CIVIL CONSTRUCTION PLANS

FOR

ROSILLO RANCH PHASES 5 & 6

SAN ANTONIO, TEXAS

PROJECT TEAM:

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SAN ANTONIO, TX 78209
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STORM SEWER
CITY OF SAN ANTONIO
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ELECTRIC
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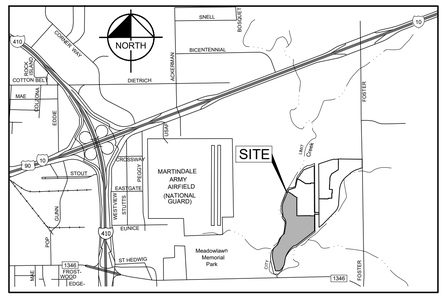

LOCATION MAP
NOT TO SCALE

BEING 35.08 ACRES
PORTION OF 701.070 ACRE TRACT CONVEYED TO
ROSILLO CREEK DEVELOPMENT, LTD. IN VOLUME 9955,
PAGE 2109 OF THE OFFICIAL PUBLIC RECORDS OF
BEXAR COUNTY, TEXAS.

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SEWER: EAST SEWERSHED - DOS RIOS W.R.C.

DEVELOPER'S NAME: HDC FOSTER, RD LLC
DEVELOPER'S ADDRESS: 100 NE LOOP 410 SUITE 1080
CITY SAN ANTONIO STATE TX ZIP 78216
PHONE # FAX #
SAWS BLOCK MAP # 200578 & 200580 TOTAL EDU'S 162
TOTAL ACREAGE 35.17 NUMBER OF LOTS 162
TOTAL LINEAR FOOTAGE OF PIPE 4271 LF ~ 8" PVC PIPE SDR-26.
PLAT NO. LAND-PLAT-21-11800632 SAWS JOB NO. 22-1604

WATER: PRESSURE ZONE 3 (HGL 828)

DEVELOPER'S NAME: HDC FOSTER RD, LLC
DEVELOPER'S ADDRESS: 100 NE LOOP 410 SUITE 1080
CITY SAN ANTONIO STATE TX ZIP 78216
PHONE # DEVELOPER EMAIL paul@hdc-group.com
SAWS BLOCK MAP # 200578 & 200580 TOTAL EDU'S 172
TOTAL ACREAGE 93.78 NUMBER OF LOTS 162
TOTAL LINEAR FOOTAGE OF PIPE 5165 LF ~ 8" PVC PIPE C900.
PLAT NO. LAND-PLAT-21-11800632 SAWS JOB NO. 22-1106

811 Know what's **below.** **Call** before you dig.

No.	REVISIONS	DATE	BY

Kimley»Horn

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TBPE: FIRM NO. 928

STATE OF TEXAS
MICHAEL A. SCHOLZE
131737
LICENSED PROFESSIONAL ENGINEER
8/12/2022

SCALE	AS NOTED
DESIGNED BY	MAS
DRAWN BY	ATR
CHECKED BY	MAS

COVER SHEET

ROSILLO RANCH
PHASES 5 & 6
MDP-LAND-21-11100067
LAND-PLAT-21-11800632
SAN ANTONIO, TEXAS

DATE
8/12/2022

PROJECT NO.
068706708

SHEET NUMBER
C1.0

Plotted By:Reed, Andrew August 11, 2022 03:27:12pm K:\SNA_Civil\068706708-Heartwood\Rosillo\Ph5-6\130\PlanSheets\C-COVR-068706708.dwg
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GENERAL CONSTRUCTION NOTES

1. ALL MATERIAL AND CONSTRUCTION SHALL CONFORM TO THE CITY'S DESIGN STANDARDS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE TO FURNISH ALL MATERIAL AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN THE CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH THE APPROPRIATE APPROVING AUTHORITIES, SPECIFICATIONS AND REQUIREMENTS.
3. THE CONTRACTOR SHALL CONTACT ALL FRANCHISED UTILITY COMPANIES TO HAVE THEM LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION AND DEPTH OF ALL FRANCHISED UTILITY SERVICES AND ANY REQUIRED RELOCATION AND/OR EXTENSIONS. SERVICES SHOWN ON THE PLANS ARE CONCEPTUAL.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL PUBLIC UTILITIES IN THE CONSTRUCTION OF THIS PROJECT. ALL MANHOLES, CLEANOUTS, VALVE BOXES, FIRE HYDRANTS, ETC., MUST BE ADJUSTED TO PROPER GRADE BY THE CONTRACTOR PRIOR TO AND AFTER PLACING OF PERMANENT PAVING. UTILITIES MUST BE MAINTAINED TO PROPER LINE AND GRADE DURING CONSTRUCTION OF THE PAVING FOR THIS PROJECT.
5. BRACING OF UTILITY POLES MAY BE REQUIRED BY UTILITY COMPANIES WHEN TRENCHING OR EXCAVATION IS IN CLOSE PROXIMITY TO THE POLES. THE COST OF BRACING POLES WILL BE BORNE BY THE CONTRACTOR. THERE IS NO SEPARATE PAY ITEM FOR THIS WORK. THE COST IS INCIDENTAL TO THE VARIOUS PAY ITEMS FOR INSTALLATION OF PIPE.
6. THE LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES SHOWN ON THE PLANS WERE OBTAINED FROM AVAILABLE UTILITY COMPANY RECORDS AND PLANS AND ARE CONSIDERED APPROXIMATE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS, ELEVATIONS, AND DIMENSIONS OF ADJACENT AND/OR CONFLICTING UTILITIES SUFFICIENTLY IN ADVANCE OF CONSTRUCTION IN ORDER THAT ADJUSTMENTS CAN BE MADE TO PROVIDE ADEQUATE CLEARANCES. THE CONTRACTOR SHALL PRESERVE AND PROTECT PUBLIC UTILITIES AT ALL TIMES DURING CONSTRUCTION. ANY DAMAGE TO UTILITIES RESULTING FROM CONTRACTOR'S OPERATIONS SHALL BE RESTORED AT THEIR EXPENSE. THE ENGINEER SHALL BE NOTIFIED WHEN PROPOSED FACILITY GRADES CONFLICT WITH EXISTING UTILITY GRADES.
7. THE CONTRACTOR SHALL IMMEDIATELY REPAIR OR REPLACE ANY PHYSICAL DAMAGE TO PRIVATE PROPERTY, INCLUDING, BUT NOT LIMITED TO FENCES, WALLS, PAVEMENT, GRASS, TREES, AND LAWN SPRINKLER AND IRRIGATION SYSTEMS AT NO COST TO THE OWNER. THIS WORK SHALL BE SUBSIDIARY TO THE CONTRACT (UNLESS OTHERWISE NOTED) AND IS NOT A SEPARATE PAY ITEM.
8. THE CONTRACTOR SHALL REMOVE SURPLUS MATERIAL FROM THE PROJECT AREA. THIS WORK SHALL BE SUBSIDIARY TO THE CONTRACT AND IS NOT A SEPARATE PAY ITEM.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS PRIOR TO CONSTRUCTION.
10. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE COPY OF THE CONTRACT DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, AND SPECIAL CONDITIONS. COPIES OF ANY REQUIRED CONSTRUCTION PERMITS, EROSION CONTROL PLANS, SWPPP AND INSPECTION REPORTS.
11. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND NOTIFICATION TO THE ENGINEER. NO CONSIDERATION WILL BE GIVEN TO CHANGE ORDERS FOR WHICH THE OWNER AND ENGINEER WERE NOT CONTACTED PRIOR TO CONSTRUCTION OF THE AFFECTED ITEM.
12. ALL COPIES OF COMPACTION, CONCRETE AND OTHER REQUIRED TEST RESULTS ARE TO BE SENT TO THE ARCHITECT, CIVIL ENGINEER AND CITY ENGINEER OF RECORD DIRECTLY FROM THE TESTING AGENCY.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING TO THE ENGINEER A CERTIFIED RECORD SURVEY SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF TEXAS DEPICTING THE ACTUAL FIELD LOCATION OF ALL CONSTRUCTED IMPROVEMENTS THAT ARE REQUIRED BY THE JURISDICTIONAL AGENCIES FOR THE CERTIFICATION PROCESS.
14. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES, JURISDICTIONAL AGENCIES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES.
15. CONTRACTOR SHALL VERIFY BENCHMARKS AND DATUM PRIOR TO COMMENCING CONSTRUCTION OR STAKING OF IMPROVEMENTS.
16. CONTRACTOR SHALL THOROUGHLY CHECK COORDINATION OF CIVIL, LANDSCAPE, MEP, ARCHITECTURAL, STRUCTURAL, AND OTHER PLANS PRIOR TO COMMENCING CONSTRUCTION. OWNER AND ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCY PRIOR TO COMMENCING WITH CONSTRUCTION.
17. ALL HORIZONTAL DIMENSIONS GIVEN ARE TO FACE OF CURB AND TO PIPE CENTERLINES UNLESS OTHERWISE NOTED ON PLANS.
18. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING RELOCATION AND INSTALLATION OF FRANCHISED UTILITIES NECESSARY FOR ON AND OFF SITE CONSTRUCTION.
19. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED SMOOTH. THE AREAS SHALL THEN BE SEEDED, IRRIGATED, AND STABILIZED AS SPECIFIED IN THE PLANS, AND MAINTAINED UNTIL SOIL IS STABILIZED IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE JOB SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. ALL EARTHEN AREAS WILL BE STABILIZED AND MULCHED AS SHOWN ON THE LANDSCAPE, GRADING, AND EROSION CONTROL PLANS.
20. ALL CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE SHOWN.
21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
22. SOD OR SEED MUST BE INSTALLED AND MAINTAINED ON EXPOSED SLOPES WITHIN 48 HOURS OF COMPLETING FINAL GRADING AND AT ANY OTHER TIME AS NECESSARY TO PREVENT EROSION, SEDIMENTATION OR TURBID DISCHARGES.
23. THE CONTRACTOR MUST REVIEW AND MAINTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN WITH ALL CONDITIONS, ATTACHMENTS, EXHIBITS, AND PERMIT MODIFICATIONS IN GOOD CONDITION AT THE CONSTRUCTION SITE. THE COMPLETE PERMIT MUST BE AVAILABLE FOR REVIEW UPON REQUEST BY WATER MANAGEMENT DISTRICT REPRESENTATIVES.
24. THE CONTRACTOR MUST CONSTRUCT AND MAINTAIN A PERMANENT STABLE PROTECTIVE COVER (GRASS) FOR EROSION AND SEDIMENT CONTROL ON ALL LAND SURFACES EXPOSED OR DISTURBED BY CONSTRUCTION OF THE PERMITTED PROJECT. THE PROTECTIVE COVER MUST BE INSTALLED WITHIN FOURTEEN DAYS AFTER FINAL GRADING OF THE AFFECTED LAND SURFACE. A PERMANENT STABLE COVER MUST BE ESTABLISHED WITHIN 60 DAYS OF IT'S INSTALLATION.
25. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE THE CIVIL ENGINEER A COPY OF AS-BUILT PLANS IDENTIFYING ALL DEVIATIONS OR VARIATIONS FROM THE ORIGINAL PLANS.
26. ALL EXISTING PAVEMENT, ADJACENT UTILITIES, STRUCTURES, ETC., DISTURBED AS A RESULT OF THE NEW CONSTRUCTION, SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
27. ALL WORK REQUIRED BY THESE PLANS SHALL BE CONDUCTED IN CONFORMANCE WITH CURRENT SAFETY CODES AND STANDARDS WITH JURISDICTION OVER THIS PROJECT.

GAS, ELECTRIC AND TELEPHONE NOTES:

1. THE CONTRACTOR SHALL INSTALL 2-4" SCHEDULE 40 PVC CONDUITS FOR AREA TELEPHONE SERVICE PROVIDER. THE SERVICE PROVIDER WILL INSTALL THE WIRING. THE CONDUITS SHALL EXTEND FROM THE BUILDING TO THE ADJACENT R.O.W. CONTRACTOR SHALL COORDINATE LOCATION, ALIGNMENT AND INSTALLATION REQUIREMENTS WITH THE AREA TELEPHONE PROVIDER OR SERVICE PROVIDER REQUIREMENTS.
2. PULL BOXES SHALL BE INSTALLED AT ALL BENDS AND AT 1000-FOOT INCREMENTS ALONG ALL TELEPHONE AND COMMUNICATIONS CONDUITS. ALL PULL BOXES SHALL BE WATERPROOF, AND THOSE IN PAVED AREAS SHALL BE TRAFFIC RATED.
3. THE CONTRACTOR SHALL PROVIDE 4 WEEKS LEAD TIME FOR (TEMPORARY AND PERMANENT) TELEPHONE SERVICE INSTALLATION, AND 14-16 WEEK LEAD TIME FOR THREE-PHASE TRANSFORMERS. COORDINATE SERVICE WITH THE LOCAL ELECTRIC PROVIDER.
4. THE CONTRACTOR SHALL COORDINATE ALL ELECTRIC AND GAS SERVICE (TEMPORARY AND PERMANENT) LOCATION, ALIGNMENT, INSTALLATION REQUIREMENTS AND COST SHARING ARRANGEMENTS WITH FRANCHISED UTILITY PROVIDER.
5. ALL FRANCHISED UTILITY LOCATIONS SHOWN ON THESE DRAWINGS ARE CONCEPTUAL IN NATURE. THE CONTRACTOR SHALL COORDINATE THE EXACT DESIGN, ALIGNMENT, INSTALLATION REQUIREMENTS AND COST SHARING ARRANGEMENTS WITH THE INDIVIDUAL UTILITY PROVIDERS. THE CONTRACTOR SHALL INCLUDE ALL ASSOCIATED COSTS TO INSTALL FRANCHISED UTILITY (GAS, ELECTRIC, PHONE, CABLE) SERVICE TO THE PROPOSED BUILDING, IN THE BASE BID ALIGNMENT WITH UTILITY PROVIDER.

PAVING AND STRIPING NOTES

1. ASPHALTIC CONCRETE PAVEMENT SHALL BE TYPE "D" HOT MIX ASPHALT AS DEFINED IN TXDOT'S STANDARD SPECIFICATIONS FOR *TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREET AND BRIDGES, 2004*. THE ASPHALTIC CONCRETE SURFACE COURSE SHALL BE PLANT MIXED, HOT LAID TYPE "D" MEETING THE SPECIFICATION REQUIREMENTS OF 2004 TXDOT ITEM 340. THE MIX SHALL BE DESIGNED FOR A STABILITY OF AT LEAST 35 AND SHALL BE COMPACTED TO BETWEEN 91 AND 95 PERCENT OF THE MAXIMUM THEORETICAL DENSITY AS DETERMINED BY TXDOT TEST METHOD TEX-227-F. THE ASPHALT CEMENT CONTENT BY PERCENT OF TOTAL MIXTURE WEIGHT SHALL FALL WITHIN THE TOLERANCE OF +/-0.5 PERCENT FROM A SPECIFIC MIX DESIGN.
2. ALL WORK AND MATERIALS ON SITE SHALL BE IN ACCORDANCE WITH THE CITY'S DESIGN CRITERIA MANUAL.
3. THE CONTRACTOR SHALL REFER TO THE PAVING PLAN AND GEOTECHNICAL REPORT FOR PAVEMENT THICKNESS AND TYPE.
4. TESTING OF MATERIALS REQUIRED FOR THE CONSTRUCTION OF THE PAVING IMPROVEMENTS SHALL BE PERFORMED BY AN AGENCY, APPROVED BY THE OWNER, FOR TESTING MATERIALS. PROCUREMENT OF THE TESTING LABORATORY AND THE PAYMENT OF SUCH TESTING SERVICES SHALL BE MADE BY THE OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE STANDARD TESTING PROCEDURES, THAT THE CONSTRUCTED MEETS THE REQUIREMENTS OF THE CITY AND PROJECT SPECIFICATIONS.
5. ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
6. RAISED PAVEMENT MARKERS SHALL BE BONDED TO THE ROADWAY SURFACE WITH ADHESIVE CONFORMING WITH THE MANUFACTURER'S RECOMMENDATIONS.
7. THE PAVEMENT UPON WHICH THE LANE AND PAVEMENT MARKERS ARE TO BE PLACED SHALL BE PREPARED TO THE APPROVAL OF THE INSPECTOR TO ENSURE PROPER CLEANING OF THE PAVEMENT SURFACE.
8. ALL ON-SITE STRIPING SHALL BE ACRYLIC MARKING MATERIAL.
9. SIGN LOCATIONS AND INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE CITY . CONTRACTOR SHALL REVIEW ALL TRAFFIC CONTROL DEVICES WITH THE CITY PRIOR TO INSTALLATION.
10. CONTRACTOR SHALL FURNISH AND INSTALL ALL PAVEMENT MARKINGS FOR FIRE LANES, PARKING STALLS, HANDICAPPED PARKING SYMBOLS, AND MISCELLANEOUS STRIPING WITHIN PARKING LOT AND AROUND BUILDING AS SHOWN ON THE PLANS.
11. ALL HANDICAP RAMPING, STRIPING, AND PAVEMENT MARKINGS SHALL CONFORM TO THE AMERICANS WITH DISABILITIES ACT OF 1994 AND THE TEXAS ARCHITECTURAL BARRIERS ACT OF 1994.
12. CONTRACTOR TO SUBMIT A PAVEMENT JOINTING PLAN TO THE ENGINEER AND OWNER PRIOR TO THE BEGINNING OF ANY CONCRETE PAVING WORK.
13. ALL EXISTING CONCRETE OR ASPHALT SHOWN TO BE REMOVED SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR.

EROSION CONTROL NOTES

1. STABILIZED CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED OF 3" TO 5" ROCK TO BE PLACED A MINIMUM LENGTH OF 25-FEET AND MAINTAINED SO THAT CONSTRUCTION DEBRIS DOES NOT FALL WITHIN THE CITY RIGHT-OF-WAY. RIGHT-OF-WAY MUST BE CLEARED FROM MUD, ROCKS, ETC. AT ALL TIMES.
2. ALL EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO SITE DISTURBANCE AND SHALL REMAIN IN PLACE UNTIL FINAL GRADING AND PAVING IS COMPLETE AND A STAND OF GRASS IS ESTABLISHED WITH 70% COVERAGE DENSITY ACHIEVED.
3. CONSTRUCTION OPERATIONS SHALL BE MANAGED SO THAT AS MUCH OF THE SITE AS POSSIBLE IS LEFT COVERED WITH TOPSOIL AND VEGETATION.
4. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL EROSION, CONSERVATION, AND SILTATION ORDINANCES. THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF PERMANENT DRAINAGE AND THE ESTABLISHMENT OF A STAND OF GRASS SUFFICIENT TO PREVENT EROSION. THE CONTRACTOR MUST USE SEDIMENT FILTERS OR OTHER MEASURES APPROVED BY THE ENGINEER AND CONSTRUCTION MANAGER TO PREVENT SILT AND CONSTRUCTION DEBRIS FROM CLOGGING STORM SEWER PIPES OR PROPOSED OR EXISTING INLETS, OR FROM BEING TRANSPORTED TO ADJACENT PROPERTIES AND STREET RIGHT OF WAYS.
5. CONTRACTOR SHALL CONSTRUCT A STABILIZED CONSTRUCTION ENTRANCE AT ALL PRIMARY POINTS OF ACCESS. CONTRACTOR IS RESPONSIBLE FOR INSURING THAT ALL CONSTRUCTION TRAFFIC UTILIZES THE STABILIZED ENTRANCE AT ALL TIMES FOR INGRESS/EGRESS TO THE SITE.
6. SITE ENTRY AND EXIT LOCATIONS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAYS. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ON A PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY. WHEN WASHING IS REQUIRED TO REMOVE SEDIMENT PRIOR TO ENTRANCE TO A PUBLIC ROADWAY, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE. ALL FINES IMPOSED FOR TRACKING ONTO PUBLIC ROADS SHALL BE PAID BY THE CONTRACTOR.
7. CONTRACTOR IS RESPONSIBLE FOR PROPER MAINTENANCE OF THE REQUIRED EROSION CONTROL DEVICES THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS. EROSION CONTROLS SHALL BE REPAIRED OR REPLACED AS INSPECTION DEEMS NECESSARY, OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE. ACCUMULATED SILT IN ANY EROSION CONTROL DEVICE SHALL BE REMOVED AND SHALL BE DISTRIBUTED ON SITE IN A MANNER NOT CONTRIBUTING TO ADDITIONAL SILTATION.
8. THE CONTRACTOR IS RESPONSIBLE FOR REESTABLISHING ANY EROSION CONTROL DEVICE WHICH THEY DISTURB. EACH CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DEFICIENCIES IN THE ESTABLISHED EROSION CONTROL MEASURES WHICH MAY LEAD TO UNAUTHORIZED DISCHARGE OR STORM WATER POLLUTION, SEDIMENTATION OR OTHER POLLUTANTS. UNAUTHORIZED POLLUTANTS INCLUDE, BUT ARE NOT LIMITED TO, EXCESS CONCRETE DUMPING OR CONCRETE RESIDUE, PAINTS, SOLVENTS, GREASES, FUEL AND LUBE OIL, PESTICIDES, AND SOLID WASTE MATERIALS.
9. THE CONTRACTOR SHALL MAINTAIN ADEQUATE SITE DRAINAGE DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL USE FILTER BARRIER (OR OTHER METHOD APPROVED BY THE ENGINEER AND CITY) AS REQUIRED TO PREVENT ADVERSE OFF SITE IMPACT OR STORM WATER QUALITY FROM SILT AND CONSTRUCTION DEBRIS FLOWING ONTO ADJACENT PROPERTIES AS REQUIRED BY THE CITY. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, OR LOCAL EROSION, CONSERVATION, AND SILTATION ORDINANCES. CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF PERMANENT DRAINAGE FACILITIES AND THE ESTABLISHMENT OF A STAND OF GRASS OR OTHER GROWTH TO PREVENT EROSION.
10. CONTRACTOR SHALL PROVIDE ADEQUATE EROSION CONTROL DEVICES DURING THE PHASED CONSTRUCTION OF THIS PROJECT.
11. CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL SILT AND DEBRIS OFF SITE FROM THE EXISTING ROADWAYS AND PROJECT SITE THAT ARE A RESULT OF THE PROPOSED CONSTRUCTION.
12. BEFORE ANY EARTHWORK IS DONE, THE CONTRACTOR SHALL STAKE OUT AND MARK THE LIMITS OF CONSTRUCTION AND OTHER ITEMS ESTABLISHED BY THE PLANS. THE CONTRACTOR SHALL PROTECT AND PRESERVE CONTROL POINTS AT ALL TIMES DURING THE COURSE OF THE PROJECT. THE GRADING CONTRACTOR SHALL PROVIDE ALL NECESSARY ENGINEERING AND SURVEYING FOR LINE AND GRADE CONTROL POINTS RELATED TO EARTHWORK.
13. THE CONTRACTOR SHALL SALVAGE AND PROTECT ALL EXISTING POWER POLES, SIGNS, MANHOLES, TELEPHONE RISERS, WATER VALVES, ETC. DURING ALL CONSTRUCTION PHASES UNLESS NOTED OTHERWISE.
14. CONTRACTOR STAGING AREA TO BE AGREED UPON BY OWNER PRIOR TO BEGINNING CONSTRUCTION.
15. AS INLETS ARE COMPLETED TEMPORARY SEDIMENT BARRIERS SHALL BE INSTALLED.
16. SILT FENCE AND INLET SEDIMENT BARRIERS SHALL REMAIN IN PLACE UNTIL REVEGETATION HAS BEEN COMPLETED.
17. DISTURBED AREAS THAT ARE SEEDED OR SODDED SHALL BE CHECKED PERIODICALLY TO SEE THAT GRASS COVERAGE IS PROPERLY MAINTAINED. DISTURBED AREAS SHALL BE WATERED, FERTILIZED, AND RESEEDED OR RESODDED, IF NECESSARY.
18. CONTRACTOR SHALL PROMOTE AND PROVIDE FOR A HEALTHY ESTABLISHMENT OF TURF GRASSES WHILE KEEPING IRRIGATION TO A MINIMUM IN ORDER TO REDUCE EROSION FROM SURFACE RUNOFF.

