

WATER AND SEWER CONSTRUCTION SPECIFICATIONS

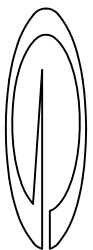
1. ALL INFRASTRUCTURE WITHIN THE SITE IS PROPOSED EXCEPT AS NOTED. GRADING OF ALL STREETS ON PLANNING AND PROFILE SHEETS SHALL PREVAIL OVER APPROXIMATE GRADING SHOWN ON THIS SHEET.
2. ALL CONSTRUCTION MATERIALS AND METHODS SHALL CONFORM WITH THE EXISTING UNITED TECHNICAL SPECS AND DETAILS, WHERE CONFLICT OCCURS BETWEEN PLANS AND THE B/C/S UNITED SPECS AND DETAILS, THE MORE CONSERVATIVE SHALL PREVAIL. A COPY OF THESE UNITED STANDARDS SHALL BE KEPT ON SITE DURING CONSTRUCTION.
3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT 811, ON-LINE FOR UNDERGROUND UTILITY LOCATING SERVICES, TO REQUEST FLAGGING UTILITY/UTCH AND TO DETERMINE THEIR EXACT DEPTH AND LOCATION PRIOR TO COMMENCING ANY WORK. ALL EXISTING UTILITY LOCATIONS SHOWN HERE ARE APPROXIMATE AND THE CONTRACTOR SHALL PROTECT THEM.
4. THE CONTRACTOR SHALL NOTIFY ALL UTILITIES AT LEAST FOUR DAYS PRIOR TO START OF CONSTRUCTION, AND REQUEST GROUND FLAGGING IF NECESSARY: BTU (ELECTRICAL) 979--821--5700
ATMOS GAS 979--774-2551
VENZON 800--463--5000
METRONET 877--386--3876
FRONTIER 800-921-8101
IF ANY ONE OF THE ABOVE NUMBERS HAS CHANGED THE CONTRACTOR SHALL OBTAIN THE CORRECT ONE.
5. THE CONTRACTOR SHALL PROVIDE ADEQUATE SHEETING, SHORING, BRACING, ETC. WHERE TRENCH DEPTH EXCEEDS 5 FEET.
6. THE CONTRACTOR SHALL MAINTAIN ACCURATE RECORDS OF ANY CONSTRUCTION CHANGES IN ORDER TO FACILITATE THE PREPARATION OF "AS-BUILT DRAWINGS" WHICH SHALL BE SUBMITTED TO THE CITY WITHIN 30 DAYS OF COMPLETION OF CONSTRUCTION CERTIFIED BY DESIGN ENGINEER.
7. THE CONTRACTOR SHALL BE RESPONSIBLE TO SECURE GEOTECHNICAL ENGINEERING SERVICES IF NEEDED.
8. THE CONTRACTOR SHALL COORDINATE ALL PROPOSED WORK AND PROCEDURES WITH THE CITY OF BRYAN.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION LAYOUT SERVICES AND OTHER SURVEYING SERVICES. IT SHALL BE RESPONSIBLE TO PROVIDE CUT SHEETS IF REQUIRED BY CITY.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTAINMENT AND PROPER DISPOSAL OF ALL LIQUID AND SOLID WASTE ASSOCIATED WITH THIS PROJECT. THE CONTRACTOR SHALL USE ALL MEANS NECESSARY TO PREVENT THE OCCURRENCE OF WIND BLOWN LITTER FROM THE PROJECT SITE.
11. BACKFILL MATERIAL SHALL BE COMPACTED TO A MINIMUM OF 90% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D 698 IN OPEN AREAS AND 98% UNDER PAVEMENT AND STRUCTURES. ALL BACKFILL SHALL BE IN 6" LIFTS.
12. ALL DIP, JOINTS & PIPE SHALL BE 8 MIL. POLY WRAPPED.
