

CONSTRUCTION NOTES

- 1. INTEGRAL CURB SECTION IS AN ACCEPTABLE ALTERNATIVE TO CURB & GUTTER IN AREAS IDENTIFIED ON THE PLANS AS CURB & GUTTER.
2. EXISTING UTILITIES ARE SHOWN IN THEIR APPROXIMATE LOCATIONS. THE CONTRACTOR WILL BE RESPONSIBLE FOR CONTACTING THE VARIOUS UTILITY COMPANIES AND VERIFYING LOCATIONS BEFORE STARTING CONSTRUCTION.
3. CONTRACTOR SHALL UTILIZE TOPSOIL FROM SITE IN LANDSCAPED AREAS WITH ANY EXCESS STOCKPILED ON SITE.
4. IMMEDIATELY UPON COMPLETION OF FINISH GRADING IN EACH AREA, ALL LANDSCAPING AREAS SHALL BE SEEDED AND MULCHED.
5. CONTRACTOR WILL REMOVE ALL TRASH, DEBRIS, TREES & BRUSH AND OTHER MATERIAL CREATED AS A RESULT OF THE CONSTRUCTION WORK AND THE SITE WILL BE RETURNED TO ITS ORIGINAL CONDITION.
6. ALL PERIMETER LANDSCAPED AREAS SHALL BE GRASS COVERED.
7. ALL DIMENSIONS ARE TO BACK OF CURB OR FACE OF THICKENED SIDEWALK.
8. PAVED AREAS TO BE PAINTED WITH 4" WIDE SINGLE WHITE SOLID LINES.
9. PEDESTRIAN CROSSWALK TO BE PAINTED WITH 4" WIDE PAINTED WHITE OR YELLOW STRIPING PARALLEL TO DIRECTION OF TRAFFIC AT 2'-0" O.C.
19. ALL SIGN POST AND BACKS AND BRACKET ARMS SHALL BE PAINTED BLACK USING CARBONLINE RUSTPROOF PENETRATING SEALER SG AND CARBONLINE 133 HB PAINT (OR EQUIVALENT AS APPROVED BY CITY). SIGNS DESIGNATING STREET NAMES SHALL BE ON THE OPPOSITE SIDE OF THE STREET FROM TRAFFIC CONTROL SIGNS.
20. WHERE WATER MAINS MUST CROSS OVER STORM DRAINS, OR SANITARY SEWERS, THE WATER MAIN MUST BE LAID AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER, AND A FULL LENGTH OF WATER MAIN PIPE MUST BE CENTERED OVER THE SEWER TO BE CROSSED SO BOTH OF THE JOINTS WILL BE EQUALLY DISTANT FROM THE SEWER AND AS REMOTE FROM THERE AS POSSIBLE WHERE CONDITIONS PREVENT THE MINIMUM VERTICAL SEPARATION FROM BEING MAINTAINED OR WHERE IT IS NECESSARY FOR THE WATER MAIN TO PASS UNDER A SEWER LINE, THE WATER MAIN MUST BE BACKFILLED WITH COMPACTED CLAY TO A MINIMUM OF 18 INCHES ABOVE AND BELOW THE OUTSIDE DIMENSION OF THE WATER MAIN AND FOR A HORIZONTAL DISTANCE OF 10 FEET FROM THE SEWER BEING CROSSED. IN NO CASE SHALL THE WATER MAIN AND THE SEWER SHARE THE SAME GRANULAR FILL BED. IN MAKING SUCH CROSSINGS, A FULL LENGTH OF PIPE MUST BE CENTERED OVER OR UNDER THE SEWER TO BE CROSSED SO THAT THE JOINTS WILL BE EQUALLY DISTANT FROM THE SEWER AND AS REMOTE THERE FROM AS POSSIBLE. WHERE A WATER MAIN MUST CROSS UNDER A SEWER, A VERTICAL SEPARATION OF AT LEAST 18 INCHES BETWEEN THE BOTTOM OF THE SEWER LINE AND THE TOP OF THE WATER MAIN MUST BE MAINTAINED WITH ADEQUATE SUPPORT FOR THE LARGER SIZE SEWER LINES TO PREVENT THEM FROM SETTling. IN NO CASE SHALL THE WATER MAIN AND THE SEWER MAIN SHARE THE SAME GRANULAR BED.
