WILDWOOD

AGENDA

for the

CITY OF WILDWOOD'S

PLANNING AND ZONING COMMISSION

City Hall Council Chambers · 16860 Main Street

March 21, 2016 · Monday

7:30 P.M.

If you would like to submit a comment regarding an item on this meeting agenda, please visit the Form Center.

I. Welcome To Attendees And Roll Call Of Commission Members

II. Review Tonight's Agenda/Questions Or Comments

III. Approval Of Minutes Of The Meeting Of Monday, March 7, 2016

Documents: III. 3-7-16 MINUTES FOR APPROVAL.PDF

IV. Department Of Planning's Opening Remarks/Updates

V. Public Hearings – One (1) Item For Consideration

1. P.Z. 5-16 City Of Wildwood Planning And Zoning Commission C/O Department Of Planning, 16860 Main Street, Wildwood, Missouri
   A request to review and consider the addition of residential land uses as permitted activities within the 'Downtown and Workplace Districts' designation under the 'Regulating Plan' of the City's Town Center Plan. Currently, these two (2) land use designations do not allow residential uses, whether single family or multiple family types. Recently, a number of inquiries have been made about this change. (**Wards One, Four, Five, Seven, and Eight**)

   Documents: V.A. P.Z. 5-16 DOWNTOWN DISTRICT.PDF

VI. Old Business – Two (2) Items For Consideration

1. Information Reports – One (1) Item For Consideration

a. P.Z. 3-16 City Of Wildwood Planning And Zoning Commission C/O Department Of Planning, 16860 Main Street, Wildwood, Missouri

A request for the Planning and Zoning Commission's review and action on the 2016 update of the City of Wildwood's Master Plan. The updated Master Plan has been under review by the Master Plan Advisory Committee (MPAC) since January 2015 and its members have acted favorably on this draft and are submitting it for consideration herein. The Master Plan establishes goals, objectives, and policies for the protection of the environment, application of planning techniques for land use and development purposes, allocation of resources and services, prioritization of transportation and infrastructure improvements, provision of public space and recreational amenities within the community, and economic development. Along with these goals, objectives, and policies, the Master Plan establishes types and densities/intensities of land use for every parcel of ground within the boundaries of the City of Wildwood. The City's Charter requires this plan to be updated every ten (10) years, and was last updated in 2006. **(Wards – All)**

Documents: VI.A. P.Z. 3-16 MASTERPLAN UPDATE.PDF

a.1. Public Comments On Recommendation

b. P.Z. 24-14 Centaur Station, (Michael Phelan), 18833 Cliffview Lane, Wildwood, Missouri, 63005 C/O Department Of Planning, City Of Wildwood, Missouri, 16860 Main Street, Wildwood, Missouri 63040

A request, in response to a communication from Michael Phelan, which is dated October 16, 2015, regarding **P.Z. 24-14 Centaur Station**, noting his intent to not proceed with the placement of the historic building on the City's registry, thereby seeking the revocation of the Landmark and Preservation Area (LPA) that was approved by the City Council on December 8, 2014 and governs these two (2) tracts of land; west side of Centaur Road, north of Wild Horse Creek Road (Locator Numbers: 19X410082 and 19Y620026/Street Addresses: 107 and 109 Centaur Road); Landmark and Preservation Area (LPA) in the Floodplain Non-Urban Residence District. **(Ward One)**

Documents: VI.B.P.Z. 24-14 PHELAN LPA REVOCATION.PDF

b.1. Public Comments On Recommendation

VII. New Business – No Items For Consideration

VIII. Site Development Plans-Public Space Plans-Record Plats – Two (2) Items For Consideration

1. Site Development Plans – Two (2) Items For Considerations

a. A Report, With Recommendation, Regarding The City Of Wildwood's Community Park - Phase 2 Project

PS Park and Scenic District; publicly owned land located in the northwest quadrant of State Route 100 and State Route 109; thereby recommending the approval the design and engineering plans for the installation of an extension of the park's interior roadway (from Bonhomme Creek to the western extension of Pond-Grove Loop Road), parking spaces, a companion trail, and the initial stages of the needed preparation of the Great Meadow Area. **(Ward One)**

Documents: VIII.A. COMMUNITY PARK PHASE 2.PDF

a.1. Public Comments On Recommendation

b. A Report, With Recommendation, Regarding P.Z. 21, 22, And 23-14 - Stone Mill Subdivision (Formerly Lombardo Homes Of St. Louis, L.L.C.), Now Whalen Custom Homes;

R1-A 22,000 square foot Residence District, with a Planned Residential Development Overlay District (PRD), for an eight (8) acre property; west side of Center Avenue, south of Manchester Road (Street Address: 2710 West Avenue/Locator Number: 24V420010); thereby recommending the approval of the Site Development Plan (SDP)

and associated materials and documents to allow for the parcel of ground's use for twelve (12) single family dwellings on individual lots, common ground, and required public space. **(Ward Eight)**

Documents: VIII.B. P.Z.21,22 AND 23-14 STONE MILL SUBDIVISION.PDF

b.1. Public Comments On Recommendation

IX. Other – No Items For Consideration

X. Closing Remarks And Adjournment By Chair Of Commission

If you would like to submit a comment regarding an item on this meeting agenda, please visit the Form Center.

CITY OF WILDWOOD, MISSOURI
RECORD OF PROCEEDINGS

MEETING OF THE PLANNING AND ZONING COMMISSION
CITY HALL, 16860 MAIN STREET, WILDWOOD, MISSOURI
March 7, 2016

The Planning and Zoning Commission meeting was called to order by Chair Bopp, at 7:45 p.m., on Monday, March 7, 2016, at Wildwood City Hall, 16860 Main Street, Wildwood, Missouri.

I. Welcome to Attendees and Roll Call of Commission Members

Chair Bopp requested a roll call be taken. The roll call was taken, with the following results:

PRESENT – (9)
Chair Bopp
Commissioner Lee
Commissioner Archeski
Commissioner Peasley
Commissioner Renner
Commissioner Gragnani
Commissioner Bauer
Council Member Manton
Mayor Woerther

ABSENT – (1)
Commissioner Liddy

Other City Officials Present: Director of Planning Vujnich, Director of Public Works and City Engineer Brown, Planner Newberry, and City Attorney Golterman.

II. Review Tonight's Agenda / Questions or Comments

There were no questions or comments on the agenda.

III. Approval of Minutes from the February 1, 2016 Meeting

A motion was made by Mayor Woerther, seconded by Commissioner Peasley, to approve the minutes from the February 16, 2016 meeting. A voice vote was taken regarding the motion for approval of the minutes. Hearing no objections, Chair Bopp declared the motion approved.

IV. Department of Planning Opening Remarks

Mayor Woerther announced that Commissioner Peasley would be resigning his position on the Planning and Zoning Commission and presented Mr. Peasley with a plaque expressing the Mayor and City Council's grateful recognition and appreciation of his service to the City, both as a City Council Member (2008) and as a Planning and Zoning Commission Member (2008-2016).

V. Public Hearings – One (1) Item for Consideration

a) **P.Z. 3-16 City of Wildwood Planning and Zoning Commission c/o Department of Planning, 16860 Main Street, Wildwood, Missouri –** A request for the Planning and Zoning Commission's review and action on the 2016 update of the City of Wildwood's Master Plan. The updated Master Plan has been under review by the Master Plan Advisory Committee (MPAC) since January 2015 and its members have acted favorably on this draft and are submitting it for consideration herein. The Master Plan establishes goals, objectives, and policies for the protection of the environment, application of planning techniques for land use and development purposes, allocation of resources and services, prioritization of transportation and infrastructure improvements, provision of public space and recreational amenities within the community, and economic development. Along with these goals, objectives, and policies, the Master Plan establishes types and densities/intensities of land use for every parcel of ground within the boundaries of the City of Wildwood. The City's Charter requires this plan to be updated every ten (10) years, and was last updated in 2006. **(Wards – All)**

Chair Bopp read the public hearing guidelines into the record and requested the item be read.

Planner Newberry read the request into the record.

Director Vujnich submitted, for the record, the Wildwood City Charter, the Master Plan, as updated in 2006, and the City's Zoning Ordinance and Subdivision and Development Regulations. Director Vujnich explained the Planning/Economic Development/Parks Committee of the City Council established the makeup of the Master Plan Advisory Committee and the process they would follow. He described the public participation process associated with the Master Plan Advisory Committee's work. The Master Plan Advisory Committee is submitting the draft version of the 2016 Master Plan Update, with a favorable recommendation. Director Vujnich outlined a number of changes and additions, included in the draft.

Chair Bopp invited members of the public to comment on the 2016 Master Plan Update.

Mary Beth Morth, 17073 Westridge Oaks Drive stated she is not in favor of the proposed change in the land use designation to the Brown property. She noted the property has already had a change to its land use designation in the Master Plan and stated it should not be considered for another change.

Director Vujnich brought to the attention of the Commission a letter submitted by Ward Five (5) Council Member Smith McCutchen that was provided at the Commission Members' seats (attached to these minutes). Commissioner Bauer, referring to Council Member McCutchen's letter, expressed her belief that establishing a business development and retention coordinator is the responsibility of the City Administrator and it is an overreach to include it as part of the Master Plan. Discussion was held regarding the legal issues associated with this objective.

Commissioner Bauer, referring to Council Member McCutchen's letter, stated her belief the objective to make a recommendation to the City Council to make the Economic Development Task Force a standing committee of the City Council is an overreach. Discussion was held regarding the legal issues associated with this objective.

Commissioner Bauer, referring to Council Member McCutchen's letter, stated her opposition to a change to the land use designation and that doing so would establish a bad precedent. Commissioner Peasley stated this situation is a case of a property owner attempting to raise the value of his lot and he does not

understand any opposition to such a proposal. Commissioner Archeski noted many changes to this property's land use designation have been considered over the years. He also noted the Planning and Zoning Commission is making a recommendation. At Mayor Woerther's request, Director Vujnich was asked to clarifiy the process of adopting the Master Plan.

Motion by Mayor Woerther, seconded by Commissioner Archeski, to close the public hearing. A voice vote was taken regarding the motion. Hearing no objections, Chair Bopp declared the motion approved.

VI. Old Business – Two (2) Items for Consideration

Information Reports – One (1) Item for Consideration

a) P.Z. 19-15 1971 Pond Road, Payne Family Homes L.L.C., 10407 Bauer Boulevard, Suite B, St. Louis, Missouri, 63132 – A request for the application of a Planned Residential Development Overlay District (PRD), within the NU Non-Urban Residence District for a 78.0 acre tract of land that is located on the north side of State Route 100, west of Pond Road (Locator Number: 23W520053/Street Address: 1971 Pond Road). **Proposed Use: A total of twenty-six (26) individual lots, with common ground, and required public space areas. Lots would range in size from one (1) acre to four and one-half (4.5) acres. (Ward One)**

Planner Newberry read the request into the record.

Motion by Commissioner Archeski, seconded by Commissioner Gragnani, to open discussion on the item.

Director Vujnich explained the request to authorize a Planned Residential Development Overlay District (PRD) in the NU-Non-Urban Residence District and outlined some of the components of the proposal, including the access point on Pond Road; the secondary emergency access from Lynda Jayne Lane; various lot sizes in regard to the PRD; and preserved, contiguous open space resulting from the application of this special procedure, Natural Resource Protection Standards, and tree preservation requirements. Director Vujnich noted this proposal was before the Commission at its February 16, 2016, meeting with a recommendation from the Department of Planning, but the petitioner respectfully requested the item be postponed. A Ward One meeting organized by Council Members DeHart and McGowen, was held with concerned citizens on March 2, 2016, with Department of Planning staff present. Director Vujnich noted the Addendum to the Department of Planning's Information Report, which has been provided to Commission Members, reflects the concerns discussed at the Ward One meeting, and included these points:

- Access to Pond Road and safety issues, particularly in regard to busses.
- Application and appropriateness of the Planned Residential Development Overlay District (PRD).
- Privacy for current and future residents.
- Use of the recirculating sand filter waste water treatment facility and placement of such on site.
- Electrical lines, utility relocation, and the effect on current residents.

Director Vujnich stated the Department supports the requested Planned Residential Development Overlay District (PRD) because it complies with the Master Plan; meets the standards required of a PRD, as set forth by the City's Zoning Regulations; and meets the criteria for a PRD in NU-Non-Urban

Residence District. He noted the Department supports only twenty-five (25) individual lots on this site, as opposed to the twenty-six (26) lots, originally proposed.

Chair Bopp invited individuals from the public to address the Commission.

Tom Smith, 17221 Portland Crest Court, stated he lives close by the proposed development and is opposed to the approval of the Planned Residential Development Overlay District (PRD). He expressed his concerns about the lot sizes less than three (3) acres and the quality of the homes in comparison to existing homes in the area.

Phil Shroeder, 1214 Pond Road, submitted a petition for the record with a number of signatures opposing the proposal *(attached to these minutes)*. He stated he also opposed the proposal. Mr. Shroeder noted just because the land is difficult to develop, does not mean it should be given special consideration.

Josh Sprunger, 1548 Pond View Drive, stated his opposition to the approval of the Planned Residential Development Overlay District (PRD). He expressed his concerns about the access to Pond Road, increased traffic, and compliance with the Master Plan. Mr. Sprunger shared a slideshow of photographs depicting examples of recirculating sand filter waste water treatment facilities servicing Three Sisters Farm, The Oaks at Wildwood, and Homestead Estates Subdivisions, which he and other residents visited. He expressed his concerns about facilities of this sort based on his observations, including the following:

- They are an eyesore and are not placed out of the view from the roadway
- They put off a foul odor
- The water leaving the facility did not appear to be clean

(The photos that Mr. Sprunger shared are attached to these minutes)

Erica Sprunger, 1548 Pond View Drive, stated she also visited the recirculating sand filter waste water treatment facilities servicing Three Sisters Farm, The Oaks at Wildwood, and Homestead Estates subdivisions and expressed her concerns about this sort of facility, specifically noting the following:

- The smell the produce, which was confirmed, in some instances, by discussions with neighboring residents
- They are an eyesore
- The sounds they produce
- Their location in comparison to homes and roadways
- The frequency of inspections and the party responsible for addressing any issues
- The quality of the outflowing water
- Why Metropolitan St. Louis Sewer District is not extending service to the site

Ms. Sprunger expressed her concerns about the lot sizes less than three (3) acres, compliance with the Master Plan, increased traffic, safety on Pond Road, and the access to Pond Road.

Tom Finochio, 1633 Pond Road, stated his opposition to the proposed number of homes and lot sizes. He expressed his concerns about property values and safety along Pond Road.

Jan Sprunger, 1547 Pond View Drive, thanked Council Members DeHart and McGowen for organizing the Ward One meeting held on March 2, 2016. She stated she is opposed to the Planned Residential

Development Overlay District (PRD). She expressed her concerns about the consistency with the surrounding area, compliance with the Master Plan regarding traffic on Pond Road, safety of pedestrians on Pond Road, and the impact of outdoor lighting. She asked that the access point be moved to State Route 100 or Lynda Jayne Lane. She expressed her concerns about recirculating sand filter waste water treatment facilities, which included the following:

- The smell they produce, which was confirmed, in some instances, by discussions with residents neighboring the facilities.
- They are an eyesore
- The sounds they produce, including "gurgling" and beeping of alarms.
- Their location in comparison to homes and roadways

Ms. Sprunger respectfully asked the Commission to postpone an decision on this matter at this time.

Arnie Sprunger, 1547 Pond View Drive, who was unable to attend, but his wife, Jan Sprunger, read from a letter he prepared. Mr. Sprunger stated he is opposed to the development, as it is currently proposed. He stated his concerns about the access to Pond Road, increased traffic, the number of homes, sizes of lots, compliance with the Master Plan, privacy of existing and future homeowners, and the impact of outdoor lighting.

Mr. Sprunger respectfully asked the Commission to postpone any decision on the matter at this time.

Glen DeHart, Council Member Ward One (1), 2347 Ossenfort Road, stated he also visited the recirculating sand filter waste water treatment facilities servicing Three Sisters Farm, The Oaks at Wildwood, and Homestead Estates Subdivisions and expressed his concerns about them, particularly that some did not appear to be working properly. Council Member DeHart asked the Commission to carefully consider these facilities and requested the Commission postpone any decision on the matter at this time.

Chair Bopp invited the representative of the petitioner to address the Commission.

Mr. Cummings addressed concerns about the use of the Planned Residential Development Overlay District (PRD), the use of a recirculating sand filter waste water treatment facility, the access on Pond Road, privacy of neighbors, outdoor lighting, and utility relocation.

Mr. Cummings made the following requests and questions regarding the Department's Information Report and Addendum:

- Clarified the acreage of the site would be verified by a final survey, but it is expected to be between seventy-eight (78) and seventy-nine acres (79).
- Requested Lot 2 be exempt from Items 4 (b) and 4 (c) in Attachment B – Conditions.
- Requested the Traffic Generation Assessment Fee apply first to the installation of the left-turn lane and the excess be applied to sidewalks and street improvements.
- Requested the removal of Item 4 (g) in Attachment B – Conditions.
- Requested clarification on Item 4 (p) in Attachment B – Conditions, regarding landscaping of public space.

Mr. Cummings thanked Council Member DeHart, Council Member McGowen, and neighbors for taking the time to meet with him.

Discussion was held among Commission Members regarding the recirculating sand filter waste water treatment facilities and how they were monitored. Director Vujnich stated he was disappointed to learn of the issues regarding these facilities discussed at tonight's meeting. He stated that investigating and resolving the issues discussed would be a top priority of the Department, moving forward.

Director Vujnich respectfully requested the Commission to postpone a decision on this item.

Motion by Commissioner Gragnani, seconded by Commissioner Bauer, to postpone this item. A voice vote was taken regarding the motion to postpone. Hearing no objections, Chair Bopp declared the motion approved.

Information Reports – One (1) Item for Consideration

A response to a communication from Jenny Mitchell, Director of Property Management for the Desco Group, which is dated October 20, 2015, that seeks a change to the Amended MXD Mixed-Use Development District Ordinance that governs the Schnucks Wildwood Crossing Center to allow for a third freestanding monument sign along the property's Manchester Road frontage - **St. Louis County's P.C. 219-85 Alfred L. Hicks and J.L. Mason of Missouri, Inc. (Ward Seven)**

Planner Newberry read the request into the record.

Director Vujnich explained the draft Information Report was before the Commission at its December 21, 2015 meeting, where the item was postponed to allow for further research. The Addendum provided for tonight's meeting outlines an appropriate alternative option for the request that involves installing a garden wall from the existing retaining wall, which would accommodate additional signage.

No discussion was held among Commission Members.

A motion was made by Mayor Woerther, seconded by Commissioner Archeski, to explore the option outlined in the Addendum provided. A voice vote was taken regarding the motion. Hearing no objections, Chair Bopp declared the motion approved.

A motion was made by Mayor Woerther, seconded by Commissioner Archeski, to extend the meeting past 10:00 p.m. A voice vote was taken regarding the motion. Hearing no objections, Chair Bopp declared the motion approved.

VII. New Business – Two (2) Items for Consideration

a) A response to a letter dated February 2, 2016 from Dale R. Hicks, owner of Wildwood Memorial Park and Gardens, regarding **P.Z. 9-10 Wildwood Memorial Park and Gardens, c/o Dale and Jon Hicks, P.O. Box 34, Eureka, Missouri 63025**; a Conditional Use Permit (CUP) in the NU Non-Urban Residence District; south side of State Route 100, at Hencken Road (Locator Numbers: 26Y640097, 26X430064, and 26X430075/Addresses: 3901 Hencken Road 18706 State Route 100, and 18706 (a) State Route 100); which seeks the right to use one (1) of the two (2), five (5) acre lots that form a portion of this overall twenty-eight (28) acre site for the scatter of composted pet remains **(Ward Six)**

Planner Newberry read the request into the record.

Director Vujnich stated the Conditional Use Permit (CUP) for this property was considered and approved by the Planning and Zoning Commission in 2010 for a human cemetery on an eight (8) acre portion of the twenty-eight (28) acre site. He explained the current proposal is to convert a portion of the site to a scatter garden for cremains of deceased pets, which will be placed on the five (5) acre area at the southwest corner of the site. Director Vujnich discussed access to the site, limited parking, and the installation of an inscription wall, benches, and native plantings. Director Vujnich discussed three (3) concerns, including environmental impact, perpetual maintenance of the site, and no change in use to this site in perpetuity. Director Vujnich noted the Department is recommending approval.

The Petitioners, Mr. Dale Hicks and Mr. Bob Jenkins, were present and discussed the cremation process, the product they plan to mix the cremains with to mitigate environmental impacts, and other aspects of the proposed use.

Discussion was held among Commission Members on potential flooding on the site, the endowment of the cemetery, preventing unauthorized scattering, and the site development plan process.

A motion was made by Mayor Woerther, seconded by Council Liaison Manton, to approve the Amended Conditional Use Permit (CUP).

Chair Bopp called the question.

A roll call vote was taken, with the following results:
Ayes: Commissioner Peasley, Commissioner Gragnani, Commissioner Lee, Commissioner Archeski, Commissioner Renner, Commissioner Bauer, Council Member Manton, Mayor Woerther, and Chair Bopp.
Nays: None
Absent: Commissioner Liddy
Abstain: None
Whereupon, Chair Bopp declared the motion approved by a vote of 9-0.

b) A response to the City Council's action upon an approved Record Plat for the Wildwood Trail Subdivision - **P.Z. 3, 4, 5, and 6-14 Wildwood Trail Subdivision, Pulte Homes of St. Louis**; R-4 7,500 square foot Residence District, with a Planned Residential Development Overlay District (PRD); east side of State Route 109, north of Manchester Road (Locator Numbers 24V440122 and 24V440104/Street Addresses: 2516 and 2520 Highway 109). The Department of Planning is requesting a modification to the existing **Planned Residential Development Overlay District (PRD) Ordinance # 2042** to address a change to the maintenance requirement for an existing eleven (11) foot wide landscape buffer, which is currently described in Condition 4 (aa.) of this legislation. **(Ward Eight)**

Planner Newberry read the request into the record.

Director Vujnich explained the request and noted the request from the Department is to amend the governing ordinance of the site to make it consistent with the approved Record Plat.

A motion was made by Commissioner Archeski, seconded by Commissioner Renner, to amend the governing ordinance.

Chair Bopp called the question.

A roll call vote was taken, with the following results:
Ayes: Commissioner Peasley, Commissioner Gragnani, Commissioner Lee, Commissioner Archeski, Commissioner Renner, Commissioner Bauer, Council Member Manton, Mayor Woerther, and Chair Bopp.
Nays: None
Absent: Commissioner Liddy
Abstain: None
Whereupon, Chair Bopp declared the motion approved by a vote of 9-0.

VIII. Site Development Plans-Public Space Plans-Record Plats – One (1) Item for Consideration

Site Development Plans – One (1) Item for Consideration

a) A report, with recommendation, regarding the City of Wildwood's **Meramec River Connector Trail Project;** FPNU Floodplain Non-Urban Residence District; publicly owned land between Bluff View Park and Rock Hollow Trail; thereby approving the design of this important length of natural surface trail linking two (2) existing trail corridors between two (2) major public holdings of land – Bluff View Park and the Rock Hollow Valley. **(Ward Six)**

Director Vujnich described the request to approve the Site Development Plan for a one-half mile (1/2 mi.) trail connecting Bluff View Park to the Rock Hollow Trail on land that is owned by the State of Missouri. He discussed the use of multiple culverts and retaining walls to complete the project and other design elements. Director Vujnich stated the Department is requesting a favorable action from the Commission.

Motion by Mayor Woerther, seconded by Commissioner Archeski, to approve the Site Development Plan.

Chair Bopp called the question.

A roll call vote was taken, with the following results:
Ayes: Commissioner Peasley, Commissioner Gragnani, Commissioner Lee, Commissioner Archeski, Commissioner Renner, Commissioner Bauer, Council Member Manton, Mayor Woerther, and Chair Bopp.
Nays: None
Absent: Commissioner Liddy
Abstain: None
Whereupon, Chair Bopp declared the motion approved by a vote of 9-0.

IX. Other – No Items for Consideration

X. Closing Remarks and Adjournment

A motion was made by Council Liaison Manton, seconded by Mayor Woerther, to adjourn the meeting. A voice vote was taken. Hearing no objections, Chair Bopp adjourned the meeting at 10:50 p.m.

DRAFT

Approved by:

Secretary – City of Wildwood Planning and Zoning Commission

Note: Recordation of the opinions, statements, and/or other meeting participation in these minutes shall not be deemed to be an acknowledgement or endorsement by the Commission of the factual accuracy, relevance, or propriety thereof.

* If comment cards were submitted indicating they did not wish to speak at tonight's meeting, they have been attached and made part of the official record.

DRAFT

From: Debra McCutchen <debra1447@sbcglobal.net>
Date: March 7, 2016 at 5:05:47 PM CST
To: Kathy Arnett <kathy@cityofwildwood.com>
Subject: please forward to the PnZ Commissioners for this evenings meeting
Reply-To: Debra McCutchen <debra1447@sbcglobal.net>

Commissioners,

Thank you for all the time and effort you put forth during the Master Plan Update process. I value the input of the residents and the time they spent participating in the process. As you know, I have raised concerns regarding three matters: the establishment of an economic development position; the strong suggestion of establishing an economic development standing committee; second master plan change for the Brown property.

Please give the following consideration before voting approval of the Master Plan Update 2016:

Regarding: Objective - Establish a business development-retention coordinator for the City. (2016)
The establishment of a staffing position is under the purview of the City Administrator. Pursuant to [Ord. No. 9 §8, 9-1-1995] – it is the responsibility of the City Administrator to design employee positions. Given such, I think it is inappropriate to establish a staffing position through the Master Plan. This objective may be included in Policy 6. Implement the City of Wildwood's Economic Development Plan **once council determines what the plan is to be and votes approval of such.**

Regarding objective 7. Make a recommendation to the City Council the Economic Development Task Force be made a standing committee of City Council. Pursuant to [Ord. No. 6 §18, 9-1-1995; Ord. No. 188 §1, 12-26-1995; Ord. No. 333 §1, 4-28-1997; Ord. No. 526 §1, 4-26-1999] there exist two established standing committees: 1. Administration and Public Works 2. Council Planning, Parks and Economic Development.

Regarding the Brown Property: If the Brown property is given a Master Plan change this will be the second Master Plan change to this property. Is this a precedent we want to set?

Debra Smith McCutchen
Councilwoman, Ward 5

Opposition to P.Z 19-15 1971 Pond Road Development by Payne Family Homes L.L.C. 10407 Baur Boulevard, Suite B, St. Louis, MO 63132

Petition Summary: To oppose Payne's residential development at (locator number 23W520053/Street Address: 1971 Pond Road 63038) for home lots less than three acres.

Action Petitioned For: We the undersigned are concerned citizens who urge our leaders to act now to oppose P.Z. 19-15 1971 Pond Road which calls for permission to build homes on lots smaller than three acres.

Date	Signature	Printed Name	Address	Email/Mobile
~~2/16~~ 3/7	Lynda Keller	Lynda Keller	2000 Lynda Jayne Lp	Lynda.Keller@earthlink.net
3/7/16	[illegible]	Tim Maloney	1521 Whetstone	MaloneyHomes@gmail.com
3/7/16	[illegible]	Lisa T Maloney	1521 Whetstone	"
3/7/16	[illegible]	Serbelio Dano	1541 Pond	[illegible]

Opposition to P.Z 19-15 1971 Pond Road Development by Payne Family Homes L.L.C. 10407 Baur Boulevard, Suite B, St. Louis, MO 63132

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Date	Signature	Printed Name	Address	Email/Mobile
~~3/7/16~~	~~Lynda Keller~~	~~Lynda Keller~~	~~2080 Lynda Jayne Lane~~	~~lynda.keller@charterlink.net~~ dup
3/7/16	[illegible]	Frank J. Fischer	1648 Belmont	bemnt@aol.com
3/7/16	[illegible]	Josh Springer	1548 Pond View Dr.	joshspringer@yahoo.com
3/7/16	[illegible]	Erica Springer	1548 Pond View Dr	espringer@gmail.com

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Date	Signature	Printed Name	Address	Email/Mobile
-6-16		Theresa A. Strong	1412 Mayapple Ct	theresa.a.strong@gmail
-6-16		Stephanie E Thompson	2432 Indian Tree Ran	
/7/16		Andrew Strong	16208 Cancun Cir. Dr.	yourmumrealtor@earthlink.net work.sitter@gmail.com
/7/16		JENNIFER STRONG	16203 CANCUN CIRCLE DR	jennifer-strong
7/16		Elizabeth Dean	1516 Englebrook D	@hotmail.com 636 346 4602

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Date	Signature	Printed Name	Address	Email/Mobile
6-2016	Bluford W Smith	Bluford W Smith	1403 Wild Foxfire Ln	BluSmith2000@Yahoo.Com
6-2016	Denise Dixon	Denise Dixon	1403 Wild Foxfire Ln	denise.parker@att.net
6-2016	Marolyn Schwenke	Marolyn Schwenke	1404 Wild Foxfire Lane	—
6-2016	Robert W. Teller	ROBERT W. TELLER	1401 INDIAN PIPE LANE	PHOENIXDZN@YAHOO.COM

Opposition to P.Z 19-15 1971 Pond Road Development by Payne Family Homes L.L.C. 10407 Baur Boulevard, Suite B, St. Louis, MO 63132

tition Summary: To oppose Payne's residential development at (locator number 23W520053/Street Address: 71 Pond Road 63038) for home lots less than three acres.

tion Petitioned For: We the undersigned are concerned citizens who urge our leaders to act now to oppose Z. 19-15 1971 Pond Road which calls for permission to build homes on lots smaller than three acres.

Date	Signature	Printed Name	Address	Email/Mobile
4/16	Dorothy McKoone	DOROTHY McKoone	1409 PRAIRIE ROSE LN 63038	
4/16	[illegible]	THOMAS McKoone	1409 PRAIRIE ROSE	TMCKOONE@SBCglobal.net
-6-16	Larry Valentine	Larry Valentine	1409 Indian Pipe Lane	lvallew@aol.com
-6-16	[illegible]	Jon Sullivan	1412 Indian Pipe	sullivanj10@gmail.com

Opposition to P.Z 19-15 1971 Pond Road Development by Payne Family Homes L.L.C. 10407 Baur Boulevard, Suite B, St. Louis, MO 63132

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Date	Signature	Printed Name	Address	Email/Mobile
3/6/16	Frank Hardy	Frank Hardy	18101 Rieger Rd 63005	314 221 9307
3/6/16	Peter Medendorp	Peter Medendorp	1100 Sara Matthews	314.323.5940
3/6/16	Sharon Cloud	Sharon Cloud	1154 Sara Matthews	636 405 3035
3-6-16	Dennis Cloud	Dennis Cloud	1156 Sara Matthews	636-405-3035

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Date	Signature	Printed Name	Address	Email/Mobile
1 MAR 16	[illegible]	SHAWN NICKELL	1401 MAYAPPLE TRAIL	910-551-2334
3-1-2016	Rebecca Nickell	REBECCA NICKELL	1401 MAYAPPLE TRAIL	910-583-8772
3-1-2016	Dora Kolker	Dora Kolker	1400 Mayapple	636-219-4380
3/1/2016	J. Bernard Kolker	J. BERNARD KOLKER	" "	" "

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Date	Signature	Printed Name	Address	Email/Mobile
2/29/16		Stephanie Schneider	1214 Pond Rd	314 495-8520
2/29/16		Jordan Covert	1502 Scofield Valley	314-605-9594
3/1/16		Jason T Walker	1503 Scofield Valley	314 479 0422
3/1/16		SANDRA WALKER	1503 Scofield Valley	314 479 0422

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Date	Signature	Printed Name	Address	Email/Mobile
03/01/16	[illegible]	Alejandra Reinhardt	1519 Scofield Valley Ln	flora1910@yahoo.com
03/1-16	[illegible]	GORDON AUTEN	1527 SCOFIELD	GAUTEN@ATT.NET
3-1-16	Vicky Auten	Vicky Auten	1527 Scofield Valley	GAuten@Att.net
3-1-16	[illegible]	John Bugnitz	17275 pond rd cove	JBugnitz@mozaic.ltd.com JBugnitz@mozaic.ltd.com

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Date	Signature	Printed Name	Address	Email/Mobile
3/1/2016	[illegible]	James C Blessing	1520 Whetstone Ct	e26933@gmail.com
3/1/16	[illegible]	Kathy Blessing	1520 Whetstone Ct	blessingjk@aol.com
3-1-16	Glenn W. Scheffing	GLENN W. SCHEFFING	1506 A WHETSTONE CT	636-[illegible]
2-1-16	Carol A. Scheffing	CAROL SCHEFFING	1505 WHETSTONE	-3488

CPERRY7@AOL.COM

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Date	Signature	Printed Name	Address	Email/Mobile
3/1/16	[illegible]	Abigail Schroeder	1214 pond road	314-971-8520
3/1/16	Maria Tate	Maria Tate	17274 Portland Cove	636-405-1205
3/1/16	Greg McDonald	Greg McDonald	17203 Portland Cove	636-458-6361
3/1/16	Natalie McDonald	NATALIE McDONALD	17203 Portland Cove	636-2/58636

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Date	Signature	Printed Name	Address	Email/Mobile
3-5-16	[illegible]	JAMES ROACH	1300 POND Wildwood 63038	636 405 0212
3-5-16	[illegible]	Barbara Roach	1300 Pond Rd Wildwood 63038	636405[illegible]
3-6-16	[illegible]	R TODD BUTLER	1711 POND RD 63038	BEAST.6666@YAHOO.COM

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Date	Signature	Printed Name	Address	Email/Mobile
3/2/2016	Judith G. Mitchell-Miller	Judith G. Mitchell-Miller	1405 MAYAPPLE TR. GLENCOE, MO 63038	jmitchmill@mindspring.com
3/2/2016	Mark C Suchland	MARK C Suchland	1404 MAYAPPLE TR Glencoe, MO 63038	Suchlma@Icloud.com
3/3/2016		Jodie Lynn	1409 May Apple Trl	em@parenttoparent.com
3/3/2016	Gilbert R Hart D	MD Gilbert R. Hart DMD	1408 May-Apple Tr	636-458-4530
3-3-2016	Nancy B. Hart	Nancy B. Hart	1408 Mayapple Trail Wildwood, MO. 63038	636-458-4530

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Date	Signature	Printed Name	Address	Email/Mobile
2/29/16	[illegible]	Penny Scholl	17261 Portland Ct	314 504-3220
2/29/16	[illegible]	ED McFARLAND	17253 Portland	636 458 4467
2/29/16	Amy Pauls	Amy Pauls	17245 Portland Crest	618 604 2907
2/29/16	Ron Weiss	RON WEISS	17237 PORTLAND	—

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Date	Signature	Printed Name	Address	Email/Mobile
3/1/2016	[illegible]	Heejan	17290 Portland Cove Wildwood	[illegible]
3/1/2016	Sheryll Cristancho	Sheryll Cristancho	17290 Portland Cove Wildwood 63038	scristancho-4@hotmail.com
3-3-2016	Kathy Walsh	Kathy Walsh	18136 Dawns Trail	
3-3-2016	[illegible]	Tom Underwood	18120 Dawns Trail	Tomunderwood@gmail.com

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Date	Signature	Printed Name	Address	Email/Mobile
3-3-16	Brigitte Underwood	Brigitte Underwood	18120 Dawns Trl	brigitsm@aol.com
3-4-16	Tatyana Mimlitz	Tatyana Mimlitz	1133 Pond Rd.	tanya@mimlitz.com
3-4-16	[illegible]	Kelly Mathews	1510 Madison Creek Lane	kellysmathews@yahoo.com
3-4-16	[illegible]	Terry McCarty	1124 Sara Mathews Ct	tmm7293@aol.com

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Date	Signature	Printed Name	Address	Email/Mobile
3/4/16	Patti Altin	Patti Altin	1133 Sarahurlens Lane	pattialtin@yahoo.com
3/4/16	Jan Allerdissen	Jan Allerdissen	1236 Pond Rd. 63038	gregallerdissen@sbcglobal.net
3/4/16	Greg Allerdissen	Greg Allerdissen	1236 Pond Rd	"
3/4/16	Kelly Matthews	KELLY MATTHEWS	1510 MADISON CR.	KELLYSMATTHEWS@YAHOO.COM

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Date	Signature	Printed Name	Address	Email/Mobile
3-5-16	Gayle Bogenschneider	Gayle	1148 Sara Mathews	
3-5-16	Lawrence Rosen	Lawrence Rosen	1148 Sara Mat	
3-5-16	Diane B. Re	Diane B. Re	1140 Sara Mathews Ln	
3-5-16	Mike Re	Mike C. Re	1140 Sara Mathews Ln	

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Date	Signature	Printed Name	Address	Email/Mobile
3/01/16		R.S. Duke	17203 Portland Cove	—
3/01/16		Tiffany Hall	17211 Portland Cove	HALLTLMSR@YAHOO
3/01/16		Chris Hall	17211 Portland Cove	
3/1/16		Hugh Bissell	1513 whetstone ct	

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Date	Signature	Printed Name	Address	Email/Mobile
3/1/16	Penny L. McKittrick	Penny L. McKittrick	11207 Rothland Crest Winwood Ridge Court	[illegible]
3/1/16	Karen Caldera	Karen Caldera	1526 Scofield Valley	Octane 340@yahoo@yahoo.com
3/1/16	Ruben Caldera	Ruben Caldera	"	streetrog70@gmail.com
3/1/16	[illegible]	Frank Reinhardt	1519 Scofield Valley	Frankcy7773@yahoo.com

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Date	Signature	Printed Name	Address	Email/Mobile
3-5-16	[illegible]	Kris Zimmer	1108 Sara Mathews	
3-5-16	[illegible]	Pam Zimmer	1108 Sara Mathews	N. Wildwood
3-5-16	[illegible]	L. Laura Medendorp	1100 Sara Mathews	Wildwood MO 63005
3-5-16	[illegible]	Lynn Butler	1211 Pond Rd	Wildwood MO 63038 636-458-3393

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Date	Signature	Printed Name	Address	Email/Mobile
Mar 3 2016	Barbara Schaich-Rieger	REBECCA SCHAICH-RIEGER	1200 Pond Rd Glencoe MO 63038	bschaich18@gmail
Mar. 3, 2016	Victoria Hardy	VICTORIA HARDY	18101 Rieger Rd. Wildwood, MO 63005	vhardy5@yahoo.com
Mar 3 2016	Cheryl Oliver	Cheryl Oliver	1116 Sara Mathews Wildwood MO 63005	cjoliver4@aol.com
Mar 3 2016	Laurie Runge	Laurie Runge	18105 Dawns Trl Wildwood MO	ARunge8168@att.com

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Date	Signature	Printed Name	Address	Email/Mobile
2-29-16	Jacquelyn S. McCormick	Jacquelyn S. McCormick	17252 Portland Crest	jacm@charter.net.
2-29-16	Sandra Curtiss	Sandra Curtiss	17229 Portland Crest Ct.	sandra.w.curtiss@gmail.com
2-29-16	Elizabeth Curtiss	Elizabeth Curtiss	17229 Portland Crest Ct.	elizabeth.m.curtiss@gmail.com
2-29-16	Sidney T. Smith	SIDNEY T. SMITH	17221 PORTLAND CREST CT	stomsmith@hotmail.com

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Date	Signature	Printed Name	Address	Email/Mobile
2-29-16	Karin L Smith	Karin L. Smith	17221 Portland Crest Ct	ksmithf@hotmail 314-369-3583 ~~314-23-43~~
2.29.16	Patrick Evans	Patrick Evans	17213 Portland Crest Ct	pat.evans@ymail.com
2-29-16	[illegible]	DEREK NAGLE	17205 PORTLAND CREST	DEREK.NAGLE@SBCGLOBAL.NET
2-29-16	Judith L. Nagle	JUDITH NAGLE	"	judithlorraine[illegible]50@yahoo.com
2-29-16	Cindy Rogers	CINDY ROGERS	17151 PORTLAND CR.	ROGERSJC@CHARTER.NET
2-29-16	Katie Sanders	Katie Sanders	17151 Portland Crest Ct.	Katieh@gmail.com
2-29-16	[illegible]	Aaron Sanders	17151 Portland Crest Ct	Sanders_a9@yahoo.com

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Date	Signature	Printed Name	Address	Email/Mobile
2/29/16	[illegible]	Philip J Schroeder	1214 Pond Road 63038	phil.schroeder@yahoo.com / 314-517 8520
2/29/16	Donald S Burley Jr	Donald S Burley	1413 Mayapple Trail	dsburleyjr@aol.com
2/29/16	Charlotte R Luce	CHARLOTTE LUCE	1413 MAYAPPLE TRAIL	thecolandmissc@aol.com
2/29/16	[illegible]	Jeff Scholl	17261 Portland Crest	chollsfg@earthlink.net

SEWAGE TREATMENT
FACILITY - KEEP- OUT

26629

WILDWOOD

PLANNING AND ZONING COMMISSION
CITY OF WILDWOOD, MISSOURI
PUBLIC HEARING PRIMER
March 21, 2016 Executive Session
Prepared by the Department of Planning

PETITION NUMBER: **P.Z. 5-16**
PETITIONER: **City of Wildwood Planning and Zoning Commission c/o Department of Planning, 16860 Main Street, Wildwood, Missouri**
REQUEST: A request to review and consider the addition of residential land uses as permitted activities within the 'Downtown and Workplace Districts' designations under the 'Regulating Plan' of the City's Town Center Plan. Currently, these two (2) land use designations do not allow residential uses, whether single family or multiple family types. Recently, a number of inquiries have been made about this change.
LOCATION: Town Center Area
ZONING: Multiple Commercial Districts
WARDS: One, Four, Five, Seven, and Eight

INTRODUCTION >>> Over the course of the last eighteen (18) months, the City has received a number of inquiries and actual submittals from different development interests for high-density residential proposals in the areas of the "Downtown and Workplace Districts" of the Town Center. These requests have involved properties that are designated for "Downtown or Workplace District" uses, not residential types in nature. With the completion of the update of the Town Center Plan in 2013, these districts do not authorize any type of stand-alone residential use, but rather commercial types only. In most instances, the interested party is advised of the conflict between his/her requested use and the Regulating Plan of the Town Center Plan and typically request what options exist for consideration.

Some of these inquiries have led to informal and formal submittals of projects, but none of them have yet to be acted upon by the Planning and Zoning Commission. The decision to proceed in submitting a formal application to the City is premised on many factors, but certainly one such major consideration is whether the application must also seek a change to the Town Center Plan's Regulating Plan, along with the change in zoning and/or the application of the special procedures permit of a planned district of the City's Zoning Ordinance. This additional step in the process and the importance of this plan to the City often discourage an interested party from proceeding beyond its initial discussions with City staff. Given the City's recent stated desire to focus on providing more rooftops in the Town Center Area, the Department thought it appropriate to have a discussion about this matter and its potential benefits along with the possible drawbacks for this special area of the City. If residential uses would be allowed in the "Downtown and Workplace Districts" of the Town Center Area, certain proposals considered by the City could then be reviewed and acted upon due to consistency with the Regulating Plan.

CURRENT REQUEST >>> The Department of Planning is presenting to the Planning and Zoning Commission a request to consider changes to the list of permitted uses associated with the Town Center Plan. These changes would affect the land use categories that are reflected upon the Town Center Plan's Regulating Plan. The

Regulating Plan assigns a land use category to all properties located within the Town Center Boundary. This land use category defines the allowable activities that can be considered by any property owner or an interested party for a site. The specific advertisement is as follows:

> ***P.Z. 5-16 City of Wildwood Planning and Zoning Commission c/o Department of Planning, 16860 Main Street, Wildwood, Missouri*** *– A request to review and consider the addition of residential land uses as permitted activities within the 'Downtown and Workplace Districts' designation under the 'Regulating Plan' of the City's Town Center Plan. Currently, these two (2) land use designations do not allow residential uses, whether single family or multiple family types. Recently, a number of inquiries have been made about this change.* (***Wards One, Four, Five, Seven, and Eight***)

DISCUSSION OF PERTINENT POINTS >>> The Department has identified certain considerations above that have prompted the presentation of this request to the Planning and Zoning Commission for its review and discussion. The Department would note that a number of important discussions points have also been identified relative to changes of these types for consideration at tonight's public hearing, which would include the following:

1. The loss of available acreage for future, and sustainable, commercial development in Town Center and City of Wildwood, whether under the "Downtown or Workplace District" regulations.
2. The alterations of land use at the street frontages, not behind buildings fronting the same. Potentially, if such were to be considered, residences could be placed across the street from commercial activities, but not in the defined pattern sought by New Urbanism principles.
3. The integration of differing land uses elsewhere beyond just the fronting streets.
4. The potential increase in population at key commercial locations in Town Center Area.
5. The integration of ground floor retail or commercial uses, as part of any residential development proposal in the "Downtown and Workplace Districts."
6. The fiscal impacts of such changes on taxes, assessments, collections, etc.

These points will be the focus of tonight's discussion on this potential set of changes to the permitted land uses of these specific commercial districts of the Town Center Plan.

SUMMARY AND CONCLUSION >>> If any of the Commission members should have questions or comments in this regard before tonight's public hearing, please feel free to contact the Department of Planning at (636) 458-0440. Thank you for your input on this matter at tonight's hearing.

Land Use Activities	*Land Use Classifications*					
Commercial	D	W	NG*	NE	C/I	POND
Animal Hospitals & Veterinary Clinics	P	P				
Art or Photo Studios or Galleries	P	P	P		C	P
Bakeries	P	P	P		C	P
Barber & Beauty Shops	P	P	P		C	P
Cleaning, Pick-up Stations	P	P	P		C	P
Coffee Shops	P	P	P		C	P
Department or Discount Stores	P					
Filling Stations for Automobiles	P	C			C	
Financial Institutions w/ Drive-Thru Facilities	P	P			C	
Financial Institutions w/o Drive-Thru Facilities		P	P		C	
Flower or Plant Stores	P	P	P		C	
Hotels	P				C	
Music or Dancing Academies	P	P			C	
Office/Warehouse Facilities	P	P	P			
Parking Areas	P	P				P
Parking Garages	P	P	P			
Professional Offices including Medical and Dental	P	P			C	
Professional Offices, not medical or dental	P	P	P		C	P
Recreational Facilities, including indoor theaters and outdoor activities	P				C	
Recreational Facilities (no indoor theater or outdoor activities)		P			C	
Research Laboratories & Facilities	P				C	
Restaurants, including fast food, w/ Drive-Thru facilities**	P				C	
Restaurants, including fast food, but w/o drive thru facilities	P	P			C	
Restaurants, no fast food	P	P	P		C	P
Sewage Treatment Facilities	P	P	P	P		P
Shops for Artists and Similar Specialties		P	P		C	P
Stores and Shops for Retail Purposes	P	P			C	
Stores, Shops, and Open-Air Markets for Retail Purposes	P	P	P			
Taverns, Cocktail Lounges, Night Clubs, or Micro-Breweries	P	P			C	
Vehicle Service Centers	P	C				
Cultural/Institutional						
Cemeteries, Mausoleums				P	C	P
Child Care Centers	P	P	P	P	C	P
Churches	P	P	P	P	P	P
Civic Buildings(government)	P	P	P	P	P	P
Colleges, Universities					P	
Libraries			P	P	P	P
Museums					P	
Nursing Homes			P		P	
Park & Open Spaces; Public and Private areas	P	P	P	P	P	P
Philanthropic Institutions					C	

Land Use Activities	*Land Use Classifications*					
	D	W	NG*	NE	C/I	POND
Post Offices	P	P			P	
Public and Other Utility Facilities	P	P			C	
Recreational Fields					P	
Scenic Areas	P	P	P	P	P	P
Schools			P	P	P	
Wildlife Refuges						
Housing						
Multi-Family Residential(live/work, rowhouses, and apartments)			P		P	P
Single-Family Attached			P		C	
Single-Family Detached			P	P	C	P
Other Housing						
Accessory Dwelling Units			P	P		P
Bed and Breakfasts			P	P		P
Group Shelters			P	P		P
Home for the Aged			P	P	C	
Home Occupations			P	P		P

P Uses permitted by right

C Uses requiring conditional use permit

* See Neighborhood General District text for a detailed explanation of permitted uses within the context of building types

** Any building footprints within the Workplace districts exceeding 10,000 sq. ft. require conditional approval

** Any building footprints within the Commercial districts exceeding 40,000 sq. ft. require conditional approval

Permitted uses and specific site requirements shall be subject to further definition or qualification as provided by ordinance

Zoning Abbreviations Key

D- Downtown
W- Workplace
NG- Neighborhood General
NE- Neighborhood Edge
C/I- Cultural/Institutional overlay
Pond – Pond Historic District

Downtown District

This design/land use district is the most urban permitted within the Town Center Area. It is intended to be a walkable, mixed-use downtown for Wildwood and surrounding communities, which can be active at least eighteen (18) hours a day and seven (7) days a week. The intent is to create intensive development within a traditional street and block system, and not to permit isolated individual structures surrounded by parking lots. Although intensive development is encouraged, the topography of watersheds and creeks should be respected in all development proposals.

Permitted Land Uses

This design/land use district permits multiple-story buildings, hotels, offices, retail stores, restaurants, and entertainment uses constructed within a street and block system. Garage parking is encouraged. Condominium and rental apartment buildings are permitted, but ground floors are limited to commercial uses only. Row houses are permitted by conditional use permit (CUP), but not on principal streets.

See the Permitted Land Use Chart on Pages xx for details.

Building Types

Mixed-use buildings, retail buildings, offices, hotels, restaurants, entertainment uses, apartment buildings, parking garages.

Lot Size (unless otherwise site-specific)

Lot Width: Twenty (20) feet minimum/no maximum, but lot must be within a street and block system
Lot Depth: Eighty (80) feet minimum/no maximum, but lot must be within a street and block system
The maximum block perimeter at the building line is 2,000 feet. The long dimension of each block may not be less than twice the short dimension.

Building Standards

Minimum Frontage Requirement: Seventy (70) percent of the frontage along Main Street and other designated Principal Streets should be occupied by buildings.

Front Setback: Facades shall be placed at the lot's frontage line, except that recesses can occur for outdoor dining areas and to create vertical bays. Frontage lines can be established on private streets that are internal to a property, as long as a continuous street and block system is maintained.

Corner buildings shall accommodate a clear view triangle defined by two (2) points thirty (30) feet from the intersection of the sidewalk curbs extended.

Side setbacks: Side setbacks for unattached buildings shall be a minimum of five (5) feet.

Rear setback: Minimum rear setback of principal building from rear lot line: thirty (30) feet; from alley or access lane: five (5) feet.

Maximum Building Height: 3.5 stories or forty (40) feet measured from the average grade level at the front facade to the eave or top of parapet. Exception: vertical elements (towers, belvederes, etc.) no greater than 240 square feet (footprint) may be up to sixty (60) feet high measured at the eave. However, the maximum building height for apartment buildings may be five (5) stories or sixty (60) feet measured from the average grade level at the front facade to the eave or top of parapet.

Building Footprints: Footprints exceeding 40,000 square feet require a Conditional Use Permit (CUP).

Ground Floor: Ground floor uses shall be commercial, and the ground floor facade along the primary street shall have continuous storefront windows, with the exception of necessary piers, columns, pilasters, etc., unless otherwise modified by a conditional use permit (CUP).

Building Height Calculations: Basements with ceilings three (3) feet or less above grade shall not count as a story. Habitable attics with floors three (3) feet or less below the eaves shall count as 1/2 story.

Large Spaces: Users requiring over 20,000 square feet must still maintain continuous storefront windows and primary entrances along street facades. Such windows and entrances can be for smaller users, as long as they are provided within the context of the larger use.

Facade Standards

Elevation: In general, all buildings should be at sidewalk grade. Commercial frontages should be at sidewalk grade. Apartment Building and Row House ground floors shall be at least 1.5′ above grade at the front and at the street side of corner lots, although entrances must meet ADA access requirements.

Interior Height: The first story interior clear ceiling height shall be at least twelve (12) feet for all buildings, except hotels, apartment houses, and row houses. The lobby spaces for hotels and apartment buildings should have interior clear ceiling heights of at least twelve (12) feet.

Vertical Bays: Facades visible from a street shall be broken into vertical bays not exceeding thirty (30) feet in width through the use of one (1) or more of the following: façade recesses, facade projections, or pilasters. Supplemental elements might include canopies, roofline changes, and parapet changes.

Arcades: If provided, shall have a minimum depth of ten (10) feet.

Ground Floor: Ground floor facades shall have continuous storefront windows along the primary street frontage. This requirement does not preclude vertical elements typically used to separate window units. As required by Building Standards, large space users requiring more than 20,000 square feet must still meet this requirement, which can be satisfied, if other uses line the street frontage and the larger structure is located behind them.

Entrance: Each individual ground floor store, restaurant, office, or other use, shall have at least one (1) main entrance having direct access to the applicable primary street. Service access doors shall only face parking areas, secondary streets, and/or service lanes.

Site Standards

Pedestrian Friendly Design: Site plans in the Downtown District should provide for continuity from sidewalks in public streets to all pedestrian entrances on the site, and walkability should be given primary importance over road speed and other access criteria.

Public Open Space: Developments located within the City's Town Center Area shall meet the requirements of the City's Zoning Ordinance for public space dedications, as set forth in Chapter 415.169 Public Space Requirements. These requirements may be modified by the City Council, as part of an approved site-specific ordinance, whether by a C-8 Planned Commercial District or a Planned Residential Development Overlay District. Public Space has been deemed to be of critical importance to the character of the community.

Environmental Preservation: In general, all development within the City's Town Center Area should be designed and built in such a way as to minimize adverse impacts on the natural environment. The design, engineering, and construction of projects located within the Town Center Area shall be subject to the environmental protection standards and regulations, as set forth specifically in the following: Chapter 420.200 Natural Resource Protection Standards and Procedures of the Subdivision and Development Regulations; Chapter 415 Grading Code; and Chapter 410 Tree Preservation and Restoration Code. These requirements may be modified by the City Council, as part of an approved site-specific ordinance, whether by a C-8 Planned Commercial District or a Planned Residential Development Overlay District.

Parking Requirements: Parking shall be provided at a ratio of three (3) spaces per 1,000 square feet of gross floor area, although reductions will be considered for shared parking proposals between abutting and adjacent properties, as herein described. On-street parking within three hundred (300) feet of the main access door into the building or use shall also count towards the required amount of total spaces. Outdoor parking lots should meet Green Parking Lot standards (as developed and to be acted upon by the City Council at a future date).

Parking Locations: Off-street parking spaces are to be located behind a building or garden wall.

Access: Off-street parking shall only be accessed by a secondary street or service lane. Service docks shall only be accessed from a secondary street or service lane.

Walls: In the absence of buildings, garden style walls shall be placed on the frontage line (edge of sidewalk furthest from street) and shall be thirty-two (32) inches to forty-two (42) inches in height. Walls shall be brick, stone, or acceptable alternative and have a masonry cap, where consistent.

Screening of Services: All loading and service activities, including storage of garbage and rubbish containers, shall take place within the building or must be screened from view from adjacent properties and primary and secondary streets.

Storm Water Management and Retention: All developments located within the Town Center Area shall meet current standards and requirements for the

management and control of stormwater runoff, as set forth by the City of Wildwood and the Metropolitan St. Louis Sewer District.

Workplace District

Workplace Districts shall be located along arterial streets. These design/ land use districts are primarily for offices, including medical and dental offices and clinics, and individual retail or restaurant businesses. Live-work units are also permitted. The intent of the Workplace District is to encourage businesses that have an individual character and relate to the immediate street. Individual developments should have a landscaped perimeter, and parking areas should be primarily at the side and rear of the buildings. The topography of watersheds and creeks should be respected in all development proposals. This design/land use district is not intended to permit commercial strip development, where individual structures are surrounded by parking, or parking lots are built in front of buildings.

Permitted Land Uses

This district permits a variety of commercial and institutional uses; residential uses are permitted on upper floors or as live-work units, either as condominiums or rentals

See the Permitted Land Use Chart on Pages xx for details.

Building Types

Permitted Buildings: Commercial Facilities, including offices, medical and dental offices, and clinics; shops and restaurants; schools; Parking Garages.

Lot Size (unless otherwise site-specific)

Lot Width: Thirty (30) foot minimum/250 foot maximum
Lot Depth: Eighty (80) foot minimum/250 foot maximum

Building Standards

Front Setback: Facades shall be placed at the lot's frontage line, which is ten (10) feet from the edge of public right-of-way, except that recesses can occur for outdoor dining areas and to create vertical bays. Corner buildings shall accommodate a clear view triangle defined by two (2) points thirty (30) feet from the intersection of the sidewalk curbs extended.

Side setbacks: Fifteen (15) feet total, but no less than five (5) feet on one (1) side.

Rear Setbacks: Minimum Rear Setback of principal building from rear lot line: thirty (30) feet; from alley or lane: three (3) feet.

Maximum Building Height: 3.5 stories or forty (40) feet measured from the average grade level at the front facade to the eave or top of parapet. Exception: vertical elements (towers, belvederes, etc.) no greater than 240 square feet (footprint) may be up to sixty (60) feet high measured at the eave.

Building Footprints: Footprints exceeding 10,000 square feet in the Workplace District require a conditional use permit (CUP).

Facade Standards

Elevation: The first story shall be at sidewalk grade.

Interior Height: The first story interior clear ceiling height shall be at least twelve (12) feet, unless the building size dictates otherwise.

Vertical Bays: Facades visible from a street shall be broken into vertical bays not exceeding thirty (30) feet in width through the use of one (1) or more of the following: façade recesses, facade projections, or pilasters. Supplemental elements might include canopies, roofline changes, and parapet changes.

Arcades: If provided, shall have a minimum depth of ten (10) feet.

Ground Floor: Ground floor facades shall have at least fifty (50) percent window and door openings along the primary street frontage. This requirement does not preclude vertical elements typically used to separate window units.

Entrance: Each ground floor space shall have at least one (1) primary entrance having direct access to the applicable primary street. Service access doors shall only face parking areas, secondary streets, or service lanes - be operable.

Site Standards

Pedestrian Friendly Design: Site plans in the Workplace District should provide for continuity from sidewalks in public streets to all pedestrian entrances on the site, and walkability should be given primary importance over road speed and other access criteria.

Public Open Space: Developments located within the City's Town Center Area shall meet the requirements of the City's Zoning Ordinance for public space dedications, as set forth in Chapter 415.169 Public Space Requirements. These requirements may be modified by the City Council, as part of an approved site-specific ordinance, whether by a C-8 Planned Commercial District or a Planned Residential Development Overlay District. Public Space has been deemed to be of critical importance to the character of the community.

Landscaped Perimeter: The side and rear boundaries of individual properties in the Workplace District shall comply with the City of Wildwood Buffer Yards Standards type 3 or higher with a width of no less than twenty (20) feet, except that these requirements may be modified by the City Council, as part of an approved site-specific ordinance, whether by a C-8 Planned Commercial District or a Planned Residential Development Overlay District.

Environmental Preservation: In general, all development within the City's Town Center Area should be designed and built in such a way as to minimize adverse impacts on the natural environment. The design, engineering, and construction of projects located within the Town Center Area shall be subject to the environmental protection standards and regulations, as set forth specifically in the following: Chapter 420.200 Natural Resource Protection Standards and Procedures of the Subdivision and Development Regulations; Chapter 415 Grading Code; and Chapter 410 Tree Preservation and Restoration

Code. These requirements may be modified by the City Council, as part of an approved site-specific ordinance, whether by a C-8 Planned Commercial District or a Planned Residential Development Overlay District.

Parking Requirements: Parking must be provided at a ratio of three (3) spaces per 1,000 square feet of gross floor area, although reductions should be considered for shared parking proposals between abutting and adjacent properties, as herein described. On-street parking within three hundred (300) feet of the main access door into the building or use shall also count towards the required amount of total spaces.

Parking Locations: Off-street parking spaces shall be located behind buildings or beside them, if the lot is small and there is no alternative. Parking should not be provided between the building and the street. At-grade outdoor parking lots should meet Green Parking Lot standards (as developed and to be acted upon by the City Council at a future date).

Access: Off-street parking shall only be accessed by a secondary street or service lane.

Walls: In the absence of buildings, garden style walls shall be placed on the frontage line (edge of sidewalk furthest from street) and shall be thirty-two (32) to forty-two (42) inches in height. Walls shall be brick, stone, or acceptable alternative and have a masonry cap, where consistent.

Screening of Services: All loading and service activities, including storage of garbage and rubbish containers, shall take place within the building or must be screened from view from adjacent properties, and primary and secondary streets.

Storm Water Management and Retention: All developments located within the Town Center Area shall meet current standards and requirements for the management and control of stormwater runoff, as set forth by the City of Wildwood and the Metropolitan St. Louis Sewer District.

Neighborhood General District

The intent of this design/land use district is to provide a variety of housing types, including apartments and row houses, in walkable neighborhoods close to the Downtown and Workplace Districts. Institutional uses and ground-floor commercial uses on principal streets are also permitted. The topography of watersheds and creeks should be respected in all development proposals.

Permitted Land Uses

This district permits a wide variety of residential uses, including condominium and rental apartment buildings and row houses. Ground floor commercial spaces are permitted within apartment buildings. Other low-intensity commercial uses are allowed, such as Bed & Breakfasts, as well as compatible institutional uses.

See the Permitted Land Use Chart on Pages xx for more details.

Building Types

Permitted Buildings: Rowhouses, Apartment Buildings, Live-Work Buildings, Houses, Parking Garages, and associated Outbuildings. Individual garages and

outbuildings associated with single-family houses may not have footprints that exceed 650 square feet Residential lots may include a secondary residential unit (not to exceed 650 square feet) over the garage or in a detached accessory structure.

Lot Size

Apartment Buildings:
Lot Width: Twenty (20) feet minimum/no maximum, but lot must be within a street and block system
Lot Depth: Eighty (80 feet minimum/no maximum, but lot must be within a street and block system
The maximum block perimeter at the building line is 2,000 feet.

Row houses:
Lot Width: Twenty (20) feet minimum/forty (40) feet maximum within a street and block system, rear access from lane required
Lot Depth: Eighty (80) feet minimum/125 feet maximum within a street and block system, rear access from lane required
The maximum block perimeter for a block containing only row houses is 1,800 feet. This requirement can be satisfied in a larger block by dividing the block with a landscaped mid-block pedestrian walkway no less than twenty (20) feet wide, including a sidewalk of suitable pervious material no less than (5) feet wide, which connects the sidewalks on two streets that form two parallel sides of the larger block.

Houses:
Lot Width: Twenty (20) feet minimum/fifty (50) feet maximum within a street and block system, rear access from lane preferred
Lot Depth: Eighty (80) feet minimum/125 foot maximum within a street and block system, rear access from lane preferred
The maximum block perimeter for a block containing only houses is 2,000 feet.

Building Standards

Apartment Buildings and Row Houses:
Front Setback: At least eighty (80) percent of the front facade of each apartment building or row house must be placed along a uniform build to/set-back line that applies to the full block frontage. This build-to/set-back line should be determined at the time that a street and block plan is approved, and should be from zero (0) feet to fifteen (15) feet from the frontage line. Buildings on corner lots should conform to the build-to/set back requirements for both streets.

Front Setback Exceptions: Stoops, balconies, unenclosed porches, and bay windows may encroach within front setbacks, but not over or into the public right-of-way.

Side Setbacks: Five (5) to fifteen (15) feet (no setback between attached Row House Units).

Minimum Rear Setback of Principal Building from Rear Lot Line: thirty (30) feet from alley or lane: **five** (5) feet.

Maximum Building Height for Apartment Buildings: five (5) stories or sixty (60) feet measured from the average grade level at the front facade to the eave or top of parapet.

Maximum Building Height for Row Houses: 3.5 stories or forty (40) feet measured from the average grade level at the front facade to the eave or top of parapet.

Maximum Building Height for Outbuildings: two (2) stories or twenty-two (22) feet measured at the eave.

Minimum Rear Setback of Principal Building from Rear Lot Line: thirty (30) feet, from alley or lane: three (3) feet.

Building Height Calculations: Basements with ceilings three (3) feet or less above grade shall not count against the number of stories. Habitable attics with eaves no higher than three (3) feet from the floor shall count as 1/2 story.

Houses:
Front Setback: At least eighty (80) percent of the front facade of each house must be placed along a uniform build to/set-back line that applies to the full block frontage. This build-to/set-back line should be determined at the time that a street and block plan is approved, and should be from zero (0) to fifteen (15) feet from the frontage line. Buildings on corner lots should conform to the build-to/set back requirements for both streets.

Front Setback Exceptions: Stoops, balconies, unenclosed porches, and bay windows may encroach within front setbacks, but not over or into the public right-of-way.

Side Setbacks: a total of fifteen (15) feet no less than five (5) feet on one (1) side.

Minimum Rear Setback of Principal Building from Rear Lot Line: twenty-five (25) feet; from alley or lane: **five (5)** feet.

Maximum Building Height for Primary Buildings: 3.5 stories or forty (40) feet measured from the average grade level at the front facade to the eave or top of parapet.

Maximum Building Height for Outbuildings: two (2) stories or twenty-two (22) feet measured at the eave.

Building Height Calculations: Basements with ceilings three (3) feet or less above grade shall not count against the number of stories. Habitable attics with eaves no higher than three (3) feet from the floor shall count as 1/2 story.

Outbuilding Maximum Size: 650 square feet building footprint.

Side Setbacks: Five (5) feet to fifteen (15) feet for Cottages / Ten (10) feet to thirty (30) feet for Houses.

Facade Standards

Elevation: Ground floors of apartment buildings at the front façade line shall be at least 1.5′ above grade at frontage line, but ground-floor shops may be entered at grade and apartment entrances must meet ADA access requirements.

Interior Heights: Ground floor interior clear heights of apartment building lobbies and ground-floor shops shall be no less than twelve (12) feet. Minimum floor to floor heights for apartments: Nine (9) feet.

Vertical Bays: Facades visible from the street shall be broken into vertical bays not exceeding thirty (30) feet in width through the use of one (1) or more of the following: façade recesses, facade projections, or pilasters. Supplemental elements might include canopies, roofline changes, and parapet changes.

Elevation: Ground floors for row houses at the front façade line shall be at least 1.5' above grade at frontage line.

Site Standards

Pedestrian Friendly Design: Site plans in the Neighborhood General District should provide for continuity from sidewalks in public streets to all pedestrian entrances on the site, and walkability should be given primary importance over road speed and other access criteria.

Public Open Space: Developments located within the City's Town Center Area shall meet the requirements of the City's Zoning Ordinance for public space dedications, as set forth in Chapter 415.169 Public Space Requirements. These requirements may be modified by the City Council, as part of an approved site-specific ordinance, whether by a C-8 Planned Commercial District or a Planned Residential Development Overlay District. Public Space has been deemed to be of critical importance to the character of the community.

Environmental Preservation: In general, all development within the City's Town Center Area should be designed and built in such a way as to minimize adverse impacts on the natural environment. The design, engineering, and construction of projects located within the Town Center Area shall be subject to the environmental protection standards and regulations, as set forth specifically in the following: Chapter 420.200 Natural Resource Protection Standards and Procedures of the Subdivision and Development Regulations; Chapter 415 Grading Code; and Chapter 410 Tree Preservation and Restoration Code. These requirements may be modified by the City Council, as part of an approved site-specific ordinance, whether by a C-8 Planned Commercial District or a Planned Residential Development Overlay District.

Parking Requirements for Apartment Buildings: A ratio of 1.5 garage spaces per unit, plus 2.5 spaces per 1,000 square feet of non-residential gross habitable building space shall be required for apartment buildings. Off-street parking may be substituted for a garage by conditional use permit. Any at-grade outdoor parking should meet Green Parking Lot standards (as developed and to be acted upon by the City Council at a future date).

Rowhouses, Houses, and Cottages: Two (2) spaces per unit, plus one (1) space for an accessory unit.

On-street parking adjacent to the frontage line(s) shall also count towards these requirements for Rowhouses and Apartments.

Parking Locations: Off-street parking spaces and garage entrances are to be located behind the building or along the least visible side of the structure from the principal street.

Access: Off-street parking for apartments and rowhouses shall be accessed from either a secondary street or service lane. Off-street parking for houses shall be accessed from either a front driveway or a rear alley or lane.

Walls and Fences: Where voids exist, walls (brick, stone, or comparable material, with masonry cap) or picket fences shall be placed within twenty-four (24) inches of the frontage line and be thirty-two (32) to forty-two (42) inches in height.

Storm Water Management and Retention: All developments located within the Town Center Area shall meet current standards and requirements for the management and control of stormwater runoff, as set forth by the City of Wildwood and the Metropolitan St. Louis Sewer District.

Neighborhood Edge District

The intent of this design/land use district is to provide for single-family houses within the Town Center Area that can be constructed on smaller lots than can be found elsewhere in Wildwood, and are located within walkable neighborhood street systems close to Workplace Districts and the Downtown District. The topography of watersheds and creeks should be respected in all development proposals.

Permitted Land Uses

This design/land use district permits only single-family residential uses, in addition to a narrow range of potentially compatible non-residential uses, such as parks, churches, schools, child care facilities, and civic buildings. However, by conditional use permit, a neighborhood grocery and prepared food service store[1] may be permitted up to 3,000 square feet.

See the Permitted Land Use Chart on Pages xx for more details.

Building Types

Permitted Buildings: Houses, Zero-lot-line Houses, Attached Houses, Garages, **Outbuildings, and Secondary Residential Units:** Garages and outbuildings may not exceed 650 square feet. Residential lots may include a secondary residential unit (not to exceed 650 square feet) over the garage or in a detached accessory structure.

Lot Size (unless otherwise site-specific)

Lot Width: Twenty (20) feet minimum/100′ maximum within a street and block system
Lot Depth: Eighty (80) feet minimum/150′ maximum within a street and block system
Maximum block perimeter: 1,800 feet. This requirement can be satisfied in a larger block by dividing the block with a landscaped mid-block pedestrian walkway no less than twenty (20) feet wide, including a sidewalk of suitable pervious material no less than (5) feet wide that connects the sidewalks on two streets that form two parallel sides of the larger block.

Building Standards

[1] Convenience store with a floor area limited to a specific maximum and the owners offer prepared food.

Front Setback: At least sixty (60) percent of the front facade of each house must be placed along a uniform build to/set-back line that applies to the full block frontage. This build-to/set-back line should be determined at the time that a street and block plan is approved, and should be from ten (10) feet to twenty-five (25) feet from the frontage line. Houses on corner lots should conform to the build-to/set back requirements for both streets.

Front Setback Exceptions: Stoops, balconies, unenclosed porches, and bay windows may encroach within front setbacks.

Side Setbacks: Attached houses and zero-lot line houses with fifteen (15) foot setbacks on one (1) side only may be approved by a conditional use permit (CUP). For detached houses, total side setbacks should equal a minimum of fifteen (15) feet, but should be no less than five (5) feet on any side.

Rear Setback: Twenty-five (25) feet for primary buildings/three (3) feet for outbuildings.

Maximum Building Height for Primary Buildings: 3.5 stories or thirty-five (35) feet measured from the average grade level at the front facade to the eave or top of parapet.

Maximum Building Height for Outbuildings: Two (2) stories or twenty-two (22) feet measured at the eave.

Building Height Calculations: Basements with ceilings three (3) feet or less above grade shall not count as a story. Habitable attics with floors three (3) feet or less below the eaves shall count as 1/2 story.

Outbuilding Maximum Size: 650 square feet building footprint.

Facade Standards

Elevation: Ground floors of buildings at the front façade shall be at least 1.5′ above grade, except that garages can be at grade. Front access garages must be recessed a minimum of fifteen (15) feet from the front facade or porch. The fifteen (15) feet minimum recess also applies to side facades on corner lots. Garage door openings fronting a street may not exceed twelve (12) feet, so that two (2) car garages shall have two (2) individual door openings. Foundations fronting on streets shall be continuous walls, not individual piers

Site Standards

Pedestrian Friendly Design: Site plans in the Neighborhood Edge District should provide for continuity from sidewalks in public streets to all pedestrian entrances on the site, and walkability should be given primary importance over road speed and other access criteria.

Public Open Space: Developments located within the City's Town Center Area shall meet the requirements of the City's Zoning Ordinance for public space dedications, as set forth in Chapter 415.169 Public Space Requirements. These requirements may be modified by the City Council, as part of an approved site-specific ordinance, whether by a C-8 Planned Commercial District or a Planned Residential Development Overlay District. Public Space has been deemed to be of critical importance to the character of the community.

Environmental Preservation: In general, all development within the City's Town Center Area should be designed and built in such a way as to minimize adverse impacts on the natural environment. The design, engineering, and construction of projects located within the Town Center Area shall be subject to the environmental protection standards and regulations, as set forth specifically in the following: Chapter 420.200 Natural Resource Protection Standards and Procedures of the Subdivision and Development Regulations; Chapter 415 Grading Code; and Chapter 410 Tree Preservation and Restoration Code. These requirements may be modified by the City Council, as part of an approved site-specific ordinance, whether by a C-8 Planned Commercial District or a Planned Residential Development Overlay District.

Parking Requirements: Two (2) garage spaces per dwelling unit, one (1) off-street car space for an accessory unit. Designated on-street parking within three hundred (300) feet of the main access door into the building or use can count towards parking requirements. Any outdoor at-grade parking should meet Green Parking Lot standards (as developed and to be acted upon by the City Council at a future date).

Access: Garage parking shall be accessed from either a front driveway or a rear alley or lane. Front facing driveways should be no wider than ten (10) feet between the build-to/setback line and the street. Front-facing garages should be located no less than twenty-five (25) feet behind the build-to/set-back line. Each front-facing garage space should have an individual garage door.

Storm Water Management and Retention: All developments located within the Town Center Area shall meet current standards and requirements for the management and control of stormwater runoff, as set forth by the City of Wildwood and the Metropolitan St. Louis Sewer District.

Cultural/Institutional District

The purpose of this design/land use district is to permit a variety of institutional uses that will reinforce the unique attractions of the Town Center Area as a place to work, shop, and live. The design and character of public open spaces is particularly important in this district. The topography of watersheds and creeks should be respected in all development proposals.

Permitted Land Uses

This design/land use district permits a variety of institutional uses, such as churches, schools, governmental buildings, libraries, museums, congregate living, and parks. In the case of colleges and universities, the district also permits "conditional" uses that are supportive and ancillary to the functioning of an institution of higher learning.

See the Permitted Land Use Chart on Pages xx for more details.

Design Standards

Building Locations: Within the context of the Town Center Area, locations at special sites, such as those mapped as Locations of civic importance, and other high-visibility sites, such as those terminating a street axis, should be sought for individual institutional buildings.

Building Setbacks: Institutional buildings may have different front and side setbacks than those of non-institutional buildings in order to emphasize their significance. There are no minimum or maximum front, side, or rear building setbacks within the Cultural/Institutional Overlay District, instead appropriate setbacks will be determined on a site specific basis by conditional use permit (CUP).

Building Height: No building within a Cultural/Institutional District shall exceed a height of sixty (60) feet, measured from final finish grade at the main entry area facing the primary street, although vertical architectural elements, such as steeples and cupolas may extend up to twenty-five (25) feet above the height limit.

Architectural Character: Main entrances should be clearly articulated through their prominent location, size, and design. Roof forms might also include cupolas, steeples, and similar vertical architectural elements intended to give the building prominence.

Site Standards

Pedestrian Friendly Design: Site plans in the Cultural/Institutional Overlay District should provide for continuity from sidewalks in public streets to all pedestrian entrances on the site, and walkability should be given primary importance over road speed and other access criteria.

Public Open Space: Developments located within the City's Town Center Area shall meet the requirements of the City's Zoning Ordinance for public space dedications, as set forth in Chapter 415.169 Public Space Requirements. These requirements may be modified by the City Council, as part of an approved site-specific ordinance, whether by a C-8 Planned Commercial District or a Planned Residential Development Overlay District. Public Space has been deemed to be of critical importance to the character of the community.

Environmental Preservation: In general, all development within the City's Town Center Area should be designed and built in such a way as to minimize adverse impacts on the natural environment. The design, engineering, and construction of projects located within the Town Center Area shall be subject to the environmental protection standards and regulations, as set forth specifically in the following: Chapter 420.200 Natural Resource Protection Standards and Procedures of the Subdivision and Development Regulations; Chapter 415 Grading Code; and Chapter 410 Tree Preservation and Restoration Code. These requirements may be modified by the City Council, as part of an approved site-specific ordinance, whether by a C-8 Planned Commercial District or a Planned Residential Development Overlay District.

Parking Requirements: Parking requirements shall be determined on a case-by-case basis, depending upon the specific use and projected peak-hour demands. Parking should be located and designed so that it can be screened from view from surrounding streets. Arrangements for shared parking are also encouraged. Any outdoor at-grade parking should meet Green Parking Lot standards (as developed and to be acted upon by the City Council at a future date).

Storm Water Management and Retention: All developments located within the Town Center Area shall meet current standards and requirements for the management and control of stormwater runoff, as set forth by the City of Wildwood and the Metropolitan St. Louis Sewer District.

Pond Historic District

The purpose of this district is to preserve and enhance the historic character of the Pond Area of Wildwood, which has a concentration of assets that have been identified as significant because of their age, architecture, or role in the community. Pond has been a village with a rural character and a mix of low-intensity residential and commercial land uses since the 1850's, but more recently experienced inappropriate intrusions of industrial uses, as authorized by St. Louis County. All alterations and additions to buildings in this district are subject to review and approval under Section 440 of the Wildwood Municipal Code, while all proposed new buildings shall be conditioned on the requirements therein applied by a site-specific ordinance associated with a zoning change of the property.

Permitted Land Uses: Single family residential buildings, apartment buildings of six (6) units or fewer, retail businesses occupying less than 5,000 square feet on the ground floor, offices (general, professional, and medical/dental types), bed and breakfasts, restaurants, and institutional buildings

Design Standards

Building Height: The height of any proposed alteration or addition should be compatible with the style and character of the historic property. No building within the Pond Historic District shall exceed a height of thirty-five (35) feet, measured from final finish grade at the main entry area facing the primary street, although vertical architectural elements, such as steeples and cupolas, may extend up to twenty-five (25) feet above the height limit.

Building Setbacks: The setback and relationship of a historic structure to the open space between it and adjoining street/roadway should be maintained. New structures should be compatible with prevailing existing setbacks.

Scale: The scale of any new, or existing, structure, after any alteration or construction, should be compatible with the original architectural style and character of any historic building that is located on the site and all development should be in blend with surrounding historic properties.

Directional Expression: Surrounding development should be compatible with the directional expression and orientation of neighboring historic properties.

Signs: The character of signs should be in keeping with the historic architectural style of the property. Character of a sign shall be interpreted to include the total number, size, area, scale, location, type, (e.g., on-site business signs), letter size and style, and intensity and type of illumination.

Site Standards

Pedestrian Friendly Design: Site plans in the Pond Historic District should provide for continuity from sidewalks in public streets to all pedestrian entrances on the site, and walkability should be given primary importance over road speed and other access criteria.

Public Open Space: Developments located within the City's Town Center Area shall meet the requirements of the City's Zoning Ordinance for public space

dedications, as set forth in Chapter 415.169 Public Space Requirements. These requirements may be modified by the City Council, as part of an approved site-specific ordinance, whether by a C-8 Planned Commercial District or a Planned Residential Development Overlay District. Public space has been deemed to be of critical importance to the character of the community.

Environmental Preservation: In general, all development within the City's Town Center Area should be designed and built in such a way as to minimize adverse impacts on the natural environment. The design, engineering, and construction of projects located within the Town Center Area shall be subject to the environmental protection standards and regulations, as set forth specifically in the following: Chapter 420.200 Natural Resource Protection Standards and Procedures of the Subdivision and Development Regulations; Chapter 415 Grading Code; and Chapter 410 Tree Preservation and Restoration Code. These requirements may be modified by the City Council, as part of an approved site-specific ordinance, whether by a C-8 Planned Commercial District or a Planned Residential Development Overlay District.

Parking Requirements: Parking requirements shall be determined on a case-by-case basis for each use, depending upon the specific nature of the activity and the projected peak-hour demands associated with it, but may not exceed the number of required spaces set forth for the activity in the City of Wildwood's Zoning Ordinance. Parking should be located and designed so that it can be screened from view from abutting streets. Arrangements for shared parking are also encouraged within this district. Any outdoor at-grade parking should meet Green Parking Lot standards (as developed and to be acted upon by the City Council at a future date).

Storm Water Management and Retention: All developments located within the Town Center Area shall meet current standards and requirements for the management and control of stormwater runoff, as set forth by the City of Wildwood.

Other: Certain activities previously authorized by St. Louis County or determined to be legal, non-conforming uses by the Zoning Ordinance of the City of Wildwood, shall be considered grandfathered under their current zoning district designations and may be allowed to make alterations, changes, expansions, or other modifications consistent with the requirements of either Chapter 415.460 Non-Conforming Uses, Lands, and Structures, Chapter 415.560 Procedure for Amending the Zoning Ordinance of the City of Wildwood Zoning Ordinance, or under the authority set forth in the site-specific ordinance for that property.

From: **Scott Haley** shaley@kpstl.com
Subject: NP Wildwood, LLC -- zoning report
Date: March 18, 2016 at 9:37 AM
To: Joe Vujnich JVujnich@cityofwildwood.com, Kathy Arnett Kathy@cityofwildwood.com

SH

Joe/Kathy,
Hope all is well.

With today being Friday, I am certain that you are wrapping up the report for Monday's meeting.

I am hopeful that staff has incorporated in the upcoming report that all the of our site specific ordinances (with all the subsequent amendments) and the accompanying staff reports encouraged the creation of a true mixed-use community. The site specific emphasized all major use components of residential, recreational and commercial activities, and that Phase II (Western side) was to potentially include up to 100 residential units.

Furthermore, all great downtowns/town centers (big or small, old or evolving) are as strong as the residents with that districts. These downtown/town center residents provide continuous life, energy and activity to the area. The intrinsic value added by a strong and growing residential base in these areas is hard to quantify, but certainly important and vital.

As both of you know, the *anatomy of successful downtowns/town centers* includes: community gathering spaces, restaurants/outdoor dining, farmers market, city hall, street retail, office space, etc – just to identify a few. But always on the top of the these lists is the incorporation of ***residential*** (ie, multi-family housing, adult communities, single-family) – the link that makes the other components successful.

Finally, your conversations with several other residential developers the past several months, highlights the desire for a variety of housing types (in addition SF) in the Wildwood Town Center.

The support and recognition of our current site specific ordinances and re-incorporating residential in the Downtown District is vital to the long-term success to the Wildwood Town Center.

Scott Haley
Managing Director of Development
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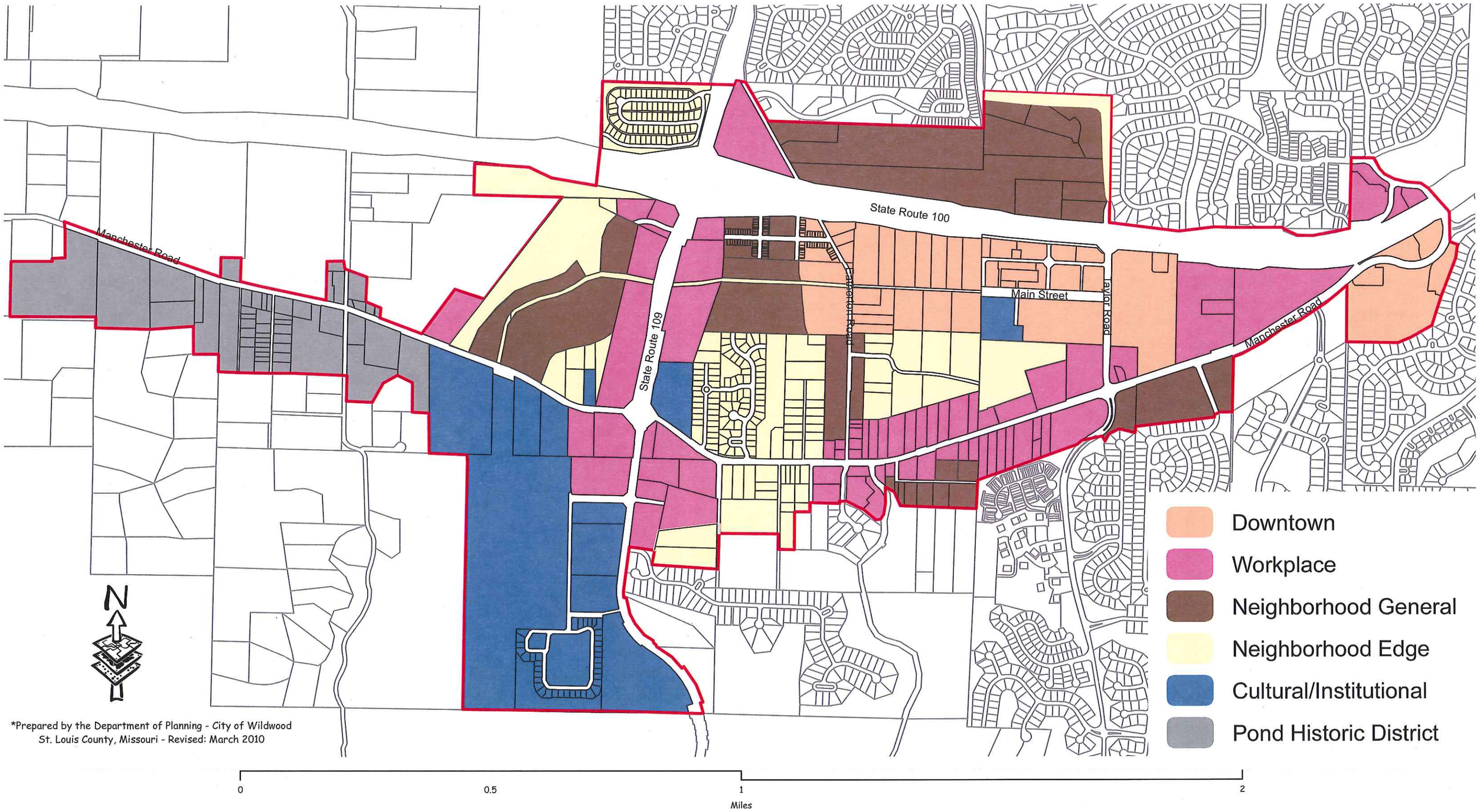
KP Development
www.kpstl.com

CITY OF WILDWOOD
MAR 18 2016
DEPT OF PLANNING & PARKS

WILDWOOD

City of Wildwood Town Center Area - Ten Year Update
Final Land Use/Regulating Plan Map



*Prepared by the Department of Planning - City of Wildwood
St. Louis County, Missouri - Revised: March 2010

AGENDA ITEM **OLD BUSINESS**

WILDWOOD

INFORMATION REPORT

Prepared by Department of Planning
March 21, 2016 Executive Session
"Planning Tomorrow Today"

Petition No.:	P.Z. 3-16
Petitioner:	**City of Wildwood Planning and Zoning Commission c/o Department of Planning**
Request:	A request for the Planning and Zoning Commission's review and action on the 2016 update of the City of Wildwood's Master Plan. The updated Master Plan has been under review by the Master Plan Advisory Committee (MPAC) since January 2015 and its members have acted favorably on this draft and are submitting it for consideration herein. The Master Plan establishes goals, objectives, and policies for the protection of the environment, application of planning techniques for land use and development purposes, allocation of resources and services, prioritization of transportation and infrastructure improvements, provision of public space and recreational amenities within the community, and economic development. Along with these goals, objectives, and policies, the Master Plan establishes types and densities/intensities of land use for every parcel of ground within the boundaries of the City of Wildwood. The City's Charter requires this plan to be updated every ten (10) years, and was last updated in 2006.
Location:	Citywide
Public Hearing Date:	March 7, 2016
Date and Vote On Information Report:	March 21, 2016 - TBD
Report:	Attachment A
Master Plan:	Attachment B
Comprehensive Zoning Plan:	Attachment C
Wards:	All

Recommendation: The Department of Planning is recommending the adoption of the updated 2016 version of the City of Wildwood's Master Plan.

In the report, evidence is provided indicating the following:

1. The Department believes the updated Master Plan will continue to provide excellent guidance to the City's elected and appointed officials under the proposed revisions, but equally important, the document has now been changed to reflect the lessons of the last ten (10) years in terms of its successes and shortcomings.
2. The update process followed a precise plan for public input and comment and meets all State and local requirements for this purpose.

3. The Department is also submitting the Conceptual Land Use Categories Map and Comprehensive Zoning Map of the City's Charter for consideration and action as well. All of these maps are supporting documentation for the Master Plan.
4. The required public hearings at the Planning and Zoning Commission and City Council have been posted in the required timeframe and in accordance with the State and local laws.
5. The Department of Planning is recommending the Planning and Zoning Commission adopt the updated Master Plan for 2016, as attached, which includes the Master Plan Advisory Committee's two (2) recommended land use changes identified in this report.

ATTACHMENT A - Report

History of Planning Process and Plan – 1995 to 2015

The City of Wildwood, Missouri began the development of its Master Plan shortly after its incorporation on September 1, 1995. The first step in the development of the Master Plan was the selection of a consultant to begin the data collection and analysis process towards formulating a plan to achieve the goals of the "Plan of Intent" and the individual ward studies completed after the February 1995 election. Once the consultant had been selected, parameters were set to ensure consistency in the development of land, expenditures on infrastructure, and the delivery of services between the plan and the desires of residents of the City of Wildwood. Jonathan Barnett, a nationally recognized urban planner from Washington, D.C., was selected to guide this process. The City committed over $250,000.00 in public funds to complete this fundamental land use planning process.

The basis of the adopted 1996 version of the Master Plan for the City of Wildwood were those referenced individual ward studies that had been created by interested parties from the different areas of the community, which was accomplished after the February 1995 election, but before the actual incorporation. These ward studies were intended to provide a more detailed direction about future land use, roadway modifications, and other issues of concern for those areas of Wildwood and refine the general information contained in the 'Plan of Intent.' Many of the recommendations of the ward studies were made based upon two (2) studies conducted by St. Louis County, prior to the incorporation of the City: **the Pond-Grover Community Area Study and the Wild Horse Valley Community Area Study**. These recommendations revised many of the principle considerations of these studies for future land use, infrastructure, and development within those areas that St. Louis County had supported.

Along with these ward studies, and the two (2) community area studies authored by St. Louis County, the writers of the City's first Master Plan utilized other reports created by the former jurisdiction to assist in creating this document. These other reports included the County's General Plan, the General Plan updates, and the landmark document "Guide for Growth." With this information, the writers of this plan were able to understand the patterns of development and land use policies that had been created for this area over a span of several decades and draw conclusions about their successes (the Non-Urban District) and failures (the Planned Environment Unit - PEU). Additionally, these reports offered insights into the desires of planners overseeing this area for thirty plus (30+) years. Availing such information to the process of creating a document of this magnitude eliminated many potential pitfalls in terms of misunderstanding the character of this area soon to be the City of Wildwood.

Over the next several months, additional data was collected and analyzed relative to the City and its residents. Numerous citizens provided support and input into this process, creating a sounding board for the preliminary findings of the community profile and analysis. Additionally, numerous focus group discussions were held with interested parties and residents to further identify concerns and desires. Ultimately, this process yielded the following conclusions, which not surprisingly, supported the tenets of the Plan of Intent, as well as the findings of each of the individual ward studies:

- The community did not accept, nor support, scattered high-density residential developments throughout the entire community. In fact, the community supported a low-density development pattern that promoted residential densities at no greater than one (1) unit per every three (3) acres of land area. Along with a low-density residential development pattern, the system of rural roadways should be retained, with topical safety improvements only.

- The community did support the creation of a land use category, which acknowledged an existing development pattern in certain areas of the City that was more intensive than site conditions, topography, and infrastructure would normally accommodate, but at a lesser density to compensate for these areas of previous over-development. This new pattern would allow a range of residential densities between one (1) unit for every three (3) acres to two (2) lots per acre.
- The community did support the location of higher density residential land uses in the wedge of properties located between State Route 100, State Route 109, and Manchester Road based on the following assets: access, reasonable anticipation of such uses, existing zonings for similar type of activities, infrastructure, utilities, and favorable environmental characteristics of the land. This higher density area was designed to allow a full range of uses and units in the City, but plan their location more reasonably, so the placement of any given development was not haphazard. This development area would be based upon "New Urbanist" planning principles, concurrency with infrastructure and services, and other principles voiced by the community.

With the framework of the Master Plan, the community set forth to create specific land use classifications for the entire City. These classifications were to reflect the input from the community, the environmental assessment completed by a consultant to the City, and the existing level of development and zoning patterns within Wildwood. To this end, the City created four (4) general land use classifications for the entire sixty-seven (67) square miles comprising this community. These classifications included the **Industrial Category, the Town Center Category, the Suburban Category, and the Non-Urban Category**. Each of these categories includes a list of requirements for the future development of properties. The categories were clearly designated on a map of the City, as dictated by the planning principles noted above and within the Master Plan.

The **Industrial Category** is applied to properties located in the Chesterfield Valley Area of the City and either already designated under an industrial zoning district classification or being utilized for a similar type of activity. These properties, given their proximity to the Spirit of St. Louis Airport and that accompanying land use pattern, mandated such a designation.

The **Town Center Area Category** is applied to properties in the traditional hub of the area, which became the City of Wildwood. Unlike other areas where high-density development had been attempted, these properties can accommodate higher densities and anticipated mixed-use development patterns. The Town Center Area designation was premised on the existing zoning patterns, topographic conditions, historic assets, infrastructure development, and the availability of utilities. Given these factors, the designation of this area for higher density residential development and commercial land use was, and continues to be, logical and appropriate.

The **Non-Urban Residential Category** is applied to properties throughout the community where infrastructure and public utilities are lacking and topography is difficult, or so restrictive in nature that a low-density residential development pattern is appropriate. The existing development pattern in this area is also low-density residential in nature and consistent with the proposed land use classification.

The **Sub-Urban Residential Category** is applied to properties that were designated as in-fill locations due to the level and extent of development surrounding them. The City utilized the work of its environmental consultant to assist in the determination of density, given the majority of these properties are located within the Caulks Creek Watershed, which has been determined to be the most degraded in the City of

Wildwood. After much analysis of the condition of the creek, the over-development of certain areas within the watershed, and the difficult terrain of the remaining properties located in this area, the City chose to limit the allowable density to no more than two (2) lots per acre, which is an appropriate mid-range designation when all existing development densities are considered in the areas termed Suburban Category (R-1 One Acre Residence District to R-4 7,500 square foot Residence District).

With the establishment of these categories, along with the objectives and policies of the Master Plan, development patterns in the City could be considered not only based upon surrounding zoning and current land use, but on the environmental characteristics of the land, the level of existing infrastructure, the availability of the public utilities, and the preservation of the character of the area that makes this City unique and desirable. These land use classifications balance the previous land use decisions of St. Louis County in this area, against a thorough analysis of the area's physical, social, and economic environment.

Subsequently, in 2002, the City Council approved the creation of the 5th Land Use Category for historic assets. This category is intended to provide the needed incentives to encourage property owners of historic assets to consider their protection, preservation, and adaptive reuse. With this category, the density of residential uses, or the type of activities, can be modified relative to the other land use categories in the Master Plan to provide the needed incentives or capital to accomplish the City's goal of historic preservation.

Since the initial adoption of the Master Plan in 1996, the City has approved a number of other supporting documents, which have been incorporated into this latest updated version. These documents include the Town Center Plan (and Development Manual), the Parks and Recreation Plan, Action Plan for Parks and Recreation 2007, Access and Mobility Plan, and Capital Improvement 5-Year Plan. These documents are referenced in the updated plan and provide the progression of the planning processes in the City and the direction of this community in these specific areas of governance. Along with these plans, the City has created numerous ordinances to promote the goals, objectives, and policies of the Master Plan and ensure it is appropriately applied in the context of its five (5) elements – Environmental, Planning, Urban Services, Transportation, and Open Space and Recreation. These legislative items include the Grading Code, Tree Preservation and Restoration Code, the Historic Preservation and Restoration Ordinance, the Architectural Review Ordinance, the Outdoor Lighting Requirements, and the Natural Resource Protection Standards.

Overview of the Master Plan's Application – 1995 to 2015

The Department of Planning has been applying the Master Plan for almost two (2) decades in the City and enjoyed success in implementing its requirements to achieve its stated goals, objectives and policies. The Master Plan remains the City's most important document, since its creation and continues to provide guidance in terms of Wildwood's planning processes each day. This plan decides every land use and zoning decision in the City, along with protecting the environment, prioritizing transportation initiatives, improving community service considerations, promoting economic development, and creating open spaces and recreation programs for the future. No City follows its Master Plan like the community of Wildwood, nor has created the other tools to protect the character and provide a level of services consistent with the desires of its residents.

The by-product of this adherence to the plan has been a well-planned community, with significant improvements over the last twenty (20) years in almost all aspects of its government. In the updated Master Plan document, many of these successes are referenced, and summarized below:

1. Resurfaced over 246 miles of rural roadways in the City.
2. Replaced over 22,000 slabs of concrete street sections.
3. Replaced over twenty-seven (27) deficient or deteriorating bridges.
4. Promoted household recycling efforts in the City, while managing a sole-source single-family residential solid waste collection contract with a single provider.
5. Participated, and partially funded, three (3) major safety improvements on State Route 109; the last of which added two (2) roundabouts at major street intersections to facilitate safer and more efficient travel along one (1) of the more congested lengths of roadway located in the City.
6. Established and upgraded the City's website, in addition to publishing the Wildwood Gazette and weekly e-newsletter.
7. Installed over sixteen (16) linear miles of multiple-use trails.
8. Restored Old Pond School and created a neighborhood-sized park in association with it.
9. Constructed Anniversary Park.
10. Established recreational programs, including nineteen (19) major events.
11. Directed annexation of additional Town Center Area into the Metropolitan St. Louis Sewer District's boundaries, via a Neighborhood Improvement District (NID).
12. Adopted codes, ordinances, and regulations to improve efficiency of City's financial management.
13. Established sound investment policies.
14. Created and updated policies and procedures to comply with Missouri Sunshine Laws and requirements and allow residents to have open access to all government activities.
15. Partnered with other local governments to provide services and programs to all residents.
16. Established the Board of Ethics, Board of Public Safety, Architectural Review Board, Historic Preservation Commission, Administrative Review Board, and ad-hoc committees to assist in major initiatives, since the incorporation of the City in 1995.
17. Added twenty-three (23) police officers to the City's force, thereby allowing for a minimum of four (4) beats to be offered at all times within Wildwood by the St. Louis County Police Department.
18. Designed and constructed Community Park - phase one - project, which included the City's first dog park component and an all-inclusive playground for children of all abilities.
19. Partnered with St. Louis County's Department of Parks and Recreation to open Bluff View Park, with its 2.3 mile long trail system, while beginning a long-term lease for Belleview Farms site - a historically significant one hundred (100) acre open space located in the Meramec River Valley.
20. Assisted in the provision of high-speed internet service to over four hundred (400) households in the rural areas of the community, which still have no other options than the two (2) providers engaged by Wildwood through its eight (8) year effort in this regard.
21. Completed two (2) segments of the Manchester Road Streetscape Project, while finishing the design and engineering for the third, and final, segment of this Town Center improvement effort slated for construction in 2017.

The 2016 update of the existing Master Plan was undertaken in the context of improving on this document and maintaining the five (5) principal goals from the incorporation. These five (5) goals were, and remain, the following:

1. Preservation and conservation of the natural environment.
2. Accountability to the people of the area.
3. Residential and commercial development consistent with long-range planning and prudent land utilization.

4. Protection of the greenbelt formed by Babler, Rockwoods Range and Reservation, and Greensfelder Parks.
5. Creation of a model community that serves its constituents but minimizes bureaucracy.

The City of Wildwood continues to be a leader in creating a community that is based upon the application of its Master Plan and related ordinances and one that has recognized both nationally and locally as a great place to live, work, and play. Over the last twenty (20) years, the City has attempted to take a leadership position in local government in terms of environmental protection, planning, urban services, transportation, and open space and recreation. Examples of this leadership role can be provided for each of these areas, such as:

- Environmental – Creation of the Natural Resources Protection Standards, the Model Telecommunications Code, Outdoor Lighting Requirements, Stormwater Management Standards for Areas not in the Boundaries of the Metropolitan St. Louis Sewer District (MSD).
- Planning – Commitment to New Urbanism development concepts in the Town Center Area.
- Urban Services – Retention of the Privatization of Governmental Services.
- Transportation –Regular and Systematic Safety Improvements to the City's System of Roadways and Bridges.
- Open Space and Recreation – Development of a Multiple-Use Trail System throughout the City.
- Economic Development (New) – Addition of new element to promote business retention and expansion activities and encourage eco-tourism in Wildwood.

Many other examples can be provided in this regard, but it is clear this City, through its elected and appointed officials, is like no other in the St. Louis Metropolitan Area. This distinguished track record is a function of its Master Plan and planning/decision-making processes associated with it.

Context of Previous Changes - 1995 to 2015

In considering changes to the Master Plan, the protocol, which must be employed, is established by State Statute and the City's Charter. Chapter 89 of the Missouri Revised Statutes authorizes the Planning and Zoning Commission of a City to adopt the Master Plan for the purposes of its application and implementation. Until the passage of the City Charter, the City Council only ratified decisions of the Planning and Zoning Commission in this regard, but could not elevate that action to law. When the voters in Wildwood approved the Charter, the Conceptual Land Use Categories of the Master Plan became the community's Comprehensive Zoning Map. Therefore, changes to the Conceptual Land Use Categories requires the City Council to approve, by super-majority, any change to the Comprehensive Zoning Map, before any zonings contrary to the current plan may lawfully be adopted. If a super-majority cannot be obtained at City Council, the modification to the Comprehensive Zoning Map, as reflected in the Master Plan, cannot become effective. All changes to the Master Plan with regard to land use are therefore a two-step process.

Along with these efforts, the City has maintained the integrity of the plan over the course of this same period of time. This adherence is reflected by the very limited number of changes that have occurred to this document between its adoption in February 1996 and the anticipated approval of the updated version in April 2016. In fact, in this approximate twenty (20) year timeframe only a dozen changes have been made to the document. These changes have included the addition of the 5th Land Use Category – Historic.

The greatest level of activity for these requested Master Plan changes has been within the Town Center Area of the City and its immediate vicinity.

This type of reluctance to alter the City's Master Plan is reflective of the desire to provide a high level of expectation to all parties, whether a property owner, business entity, developer, or resident, about what can be expected to happen in the community and plan accordingly for their future as well. This expectation was a major goal of the adoption of the original plan and has been emphasized in all applications since that time.

Update Process for Master Plan – 2015/2016

The City of Wildwood, Missouri has been updating its Master Plan over the last year with a group of twenty-three (23) volunteers, including the Mayor, two (2) City Council members, eight (8) citizen members of the Planning and Zoning Commission, and twelve (12) residents selected from each of City's eight (8) wards, two (2) business representatives, and two (2) at-large. The selection of these individuals was intended to provide a representative cross-section of the community and offer all points of view. This committee was given the responsibility to oversee the update process that had been adopted by the City Council at the end of 2014. Every action of the City in regards to this Master Plan has been presented to the advisory committee for consideration and action.

This update is occurring on a ten (10) year cycle to correspond to the City's Charter requirement relating to the Comprehensive Zoning Map. The Master Plan must be reviewed and updated to reflect changing conditions within the community relating to numerous factors, such as emerging technologies, demographic alterations, or new preferences on the part of residents. The update of this document is very important and has been undertaken with a great deal of diligence and deliberation to ensure the process was open and fair to all participants.

During the past year, the advisory committee met over twenty-five (25) times and heard from over three hundred (300) residents, property owners, and businesses about potential changes to the main chapters, background information, and land use designations of properties of the Master Plan. Three (3) of these meetings were public input sessions held throughout the City for the collective eight (8) wards. Over two hundred (200) residents, property owners, and businesses attended one (1) of these three (3) sessions. The input received from these sessions was the basis for all discussions about potential changes to the Master Plan, after its first ten (10) years of application. The advisory committee strove to utilize this input as the guide and compare all changes to it, before considering alterations to the plan.

Along with these public input sessions, the advisory committee also directed the Department of Planning to send to each household in the City notices regarding these public meetings and the land use changes. In all, over forty thousand (40,000) mailings were sent in support of this Master Plan Update Process. These mailings allowed many residents, property owners, and businesses to follow the progress of the planning process over the course of this year. Additionally, the City utilized its website (www.cityofwildwood.com) to provide a forum for comments and the posting of information relating to every aspect of the process and plan, along with two (2) professionally-managed internet surveys; one (1) for residents and property owners and the other for businesses only. The intent of this overall process was to improve the communication between the City and its residents, property owners, and businesses.

Those residents and property owners that participated in this update process voiced support of the current Master Plan and wanted only limited changes to it, while supporting in some form the following fifteen (15) major modifications described below:

1. Addition of a Goal Statement in the Environmental Element regarding legacy sites in the City and the protection of public health, safety, and welfare (**ENVIRONMENTAL – GOAL #5**).

2. Implementation of the Phase II requirements of the Clean Water Act for stormwater management in the City of Wildwood (**ENVIRONMENTAL – POLICY #1**).

3. Protection of the City's groundwater resources for depletion or misuse (**ENVIRONMENTAL – POLICY #18**).

4. Maintenance of the Town Center Area as the focal point of the community for commercial activities and higher density residential uses (**PLANNING – OBJECTIVE #7**).

5. Requirement that all land use matters be reviewed first by the Planning and Zoning Commission (**PLANNING - POLICY #9**).

6. Continuation of private contracts for public services (**COMMUNITY SERVICES – OBJECTIVE #4**).

7. Addition of a new goal and associated policy to first ensure the City's housing stock is preserved and maintained, while creating a working group of residents to consider the development of a re-occupancy permit inspection program for Wildwood associated with the sale of existing dwellings. (**COMMUNITY SERVICES – GOAL #5 AND POLICY #11**)

8. Provision of increased options for senior citizens in terms of all types of programs and activities (**COMMUNITY SERVICES – POLICY #10**).

9. Addition of a new goal that restates the City's position of "Save the Greenbelt, Stop the Outerbelt" (**TRANSPORTATION – GOAL #4**).

10. Employment of new approaches to transportation and infrastructure design to ensure it is multi-modal in nature (**TRANSPORTATION – OBJECTIVE #4**).

11. Reaffirmation of the City's support for the State Route 109 Corridor Study completed by the Missouri Department of Transportation in 1999 (**TRANSPORTATION – POLICY #2**).

12. Maintenance of the City's arterial roadway systems and identification of those streets and roadways (**TRANSPORTATION – POLICY #9**).

13. Study and development of a funding source for parks, trails, facilities, and their maintenance and upkeep (**OPEN SPACE AND RECREATION – POLICY #3**).

14. Development of a new Economic Development Element for the plan, along with four (4) goals, eight (8) objectives, and seven (7) policies (**ECONOMIC DEVELOPMENT - MULTIPLE**).

15. Modification of the current Conceptual Land Use Classifications for two (2) tracts of land by amending the text descriptions of the Non-Urban Residential Area and the Sub-Urban Residential Area. These properties are the BP Amoco Service Station at Wild Horse Creek Road and State Route 109 and the Brown Properties at the terminus of West Avenue.

These changes are representative of the desire of the Master Plan Advisory Committee to limit the number of modifications to this document due to the feedback received from participants in the series of the public input sessions.

Master Plan Mapping Component

The Master Plan contains several maps relating to information contained within it. These maps include the following:

1. Conceptual Land Use Categories Map
2. Pedestrian and Trail Network Map
3. Zoning and Watershed Map

These maps are integral to the depiction of information associated with its goals, objectives, and policies.

Analysis

Necessary to the Department's consideration of the updated plan is the definition of its respective components. These components are analyzed to determine the appropriateness of the process and product against several key factors. These factors are: (1.) the rationales for supporting the update process for the City's Master Plan; (2.) the reasonableness of the proposed revisions to the Master Plan; and (3.) the community benefits derived from the proposed revised Master Plan. Each of these factors must be favorable before the Department can consider a recommendation, which supports the request.

<u>Rationales Supporting Update Process</u>

The need for the update of the Master Plan is premised on a number of reasons, some relating to appropriate planning practices associated with such an important document that guides decision making by the City's elected and appointed officials and others relating to the changing conditions over the past twenty (20) years of its application. Beyond these reasons is the requirement of the City's Charter to update a component of the Master Plan relating to its categories for land use. Additionally, the City Council and the Planning and Zoning Commission have always chosen to promote the need to maintain a plan that reflects the community and its desires.

In terms of legal requirements, the Department would note that State Statute (Chapter 89 of Missouri Revised Statutes) authorizes the Planning and Zoning Commission to adopt plans for the management of the City in terms of land use, transportation, and related areas. Additionally, the City's Charter requires an update of the Comprehensive Zoning Map, which is the Conceptual Land Use Category Map of the Master Plan, every ten (10) years, which leads to the Master Plan action as well. Finally, the City's Municipal Code empowers the Planning and Zoning Commission to adopt the Master Plan and any subsequent amendments to it by a formal and thorough process. In this case, all of the legal requirements have been met to guarantee its legality in the event of challenge.

One (1) of the main responsibilities of the Department of Planning is to ensure the Master Plan continues to respond to changes in the economy and technology, along with the community itself in terms of its desires, needs, and demands. Therefore, updating the Master Plan is an outgrowth of this responsibility in that such an action ensures the community an opportunity to comment on its content and application, while allowing the City Council and the Planning and Zoning Commission to address changes that are occurring in Wildwood that may not have been foreseen at the time of its adoption. Along with these reasons, the update process protects the City from failing to keep pace with changes in technology or new legislative changes that may or may not affect the quality of life of its residents or property owners. The Department of Planning continues to encourage the protection of the community by maintaining a strong Master Plan that always reflects current conditions, threats, and opportunities.

Based upon the information of the public input sessions and other comments submitted as part of this process, the Department of Planning is convinced the community wants to retain a strong Master Plan that is adhered to by elected and appointed officials. The process for updating the Master Plan allows the community to comment on this plan and maintain its support. The Department continues to support the update process on a ten (10) year increment due to several factors, primarily the need to allow it adequate time to achieve its objectives and policies. Shorter timeframes would limit its effectiveness and open it to potential problems, while greater than ten (10) years would reduce its effectiveness. The Department knows the advantage of this strong plan and how it encourages appropriate development, resource management, and planning actions.

Reasonableness of the Proposed Revisions

The Master Plan Advisory Committee, which contained all of the existing members of the Planning and Zoning Commission, recommended a number of changes to the Master Plan that ranged from a change in the document's format. Additionally, the following revisions were recommended to the Master Plan in accordance with the update process adopted by the Master Plan Advisory Committee:

1. Updated the introduction to the document, along with explaining the Master Plan process, including a list identifying the City's major events in its history and retaining the comprehensive discussion of environmental policy and land use in this area.
2. Revised the population figures for the City of Wildwood, reflecting the growth trends of this area over the last ten (10) years.
3. Created a new, sixth element – Economic Development.
4. Added a cross-reference index to all of the six (6) elements of the Master Plan.
5. Changed the Master Plan five (5) elements (chapters).
    - **Environmental Element** – major additions relating to goals on wastewater treatment connections to the public system and identifying health risks associated with environmental legacy sites. A new policy includes protecting groundwater resources from contamination, waste, or overuse.
    - **Planning Element** – major additions or updates to the goals, objectives, and policies of this element included removing references to the Wildlife Species/Vegetation Corridor, institutionalizing the process to ensure adherence of development proposals to the Town Center Plan's standards and guidelines, and requiring any land use issue or request in the City to be first reviewed by the Planning and Zoning Commission, before any other board, commission, and City Council.

- **Community Services** – major additions or updates included defining that one (1) of the major challenges facing the City is possible changes to the pooled sales tax legislation. Additionally, the plan restates continuing with the privatization of services, implementing new processes to protect the existing housing stock of the City, expanding internet access and other utilities within the unserved portions of the City, and improving communication services between the City and its constituents.
- **Transportation** – major additions or updates to policies were to memorialize the vision of the original incorporators to "Save the Greenbelt, Stop the Outerbelt," while the plan includes the following considerations: encouraging a safe street initiative and designating new roadways as arterial streets.
- **Open Space and Recreation Element** – major additions or updates to the objectives and policies included identifying the goals of the Action Plan for Parks and Recreation 2007, while also noting the need to ensure the on-going maintenance of expenditures for facilities and programs and restating the need to create partnerships with other agencies to provide services to residents, so as not to duplicate them, if at all possible.
- **Economic Development** – major addition to the Master Plan and added goals, objectives, and policies for business retention, expansion, and recruitment. Also noted is the need to adhere to the vision of Wildwood and the other five (5) elements of the Master Plan in assuring their implementation does not impact the character of this community in a negative fashion and better promote the City as a destination for recreational and outdoor enthusiasts from all over the region, State, and country.

6. Considered and adopted a limited number of changes to the Conceptual Land Use Categories of the Master Plan for a total of three (3) tracts of land (or two (2) locations). Provided a comprehensive description of the process to address the land use changes.
7. Added the results of the two (2) internet-based surveys that were part of the public outreach process associated with this update effort, which focused on resident and business inputs and responses (Appendix II).

The Department of Planning is fully supportive of these recommended changes to the updated Master Plan and believes these modifications continue to improve the function of this document, as a guide to governmental decisions effecting all actions of the City. The content of these changes were based upon the input of the residents, property owners, and businesses that participated in this process by attending one (1) or more of the public input sessions or other meetings. As noted above, these participants were clear the existing Master Plan was working well and should only be strengthened to further protect the environment or character of Wildwood.

Community Benefits of Proposed Revisions

The Master Plan Advisory Committee spent much of the update process listening to input from participants, whether it be from one (1) or more of the three (3) public input sessions, internet surveys of residents and businesses, letters and e-mails with comments, or the property owners' meetings and tour. In all, the committee wanted the revisions to be based upon public input and the residents/property owners and business input, not solely on recommendations from City staff or the development community. The desire of this committee to solicit this input is reflected by its endorsement to have four (4) City-wide mailings sent out by the Department of Planning to garner this participation. The outcome of this participation and input, as noted above, was not a major revision to the Master Plan, but a further fine-

tuning of a document that was believed by many to be satisfactorily achieving its goals, objectives, and policies.

Along with the benefit derived by soliciting public input into the update of the City's Master Plan, which creates support for its future application over the next ten (10) years, other benefits are derived to the community from this process. These benefits are equally tangible and further reinforce the desire of those voters supporting the incorporation in 1995, now twenty (20) years later, that Wildwood must retain its unique character. These other benefits from the proposed revisions to the plan are as follows:

1. Memorializes the history and successes of the last twenty (20) years as a community and recognizes the support of residents and property owners in this effort.
2. Reinforces the concept of the Town Center Area and the planning process associated with it.
3. Places greater responsibilities on developers of properties to protect groundwater resources for potable water purposes.
4. Requires the City to improve communication efforts with residents, property owners, and businesses about its regulations and laws, while improving current enforcement procedures associated with them.
5. Recognizes the need to provide a mix of housing types in the City for all age groups and income levels.
6. Encourages the more harmonic development of property with the surrounding natural and built environments.
7. Summarizes major challenges facing the City in the upcoming ten (10) year period.
8. Imports priority to providing Internet service to the whole community at a serviceable standard.
9. Supports the continued use of private contractors to provide public services.
10. Reinforces the current policies of the City in terms of addressing unsafe streets, roadways, and bridges by repair and replacement.
11. Demands more effort and resources be provided to improve open space and recreational opportunities in the City.
12. Reflects the desire of Wildwood residents to promote the area as a great place to have, expand, or open a business.
13. Maintains land use categories for the overwhelming majority of the City, thereby meeting the expectations of the community participating in this process.

Along with all these benefits, maintaining a strong Master Plan will further improve the quality of life in the City, while promoting property values as well. Accompanying these items are a better environment, managed and planned growth, safer streets, roadways, and bridges, and more future public space. This update, as led by the Master Plan Advisory Committee, should position the City well for the upcoming ten (10) year period of time.

Summary and Recommendation

The Department believes the updated Master Plan will continue to provide excellent guidance to the City's elected and appointed officials under the proposed revisions, but equally important, the document has now been changed to reflect the lessons of the last ten (10) years in terms of its successes and shortcomings. This update process followed a precise plan for public input and comment and meets all State and local requirements for this purpose. Along with the updated Master Plan, the Department is submitting the Conceptual Land Use Categories Map and Comprehensive Zoning Map of the City's Charter for consideration and action as well. All of these maps are supporting documentation for the Master Plan.

The required public hearings at the Planning and Zoning Commission and City Council have been posted in the required timeframe and in accordance with the State and local laws. Therefore, the Department of Planning is recommending the Planning and Zoning Commission adopt the updated Master Plan for 2016, as attached.

In closing, the staff of the Department of Planning would like to acknowledge the support, assistance, and efforts of the Master Plan Advisory Committee in this process. Without their dedication to this process, many of its aspects would have suffered. Each of the residents working on this committee dedicated numerous hours to listening, debating, questioning, and finally acting on proposed revisions, which led to this final document attached to this report. Their diligence and desire to "ferret out" the best of the best in terms of recommendations, comments, and changes has produced this timely and far-thinking document. Again, City staff, particularly those professionals in the Department of Planning, would like to acknowledge a "job well done" to the volunteers.

Additionally, the Department would like to thank those members of the City Council, residents, property owners, and businesses, along with its consultants, and service providers and utilities that provided input into this document. Although not all were satisfied with the outcome or their issues not addressed in the manner sought, their help is reflected in this document. Once again, when needed, the people of Wildwood step forward and continue to support their community and its way of life.

Along with these parties, the Department would like to also acknowledge the original authors and participants of the Master Plan. In reviewing the updated version of the Master Plan, a reader will see much of the original statements, policies, and objectives remain unchanged. The retention of much of the original document is a major recognition of its accuracy and applicability then and now. It would be a mistake of the City not to once again recognize those individuals that worked on the original Master Plan and started a City on the right path, which all believe will continue with this updated version.

ATTACHMENT B
Updated Master Plan - 2016

Acknowledgments

The City of Wildwood began 2015 with a major effort in updating its Master Plan. It is a major effort, in that, this document, more so than in any other created and/or adopted by the City, guides the decision making process of Wildwood officials and staff in a range of areas. These areas include the environment, planning, community services, transportation, open space and recreation, and economic development. This Master Plan contains goals, objectives, and policies in each of these areas or elements. Accordingly, updating these important goals, objectives, and policies is essential for the City to maintain the values, character, and direction its original founders defined in 1995.

State Statute and the City's Charter mandate this ten (10) year update process for all of its long-range planning documents. This ten (10) year cycle began with the incorporation of the City in 1995, continued with the first of these updates in 2005 to 2006, and now 2015 to 2016. As a part of each update effort, the City's leaders sought public input and participation. Public participation came in many forms, but the consistent element has been the formation and use of a group of citizen volunteers that mange this process of updating the Master Plan. This year's process included a committee of twenty-three (23) residents, business owners, and others to oversee, address, and recommend changes, updates, and/or additions/deletions to the current Master Plan adopted by the Planning and Commission in 2006.

This committee began the update process in January 2015, conducted public input sessions in March and April (over two hundred (200) participants), reviewed all of the existing five (5) elements, created a new element (Economic Development), and held the necessary land use meetings, where over twenty (20) plus property owners presented requests for possible changes to their current land use designations. Collectively, this process took over one (1) year to complete and create the final document for consideration by the Planning and Zoning Commission and the City Council.

During the Master Plan update process, three (3) Citywide mailings were sent to all residents, information on the process was made available on the City's website (www.cityofwildwood.com), and all of its social media was integrated into this effort to promote and invite any interested party to comment, assist, and participate in all meetings. The committee of volunteers wanted to ensure that no interested party would be excluded from this process, or any component of it, could add input, comment, suggestion, and review. Therefore, via direction from the City Council and Planning and Zoning Commission, the committee worked to create an environment of participation in this process.

With the conclusion of the update process, the committee provided a document, which has been updated on this collective input of its participants. The Planning and Zoning Commission and City Council want to recognize the thoroughness of the committee's work and the process it employed to create this updated Master Plan 2016 and its related components. Additionally, the committee understood that changing conditions, not only here in Wildwood, but also across the St. Louis Region, State, and country, play a role in this update process. These changing conditions presented challenges and opportunities to the committee, but City officials are confident they have been addressed in an appropriate manner for the purposes of keeping Wildwood a great place to live, work, and play.

The individuals that formed this committee are listed on the next page.

Master Plan Advisory Committee Members

Timothy Woerther	Mayor
Fran Gragnani, Ward One	Planning & Zoning Commission
Kevin Liddy, Ward Two	Planning & Zoning Commission
Ron Peasley, Ward Three	Planning & Zoning Commission
Michael Lee, Ward Four	Planning & Zoning Commission
Alan Renner, Ward Five	Planning & Zoning Commission
R. Jon Bopp, Ward Six	Planning & Zoning Commission
Rick Archeski, Ward Seven	Planning & Zoning Commission
Michele Bauer, Ward Eight	Planning & Zoning Commission
David Geile, Ward One	Resident Member
Joe Frazzetta, Ward Two	Resident Member
Samuel Visintine, Ward Three	Resident Member
Gary Bohn, Ward Four	Resident Member
Harry LeMay, Ward Five	Resident Member
Jane Wright, Ward Six	Resident Member
Kristy Hull, Ward Seven	Resident Member
David Beattie, Ward Eight	Resident Member
Larry Feuerstein, At-Large	Resident Member
Dennis Welker, At-Large	Resident Member
Ed Kohn	Business/Development Entity
April Porter	Business/Development Entity
Debra Smith McCutchen, Ward Five	City Council Liaison
Greg Stine, Ward Seven	City Council Liaison

Along with these individuals, city staff members, specifically Kathy Arnett, Joe Vujnich, and Liz Weiss, were instrumental to this successful update process. Finally, providing needed and valuable input, was a group of service providers and utility companies that were asked to provide comments and other input on their service needs and changes that might have an impact, either positive or negative, on the City. To this group of participants, the City Council and Planning and Zoning Commission would like to extend its appreciation in this regard and acknowledge the integral and important role each played in this update process of the Master Plan.

Although the City of Wildwood is just twenty (20) years of age, much has happened in that period to further memorialize its commitment to "Planning Tomorrow Today." These happenings included the further development of refined plans to address a host of needs, priorities, and improvements to the community of Wildwood, which all originated from the desire to provide the best place in all of the country for its residents. These plans have led to wide community support for efforts and projects, none of which could have been accomplished without the work of many volunteers, like those individuals who spent the last year working on this update of the Master Plan. To them, the City and its residents owe a debt of gratitude and acknowledgement. Job well done.

Respectfully submitted,
CITY OF WILDWOOD, MISSOURI

The Honorable Timothy Woerther, Mayor

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Introduction

The City of Wildwood was incorporated on September 1, 1995. This City occupies a 68 square-mile area in western St. Louis County that is generally bounded on the west by the Franklin County line; on the south by Interstate 44, the City of Eureka, and the Meramec River; and on the east and north by the Cities of Ellisville, Clarkson Valley, and Chesterfield, and the Missouri River. The major focal point of the City is its Town Center Area, which includes many of the City's commercial land uses, institutional uses, and unique architecture and streetscapes. An integral part of the Town Center Area is the intersection of State Route 109 and State Route 100, the center of its four (4) recognized quadrants: northeast, northwest, southwest, and southeast, which includes the Town Center Area. These quadrants extend from this intersection outward to the corresponding City boundaries.

The Purpose of the Master Plan

This Master Plan is part of a continuous, on-going process to implement the *Plan of Intent for Wildwood* by outlining policies that conserve, preserve, and protect the natural environment; assure the integrity of the greenbelt created by the four (4) regional public parks in the western part of the City; provide safe and functional roads and bridges, and establish a framework for residential, institutional, and commercial development that is consistent with community-based, long-range planning goals and prudent land utilization practices.

The Master Plan addresses issues of environmental protection, planning, transportation, community services, public space and recreation, and, now, economic development. These elements form the core of the Master Plan, which is applied in all circumstances by City officials, when decisions must be made, funds allocated, and actions taken in these specific regards. As the community's vision is implemented and new conditions arise, the Master Plan may be reviewed and, if necessary, modified to reflect the City of Wildwood's response to new circumstances. The City of Wildwood's land use decision-making process and other public actions shall include careful consideration of the extent to which proposed actions are consistent with the Master Plan's goals, objectives, and policies.

Public Participation Process

The need to engage residents, property owners, and businesses in the activities of the City is important and always an on-going goal and challenge for elected officials and staff. One (1) of the forums to obtain this input has been the City's three (3) Master Plan efforts; the first being its initial

adoption, the second, the 2006 update, and the third in 2016. In these instances, City staff, the Planning and Zoning Commission, and the City Council employed a number of different techniques to obtain participation in establishing the direction of Wildwood for the next decade. Without public participation, the Master Plan would suffer, as well as lack the community's support for it, particularly those components of the document that affect each household on a day-to-day basis.

To achieve participation, as part of the Master Plan 2016 Update Process, the City employed a number of different approaches to obtain the comments and input from stakeholders within and around the community. These options included two (2) series of public input sessions totaling three (3) different meetings within Wildwood, which were attended by over three hundred (300) residents. Additionally, a mailing was sent to each home in Wildwood seeking input regarding future land use considerations. Along with those efforts, the City utilized its website significantly to allow for review and comments of work products and the efforts of the Committee relating to the Master Plan 2016 Update Process.

The culmination of this approach was the design and implementation of two (2) internet surveys that were posted on the City's website for review and comment by any resident and then any local business. These surveys were prepared by an outside consultant to the City who focused a number of questions and requested responses on the level and appropriateness of services, allocations of funds, attentiveness to residents' needs, and improvements necessary for the next ten (10) years of the City. These surveys, and the collated results, are contained in an appendix of this Master Plan for review and on-going reference in the future.

~~As part of the Public Input Sessions for the Master Plan 2006 Update, many residents noted the need for better communication with the City. Numerous responses indicated that residents and others were not up-to-date on the issues facing the City and how decisions on these items were being made. The Master Plan 2006 Update Process has made it clear that more needs to be done to help residents, property owners, and businesses access information and participate in the City's decision-making processes, as well as understand their role in keeping the City of Wildwood a great place to live, work, and play.~~

Interpretation and Revisions

The Planning and Zoning Commission and the City Council of Wildwood, in accordance with State Statute and local Charter, shall make interpretations and revisions regarding the Master Plan's goals, objectives, and policies, as well as undertake their implementation.

Relationship of the Master Plan to Other City Planning Documents and Development Regulations

Given the comprehensiveness and applicability of the City's Master Plan to all aspects of Wildwood's governance, it sets the direction that all other plans and processes that exist in the City of Wildwood must follow. As part of the work program for updating the Master Plan, other major City planning initiatives and documents were utilized in this process, including the Town Center Plan, the Town Center Development Manual, the Parks and Recreation Plan, the Action Plan for Parks and Recreation 2007, and the Five Year Capital Improvement Program. These major planning initiatives that occurred in the City's last twenty (20) years were often in direct response to objectives and policies contained in the 1996 and 2006 versions of the Master Plan and reflected in their implementations.

Additionally, the 2016 Master Plan update process considered amendments to the Zoning Code, the Subdivision and Development Regulations, the Grading Code, Tree Preservation and Restoration Code, Historic Preservation and Restoration Code, and Model Telecommunications Code that had been adopted and applied, either for the entirety of the last twenty (20) years or a portion thereof. Along with legislative considerations, the City completed a 5-Year Annexation Plan for the St. Louis County Boundary Commission, which did not anticipate any modifications to Wildwood's boundaries in that period and none were completed relative to any nearby-unincorporated area of St. Louis County.

All of these data resources were included in this update process for the Master Plan to guarantee its timeliness and prepare it for the upcoming decade, which will offer new challenges and opportunities. As a leader in implementing new initiatives, the City of Wildwood must always be cognizant of the need to review and update these plans, codes, and other documents to meet new demands or changing conditions, which may arise from all types of sources, i.e. the courts, the State legislature, resident organizations, and others. "Planning Tomorrow Today" demands staying ahead of circumstances that affect the overall quality of life in this City and meeting them with ideas, not delays.

Synopsis of Planning History

History of Planning in Wildwood

1. From its earliest settlers to today's newest residents, the area of Wildwood has been admired and valued for its unique natural beauty and character.

2. The first major planning initiative in the area, which would become the City of Wildwood, began in 1938 with the reservation of regional public parks to form a greenbelt.

3. All St. Louis County planning documents, from the first *County Plan* in 1962 to the incorporation of the City of Wildwood, described the area as primarily rural in character.

4. St. Louis County's first comprehensive zoning ordinance in 1965 designated much of what is now the City of Wildwood as *NU* - Non Urban District.

5. *The 1973 Land Element* of *St. Louis County's General Plan* showed that only a small portion of the land in the City of Wildwood would be suitable for urbanization. This finding was affirmed in subsequent *St. Louis County Plan Updates* in 1985 and 1993.

6. St. Louis County's first stated policies for the urbanization of the Wildwood area date from the *St. Louis County Plan Update of 1985*. In that plan, most of what is now the City of Wildwood continued to be shown as rural, but its northeast quadrant was designated as the western edge of an urbanizing area centered on the intersection of Highway 40/Interstate 64 and Clarkson/Olive Street Road.

7. St. Louis County planning documents acknowledged the potential conflict between urbanization policies and the ecology of the City of Wildwood, where the vast majority of the land area is not suitable for traditional development densities. County planning documents enumerated the necessary safeguards that should be used, as urbanization in the northeast quadrant took place.

8. These environmental safeguards were not incorporated sufficiently into developments approved in the area of the region that would become the City of Wildwood, with the result being increased erosion and incidences of localized flooding within the area's watersheds. These same St. Louis County planning documents predicted these impacts.

9. Dissatisfaction with State and County roadway plans and the latter's continuing disregard for citizen concerns regarding new development led to the incorporation of Wildwood on September 1, 1995. The *Plan of Intent for Wildwood* included the following five (5) objectives, which are also the basis for this Master Plan:

   - Preservation and conservation of the natural environment.
   - Accountability to the people of the area.
   - Residential and commercial development consistent with long-range planning and prudent land utilization.
   - Protection of the greenbelt formed by Babler, Rockwoods Reservation and Range, and Greensfelder Parks.
   - The creation of a model community that serves its constituents but minimizes bureaucracy.

10. After the approval of the City's incorporation in 1995, the voters of Wildwood approved two (2) taxes – readoption of an existing Gross Receipts Tax on utility consumption and a new Capital Improvements Pooled Sales Tax for road, bridge, and other public improvement projects.

11. To increase the standing of local governance, the voters of the City of Wildwood approved a Charter in 1997. The Charter was particularly significant to the Master Plan, since it created the needed mechanism to elevate its land use component to the standing of law.

12. With the approval of the Master Plan by the Planning and Zoning Commission in 1996, and subsequent ratification by the City Council one (1) month later, the Town Center concept was created. The Town Center concept, based on the principles of 'New Urbanism,' led to a plan for an area of the City where higher density residential and commercial development would be encouraged, which was approved in final form in 1998. Some seven (7) years later, the Town Center Development Manual was adopted by the Planning and Zoning Commission defining specific standards and guidelines for this area.

13. In response to growing demand from residents, a Parks and Recreation Plan was adopted in 2001, which identified the existing and future need to acquire property in the City for future active recreational facilities and endorsed the concept of requiring new residential and commercial developments to accommodate dedications as part of any future project(s).

14. Based upon its 5-Year Annexation Plan, the City of Wildwood annexed a four hundred seventy-five (475) acre area of unincorporated St. Louis County in 2006, after successful votes in the annexation area and within the City. This area is bounded by the City of Ellisville to the north, City of Wildwood to the west, the community of Sherman to the south, and generally by St. Paul Road to the east.

15. After the adoption of the *Parks and Recreation Plan* in 2001, a subset process was established by the City Council. This led to the *Action Plan for Parks and Recreation 2007*, which set four (4) major goals, along with 57 recommendations, for immediate action. Each of these four (4) goals has

been implemented to some level, including the action to purchase a large parcel of ground for the City's Community Park.

16. After ten (10) years of application, the Town Center Plan began an update process in 2008, with the creation of a citizen volunteer committee, which led an eighteen (18) month process, culminating in a recommendation by these volunteers for major changes to the plan. The Planning and Zoning Commission adopted this recommendation and accompanying updated plan in March 2010. The two (2) major changes were a simplification of the plan and the decrease in workplace/commercial designated properties and a corresponding increase in residential land use designations.

17. The City Council received the updated Town Center Plan in March 2010 and spent the next two (2) years debating the merits of four (4) proposed land use designation changes to four (4) properties, two (2) of these sites constituting over one hundred thirty (130) acres of the overall eight hundred (800) acre boundary. In 2012, the majority of the updated plan was endorsed and ratified by the City Council, with the four (4) properties remaining undecided.

18. The City's Historic Preservation Commission spent all of 2014 and the majority of 2015 updating its enabling ordinance to improve its function. During the same period it completed the survey of 350 historic properties located in Wildwood, and developed the histories of the original eleven (11) historic communities that predated the City's incorporation and are now a part of it.

19. In 2015, the City began its second major update of its Master Plan, led again by a group of twenty-three (23) resident and business volunteers from the community. New focuses of the Master Plan that were identified by community input are economic development and developing internet-based telecommunication options for residences and businesses.

A Brief History of Planning and Development Policies and Practices in Wildwood

Historic Character of Wildwood

St. Louis County was formed in 1812, while the area was still part of the Louisiana Territory. Missouri became a State in 1821. The western portions of St. Louis County, then called the Meramec Township, later divided into the Meramec and Chesterfield Townships, remained rural in character until the late 1970's, when the first of new residential subdivisions were approved and began construction. The area that was to become Wildwood contained a few small villages organized along roads, many of which were trails that had been used by Shawnee, Delaware, Osage, and other Native American tribes and then adopted by the early settlers.

Of these early trails, three (3) retain a relative level of significance today. These three trails are now the following roads:

> Old State Road follows one of these early trails from the days before the Spanish and the French came to the area. It runs southward from Manchester Road, just west of Ellisville, "past the Ninian Hamilton Place, now the Catholic Orphan Protectorate [and today the LaSalle Institute], north of Eureka, Allenton, and Dozier's, to Mary and Mac's...a very early and rare house of entertainment near the site of the present

town of Pacific and near the St. Louis County Line." (William Muir, 1893, quoted in *History of St. Louis City and County*, 1919).

Manchester Road, in the middle of the City, was designed in 1835 as part of the main link between St. Louis and Jefferson City. It runs westward from Ellisville through Grover and Pond, then dips south to Fox Creek, and continues westward across the Franklin County line. In general, this road follows the ridge line that separates the area's drainage networks into the Meramec River to the south and the Missouri River to the north. From about 1926 through 1932, a portion of this road was designated Route 66, while the permanent right-of-way for it was still under construction. The Big Chief Hotel in Pond dates from the days when this stretch of highway was part of the main route westward from the City of St. Louis.

Wild Horse Creek Road, near Wildwood's northern boundary, runs westward from what was originally the small village of Chesterfield past Westland Acres, an early black community, through Orrville, and then south towards Melrose; an area planned as a resort, which failed and was sold at a Sheriff's sale in 1879.

Two (2) major railroad rights-of-way follow the City's northern and southern boundaries. The St. Louis Southwestern Railroad (adjacent to the Chicago Pacific-Rock Island Railroad) right-of-way runs along the northern edge of Wildwood, just south of Howell Island and Steamboat Island, past the historic town of Centaur, once the center of limestone and stave manufacturing. The Missouri Pacific Railroad follows the gradient of the Meramec River through the western part of the County, going through St. Paul, Glencoe, Eureka, Allenton and on to Pacific, just over the Franklin County Line.

Most of these old place names are still used today, and many of the surviving historic buildings still exist in these early settlements.

First Initiatives to Protect Wildwood's Environment

The first major planning initiative in what is now the City of Wildwood, other than the building of roads and railroads and the platting of small towns, was the creation of the permanent park reservations. Rockwoods Reservation, originally part of an 1800 Spanish land grant to Ninian Hamilton, was purchased by the State of Missouri in 1938 from the bankrupt Cobb-Wright-Case Mining Company. The Reservation is currently managed by the Missouri Department of Conservation. The Dr. Edmund A. Babler Memorial State Park was dedicated on October 1, 1939. It was financed, developed, and donated to the State of Missouri by a private non-profit trust established by Jacob Babler in memory of his brother. The trust continues to manage the park. The Greensfelder family gave 1700 acres to St. Louis County to establish Greensfelder Park in 1963.

In 1946, St. Louis County adopted its first zoning ordinance, although accompanying maps were not prepared until 1955. Property was not zoned based upon its particular use at that time, but was either designated "A" small farm or "B" one-acre residential in this area.

Guide for Growth-The Land Use Plan, the first official County General Plan, was published in 1962. The plan showed two districts in the western part of St. Louis County, with District 11 essentially north of Manchester Road and District 12 to the south. In District 11, the area immediately around Chesterfield, was seen as appropriate for development; the rest of the district was designated an open-space reserve. In District 12, the area between Eureka and Allenton was designated for

urbanization, while the policy for the remaining part stated development should be discouraged in flood plains or areas of rugged topography.

St. Louis County's 1965 publication *The Challenge of Growth - A Study of Major County and Regional Park Needs* suggested extending the Rockwoods Reservation and Range, Babler, and Greensfelder Park properties to create a greenbelt that would link the Meramec and Missouri Rivers. In addition, the study suggested the greenbelt could be extended to Steamboat Island, Howell Island, and ultimately toward the northwest to the Busch Wildlife Preserve in St. Charles County. This concept has drawn strong support from ecologists, preservationists, and area residents but has never been actively implemented, except for the 34.4 acres St. Louis County added to Greensfelder Park between 1971 and 1980.

Historical Zoning Initiatives and Planning Policies to Protect Wildwood's Environment

In 1965, a new comprehensive zoning ordinance, reflecting for the first time land use designations based upon a planning document, was adopted by St. Louis County. In this 1965 report, much of what is now the City of Wildwood was zoned *NU* Non-Urban District; a new classification originally meant to be a conservation zone. St. Louis County planning officials suggested the NU District designation permit only one (1) residence for every twenty (20) acres, but the final version, which was approved, permitted one (1) residence for every three (3) acres. As a result, the NU District turned out not to be a conservation zone, but, in effect, a low-density residential development zone.

As growth pressures from the westward movement of development from the inner-ring communities of St. Louis County intensified, the *Land Element of the 1973 St. Louis County General Plan* was devised to create land suitability classifications based on soil type, topography, forest cover, hydrology, and geology. After subtracting out land that had already been urbanized or protected by park or other institutional controls, the 1973 Plan set the following categories of property in order of suitability for development:

Prime, Secondary, Marginal, Restrictive, Protection, and *Production* (vacant class 1 agricultural land located in flood plains). Only land in two (2) of the six (6) categories (*Prime and Secondary*) was considered suitable for urban or suburban type development densities. It further suggested that land in the *Secondary* category should generally be reserved for agricultural uses only. In addition, only a small proportion of the area that was to become the City of Wildwood was shown in the 1973 map as having *Prime and Secondary* land; these areas occurring mostly in the hilly uplands of the northeastern quadrant of the City or immediately adjacent to Manchester Road in the unincorporated communities of Grover and Pond. As the categories were derived from the ecosystem, the boundaries of the categories followed the natural systems and did not conform to the lot lines of individual pieces of property. Although the 1973 Plan was published and distributed to the public, these maps were never officially adopted by St. Louis County, but their existence shows that planning officials were very much aware that a high proportion of the land in the Wildwood area was not suitable for development at traditional urban densities.

The *1985 St. Louis County General Plan Update* intensified this theme of growth by stating that land within the County was becoming an increasingly scarce resource.

