AGENDA

for the

CITY OF WILDWOOD'S

SITE PLAN SUBCOMMITTEE OF THE PLANNING AND ZONING COMMISSION

City Hall Community Room · 16860 Main Street

January 19, 2016 - Tuesday

6:30 P.M. to 7:20 P.M.

Re: P.Z. 20-14 Happy Hounds Playground, LLC, c/o Clayton Engineering, Steve Quigley

I. Welcome To Attendees And Roll Call Of Commission Members

II. Review Tonight's Agenda/Questions Or Comments

III. Review And Discussion Of The Site Development Plan (SDP), And Related Items, For Happy Hounds Playground (P.Z. 20-14 Happy Hounds Playground, L.L.C. C/O Clayton Engineering, Steve Quigley); Conditional Use Permit In The NU Non-Urban Residence District; East Side Of Pond Road, South Of State Route 100. (Ward One)

Documents: SITE PLAN SUBCOMMITTEE REVIEW - HAPPY HOUNDS.PDF

1. Overview Of Plan And Related Items By Department Of Planning Staff
2. Presentation By Petitioner/Petitioner's Representation
3. Comments And Questions By Subcommittee Members
4. Consensus On Recommendation

IV. Public Comment

V. Other

VI. Closing Remarks And Adjournment

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

WILDWOOD

December 21, 2015

Clayton Engineering
ATTN: Steven W. Quigley, President
11920 Westline Industrial Drive
St. Louis, Missouri 63146

Re: P.Z. 20-14 Happy Hounds Playground, L.L.C.; a Conditional Use Permit (CUP) in the NU Non-Urban Residence District for a recreational land use facility (commercial dog park) at 2440 and 2448 Pond Road (Locator Numbers 23W34042 and 23W330032).

Dear Mr. Quigley:

The Department of Planning, in conjunction with the Department of Public Works, has completed its third review of the Site Development Plan being submitted in association with the approved Conditional Use Permit (CUP) in the NU Non-Urban Residence District for a recreational land use facility (commercial dog park) at the above-referenced location. This review centered on the plan's compliance with the applicable sections of the City's Zoning Ordinance, the Conditional Use Permit (CUP) for the tract of land, and other related requirements and design criteria of the City of Wildwood. In this comparison, a number of items were identified that must be addressed, before this matter can be scheduled for Site Plan Subcommittee's review. These items are as follows:

Sheet 1

1. Please provide the total number of required parking spaces (twenty-nine (29)), as part of the calculation.
2. Please remove 'and MSD' in Note #3.
3. Please modify Note #3 under the Waste Management Plan to state the dumpster will be emptied 'at least' once per week.
4. Please provide details regarding the eighteen (18) foot by twenty-four (24) foot shed, specifically its height, materials, and color.
5. Please indicate, as best as possible, the full extent of the sanitary drip irrigation field.
6. Please note the color of the block steps providing access between the small and large dog park areas.

Sheet 3

7. Please revise the tree clearing limits to reflect the current grading plan, as shown on Sheet 1 of 14.

Sheet 5

8. Please add the owners' script to the SWPPP, in addition to the engineer's signature block.

Sheet 8

9. Please note the color of the trash receptacles, benches, and bicycle racks.

Sheet 9

10. Please complete the Natural Resource Protection Table to include the amount of preservation required in each area and provide the Soil Scientist script and signature block.

Sheet L-201

11. Please address the comments included in the attached review letter on future submittals of the Landscape Plan

Sheet L-201

12. Please correct the Landscape Plan to comply with the attached comment letter from the City's Landscape Consultant.

Sheet L-601

13. Please explain how the access bars (gate canes) will be accessible to the trash company. If they are to be placed on the exterior of the enclosure, please add a note stating they will be painted to match the wood enclosure and not left galvanized steel.
14. Please note the monument sign will be authorized under a separate permit. As a reminder, this sign will need a variance from the Board of Adjustment for its location within the front yard setback. The Board of Adjustment only meets once a month, so to begin this process, please see the application and instructions found on the City's website here: http://www.cityofwildwood.com/145/Board-of-Adjustment.

General

15. Please note the Department of Public Works is still reviewing the Improvement Plans and will forward its comments under a separate letter.
16. As a reminder, a consolidation plat will need to be completed, since the project overlaps multiple parcels of ground. By completing this consolidation, the interior setbacks will be removed, which currently preclude disturbance in those areas.
17. Please provide an escrow, in the amount of $1,107.09, for the future installation of a sidewalk along Pond Road. This escrow will be required prior to the issuance of any grading permit or zoning authorization for construction of any improvements.

The Department would like to schedule this item for review by the Planning and Zoning Commission Site Plan Subcommittee at its January 19, 2016 meeting. To meet this date, the resubmittal of the plans would need to occur no later than January 12, 2016. Please let us know if you are unable to meet this deadline and we will schedule this review by the Subcommittee for a later date.

Once the revisions are complete, please resubmit three (3) full sets, and a digital set, of the revised Preliminary Development Plan to the Department of Planning for further review. Please be advised that additional comments may follow after this resubmittal, given the extent of information being sought. If you should have any questions or comments in this regard, please feel free to contact the Departments of Public Works and/or Planning at (636) 458-0440.

Sincerely,
CITY OF WILDWOOD

Joe Vujnich, Director
Department of Planning and Parks

CC: The Honorable Timothy Woerther, Mayor
Council Members Glen DeHart and Larry McGowen, Ward One
Ryan Thomas, P.E., City Administrator
Rob Golterman, City Attorney
Kathy Arnett, Assistant Director of Planning and Parks
Terri Gaston, Senior Planner
Travis Newberry, Planner
Happy Hounds Playground, L.L.C., 431 Castle Glen Court, Ballwin, Missouri

terraspec

November 16, 2015

Mr. Joe Vujnich
Director of Planning
City of Wildwood
16860 Main Street
Wildwood, Mo 63040

Re: Landscape Plan Review #1
Happy Hounds Playground
2448 Pond Road
terraspec Job Number 02038-98

Dear Mr. Vujnich:

Per your request we have performed a review of the proposed landscape plan for the above referenced project and submit for consideration the following comments and recommendations.

We have reviewed the landscape plan prepared for Happy Hounds Playground. by Arcturis, Inc. dated Rev. 8/13/15 and find that the landscape development proposed for this project does not appear to meet the minimum requirements set forth in the City's Ordinances and Tree Manual/Sustainable Plantings Guide.

1. To meet the minimum drawing requirements, the plan should include General Notes from the Landscape Plans section of the Tree Manual (b through j) as well as the following notes from the Landscape Applications section:

- Grading - All grading for landscaped areas will not exceed a slope greater than 3:1. All exposed slopes will be protected from erosion as needed.
- Maintenance - The landscape of all undeveloped and developed property will be properly maintained in a sightly and well-kept manner.
- Replacement - Replanting and replacement of existing plant materials will be executed on an annual basis as needed by the property owner.

2. To meet the minimum planting requirements for a non-residential application, the plan should include:

A. Street Trees along Pond Road frontage at (1) 2-1/2" tree per 30' of frontage
(230'/30 = 7.66 say **8 trees required**) Note: These trees should be grouped and not evenly spaced)

B. Parking Lot Plantings at 1 Plant Unit (PU) per 8 spaces.
(42 spaces / 8 = **5 PU's required**) Note: 1 Standard Plant Unit (PU) = (2) 3" cal. Canopy Tree, (0) 2" cal. Ornamental Tree, (5) 24" ht. evergreen shrubs and (5) 24" ht. deciduous shrubs , see Tree Manual for Alternative Plant Units) (Note: 3 additional islands are needed to achieve a minimum of 1 island per 8 spaces and eliminate long lines of parking. This requirement will reduce the total parking to 39 spaces, which does not affect the total number of PU's required for the parking area)

C. Entrance Drive at 3 PUs per 8000 sf of drive area.
(10,250 sf / 8000 = 1.28 x 3 PUs = 3.84 say **4 PUs required**) Note: PU requirements for entrance drive is the same as for parking areas.

(Continued on page 2)

D. Non-Residential Building Sites at 1 PU (Plant Unit) for every 75' of new building perimeter
(100 lf / 75' = 1.33 say **1 PU required**) Note: 1 Standard Plant Unit PU = (1) 3" cal. Canopy Tree, (1) 2" cal. Understory Tree, (10) 24" ht. shrubs and (1) 8' ht. Evergreen Tree, see Tree Manual for Alternative Plant Units)

In addition to the above requirement regarding building perimeter, each acre of non-wooded landscape surface not designated for parking, pavements, buildings or bufferyards shall contain 15 PUs. (Approx. 5 acres of non-wooded landscape area x 15 PUs = **75 PUs required**)
Note: Exact calculations were not performed by this office as part of the review. Applicant should show calculations for non-wooded landscape surface planting requirements on the next submittal along with the calculations for all landscape requirements indicating requirements and how those requirements are being met.

E. Bufferyards - Type 'E' required for separation between NU and "Commercial" Use
North Bufferyard at 5 PU's per 150 lf of bufferyard
(550 lf / 150 = 3.33 x 5 PUs = 16.66 say **17 PUs required**) (Note: Due to the extensive amount of woodlands on the property, adjacent to the property line, it is our recommendation that bufferyard requirements be applied only to the first 550' of the 1300'+/- property line
South Bufferyard at 5 PUs per 150 lf of bufferyard
(440 lf / 150 = 2.93 x 5 PUs = 14.66 say **15 PUs required**) (Note: Due to the extensive amount of woodlands on the property, adjacent to the property line, it is our recommendation that bufferyard requirements be applied only to the first 440' of the 1300'+/- south property lines)
East Bufferyard at 5 PUs per 150 lf of bufferyard
Due to the extensive amount of woodlands on the property, adjacent to the property line, it is our recommendation that bufferyard requirements be waived along this property line.
West Bufferyard at 5 PUs per 150 lf of bufferyard
(260 lf / 150 = 1.73 x 5 PUs = 8.66 say **9 PUs required**)

Bufferyard Note: 1 Standard Plant Unit (PU) = (1) Canopy Tree, (1) Understory Tree, (1) Evergreen Tree and (10) 24" ht. shrubs, see Tree Manual for Alternative Plant Units and the various size requirements for each type of plant listed.

F. Street Bufferyard - Type 'C' required along Pond Rd. at 3 PUs per 150 lf of frontage
(230 lf / 150 = 1.53 x 3 PUs = 4.6 say **5 PUs required**)
Note: the Standard Plant Unit (PU) requirements for Street Bufferyards is the same as Indicated above for Bufferyards.

3. Additional Comments:

A. The proposed plant materials indicated on the submitted landscape plan are considered hardy to the area and are reasonable selections for the particular applications with a couple of exceptions. We highly recommend that a different species of tree be utilized in lieu of the specified Cornus florida (Flowering Dogwood) due to the fact that, even though this tree is native to MO, it is susceptible to all sorts of problems when sited in stressful locations. Also, we recommend that another tree species be selected for the parking lot islands. Liriodendron tulipifera (Tulip Tree) is a very large, fast growing, weak wooded tree that is best utilized in large, open areas, not confined landscape islands.

terraspec

B. The site specific ordinance requires that the landscape plan be prepared, signed and sealed by a Missouri registered landscape architect.

C. It appears that clearing and grading are proposed within the 30' no land disturbance setback along a large portion of the northern property line of this development as well as portions of the western property line where it adjoins the existing residential properties along Pond Road. Clearing and grading limits should be adjusted so as to not encroach in these setbacks.

D. How are the bio retention basins to be planted?

E. Additional labeling of the plans, indicating hardscape elements would be very helpful.

If there are any questions or additional information is required, please don't hesitate to contact this office.

Sincerely,
terraspec

Kenneth J. Keitel, PLA, ASLA
Landscape Architect

terraspec

WILDWOOD

September 16, 2015

Happy Hounds Playground, L.L.C.
c/o Clayton Engineering, Steven W. Quigley, President
11920 Westline Industrial Drive
St. Louis, Missouri 63146

Re: P.Z. 20-14 Happy Hounds Playground, L.L.C.; a Conditional Use Permit (CUP) in the NU Non-Urban Residence District for a recreational land use facility (commercial dog park) at 2440 and 2448 Pond Road (Locator Numbers 23W34042 and 23W330032).

Dear Mr. Quigley:

The Department of Planning, in conjunction with the Department of Public Works, has completed its second review of the Site Development Plan being submitted in association with the approved Conditional Use Permit (CUP) in the NU Non-Urban Residence District for a recreational land use facility (commercial dog park) at the above-referenced location. This review centered on the plan's compliance with the applicable sections of the City's Zoning Ordinance, the Conditional Use Permit (CUP) for the tract of land, and other related requirements and design criteria of the City of Wildwood. In this comparison, a number of items were identified that must be addressed, before this matter can be scheduled for Site Plan Subcommittee's review. These items are as follows:

Additional Information/Requirements:

1. Please overlay the Natural Resource Protection Standard Areas onto the overall development plan for the site, per the requirements of the Subdivision and Development Regulations. Additionally, the attribute areas and percentages of preservation will need to be included, as a related sheet, in relation to the Natural Resource Protection Standards report that was submitted.
2. Please add the catalog cut sheets of all trash receptacles, benches, bicycle racks, and other human items that are planned to be placed at the facility on to a plan sheet.
3. Please provide MoDOT's comments on the traffic study completed at State Route 100 and Pond Road.
4. Please provide details regarding whether the St. Louis County – Plumbing Section will allow an active use area of the facility on top of the drip irrigation field.
5. Please note the demolition of the buildings on site will need to be reviewed by the City's Historic Preservation Commission due to their age (over seventy-five (75) years). To begin this process, please identify, on a survey section, the buildings to be removed and email the information to Liz Weiss, staff liaison to the Historic Preservation Commission. Liz's email is liz@cityofwildwood.com.
6. Due to the high level of detail already shown on the submitted plans, please consider combining them with the Improvement Plans and submit as one. The City will combine the review in an effort to streamline the final stages of this process.
7. Please provide a Stormwater Management Plan, including full stormwater calculations for the site and floodwater and water quality calculations, in accordance with City standards (these standards are identical to the Metropolitan St. Louis Sewer District's requirements).
8. Please provide greater detail in the area by Bioretention #2, by better illustrating the terminus of the sidewalk that defines the southern edge of the parking lot area.
9. Please provide more detail relating to the two (2) outfall and rip rap areas.
10. Please provide details on the inlet and pipe from the retention basin, as part of the requested stormwater construction plans.

11. Please provide details/clarification on how water is discharged from the site, at the eastern portion of the property, then north into Bonhomme Creek.
12. Please provide a drainage area map, as part of the stormwater calculations.
13. Please note the monument sign, at the entrance, will need a variance from the Board of Adjustment for its location within the front yard setback. The Board of Adjustment only meets once a month, so to begin this process, please see the application and instructions found on the City's website here: http://www.cityofwildwood.com/145/Board-of-Adjustment.
14. Please be advised that, if any of the sheets reflecting architectural details of the building are to change, the details must be updated as well. The Department had been advised the cost of the building precluded its construction, and the property owner was going to seek modifications.
15. Please revise the location of the dual six foot (6') wide maintenance gates and the disturbance in the setback area on the west side of the property, near the large dog area. Both extend into this setback limit, which is a non-disturbance area.
16. Please provide an escrow, in the amount of $1,107.09, for the future installation of a sidewalk along Pond Road.
17. Please amend the type of easement shown for the sidewalk along Pond Road to a utility, roadway, and multiple-use trail easement.
18. In addition to the striped crosswalk, please provide, and identify on the plans, the appropriate signage.
19. Please dimension the two (2) accessible spaces, and the aisle between them, in addition to details and the location of the required signs for these spaces.
20. Please add information in the waste management plan to provide a schedule for when the dumpster will be emptied.
21. Please overlay the proposed site grading on the Tree Preservation Plan sheet and determine if there are any areas where the amount of tree protection can be increased.
22. Please note a consolidation plat will need to be completed, since the project overlaps multiple parcels of ground. By completing this consolidation, the interior setbacks will be removed, which currently preclude disturbance in those areas.

Once the revisions are completed, please resubmit three (3) full sets of the revised Preliminary Development Plan and other requested items to the Department of Planning for further review. Please be advised that additional comments may follow after this resubmittal, given the extent of information being sought. If you should have any questions or comments in this regard, please feel free to contact the Departments of Public Works and/or Planning at (636) 458-0440.

Sincerely,
CITY OF WILDWOOD

Joe Vujnich, Director
Department of Planning and Parks

Sincerely,
CITY OF WILDWOOD

Rick Brown, P.E., P.T.O.E., Director
Department of Public Works

CC: The Honorable Timothy Woerther, Mayor
Council Members Glen DeHart and Larry McGowen, Ward One
Ryan Thomas, P.E., City Administrator
Rob Golterman, City Attorney
Kathy Arnett, Senior Planner I
Liz Weiss, Senior Planner II
Terri Gaston, Planner
Happy Hounds Playground, L.L.C., 431 Castle Glen Court, Ballwin, Missouri

WILDWOOD

June 18, 2015

Happy Hounds Playground, L.L.C.
c/o Clayton Engineering, Steven W. Quigley
11920 Westline Industrial Drive
St. Louis, Missouri 63146

Re: P.Z. 20-14 Happy Hounds Playground, L.L.C.; a Conditional Use Permit (CUP) in the NU Non-Urban Residence District for a recreational land use facility (commercial dog park) at 2440 and 2448 Pond Road (Locator Numbers 23W34042 and 23W330032).

Dear Mr. Quigley:

The Department of Planning, in conjunction with the Department of Public Works, has completed its initial review of your Site Development Plan in association with the approved Conditional Use Permit (CUP) in the NU Non-Urban Residence District for a recreational land use facility (commercial dog park) at the above-referenced location. This review centered on the plan's compliance with the applicable sections of the City's Zoning Ordinance, the Conditional Use Permit (CUP) for the tract of land, and other related requirements and design criteria of the City of Wildwood. In this comparison, a number of items were identified that must be addressed, before this matter can be scheduled for Site Plan Subcommittee review. These items are as follows:

Additional Information/Requirements:

1. Provide the Natural Resource Protection Plan and Analysis to the City.
2. Provide the Geotechnical Report to the City. Additionally, the Professional Engineer preparing the geotechnical report must sign and seal the plan.
3. Provide to the City the catalog cut sheets of all trash receptacles, play equipment, and other items planned to be placed at the facility.
4. Provide a copy of the plan set to the Metro West Fire Protection District for its review and comments.
5. Provide a copy of the traffic study completed at State Route 100 and Pond Road to MoDOT, along with a copy of the plan set, for its review and analysis.
6. Provide a copy of the plan set to St. Louis County – Plumbing Section for its review and comments. Also, please note if this entity will allow an active use area of the facility on top of the drip irrigation field.
7. Provide a copy of the plan set to Missouri American Water Company for its review and comments.
8. Provide a copy of the supporting documentation (profile along sight distance line) for determining sight distance measurements.
9. Please note the demolition of the buildings on site will need to be reviewed by the City's Historic Preservation Commission due to their age (over seventy-five (75) years).
10. Please provide a Stormwater Management Plan for the development area, in accordance with City standards (these standards are identical to the Metropolitan St. Louis Sewer District's requirements).
11. Please note the monument sign, at the entrance, will need a variance from the Board of Adjustment for its location within the front yard setback.

Preliminary Development Plan:

12. Please provide the size and zoning district designations of adjoining parcels of ground.
13. Please identify the pavement width along Pond Road.
14. Please remove all play features in the Small Dog Agility Area, Large Dog Agility Area, along with the mulched path on the north side of the property from the thirty (30) foot side setback area.
15. Please add a page to the plan set that has all CUP conditions to the Site Development Plan.
16. Please modify the Existing Zoning, listed on the Site Development Plan, to be NU Non-Urban Residence District, with a Conditional Use Permit.
17. Please number the plan sheets for ease in reference.
18. Please provide details regarding the proposed building's height.
19. Please note how the pond's size was determined and if it was based upon normal pool elevations.
20. Please provide mitigation for the grading in the side yard setback area along the northern boundary of the property.
21. Please consider a different material for the steps, other than railroad ties, since wood would be slippery when wet.
22. Please add a note that all bridges will require building permits.
23. Please add to the Waste Management Plan the disposal schedule for the facility.
24. Please overlay the proposed improvements on to the Tree Preservation Plan.
25. Please better define the forest management activity that is identified on the Tree Preservation Plan.
26. Please provide a minimum five (5) foot sidewalk along Pond Road, with handicapped curbs and ramps at the driveway access points. This improvement will help meet the City's public space requirement.
27. Please indicate a striped crosswalk on Pond Road to connect the eight (8) foot trail shown south of the parking lot, to connect to the existing pedestrian network on the west side of Pond Road. This crosswalk is also a public space requirement.

Once the revisions are completed, please resubmit three (3) full sets of the revised Preliminary Development Plan and other requested items to the Department of Planning for further review. Please be advised that additional comments may follow after this resubmittal, given the extent of information being sought. If you should have any questions or comments in this regard, please feel free to contact the Departments of Public Works and/or Planning at (636) 458-0440.

Sincerely,
CITY OF WILDWOOD

Joe Vujnich, Director
Department of Planning and Parks

Sincerely,
CITY OF WILDWOOD

Rick Brown, P.E., P.T.O.E., Director
Department of Public Works

CC: The Honorable Timothy Woerther, Mayor
Council Members Glen DeHart and Larry McGowen, Ward One
Ryan Thomas, P.E., City Administrator
Rob Golterman, City Attorney
Kathy Arnett, Senior Planner I
Liz Weiss, Senior Planner II
Terri Gaston, Planner
Happy Hounds Playground, L.L.C., 431 Castle Glen Court, Ballwin, Missouri

Metro West
Fire Protection District
of St. Louis County

P.O. Box 310
Wildwood, Missouri 63040

(636) 458-2100
Fax (636) 458-2199

www.metrowest-fire.org

Vincent T. Loyal
Chief Fire &
EMS Services

Tim Flora
Director

Ralph Starck
Director

Mark Macinski
Director

Serving all or portions of

Ballwin
Ellisville
Wildwood
Chesterfield
Clarkson Valley
Winchester

Unincorporated Areas of

Sherman
St. Louis, Co.
Castlewood

CITY OF WILDWOOD
OCT 09 2014
DEPT OF PLANNING & PARKS

October 7, 2014

The Clayton Engineering Company, Inc.
11920 Westline Industrial Dr.
St. Louis, MO 63146

RE: Happy Hounds Dog Park

Dear Sir,

The Bureau of Fire Prevention has reviewed the above-mentioned plat as submitted. There are no additional fire requirements.

If there are any additional questions please give my office a call 636-821-5806.

Yours in Fire Safety,

David E. Phipps
Fire Marshal
Metro West Fire Protection District

MISSOURI
AMERICAN WATER

Missouri American Water
727 Craig Road, Suite 201
St. Louis, MO 63141
amwater.com

September 9, 2015

Steve Quigley
The Clayton Engineering Company
2268 Welsch Industrial Court
St Louis, MO 63146

Re: E2015-446 – Happy Hounds Dog Park – 2448 Pond Road

Thank you for the opportunity to review your revised plans for the above-referenced project. Based on the drawings received to date with respect to our existing water facilities, we do not anticipate any potential conflicts with our facilities at this time.

Please be aware that it is the responsibility of your contractor to verify the exact location of our facilities prior to any excavation as well as ensuring the water main is adequately supported along any exposed length that spans an open excavation. An approximate location of our facilities can be obtained by contacting our System Records Department at (314) 996-2244. The contractor should use care when working around these facilities, as they will be responsible for any damage to MAWC facilities caused by their construction activities. Additionally, over dig in the vicinity of our existing fittings and/or thrust blocks would disturb the supporting soil such that failure of the water main is likely.

Please verify the submitted plans are in accordance with the Department of Natural Resources Code of State Regulations 10CSR 20-8.120, which states: Sewers and laterals shall maintain a horizontal separation of at least 10-ft. from any existing or proposed water main. The distances shall be measured edge-to-edge. Sewer runs crossing water mains shall be laid to provide a minimum vertical distance of eighteen inches (18") (46cm) between the outside of the water main and the outside of the sewer and the water main must remain on an undisturbed earth shelf. The crossing shall be arranged so that the sewer joints will be equidistant and as far as possible from the water main joints.

MISSOURI
AMERICAN WATER

Missouri American Water
727 Craig Road, Suite 201
St. Louis, MO 63141
amwater.com

Please be advised that you will need to contact the Operations Supervisor, Tom Masters at (314) 996-2432 or Tom.Masters@amwater.com for the required specifications concerning service line configuration, location, suitability and related meter box requirements or to discuss any other requirements for your project. If you do not contact the aforementioned Operations Supervisor concerning the service line requirements for your project, this may cause delays with the approval of your service line connection, possibly requiring additional modifications to your service line installation.

If you have any questions or comments, please contact me at 314-996-2247.

Sincerely,

Monte E Griffith

Monte Griffith, PE
Project Manager

Kathy Arnett

From: Elizabeth Weiss
Sent: Monday, September 28, 2015 3:56 PM
To: Kathy Arnett
Subject: FW: Happy Hounds Playground Traffic Assessment

From: Steve Quigley [mailto:SQuigley@claytoneng.com]
Sent: Monday, September 28, 2015 2:33 PM
To: Elizabeth Weiss; Joe Vujnich
Subject: FW: Happy Hounds Playground Traffic Assessment

Steven W. Quigley
President
The Clayton Engineering Company, Inc.
2268 Welsch Industrial Court
St. Louis, Mo. 63146
314-692-8888 ext. 113

CITY OF WILDWOOD
SEP 28 2015
DEPT OF PLANNING & PARKS

From: JEANETTE K RUGGERI [mailto:Jeanette.Ruggeri@modot.mo.gov]
Sent: Monday, September 28, 2015 2:21 PM
To: Brensing.cbbtraffic.com <Brensing@cbbtraffic.com>
Cc: Steve Quigley (squigley@claytoneng.com) <squigley@claytoneng.com>
Subject: RE: Happy Hounds Playground Traffic Assessment

MoDOT has no comments or concerns regarding this development.

Thank you,

Jeanette Ruggeri

Senior Traffic Studies Specialist
Missouri Department of Transportation
South and West St. Louis County
jeanette.ruggeri@modot.mo.gov

From: Brensing.cbbtraffic.com
Sent: Wednesday, September 23, 2015 4:30 PM
To: JEANETTE K RUGGERI
Cc: Steve Quigley (squigley@claytoneng.com)
Subject: Happy Hounds Playground Traffic Assessment

Jeanette,

CBB prepared a traffic assessment in February of this year for a proposed dog park "Happy Hounds Playground" located in Wildwood, generally the southeast quadrant of Route 100 and Pond Road. It was my understanding that MoDOT did not have any specific concerns about the project or require a traffic study, so CBB did not engage MoDOT. Instead CBB did a traffic assessment to help address some comments from Wildwood regarding potential impacts to Route 100 and Pond Road. Wildwood has now asked for MoDOT's comments/concurrence on the assessment, so I am submitting the assessment to you for review/comment/concurrence.

I also included a preliminary site plan that was provided to me in January for the study. Changes were likely made to the site plans since then so I copied Steve Quigley with The Clayton Engineering Company. He is the site civil if you have questions regarding the site or want updated plans.

Thanks.

Brian Rensing, PE, PTOE
Transportation Engineer
CBB
12400 Olive Boulevard, Suite 430 | St. Louis, MO 63141
314-878-6644, Ext. 37 (Office) | 314-479-5022 (Mobile) | 314-878-5876 (Fax)
Brensing@cbbtraffic.com | www.cbbtraffic.com

ATTACHMENT B - Conditions

1. **PERMITTED USES**

   This Conditional Use Permit (CUP) shall authorize a **recreational land use (commercial type), i.e. a private dog park**, as defined by the City's Zoning Ordinance, which can offer said services to the general public. No boarding, grooming, or training services shall be authorized at this site for the general public, as part of this operation under the requirements of this Conditional Use Permit (CUP). Additionally, no dog shows shall be conducted at the site.

2. **LOT, BUILDING, AND USE REQUIREMENTS**

   ~~a. The maximum number of members allowed, as part of this conditional use authorized on this subject property, shall not exceed four hundred (400) in total. Modifications to this number of authorized members can be considered and amended by the Planning and Zoning Commission, upon written request of the owners, via the defined amendment request set for in the City of Wildwood Zoning Ordinance for Conditional Use Permit (CUP).~~ *Eliminated by the Planning and Zoning Commission, as part of its favorable action on this permit request (1-20-2015).*

   a. The facility may have up to three (3) activity areas for large and small dogs collectively, while offering a total of two (2) splash pads within the use area as well. Equipment placement within these authorized areas shall be indicated on the submitted Site Development Plan. These splash pads must be designed to utilize only a public water supply available to the site from the Missouri American Water Company.

   b. The development of the proposed trail system shall be authorized as part of this Conditional Use Permit (CUP) on the site and consist of hard and natural surface types. The locations of these trails shall be indicated on the required Site Development Plan and acted upon by the Planning and Zoning Commission, as part of its review of such.

   c. No building and/or structure shall be more than two (2) stories above final grade, as determined by finish final grade in the area of the development. The size of the primary building shall not exceed 1,200 square feet in overall size. The main building shall accommodate permanent restroom facilities for the customers of this conditional use.

   d. All structures or buildings that are to be constructed on the subject property shall be reviewed and acted upon by the City's Architectural Review Board. Plan submittals must be completed, signed, and sealed by a licensed, practicing architect in the State of Missouri. The selection of colors, materials, design components, and related architectural items shall adhere to the City of Wildwood's Zoning Ordinance requirements, as set forth in Chapter 415.380 Miscellaneous Regulations.

   e. The minimum size of the Conditional Use Permit (CUP) area to accommodate this activity shall be eleven (11) acres in area.

   f. The facility shall be authorized for operation on the following days and at these allowable times: Monday through Saturday - 6:00 a.m. to dusk; and Sunday - 7:00 a.m. to dusk.

   g. No outdoor lighting shall be authorized, as part of the site's utilization, within the active use locations of the dog park, excepting standards and bollards to light specific activity areas, pathways, and entries/exits. The approval of this authorized lighting shall be as part of the Site Development Plan, which shall be acted upon by the Planning and Zoning Commission.

h. The maximum area of this 11.02 acre tract of land, which can be used for development and related land disturbance for the permitted and accessory uses, shall not exceed 7.02 acres.

i. The minimum amount of this 11.02 acre tract of land, which must be preserved as part of this development, shall be four point seven (4.7) acres in overall size.