21. ALL PAVING TO BE IN ACCORDANCE WITH THE ST. CHARLES COUNTY STANDARDS AND SPECIFICATIONS, EXCEPT AS MODIFIED BY THE CITY OF O'FALLON ORDINANCES.
22. ALL STORM SEWER INLETS SHALL BE MARKED WITH ONE OF THE FOLLOWING (OR APPROVED EQUAL BY ALMETEK INDUSTRIES):
MANUFACTURER SIZE ADHESIVE STYLE MESSAGE
ACP INTERNATIONAL 3 7/8" EPOXY CRYSTAL CAP "NO DUMPING-DRAINS TO WATER WAYS (SD-W-CG)
DAS MANUFACTURING, INC. 4" EPOXY STANDARD STYLE "NO DUMPING -DRAINS TO STREAM" (#SDS)
PEEL & STICK PADS WILL NOT BE ALLOWED
23. SIDEWALKS, CURB RAMPS, RAMP, AND ACCESSIBLE PARKING SPACES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT APPROVED "AMERICAN WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES" (ADAAG) ALONG WITH THE REQUIRED GRADES, CONSTRUCTION MATERIALS, SPECIFICATIONS AND SIGNAGE IF ANY CONFLICT OCCURS BETWEEN THE ABOVE INFORMATION AND THE PLANS, THE ADAAG GUIDELINES SHALL TAKE PRECEDENCE AND THE CONTRACTOR, PRIOR TO ANY CONSTRUCTION, SHALL NOTIFY THE PROJECT ENGINEER, PROVIDE AT LEAST ONE 6' WIDE ADA ACCESS AISLE AND CURB RAMPS SHALL NOT PROJECT INTO ADA ACCESS AISLE.
24. HANDICAP PARKING SIGNS WITH A FINE LEGEND (\$50 - \$300) SHALL BE PROVIDED FOR ALL ACCESSIBLE PARKING SPACES.
25. LIGHTING VALUES WILL BE REVIEWED ON SITE PRIOR TO THE FINAL OCCUPANCY INSPECTION. CORRECTIONS WILL NEED TO BE MADE IF NOT IN COMPLIANCE WITH CITY STANDARDS.
26. ALL SIGN LOCATIONS AND SIZES MUST BE APPROVED SEPARATELY THROUGH THE PLANNING DIVISION.
27. TRAFFIC CONTROL SHALL BE PER MISSOURI DEPARTMENT OF TRANSPORTATION OR MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, WHICHEVER IS MOST STRINGENT.
28. DEVELOPER MUST SUPPLY CITY CONSTRUCTION INSPECTORS WITH SOIL REPORTS PRIOR TO OR DURING SITE SOIL TESTING. THE SOIL REPORT WILL BE REQUIRED TO CONTAIN THE FOLLOWING INFORMATION ON SOIL TEST RESULTS (PROCTOR REPORTS) FOR PROJECTS WITHIN THE CITY:
* MAXIMUM DRY DENSITY
* OPTIMUM MOISTURE CONTENT
* MAXIMUM AND MINIMUM ALLOWABLE MOISTURE CONTENT
* CURVE MUST BE PLOTTED TO SHOW DENSITY FROM A MINIMUM OF 90% COMPACTION AND ABOVE AS DETERMINED BY THE "MODIFIED AASHTO T-180 COMPACTION TEST" (A.S.T.M.-D-1517) OR FROM A MINIMUM OF 95% AS DETERMINED BY THE "STANDARD PROCTOR TEST ASHTO T-99, METHOD C" (A.S.T.M.-D-698), PROCTOR TYPE MUST BE DESIGNATED ON DOCUMENT.
* CURVE MUST HAVE AT LEAST 5 DENSITY POINTS WITH MOISTURE CONTENT AND SAMPLE LOCATIONS LISTED ON DOCUMENT.
* SPECIFIC GRAVITY.
* NATURAL MOISTURE CONTENT.
* LIQUID LIMIT.
* PLASTIC LIMIT.
29. ALL PROPOSED UTILITIES SHALL BE UNDERGROUND.
30. THE DEVELOPER SHALL POST A FINANCIAL GUARANTEE OF PERFORMANCE (PER AN APPROVED COST ESTIMATE) AS REQUIRED BY ARTICLE 405 OF SUBDIVISION ORDINANCE.