> *"This presents a particular problem in areas where environmentally sensitive land is now being considered for urban uses. Although factors such as flood plains and steep slopes do not completely rule out urban uses in these areas, they do require special considerations and*

construction techniques." (*1985 General Plan Update*, Pg. 19, Italics added)

Urbanization Policies of St. Louis County within the Wildwood Area

St. Louis County's *1985 General Plan Update* was the first official planning document that showed substantial development anticipated for the area now known as the City of Wildwood. The southern and western areas of the City were shown as *Rural*, while an area slightly larger than the existing parkland was shown as *Preservation*. However, the northeast quadrant of the City of Wildwood was shown as *Urbanizing*. *Urbanizing* was defined by this plan as having a minimum population density of one thousand (1,000) persons per square mile.

An area around the intersection of State Routes 100 and 109 was also identified at this time as a future *activity center* - an *activity center* being defined in the 1985 Plan Update as having a scale of employment or daily trip attractions comparable to a regional shopping center (over 500,000 square feet in size). However, the principal activity center shown in this plan for the western part of St. Louis County is now the location of Chesterfield Mall and its surrounding office buildings, hotels, and high density housing. The activity center in Wildwood was shown as a satellite to this much larger counterpart. Urbanized development west of Chesterfield, according to the 1985 County Plan, was to stop within the northeast quadrant of what is now known as Wildwood, thereby forming the western edge of a larger urbanized region centered on the intersection of Highway 40/61 and Clarkson/Olive Street Road.

This change in St Louis County planning policies reflected changes already happening on the ground. Interstate 44 was connected to State Route 109 in 1971, thereby making the Wildwood area far more accessible from St. Louis and the eastern part of the County. Development was also moving westward from the area of Chesterfield with its direct access to Interstate 64/40 and the City of Ellisville on the State Route 100 corridor.

In 1977 alone, according to information assembled by the City of Wildwood, St. Louis County approved 1,521 suburban lots (one acre and denser lots), as distinguished from non-urban (three acre minimum lot) subdivisions, in Wildwood. Traditional suburban lots totaled 373 lots in 1978, 679 lots in 1979, and 159 lots in 1980. In 1981, 1982, and 1983, however, no suburban subdivisions were approved.

County policy makers expressed concern in their 1985 plan document that the boom development conditions which had prevailed in St. Louis County since World War II were coming to an end. The population growth in St. Louis County had leveled off and was now taking place elsewhere in the St. Louis Metropolitan Area, notably St. Charles and Jefferson Counties. St. Louis County's share of new housing construction in the metropolitan area had dropped from sixty percent (60%) in 1970 to twenty-nine percent (29%) in 1980. The reason for concern over these statistics is made clear in the *1985 Plan Update*:

> "A 1983 study of revenue and services revealed that while the unincorporated areas generated 37 percent of County Government revenues, they received slightly more than 27 percent of the service expenditures." (*1985 General Plan Update*, Pg. 15)

Revenue from new development taking place in unincorporated areas helped finance the delivery of services in older parts of St. Louis County. The County brought its regional share of new housing construction up to thirty-five percent (35%) in the mid 1980s. After the three-year lull in the

Wildwood area, the County approved 664 new suburban lots in 1984 and 710 lots in 1985.

Impact of County Urbanization Policies in Area of Wildwood

One set of special environmental considerations outlined in the *1985 General Plan Update* was the list of 10 planning principles for stormwater drainage that should be followed in the design and construction of new development described in detail in the next chapter of this Master Plan.

While these provisions are meant to apply to all of St. Louis County and do not take into account all of the special environmental conditions prevailing in the Wildwood area, an analysis completed in the preparation of this Master Plan indicates that, had the St. Louis County Planning Commission and County Council required the kinds of precautions outlined in their own planning document, much of the serious, irreversible environmental damage in the City of Wildwood that is described in the next chapter of this Master Plan could have been avoided. Instead, the St. Louis County Government continued to approve developments in the area of Wildwood that were re-graded and designed in ways that have proven inappropriate to the steep terrain and soils sensitive to erosion.

From 1965, when St. Louis County first adopted its current zoning categories, to September 1, 1995, it approved subdivisions totaling 5,565 residential lots in the City's northeast quadrant alone, and a total of 11,437 lots in residential subdivisions in the whole community. Of these lots, 4,878 were in urban residential subdivisions approved after 1985. From 1989 to September 1, 1995, the County issued 3,778 building permits in the City of Wildwood.

Following a surge in new development in the western reaches of the County, the connection of an improved State Route 100 to State Route 109 was completed in 1989. Subsequently, an improved State Highway 40 was connected to Clarkson Road in 1992 and the widening of Clarkson Road to Manchester Road was completed in 1994. These road improvements coincided with the increased pace in new development.

The 1993 St. Louis County Plan Update repeated the general statement that development in areas of flood plains and steep slopes required special considerations and construction techniques; it did not repeat the more detailed statements about stormwater drainage and other issues from the previous 1985 Plan. However, the 1993 Plan Update did include a map showing all of the area of what is now Wildwood as having different categories of environmentally sensitive land. (*The 1993 St. Louis County Plan Update*, Pg. 24)

The St. Louis County Department of Planning prepared two detailed Community Area Studies for districts within the area that became Wildwood: The Pond-Grover Study, published in December 1990, and the Wild Horse Valley Study, published in June 1993. These studies cover the areas within the City of Wildwood identified as urbanizing in the 1985 Plan Update. The process of producing these documents involved numerous meetings with residents of these areas to gain their input, although the St. Louis County Planning Commission and Council were given the authority for making the final decisions regarding land use policies as they applied to individual petitions for rezoning. These two studies went beyond the level of traditional master plan research and principles to suggest land use policies for individual subareas within each plan area.

By September 1995, a high proportion of the development anticipated in the 1985 General Plan Update had already been approved, including a large commercial site in the eastern end of the proposed Town Center Area. The pace of development was extraordinarily rapid. As will be

discussed in more detail later in this document, the population of the City of Wildwood virtually doubled between the 1990 and 2000 census.

The Incorporation of Wildwood

Wildwood was officially incorporated on September 1, 1995. The incorporation was the culmination of a large grassroots effort on the part of residents and a four (4) year legal battle to stop plans for a north-south, multiple-lane divided highway along a corridor that paralleled the existing State Route 109. The groups included the Babler/Rockwoods Preservation Association, the West Chesterfield Citizens for Responsible Development, the South Wild Horse Creek Homeowners Association, the Northwest Jefferson County Association, and the Wild Horse Creek Valley Association. The Wild Horse Valley and Pond-Grover Community Area Studies undertaken by St. Louis County were also a catalyst for incorporation as they provided a forum for discussing planning issues. Much of the continued support for incorporation came from the general dissatisfaction with fragmentary urbanization and degradation of the natural environment as a consequence of the way that the St. Louis County Government had been administering the rapid development of the Wildwood area.

The Plan of Intent for Wildwood was filed on December 18, 1992 with the St. Louis County Boundary Commission. The *Plan of Intent for Wildwood* listed five essential reasons for incorporation:

1. Preservation and conservation of the natural environment;
2. Accountability to the people of the area;
3. Residential and commercial development consistent with long-range planning and prudent land utilization;
4. Protection of the greenbelt formed by Babler, Rockwood and Greensfelder parks;
5. The creation of a model community that serves its constituents but minimizes bureaucracy.

The St. Louis County Boundary Commission voted 6 to 2 in 1993 not to place the issue of Wildwood's incorporation on the ballot. However, in May of 1994, the Missouri Supreme Court declared the Boundary Commission statute unconstitutional, thereby negating their previous actions. During the following summer, attempts to get the St. Louis County Council to put Wildwood's incorporation to a vote in the community were unsuccessful. However, by the beginning November 1994, Circuit Court Judge Kenneth Romines had ordered the issue of Wildwood's incorporation placed on the February 7, 1995 ballot.

On February 7, 1995, sixty-one percent (61%) of the registered voters of Wildwood voted yes to form the new City. On June 29, 1995, the St. Louis County Council dropped its efforts to continue opposing the issue of the incorporation in the courts. Under Missouri State statutes, the St. Louis County Council had the authority to appoint the City's first Council to act as its interim government until the April 1996 municipal election.

Population Description

At the time of the City's incorporation, information was provided from several competent resources estimating its population. Due to the City's size (it encompassed all or a portion of seven (7) postal zip codes and numerous census blocks and tracts), making an accurate population count was difficult to complete. Based upon the 1990 census tract information, and best available records from building permits issued by St. Louis County, the population at the time of the City's incorporation

was estimated at 24,000 residents. This area was in the middle of a housing boom that would continue unabated for several years after the incorporation.

Upon the City's incorporation, it gained a multitude of lots that had been recently approved by St. Louis County. The estimate completed at that time reflected approximately 2,650 vacant lots. Through 1998, the number of building permits issued each year maintained a steady pace. That year also reflected the first accurate population estimate provided by the U.S. Bureau of the Census. Following a population estimate of 18,123 being provided by the U.S. Bureau of the Census, the City challenged this figure based upon building permit information and was successful in convincing the federal government to revise their numbers. Their estimation, in support of City records, established Wildwood's population at 30,967 as of July 1, 1998 (accurate population information is critical to the City, given sales tax distribution is based on such).

Between July 1, 1998 and April 1, 2000, estimates of the City's population were again based upon the number of building permits issued. Department of Planning staff estimated the City's population at the time of the decennial census in 2000 to be approximately 32,700. This estimate was verified by the census, which revealed the 2000 population of the City to be 32,884. In 2010, however, growth in population slowed substantially, as reflected on the official census count that was provided by the federal government to the City. This ten (10) year period included the Great Recession, which virtually stopped all new residential projects abruptly. Despite the recession, the City of Wildwood was one (1) of a handful that did have an increase in population growth from 2000 to 2010, which was 2,186 people. Therefore, the U.S. Census Bureau estimated the population of the City of Wildwood in 2010 as 35,661.

This U.S. Census Bureau figure has been the baseline for subsequent projections in each year following 2010. These estimates use the census' calculation of 2.95 people per household (reduced from 2000, when the figure was 3.02 people per household) and are as follows:

Year	# of New Households Authorized	Estimated Population at Years' End
2010	49	35,661
2011	38	35,773
2012	38	35,885
2013	63	36,070
2014	60	36,247
2015	52	36,400

The growth in the area has slowed based upon a number of factors, including the City of Wildwood's land use policies, the aforementioned Great Recession, and banking trends. The area's population doubled in just ten (10) years, from 1990 to 2000, while over the next ten (10) years, grew a total of ten (10) percent, a one (1) percent growth each year. Not surprisingly, the number of vacant lots

available for new homes decreased since the incorporation of the City. However, more recently, in the last two (2) years (2014-2015), residential activity has accelerated, with the potential of over six hundred (600) new homesites being considered by the City. This number of new homesites does not take into account new multiple family units that are now also being considered in Wildwood's Town Center Area, which could increase the number of new households in the City by four hundred (400) units. ~~This estimate, as of December 2005, identifies 1,682 parcels as vacant, approximately one thousand (1,000) less than at the time of incorporation. Additionally, a significant area was annexed into the City on January 1, 2006 including about 75 residences. This area increased the City's population by approximately 226 people.~~

To calculate future population projections, the Department of Planning has considered a number of factors, including the amount of available land, the City's land use policies, and the number of new lots approved each year, to determine a conservative annual growth rate estimate of one-half of one percent (1/2%). Additionally, a large number of new residential homesites are proposed at this time (Early 2016), so a second projected population, utilizing a growth rate estimate of one percent (1%) has also been calculated, to consider a population including this anticipated growth. Eventually growth rates in the City may slow further, if land use policies remain unchanged. Currently, the projections for the next five (5) years are:

Year	Projected Population (Conservative)	Projected Population (With Anticipated Growth)
2016	36,582	36,582
2017	36,765	36,948
2018	36,949	37,317
2019	37,134	37,690
2020	37,320	38,067

The population projections provided in the above table indicate the City of Wildwood will continue its managed growth and will approach a total of almost forty thousand (40,000) residents near 2025, which, under the City's Charter, will require the establishment of a ninth ward, with two (2) additional ward representatives added to the current City Council. At that time, the City Council would be a total of eighteen (18) City Council members.

Environmental Element

Preservation and conservation of the natural environment is the first of the five (5) policies highlighted in the Plan of Intent as the reason for the incorporation of Wildwood.

The Ecology of Wildwood

The long steep hillsides, narrow convex summits, erodible soil surfaces, slowly permeable and restrictive subsoil layers, existing young and mature woodlands with abundant native

vegetation, and numerous creek beds of the City form an ecology substantially different from the more gentle and rolling topography and permeable soils of other nearby areas of the County. Compounding these sensitive physical attributes of the land, the St. Louis Metropolitan Area receives a substantial amount of its rainfall in the form of high-intensity thunderstorms, with large amounts of rain within a relatively short period of time. These kind of rainfall events lead to serious erosion problems given the aforementioned terrain and soils found in the City of Wildwood. Vigilance is needed in all aspects of the land use decision-making process to protect Wildwood's environment.

The Need for Watershed Management Practices in the City of Wildwood

Areas of the City that are still in their natural state do not suffer significant erosion even after unusually heavy and sudden rainstorms. The ecosystem, although fragile, has reached a state of equilibrium and protects itself. Downstream from more dense residential and commercial developments in other areas of the City, the landscape tells a different story: hundreds of tons of soil and rock have shifted, streams and hillsides have eroded severely, and the damage continues, despite the efforts of the City to curtail it.

There are two (2) very dramatic examples of these differences in the City: Wild Horse Creek and Caulks Creek. Wild Horse Creek currently exists in a state of natural equilibrium as a properly functioning streambed. Caulks Creek has sustained severe damage from stormwater runoff and is an unhealthy streambed due to this degradation. The first of these two (2) watersheds to be discussed is Wild Horse Creek.

The upper reaches of Wild Horse Creek Watershed, whose source-area remains largely forested, is an example of a properly functioning forest stream ecosystem. Even after the relatively long dry spell from the end of the summer of 2005 through the fall, this stream had flowing water. Banks were stable, the streambed was a mixture of rounded gravels and sands - indicating they had remained in place long enough to be smoothed by the action of the water - and the width-to-depth ratio was small. After a rain, the upper Wild Horse Creek ecosystem retains much of the water, thereby allowing it to filter slowly and gradually to the stream while maintaining an even, continuous flow.

In direct contrast, the second watershed to be discussed is Caulks Creek. Within Caulks Creek from Clayton and Prospector Ridge Roads to Kehrs' Mill Road, this stream has seriously deteriorated from its natural state. It has an extremely wide channel-to-depth ratio. Active erosion is taking place along all of its banks. The bottom of the streambed has an enormous load of angular chert fragments that exceed fifteen (15) feet in depth. When rain falls in the badly damaged Caulks Creek ecosystem, stormwater turns into a series of concentrated, high-energy flows, moving great quantities of soil into the creek and then pouring quickly down its bed, causing rapid, violent erosion as it goes. In many places, roads and bridges are being undermined. Underground power cables and sewer lines have also been exposed by erosion.

The Caulks Creek Watershed has had extensive clearing of vegetation and topsoil due to the re-grading practices of the many subdivisions previously constructed in its drainage area. This previous pattern of development practices have been curtailed in Wildwood, but damage persists from them due to the inadequate standards that were in place when many of these projects were constructed. In direct contrast, the Wild Horse Creek Watershed, which has not sustained the same level and type of development as the Caulks Creek Watershed, remains a properly functioning streambed.

After the adoption of the Master Plan, the City Council continued to prioritize the need to address the Caulks Creek situation. For a period of approximately seven (7) years, a scientific study was funded by the City to better understand how to arrest the on-going erosion problem. This study, yet completed, indicates the need to retrofit older detention/retention facilities upstream to hold the stormwater runoff in place for longer periods of time and capture smaller storm events as well. Until these retrofits are completed, on-going degradation of the Caulks Creek will continue, despite the City limiting the density of development on remaining infill properties located in this watershed.

~~As witness to the on-going need to be diligent in addressing the City's top priority relating to the environment, a recent problem experienced in a new development within the Caulks Creek Watershed provides an excellent example. With the development of the former Cherry Hills Golf Course site, the City, the Missouri Department of Natural Resources, and the Metropolitan St. Louis Sewer District imposed all of the required regulations onto this residential subdivision. The goal was to manage stormwater from this site in a manner that would limit on-site and downstream impacts. With a large-sized site like this property, the need was clear to control runoff to protect the environment.~~

~~Since the initial grading began on this property, problems have been experienced both on the site and downstream. These problems, based upon weather, poor application of siltation control techniques, and ineffective standards, have created unwanted and negative impacts in the watershed. Therefore, the Master Plan 2006 Update recognizes the on-going need to maintain vigilance in protecting the environment of Wildwood through thoughtful regulations and improved land use policies.~~

The Treatment of Sewage Effluent in This Environmentally Sensitive Area

Developments in the Non-Urban Residence District zoned areas of the City, where the lot sizes are three acres or larger, have far fewer erosion problems, particularly where the access road and building sites are confined to the ridge lines. However, despite this fact, Non-Urban Residence District zoned properties and other development outside Metropolitan St. Louis Sewer District boundaries raise another serious environmental problem regarding sewage treatment.

> The soils in much of the City are unsuitable for individual septic systems, and lots in urban residential zones [R-1 District (43,560 square foot lots) to R-6A District (4,500 square foot lots)] are, in any case, too small for these systems. While a percolation test has been required, it is not clear these tests have been administered correctly, as their results can vary significantly depending upon the saturation of the soil and where on the property the test was made. Improper placement in the landscape, lack of required inspections, and sporadic maintenance of individual septic systems can adversely affect the quality of both the aquifer and the streams in the western part of the City. Newer State legislation allows for a soil morphology test to substitute for the previous percolation analysis, which would appear to be a better means to ascertain the suitability of locations on properties for wastewater treatment, given the soils conditions in the City of Wildwood.

The alternative to individual septic systems the City has employed in these unserved areas are small sewage treatment plants. These "package plants" can serve an entire residential subdivision. Several residential subdivisions in the City of Wildwood already have package plants. Package plants are also necessary for commercial development outside the Metropolitan St. Louis Sewer District boundaries. Package plants are required to be periodically inspected (monthly) by the Department of Natural

Resources (DNR). Therefore, the maintenance of the plant and evaluation of the effluent are more regulated than individual systems.

Although package plants are a better alternative than individual septic systems, they are not an effective substitute for a regional public sewer system. Their maintenance is variable and, at best, usually provides only secondary treatment, meaning the effluent can still pollute the local aquifer or stream where they are located. However, with certain permitting requirements by the State, the potential for discovering and correcting a plant that is not functioning well is greater than an individual septic system on a privately-owned property.

It is also important to note that many property owners west of State Route 109, and some to the east, are on well water. If an improperly functioning septic system exists on the property with a well, the potential exists for contamination. This contamination can also extend to other well sites downstream. One (1) alternative to protect the public's health and safety is to promote the extension of public water lines.

Given the Metropolitan St. Louis Sewer District's limitations, and the constraints of individual septic systems and package plants in this environment, there are difficulties in approving suburban densities for residential development or major commercial uses outside the Metropolitan St. Louis Sewer District's boundaries for the foreseeable future.

Application of Wildwood Codes and Policies (1995-2015)

On the first day of Wildwood's incorporation, and over the next seven (7) months, its City Council worked to create two (2) new codes and modify others to address the problems noted above relating to grading and tree removal in the City's nine (9) different watersheds. These two (2) new codes, the Grading and Excavation Code and Tree Preservation and Restoration Code, and the revised Zoning Code and Subdivision and Development Regulations were intended to stop the past practices of mass grading, tree removal, and poor land use decisions that led to increased stormwater runoff, erosion, and siltation of the natural drainage areas of the City. Each of these codes, whether new or revised, took into account the problems facing the City and focused on identifying steps to lessen grading on development sites, preserve more trees, reduce densities in sensitive environmental areas, and promote higher stormwater management standards.

Additionally, along with these actions, the City also took the bold step of creating a one-of-a-kind regulation called the Natural Resource Protection Standards. These standards were developed by Dr. David Hammer, a Professor of Soil Science at the University of Missouri-Columbia, to assist in understanding the relationship between the soil and the climate of Wildwood. Utilizing five (5) different variables of the soil, areas of development and non-development were to be determined on a site-specific basis. All of this work was to be completed on the property by a qualified Professional Soil Scientist. The City has been applying these standards for over nine (9) years and saved hundreds and hundreds of environmentally sensitive acres of land from disturbance.

The City also took into account that density is a major determinant on the extent of impact on the environment. In creating the three (3) residential land use categories for the City, the community noted that only one (1) should accommodate higher densities: the Town Center. The other two (2) categories, the Sub-Urban and Non-Urban Residential Areas, would have densities ranging from one (1) unit per every three (3) acres to no more than one (1) ~~two (2)~~ unit per acre. It was hoped these limited densities would further lessen impacts in the City's watersheds. Although partially successful,

the City discovered in its review of development data, as part of the 2006 update of the Master Plan, that Sub-Urban Residential Area density was still too substantial. As part of this revised Master Plan, the Advisory Group changed it, which led to the establishment of the aforementioned one (1) unit per acre density. This step was intended to provide further protections to Wildwood's unique and fragile environment.

ENVIRONMENTAL GOALS

1. Wildwood's unique environment is one of its greatest assets and needs to be preserved and protected. (2006)

2. Wildwood's topography and soils, part of nine different watersheds, make it unusually vulnerable to erosion, siltation, and flooding caused by storm events, which necessitates regulations to safeguard it. (2006)

3. Wildwood should promote, through its regulations and day-to-day activities, the prudent use of its natural resources looking to the needs of the community. (2006; Modified in 2016)

4. Connections to public sanitary sewer systems should be a priority of the City of Wildwood, whether for new development, redevelopment, or any other land use activities, to advance improved public health and environmental benefits of such service. (2016)

5. Environmental legacy sites, whether identified or discovered at some later date, should only be considered for future use, after health risks to users have been eliminated. (2016)

ENVIRONMENTAL OBJECTIVES

1. The environmental damage resulting from future development should be controlled to the greatest extent possible. (1996; Modified in 2016)

2. The wastewater effluent from systems, both individual and community, not managed by the Metropolitan St. Louis Sewer District, should be prevented from polluting streams and aquifers in the City.
3. The natural systems of the environment, particularly its soil layers and tree and vegetative covers, should be utilized to retain and absorb stormwater runoff.

4. The primacy of the watershed as a planning unit should be acknowledged in this community and a coordinated approach for stormwater and wastewater management should be fostered between the Metropolitan St. Louis Sewer District and neighboring municipalities in each of them.

ENVIRONMENTAL POLICIES

1. Adopt and apply all applicable standards and regulations [Phase II Stormwater Rule and Municipal Separate Storm Sewer Systems (MS4)] for the management of stormwater within the City of Wildwood, as promulgated by those responsible federal, state, or local jurisdictions (Metropolitan St. Louis Sewer District), with such being consistent with the Master Plan's goals,

objectives, and policies for protecting public and private properties from damage. (1996; Modified in 2016)

2. Recognize that terrain in the City of Wildwood varies from relatively flat land, with soils suitable for development, to landforms and soils highly unsuitable for development. These variations in terrain generally do not correspond to property boundaries and, while more environmentally sensitive land is located in the western and southern quadrants of the City, they exist throughout the community.

3. Require that natural drainageways remain undisturbed and the system of existing detention/retention basins and associated improvements within the boundaries of the Metropolitan St. Louis Sewer District (MSD) be accepted by MSD for their maintenance and eventually upgraded to reduce current deficiencies in terms of design and function, when funding resources are available.

4. Require that areas of steep slopes and highly erodible soils remain in their natural undisturbed state.

5. Continue to employ the current procedure that is part of the City's development regulations for mapping the landforms and soil conditions on individual pieces of property and then evaluating their suitability for development.

6. Maintain the current flexible procedure within the development regulations that allows an owner of a property to better utilize a site's natural characteristics through the application of innovative design and construction practices and the clustering of units, while offering community amenities and useable open space. The application of this procedure should be consistent with the environmental parameters of the site.

7. Require all developments to submit a site plan that includes the delineation of the property's natural drainageways and the location of all proposed retention and detention basins necessary to meet new stormwater standards to minimize runoff and control its downstream impacts.

8. Develop appropriate grading and soil reconstruction techniques to minimize site disturbance by the promulgation of new regulations that better reflect a greater level of stewardship and respect for the land.

9. Maintain and improve current grading and tree preservation ordinances that require the retention of natural vegetation and topsoil and an approved site plan or preliminary plat before land disturbance or grading can commence on a property. Coordinate regulations promulgated by State and federal agencies to better implement these laws and ensure compliance by the City and developers to such requirements and practices. (Modified 2006)

10. Stabilize Caulks Creek, either through remediation measures, or its rehabilitation to a more stable ecosystem by damming the creek at intervals and creating ponds and wetlands or other equally environmentally sound methods, on its periphery to reduce the volume and velocity of runoff entering the waterway. Avenues of federal, state, and local funding should be explored to assist the City of Wildwood in this project.

11. Require the installation of individual household wastewater treatment systems to meet environmental standards based upon the area's physical characteristics as defined by soil scientists and adopted by the City of Wildwood, as a means to protect the public's health, safety, and welfare.

12. Inspect individual septic systems periodically to ensure their operations meet minimum health standards and through a program of mandatory inspections upon any re-occupancy or sale of a single-family residence.

13. Establish an effective inspection system for package wastewater treatment plants. (1996; Modified in 2016)

14. Require the treatment of wastewater effluent from individual systems or packaged plants to meet current governmental standards, when changes are considered, adopted, and implemented via the City's applicable codes and regulations. (1996; Modified in 2016)

15. Where feasible, extend public potable water to all areas of the City currently without this service to reduce future health and safety problems relating to wastewater effluent from non-public systems, while providing fire hydrants for public safety purposes. (1996; Modified in 2016)

16. Enact new legislation that creates incentives for the recycling of surplus construction materials from commercial, residential, and institutional development projects, while expanding bulk pick-up services within all residential neighborhoods located in the City. (2006)

17. Complete the extension of the public sanitary sewer, public potable water, and stormwater management systems to the Town Center Area, particularly into the Pond Historic District, including the development of any studies necessary for support of these utilities extensions. (2006; Modified in 2016)

18. Protect groundwater resources, and the aquifer, which is its source, from contamination, waste, or overuse through the consistent application of federal, state and city laws, regulations, and standards that preserve the soil and vegetation layers, while ensuring new development does not exceed the carrying capacity of the land. (2016)

Environmental Element Cross-References

Each of the cross-reference tables have been included to assist users in understanding the interrelationships of the adopted goals, objectives, and policies of the Master Plan's six (6) elements and the role each plays in achieving the desired outcomes set forth in them.

	Goal 1	Goal 2	Goal 3	Goal 4	Goal 5
Obj. 1	X	X	X	X	X
Obj. 2	X		X	X	
Obj. 3	X	X	X		

Obj. 4	X	X		X	
Pol. 1	X	X	X	X	
Pol. 2	X	X	X		
Pol. 3	X	X	X		
Pol. 4	X	X	X		
Pol. 5	X	X	X		
Pol. 6	X		X		
Pol. 7	X	X	X		
Pol. 8	X		X		
Pol. 9	X		X		
Pol. 10	X	X			
Pol. 11	X		X		
Pol. 12	X		X		
Pol. 13	X		X		
Pol. 14	X		X		
Pol. 15	X		X		
Pol. 16	X		X		
Pol. 17	X			X	
Pol. 18	X		X		X

Planning Element

Three (3) of the five (5) objectives noted in the Wildwood's *Plan of Intent* were specific to land use policy:

> *Residential and commercial development consistent with long-range planning and prudent land utilization;*
>
> *Protection of the greenbelt formed by Babler, Rockwood Reservation and Range, and Greensfelder Parks; and*

Preservation and conservation of the natural environment.

Protection of the natural environment was one (1) of the five (5) objectives outlined in the *Plan of Intent* and has already been discussed in the Environmental Element of this Master Plan.

Benefit (and Need) of the Non-Urban Residence District to the Larger St. Louis Metropolitan Area

The Non-Urban Residence District zoned land in the City serves an important regional function by preserving open space in some of the most complex ecology of the region and enhancing, by contrast, the character of more densely settled areas of the community and surrounding municipalities. By promoting a diverse character of development in St. Louis County, the rural areas of the City of Wildwood permit other parts of the region to "borrow" open space that has been preserved through its planning policies.

Major Initiatives in the City of Wildwood (1995-2015)

Over the last twenty (20) ~~ten (10)~~ years, the City has engaged in a number of major planning initiatives to achieve the adopted objectives and policies of the Master Plan. The efforts can be summarized as follows:

1. Completed Model Telecommunication Code in December, 1997.
2. Completed Town Center Process and Plan in February, 1998.
3. Completed Historic Preservation and Restoration Code in August, 1999.
4. Completed Outdoor Lighting Requirements in August, 1999.
5. Completed Architectural Review Board Ordinance and Standards in May, 1999 and June, 2001.
6. Completed Parks and Recreation Plan in June, 2001.
7. Completed Town Center Development Manual in June, 2004.
8. Completed Public Space Ordinance in January, 2006.
9. Completed the Action Plan for Parks and Recreation in 2007.
10. Completed the update of the Town Center Plan in March 2010 and October 2012 (City Council).

Along with these plans and associated efforts overseen by the Department of Planning, the Departments of Administration and Public Works have also undertaken extensive planning activities. These efforts have focused on the creation of transportation priorities in its Annual Capital Improvement Budget and its 5-Year Capital Improvements Program. In the past twenty (20) years, several of these planned major initiatives have improved the safety of the City's streets, rural roadways, and bridges. Additionally, the major upgrades have established appropriate stormwater management criteria and standards for areas located outside the Metropolitan St. Louis Sewer District's boundaries.

Since the incorporation of the City, and the passage of the City's Charter, planning efforts have led to improved developments in terms of their character, respect for the environment, and functionality. Development continues to be a major influence in the City, particularly as the Town Center Area continues to grow in popularity and interest. Although the relative number of single family dwelling permit issuances may have declined from their peak levels prior to the City's incorporation, the number of permits still being issued is significant, increasing in total, particularly over the last two (2) years (2014-2015), and continue to reflect the desirability of Wildwood as a place to locate a home or business.

Master Plan Processes and Updates

Under the City's Charter, the Comprehensive Zoning Plan must be updated every ten (10) years. The update process is intended to keep this important planning document germane to changing conditions and reflect residents' vision of their community. Additionally, the update of the entire Master Plan is also an excellent time to consider the progress and challenges that occurred within the City in the previous ten (10) year period. Along with these considerations, the Master Plan process is always necessary to keep pace with new technologies and other conditions that occur, which were not anticipated in the previous ten (10) year period.

Updates, however, must be respectful of maintaining a common consistency, so residents, property owners, and businesses have some level of expectation regarding future actions or changes within the community. This expectation, which is derived from a Master Plan that is supported by the elected and appointed officials, is critical to achieving support for new initiatives to meet the goals, objectives, and policies of the document. *Accordingly, changes to the Conceptual Land Use Classifications Map after its adoption, should only be considered in the most unique or pressing circumstances or when such provides a clearly definable community benefit meeting the goals, objectives, and policies of this document.*

PLANNING GOALS

1. Improve the quality of life in the City of Wildwood by implementing, updating, and maintaining land use regulations. (2006; Modified in 2016)

2. Planning efforts in Wildwood must be coordinated with other jurisdictions, service providers, and utilities. (2006; Modified in 2016)

3. Land use and planning decisions need to be related closely to environmental quality, community services, transportation systems, and open space/parks considerations. (2006)

PLANNING OBJECTIVES

1. The overall rural character and fragile ecology of the City of Wildwood should be preserved.

2. The greenbelt of regional parks should be protected by preserving existing zoning and land use patterns on their periphery, thereby ensuring a protective transitional landscape around each one. (1996; Modified in 2016)

3. The expansion of suburban-type densities within this community should be limited to those locations, and associated parcels of ground, identified as "Sub-Urban Residential Area" on the Conceptual Land Use Categories Map of the Master Plan. (1996; Modified in 2016)

4. Commercial and industrial development should be promoted within the City as a means to provide an adequate tax and service base for its citizens, but they should be strictly defined and limited to very specific locations in the community, i.e. the Town Center for commercial activities and the Chesterfield Valley Area of the City for industrial uses.

5. Programs to improve communication about, and enforcement of, planning and zoning regulations, should be implemented by the City. (2006; Modified in 2016)

6. The City of Wildwood should continue to encourage life-cycle housing opportunities to all age groups. (2006; Modified in 2016)

7. Within The Town Center Area of Wildwood, application of its required Neighborhood Design Standards and Architectural Guidelines, from the *Town Center Plan*, shall be met or exceeded by development interests. (2016)

PLANNING POLICIES

1. Consolidate future commercial development within the boundaries of the City of Wildwood's Town Center.

2. Relate changes in the mapped zoning density within the two suburban residential areas to the pattern on adjacent properties, but the densities of new developments should not be in excess of one (1) unit per acre. Higher residential densities may be appropriate within the Town Center Area, if part of that overall plan (see Conceptual Land Use Map). (Modified 2006)

3. Continue Non-Urban Residence District zoning designation as the major land use category in the City of Wildwood. The Non-Urban Residence District designation of land performs an important regional function for the more developed communities in St. Louis County. Through the preservation of this zoning designation around the regional parks, the protection of the regional greenbelt is furthered. In addition, maintaining an existing Non-Urban Residence District designation is especially appropriate in areas of steep topography and highly erodible soil profiles. (1996; Modified in 2016)

4. **Incorporate the Land Use Categories of the Regulating Plan in the Town Center Development Manual, as part of the City's Zoning Code, in accordance with the map contained therein.**

5. Maintain the policy of preserving historic buildings/sites and archaeological areas through their designation on the City's Historic Registry. (1996; Modified in 2016)

6. Maintain land use and environmental policies to protect the regional park system from erosion and pollution. (2006; Modified in 2016)

7. Promote the development of consistent regulations between other service providers (fire and school districts) and utilities and the City's land use standards and requirements, particularly for the Town Center and Non-Urban Areas of Wildwood. (2006)

8. Maintain design criteria and standards for the use of land and for the architecture of buildings and structures, so that new construction complements the surrounding natural and built environments and minimizes harm or damage to them. (2006; Modified in 2016)

9. Any land use related matter must be reviewed and acted upon by the Planning and Zoning Commission, before City Council Committee or City Council can take an action upon it. (2016)

Planning Element Cross-References

Each of the cross-reference tables have been included to assist users in understanding the interrelationships of the adopted goals, objectives, and policies of the Master Plan's six (6) elements and the role each plays in achieving the desired outcomes set forth in them.

	Goal 1	Goal 2	Goal 3
Obj. 1			X
Obj. 2			X
Obj. 3	X		X
Obj. 4	X		
Obj. 5		X	X
Obj. 6	X		
Obj. 7	X		
Pol. 1	X		
Pol. 2	X		
Pol. 3	X		X
Pol. 4	X		
Pol. 5	X		
Pol. 6	X		X
Pol. 7	X	X	
Pol. 8	X		
Pol. 9	X		

Community Services Element

The City of Wildwood began on a premise of providing needed services in a different manner than other communities located within St. Louis County. This approach was to employ a small group of staff, which would be offset by utilizing the private sector to deliver all other services through a series of managed contracts. The quality of the services delivered to Wildwood residents and

businesses could then be annually reviewed to ensure on-going high quality and competitive low costs. City staff would manage these contracts for the community and make the necessary determinations of efficiency, cost, and need on an annual basis. Over the last twenty (20) years, community services have always been offered to residents and businesses utilizing this model, which has resulted in all necessary services being provided to them with assurances on quality, cost, and experience of the providers annually guaranteed. ~~In the original Master Plan adopted in 1996 by the Planning and Zoning Commission and ratified by the City Council, this element was named "Urban Services." In the Master Plan 2006 Update Process, the name of this element was changed to "Community Services" to better reflect the character of Wildwood. With the City of Wildwood maintaining its unique character and creating opportunities for residents to better identify with this area through a number of different initiatives and efforts, the term "community" is much more suitable, since creating ownership in this City is critical to its success well into the future.~~

Major Initiatives in the City of Wildwood (1995-2015)

This element represents the administration of government and the provision of important services to residents, property owners, and businesses living, working, or otherwise located in the City of Wildwood. These services add to the quality of life, maintain property values, and provide a safe and secure environment for everyone. Many of these services that are essential to a vibrant and safe City environment are provided by other entities or utilities not affiliated with Wildwood. These partnerships are key to the success of the City and its residents, property owners, and businesses benefit from the expertise of these other entities and providers.

Over the past twenty (20) years, the City has made many upgrades and improvements to the service levels residents, property owners, and businesses receive relative to the previous jurisdiction - St. Louis County. These upgrades and improvements were promised as part of the incorporation effort and integral to the *Plan of Intent's* stated direction. A summary of upgrades and improvements is as follows:

1. Resurfaced over 246 miles of rural roadways in the City.
2. Replaced over 22,000 slabs of concrete street sections.
3. Replaced over twenty-seven (27) deficient or deteriorating bridges.
4. Promoted household recycling efforts in the City, while managing a sole-source single-family residential solid waste collection contract with a single provider.
5. Participated, and partially funded, three (3) ~~two (2)~~ major safety improvements on State Route 109; the last of which added two (2) roundabouts at major street intersections to facilitate safer and more efficient travel along one (1) of the more congested lengths of roadway located in the City.
6. Established and upgraded the City's website, in addition to publishing the Wildwood Gazette and weekly e-newsletter.
7. Installed over sixteen (16) ~~fourteen (14)~~ linear miles of multiple-use trails.
8. Restored Old Pond School and created a neighborhood-sized park in association with it.
9. Constructed Anniversary Park.
10. Established recreational programs, including nineteen (19) ~~nine (9)~~ major events.
11. Directed annexation of additional Town Center Area into the Metropolitan St. Louis Sewer District's boundaries, via a Neighborhood Improvement District (NID).
12. Adopted codes, ordinances, and regulations to improve efficiency of City's financial management.
13. Established sound investment policies.
14. Created and updated policies and procedures to comply with Missouri Sunshine Laws and requirements and allow residents to have open access to all government activities.
15. Partnered with other local governments to provide services and programs to all residents.
16. Established the Board of Ethics, Board of Public Safety, Architectural Review Board, Historic

Preservation Commission, Administrative Review Board, and ad-hoc committees to assist in major initiatives, since the incorporation of the City in 1995.

17. Added twenty-three (23) police officers to the City's force, thereby allowing for a minimum of four (4) beats to be offered at all times within Wildwood by the St. Louis County Police Department.
18. Designed and constructed Community Park - phase one - project, which included the City's first dog park component and an all-inclusive playground for children of all abilities.
19. Partnered with St. Louis County's Department of Parks and Recreation to open Bluff View Park, with its 2.3 mile long trail system, while beginning a long-term lease for a Belleview Farms site - a historically significant one hundred (100) acre open space located in the Meramec River Valley.
20. Assisted in the provision of high-speed internet service to over four hundred (400) households in the rural areas of the community, which still have no other options than the two (2) providers engaged by Wildwood through its eight (8) year effort in this regard.
21. Completed two (2) segments of the Manchester Road Streetscape Project, while finishing the design and engineering for the third, and final, segment of this Town Center improvement effort slated for construction in 2017.

Meeting the needs of the City's constituents has been the primary goal of four (4) Mayors, numerous City Council Members, and staff over the past twenty (20) years. In the public input sessions, many of the participants noted the level and quality ~~improved~~ of services offered by the City, since it incorporated, and wanted them to continue into the future. Additionally, many of the service providers and utilities responding to the request for information from the Department of Planning for this update of the Master Plan noted improved service levels and expanded networks of utilities had been achieved in the area of Wildwood over the past twenty (20) years, with other improvements planned in the next decade (see Appendix V).

Major Challenges Facing the City of Wildwood (2005-2015)

The ability of the City to undertake and complete those major initiatives over the last twenty (20) years has been premised on the availability of funding from a number of dedicated and predictable sources. The primary source of funding has been the City's share of the sales tax received from its participation in St. Louis County's pooled distribution formula. The City receives this pooled sales tax revenue based upon a per capita formula of total residents in the community. Since the City of Wildwood experienced substantial growth between 1995 (its incorporation) to 2010, a marked increase occurred in revenues from the sales tax. The City has continued to grow since the 2010 Census was completed and is anticipating adding approximately two thousand (2,000) more residents by the end of this decade. Under the current sales and other formulas, the City would receive an increase in revenues from this growth in population.

Over the past several years, an on-going discussion has been held at the State Legislature among municipal and State leaders about the distribution of pooled sales tax revenues and how it might be changed to address what certain cities have claimed are inequities in its structure. These discussions have led to numerous bills and other legislative initiatives to be proposed and debated for possible consideration, introduction, and passage. The City of Wildwood has and must continue to address attempts to change this tax structure, since it is the major source of operating and capital improvement revenues. Any changes to this tax structure could impact the City in a negative manner, which might lead to reductions in community services. Therefore, the City needs to be prepared to participate in any discussions on this matter, while maintaining vigilance in monitoring any legislative initiatives on possible changes to the taxing formulas and encouraging equity to all parties, (if changed).

During the last ten (10) years, the City Council adopted a specific policy and associated procedures for the consideration of requests for development incentives. Development incentives, such as Neighborhood Improvement Districts (NID), Transportation Development Districts (TDD), Community Improvement Districts (CID), and Tax Increment Financing (TIF), may be appropriate planning strategies, when applied as a means to achieve community goals, objectives, and policies set forth in the Master Plan and policies established by the City Council consistent with the same. However, in evaluating such mechanisms, the inherent costs to federal and state taxpayers from tax-exempt financing or other public costs should be fully weighed against the private and public benefits sought in order to ensure that the City uses, such tools only to promote the overall public good for its residents, while adhering to the City's twenty (20) year commitment to regionalism.

As the City of Wildwood matures, challenges will also mount on maintaining the current level of services it provides to its residents, property owners, and businesses. These challenges could lead to the Mayor and City Council members having to make difficult decisions about the level of services, the providers of these services, and the character of these services. Since the City contracts with private providers for many of its services, costs are competitive due to the bidding processes associated with them. In the next ten (10) years, overarching all decisions must be the need to protect the public's health, safety, and general welfare, while maintaining the high level of services and their delivery.

COMMUNITY SERVICES GOALS

1. Appropriate police, fire, EMS, sanitation, and other municipal services need to be maintained. (2006)

2. Development levels, and accompanying service responsibilities, should not exceed available municipal service capabilities. (2006; Modified in 2016)

3. Internet-based communication services should be improved, as an essential part of daily living and working throughout Wildwood. (2006; Modified in 2016)

4. Residents and businesses need to be well informed about Wildwood's government activities and its fiscal condition. (2006)

5. Promote the preservation of City's housing stock by its careful monitoring through the application of appropriate, Wildwood-based codes. (2006; Modified in 2016)

COMMUNITY SERVICES OBJECTIVES

1. The allocation of future capital investments by the City should be planned and managed in such a way the established character of the community is maintained and improved.

2. The constraints on development imposed by the fiscal and geographic limitations of all service providers, i.e. utilities and other jurisdictions, must be accepted by the City and related parties. (1996; Modified in 2016)

3. The concept of concurrency for new developments in the City of Wildwood should always be considered, so the capacity of existing infrastructure or government services is not exceeded,

thereby ensuring they are commensurate with the level of population and physical growth.

4. The use of private contractors for services in the City should be continued, but premised on cost-effectiveness, performance and quality evaluations in terms of citizen satisfaction. (2006; Modified in 2016)

5. The City should preserve and enhance property values by implementing plans, regulations, and standards for maintenance of its housing stock and land areas. (2006)

6. The network of existing and future utilities should be constructed underground and coordinated with other providers and public infrastructure to the extent feasible by technology, type of service, and proximity to buildings, trees, or denser development. (2006)

COMMUNITY SERVICES POLICIES

1. Maintain a long-range capital improvements program for the City of Wildwood based upon its own fiscal resources, grants from the federal and state government, and other sources of outside funding. (Modified in 2016)

2. Follow a policy of fiscal prudence in considering major new development initiatives, while creating specific procedures governing the review and processing of development incentive requests submitted to the City.

3. Continue contractual arrangement for police services, while seeking improvements and better efficiencies whenever possible. (2006)

4. Infrastructure for new or upgraded telecommunication services should be consistent with the rural appearance of the community and combine the use of pre-existing structures and rights-of-way, as the preferred methods of providing these facilities. (2006; Modified in 2016)

5. Develop opportunities, foster partnerships with providers, and create incentives for the provision of internet-based communication services to all households and businesses in the City of Wildwood. (2006; Modified in 2016)

6. Seek a library facility in the Town Center Area of the City. (2006)

7. Submit all publicly-funded projects to the City's review processes to guarantee compliance with its regulations and requirements. (2006)

8. Residents and business owners need to be well informed about Wildwood's government and its activities and the City should utilize all available media forums in this effort, including, but not limited to, direct mail, internet-based communication opportunities, and local newspapers. (2006; Modified in 2016)

9. Complete 5-Year Annexation Plans that are required by the St. Louis County Boundary Commission in keeping with State Statute and their procedures, as adopted, for potential additions of land area to the City's current boundaries. Decisions relating to annexation proposals should consider a number of factors, including fiscal, service, and community of

interest benefits and/or costs. (2006)

10. Establish programs for senior citizens in the community, including partnerships with other local entities, with the resources to help support said efforts. (2016)

11. Establish a working group of residents, City officials, and building professionals to consider appropriate life/safety considerations associated with the City of Wildwood implementing a reoccupancy permit system for its housing stock, while acknowledging the need to avoid any duplication of services and additional costs. (2016)

Community Services Element Cross-Reference

Each of the cross-reference tables have been included to assist users in understanding the interrelationships of the adopted goals, objectives, and policies of the Master Plan's six (6) elements and the role each plays in achieving the desired outcomes set forth in them.

	Goal 1	Goal 2	Goal 3	Goal 4	Goal 5
Obj. 1		X			
Obj. 2	X	X			
Obj. 3	X	X			
Obj. 4	X	X			
Obj. 5		X			X
Obj. 6		X			
Pol. 1		X			
Pol. 2		X			
Pol. 3	X				
Pol. 4			X		
Pol. 5			X		
Pol. 6					
Pol. 7				X	
Pol. 8				X	
Pol. 9		X			

Pol. 10				X	
Pol. 11					X

Transportation Element

Major Transportation Issues – Then and Now

Proposals to create a major north-south highway paralleling State Route 109 helped convince area residents of the need to take control of their own future in the late 1980's and early 1990's. The current regional transportation plan of the East-West Council of Governments (the St. Louis Metropolitan Area's official coordinating body for transportation improvements) does not include a new north-south highway on or near State Route 109. It does, however, identify State Route 109 as part of a Major Transportation Investment Corridor requiring short-term safety improvements. Concerns remain in the community regarding the extension of State Route 109 into the Chesterfield Valley Area, along with the addition of traffic lanes and proposed interchanges, under the guise of a safety-improvement program, which could ultimately lead it to becoming a part of a third metropolitan by-pass with links south to Interstate 44, Highways 30 and 21, and Interstate 55, and a link north to Interstates 64 and 70.

State Route 109 is already connected to Interstate 44, but its northern end currently terminates at Wild Horse Creek Road; a two-lane, east-west arterial. There are no official plans for improving Wild Horse Creek Road. However, State Route 109 could become a regional highway if it were connected to a widened Eatherton Road in the City of Chesterfield and then extended northward to a new interchange with Interstate 64. This route appears to be part of the traffic improvement corridor shown in the East-West Gateway Council of Government's short-term plan. This major regional planning initiative should not be created in the guise of short-term traffic improvements. If a third-ring bypass is built, its regional planning consequences on the entire metropolitan area should be fully assessed and its route determined based on these considerations.

The effect of making this link would be to open up Jefferson, Franklin and St. Charles Counties to more intensive development, most of which is likely to be drawn from the inner areas of St. Louis County and the City of St. Louis. The benefits of taking this initiative are debatable. Spending money on this new infrastructure could well encourage people to stop using existing facilities. The third-ring bypass is likely to accelerate the process of drawing development out of the older parts of the region, in complete contradiction to policies of regional integration and of preserving the Cities of St. Louis and Clayton as the centers of the metropolitan area.

Even if a third-ring bypass is ultimately to be constructed, there are strong arguments against using the State Route 109 corridor for this purpose. The unusual soil conditions in the City, detailed in the Environmental Element of this Master Plan, make it an inappropriate area in which to create major new highways. The enemy of ecological stability in the City is rapid runoff. The more impervious surfaces, particularly continuous highway lanes in hilly areas, the more rapid runoff is generated. State Route 109 adjoins the regional parks and actually goes through one (1) of them. The City of Wildwood has an obligation to protect the regional parks located within it; building a major highway through part of these parks and subjecting them to accelerated surges of rainwater polluted by motor oil and petroleum combustion products is counter to all other efforts to protect the regional

park system.

Major Initiatives in the City of Wildwood (1995-2015)

In the past two (2) decades, the City's Departments of Administration, Public Works, and Planning have established a Capital Improvement Program for Wildwood. Along with an annual budget, a five (5) year program has also been established to guide the development of infrastructure in the City. These improvements are funded by a 1/2¢ Capital Improvement Sales Tax approved by the voters of Wildwood in 1998, federal and state grants, and general revenue funds. Overall goals of the Capital Improvement Program are to provide safe streets and bridges and reduce commuting time between local locations by offering logical connections of existing and proposed streets. Management of traffic by limiting curb cuts on major arterial streets has also been a policy of the City of Wildwood.

Since the update of the Master Plan in 2006, the City has created many opportunities for multi-modal transportation options to serve users other than vehicles. This approach includes making existing streets and roadways more accommodating to users other than vehicles, along with designing and constructing new infrastructure that promotes the same. Additionally, the availability of public transit to the Town Center, including the St. Louis Community College - Wildwood Campus, has been a priority and recently realized. Along with these efforts and programs, the City has continued in the last ten (10) years to construct trails and make connections to Town Center Area, public space areas, and residential communities located throughout Wildwood. More so, at any other point in the history of Wildwood, this community is interconnected, linked, and poised to be a recreational center for the entire metropolitan region and beyond.

TRANSPORTATION GOALS

1. Safe streets, sidewalks/trails, and bridges need to be maintained throughout Wildwood. (2006)

2. Roadway projects need to be appropriate to the character of Wildwood. (2006; Modified in 2016)

3. Wildwood should encourage multi-modal options for transportation for residents, visitors, and guests, and businesses. (2006; Modified in 2016)

4. Support the founding vision of 'Save the Greenbelt, Stop the Outerbelt.' (2016)

TRANSPORTATION OBJECTIVES

1. The existing and proposed roadway network in the City of Wildwood should be designed and maintained so that it is safe and efficient, but also consistent with the community's long-standing, historic rural character. Roadway modifications shall be commensurate with expected traffic volumes and City standards established for these specific land use categories. (1996; Modified in 2016)

2. Changes to the regional roadway network, if proposed, should proceed only after the land use and economic costs and benefits (including the effects on the St. Louis Region) are fully understood and evaluated. (1996; Modified in 2016)

3. The City's topography, its associated fragile and rocky soils, and the linked group of outstanding

regional parks located here, should be protected from the erosion and pollution caused by the construction and use of major roadway corridors.

4. The development of future alternatives to automobile transportation in the City of Wildwood should be explored. (1996; Modified in 2016)

5. The natural vegetation and scenic views located along the City's network of roadways should be preserved and enhanced for the benefit of both residents and visitors. (1996; Modified in 2016)

TRANSPORTATION POLICIES

1. Promote a policy for the City of Wildwood's traffic needs, which supports the primary creation of a network of safe and ecologically responsible, two-lane, local arterial roadways. Make only improvements required for traffic safety, such as adding shoulders, improving the configuration of intersections, replacing substandard bridges, installing traffic signals, and other topical measures.

2. The City of Wildwood should promote the State Route 109 Corridor Study (Missouri Department of Transportation – July 1999) as a guide for future modifications to this roadway, while prioritizing topical improvements to facilitate the safe movement of local traffic within the community. This policy is premised on the negative impacts an outerbelt would have upon this community, particularly with respect to the environmental degradation associated with its construction and increased traffic, the loss of parkland through direct acquisition for roadway right-of-ways, the promotion of greater inter-County traffic movements, and the division of this community into two parts. (1996; Modified in 2016)

3. Oppose construction of major new highways within the City of Wildwood.

4. Support the City's existing highway and street network by adopting and implementing land use policies that will promote a compact concentration of development in the Town Center and the two suburban residential areas. These policies should enable more people to walk to their destinations, while also encouraging the Town Center to be served by other forms of access besides the automobile.

5. Require local access streets within individual subdivisions to be built to City standards, but consider having such roadways remain private and maintained by the homeowners to further encourage greater control over their ultimate use and appearance, except in the two suburban residential areas and Town Center, where local access streets should be publicly maintained.

6. Identify safety improvements necessary to all City-maintained roadways, as part of Wildwood's Capital Improvement Program. Such improvements may include the following: replacing antiquated bridges that are too narrow and subject to flooding; improving road alignments in places where there have been repeated crashes; widening roads where necessary and feasible to provide shoulders; correcting unsafe intersections; and providing a network of multiple links, so there is always more than a single way of going from one destination to another. (1996; Modified in 2016)

7. Protect existing bridges by implementing such measures as the posting of weight limits to

protect them from excessive loads, identify potentially dangerous approaches with appropriate warning signs, and prohibit truck traffic on roadways where weight-restricted crossings are located.

8. Preserve and enhance the scenic environmental qualities, which exist along many of the City's roadways and their intersections, through the application of appropriate design standards reflecting a sensitivity toward the area's unique environmental characteristics. These standards should be applied in the planning, construction, and maintenance of all roadways.

9. Designate certain roadways (listed in the Transportation Element and shown on the Transportation Plan) for the City of Wildwood's arterial system and provide an improvement policy for each of them. Roadways necessary to support the City of Wildwood's Town Center will be identified in conjunction with its own detailed plan. (1996; Modified in 2016)

10. **Continue to promote safe roadways for pedestrians, bicyclists, and motorists (Safe Streets Initiative). (2006)**

Roads

East-West Arterials

Clayton Road (County). **A two to three-lane arterial road.** Improvements to Clayton Road have been completed from the eastern boundary of the City to Strecker Road. This roadway now accommodates three (3) lanes of traffic, with vertical curbs, stormwater management facilities, and sidewalks. Clayton Road, west of Strecker Road, remains a two-lane roadway.
Wild Horse Creek Road (State). **A two-lane arterial road.** There are no official plans for adding lanes. Topical safety improvements should be planned.

Manchester Road (Wildwood). City plans are for **a two-lane arterial,** with widenings for turn-lanes or other safety improvements, as required. The design of this road within the Wildwood Town Center has been studied in detail and these levels of improvement are included as part of that plan. West of the Town Center, this road should remain **two-lanes in width.**

State Route 100 (State). **A limited-access four-lane road** from the Westglen Farms Drive/Manchester Road intersection to State Highway T. There are long-term safety improvements proposed for the section west of State Highway T to Interstate 44 in the current East-West Gateway Council of Governments' plan.

State Highway T/St. Albans Road (State). This road should remain **a two-lane arterial,** with topical safety improvements, as needed.

Main Street (Wildwood). City plans are for a two-lane boulevard, with adjacent on-street parking, bicycle lanes, sidewalks, and streetscape enhancements in accordance with the Town Center Plan.

Melrose Road (from Allenton Road to State Route 100) (Wildwood). A two-lane arterial that should remain substantially unchanged, except for topical safety improvements.

North-South Arterials[1]

Allenton Road (Wildwood). **A two-lane arterial** that should remain substantially unchanged, except for topical safety improvements.

Fox Creek Road (Wildwood). **A two-lane arterial** that should remain substantially unchanged, except for topical safety improvements.

Old State Road (County). Built on a narrow ridge, this road should remain **a two-lane arterial.** Shoulders should be added, where possible, and other topical safety improvements made. A section of this roadway, located in the City of Wildwood, is to be improved to a three (3) lane arterial level, as part of a St. Louis County project (from Ridge Road on the north end to Old Fairway Drive on the south end).

Ossenfort/Wild Horse Creek Road (Wildwood). The north-south portion of Wild Horse Creek Road, west of State Route 109, is part of the City's roadway network. It should remain substantially unchanged as **a two-lane arterial** road, except for topical safety improvements.

State Route 109 (State)/*North Eatherton Road* (County). Currently, a two-lane arterial. Safety improvements should be made, but the **two-lane configuration should be retained.** No new connections should be made north to Interstate 64.

Strecker Road (Wildwood). **A two-lane arterial.** A portion of this roadway was rebuilt during the last ten (10) year period of time and now contains sidewalks, improved stormwater management facilities, planting and landscape islands, and improved lane surfaces. Limit any new improvements to topical safety enhancements.

Shepard Road (Wildwood). A two-lane arterial that should remain substantially unchanged, except for topical safety improvements.

Thunderhead Canyon Road and West Glen Farms Road (Wildwood). These roads are necessary traffic links, but their speed limits should be strictly enforced.

Valley Road (Wildwood). **A two-lane arterial** that should remain substantially unchanged, except for topical safety improvements.

Taylor Road (Wildwood). A two to four-lane boulevard, with adjacent on-street parking, sidewalks, and streetscape enhancements in accordance with the Town Center Plan.

[1]Arterial - For the purposes of this plan, an arterial designation does not infer the street or roadway is part of a regional system serving the larger metropolitan population, but more the immediate West County Area and Wildwood. This designation is intended to define these roadways as major transportation corridors within the City that provide logical connections from the hierarchy of collector and local streets, require access management practices, and receive priority in terms of revenue resources for maintenance, repair, and upkeep.

Transportation Element Cross-Reference

Each of the cross-reference tables have been included to assist users in understanding the interrelationships of the adopted goals, objectives, and policies of the Master Plan's six (6) elements and the role each plays in achieving the desired outcomes set forth in them.

	Goal 1	Goal 2	Goal 3	Goal 4
Obj. 1	X	X		X
Obj. 2	X	X		X
Obj. 3	X	X		
Obj. 4			X	
Obj. 5	X	X		
Pol. 1	X	X		X
Pol. 2		X		X
Pol. 3				X
Pol. 4	X		X	
Pol. 5	X			
Pol. 6	X			
Pol. 7	X			
Pol. 8	X			
Pol. 9	X	X		
Pol. 10	X		X	

Open Space and Recreation Element

Major Initiatives in the City of Wildwood (1995-2005)

In 2001, the City Council approved a *Parks and Recreation Plan* for Wildwood. This plan was the beginning of a major effort on the part of the City to begin providing comprehensive recreational programming to its residents and visitors, while undertaking the development of park properties with facilities. Since that time, the growth in programs and facilities has been substantial. These programs include over sixty (60) annual events for the community, two (2) neighborhood style parks with facilities, and several other passive areas serving as open space, which have been acquired and

improved. Along with programs and park facilities, the City has installed over fourteen (14) miles of multiple use trails, while partnering with the Missouri Department of Natural Resources and St. Louis County in opening the *Al Foster Memorial Trail* along the Meramec River. Many other activities, facilities, and programs are planned in the years to come.

Along with these City efforts in the more traditional areas of parks and recreation planning and implementation, Wildwood has been applying the Master Plan land use categories and environmental regulations to protect existing parkland from degradation and harm. These types of policies and applications were key components of the incorporation effort and, from the standpoint of the City, have been achieved when the condition of the major public park holdings are reviewed. Similarly, the City has been receiving dedications of land area to further the connection of Babler State Park to Rockwoods Reservation through development proposals in the Non-Urban Residential Areas. New developments, beyond these dedications of land area, are also required to buffer and protect park properties from stormwater runoff, grading, and tree removal/damage. These buffers normally exceed one hundred fifty (150) feet in size.

Just before the adoption of the Master Plan 2006 Update, the City Council approved a new Public Space Ordinance, which formalizes the dedication processes of obtaining land area, fees, and improvements as part of the development or the division of land. This ordinance will create a fair and concise mechanism to gauge the impact of the new development on the need for public space and offer options to the developer to comply. When great communities are recognized or discussed, often heard is the abundance of public space, with improvements for residents to enjoy and use. The adoption of this ordinance begins the process of fulfilling many of the goals, objectives, and policies of the Master Plan and will ultimately lead to the need to create perpetual funding mechanisms within the community for the maintenance and upkeep of park properties and related facilities.

In 2006, the City Council, along with City staff, agreed to undertake a new approach to implement the goals of the 2001 plan, which led to the formation of a citizen committee to achieve this end. The approach was to identify a limited number of goals from the 2001 plan and implement them in an abbreviated time to achieve the intended outcome. This process led to the development of an Action Plan that had four (4) goals and fifty-seven (57) recommendations. These goals and recommendations were then implemented thereafter and led to the following actions:

1. **Programming** - Partner with the other providers to create the greatest range of programming opportunities possible for residents, beginning with the Wildwood Family YMCA, the Pond Athletic Association, the Rockwood School District, and the St. Louis Community College - Wildwood Campus.
2. **Facilities** - Expand current commitments to development of all types of trail systems (pedestrian, bicycle, equestrian) in the City of Wildwood, which are intended to link all public park spaces and population centers together, along with implementing the recently adopted "Access and Mobility Plan."
3. **Acquisition** - Identify and prioritize locations for future parkland acquisitions, with the first action to be the acquisition of a parcel of ground, of a size to accommodate a community park, within the central area of the City (proximity to State Route 100 and State Route 109 and environs).
4. **Funding** - Implement the necessary steps to promote the presentation of a park sales tax to the voters of Wildwood... for use in the development of parks facilities and recreation programs, to include staffing, maintenance, and other expenses.

OPEN SPACE AND RECREATION GOALS

1. **Wildwood's parks and recreation facilities should improve the quality of life within the City, enhance property values, promote a sense of community, and welcome and engage residents and the visiting public. (2006)**

2. **Wildwood facilities and park and recreation programs should meet residents' needs and preferences within prudent fiscal constraints. (2006; Modified in 2016)**

3. **Wildwood should have permanent funding sources for its park and recreation facilities/programs and their maintenance. (2006)**

OPEN SPACE AND RECREATION OBJECTIVES

1. The regional parks located within the City of Wildwood should be protected from adverse environmental consequences created by roadways, highways, and new developments located adjacent to or upstream from these publicly-held properties.

2. The connection of Babler, Rockwood Reservation and Range, and Greensfelder Parks should be encouraged, as part of a larger regional park system.

3. Protection of the diversity and health of vegetative and wildlife species within the City of Wildwood should be supported and adopted for application. (1996; Modified in 2016)

4. **Funding mechanisms, along with conservation easements, development incentives, and donation opportunities, for the active acquisition of properties and facilities to address the park and recreation needs of the City of Wildwood should be defined, established, created, and maintained. (2006)**

5. **Partnerships with federal, state, and local park and recreation agencies, other municipalities and public and private not-for-profit groups to implement the goals and objectives of this effort and regional actions of the greater community should be promoted and established. (2006)**

OPEN SPACE AND RECREATION POLICIES

1. Encourage the purchase or donation of additional land for the regional parks through a variety of traditional and innovative programs. (1996; Modified in 2016)

2. Create community/neighborhood parks throughout the more developed areas of Wildwood, with appropriate facilities to serve the surrounding areas, designed to accommodate residents, visitors, and guests to the City. (2006; Modified in 2016)

3. Pursue funding and financing options and mechanisms for the acquisition of park and recreational facilities for Wildwood residents, visitors, and guests. (2006; Modified in 2016)

4. Encourage diversity in the type of facilities to be funded and built, so that they complement other facilities in the City and within surrounding communities. The design of these facilities should allow for expansion, as growth occurs or user demands change. (2006)

5. Define, prioritize, and select potential locations for the acquisition, or protection by other means, of scenic vistas, pristine woodlands, diverse water features, prime agricultural lands, and properties whose acquisition will further such preservation within the City of Wildwood. (2006)

6. Ensure all efforts relating to parks and recreation planning in the City of Wildwood complement and adhere to the goals and objectives of the Master Plan, standards and guidelines of the Town Center Plan, requirements of the City Charter, and related municipal codes. (2006)

7. Initiate and implement partnerships with other entities to provide educational, and community outreach programs to residents, visitors, and guests of the City of Wildwood. (2006; Modified in 2016)

8. Develop opportunities for arts and cultural events for residents, visitors, and guests, as part of the City's public facilities and programs, and complement those provided by the public and private schools and regional institutions serving the St. Louis Metropolitan Area. (2006; Modified in 2016)

Open Space and Recreation Element Cross-Reference

Each of the cross-reference tables have been included to assist users in understanding the interrelationships of the adopted goals, objectives, and policies of the Master Plan's six (6) elements and the role each plays in achieving the desired outcomes set forth in them.

	Goal 1	Goal 2	Goal 3
Obj. 1	X		
Obj. 2	X		
Obj. 3	X		
Obj. 4		X	X
Obj. 5	X	X	
Pol. 1	X		
Pol. 2	X	X	
Pol. 3			X
Pol. 4	X		
Pol. 5	X		
Pol. 6	X	X	

Pol. 7	X		
Pol. 8	X		

Economic Development Element

A New Element for the Plan (2016)

In the past twenty (20) years, the City has created a number of opportunities for development in Wildwood, whether in residential settings or commercial locations. The commercial locations have been focused in the Town Center Area, given the allowable types, densities, and intensities of land use activities allowed in this special part of the City. The intent of the Town Center was to create a unique environment that provided engaging building architecture, walkable, pedestrian-friendly areas, park once and shop designs for convenience and building placements, and public spaces for gathering and outdoor enjoyment. All types of residential development have continued to occur throughout the community, from three (3) acre lots rural in nature, to the higher density projects in the Town Center Area. Collectively, this growth, whether residential or commercial in nature, was viewed for many years as the City's economic development efforts and sufficient in this regard.

More recently, however, in the last few years, (2013-2015) concerns have been raised, particularly after the Great Recession, that more was needed from the City to spur commercial growth, which would be facilitated by the development of more rooftops. Accordingly, the City Council appointed a task force of its members to develop an approach to this matter. This task force, a group of five (5) City Council members and the Mayor, spent its first year defining the City's long and short-term goals, which are defined on the next page:

Economic Development Task Force - Long Term Goals (2013)
1. Commitment to sustainable and on-going implementation of all goals.
2. Assign staff coordinator/contact for outreach and information.
3. Develop marketing brochure.
4. Update City's website.
5. Coordinate effort with public relations or economic development consultant(s).
6. Use social networking to advance message of City.
7. Continue long-term strategic goals of the City (capital improvements projects).

Economic Development Task Force - Short Term Goals (2013)
1. Resolve the Town Center Plan Update.
2. Identify City's assets.
3. Develop and implement a branding message campaign.
4. Upgrade existing website to include economic development component.
5. Invite outside advisors (speakers, representatives of various entities or other communities), both local and nationally recognized experts.

The task force engaged an outside consultant to create an Economic Development Plan for the City and identify a group of tasks for implementation and action. With the consultant's work on-going during the development of the 2016 Master Plan update, the committee was able to review its products and also discuss whether or not a new element related to economic development should be included in the Master Plan. The committee agreed that, at this stage in the City's history, this new element would be beneficial and appropriate for inclusion into the Master Plan, given the need to foster new interest in Town Center, maintain the current successes within this area, and grow the overall community by expanding its population, developing necessary and desired services, and forming new utility networks and infrastructure connections. Collectively, the committee sought to ensure Wildwood, regardless of existing or future revenue sources, would be self-sustaining in terms of its budgetary needs for the immediate ten (10) year period covered by this updated Master Plan.

Balancing Development Needs and Wildwood's Character

Many pressures face communities in the new economy and competition for new development and retaining existing businesses increases each year. Communities have offered and provided public finance incentives, constructed infrastructure and utilities at no cost to the identified development interests, and competed against each other across the region to bring businesses to their respective locations, at the loss to the other governments in the region. This approach to economic development has been studied and criticized and, conversely, praised by different parties, depending on their perspectives and/or perceived benefits. Regardless of the perspective, economic development in this fashion has limited merits, risky and short-term benefits, and high impacts associated with the incumbent negative consequences on other service providers and neighboring communities.

The City of Wildwood has never placed its principles at stake for the short-term benefits of a possible outcome. Of late, certain parties within the City have stated that Wildwood does not have a favorable business environment and changes to its long time regulations and policies in this regard need to be considered and acted upon, so as to change this circumstance and grow the local economy. This growth in the economy is partially based upon the uncertainty that is now associated with the future of the pooled sales tax and the funds it generates for the City. The committee recognizes that it is important to have stable funding sources for the City and a business

environment that is positive and vibrant, but is clear in its belief that such must be respective of the goals, objectives, and policies of the City's other elements of its Master Plan.

With each State legislative session, this pooled sales tax issue continues to be debated and it is important for the City to be attentive in this regard, concurrently it must also work to implement the items adopted by the City Council from the consultant's report on economic development. Implementation of these action items identified in the consultant's report has been characterized as being a mix of short and long-term implementation timeframes. Therefore, progress in terms of their implementation should be measured in this regard, but always from the perspective of facilitating business retention and growth, consistent with the established direction of this community, since its incorporation, which has always been by measured and managed growth and quality, resident-based processes to verify successes.

ECONOMIC DEVELOPMENT GOALS

1. Continue to designate and promote the Town Center as the City's core commercial and business area for development (see Planning Element – Objective #4). (2016)

2. Retention of current businesses and the development of new enterprises should be a priority to all staff, boards, commissions, and elected officials of the City. (2016)

3. Allocate funding for capital improvement projects in Town Center Area, focusing on expansions or upgrades to the current street and utility networks, along with open space, park, and trail development there as well. (2016)

4. Develop strategies for the City, so tourists, recreational enthusiasts, and residents of the St. Louis Area will recognize it as a regional destination point. (2016)

ECONOMIC DEVELOPMENT OBJECTIVES

1. Undertake promotional efforts for the Town Center and Chesterfield Valley Industrial Areas. (2016)

2. Organize and participate in outreach efforts among applicable business groups to foster interest in the Town Center and Chesterfield Valley Industrial Areas. (2016)

3. Inventory and report on Town Center Area's and Chesterfield Valley Industrial Area's growth, investment, and business patterns on an annual basis to the City Council, business community, and public. (2016)

4. Use the City's 5-Year Capital Improvement Plan to identify and support projects in Town Center and Chesterfield Valley Industrial Areas to encourage new development within them. (2016)

5. Review on three (3) year cycles and modify, when needed, City land use regulations, permitting processes, and compliance efforts to determine and ensure effectiveness in their respective applications. (2016)

6. Establish a business development-retention coordinator for the City. (2016)

7. Make a recommendation to the City Council the Economic Development Task Force be made a standing committee of City Council. (2016)

8. Create and maintain a business development plan focused on the Town Center and Chesterfield Valley Industrial Areas. (2016)

ECONOMIC DEVELOPMENT POLICIES

1. Conduct research to determine what attracts people to Wildwood and develop a promotional campaign highlighting these features. (2016)

2. Identify key strategies for promoting and marketing Wildwood and then implement them. (2016)

3. Establish relationships with organizations/businesses that hold unique community assets, which helps in creating Wildwood's unique character. (2016)

4. Optimize the utilization of the City website, e-newsletter, and social media, including the possible development of new mobile applications. (2016)

5. Develop promotional materials, in conjunction with community representatives, which can be disseminated to desired businesses, restaurants, employers, development interests, and others to market Wildwood as a great place to live, work, and play. (2016)

6. Implement the City of Wildwood's Economic Development Plan. (2016)

7. Complete the third phase of the Manchester Road Streetscape Project and facilitate the development of Main Street from its current terminus, at Market Avenue, to State Route 109. (2016)

Economic Development Element Cross-Reference

Each of the cross-reference tables have been included to assist users in understanding the interrelationships of the adopted goals, objectives, and policies of the Master Plan's six (6) elements and the role each plays in achieving the desired outcomes set forth in them.

	Goal 1	Goal 2	Goal 3	Goal 4
Obj. 1	X		X	X
Obj. 2	X		X	X
Obj. 3		X		
Obj. 4			X	
Obj. 5	X			X

Obj. 6		X		X
Obj. 7	X	X		
Obj. 8	X			X
Pol. 1		X		X
Pol. 2	X			X
Pol. 3	X	X		X
Pol. 4	X			X
Pol. 5	X			X
Pol. 6	X	X	X	X
Pol. 7			X	

Conclusions and Conceptual Land Use Classifications

The residents, business owners, and service providers who live and work in the City of Wildwood, Missouri, have participated in the development of this updated Master Plan through a series of meetings, public hearings, and written comments received by the Department of Planning and Parks. These meetings, hearings, and comments were intended to obtain all possible information and opinions from the community to begin defining its vision for the future. As one of St. Louis County's ninety-two (92) municipalities, and the largest in terms of geographic size, the City of Wildwood has always had a unique, but difficult task ahead of it, due to the amount of undeveloped land area located here. These circumstances create development pressures in an area, which has long been known for its rugged terrain and natural beauty and has drawn many of its residents here for these reasons. While responsible, sustainable development is acceptable, and encouraged within the Town Center and Industrial Areas of Wildwood, it must be noted the existing density of development in many of its watersheds ~~Caulks Creek Watershed~~ has produced environmental and fiscal situations that should not be repeated in the remaining quadrants' watershed areas located in the northwest, southwest and southern section of the southeast quadrant of the City.

This shared vision of the community began on February 7, 1995 at the polls and will be furthered through the adoption and implementation of this updated plan. The Master Plan addresses a number of areas relating to the City's policies on environmental protection, service provision, resource allocation, transportation analysis, public space, economic development, and land use development and control. The plan contains twenty-three (23) goal statements, thirty-five (35) statements of objectives, and an additional sixty-three (63) policy statements designed to achieve these objectives. The major highlights of these one hundred twenty-one (121) statements include the following:

ENVIRONMENTAL – ~~Of the five (5)~~ The goals and objectives in this element~~, the primary policy for the area is to~~ minimize environmental disturbance and damage within the existing developed areas, restore watersheds where erosion has negatively impacted the natural equilibrium, and prevent future disturbance or damage to both non-impacted and impacted areas. This protection and restoration is to be encouraged through the implementation of appropriate zoning densities and the clustering of lots to limit disturbance.

~~Of the twenty (20)~~ The policy statements in the Master Plan~~, the emphasis is on~~ emphasize improving standards and development practices to address the sensitive nature of the City's environment. The overall direction of these policies is to better manage the development process through the continued implementation of the City's environmental regulations, including the tree preservation and restoration and grading and excavation codes, while exerting greater control over activities, which could potentially degrade the environment, such as, unmaintained stormwater control and sewage facilities.

PLANNING – ~~Of the six (6)~~ The focus of the goals and objectives in this element ~~the primary consensus in this area~~ is to continue to consolidate more traditional urban densities in certain areas of the City where environmental characteristics, access, existing development patterns, and availability of services are more favorable to this type of density. Additionally, the City should maintain its current five (5) land use categories called Non-Urban Residential, Sub-Urban Residential, Town Center, Industrial, and Historic.

~~Of the ten (10)~~ The policy statements in the Master Plan ~~the emphasis is on~~ emphasize limiting suburban development densities to the two (2) areas of the community, where this pattern already exists, while concentrating commercial and innovative higher density residential development to the Town Center. Furthermore, the Non-Urban District zoned areas of the City should continue to be considered a legitimate and permanent land use category. This designation will also further the effort to protect expectations of existing homeowners in those areas, promote the protection and linkage of the parks, ~~create a species/vegetation corridor between them,~~ and thus establish the concept of the greenbelt that the residents of this area have long supported.

COMMUNITY SERVICES – ~~Of the seven (7)~~ The goals and objectives in this element~~, the primary consensus is to~~ promote a level of development commensurate with the availability of support services. Where services are not available or severely hampered, development densities and intensities must be limited.

~~Of the eleven (11)~~ The policy statements ~~in the plan, the emphasis is on promoting~~ promote the concept of concurrency and managing the City's

growth and expenditures based upon its longstanding rural character.

TRANSPORTATION – ~~Of the five (5)~~ The goals and objectives in this element~~, the primary consensus is to~~ promote a network of safe and efficient roads in the community, which are designed to serve the needs of the City. The construction or improvement of the area's roadway system should be based upon the unique characteristics of its environment and level of development, while also cognizant of increasing traffic volumes in certain areas necessitating certain changes for safety of users and travelers.

~~Of the eleven (11)~~ The policy statements in the Master Plan~~, the emphasis is on~~ emphasize limiting the improvement of the area's roadway network to primarily two (2) lane arterial roads, including State Route 109. Additionally, the level of topical safety improvements should be based on specific plans developed for each of the roadways located in the City's eight (8) wards, including Town Center. Roads serving the Non-Urban Residential area should be built to City standards, but remain private, while those streets in the Sub-Urban Residential areas and the Town Center should be publicly maintained, except where specific circumstances dictate to the contrary.

OPEN SPACE AND RECREATION – ~~Of the seven (7)~~ The goals and objectives in this element~~, the primary consensus is to~~ protect the regional park system and encourage the eventual development of the greenbelt linkage between these publicly-held properties as noted in St. Louis County's first Parks Plan in 1965.

~~Of the ten (10)~~ The policy statements in the Master Plan ~~the emphasis is on creating policies~~ emphasize the creation of strategies and programs to encourage the dedication of land between these parks for inclusion in the greenbelt, thereby protecting these facilities from inappropriate development, and fostering the establishment of active park and trail facilities in Wildwood for the overall health of the community and region. ~~of the wildlife species/vegetation corridor.~~

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ECONOMIC DEVELOPMENT – The goals and objectives in this element emphasize an environment that is conducive to retaining businesses already located in the City, through regular communication with them, strategic updates of regulations applicable to them, and better promotion of City programs for assistance in this regard. Along with business retention, this element's goals and objectives promote a targeted approach to economic development, which includes engaging an individual, who is responsible for this initiative, on a full to part-time basis, depending on need.

The policy statements in the Master Plan emphasize the creation of new approaches to promote Wildwood and its Town Center to area residents, and the overall region. Additionally, several of these policy statements seek for the City to provide certain benchmark activities to improve the business environment of Wildwood, including

completing Phase Three of the Manchester Road Streetscape Project.

Conceptual Land Use Categories

This Master Plan is unique and one which is used on a daily basis in making the City of Wildwood a better place to live, work and play indicative of the level of concern its residents hold regarding preservation of the City's natural attributes and rural character for future generations to enjoy. In attempting to accomplish this goal, the implementation of land use policies is paramount. As discussed in the preceding summary, the community has reached a consensus on this policy and it is as follows: there should be five (5) major land use designations in the City --- Non-Urban Residential, Sub-Urban Residential, Industrial, Town Center, and Historic [Fifth Land Use Category - Historic was added to Master Plan with Ordinance #883 on October 14, 2002]. Each of these designations are described in greater detail below:

NON-URBAN RESIDENTIAL - This category contains the areas of the City currently zoned NU Non-Urban Residence District, **including one (1) commercially zoned property (Amended C-8 Planned Commercial District).** Principally located west of the State Route 109 corridor, but additional properties of similar zoning and nature are found in all quadrants of the City. The Non-Urban Residential Area is generally not served by public sewer or water and is dependent upon individual systems for these services. Characteristically, the land area is steeply sloping, heavily vegetated, and relatively undeveloped in terms of traditional urban densities. The adjoining land use pattern is principally low density residential or parkland and access is limited to a network of rural roadways characterized by narrow widths, one-lane bridges, no shoulders, steep hills, and poor alignments. These characteristics are aesthetically desirable, but also at the same time dictate a low-density residential pattern (generally three (3) acre lots or greater in size) for the future. Additionally, existing developments on lots of three (3) acres or more in these areas strongly weigh against any new development of higher densities in this land use designation. **Regarding the one (1) commercially zoned property located at the southeast corner of State Route 109/Wild Horse Creek Road, its designation should be retained, as part of an Amended C-8 Planned Commercial District classification within this land use area, but for the sale of beer and wine only. However, no further commercial designations of properties located beyond this site should be considered, thereby acknowledging this previous zoning was part of St. Louis County's rejected land use policy and not the City of Wildwood.**

~~This category contains the areas of the City currently zoned NU Non-Urban District. Principally, this area is located west of the State Route 109 corridor, but additional properties of similar zoning and nature are found in all quadrants of the City. The Non-Urban Residential area is generally not served by public sewer or water and is dependent upon individual systems and/or package systems for~~

~~these services. Characteristically, the land area is steeply sloping, heavily vegetated, and relatively undeveloped in terms of traditional urban densities. The adjoining land use pattern is principally low density residential or parkland and access is limited to a network of rural roadways characterized by narrow widths, one-lane bridges, no shoulders, steep hills, and poor alignments. These characteristics are aesthetically desirable, but also at the same time dictate a low density residential pattern (generally three (3) acre lots or greater in size) for the future. Additionally, existing developments on lots of three (3) acres or more in these areas strongly weigh against any new development of higher densities in this land use designation.~~

SUB-URBAN RESIDENTIAL - This category contains the areas of the City currently zoned for more intensive urban designations, such as the R-1 One Acre Residence District to the R-6A 4,000 square foot Residence District, including eight (8) commercially zoned properties (Amended C-8 Planned Commercial District). These two (2) areas are located east of the State Route 109 corridor and within the northeast and southeast quadrants of the City. Public sewer and water systems, along with a number of other services from additional utilities, generally serve these areas. The land's characteristics in these designations are more varied than the Non-Urban Residential areas of the City. Primarily, the land varies between steeply-sloping to rolling topography, forested to pasture, and to some extent has been disturbed by previous development, particularly in the Caulks Creek Watershed. Surrounding land use patterns are low to medium density residential, with limited commercial and institutional development as well. Access into these areas is principally from the State Route 100 or 109 corridors onto a system of formerly rural roads somewhat improved as development progressed into these areas. Given their proximity to existing development, a low-medium density residential development pattern would be compatible in this area, subject to the environmental limitations of any given site that may require lower densities or alternative designs. With the variability of site characteristics in these areas, the appropriate zoning designations in the range of the NU Non-Urban District to the R-1 One Acre Residence District, with a minimum lot size of 15,000 square feet as part of a Planned Residential Development (PRD), are appropriate, **excepting three (3) properties located at the terminuses of Center and West Avenues. These three (3) properties can be considered suitable for a greater residential land use density of one point seven five (1.75) units per acre, where appropriate, given their relative placements between high density land uses associated with St. Louis County's past actions and proximity to the Town Center Area's Boundary.** Regarding the eight (8) commercially-zoned properties located in and around the Clayton Road/Strecker Road intersection, their designation should be retained as part of an Amended C-8 Planned Commercial District classification within this land use area limiting the intensity of the commercial uses to C-1 authorized uses and requiring the neighborhood compatibility of the development. However, no

future commercial designations of properties located in either of these areas should be considered, thereby acknowledging all such previous zonings were part of St. Louis County's rejected land use policy and not the City of Wildwood's. The relative level of appropriateness for individual lot sizes within these zoning designations is premised on a number of variables, not withstanding surrounding development patterns and the extent of natural resource attribute restrictions exhibited by the individual sites. Therefore, the smallest minimum lot size of 15,000 square feet may not be appropriate on all sites and shall be viewed on a case-by-case basis to ensure its sensitivity to the objectives and policies of this Master Plan.

INDUSTRIAL - This category contains the areas of the City currently zoned M-3 Planned Industrial District and are primarily located in the Chesterfield Valley in the northwest quadrant of the City, which borders the Missouri River. This designation also includes one (1) isolated site along Ruck Road in the southeast quadrant of the City. This property is utilized for the St. Louis County Department of Highways and Traffic District garage/storage yard. Access to this property is by a County-maintained local road, not designated for heavy truck traffic. Given the isolated nature of this site and the predominant land use pattern around it, the expansion of the industrial activities would be inappropriate. Whereas, in the Chesterfield Valley, the development of these properties for the uses permitted under the site specific ordinance created at the time of the M-3 Planned Industrial District's adoption would be reasonable and supportable by the City.

TOWN CENTER - This category contains the areas of the City currently zoned either NU Non-Urban District or C-8 Planned Commercial District and include the historic communities of Grover and Pond. This area is primarily centered in the wedge of properties bordered by State Route 100, State Route 109, and Manchester Road, with a small extension to the west along Manchester Road to Pond. A majority of this area is located inside public sewer and water service areas, but also relies upon individual systems for the provision of these services. The characteristics of the land are less restrictive than the remainder of the City and can be described as rolling to gently-sloping, forested to pasture, or developed. Many of these properties have been disturbed by previous development, given the long history of settlement associated with the two (2) communities. There are a mix of uses ranging from single family residences on very small lots and three acre developments, commercial businesses, and institutional uses to agricultural lands. Access to this area is good due to its proximity to the two (2) State roadways and Manchester Road. With their traditional heritage as the commercial centers of the area, Pond, Grover, and the surrounding properties offer an excellent location for the Town Center, which would include a mix of high density residential developments and commercial uses of a neighborhood orientation. The density of residential

development should not exceed the R-6A 4,000 square foot Residence District (unless authorized by City Council as part of a site-specific ordinance) and would only be considered in this Town Center Area as part of a Planned Residential Development (PRD).

The intent of the Town Center is to create a center where a sense of community is established through the use of creative and innovative development features. These features will include: active and passive green space; interconnecting pedestrian pathways; family-owned and operated businesses; architecturally harmonious designs; integration and preservation of historical sites and local history; blending of local commercial development with appropriately buffered and situated residential development; an integrated system for sanitary and storm sewers; and protection of environmentally sensitive tracts. The Town Center should have a centralized area of park space that can be used as a gathering place for area residents to interact and truly develop a sense of place in their community, with plazas and mini-parks intermingled amongst future residential and commercial developments.

HISTORIC - This category contains properties or areas, which are listed on the City of Wildwood's Historic Register and can be located throughout the community, but only upon land zoned NU Non-Urban Residence District or the FPNU Floodplain Non-Urban Residence District, and not within the boundaries of the Town Center. The Historic Category is intended to provide property owners the opportunity to utilize their buildings, structures, or areas to a greater extent possible than normally allowed under their current Master Plan land use category or zoning district designation as an incentive for their preservation, protection, or adaptive reuse. Designation of properties or areas must meet the criteria listed in the Historic Preservation Ordinance for their nomination and consideration. The designation of properties or areas to this land use category must be approved by the Historic Preservation Commission, the Planning and Zoning Commission, and the City Council and only becomes effective when the owner agrees to have the property or area placed on the City's Historic Register and this designation is finalized. Future use of a historic property or an area will be premised on the surrounding land use pattern, access, utility service, and the sites' natural features and must provide a true community benefit for its consideration.

Conceptual Land Use Categories Map

The City's Charter is unique in that, when the voters of Wildwood approved it, it included a provision, which linked it to the Master Plan. This link was accomplished by adopting the Master Plan's Conceptual Land Use Category Plan as the Charter's Comprehensive Zoning Plan. Both of these plans, show as maps within each such document, create a legal requirement for land use decisions to correspond between these two (2) components. Therefore, the City Council cannot approve any zoning change that is inconsistent with the

Conceptual Land Use Category Plan of the Master Plan, which is set forth in the Charter. Zoning amendments contrary to these maps are prohibited and may only be made by first amending the Comprehensive Zoning Plan itself, so that these types of decisions are always supported by an established document. The City has, therefore, created a system of checks and balances that elevates land use decisions to a status of significance that few other cities have chosen to incorporate into these development processes.

As the Master Plan Advisory Committee considered changes to the Conceptual Land Use Categories Map of this document, it recognized the significance of potential changes to property designations and chose to consider them carefully and based upon clear and rational criteria. This Master Plan represents the single most important representation of future land use over the next ten (10) year period. The protection offered by this Master Plan is expressed by the very limited number of changes that occurred to it in its first twenty (20) years of application (1996 – 2016). Providing property owners expectation on how parcels of ground may be utilized is one of the principal benefits of the City's planning processes. As a result of this process, and the importance of this Master Plan, the Master Plan Advisory Committee ultimately made very few changes to the existing Conceptual Land Use Categories Map. These changes are described in detail in Appendix I of the Master Plan.

Although some changes were made, based upon the data and comments compiled through the update process, future modifications to properties were also discussed in the context of a specific set of criteria premised on unique circumstances or specific conditions not anticipated at this time. In no instance did the Master Plan Advisory Committee agree the previous policies of St. Louis County should be used to justify a future change to the Master Plan's Conceptual Land Use Categories Map. The Master Plan Advisory Committee noted that certain higher density residential developments and isolated commercial projects do exist in locations designated Non-Urban Residential Area in the original Master Plan, as legal non-conforming uses, and creating these non-conformities at that time was an appropriate policy that should be continued. This policy protects the character of Wildwood from previous land use decisions that were made with little regard to the overall impact upon the larger landscape and enforces the City's direction to not continue this application. ~~Equally, the advisory committee did agree that surrounding land use, on one (1) properties (Property #9 in Appendix VI), could ultimately be considered as part of a land use change proposal, but only where its benefit to the community is clearly definable public safety considerations are substantial.~~

In all, this group of volunteers responded to the input it received from the public input sessions and respected the system of checks and balances in place, as part of the Master Plan and Charter of the City to protect the character of Wildwood and limit the number of overall changes relating to land use. This action is reflected in the revised Conceptual Land Use Categories Map that is part of this Master Plan.
Conceptual Land Use Categories Map on next page.

Policy Advisors

Assisting the volunteers in updating the Master Plan were a number of professionals from a broad range of backgrounds. These professionals provided valuable input, guidance, comments, and critiques of the recommended changes now contained in the Master Plan Update. These professionals are as follows:

Dr. Terry Jones, PhD.
Moderator of Update Process

Ryan S. Thomas, P.E., City Administrator
Community Services and Administration

Rob Golterman, Esq., City Attorney
Legal Consultant

Tim Tanner, Captain, St. Louis County Police - Wildwood Precinct
Police Services

Rick Brown, P.E. and P.T.O.E., Director of Public Works/City Engineer
Transportation Policies and Infrastructure Programming

Kathy Arnett, Assistant Director of Planning and Parks
Plan Coordinator and Web and Format Manager

Liz Weiss, City Clerk
Initial Plan Coordinator (now City Clerk)

Terri L. Gaston, Senior Planner
Mapping Services

Joe Vujnich, Director of Planning and Parks

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APPENDIX I

Explanation of Conceptual Land Use Changes

As part of the update of the Master Plan, the volunteer group assisting City officials and staff in considering changes to it studied the land use designations of all parcels of ground located within the boundaries of Wildwood. To accomplish this process, the Master Plan Advisory Committee considered a number of options to accurately understand the extent of changes and how the community might feel about any proposed modifications based on this input. The Master Plan Advisory Committee ~~developed tentative recommendations, but, after lengthy discussion and multiple public meetings within the various wards, it~~ decided to send to each household in the City a letter requesting ~~any additional~~ input on whether they would like to have their property reviewed in terms of its current land use designation or to offer opinions on whether or not land use changes should be considered and, if so, to what extent. This mailing involved over 13,000 households and was intended to bring the decision-making about the City's future to each property owner in Wildwood.

After providing approximately two (2) weeks for residents to respond to this letter and related request, the City received approximately fifty-three (53) responses. Of those fifty-three (53) responses, sixteen (16) letters specifically sought changes to their current land use designations under the existing Master Plan. These sixteen (16) properties are summarized on the next pages. During ~~September,~~ October, and November, the Master Plan Advisory Committee considered the input it had received from these sixteen (16) property owners and representatives and held meetings where these individuals presented rationales and supporting evidence on their individual requests. Ultimately, two (2) of these requests were determined to meet the high standard necessary for a modification of their respective "Conceptual Land Use Categories." ~~Additionally, this other parcel of ground was added due to its proximity to others being recommended for change (Missouri Department of Transportation garage).~~ With the desire of participating parties to maintain a high standard of expectation in terms of future land use in this City, changes to these designations were not taken lightly.

Sixteen (16) Properties Considered for Land Use Changes

Property Id. and Number	Location	Requested Master Plan Category Change	Action (N=no)
McCann- #1	Wild Horse Creek Road	Non-Urban to Sub-Urban	N
Abdiannia - #2	State Route 109	Text Change in Non-Urban	See Page 99
McCarthy/Dierberg - #3	Wild Horse Creek Road and State Route 109	Non-Urban to Town Center	N
Callahan - #4	Strecker Road	Text Change in Sub-Urban	N
Burtelow - #5	Clayton Road and State Route 109	Sub-Urban to Town Center	N
Passiglia - #6	Clayton Road and State Route 109	Non-Urban to Town Center	N
Virant - #7	Christmas Valley	Non-Urban to Sub-Urban	N
Payne Family Homes/Von Gruben- #8	State Route 109	Non-Urban to Sub-Urban	N
Blechle - #9	State Route 109	Non-Urban to Sub-Urban	N
Eckman - #10	State Route 109	Non-Urban to Sub-Urban	N
Payne Family Homes - #11	Manchester Road	Non-Urban to Sub-Urban	N
St. Albans Properties - #12	State Route 100 and State Route T	Non-Urban to Town Center	N
Brown - #13	West Avenue	Text Change in Sub-Urban	See Page 100

Manlin Development - #14	East Avenue	Town Center to Sub-Urban	Withdrawn by Petitioner
Bethesda Health Group - #15	State Route 109	Non-Urban to Sub-Urban	N
PWM Properties - #16	Valley Road	Non-Urban to Sub-Urban	N

The Master Plan Advisory Committee used the rationales highlighted within the tables on the subsequent pages for supporting changes to two (2) total properties (requests):

Property Receiving Favorable Land Use Recommendation

Property Id.	Abdiannia - #2
Location	Southeast intersection of State Route 109 and Wild Horse Creek Road
Current Designation	Non-Urban
Proposed Designation	Non-Urban, with a Text Modification
Comments	1otential precedence associated with this change is limited to one (1) additional property in the City of Wildwood, the Glencoe Post Office. 2. The alteration would allow for the future growth of the facility, ensuring its viability and avoiding a vacant, limited–use building type from creating other issues in the future. 3. The previous land use jurisdiction, St. Louis County, established the prohibition on alcohol sales at this location in 1987, while the types and numbers of businesses providing alcohol for sale have changed radically since then. Therefore, accommodating this change at this location for the sale of alcohol has a limited geographic impact.

Property Receiving Favorable Land Use Recommendation

Property Id.	Brown - #13
Location	West Avenue, south of Manchester Road
Current Designation	Sub-Urban
Proposed Designation	Sub-Urban, with a Text Modification
Comments	1ed this requested change in the past. 2. The property abuts the Town Center Area on two (2) of its four (4) sides, a recently approved residential subdivision at the requested density of 1.75 units per acre, and an existing subdivision that mix of R-3 10,000 square foot Residence District and R-1 One Acre Residence District zoning designations. This allowance on the subject property would be consistent with such. 3. The site has access to an improved street and all utility services are available.

APPENDIX II

Resident and Business Surveys (2015)

Resident Survey

In March 2015, the Master Plan Advisory Committee commissioned a survey of all residents within the City of Wildwood to seek feedback on a number of topics relative to the Master Plan update. A postcard was mailed to each household in the City informing them of the survey and how they could access it. At the conclusion, seven hundred and one (701) responses were received.

Listed below are the forty-seven (47) questions posed in this survey and the responses by percentage. Due to rounding, not all percentages add up to 100%. Open-ended questions were also posed, and received two hundred thirty-two (232) responses. These responses are not part of this Appendix, but are available from the City Clerk.

Q1. How would you rate the City of Wildwood as a place to live?

Excellent	63.6%
Good	34.4%
Only fair	1.9%
Poor	0.1%
Don't know	0.0%

Q2. How would you rate the police services supplied by the City of Wildwood's contract with the St. Louis County Police Department?

Excellent	51.6%
Good	35.4%
Only fair	4.6%
Poor	1.1%
Don't know	7.3%

Q3. How would you rate the trail system within the City of Wildwood?

Excellent	48.2%
Good	37.9%
Only fair	7.0%
Poor	0.7%
Don't know	6.1%

Q4. How would you rate the residential trash collection services supplied by the City of Wildwood's contract with Meridian Waste Services?

Excellent	47.2%
Good	43.1%
Only fair	6.1%

Poor	1.9%
Don't know	1.7%

Q5. How would you rate snow removal on residential streets?

Excellent	33.8%
Good	44.1%
Only fair	10.1%
Poor	2.3%
Don't know	9.7%

Q6. How would you rate the City's maintenance of the streets and rural roadways it is responsible for?

Excellent	24.5%
Good	56.2%
Only fair	12.4%
Poor	3.1%
Don't know	3.7%

Q7. How would you rate the City's effectiveness in managing your tax dollars?

Excellent	17.8%
Good	50.8%
Only fair	12.1%
Poor	4.6%
Don't know	14.7%

Q8. How would you rate the City of Wildwood's government in getting advice and input from residents?

Excellent	30.4%
Good	41.1%
Only fair	14.3%
Poor	5.0%
Don't know	9.3%

Q9. How would you rate the management of stormwater runoff in Wildwood?

Excellent	13.3%
Good	45.2%
Only fair	10.1%
Poor	2.1%
Don't know	29.2%

Q10. How would you rate internet access at your residence?

Excellent	33.4%
Good	33.9%
Only fair	11.3%
Poor	14.0%
Don't know	1.4%

Q11. How would you rate the City of Wildwood's performance in preserving and conserving the natural environment?

Excellent	37.7%
Good	51.4%
Only fair	6.6%

Poor	1.4%
Don't know	3.0%

Q12. How would you rate how the City of Wildwood plans for your future?

Excellent	15.5%
Good	43.1%
Only fair	12.7%
Poor	3.1%
Don't know	25.5%

Q13. How would you rate the economic success of the City of Wildwood Town Center?

Excellent	9.8%
Good	44.2%
Only fair	24.8%
Poor	8.3%
Don't know	12.8%

Q14. How would you rate the City's recycling program?

Excellent	34.8%
Good	50.4%
Only fair	8.4%
Poor	1.7%
Don't know	4.7%

Q15. How would you rate the City's historic preservation efforts?

Excellent	22.4%
Good	46.1%

Only fair	7.4%
Poor	1.0%
Don't know	23.1%

Q16. How would you rate the bridges in the City of Wildwood?

Excellent	26.2%
Good	55.1%
Only fair	6.7%
Poor	1.9%
Don't know	10.1%

Q17. Future commercial and business development in the City of Wildwood should be restricted to the Town Center?

Strongly agree	27.2%
Somewhat agree	26.1%
Neither agree nor disagree	12.1%
Somewhat disagree	22.0%
Strongly disagree	12.6%

Q18. For properties located outside the Town Center Area, there should be no more than one unit per acre?

Strongly agree	28.4%
Somewhat agree	26.2%
Neither agree nor disagree	21.0%
Somewhat disagree	14.0%
Strongly disagree	10.4%

Q19. Wherever possible, existing and future utilities should be constructed underground.

Strongly agree	83.2%
Somewhat agree	13.4%
Neither agree nor disagree	2.4%
Somewhat disagree	0.7%
Strongly disagree	0.3%

Q20. Having a Metrolink Line should be one of the City of Wildwood's long-range goals.

Strongly agree	19.8%
Somewhat agree	18.4%
Neither agree nor disagree	14.7%
Somewhat disagree	16.1%
Strongly disagree	31.0%

Q21. Projects that connect existing trails should be given the highest priority in planning improvements in the existing system.

Strongly agree	26.3%
Somewhat agree	40.1%
Neither agree nor disagree	19.5%
Somewhat disagree	9.2%
Strongly disagree	5.0%

Q22. The City of Wildwood should build a recreation complex.

Strongly agree	25.0%
Somewhat agree	25.9%
Neither agree nor disagree	19.5%
Somewhat disagree	13.6%

Strongly disagree	16.0%

Q23. The City of Wildwood Master Plan needs a focused business development plan for the Town Center.

Strongly agree	36.5%
Somewhat agree	44.2%
Neither agree nor disagree	15.0%
Somewhat disagree	2.6%
Strongly disagree	1.7%

Q24. The City of Wildwood needs more housing that young families can afford.

Strongly agree	11.9%
Somewhat agree	23.0%
Neither agree nor disagree	31.9%
Somewhat disagree	20.2%
Strongly disagree	13.0%

Q25. The City of Wildwood sponsors community events like BBQ Bash, Founders Day, and a concert series. Does the City sponsor too many events, too few, or about the right amount?

Too many events	3.7%
Too few	11.3%
About the right amount	80.7%
Don't know	4.3%

Q26. How important is it the City of Wildwood government place more emphasis on environmental sustainability?

Extremely important	22.8%
Very important	35.5%

Somewhat important	31.1%
Not very important	7.9%
Not at all important	2.7%

Q27. Do you think the City of Wildwood's enforcement of codes for residential property is too strict, about right, or not strict enough?

Too strict	13.2%
About right	59.4%
Not strict enough	11.9%
Don't know	15.5%

Q28. Do you think the City of Wildwood's enforcement of codes for commercial property is too strict, about right, or not strict enough?

Too strict	12.8%
About right	45.2%
Not strict enough	10.0%
Don't know	32.0%

Q29. Do you think the City of Wildwood needs more neighborhood parks, fewer neighborhood parks, or does it have about the right amount?

Needs more neighborhood parks	45.2%
Fewer neighborhood parks	4.5%
It has about the right amount	45.1%
Don't know	5.2%

Q30. In general, do you think the City of Wildwood's land use policies are too strict, about right, or not strict enough?

Too strict	18.7%
About right	48.7%

Not strict enough	9.8%
Don't know	22.8%

Q31. What's your opinion about having higher density residential development in the Town Center?

Strongly favor	9.1%
Somewhat favor	26.4%
Neither favor or oppose	24.1%
Somewhat oppose	22.1%
Strongly oppose	18.2%

Q32. How important is it that the City of Wildwood seek to have the St. Louis County Public Library build a facility in the Town Center?

Extremely important	16.5%
Very important	17.2%
Somewhat important	30.2%
Not very important	24.9%
Not at all important	11.2%

Q33. The City of Wildwood receives most of its general revenues from two sources: its share of the County-wide sales tax pool and gross receipts taxes on utilities, like electricity and telephones. It does not have a property tax—those dollars go to other jurisdictions like school districts and fire protection districts.

Knowing that and considering the services you receive from the City of Wildwood compared to the taxes you pay to the City, does your household receive more than its money's worth, somewhat more than it's money's worth, somewhat less than its money's worth, or less than its money's worth?

More than its money's worth	8.1%
Somewhat more than its money's worth	35.3%
Somewhat less than its money's worth	21.3%
Less than its money's worth	12.4%

Don't know	23.0%

Q34. How much do you think the roundabouts on Highway 109 have helped traffic?

A great deal	29.5%
Somewhat	35.6%
Not very much	12.8%
Not at all	13.3%
Don't know	15.5%

Q35. How familiar are you with the City of Wildwood Master Plan?

Very familiar	9.2%
Somewhat familiar	45.8%
Not very familiar	32.4%
Not at all familiar	12.5%

Q36. About how many times have you visited the City of Wildwood website during the past twelve months?

20 times or more	9.8%
10 to 19 times	15.9%
5 to 9 times	24.9%
3 to 4 times	27.2%
1 to 2 times	17.3%
Not at all	4.9%

Q37. How would you rate the City of Wildwood's website?

Excellent	10.8%
Good	70.7%

Only fair	11.4%
Poor	2.3%
Have not visited the City's website	4.8%

Q38. The City of Wildwood sends a newsletter the "Gazette" to each resident three times a year. Over the past twenty-four (24) months, have you rad all of them, most of them, one or two of them, or none of them?

Read all of them	55.6%
Read most of them	27.2%
Read one or two of them	11.5%
Read none of them	5.6%

Q39. How would you rate the City of Wildwood's newsletter, the Gazette?

Excellent	25.6%
Good	63.0%
Only fair	6.1%
Poor	0.6%
Have not read the Gazette	4.8%

Q40. How often do you get news about the City of Wildwood through Facebook, Twitter, or other social networking sites?

Regularly	12.1%
Sometimes	14.1%
Hardly ever	20.2%
Never	53.6%

Q41. What is the best way for the City of Wildwood to get information to you?

The City's website	19.9%
The Gazette	22.6%

Mailings from the City	26.2%
Reader boards along roadways	3.7%
Social Media (like Facebook or Twitter)	12.4%
Other	15.1%

Q42. Here is a map of the City of Wildwood's eight wards. Which ward do you live in?

Ward 1	18.3%
Ward 2	4.2%
Ward 3	10.7%
Ward 4	5.8%
Ward 5	7.7%
Ward 6	11.6%
Ward 7	4.2%
Ward 8	14.8%
Can't tell from the map	22.8%

Q43. How long have you lived in the City of Wildwood?

5 years or less	22.5%
6 to 10 years	19.2%
11 to 19 years	27.9%
20 or more years	30.4%

Q44. Do you have any children eighteen or younger living at home?

Yes	44.2%
No	55.8%

Q45. How did you find out about this survey? Check all that apply.

Postcard mailed to my residence	53.4%
Noticed on the City of Wildwood website	18.5%
A friend or neighbor mentioned it	11.0%
Other	28.4%

Q46. If you would like to continue to receive information about the Master Plan Update and other City of Wildwood activities, please provide your e-mail address in the box below.

Provided email address	44.1%
Did not provide email address	55.9%

Q47. The Master Plan Advisory Committee thanks you for taking the time to express your views. If there is anything else you would like to add, just type your response in the box below. *Note: these transcribed comments are not part of this appendix, but are available by request through the City Clerk's office.*

Provided comment	33.1%
Did not respond	66.9%

Business Survey

The business survey was available from May 19, 2015 to June 10, 2015 and notifications were sent to two hundred thirty-seven (237) Wildwood businesses and not-for-profit entities. At the conclusion of the survey, sixty-five (65) responses were received. This represented a 27.6% response rate.

The surveys sought a 3:1 standard. The three-to-one ratio is based on the proposition that having at least three favorable/positive responses for every one unfavorable/negative reply is an ambitious, but achievable standard for municipal service/facility performance. Although higher ratios are of course possible, it would not be reasonable to consider an organization subpar for failure to accomplish them.

The following ratings met the 3:1 standard:

- Bridges
- City publications
- City website
- Historic preservation
- Parking, street lighting
- Physical attractiveness
- Police services
- Preservation/conservation
- Providing information
- Snow removal
- Staff contact quality
- Stormwater control
- Street/roadway maintenance
- Trail/sidewalk access

The three (3) highest ratings for 3:1 ratios:

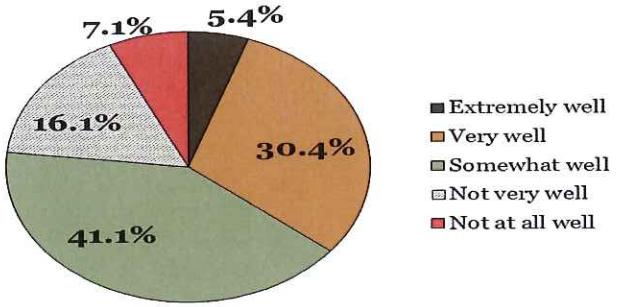
1. Police Services supplied by St. Louis County (Ratio: 54.87/1.00) with 92.3% responding that service is 'Excellent' or 'Good.'
2. Physical Attractiveness of Business Area (Ratio: 19.39/1.00) with 89.2% responding that the attractiveness is either 'Excellent' or 'Good.'
3. Preserving/Conserving Natural Environment (Ratio: 18.41/1.00) with 84.7% responding that this effort is either 'Excellent' or 'Good.'

The following ratings did not meet the 3:1 standard:

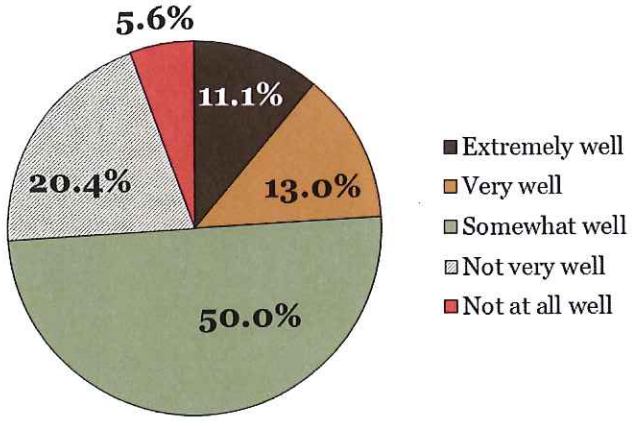
Service	Excellent/Good	Only Fair/Poor	Ratio
Internet Access	72.3%	24.6%	2.94/1.00
Event Promotion	71.9%	28.0%	2.56/1.00
Managing Tax Dollars	55.4%	27.7%	2.01/1.00
Planning for the Future	47.7%	33.8%	1.41/1.00
Town Center Success	53.8%	46.1%	1.17/1.00
Getting Advice and Input from Business	44.9%	47.0%	0.96/1.00

The following two (2) graphs identify the responses relative to **Support for the Environment.**

1. Balance between protecting the environment and helping business develop:



2. Emphasis on environmental sustainability:



Business and not-for-profit responders also noted the following:

- A strong majority (68%) say City taxes and fees on business are about right and less than one-third (30%) think they are too high.
- More businesses report "Getting a permit or license to open, operate, or expand a business" is easy (48%) than say it is difficult (30%).
- A narrow majority (52%) say the City's code enforcement for commercial properties is about right and 48% find it too strict.
- A clear majority (60%) think the City's regulation of business (such as signs, hours of operation, and outdoor patios) is too strict with less than a third (32%) saying it is about right.

Relative to their location, businesses noted the following:

- Their current business location does not meet their business needs very well or not at all well - 7%
- They are not very likely to relocate their business outside the City during the next few years - 71%
- The City will be the same or an even better place to do business five years from now - 92%

Four (4) factors were identified citing what businesses like best about Wildwood:

1. Physical setting
2. Small town ambience
3. Location
4. People

The survey results identified four (4) areas where businesses and residents disagreed in their responses:

1. Future commercial and business development in the City of Wildwood should be restricted to the Town Center. 35% of residents disagreed with this statement, while 68% of business responders disagreed.
2. For properties outside the Town Center Area, there should be no more than one unit per acre. 24% of resident responders disagreed with this statement, while 61% of businesses disagreed.
3. The City of Wildwood needs more housing that young families can afford. 35% of residents agreed with this statement, while 59% of business responders agreed.
4. Businesses are more likely to consider the City's land use policies to be too strict. 19% of residents agreed with this statement, while 48% of business responders agreed.

Those businesses and not-for-profit agencies that were surveyed, provided the following responses:

Proposal/Question	Agree	Disagree	Neutral
Whenever possible, existing and future utilities should be constructed underground.	79.6%	7.5%	13.0%
The City of Wildwood should build a Recreation Complex.	48.1%	29.7%	22.2%
The City of Wildwood Master Plan needs a focused business development plan for the Town Center.	75.9%	7.4%	16.7%
Having a Metrolink line should be one of the City of Wildwood's long-range plans.	25.9%	61.1%	13.0%
Opinion on having higher density residential development in the Town Center.	46.3% in favor	22.3% oppose	31.5% neutral
Should most community events (i.e. BBQ Bash, Founders Day, and concerts) be held in the Town Center or at many different locations.	59.30% in Town Center	40.70% in many locations	

Finally, businesses and not-for-profit responders collectively noted their primary concern as the existence of an adequate customer base. They also noted the City can increase its promotion efforts and simplify its regulations as ways to assist its businesses.

APPENDIX III

Parks and Recreation Action Plan (2007)

Foreword

Citizens Committee for Park Progress

City of Wildwood, Missouri

September 20, 2007

On February 7, 1995, after several years of the St. Louis County Council's approval of every developer's request for zoning changes to eliminate the Non-Urban District (minimum three (3) acre lot size), the citizens of West County got the chance to vote on the formation of a new city. The measure passed with a 61% majority and the City of Wildwood was born. This successful vote would not have been possible without the dedicated effort of the citizens, who gathered signatures on petitions, and researched the legal requirements of incorporation to make the dream a reality.

These were heady, euphoric days, when various citizens' committees drafted the Master Plan, and studied various ways to manage development, while keeping the beauty of Wildwood intact. These concepts are expressed in two (2) of the five (5) objectives in both the Original and Revised Master Plans as follows:

* "Preservation and conservation of the natural environment."
* "Residential and commercial development consistent with long-range planning and prudent land utilization."

Most Wildwood residents have chosen to live in this area because of its unique natural beauty, offering a rural country lifestyle well within commuting distance of jobs, schools, shopping, entertainment, and their friends in urban areas. Now that the ground work has been established, it is time to consider the needs of an expanding population, especially those families with children. Over half of the households in Wildwood have at least one (1) child under the age of eighteen (18).

The results of the 2007 survey of randomly-sampled households and the public input forums indicate there is strong support for additional local parks and recreational facilities in Wildwood. With the rising cost of land and increasing demands from residents, now is the time to address additional parks and recreational amenities within Wildwood, in keeping with the desires of the community and its motto..."Planning Tomorrow Today."

Executive Summary

The Citizens Committee for Park Progress has worked for approximately one (1) year defining the future of park and recreation efforts in the City of Wildwood. This group undertook a lengthy public comment process, culminated by a professionally designed and administered random survey to approximately three thousand (3,000) households in the City. The outgrowth of this public comment effort was significant input from residents of the City of Wildwood regarding their opinions about park facilities, recreation programs, acquisition efforts, and financing. Collectively, the Committee recognized the need for a citizen-based plan that would create support within all sectors of the community and ultimately be viewed by its users as a fair and representative document that reflected the unique circumstances that define the City of Wildwood, i.e. its land, interests, and

current conditions.

The Citizens Committee for Park Progress developed an Action Plan that contains four (4) points this group believed were essential for the City Council to implement over a total of two (2), five (5) year renewals. The four (4) Action Point areas are as follows:

Programming - Partner with the other providers to create the greatest range of programming opportunities possible for residents, beginning with the Wildwood Family YMCA, the Pond Athletic Association, the Rockwood School District, and the St. Louis Community College.

Facilities - Expand current commitments to development of all types of trail systems (pedestrian, bicycle, equestrian) in the City of Wildwood, which are intended to link all public park spaces and population centers together, along with implementing the recently adopted "Access and Mobility Plan."

Acquisition - Identify and prioritize locations for future park land acquisitions, with the first action to be the acquisition of a parcel of ground, of a size to accommodate a community park, within the central area of the City (proximity to State Route 100 and State Route 109 and environs).

Funding - Implement the necessary steps to promote the presentation of a park sales tax to the voters of Wildwood, no later than the November 2008 General Election, for use in the development of parks facilities and recreation programs, to include staffing, maintenance, and other expenses.

Each of the Action Points contain information relating to how the recommendations were developed, identifies the supporting information used in creating these points, and establishes timeframes for their implementation. In completing this plan, the Committee entertained any and all opinions, comments, and input from all participants to create a community-based planning process that was intended to generate interest by users and support from the community.

The other desire of the Committee was to create a reasonable set of recommendations under the four (4) Action Points that recognized certain controlling parameters that exist relative to specific facilities and programs for this City. The members of the Committee recognized the need to have adequate funding sources in place for current and future facilities and programming, thereby guaranteeing a quality environment for users and neighbors and superior maintenance and upkeep of them over time. The Committee believes that, with the current assets that are identified in the plan and the proposed recommendations, Wildwood's goal of a world-class system of park facilities and recreational opportunities will become reality.

Introduction

Wildwood is a unique community, which benefits from the rolling and hilly woodlands of the Ozark Foothills. The City was founded to provide for development that will preserve the natural environment. The City recognized that parks and recreational facilities are necessary to maintain a healthy and viable community, and that residents need and want such amenities. Therefore, two (2) volunteers from each ward were selected by the Mayor and approved by City Council to form the independent Citizens Committee for Park Progress ("CCPP"). Building a parks and recreation program commensurate with these unique attributes of Wildwood's government and area were the goals of the volunteers that formed the CCPP. With these goals identified and supported, this group

began the formation of the Action Plan with the acknowledgment that Wildwood is a unique community of environments, people, and opportunities and its parks and recreation offerings would be an extension of them.

The CCPP does not believe the City's park improvements and recreation programming should attempt to replicate existing facilities available elsewhere, but provide opportunities that would address gaps or shortfalls, while maximizing current assets, such as the eleven (11) square miles of public space, and also address the defined priorities of the respective wards and their residents, which can reasonably be met. This acknowledgement is based upon a reasonable analysis of future needs and capabilities of Wildwood, since it currently has no property tax to support governmental programs, including recreational types, and facilities.

Key decisions have been discussed by the CCPP to create this Action Plan, which is premised on a number of resources that were collected over the course of an approximately one (1) year timeframe. These resources included a professionally administered, statistically valid survey that was sent to approximately three thousand (3,000), randomly-sampled households in the City (the "survey"); two (2) public input forums held in the community; a Service Providers Open House and letter; comment forms on the City's website; and regularly scheduled meetings of the CCPP, which were open to the public. These resources were intended to provide all who had any interest in parks and recreation activities an opportunity to participate in providing input into the development of the Action Plan. At the end of this process, the CCPP had received input from all of these resources, along with responses that followed accepted guidelines in terms of design, administration, and analysis to create a ninety-five (95) percent confidence level in its results for the entire population of the City of Wildwood (survey instrument, Executive Summary, Survey Analysis, and Market Segmentation Sections are contained in this plan's appendices).

Furthermore, the CCPP also challenged all participants not to limit themselves to previously accepted patterns of park development and recreational programming and disregard conventional wisdom on funding, financing, and partnerships, so as to explore all avenues that may be available to the City to create a diverse, safe, and acceptable set of facilities, amenities, and programs for residents and non-residents of Wildwood. To address these challenges, the CCPP met with experts in the fields of open space, partnering, facility development and management, and finance to better understand current trends in the development and implementation of park facilities and recreation programming, along with future changes that might influence the Action Plan in the next five (5) to ten (10) years. These experts, along with the aforementioned resources, allowed the CCPP to have a thorough understanding of the opportunities and challenges facing the City of Wildwood in providing for greater facilities and programs for residents and visitors to the community. Therefore, this Action Plan reflects the respective input, experience, and projections of the community of experts and participants, including residents of the City of Wildwood, for the purposes of creating a world-class system of facilities and programs for the defined and targeted populations.

Opportunities for Residents

In creating this Action Plan, the CCPP would note the City of Wildwood is not without many of the components of creating this world-class system of park facilities and recreation programs already. This situation allows the City a level of flexibility and creativity in finding new opportunities to address the desires of residents for facilities and programs. In considering the components that currently exist in the City, the CCPP identified the following assets:

1. Over eleven (11) square miles of publicly-held open space, which includes Babler State Park (2,441 acres); Rockwoods Reservation (1,881 acres); Rockwoods Range (1,388 acres); and Greensfelder County Park (1,583 acres). Additionally, the State of Missouri and St. Louis County have other facilities in the City, including Packwood Park (undeveloped) and Howell Island (Missouri Department of Conservation Area).
2. Two (2), neighborhood-sized City parks, which includes Anniversary Park (Clayton and Strecker Roads) and Old Pond School Park (Manchester Road).
3. Al Foster Memorial Trail and Trailhead, including over twenty (20) acres of additional land in the Glencoe Area of the City.
4. Additional land area banked in the areas of Strecker Road and Clayton Road (Woodcliff Heights Park Property), Chesterfield Valley (Kohn Memorial Park), and Bridge Park (north entry of pedestrian bridge across State Route 100).
5. Future park properties in Wildwood Square Commercial Area, near planned Farmers Market Facility, and Homestead Estates Subdivision.
6. Over ten (10) miles of multiple use trails in Town Center Area and environs, including the pedestrian bridge.
7. Wildwood Family YMCA facility located on State Route 109 in the City's Town Center Area.
8. Over eight (8) Rockwood School District sites, which include athletic fields, swimming pools, outdoor running tracks, and many other amenities.
9. St. Louis Community College's Wildwood Campus, with public space and meeting rooms.
10. Over sixty (60) current recreational programs offered by the City of Wildwood to residents and non-residents alike, highlighted by the annual Wildwood Celebration.
11. Over seventeen (17) places of worship offering recreational programming and facilities for Wildwood residents.
12. Monarch-Chesterfield Levee and planned trail system.
13. St. Louis Southwestern Railroad right-of-way, providing an opportunity for future trail system between Labadie, Missouri and Creve Coeur County Park.
14. Meramec and Missouri Rivers and related floodplain.
15. Hidden Valley Golf and Ski Resort on Alt Road within the City of Wildwood.
16. Rock Hollow Trail and Park Property (Great Rivers Greenway and St. Louis County) – also known as Zombie Road.
17. Over one hundred fifty (150) centerline miles of public rights-of-way for multi-modal use.
18. Wabash-Frisco and Pacific Mini-Gauge Railroad Facility in the Glencoe Area.
19. Pond Athletic Association and its lighted playing fields.
20. Camp Wyman

All of these facilities have amenities located within them as well. These amenities range from swimming pools to equestrian trails and related facilities. With these existing amenities already located in the City of Wildwood, residents and non-residents already have a comprehensive array of facilities and programs available to them for use and enjoyment. Building on these facilities, programs, and amenities is a major goal of the CCPP and allows for unique opportunities for partnering and providing other facilities and programs not readily or currently available in the City or local region.

Not identified in this list of opportunities are surrounding cities, which also have excellent systems of parks and recreation facilities and programs. Many of these facilities are located within close proximity of the City of Wildwood and a short drive from residents' homes and nearby businesses. Many of the City's residents already take advantage of these facilities, particularly the major

swimming pool complexes, and related programs. Other cities graciously provide excellent opportunities to Wildwood residents.

Regionally, the City is also fortunate to be located in a metropolitan area that is rich in recreational opportunities, as well. The St. Louis Metropolitan Region has an extensive system of public park holdings, which range from areas like Forest Park to the Katy Trail. The region also provides a diverse and comprehensive offering of recreational programs and opportunities for all age groups, while also being nationally recognized for its high school and college sport programs, club programs, and age appropriate programs for seniors. Along with these facilities and programs, the St. Louis Metropolitan Region has three (3) of the larger river systems in the United States within it, i.e. Mississippi River, Missouri River, and the Meramec River. These river systems provide ample boating, fishing, and wildlife viewing opportunities unrivaled elsewhere in the country. The CCPP believes the local and regional opportunities provide an exceptional foundation for the future of Wildwood's expanded system of parks and recreation facilities and programs.

Challenges for the Future

The CCPP also chose to define the challenges that exist for Wildwood and the impacts they may create in implementing this Action Plan. These challenges do not necessarily present impediments to the implementation of this Action Plan, but are addressed or recognized, since their influence was considered significant enough to justify their identification. These challenges were discussed and collectively identified for the purposes of this plan and include the following:

1. The reluctance of voters to endorse certain types of taxes to support parks and recreation efforts in the City of Wildwood.
2. The diversity of the population failing to gain consensus on certain issues relating to facilities and programs and losing opportunities for development and growth.
3. The competition for available sites with private developers and institutional users.
4. The lack of cooperation between other governmental units and service providers on exploring and establishing partnering opportunities for Wildwood residents.
5. The conflict of providing facilities for convenience sake, when other providers offer them within a short commute of Wildwood.
6. The nature of competitive grants and the challenges presented by these processes, particularly in terms of timing.

As reflected in the survey conducted in March 2007 through April 2007, the residents of Wildwood have a strong support for park and recreation opportunities in the City, but show a reluctance to support them by any other means than grants and fees to users. Along with this major consideration, the residents have also indicated in this survey, and by other available forums, that certain facilities are preferred, but often are the most costly to construct, operate, and maintain. These challenges and the others listed above were discussed at length by the CCPP and addressed in the Action Points outlined below. In addressing these challenges, the CCPP also believed, if duly recognized, they could be changed into positive attributes and further the City's desire to host a world-class park system.

Timelines for Implementation and Use

In the course of creating this Action Plan, the CCPP worked to ensure its Action Points could be achievable in a reasonable timeframe. The first step in this effort was to recognize the need to review and update the Action Plan on a five (5) year basis to gauge successes and failures in implementing and completing the Action Points. In considering this five (5) year review cycle, the

CCPP believed it was a long enough timeframe to allow progress to be made on the plan's relative Action Points. This timeframe is still short enough to integrate new ideas and trends into them; alter direction on items or considerations associated with them, particularly if these items are not realizing success or lack support among residents or elected officials; gauge successes and build upon the key ingredients associated with them; and create interest in the Action Plan by keeping it a part of the City's active planning programs. With a five (5) year review window, the CCPP remains assured that Action Points will be addressed appropriately for the future in terms of implementation and application.

Another major point in this effort was to establish reasonable expectations and timelines for implementation of the plan's Action Points, based upon available resources. The CCPP's determination was that each of these recommendations should be analyzed and categorized based upon immediate, intermediate, and long-term priorities. The members of CCPP believed this hierarchy would allow for the development of a two (2) tiered approach to acquiring property for future facilities, building new venues for all ages, and creating recreational programs over the next five (5) and ten (10) year periods of time. This two (2) tiered approach also offered the CCPP a manner to address one (1) of the major challenges it faced, which was creating a financing plan that anticipates current levels of revenues and resources, with no change. The plan also addresses the situation if new types are established, and a program for implementation, if these sources are created for use within the community. The CCPP took this approach, given the results of the survey of households in Wildwood, which indicated some supported new taxes for the purposes of parks and recreation efforts. Therefore, under each Action Point, the implementation strategy is based upon current funding sources, if no new funding options are created for parks and recreation efforts and, another, if new avenues of revenues are established. Each implementation strategy in the respective tier of an Action Point is then identified from a standpoint of immediate, intermediate, or long-term timeframe[1].

Much of the CCPP's work was premised on understanding the relationship of availability of funding to the extent of facilities, programs, operations, and maintenance that could be expected. The survey indicated a significant level of support for park facilities and recreational programs, but funded through grants, gifts, fees, and other charges, with limited interest for future tax increases, particularly on real property. Regardless of the sources, the CCPP remained committed to providing a park and recreation system that would meet the desires of residents, while acknowledging that partnering with other providers and not replicating existing facilities and programs could not meet all of Wildwood's needs in terms of park facilities and recreation programs.

[1] Immediate timeframe = Years 1 to 2; Intermediate timeframe = Years 3 to 5; and Long-Term timeframe = Years 6 to 10.

Concurrence and Overall Direction

The CCPP worked to create an Action Plan that accounted for all of the respective input it had received from a number of sources and a deliberative process of discussion at its meetings. All of the Action Points that are included in the Action Plan reflect a consensus on the item by the members of the CCPP. If an Action Point is included in the plan, the CCPP believed it met a high level of support in the community and would address a missing component of facility, program, or service sought by the residents of Wildwood. Collectively, the Action Plan was created through a process of study, discussion, and acceptance among the sixteen (16) volunteers representing each of the City's eight (8) wards (two (2) from each ward appointed by the Mayor and approved by the City Council).

The CCPP submitted this Action Plan to the City Council for consideration and action, with the expectation that each of the Action Points, whether accomplished under current requirements of funding or through a future source, as well as in an established timeframe, would be equally supported by elected officials. The CCPP developed this expectation from the knowledge that parks and recreation opportunities are expected by Wildwood residents and they are an integral part of building a community that is diverse in its interests and fun for all. Overall, the outcome of this planning process was the development of a document that offers a mix of facilities, activities, and opportunities, based upon the input of the community. A key issue in the development of Action Points is the assumption that the principles of the incorporation of Wildwood would be exercised by the City officials and staff in implementing them, so as to provide the greatest number of resources at the least cost.

Action Plan Components

Action Point Number #1 - Recreational Programs and Target Populations

Goal: To offer a broad range of programs to all residents of Wildwood that may be added or eliminated, as new interests are defined among targeted populations over time.

Recommendations: Partner with the other providers to create the greatest range of programming opportunities possible for residents, beginning with the Wildwood Family YMCA, the Pond Athletic Association, the Rockwood School District, and the St. Louis Community College; Establish, as part of these partnerships, opportunities for residents to obtain these services and programs from these other providers at reduced or subsidized levels by creating financial agreements with said entities; Increase programming emphasizing fitness and wellness for children, teens, and families (as funding is provided), which would include fitness walking, aquatics, hiking, biking, and equestrian rides; Construct facilities that are commensurate and appropriate for the programming efforts that are in place and planned for the future by the City of Wildwood; Create new recreation programs that foster opportunities for community gatherings and encourage a sense of place for residents, old and new; and Promote new recreation programs that provide opportunities that are not currently available within the City and surrounding area, so as to complement, not compete, with other providers.

Timeline Tier Level(s): Current

Priority: Immediate Term

Support Information: The Parks and Recreation Survey indicated that over seventy (70) percent of respondents supported providing programs for six (6) to twelve (12) year olds, teenagers, and families (in order of priority). Additionally, the overwhelming majority of these same respondents supported creating programs for residents first and others after. Along with these two (2) considerations, the households that were surveyed felt that a broad diversity of programs providing experience levels from beginners to advanced, versus just introductory, should be the focus of the City in this regard. Public input forum participants expressed strong support for the programs that are currently provided by the City of Wildwood, but noted lack of equestrian activities at this time.

Supplemental Factors:

⇒ Residents (primary service group)

1. With limited resources at this time, the City should focus on a qualitative versus quantitative approach in current programming efforts.
2. Current programs continue to grow and receive positive feedback from participants.
3. Other opportunities to provide more and broader recreation program offerings should always be explored through a systematic review, on a yearly basis, similar to the Capital Improvement Program of the City of Wildwood.

⇒ Younger age groups and families

1. Demographic characteristics indicate a high percentage of households within the City have children.
2. These populations will need a diversity of programs to meet their anticipated needs.

⇒ Partnerships

1. Partnerships extend through all aspects of the City's programming efforts in its recreation activities.
2. Establish partnerships with service providers already located in the City, such as the Rockwood School District, the Pond Athletic Association, the Wildwood Family YMCA, the Missouri Department of Conservation, and the Missouri Department of Natural Resources, and others.
3. Other service providers have expressed interest in partnering with the City of Wildwood in this area.

Assumptions:

1. The allowance for growth in programs will primarily be based upon availability of funding to support them.
2. The current programs should be continued and improved, based upon year-end evaluations in terms of attendance and related feedback from participants.
3. Engaging residents in enjoyable, safe programs builds support for parks and recreation facilities and activities within the community.
4. The provision of recreation programs provides a medium to grow community spirit and recognition of Wildwood.

Action Point Number #2 – Type and Extent of Facilities

Goal: To provide a range of facilities at locations throughout the City that offer ample space for recreational buildings, and programs, while creating passive areas as well, particularly in environmentally sensitive portions of the publicly-owned properties.

Recommendations: Expand current commitments to the development of all types of trail systems (pedestrian, bicycle, equestrian) in the City of Wildwood, which should eventually link all public park spaces and population centers together, and follow the recommendations of the recently adopted "Access and Mobility Plan;" Develop a Facilities Plan that is coordinated with the acquisition policies and actions of the City; Provide facilities that are accessible, adaptable, and flexible, so as to maximize their use regardless of the season of the year, such as, but not limited to, playgrounds, trails (all types), picnic areas, outdoor ball fields/soccer fields, outdoor/indoor swimming pools, tennis courts, equestrian facilities, fishing lake, and barbeque pits; Actively explore a partnership with the Wildwood Family YMCA in their planned expansion of their current facility; Establish a minimum of three (3), new neighborhood-sized parks in the City of Wildwood within the next five (5) years, with their locations based upon projected population densities; Require the provision of playgrounds, pavilions, and barbeque pits in all public space areas located within new residential subdivisions, as well as in all planned City facilities; Create a plan and working committee of interested parties to develop a major outdoor swimming pool/water park facility within the next ten (10) years in the City of Wildwood through a partnership with the Wildwood Family YMCA, the Rockwood School District, and the St. Louis Community College; and set aside a proportion of future park properties for passive activities and limited use, particularly on land areas where topography or other physical characteristics are environmentally sensitive.

Timeline Tier Level(s): Future

Priority: Intermediate to Long Term

Support Information: The Parks and Recreation Survey indicated a broad range of interests in the City of Wildwood, with a very active population in terms of their use of current facilities, both here in this community and the surrounding area. The Service Providers' Open House, as well as comments from these other entities, indicates a willingness on the part of them to partner with the City of Wildwood in a number of different venues, facilities, and improvements. At the two (2) public forums held by the CCPP, the majority of participants spoke in favor of equestrian trails and facilities, along with multiple-use trails and an outdoor swimming pool. Comments received from other sources, such as the City's website, indicate certain respondents prefer facilities that are not currently readily available, such as dog and skate parks, golf courses, river access points, ice rinks, and community event rooms.

Supplemental Factors:

⇒ Park Types

1. The respondents to the survey noted the need for a large, community-sized park for the City of Wildwood.
2. Input received from the community indicated a desire for additional neighborhood and pocket type parks for the future, in close proximity to their neighborhoods.

⇒ Passive and active types

1. The diversity of environments on properties in Wildwood will almost always dictate a portion of any property will have a mix of favorable and unfavorable topography and other physical features.
2. The development of a single, larger park property should accommodate the type of facilities identified by the CCPP for inclusion, while preserving an ample area for passive purposes (described by respondents of the survey as "essential to very important").
3. The respondents of the survey noted that "acquiring additional greenways, open space, and parks should be prioritized over developing recreation centers for indoor activities."

⇒ Playgrounds

1. The provision of playgrounds garnered the highest level of support in the survey (69% viewed it as "essential to very important").
2. The location of neighborhood parks appear to be best suited in higher density areas of the City, where the population is the greatest and the largest number of residents can be served.
3. The application of the City's new Public Space Requirements of the Zoning Ordinance will continue to provide an appropriate vehicle to obtain these types of facilities in new residential and mixed use projects.

⇒ Pavilions/Barbeque Pits

1. The success of Anniversary Park and the Old Pond School are indicative of the need that has been identified in the community, as a function of the survey.

⇒ Athletic fields

1. Over fifty (50%) percent of respondents to the Parks and Recreation Survey identified outdoor ballfields as "essential or very important."
2. Approximately forty (40%) percent of respondents to the Parks and Recreation Survey identified outdoor soccer fields as "very important."
3. The Pond Athletic Association, Babler State Park, the Rockwood School District, and the Wildwood Family YMCA (at LaSalle Institute) provide a limited number of these types of fields in the City of Wildwood.
4. The City often has received comments from residents about the need for athletic fields for many years.

⇒ Trails

1. The level of support for additional trails was high by respondents to the Parks and Recreation Survey at approximately fifty-six (56%) percent.
2. The most popular activity identified in the survey of households in the City is using trails (73%).
3. The City of Wildwood has over ten (10) miles of multiple-use trails, with many more miles located in the four (4), major public holdings in this community (Babler State Park, Rockwoods Reservation, Rockwoods Range, and Greensfelder County Park).

⇒ Other facilities

1. The survey of households indicated that three (3) in ten (10) residents felt a multiple use recreation or community center was "essential."
2. The information provided by invited speakers and members of the CCPP indicated larger facilities seldom operate without subsidies from general revenue funds of the cities that have constructed them.
3. Those households that responded to the Parks and Recreation Survey identified skate parks (16%), dog parks (just over 25%), boat launches (20%), equestrian trails (10%), and an equestrian facility (9%) were given the lowest importance ratings of all facilities identified (over sixteen (16) were listed in the survey).

Assumptions:

1. The development of facilities will require the greatest amount of expenditures, immediate and long-term, for construction, operation, and maintenance than all other costs associated with its parks and recreation efforts. Therefore, a revenue source must be in place not only to address capital improvements, but the on-going operation and maintenance of these facilities, buildings, and structures.
2. The availability of other facilities within Wildwood, and surrounding cities, offers opportunities for an immediate impact to residents, if specific arrangements can be developed with other providers on use accommodations by City officials. However, when partnering with other providers, the missions of the different entities can sometimes compete or cause problems and should be considered in the development of these relationships.
3. The inclination of the CCPP members was to provide parks and park amenities first, with facilities to follow thereafter. The overarching desire of the CCPP members was to provide a facility large enough to allow for flexibility and adaptability in its use.
4. The City of Wildwood has an aging population that favors certain facilities over others.

Action Point Number #3 – Acquisition Policies and Programs

Goal: To provide land area for future park properties to support facilities and programs.

Recommendations: Identify and prioritize locations for future park land acquisitions, with the first action to be the acquisition of a parcel of ground, of a size to accommodate a community park, within the central area of the City (proximity to State Route 100 and State Route 109 and environs) or the acceptance of land-banked property from another governmental entity, i.e. St. Louis County's Packwood Park; Set aside revenues in each fiscal year, as part of the capital improvements budget, to expand current efforts in terms of its property acquisition programs, particularly in the Glencoe Area of Wildwood; Partner with the Open Space Council of Greater St. Louis to pursue landbanking of environmentally sensitive sites for passive recreational areas; Continue the application of the Public Space Requirements of the City's Zoning Ordinance; and Pursue gifts and donations from landowners in the City by offering tax benefits, naming opportunities, life estates, conservation easements, or other incentives for their consideration.

Timeline Tier Level(s): Current and Future

Priority: Immediate, Intermediate, and Long Term

Support Information: Survey results indicated residents want acquisition of properties that are substantial in size, as well as others for the creation of more neighborhood sized park areas (one (1) to five (5) acres); larger park properties should be diverse in character to provide active and passive spaces; and participants at the two (2) public forums wanted immediate action.

Supplemental Factors:

⇒ Location(s) in Town Center, a Central Site, and/or Elsewhere in Wildwood

1. The development of a single central site along the State Route 100 corridor, near its intersection of State Route 109.
2. The development of several, neighborhood park sites, particularly in the area of major subdivision developments in the vicinities of Manchester Road, Clayton Road, and Valley Road.

⇒ Affordability

1. The cost per acre/square foot for land area must balance against accessibility, physical features, availability, and adaptability for future use category, i.e. mini-park, neighborhood, and/or community.

⇒ Types of Facilities and Programs (dictate size requirements)

1. The respondents to the survey indicated general support for the following facilities: trails, all types; playgrounds, including pavilions, picnic tables, and barbecue pits; outdoor swimming pool and water park; athletic fields; and a recreational complex.

Assumptions:

1. The cost of land in the City of Wildwood continues to increase and dictates the need for the City to act promptly on property acquisitions.
2. The City of Wildwood does have land area of all sizes that is currently available for any of its future acquisition efforts.
3. The investment of the City into property can only be viewed as positive from all perspectives.

Action Point Number #4 – Funding Sources and Application Policies

Goal: To develop and maintain funding sources, along with programs for grants, gifts, and donations, to meet the recreational and fitness needs of residents through a system of park facilities and recreation programs.

Recommendations: Implement the necessary steps to promote the presentation of a park sales tax[2] to the voters of Wildwood, no later than the November 2008 General Election, for use in the development of parks facilities and recreation programs, along with staffing, maintenance, and other expenses; Continue to fund current programs and efforts through a combination of the general revenue and capital improvement budgets of the City; Establish a line item in the Department of Planning and Parks budget for advertisement and promotion of opportunities to participate in a gifts/donations program for public lands; Accept gifts and donations from all sources for non-acquisition types of efforts, along with creating programs to administer such activities, including defining incentives to encourage them; Provide programs for landbanking, conservation easements, life trusts, and others as a means to acquire property in a collaborative atmosphere with their respective owners; Plan and establish reliable revenue sources, including user fees, for the funding of operational and maintenance costs associated with recreation programs and related facilities; and Pursue all grants that are available from the myriad of resources at all levels, including local, State, and federal.

Timeline Tier Level(s): Current

Priority: Immediate term

Support Information: The Parks and Recreation Survey indicated limited to just over a majority of

support for new taxes of any kind. The Service Providers' Open House, as well as comments from these other entities, suggests that partnering and sharing of facilities may be the most advantageous manner to address major facilities in the future. At the two (2) public forums held by the CCPP, the majority of participants spoke in favor of parks and stormwater tax, and against any type of property tax. Comments received from other sources, such as the City's website, indicate residents support parks and recreation efforts, more so than other governmental buildings or similar capital outlays.