STORM SEWER DISCHARGE AUTHORIZATION:

1. A CONSTRUCTION SITE NOTICE SHALL BE POSTED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
2. ALL CONTRACTORS AND SUBCONTRACTORS PROVIDING SERVICES RELATED TO THE SWPPP SHALL SIGN A CONTRACTOR CERTIFICATION STATEMENT ACKNOWLEDGING THEIR RESPONSIBILITIES AS SPECIFIED IN THE SWPPP.
3. A COPY OF THE SWPPP, INCLUDING CONTRACTOR CERTIFICATIONS AND ANY REVISIONS, SHALL BE SUBMITTED TO THE CITY AND FILED WITH THE CONSTRUCTION PLANS, AND SHALL BE RETAINED ON-SITE DURING CONSTRUCTION.
4. A NOTICE OF TERMINATION (N.O.T.) SHALL BE SUBMITTED TO THE TCEQ BY THE CONTRACTOR WHEN THE SITE HAS 100% OF THE DISTURBED AREAS STABILIZED AND THE SITE NO LONGER HAS STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES, OR THE N.O.T. PERMITTEE OR CO-PERMITTEE NO LONGER HOLDS OPERATIONAL CONTROL OF THE CONSTRUCTION.

GRADING NOTES

1. A GRADING PERMIT IS REQUIRED FROM THE CITY PRIOR TO STARTING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR OBTAINING PERMIT AND PAYING ALL ASSOCIATED FEES.
2. CONTRACTOR SHALL FIELD VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING UTILITIES (SHOWN OR NOT SHOWN) WITHIN SCOPE OF CONSTRUCTION. IF ANY EXISTING UTILITIES ARE DAMAGED, THE CONTRACTOR SHALL REPLACE THEM AT HIS OWN EXPENSE.
3. ALL SPOT ELEVATIONS SHOWN ARE TO TOP OF PAVING SURFACE OR FINISHED EARTH GRADE UNLESS NOTED OTHERWISE. ADD 0.50' TO SPOT GRADES SHOWN FOR TOP OF CURB ELEVATIONS.
4. CONTRACTOR TO ENSURE POSITIVE DRAINAGE FROM THE PROPOSED BUILDINGS AND NO PONDING IN PAVED AREAS. CONTRACTOR ADJUSTMENTS TO SPOT GRADES TO MAINTAIN POSITIVE DRAINAGE IS ALLOWED WITH THE PRIOR APPROVAL OF THE ENGINEER. CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO PAVING IF ANY AREAS OF POOR DRAINAGE ARE ENCOUNTERED.
5. THE CONTRACTOR SHALL PROTECT ALL MANHOLE COVERS, VALVE COVERS, VAULT LIDS, FIRE HYDRANTS, POWER POLES, GUY WIRES, AND TELEPHONE BOXES WHICH ARE TO REMAIN IN PLACE AND UNDISTURBED DURING CONSTRUCTION.
6. ALL EXISTING CONCRETE PAVING, CHANNEL IMPROVEMENTS, SIDEWALK, STRUCTURES AND CURB DEMOLITION SHALL BE REMOVED IN THEIR ENTIRETY AND DISPOSED OF BY THE CONTRACTOR OFF SITE, UNLESS OTHERWISE DIRECTED BY THE OWNER OR ENGINEER.
7. ALL AREAS DISTURBED BY GRADING OPERATIONS SHALL BE SEEDED, TEMPORARILY IRRIGATED AND MAINTAINED UNTIL A UNIFORM COVERAGE OF 70% MINIMUM DENSITY, AS DETERMINED BY THE OWNER OR OWNER'S REPRESENTATIVE, IS ACHIEVED.
8. BUILDING PAD PREPARATION SHALL BE CONSISTENT WITH THE GEOTECHNICAL REPORT.
9. ALL CLEARING, GRADING, COMPACTION AND SUBGRADE PREPARATION SHALL BE IN ACCORDANCE TO THE RECOMMENDATIONS MADE IN THE GEOTECHNICAL REPORT.
10. GRADING CONTRACTOR TO COORDINATE WITH THE FRANCHISED UTILITY COMPANIES FOR ANY REQUIRED UTILITY ADJUSTMENTS AND/OR RELOCATIONS.
11. THE CONTRACTOR SHALL CALCULATE HIS OWN EARTHWORK QUANTITIES AND USE TO DETERMINE HIS BID ACCORDINGLY. ANY DEVIATION FROM A BALANCED CUT AND FILL SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT AND CIVIL ENGINEER AND ANY VARIANCE QUANTIFIED ON THE BID.
12. REFERENCE STRUCTURAL PLANS AND SPECIFICATIONS AND GEOTECHNICAL REPORT FOR ALL BUILDING PAD LAYOUT AND SOIL PREPARATION/COMPACTION.

STORM SEWER NOTES

1. CONTRACTOR SHALL FIELD VERIFY THE VERTICAL AND HORIZONTAL LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND CONSTRUCTION MANAGER IMMEDIATELY IF A CONFLICT IS DISCOVERED.
2. CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS SHOWN, INCLUDING THE HORIZONTAL AND VERTICAL LOCATION OF CURB INLETS, GRATE INLETS, AND ALL UTILITIES CROSSING THE STORM SEWER. FLOW LINES AND RIMS OF PROPOSED INLETS SHALL BE VERIFIED WITH THE PROPOSED GRADE PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE PROVIDED AN ELECTRONIC ACAD FILE FOR USE IN CONSTRUCTION STAKING AND LAYOUT.
3. THE SITE UTILITY CONTRACTOR SHALL PROVIDE ALL MATERIALS AND APPURTENANCES NECESSARY FOR COMPLETE INSTALLATION OF THE STORM SEWER.
4. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL CONSTRUCTION PERMITS.
5. THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL VERIFY THE SUITABILITY OF ALL EXISTING AND PROPOSED SITE CONDITIONS INCLUDING GRADES AND DIMENSIONS BEFORE COMMENCEMENT OF CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
6. REFERENCE CITY'S DESIGN STANDARDS FOR NEW STORM SEWER SYSTEMS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING AND IMPLEMENTING A TRENCH PROTECTION PLAN FOR ALL OPEN TRENCH EXCAVATION.
8. EXISTING MANHOLE TOPS AND ALL OTHER DRAINAGE FACILITIES SHALL BE ADJUSTED AS REQUIRED TO MATCH FINAL GRADES AS SHOWN ON GRADING PLAN. NO SEPARATE PAY ITEM.
9. ALL STORM SEWER PIPE WITHIN PUBLIC EASEMENTS/R.O.W. SHALL BE REINFORCED CONCRETE PIPE (RCP), ASTM C 76, CLASS III ONLY.
10. ALL PRIVATE STORM DRAINS SHALL BE:
    A. REINFORCED CONCRETE PIPE (RCP), ASTM C 76, CLASS III OR IV AS NOTED
    B. POLYVINYL CHLORIDE (PVC), SDR 25
    C. HIGH DENSITY POLYETHYLENE (HDPE), SMOOTH INTERIOR, AASHTO M252 AND M294
11. CONTRACTOR IS RESPONSIBLE FOR ALL MATERIALS, LABOR AND COSTS TO CONNECT ALL UTILITIES TO BUILDING.

TRAFFIC CONTROL NOTES

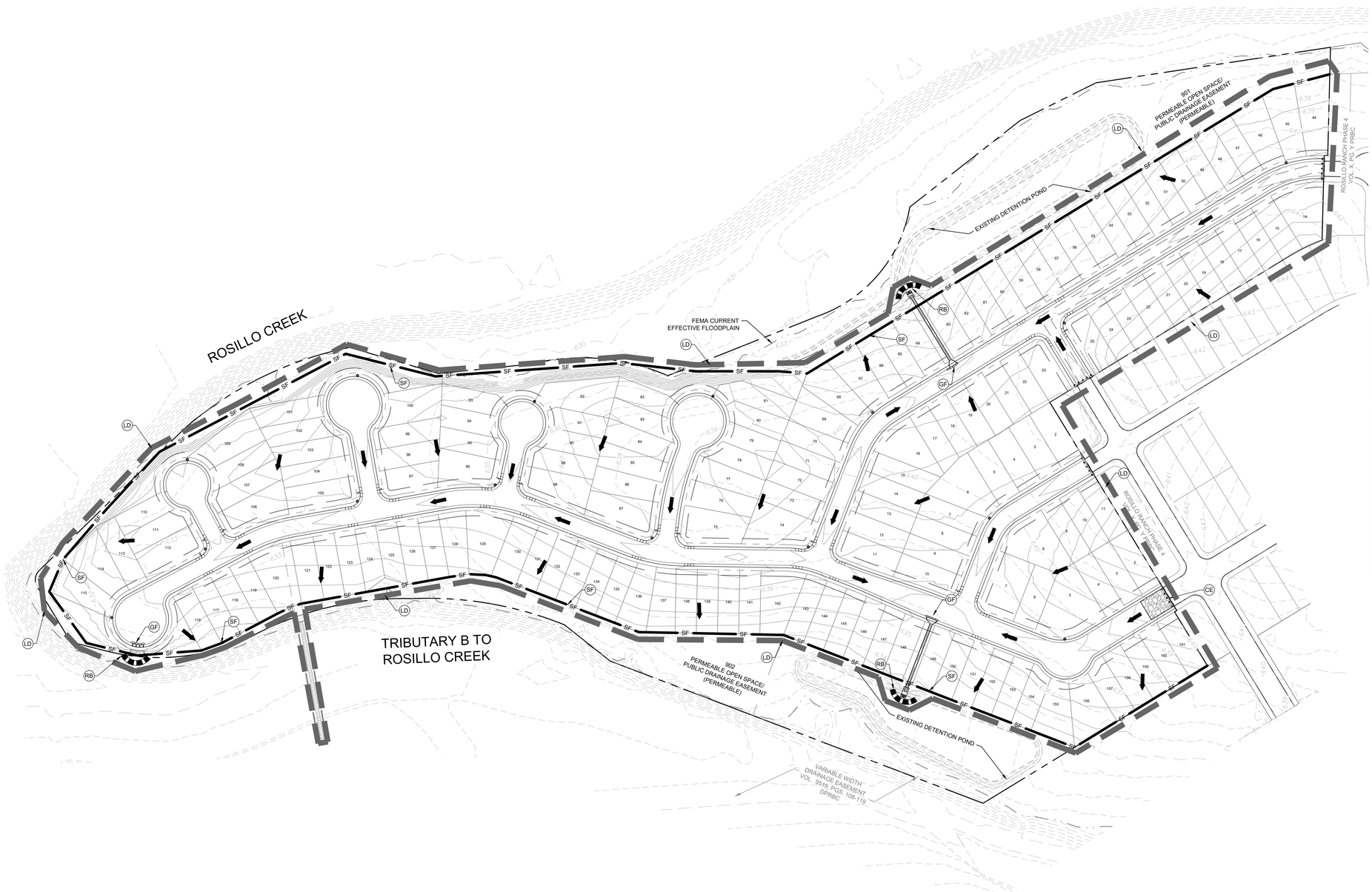
1. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL PLANS, AT LEAST 48 HOURS PRIOR TO ANY WORK IN A CITY STREET.
2. ALL TRAFFIC CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD), LATEST VERSION.
3. THE CONTRACTOR SHALL COVER EXISTING SIGNS AND OBLITERATE EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH THE INTENT OF THESE TRAFFIC CONTROL PLANS TO AVOID CONFUSION TO THE TRAVELING PUBLIC.
4. THE CONTRACTOR SHALL UNCOVER EXISTING SIGNS AND REPLACE PAVEMENT MARKINGS IN-KIND AS ORIGINALLY CONFIGURED AT THE END OF CONSTRUCTION OPERATIONS AND PRIOR TO FINAL ACCEPTANCE BY THE OWNER.
5. ALL TEMPORARY SIGNS, BARRICADES, WARNING LIGHTS AND OTHER MISCELLANEOUS TRAFFIC CONTROL MEASURES SHALL BE REMOVED AND ORIGINAL TRAFFIC CONTROL MEASURES REPLACED AT THE END OF THE CONTRACTOR'S CONSTRUCTION OPERATIONS.
6. THE TEMPORARY TRAFFIC CONTROL MEASURES SHOWN ON THESE PLANS ARE TO BE CONSIDERED AN ESTABLISHED MINIMUM. ADDITIONAL SIGNS, BARRICADES OR OTHER WARNING DEVICES SHALL BE FURNISHED WHEN NECESSARY TO SAFELY GUIDE TRAFFIC THROUGH THE CONSTRUCTION AREA.
7. TRAFFIC BARRICADES WILL BE REQUIRED AT ALL PROPOSED DRIVEWAY CONNECTIONS TO STREETS AND STORM SEWER CONSTRUCTION IN STREET RIGHT-OF-WAY. BARRICADES SHALL CONFORM TO THE INSTALLATION SHOWN IN THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD), LATEST VERSION.

SAN ANTONIO WATER SYSTEMS NOTES

SAWS GENERAL CONSTRUCTION NOTES
COUNTER PERMIT AND GENERAL CONSTRUCTION PERMIT

GENERAL SECTION

1. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL BE APPROVED BY THE SAN ANTONIO WATER SYSTEM (SAWS) AND COMPLY WITH THE PLANS, SPECIFICATIONS, GENERAL CONDITIONS AND WITH THE FOLLOWING AS APPLICABLE:
   A. CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) "DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEM", TEXAS CODE ADMINISTRATIVE (TAC) TITLE 30 PART 1 CHAPTER 217 AND "PUBLIC DRINKING WATER", TAC TITLE 30 PART 1 CHAPTER 290.
   B. CURRENT TXDOT "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND DRAINAGE".
   C. CURRENT "SAN ANTONIO WATER SYSTEM STANDARD SPECIFICATIONS FOR WATER AND SANITARY SEWER CONSTRUCTION".
   D. CURRENT CITY OF SAN ANTONIO "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION".
   E. CURRENT CITY OF SAN ANTONIO "UTILITY EXCAVATION CRITERIA MANUAL" (UECM).
2. THE CONTRACTOR SHALL NOT PROCEED WITH ANY PIPE INSTALLATION WORK UNTIL THEY OBTAIN A COPY OF THE APPROVED COUNTER PERMIT OR GENERAL CONSTRUCTION PERMIT (GCP) FROM THE CONSULTANT AND HAS BEEN NOTIFIED BY SAWS CONSTRUCTION INSPECTION DIVISION TO PROCEED WITH THE WORK AND HAS ARRANGED A MEETING WITH THE INSPECTOR AND CONSULTANT FOR THE WORK REQUIREMENTS. WORK COMPLETED BY THE CONTRACTOR WITHOUT AN APPROVED COUNTER PERMIT AND/OR A GCP



NORTH

GRAPHIC SCALE IN FEET
0 50 100 200

LEGEND

- PROPERTY BOUNDARY
- 640 EXISTING CONTOUR
- 640 PROPOSED CONTOUR
- (LD) PROPOSED LIMITS OF DISTURBANCE
- (GF) GRAVEL FILTER BAGS (SEE DETAIL SHEET C2.1)
- DIRECTION OF OVERLAND FLOW W/GRADE
- SF (SF) SILT FENCE (SEE DETAIL SHEET C2.1)
- (CE) CONSTRUCTION ENTRANCE (SEE DETAIL SHEET C2.1)
- (RB) ROCK BERM (SEE DETAIL SHEET C2.1)

NOTES

1. DISTURBED SOILS SHALL BE STABILIZED BY VEGETATION
2. ROCK BERMS TO BE REMOVED ONCE THE AREA WITHIN THE LIMITS OF DISTURBANCE ARE FULLY STABILIZED
3. PER TPDES REQUIREMENTS, DISTURBED AREAS ON WHICH CONSTRUCTION ACTIVITIES HAVE CEASED (TEMPORARILY OR PERMANENTLY) SHALL BE STABILIZED WITH 14 DAYS UNLESS ACTIVITY RESUMES WITHIN 21 DAYS.

EROSION CONTROL SCHEDULE AND SEQUENCING

I.	ROUGH GRADING/ DEMOLITION	CONSTRUCTION ENTRANCE/EXIT, TREE PROTECTION, FILTER DAMS AND SILT FENCE PROTECTION SHALL BE INSTALLED PRIOR TO THE INITIATION OF ROUGH GRADING, AS NEEDED.
II.	UTILITY INSTALLATION	ALL PRIOR EROSION CONTROL MEASURES INSTALLED ABOVE TO BE MAINTAINED AS NECESSARY DURING UTILITY INSTALLATION.
III.	PAVING	ALL PRIOR EROSION CONTROL MEASURES INSTALLED ABOVE TO BE MAINTAINED AS NECESSARY DURING PAVING AND THROUGHOUT THE REMAINDER OF THE PROJECT.
IV.	FINAL GRADING/ SOIL STABILIZATION/ LANDSCAPING	ALL TEMPORARY EROSION CONTROL MEASURES TO BE REMOVED AT THE CONCLUSION OF THE PROJECT AS DIRECTED BY THE CITY OR COUNTY.

SITE DATA

TOTAL LOT AREA	35.08 AC	1,527,944 SF
TOTAL AREA DISTURBED *	30.10 AC	1,311,051 SF
PAVED AREA	3.82 AC	166,498 SF

* DOES NOT INCLUDE ANY OFF-SITE DISPOSAL OR BORROW AREAS - CONTRACTOR TO UPDATE AS NECESSARY DURING CONSTRUCTION.

