EXISTING CONDITIONS NOTES

1. BEARING SYSTEM ADOPTED ALONG THE SOUTHWEST RIGHT OF WAY LINE OF I-64 (ROUTE 40) PER MODOT PLANS, JOB J6P0672H DATED 6-2-02. (S36°11'38"E)
2. THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY THE LAND SURVEYOR.
3. NO INVESTIGATION HAS BEEN PERFORMED BY COCHRAN REGARDING HAZARDOUS WASTE, UNDERGROUND CONDITIONS OR UTILITIES AFFECTING THE TRACT SHOWN HEREON.
4. THIS PROPERTY LIES WITHIN "ZONE X"(UNSHADED) AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD, "ZONE X"(SHADED) AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE; FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE, PER FLOOD INSURANCE RATE MAP FOR ST. CHARLES COUNTY, MISSOURI, PANEL 220 OF 525, COMMUNITY PANEL NUMBER 29183C0220G, EFFECTIVE DATE JANUARY 20, 2016. EXTENTS OF FLOOD PLAIN LIMITS SHOWN HEREON.
5. UNDERGROUND STRUCTURES, FACILITIES, AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE PLANS AND OBSERVED EVIDENCE. ALONGWITH LOCATES FROM LOCAL UTILITY COMPANIES, AND MISSOURI ONE CALL. THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY AND MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN.
6. MISSOURI ONE CALL TICKET NO.: 1724311131 THROUGH 172431140
7. PROJECT BENCHMARK IS MISSOURI GEOGRAPHIC REFERENCE SYSTEM STATION SC-37 PUBLISHED. ELEVATION = 631.23.
8. TOPOGRAPHIC INFORMATION IS PER SURVEY BY COCHRAN IN NOVEMBER, 2017.

Rock Preparation and Compaction:

Prior to fill placement, vegetation should be stripped and sloped areas should be benched. The fill materials placed at the site will consist primarily of a rock/soil mixture and blasted rock generated from the site. The shot rock fill materials should be well graded with particle sizes ranging from sand and silt to boulders less that 18 inches in diameter. Boulders larger than 18 inches in diameter should be separated and broke using a track hoe with a breaker or by other means or the boulders should be placed in non-critical fill areas, as approved by a soil technician. We recommend that boulders larger than 18 inches not be placed in areas where they will be encountered when excavating to install utilities or construct basements, or within 2 or 3 feet of the street subgrade level. Where the larger boulders are placed, care should be taken to ensure that voids are not present around them. It may be necessary to place gravel to in fill or "choke off" voids around the larger boulders.

Ripped rock and shot rock should be placed in horizontal lifts not exceeding 18 inches in loose thickness and compacted by a minimum of five passes of a vibratory roller weighing at least 10 tons. Proper compaction may not be achieved without vibratory roller. Due to the varying graduation of fill materials, density tests will generally be considered inappropriate to determine the quality of the fill. Therefore, performance criteria will be used to evaluate the fill. This involves observing the placement of each lift of fill and the effects of the compaction equipment prior to placing additional fill.

Soil Preparation and Compaction:

Remove all stumps, bushes, trees, weeds, roots and other surface obstructions from the site. Contractor to strip all topsoil from the entire area to be graded. After the removal of all foreign organic matter, and after stripping of topsoil, the entire surface to be filled, or areas that are cut to subgrade shall be scarified to a minimum depth of 12 inches and the compacted by proof rolling with suitable compaction equipment weighing not less than 400 psi based on the contact area of one row of feet, or pneumatic-tired roller of equivalent compaction characteristics.

The maximum thickness of fill shall be in lifts not to exceed 8 inches. The proof rolling and the fill compaction operations under the building and paved areas shall produce at least 95% of the Standard Proctor Maximum Dry Density Test (ASTM D-698). Any soft areas encountered during proof rolling shall be undercut and replaced with a properly compacted fill. The compaction of the fill shall be tested during placement by a qualified soil technician to determine if the proper densification is taking place. All fill used on the site should consist of low plasticity soils as approved by the soils engineer. After proof rolling, no water should be allowed to pond on the surface. The earthwork for all building foundations and slabs shall be in accordance with architectural building plans and specifications. Compaction equipment shall be operating of the site at all times during filling operations.