Supplemental Factors:

⇒ Grants, gifts, and donations

1. The City of Wildwood has received millions of dollars in grants for its current system of multiple-use trails and parks from a variety of sources.
2. The locations of Anniversary Park and Old Pond School were gifts to the City by their respective owners.
3. The existence of Great Rivers Greenway and the Municipal Park Grant Commission offer ample opportunities to continue to construct a world-class trail system in the City of Wildwood.

⇒ General revenue funds

1. The City currently budgets approximately $260,000 for its parks and recreation efforts. This amount is approximately 3.4% of the overall General Fund for Fiscal Year 2007.
2. This amount of money for Fiscal Year 2007 is the greatest, since the incorporation of the City.
3. The respondents to the survey indicated that nearly two-thirds of them were in favor of using the City's general revenue funds, despite potential reductions in funding for other services.

⇒ Parks and stormwater sales tax

1. The anticipated revenue from this source for the City of Wildwood was estimated at approximately $750,000 [based upon 2007 revenues] and does require the action of registered voters via an election (simple majority required for passage).
2. This tax is authorized by State Statute and utilized by a number of communities in the area, including the Cities of Ballwin, Chesterfield, and Ellisville.
3. The parks and stormwater sales tax is dedicated to these activities only and can be used to leverage greater borrowing in the future.

⇒ Other sources, i.e. bond issue for land purchase and major facilities

1. The use of bonds for construction of major facilities has been used by many communities over the years, but requires voter approval.
2. The City of Wildwood has an excellent credit rating and low bond encumbrance, which would allow it to use this method of financing.
3. The market for municipal bonds is generally good.
4. The available resources to fund acquisition and the construction of facilities are diverse, but the costs associated with these activities continue to rise.

Assumptions:

1. The use of grants and gifts to further the parks and recreation efforts of the City must always be an integral part of any planning effort.
2. The CCPP recognized the difficulty of seeking support for a property tax increase for the purpose of expanding its park facilities and programming offerings.
3. The amount of user fees will not cover the operation and maintenance of larger park properties or facilities.
4. The design of any future comprehensive program for park facilities and lands must take into account their immediate and long-term maintenance and operation.

2 This sales tax, if approved, should be structured to be solely dedicated to parks funding and contain no sunset clause, thereby ensuring monies for on-going maintenance of properties and related improvements.

Implementation and Plan Updates

The CCPP has spent approximately one (1) year reviewing the data relating to the City of Wildwood, the surrounding area, St. Louis County, and the St. Louis Metropolitan Region to understand park and recreation trends, facilities, programs, and efforts currently underway or planned for the future. In addition to this data collection effort, the CCPP held public forums with the residents and other park and recreation providers, which also involved conducting a City-wide survey of households, to better understand what opportunities exist and what residents want now and in the future. Furthermore, the CCPP held numerous meetings to understand how best to serve Wildwood, while maintaining the key tenants of its Master Plan, Parks and Recreation Plan, and Access and Mobility Plan. All told, the group of volunteers serving on this CCPP undertook a painstaking effort to define all the options, issues, and opportunities for the City of Wildwood, as it embarks on upgrades and expansions of its parks and recreation offerings over the next five (5) to ten (10) years.

As a result of this effort, the CCPP created this Action Plan, which is reflective of the collective thinking of this group. The members of the CCPP believed the best approach to achieving success in implementing the recommendations of the Action Points were to categorize them first as "current and future" endeavors and then establish within these broad timelines priorities therein, specifically, immediate, intermediate, and long-term types. Therefore, if an Action Point is identified as "Immediate/Short," the CCPP believed this item should be acted upon by the City Council and Department of Planning and Parks staff as quickly as possible and be the focus of its efforts now, and until completed or implemented. Those Action Points, with ranges of times and priorities, would then follow. This prioritization was done with the intent to assist the City Council in its efforts, but certainly not to challenge its authority in this regard. The CCPP believes this type of prioritization was part of the charge given to its members when the City Council formed it in June 2006. ***However, in no case, did the CCPP specifically bind the City Council to appropriate funds beyond its advisory authority.***

The implementation of this Action Plan should begin immediately, once adopted by the City Council. The CCPP designed this document to provide direction for an immediate five (5) year time window, while also creating a ten (10) year sunset. At the end of five (5) years, it is the opinion of the CCPP members that all of the "Intermediate/Short-term" priorities should be completed, with Future/Medium and Long-Term priorities begun, with an anticipated completion sometime thereafter. Although with regards to some recommendations within the four (4) Action Points, these timelines are aggressive, the CCPP believed it was best to encourage action rather than delay.

Additionally, the CCPP has made recommendations regarding updates and reviews of this plan, both annually and at the end of the first five (5) year period of time. The CCPP believes it is critical to the success of this document to have these regular reports to the City Council on the status of the Action Points and their recommendations, thereby allowing unexpected circumstances to be addressed, current programs improved, and new trends incorporated into them as well. At the first five (5) year anniversary, the CCPP fully expects, like at each of the annual reports to City Council by Department of Planning and Parks staff, certain recommendations will be enacted or implemented, and others underway, while all planned for the future. The five (5) year update will also allow for a thorough review of the Action Points and any major alterations to be made. Keeping the Action Plan germane, fresh, and a part of the community's collective memory, is the stated desire of the members of this CCPP.

Summary and Conclusions

The members of this CCPP were asked by the City Council at the start of this process to provide to it a plan for the expansion, improvement, and sustainability of a parks and recreation effort that meets the residents' needs in almost all ways. Recognizing the unique nature of the City of Wildwood, from its founding to the manner in which it provides services, the CCPP recognized this Action Plan would not create a typical parks and recreation profile in terms of the types of facilities, parks, and programs that would be offered. Respective of Wildwood's natural beauty, environmentally sensitive lands, small staff, and privatization goals, the CCPP relied heavily on resident input in making its recommendations and chose those considerations best suited to the aforementioned characteristics of this City. Similarly, the CCPP believed that partnering opportunities with a host of other governments, private, not-for-profit organizations, and other service providers was the best, and quickest, way to meet current and future residents' needs.

In considering the components of the four (4) Action Points of this plan, and the numerous recommendations contained in each, the CCPP did reach a consensus on this document, as well as what it believed should be the City of Wildwood's first steps in its implementation. In creating these first steps, the CCPP again referenced the survey results from the randomly-sampled households in the City, the input from the public forums, and Service Provider's Open House, along with comments provided throughout the process, to draw these final conclusions. Accordingly, the CCPP supports the following priority steps:

Programming - Partner with the other providers to create the greatest range of programming opportunities possible for residents, beginning with the Wildwood Family YMCA, the Pond Athletic Association, the Rockwood School District, and the St. Louis Community College.

Facilities - Expand current commitments to development of all types of trail systems (pedestrian, bicycle, equestrian) in the City of Wildwood, which are intended to link all public park spaces and population centers together, along with implementing the recently adopted "Access and Mobility Plan."

Acquisition - Identify and prioritize locations for future park land acquisitions, with the first action to be the acquisition of a parcel of ground, of a size to accommodate a community park, within the central area of the City (proximity to State Route 100 and State Route 109 and environs).

Funding - Implement the necessary steps to promote the presentation of a park sales tax to the voters of Wildwood, no later than the November 2008 General Election, for use in the development of parks facilities and recreation programs, along with staffing, maintenance, and other expenses.

The CCPP believes these components of the Action Points are where the City of Wildwood needs to begin its new efforts in providing parks and recreation opportunities commensurate with all of its other current services in this community.

The CCPP would like to thank the City Council, and its members, for the opportunity to provide this Action Plan to it for consideration, and the latitude given to it in completing this task. The members appreciated the flexibility they were allowed in creating this plan, the Action Points, and recommendations associated therein by the City Council. No preconceived notions or requirements

were placed upon the CCPP by the City Council, nor was influence exerted in this process to add, subtract, or otherwise alter the plan's outcome. To the members of this CCPP, the City Council's desire for their opinions, shown by allowing this freedom in developing this plan, was greatly appreciated and recognized. With the conclusion of this planning effort, the CCPP believes the City, and its leaders, are now in a position to create a world-class park and recreation system in Wildwood by utilizing existing park lands and facilities, partnering with other providers, and building/adding new lands, facilities, and programs attune to the unique character of the City and this area of west St. Louis County.

APPENDIX IV

Town Center Plan (2013)

The Town Center Plan will establish a long-term development philosophy that promotes the establishment of mixed-use communities consistent with the concepts of "Town Center Planning." Incumbent to the selection of the "Town Center Planning" concepts for use in the City's proposed Town Center was the belief that current suburban development practices predominant in the region and elsewhere were not appropriate for this new community. These existing practices favor the strict segregation of land uses, which assumes all travel to and from destinations will be accomplished by the automobile. Therefore, all design criteria for their development reflects an insensitivity toward the pedestrian and other modes of transportation and creates a streetscape that is less than pleasing to the eye. Accordingly, the City of Wildwood has attempted to redress this conventional wisdom by employing a different set of criteria for future development in the Town Center.

In applying the concepts of "Town Center Planning," several principle tenets were formulated to guide development. These tenets include the following:

1. Neighborhood Design - all neighborhoods should be pedestrian-friendly, with the use of multiple access points for vehicles. The use of cul-de-sacs should be discouraged.
   - Parking should be located to the side or rear of buildings. On-street parking is encouraged in these areas as well.
   - Building locations should be as close to the right-of-way as possible and at a scale and size consistent with the concepts of "Town Center Planning."

   Variations to these building requirements along State Route 100 and State Route 109 may be considered on a case-by-case basis by the Planning and Zoning Commission.

2. Green Space - all neighborhoods should have abundant public/open space and it should be incorporated into all designs. Development designs permitted by the Town Center densities will require a greater need for public/open space. The dedication of areas for use as public/open space must be incorporated as focal points in the overall development scheme of each individual project, which is part of the larger neighborhood fabric. Additionally, these areas shall be capable of providing a varied use in terms of active recreational opportunities, and not all be property significantly restricted by environmental features.

   Existing vegetation shall be preserved whenever possible. Credits for preserving existing vegetation shall be given to developers to offset City imposed requirements from the Tree

Manual.

Developments adjoining State Route 100 and State Route 109 shall comply with the City's stated intent to plant and improve these corridors into greenscape areas which are consistent with the concept put forth by the community in its grant application to the Missouri Department of Transportation.

Dedication of land or impact fees may be required for the purchase of off-site properties.

3. Architecture - all neighborhoods should adhere to the specific architectural guidelines of the Town Center Plan in terms of signage, lighting, fencing, and building styles and designs. Lighting design shall reflect the nature of use in the area and promote visibility in commercial areas and safety in residential locations, reduce night glow, and spillage of light onto adjacent properties.

4 Land Use - all activities allowed by the Town Center zoning designations should be compatible with the existing land use pattern on adjoining properties. Certain uses are permitted by right within each of the respective land use designations proposed as part of the Town Center Plan. Other more intensive uses which require special consideration and review will only be authorized as part of a Conditional Use Permit. These uses which require a permit include certain commercial uses with large building footprints, drive- through facilities in conjunction with any authorized commercial use, and other higher intensity or problematic use characteristics. Intense commercial uses should be limited to a small number of districts located toward the perimeter of the Town Center (Manchester Road, State Route 100, State Route 109, and Taylor Road), while other business activities should be fully cohesive with the remaining land uses to form a traditional Town Center.

Incumbent to creating this traditional Town Center, a true mix of uses must be provided by limiting a percentage of housing types and commercial uses allowed in any one given area. Therefore, all properties will either be designated Commercial, Workplace, Neighborhood Center, Neighborhood General, Neighborhood Edge, Public/Open Space or Cultural/Institutional. Regardless of designation, existing neighborhoods should be preserved. The attached Land Use Designation Parcel Map (Attachment Three) shall establish permitted uses for all properties within The Town Center.

5. Streets and Sidewalks - all public improvements shall comply with the Town Center specifications in their construction.

Street trees, lighting, furniture, and other items shall adhere to the Streetscape Design Standards of the City. The layout of streets will adhere to a grid pattern, but not necessarily rectangular in shape. The existing network of streets, including Taylor Road, will form the basis of the future layout of all new roadways. New streets shall be linked to this existing network.

Curb cuts shall be minimized along the main thoroughfares, such as Taylor Road, as well as State Routes 100 and 109, wherever possible, by promoting shared access between properties or the use of lanes serving the rear of properties.

Traffic Generation Impact fees may be imposed to address the impact of any new development in the Town Center.

6. Infrastructure - all storm water management improvements shall comply with the Town Center specifications in their construction.

   Regional facilities are preferred over individual site improvements. In-stream detention will only be considered when regional benefits to the storm water collection and management system clearly outweigh the impact to the natural environment of that location. The system of natural streams and creeks shall be preserved, whenever possible. Setbacks from these features will be reviewed on a case-by-case basis relative to the goals of regional detention/retention. Impact fees may be imposed as a part of any development in the Town Center to address off-site impacts to fund construction of regional detention.

   The installation of new or the improvement of old utility systems and lines shall be placed underground in conduits within City-owned rights-of-way.

   The development of public sewer systems to serve growth in the Town Center area are encouraged and preferred within the Metropolitan St. Louis Sewer District's boundary.

7. Historic District - all developments located within the Historic District shall be consistent with the overall period of architecture chosen for this area. The reuse and restoration of historic structures and buildings is encouraged.

Town Center Regulations

With the adoption of the Town Center Plan Boundary Map, Neighborhood Design Standards and Architectural Guidelines, Street Network Map, and Land Use Designation Map, any new zoning of parcels of land after this action and any development within the Town Center shall comply with this Town Center Plan. The Town Center District Zoning Ordinance is anticipated to formalize many of these policies into detailed regulations. In those instances where regulations may not be appropriate for adoption as part of the Zoning Code, such as design specifications for streets, utilities, and other public improvements, they will be incorporated into the appropriate manual for use.

The policies in the Town Center Plan are intended to cover all aspects of the development of properties within the Town Center Boundary and create the appropriate setting to achieve the stated goals of this plan and promote and apply the principles of "Town Center Planning" in this area, while protecting the community from previous land use policies established in this City by the former jurisdiction.

[1] The Historic District shall permit zoning under the Historic Neighborhood Center, Historic Neighborhood Edge, Cultural/Institutional, and Open Space categories.

Boundaries of the Town Center

The boundaries of the area within the City of Wildwood designated as The Town Center and subject to Town Center Zoning and Regulations shall be the area and parcels of ground designated on the Town Center Boundary Map.

Neighborhood Design Standards and Architectural Guidelines

The Town Center the Neighborhood Design Standards and the Architectural Guidelines are adopted in principle by the Town Center Plan. These standards and guidelines will be formalized with the passage of the Town Center Zoning Ordinance. These standards and guidelines will address all aspects of development within the Town Center Boundaries, but modifications consistent with the Town Center Plan principles will be considered on a case-by-case basis relative to the site's size, location, physical characteristics, surrounding land use pattern, and access, infrastructure, and utility options. Individual merit of the request will only be considered.

Land Use Activities within the Identified Categories

The following categories are hereby established for the area of the City designated as the Town Center, with corresponding permitted land use activities identified for each as well. These categories and activities are applicable only to properties within the Town Center Boundaries. Lot sizes, widths, and depths and other similar criteria shall be as established in the Neighborhood Design Standards of the Town Center Plan.

Town Center Categories	***Land Use Activities***
Downtown	**********

(Downtown District allows a larger building footprint for certain uses)

Commercial Land Use Activities	*Animal Hospitals & Veterinary Clinics* *Art or Photo Studios or Galleries* *Bakeries* *Barber & Beauty Shops* *Cleaning, Pick-up Stations* *Coffee Shops* *Department or Discount Stores* *Filling Stations for Automobiles* *Financial Institutions w/ Drive-thru Facilities* *Flower or Plant Stores* *Hotels*

[2] Certain activities have been determined to be appropriate only under a set of specific and special conditions which are needed because of the type of use, the location of the use, the characteristics of the use, and the development pattern around the use dictate a greater need of control. These activities shall be permitted only by Conditional Use Permit (including planned zoning expressly authorizing the activity) for their development or establishment in the applicable Land Use Designation where they may exist. The criteria for approving a Conditional Use Permit shall be described in 1003.181 of the City of Wildwood's Zoning Code and may be granted only where consistent with the principles established by this Master Plan.

Town Center Categories	***Land Use Activities***
Downtown District (continued)	**********
Commercial Land Use Activities (continued)	*Music or Dancing Academies* *Office/Warehouse Facilities* *Parking Areas* *Parking Garages* *Professional Offices including medical and dental* *Professional Offices, not medical or dental* *Recreational Facilities, including indoor theaters and outdoor activities* *Research Laboratories & Facilities* *Restaurants, including fast food, w/ Drive-thru Facilities* *Restaurants, including fast food, but w/o Drive-thru Facilities* *Restaurants, no fast food* *Sewage Treatment Facilities* *Stores and Shops for Retail Purposes* *Stores, Shops, and Open-Air Markets for Retail Purposes* *Taverns, Cocktail Lounges, Night Clubs, or Microbreweries* *Vehicle Service Centers*
Cultural/Institutional Land Use Activities	********** *Child Care Centers* *Churches* *Civic Buildings (government)* *Park & Open Spaces; Public and Private areas* *Post Offices* *Public and Other Utility Facilities* *Scenic Areas*

Town Center Categories	***Land Use Activities***
**********	**********
Workplace District	
Commercial Land Use Activities	*Animal Hospitals & Veterinary Clinics*
	Art or Photo Studios or Galleries
	Bakeries
	Barber & Beauty Shops
	Cleaning, Pick-up Stations
	Coffee Shops
	Filling Stations for Automobiles[1]
	Financial Institutions w/ Drive-thru Facilities
	Financial Institutions w/o Drive-thru Facilities
	Flower or Plant Stores
	Music or Dancing Academies
	Office/Warehouse Facilities
	Parking Areas
	Parking Garages
	Professional Offices including medical and dental
	Professional Offices, not medical or dental
	Recreational Facilities (no indoor theater or outdoor activities)
	Restaurants, including fast food, but w/o Drive-thru Facilities
	Restaurants, no fast food
	Sewage Treatment Facilities
	Shops for Artists and Similar Specialties
	Stores and Shops for Retail Purposes
	Stores, Shops, and Open-Air Markets for Retail Purposes
	Taverns, Cocktail Lounges, Night Clubs, or Microbreweries
	Vehicle Service Centers[1]

Town Center Categories	*Land Use Activities*
Workplace District (continued)	**********
Cultural/Institutional Land Use Activities	*Child Care Centers* *Churches* *Civic Buildings (government)* *Park & Open Spaces; Public and Private areas* *Post Offices* *Public and Other Utility Facilities* *Scenic Areas*
**********	**********
Neighborhood General District	
Commercial Land Use Activities	*Art or Photo Studios or Galleries* *Bakeries* *Barber & Beauty Shops* *Cleaning, Pick-up Stations* *Coffee Shops* *Financial Institutions w/o Drive-thru Facilities* *Flower or Plant Stores* *Office/Warehouse Facilities* *Parking Garages* *Professional Offices, not medical or dental* *Restaurants, no fast food* *Sewage Treatment Facilities* *Shops for Artists and Similar Specialties* *Stores, Shops, and Open-Air Markets for Retail Purposes*
Cultural/Institutional Land Use Activities	**********
	Child Care Centers *Churches* *Civic Buildings (government)* *Libraries* *Nursing Homes* *Park & Open Spaces; Public and Private Areas* *Scenic Areas* *Schools*

Town Center Categories	***Land Use Activities***
Neighborhood General District (continued)	**********
Housing Land Use Activities	*Multi-Family Residential (live/work, rowhouses, and apartments)* *Single-Family Attached* *Single-Family Detached* *Accessory Dwelling Units* *Bed and Breakfasts* *Group Shelters* *Home for the Aged* *Home Occupations*
**********	**********
Neighborhood Edge District	
Commercial Land Use Activities	*Sewage Treatment Facilities*
Cultural/Institutional Land Use Activities	**********
	Cemeteries, Mausoleums *Child Care Centers* *Churches* *Civic Buildings (government)* *Libraries* *Park & Open Spaces; Public and Private Areas* *Scenic Areas* *Schools*
Housing Land Use Activities	**********
	Single-Family Detached *Accessory Dwelling Units* *Bed and Breakfasts* *Group Shelters* *Home for the Aged* *Home Occupations*

Town Center Categories	***Land Use Activities***
**********	**********
Cultural/Institutional District	
Commercial Land Use Activities	*Art or Photo Studios or Galleries*[1]
	Bakeries[1]
	Barber & Beauty Shops[1]
	Cleaning, Pick-up Stations[1]
	Coffee Shops[1]
	Filling Stations for Automobiles[1]
	Financial Institutions w/ Drive-thru Facilities[1]
	Financial Institutions w/o Drive-thru Facilities[1]
	Flower or Plant Stores[1]
	Hotels[1]
	Music or Dancing Academies[1]
	Professional Offices, including medical or dental[1]
	Professional Offices, not medical or dental[1]
	Recreational Facilities, including indoor theaters and outdoor activities[1]
	Recreational Facilities (no indoor theater or outdoor activities)[1]
	Research Laboratories & Facilities[1]
	Restaurants, including fast food, w/ Drive-thru Facilities[1]
	Restaurants, including fast food, but w/o Drive-thru Facilities[1]
	Restaurants, no fast food[1]
	Shops for Artists and Similar Specialties[1]
	Stores and Shops for Retail Purposes[1]
	Taverns, Cocktail Lounges, Night Clubs, or Microbreweries[1]

Town Center Categories	***Land Use Activities***
Cultural/Institutional District (continued)	**********
Cultural/Institutional Land Use Activities	*Cemeteries, Mausoleums*[1] *Child Care Centers*[1] *Churches* *Civic Buildings (government)* *Colleges, Universities* *Libraries* *Museums* *Nursing Homes* *Park & Open Spaces; Public and Private Areas* *Philanthropic Institutions*[1] *Post Offices* *Public and Other Utility Facilities1* *Recreational Fields* *Scenic Areas* *Schools*
Housing Land Use Activities	**********
	Multi-Family Residential (live/work, rowhouses, and apartments) *Single-Family Attached*[1] *Single-Family Detached*[1] *Home for the Aged*[1]
**********	**********
Pond Historic District **Commercial Land Use Activities**	*Art or Photo Studios or Galleries* *Bakeries* *Barber & Beauty Shops* *Cleaning, Pick-up Stations* *Coffee Shops* *Parking Areas* *Professional Offices, not medical or dental* *Restaurants, no fast food* *Sewage Treatment Facilities* *Shops for Artists and Similar Specialties*

Town Center Categories	*Land Use Activities*
Pond Historic District (continued)	**********
Cultural/Institutional Land Use Activities	*Cemeteries, Mausoleums* *Child Care Centers* *Churches* *Civic Buildings (government)* *Libraries* *Park & Open Spaces; Public and Private areas* *Scenic Areas*
Housing Land Use Activities	********** *Multi-Family Residential (live/work, rowhouses, and apartments)* *Single-Family Detached* *Accessory Dwelling Units* *Bed and Breakfasts* *Group Shelters* *Home Occupations*

NOTE: All Land Use Categories other than "Downtown" shall permit building footprints in excess of 10,000 square feet only by Conditional Use Permit.[1] Uses in the "Downtown" District shall permit building footprints in excess of 40,000 square feet only by Conditional Use Permit.[1]

[1] Certain activities have been determined to be appropriate only under a set of specific and special conditions which are needed because of the type of use, the location of the use, the characteristics of the use, and the development pattern around the use dictate a greater need of control. These activities shall be permitted only by Conditional Use Permit (including planned zoning expressly authorizing the activity) for their development or establishment in the applicable Land Use Designation where they may exist. The criteria for approving a Conditional Use Permit shall be described in 1003.181 of the City of Wildwood's Zoning Code and may be granted only where consistent with the principles established by this Master Plan.

Designation of Land Use for Specific Properties Within Town Center

The land use designations described in this Appendix are established for all properties located in the Town Center boundary. These land use designations correspond to the identified Town Center Categories and Land Use Activities noted above ~~and are identified by a specific parcel number as indicated in the text set forth in the town Center Plan Phase II Report dated February 3, 1998 and on file with the City Clerk~~. Minor boundary adjustments of each Town Center Category may be necessary on a case-by-case basis, where appropriate, and shall not be deemed a violation of this plan and may be accommodated without a map amendment.

Street Network Plan

The avenues, streets, roads, and lanes set forth on the Town Center Street Network Map are established as the planned street layout of the Town Center, subject to the qualifications and modifications noted below. New and modified streets constructed as part of any development should be expected to meet the general guidelines of the Town Center Plan in terms of location, purpose, and design, unless better alternatives are available. The exception to the adoption of this roadway network is the deletion of the system of grid streets in the area served by the Niere Acres Drive. This area will be served by the existing private roadway only and individual residential driveways, where needed. Additionally, the roadway network was not intended to extend the

existing stub street in Old Grover Estates from its terminus at the northern property line to the proposed Main Street. Concerns relative to traffic volumes and safety were the reasons for this modification. All other stub streets in this development would be connected as part of the Town Center's network of roadways.

Other roadways were also proposed as part of the engineering study completed by the City's consultant in this matter, which are shown on the Street Network Map and hereby adopted in principle. However, these roadways are to be reviewed on a case-by-case basis relative to the development of the individual properties where interest is centered. The development of these roadways, along with the desired open space areas and pocket parks indicated as a part of each, will be premised on their need or utility to achieve the goals of the Town Center planning concept and compliance with engineering standards proposed as part of this process.

The following additional street considerations are incorporated in the Street Network Map:

Crestview Lane - extension of this existing private roadway to the east and west to intersect with the proposed Taylor Road and State Route 109. This roadway will be the Main Street/Neighborhood Boulevard as described in the Street Specifications of the Town Center Plan.

Pond-Grover Loop Road - extend existing street to the south and east to connect with Taylor Road.

New Unnamed Roadways (as described by property location) -

- Schneider Property - two (2) new additional north-south roadways, which intersect the Main Street.
- RDR Property - new roadway from Amoco Oil Company facility to Eatherton Road.
- Properties along the north side of Crestview Lane - parallel roadway along State Route 100. This roadway will be located between Eatherton Road and the proposed Taylor Road.
- Properties owned by Greenberg Development Company and Covert-Corsair - three (3) north-south roadways and two (2) east-west roadways. Two (2) of the north-south roadways intersect Manchester Road, west of Village Hills Parkway.
- Greenberg Development Company Property (east side of Taylor Road) - two east-west roadways and one (1) north-south roadway. The two (2) east-west roadways intersect the proposed north-south roadway which ends at Manchester Road.
- Jones Family Properties - one (1) east-west roadway which extends across State Route 109 into the Bower tract of land. This roadway will extend from Taylor Road to State Route 109 then onward to the western end of the Town Center.
- Properties around Old Grover Estates - extension of existing stub streets to surrounding roadway system. The western stub street will turn to the south and intersect Manchester Road.
- St. Onge Property at the southwest corner of State Route 100 and State Route 109 - one (1) east-west roadway and one (1) stub to the south.
- Slavik Property - two (2) north-south roadways and one (1) east-west roadway. One (1) of the north-south roadways connects to Manchester Road.
- Properties located in the Northwest Quadrant of Manchester Road and State Route 109 - one (1) east-west roadway. Starts at Manchester Road and connects to the north-south roadway on the Slavik tract of land.

Development Policies for Established Neighborhoods in the Town Center

Special additional development policies shall apply when development is planned near or affecting existing residential neighborhoods. These policies are intended to promote the concepts of "traditional town planning," while protecting existing neighborhoods and the overall character of the area. Most important of these development policies which must be considered when applying the concepts of Town Center planning to properties within its boundaries is the appropriate transitioning of lot sizes around established neighborhoods, such as Old Grover Estates, Meadows at Cherry Hills, Lindy Lane, Niere Acres Drive, and Crestview Lane. The intent of transitioning lot sizes is to preserve the character of existing neighborhoods which have limited or no redevelopment potential or represent exactly the type of areas the Town Center planning process is trying to achieve, such as Niere Acres and Lindy Lane in particular. Where these circumstances exist, developing properties must reflect an appropriate lot size and density as not to impact the existing character of the area.

Additionally, the development of property near existing residential neighborhoods shall particularly require the dedication of appropriate areas of open space to serve the Town Center community. The areas intended for public use have been partially identified as part of future land use designations for all properties in the Town Center. Additionally, the provision of other open space areas on individual development sites, where applicable and functional, must also be considered. These smaller areas may include portions of developed properties where improvements permit, such as parking areas, pedestrian walkways, and others.

Two (2) other policies to be used in the development of properties in the Town Center include the following:

- the definable portions of any walkable neighborhood must have an appropriate mix of land uses. Therefore, the development of one type of housing unit to the point of shifting this balance should not be considered.

- the layout of streets to serve uses in the Town Center area must be respectful of and take into account appropriate block sizes (length and width) to accommodate proposed Neighborhood Design Standards for different lot types and always promote connectivity of them throughout its boundary.

APPENDIX V

City of Wildwood 5-Year Capital Improvement Program

Planned Project Expenditures

Roadway Improvements

Project Name	Source Funds	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Manchester Road Bike Lanes—Construction	Local/Grant	1,200,000				
Manchester Road Streetscape Phase 3—Right-of-Way	Local	90,000				
Manchester Road Streetscape Phase 3—Construction	Local/Grant		2,600,000			
State Route 109 Roundabouts and Bridge–Design	Local	550,000				
State Route 109 Roundabouts and Bridge—Construction	Local/TBD					
Eatherton Road Reconstruction—Preliminary Design	Local	125,000				

Pond-Grover Loop Road Extension and Traffic Calming	Local	125,000				
Waterfront Way Extension—Construction	Local/Escrow				125,000	
Other Roadway Improvement Projects	Local	25,000	25,000	25,000	25,000	25,000
Traffic Safety Improvements	Local	65,000	25,000	25,000	25,000	25,000
Subtotal		**2,180,000**	**2,650,000**	**50,000**	**175,000**	**50,000**

Bridge Reconstruction

Project Name	Source Funds	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Wild Horse Creek Bridge #386—Construction	Local				525,000	
Ossenfort Bridge #385—Construction	Local				325,000	
Woods Road Bridge #348 Replacement—Construction	Local/Grant	700,000				
Fox Creek Road Bridge #336 Replacement—Construction	Local/Grant	610,000				

Wild Horse Creek Bridge #392—Right-of-way	Local/Grant	20,000				
Wild Horse Creek Bridge #392—Construction	Local/ Grant		880,000			
Bouquet Road Bridge #353—Construction	Local/Grant		720,000			
Strecker Road Bridge #3-102—Construction	Local/Grant		1,200,000			

Eatherton Road Bridge #3-110—Right-of-Way	Local/Grant		10,000			
Eatherton Road Bridge #3-110—Construction	Local/Grant			1,000,000		
Subtotal		**1,330,000**	**2,810,000**	**1,000,000**	**850,000**	

Other Capital Investment

Project Name	Source Funds	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Salt Storage Facility	Local	450,000				
Salt Storage Facility—Design	Local	27,000				

Other Engineering Services	Local	75,000	75,000	25,000	25,000	25,000
Great Streets Project(s)	Local	50,000	50,000	50,000	50,000	50,000
Vehicle Replacement/Purchase	Local	25,000		25,000		25,000

Rural Internet Access Project	Local	50,000				
Subtotal		**677,000**	**125,000**	**100,000**	**75,000**	**100,000**

Capital Maintenance

Project Name	Source Funds	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Asphalt Pavement Resurfacing	Local	950,000	500,000	500,000	500,000	500,000
Concrete Pavement Replacement	Local	910,000	900,000	900,000	900,000	900,000
Storm Drainage Structure Replacement	Local	50,000	50,000	50,000	50,000	50,000
Sidewalk Replacement	Local	100,000	100,000	100,000	100,000	100,000
Subtotal		**2,010,000**	**1,550,000**	**1,550,000**	**1,550,000**	**1,550,000**

Park and Trail Development

Project Name	Source Funds	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Property Acquisitions	Local	900,000	500,000	500,000	500,000	500,000
Al Foster Trailhead Improvements—Construction	Local	450,000				
Woodcliff Heights Park—Construction	Local		400,000			
Homestead Trail Design/Engineering and Improvements	Local	50,000	600,000			
Wildwood Greenway Phase 6 Construction—Trail + Bridge	Local/Grant	350,000				
Pedestrian Bridge Over Route 100 at Eatherton Road—Construction	Local/Grant	1,200,000				
Kohn Park Repairs	Local	50,000				
Old Pond School Repairs	Local	10,000	5,000	50,000		

Capital Equipment/Facilities Purchase/Replacement	Local	50,000	50,000	50,000	50,000	50,000
Monarch Levee Trailhead	Local/Grant	200,000				
Community Park Phase II—Construction	Local/Grant	700,000				
Community Park Phase III—Design and Engineering	Local	150,000				
Community Park Phase III—Construction	Local		1,000,000			
Boardwalk Trail Between Mobil-on-the-Run and Pedestrian Bridge	Local	330,000				
Future Trail Development—Design	Local	150,000	150,000		150,000	
Future Trail Development—Construction	Local	1,000,000		1,000,000		1,000,000

Trail Resurfacing	Local	100,000		100,000		100,000
Restroom Facilities—Old Pond School	Local	120,000	100,000			
Athletic Field Planning and Development	Local	50,000	50,000			

Anniversary and Glencoe City Parks—Renovations	Local		100,000			
Town Center Park Development (Neighborhood Type)	Local					
Belleview Farms	Grant	25,000				
Community Park—Phase IV—Design and Engineering	Local			300,000		
Community Park Phase IV—Construction	Local				2,000,000	
Subtotal		**5,885,000**	**2,955,000**	**2,000,000**	**2,700,000**	**1,650,000**

Total Capital Improvement Expenditures

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Total	**12,082,000**	**10,090,000**	**4,700,000**	**5,350,000**	**3,350,000**

APPENDIX VI

Service Provider Comments

As part of the development of information for the Master Plan Update, the Master Plan Advisory Committee requested the Department of Planning contact all of the service providers, utility companies, and the Rockwood School District to ascertain future plans within the City of Wildwood. A letter was sent to each of the providers/agencies listed below requesting responses to five (5) questions relating to their role in providing services to residents and businesses located within the City of Wildwood. These five (5) questions included the following:

1. Any new facilities, buildings, or structures, which *may* be constructed or expanded in the next ten (10) year period (beginning in January 2015).
2. Any reductions, expansions, or other alterations in the network of improvements or infrastructure, which currently provides service to the City of Wildwood (beginning in January 2015).
3. Any new design standards or requirements that *may* be modified, altered, or adopted which are currently being discussed that may be applied in the City of Wildwood within the next decade (beginning in January 2015).
4. Any information which *may* effect the land use policies, the transportation network of streets, roads, and bridges, the development of parks and related facilities that involves your agency or organization and would be helpful to City officials as part of this update process.
5. Any trends in your service areas that *may* be influential in the upcoming ten (10) year period that your agency or organization is reviewing with the anticipation of addressing in meeting your required responsibilities.

The individuals' responses relating to these five (5) questions have been reviewed and discussed by the advisory committee members, but are not included in this Master Plan. The specific information that was received in response to the City's requests is on file with the City Clerk and incorporated as part of this Master Plan by reference herein.

List of Service Providers/Agencies

Ameren UE
Army Corp of Engineers
AT&T Wireless & U-verse (formerly Southwestern Bell)
Bays ET
Charter Communications
Chesterfield Valley Coalition
City of Chesterfield
City of Clarkson Valley
City of Ellisville
City of Eureka
City of Pacific
Crown Castle
Eureka Fire Protection District
Franklin County
Great Rivers Greenway
Laclede Gas
Lindenwood University
Metro (Bi-State Development Agency)
Metro West Fire Protection District
Metropolitan St. Louis Sewer District
Missouri American Water Company
Missouri Department of Conservation
Missouri Department of Natural Resources

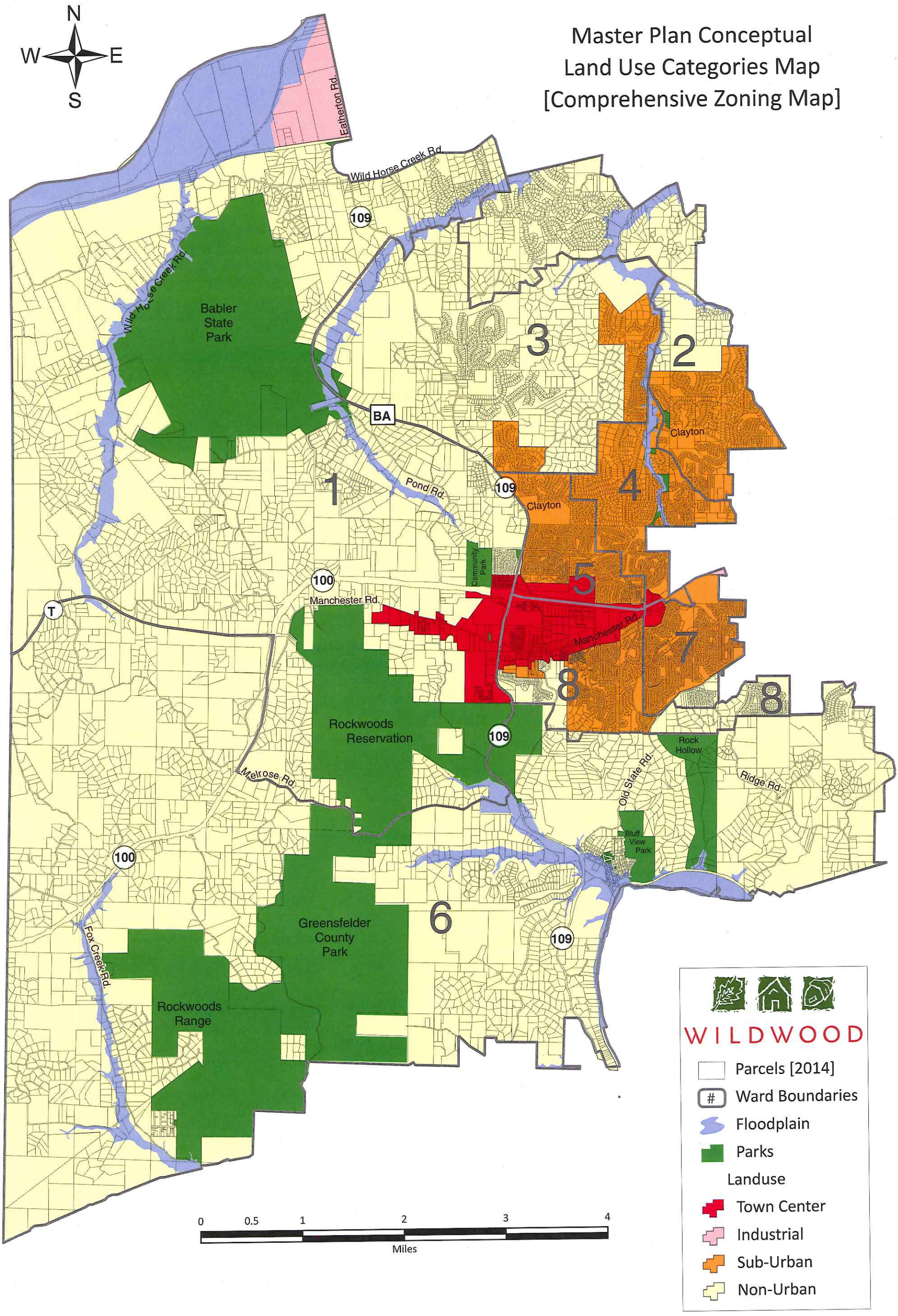
Missouri Department of Transportation
Monarch Fire Protection District
Monarch-Chesterfield Levee District
Open Space Council
Rockwood School District
Spirit of St. Louis Airport
Sprint Wireless
St. Louis Community College
St. Louis County Department of Highways and Traffic
St. Louis County Department of Parks and Recreation
St. Louis County Department of Planning
T-Mobile
United States Environmental Protection Agency
Verizon Wireless
Wildwood Family YMCA
Wisper ISP

APPENDIX VII

Zoning and Access and Mobility Plan Maps

ATTACHMENT C
Comprehensive Zoning Plan

CITY OF WILDWOOD



*Prepared by the Department of Planning - City of Wildwood | St. Louis County, Missouri | Revised: December 2014

AGENDA ITEM **OLD BUSINESS**

WILDWOOD

INFORMATION REPORT
Prepared by Department of Planning
March 21, 2016 Executive Session
"Planning Tomorrow Today"

Petition Number:	P.Z. 24-14
Petitioner:	Centaur Station, (Michael Phelan), 18833 Cliffview Lane, Wildwood, Missouri, 63005 c/o Department of Planning, City of Wildwood, Missouri, 16860 Main Street, Wildwood, Missouri 63040
Request:	A request, in response to a communication from Michael Phelan, which is dated October 16, 2015 noting his intent to not proceed with the placement of the historic building on the City's registry, thereby seeking the revocation of the Landmark and Preservation Area (LPA) that was approved by the City Council on December 8, 2014 and governs these two (2) tracts of land
Location:	West side of Centaur Road, north of Wild Horse Creek Road
Tract Size:	3.11 acres
Locator Numbers:	19X410082 and 19Y6200260
Street Address:	107 and 109 Centaur Road
Public Hearing Date:	February 16, 2016
Date and Vote on Information Report:	March 21, 2016 - TBD
Report:	Attachment A
Preliminary Development Plan:	Attachment B
Background Information:	Attachment C
School District:	Rockwood
Fire District:	Monarch Fire Protection District
Ward:	One

Recommendation: The Department of Planning is recommending the Landmark and Preservation Area (LPA) be voided and rescinded at this time for non-compliance to the conditions of the site-specific ordinance.

In the report, evidence is provided indicating the following:

1. The Department believes the application of this special procedure permit is now not appropriate at this location and should be revoked, given the circumstances associated with its approval.
2. The Department is recommending the Planning and Zoning Commission act to remove the Landmark and Preservation Area (LPA) from this site, which would return its allowable uses to those activities that are prescribed in the City's FPNU Floodplain Non-Urban Residence District.
3. This recommended action is not premised on the historically significance of the property, which is substantial, but rather on the property owner's non-compliance to the overlay district's requirements and conditions.

ATTACHMENT A

< Background and Zoning History >

The Planning and Zoning Commission had recommended the granting of a Landmark and Preservation Area Overlay District (LPA) onto a property that is located on Centaur Road in the historic Centaur Community on November 3, 2014. This overlay district mechanism is restricted to the use on properties that are determined to be historically significant and have such a prominent role in the community's past that zoning allowances/incentives in terms of types of uses and activities can be considered upon them. Specifically, this overlay district, as it was approved by City Council, allowed limited commercial uses/activities in the current floodplain residential zoning district designation.

The background of this request, which had been presented to the City as **P.Z. 24-14 Centaur Station** and heard on September 14, 2014 at a public hearing before the Planning and Zoning Commission, involved a two (2) story brick building and associated accessory structures that formed a major node of the former Centaur Community. At the public hearing, the owner of the historic element noted that many improvements had been made to the property, building, and accessory structures, since his ownership was finalized, and he was not sure of the eventual outcome of the site's use, but wanted the flexibility for possible expanded uses/activities there, if at all possible. The Planning and Zoning Commission questioned the uses/activities that might be acceptable at this location, given its rural nature, but also noted the character of the main building and its prominence on the City's roadway were components that lent itself to a greater range of uses/activities. Also supporting this allowance was the past use of this property and building at this location, which was a general store for the community of Centaur for many, many years.

The Planning and Zoning Commission recommended approval of the application of the overlay district and established a list of conditions that would have to be met by the owner in terms of further improvements to the property, which would be indicated on the required Site Development Plan, along with operating parameters and protections relative to the building and its ultimate uses/activities. One (1) of these conditions that was recommended by the Planning and Zoning Commission, as part of its action, was the owner would be required to submit an application to the City's Historic Preservation Commission for its consideration, as a candidate for Wildwood's Historic Registry. Under the requirement of this site-specific ordinance, this submittal was to be completed "at

a time no later than the date of the final action of the City Council on the site-specific ordinance for this proposed overlay district." The site-specific ordinance for this project was approved by the City Council on December 8, 2014.

Accordingly, the owner of the historic element submitted the required application to the Historic Preservation Commission to have the property placed on the City's registry, but a public hearing was never conducted on this matter, given the property owner requested multiple postponements. Near the end of 2015, the property owner submitted an e-mail stating it was no longer his intent to move forward with the registry request and sought its withdrawal from the Historic Preservation Commission's agenda. Thereafter, the Historic Preservation Commission withdrew the request from its active agenda.

With that action, the Department advised the Historic Preservation Commission, and now, the Planning and Zoning Commission that one (1) of the major conditions for supporting the Landmark and Preservation Area authorization on this site will now not be met and the timelines relating to the submittal of the required Site Development Plan have also passed. Therefore, under the condition of the site-specific ordinance, the following option exists for action: ***Failure to comply with any or all of the conditions of this ordinance shall be adequate cause for revocation of permits by the issuing City of Wildwood Departments or Commissions.***

< Current Request >

The Planning and Zoning Commission is now being requested by the Department of Planning to consider revoking an established Landmark and Preservation Area Overlay District (LPA) that was approved by the City Council in 2014. This zoning overlay contained considerations and requirements stipulating timelines and action, on the part of the property owner, that were to be met, which have passed or not been completed. Specifically, the request again is as follows: **P.Z. 24-14 Centaur Station, (Michael Phelan), 18833 Cliffview Lane, Wildwood, Missouri, 63005 c/o Department of Planning, City of Wildwood, Missouri, 16860 Main Street, Wildwood, Missouri 63040 –** A request, in response to a communication from Michael Phelan, which is dated October 16, 2015, regarding **P.Z. 24-14 Centaur Station**, noting his intent to not proceed with the placement of the historic building on the City's registry, thereby seeking the revocation of the Landmark and Preservation Area (LPA) that was approved by the City Council on December 8, 2014 and governs these two (2) tracts of land; west side of Centaur Road, north of Wild Horse Creek Road (Locator Numbers: 19X410082 and 19Y620026/Street Addresses: 107 and 109 Centaur Road); Landmark and Preservation Area (LPA) in the Floodplain Non-Urban Residence District. **(Ward One)**

< Analysis >

The Department of Planning would note the zoning of property often creates a major benefit to it and the community as a whole. Zoning creates order and allows activities that are compatible with the surrounding area as well. Additionally, the zoning of property can provide the incentive for improvement of current conditions at a location and offer options that are not currently available to it. Therefore, the granting of zoning is significant and, in the City of Wildwood, its officials manage the

process to ensure that, when an action is complete, the decision is appropriate and consistent with the Master Plan.

With any zoning approval, that decision is based upon compliance to the City's plans and codes and the rights of the petitioner to request a change to the use of his or her property consistent with the Master Plan. Conversely, once the zoning is changed, certain requirements or conditions have been established as part of it to allow the proposed use to proceed, but in a managed manner. Therefore, the zoning process can be considered an agreement between parties. This agreement is critical to protecting the City and its property owners from inappropriate land use decisions and the accompanying impacts that might follow from such.

Acknowledging this agreement that is associated with the zoning process, if a petitioner does not meet the conditions of zoning, then an action is needed to preserve the integrity of the City's process. In the case of this petition, the property owner was required to place this historic element on the City's Historic Registry, given its age and significance within the Centaur Community, one of the older and original settlements in St. Louis County. This requirement was also appropriate, since the zoning action was for a Landmark and Preservation Area (LPA), which can only be used when a historically significant structure is part of the subject request. Therefore, the rationale for this request and the City's action were all focused on this historic element and its preservation, with active reuse. Given the owner now has chosen not to pursue this condition of the ordinance, non-compliance exists and the zoning initiative of the City is voided.

With these described circumstances now in place, the City's land use codes allows the Planning and Zoning Commission and the City Council to address this matter by revoking the zoning overlay district that was granted for the extra land use rights for this property, i.e. commercial activities in a residential area. The Department does support this action for the following reasons:

1. The allowance for commercial activities in a residential zoning district designation was premised on a partnership between the property owner and the City, which cannot exist to the degree necessary, if the element is not placed on the Wildwood Historic Registry.
2. The granting of the Landmark and Preservation Area (LPA) is not mandatory on the part of the City and, based upon an expectation the historic element is part of the overall outcome, which, given the property owner's statement, will not be at this time, the overlay district must be rescinded.
3. The protection of the residential area, where this site is located, is the priority, which requires the elimination of the overlay district, when not paired with the City's Historic Register.
4. The property's location in the floodplain of the Missouri River dictates a cautious approach to its expanded use, particularly when not linked to a preservation effort for the building and related structures.
5. The property owner could request the application of this overlay district again, in the future, if circumstances change in this regard.

Given these reasons, the Department is recommending the Landmark and Preservation Area (LPA) granted to this property be voided and rescinded and the property's zoning district designation for any future uses be limited to the permitted uses of the FPNU Floodplain Non-Urban Residence District.

< Summary >

The Department believes the application of this special procedure permit is now not appropriate at this location and should be revoked, given the circumstances associated with its approval. To this end, the Department is recommending the Planning and Zoning Commission act to remove the Landmark and Preservation Area (LPA) from this site, which would return its allowable uses to those activities that are prescribed in the City's FPNU Floodplain Non-Urban Residence District. This action is not premised on the historical significance of the property, which is substantial, but rather on the property owner's non-compliance to the overlay district's requirements and conditions.

ATTACHMENT B
Preliminary Development Plan

St. Louis County Parcel Map

March 18, 2016

Parcel Selected

1:4,800

0 0.04 0.08 0.16 mi

0 0.05 0.1 0.2 km

St. Louis County GIS Service Center

Created by: St. Louis County GIS Service Center
Copyright St. Louis County, all rights reserved

St. Louis County Parcel Map

March 18, 2016

Parcel Selected

1:2,400

0 0.02 0.04 0.08 mi

0 0.0325 0.065 0.13 km

St. Louis County GIS Service Center

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ATTACHMENT C
Background Information

WILDWOOD

PUBLIC HEARING PRIMER[i]

REVOCATION PROCESS
FOR AN
ESTABLISHED LANDMARK AND PRESERVATION AREA (LPA)

City of Wildwood, Missouri
Planning and Zoning Commission
February 16, 2016
"Planning Tomorrow Today"

< Posted and Advertised Request >

P.Z. 24-14 Centaur Station, (Michael Phelan), 18833 Cliffview Lane, Wildwood, Missouri, 63005 c/o Department of Planning, City of Wildwood, Missouri, 16860 Main Street, Wildwood, Missouri 63040– A request, in response to a communication from Michael Phelan, which is dated October 16, 2015, regarding **P.Z. 24-14 Centaur Station**, noting his intent to not proceed with the placement of the historic building on the City's registry, thereby seeking the revocation of the Landmark and Preservation Area (LPA) that was approved by the City Council on December 8, 2014 and governs these two (2) tracts of land; west side of Centaur Road, north of Wild Horse Creek Road (Locator Numbers: 19X410082 and 19Y620026/Street Addresses: 107 and 109 Centaur Road); Landmark and Preservation Area (LPA) in the Floodplain Non-Urban Residence District. **(Ward One)**

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but wanted the flexibility for possible expanded uses/activities there, if at all possible. The Planning and Zoning Commission questioned the uses/activities that might be acceptable at this location, given its rural nature, but also noted the character of the main building and its prominence on the City's roadway were components that lent itself to a greater range of uses/activities. Also supporting this allowance was the past use of this property and building at this location, which was a general store for the community of Centaur for many, many years.

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< Current Request >

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response to a communication from Michael Phelan, which is dated October 16, 2015, regarding **P.Z. 24-14 Centaur Station**, noting his intent to not proceed with the placement of the historic building on the City's registry, thereby seeking the revocation of the Landmark and Preservation Area (LPA) that was approved by the City Council on December 8, 2014 and governs these two (2) tracts of land; west side of Centaur Road, north of Wild Horse Creek Road (Locator Numbers: 19X410082 and 19Y620026/Street Addresses: 107 and 109 Centaur Road); Landmark and Preservation Area (LPA) in the Floodplain Non-Urban Residence District. **(Ward One)**

< Next Steps >

At tonight's public hearing, the City Attorney and the Department of Planning are seeking input on this matter in preparation of a recommendation on whether to revoke the overlay district associated with the subject tract of land and address this advertised matter. If any of the Commission members should have questions or comments in this regard, please feel free to contact the City Attorney (Rob Golterman) at (314) 444-7500 or the Department of Planning at (636) 458-0440. Thank you for your review of this information in preparation of tonight's hearing on this topic.

---

[i] **CHAPTER 415.560 (B.)-2** Each such petition, ***other than those initiated by the Planning Commission or the City Council***, shall be verified by all deed owners or contractual owners of property within the area proposed to be changed attesting to the truth and correctness of all facts and information presented therein. If petitioners are contract owners, a complete copy of the contract creating such interest shall be included with the petition

From: Michael Phelan
To: Kathy Arnett
Subject: Re: Site Development Plan for PZ 24-14 Centaur Station
Date: Friday, October 16, 2015 7:59:37 AM

Kathy at this time I wish to withdraw my application for the LPA.

Please pass along my sincere thank you to Joe and Liz for their efforts in trying to put together the LPA.

Regards

Mike Phelan

On Oct 15, 2015, at 8:43 AM, Kathy Arnett <Kathy@cityofwildwood.com> wrote:

Hi Mike,

I got your email from Liz Weiss and wanted to reach out to you since I'm now handling zoning issues before the Planning and Zoning Commission. I wanted to let you know that according to the ordinance that was approved for your LPA, see attached, your Site Development Plan needs to be approved by the Planning and Zoning Commission within twelve (12) months of the LPA approval. That date was December 8, 2014. This timeframe may be extended once, if due cause is shown, by the Planning and Zoning Commission.

Since we haven't received a SDP to begin review and present to the Commission, you'll need to request an extension to this timeframe. Please submit a letter requesting the extension and providing your rationales for why it should be approved. I'd like to place this item on the Commission's November 2nd agenda, which means I'd need the letter by next Friday, October 23rd. Additionally, you'll need to submit a SDP soon, so we can begin the review and approval process.

Please let me know if you have any questions.

Sincerely,
Kathy

Kathy Arnett
Senior Planner I
City of Wildwood
16860 Main Street
Wildwood, MO 63040
kathy@cityofwildwood.com
636-458-0440 x135

<image001.jpg><image002.png><image003.png>

Please Subscribe to the City's Weekly e-News:
http://www.cityofwildwood.com/list.aspx

<Pages from 2070 Centaur Road LPA.PDF>

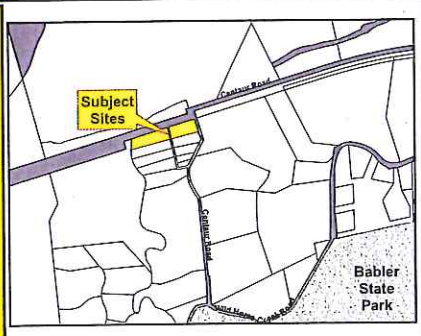
WILDWOOD

16860 Main Street
Wildwood, MO 63040

CITY OF WILDWOOD
NOTICE OF
PUBLIC HEARING
before the Planning and Zoning Commission
Tuesday, February 16, 2016, at 7:30 p.m.

AS A RESIDENT OR PROPERTY OWNER NEAR THE SITE THAT IS IDENTIFIED ON THIS MAILER, THE CITY OF WILDWOOD WOULD LIKE TO ENSURE YOU ARE AWARE OF THIS REQUEST/PROPOSAL BECAUSE IT IS LOCATED WITHIN 3,000 FEET OF YOUR PROPERTY. YOUR COMMENTS ARE ENCOURAGED, ALONG WITH YOUR PARTICIPATION AT THE SCHEDULED HEARING OR MEETING. THIS ITEM IS SCHEDULED FOR DISCUSSION AND ITS OUTCOME MAY IMPACT YOUR HOME, NEIGHBORHOOD, OR AREA, SO PLEASE CAREFULLY READ THE DESCRIPTION AND PARTICIPATE AT YOUR DISCRETION. THE CITY OF WILDWOOD ENCOURAGES CITIZEN INPUT AT ALL OF ITS HEARINGS OR MEETINGS AND YOUR INVOLVEMENT WILL ASSIST IT IN REACHING THE BEST DECISION POSSIBLE FOR ALL PARTIES.

*** PLEASE SEE YELLOW BOX ON OPPOSITE SIDE OF THIS MAILER FOR A LIST OF WAYS TO EITHER COMMENT ON AND/OR TRACK THIS ITEM.**



Street Addresses of Subject Sites:
107 and 109 Centaur Road
Wildwood, MO 63005

THE CITY WELCOMES AND ENCOURAGES YOUR COMMENTS AND PARTICIPATION IN ITS PUBLIC PROCESSES.

The Planning and Zoning Commission of the City of Wildwood will hold a public hearing on **Tuesday, February 16, 2016 at 7:30 p.m. in the City Hall Council Chambers, 16860 Main Street, Wildwood, Missouri 63040** for the purposes of accepting testimony regarding a request for either the modification of zoning district designations, application or amendment of special procedures, change in the underlying regulations of the Zoning Ordinance, action on Record Plats, updates to other land use regulations, or amendment of the Master Plan, which will then be taken under advisement for future action. The meeting will be open to all interested parties to comment upon this request, whether in favor or opposition, or provide additional input for consideration. *If you wish to attend this public hearing and require accommodation due to disability, please contact the Department of Planning forty-eight (48) hours in advance at (636) 458-0440.* If you do not have comments regarding this request, no action is required on your part. The following **request** will be considered at this time:

P.Z. 24-14 Centaur Station, (Michael Phelan), 18833 Cliffview Lane, Wildwood, Missouri, 63005 c/o Department of Planning, City of Wildwood, Missouri, 16860 Main Street, Wildwood, Missouri 63040– A request, in response to a communication from Michael Phelan, which is dated October 16, 2015, regarding **P.Z. 24-14 Centaur Station**, noting his intent to not proceed with the placement of the historic building on the City's registry, thereby seeking the revocation of the Landmark and Preservation Area (LPA) that was approved by the City Council on December 8, 2014 and governs these two (2) tracts of land; west side of Centaur Road, north of Wild Horse Creek Road (Locator Numbers: 19X410082 and 19Y620026/Street Addresses: 107 and 109 Centaur Road); Landmark and Preservation Area (LPA) in the Floodplain Non-Urban Residence District. **(Ward One)**

***RESIDENT OR PROPERTY OWNER - PLEASE COMMENT ON AND/OR TRACK THIS REQUEST BY:**

1) Submitting a comment online by visiting: **http://www.cityofwildwood.com/comment.**
2) Submitting a written comment prior to the hearing and addressed to the Planning and Zoning Commission, City of Wildwood, 16860 Main Street, Wildwood, Missouri 63040.
3) Viewing the Planning and Zoning Commission's agenda, which is available on the City's website at: **www.cityofwildwood.com**, the Friday before the aforementioned meeting date.

If you should have any questions regarding this information, please feel free to contact the Department of Planning at (636) 458-0440. Thank you in advance for your interest in this matter.

BILL #2070 **ORDINANCE #2070**

AN ORDINANCE BY THE CITY COUNCIL OF THE CITY OF WILDWOOD, MISSOURI APPROVING A LANDMARK AND PRESERVATION AREA (LPA) ON A THREE (3) ACRE PROPERTY THAT IS LOCATED ON THE WEST SIDE OF CENTAUR ROAD, NORTH OF WILD HORSE CREEK ROAD, THEREBY ALLOWING IT TO BE USED FOR CERTAIN COMMERCIAL ACTIVITIES, BUT REQUIRING ITS PLACEMENT ON THIS COMMUNITY'S HISTORIC REGISTER, AND PROHIBITING ITS REMOVAL, WITHOUT REVIEW AND ACTION OF THE HISTORIC PRESERVATION COMMISSION AND CITY COUNCIL; ALL BEING CONSISTENT WITH THE REPORT ON THIS MATTER THAT WAS PREPARED BY THE PLANNING AND ZONING COMMISSION AND DATED NOVEMBER 3, 2014 – PZ. 24-14 Centaur Station, c/o Michael Phelan. (Ward One)

WHEREAS, the protection and, whenever possible, the preservation of historic elements of the City of Wildwood is a high priority and requires special attention of its officials in this regard; and

WHEREAS, the efforts of the City have taken many forms in this regard, including the development of its Historic Preservation Commission, and associated ordinance, the inclusion of goals, objectives, and policies in the City's Master Plan for this effort, and the retention of the Landmarks and Preservation Area (LPA) procedure in the City's Zoning Ordinance; and

WHEREAS, all of these forms are intended to create an atmosphere of respect for historical elements between all parties involved and, whenever possible, retain and reuse buildings and structures of historic significance; and

WHEREAS, one (1) area of Wildwood that has had a long and rich history dating back to the first settlers in this area, Native Americans, is the Centaur Community, which is located near the Missouri River and just to the south of the former Gumbo Flats; and

WHEREAS, the Centaur Community has seen a tide of changes, of which over the last twenty (20) years began with on-going decline to now a renaissance of sorts, with the purchase of many of the properties by Michael Phelan and their maintenance and upkeep beginning and now being maintained; and

WHEREAS, one (1) of the properties that has been purchased by Michael Phelan was the old Centaur General Store and Station Property, which has a distinctive two (2) story brick building located upon it and a smaller accessory structure situated next to the railroad tracks that define this property's northern boundary line; and

WHEREAS, the property owner has begun the rehabilitation and maintenance of these elements and, in a very short time, has taken them from a dilapidated and poorly maintained state to a well-kept and prominent addition to the area again; and

WHEREAS, with this rehabilitation, the property owner sought the authorization to possibly utilize the site for increased uses, given the buildings' past use as a general store, community gathering spot, and other activities; and

WHEREAS, given the underlying zoning district designation of this site is FPNU Floodplain Non-Urban Residence District, which does not allow any type of commercial activity other than a Conditional Use Permit (CUP), but not retail, service, or office in any instance, which the Landmark and Preservation Area (LPA) does accommodate under a set of restrictions and conditions; and

WHEREAS, the Planning and Zoning Commission received the required application for this Landmark and Preservation Area (LPA) and immediately referred it to the Historic Preservation Commission for their review and recommendation, which was provided after careful study and discussion, which identified this property as historically significant and worthy of preservation and incentives to achieve such; and

WHEREAS, the Historic Preservation Commission forwarded the report and recommendation to the Planning and Zoning Commission for its public hearing held on September 15, 2014, where testimony was accepted on this matter; and

WHEREAS, after the public hearing, the Planning and Zoning Commission considered all of the factors and information provided to it and recommended the application of the Landmark and Preservation Area (LPA) to the City Council for its consideration and, in doing so, noted the support of the Historic Preservation Commission for this action (by its report and recommendation), the character of the area, the limitations on types of uses imposed on the property by the Planning and Zoning Commission, and the benefits of the reuse of this property to the overall community; and

WHEREAS, the City Council received the Planning and Zoning Commission's Letter of Recommendation on this request and held another public hearing to accept testimony on it and other comments relative to this site, its history, and its future; and

WHEREAS, at the conclusion of this public hearing, the City Council concurred with the findings of the Historic Preservation Commission and the Planning and Zoning Commission and authorized the preparation of the necessary legislation for this matter to be considered further; and

WHEREAS, the bill that would authorize the application of the Landmarks and Preservation Area (LPA) has been prepared in accordance with City codes and regulations in this regard and is within the legislative authority of the City Council, under State Statute and City Charter to proceed forward in its consideration.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF WILDWOOD, MISSOURI, AS FOLLOWS:

Section One. The City of Wildwood Zoning Ordinance, and Official Zoning District Maps, which are made a part hereof and hereby amended, by enacting a Landmark and Preservation Area (LPA) upon the subject three (3) acre tract of land, as set forth in this ordinance for the following described lot(s): Lot 1 of the Fehrenbach Subdivision (107 Centaur Road) - St. Louis County Locator Number 19x410082 and Lot 9 of the Fehrenbach Subdivision (109 Centaur Road) - St. Louis County Locator Number 19Y620026.

Section Two: The zoning authority and approval embodied in this ordinance is granted subject to compliance with the Subdivision and Development Regulations, Zoning Ordinance, and all other City of Wildwood ordinances, rules, and regulations and the conditions of this ordinance, except as, may be modified herein, upon the requirement the development and approved Site Development Plan are carried out in accordance with the recommendation forwarded to the City Council by the Planning and Zoning Commission within the communication dated November 3, 2014, which is incorporated herein by reference as if fully set forth in this ordinance. The zoning authority granted herein is further subject to the following conditions:

1. PERMITTED USES

This **Landmark and Preservation Area** shall authorize offices, professional types only, and limited service and retail facilities, in which goods and services may be sold or provided directly to the public on the premises, such as, but not limited to, studios or galleries for artwork or antiques or studios or work areas for artists, candy makers, dressmakers, and tailors, along with any accessory uses normally found in conjunction with the primary activities. No alcohol sales shall be allowed on this site (beer, wine, and spirits).

2. DEVELOPMENT AREAS AND BUILDING REQUIREMENTS

a. The overall size of this **Landmarks and Preservation Area** shall not be less than three (3) acres in area.

b. The maintenance of the main building and the two (2) accessory structures shall comply with the requirements that are set forth in Chapter 440 Historic Preservation and Restoration Code (see Chapter 440.010, General Provisions, Item (B.) - Definitions – Minimum Maintenance and Ordinary Maintenance; and Section 440.100 Fess and Penalties, Item (B.).

c. No demolition or major alteration of any building or structure, as defined in Chapter 415 Zoning Ordinance, Section 415.460 Non-Conforming Use, Lands, and Structures, Item C, shall be authorized by the City, while the **Landmark and Preservation Area** is in place on the subject property.

d. The two (2) existing outbuildings, along with the primary building, shall be retained on this site. Any new buildings or accessory structures added to the property must first be acted upon by the Historic Preservation Commission and the Planning and Zoning Commission on a Site Development Plan (SDP) submittal, which shall minimally comply with Section 3 of this ordinance. No new structure shall exceed the footprint size of the primary building that is located on the property.

e. The architectural design, mass, proportion, materials, and style of new building or structure shall be harmonious with the character of the surrounding area and utilize existing site elements in their appearance and layout. Any new building or structure shall be reviewed and acted upon by the Historic Preservation Commission and the Architectural Review Board. Any alteration to the existing historic elements shall also be reviewed by the Architectural Review Board, along with the Historic Preservation Commission, utilizing the requirements of the Certificate of Appropriateness process set forth in Chapter 440 Historic Preservation and Restoration Code.

3. PLAN SUBMITTAL REQUIREMENTS

Within twelve (12) months of the **Landmarks and Preservation Area** being approved by the City Council, and prior to any site disturbance, the developer shall submit to the Planning and Zoning Commission for their review and approval a Site Development Plan. Where due cause is shown by the developer, this time interval may be extended once by the Planning and Zoning Commission in accord with requirements of Chapter 420.060 of the City of Wildwood Zoning Ordinance. Said Site Development Plan shall include, but not be limited to, the following information:

a. Outboundary plat and legal description of the property.
b. The location and size of all parking areas, pavement widths, and right-of-way dedications.
c. A general plan indicating all structure and parking setback lines along the perimeter of the subject tract of land.
d. Location of all roadways adjacent to the property, including required roadway right-of-way dedication and pavement widening, with existing and proposed improvements, and general location, size, right-of-way, and pavement width of all interior access areas.
e. The location and size of all freestanding signs, lighting, fences, sidewalks, and other above-ground structures, except retaining walls less than two (2) feet in height per section.
f. Existing and proposed contours at vertical intervals of not more than two (2) feet.
g. Parking calculations for the proposed use.
h. A Landscape Plan including the location, size, and general type of plant materials to be used in accord with the City of Wildwood's Chapter 410 and accompanying Tree Manual.
i. An inventory indicating the percent of tree canopy to be retained on the site.
j. Location of all existing and proposed easements.
k. All other information not mentioned above, but required on a preliminary plat in accord with Chapter 420.060 of the City of Wildwood's Subdivision Ordinance.

4. SITE DEVELOPMENT PLAN DESIGN CRITERIA

The above Site Development Plan shall adhere to the following specific design criteria:

Build-To Lines/Setback Distances

a. No new building or structure, other than boundary, garden, and/or retaining walls, fences, and/or light standards, shall be located within the required setback distances, as defined by Chapter 415.090 NU Non-Urban Residence District Regulations of the City of Wildwood Zoning Ordinance.

Parking Setbacks

b. No parking stall, loading space, internal drive, or roadway, excluding points of ingress or egress, shall be located within the required setback distances, as established for in Chapter 415.090 NU Non-Urban Residence District of the City of Wildwood Zoning Ordinance.

Miscellaneous Setbacks – Floodplain

c. No fill or spoils may be placed on this property, without approval of the Floodplain Administrator of the City of Wildwood.

Access and Roadway Improvements

d. Access to this development shall be limited to Centaur Road and the existing curb cut that is located on the subject property.

Miscellaneous Roadway Requirements

e. Installation of landscaping and ornamental entrance monument or identification signage, if proposed, shall be reviewed by the Missouri Department of Transportation and the Department of Public Works for sight distance considerations and approved prior to its installation or construction.

f. The developer is advised that utility companies will require compensation for relocation of their facilities within public road right-of-way. The developer should also be aware of extensive delays in utility company relocation and adjustments. Such delays will not constitute a cause to allow occupancy prior to completion of road improvements.

g. Dedicate twenty (20) foot wide, perpetual multiple-use trail easements to the City of Wildwood, as directed by the Department of Public Works and the Department of Planning, along the subject property's frontage onto Centaur Road and abutting the railroad right-of-way the entire depth of it as well.

Parking Requirements

h. Parking spaces shall be provided according to the City of Wildwood's Town Center Plan for the Neighborhood General District and as may be required by Chapter 415.340 Off-Street Parking and Loading Requirements of the City of Wildwood's Zoning Code for the NU Non-Urban Residence District.

Landscape Requirements - Specific

i. Landscaping shall adhere to all requirements of the City of Wildwood's Chapter 410 and its accompanying Tree Manual, including the submittal of a Tree Preservation Plan in conjunction

with the Site Development Plan. All new landscaping materials shall meet the following criteria: Deciduous Trees - two and one-half (2½) inch minimum caliper; Evergreen Trees - Six (6) feet minimum height; and Shrubs - twenty-four (24) inch minimum height.

j. The areas of existing vegetation within the **Landmarks and Preservation Area** boundaries identified as to be retained shall be marked on the site prior to the commencement of any disturbance in accord with the City of Wildwood's Chapter 410. These areas shall be indicated on the Site Development Plan submitted to the City of Wildwood for Planning and Zoning Commission review and approval. Existing mature tree canopy shall be preserved in accordance with the requirements of City of Wildwood's Chapter 410 Tree Preservation and Restoration Code.

k. All stormwater facilities shall be appropriately landscaped and comply with Chapter 410 of the City of Wildwood's Codified Ordinances and its accompanying Tree Manual. Wetlands plantings must be used at appropriate locations within the basins themselves as directed by the Department of Public Works.

l. Replanting of trees shall conform to the requirements of Chapter 410 of the City of Wildwood's Codified Ordinances and its accompanying Tree Manual to achieve a minimum amount of thirty (30) percent canopy area on this site. Tree selection and location shall be reviewed and acted upon by the Planning and Zoning Commission as part of the Site Development Plan process. Street tree planting patterns must be based on and comply with the Town Center Streetscape Design.

m. A Registered Landscape Architect shall prepare and sign all Landscape Plans for this development.

Signs

n. Signs for this facility shall be erected in accordance with the City of Wildwood's Town Center Architectural Guidelines and Chapter 415.410 Sign Regulations of the City of Wildwood's Zoning Ordinance for the NU Non-Urban Residence District. However, in no instance, shall any permitted sign exceed ten (10) square feet in overall size. All signs shall be externally illuminated by approved sources.

o. The location of all signage shall be as approved on the Site Development Plan by the Historic Preservation Commission and the Planning and Zoning Commission.

Lighting Requirements

p. The location of all lighting standards shall be as approved on the Site Development Plan. No on-site illumination source shall exceed sixteen (16) feet in height or be so situated that light is cast directly on adjoining properties. Illumination levels for all lighting shall comply with the provisions of the City of Wildwood's Zoning Code Chapter 415.450 "Outdoor Lighting Requirements." A Lighting Study shall be submitted in conjunction with the Site Development Plan indicating compliance to these requirements. The Planning and Zoning Commission shall approve the location, design, and appearance of all light standards and fixtures as part of the Site Development Plan review process.

Miscellaneous Conditions

q. All trash areas, if provided, shall be enclosed with a six (6) foot high, sight-proof fence or wall (with gate) and be appropriately landscaped around its perimeter, if applicable. The Planning and Zoning Commission shall approve the location and design of the enclosure on the Site Development Plan. The design of this enclosure shall reflect the appearance, character, and style, in terms of its color, material, and composition, of the approved architecture of the building.

r. Parking, circulation, and other applicable site design features shall comply with Chapter 1101, Section 512.4 "Physically Handicapped and Aged" of the City of Wildwood Building Code, as amended.

s. The Planning and Zoning Commission shall approve the location of all utility easements for proposed service to this development on the Site Development Plan. Easement locations must avoid all preservation areas of the site and generally parallel the rights-of-way locations, whenever possible, except where varied by the Planning and Zoning Commission.

t. An application for the consideration of the placement of the subject property (two (2) lots of record) onto the City of Wildwood's Historic Registry shall be submitted by the owner of it, at a time no later than the date of final action by the City Council on the site-specific ordinance for this **Landmarks and Preservation Area**.

5. TRAFFIC GENERATION ASSESSMENT

The developer shall contribute to the West Area Corridor Traffic Generation Assessment Road Trust Fund established by Chapter 140 of the City's Codified Ordinances. This contribution shall not exceed an amount established by multiplying the proposed parking spaces by the following rate schedule.

Type of Development	Required Contribution
Offices, Professional	$ 644.74/Parking Space
Retail	$ 1934.32/Parking Space
Loading Space	$3,165.27/Loading Space

(Parking space, as required by Chapter 415.340 of the City of Wildwood Zoning Ordinance.)

If types of development proposed differ from those listed, rates shall be provided by the Department of Planning.

As this development is located within a trust fund area established by the City of Wildwood, any portion of the Traffic Generation Assessment contribution, which remains, following completion of road improvements required by the development, shall be retained in the appropriate trust fund.

The amount of this required contribution, if not submitted by January 1, 2015, shall be adjusted on that date and on the first day of January in each succeeding year thereafter in accordance with the construction cost index, as determined by the City of Wildwood Department of Public Works.

This assessment can be waived by the City Council, if the property is placed on the City's Historic Registry, by recommendation of the Historic Preservation Commission.

6. VERIFICATION PRIOR TO APPROVAL OF THE SITE DEVELOPMENT PLAN

Prior to the approval of the Site Development Plan, the petitioner shall:

Stormwater Improvements

a. Submit to the Planning and Zoning Commission an engineering plan approved by the City of Wildwood's Department of Public Works showing that adequate handling of the stormwater drainage of the site is provided.

1.) The developer is required to provide adequate stormwater systems in accordance with the City of Wildwood standards.
2.) All stormwater shall be discharged at an adequate natural discharge point.
3.) Detention of differential runoff of stormwater shall be required by the City of Wildwood's Department of Public Works. Said detention shall be provided in the form of permanent retention facilities. The retention facilities shall be completed and in operation prior to paving of any driveways or parking areas. Installation of this facility shall employ 'best construction practices.'

7. RECORDING

Within sixty (60) days of approval of the Site Development Plan by the Planning and Zoning Commission, the approved plan shall be recorded with the St. Louis County Recorder of Deeds.

8. VERIFICATION PRIOR TO PERMITS

Notification to Department of Planning

a. Subsequent to approval of the Site Development Plan, and prior to issuance of any grading, foundation, or building permit, all approvals from the Department of Public Works must be received by the Department of Planning.

9. GENERAL DEVELOPMENT CONDITIONS

a. Provide adequate temporary off-street parking for construction employees. Parking on non-surfaced areas shall be prohibited in order to eliminate the condition whereby mud from construction and employee vehicles is tracked onto the pavement causing hazardous roadway and driving conditions.

b. A grading permit is required prior to any grading on the site. Interim stormwater drainage control, in the form of siltation control measures, is required.

c. The petitioner shall be responsible for obtaining all necessary permits from the Department of Natural Resources Clean Water Commission as they relate to the development of this tract of land.

d. If cut and fill operations occur during a season not favorable for immediate establishment of a permanent ground cover, a fast germinating annual, such as Rye or Sudan Grasses, shall be utilized to retard erosion.

e. Failure to comply with any or all of the conditions of this ordinance shall be adequate cause for revocation of permits by the issuing City of Wildwood Departments or Commissions.

f. The Zoning Enforcement Officer of the City of Wildwood, Missouri, shall enforce the conditions of this ordinance in accord with Site Development Plans approved by the Planning and Zoning Commission and the Department of Planning.

g. Any other applicable zoning, subdivision, or other regulations or requirements of the City, whether in effect at the adoption of this ordinance or as may be hereinafter adopted, shall further apply to the development of this property as authorized by this **Landmarks and Preservation Area**, except as may be provided by law. Nothing herein shall be deemed a waiver of any subdivision, zoning or other development regulation of the City whether by implication or reference.

h. This zoning approval is conditioned on compliance with the Zoning Code, Subdivision Code, and all applicable laws of the City. Such additional regulations are supplemental to the requirements herein and no modification of any applicable regulations shall result from this **Landmarks and Preservation Area**, except where this permit has expressly modified such regulations by reference to the applicable provision authorizing such modification.

10. PUBLIC SPACE REQUIREMENTS

a. Developer shall construct improved public space in conformance with or otherwise satisfying the requirements of the City's Public Space Ordinance, Chapter 415.260 and 415.270 of the City of Wildwood's Zoning Ordinance. The City Council accepts the findings of the Public Space Study adopted therein and determines the compliance with the Public Space Ordinance provisions will address the impact of this specific development on public space needs in a manner and amount that is equal to less than an amount that is roughly proportional to the actual or anticipated impact. The installation of required public space improvements shall be as required by the applicable ordinances, but shall be completed prior to issuance of any occupancy (temporary or final) permit for the use of the main historic building. Unless otherwise approved pursuant to the procedures set forth in the Public Space Ordinance, the public space attributable to this development, based upon the number of provided parking spaces on the property at a rate of one (1) acre per every one hundred fifty (150) spaces. This ratio can be pro-rated per the permitted use's parking requirements, as set forth herein.

Section Three. This ordinance shall be in full force and effect on and after its passage and approval.

This Bill was passed and approved this 8 day of December, 2014 by the Council of the City of Wildwood, Missouri, after having been read by title, or in full, two (2) times prior to its passage.

Presiding Officer

Timothy Woerther, Mayor

ATTEST:

City Clerk

City Clerk

WILDWOOD

November 3, 2014

The Honorable City Council
City of Wildwood, Missouri
16860 Main Street
Wildwood, Missouri 63040

Council Members:

The Planning and Zoning Commission has completed its review of the requested rezoning of this subject site and prepared the following recommendation regarding its consideration of this matter for City Council's use. This review resulted in a recommendation supporting the requested application of the City's Landmark and Preservation Area (LPA) of the Zoning Ordinance, so as to allow the reuse of the subject property professional offices and limited retail and service activities, all being consistent with the historic character. This action was completed in accordance with the requirements of the Zoning Ordinance of the City of Wildwood relative to the review and consideration of rezoning requests (Chapter 415.560) and applications for planned district zonings (Chapter 415.190), as defined by those specific regulations. This recommendation is as follows:

Petition Number:	**P.Z. 24-14**
Petitioner:	**Centaur Station, c/o Michael Phelan, 18833 Cliffview Lane, Wildwood, Missouri, 63005**
Request:	A request for the application of a Landmark and Preservation Area (LPA) upon the property, buildings, and structures (Centaur Station) located in the Historic Centaur Area for low-intensity commercial uses under the allowances of this Special Procedures Permit process of the City's Zoning Ordinance. **Potential Uses: Office, Limited Services and Retail Facilities, and Offices, with Affiliated Dwelling Units.**
Location:	West side of Centaur Road, north of Wild Horse Creek Road
Tract Size:	3.11 acres
Locator Numbers:	19X410082 and 19Y6200260
Street Address:	107 and 109 Centaur Road
Public Hearing Date:	September 15, 2014
Date and Vote on Information Report:	October 20 2014 - Approval of the LPA by a vote to 8 to 0 (Ayes – Manton, Lee, Archeski, Peasley, Gragnani, Bauer, Woerther, and Bopp)
Date and Vote on Letter of Recommendation:	November 3, 2014 -
Report:	Attachment A
Conditions:	Attachment B

Preliminary Development Plan:	Attachment C
Background Information:	Attachment D
School District:	Rockwood
Fire District:	Monarch Fire Protection District
Ward:	One

A copy of the legal description for this property is on file in the City Clerk's Office.

Respectfully submitted,
CITY OF WILDWOOD PLANNING AND ZONING COMMISSION

R. Jon Bopp, Chair

ATTEST:

Joe Vujnich, Director
Department of Planning

Cc: The Honorable Timothy Woerther, Mayor
Lynne Green Beldner and Ryan S. Thomas, P.E., Co-Acting City Administrators
Rob Golterman, City Attorney
Liz Weiss, Planner – Zoning

ATTACHMENT A

BACKGROUND - The site of this request is a parcel of ground that is located on the west side of Centaur Road, north of Wild Horse Creek Road. This parcel of ground is bordered by a set of railroad tracks to its north, which extend west to Labadie, Missouri and east toward the City of St. Louis (Chicago, Rock Island & Pacific). The parcel of ground is three (3) acres in size and comprised of two (2) lots, which appear to have been created around the middle part of the 1800's. A paper street separates the two (2) lots and it is approximately thirty (30) feet in width, but has no improvements to indicate its location, other than on current mapping sources. The amount of frontage of this parcel of ground along Centaur Road is 170 feet.

Centaur Road is maintained by the City of Wildwood and provides a connection between North Eatherton Road to the east and Wild Horse Creek Road to the south. The roadway is two (2) lanes in width and has earthen swales for stormwater management purposes. This roadway does not have sidewalks, but it is used by a number of bicyclists, who travel Wildwood's rural roadways for recreation and training. Traffic volumes are moderate, given the aforementioned connection. Centaur Road serves a residential, agricultural, and industrial land use pattern.

At the time of the petitioner's presentation of this request to the Planning and Zoning Commission, the petitioner had already completed a significant amount of work on the property, given it had previously been used for rental purposes and suffered a slow decline in its condition over an extended period of time. With

the petitioner's ownership, the property has been substantially improved and the buildings and structures secured, rehabilitated, and now are an important and respected part of the Centaur community.
Specifically, located on this parcel of ground are several buildings/structures and other improvements. The main building is historic in nature and has been located on the lot since the late 1800's. This building is a two (2) story, brick residence, which at one time was a general store for the community of Centaur. The other two (2) structures were constructed around 1920, according to St. Louis County Assessor Records, and add to the historic nature of the property, given their complementary architecture and materials. The main building is not occupied and the other structures appear to be used for storage purposes. Additionally, the petitioner has added vintage signs onto the main building and the 'Centaur Station' structure, along with placing antique gas pumps in the adjoining parking area, which is located next to the railroad tracks and the second accessory structure. Supporting these buildings is a large gravel parking area that abuts the north side of the main building and extends to railroad tracks on the north boundary of the property.

Despite the age of the buildings and structures and the long and active use of the site, there are limited tree masses on it. The property, notwithstanding the gravel parking area, is primarily lawn area and maintained in a good condition. The relief of the site is reflective of its floodplain location and just several feet. The extent of slope is to the north and west toward the Missouri River, which this site is part of its floodplain area and not protected by a levee.

The property is zoned FPNU Floodplain Non-Urban Residence District and has been since the incorporation of the City of Wildwood in 1995. This zoning district designation reflects the property's location in the floodplain of the Missouri River and the rural areas of Wildwood. Several properties in the vicinity of this site have this same zoning district designation and are not protected by the nearby Monarch-Chesterfield Levee. Not far removed from the subject site, though, are properties that are not part of the floodplain and zoned NU Non-Urban Residence District. This pattern of zoning, and the associated land use, are reflected in a review of the area in the vicinity of the site:

To the North: Crossing the railroad tracks is a 162 acre tract of land that has a large slough that bisects it. This parcel of ground is owned by the petitioner and zoned FPNU Floodplain Non-Urban Residence District.

To the South: Abutting in this direction are several one-half to one (1) acre sized lots that are part of the Centaur community. These lots have some residences located upon them, along with accessory structures. All of these properties generally have a floodplain designation associated with the NU Non-Urban Residence District. Further south is a large parcel of ground (20 acres) zoned NU Non-Urban Residence District and vacant.

To the West: Adjoining in this direction is two (2) large parcels of ground that are seventeen (17) acres and over two hundred (200) acres in size. The smaller parcel of ground is vacant, while the larger site is owned by the Jesuit Order and used as a retreat center. Both these properties are zoned a mix of FPNU Floodplain Non-Urban Residence District and NU Non-Urban Residence District.

To the East: Crossing Centaur Road is a large parcel ground owned by the petitioner that has a single family dwelling on it and several accessory buildings. These accessory buildings are used for recreational purposes and one (1) of them is a restored schoolhouse/church dating back to the early history of the Centaur community. This property is zoned a combination of FPNU Floodplain Non-Urban Residence District and NU Non-Urban Residence District.

HISTORIC PRESERVATION AND RESTORATION CODE AND THE HISTORIC PRESERVATION COMMISSION'S ACTION - Any building or structure over the age of seventy-five (75) years is considered historic in the City of Wildwood and listed in its survey document. Since the registry process is voluntary in the City of Wildwood, the identification of a property, building, and/or structure (collectively termed elements) is a listing, but has no control over its disposition over time. With the application of a Landmark and Preservation Area (LPA) designation on an element, such control over its condition, retention, or demolition does exist via a site-specific ordinance. Therefore, from the perspective of the Historic Preservation Commission, this special procedures permit is a very important tool to maintain Wildwood's unique and varied history here in the Centaur community.

The consideration of a structure, building, and/or property to a Landmark and Preservation Area designation requires the Historic Preservation Commission to provide a recommendation to the Planning and Zoning Commission for its consideration, as part of its review process. Specifically, the Zoning Ordinance regulation for such is as follows: *"the Historic Preservation Commission shall make their comments and recommendation known to the Planning Commission and petitioner no later than seven (7) days prior to the public hearing before the Planning Commission. The said comments and recommendations shall be made available for public inspection. The Planning Commission will construe the absence of comment or recommendation as acceptance of the petition by the Historic Preservation Commission."* This regulation of the Landmark and Preservation Area (LPA) reflects the need for the Historic Preservation Commission to provide its expertise in these matters, so the historic value of the element is retained and suggest any appropriate conditions for this purpose are included in the site-specific ordinance designating the site with this designation.

The City's Historic Preservation Commission has summarized the history of this area for the purposes of its review of this proposal, which is a requirement of the Landmarks and Preservation Area process. The Historic Preservation Commission supported this application and noted the retention of the main building is essential to retaining the character and history of this area, while noting the petitioner's ownership has already substantially improved its condition (see attached report from the Historic Preservation Commission). Specifically, the history of the Centaur Community, as developed by the Historic Preservation Commission, is as follows:

> Centaur is an area that still offers an opportunity to look back to what western St Louis County used to resemble at the time of its earliest settlement. Centaur's character is attributable to its location near the Missouri River and associated floodplain. The threat and existence of flooding in this community caused it not to experience the levels of growth that other portions of St. Louis County experienced over almost two hundred (200) years of existence. Therefore, Centaur is a community that is defined by the natural features in many ways, and different from other historic locations that now form an integral part of the City of Wildwood.
>
> The Missouri River is the defining natural feature in this area, given the remnants of its former path create the fertile floodplain that still sustains agricultural activities today, while creating the pronounced bluffs, where Centaur remains, nestled next to them. These bluffs, consisting of limestone, provided a building material source and led to the growth of quarrying in this area as well. With these quarries in the area of Centaur, the river provided transportation for goods, which was eventually supplanted by the railroad, which followed the bluffs and the edge of the wide floodplain to markets across the region, and beyond.
>
> These natural attributes that led to the development of the Centaur community were first recognized by the native tribes that inhabited the area for many millenniums. These tribes appear to have been in the area beginning around 12000 to 8000 B.C., based upon the very limited archeological remains and remnants that have been discovered in other similar settings elsewhere. These archeological remains

and remnants are hard to find, and limited, due to the nomadic nature of these people and their small populations. The cultural periods spanned by these inhabitants are from the Early Man to the Dalton Period (Harl, Naglich, and Nixon, 1990). Thereafter, the tribes became more stationary and formed small settlements near water and the other plentiful resources that are found in this area. This pattern of settlement appears to have ended during the timeframe of 1300 and 1400 A.D., leading to the inhabitants returning to a more nomadic nature and traveling further south of this area.

The first Euro-American settlement in the vicinity of Centaur appears to be in the nearby the Wild Horse Valley Area in 1797 by James Mackey, at the mouth of Bonhomme Creek, and was named St. Andrews. This settlement was situated well to east of the current Centaur community. At one point, this community had three hundred (300) residents. James Mackey owned almost four thousand (4,000) acres in this area and controlled much of the land that formed the Wild Horse Creek Watershed. One (1) of the first to settle the Centaur Area was a prominent Virginia family, led by Reverend Robert Coleman, along with two (2) sons – Robert G. and William H. Coleman. Other settlers in this area included Alexander McCourtney, William Bellew, William Bell, Henry Tyler, Theodore St. Onge, Adam Kesselring, Johann Sandfoss, and Anton Leiweke. These large or influential landowners, of which several profited due to ownership of slaves, shaped the character of this portion of west St. Louis County, which is now Wildwood.

The Centaur community was settled sometime between 1885 and 1891 by Anton Leiweke and would soon include the Centaur Lime Company and a stave factory owned by Henry Kelpe and his sons, who traveled from their home, located to south, to Centaur. Centaur had a modest population of thirty-three (33) inhabitants in 1909 (John Sebastian, 1909), but was an entrepreneurial hotbed due to its rich base of resources and transportation options, all being anchored by the railroad that had come to the area many years earlier in 1887 and the ever-prevalent and defining Missouri River. This area provided needed materials for a growing region, with some of the lime, rock, sand, and gravel used at the 1904 World's Fair, which was hosted by the City of St. Louis, for the grand buildings, structures, and outdoor spaces. The railroad station in Centaur was an integral part of this community, served generations of residents and workers, and remains today, as a reminder of this area's rich past.

The Centaur community, from approximately 1909 to 1933, is a story of the Leiweke Family and its role in its development. The Leiweke Family opened a quarrying operation, along with other enterprises, in the Centaur community, all of which flourished for over two (2) decades. The community, again, benefited from its proximity to the railroad line and the Missouri River. Centaur's location is synonymous to these surrounding man-made and physical features and, through time, and by water and other natural forces, helped the community grow, but also led to many devastating events.

In 1924, a major fire occurred in the Centaur community, starting in the Centaur Lime Company Building and encompassing seven (7) other houses and barns. This major fire also destroyed the local church/parsonage. After the fire, Anton Leiweke constructed a two (2) story, brick residence on the location of the destroyed Centaur Lime Building Company facility, which is currently owned by Michael Phelan. A new barn was constructed as well (which was also lost to another fire), but many of the other buildings were never replaced, after this 1924 fire, and business activity slowed, as the Great Depression descended on America. By 1929, the Centaur community began to struggle, which would affect it for many decades.

However, in 1965, the St. Louis County Council established a new Zoning Ordinance and corresponding classifications, which created a three (3) acre land use pattern around the Centaur community. This large-lot, single family pattern of development began a new chapter for the area, where individuals invested in larger tracts of land for single homesites and thereby preserved the rural character of the area. Although the Centaur community maintained its residential nature throughout this same period of time, these new residences in the area bolstered it.

For almost thirty (30) years, from that 1965 event, St. Louis County, Missouri provided government services to the area of Centaur that included its application of modern zoning, land use, and subdivision laws, along with the maintenance of public roads and bridges. Many people in the larger community of unincorporated subdivisions, neighborhoods, and rural areas in Centaur's vicinity, and beyond, were dissatisfied with the services offered by St. Louis County Government. This dissatisfaction reached a point, where a group of residents began to explore creating a new city that would encompass much of the far western reaches of St. Louis County and include many of the historic communities that had pre-dated the more recent formation of municipal governments around it. These residents, known as the founders or incorporators, labored against significant odds to form this government that would oversee almost sixty-seven (67) square miles of land area. However, these odds did not prove to be insurmountable and, on February 6, 1995, voters in this area agreed to form the new City of Wildwood. This new City included the Centaur community and many other historic settlements, structures, buildings, and elements that had existed in some form for almost two (2) centuries, in some instances. The incorporation effort that formed the City of Wildwood was a landmark event for St. Louis County and set into place a vision to preserve the assets of this community from degradation and rapid change, keeping them from slowly disappearing over time and from the collective memory of this area. This vision, expressed in the City's Charter and Master Plan, remains as focused today, as it was in 1995.

More recently, the purchase of many parcels of ground by Michael Phelan has led to a renaissance in the area and the restoration of many of the historic buildings, including the old church/school that is located on the east side of Centaur Road, south of the railroad tracks. Beyond the activities of Mr. Phelan and other large and small landowners, the Centaur community is still effected by the Missouri River and its flooding. In 1993, a major, catastrophic flood significantly impacted the area and, since then, has had several instances of other high water occurrences, including 2013. The relationship of this community and the river remains one (1) of its primary defining characteristics.

Sources:

Harl, Joseph, Naglich, Dennis and Nixon, Joseph M.
1990 Report of Phase I Reconnaissance Level Survey of Prehistoric and Historic Cultural Resources in the Wildhorse Creek Drainage Basin in South St. Louis County.
Research Report - Administered by Missouri Department of Natural Resources -January 1990.
Sebastian, John
1909 In the Heart of Missouri, The New Rock Island Country.
Passenger Traffic Department, Rock Island Lines, Chicago.

The Historic Preservation Commission did consider this location and does believe it meets the criteria to be considered historic by the virtue of meeting one (1), if not more, of the following requirements set forth in the regulations for a Landmark and Preservation Area (LPA):

1. Has significant character, interest or value as part of the development, heritage or cultural characteristics of the City of Wildwood, State of Missouri or the United States.
2. Is the site of a significant historic event?
3. Is the work of a designer whose individual work has significantly influenced the development of the St. Louis region, State of Missouri or United States?
4. Contains elements of design, detail, materials or craftsmanship, which represent a particular architectural style or significant innovation.
5. Owing to its unique location or singular physical characteristic, represents an established and familiar visual feature of a neighborhood or within the City of Wildwood.

With this determination by the Historic Preservation Commission, it noted the main building has been at this location for over one hundred (100) years, the property acted as a major commercial node of the community

for generations, and the setting remains a major landmark in this portion of Wildwood. As part of its support for the application of this special procedures permit at this location, the Commission would also recommended the following conditions be included in the site-specific ordinance for this property:

1. The petitioner is required to place the property, and associated buildings and structures, on the City's Historic Registry. This registry process, in terms of required application and review steps, must parallel that relative to the timeframes associated with the Planning and Zoning Commission and City Council's considerations of the Landmark and Preservation Area (LPA) request.
2. The petitioner not be allowed to demolish the main building or 'station' structure, unless the Historic Preservation Commission would grant such allowance, per its regulations in this regard.
3. The petitioner follows all permitting requirements for the rehabilitation and restoration of the element, as set forth in the City's building and land use codes.

With these conditions, a reasonable level of control can be exercised by the Historic Preservation Commission over the element to ensure its longevity and preservation for future generations, while not obstructing the petitioner's right of utilization of it for his enjoyment.

CURRENT REQUEST - In the Zoning Ordinance, a special procedure permit process exists for special properties, which have been determined to have historic significance within the community. These properties, which includes buildings and structures, must meet certain criteria for consideration for the application of this special procedure and, once considered historic, may be allowed a range of authorized activities and uses that are normally not allowed by that underlying zoning district designation. The intent of this procedure is to encourage historic preservation activities, including restoration, rehabilitation, and/or reuse. The ordinance reads as follows in this regard: *"the purpose of this Section is to promote the general welfare, heritage, education and economic benefit of the City of Wildwood through the preservation, protection and regulation of buildings, sites, structures, monuments and neighborhoods of historic, architectural, cultural or archeological significance. It is further the intent of this procedure to encourage the adaptation of these buildings, sites, structures, etc., for current use."*

The owner of this property has submitted an application to the City of Wildwood for the use of this procedure at the above-referenced location. On the application, the petitioner notes his desire to complete the rehabilitation of the property and structures and potentially use the main building located on it for a low-impact commercial type activity or use, as defined in the code. These uses can include the following:

1. Offices.
2. Limited service and retail facilities in which goods and services may be sold or provided directly to the public on the premises such as, but not limited to, studios or galleries for artwork or antiques; studios or work areas for artists, candy makers, dressmakers, tailors; music teachers; dance teachers; restaurants (excluding fast-food restaurants). In no case shall any use involving the manufacture of products be permitted to occupy more than four thousand (4,000) square feet of gross floor area.
3. Offices (as permitted in Subsection (C) (1) above) with affiliated dwelling units, wherein occupancy of the dwelling unit shall be limited to the owner, manager or employee of the office use and their respective families.
4. Child care centers, nursery schools, day nurseries.
5. Single-, two- and multiple-family dwellings.

According to the petitioner, during a discussion on this matter before the Planning and Zoning Commission, he had not yet decided a specific activity or use, but would like to have a range, so as to allow him a certain

amount of flexibility in the future. The petitioner understood the limited nature of the permitted activities or uses under this special procedure permit and that a number of conditions can be levied as part of it regarding the future development and use of the property.

REPORT AND RECOMMENDATION - As noted above, the Historic Preservation Commission of the City has reviewed this request from the perspectives of its significance relative to its history and impact on the community. The Historic Preservation Commission determined the property, and related elements, were historically significant and the use of any zoning mechanism as an incentive for its preservation was appropriate. Given this input, the Planning and Zoning Commission believes the property and related elements are historically significant and would meet the criteria of the Landmarks and Preservation Area for it to be considered at this location for application. The rationales noted by the Historic Preservation Commission for its determination of historical significant are agreed to by the Planning and Zoning Commission as well.

With the property's determination as historically significant (a determination supported by the City's Historic Preservation Commission), the Commission must now consider that, if the Landmarks and Preservation Area is granted to the site, which is appropriate due to its age and other factors associated with the property and buildings, what uses should be allowed at this location and the level of improvements to the property to ensure it does not create unwanted impacts on the area. Also, in conjunction with these two (2) considerations, the Commission must also weigh any circumstances that might affect the historic nature of the property, if allowed for reuse, under the provisions of this overlay district. Each of these considerations are noted below.

>>> Permitted Uses – The Commission believes that only a few types of uses would be considered appropriate here. These uses, professional offices and limited retail and service activities, would seem to fit with the past history of the main building, as a general store and community focal point, while recognizing the size of the lot, the lack of public sanitary sewer service, and the surrounding, and long-standing, residential land use pattern. These recommended uses would allow the petitioner to offer the property for one (1) of the activities he had mentioned at the public hearing on this matter, an antique store, but also small offices, or a location for artists, crafters, and other similar people, who would benefit from the character of Centaur, the charm of the building, and the history of Wildwood. The recommended uses are also identified in the regulations for the Landmarks and Preservation Area, which is part of the City's Zoning Ordinance.

It is important to note the Commission does not support a restaurant at this location, given the potential amount of wastewater such might generate, and the limited space for a treatment system on the site. Additionally, the list of recommended uses do not typically generate significant amounts of traffic, nor require large parking lot areas. By managing the uses, the site can retain its historic character, but have an eventual activity that will complement it as well.

>>> Improvement Levels – With the recommended accommodation to the permitted uses on the site, the Commission does not believe any undue impacts will occur from the allowable activity that does occupy the property, which justifies maintaining the current conditions on it, as much as possible. To require any major roadway improvements would impact the historic building and change the character of the streetscape substantially as well. The application of other zoning requirements, such as an asphalt parking lot area, would also impact the character of the site (and area), which the Commission believes would be detrimental to the historical significance of it and the Centaur community. Accordingly, the Commission is not recommending major improvements to the roadway system, nor to the site itself.

However, the Commission does support the placement of two (2), multiple-use trail easements onto the property, so as to accommodate future options in this regard. The trail easements would be placed along the edge of the property's frontage onto Centaur Road and its northern boundary, which parallels the railroad tracks. Two (2) of the existing buildings and structures are located where these easements would be established, so their placement does have to be respective of such situation. However, where the building and structure is not located on the property, the easements will provide assistance for future trail improvements on the highly used roadway by bicyclists and others.

The Commission has developed a set of conditions, as part of this report, which will guarantee any future buildings or structures that might be planned on the site would complement the history of it, while meeting all current zoning ordinance requirements, including floodplain provisions. These conditions, again, would not be applied on the site, until such time the petitioner would seek a change to it. Review authorities involved in any future development of the property would include the Historic Preservation Commission, the Architectural Review Board, and the Planning and Zoning Commission.

>>> Historic Component - The deference of improvements that is identified above is based upon the historical significance of this property and the elements associated with it. Accordingly, and based upon the recommendation of the Historic Preservation Commission, the Commission believes those conditions recommended by it must be applied here to ensure this site is preserved for as long as possible for the enjoyment of many. These recommended conditions include the following:

1. The petitioner is required to place the property, and associated buildings and structures, on the City's Historic Registry. This registry process, in terms of required application and review steps, must parallel that relative to the timeframes associated with the Planning and Zoning Commission and City Council's considerations of the Landmark and Preservation Area (LPA) request.
2. The petitioner not be allowed to demolish the main building or 'station' structure, unless the Historic Preservation Commission would grant such allowance, per its regulations in this regard.
3. The petitioner follows all permitting requirements for the rehabilitation and restoration of the element, as set forth in the City's building and land use codes.

With these conditions in place, the site will retain its current character, but also provide assurances to the City and its residents that it will be preserved and protected, while identifying another element of this area's rich history.

SUMMARY - The Commission believes the application of this special procedure permit is appropriate at this location and appreciates the efforts of the petitioner in this regard. To this end, the Commission has created a set of conditions, which seek to provide the petitioner options for the future, but protects and preserves the historical elements of the site, first and foremost. With the application of these conditions, the site will also be considered for placement on the City's Historic Registry, a positive step for all participating parties.

ATTACHMENT B – CONDITIONS

1. **PERMITTED USES**

This **Landmark and Preservation Area** shall authorize offices, professional types only, and limited service and retail facilities, in which goods and services may be sold or provided directly to the public on the premises, such as, but not limited to, studios or galleries for artwork or antiques or studios or work areas for artists, candy makers, dressmakers, and tailors, along with any accessory uses normally found in conjunction with the primary activities. No alcohol sales shall be allowed on this site (beer, wine, and spirits).

2. **DEVELOPMENT AREAS AND BUILDING REQUIREMENTS**

a. The overall size of this **Landmarks and Preservation Area** shall not be less than three (3) acres in area.

b. The maintenance of the main building and the two (2) accessory structures shall comply with the requirements that are set forth in Chapter 440 Historic Preservation and Restoration Code (see Chapter 440.010, General Provisions, Item (B.) - Definitions – Minimum Maintenance and Ordinary Maintenance; and Section 440.100 Fess and Penalties, Item (B.).

c. No demolition or major alteration of any building or structure, as defined in Chapter 415 Zoning Ordinance, Section 415.460 Non-Conforming Use, Lands, and Structures, Item C, shall be authorized by the City, while the **Landmark and Preservation Area** is in place on the subject property.

d. The two (2) existing outbuildings, along with the primary building, shall be retained on this site. Any new buildings or accessory structures added to the property must first be acted upon by the Historic Preservation Commission and the Planning and Zoning Commission on a Site Development Plan (SDP) submittal, which shall minimally comply with Section 3 of this ordinance. No new structure shall exceed the footprint size of the primary building that is located on the property.

e. The architectural design, mass, proportion, materials, and style of new building or structure shall be harmonious with the character of the surrounding area and utilize existing site elements in their appearance and layout. Any new building or structure shall be reviewed and acted upon by the Historic Preservation Commission and the Architectural Review Board. Any alteration to the existing historic elements shall also be reviewed by the Archtiectural Review Board, along with the Historic Preservation Commission, utilizing the requirements of the Certificate of Appropriateness process set forth in Chapter 440 Historic Preservation and Restoration Code.

3. PLAN SUBMITTAL REQUIREMENTS

Within twelve (12) months of the **Landmarks and Preservation Area** being approved by the City Council, and prior to any site disturbance, the developer shall submit to the Planning and Zoning Commission for their review and approval a Site Development Plan. Where due cause is shown by the developer, this time interval may be extended once by the Planning and Zoning Commission in accord with requirements of Chapter 420.060 of the City of Wildwood Zoning Ordinance. Said Site Development Plan shall include, but not be limited to, the following information:

a. Outboundary plat and legal description of the property.
b. The location and size of all parking areas, pavement widths, and right-of-way dedications.
c. A general plan indicating all structure and parking setback lines along the perimeter of the subject tract of land.
d. Location of all roadways adjacent to the property, including required roadway right-of-way dedication and pavement widening, with existing and proposed improvements, and general location, size, right-of-way, and pavement width of all interior access areas.
e. The location and size of all freestanding signs, lighting, fences, sidewalks, and other above-ground structures, except retaining walls less than two (2) feet in height per section.
f. Existing and proposed contours at vertical intervals of not more than two (2) feet.
g. Parking calculations for the proposed use.
h. A Landscape Plan including the location, size, and general type of plant materials to be used in accord with the City of Wildwood's Chapter 410 and accompanying Tree Manual.
i. An inventory indicating the percent of tree canopy to be retained on the site.
j. Location of all existing and proposed easements.
k. All other information not mentioned above, but required on a preliminary plat in accord with Chapter 420.060 of the City of Wildwood's Subdivision Ordinance.

4. SITE DEVELOPMENT PLAN DESIGN CRITERIA

The above Site Development Plan shall adhere to the following specific design criteria:

Build-To Lines/Setback Distances

a. No new building or structure, other than boundary, garden, and/or retaining walls, fences, and/or light standards, shall be located within the required setback distances, as defined by Chapter 415.090 NU Non-Urban Residence District Regulations of the City of Wildwood Zoning Ordinance.

Parking Setbacks

b. No parking stall, loading space, internal drive, or roadway, excluding points of ingress or egress, shall be located within the required setback distances, as established for in Chapter 415.090 NU Non-Urban Residence District of the City of Wildwood Zoning Ordinance.

Miscellaneous Setbacks – Floodplain

c. No fill or spoils may be placed on this property, without approval of the Floodplain Administrator of the City of Wildwood.

Access and Roadway Improvements

d. Access to this development shall be limited to Centaur Road and the existing curb cut that is located on the subject property.

Miscellaneous Roadway Requirements

e. Installation of landscaping and ornamental entrance monument or identification signage, if proposed, shall be reviewed by the Missouri Department of Transportation and the Department of Public Works for sight distance considerations and approved prior to its installation or construction.

f. The developer is advised that utility companies will require compensation for relocation of their facilities within public road right-of-way. The developer should also be aware of extensive delays in utility company relocation and adjustments. Such delays will not constitute a cause to allow occupancy prior to completion of road improvements.

g. Dedicate twenty (20) foot wide, perpetual multiple-use trail easements to the City of Wildwood, as directed by the Department of Public Works and the Department of Planning, along the subject property's frontage onto Centaur Road and abutting the railroad right-of-way the entire depth of it as well.

Parking Requirements

h. Parking spaces shall be provided according to the City of Wildwood's Town Center Plan for the Neighborhood General District and as may be required by Chapter 415.340 Off-Street Parking and Loading Requirements of the City of Wildwood's Zoning Code for the NU Non-Urban Residence District.

Landscape Requirements - Specific

i. Landscaping shall adhere to all requirements of the City of Wildwood's Chapter 410 and its accompanying Tree Manual, including the submittal of a Tree Preservation Plan in conjunction with the Site Development Plan. All new landscaping materials shall meet the following criteria: Deciduous Trees - two and one-half (2½) inch minimum caliper; Evergreen Trees - Six (6) feet minimum height; and Shrubs - twenty-four (24) inch minimum height.

j. The areas of existing vegetation within the **Landmarks and Preservation Area** boundaries identified as to be retained shall be marked on the site prior to the commencement of any disturbance in accord with the City of Wildwood's Chapter 410. These areas shall be indicated on the Site Development Plan submitted to the City of Wildwood for Planning and Zoning Commission review and approval. Existing mature tree canopy shall be preserved in accordance with the requirements of City of Wildwood's Chapter 410 Tree Preservation and Restoration Code.

k. All stormwater facilities shall be appropriately landscaped and comply with Chapter 410 of the City of Wildwood's Codified Ordinances and its accompanying Tree Manual. Wetlands plantings must be used at appropriate locations within the basins themselves as directed by the Department of Public Works.

l. Replanting of trees shall conform to the requirements of Chapter 410 of the City of Wildwood's Codified Ordinances and its accompanying Tree Manual to achieve a minimum amount of thirty (30) percent canopy area on this site. Tree selection and location shall be reviewed and acted upon by the Planning and Zoning Commission as part of the Site Development Plan process. Street tree planting patterns must be based on and comply with the Town Center Streetscape Design.

m. A Registered Landscape Architect shall prepare and sign all Landscape Plans for this development.

Signs

n. Signs for this facility shall be erected in accordance with the City of Wildwood's Town Center Architectural Guidelines and Chapter 415.410 Sign Regulations of the City of Wildwood's Zoning Ordinance for the NU Non-Urban Residence District. However, in no instance, shall any permitted sign exceed ten (10) square feet in overall size. All signs shall be externally illuminated by approved sources.

o. The location of all signage shall be as approved on the Site Development Plan by the Historic Preservation Commission and the Planning and Zoning Commission.

Lighting Requirements

p. The location of all lighting standards shall be as approved on the Site Development Plan. No on-site illumination source shall exceed sixteen (16) feet in height or be so situated that light is cast directly on adjoining properties. Illumination levels for all lighting shall comply with the provisions of the City of Wildwood's Zoning Code Chapter 415.450 "Outdoor Lighting Requirements." A Lighting Study shall be submitted in conjunction with the Site Development Plan indicating compliance to these requirements. The Planning and Zoning Commission shall approve the location, design, and appearance of all light standards and fixtures as part of the Site Development Plan review process.

Miscellaneous Conditions

q. All trash areas, if provided, shall be enclosed with a six (6) foot high, sight-proof fence or wall (with gate) and be appropriately landscaped around its perimeter, if applicable. The Planning and Zoning Commission shall approve the location and design of the enclosure on the Site Development Plan. The design of this enclosure shall reflect the appearance, character, and style, in terms of its color, material, and composition, of the approved architecture of the building.

r. Parking, circulation, and other applicable site design features shall comply with Chapter 1101, Section 512.4 "Physically Handicapped and Aged" of the City of Wildwood Building Code, as amended.

s. The Planning and Zoning Commission shall approve the location of all utility easements for proposed service to this development on the Site Development Plan. Easement locations must avoid all preservation areas of the site and generally parallel the rights-of-way locations, whenever possible, except where varied by the Planning and Zoning Commission.

t. An application for the consideration of the placement of the subject property (two (2) lots of record) onto the City of Wildwood's Historic Registry shall be submitted by the owner of it, at a time no later than the date of final action by the City Council on the site-specific ordinance for this **Landmarks and Preservation Area**.

5. TRAFFIC GENERATION ASSESSMENT

The developer shall contribute to the West Area Corridor Traffic Generation Assessment Road Trust Fund established by Chapter 140 of the City's Codified Ordinances. This contribution shall not exceed an amount established by multiplying the proposed parking spaces by the following rate schedule.

Type of Development	Required Contribution
Offices, Professional	$ 644.74/Parking Space
Retail	$ 1934.32/Parking Space
Loading Space	$3,165.27/Loading Space

(Parking space, as required by Chapter 415.340 of the City of Wildwood Zoning Ordinance.)

If types of development proposed differ from those listed, rates shall be provided by the Department of Planning.

As this development is located within a trust fund area established by the City of Wildwood, any portion of the Traffic Generation Assessment contribution, which remains, following completion of road improvements required by the development, shall be retained in the appropriate trust fund.

The amount of this required contribution, if not submitted by January 1, 2015, shall be adjusted on that date and on the first day of January in each succeeding year thereafter in accordance with the construction cost index, as determined by the City of Wildwood Department of Public Works.

This assessment can be waived by the City Council, if the property is placed on the City's Historic Registry, by recommendation of the Historic Preservation Commission.

6. VERIFICATION PRIOR TO APPROVAL OF THE SITE DEVELOPMENT PLAN

Prior to the approval of the Site Development Plan, the petitioner shall:

Stormwater Improvements

a. Submit to the Planning and Zoning Commission an engineering plan approved by the City of Wildwood's Department of Public Works showing that adequate handling of the stormwater drainage of the site is provided.

1.) The developer is required to provide adequate stormwater systems in accordance with the City of Wildwood standards.
2.) All stormwater shall be discharged at an adequate natural discharge point.
3.) Detention of differential runoff of stormwater shall be required by the City of Wildwood's Department of Public Works. Said detention shall be provided in the form of permanent retention facilities. The retention facilities shall be completed and in operation prior to paving of any driveways or parking areas. Installation of this facility shall employ 'best construction practices.'

7. **RECORDING**

Within sixty (60) days of approval of the Site Development Plan by the Planning and Zoning Commission, the approved plan shall be recorded with the St. Louis County Recorder of Deeds.

8. **VERIFICATION PRIOR TO PERMITS**

Notification to Department of Planning

a. Subsequent to approval of the Site Development Plan, and prior to issuance of any grading, foundation, or building permit, all approvals from the Department of Public Works must be received by the Department of Planning.

9. **GENERAL DEVELOPMENT CONDITIONS**

a. Provide adequate temporary off-street parking for construction employees. Parking on non-surfaced areas shall be prohibited in order to eliminate the condition whereby mud from construction and employee vehicles is tracked onto the pavement causing hazardous roadway and driving conditions.

b. A grading permit is required prior to any grading on the site. Interim stormwater drainage control, in the form of siltation control measures, is required.

c. The petitioner shall be responsible for obtaining all necessary permits from the Department of Natural Resources Clean Water Commission as they relate to the development of this tract of land.

d. If cut and fill operations occur during a season not favorable for immediate establishment of a permanent ground cover, a fast germinating annual, such as Rye or Sudan Grasses, shall be utilized to retard erosion.

e. Failure to comply with any or all of the conditions of this ordinance shall be adequate cause for revocation of permits by the issuing City of Wildwood Departments or Commissions.

f. The Zoning Enforcement Officer of the City of Wildwood, Missouri, shall enforce the conditions of this ordinance in accord with Site Development Plans approved by the Planning and Zoning Commission and the Department of Planning.

g. Any other applicable zoning, subdivision, or other regulations or requirements of the City, whether in effect at the adoption of this ordinance or as may be hereinafter adopted, shall further apply to the development of this property as authorized by this **Landmarks and**

Preservation Area, except as may be provided by law. Nothing herein shall be deemed a waiver of any subdivision, zoning or other development regulation of the City whether by implication or reference.

h. This zoning approval is conditioned on compliance with the Zoning Code, Subdivision Code, and all applicable laws of the City. Such additional regulations are supplemental to the requirements herein and no modification of any applicable regulations shall result from this **Landmarks and Preservation Area**, except where this permit has expressly modified such regulations by reference to the applicable provision authorizing such modification.

10. PUBLIC SPACE REQUIREMENTS

a. Developer shall construct improved public space in conformance with or otherwise satisfying the requirements of the City's Public Space Ordinance, Chapter 415.260 and 415.270 of the City of Wildwood's Zoning Ordinance. The City Council accepts the findings of the Public Space Study adopted therein and determines the compliance with the Public Space Ordinance provisions will address the impact of this specific development on public space needs in a manner and amount that is equal to less than an amount that is roughly proportional to the actual or anticipated impact. The installation of required public space improvements shall be as required by the applicable ordinances, but shall be completed prior to issuance of any occupancy (temporary or final) permit for the use of the main historic building. Unless otherwise approved pursuant to the procedures set forth in the Public Space Ordinance, the public space attributable to this development, based upon the number of provided parking spaces on the property at a rate of one (1) acre per every one hundred fifty (150) spaces. This ratio can be pro-rated per the permitted use's parking requirements, as set forth herein.

ATTACHMENT C

Preliminary Development Plan

LOT 1 OF FRIENDBACH'S SUBDIVISION AS RECORDED IN PLAT BOOK 31 PAGE 14 OF THE ST. LOUIS COUNTY RECORDS AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A FOUND AXLE MARKING THE NORTHWEST CORNER OF SAID LOT 1;
THENCE NORTH 72°00'00" EAST A DISTANCE OF 337.75 FEET TO A POINT;
THENCE SOUTH 18°00'00" EAST A DISTANCE OF 160.97 FEET TO A POINT;
THENCE SOUTH 71°59'57" WEST A DISTANCE OF 111.43 FEET TO A FOUND IRON ROD;
THENCE SOUTH 73°13'15" WEST A DISTANCE OF 237.35 FEET TO A FOUND AXLE;
THENCE NORTH 14°05'00" WEST A DISTANCE OF 159.00 FEET TO THE POINT OF BEGINNING CONTAINING 1.30 ACRES MORE OR LESS.

LOT 9 OF FRIENDBACH'S SUBDIVISION AS RECORDED IN PLAT BOOK 31 PAGE 14 OF THE ST. LOUIS COUNTY RECORDS AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A FOUND AXLE MARKING THE NORTHEAST CORNER OF SAID LOT 9;
THENCE SOUTH 14°05'00" EAST A DISTANCE OF 156.00 FEET TO A FOUND IRON ROD;
THENCE SOUTH 72°00'00" WEST A DISTANCE OF 538.92 FEET TO A POINT OF A CURVE ON THE CENTERLINE OF WILDHORSE CREEK, THE RADIUS POINT OF SAID CURVE BEARS SOUTH 09°49'00" EAST 225.00 FEET;
THENCE WITH THE CENTERLINE OF WILDHORSE CREEK ALONG SAID CURVE, TO THE RIGHT AN ARC DISTANCE OF 60.24 FEET TO A POINT OF REVERSE CURVE;
THENCE WITH SAID REVERSE CURVE HAVING A RADIUS OF 230.00 FEET AN ARC DISTANCE OF 62.23 FEET TO A POINT;
THENCE NORTH 00°01'10" EAST A DISTANCE OF 40.30 FEET TO A POINT;
THENCE WITH A CURVE TO THE LEFT HAVING A RADIUS OF 63.00 FEET AN ARC DISTANCE OF 7.04 FEET TO A POINT ON THE NORTH LINE OF AFOREMENTIONED LOT 9;
THENCE DEPARTING SAID CREEK CENTERLINE AND WITH THE NORTH LINE OF SAID LOT 9 NORTH 72°00'00" EAST A DISTANCE OF 462.03 FEET TO THE POINT OF BEGINNING AND CONTAINING 1.81 ACRES MORE OR LESS.

SITE & BENCHMARK INFORMATION: ST. LOUIS COUNTY BENCHMARK #11-39: "L" ON NORTHEAST CORNER OF SIDEWALK TO A TWO-STORY BRICK HOUSE AT THE SOUTHWEST CORNER OF RAILROAD TRACKS AND CENTAUR ROAD. ELEVATION = 467.76'

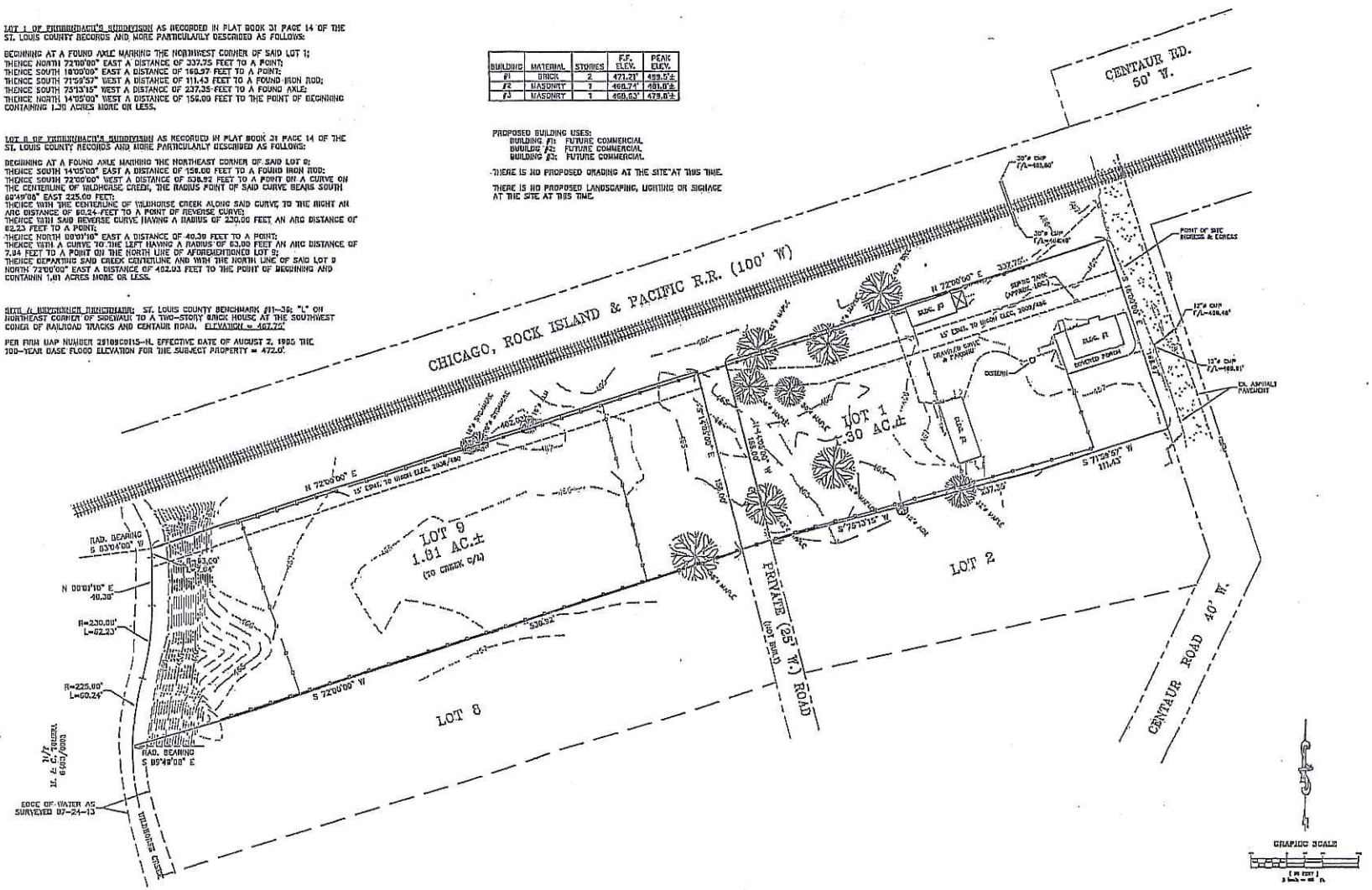
PER FIRM MAP NUMBER 29189C0115-H, EFFECTIVE DATE OF AUGUST 2, 1995 THE 100-YEAR BASE FLOOD ELEVATION FOR THE SUBJECT PROPERTY = 472.0'.

BUILDING	MATERIAL	STORIES	F.F. ELEV.	PEAK ELEV.
#1	BRICK	2	471.21'	499.0'±
#2	MASONRY	1	468.74'	481.0'±
#3	MASONRY	1	468.63'	479.0'±

PROPOSED BUILDING USES:
BUILDING #1: FUTURE COMMERCIAL
BUILDING #2: FUTURE COMMERCIAL
BUILDING #3: FUTURE COMMERCIAL

THERE IS NO PROPOSED GRADING AT THE SITE AT THIS TIME.

THERE IS NO PROPOSED LANDSCAPING, LIGHTING OR SIGNAGE AT THE SITE AT THIS TIME.



This document shall remain the property of Burescher Ditch and Associates, Inc. (BDA) and may not be used by any other party without the written consent of said DDA.

No.	DATE	REVISION DESCRIPTION

BURESCHER DITCH & ASSOCIATES, INC.
2 East Fifth Street, P.O. Box 621, Washington, Missouri 63090
Telephone: 1-636-239-6266 Fax: 1-636-239-7681
Email: www.burescherditch.com
Corporation No. 0001010603
L.P.S. Corporation No. 0001010600

SITE IMPROVEMENT PLAN
LOTS 1 & 9, FRIENDBACH'S SUB.
107 & 109 CENTAUR ROAD
WILDWOOD, MO

MARK A. DITCH
PROJECT ENGINEER
CIVIL E-21109
LICENSE NUMBER
12-10-13
DATE
11001-A
PROJECT NUMBER
PRELIMINARY DEVELOPMENT PLAN
PLAN TITLE
1 OF 1
SHEET OF
CLS
DRAWN CHECKED

ATTACHMENT D

Background Information

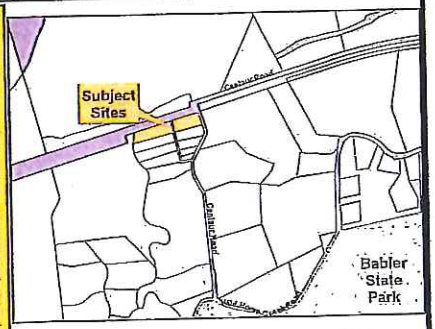
WILDWOOD

16860 Main Street
Wildwood, MO 63040

CITY OF WILDWOOD
NOTICE OF
PUBLIC MEETING
before the Planning and Zoning Commission
Monday, October 20, 2014, at 7:30 p.m.

AS A RESIDENT OR PROPERTY OWNER NEAR THE SITE THAT IS IDENTIFIED ON THIS MAILER, THE CITY OF WILDWOOD WOULD LIKE TO ENSURE YOU ARE AWARE OF THIS REQUEST/PROPOSAL BECAUSE IT IS LOCATED WITHIN 3,000 FEET OF YOUR PROPERTY. YOUR COMMENTS ARE ENCOURAGED, ALONG WITH YOUR PARTICIPATION AT THE SCHEDULED HEARING OR MEETING. THIS ITEM IS SCHEDULED FOR DISCUSSION AND ITS OUTCOME MAY IMPACT YOUR HOME, NEIGHBORHOOD, OR AREA, SO PLEASE CAREFULLY READ THE DESCRIPTION AND PARTICIPATE AT YOUR DISCRETION. THE CITY OF WILDWOOD ENCOURAGES CITIZEN INPUT AT ALL OF ITS HEARINGS OR MEETINGS AND YOUR INVOLVEMENT WILL ASSIST IT IN REACHING THE BEST DECISION POSSIBLE FOR ALL PARTIES.

* PLEASE SEE YELLOW BOX ON OPPOSITE SIDE OF THIS MAILER FOR A LIST OF WAYS TO EITHER COMMENT ON AND/OR TRACK THIS ITEM.



Street Addresses of Subject Sites:
107 and 109 Centaur Road
Wildwood, MO 63005

THE CITY WELCOMES AND ENCOURAGES YOUR COMMENTS AND PARTICIPATION IN ITS PUBLIC PROCESSES.

Listed below is a request that was presented to the Planning and Zoning Commission at a public hearing held on September 15, 2014. You and many of your neighbors may have expressed interest in its outcome and the Commission is scheduled to take action upon this item at their upcoming meeting. If inclined, the Commission encourages you to attend this meeting and hear the Department of Planning's recommendation on this matter and participate in its discussion. The meeting will be held on **Monday, October 20, 2014, at 7:30 p.m.** in the City Hall Council Chambers, 16860 Main Street, Wildwood, Missouri 63040. The specific request under consideration is as follows:

P.Z. 24-14 Centaur Station, c/o Michael Phelan, 18833 Cliffview Lane, Wildwood, Missouri, 63005 – A request for the application of a Landmark and Preservation Area (LPA) upon the property, buildings, and structures (Centaur Station) located in the Historic Centaur Area for low-intensity commercial uses under the allowances of this Special Procedures Permit process of the City's Zoning Ordinance; Addresses: 107 and 109 Centaur Road/Locator Numbers: 19X410082 and 19Y620026; NU Non-Urban Residence District and FPNU Floodplain Non-Urban Residence District. Potential Uses: Office, Limited Services and Retail Facilities, and Offices, with Affiliated Dwelling Units. **(Ward One)**

***RESIDENT OR PROPERTY OWNER - PLEASE COMMENT ON AND/OR TRACK THIS REQUEST BY:**

1) Submitting a comment online by visiting: http://www.cityofwildwood.com/comment.
2) Submitting a written comment prior to the meeting and addressed to the Planning and Zoning Commission, City of Wildwood, 16860 Main Street, Wildwood, Missouri 63040.
3) Viewing the Planning and Zoning Commission's agenda and report, which is available on the City's website at: www.cityofwildwood.com, the Friday before the aforementioned meeting date.

If you should have any questions regarding this information, please feel free to contact the Department of Planning at (636) 458-0440. Thank you in advance for your interest in this matter.

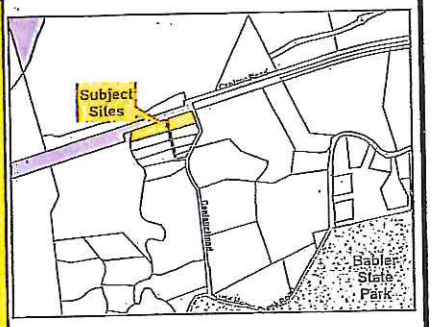
WILDWOOD

16860 Main Street
Wildwood, MO 63040

CITY OF WILDWOOD
NOTICE OF
PUBLIC HEARING
before the Planning and Zoning Commission
Monday, September 15, 2014, at 7:30 p.m.

AS A RESIDENT OR PROPERTY OWNER NEAR THE SITE THAT IS IDENTIFIED ON THIS MAILER, THE CITY OF WILDWOOD WOULD LIKE TO ENSURE YOU ARE AWARE OF THIS REQUEST/PROPOSAL BECAUSE IT IS LOCATED WITHIN 3,000 FEET OF YOUR PROPERTY. YOUR COMMENTS ARE ENCOURAGED, ALONG WITH YOUR PARTICIPATION AT THE SCHEDULED HEARING OR MEETING. THIS ITEM IS SCHEDULED FOR DISCUSSION AND ITS OUTCOME MAY IMPACT YOUR HOME, NEIGHBORHOOD, OR AREA, SO PLEASE CAREFULLY READ THE DESCRIPTION AND PARTICIPATE AT YOUR DISCRETION. THE CITY OF WILDWOOD ENCOURAGES CITIZEN INPUT AT ALL OF ITS HEARINGS OR MEETINGS AND YOUR INVOLVEMENT WILL ASSIST IT IN REACHING THE BEST DECISION POSSIBLE FOR ALL PARTIES.

* PLEASE SEE YELLOW BOX ON OPPOSITE SIDE OF THIS MAILER FOR A LIST OF WAYS TO EITHER COMMENT ON AND/OR TRACK THIS ITEM.



Street Addresses of Subject Sites:
107 and 109 Centaur Road
Wildwood, MO 63005

THE CITY WELCOMES AND ENCOURAGES YOUR COMMENTS AND PARTICIPATION IN ITS PUBLIC PROCESSES.

The Planning and Zoning Commission of the City of Wildwood will hold a public hearing on **Monday, September 15, 2014 at 7:30 p.m.** **in the City Hall Council Chambers, 16860 Main Street, Wildwood, Missouri 63040** for the purposes of accepting testimony regarding a request for either the modification of zoning district designations, application or amendment of special procedures, change in the underlying regulations of the Zoning Ordinance, action on Record Plats, updates to other land use regulations, or amendment of the Master Plan, which will then be taken under advisement for future action. The meeting will be open to all interested parties to comment upon this request, whether in favor or opposition, or provide additional input for consideration. *If you wish to attend this public hearing and require accommodation due to disability, please contact the Department of Planning forty-eight (48) hours in advance at (636) 458-0440.* If you do not have comments regarding this request, no action is required on your part. The following **request** will be considered at this time:

P.Z. 24-14 Centaur Station, c/o Michael Phelan, 18833 Cliffview Lane, Wildwood, Missouri, 63005 – A request for the application of a Landmark and Preservation Area (LPA) upon the property, buildings, and structures (Centaur Station) located in the Historic Centaur Area for low-intensity commercial uses under the allowances of this Special Procedures Permit process of the City's Zoning Ordinance; Addresses: 107 and 109 Centaur Road/Locator Numbers: 19X410082 and 19Y620026; NU Non-Urban Residence District and FPNU Floodplain Non-Urban Residence District. Potential Uses: Office, Limited Services and Retail Facilities, and Offices, with Affiliated Dwelling Units. **(Ward One)**

***RESIDENT OR PROPERTY OWNER - PLEASE COMMENT ON AND/OR TRACK THIS REQUEST BY:**

1) Submitting a comment online by visiting: **http://www.cityofwildwood.com/comment.**
2) Submitting a written comment prior to the hearing and addressed to the Planning and Zoning Commission, City of Wildwood, 16860 Main Street, Wildwood, Missouri 63040.
3) Viewing the Planning and Zoning Commission's agenda, which is available on the City's website at: **www.cityofwildwood.com**, the Friday before the aforementioned meeting date.

If you should have any questions regarding this information, please feel free to contact the Department of Planning at [illegible] Thank you in advance for your interest in this matter.

WILDWOOD

August 28,2014

The Planning and Zoning Commission
City of Wildwood, Missouri
16860 Main Street
Wildwood, Missouri 63040

Re:	A recommendation report on a planned request for the application of a Landmark and Preservation Area (LPA) upon a property, buildings, and structures (Centaur Station) that have had a range of uses over their one hundred (100) year plus history.
Location:	West side of Centaur Road, north of Wild Horse Creek Road (107 and 109 Centaur Road)
Zoning:	FPNU Floodplain Non-Urban Residence District
Historic Community Name:	Centaur
Ward:	One

Commission Members:

BACKGROUND - In the Zoning Ordinance, a special procedure permit process exists for special properties that have been determined to have historic significance within the community. These properties, which have buildings and structures situated upon them, must meet certain criteria for consideration for the application of this special procedure and, once considered historic, may be allowed a range of authorized activities and uses that are normally not permitted by that underlying zoning district designation. The intent of this procedure is to encourage historic preservation activities, including restoration, rehabilitation, and/or reuse. The ordinance reads as follows in this regard: "*the purpose of this Section is to promote the general welfare, heritage, education and economic benefit of the City of Wildwood through the preservation, protection and regulation of buildings, sites, structures, monuments and neighborhoods of historic, architectural, cultural or archeological significance. It is further the intent of this procedure to encourage the adaptation of these buildings, sites, structures, etc., for current use.*"

CURRENT REQUEST - The owner of this property has submitted an application to the City of Wildwood for the use of this procedure at the above-referenced location. On the application, the petitioner notes his desire to complete the rehabilitation of the property and buildings/structures and potentially use the main building and **associated station structure** located on it for low-impact commercial type activities or uses, as defined in the code. These activities and uses can include the following:

1. Offices.
2. Limited service and retail facilities in which goods and services may be sold or provided directly to the public on the premises such as, but not limited to, studios or galleries for artwork or antiques; studios or work areas for artists, candymakers, dressmakers, tailors; music teachers; dance teachers; restaurants (excluding fast-food restaurants). In no case shall any use involving the manufacture of products be permitted to occupy more than four thousand (4,000) square feet of gross floor area.

3. Offices (as permitted in Subsection (C) (1) above) with affiliated dwelling units, wherein occupancy of the dwelling unit shall be limited to the owner, manager or employee of the office use and their respective families.
4. Child care centers, nursery schools, day nurseries.
5. Single-, two- and multiple-family dwellings.

According to the petitioner, during a discussion on this matter before the Historic Preservation Commission, he has not yet decided a specific activity or use or combination, but would like to have a range, so as to allow him a certain amount of flexibility in the future. The petitioner understood the limited nature of the permitted activities or uses under this special procedure permit and that a number of conditions can be levied as part of it regarding the future development and use of the property.

PROPERTY'S CHARACTERISTICS - At the time of the petitioner's presentation to the Historic Preservation Commission, the petitioner had already completed a significant amount of work on the property, given it had been used for rental purposes and suffered a slow decline in its condition over an extended period of time. With the petitioner's ownership, the property has been substantially improved and the buildings and structures secured, rehabilitated, and now are an important and respected part of the Centaur community. The property has a number of improvements associated with it, which can be summarized as follows:

Improvement	Year Built (St. Louis County Records)	Comment
Main Building	1920	Two story building constructed of brick, with large covered front porch along roadway.
Accessory Structure #1	1920	Called Centaur Station structure and resembles a small train station building.
Accessory Structure #2	1920	Located in westernmost portion of the site, which has lawn area around it.
Parking Lot Area	Undetermined	Informal gravel area around north side of main building and surrounding accessory structure #1.

Any building or structure over the age of seventy-five (75) years is considered historic in the City of Wildwood and listed in its survey document. Since the registry process is voluntary in the City of Wildwood, the identification of a property, building, and/or structure (collectively termed elements) is a listing, but has no control over its disposition over time. With the application of a Landmark and Preservation Area (LPA) designation on an element, such control over its condition, retention, or demolition does exist via a site-specific ordinance. Therefore, from the perspective of the Historic Preservation Commission, this special procedures permit is a very important tool to maintain Wildwood's unique and varied history here in the Centaur community.

REPORT AND RECOMMENDATION OF THE COMMISSION - As part of the consideration of a structure(s), building(s), and/or property/properties to a Landmark and Preservation Area designation, the Historic Preservation Commission must provide a recommendation to the Planning and Zoning Commission for its consideration, as part of its review process. Specifically, the Zoning Ordinance regulation for such is as follows: "*the Historic Preservation Commission shall make their comments and recommendation known to the Planning Commission and petitioner no later than seven (7) days prior to the public hearing before the Planning Commission. The said comments and recommendations shall be made available for public inspection. The Planning Commission will construe the absence of comment or recommendation as acceptance of the petition*

by the Historic Preservation Commission." This regulation of the Landmark and Preservation Area (LPA) reflects the need for the Historic Preservation Commission to provide its expertise in these matters, so the historic value of the element is retained and suggest any appropriate conditions for this purpose are included the site-specific ordinance designating the site with this designation.

The Historic Preservation Commission has considered this location and does believe it meets the criteria to be considered historic by the virtue of meeting one (1), if not more, of the following requirements set forth in the regulations for a Landmark and Preservation Area (LPA):

1. Has significant character, interest or value as part of the development, heritage or cultural characteristics of the City of Wildwood, State of Missouri or the United States.
2. Is the site of a significant historic event.
3. Is the work of a designer whose individual work has significantly influenced the development of the St. Louis region, State of Missouri or United States.
4. Contains elements of design, detail, materials or craftsmanship, which represent a particular architectural style or significant innovation.
5. Owing to its unique location or singular physical characteristic, represents an established and familiar visual feature of a neighborhood or within the City of Wildwood.

With this determination by the Historic Preservation Commission, it would note the main building **and station structure** have been at this location for over one hundred (100) years, the properties acted as a major commercial node of the community for generations, and the setting remains a major landmark in this portion of Wildwood (please see the attached history prepared by the Historic Preservation Commission on the Centaur Area). As part of this support for the application of this special procedures permit at this location, the Commission would also recommend the following conditions be included in the site-specific ordinance for this property:

1. The petitioner is required to place the property, **and associated buildings and structures,** on the City's Historic Registry. This registry process, **in terms of the required application and review steps, must parallel that in terms of time of the Planning and Zoning Commission and City Council's consideration of ~~within one (1) year~~ the Landmark and Preservation Area (LPA) request**.
2. The petitioner cannot demolish the main building or **station structure**, unless the Historic Preservation Commission would grant such allowance, per its regulations in this regard.
3. The petitioner follows all permitting requirements for the rehabilitation and restoration of the element, as set forth in the City's building and land use codes.