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No.	REVISIONS	DATE	BY

Kimley»Horn
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10101 REUNION PLACE, SUITE 400, SAN ANTONIO, TX 78216
PHONE: 210-541-9166 FAX: 210-541-4999
WWW.KIMLEY-HORN.COM
TBPE: FIRM NO. 928

STATE OF TEXAS
MICHAEL A. SCHOLZE
131737
LICENSED PROFESSIONAL ENGINEER
8/10/2022

SCALE	AS NOTED
DESIGNED BY	MAS
DRAWN BY	ATR
CHECKED BY	MAS

EROSION CONTROL PLAN

ROSILLO RANCH
PHASES 5 & 6
MDP-LAND-21-11100067
LAND-PLAT-21-11800632
SAN ANTONIO, TEXAS

DATE
8/12/2022
PROJECT NO.
068706708
SHEET NUMBER
C2.0

Plotted By:Reed, Andrew August 11, 2022 03:27:48pm K:\SNA_Civil\068706708-Hoerr\exhibit\Rosillo\Ph5-6\C40\Plan Sheets\C--EROS--068706708.dwg
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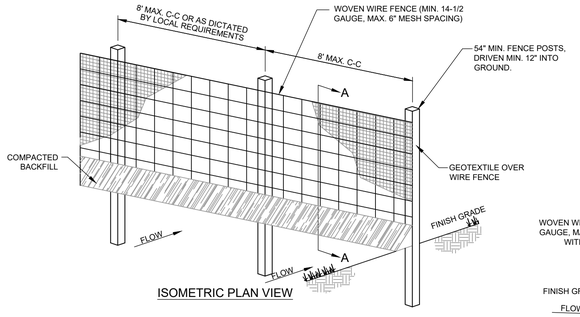
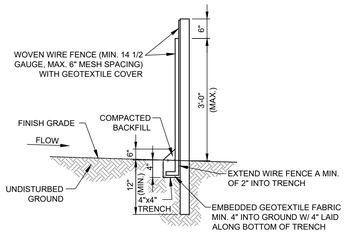


ISOMETRIC PLAN VIEW

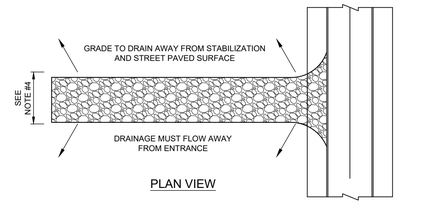


CROSS SECTION A-A

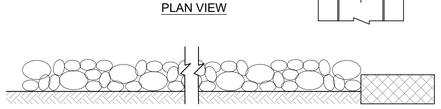
NOTE:
1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES.
2. GEOTEXTILE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF GEOTEXTILE ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED TO NEXT POST. 8' MAX.
4. MAINTENANCE SHALL BE PERFORMED AS NOTED IN THE SWPPP.
5. COLLECTED MATERIAL SHALL BE REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
6. ALL SILT FENCE SHALL INCLUDE WIRE SUPPORT UNLESS INDICATED OTHERWISE.
7. PROVIDE A DOUBLE ROW WHERE SHOWN ON THE PLAN. MAINTAIN 2.5' BETWEEN ROWS.

POSTS: STEEL EITHER T OR U TYPE.
FENCE: WOVEN WIRE, 14-1/2 GA. 6" MAX. MESH OPENING
FABRIC: 1. AMOCO 1198
2. BELTECH 810
3. MIRAFI 130X
4. LING GTF 190
5. SI 915 SC

SILT FENCE DETAIL | C2



PLAN VIEW



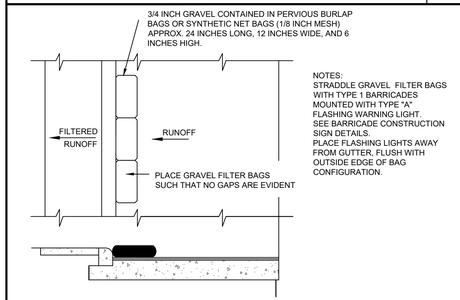
PROFILE VIEW

NOTES:
1. STONE SHALL BE 3 TO 5 INCH DIAMETER CRUSHED ROCK OR ACCEPTABLE CRUSHED PORTLAND CEMENT CONCRETE.
2. LENGTH SHALL BE SHOWN ON PLANS, WITH A MINIMUM LENGTH OF 20 FEET FOR LOTS WHICH ARE LESS THAN 150 FEET FROM EDGE OF PAVEMENT. THE MINIMUM DEPTH IN ALL OTHER CASES SHALL BE 50 FEET.
3. STONE LAYER THICKNESS SHALL NOT BE LESS THAN 6
4. THE WIDTH SHALL BE NO LESS THAN THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS. INCHES.
5. WHEN NECESSARY, VEHICLES SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO A PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WITH DRAINAGE FLOWING AWAY FROM BOTH THE STREET AND THE STABILIZED ENTRANCE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
6. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PAVED SURFACES. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PAVED SURFACES MUST BE REMOVED IMMEDIATELY.
7. THE ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.

Table 3.9 Minimum Exit Dimensions

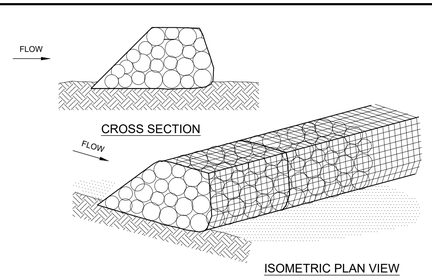
Disturbed Area	Min. Width of Exit	Min. Length of Exit
< 1 Acre	15 feet	20 feet
≥ 1 Acre but < 5 Acres	25 feet	50 feet
≥ 5 Acres	30 feet	50 feet

CONSTRUCTION ENTRANCE | B3



NOTES:
STRADDLE GRAVEL FILTER BAGS WITH TYPE 1 BARRICADES MOUNTED WITH TYPE "A" FLASHING WARNING LIGHT. SEE BARRICADE CONSTRUCTION SIGN DETAILS.
PLACE FLASHING LIGHTS AWAY FROM GUTTER, FLUSH WITH OUTSIDE EDGE OF BAG CONFIGURATION.

GRAVEL FILTER BAGS | A1



ISOMETRIC PLAN VIEW

NOTE:
1. ROCK BERM SHALL BE A MINIMUM OF 2 FEET TALL.
2. USE ONLY OPEN GRADED ROCK 4-8 INCHES IN DIAMETER FOR STREAM FLOW CONDITION. USE OPEN GRADED ROCK 3-5 INCHES IN DIAMETER FOR OTHER CONDITIONS.
3. THE ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING A MAXIMUM OPENING OF 1 INCH AND A MINIMUM WIRE SIZE OF 20 GAUGE AND SHALL BE BURIED IN A TRENCH APPROXIMATELY 3 TO 4 INCHES DEEP.
4. THE ROCK BERM SHALL BE INSPECTED EVERY TWO WEEKS OR AFTER EACH 1/2" RAIN EVENT AND SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTEDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
5. WHEN SILT REACHES A DEPTH EQUAL TO ONE-THIRD OF THE HEIGHT OF THE BERM OR ONE FOOT, WHICHEVER IS LESS, THE SILT SHALL BE REMOVED AND DISPOSED OF PROPERLY.
6. WHEN THE SITE IS COMPLETELY STABILIZED, THE BERM AND ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.
7. ROCK BERM SHOULD BE USED AS CHECK DAMS FOR CONCENTRATED FLOW AND ARE NOT INTENDED FOR USE IN PERIMETER PROTECTION.

ROCK BERM DETAIL | A3

SITE MAPS - SITE SPECIFIC NOTES

1. CONSTRUCTION ENTRANCE SHALL BE LOCATED SO AS TO PROVIDE THE LEAST AMOUNT OF DISTURBANCE TO THE FLOW OF TRAFFIC IN AND OUT OF THE SITE. ADDITIONALLY, CONSTRUCTION ENTRANCE SHALL BE LOCATED TO COINCIDE WITH THE PHASING OF THE PAVEMENT REPLACEMENT.
2. THE NATURE OF THIS SITE'S CONSTRUCTION CONSISTS OF:
   A. CLEARING AND GRUBBING
   B. PRELIMINARY GRADING
   C. UTILITY AND STORM SEWER INSTALLATION
   D. PAVEMENT CONSTRUCTION
   E. FINAL GRADING AND STABILIZATION
3. THE SUBSURFACE CONDITIONS ON-SITE CONSIST GENERALLY OF BROWN, GRAY, AND TAN CLAY PER THE GEOTECHNICAL REPORT PROVIDED BY INTEGRATED TESTING AND ENGINEERING COMPANY OF SAN ANTONIO, L.P, DATED SEPTEMBER 25, 2013, REPORT NO.S131320.
4. STORM WATER ON-SITE WILL LEAVE THE SITE VIA SURFACE FLOW.
5. POST CONSTRUCTION STORM WATER POLLUTION CONTROL MEASURES INCLUDE STABILIZATION BY PERMANENT PAVING, OR LANDSCAPING.
6. VELOCITY DISSIPATION DEVICES (RIP-RAP) WILL BE USED.
7. DISTURBED PORTIONS OF SITE MUST BE STABILIZED. STABILIZATION PRACTICES MUST BE INITIATED WITHIN 14 DAYS IN PORTIONS OF THE SITE WHERE CONSTRUCTION HAS BEEN EITHER TEMPORARILY OR PERMANENTLY CEASED, UNLESS EXCEPTED WITHIN THE TPDES PERMIT. CONTRACTOR SHALL REMOVE TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF STABILIZATION OR PERMANENT DRAINAGE FACILITIES.
8. PER FIRM MAPS 48029C0440G, DATED SEPTEMBER 29 2010, THE SITE IS NOT LOCATED WITHIN A FEMA DESIGNATED FLOODPLAIN.
9. CONTRACTOR IS RESPONSIBLE FOR MODIFYING THE SWPPP/SITE MAP TO INCLUDE BMP'S FOR ANY OFF-SITE MATERIAL WASTE, BORROW OR EQUIPMENT STORAGE AREAS.
10. CONTRACTOR SHALL INSPECT DISTURBED AREAS, MATERIAL STORAGE AREAS EXPOSED TO PRECIPITATION, STRUCTURAL CONTROL MEASURES, AND VEHICLE ENTRY AND EXIT AREAS AT LEAST ONCE EVERY 14 CALENDAR DAYS AND WITHIN 24 HOURS OF A STORM EVENT OF 0.5 INCHES OR GREATER.

SITE MAP - GENERAL NOTES

1. CONTRACTOR IS SOLELY RESPONSIBLE FOR SELECTION, IMPLEMENTATION, MAINTENANCE, AND EFFECTIVENESS OF ALL SWPPP CONTROLS - CONTROLS SHOWN ON THIS SITE MAP ARE SUGGESTED CONTROLS ONLY.
2. CONTRACTOR SHALL RECORD INSTALLATION, MAINTENANCE OR MODIFICATION, AND REMOVAL DATES FOR EACH BMP EMPLOYED (WHETHER CALLED OUT ON ORIGINAL SWPPP OR NOT) DIRECTLY ON THE SITE MAP.
3. DRAINAGE PATTERNS ARE SHOWN ON THIS PLAN BY PROPOSED AND EXISTING CONTOURS, FLOW ARROWS, AND SLOPES.
4. TEMPORARY AND PERMANENT STABILIZATION PRACTICES AND BMP'S SHALL BE INSTALLED AT THE EARLIEST POSSIBLE TIME DURING THE CONSTRUCTION SEQUENCE. AS AN EXAMPLE, PERIMETER SILT FENCE SHALL BE INSTALLED BEFORE COMMENCEMENT OF ANY GRADING ACTIVITIES. OTHER BMP'S SHALL BE INSTALLED AS SOON AS PRACTICABLE AND SHALL BE MAINTAINED UNTIL FINAL SITE STABILIZATION IS ATTAINED. CONTRACTOR SHALL ALSO REFERENCE CIVIL AND LANDSCAPE PLANS SINCE PERMANENT STABILIZATION IS PROVIDED BY LANDSCAPING, THE BUILDING(S), AND SITE PAVING.
5. BMP'S HAVE BEEN LOCATED AS INDICATED ON THIS PLAN IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES IN ORDER TO MINIMIZE SEDIMENT TRANSFER. FOR EXAMPLE: SILT FENCES LOCATED AT TOE OF SLOPE AND INLET PROTECTION FOR INLETS RECEIVING SEDIMENT FROM SITE RUN-OFF.
6. SANITARY SEWER EFFLUENT IS DISPOSED OF VIA AN ONSITE SEWER SYSTEM CONNECTED TO A MUNICIPAL SEWER SYSTEM.

TEMPORARY EROSION CONTROL NOTES

1. THE CONTRACTOR SHALL INSTALL EROSION/SEDIMENTATION CONTROLS AND TREE/NATURAL AREA PROTECTIVE FENCING PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR EXCAVATION).
2. THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS SHALL BE IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN.
3. THE PLACEMENT OF TREE/NATURAL AREA PROTECTIVE FENCING SHALL BE IN ACCORDANCE WITH STANDARD NOTES FOR TREE AND NATURAL AREA PROTECTION AND THE APPROVED GRADING/TREE AND NATURAL AREA PLAN.
4. A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD ON-SITE WITH THE CONTRACTOR, DESIGN ENGINEER/PERMIT APPLICANT AND ENVIRONMENTAL INSPECTOR AFTER INSTALLATION OF THE EROSION/SEDIMENTATION CONTROLS AND TREE/NATURAL AREA PROTECTION MEASURES AND PRIOR TO BEGINNING ANY SITE PREPARATION WORK. THE CONTRACTOR SHALL NOTIFY THE CITY AT LEAST THREE (3) DAYS PRIOR TO THE MEETING DATE.
5. ANY MAJOR VARIATION IN MATERIALS OR LOCATIONS OF CONTROLS OR FENCES FROM THOSE SHOWN ON THE APPROVED PLANS WILL REQUIRE A REVISION AND MUST BE APPROVED BY THE REVIEWING ENGINEER, ENVIRONMENTAL SPECIALIST, OR ARBORIST AS APPROPRIATE. MAJOR REVISIONS MUST BE APPROVED BY THE PLANNING AND DEVELOPMENT DEPARTMENT AND THE DRAINAGE UTILITY DEPARTMENT. MINOR CHANGES OR ADDITIONAL CONTROL MEASURES TO BE MADE AS FIELD REVISIONS TO THE EROSION AND SEDIMENTATION CONTROL PLAN MAY BE REQUIRED BY THE ENVIRONMENTAL INSPECTOR DURING THE COURSE OF CONSTRUCTION TO CORRECT CONTROL INADEQUACIES AT NO ADDITIONAL COST TO THE OWNER.
6. THE CONTRACTOR IS REQUIRED TO INSPECT THE CONTROLS AND FENCES AT WEEKLY INTERVALS AND AFTER SIGNIFICANT RAINFALL EVENTS TO INSURE THAT THEY ARE FUNCTIONING PROPERLY. THE PERSON(S) RESPONSIBLE FOR MAINTENANCE OF CONTROLS AND FENCES SHALL IMMEDIATELY MAKE ANY NECESSARY REPAIRS TO DAMAGED AREAS. SILT ACCUMULATION AT CONTROLS MUST BE REMOVED WHEN THE DEPTH REACHES SIX (6) INCHES.

PERMANENT EROSION CONTROL NOTES

ALL DISTURBED AREAS SHALL BE RESTORED AS NOTED BELOW.

A. A MINIMUM OF FOUR (4) INCHES OF TOPSOIL SHALL BE PLACED IN ALL DRAINAGE CHANNELS (EXCEPT ROCK) AND BETWEEN THE CURB AND THE RIGHT-OF-WAY LINE.

B. THE SEEDING FOR PERMANENT EROSION CONTROL SHALL BE APPLIED OVER AREAS DISTURBED BY CONSTRUCTION AS FOLLOWS:

BROADCAST SEEDING:

1. FROM SEPTEMBER 15 TO MARCH 1, SEEDING SHALL BE WITH A COMBINATION OF 2 POUNDS PER 1000 SQUARE FEET OF UNHULLED BERMUDA AND 7 POUNDS PER 1000 SQUARE FOOT OF WINTER RYE WITH A PURITY OF 95% WITH 90% GERMINATION.
2. FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERMUDA AT A RATE OF 2 POUNDS PER 1000 SQUARE FEET WITH A PURITY OF 95% WITH 85% GERMINATION.
   A. FERTILIZER SHALL BE A PELLETED OR GRANULAR SLOW RELEASE WITH AN ANALYSIS OF 15-15-15 TO BE APPLIED ONCE AT PLANTING AND ONCE DURING THE PERIOD OF ESTABLISHMENT AT THE RATE OF 1 POUND PER 1000 SQUARE FEET.
   B. MULCH TYPE USED SHALL BE HAY, STRAW OR MULCH APPLIED AT A RATE OF 45 POUNDS PER 1000 SQUARE FEET.

HYDRAULIC SEEDING:

1. FROM SEPTEMBER 15 TO MARCH 1, SEEDING SHALL BE WITH A COMBINATION OF 1 POUND PER 1000 SQUARE FEET OF UNHULLED BERMUDA AND 7 POUNDS PER 1000 SQUARE FOOT OF WINTER RYE WITH A PURITY OF 95% WITH 90% GERMINATION.
2. FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERMUDA AT A RATE OF 1 POUND PER 1000 SQUARE FEET WITH A PURITY OF 95% WITH 85% GERMINATION.
   A. FERTILIZER SHALL BE A WATER SOLUBLE FERTILIZER WITH AN ANALYSIS OF 15-15-15 AT THE RATE OF 1.5 POUNDS PER 1000 SQUARE FEET.
   B. MULCH TYPE USED SHALL BE HAY, STRAW OR MULCH APPLIED AT A RATE OF 45 POUNDS PER 1000 SQUARE FEET, WITH SOIL TACKIFIER AT A RATE OF 1.4 POUNDS PER 1000 SQUARE FEET.
   C. THE PLANTED AREA SHALL BE IRRIGATED OR SPRINKLED IN A MANNER THAT WILL NOT ERODE THE TOPSOIL, BUT WILL SUFFICIENTLY SOAK THE SOIL TO A DEPTH OF SIX (6) INCHES. THE IRRIGATION SHALL OCCUR AT TEN-DAY INTERVALS DURING THE FIRST TWO MONTHS. RAINFALL OCCURRENCES OF 1/2 INCH OR MORE SHALL POSTPONE THE WATERING SCHEDULE FOR ONE WEEK.
   D. RESTORATION SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1-1/2 INCHES HIGH WITH 95% COVERAGE, PROVIDED NO BARE SPOTS LARGER THAN 16 SQUARE FEET EXIST.
   E. WHEN REQUIRED, NATIVE GRASS SEEDING SHALL COMPLY WITH REQUIREMENTS OF THE ENVIRONMENTAL CRITERIA MANUAL.

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No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
10101 REUNION PLACE, SAN ANTONIO, TX 78216
PHONE: 210-541-9166 FAX: 210-541-1699
WWW.KIMLEY-HORN.COM
TBPE: FIRM NO. 928

STATE OF TEXAS
MICHAEL A. SCHOLZE
131737
LICENSED PROFESSIONAL ENGINEER
8/10/2022

SCALE	AS NOTED
DESIGNED BY	MAS
DRAWN BY	ATR
CHECKED BY	MAS

EROSION CONTROL DETAILS

ROSILLO RANCH
PHASES 5 & 6
MDP-LAND-21-11100067
LAND-PLAT-21-11800632
SAN ANTONIO, TEXAS

DATE
8/12/2022

PROJECT NO.
068706708

SHEET NUMBER
C2.1

Plotted By:Reed, Andrew August 11, 2022 03:27:51pm K:\SNA_Civil\068706708-HomebaseBasilisPh5-6\CAD\PlanSheets\C-EROS-068706708.dwg
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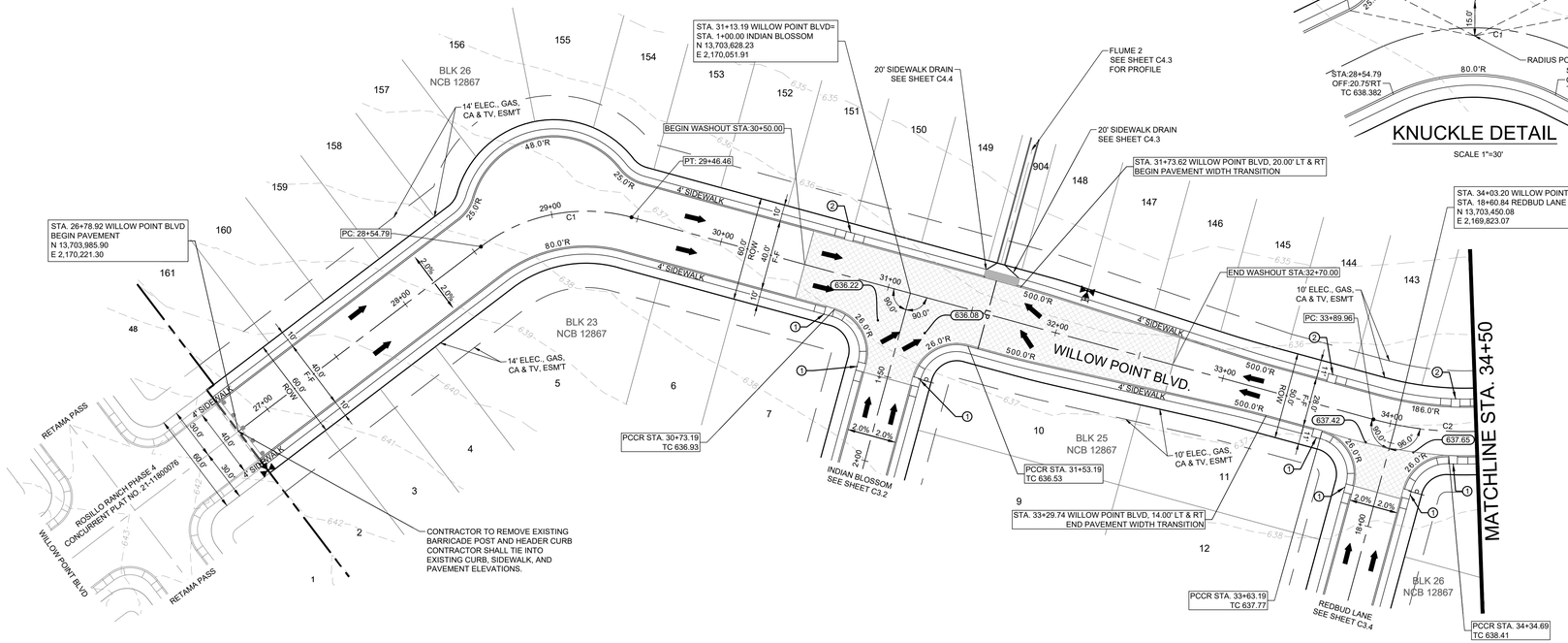
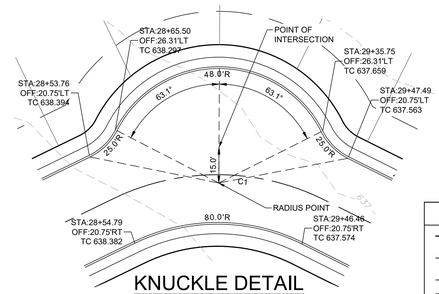
CURVE TABLE						
CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
C1	100.00'	91.66'	N25°55'38"E	88.49'	52°31'06"	49.33'
C2	200.00'	70.17'	S42°08'07"W	69.81'	20°06'08"	35.45'





KNUCKLE DETAIL

SCALE 1"=30'

GRAPHIC SCALE IN FEET
0 20 40 80

LEGEND

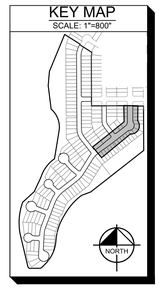
UNIT BOUNDARY	
HP	HIGH POINT
LP	LOW POINT
	WASHOUT CROWN SECTION
	SIDEWALK TO BE BUILT BY DEVELOPER
	STREET DRAINAGE FLOW DIRECTION
640.00	PAVEMENT SPOT ELEVATION
PC	POINT OF CURVATURE
PT	POINT OF TANGENCY
PI	POINT OF INTERSECTION
CR	CURB RETURN
PCCR	POINT OF CURVATURE AT CURB RETURN
PICR	POINT OF INTERSECTION AT CURB RETURN
EX	EXISTING
PVI	POINT OF VERTICAL INTERSECTION
PR TC LT/RT	PROPOSED TOP OF CURB LEFT/RIGHT
TC	TOP OF CURB
TP	TOP OF PAVEMENT

NOTES:
1. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
2. ALL RAMPS AND ANY PROPOSED SIDEWALKS THAT IS NOT CONSTRUCTED BY THE DEVELOPER SHALL BE CONSTRUCTED BY THE HOME BUILDER
3. REFER TO STORM SEWER PLAN FOR INLET SIZES. STORM STRUCTURES SHALL BE BUILT BASED ON STORM PLAN SPECIFICATIONS.
4. SEE SHEET C3.7 FOR TYPICAL PAVEMENT SECTION AND DETAILS.