SWPPP NOTES

- 1. CONTRACTOR SHALL FOLLOW STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE GENERAL N.P.D.E.S. PERMIT FOR STORM WATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES. A COPY OF THIS PLAN AND PERMIT SHALL REMAIN ON SITE THROUGHOUT CONSTRUCTION.
2. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME. CONTRACTOR SHALL REFERENCE THE ST. CHARLES COUNTY SOIL AND WATER CONSERVATION DISTRICT EROSION AND SEDIMENT CONTROL GUIDELINES.
3. NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL EROSION CONTROL MEASURES HAVE BEEN INSTALLED AND APPROVAL HAS BEEN RECEIVED FROM ALL GOVERNING AUTHORITIES. CONTRACTOR SHALL UTILIZE TOPSOIL FROM SITE IN LANDSCAPED AREAS WITH ANY EXCESS BEING REMOVED FROM SITE.
4. IMMEDIATELY UPON COMPLETION OF FINISH GRADING IN EACH AREA, ALL LANDSCAPING AREAS SHALL BE SEEDED AND MULCHED.
5. SHOULD CONSTRUCTION STOP FOR LONGER THAN 14 DAYS, THE SITE SHALL BE SEEDED AS SPECIFIED IN THE SWPPP.
6. INSPECT AND MAINTAIN EROSION CONTROL MEASURES WITHIN 24 HOURS OF ANY RAIN STORM RESULTING IN 1/2 INCH OF RAIN OR MORE AND AT LEAST ONCE A WEEK.
7. CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL ORDINANCES THAT APPLY.
8. CONTRACTOR SHALL ASSUME COMPLETE RESPONSIBILITY FOR CONTROLLING ALL SILTATION AND EROSION OF THE PROJECT AREA. CONTRACTOR SHALL USE WHATEVER MEANS NECESSARY TO CONTROL SILTATION AND EROSION INCLUDING, BUT NOT LIMITED TO, STAKED STRAW BALES AND/OR SILTATION FENCES (POSSIBLE METHODS OF CONTROL ARE DETAILED ON THE PLAN). CONTROL SHALL COME WITH GRADING AND BE MAINTAINED THROUGHOUT THE PROJECT UNTIL ACCEPTANCE OF THE WORK BY THE OWNER AND/OR THE CITY OF O'FALLON AND/OR MODOT. CONTRACTOR'S RESPONSIBILITIES INCLUDE ALL DESIGN AND IMPLEMENTATION AS REQUIRED TO PREVENT EROSION AND DEPOSITING SILT. THE OWNER AND/OR THE CITY OF O'FALLON AND/OR MODOT MAY AT THEIR OPTION DIRECT THE CONTRACTOR IN HIS METHODS AS DEEMED FIT TO PROTECT PROPERTY AND IMPROVEMENTS. ANY DEPOSITING OF SILT OR MUD ON NEW OR EXISTING STORM SEWERS OR SWALES SHALL BE REMOVED AFTER EACH RAIN AND AFFECTED AREA CLEANED TO THE SATISFACTION OF THE OWNER AND/OR THE CITY OF O'FALLON AND/OR MODOT.
9. CONTRACTOR SHALL PROVIDE A 20' x 40' TEMPORARY TRUCK WASH OFF AREA, CONSTRUCT PER CONSTRUCTION ENTRANCE DETAIL. CONTRACTOR SHALL PROVIDE WATER TO THE TEMPORARY WASH OFF AREA. IF ON-SITE WATER IS NOT AVAILABLE, CONTRACTOR SHALL PROVIDE A WATER TRUCK. SITE WILL BE ACCESSED VIA EXISTING PAVEMENT.
10. NO SLOPES SHALL BE STEEPER THAN 3:1.
11. CONTRACTOR SHALL REMOVE ALL TRASH, DEBRIS, TREES & BRUSH AND OTHER MATERIAL CREATED AS A RESULT OF THE CONSTRUCTION WORK AND THE SITE SHALL BE RETURNED TO ITS ORIGINAL CONDITION.
12. ALL PERIMETER LANDSCAPED AREAS SHALL BE GRASS COVERED.
13. THE STORM WATER DETENTION SYSTEM WAS CONSTRUCTED WITH A PRIOR PHASE AND IS EXISTING. THIS DETENTION SYSTEM IS LOCATED UNDERGROUND AND IS WITHIN GENTEMANN MANOR PHASE 3 AREA.