3. PLAN SUBMITTAL REQUIREMENTS

Within twelve (12) months of the Conditional Use Permit (CUP) granted by the Planning and Zoning Commission, and prior to any site disturbance, the operator shall submit to the Planning and Zoning Commission for their review and approval a Site Development Plan. Where due cause is shown by the operator, this time interval may be extended once by the Planning and Zoning Commission in accord with requirements of Chapter 415.510 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. Location and extent of all existing and proposed improvements, including parking lot area, play areas, splash pads, trail network, and accessory structures, along with the water feature (lake).
c. A general plan indicating setback lines along the perimeter of the subject tract of land and surrounding property lines and related improvements within two hundred (200) feet of this site's boundaries, i.e. curb cut and access locations, stormwater facilities, and utility installations and easements.
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 trails, and general location, size, right-of-way, and pavement width of all interior drives.
e. The location and size of all freestanding signs, lighting, fences, and other above ground structures, except retaining walls less than three (3) feet in height per section.
f. Existing and proposed contours at vertical intervals of not more than two (2) feet.
g. General location of sanitary sewer and stormwater facilities.
h. Parking calculations.
i. Conceptual location and size of public space areas.
j. 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 Chapter 410 and accompanying Tree Manual.
k. An inventory of the percent of tree canopy or individual trees to be retained on the site indicated on a Tree Preservation Plan completed in accordance with the City of Wildwood Chapter 410 Tree Preservation and Restoration Code and accompanying Tree Manual.
l. Location of all existing and proposed easements.
m. All other information not mentioned above, but required on a preliminary plat in accord with Chapter 420.060 of the City of Wildwood Subdivision and Development Regulations.
n. A Stormwater Pollution Prevention Plan (SWPPP) for the site, which shall include the developer's signature and acknowledgment of its requirements.

4. SITE DEVELOPMENT PLAN DESIGN CRITERIA

The above Site Development Plan shall adhere to the following specific design criteria:

Building Setbacks – Residential

a. No new building or structure, other than boundary and/or retaining walls, fences, detention/retention facilities, and/or light standards, shall be located within the following setbacks:

1. Fifty (50) feet from any roadway right-of-way.
2. Thirty (30) feet from any side yard property line of any individual lot, excepting a minimum of fifty (50) feet shall be maintained along the western boundary line of the permit area, which is shared by the two (2) existing single family dwellings located there.
3. Thirty (30) feet from any rear yard property line of any individual lot.

Parking Setbacks - Residential

b. All parking stalls or loading spaces, excluding points of ingress or egress and streets and roads, shall comply with the requirements of Chapter 415.090 NU Non-Urban Residence District of the City of Wildwood's Zoning Ordinance.

Miscellaneous Setbacks - Right-of-Way and Other Locations

c. No land disturbance shall be authorized within thirty (30) feet of any boundary line of this Conditional Use Permit (CUP), except as authorized on the Site Development Plan by the Planning and Zoning Commission.

Access and Roadway Improvements

d. Roadway improvements shall be required to Pond Road for this conditional use, specifically for ingress and egress to the site and any required sight distance modifications to it, which shall be premised on a Sight Distance Study prepared by a registered engineer. Any improvements shall minimally comply with the requirements of the City of Wildwood's construction standards. The required improvements within the public right-of-way shall be as approved by the Director of Public Works. The dedication of public right-of-way and the establishment of corresponding easements on Pond Road, if determined necessary, shall be in accordance with Chapter 420 Subdivision and Development Regulations of the City of Wildwood Municipal Code. 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.

e. Access to Pond Road shall be limited to one (1) commercial street approach located to provide required sight distance and constructed to conform to the requirements of the Department of Public Works in this regard. All work within the right-of-way shall be as directed by the Department of Public Works.

f. Dedicate, as public right-of-way, to the City of Wildwood the necessary land area along Pond Road to eliminate the existing notch located along the southern most portion of it, as directed by the City of Wildwood Department of Public Works.

Miscellaneous Roadway Requirements

g. The construction of all drainageway crossings, i.e. culverts, shall comply with the City of Wildwood standards and all other applicable Federal and State regulations in this regard. All submittals to the City shall be reviewed and approved by the Department of Public Works, as part of the Planning and Zoning Commission's consideration of the Site Development Plan.

j. A Traffic Study shall be submitted to the Planning and Zoning Commission for its review, which indicates the current Level of Service at the State Route 100/Pond Road intersection and how this facility will impact that current situation. Additionally, if Level of Service is determined to be at a "D"

through "F" Level, improvements to the State Route 100/Pond Road intersection shall be required and must comply with all requirements and standards of the Missouri Department of Transportation for their right-of-way. Review and action of these determined improvements, if required, shall be by the Planning and Zoning Commission on the Site Development Plan.

k. 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.

Parking Requirements

j. Parking spaces shall be provided, as required by Chapter 415.340 Off-Street Parking and Loading Requirements of the City of Wildwood Zoning Ordinance for the NU Non-Urban Residence District. Minimally, forty-two (42) parking spaces shall be provided on the site (1% of the land use area).

Landscape Requirements - General

k. Landscaping shall adhere to all requirements of Chapter 410 of the City's Tree Preservation and Restoration Code and its accompanying Sustainable Plantings Guide and Tree Manual, including the submittal of a Tree Preservation Plan, in conjunction with the Site Development Plan. All roadway frontages shall be appropriately landscaped, as required by the Chapter 410 Tree Preservation and Restoration Code, and be approved by the Planning and Zoning Commission on the Site Development Plan.

l. The areas of existing vegetation within the Conditional Use Permit (CUP) 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. Initial clearing and grubbing of the site shall be limited to the installation of any new building and structure.

m. All disturbed areas of the site shall be restored in compliance to the City's Sustainable Plantings Guide and Tree Manual by a combination of ground cover, landscaping, berms, natural stones, and other means to address stormwater runoff and erosion, as well as improve overall site aesthetics. The restoration of disturbed areas shall be indicated on the required Landscape Plan and acted upon by the Planning and Zoning Commission.

n. A registered Landscape Architect shall prepare, submit, and sign all plan(s).

Signs

o. Signs for this Conditional Use Permit (CUP) shall be erected in accordance with Chapter 415.410 Sign Regulations of the City of Wildwood Zoning Ordinance for the NU Non-Urban Residence District. However, the one (1) allowable freestanding sign (monument type) shall not exceed an overall size of thirty (30) square feet. The location and design of this sign, and all other signage, shall be as reviewed and acted upon by the Planning and Zoning Commission, as part of the Site Development Plan process.

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. Minimally, lighting levels and their design specifications shall be approved by the Planning and Zoning Commission and are subject to the standards and requirements defined in the City of Wildwood's Lighting Code – Chapter 415.450 of the Zoning Ordinance. Lighting associated with the active use areas may be provided for safety and visibility purposes therein, but must placed on a timer to ensure all equipment is off one-half hour after closing. Illumination sources in these active use areas may not exceed twelve (12) feet in height.

Miscellaneous Conditions

q. Parking, circulation, and other applicable site design features shall comply with Chapter 1101, Section 512.4 "Physically Handicapped and Aged" of the S.L.C.R.O. 1974, as amended.

r. The 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.

s. 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 or boulders. The Planning and Zoning Commission, as part of the Site Development Plan review process, shall approve said materials and design.

t. The generalized 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.

u. All utilities serving this site shall be installed underground in accord with the requirements of the City of Wildwood's Subdivision and Development Regulations. Any existing easements located on the subject site, which are not being utilized, shall be vacated under the standard procedures of the City of Wildwood Subdivision and Development Regulations.

v. No outdoor public address system is permitted on this site.

5. PUBLIC SPACE REQUIREMENTS

Developer shall construct improved public space in conformance with or otherwise satisfying the requirements of the City's Public Space Ordinance, Chapter 415.260 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 public space improvements shall be as required by the applicable ordinance, but must be completed prior to issuance of any zoning authorizations for any building permit 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 provided parking spaces, shall be 290.4 square feet or its equivalent.

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 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. 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 buildings and structures.
4. 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/water quality 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 discharging from the subject site.
5. The developer shall provide adequate detention and/or hydrologic calculations for review and approval of all stormwater that will encroach on City of Wildwood rights-of-way.

Stormwater Pollution Prevention Plan

b. Submit a Stormwater Pollution Prevention Plan, as part of the Site Development Plan review process, indicating compliance to Federal, State, and local requirements regarding the management of stormwater runoff to prevent siltation and erosion, both on-site and upon downstream properties.

Waste Management Plan

c. Provide a management plan for the disposal of animal waste and by-products of the operation for review and approval by the Planning and Zoning Commission. Minimally, this plan should address the removal of animal wastes on a weekly basis to an approved location for their disposal.

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.

Geotechnical Report

e. 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 the Site Development Plan. The development and construction plans shall be designed to conform to the requirements and conditions of the Geotechnical Report.

7. RECORDING

Within sixty (60) days of granting of the Conditional Use Permit (CUP) by the Planning and Zoning Commission, the approved permit language and legal description of the property 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 or building permit, all approvals from the Department of Public Works, the Missouri Department of Natural Resources, the Missouri Department of Transportation (if required), St. Louis County Department of Public Works, and the Metro West Fire Protection District must be received by the Department of Planning.

Roadway Improvements

b. Based upon the preliminary development plan, improvements to Pond Road and State Route 100 (if required) must be completed prior to issuance of the occupancy permits.

Nuisance Bond

c. Provide to the City of Wildwood a bond, letter of credit, or cash deposit in the amount of one thousand dollars ($1,000.00) for use to correct any potential nuisance violations, if the property and improvements are not maintained in accordance with said regulations (Chapter 215 Nuisances of the City of Wildwood Municipal Code). The City shall hold this deposit and it will be pre-authorized by the owner/operator, in writing, to exercise its use, if violations are noted and not abated in a timely manner.

Public Potable Water

d. The developer shall be required to provide public potable water from the Missouri American Water Company to the property. Verification of this service shall be in a form acceptable to the City of Wildwood. Additionally, the design and location of this water system shall be reviewed and acted upon by the Planning and Zoning Commission, as part of the Site Development Plan submittal process.

Escrow Requirements

e. All landscaping costs shall be submitted to the City of Wildwood through the standard bond procedures.

Land Subdivision

f. 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.

Sanitary Sewers

g. Provide an engineered plan to the City of Wildwood and the St. Louis County Department of Public Works for review and acceptance indicating the proper treatment of all wastewater generated by the use of this site. This on-site wastewater system shall meet all current St. Louis County Plumbing Code requirements for the quality of effluent and not exceed a capacity of five thousand (5,000) gallons per day.

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 controls in the form of siltation control measures are required and must comply with the Stormwater Pollution Prevention Plan for this development (SWPPP). The developer shall be solely responsible for obtaining any temporary slope and construction licensees needed to address the installation of public and private improvements on this site that require the use of adjoining parcels of ground that are not under their ownership or control.

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. The developer is advised that utility companies will require compensation for relocation of their utility facilities within public 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 infrastructure improvements.

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. This restoration must occur within thirty (30) days of the conclusion of preliminary grading as determined by the Director of Public Works.

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 Plan approved by the Planning and Zoning Commission and the Department of Planning. The owner/operator must acknowledge in writing that access to this site for inspection purposes by personnel of the City of Wildwood shall be authorized and, if refused, such action is grounds for revocation of said permit by the City.

j. Any other applicable zoning, subdivision, or other regulations or requirements of the City shall further apply to the development of this property, as authorized by this Conditional Use Permit (CUP), 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.

k. This zoning approval is conditioned on compliance with the Zoning Ordinance, Subdivision and Development Regulations, 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

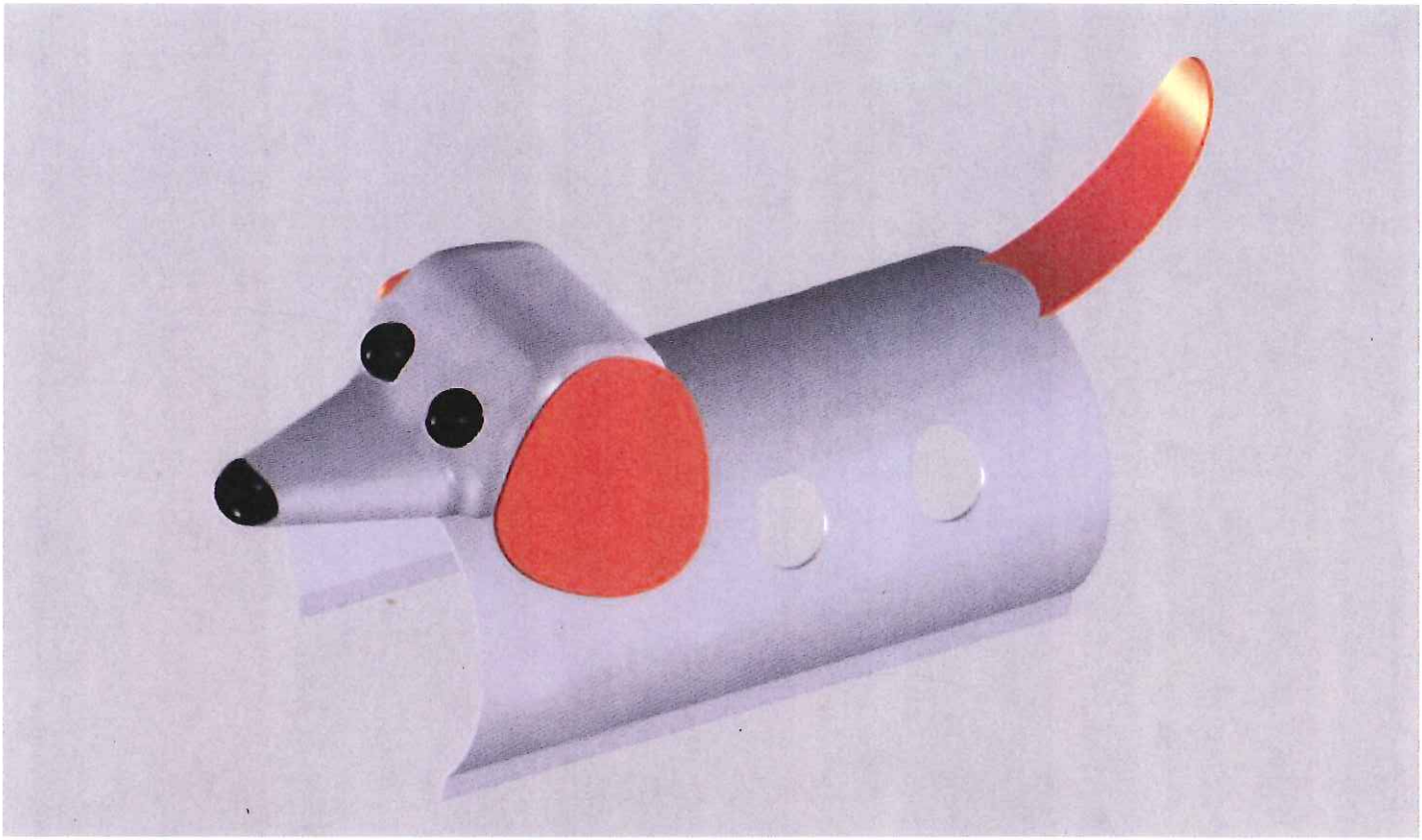
from this Conditional Use Permit (CUP), except where this ordinance has expressly modified such regulations by reference to the applicable provision authorizing such modification.

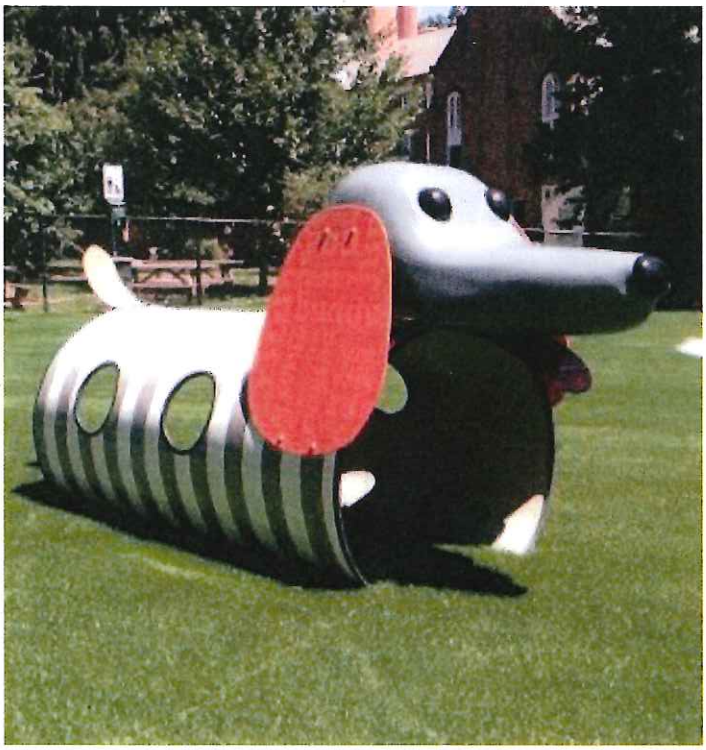
K9RECREATION

Materials: FRP Composite with smooth finish
Optional: Graphics Wrap (choice of images)
Tunnel Dimensions: 6' x 3'
Overall: 9' x 4'
Shipping Weight: Approx. 260lbs

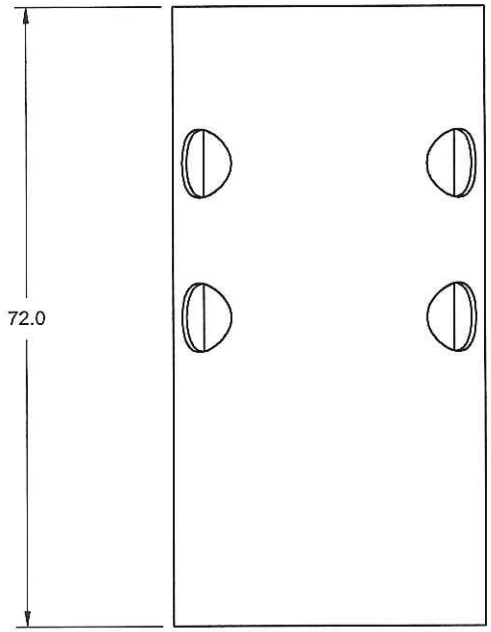
** Tunnels are handcrafted so slight variations in size and weight are expected*

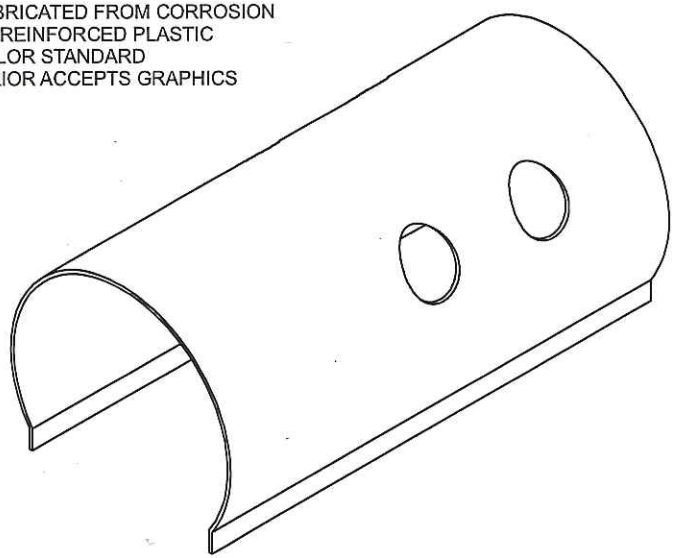
"Doxie" Tunnel

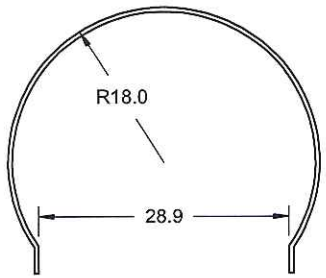


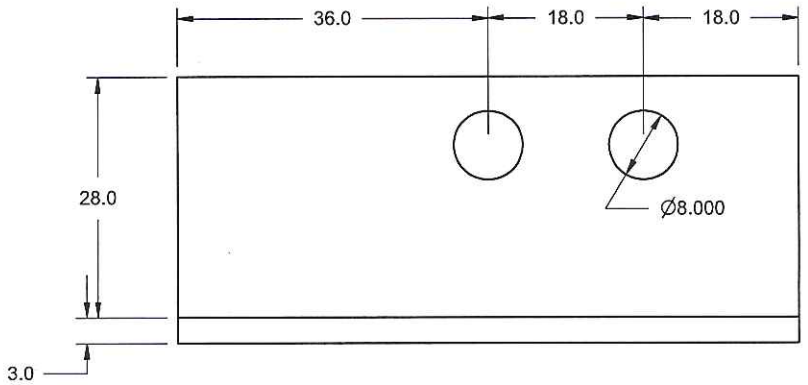


NOTES:
1. BODY TO BE FABRICATED FROM CORROSION RESISTANT FIBER REINFORCED PLASTIC
2. LIGHT GRAY COLOR STANDARD
3. SMOOTH EXTERIOR ACCEPTS GRAPHICS









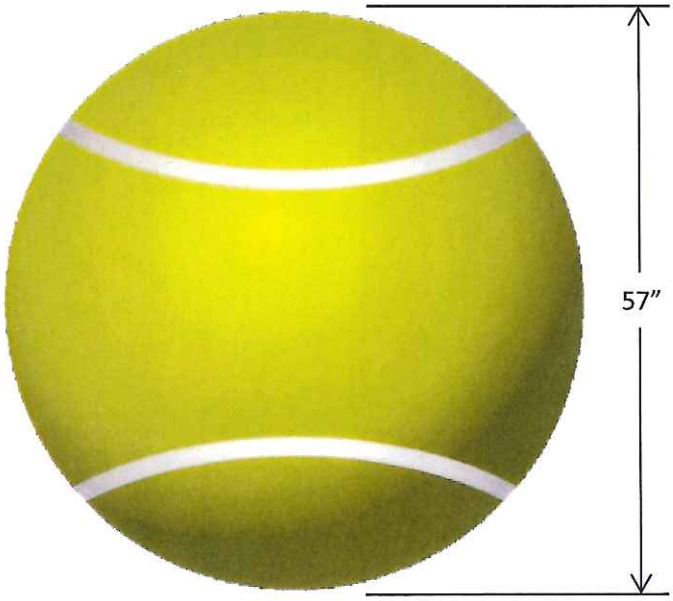
Aqua Play Solutions Inc.	SIZE A	PART NO.	DESCRIPTION. DOXIE BODY / REV 1
	SCALE 1:20		SHEET 1 0F 1

K9RECREATION

Materials: FRP Composite
Finish: Semi-smooth w/1/3 Tennis Ball Graphics
Dimensions: 57" W x 20" H
Shipping Weight: Approx. 220lbs

** FRP Features are handcrafted so slight variations in size and weight are expected*

"Tennis" Ball



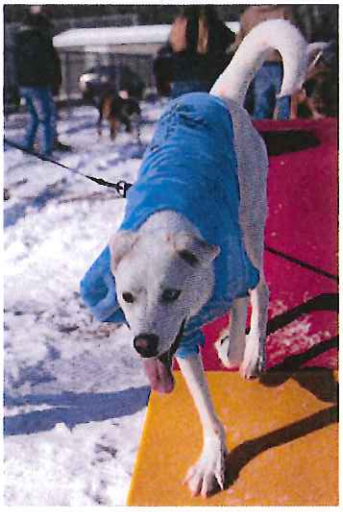
Dog-ON-It-Parks®

626 128th St SW Suite #104A • Everett, WA 98204 • WWW.DOG-ON-IT-PARKS.COM
PH: 877-348-3647 • Fax: 425-347-3056 • Email: info@dog-on-it-parks.com

6401 A-FRAME

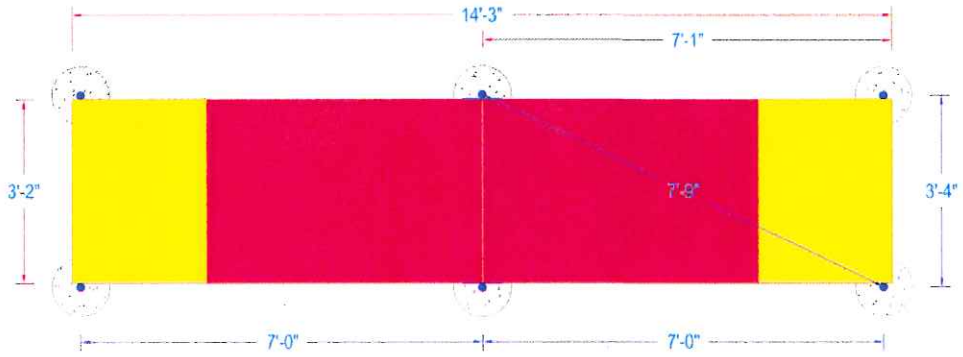
Revision: 2.3
Issued: 10/18/2011

IMAGES



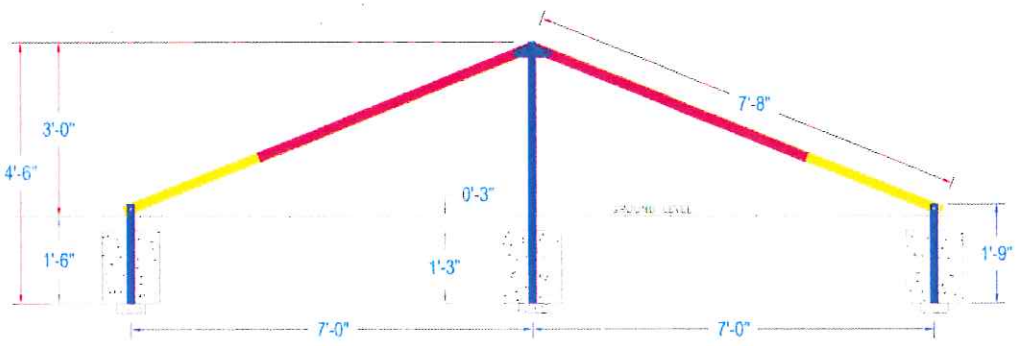
TOP VIEW

- *One-piece 10 gauge reinforced aluminum planks.*
- *Highly-textured Paws Grip™ poly urea coating for superior slip-resistance.*
- *Two-color UV-resistant polymeric top coat finish.*
- *Stainless steel hardware.*
- *Schedule 40 aluminum posts.*



FRONT VIEW

- *Refer to the installation manual for all installation instructions.*



MADE IN U.S.A

Dog-On-It-Parks - Copyright 2011 - DO NOT DUPLICATE in part or in its entirety without written permission.

Dog-ON-It-Parks®
626 128th St SW Suite #104A • Everett, WA 98204 • WWW.DOG-ON-IT-PARKS.COM
PH: 877-348-3647 • Fax: 425-347-3056 • Email: info@dog-on-it-parks.com

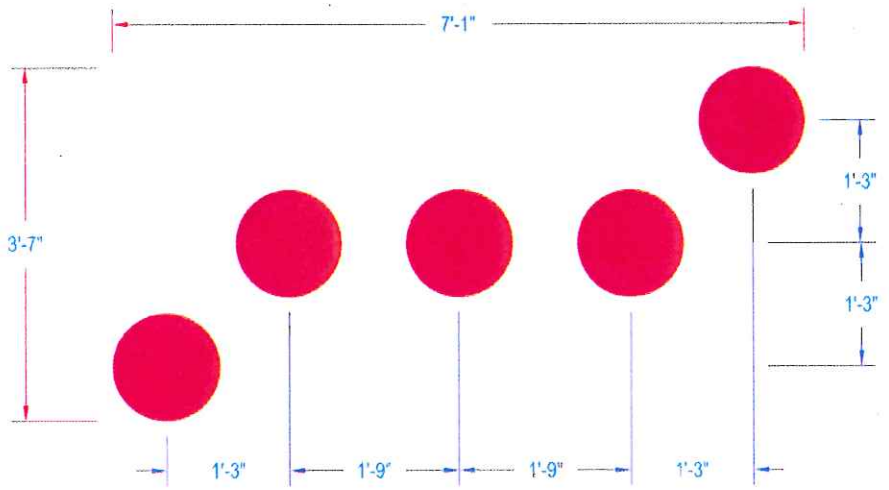
6413
AGILITY WALK

Revision: 2.3
Issued: 10/18/2011

IMAGES

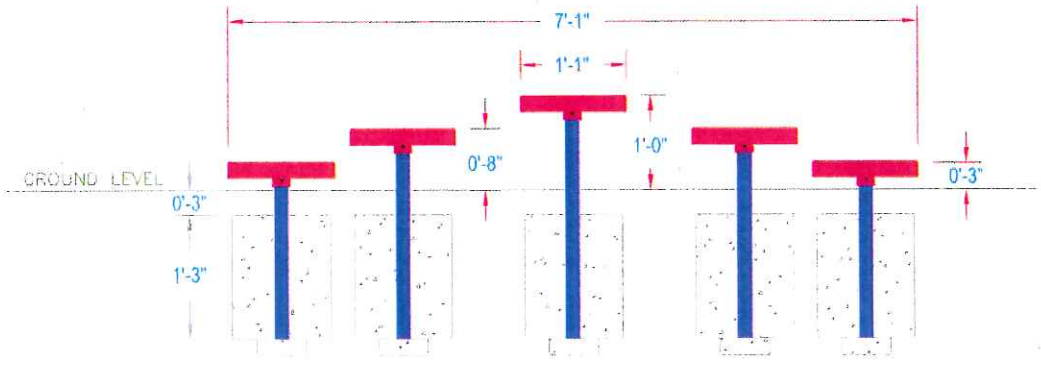
TOP VIEW

- *10 gauge reinforced aluminum discs.*
- *Highly-textured Paws Grip™ poly urea coating for superior slip-resistance.*
- *Varied heights.*
- *Schedule 40 aluminum posts.*



FRONT VIEW

- *Refer to the installation manual for all installation instructions.*



MADE IN U.S.A

Dog-On-It-Parks - Copyright 2011 - DO NOT DUPLICATE in part or in its entirety without written permission.