CONSTRUCTION NOTES	
NUMBER	DESCRIPTION
1	PROPOSED CITY OF SAN ANTONIO TYPE I ADA RAMP SEE DETAIL, SHEET C3.8
2	PROPOSED CITY OF SAN ANTONIO TYPE II ADA RAMP SEE DETAIL, SHEET C3.8

PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

KEY MAP
SCALE: 1"=800'



BENCHMARK LIST

BM #50 CP MAGNAIL W/ WASHER
N: 13705110 E: 2170235
ELEVATION: 646.51'
BM #51 CP MAGNAIL W/ WASHER
N: 13705307 E: 2169932
ELEVATION: 639.13'

CAUTION!!
EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING UTILITIES DUE TO DAMAGE INCURRED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.

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	DATE	REVISIONS	BY

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TBPE: FIRM NO. 928

STATE OF TEXAS
MICHAEL A. SCHOLZE
131737
LICENSED PROFESSIONAL ENGINEER
8/12/2022

SCALE	AS NOTED
DESIGNED BY	MAS
DRAWN BY	ATR
CHECKED BY	MAS

WILLOW POINT BLVD. PLAN & PROFILE

ROSILLO RANCH
PHASES 5 & 6
MDP-LAND-21-11100067
LAND-PLAT-21-11800632
SAN ANTONIO, TEXAS

DATE 8/12/2022
PROJECT NO. 068706708
SHEET NUMBER C3.0

Plotted By:Reed, Andrew August 11, 2022 03:28:25pm K:\SNA_Civil\068706708-HeartlandRosilloPh5-6\CAD\PlanSheets\C-ROAD-1.dwg
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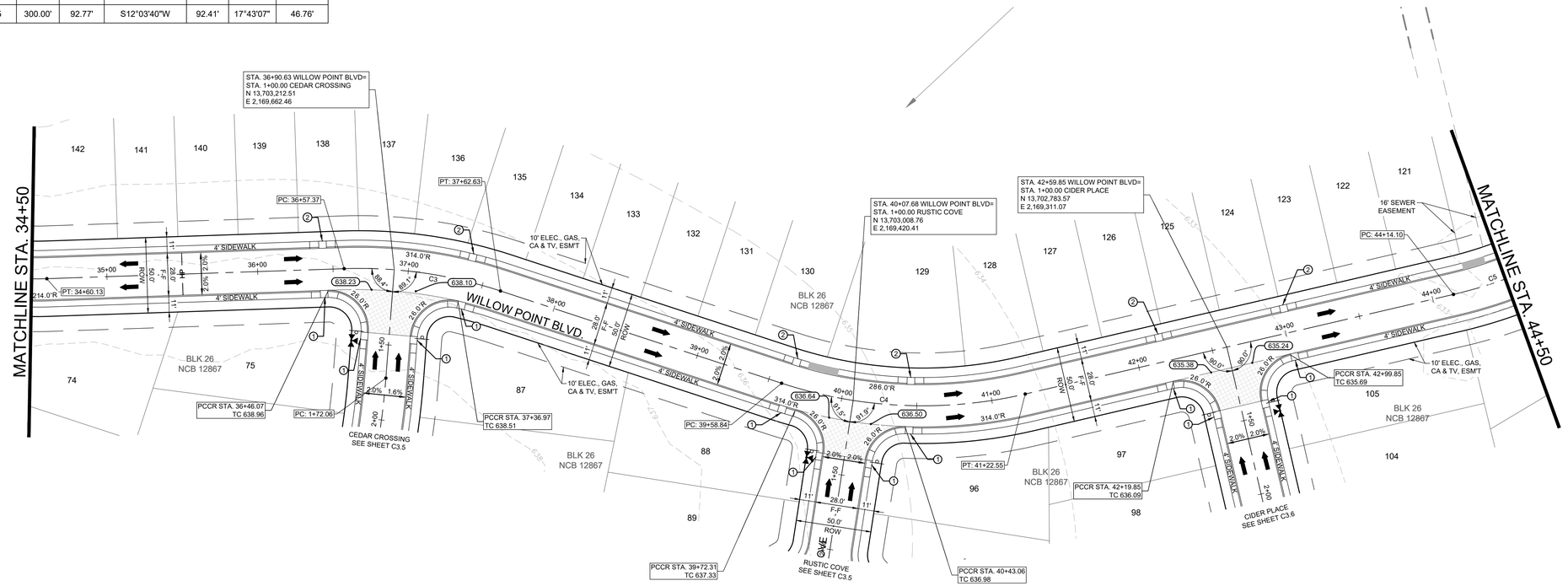
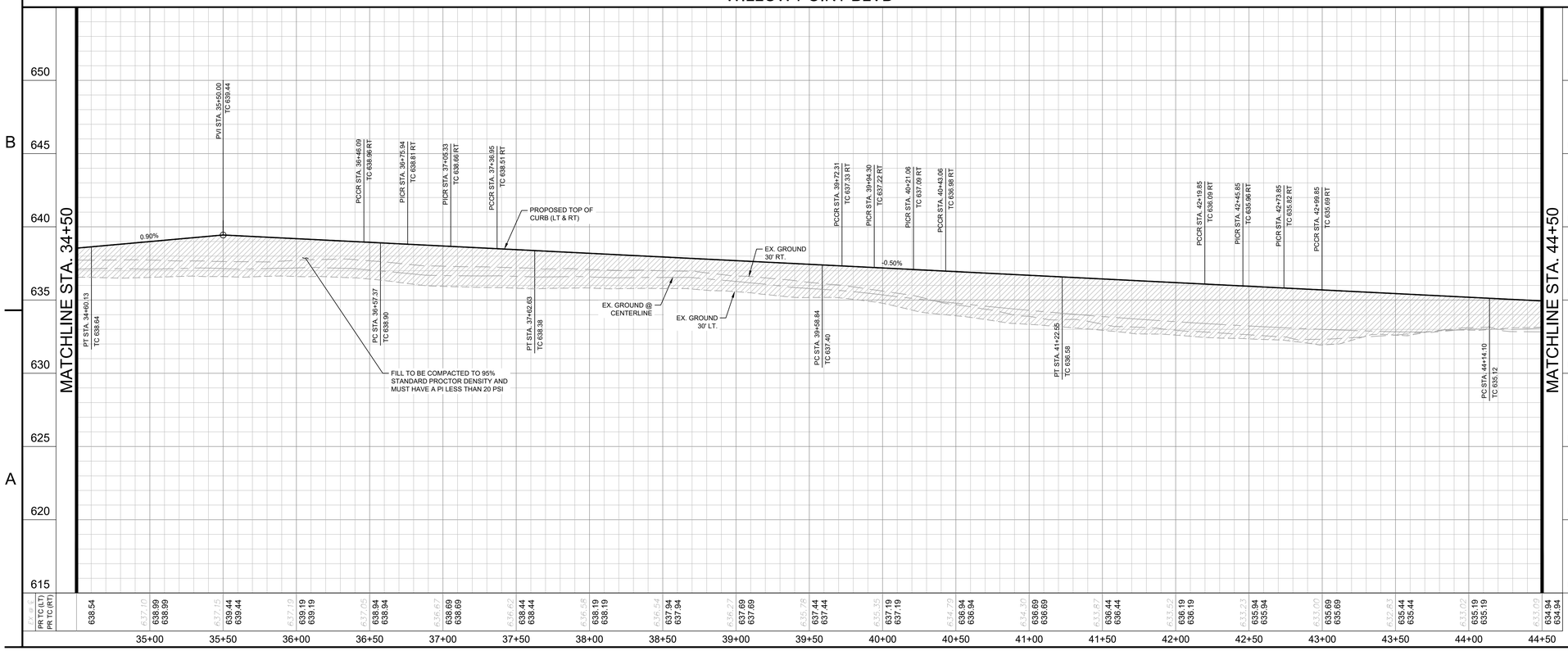
CURVE TABLE						
CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
C3	300.00'	105.25'	N42°08'07"E	104.72'	20°06'08"	53.17'
C4	300.00'	163.71'	S36°33'12"W	161.68'	31°15'57"	83.95'
C5	300.00'	92.77'	S12°03'40"W	92.41'	17°43'07"	46.76'





WILLOW POINT BLVD

GRAPHIC SCALE IN FEET
0 20 40 80

LEGEND	
	UNIT BOUNDARY
HP	HIGH POINT
LP	LOW POINT
	WASHOUT CROWN SECTION
	SIDEWALK TO BE BUILT BY DEVELOPER
	STREET DRAINAGE FLOW DIRECTION
640.00	PAVEMENT SPOT ELEVATION
PC	POINT OF CURVATURE
PT	POINT OF TANGENCY
PI	POINT OF INTERSECTION
CR	CURB RETURN
PCCR	POINT OF CURVATURE AT CURB RETURN
PICR	POINT OF INTERSECTION AT CURB RETURN
EX	EXISTING
PVI	POINT OF VERTICAL INTERSECTION
PR TC LT/RT	PROPOSED TOP OF CURB LEFT/RIGHT
TC	TOP OF CURB
TP	TOP OF PAVEMENT

NOTES:
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3. REFER TO STORM SEWER PLAN FOR INLET SIZES. STORM STRUCTURES SHALL BE BUILT BASED ON STORM PLAN SPECIFICATIONS.
4. SEE SHEET C3.7 FOR TYPICAL PAVEMENT SECTION AND DETAILS.

CONSTRUCTION NOTES	
NUMBER	DESCRIPTION
1	PROPOSED CITY OF SAN ANTONIO TYPE I ADA RAMP SEE DETAIL, SHEET C3.8
2	PROPOSED CITY OF SAN ANTONIO TYPE II ADA RAMP SEE DETAIL, SHEET C3.8

PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

KEY MAP
SCALE: 1"=800'

BENCHMARK LIST
BM #50 CP MAGNAIL W/ WASHER N: 13705110 E: 2170235 ELEVATION: 646.51' BM #51 CP MAGNAIL W/ WASHER N: 13705307 E: 2169932 ELEVATION: 639.13'

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WWW.KIMLEY-HORN.COM
TBPE: FIRM NO. 928

STATE OF TEXAS
MICHAEL A. SCHOLZE
131737
LICENSED PROFESSIONAL ENGINEER
8/12/2022

SCALE	AS NOTED
DESIGNED BY	MAS
DRAWN BY	ATR
CHECKED BY	MAS

WILLOW POINT BLVD PLAN & PROFILE

ROSILLO RANCH
PHASES 5 & 6
MDP-LAND-21-11100067
LAND-PLAT-21-11800632
SAN ANTONIO, TEXAS

DATE
8/12/2022

PROJECT NO.
068706708

SHEET NUMBER
C3.1

Plotted By:Reed, Andrew August 11, 2022 03:28:40pm K:\SNA_Civil\068706708-HeartlandRosilloPh5-6\CAD\PlanSheets\C-ROAD-1.dwg
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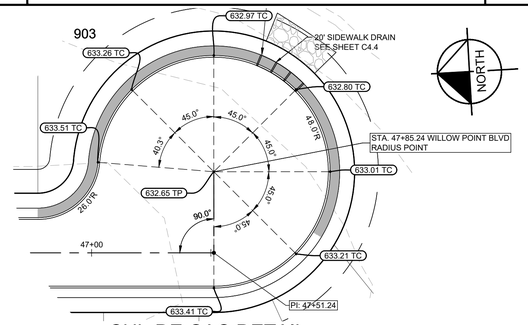
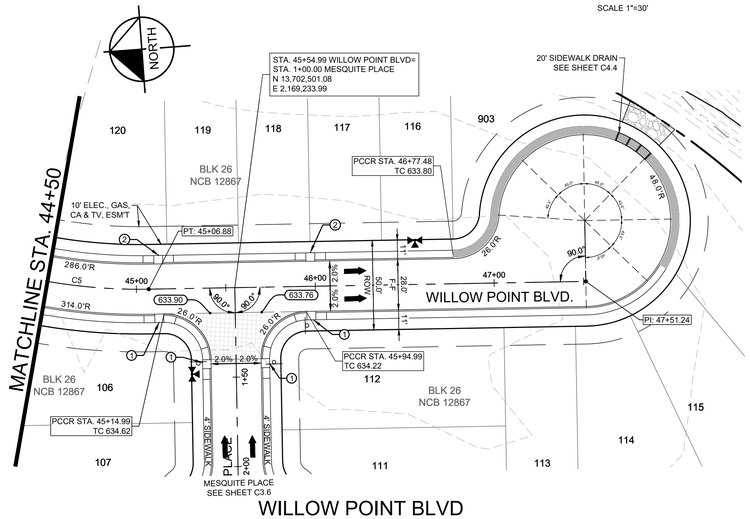
CURVE TABLE						
CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
C5	300.00'	92.77'	S12°03'40"W	92.41'	17°43'07"	46.76'
C6	100.00'	65.42'	S19°04'22"E	64.26'	37°28'54"	33.93'

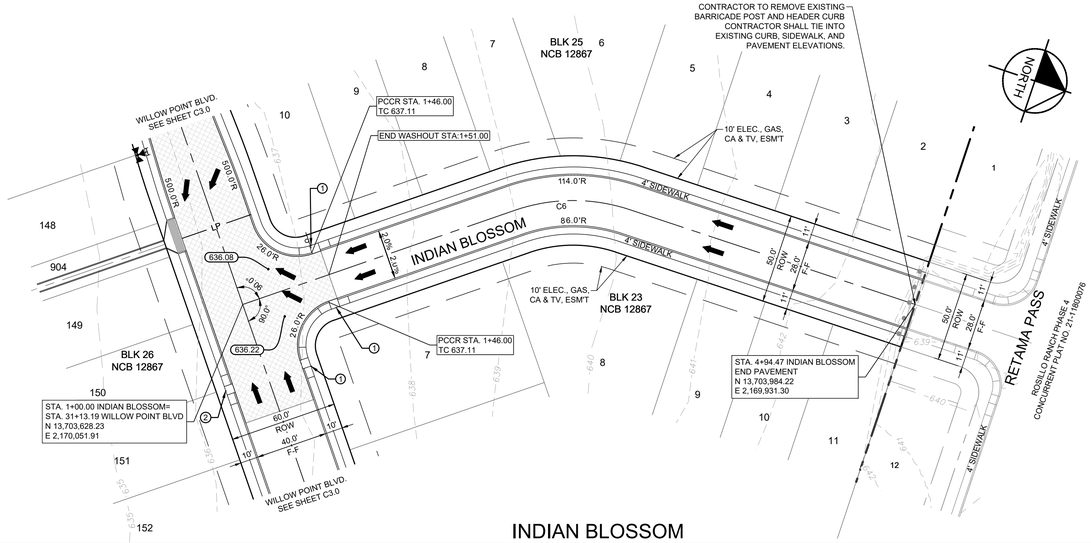


CUL-DE-SAC DETAIL

SCALE 1"=30'



WILLOW POINT BLVD



INDIAN BLOSSOM

GRAPHIC SCALE IN FEET
0 20 40 80

LEGEND

	UNIT BOUNDARY
HP	HIGH POINT
LP	LOW POINT
	WASHOUT CROWN SECTION
	SIDEWALK TO BE BUILT BY DEVELOPER
	STREET DRAINAGE FLOW DIRECTION
640.00	PAVEMENT SPOT ELEVATION
PC	POINT OF CURVATURE
PT	POINT OF TANGENCY
PI	POINT OF INTERSECTION
CR	CURB RETURN
PCCR	POINT OF CURVATURE AT CURB RETURN
PICR	POINT OF INTERSECTION AT CURB RETURN
EX	EXISTING
PVI	POINT OF VERTICAL INTERSECTION
PR TC LT/RT	PROPOSED TOP OF CURB LEFT/RIGHT
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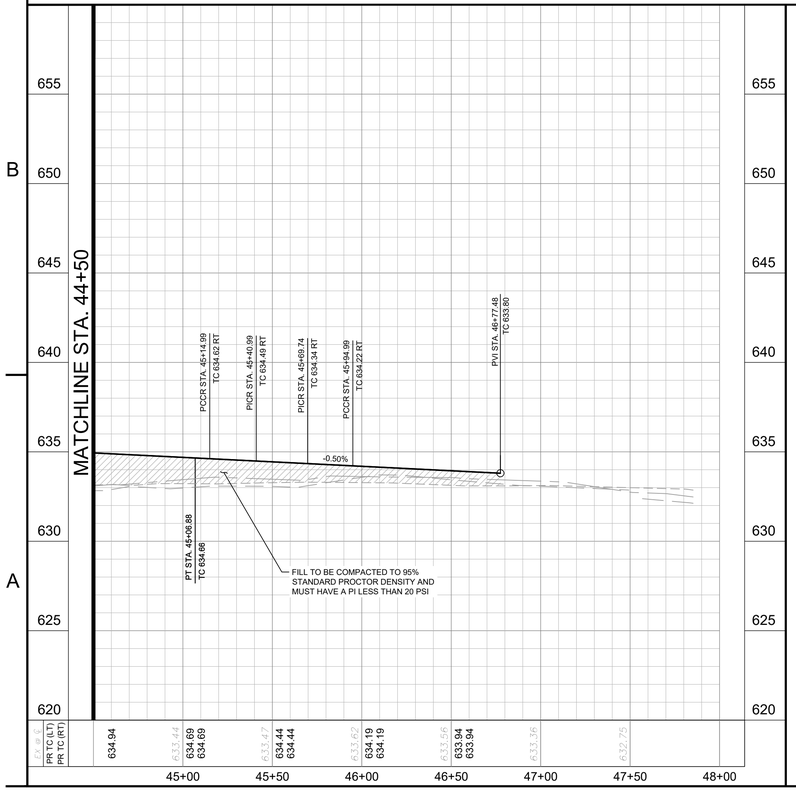
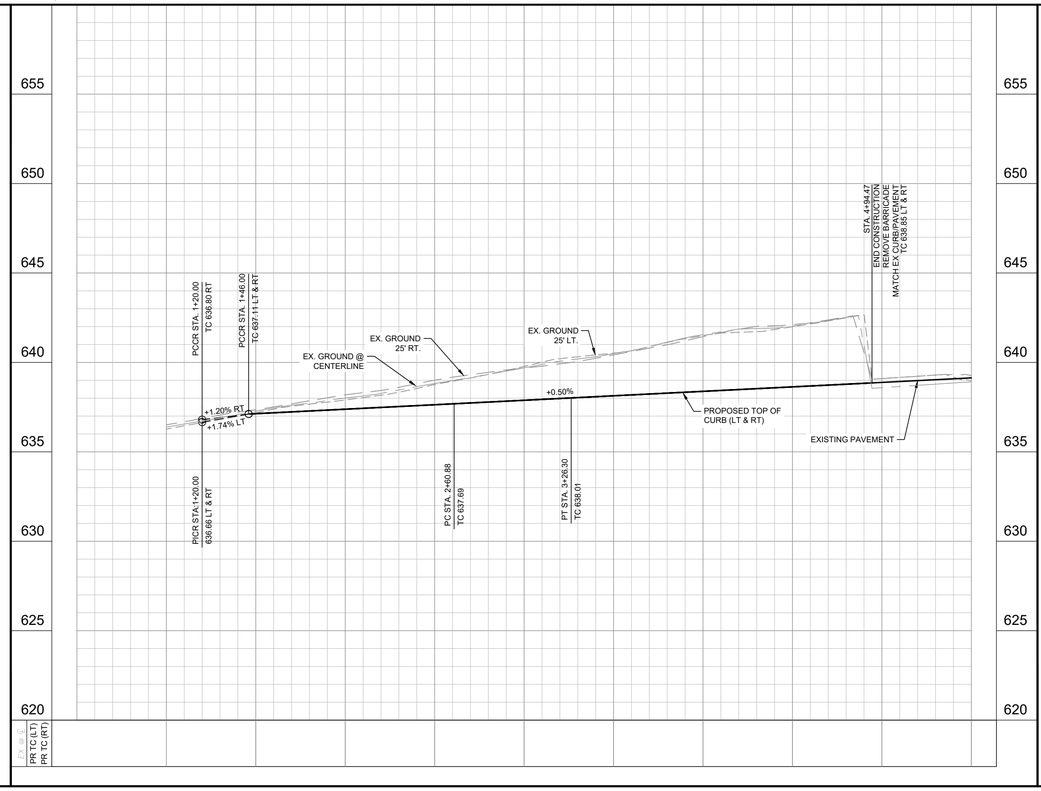
CONSTRUCTION NOTES	
NUMBER	DESCRIPTION
1	PROPOSED CITY OF SAN ANTONIO TYPE I ADA RAMP SEE DETAIL, SHEET C3.8
2	PROPOSED CITY OF SAN ANTONIO TYPE II ADA RAMP SEE DETAIL, SHEET C3.8