NECAC ADDITION SITE PLAN 1 FEBRUARY 2008 REVISED 9 APRIL 2008

SEED MIX SPECIFICATIONS

Table with columns: GENERAL, SEEDING MIXTURES SPECIFICATIONS, TYPE 1A, LAWN MIXTURE, SUNNY CONDITIONS, TYPE OF SEED, APPLICATION RATE (lb/acre)

Table with columns: TYPE 2, EROSION CONTROL MIXTURE, TYPE OF SEED, APPLICATION RATE (lb/acre)

Table with columns: TYPE 5, STABILIZING CROP (TEMPORARY), TYPE OF SEED, APPLICATION RATE (lb/acre)

MULCH SEEDED AREA WITH 2 TONS PER ACRE CLEAN GRAIN STRAW. ANCHOR STRAW WITH HYDRAULIC WOOD FIBER MULCH AT THE RATE OF 1000 LBS PER ACRE, OR 150-200 POUNDS OF ORGANIC MULCH TACKIFIER PER ACRE, OR USE NETTING.

SEED BED PREPARATION (PERMANENT SEEDING) SURFACE WATER CONTROL MEASURES SHALL BE IN PLACE. AREA TO BE SEEDED SHALL BE RIPPED AND SPREAD WITH AVAILABLE TOPSOIL. TOTAL SEEDED PREPARED DEPTH SHOULD BE AT LEAST 4 INCHES. LOOSE ROCKS, ROOTS AND OTHER OBSTRUCTIONS NEED TO BE REMOVED FROM THE SURFACE SO THAT THEY WILL NOT INTERFERE WITH THE ESTABLISHMENT AND MAINTENANCE OF VEGETATION. SURFACE FOR FINAL SEEDED PREPARATION SHOULD BE AT FINISH GRADE AND BE REASONABLY SMOOTH AND UNIFORM.

IF NO SOIL TEST IS TAKEN, FERTILIZER AND LIME SHOULD BE ACCORDING TO SEEDING SPECIFICATIONS. IF SOIL TEST IS TAKEN, APPLY FERTILIZER AND LIME ACCORDING TO SOIL TEST REPORT. FERTILIZER AND LIME SHALL BE APPLIED UNIFORMLY AND MIXED WITH THE SOIL DURING SEEDED PREPARATION. WEIGHTS, SEED SPECIES AND PERCENTAGE OF PURITY AND GERMINATION MUST BE CHECKED PRIOR TO SEEDING.

SEEDING SHALL BE ACCOMPLISHED IN TWO DIRECTIONS AND AT RIGHT ANGLES TO EACH OTHER. LAWN AREAS SHALL BE SEEDED AT THE RATE INDICATED ON THE DRAWINGS BY SOWING EVENLY WITH AN APPROVED MECHANICAL CULT-PACKER SEEDER TO COVER THE SEED AND FORM THE SEEDED IN ONE OPERATION. IF BROADCAST SEEDER IS USED, THE SEEDING RATE SHALL BE TWO (2) TIMES THE DRILL RATE. IN INACCESSIBLE AREAS, THE SEED SHALL BE LIGHTLY RAKED WITH FLEXIBLE RAKES AND ROLLED WITH A WATER BALLAST ROLLER. AFTER ROLLING SEEDED AREAS ARE TO BE MULCHED ACCORDING TO SPECIFICATION. IF HYDROSEED OPERATION IS USED, SEEDING RATE SHALL BE FIVE (5) TIMES THE DRILL RATE INDICATED ON THE DRAWINGS.

IF SEEDING CAN NOT BE ACCOMPLISHED DUE TO SEASONAL CONSTRAINTS, APPLY STRAW MULCH AND TACKIFIER TO ALL SLOPES AND DISTURBED AREAS UNTIL PERMANENT SEEDING IS ALLOWED. IN THE EVENT SEEDING OCCURS OUT OF SEASON, MAINTENANCE SHALL OCCUR AND CONTINUE INTO THE FOLLOWING GROWING SEASON OR UNTIL A UNIFORM STAND OF THE SPECIFIED PERMANENT GRASSES HAS BEEN ESTABLISHED AND THE SITE HAS REACHED 85% STABILIZATION. PERMANENT AND TEMPORARY SEEDING SHALL BE ACCOMPLISHED THROUGHOUT THE CONSTRUCTION PROCESS.