6520
ADJUSTABLE TIRE JUMP

Dog-ON-It-Parks®
626 128th St SW Suite #104A • Everett, WA 98204 • WWW.DOG-ON-IT-PARKS.COM
PH: 877-348-3647 • Fax: 425-347-3056 • Email: info@dog-on-it-parks.com

Revision: 2.3
Issued: 10/18/2011

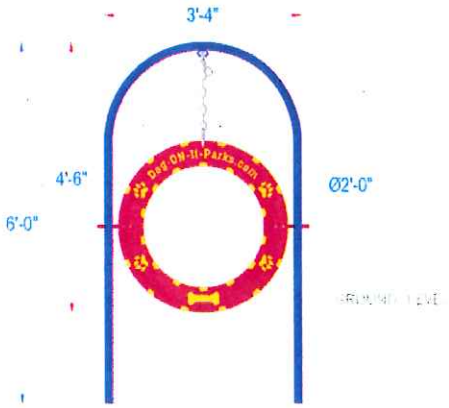
IMAGES

TOP VIEW

- *Height easily adjusted by useres*
- *Multi-colored precision machined solid polyethylene plastic is 3/4" thick.*
- *Sliding brackets reduce noise.*
- *Stainless steel hardware.*
- *Inside diameter is big enough for the largest dogs.*
- *Approximatley 14" range of height adjustment*
- *Schedule 40 aluminum arch with baked polyester finish.*

FRONT VIEW

- *Refer to the installation manual for all installation instructions.*



MADE IN U.S.A

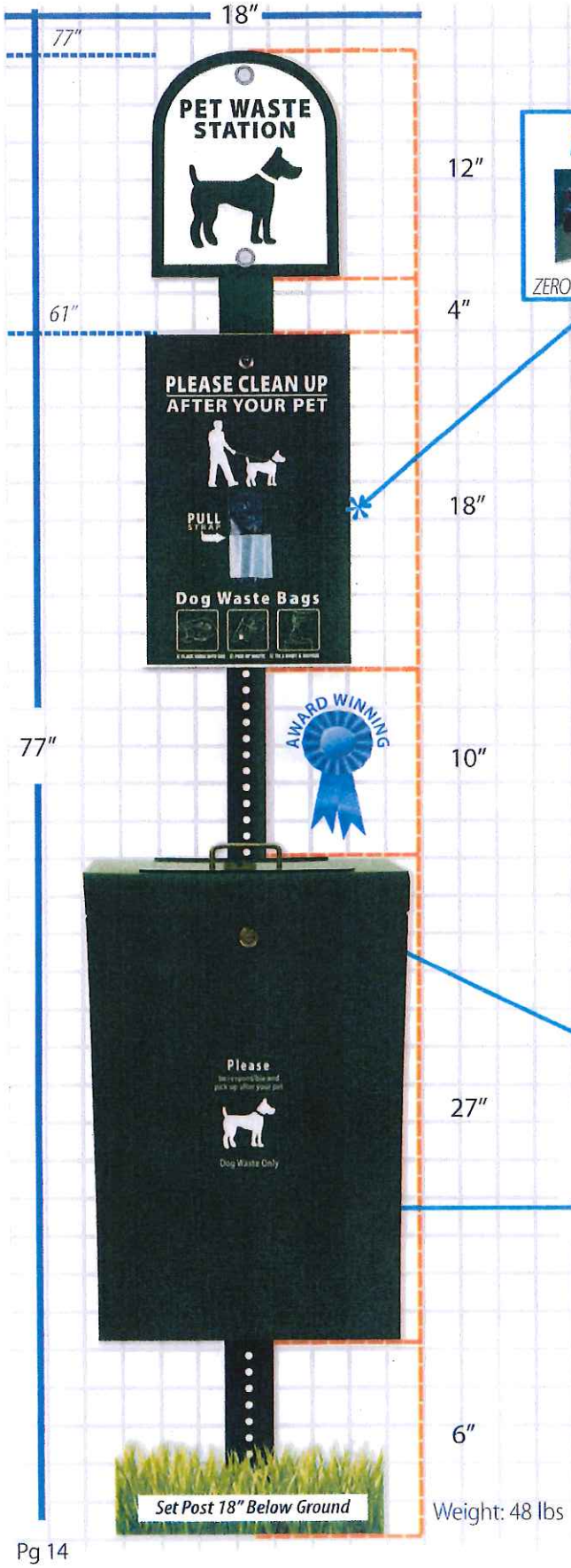
Dog-On-It-Parks - Copyright 2011 - DO NOT DUPLICATE in part or in its entirety without written permission.

© ZEROWASTEUSA 2011 • 800.789.2563 • www.ZEROWASTEUSA.com

zerowasteUSA.com
Green Pet Waste Solutions®

The GLADIATOR® PET WASTE STATION

AWARD WINNING • FULLY SEALED • LOCKING CAN



Includes EVERYTHING:

- 7 ft Square Post
- Bag Dispenser (Zero Waste **or** Roll Bag)
- 11 Gallon Locking Can
- Hardware & Keys
- Installation Instructions
- Sign
- Sign Bracket
- 50 Can Liners
- 400 Waste Bags

Clear & Simple

Easy To See, Simple To Use

Highly visible integrated signage. Simple instructions show how to dispense and use bags.
(permanent screened lettering will not peel or fade)

NO RUST ALUMINUM

Strong & Durable

Commercial Aluminum, Rust-Proof

Manufactured to endure the harshest elements. Commercial-grade aluminum is built to last—will not rust like metal pet waste stations; will not crack like polyresin or plastic stations.

Locking Can, Sealed Chute

Large, Sealed System, Locking

The Gladiator can is made from heavy gauge, rust-proof aluminum. The sealed chute keeps out the elements while the large can holds 11gallons of waste.

Commercial-Grade Post

Heavy weight, Commercial-Grade.

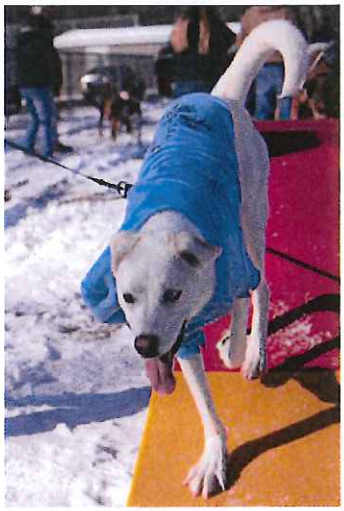
A sturdy 14 gauge steel square post. A two piece telescoping 7 ft post for easy installation. Powder-coated.

6402
DOG WALK RAMP

Dog-ON-It-Parks®
626 128th St SW Suite #104A • Everett, WA 98204 • WWW.DOG-ON-IT-PARKS.COM
PH: 877-348-3647 • Fax: 425-347-3056 • Email: info@dog-on-it-parks.com

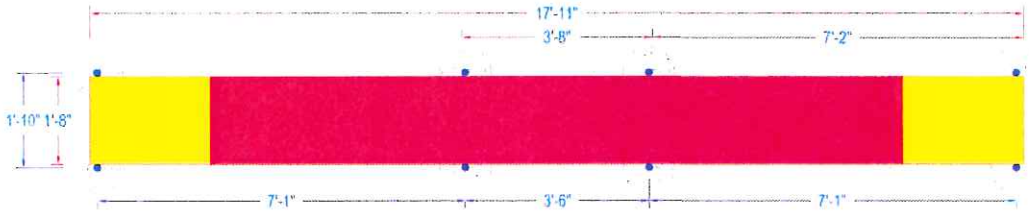
Revision: 2.3
Issued: 10/18/2011

IMAGES



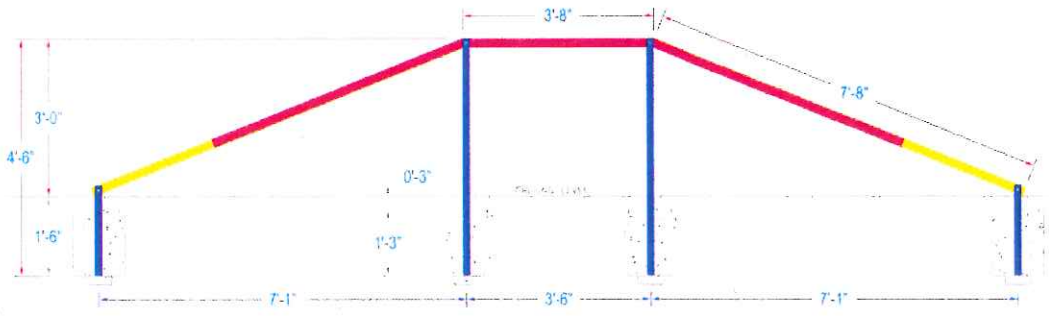
TOP VIEW

- *One-piece 10 gauge reinforced aluminum planks.*
- *Highly-textured Paws Grip™ poly urea coating for superior slip-resistance.*
- *Two-color UV-resistant polymeric top coat finish.*
- *Stainless steel hardware.*
- *Schedule 40 aluminum posts.*



FRONT VIEW

- *Refer to the installation manual for all installation instructions.*



MADE IN U.S.A

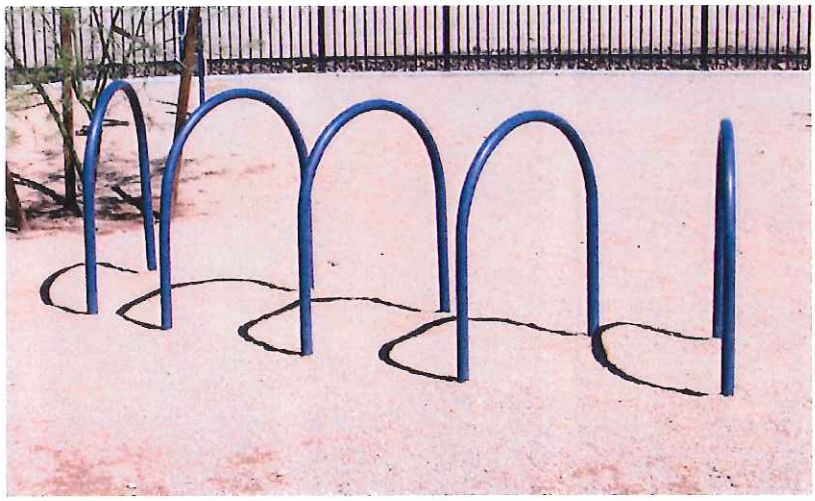
Dog-On-It-Parks - Copyright 2011 - DO NOT DUPLICATE in part or in its entirety without written permission.

Dog-ON-It-Parks®
626 128th St SW Suite #104A • Everett, WA 98204 • WWW.DOG-ON-IT-PARKS.COM
PH: 877-348-3647 • Fax: 425-347-3056 • Email: info@dog-on-it-parks.com

6415
HOUND HOOPS

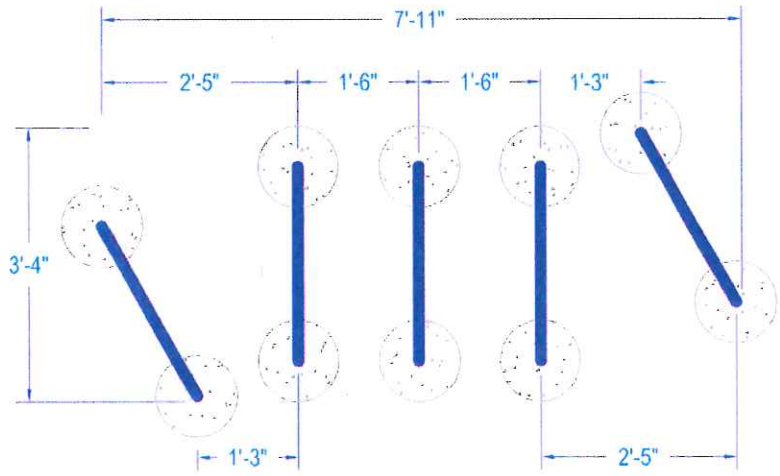
Revision: 2.3
Issued: 10/18/2011

IMAGES



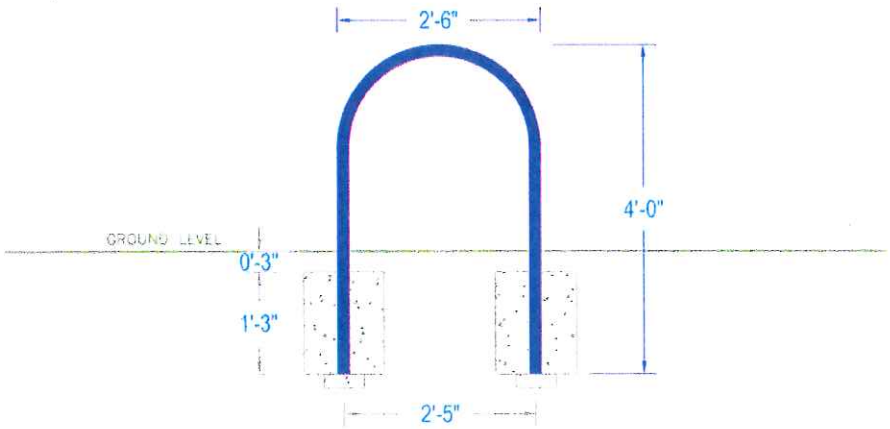
TOP VIEW

- *Schedule 40 aluminum posts with baked polyester finish.*
- *Includes 5 hoops (arranged in a serpentine shape)*



FRONT VIEW

- *Refer to the installation manual for all installation instructions.*



MADE IN U.S.A

Dog-On-It-Parks - Copyright 2011 - DO NOT DUPLICATE in part or in its entirety without written permission.

Dog-ON-It-Parks®
626 128th St SW Suite #104A • Everett, WA 98204 • WWW.DOG-ON-IT-PARKS.COM
PH: 877-348-3647 • Fax: 425-347-3056 • Email: info@dog-on-it-parks.com

6521
ADJUSTABLE JUMP BAR W/ HYDRANTS

Revision: 2.3
Issued: 10/18/2011

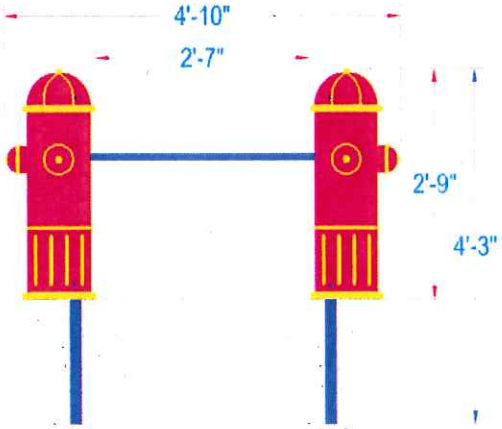
IMAGES

TOP VIEW

- *Extra strong solid aircraft aluminum crossbar adjust to 7 positions.*
- *Multi-colored precision machined solid polyethylene plastic is 3/4" thick.*
- *Crossbar will fall from jumping position with minimal impact from a jumping dog.*
- *Stainless steel hardware.*
- *Schedule 40 aluminum posts.*

FRONT VIEW

- *Refer to the installation manual for all installation instructions.*



MADE IN U.S.A

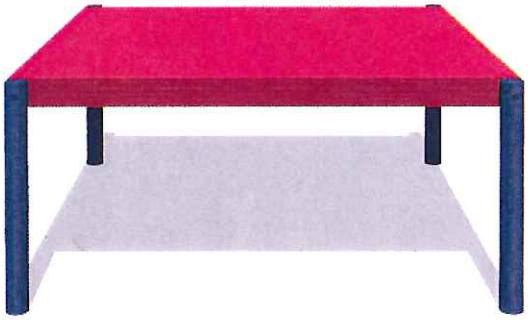
Dog-On-It-Parks - Copyright 2011 - DO NOT DUPLICATE in part or in its entirety without written permission.

Dog-ON-It-Parks®
626 128th St SW Suite #104A • Everett, WA 98204 • WWW.DOG-ON-IT-PARKS.COM
PH: 877-348-3647 • Fax: 425-347-3056 • Email: info@dog-on-it-parks.com

6404
WAIT TABLE

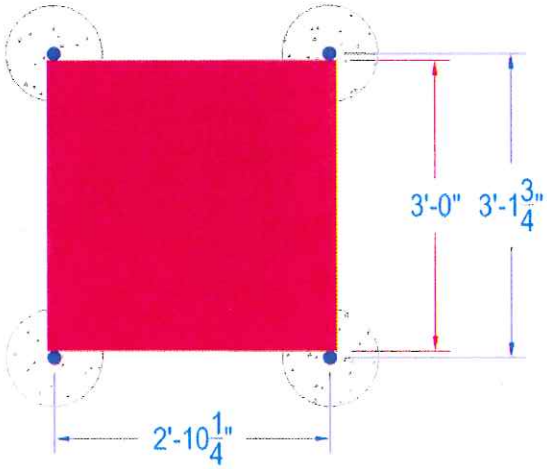
Revision: 2.3
Issued: 10/18/2011

IMAGES



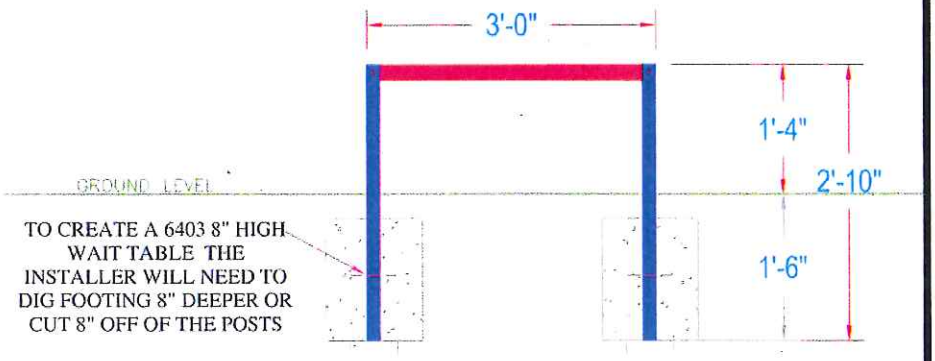
TOP VIEW

- *One-piece 10 gauge aluminum planks.*
- *Highly-textured Paws Grip™ poly urea coating for superior slip-resistance.*
- *UV-resistant polymeric top coat.*
- *Availbe in 8" & 16" heights*
- *Stainless steel hardware.*
- *Schedule 40 aluminum posts.*



FRONT VIEW

- *Refer to the installation manual for all installation instructions.*



MADE IN U.S.A

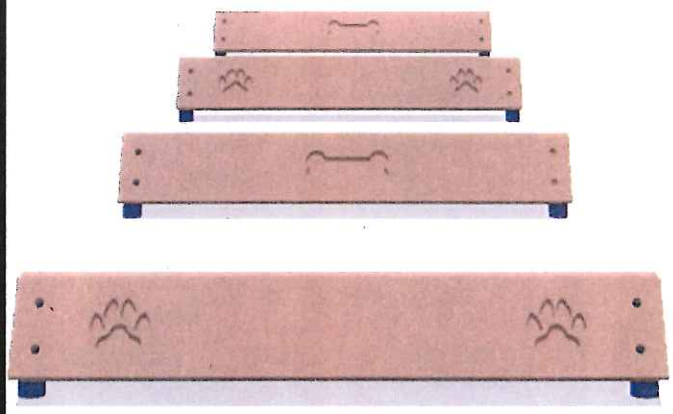
Dog-On-It-Parks - Copyright 2011 - DO NOT DUPLICATE in part or in its entirety without written permission.

6509
HOUND HURDLES

Dog-ON-It-Parks®
626 128th St SW Suite #104A • Everett, WA 98204 • WWW.DOG-ON-IT-PARKS.COM
PH: 877-348-3647 • Fax: 425-347-3056 • Email: info@dog-on-it-parks.com

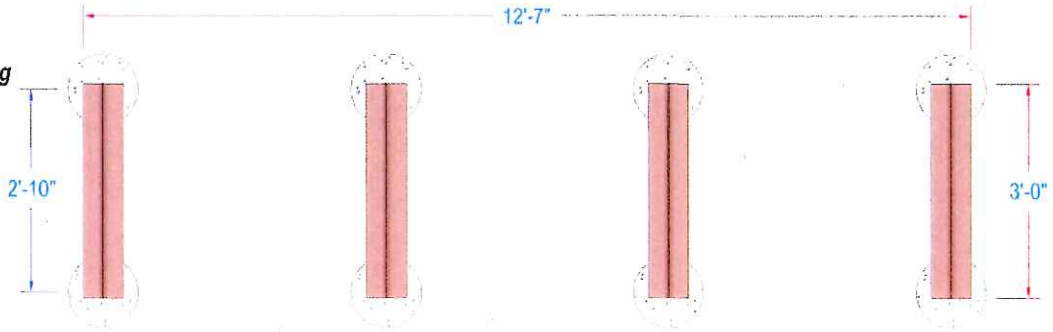
Revision: 2.3
Issued: 10/18/2011

IMAGES



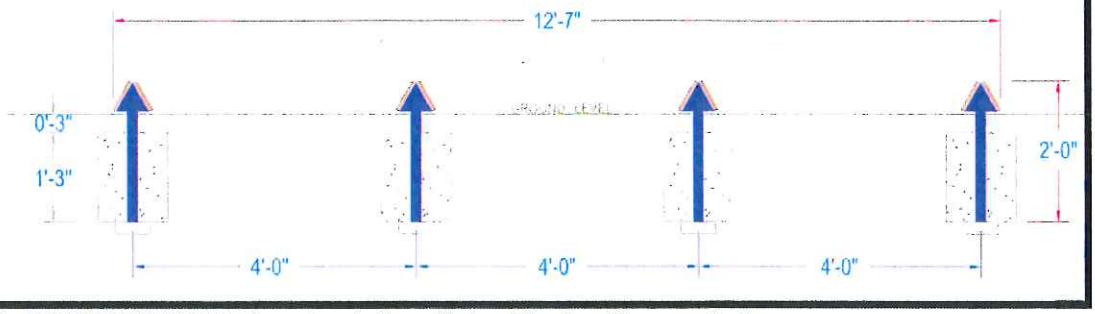
TOP VIEW

- *Attractive engraved recycled plastic planks.*
- *Arrange with appropriate spacing for intended dog sizes.*
- *Stainless steel hardware.*
- *Schedule 40 aluminum posts with welded 10 gauge aluminum brackets.*



FRONT VIEW

- *Refer to the installation manual for all installation instructions.*



MADE IN U.S.A

Dog-On-It-Parks - Copyright 2011 - DO NOT DUPLICATE in part or in its entirety without written permission.

Dog-ON-It-Parks®
626 128th St SW Suite #104A • Everett, WA 98204 • WWW.DOG-ON-IT-PARKS.COM
PH: 877-348-3647 • Fax: 425-347-3056 • Email: info@dog-on-it-parks.com

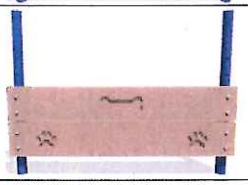
6601-6603 WALL JUMPS

(SINGLE, DOUBLE & TRIPLE PLANK)

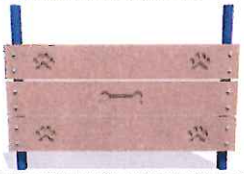
Revision: 2.3
Issued: 10/18/2011

IMAGES

6601



6602

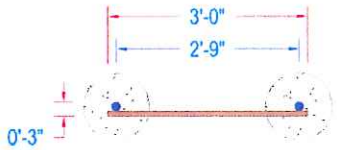


6603

6602

TOP VIEW

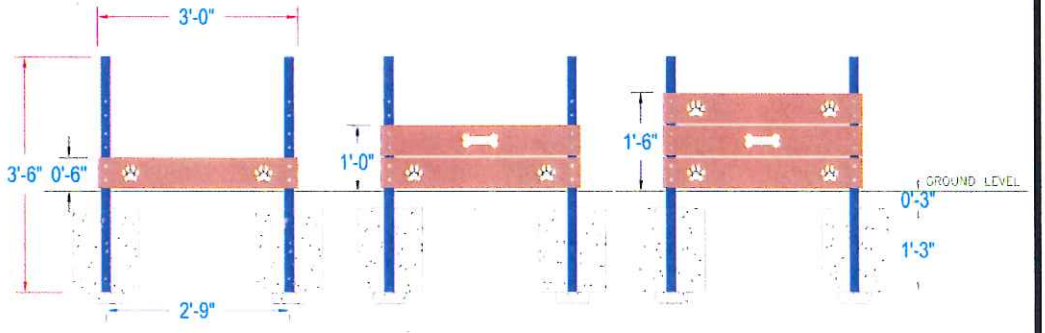
- *Attractive engraved recycled plastic planks.*
- *Arrange with appropriate spacing for intended dog sizes.*
- *Stainless steel hardware.*
- *Schedule 40 aluminum posts.*



FRONT VIEW

- *Refer to the installation manual for all installation instructions.*

6601 **6602** **6603**



MADE IN U.S.A

Dog-On-It-Parks - Copyright 2011 - DO NOT DUPLICATE in part or in its entirety without written permission.

6412
TEETER TOTTER

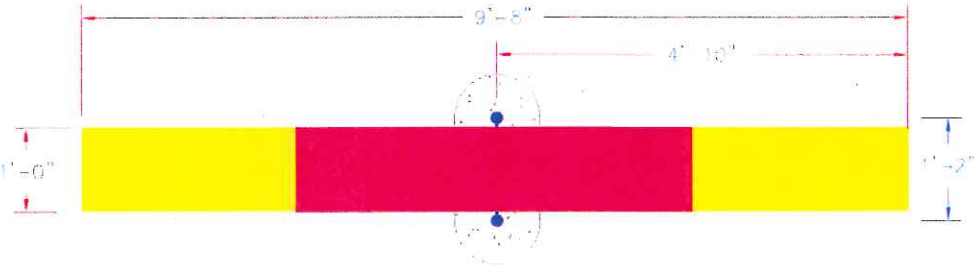
Dog-ON-It-Parks®
626 128th St SW Suite #104A • Everett, WA 98204 • WWW.DOG-ON-IT-PARKS.COM
PH: 877-348-3647 • Fax: 425-347-3056 • Email: info@dog-on-it-parks.com

Revision: 2.3
Issued: 10/18/2011

IMAGES

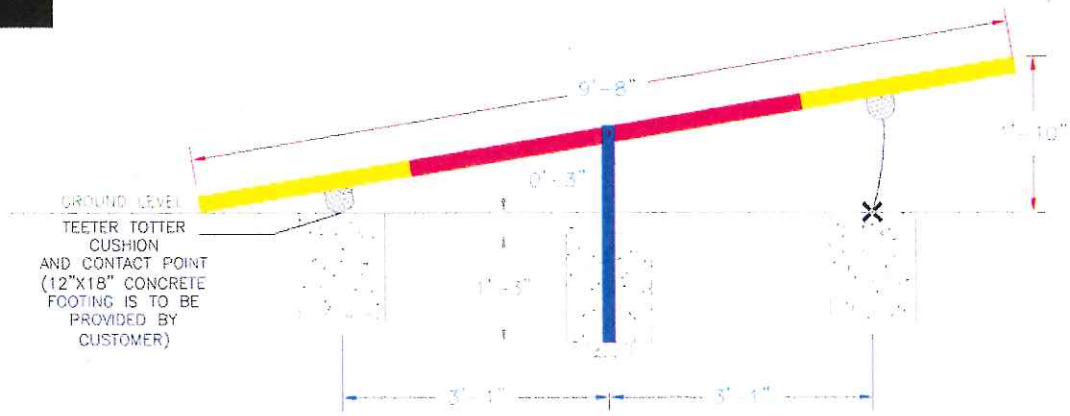
TOP VIEW

- *One-piece 10 gauge reinforced aluminum planks.*
- *Highly-textured Paws Grip™ poly urea coating for superior slip-resistance.*
- *Two-color UV-resistant polymeric top coat finish.*
- *Stainless steel hardware.*
- *Cushioned bumpers for soft landgings.*
- *Schedule 40 aluminum posts.*



FRONT VIEW

- *Refer to the installation manual for all installation instructions.*



MADE IN U.S.A

Dog-On-It-Parks - Copyright 2011 - DO NOT DUPLICATE in part or in its entirety without written permission.

Dog-ON-It-Parks®
626 128th St SW Suite #104A • Everett, WA 98204 • WWW.DOG-ON-IT-PARKS.COM
PH: 877-348-3647 • Fax: 425-347-3056 • Email: info@dog-on-it-parks.com

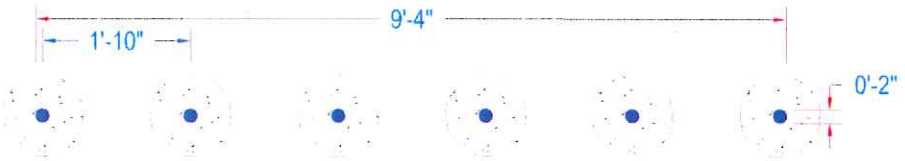
6516
WEAVE POLES

Revision: 2.3
Issued: 10/18/2011

IMAGES

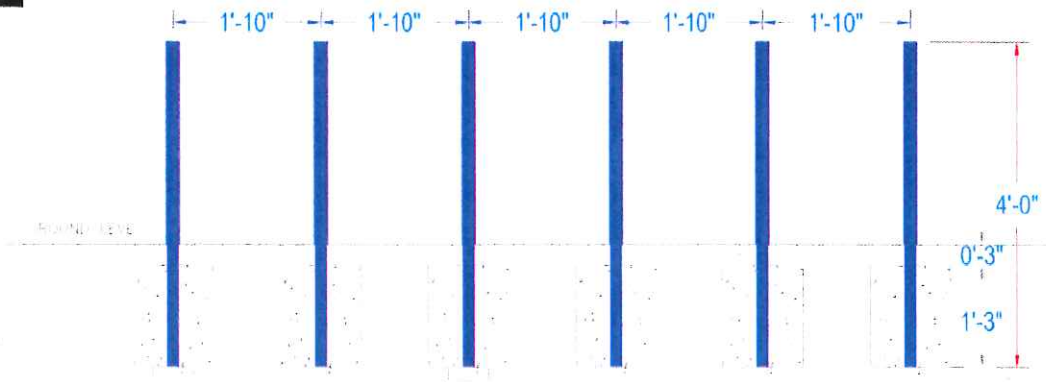
TOP VIEW

- *Flexible urethane poles can collapse without breaking, and return to an upright position with very little spring back (patent pending).*
- *Urethane poles are very resilient and hold up well against chewing.*
- *Stainless steel hardware.*
- *Schedule 40 aluminum post in ground assembly.*



FRONT VIEW

- *Refer to the installation manual for all installation instructions.*



MADE IN U.S.A

Dog-On-It-Parks - Copyright 2011 - DO NOT DUPLICATE in part or in its entirety without written permission.