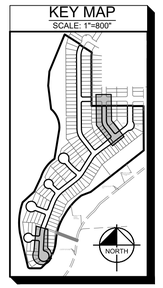


PROFILE SCALE

1" = 40' HORIZONTAL
1" = 4' VERTICAL

KEY MAP

SCALE: 1"=800'



BENCHMARK LIST

BM #50 CP MAGNAIL W/ WASHER
N: 13705110 E: 2170235
ELEVATION: 646.51'
BM #51 CP MAGNAIL W/ WASHER
N: 13705307 E: 2169932
ELEVATION: 639.13'

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STATE OF TEXAS
MICHAEL A. SCHOLZE
131737
LICENSED PROFESSIONAL ENGINEER
8/12/2022

SCALE	AS NOTED
DESIGNED BY	MAS
DRAWN BY	ATR
CHECKED BY	MAS

WILLOW POINT BLVD & INDIAN BLOSSOM PLAN & PROFILE

ROSILLO RANCH
PHASES 5 & 6
MDP-LAND-21-11100067
LAND-PLAT-21-11800632
SAN ANTONIO, TEXAS

DATE 8/12/2022
PROJECT NO. 068706708
SHEET NUMBER C3.2

Plotted By:Reed, Andrew August 11, 2022 03:29:05pm K:\SNA_Civil\068706708-HeartlandRosilloPh5-6\CAD\PlanSheets\C-ROAD-1.dwg
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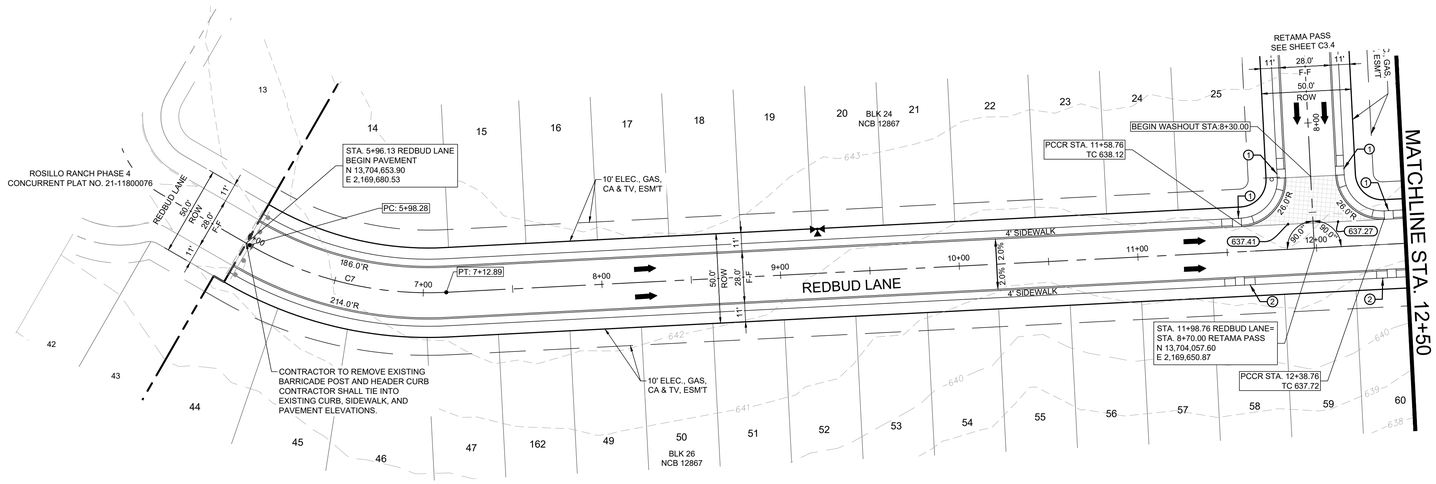
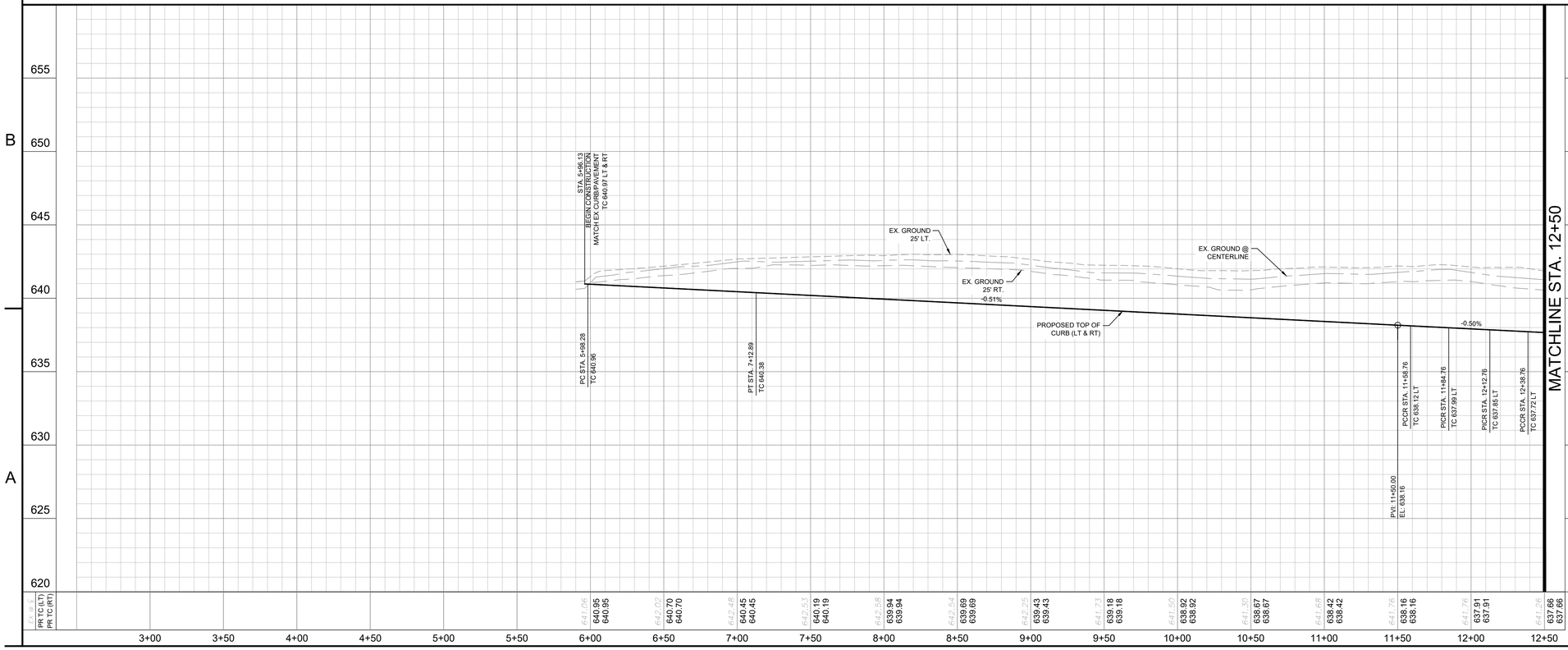
CURVE TABLE						
CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
C7	200.00'	114.61'	S16°05'06"W	113.05'	32°50'02"	58.93'

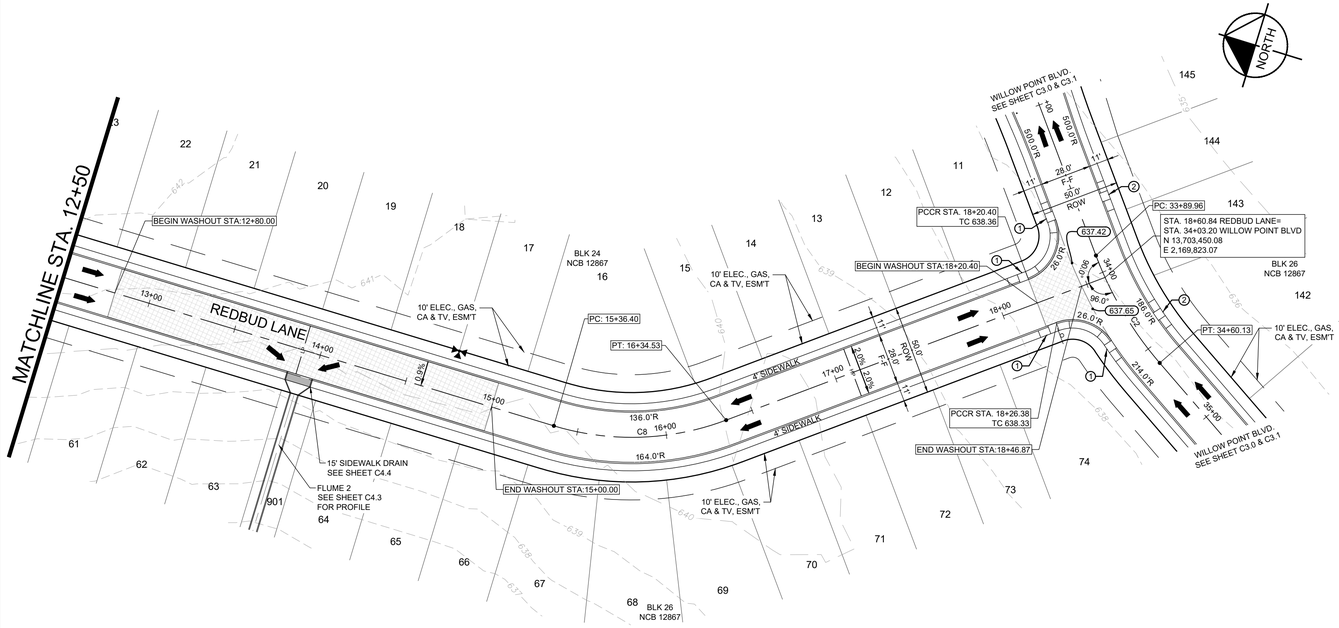


REDBUD LANE

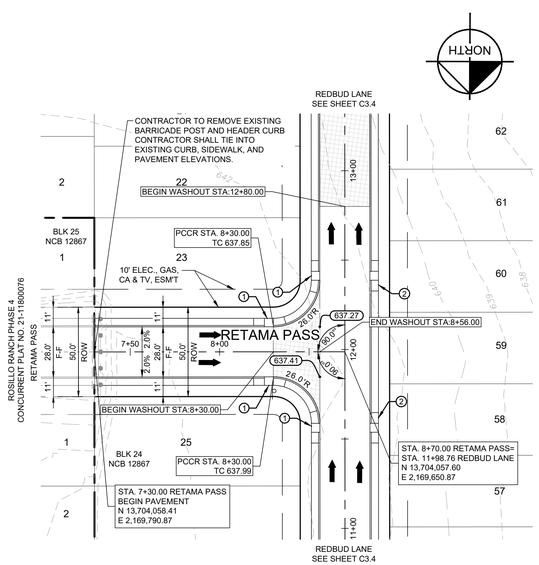


| | | | | | |

CURVE TABLE						
CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
C2	200.00'	70.17'	S42°08'07"W	69.81'	20°06'08"	35.45'
C8	150.00'	98.13'	S19°04'22"E	96.39'	37°28'55"	50.89'



REDBUD LANE



RETAMA PASS

GRAPHIC SCALE IN FEET
0 20 40 80

LEGEND

- UNIT BOUNDARY
- HP — HIGH POINT
- LP — LOW POINT
- WASHOUT CROWN SECTION
- SIDEWALK TO BE BUILT BY DEVELOPER
- STREET DRAINAGE FLOW DIRECTION
- (640.00) PAVEMENT SPOT ELEVATION
- PC — POINT OF CURVATURE
- PT — POINT OF TANGENCY
- PI — POINT OF INTERSECTION
- CR — CURB RETURN
- PCCR — POINT OF CURVATURE AT CURB RETURN
- PICR — POINT OF INTERSECTION AT CURB RETURN
- EX — EXISTING
- PVI — POINT OF VERTICAL INTERSECTION
- PR TC LT/RT — PROPOSED TOP OF CURB LEFT/RIGHT
- TC — TOP OF CURB
- TP — TOP OF PAVEMENT

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CONSTRUCTION NOTES	
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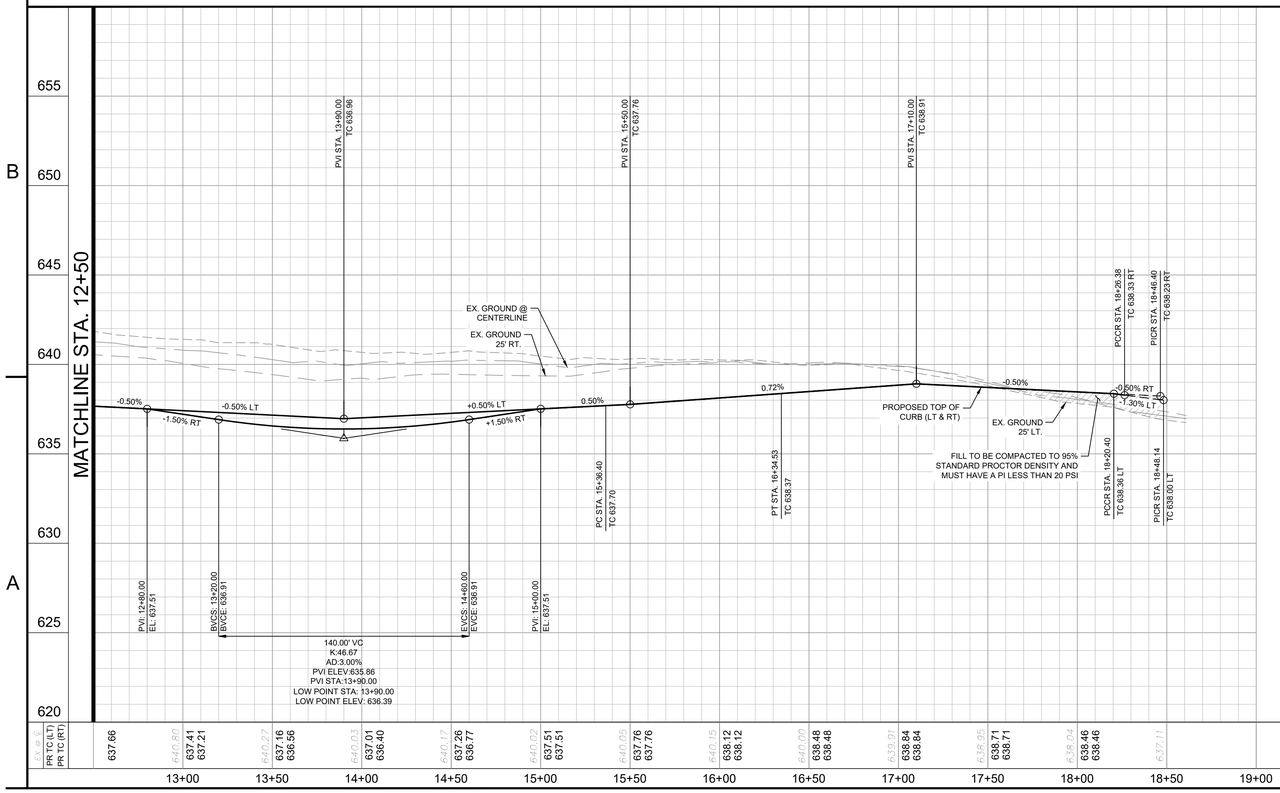
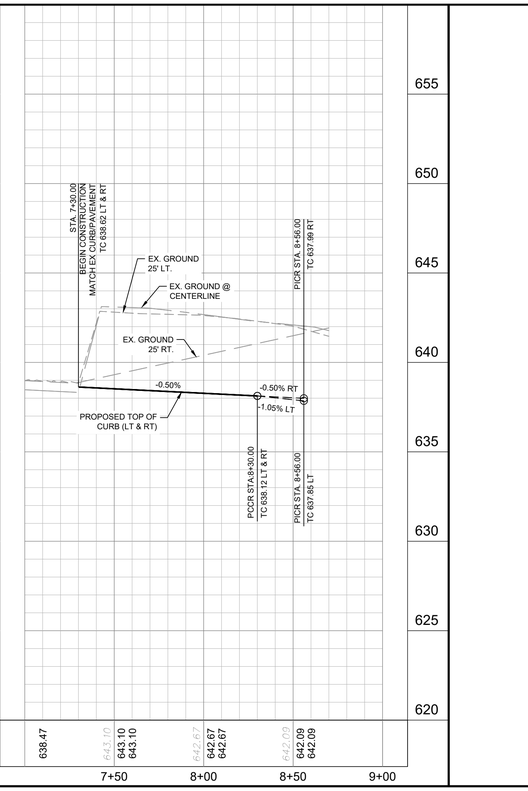
2	PROPOSED CITY OF SAN ANTONIO TYPE II ADA RAMP SEE DETAIL, SHEET C3.8



REDBUD LANE

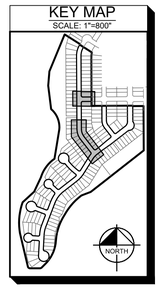


REDBUD LANE

RETAMA PASS

PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

KEY MAP
SCALE: 1"=800'



BENCHMARK LIST
BM #50 CP MAGNAIL W/ WASHER N: 13705110 E: 2170235 ELEVATION: 646.51' BM #51 CP MAGNAIL W/ WASHER N: 13705307 E: 2169932 ELEVATION: 639.13'

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811 Know what's **below.** **Call** before you dig.