INSPECTION INSPECT SEEDED AREAS FREQUENTLY. IF SEEDED AREAS FAIL TO GERMINATE, OR TO PROVIDE ADEQUATE GROUND COVERAGE, THE AREA SHALL BE RE-SEEDED UNTIL FINAL STABILIZATION IS ACHIEVED. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AT MINIMUM EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24-HOURS OF A RAINFALL EVENT OF GREATER THAN .5 INCHES OF RAIN DURING A 24-HOUR PERIOD (OR MORE FREQUENTLY IF REQUIRED BY THE STATE NPDES GENERAL PERMIT) THROUGHOUT CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED OR MORE FREQUENTLY IF REQUIRED BY STATE NPDES GENERAL PERMIT.



OWNER NORTH EAST COMMUNITY ACTION CORPORATION 16 NORTH COURT STREET BOWLING GREEN, MO 63334

ZONING NOTE

R-4 (APARTMENT HOUSE DISTRICT) WITH SENIOR OVERLAY DISTRICT

FLOOD PLAIN NOTE

THIS PROPERTY IS LOCATED IN ONE (1) OF THE "X" AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOOD PLAIN, AS SHOWN BY FLOOD INSURANCE RATE MAP NUMBER 29183C0240 E, DATED AUGUST 2, 1998.

PROPERTY DESCRIPTION

NECAC LOT (NOT PLATTED) A TRACT OF LAND LOCATED IN THE NORTHWEST QUARTER OF SECTION 30 T47N R3E, IN O'FALLON, ST. CHARLES COUNTY, MISSOURI, BEING PART OF THE TRACT DESCRIBED BY A "BOUNDARY ADJUSTMENT OF PARENT TRACT", RECORDED IN PLAT BOOK 41 PAGE 332 OF THE ST. CHARLES COUNTY RECORDS, DESCRIBED AS FOLLOWS:

STARTING AT THE NORTHEAST CORNER OF THE TRACT DESCRIBED BY A "BOUNDARY ADJUSTMENT OF PARENT TRACT", RECORDED IN PLAT BOOK 41 PAGE 332 OF THE ST. CHARLES COUNTY RECORDS, THENCE S 23°20'E, ALONG THE EASTERLY LINE THEREOF, 208.29 FEET TO THE POINT OF BEGINNING.

FROM THE POINT OF BEGINNING, THENCE S 23°20'E, CONTINUING ALONG THE EAST LINE OF THE TRACT DESCRIBED BY A "BOUNDARY ADJUSTMENT OF PARENT TRACT", RECORDED IN PLAT BOOK 41 PAGE 332, A DISTANCE OF 103.07 FEET; THENCE, LEAVING SAID LINE, N 90°00'00"W 58.50 FEET; THENCE S 0°00'00"E 37.51 FEET; THENCE N 90°00'00"W 125.39 FEET; THENCE N 191°30'00"W 73.76 FEET; THENCE N 0°00'00"E 70.86 FEET; THENCE N 90°00'00"E 203.62 FEET TO THE BEGINNING AND CONTAINING 0.60 ACRE

PARKING NOTE

REQUIRED PARKING 4,270 SF @ 1 SPACE / 300 SPACES = 14 SPACES
PROVIDED PARKING 4,270 SF / 28 SPACES = 1 SPACE / 153 SF

OPEN SPACE STANDARDS

PERMANENT PROTECTED OPEN SPACE LOT AREA = 25,977 SF
= 30%
= 7,793 SF REQUIRED - 11,000 SF PROPOSED
ACTIVE/PASSIVE OPEN SPACE OPEN SPACE = 7,793 SF
= 40%
= 3,117 SF REQUIRED - 3,200 SF PROPOSED

SANITARY FLOW NOTE

ESTIMATED SANITARY FLOW 17 EMPLOYEES TOTAL x 15 GALLONS PER DAY PER EMPLOYEE = 255 GALLONS PER DAY



BENCH MARK

BM - CUT "+ IN CONCRETE SIDEWALK EAST OF BUILDING A-1, BY OTHERS. ELEVATION=593.83

ENGINEERING SURVEYS & SERVICES UTILIZED EXISTING CONTROL ESTABLISHED BY LDC INCORPORATED. THE BENCHMARK PROVIDED FOR THIS CONTROL, AS TAKEN FROM THE ALTA/ACSM LAND TITLE SURVEY FOR GENTEMANN MANOR LOT 1 PREPARED JANUARY 1, 2005, IS AS FOLLOWS:

BENCHMARKS PROJECT BENCHMARK: STANDARD DISK STAMPED D 149 1935 2.3 MILES WEST OF O'FALLON ALONG THE WABASH RAILROAD, 42 FEET SOUTHWEST OF A PRIVATE ROAD CROSSING 25 FEET WEST OF A GATE. EL. 590.82 (NOV 29) SITE BENCHMARK: CROSS CUT IN BOLT AT BASE OF THE RAILROAD SIGNAL AT THE SOUTHEAST CORNER OF GENTEMANN ROAD AND THE WABASH RAILROAD EL=576.14 (617.87 NOV 29) TO OBTAIN U.S.G.S. ELEVATIONS FOR THIS SITE ADD 41.73 FEET.