Dog-ON-it-Parks
626 128th St SW Suite #104A • Everett, WA 98204 • WWW.DOG-ON-IT-PARKS.COM
PH: 877-348-3647 Fax: 425-347-3056 • Email: info@dog-on-it-parks.com

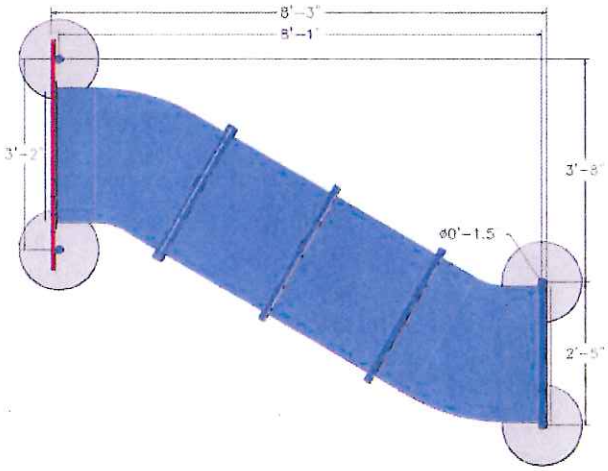
6801
S-TUNNEL W/ DOG HOUSE & PIPE ARCH

Issued / Revised: A 12/08

3-D & PHOTO

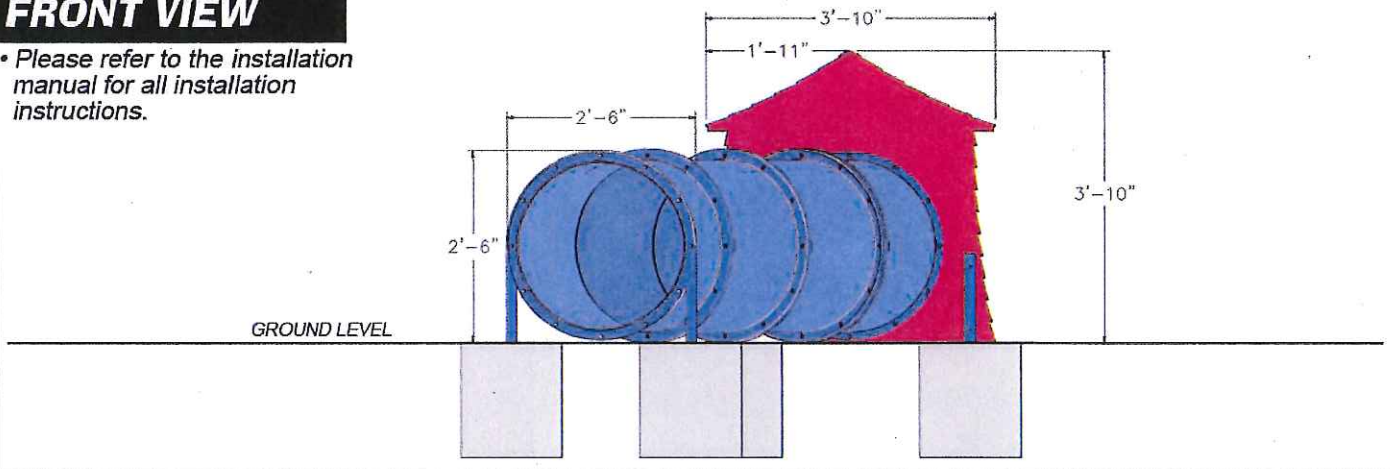
TOP VIEW

- *Extra large 27" diameter tube.*
- *Large tube fits wider range of dogs.*
- *Non-toxic "Paws Grip"™ slip-resistant texture is impregnated into the plastic for long life.*
- *Multi-colored precision-machined 3/4" thick solid poly-ethylene on optional dog house entrances.*
- *Stainless steel hardware.*
- *Galvanized steel posts with baked polyester finish.*

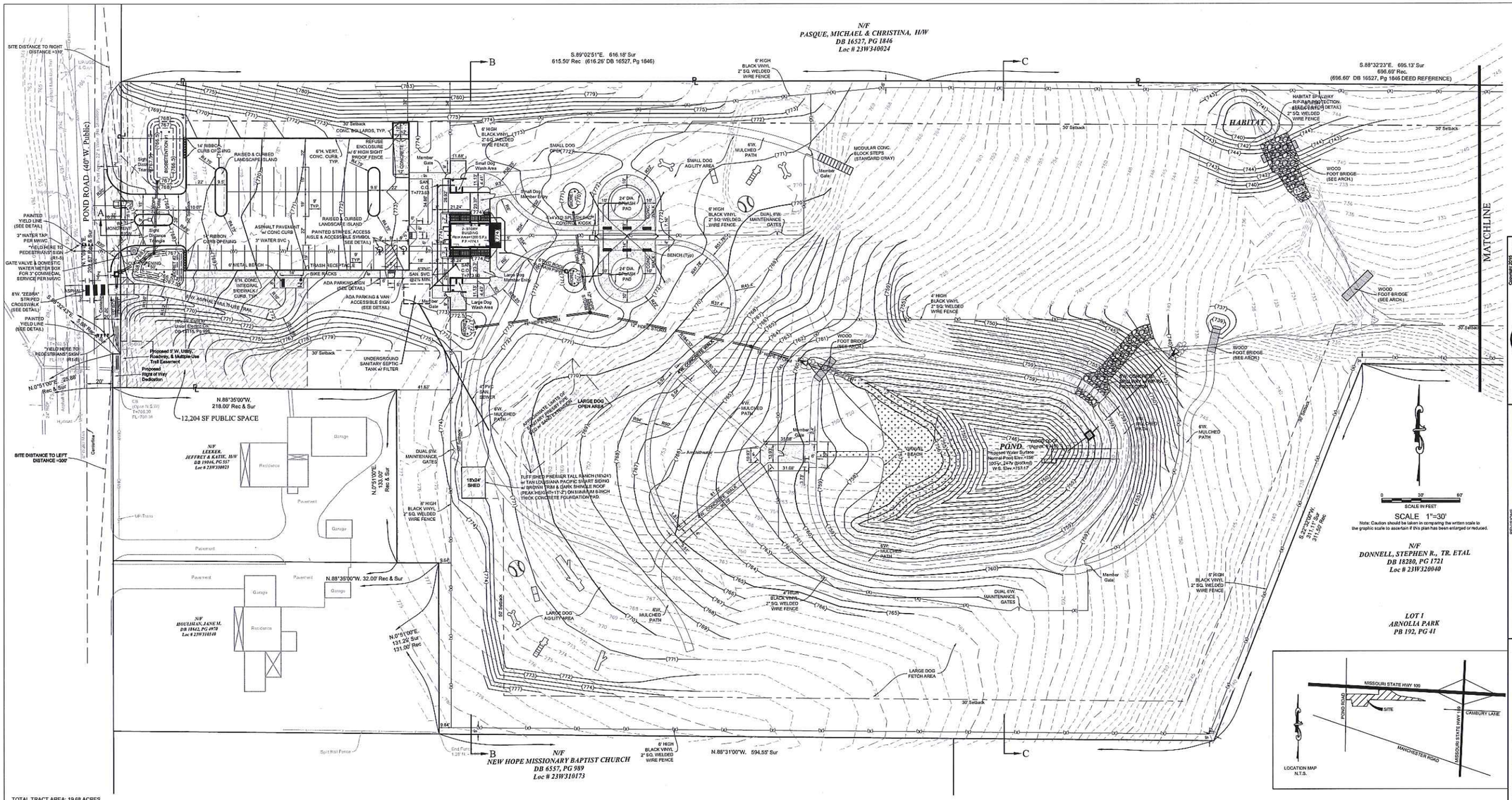


FRONT VIEW

- *Please refer to the installation manual for all installation instructions.*



Dog-On-It-Parks - Copyright 2008 - DO NOT DUPLICATE in part or in its entirety without written permission.



TOTAL TRACT AREA: 19.68 ACRES

C.U.P. SITE AREA: 11.02 ACRES
PARCEL 1: 8.02 ACRES LOCATOR # 23W340042
PARCEL 2: 3.00 ACRES LOCATOR # 23W330032
EXISTING ZONING: NU NON-URBAN RESIDENCE DISTRICT w/ A CONDITIONAL USE PERMIT
STRUCTURE HEIGHT: 30' (2-STORY)
STRUCTURE AREA: 1,022 SQ. FT.
PARKING CALCULATION: SPACE EQUIVALENT TO 1% OF THE LAND USE AREA
480,082 SF x 1% = 4,801 SF
PARKING REQUIRED = 4,801 SF / 171 SF EACH = 29 SPACES
PARKING PROVIDED: 42 SPACES @ 171 SF EACH = 7,182 SF
POND AREA = 29,639 S.F. or 0.68 ACRES
UNDISTURBED AREA = 224,867 S.F. or 5.16 ACRES
POND & UNDISTURBED AREA = 5.84 ACRES

MAXIMUM LAND DISTURBANCE PERMITTED = 7.02 ACRES

PUBLIC SPACE CALCULATIONS:

NUMBER OF PARKING SPACES PROVIDED	42
STANDARD FOR PUBLIC SPACE CALCULATION:	ONE (1) ACRE FOR EVERY 150 PARKING SPACES (290.4 SQUARE FEET PER PARKING SPACE)
AMOUNT OF REQUIRED PUBLIC SPACE	12,196.80 SQUARE FEET
AMOUNT OF PROVIDED PUBLIC SPACE	12,200 SQUARE FEET
MULTIPLE USE TRAIL	1,400 SQUARE FEET
UNDERGROUND DETENTION AREA	0 SQUARE FEET
PUBLIC LAND DEDICATION	0 SQAURE FEET
PRIVATELY HELD COMMON GROUND	12,200 SQUARE FEET
OTHER	0 SQUARE FEET
LIST INSTALLED IMPROVEMENTS	TOTAL NUMBER (LIST BELOW ON LINES)
PICNIC TABLES	0
BENCHES	1
TRASH RECEPTACLES	1
BICYCLE RACKS	2
OTHER	0
OTHER PUBLIC SPACE ITEMS (IF PROVIDED)	0
FEE IN LIEU (IF APPLICABLE)	0

NOTES:

ENTRANCE, STREET INTERSECTION, CUL-DE-SAC SHALL BE CONSTRUCTED TO CITY OF WILDWOOD STANDARDS.

GRADING SHALL BE DONE PER CITY OF WILDWOOD STANDARDS.

GRADING AND DRAINAGE SHALL BE PER CITY OF WILDWOOD STANDARDS.

SLOPE SHALL NOT EXCEED 3 (HORIZONTAL) : 1 (VERTICAL), UNLESS SUPPORTED BY GEOTECHNICAL REPORT.

STORM WATER SHALL BE DISCHARGED AT AN ADEQUATE NATURAL DISCHARGE POINT. SINK HOLES ARE NOT ADEQUATE NATURAL DISCHARGE POINTS.

ALL CONCRETE WALKS WILL BE ADA ACCESSIBLE.

ST. LOUIS COUNTY DEPARTMENT OF PUBLIC WORKS - PLUMBING SECTION - RESTRICTIONS OVER THE DRIP IRRIGATION FIELD IS: NO CATTLE, HORSES OR HEAVY FARM EQUIPMENT. PEDESTRIAN AND LIGHT TO MEDIUM DUTY LAWN EQUIPMENT IS ACCEPTABLE.

PROJECT BENCHMARK:
16-47 ELEVATION=799.39 "L" ON THE SOUTHWEST CORNER OF CONCRETE STEP AT SIDE ENTRANCE TO SOUTHWESTERN BELL TELEPHONE BUILDING; (ONE STORY BRICK) 43' EAST OF CENTERLINE OF POND ROAD AND 86' NORTH OF CENTERLINE OF MANCHESTER ROAD (N304912 E236447)

SITE BENCHMARK:
FOUND IRON PIPE AT THE SOUTHWESTERN CORNER OF PARCEL 1 OF PROPERTY CONVEYED TO HAPPY HOUNDS PLAYGROUND LLC. ELEV=781.32

SIGNAGE SHALL COMPLY WITH CITY OF WILDWOOD REQUIREMENTS

SITE LIGHTING SHALL COMPLY WITH CITY OF WILDWOOD REQUIREMENTS.

ALL BRIDGES WILL REQUIRE BUILDING PERMITS.

WASTE MANAGEMENT PLAN:
MEMBERS WILL BE EXPECTED TO BAG AND PROPERLY DISPOSE OF THEIR DOGS FECES IN THE PARK'S WASTE RECEPTACLES. TEN DOG WASTE STATIONS WILL BE CONVENIENTLY PLACED – TWO AT THE ENTRANCE TO THE PARK, TWO INSIDE THE SMALL DOG AREA, AND 6 INSIDE THE LARGE DOG AREA – TO MAKE WASTE REMOVAL EASY.

THE PARK'S WASTE RECEPTACLES WILL BE COLLECTED AND EMPTIED INTO DUMPSTER EACH DAY. THE PARK WILL BE CHECKED EACH DAY FOR ADDITIONAL WASTE PICKUP THAT MAY HAVE BEEN MISSED BY MEMBERS.

THE PARK'S DUMPSTER SHALL BE SCHEDULED TO BE EMPTIED AT LEAST ONCE PER WEEK.

THIS SITE IS SERVED BY THE FOLLOWING UTILITIES:

FIRE DISTRICT:	METRO WEST FIRE PROTECTION DISTRICT
WATER:	MISSOURI AMERICAN WATER COMPANY
SEWERS:	ONSITE SEPTIC (PRIVATE)
GAS:	LACLEDE GAS COMPANY
ELECTRIC:	AMEREN MISSOURI
TELEPHONE:	AT&T
INTERNET:	CHARTER COMMUNICATIONS
SCHOOL:	ROCKWOOD SCHOOL DISTRICT.
WARD:	CITY COUNCIL WARD 1

SHEET INDEX:

1. SITE DEVELOPMENT PLAN
2. C.U.P. NOTES
3. SITE DEMOLITION PLAN
4. SITE CROSS SECTIONS
5. STORMWATER POLLUTION PREVENTION PLAN
6. SITE DEVELOPMENT PLAN - AERIAL PHOTO
7. ZONING & ACREAGE PLAT
8. SITE DEVELOPMENT PLAN DETAILS
9. NATURAL RESOURCE DELINEATION
10. TREE PRESERVATION PLAN (L-001)
11. LANDSCAPE SITE PLAN (L-201)
12. LANDSCAPE DETAIL PLANS (L-301)
13. SITE STRUCTURES (L-601)
14. LANDSCAPE & FENCE DETAILS (L-801)

STORM WATER CALCULATIONS (15-YR., 20-MIN.)

ONSITE ANALYSIS / PROJECT AREA

EXISTING CONDITIONS
PROPERTY AREA = 11.02 AC
GRASS AREA = 10.75 AC
GRAVEL AREA = 0.11 AC
PAVEMENT AREA = 0.10 AC
ROOF AREA = 0.06 AC
COMPOSITE Pi = 1.741 CFS/AC
Q = 19.19 CFS

DEVELOPED CONDITIONS
PROPERTY AREA = 11.02 AC
GRASS AREA = 10.05 AC
GRAVEL AREA = 0.16 AC
PAVEMENT AREA = 0.79 AC
ROOF AREA = 0.02 AC
COMPOSITE Pi = 1.857 CFS/AC
Q = 20.46 CFS

STORMWATER MANAGEMENT SUMMARY:
15-yr.,20-min. ONSITE DIFFERENTIAL = + 1.28 CFS < 2 CFS

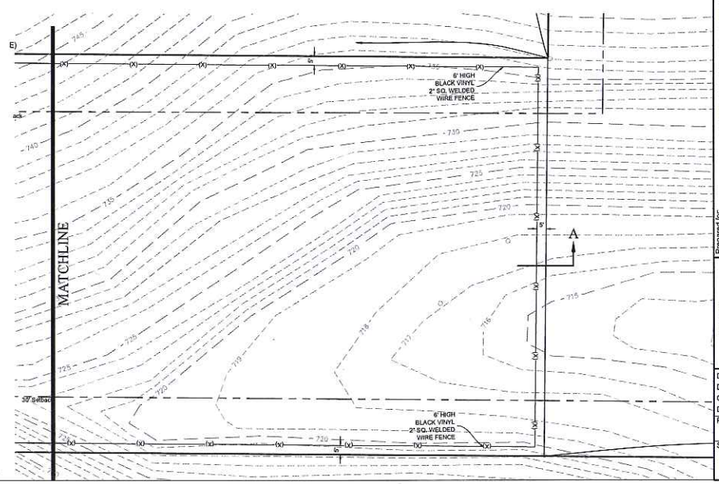
--FLOOD DETENTION IS NOT REQUIRED--

Underground facilities, structures & utilities have been plotted from available surveys, records & information, and therefore, do not necessarily reflect the actual existence, nonexistence, size, type, number of, or location of these facilities, structures, & utilities.

The Contractor shall be responsible for verifying the actual location of all underground facilities, structures, & utilities, either shown or not shown on these plans. The underground facilities, structures, & utilities shall be located in the field prior to any grading, excavation or construction of improvements. These provisions shall in no way obsolve any party from complying with the Underground Facility Safety and Damage Prevention Act, Chapter 319, RSMO.

Call Before you DIG
Dial 811 or TOLL FREE
1-800-344-7483
mofcall.com
MISSOURI ONE-CALL SYSTEM INC.

The signed and sealed original of this drawing is on file at the offices of The Clayton Engineering Company, Inc. The signed and sealed original is the official document and shall take precedence over any digital version.



Copyright 2015
Clayton Engineering Co.
All Rights Reserved

MO Cert. of Authority - Prof. Engineering #000001 & Prof. Surveying #000144
E. Saint Louis & Prof. Engineering Cert. # 184-000979

the clayton engineering company, inc.
ENGINEERS • SURVEYORS • PLANNERS
2349 POND ROAD
ST. LOUIS, MISSOURI 63146
PHONE (636) 343-9770 FAX (636) 343-9771

NO.	DATE	BY	REVISIONS
1	03/23/15	EJS	Revised per City Comments
2	12/11/14	EJS	Revised Grading per City Comments
3	09/14/15	EJS	Revised per City Comments & Client Input
4	10/02/15	EJS	Revised per City Comments
5	01/21/16	EJS	Revised per City Comments

F.B. 1155 DUR.
PLOTTED: 1/28/2016 8:51 AM BY: EJS
F.S. S:\Shared\Projects\2013\13199 HAPPY HOUNDS PLAYGROUND\Drawings\Site\13199 SDP.dwg

HAPPY HOUNDS PLAYGROUND, LLC
895 Bolger Court
Fenton, Missouri, 63026
636-343-9770

Prepared for:

SITE DEVELOPMENT PLAN
HAPPY HOUNDS PLAYGROUND
2444 Pond Road
Wildwood, MO 63040

Erik J. Sloan - Professional Engineer
PE-2006000132
STATE OF MISSOURI
ERIK JOHN SLOAN
NUMBER PE-2006000132
01/21/16

Designed	SWQ
Drawn	HRL
Checked	EJS
Date	June 11, 2014
Project Number	13199
Sheet Number	1 of 14

[redacted]

2015031900355

GERALD E SMITH, RECORDER OF DEEDS
ST. LOUIS COUNTY MISSOURI
41 SOUTH CENTRAL, CLAYTON, MO 63105

TYPE OF INSTRUMENT	GRANTOR	TO	GRANTEE
PERMT	HAPPY HOUNDS PLAYGROUND LLC		

PROPERTY DESCRIPTION: SEC: 2 TWP: 44 RNG: 3

Lien Number	Notation	Locator

NOTE: I, the undersigned Recorder of Deeds, do hereby certify that the information shown on this Certification Sheet as to the TYPE OF INSTRUMENT, the NAMES of the GRANTOR and GRANTEE as well as the DESCRIPTION of the REAL PROPERTY affected is furnished merely as a convenience only, and in the case of any discrepancy of such information between this Certification Sheet and the attached Document, the ATTACHED DOCUMENT governs. Only the DOCUMENT NUMBER, the DATE and TIME of filing for record, and the BOOK and PAGE of the recorded Document is taken from this CERTIFICATION SHEET.

RECORDER OF DEEDS DOCUMENT CERTIFICATION

STATE OF MISSOURI)
SS.
COUNTY OF ST. LOUIS)

Document Number **00355**

I, the undersigned Recorder of Deeds for said County and State, do hereby certify that the following and annexed instrument of writing, which consists of 12 pages, (this page inclusive), was filed for record in my office on the 19 day of March 2015 at 01:20PM and is truly recorded in the book and at the page number printed above.

In witness whereof I have hereunto set my hand and official seal the day, month and year aforesaid.

JLM2
Deputy Recorder

Gerald E. Smith
Recorder of Deeds
St. Louis County, Missouri

Mail to:
CLAYTON ENGINEERING
11920 WESTLINE INDUSTRIAL DR.
ST. LOUIS, MO 63146

Destination code: 3005 M

RECORDING FEE 54.00
(Paid at the time of Recording)

WILDWOOD

DATE: March 18, 2015

Gerald E. Smith
St. Louis County Recorder of Deeds
41 South Central Avenue
Clayton, Missouri 63105

RE: Authorization for Plat/Document Recordation - City of Wildwood, Missouri

Dear Mr. Smith:

The below described,

___ SITE DEVELOPMENT PLAN
___ SUBDIVISION RECORD PLAT
___ DWELLING UNIT DISPLAY PLAT
___ BOUNDARY ADJUSTMENT PLAT
___ CONDOMINIUM PLAT
√ (Other) Conditional Use Permit (CUP)

is hereby authorized by the City of Wildwood to be received and recorded in the St. Louis County Record.

The following items are to be filed simultaneously with the above document(s):

___ Trust Indenture/Deed Restrictions
___ General Warranty Deed
___ Condominium Declaration/Amendments
___ Ordinance/Resolution
√ (Other) Conditions and legal description of property
___ None

DOCUMENT INFORMATION:

PROJECT NAME: P.Z. 20-14 Happy Hounds Playground, L.L.C.
OWNER/DEVELOPER: Laura Van Berpen
ORDINANCE/RESOLUTION: N/A
CITY COUNCIL APPROVAL DATE: February 10 2015
PLANNING COMMISSION APPROVAL DATE: January 20, 2015

NOTE: The Owner/Developer will be required to submit 2 recorded copies of all checked material(s) listed above to the City of Wildwood, upon which proof of proper recordation is indicated. THE CITY CANNOT RELEASE ZONING AUTHORIZATION(S) FOR BUILDING PERMITS, IF ANY OF THE ABOVE-REFERENCED RECORDED COPIES ARE NOT ON FILE WITH THE DEPARTMENT OF PLANNING.

Authorized By:

Joe Vujnich 3-18-15
Joe Vujnich, Director of Planning

Mylar Review: LW

Planning Tomorrow Today

ATTACHMENT B - Conditions

1. PERMITTED USES

This Conditional Use Permit (CUP) shall authorize a recreational land use (commercial type), i.e. a private dog park, as defined by the City's Zoning Ordinance, which can offer said services to the general public. No boarding, grooming, or training services shall be authorized at this site for the general public, as part of this operation under the requirements of this Conditional Use Permit (CUP). Additionally, no dog shows shall be conducted at the site.

2. LOT, BUILDING, AND USE REQUIREMENTS

a. ~~The maximum number of members allowed, as part of this conditional use authorized on this subject property, shall not exceed four hundred (400) in total. Modifications to this number of authorized members can be considered and amended by the Planning and Zoning Commission, upon written request of the owners, via the defined amendment request set for in the City of Wildwood Zoning Ordinance for Conditional Use Permit (CUP).~~ *Eliminated by the Planning and Zoning Commission, as part of its favorable action on this permit request (1-20-2015).*

a. The facility may have up to three (3) activity areas for large and small dogs collectively, while offering a total of two (2) splash pads within the use area as well. Equipment placement within these authorized areas shall be indicated on the submitted Site Development Plan. These splash pads must be designed to utilize only a public water supply available to the site from the Missouri American Water Company.

b. The development of the proposed trail system shall be authorized as part of this Conditional Use Permit (CUP) on the site and consist of hard and natural surface types. The locations of these trails shall be indicated on the required Site Development Plan and acted upon by the Planning and Zoning Commission, as part of its review of such.

c. No building and/or structure shall be more than two (2) stories above final grade, as determined by finish final grade in the area of the development. The size of the primary building shall not exceed 1,200 square feet in overall size. The main building shall accommodate permanent restroom facilities for the customers of this conditional use.

d. All structures or buildings that are to be constructed on the subject property shall be reviewed and acted upon by the City's Architectural Review Board. Plan submittals must be completed, signed, and sealed by a licensed, practicing architect in the State of Missouri. The selection of colors, materials, design components, and related architectural items shall adhere to the City of Wildwood's Zoning Ordinance requirements, as set forth in Chapter 415.380 Miscellaneous Regulations.

e. The minimum size of the Conditional Use Permit (CUP) area to accommodate this activity shall be eleven (11) acres in area.

f. The facility shall be authorized for operation on the following days and at these allowable times: Monday through Saturday - 6:00 a.m. to dusk; and Sunday - 7:00 a.m. to dusk.

g. No outdoor lighting shall be authorized, as part of the site's utilization, within the active use locations of the dog park, excepting standards and bollards to light specific activity areas, pathways, and entries/exits. The approval of this authorized lighting shall be as part of the Site Development Plan, which shall be acted upon by the Planning and Zoning Commission.

W 1

h. The maximum area of this 11.02 acre tract of land, which can be used for development and related land disturbance for the permitted and accessory uses, shall not exceed 7.02 acres.

i. The minimum amount of this 11.02 acre tract of land, which must be preserved as part of this development, shall be four point seven (4.7) acres in overall size.

3. PLAN SUBMITTAL REQUIREMENTS

Within twelve (12) months of the Conditional Use Permit (CUP) granted by the Planning and Zoning Commission, and prior to any site disturbance, the operator shall submit to the Planning and Zoning Commission for their review and approval a Site Development Plan. Where due cause is shown by the operator, this time interval may be extended once by the Planning and Zoning Commission in accord with requirements of Chapter 415.510 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. Location and extent of all existing and proposed improvements, including parking lot area, play areas, splash pads, trail network, and accessory structures, along with the water feature (lake).
c. A general plan indicating setback lines along the perimeter of the subject tract of land and surrounding property lines and related improvements within two hundred (200) feet of this site's boundaries, i.e. curb cut and access locations, stormwater facilities, and utility installations and easements.
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 trails, and general location, size, right-of-way, and pavement width of all interior drives.
e. The location and size of all freestanding signs, lighting, fences, and other above ground structures, except retaining walls less than three (3) feet in height per section.
f. Existing and proposed contours at vertical intervals of not more than two (2) feet.
g. General location of sanitary sewer and stormwater facilities.
h. Parking calculations.
i. Conceptual location and size of public space areas.
j. 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 Chapter 410 and accompanying Tree Manual.
k. An inventory of the percent of tree canopy or individual trees to be retained on the site indicated on a Tree Preservation Plan completed in accordance with the City of Wildwood Chapter 410 Tree Preservation and Restoration Code and accompanying Tree Manual.
l. Location of all existing and proposed easements.
m. All other information not mentioned above, but required on a preliminary plat in accord with Chapter 420.060 of the City of Wildwood Subdivision and Development Regulations.
n. A Stormwater Pollution Prevention Plan (SWPPP) for the site, which shall include the developer's signature and acknowledgment of its requirements.

4. SITE DEVELOPMENT PLAN DESIGN CRITERIA

The above Site Development Plan shall adhere to the following specific design criteria:

Building Setbacks - Residential

a. No new building or structure, other than boundary and/or retaining walls, fences, detention/retention facilities, and/or light standards, shall be located within the following setbacks:

W 2

1. Fifty (50) feet from any roadway right-of-way.
2. Thirty (30) feet from any side yard property line of any individual lot, excepting a minimum of fifty (50) feet shall be maintained along the western boundary line of the permit area, which is shared by the two (2) existing single family dwellings located there.
3. Thirty (30) feet from any rear yard property line of any individual lot.

Parking Setbacks - Residential

b. All parking stalls or loading spaces, excluding points of ingress or egress and streets and roads, shall comply with the requirements of Chapter 415.090 NU Non-Urban Residence District of the City of Wildwood's Zoning Ordinance.

Miscellaneous Setbacks - Right-of-Way and Other Locations

c. No land disturbance shall be authorized within thirty (30) feet of any boundary line of this Conditional Use Permit (CUP), except as authorized on the Site Development Plan by the Planning and Zoning Commission.

Access and Roadway Improvements

d. Roadway improvements shall be required to Pond Road for this conditional use, specifically for ingress and egress to the site and any required sight distance modifications to it, which shall be premised on a Sight Distance Study prepared by a registered engineer. Any improvements shall minimally comply with the requirements of the City of Wildwood's construction standards. The required improvements within the public right-of-way shall be as approved by the Director of Public Works. The dedication of public right-of-way and the establishment of corresponding easements on Pond Road, if determined necessary, shall be in accordance with Chapter 420 Subdivision and Development Regulations of the City of Wildwood Municipal Code. 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.

e. Access to Pond Road shall be limited to one (1) commercial street approach located to provide required sight distance and constructed to conform to the requirements of the Department of Public Works in this regard. All work within the right-of-way shall be as directed by the Department of Public Works.

f. Dedicate, as public right-of-way, to the City of Wildwood the necessary land area along Pond Road to eliminate the existing notch located along the southern most portion of it, as directed by the City of Wildwood Department of Public Works.

Miscellaneous Roadway Requirements

g. The construction of all drainageway crossings, i.e. culverts, shall comply with the City of Wildwood standards and all other applicable Federal and State regulations in this regard. All submittals to the City shall be reviewed and approved by the Department of Public Works, as part of the Planning and Zoning Commission's consideration of the Site Development Plan.

j. A Traffic Study shall be submitted to the Planning and Zoning Commission for its review, which indicates the current Level of Service at the State Route 100/Pond Road intersection and how this facility will impact that current situation. Additionally, if Level of Service is determined to be at a "D"

W 3

through "F" Level, improvements to the State Route 100/Pond Road intersection shall be required and must comply with all requirements and standards of the Missouri Department of Transportation for their right-of-way. Review and action of these determined improvements, if required, shall be by the Planning and Zoning Commission on the Site Development Plan.

k. 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.

Parking Requirements

j. Parking spaces shall be provided, as required by Chapter 415.340 Off-Street Parking and Loading Requirements of the City of Wildwood Zoning Ordinance for the NU Non-Urban Residence District. Minimally, forty-two (42) parking spaces shall be provided on the site (1% of the land use area).

Landscape Requirements - General

k. Landscaping shall adhere to all requirements of Chapter 410 of the City's Tree Preservation and Restoration Code and its accompanying Sustainable Plantings Guide and Tree Manual, including the submittal of a Tree Preservation Plan, in conjunction with the Site Development Plan. All roadway frontages shall be appropriately landscaped, as required by the Chapter 410 Tree Preservation and Restoration Code, and be approved by the Planning and Zoning Commission on the Site Development Plan.

l. The areas of existing vegetation within the Conditional Use Permit (CUP) 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. Initial clearing and grubbing of the site shall be limited to the installation of any new building and structure.

m. All disturbed areas of the site shall be restored in compliance to the City's Sustainable Plantings Guide and Tree Manual by a combination of ground cover, landscaping, berms, natural stones, and other means to address stormwater runoff and erosion, as well as improve overall site aesthetics. The restoration of disturbed areas shall be indicated on the required Landscape Plan and acted upon by the Planning and Zoning Commission.

n. A registered Landscape Architect shall prepare, submit, and sign all plan(s).

Signs

o. Signs for this Conditional Use Permit (CUP) shall be erected in accordance with Chapter 415.410 Sign Regulations of the City of Wildwood Zoning Ordinance for the NU Non-Urban Residence District. However, the one (1) allowable freestanding sign (monument type) shall not exceed an overall size of thirty (30) square feet. The location and design of this sign, and all other signage, shall be as reviewed and acted upon by the Planning and Zoning Commission, as part of the Site Development Plan process.

W 4

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. Minimally, lighting levels and their design specifications shall be approved by the Planning and Zoning Commission and are subject to the standards and requirements defined in the City of Wildwood's Lighting Code – Chapter 415.450 of the Zoning Ordinance. Lighting associated with the active use areas may be provided for safety and visibility purposes therein, but must placed on a timer to ensure all equipment is off one-half hour after closing. Illumination sources in these active use areas may not exceed twelve (12) feet in height.

Miscellaneous Conditions

q. Parking, circulation, and other applicable site design features shall comply with Chapter 1101, Section 512.4 "Physically Handicapped and Aged" of the S.L.C.R.O. 1974, as amended.

r. The 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.

s. 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 or boulders. The Planning and Zoning Commission, as part of the Site Development Plan review process, shall approve said materials and design.

t. The generalized 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.

u. All utilities serving this site shall be installed underground in accord with the requirements of the City of Wildwood's Subdivision and Development Regulations. Any existing easements located on the subject site, which are not being utilized, shall be vacated under the standard procedures of the City of Wildwood Subdivision and Development Regulations.

v. No outdoor public address system is permitted on this site.

5. PUBLIC SPACE REQUIREMENTS

Developer shall construct improved public space in conformance with or otherwise satisfying the requirements of the City's Public Space Ordinance, Chapter 415.260 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 public space improvements shall be as required by the applicable ordinance, but must be completed prior to issuance of any zoning authorizations for any building permit 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 provided parking spaces, shall be 190.4 square feet or its equivalent.