DATE	8/12/2022
PROJECT NO.	068706708
SHEET NUMBER	C3.4

REDBUD LANE & RETAMA PASS PLAN & PROFILE

ROSILLO RANCH PHASES 5 & 6 MDP-LAND-21-11100067 LAND-PLAT-21-11800632 SAN ANTONIO, TEXAS

NO.	REVISIONS	DATE	BY	
SCALE	AS NOTED	DESIGNED BY	MAS	
		DRAWN BY	ATR	
		CHECKED BY	MAS	

STATE OF TEXAS
MICHAEL A. SCHOLZE
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LICENSED PROFESSIONAL ENGINEER
8/12/2022

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TBPE: FIRM NO. 928

Plotted By:Reed, Andrew August 11, 2022 03:29:51pm K:\SNA_Civil\068706708-Hearhead\Resilia\Ph5-6\CAD\PlanSheets\C-ROAD-2.dwg
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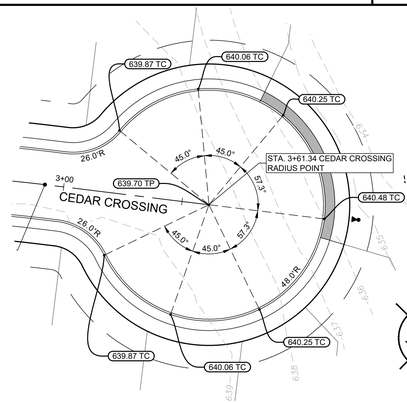
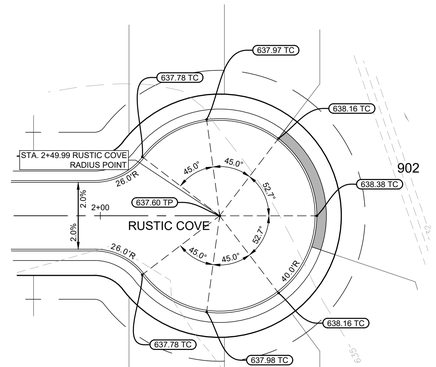
CEDAR CROSSING CUL-DE-SAC DETAIL

SCALE 1"=30'



RUSTIC COVE CUL-DE-SAC DETAIL

SCALE 1"=30'



CURVE TABLE

CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
C3	300.00'	105.25'	N42°08'07"E	104.72'	20°06'08"	53.17'
C4	300.00'	163.71'	S36°33'12"W	161.68'	31°15'57"	83.95'
C9	500.00'	119.99'	S44°41'19"E	119.70'	13°45'00"	60.29'

GRAPHIC SCALE IN FEET
0 20 40 80

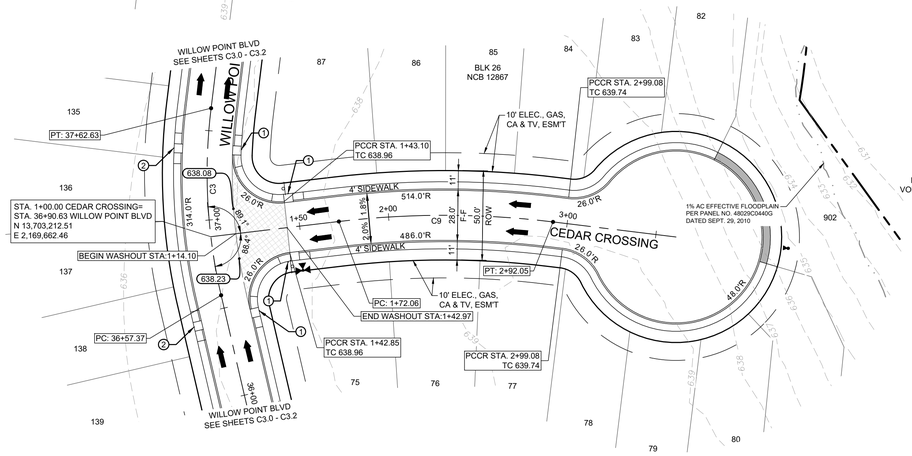
LEGEND

UNIT BOUNDARY	
HP	HIGH POINT
LP	LOW POINT
	WASHOUT CROWN SECTION
	SIDEWALK TO BE BUILT BY DEVELOPER
	STREET DRAINAGE FLOW DIRECTION
640.00	PAVEMENT SPOT ELEVATION
PC	POINT OF CURVATURE
PT	POINT OF TANGENCY
PI	POINT OF INTERSECTION
CR	CURB RETURN
PCCR	POINT OF CURVATURE AT CURB RETURN
PICR	POINT OF INTERSECTION AT CURB RETURN
EX	EXISTING
PVI	POINT OF VERTICAL INTERSECTION
PR TC LT/RT	PROPOSED TOP OF CURB LEFT/RIGHT
TC	TOP OF CURB
TP	TOP OF PAVEMENT

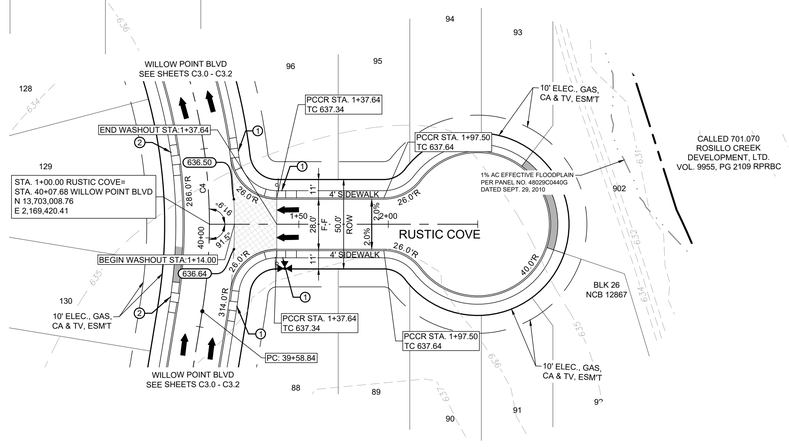
NOTES:
1. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
2. ALL RAMPS AND ANY PROPOSED SIDEWALKS THAT IS NOT CONSTRUCTED BY THE DEVELOPER SHALL BE CONSTRUCTED BY THE HOME BUILDER
3. REFER TO STORM SEWER PLAN FOR INLET SIZES. STORM STRUCTURES SHALL BE BUILT BASED ON STORM PLAN SPECIFICATIONS.
4. SEE SHEET C3.7 FOR TYPICAL PAVEMENT SECTION AND DETAILS.

CONSTRUCTION NOTES

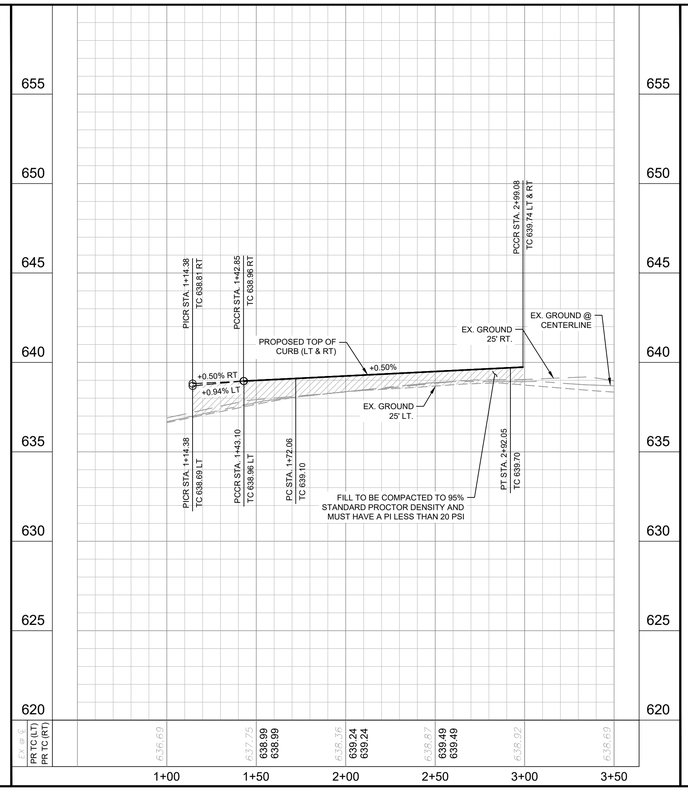
NUMBER	DESCRIPTION
1	PROPOSED CITY OF SAN ANTONIO TYPE I ADA RAMP SEE DETAIL, SHEET C3.8
2	PROPOSED CITY OF SAN ANTONIO TYPE II ADA RAMP SEE DETAIL, SHEET C3.8



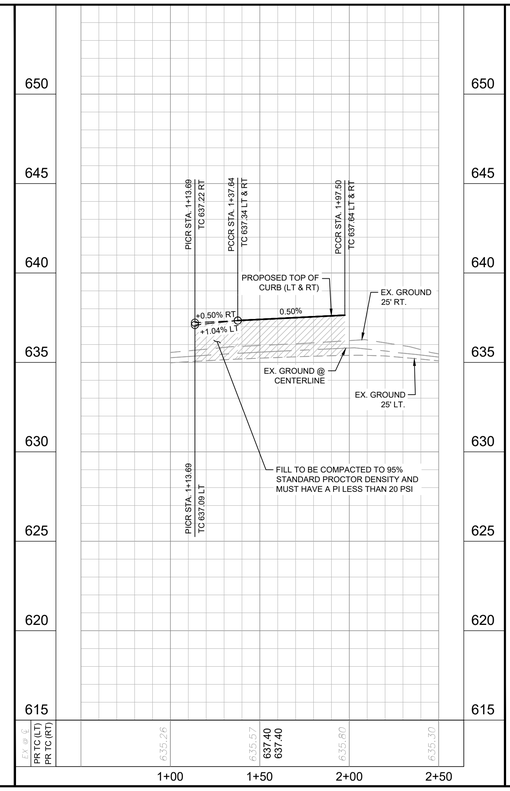
CEDAR CROSSING



RUSTIC COVE



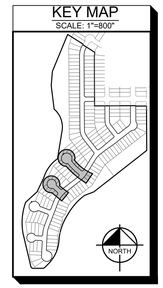
CEDAR CROSSING



RUSTIC COVE

PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

KEY MAP
SCALE: 1"=800'



BENCHMARK LIST

BM #50 CP MAGNAIL W/ WASHER
N: 13705110 E: 2170235
ELEVATION: 646.51'
BM #51 CP MAGNAIL W/ WASHER
N: 13705307 E: 2169932
ELEVATION: 639.13'

CAUTION!!
EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING UTILITIES DUE TO DAMAGE INCURRED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.

811 Know what's **below.** **Call** before you dig.

NO.	DATE	BY	REVISIONS

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
10101 REUNION PLACE, SUITE 400, SAN ANTONIO, TX 78216
PHONE: 210-541-9166 FAX: 210-541-1699
WWW.KIMLEY-HORN.COM
TBPE: FIRM NO. 928

STATE OF TEXAS
MICHAEL A. SCHOLZE
131737
LICENSED PROFESSIONAL ENGINEER
8/12/2022

SCALE	DESIGNED BY	DRAWN BY	CHECKED BY
AS NOTED	MAS	ATR	MAS

CEDAR CROSSING & RUSTIC COVE PLAN & PROFILE

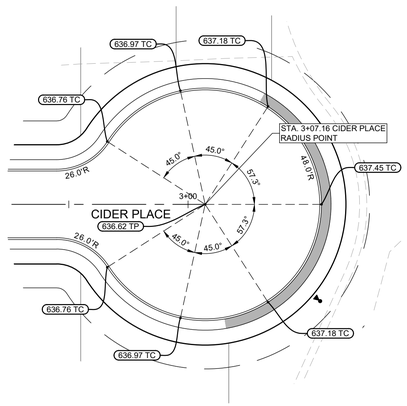
ROSILLO RANCH PHASES 5 & 6

MDP-LAND-21-11100067
LAND-PLAT-21-11800632
SAN ANTONIO, TEXAS

DATE
8/12/2022

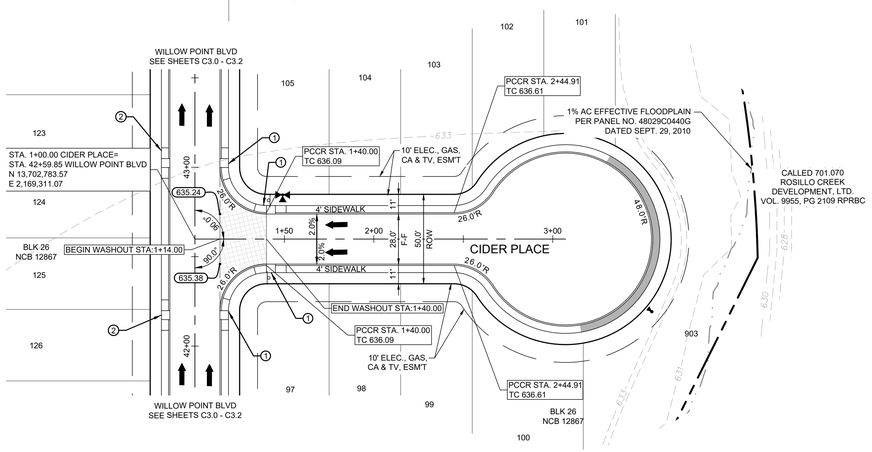
PROJECT NO.
068706708

SHEET NUMBER
C3.5

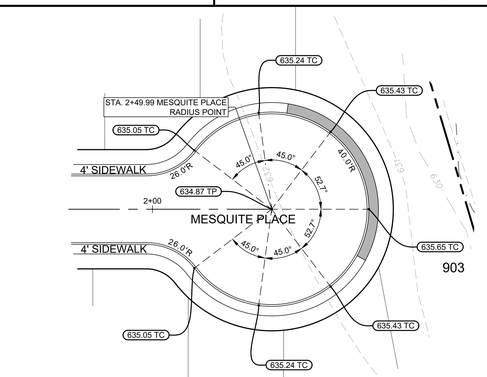


CEDAR CROSSING CUL-DE-SAC DETAIL

SCALE 1"=30'

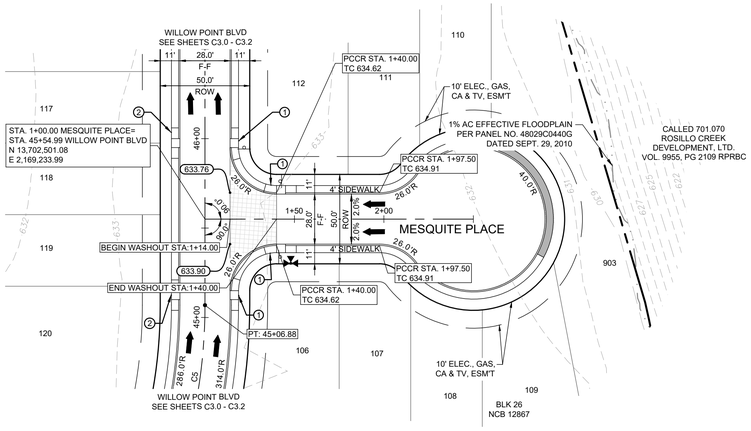


CIDER PLACE



RUSTIC COVE CUL-DE-SAC DETAIL

SCALE 1"=30'



MESQUITE PLACE

CURVE TABLE

CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
C5	300.00'	92.77'	S12°03'40"W	92.41'	17°43'07"	46.76'

GRAPHIC SCALE IN FEET
0 20 40 80

LEGEND

———	UNIT BOUNDARY
HP	HIGH POINT
LP	LOW POINT
	WASHOUT CROWN SECTION
	SIDEWALK TO BE BUILT BY DEVELOPER
→	STREET DRAINAGE FLOW DIRECTION
640.00	PAVEMENT SPOT ELEVATION
PC	POINT OF CURVATURE
PT	POINT OF TANGENCY
PI	POINT OF INTERSECTION
CR	CURB RETURN
PCCR	POINT OF CURVATURE AT CURB RETURN
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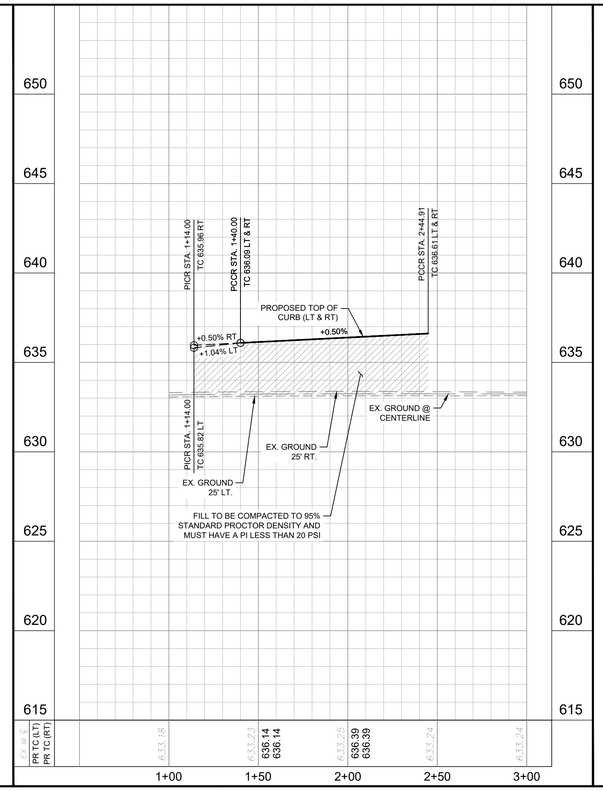
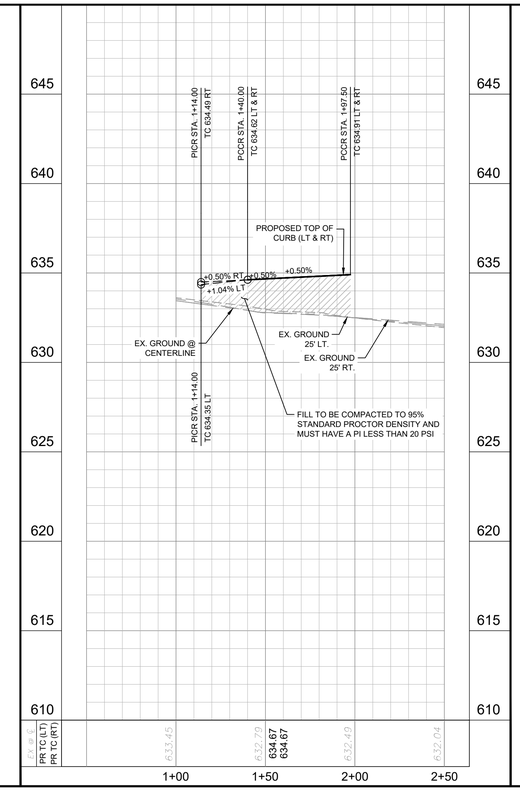


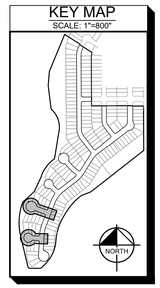
CIDER PLACE



MESQUITE PLACE

PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

KEY MAP
SCALE: 1"=800'



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Kimley»Horn
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STATE OF TEXAS
MICHAEL A. SCHOLZE
131737
LICENSED
PROFESSIONAL ENGINEER
8/12/2022

SCALE	DESIGNED BY	DRAWN BY	CHECKED BY
AS NOTED	MAS	ATR	MAS

CIDER PLACE & MESQUITE PLACE PLAN & PROFILE

ROSILLO RANCH
PHASES 5 & 6
MDP-LAND-21-11100067
LAND-PLAT-21-11800632
SAN ANTONIO, TEXAS

DATE
8/12/2022

PROJECT NO.
068706708

SHEET NUMBER
C3.6

Plotted By:Reed, Andrew August 11, 2022 03:30:38pm K:\SNA_Civil\068706708-HeartwoodRosilloPh5-6\CAD\PlanSheets\C-ROAD-3.dwg
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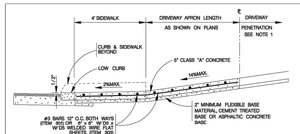
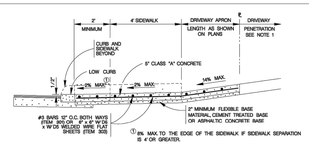


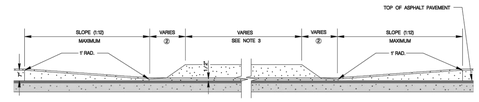
TYPICAL RESIDENTIAL DRIVEWAY SECTION

WITH SIDEWALK ABUTTING CURB
ITEM 503.1



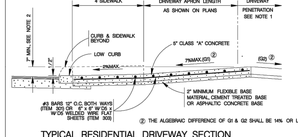
TYPICAL RESIDENTIAL DRIVEWAY SECTION

WITH SIDEWALK SEPARATED FROM CURB
ITEM 503.1



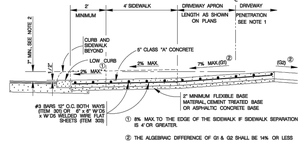
CURB PROFILE AT DRIVEWAY

WITH SIDEWALK ABUTTING CURB



TYPICAL RESIDENTIAL DRIVEWAY SECTION

WHERE PROPERTY IS LOWER THAN STREET & SIDEWALK IS ABUTTING CURB
ITEM 503.1

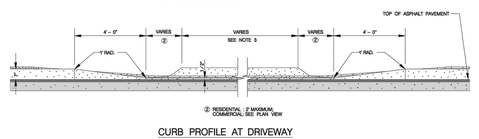


TYPICAL RESIDENTIAL DRIVEWAY SECTION

WHERE PROPERTY IS LOWER THAN STREET & SIDEWALK IS SEPARATED FROM CURB
ITEM 503.1

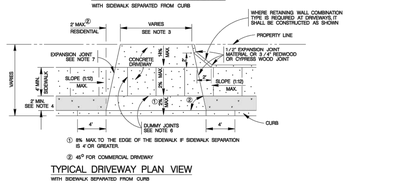
TYPICAL DRIVEWAY PLAN VIEW

WITH SIDEWALK ABUTTING CURB



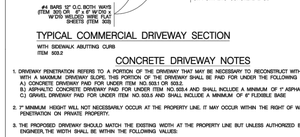
CURB PROFILE AT DRIVEWAY

WITH SIDEWALK SEPARATED FROM CURB



TYPICAL DRIVEWAY PLAN VIEW

WITH SIDEWALK SEPARATED FROM CURB



TYPICAL COMMERCIAL DRIVEWAY SECTION

WITH SIDEWALK ABUTTING CURB
ITEM 503.2

TYPICAL COMMERCIAL DRIVEWAY SECTION

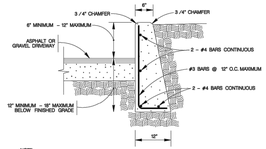
WITH SIDEWALK SEPARATED FROM CURB
ITEM 503.2

CONCRETE DRIVEWAY NOTES

1. DRIVEWAY PENETRATION REFERS TO A PORTION OF THE DRIVEWAY THAT MAY BE NECESSARY TO RECONSTRUCT WITHIN PRIVATE PROPERTY TO COMPLY WITH A MAXIMUM DRIVEWAY SLOPE. THIS PORTION OF THE DRIVEWAY SHALL BE PAID FOR UNDER THE FOLLOWING ITEMS AS MAY APPLY:
   A) CONCRETE DRIVEWAY PAD FOR UNDER ITEM NO. 503.1 OR 503.2.
   B) ASPHALTIC CONCRETE DRIVEWAY PAD FOR UNDER ITEM NO. 503.4 AND SHALL INCLUDE A MINIMUM OF 1" ASPHALT TYPE 'D' & 6" FLEXIBLE BASE
   C) GRAVEL DRIVEWAY PAD FOR UNDER ITEM NO 503.5 AND SHALL INCLUDE A MINIMUM OF 6" FLEXIBLE BASE
2. 7" MINIMUM HEIGHT WILL NOT NECESSARILY OCCUR AT THE PROPERTY LINE, IT MAY OCCUR WITHIN THE RIGHT OF WAY OR WITHIN THE DRIVEWAY PENETRATION ON PRIVATE PROPERTY.
3. THE PROPOSED DRIVEWAY SHOULD MATCH THE EXISTING WIDTH AT THE PROPERTY LINE BUT UNLESS AUTHORIZED BY THE CITY TRAFFIC ENGINEER, THE WIDTH SHALL BE WITHIN THE FOLLOWING VALUES:

TYPE	MINIMUM	MAXIMUM
RESIDENTIAL	10'	20'
COMMERCIAL – ONE WAY	12'	20'
COMMERCIAL – TWO WAY	24'	30'

4. FOR LOCAL TYPE "A" STREETS, SIDEWALK SHALL HAVE A MINIMUM WIDTH OF 4' AND IF SEPARATED FROM THE CURB, THE SIDEWALK SHALL BE LOCATED A MINIMUM OF 2' FROM THE BACK OF CURB.
5. FOR OTHER THAN LOCAL TYPE "A" STREETS, THE SIDEWALK SHALL HAVE A MINIMUM WIDTH OF 4' AND SEPARATED A MINIMUM OF 2' FROM THE BACK OF CURB OR, AS AN OPTION, THE SIDEWALK SHALL HAVE A MINIMUM WIDTH OF 6' WHEN LOCATED AT THE BACK OF CURB.
6. DUMMY JOINTS PARALLEL TO THE CURB SHALL BE PLACED WHERE THE SIDEWALK MEETS THE DRIVEWAY. DUMMY JOINTS PERPENDICULAR TO THE CURB, AND WITHIN THE BOUNDARIES OF THE PARALLEL DUMMY JOINTS, SHALL BE PLACED AT INTERVALS EQUAL TO THE WIDTH OF THE SIDEWALK.
7. A MINIMUM OF TWO ROUND AND SMOOTH DOWEL BARS 3/4" IN DIAMETER AND 18" IN LENGTH SHALL BE SPACED 18" APART AT EACH EXPANSION JOINT.
8. SIDEWALK RAMP LENGTHS SHALL BE OF SUFFICIENT LENGTH TO MAINTAIN 8.33% (1:12) MAXIMUM SLOPE. WHERE SIDEWALKS CROSS DRIVEWAYS, SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.
9. SIDEWALK RAMP SURFACE SHALL BE BRUSH FINISHED.