GENERAL NOTES

1. THE SITEWORK ON THIS PROJECT SHALL MEET OR EXCEED THE CITY OF O'FALLON, MO STANDARDS AND SPECIFICATIONS.
2. PROJECT BENCHMARK: MISSOURI GEOGRAPHIC REFERENCE SYSTEM STATION SC-37. PUBLISHED ELEVATION = 631.23.
3. SITE BENCHMARK: CROSS IN BACK OF CURB ON THE SOUTH SIDE OF DALRIADA BLVD. BETWEEN UPLAND LOOP AND HIGHLAND PRAIRIE DR. ELEV. = 564.70
4. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING ALL BARRICADES, WARNING SIGNS, FLASHING LIGHTS AND TRAFFIC CONTROL DEVICES DURING CONSTRUCTION. CONTRACTOR TO COMPLY WITH ALL OSHA REGULATION REQUIREMENTS AND SAFETY MEETING REQUIREMENT.
5. UNDERGROUND STRUCTURES, FACILITIES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS. THEREFORE, THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN.
6. NO INVESTIGATION HAS BEEN PERFORMED BY COCHRAN REGARDING HAZARDOUS WASTE, UNDERGROUND CONDITIONS OR UTILITIES AFFECTING THE TRACT SHOWN HEREON.
7. CONTRACTOR TO CONTACT TELEPHONE, ELECTRIC, GAS, WATER AND CABLE COMPANIES TO HAVE UNDERGROUND UTILITIES LOCATED ON THIS SITE AND ADJACENT TO THIS SITE PRIOR TO DOING ANY EXCAVATING.
8. ALL UNSURFACED AREAS ARE TO RECEIVE 4 INCHES OF TOPSOIL. CONTRACTOR TO SEED, MULCH, FERTILIZE, AND MAINTAIN ALL AREAS OUTSIDE OF PAVED AREAS THAT WERE DISTURBED DURING CONSTRUCTION UNTIL AN ACCEPTABLE STAND OF GRASS IS ESTABLISHED. THE CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
9. SEE LANDSCAPING PLANS FOR LANDSCAPING REQUIREMENTS.
10. ALL GRADING, DRAINAGE, DETENTION, AND EROSION CONTROL SHALL BE IN CONFORMANCE WITH THE CITY OF O'FALLON, MO STANDARDS.
11. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES, WHICH CONFLICT WITH THE NEW IMPROVEMENTS SHOWN ON PLANS.
12. ALL TRENCHES UNDER PAVED AREAS SHALL BE BACKFILLED WITH GRANULAR MATERIAL AND COMPACTED TO MEET COMPACTION REQUIREMENTS FOR THE ROAD/PARKING LOT.
13. ALL SURVEY MONUMENTS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BY A LICENSED LAND SURVEYOR LICENSED IN THE STATE IN WHICH THIS PROJECT IS LOCATED AT THE CONTRACTOR'S EXPENSE.
14. CONTRACTOR TO OBTAIN AND FOLLOW INSTALLATION REQUIREMENTS FOR STORM SEWER FROM PIPE MANUFACTURER FOR EACH TYPE OF PIPING MATERIAL. HDPE FLARED ENDS SHALL NOT BE ALLOWED.
15. (A) STORM SEWER PIPE SHALL BE REINFORCED CONCRETE PIPE, CLASS III PER ASTM C-76, WITH FLEXIBLE PLASTIC BITUMEN GASKETS AT JOINTS.