W 5

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 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. 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 buildings and structures.
4. 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/water quality 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 discharging from the subject site.
5. The developer shall provide adequate detention and/or hydrologic calculations for review and approval of all stormwater that will encroach on City of Wildwood rights-of-way.

Stormwater Pollution Prevention Plan

b. Submit a Stormwater Pollution Prevention Plan, as part of the Site Development Plan review process, indicating compliance to Federal, State, and local requirements regarding the management of stormwater runoff to prevent siltation and erosion, both on-site and upon downstream properties.

Waste Management Plan

c. Provide a management plan for the disposal of animal waste and by-products of the operation for review and approval by the Planning and Zoning Commission. Minimally, this plan should address the removal of animal wastes on a weekly basis to an approved location for their disposal.

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.

Geotechnical Report

e. 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,

W 6

landslide, and/or creep. A statement of compliance with this study, signed by the Geotechnical Engineer preparing the report, shall be included on the Site Development Plan. The development and construction plans shall be designed to conform to the requirements and conditions of the Geotechnical Report.

7. RECORDING

Within sixty (60) days of granting of the Conditional Use Permit (CUP) by the Planning and Zoning Commission, the approved permit language and legal description of the property 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 or building permit, all approvals from the Department of Public Works, the Missouri Department of Natural Resources, the Missouri Department of Transportation (if required), St. Louis County Department of Public Works, and the Metro West Fire Protection District must be received by the Department of Planning.

Roadway Improvements

b. Based upon the preliminary development plan, improvements to Pond Road and State Route 100 (if required) must be completed prior to issuance of the occupancy permits.

Nuisance Bond

c. Provide to the City of Wildwood a bond, letter of credit, or cash deposit in the amount of one thousand dollars ($1,000.00) for use to correct any potential nuisance violations, if the property and improvements are not maintained in accordance with said regulations (Chapter 215 Nuisances of the City of Wildwood Municipal Code). The City shall hold this deposit and it will be pre-authorized by the owner/operator, in writing, to exercise its use, if violations are noted and not abated in a timely manner.

Public Potable Water

d. The developer shall be required to provide public potable water from the Missouri American Water Company to the property. Verification of this service shall be in a form acceptable to the City of Wildwood. Additionally, the design and location of this water system shall be reviewed and acted upon by the Planning and Zoning Commission, as part of the Site Development Plan submittal process.

Escrow Requirements

e. All landscaping costs shall be submitted to the City of Wildwood through the standard bond procedures.

Land Subdivision

f. 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.

W 7

Sanitary Sewers

g. Provide an engineered plan to the City of Wildwood and the St. Louis County Department of Public Works for review and acceptance indicating the proper treatment of all wastewater generated by the use of this site. This on-site wastewater system shall meet all current St. Louis County Plumbing Code requirements for the quality of effluent and not exceed a capacity of five thousand (5,000) gallons per day.

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 controls in the form of siltation control measures are required and must comply with the Stormwater Pollution Prevention Plan for this development (SWPPP). The developer shall be solely responsible for obtaining any temporary slope and construction licensees needed to address the installation of public and private improvements on this site that require the use of adjoining parcels of ground that are not under their ownership or control.

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. The developer is advised that utility companies will require compensation for relocation of their utility facilities within public 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 infrastructure improvements.

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. This restoration must occur within thirty (30) days of the conclusion of preliminary grading as determined by the Director of Public Works.

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 Plan approved by the Planning and Zoning Commission and the Department of Planning. The owner/operator must acknowledge in writing that access to this site for inspection purposes by personnel of the City of Wildwood shall be authorized and, if refused, such action is grounds for revocation of said permit by the City.

j. Any other applicable zoning, subdivision, or other regulations or requirements of the City shall further apply to the development of this property, as authorized by this Conditional Use Permit (CUP), 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.

k. This zoning approval is conditioned on compliance with the Zoning Ordinance, Subdivision and Development Regulations, 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

W 8

from this Conditional Use Permit (CUP), except where this ordinance has expressly modified such regulations by reference to the applicable provision authorizing such modification.

W 9

PROPERTY DESCRIPTION

A tract of land being a composite of that part of property conveyed, as Parcels 1 and 2, to Happy Hounds Playground, LLC by deed recorded in Deed Book 20778, Page 2383 and Correction Deed recorded in Deed Book 20874, Page 1049 of the St. Louis County Records, situated in Section 2, Township 44 North, Range 3 East, in the City of Wildwood, St. Louis County, Missouri, being more particularly described as follows:

Beginning at a point on the Eastern right of way line of Pond Road, 40 feet wide, at its intersection with a point on the East-West Centerline of said Section 2; thence Northeasterly, along the Eastern right of way line thereof, North 01 degree 09 minutes 00 seconds East, 209.67 feet to the Northwest corner of property conveyed to Mildred E. Schneider Revocable Living Trust, dated 01/17/01, by deed recorded in Deed Book 12833, Page 659 of the St. Louis County Records; thence Southeasterly, along the Northern line thereof, South 89 degrees 02 minutes 51 seconds East, 616.18 feet to a point; thence Southeasterly, along the Northern line of property conveyed to Mildred E. Schneider Revocable Living Trust, dated 01/17/01, by deed recorded in Deed Book 12833, Page 602 of the St. Louis County Records, South 88 degrees 32 minutes 23 seconds East, 695.13 feet to its intersection with a point on the North-South Centerline of said Section 2; thence Southwesterly, along the North-South Centerline thereof, South 01 degree 33 minutes 26 seconds West, 215.00 feet to its intersection with a point on the aforementioned East-West Centerline of said Section 2; thence Northwesterly, along the East-West Centerline thereof, North 88 degrees 32 minutes 43 seconds West, 356.16 feet to a point; thence Southwesterly, departing the East-West Centerline of said Section 2, South 22 degrees 32 minutes 00 seconds West, 311.11 feet to a point; thence North 88 degrees 31 minutes 00 seconds West, 594.55 feet to a point; thence Northeasterly, along the Eastern line of property conveyed, as Parcels 1 and 2, to Jane M. Houlihan by deed recorded in Deed Book 18642, Page 4970 of the St. Louis County Records, North 00 degrees 51 minutes 00 seconds East, 131.29 feet to the Northeastern corner of Parcel 1 thereof; thence Northwesterly, along the Northern line of said Parcel 1, North 88 degrees 35 minutes 00 seconds West, 32.00 feet to the Southeastern corner of property conveyed to Jeffrey Leeker and Katie Leeker, husband and wife, by deed recorded in Deed Book 19046, Page 557 of the St. Louis County Records; thence Northeasterly, along the Eastern line of said property conveyed to Jeffrey Leeker et ux, North 00 degrees 51 minutes 00 seconds East, 133.00 feet to the Northeastern corner thereof; thence Northwesterly, along the Northern line thereof, North 88 degrees 35 minutes 00 seconds West, 218.00 feet to its intersection with a point on the Eastern right of way line of Pond Road, as aforementioned; thence Northeasterly, along the Eastern right of way line of said Pond Road, North 00 degrees 51 minutes 00 seconds East, 25.88 feet to an angle point on the Eastern right of way line thereof, at its intersection with a point on the East-West Centerline of said Section 2; thence Southeasterly, continuing along the Eastern right of way line of said Pond Road and also being along the East-West Centerline of said Section 2, South 88 degrees 32 minutes 43 seconds East, 5.88 feet to the point of beginning and containing 11.02 acres, more or less (480,062 square feet).

THE CLAYTON ENGINEERING COMPANY
February 26, 2015

C:\Users\...\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Outlook\...\PROPERTY DESCRIPTION - PARCELS 1 AND 2 DB 20778 PG 2383 (revised 2-26-15) (2).doc

Copyright 2015 Clayton Engineering Co. All Rights Reserved

the clayton engineering company, inc.
ENGINEERS · SURVEYORS · PLANNERS
11920 WESTLINE INDUSTRIAL DRIVE
ST. LOUIS, MISSOURI 63146
(314) 692-8888 FAX: (314) 692-8688 claytoneng.pro
MO Cert. of Authority - Prof. Engineering #000067 & Prof. Surveying #000014
IL Dept. Financial & Prof. Reg. Prof. Design & Engineering Corp. #184.000879

REVISIONS			
1	09/23/14	EJS	Revised per City Comments
2	12/11/14	EJS	Revised Grading per City Comments
3	08/14/15	EJS	Revised per City Comments & Client Input
4	10/22/15	EJS	Revised per City Comments
5	01/11/16	EJS	Revised per City Comments

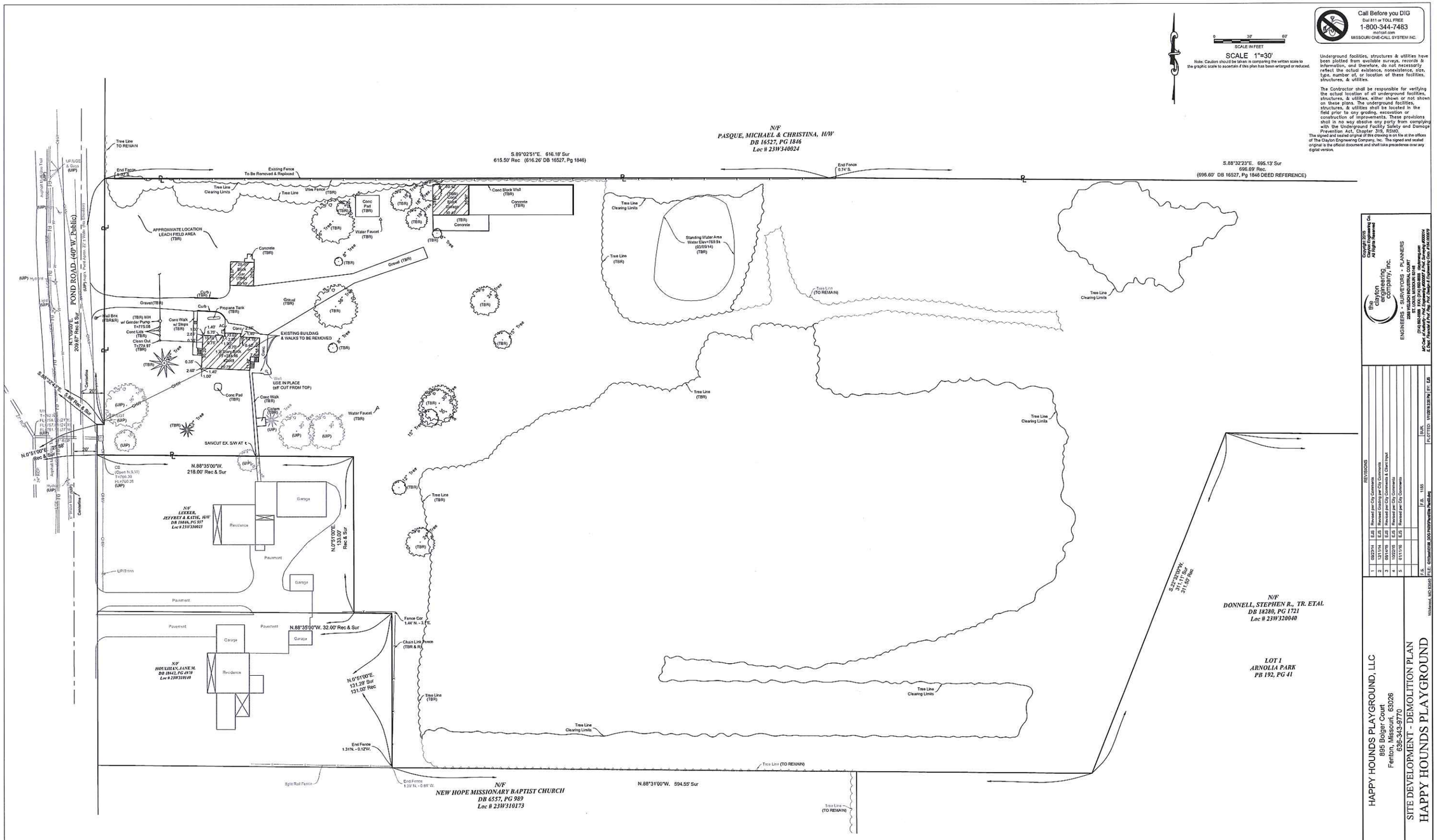
F.B. 1155 | F.S. | SUR. | PLOTTED: 1/11/2016 1:07 PM | BY: EJS
FILE: G:\13xxx\13199_DOG PARK\Plans\Site Plans\03 CUP Sheet.dwg

Prepared for:
HAPPY HOUNDS PLAYGROUND, LLC
895 Bolger Court
Fenton, Missouri, 63026
636-343-9770

SITE DEVELOPMENT PLAN - CUP NOTES
HAPPY HOUNDS PLAYGROUND
2448 Pond Road, Wildwood, MO 63040

Erik J. Staley - Professional Engineer (PE-2006000132)
STATE OF MISSOURI, ERIK JON STALEY, NUMBER PE-2006000132, PROFESSIONAL ENGINEER, 01/11/16

Designed	SWQ
Drawn	HRL
Checked	EJS
Date	June 11, 2014
Project Number	13199
Sheet Number	2 of 14



LEGEND:
(ATG) ADJUST TO GRADE
(TBR) TO BE REMOVED
(TBR&R) TO BE REMOVED & REPLACED
(UIP) USE IN PLACE

NOTES:
1. DEMOLITION OF EXISTING BUILDINGS ON SITE WILL NEED TO BE REVIEWED BY THE CITY'S HISTORIC PRESERVATION COMMISSION DUE TO THEIR AGE (OVER 75 YEARS).
2. REFER TO SHEET L-001, TREE PRESERVATION PLAN, FOR LIMITS OF TREE REMOVAL AREAS THAT MUST BE PERFORMED WITHOUT MACHINERY GREATER THAN 1,800 POUNDS.

Copyright 2016
Clayton Engineering Co.
All Rights Reserved

the clayton engineering company, inc.
ENGINEERS - SURVEYORS - PLANNERS
CIVIL DEVELOPMENT CONSULTANTS
ST. LOUIS, MISSOURI 63141
PH (636)343-9770 FAX (636)343-9772 Email: clayton@claytoneng.com
MO Cert. of Authority - Prof. Eng. (000322) Prof. Surveyor (000314)
E. Clair Freeland, II Prof. Engr. Prof. Surveyor & Engineering Corp. (1992000979)

			REVISIONS	P.E.	1155	SURV.
1	08/20/14	EJS	Revised per City Comments			
2	12/11/14	EJS	Revised Grading per City Comments			
3	06/14/15	EJS	Revised per City Comments & Client Input			
4	10/02/15	EJS	Revised per City Comments			
5	01/11/16	EJS	Revised per City Comments			
				P.E.		

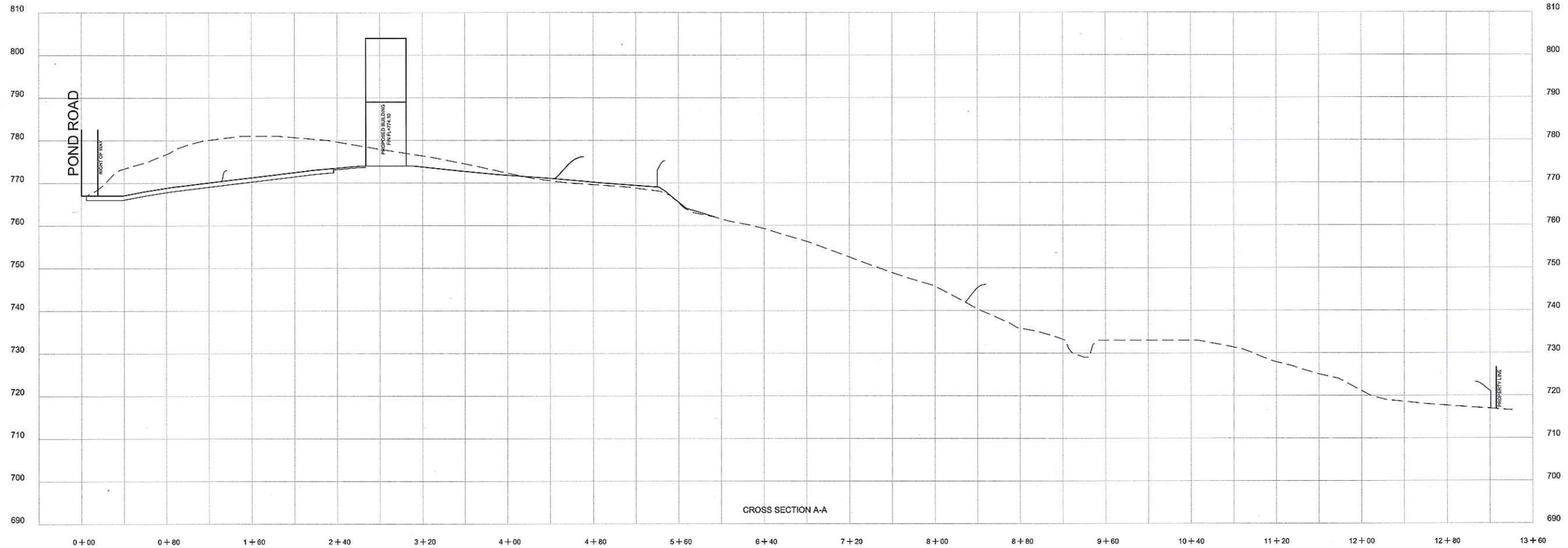
F:\Projects\13199_2000 Hoo\Plans\Site Plan\Site Dev Plan.dwg PLOTTED: 1/11/2016 2:33 PM BY: EJS

Prepared for:
HAPPY HOUNDS PLAYGROUND, LLC
895 Bolger Court
Fenton, Missouri 63026
636-343-9770

SITE DEVELOPMENT - DEMOLITION PLAN
HAPPY HOUNDS PLAYGROUND
Wildwood, MO 63040
Pond Road

Erik J. Stamp - Professional Engineer
STATE OF MISSOURI
ERIK JOHN STAMPA
NUMBER PE-2006000132
REGISTERED PROFESSIONAL ENGINEER
01/11/16

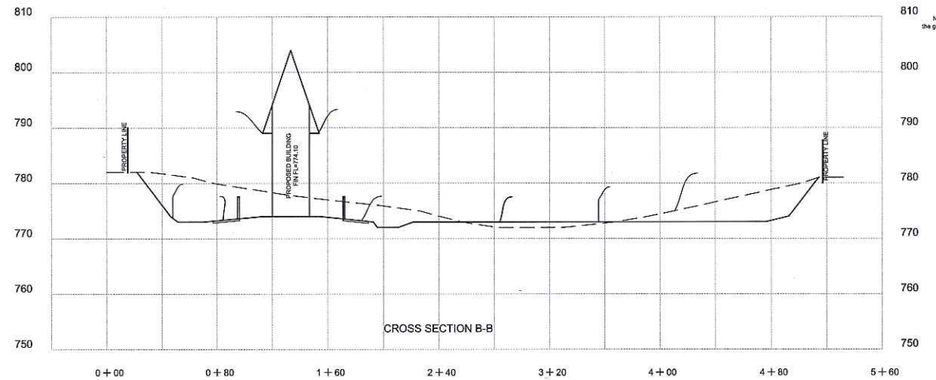
Designed	SWD
Drawn	HRL
Checked	EJS
Date	June 11, 2014
Project Number	13199
Sheet Number	3 of 14



SCALE IN FEET 0 40' 80'

HORIZONTAL SCALE 1"=40'

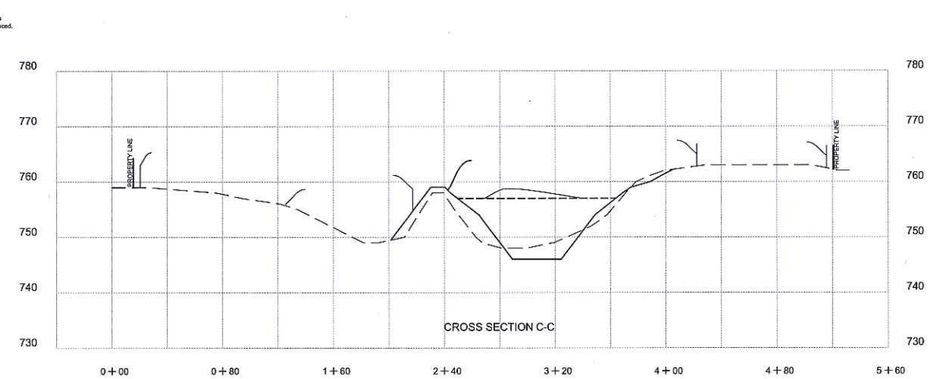
Note: Caution should be taken in computing this written scale to the graphic scale to ascertain if this plan has been enlarged or reduced.



SCALE IN FEET 0 20' 40'

VERTICAL SCALE 1"=10'

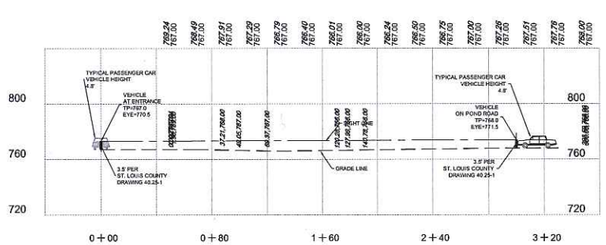
Note: Caution should be taken in comparing the written scale to the graphic scale to ascertain if this plan has been enlarged or reduced.



SCALE IN FEET 0 40' 80'

HORIZONTAL SCALE 1"=40'

Note: Caution should be taken in comparing the written scale to the graphic scale to ascertain if this plan has been enlarged or reduced.

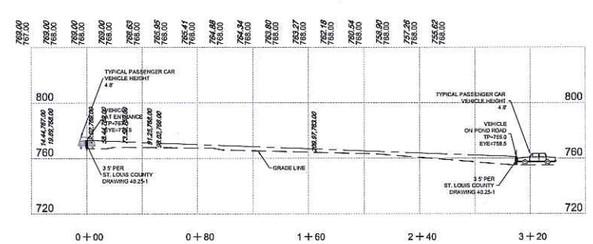


SIGHT DISTANCE TO LEFT - DISTANCE = 300' (30 MPH SPEED LIMIT)

SCALE IN FEET 0 40' 80'

VERTICAL SCALE 1"=10'

Note: Caution should be taken in comparing the written scale to the graphic scale to ascertain if this plan has been enlarged or reduced.



SIGHT DISTANCE TO RIGHT - DISTANCE = 310' (30 MPH SPEED LIMIT)

The signed and sealed original of this drawing is on file at the offices of The Clayton Engineering Company, Inc. The signed and sealed original is the official document and shall take precedence over any digital version.

Copyright 2013
Clayton Engineering Co.
All Rights Reserved

the clayton engineering company, inc.
ENGINEERS • SURVEYORS • PLANNERS
8000 MARYLAND AVENUE - SUITE 1350
ST. LOUIS, MISSOURI 63105
PHONE (314) 862-3900 FAX (314) 862-3999 www.claytoneng.com
MO Cert. of Authority: Engineering #000935 Surveying #000101
IL Dept. Financial & Prof. Regs. Prof. Design Firm #184.000976

1	05/02/14	EJS	Revised per City Comments
2	10/11/14	EJS	Revised Grading per City Comments
3	09/14/15	EJS	Revised per City Comments & Client Input
4	10/22/15	EJS	Revised per City Comments
5	01/11/16	EJS	Revised per City Comments

F.S.
P.E. G:\Start\13199 2000 HAPPYhuntsville\Plat\Dwg

Prepared for:
HAPPY HOUNDS PLAYGROUND, LLC
895 Bolger Court
Fenton, Missouri 63026
636-343-9770

DEVELOPMENT PLAN - CROSS SECTIONS
HAPPY HOUNDS PLAYGROUND
Wildwood, MO (Ward 4)
544ft Pond Road

Erik J. Sklar - Professional Engineer
PE-2006000132
STATE OF MISSOURI
ERIK JON STALLARD
NUMBER PE-2006000132
PROFESSIONAL ENGINEER
10/11/16

Designed	SWQ
Drawn	HRL
Checked	EJS
Date	June 11, 2014
Project Number	13199
Sheet Number	4 of 14

CONSTRUCTION & EROSION CONTROL NOTES:

1. ANY LAND CLEARING, CONSTRUCTION, OR DEVELOPMENT INVOLVING THE MOVEMENT OF EARTH SHALL BE IN ACCORDANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN, AND THE PERSON ISSUED A LAND DISTURBANCE PERMIT ASSUMES AND ACKNOWLEDGES RESPONSIBILITY FOR COMPLIANCE WITH THE CITY OF WILDWOOD LAND DISTURBANCE CODE AND THE APPROVED STORM WATER POLLUTION PREVENTION PLAN AT THE SITE OF THE PERMITTED ACTIVITY.
2. A LAND DISTURBANCE PERMIT FROM THE STATE OF MISSOURI DEPARTMENT OF NATURAL RESOURCES (MDNR) WILL BE REQUIRED FOR THIS PROJECT, AS IT IS OVER 1 ACRE OF DISTURBANCE.
3. THE SILT CONTROLS SHALL BE INSTALLED PRIOR TO ANY OTHER LAND DISTURBANCE.
4. ADDITIONAL SILTATION CONTROL MEASURES MAY BE REQUIRED AS DEEMED NECESSARY BY THE CITY OF WILDWOOD AND/OR MNDR.
5. UPON COMPLETION OF CONSTRUCTION OR COMPACTION , SLOPES STEEPER THAN 5:1 SHALL BE PROTECTED BY SODDING (OR APPROVED EQUAL). ALL OTHER AREAS DISTURBED BY GRADING OPERATIONS TO BE PROTECTED BY SEEDING AND MULCHING AS SOON AS POSSIBLE (SEE SWPPP DETAILS - SEEDING & MULCHING SCHEDULES) .
6. AN APPROVED EROSION CONTROL BLANKET MAY BE USED AS A TEMPORARY EROSION CONTROL MEASURE ON SLOPES STEEPER THAN 5:1 WITH APPROVAL OF THE CIVIL ENGINEER AND THE CITY OF WILDWOOD.
7. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED DURING CONSTRUCTION THAT ARE NOT SHOWN ON THESE PLANS. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING AND MAINTAINING TEMPORARY AND/OR INTERIM EROSION CONTROL MEASURES DURING CONSTRUCTION PROGRESSION OR AS REQUIRED BY CITY/MDNR INSPECTOR. ANY CHANGES/ADDITIONS TO THE SWPPP PLAN SHALL BE DOCUMENTED BY THE CONTRACTOR AND REMAIN ON FILE AT THE SITE.
8. THE CONTRACTOR TO REPAIR ANY DAMAGE THAT OCCURS TO THE EXISTING LOCAL PUBLIC STREETS RESULTING FROM WORK ON THIS SITE.
9. A CONCRETE WASHDOWN AREA SHALL BE DEDICATED ON THE SITE. THE CONTRACTOR SHALL NOT LOCATE THIS IN A STORMWATER DRAINAGE FLOW PATH.
10. DUST CONTROL SHALL BE UTILIZED FOR THIS PROJECT.
11. CONTRACTOR TO PROVIDE SUFFICIENT TEMPORARY TOILET FACILITIES TO SERVE THE NUMBER OF WORKERS ONSITE.
12. A STABILIZED CONSTRUCTION ENTRANCE AND WASHDOWN STATION SHALL BE INSTALLED IN THE LOCATION OF THE EXISTING GRAVEL DRIVEWAY ON POND ROAD. STABILIZED CONSTRUCTION PARKING AREAS SHALL BE UTILIZED FOR THE OFF-STREET TEMPORARY PARKING.
13. SEDIMENT SHALL BE WASHED FROM ALL VEHICLES AT WASH DOWN STATION PRIOR TO LEAVING THE SITE. NO TRACKING OF MUD ONTO PUBLIC ROADS SHALL BE ALLOWED. THE CONTRACTOR MUST PROVIDE OR ESTABLISH A WATER SOURCE AT THE WASHDOWN STATION.
14. NO ONSITE TEMPORARY ACTIVITIES ARE PLANNED FOR THIS PROJECT, LIKE CONCRETE OR ASPHALT BATCH PLANTS.
15. NO ANTICIPATED POTENTIAL SOURCES OF POLLUTION (OTHER THAN SEDIMENT), WASTE, OR CONSTRUCTION MATERIALS ARE EXPECTED TO BE STORED ONSITE AND UNPROTECTED. TYPICALLY, SOURCES OF POLLUTANTS OF THIS NATURE DURING CONSTRUCTION INCLUDE SMALL FUELING ACTIVITIES, MINOR EQUIPMENT MAINTENANCE, AND SANITARY FACILITIES. TYPICAL WASTE OR CONSTRUCTION MATERIALS MAY INCLUDE GENERAL BUILDING MATERIALS, SOLVENTS, ADHESIVES, PAVING MATERIALS, PAINTS, AGGREGATES, TRASH, ETC. HOWEVER, FOR THIS PROJECT ANY MATERIALS OF THIS SORT MUST BE STORED EITHER IN ENCLOSED CONSTRUCTION TRAILERS, AND/OR IN APPROPRIATE DUMPSTER FACILITIES.
16. NO ONSITE MAINTENANCE FOR RELATED CONSTRUCTION VEHICLES IS PERMITTED FOR THIS PROJECT. ALL MAINTENANCE MUST BE PERFORMED OFFSITE.

ROUTINE INSPECTION SCHEDULE

The permit-holder shall contact the CITY/MDNR Inspector for a site inspection at least two working days prior to the following:

1. Start of construction;
2. Installation of sediment and erosion control measures;
3. Completion of site clearing;
4. Completion of rough grading;
5. Completion of final grading;
6. Close of construction season;
7. Completion of final landscaping.

Inspections by the permit-holder's inspector shall be regularly performed on land disturbance sites, including all erosion and sediment and other pollutant control measures, outfall and off-site receiving waters per the following schedule:

1. At least once per week;
2. No later than 48 hours after a rainfall that causes storm water runoff to occur onsite.

All inspections shall be documented in writing on weekly reports with copies submitted to the CITY/MDNR, if required.

The permit-holder shall notify the Contractor of any deficiencies identified. The Contractor shall have seven calendar days to correct the deficiencies.

AMENDING THE STORM WATER POLLUTION PREVENTION PLAN
THE PERMIT-HOLDER SHALL AMEND THE STORM WATER POLLUTION PREVENTION PLAN WHENEVER:

1. DESIGN, OPERATION OR MAINTENANCE OF BEST MANAGEMENT PRACTICES (BMP'S) IS CHANGED.
2. DESIGN OF THE CONSTRUCTION PROJECT IS CHANGED THAT COULD SIGNIFICANTLY AFFECT THE QUALITY OF THE STORM WATER DISCHARGES.
3. SITE OPERATOR'S INSPECTIONS INDICATE DEFICIENCES IN THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) OR ANY BEST MANAGEMENT PRACTICES (BMP'S).
4. INSPECTIONS BY A LOCAL AUTHORITY OR BY THE MISSOURI DEPARTMENT OF NATURAL RESOURCES INDICATE DEFICIENCIES IN THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) OR ANY BEST MANAGEMENT PRACTICES (BMP'S).