13. PROPOSED WATER LINE SHALL BE BURIED A MINIMUM OF 4' BELOW FINAL GRADE.
14. WATER SERVICES SHALL BE IDENTIFIED BY BLUE METAL T--POST MARKERS. ALL PVC PIPE SHALL BE TOPPED BY METAL DETECTOR TAPE.
15. TOP ELEVATIONS FOR EACH MANHOLE SHALL MATCH THE ADJOINING FINISHED GROUND AFTER GRADING OR ROAD/SIDEWALK CONSTRUCTION.
16. MAXIMUM SLOPE FOR NEW BERMS, BANKS AND NATURAL GROUND TO FLUMES SHALL BE 4 TO 1.
17. ALL WATER LINES SHALL BE 6" PVC AWWA C-900 DR14 CLASS 200, EXCEPT AT THE CROSSING WITH THE DOUBLE BARREL STEEL DRAINAGE PIPE WHERE THE O.D. CLEARING DISTANCE BETWEEN THE DRAINAGE PIPES (ABOVE) AND THE PROPOSED 8" WATER LINE (BELOW) WILL BE ABOUT 12". THIS WILL NECESSITATE THE USE OF A 40" SECTION OF DIP ANSI/AWWA C151, CLASS 350, AT THIS CREEK CROSSING.
18. MAXIMUM DEFLECTION ANGLE FOR 6" WATER LINE SHALL BE 2'30" PER 20' SEGMENT OR MAXIMUM DEFLECTION SHALL BE 1/2 OF RECOMMENDED BY MANUFACTURER.
19. ALL SANITARY SEWER SHALL BE 6" PVC SDR26 ASTM 3034, EXCEPT IN LINE B, AT THE CROSSING WITH THE CREEK WHERE THE LINE WILL BE 6" DIP SDR C151 AWWA CLASS 350.
20. WHERE A NEW POTABLE WATERLINE CROSSES A NEW, PRESSURE RATED WASTEWATER LINE, ONE SEGMENT OF THE WATERLINE PIPE SHALL BE CENTERED OVER THE WASTEWATER LINE SUCH THAT THE JOINTS OF THE WATERLINE PIPE ARE EQUIDISTANT AND AT LEAST NINE FEET HORIZONTALLY FROM THE CENTRLINE OF THE WASTEWATER LINE. THE POTABLE WATERLINE SHALL BE AT LEAST SIX INCHES ABOVE THE WASTEWATER LINE. WHENEVER POSSIBLE, THE CROSSING SHOULD BE CENTERED BETWEEN THE JOINTS OF THE WASTEWATER LINE.
21. RUBBLE RIP--RAP PIECES SHALL BE A MINIMUM OF 20 LBS IN ALL CASES WHERE RIP RAP IS USED. THE QUANTITY NOTED MAY CHANGE AT THE TIME OF CONSTRUCTION.
22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING SITE FIELD STAKING FROM A REGISTERED PROFESSIONAL LAND SURVEYOR.
23. BACKFILL MATERIAL SHALL BE COMPACTED TO A 98% STANDARD PROCTOR IN 6" LIFTS EVERY 200'.
24. WATER SERVICES SHALL BE IDENTIFIED BY BLUE METAL T--POST MARKERS, AND SANITARY SEWER SERVICE SHALL BE IDENTIFIED BY GREEN METAL T--POST MARKERS. ALL PVC PIPE SHALL BE TOPPED BY METAL DETECTOR TAPE.
25. TOP OF MANHOLE ELEVATIONS FOR EACH MANHOLE SHALL MATCH THE ADJOINING FINISHED GROUND AFTER GRADING, DRIVEWAY BUILDING OR FINAL PARKING GRADE.
26. ALL DIP, JOINTS & PIPE SHALL BE 8 MIL. POLY WRAPPED.
27. MANDREL AND TV TESTS OF SANITARY SEWER SYSTEM WILL BE REQUIRED FOR ACCEPTANCE.
28. MAXIMUM SLOPE FOR NEW BERMS, BANKS AND NATURAL GROUND TO FLUMES SHALL BE 3 TO 1.