NOTE:
1. COST OF REINFORCEMENT TO BE INCLUDED IN UNIT COST OF ITEM 307.1.
2. CONCRETE RETAINING WALL COMBINATION TYPE SHALL BE USED FOR CONCRETE DRIVEWAYS.

DRIVEWAY – CONCRETE RETAINING WALL

ON COMPACTED SUBGRADE
ITEM 307.1

MAY 2009

CITY OF SAN ANTONIO

CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

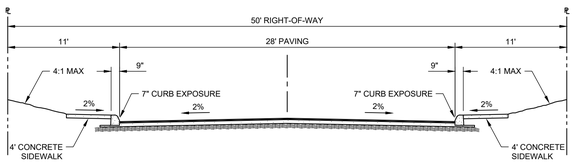
CONCRETE DRIVEWAY STANDARDS

% SUBMITTAL	PROJECT NO.:	DATE:
DRAWN BY: V. VASQUEZ	DSGN BY:___	CHKD. BY: R.S. HOSSEINI, P.E.

SHEET NO.:___OF___

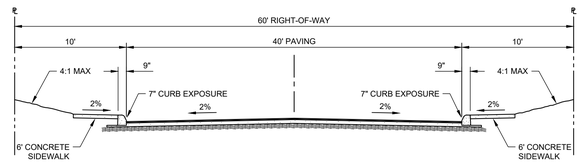
PAVEMENT NOTES

1. CONTRACTOR TO REFER TO GEOTECH REPORT PREPARED BY INTEC, INC (REPORT #S221093) DATED MARCH 17, 2022
2. THE PROJECT GEOTECHNICAL ENGINEER SHOULD DELINEATE THE STREET SECTIONS FOR LIME STABILIZATION AREAS AND AREAS WHICH DO NOT REQUIRE LIME STABILIZATION AT THE TIME OF CONSTRUCTION.



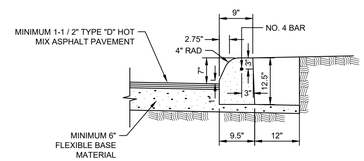
B1 LOCAL TYPE "A" STREET SECTION 50' ROW

N.T.S.



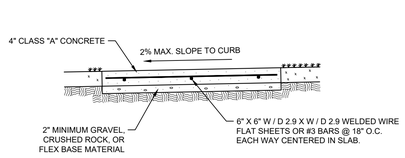
B3 LOCAL TYPE "B" STREET SECTION 60' ROW

N.T.S.



A1 CONCRETE CURB

N.T.S.



A2 CONCRETE SIDEWALK

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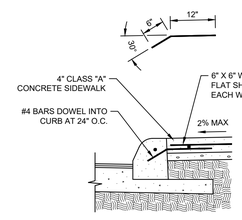
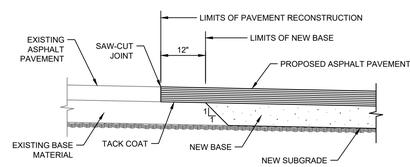


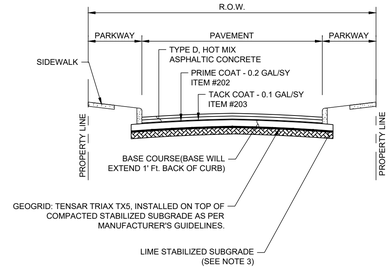
A3 CONCRETE SIDEWALK ABUTTING CURB

N.T.S.



A4 PAVEMENT JUNCTION DETAIL

N.T.S.



PAVEMENT SECTION NOTES

1. ALL VEGETATION AND TOPSOIL CONTAINING ORGANIC MATERIAL SHOULD BE CLEARED AND GRUBBED TO A MINIMUM DEPTH OF 6 INCHES AT THE BEGINNING OF EARTHWORK CONSTRUCTION. THE SUBGRADE SHOULD BE COMPACTED TO 95 PERCENT OF THE MAXIMUM DRY DENSITY, AS DETERMINED BY ASTM D 698 TEST METHOD WITHIN OPTIMUM AND 3 PERCENT ABOVE OPTIMUM MOISTURE CONTENT.
2. BASE COURSE TO BE CRUSHED LIMESTONE OR GRAVEL AND SHOULD CONFORM TO TXDOT ITEM 247, TYPE A, GRADE 1 OR 2. THE BASE COURSE SHOULD BE BROUGHT TO NEAR OPTIMUM MOISTURE CONDITIONS AND COMPACTED IN LIFTS TO AT LEAST 95 PERCENT OF MAXIMUM DRY DENSITY AS DETERMINED BY TEST METHOD TXDOT 113E.
3. IF THE PAVEMENT SUBGRADE P.I. VALUES ARE GREATER THAN 20, THEN:
   3.1. THE SUGBRADE SHOULD BE STABILIZED TO A DEPTH OF 6" OR 8" USING 7% LIME CONTENT.
   3.2. THE SUBGRADE SOILS SHOULD BE TESTED FOR SOIL SULFATE CONTENT PRIOR TO STABILIZATION. IF THE SOIL SULFATE CONTENT IS HIGHER THAN 3000 PPM, AN ALTERNATE PROCEDURE WILL BE NEEDED.
   3.3. LIME APPLICATION RATE OF 32.0 LBS PER S.Y. FOR 6" DEPTH.
   3.4. LIME APPLICATION RATE OF 43.0 LBS PER S.Y. FOR 8" DEPTH.
4. FILL MATERIAL USED TO RAISE THE GRADE SHALL HAVE A MINIMUM CBR VALUE OF 2.0 AND A MAXIMUM PLASTICITY INDEX VALUE OF 60. LIME APPLICATION RATES SHOULD BE RE-EVALUATED AND TESTED FOR SULFATE CONTENT PRIOR TO USE OF THE FILL MATERIAL. FILL MATERIAL SHOULD BE APPROVED BY THE GEOTECHNICAL ENGINEER, FREE OF DELETERIOUS MATERIAL, AND THE GRAVEL SIZE SHOULD NOT EXCEED 3 INCHES IN SIZE.

PAVEMENT SECTION					
	ASPHALTIC CONCRETE	AGGREGATE BASE	GEOGRID	STABILIZED SUBGRADE	
STREET CLASS	TYPE D (IN.)	TYPE B (IN.)	(IN.)		(IN.)
LOCAL TYPE A	3	-	12.5	YES	8
LOCAL TYPE B	3	-	18	YES	8

A5 PAVEMENT SECTION NOTES

N.T.S.

NO.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
10101 REUNION PLACE, SAN ANTONIO, TX 78216
PHONE: 210-541-9166 FAX: 210-366-8999
WWW.KIMLEY-HORN.COM
TBPE: FIRM NO. 928

STATE OF TEXAS
MICHAEL A. SCHOLZE
131737
LICENSED PROFESSIONAL ENGINEER
8/12/2022

SCALE	AS NOTED
DESIGNED BY	MAS
DRAWN BY	ATR
CHECKED BY	MAS

PAVING DETAILS

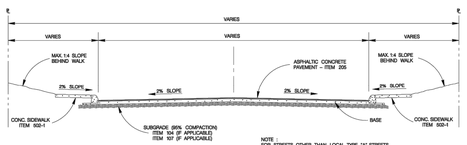
ROSILLO RANCH
PHASES 5 & 6
MDP-LAND-21-11100067
LAND-PLAT-21-11800632
SAN ANTONIO, TEXAS

DATE
8/12/2022

PROJECT NO.
068706708

SHEET NUMBER
C3.7

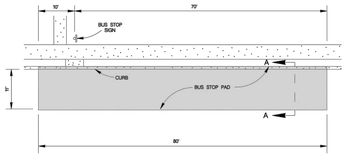
Plotted By: Reed, Andrew August 11, 2022 04:54:02pm K:\SNA_Civil\068706708-HeartlandRosillo\Ph5_6\CAD\PlanSheets\C-DETL-068706708.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



NOTE:
FOR STREETS OTHER THAN LOCAL TYPE "A" STREETS, THE EDGE OF THE SIDEWALK MUST BE LOCATED A MINIMUM OF TWO FEET AWAY FROM THE BACK OF THE CURB.

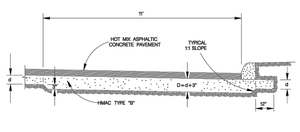
TYPICAL STREET SECTION

SCALE: 1"=4'



PLAN VIEW

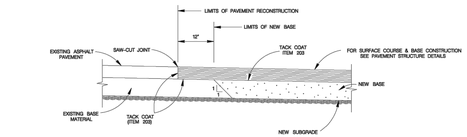
SCALE: 1"=30'



SECTION "A-A"

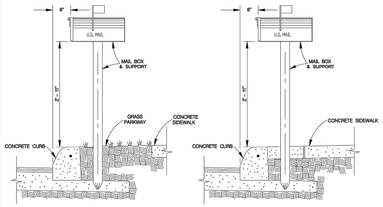
SCALE: 1"=4'

NOTES:
1. EXCAVATION FOR THICKENED PAVEMENT SECTION WILL BE PAID UNDER ITEM NO. 104 "STREET EXCAVATION".
2. BASE MATERIALS
A.) IF THE MEASUREMENT FOR THE HMAC MATERIAL IS PER TON, THICKENED PAVEMENT SECTION WILL BE PAID FOR UNDER ITEM NO. 204 "PFC TY" – PER TON.
B.) IF THE MEASUREMENT FOR THE HMAC MATERIAL IS PER SQUARE YARD, NO EXTRA PAYMENT WILL BE MADE FOR THE THICKENED PAVEMENT.



PAVEMENT JUNCTION DETAILS

SCALE: 1"=2'



MAIL BOX PERPENDICULAR TO CURB

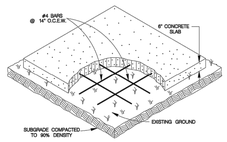
WHEN SIDEWALK IS DETACHED FROM CURB
SCALE: 1"=2"

MAIL BOX PERPENDICULAR TO CURB

WHEN SIDEWALK IS ATTACHED TO CURB
SCALE: 1"=2"

MAIL BOX LOCATION

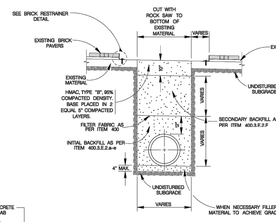
ITEM 513.1



MAIL BOX PAD NOTES
1. THE CONTRACTOR WILL CONSTRUCT SLABS FOR "TEMPORARY MAIL BOX COLLECTION PAD" FOR THE UNITED STATES POSTAL SERVICE WITH LOCATIONS AND SIZES SPECIFIED BY THE CITY ENGINEER DURING CONSTRUCTION.
2. THE CONSTRUCTION OF SLABS SHALL CONFORM TO ITEM 513 "REMOVING AND RELOCATING MAILBOXES".
3. PAYMENT WILL BE MADE UNDER ITEM 513.2 "COMMUNITY MAILBOX SLAB – PER SQUARE YARD".
4. UNIT PRICE WILL INCLUDE REMOVAL OF "TEMPORARY MAIL BOX COLLECTION PAD" SLABS AT THE END OF THE PROJECT. NO SEPARATE PAY ITEM.

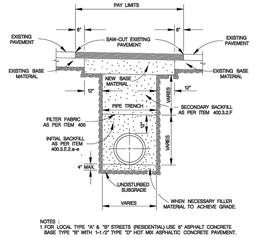
COMMUNITY MAIL BOX SLAB

ITEM 513.2
SCALE: 1"=4"



TYPICAL BASE REPLACEMENT FOR BRICK SURFACED STREET SECTION

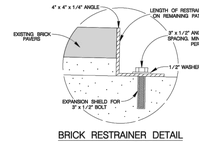
ITEM 251.3
SCALE: 1"=4"



NOTES:
1. FOR LOCAL TYPE "A" & "B" STREETS (RESIDENTIAL) USE 4" ASPHALT CONCRETE. BASE TYPE "B" WITH 1"-1/2" TYPE "D" HOT MIX ASPHALTIC CONCRETE PAVEMENT.
2. FOR ARTERIAL & SECONDARY STREETS (COMMERCIAL) USE 12.5" TYPE "B" HOT MIX ASPHALTIC CONCRETE PAVEMENT LEVELING UP COURSE & 1-1/2" TYPE "D" HOT MIX ASPHALTIC CONCRETE PAVEMENT SURFACE COURSE.

TYPICAL PAVEMENT REPLACEMENT

ITEM 251
SCALE: 1"=4"



BRICK RESTRAINER DETAIL

SCALE = 1 : 6

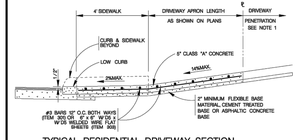
HMAC BUS STOP PAD

NEED CITY ENGINEER'S APPROVAL TO USE HMAC BUS PAD

FEBRUARY 2010
CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

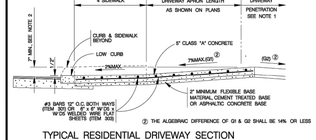
MISCELLANEOUS CONSTRUCTION STANDARDS II

% SUBMITTAL | PROJECT NO.: | DATE:
DRAWN BY: V. VASQUEZ | DSGN. BY: | CHKD. BY:R.S. HOSSEIN, P.E. | SHEET NO.: | OF



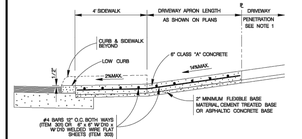
TYPICAL RESIDENTIAL DRIVEWAY SECTION

WITH SIDEWALK ABUTTING CURB
ITEM 503.1



TYPICAL RESIDENTIAL DRIVEWAY SECTION

WHERE PROPERTY IS LOWER THAN STREET & SIDEWALK IS ABUTTING CURB
ITEM 503.1



TYPICAL COMMERCIAL DRIVEWAY SECTION

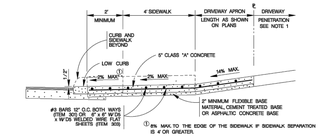
WITH SIDEWALK ABUTTING CURB
ITEM 503.2

CONCRETE DRIVEWAY NOTES

1. DRIVEWAY PENETRATION REFERS TO A PORTION OF THE DRIVEWAY THAT MAY BE NECESSARY TO RECONSTRUCT WITHIN PRIVATE PROPERTY TO COMPLY WITH A MAXIMUM DRIVEWAY SLOPE. THIS PORTION OF THE DRIVEWAY SHALL BE PAID FOR UNDER THE FOLLOWING ITEMS AS MAY APPLY:
A.) CONCRETE DRIVEWAY PAD FOR UNDER ITEM NO. 503.1 OR 503.2.
B.) ASPHALTIC CONCRETE DRIVEWAY PAD FOR UNDER ITEM NO. 503.4 AND SHALL INCLUDE A MINIMUM OF 1" ASPHALT TYPE "D" & 6" FLEXIBLE BASE
C.) GRAVEL DRIVEWAY PAD FOR UNDER ITEM NO. 503.5 AND SHALL INCLUDE A MINIMUM OF 6" FLEXIBLE BASE
2. 1" MINIMUM HEIGHT WILL NOT NECESSARILY OCCUR AT THE PROPERTY LINE. IT MAY OCCUR WITHIN THE RIGHT OF WAY OR WITHIN THE DRIVEWAY PENETRATION ON PRIVATE PROPERTY.
3. THE PROPOSED DRIVEWAY SHOULD MATCH THE EXISTING WIDTH AT THE PROPERTY LINE BUT UNLESS AUTHORIZED BY THE CITY TRAFFIC ENGINEER, THE WIDTH SHALL BE WITHIN THE FOLLOWING VALUES:

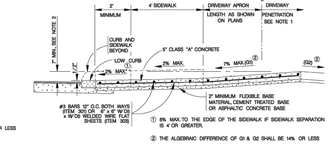
TYPE	MINIMUM	MAXIMUM
RESIDENTIAL	10'	20'
COMMERCIAL – ONE WAY	10'	20'
COMMERCIAL – TWO WAY	24'	30'

4. FOR LOCAL TYPE "A" STREETS, SIDEWALK SHALL HAVE A MINIMUM WIDTH OF 4' AND IF SEPARATED FROM THE CURB, THE SIDEWALK SHALL BE LOCATED A MINIMUM OF 2' FROM THE BACK OF CURB.
5. FOR OTHER THAN LOCAL TYPE "A" STREETS, THE SIDEWALK SHALL HAVE A MINIMUM WIDTH OF 4' AND IF SEPARATED A MINIMUM OF 2' FROM THE BACK OF CURB OR, AS AN OPTION, THE SIDEWALK SHALL HAVE A MINIMUM WIDTH OF 6' WHEN LOCATED AT THE BACK OF CURB.
6. DUMMY JOINTS PARALLEL TO THE CURB SHALL BE PLACED WHERE THE SIDEWALK MEETS THE DRIVEWAY. DUMMY JOINTS PERPENDICULAR TO THE CURB, AND WITHIN THE BOUNDARIES OF THE PARALLEL DUMMY JOINTS, SHALL BE PLACED AT INTERVALS EQUAL TO THE WIDTH OF THE SIDEWALK.
7. A MINIMUM OF TWO ROUND AND SMOOTH DOWEL BARS 3 /4" IN DIAMETER AND 18" IN LENGTH SHALL BE SPACED 18" APART AT EACH EXPANSION JOINT.
8. SIDEWALK RAMP LENGTHS SHALL BE OF SUFFICIENT LENGTH TO MAINTAIN 8.33% (1:12) MAXIMUM SLOPE. WHERE SIDEWALKS CROSS DRIVEWAYS, SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.
9. SIDEWALK RAMP SURFACE SHALL BE BRUSH FINISHED.



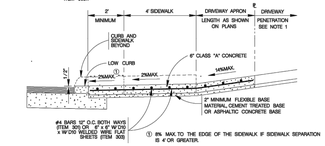
TYPICAL RESIDENTIAL DRIVEWAY SECTION

WITH SIDEWALK SEPARATED FROM CURB
ITEM 503.1



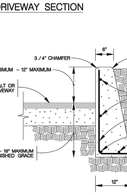
TYPICAL RESIDENTIAL DRIVEWAY SECTION

WHERE PROPERTY IS LOWER THAN STREET & SIDEWALK IS SEPARATED FROM CURB
ITEM 503.1



TYPICAL COMMERCIAL DRIVEWAY SECTION

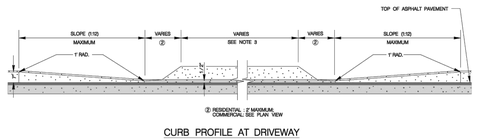
WITH SIDEWALK SEPARATED FROM CURB
ITEM 503.2



NOTE:
1. COST OF REINFORCEMENT TO BE INCLUDED IN UNIT COST OF ITEM 307.1.
2. CONCRETE RETAINING WALL COMBINATION TYPE SHALL BE USED FOR CONCRETE DRIVEWAYS.