DEWATERING PROCEDURES

1. ALTHOUGH NO DEWATERING ACTIVITIES ARE ANTICIPATED FOR THIS PROJECT, IF THEY BECOME NECESSARY DUE TO UNFORSEEN CIRCUMSTANCES, THE CONTRACTOR SHALL FOLLOW ALL APPLICABLE RULES AND REGULATIONS FOR DEWATERING, THESE INCLUDE BUT ARE NOT LIMITED TO THE CITY OF WILDWOOD, MDNR, ST. LOUIS COUNTY, AND THE EPA.
2. DURING DEWATERING ACTIVITIES, STANDING "CLEAR, UNPOLLUTED WATER" CAN BE DECANTED AND DISCHARGED ONSITE. WATER THAT HAS BECOME TURBID DURING CLEANING SHOULD BE EITHER, (1) PUMPED AND HAULED TO AN ACCEPTABLE WASTEWATER DISPOSAL FACILITY OR (2) TREATED BY FILTRATION, SUCH AS PUMPED THROUGH A BAG FILTER AND DISCHARGED ONSITE.
3. THE CONTRACTOR IS RESPONSIBLE TO MAKE THE DETERMINATION FOR PROPER DISPOSAL MEETING LOCAL, STATE AND FEDERAL LAWS.

DEFINITIONS

CLEAR WATER: WATER THAT HAS SETTLED ITS SOLIDS FOR 24 HOURS AND CAN BE PUMPED OUT WITHOUT RE-SUSPENDING THE SOLIDS.

UNPOLLUTED WATER: DEFINED BY MSD ORDINANCE 12559 AS MEANING "ANY WATER THAT MAY BE DISCHARGED UNDER NPDES REGULATIONS INTO WATERS OF THE STATE WITHOUT HAVING TO BE AUTHORIZED BY A NPDES PERMIT AND WHICH WILL NOT CAUSE ANY VIOLATIONS OF STATE OR FEDERAL WATER QUALITY STANDARDS.

CONTAINMENT FAILURE PLAN
IN THE EVENT OF ANY LOSS OF CONTAINED SEDIMENT:

1. REPAIR ANY DAMAGED SILTATION FENCES.
2. CLEAN UP ANY NECESSARY SILTED AREAS.
3. RESTORE ANY NECESSARY SILTED AREAS.
4. PROVIDE DOCUMENTATION OF ACTIONS & MANDATORY REPORTING TO THE CITY OF WILDWOOD DEPARTMENT OF PUBLIC WORKS.

OWNER INFORMATION :
HAPPY HOUNDS PLAYGROUND, LLC
895 BOLGER COURT
FENTON, MO 63026
(636) 343-9770

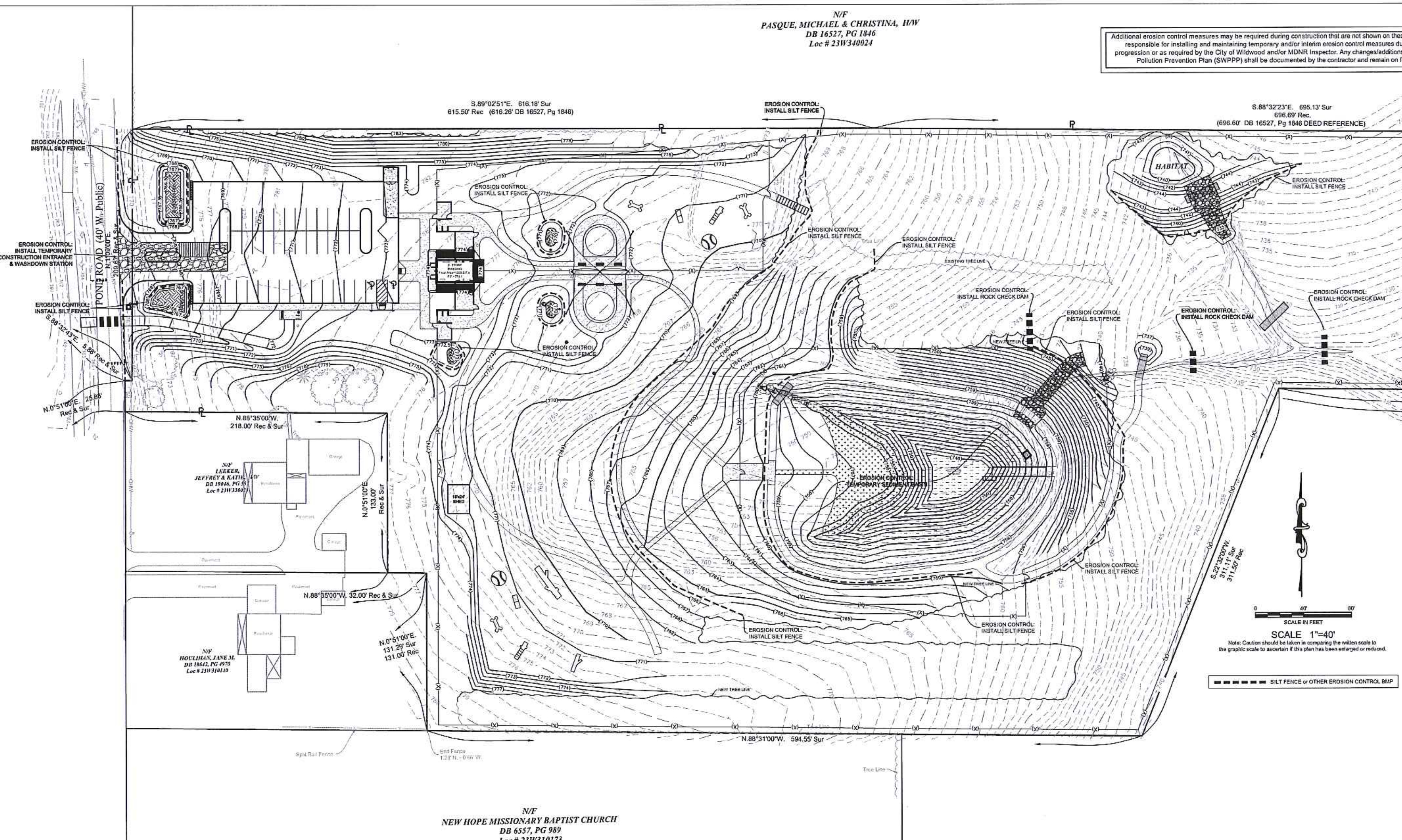
24-HOUR EMERGENCY CONTACT :
MRS. LAURA VANGERPEN
HAPPY HOUNDS PLAYGROUND, LLC
895 BOLGER COURT
FENTON, MO 63026
(636) 343-9770

SITE ADDRESS:
2448 POND ROAD
WILDWOOD, MO 63040
PARCEL 1 LOCATOR # 23W340042
PARCEL 2 LOCATOR # 23W330032

SITE INFORMATION :
PROJECT ANALYSIS AREA = 11.02 ACRES;
PRE - DEV. RUNOFF COEFFICIENT = 0.313±
POST - DEV. RUNOFF COEFFICIENT = 0.345±
AREA OF DISTURBANCE: 7.02± ACRES MAX.

HAUL ROUTE:
NO HAUL ROUTE ANTICIPATED (BALANCED EARTHWORK FOR SITE), NOT INCLUDING DEMOLITION MATERIALS. IF ALTERED BY CONTRACTOR, THEY MUST SUBMIT HAUL ROUTE TO CITY OF WILDWOOD

Additional erosion control measures may be required during construction that are not shown on these plans. Contractor is responsible for installing and maintaining temporary and/or interim erosion control measures during construction progression or as required by the City of Wildwood and/or MDNR Inspector. Any changes/additions to the Storm Water Pollution Prevention Plan (SWPPP) shall be documented by the contractor and remain on file at the site.



SCALE 1"=40'
Note: Caution should be taken in comparing the written scale to the graphic scale to ascertain if this plan has been enlarged or reduced.

SILT FENCE or OTHER EROSION CONTROL BMP

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

SWPPP CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT THIS STORM WATER POLLUTION PREVENTION PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE REQUIREMENTS AND REGULATIONS OF THE MISSOURI DEPARTMENT OF NATURAL RESOURCES AND THE APPROVAL OF THE LOCAL GOVERNING AGENCY. ADDITIONALLY, THIS PLAN HAS BEEN PREPARED TO SUBSTANTIALLY COMPLY WITH THE GENERAL PERMIT REQUIREMENTS OF THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY. TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE INFORMATION CONTAINED IN THIS PLAN IS TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWN VIOLATIONS.

SIGNATURE: [signature] DATE: 01/11/16

The signed and sealed original of this drawing is on file at the offices of The Clayton Engineering Company, Inc. The signed and sealed original is the official document and shall take precedence over any digital version.

Call Before you DIG
Dial 811 or TOLL FREE
1-800-344-7483
mo1call.com
MISSOURI ONE-CALL SYSTEM INC.

Underground facilities, structures & utilities have been plotted from available surveys, records & information, and therefore, do not necessarily reflect the actual existence, nonexistence, size, type, number of, or location of these facilities, structures, & utilities.

The Contractor shall be responsible for verifying the actual location of all underground facilities, structures, & utilities, either shown or not shown on these plans. The underground facilities, structures, & utilities shall be located in the field prior to any grading, excavation or construction of improvements. These provisions shall in no way absolve any party from complying with the Underground Facility Safety and Damage Prevention Act, Chapter 319, RSMO.

minimum depth of 18 inches. Depth shall be increased to a minimum of 22 inches if fence is placed on a slope of 3:1 or greater. When the post embedment depth is impossible to obtain, the posts shall be adequately secured to prevent overturning of the fence due to sediment loading.

Erect silt fence in a continuous fashion from a single roll of fabric to eliminate gaps in the fence. If a continuous roll of fabric is not available, overlap the fabric from both directions only at stakes or posts. Overlap at least 6 inches.

The Geosynthetic filter fabric and wire mesh (when applicable) shall be no less than 30 inches above ground and are stapled or wired to the upslope side of the post. Staples should be a 17-gauge wire and ½ inch long. Excavate a trench to bury the bottom of the fabric fence in a "J" configuration at least 6 inches below the ground surface. The trench shall be backfilled with native soil and the soil compacted over the geotextile. This helps to prevent gaps from forming near the ground surface. Gaps would make the fencing useless as a sediment barrier.

The height of the fence posts should be 38 (22-inch embedment) to 42 (18-inch embedment) inches above the original ground surface. If standard-strength fabric is used with 14-gauge steel wire with a mesh spacing of 6 inches by 6 inches (or a prefabricated polymeric mesh of equivalent strength), space the posts no more than 4 feet apart. If extra-strength fabric is used without wire mesh reinforcement, space the posts no more than 4 feet apart with woven or 6 feet apart with non-woven geosynthetic.

Alternate Construction: Install fence by slicing it into ground with specialized equipment. Install posts at reduced spacing indicated on detail.

LIMITATIONS - Do not install silt fences along areas where rocks or other hard surfaces will prevent you from uniformly anchoring the fence posts and entrenching the filter fabric. Installing fences in such an area greatly reduces their effectiveness and can create runoff channels leading offsite. Silt fences are not suitable for areas where large amounts of concentrated runoff are likely. Fence shall not be used when slope is 1:1 or greater and water flow rates exceed 2 cubic feet per minute. Open, windy areas present a maintenance challenge, too, because high winds can make the filter fabric deteriorate faster. Do not install silt fences across streams, ditches, or waterways (Smolen et al., 1988).

When the pores of the fence fabric become clogged with sediment, pools of water are likely to form on the uphill side of the fence. Setting and design of the silt fence should account for this. Take care to avoid unnecessarily diverting stormwater from these pools, causing further erosion damage.

MAINTENANCE CONSIDERATIONS - Inspect silt fences regularly and frequently, as well as after each rainfall event, to make sure that they are intact and that there are no gaps where the fence meets the ground or tears along the length of the fence. If you find gaps or tears, repair or replace the fabric immediately. Remove accumulated sediments from the fence base when the sediment reaches one-third to one-half the fence height. Remove sediment more frequently if accumulated sediment is creating noticeable strain on the fabric and the fence might fail from a sudden storm event. When you remove the silt fence, remove the accumulated sediment, dress the area disturbed to give it a pleasing appearance and vegetate all bare areas as well.

O&M PROCEDURES

- ✓ Inspect every week and after every storm.
- ✓ Remove sediment buildup deeper than ½ the fence height or 12", whichever is less.
- ✓ Replace torn of clogged fabric; repair loose fabric.
- ✓ Repair unstable or broken posts.
- ✓ Stabilize any areas susceptible to undermining.
- ✓ Extend fence or add additional row(s) of fence if necessary to provide adequate protection.

SITING AND DESIGN CONSIDERATIONS - The material for silt fences should be a pervious sheet of synthetic fabric such as polypropylene, nylon, and polyester or polyethylene yarn. Choose the material based on the minimum synthetic fabric requirements shown in Table 1 below.

Table 1- Temporary Silt Fence Property Requirements

Physical Property	Test Method	Units	MARV Geotextile Requirements: Supported Silt Fence[2]	Unsupported Silt Fence: Woven, Elongation ≥ 50%[1]	Unsupported Silt Fence: Non-Woven, Elongation ≤ 50%[1]
Post Spacing (Maximum)		feet	4	4	6
Height of Wire / Polymer Fence (Minimum)		inches	30	---	---
Grab Strength (Minimum): Machine Direction / Cross Machine Direction	ASTM D 4632	pounds	90 / 90	125 / 100	125 / 100
Permittivity (Minimum)	ASTM D 4491	sec^{-1}	0.05	0.05	0.05
Apparent Opening Size (AOS)[3]	ASTM D 4751	Sieve Number	30	30	30
Ultraviolet Stability (Minimum) (retained strength)	ASTM D 4355	70% after 500 h of exposure			

Notes:

MARV Minimum Average Roll Value

[1] Elongation measured in accordance with ASTM D 4632

[2] Silt Fence Support - 14-gauge steel wire with a mesh spacing of 6 inches by 6 inches (or a prefabricated polymeric mesh of equivalent strength)

[3] Maximum Average Roll Value

SITE CONDITIONS FOR REMOVAL - After permanent vegetation of slope is established. Remove fence and post, re-grade trench area and vegetate.

TYPICAL DETAIL - 806-70.0

SILT FENCE

PHYSICAL DESCRIPTION - Silt fences are used as temporary perimeter controls, appropriate to the BMP, at sites where construction activities will disturb the soil. They can also be used on the interior of the site. A silt fence consists of a length of filter fabric stretched between anchoring posts spaced at regular intervals along the site at low and down slope areas. The filter fabric should be entrenched in the ground. When installed correctly and inspected frequently, silt fence can be an effective barrier to silt leaving the site in storm water runoff.

WHERE BMP IS TO BE INSTALLED - Silt fences apply to construction sites with relatively small drainage areas. They are appropriate in areas where runoff will occur as low-level flow, not exceeding 0.5 c.f.s. The drainage area for silt fences should not exceed 0.25 acre per 100-foot fence length (100 square feet per foot of fence). The slope length above the fence should not exceed 100 feet (NAHB, 1995). The fence should be designed to withstand the runoff from a 10-year peak storm event.

CONDITIONS FOR EFFECTIVE USE OF BMP - Spacing of parallel lengths of silt fence along slopes is relative to slope steepness as follows:

Type of Flow: Sheet flow only.

Contributing Slope Length: 30 foot maximum for 3:1 slopes.
50 foot maximum for slopes between 3:1 and 10:1.
100 foot maximum for slopes under 10%.

For additional information see Section 806.70 of St. Louis County's Standard Specification for Highway Construction.

WHEN BMP IS TO BE INSTALLED - Prior to disturbance of natural vegetation and at intervals during construction of fill slopes. Install on the perimeter of the site (where storm water exits the site) prior to disturbance of natural vegetation, around material stock piles and interior to the site along slopes, at the base of slopes and at intervals during construction of slopes.

INSTALLATION / CONSTRUCTION PROCEDURES

- ✓ Drive post for fence line.
- ✓ Dig trench to required dimensions in front of posts for fabric burial.
- ✓ Attach wire mesh to posts.
- ✓ Attach fabric to posts, allowing required length below ground level to run fabric along bottom of trench
- ✓ Backfill and compact soil in trench to protect and anchor fabric.

If a standard-strength fabric is used, it can be reinforced with wire mesh behind the filter fabric. This increases the effective life of the fence. The maximum life expectancy for synthetic fabric silt fences is about 6 months, depending on the amount of rainfall and runoff.

The stakes used to anchor the filter fabric should be wood or metal. Wooden stakes should have minimum dimensions of 2 by 2 inches if a hardwood like oak is used. Stakes from soft woods like No. 2 Southern Pine, should have minimum dimensions of 4 by 4 inches. When using steel (standard U, T, L or C shape sections) posts in place of wooden stakes, they should weigh no less than 1.0 lb/linear foot. If metal posts are used, attachment points are needed for fastening the filter fabric with wire ties. Posts should be least 5 feet long and driven or placed at a slight upstream angle into the ground to a

SEEDING REQUIREMENTS

Dates for Seeding

Permanent Seeding	Jan	Feb	March	April	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	P	O	O	P	P	A

Temporary Seeding	Jan	Feb	March	April	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 = Permitted seeding dates with reseeding 2 months later - Initially use 50% of seed and 75% of fertilizer. Reseed 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	200	4.6
Mixture # 1	250	5.7
Mixture # 2	210	4.8

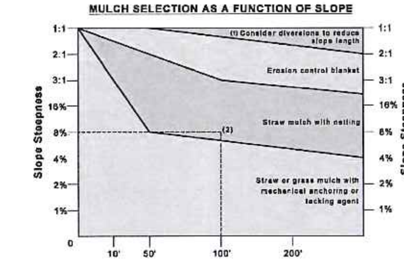
Mixture # 1 = Tall Fescue @ 150 pounds per acre and Brome @ 100 pounds per acre
Mixture # 2 = Tall Fescue @ 100 pounds per acre; Perennial Rye grass @ 100 pounds per acre; and Kentucky Blue grass @ 10 pounds per acre.
* = Seeding rate for slopes in excess of 20% (5:1), shall be 10 pounds per 1000 sq. ft.

Temporary Seeding	Pounds per acre	Pounds Per 1000 sq. ft.
Rye or Sudan	150	3.5
Oats	200	2.5

Fertilizer	Permanent Seeding (pounds per acre)	Temporary Seeding (pounds per acre)
Nitrogen	45	30
Phosphate	65	30
Potassium	65	30
Lime - ENM	500	500

ENM = Effective neutralizing material per State 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 straw mulch with netting

GENERAL MULCH RECOMMENDATIONS TO PROTECT FROM SPLASH AND SHEET FLOW

Material	Rate Per Acre	Requirements	Notes
Straw	2 to 2.5 tons	Dry, unchopped unweathered; 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 to tack 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 fine turf areas.
Bark	35 cu. yds.	Air dry, shredded, or hammermilled; or chips	Apply with mulch blower, chip handler or by hand. Do not use asphalt tack.

Copyright 2015
Clayton Engineering Co.
All Rights Reserved

the clayton engineering company, inc.
ENGINEERS • SURVEYORS • PLANNERS
2288 WELSCH INDUSTRIAL COURT
ST. LOUIS, MISSOURI 63146
(314) 692-8888 FAX: (314) 692-8688 claytoneng.com
MO Cert. of Authority - Prof. Engineering #000087 & Prof. Surveying #000014
IL Dept. Financial & Prof. Reg. Prof. Design & Engineering Corp. #184.000879

REVISIONS

No.	Date	By	Description
1	09/23/14	EJS	Revised per City Comments
2	12/11/14	EJS	Revised Grading per City Comments
3	08/14/15	EJS	Revised per City Comments & Client Input
4	10/22/15	EJS	Revised per City Comments

F.S. F.B. 1155 SUR.
FILE: G:\13xxx\13199_DOG PARK\Plans\Site Plan03.dwg PLOTTED: 1/12/2016 8:54 AM BY: EJS

Prepared for:
HAPPY HOUNDS PLAYGROUND, LLC
895 Bolger Court
Fenton, Missouri, 63026
636-343-9770

SITE DEVELOPMENT - STORMWATER POLLUTION PREVENTION PLAN
HAPPY HOUNDS PLAYGROUND
2448 Pond Road Wildwood, MO 63040

Erik J. Staley - Professional Engineer (PE-2006000132)
STATE OF MISSOURI
ERIK JON STALEY
NUMBER PE-2006000132
PROFESSIONAL ENGINEER
01/11/16

Designed	SWQ
Drawn	HRL
Checked	EJS
Date	June 11, 2014
Project Number	13199
Sheet Number	5 of 14

APPROXIMATE 200' LIMITS FROM SUBJECT PROPERTY

SCALE 1"=50'

Note: Caution should be taken in comparing the written scale to the graphic scale to ascertain if this plan has been enlarged or reduced.

APPROXIMATE 200' LIMITS FROM SUBJECT PROPERTY

Call Before you DIG
Dial 811 or TOLL FREE
1-800-344-7483
mo1call.com
MISSOURI ONE-CALL SYSTEM INC.

Underground facilities, structures & utilities have been plotted from available surveys, records & information, and therefore, do not necessarily reflect the actual existence, nonexistence, size, type, number of, or location of these facilities, structures, & utilities.

The Contractor shall be responsible for verifying the actual location of all underground facilities, structures, & utilities, either shown or not shown on these plans. The underground facilities, structures, & utilities shall be located in the field prior to any grading, excavation or construction of improvements. These provisions shall in no way absolve any party from complying with the Underground Facility Safety and Damage Prevention Act, Chapter 319, RSMO.

The signed and sealed original of this drawing is on file at the offices of The Clayton Engineering Company, Inc. The signed and sealed original is the official document and shall take precedence over any digital version.

Copyright 2015
Clayton Engineering Co.
All Rights Reserved

the clayton engineering company, inc.
ENGINEERS • SURVEYORS • PLANNERS
2288 WILDACH INDUSTRIAL COURT
ST. LOUIS, MISSOURI 63146
(314) 692-1100 FAX (314) 692-1101
MO Cert. of Authority - Prof. Engineering #000597 & Prof. Surveying #000594
E-Mail: Website & Plan Copy - Prof. Engineer & Engineering Corp. Cert. of Authority

NO.	DATE	BY	REVISIONS
1	09/23/14	EJS	Revised per City Comments
2	12/11/14	EJS	Revised Grading per City Comments
3	09/14/15	EJS	Revised per City Comments & Client Input
4	10/13/15	EJS	Revised per City Comments
5	01/11/16	EJS	Revised per City Comments

P.M. 1155 | Scale: | P.C.T.O.D. 10/28/15 5:55 PM | BY: EJS

G:\Shared\SITE JOBS\HH\Permits Set.dwg

Prepared for:

HAPPY HOUNDS PLAYGROUND, LLC
895 Bolger Court
Fenton, Missouri, 63026
636-343-9770

Erik J. Storey - Professional Engineer
PE-2006000132

STATE OF MISSOURI
ERIK JOHN STOREY
NUMBER
PE-2006000132
PROFESSIONAL ENGINEER
01/11/16

SITE DEVELOPMENT PLAN - AERIAL PHOTO

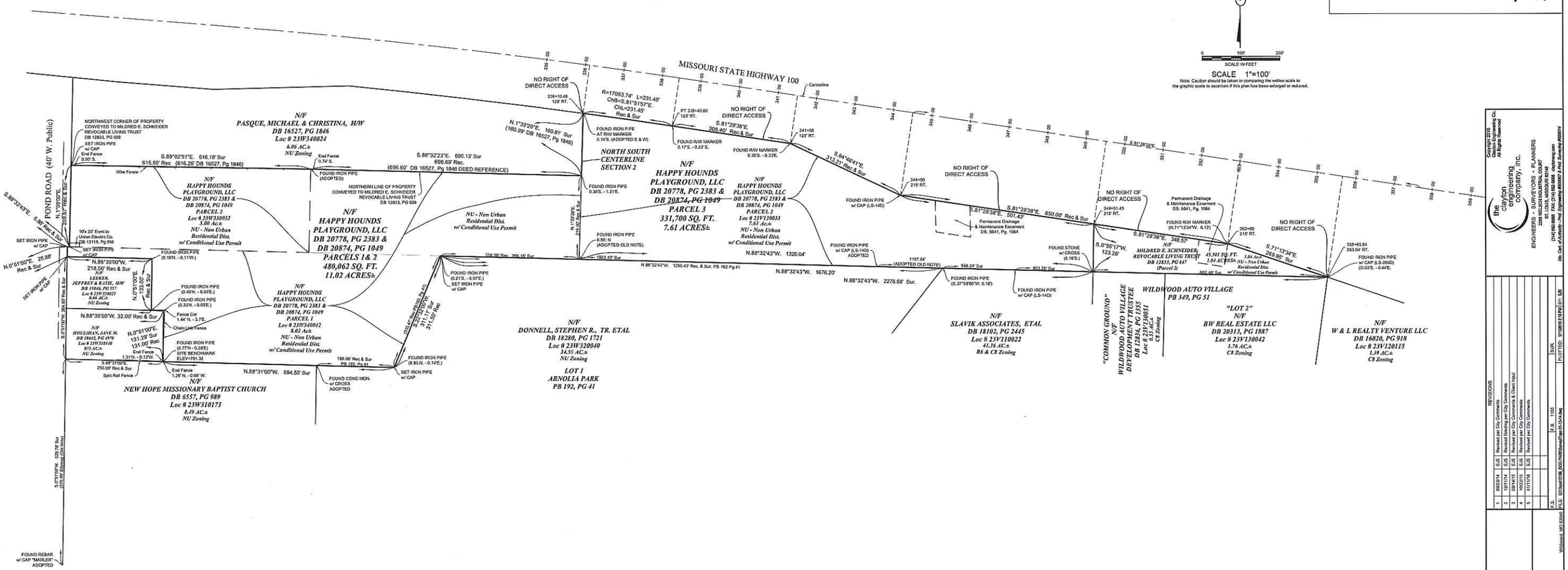
HAPPY HOUNDS PLAYGROUND

3444 Pond Road

Willowood, MO 63080

Designed	SWQ
Drawn	HRL
Checked	EJS
Date	June 11, 2014
Project Number	13199
Sheet Number	6 of 14

A TRACT OF LAND IN
SECTION 2
TOWNSHIP 44 NORTH RANGE 3 EAST
CITY OF WILDWOOD, ST. LOUIS COUNTY, MISSOURI



Copyright 2015
Clayton Engineering Co.
All Rights Reserved

the clayton engineering company, Inc.
ENGINEERS - SURVEYORS - PLANNERS
2349 WELSCH INDUSTRIAL COURT
ST. LOUIS, MISSOURI 63146
(314) 432-8855 FAX (314) 432-8858 claytoneng.com
Mo. Cert. of Authority - Prof. Engineering #000819 & Prof. Surveying #000819

REVISIONS		
1	6/6/2014	E.S. Revised per City Comments
2	12/11/14	E.S. Revised per City Comments
3	03/14/15	E.S. Revised per City Comments & Client Input
4	10/23/15	E.S. Revised per City Comments
5	3/21/2016	E.S. Revised per City Comments
F.S.		F.B. 1153 SURV.
P.E.	G:\Staff\TIM_BOD\1A\Williamsf\Plat-SI-044.dwg	PLOTTED: 3/15/2016 2:54 PM BY: EJS

Prepared for:
NEAL & LAURA VAN GERPEN
895 Bolger Court
Fenton, Missouri, 63026
636-343-9770

ZONING & ACREAGE PLAT
HAPPY HOUNDS PLAYGROUND
Willwood, Mo's Initial 2248 Pond Road

Erik J. Slaby - Professional Engineer
PE-2005006132

STATE OF MISSOURI
ERIK JOHN SLABY
NUMBER PE-2005006132
PROFESSIONAL ENGINEER
3/21/16

Designed	
Drawn	HRL
Checked	JDB
Date	June 11, 2014
Project Number	13199
Sheet Number	7 of 14

The signed and sealed original of this drawing is on file at the offices of The Clayton Engineering Company, Inc. The signed and sealed original is the official document and shall take precedence over any digital version.

Dog-ON-It-Parks®

626 128th St SW Suite #104A • Everett, WA 98204 • WWW.DOG-ON-IT-PARKS.COM
PH: 877-348-3647 • Fax: 425-347-3056 • Email: info@dog-on-it-parks.com

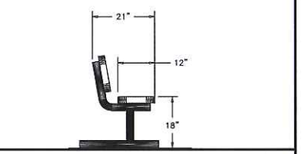
7202
6' BASIC DOG PAW BENCH

Revision: 2.3
Issued: 10/18/2011

IMAGES

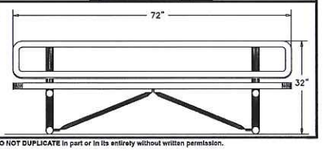
TOP VIEW

- 2 3/8" diameter pipe frames.
- In ground, portable, and surface mount options are available.
- No extra charge for surface mount or bolt down option. (mounting hardware is not included)
- Baked polyester finish on frames.
- Custom logos are available with an additional set-up cost.



FRONT VIEW

- Refer to the Installation manual for all installation instructions.



MADE IN USA

Dog-On-It-Parks - Copyright 2011 - DO NOT DUPLICATE in part or in its entirety without written permission.

BENCHES TO BE RED

Dog-ON-It-Parks®

626 128th St SW Suite #104A • Everett, WA 98204 • WWW.DOG-ON-IT-PARKS.COM
PH: 877-348-3647 • Fax: 425-347-3056 • Email: info@dog-on-it-parks.com

7212
ADA -BI-LEVEL BARRIER FREE PEDESTAL FOUNTAIN

Revision: 2.4
Issued: 3/26/2013

IMAGES

SUGGESTED SPECIFICATIONS:
Model 7212 is an ADA accessible bi-level, barrier free, pedestal mounted, vandal resistant, round drinking fountain made from an 18 gage, 304 stainless steel bowl mounted into a welded stainless steel pedestal. Unit shall be activated by a front mounted self-closing button, by using less than 5 pounds of force, which activates an internally mounted valve with an adjustable stream regulator controlling the water flow. Bubbler shall be polished chrome plated brass with a non-squirt feature and operate on water pressure range of 20 - 105 psig. Unit shall adhere to ANSI A117.1 and Americans with Disabilities Act of 1990 frontal approach and protruding objects requirements, Adult ADA parallel and frontal approach and ANSI/NSF 61, Section 9.

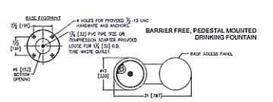
OPTIONAL GREEN POWDERCOAT

STANDARD STAINLESS STEEL FINISH

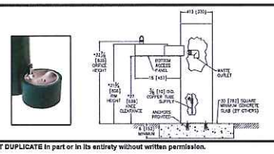
PHOTO NOT AVAILABLE

TOP VIEW

- Resistant to sunlight, heat, moisture and wear.
- 18 gage, 304 stainless steel bowl.
- Heavy duty stainless steel pedestal, corrosion resistant, brushed stainless steel finish. Powder coat colors are available
- Polished chrome plated brass, anti-rotation non-squirt bubbler.
- 100 mesh inlet strainer.
- Access door, heavy duty steel, vandal resistant.
- Vandal resistant stainless steel bottom plate.



FRONT VIEW



MADE IN USA

Dog-On-It-Parks - Copyright 2011 - DO NOT DUPLICATE in part or in its entirety without written permission.