With these conditions, a reasonable level of control can be exercised by the Historic Preservation Commission over the elements to ensure its longevity and preservation for future generations, while not obstructing the petitioner's right of utilization of it for his enjoyment.

The Historic Preservation Commission appreciates the opportunity to comment on this matter and, if any of the Planning and Zoning Commission members should have any questions or comments in this regard, please feel free to contact the Department of Planning at (636) 458-0440. Thank you again.

Respectfully submitted,
CITY OF WILDWOOD

William F. Kennedy, Chair
Historic Preservation Commission

ATTEST:

Joe Vujnich, Director
Department of Planning

Cc: The Honorable City Council Members
Daniel E. Dubruiel, City Administrator
Rob Golterman, City Attorney
Liz Weiss, Planner
Michael Phelan, Petitioner and Property Owner

Editor's Note: Modifications to the report, which were requested by the Commission at its July meeting, are indicated by bolded, red type, while deletions by a single, strike-though line.

Attachment A –
LPA Application Packet

12/11/13

P.Z. Number(s): _____
(as assigned by department)

DEPT OF PLANNING & PARKS
DEC 11 2013
CITY OF WILDWOOD

PETITION

before the
CITY OF WILDWOOD'S
PLANNING AND ZONING COMMISSION
FOR THE PURPOSE OF HEARING REQUESTS
FOR ONE OR A COMBINATION OF THE FOLLOWING:
(PLEASE CHECK THOSE ITEMS WHICH ARE APPLICABLE)

X Change in Zoning
___ Conditional Use Permit
X Approval of a Planned District or other special procedure (C-8/M-3/PRD)

APPLICANT/OWNER INFORMATION

Applicant's Name: Michael Phelan
Mailing Address: 18833 Cliff View Lane
Wildwood, MO 63005
Telephone Number, with Area Code: 314 406 1349
Fax Number, with Area Code: _____
E-Mail Address: downincentaur@yahoo.com
Interest in Property (Owner or Owner Under Contract):
OWNER

If owner under contract, please attach a copy of the contract.

Owner's Name (if different than applicant): _____

Address: _____

Telephone Number, with Area Code: _____

SITE INFORMATION

Postal Address of the Petitioned Property(ies): 107 Centaur Road, 109 Centaur Rd
Wildwood, MO 63005

Locator Number(s) of the petitioned Property(ies): 19X410082
19Y620086

Total Acreage of the Site to the Nearest Tenth of an Acre: 3.11

Current Zoning District Designation:

Proposed Zoning District Designation: LPA

Proposed Planned District or Special Procedure: LPA

USE INFORMATION

Current Use of Petitioned Site: VACANT Residential

Proposed Use of Site: USES permitted under LANDMARK AND PRESERVATION AREA (LPA) Section 415.520

Proposed Title of Project: Centaur Station

Proposed Development Schedule (include approximate date of start and completion of the project): SPRING 2014

CONSULTANT INFORMATION

Engineer's/Architect's Name: Buescher Ditch

Address: PO Box 621
Washington, MO 63090

Telephone Number, with area code: 636 239 6255

Fax Number, with area code:

E-Mail Address:

Soil Scientist/Forester's Name:

Address:

Telephone Number, with area code:

Fax Number, with area code:

E-Mail Address:

ACKNOWLEDGEMENT INFORMATION

The petitioner(s) state(s) they (he) (she) will comply with all the requirements of the city of wildwood with regard to the procedures relating to its administration of land use and development controls within its boundaries, including the payment of all applicable fees.

The petitioner(s) further represent(s) and agree(s) that they (he) (she) has (have) not made any arrangement to pay any commission, gratuity, or consideration, directly or indirectly, to any official, employee, or appointee of the City of Wildwood with respect to this application.

The petitioner(s) hereby certify(ies) that (indicate one):

(✓) I (we) have a legal interest in the hereinabove described property.

( ) I am (we are) the duly appointed agent of the petitioner(s) and that all information given and represented on this application is an accurate and true statement of fact. Any misrepresentation of information on this application or accompanying information shall constitute grounds for the City of Wildwood, Missouri to terminate review of this petition and return all materials, minus any fees, associated with its review up to and through that point.

SIGNATURE: _____

NAME (PRINTED): Michael D' Phelan

ADDRESS: 18833 Cliff View Lane
Wildwood, MO 63005

TELEPHONE NUMBER: 314 406 1349

[PLEASE NOTE: THE ABOVE NAMED PERSON SHALL RECEIVE ALL OFFICIAL NOTICES REGARDING THIS REQUEST, INCLUDING THE PUBLIC HEARING NOTICE.]

SUBSCRIBED AND SWORN BEFORE ME THIS _____ DAY OF _____, 20_____.

SEAL:

SIGNED: _____
(NOTARY PUBLIC)

NOTARY PUBLIC _____,
STATE OF MISSOURI.

MY COMMISSION EXPIRES _____.

FOR OFFICE USE ONLY

1ST SUBMITTAL DATE: _____
FEE: _____; RECEIVED BY: _____
PRELIMINARY DEVELOPMENT PLAN: YES NO
PACKET COMPLETE: YES NO

2ND SUBMITTAL DATE: _____
PACKET COMPLETE: YES NO

3RD SUBMITTAL DATE: _____
PACKET COMPLETE: YES NO

4TH SUBMITTAL DATE: _____
PACKET COMPLETE: YES NO

Proposed Landmark Preservation Area
107 and 109 Centaur Road Wildwood, MO 63005

Statement of Historical and Architectural Significance.

The land in the proposed LPA has a long history associated with it as the former town of Centaur Missouri.

In 1893 Anton Leiweke organized the Centaur Lime Company and its company store, and offices were erected on this site, the company employed 100 people. In 1894 the railroad came through the property and a train station and hotel were added to the site. These buildings of frame construction burned approximately 1918, and the current buildings were constructed of brick and mortar in about 1920.

The construction of the buildings are of brick and or mortar and quarried from the company limestone mine directly across the street from the site.

The President of the company and owner of the house was killed with 3 members of his family on May 5th ,1932 in train accident in front of the house. (see attached pic and article from the Post Dispatch)

May 5 — 1932

ST. LOUIS POST-DISPATCH

Killed When Train Struck Auto

YOUR members of a family killed when a freight train struck their automobile at Centaur, St. Louis county, today. Above, DOROTHY LEIWEKE (left) and her cousin, LORETTA LEIWEKE; below, C. LEIWEKE JR., Loretta's brother, and A. LEIWEKE, their father, who was driving.

H HURT WHEN IN RUNS INTO TO AT CENTAUR

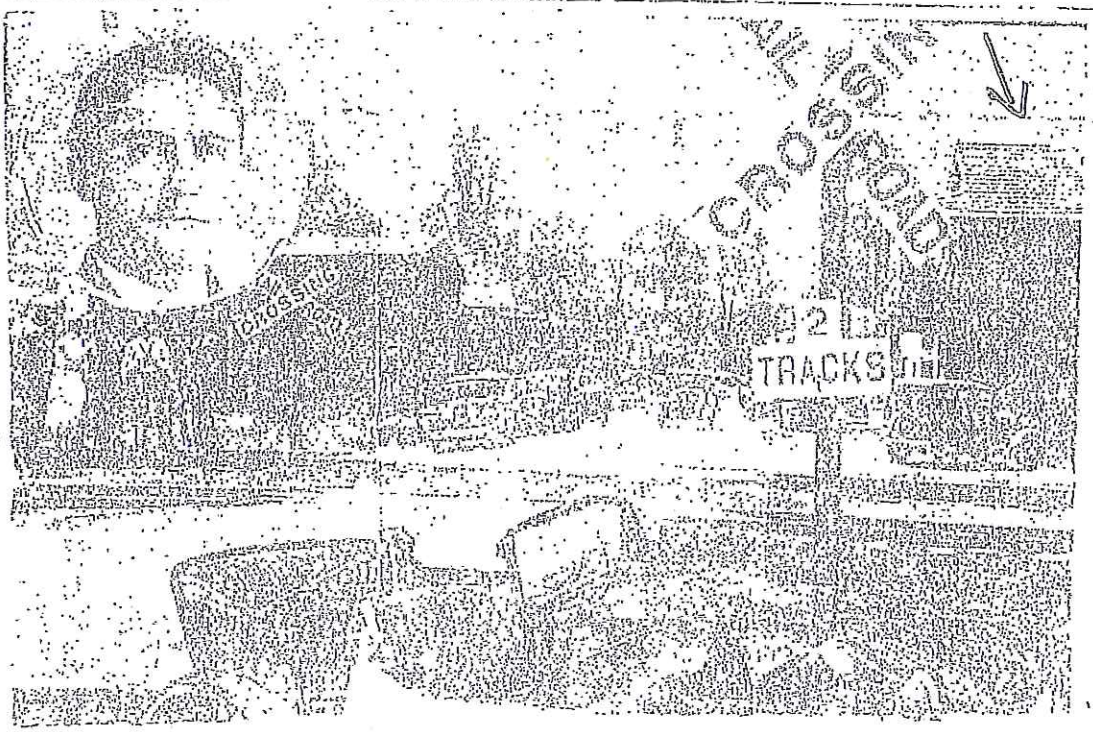
iweke, 50, Daughter, ece, 8, and Nephew, 9, Are Victims.

V WAY TO CHURCH

s Brother Hurt—No ning Sounded, Witnesses Assert.

ersons were killed and one red as they were driving sion Thursday mass at 7:30 oday when an eastbound land train struck their le at a grade crossing in —the west of Ceylon

Victims of Crash and Scene Where Four Were Killed



M S

HE Ha

MAN, 3 CHILDREN KILLED WHEN AUTO IS HIT BY TRAIN

Head of Lime Company, Daughter, Niece and Nephew Fatally Injured at Centaur, St. Louis County

DRIVER'S BROTHER SERIOUSLY INJURED

Family on the Way to Church at Time of Accident—Verdict of Unavoidable Accident.

Four members of a family were killed and a fifth seriously injured when a Rock Island freight train struck an automobile at Centaur, St. Louis County, at 6:50 o'clock this morning. The dead:

A. Leo Leiweke 53 years old president-treasurer of the Centaur Lime Co.

Dolores, 11, his daughter.

Loretta, 11, daughter of his brother, Joseph H. C. Leiweke.

Joseph Jr., 16, brother of Loretta.

Justice of the Peace Joseph H. C. Leiweke, 55 years old, president and secretary of the lime company, was injured. He is unconscious in St. Mary's Hospital with injuries of the skull and left arm and body bruises.

The family [illegible] was [illegible] the Leiweke home in Centaur to the Ascension Catholic Church at Clay-

Ascension Thursday, when Catholics are obligated to attend mass. Leo Leiweke was driving, in a touring car.

A regular passenger train had passed a short time previously and relatives think Leo Leiweke was not looking for another train. The freight was an eastbound extra, not regularly scheduled. There is no automatic signal at the crossing and no agent on duty at the station. The car was northbound in Centaur road, preparatory to turning east on a new road between the track and the Missouri River.

Automobile Demolished.

The automobile was carried about 100 feet and demolished. The elder Joseph Leiweke was found under the car when relatives and other residents of the hamlet hurried to the scene. Loralia was found near the crossing with a skull fracture. She died a half hour later in the frame railroad station, after being given first aid by her brother, Francis, postmaster and merchant at Centaur.

The body of Dolores was found about 225 feet from the crossing. The bodies of Leo Leiweke and Joseph Jr. were near the wreck of the machine.

Coroner's Verdict of Accident.

A Coroner's jury returned a verdict of unavoidable accident this noon.

The Rev. V. J. McCartney, pastor of Ascension Church and of St. Anthony's Church at Centaur and Mrs. Minnie Bellaire of Chesterfield testified they were driving about 50 feet behind the Leiwekes and heard no whistle. They said they did not see the train, but heard it. Trees and structures interfered with the engineer's vision of the machines approaching the crossing from the south, they declared.

Father McCartney had celebrated mass at Centaur and Mrs. Bellaire was taking him to the church at Chesterfield.

Edgar Nelson of Eldon, Mo., the engineer, testified that a grove of trees obscured the road. He said he whistled three times and rang the bell as he approached Centaur. His train, consisting of 26 loaded cars and a caboose, was going 35 miles an hour, but he stopped the locomotive about 100 feet east of the crossing, Nelson related. Sumner E. Gunn of Eldon, the fireman, corroborated the engineer's testimony about the whistle and bell, but said he did not see the accident.

Centaur is in the northwestern corner of St. Louis County, in a narrow valley. The Rock Island runs at the foot of the river bluffs.

WILDWOOD

January 8, 2014

The Historic Preservation Commission
City of Wildwood, Missouri
16860 Main Street
Wildwood, Missouri 63040

Re: Application for the Landmarks and Preservation Area (LPA) – 107 and 109 Centaur Road

Commission Members:

In December of last year, the Department of Planning received an application packet from a property owner of a historic element in the Centaur Community of Wildwood. This historic element is the all-brick construction, two-story residence located at the ninety-degree turn on Centaur Road, at the railroad tracks. This building has a long history in this area and was an integral part of the Centaur community, when it was a place of commerce and trade in the 1800's. Although an old structure, the new owner has invested a great deal of effort over the past several months and begun to stabilize it and return it to its past glory and significance.

The application packet that was provided by the owner of this historic element is the initial step in the process that seeks the City's support relative to the redevelopment of the property for limited commercial uses to complement the past history of the Centaur Community as a center of some commerce and accommodate the growing number of cyclists that pass through this area as well. The packet contains an application for rezoning, information relating to the property, and other items necessary for this land use process to begin. The application for rezoning identifies the Landmark and Preservation Area (LPA) would be placed on this site, which is currently designated as NU Non-Urban Residence District and FPNU Floodplain Non-Urban Residence District, like many of the properties in its vicinity. Thus, these properties and area have flooded, with water from the nearby Missouri River.

The LPA is specifically set forth for use on historic properties, as a mechanism to foster their preservation and adaptive reuse. This zoning district can be used without the benefit of the Master Plan's 5th Land Use Category, which is not the case in all instances. This overlay district was carried over from St. Louis County, at the time of the incorporation and remained in the City's Zoning Ordinance, since that date. Over the last eighteen (18) years, only one (1) application has been submitted for its use, until now, and that location was in the Orrville Community. However, the one (1) previous application was withdrawn, before the Planning and Zoning Commission and the City Council took any formal action upon it.

The specifics associated with the LPA are extensive and detailed in the section of the City's Zoning Ordinance. Important among these specifics is the requirement the element can be protected from any future demolition or major alterations by the City, if the overlay district is approved on the properties. Other items are detailed below:

SECTION 415.520: LANDMARK AND PRESERVATION AREA (LPA)

A. *Purpose And Intent.* The purpose of this Section is to promote the general welfare, heritage, education and economic benefit of the City of Wildwood through the preservation, protection and regulation of buildings, sites, structures, monuments and neighborhoods of historic, architectural, cultural or archeological significance. It is further the intent of this procedure to encourage the adaptation of these buildings, sites, structures, etc., for current use.

B. In any zoning district, except "PS" Park and Scenic District, a single parcel or geographic area may be designated as a landmark and preservation area thereby encouraging the preservation, enhancement, rehabilitation and perpetuation of the landmark building, structure or area. The Planning Commission may recommend and the City Council, by ordinance, may approve designation for a specific parcel or area provided the area is characterized by one (1) or more of the following criteria:
   1. Has significant character, interest or value as part of the development, heritage or cultural characteristics of the City of Wildwood, State of Missouri or the United States.
   2. Is the site of a significant historic event.
   3. Is the work of a designer whose individual work has significantly influenced the development of the St. Louis region, State of Missouri or United States.
   4. Contains elements of design, detail, materials or craftsmanship which represent a particular architectural style or significant innovation.
   5. Owing to its unique location or singular physical characteristic, represents an established and familiar visual feature of a neighborhood or within the City of Wildwood.

C. *Additional Permitted Land Uses And Developments.* Designation as a landmark and preservation area qualifies property for additional uses beyond those permitted or conditional uses in the zoning district in which the property is located. A designated landmark and preservation area may contain such of the following additional uses as determined by the Planning Commission and the City Council, provided that these uses shall not create an appreciable increase in land use intensity, beyond what normally occurs in the applicable zoning district, nor substantially alter or affect the character of surrounding development:
   1. Offices.
   2. Limited service and retail facilities in which goods and services may be sold or provided directly to the public on the premises such as, but not limited to, studios or galleries for artwork or antiques; studios or work areas for artists, candymakers, dressmakers, tailors; music teachers; dance teachers; restaurants (excluding fast-food restaurants). In no case shall any use involving the manufacture of products be permitted to occupy more than four thousand (4,000) square feet of gross floor area.
   3. Offices (as permitted in Subsection (C)(1) above) with affiliated dwelling units, wherein occupancy of the dwelling unit shall be limited to the owner, manager or employee of the office use and their respective families.
   4. Child care centers, nursery schools, day nurseries.
   5. Single-, two- and multiple-family dwellings.

D. All such additional uses shall conform to specific conditions established in the ordinance governing the particular landmark and preservation area concerning, but not limited to, the following:
   1. Building appearance.
   2. Number of employees or pupils.
   3. Minimum and maximum square footage per use.
   4. Open space requirements.
   5. Signs (number, type, location).
   6. Parking (number, location).

E. *Performance Standards.* All uses established in a landmark and preservation area shall operate in accord with standards contained in Section 415.250 "Zoning Performance Standards Regulations". These performance standards are minimum requirements and may be made more restrictive in the conditions of the ordinance governing the particular landmark and preservation area.

F. *Height Limitations For Structures.* Unless otherwise restricted by application of regulations in Section 415.240 "Air Navigation Space Regulations" of this Chapter, the total height of any structure shall be limited by the applicable zoning district regulations. The height limitations may be made more restrictive in the conditions of the ordinance governing the particular landmark and preservation area.

G. *Lot Area And Yard Requirements.*
   1. *Minimum lot area.* The lot area for any use or new building in a landmark and preservation area shall be governed by the regulations and the zoning district regulations in which the lot is located.
   2. *Minimum yard requirements.* Setbacks for new parking areas and new structures shall be established in the conditions

of the ordinance governing the particular landmark and preservation area; however in no instance shall they be less restrictive than the requirements of the zoning district in which the property is located.

H. *Off-Street Parking And Loading Requirements.* The minimum off-street parking and loading requirements for any use or building in a designated landmark and preservation area shall not be reduced below that required for the same use in any other "M" Industrial, "C" Commercial, "R" Residential, "NU" Non-Urban Residence zoning district as set forth in **Section 415.280** "Off-Street Parking and Loading Requirements". These requirements may be made more restrictive in the conditions of the ordinance governing the particular landmark and preservation area. Where determined necessary and where the landmark and preservation area includes two (2) or more uses, the Planning Commission may recommend and the City Council may approve a total reduction of not more than twenty percent (20%) of the required off-street parking and loading spaces, where it has been demonstrated by study of the combined uses and customary operation of the uses that adequate parking would be provided.

I. *Sign Regulations.* The number, type and location of all signs, display or advertising devices proposed and visible from the public right-of-way shall be subject to the regulation and control of the particular zoning district in which the property is located as set forth in **Section 415.400** "Sign Regulations"; however these regulations may be made more restrictive in the conditions of the ordinance governing the particular landmark and preservation area.

J. *Procedure--Establishment Of Area.* In order to establish a landmark and preservation area, the procedure shall be as follows:

1. *Application.* A petition shall be filed with the City Council on forms prescribed for this purpose by the Planning Commission. Said petition may be initiated by the City Council, Planning Commission, the owner(s) of record or owners under contract of a lot or tract or their authorized representatives or by the owners of fifty percent (50%) or more of the area (excluding streets and alleys) included within the proposed area.
   a. Three (3) sets of forms shall be submitted to the Department of Planning on petitions initiated by owner(s) of record or owners under contract or their authorized representative or by owners of fifty percent (50%) or more of the area in a proposed area and are to be accompanied by the following:
      (1) Filing fee per requirements of **Section 415.550** "Fees".
      (2) General location map, outboundary plat and legal description of the property in question.
      (3) A statement documenting the historic, architectural, cultural, archaeological or aesthetic significance of the proposed lot or lots.
      (4) Summary, description, example or outline of proposed conditions to be applied within the area including, but not limited to, design and construction standards for building facades, setbacks, height, scale, material, color and texture, trim, roof design and landscaping; standards for the design details for all fences, street furniture and signs.
      (5) A preliminary development plan indicating existing and proposed structures and uses of all properties within the proposed area including:
         (a) Existing and proposed contours at intervals of not more than five (5) feet referred to sea level datum.
         (b) Proposed ingress and egress to site, including adjacent streets.
   b. Petitions initiated by the City Council or Planning Commission shall be accompanied by the following:
      (1) A statement from the Historic Preservation Commission documenting the historic, architectural, cultural, archaeological or aesthetic significance of the proposed lot or lots.
      (2) A survey of the property furnished by the Department of Planning from information of record.
      (3) A letter of intent from the initiating party indicating the proposed use.
2. *Public hearing.*
   a. A public hearing on the petition shall be held by the Planning Commission in the same manner and with the same public notice procedure as required in the procedure for amending the zoning ordinance, provided that a date for a public hearing shall be set within forty-five (45) days of acceptance of the petition by the Department of Planning. Additional time may be required to set a date for public hearing for petitions initiated by the City Council or the Planning Commission.
   b. Upon acceptance of the petition, the Department of Planning shall forward the application for landmark and Preservation area designation to the Historic Preservation Commission for their comments and recommendation.
   c. The Historic Preservation Commission shall make their comments and recommendation known to the Planning Commission and petitioner no later than seven (7) days prior to the public hearing before the Planning Commission. The said comments and recommendations shall be made available for public inspection. The Planning Commission will construe the absence of comment or recommendation as acceptance of the petition by the Historic Preservation Commission.
3. *Planning Commission recommendation.* No action shall be taken by the City Council with respect to the petition until it has received the recommendation of the Planning Commission. Said recommendation shall include the comments and recommendation of the Historic Preservation Commission and shall address the comments and recommendation of the Historic Preservation Commission, general planning considerations, including consistency with good planning practice,

and compatibility with adjoining permitted developments and uses. All recommendations shall be made in consideration of plans or area studies, subdivision and zoning requirements and projected public improvements applicable to the area affected by designation. A recommendation of approval shall be accompanied by conditions to be included in the ordinance establishing the landmark and preservation area or approval of a site development plan in a landmark and preservation area. Such conditions shall include, but not be limited to, the following:

a. Permitted uses, including maximum floor area;
b. Preservation and design standards for all new construction, alteration and repair;
c. Height limitations;
d. Review of exterior facade and design features or details by the Historic Buildings Commission;
e. Minimum yard requirements;
f. Off-street parking and loading requirements;
g. Sign regulations;
h. Requirements for deed restrictions, as applicable.

4. *Appeal or protest to Commission recommendation.*
   a. *Appeal by petitioner to recommendation of denial.* The petitioner may file an appeal to the City Council of a Planning Commission recommendation of denial of an application for a landmark and preservation area procedure or an amendment thereto in accord with the provisions of **Section 415.530** "Appeal and Protest Procedure for Special Procedures".
   b. *Protest by specified nearby property owners to recommendation of approval.* Specified nearby property owners may file a protest with the City Council against the Planning Commission's recommendation of approval of an application for a landmark and preservation area procedure or an amendment thereto in accord with the provisions of **Section 415.530** "Appeal and Protest Procedure for Special Procedures".

K. *Procedure--Approval Of Site Development Plan.* After passage by the City Council of an ordinance establishing a landmark and preservation area, a site development plan shall be submitted in accord with the following provisions. No building permits or authorization for improvement or development shall be issued prior to approval of such plans.

1. Plans for single-lot developments shall be submitted to the Department of Planning to be reviewed for compliance with the zoning ordinances and then forwarded to the Historic Preservation Commission for review by the Historic Preservation Commission. Said plans shall contain the minimum conditions of the specific ordinance governing the landmark and preservation area and, further, shall comply with provisions of the subdivision ordinance and other applicable City ordinances. Single lot development plans shall be recorded as outlined in Subsection (M).
2. If development in a designated landmark and preservation area requires trust indentures and/or maintenance agreements, a copy of the landmark and preservation area ordinance shall be recorded with said indentures or agreements.
3. In the case of multiple-lot developments, a site development concept plan for the designated area shall be submitted to the Planning Commission for review and approval. The concept plan shall be recorded as required by Subsection. Detailed site development section plans shall be submitted to the Department of Planning (and forwarded to the Historic Preservation Commission) for review and approval by the Planning Commission by individual building, lot, phase or plat representing a portion of the site development concept plan. The detailed site development section plans shall be recorded as required in Subsection (M).

L. *Procedure--Amendment Of Conditions Or Site Development Plan.* In order to amend conditions of an existing landmark and preservation area or to amend the site development plan approved for the landmark and preservation area, the procedure shall be as follows:

1. To amend the landmark and preservation area ordinance.
   a. The property owner or authorized agent shall submit a written request to amend ordinance conditions to the Department of Planning for review. A copy of the request shall be forwarded to the Historic Preservation Commission for review and recommendation. The Department shall evaluate the request for consistency in purpose and content with the nature of the proposal as originally advertised for public hearing and shall consider the comments of the Historic Preservation Commission.
   b. If the Department determines that the requested amendment is consistent in purpose and content with the nature of the original proposal as advertised, the Department shall so report to the Planning Commission. The Planning Commission shall then review the request and the report of the Department, then forward a recommendation to the City Council. A recommendation of approval shall include conditions to be included in the amended ordinance.
   c. If the Department of Planning determines that the requested amendment is not consistent in purpose and content with the nature of the proposal as originally advertised for public hearing, the Department shall so report to the applicant and the Planning Commission. The Planning Commission may forward a resolution of intent to the City Council for the purpose of a new public hearing on the matter in accord with proceedings specified in Section 415.560 "Procedure for Amending the Zoning Ordinance".
2. To amend the site development plan approved for the landmark and preservation area.
   a. The property owner or authorized representative shall submit an amended site development plan to the

Department of Planning for review. The Department shall forward a copy to the Historic Preservation Commission for its review and recommendation. The Department shall then evaluate the request for consistency in purpose and content with the nature of the proposal as originally advertised for public hearing with the Historic Preservation Commission's recommendation and the preliminary development plan approved by the City Council.

b. If the Department of Planning determines that the proposed site plan amendment is not in conflict with the original proposal as advertised and the approved preliminary development plan and meets all conditions of the landmark and preservation area ordinance, the Department upon recommendation of the Historic Preservation Commission may approve said amended plan. Said plan shall be recorded as required by Subsection (M).

c. If the Department of Planning determines that the proposed site plan amendment is not consistent in purpose and content with the nature of the proposal as originally advertised for public hearing or with the preliminary development plan approved by the City Council, the Department shall so report to the applicant and the Planning Commission. The Planning Commission may forward a resolution of intent to the City Council for the purpose of a new public hearing on the matter in accord with proceedings specified in **Section 415.560** "Procedure for Amending the Zoning Ordinance".

d. *Appeal to Commission of a decision by Department in reviewing development plan.* The petitioner/developer may appeal a decision by the Department of Planning, in cases where the Department of Planning is authorized to review development plans, to the Planning Commission. The petitioner shall have a fifteen (15) day period in which to file a written appeal and plan with the Commission. The written appeal, stating the reasons for the appeal, shall be submitted to the Department. The Commission shall make the final determination of the matter. No exceptions will be granted that are in violation of the particular ordinance governing the development plan.

M. *Recording.* Within sixty (60) days of approval of the initial, conceptual or amended site development plan, the plan shall be recorded with the St. Louis County Recorder of Deeds and thereby authorize development as depicted thereon with a copy to be filed with the City of Wildwood.

N. The permitted uses established in the ordinance governing the particular landmark and preservation area shall become effective upon recording of an instrument approved by the Department of Planning and the City Attorney. This recorded instrument shall constitute an affirmative covenant running with the land for a period of time specified in the ordinance. This covenant shall require the continuation of the preservation of the structure, site or area and prohibit the demolition of any structure without approval by the Historic Preservation Commission and the City Council. The City Council may release the covenant upon receipt of a report from the Planning Commission. (Ord. No. 1324 App. A §1003.191, 8-14-06)

The process for the consideration of this LPA request is as follows, with much of it being set forth in the regulations noted above:

	Steps in Process[1]	Review Authority
1.	First Presentation of Request to Historic Preservation Commission	Department of Planning
2.	Discussion of Request for Recommendation Purposes	Historic Preservation Commission and Department of Planning
3.	Action on Request, with Recommendation	Historic Preservation Commission
4.	Public Hearing on LPA	Planning and Zoning Commission
5.	Information Report	Department of Planning
6.	Letter of Recommendation	Planning and Zoning Commission
7.	Public Hearing on LPA	City Council
8.	Introduction of Bill (assumes approval of LPA)	City Council
9.	Passage of Bill into Ordinance (assumes approval of LPA)	City Council
10.	Placement of Element on City's Historic Registry (a requirement of the site-specific ordinance) – requires many of the same steps noted above	Historic Preservation Commission

At tonight's meeting, the intent of this agenda item is to introduce the proposal to the Historic Preservation Commission and accept preliminary comments from its members, so as at the next meeting, discussion can continue, leading to a recommendation that would be forwarded to the Planning and Zoning Commission for its use and consideration.

If any of the Commission Members should have any questions regarding this information, please feel free to contact the Department of Planning at (636) 458-0440. Thank you for your consideration of this information and input on this item.

Respectfully submitted,
CITY OF WILDWOOD

Joe Vujnich, Director
Department of Planning

Cc: The Honorable Timothy Woerther, Mayor
The Honorable City Council of the City of Wildwood
Daniel E. Dubruiel, City Administrator
Rob Golterman, City Attorney
Liz Weiss, Planner – Zoning
Michael Phelan, Element Owner

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[i] Additional meetings may be scheduled at the discretion of the Commissions or City Council, if needed or desired.

Attachment B –
Background Information

WILDWOOD

HISTORIC CENTAUR

City of Wildwood, Missouri

Historic Preservation Commission

Approval Date of History – April 24, 2014

Centaur is an area that still offers an opportunity to look back to what western St Louis County used to resemble at the time of its earliest settlement. Centaur's character is attributable to its location near the Missouri River and associated floodplain. The threat and existence of flooding in this community caused it not to experience the levels of growth that other portions of St. Louis County experienced over almost two hundred (200) years of existence. Therefore, Centaur is a community that is defined by the natural features in many ways, and different from other historic locations that now form an integral part of the City of Wildwood.

The Missouri River is the defining natural feature in this area, given the remnants of its former path create the fertile floodplain that still sustains agricultural activities today, while creating the pronounced bluffs, where Centaur remains, nestled next to them. These bluffs, consisting of limestone, provided a building material source and led to the growth of quarrying in this area as well. With these quarries in the area of Centaur, the river provided transportation for goods, which was eventually supplanted by the railroad, which followed the bluffs and the edge of the wide floodplain to markets across the region, and beyond.

These natural attributes that led to the development of the Centaur community were first recognized by the native tribes that inhabited the area for many millenniums. These tribes appear to have been in the area beginning around 12000 to 8000 B.C., based upon the very limited archeological remains and remnants that have been discovered in other similar settings elsewhere. These archeological remains and remnants are hard to find, and limited, due to the nomadic nature of these people and their small populations. The cultural periods spanned by these inhabitants are from the Early Man to the Dalton Period (Harl, Naglich, and Nixon, 1990). Thereafter, the tribes became more stationary and formed small settlements near water and the other plentiful resources that are found in this area. This pattern of settlement appears to have ended during the timeframe of 1300 and 1400 A.D., leading to the inhabitants returning to a more nomadic nature and traveling further south of this area.

The first Euro-American settlement in the vicinity of Centaur appears to be in the nearby the Wild Horse Valley Area in 1797 by James Mackey, at the mouth of Bonhomme Creek, and was named St. Andrews. This settlement was situated well to east of the current Centaur community. At one point, this community had three hundred (300) residents. James Mackey owned almost four thousand (4,000) acres in this area and controlled much of the land that formed the Wild Horse Creek Watershed. One (1) of the first to settle the Centaur Area was a prominent Virginia family, led by Reverend Robert Coleman, along with two (2) sons – Robert G. and William H. Coleman.

Other settlers in this area included Alexander McCourtney, William Bellew, William Bell, Henry Tyler, Theodore St. Onge, Adam Kesselring, Johann Sandfoss, and Anton Leiweke. These large or influential landowners, of which several profited due to ownership of slaves, shaped the character of this portion of west St. Louis County, which is now Wildwood.

The Centaur community was settled sometime between 1885 and 1891 by Anton Leiweke and would soon include the Centaur Lime Company and a stave factory owned by Henry Kelpe and his sons, who traveled from their home, located to south, to Centaur. Centaur had a modest population of thirty-three (33) inhabitants in 1909 (John Sebastian, 1909), but was an entrepreneurial hotbed due to its rich base of resources and transportation options, all being anchored by the railroad that had come to the area many years earlier in 1887 and the ever-prevalent and defining Missouri River. This area provided needed materials for a growing region, with some of the lime, rock, sand, and gravel used at the 1904 World's Fair, which was hosted by the City of St. Louis, for the grand buildings, structures, and outdoor spaces. The railroad station in Centaur was an integral part of this community, served generations of residents and workers, and remains today, as a reminder of this area's rich past.

The Centaur community, from approximately 1909 to 1933, is a story of the Leiweke Family and its role in its development. The Leiweke Family opened a quarrying operation, along with other enterprises, in the Centaur community, all of which flourished for over two (2) decades. The community, again, benefited from its proximity to the railroad line and the Missouri River. Centaur's location is synonymous to these surrounding man-made and physical features and, through time, and by water and other natural forces, helped the community grow, but also led to many devastating events.

In 1924, a major fire occurred in the Centaur community, starting in the Centaur Lime Company Building and encompassing seven (7) other houses and barns. This major fire also destroyed the local church/parsonage. After the fire, Anton Leiweke constructed a two (2) story, brick residence on the location of the destroyed Centaur Lime Building Company facility, which is currently owned by Michael Phelan. A new barn was constructed as well (which was also lost to another fire), but many of the other buildings were never replaced, after this 1924 fire, and business activity slowed, as the Great Depression descended on America. By 1929, the Centaur community began to struggle, which would affect it for many decades.

However, in 1965, the St. Louis County Council established a new Zoning Ordinance and corresponding classifications, which created a three (3) acre land use pattern around the Centaur community. This large-lot, single family pattern of development began a new chapter for the area, where individuals invested in larger tracts of land for single homesites and thereby preserved the rural character of the area. Although the Centaur community maintained its residential nature throughout this same period of time, these new residences in the area bolstered it.

For almost thirty (30) years, from that 1965 event, St. Louis County, Missouri provided government services to the area of Centaur that included its application of modern zoning, land use, and subdivision laws, along with the maintenance of public roads and bridges. Many people in the larger community of unincorporated subdivisions, neighborhoods, and rural areas in Centaur's vicinity, and beyond, were dissatisfied with the services offered by St. Louis County Government.

This dissatisfaction reached a point, where a group of residents began to explore creating a new city that would encompass much of the far western reaches of St. Louis County and include many of the historic communities that had pre-dated the more recent formation of municipal governments around it. These residents, known as the founders or incorporators, labored against significant odds to form this government that would oversee almost sixty-seven (67) square miles of land area. However, these odds did not prove to be insurmountable and, on February 6, 1995, voters in this area agreed to form the new City of Wildwood. This new City included the Centaur community and many other historic settlements, structures, buildings, and elements that had existed in some form for almost two (2) centuries, in some instances. The incorporation effort that formed the City of Wildwood was a landmark event for St. Louis County and set into place a vision to preserve the assets of this community from degradation and rapid change, keeping them from slowly disappearing over time and from the collective memory of this area. This vision, expressed in the City's Charter and Master Plan, remains as focused today, as it was in 1995.

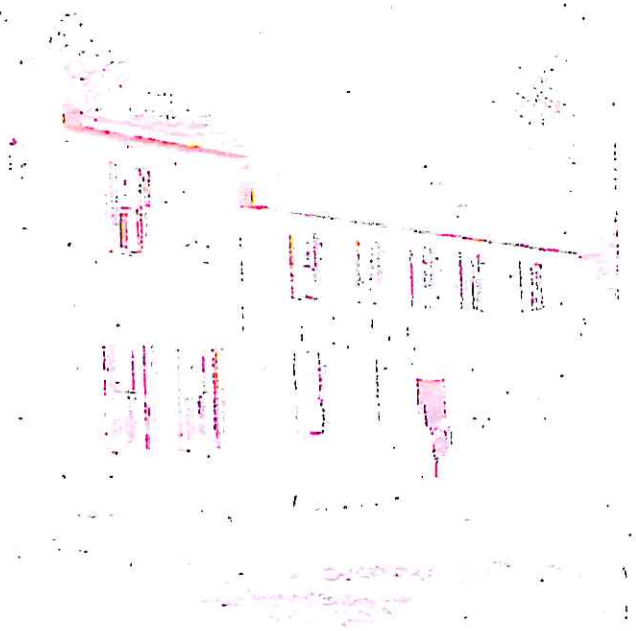
More recently, the purchase of many parcels of ground by Michael Phelan has led to a renaissance in the area and the restoration of many of the historic buildings, including the old church/school that is located on the east side of Centaur Road, south of the railroad tracks. Beyond the activities of Mr. Phelan and other large and small landowners, the Centaur community is still effected by the Missouri River and its flooding. In 1993, a major, catastrophic flood significantly impacted the area and, since then, has had several instances of other high water occurrences, including 2013. The relationship of this community and the river remains one (1) of its primary defining characteristics.

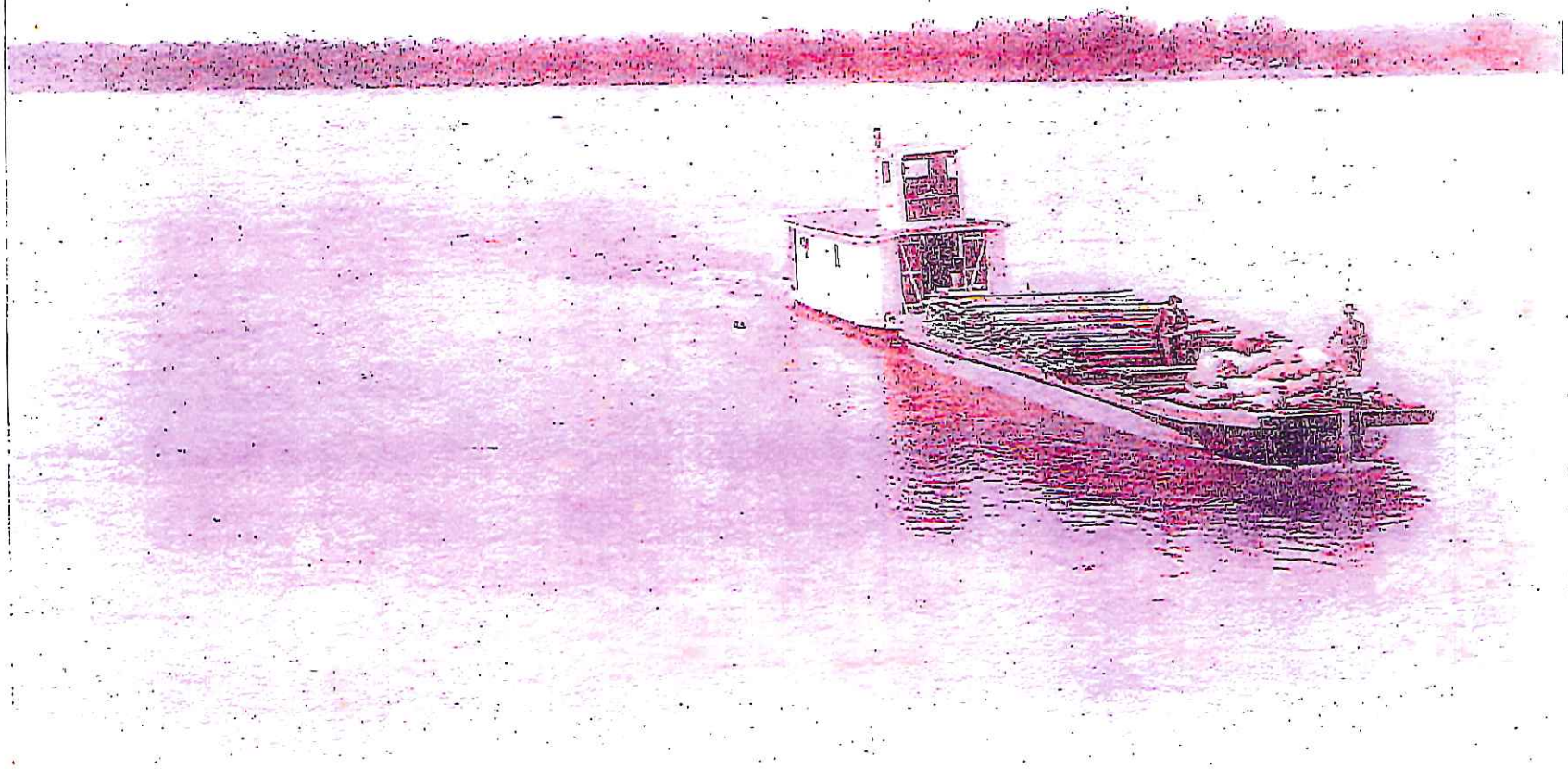
Sources:

Harl, Joseph, Naglich, Dennis and Nixon, Joseph M.
1990 Report of Phase I Reconnaissance Level Survey of Prehistoric and Historic Cultural Resources in the Wildhorse Creek Drainage Basin in South St. Louis County.
Research Report - Administered by Missouri Department of Natural Resources -January 1990.

Sebastian, John
1909 In the Heart of Missouri, The New Rock Island Country.
Passenger Traffic Department, Rock Island Lines, Chicago.

CENTAUR LIMS. & DRY GOODS & GROCERIES.

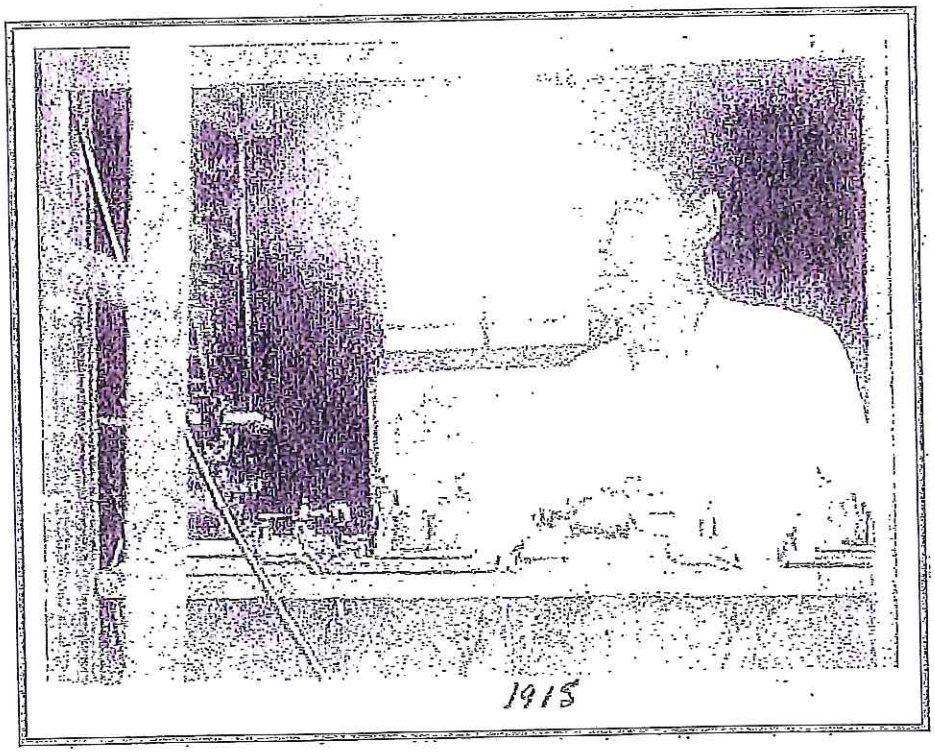


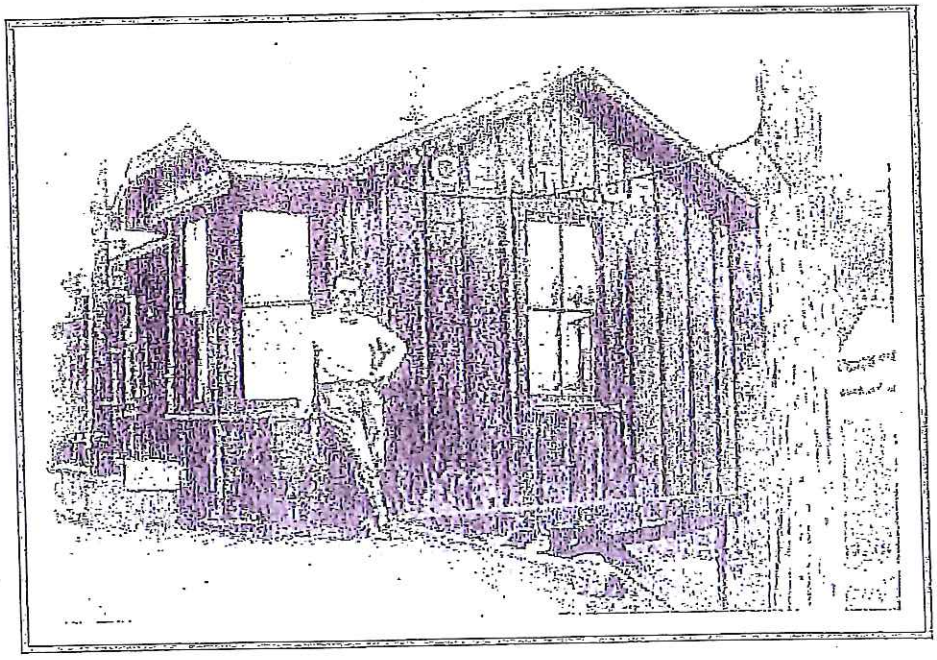


CENTAUR STATION

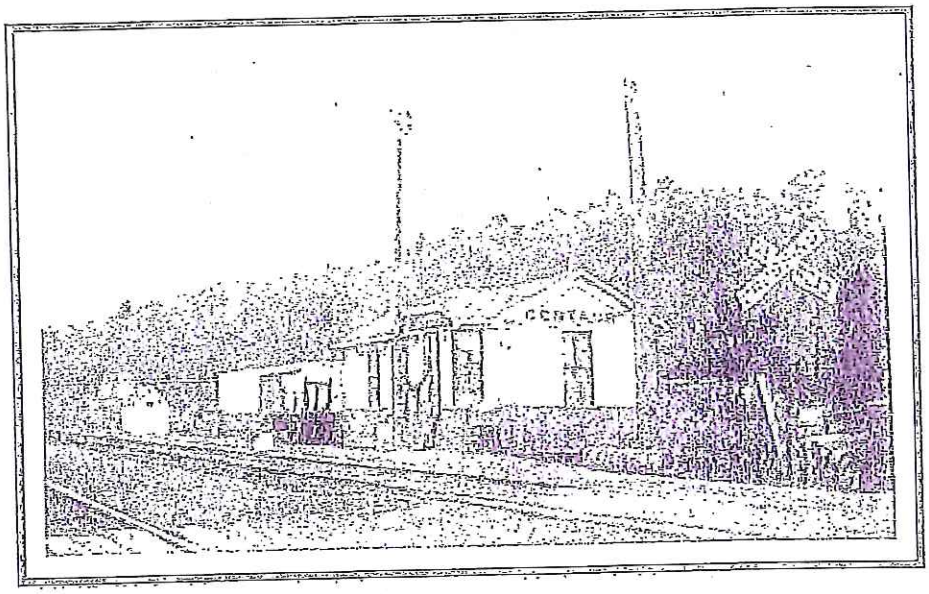
These photos of the Centaur Depot were contributed by Irene Selz-Hosfeld, the daughter of the Walter Selz, the Station Agent at the time of the photos.

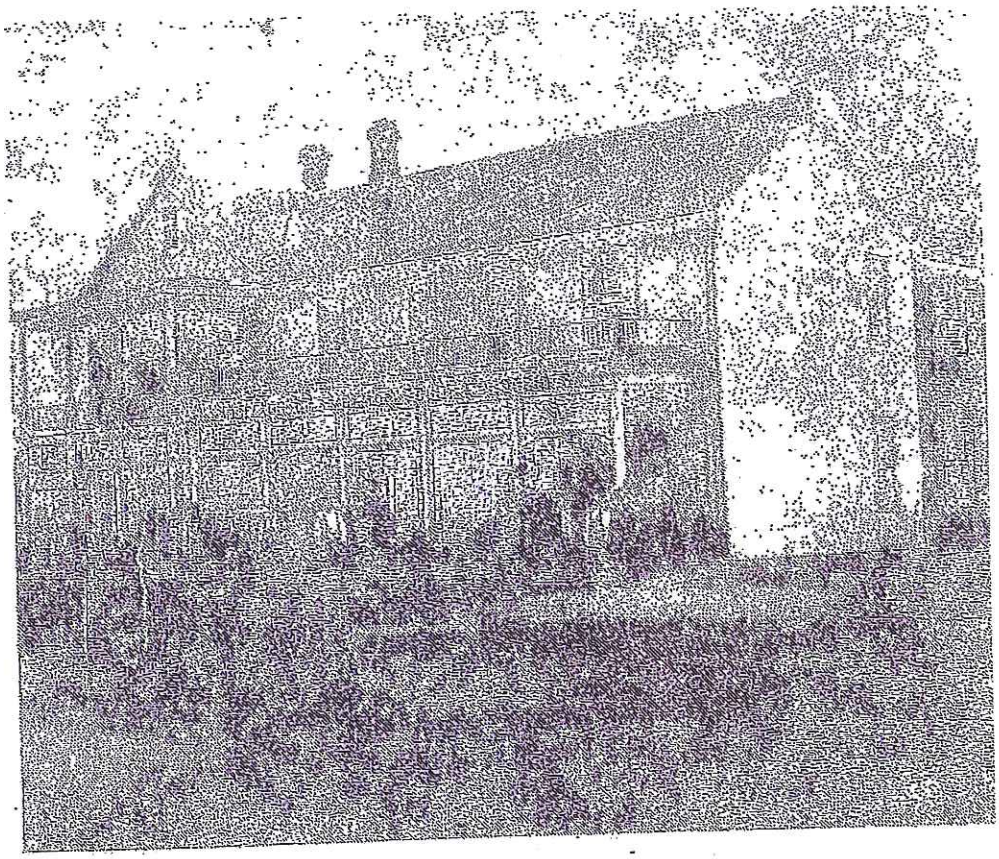
The first two photos were taken in 1915.





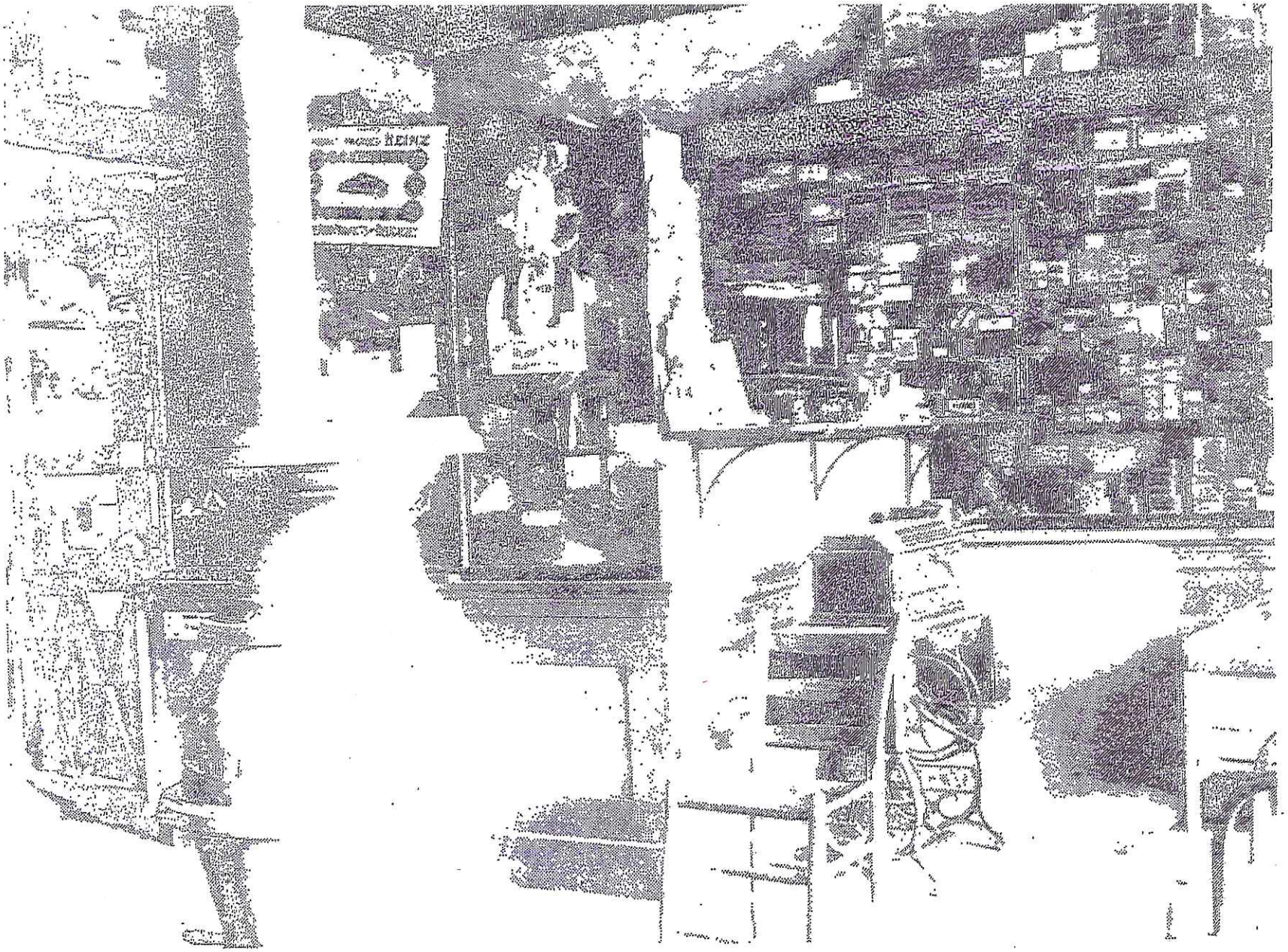
This 1928 photo shows the new paint scheme:



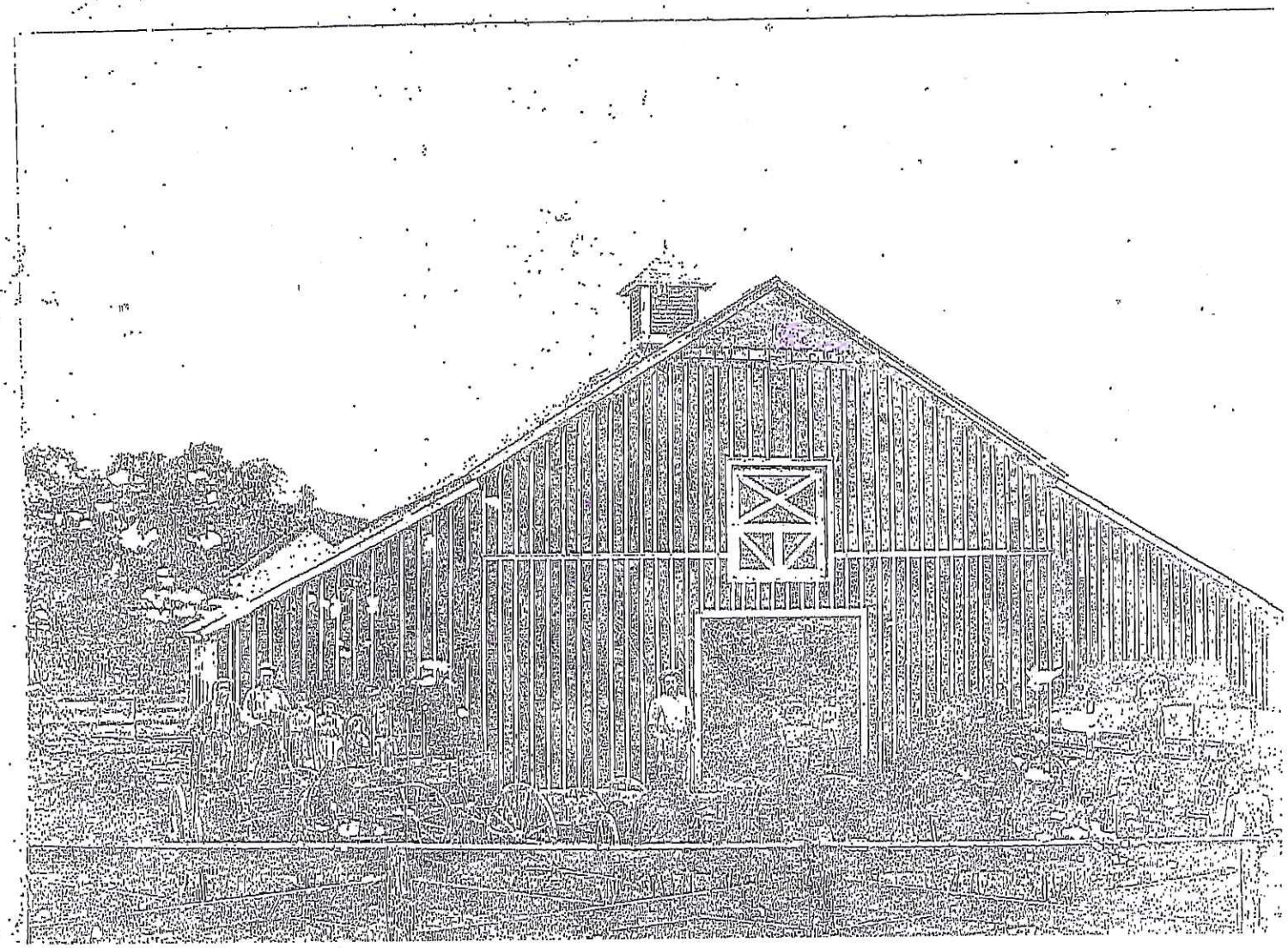


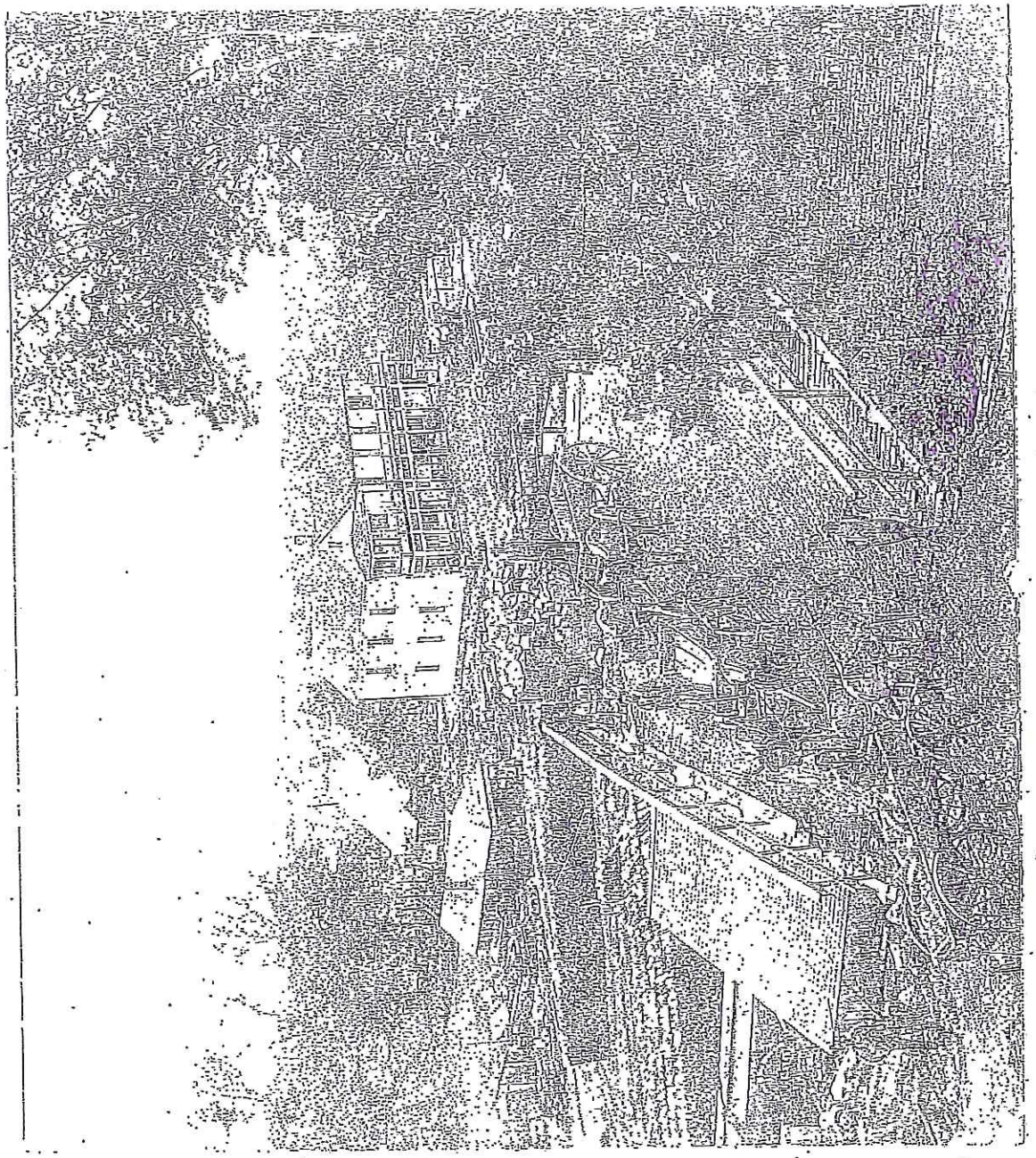
Located in the center of Centaur Station, this building served as both the office of the Centaur Lime Company and the general store.

Photo courtesy of Robert Leiweke

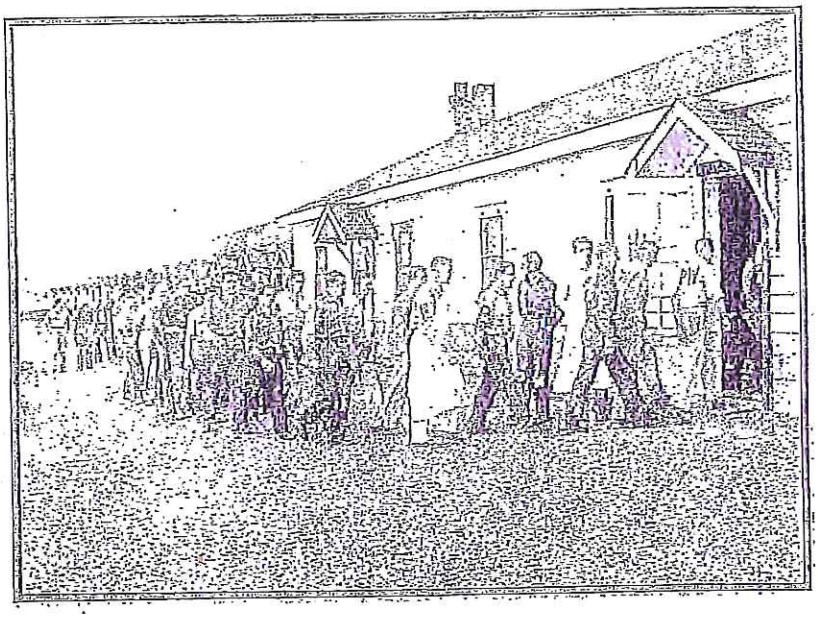


[illegible] the general store at Centaur Station during the turn of [illegible] century.



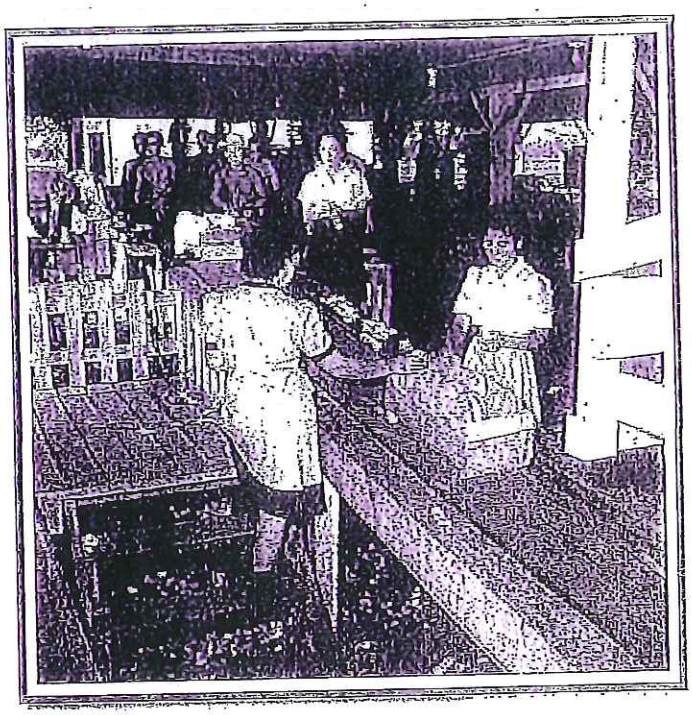


HELLWIG FARMS - WWII

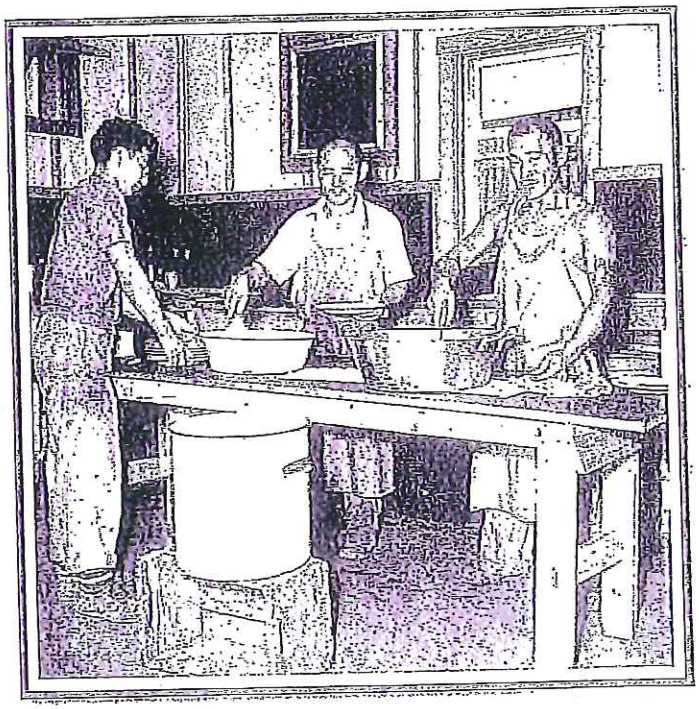


German POWs march into the mess hall at their small work camp on the Hellwig Brothers Farm on Gumbo Flats, the Missouri River bottomland now called Chesterfield Valley, in March 1945. About 100 POWs lived there and worked on area farms, replacing Americans who had gone to war.

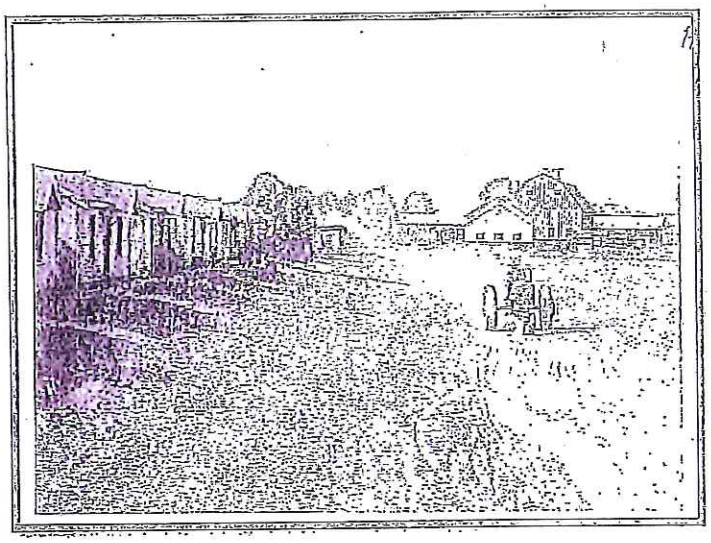
The front gate of the POW camp at Hellwig Brothers Farm on Gumbo Flats, part of the Missouri River bottomland in St. Louis County. The photo was taken in March 1945, shortly after radio commentator Walter Winchell told his national audience that POWs from Gumbo could sneak across the river and blow up the munitions plant at Weldon Spring. American commanders said it couldn't happen. Post-Dispatch file photo



A scene in the cantaloupe shipping sheds at the Hellwig Brothers farm near St. Louis. The Hellwig Brothers employ nearly 100 men from the Rohwer Relocation Center. In the foreground are seen two or three women who are wives of the employees. They are labeling the choice melons before they are packed for shipping. -- Photographer: Mace, Charles E. -- Gumbo, Missouri. 9/1/43

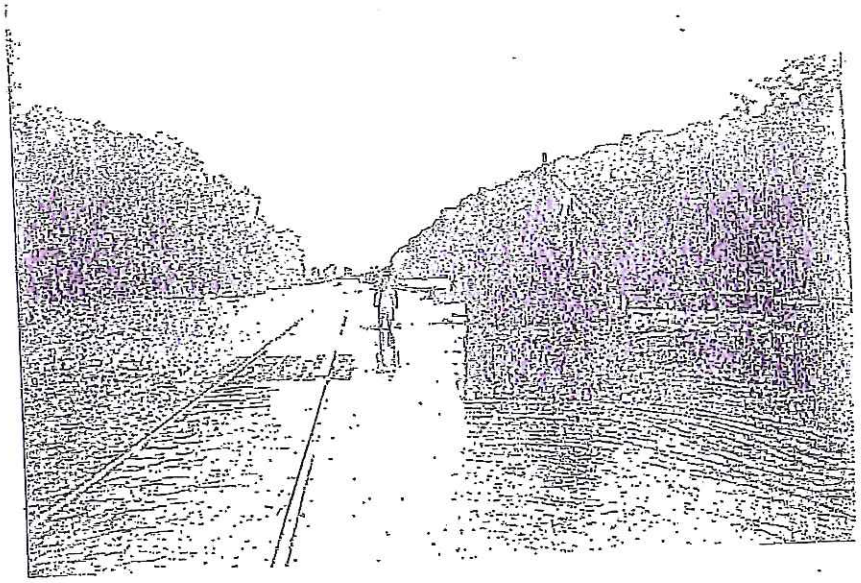


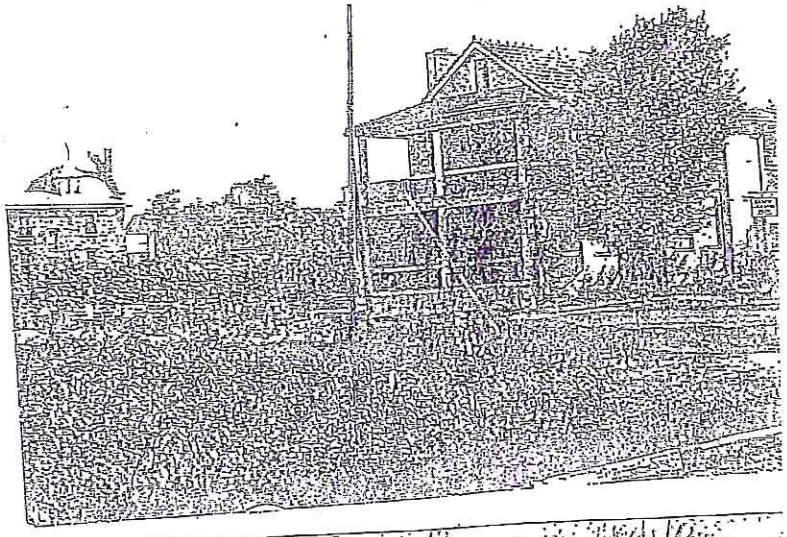
Kitchen crew at the Hellwig Brothers Farm near St. Louis. All the men were recruited from the Relocation Center at Rohwer, and they work in the mess hall which was erected by the Hellwigs specially for the nearly 100 relocatees they employ. The men are, left to right: Koyama, Kaneda and Kuwata. Photographer: Mace, Charles E. Gumbo, Missouri.

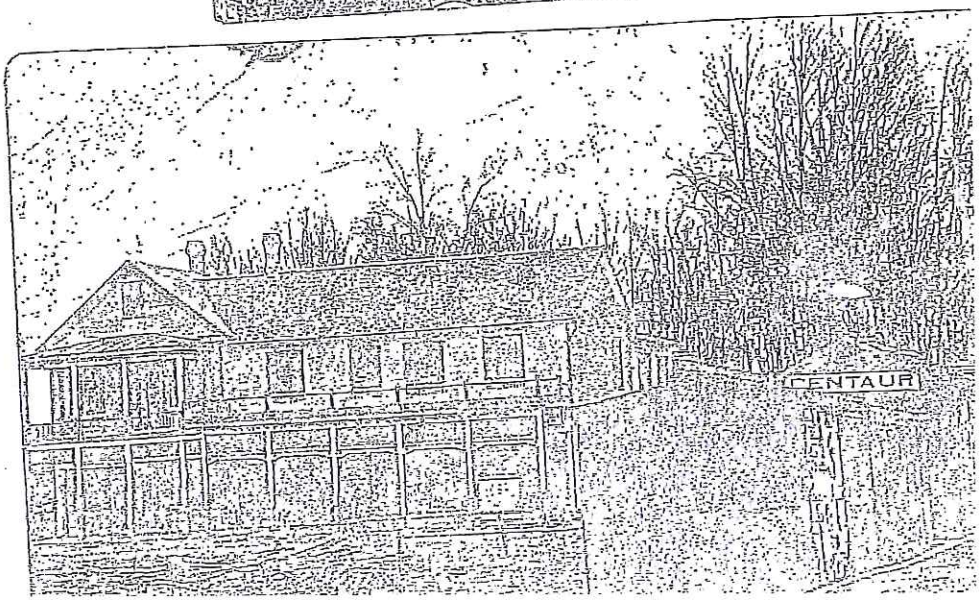


Showing some of the dormitories and the mess hall which were built by the Hellwig Brothers on their farm west of St. Louis. The buildings were specially erected and house many Japanese-American relocatees employed by the Hellwigs. One of the recruits from the Rohwer Center drives a tractor in the foreground. -- Photographer: Mace, Charles E. -- Gumbo, Missouri. 9/2/43

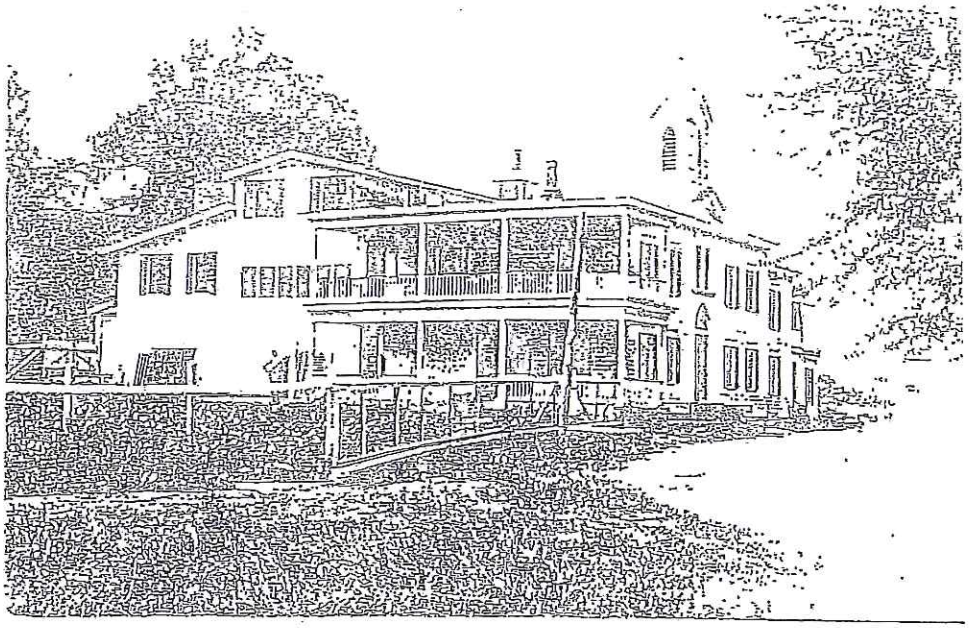
(The Rohwer War Relocation Center was a World War II Japanese American internment camp located in rural southeastern Arkansas, in Desha County. It was in operation from September 18, 1942 until November 30, 1944, and held as many as 8,475 Japanese Americans forcibly evacuated from California. The Rohwer War Relocation Center Cemetery is located there, and it was declared a National Historic Landmark in 1992.)





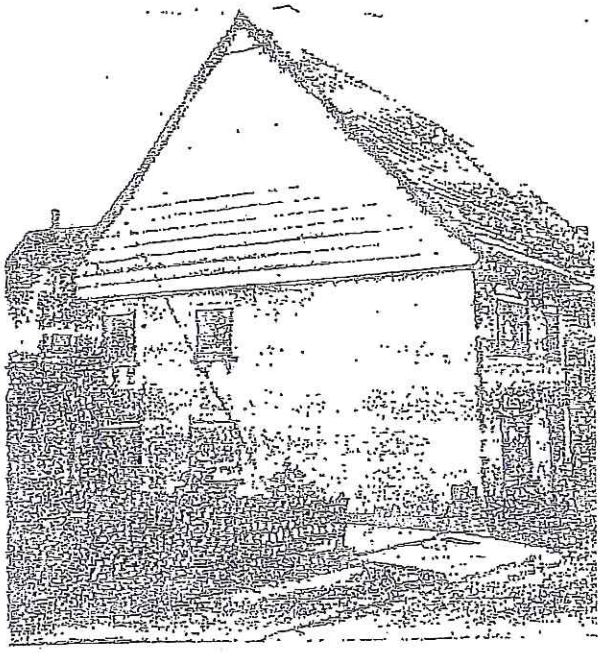

CENTAUR

The Joseph Leiweke Family
Adeline Helen Francis Rose

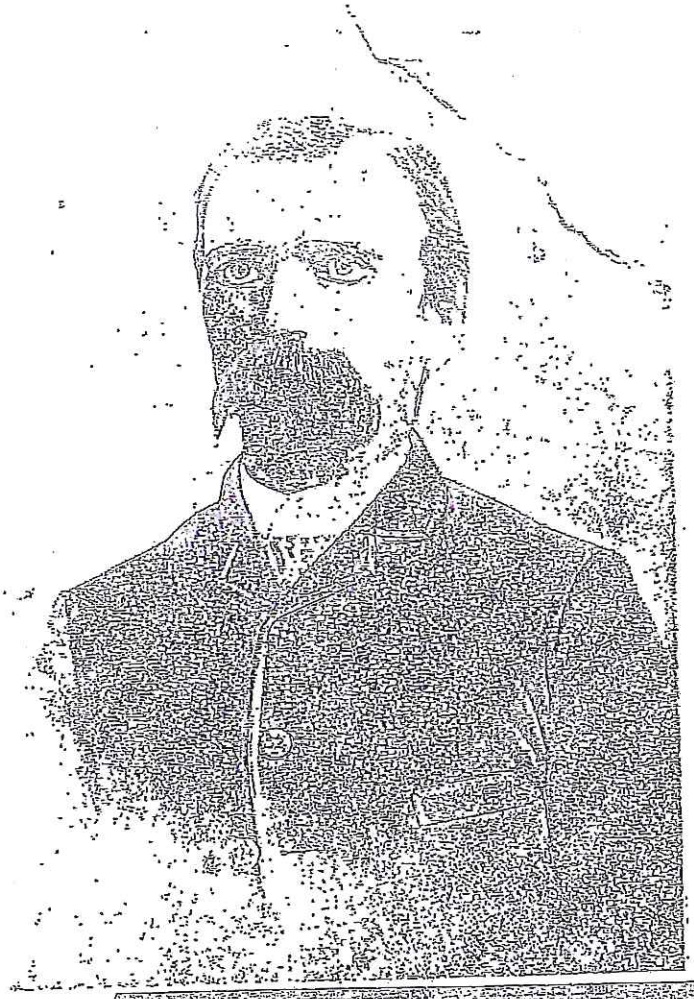


The Leiweke Home and St. Anthony's Church in Centa

Anton and Josephine
Reilly Leiweke
Anna and Joseph Leiweke



Anton's home in Riesel, Germany



Anton Leiweke

Selig sind die Todten, die im Herrn sterben! Von nun an spricht der Geist, sollen sie ruhen von ihren Mühen, denn ihre Werke folgen ihnen nach. Offenb. Joh. 14, 13.

Zum frommen Andenken

an

unsere unvergeßliche Mutter

Antonia Leiweke,

geborene Bartmann,

geb. am 18. Februar 1860 zu Westphalia, Osage Co., Mo., gestorben am 26. September 1900 zu St. Louis, Missouri.

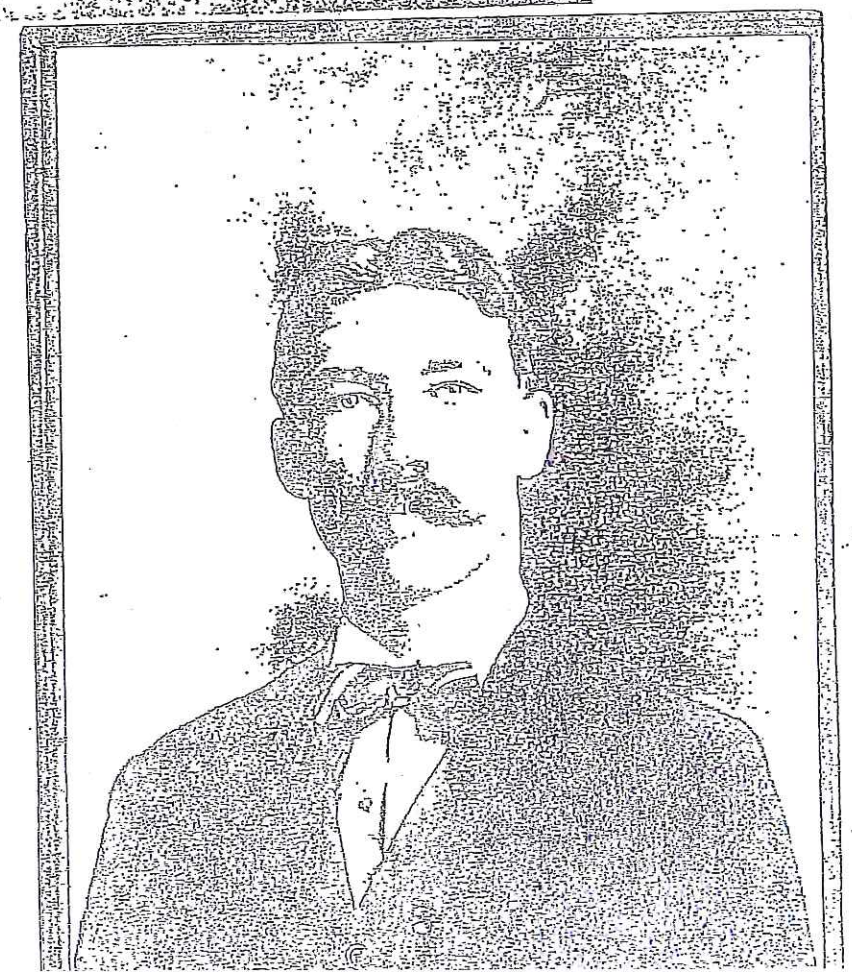
Ablaßgebete.

Mein Jesus, Barmherzigkeit!
100 Tage Ablaß, den armen Seelen zuwendbar.

Jesus, Maria und Joseph, euch schenke ich mein Herz und meine Seele.

Jesus, Maria und Joseph, steht mir bei im letzten Streit.

Jesus, Maria und Joseph, möge meine Seele mit euch im Frieden scheiden.
300 Tage Ablaß, den armen Seelen zuwendbar.



Joseph H.C. Leiweke

INCORPORATED UNDER THE LAWS OF THE STATE OF MISSOURI

No. 20

Shares

Capital Stock, $12,000.00

Centaur Lime Company

Full Paid [redacted] Non-Assessable

This Certifies that Jas. H. Lepper is the owner of Eighteen (18) Shares of One Hundred Dollars each of the Capital Stock of Centaur Lime Company

Transferable only on the Books of the Corporation by the Holder hereof in person or by Attorney upon surrender of this Certificate properly endorsed.

In Witness Whereof, the duly authorized officers of said Corporation have hereunto subscribed their names and caused the Corporate Seal to be hereto affixed this [illegible] day of [illegible] A.D. 19[illegible]

Jas. H. Lepper, Secretary

A. Benj. Lewis, President.

SHARE

ONE HUNDRED DOLLARS

SHARES

$100 EACH

No. 9033.

A.

Post Office Department,

OFFICE OF THE FOURTH ASSISTANT POSTMASTER GENERAL,

BOND DIVISION.

Washington, D. C., Sept 22, 1905.

SIR:

THE POSTMASTER GENERAL has this day discontinued the Post Office of Pillsman, in the County of Franklin and State of Ohio, to take effect Oct 14, 1905.

The Postmaster at that office having been instructed to transmit by mail, duly registered, to your address, the public property belonging to the late Post Office of Pillsman consisting of mail keys, locks, books, registry records, receipts, stationery, stamps, and stamped envelopes, etc., you are required by the Postmaster General to take charge of the same, and having given the late Postmaster receipts therefor, to transmit the keys to the Office of the Second Assistant Postmaster General in a sealed letter, *duly registered*, and the books and other records and papers received by you must be kept as a part of the files of your office. Such books, blanks, and papers must be regarded by the Postmaster receiving them as a part of the records of his office, and must be kept subject to any call or examination that may be made by the Department or its authorized officials. All unused blanks (not records), may be retained by you for official use in your office. All postmarking and canceling stamps, canceling ink, inking pads, and copies of the Postal Laws and Regulations you will forward by mail to the First Assistant Postmaster General, Division of Post Office Supplies. You will also direct the mail contractor or the carrier to omit supplying said office with the mail.

The postage stamps, stamped envelopes, etc., you will retain and dispose of by sale at your office, accounting for them the same as if the stock had been received direct from the Department, except that your records must show from what source it came. Charge the stock in the Quarterly Postal Account between Articles A and B by an entry reading, for example, "Stock received from Eagle, Pa., $ _____;" if stock is received from more than one office, then have the entry read, "Stock received from discontinued offices, $ _____," and on a separate piece of paper make a list of the offices and the amount received from each; **pin this list inside the Quarterly Report.** **PRESIDENTIAL** offices should make such lists on Form No. 1511, Statement of Stamps, etc., Received During the Quarter, after first entering and making a total of the stock received direct from the Department.

You are furthermore directed to make known to the people interested in the office the fact of its discontinuance, and to open, deliver, and account for the mails addressed to the late office.

You are required to report your action in the premises, with all convenient dispatch, under address to me.

If the discontinuance of the above-named office shall also involve discontinuance of the mail service (or any portion of it) on the route on which the office is situated, care should be taken to obtain the public property (money excepted) at the said office before the contractor makes his last trip, AS YOU ARE NOT AUTHORIZED TO INCUR ANY EXPENSE TO THE DEPARTMENT IN EXECUTING THIS ORDER.

If it, moreover, involve the discontinuance of the money-order business and the Postmaster thereat transmits to you records and supplies pertaining to that office, you will be pleased to promptly notify the "First Assistant Postmaster General, Money-Order Division, Washington, D. C.," giving the date of actual discontinuance and requesting instructions as to what disposal shall be made of the supplies and records thus received.

Very respectfully,

P. V. DeGraw

Fourth Assistant Postmaster General.

Postmaster,

Centaur Stn

_____ Co.,

Ohio

5—3663

In all communications to this Department be careful to give the name of your Post Office, County, and State.

Send cancelling ink and inking pads to office of First Asst. P. M. General, Div. of Post Office Supplies.

No. 9033.

Post Office Department,

OFFICE OF THE FOURTH ASSISTANT POSTMASTER GENERAL,

BOND DIVISION,

Washington, D. C., MAY 13 1904, 190

SIR:

THE POSTMASTER GENERAL has this day discontinued the Post Office of Fox Creek, in the County of St. Louis and State of Mo., to take effect MAY 31 1904, 190

The Postmaster at that office having been instructed to transmit by mail, duly registered, to your address, the public property belonging to the late Post Office of Fox Creek consisting of mail keys, locks, books, registry records, receipts, stationery, stamps, and stamped envelopes, etc., you are required by the Postmaster General to take charge of the same, and having given the late Postmaster receipts therefor, to transmit the keys to the Office of the Second Assistant Postmaster General in a sealed letter, *duly registered*, and the books and other records and papers received by you must be kept as a part of the files of your office. Such books, blanks, and papers must be regarded by the Postmaster receiving them as a part of the records of his office, and must be kept subject to any call or examination that may be made by the Department or its authorized officials. All unused blanks (not records) and the ~~canceling ink and inking~~ pads may be retained by you for official use in your office. All postmarking and canceling stamps and copies of the Postal Laws and Regulations you will forward by mail to the First Assistant Postmaster General, Division of Post Office Supplies. You will also direct the mail contractor or the carrier to omit supplying said office with the mail.

The postage stamps, stamped envelopes, etc., you will retain and dispose of by sale at your office, accounting for them the same as if the stock had been received direct from the Department, except that your records must show from what source it came. Charge the stock in the Quarterly Postal Account between Articles A and B by an entry reading, for example, "Stock received from Eagle, Pa., $ .....;" if stock is received from more than one office, then have the entry read, "Stock received from discontinued offices, $ .....," and on a separate piece of paper make a list of the offices and the amount received from each; **pin this list inside the Quarterly Report.** PRESIDENTIAL offices should make such lists on Form No. 1511, Statement of Stamps, etc., Received During the Quarter, after first entering and making a total of the stock received direct from the Department.

You are furthermore directed to make known to the people interested in the office the fact of its discontinuance, and to open, deliver, and account for the mails addressed to the late office.

You are required to report your action in the premises, with all convenient dispatch, under address to me.

If the discontinuance of the above-named office shall also involve discontinuance of the mail service (or any portion of it) on the route on which the office is situated, care should be taken to obtain the public property (money excepted) at the said office before the contractor makes his last trip, AS YOU ARE NOT AUTHORIZED TO INCUR ANY EXPENSE TO THE DEPARTMENT IN EXECUTING THIS ORDER.

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Very respectfully,

J. T. Priston

Fourth Assistant Postmaster General.

Postmaster,

Centaur Sta

St. Louis Co.,

Mo.

5—3863

LOT 1 OF FEHRENBACH'S SUBDIVISION AS RECORDED IN PLAT BOOK 31 PAGE 14 OF THE ST. LOUIS COUNTY RECORDS AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A FOUND AXLE MARKING THE NORTHWEST CORNER OF SAID LOT 1;
THENCE NORTH 72°00'00" EAST A DISTANCE OF 337.75 FEET TO A POINT;
THENCE SOUTH 18°00'00" EAST A DISTANCE OF 148.57 FEET TO A POINT;
THENCE SOUTH 71°50'57" WEST A DISTANCE OF 111.43 FEET TO A FOUND IRON ROD;
THENCE SOUTH 75°13'15" WEST A DISTANCE OF 237.35 FEET TO A FOUND AXLE;
THENCE NORTH 14°05'00" WEST A DISTANCE OF 156.00 FEET TO THE POINT OF BEGINNING.
CONTAINING 1.30 ACRES MORE OR LESS.

LOT 9 OF FEHRENBACH'S SUBDIVISION AS RECORDED IN PLAT BOOK 31 PAGE 14 OF THE ST. LOUIS COUNTY RECORDS AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A FOUND AXLE MARKING THE NORTHEAST CORNER OF SAID LOT 9;
THENCE SOUTH 14°00'00" EAST A DISTANCE OF 108.00 FEET TO A FOUND IRON ROD;
THENCE SOUTH 72°00'00" WEST A DISTANCE OF 502.02 FEET TO A POINT ON A CURVE ON THE CENTERLINE OF WHITEHORSE CREEK, THE RADIUS POINT OF SAID CURVE BEARS SOUTH 05°48'00" EAST 225.00 FEET;
THENCE WITH THE CENTERLINE OF WHITEHORSE CREEK ALONG SAID CURVE TO THE RIGHT AN ARC DISTANCE OF 60.24 FEET TO A POINT OF REVERSE CURVE;
THENCE WITH SAID REVERSE CURVE HAVING A RADIUS OF 230.00 FEET AN ARC DISTANCE OF 62.23 FEET TO A POINT;
THENCE NORTH 00°01'10" EAST A DISTANCE OF 40.30 FEET TO A POINT;
THENCE WITH A CURVE TO THE LEFT HAVING A RADIUS OF 63.00 FEET AN ARC DISTANCE OF 7.54 FEET TO A POINT ON THE NORTH LINE OF AFOREMENTIONED LOT 9;
THENCE DEPARTING SAID CREEK CENTERLINE AND WITH THE NORTH LINE OF SAID LOT 9 NORTH 72°00'00" EAST A DISTANCE OF 487.03 FEET TO THE POINT OF BEGINNING AND CONTAINS 1.61 ACRES MORE OR LESS.

SITE A RECORDED BENCHMARK: ST. LOUIS COUNTY BENCHMARK (11-36) "L" ON NORTHEAST CORNER OF SIDEWALK TO A TWO-STORY BRICK HOUSE AT THE SOUTHWEST CORNER OF RAILROAD TRACKS AND CENTAUR ROAD. ELEVATION = 487.72'

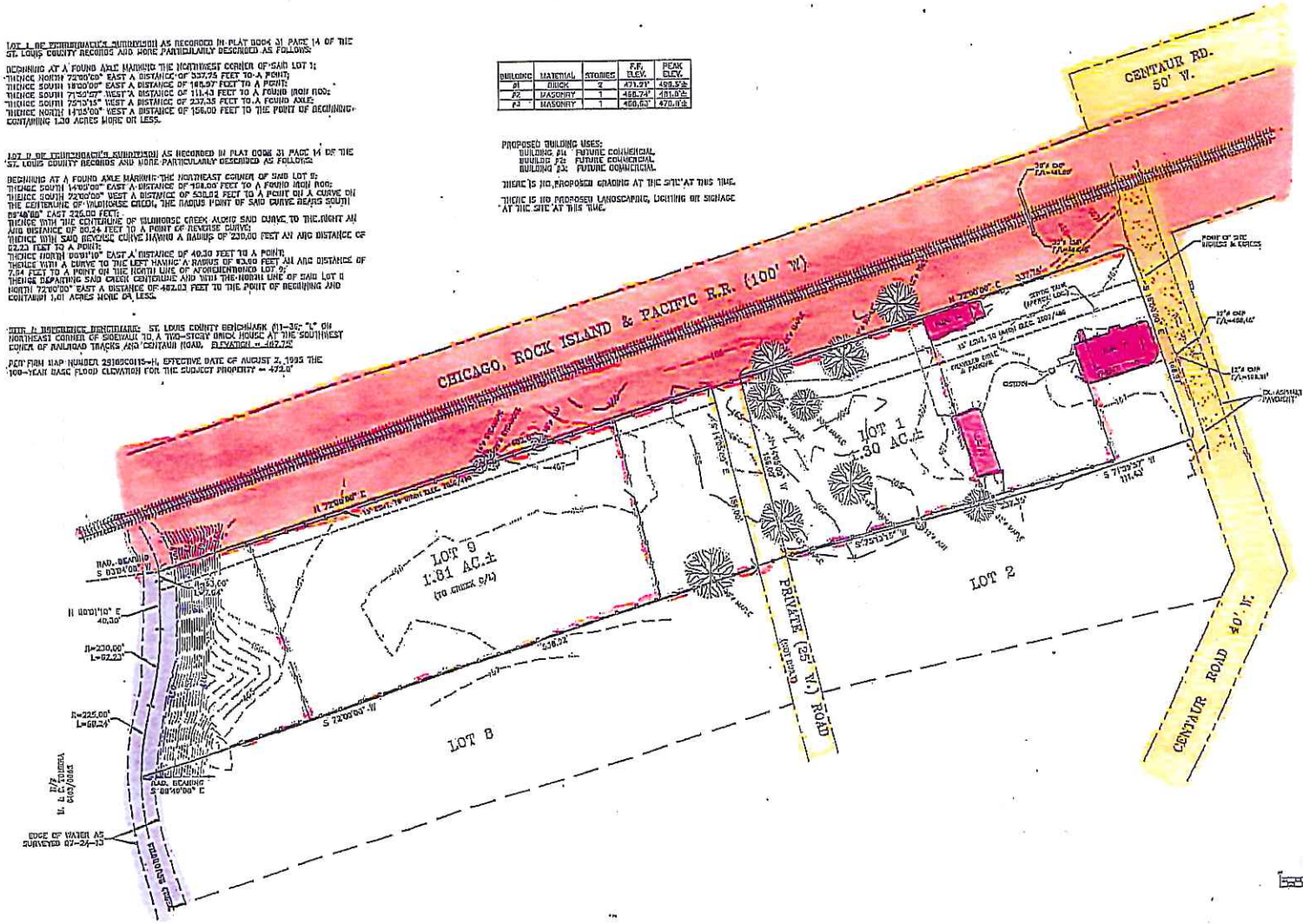
PER FIRM MAP NUMBER 29189C0115-H, EFFECTIVE DATE OF AUGUST 2, 1995 THE 100-YEAR BASE FLOOD ELEVATION FOR THE SUBJECT PROPERTY = 472.0'

BUILDING	MATERIAL	STORIES	F.F. ELEV.	PEAK ELEV.
#1	BRICK	2	471.71'	491.5'±
#2	MASONRY	1	466.74'	481.0'±
#3	MASONRY	1	468.63'	470.0'±

PROPOSED BUILDING USES:
BUILDING #1: FUTURE COMMERCIAL
BUILDING #2: FUTURE COMMERCIAL
BUILDING #3: FUTURE COMMERCIAL

THERE IS NO PROPOSED GRADING AT THE SITE AT THIS TIME.

THERE IS NO PROPOSED LANDSCAPING, LIGHTING OR SIGNAGE AT THE SITE AT THIS TIME.



This document shall remain the property of Bierscher Ditch and Associates, Inc. (BDA) and may not be used by anyone party without the written consent of said BDA.

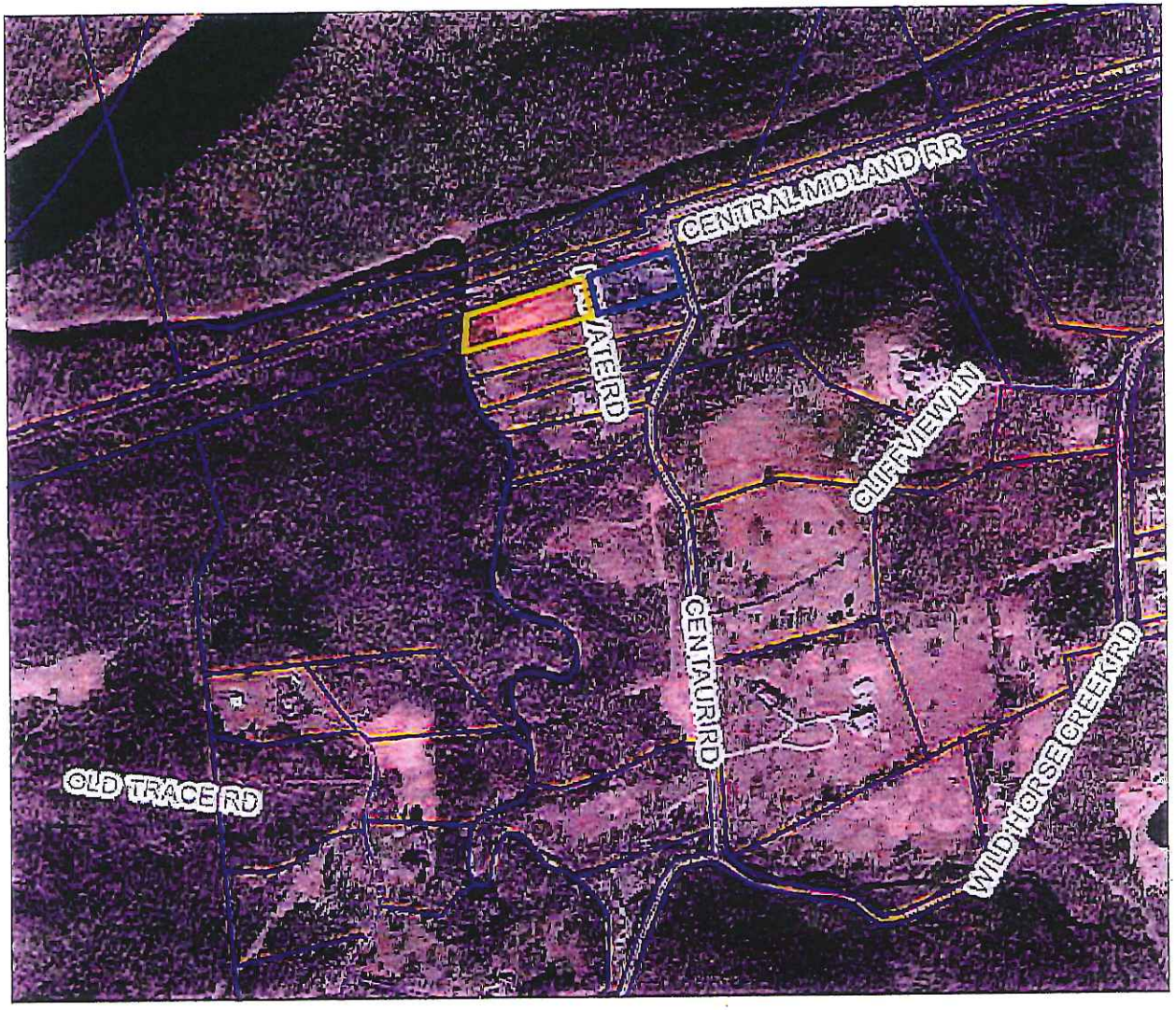
No.	DATE	REVISION DESCRIPTION

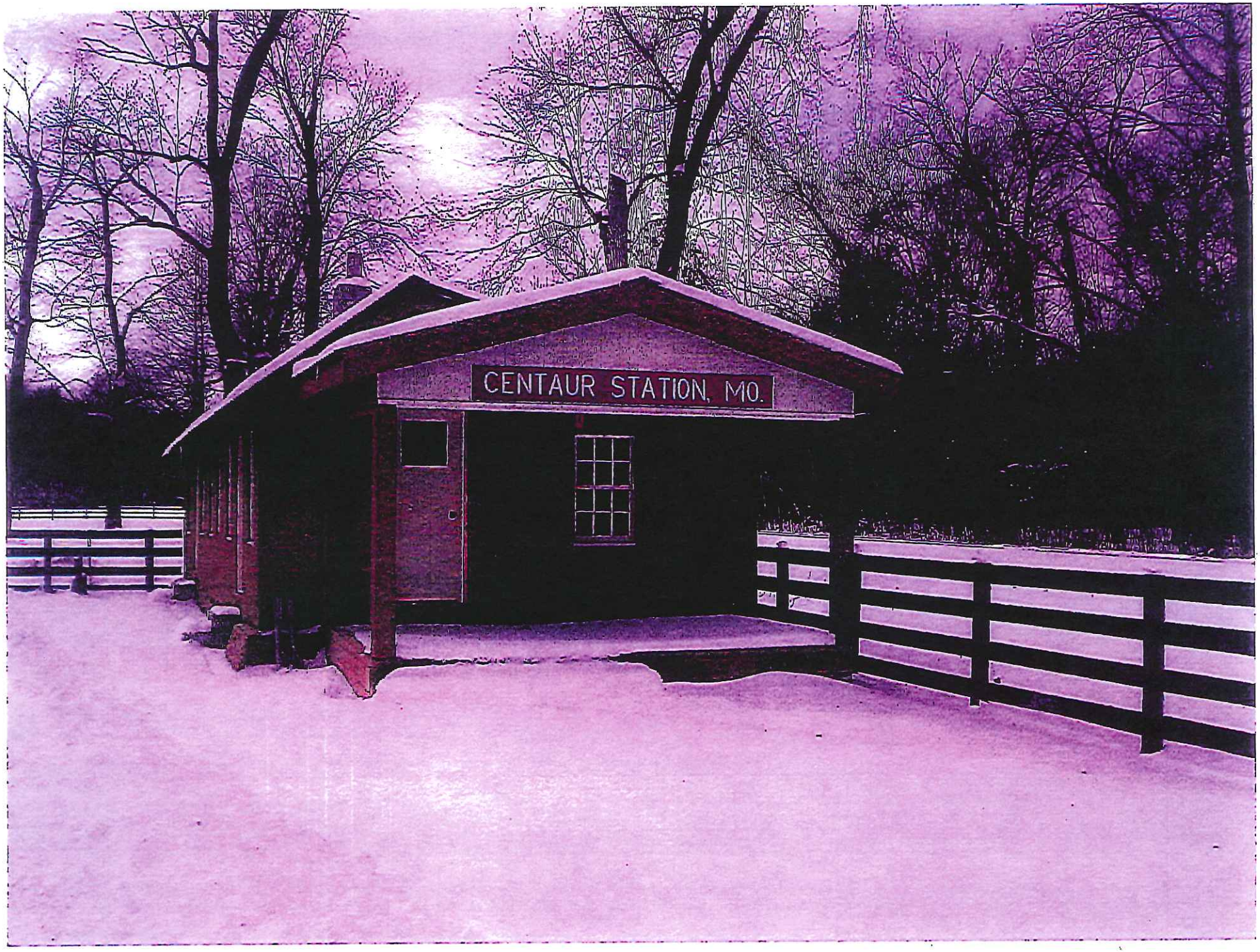
BURSCHER DITCH & ASSOCIATES, INC.
23 East Fifth Street P.O. Box 511 Washington Missouri 63090
Tel: 1-636-239-7061 Fax: 1-636-239-6165
E-Mail: www.bearsdc@ditch.com
B.T. Chrisendus, Inc. 2010105063
P.L.S. Corporation, Inc. 2010105063

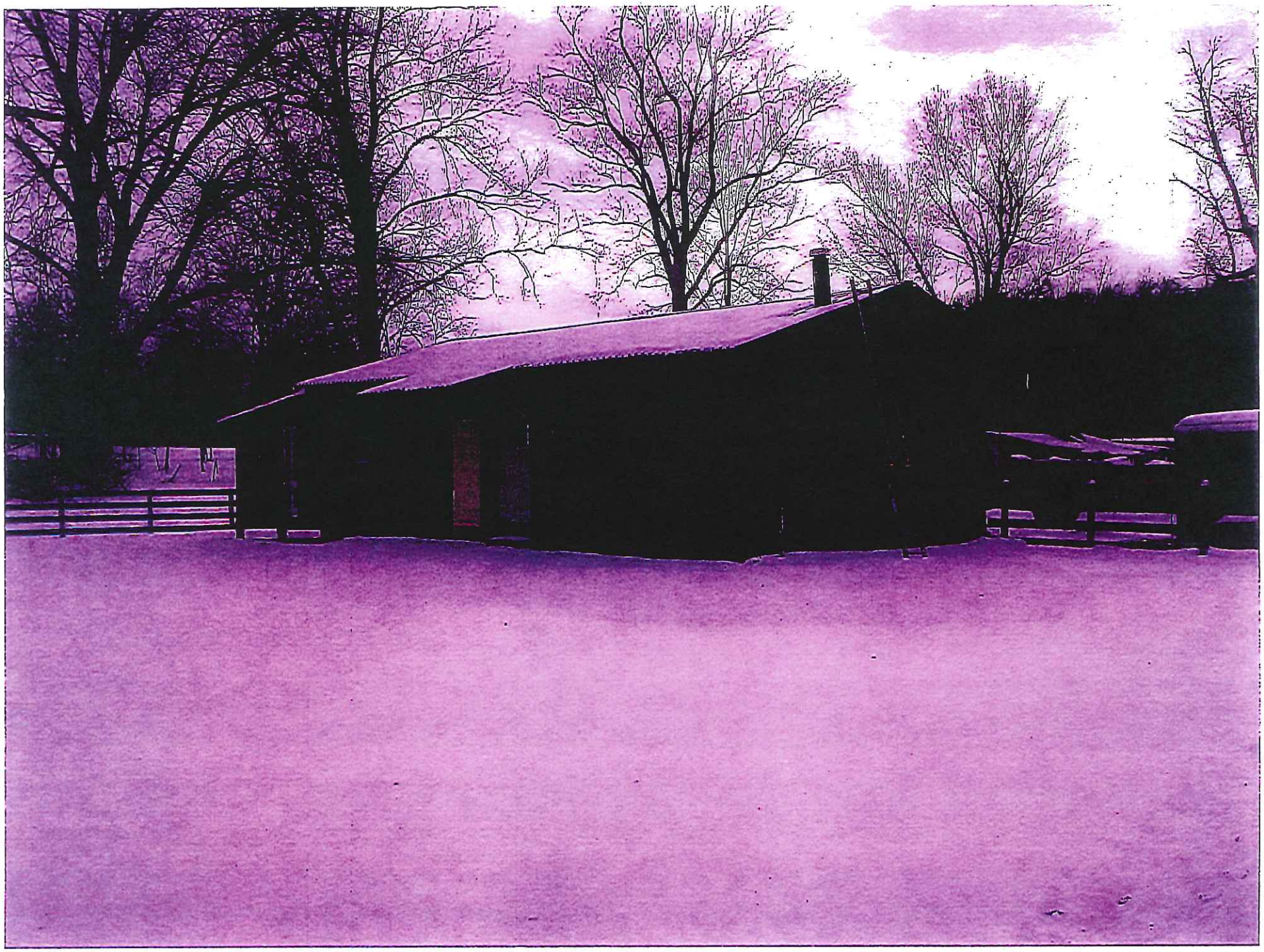
SITE IMPROVEMENT PLAN
LOTS 1 & 9, FEHRENBACH'S SUB.
107 & 109 CENTAUR ROAD
WILDWOOD, MO

DRAWN BY	
PROJECT NUMBER	DDA_K-21109
SURVEY NUMBER	
DATE	12-16-13
TIME	
PROJECT MANAGER	
DRAWN	
FILE NAME	PROPOSED DEVELOPMENT PLAN
SCALE	1 IN = 1
SHEET	1 OF 1
CITY	WILDWOOD
STATE	MISSOURI

Aerial Photograph
107 and 109 Centaur Road




CENTAUR STATION, MO.



Elizabeth Weiss

From: support@civicplus.com
Sent: Tuesday, September 02, 2014 1:23 PM
To: Lynne Greene-Beldner; Ryan Thomas; Elizabeth Weiss
Subject: Online Form Submittal: Public Hearing Comment Form

If you are having problems viewing this HTML email, click to view a Text version.

Public Hearing Comment Form

By utilizing this form, your comments will be considered by the Department of Planning in its development of a recommendation of this request. Additionally, the Planning and Zoning Commission, the City Council, and/or the applicable board or committee will also receive copies of your comments, as they consider the merits of these land use proposals being reviewed by the city. You must submit a separate form for each public hearing for which you have comments.

Request Being Considered

P.Z. 24-14 Centaur Station, c/o Michael Phelan

Position on Request

(X)Support ( )Do Not Support ( )Other

General Comments

wonderful idea.....Michael Phelan has improved properties around this area....just better for Wildwood

Name*
Mary & Dave Bullock

Address*
19215 E POINT LN

City* CHESTERFIELD
State* MO
Zip* 63005

Phone Number*
6364580616

Email*
mary-bullock@sbcglobal.net

The following form was submitted via your website: Public Hearing Comment Form

: By utilizing this form, your comments will be considered by the Department of Planning in its development of a recommendation of this request. Additionally, the Planning and Zoning Commission, the City Council, and/or the applicable board or committee will also receive copies of your comments, as they consider the merits of these land use proposals being reviewed by the city.

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Request Being Considered: P.Z. 24-14 Centaur Station, c/o Michael Phelan

Position on Request: Support

General Comments: wonderful idea.....Michael Phelan has improved properties around this area....just better for Wildwood

Name: Mary & Dave Bullock

Address: 19215 E POINT LN

City: CHESTERFIELD

State: MO

Zip: 63005

Phone Number: 6364580616

Email: mary-bullock@sbcglobal.net

Additional Information:
Form Submitted on: 9/2/2014 1:23:25 PM
Submitted from IP Address: 67.142.182.25
Referrer Page: http://www.cityofwildwood.com/FormCenter/Planning-Department-5/Public-Hearing-Comment-Form-48
Form Address: http://www.cityofwildwood.com/FormCenter/Planning-Department-5/Public-Hearing-Comment-Form-48

WILDWOOD

Recommendation Report
<<< Site Development Plan Package >>>
City of Wildwood Planning and Zoning Commission
March 21, 2016 Executive Session

Petitioner:	**City of Wildwood, Missouri c/o Department of Planning and Parks**
Zoning District(s):	PS Park and Scenic District
Location:	Northwest quadrant of State Route 100 and State Route 109
Locator Number:	23V410423
Ward:	One
Tract Size:	66.1 acres
Property Owner:	City of Wildwood, Missouri
Planning and Commission Meeting:	March 21, 2016
Nature of Request:	Approval of the Site Development Plan (SDP) for the development of an approximately 3,200 foot long connector roadway within the City of Wildwood's community park, which also includes a companion trail, limited parking, and the preparation of the Great Meadow Area for future use.

Introduction:

The Department of Planning and Parks is presenting to the Planning and Zoning Commission a Site Development Plan (SDP) for the construction of an approximately 3,200 foot long connector roadway within the City of Wildwood's community park, which also includes a companion trail, limited parking, and the preparation of the Great Meadow Area for future use. The Department of Planning and Parks, which has overseen the development of this plan set for this purpose, is submitting it to the Planning and Zoning Commission for its consideration and action, given all items necessary for its construction are now in place.

Current Request:

The Department of Planning and Parks is presenting to the Planning and Zoning Commission a Site Development Plan (SDP) for the construction of an approximately 3,200 foot long connector roadway within the City of Wildwood's community park, which also includes a companion trail, limited parking, and the preparation of the Great Meadow Area for future use. This plan set has been under development, since Phase One of the community park project began in September 2014. With Phase One now completed, the need for this additional access point to State Route 109 has become more apparent and necessary.

Beginning approximately one (1) year ago, the Department started discussions with the project engineer and the Planning/Economic Development/Parks Committee of City Council on the need to prioritize the development of an access roadway from the Phase One Area of community park to State Route 109, and, therefore, not be solely dependent upon ingress and egress to this property from State Route 100. In

fact, as Phase One was under development, excess fill from that area was stockpiled on the property, knowing it would be needed to complete this future access roadway, which was indicated on the approved Concept Plan for this park site. The pre-planning of this phase of community park was acknowledged by the City Council, its committee on park matters, and indicated in the approved 5-Year Capital Improvement Plan for a number of years. The pre-planning of this phase of the park also led to a successful grant application to the St. Louis County Municipal Park Grant Commission, which awarded to the City of Wildwood four hundred thousand dollars ($400,000.00) toward its construction.

Critical in this design is the provision of access to State Route 109 for users, thereby reducing the current dependence on the State Route 100 curb cut. This connection between these two (2), major State-maintained highways in Wildwood will allow safer access to the park and its facilities. Also, with the installation of the roadway, a companion trail system will be constructed that will allow for pedestrian, runners, bicyclists, and others to connect between the park site and the surrounding residential subdivisions and State Route 109. Along with these improvements, parking spaces are to be provided in the vicinity of the Great Meadow Area, while this special section of the park will begin undergoing preparation to become the centerpiece of the facility's active and passive open space.

At the September 2015 meeting of the Planning/Economic Development/Parks Committee (PEP), the Department presented these plan sheets to its members for consideration and action. The Committee granted a favorable recommendation at this meeting, and the City Council concurred thereafter at its meeting on January 11, 2016. As a point of reference, this project is funded for 2016. Again, given the popularity of the community park, this connector roadway and companion trail will be extensively used and reflects what the community and users have identified as a needed addition.

1. The roadway will be approximately 3,200 feet in total length.
2. The roadway will be twenty (20) to twenty-seven (27) feet in width and have two (2), six (6) foot wide drainage swales on either side of it.
3. The drainage swale on the eastern side of the roadway will provide separation for the proposed ten (10) foot wide, multiple-use trail that will connect to the existing facility in Phase One of the park and the new Pond-Grover Loop Road.
4. The roadway will provide a limited number of parking spaces (12), at the Great Meadow Area of the park.
5. The roadway will have a section of grade at ten (10) percent between Stations 24 and 27.
6. The connection of this roadway at Pond-Grover Loop Road will be affected by a water line of the Missouri American Water Company.

The engineer provided a cost estimate for this project, which was $636,000.00, and included an estimate for the relocation of a waterline near the Pond-Grover Loop Road. The actual cost of the roadway and trail (from the bidding process), minus the waterline relocation and contingencies, is just over four hundred thousand dollars ($400,000.00). All components of this project will not exceed seven hundred

thousand dollars ($700,0000.00) in cost (the City Council has dedicated three hundred thousand dollars ($300,000.00) to this project for 2016 to cover the expenditures over and above the amount of funding provided by the aforementioned grant).

Recommendation:

The Planning and Zoning Commission members have reviewed the Site Development Plan (SDP) that has been submitted for its review and action. This Commission is supportive of this approximately 3,200 foot long access roadway and companion trail, which includes the preparation of the Great Meadow Area as well. This support is premised on a number of reasons that include these items:

1. The roadway/trail connection is needed for all users at this time. This additional point of access into and out of the park will improve safety, while allowing pedestrians and other non-vehicular traffic access into the facility, which is currently not available along State Route 100.
2. The trail component provides another option for all users, in this very popular recreation corridor.
3. This project will add more useable acreage and access to it for the residents of Wildwood and visitors to this wonderful recreational asset.
4. The design of these improvements is consistent with the conditions of the area and environmentally sensitive by limiting its impact and overall site disturbance (only twenty-eight (28) trees are to be removed).
5. The design of these improvements requires limited assets for its maintenance and upkeep.
6. The benefits of active recreational facilities are plentiful and meet many of the recommendations of the City's *Action Plan for Parks and Recreation* – 2007 in regards to promoting facilities to encourage healthy lifestyles for residents of the City of Wildwood.

Summary and Conditions:

The Planning and Zoning Commission has completed its review of the aforementioned Site Development Plan (SDP) and related items and determined them to be in compliance with the requirements for the development of them in the City's community park area. Therefore, based upon the analysis provided above in this report, the Planning and Zoning Commission hereby grants its approval of this Site Development Plan for the proposed trail project.

Vote of the Commission:

Approval of the Site Development Plan (SDP) and related items by a vote of --- to --- by the Planning and Zoning Commission at its March 21, 2016 Executive Session.

Attachments And Enclosures:

Attachment A –Site Development Plan (SDP) and Related Items
Attachment B – Background Information

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		ST. LOUIS	19	1
POND GROVER LOOP ROAD	MISSOURI			

WILDWOOD COMMUNITY PARK - PHASE 2

(POND GROVER LOOP ROAD EXTENSION)

WILDWOOD, MO
ST. LOUIS COUNTY

LEGEND

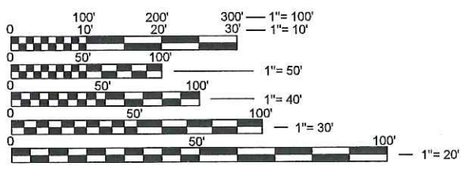
EX	NEW		EX	NEW	
		SIGN (TRAFFIC)			ELECTRIC BOX
		SIGN (ADVERTISEMENT)			MAILBOX
		TELEPHONE / POWER POLE			CLEANOUT
		LIGHT POLE			AREA INLET
		ANCHOR POLE			CATCH BASIN
		GUY WIRE			CURB INLET
		FIRE HYDRANT			MANHOLE
GV	GV	GAS VALVE			TRAFFIC SIGNAL BOX
WV	WV	WATER VALVE			TRAFFIC SIGNAL
EM	EM	ELECTRIC METER			HANDHOLE
GM	GM	GAS METER			CONTROL POINT
T	T	TELEPHONE BOX			BENCHMARK

LINETYPES

EX		NEW
W	WATER LINE	W
G	GAS LINE	G
T	TELEPHONE LINE	T
OE	OVERHEAD ELECTRIC LINE	OE
E	ELECTRIC LINE	E
FO	FIBER OPTIC LINE	FO
	STORM SEWER	
	SANITARY SEWER (GRAVITY)	
FM	SANITARY SEWER (FORCE MAIN)	FM
x	FENCE LINE	x
	TREE LINE	
	LIMITS OF CONST	

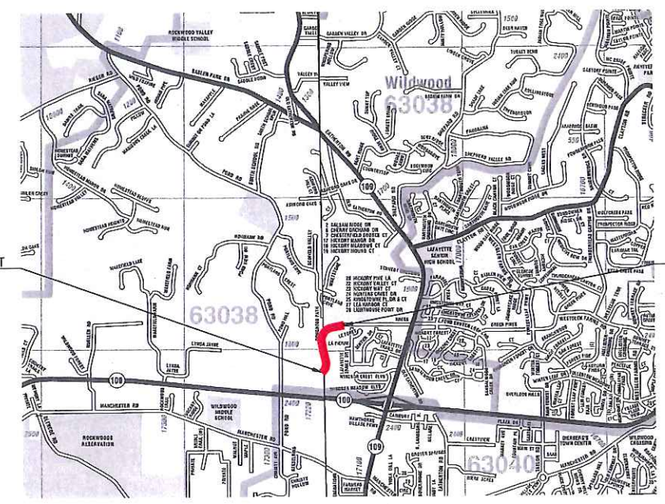
SCALE IN FEET

PLAN	1" = 20'
PROFILE HORIZ	1" = 20'
PROFILE VERT	1" = 5'
CROSS SECTION HORIZ	1" = 10'
CROSS SECTION VERT	1" = 5'



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

MISSOURI ONE CALL SYSTEM
1-800-344-7483 (DIG-RITE)
OR 811



N

LOCATION MAP

SCALE 1" = 2,000'

LENGTH OF PROJECT = 1,880 FEET (0.356 MILES)

INDEX OF SHEETS

SHEET NO.	ITEM
1	COVER SHEET
2	GENERAL NOTES, ABBREVIATIONS & COMMITMENTS
3	TYPICAL SECTIONS
4	REMOVAL AND EROSION CONTROL SHEET
5 - 8	PLAN & PROFILE SHEETS
9 - 12	CONSTRUCTION DETAILS
13 - 19	CROSS SECTIONS

AGENCY RESPONSIBLE FOR LETTING

APPROVED _____ _____
City of Wildwood, Director of Planning and Parks — Date

The City of WILDWOOD MISSOURI
PLANNING TOMORROW TODAY

CITY OF WILDWOOD
183 PLAZA DRIVE
WILDWOOD, MO 63040
Phone: 636.458.0440
Email: joe@cityofwildwood.com

STATE OF MISSOURI
THOMAS LEE CISSELL III
NUMBER
PE-2002016635
PROFESSIONAL ENGINEER

Thomas L Cissell DATE: 12/30/15
THOMAS LEE CISSELL
MO P.E. NO. 2002016635
EXPIRES 12/31/2016

OATES ASSOCIATES
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COLLINSVILLE
100 Lanter Court, Suite 1
Collinsville, IL 62234
tel 618.345.2200

BELLEVILLE
20 E. Main Street
Belleville, IL 62220
tel 618.416.4688

ST. LOUIS
720 Olive, Suite 700
St. Louis, MO 63101
tel 314.588.8381

www.oatesassociates.com

MISSOURI DESIGN FIRM LICENSE NO.: 001166

EXPIRES: 04/30/2017

12045.005

GENERAL NOTES

UTILITIES

1. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS. THEIR LOCATIONS MUST BE CONSIDERED TO BE APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS NOT PRESENTLY KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION AND TO AVOID DAMAGE THERETO. MISSOURI LAW REQUIRES A MINIMUM 48-HOUR NOTICE TO ALL UTILITY COMPANIES BEFORE DIGGING. FIELD LOCATIONS OF UNDERGROUND FACILITIES MAY BE OBTAINED BY CALLING THE ONE-CALL SYSTEM IN MISSOURI AT 1-800-344-7483 AND PROVIDING 48 HOURS ADVANCE NOTICE. NON-J.U.L.I.E MEMBERS MUST BE NOTIFIED INDIVIDUALLY. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT LIMITS ARE LISTED BELOW.

2. ANY FACILITIES OR APPURTENANCES WHICH ARE THE PROPERTY OF ANY PUBLIC UTILITY LOCATED WITHIN THE LIMITS OF CONSTRUCTION SHALL BE RELOCATED OR ADJUSTED BY THEIR RESPECTIVE OWNERS. THE CONTRACTOR SHALL NOTIFY AND COOPERATE WITH THE OWNERS OF ANY SUCH FACILITY IN THEIR REMOVAL AND REARRANGEMENT OPERATIONS IN ORDER THAT THESE OPERATIONS AND THE CONSTRUCTION OF THIS PROJECT MAY PROGRESS IN A REASONABLE MANNER. ALL ROADSIDE OBJECTS (UTILITY POLES, FIRE HYDRANTS, SIGNS, ETC.) SHALL BE RELOCATED TO PROVIDE A MINIMUM OF 1.5 FEET CLEARANCE, MEASURED FROM THE FACE OF CURB TO THE NEAR EDGE OF THE OBJECT.

3. THE FOLLOWING UTILITY COMPANIES MAY HAVE FACILITIES LOCATED WITHIN THE LIMITS OF CONSTRUCTION WHICH MAY REQUIRE ADJUSTMENT, RELOCATION OR REMOVAL. ALL ARE MEMBERS OF MISSOURI ONE CALL, UNLESS NOTED OTHERWISE.

METROPOLITAN ST. LOUIS SEWER DISTRICT
2350 MARKET STREET
ST .LOUIS, MO. 63103
314-768-6200

MISSOURI-AMERICAN WATER COMPANY
727 CRAIG ROAD
ST. LOUIS, MO. 63141
314-996-2396

LACLEDE GAS COMPANY
6400 GRAHAM ROAD
ST. LOUIS, MO. 63134
314-522-2297

CHARTER COMMUNICATIONS
#815 CHARTER COMMONS
MANCHESTER, MO. 63017
636-220-2174

AT&T
402 NORTH THIRD STREET
ST. CHARLES, MO. 63301
606-949-1313

AMEREN UE
12121 DORSETT ROAD
MARYLAND HEIGHTS, MO. 63043
P.O. BOX 66149, MC 657
314-344-9504

THIS UTILITY INFORMATION REPRESENTS THE BEST INFORMATION AVAILABLE TO THE LOCAL AGENCY AND IS ONLY INCLUDED FOR THE CONVENIENCE OF THE BIDDER. IT IS UNDERSTOOD AND AGREED THAT THE CONTRACTOR HAS TAKEN THE FOREGOING INTO CONSIDERATION IN PREPARING HIS/HER BID, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR ANY DELAYS OR INCONVENIENCE CAUSED BY SAME.

4. PRIOR TO TREE REMOVAL, THE CONTRACTOR SHALL POTHOLE THE EXISTING WATER MAIN LOCATED AT STATION 31+55 TO CHECK DEPTH. THIS INFORMATION SHALL BE RELAYED TO THE ENGINEER TO DETERMINE IF THE WATER MAIN WILL NEED TO BE RELOCATED. THE CONTRACTOR SHALL COOPERATE WITH THE MISSOURI AMERICAN WATER MAIN RELOCATION OPERATION AND FACTOR INTO THE SEQUENCE OF CONSTRUCTION OPERATIONS. THE COST OF POTHOLING AND COOPERATION SHALL BE INCLUDED IN THE COST OF THE PROJECT.

GENERAL CONSTRUCTION

5. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO ORDERING MATERIALS AND COMMENCING CONSTRUCTION.

6. IN CASE OF CONFLICT BETWEEN THE CONSTRUCTION PLANS AND THE RIGHT OF WAY PLANS, THE RIGHT OF WAY PLANS SHALL TAKE PRECEDENCE IN MATTERS CONCERNING RIGHT OF WAY AND EASEMENTS. THE CONSTRUCTION PLANS SHALL TAKE PRECEDENCE IN MATTERS CONCERNING CONSTRUCTION ITEMS.

7. THE CONTRACTOR SHALL STAGE ALL WORK IN SUCH A WAY AS TO MAINTAIN INGRESS AND EGRESS TO ALL ABUTTING PROPERTIES AT ALL TIMES DURING CONSTRUCTION.

8. THE CONTRACTOR SHALL CONFINE ALL OPERATIONS TO THE CONSTRUCTION LIMITS LINE SHOWN ON THE PLANS. ANY AREA DISTURBED BEYOND THESE LIMITS SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.

9. THE CONTRACTOR SHALL FERTILIZE, SEED AND MULCH OR SOD AS SHOWN ON PLANS ALL EARTH SURFACES DISTURBED BY CONSTRUCTION. FERTILIZER, SEEDING AND MULCH OR SOD WITHIN THE CONSTRUCTION LIMITS WILL BE PAID FOR AS PROVIDED IN THE CONTRACT. FERTILIZER, SEEDING AND MULCH OUTSIDE THESE LIMITS WILL NOT BE MEASURED FOR PAYMENT.

10. WHERE TREE REMOVAL CONFLICTS WITH EXISTING UNDERGROUND UTILITIES, THE CONTRACTOR SHALL CUT THE TREE OFF AT THE GROUND LINE AND GRIND THE STUMP AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT LUMP SUM PRICE.

11. ALL EXISTING ROADWAY FEATURES INCLUDING, BUT NOT LIMITED TO, PAVEMENT, CURB, SIDEWALK, DRIVEWAY PAVEMENT, CULVERTS, HEADWALLS, RIPRAP, FENCING, RETAINING WALLS, WHICH INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR UNLESS NOTED OTHERWISE ON THE PLANS. ALL FEATURES WHICH ARE TO BE REMOVED AND FOR WHICH THERE IS NO SPECIFIC CALLOUT, WILL NOT BE MEASURED SEPARATELY FOR PAYMENT AND THE COST OF THIS REMOVAL WORK SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT LUMP SUM PRICE FOR THE VARIOUS REMOVAL ITEMS INCLUDED IN THE CONTRACT.

12. ALL TRAFFIC SIGNS WHICH INTERFERE WITH CONSTRUCTION OPERATIONS SHALL BE REMOVED AND ERECTED AT TEMPORARY LOCATIONS AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. AS SOON AS CONSTRUCTION OPERATIONS WILL ALLOW, ALL SIGNS SHALL BE PERMANENTLY RELOCATED AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST.

13. ANY UNSUITABLE MATERIAL ENCOUNTERED DURING CONSTRUCTION SHALL BE REMOVED BY THE GENERAL CONTRACTOR AND REPLACED WITH SUITABLE MATERIAL AS APPROVED BY THE ENGINEER. THE COST TO REMOVE AND REPLACE UNSUITABLE MATERIAL WILL BE CONSIDERED AN UNFORSEEN CONDITION AND WILL BE PAID FOR AS AN AGREED PRICE OR ON A TIME AND MATERIAL BASIS.

14. FULL DEPTH SAW CUTTING ON ALL EDGES FOR REMOVAL ITEMS SHALL BE INCLUDED IN THE COST FOR REMOVAL OF IMPROVEMENTS.

15. PROVIDE THE NECESSARY SIGNS AND BARRICADES WHILE WORKING THROUGHOUT THE CONSTRUCTION PERIOD INCLUDING PLACING BARRICADES AT THE PROJECT ENTRANCE TO PREVENT PUBLIC ENTRY. ALL MATERIAL PILES, EQUIPMENT, OPEN EXCAVATIONS OR THEIR OBSTRUCTIONS OR HAZARDS TO MOTORISTS OR PEDESTRIANS SHALL BE ENCLOSED BY FENCES OR PROTECTED BY BARRICADES.

PAVING

16. THE CONTRACTOR SHALL NOTE THE LOCATION OF ALL MANHOLE AND VALVE COVER FRAMES AND LIDS LOCATED WITHIN RESURFACING LIMITS. APPROPRIATE CARE SHALL BE TAKEN TO PROTECT THESE ITEMS DURING MILLING OPERATIONS.

DRAINAGE

17. CULVERT INVERTS SHOWN ON THE PLANS HAVE BEEN CALCULATED TO THE END OF THE FLARED END. THE STORM SEWER SLOPES SHOWN ON THE PLANS ARE THE PERCENT GRADE FROM CENTER TO CENTER OF STRUCTURE. THE LENGTH OF STORM SEWERS SHOWN ON THE PLANS IS THE DISTANCE FROM CENTER TO CENTER OF STRUCTURE.

18. ALL DRAINAGE STRUCTURES CONSTRUCTED, ADJUSTED OR RECONSTRUCTED UNDER THE CONTRACT, SHALL BE CLEANED OF ANY ACCUMULATION OF SILT, DEBRIS OR FOREIGN MATTER AT THE END OF EACH WORKING DAY AND AT THE TIME OF FINAL INSPECTION. THE COST OF THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT FOR THE VARIOUS DRAINAGE STRUCTURE ITEMS INCLUDED.

PAVEMENT MARKING

19. THE PAVEMENT MARKING LOCATIONS SHOWN IN THE PLANS ARE APPROXIMATE. PROPOSED CHEVRONS AND SOLID CENTERLINE STRIPING SHALL BE ADJUSTED AS DIRECTED BY THE ENGINEER, IF NECESSARY, TO MATCH FIELD CONDITIONS.