    OR

    (B) POLYPROPYLENE PIPE (PP) SMOOTH INTERIOR: AASHTO DESIGNATION M330, MAXIMUM DIAMETER OF 36-INCHES. PIPE SHALL BE INSTALLED IN ACCORDANCE WITH PIPE MANUFACTURER'S INSTALLATION GUIDELINES FOR CULVERT STORM DRAINAGE APPLICATIONS. PIPES LARGER THAN 36-INCHES WILL BE REQUIRED TO BE REINFORCED CONCRETE PIPE.
16. CONTRACTOR SHALL COORDINATE ADJUSTMENTS TO EXISTING UTILITIES WITH APPROPRIATE UTILITY COMPANY AS WORK PROGRESSES.
17. CONTRACTOR SHALL COORDINATE THE SCHEDULING AND LOCATION OF THE DEMOLITION AND INSTALLATION OF ALL UTILITIES, INCLUDING STAKEOUT, CONDUIT REQUIRED, TRENCHING REQUIRED, ETC. CONTRACTOR SHALL CONTACT EACH UTILITY PROVIDER WITH AT LEAST 30 DAYS ADVANCE NOTICE OF ANY WORK TO BE DONE.
18. CONTRACTOR SHALL PROVIDE A MINIMUM OF 18" OF CLEARANCE BETWEEN SANITARY SEWER AND WATERLINES AND A MINIMUM OF 18" OF CLEARANCE BETWEEN STORM SEWERS AND WATERLINES. THIS MAY MEAN THAT LOWERING OF WATERLINES MAY BE NECESSARY.
19. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR SANITARY SEWER, WATER MAIN, AND STORM SEWER STRUCTURES TO COCHRAN FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OF ANY STRUCTURES.
20. STORM AND SANITARY SEWER PLAN INFORMATION DEPICTS PIPE LENGTHS AND GRADES CALCULATED FROM THE CENTER OF ALL STRUCTURES.
21. ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS.
22. UTILITY CONTRACTOR SHALL HAVE APPROVAL OF ALL GOVERNING AGENCIES HAVING JURISDICTION OVER THIS SYSTEM PRIOR TO INSTALLATION.
23. ALL NECESSARY INSPECTIONS, TESTING, AND/OR CERTIFICATIONS REQUIRED BY CODES, THE COUNTY, AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES.
24. CONTRACTOR IS ENCOURAGED TO VISIT THE SITE PRIOR TO SUBMITTING THEIR BID FOR THIS PROJECT.
25. CONTRACTOR SHALL MAINTAIN THE SITE IN A WELL-DRAINED MANNER IN ORDER TO ASSUME THE SHORTEST POSSIBLE DRYING TIME AFTER EACH RAINFALL. THIS WILL MEAN THAT PUMPING OF STANDING WATER IN LOW AREAS ON THE SITE WILL MOST LIKELY BE REQUIRED DURING CONSTRUCTION.
26. CONTRACTOR SHALL SAW CUT ALL CURB AND GUTTER SECTIONS, CONCRETE MEDIANS AND ALONG PAVEMENT WHERE NEW CONSTRUCTION TIES INTO EXISTING AREAS. CONTRACTOR SHALL MAINTAIN TRAFFIC FLOW AND PROVIDE TRAFFIC CONTROL THROUGHOUT CONSTRUCTION.
27. ALL EXISTING STRUCTURES UNLESS OTHERWISE NOTED TO REMAIN, (I.E. FENCING, TREES, CONCRETE, ASPHALT PAVEMENT, UTILITIES, ETC.) WITHIN THE CONSTRUCTION AREA SHALL BE REMOVED AND DISPOSED OFF-SITE IN A MANNER MEETING LOCAL AND STATE REGULATIONS. ANY BURNING ON SITE SHALL BE SUBJECT TO LOCAL AND STATE ORDINANCES AND THE OWNER'S SPECIFICATIONS.
28. ALL CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE NOTED.
29. EXISTING GRADE CONTOURS SHOWN AT 2 FEET INTERVALS. NEW GRADE CONTOURS SHOWN AT 2 FEET INTERVALS.
30. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
31. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL GREEN SPACE AND PAVED AREAS.
32. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO KEEP ALL MUD AND SILT ON SITE AND OFF OF STREETS.
33. LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AGENCIES AND UNTIL ALL EROSION CONTROL MEASURES HAVE BEEN TAKEN.
34. NEW WATER LINES SHALL BE SDR 21 CLASS 200 PVC PIPE. NEW WATERLINES LESS THAN 2" SHALL BE TYPE "K" COPPER TUBING. ALL WATERLINES CONSTRUCTED SHALL HAVE A MINIMUM OF 42 INCHES OF COVER BELOW FINISHED GRADE, UNLESS OTHERWISE INDICATED ON PLANS.
35. SANITARY SEWER PIPE SHALL BE SDR 35 PVC PER ASTM D 3034 OR SCHEDULE 50 DUCTILE IRON PIPE. SEE PLANS FOR LOCATION OF EACH PIPE TYPE.
36. PARKING IS TO BE STRIPED WITH 4" WIDE PAINTED YELLOW LINES AS INDICATED.