TRASH RECEPTABLES TO BE GREEN POWDERCOAT

Dog-ON-it-PARKS

626 128th St SW #104A Everett, WA 98204
877-FIT-DOGS www.dog-on-it-parks.com

7502 - 32 Gallon "Trash Only" Receptacle w/ liner, lid & surface mount kit

Please take the time to locate and identify each part. Assemble the units on a smooth flat surface. It is also helpful to lay the tops and seats on cardboard or a drop cloth to prevent scratching of the surface during assembly. All parts have been pre-cut and pre-drilled for ease of assembly. All holes are slotted to allow for easy assembly and for final leveling of tops and seats to frames. Fully assemble all parts without totally tightening nuts and bolts. After all assembled go back and retighten nuts to bolts. DO NOT OVER TIGHTEN NUTS TO BOLTS. Over tightened nuts can crack the plastisol coating. All the necessary quantities of parts required are listed in this assembly instructions.

DO NOT BEGIN ASSEMBLY UNTIL YOU HAVE READ THESE INSTRUCTIONS AND ARE FAMILIAR WITH THE PARTS.

TRASH RECEPTABLES TO BE DARK GREEN

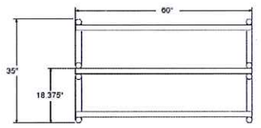
SPEC SHEET: SJDBK

5' WIDE 8 SPACES "J" FRAME BIKE RACK DOUBLE SIDED Wt. 74 lbs

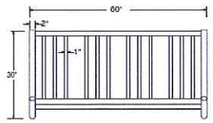
photo

10JDBK FOR SHOW ONLY

top view

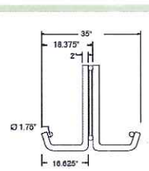


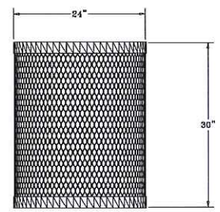
front view



BIKE RACK TO BE SILVER

side view





SPECIFICATIONS

30" X 24" STEEL RIBBED TRASH RECEPTACLE.
COATED WITH A 1/8" TO 1/4" THICK PLASTISOL ULTRAVIOLET STABILIZED VINYL COATING FUSED AND BAKED TO A 90% GLOSS.

30" TALL X 24" DIAMETER. 32 GALLON CAN SIZE

ALL HARDWARE IS NON CORROSIVE.
WEIGHT IS 70 LB.

MAINTENANCE

To maintain luster it is recommended to wash, rinse, and dry the units after prolonged use. Check for loose bolts and nuts and tighten as needed. Contact the factory for genuine Webcoat part replacements if needed.

TUFF SHED

Premier Tall Ranch

A taller version of our Premier Ranch with the same great Premier Series features. The taller walls of the Premier Tall Ranch add more wall and overhead storage space, plus they allow for more door placement options. For popular sizes, prices and more specs, click the tabs below.

7 YEAR WARRANTY

- 75" interior sidewall height
- 67" tall, steel-reinforced door placed on any wall
- Galvanized steel floor joists
- Treated LP® ProStruct Floor with Smart Finish™
- 2×4 wall framing placed 16" on center
- LP SilverTech™ radiant barrier siding and roof decking
- Owens Corning® 25 Year shingles

Categories: Ranch Styles, Sheds

Specifications

- 7-Year Warranty
- Galvanized Steel Floor with 6" Joists at 2' on Center
- 6" Patented Keyed, Locking Door Handle
- 4' x 67" Steel Reinforced Door
- 75" Interior Clear Sidewall Height
- 2"x4" Spaced 16" On Center Wall Framing
- Double Top Plates on All Walls
- Siding: LP® SilverTech Radiant Barrier Siding w/ 50-Year Manufacturer's Warranty
- 4" Trim – 50 Year Limited Warranty Smart Trim
- 3/4" Heavy-Duty Tongue & Groove Treated LP® ProStruct Floor Decking with Smart Finish
- 7/16" Radiant Heat Barrier Roof Decking
- 4" Box w/ 4" Fascia on Sidewalls Eave
- 15# Felt Paper
- Entire Roof Perimeter covered with Colored, Baked Enamel Drip Edge
- 25-Year Limited Warranty 3-Tab Composition Shingles from Owens Corning
- Rafters and Trusses Joined w/ Steel Plates
- Roof Pitch at Peak (4/12)
- On-Site Installation Included in Price (Delivery, Access, and/or Generator fees may apply)

TUFF SHED PREMIER TALL RANCH (18'x24') w/ TAN LOUISIANA PACIFIC SMART SIDING w/ BROWN TRIM & DARK SHINGLE ROOF (PEAK HEIGHT=11'-2") ON MINIMUM 6-INCH THICK CONCRETE FOUNDATION PAD.

SITE ITEMS DISCLAIMER

ALL DETAILS AND SPECIFICATIONS SHOWN ON THIS PLAN SHEET WERE PROVIDED BY A THIRD PARTY. THE CLAYTON ENGINEERING COMPANY, INC. IS NOT RESPONSIBLE FOR THE SELECTION, INSTALLATION DETAILS, PRODUCT SPECIFICATIONS, ETC. FOR ANY OF THESE ITEMS. THESE ITEMS HAVE BEEN PROVIDED AS A PART OF THIS PLAN SET FOR INFORMATIONAL PURPOSES ONLY. CURRENT PRODUCT CUT SHEETS, PROVIDED BY OTHERS, SHALL TAKE PRECEDENCE OVER ANY DETAILS AND/OR SPECIFICATIONS SHOWN HERE.

Copyright 2015
Clayton Engineering Co.
All Rights Reserved

the clayton engineering company, Inc.
ENGINEERS - SURVEYORS - PLANNERS
MO Cert. of Authority - Prof. Engineering #000001 & Prof. Surveying #000101
MO Cert. of Authority - Prof. Engineering #000001 & Prof. Surveying #000101
& Prof. Planning # Prof. Phy. Prof. Geologist & Engineering Corp. #2003029
www.clayton-engineering.com
EMAIL INFO@CLAYTON-ENGINEERING.COM
ST. LOUIS, MISSOURI 63146
(314) 692-2000 FAX (314) 692-2001

NO.	DATE	BY	REVISIONS
1	09/23/14	EJS	Revised per City Comments
2	12/11/14	EJS	Revised Grading per City Comments
3	09/14/15	EJS	Revised per City Comments & Client Input
4	10/28/15	EJS	Revised per City Comments
5	01/07/16	EJS	Revised per City Comments

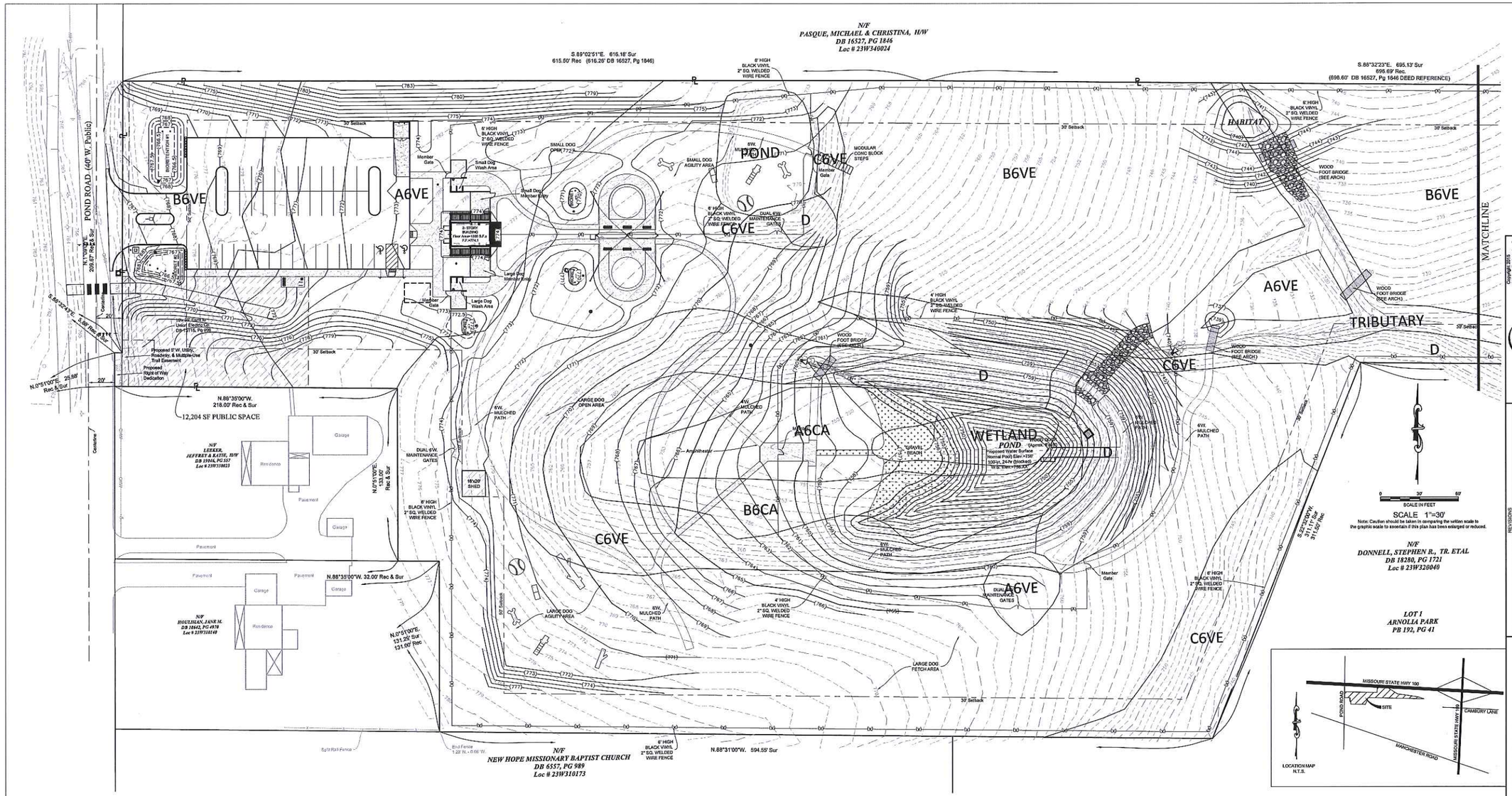
F.S. 1155
PLOT DATE: 1/7/2016 8:54 AM | BY: EJS
F.S. 1155
F:\Engineering\JOB FILES\Parks\Bike Rack.dwg

Prepared for:
HAPPY HOUNDS PLAYGROUND, LLC
895 Bolger Court
Fenton, Missouri, 63026
636-343-9770

SITE DEVELOPMENT PLAN DETAILS
HAPPY HOUNDS PLAYGROUND
Wildwood, MO 63040
2445 Pond Road

Erik J. Stang - Professional Engineer
PE-2006000132
STATE OF MISSOURI
ERIK JON STANG
NUMBER PE-2006000132
PROFESSIONAL ENGINEER
1/7/16

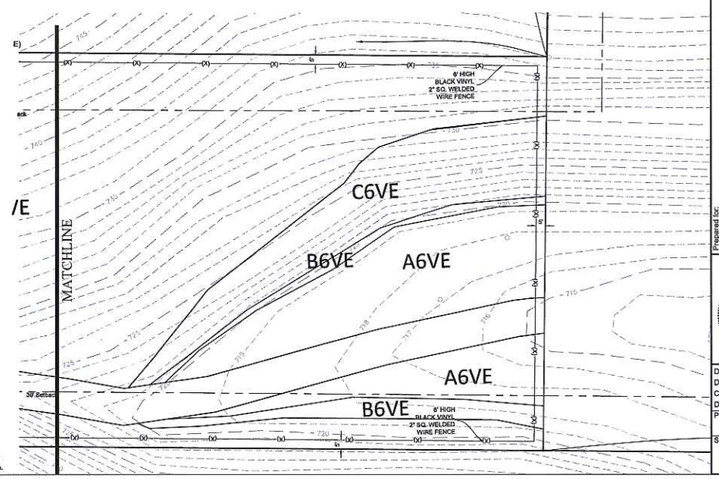
Designed	SWQ
Drawn	HRL
Checked	EJS
Date	June 11, 2014
Project Number	13199
Sheet Number	8 of 14



SLOPE CLASS	ACREAGE	% PRESERVED	ACRES TO BE PRESERVED	ACRES PRESERVED
A6CA	0.29	0	0	0
A6VE	1.48	0	0	1.07
B6CA	0.46	60	0.28	0
B6VE	6.25	30	1.88	2.39
C6VE	1.26	50	0.63	0.74
D	0.50	100	0.50	0.33
WATERBODIES	0.67	100	0.67	0.33
WETLANDS	0.11	100	0.11	0
TOTAL	11.02	-	4.70	4.86

THIS PLAN WAS COMPLETED IN ACCORDANCE WITH THE CITY OF WILDWOOD'S SUBDIVISION CODE SECTION 1005.200 NATURAL RESOURCES PROTECTION STANDARDS AND REFLECT THE RESULTS OF THE ON-SITE FIELD INVESTIGATION CONTAINED IN THE ACCOMPANYING REPORT

SCOTT D. HARDING CPSS/SC



Underground facilities, structures & utilities have been plotted from available surveys, records & information, and therefore, do not necessarily reflect the actual existance, nonexistance, size, type, number of, or location of these facilities, structures, & utilities.

The Contractor shall be responsible for verifying the actual location of all underground facilities, structures, & utilities, either shown or not shown on these plans. The underground facilities, structures, & utilities shall be located in the field prior to any grading, excavation or construction of improvements. These provisions shall in no way absolve any party from complying with the Underground Facility Safety and Damage Prevention Act, Chapter 319, RSMO.

Call Before you DIG
Dial 811 or TOLL FREE
1-800-344-7483
mo1call.com
MISSOURI ONE-CALL SYSTEM INC.

The signed and sealed original of this drawing is on file at the offices of The Clayton Engineering Company, Inc. The signed and sealed original is the official document and shall take precedence over any digital version.

Copyright 2014
Clayton Engineering Co.
All Rights Reserved

the clayton engineering company, inc.
ENGINEERS • SURVEYORS • PLANNERS
2535 Dougherty Ferry Court
ST. LOUIS, MISSOURI 63146
PH 314/993-0880 FAX: PH 314/993-0886 claytoneng.com
MO Cert. of Authority: Engineering #000274, Surveying #000274
E. Gary Clayton # Prof. Eng. Prof. Surveyor & Professional Planner #E-24535

NO.	DATE	BY	REVISIONS
1	09/27/14	EJS	Revised per City Comments
2	12/17/14	EJS	Revised per City Comments & Client Input
3	06/14/15	EJS	Revised per City Comments
4	10/22/15	EJS	Revised per City Comments
5	03/17/16	EJS	

P.A.
P.E.
DATE
PLOTTED: 5/11/2016 11:53:34 AM | BY: EJS
FILE: G:\Projects\HAPPY HOUNDS PLAYGROUND\Dwg\Site\Natural Resource Delineation.dwg

HAPPY HOUNDS PLAYGROUND, LLC
895 Boiger Court
Fenton, Missouri 63026
636-343-9779

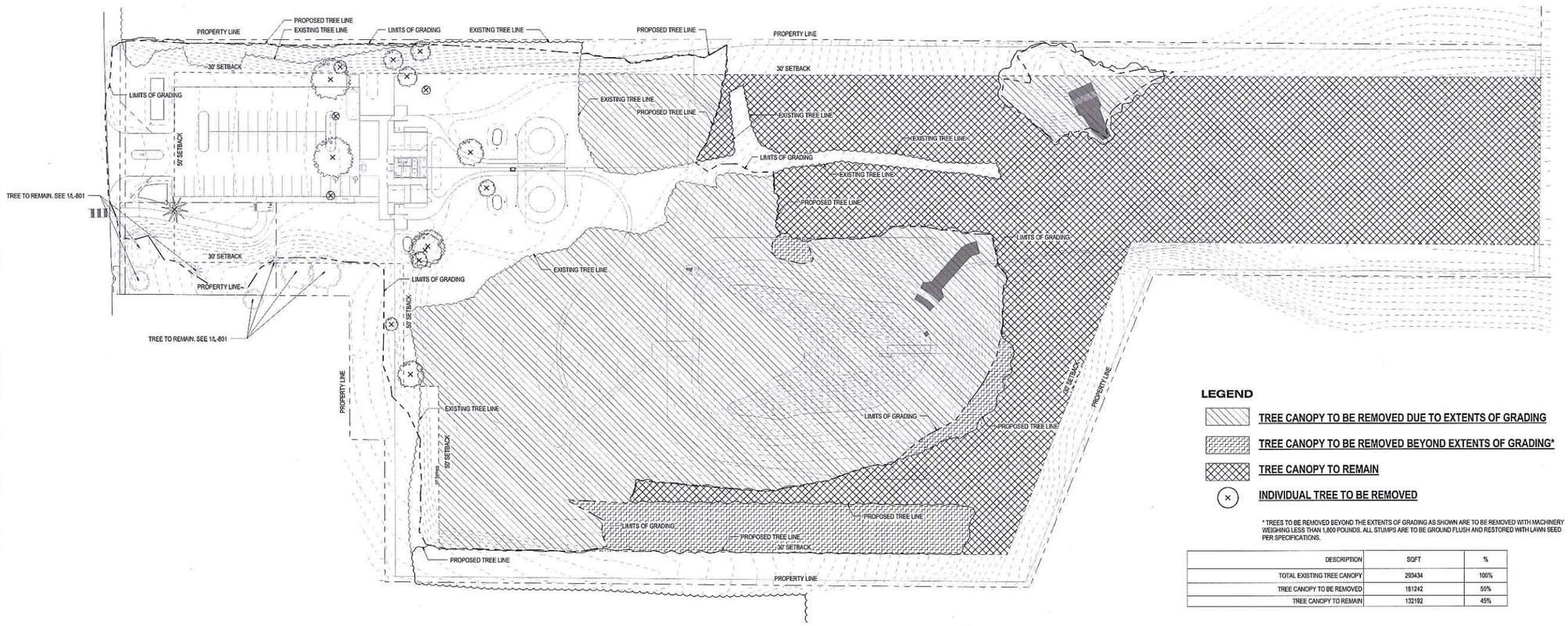
Prepared for:

NATURAL RESOURCE DELINEATION
HAPPY HOUNDS PLAYGROUND

1448 Pond Road
Wildwood, MO 63005

Erik J. Ebeling - Professional Engineer
PE-2005000132
STATE OF MISSOURI
ERIK J. EBELING
NUMBER PE-2005000132
PROFESSIONAL ENGINEER
5/17/16

Designed	SWG
Drawn	HRL
Checked	EJS
Date	June 11, 2014
Project Number	13199
Sheet Number	9 of 14



LEGEND

- TREE CANOPY TO BE REMOVED DUE TO EXTENTS OF GRADING
- TREE CANOPY TO BE REMOVED BEYOND EXTENTS OF GRADING*
- TREE CANOPY TO REMAIN
- INDIVIDUAL TREE TO BE REMOVED

* TREES TO BE REMOVED BEYOND THE EXTENTS OF GRADING AS SHOWN ARE TO BE REMOVED WITH MACHINERY WEIGHING LESS THAN 1,800 POUNDS. ALL STUMPS ARE TO BE GROUND FLUSH AND RESTORED WITH LAWN SEED PER SPECIFICATIONS.

DESCRIPTION	SQFT	%
TOTAL EXISTING TREE CANOPY	293434	100%
TREE CANOPY TO BE REMOVED	161242	55%
TREE CANOPY TO REMAIN	132192	45%

1 L-001 TREE PRESERVATION PLAN
1" = 40'-0"

NOTE:
1. CONTRACTOR TO STAKE TREE REMOVAL AREA WITH STAKES AND FLAGGING IN FIELD PRIOR TO TREE REMOVAL. LANDSCAPE ARCHITECT TO APPROVE IN FIELD.

NOT FOR CONSTRUCTION

Happy Hounds Playground
2448 Pond Rd.
Wildwood, MO 63040

ARCTURIS
together we create
720 OLIVE STREET, SUITE 200 SAINT LOUIS, MO 63101
T 314 206 7100 F 314 231 9801

CIVIL ENGINEER
CLAYTON ENGINEERING GROUP- (314) 692-6868

STRUCTURAL ENGINEER
AEDIFICA CASE - (636) 349-1600

Aedifica engineering | case
St. Louis • Montreal
796 Mona Court
St. Louis, MO 63026
T 636.349.1600
F 636.349.1730
aedificacase.com
mechanical
electrical
plumbing
fire protection
structural
CERTIFICATE OF AUTHORITY NO. E-2009155319-D

ARCHITECT OF RECORD:
STATE OF MISSOURI RUSSELL G. VOLMERT NUMBER LA-000172 LANDSCAPE ARCHITECT
RUSSELL G. VOLMERT
MISSOURI LA-000172

ISSUE DATE	DESCRIPTION
4.16.2015	SITE PRICING SET - 75% CDS
6.12.2015	BUILDING PRICING SET
9.13.2015	SITE DEV PLAN -REVISED
1.19.2016	SITE DEV PLAN -REVISED

Revision Schedule

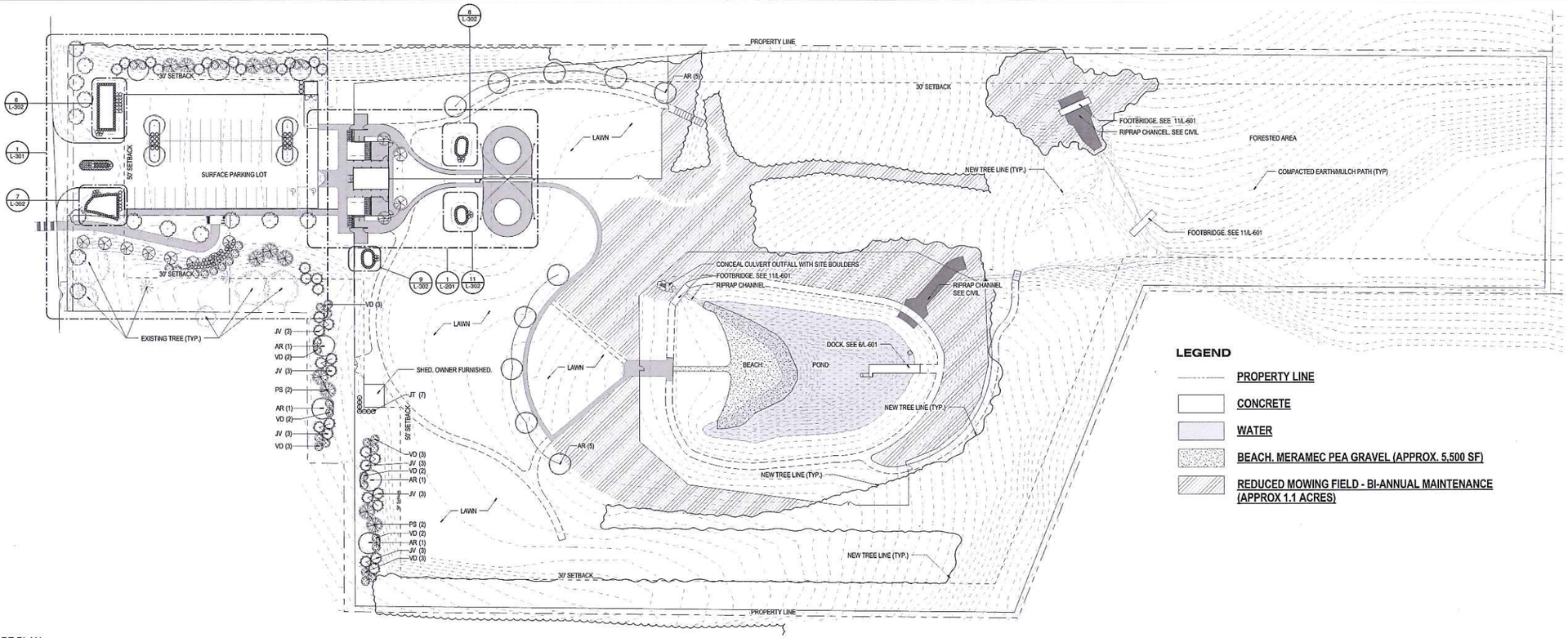
No.	Date	Description

Key Plan:

Project Number: 14-2287.00

Sheet Title:
TREE PRESERVATION PLAN P-7

L-001



11 L-201 LANDSCAPE PLAN
1" = 40'-0"

LANDSCAPE REQUIREMENTS CALCULATIONS

BUFFERYARDS

	DISTANCE	TYPE / PUs	REQUIRED*	SHOWN
NORTH	550 LF	E / 17 PUs	(17) CANOPY TREES (17) EVERGREEN TREES (17) UNDERSTORY TREES (170) SHRUBS	(3) CANOPY TREES (10) EVERGREEN TREES (3) UNDERSTORY TREES (6) SHRUBS
SOUTH	440 LF	E / 15 PUs	(15) CANOPY TREES (15) EVERGREEN TREES (15) UNDERSTORY TREES (150) SHRUBS	(9) CANOPY TREES (7) EVERGREEN TREES (8) UNDERSTORY TREES (48) SHRUBS
WEST	260 LF	E / 9 PUs	(9) CANOPY TREES (9) EVERGREEN TREES (9) UNDERSTORY TREES (90) SHRUBS	(4) CANOPY TREES (22) EVERGREEN TREES (0) UNDERSTORY TREES (20) SHRUBS
EAST	N/A	N/A		
STREET	(WAIVED 1/7/16)			

ADDITIONAL REQUIREMENTS

	DISTANCE	TYPE / PUs	REQUIRED*	SHOWN
STREET TREES	230 LF	1 PER 30 LF	(8) TREES	(8) TREES
PARKING LOT	42 SPACES	5 PUs	(10) CANOPY TREES (50) SHRUBS	(4) CANOPY TREES (16) SHRUBS (80) GRASSES
ENTRANCE DRIVE	(WAIVED 1/7/16)			
NON-RESIDENTIAL BUILDING SITES	(WAIVED 1/7/16)			

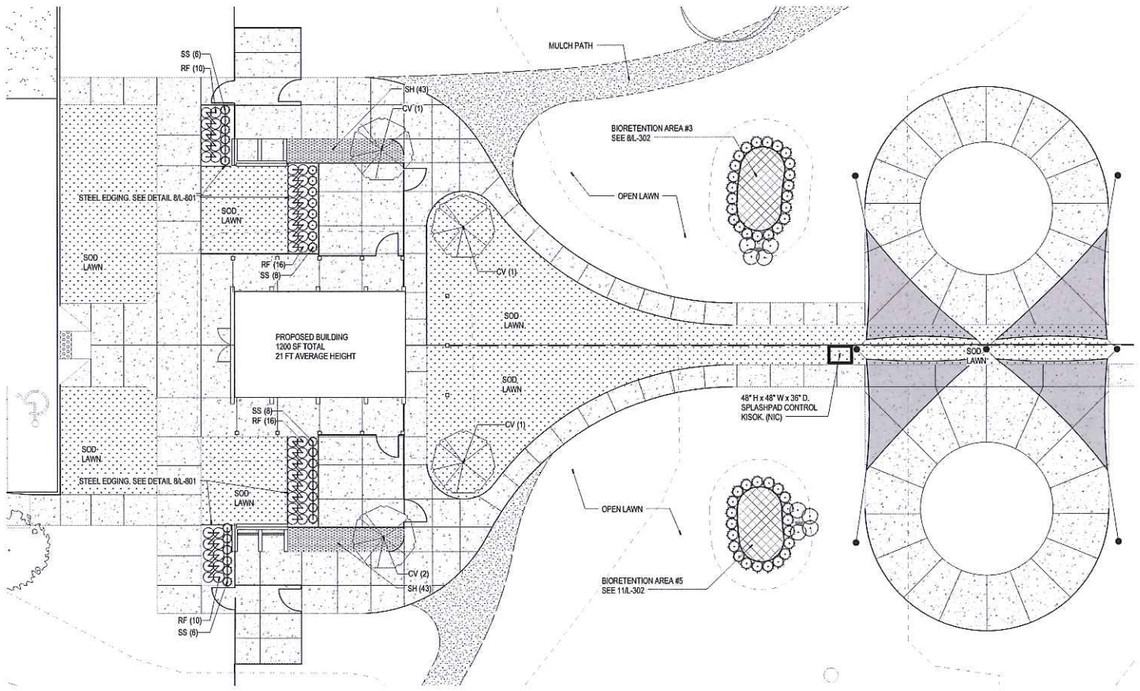
*REQUIREMENTS SHOWN WERE PROVIDED WITHIN LANDSCAPE PLAN REVIEW BY TERRASPEC, DATED NOVEMBER 16, 2015. CITY OF WILDWOOD DIRECTOR OF PLANNING HAS AGREED TO WAIVE REQUIREMENTS PER JANUARY 7, 2016 MEETING. LANDSCAPE PLAN AS SHOWN REFLECTS DIRECTION FROM THE DIRECTOR OF PLANNING

GENERAL NOTES:

1. GRADING SHOWN IS FOR REFERENCE ONLY. SEE CIVIL DRAWINGS FOR GRADING PLANS.
2. REFER TO CIVIL DRAWINGS FOR UNDERGROUND UTILITY LOCATIONS AND INFORMATION AS WELL AS SIDEWALK AND PAVING LAYOUTS, UNLESS NOTED OTHERWISE.
3. ANY AND ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES - WHETHER SHOWN ON THE DRAWINGS OR OCCURRING IN THE FIELD - ARE TO BE RESTORED WITH SEED OR SOD. AREAS TO BE REPLACED WITH SOD WILL BE SPECIFICALLY NOTED ON LANDSCAPE PLANS. SEE SPECIFICATIONS FOR LAWN SEED MIXTURE
4. CONTRACTOR SHALL REMOVE EXISTING BRUSH AND TREES AS NECESSARY TO INSTALL PROPOSED LANDSCAPING AS INDICATED.
5. ALL TREE REMOVAL AND NEW TREE LINES TO BE VERIFIED BY LANDSCAPE ARCHITECT IN THE FIELD.
6. CONTRACTOR SHALL PROTECT EXISTING AND NEW TREES, SEE DETAIL 1/L-801, WITHIN THE DISTURBED AREA OF THE PROJECT CONSTRUCTION LIMITS.
7. ALL PLANTINGS TO HAVE A SPADE CUT EDGE UNLESS OTHERWISE NOTED.
8. ALL WOODED MATERIAL CLEARED FROM SITE IS TO BE SHREDDED INTO MULCH FOR USE ON WALKING PATHS AND OTHER AREAS AS NOTED
9. REFER TO SHEET L-801 FOR PLANTING SCHEDULE AND DETAILS.
10. ALL AREAS SHOWN AS OPEN LAWN TO BE RESEEDED AFTER CONSTRUCTION
11. ALL SQUARE FOOTAGE ESTIMATES ARE APPROXIMATE AND ARE TO BE FIELD VERIFIED BY CONTRACTOR
12. REFER TO CIVIL DRAWINGS FOR BIORETENTION AREA LAYOUTS

CITY OF WILDWOOD LANDSCAPE GENERAL NOTES

1. 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)
2. ALL TREES ARE TO BE LOCATED A MINIMUM DISTANCE OF 5' FROM ALL UTILITY BOXES, 5' FROM A STORM DRAIN 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;
3. LOCATIONS OF STREET TREES MAY BE SUBJECT TO CHANGE IN ORDER TO AVOID CONFLICT WITH STREET LIGHTING
4. ANY PLANTING WITHIN A TREE PRESERVATION AREA, AS DESIGNATED ONT HE TREE PRESERVATION PLAN AND SHOWN ON THIS PLAN, MUST BE DONE TO AVOID ANY ADVERSE IMPACT TO THE ROOTS OF EXISTING TREES
5. PLANT TYPE SUBSTITUTIONS ARE PERMITTED WITH VERBAL OR WRITTEN APPROVAL FROM THE CITY OF WILDWOOD PLANNING DEPARTMENT
6. 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
7. ALL PLANS MUST MEET STANDARDS OF THE LATEST EDITION OF THE AMERICAN STANDARDS FOR NURSERY STOCK SPONSORED BY THE ASSOCIATION OF AMERICAN NURSERYMEN
8. NO PLAN SHALL BE LOCATED IN AREAS OF OBVIOUS POOR DRAINAGE. IF SUCH CONDITIONS EXIST, CONTACT THE LANDSCAPE ARCHITECT IMMEDIATELY TO RELOCATE AFFECTED PLANT MATERIAL.
9. 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.
10. GRADING - ALL GRADING FOR LANDSCAPED AREAS WILL NOT EXCEED A SLOPE GREATER THAN 3:1. ALL EXPOSED SLOPES WILL BE PROTECTED FROM EROSION AS NEEDED.
11. MAINTENANCE - THE LANDSCAPE OF ALL UNDEVELOPED AND DEVELOPED PROPERTY WILL BE PROPERLY MAINTAINED IN A SIGHTLY AND WELL-KEPT MANNER
12. REPLACEMENT - REPLANTING AND REPLACEMENT OF EXISTING PLANT MATERIALS WILL BE EXECUTED ON AN ANNUAL BASIS AS NEEDED BY THE PROPERTY OWNER.