APPROXIMATE SYMBOLS & ABBREVIATIONS

20. THE FOLLOWING SYMBOLS AND ABBREVIATIONS ARE USED THROUGHOUT THE PLANS:

AD	ALGEBRAIC DIFFERENCE IN GRADE
BVCE	BEGINNING OF VERTICAL CURVE ELEVATION
BVCS	BEGINNING OF VERTICAL CURVE STATION
BO	BY OTHERS (USED IN CONJUNCTION WITH TBA & TBR)
CONSTR	CONSTRUCTION
CP	CONTROL POINT
ESMT	EASEMENT
ELEV	ELEVATION
EVCE	END OF VERTICAL CURVE ELEVATION
EVCS	END OF VERTICAL CURVE STATION
FES	FLARED END SECTION
K	LENGTH OF VERTICAL CURVE PER PERCENT GRADE DIFFERENCE
ME	MATCH EXISTING
N/F	NOW OR FORMERLY
PVI	POINT OF VERTICAL INTERSECTION
PVC	POLYVINYL CHLORIDE PIPE
TCE	TEMPORARY CONSTRUCTION EASEMENT
TUP	TEMPORARY USE PERMIT
TBA	TO BE ADJUSTED
TBRL	TO BE RELOCATED
TYP	TYPICAL
W	WIDTH

COMMITMENTS

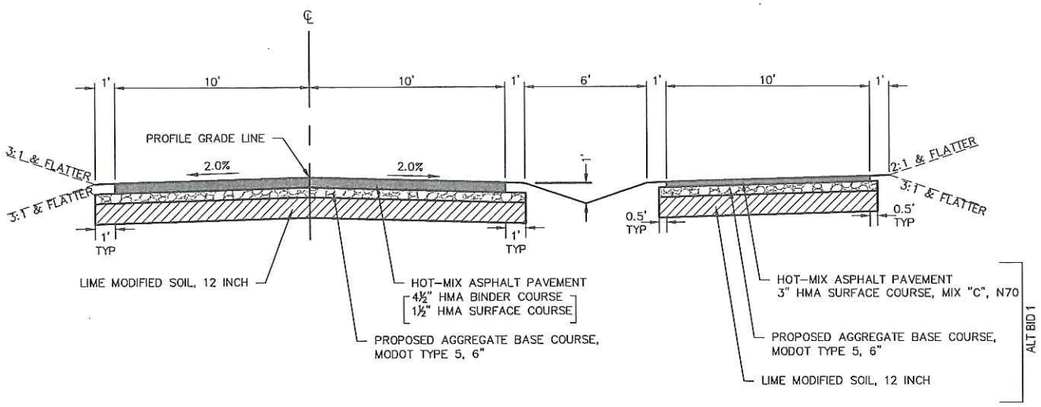
NONE AT THIS TIME

STATE OF MISSOURI
THOMAS LEE CISSELL III
NUMBER
PE-2002016635
PROFESSIONAL ENGINEER

11/20/15
EXP 12/31/16

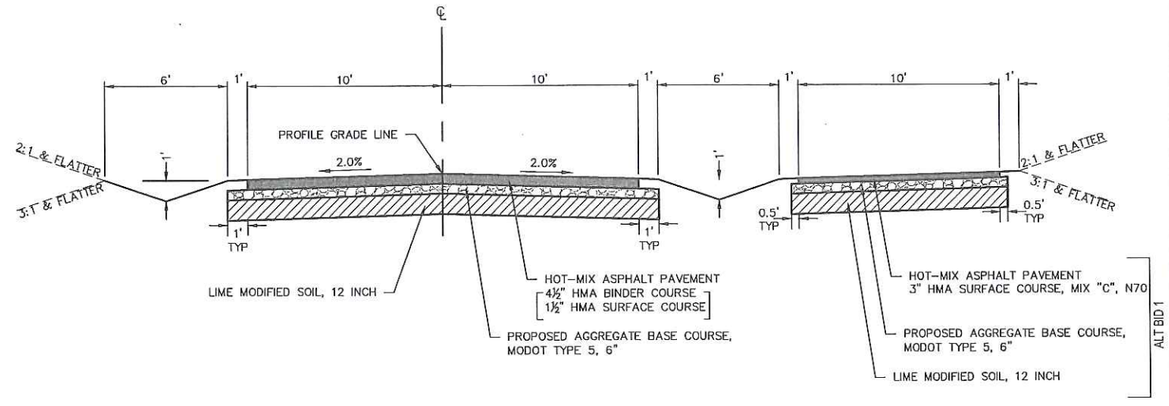
FILE NAME = 12045.005_DETAILS.DWG

OATES ASSOCIATES Engineering + Architecture www.oatesassociates.com MISSOURI DESIGN FIRM LICENSE NO.: 001166	USER NAME = TYLER HUFFMAN	DESIGNED - ___	REVISED -	The City of WILDWOOD MISSOURI PLANNING TOMORROW TODAY	WILDWOOD COMMUNITY PARK - PHASE 2 GENERAL NOTES, ABBREVIATIONS, & COMMITMENTS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - ___	REVISED -			___	-_-_-_-	ST. LOUIS	19	2
	PLOT SCALE = 1' = 1'	CHECKED - ___	REVISED -							
	PLOT DATE = 2015-11-06	DATE - 2015-09-03	REVISED -		SCALE: / SHEET NO. 1 OF 1 SHEETS / STA. _____ TO STA. _____		MISSOURI			



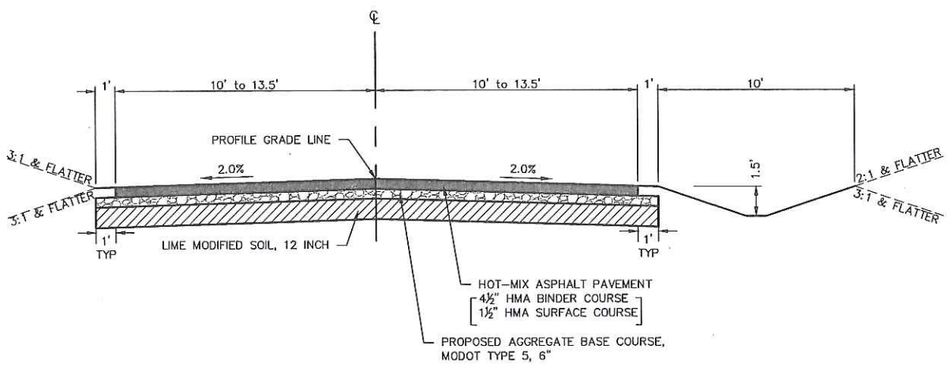
PROPOSED POND GROVER LOOP ROAD

STA. 26+50 TO STA. 30+50
NO SCALE



PROPOSED POND GROVER LOOP ROAD

STA. 30+50 TO STA. 32+56
NO SCALE



PROPOSED POND GROVER LOOP ROAD

STA. 14+77 TO STA. 26+50
NO SCALE

CURVE TABLE

POND GROVER LOOP ROAD							
CURVE #	P.I. STA.	Δ	T	R	L	P.C. STA.	P.T. STA.
PGLR 1	15+69.61	111°42'53"	140.09'	95'	185.23'	14+77.00	16+62.23
PGLR 2	21+36.44	16°29'52"	260.95'	1800'	518.29'	18+77.30	23+95.59
PGLR 3	25+96.92	65°54'55"	226.92'	350'	402.65'	23+95.59	27+98.24
PGLR 4	31+16.21	16°48'27"	141.09'	955'	280.15'	29+76.13	32+56.28

STATE OF MISSOURI
THOMAS LEE GISSELL III
NUMBER
PE-2002016635
PROFESSIONAL ENGINEER
11/10/15
Exp 12/31/16

FILE NAME: TYPICALS.DWG

OATES ASSOCIATES Engineering + Architecture www.oatesassociates.com MISSOURI DESIGN FIRM LICENSE NO.: 001166	USER NAME = TYLER HUFFMAN	DESIGNED - ___	REVISED -	The City of WILDWOOD MISSOURI PLANNING TOMORROW TODAY	WILDWOOD COMMUNITY PARK - PHASE 2
		DRAWN - ___	REVISED -		TYPICAL SECTIONS
	PLOT SCALE = 1' = 1'	CHECKED - ___	REVISED -		SCALE: SHEET NO. 1 OF 1 SHEETS STA. TO STA.
	PLOT DATE = 2015-09-10	DATE - ___	REVISED -		

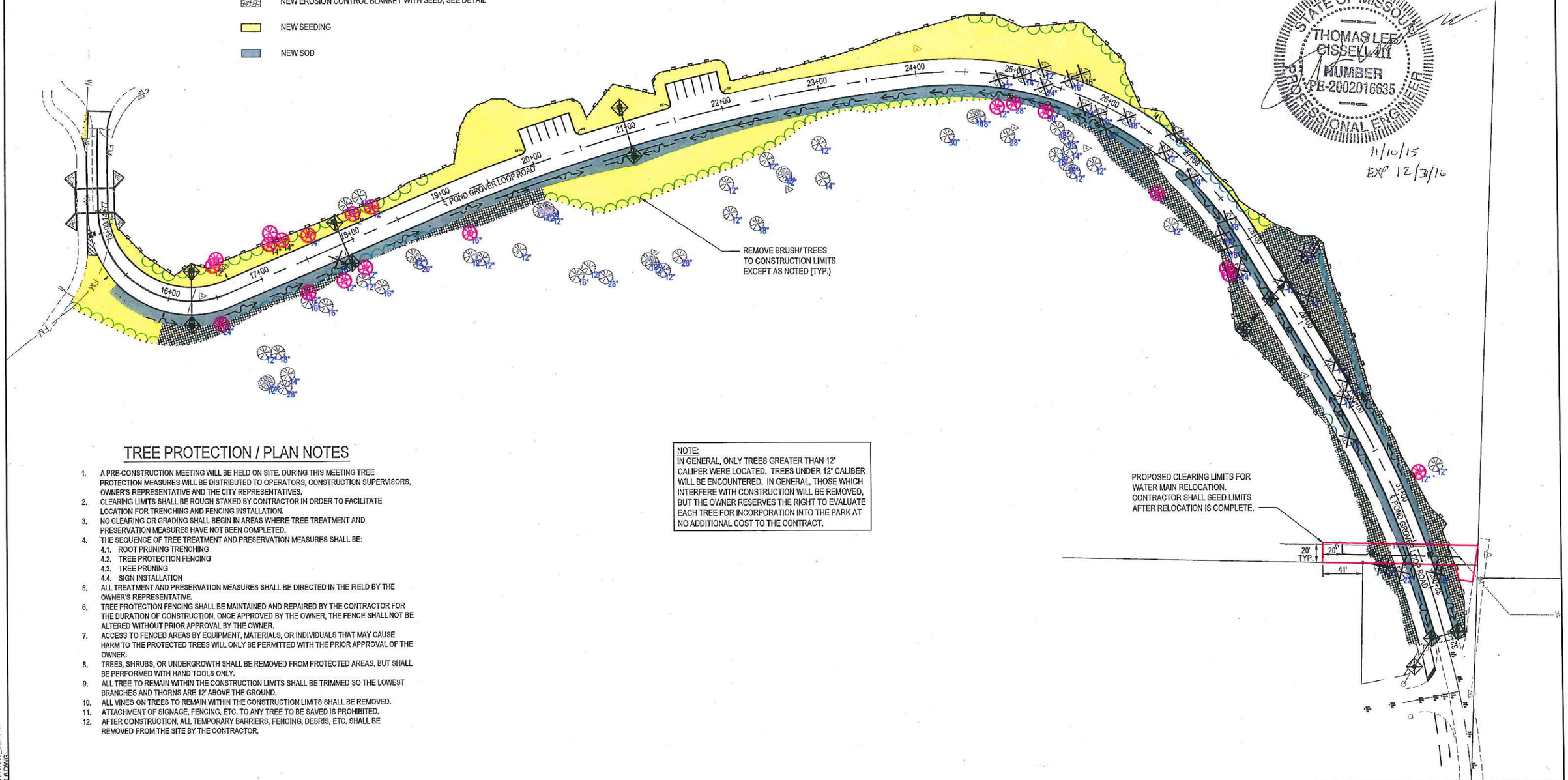
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
___	- - - -	ST. LOUIS	19	3
		MISSOURI		

REMOVAL AND EROSION CONTROL LEGEND

- EXISTING TREE, TO BE PROTECTED
- EXISTING TREE, TO BE REMOVED
- PROPOSED TREE / BRUSH LINE
- NEW PERIMETER EROSION BARRIER, SEE DETAIL
- NEW PIPE PROTECTION, SEE DETAIL
- NEW EROSION CONTROL BLANKET WITH SEED, SEE DETAIL
- NEW SEEDING
- NEW SOD

N

SCALE: 1" = 50'



STATE OF MISSOURI
THOMAS LEE CISSELL III
NUMBER PE-2002016635
PROFESSIONAL ENGINEER

11/10/15
EXP 12/3/16

TREE PROTECTION / PLAN NOTES

1. A PRE-CONSTRUCTION MEETING WILL BE HELD ON SITE. DURING THIS MEETING TREE PROTECTION MEASURES WILL BE DISTRIBUTED TO OPERATORS, CONSTRUCTION SUPERVISORS, OWNER'S REPRESENTATIVE AND THE CITY REPRESENTATIVES.
2. CLEARING LIMITS SHALL BE ROUGH STAKED BY CONTRACTOR IN ORDER TO FACILITATE LOCATION FOR TRENCHING AND FENCING INSTALLATION.
3. NO CLEARING OR GRADING SHALL BEGIN IN AREAS WHERE TREE TREATMENT AND PRESERVATION MEASURES HAVE NOT BEEN COMPLETED.
4. THE SEQUENCE OF TREE TREATMENT AND PRESERVATION MEASURES SHALL BE:
   - 4.1. ROOT PRUNING TRENCHING
   - 4.2. TREE PROTECTION FENCING
   - 4.3. TREE PRUNING
   - 4.4. SIGN INSTALLATION
5. ALL TREATMENT AND PRESERVATION MEASURES SHALL BE DIRECTED IN THE FIELD BY THE OWNER'S REPRESENTATIVE.
6. TREE PROTECTION FENCING SHALL BE MAINTAINED AND REPAIRED BY THE CONTRACTOR FOR THE DURATION OF CONSTRUCTION. ONCE APPROVED BY THE OWNER, THE FENCE SHALL NOT BE ALTERED WITHOUT PRIOR APPROVAL BY THE OWNER.
7. ACCESS TO FENCED AREAS BY EQUIPMENT, MATERIALS, OR INDIVIDUALS THAT MAY CAUSE HARM TO THE PROTECTED TREES WILL ONLY BE PERMITTED WITH THE PRIOR APPROVAL OF THE OWNER.
8. TREES, SHRUBS, OR UNDERGROWTH SHALL BE REMOVED FROM PROTECTED AREAS, BUT SHALL BE PERFORMED WITH HAND TOOLS ONLY.
9. ALL TREE TO REMAIN WITHIN THE CONSTRUCTION LIMITS SHALL BE TRIMMED SO THE LOWEST BRANCHES AND THORNS ARE 12' ABOVE THE GROUND.
10. ALL VINES ON TREES TO REMAIN WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED.
11. ATTACHMENT OF SIGNAGE, FENCING, ETC. TO ANY TREE TO BE SAVED IS PROHIBITED.
12. AFTER CONSTRUCTION, ALL TEMPORARY BARRIERS, FENCING, DEBRIS, ETC. SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.

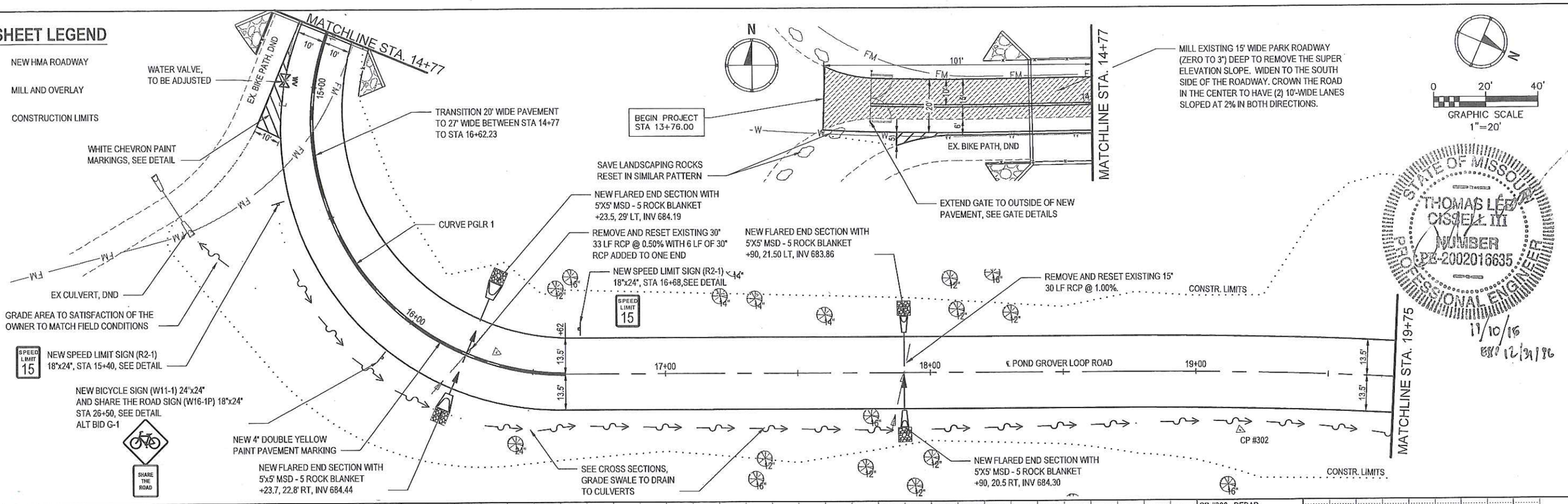
NOTE:
IN GENERAL, ONLY TREES GREATER THAN 12" CALIPER WERE LOCATED. TREES UNDER 12" CALIBER WILL BE ENCOUNTERED. IN GENERAL, THOSE WHICH INTERFERE WITH CONSTRUCTION WILL BE REMOVED, BUT THE OWNER RESERVES THE RIGHT TO EVALUATE EACH TREE FOR INCORPORATION INTO THE PARK AT NO ADDITIONAL COST TO THE CONTRACT.

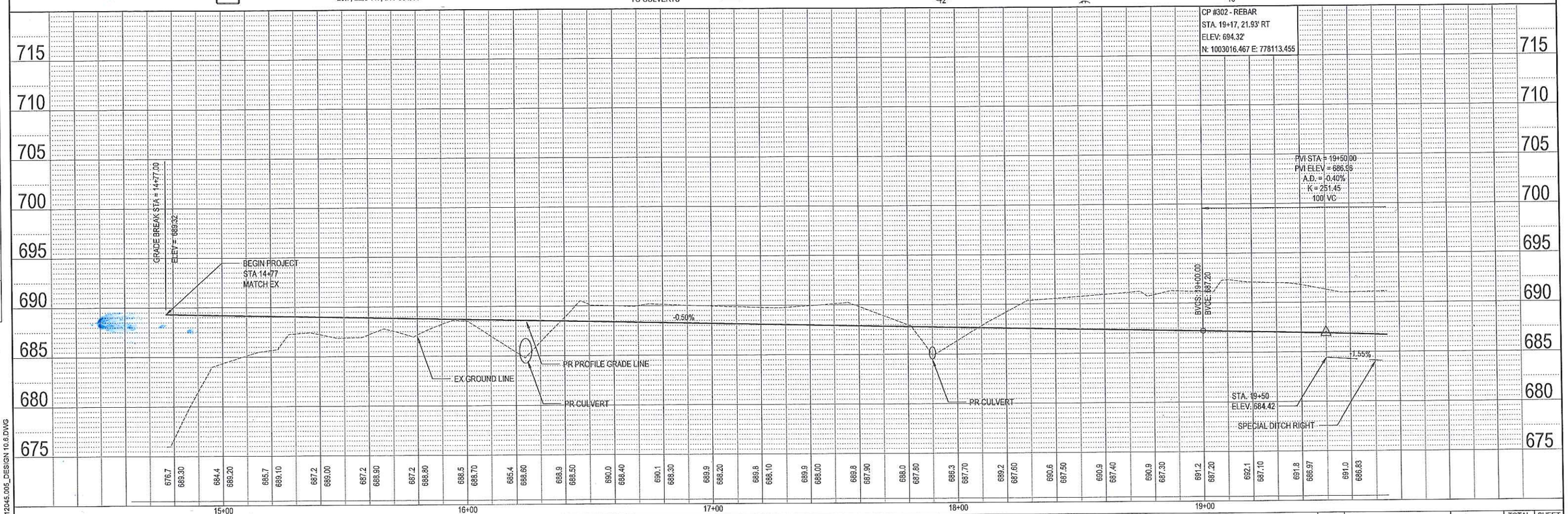
FILE NAME = 12045.005_DESIGN 10.6.DWG

OATES ASSOCIATES Engineering + Architecture www.oatesassociates.com MISSOURI DESIGN FIRM LICENSE NO.: 001166	USER NAME = TYLER HUFFMAN	DESIGNED -	REVISED -	The City of WILDWOOD MISSOURI PLANNING TOMORROW TODAY	WILDWOOD COMMUNITY PARK - PHASE 2	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS / SHEET NO.
		DRAWN -	REVISED -		REMOVAL AND EROSION CONTROL SHEET			ST. LOUIS	19 / 4
	PLOT SCALE = 1' = 1'	CHECKED -	REVISED -						
	PLOT DATE =	DATE - 2015-08-31	REVISED -		SCALE: / SHEET NO. 1 OF 1 SHEETS / STA. ____ TO STA. ____		MISSOURI		

PLAN SHEET LEGEND

- NEW HMA ROADWAY
- MILL AND OVERLAY
- CONSTRUCTION LIMITS





PLAN	BY	DATE
SURVEYED		
PLOTTED		
ALIGNMENT CHECKED		
RT. OF WAY CHECKED		
CADD FILE NAME		
NOTE BOOK		
NO.		

PROFILE	BY	DATE
SURVEYED		
PLOTTED		
GRADES CHECKED		
B.M. NOTED		
STRUCTURE NOTATNS CHKD		
NOTE BOOK		
NO.		

FILE NAME = 12045.005_DESIGN 10.6.DWG

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USER NAME =	TYLER HUFFMAN	DESIGNED -	—	REVISED -	
		DRAWN -	—	REVISED -	
PLOT SCALE =	1' = 1'	CHECKED -	—	REVISED -	
PLOT DATE =	2015-11-06	DATE -	2008-02-25	REVISED -	

The City of WILDWOOD MISSOURI
PLANNING TOMORROW TODAY

WILDWOOD COMMUNITY PARK - PHASE 2

PLAN & PROFILE SHEETS

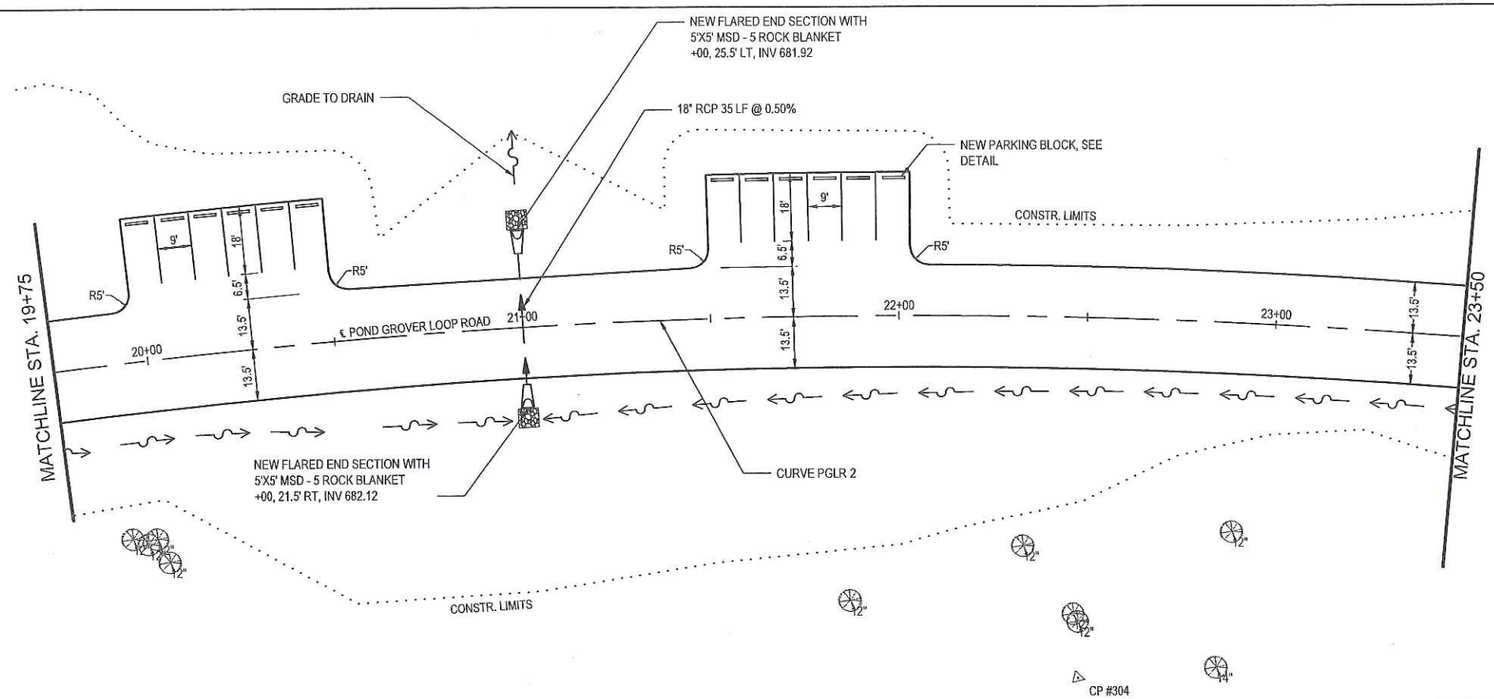
SCALE: | SHEET NO. 1 OF 4 SHEETS | STA. 14+77 TO STA. 19+75

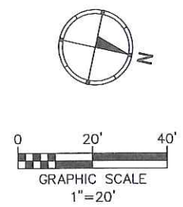
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
—	— - — - —	ST. LOUIS	19	5
		MISSOURI		

PLAN SHEET LEGEND

NEW HMA ROADWAY

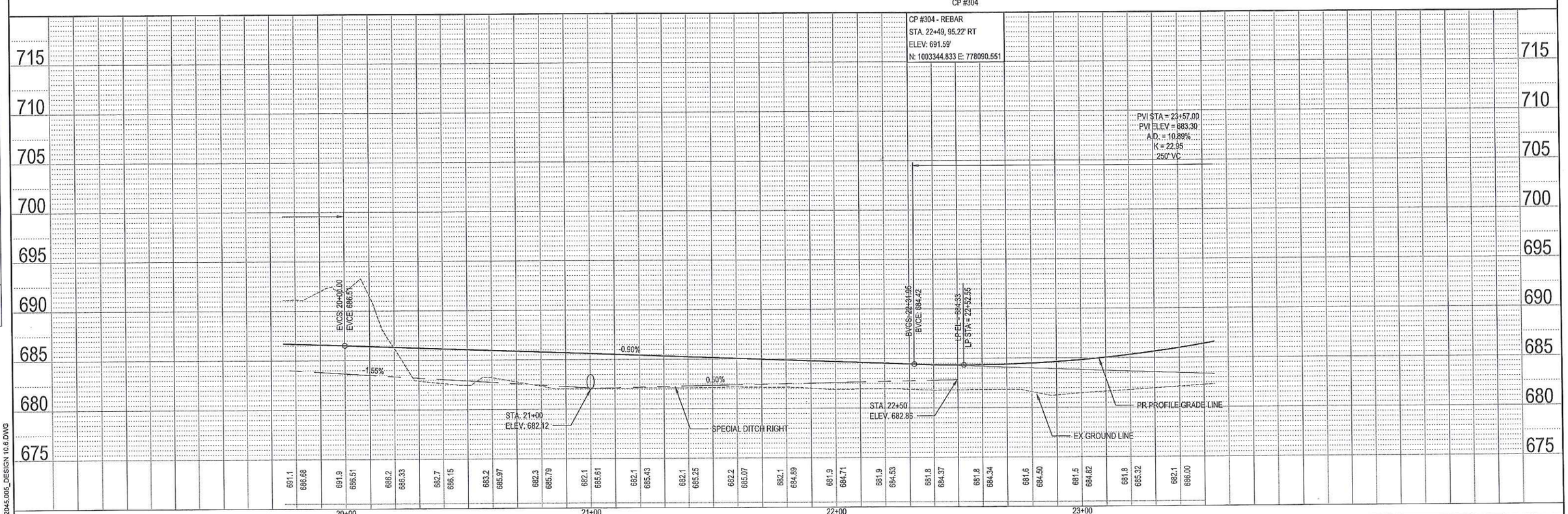
CONSTRUCTION LIMITS





STATE OF MISSOURI
THOMAS LEE GISSELL III
NUMBER
PE-2002016635
PROFESSIONAL ENGINEER

11/10/15
Exp 12/31/16



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SURVEYED	
PLOTTED	
ALIGNMENT CHECKED	
RT. OF WAY CHECKED	
CADD FILE NAME	
BY	
NOTE BOOK	
NO.	

PROFILE	DATE
SURVEYED	
PLOTTED	
GRADES CHECKED	
BALANCED	
STRUCTURE NOTATNS CHKD	
BY	
NOTE BOOK	
NO.	

FILE NAME = 12045.005_DESIGN 10.6.DWG

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MISSOURI DESIGN FIRM LICENSE NO.: 001166

USER NAME =	TYLER HUFFMAN	DESIGNED -	___	REVISED -	
		DRAWN -	___	REVISED -	
PLOT SCALE =	1' = 1'	CHECKED -	___	REVISED -	
PLOT DATE =	2015-11-06	DATE -	2008-02-25	REVISED -	

The City of WILDWOOD MISSOURI
PLANNING TOMORROW TODAY

WILDWOOD COMMUNITY PARK - PHASE 2

PLAN & PROFILE SHEETS

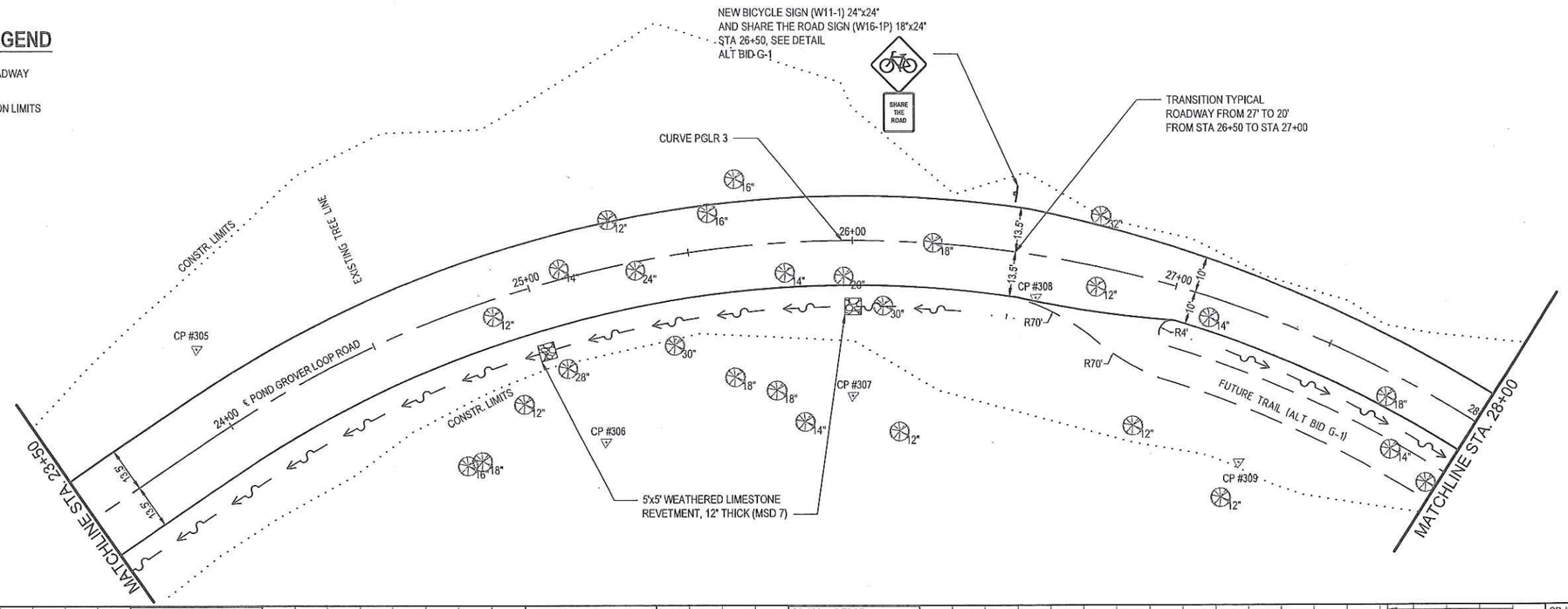
SCALE: | SHEET NO. 2 OF 4 SHEETS | STA. 19+75 TO STA. 23+50

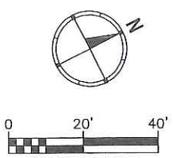
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
___	___ - ___ - ___	ST. LOUIS	19	6
	MISSOURI			

PLAN SHEET LEGEND

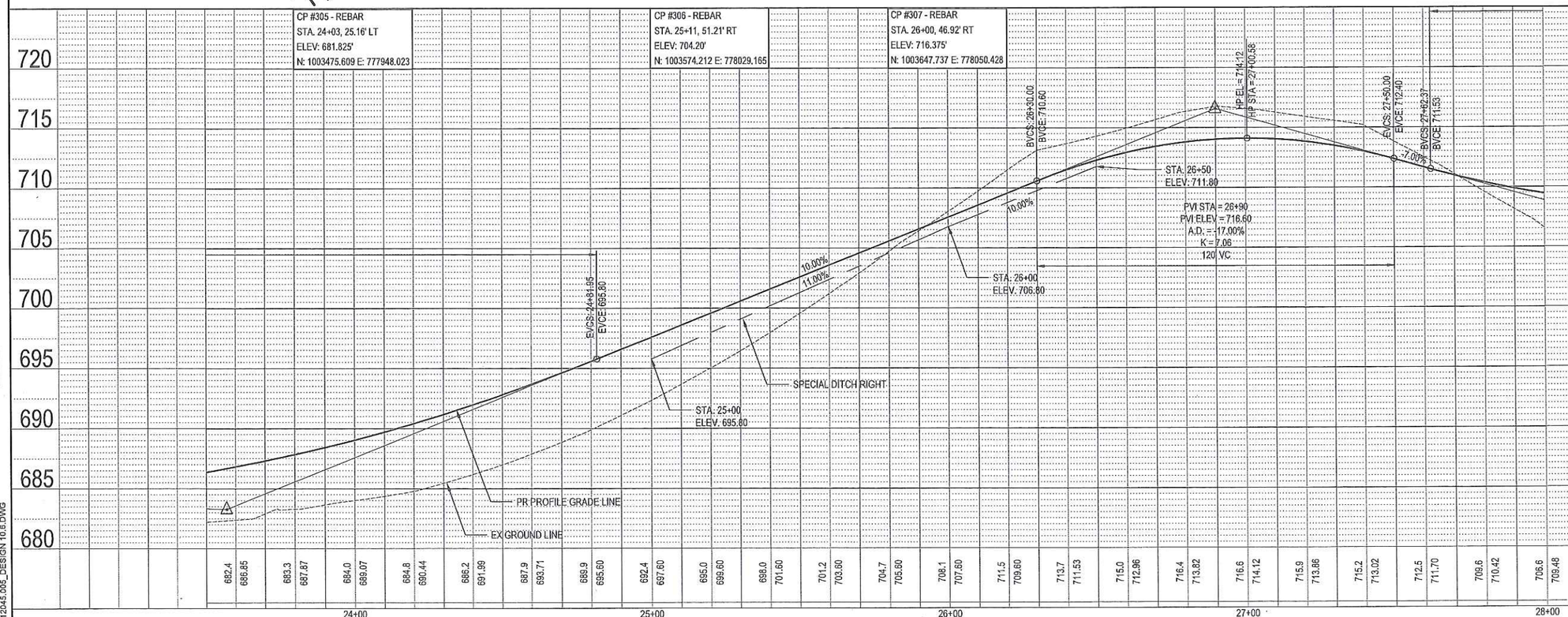
NEW HMA ROADWAY

CONSTRUCTION LIMITS





STATE OF MISSOURI
THOMAS LEE CISSELL III
NUMBER
PE-2002016635
PROFESSIONAL ENGINEER
11/10/15
EXP 12/31/16



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PROFILE — SURVEYED / PLOTTED / GRADES CHECKED / B.M. NOTED / STRUCTURE NOTATNS CHKD — NOTE BOOK — NO. — BY — DATE

FILE NAME = 12045.005_DESIGN 10.8.DWG

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		DRAWN - ___	REVISED -
	PLOT SCALE = 1' = 1'	CHECKED - ___	REVISED -
	PLOT DATE = 2015-11-06	DATE - 2008-02-25	REVISED -

The City of WILDWOOD MISSOURI — PLANNING TOMORROW TODAY

WILDWOOD COMMUNITY PARK - PHASE 2

PLAN & PROFILE SHEETS

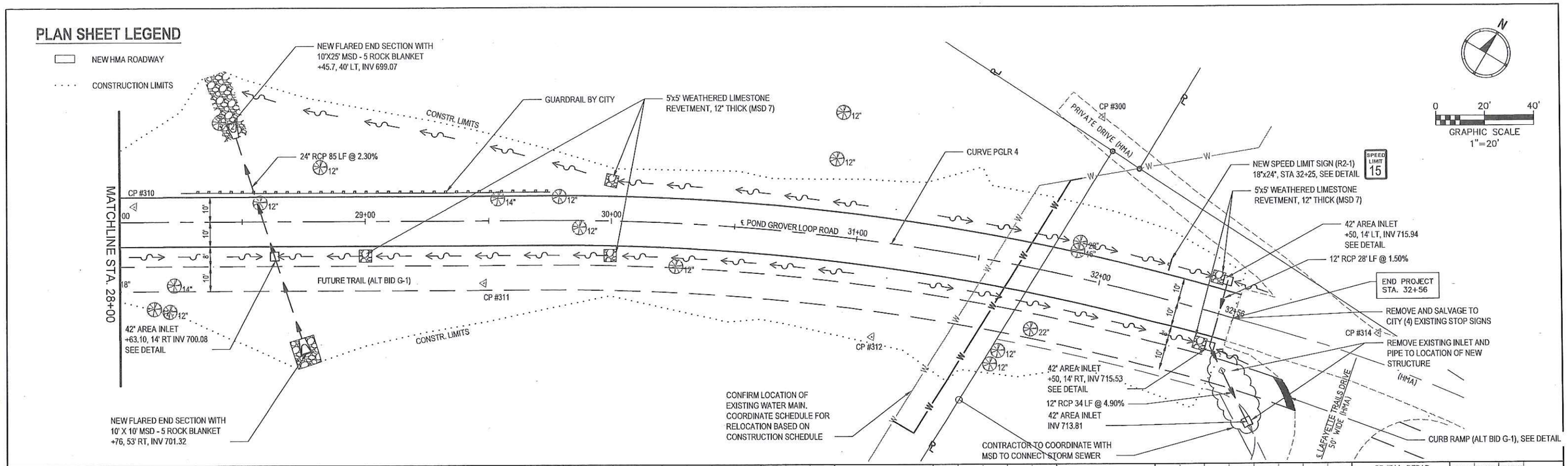
SCALE: | SHEET NO. 3 OF 4 SHEETS | STA. 23+50 TO STA. 28+00

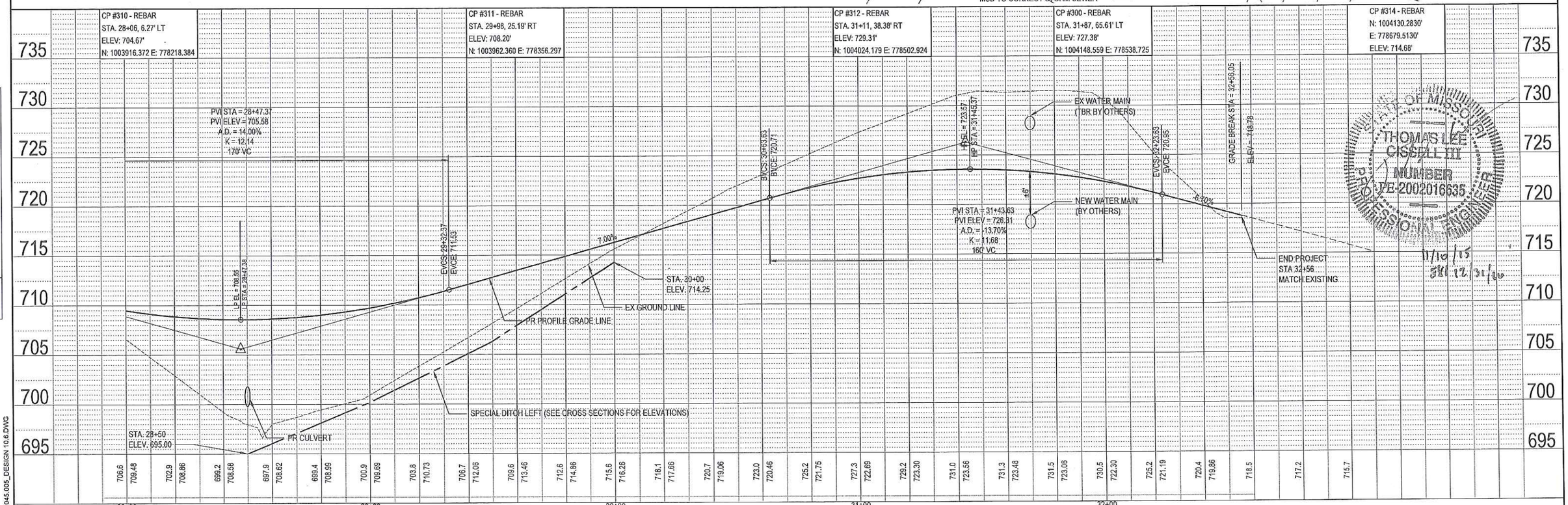
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
___	___	ST. LOUIS	19	7
		MISSOURI		

PLAN SHEET LEGEND

NEW HMA ROADWAY

CONSTRUCTION LIMITS





PLAN	BY	DATE
SURVEYED		
PLOTTED		
GRADES CHECKED		
B.M. NOTED		
STRUCTURE NOTATNS CHKD		
NOTE BOOK NO.		

PROFILE	BY	DATE
SURVEYED		
PLOTTED		
GRADES CHECKED		
B.M. NOTED		
STRUCTURE NOTATNS CHKD		
NOTE BOOK NO.		

FILE NAME = 12045.005_DESIGN 10.6.DWG

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USER NAME = TYLER HUFFMAN	DESIGNED - ___	REVISED -	
	DRAWN - ___	REVISED -	
PLOT SCALE = 1" = 1'	CHECKED - ___	REVISED -	
PLOT DATE = 2015-11-06	DATE - 2008-02-25	REVISED -	

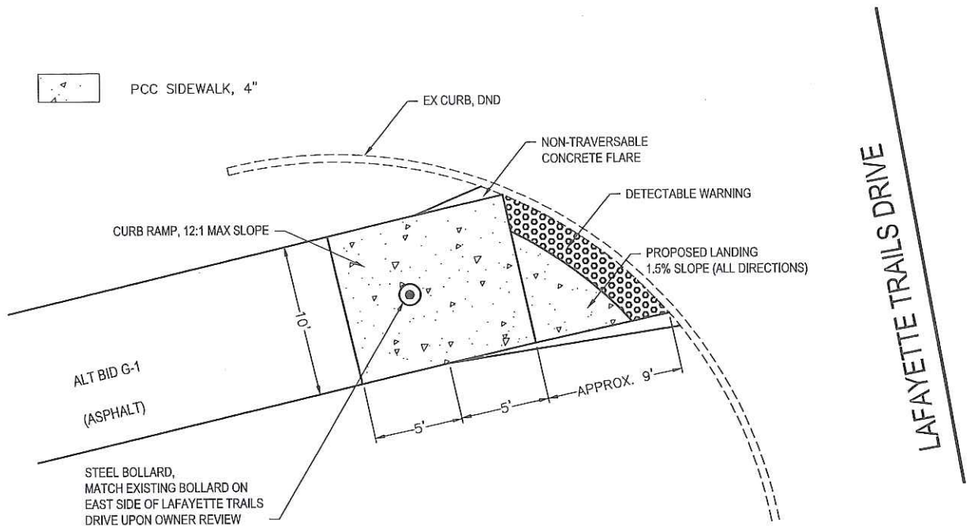
The City of WILDWOOD MISSOURI
PLANNING TOMORROW TODAY

WILDWOOD COMMUNITY PARK - PHASE 2
PLAN & PROFILE SHEETS

SCALE: | SHEET NO. 4 OF 4 SHEETS | STA. 28+00 TO STA. 32+56

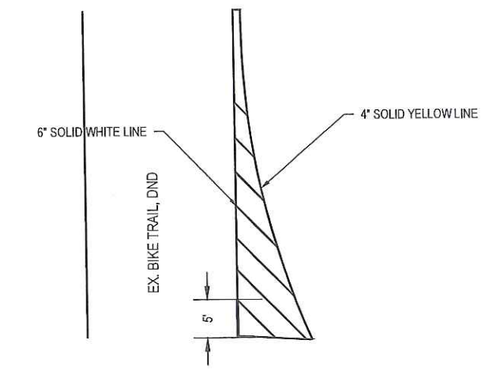
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
___	- - - -	ST. LOUIS	19	8
	MISSOURI			

STATE OF MISSOURI
THOMAS LEE GOSELLIN III
NUMBER PE-2002016635
PROFESSIONAL ENGINEER
11/10/15
SH 12/31/16



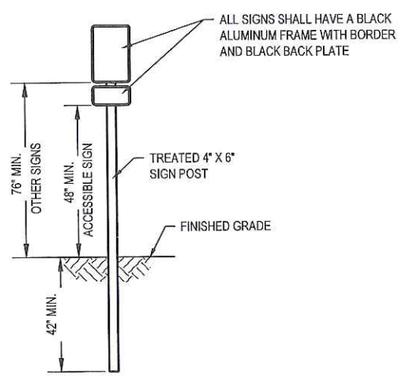
CURB RAMP DETAIL (ALT BID G-1)

(NOT TO SCALE)



WHITE HATCHING MARKINGS DETAIL

(NOT TO SCALE)



SIGN DETAIL

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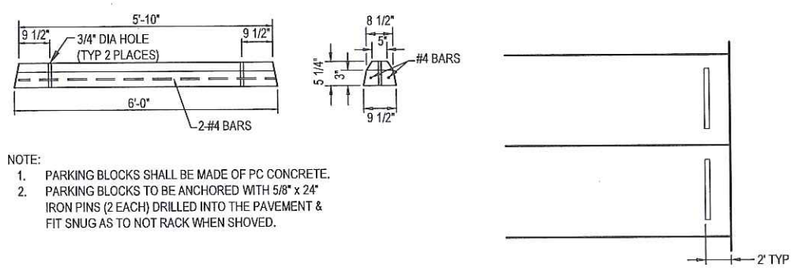
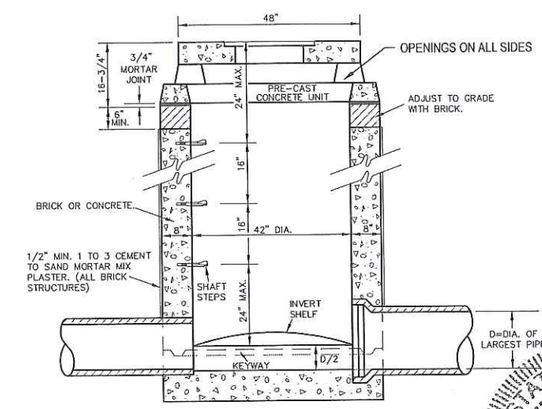


NOTE:

1. PARKING BLOCKS SHALL BE MADE OF PC CONCRETE.
2. PARKING BLOCKS TO BE ANCHORED WITH 5/8" x 24" IRON PINS (2 EACH) DRILLED INTO THE PAVEMENT & FIT SNUG AS TO NOT RACK WHEN SHOVED.

PARKING BLOCK DETAIL

(NOT TO SCALE)



FOR PRIVATE USE ONLY

AREA INLET DETAIL

(NOT TO SCALE)

STATE OF MISSOURI
THOMAS LEE CISSELL III
NUMBER PE-2002016635
PROFESSIONAL ENGINEER

11/10/15
Exp. 12/31/16

FILE NAME = 12045.005_DETAILS.DWG

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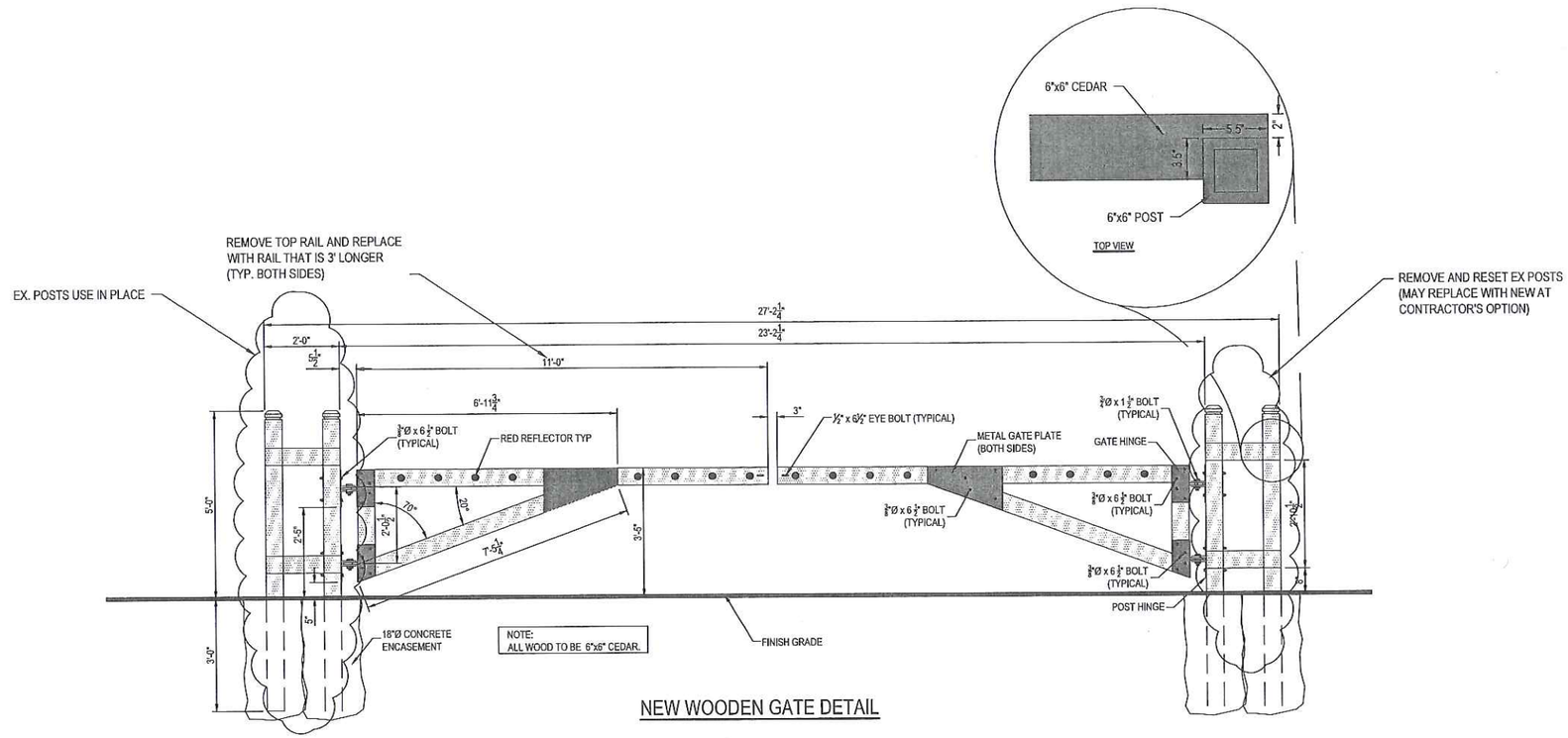
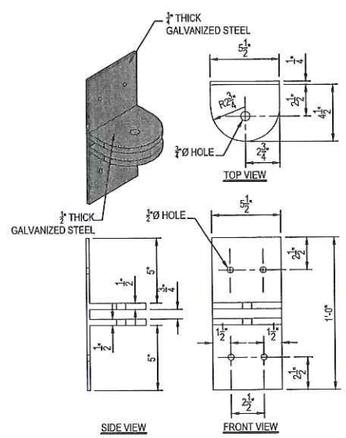
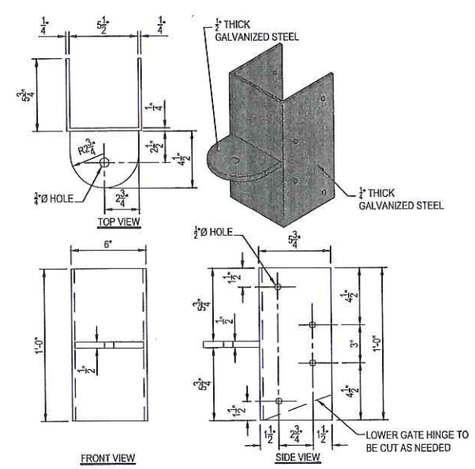
		DRAWN - ___	REVISED -					ST. LOUIS	19	9
	PLOT SCALE = 1" = 1'	CHECKED - ___	REVISED -							
	PLOT DATE = 2015-11-06	DATE - 2015-09-03	REVISED -		SCALE: / SHEET NO. 1 OF 4 SHEETS / STA. ___ TO STA. ___			MISSOURI		



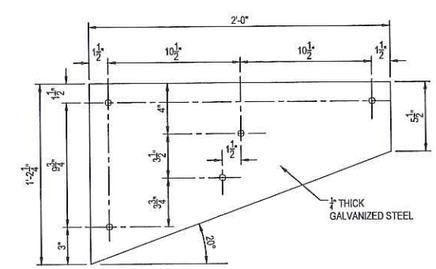
NEW WOODEN GATE DETAIL



POST HINGE DETAIL



GATE HINGE DETAIL



METAL GATE PLATE DETAIL

STATE OF MISSOURI
THOMAS LEE CISELLI III
NUMBER
PE-2002016635
PROFESSIONAL ENGINEER

11/10/15
Exp. 12/31/16

FILE NAME = 12045.005_DETAILS.DWG

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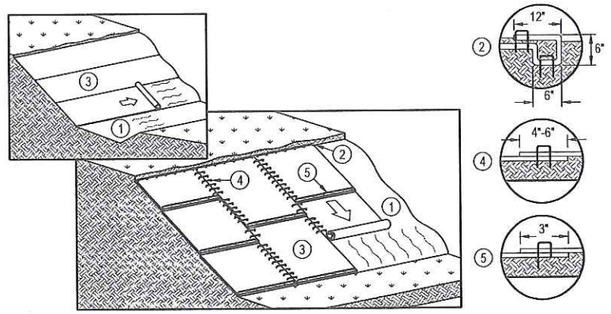
		DRAWN - ___	REVISED -			___	- - - -	ST. LOUIS	19	10
	PLOT SCALE = 1' = 1'	CHECKED - ___	REVISED -		SCALE:	SHEET NO. 2 OF 4 SHEETS	STA. _____ TO STA. _____		MISSOURI	
	PLOT DATE = 2015-09-10	DATE - 2015-09-03	REVISED -							



1. PREPARE FINISHED GRADE BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED ACCORDING TO THE SPECIFICATIONS.

2. ANCHOR THE BLANKET IN A 6" DEEP BY 6" WIDE TRENCH AT THE TOP OF THE SLOPE WITH A ROW OF LANDSCAPE STAPLES AT 12" SPACING IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. SEED THE SOIL AND FOLD THE REMAINING 12" LONG BLANKET REMNANT BACK OVER SEED AND TOP SOIL. ANCHOR THE BLANKET OVER COMPACTED TOP SOIL WITH A ROW OF LANDSCAPE STAPLES SPACED AT 12" SPACING ACROSS THE BLANKET AT THE TOP OF THE SLOPE.

3. ROLL THE BLANKETS DOWN (OPTION A) OR HORIZONTALLY (OPTION B) ACROSS THE SLOPE. UNROLL BLANKETS WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. SECURELY FASTEN BLANKETS TO SOIL BY PLACING LANDSCAPE STAPLES PER MANUFACTURER'S RECOMMENDATION.

4. STAPLE THE EDGES OF PARALLEL BLANKETS WITH A MINIMUM 6" OVERLAP OR PER MANUFACTURER'S RECOMMENDATIONS.

5. SPLICE BLANKETS END OVER END WITH A 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA AT 12" SPACING THE ACROSS ENTIRE BLANKET WIDTH OR PER MANUFACTURER'S SPECIFICATIONS.

6. TERMINAL ENDS SHALL BE ANCHORED WITH A ROW OF LANDSCAPE STAPLES SPACED 12" APART IN A 6" DEEP BY 6" WIDE TRENCH. BACKFILL, COMPACT, AND SEED THE TRENCH WITH TOPSOIL AFTER STAPLING.

NOTES:

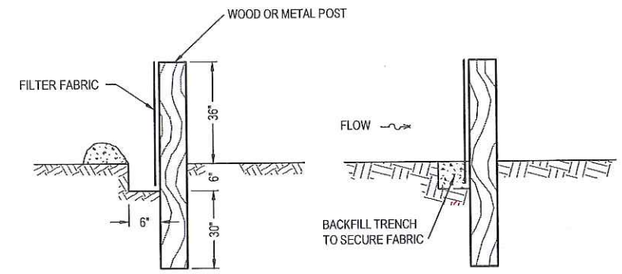
1. PLACE STAPLES/STAKES PER MANUFACTURER'S RECOMMENDATION FOR THE APPROPRIATE SLOPE BEING APPLIED.

2. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

3. FOLLOW SPECIFICATIONS FOR PROCUCT SELECTION.

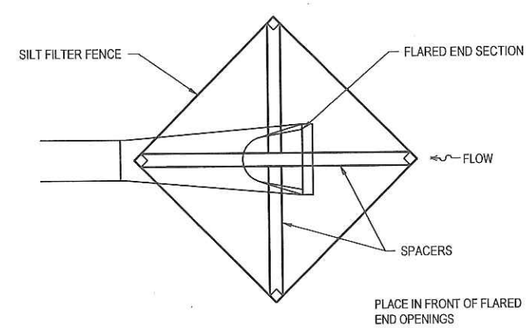
EROSION CONTROL BLANKETS FOR SLOPES

(NOT TO SCALE)



SILT FILTER FENCE AS A PERIMETER EROSION BARRIER

(NOT TO SCALE)



PIPE PROTECTION

(NOT TO SCALE)

STATE OF MISSOURI
THOMAS LEE CISSELL III
NUMBER
PE-2002016635
PROFESSIONAL ENGINEER

11/10/15
EXP 12/31/16

FILE NAME = 12045.005_DETAILS.DWG

OATES ASSOCIATES Engineering + Architecture www.oatesassociates.com MISSOURI DESIGN FIRM LICENSE NO.: 001166	USER NAME = TYLER HUFFMAN	DESIGNED -	REVISED -	The City of WILDWOOD MISSOURI PLANNING TOMORROW TODAY	WILDWOOD COMMUNITY PARK - PHASE 2 CONSTRUCTION DETAILS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -					ST. LOUIS	19	11
	PLOT SCALE = 1' = 1'	CHECKED -	REVISED -							
	PLOT DATE = 2015-09-10	DATE - 2015-09-03	REVISED -		SCALE: SHEET NO. 3 OF 4 SHEETS STA. ____ TO STA. ____		MISSOURI			

PROJECT NAME:

WILDWOOD COMMUNITY PARK - PHASE 2
SECTION 2, TOWNSHIP 44 NORTH, RANGE 3 EAST OF THE 5TH PRINCIPAL MERIDIAN
2153 HIGHWAY 109
WILDWOOD, MISSOURI, 63040

OWNER NAME & ADDRESS:

CITY OF WILDWOOD
183 PLAZA DRIVE
WILDWOOD, MISSOURI 63040

DESCRIPTION:

SOIL DISTURBING ACTIVITIES WILL INCLUDE: DEMOLITION, CLEARING AND GRUBBING, TREE REMOVAL, MASS GRADING, FINE GRADING.

WATERSHED SOIL CLASSIFICATION: HYDROLOGIC SOIL GROUP "C", "D" AND "C/D".

EROSION CONTROL MEASURES SHALL INCLUDE: INSTALLING PERIMETER SILT FENCE, SODDING, EROSION CONTROL BLANKET, PIPE PROTECTION, TEMPORARY AND PERMANENT VEGETATION.

SITE AREA:

THE SITE IS APPROXIMATELY 3 ACRES.

THE SEQUENCE OF MAJOR ACTIVITIES SHALL BE AS FOLLOWS:

1. PERFORM REMOVALS
2. INSTALL PERIMETER SILT FENCE
3. CLEAR AND GRUB.
4. MASS GRADE.
5. STABILIZE DENUDED AREA AND STOCKPILES WITH TEMPORARY SEEDING WITHIN 14 DAYS OF THE LAST GRADING ACTIVITY IN THAT AREA.
6. INSTALL PIPE CULVERTS.
7. INSTALL PIPE PROTECTION ON NEW OUTLETS.
8. COMPLETE FINE GRADING AND INSTALL PERMANENT SODDING AND SEEDING.
9. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND ALL VEGETATION IS ESTABLISHED, REMOVE ALL EROSION CONTROL MEASURES, AND RE-SOD/ RE-SEED ANY AREAS DISTURBED BY THEIR REMOVAL.

NAME OF RECEIVING WATERS:

NO STORM WATER IS BEING REDIRECTED FROM ITS PREVIOUS RECEIVING WATER.

OFFSITE VEHICLE TRACKING:

PAVED STREETS ADJACENT TO THE SITE SHALL BE CLEANED DAILY OR MORE FREQUENTLY AS NECESSARY. CLEANING SHALL INCLUDE SCRAPING SIGNIFICANT AMOUNTS OF SOIL AND POWER SWEEPING AS NEEDED TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE.

TIMING OF CONTROL MEASURES:

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES PERIMETER SILT FENCE SHALL BE CONSTRUCTED AT THE COMMENCEMENT OF THE SEQUENCE OF GRADING OPERATIONS AS PRACTICAL. AREAS WHERE CONSTRUCTION ACTIVITY WILL TEMPORARILY CEASE FOR MORE THAN 21 DAYS SHALL BE STABILIZED WITH TEMPORARY SEEDING AND MULCH WITHIN 14 DAYS OF THE LAST DISTURBANCE.

TEMPORARY SEEDING SHALL CONSIST OF RYE OR WHEAT APPLIED AT A RATE OF 120 POUNDS PER ACRE. 270 POUNDS OF NUTRIENTS OF 10-10-10 FERTILIZER SHALL BE APPLIED TO EACH ACRE. AFTER SEEDING, STRAW MULCH SHALL BE APPLIED AT A RATE OF 4000 POUNDS PER ACRE AND ANCHORED BY CRIMPING.

ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, THAT AREA SHALL BE STABILIZED WITH PERMANENT SODDING. PERMANENT SODDING SHALL BE IN ACCORDANCE WITH PART 8, SECTION F OF THE STANDARD SPECIFICATIONS.

THE CONTRACTOR SHALL INSPECT AND REMOVE ANY LOOSE MATERIAL THAT IS DEPOSITED IN THE FLOW LINES OF GUTTERS, DRAINAGE STRUCTURES, DITCHES, ETC. TO ENSURE THAT THE NATURAL FLOW LINE OF WATER IS NOT OBSTRUCTED. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS.

AT THE CONCLUSION OF EACH DAY, THE CONTRACTOR SHALL INSURE POSITIVE SITE DRAINAGE TO AN AREA PROTECTED BY EROSION CONTROLS. SITE DRAINAGE MAY BE ACHIEVED BY SHEET FLOW, STORM SEWERS, DITCHING OR PUMPING.

CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS:

THE STORM WATER POLLUTION PREVENTION PLAN REFLECTS THE METROPOLITAN ST. LOUIS SEWER DISTRICT (MSD) AND TOWN AND COUNTRY MUNICIPAL CODE REQUIREMENTS FOR STORM WATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL. TO ENSURE COMPLIANCE, THIS PLAN WAS PREPARED IN ACCORDANCE WITH MSD AND THE REQUIREMENTS OF THE NPDES PERMIT PROGRAM.

MAINTENANCE/INSPECTION PROCEDURES:

THE GENERAL CONTRACTOR SHALL SELECT UP TO THREE INDIVIDUALS WHO SHALL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES, AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.

PERSONNEL SELECTED FOR INSPECTION RESPONSIBILITIES SHALL RECEIVE TRAINING FROM THE SITE SUPERINTENDENT. THEY SHALL BE TRAINED IN ALL THE INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ONSITE IN GOOD WORKING ORDER.

THE FOLLOWING INSPECTION AND MAINTENANCE PRACTICES SHALL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS:

ALL CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE EACH WEEK AND FOLLOWING ANY RAINFALL EVENT OF 0.5 INCHES OR GREATER. DURING PERIODS OF EXTENDED RAINFALL, ALL MEASURES SHALL BE INSPECTED DAILY.

ALL MEASURES SHALL BE MAINTAINED IN GOOD WORKING ORDER. IF A REPAIR IS NECESSARY, IT SHALL BE INITIATED WITHIN 24 HOURS OF REPORT.

BUILT UP SEDIMENT SHALL BE REMOVED FROM SILT FENCES AND STRAW BALE DIKES WHEN IT HAS REACHED ONE-THIRD THE DESIGN HEIGHT OF THE FENCE OR BALE.

TEMPORARY AND PERMANENT SEEDING SHALL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND UNHEALTHY GROWTH.

A MAINTENANCE INSPECTION REPORT SHALL BE MADE AFTER EACH INSPECTION. ALL INSPECTION REPORTS SHALL BE KEPT IN THE CONSTRUCTION OFFICE ON-SITE. IF THE PROVIDED FORM IS INSUFFICIENT, ADDITIONAL FORMS SHALL BE USED AS NECESSARY UNTIL THE PROJECT IS COMPLETED. A REPORT SHALL BE COMPLETED FOR EACH OF THE REQUIRED INSPECTION INTERVALS.

NON-STORM WATER DISCHARGES

IT IS ANTICIPATED THAT SOME NON-STORM WATER DISCHARGES WILL OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD.

ANTICIPATED NON-STORM DISCHARGES EXPECTED INCLUDE, PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED), AND UNCONTAMINATED GROUNDWATER (FROM DEWATERING EXCAVATION).

PRODUCT SPECIFIC PRACTICES

THE FOLLOWING PRODUCT SPECIFIC PRACTICES SHALL BE FOLLOWED ONSITE:

PETROLEUM PRODUCTS:

ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS, WHICH ARE CLEARLY LABELED. ANY BITUMINOUS SUBSTANCES USED ONSITE SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FERTILIZERS:

FERTILIZERS USED SHALL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER SHALL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE SHALL BE IN A COVERED SHED. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

INSPECTION AND MAINTENANCE REPORT FORM

DATE / TIME	INSPECTORS NAME	WEATHER CONDITIONS	RAINFALL LAST 24 HRS.	IS SEDIMENT TRACKED ON TO ROAD	DEPTH OF SILT ON SILT FENCES	DEPTH OF SILT AGAINST DITCH CHECKS	CONDITION OF BASIN SIDE SLOPES	DEPTH OF SILT AGAINST ROCK DAM	ACTION REQUIRED	CONTRACTOR		
										CONTRACTOR'S NAME	CONTRACTOR'S SIGNATURE	DATE OF ACTION

CONTRACTOR CERTIFICATION STATEMENT

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION. I HAVE READ AND UNDERSTAND ALL OF THE INFORMATION AND REQUIREMENTS STATED IN THE STORM WATER POLLUTION PREVENTION PLAN FOR THE ABOVE MENTIONED PROJECT. I HAVE PROVIDED ALL DOCUMENTATION REQUIRED TO BE IN COMPLIANCE WITH THE ILR10 AND STORM WATER POLLUTION PREVENTION PLAN AND WILL PROVIDE TIMELY UPDATES TO THESE DOCUMENTS AS NECESSARY.

PRINT NAME	SIGNATURE	STREET ADDRESS
TITLE	DATE	CITY/STATE/ZIP
NAME OF FIRM	TELEPHONE	

STATE OF MISSOURI
THOMAS LEE CISSELL III
NUMBER
PE-2002016635
PROFESSIONAL ENGINEER
11/10/15 Exp 12/31/16

FILE NAME = 12045.005_DETAILS.DWG

OATES ASSOCIATES Engineering + Architecture www.oatesassociates.com MISSOURI DESIGN FIRM LICENSE NO.: 001166	USER NAME = TYLER HUFFMAN	DESIGNED -	REVISED -	The City of WILDWOOD MISSOURI PLANNING TOMORROW TODAY
		DRAWN -	REVISED -	
	PLOT SCALE = 1' = 1'	CHECKED -	REVISED -	
	PLOT DATE = 2015-09-10	DATE - 2015-09-03	REVISED -	

WILDWOOD COMMUNITY PARK - PHASE 2
CONSTRUCTION DETAILS

SCALE: | SHEET NO. 4 OF 4 SHEETS | STA. _____ TO STA. _____

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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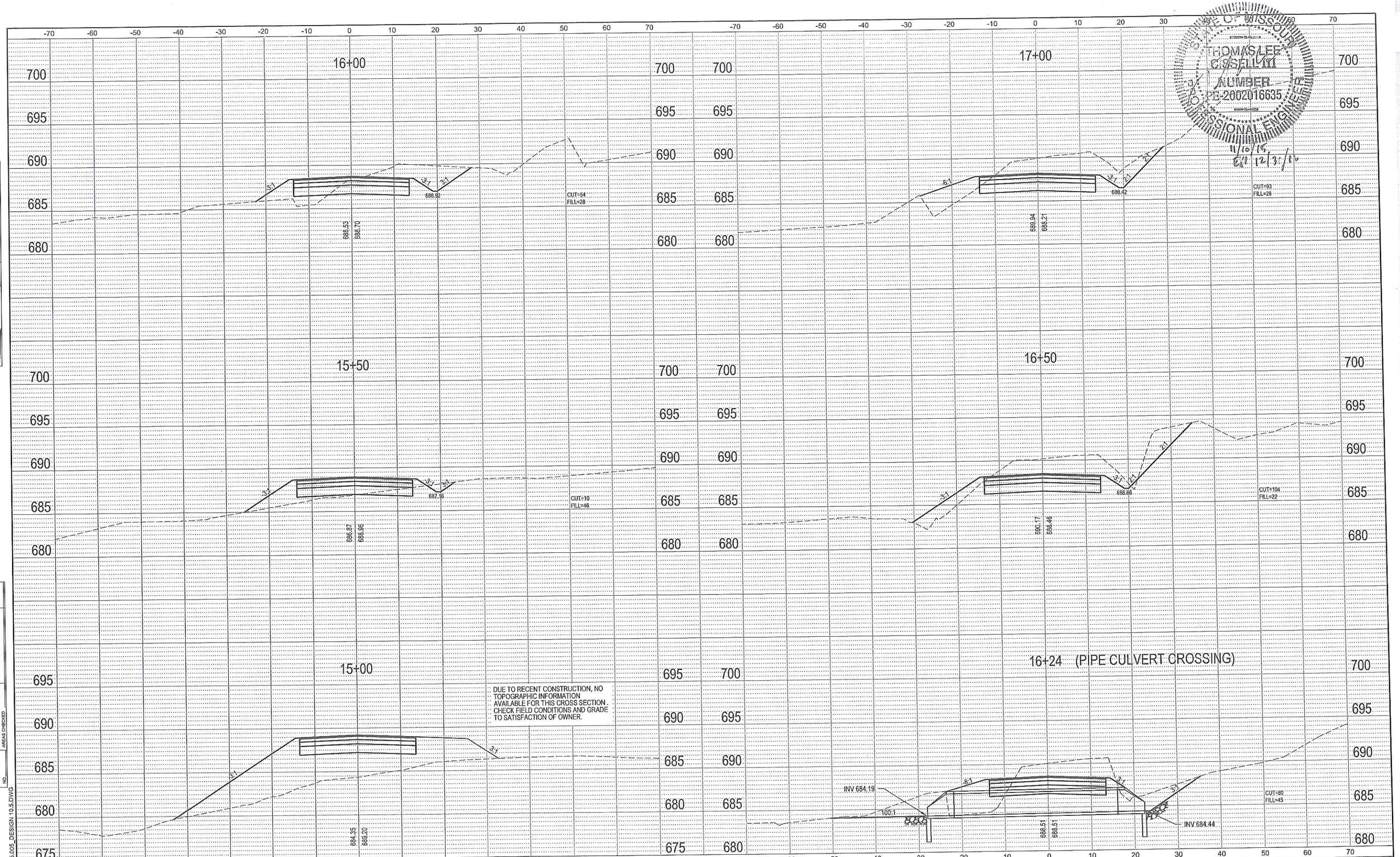
		MISSOURI		



STATE OF MISSOURI
THOMAS LEE CASELLI III
NUMBER PE-2002016635
PROFESSIONAL ENGINEER
11/10/15
12/31/16

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AREAS CHECKED		
NOTE BOOK		
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ORIGINAL SURVEY	BY	DATE
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FILE NAME = 12045.005_DESIGN 10.5.DWG

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MISSOURI DESIGN FIRM LICENSE NO. 001166

USER NAME = TYLER HUFFMAN	DESIGNED - TLC	REVISED -
	DRAWN - TCH	REVISED -
PLOT SCALE = 6" = 1'	CHECKED - TLC	REVISED -
PLOT DATE = —	DATE - 2015-07-06	REVISED -

The City of WILDWOOD MISSOURI
PLANNING TOMORROW TODAY

WILDWOOD COMMUNITY PARK - PHASE 2

CROSS SECTIONS

SCALE: | SHEET NO. 1 OF 7 SHEETS | STA. 14+77 TO STA. 17+00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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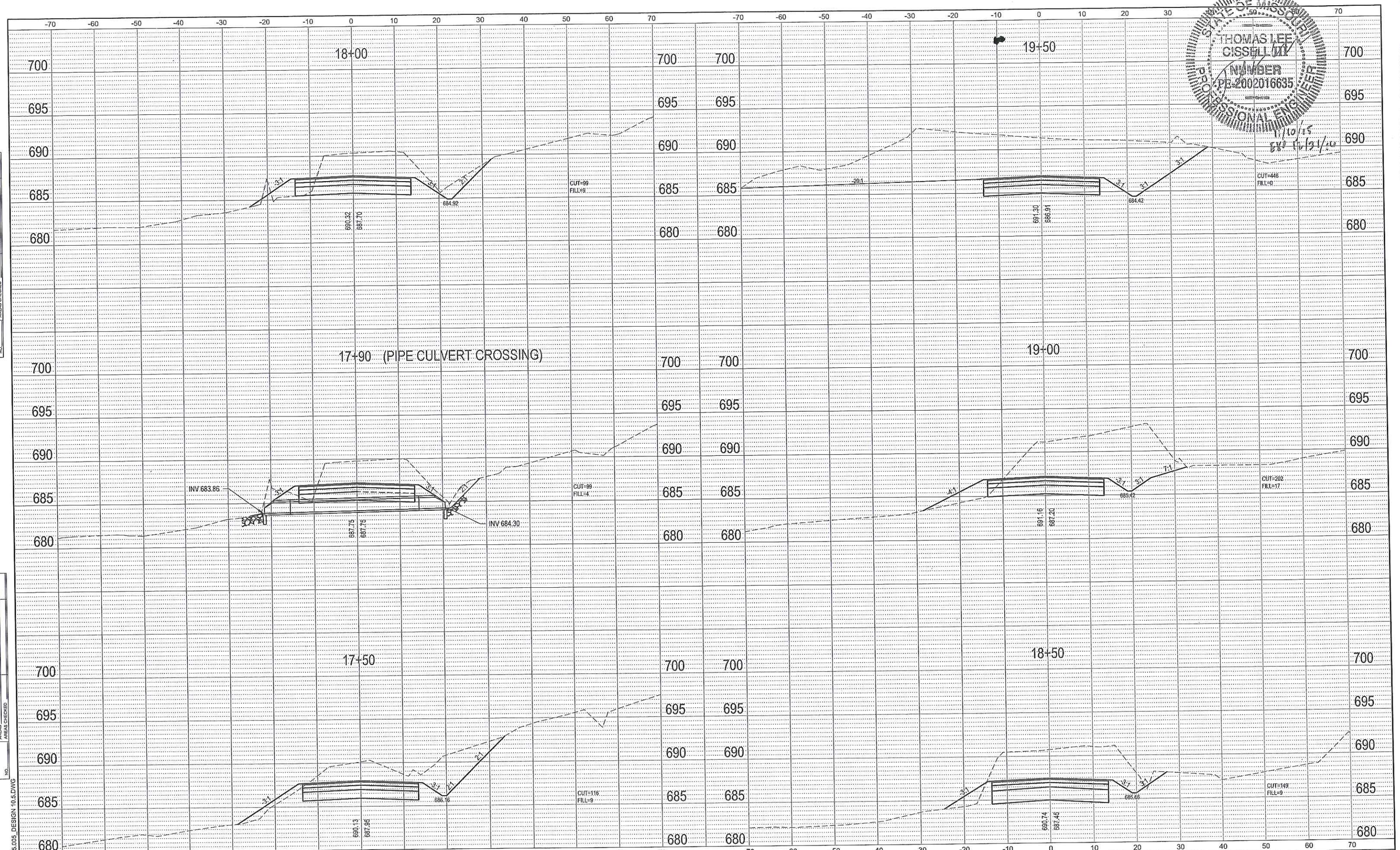
		MISSOURI		



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STATE OF MISSOURI
THOMAS LEE CISSELL III
NUMBER PE-2002016635
PROFESSIONAL ENGINEER
11/10/15
EW 12/21/16

FILE NAME = 12045.005_DESIGN 10.5.DWG

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MISSOURI DESIGN FIRM LICENSE NO. 001166

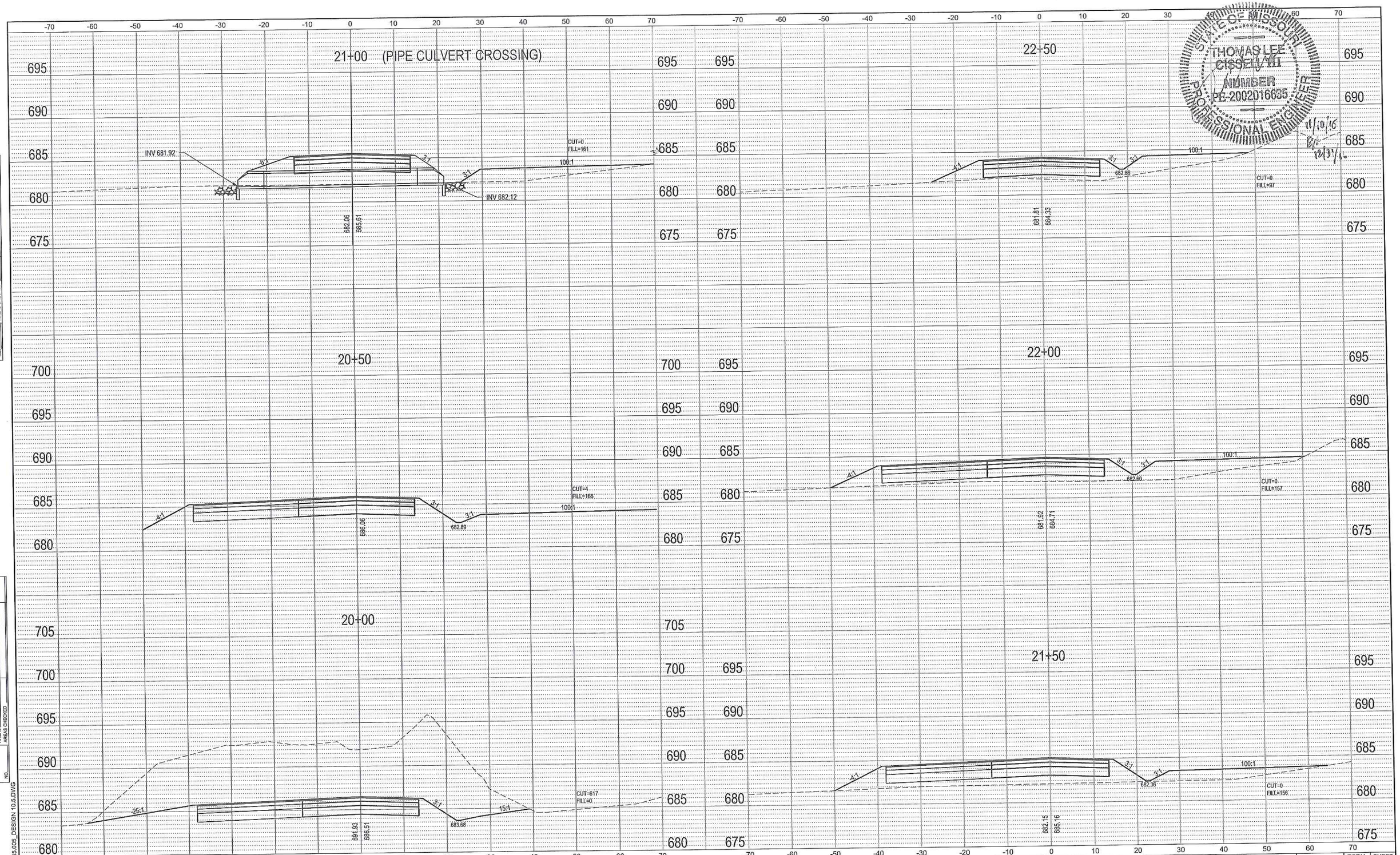
USER NAME = TYLER HUFFMAN	DESIGNED - TLC	REVISED -	
	DRAWN - TCH	REVISED -	
PLOT SCALE = 6" = 1'	CHECKED - TLC	REVISED -	
PLOT DATE = ----	DATE - 2015-07-06	REVISED -	

The City of WILDWOOD MISSOURI
PLANNING TOMORROW TODAY

WILDWOOD COMMUNITY PARK - PHASE 2
CROSS SECTIONS

SCALE: | SHEET NO. 2 OF 7 SHEETS | STA. 17+50 | TO STA. 19+50

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	- - -	ST. LOUIS	19	14
		MISSOURI		



STATE OF MISSOURI
THOMAS LEE CISSELL III
NUMBER
PE-2002016635
PROFESSIONAL ENGINEER
11/10/16
12/31/16

FINAL SURVEY	BY	DATE
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FILE NAME = 12045.005_DESIGN 10.5.DWG

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MISSOURI DESIGN FIRM LICENSE NO. 001166

USER NAME = TYLER HUFFMAN	DESIGNED - TLC	REVISED -	
	DRAWN - TCH	REVISED -	
PLOT SCALE = 6" = 1'	CHECKED - TLC	REVISED -	
PLOT DATE = —	DATE - 2015-07-06	REVISED -	

The City of WILDWOOD MISSOURI
PLANNING TOMORROW TODAY

WILDWOOD COMMUNITY PARK - PHASE 2
CROSS SECTIONS

SCALE: | SHEET NO. 3 OF 7 SHEETS | STA. 20+00 TO STA. 22+50

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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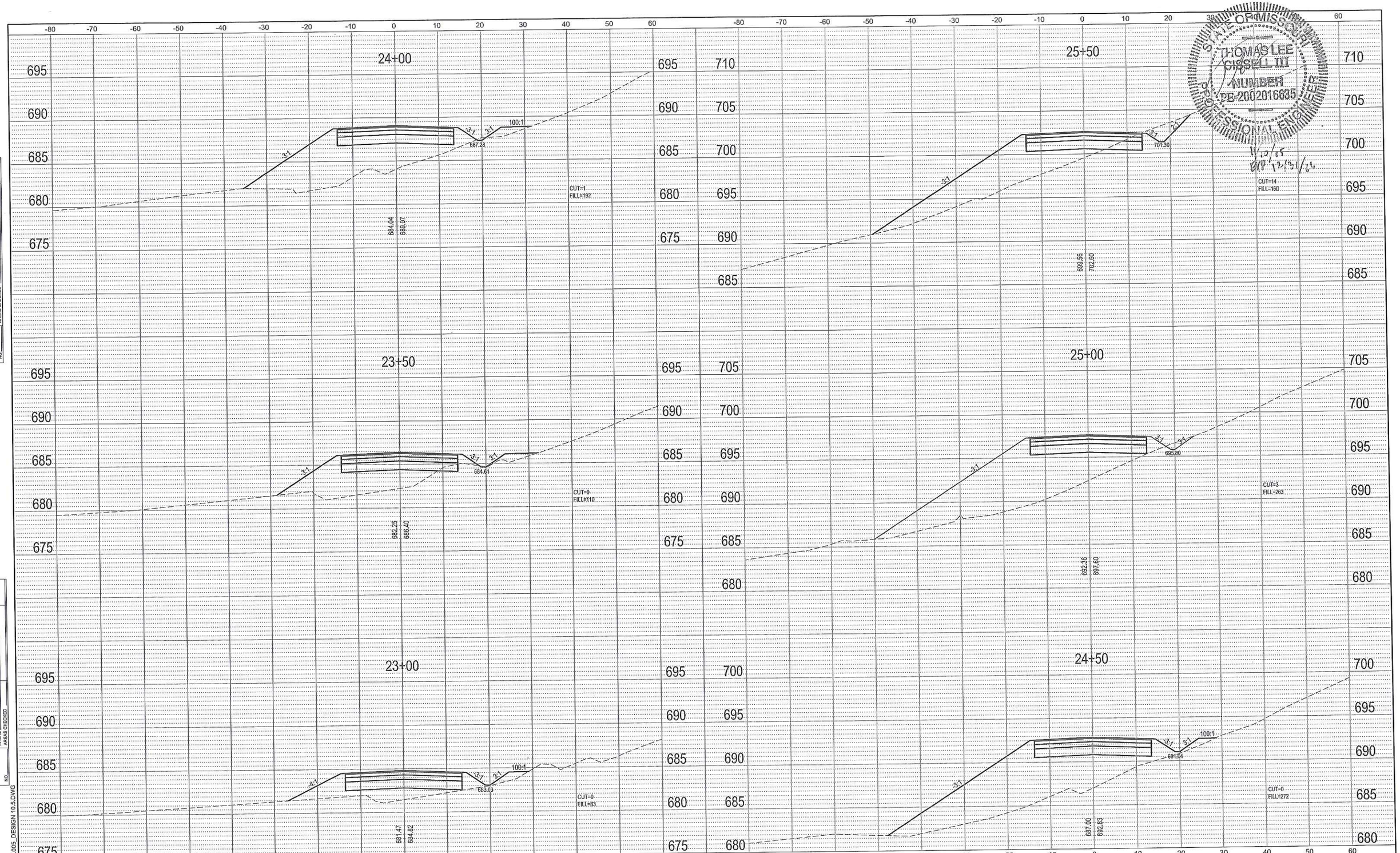
		MISSOURI		



STATE OF MISSOURI
THOMAS LEE CISSELL III
NUMBER
PE-2002016635
PROFESSIONAL ENGINEER

11/12/15
12/31/14

FINAL SURVEY	BY	DATE
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FILE NAME = 12045.005_DESIGN 10.5.DWG

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USER NAME = TYLER HUFFMAN	DESIGNED - TLC	REVISED -	
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PLOT SCALE = 6" = 1'	CHECKED - TLC	REVISED -	
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The City of WILDWOOD MISSOURI
PLANNING TOMORROW TODAY

WILDWOOD COMMUNITY PARK - PHASE 2

CROSS SECTIONS

SCALE: | SHEET NO. 4 OF 7 SHEETS | STA. 23+00 TO STA. 24+50

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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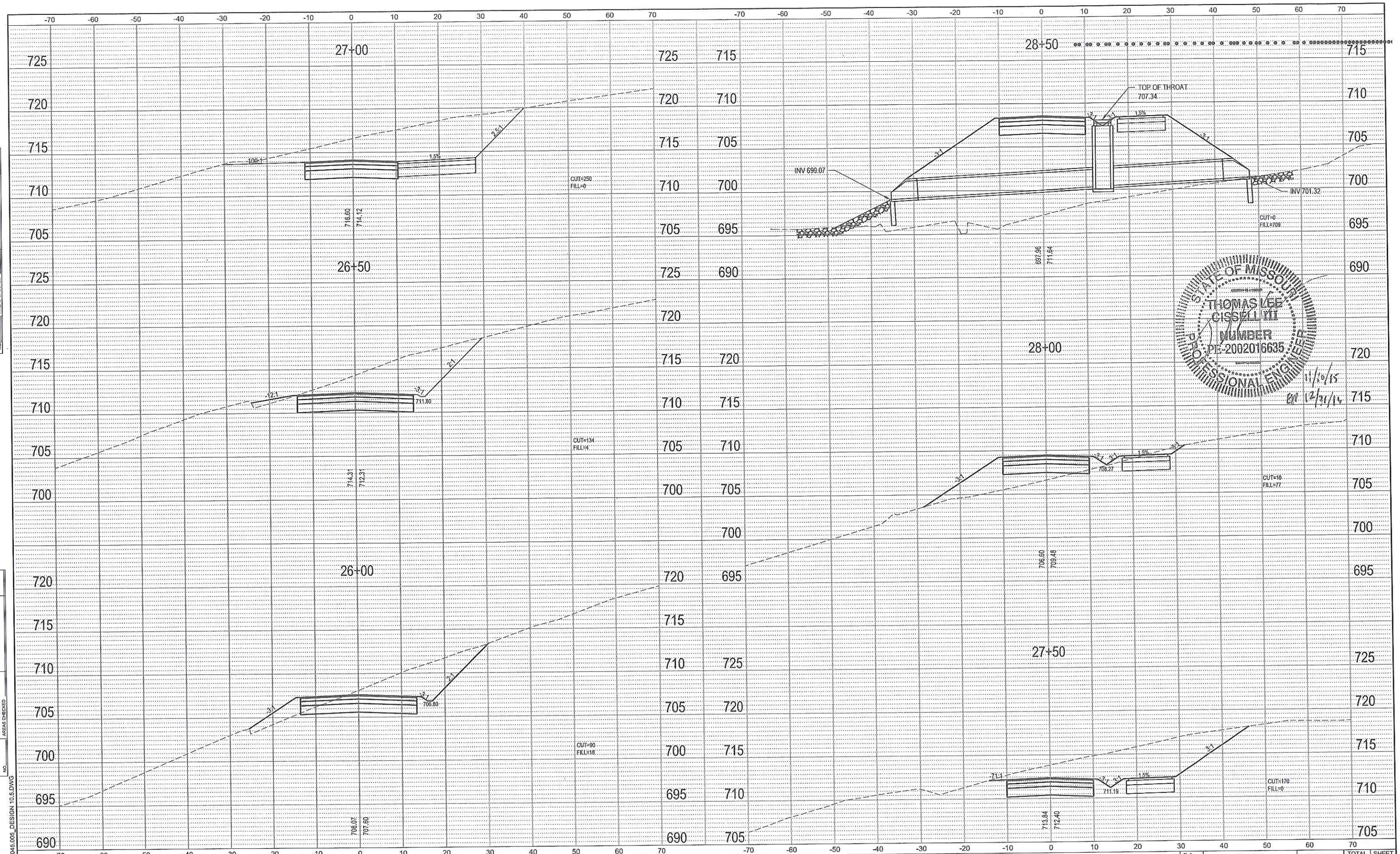
		MISSOURI		



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FILE NAME = 12045.005_DESIGN 10.5.DWG

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MISSOURI DESIGN FIRM LICENSE NO. 001166

USER NAME = TYLER HUFFMAN	DESIGNED - TLC	REVISED -	
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PLOT DATE = —	DATE - 2015-07-06	REVISED -	

The City of WILDWOOD MISSOURI
PLANNING TOMORROW TODAY

WILDWOOD COMMUNITY PARK - PHASE 2

CROSS SECTIONS

SCALE: | SHEET NO. 5 OF 7 SHEETS | STA. 26+00 TO STA. 28+50

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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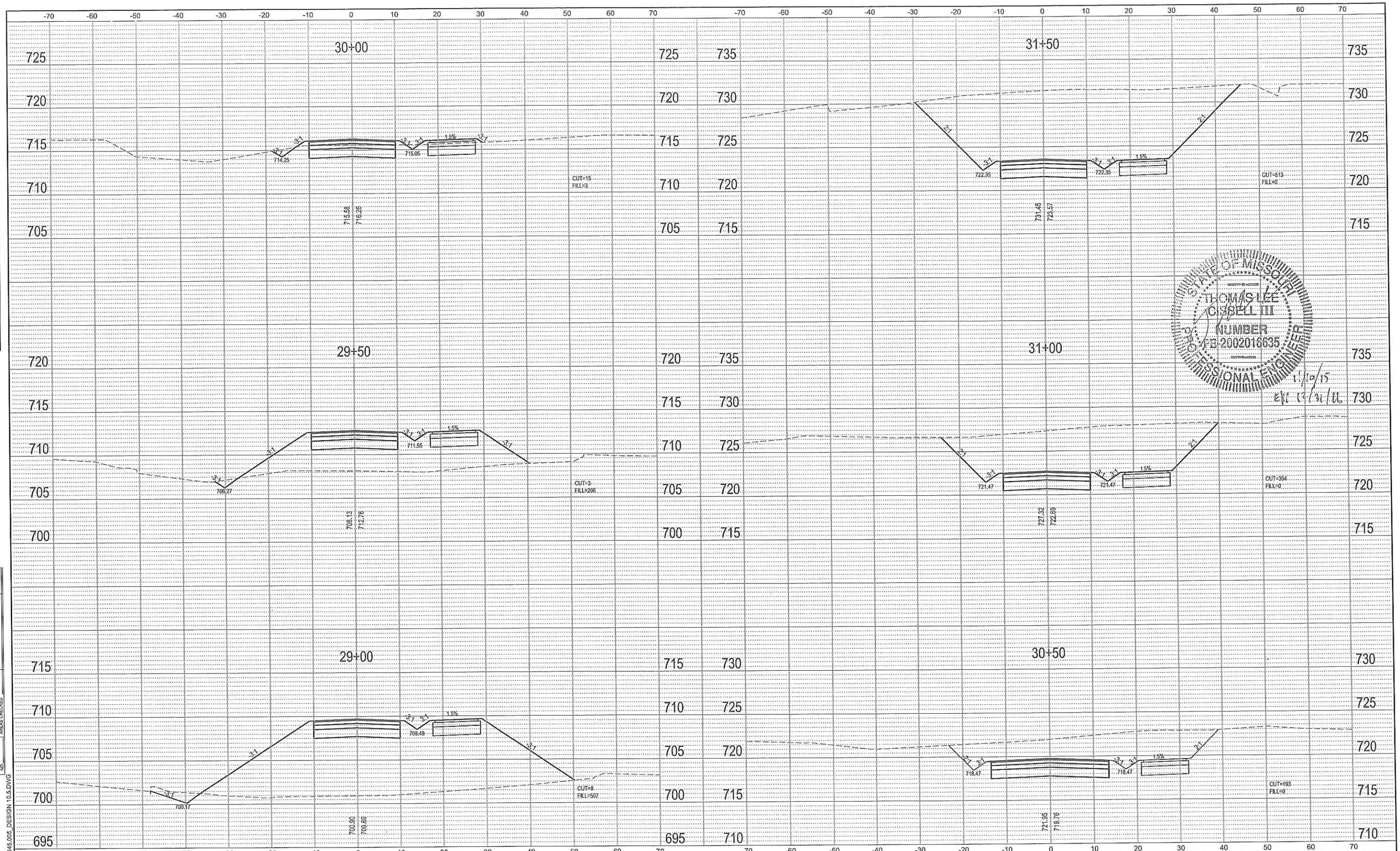
		MISSOURI		



STATE OF MISSOURI
THOMAS LEE CISSELL III
NUMBER
PE-2002016635
PROFESSIONAL ENGINEER
1/10/15
EH 11/21/11

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FILE NAME = 12045.005_DESIGN 10.5.DWG

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USER NAME = TYLER HUFFMAN	DESIGNED - TLC	REVISED -	
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The City of WILDWOOD MISSOURI
PLANNING TOMORROW TODAY

WILDWOOD COMMUNITY PARK - PHASE 2

CROSS SECTIONS

SCALE:

SHEET NO. 6 OF 7 SHEETS

STA. 29+00 TO STA. 31+50

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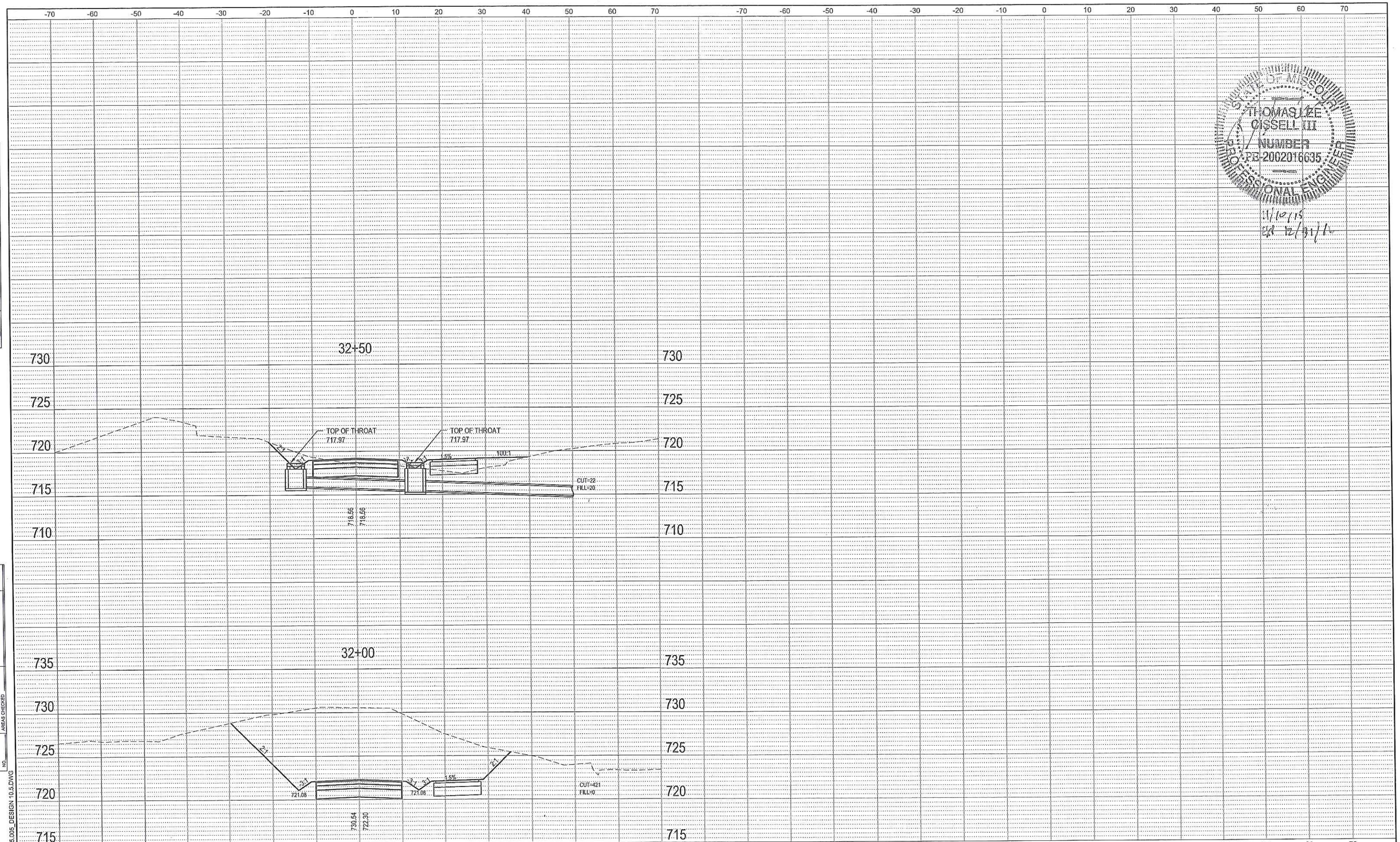
		MISSOURI		



STATE OF MISSOURI
THOMAS LEE CISSELL III
NUMBER PE-2002016635
PROFESSIONAL ENGINEER
11/10/15
EXP. 12/31/16

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FILE NAME = 12045.005_DESIGN 10.5.DWG

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MISSOURI DESIGN FIRM LICENSE NO. 001166

USER NAME = TYLER HUFFMAN	DESIGNED - TLC	REVISED -	
	DRAWN - TCH	REVISED -	
PLOT SCALE = 6" = 1'	CHECKED - TLC	REVISED -	
PLOT DATE = —	DATE - 2015-07-06	REVISED -	

The City of WILDWOOD MISSOURI
PLANNING TOMORROW TODAY

WILDWOOD COMMUNITY PARK - PHASE 2

CROSS SECTIONS

SCALE: | SHEET NO. 7 OF 7 SHEETS | STA. 32+00 | TO STA. 32+50

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
—	— - — - —	ST. LOUIS	19	19
		MISSOURI		

WILDWOOD

Recommendation Report

<<< Site Development Plan Package >>>

City of Wildwood Planning and Zoning Commission – Site Plan Subcommittee

March 21, 2016 Executive Meeting

Petition No.:	P.Z. 21, 22, and 23-14 Stone Mill
Original Petitioner:	Lombardo Homes of St. Louis, L.L.C., Skip Stone, 2299 Technology Drive, Suite 150, O'Fallon, Missouri 63368, c/o SmithAmundsen, L.L.C., Brad Goss, 120 South Central Avenue, Suite 700, St. Louis, Missouri 63105
Current Owner and Petitioner:	Whalen Custom Homes, Michael Whalen, 338 South Kirkwood Road, Kirkwood, Missouri 63122
Zoning District(s):	R-1A 22,000 Square Foot Residence District, with a Planned Residential Development Overlay District (PRD)
Location:	West side of Center Avenue, south of Manchester Road
Street Addresses:	2710 West Avenue
Locator Number:	24V420010
Ward:	Eight
Tract Size:	8.01 acres
Site Plan Subcommittee Meeting Date:	March 7, 2016
Approval Date of the Plan Package:	March 21, 2016
Petitioner's Request:	Approval of the Site Development Plan (SDP) and related items to allow for the development of this twelve (12) lot, single-family residential subdivision, with common ground and public space areas.
Subcommittee Recommendation:	Approval of a Site Development Plan (SDP) and related items to allow for the development of this twelve (12) lot, single-family residential subdivision, with common ground and public space areas.
Background on Proposal/Project:	The Site Plan Subcommittee of the Planning and Zoning Commission held its meeting on this submittal package on March 7, 2016, where the petitioner (Whalen Custom Homes) and Department of Planning staff were in attendance as well. The Department of Planning began the discussion of the Site Development Plan (SDP) and related items by providing a history of the site, once the former location Grover Maintenance Facility for the Missouri Department of Transportation. This site was

used for parking of vehicles and equipment, office related uses, and storage of materials, such as soil, cinder, and salt. The Department also described the change in its ownership from Lombardo Homes to Whalen Custom Homes. The Department then described the plan and packet of the related information that had been provided for tonight's meeting to assist in its discussion. Highlights of this review included the plan sheets, review/comment letters from the City, service provider letters, with comments, and the approved site-specific ordinance, which governs the property and its future use.

Additionally, at this meeting, the Department of Planning provided an overview of this proposed site, which is intended to be developed with a residential subdivision of twelve (12) lot, single family homes. The Department also explained the history associated with its zoning, which included a text change to the Master Plan to change the definition of 'Sub-urban Residential Area' to allow this site to have increased density of units – up to1.75 units per acre. This text change allowed for this site, with its unique placement between existing high density residential communities and the Town Center's boundary, to develop in a way that provides an appropriate transition, which is a priority for the City.

The Department then described the design components associated with the proposed plan, including its compliance to the Planned Residential Development Overlay District (PRD) ordinance approved by the City Council. After this review, the Department then identified key points on the Site Development Plan (SDP) relating to its major characteristics and components. These points included the following:

>>> Development Characteristics <<<

1. The property is 8.01 acres in size and located on the west side of Center Avenue, south of Manchester Road, and has been authorized for twelve (12) single family homes on individual lots. The minimum lot size of any lot is 15,000 square feet, with a minimum lot width of one hundred feet (100'), excepting those parcels of ground located in the cul-de-sac area. All proposed lots, including those parcels of ground in the cul-de-sac area, achieve a minimum lot width of one hundred feet (100').
2. The lot sizes of these homesites range from aforementioned 15,000 square feet to over 36,000 square feet, and maintain a density of 1.62 units per acre, which is acceptable, given the approved density of 1.75 units per acre.
3. The project includes one (1) flag lot – Lot 12 – as approved by the governing ordinance, which fronts onto the undeveloped southern section of Center Avenue. This segment of right-of-way is to be vacated and dedicated to the City of Wildwood as public open space. The shared drive that will access Lot 11 and the flag lot – Lot 12 – will be maintained by the future Stone Mill Subdivision Homeowners Association.
4. The lots will be served by Center Avenue, from Manchester Road and have direct access to Bordeaux Estates Subdivision on Bordeaux Walk Way. Additionally, the petitioner is not permitted to use East Avenue or Bordeaux

Walk Way, from Manchester Road, for any construction-related traffic in association with the development of these twelve (12) lots.

5. The necessary amount of right-of-way for the portion of Center Avenue along this site will be dedicated to create a forty foot (40') wide public right-of-way area, with the construction of a twenty-two foot (22') wide pavement section, and a six foot (6') wide concrete sidewalk, located on the west side of the street. All of these components will be adhere to the City of Wildwood's Design Criteria Handbook and associated requirements, as directed by the Department of Public Works.
6. Center Avenue is to be dedicated as a public roadway; however, the City and petitioner plan to maintain its rural character, which is a response to the concerns of the property owners to the north of the site. Improvements will be to a minimum standard for safety and durability. The City's consultant is currently preparing designs for improvements to Center Avenue, but those plans are not complete at this time.
7. The internal public street, Falstone Mill Court, aligns with Bordeaux Walk Way in the northwest quadrant of the site and curves into the southwest corner of the site, terminating at a cul-de-sac, with a landscaped island. The right-of-way to be dedicated as public is thirty-five foot (35') wide. The roadway is twenty-two foot (22') wide concrete pavement, with rolled curbs, at the direction of the Department of Public Works. Parking will be restricted to one side, at the direction of Metro West Fire Protection District.
8. The petitioner is proposing side-entry garages, with carriage type designs, including windows, as determined appropriate by the City's Architectural Review Board. By providing these two (2) enclosed parking spaces, the petitioner meets the minimum Off-Street Parking and Loading Requirements for R-1A 22,000 square foot Residence District.
9. The petitioner is required to provide 20,908.80 square feet of public space and has exceeded that amount by providing 32,131 square feet of public space. This dedication was achieved partly by vacating sections of West Avenue and Center Avenue, which are currently paper streets, and dedicating them as publicly-held land and by providing stormwater best management practices. An important component to the public space provided by this project is the dedication of a twenty foot (20') wide trail easement and construction of a ten foot (10') wide multiple-use asphalt trail, which is located along the property's norther boundary and connects West Avenue to the proposed sidewalk on Center Avenue and existing pedestrian network in Bordeaux Estates Subdivision.
10. The stormwater management plan for this site includes a 1,644 square foot bio-retention basin located in a 12,098 square foot stormwater maintenance easement. There is an outfall area located on the property line between Lots 4 and 5 that flows into the BMP Reserve Area situated in the northwest corner of the site. The outfall from the BMP Reserve Area flows north, into a culvert under the proposed multiple-use asphalt trail. The Department has notified the petitioner that it is concerned about this outfall area and advised them to ensure the design is functional and will not damage the trail and

that such must be approved by Department of Public Works, upon submittal of Improvement Plans.

11. Given the prior use of the site by Missouri Department of Transportation, much of the site has been altered, and the petitioner is proposing limited grading.
12. The design of the lots, based upon the Natural Resource Protection Standards, preserves almost all of the existing woodlands located along the south and west sides of the site. Additionally, the governing ordinance for this site requires a minimum fifty foot (50') non-disturbed buffer area along the property's southern boundary line (Westridge Oaks Subdivision) and a thirty foot (30') non-disturbed buffer area along the property's western boundary line. Both of these non-disturbed buffer areas preclude any utility extensions through them.
13. The petitioner is proposing one (1) subdivision entrance monument sign to be located in the northeast corner of the subdivision, at Center Avenue and the proposed public roadway, Falstone Court. The sign is located in an easement and will be reviewed under a separate permit.
14. The site-specific ordinance governing this project requires the proposed architectural design, character, and style of all dwellings units to adhere to the City of Wildwood's Architectural Guidelines for all districts, with no vinyl siding to be allowed on any dwelling. All materials to be used on any façade of these residential units are to be fiber cement siding, wood, brick, and/or stone.
15. The initial petitioner, Lombardo Homes, provided to the City Phase I and partial Phase II Environmental Assessments, given the past use of the site. The results of these assessments identified salt storage that occurred on the site by the State as an issue for remediation.
16. The petitioner has provided approvals from Metro West Fire Protection District. In the Site Plan Subcommittee meeting held on March 7, 2016, the petitioner had not yet submitted comments from Metropolitan St. Louis Sewer District (MSD). The petitioner has since submitted those comments, with MSD approval, and they have been included as an attachment to this recommendation report.
17. The lighting plan for this project is minimal, with only three (3) proposed street lights. The lighting plan has been reviewed by the City's consultant and meets the City's Outdoor Lighting Requirements.
18. The site will be served entirely by public services and will not create a burden on existing homes, in this regard.

The Site Plan Subcommittee Members discussed this proposed development and its design and responded to this presentation with several questions relating to its plan components and related items, which included the following: the improvements on Center Avenue, the stormwater outfall area near the trail, the public space created by the vacation of Center Avenue in relation to the adjacent public space located in Bordeaux Estates Subdivision, the Phase I and Phase II Environmental Assessments, and maintenance of the drive accessing the flag lot.

The petitioner and the Department of Planning staff responded to these comments and questions by addressing them as follows:

- The Department explained improvements to Center Avenue will be completed in partnership with the petitioner. The City's consultant is currently preparing designs for improvements to Center Avenue, but those designs are not complete at this time. The Department will present the Improvement Plans for Center Avenue to the Planning and Zoning Commission at the appropriate time, as is the case with all capital improvement projects.
- The petitioner indicated a functional design for the outfall area near the trail will be submitted on the required Improvement Plans.
- The future use of the public space in Bordeaux Estates Subdivision and adjacent public space to be created by the vacation and dedication of the southern portion of Center Avenue has yet to be determined.
- The petitioner indicated the Phase I and Phase II Environmental Assessments had been reviewed. The petitioner stated approximately six hundred (600) cubic yards of soil would be remediated to address the issues in the report caused by the storage of salt on the site by the State.
- The Department explained the shared drive aisle that will access Lot 11 and the flag lot, Lot 12, will be maintained by the future Stone Mill Subdivision Homeowners Association.

Site Plan Subcommittee's Recommendation:

The Site Plan Subcommittee of the Planning and Zoning Commission has considered the submitted plans, which includes the Site Development Plan (SDP) and related items, and believes them to be in compliance with the site-specific ordinance governing this property and the City's Zoning Ordinance and Subdivision and Development Regulations. This compliance leads the members of the Site Plan Subcommittee to support approval of this complement of plans, thereby allowing the Department of Planning to sign and release them. This determination is based upon review of these plans by the Departments of Planning and Public Works and the comments that were generated by such. These reviews by the respective departments addressed the requirements set forth by City codes. Additionally, other service providers have provided comments that have been incorporated into the plan as well.

The Site Plan Subcommittee would also note the proposal for this site reinforces the priority of the City to provide appropriate transitions between the Town Center Area and existing residential communities. Additionally, this proposal provides improvements to Center Avenue, while maintaining its rural character, which is of importance to the property owners to the north of the site. Lastly, the proposed

multiple-use trail on the northern boundary of the site enhances the pedestrian and bicycle network in the City of Wildwood by connecting West Avenue to Center Avenue and will be a valuable amenity for the surrounding communities.

Summary and Conditions of Action:

This recommendation is contingent upon all other required codes, regulations, and standards of the City relating to this property and the development of land being met during the construction of the buildings and public space areas. The Site Plan Subcommittee is again recommending approval of the Site Development Plan and related items by the Planning and Zoning Commission at this time, with the acknowledgement that Center Avenue Improvement Plans will be provided, when prepared, for is consideration and action. This recommendation is based upon the completion of all required improvements, in accordance with the plans approved for such by the City of Wildwood.

Attachments And Enclosures:

Attachment A –Site Development Plan (SDP) and Related Items
Attachment B – Site-Specific Ordinance
Attachment C – Background Information

ATTACHMENT A
Site Development Plan (SDP) and Related Items

Stone Mill

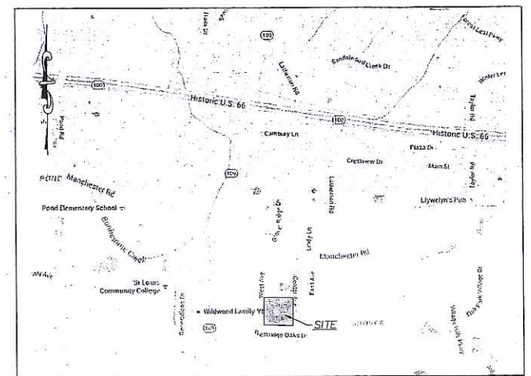
A TRACT OF LAND IN THE NORTH 1/2 OF THE NORTHWEST 1/4 OF SECTION 12,
TOWNSHIP 44 NORTH, RANGE 3 EAST
CITY OF WILDWOOD, ST. LOUIS COUNTY, MISSOURI

SITE DEVELOPMENT PLAN

R1-A RESIDENCE DISTRICT, WITH A PLANNED RESIDENTIAL
DEVELOPMENT OVERLAY DISTRICT (PRD)

LEGEND

EXISTING		PROPOSED
542	CONTOURS	542
X536	SPOT ELEVATIONS	536.0
	CENTER LINE	
	BUILDINGS, ETC.	
	TREE LINE	
	FENCE	
	STORM SEWERS	
	SANITARY SEWERS	
EX. CI	CATCH BASIN	CI NO.
EX. AI	AREA INLET	AI NO.
EX. GI	GRATED INLET	GI NO.
EX. MH	STORM MANHOLE	MH NO.
EX. AM	SANITARY MANHOLE	MH NO.
EX. FE	FLARED END SECTION	FE NO.
CO	CLEANOUT	CO
	LATERAL CONNECTION	
	UTILITY OR POWER POLE	
	FIRE HYDRANT	
	TEST HOLE	
	PAVEMENT	
2"G	GAS MAIN & SIZE	(2"G)
6"W	WATER MAIN & SIZE	(6"W)
T	TELEPHONE	(T)
E	ELECTRIC (U) UNDERGROUND	(E)
OHW	ELECTRIC (O) OVERHEAD	(OHW)
	FLOW LINE	
	TO BE REMOVED	TBR
TC	TOP OF CURB	(TC)
	SWALE	
	LIGHT STANDARD	
	STREET SIGN	
P.S.	PARKING STALLS	P.S.
YLG	YARD LIGHT	ELEC
TRM	TURF REINFORCEMENT MAT	



LOCATION MAP
(NOT TO SCALE)

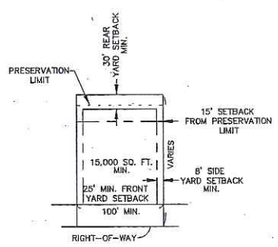
SHEET INDEX

1.0	COVER SHEET
2.0	SITE PLAN
3.0	GRADING PLAN
4.0	DETAILS
5.0-5.1	ORDINANCE
6.0	NATURAL RESOURCE PROTECTION PLAN
7.0	STORMWATER POLLUTION PROTECTION PLAN
7.1	SWPP NOTES & DETAILS

DEVELOPMENT NOTES:

LOCATOR NUMBER: 24V420010

1. SITE ADDRESS: 2710 WEST AVENUE
   OWNER: WHALEN CUSTOM HOMES
   338 S. KIRKWOOD RD.
   KIRKWOOD, MO 63122
2. EXISTING ZONING: NU – NON-URBAN RESIDENCE DISTRICT
3. PROPOSED ZONING: R-1A 22,000 SQUARE FOOT RESIDENTIAL DISTRICT WITH A PLANNED RESIDENTIAL DEVELOPMENT OVERLAY DISTRICT (PRD)
4. PROPOSED USE: SINGLE FAMILY RESIDENTIAL
5. GROSS AREA OF SITE: 8.03 ACRES
   LESS RIGHT-OF-WAY: <0.65> ACRES
   NET AREA: 7.38 ACRES
6. DENSITY = 12 LOTS/7.38 ACRES = 1.62 LOTS/ACRE
   7.38 ACRES x 1.75 UNITS/ACRE = 12.915 UNITS, 12 LOTS PERMITTED
7. NUMBER OF LOTS PROPOSED: 12
8. LOT SIZE: 15,000 S.F. MINIMUM
10. AVERAGE LOT SIZE: 25,301 S.F.
11. PARKING REQUIREMENTS:
    2/UNIT: 24 SPACES
    PROVIDED: 24 SPACES



TYPICAL LOT
NOT TO SCALE

FLOOD NOTE:

ACCORDING TO THE FLOOD INSURANCE RATE MAP ADOPTED BY FEMA (PANEL NUMBER 29189C0260K EFFECTIVE FEBRUARY 4, 2015), THIS PROPERTY LIES ENTIRELY OUTSIDE THE 500-YEAR FLOODPLAIN.

TREE PRESERVATION CALCULATIONS:

EXISTING TREE CANOPY: 1.87 AC.
TREE CANOPY REMOVED: 0.15 AC.
REMAINING TREE CANOPY: 1.72 AC. (92%)

GENERAL NOTES:

1. THIS SITE IS IN THE FOLLOWING DISTRICTS AND UTILITY SERVICE AREAS:
   WARD EIGHT
   METRO WEST FIRE PROTECTION DISTRICT
   ST. LOUIS COUNTY POLICE DEPARTMENT – WILDWOOD PRECINCT
   ROCKWOOD R-6 SCHOOL DISTRICT
   METROPOLITAN ST. LOUIS SEWER DISTRICT
   AMEREN MISSOURI
   AT&T
   LACLEDE GAS COMPANY
   MISSOURI AMERICAN WATER COMPANY
   CHARTER CABLE SERVICES
2. SANITARY SEWER CONSTRUCTION AND CONNECTIONS SHALL BE AS APPROVED BY THE METROPOLITAN ST. LOUIS SEWER DISTRICT AND IN ACCORDANCE WITH THE STANDARD CONSTRUCTION SPECIFICATIONS FOR SEWERS AND DRAINAGE FACILITIES.
3. STORMWATER SYSTEM DESIGN SHALL BE PURSUANT TO THE CITY OF WILDWOOD AND METROPOLITAN ST. LOUIS SEWER DISTRICT REQUIREMENTS AND SHALL DISCHARGE AT AN ADEQUATE NATURAL DISCHARGE POINT. SINKHOLES ARE NOT ADEQUATE NATURAL DISCHARGE POINTS.
4. ALL GRADING AND DRAINAGE SHALL BE PER CITY OF WILDWOOD AND METROPOLITAN ST. LOUIS SEWER DISTRICT STANDARDS.
5. NO SLOPES SHALL EXCEED 3 (HORIZONTAL) TO 1 (VERTICAL), UNLESS JUSTIFIED BY GEOTECHNICAL REPORT WHICH HAS BEEN ACCEPTED/APPROVED BY THE CITY OF WILDWOOD. NO SLOPES WITHIN CITY OF WILDWOOD RIGHT-OF-WAY SHALL EXCEED 3 (HORIZONTAL) TO 1 (VERTICAL).
6. ALL UTILITIES WILL BE LOCATED UNDERGROUND WITHIN THIS SITE.
7. ALL STREETS WILL BE CONSTRUCTED TO CITY OF WILDWOOD SPECIFICATIONS. ALL PROPOSED STREETS WILL BE PUBLIC AND SHALL BE 22' WIDE PAVEMENT, NO CURBS IN A 35' WIDE ROADWAY RIGHT-OF-WAY.
8. NO PLANTS, TREES, SIGNS, ETC. GREATER THAN 36" IN HEIGHT SHALL BE PLACED WITHIN THE SIGHT DISTANCE TRIANGLE.
9. MAXIMUM HEIGHT OF STREET LIGHTING FIXTURES SHALL BE 16 FEET AND SHALL BE IN COMPLIANCE WITH THE CITY OF WILDWOOD CODE REQUIREMENTS.
10. STREET TREES AND SITE LANDSCAPING SHALL BE AS REQUIRED BY THE CITY OF WILDWOOD AND COMPLY WITH ITS TREE MANUAL AND SUSTAINABLE PLANTINGS GUIDE.
11. BUILDING HEIGHT SHALL NOT EXCEED 2 STORIES OR 24 FEET.
12. THE NEAREST MAJOR INTERSECTION IS MANCHESTER ROAD AND STATE ROUTE 109 APPROXIMATELY 0.5 MILES TO THE NORTHWEST.
13. PHASE I & II ENVIRONMENTAL REPORT HAVE BEEN PROVIDED TO CITY OF WILDWOOD.
14. ENTRANCE, STREET INTERSECTION, CUL-DE-SAC SHALL BE CONSTRUCTED TO CITY OF WILDWOOD STANDARDS.
15. THE IMPROVEMENTS FOR CENTER AVENUE, INCLUDING THE ENGINEERING AND DESIGN, WILL BE SUBMITTED ON A SEPARATE PLAN. DESIGN, ENGINEERING, AND CONSTRUCTION COSTS ARE TO BE SHARED BETWEEN DEVELOPER AND THE CITY OF WILDWOOD.

BENCHMARK INFORMATION:

STL CO BM 16066
NAVD88 (SLC2011a) ELEV = 783.32 FtUS (or) 238.756 METER
NAVD29 ELEV = 783.46 FtUS
"L" ON THE SOUTHWEST CORNER OF A CONCRETE HEADWALL; 30' WEST OF THE CENTERLINE OF HIGHWAY 109, 75' NORTH OF TURKEY TRACK ROAD AND 1.4 MILES NORTH OF WOODS ROAD.
SP MO EAST N=303938± E=237321± METER – ESTIMATED
ROUGH NAD83 LAT=38.572062°±(N/+) LONG=90.645501°±(W/–)

STL CO BM 16109
NAVD88 (SLC2011a) ELEV = 794.47 FtUS (or) 242.156 METER
NAVD29 ELEV = 794.70 FtUS
"L" ON THE WEST SIDE OF A CONCRETE PORCH OF BUILDING AT #16957 MANCHESTER ROAD; 21' EAST OF THE CENTERLINE OF EATHERTON ROAD AND 39' NORTH OF THE CENTERLINE OF MANCHESTER ROAD.
SP MO EAST N=304400± E=238058± METER – ESTIMATED
ROUGH NAD83 LAT=38.576234°±(N/+) LONG=90.637052°±(W/–)

PROPERTY DESCRIPTION:

A TRACT OF LAND IN THE NORTH 1/2 OF THE NORTHWEST 1/4 OF SECTION 12, TOWNSHIP 44 NORTH, RANGE 3 EAST, CITY OF WILDWOOD, ST. LOUIS COUNTY, MISSOURI AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF A TRACT OF LAND DESCRIBED IN A DEED TO LEOLA MARY SCHLEMPER REVOCABLE TRUST RECORDED IN DEED BOOK 18787 PAGE 1614 OF THE ST. LOUIS COUNTY RECORDS, SAID POINT BEING ON THE WEST LINE OF CENTER (30'WIDE) AVENUE; THENCE WITH THE WEST LINE OF CENTER AVENUE, BEING 15'WEST OF AND PARALLEL TO THE CENTERLINE THEREOF, SOUTH 00°33'53"WEST 591.57 FEET TO THE SOUTH LINE OF THE NORTH 1/2 OF THE NORTHWEST 1/4 OF SECTION 12, SAID POINT ALSO BEING THE NORTH LINE OF WESTRIDGE OAKS PLAT ONE AS PER THE PLAT THEREOF RECORDED IN PLAT BOOK 338 PAGE 53 OF THE ST. LOUIS COUNTY RECORDS; THENCE DEPARTING THE WEST LINE OF CENTER AVENUE WITH THE NORTH LINE OF WESTRIDGE OAKS PLAT ONE, NORTH 88°24'12"WEST 599.97 FEET TO A POINT ON THE EAST LINE OF WEST (30'WIDE) AVENUE; THENCE WITH THE EAST LINE OF WEST AVENUE, BEING 15'EAST OF AND PARALLEL TO THE CENTERLINE THEREOF AND 30 FEET EAST OF AND PARALLEL TO THE WEST LINE OF SECTION 12, NORTH 00°30'34"EAST 573.71 FEET TO THE SOUTHWEST CORNER OF THE AFORESAID LEOLA MARY SCHLEMPER REVOCABLE TRUST TRACT; THENCE WITH THE SOUTH LINE OF SAID LEOLA MARY SCHLEMPER REVOCABLE TRUST TRACT, NORTH 89°53'28"EAST 600.46 FEET TO THE POINT OF BEGINNING AND CONTAINING 349,670 (8.0273 ACRES), MORE OR LESS, ACCORDING TO A SURVEY BY THE STERLING COMPANY DURING THE MONTH OF JANUARY 2013 UNDER ORDER NUMBER 12-11-311.

UTILITY INFORMATION:

UTILITIES SHOWN HAVE BEEN TAKEN FROM AVAILABLE SURVEYS, UTILITY COMPANY MAPS AND PHYSICAL PROPERTY INSPECTION. THE LOCATIONS AND FACILITIES SHALL BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE ADDITIONAL UTILITIES THAT HAVE NOT BEEN SHOWN ON THIS SURVEY. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE LOCATIONS OF ALL UTILITIES PRIOR TO EXCAVATION OR CONSTRUCTION.

MISSOURI ONE CALL SYSTEM, INC. 1-800-344-7483 STOP-CALL BEFORE YOU DIG!

CALL 1-800-DIG-RITE (MISSOURI ONE CALL) TO HAVE LOCATIONS MARKED IN THE FIELD (SUBSCRIBING UTILITIES REQUIRE 48 HOURS NOTICE PRIOR TO CONSTRUCTION).

CITY OF WILDWOOD
MAR 02 2016
DEPT OF PLANNING & PARKS

MSD P# 30612-00 MSD BASEMAP: 24V1 ORDINANCE #2088

Special Inspections, LLC
16624 Old Chesterfield Rd.
St. Louis, MO. 63017
(636)751-3161
SpecialInspections.info

STATE OF MISSOURI
MICHAEL T. MATTHEWS
NUMBER
LE-14922
REGISTERED PROFESSIONAL ENGINEER
2/29/16

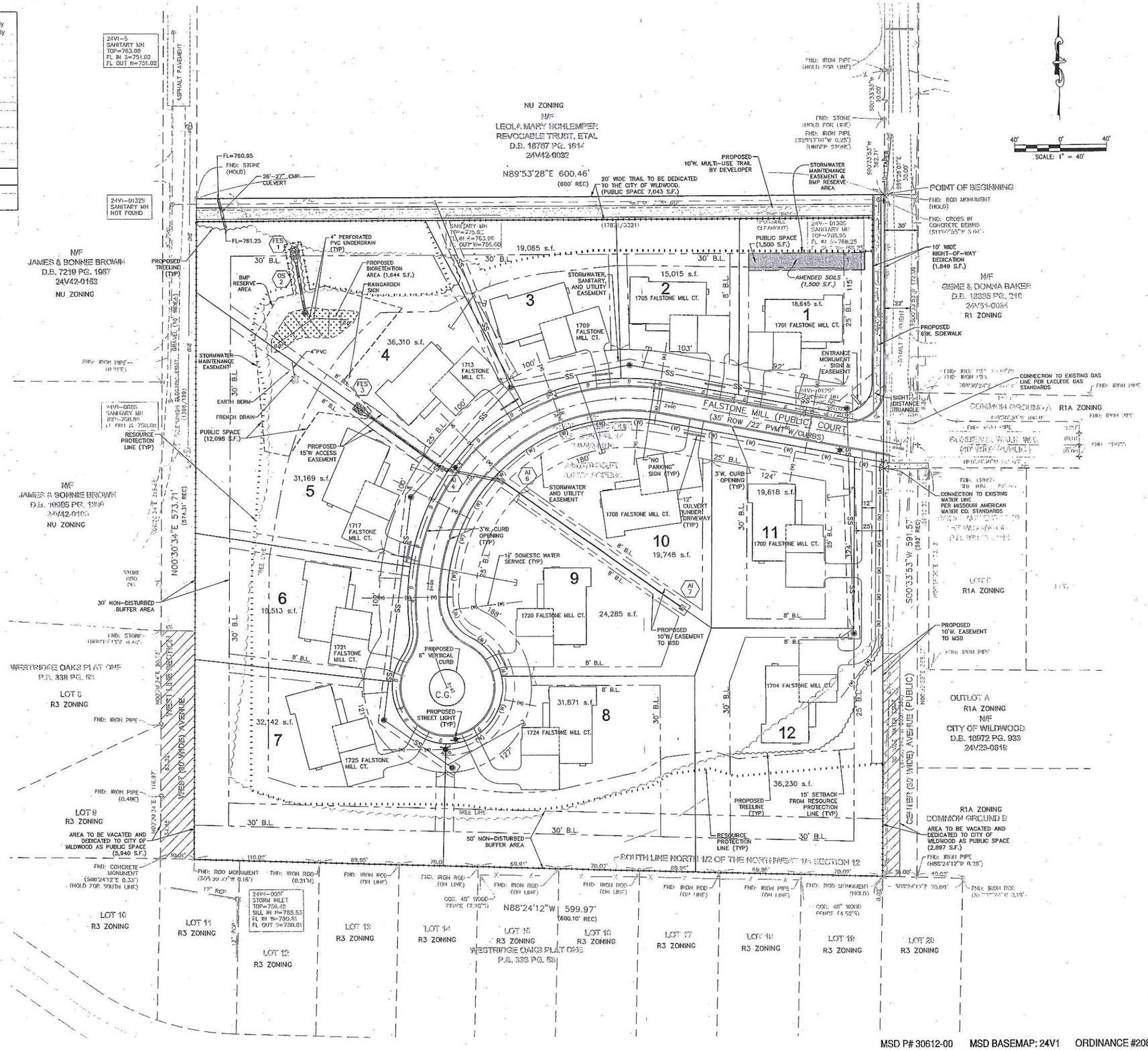
OWNER/DEVELOPER:
Whalen Custom Homes
338 S. Kirkwood Rd.
Kirkwood, MO 63122
314-575-7645

PROJECT TITLE AND LOCATION:
Stone Mill
2710 West Avenue
Wildwood, MO 63040

JOB NUMBER:	15-001
DATE:	9/10/2015
DRAWN BY:	TBM
CHECKED BY:	MTM
SHEET TITLE:	Cover Sheet
SHEET NUMBER:	1.0

Standard for Public Space Calculation:	Four (4) acres for every one hundred (100) Single Family Dwelling Units (1,742.4 square feet per new singel family dwelling)
Amount of Required Public Space	20,908.8 s.f.
Amount of Provided Public Space	32,131 s.f.
Multiple Use Trail	7,043 s.f.
Underground Detention Area	
Public Land Dedication	10,688 s.f.*
Privately-Held Common Ground	
List Installed Improvements	
Picnic Tables	
Benches	
Trash Receptacles	
Bicycle Racks	
Other:	
Other Public Space Items(if provided)	14,402 s.f.**
Fee In Lieu	

*Street Vacation(5,940+2,897)+R.O.W Ded.(1,849) =10,688 S.F.
**Common Ground (804)+BMP(12,098+1,500)=14,402 S.F.



MSD P# 30612-00 MSD BASEMAP: 24V1 ORDINANCE #2088

Special Inspections, LLC
16624 Old Chesterfield Rd.
St. Louis, MO. 63017
(636)751-3161
Specialinspections.info

STATE OF MISSOURI MICHAEL T. MATANDY NUMBER E-14922 REGISTERED PROFESSIONAL ENGINEER
2/29/16

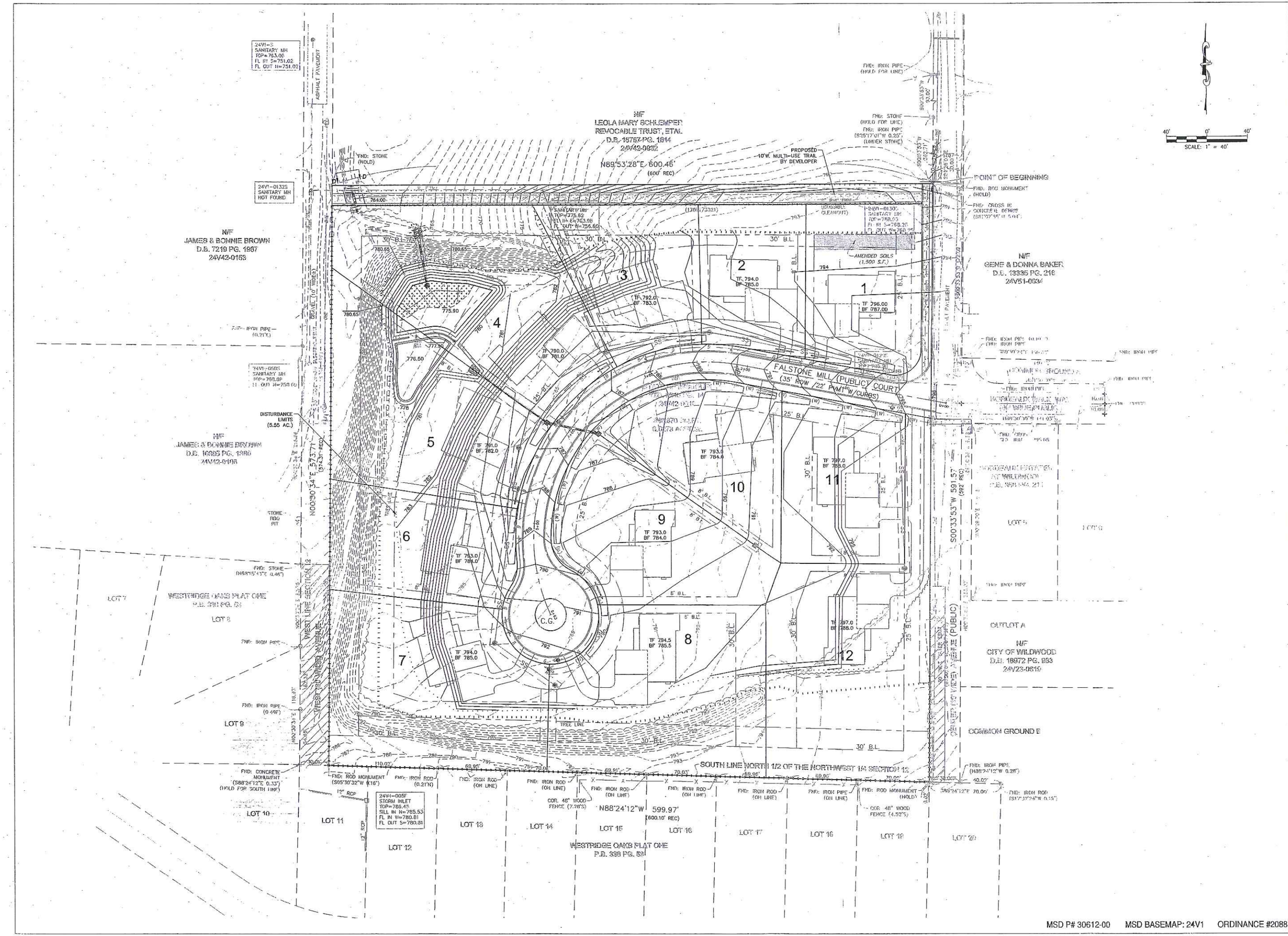
PROJECT TITLE AND LOCATION:

Whalen Custom Homes
338 S. Kirkwood Rd.
Kirkwood, MO 63122
314-575-7645

OWNER/DEVELOPER:

Stone Mill
2710 West Avenue
Wildwood, MO 63040

JOB NUMBER:	15-001
DATE:	9/10/2015
DRAWN BY:	TBM
CHECKED BY:	MTM
SHEET TITLE:	Site Plan
SHEET NUMBER:	2.0



MSD P# 30612-00 MSD BASEMAP: 24V1 ORDINANCE #2088

Special Inspections, LLC

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St. Louis, MO. 63017
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STATE OF MISSOURI
MICHAEL T. MATTINGLY
NUMBER
LE-14922
REGISTERED PROFESSIONAL ENGINEER
2/29/16

OWNER/DEVELOPER:

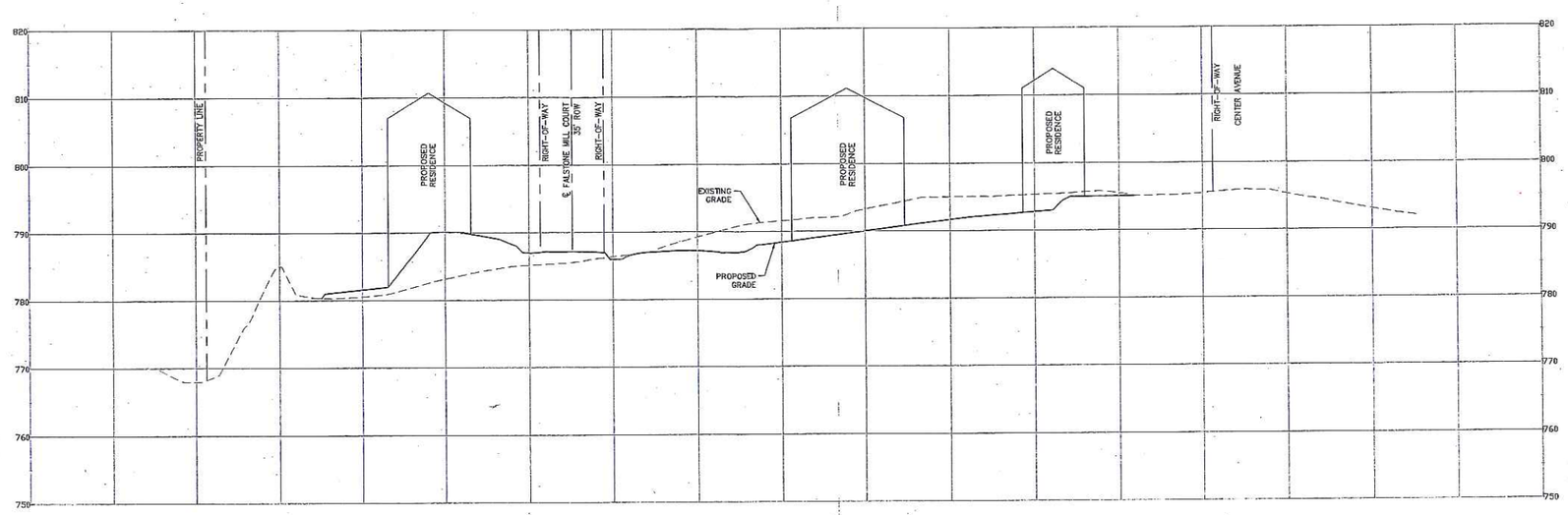
Whalen Custom Homes
338 S. Kirkwood Rd.
Kirkwood, MO 63122
314-575-7645

PROJECT TITLE AND LOCATION:

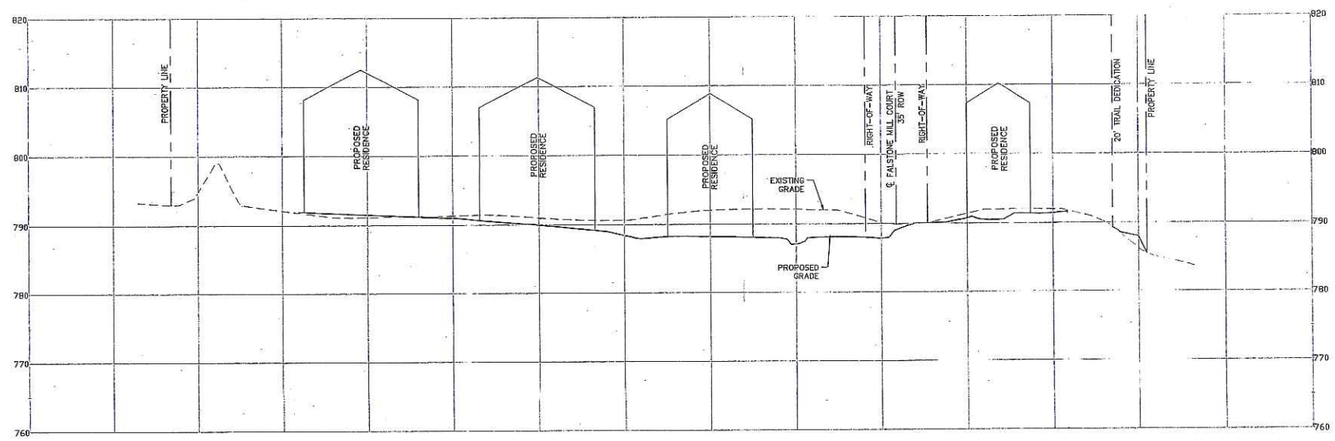
Stone Mill
2710 West Avenue
Wildwood, MO 63040

JOB NUMBER:	15-001
DATE:	9/10/2015
DRAWN BY:	TBM
CHECKED BY:	MTM
SHEET TITLE:	Grading Plan
SHEET NUMBER:	3.0

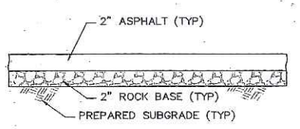
"NO PARKING" SIGN
SCALE: NOT TO SCALE



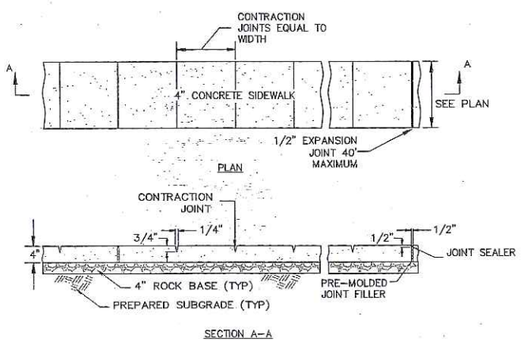
SITE CROSS SECTION A-A
SCALE: 1"=40' HORIZ.
1"=10' VERT.



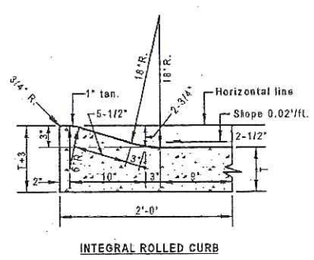
SITE CROSS SECTION A-A
SCALE: 1"=40' HORIZ.
1"=10' VERT.