STORMWATER POLLUTION PREVENTION PLAN

1. SITE AND PROJECT DESCRIPTION
IT IS EXPECTED THAT CONSTRUCTION OF THIS INFRASTRUCTURE WILL DISTURB APPROXIMATELY 2.1 ACRES AND WILL BE COMPLETED IN SIX MONTHS APPROXIMATELY.
 - A) EARTH WORK (EXCAVATION AND FILL)
 - B) STREET CONSTRUCTION
 - C) WATER LINE CONSTRUCTION
 - D) CLEANING AND LANDSCAPING
- ATTACHED IS A COPY OF THE GRADING AND UTILITIES PLAN IN A 24"x36" FORMAT. ALSO ATTACHED IS THE CONSTRUCTION SITE NOTICE, PREPARED UNDER THE PROVISIONS OF TPDES GENERAL PERMIT NO. TXR150000.
2. EROSION AND SEDIMENT CONTROL
BEST MANAGEMENT PRACTICES SHALL BE FOLLOWED TO PREVENT EROSION AND SEDIMENTATION FROM DISTURBED SOIL. TO THIS EFFECT THE FOLLOWING DEVICES SHALL BE INSTALLED.
A) A SILING BARRIER ALONG THE LOWER ENDS OF THE LAND BEING DISTURBED. THIS BARRIER WILL REMAIN IN PLACE UNTIL STABILIZATION OR REVEGETATION OCCURS.
B) A CONSTRUCTION ENTRANCE A MINIMUM OF 12'x50' CONSISTING OF ROCK--RUBBLE WITH PIECES 1-1/2" TO 3- 1/2" IN DIAMETER.
C) ALL STORM DRAINAGE INLETS SHALL BE PROTECTED DURING CONSTRUCTION. UNTIL REVEGETATION OR STABILIZATION IS COMPLETE, FROM RUNOFF SEDIMENTATION BY A 6"--HIGH BARRIER MADE UP OF 20--LB STRAW FILLED BURLAP BAGS (OR EQUIVALENT BARRIER) BARRIER) TRAPS SHALL BE CLEANED AS SOON AS THEIR CAPACITY HAS BEEN REDUCED BY 50%.
D) A LOCATION WITHIN THE PROJECT AREA AND NEAR ITS ENTRANCE SHALL BE IDENTIFIED AS A TRUCK WASH OUT AREA.
E) A LOCATION WITHIN THE PROJECT SHALL BE IDENTIFIED AS ON-SITE STORAGE OF CONSTRUCTION WASTE MATERIALS SUCH AS BROKEN CONCRETE, CONCRETE WASHOUT AND WASTE ASPHALT.
 3. STABILIZATION PRACTICES
A) WHERE CALLED FOR IN THE DESIGN RUBBLE RIPRAP SHALL BE INSTALLED CONSISTING OF 20--LB PIECES PLACED ON PLASTIC LINER OR CEMENT STABILIZED GROUND.
 4. SCHEDULED MAINTENANCE
ALL AREAS WHERE EXISTING VEGETATION AND GRASS COVER HAVE BEEN BARED BY CONSTRUCTION SHALL BE RE-ADJUDICATELY BLOCK SEEDING OR HYDROSEEDING AND WATERED. WHENEVER POSSIBLE, GROWTH IS ESTABLISHED IN DEVELOPED AREAS WHERE GRASS IS PRESENT. BLOCK SOD WILL BE REQUIRED. BARED AREAS SHALL BE SEEDD OR SODDED WITHIN 14 CALENDAR DAYS OF LAST DISTURBANCE.
APPROVED EROSION CONTROL MEASURES MUST BE INSTALLED DURING THE ENTIRE TIME THAT EARTH HAS BEEN BARED BY CONSTRUCTION AND SHALL STAY IN PLACE UNTIL ACCEPTABLE VEGETATIVE GROWTH IS ESTABLISHED AFTER CONSTRUCTION IS COMPLETE AND THEN REMOVED BY CONTRACTOR.
ALL EROSION CONTROL MEASURES SHOULD BE CLEANED OF SILT AFTER EVERY RAIN.

ADDITIONAL NOTES

1. IRRIGATION SYSTEM DESIGN AND INSTALLATION WILL BE HANDLED BY A THIRD PARTY.
2. A LIFT STATION WITH DUPLEX GRINDER PUMPS, DESIGNED AND SUPPLIED BY A THIRD PARTY SHALL BE INSTALLED BY THE GENERAL CONTRACTOR. SEE SHEET 08.
3. THE LIFT STATION SHALL BE CONCRETE, 3-PI POWER, 50 GPM, WITH 76" OF FORCE MAIN AND DISCHARGING INTO 4" CLEAN OUT LOCATED JUST OUTSIDE OF THE PROPERTY LINE.
4. AN 8-FT HIGH PRIVACY FENCE SHALL BE INSTALLED ALONG THE FRONT OF THE PROPERTY WITHOUT BLOCKING THE ENTRANCE DRIVE. FID FENCE SHALL BE SET ON CONCRETE BLOCKS 6" ABOVE THE IMPROVED GOUND FOR A DISTANCE OF 120' PASSED THE ENTRANCE DRIVEWAY
5. A DRY BORE ABOUT 80' LONG THROUGH NORTH TEXAS AVE AT THE LOCATION SHOWN ON SHEET 10/10. THE BORE AND CASING WILL ALLOW THE EXTENSION OF THE 8" WATER LINE THAT WILL SERVE THE PARK.
6. A MOVABLE PROPANE TANK SHALL BE INSTALLED AT A CONVENIENT LOCATION NEXT TO THE OFFICE BUILDING. THIS BUILDING IS THE ONLY STRUCTURE TO REMAN ON SITE UPGRADED TO OFFICE BUILING.



ALINDO ENGINEERS AND PLANNERS, INC.

3107 ROLLING GLEN

BRYAN, TEXAS 77807

979--846--8868

FIRM LICENSE: ENGINEERING F-1799

OWNER/DEVELOPER: BARBARA JO RECTOR 4010 NORTH TEXAS AVE. BRYAN, TX 77803 979-213-7752 Email: brector@theeringinonlineforillia.com		4.890-ACRE TRACT 4010 NORTH TEXAS AVENUE LOT 1, BLOCK 1 RECTOR SUBDIVISION BRYAN, TEXAS VOLUME 10798, PAGE 111 OFFICIAL RECORDS BRADDO COUNTY, TEXAS		DATE: MAY 5, 2025 APPROVED BY: CAG REVISIONS:	PROJECT 2-23 SHEET 11 of
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NOTES AND SPECIFICATIONS
SITE PLAN - RECTOR RV PARK