DEVELOPMENT NOTES

1. Pool/Clubhouse/Amenity Area: 5.89 Acres
2. Existing Zoning: R-3 P.U.D.
3. Proposed Uses: Common Ground Amenity Area
4. Current Owner:
   DD Land Development, LLC
   Attn: William Allen
   10407 Baur Blvd. Suite B
   Saint Louis, MO 63132
5. Boundary information is per ALTA survey as completed by Cochran during September 2017.
6. The developer shall comply with current Tree Preservation Ordinance and provide landscaping as set forth by the City of O'Fallon Zoning Ordinances.
7. Detention for this development to be provided by Wet Basin #2 within the common ground area. Detention requirements shall meet the City of O'Fallon regulations.
8. All new utilities will be underground.
9. Sidewalks not within public right-of-way are private.
10. A ten (10) foot wide general utility easement will be provided along all public right-of-ways.
11. All signage shall be reviewed and approved through a separate permitting process.
12. Street trees and Preservation requirements: See Landscape Plan

GEOTECHNICAL REQUIREMENTS

1. Expansive clay soils were encountered across the development. If expansive clay soils are encountered, they shall be removed to a minimum depth of 3 feet beneath the bottom of the floor slab, and to a depth of 2 feet below the shallow building foundations. The overexcavation shall extend at least 2 feet beyond the building and/or foundation footprints to facilitate uniform compaction of replacement materials, and may require additional widening at the corners to allow equipment access for proper compaction. The overexcavation shall be backfilled with properly compacted low plastic soil or 1-inch minus crushed limestone. As an alternative, the overexcavation for shallow foundations may be backfilled with lean concrete, which would not require widening of the footing overexcavations.

   Contractor shall provide alternate bid for remediation of plastic soils in case of encountering during construction.

OWNER/DEVELOPER:
DD LAND DEVELOPMENT, LLC
10407 BAUR BLVD. SUITE B
ST. LOUIS, MO 63132

636-584-0540 (tel.)
636-584-0542 (fax)
mail@cochranengineering.com
5304 E. Independence Dr.
Union, Missouri 63084
COCHRAN
• Civil Engineering • Land Surveying • Architecture • Site Development • General Consulting • Master Planning
Missouri State Certificate of Authority Numbers:
Survey : 000380
Engineering : 001655
Architecture: 2002014240

There working days prior to the start of any excavation on this site, contractor shall contact Missouri One Call for utility location information.

All OSHA rules & regulations established for the type of construction project shown on plans shall be strictly followed (ie. Trenching, Blasting, etc.)

STATE OF MISSOURI
TIMOTHY SCHOWE
Timothy Schowe
NUMBER PE-2018000268
8-18-21
PROFESSIONAL ENGINEER

THE STREETS OF CALEDONIA
POOL CLUBHOUSE
O'FALLON, MISSOURI

DATE:	REVISION:	DRWN. BY:	APPD. BY:
08-18-21	△1 CITY COMMENTS/CLARIFICATIONS	JMM	ERR

GENERAL NOTES

DRWN. BY: JMM
APPD. BY: ERR
DATE: AUG. 04, 2021
SCALE: NO SCALE
PROJ. NO: 17-6821
DWG. NO: C1.01

Drawing name: F:\17-6821 - 260 Acre Tract along Hwy 40, O'Fallon, MO\AutoCad Drawings\6821 - Plan Sheets\Construction Drawings\Pool & Clubhouse Plans\01_General Notes - Pool Clubhouse.dwg Tab: COCHRAN NOTES Plotted on: Aug 20, 2021 - 7:10am Plotted by: tschowe