ASPHALT TRAIL SECTION DETAIL
SCALE: NOT TO SCALE

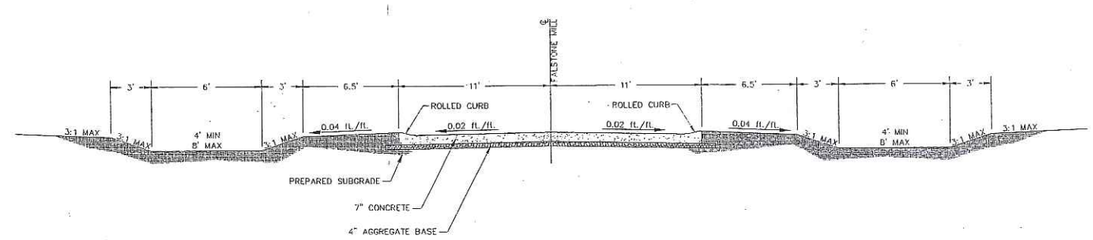


CONCRETE SIDEWALK DETAIL
SCALE: NOT TO SCALE



INTEGRAL ROLLED CURB

ROLLED CURB DETAIL
SCALE: NOT TO SCALE



STREET TYPICAL SECTION
FALSTONE MILL COURT
SCALE: NOT TO SCALE

MSD P# 30612-00 MSD BASEMAP: 24V1 ORDINANCE #2088

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2/29/16

OWNER/DEVELOPER:

Whalen Custom Homes
338 S. Kirkwood Rd.
Kirkwood, MO 63122
314-575-7645

PROJECT TITLE AND LOCATION:

Stone Mill
2710 West Avenue
Wildwood, MO 63040

JOB NUMBER:	15-001
DATE:	9/10/2015
DRAWN BY:	TBM
CHECKED BY:	MTM
SHEET TITLE:	Details
SHEET NUMBER:	4.0

AMENDED BILL NO.: 2088 AMENDED ORDINANCE NO.: 2088

AN ORDINANCE BY THE CITY COUNCIL OF THE CITY OF WILDWOOD, MISSOURI AUTHORIZING A CHANGE IN ZONING FROM THE NU NON-URBAN RESIDENCE DISTRICT TO THE R-1A 22,000 SQUARE FOOT RESIDENCE DISTRICT, WITH A PLANNED RESIDENTIAL DEVELOPMENT OVERLAY DISTRICT (PRD), TO ACCOMMODATE THE DEVELOPMENT OF AN 8.01 ACRE TRACT OF LAND THAT IS LOCATED ON THE WEST SIDE OF CENTER AVENUE, SOUTH OF MANCHESTER ROAD, WITH TWELVE (12) SINGLE FAMILY DETACHED DWELLINGS ON INDIVIDUAL LOTS, WITH COMMON GROUND AND PUBLIC SPACE AREAS, PER THE ACTION OF THE PLANNING AND ZONING COMMISSION, WHICH IS DETAILED IN ITS LETTER OF RECOMMENDATION DATED FEBRUARY 2, 2015 – P.Z. 21, 22, and 23-14 Stone Mill. (Ward Eight)

WHEREAS, the Master Plan of the City of Wildwood, Missouri contains four (4), major conceptual land use categories that are applied for properties located within its boundaries and these classifications determine how they may be developed in terms of use and density/intensity; and

WHEREAS, one (1) of these categories is the "Suburban Residential Area" that is applied to properties that had been zoned by St. Louis County, prior to the City's incorporation, for single family residential uses, at densities that varied from two (2) units per acre to five (5) units per acre, which included much of the Wildwood community east of State Route 109; and

WHEREAS, this pattern was recognized and the first City Council and Planning and Zoning Commission agreed to allow numerous surrounding properties that were vacant or undeveloped to be used for similar purposes, but at a density no greater than two (2) units per acre, which was substantially less than the past actions of St. Louis County; and

WHEREAS, in 2006, the density in the "Suburban Residential Area" was changed, as part of the Master Plan update process, to one (1) unit per acre from the earlier two (2) units per acre, which was due to the impact this density of units was causing on some of the remaining sites available for future development, particularly in the Strecker Road/Clayton Road Area; and

WHEREAS, long after this change in the text of the Master Plan, the petitioner purchased a site formerly owned by the State of Missouri and was advised of the limitations on its future density of residential units, but sought a change to the Master Plan definition of "Suburban Residential Area," so as to be able to develop it with a comparable density to that of the surrounding subdivisions; and

WHEREAS, this Master Plan modification to the definition of "Suburban Residential Area" would allow for the development of twelve (12) lots on the 8.01 acre site, which also requires its rezoning and the application of a Planned Residential Development Overlay District (PRD), all of which were applied for by Lombardo Homes; and

WHEREAS, with the applications for these three (3) items, the Planning and Zoning Commission held a public hearing on December 1, 2014 upon them, where comments were provided in this regard; and

WHEREAS, the Planning and Zoning Commission reviewed these comments and discussed considerations, with finally granting a change to the Master Plan's "Suburban Residential Area" definition to allow for this single property to have a density of up to 1.75 units per acre, given the circumstances of its location, i.e. abutting Town Center, other surrounding development densities, and available utilities; and

WHEREAS, with this action, the associated rezoning and application of special procedures permit were also recommended for approval by the Planning and Zoning Commission, which was reflected in its Letter of Recommendation on this matter, being dated February 2, 2015; and

WHEREAS, in this Letter of Recommendation, the Planning and Zoning Commission noted the rezoning and associated special procedures permit were reasonable at this location, given the Master Plan amendment had been supported, and would address a difficult property with a comparable development proposal in terms of type and density of use; and

WHEREAS, this action was undertaken in accordance with the requirements of the City's Charter and the State Statute for the consideration of modifications to Master Plans, General Plans, and Comprehensive Plans of a similar nature.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF WILDWOOD, MISSOURI, AS FOLLOWS:

Section One. The City of Wildwood Zoning Ordinances and Official Zoning District Maps, which are made a part hereof, are hereby, amended to reflect the change in zoning from the NU Non-Urban Residence District to the R-1A 22,000 square foot Residence District, with a Planned Residential Development Overlay District (PRD), as set forth in this ordinance, for the following described land:

A TRACT OF LAND IN THE NORTH 1/2 OF THE NORTHWEST 1/4 OF SECTION 12, TOWNSHIP 45 NORTH, RANGE 3 EAST, CITY OF WILDWOOD, ST. LOUIS COUNTY, MISSOURI AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF A TRACT OF LAND DESCRIBED IN A DEED TO LEOLA MARY SCHLEMPER REVOCABLE TRUST RECORDED IN DEED BOOK 18767 PAGE 1614 OF THE ST. LOUIS COUNTY RECORDS, SAID POINT BEING ON THE WEST LINE OF CENTER (30' WIDE) AVENUE; THENCE WITH THE WEST LINE OF CENTER AVENUE, BEING 15' WEST OF AND PARALLEL TO THE CENTERLINE THEREOF, SOUTH 00°39'53" WEST 591.57 FEET TO THE SOUTH LINE OF THE NORTH 1/2 OF THE NORTHWEST 1/4 OF SECTION 12, SAID POINT ALSO BEING THE NORTH LINE OF WESTRIDGE OAKS PLAT ONE AS PER THE PLAT THEREOF RECORDED IN PLAT BOOK 338 PAGE 53 OF THE ST. LOUIS COUNTY RECORDS; THENCE DEPARTING THE WEST LINE OF CENTER AVENUE WITH THE NORTH LINE OF WESTRIDGE OAKS PLAT ONE, NORTH 88°24'12" WEST 599.97 FEET TO A POINT ON THE EAST LINE OF WEST (30' WIDE) AVENUE; THENCE WITH THE EAST LINE OF WEST AVENUE, BEING 15' EAST OF AND PARALLEL TO THE CENTERLINE THEREOF AND 30 FEET EAST OF AND PARALLEL TO THE WEST LINE OF SECTION 12, NORTH 00°39'53" EAST 575.71 FEET TO THE SOUTHWEST CORNER OF THE AFORESAID LEOLA MARY SCHLEMPER REVOCABLE TRUST TRACT; THENCE WITH THE SOUTH LINE OF SAID LEOLA MARY SCHLEMPER REVOCABLE TRUST TRACT, NORTH 89°53'38" EAST 600.46 FEET TO THE POINT OF BEGINNING AND CONTAINING 349,620 (8.029 ACRES), MORE OR LESS, ACCORDING TO A SURVEY BY THE STERLING COMPANY DURING THE MONTH OF JANUARY 2015 UNDER ORDER NUMBER 12-11-311.

Section Two. The zoning authority and approval embodied in this ordinance is granted subject to compliance with the Subdivision and Development Regulations, Zoning Code, and all other City of Wildwood ordinances, rules, and regulations and the conditions of this ordinance, except as, may be modified herein, upon the requirement the development and approved Site Development Plan are carried out in accordance with the recommendation forwarded to the City Council by the Planning and Zoning Commission within the communication dated February 2, 2015, which is incorporated herein by reference as if fully set forth in this ordinance. The zoning authority granted herein is further subject to the following conditions:

1. PERMITTED USES

a. This Planned Residential Development (P.R.D.) Overlay District shall authorize the maximum development of twelve (12) detached single family dwellings on individual lots, with common ground, and all permitted accessory structures normally found in conjunction with the primary uses.

2. LOT SIZES, DEPTHS, AND BUILDING REQUIREMENTS

a. Each detached dwelling unit shall be located on an individual lot of record that is a minimum of 15,000 square feet in size. The minimum width of any lot within this P.R.D. Overlay District shall be one hundred (100) feet in distance, excepting within the cul-de-sac area, which shall be as determined by the Planning and Zoning Commission, as part of its review and action on the Site Development Plan. This width shall be measured at the front building line.

b. No building and/or structure shall be more than two (2) stories above final grade, as measured from the front building line on any individual lot.

c. Direct residential drive access shall be allowed for up to two (2) of the single family detached units within this development from Center Avenue, while the other ten (10) lots shall only be served by the proposed public internal street. All garages on each of the units shall be side-entry designs only, and must use carriage type designs, including windows, as determined by the City's Architectural Review Board to be appropriate. Architectural type shingle selections shall be required on all residential units of a minimum thirty (30) year standard.

d. The first story, interior clear height for all single family dwellings shall be not less than eight (8) feet.

e. The proposed architectural design, character, and style of all buildings and dwelling units shall adhere to the City of Wildwood's Zoning Ordinance regulations for architectural review in all districts, excepting no vinyl siding shall be allowed on any dwelling unit within the boundaries of this Planned Residential Development Overlay District (PRD). All materials used on any facade of a residential unit shall be fiber cement siding and backer board, wood, brick, and/or stone. Approval of the required design shall be by the Architectural Review Board. Minimally, all buildings shall maintain a consistent theme throughout the boundaries of this Planned Residential Development Overlay District in terms of material, color, and style.

f. The maximum area of this site that can be disturbed for development purposes shall not exceed 5.3 acres in size and does not include the Director of Planning's variance, but does preclude its allowable use.

g. The minimum area of this site that must be protected and cannot be used for development purposes is 2.7 acres in size and does not include the Director of Panning's variance, but does not preclude its allowable use.

3. PLAN SUBMITTAL REQUIREMENTS

Within twelve (12) months of the P.R.D. Overlay District approval by the City Council, and prior to any site disturbance, the developer shall submit to the Planning and Zoning Commission for their review and approval a Site Development Plan. Where due cause is shown by the developer, time intervals may be extended once by the Planning and Zoning Commission in accord with requirements of Section 420.060 of the City of Wildwood Zoning Ordinance. Said Site Development Plan shall include, but not be limited to, the following information:

a. Outboundary plat and legal description of the property.
b. A general numbered lot plan with setback lines from all streets and roadways on and adjacent to the property. A typical lot diagram, indicating all site design information such as, but not limited to, right-of-way width, improvement dimensions and locations, setbacks, and building placement.
c. The location and size of all parking areas, pavement widths, and right-of-way dedications of all internal roadway improvements and drives.
d. A general plan indicating setback lines along the perimeter of the subject tract of land and surrounding property lines and related improvements within four hundred (400) feet of this site's boundaries.
e. Location of all roadways adjacent to the property, including required roadway right-of-way dedication and pavement widening with existing and proposed improvements, and general location, size, right-of-way, and pavement width of all interior drives.
f. The location and size of all freestanding signs, lighting, fences, sidewalks, and other above ground structures, except retaining walls less than two (2) feet in height per section.
g. Existing and proposed contours at vertical intervals of not more than two (2) feet.
h. General location of sanitary sewer facilities.
i. Parking and density calculations.
j. Conceptual location and size of common ground areas.
k. A typical section of the proposed road indicating the placement and design of required streetscape improvements.
l. A Landscape Plan including, but not limited to, the location, size, and general type of plant materials to be used in accord with the City of Wildwood's Ordinance 410 and accompanying Tree Manual.
m. An inventory of the percent of tree canopy or individual trees to be retained on the site.
n. Location of all existing and proposed easements.
o. All other information not mentioned above, but required on a preliminary plat in accord with Section 420.060 of the City of Wildwood Subdivision and Development Regulations.

4. SITE DEVELOPMENT PLAN DESIGN CRITERIA

The above Site Development Plan shall adhere to the following specific design criteria:

Build-To Lines/Setbacks/Other - Residential

a. Any building or structure, other than boundary and/or retaining walls, fences, detention facilities, and/or light standards, shall adhere to the following setback lines:

1. Twenty-five (25) feet from any right-of-way line.
2. Eight (8) feet for any side yard property line and ten (10) feet for side yard areas that abut the perimeter of the Planned Residential Development Overlay District.
3. Thirty (30) feet from any rear yard property line.
4. No foundation associated with any authorized dwelling, or any structural element attached therein to it, shall encroach within fifteen (15) feet of the Final Resource Protection Line, as shown on the Record Plat.

Parking Setbacks – Residential

b. All parking stalls or loading spaces, excluding points of ingress or egress for the detached dwelling units, shall be located behind the edge of the public right-of-way a minimum of twenty-five (25) feet.

Access and Roadway Improvements

c. Dedicate the necessary amount of right-of-way (a minimum of ten (10) feet), along with all easements and licenses for construction purposes, for Center Avenue to allow for the creation of a minimum forty (40) foot wide public right-of-way area and the construction of a twenty-two (22) foot wide pavement section, with a six (6) foot wide sidewalk, on the west side of the street, which adheres to the City of Wildwood's Design Criteria Handbook and associated requirements, as directed by the Department of Public Works. All elements including, but not limited to, tree lawn area, street trees and lights, and other amenities, as set forth herein, shall be indicated on the Site Development Plan and reviewed and acted upon by the Planning and Zoning Commission.

d. Provide a twenty (20) foot wide trail dedication along the entire length of the northern property line to the City of Wildwood for public use forever. This dedication shall be indicated on the Record Plat for this subdivision and contained within in it a ten (10) foot wide multiple-use trail that will connect to Center and West Avenue. This design shall be reviewed and acted upon by the Planning and Zoning Commission, as part of the Site Development Plan process. All standards, specifications, and requirements for the dedication, platting, and design shall be per the direction of the Department's of Public Works and Planning.

e. Dedicate a thirty-five (35) foot right-of-way area for public use and within this area construct a minimum twenty-two (22) foot wide street, with cul-de-sac, ~~and sidewalks on both sides of it~~, all designed in accordance with the City of Wildwood's Design Criteria Handbook, and as directed by the Department of Public Works.

Miscellaneous Roadway Requirements

f. Installation of landscaping and ornamental entrance monument or identification signage, if proposed, shall be reviewed by the Department of Public Works for sight distance considerations and approved prior to its installation or construction.

g. If required sight distance cannot be provided at the access location, acquisition of right-of-way, reconstruction of pavement, including correction to vertical alignment and other off-site improvements, may be required to provide the required sight distance as directed by the Department of Public Works.

h. Construction access shall be from Manchester Road to Center Avenue during the development of this site, not East Avenue or Bordeaux Walk Way.

i. Sidewalks shall be required on all public streets and provide for a continuous and logical layout of this pedestrian network. Design and construction requirements for all sidewalks within the entire development shall be as established in the City of Wildwood's Design Criteria Handbook. Approval of their location, design, and material shall be by the Planning and Zoning Commission, as part of the Site Development Plan review process.

j. The developer is advised that utility companies will require compensation for relocation of their utility facilities within public road right-of-way. Utility relocation cost shall not be considered as an allowable credit against the petitioner's Traffic Generation Assessment contributions. The developer should also be aware of extensive delays in utility company relocation and adjustments. Such delays will not constitute a cause to allow occupancy prior to completion of roadway improvements.

k. All internal streets, access drives, or lanes, whether public or private, shall comply with the City of Wildwood's Design Criteria Handbook, in terms of improvements, such as drive lane widths, sidewalks, stormwater drainage facilities, and street trees and lights.

Parking Requirements - Residential

l. Parking spaces shall be provided, as required by the Section 415.340 Off-Street Parking and Loading Requirements of the City of Wildwood Zoning Ordinance, for the R-1-A 22,000 square foot Residence District.

Landscape Requirements - Specific

m. Landscaping shall adhere to all requirements of Ordinance 410 and its accompanying Tree Manual, including the submittal of a Tree Preservation Plan in conjunction with the Site Development Plan.

n. All streets, roads, and lanes shall be appropriately landscaped as required by City's Tree Manual and Sustainable Plantings Guide and approved by the Planning and Zoning Commission on the Site Development Plan.

o. The areas of existing vegetation within the P.R.D. Overlay District boundaries identified as to be retained shall be marked on the site prior to the commencement of any disturbance in accord with the City of Wildwood's Ordinance 410. These areas shall be indicated on the Site Development Plan submitted to the City of Wildwood for Planning and Zoning Commission review and approval. Existing mature tree canopy shall be preserved in accordance with the requirements of City of Wildwood's Ordinance 410 Tree Preservation and Restoration Code.

p. A minimum fifty (50) foot, non-disturbed buffer area of the existing woodlands shall be maintained along the property's entire southern boundary line with the Westridge Oaks Subdivision. Non-disturbed shall be interpreted to include no utility extensions through this buffer area. A similar non-disturbed buffer area of no less than thirty (30) feet shall also be required along the entire western boundary line of the subject lot.

q. A Landscape Architect shall sign and submit all plans for review and approval for this mixed-use development.

Signs - Residential

r. Signs for this P.R.D. Overlay District shall be erected in accordance with Section 415.410 Sign Regulations of the City of Wildwood Zoning Ordinance for the R-1-A 22,000 square foot Residence District.

s. The location of all signage shall be as approved on the Site Development Plan by the Planning and Zoning Commission. Signage not located on common ground must be erected within an easement.

Lighting Requirements

t. The location of all lighting standards shall be as approved on the Site Development Plan. No on-site illumination source shall exceed sixteen (16) feet in height or be so situated that light is cast directly on adjoining properties. Illumination levels for all lighting shall comply with the provisions of the City of Wildwood's Zoning Code, Section 415.450 "Outdoor Lighting Requirements." A Lighting Study shall be submitted in conjunction with the Site Development Plan indicating compliance to these requirements. The Planning and Zoning Commission shall approve the location, design, and appearance of all light standards and fixtures as part of the Site Development Plan review process.

Miscellaneous Conditions

u. The design, color, material, and location of all garden and screen walls or fences, if planned or required, shall be indicated on the Site Development Plan, as part of its review and action by the Planning and Zoning Commission and the Architectural Review Board.

v. Improvements associated with public infrastructure, such as roadways, sidewalks, and access points, shall comply with general design principles that will provide for safe and efficient movement of traffic in and around these sites and improve overall circulation in the area. These improvements shall be reviewed and approved by the Department of Public Works.

w. Hours of construction and grading activity shall be limited to 7:00 a.m. to 6:00 p.m. Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturday. No development (grading and construction) activity shall be authorized on Sundays.

x. All retaining walls exceeding three (3) feet in height per section or crossing individual property lines shall be constructed of an appropriate inter-locking concrete block system. Walls crossing property lines shall be located in a maintenance easement. The design, color, material, and location of all walls shall shown on the Site Development Plan for review and action by the Planning and Zoning Commission.

y. The location of all utility easements for proposed service to this development shall be as approved by the Planning and Zoning Commission on the Site Development Plan. All utilities installed to serve this site shall be placed underground, including any existing overhead lines located on the subject property.

5. TRAFFIC GENERATION ASSESSMENT FEE

The developer shall contribute to the East Area Traffic Generation Assessment Trust Fund established by Section 140.210 of the City of Wildwood's Revised Codes. This assessment must be paid in full at the time of the first Zoning Authorization for any building or structure or when the individual issuances of building permits for the authorized lots are approved. This contribution shall not exceed the amount established by multiplying the number of parking spaces provided by the following rate:

Type of Development	*Required Contribution*
Single Family Dwelling (detached)	$1,085.70 /Parking Space

MSD P# 30612-00 MSD BASEMAP: 24V1 ORDINANCE #2088

Special Inspections, LLC

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STATE OF MISSOURI
MICHAEL T. MATHEWS
NUMBER
PE-14922
REGISTERED PROFESSIONAL ENGINEER
2/23/16

OWNER/DEVELOPER:

Whalen Custom Homes
338 S. Kirkwood Rd.
Kirkwood, MO 63122
314-575-7645

PROJECT TITLE AND LOCATION:

Stone Mill
2710 West Avenue
Wildwood, MO 63040

JOB NUMBER: 15-001

DATE: 9/10/2015

DRAWN BY: TBM

CHECKED BY: MTM

SHEET TITLE: Ordinance #2088

SHEET NUMBER: 5.0

(Parking space is defined by Section 415.280 of the City of Wildwood Zoning Code.)

Credits to this required Traffic Generation Assessment Fee (TGA), which shall be at the discretion of the City Council, for off-site work, as defined in the enabling ordinance for this assessment, within the Center Avenue right-of-way, may be allowed. Design and engineering of these improvements to Center Avenue shall be reviewed and acted upon by the Planning and Zoning Commission on the Site Development Plan, all being in accordance with the direction of the Department of Public Works.

If type of development proposed differ than those listed, rates shall be provided by the Department of Public Works.

As this development is located within a Trust Fund area established by the City of Wildwood, any portion of the traffic generation assessment contribution, which remains, following completion of roadway improvements required by the development shall be retained in the appropriate trust fund.

The amount of this required contribution, if not submitted by January 1, 2016, shall be adjusted on that date and on the first day of January in each succeeding year thereafter in accord with the construction cost index as determined by the City of Wildwood Department of Public Works.

6. VERIFICATIONS PRIOR TO APPROVAL OF THE SITE DEVELOPMENT PLAN

Prior to approval of the Site Development Plan, the developer shall provide the following:

Stormwater Improvements

a. Submit to the Planning and Zoning Commission an engineering plan approved by the City of Wildwood Department of Public Works and the Metropolitan St. Louis Sewer District showing that adequate handling of the stormwater drainage of the site is provided.

   1. The developer is required to provide adequate stormwater systems in accordance with the City of Wildwood and the Metropolitan St. Louis Sewer District standards.
   2. All stormwater shall be discharged at an adequate natural discharge point.
   3. Retention/detention of differential runoff of stormwater shall be required. Stormwater management shall be provided in permanent retention/detention facilities, such as ponds or other acceptable alternatives. These retention/detention facilities shall be completed and in operation prior to the issuance of building permits for an approved dwelling unit, except display lots.
   4. All proposed retention/detention facilities and related stormwater improvements shall be located in a common ground area and insure perpetual maintenance to the Homeowners Association to be created at the time of platting of this development.
   5. The developer of this site shall be solely responsible to provide the necessary mechanisms, as part of the Site Development Plan/Improvement Plan process, to implement "best management practices" for stormwater management and the construction of related facilities. Minimally, these practices/facilities should include rain gardens, vegetative swales, and other options to substantially reduce the amount of stormwater leaving the subject site.

Geotechnical Report

b. Provide a Geotechnical Report covering development and grading required by improvements involved with this site, as directed by the Department of Public Works. Said report shall verify the adaptability of grading and improvements with soil and geologic conditions which are susceptible to rapid erosion, landslide, and/or creep. A statement of compliance with this study, signed by the Geotechnical Engineer preparing the report, shall be included on all Site Development Plans. The development and construction plans shall be designed to conform to the requirements and conditions of the Geotechnical Report. The Geotechnical Engineer shall be required to sign and seal all plans with a certification the proposed construction will be completed in accordance with the grading and soils requirements and conditions contained in the report.

Stormwater Pollution Prevention Plan

c. Submit a Stormwater Pollution Prevention Plan, as part of the Site Development Plan review process, indicating compliance to all Federal, State, and local requirements regarding the management of stormwater runoff to prevent siltation and erosion, while preserving water quality, both upon the site and on downstream properties.

Natural Resource Protection Plan

d. Provide a revised and final copy of the Natural Resource Protection Plan indicating all areas of the site, which are to be designated as protected and not developable. This revised and final copy of this map shall be reviewed and signed by a qualified soil scientist, who completed the analysis, and a statement indicating compliance with all the requirements of Section 1005.200 of the City of Wildwood's Subdivision and Development Regulations.

Environmental Assessments – Phase One and Two

e. The developer shall provide to the Planning and Zoning Commission, as part of the Site Development Plan submittal package, a Phase I and Phase II Environmental Assessment Reports of the property, which indicate its current condition relative to its past utilization by other owners. Determination regarding any required mediation shall be identified and completed, prior to the approval of the Record Plat and before the occupancy of any residential unit, all being in accordance with State and federal standards and guidelines, as set forth by the United States Environmental Protection Agency (EPA) and the Missouri Department of Natural Resources (MDNR), for any determined contaminant exceeding a residential cleanup standard/guideline, with the cost borne for such by the developer and not the City of Wildwood.

7. RECORDING

Within ninety (90) days of approval of the Site Development Plan by the Planning and Zoning Commission, the approved plan shall be recorded with the St. Louis County Recorder of Deeds.

8. VERIFICATION PRIOR TO PERMITS

Notification to Department of Planning

a. Subsequent to approval of the Site Development Plan and prior to issuance of any grading, foundation, or building permit, all approvals from the Department of Public Works, the Missouri Department of Natural Resources, and the Metropolitan St. Louis Sewer District must be received by the Department of Planning.

b. Prior to the issuance of a foundation or building permit for any lot, which adjoins the common ground area and/or detention, basin, written certification from a Professional Engineer which verifies these areas are graded in accordance with the approved plans, must be received by the Department of Planning.

Roadway Improvements

c. Improvements to Center Avenue must be completed prior to the issuance of more than one (1) building permit. Any delays in utility company relocation and adjustments will not constitute a cause to allow occupancy prior to completion of roadway improvements.

Land Subdivision

d. Record a proper subdivision of the property and comply with all other applicable Subdivision and Development Regulations sections affecting the development of land, except as otherwise specified by this ordinance.

Indentures

e. With the filing of the record plat establishing separate lots, the developer shall record an approved indenture, which defines the necessary assessments and specific trustee obligations in accord with provisions of Section 415.470 and 415.510 of the City of Wildwood Zoning Code.

Escrow Requirements

f. All improvement and landscaping costs shall be submitted to the City of Wildwood through the standard subdivision escrow procedures.

Improvement Plans

g. The developer of this residential subdivision shall provide to the City Improvement Plans indicating construction details relative to public and private infrastructure associated with its development. Said plans will be used to calculate escrow requirements for these identified improvements.

Sanitary Sewage System

h. The developer shall provide verification from the Metropolitan St. Louis Sewer District that public sewer service has been provided to this site. Verification shall be in a form acceptable to the City of Wildwood. This lot is part of the Town Center Neighborhood Improvement District (NID) for the required wastewater improvements that have been installed thereafter and each of the proposed properties will have an assessment associated with them that is the responsibility of that owner to pay each year.

Potable Water Service

i. The developer shall be required to provide public potable water from the Missouri American Water Company to the property and related homesites. This area has experienced "low pressure" issues and such may affect these twelve (12) lots. Verification of acceptable service to these twelve (12) lots shall be in the form acceptable to the City of Wildwood. Additionally, the design and location of this water service system shall be reviewed and acted upon by the Planning and Zoning Commission, as part of the Site Development Plan submittal process.

9. GENERAL DEVELOPMENT CONDITIONS

a. Provide adequate temporary off-street parking for construction employees. Parking on non-surfaced areas shall be prohibited in order to eliminate the condition whereby mud from construction and employee vehicles is tracked onto the pavement causing hazardous roadway and driving conditions.

b. A grading permit is required prior to any grading on the site. Interim stormwater drainage control in the form of salutation control measures is required.

c. A copy of the most recently approved Site Development Plan for this P.R.D. Overlay District development shall be prominently displayed at all times in all sales offices for this development.

d. The petitioner shall be responsible for obtaining all necessary permits from the Department of Natural Resources Clean Water Commission as they relate to the development of this tract of land.

e. If cut and fill operations occur during a season not favorable for immediate establishment of a permanent ground cover, a fast germinating annual, such as Rye or Sudan Grasses, shall be utilized to retard erosion.

f. Failure to comply with any or all of the conditions of this ordinance shall be adequate cause for revocation of permits by issuing City of Wildwood Departments or Commissions.

g. The Zoning Enforcement Officer of the City of Wildwood, Missouri, shall enforce the conditions of this ordinance in accord with Site Development Plans approved by the Planning and Zoning Commission and the Department of Planning.

h. Any other applicable zoning, subdivision, or other regulations or requirements of the City, whether in effect at the adoption of this ordinance or as may be hereinafter adopted, shall further apply to the development of this property as authorized by this Planned Residential Development Overlay District Ordinance, except as may be provided by law. Nothing herein shall be deemed a waiver of any subdivision, zoning or other development regulation of the City whether by implication or reference.

i. This zoning approval is conditioned on compliance with the Zoning Code, Subdivision Code, and all applicable laws of the City. Such additional regulations are supplemental to the requirements herein and no modification of any applicable regulations shall result from this Planned Residential Development Overlay District ordinance, except where this ordinance has expressly modified such regulations by reference to the applicable provision authorizing such modification.

10. PUBLIC SPACE REQUIREMENTS

a. Developer shall construct improved public space in conformance with or otherwise satisfying the requirements of the City's Public Space Ordinance, Chapter 415.260 and 415.270 of the City of Wildwood's Zoning Ordinance. The City Council accepts the findings of the Public Space Study adopted therein and determines the compliance with the Public Space Ordinance provisions will address the impact of this specific development on public space needs in a manner and amount that is equal to less than an amount that is roughly proportional to the actual or anticipated impact. The installation of required public space improvements shall be as required by the applicable ordinances, but shall be completed prior to issuance of any occupancy (temporary or final) permit for the authorized by this ordinance. Unless otherwise approved pursuant to the procedures set forth in the Public Space Ordinance, the public space attributable to this development, based upon the number of authorized dwelling units at a rate of 1,742.4 square feet per new single family dwelling, is 20,908.80 square feet in total area..

Editor's Note: Changes to the ordinance, as directed by the Planning and Zoning Commission, are shown in bolded, blue type; where a single, strike-through line indicates deletions to them.

Section Three. This ordinance shall be in full force and effect on and after its passage and approval.

This Bill was passed and approved this 9 day of March, 2015, by the Council of the City of Wildwood, Missouri after having been read by title, or in full, two (2) times prior to its passage.

Presiding Officer

The Honorable Timothy Woerther, Mayor

ATTEST:

City Clerk

Lynne Greene Beldner
Deputy City Administrator/City Clerk

MSD P# 30612-00 MSD BASEMAP: 24V1 ORDINANCE #2088

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STATE OF MISSOURI
MICHAEL T. MATTHIANS
NUMBER
E-14922
REGISTERED PROFESSIONAL ENGINEER

2/29/16

Owner/Developer:
Whalen Custom Homes
338 S. Kirkwood Rd.
Kirkwood, MO 63122
314-575-7645

Project Title and Location:
Stone Mill
2710 West Avenue
Wildwood, MO 63040

Job Number: 15-001
Date: 9/10/2015
Drawn By: TBM
Checked By: MTM
Sheet Title: Ordinance #2088
Sheet Number: 5.1

NATURAL RESOURCE PROTECTION STANDARD ANALYSIS – PREPARED BY ON-SITE SOILS, INC.

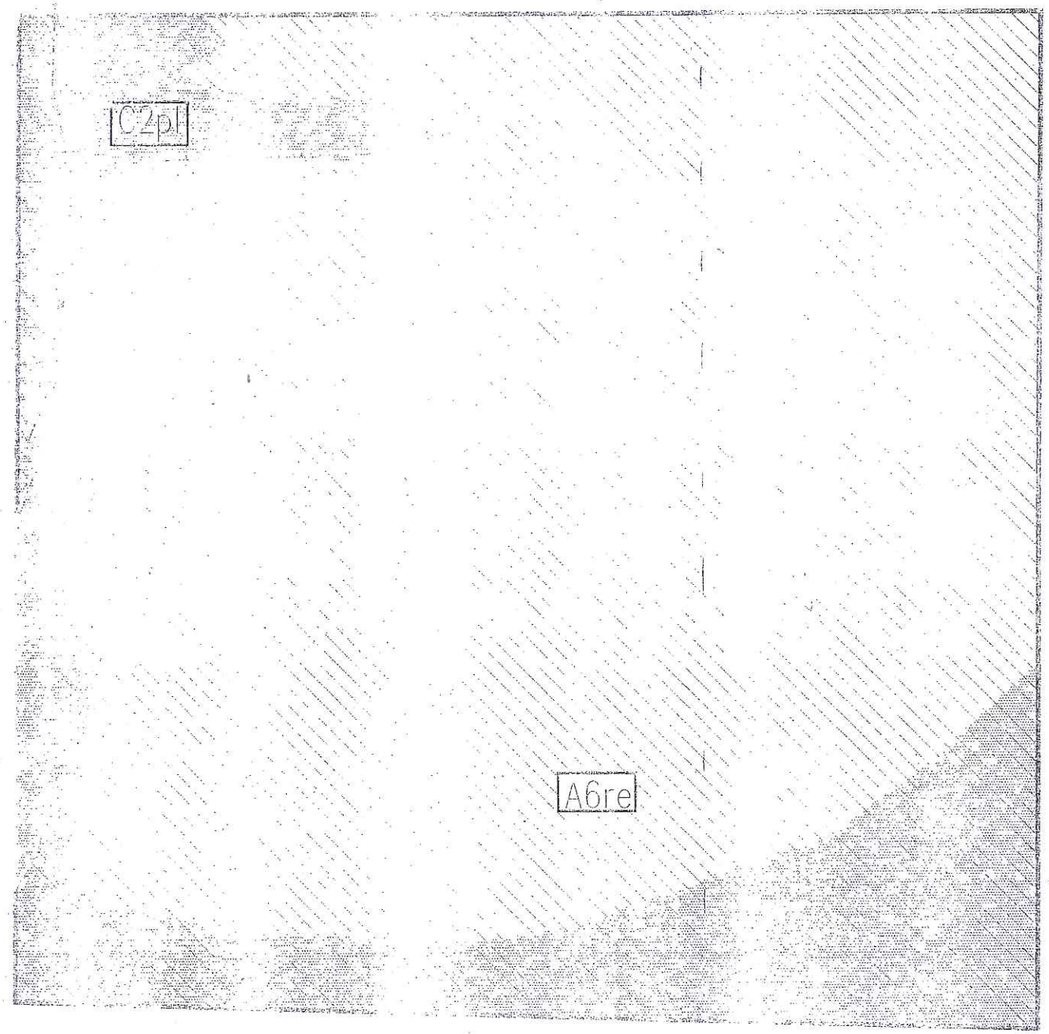
	MAP UNIT	AREA	%REQUIRED TO BE PRESERVED	AREA REQUIRED TO BE PRESERVED	ACRES PRESERVED	%PRESERVED	ACRES DISTURBED	%DISTURBED	ACRES USABLE
	C2pl	0.44	40%	0.18	0.42	95%	0.02	5%	0.26
	A6re	7.56	30%	2.27	2.27	30%	5.29	70%	5.29
– → –	Drainageway	0.01	100%	0.01	0.01	100%	0.00	0%	0.00
	TOTAL	8.01		2.46	2.70	34%	5.31	66%	5.55

SOIL SCIENTIST CERTIFICATION:

THIS IS TO CERTIFY THAT WE HAVE, DURING THE MONTH OF JANUARY 2013, PREPARED A REPORT REGARDING THE SOILS AND NATURAL RESOURCE EVALUATION OF THE SUBJECT PROPERTY. THE REPORT AND INFORMATION CONTAINED ON THIS PLAN RELATING TO SAME IS IN COMPLIANCE WITH SECTION 420.200, "NATURAL RESOURCE PROTECTION STANDARDS AND PROCEDURES" OF THE CITY OF WILDWOOD, MISSOURI.

SOIL SCIENTIST

2/1/16
DATE



40' 0' 40'
SCALE: 1" = 40'

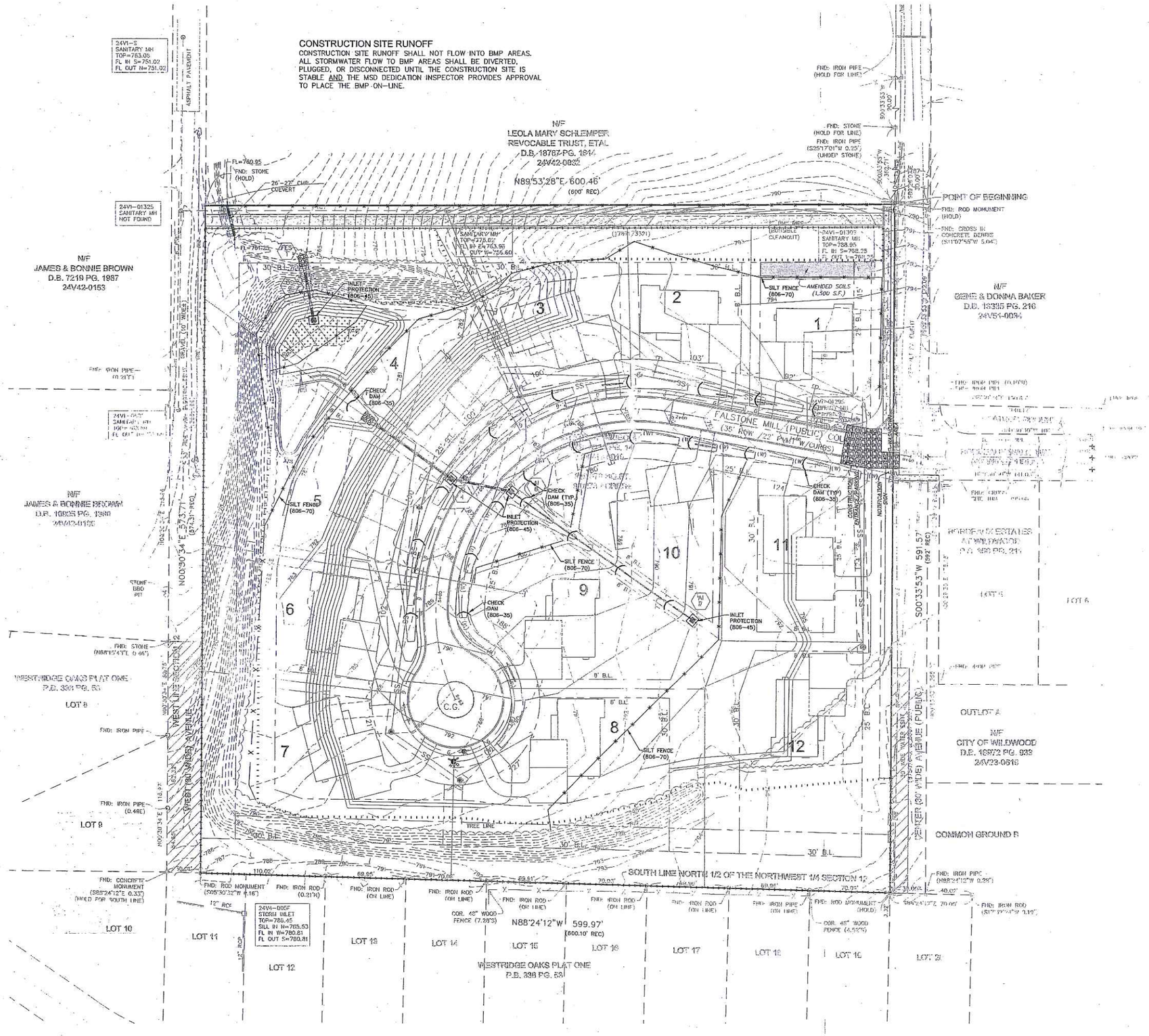
Natural Resourc
Protection Plan

6.0

Xref C:\Stonemill Project\Output dwgs\Title block.dwg

CONSTRUCTION SITE RUNOFF

CONSTRUCTION SITE RUNOFF SHALL NOT FLOW INTO BMP AREAS. ALL STORMWATER FLOW TO BMP AREAS SHALL BE DIVERTED, PLUGGED, OR DISCONNECTED UNTIL THE CONSTRUCTION SITE IS STABLE AND THE MSD DEDICATION INSPECTOR PROVIDES APPROVAL TO PLACE THE BMP ON-LINE.



MSD P# 30612-00 MSD BASEMAP: 24V1 ORDINANCE #2088

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STATE OF MISSOURI
MICHAEL T. MATTHEWS
NUMBER
E-14922
REGISTERED PROFESSIONAL ENGINEER
2/29/16

OWNER/DEVELOPER:

Whalen Custom Homes
338 S. Kirkwood Rd.
Kirkwood, MO 63122
314-575-7645

PROJECT TITLE AND LOCATION:

Stone Mill
2710 West Avenue
Wildwood, MO 63040

JOB NUMBER:	15-001
DATE:	9/10/2015
DRAWN BY:	TBM
CHECKED BY:	MTM
SHEET TITLE:	SWPPP
SHEET NUMBER:	7.0

SWPPP NOTES

1. SITE OWNER: WHALEN CUSTOM HOMES
   338 S. KIRKWOOD RD.
   KIRKWOOD, MO 63122
   314-575-7645
2. SITE ADDRESS: 2710 WEST AVENUE, WILDWOOD, MO 63040
3. REFER TO IMPROVEMENT PLANS FOR PERTINENT SITE MAP INFO.
4. REFER TO IMPROVEMENT PLANS FOR PERTINENT TOPOGRAPHICAL INFO.
5. RUNOFF COEFFICIENTS: UNDEVELOPED – 0.90
   DEVELOPED – 0.92
6. TOTAL LAND ESTIMATED TO BE DISTURBED – APROXIMATELY 5.55 ACRES
7. REFER TO DRAINAGE AREA MAP IN IMPROVEMENT PLANS FOR DRAINAGE PATTERNS.
8. REFER TO SWPP PLAN FOR LOCATION OF ACCESS TO CONSTRUCTION SITE.
9. DESCRIPTION OF B.M.P.'S TO CONTROL EROSION AND SEDIMENTATION (INTERIM AND PERMANENT STABILIZATION PRACTICES)
   A. FOR DETAILED DESCRIPTION OF EACH BMP REQUIRED ON THE SITE SEE THIS SHEET.
   B. CONTRACTOR SHALL ESTABLISH PERIMETER SILTATION CONTROL PRIOR TO ANY CONSTRUCTION ACTIVITIES. AREAS REQUIRING MINOR CLEARING &/OR GRADING PRIOR TO INSTALLATION OF SILTATION CONTROL SHALL BE COMPLETED IN A TIMELY MANNER AND SILTATION CONTROL ESTABLISHED IMMEDIATELY FOLLOWING.
   C. TEMPORARY CONSTRUCTION ENTRANCE SHALL BE INSTALLED WHERE THE ACCESS AREAS INTERSECT WITH PUBLIC ACCESS WAYS. DURING MUDDY CONDITIONS, DRIVERS OF VEHICLES WILL BE REQUIRED TO WASH THEIR WHEELS BEFORE ENTERING THE ROADWAY. WHERE SEDIMENT IS TRANSPORTED ONTO PUBLIC ACCESS WAYS, THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROAD BY SHOVELING OR SWEEPING. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER.
   D. UPON COMMENCEMENT OF INITIAL CLEARING AND GRUBBING OPERATIONS, AS WELL AS FUTURE GRADING OPERATIONS, TOPSOIL MUST BE STRIPPED FROM GRADED AREAS AND STOCKPILED FOR IN FINAL GRADING AND / OR EXCESS REMOVAL. THE STOCKPILES WILL BE KEPT ON SITE BUT MUST STAY CLEAR OF ALL CONSTRUCTION ACTIVITY. THE STOCKPILE MUST BE STABILIZED WITH TEMPORARY VEGETATION, OR COVERED AT THE END PF EACH WORKDAY, OR PERIMETER CONTROLS MUST BE IN PLACE TO PREVENT SOIL LOSS AND SEDIMENT TRANSPORT FROM THE STOCKPILE ITSELF UNTIL NEEDED.
   E. TEMPORARY ROADS SHALL FOLLOW THE CONTOUR OF THE NATURAL TERRAIN TO THE EXTENT POSSIBLE. SLOPES SHALL NOT EXCEED 10 PERCENT SLOPE.
   F. CONTRACTOR SHALL CLEAR AND GRUB THOSE AREAS OF THE SITE SCHEDULED FOR CONSTRUCTION. AREAS NOT SCHEDULED FOR IMMEDIATE CONSTRUCTION SHALL NOT BE CLEARED OF ESTABLISHED VEGETATION UNTIL REQUIRED. REMAINDER OF SITE SHALL BE GRADED, AS REQUIRED. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION AND MAINTENANCE OF SILTATION CONTROL THROUGHOUT THE DURATION OF THE PROJECT.
   G. STORM DRAINS SHALL BE INSTALLED AS EARLY AS POSSIBLE, PROVIDED THE INSTALLATION DOES NOT CONFLICT WITH OTHER CONSTRUCTION ACTIVITIES. INLET PROTECTION SHALL BE PLACED AROUND EACH INLET, IMMEDIATELY UPON COMPLETION OF CONSTRUCTION OF EACH INLET. INLETS MAY BE UTILIZED FOR STORM WATER CONTROL DURING CONSTRUCTION, WITH THE SILT FENCE AND EROSION CONTROL MEASURES IN PLACE.
   H. IF SEEDING OR ANOTHER VEGETATIVE EROSION CONTROL METHOD IS USED, IT SHALL BECOME ESTABLISHED WITHIN TWO WEEKS OR THE SITE SHALL BE RE-SEEDED OR A NON-VEGETATIVE OPTION EMPLOYED.
   I. TECHNIQUES SHALL BE EMPLOYED TO ENSURE STABILIZATION ON STEEP SLOPES AND IN DRAINAGE WAYS.
   J. THE ENTIRE SITE MUST BE STABILIZED, USING HEAVY MULCH LAYER OR ANOTHER METHOD THAT DOES NOT REQUIRE GERMINATION TO CONTROL EROSION, AT THE CLOSE OF THE CONSTRUCTION SEASON. REFER TO TABLE 2 FOR MULCHING RATES.
   K. TECHNIQUES SHALL BE EMPLOYED TO PREVENT THE BLOWING OF DUST OR SEDIMENT FROM THE SITE.
   L. TECHNIQUES SHALL BE EMPLOYED TO DIVERT UPLAND RUNOFF PAST DISTURBED SLOPES
   M. ALL PROPOSED TURF AREAS, ONCE CONSTRUCTED TO FINAL GRADE SHALL BE SEEDED/SODDED WITHIN FIVE DAYS AFTER FINAL GRADING OF THE SITE WHERE SHOWN ON THE PLAIN. SHOULD WEATHER CAUSE DELAYS IN EARTHWORK OPERATIONS, ADDITIONAL SILTATION CONTROL MEASURES MAY BE REQUIRED.
   N. ANY DISTURBED AREAS WHICH WILL REMAIN UNWORKED FOR FIVE DAYS OR MORE SHALL BE STABILIZED WITH SEEDING AND MULCHING PER SPECIFICATIONS WITHIN FIVE DAYS. IF SEASONAL CONDITIONS PROHIBIT SEEDING, MULCHING OR MATTING SHALL BE USED.
   O. SETTLING BASINS, SEDIMENT TRAPS, OR TANKS AND PERIMETER CONTROLS AS REQUIRED.
   P. SETTLING BASINS SHALL BE PROVIDED FOR EACH DRAINAGE AREA WITHIN 10 OR MORE ACRES DISTURBED AT ONE TIME AND SHALL BE SIZED TO CONTAIN 0.5 INCH OF SEDIMENT FROM THE DRAINAGE AREA AND BE ABLE TO CONTAIN A 2-YEAR, 24-HOUR STORM. IF THE PROVISION OF A BASIN OF THIS SIZE IS IMPRACTICAL, OTHER SIMILARLY EFFECTIVE BEST MANAGEMENT PRACTICES (BMP), AS EVALUATED AND SPECIFIED IN THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP), SHALL BE UTILIZED.
   Q. WHEN REQUIRED, SETTLING BASINS SHALL BE DESIGNED IN A MANNER THAT ALLOWS ADAPTATION TO PROVIDE LONG-TERM STORM WATER MANAGEMENT, AS REQUIRED BY THE COUNTY DEPARTMENT(S) HAVING ENFORCEMENT AUTHORITY AND RESPONSIBILITIES.
   R. SETTLING BASINS SHALL HAVE STABILIZED SPILLWAYS TO MINIMIZE THE POTENTIAL FOR EROSION OF THE SPILLWAY OR BASIN EMBANKMENT.
   S. PROTECTION FOR ADJACENT PROPERTIES BY THE USE OF VEGETATED BUFFER STRIP IN COMBINATION WITH PERIMETER CONTROLS.
   T. SEDIMENTATION CONTROLS SHALL ONLY BE REMOVED AFTER THE SITE IS COMPLETELY STABILIZED, VEGETATION IS WELL ESTABLISHED, AND ALL PAVEMENT AREAS ARE INSTALLED.
10. DESCRIPTION OF B.M.P.'S TO PREVENT POTENTIAL POLLUTANTS
    (CONSTRUCTION WASTES, TOXIC OR HAZARDOUS SUBSTANCES, PETROLEUM PRODUCTS, PESTICIDES, HERBICIDES, SITE LITTER, SANITARY WASTES, ETC.)
    A. SOLID NON-HAZARDOUS CONSTRUCTION WASTE – DISPOSE OF IN TRASH DUMPSTERS OR APPROVED EQUIVALENT IN A LOCATION APPROVED BY THE OWNER. POTENTIALLY SOLUBLE OR LEACHABLE SOLID WASTE SHALL BE STORED OFF THE GROUND AND IN COVERED LEAK-PROOF CONTAINERS. SOLID WASTE SHALL BE STORED OFF THE GROUND AND IN COVERED LEAK-PROOF CONTAINERS. SOLID WASTE SHALL BE PROPERLY DISPOSED OF OFF-SITE ON A REGULAR BASIS.
    B. HAZARDOUS WASTE – HAZARDOUS WASTE SHALL BE SEGREGATED FROM NON-HAZARDOUS CONSTRUCTION SITE DEBRIS. LIQUID OR SEMI-LIQUID HAZARDOUS WASTE SHALL BE STORED IN APPROPRIATE CONTAINERS (CLOSED DRUMS OR SIMILAR) AND SHALL BE KEPT UNDER COVER. GRANULAR, SOLUBLE, OR LEACHABLE HAZARDOUS WASTE MATERIALS SHALL BE STORED OFF THE GROUND AND IN COVERED LEAK-PROOF CONTAINERS, THE OWNER SHALL PROPERLY APPROVE ANY HAZARDOUS WASTE STORAGE AREA LOCATIONS.
    C. HAZARDOUS WASTE SHALL BE PROPERLY DISPOSED OF OFF-SITE ON A REGULAR BASIS BY A REPUTABLE, LICENSED HAZARDOUS WASTE HAULER.
    D. IT IS NOT THE INTENT OF THIS SWPPP TO SUPERSEDE OR REPLACE NORMAL SITE ASSESSMENT AND REMEDIATION PROCEDURES CONCERNING HAZARDOUS MATERIALS. SIGNIFICANT SPILLS AND/OR CONTAMINATION WARRANT AN IMMEDIATE RESPONSE BY TRAINED PROFESSIONALS. SUSPECTED JOB SITE CONTAMINATION SHOULD IMMEDIATELY BE REPORTED TO REGULATORY AUTHORITIES AND PROTECTIVE MEASURES TAKEN.
    E. FRESH CONCRETE WASTE AND CONCRETE EQUIPMENT WASH DOWNS SHALL BE CONTAINED AND SHALL BE STORED AWAY FROM DRAINAGE DITCHES, SWALES AND DRAINAGE STRUCTURES. WHERE APPROPRIATE, CONTAINMENT BERMS SHALL BE PLACED AROUND WASTE STORAGE AREAS.
    F. ON-SITE FUELING FACILITIES ARE REQUIRED TO ADHERE TO ALL APPLICABLE FEDERAL AND STATE REGULATIONS CONCERNING STORAGE AND DISPENSERS.
    G. PROVISIONS SHALL BE MADE SO THAT A SUFFICIENT NUMBER OF TEMPORARY TOILET FACILITIES ARE AVAILABLE TO SERVE THE NUMBER OF WORKERS ON-SITE.
    H. PROVISIONS SHALL ME MADE FOR LITTER CONTROL.
11. DESCRIPTION OF B.M.P.'S TO REMAIN AFTER CONSTRUCTION
    A. STORM DRAINS – THE DEVELOPMENT WILL BE SERVED BY A STORM WATER SYSTEM CONSISTING OF PIPE AND INLETS. ANY STORM DRAINAGE SYSTEM DESIGNATED AS "PRIVATE" SHALL BE OPERATED AND MAINTAINED BY THE OWNER. ANY STORM DRAINAGE SYSTEM DESIGNATED AS "PUBLIC" SHALL BE MAINTAINED BY THE METROPOLITAN ST. LOUIS SEWER DISTRICT (MSD) UPON DEDICATION OF THE SEWERS TO THE DISTRICT.
    B. TURF AREAS – TURF AREAS SHALL BE MAINTAINED TO INSURE SITE AREAS REMAIN STABILIZED UPON COMPLETION OF CONSTRUCTION ACTIVITIES.
    C. PAVED AREAS AND WALKWAYS – AREAS SUBJECT TO FOOT AND VEHICLE TRAFFIC SHALL BE PAVED AND KEPT IN GOOD REPAIR FOLLOWING COMPLETION OF CONSTRUCTION ACTIVITIES.
12. CONTRACTOR TO COORDINATE WITH THE CITY AND DEVELOPER FOR OFF STREET PARKING AREA..
13. HAUL ROUTE OF EXCESS SPOILS TO BE DETERMINED BY SITE CONTRACTOR.
14. REFER TO D.M.P.'S DESCRIPTIONS (#10, #11, #12) AND THE SWPP PLAN TO REFERENCE ALL EROSION AND SEDIMENT CONTROL MEASURES REQUIRED FOR THIS SITE.
15. REFER TO SEEDING RATES/MIXTURES TABLE 1.
16. PLANNED RESPONSE TO LOSS OF CONTAINED SEDIMENT:

    B.M.P.'S SHALL BE REPAIRED AND/OR REPLACED IMMEDIATELY, AS REQUIRED, TO STABILIZE SITE AND CONTAIN SEDIMENT LADEN RUNOFF. OFFSITE AREAS SHALL BE REVIEWED FOR EXTENT OF IMPACT FROM B.M.P. FAILURE. PERMIT HOLDER SHALL BE REQUIRED TO PROVIDE DOCUMENTATION OF THE B.M.P. MEASURES, INSTALLED AND SCHEDULED MAINTENANCE, AND REPAIRS.

    CONTRACTORS ON-SITE WILL BE EDUCATED ON THE RESPONSE TO ANY SPILLS ON THE SITE. UPON DISCOVERY OF THE SOURCE OF THE SPILL, IT IS TO BE IMMEDIATELY STOPPED BY ANY MEANS NECESSARY AND ANY CONTAMINATED SOIL SHALL BE DISPOSED OF OFFSITE AT A REQUIRED AND LICENSED CONTAMINATION SITE. THE RESPONSIBILITY FOR ENFORCING THESE CLEANUPS IS HELD BY THE ONSITE SUPERINTENDENT. ALL GENERAL CONTRACTORS WILL BE UNDER WRITTEN AGREEMENT TO ABIDE BY THESE REGULATIONS. RESPONSE MUST INCLUDE DOCUMENTATION OF ACTIONS AND MANDATORY REPORTING TO PUBLIC WORKS.

17. PERMIT HOLDER
    A. PERMIT HOLDER SHALL NOTIFY ALL CONTRACTORS AND OTHER ENTITIES (INCLUDING UTILITY CREWS, CITY EMPLOYEES, OR THEIR AGENTS) THAT WILL PERFORM WORK AT THE SITE, OF THE EXISTENCE OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND WHAT ACTIONS OR PRECAUTIONS SHALL BE TAKEN WHILE ON SITE TO MINIMIZE THE POTENTIAL FOR EROSION AND THE POTENTIAL FOR DAMAGING ANY BEST MANAGEMENT PRACTICES (BMP'S).
    B. PERMIT HOLDER SHALL DETERMINE THE NEED FOR AND ESTABLISH TRAINING PROGRAMS TO ENSURE THAT ALL SITE WORKERS HAVE BEEN TRAINED, AT A MINIMUM, IN EROSION CONTROL, MATERIAL HANDLING AND STORAGE, AND HOUSEKEEPING.
    C. PROVIDE COPIES OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) TO ALL PARTIES WHO ARE RESPONSIBLE FOR INSTALLATION, OPERATION, OR MAINTENANCE FOR ANY BEST MANAGEMENT PRACTICES (BMP'S).
    D. MAINTAIN A CURRENT COPY OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) ON THE SITE AT ALL TIMES.
18. PRIOR TO ANY MAJOR LAND DISTURBANCE ACTIVITY, A LAND DISTURBANCE PERMIT FROM THE STATE OF MISSOURI DEPARTMENT OF NATURAL RESOURCES, WILL BE REQUIRED.
19. ANY LAND CLEARING, CONSTRUCTION, OR DEVELOPMENT INVOLVING THE MOVEMENT OF EARTH SHALL BE IN ACCORDANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN.
20. SEE PAGE 56 OF THE ST LOUIS COUNTY EROSION CONTROL MANUAL FOR DESCRIPTION OF SILT FENCE BMP.
21. CONTRACTOR SHALL KEEP SILT FROM ENTERING INTO THE STORM SEWER SYSTEM AND ALL KEEP WATER FROM PONDING ON THE PAVEMENT THAT IS PART OF THE VEHICLE OR PEDESTRIAN TRAVEL WAY. INLET PROTECTION SHALL ONLY BE USED AS NECESSARY TO KEEP SILT FROM ENTERING INTO THE STORM SEWER SYSTEM.

SEEDING REQUIREMENTS

Dates for Seeding

Permanent Seeding	Jan	Feb	March	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
Tall Fescue			O	O	O			O	O			
Smooth Brome			O	O	O			O	O			
Fescue & Brome			O	O	O	O		O	O			
Fescue, Rye & Bluegrass	A	A	O	O	O	P	F	O	O	P	P	A

Temporary Seeding	Jan	Feb	March	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
Rye or Sudan	A	A	O	O	O	O	O	O	O	O	A	A
Oats		A	O	O	O	O	O	O	O			

O = Optimum seeding dates
A = Acceptable seeding dates
P = Permanent seeding dates with overseeding 2 months later – Initially use 50% of seed and 75% of fertilizer. Finished with additional 75% seed and remaining fertilizer.

Minimum Fertilizer and Seeding Rates

Permanent Seeding*	Pounds per acre	Pounds Per 1000 sq.ft.
Tall Fescue	300	7.0
Smooth Brome	300	4.5
Mixture # 1	250	5.7
Mixture # 2	210	4.8

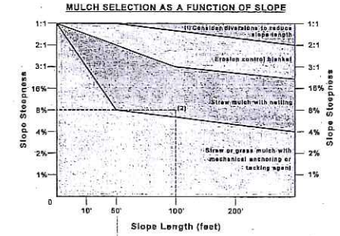
Mixture # 1 = Tall Fescue @ 150 pounds per acre and Brome @ 150 pounds per acre.
Mixture # 2 = Tall Fescue @ 150 pounds per acre; Perennial Rye grass @ 100 pounds per acre, and Kentucky Blue grass @ 10 pounds per acre.
* = Seeding rates for others in excess of 20% (5.5) shall be 15 pounds per 1000 sq. ft.

Temporary Seeding	Pounds per acre	Pounds Per 1000 sq.ft.
Rye or Sudan	100	3.5
Oats	200	2.5

Fertilizer	Pounds per 1000 sq.ft. (pounds per acre)	Temporary Seeding (pounds per acre)
Nitrogen	45	30
Phosphorus	65	30
Potassium	85	30
Lime - Dolo	600	600

ENM = Effective neutralizing material per Soils evaluation of quarried rock.

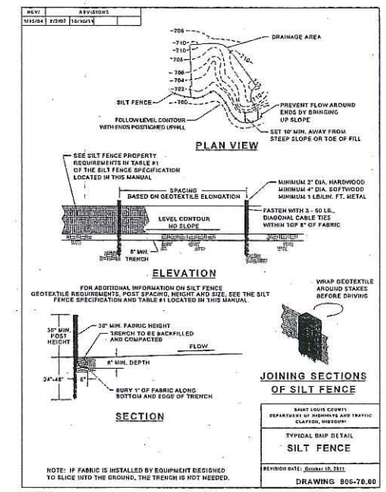
MULCH SELECTION AS A FUNCTION OF SLOPE

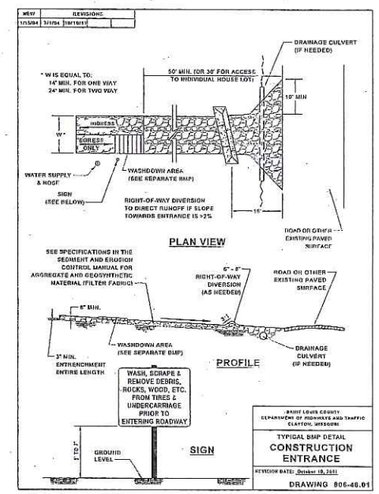


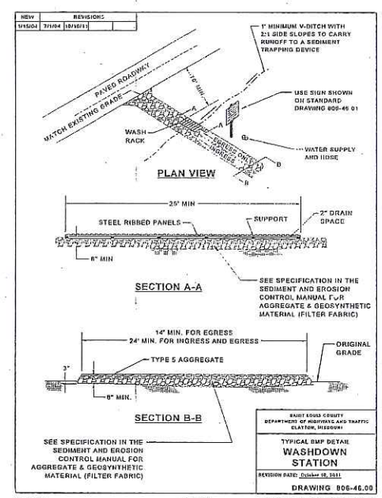
(1) For slopes steeper than 1:1, consider building a diversion above slope to divert water
(2) Example: An 8% slope, 100 feet long, requires some mulch with netting

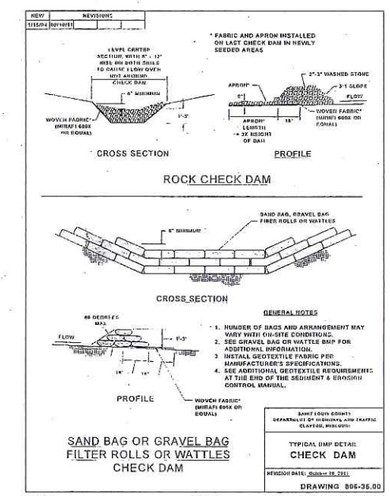
GENERAL MULCH RECOMMENDATIONS TO PROTECT FROM SPLASH AND SHEET FLOW

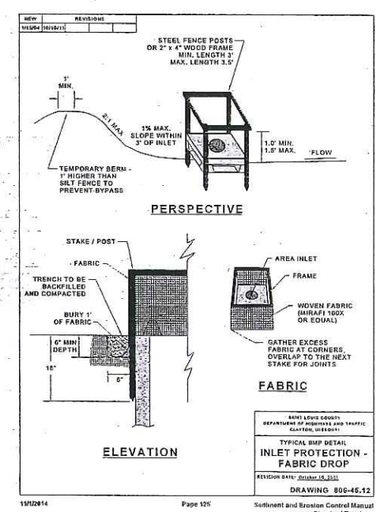
Material	Rate Per Acre	Remarks	Notes
Straw	2 to 2.5 tons	Dry, undecayed unwoodenmic, avoid weeds	Spread by hand or machine; must be tacked or tied down.
Wood Fiber or Wood Cellulose	0.5 to 1 ton		Use with hydro seeder; may be used in lieu of straw. Do not use in hot, dry weather.
Wood Chips	5 to 6 tons	Air dry. Add nitrogen fertilizer at 12 lb per ton	Apply with blower, chip handler, or by hand. Not for low foot areas
Bark	36 cu. yd.	Air dry, shredded, or hammermilled; or chips	Apply with mulch blower, chip handler or by hand. Do not use asphalt tack.











MSD P# 30612-00 MSD BASEMAP: 24V1 ORDINANCE #2088

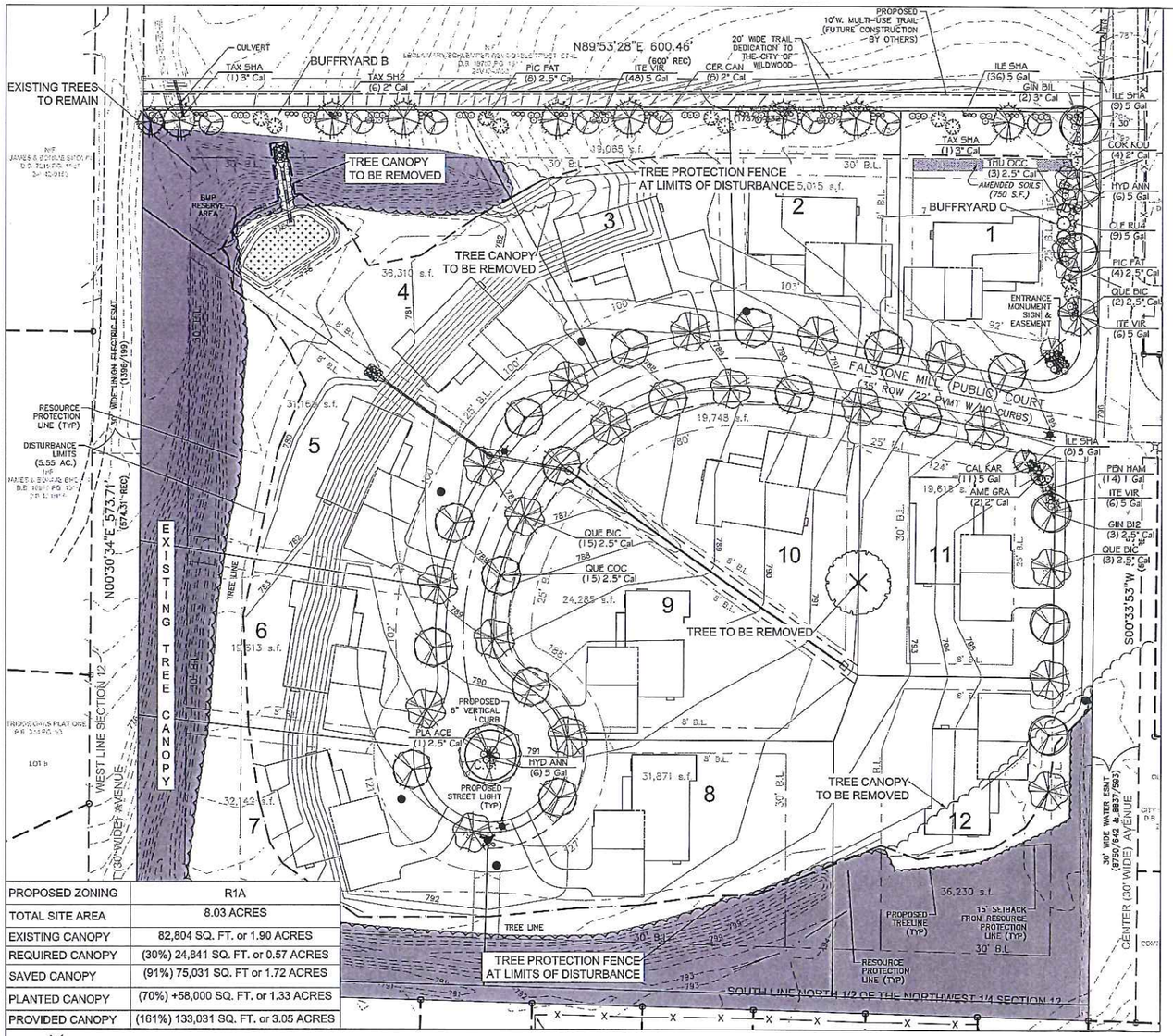
Special Inspections, LLC
16624 Old Chesterfield Rd.
St. Louis, MO. 63017
(636)751-3161
Specialinspections.info

STATE OF MISSOURI
MICHAEL T. MARANTO
NUMBER LE-14922
REGISTERED PROFESSIONAL ENGINEER
2/29/16

OWNER/DEVELOPER:
Whalen Custom Homes
338 S. Kirkwood Rd.
Kirkwood, MO 63122
314-575-7645

PROJECT TITLE AND LOCATION:
Stone Mill
2710 West Avenue
Wildwood, MO 63040

JOB NUMBER: 15-001
DATE: 9/10/2015
DRAWN BY: TBM
CHECKED BY: MTM
SHEET TITLE: Swpp Notes and Details
SHEET NUMBER: 7.1



PROPOSED ZONING	R1A
TOTAL SITE AREA	8.03 ACRES
EXISTING CANOPY	82,804 SQ. FT. or 1.90 ACRES
REQUIRED CANOPY	(30%) 24,841 SQ. FT. or 0.57 ACRES
SAVED CANOPY	(91%) 75,031 SQ. FT or 1.72 ACRES
PLANTED CANOPY	(70%) +58,000 SQ. FT. or 1.33 ACRES
PROVIDED CANOPY	(161%) 133,031 SQ. FT. or 3.05 ACRES

NORTH

0 40 80 120 feet

SCALE: 1" = 40'

TREE PRESERVATION AND LANDSCAPE PLAN

GENERAL NOTES:

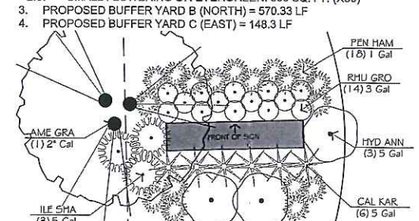
1. INDIVIDUAL HOMEOWNERS MUST BE NOTIFIED AT LEAST ONE WEEK PRIOR TO INSTALLATION OF PLANTS ON LOTS THAT HAVE AN OCCUPIED DWELLING;
2. UNLESS OTHERWISE STIPULATED BY SPECIFIC REQUIREMENTS OF THE CITY OF WILDWOOD TREE MANUAL, THE LANDSCAPING SHOWN ON THIS PLAN MUST BE PLANTED IN ACCORDANCE WITH THE LATEST EDITION OF THE TREE AND SHRUB TRANSPLANTING MANUAL PUBLISHED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE (PO BOX GG, SAVOY, IL 61874-9902;
3. ALL TREES ARE TO BE LOCATED A MINIMUM DISTANCE OF 5' FROM ALL UTILITY BOXES, 5' FROM A STORM INLET OR MANHOLE, 10' FROM A FIRE HYDRANT, 15' FROM PUBLIC STREET LIGHTS, 5' FROM DRIVEWAY APRONS, 20' FROM ANY TRAFFIC CONTROL SIGN, AND AT LEAST 30' FROM ANY INTERSECTION;
4. LOCATIONS O F STREET TREES MAY BE SUBJECT TO CHANGE IN ORDER TO AVOID CONFLICT WITH STREET LIGHTING;
5. ANY PLANTING WITHIN A TREE PRESERVATION AREA, AS DESIGNATED ON THE TREE PRESERVATION PLAN AND SHOWN ON THIS PLAN, MUST BE DONE TO AVOID ANY ADVERSE IMPACT TO THE ROOTS OF EXISTING TREES;
6. PLANT TYPE SUBSTITUTIONS ARE PERMITTED WITH VERBAL OR WRITTEN APPROVAL FROM THE CITY OF WILDWOOD PLANNING DEPARTMENT;
7. ALL PLANT MATERIAL WILL BE REINSPECTED FOR SURVIVAL BY THE CITY OF WILDWOOD PLANNING DEPARTMENT ONE YEAR FOLLOWING INSTALLATION AND AGAIN TWO FULL GROWING SEASONS AFTER PLANTING;
8. ALL PLANTS MUST MEET STANDSARDS OF THE LATEST EDITION OF THE AMERICAN STANDARDS FOR NURSERY STOCK SPONSORED BY THE ASSOCIATION OF AMERICAN NURSERYMEN;
9. NO PLANT SHALL BE LOCATED IN AREAS OF OBVIOUS POOR DRAINAGE. IF SUCH CONDITIONS EXIST, CONTACT THE LANDSCAPE ARCHITECT IMMEDIATELY TO RELOCATE AFFECTED PLANT MATERIAL;
10. SOIL CONDITIONS MUST BE TESTED, VERIFIED AND ADJUSTED BY THE LANDSCAPE CONTRACTOR TO INSURE THAT APPROPRIATE SOIL COMPOSITION AND pH LEVELS ARE SUITABLE FOR PLANT MATERIAL SPECIFIED FOR THAT SPECIFIC LOCATION.
11. LANDSCAPE ARCHITECT IS NOT RESPONSIBLE FOR SURVEYED LOCATION AND VERIFICATION OF EXISTING VEGETATION.

SPECIFICATIONS:

1. PLANTING SOIL SHALL BE A PREPARED SOIL BY A REPUTABLE LOCAL NURSERY OR SIMILAR SOURCE.
2. PLANTING SOIL SHALL BE FREE OF STONES, STUMPS, ROOTS OR OTHERWOODY MATERIAL OVER 1 INCH IN DIAMETER. FOR BEST RESULTS BRUSHOR SEEDS FROM NOXIOUS WEEDS, SUCH AS JOHNSON GRASS,MUGWORT, NUTSEDGE AND CANADIAN THISTLE SHOULD NOT BEPRESENT IN THE SOILS.
3. pH RANGE: 5.0 - 7.0
4. ORGANIC MATTER: UP TO 10%

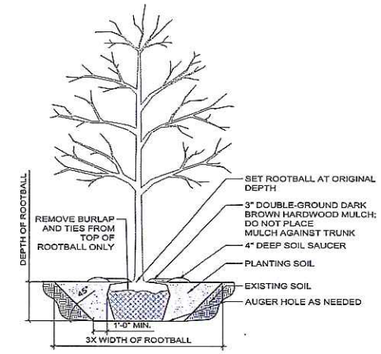
CALCULATIONS:

1. ALL STREET TREES ARE TO BE PLANTED APPROXIMATELY 30' APART, NO MORE THAN 45' APART.
2. PROPOSED TREE CANOPY AREAS ARE FROM WILDWOOD TREE LANDSCAPE MANUAL:
   - 2.1. LARGE SHADE TREE: 1,000 SQ. FT. (X49)
   - 2.2. MEDIUM SHADE TREE OR EVERGREEN: 700 SQ. FT. (0)
   - 2.3. SMALL FLOWERING OR EVERGREEN: 300 SQ. FT. (X30)
3. PROPOSED BUFFER YARD B (NORTH) = 570.33 LF
4. PROPOSED BUFFER YARD C (EAST) = 148.3 LF



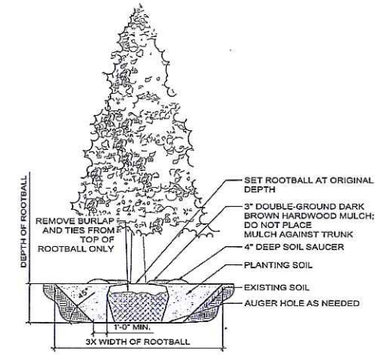
1"=5'

ENTRY MONUMENT SIGN DETAIL PLAN



1 DECIDUOUS TREE PLANTING

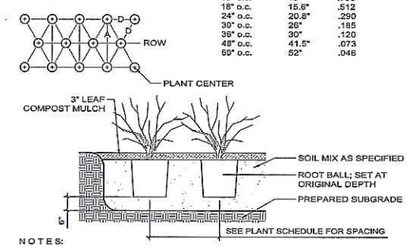
NTS P-CO-DCS-DCST-05



2 CONIFEROUS TREE PLANTING

NTS P-RE-PBP-11

PLANT SPACING DIAGRAM (NTS)



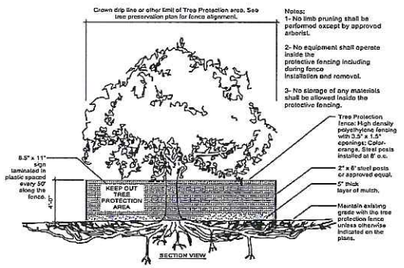
Spacing ("D")	Row ("A")	Plants / Sq. Ft.
15" o.c.	13"	.738
18" o.c.	15.6"	.512
24" o.c.	20.8"	.290
30" o.c.	26"	.185
36" o.c.	30"	.120
48" o.c.	41.5"	.073
60" o.c.	52"	.046

NOTES:

1. Space plants equally or as shown on planting plan.
2. See plant schedule for plant quantities and spacing.

3 SHRUB + PERENNIAL PLANTING

NTS P-CO-DCS-DCST-03



NOTE:
ANY VISIBLE ROOT OVER (1) ONE INCH IN DIAMETER IS TO BE CLEANLY CUT WHERE VISIBLE AT SURFACE LAYER OR DURING TRENCHING OPERATIONS FOR PRESERVED TREES WITHIN 11 FEET OF THE LIMITS OF DISTURBANCE BOUNDARY.

4 TREE PROTECTION DETAIL

3/16" = 1'-0" P-RE-STO-11

PLANT SCHEDULE

TREES	CODE	BOTANICAL NAME / COMMON NAME	CAL	CONT	HGT	QTY
	AME GRA	AMELANCHIER X GRANDIFLORA `AUTUMN BRILLIANCE` / `AUTUMN BRILLIANCE` SERVICEBERRY	2" CAL	B+B		3
	CER CAN	CERCIS CANADENSIS / EASTERN REDBUD	2" CAL			8
	COR KOU	CORNUS KOUSA / KOUSA DOGWOOD	2" CAL	B+B		4
	GIN BI2	GINKGO BILOBA / MAIDENHAIR TREE	2.5" CAL	B+B		3
	GIN BIL	GINKGO BILOBA / MAIDENHAIR TREE	3" CAL	B+B		2
	PIC FAT	PICEA PUNGENS GLAUCA `FAT ALBERT` / FAT ALBERT COLORADO BLUE SPRUCE	2.5" CAL	B+B	6 FT.	12
	PLA ACE	PLATANUS X ACERIFOLIA / LONDON PLANE TREE	2.5" CAL	B+B		1
	QUE BIC	QUERCUS BICOLOR / SWAMP WHITE OAK	2.5" CAL	B+B		20
	QUE COC	QUERCUS COCCINEA / SCARLET OAK	2.5" CAL	B+B		15
	TAX SH2	TAXODIUM DISTICHUM `SHAWNEE BRAVE` TM / BALD CYPRESS	2" CAL	B+B		6
	TAX SHA	TAXODIUM DISTICHUM `SHAWNEE BRAVE` TM / BALD CYPRESS	3" CAL	B+B		2
	THU OCC	THUJA OCCIDENTALIS `GREEN GIANT` / GREEN GIANT ARBORVITAE	2.5" CAL	B+B	8 FT.	3

SHRUBS	CODE	BOTANICAL NAME / COMMON NAME	CONT	SPACING	QTY
	CLE RU4	CLETHRA ALNIFOLIA `RUBY SPICE` / RUBY SPICE CLETHRA	5 GAL	48" o.c.	9
	HYD ANN	HYDRANGEA ARBORESCENS `ANNABELLE` / ANNABELLE SMOOTH HYDRANGEA	5 GAL	48" o.c.	15
	ILE SHA	ILEX GLABRA `SHAMROCK` / INKBERRY	5 GAL	36" o.c.	56
	ITE VIR	ITEA VIRGINICA `HENRY'S GARNET` / HENRY'S GARNET SWEETSPIRE	5 GAL	48" o.c.	60
	RHU GRO	RHUS AROMATICA `GRO-LOW` / GRO-LOW FRAGRANT SUMAC	3 GAL	18" o.c.	14

GRASSES	CODE	BOTANICAL NAME / COMMON NAME	CONT	SPACING	QTY
	CAL KAR	CALAMAGROSTIS X ACUTIFLORA `KARL FOERSTER` / FEATHER REED GRASS	5 GAL	36" o.c.	17
	PEN HAM	PENNISETUM ALOPECUROIDES `HAMELN` / HAMELN DWARF FOUNTAIN GRASS	1 GAL	24" o.c.	32

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CONSULTANT

STONE MILL
WHALEN CUSTOM HOMES
WILDWOOD, MISSOURI 63040

NO.	ISSUED FOR	DATE
	PRE-PLAN REVIEW	09/30/15
	PLANNING REVIEW	10/26/15
	FINAL PLANNING REVIEW	12/21/15

STAMP

STATE OF MISSOURI
KRISTY DESGUIRE
NUMBER
LA-2010000189
LANDSCAPE ARCHITECT

Kristy DeSguire
Landscape Architect
LA-2010000189

DRAWING TITLE
TREE PRESERVATION AND LANDSCAPE PLAN

PROJECT #: 15-215

SHEET NUMBER
L100

Warning: It is a violation of the law for any person, unless acting under the direction of a licensed landscape architect, to alter an item in any way. If an item in this document is altered, the altering landscape architect, if other than the landscape architect of record, shall affix to the item his seal and the notation "altered by" follows by his signature and the date of such alteration, and the specific description of the alteration.

FOR OFFICIAL USE ONLY

ATTACHMENT B
Site Specific Ordinance

AMENDED BILL NO.: 2088 **AMENDED ORDINANCE NO.: 2088**

AN ORDINANCE BY THE CITY COUNCIL OF THE CITY OF WILDWOOD, MISSOURI AUTHORIZING A CHANGE IN ZONING FROM THE NU NON-URBAN RESIDENCE DISTRICT TO THE R-1A 22,000 SQUARE FOOT RESIDENCE DISTRICT, WITH A PLANNED RESIDENTIAL DEVELOPMENT OVERLAY DISTRICT (PRD), TO ACCOMMODATE THE DEVELOPMENT OF AN 8.01 ACRE TRACT OF LAND THAT IS LOCATED ON THE WEST SIDE OF CENTER AVENUE, SOUTH OF MANCHESTER ROAD, WITH TWELVE (12) SINGLE FAMILY DETACHED DWELLINGS ON INDIVIDUAL LOTS, WITH COMMON GROUND AND PUBLIC SPACE AREAS, PER THE ACTION OF THE PLANNING AND ZONING COMMISSION, WHICH IS DETAILED IN ITS LETTER OF RECOMMENDATION DATED FEBRUARY 2, 2015 – P.Z. 21, 22, and 23-14 Stone Mill. (Ward Eight)

WHEREAS, the Master Plan of the City of Wildwood, Missouri contains four (4), major conceptual land use categories that are applied for properties located within its boundaries and these classifications determine how they may be developed in terms of use and density/intensity; and

WHEREAS, one (1) of these categories is the "Suburban Residential Area" that is applied to properties that had been zoned by St. Louis County, prior to the City's incorporation, for single family residential uses, at densities that varied from two (2) units per acre to five (5) units per acre, which included much of the Wildwood community east of State Route 109; and

WHEREAS, this pattern was recognized and the first City Council and Planning and Zoning Commission agreed to allow numerous surrounding properties that were vacant or undeveloped to be used for similar purposes, but at a density no greater than two (2) units per acre, which was substantially less than the past actions of St. Louis County; and

WHEREAS, in 2006, the density in the "Suburban Residential Area" was changed, as part of the Master Plan update process, to one (1) unit per acre from the earlier two (2) units per acre, which was due to the impact this density of units was causing on some of the remaining sites available for future development, particularly in the Strecker Road/Clayton Road Area; and

WHEREAS, long after this change in the text of the Master Plan, the petitioner purchased a site formerly owned by the State of Missouri and was advised of the limitations on its future density of residential units, but sought a change to the Master Plan definition of "Suburban Residential Area," so as to be able to develop it with a comparable density to that of the surrounding subdivisions; and

WHEREAS, this Master Plan modification to the definition of "Suburban Residential Area" would allow for the development of twelve (12) lots on the 8.01 acre site, which also requires its rezoning and the application of a Planned Residential Development Overlay District (PRD), all of which were applied for by Lombardo Homes; and

WHEREAS, with the applications for these three (3) items, the Planning and Zoning Commission held a public hearing on December 1, 2014 upon them, where comments were provided in this regard; and

WHEREAS, the Planning and Zoning Commission reviewed these comments and discussed considerations, with finally granting a change to the Master Plan's "Suburban Residential Area" definition to allow for this single property to have a density of up to 1.75 units per acre, given the

circumstances of its location, i.e. abutting Town Center, other surrounding development densities, and available utilities; and

WHEREAS, with this action, the associated rezoning and application of special procedures permit were also recommended for approval by the Planning and Zoning Commission, which was reflected in its Letter of Recommendation on this matter, being dated February 2, 2015; and

WHEREAS, in this Letter of Recommendation, the Planning and Zoning Commission noted the rezoning and associated special procedures permit were reasonable at this location, given the Master Plan amendment had been supported, and would address a difficult property with a comparable development proposal in terms of type and density of use; and

WHEREAS, this action was undertaken in accordance with the requirements of the City's Charter and the State Statute for the consideration of modifications to Master Plans, General Plans, and Comprehensive Plans of a similar nature.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF WILDWOOD, MISSOURI, AS FOLLOWS:

Section One. The City of Wildwood Zoning Ordinances and Official Zoning District Maps, which are made a part hereof, are hereby, amended to reflect the change in zoning from the NU Non-Urban Residence District to the R-1A 22,000 square foot Residence District, with a Planned Residential Development Overlay District (PRD), as set forth in this ordinance, for the following described land:

A TRACT OF LAND IN THE NORTH 1/2 OF THE NORTHWEST 1/4 OF SECTION 12, TOWNSHIP 44 NORTH, RANGE 3 EAST, CITY OF WILDWOOD, ST. LOUIS COUNTY, MISSOURI AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF A TRACT OF LAND DESCRIBED IN A DEED TO LEOLA MARY SCHLEMPER REVOCABLE TRUST RECORDED IN DEED BOOK 18787 PAGE 1614 OF THE ST. LOUIS COUNTY RECORDS, SAID POINT BEING ON THE WEST LINE OF CENTER (30' WIDE) AVENUE; THENCE WITH THE WEST LINE OF CENTER AVENUE, BEING 15' WEST OF AND PARALLEL TO THE CENTERLINE THEREOF, SOUTH 00°33'53" WEST 591.57 FEET TO THE SOUTH LINE OF THE NORTH 1/2 OF THE NORTHWEST 1/4 OF SECTION 12, SAID POINT ALSO BEING THE NORTH LINE OF WESTRIDGE OAKS PLAT ONE AS PER THE PLAT THEREOF RECORDED IN PLAT BOOK 338 PAGE 53 OF THE ST. LOUIS COUNTY RECORDS; THENCE DEPARTING THE WEST LINE OF CENTER AVENUE WITH THE NORTH LINE OF WESTRIDGE OAKS PLAT ONE, NORTH 88°24'12" WEST 599.97 FEET TO A POINT ON THE EAST LINE OF WEST (30' WIDE) AVENUE; THENCE WITH THE EAST LINE OF WEST AVENUE, BEING 15' EAST OF AND PARALLEL TO THE CENTERLINE THEREOF AND 30 FEET EAST OF AND PARALLEL TO THE WEST LINE OF SECTION 12, NORTH 00°30'34" EAST 573.71 FEET TO THE SOUTHWEST CORNER OF THE AFORESAID LEOLA MARY SCHLEMPER REVOCABLE TRUST TRACT; THENCE WITH THE SOUTH LINE OF SAID LEOLA MARY SCHLEMPER REVOCABLE TRUST TRACT, NORTH 89°53'28" EAST 600.46 FEET TO THE POINT OF BEGINNING AND CONTAINING 349,670 (8.0273 ACRES), MORE OR LESS, ACCORDING TO A SURVEY BY THE STERLING COMPANY DURING THE MONTH OF JANUARY 2013 UNDER ORDER NUMBER 12-11-311.

Section Two. The zoning authority and approval embodied in this ordinance is granted subject to compliance with the Subdivision and Development Regulations, Zoning Code, and all other City of Wildwood ordinances, rules, and regulations and the conditions of this ordinance, except as, may be modified herein, upon the requirement the development and approved Site Development Plan are carried out in accordance with the recommendation forwarded to the City Council by the Planning and Zoning Commission within the communication dated February 2, 2015, which is incorporated herein by reference as if fully set forth in this ordinance. The zoning authority granted herein is further subject to the following conditions:

1. **PERMITTED USES**

a. This Planned Residential Development (P.R.D.) Overlay District shall authorize the maximum development of **twelve (12)** detached single family dwellings on individual lots, with common ground, and all permitted accessory structures normally found in conjunction with the primary uses.

2. **LOT SIZES, DEPTHS, AND BUILDING REQUIREMENTS**

a. Each detached dwelling unit shall be located on an individual lot of record that is a minimum of **15,000 square feet** in size. The minimum width of any lot within this P.R.D. Overlay District shall be **one hundred (100) feet** in distance, **excepting within the cul-de-sac area, which shall be as determined by the Planning and Zoning Commission, as part of its review and action on the Site Development Plan.** This width shall be measured at the front building line.

b. No building and/or structure shall be more than two (2) stories above final grade, as measured from the front building line on any individual lot.

c. Direct residential drive access shall be allowed for up to **two (2)** of the single family detached units within this development from Center Avenue, while the other ten (10) lots shall only be served by the proposed public internal street. All garages on each of the units shall be **side-entry designs** only, and must use **carriage type designs**, including windows, as determined by the City's Architectural Review Board to be appropriate. **Architectural type shingle selections shall be required on all residential units of a minimum thirty (30) year standard.**

d. The first story, interior clear height for all single family dwellings shall be not less than **eight (8) feet**.

e. The proposed architectural design, character, and style of all buildings and dwelling units shall adhere to the City of Wildwood's Zoning Ordinance regulations for architectural review in all districts, **excepting no vinyl siding shall be allowed on any dwelling unit within the boundaries of this Planned Residential Development Overlay District (PRD). All materials used on any facade of a residential unit shall be fiber cement siding and backer, board, wood, brick, and/or stone**. Approval of the required design shall be by the Architectural Review Board. Minimally, all buildings shall maintain a consistent theme throughout the boundaries of this Planned Residential Development Overlay District in terms of material, color, and style.

f. The maximum area of this site that can be disturbed for development purposes shall not exceed 5.3 acres in size and does not include the Director of Planning's variance, **but does preclude its allowable use.**

g. The minimum area of this site that must be protected and cannot be used for development purposes is 2.7 acres in size and does not include the Director of Panning's variance, **but does not preclude its allowable use.**

3. PLAN SUBMITTAL REQUIREMENTS

Within twelve (12) months of the P.R.D. Overlay District approval by the City Council, and prior to any site disturbance, the developer shall submit to the Planning and Zoning Commission for their review and approval a Site Development Plan. Where due cause is shown by the developer, time intervals may be extended once by the Planning and Zoning Commission in accord with requirements of Section 420.060 of the City of Wildwood Zoning Ordinance. Said Site Development Plan shall include, but not be limited to, the following information:

a. Outboundary plat and legal description of the property.
b. A general numbered lot plan with setback lines from all streets and roadways on and adjacent to the property. A typical lot diagram, indicating all site design information such as, but not limited to, right-of-way width, improvement dimensions and locations, setbacks, and building placement.
c. The location and size of all parking areas, pavement widths, and right-of-way dedications of all internal roadway improvements and drives.
d. A general plan indicating setback lines along the perimeter of the subject tract of land and surrounding property lines and related improvements within four hundred (400) feet of this site's boundaries.
e. Location of all roadways adjacent to the property, including required roadway right-of-way dedication and pavement widening with existing and proposed improvements, and general location, size, right-of-way, and pavement width of all interior drives.
f. The location and size of all freestanding signs, lighting, fences, sidewalks, and other above ground structures, except retaining walls less than two (2) feet in height per section.
g. Existing and proposed contours at vertical intervals of not more than two (2) feet.
h. General location of sanitary sewer facilities.
i. Parking and density calculations.
j. Conceptual location and size of common ground areas.
k. A typical section of the proposed road indicating the placement and design of required streetscape improvements.
l. A Landscape Plan including, but not limited to, the location, size, and general type of plant materials to be used in accord with the City of Wildwood's Ordinance 410 and accompanying Tree Manual.
m. An inventory of the percent of tree canopy or individual trees to be retained on the site.
n. Location of all existing and proposed easements.
o. All other information not mentioned above, but required on a preliminary plat in accord with Section 420.060 of the City of Wildwood Subdivision and Development Regulations.

4. SITE DEVELOPMENT PLAN DESIGN CRITERIA

The above Site Development Plan shall adhere to the following specific design criteria:

Build-To Lines/Setbacks/Other - Residential

a. Any building or structure, other than boundary and/or retaining walls, fences, detention facilities, and/or light standards, shall adhere to the following setback lines:

   1. **Twenty-five (25)** feet from any right-of-way line.
   2. **Eight (8) feet** for any side yard property line and ten (10) feet for side yard areas that abut the perimeter of the Planned Residential Development Overlay District.
   3. **Thirty (30) feet from any rear yard property line.**
   4. No foundation associated with any authorized dwelling, or any structural element attached therein to it, shall encroach within **fifteen (15) feet** of the Final Resource Protection Line, as shown on the Record Plat.

Parking Setbacks – Residential

b. All parking stalls or loading spaces, excluding points of ingress or egress for the detached dwelling units, shall be located behind **the edge of the public right-of-way** a minimum of **twenty-five (25) feet.**

Access and Roadway Improvements

c. Dedicate the necessary amount of right-of-way (**a minimum of ten (10) feet**), along with all easements and licenses for construction purposes, for Center Avenue to allow for the creation of a minimum forty (40) foot wide public right-of-way area and the construction of a **twenty-two (22) foot wide pavement section, with a six (6) foot wide sidewalk,** on the west side of the street, which adheres to the City of Wildwood's Design Criteria Handbook and associated requirements, as directed by the Department of Public Works. All elements including, but not limited to, tree lawn area, street trees and lights, and other amenities, as set forth herein, shall be indicated on the Site Development Plan and reviewed and acted upon by the Planning and Zoning Commission.

d. Provide a **twenty (20) foot wide trail dedication** along the entire length of the northern property line to the City of Wildwood for public use forever. This dedication shall be indicated on the Record Plat for this subdivision and contained within in it a **ten (10) foot wide multiple-use trail** that will connect to Center and West Avenue. This design shall be reviewed and acted upon by the Planning and Zoning Commission, as part of the Site Development Plan process. All standards, specifications, and requirements for the dedication, platting, and design shall be per the direction of the Department's of Public Works and Planning.

e. Dedicate a **thirty-five (35) foot right-of-way area** for public use and within this area construct a minimum **twenty-two (22) foot wide street**, with cul-de-sac, ~~and sidewalks on both sides of it,~~ all designed in accordance with the City of Wildwood's Design Criteria Handbook, and as directed by the Department of Public Works.

Miscellaneous Roadway Requirements

f. Installation of landscaping and ornamental entrance monument or identification signage, if proposed, shall be reviewed by the Department of Public Works for sight distance considerations and approved prior to its installation or construction.

g. If required sight distance cannot be provided at the access location, acquisition of right-of-way, reconstruction of pavement, including correction to vertical alignment and other off-site improvements, may be required to provide the required sight distance as directed by the Department of Public Works.

h. **Construction access shall be from Manchester Road to Center Avenue during the development of this site, not East Avenue or Bordeaux Walk Way.**

i. Sidewalks shall be required on all public streets and provide for a continuous and logical layout of this pedestrian network. Design and construction requirements for all sidewalks within the entire development shall be as established in the City of Wildwood's Design Criteria Handbook. Approval of their location, design, and material shall be by the Planning and Zoning Commission, as part of the Site Development Plan review process.

j. The developer is advised that utility companies will require compensation for relocation of their utility facilities within public road right-of-way. Utility relocation cost shall not be considered as an allowable credit against the petitioner's Traffic Generation Assessment contributions. The developer should also be aware of extensive delays in utility company relocation and adjustments. Such delays will not constitute a cause to allow occupancy prior to completion of roadway improvements.

k. All internal streets, access drives, or lanes, whether public or private, shall comply with the City of Wildwood's Design Criteria Handbook, in terms of improvements, such as drive lane widths, sidewalks, stormwater drainage facilities, and street trees and lights.

Parking Requirements - Residential

l. Parking spaces shall be provided, as required by the Section 415.340 Off-Street Parking and Loading Requirements of the City of Wildwood Zoning Ordinance, for the R-1-A 22,000 square foot Residence District.

Landscape Requirements - Specific

m. Landscaping shall adhere to all requirements of Ordinance 410 and its accompanying Tree Manual, including the submittal of a Tree Preservation Plan in conjunction with the Site Development Plan.

n. All streets, roads, and lanes shall be appropriately landscaped as required by City's Tree Manual and Sustainable Plantings Guide and approved by the Planning and Zoning Commission on the Site Development Plan.

o. The areas of existing vegetation within the P.R.D. Overlay District boundaries identified as to be retained shall be marked on the site prior to the commencement of any disturbance in accord with the City of Wildwood's Ordinance 410. These areas shall be indicated on the Site Development Plan submitted to the City of Wildwood for Planning and Zoning Commission review and approval. Existing mature tree canopy shall be preserved in accordance with the requirements of City of Wildwood's Ordinance 410 Tree Preservation and Restoration Code.

p. A minimum **fifty (50) foot, non-disturbed buffer area of the existing woodlands** shall be maintained along the property's entire southern boundary line with the Westridge Oaks Subdivision. Non-disturbed shall be interpreted to include no utility extensions through this buffer area. A similar non-disturbed buffer area of no less than **thirty (30) feet** shall also be required along the entire western boundary line of the subject lot.

q. A Landscape Architect shall sign and submit all plans for review and approval for this mixed-use development.

Signs - Residential

r. Signs for this P.R.D. Overlay District shall be erected in accordance with Section 415.410 Sign Regulations of the City of Wildwood Zoning Ordinance for the R-1-A 22,000 square foot Residence District.

s. The location of all signage shall be as approved on the Site Development Plan by the Planning and Zoning Commission. Signage not located on common ground must be erected within an easement.

Lighting Requirements

t. The location of all lighting standards shall be as approved on the Site Development Plan. No on-site illumination source shall exceed sixteen (16) feet in height or be so situated that light is cast directly on adjoining properties. Illumination levels for all lighting shall comply with the provisions of the City of Wildwood's Zoning Code, Section 415.450 "Outdoor Lighting Requirements." A Lighting Study shall be submitted in conjunction with the Site

Development Plan indicating compliance to these requirements. The Planning and Zoning Commission shall approve the location, design, and appearance of all light standards and fixtures as part of the Site Development Plan review process.

Miscellaneous Conditions

u. The design, color, material, and location of all garden and screen walls or fences, if planned or required, shall be indicated on the Site Development Plan, as part of its review and action by the Planning and Zoning Commission and the Architectural Review Board.

v. Improvements associated with public infrastructure, such as roadways, sidewalks, and access points, shall comply with general design principles that will provide for safe and efficient movement of traffic in and around these sites and improve overall circulation in the area. These improvements shall be reviewed and approved by the Department of Public Works.

w. **Hours of construction and grading activity shall be limited to 7:00 a.m. to 6:00 p.m. Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturday. No development (grading and construction) activity shall be authorized on Sundays.**

x. All retaining walls exceeding three (3) feet in height per section or crossing individual property lines shall be constructed of an appropriate inter-locking concrete block system. Walls crossing property lines shall be located in a maintenance easement. The design, color, material, and location of all walls shall shown on the Site Development Plan for review and action by the Planning and Zoning Commission.

y. The location of all utility easements for proposed service to this development shall be as approved by the Planning and Zoning Commission on the Site Development Plan. All utilities installed to serve this site shall be placed underground, including any existing overhead lines located on the subject property.

5. TRAFFIC GENERATION ASSESSMENT FEE

The developer shall contribute to the East Area Traffic Generation Assessment Trust Fund established by Section 140.210 of the City of Wildwood's Revised Codes. This assessment must be paid in full at the time of the first Zoning Authorization for any building or structure or when the individual issuances of building permits for the authorized lots are approved. This contribution shall not exceed the amount established by multiplying the number of parking spaces provided by the following rate:

Type of Development	*Required Contribution*
Single Family Dwelling **(detached)**	$1,085.70 /Parking Space

(Parking space is defined by Section 415.280 of the City of Wildwood Zoning Code.)

Credits to this required Traffic Generation Assessment Fee (TGA), which shall be at the discretion of the City Council, for off-site work, as defined in the enabling ordinance for this assessment, within the Center Avenue right-of-way, may be allowed. Design and engineering of these improvements to Center Avenue shall be reviewed and acted upon by the Planning and Zoning Commission on the Site Development Plan, all being in accordance with the direction of the Department of Public Works.

If type of development proposed differ than those listed, rates shall be provided by the Department of Public Works.

As this development is located within a Trust Fund area established by the City of Wildwood, any portion of the traffic generation assessment contribution, which remains, following completion of roadway improvements required by the development shall be retained in the appropriate trust fund.

The amount of this required contribution, if not submitted by January 1, 2016, shall be adjusted on that date and on the first day of January in each succeeding year thereafter in accord with the construction cost index as determined by the City of Wildwood Department of Public Works.

6. VERIFICATIONS PRIOR TO APPROVAL OF THE SITE DEVELOPMENT PLAN

Prior to approval of the Site Development Plan, the developer shall provide the following:

Stormwater Improvements

a. Submit to the Planning and Zoning Commission an engineering plan approved by the City of Wildwood Department of Public Works and the Metropolitan St. Louis Sewer District showing that adequate handling of the stormwater drainage of the site is provided.

1. The developer is required to provide adequate stormwater systems in accordance with the City of Wildwood and the Metropolitan St. Louis Sewer District standards.
2. All stormwater shall be discharged at an adequate natural discharge point.
3. Retention/detention of differential runoff of stormwater shall be required. Stormwater management shall be provided in permanent retention/detention facilities, such as ponds or other acceptable alternatives. These retention/detention facilities shall be completed and in operation prior to the issuance of building permits for an approved dwelling unit, except display lots.
4. All proposed retention/detention facilities and related stormwater improvements shall be located in a common ground area and insure perpetual maintenance to the Homeowners Association to be created at the time of platting of this development.
5. The developer of this site shall be solely responsible to provide the necessary mechanisms, as part of the Site Development Plan/Improvement Plan process, to

implement "best management practices" for stormwater management and the construction of related facilities. Minimally, these practices/facilities should include rain gardens, vegetative swales, and other options to substantially reduce the amount of stormwater leaving the subject site.

Geotechnical Report

b. Provide a Geotechnical Report covering development and grading required by improvements involved with this site, as directed by the Department of Public Works. Said report shall verify the adaptability of grading and improvements with soil and geologic conditions which are susceptible to rapid erosion, landslide, and/or creep. A statement of compliance with this study, signed by the Geotechnical Engineer preparing the report, shall be included on all Site Development Plans. The development and construction plans shall be designed to conform to the requirements and conditions of the Geotechnical Report. The Geotechnical Engineer shall be required to sign and seal all plans with a certification the proposed construction will be completed in accordance with the grading and soils requirements and conditions contained in the report.

Stormwater Pollution Prevention Plan

c. Submit a Stormwater Pollution Prevention Plan, as part of the Site Development Plan review process, indicating compliance to all Federal, State, and local requirements regarding the management of stormwater runoff to prevent siltation and erosion, while preserving water quality, both upon the site and on downstream properties.

Natural Resource Protection Plan

d. Provide a revised and final copy of the Natural Resource Protection Plan indicating all areas of the site, which are to be designated as protected and not developable. This revised and final copy of this map shall be reviewed and signed by a qualified soil scientist, who completed the analysis, and a statement indicating compliance with all the requirements of Section 1005.200 of the City of Wildwood's Subdivision and Development Regulations.

Environmental Assessments – Phase One and Two

e. **The developer shall provide to the Planning and Zoning Commission, as part of the Site Development Plan submittal package, a Phase I and Phase II Environmental Assessment Reports of the property, which indicate its current condition relative to its past utilization by other owners. Determination regarding any required mediation shall be identified and completed, prior to the approval of the Record Plat and before the occupancy of any residential unit, all being in accordance with State and federal standards and guidelines, as set forth by the United States Environmental Protection Agency (EPA) and the Missouri Department of Natural Resources (MDNR), for any determined contaminant**

exceeding a residential cleanup standard/guideline, with the cost borne for such by the developer and not the City of Wildwood.

7. RECORDING

Within ninety (90) days of approval of the Site Development Plan by the Planning and Zoning Commission, the approved plan shall be recorded with the St. Louis County Recorder of Deeds.

8. VERIFICATION PRIOR TO PERMITS

Notification to Department of Planning

a. Subsequent to approval of the Site Development Plan and prior to issuance of any grading, foundation, or building permit, all approvals from the Department of Public Works, the Missouri Department of Natural Resources, and the Metropolitan St. Louis Sewer District must be received by the Department of Planning.

b. Prior to the issuance of a foundation or building permit for any lot, which adjoins the common ground area and/or detention, basin, written certification from a Professional Engineer which verifies these areas are graded in accordance with the approved plans, must be received by the Department of Planning.

Roadway Improvements

c. Improvements to Center Avenue must be completed prior to the issuance of more than one (1) building permit. Any delays in utility company relocation and adjustments will not constitute a cause to allow occupancy prior to completion of roadway improvements.

Land Subdivision

d. Record a proper subdivision of the property and comply with all other applicable Subdivision and Development Regulations sections affecting the development of land, except as otherwise specified by this ordinance.

Indentures

e. With the filing of the record plat establishing separate lots, the developer shall record an approved indenture, which defines the necessary assessments and specific trustee obligations in accord with provisions of Section 415.470 and 415.510 of the City of Wildwood Zoning Code.

Escrow Requirements

f. All improvement and landscaping costs shall be submitted to the City of Wildwood through the standard subdivision escrow procedures.

Improvement Plans

g. The developer of this residential subdivision shall provide to the City Improvement Plans indicating construction details relative to public and private infrastructure associated with its development. Said plans will be used to calculate escrow requirements for these identified improvements.

Sanitary Sewage System

h. The developer shall provide verification from the Metropolitan St. Louis Sewer District that public sewer service has been provided to this site. Verification shall be in a form acceptable to the City of Wildwood. **This lot is part of the Town Center Neighborhood Improvement District (NID) for the required wastewater improvements that have been installed thereafter and each of the proposed properties will have an assessment associated with them that is the responsibility of that owner to pay each year.**

Potable Water Service

i. The developer shall be required to provide public potable water from the Missouri American Water Company to the property and related homesites. This area has experienced "low pressure" issues and such may affect these twelve (12) lots. Verification of acceptable service to these twelve (12) lots shall be in the form acceptable to the City of Wildwood. Additionally, the design and location of this water service system shall be reviewed and acted upon by the Planning and Zoning Commission, as part of the Site Development Plan submittal process.

9. GENERAL DEVELOPMENT CONDITIONS

a. Provide adequate temporary off-street parking for construction employees. Parking on non-surfaced areas shall be prohibited in order to eliminate the condition whereby mud from construction and employee vehicles is tracked onto the pavement causing hazardous roadway and driving conditions.

b. A grading permit is required prior to any grading on the site. Interim stormwater drainage control in the form of salutation control measures is required.

c. A copy of the most recently approved Site Development Plan for this P.R.D. Overlay District development shall be prominently displayed at all times in all sales offices for this development.

d. The petitioner shall be responsible for obtaining all necessary permits from the Department of Natural Resources Clean Water Commission as they relate to the development of this tract of land.

e. If cut and fill operations occur during a season not favorable for immediate establishment of a permanent ground cover, a fast germinating annual, such as Rye or Sudan Grasses, shall be utilized to retard erosion.

f. Failure to comply with any or all of the conditions of this ordinance shall be adequate cause for revocation of permits by issuing City of Wildwood Departments or Commissions.

g. The Zoning Enforcement Officer of the City of Wildwood, Missouri, shall enforce the conditions of this ordinance in accord with Site Development Plans approved by the Planning and Zoning Commission and the Department of Planning.

h. Any other applicable zoning, subdivision, or other regulations or requirements of the City, whether in effect at the adoption of this ordinance or as may be hereinafter adopted, shall further apply to the development of this property as authorized by this Planned Residential Development Overlay District Ordinance, except as may be provided by law. Nothing herein shall be deemed a waiver of any subdivision, zoning or other development regulation of the City whether by implication or reference.

i. This zoning approval is conditioned on compliance with the Zoning Code, Subdivision Code, and all applicable laws of the City. Such additional regulations are supplemental to the requirements herein and no modification of any applicable regulations shall result from this Planned Residential Development Overlay District ordinance, except where this ordinance has expressly modified such regulations by reference to the applicable provision authorizing such modification.

10. PUBLIC SPACE REQUIREMENTS

a. Developer shall construct improved public space in conformance with or otherwise satisfying the requirements of the City's Public Space Ordinance, Chapter 415.260 and 415.270 of the City of Wildwood's Zoning Ordinance. The City Council accepts the findings of the Public Space Study adopted therein and determines the compliance with the Public Space Ordinance provisions will address the impact of this specific development on public space needs in a manner and amount that is equal to less than an amount that is roughly proportional to the actual or anticipated impact. The installation of required public space improvements shall be as required by the applicable ordinances, but shall be completed prior to issuance of any occupancy (temporary or final) permit for the authorized by this ordinance. Unless otherwise approved pursuant to the procedures set forth in the Public Space Ordinance, **the public space attributable to this development, based upon the number of authorized dwelling units at a rate of 1,742.4 square feet per new single family dwelling, is 20,908.80 square feet in total area..**

Editor's Note: Changes to the conditions, as directed by the Planning and Zoning Commission, are shown in bolded, blue type, while a single, strike-through line indicates deletions to them.

Section Three. This ordinance shall be in full force and effect on and after its passage and approval.

This Bill was passed and approved this 9 day of MARCH, 2015, by the Council of the City of Wildwood, Missouri after having been read by title, or in full, two (2) times prior to its passage.

Presiding Officer

The Honorable Timothy Woerther, Mayor

ATTEST:

City Clerk

Lynne Greene Beldner
Deputy City Administrator/City Clerk

ATTACHMENT C
Background Information

Metropolitan
St. Louis Sewer
District

2350 Market Street
St. Louis, MO 63103-2555
(314) 768-6200

January 19, 2016

Special Inspections
16624 Old Chesterfield Rd
Chesterfield, MO 63017

In reply refer to
MSD Ref. No.: P-0030612-00

Gentlemen:

In the review of plans for:
WEST AVE 380' SE OF NEW COLLEGE (RES 12 LOT SUBD - 2710 WEST AVE)
New

This is to (X) request ( ) confirm:

( ) Revised copies of plans for further review as noted on enclosed plan.

(9) Additional copies of plans as noted on enclosed plan.

( ) Revised copies of plans for further review as requested in conference.

( ) Additional copies of plans as requested in conference.

REMARKS:

Your cooperation in furnishing us with the above will facilitate final approval of the project for construction.

By direction of Richard Unverferth, Director of Engineering.

Yours truly,

William H. Croker, P.E. 768-6304,
Engineer
Engineering Department

cc: Developer ✓
File

METROPOLITAN ST. LOUIS SEWER DISTRICT
2350 MARKET STREET, ST. LOUIS, MO 63103, 314-768-6272

ENGINEERING DEPARTMENT RECEIPT FOR PLANS

DATE: 09/24/2015 M.S.D. REFERENCE NO.: P-0030612-00

THE ENGINEERING DEPARTMENT OF THE METROPOLITAN ST. LOUIS SEWER DISTRICT HAS ON THIS DATE RECEIVED 3 COPIES OF THE PRELIMINARY SEWER PLANS.

New

TITLE: WEST AVE 380' SE OF NEW COLLEGE (RES 12 LOT SUBD - 2710 WEST AVE)

LOCATION
West Ave. 380' SE of New College

MUNICIPALITY
Wildwood

WATERSHED
Caulks Creek/Missouri River

TREATMENT FACILITY
Missouri River

SANITARY DISPOSAL: Caulks Creek Sanitary system

STORM DISPOSAL: To onsite detention then creek

COMBINED DISPOSAL: None

ENGINEER: Special Inspections
16624 Old Chesterfield Rd
Chesterfield, MO 63017

CONTACT: Mike Mahaney
TELEPHONE: 578-7231
FAX:
Email:

OWNER: Whalen Custom Homes, Inc.
228 S. Kirkwood Rd
St. Louis, MO 63122

CONTACT: Mike Whalen
TELEPHONE: 575-7645
FAX:
Email:

DEDICATION AGREEMENT: Y ACREAGE 5.55 USAGE: RES

* REVIEW FEES AND CONNECTION FEES MUST BE TWO (2) SEPARATE CHECKS.

WHEN EASEMENTS ARE REQUIRED, PLANS WILL NOT BE APPROVED UNTIL:

1. NEEDED RIGHT-OF-WAY HAS BEEN ACQUIRED.

2. A SIGNED SUBDIVISION PLAT, SHOWING EASEMENTS READY FOR RECORDING, HAS BEEN SUBMITTED.

3. THE RECORDED BOOK AND PAGE NUMBERS OF ANY EXISTING EASEMENT TO BE USED SHALL BE NOTED ON THE PLAN. ANY RESTRICTIVE CONDITIONS AS TO THE USE OF EASEMENTS SHALL BE NOTED.

PRELIMINARY EXAMINATION OF THE PLANS INDICATES THAT THE FOLLOWING WILL BE REQUIRED:

1. Submittal Charge $450.00 - RCVD.
2. Addresses & Zip Code
3. Agreemt to Dedicate & Use
4. Connection Fee $12,864.00
5. Water Quality - RCVD.
6. Channel Protection - RCVD.
7. Easements
8. Maintenance Agreement w/Exhibit
9. Recording Fee TBD
10. Subdivision Plat
11. Review Fee $839.49 - RCVD.
12. Caulks Creek Contract
13. Caulks Creek Surcharge $22,082.50

ABSENCE OF ANY OF THE ABOVE REQUIREMENTS WILL DELAY APPROVAL OF THIS PLAN.

(ALL FURTHER CORRESPONDENCE MUST HAVE THE M.S.D. REFERENCE NUMBER NOTED)

BASE MAP NO: 24V1

cc:
Engineering Dept. MSD Owner
Permit Dept. MSD Environmental Comp. MSD
Consulting Engineer Central Files MSD

Wunnenberg's Page: 43
Grid: JJ26

REVIEWING ENGINEER
William H. Croker, P.E. 768-6304

MSD Form 5.2 (Rev. 8/87)

AGREEMENT TO DEDICATE AND USE

This agreement entered into this **19** day of **January, 2016** by and between **Whalen Custom Homes, Inc.**, Party of the First Part, and the Metropolitan St. Louis Sewer District, a municipal corporation and a political subdivision of the State of Missouri, Party of the Second Part.

WHEREAS, Party of the First Part is desirous of securing sewage disposal for a tract or parcel of land known as, **WEST AVE 380' SE OF NEW COLLEGE (RES 12 LOT SUBD - 2710 WEST AVE)** (MSD REF # **P-0030612-00**)

WHEREAS, Party of the Second Part is desirous of providing such sewage disposal to Party of the First Part.

NOW, THEREFORE, in consideration of the premises, and of the performance of the covenants hereinafter set out, it is mutually agreed that, upon completion of the sewer or sewers and treatment plants, if any and after final inspection has been completed by Party of the Second Part, Party of the First Part shall file with the Party of the Second Part a Deed of Dedication conveying and transferring to The Metropolitan St. Louis Sewer District all rights, titles and interests in the aforesaid sewers, together with the appropriate sewer easements and treatment plants, and Party of the Second Part shall accept for public use said Dedication, and shall thereafter undertake the operation and maintenance of all aforesaid sewers, easements and treatment plants. In addition, however, the Party of the First Part agrees that the Party of the Second Part or any permittee thereof may connect with and use any such sewer or sewers and appurtenances thereto at anytime prior to such dedication.

IN WITNESS WHEREOF, the Party of the First Part and the Party of the Second Part have hereunto set their hands and seals the day and year first above written.

_____ _____ (Corporate Seal)

Attest _____

THE METROPOLITAN ST. LOUIS SEWER DISTRICT

By _____

Richard Unverferth

Director of Engineering

MSD 3.11 Corporate (Revised 10-01-94)

AGREEMENT TO DEDICATE AND USE

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WHEREAS, Party of the Second Part is desirous of providing such sewage disposal to Party of the First Part.

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IN WITNESS WHEREOF, the Party of the First Part and the Party of the Second Part have hereunto set their hands and seals the day and year first above written.

_____ _____ (Corporate Seal)

Attest _____

THE METROPOLITAN ST. LOUIS SEWER DISTRICT

By _____

Richard Unverferth

Director of Engineering

MSD 3.11 Corporate (Revised 10-01-94)

CONTRACT

THIS CONTRACT, made and entered into this _____ day of _____, by and between Whalen Custom Homes, Inc.(Developer), and THE METROPOLITAN ST. LOUIS SEWER DISTRICT, a municipal corporation and political subdivision of the State of Missouri (MSD).

WHEREAS, MSD proposes to design and construct improvements and renovations to the Caulks Creek Pump Station "A" and the Caulks Creek Force Main, at an estimated cost of Thirteen Million Four Hundred Thousand Dollars ($13,400,000.00), in order to improve and eventually to serve the area tributary to Caulks Creek Pump Station "A" and Caulks Creek Force Main which area includes a construction project of Developer known as WEST AVE 380' SE OF NEW COLLEGE (RES 12 LOT SUBD - 2710 WEST AVE) P-0030612-00, and

WHEREAS, the aforesaid improvements are necessary to provide additional capacity, and

WHEREAS, the aforesaid improvements to the Caulks Creek Pump Station "A" and Caulks Creek Force Main will allow MSD to provide service to a watershed area consisting of approximately 24,731 acres of which 12,737 acres are undeveloped, and

WHEREAS, of the 12,737 total undeveloped acres approximately 50% thereof is deemed to be developable, and

WHEREAS, "developable acre" as used herein is defined to be all lot areas, street right of ways, easements and common ground, and

WHEREAS, the estimated total cost of design, construction and related costs using the aforesaid formula is approximately $2,750.00 per developable acre, and

WHEREAS, the Developer and MSD each desire to insure and expedite the improvements to the Caulks Creek Pump Station "A" and Caulks Creek Force Main,

NOW, THEREFORE, the parties hereto do mutually agree as follows:

1. In consideration of MSD's approval of new connections for Developer's said WEST AVE 380' SE OF NEW COLLEGE (RES 12 LOT SUBD - 2710 WEST AVE) P-0030612-00 project, Developer agrees to pay to MSD the sum of $2,750.00 per acre based on 8.03 developable acres in its aforesaid project as reimbursement of MSD for the design, construction and related costs for the improvements and renovations to the Caulk's Creek Pump Station "A" and the Caulk's Creek Force Main which will serve said project. Payment of $2,750.00 per acre shall hereafter be made by Developer prior to MSD's approval to release a building permit for any lot in Developer's aforesaid project.

WHEREFORE, the parties hereto have executed this agreement on the day and year first above written.

ATTEST: By_____

_____ _____

Secretary Developer

STATE OF MISSOURI)
) SS.
_____OF ST. LOUIS)

On this _____ day of _____, 20_____, before me appeared _____, to me personally known, who being by me duly sworn did say he is the President of _____, a _____ corporation authorized to do business in Missouri, and that the seal affixed to the foregoing instrument is the corporate seal of said corporation and that said instrument was signed and sealed on behalf of said corporation by authority of the corporation's Board of Directors, and said _____ acknowledged said instrument to be the free act and deed of said corporation.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal at my office in _____ the day and year first above written.

My commission expires _____ _____
Notary Public

The Metropolitan St. Louis Sewer District

ATTEST:

_____ By _____
Tim R. Snoke, Secretary-Treasurer Brian Hoelscher, Executive Director

Approved as to Form _____
Susan M. Myers, General Counsel

STATE OF MISSOURI)
) SS.
CITY OF ST. LOUIS)

On this _____ day of _____, 20____, before me appeared Brian Hoelscher, to me personally known, who being by me duly sworn did say he is the Executive Director of The Metropolitan St. Louis Sewer District, a body corporate, municipal corporation and political subdivision of the State of Missouri; that the seal affixed to the foregoing instrument is the seal of said corporation; that said instrument was signed and sealed on behalf of said corporation by authority of its Board of Trustees; and said Brian Hoelscher acknowledged said instrument to be the free act and deed of said corporation.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal at my office in St. Louis, Missouri the day and year first above written.

My commission expires _____. _____
Notary Public

CONTRACT

THIS CONTRACT, made and entered into this _____ day of _____, by and between Whalen Custom Homes, Inc.(Developer), and THE METROPOLITAN ST. LOUIS SEWER DISTRICT, a municipal corporation and political subdivision of the State of Missouri (MSD).

WHEREAS, MSD proposes to design and construct improvements and renovations to the Caulks Creek Pump Station "A" and the Caulks Creek Force Main, at an estimated cost of Thirteen Million Four Hundred Thousand Dollars ($13,400,000.00), in order to improve and eventually to serve the area tributary to Caulks Creek Pump Station "A" and Caulks Creek Force Main which area includes a construction project of Developer known as WEST AVE 380' SE OF NEW COLLEGE (RES 12 LOT SUBD - 2710 WEST AVE) P-0030612-00, and

WHEREAS, the aforesaid improvements are necessary to provide additional capacity, and

WHEREAS, the aforesaid improvements to the Caulks Creek Pump Station "A" and Caulks Creek Force Main will allow MSD to provide service to a watershed area consisting of approximately 24,731 acres of which 12,737 acres are undeveloped, and

WHEREAS, of the 12,737 total undeveloped acres approximately 50% thereof is deemed to be developable, and

WHEREAS, "developable acre" as used herein is defined to be all lot areas, street right of ways, easements and common ground, and

WHEREAS, the estimated total cost of design, construction and related costs using the aforesaid formula is approximately $2,750.00 per developable acre, and

WHEREAS, the Developer and MSD each desire to insure and expedite the improvements to the Caulks Creek Pump Station "A" and Caulks Creek Force Main,

NOW, THEREFORE, the parties hereto do mutually agree as follows:

1. In consideration of MSD's approval of new connections for Developer's said WEST AVE 380' SE OF NEW COLLEGE (RES 12 LOT SUBD - 2710 WEST AVE) P-0030612-00 project, Developer agrees to pay to MSD the sum of $2,750.00 per acre based on 8.03 developable acres in its aforesaid project as reimbursement of MSD for the design, construction and related costs for the improvements and renovations to the Caulk's Creek Pump Station "A" and the Caulk's Creek Force Main which will serve said project. Payment of $2,750.00 per acre shall hereafter be made by Developer prior to MSD's approval to release a building permit for any lot in Developer's aforesaid project.

WHEREFORE, the parties hereto have executed this agreement on the day and year first above written.

ATTEST: By_____

_____ _____

Secretary Developer

STATE OF MISSOURI)
) SS.
_____OF ST. LOUIS)

On this _____ day of _____, 20_____, before me appeared _____, to me personally known, who being by me duly sworn did say he is the President of _____, a _____ corporation authorized to do business in Missouri, and that the seal affixed to the foregoing instrument is the corporate seal of said corporation and that said instrument was signed and sealed on behalf of said corporation by authority of the corporation's Board of Directors, and said _____ acknowledged said instrument to be the free act and deed of said corporation.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal at my office in _____ the day and year first above written.

My commission expires _____ _____
Notary Public

The Metropolitan St. Louis Sewer District

ATTEST:

_____ By _____
Tim R. Snoke, Secretary-Treasurer Brian Hoelscher, Executive Director

Approved as to Form _____
Susan M. Myers, General Counsel

STATE OF MISSOURI)
) SS.
CITY OF ST. LOUIS)

On this _____ day of _____, 20____, before me appeared Brian Hoelscher, to me personally known, who being by me duly sworn did say he is the Executive Director of The Metropolitan St. Louis Sewer District, a body corporate, municipal corporation and political subdivision of the State of Missouri; that the seal affixed to the foregoing instrument is the seal of said corporation; that said instrument was signed and sealed on behalf of said corporation by authority of its Board of Trustees; and said Brian Hoelscher acknowledged said instrument to be the free act and deed of said corporation.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal at my office in St. Louis, Missouri the day and year first above written.

My commission expires _____. _____
Notary Public

Travis Newberry

From: Mike Whalen <mike@whalencustomhomes.com>
Sent: Thursday, February 25, 2016 8:25 AM
To: Travis Newberry; Joe Vujnich; Kathy Arnett
Subject: Fwd: Stone Mill

---------- Forwarded message ----------
From: **Dave Phipps** <daveph@metrowest-fire.org>
Date: Thu, Jan 21, 2016 at 9:12 AM
Subject: RE: Stone Mill
To: Mike Whalen <mike@whalencustomhomes.com>
Cc: Joe Vujnich <JVujnich@cityofwildwood.com>

Mike,

I have reviewed the attached site plan for Stone Mill. Your street is 22 feet wide, any street under 26 foot wide is required to restrict parking on one side, no parking signage is required and must be record on the plat. You will need a resolution from the fire district for the Missouri American Water Co to cover the water main extension and fire hydrant locations, when you start the project I will issue the resolution.

David E. Phipps

Fire Marshal

Metro West Fire Protection District

(636) 821-5806

From: Mike Whalen [mailto:mike@whalencustomhomes.com]
Sent: Wednesday, January 20, 2016 11:54 AM
To: Dave Phipps <daveph@metrowest-fire.org>
Subject: Fwd: Stone Mill

Fire Marshall Phipps:

Thank you for taking the time to review my plan. Attached, please find the site plan and utility plan. Please don't hesitate to call if you have any questions or concerns. You can reach me at 314-575-7645. Thanks for your service. My little brother is a Fireman in North St. Louis City. I loo forward to hearing from you.

WILDWOOD

February 24, 2016

Whalen Custom Homes
Attn: Mike Whalen
338 S. Kirkwood Road
Kirkwood, Missouri 63112

Re: Site Development Plan for Stone Mill Subdivision – R-1A District with Planned Residential Development Overlay District (Amended Ordinance #2088)

Dear Mr. Whalen,

The Department of Planning has completed its second review of the Site Development Plan that has been submitted for the 8.03 acre tract of land located on the west side of Center Avenue, south of Manchester Road. This review compared the compliance of this plan and related components to the approved site-specific ordinance for the project, and the Zoning Ordinance requirements for residential developments of this type. This review discovered a number of items that need to be addressed, before the plan can be submitted to the Planning and Zoning Commission for its review and action, beginning with its Site Plan Subcommittee. These items can be summarized as follows:

1. Please provide preliminary comments from Metropolitan St. Louis Sewer District (MSD) and Metro West Fire Protection District.
2. Please submit a Geotechnical Study to the Department of Public Works for its review.
3. Please correct the density calculations listed in Development Note #6. The following calculations are correct: 7.38 acres x 1.75 units/acre=12.915 units, 12 lots permitted
4. Please add to General Note #10 to read, "Street trees and site landscaping shall be as required by the City of Wildwood and comply with its Tree Manual and Sustainable Plantings Guide.
5. Please add the following sentence to General Note #15: "Design, engineering, and construction costs are to be shared between developer and the City of Wildwood."
6. Please include the Ordinance #2088 as part of the "Site Development Plan" title block.
7. Please provide tree preservation calculations that include existing canopy, canopy to be removed, and canopy retained. Please note, this site is required to retain at least 30% of the existing tree canopy.
8. Please provide more detailed Public Space calculations, as the calculation for the multiple-use trail appears to be inaccurate.
9. Please move the overflow area shown between Lot Four (4) and Lot Five (5) farther to the west, so it is not located between the two (2) planned homes.
10. Please provide the size of the areas to be vacated and dedicated to the City as Public Space, which are located on the site's southwest and southeast corners (formerly right-of-way of Center and West Avenues).

11. Please consider switching the configuration of the home and garage on Lot Ten (10), so as the drive aisle and garage are located on the west side of the lot. This request is to ensure the rear elevation and yard of the home on Lot Eleven (11) is not facing a garage entry.
12. Please add "(by developer)" to the note indicating the proposed ten foot (10') multi-use trail on Sheet 2.
13. Please remove any easement to MSD that is located within the fifty foot (50') non-disturbed buffer area and the Natural Resource Protection Line.
14. Please be aware, the Department is concerned about the outfall pipe from the BMP Reserve Area, which is located near the trail and its potential impact on it. It appears from the Grading Plan a grass swale is to transport the stormwater from the end of this pipe to another pipe placed under the trail. When Improvement Plans are submitted for this project, please ensure this design is functional and will not damage the trail.
15. Please provide a cross-section detail of the proposed trail and sidewalk.
16. Please indicate the accurate sheet number on the Natural Resource Protection Plan sheet.

This item is scheduled before the Site Plan Subcommittee of the Planning and Zoning Commission on March 7, 2016, at 5:45 p.m., in the City Hall Community Room, 16860 Main Street, Wildwood, Missouri 63040. Please submit fifteen (15) full-sized plan sets, with these changes, to the Department of Planning no later than Thursday, March 3rd.

If you should have any questions or comments regarding this information, please feel free to contact the Department of Planning at (636) 458-0440. Thank you for your cooperation in this matter.

Sincerely,
CITY OF WILDWOOD

Joe Vujnich

Joe Vujnich, Director
Department of Planning

Cc: The Honorable Timothy Woerther, Mayor
Ryan S. Thomas, P.E., City Administrator
Rick Brown, P.E. and P.T.O.E., Director of Public Works
Kathy Arnett, Assistant Director of Planning and Parks
Travis Newberry, Planner

WILDWOOD

January 19, 2016

Whalen Custom Homes
Attn: Mike Whalen
338 S. Kirkwood Road
Kirkwood, MO 63112

Re: Site Development Plan for Stone Mill Subdivision – R-1A District with Planned Residential Development Overlay District (Amended Ordinance #2088)

Dear Mr. Whalen,

The Department of Planning has completed its initial review of the Site Development Plan that has been submitted for the 8.3 acre tract of land located on the west side of Center Avenue, south of Manchester Road. This review compared the compliance of this plan and related components to the approved site-specific ordinance for the project, and the Zoning Ordinance requirements for residential developments of this type. This review discovered a number of items that need to be addressed, before the plan can be submitted to the Planning and Zoning Commission for its review and action. These items can be summarized as follows:

1. Please provide the correct site address in Development Note #1.
2. Please provide preliminary comments from Metropolitan St. Louis Sewer District and Metro West Fire Protection District.
3. Please submit a Geotechnical Study to the Department of Public Works for its review.
4. Please provide a Stormwater Pollution Protection Plan, as a component of this package.
5. Please provide the Natural Resource Protection analysis table and map.
6. Please note that the twenty foot (20') trail easement is not a required deduction under the PRD Regulations. Make this adjustment and please revise the associated density calculations.
7. Please add note: "Entrance, street intersection, cul-de-sac shall be constructed to City of Wildwood standards."
8. Please change the Flood Note to reflect revised Flood Insurance Rate Map adopted by FEMA effective February 4, 2015.
9. Provide the zoning of adjacent parcels of ground, if different than the site.
10. Please add the public space table to Sheet 2.0, given the trail constitutes much of the dedication.
11. Please delete "future construction by others" from the note about the proposed ten foot (10') wide multi-use trail and note the construction of such is required of the developer (see Ordinance #2088).
12. Please show the required fifty foot (50') non-disturbed buffer area of the existing woodlands along the property's entire southern boundary line, which is adjacent to Westridge Oaks Subdivision.
13. Please indicate the thirty foot (30') build-to line on the property's entire western boundary as also the thirty foot (30') non-disturbed buffer area.

14. The thirty foot (30') build-to line that is shown along the southern boundary of the site is incorrectly measured from the easement, not the property line. Please correct.
15. Please remove the ten foot (10') wide proposed easement to MSD along the property's western and southern boundaries. These areas are within the non-disturbed buffer protected by ordinance and, therefore, cannot be used as such.
16. Please note if MSD standards will require the proposed bioretention basin to be in an easement or common ground. If not, please note how the homeowners association will access the area for ongoing maintenance, whether through easement or common ground designation, since this feature is located in the rear yard areas of two (2) lots.
17. Please indicate the dimensions and material of the culvert located at the northwest corner of the property.
18. Please provide an easement for the 1,500 square foot amended soils BMP located at the northeast corner of the property.
19. Please indicate a stormwater easement along the south side of the public right-of-way, on the private lots, to cover the planned swale to be constructed across their respective frontages for maintenance purpose.
20. Please indicate the sight distance triangle at the intersection of Center Avenue and Falstone Mill Court.
21. Please show the required improvements on Center Avenue.
22. Please identify Center Avenue as a public street.
23. Please remove all driveway approaches/aprons from side yard setback areas.
24. Please show dimensions for the drive aisle that provides access to Lots 11 and 12.
25. Please restrict parking to one side of the street on Falstone Mill Court. Provide catalog cutsheet and locations of "No Parking" signs, per Metro West Fire Protection District requirements.
26. Please crown Falstone Mill Ct. This will require a ditch along both sides of the street. The Department would like curbs provided along the outside of Falstone Mill Ct. with curb breaks provided for storm water drainage into the adjacent ditch.

Once the modifications have been made to the plan, please return three (3) copies of it for further review and comment. The ordinance requires that the Site Development Plan (SDP) be approved by the Planning and Zoning Commission one (1) year after the ordinance is in effect. To meet the March 6, 2016 deadline for SDP approval, it will need to be ready for the February 16, 2016 meeting of the Site Plan Subcommittee of the Planning and Zoning Commission. If this deadline cannot be met, please send a letter requesting the Planning and Zoning Commission extend this deadline.

If you should have any questions or comments regarding this information, please feel free to contact the Department of Planning at (636) 458-0440. Thank you for your cooperation in this matter.

Sincerely,
CITY OF WILDWOOD

Joe Vujnich

Joe Vujnich, Director
Department of Planning

Cc: The Honorable Timothy Woerther, Mayor
Ryan S. Thomas, P.E., City Administrator
Rick Brown, P.E. and P.T.O.E., Director of Public Works
Kathy Arnett, Assistant Director of Planning and Parks
Travis Newberry, Planner

SCI ENGINEERING, INC.
130 Point West Boulevard
St. Charles, Missouri 63301
636-949-8200 Fax 636-949-8269
www.sciengineering.com

Phase One Environmental Site Assessment

STONE MILL
WILDWOOD, MISSOURI

March 2013

CITY OF WILDWOOD
JUL 31 2014
DEPT OF PLANNING & PARKS

Prepared for:

LOMBARDO HOMES ST. LOUIS

SCI No. 2013-0121.20

SCI ENGINEERING, INC.

CONSULTANTS IN DEVELOPMENT,
DESIGN AND CONSTRUCTION
GEOTECHNICAL
ENVIRONMENTAL
NATURAL RESOURCES
CULTURAL RESOURCES
CONSTRUCTION SERVICES

March 8, 2013

Mr. Jeff Boland
Lombardo Homes St. Louis
2299 Technology Drive
O'Fallon, Missouri 63368

RE: Phase One Environmental Site Assessment
Stone Mill
Wildwood, Missouri
SCI No. 2013-0121.20

Dear Mr. Boland:

SCI Engineering, Inc. (SCI) has completed the Phase One Environmental Site Assessment at the above-referenced site, the report of which is contained herein. Phase One activities consisted of historical and public records research, historical review, interviews, and a reconnaissance survey.

Based on the activities which were performed in general accordance with the ASTM Practice E 1527-05 for Phase One Environmental Site Assessments, SCI identified evidence of recognized environmental conditions in connection with the subject site. These issues are further discussed in Section 9.0.

SCI appreciates being of service to you on this project. Please contact us if you have any questions or comments regarding this report.

Respectfully,

SCI ENGINEERING, INC.