LEGEND

Legend table listing symbols for PROPERTY LINE, SANITARY SEWER LINE, STORM SEWER LINE, WATER LINE, FENCE, DRAINAGE SWALE, LIGHT STANDARD, UNDERGROUND ROOF DRAIN, WATER VALVE, FIRE HYDRANT, CLEANOUT, HIGH DENSITY POLYETHYLENE PIPE, POLYVINYL CHLORIDE PIPE, TOP OF WALL, IRON, EXISTING CONTOUR, FINISH CONTOUR PER ES&S JOB #0600 & #0721, FINISH CONTOUR, FINISH ELEVATION, EROSION CONTROL BARRIER, PROPOSED STORM SEWER LINE.

SURVEY CONTROL POINTS

Table with columns: POINT NUMBER, NORTH, EAST, ELEVATION, DESCRIPTION

SITE COVERAGE

Table with columns: EXISTING TOTAL AREA, BUILDING FOOTPRINT AREA, LANDSCAPED AREA, PAVEMENT AREA, PROPOSED TOTAL AREA, BUILDING FOOTPRINT AREA, LANDSCAPED AREA, PAVEMENT AREA.

UTILITY NOTES

- WATER ALLIANCE WATER RESOURCES CITY OF O'FALLON CONTACT: 636-281-2858
ELECTRIC AMEREN UE CONTACT: MIKE JAMES 636-639-8235
GAS AMEREN UE CONTACT: MIKE JAMES 636-639-8235
TELEPHONE CENTURYTEL CONTACT: CARL OWENS 636-382-7392
SANITARY SEWER ALLIANCE WATER RESOURCES CITY OF O'FALLON CONTACT: 636-281-2858
STORM SEWER ALLIANCE WATER RESOURCES CITY OF O'FALLON CONTACT: 636-281-2858
FIRE DEPARTMENT CONTACT: ASSISTANT FIRE MARSHALL MARK MORRISON 636-272-3493