1 L-201 LANDSCAPE DETAIL PLAN - BUILDING
1" = 10'-0"

NOT FOR CONSTRUCTION

Happy Hounds Playground
2448 Pond Rd.
Wildwood, MO 63040

ARCTURIS
together we create
720 OLIVE STREET, SUITE 200 SAINT LOUIS, MO 63101
T 314.259.7100 F 314.231.9801

CIVIL ENGINEER
CLAYTON ENGINEERING GROUP- (314) 692-8658

STRUCTURAL ENGINEER
AEDIFICA CASE - (636) 349-1600

Aedifica engineering | case
St. Louis - Montreal
796 Manor Court
St. Louis, MO 63026
T 636.349.1600
F 636.349.1739
mechanical
electrical
plumbing
fire protection
structural
CERTIFICATE OF AUTHORITY NO. E-2000155319-D

ARCHITECT OF RECORD:
RUSSELL G. VOLMERT
MISSOURI LA-000172

ISSUE DATE	DESCRIPTION
4.16.2015	SITE PRICING SET - 75% CDS
6.12.2015	BUILDING PRICING SET
9.13.2015	SITE DEV PLAN -REVISED
1.19.2016	SITE DEV PLAN -REVISED

Revision Schedule

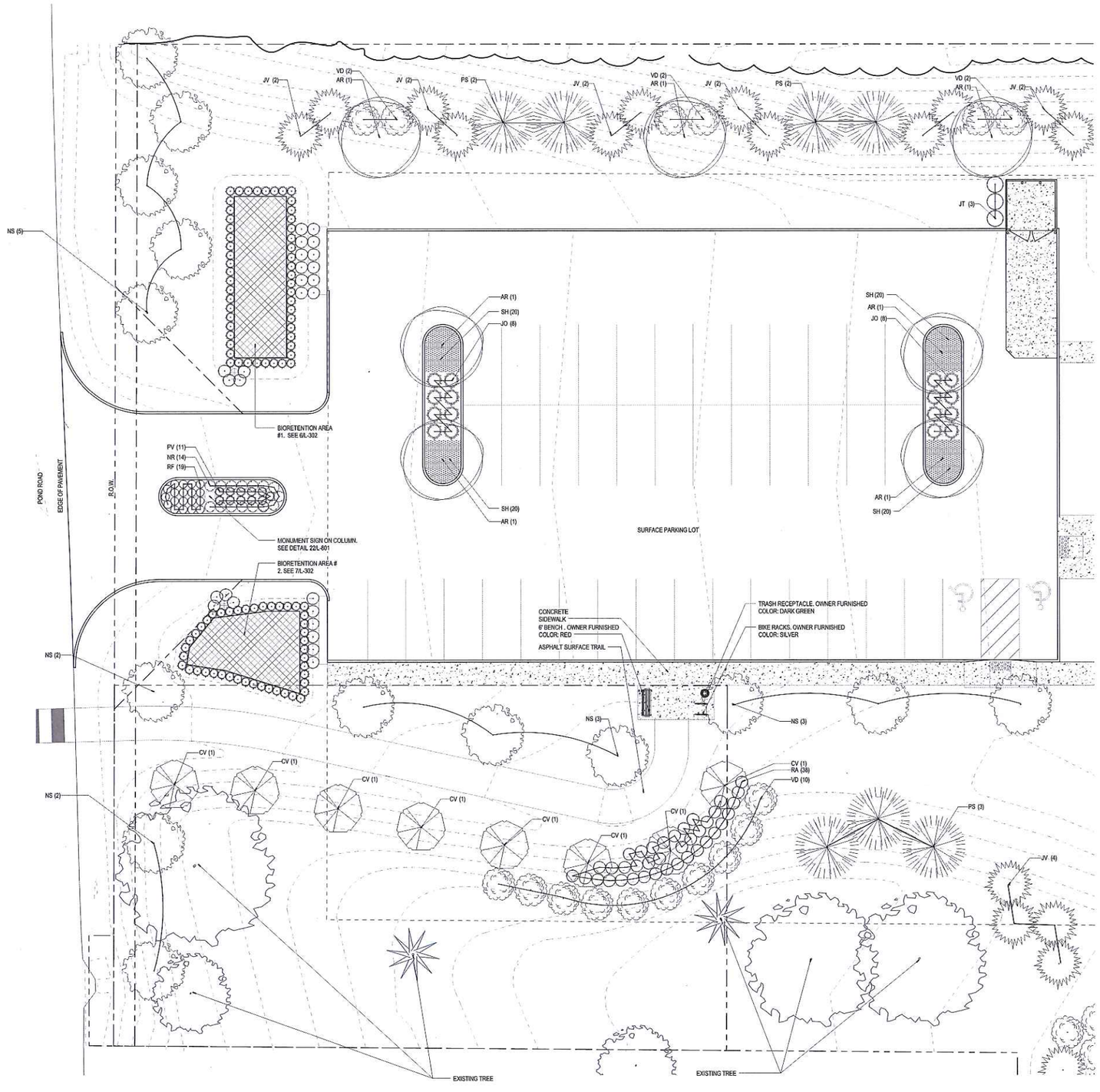
No.	Date	Description

Key Plan:

Project Number: 14-2287.00

Sheet Title:
LANDSCAPE SITE PLAN P-10

L-201



1 L-301 LANDSCAPE DETAIL PLAN - PUBLIC SPACE
1" = 10'-0"

GENERAL NOTES:

1. GRADING SHOWN IS FOR REFERENCE ONLY. SEE CIVIL DRAWINGS FOR GRADING PLANS.
2. REFER TO CIVIL DRAWINGS FOR UNDERGROUND UTILITY LOCATIONS AND INFORMATION AS WELL AS SIDEWALK AND PAVING LAYOUTS, UNLESS NOTED OTHERWISE.
3. ANY AND ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES - WHETHER SHOWN ON THE DRAWINGS OR OCCURRING IN THE FIELD - ARE TO BE RESTORED WITH SEED OR SOD. AREAS TO BE REPLACED WITH SOD WILL BE SPECIFICALLY NOTED ON LANDSCAPE PLANS. SEE SPECIFICATIONS FOR LAWN SEED MIXTURE
4. CONTRACTOR SHALL REMOVE EXISTING BRUSH AND TREES AS NECESSARY TO INSTALL PROPOSED LANDSCAPING AS INDICATED.
5. ALL TREE REMOVAL AND NEW TREE LINES TO BE VERIFIED BY LANDSCAPE ARCHITECT IN THE FIELD.
6. CONTRACTOR SHALL PROTECT EXISTING AND NEW TREES, SEE DETAIL 18./L-601, WITHIN THE DISTURBED AREA OF THE PROJECT CONSTRUCTION LIMITS.
7. ALL PLANTINGS TO HAVE A SPADE CUT EDGE UNLESS OTHERWISE NOTED.
8. REFER TO SHEET L-801 FOR PLANTING SCHEDULE AND DETAILS.
9. ALL AREAS SHOWN AS OPEN LAWN TO BE RESEEDED AFTER CONSTRUCTION
10. REFER TO CIVIL DRAWINGS FOR BIORETENTION LAYOUTS

CITY OF WILDWOOD LANDSCAPE GENERAL NOTES

1. 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)
2. ALL TREES ARE TO BE LOCATED A MINIMUM DISTANCE OF 5' FROM ALL UTILITY BOXES, 5' FROM A STORM DRAIN 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;
3. LOCATIONS OF STREET TREES MAY BE SUBJECT TO CHANGE IN ORDER TO AVOID CONFLICT WITH STREET LIGHTING
4. ANY PLANTING WITHIN A TREE PRESERVATION AREA, AS DESIGNATED ONT HE TREE PRESERVATION PLAN AND SHOWN ON THIS PLAN, MUST BE DONE TO AVOID ANY ADVERSE IMPACT TO THE ROOTS OF EXISTING TREES
5. PLANT TYPE SUBSTITUTIONS ARE PERMITTED WITH VERBAL OR WRITTEN APPROVAL FROM THE CITY OF WILDWOOD PLANNING DEPARTMENT
6. 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
7. ALL PLANS MUST MEET STANDARDS OF THE LATEST EDITION OF THE AMERICAN STANDARDS FOR NURSERY STOCK SPONSORED BY THE ASSOCIATION OF AMERICAN NURSERYMEN
8. NO PLAN SHALL BE LOCATED IN AREAS OF OBVIOUS POOR DRAINAGE. IF SUCH CONDITIONS EXIST, CONTACT THE LANDSCAPE ARCHITECT IMMEDIATELY TO RELOCATE AFFECTED PLANT MATERIAL.
9. 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.
10. GRADING - ALL GRADING FOR LANDSCAPED AREAS WILL NOT EXCEED A SLOPE GREATER THAN 3:1. ALL EXPOSED SLOPES WILL BE PROTECTED FROM EROSION AS NEEDED.
11. MAINTENANCE - THE LANDSCAPE OF ALL UNDEVELOPED AND DEVELOPED PROPERTY WILL BE PROPERLY MAINTAINED IN A SIGHTLY AND WELL-KEPT MANNER
12. REPLACEMENT - REPLANTING AND REPLACEMENT OF EXISTING PLANT MATERIALS WILL BE EXECUTED ON AN ANNUAL BASIS AS NEEDED BY THE PROPERTY OWNER.

NOT FOR CONSTRUCTION

Happy Hounds Playground

Happy Hounds Playground
2448 Pond Rd.
Wildwood, MO 63040

ARCTURIS
together we create
720 OLIVE STREET, SUITE 200 SAINT LOUIS, MO 63101
T 314.206.7100 F 314.231.5931

CIVIL ENGINEER
CLAYTON ENGINEERING GROUP- (314) 692-8868

STRUCTURAL ENGINEER
AEDIFICA CASE - (636) 349-1600

Aedifica engineering | case — St. Louis • Montreal
796 Mesa Court
St. Louis, MO 63026
T 636.349.1600
F 636.349.1739
mail@case.com
mechanical
electrical
plumbing
fire protection
structural
CERTIFICATE OF AUTHORITY NO. E-2000115319-D

ARCHITECT OF RECORD:
MISSOURI STATE CERTIFICATE OF AUTHORITY #00246198

MEGAN NASRALLAH
ARCHITECT MISSOURI 7565

ISSUE DATE	DESCRIPTION
4.16.2015	SITE PRICING SET - 75% CDS
6.12.2015	BUILDING PRICING SET
8.13.2015	SITE DEV PLAN -REVISED
1.19.2016	SITE DEV PLAN -REVISED

Revision Schedule

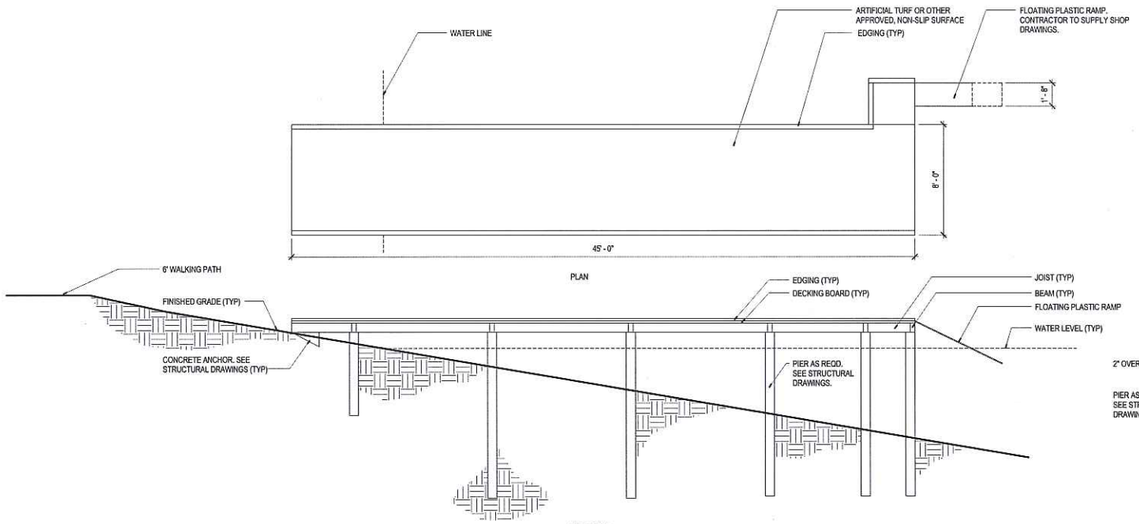
No.	Date	Description

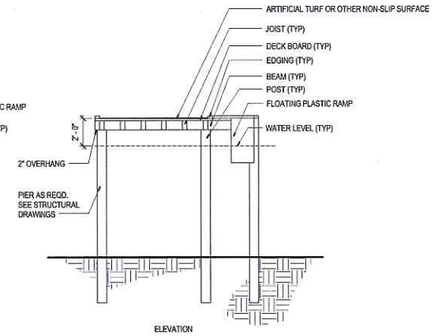
Key Plan:

Project Number: **14-2287.00**

Sheet Title:
LANDSCAPE DETAIL PLANS P-11

L-301

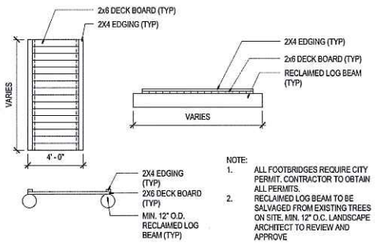




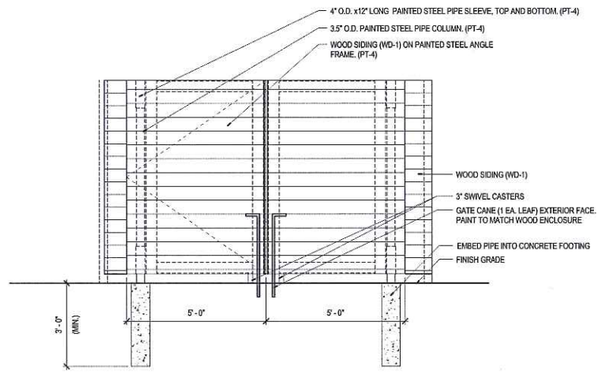
NOTES:

1. ALL WOOD TO BE PRESSURE TREATED, STAINED AND SEALED.
2. DOCK SHOWN FOR AESTHETIC DIRECTION ONLY AND SHALL CONFORM TO THE OFFICIAL DOCK JUMPING REQUIREMENTS.
3. DOCK TO BE DESIGN BUILD BY DOCK CONTRACTOR. CONTRACTOR TO FURNISH SHOP DRAWINGS AND CALCULATIONS, SIGNED AND SEALED BY STRUCTURAL ENGINEER LICENSED IN THE STATE OF MISSOURI.

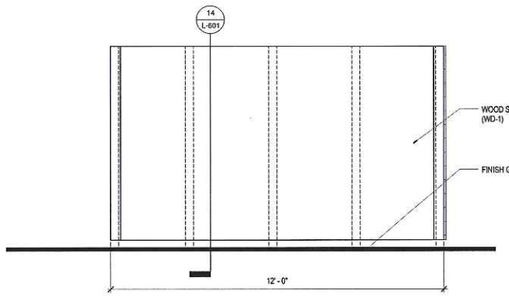
6 L-601 DOCK 1/4" = 1'-0"



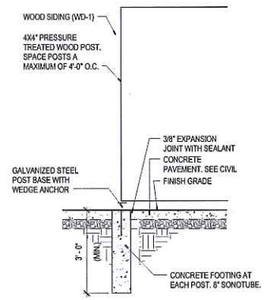
11 L-601 FOOT BRIDGE 1/4" = 1'-0"



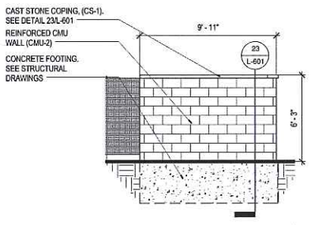
12 L-601 ELEVATION - TRASH ENCLOSURE SOUTH 1/2" = 1'-0"



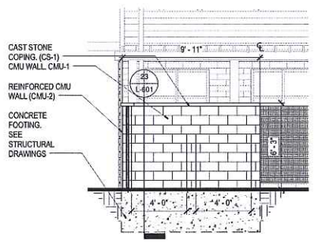
13 L-601 ELEVATION - TRASH ENCLOSURE WEST 1/2" = 1'-0"



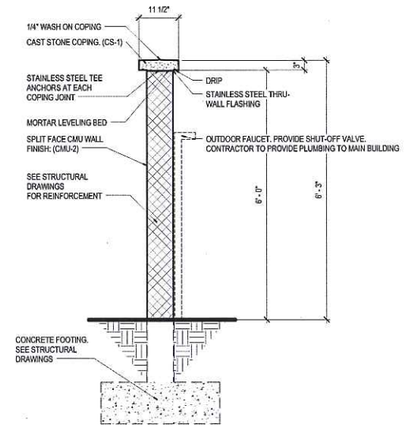
14 L-601 SECTION - TRASH ENCLOSURE 1/2" = 1'-0"



21 L-601 ELEVATION - SHOWER WALL SOUTH 1/4" = 1'-0"



22 L-601 ELEVATION - SHOWER WALL NORTH 1/4" = 1'-0"



23 L-601 SECTION - SHOWER WALL 3/4" = 1'-0"

FINISH LEGEND

PT-4 **EXTERIOR PAINT:**
MANUFACTURER: SHERWIN WILLIAMS
PRODUCT: SW 7018 E29
COLOR: DOVETAIL
LOCATION/REMARKS: EXTERIOR DOORS & FRAMES
REP: HANK MEINKING (314) 281-7485

CMU-2 **CMU:**
MANUFACTURER: TRENWYTH INDUSTRIES
DESCRIPTION: GROUND FACE MASONRY UNITS
PRODUCT: TRENDSTONE
COLOR:HAYDITE
LOCATION/REMARKS: EXTERIOR SHOWERS
REP:

CS-1 **CAST STONE:**
MANUFACTURER: MIDWEST CAST STONE
DESCRIPTION: CAST STONE COPING
COLOR: TBD
LOCATION/REMARKS: TOP OF EXTERIOR SHOWER WALLS

WD-1 **WOOD:**
MANUFACTURER: ARBORWOOD CO.
DESCRIPTION: THERMALLY MODIFIED 6" SHIPLAP ASH WOOD SIDING
SPECIES: ASH LIGHT 190
LOCATION/REMARKS: EXTERIOR SIDING
REP:

NOT FOR CONSTRUCTION

Happy Hounds Playground
2448 Pond Rd.
Wildwood, MO 63040

ARCTURIS
together we create
720 OLIVE STREET, SUITE 200 SAINT LOUIS, MO 63101
T 314 209 7100 F 314 231 9501

CIVIL ENGINEER
CLAYTON ENGINEERING GROUP- (314) 692-6688

STRUCTURAL ENGINEER
AEDIFICA CASE - (636) 349-1600

Aedifica engineering | case
St. Louis - Montreal
796 Mema Court
St. Louis, MO 63026
T 636.349.1600
F 636.349.1720
mail@case-mae.com
mechanical
electrical
plumbing
fire protective
structural
CERTIFICATE OF AUTHORITY NO. E-2000155319-D

ARCHITECT OF RECORD:
RUSSELL G. VOLMERT
MISSOURI LA-000172

ISSUE DATE	DESCRIPTION
4.16.2015	SITE PRICING SET - 75% CDS
6.12.2015	BUILDING PRICING SET
6.13.2015	SITE DEV PLAN -REVISED
1.19.2016	SITE DEV PLAN -REVISED

Revision Schedule

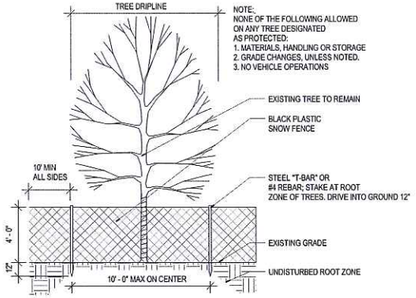
No.	Date	Description

Key Plan:

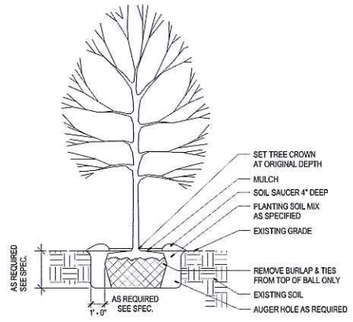
Project Number: 14-2267.00

Sheet Title:
SITE STRUCTURES P-12

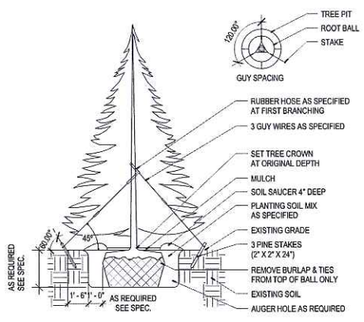
L-601



1 L-801 DETAIL - LANDSCAPE - TREE PROTECTION
1/4" = 1'-0"



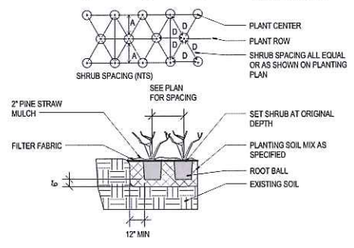
2 L-801 TREE PLANTING
1/4" = 1'-0"



3 L-801 EVERGREEN TREE PLANTING
1/4" = 1'-0"

SPACING "D"	ROW "A"	NUMBER OF PLANTS PER SQ
24"	20.8"	.290
30"	26"	.185
36"	30"	.120
4'	41.5"	.073
5'	52"	.046

QUANTITY OF SHRUBS AND SPACING AS NOTED IN PLANTING SCHEDULE

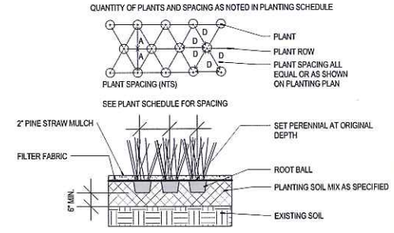


4 L-801 SHRUB PLANTING
1/4" = 1'-0"

SPACING "D"	ROW "A"	NUMBER OF BULBS PER SQ. FT.
18"	15.6"	0.50
12" O.C.	10.4"	1.15
10" O.C.	8.7"	1.66
8" O.C.	6.9"	2.60

NOTES:
QUANTITIES WERE DETERMINED BY MULTIPLYING AREA (SQ. FT.) BY NUMBER OF PLANTS PER SQ. FT. FOR REQUIRED SPACING

QUANTITY OF PLANTS AND SPACING AS NOTED IN PLANTING SCHEDULE

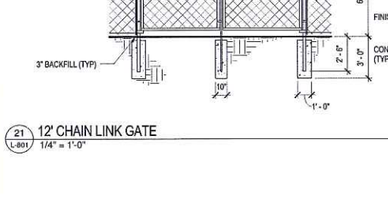


5 L-801 PERENNIAL PLANTING
1/2" = 1'-0"

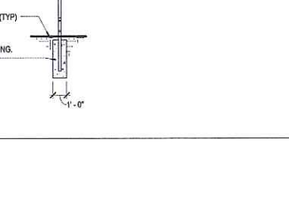
SPACING "D"	ROW "A"	NUMBER OF BULBS PER SQ. FT.
12" O.C.	10.4"	1.15
10" O.C.	8.7"	1.66
8" O.C.	6.9"	2.60

NOTES:
QUANTITIES WERE DETERMINED BY MULTIPLYING AREA (SQ. FT.) BY NUMBER OF PLANTS PER SQ. FT. FOR REQUIRED SPACING

QUANTITY OF PLANTS AND SPACING AS NOTED IN PLANTING SCHEDULE



6 L-801 GROUNDCOVER PLANTING
1/2" = 1'-0"



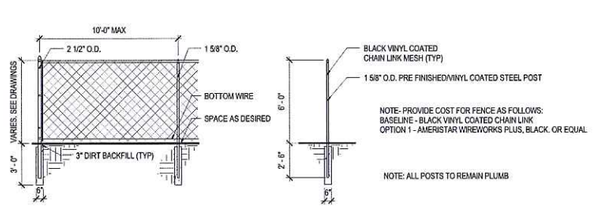
7 L-801 SPADE CUT EDGE
1 1/2" = 1'-0"

8 L-801 STEEL EDGING
1 1/2" = 1'-0"

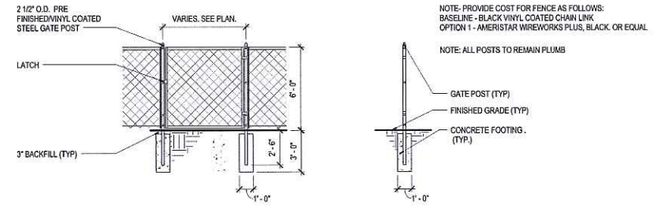
PLANTING SCHEDULE

SYMBOL	QUANTITY	BOTANICAL NAME	CULTIVAR	COMMON NAME	SIZE/CALIPER	METHOD	SPACING	DETAIL	COMMENTS
TREES									
AR	21	Acer rubrum	'Red Sunset'	Red Maple	3" Cal.	BB	As Shown	2/L-801	
CV	12	Crataegus viridis	'Winter King'	Winter King Hawthorn	2.5" Cal.	BB	As Shown	2/L-801	
JT	10	Juniperus virginiana	'Taylor'	Columnar Red Cedar	6'	BB	As Shown	3/L-801	
JV	34	Juniperus virginiana	'Canaerti'	Canaerti Red Cedar	6'	BB	As Shown	3/L-801	
NS	14	Nyssa sylvatica	'Wildfire'	Blackgum	2.5" Cal.	BB	As Shown	2/L-801	
PS	11	Pinus strobus		White Pine	6'	BB	As Shown	3/L-801	
SHRUBS									
JO	16	Juniperus virginiana	'Grey Owl'	Grey Owl Juniper	#5				
RA	78	Rhus Aromatica	'Gro Low'	Fragrant Sumac	#3	Cont.	36" O.C.	4/L-801	
VD	38	Viburnum denatum		Arrowwood Viburnum	#5	Cont.	As Shown	4/L-801	
PERENNIAL									
NR	16	Nepeta racemosa	'Walker's Low'	Catmint	SP4	Cont.	30" O.C.	5/L-801	
RF	71	Rudbeckia fulgida	var. Sullivantii 'Goldsturm'	Black-eyed Susan	SP4	Cont.	24" O.C.	5/L-801	
ORNAMENTAL GRASSES									
PV	36	Panicum virgatum	'Northwinds'	Northwinds Switchgrass	#1	Cont.	30" O.C.	5/L-801	
SS	35	Schizachyrium scoparium	'Mnnblue\' BLUE HEAVEN	Blue Heaven Little Bluestem	#1	Cont.	24" O.C.	4/L-801	
GROUNDCOVER									
SH	366	Sporobolus heterolepis		Prairie Dropseed	PLUG	Cont.	24" O.C.	4/L-801	

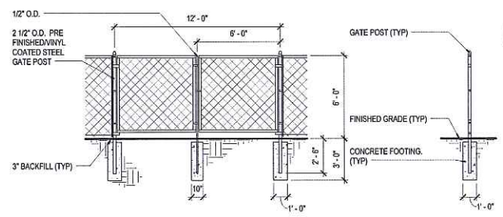
NOTE: SEE SHEET L-302 FOR BIORETENTION AREA PLANTING SCHEDULE



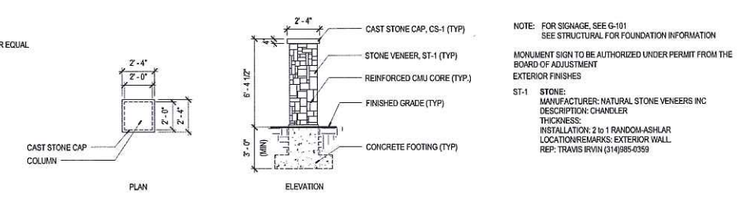
16 L-801 CHAIN LINK FENCE
1/4" = 1'-0"



17 L-801 CHAIN LINK MEMBER GATE
1/4" = 1'-0"



21 L-801 12' CHAIN LINK GATE
1/4" = 1'-0"



22 L-801 FREE STANDING STONE COLUMN
1/4" = 1'-0"

NOT FOR CONSTRUCTION

Happy Hounds Playground
2448 Pond Rd.
Wildwood, MO 63040

ARCTURIS
together we create
720 OLIVE STREET, SUITE 200 SAINT LOUIS, MO 63101
T 314 206 7100 F 314 231 9801

CIVIL ENGINEER
CLAYTON ENGINEERING GROUP- (314) 692-6868

STRUCTURAL ENGINEER
AEDIFICA CASE - (636) 349-1600

Aedifica engineering | case
St. Louis • Montreal
796 Mews Court
St. Louis, MO 63026
T 636.349.1600
F 636.349.1750
mail@aecase.com
mechanical
electrical
plumbing
fire protection
structural
CERTIFICATE OF AUTHORITY NO. E-2001155319-D

ARCHITECT OF RECORD:

RUSSELL G. VOLMERT
MISSOURI LA-000172

ISSUE DATE	DESCRIPTION
4.16.2015	SITE PRICING SET - 75% CDS
6.12.2015	BUILDING PRICING SET
6.13.2015	SITE DEV PLAN -REVISED
1.19.2016	SITE DEV PLAN -REVISED

Revision Schedule

No.	Date	Description

Key Plan:

Project Number: 14-2287.00

Sheet Title:
LANDSCAPE DETAILS P-13

L-801