Benjamin K. Butterfield
Staff Scientist

Karl E. Ruhmann, P.E., R.G.
Vice President

BKB/KER/lf/rah

Enclosure

V:\1soils\1NEW\PROJECT FILES\2013 PROJECTS\2013-0121 Stone Mill\ES\20\130121.20 Phase One ESA.doc

Stone Mill
Center Ave
Grover, MO 63040

Inquiry Number: 3517510.1s
February 12, 2013

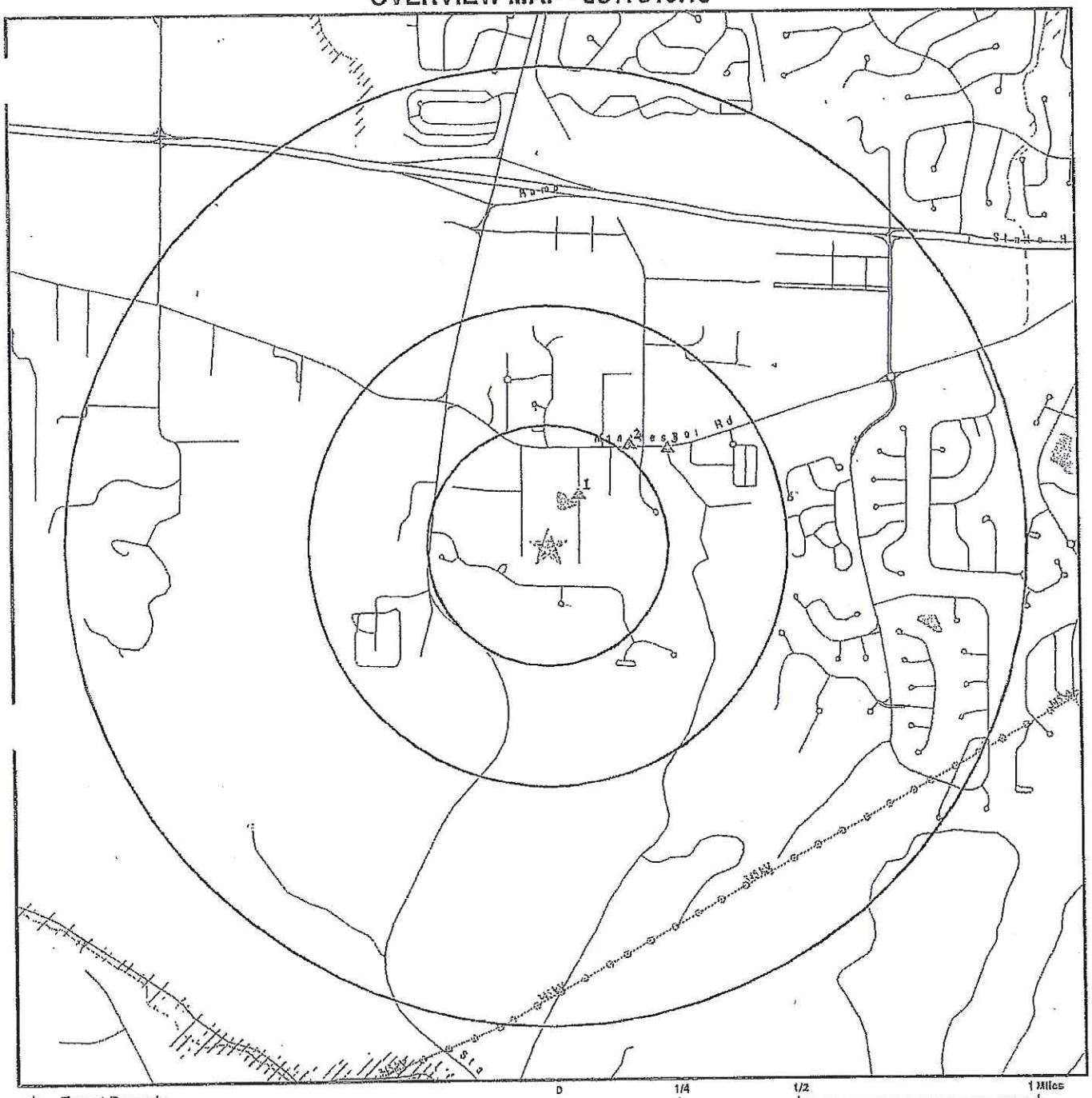
The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-TXB

OVERVIEW MAP - 3517510.1s



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

TE NAME: Stone Mill ADDRESS: Center Ave Grover MO 63040 LAT/LONG: 38.5732 / 90.6408	CLIENT: SCI Engineering, Inc. CONTACT: Ben Butterfield INQUIRY #: 3517510.1s DATE: February 12, 2013 2:17 pm

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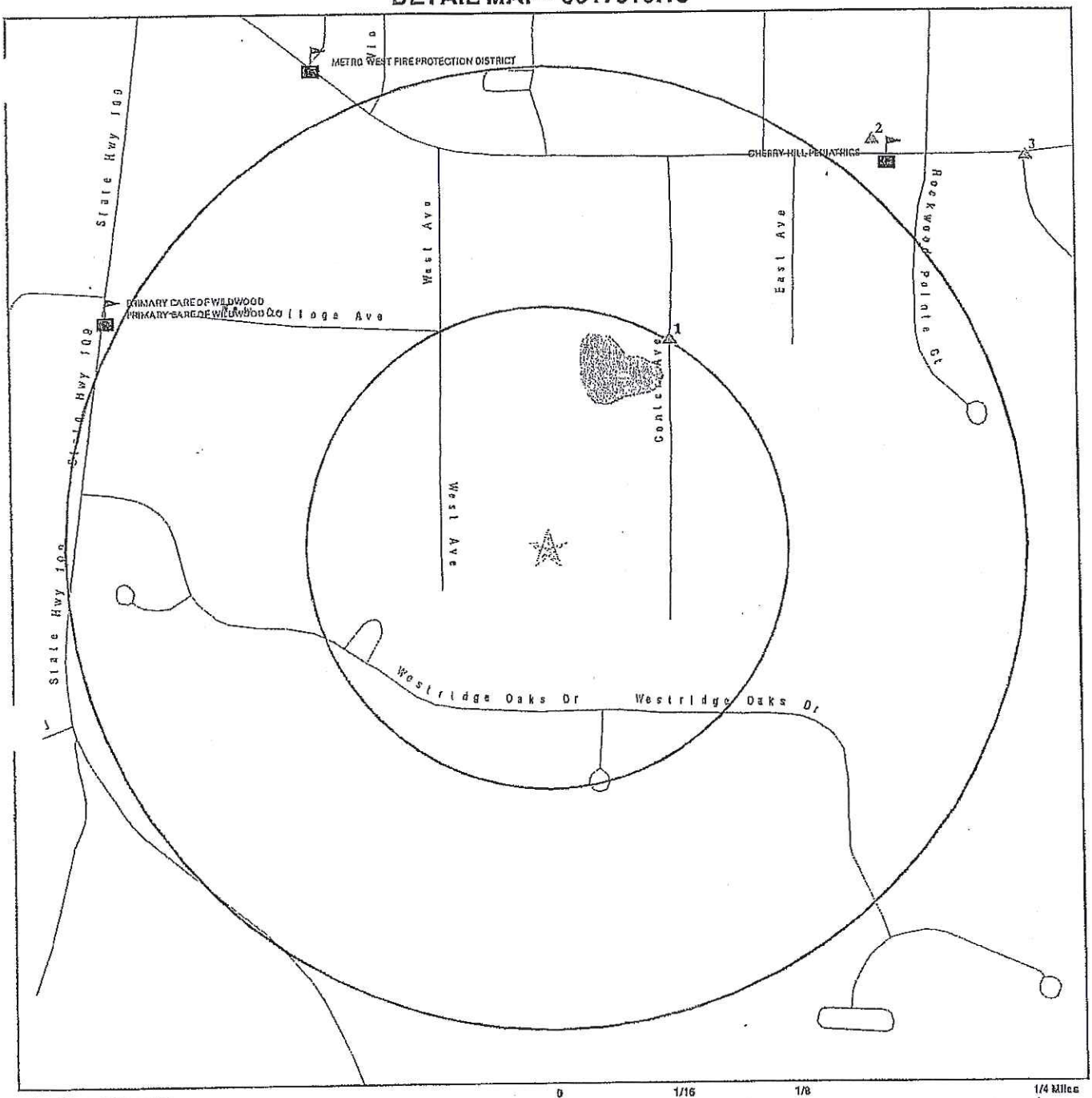
DETAIL MAP - 3517510.1s



0 1/16 1/8 1/4 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

TE NAME: Stone Mill ADDRESS: Center Ave Grover MO 63040 LAT/LONG: 38.5732 / 90.6408	CLIENT: SCI Engineering, Inc. CONTACT: Ben Butterfield INQUIRY #: 3517510.1s DATE: February 12, 2013 2:21 pm

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

CENTER AVE
GROVER, MO 63040

COORDINATES

Latitude (North):	38.5732000 - 38' 34' 23.52"
Longitude (West):	90.6408000 - 90' 38' 26.88"
Universal Tranverse Mercator:	Zone 15
UTM X (Meters):	705527.1
UTM Y (Meters):	4271848.0
Elevation:	780 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	38090-E6 EUREKA, MO
Most Recent Revision:	1993
East Map:	38090-E5 MANCHESTER, MO
Most Recent Revision:	1993

AERIAL PHOTOGRAPHY IN THIS REPORT

Photo Year:	2010
Source:	USDA

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List

EXECUTIVE SUMMARY

Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY..... Federal Facility Site Information listing

Federal CERCLIS NFRAP site List

CERC-NFRAP..... CERCLIS No Further Remedial Action Planned

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators
RCRA-SQG..... RCRA - Small Quantity Generators
RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROL..... Sites with Institutional Controls
LUCIS..... Land Use Control Information System

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent CERCLIS

SHWS..... Registry of Confirmed Abandoned or Uncontrolled Hazardous Waste Disposal Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Permitted Facility List

State and tribal leaking storage tank lists

LAST..... Leaking Aboveground Storage Tanks
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

UST..... Petroleum Storage Tanks

EXECUTIVE SUMMARY

AST..... Aboveground Petroleum Storage Tanks
INDIAN UST..... Underground Storage Tanks on Indian Land
FEMA UST..... Underground Storage Tank Listing

State and tribal institutional control / engineering control registries

AUL..... Sites with Controls

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing
VCP..... Voluntary Cleanup Program Site Listing

State and tribal Brownfields sites

BROWNFIELDS..... Brownfields Site List

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

ODI..... Open Dump Inventory
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
HIST LF..... Solid Waste Facility Database List
SWRCY..... Solid Waste Recycling Facilities
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL..... Clandestine Drug Labs
DEL SHWS..... Registry Sites Withdrawn or Deleted
CDL..... Environmental Emergency Response System
US HIST CDL..... National Clandestine Laboratory Register

Local Land Records

LIENS 2..... CERCLA Lien Information

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System
SPILLS..... Environmental Response Tracking Database

Other Ascertainable Records

DOT OPS..... Incident and Accident Data
DOD..... Department of Defense Sites
FUDS..... Formerly Used Defense Sites
CONSENT..... Superfund (CERCLA) Consent Decrees
ROD..... Records Of Decision

EXECUTIVE SUMMARY

UMTRA	Uranium Mill Tailings Sites
US MINES	Mines Master Index File
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
SSTS	Section 7 Tracking Systems
ICIS	Integrated Compliance Information System
PADS	PCB Activity Database System
MLTS	Material Licensing Tracking System
RADINFO	Radiation Information Database
FINDS	Facility Index System/Facility Registry System
RAATS	RCRA Administrative Action Tracking System
RMP	Risk Management Plans
UIC	Underground Injection Wells Database
DRYCLEANERS	Drycleaners in Missouri Listing
MO RRC	Certified Hazardous Waste Resource Recovery Facilities
NPDES	Permitted Facility Listing
AIRS	Permit Facility Listing
INDIAN RESERV	Indian Reservations
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US AIRS	Aerometric Information Retrieval System Facility Subsystem
PRP	Potentially Responsible Parties
MINES	Industrial Mineral Mines Database
EPA WATCH LIST	EPA WATCH LIST
US FIN ASSUR	Financial Assurance Information
PCB TRANSFORMER	PCB Transformer Registration Database
2020 COR ACTION	2020 Corrective Action Program List
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
Financial Assurance	Financial Assurance Information Listing
COAL ASH	Coal Ash Disposal Sites

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants
EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations
EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tanks.

A review of the LUST list, as provided by EDR, and dated 12/04/2012 has revealed that there are 2 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GROVER	*OLD RT 100*	*NE 1/4 - 1/2 (0.272 mi.)*	*2*	*8*
LAKE CHESTERFIELD AUTOMOTIVE	*16944 MANCHESTER RD*	*NE 1/4 - 1/2 (0.323 mi.)*	*3*	*13*

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 09/11/2012 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MODOT GROVER	2639 CENTER ST	NNE 1/8 - 1/4 (0.127 mi.)	1	7

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 23 records.

Site Name	Database(s)
EDITH WALDEN CLEANERS	DRYCLEANERS
COLONIAL DRY CLEANERS & SHIRT LNDR	DRYCLEANERS
CASSIDY CLEANERS	DRYCLEANERS
COUNTRY CLUB CLEANERS	RCRA NonGen / NLR, FINDS, DRYCLEANERS
BALLWIN BAPTIST CHURCH	CERC-NFRAP
SOS RENTAL	CERC-NFRAP
BRIDLE TRAILS WEST	CERC-NFRAP
ABRAHAM RESIDENCE	CERC-NFRAP
BRIDGETON LANDFILL, L.L.C.	SWF/LF, HIST LF, Financial Assurance
SPEEDY CAR WASH	LUST, UST
BALLWIN FIRE DISTRICT	LUST, UST
SONNY'S AUTOMOTIVE	LUST, UST
MOBIL ON THE RUN #609	UST
POND CENTRAL OFFICE CF1712	UST
QUIK TRIP	AST
SPEEDY CAR WASH LLC	AST
ENERGY PETROLEUM	AST
WILDWOOD AMOCO	AST
CVS PHARMACY #5689	RCRA-SQG
DON ESSEN CHEVROLET	RCRA NonGen / NLR
VEECO INVESTMENT CO	RCRA NonGen / NLR
ROY E DUENKE CABINET CO	RCRA NonGen / NLR
GAYWOOD MFG CO	RCRA NonGen / NLR

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	0	0	0	NR	0
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	2	NR	NR	2
LAST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
AUL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
HIST LF	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
DEL SHWS	1.000		0	0	0	0	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	1	NR	NR	NR	1
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
MO RRC	TP		NR	NR	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
MINES	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
COAL ASH	0.500		0	0	0	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	0	NR	NR	NR	0
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
1 NNE 1/8-1/4 0.127 mi. 669 ft.	MODOT GROVER 2639 CENTER ST WILDWOOD, MO 63040	RCRA NonGen / NLR	1012211526 MOR000535898

Relative: Higher

Actual: 780 ft.

RCRA NonGen / NLR:

Date form received by agency:	02/25/2010
Facility name:	MODOT GROVER
Facility address:	2639 CENTER ST WILDWOOD, MO 630401114
EPA ID:	MOR000535898
Mailing address:	PO BOX 270 JEFFERSON CITY, MO 65102
Contact:	KEVIN WIDEMAN
Contact address:	PO BOX 270 JEFFERSON CITY, MO 65102
Contact country:	US
Contact telephone:	(573) 526-4171
Contact email:	KEVIN.WIDEMAN@MODOT.MO.GOV
EPA Region:	07
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	MODOT
Owner/operator address:	PO BOX 270 JEFFERSON CITY, MO 65102
Owner/operator country:	US
Owner/operator telephone:	(573) 526-4171
Legal status:	State
Owner/Operator Type:	Operator
Owner/Op start date:	12/10/2009
Owner/Op end date:	Not reported

Owner/operator name:	MODOT
Owner/operator address:	PO BOX 270 JEFFERSON CITY, MO 65102
Owner/operator country:	US
Owner/operator telephone:	(573) 526-4171
Legal status:	State
Owner/Operator Type:	Owner
Owner/Op start date:	12/10/2009
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No

MODOT GROVER (Continued) 1012211526

Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 01/22/2010
Facility name: MODOT GROVER
Classification: Small Quantity Generator

Date form received by agency: 12/10/2009
Facility name: MODOT GROVER
Classification: Small Quantity Generator

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D007
Waste name: CHROMIUM

Waste code: D008
Waste name: LEAD

Violation Status: No violations found

2
NE
1/4-1/2
0.272 mi.
1438 ft.

GROVER
OLD RT 100
GROVER, MO 63040

LUST U001159274
~~UST~~ ~~N/A~~

Relative:
Higher

Actual:
795 ft.

LUST:
Facility ID: ST0012135
Region: SL - St. Louis Regional Office
Lat/Long (dms): Not reported
Spill Number: Not reported
Release Date: 11/01/1991
Release Type: UNDERGROUND STORAGE TANK
Date Cleanup Started: 11/01/1991
Date Cleanup Finished: 05/28/1992
Expedited: No
Expedited Date: Not reported
Expenditures From The American Recovery and Reinvestment Act of 2009No
Reopened Date: Not reported
Number Of Remediation Monitoring Wells: 0
Active: No
Date Of NFA Letter From DNR: Not reported
Date Record Meets Archive Criteria: Not reported
Remediation ID: R003222
Rank: Not reported
Emergeny Response Date: Not reported
Emergency Cleanup Start: Not reported

GROVER (Continued) U001159274

Referred To DGLS for Investigation:	Not reported
Contractor Performing Clean Up:	Not reported
RBCA NFA:	No
Project Manager:	L
Next Correspondence/Update With Fac:	Not reported
Date Added:	06/30/1995
Date Record Edited:	Not reported
Person Adding Or Editing Record:	Not reported
Facility Sent To State Archive:	Yes
Date Remediation Unit Closed The File:	Not reported
Site Affectd By Funding Level From PSTIF:	No
General Comments:	Not reported

UST:

Facility ID:	ST0012135
Region:	SL
Lat/Long:	38.5707 / -90.65255
Lat/Long (dms):	Not reported
Easting:	788678.599
Northing:	4120926.5
Accuracy Of Geospatial Data:	5
Owner Of Geospatial Data:	Hazardous Waste Program
Amount Of Deviation In Accuracy:	Not reported
Geospatial Data Collected By:	KIRCHNER, M
Geospatial Elevation Method:	Not reported
Geospatial Elevation Refernce Datum:	Not reported
Date Gis Data Collected:	10/31/2011

Tanks:

Owner:

Owner ID:	OW10226
Owner Name:	MO DEPT OF HIGHWAY & TRANSPORTATION
Owner Address:	PO BOX 270, 105 W. CAPITOL AVE
Owner City,St,Zip:	JEFFERSON CITY, MO 65102
Owner County Code:	51
Owner Phone:	5264764
Mail Was Not Deliverable:	Yes
Is Owner Active?:	Yes
Date Registration Received:	Not reported
Date Record Added:	1995-06-30 00:00:00
Date Record Edited:	2007-06-06 00:00:00
Name of Person Editing Record:	PURVIS, K

Tank ID:	1
Tank Double Wall:	0
Tank Type:	Below Ground
Tank Status:	**Removed**
Meet 98 Update Requirements:	No
Date Tank Installed:	Not reported
Tank Material:	Steel
Code for Tank Material Manufacturer:	Not reported
Code for Tank Installer:	Not reported
Other Type Of Tank Material:	Not reported
Tank Internal Protection:	No
Other Tank Internal Protection:	Not reported
Tank Internal Protection Date:	Not reported

GROVER (Continued) U001159274

Tank External Protection: Not reported
Other Type Tank Extrn Protec: Not reported
Tank External Protec Date: Not reported
Date Tank Last Used: 06/05/1992
Date Tank Permanently Closed/ Removed: 06/05/1992
Dt Tk Exp Brought InUse/Internal Tracking: Not reported
Tank Fees Waived: No
Expedite Closure On Tank?: No
Responsible Person Expediting Closure: Not reported
Temporary Status Verified Date: Not reported
Admin Fee 585: Not reported
Date Administratively Closed: Not reported
Date Record Added: 06/30/1995
Date Record Edited: Not reported
Person Adding/Editing Record: Not reported
Date Of NFA Letter: 06/05/1992
Is Tank Used For Emergency Generator: No
Date Closure Notice Received: 06/20/1991
Date Of Aprroval Letter: 1992-06-05 00:00:00
Firm Closing Tank: MHTD
Date Closure Report Received: Not reported
Registration End Date: Not reported
LockOut Flag: No
Comments: 1-1000 GAL DIESEL, 1-2000 GAL GAS

Tank Compartment:
Tank Compartment PK: 30092
Tank PK: 30092
Compartment No: 1
Compartment Status: Removed
Compartment Temp Verified Dt: Not reported
Capacity: 1000
Pipe Installation Dt: Not reported
Pipe System: Not reported
Pipe Material: 1
Pipe Material Other: Not reported
Pipe Protection: Not reported
Pipe Protection Dt: Not reported
Pipe Double Wall: 0
Substance: Diesel
Substance Other: Not reported
Hazardous Substance: Not reported
Case Number: Not reported
Mixture: 0
Date of Last Use: 1992-06-05 00:00:00
Spill Protection: 0
Tanks Use: 0

Owner:
Owner ID: OW10226
Owner Name: MO DEPT OF HIGHWAY & TRANSPORTATION
Owner Address: PO BOX 270, 105 W. CAPITOL AVE
Owner City,St,Zip: JEFFERSON CITY, MO 65102
Owner County Code: 51
Owner Phone: 5264764
Mail Was Not Deliverable: Yes

GROVER (Continued) U001159274

Is Owner Active?:	Yes
Date Registration Received:	Not reported
Date Record Added:	1995-06-30 00:00:00
Date Record Edited:	2007-06-06 00:00:00
Name of Person Editing Record:	PURVIS, K

Tank ID:	2
Tank Double Wall:	0
Tank Type:	Below Ground
Tank Status:	**Removed**
Meet 98 Update Requirements:	No
Date Tank Installed:	Not reported
Tank Material:	Steel
Code for Tank Material Manufacturer:	Not reported
Code for Tank Installer:	Not reported
Other Type Of Tank Material:	Not reported
Tank Internal Protection:	No
Other Tank Internal Protection:	Not reported
Tank Internal Protection Date:	Not reported
Tank External Protection:	Not reported
Other Type Tank Extrn Protec:	Not reported
Tank External Protec Date:	Not reported
Date Tank Last Used:	06/05/1992
Date Tank Permanently Closed/ Removed:	06/05/1992
Dt Tk Exp Brought InUse/Internal Tracking:	Not reported
Tank Fees Waived:	No
Expedite Closure On Tank?:	No
Responsible Person Expediting Closure:	Not reported
Temporary Status Verified Date:	Not reported
Admin Fee 585:	Not reported
Date Administratively Closed:	Not reported
Date Record Added:	06/30/1995
Date Record Edited:	Not reported
Person Adding/Editing Record:	Not reported
Date Of NFA Letter:	06/05/1992
Is Tank Used For Emergency Generator:	No
Date Closure Notice Received:	06/20/1991
Date Of Aprroval Letter:	1992-06-05 00:00:00
Firm Closing Tank:	MHTD
Date Closure Report Received:	Not reported
Registration End Date:	Not reported
LockOut Flag:	No
Comments:	1-1000 GAL DIESEL, 1-2000 GAL GAS

Tank Compartment:

Tank Compartment PK:	30093
Tank PK:	30093
Compartment No:	1
Compartment Status:	Removed
Compartment Temp Verified Dt:	Not reported
Capacity:	2000
Pipe Installation Dt:	Not reported
Pipe System:	Not reported
Pipe Material:	1
Pipe Material Other:	Not reported
Pipe Protection:	Not reported
Pipe Protection Dt:	Not reported

GROVER (Continued) U001159274

Pipe Double Wall:	0
Substance:	Gasoline, Including Blends
Substance Other:	Not reported
Hazardous Substance:	Not reported
Case Number:	Not reported
Mixture:	0
Date of Last Use:	1992-06-05 00:00:00
Spill Protection:	0
Tanks Use:	0

Tank Aug 2011:

Facility Id:	ST0012135
Tank Id:	1
Site Usage:	Not reported
Risk Type:	Not reported
Soil Type:	Not reported
GW Flow:	Not reported
Offsite Impact:	Not reported
Free Product:	Not reported
Drinking Water:	Not reported
Closed Under:	Not reported
No Drinking Wells:	No
No Buildings:	No
Vapor Barrier:	0
St Louis Mo:	No
Special Well Area:	No
Surface Cap:	No
No Excavation:	No

Facility Id:	ST0012135
Tank Id:	2
Site Usage:	Not reported
Risk Type:	Not reported
Soil Type:	Not reported
GW Flow:	Not reported
Offsite Impact:	Not reported
Free Product:	Not reported
Drinking Water:	Not reported
Closed Under:	Not reported
No Drinking Wells:	No
No Buildings:	No
Vapor Barrier:	0
St Louis Mo:	No
Special Well Area:	No
Surface Cap:	No
No Excavation:	No

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
3 NE 1/4-1/2 0.323 mi. 1708 ft.	LAKE CHESTERFIELD AUTOMOTIVE 16944 MANCHESTER RD GROVER, MO 63040	LUST ~~UST~~	U000283051 N/A

Relative: Higher

Actual: 783 ft.

LUST:

Facility ID:	ST0007105
Region:	SL - St. Louis Regional Office
Lat/Long (dms):	Not reported
Spill Number:	Not reported
Release Date:	09/11/1992
Release Type:	UNDERGROUND STORAGE TANK
Date Cleanup Started:	08/28/1992
Date Cleanup Finished:	10/23/1992
Expedited:	No
Expedited Date:	Not reported
Expenditures From The American Recovery and Reinvestment Act of 2009	No
Reopened Date:	Not reported
Number Of Remediation Monitoring Wells:	0
Active:	No
Date Of NFA Letter From DNR:	**Not reported**
Date Record Meets Archive Criteria:	Not reported
Remediation ID:	R003419
Rank:	Not reported
Emergeny Response Date:	Not reported
Emergency Cleanup Start:	Not reported
Referred To DGLS for Investigation:	Not reported
Contractor Performing Clean Up:	Not reported
RBCA NFA:	No
Project Manager:	L
Next Correspondence/Update With Fac:	Not reported
Date Added:	06/30/1995
Date Record Edited:	08/17/1999
Person Adding Or Editing Record:	NREQHW-GARRV
Facility Sent To State Archive:	Yes
Date Remediation Unit Closed The File:	Not reported
Site Affectd By Funding Level From PSTIF:	No
General Comments:	Not reported

UST:

Facility ID:	ST0007105
Region:	SL
Lat/Long:	38.5763243 / -90.639724
Lat/Long (dms):	Not reported
Easting:	705606.674
Northing:	4272404.11
Accuracy Of Geospatial Data:	8
Owner Of Geospatial Data:	Hazardous Waste Program
Amount Of Deviation In Accuracy:	100
Geospatial Data Collected By:	ROBERTS, J
Geospatial Elevation Method:	Not reported
Geospatial Elevation Refernce Datum:	Not reported
Date Gis Data Collected:	01/15/2004

Tanks:

Owner:

Owner ID:	OW02521
Owner Name:	MC KINNON MARKETPLACT PARTNERSHIP

LAKE CHESTERFIELD AUTOMOTIVE (Continued) U000283051

Owner Address:	251 WHITE TREE LANE []
Owner City,St,Zip:	BALLWIN, MO 63011
Owner County Code:	Not reported
Owner Phone:	3910360
Mail Was Not Deliverable:	Yes
Is Owner Active?:	No
Date Registration Received:	Not reported
Date Record Added:	1995-06-30 00:00:00
Date Record Edited:	Not reported
Name of Person Editing Record:	Not reported

Tank ID:	1
Tank Double Wall:	0
Tank Type:	Below Ground
Tank Status:	Removed
Meet 98 Update Requirements:	No
Date Tank Installed:	01/01/1970
Tank Material:	Steel
Code for Tank Material Manufacturer:	Not reported
Code for Tank Installer:	Not reported
Other Type Of Tank Material:	Not reported
Tank Internal Protection:	No
Other Tank Internal Protection:	Not reported
Tank Internal Protection Date:	Not reported
Tank External Protection:	Unknown
Other Type Tank Extrn Protec:	Not reported
Tank External Protec Date:	Not reported
Date Tank Last Used:	11/15/1990
Date Tank Permanently Closed/ Removed:	11/19/1990
Dt Tk Exp Brought InUse/Internal Tracking:	Not reported
Tank Fees Waived:	No
Expedite Closure On Tank?:	No
Responsible Person Expediting Closure:	Not reported
Temporary Status Verified Date:	Not reported
Admin Fee 586:	Not reported
Date Administratively Closed:	Not reported
Date Record Added:	06/30/1995
Date Record Edited:	07/23/1999
Person Adding/Editing Record:	NREQHW-FASTT
Date Of NFA Letter:	11/19/1990
Is Tank Used For Emergency Generator:	No
Date Closure Notice Received:	05/30/1990
Date Of Aprroval Letter:	1990-11-19 00:00:00
Firm Closing Tank:	Not reported
Date Closure Report Received:	1990-10-19 00:00:00
Registration End Date:	Not reported
LockOut Flag:	No
Comments:	SENT TO MS. MCFERREN FOR REVISION

Tank Compartment:

Tank Compartment PK:	17963
Tank PK:	17963
Compartment No:	1
Compartment Status:	Removed
Compartment Temp Verified Dt:	Not reported
Capacity:	200
Pipe Installation Dt:	Not reported

LAKE CHESTERFIELD AUTOMOTIVE (Continued) U000283051

Pipe System:	4
Pipe Material:	0
Pipe Material Other:	Not reported
Pipe Protection:	Not reported
Pipe Protection Dt:	Not reported
Pipe Double Wall:	0
Substance:	Used Oil
Substance Other:	Not reported
Hazardous Substance:	Not reported
Case Number:	Not reported
Mixture:	0
Date of Last Use:	1990-11-15 00:00:00
Spill Protection:	0
Tanks Use:	0

Owner:

Owner ID:	OW02521
Owner Name:	MC KINNON MARKETPLACT PARTNERSHIP
Owner Address:	251 WHITE TREE LANE []
Owner City,St,Zip:	BALLWIN, MO 63011
Owner County Code:	Not reported
Owner Phone:	3910360
Mail Was Not Deliverable:	Yes
Is Owner Active?:	No
Date Registration Received:	Not reported
Date Record Added:	1995-06-30 00:00:00
Date Record Edited:	Not reported
Name of Person Editing Record:	Not reported

Tank ID:	2
Tank Double Wall:	0
Tank Type:	Below Ground
Tank Status:	**Removed**
Meet 98 Update Requirements:	No
Date Tank Installed:	01/01/1970
Tank Material:	Steel
Code for Tank Material Manufacturer:	Not reported
Code for Tank Installer:	Not reported
Other Type Of Tank Material:	Not reported
Tank Internal Protection:	No
Other Tank Internal Protection:	Not reported
Tank Internal Protection Date:	Not reported
Tank External Protection:	Unknown
Other Type Tank Extrn Protec:	Not reported
Tank External Protec Date:	Not reported
Date Tank Last Used:	11/15/1990
Date Tank Permanently Closed/ Removed:	11/19/1990
Dt Tk Exp Brought InUse/Internal Tracking:	Not reported
Tank Fees Waived:	No
Expedite Closure On Tank?:	No
Responsible Person Expediting Closure:	Not reported
Temporary Status Verified Date:	Not reported
Admin Fee 585:	Not reported
Date Administratively Closed:	Not reported
Date Record Added:	06/30/1995

LAKE CHESTERFIELD AUTOMOTIVE (Continued) U000283051

Date Record Edited:	07/23/1999
Person Adding/Editing Record:	NREQHW-FASTT
Date Of NFA Letter:	11/19/1990
Is Tank Used For Emergency Generator:	No
Date Closure Notice Received:	05/30/1990
Date Of Aprroval Letter:	1990-11-19 00:00:00
Firm Closing Tank:	Not reported
Date Closure Report Received:	1990-10-19 00:00:00
Registration End Date:	Not reported
LockOut Flag:	No
Comments:	SENT TO MS. MCFERREN FOR REVISION

Tank Compartment:

Tank Compartment PK:	17964
Tank PK:	17964
Compartment No:	1
Compartment Status:	Removed
Compartment Temp Verified Dt:	Not reported
Capacity:	1000
Pipe Installation Dt:	Not reported
Pipe System:	4
Pipe Material:	0
Pipe Material Other:	Not reported
Pipe Protection:	Not reported
Pipe Protection Dt:	Not reported
Pipe Double Wall:	0
Substance:	Used Oil
Substance Other:	Not reported
Hazardous Substance:	Not reported
Case Number:	Not reported
Mixture:	0
Date of Last Use:	1990-11-15 00:00:00
Spill Protection:	0
Tanks Use:	0

Owner:

Owner ID:	OW02521
Owner Name:	MC KINNON MARKETPLACT PARTNERSHIP
Owner Address:	251 WHITE TREE LANE []
Owner City,St,Zip:	BALLWIN, MO 63011
Owner County Code:	Not reported
Owner Phone:	3910360
Mail Was Not Deliverable:	Yes
Is Owner Active?:	No
Date Registration Received:	Not reported
Date Record Added:	1995-06-30 00:00:00
Date Record Edited:	Not reported
Name of Person Editing Record:	Not reported

Tank ID:	3
Tank Double Wall:	0
Tank Type:	Below Ground
Tank Status:	Removed
Meet 98 Update Requirements:	No
Date Tank Installed:	01/01/1970

LAKE CHESTERFIELD AUTOMOTIVE (Continued) U000283051

Tank Material:	Steel
Code for Tank Material Manufacturer:	Not reported
Code for Tank Installer:	Not reported
Other Type Of Tank Material:	Not reported
Tank Internal Protection:	No
Other Tank Internal Protection:	Not reported
Tank Internal Protection Date:	Not reported
Tank External Protection:	Unknown
Other Type Tank Extrn Protec:	Not reported
Tank External Protec Date:	Not reported
Date Tank Last Used:	11/15/1990
Date Tank Permanently Closed/ Removed:	11/19/1990
Dt Tk Exp Brought InUse/Internal Tracking:	Not reported
Tank Fees Waived:	No
Expedite Closure On Tank?:	No
Responsible Person Expediting Closure:	Not reported
Temporary Status Verified Date:	Not reported
Admin Fee 585:	Not reported
Date Administratively Closed:	Not reported
Date Record Added:	06/30/1995
Date Record Edited:	07/23/1999
Person Adding/Editing Record:	NREQHW-FASTT
Date Of NFA Letter:	11/19/1990
Is Tank Used For Emergency Generator:	No
Date Closure Notice Received:	05/30/1990
Date Of Aprroval Letter:	1990-11-19 00:00:00
Firm Closing Tank:	Not reported
Date Closure Report Received:	1990-10-19 00:00:00
Registration End Date:	Not reported
LockOut Flag:	No
Comments:	SENT TO MS. MCFERREN FOR REVISION

Tank Compartment:

Tank Compartment PK:	17965
Tank PK:	17965
Compartment No:	1
Compartment Status:	Removed
Compartment Temp Verified Dt:	Not reported
Capacity:	500
Pipe Installation Dt:	Not reported
Pipe System:	Not reported
Pipe Material:	0
Pipe Material Other:	Not reported
Pipe Protection:	Not reported
Pipe Protection Dt:	Not reported
Pipe Double Wall:	0
Substance:	Kerosene
Substance Other:	Not reported
Hazardous Substance:	Not reported
Case Number:	Not reported
Mixture:	0
Date of Last Use:	1990-11-15 00:00:00
Spill Protection:	0
Tanks Use:	0

Owner:

LAKE CHESTERFIELD AUTOMOTIVE (Continued) U000283051

Owner ID:	OW02521
Owner Name:	MC KINNON MARKETPLACT PARTNERSHIP
Owner Address:	251 WHITE TREE LANE []
Owner City,St,Zip:	BALLWIN, MO 63011
Owner County Code:	Not reported
Owner Phone:	3910360
Mail Was Not Deliverable:	Yes
Is Owner Active?:	No
Date Registration Received:	Not reported
Date Record Added:	1995-06-30 00:00:00
Date Record Edited:	Not reported
Name of Person Editing Record:	Not reported

Tank ID:	4
Tank Double Wall:	0
Tank Type:	Below Ground
Tank Status:	**Removed**
Meet 98 Update Requirements:	No
Date Tank Installed:	01/01/1976
Tank Material:	Steel
Code for Tank Material Manufacturer:	Not reported
Code for Tank Installer:	Not reported
Other Type Of Tank Material:	Not reported
Tank Internal Protection:	No
Other Tank Internal Protection:	Not reported
Tank Internal Protection Date:	Not reported
Tank External Protection:	Unknown
Other Type Tank Extrn Protec:	Not reported
Tank External Protec Date:	Not reported
Date Tank Last Used:	10/27/1992
Date Tank Permanently Closed/ Removed:	10/27/1992
Dt Tk Exp Brought InUse/Internal Tracking:	Not reported
Tank Fees Waived:	No
Expedite Closure On Tank?:	No
Responsible Person Expediting Closure:	Not reported
Temporary Status Verified Date:	Not reported
Admin Fee 585:	Not reported
Date Administratively Closed:	Not reported
Date Record Added:	06/30/1995
Date Record Edited:	07/23/1999
Person Adding/Editing Record:	NREQHW-FASTT
Date Of NFA Letter:	10/27/1992
Is Tank Used For Emergency Generator:	No
Date Closure Notice Received:	10/26/1992
Date Of Aprroval Letter:	1992-10-27 00:00:00
Firm Closing Tank:	Not reported
Date Closure Report Received:	1992-09-17 00:00:00
Registration End Date:	Not reported
LockOut Flag:	No
Comments:	1-1000 GAL GAS

Tank Compartment:

Tank Compartment PK:	17966
Tank PK:	17966
Compartment No:	1
Compartment Status:	Removed
Compartment Temp Verified Dt:	Not reported

LAKE CHESTERFIELD AUTOMOTIVE (Continued) U000283051

Capacity:	500
Pipe Installation Dt:	Not reported
Pipe System:	Not reported
Pipe Material:	Not reported
Pipe Material Other:	Not reported
Pipe Protection:	Not reported
Pipe Protection Dt:	Not reported
Pipe Double Wall:	0
Substance:	Gasoline, Including Blends
Substance Other:	Not reported
Hazardous Substance:	Not reported
Case Number:	Not reported
Mixture:	0
Date of Last Use:	1992-10-27 00:00:00
Spill Protection:	0
Tanks Use:	0

Tank Aug 2011:

Facility Id:	ST0007105
Tank Id:	1
Site Usage:	Not reported
Risk Type:	Not reported
Soil Type:	Not reported
GW Flow:	Not reported
Offsite Impact:	Not reported
Free Product:	Not reported
Drinking Water:	Not reported
Closed Under:	Not reported
No Drinking Wells:	No
No Buildings:	No
Vapor Barrier:	0
St Louis Mo:	No
Special Well Area:	No
Surface Cap:	No
No Excavation:	No

Facility Id:	ST0007105
Tank Id:	2
Site Usage:	Not reported
Risk Type:	Not reported
Soil Type:	Not reported
GW Flow:	Not reported
Offsite Impact:	Not reported
Free Product:	Not reported
Drinking Water:	Not reported
Closed Under:	Not reported
No Drinking Wells:	No
No Buildings:	No
Vapor Barrier:	0
St Louis Mo:	No
Special Well Area:	No
Surface Cap:	No
No Excavation:	No

Facility Id:	ST0007105
Tank Id:	3

LAKE CHESTERFIELD AUTOMOTIVE (Continued) U000283051

Site Usage:	Not reported
Risk Type:	Not reported
Soil Type:	Not reported
GW Flow:	Not reported
Offsite Impact:	Not reported
Free Product:	Not reported
Drinking Water:	Not reported
Closed Under:	Not reported
No Drinking Wells:	No
No Buildings:	No
Vapor Barrier:	0
St Louis Mo:	No
Special Well Area:	No
Surface Cap:	No
No Excavation:	No

Facility Id:	ST0007105
Tank Id:	4
Site Usage:	Not reported
Risk Type:	Not reported
Soil Type:	Not reported
GW Flow:	Not reported
Offsite Impact:	Not reported
Free Product:	Not reported
Drinking Water:	Not reported
Closed Under:	Not reported
No Drinking Wells:	No
No Buildings:	No
Vapor Barrier:	0
St Louis Mo:	No
Special Well Area:	No
Surface Cap:	No
No Excavation:	No

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List
National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 10/01/2012
Date Data Arrived at EDR: 10/11/2012
Date Made Active in Reports: 12/20/2012
Number of Days to Update: 70

Source: EPA
Telephone: N/A
Last EDR Contact: 01/04/2013
Next Scheduled EDR Contact: 04/22/2013
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 10
Telephone 206-553-8665

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

Proposed NPL: Proposed National Priority List Sites
A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 10/01/2012
Date Data Arrived at EDR: 10/11/2012
Date Made Active in Reports: 12/20/2012
Number of Days to Update: 70

Source: EPA
Telephone: N/A
Last EDR Contact: 01/04/2013
Next Scheduled EDR Contact: 04/22/2013
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens
Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 10/01/2012	Source: EPA
Date Data Arrived at EDR: 10/11/2012	Telephone: N/A
Date Made Active in Reports: 12/20/2012	Last EDR Contact: 01/04/2013
Number of Days to Update: 70	Next Scheduled EDR Contact: 04/22/2013
	Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 11/02/2012	Source: EPA
Date Data Arrived at EDR: 11/28/2012	Telephone: 703-412-9810
Date Made Active in Reports: 01/07/2013	Last EDR Contact: 01/04/2013
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/11/2013
	Data Release Frequency: Quarterly

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 07/31/2012	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/09/2012	Telephone: 703-603-8704
Date Made Active in Reports: 12/20/2012	Last EDR Contact: 01/11/2013
Number of Days to Update: 72	Next Scheduled EDR Contact: 04/22/2013
	Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 11/02/2012	Source: EPA
Date Data Arrived at EDR: 11/28/2012	Telephone: 703-412-9810
Date Made Active in Reports: 01/07/2013	Last EDR Contact: 01/04/2013
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/11/2013
	Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/19/2011
Date Data Arrived at EDR: 08/31/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 132

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 02/08/2013
Next Scheduled EDR Contact: 05/27/2013
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 09/11/2012
Date Data Arrived at EDR: 10/04/2012
Date Made Active in Reports: 12/04/2012
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 913-551-7003
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: 04/15/2013
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/11/2012
Date Data Arrived at EDR: 10/04/2012
Date Made Active in Reports: 12/04/2012
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 913-551-7003
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: 04/15/2013
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 09/11/2012
Date Data Arrived at EDR: 10/04/2012
Date Made Active in Reports: 12/04/2012
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 913-551-7003
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: 04/15/2013
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/11/2012
Date Data Arrived at EDR: 10/04/2012
Date Made Active in Reports: 12/04/2012
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 913-551-7003
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: 04/15/2013
Data Release Frequency: Varies

Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 006299 Stratordr: 32300
Fmtop: 45
Fmbot: 80
Formation : BURLINGTON LIMESTONE
Primlith: LIMESTONE
Seclith: CHERT Minlith: DOLOMITE
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 006299 Stratordr: 35100
Fmtop: 80
Fmbot: 90
Formation : DEVONIAN SYSTEM
Primlith: Not Reported
Seclith: Not Reported Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 006299 Stratordr: 35200
Fmtop: 80
Fmbot: 90
Formation : UPPER DEVONIAN SERIES
Primlith: Not Reported
Seclith: Not Reported Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 006299 Stratordr: 35900
Fmtop: 80
Fmbot: 90
Formation : SULPHUR SPRINGS GROUP
Primlith: SANDSTONE
Seclith: Not Reported Minlith: LIMESTONE
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	006299	Stratordr:	36000
Fmtop:	80		
Fmbot:	90		
Formation :	BUSHBERG SANDSTONE		
Primlith:	SANDSTONE		
Seclith:	Not Reported	Minlith:	LIMESTONE
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	006299	Stratordr:	39000
Fmtop:	90		
Fmbot:	450		
Formation :	ORDOVICIAN SYSTEM		
Primlith:	Not Reported		
Seclith:	Not Reported	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	006299	Stratordr:	40100
Fmtop:	90		
Fmbot:	450		
Formation :	MOHAWKIAN SERIES		
Primlith:	Not Reported		
Seclith:	Not Reported	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	006299	Stratordr:	40100
Fmtop:	90		
Fmbot:	450		
Formation :	MOHAWKIAN SERIES		
Primlith:	Not Reported		
Seclith:	Not Reported	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List
A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 07/18/2012
Date Data Arrived at EDR: 07/24/2012
Date Made Active in Reports: 11/05/2012
Number of Days to Update: 104

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 12/10/2012
Next Scheduled EDR Contact: 03/25/2013
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls
A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 07/18/2012
Date Data Arrived at EDR: 07/24/2012
Date Made Active in Reports: 11/05/2012
Number of Days to Update: 104

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 12/10/2012
Next Scheduled EDR Contact: 03/25/2013
Data Release Frequency: Varies

LUCIS: Land Use Control Information System
LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005
Date Data Arrived at EDR: 12/11/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 31

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 11/15/2012
Next Scheduled EDR Contact: 03/04/2013
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System
Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 04/02/2012
Date Data Arrived at EDR: 04/03/2012
Date Made Active in Reports: 06/14/2012
Number of Days to Update: 72

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 01/17/2013
Next Scheduled EDR Contact: 04/15/2013
Data Release Frequency: Annually

State- and tribal - equivalent CERCLIS

SHWS: Registry of Confirmed Abandoned or Uncontrolled Hazardous Waste Disposal Sites
State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 06/07/2012
Date Made Active in Reports: 07/18/2012
Number of Days to Update: 41

Source: Department of Natural Resources
Telephone: 573-751-1990
Last EDR Contact: 12/03/2012
Next Scheduled EDR Contact: 03/18/2013
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

HWS DETAIL: Registry Annual Report
Each site is described in detail in this annual report and includeds the following information: a general description of the site; a summary of any significant environmental problems at and near the site; a summary of any serious health problems in the immediate vicinity of the site; the status of any testing, monitoring or remedial actions in progress or recommended by the department.

Date of Government Version: 06/30/2011
Date Data Arrived at EDR: 03/16/2012
Date Made Active in Reports: 04/11/2012
Number of Days to Update: 26

Source: Department of Natural Resources
Telephone: 573-751-3176
Last EDR Contact: 12/10/2012
Next Scheduled EDR Contact: 07/02/5007
Data Release Frequency: Annually

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Solid Waste Facility List
Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 01/10/2013
Date Data Arrived at EDR: 01/11/2013
Date Made Active in Reports: 01/18/2013
Number of Days to Update: 7

Source: Department of Natural Resources
Telephone: 573-751-5401
Last EDR Contact: 11/15/2012
Next Scheduled EDR Contact: 03/04/2013
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tanks
Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 12/04/2012
Date Data Arrived at EDR: 12/18/2012
Date Made Active in Reports: 01/24/2013
Number of Days to Update: 37

Source: Department of Natural Resources
Telephone: 573-751-0135
Last EDR Contact: 11/30/2012
Next Scheduled EDR Contact: 04/01/2013
Data Release Frequency: Semi-Annually

LAST: Leaking Aboveground Storage Tanks
A listing of leaking aboveground storage tanks.

Date of Government Version: 12/04/2012
Date Data Arrived at EDR: 12/18/2012
Date Made Active in Reports: 01/24/2013
Number of Days to Update: 37

Source: Department of Natural Resources
Telephone: 573-751-6822
Last EDR Contact: 11/30/2012
Next Scheduled EDR Contact: 04/01/2013
Data Release Frequency: Quarterly

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 08/01/2012
Date Data Arrived at EDR: 08/02/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 75

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/30/2012
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Quarterly

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/27/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 09/06/2012
Date Data Arrived at EDR: 09/07/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/12/2012
Date Data Arrived at EDR: 05/09/2012
Date Made Active in Reports: 07/10/2012
Number of Days to Update: 62

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 02/01/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 12/14/2011
Date Data Arrived at EDR: 12/15/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 26

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Semi-Annually

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 09/12/2011
Date Data Arrived at EDR: 09/13/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 59

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 08/17/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Varies

State and tribal registered storage tank lists

UST: Petroleum Storage Tanks
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 12/04/2012
Date Data Arrived at EDR: 12/18/2012
Date Made Active in Reports: 01/22/2013
Number of Days to Update: 35

Source: Department of Natural Resources
Telephone: 573-751-0135
Last EDR Contact: 11/30/2012
Next Scheduled EDR Contact: 04/01/2013
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

AST: Aboveground Petroleum Storage Tanks
Registered Aboveground Storage Tanks.

Date of Government Version: 01/24/2013
Date Data Arrived at EDR: 01/25/2013
Date Made Active in Reports: 02/08/2013
Number of Days to Update: 14

Source: Department of Agriculture
Telephone: 573-751-7062
Last EDR Contact: 01/02/2013
Next Scheduled EDR Contact: 04/01/2013
Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/12/2012
Date Data Arrived at EDR: 05/02/2012
Date Made Active in Reports: 07/16/2012
Number of Days to Update: 75

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 02/01/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 12/14/2011
Date Data Arrived at EDR: 12/15/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 26

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 08/02/2012
Date Data Arrived at EDR: 08/03/2012
Date Made Active in Reports: 11/05/2012
Number of Days to Update: 94

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/10/2011
Date Data Arrived at EDR: 05/11/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 34

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 08/17/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 08/27/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 08/01/2012
Date Data Arrived at EDR: 08/02/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 75

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 09/06/2012
Date Data Arrived at EDR: 09/07/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 39

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Quarterly

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 01/14/2013
Next Scheduled EDR Contact: 04/29/2013
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

AUL: Sites with Controls
Activity and use limitations include both engineering controls and institutional controls.

Date of Government Version: 10/25/2012
Date Data Arrived at EDR: 11/19/2012
Date Made Active in Reports: 01/17/2013
Number of Days to Update: 59

Source: Department of Natural Resources
Telephone: 573-751-3176
Last EDR Contact: 11/19/2012
Next Scheduled EDR Contact: 03/04/2013
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/28/2012
Date Data Arrived at EDR: 10/02/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 14

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 01/04/2013
Next Scheduled EDR Contact: 04/15/2013
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Sites Participating in the Voluntary Cleanup Program
Sites participating in the Voluntary Cleanup Program.

Date of Government Version: 10/25/2012
Date Data Arrived at EDR: 11/19/2012
Date Made Active in Reports: 01/17/2013
Number of Days to Update: 59

Source: Department of Natural Resources
Telephone: 573-526-8913
Last EDR Contact: 11/19/2012
Next Scheduled EDR Contact: 03/04/2013
Data Release Frequency: Semi-Annually

State and tribal Brownfields sites

BROWNFIELDS: Brownfields Site List
Brownfields are sites where redevelopment and reuse is hampered by known or suspected contamination with hazardous substances. While many brownfield sites are minimally contaminated, potential environmental liability can be a problem for owners, operators, prospective buyers and financial institutions. Because of the large number of these sites, their economic impact especially in heavily industrial areas is substantial.

Date of Government Version: 10/25/2012
Date Data Arrived at EDR: 11/19/2012
Date Made Active in Reports: 01/17/2013
Number of Days to Update: 59

Source: Department of Natural Resources
Telephone: 573-526-8913
Last EDR Contact: 11/19/2012
Next Scheduled EDR Contact: 03/04/2013
Data Release Frequency: Semi-Annually

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/10/2012
Date Data Arrived at EDR: 12/11/2012
Date Made Active in Reports: 12/20/2012
Number of Days to Update: 9

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 12/11/2012
Next Scheduled EDR Contact: 04/08/2013
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HIST LF: Solid Waste Facility Database List
This database contains detailed information per site. It is no longer maintained by the Department of Natural Resources. For current information on solid waste facilities/landfills see the SWF/LF database.

Date of Government Version: 04/12/2005
Date Data Arrived at EDR: 07/19/2006
Date Made Active in Reports: 08/18/2006
Number of Days to Update: 30

Source: Department of Natural Resources
Telephone: 573-751-5401
Last EDR Contact: 01/12/2009
Next Scheduled EDR Contact: 04/13/2009
Data Release Frequency: No Update Planned

SWRCY: Solid Waste Recycling Facilities
A listing of recycling center locations.

Date of Government Version: 11/05/2009
Date Data Arrived at EDR: 12/23/2009
Date Made Active in Reports: 01/21/2010
Number of Days to Update: 29

Source: Department of Natural Resources
Telephone: 573-526-3944
Last EDR Contact: 12/07/2012
Next Scheduled EDR Contact: 03/18/2013
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 02/05/2013
Next Scheduled EDR Contact: 05/20/2013
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 07/11/2012
Date Data Arrived at EDR: 09/12/2012
Date Made Active in Reports: 11/05/2012
Number of Days to Update: 54

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 12/03/2012
Next Scheduled EDR Contact: 03/18/2013
Data Release Frequency: Quarterly

DEL SHWS: Registry Sites Withdrawn or Deleted
A list of sites that were removed from the Registry or for which Registry action was suspended due to cleanup.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 06/07/2012
Date Made Active in Reports: 07/18/2012
Number of Days to Update: 41

Source:, Department of Natural Resources
Telephone: 573-522-3710
Last EDR Contact: 12/03/2012
Next Scheduled EDR Contact: 03/18/2013
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CDL: Environmental Emergency Response System
Incidents reported to the Department of Natural Resources where drug lab materials were involved.

Date of Government Version: 11/30/2012
Date Data Arrived at EDR: 12/18/2012
Date Made Active in Reports: 01/18/2013
Number of Days to Update: 31

Source: Department of Natural Resources
Telephone: 573-751-3443
Last EDR Contact: 12/18/2012
Next Scheduled EDR Contact: 04/01/2013
Data Release Frequency: Varies

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007
Date Data Arrived at EDR: 11/19/2008
Date Made Active in Reports: 03/30/2009
Number of Days to Update: 131

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/16/2012
Date Data Arrived at EDR: 03/26/2012
Date Made Active in Reports: 06/14/2012
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Varies

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 04/01/2012
Date Data Arrived at EDR: 04/03/2012
Date Made Active in Reports: 06/14/2012
Number of Days to Update: 72

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: 04/15/2013
Data Release Frequency: Annually

SPILLS: Environmental Response Tracking Database
Releases of hazardous substances reported to the department's Environmental Emergency Response (EER) section.

Date of Government Version: 11/30/2012
Date Data Arrived at EDR: 12/18/2012
Date Made Active in Reports: 01/18/2013
Number of Days to Update: 31

Source: Department of Natural Resources
Telephone: 573-526-3349
Last EDR Contact: 12/18/2012
Next Scheduled EDR Contact: 04/01/2013
Data Release Frequency: Semi-Annually

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/11/2012
Date Data Arrived at EDR: 10/04/2012
Date Made Active in Reports: 12/04/2012
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 913-551-7003
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: 04/15/2013
Data Release Frequency: Varies

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 02/05/2013
Next Scheduled EDR Contact: 05/20/2013
Data Release Frequency: Varies

DOD: Department of Defense Sites
This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 01/17/2013
Next Scheduled EDR Contact: 04/29/2013
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites
The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 08/12/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 112

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 12/10/2012
Next Scheduled EDR Contact: 03/25/2013
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 10/01/2012
Date Data Arrived at EDR: 10/19/2012
Date Made Active in Reports: 12/20/2012
Number of Days to Update: 62

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 12/28/2012
Next Scheduled EDR Contact: 04/15/2013
Data Release Frequency: Varies

ROD: Records Of Decision
Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 02/27/2012
Date Data Arrived at EDR: 03/14/2012
Date Made Active in Reports: 06/14/2012
Number of Days to Update: 92

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 12/11/2012
Next Scheduled EDR Contact: 03/25/2013
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites
Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 11/28/2012
Next Scheduled EDR Contact: 03/11/2013
Data Release Frequency: Varies

US MINES: Mines Master Index File
Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/18/2011
Date Data Arrived at EDR: 09/08/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 21

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 12/05/2012
Next Scheduled EDR Contact: 03/18/2013
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System
Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 09/01/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 131

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 11/28/2012
Next Scheduled EDR Contact: 03/11/2013
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act
Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 09/29/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 64

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 12/28/2012
Next Scheduled EDR Contact: 04/08/2013
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 11/26/2012
Next Scheduled EDR Contact: 03/11/2013
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 11/26/2012
Next Scheduled EDR Contact: 03/11/2013
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems
Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/20/2011
Date Data Arrived at EDR: 11/10/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 01/17/2013
Next Scheduled EDR Contact: 04/29/2013
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 11/01/2010
Date Data Arrived at EDR: 11/10/2010
Date Made Active in Reports: 02/16/2011
Number of Days to Update: 98

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 01/16/2013
Next Scheduled EDR Contact: 04/29/2013
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 06/21/2011
Date Data Arrived at EDR: 07/15/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 60

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 12/10/2012
Next Scheduled EDR Contact: 03/25/2013
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 10/02/2012
Date Data Arrived at EDR: 10/02/2012
Date Made Active in Reports: 11/05/2012
Number of Days to Update: 34

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 01/09/2013
Next Scheduled EDR Contact: 04/22/2013
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 10/23/2011
Date Data Arrived at EDR: 12/13/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 79

Source: EPA
Telephone: (913) 551-7003
Last EDR Contact: 12/11/2012
Next Scheduled EDR Contact: 03/25/2013
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 05/08/2012
Date Data Arrived at EDR: 05/25/2012
Date Made Active in Reports: 07/10/2012
Number of Days to Update: 46

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 03/01/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 62

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 11/30/2012
Next Scheduled EDR Contact: 03/11/2013
Data Release Frequency: Biennially

UIC: Underground Injection Wells Database
A listing of underground injection well locations. The UIC Program is responsible for regulating the construction, operation, permitting, and closure of injection wells that place fluids underground for storage or disposal.

Date of Government Version: 11/19/2012
Date Data Arrived at EDR: 11/29/2012
Date Made Active in Reports: 01/17/2013
Number of Days to Update: 49

Source: Department of Natural Resources
Telephone: 573-368-2183
Last EDR Contact: 11/26/2012
Next Scheduled EDR Contact: 03/11/2013
Data Release Frequency: Varies

DRYCLEANERS: Drycleaners in Missouri Listing
A listing of drycleaner facilities that are potentially eligible for reimbursement of department approved cleanup costs under the Drycleaning Environmental Response Trust Fund.

Date of Government Version: 12/14/2012
Date Data Arrived at EDR: 12/17/2012
Date Made Active in Reports: 01/17/2013
Number of Days to Update: 31

Source: Department of Natural Resources
Telephone: 573-526-8913
Last EDR Contact: 12/12/2012
Next Scheduled EDR Contact: 04/01/2013
Data Release Frequency: Varies

RRC: Certified Hazardous Waste Resource Recovery Facilities
Facilities that take hazardous waste material, either from on-site or off-site, and make it re-usable.

Date of Government Version: 12/11/2012
Date Data Arrived at EDR: 12/17/2012
Date Made Active in Reports: 01/17/2013
Number of Days to Update: 31

Source: Department of Natural Resources
Telephone: 573-751-3176
Last EDR Contact: 12/13/2012
Next Scheduled EDR Contact: 04/01/2013
Data Release Frequency: Semi-Annually

NPDES: Permitted Facility Listing
A listing of permitted facilities from the Water Pollution Branch.

Date of Government Version: 10/10/2012
Date Data Arrived at EDR: 10/11/2012
Date Made Active in Reports: 11/14/2012
Number of Days to Update: 34

Source: Department of Natural Resources
Telephone: 573-751-7023
Last EDR Contact: 01/07/2013
Next Scheduled EDR Contact: 04/22/2013
Data Release Frequency: Varies

AIRS: Permit Facility Listing
A listing of Air Pollution Control Program permits.

Date of Government Version: 12/17/2012
Date Data Arrived at EDR: 12/18/2012
Date Made Active in Reports: 01/18/2013
Number of Days to Update: 31

Source: Department of Natural Resources
Telephone: 573-751-4817
Last EDR Contact: 12/12/2012
Next Scheduled EDR Contact: 04/01/2013
Data Release Frequency: Varies

INDIAN RESERV: Indian Reservations
This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 01/17/2013
Next Scheduled EDR Contact: 04/29/2013
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing
The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 01/21/2013
Next Scheduled EDR Contact: 05/06/2013
Data Release Frequency: Varies

2020 COR ACTION: 2020 Corrective Action Program List
The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 11/11/2011
Date Data Arrived at EDR: 05/18/2012
Date Made Active in Reports: 05/25/2012
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 08/16/2012
Next Scheduled EDR Contact: 11/26/2012
Data Release Frequency: Varies

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 10/01/2012
Date Data Arrived at EDR: 10/04/2012
Date Made Active in Reports: 11/05/2012
Number of Days to Update: 32

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: 04/15/2013
Data Release Frequency: Quarterly

FEDLAND: Federal and Indian Lands
Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 01/17/2013
Next Scheduled EDR Contact: 04/29/2013
Data Release Frequency: N/A

MINES: Industrial Mineral Mines Database
This data set contains names, locations and additional data for active Industrial Mineral Mines permitted with the Missouri Department of Natural Resources, Division of Environmental Quality, Land Reclamation Program. Industrial Mineral Mines permitted are rock quarries, clay pits, sand and gravel pits, or in-stream sand and gravel operations.

Date of Government Version: 10/24/2008
Date Data Arrived at EDR: 12/17/2012
Date Made Active in Reports: 12/21/2012
Number of Days to Update: 4

Source: Department of Natural Resources
Telephone: 573-751-4041
Last EDR Contact: 12/17/2012
Next Scheduled EDR Contact: 04/01/2013
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing
Financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/10/2012
Date Data Arrived at EDR: 12/11/2012
Date Made Active in Reports: 01/17/2013
Number of Days to Update: 37

Source: Department of Natural Resources
Telephone: 573-751-5401
Last EDR Contact: 12/11/2012
Next Scheduled EDR Contact: 03/25/2013
Data Release Frequency: Varies

COAL ASH: Coal Ash Disposal Sites
A listing of power plants with coal ash ponds.

Date of Government Version: 10/09/2012
Date Data Arrived at EDR: 10/11/2012
Date Made Active in Reports: 11/14/2012
Number of Days to Update: 34

Source: Department of Natural Resources
Telephone: 573-526-1825
Last EDR Contact: 01/07/2013
Next Scheduled EDR Contact: 04/22/2013
Data Release Frequency: Varies

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)
The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 01/18/2012
Date Data Arrived at EDR: 01/27/2012
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 34

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 12/28/2012
Next Scheduled EDR Contact: 04/15/2013
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 01/18/2012
Date Data Arrived at EDR: 01/27/2012
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 34

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 12/28/2012
Next Scheduled EDR Contact: 04/15/2013
Data Release Frequency: Annually

EPA WATCH LIST: EPA WATCH LIST
EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/13/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 02/12/2013
Next Scheduled EDR Contact: 05/27/2013
Data Release Frequency: Quarterly

US FIN ASSUR: Financial Assurance Information
All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 08/20/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 11/05/2012
Number of Days to Update: 69

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 11/16/2012
Next Scheduled EDR Contact: 03/04/2013
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 02/01/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Varies

COAL ASH DOE: Steam-Electric Plan Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 01/15/2013
Next Scheduled EDR Contact: 04/29/2013
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 08/17/2010
Date Data Arrived at EDR: 01/03/2011
Date Made Active in Reports: 03/21/2011
Number of Days to Update: 77

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 12/11/2012
Next Scheduled EDR Contact: 03/25/2013
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information.

Date of Government Version: 12/27/0012
Date Data Arrived at EDR: 01/02/2013
Date Made Active in Reports: 01/18/2013
Number of Days to Update: 16

Source: Department of Natural Resources
Telephone: 573-751-3553
Last EDR Contact: 12/21/2012
Next Scheduled EDR Contact: 03/25/2013
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Auto Stat: EDR Proprietary Historic Gas Stations - Cole

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Proprietary Historic Dry Cleaners - Cole

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 11/19/2012
Date Data Arrived at EDR: 11/19/2012
Date Made Active in Reports: 01/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 11/19/2012
Next Scheduled EDR Contact: 03/04/2013
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 11/01/2012
Date Data Arrived at EDR: 11/07/2012
Date Made Active in Reports: 12/11/2012
Number of Days to Update: 34

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 02/07/2013
Next Scheduled EDR Contact: 05/20/2013
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/23/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 57

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 01/21/2013
Next Scheduled EDR Contact: 05/06/2013
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 06/22/2012
Date Made Active in Reports: 07/31/2012
Number of Days to Update: 39

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 11/26/2012
Next Scheduled EDR Contact: 03/11/2013
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/19/2012
Date Made Active in Reports: 09/27/2012
Number of Days to Update: 70

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 12/13/2012
Next Scheduled EDR Contact: 04/01/2013
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: Rextag Strategies Corp.
Telephone: (281) 769-2247
U.S. Electric Transmission and Power Plants Systems Digital GIS Data

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.
Daycare Centers: Licensed Child Care Facilities
Source: Department of Health & Senior Services
Telephone: 573-751-2450

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

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GEOCHECK®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

STONE MILL
CENTER AVE
GROVER, MO 63040

TARGET PROPERTY COORDINATES

Latitude (North):	38.5732 - 38' 34' 23.52"
Longitude (West):	90.6408 - 90' 38' 26.88"
Universal Tranverse Mercator:	Zone 15
UTM X (Meters):	705527.1
UTM Y (Meters):	4271848.0
Elevation:	780 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	38090-E6 EUREKA, MO
Most Recent Revision:	1993
East Map:	38090-E5 MANCHESTER, MO
Most Recent Revision:	1993

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

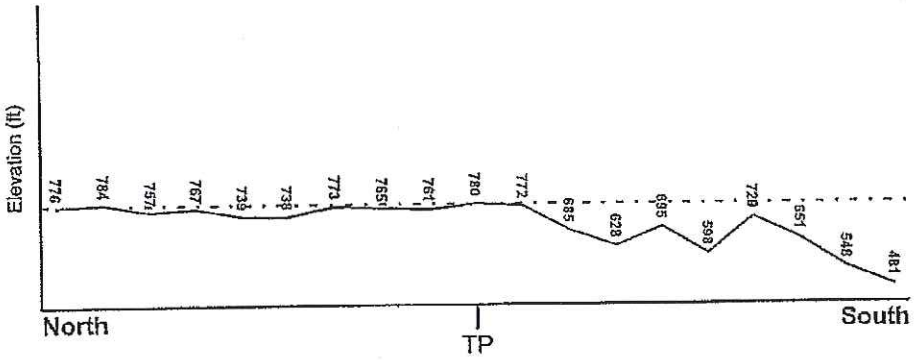
TOPOGRAPHIC INFORMATION

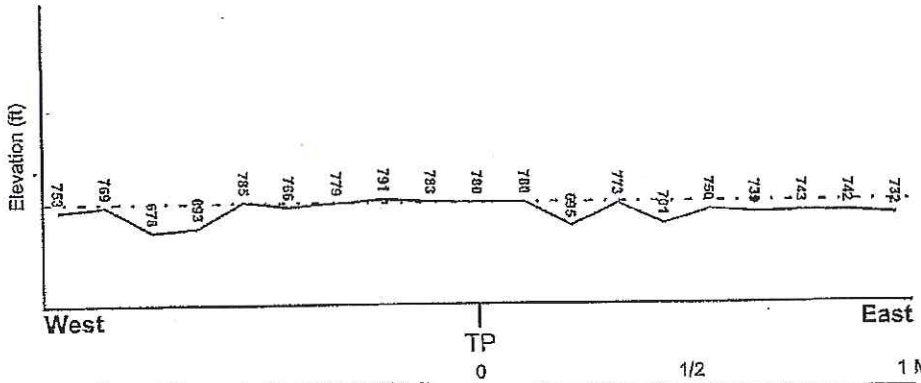
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SSE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 780 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
ST LOUIS, MO	YES - refer to the Overview Map and Detail Map
Flood Plain Panel at Target Property:	29189C0235H - FEMA Q3 Flood data
Additional Panels in search area:	29189C0253H - FEMA Q3 Flood data 29189C0245H - FEMA Q3 Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
EUREKA	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

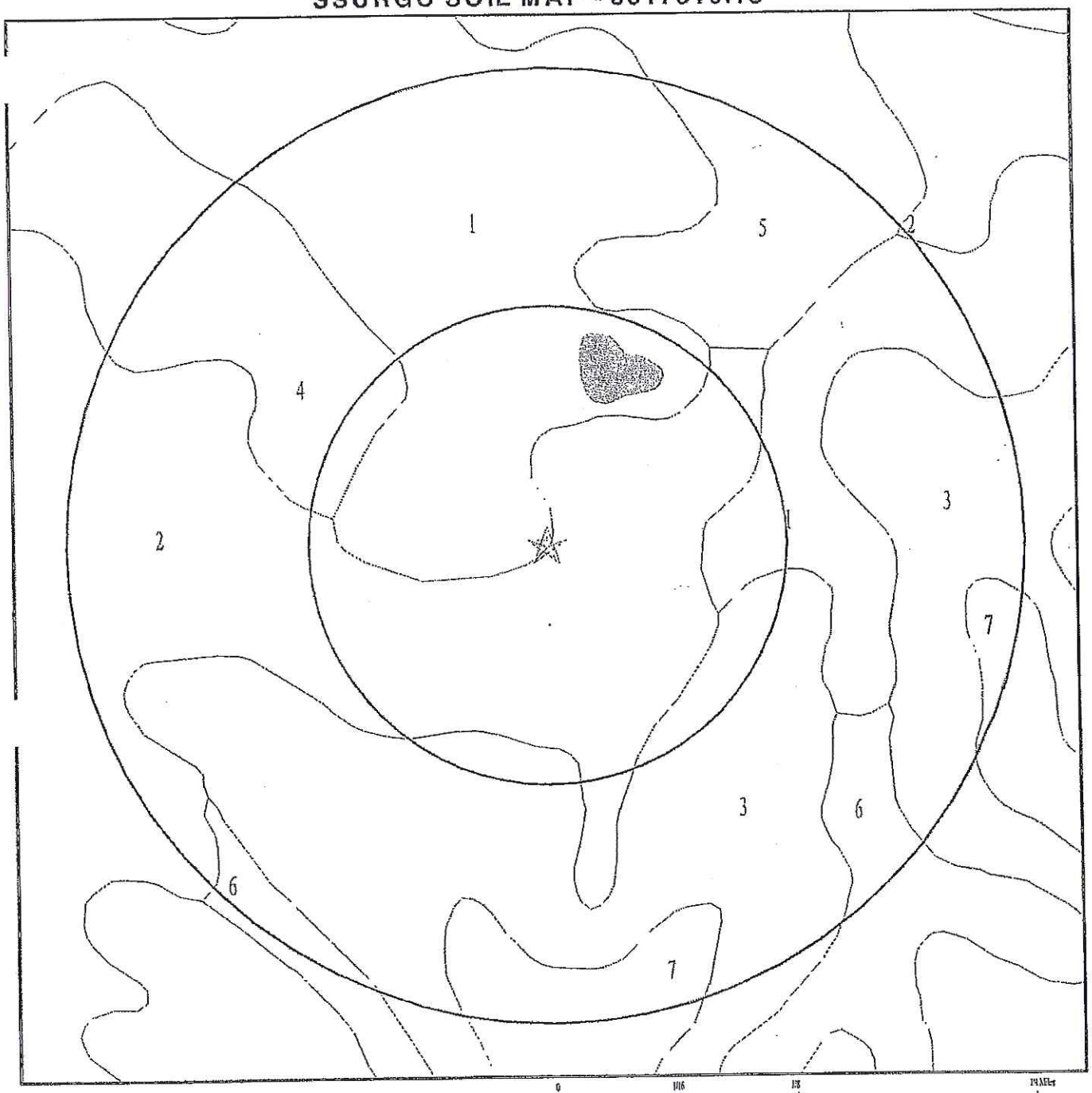
Era:	Paleozoic
System:	Mississippian
Series:	Osagean and Kinderhookian Series
Code:	M1 *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 3517510.1s



Target Property
SSURGO Soil
Water

SITE NAME: Stone Mill ADDRESS: Center Ave Grover MO 63040 LAT/LONG: 38.5732 / 90.6408	CLIENT: SCI Engineering, Inc. CONTACT: Ben Butterfield INQUIRY #: 3517510.1s DATE: February 12, 2013 2:21 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Winfield

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 99 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	silt loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.1
2	9 inches	16 inches	silt loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.1
3	16 inches	48 inches	silty clay loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.1
4	48 inches	59 inches	silt loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.1

Soil Map ID: 2

Soil Component Name: Winfield

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 99 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	silt loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.1
2	9 inches	16 inches	silt loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.1
3	16 inches	48 inches	silty clay loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.1
4	48 inches	59 inches	silt loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.1

Soil Map ID: 3

Soil Component Name: Goss

Soil Surface Texture: gravelly silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	16 inches	gravelly silt loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 4.5

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	16 inches	27 inches	very gravelly silt loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 4.5
3	27 inches	55 inches	extremely gravelly silty clay	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 4.5
4	55 inches	59 inches	silty clay	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 4.5

Soil Map ID: 4

Soil Component Name: Winfield

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 99 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	silt loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.1
2	9 inches	16 inches	silt loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.1
3	16 inches	48 inches	silty clay loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.1
4	48 inches	59 inches	silt loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.1

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 5

Soil Component Name: Iva

Soil Surface Texture: silt loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Somewhat poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 61 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	12 inches	silt loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.6
2	12 inches	55 inches	silty clay loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.6
3	55 inches	59 inches	silt loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.6

Soil Map ID: 6

Soil Component Name: Goss

Soil Surface Texture: gravelly silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	16 inches	gravelly silt loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 4.5
2	16 inches	27 inches	very gravelly silt loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 4.5
3	27 inches	55 inches	extremely gravelly silty clay	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 4.5
4	55 inches	59 inches	silty clay	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 4.5

Soil Map ID: 7

Soil Component Name: Gasconade

Soil Surface Texture: flaggy silty clay loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 48 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	flaggy silty clay loam	Not reported	Not reported	Max: 0.11 Min: 0	Max: Min:
2	9 inches	16 inches	very flaggy silty clay	Not reported	Not reported	Max: 0.11 Min: 0	Max: Min:
3	16 inches	20 inches	bedrock	Not reported	Not reported	Max: 0.11 Min: 0	Max: Min:

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
2	USGS2484996	1/8 - 1/4 Mile NNW
A3	USGS2484993	1/4 - 1/2 Mile WNW
6	USGS2484989	1/2 - 1 Mile West
9	USGS2484956	1/2 - 1 Mile SW
B10	USGS2484858	1/2 - 1 Mile North

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	MOLOG1000017704	0 - 1/8 Mile WSW
A4	MOLOG1000017719	1/4 - 1/2 Mile WNW
5	MOLOG1000017717	1/2 - 1 Mile West
7	MO6000000004831	1/2 - 1 Mile NNW
8	MO6000000004833	1/2 - 1 Mile NNW
B11	MOLOG1000017844	1/2 - 1 Mile North
12	MOLOG1000017799	1/2 - 1 Mile NE

PHYSICAL SETTING SOURCE MAP - 3517510.1s

County Boundary
Major Roads
Contour Lines
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons
Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location
Oil, gas or related wells

TE NAME: Stone Mill ADDRESS: Center Ave Grover MO 63040 LAT/LONG: 38.5732 / 90.6408	CLIENT: SCI Engineering, Inc. CONTACT: Ben Butterfield INQUIRY #: 3517510.1s DATE: February 12, 2013 2:21 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation	Database	EDR ID Number
1 WSW 0 - 1/8 Mile Lower	MO WELLS	MOLOG1000017704

Id:	022358	Located:	Y
Notenough:	Not Reported	Scale:	24k
Locator:	Michael Lemon - Interpolated	Stname:	MISSOURI
Stabbrev:	MO	County:	ST. LOUIS
Utm x:	705456.21895		
Utm y:	4271819.03073		
Latitude:	38.57296		
Longitude:	-90.64162		
Qtr3:	NE	Qtr2:	NE
Qtr1:	NE		
Section:	11		
Tnsp:	44		
Tnspdir:	Not Reported		
Rng:	3		
Rngdir:	E		
Plssx:	704657		
Plssy:	4271356		
Location p:	146		
Elev:	767		
Idnum:	22358		
Swl:	275		
Quadrangle:	EUREKA	Site Id:	MOLOG1000017704

Header Information:

Id:	022358	Well type:	Private Well
Agencyname:	GEOLOGICAL SURVEY (DGLS)	County:	ST. LOUIS
Fips:	189	Stname:	MISSOURI
Stabbrev:	MO	Qtr3:	NE
Qtr2:	NE	Qtr1:	NE
Section:	11	Tnsp:	44
Tnspdir:	N	Rng:	03
Rngdir:	E		
Latitude:	38.57296		
Longitude:	-90.64162		
Utm x:	705456.21895		
Utm y:	4271819.03073		
Quadmap na:	EUREKA	Ohio code:	38090E6
Llmeas:	D	Scale:	24k
Locator:	Interpolated	Typelog1:	S
Typelog2:	Not Reported	Typelog3:	Not Reported
Ownerind:	0	Owner:	Boyer, Joe
Leasenam:	Not Reported	Driller:	Shepard Well Drlg Co
Drldate:	1963/09/18	Permit:	Not Reported
Logdate:	1964/03/31	Logger:	Wells, J.
Elev:	767		
Elevbase:	S	Prodyld:	12
Gpmcfs:	G		
Depthbed:	75		
Sampsav:	0	Swla:	275
Swlb:	Not Reported		
Water at:	300'		
Toldepth:	505	Formation :	FERN GLEN FORMATION
Formation1:	ST. PETER SANDSTONE		
Interdtp:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Intordbt:	0		
Drawdown:	Not Reported	Aquclass:	Not Reported
Confind:	0	Reldate:	Not Reported
Probind1:	Not Reported	Probind2:	Not Reported
Probind3:	Not Reported	Additional:	Not Reported
Alagncy1:	Not Reported	Add databa:	Not Reported
Addition 1:	Not Reported	Add data 1:	Not Reported
Alnum2:	Not Reported	Add data 2:	Not Reported
Add data 3:	Not Reported	Rmkind:	N
Remarks:	GROVER		
C total:	117	C plugind:	N
C remarks:	Not Reported		

Construction Information:

Id:	022358	Well type:	Private Well
Agencyname:	GEOLOGICAL SURVEY (DGLS)	Datecomp:	196309
Plugind:	N	Dateplug:	Not Reported
Casemat1:	Not Reported	Casemat2:	Not Reported
Cas1dpth:	76		
Cas1diam:	6.25		
Cas2dpth:	41		
Cas2diam:	5		
Cas3dpth:	0		
Cas3diam:	0		
Cas4dpth:	0		
Cas4diam:	0		
Inout1:	O	Typgrt1:	Not Reported
Typgrt2:	Not Reported	Typgrt3:	Not Reported
Mthgrout:	Not Reported	Rigtype:	Not Reported
Weltreat:	Not Reported	Rmkind:	Not Reported
Dateabnd:	Not Reported		
Plgdpt1b:	0		
Plgdpt1t:	0		
Multcase:	N		
Szcashol:	0		
Szbelcas:	0		
Sizscrn:	0		
Slotsize:	0		
Lenscrn:	0		
Typescrn:	Not Reported	Typedev:	Not Reported
Typepump:	Not Reported		
Pumpcap:	0		
Pumptdh:	0		
Pumpset:	0		
Typecomp:	Not Reported		
Perfintt:	0		
Perfintb:	0		
Oilprod:	Not Reported	Gasprod:	Not Reported
Tubepres:	Not Reported	Remarks:	Not Reported
Other data:	Not Reported	Formation :	KIMMSWICK LIMESTONE
Formation1:	ST. PETER SANDSTONE		

Strata Information:

Id:	022358	Stratordr:	0
Fmtop:	0		
Fmbot:	75		
Formation :	NO SAMPLES		
Primlith:	Not Reported		
Seclith:	Not Reported	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		

GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS

Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	022358	Stratordr:	0
Fmtop:	115		
Fmbot:	505		
Formation :	MIDDLE ORDOVICIAN SERIES		
Primlith:	Not Reported		
Seclith:	Not Reported	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	022358	Stratordr:	28400
Fmtop:	75		
Fmbot:	110		
Formation :	MISSISSIPPIAN SYSTEM		
Primlith:	Not Reported		
Seclith:	Not Reported	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	022358	Stratordr:	31800
Fmtop:	75		
Fmbot:	110		
Formation :	OSAGEAN SERIES		
Primlith:	Not Reported		
Seclith:	Not Reported	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	022358	Stratordr:	33400
Fmtop:	75		
Fmbot:	110		
Formation :	FERN GLEN FORMATION		
Primlith:	LIMESTONE		
Seclith:	CHERT	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		

Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 022358 Stratordr: 35100
Fmtop: 110
Fmbot: 115
Formation : DEVONIAN SYSTEM
Primlith: Not Reported
Seclith: Not Reported Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 022358 Stratordr: 35200
Fmtop: 110
Fmbot: 115
Formation : UPPER DEVONIAN SERIES
Primlith: Not Reported
Seclith: Not Reported Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 022358 Stratordr: 35900
Fmtop: 110
Fmbot: 115
Formation : SULPHUR SPRINGS GROUP
Primlith: SAND
Seclith: LIMESTONE Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 022358 Stratordr: 39000
Fmtop: 115
Fmbot: 505
Formation : ORDOVICIAN SYSTEM
Primlith: Not Reported
Seclith: Not Reported Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported

Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 022358 Stratordr: 40100
Fmtop: 115
Fmbot: 505
Formation : MOHAWKIAN SERIES
Primlith: Not Reported
Seclith: Not Reported Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 022358 Stratordr: 40100
Fmtop: 115
Fmbot: 505
Formation : MOHAWKIAN SERIES
Primlith: Not Reported
Seclith: Not Reported Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 022358 Stratordr: 40100
Fmtop: 115
Fmbot: 505
Formation : MOHAWKIAN SERIES
Primlith: Not Reported
Seclith: Not Reported Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 022358 Stratordr: 40200
Fmtop: 115
Fmbot: 200
Formation : KIMMSWICK LIMESTONE
Primlith: LIMESTONE
Seclith: CHERT Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported

Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	022358	Stratordr:	40300
Fmtop:	200		
Fmbot:	220		
Formation :	DECORAH GROUP		
Primlith:	LIMESTONE		
Seclith:	SHALE	Minlith:	DOLOMITE
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	022358	Stratordr:	41000
Fmtop:	220		
Fmbot:	350		
Formation :	PLATTIN GROUP		
Primlith:	LIMESTONE		
Seclith:	DOLOMITE	Minlith:	CHERT
Primmin:	ZnS		
Primocc:	3		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	022358	Stratordr:	41900
Fmtop:	340		
Fmbot:	350		
Formation :	BLOOMSDALE LIMESTONE		
Primlith:	LIMESTONE		
Seclith:	SHALE	Minlith:	DOLOMITE
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	022358	Stratordr:	42300
Fmtop:	350		
Fmbot:	420		
Formation :	"ROCK LEVEE FORMATION"		
Primlith:	DOLOMITE		
Seclith:	SHALE	Minlith:	Not Reported
Primmin:	ZnS		
Primocc:	4		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		

Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	022358	Stratordr:	42800
Fmtop:	350		
Fmbot:	470		
Formation :	JOACHIM DOLOMITE		
Primlith:	DOLOMITE		
Seclith:	SAND	Minlith:	SHALE
Primmin:	ZnS		
Primocc:	4		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	022358	Stratordr:	43900
Fmtop:	470		
Fmbot:	505		
Formation :	ST. PETER SANDSTONE		
Primlith:	SANDSTONE		
Seclith:	Not Reported	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	022358	Stratordr:	99900
Fmtop:	505		
Fmbot:	505		
Formation :	TOTAL DEPTH		
Primlith:	Not Reported		
Seclith:	Not Reported	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

2
NNW
1/8 - 1/4 Mile
Lower

FED USGS USGS2484996

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Agency cd:	USGS	Site no:	383431090383201
Site name:	T44N R03E 11AAA1		
Latitude:	383431	EDR Site id:	USGS2484996
Longitude:	0903832	Dec lat:	38.57533105
Dec lon:	-90.64234848	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	29
State:	29	County:	189
Country:	US	Land net:	Not Reported
Location map:	EUREKA	Map scale:	24000
Altitude:	757.00		
Altitude method:	Interpolated from topographic map		
Altitude accuracy:	5.		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	Lower Missouri. Missouri. Area = 1590 sq.mi.		
Topographic:	Hillside (slope)		
Site type:	Ground-water other than Spring	Date construction:	19630000
Date inventoried:	Not Reported	Mean greenwich time offset:	CST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	ST PETER SANDSTONE		
Well depth:	505	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1963-09-01	Ground water data end date:	1963-09-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1963-09-01	276	

A3
WNW
1/4 - 1/2 Mile
Higher

FED USGS **USGS2484993**

Agency cd:	USGS	Site no:	383429090384301
Site name:	T44N R03E 11AAB1		
Latitude:	383429	EDR Site id:	USGS2484993
Longitude:	0903843	Dec lat:	38.57477549
Dec lon:	-90.64540414	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	29
State:	29	County:	189
Country:	US	Land net:	Not Reported
Location map:	EUREKA	Map scale:	24000
Altitude:	779.00		
Altitude method:	Interpolated from topographic map		
Altitude accuracy:	5.		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	Lower Missouri. Missouri. Area = 1590 sq.mi.		
Topographic:	Hillside (slope)		
Site type:	Ground-water other than Spring	Date construction:	19640000
Date inventoried:	Not Reported	Mean greenwich time offset:	CST

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	ST PETER SANDSTONE		
Well depth:	480	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1964-09-01	Ground water data end date:	1964-09-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1964-09-01	330	

A4
WNW
1/4 - 1/2 Mile
Lower

MO WELLS **MOLOG1000017719**

Id:	023183	Located:	Y
Notenough:	Not Reported	Scale:	24k
Locator:	Michael Lemon - Interpolated	Stname:	MISSOURI
Stabbrev:	MO	County:	ST. LOUIS
Utm x:	705077.62484		
Utm y:	4271953.9685		
Latitude:	38.57426		
Longitude:	-90.64592		
Qtr3:	NW	Qtr2:	NE
Qtr1:	NE		
Section:	11		
Tnsp:	44		
Tnspdir:	Not Reported		
Rng:	3		
Rngdir:	E		
Plssx:	704657		
Plssy:	4271356		
Location p:	146		
Elev:	775		
Idnum:	23183		
Swl:	330		
Quadrangle:	EUREKA	Site id:	MOLOG1000017719

Header Information:

Id:	023183	Well type:	Noncommunity Public Well
Agencyname:	GEOLOGICAL SURVEY (DGLS)	County:	ST. LOUIS
Fips:	189	Stname:	MISSOURI
Stabbrev:	MO	Qtr3:	NW
Qtr2:	NE	Qtr1:	NE
Section:	11	Tnsp:	44
Tnspdir:	N	Rng:	03
Rngdir:	E		
Latitude:	38.57426		
Longitude:	-90.64592		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Utm x:	705077.62464		
Utm y:	4271953.9685		
Quadmap na:	EUREKA	Ohio code:	38090E6
Limeas:	D	Scale:	24k
Locator:	Interpolated	Typelog1:	S
Typelog2:	Not Reported	Typelog3:	Not Reported
Ownerind:	1	Owner:	Wright Family
Leasenam:	Not Reported	Driller:	Shepard Well Drlg
Drldate:	1964/09/22	Permit:	Not Reported
Logdate:	1965/03/03	Logger:	Groves, H.M.
Elev:	775		
Elevbase:	S	Prodyld:	15
Gpmcfs:	G		
Depthbed:	45		
Sampsav:	0	Swla:	330
Swlb:	Not Reported		
Water at:	360'		
Totdepth:	480	Formation :	KEOKUK-BURLINGTON-FERN GLEN
Formation1:	ST. PETER SANDSTONE		
Interdtp:	0		
Interdbt:	0		
Drawdown:	Not Reported	Aquclass:	Not Reported
Confind:	0	Reldate:	Not Reported
Probind1:	Not Reported	Probind2:	Not Reported
Probind3:	Not Reported	Additional:	Not Reported
Alagncy1:	Not Reported	Add databa:	Not Reported
Addition 1:	Not Reported	Add data 1:	Not Reported
Alnum2:	Not Reported	Add data 2:	Not Reported
Add data 3:	Not Reported	Rmkind:	N
Remarks:	WRIGHT STORE NEAR JCT HWYS 100 & 109		
C total:	87	C plugind:	N
C remarks:	Not Reported		

Construction Information:

Id:	023183	Well type:	Private Well
Agencyname:	GEOLOGICAL SURVEY (DGLS)	Datecomp:	196409
Plugind:	N	Dateplug:	Not Reported
Casemat1:	Not Reported	Casemat2:	Not Reported
Cas1dpth:	87		
Cas1diam:	6.25		
Cas2dpth:	0		
Cas2diam:	0		
Cas3dpth:	0		
Cas3diam:	0		
Cas4dpth:	0		
Cas4diam:	0		
Inout1:	O	Typgrt1:	Not Reported
Typgrt2:	Not Reported	Typgrt3:	Not Reported
Mthgrout:	Not Reported	Rigtype:	Not Reported
Weltreat:	Not Reported	Rmkind:	Not Reported
Dateabnd:	Not Reported		
Plgdpt1b:	0		
Plgdpt1t:	0		
Multcase:	N		

GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS

Szcashol:	0		
Szbelcas:	0		
Sizscrn:	0		
Slotsize:	0		
Lenscrn:	0		
Typescrn:	Not Reported	Typedev:	Not Reported
Typepump:	Not Reported		
Pumpcap:	0		
Pumptdh:	0		
Pumpset:	0		
Typecomp:	Not Reported		
Perfintt:	0		
Perfintb:	0		
Oilprod:	Not Reported	Gasprod:	Not Reported
Tubepres:	Not Reported	Remarks:	Not Reported
Other data:	Not Reported	Formation :	KEOKUK-BURLINGTON-FERN GLEN
Formation1:	ST. PETER SANDSTONE		

Strata Information:

Id:	023183	Stratordr:	0
Fmtop:	130		
Fmbot:	480		
Formation :	MIDDLE ORDOVICIAN SERIES		
Primlith:	Not Reported		
Seclith:	Not Reported	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	023183	Stratordr:	0
Fmtop:	0		
Fmbot:	45		
Formation :	NO SAMPLES		
Primlith:	Not Reported		
Seclith:	Not Reported	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	023183	Stratordr:	28400
Fmtop:	45		
Fmbot:	115		
Formation :	MISSISSIPPIAN SYSTEM		
Primlith:	Not Reported		
Seclith:	Not Reported	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		

Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 023183 Stratordr: 31800
Fmtop: 45
Fmbot: 115
Formation : OSAGEAN SERIES
Primlith: Not Reported
Seclith: Not Reported Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 023183 Stratordr: 32200
Fmtop: 45
Fmbot: 115
Formation : KEOKUK-BURLINGTON-FERN GLEN
Primlith: LIMESTONE
Seclith: CHERT Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 023183 Stratordr: 35100
Fmtop: 115
Fmbot: 130
Formation : DEVONIAN SYSTEM
Primlith: Not Reported
Seclith: Not Reported Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 023183 Stratordr: 35200
Fmtop: 115
Fmbot: 130
Formation : UPPER DEVONIAN SERIES
Primlith: Not Reported
Seclith: Not Reported Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported

Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	023183	Stratordr:	35900
Fmtop:	115		
Fmbot:	130		
Formation :	SULPHUR SPRINGS GROUP		
Primlith:	LIMESTONE		
Seclith:	SAND	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	023183	Stratordr:	39000
Fmtop:	130		
Fmbot:	480		
Formation :	ORDOVICIAN SYSTEM		
Primlith:	Not Reported		
Seclith:	Not Reported	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	023183	Stratordr:	40100
Fmtop:	130		
Fmbot:	480		
Formation :	MOHAWKIAN SERIES		
Primlith:	Not Reported		
Seclith:	Not Reported	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	023183	Stratordr:	40100
Fmtop:	130		
Fmbot:	480		
Formation :	MOHAWKIAN SERIES		
Primlith:	Not Reported		
Seclith:	Not Reported	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		

Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	023183	Stratordr:	40100
Fmtop:	130		
Fmbot:	480		
Formation :	MOHAWKIAN SERIES		
Primlith:	Not Reported		
Seclith:	Not Reported	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	023183	Stratordr:	40200
Fmtop:	130		
Fmbot:	205		
Formation :	KIMMSWICK LIMESTONE		
Primlith:	LIMESTONE		
Seclith:	DOLOMITE	Minlith:	CHERT
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	023183	Stratordr:	40300
Fmtop:	205		
Fmbot:	220		
Formation :	DECORAH GROUP		
Primlith:	LIMESTONE		
Seclith:	SHALE	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	023183	Stratordr:	41000
Fmtop:	220		
Fmbot:	350		
Formation :	PLATTIN GROUP		
Primlith:	DOLOMITE		
Seclith:	LIMESTONE	Minlith:	SHALE
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		

Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	023183	Stratordr:	42100
Fmtop:	340		
Fmbot:	350		
Formation :	BRICKEYS MEMBER		
Primlith:	LIMESTONE		
Seclith:	DOLOMITE	Minlith:	SHALE
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	023183	Stratordr:	42800
Fmtop:	350		
Fmbot:	470		
Formation :	JOACHIM DOLOMITE		
Primlith:	DOLOMITE		
Seclith:	SAND	Minlith:	SHALE
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	023183	Stratordr:	43900
Fmtop:	470		
Fmbot:	480		
Formation :	ST. PETER SANDSTONE		
Primlith:	SANDSTONE		
Seclith:	Not Reported	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	023183	Stratordr:	99900
Fmtop:	480		
Fmbot:	480		
Formation :	TOTAL DEPTH		
Primlith:	Not Reported		
Seclith:	Not Reported	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		

Minrocc:	0
Rmk20:	Not Reported

5
West
1/2 - 1 Mile
Lower

MO WELLS MOLOG1000017717

Id:	006299	Located:	Y
Notenough:	Not Reported	Scale:	24k
Locator:	Michael Lemon - Interpolated	Stname:	MISSOURI
Stabbrev:	MO	County:	ST. LOUIS
Utm x:	704612.56261		
Utm y:	4271902.75006		
Latitude:	38.5739		
Longitude:	-90.65127		
Qtr3:	SE	Qtr2:	NE
Qtr1:	NW		
Section:	11		
Tnsp:	44		
Tnspdir:	Not Reported		
Rng:	3		
Rngdir:	E		
Plssx:	704657		
Plssy:	4271356		
Location p:	146		
Elev:	776		
Idnum:	6299		
Swl:	200		
Quadrangle:	EUREKA	Site id:	MOLOG1000017717

Header Information:

Id:	006299	Well type:	Private Well
Agencyname:	GEOLOGICAL SURVEY (DGLS)	County:	ST. LOUIS
Fips:	189	Stname:	MISSOURI
Stabbrev:	MO	Qtr3:	SE
Qtr2:	NE	Qtr1:	NW
Section:	11	Tnsp:	44
Tnspdir:	N	Rng:	03
Rngdir:	E		
Latitude:	38.5739		
Longitude:	-90.65127		
Utm x:	704612.56261		
Utm y:	4271902.75006		
Quadmap na:	EUREKA	Ohio code:	38090E6
Limeas:	D	Scale:	24k
Locator:	Interpolated	Typelog1:	S
Typelog2:	Not Reported	Typelog3:	Not Reported
Ownerind:	0	Owner:	Benedick, Fred
Leasenam:	Not Reported	Driller:	Clark Brothers
Drldate:	1940/06/	Permit:	Not Reported
Logdate:	1940/09/11	Logger:	Hundhausen
Elev:	776		
Elevbase:	S	Prodyld:	15
Gpmcfs:	G		
Depthbed:	45		
Sampsav:	0	Swla:	200
Swlb:	Not Reported		
Water at:	Not Reported		
Totdepth:	450	Formation :	FERN GLEN FORMATION
Formation1:	ST. PETER SANDSTONE		
Intcrdtp:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Intcrdbt:	0		
Drawdown:	125	Aquclass:	Not Reported
Confind:	0	Reldate:	Not Reported
Probind1:	Not Reported	Probind2:	Not Reported
Probind3:	Not Reported	Additional:	Not Reported
Alagncy1:	Not Reported	Add databa:	Not Reported
Addition 1:	Not Reported	Add data 1:	Not Reported
Alnum2:	Not Reported	Add data 2:	Not Reported
Add data 3:	Not Reported	Rmkind:	N
Remarks:	ON CHRISTY AVE, IN POND, 0.5 MI S OF HWY 50		
C total:	45	C plugind:	N
C remarks:	Not Reported		

Construction Information:

Id:	006299	Well type:	Private Well
Agencyname:	GEOLOGICAL SURVEY (DGLS)	Datecomp:	194006
Plugind:	N	Dateplug:	Not Reported
Casemat1:	Not Reported	Casemat2:	Not Reported
Cas1dpth:	45		
Cas1diam:	6.25		
Cas2dpth:	0		
Cas2diam:	0		
Cas3dpth:	0		
Cas3diam:	0		
Cas4dpth:	0		
Cas4diam:	0		
Inout1:	O	Typgrt1:	Not Reported
Typgrt2:	Not Reported	Typgrt3:	Not Reported
Mthgrout:	Not Reported	Rigtype:	Not Reported
Weltreat:	Not Reported	Rmkind:	Not Reported
Dateabnd:	Not Reported		
Plgdpt1b:	0		
Plgdpt1t:	0		
Multicase:	N		
Szcashol:	0		
Szbelcas:	0		
Sizscrn:	0		
Slotsize:	0		
Lenscrn:	0		
Typescrn:	Not Reported	Typedev:	Not Reported
Typepump:	Not Reported		
Pumpcap:	0		
Pumptdh:	0		
Pumpset:	0		
Typecomp:	Not Reported		
Perfintt:	0		
Perfintb:	0		
Oilprod:	Not Reported	Gasprod:	Not Reported
Tubepres:	Not Reported	Remarks:	Not Reported
Other data:	Not Reported	Formation :	FERN GLEN FORMATION
Formation1:	ST. PETER SANDSTONE		

Strata Information:

Id:	006299	Stratordr:	0
Fmtop:	0		
Fmbot:	45		
Formation :	NO SAMPLES		
Primlith:	Not Reported		
Seclith:	Not Reported	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		

Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 006299 Stratordr: 0
Fmtop: 90
Fmbot: 450
Formation : MIDDLE ORDOVICIAN SERIES
Primlith: Not Reported
Seclith: Not Reported Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 006299 Stratordr: 28400
Fmtop: 45
Fmbot: 80
Formation : MISSISSIPPIAN SYSTEM
Primlith: Not Reported
Seclith: Not Reported Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 006299 Stratordr: 31800
Fmtop: 45
Fmbot: 80
Formation : OSAGEAN SERIES
Primlith: Not Reported
Seclith: Not Reported Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 006299 Stratordr: 32300
Fmtop: 45
Fmbot: 80
Formation : BURLINGTON LIMESTONE
Primlith: LIMESTONE
Seclith: CHERT Minlith: DOLOMITE
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported

Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 006299 Stratordr: 40100
Fmtop: 90
Fmbot: 450
Formation : MOHAWKIAN SERIES
Primlith: Not Reported
Seclith: Not Reported Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 006299 Stratordr: 40200
Fmtop: 90
Fmbot: 160
Formation : KIMMSWICK LIMESTONE
Primlith: LIMESTONE
Seclith: Not Reported Minlith: CHERT
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 006299 Stratordr: 40300
Fmtop: 160
Fmbot: 180
Formation : DECORAH GROUP
Primlith: LIMESTONE
Seclith: Not Reported Minlith: SHALE
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 006299 Stratordr: 41000
Fmtop: 180
Fmbot: 315
Formation : PLATTIN GROUP
Primlith: LIMESTONE
Seclith: CHERT Minlith: SHALE
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported

Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 006299 Stratordr: 42100
Fmtop: 300
Fmbot: 315
Formation : BRICKEYS MEMBER
Primlith: LIMESTONE
Seclith: SHALE Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 006299 Stratordr: 42800
Fmtop: 315
Fmbot: 430
Formation : JOACHIM DOLOMITE
Primlith: DOLOMITE
Seclith: SAND Minlith: LIMESTONE
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 006299 Stratordr: 43900
Fmtop: 430
Fmbot: 450
Formation : ST. PETER SANDSTONE
Primlith: SANDSTONE
Seclith: Not Reported Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 006299 Stratordr: 99900
Fmtop: 450
Fmbot: 450
Formation : TOTAL DEPTH
Primlith: Not Reported
Seclith: Not Reported Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported

Minrocc:	0
Rmk20:	Not Reported

6
West
1/2 - 1 Mile
Lower

FED USGS USGS2484989

Agency cd:	USGS	Site no:	383426090391401
Site name:	T44N R03E 11BAC1		
Latitude:	383426	EDR Site id:	USGS2484989
Longitude:	0903914	Dec lat:	38.57394214
Dec lon:	-90.65401556	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	29
State:	29	County:	189
Country:	US	Land net:	Not Reported
Location map:	EUREKA	Map scale:	24000
Altitude:	770.00		
Altitude method:	Interpolated from topographic map		
Altitude accuracy:	5.		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	Lower Missouri, Missouri, Area = 1590 sq.mi.		
Topographic:	Hillside (slope)		
Site type:	Ground-water other than Spring	Date construction:	19400000
Date inventoried:	Not Reported	Mean greenwich time offset:	CST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	ST PETER SANDSTONE		
Well depth:	450	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1940-06-01	Ground water data end date:	1940-06-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1940-06-01	200	

7
NNW
1/2 - 1 Mile
Lower

MO WELLS MO6000000004831

Objectid:	5747	Uniqueid:	105974
Logid:	Not Reported	Wwimsid:	00236285
Pwssname:	Glaser Commons Shopping Cente	Pwssid:	6182822
Pwssidext:	6182822101	Ipws:	MO6182822
Ipwsext:	MO6182822101	Wellnum:	1
Localname:	Well #1	Wellid:	18010
Factype:	Restaurant	Fed type:	NP
Status:	Proposed		
Ddlat:	38.583667		
Ddlong:	-90.643944		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Mapname:	Eureka	Fips:	29189
County:	St. Louis	Mdnrreg:	St. Louis
Mdnrnum:	6	Drilldate:	2000
Aban:	0	Plug:	0
Material:	Consolidated		
Form cd:	Kimmswick		
Form id:	St. Peter		
Totdepth:	613	Grndelev:	0
Topseal:	Cement Slurry	Botseal:	Cement Slurry
Casedepth:	202	Casesize:	6
Casetype:	Steel		
Topcaseelv:	0		
Caseheight:	0	Outcasedep:	0
Outcasesiz:	0	Scrnlength:	-9999
Scrnsize:	-9999	Staticleve:	296
Yield:	40	Head:	0
Drawdown:	0	Pumptestda:	0
Pumptype:	Not Reported	Pumpmanuf:	Not Reported
Pumpdepth:	504	Pumpcapaci:	40
Meter:	Not Reported	Sidbypwr:	Not Reported
Voc:	Not Reported	Nitrate:	Not Reported
Chlor:	Not Reported	Filter:	Not Reported
Gwudisw:	Not Reported	Stappr:	Not Reported
Surfdrain:	Not Reported	Entry:	Not Reported
Method:	GPS	Accuracy:	12
Locstatus:	Not Verified	Verloc:	N
Lastupdate:	2007/03/21	Tweyrswa:	230
Welldist:	0	Site id:	MO6000000004831

8
NNW
1/2 - 1 Mile
Lower

MO WELLS MO6000000004833

Objectid:	4947	Uniqueid:	104959
Logid:	Not Reported	Wwimsid:	Not Reported
Pwssname:	Wildwood Auto Village	Pwssid:	6182498
Pwssidext:	6182498101	Ipws:	MO6182498
Ipwsext:	MO6182498101	Wellnum:	1
Localname:	Well #1	Wellid:	16130
Factype:	Indus. & Lg Business	Fed type:	NC
Status:	Active		
Ddlat:	38.58403		
Ddlong:	-90.6466		
Mapname:	Eureka	Fips:	29189
County:	St. Louis	Mdnrreg:	St. Louis
Mdnrnum:	6	Drilldate:	0
Aban:	0	Plug:	0
Material:	Consolidated		
Form cd:	Not Reported		
Form id:	Not Reported		
Totdepth:	0	Grndelev:	0
Topseal:	Cement Grout	Botseal:	Cement Grout
Casedepth:	0	Casesize:	0

Casetype:	Steel		
Topcaseelv:	0		
Caseheight:	0	Outcasedep:	0
Outcasesiz:	0	Scrnlength:	-9999
Scrnsize:	-9999	Staticleve:	0
Yield:	0	Head:	0
Drawdown:	0	Pumptestda:	0
Pumptype:	Submersible	Pumpmanuf:	Not Reported
Pumpdepth:	0	Pumpcapaci:	0
Meter:	Y	Stdbypwr:	Not Reported
Voc:	N	Nitrate:	N
Chlor:	Not Reported	Filter:	Not Reported
Gwudisw:	Not Reported	Stappr:	Y
Surfdrain:	Not Reported	Entry:	Not Reported
Method:	PLSS	Accuracy:	0
Locstatus:	Not Verified	Verloc:	N
Lastupdate:	2002/06/18	Tweyrswa:	300
Welldist:	0	Site id:	MO6000000004833

9
SW
1/2 - 1 Mile
Lower

FED USGS USGS2484956

Agency cd:	USGS	Site no:	383354090390801
Site name:	T44N R03E 11CDA1		
Latitude:	383354	EDR Site id:	USGS2484956
Longitude:	0903908	Dec lat:	38.5650533
Dec lon:	-90.65234894	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	29
State:	29	County:	189
Country:	US	Land net:	Not Reported
Location map:	EUREKA	Map scale:	24000
Altitude:	570.00		
Altitude method:	Interpolated from topographic map		
Altitude accuracy:	5.		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	Lower Missouri, Missouri, Area = 1590 sq.mi.		
Topographic:	Valley flat		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	CST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	ST PETER SANDSTONE		
Well depth:	306	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1941-05-01	Ground water data end date:	1941-05-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1941-05-01	100	

B10
North
1/2 - 1 Mile
Lower

FED USGS **USGS2484858**

Agency cd:	USGS	Site no:	383507090383501
Site name:	T44N R03E 02ADA1		
Latitude:	383507	EDR Site id:	USGS2484858
Longitude:	0903835	Dec lat:	38.58533099
Dec lon:	-90.64318172	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	29
State:	29	County:	189
Country:	US	Land net:	Not Reported
Location map:	EUREKA	Map scale:	24000
Altitude:	751.00		
Altitude method:	Interpolated from topographic map		
Altitude accuracy:	5.		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	Lower Missouri. Missouri. Area = 1590 sq.mi.		
Topographic:	Hillside (slope)		
Site type:	Ground-water other than Spring	Date construction:	19360000
Date inventoried:	Not Reported	Mean greenwich time offset:	CST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	ST PETER SANDSTONE		
Well depth:	511	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1936-10-01	Ground water data end date:	1936-10-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1936-10-01	275	

B11
North
1/2 - 1 Mile
Lower

MO WELLS **MOLOG1000017844**

GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS

Id:	003888	Located:	Y
Notenough:	Not Reported	Scale:	24k
Locator:	Michael Lemon - Interpolated	Stname:	MISSOURI
Stabbrev:	MO	County:	ST. LOUIS
Utm x:	705287.46863		
Utm y:	4273232.56236		
Latitude:	38.58572		
Longitude:	-90.64314		
Qtr3:	NE	Qtr2:	SE
Qtr1:	NE		
Section:	2		
Tnsp:	44		
Tnspdir:	Not Reported		
Rng:	3		
Rngdir:	E		
Plssx:	704647		
Plssy:	4272995		
Location p:	146		
Elev:	751		
Idnum:	3888		
Swl:	275		
Quadrangle:	EUREKA	Site id:	MOLOG1000017844

Header Information:

Id:	003888	Well type:	Private Well
Agencyname:	GEOLOGICAL SURVEY (DGLS)	County:	ST. LOUIS
Fips:	189	Stname:	MISSOURI
Stabbrev:	MO	Qtr3:	NE
Qtr2:	SE	Qtr1:	NE
Section:	02	Tnsp:	44
Tnspdir:	N	Rng:	03
Rngdir:	E		
Latitude:	38.58572		
Longitude:	-90.64314		
Utm x:	705287.46863		
Utm y:	4273232.56236		
Quadmap na:	EUREKA	Ohio code:	38090E6
Limeas:	D	Scale:	24k
Locator:	Interpolated	Typelog1:	S
Typelog2:	Not Reported	Typelog3:	Not Reported
Ownerind:	0	Owner:	Schieble, J.F.
Leasenam:	Not Reported	Driller:	Clark Brothers
Drldate:	1936/10/01	Permit:	Not Reported
Logdate:	Not Reported	Logger:	Grohskopf
Elev:	751		
Elevbase:	S	Prodyld:	8
Gpmcfs:	G		
Depthbed:	60		
Sampsav:	0	Swla:	275
Swlb:	Not Reported		
Water at:	11-120', 470'		
Totdepth:	511	Formation :	FERN GLEN FORMATION
Formation1:	ST. PETER SANDSTONE		
Intcrdtp:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Intcrdbt:	0		
Drawdown:	Not Reported	Aquclass:	Not Reported
Confind:	0	Reldate:	Not Reported
Probind1:	Not Reported	Probind2:	Not Reported
Probind3:	Not Reported	Additional:	Not Reported
Alagncy1:	Not Reported	Add databa:	Not Reported
Addition 1:	Not Reported	Add data 1:	Not Reported
Alnum2:	Not Reported	Add data 2:	Not Reported
Add data 3:	Not Reported	Rmkind:	N
Remarks:	IN WOODS 0.45 MI W, 0.5 MI N OF TTR @ GROVER		
C total:	69	C plugind:	N
C remarks:	Not Reported		

Construction Information:

Id:	003888	Well type:	Private Well
Agencyname:	GEOLOGICAL SURVEY (DGLS)	Datecomp:	193610
Plugind:	N	Dateplug:	Not Reported
Casemat1:	Not Reported	Casemat2:	Not Reported
Cas1dpth:	69		
Cas1diam:	6.25		
Cas2dpth:	0		
Cas2diam:	0		
Cas3dpth:	0		
Cas3diam:	0		
Cas4dpth:	0		
Cas4diam:	0		
Inout1:	O	Typgrt1:	Not Reported
Typgrt2:	Not Reported	Typgrt3:	Not Reported
Mthgrout:	Not Reported	Rigtype:	Not Reported
Weltreat:	Not Reported	Rmkind:	Not Reported
Dateabnd:	Not Reported		
Plgdpt1b:	0		
Plgdpt1t:	0		
Multcase:	N		
Szcashol:	0		
Szbelcas:	0		
Slzscrn:	0		
Slotsize:	0		
Lenscrn:	0		
Typescrn:	Not Reported	Typedev:	Not Reported
Typepump:	Not Reported		
Pumpcap:	0		
Pumptdh:	0		
Pumpset:	0		
Typecomp:	Not Reported		
Perfintt:	0		
Perfintb:	0		
Oilprod:	Not Reported	Gasprod:	Not Reported
Tubepres:	Not Reported	Remarks:	Not Reported
Other data:	Not Reported	Formation :	FERN GLEN FORMATION
Formation1:	ST. PETER SANDSTONE		

Strata Information:

Id:	003888	Stratordr:	0
Fmtop:	125		
Fmbot:	511		
Formation :	MIDDLE ORDOVICIAN SERIES		
Primlith:	Not Reported		
Seclith:	Not Reported	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		

GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS

Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 003888 Stratordr: 0
Fmtop: 0
Fmbot: 60
Formation : NO SAMPLES
Primlith: Not Reported
Seclith: Not Reported Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 003888 Stratordr: 28400
Fmtop: 60
Fmbot: 110
Formation : MISSISSIPPIAN SYSTEM
Primlith: Not Reported
Seclith: Not Reported Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 003888 Stratordr: 35100
Fmtop: 110
Fmbot: 125
Formation : DEVONIAN SYSTEM
Primlith: Not Reported
Seclith: Not Reported Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 003888 Stratordr: 35200
Fmtop: 110
Fmbot: 125
Formation : UPPER DEVONIAN SERIES
Primlith: Not Reported
Seclith: Not Reported Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported

Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 003888 Stratordr: 35900
Fmtop: 110
Fmbot: 125
Formation : SULPHUR SPRINGS GROUP
Primlith: LIMESTONE
Seclith: SANDSTONE Minlith: Not Reported
Primmin: ZnS
Primocc: 1
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 003888 Stratordr: 36000
Fmtop: 110
Fmbot: 120
Formation : BUSHBERG SANDSTONE
Primlith: SANDSTONE
Seclith: LIMESTONE Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 003888 Stratordr: 36100
Fmtop: 120
Fmbot: 125
Formation : GLEN PARK LIMESTONE
Primlith: LIMESTONE
Seclith: CHERT Minlith: Not Reported
Primmin: ZnS
Primocc: 1
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 003888 Stratordr: 39000
Fmtop: 125
Fmbot: 511
Formation : ORDOVICIAN SYSTEM
Primlith: Not Reported
Seclith: Not Reported Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported

Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 003888 Stratordr: 40100
Fmtop: 125
Fmbot: 511
Formation : MOHAWKIAN SERIES
Primlith: Not Reported
Seclith: Not Reported Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 003888 Stratordr: 40100
Fmtop: 125
Fmbot: 511
Formation : MOHAWKIAN SERIES
Primlith: Not Reported
Seclith: Not Reported Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 003888 Stratordr: 40100
Fmtop: 125
Fmbot: 511
Formation : MOHAWKIAN SERIES
Primlith: Not Reported
Seclith: Not Reported Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 003888 Stratordr: 40200
Fmtop: 125
Fmbot: 190
Formation : KIMMSWICK LIMESTONE
Primlith: LIMESTONE
Seclith: CHERT Minlith: Not Reported
Primmin: ZnS
Primocc: 1
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported

Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	003888	Stratordr:	40300
Fmtop:	190		
Fmbot:	220		
Formation :	DECORAH GROUP		
Primlith:	LIMESTONE		
Seclith:	SHALE	Minlith:	CHERT
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	003888	Stratordr:	41000
Fmtop:	220		
Fmbot:	340		
Formation :	PLATTIN LIMESTONE		
Primlith:	LIMESTONE		
Seclith:	CHERT	Minlith:	SHALE
Primmin:	ZnS		
Primocc:	1		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	003888	Stratordr:	42100
Fmtop:	335		
Fmbot:	340		
Formation :	BRICKEYS MEMBER		
Primlith:	LIMESTONE		
Seclith:	Not Reported	Minlith:	SHALE
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	003888	Stratordr:	42800
Fmtop:	340		
Fmbot:	465		
Formation :	JOACHIM DOLOMITE		
Primlith:	DOLOMITE		
Seclith:	SHALE	Minlith:	SAND
Primmin:	ZnS		
Primocc:	4		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		

Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	003888	Stratordr:	43900
Fmtop:	465		
Fmbot:	511		
Formation :	ST. PETER SANDSTONE		
Primlith:	SANDSTONE		
Seclith:	Not Reported	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	003888	Stratordr:	99900
Fmtop:	511		
Fmbot:	511		
Formation :	TOTAL DEPTH		
Primlith:	Not Reported		
Seclith:	Not Reported	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

12
NE
1/2 - 1 Mile
Lower

MO WELLS **MOLOG1000017799**

Id:	024942	Located:	Y
Notenough:	Not Reported	Scale:	24k
Locator:	Michael Lemon - Interpolated	Sname:	MISSOURI
Stabbrev:	MO	County:	ST. LOUIS
Utm x:	706605.75006		
Utm y:	4272807.49987		
Latitude:	38.58159		
Longitude:	-90.62814		
Qtr3:	NE	Qtr2:	NW
Qtr1:	SE		
Section:	1		
Tnsp:	44		
Tnspdir:	Not Reported		
Rng:	3		
Rngdir:	E		
Plssx:	706274		
Plssy:	4272975		
Location p:	147		
Elev:	752		
Idnum:	24942		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Swl:	308		
Quadrangle:	EUREKA	Site id:	MOLOG1000017799

Header Information:

Id:	024942	Well type:	Private Well
Agencyname:	GEOLOGICAL SURVEY (DGLS)	County:	ST. LOUIS
Fips:	189	Stname:	MISSOURI
Stabbrev:	MO	Qtr3:	NE
Qtr2:	NW	Qtr1:	SE
Section:	01	Tnsp:	44
Tnspdir:	N	Rng:	03
Rngdir:	E		
Latitude:	38.58159		
Longitude:	-90.62814		
Utm x:	706605.75006		
Utm y:	4272807.49987		
Quadmap na:	EUREKA	Ohio code:	38090E6
Limeas:	D	Scale:	24k
Locator:	Interpolated	Typelog1:	S
Typelog2:	Not Reported	Typelog3:	Not Reported
Ownerind:	0	Owner:	Wilson, Donald J.
Leasenam:	Not Reported	Driller:	St. Charles Drlg Co
Drldate:	1966/10/21	Permit:	Not Reported
Logdate:	1968/10/01	Logger:	Thacker, J.
Elev:	752		
Elevbase:	S	Prodyld:	25
Gpmcfs:	G		
Depthbed:	65		
Sampsav:	0	Swla:	308
Swlb:	Not Reported		
Water at:	220-230',465',480-495', 555',565'		
Totdepth:	565	Formation :	BURLINGTON LIMESTONE
Formation1:	ST. PETER SANDSTONE		
Intcrdtp:	0		
Intcrdbt:	0		
Drawdown:	Not Reported	Aquclass:	Not Reported
Confind:	0	Reldate:	Not Reported
Probind1:	Not Reported	Probind2:	Not Reported
Probind3:	Not Reported	Additional:	Not Reported
Alagncy1:	Not Reported	Add databa:	Not Reported
Addition 1:	Not Reported	Add data 1:	Not Reported
Alnum2:	Not Reported	Add data 2:	Not Reported
Add data 3:	Not Reported	Rmkind:	N
Remarks:	NEAR GLENCOE - CHERRY HILLS		
C total:	125	C plugind:	N
C remarks:	Not Reported		

Construction Information:

Id:	024942	Well type:	Private Well
Agencyname:	GEOLOGICAL SURVEY (DGLS)	Datecomp:	196610
Plugind:	N	Dateplug:	Not Reported
Casemat1:	Not Reported	Casemat2:	Not Reported
Cas1dpth:	125		
Cas1diam:	5.5		
Cas2dpth:	0		
Cas2diam:	0		
Cas3dpth:	0		
Cas3diam:	0		

GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS

Cas4dpth:	0		
Cas4diam:	0		
Inout1:	O	Typgrt1:	Not Reported
Typgrt2:	Not Reported	Typgrt3.	Not Reported
Mthgrout:	Not Reported	Rigtype:	Not Reported
Weltreat:	Not Reported	Rmkind:	Not Reported
Dateabnd:	Not Reported		
Plgdpt1b:	0		
Plgdpt1t:	0		
Multcase:	N		
Szcashol:	0		
Szbelcas:	0		
Sizscrn:	0		
Slotsize:	0		
Lenscrn:	0		
Typescrn:	Not Reported	Typedev:	Not Reported
Typepump:	Not Reported		
Pumpcap:	0		
Pumptdh:	0		
Pumpset:	0		
Typecomp:	Not Reported		
Perfintt:	0		
Perfintb:	0		
Oilprod:	Not Reported	Gasprod:	Not Reported
Tubepres:	Not Reported	Remarks:	Not Reported
Other data:	Not Reported	Formation :	FERN GLEN FORMATION
Formation1:	ST. PETER SANDSTONE		

Strata Information:

Id:	024942	Stratordr:	0
Fmtop:	200		
Fmbot:	565		
Formation :	MIDDLE ORDOVICIAN SERIES		
Primlith:	Not Reported		
Seclith:	Not Reported	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	024942	Stratordr:	0
Fmtop:	0		
Fmbot:	65		
Formation :	NO SAMPLES		
Primlith:	Not Reported		
Seclith:	Not Reported	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		

Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 024942 Stratordr: 0
Fmtop: 85
Fmbot: 125
Formation : NO SAMPLES
Primlith: Not Reported
Seclith: Not Reported Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 024942 Stratordr: 28400
Fmtop: 65
Fmbot: 185
Formation : MISSISSIPPIAN SYSTEM
Primlith: Not Reported
Seclith: Not Reported Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 024942 Stratordr: 32300
Fmtop: 65
Fmbot: 85
Formation : BURLINGTON LIMESTONE
Primlith: LIMESTONE
Seclith: CHERT Minlith: DOLOMITE
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: SAMPLES MISSING

Strata Information:
Id: 024942 Stratordr: 32300
Fmtop: 65
Fmbot: 85
Formation : BURLINGTON LIMESTONE
Primlith: LIMESTONE
Seclith: CHERT Minlith: DOLOMITE
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported

Minrocc: 0
Rmk20: SAMPLES MISSING

Strata Information:
Id: 024942 Stratordr: 33400
Fmtop: 125
Fmbot: 185
Formation : FERN GLEN FORMATION
Primlith: CHERT
Seclith: LIMESTONE Minlith: SHALE
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 024942 Stratordr: 35100
Fmtop: 185
Fmbot: 200
Formation : DEVONIAN SYSTEM
Primlith: Not Reported
Seclith: Not Reported Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 024942 Stratordr: 35200
Fmtop: 185
Fmbot: 200
Formation : UPPER DEVONIAN SERIES
Primlith: Not Reported
Seclith: Not Reported Minlith: Not Reported
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported
Minrocc: 0
Rmk20: Not Reported

Strata Information:
Id: 024942 Stratordr: 36000
Fmtop: 185
Fmbot: 200
Formation : BUSHBERG SANDSTONE
Primlith: SANDSTONE
Seclith: Not Reported Minlith: LIMESTONE
Primmin: Not Reported
Primocc: 0
Secmin: Not Reported
Secocc: 0
Minrmin: Not Reported

Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	024942	Stratordr:	39000
Fmtop:	200		
Fmbot:	565		
Formation :	ORDOVICIAN SYSTEM		
Primlith:	Not Reported		
Seclith:	Not Reported	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	024942	Stratordr:	40100
Fmtop:	200		
Fmbot:	565		
Formation :	MOHAWKIAN SERIES		
Primlith:	Not Reported		
Seclith:	Not Reported	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	024942	Stratordr:	40100
Fmtop:	200		
Fmbot:	565		
Formation :	MOHAWKIAN SERIES		
Primlith:	Not Reported		
Seclith:	Not Reported	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	024942	Stratordr:	40100
Fmtop:	200		
Fmbot:	565		
Formation :	MOHAWKIAN SERIES		
Primlith:	Not Reported		
Seclith:	Not Reported	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		

GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS

Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	024942	Stratordr:	40200
Fmtop:	200		
Fmbot:	295		
Formation :	KIMMSWICK LIMESTONE		
Primlith:	LIMESTONE		
Seclith:	CHERT	Minlith:	SHALE
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	024942	Stratordr:	40300
Fmtop:	295		
Fmbot:	320		
Formation :	DECORAH GROUP		
Primlith:	LIMESTONE		
Seclith:	SAND	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	024942	Stratordr:	41000
Fmtop:	320		
Fmbot:	455		
Formation :	PLATTIN LIMESTONE		
Primlith:	LIMESTONE		
Seclith:	DOLOMITE	Minlith:	SHALE
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	024942	Stratordr:	42800
Fmtop:	455		
Fmbot:	560		
Formation :	JOACHIM DOLOMITE		
Primlith:	DOLOMITE		
Seclith:	SHALE	Minlith:	SAND
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	024942	Stratordr:	43900
Fmtop:	560		
Fmbot:	565		
Formation :	ST. PETER SANDSTONE		
Primlith:	SANDSTONE		
Seclith:	Not Reported	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

Strata Information:

Id:	024942	Stratordr:	99900
Fmtop:	565		
Fmbot:	565		
Formation :	TOTAL DEPTH		
Primlith:	Not Reported		
Seclith:	Not Reported	Minlith:	Not Reported
Primmin:	Not Reported		
Primocc:	0		
Secmin:	Not Reported		
Secocc:	0		
Minrmin:	Not Reported		
Minrocc:	0		
Rmk20:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: MO Radon

Radon Test Results

Zipcode	Test Date	Result
63040	01/31/09	5.6
63040	04/15/08	1.8
63040	03/07/08	< 0.3
63040	03/10/09	1.3
63040	03/16/09	5
63040	08/17/05	1

Federal EPA Radon Zone for ST. LOUIS County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1996. Prior to August 1996, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Missouri Public Drinking Water Wells
Source: Department of Natural Resources
Telephone: 573-526-5448

OTHER STATE DATABASE INFORMATION

Oil and Gas Well Database
Source: Department of Natural Resources
Telephone: 573-368-2143

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

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Benjamin K. Butterfield

Staff Scientist

Professional Summary

Mr. Butterfield joined SCI's Natural Resource Group in June 2011 to provide wetland delineation services, including field work and report writing. Mr. Butterfield also conducts Phase One Environmental Site Assessments (Phase One ESA), conducts environmental Phase Two drilling, and geotechnical drilling. Mr. Butterfield is also responsible for producing Phase One reports, and produces Stormwater Pollution Prevention Plans (SWPPP) as well as conducting the monitoring of stormwater sites.

His previous experience includes serving as a Research Intern for Taylor University's Environmental Sciences Department. In this capacity, he collected data on a hardwoods reforestation project and an interseeding prairie restoration project.

Education

M.S., Environmental Science, Taylor University, 2011

B.S., Environmental Science, Taylor University, 2010

Project Experience

- **Grissom Air Base** [Cass and Miami County, Indiana] –Assisted with a wetland and waterbody exploration of the Grissom Air Reserve Base (ARB) project site and preparation of a report summarizing the condition of all wetlands and waterbodies identified within the project site. The proposed project involved the demolition and removal of an abandoned runway, the installation of pipes in open ditch areas, and road widening and other improvements around an existing ammunition storage area.

- **Keystone XL Pipeline** [Montana, South Dakota, Nebraska] – Lead teams along the projected pipeline path to identify areas containing streams, wetlands, threatened and endangered species and habitats, and noxious (invasive) flora.

- **Missouri Bluffs Apartments** [St. Charles County, Missouri] – Conducted a biological exploration for the proposed apartment complex. Responsibilities included a field exploration of the project site to investigate any wetlands or waterbodies that would be regulated by the US Army Corps of Engineers, GPS data collection using a Trimble handheld GPS units, and preparation of a formal report to the client. Assisted the client with permitting processing through the US Army Corps of Engineers.

- Isla del Sol [Miller County, Missouri] – Conducted a compliance investigation in response to a FERC order issued to a developer, and was in charge of documenting proper boat dock installation and lighting, as well as fish habitat and shoreline vegetation mitigation areas. Field investigation included photo documentation of docks and mitigation areas, as well as identification of vegetative species and recommendations on proper species mixes to allow for better vegetative establishment on site. A report on these findings was produced following field investigation.

- **Forest Lakes Development** – [St. Clair County, Illinois] – Developed a SWPPP. Created the written SWPPP prescribing measures for slope and erosion stabilization on site. These included the establishment of native vegetation to provide permanent stabilization. Conducted site investigations of erosion control procedures including the establishment of vegetative cover for slope stabilization.

- **Jefferson Barracks VA Medical Center** – [Jefferson Barracks, Missouri] – Conducted an environmental site assessment to document current site conditions. Produced a Phase One ESA report, which included a review of historical information related to the subject site as well as determinations about current and historic uses of the site as they relate to potential Recognized Environmental Conditions.

- **Bunkum Road (FAU 9160)** – [Caseyville, Illinois] – Conducted a limited subsurface investigation associated with a Phase Two ESA. Logged borings and collected soil samples to be analyzed in an environmental laboratory for metals and hazardous substances.

Karl E. Ruhmann, P.E., R.G.

Vice President, Director of Environmental Services

Professional Summary

Mr. Ruhmann joined SCI Engineering in 1986 and has since performed environmental engineering services at facilities throughout the Midwest. He oversees all aspects of the Environmental Services Group, which includes the performance of Phase I and Phase II Environmental Assessments, Phase I and Phase II Archaeological Surveys, Environmental Impact Statements, Categorical Exclusions, Underground Storage Tank (UST) removal monitoring and surveys, corrective action plans, asbestos and lead-based paint surveys, mold investigations, and NPDES permitting and reporting. Mr. Ruhmann's extensive experience and technical expertise is primarily focused in the following areas:

- Project management of Phase I Environmental Site Assessments at multiple concurrent sites
- Generation and monitoring of remedial action strategies for clean-up of impacted soil and groundwater
- Performance of extensive and intrusive environmental investigations of industrial/commercial sites
- Mold assessments of various commercial structures

Education

B.S., Petroleum Engineering, University of Missouri – Rolla, 1984

Mold Assessment and Remediation in Buildings, 2002

NEPA and the Transportation Decision Making Process, 2002

Risk-Based Decision-Making: Getting Contaminated Property Deals Done, 2000

Leadership Training for Managers, Dale Carnegie Training, 1998

Registrations and Certifications

Professional Engineer
Missouri 025122 (1991)
Illinois 062-047498 (1991)

Registered Geologist
Missouri 2003029665 (2003)

OSHA 40-Hour Hazardous Waste Operations and Emergency Response (HAZWOPER)

Affiliations

Association of Engineering Geologists

Home Builders Association, Board of Directors

American Council of Engineering Companies – Missouri

Project Experience

Project Management/Oversight

- **The Streets of St. Charles at Noah's Ark** [St. Charles, MO] – Provided a full suite of environmental services for one of the largest redevelopment projects in the St. Louis area, and one of the most unique mixed-use developments in Missouri.
- **Missouri Department of Transportation, Statewide Hazardous Waste Services** [Statewide, Missouri] – Indefinite delivery/indefinite quantity contract to provide environmental services including contamination/UST services and asbestos abatement/air monitoring services. This contract was awarded in 2006, and is on-going (2008). To date, SCI has provided services for seven projects in District 6.
- **Missouri Department of Transportation, On-Call Environmental Services** [Statewide, Missouri] – Indefinite delivery/indefinite quantity contract to provide state-wide on call environmental consulting services. Contract was awarded in 2008 and is on-going.
- **Missouri Department of Natural Resources – Statewide PACE Contract** [Statewide, Missouri] – Indefinite delivery/indefinite quantity contract to provide third party project monitoring for abatement/remediation projects and analysis of environmental samples for asbestos, lead, and mold. This contract was awarded in 2008.
- **MLK Plaza** [St. Louis, MO] – Multi-discipline services for a new retail development on a 4.5-acre site which features a 45,000-square-foot shopping center anchored by a grocery store.
- **Gaslight Square** [St. Louis, MO] – Performed numerous environmental services for this mixed-

use redevelopment project. Received the Grand Award for brownfield work at this site from ACEC-MO, and subsequently achieved National Finalist status in the Engineering Excellence Awards also sponsored by ACEC.

- **Botanical Heights** [St. Louis, MO] – Performed various environmental consulting services for this project, which is one of the largest urban redevelopment projects in St. Louis.
- **Walgreens at Kingshighway and Natural Bridge Road** [St. Louis, MO] – Phase One ESA, UST removal monitoring and closure services and asbestos survey were performed for two abandoned service stations. This site had previously been looked at by others for redevelopment, but its environmental condition was a limiting factor. SCI was able to demonstrate that the site was able to be closed with no remediation via Risk-Based Corrective Action.

Cellular Towers

Mr. Ruhmann's extensive experience and technical expertise is primarily focused in the following areas for cellular communication construction:

- Phase I and II Environmental Site Assessments
- NEPA Checklists
- Performance of training sessions on assessment strategies and view shed methodologies for new and existing clients
- Coordination of the performance of combined geotechnical, environmental, and archaeological services
- View Shed Analysis
- Technical review of environmental and archaeological reports

- **Cingular Wireless, Bechtel Corporation, Nextel Communications, Sprint PCS** [St. Louis and outlying areas, MO] – Project Manager for more than 150 cellular communication tower projects from 1999 – 2002, performing all above-mentioned services.

SCI ENGINEERING, INC.
130 Point West Boulevard
St. Charles, Missouri 63301
636-949-8200 Fax 636-949-8269
www.sciengineering.com

April 26, 2013

Mr. Jeff Boland
Lombardo Homes St. Louis
2299 Technology Drive
O'Fallon, Missouri 63368

RE: Limited Phase Two Environmental Site Assessment Report
Stone Mill
Wildwood, Missouri
SCI No. 2013-0121.21

Dear Mr. Boland:

INTRODUCTION

SCI Engineering, Inc. (SCI) is pleased to submit this summary of Limited Phase Two Environmental Site Assessment (Limited Phase Two) activities at the above-referenced site (subject site or site).

The purpose of our Limited Phase Two was to evaluate for the presence of widespread impact to the soil and/or groundwater on the site from the recognized environmental conditions (RECs) identified during SCI's Phase One Environmental Site Assessment (Phase One) of the subject site, dated March 8, 2013. These RECs were as follows:

- Two former USTs on the subject site removed in 1992;
- One 2,000-gallon diesel fuel AST on the subject site;
- Two 6,800 liquid asphalt storage tanks on the subject site; and
- Former roadway de-icing salt storage on the subject site, including a 10,000 gallon liquid salt AST.

SCI was notified on March 12, 2013 that the geotechnical investigation of the subject site, conducted by others, was occurring on that day. SCI contacted Jacobi Engineering, the geotechnical engineer, and coordinated two additional borings in an attempt to screen for impact from the above-referenced concerns. SCI obtained the soil samples from the geotechnical borings and screened these samples with a PID, and some detections were noted. SCI mobilized to the site on March 13, 2013 to observe the location of the geotechnical borings. During that visit, SCI noted a petroleum odor in the borehole cuttings of Boring 4, which was advanced in the vicinity of the former UST. It was also noted that the Boring 5 was not advanced in the vicinity of the liquid salt AST, as requested. Therefore, SCI recommended that these issues be further addressed. Based on the lack of evidence of widespread impact to the subject site from the other concerns, SCI no longer considers these issues to represent RECs.

SCOPE OF SERVICE

Geoprobe Activities

On April 15, 2013, a Geo-Probe system was utilized to hydraulically drive 2.5-inch diameter stainless steel probes at two locations on site. Specifically, boring SCI-1 was advanced to a depth of 18.5 feet below the ground surface (bgs) adjacent to a former underground storage tank (UST) pit. Boring SCI-1 was terminated at a depth of 18.5 feet bgs due to probe refusal. Boring SCI-2 was advanced beneath the former location of a liquid salt aboveground storage tank (AST). Boring SCI-2 was terminated at 13 feet bgs due to probe refusal. A map depicting the locations of the borings is enclosed as Appendix A.

Soil samples were continuously collected throughout the depth of each probe advancement. Soil samples were screened on approximate 2-foot vertical intervals using a photo-ionization detector (PID) which is capable of detecting variations in concentrations of various organic trace gases. This sampling protocol and subsequent screening process aided in determining if soil impact was present. Minor PID readings were encountered in SCI-1. The sample near the highest PID reading (0 to 2 feet bgs) was collected for analytical testing. Boring SCI-2 was advanced in the vicinity of a former liquid salt AST to screen for saline soils. However, SCI also screened the soil samples from this boring with the PID meter. Minimal readings were encountered, which SCI does not consider indicative of impact to the subsurface.

In addition to soil samples, a temporary piezometer was set in SCI-1 at a depth of 18.5 feet bgs, in an attempt to collect groundwater samples. This piezometer did not produce groundwater initially, however, SCI returned to the site approximately 48 hours after the piezometer was installed. A groundwater sample was collected successfully at that time. SCI collected the groundwater sample from the SCI-1 location using a disposable polyethylene bailer.

Analytical Testing

The soil and groundwater sample collected from the boring SCI-1 was analyzed for total petroleum hydrocarbons-gasoline range organics (TPH-GRO) and volatile organic compounds (VOCs) by U.S. EPA method 8260, and total petroleum hydrocarbons diesel range organics/oil range organics (TPH-DRO/ORO) by EPA Method 8270. Laboratory results of detected constituents in the soil sample are summarized and compared to the Missouri Department of Natural Resources (MDNR) Default Target Levels (DTLs) in Table 1. The DTLs are the most conservative target levels established by the MDNR and are based on unrestricted land use. Analytical results which exceeded the DTLs or background concentrations would be compared to the Tier One Risk-Based Target Levels (RBTLs) for the anticipated routes of exposure; however, no detected analytes exceeded the DTLs in soil. Laboratory results of detected constituents in the groundwater sample collected from SCI-1 are summarized and compared to the MDNR DTLs and Tier 1 RBTLs.

Table 1 – Detected Analytical Results for Soil

Constituents	Sample ID (depth)	Remediation Objectives		
	SCI-1 (2')	DTL[1]	RBTL[2]	RBTL[3]
TPH-DRO	3,400	1,110	1,720	37,200
1,2,3,-Trimethylbenzene	0.00099	NPV	---	---
Acetone	0.029	4.2	---	---
Toluene	0.0025	29.8	---	---
TPH-GRO	0.37	41.2	---	---

Notes: All results are in mg/kg or parts per million.
NPV – no published value
Shaded areas represent an exceednace of MDNR DTLs
Bolded concentrations represent an exceedance of Tier I RBTLs
[1]Missouri Risk-Based Corrective Action (10-CSR 25-18) Lowest Default Target Levels – All Soil Types and All Pathways.
[2]Missouri Risk-Based Corrective Action (10-CSR 25-18) Risk-Based Target Level Residential Land Use Soil Type 1, cumulative exposure pathway.
[3]Missouri Risk-Based Corrective Action (10-CSR 25-18) Risk-Based Target Level Construction Worker Exposure Soil Type 1, cumulative exposure pathway

As detailed in Table 1, above, none of the detected analytes in the soil sample collected from boring SCI-1 were in excess of the associated MRBCA DTLs, with the exception of the concentration of TPH-DRO. This level also exceeded the associated Tier 1 RBTL for surficial soil, cumulative exposure pathway, which is reflective of exposure via the indoor inhalation, ingestion, and dermal contact pathway. Based on this exceedance, this area of impact would not be suitable for use within a residential development. At this time, the horizontal and vertical extent of impact is unknown, but could be determined if more sampling is conducted. Impacted materials on the subject site would likely need to be removed and disposed of off-site. Additionally, MDNR offers regulatory oversight of remedial activities through their Brownfields/Voluntary Cleanup Program (B/VCP). If the site were to go through this program, a "No Further Action" (NFA) letter may be obtained, which would indicate that the remedial activities were conducted to the satisfaction of the state regulatory agency. SCI would be pleased to assist you with this process.

SCI further compared the detected concentration of TPH-DRO to the permissible construction worker exposure RBTL, and as detailed in Table 1, above, the detected concentration did not exceed this RBTL.

Table 2 – Detected Analytical Results for Groundwater

Constituents	Sample ID (depth)	Remediation Objectives	
	SCI-1	DTL[1]	RBTL[2]
TPH-DRO	0.440	.172	82.9
TPH-ORO	0.424	.469	---
Acetone	0.0362	2.97	---

Notes: All results are in mg/L or parts per million.
[1]Missouri Risk-Based Corrective Action (10-CSR 25-18) Lowest Default Target Levels – All Soil Types and All Pathways.
[2]Missouri Risk-Based Corrective Action (10-CSR 25-18) Risk-Based Target Level Residential Land Use Soil Type 1, Indoor Inhalation Pathway.

As detailed in Table 2, above, the concentration of TPH-DRO detected in the groundwater sample collected from SCI-1 was in excess of the MDNR DTL for this compound. The DTL for TPH-DRO is associated with the domestic use of groundwater exposure route, which is typically associated with the use of groundwater for potable purposes. In order to ensure that groundwater consumption does not occur on the subject site, a deed restriction may be deemed necessary. MDNR B/VCP oversight would likely be required to obtain such a restriction. SCI assumes that water supplied to the proposed development will be provided by municipal utilities, and that drinking water wells will not be installed on the subject site. Therefore, SCI compared this concentration to the Tier 1, Soil Type 1, RBTL for residential land use, indoor inhalation pathway. The concentration of TPH-DRO was below the RBTL for the indoor inhalation exposure route, and therefore, SCI does not consider this concentration to represent a concern to the subject site, due to the fact that the exposure route associated with the DTL is not complete on the subject site.

Two soil samples were collected from the boring SCI-2, advanced in the vicinity of the former liquid salt AST. These samples were analyzed for conductivity, which was then compared the sample results to USDA published values for soil salinity, which are determined by comparing conductivity of a soil sample to a salinity level. The results of the analysis are contained in Table 2.

Table 3 – Detected Analytical Results for Soil

Constituents	Sample ID (depth)		Soil Salinity Classes[1]				
	SCI-2 (1')	SCI-2 (3')	Nonsaline	Very Slightly Saline	Slightly Saline	Moderately Saline	Strongly Saline
Specific Conductance	2.36	2.86	0 – 2.0	2.0 – 4.0	4.0 – 8.0	8.0 – 16.0	>16.0

Notes: All results are in millimhos per centimeter (mmhos/cm^{-1}).
[1]Soil Salinity Classification as published by USDA HortNote No. 5, 2002.

As detailed in Table 3, above, the salinity classification of the soil sampled on the subject site falls into the Very Slightly Saline Category. Due to the low salinity rating of the on-site soils, SCI considers it unlikely that impact from the former on-site salt storage will have negative impacts on the proposed development.

CONCLUSIONS AND RECOMMENDATIONS

Based upon review of the analytical results, SCI makes the following conclusions:

- No TPH-DRO/ORO, TPH-GRO, or VOC impact was encountered at levels exceeding the MDNR DTLs with the exception of TPH-DRO in the soil and groundwater sample collected from SCI-1.
- The conductivity analysis and salinity comparison revealed that very slightly saline soils are present on the subject site.

As discussed above, the TPH-DRO concentration in the groundwater sample does not represent a concern due to the fact that this concentration is below the RBTL for the applicable exposure route on the subject site. However, the concentration of TPH-DRO in the soil sample collected from boring SCI-1 was in excess of the associated Tier 1, Soil Type 1, RBTL for the cumulative exposure pathway. As previously mentioned, based on this exceedance, this area of impact is not suitable for use within a residential development. At this time, the full horizontal and vertical extent of impact is unknown; however, this information could be determined through additional sampling activities, as SCI recommends that the

impacted material be excavated and disposed of off-site. Should regulatory oversight be desired, the MDNR B/VCP offers such oversight of remedial activities, and provided the site is cleanup up to MDNR's satisfaction, an NFA letter may be obtained. SCI has provided consulting services for numerous B/VCP sites and is very familiar with the process. Should regulatory oversight on this project be desired, SCI would be pleased to assist you.

SCI does not consider the presence of very slightly saline soil on the subject site to pose a significant risk to the planned development on the subject site, and therefore, SCI no longer considers the presence of the former liquid salt AST to represent an REC.

LIMITATIONS

This report has been prepared for the exclusive use of Lombardo Homes of St. Louis, and their lenders (if applicable). SCI is not responsible for independent conclusions or recommendations made by others. The services performed and opinions expressed herein are consistent with other environmental consulting firms in this geographic area. The findings of this report are valid as of the present date of the assessment.

Changes in surface and subsurface conditions of a property can occur with the passage of time, whether due to natural processes or the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards may occur, whether they result from legislation, the broadening of knowledge, or other reasons. Accordingly, the findings of this report may be invalidated in whole or in part by changes outside our control.

No subsurface exploration can completely reveal conditions below the ground surface. Depending upon the sample spacing and frequency, every soil and groundwater condition may not be observed and some materials, stratums, or conditions present in the subsurface may not be observed. Furthermore, changes in groundwater elevation can result in changed in dissolved concentrations.

SCI should be contacted with any known or suspected variations from the conditions described herein. If further development of this site indicates the presence of hazardous, toxic, or petroleum materials, or other concerns of an environmental nature, SCI should be notified to perform a re-evaluation of the environmental conditions.

SCI appreciates the opportunity to be of continued service to you on your project. If you have any questions or require further clarification, please contact us at (636) 949-8200.

Respectfully,

SCI ENGINEERING, INC.

Benjamin K. Butterfield
Staff Scientist

Karl E. Ruhmann, P.E., R.G.
Vice President

BKB/KER/rah

Enclosures

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SCI ENGINEERING, INC.

CONSULTANTS IN DEVELOPMENT,
DESIGN AND CONSTRUCTION
GEOTECHNICAL
ENVIRONMENTAL
NATURAL RESOURCES
CULTURAL RESOURCES
CONSTRUCTION SERVICES

March 15, 2013

Mr. Jeff Boland
Lombardo Homes St. Louis
2299 Technology Drive
O'Fallon, Missouri 63368

RE: Limited Phase Two Environmental Site Assessment Proposal - Revised
Stone Mill
Wildwood, Missouri
SCI No. 2013-0121.21

Dear Mr. Boland:

INTRODUCTION

SCI Engineering, Inc. (SCI) is pleased to submit this proposal for environmental consulting services at the above-referenced site. The subject site is currently undeveloped but was formerly used as a Missouri Department of Transportation (MODOT) truck facility. SCI is currently performing a Phase One Environmental Site Assessment of this property. As of the date of this proposal, the following recognized environmental conditions have been identified:

- Two former USTs on the subject site removed in 1992;
- One 2,000-gallon diesel fuel AST on the subject site;
- Two 6,800 liquid asphalt storage tanks on the subject site; and
- Former roadway de-icing salt storage on the subject site, including a 10,000 gallon liquid salt AST.