SHEET INDEX

Table with columns: SHEET NUMBER, SHEET DESCRIPTION

Engineering Surveys & Services 1113 Fay Street Columbia, Missouri 573-449-2646

RECEIVED

JUN 24 2008

GRADING NOTES

- 1. 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 COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
2. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
3. ALL STORM SEWER PIPES AND INLETS SHALL MEET HEAVY DUTY TRAFFIC (H20) LOADING AND BE INSTALLED ACCORDINGLY.
4. PROVIDE 5/8" DIAMETER TRASH BAR FOR ALL SIDE OPEN INLETS.
5. CONNECTION AT ALL SANITARY AND STORM SEWER STRUCTURES SHALL BE MADE WITH A-LOCK JOINTS, OR APPROVED EQUAL.
6. BRICK SHALL NOT BE USED IN THE CONSTRUCTION OF SANITARY OR STORM SEWER STRUCTURES. CONTRACTOR SHALL USE PRECAST CONCRETE STRUCTURES UNLESS OTHERWISE NOTED AND APPROVED BY THE CITY OF O'FALLON.
7. PVC PIPE SHALL BE SDR 35 OR GREATER AS REQUIRED BY DEPTH, WATER TIGHT TO MEET ASTM F1417 WATER TIGHT FIELD TEST, AND MEET THE REQUIREMENT OF CITY OF O'FALLON FOR GASKETED O-RING TYPE PIPE CONNECTION. INSTALLATION SHALL FOLLOW THE "EMBEDMENT OF PLASTIC STORM SEWER PIPE" DETAIL. HDPE MAY BE USED IN LIEU OF PVC PIPE. HDPE PIPE SHALL BE ADS N-12WT WATER TIGHT (TO MEET ASTM F1417 WATER TIGHT FIELD TEST), SMOOTH INTERIOR PIPE OR APPROVED EQUAL, TO MEET THE REQUIREMENT OF CITY OF O'FALLON FOR GASKETED O-RING TYPE PIPE CONNECTION.
8. BUILDING PAD AND PARKING AREAS SHALL BE PROOF-ROLLED WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK TO IDENTIFY ANY SOFT OR UNSUITABLE AREAS. PRIOR TO BASE ROCK PLACEMENT, THE PROOF-ROLL SHALL BE OBSERVED BY A GEOTECHNICAL ENGINEER OF THIS FIRM. AREAS IDENTIFIED AS UNSUITABLE SHALL BE OVER EXCAVATED AND RECONSTRUCTED WITH ENGINEERED FILL.
9. CONTRACTOR SHALL ADJUST ALL GRATES, MANHOLES, VALVE BOXES, ETC. TO MATCH FINISH GRADES, AS REQUIRED.
10. ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR INVERT FROM INVERT IN TO INVERT OUT.
11. ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RING & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE FLUSH WITH FINISH GRADE. LIDS SHALL BE LABELED "STORM SEWER". TOP OF BOXES SHALL BE SLOPED TO MATCH PAVEMENT GRADE.
12. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
13. ALL SITES USED FOR IMPORTING OR EXPORTING OF FILL MATERIAL SHALL HAVE AN ACTIVE MISSOURI DEPARTMENT OF NATURAL RESOURCES LAND DISTURBANCE PERMIT.
14. ALL FILL PLACED UNDER PROPOSED STORM AND SANITARY SEWER, PROPOSED ROADS, AND/OR PAVED AREAS SHALL BE COMPACTED TO 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED AASHTO T-180 COMPACTION TEST OR 100% OF MAXIMUM DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST ASHTO T-99. ALL FILL PLACED IN PROPOSED ROADS SHALL BE COMPACTED FROM THE BOTTOM OF THE FILL UP. ALL TESTS SHALL BE VERIFIED BY THE SOILS ENGINEER CONCURRENT WITH GRADING AND BACKFILLING OPERATIONS. MOISTURE CONTENT SHALL CORRESPOND TO THE COMPACTIVE EFFORT AS DEFINED BY THE STANDARD OR MODIFIED PROCTOR TEST. SOIL COMPACTION CURVES SHALL BE SUBMITTED TO THE CITY OF O'FALLON PRIOR TO THE PLACEMENT OF FILL. PROOF ROLLING MAY BE REQUIRED TO VERIFY SOIL STABILITY AT THE DISCRETION OF THE CITY OF O'FALLON.
17. CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS, TREES AND BRUSH, AND OTHER MATERIAL CREATED AS A RESULT OF CONSTRUCTION. MATERIAL SHALL BE DISPOSED IN COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS. LANDFILL TICKETS FOR SUCH DISPOSAL SHALL BE MAINTAINED ON FILE BY THE DEVELOPER. BURNING ON SITE SHALL BE ALLOWED ONLY BY PERMIT FROM THE LOCAL FIRE DISTRICT. IF A BURN PIT IS PROPOSED, THE LOCATION AND MITIGATION SHALL BE SHOWN IN THE GRADING PLANS AND DOCUMENTED BY THE SOILS ENGINEER.