SCI was notified on March 12, 2013 that the geotechnical investigation of the subject site, conducted by others, was occurring on that day. SCI contacted Jacobi Engineering, the geotechnical engineer, and coordinated two additional borings to attempt to screen for impact from the above-referenced concerns. SCI obtained the soil samples from the geotechnical borings and screened these samples with a PID, and some detections were noted. SCI mobilized to the site on March 13, 2013 to observe the location of the geotechnical borings. During that visit, SCI noted a petroleum odor in the borehole cuttings of Boring 4, which was advanced in the vicinity of the former UST. It was also noted that the Boring 5 was not advanced in the vicinity of the liquid salt AST, as requested. Therefore, SCI recommends that these issues be further addressed. Based on the lack of evidence of widespread impact to the subject site from the other concerns, SCI no longer considers these issues to represent RECs.

The purpose of this proposal will be to evaluate the presence of large-scale impact to the soil and groundwater on the subject site due to these conditions.

SCOPE OF SERVICE

For the purpose of this proposal, SCI has identified four key project elements. The elements are listed below and detailed in the following sections:

- Soil Sampling
- Groundwater Sampling
- Analytical Testing
- Formal Report

Soil Sampling

SCI will advance one boring in the vicinity of the former USTs on the subject site. A Geoprobe system will be used to hydraulically drive two 2½-inch diameter stainless steel probes to a depth of 5 feet below the observed perched groundwater zone [approximately 25 feet below the ground surface (bgs)] at the selected locations. The proposed location of this boring is depicted on the attached sketch.

Soil samples will be continuously collected throughout the depth of each probe advancement. Soil samples will be retrieved using a closed-point type, large bore sampler assembly which requires a 2½-inch diameter by 4-foot long soil core in an acetate sleeve sample liner.

Each soil sample retrieved will be screened on approximate 2-foot vertical intervals using a photo-ionization detector (PID). This PID is capable of detecting variations in concentrations of organic trace gases, including aromatic petroleum hydrocarbons. This sampling protocol and subsequent screening process will aid in determining the vertical extent of soil impact, if present.

The soil sample with the highest PID reading from the boring will be submitted for analytical testing. If no PID readings are encountered during probe advancement, SCI will submit the soil sample from directly above the perched groundwater zone observed during drilling. If no groundwater is observed, SCI will submit the deepest soil sample for analysis.

To address the concerns regarding the former salt storage on the subject site, SCI will advance one boring in the vicinity of the former liquid salt AST. The proposed location of this boring is depicted on the attached sketch. Two soil samples will be collected from the boring and analyzed for soil salinity.

Decontamination procedures will consist of washing all sampling equipment in a solution of tap water and laboratory grade detergent (liquinox) followed by tap water rinse and double rinse with distilled water.

As part of the proposed scope, SCI will notify Missouri One-Call to locate public utilities. You will be responsible to locate all private utilities or structures. As such, SCI will not be responsible for damage to any unmarked or unknown utilities or structures.

Groundwater Sampling

SCI proposes to install a piezometer in the soil boring located in the vicinity of the former USTs. When the targeted soil boring depth is reached, the piezometer will be installed. The piezometer will be constructed of a Schedule 40 PVC (polyvinyl chloride) riser and screen. The screened interval is anticipated to be 10-slot (0.010-inch) for a 10-foot interval.

The piezometer will be emplaced such that the screen extends approximately 5 feet below the groundwater level observed at the time of drilling. SCI will attempt to collect a representative water sample at the time of piezometer installation. However, should groundwater not be present on the date of drilling, SCI will return periodically in attempt to collect a groundwater sample. As soon as the water sample is collected, the piezometers will be removed and the remaining void space will be filled with bentonite. The surface will be repaired as appropriate. Water samples will be transported to the laboratory in chilled containers.

Analytical Testing

The soil and groundwater samples from the boring advanced in the vicinity of the former USTs will be analyzed for total petroleum hydrocarbons-gasoline range organics (TPH-GRO) by U.S. EPA method 8260, total petroleum hydrocarbons – diesel range organics (TPH-DRO/ORO) by U.S. EPA method 8270, and volatile organic compounds (VOCs) by U.S. EPA method 8260.

Two samples will be collected from the boring advanced in the vicinity of the former liquid salt AST. These samples will be analyzed for soil salinity.

Formal Report

Results of the scope of work outlined in this proposal will be reviewed by the project manager. SCI's findings and recommendations will be presented in a formal report. The report will include a description of sampling methods, laboratory data, a site plan, and all supporting data.

ESTIMATED SCHEDULE

SCI will require three to four weeks from authorization to complete the project. Preliminary results will be available two weeks after sample submittal to the laboratory and the report will be completed one week later. However, for an additional fee of **$750.00**, SCI can initiate a rapid turnaround assessment of the site, allowing for issuance of a formal report within two weeks from authorization (report status can be relayed by letter as available). The additional fee for a rapid turnaround assessment discussed above is reflective of premiums for reporting and laboratory analysis. If you elect this option, please make a notation on the enclosed *Acceptance of Proposal for Professional Services* sheet.

SERVICE FEE

SCI will perform this study as detailed herein for a fee of **$3,100.00**. If, during the course of this exploration, SCI has reason to believe the actual fee for services could exceed the estimated cost by more than 10 percent, SCI will contact the client for authorization to continue. The findings from this initial assessment may indicate the need for additional environmental activities. We will contact you as soon as possible if such activities are foreseen as necessary.

ACCEPTANCE

If the work order outlined herein is acceptable, please provide formal authorization to proceed by completing, signing, and returning the enclosed *Acceptance of Proposal for Professional Services* sheet (a self-addressed, postage-paid envelope is enclosed for your convenience). This sheet provides important information regarding report distribution and invoicing. Formal authorization is necessary prior to initiation of the activities outlined herein. SCI services will be performed for the signatory of the enclosed form, and their lender (if applicable). Written consent must be provided by SCI should anyone other than the client (signatory) wish to excerpt, or rely on, the results of our activities. The enclosed *General Terms and Conditions* will also apply to any future services you authorize for this project.

Thank you for the opportunity to submit this proposal. If you have any questions regarding this proposal or desire to modify the proposed scope, please do not hesitate to call.

Respectfully,

SCI ENGINEERING, INC.

Benjamin K. Butterfield
Staff Scientist

Karl E. Ruhmann, P.E. R.G.
Vice President

BKB/KER/rah

Enclosures

V:\Isoils\1 NEW\PROJECT FILES\2013 PROJECTS\2013-0121 Stone Mill\Financial\130121.21 Limited Phase Two Proposal.doc

SCI ENGINEERING, INC.

ACCEPTANCE OF PROPOSAL FOR PROFESSIONAL SERVICES

Project Name: Stone Mill – Proposal for Limited Phase Two ESA - Revised

Project Number: SCI No. 2013-0121.21

Date: March 15, 2013

Fee: **$3,100.00** Standard processing **$3,850.00** Rapid processing
(Please check preferred processing)

Please provide formal authorization to proceed by completing, signing, and returning this form. The attached terms and conditions will apply to the services outlined in the accompanying proposal.

Accepted By:

Name and Title: Jeff Boland Address: 2259 Technology Dr

Signature: City,State,Zip: O'Fallon MO 63368

Company Name: Lombardo Homes St Louis LLC Telephone: 636-265-2710

Date: 4/5/2013

Party responsible for payment: (if different than Accepted By)

Name and Title: _____ Address: _____

Signature: _____ City, State, Zip: _____

Company Name: _____ Telephone: _____

Date: _____

Report Distribution (Note: Additional report copies after final submittal will be billed at $25.00 each)

Company Name:	Address:	No. Reports

NOTICE TO OWNER: **(FOR SITES IN MISSOURI ONLY)**

FAILURE OF THIS CONTRACTOR TO PAY THOSE PERSONS SUPPLYING MATERIAL OR SERVICES TO COMPLETE THIS CONTRACT CAN RESULT IN THE FILING OF A MECHANIC'S LIEN ON THE PROPERTY WHICH IS THE SUBJECT OF THIS CONTRACT PURSUANT TO CHAPTER 429.RSMo. TO AVOID THIS RESULT YOU MAY ASK THIS CONTRACTOR FOR "LIEN WAIVERS" FROM ALL PERSONS SUPPLYING MATERIAL OR SERVICES FOR THE WORK DESCRIBED IN THIS CONTRACT. FAILURE TO SECURE LIEN WAIVERS MAY RESULT IN YOU PAYING FOR LABOR AND MATERIAL TWICE.

SCI ENGINEERING, INC.

GENERAL TERMS AND CONDITIONS

1. **ACCEPTANCE OF AGREEMENT** The terms and conditions of the agreement between the client and SCI ENGINEERING, INC. (hereinafter called SCI) are detailed below and have been established to allocate risks between both. For the purposes of convenience, the client may choose to orally authorize our service, in which case the client agrees that the verbal agreement constitutes formal acceptance of the terms and conditions detailed below. Subsequent to an agreement by both parties to perform the services, modifications to the terms and conditions are prohibited.

2. **SITE ENTRY** You, the Client, will provide for right of entry of SCI or employees of firms working under the direction of SCI, and all necessary equipment, in order to perform the work. Although SCI will exercise reasonable care in performing its services, the Client understands that use of testing or other equipment may unavoidably cause some damage, the correction of which is not part of this agreement. The client agrees, to the fullest extent permitted by law, to indemnify and hold harmless SCI and its subconsultants against any damages, liabilities, or costs, arising or allegedly arising from procedures associated with testing or investigative activities. If you desire or require us to restore the site to its former condition, upon written request, we will perform such additional work as is necessary and you agree to pay all costs incurred.

3. **SUBSURFACE STRUCTURES OR UTILITIES** The Client will furnish to SCI information identifying the type and location of utility lines and other man-made objects beneath the site's surface. SCI will take reasonable precautions to avoid damaging these man-made objects . You agree to waive any claim against SCI, and to defend, indemnify and hold SCI harmless from any claim or liability for injury or loss allegedly arising from SCI's damaging underground utilities or other man-made objects that were not called to SCI's attention, or which were not properly located on plans furnished to SCI.

4. **SAMPLES** Soil, rock, water, or other samples obtained from the project site are your property. SCI shall preserve such samples for no longer than thirty (30) calendar days after the issuance of any document that includes the data obtained from them, unless other mutually agreed arrangements are documented.

Concrete test specimens will be discarded after testing. If project specification strengths are met, "hold" cylinders will be discarded at that time.

If in SCI's opinion any of the samples collected may be affected by regulated contaminants, SCI shall package such samples in accordance with applicable law and client shall arrange for lawful disposal procedures. SCI shall not, under this agreement, arrange for or be responsible for the disposal of substances affected by regulated contaminants. Furthermore, unless detailed in a specific work scope, SCI is not responsible for any soil cuttings or produced groundwater generated for the purpose of sample collection that may be affected by regulated contaminants that are left at a job site and were generated for the collection of soil and groundwater samples. SCI will, at the client's request, help the client identify appropriate alternatives for the off-site treatment, storage, or disposal of these materials, for additional fees.

5. **GENERAL LIABILITY AND LIMITATION** SCI agrees to hold you harmless and to indemnify you on account of any liability due to bodily injury or property damage arising directly out of our negligent operational acts, but such hold harmless and indemnity will be limited to that covered by our comprehensive general liability insurance. Our general liability insurance, subject to its limits, terms and conditions, provides protection against liability arising out of bodily injury and property damage that is the direct result of our operational negligence. At your request, SCI will provide certificates evidencing such coverage and will purchase additional limits of liability that you may require as a separate cost item to be borne by you.

You shall not be liable to SCI and SCI shall not be liable to you for any consequential damages incurred by either due to the fault of the other, regardless of the nature of this fault, or whether it was committed by you or SCI, their employees, agents, or subcontractors. Consequential damages include, but are not limited to, loss of use, loss of profit, loss of business, loss of income, loss of reputation or any other consequential damage that any party may have incurred from any cause of action, including, but not limited to negligence, strict liability, breach of contract, or breach of warranty.

6. **SHARED RISK ALLOCATION** The Client and SCI agree to allocate certain of the risks so that, to the fullest extent permitted by law, SCI's total aggregate liability to the Client is limited to $50,000.00 for any and all injuries, damages, claims, losses, expenses, or claim expenses (including attorney's and expert witness' fees) arising out of this AGREEMENT from any cause or causes. Such causes include, but are not limited to, SCI's negligence, errors, omissions, strict liability, statutory liability, breach of contract, breach of warranty, negligent misrepresentation, or other acts giving rise to liability based upon contract, tort, or statute. Higher limits may be available upon request and additional negotiated fee.

Limitations on liability, waivers and indemnities in this Agreement are business understandings between the parties and shall apply to all legal theories of recovery, including breach of contract or warranty, breach of fiduciary duty, tort (including negligence), strict or statutory liability, or any other cause of action. You agree that you will not seek damages in excess of the contractually agreed-upon limitation directly or indirectly through suits against other parties who may join the Consultant as third-party defendant. None of the insurance or indemnity obligations under this agreement shall be deemed to be in conflict with this limitation of liability provision.

7. **INVOICES** You will make all payments in accordance with SCI's invoices, and payment is due upon receipt of invoice. A fee of 1½ percent per month will be payable on any amounts not paid within thirty (30) days, payment thereafter to be applied first to accrued interest and then to your unpaid amount. You agree to pay invoices under these terms and to bear collection fees, court costs, or any other reasonable expense involved in the collection of amounts not paid.

8. **HAZARDOUS MATERIALS; NOTIFICATION OF AND DISCOVERY OF** When hazardous materials are known, assumed, or suspected to exist at a site, SCI is required to take appropriate precautions to protect the health and safety of its personnel, to comply with applicable laws and regulations, and to follow procedures that SCI deems prudent to help minimize physical risks to employees and the public. You warrant that you have provided to SCI all available information about type and location of known and suspected hazardous materials on, under, or adjacent to the project site.

The discovery of unanticipated hazardous or suspected hazardous materials will constitute a changed condition mandating termination of services if SCI and you are unable to renegotiate the scope of service in a timely manner. SCI will notify you as soon as practically possible should SCI encounter unanticipated hazardous or suspected hazardous materials.

The discovery of unanticipated hazardous or suspected hazardous materials may make it necessary for SCI to take measures that in SCI's professional opinion are needed to help preserve and protect the health and safety of SCI's personnel and of the public, and/or to preserve and protect the environment. As a condition precedent to the provision of service for this project, you agree to compensate SCI for the additional fees and costs associated with any such measures and further agree to defend, indemnify, and hold harmless from any claim or liability for injury or loss arising from SCI's encountering unanticipated hazardous or suspected hazardous materials.

9. CONTAMINATION OF AN AQUIFER Unavoidable contamination of soil or groundwater may occur during subsurface exploration, as when drilling or sampling tools penetrate a contaminated area, linking it to an aquifer, underground stream, or other hydrous body not previously contaminated and capable of spreading contaminants. Because subsurface exploration is an essential aspect of the services that SCI will provide on your behalf, you shall indemnify, defend, and hold SCI harmless from any claim or liability for injury or loss which may arise as a result of contamination allegedly caused by subsurface exploration.

10. SITE SAFETY With respect to project site safety, SCI shall be responsible solely for the on-site activities of its employees and subcontractors, and this responsibility shall not be construed by any party to relieve you or the general contractor from your obligation to maintain a safe project site. Neither the professional activities of SCI, nor the presence of SCI's employees or subcontractors shall be construed by any party to imply that SCI has any responsibility for any contractor's methods of work performance, procedures, superintendence, sequencing of operations, or safety in, on, or about the project site. You agree that the general contractor is responsible for project site safety, and warrant that this intent shall be made evident in your agreement with the general contractor.

11. CONSTRUCTION COST ESTIMATES An opinion of construction cost prepared by SCI represents our judgment as a design professional and is supplied for your general guidance only. Since we have no control over the cost of labor and material, nor over competitive bidding or market conditions, we do not guarantee the accuracy of our opinion as compared to other sources, such as, contractor bids of actual cost to the owner.

12. DEFECTS IN SERVICE You and your personnel, contractors, and subcontractors shall promptly report to SCI any defects or suspected defects in SCI's work, in order that SCI may take prompt effective measures which in SCI's opinion will minimize the consequences of any such defect.

13. TERMINATION Any or all services being provided for you by SCI under these General Terms and Conditions or under separate contract may be terminated by either party upon seven (7) days prior written notice. In the event of termination, SCI shall be compensated by you for all services performed up to and including the termination date, including reimbursable expenses.

14. ENVIRONMENTAL SITE ASSESSMENT An Environmental Site Assessment is conducted to render an opinion about the possibility of regulated contaminants being present on, in, or beneath the site specifically at the time services were conducted. Client understands that no matter how thorough an Environmental Site Assessment is, SCI cannot know or state factually that a site is unaffected by reportable quantities of regulated contaminants. Furthermore, even if SCI believes that reportable quantities are not present, the client bears the risk that such contaminants may be present or may migrate to the site after the study is complete. Likewise, the client agrees to hold SCI harmless from any claim or liability for injury or loss arising from the unanticipated discovery of hazardous materials or suspected hazardous materials to the fullest extent permitted by law.

15. FAILURE TO FOLLOW RECOMMENDATIONS SCI disclaims any and all responsibility and liability for problems that may occur during implementation of SCI's plans, specifications, or recommendations when SCI is not retained to observe such implementation.

16. ALTERATION OF INSTRUMENTS OF SERVICE Client agrees that designs, plans, specifications, reports, proposals, and similar documents prepared by SCI are instruments of professional service, and as such, they may not under any circumstances be altered by any party except SCI. Client warrants that SCI's instruments of service will be used only and exactly as submitted by SCI. Accordingly, Client shall waive any claim against SCI and shall, to the fullest extent permitted by law, indemnify, defend, and hold SCI harmless of any claim or liability for injury or loss arising from unauthorized alteration of SCI's instruments of service.

17. MOLD DISCLAIMER The services performed by SCI, unless specifically addressed in our scope of services, are not intended to take into account indoor amplification of mold. SCI's services may comment on depth to groundwater and site drainage, but in no instance is this to be interpreted that we were specifically intending to reduce moisture contents and/or humidity measurements within the structure as they may relate to mold. Client understands our services, unless specifically expressed in our work scope, are in no way intended to address the potential for mold infestation, and, as such, agrees to indemnify and hold SCI harmless from any claim alleging that SCI's services caused or aggravated a mold infestation.

18. OTHER PROVISIONS You agree that this contract is entered into by the parties for the sole benefit of the parties to the contract, and that nothing in the contract shall be construed to create a right or benefit for any third party.

a. Neither party shall hold the other responsible for damages or delay in performance caused by acts of God, strikes, lockouts, accidents, or other events beyond the control of the other or the other's employees and agents.

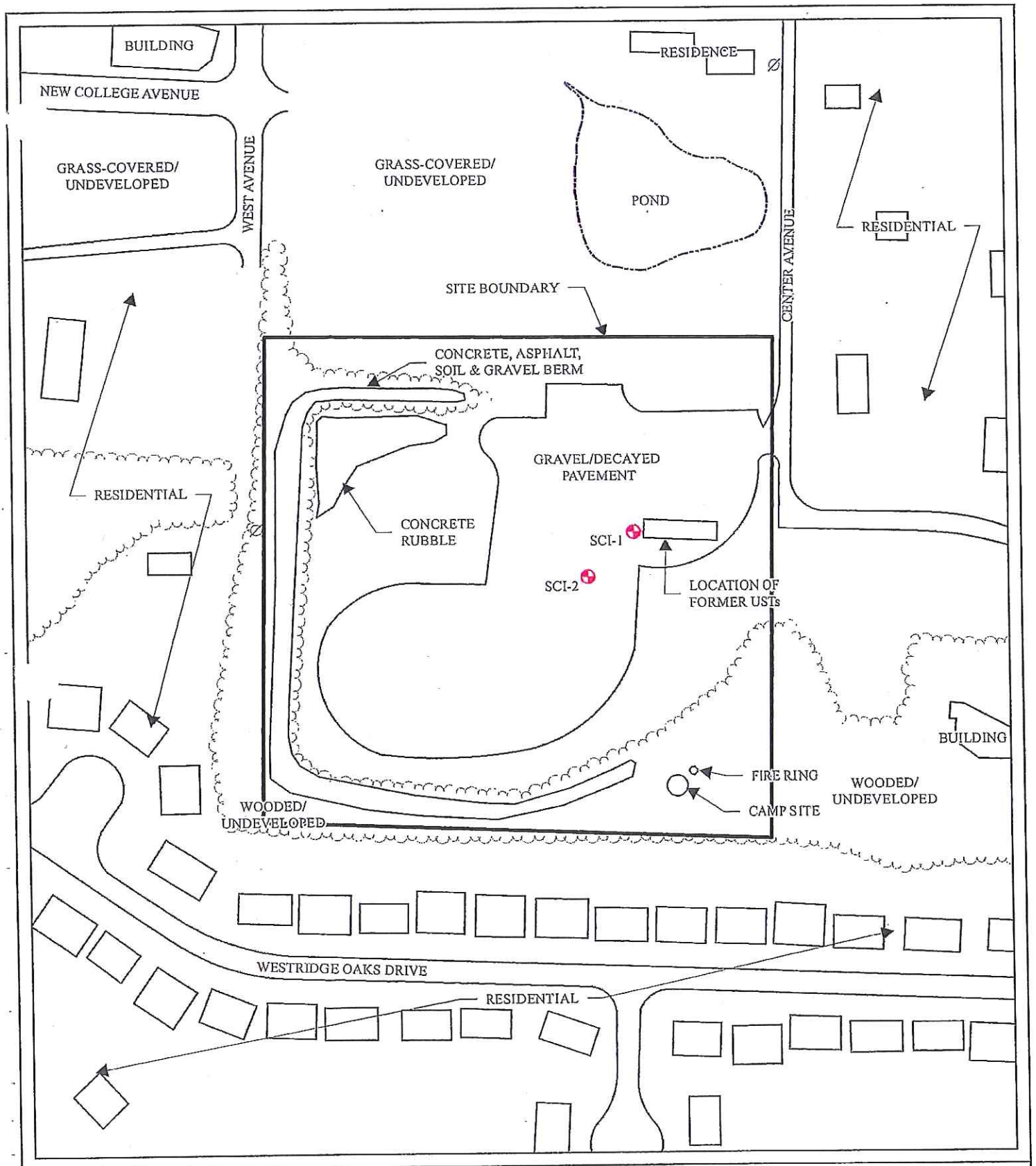
b. You agree that any and all limitations of SCI's liability and indemnifications by you shall include and extend to those individuals and entities SCI retains for performance of the services under this Agreement, including but not limited to SCI's officers, directors, and employees and their heirs and assigns, and SCI's subconsultants.

c. In an effort to resolve any conflicts that arise during or following completion of the project, you and SCI agree that all disputes between us arising out of or related to this Agreement shall be submitted to non-binding mediation, unless the parties mutually agree otherwise.

d. In the event there is a dispute between SCI and you, other than collection of fees and which is not resolved by mediation, the prevailing party shall be awarded its reasonable attorney's fees, expert witness fees, and other costs. THE PARTIES TO THIS CONTRACT HEREBY AGREE TO SUBMIT ANY SUCH DISPUTE TO THE CIRCUIT COURT OF ST. CHARLES COUNTY, STATE OF MISSOURI.

e. Test borings and test pits are an accepted and informative means of subsurface exploration. However, in the nature of things, they cannot indicate with absolute certainty the nature of the subsurface conditions between and sample locations of the exploration and below the termination of the borings or pits. Therefore, a report based on test borings, test pits, or other exploration method cannot ascertain the nature of the subsurface conditions between and beyond the specific sample locations. If conditions different than are indicated in our report come to your attention after you receive the report, it is recommended that you contact SCI immediately to inform SCI completely of what you have discovered and to authorize further evaluation, if appropriate.

f. Any recommendations provided in any correspondence, reports, plans, etc. from SCI are for the exclusive use of our client and are specific to the project covered by this contract. Recommendations provided by SCI are not meant to supercede more stringent requirements of local ordinances.



PROJECT NAME STONE MILL WILDWOOD, MISSOURI				GENERAL NOTES/LEGEND Ø DENOTES APPROXIMATE LOCATION OF A POLE-MOUNTED TRANSFORMER DENOTES APPROXIMATE SOIL BORING LOCATION. DIMENSIONS AND LOCATIONS ARE APPROXIMATE; ACTUAL MAY VARY. DRAWING SHALL NOT BE USED OUTSIDE THE CONTEXT OF THE REPORT FOR WHICH IT WAS GENERATED.
BORING LOCATION MAP				
DRAWN BY	RCV	DATE	JOB NUMBER	
CHECKED BY	BKB	04/2013	2013-0121.21	

N W E S

SCALE 1" = 150'

APPENDIX A

BORING LOG

PROJECT Stone Mill
LOCATION Wildwood, Missouri
DRILLER Geo Drill
HAMMER n/a
EQUIPMENT Geoprobe
ELEVATION

BORING NUMBER SCI-1
SHEET 1 of 1
PROJECT NO. 2013-0121.21
DATE DRILLED 04/15/13

DEPTH (ft)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE RECOVERY (in/in)	SAMPLE BLOWS (per 6 in)	DESCRIPTION (UNIFIED SOIL CLASSIFICATION)	GRAPHIC	SEE REMARK NO.	LABORATORY TEST RESULTS: MOISTURE CONTENT (%)	DRY DENSITY (pcf)	HAND PENETROMETER (ksf)	PID READING (ppm)	LIQUID LIMIT	PLASTIC LIMIT	DEPTH (ft)
					5" ASPHALTIC CONCRETE									
					2" CRUSHED ROCK									
					LEAN CLAY (CL): Gray, slight odor		1				44.0			
	1	CS	40/48											
3					Becomes brown with gray, no odor						6.6			3
											6.5			
6	2	CS	48/48											6
											5.0			
9											4.2			9
	3	CS	48/48											
											8.6			
12					With gravel									12
											1.0			
	4	CS	40/48											
15											1.0			15
					SHALEY CLAY (CH): Light brown with gray									
											1.0			
	5	CS	30/30											
18														18
					Refusal at 18.5 feet.									

WATER LEVEL:
X NONE OBSERVED WHILE DRILLING
ft WHILE DRILLING
ft HRS AFTER DRILLING
ft DAYS AFTER DRILLING

REMARKS:
1) Sample collected from 0 to 2 feet.

BORING LOG

PROJECT Stone Mill
LOCATION Wildwood, Missouri
DRILLER Geo Drill
HAMMER n/a
EQUIPMENT Geoprobe
ELEVATION

BORING NUMBER SCI-2
SHEET 1 of 1
PROJECT NO. 2013-0121.21
DATE DRILLED 04/15/13

DEPTH (ft)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE RECOVERY (in/in)	SAMPLE BLOWS (per 6 in)	DESCRIPTION (UNIFIED SOIL CLASSIFICATION)	GRAPHIC	SEE REMARK NO.	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	HAND PENETROMETER (ksf)	PID READING (ppm)	LIQUID LIMIT	PLASTIC LIMIT	DEPTH (ft)
					5" ASPHALTIC CONCRETE									
					2" CRUSHED ROCK									
					LEAN CLAY (CL): Brown		1				9.0			
	1	CS	30/48											
3							2				6.0			3
											6.0			
6	2	CS	48/48											6
											3.5			
					Becomes red with gray, trace gravel									
9											<1			9
	3	CS	48/48											
					GRAVELY SHALEY CLAY (CH): Light brown with gray						<1			
12														12
	4	CS	12/12											
					Refusal at 13 feet.									
15														15
18														18

WATER LEVEL:
X NONE OBSERVED WHILE DRILLING
ft WHILE DRILLING
ft HRS AFTER DRILLING
ft DAYS AFTER DRILLING

REMARKS:
1) Sample collected from 0 to 2 feet.
2) Sample collected from 2 to 4 feet.

Teklab, Inc.
Environmental Laboratory

http://www.teklabinc.com/

April 22, 2013

Ben Butterfield
SCI Engineering, Inc.
130 Point West Boulevard
St. Charles, MO 63301
TEL: (618) 206-3028
FAX: (636) 949-8269

NELAP ACCREDITED TNI LABORATORY

RE: Stone Mill/2013-0121.21

WorkOrder: 13040743

Dear Ben Butterfield:

TEKLAB, INC received 2 samples on 4/15/2013 4:35:00 PM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Elizabeth A. Hurley

Elizabeth A. Hurley
Project Manager
(618)344-1004 ex 33
ehurley@teklabinc.com

Teklab, Inc.
Environmental Laboratory

Report Contents

http://www.teklabinc.com/

Client: SCI Engineering, Inc.
Client Project: Stone Mill/2013-0121.21

Work Order: 13040743
Report Date: 22-Apr-13

This reporting package includes the following:

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	4
Laboratory Results	5
Quality Control Results	9
Receiving Check List	21
Chain of Custody	Appended

Definitions

Client: SCI Engineering, Inc.

Client Project: Stone Mill/2013-0121.21

Work Order: 13040743

Report Date: 22-Apr-13

Abbr Definition

CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.

DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilutions factors.

DNI Did not ignite

DUP Laboratory duplicate is an aliquot of a sample taken from the same container under laboratory conditions for independent processing and analysis independently of the original aliquot.

ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.

IDPH IL Dept. of Public Health

LCS Laboratory control sample, spiked with verified known amounts of analytes, is analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system. The acceptable recovery range is in the QC Package (provided upon request).

LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MB Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.

MDL Method detection limit means the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).

SD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MW Molecular weight

ND Not Detected at the Reporting Limit

NELAP NELAP Accredited

PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions. The acceptable recovery range is listed in the QC Package (provided upon request).

RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.

RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).

SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.

Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.

TNTC Too numerous to count (> 200 CFU)

Qualifiers

- Unknown hydrocarbon

E - Value above quantitation range

J - Analyte detected below quantitation limits

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside recovery limits

B - Analyte detected in associated Method Blank

H - Holding times exceeded

M - Manual Integration used to determine area response

R - RPD outside accepted recovery limits

X - Value exceeds Maximum Contaminant Level

Teklab, Inc.
Environmental Laboratory

Case Narrative

http://www.teklabinc.com/

Client: SCI Engineering, Inc.
Client Project: Stone Mill/2013-0121.21

Work Order: 13040743
Report Date: 22-Apr-13

Cooler Receipt Temp: 3.8 °C

This report was revised on 4/22/2013 per Ben Butterfield's request. The reason for the revision is to include J-flagged results. Please replace report dated 4/17/2013 with this report. EAH 4/22/13

Locations and Accreditations

Collinsville		Springfield		Kansas City	
Address	5445 Horseshoe Lake Road Collinsville, IL 62234-7425	Address	3920 Pintail Dr Springfield, IL 62711-9415	Address	8421 Nieman Road Lenexa, KS 66214
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State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2014	Collinsville
Kansas	KDHE	E-10374	NELAP	1/31/2014	Collinsville
Louisiana	LDEQ	166493	NELAP	6/30/2013	Collinsville
Louisiana	LDEQ	166578	NELAP	6/30/2013	Springfield
Texas	TCEQ	T104704515-12-1	NELAP	7/31/2013	Collinsville
Arkansas	ADEQ	88-0966		3/14/2014	Collinsville
Illinois	IDPH	17584		4/30/2013	Collinsville
Kentucky	UST	0073		4/5/2014	Collinsville
Missouri	MDNR	00930		4/13/2013	Collinsville
Oklahoma	ODEQ	9978		8/31/2013	Collinsville

Teklab, Inc.
Environmental Laboratory

Laboratory Results

http://www.teklabinc.com/

Client: SCI Engineering, Inc.
Client Project: Stone Mill/2013-0121.21
Lab ID: 13040743-001
Matrix: SOLID

Work Order: 13040743
Report Date: 22-Apr-13
Client Sample ID: SCI-1
Collection Date: 04/15/2013 9:45

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974								
Percent Moisture		0.1		5.7	%	1	04/16/2013 14:09	R176037
SW-846 3550B, 8270C SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS								
TPH-DRO (C10 - C21)		6350	J	3400	mg/Kg-dry	100	04/16/2013 17:44	87459
TPH-ORO (C21 - C35)		6350		ND	mg/Kg-dry	100	04/16/2013 17:44	87459
Surr: 2-Fluorobiphenyl		12-133		99.8	%REC	100	04/16/2013 17:44	87459
Surr: Nitrobenzene-d5		30.9-115		99.8	%REC	100	04/16/2013 17:44	87459
Surr: p-Terphenyl-d14		31.5-137		119.8	%REC	100	04/16/2013 17:44	87459
Elevated reporting limit due to sample extract composition.								
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
1,1,1-Trichloroethane	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
1,1,2,2-Tetrachloroethane	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
1,1,2-Trichloro-1,2,2-trifluoroethane		4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
1,1,2-Trichloroethane	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
1,1-Dichloro-2-propanone		41.4		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
1,1-Dichloroethane	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
1,1-Dichloroethene	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Dichloropropene	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
1,3-Trichlorobenzene	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
1,2,3-Trichloropropane	NELAP	8.28		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
1,2,3-Trimethylbenzene		4.14	J	0.99	µg/Kg-dry	1	04/16/2013 20:02	87519
1,2,4-Trichlorobenzene	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
1,2,4-Trimethylbenzene	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
1,2-Dibromo-3-chloropropane	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
1,2-Dibromoethane	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
1,2-Dichlorobenzene	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
1,2-Dichloroethane	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
1,2-Dichloropropane	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
1,3,5-Trimethylbenzene	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
1,3-Dichlorobenzene	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
1,3-Dichloropropane	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
1,4-Dichlorobenzene	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
1-Chlorobutane	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
2,2-Dichloropropane	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
2-Butanone	NELAP	41.4		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
2-Chlorotoluene	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
2-Hexanone	NELAP	41.4		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
2-Nitropropane	NELAP	41.4		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
4-Chlorotoluene	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
4-Methyl-2-pentanone	NELAP	41.4		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Acetone	NELAP	41.4	J	29	µg/Kg-dry	1	04/16/2013 20:02	87519
Acetonitrile	NELAP	82.8		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Acrolein	NELAP	82.8		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Acrylonitrile	NELAP	8.28		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
chloride	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Benzene	NELAP	0.828		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Bromobenzene	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519

Teklab Inc. Environmental Laboratory

Laboratory Results

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Client: SCI Engineering, Inc.
Client Project: Stone Mill/2013-0121.21
Lab ID: 13040743-001
Matrix: SOLID

Work Order: 13040743
Report Date: 22-Apr-13
Client Sample ID: SCI-1
Collection Date: 04/15/2013 9:45

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Bromochloromethane	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Bromodichloromethane	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Bromoform	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Bromomethane	NELAP	8.28		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Carbon disulfide	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Carbon tetrachloride	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Chlorobenzene	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Chloroethane	NELAP	8.28		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Chloroform	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Chloromethane	NELAP	8.28		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
cis-1,2-Dichloroethene	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
cis-1,3-Dichloropropene	NELAP	3.31		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Cyclohexanone		82.8		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Dibromochloromethane	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Dibromomethane	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Dichlorodifluoromethane	NELAP	8.28		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Diisopropyl ether		4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Ethyl ether	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
hyl methacrylate	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
hylbenzene	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Ethyl-tert-butyl ether		4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Hexachlorobutadiene	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Hexachloroethane	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Iodomethane	NELAP	8.28		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Isopropylbenzene	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
m,p-Xylenes	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Methacrylonitrile	NELAP	41.4		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Methyl Methacrylate	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Methyl tert-butyl ether	NELAP	1.66		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Methylacrylate	NELAP	8.28		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Methylene chloride	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Naphthalene	NELAP	8.28		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
n-Butylbenzene	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
n-Heptane		16.6		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
n-Hexane		16.6		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Nitrobenzene	NELAP	82.8		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
n-Propylbenzene	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
o-Xylene	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Pentachloroethane	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
p-Isopropyltoluene	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Propionitrile	NELAP	41.4		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
sec-Butylbenzene	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Styrene	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
tert-Amyl methyl ether		4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
ert-Butyl alcohol		41.4		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
t-Butylbenzene	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
etrachloroethene	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519

Teklab, Inc.
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Laboratory Results

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Client: SCI Engineering, Inc.
Client Project: Stone Mill/2013-0121.21
Lab ID: 13040743-001
Matrix: SOLID

Work Order: 13040743
Report Date: 22-Apr-13
Client Sample ID: SCI-1
Collection Date: 04/15/2013 9:45

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Tetrahydrofuran	NELAP	41.4		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Toluene	NELAP	4.14	J	2.5	µg/Kg-dry	1	04/16/2013 20:02	87519
TPH - GRO (C6 - C10)		414	J	370	µg/Kg-dry	1	04/16/2013 20:02	87519
trans-1,2-Dichloroethene	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
trans-1,3-Dichloropropene	NELAP	3.31		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
trans-1,4-Dichloro-2-butene	NELAP	8.28		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Trichloroethene	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Trichlorofluoromethane	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Vinyl acetate	NELAP	41.4		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Vinyl chloride	NELAP	1.66		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Xylenes, Total	NELAP	4.14		ND	µg/Kg-dry	1	04/16/2013 20:02	87519
Surr: 1,2-Dichloroethane-d4		72.2-131		103.7	%REC	1	04/16/2013 20:02	87519
Surr: 4-Bromofluorobenzene		82.1-116		102.0	%REC	1	04/16/2013 20:02	87519
Surr: Toluene-d8		86-116		98.4	%REC	1	04/16/2013 20:02	87519

Teklab, Inc.
Environmental Laboratory

Laboratory Results

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Client: SCI Engineering, Inc.
Work Order: 13040743
Client Project: Stone Mill/2013-0121.21
Report Date: 22-Apr-13
Lab ID: 13040743-002
Client Sample ID: SCI-2
Matrix: SOLID
Collection Date: 04/15/2013 10:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 600 2-78-054 METHOD 3.2.18.1								
Specific Conductance, Solid		10		2360	µmhos/cm	1	04/15/2013 18:33	R175954

Teklab, Inc. Environmental Laboratory

Quality Control Results

http://www.teklabinc.com/

Client: SCI Engineering, Inc.

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Work Order: 13040743

Report Date: 22-Apr-13

EPA 600 2-78-054 METHOD 3.2.18.1

Batch R175954 SampType: LCS1 Units µmhos/cm

SampID: LCS1-R175954

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Specific Conductance, Solid	10		6300	6670	0	94.5	90	110	04/15/2013

Batch R175954 SampType: DUP Units µmhos/cm RPD Limit 10

SampID: 13040743-002ADUP

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Specific Conductance, Solid	10		2380				2360	0.84	04/15/2013

EPA SW846 3550C, 5035A, ASTM D2974

Batch R176037 SampType: LCS Units %

SampID: LCS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Percent Moisture	0.1		99.0	99.0	0	100	90	110	04/16/2013

Batch R176037 SampType: LCSQC Units %

SampID: LCSQC

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Percent Moisture	0.1		99.0	99.0	0	100	90	110	04/16/2013

Batch R176037 SampType: DUP Units % RPD Limit 15

SampID: 13040557-012A-DUP

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Percent Moisture	0.1		13.8				13.78	0.43	04/16/2013

Batch R176037 SampType: DUP Units % RPD Limit 15

SampID: 13040614-010A-DUP

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Percent Moisture	0.1		21.7				21.24	2.10	04/16/2013

Batch R176037 SampType: DUP Units % RPD Limit 15

SampID: 13040687-002A-DUP

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Percent Moisture	0.1		19.7				19.64	0.31	04/16/2013

Batch R176037 SampType: DUP Units % RPD Limit 15

SampID: 13040687-004A-DUP

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Percent Moisture	0.1		17.5				17.61	0.63	04/16/2013

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EPA SW846 3550C, 5035A, ASTM D2974

Batch R176037 SampType: DUP Units % RPD Limit 15

SampID: 13040744-001B-DUP

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Percent Moisture	0.1	R	8.6				7.350	15.21	04/16/2013

SW-846 3550B, 8270C SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 87459 SampType: MBLK Units mg/Kg

SampID: MBLK-87459

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
TPH-DRO (C10 - C21)	12.0		ND						04/16/2013
TPH-ORO (C21 - C35)	12.0		ND						04/16/2013
Surr: 2-Fluorobiphenyl			0.591	0.835		70.7	46.3	106	04/16/2013
Surr: Nitrobenzene-d5			0.572	0.835		68.5	42.4	99.2	04/16/2013
Surr: p-Terphenyl-d14			0.692	0.835		82.9	45.5	115	04/16/2013

Batch 87459 SampType: LCS Units %REC

SampID: LCS-87459

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Surr: 2-Fluorobiphenyl			0.563	0.835		67.5	46.3	106	04/16/2013
Surr: Nitrobenzene-d5			0.555	0.835		66.4	35.1	106	04/16/2013
Surr: p-Terphenyl-d14			0.677	0.835		81.1	45.5	115	04/16/2013

Batch 87459 SampType: LCS Units mg/Kg

SampID: LCSDRO-87459

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
TPH-DRO (C10 - C21)	12.0		24.2	33.4	0	72.5	17.2	146	04/16/2013
Surr: 2-Fluorobiphenyl			0.582	0.835		69.7	46.3	106	04/16/2013
Surr: Nitrobenzene-d5			0.560	0.835		67.1	35.1	106	04/16/2013
Surr: p-Terphenyl-d14			0.715	0.835		85.6	45.5	115	04/16/2013

Batch 87459 SampType: MS Units mg/Kg-dry

SampID: 13040687-003AMS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
TPH-DRO (C10 - C21)	15.0		31.2	41.7	0	74.8	34.5	160	04/16/2013
Surr: 2-Fluorobiphenyl			0.546	1.04		52.4	12	133	04/16/2013
Surr: Nitrobenzene-d5			0.606	1.04		58.0	30.9	115	04/16/2013
Surr: p-Terphenyl-d14			0.910	1.04		87.3	31.5	137	04/16/2013

Batch 87459 SampType: MSD Units mg/Kg-dry RPD Limit 30

SampID: 13040687-003AMSD

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
TPH-DRO (C10 - C21)	15.0		30.7	41.8	0	73.4	31.22	1.72	04/16/2013
Surr: 2-Fluorobiphenyl			0.551	1.04		52.8			04/16/2013
Surr: Nitrobenzene-d5			0.597	1.04		57.2			04/16/2013
Surr: p-Terphenyl-d14			0.871	1.04		83.4			04/16/2013

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Work Order: 13040743

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SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 87519 SampType: MBLK Units µg/Kg

SampID: MBLK-G130416-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
1,1,1,2-Tetrachloroethane	5.00		ND						04/16/2013
1,1,1-Trichloroethane	5.00		ND						04/16/2013
1,1,2,2-Tetrachloroethane	5.00		ND						04/16/2013
1,1,2-Trichloro-1,2,2-trifluoroethane	5.00		ND						04/16/2013
1,1,2-Trichloroethane	5.00		ND						04/16/2013
1,1-Dichloro-2-propanone	50.0		ND						04/16/2013
1,1-Dichloroethane	5.00		ND						04/16/2013
1,1-Dichloroethene	5.00		ND						04/16/2013
1,1-Dichloropropene	5.00		ND						04/16/2013
1,2,3-Trichlorobenzene	5.00		ND						04/16/2013
1,2,3-Trichloropropane	10.0		ND						04/16/2013
1,2,3-Trimethylbenzene	5.00		ND						04/16/2013
1,2,4-Trichlorobenzene	5.00		ND						04/16/2013
1,2,4-Trimethylbenzene	5.00		ND						04/16/2013
1,2-Dibromo-3-chloropropane	5.00		ND						04/16/2013
1,2-Dibromoethane	5.00		ND						04/16/2013
1,2-Dichlorobenzene	5.00		ND						04/16/2013
1,2-Dichloroethane	5.00		ND						04/16/2013
Dichloropropane	5.00		ND						04/16/2013
1,3,5-Trimethylbenzene	5.00		ND						04/16/2013
1,3-Dichlorobenzene	5.00		ND						04/16/2013
1,3-Dichloropropane	5.00		ND						04/16/2013
1,4-Dichlorobenzene	5.00		ND						04/16/2013
1-Chlorobutane	5.00		ND						04/16/2013
2,2-Dichloropropane	5.00		ND						04/16/2013
2-Butanone	50.0		ND						04/16/2013
2-Chlorotoluene	5.00		ND						04/16/2013
2-Hexanone	50.0		ND						04/16/2013
2-Nitropropane	50.0		ND						04/16/2013
4-Chlorotoluene	5.00		ND						04/16/2013
4-Methyl-2-pentanone	50.0		ND						04/16/2013
Acetone	50.0		ND						04/16/2013
Acetonitrile	100		ND						04/16/2013
Acrolein	100		ND						04/16/2013
Acrylonitrile	10.0		ND						04/16/2013
Allyl chloride	5.00		ND						04/16/2013
Benzene	1.00		ND						04/16/2013
Bromobenzene	5.00		ND						04/16/2013
Bromochloromethane	5.00		ND						04/16/2013
Bromodichloromethane	5.00		ND						04/16/2013
Bromoform	5.00		ND						04/16/2013
Bromomethane	10.0		ND						04/16/2013
Carbon disulfide	5.00		ND						04/16/2013
Carbon tetrachloride	5.00		ND						04/16/2013
robenzene	5.00		ND						04/16/2013
roethane	10.0		ND						04/16/2013
Chloroform	5.00		ND						04/16/2013

Client: SCI Engineering, Inc.

Client Project: Stone Mill/2013-0121.21

Work Order: 13040743

Report Date: 22-Apr-13

SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 87519 SampType: MBLK Units µg/Kg

SampID: MBLK-G130416-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloromethane	10.0		ND						04/16/2013
cis-1,2-Dichloroethene	5.00		ND						04/16/2013
cis-1,3-Dichloropropene	4.00		ND						04/16/2013
Cyclohexanone	100		ND						04/16/2013
Dibromochloromethane	5.00		ND						04/16/2013
Dibromomethane	5.00		ND						04/16/2013
Dichlorodifluoromethane	10.0		ND						04/16/2013
Diisopropyl ether	5.00		ND						04/16/2013
Ethyl ether	5.00		ND						04/16/2013
Ethyl methacrylate	5.00		ND						04/16/2013
Ethylbenzene	5.00		ND						04/16/2013
Ethyl-tert-butyl ether	5.00		ND						04/16/2013
Hexachlorobutadiene	5.00		ND						04/16/2013
Hexachloroethane	5.00		ND						04/16/2013
Iodomethane	10.0		ND						04/16/2013
Isopropylbenzene	5.00		ND						04/16/2013
m,p-Xylenes	5.00		ND						04/16/2013
Methacrylonitrile	50.0		ND						04/16/2013
ethyl Methacrylate	5.00		ND						04/16/2013
ethyl tert-butyl ether	2.00		ND						04/16/2013
Methylacrylate	10.0		ND						04/16/2013
Methylene chloride	5.00		ND						04/16/2013
Naphthalene	10.0		ND						04/16/2013
n-Butylbenzene	5.00		ND						04/16/2013
n-Heptane	20.0		ND						04/16/2013
n-Hexane	20.0		ND						04/16/2013
Nitrobenzene	100	J	55						04/16/2013
n-Propylbenzene	5.00		ND						04/16/2013
o-Xylene	5.00		ND						04/16/2013
Pentachloroethane	5.00		ND						04/16/2013
p-Isopropyltoluene	5.00		ND						04/16/2013
Propionitrile	50.0		ND						04/16/2013
sec-Butylbenzene	5.00		ND						04/16/2013
Styrene	5.00		ND						04/16/2013
tert-Amyl methyl ether	5.00		ND						04/16/2013
tert-Butyl alcohol	50.0		ND						04/16/2013
tert-Butylbenzene	5.00		ND						04/16/2013
Tetrachloroethene	5.00		ND						04/16/2013
Tetrahydrofuran	50.0		ND						04/16/2013
Toluene	5.00		ND						04/16/2013
trans-1,2-Dichloroethene	5.00		ND						04/16/2013
trans-1,3-Dichloropropene	4.00		ND						04/16/2013
trans-1,4-Dichloro-2-butene	10.0		ND						04/16/2013
Trichloroethene	5.00		ND						04/16/2013
Trichlorofluoromethane	5.00		ND						04/16/2013
yl acetate	50.0		ND						04/16/2013
Vinyl chloride	2.00		ND						04/16/2013

Teklab, Inc.
Environmental Laboratory

Quality Control Results

http://www.teklabinc.com/

Client: SCI Engineering, Inc.

Client Project: Stone Mill/2013-0121.21

Work Order: 13040743

Report Date: 22-Apr-13

SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 87519 **SampType:** MBLK Units µg/Kg

SampID: MBLK-G130416-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Xylenes, Total	5.00		ND						04/16/2013
TPH - GRO (C6 - C10)	500		ND						04/16/2013
Surr: 1,2-Dichloroethane-d4			48.5	50.0		97.0	72.2	131	04/16/2013
Surr: 4-Bromofluorobenzene			49.8	50.0		99.7	82.1	116	04/16/2013
Surr: Toluene-d8			49.5	50.0		98.9	86	116	04/16/2013

Teklab, Inc.
Environmental Laboratory

Quality Control Results

http://www.teklabinc.com/

Client: SCI Engineering, Inc.
Client Project: Stone Mill/2013-0121.21

Work Order: 13040743
Report Date: 22-Apr-13

SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 87519 SampType: LCSD Units µg/Kg RPD Limit 40

SampID: LCSD-G130416-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
1,1,1,2-Tetrachloroethane	5.00		49.6	50.0	0	99.2	47.42	4.53	04/16/2013
1,1,1-Trichloroethane	5.00		47.8	50.0	0	95.6	47.70	0.23	04/16/2013
1,1,2,2-Tetrachloroethane	5.00		46.5	50.0	0	92.9	46.67	0.43	04/16/2013
1,1,2-Trichloro-1,2,2-trifluoroethane	5.00		45.9	50.0	0	91.9	45.49	0.98	04/16/2013
1,1,2-Trichloroethane	5.00		49.4	50.0	0	98.9	46.95	5.15	04/16/2013
1,1-Dichloro-2-propanone	50.0		88.9	125	0	71.2	87.69	1.42	04/16/2013
1,1-Dichloroethane	5.00		49.3	50.0	0	98.7	48.81	1.06	04/16/2013
1,1-Dichloroethene	5.00		45.9	50.0	0	91.8	45.55	0.72	04/16/2013
1,1-Dichloropropene	5.00		48.0	50.0	0	95.9	47.66	0.61	04/16/2013
1,2,3-Trichlorobenzene	5.00		51.6	50.0	0	103.1	51.73	0.33	04/16/2013
1,2,3-Trichloropropane	10.0		44.2	50.0	0	88.3	44.80	1.44	04/16/2013
1,2,3-Trimethylbenzene	5.00		52.2	50.0	0	104.4	51.43	1.51	04/16/2013
1,2,4-Trichlorobenzene	5.00		50.5	50.0	0	101.0	49.96	1.04	04/16/2013
1,2,4-Trimethylbenzene	5.00		50.4	50.0	0	100.7	49.75	1.22	04/16/2013
1,2-Dibromo-3-chloropropane	5.00		44.9	50.0	0	89.8	44.76	0.29	04/16/2013
1,2-Dibromoethane	5.00		49.2	50.0	0	98.4	46.74	5.11	04/16/2013
1,2-Dichlorobenzene	5.00		48.1	50.0	0	96.2	47.26	1.74	04/16/2013
1,2-Dichloroethane	5.00		47.3	50.0	0	94.6	48.82	3.16	04/16/2013
?-Dichloropropane	5.00		48.3	50.0	0	96.6	49.19	1.85	04/16/2013
,5-Trimethylbenzene	5.00		49.6	50.0	0	99.3	48.83	1.67	04/16/2013
1,3-Dichlorobenzene	5.00		48.8	50.0	0	97.7	48.41	0.88	04/16/2013
1,3-Dichloropropane	5.00		48.5	50.0	0	97.0	46.81	3.57	04/16/2013
1,4-Dichlorobenzene	5.00		48.8	50.0	0	97.6	48.33	0.95	04/16/2013
1-Chlorobutane	5.00		48.1	50.0	0	96.2	45.13	6.37	04/16/2013
2,2-Dichloropropane	5.00		46.5	50.0	0	92.9	46.35	0.26	04/16/2013
2-Butanone	50.0		107	125	0	85.4	114.8	7.24	04/16/2013
2-Chlorotoluene	5.00		47.4	50.0	0	94.8	47.09	0.68	04/16/2013
2-Hexanone	50.0		115	125	0	92.3	116.0	0.46	04/16/2013
2-Nitropropane	50.0		463	500	0	92.7	512.3	10.05	04/16/2013
4-Chlorotoluene	5.00		48.4	50.0	0	96.8	47.72	1.39	04/16/2013
4-Methyl-2-pentanone	50.0		112	125	0	89.8	141.6	23.12	04/16/2013
Acetone	50.0		97.9	125	0	78.3	110.0	11.65	04/16/2013
Acetonitrile	100		464	500	0	92.8	482.5	3.94	04/16/2013
Acrolein	100		318	500	0	63.7	345.7	8.23	04/16/2013
Acrylonitrile	10.0		45.0	50.0	0	89.9	46.18	2.65	04/16/2013
Allyl chloride	5.00		50.1	50.0	0	100.1	51.07	1.98	04/16/2013
Benzene	1.00		48.3	50.0	0	96.6	47.85	0.94	04/16/2013
Bromobenzene	5.00		47.5	50.0	0	95.0	45.92	3.38	04/16/2013
Bromochloromethane	5.00		45.6	50.0	0	91.1	46.75	2.56	04/16/2013
Bromodichloromethane	5.00		49.7	50.0	0	99.4	50.69	1.99	04/16/2013
Bromoform	5.00		48.5	50.0	0	97.1	47.25	2.69	04/16/2013
Bromomethane	10.0		39.2	50.0	0	78.3	40.05	2.27	04/16/2013
Carbon disulfide	5.00		43.4	50.0	0	86.9	43.13	0.74	04/16/2013
Carbon tetrachloride	5.00		46.2	50.0	0	92.5	46.02	0.50	04/16/2013
Chlorobenzene	5.00		50.7	50.0	0	101.4	48.44	4.58	04/16/2013
'oroethane	10.0		42.1	50.0	0	84.3	46.10	8.98	04/16/2013
Chloroform	5.00		47.6	50.0	0	95.3	47.36	0.57	04/16/2013

Teklab, Inc.
Environmental Laboratory

Quality Control Results

http://www.teklabinc.com/

Client: SCI Engineering, Inc.

Client Project: Stone Mill/2013-0121.21

Work Order: 13040743

Report Date: 22-Apr-13

SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 87519 SampType: LCSD Units µg/Kg RPD Limit 40

SampID: LCSD-G130416-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloromethane	10.0		32.0	50.0	0	64.0	36.29	12.56	04/16/2013
cis-1,2-Dichloroethene	5.00		49.2	50.0	0	98.3	47.97	2.45	04/16/2013
cis-1,3-Dichloropropene	4.00		50.4	50.0	0	100.7	51.76	2.72	04/16/2013
Cyclohexanone	100		417	500	0	83.5	454.0	8.38	04/16/2013
Dibromochloromethane	5.00		50.9	50.0	0	101.8	48.80	4.17	04/16/2013
Dibromomethane	5.00		49.4	50.0	0	98.8	50.03	1.27	04/16/2013
Dichlorodifluoromethane	10.0		28.4	50.0	0	56.9	30.67	7.55	04/16/2013
Diisopropyl ether	5.00		44.0	50.0	0	88.0	48.13	8.99	04/16/2013
Ethyl ether	5.00		45.0	50.0	0	90.0	46.21	2.63	04/16/2013
Ethyl methacrylate	5.00		52.4	50.0	0	104.8	51.74	1.31	04/16/2013
Ethylbenzene	5.00		51.0	50.0	0	102.0	48.66	4.74	04/16/2013
Ethyl-tert-butyl ether	5.00		43.7	50.0	0	87.4	47.57	8.53	04/16/2013
Hexachlorobutadiene	5.00		50.2	50.0	0	100.3	47.83	4.78	04/16/2013
Hexachloroethane	5.00		44.9	50.0	0	89.7	44.38	1.10	04/16/2013
Iodomethane	10.0		45.4	50.0	0	90.8	40.40	11.70	04/16/2013
Isopropylbenzene	5.00		51.7	50.0	0	103.4	49.65	4.03	04/16/2013
m,p-Xylenes	5.00		104	100	0	103.7	99.81	3.84	04/16/2013
Methacrylonitrile	50.0		50.3	50.0	0	100.6	52.62	4.51	04/16/2013
Methyl Methacrylate	5.00		43.7	50.0	0	87.4	45.63	4.30	04/16/2013
Methyl tert-butyl ether	2.00		43.9	50.0	0	87.8	48.30	9.59	04/16/2013
Methylacrylate	10.0		47.2	50.0	0	94.4	48.93	3.60	04/16/2013
Methylene chloride	5.00		45.8	50.0	0	91.6	45.17	1.43	04/16/2013
Naphthalene	10.0		51.7	50.0	0	103.4	52.37	1.33	04/16/2013
n-Butylbenzene	5.00		53.2	50.0	0	106.5	53.21	0.08	04/16/2013
n-Heptane	20.0		49.9	50.0	0	99.7	47.62	4.62	04/16/2013
n-Hexane	20.0		46.1	50.0	0	92.2	44.42	3.67	04/16/2013
Nitrobenzene	100		280	500	0	56.1	299.6	6.59	04/16/2013
n-Propylbenzene	5.00		49.2	50.0	0	98.4	48.38	1.72	04/16/2013
o-Xylene	5.00		50.8	50.0	0	101.6	48.61	4.43	04/16/2013
Pentachloroethane	5.00		46.9	50.0	0	93.8	45.63	2.72	04/16/2013
p-Isopropyltoluene	5.00		51.6	50.0	0	103.2	51.19	0.78	04/16/2013
Propionitrile	50.0		460	500	0	91.9	475.3	3.32	04/16/2013
sec-Butylbenzene	5.00		49.7	50.0	0	99.4	48.71	2.03	04/16/2013
Styrene	5.00		53.0	50.0	0	106.1	50.93	4.08	04/16/2013
tert-Amyl methyl ether	5.00		44.1	50.0	0	88.3	48.94	10.34	04/16/2013
tert-Butyl alcohol	50.0		204	250	0	81.7	235.6	14.19	04/16/2013
tert-Butylbenzene	5.00		49.3	50.0	0	98.6	47.62	3.45	04/16/2013
Tetrachloroethene	5.00		51.8	50.0	0	103.6	48.58	6.40	04/16/2013
Tetrahydrofuran	50.0	J	47	50.0	0	93.3	47.77	0.00	04/16/2013
Toluene	5.00		49.4	50.0	0	98.8	46.60	5.79	04/16/2013
trans-1,2-Dichloroethene	5.00		48.7	50.0	0	97.4	48.00	1.43	04/16/2013
trans-1,3-Dichloropropene	4.00		55.7	50.0	0	111.3	53.01	4.90	04/16/2013
trans-1,4-Dichloro-2-butene	10.0		42.5	50.0	0	85.0	43.90	3.29	04/16/2013
Trichloroethene	5.00		49.9	50.0	0	99.7	49.44	0.87	04/16/2013
Trichlorofluoromethane	5.00		41.5	50.0	0	82.9	45.17	8.57	04/16/2013
Vinyl acetate	50.0		54.8	50.0	0	109.5	53.77	1.82	04/16/2013
Vinyl chloride	2.00		34.3	50.0	0	68.5	39.69	14.66	04/16/2013

Client: SCI Engineering, Inc.

Client Project: Stone Mill/2013-0121.21

Work Order: 13040743

Report Date: 22-Apr-13

SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 87519 SampType: LCSD Units µg/Kg RPD Limit 40

SamplID: LCSD-G130416-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Xylenes, Total	5.00		155	150	0	103.0	148.4	4.03	04/16/2013
Surr: 1,2-Dichloroethane-d4			48.5	50.0		97.1			04/16/2013
Surr: 4-Bromofluorobenzene			53.3	50.0		106.6			04/16/2013
Surr: Toluene-d8			52.3	50.0		104.5			04/16/2013

Teklab, Inc.
Environmental Laboratory

Quality Control Results

http://www.teklabinc.com/

Client: SCI Engineering, Inc.

Client Project: Stone Mill/2013-0121.21

Work Order: 13040743

Report Date: 22-Apr-13

SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 87519 SampType: LCS Units µg/Kg

SampID: LCS-G130416-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
1,1,1,2-Tetrachloroethane	5.00		47.4	50.0	0	94.8	84	114	04/16/2013
1,1,1-Trichloroethane	5.00		47.7	50.0	0	95.4	81.6	121	04/16/2013
1,1,2,2-Tetrachloroethane	5.00		46.7	50.0	0	93.3	73.8	117	04/16/2013
1,1,2-Trichloro-1,2,2-trifluoroethane	5.00		45.5	50.0	0	91.0	73.9	122	04/16/2013
1,1,2-Trichloroethane	5.00		47.0	50.0	0	93.9	83	112	04/16/2013
1,1-Dichloro-2-propanone	50.0		87.7	125	0	70.2	52.2	138	04/16/2013
1,1-Dichloroethane	5.00		48.8	50.0	0	97.6	82.7	117	04/16/2013
1,1-Dichloroethene	5.00		45.6	50.0	0	91.1	77.8	120	04/16/2013
1,1-Dichloropropene	5.00		47.7	50.0	0	95.3	81.5	119	04/16/2013
1,2,3-Trichlorobenzene	5.00		51.7	50.0	0	103.5	73.5	139	04/16/2013
1,2,3-Trichloropropane	10.0		44.8	50.0	0	89.6	73.2	115	04/16/2013
1,2,3-Trimethylbenzene	5.00		51.4	50.0	0	102.9	81	121	04/16/2013
1,2,4-Trichlorobenzene	5.00		50.0	50.0	0	99.9	72.5	145	04/16/2013
1,2,4-Trimethylbenzene	5.00		49.8	50.0	0	99.5	82.7	115	04/16/2013
1,2-Dibromo-3-chloropropane	5.00		44.8	50.0	0	89.5	67.3	127	04/16/2013
1,2-Dibromoethane	5.00		46.7	50.0	0	93.5	84.5	114	04/16/2013
1,2-Dichlorobenzene	5.00		47.3	50.0	0	94.5	85.8	116	04/16/2013
[illegible]-Dichloroethane	5.00		48.8	50.0	0	97.6	75.2	126	04/16/2013
[illegible]Dichloropropane	5.00		49.2	50.0	0	98.4	82.1	117	04/16/2013
1,3,5-Trimethylbenzene	5.00		48.8	50.0	0	97.7	79.3	122	04/16/2013
1,3-Dichlorobenzene	5.00		48.4	50.0	0	96.8	84.8	119	04/16/2013
1,3-Dichloropropane	5.00		46.8	50.0	0	93.6	81.4	113	04/16/2013
1,4-Dichlorobenzene	5.00		48.3	50.0	0	96.7	83.3	120	04/16/2013
1-Chlorobutane	5.00		45.1	50.0	0	90.3	76.1	115	04/16/2013
2,2-Dichloropropane	5.00		46.4	50.0	0	92.7	76.9	123	04/16/2013
2-Butanone	50.0		115	125	0	91.8	61.4	128	04/16/2013
2-Chlorotoluene	5.00		47.1	50.0	0	94.2	80.5	116	04/16/2013
2-Hexanone	50.0		116	125	0	92.8	60.6	127	04/16/2013
2-Nitropropane	50.0		512	500	0	102.5	63.7	136	04/16/2013
4-Chlorotoluene	5.00		47.7	50.0	0	95.4	80.9	119	04/16/2013
4-Methyl-2-pentanone	50.0		142	125	0	113.2	62.7	138	04/16/2013
Acetone	50.0		110	125	0	88.0	49.9	127	04/16/2013
Acetonitrile	100		482	500	0	96.5	55.6	140	04/16/2013
Acrolein	100		346	500	0	69.1	1	200	04/16/2013
Acrylonitrile	10.0		46.2	50.0	0	92.4	67.9	128	04/16/2013
Allyl chloride	5.00		51.1	50.0	0	102.1	60.7	134	04/16/2013
Benzene	1.00		47.8	50.0	0	95.7	82.7	118	04/16/2013
Bromobenzene	5.00		45.9	50.0	0	91.8	83.6	113	04/16/2013
Bromochloromethane	5.00		46.8	50.0	0	93.5	78.4	119	04/16/2013
Bromodichloromethane	5.00		50.7	50.0	0	101.4	85.1	122	04/16/2013
Bromoform	5.00		47.2	50.0	0	94.5	80.5	120	04/16/2013
Bromomethane	10.0		40.0	50.0	0	80.1	1	165	04/16/2013
Carbon disulfide	5.00		43.1	50.0	0	86.3	67.5	122	04/16/2013
Carbon tetrachloride	5.00		46.0	50.0	0	92.0	79.8	123	04/16/2013
[illegible]robenzene	5.00		48.4	50.0	0	96.9	85.5	116	04/16/2013
[illegible]oroethane	10.0		46.1	50.0	0	92.2	54.2	138	04/16/2013
Chloroform	5.00		47.4	50.0	0	94.7	82.6	117	04/16/2013

Teklab, Inc.
Environmental Laboratory

Quality Control Results

http://www.teklabinc.com/

Client: SCI Engineering, Inc.

Client Project: Stone Mill/2013-0121.21

Work Order: 13040743

Report Date: 22-Apr-13

SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 87519 SampType: LCS Units µg/Kg

SampID: LCS-G130416-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloromethane	10.0		36.3	50.0	0	72.6	30	161	04/16/2013
cis-1,2-Dichloroethene	5.00		48.0	50.0	0	95.9	85.2	115	04/16/2013
cis-1,3-Dichloropropene	4.00		51.8	50.0	0	103.5	84	121	04/16/2013
Cyclohexanone	100		454	500	0	90.8	47.9	130	04/16/2013
Dibromochloromethane	5.00		48.8	50.0	0	97.6	83.3	117	04/16/2013
Dibromomethane	5.00		50.0	50.0	0	100.1	83.5	117	04/16/2013
Dichlorodifluoromethane	10.0		30.7	50.0	0	61.3	1	200	04/16/2013
Diisopropyl ether	5.00		48.1	50.0	0	96.3	76.7	119	04/16/2013
Ethyl ether	5.00		46.2	50.0	0	92.4	78.3	117	04/16/2013
Ethyl methacrylate	5.00		51.7	50.0	0	103.5	76.9	118	04/16/2013
Ethylbenzene	5.00		48.7	50.0	0	97.3	85.4	116	04/16/2013
Ethyl-tert-butyl ether	5.00		47.6	50.0	0	95.1	80.2	120	04/16/2013
Hexachlorobutadiene	5.00		47.8	50.0	0	95.7	71.9	141	04/16/2013
Hexachloroethane	5.00		44.4	50.0	0	88.8	75.1	119	04/16/2013
Iodomethane	10.0		40.4	50.0	0	80.8	47.7	147	04/16/2013
Isopropylbenzene	5.00		49.6	50.0	0	99.3	85.3	125	04/16/2013
m,p-Xylenes	5.00		99.8	100	0	99.8	86.2	117	04/16/2013
Methacrylonitrile	50.0		52.6	50.0	0	105.2	67.4	135	04/16/2013
›thyl Methacrylate	5.00		45.6	50.0	0	91.3	75.4	123	04/16/2013
;thyl tert-butyl ether	2.00		48.3	50.0	0	96.6	81	123	04/16/2013
Methylacrylate	10.0		48.9	50.0	0	97.9	70.6	129	04/16/2013
Methylene chloride	5.00		45.2	50.0	0	90.3	76.5	116	04/16/2013
Naphthalene	10.0		52.4	50.0	0	104.7	68.2	132	04/16/2013
n-Butylbenzene	5.00		53.2	50.0	0	106.4	70.5	136	04/16/2013
n-Heptane	20.0		47.6	50.0	0	95.2	72.2	117	04/16/2013
n-Hexane	20.0		44.4	50.0	0	88.8	62.5	124	04/16/2013
Nitrobenzene	100		300	500	0	59.9	25.6	131	04/16/2013
n-Propylbenzene	5.00		48.4	50.0	0	96.8	81.3	118	04/16/2013
o-Xylene	5.00		48.6	50.0	0	97.2	85.2	117	04/16/2013
Pentachloroethane	5.00		45.6	50.0	0	91.3	81	118	04/16/2013
p-Isopropyltoluene	5.00		51.2	50.0	0	102.4	80.1	127	04/16/2013
Propionitrile	50.0		475	500	0	95.1	64.6	135	04/16/2013
sec-Butylbenzene	5.00		48.7	50.0	0	97.4	82.1	120	04/16/2013
Styrene	5.00		50.9	50.0	0	101.9	88.4	120	04/16/2013
tert-Amyl methyl ether	5.00		48.9	50.0	0	97.9	83.3	118	04/16/2013
tert-Butyl alcohol	50.0		236	250	0	94.2	54.3	135	04/16/2013
tert-Butylbenzene	5.00		47.6	50.0	0	95.2	75.3	127	04/16/2013
Tetrachloroethene	5.00		48.6	50.0	0	97.2	84	117	04/16/2013
Tetrahydrofuran	50.0	J	48	50.0	0	95.5	63.6	126	04/16/2013
Toluene	5.00		46.6	50.0	0	93.2	81.1	110	04/16/2013
trans-1,2-Dichloroethene	5.00		48.0	50.0	0	96.0	81.3	120	04/16/2013
trans-1,3-Dichloropropene	4.00		53.0	50.0	0	106.0	82.6	114	04/16/2013
trans-1,4-Dichloro-2-butene	10.0		43.9	50.0	0	87.8	67	119	04/16/2013
Trichloroethene	5.00		49.4	50.0	0	98.9	86.1	120	04/16/2013
Trichlorofluoromethane	5.00		45.2	50.0	0	90.3	67.5	131	04/16/2013
ıyl acetate	50.0		53.8	50.0	0	107.5	72.5	120	04/16/2013
vinyl chloride	2.00		39.7	50.0	0	79.4	40.6	162	04/16/2013

Client: SCI Engineering, Inc.

Client Project: Stone Mill/2013-0121.21

Work Order: 13040743

Report Date: 22-Apr-13

SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 87519 **SampType:** LCS Units µg/Kg

SampID: LCS-G130416-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Xylenes, Total	5.00		148	150	0	98.9	86.1	117	04/16/2013
Surr: 1,2-Dichloroethane-d4			50.8	50.0		101.6	72.2	131	04/16/2013
Surr: 4-Bromofluorobenzene			51.0	50.0		101.9	82.1	116	04/16/2013
Surr: Toluene-d8			49.7	50.0		99.4	86	116	04/16/2013

Batch 87519 **SampType:** LCSGD Units µg/Kg RPD Limit 20

SampID: LCSGD-G130416-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
TPH - GRO (C6 - C10)	500		2270	2000	0	113.4	2455	7.90	04/16/2013
Surr: 1,2-Dichloroethane-d4			46.7	50.0		93.4			04/16/2013
Surr: 4-Bromofluorobenzene			52.8	50.0		105.6			04/16/2013
Surr: Toluene-d8			49.8	50.0		99.6			04/16/2013

Batch 87519 **SampType:** LCSG Units µg/Kg

SampID: LCSG-G130416-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
TPH - GRO (C6 - C10)	500		2460	2000	0	122.8	70	130	04/16/2013
Surr: 1,2-Dichloroethane-d4			46.7	50.0		93.3	72.2	131	04/16/2013
Surr: 4-Bromofluorobenzene			51.9	50.0		103.9	82.1	116	04/16/2013
Surr: Toluene-d8			49.5	50.0		99.0	86	116	04/16/2013

Batch 87519 **SampType:** MS Units µg/Kg-dry

SampID: 13040744-001AMS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
1,1-Dichloroethene	5.63		55.5	56.3	0	98.5	46.8	150	04/16/2013
Benzene	1.13		49.1	56.3	0	87.1	50.9	138	04/16/2013
Chlorobenzene	5.63		38.6	56.3	0	68.6	29.9	160	04/16/2013
Ethylbenzene	5.63		42.0	56.3	0	74.6	39.1	160	04/16/2013
m,p-Xylenes	5.63		39.9	56.3	0	70.8	32.2	154	04/16/2013
o-Xylene	5.63		38.8	56.3	0	69.0	33.9	155	04/16/2013
Toluene	5.63		44.9	56.3	0	79.7	44.8	143	04/16/2013
Trichloroethene	5.63		50.9	56.3	0	90.3	44.3	152	04/16/2013
Xylenes, Total	5.63		78.7	113	0	69.9	33.9	154	04/16/2013
Surr: 1,2-Dichloroethane-d4			61.0	56.3		108.3	72.2	131	04/16/2013
Surr: 4-Bromofluorobenzene			52.5	56.3		93.2	82.1	116	04/16/2013
Surr: Toluene-d8			58.6	56.3		104.0	86	116	04/16/2013

Client: SCI Engineering, Inc.

Client Project: Stone Mill/2013-0121.21

Work Order: 13040743

Report Date: 22-Apr-13

SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 87519 SampType: MSD Units µg/Kg-dry RPD Limit 20

SampID: 13040744-001AMSD

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
1,1-Dichloroethene	5.63		49.8	56.3	0	88.4	55.51	10.83	04/16/2013
Benzene	1.13		46.8	56.3	0	83.1	49.05	4.65	04/16/2013
Chlorobenzene	5.63		40.7	56.3	0	72.3	38.64	5.20	04/16/2013
Ethylbenzene	5.63		41.2	56.3	0	73.1	42.01	2.03	04/16/2013
m,p-Xylenes	5.63		39.5	56.3	0	70.2	39.88	0.88	04/16/2013
o-Xylene	5.63		39.7	56.3	0	70.5	38.85	2.15	04/16/2013
Toluene	5.63		43.8	56.3	0	77.8	44.90	2.46	04/16/2013
Trichloroethene	5.63		47.3	56.3	0	84.0	50.87	7.18	04/16/2013
Xylenes, Total	5.63		79.2	113	0	70.3	78.73	0.63	04/16/2013
Surr: 1,2-Dichloroethane-d4			58.9	56.3		104.6			04/16/2013
Surr: 4-Bromofluorobenzene			48.9	56.3		86.7			04/16/2013
Surr: Toluene-d8			59.2	56.3		105.2			04/16/2013

Teklab, Inc.
Environmental Laboratory

Receiving Check List

http://www.teklabinc.com/

Client: SCI Engineering, Inc.
Client Project: Stone Mill/2013-0121.21

Work Order: 13040743
Report Date: 22-Apr-13

Carrier: Kendrick Prejean

Received By: SRH

Completed by: Emily Pohlman
On: 16-Apr-13

Reviewed by: Elizabeth A. Hurley
On: 16-Apr-13

Pages to follow: Chain of custody 1 Extra pages included 0

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	Temp °C 3.8
Type of thermal preservation?	None ☐	Ice ☑	Blue Ice ☐	Dry Ice ☐
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Reported field parameters measured:	Field ☐	Lab ☐	NA ☑	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐		

When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.

Water – at least one vial per sample has zero headspace?	Yes ☐	No ☐	No VOA vials	☑
Water - TOX containers have zero headspace?	Yes ☐	No ☐	No TOX containers	☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐		
NPDES/CWA TCN interferences checked/treated in the field?	Yes ☐	No ☐	NA	☑

Any No responses must be detailed below or on the COC.

CHAIN OF CUSTODY

pg. 1 of 1 Work order # 13040743

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client: SCI Engineering, Inc.
Address: 130 Point West Boulevard
City / State / Zip: St. Charles, MO 63301
Contact: Ben Butterfield Phone: (636) 949-8200
E-Mail: bbutterfield@sciengineering.com Fax:

Samples on: ☒ ICE ☐ BLUE ICE ☐ NO ICE 3.8 °C
Preserved in: ☐ LAB ☒ FIELD
FOR LAB USE ONLY
Lab Notes:

Client Comments:
Analyze/report salinity as conductivity of soil.
MEET MRBCA DTL'S

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☒ No
Are these samples known to be hazardous? ☐ Yes ☒ No
Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. ☒ Yes ☐ No

Project Name/Number: Stone Mill/2013-0121.21
Sample Collector's Name: BEN BUTTERFIELD
Results Requested: ☒ Standard ☐ 1-2 Day (100% Surcharge) ☐ Other ____ ☐ 3 Day (50% Surcharge)
Billing Instructions: 13-0121.21

Lab Use Only	Sample Identification	Date/Time Sampled	# and Type of Containers: UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER	MATRIX: Aqueous	Drinking Water	Soil	Sludge	Special Waste	INDICATE ANALYSIS REQUESTED: DRO ORO	Salinity	VOCs with GRO
13040743-001	SCI-1	4/15/13 945	2				2		1				X			X		X
-002	SCI-2	4/15/13 1000	X										X				X	

Teklab, Inc.
Courier Pick Up

Relinquished By	Date/Time	Received By	Date/Time
Ben Butterfield	4/15/13 1125	[illegible]	4-15-13 15:56
[illegible]	4-15-13 16:35	[illegible]	4/15/13 16:35

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client.

BottleOrder: 14513

April 22, 2013

Ben Butterfield
SCI Engineering, Inc.
130 Point West Boulevard
St. Charles, MO 63301
TEL: (618) 206-3028
FAX: (636) 949-8269

RE: Stone Mill/2013-0121.21

WorkOrder: 13040925

Dear Ben Butterfield:

TEKLAB, INC received 1 sample on 4/17/2013 5:05:00 PM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Elizabeth A. Hurley

Elizabeth A. Hurley
Project Manager
(618)344-1004 ex 33
ehurley@teklabinc.com

Teklab, Inc.
Environmental Laboratory

Report Contents

http://www.teklabinc.com/

Client: SCI Engineering, Inc.
Client Project: Stone Mill/2013-0121.21

Work Order: 13040925
Report Date: 22-Apr-13

This reporting package includes the following:

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Chain of Custody	Appended

Definitions

Client: SCI Engineering, Inc.
Client Project: Stone Mill/2013-0121.21

Work Order: 13040925
Report Date: 22-Apr-13

Abbr Definition

CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.

DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilutions factors.

DNI Did not ignite

DUP Laboratory duplicate is an aliquot of a sample taken from the same container under laboratory conditions for independent processing and analysis independently of the original aliquot.

ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.

IDPH IL Dept. of Public Health

LCS Laboratory control sample, spiked with verified known amounts of analytes, is analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system. The acceptable recovery range is in the QC Package (provided upon request).

LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MB Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.

MDL Method detection limit means the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).

SD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MW Molecular weight

ND Not Detected at the Reporting Limit

NELAP NELAP Accredited

PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions. The acceptable recovery range is listed in the QC Package (provided upon request).

RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.

RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).

SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.

Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.

TNTC Too numerous to count (> 200 CFU)

Qualifiers

- Unknown hydrocarbon

E - Value above quantitation range

M - Manual Integration used to determine area response

R - RPD outside accepted recovery limits

X - Value exceeds Maximum Contaminant Level

B - Analyte detected in associated Method Blank

H - Holding times exceeded

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside recovery limits

Client: SCI Engineering, Inc.

Client Project: Stone Mill/2013-0121.21

Work Order: 13040925

Report Date: 22-Apr-13

Cooler Receipt Temp: 2.4 °C

Locations and Accreditations

Collinsville		Springfield		Kansas City	
Address	5445 Horseshoe Lake Road Collinsville, IL 62234-7425	Address	3920 Pintail Dr Springfield, IL 62711-9415	Address	8421 Nieman Road Lenexa, KS 66214
Phone	(618) 344-1004	Phone	(217) 698-1004	Phone	(913) 541-1998
Fax	(618) 344-1005	Fax	(217) 698-1005	Fax	(913) 541-1998
Email	jhriley@teklabinc.com	Email	KKlostermann@teklabinc.com	Email	dthompson@teklabinc.com

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2014	Collinsville
Kansas	KDHE	E-10374	NELAP	1/31/2014	Collinsville
Louisiana	LDEQ	166493	NELAP	6/30/2013	Collinsville
Louisiana	LDEQ	166578	NELAP	6/30/2013	Springfield
Texas	TCEQ	T104704515-12-1	NELAP	7/31/2013	Collinsville
Arkansas	ADEQ	88-0966		3/14/2014	Collinsville
Illinois	IDPH	17584		4/30/2013	Collinsville
Kentucky	UST	0073		4/5/2014	Collinsville
Missouri	MDNR	00930		4/13/2013	Collinsville
Oklahoma	ODEQ	9978		8/31/2013	Collinsville

Teklab, Inc.
Environmental Laboratory

Laboratory Results

http://www.teklabinc.com/

Client: SCI Engineering, Inc.
Client Project: Stone Mill/2013-0121.21
Lab ID: 13040925-001
Matrix: AQUEOUS

Work Order: 13040925
Report Date: 22-Apr-13
Client Sample ID: SCI-1
Collection Date: 04/17/2013 12:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS								
TPH-DRO (C10 - C21)		0.300		0.440	mg/L	1	04/18/2013 15:57	87578
TPH-ORO (C21 - C35)		0.300		0.424	mg/L	1	04/18/2013 15:57	87578
Surr: 2-Fluorobiphenyl		25.9-104		55.9	%REC	1	04/18/2013 15:57	87578
Surr: Nitrobenzene-d5		15.5-114		58.0	%REC	1	04/18/2013 15:57	87578
Surr: p-Terphenyl-d14		1-121		38.1	%REC	1	04/18/2013 15:57	87578
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
1,1,1-Trichloroethane	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
1,1,2,2-Tetrachloroethane	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
1,1,2-Trichloro-1,2,2-trifluoroethane		20.0		ND	µg/L	1	04/18/2013 15:48	87638
1,1,2-Trichloroethane	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
1,1-Dichloro-2-propanone	NELAP	50.0		ND	µg/L	1	04/18/2013 15:48	87638
1,1-Dichloroethane	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
1,1-Dichloroethene	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
1,1-Dichloropropene	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
1,2,3-Trichlorobenzene	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
1,2,3-Trichloropropane	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
[illegible]3-Trimethylbenzene		5.00		ND	µg/L	1	04/18/2013 15:48	87638
[illegible]-Trichlorobenzene	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
1,2,4-Trimethylbenzene	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
1,2-Dibromo-3-chloropropane	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
1,2-Dibromoethane	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
1,2-Dichlorobenzene	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
1,2-Dichloroethane	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
1,2-Dichloroethene, Total		5.00		ND	µg/L	1	04/18/2013 15:48	87638
1,2-Dichloropropane	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
1,3,5-Trimethylbenzene	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
1,3-Dichlorobenzene	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
1,3-Dichloropropane	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
1,3-Dichloropropene, Total		5.00		ND	µg/L	1	04/18/2013 15:48	87638
1,4-Dichloro-2-butene, Total		10.0		ND	µg/L	1	04/18/2013 15:48	87638
1,4-Dichlorobenzene	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
1-Chlorobutane	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
2,2-Dichloropropane	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
2-Butanone	NELAP	25.0		ND	µg/L	1	04/18/2013 15:48	87638
2-Chloroethyl vinyl ether	NELAP	20.0		ND	µg/L	1	04/18/2013 15:48	87638
2-Chlorotoluene	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
2-Hexanone	NELAP	25.0		ND	µg/L	1	04/18/2013 15:48	87638
2-Nitropropane	NELAP	50.0		ND	µg/L	1	04/18/2013 15:48	87638
4-Chlorotoluene	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
4-Methyl-2-pentanone	NELAP	25.0		ND	µg/L	1	04/18/2013 15:48	87638
Acetone	NELAP	25.0		36.2	µg/L	1	04/18/2013 15:48	87638
Acetonitrile	NELAP	50.0		ND	µg/L	1	04/18/2013 15:48	87638
Acrolein	NELAP	100		ND	µg/L	1	04/18/2013 15:48	87638
[illegible]ionitrile	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
[illegible]yl chloride	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
Benzene	NELAP	2.00		ND	µg/L	1	04/18/2013 15:48	87638

Teklab, Inc.
Environmental Laboratory

Laboratory Results

http://www.teklabinc.com/

Client: SCI Engineering, Inc.
Client Project: Stone Mill/2013-0121.21
Lab ID: 13040925-001
Matrix: AQUEOUS

Work Order: 13040925
Report Date: 22-Apr-13
Client Sample ID: SCI-1
Collection Date: 04/17/2013 12:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Bromobenzene	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
Bromochloromethane	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
Bromodichloromethane	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
Bromoform	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
Bromomethane	NELAP	10.0		ND	µg/L	1	04/18/2013 15:48	87638
Carbon disulfide	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
Carbon tetrachloride	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
Chlorobenzene	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
Chloroethane	NELAP	10.0		ND	µg/L	1	04/18/2013 15:48	87638
Chloroform	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
Chloromethane	NELAP	10.0		ND	µg/L	1	04/18/2013 15:48	87638
Chloroprene	NELAP	20.0		ND	µg/L	1	04/18/2013 15:48	87638
cis-1,2-Dichloroethene	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
cis-1,3-Dichloropropene	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
cis-1,4-Dichloro-2-butene	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
Cyclohexanone		50.0		ND	µg/L	1	04/18/2013 15:48	87638
Dibromochloromethane	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
Dibromomethane	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
ichlorodifluoromethane	NELAP	10.0		ND	µg/L	1	04/18/2013 15:48	87638
isopropyl ether		2.00		ND	µg/L	1	04/18/2013 15:48	87638
Ethyl acetate	NELAP	10.0		ND	µg/L	1	04/18/2013 15:48	87638
Ethyl ether	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
Ethyl methacrylate	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
Ethylbenzene	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
Ethyl-tert-butyl ether		2.00		ND	µg/L	1	04/18/2013 15:48	87638
Hexachlorobutadiene	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
Hexachloroethane	NELAP	10.0		ND	µg/L	1	04/18/2013 15:48	87638
Iodomethane	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
Isopropylbenzene	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
m,p-Xylenes	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
Methacrylonitrile	NELAP	10.0		ND	µg/L	1	04/18/2013 15:48	87638
Methyl Methacrylate	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
Methyl tert-butyl ether	NELAP	2.00		ND	µg/L	1	04/18/2013 15:48	87638
Methylacrylate	NELAP	10.0		ND	µg/L	1	04/18/2013 15:48	87638
Methylene chloride	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
Naphthalene	NELAP	10.0		ND	µg/L	1	04/18/2013 15:48	87638
n-Butyl acetate		25.0		ND	µg/L	1	04/18/2013 15:48	87638
n-Butylbenzene	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
n-Heptane		20.0		ND	µg/L	1	04/18/2013 15:48	87638
n-Hexane		20.0		ND	µg/L	1	04/18/2013 15:48	87638
Nitrobenzene	NELAP	50.0		ND	µg/L	1	04/18/2013 15:48	87638
n-Propylbenzene	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
o-Xylene	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
Pentachloroethane	NELAP	20.0		ND	µg/L	1	04/18/2013 15:48	87638
o-Isopropyltoluene	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
opionitrile	NELAP	50.0		ND	µg/L	1	04/18/2013 15:48	87638
sec-Butylbenzene	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638

Teklab, Inc.
Environmental Laboratory

Laboratory Results

http://www.teklabinc.com/

Client: SCI Engineering, Inc.
Client Project: Stone Mill/2013-0121.21
Lab ID: 13040925-001
Matrix: AQUEOUS

Work Order: 13040925
Report Date: 22-Apr-13
Client Sample ID: SCI-1
Collection Date: 04/17/2013 12:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Styrene	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
tert-Amyl methyl ether		2.00		ND	µg/L	1	04/18/2013 15:48	87638
tert-Butyl alcohol		25.0		ND	µg/L	1	04/18/2013 15:48	87638
tert-Butylbenzene	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
Tetrachloroethene	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
Tetrahydrofuran	NELAP	20.0		ND	µg/L	1	04/18/2013 15:48	87638
Toluene	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
TPH - GRO (C6 - C10)		500		ND	µg/L	1	04/17/2013 18:58	87604
trans-1,2-Dichloroethene	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
trans-1,3-Dichloropropene	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
trans-1,4-Dichloro-2-butene	NELAP	10.0		ND	µg/L	1	04/18/2013 15:48	87638
Trichloroethene	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
Trichlorofluoromethane	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
Vinyl acetate	NELAP	10.0		ND	µg/L	1	04/18/2013 15:48	87638
Vinyl chloride	NELAP	2.00		ND	µg/L	1	04/18/2013 15:48	87638
Xylenes, Total	NELAP	5.00		ND	µg/L	1	04/18/2013 15:48	87638
Surr: 1,2-Dichloroethane-d4		74.7-129		102.2	%REC	1	04/18/2013 15:48	87638
Surr: 4-Bromofluorobenzene		86-119		103.2	%REC	1	04/18/2013 15:48	87638
Surr: Toluene-d8		84.3-114		95.6	%REC	1	04/18/2013 15:48	87638

Client: SCI Engineering, Inc.

Client Project: Stone Mill/2013-0121.21

Work Order: 13040925

Report Date: 22-Apr-13

SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 87578 SampType: MBLK Units mg/L

SampID: MBLK-87578

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
TPH-DRO (C10 - C21)	0.300		ND						04/18/2013
TPH-ORO (C21 - C35)	0.300		ND						04/18/2013
Surr: 2-Fluorobiphenyl			0.0169	0.0250		67.6	31	109	04/18/2013
Surr: Nitrobenzene-d5			0.0164	0.0250		65.5	38.4	98.5	04/18/2013
Surr: p-Terphenyl-d14			0.0178	0.0250		71.2	42.4	131	04/18/2013

Batch 87578 SampType: LCS Units %REC

SampID: LCS-87578

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Surr: 2-Fluorobiphenyl			0.0153	0.0250		61.1	31	109	04/18/2013
Surr: Nitrobenzene-d5			0.0158	0.0250		63.2	35.7	114	04/18/2013
Surr: p-Terphenyl-d14			0.0180	0.0250		72.0	42.4	131	04/18/2013

Batch 87578 SampType: LCSD Units %REC RPD Limit 0

SampID: LCSD-87578

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Surr: 2-Fluorobiphenyl			0.0145	0.0250		58.1			04/18/2013
Surr: Nitrobenzene-d5			0.0123	0.0250		49.1			04/18/2013
Surr: p-Terphenyl-d14			0.0175	0.0250		69.8			04/18/2013

Batch 87578 SampType: LCS Units mg/L

SampID: LCSDRO-87578

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
TPH-DRO (C10 - C21)	0.300		0.645	1.00	0	64.5	58	131	04/18/2013
Surr: 2-Fluorobiphenyl			0.0156	0.0250		62.4	31	109	04/18/2013
Surr: Nitrobenzene-d5			0.0143	0.0250		57.3	35.7	114	04/18/2013
Surr: p-Terphenyl-d14			0.0174	0.0250		69.6	42.4	131	04/18/2013

Batch 87578 SampType: LCSD Units mg/L RPD Limit 36.2

SampID: LCSDROD-87578

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
TPH-DRO (C10 - C21)	0.300		0.640	1.00	0	64.0	0.6453	0.75	04/18/2013
Surr: 2-Fluorobiphenyl			0.0168	0.0250		67.2			04/18/2013
Surr: Nitrobenzene-d5			0.0160	0.0250		64.0			04/18/2013
Surr: p-Terphenyl-d14			0.0184	0.0250		73.8			04/18/2013

Teklab, Inc.
Environmental Laboratory

Quality Control Results

http://www.teklabinc.com/

Client: SCI Engineering, Inc.
Client Project: Stone Mill/2013-0121.21

Work Order: 13040925
Report Date: 22-Apr-13

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 87604 SampType: MBLK Units µg/L
SampID: MBLK-N130417-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
1,2-Dibromoethane	2.0		ND						04/17/2013
1,2-Dichloroethane	2.0		ND						04/17/2013
Benzene	2.0		ND						04/17/2013
Diisopropyl ether	2.0		ND						04/17/2013
Ethylbenzene	2.0		ND						04/17/2013
Ethyl-tert-butyl ether	2.0		ND						04/17/2013
m,p-Xylenes	2.0		ND						04/17/2013
Methyl tert-butyl ether	2.0		ND						04/17/2013
Naphthalene	5.0		ND						04/17/2013
o-Xylene	2.0		ND						04/17/2013
tert-Amyl methyl ether	2.0		ND						04/17/2013
tert-Butyl alcohol	25.0		ND						04/17/2013
Toluene	2.0		ND						04/17/2013
Xylenes, Total	5.0		ND						04/17/2013
TPH - GRO (C6 - C10)	500		ND						04/17/2013
Surr: 1,2-Dichloroethane-d4			50.6	50.0		101.3	74.7	129	04/17/2013
Surr: 4-Bromofluorobenzene			50.5	50.0		100.9	86	119	04/17/2013
Surr: Toluene-d8			46.4	50.0		92.7	84.3	114	04/17/2013

Batch 87604 SampType: LCSD Units µg/L RPD Limit 40
SampID: LCSD-N130417-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
1,2-Dibromoethane	2.0		47.1	50.0	0	94.1	47.34	0.59	04/17/2013
1,2-Dichloroethane	2.0		43.0	50.0	0	85.9	43.45	1.11	04/17/2013
Benzene	2.0		44.4	50.0	0	88.9	44.21	0.50	04/17/2013
Diisopropyl ether	2.0		42.2	50.0	0	84.3	41.67	1.19	04/17/2013
Ethylbenzene	2.0		46.0	50.0	0	92.0	45.43	1.25	04/17/2013
Ethyl-tert-butyl ether	2.0		43.6	50.0	0	87.3	43.92	0.62	04/17/2013
m,p-Xylenes	2.0		93.8	100	0	93.8	92.62	1.30	04/17/2013
Methyl tert-butyl ether	2.0		45.7	50.0	0	91.4	45.90	0.41	04/17/2013
Naphthalene	5.0		51.2	50.0	0	102.5	51.09	0.27	04/17/2013
o-Xylene	2.0		43.8	50.0	0	87.6	43.63	0.34	04/17/2013
tert-Amyl methyl ether	2.0		44.0	50.0	0	88.0	44.56	1.22	04/17/2013
tert-Butyl alcohol	25.0		248	250	0	99.2	249.0	0.44	04/17/2013
Toluene	2.0		44.7	50.0	0	89.5	43.34	3.16	04/17/2013
Xylenes, Total	5.0		138	150	0	91.7	136.2	0.99	04/17/2013
Surr: 1,2-Dichloroethane-d4			48.7	50.0		97.5			04/17/2013
Surr: 4-Bromofluorobenzene			49.3	50.0		98.7			04/17/2013
Surr: Toluene-d8			49.6	50.0		99.2			04/17/2013

Client: SCI Engineering, Inc.
Client Project: Stone Mill/2013-0121.21

Work Order: 13040925
Report Date: 22-Apr-13

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 87604 SampType: LCS Units µg/L
SampID: LCS-N130417-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
1,2-Dibromoethane	2.0		47.3	50.0	0	94.7	83.5	113	04/17/2013
1,2-Dichloroethane	2.0		43.4	50.0	0	86.9	79.8	117	04/17/2013
Benzene	2.0		44.2	50.0	0	88.4	83.5	113	04/17/2013
Diisopropyl ether	2.0		41.7	50.0	0	83.3	83.2	115	04/17/2013
Ethylbenzene	2.0		45.4	50.0	0	90.9	80.7	109	04/17/2013
Ethyl-tert-butyl ether	2.0		43.9	50.0	0	87.8	83.6	113	04/17/2013
m,p-Xylenes	2.0		92.6	100	0	92.6	83.2	113	04/17/2013
Methyl tert-butyl ether	2.0		45.9	50.0	0	91.8	82.8	116	04/17/2013
Naphthalene	5.0		51.1	50.0	0	102.2	64.3	148	04/17/2013
o-Xylene	2.0		43.6	50.0	0	87.3	81.9	111	04/17/2013
tert-Amyl methyl ether	2.0		44.6	50.0	0	89.1	81.5	112	04/17/2013
tert-Butyl alcohol	25.0		249	250	0	99.6	67.8	138	04/17/2013
Toluene	2.0		43.3	50.0	0	86.7	81	110	04/17/2013
Xylenes, Total	5.0		136	150	0	90.8	82.8	112	04/17/2013
Surr: 1,2-Dichloroethane-d4			49.2	50.0		98.4	74.7	129	04/17/2013
Surr: 4-Bromofluorobenzene			49.5	50.0		98.9	86	119	04/17/2013
Surr: Toluene-d8			49.3	50.0		98.7	84.1	114	04/17/2013

h 87604 SampType: LCSGD Units µg/L RPD Limit 20
..pID: LCSGD-N130417-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
TPH - GRO (C6 - C10)	500		1970	2000	0	98.3	1925	2.07	04/17/2013
Surr: 1,2-Dichloroethane-d4			50.1	50.0		100.2			04/17/2013
Surr: 4-Bromofluorobenzene			51.1	50.0		102.1			04/17/2013
Surr: Toluene-d8			49.0	50.0		98.0			04/17/2013

Batch 87604 SampType: LCSG Units µg/L
SampID: LCSG-N130417-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
TPH - GRO (C6 - C10)	500		1920	2000	0	96.2	70	130	04/17/2013
Surr: 1,2-Dichloroethane-d4			49.1	50.0		98.2	74.7	129	04/17/2013
Surr: 4-Bromofluorobenzene			51.1	50.0		102.1	86	119	04/17/2013
Surr: Toluene-d8			49.3	50.0		98.6	84.3	114	04/17/2013

Client: SCI Engineering, Inc.

Client Project: Stone Mill/2013-0121.21

Work Order: 13040925

Report Date: 22-Apr-13

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 87604 SampType: MS Units µg/L

SampID: 13040864-003EMS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Benzene	2.0		34.7	43.0	0	80.6	62.5	121	04/17/2013
Ethylbenzene	2.0		42.1	43.0	0	97.9	74.4	130	04/17/2013
m,p-Xylenes	2.0		41.7	43.0	0	97.0	70.5	126	04/17/2013
o-Xylene	2.0		39.1	43.0	0	90.9	71.2	124	04/17/2013
Toluene	2.0		35.9	43.0	0	83.6	69.5	118	04/17/2013
Xylenes, Total	5.0		80.8	86.0	0	94.0	71.1	125	04/17/2013
Surr: 1,2-Dichloroethane-d4			50.2	50.0		100.3	74.7	129	04/17/2013
Surr: 4-Bromofluorobenzene			50.2	50.0		100.3	86	119	04/17/2013
Surr: Toluene-d8			48.2	50.0		96.4	84.3	114	04/17/2013

Batch 87604 SampType: MSD Units µg/L RPD Limit 20

SampID: 13040864-003EMSD

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Benzene	2.0		33.9	43.0	0	78.9	34.66	2.19	04/17/2013
Ethylbenzene	2.0		42.6	43.0	0	99.1	42.10	1.20	04/17/2013
m,p-Xylenes	2.0		40.7	43.0	0	94.6	41.71	2.55	04/17/2013
o-Xylene	2.0		39.5	43.0	0	91.8	39.10	0.97	04/17/2013
ene	2.0		35.7	43.0	0	83.1	35.94	0.61	04/17/2013
enes, Total	5.0		80.1	86.0	0	93.2	80.81	0.83	04/17/2013
Surr: 1,2-Dichloroethane-d4			49.1	50.0		98.1			04/17/2013
Surr: 4-Bromofluorobenzene			50.8	50.0		101.5			04/17/2013
Surr: Toluene-d8			47.3	50.0		94.5			04/17/2013

Client: SCI Engineering, Inc.

Client Project: Stone Mill/2013-0121.21

Work Order: 13040925

Report Date: 22-Apr-13

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 87638 SampType: MBLK Units µg/L

SampID: MBLK-T130418-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
1,1,1,2-Tetrachloroethane	5.0		ND						04/18/2013
1,1,1-Trichloroethane	5.0		ND						04/18/2013
1,1,2,2-Tetrachloroethane	5.0		ND						04/18/2013
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0		ND						04/18/2013
1,1,2-Trichloroethane	5.0		ND						04/18/2013
1,1-Dichloro-2-propanone	50.0		ND						04/18/2013
1,1-Dichloroethane	5.0		ND						04/18/2013
1,1-Dichloroethene	5.0		ND						04/18/2013
1,1-Dichloropropene	5.0		ND						04/18/2013
1,2,3-Trichlorobenzene	5.0		ND						04/18/2013
1,2,3-Trichloropropane	5.0		ND						04/18/2013
1,2,3-Trimethylbenzene	5.0		ND						04/18/2013
1,2,4-Trichlorobenzene	5.0		ND						04/18/2013
1,2,4-Trimethylbenzene	5.0		ND						04/18/2013
1,2-Dibromo-3-chloropropane	5.0		ND						04/18/2013
1,2-Dibromoethane	5.0		ND						04/18/2013
1,2-Dichlorobenzene	5.0		ND						04/18/2013
1,2-Dichloroethane	5.0		ND						04/18/2013
?-Dichloropropane	5.0		ND						04/18/2013
3,5-Trimethylbenzene	5.0		ND						04/18/2013
1,3-Dichlorobenzene	5.0		ND						04/18/2013
1,3-Dichloropropane	5.0		ND						04/18/2013
1,4-Dichlorobenzene	5.0		ND						04/18/2013
1-Chlorobutane	5.0		ND						04/18/2013
2,2-Dichloropropane	5.0		ND						04/18/2013
2-Butanone	25.0		ND						04/18/2013
2-Chloroethyl vinyl ether	20.0		ND						04/18/2013
2-Chlorotoluene	5.0		ND						04/18/2013
2-Hexanone	25.0		ND						04/18/2013
2-Nitropropane	50.0		ND						04/18/2013
4-Chlorotoluene	5.0		ND						04/18/2013
4-Methyl-2-pentanone	25.0		ND						04/18/2013
Acetone	25.0		ND						04/18/2013
Acetonitrile	50.0		ND						04/18/2013
Acrolein	100		ND						04/18/2013
Acrylonitrile	5.0		ND						04/18/2013
Allyl chloride	5.0		ND						04/18/2013
Benzene	2.0		ND						04/18/2013
Bromobenzene	5.0		ND						04/18/2013
Bromochloromethane	5.0		ND						04/18/2013
Bromodichloromethane	5.0		ND						04/18/2013
Bromoform	5.0		ND						04/18/2013
Bromomethane	10.0		ND						04/18/2013
Carbon disulfide	5.0		ND						04/18/2013
Carbon tetrachloride	5.0		ND						04/18/2013
.lorobenzene	5.0		ND						04/18/2013
Chloroethane	10.0		ND						04/18/2013

Client: SCI Engineering, Inc.

Client Project: Stone Mill/2013-0121.21

Work Order: 13040925

Report Date: 22-Apr-13

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 87638 SampType: MBLK Units µg/L

SampID: MBLK-T130418-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloroform	5.0		ND						04/18/2013
Chloromethane	10.0		ND						04/18/2013
Chloroprene	20.0		ND						04/18/2013
cis-1,2-Dichloroethene	5.0		ND						04/18/2013
cis-1,3-Dichloropropene	5.0		ND						04/18/2013
cis-1,4-Dichloro-2-butene	5.0		ND						04/18/2013
Cyclohexanone	50.0		ND						04/18/2013
Dibromochloromethane	5.0		ND						04/18/2013
Dibromomethane	5.0		ND						04/18/2013
Dichlorodifluoromethane	10.0		ND						04/18/2013
Ethyl acetate	10.0		ND						04/18/2013
Ethyl ether	5.0		ND						04/18/2013
Ethyl methacrylate	5.0		ND						04/18/2013
Ethylbenzene	5.0		ND						04/18/2013
Hexachlorobutadiene	5.0		ND						04/18/2013
Hexachloroethane	10.0		ND						04/18/2013
Iodomethane	5.0		ND						04/18/2013
Isopropylbenzene	5.0		ND						04/18/2013
Xylenes	5.0		ND						04/18/2013
Methacrylonitrile	10.0		ND						04/18/2013
Methyl Methacrylate	5.0		ND						04/18/2013
Methyl tert-butyl ether	2.0		ND						04/18/2013
Methylacrylate	10.0		ND						04/18/2013
Methylene chloride	5.0		ND						04/18/2013
Naphthalene	10.0		ND						04/18/2013
n-Butyl acetate	25.0		ND						04/18/2013
n-Butylbenzene	5.0		ND						04/18/2013
n-Heptane	20.0		ND						04/18/2013
n-Hexane	20.0		ND						04/18/2013
Nitrobenzene	50.0		ND						04/18/2013
n-Propylbenzene	5.0		ND						04/18/2013
o-Xylene	5.0		ND						04/18/2013
Pentachloroethane	20.0		ND						04/18/2013
p-Isopropyltoluene	5.0		ND						04/18/2013
Propionitrile	50.0		ND						04/18/2013
sec-Butylbenzene	5.0		ND						04/18/2013
Styrene	5.0		ND						04/18/2013
tert-Butylbenzene	5.0		ND						04/18/2013
Tetrachloroethene	5.0		ND						04/18/2013
Tetrahydrofuran	20.0		ND						04/18/2013
Toluene	5.0		ND						04/18/2013
trans-1,2-Dichloroethene	5.0		ND						04/18/2013
trans-1,3-Dichloropropene	5.0		ND						04/18/2013
trans-1,4-Dichloro-2-butene	10.0		ND						04/18/2013
loroethene	5.0		ND						04/18/2013
..ilorofluoromethane	5.0		ND						04/18/2013
Vinyl acetate	10.0		ND						04/18/2013

Client: SCI Engineering, Inc.

Client Project: Stone Mill/2013-0121.21

Work Order: 13040925

Report Date: 22-Apr-13

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 87638 SampType: MBLK Units µg/L

SampID: MBLK-T130418-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Vinyl chloride	2.0		ND						04/18/2013
Xylenes, Total	5.0		ND						04/18/2013
1,3-Dichloropropene, Total	5.0		ND						04/18/2013
1,4-Dichloro-2-butene, Total	10.0		ND						04/18/2013
1,2-Dichloroethene, Total	5.0		ND						04/18/2013
Surr: 1,2-Dichloroethane-d4			51.4	50.0		102.8	74.7	129	04/18/2013
Surr: 4-Bromofluorobenzene			51.8	50.0		103.6	86	119	04/18/2013
Surr: Toluene-d8			48.0	50.0		96.0	84.3	114	04/18/2013

Teklab, Inc.
Environmental Laboratory

Quality Control Results

http://www.teklabinc.com/

Client: SCI Engineering, Inc.

Client Project: Stone Mill/2013-0121.21

Work Order: 13040925

Report Date: 22-Apr-13

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 87638 SampType: LCSD Units µg/L RPD Limit 40

SampID: LCSD-T130418-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
1,1,1,2-Tetrachloroethane	5.0		49.4	50.0	0	98.7	50.17	1.65	04/18/2013
1,1,1-Trichloroethane	5.0		48.8	50.0	0	97.5	50.79	4.06	04/18/2013
1,1,2,2-Tetrachloroethane	5.0		41.5	50.0	0	83.0	44.98	8.05	04/18/2013
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0		47.2	50.0	0	94.5	49.26	4.21	04/18/2013
1,1,2-Trichloroethane	5.0		44.3	50.0	0	88.6	46.11	3.96	04/18/2013
1,1-Dichloro-2-propanone	50.0		119	125	0	94.8	139.1	15.98	04/18/2013
1,1-Dichloroethane	5.0		45.1	50.0	0	90.2	47.11	4.36	04/18/2013
1,1-Dichloroethene	5.0		45.7	50.0	0	91.4	47.84	4.60	04/18/2013
1,1-Dichloropropene	5.0		44.0	50.0	0	88.0	45.68	3.79	04/18/2013
1,2,3-Trichlorobenzene	5.0		46.8	50.0	0	93.6	49.32	5.24	04/18/2013
1,2,3-Trichloropropane	5.0		44.0	50.0	0	88.1	47.96	8.54	04/18/2013
1,2,3-Trimethylbenzene	5.0		48.1	50.0	0	96.2	50.29	4.43	04/18/2013
1,2,4-Trichlorobenzene	5.0		44.5	50.0	0	89.1	46.46	4.22	04/18/2013
1,2,4-Trimethylbenzene	5.0		45.2	50.0	0	90.5	47.69	5.27	04/18/2013
1,2-Dibromo-3-chloropropane	5.0		45.5	50.0	0	91.0	51.65	12.62	04/18/2013
1,2-Dibromoethane	5.0		46.2	50.0	0	92.3	47.50	2.86	04/18/2013
1,2-Dichlorobenzene	5.0		45.1	50.0	0	90.2	46.95	4.02	04/18/2013
1,2-Dichloroethane	5.0		44.6	50.0	0	89.2	46.28	3.70	04/18/2013
[illegible]ichloropropane	5.0		43.4	50.0	0	86.8	44.83	3.29	04/18/2013
[illegible]-Trimethylbenzene	5.0		46.0	50.0	0	91.9	48.40	5.19	04/18/2013
1,3-Dichlorobenzene	5.0		45.1	50.0	0	90.2	47.15	4.40	04/18/2013
1,3-Dichloropropane	5.0		44.8	50.0	0	89.6	46.60	3.96	04/18/2013
1,4-Dichlorobenzene	5.0		45.0	50.0	0	89.9	47.07	4.56	04/18/2013
1-Chlorobutane	5.0		45.4	50.0	0	90.9	47.46	4.37	04/18/2013
2,2-Dichloropropane	5.0		42.8	50.0	0	85.5	45.47	6.12	04/18/2013
2-Butanone	25.0		107	125	0	85.4	123.1	14.27	04/18/2013
2-Chloroethyl vinyl ether	20.0		44.8	50.0	0	89.6	47.29	5.45	04/18/2013
2-Chlorotoluene	5.0		44.3	50.0	0	88.7	46.41	4.56	04/18/2013
2-Hexanone	25.0		109	125	0	87.4	122.3	11.21	04/18/2013
2-Nitropropane	50.0		519	500	0	103.8	578.2	10.77	04/18/2013
4-Chlorotoluene	5.0		45.2	50.0	0	90.3	47.24	4.52	04/18/2013
4-Methyl-2-pentanone	25.0		111	125	0	89.1	123.4	10.27	04/18/2013
Acetone	25.0		111	125	0	88.5	125.6	12.69	04/18/2013
Acetonitrile	50.0		464	500	0	92.8	531.4	13.57	04/18/2013
Acrolein	100		325	500	0	65.1	366.4	11.86	04/18/2013
Acrylonitrile	5.0		46.3	50.0	0	92.6	51.59	10.81	04/18/2013
Allyl chloride	5.0		43.7	50.0	0	87.4	45.08	3.15	04/18/2013
Benzene	2.0		45.1	50.0	0	90.2	47.35	4.85	04/18/2013
Bromobenzene	5.0		42.5	50.0	0	85.1	44.34	4.14	04/18/2013
Bromochloromethane	5.0		47.4	50.0	0	94.9	49.09	3.42	04/18/2013
Bromodichloromethane	5.0		48.0	50.0	0	96.0	49.95	3.94	04/18/2013
Bromoform	5.0		53.8	50.0	0	107.6	55.12	2.41	04/18/2013
Bromomethane	10.0		47.2	50.0	0	94.3	50.37	6.60	04/18/2013
Carbon disulfide	5.0		46.6	50.0	0	93.1	49.05	5.23	04/18/2013
[illegible]on tetrachloride	5.0		51.0	50.0	0	102.0	52.81	3.47	04/18/2013
[illegible]obenzene	5.0		45.7	50.0	0	91.5	46.88	2.46	04/18/2013
Chloroethane	10.0		43.8	50.0	0	87.5	47.31	7.77	04/18/2013

Client: SCI Engineering, Inc.

Client Project: Stone Mill/2013-0121.21

Work Order: 13040925

Report Date: 22-Apr-13

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 87638 **SampType:** LCSD Units µg/L RPD Limit 40

SampID: LCSD-T130418-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloroform	5.0		46.6	50.0	0	93.2	48.09	3.13	04/18/2013
Chloromethane	10.0		50.6	50.0	0	101.3	53.51	5.51	04/18/2013
Chloroprene	20.0		48.7	50.0	0	97.5	50.62	3.78	04/18/2013
cis-1,2-Dichloroethene	5.0		46.7	50.0	0	93.5	48.38	3.45	04/18/2013
cis-1,3-Dichloropropene	5.0		46.2	50.0	0	92.5	47.62	2.92	04/18/2013
cis-1,4-Dichloro-2-butene	5.0		38.6	50.0	0	77.3	40.90	5.71	04/18/2013
Cyclohexanone	50.0		417	500	0	83.3	498.5	17.89	04/18/2013
Dibromochloromethane	5.0		50.2	50.0	0	100.4	51.35	2.30	04/18/2013
Dibromomethane	5.0		44.3	50.0	0	88.5	46.26	4.40	04/18/2013
Dichlorodifluoromethane	10.0		62.2	50.0	0	124.4	64.89	4.25	04/18/2013
Ethyl acetate	10.0		43.3	50.0	0	86.5	47.41	9.13	04/18/2013
Ethyl ether	5.0		43.7	50.0	0	87.3	45.83	4.83	04/18/2013
Ethyl methacrylate	5.0		47.1	50.0	0	94.2	49.84	5.65	04/18/2013
Ethylbenzene	5.0		46.0	50.0	0	92.0	47.10	2.32	04/18/2013
Hexachlorobutadiene	5.0		49.2	50.0	0	98.4	52.97	7.34	04/18/2013
Hexachloroethane	10.0		49.6	50.0	0	99.3	52.02	4.68	04/18/2013
Iodomethane	5.0		66.6	50.0	0	133.3	69.54	4.26	04/18/2013
Isopropylbenzene	5.0		47.8	50.0	0	95.5	49.27	3.11	04/18/2013
p-Xylenes	5.0		92.8	100	0	92.8	95.16	2.47	04/18/2013
Methacrylonitrile	10.0		43.2	50.0	0	86.3	47.22	9.01	04/18/2013
Methyl Methacrylate	5.0		43.7	50.0	0	87.3	47.00	7.37	04/18/2013
Methyl tert-butyl ether	2.0		45.9	50.0	0	91.8	48.04	4.56	04/18/2013
Methylacrylate	10.0		45.0	50.0	0	90.0	49.93	10.41	04/18/2013
Methylene chloride	5.0		44.1	50.0	0	88.2	45.64	3.39	04/18/2013
Naphthalene	10.0		48.4	50.0	0	96.9	51.73	6.57	04/18/2013
n-Butyl acetate	25.0		44.0	50.0	0	88.1	47.56	7.69	04/18/2013
n-Butylbenzene	5.0		43.0	50.0	0	86.1	46.40	7.49	04/18/2013
n-Heptane	20.0		39.7	50.0	0	79.5	41.61	4.60	04/18/2013
n-Hexane	20.0		41.1	50.0	0	82.3	43.19	4.86	04/18/2013
Nitrobenzene	50.0		618	500	0	123.7	719.4	15.10	04/18/2013
n-Propylbenzene	5.0		44.5	50.0	0	89.0	46.83	5.15	04/18/2013
o-Xylene	5.0		46.6	50.0	0	93.3	47.82	2.50	04/18/2013
Pentachloroethane	20.0		50.4	50.0	0	100.9	52.61	4.19	04/18/2013
p-Isopropyltoluene	5.0		44.2	50.0	0	88.5	47.74	7.61	04/18/2013
Propionitrile	50.0		443	500	0	88.5	502.0	12.57	04/18/2013
sec-Butylbenzene	5.0		44.9	50.0	0	89.9	47.64	5.86	04/18/2013
Styrene	5.0		48.8	50.0	0	97.7	49.59	1.54	04/18/2013
tert-Butylbenzene	5.0		46.0	50.0	0	92.0	48.24	4.71	04/18/2013
Tetrachloroethene	5.0		48.4	50.0	0	96.8	51.03	5.29	04/18/2013
Tetrahydrofuran	20.0		40.7	50.0	0	81.4	46.27	12.86	04/18/2013
Toluene	5.0		45.6	50.0	0	91.3	46.89	2.68	04/18/2013
trans-1,2-Dichloroethene	5.0		45.4	50.0	0	90.7	47.15	3.85	04/18/2013
trans-1,3-Dichloropropene	5.0		46.3	50.0	0	92.6	48.29	4.19	04/18/2013
trans-1,4-Dichloro-2-butene	10.0		36.0	50.0	0	72.0	39.81	10.00	04/18/2013
Trichloroethene	5.0		47.6	50.0	0	95.1	49.65	4.30	04/18/2013
Trichlorofluoromethane	5.0		54.6	50.0	0	109.1	57.09	4.55	04/18/2013
Vinyl acetate	10.0		46.2	50.0	0	92.4	48.28	4.42	04/18/2013

Teklab, Inc.
Environmental Laboratory

Quality Control Results

http://www.teklabinc.com/

Client: SCI Engineering, Inc.

Client Project: Stone Mill/2013-0121.21

Work Order: 13040925

Report Date: 22-Apr-13

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 87638 SampType: LCSD Units µg/L RPD Limit 40

SampID: LCSD-T130418-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Vinyl chloride	2.0		45.2	50.0	0	90.4	48.22	6.42	04/18/2013
Xylenes, Total	5.0		139	150	0	93.0	143.0	2.48	04/18/2013
1,3-Dichloropropene, Total	5.0		92.6	100	0	92.6	95.91	3.55	04/18/2013
1,4-Dichloro-2-butene, Total	10.0		74.6	100	0	74.6	80.71	7.80	04/18/2013
1,2-Dichloroethene, Total	5.0		92.1	100	0	92.1	95.53	3.65	04/18/2013
Surr: 1,2-Dichloroethane-d4			51.0	50.0		102.0			04/18/2013
Surr: 4-Bromofluorobenzene			52.1	50.0		104.2			04/18/2013
Surr: Toluene-d8			49.1	50.0		98.1			04/18/2013

Client: SCI Engineering, Inc.

Client Project: Stone Mill/2013-0121.21

Work Order: 13040925

Report Date: 22-Apr-13

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 87638 SampType: LCS Units µg/L

SampID: LCS-T130418-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
1,1,1,2-Tetrachloroethane	5.0		50.2	50.0	0	100.3	82.5	112	04/18/2013
1,1,1-Trichloroethane	5.0		50.8	50.0	0	101.6	74.2	118	04/18/2013
1,1,2,2-Tetrachloroethane	5.0		45.0	50.0	0	90.0	73.5	121	04/18/2013
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0		49.3	50.0	0	98.5	64.8	116	04/18/2013
1,1,2-Trichloroethane	5.0		46.1	50.0	0	92.2	82.5	112	04/18/2013
1,1-Dichloro-2-propanone	50.0		139	125	0	111.3	73.4	132	04/18/2013
1,1-Dichloroethane	5.0		47.1	50.0	0	94.2	82.4	112	04/18/2013
1,1-Dichloroethene	5.0		47.8	50.0	0	95.7	74.5	114	04/18/2013
1,1-Dichloropropene	5.0		45.7	50.0	0	91.4	78.9	113	04/18/2013
1,2,3-Trichlorobenzene	5.0		49.3	50.0	0	98.6	78.8	120	04/18/2013
1,2,3-Trichloropropane	5.0		48.0	50.0	0	95.9	64.7	122	04/18/2013
1,2,3-Trimethylbenzene	5.0		50.3	50.0	0	100.6	84.9	123	04/18/2013
1,2,4-Trichlorobenzene	5.0		46.5	50.0	0	92.9	72.3	125	04/18/2013
1,2,4-Trimethylbenzene	5.0		47.7	50.0	0	95.4	82.2	115	04/18/2013
1,2-Dibromo-3-chloropropane	5.0		51.6	50.0	0	103.3	77.1	122	04/18/2013
1,2-Dibromoethane	5.0		47.5	50.0	0	95.0	83.5	113	04/18/2013
1,2-Dichlorobenzene	5.0		47.0	50.0	0	93.9	81.8	111	04/18/2013
1,2-Dichloroethane	5.0		46.3	50.0	0	92.6	79.8	117	04/18/2013
2-Dichloropropane	5.0		44.8	50.0	0	89.7	84.6	114	04/18/2013
,5-Trimethylbenzene	5.0		48.4	50.0	0	96.8	81.8	114	04/18/2013
1,3-Dichlorobenzene	5.0		47.2	50.0	0	94.3	83	112	04/18/2013
1,3-Dichloropropane	5.0		46.6	50.0	0	93.2	80.3	113	04/18/2013
1,4-Dichlorobenzene	5.0		47.1	50.0	0	94.1	81.4	110	04/18/2013
1-Chlorobutane	5.0		47.5	50.0	0	94.9	75.2	114	04/18/2013
2,2-Dichloropropane	5.0		45.5	50.0	0	90.9	67	122	04/18/2013
2-Butanone	25.0		123	125	0	98.5	75.4	130	04/18/2013
2-Chloroethyl vinyl ether	20.0		47.3	50.0	0	94.6	20	133	04/18/2013
2-Chlorotoluene	5.0		46.4	50.0	0	92.8	78.9	113	04/18/2013
2-Hexanone	25.0		122	125	0	97.8	71.8	129	04/18/2013
2-Nitropropane	50.0		578	500	0	115.6	80.9	132	04/18/2013
4-Chlorotoluene	5.0		47.2	50.0	0	94.5	78.6	113	04/18/2013
4-Methyl-2-pentanone	25.0		123	125	0	98.7	78.7	126	04/18/2013
Acetone	25.0		126	125	0	100.5	67.1	133	04/18/2013
Acetonitrile	50.0		531	500	0	106.3	70.8	135	04/18/2013
Acrolein	100		366	500	0	73.3	27	145	04/18/2013
Acrylonitrile	5.0		51.6	50.0	0	103.2	80	127	04/18/2013
Allyl chloride	5.0		45.1	50.0	0	90.2	76.6	123	04/18/2013
Benzene	2.0		47.4	50.0	0	94.7	83.5	113	04/18/2013
Bromobenzene	5.0		44.3	50.0	0	88.7	75.4	122	04/18/2013
Bromochloromethane	5.0		49.1	50.0	0	98.2	85.2	116	04/18/2013
Bromodichloromethane	5.0		50.0	50.0	0	99.9	85.1	118	04/18/2013
Bromoform	5.0		55.1	50.0	0	110.2	82.2	117	04/18/2013
Bromomethane	10.0		50.4	50.0	0	100.7	51.5	150	04/18/2013
Carbon disulfide	5.0		49.0	50.0	0	98.1	70.6	113	04/18/2013
Carbon tetrachloride	5.0		52.8	50.0	0	105.6	71.6	122	04/18/2013
lorobenzene	5.0		46.9	50.0	0	93.8	81.6	110	04/18/2013
nloroethane	10.0		47.3	50.0	0	94.6	70.8	129	04/18/2013

Teklab, Inc.
Environmental Laboratory

Quality Control Results

http://www.teklabinc.com/

Client: SCI Engineering, Inc.
Client Project: Stone Mill/2013-0121.21

Work Order: 13040925
Report Date: 22-Apr-13

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 87638 SampType: LCS Units µg/L
SampID: LCS-T130418-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloroform	5.0		48.1	50.0	0	96.2	82.6	112	04/18/2013
Chloromethane	10.0		53.5	50.0	0	107.0	49.4	128	04/18/2013
Chloroprene	20.0		50.6	50.0	0	101.2	75.7	112	04/18/2013
cis-1,2-Dichloroethene	5.0		48.4	50.0	0	96.8	84.2	114	04/18/2013
cis-1,3-Dichloropropene	5.0		47.6	50.0	0	95.2	84.8	117	04/18/2013
cis-1,4-Dichloro-2-butene	5.0		40.9	50.0	0	81.8	48.1	129	04/18/2013
Cyclohexanone	50.0		499	500	0	99.7	48.4	154	04/18/2013
Dibromochloromethane	5.0		51.4	50.0	0	102.7	84.8	115	04/18/2013
Dibromomethane	5.0		46.3	50.0	0	92.5	84.5	114	04/18/2013
Dichlorodifluoromethane	10.0		64.9	50.0	0	129.8	25.1	141	04/18/2013
Ethyl acetate	10.0		47.4	50.0	0	94.8	68.3	123	04/18/2013
Ethyl ether	5.0		45.8	50.0	0	91.7	79.3	109	04/18/2013
Ethyl methacrylate	5.0		49.8	50.0	0	99.7	81.6	117	04/18/2013
Ethylbenzene	5.0		47.1	50.0	0	94.2	80.7	109	04/18/2013
Hexachlorobutadiene	5.0		53.0	50.0	0	105.9	72.7	115	04/18/2013
Hexachloroethane	10.0		52.0	50.0	0	104.0	72.1	112	04/18/2013
Iodomethane	5.0		69.5	50.0	0	139.1	39.1	151	04/18/2013
Isopropylbenzene	5.0		49.3	50.0	0	98.5	82.9	112	04/18/2013
ylenes	5.0		95.2	100	0	95.2	83.2	113	04/18/2013
Methacrylonitrile	10.0		47.2	50.0	0	94.4	81.7	121	04/18/2013
Methyl Methacrylate	5.0		47.0	50.0	0	94.0	81.2	121	04/18/2013
Methyl tert-butyl ether	2.0		48.0	50.0	0	96.1	82.8	116	04/18/2013
Methylacrylate	10.0		49.9	50.0	0	99.9	72.6	131	04/18/2013
Methylene chloride	5.0		45.6	50.0	0	91.3	81.1	110	04/18/2013
Naphthalene	10.0		51.7	50.0	0	103.5	64.3	148	04/18/2013
n-Butyl acetate	25.0		47.6	50.0	0	95.1	73	120	04/18/2013
n-Butylbenzene	5.0		46.4	50.0	0	92.8	77.7	121	04/18/2013
n-Heptane	20.0		41.6	50.0	0	83.2	53.8	123	04/18/2013
n-Hexane	20.0		43.2	50.0	0	86.4	56	123	04/18/2013
Nitrobenzene	50.0		719	500	0	143.9	32.3	159	04/18/2013
n-Propylbenzene	5.0		46.8	50.0	0	93.7	81.3	112	04/18/2013
o-Xylene	5.0		47.8	50.0	0	95.6	81.9	111	04/18/2013
Pentachloroethane	20.0		52.6	50.0	0	105.2	72	121	04/18/2013
p-Isopropyltoluene	5.0		47.7	50.0	0	95.5	83.4	118	04/18/2013
Propionitrile	50.0		502	500	0	100.4	76.8	136	04/18/2013
sec-Butylbenzene	5.0		47.6	50.0	0	95.3	80.5	115	04/18/2013
Styrene	5.0		49.6	50.0	0	99.2	85.6	117	04/18/2013
tert-Butylbenzene	5.0		48.2	50.0	0	96.5	76.3	114	04/18/2013
Tetrachloroethene	5.0		51.0	50.0	0	102.1	73.8	115	04/18/2013
Tetrahydrofuran	20.0		46.3	50.0	0	92.5	58.8	132	04/18/2013
Toluene	5.0		46.9	50.0	0	93.8	81	110	04/18/2013
trans-1,2-Dichloroethene	5.0		47.2	50.0	0	94.3	79.8	116	04/18/2013
trans-1,3-Dichloropropene	5.0		48.3	50.0	0	96.6	84.1	114	04/18/2013
trans-1,4-Dichloro-2-butene	10.0		39.8	50.0	0	79.6	57.7	124	04/18/2013
loroethene	5.0		49.6	50.0	0	99.3	82.6	113	04/18/2013
orofluoromethane	5.0		57.1	50.0	0	114.2	62.2	124	04/18/2013
Vinyl acetate	10.0		48.3	50.0	0	96.6	81.1	121	04/18/2013

Client: SCI Engineering, Inc.
Client Project: Stone Mill/2013-0121.21

Work Order: 13040925
Report Date: 22-Apr-13

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 87638 SampType: LCS Units µg/L
SampID: LCS-T130418-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Vinyl chloride	2.0		48.2	50.0	0	96.4	57	124	04/18/2013
Xylenes, Total	5.0		143	150	0	95.3	82.8	112	04/18/2013
1,3-Dichloropropene, Total	5.0		95.9	100	0	95.9	85	115	04/18/2013
1,4-Dichloro-2-butene, Total	10.0		80.7	100	0	80.7	54	125	04/18/2013
1,2-Dichloroethene, Total	5.0		95.5	100	0	95.5	83.6	113	04/18/2013
Surr: 1,2-Dichloroethane-d4			51.2	50.0		102.4	74.7	129	04/18/2013
Surr: 4-Bromofluorobenzene			51.9	50.0		103.8	86	119	04/18/2013
Surr: Toluene-d8			48.7	50.0		97.4	84.1	114	04/18/2013

Batch 87638 SampType: MS Units µg/L
SampID: 13040920-003AMS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
1,1-Dichloroethene	5.0		28.8	38.0	0	75.9	35.7	136	04/18/2013
Benzene	2.0		35.1	38.0	0	92.3	62.5	121	04/18/2013
Chlorobenzene	5.0		38.5	38.0	0	101.3	78.6	114	04/18/2013
Ethylbenzene	5.0		37.7	38.0	0	99.3	74.4	130	04/18/2013
m,p-Xylenes	5.0		34.8	38.0	0	91.6	70.5	126	04/18/2013
o-Xylene	5.0		35.0	38.0	0	92.0	71.2	124	04/18/2013
'uene	5.0		34.4	38.0	0	90.6	69.5	118	04/18/2013
,ichloroethene	5.0		38.6	38.0	0	101.7	69.4	117	04/18/2013
Xylenes, Total	5.0		69.8	76.0	0	91.8	71.1	125	04/18/2013
Surr: 1,2-Dichloroethane-d4			51.0	50.0		101.9	74.7	129	04/18/2013
Surr: 4-Bromofluorobenzene			50.7	50.0		101.3	86	119	04/18/2013
Surr: Toluene-d8			46.8	50.0		93.7	84.3	114	04/18/2013

Batch 87638 SampType: MSD Units µg/L RPD Limit 20
SampID: 13040920-003AMSD

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
1,1-Dichloroethene	5.0		28.5	38.0	0	74.9	28.83	1.22	04/18/2013
Benzene	2.0		35.0	38.0	0	92.1	35.07	0.26	04/18/2013
Chlorobenzene	5.0		39.0	38.0	0	102.7	38.51	1.29	04/18/2013
Ethylbenzene	5.0		37.6	38.0	0	98.8	37.74	0.48	04/18/2013
m,p-Xylenes	5.0		34.8	38.0	0	91.7	34.81	0.09	04/18/2013
o-Xylene	5.0		34.8	38.0	0	91.6	34.96	0.49	04/18/2013
Toluene	5.0		34.7	38.0	0	91.3	34.42	0.75	04/18/2013
Trichloroethene	5.0		38.9	38.0	0	102.4	38.65	0.67	04/18/2013
Xylenes, Total	5.0		69.6	76.0	0	91.6	69.77	0.20	04/18/2013
Surr: 1,2-Dichloroethane-d4			51.4	50.0		102.8			04/18/2013
Surr: 4-Bromofluorobenzene			51.3	50.0		102.6			04/18/2013
Surr: Toluene-d8			46.8	50.0		93.7			04/18/2013

Teklab, Inc.
Environmental Laboratory

Receiving Check List

http://www.teklabinc.com/

Client: SCI Engineering, Inc.
Client Project: Stone Mill/2013-0121.21

Work Order: 13040925
Report Date: 22-Apr-13

Carrier: Kendrick Prejean

Received By: SRH

Completed by: On: 17-Apr-13 — Emily E. Pohlman

Reviewed by: On: 18-Apr-13 — Michael L. Austin

Pages to follow: Chain of custody 1 Extra pages included 0

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	Temp °C 2.4
Type of thermal preservation?	None ☐	Ice ☑	Blue Ice ☐	Dry Ice ☐
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Reported field parameters measured:	Field ☐	Lab ☐	NA ☑	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐		

When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.

,ater – at least one vial per sample has zero headspace?	Yes ☑	No ☐	No VOA vials	☐
Water - TOX containers have zero headspace?	Yes ☐	No ☐	No TOX containers	☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐		
NPDES/CWA TCN interferences checked/treated in the field?	Yes ☐	No ☐	NA	☑

Any No responses must be detailed below or on the COC.

CHAIN OF CUSTODY

pg. 1 of 1 Work order # 13 *0925

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client:	SCI Engineering, Inc.
Address:	130 Point West Boulevard
City / State / Zip	St. Charles, MO 63301
Contact:	Ben Butterfield — Phone: (636) 949-8200
E-Mail:	bbutterfield@sciengineering.com — Fax:

Samples on: [X] ICE [ ] BLUE ICE [ ] NO ICE 2.7 °C

Preserved in: [ ] LAB [X] FIELD

FOR LAB USE ONLY

Lab Notes: 2010 headspace EEP 4/17/13

Client Comments:

~~Analyze/report salinity as conductivity of soil.~~

MEET MRBCA DTL'S

Are these samples known to be involved in litigation? If yes, a surcharge will apply [ ] Yes [X] No

Are these samples known to be hazardous? [ ] Yes [X] No

Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. [X] Yes [ ] No

Project Name/Number: Stone Mill/2013-0121.21

Sample Collector's Name: BEN BUTTERFIELD

Results Requested: [X] Standard [ ] 1-2 Day (100% Surcharge) [ ] Other ____ [ ] 3 Day (50% Surcharge)

Billing Instructions: B-0121.21

Lab Use Only	Sample Identification	Date/Time Sampled	UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER	Aqueous	Drinking Water	Soil	Sludge	Special Waste	DRO ORO	Salinity	VOCs with GRO
1304 0925 -sd	SCI - 1	4/17/13 1200	X							2	X					X		p

Teklab, Inc. Courier Pick Up

Relinquished By	Date/Time	Received By	Date/Time
Ben Butterfield	4/17/13 14:15	[signature]	4-17-13 14:15
[signature]	4-17-13 17:05	Stephanie Haynes	4/17/13 17:05

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client.

BottleOrder: 14513

April 23, 2013

Ben Butterfield
SCI Engineering, Inc.
130 Point West Boulevard
St. Charles, MO 63301
TEL: (618) 206-3028
FAX: (636) 949-8269

RE: Stone Mill/2013-0121.21

WorkOrder: 13041091

Dear Ben Butterfield:

TEKLAB, INC received 1 sample on 4/15/2013 4:35:00 PM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Elizabeth A. Hurley

Elizabeth A. Hurley
Project Manager
(618)344-1004 ex 33
ehurley@teklabinc.com

Teklab, Inc.
Environmental Laboratory

Report Contents

http://www.teklabinc.com/

Client: SCI Engineering, Inc.
Client Project: Stone Mill/2013-0121.21

Work Order: 13041091
Report Date: 23-Apr-13

This reporting package includes the following:

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Laboratory Results	5
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Chain of Custody	Appended

Definitions

Client: SCI Engineering, Inc.

Client Project: Stone Mill/2013-0121.21

Work Order: 13041091

Report Date: 23-Apr-13

Abbr	Definition
CCV	Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
DF	Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilutions factors.
DNI	Did not ignite
DUP	Laboratory duplicate is an aliquot of a sample taken from the same container under laboratory conditions for independent processing and analysis independently of the original aliquot.
ICV	Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
IDPH	IL Dept. of Public Health
LCS	Laboratory control sample, spiked with verified known amounts of analytes, is analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system. The acceptable recovery range is in the QC Package (provided upon request).
LCSD	Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MB	Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
MDL	Method detection limit means the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.
MS	Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
MSD	Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MW	Molecular weight
ND	Not Detected at the Reporting Limit
NELAP	NELAP Accredited
PQL	Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions. The acceptable recovery range is listed in the QC Package (provided upon request).
RL	The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
RPD	Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
SPK	The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
Surr	Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
TNTC	Too numerous to count (> 200 CFU)

Qualifiers

- # - Unknown hydrocarbon
- E - Value above quantitation range
- M - Manual Integration used to determine area response
- R - RPD outside accepted recovery limits
- X - Value exceeds Maximum Contaminant Level
- B - Analyte detected in associated Method Blank
- H - Holding times exceeded
- ND - Not Detected at the Reporting Limit
- S - Spike Recovery outside recovery limits

Teklab, Inc.
Environmental Laboratory

Case Narrative

http://www.teklabinc.com/

Client: SCI Engineering, Inc.
Client Project: Stone Mill/2013-0121.21

Work Order: 13041091
Report Date: 23-Apr-13

Cooler Receipt Temp: °C

Additional analysis to WO# 13040743.

Per Ben Butterfield, analyze SCI-2 (jar 2 of 2) for conductivity. EAH 4/22/13

Locations and Accreditations

Collinsville		Springfield		Kansas City	
Address	5445 Horseshoe Lake Road Collinsville, IL 62234-7425	Address	3920 Pintail Dr Springfield, IL 62711-9415	Address	8421 Nieman Road Lenexa, KS 66214
Phone	(618) 344-1004	Phone	(217) 698-1004	Phone	(913) 541-1998
Fax	(618) 344-1005	Fax	(217) 698-1005	Fax	(913) 541-1998
Email	jhriley@teklabinc.com	Email	KKlostermann@teklabinc.com	Email	dthompson@teklabinc.com

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2014	Collinsville
Kansas	KDHE	E-10374	NELAP	1/31/2014	Collinsville
Louisiana	LDEQ	166493	NELAP	6/30/2013	Collinsville
Louisiana	LDEQ	166578	NELAP	6/30/2013	Springfield
Texas	TCEQ	T104704515-12-1	NELAP	7/31/2013	Collinsville
Arkansas	ADEQ	88-0966		3/14/2014	Collinsville
Illinois	IDPH	17584		4/30/2013	Collinsville
Kentucky	UST	0073		4/5/2014	Collinsville
Missouri	MDNR	00930		4/13/2013	Collinsville
Oklahoma	ODEQ	9978		8/31/2013	Collinsville

Teklab, Inc.
Environmental Laboratory

Laboratory Results

http://www.teklabinc.com/

Client: SCI Engineering, Inc.
Client Project: Stone Mill/2013-0121.21
Lab ID: 13041091-001
Matrix: SOLID

Work Order: 13041091
Report Date: 23-Apr-13
Client Sample ID: SCI-2 (Jar 2 of 2)
Collection Date: 04/15/2013 10:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 600 2-78-054 METHOD 3.2.18.1								
Specific Conductance, Solid		10		2860	µmhos/cm	1	04/22/2013 13:54	R176247

Teklab, Inc.
Environmental Laboratory

Quality Control Results

http://www.teklabinc.com/

Client: SCI Engineering, Inc.
Client Project: Stone Mill/2013-0121.21

Work Order: 13041091
Report Date: 23-Apr-13

EPA 600 2-78-054 METHOD 3.2.18.1

Batch R176247 SampType: LCS Units µmhos/cm
SampID: LCS1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Specific Conductance, Solid	10		6610	6670	0	99.1	90	110	04/22/2013

Batch R176247 SampType: LCS Units µmhos/cm
SampID: LCS-R176247

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Specific Conductance, Solid	10		1440	1410	0	102.0	90	110	04/22/2013

Batch R176247 SampType: DUP Units µmhos/cm RPD Limit 10
SampID: 13041091-001ADUP

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Specific Conductance, Solid	10		2750				2860	3.92	04/22/2013

TEKLAB, INC
5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
TEL: (618) 344-1004
FAX: (618) 344-1005

CHAIN-OF-CUSTODY RECORD

1a- H091 -

WorkOrder: 13041091

Client:
SCI Engineering, Inc.
130 Point West Boulevard
St. Charles, MO 63301

TEL: (636) 949-8200
FAX: (636) 949-8269
Project: Stone Mill/2013-0121.21

One Day TAT

22-Apr-13

Requested Tests

Sample ID	ClientSampID	Matrix	Date Collected	Bottle	EPA2-78-054 (S)
13041091-001	SCI-2	Solid	4/15/2013 10:00:00 AM		A

Comments: Per Ben Butterfield, analyze SCI-2 (the previously unused jar -2 of 2) for conductivity. EAH 4/22/13.

	Date/Time		Date/Time
Relinquished by:		Received by:	4/22/13
Relinquished by:		Received by:	
Relinquished by:		Received by:	

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other