18. CONTRACTOR SHALL NOT ADVANCE TRENCH EXCAVATION BEYOND AMOUNT THAT CAN ACCOMMODATE PIPE INSTALLATION AND BACKFILLING AT THE END OF EACH DAY.
19. ENGINEERED FILL SHOULD BE FREE OF FROZEN SOIL, ORGANICS, RUBBISH, LARGE ROCKS, WOOD, OR OTHER DELETERIOUS MATERIAL. COHESIVE FILLS SHOULD BE UNIFORMLY COMPACTED TO AT LEAST 98 PERCENT WITHIN THE BUILDING PAD AND 95 PERCENT IN ALL OTHER AREAS, OF THE "STANDARD" MAXIMUM DRY DENSITY AND BE WITHIN -2 TO +2 PERCENT OF OPTIMUM MOISTURE CONTENT AS DESCRIBED BY ASTM D698. GRANULAR FILLS SHOULD BE UNIFORMLY COMPACTED TO AT LEAST 98 PERCENT WITHIN THE BUILDING PAD AND 95 PERCENT IN ALL OTHER AREAS, OF THE "STANDARD" MAXIMUM DRY DENSITY AND SHOULD BE DRIER THAN +4 PERCENT OF OPTIMUM MOISTURE CONTENT. PLACE FILL MATERIAL IN LOOSE LIFTS NOT TO EXCEED 8 INCHES IN THICKNESS.
20. IMPORTED SOILS PROPOSED FOR USE AS FILL OR BACKFILL SHOULD BE REVIEWED AND ANALYZED BY THE GEOTECHNICAL ENGINEER PRIOR TO USE ON SITE. SOIL CLASSIFIED AS MH, OL, CL, OR PT (HIGH PLASTICITY SOILS AND ORGANIC SOILS) BY THE UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D2487) SHOULD NOT BE IMPORTED FOR USE AS ENGINEERED FILL. SUITABLE IMPORTED MATERIALS FOR GENERAL SITE FILL ARE THOSE THAT CLASSIFY AS GW, GM, GC, SC, AND CL IN ACCORDANCE WITH ASTM D2487. MATERIALS CLASSIFIED AS CH SHOULD BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO THEIR IMPORTATION AND ONLY USED OUTSIDE THE BUILDING PAD AT DEPTHS BELOW THE UPPER 2 FEET OF SUBGRADE. SUBJECT TO FINAL DESIGN REQUIREMENTS FOR WALL BACKFILL, SUITABLE IMPORTED MATERIALS FOR WALL AND TRENCH BACKFILL ARE THOSE THAT CLASSIFY AS GW, G1, GM, GC, SM, SW, SP, SC, AND CL IN ACCORDANCE WITH ASTM D2487.
21. FILLS PLACED IN AREAS WHERE THE NATURAL SLOPE IS GREATER THAN 5H:1V (HORIZONTAL TO VERTICAL) SHOULD BE BENCHED INTO THE EXISTING GRADE TO REDUCE THE POTENTIAL FOR SLIPPAGE BETWEEN EXISTING SLOPES AND ENGINEERED FILL. BENCHES SHOULD BE LEVEL AND WIDE ENOUGH TO ACCOMMODATE COMPACTION AND EARTH MOVING EQUIPMENT.
22. FILL AND SUBGRADE CONSTRUCTION SHOULD NOT BE STARTED ON FOUNDATION SOIL, PARTIALLY COMPLETED FILL, OR SUBGRADES THAT CONTAIN FROST OR ICE. FILL SHOULD NOT BE CONSTRUCTED OF FROZEN SOIL. FROZEN SOIL SHOULD BE REMOVED PRIOR TO FINISH FILL MATERIAL.
23. AFTER STRIPPING AND GRUBBING OPERATIONS ARE COMPLETED AND PRIOR TO FILL PLACEMENT, AREAS TO BE FILLED SHALL BE PROOF ROLLED USING A LOADED TANDEM AXLE DUMP TRUCK TO IDENTIFY SOFT AND UNSUITABLE AREAS, PER THE DIRECTION OF THE GEOTECHNICAL ENGINEER AND THE CITY OF O'FALLON. SOFT MATERIAL MAY BE MOISTURE CONDITIONED AND REUSED AS ENGINEERED FILL, UNSUITABLE AND DELETERIOUS MATERIAL SHALL BE REMOVED FROM SITE.
24. ALL NEW UTILITY TRENCHES SHOULD BE BACKFILLED IN ACCORDANCE WITH APPROPRIATE CONTROLLED ENGINEERED FILL SPECIFICATIONS.
25. FIELD DENSITY TESTS SHOULD BE CONDUCTED IN ACCORDANCE WITH ASTM D2922 AND D3017 (NUCLEAR METHODS) OR ASTM D1556 (SAND CONE METHOD). FIELD DENSITY TESTS SHOULD BE PERFORMED AT THE RATE OF ONE TEST PER 4,000 SQUARE FEET PER LIFT WITHIN THE BUILDING AND 10,000 SQUARE FEET PER LIFT BENEATH PAVEMENTS, SIDEWALKS, AND OTHER POTENTIAL STRUCTURAL AREAS WITH A MINIMUM OF 3 TESTS PER LIFT AND ONE TEST PER 150 LINEAL FEET PER LIFT FOR FOUNDATION, TRENCH AND WALL BACKFILL.

RECEIVED

JUL 11 2008

CITY OF O'FALLON COMMUNITY DEVELOPMENT DEPARTMENT ACCEPTED FOR CONSTRUCTION DATE: 6-30-08

INDICATES RESPONSIBILITY FOR DESIGN

PROFESSIONAL ENGINEER'S SEAL

CONSTRUCTION INSPECTION CITY OF O'FALLON

Const. Inspector