DRIVEWAY – CONCRETE RETAINING WALL

ON COMPACTED SUBGRADE
ITEM 307.1



② RESIDENTIAL – 5' MINIMUM, COMMERCIAL SEE PLAN VIEW

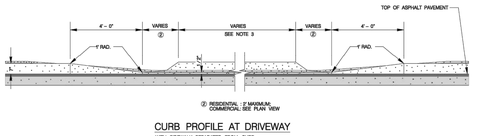
CURB PROFILE AT DRIVEWAY

WITH SIDEWALK ABUTTING CURB

② 40' FOR COMMERCIAL DRIVEWAY

TYPICAL DRIVEWAY PLAN VIEW

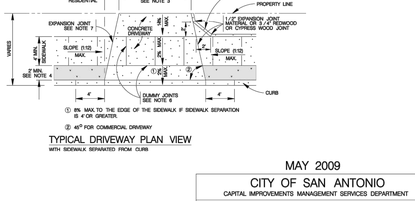
WITH SIDEWALK ABUTTING CURB



② RESIDENTIAL 5' MAXIMUM, COMMERCIAL SEE PLAN VIEW

CURB PROFILE AT DRIVEWAY

WITH SIDEWALK SEPARATED FROM CURB



① 8% MAX. TO THE EDGE OF THE SIDEWALK IF SIDEWALK SEPARATION IS 4' OR GREATER.
② 40' FOR COMMERCIAL DRIVEWAY

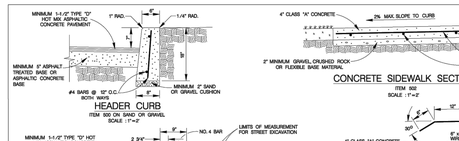
TYPICAL DRIVEWAY PLAN VIEW

WITH SIDEWALK SEPARATED FROM CURB

MAY 2009
CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

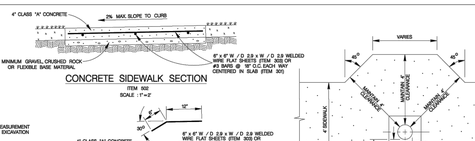
CONCRETE DRIVEWAY STANDARDS

% SUBMITTAL | PROJECT NO.: | DATE:
DRAWN BY: V. VASQUEZ | DSGN. BY: | CHKD. BY:R.S. HOSSEIN, P.E. | SHEET NO.: | OF



HEADER CURB

ITEM 500 ON SAND OR GRAVEL
SCALE: 1"=2"

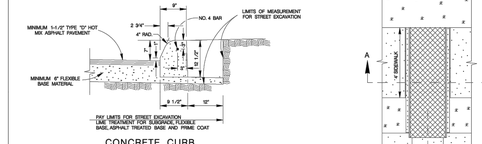


CONCRETE SIDEWALK SECTION

ITEM 502
SCALE: 1"=2"

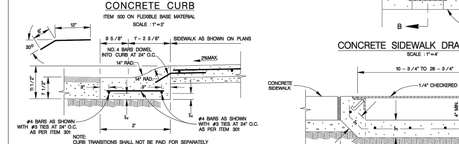
CONCRETE CURB

ITEM 500 ON ASPHALT TREATED BASE OR ASPHALTIC CONCRETE BASE
SCALE: 1"=2"



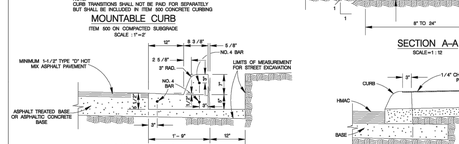
CONCRETE CURB

ITEM 500 ON FLEXIBLE BASE MATERIAL
SCALE: 1"=2"



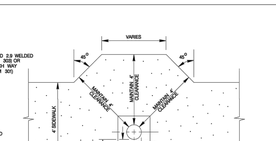
MOUNTABLE CURB

ITEM 500 ON COMPACTED SUBGRADE
SCALE: 1"=2"



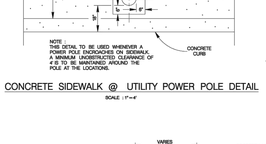
TYPICAL CURB & GUTTER DETAIL

ITEM 500 ON ASPHALT TREATED BASE OR ASPHALTIC CONCRETE BASE
SCALE: 1"=2"



CONCRETE SIDEWALK @ UTILITY POWER POLE DETAIL

SCALE: 1"=4"



CONCRETE RETAINING WALL – COMBINATION TYPE

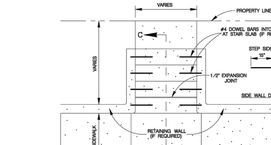
ITEM 308
SCALE: 1"=2"

CONCRETE SIDEWALK ABUTTING CURB SECTION

ITEM 502
SCALE: 1"=2"

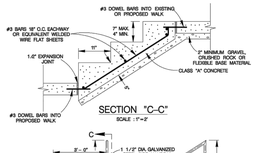
CONCRETE SIDEWALK DRAIN DETAIL

SCALE: 1"=4"



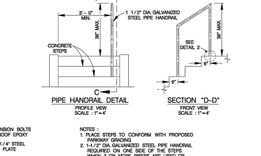
CONCRETE STEPS

ITEM 524
SCALE: 1"=4"



SECTION "C–C"

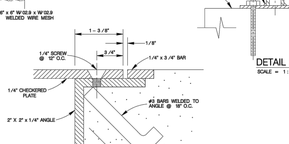
SCALE: 1"=2"



NOTES:
1. PLACE STEPS TO CONFORM WITH PROPOSED FINISHED GRADING.
2. 1-1/2" DIA. GALVANIZED STEEL PIPE HANDRAIL REQUIRED ON ONE SIDE OF THE STEPS WHERE THE RISE IS GREATER THAN 30". AS DIRECTED BY ENGINEER, TO BE PAID UNDER ITEM 522

HANDRAIL FOR CONCRETE STEPS

ITEM 522



SECTION B

SCALE: 1"=2"

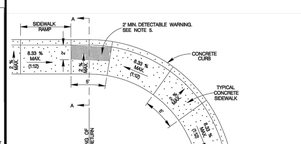
SECTION A–A

SCALE=1 : 12

MAY 2009
CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

MISCELLANEOUS CONSTRUCTION STANDARDS I

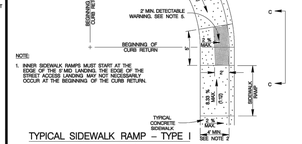
% SUBMITTAL | PROJECT NO.: | DATE:
DRAWN BY: V. VASQUEZ | DSGN. BY: | CHKD. BY:R.S. HOSSEIN, P.E. | SHEET NO.: | OF



NOTE:
1. INNER SIDEWALK RAMPS MUST START AT THE EDGE OF THE 5' MID LANDING. THE EDGE OF THE STREET ACCESS LANDING MAY NOT NECESSARILY OCCUR AT THE BEGINNING OF THE CURB RETURN.

TYPICAL SIDEWALK RAMP – TYPE I

SIDEWALK ABUTS THE CURB
SCALE: 1"=10'

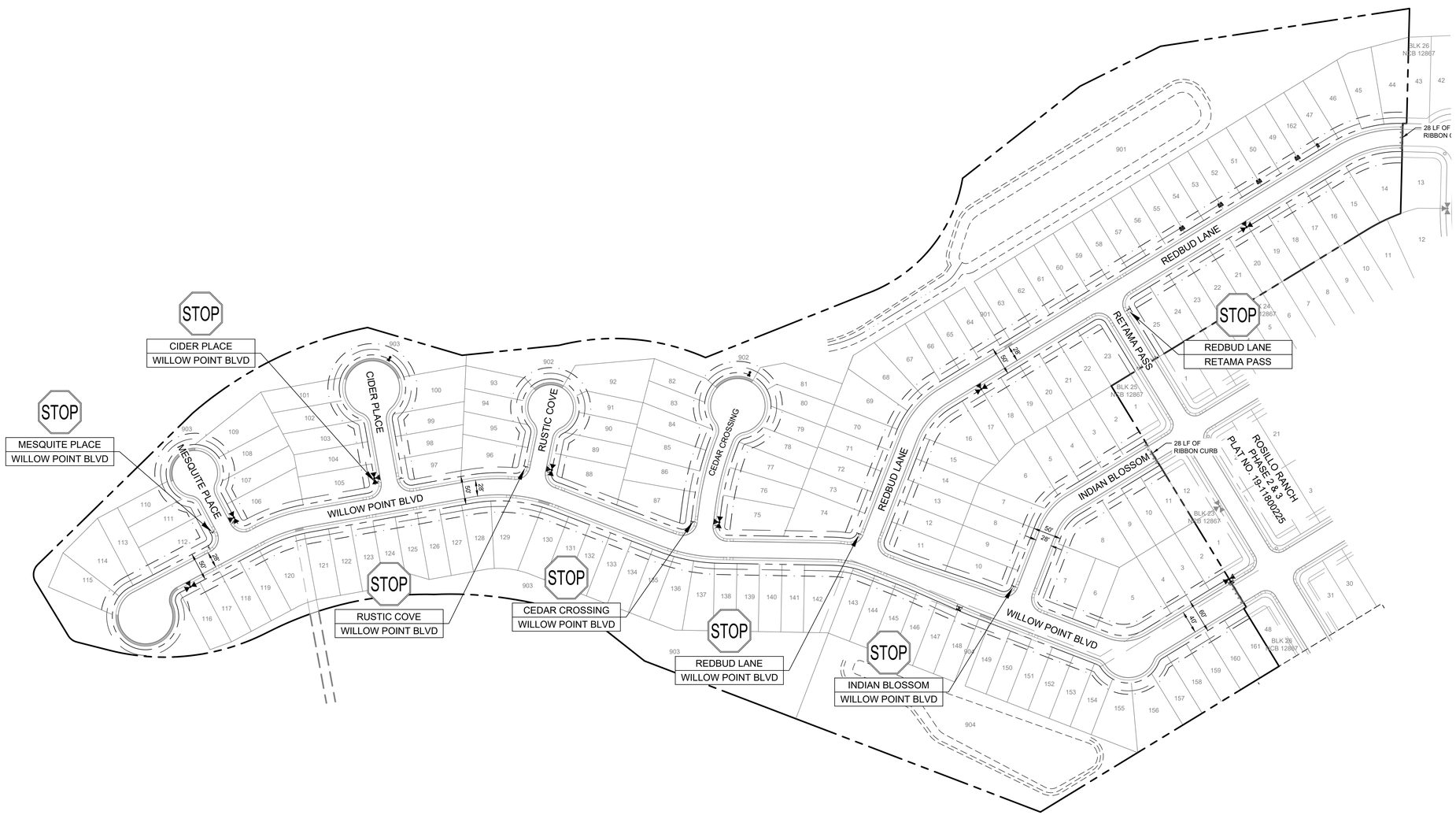


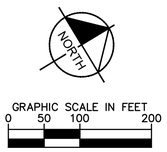
TYPICAL SIDEWALK RAMP – TYPE II

USED AT TEE INTERSECTIONS WHERE SIDEWALK ABUTS CURB
SCALE: 1"=10'

GENERAL NOTES

1. WHEN POSSIBLE SIDEWALKS SHOULD BE PLACED NEXT TO THE PROPERTY LINE, ALLOWING A MINIMUM OF 1 FOOT BUFFER, DEVIATION OF THE PATHWAY FROM A STRAIGHT LINE IS ENCOURAGED TO AVOID TREES OR OTHER OBSTRUCTIONS.
2. FOR LOCAL TYPE "A" STREETS, SIDEWALKS SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF 4' AND IF SEPARATED FROM THE CURB, THE SIDEWALK SHALL BE LOCATED A MINIMUM OF 2' FROM THE BACK OF CURB.
3. FOR OTHER THAN LOCAL TYPE "A" STREETS, SIDEWALKS SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF 4' AND SEPARATED A MINIMUM OF 2' FROM THE BACK OF CURB OR AS AN OPTION, THE SIDEWALK SHALL HAVE A MINIMUM WIDTH OF 6' WHEN LOCATED AT THE BACK OF CURB.
4. SIDEWALK RAMP LENGTHS PRESENTED IN TABLE 1 ARE GUIDELINES ONLY. SIDEWALK RAMP LENGTHS SHALL BE OF SUFFICIENT LENGTH TO MAINTAIN 8.33% (1:12) MAXIMUM SLOPE.
5. ALL CURB RAMPS OR LANDINGS ABUTTING THE CROSSWALK SHALL HAVE A DETECTABLE WARNING 24 INCHES DEEP (IN THE DIRECTION OF PEDESTRIAN TRAVEL) AND EXTENDING THE FULL WIDTH OF THE CURB RAMP OR LANDING. THE DETECTABLE WARNING SHALL CONSIST OF RAISED TRUNCATED DOMES ALIGNED IN A GRID PATTERN WITH A BASE DIAMETER OF 0.9 INCHES TO 1.4 INCHES, A HEIGHT OF 0.2 INCHES, AND A CENTER-TO-CENTER SPACING OF NOMINAL 2.35 INCHES (60 MM). THE DETECTABLE WARNING SURFACE SHALL BE A CAST-IN-PLACE TILE CONFORMING TO THE CITY OF SAN ANTONIO STANDARD SPECIFICATIONS FOR PAVERS CONFORMING TO TDOT STANDARD 705.04-03 PEDESTRIAN FACILITIES.
6. DETECTABLE WARNINGS SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT. THE MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE.
7. SIDEWALK RAMP TYPE V SHALL BE USED ONLY WHERE THERE IS SIGNIFICANT RESTRICTION WITHIN THE PAWAWAY TO CONSTRUCT TYPE I OR TYPE III RAMPS.
8. CONSTRUCTION OF ALL WHEELCHAIR RAMPS TO BE INCLUDED UNDER ITEMS 7000 – CONCRETE CURB, GUTTER, AND CONCRETE CURB AND GUTTER" AND FOR "502 – CONCRETE SIDEW





SYMBOL	DESC.	COSA ITEM NO.
	UNIT BOUNDARY	
STREET / STREET	STANDARD STREET NAME SIGN	531.57
STOP	STOP SIGN (30")(HIGH INTENSITY) (R1-1)	531.3

NOTES:

1. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL REGULATORY AND WARNING SIGNS, STREETS NAME SIGNS AND SIGN MOUNTS IN ACCORDANCE WITH APPROVED ENGINEERING PLANS. THE CITY WILL INSPECT ALL SIGNS AT FINAL INSPECTION.
2. THE CONTRACTOR SHALL INSTALL ALL PAVEMENT MARKINGS IN ACCORDANCE WITH APPROVED ENGINEERING PLANS. THE CONTRACTOR SHALL NOTIFY THE CITY AT LEAST TWENTY-FOUR (24) HOURS PRIOR TO THE INSTALLATION OF ALL SEALER AND FINAL MARKINGS. THE CITY WILL INSPECT ALL MARKINGS AT FINAL APPLICATION.
3. CONTRACTOR TO COMPLY WITH MUTCD STANDARD ON EXACT SIGNAGE LOCATIONS (I.E. OFFSET STATION AND DISTANCES).

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No.	REVISIONS	DATE	BY

Kimley»Horn

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TBPE: FIRM NO. 928

STATE OF TEXAS
MICHAEL A. SCHOLZE
131737
LICENSED PROFESSIONAL ENGINEER
8/15/2022

SCALE	AS NOTED
DESIGNED BY	MAS
DRAWN BY	ATR
CHECKED BY	MAS

SIGNAGE AND STRIPING PLAN

ROSILLO RANCH
PHASES 5 & 6
MDP-LAND-21-11100067
LAND-PLAT-21-11800632
SAN ANTONIO, TEXAS

DATE
8/12/2022

PROJECT NO.
068706708

SHEET NUMBER
C3.9

Plotted By:Reed, Andrew August 11, 2022 03:31:10pm K:\SNA_Civil\068706708-HeartwoodRosillo\Ph5-6\CAD\PlanSheets\C-SIGN-068706708.dwg
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GENERAL NOTES

1.) THE EXISTING SIGNS LOCATED ON THE JOBSITE ARE THE PROPERTY OF THE CITY OF SAN ANTONIO. THROUGHOUT THE PERIOD OF THE CONTRACT, THE CONTRACTOR SHALL PROTECT THESE SIGNS SUCH THAT THEY ARE NOT DAMAGED IN THE COURSE OF CONSTRUCTION ACTIVITY. SUCH PROTECTION SHALL INCLUDE THE PERIOD AFTER SIGNS ARE REMOVED FROM INSTALLATION AND STORED BY THE CONTRACTOR OR DELIVERED TO TRAFFIC OPERATIONS. THE ASSISTANT TRAFFIC SUPERINTENDENT (207-7765) MUST BE NOTIFIED 48 HOURS IN ADVANCE PRIOR TO DELIVERY.

2.) AFTER SIGNS ARE REMOVED FROM INSTALLATION AND ARE BEING STORED BY THE CONTRACTOR, THE CONTRACTOR SHALL CONTACT THE TRAFFIC OPERATIONS SECTION OF THE PUBLIC WORKS DEPARTMENT (207-7765) AND ARRANGE FOR A CONVENIENT TIME TO DELIVER CITY SIGNS AND POLES.

3.) PRIOR TO THE START OF CONSTRUCTION, ALL EXISTING SIGNS WITHIN THE AREA OF CONSTRUCTION WILL BE INVENTORIED AND DOCUMENTED JOINTLY BY THE TRAFFIC ENGINEERING (207-7720) CONSTRUCTION INSPECTION AND THE CONTRACTOR. THIS DOCUMENT WILL BE JOINTLY SIGNED BY BOTH PARTIES REFLECTING THE SIGN TYPE, SIGN SIZE, SIGN CONDITION, SIGN LOCATION, REFLECTIVITY ADEQUACY, ETC. THE CONTRACTOR IS HELD ACCOUNTABLE FOR THESE SIGNS THROUGHOUT THE PROJECT AND AT THE PROJECTS COMPLETION.

4.) ALL GROUND MOUNTED SIGNS SHALL USE HIGH INTENSITY REFLECTIVE SHEETING.

5.) ALL OVERHEAD SIGNS SHALL USE DIAMOND GRADE REFLECTIVE SHEETING.

6.) ALL BLANKS TO BE ALUMINUM ALLOY NO. 5052-H38.

7.) "T" DENOTES THICKNESS OF SIGN BLANKS.

8.) ALL HOLES SHALL BE 3 /8" DIAMETER DRILLED OR PUNCHED AS SHOWN ON EACH BLANK DETAIL AND SHALL BE FREE OF BURRS AND /OR ROUGH EDGES.

9.) SIGN BLANK CORNERS TO BE ROUNDED AS SHOWN ON EACH DETAIL.

10.) ALL SIGN BLANK TO BE ETCHED, DEGREASED, AND HAVE AN ALODINE FINISH PRIOR TO APPLICATION OF LEGENDS.

11.) ALL DETAILS ARE NOT TO SCALE.

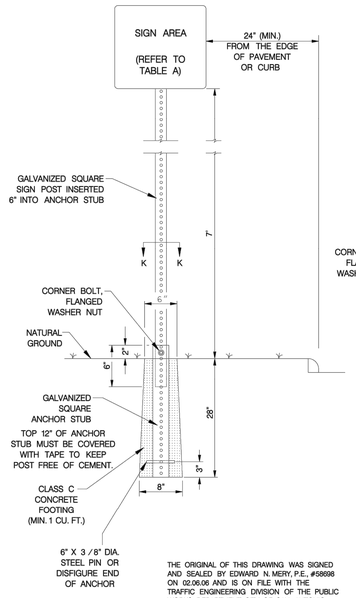
12.) ALL DIMENSIONS ARE IN INCHES.

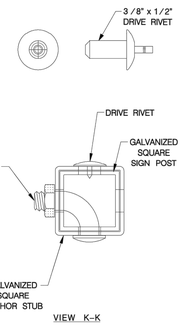
13.) ALL SIGNS SHALL BE MANUFACTURED AND INSTALLED IN CONFORMANCE TO THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND STANDARD HIGHWAY SIGNS (FHWA) LATEST EDITION.

14.) REINSTALLATION OF PREVIOUSLY EXISTING SIGNS, WHERE REQUIRED BY THE CITY TRAFFIC ENGINEER, SHALL BE AT THE CONTRACTOR'S EXPENSE.

TYPICAL GROUND SIGN INSTALLATION

TYPE "U" MOUNT
PERFORATED SQUARE METAL TUBING (DRIVEABLE)





VIEW K–K

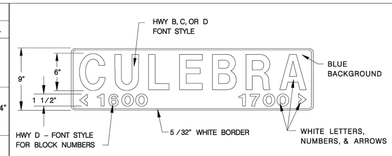
THE ORIGINAL OF THIS DRAWING WAS SIGNED AND SEALED BY EDWARD N. MERY, P.E., #58698 ON 02.06.06 AND IS ON FILE WITH THE TRAFFIC ENGINEERING DIVISION OF THE PUBLIC WORKS DEPARTMENT, CITY OF SAN ANTONIO.

METAL TUBING	SIGN AREA	
	≤ 10 SQ. FT.	> 10 SQ. FT.
GALVANIZED SQUARE SIGN POST (PERFORATED)	1-3 /4" x 1-3 /4" (14 GAUGE)	2" x 2" (12 GAUGE)
GALVANIZED SQUARE ANCHOR STUB (PERFORATED)	2" X 2" (14 GAUGE)	2-1 /4" x 2-1 /4" (14 GAUGE)

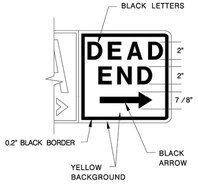
TABLE A

FEBRUARY 2006
CITY OF SAN ANTONIO
DEPARTMENT OF PUBLIC WORKS
TRAFFIC SIGN STANDARDS
GENERAL NOTES AND GROUND SIGN MOUNTING
SHEET 1 OF 4

% SUBMITTAL	PROJECT NO.:	DATE:
DRAWN BY: A.F.S.	DESIGN BY: E.N.M.	CHKD. BY: J.D.F./E.N.M.



9" D3 – STREET NAME SIGN



NEW 9" D3 W / DEAD END OR NO OUTLET SIGNAGE

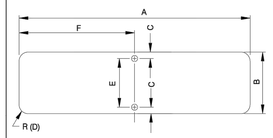
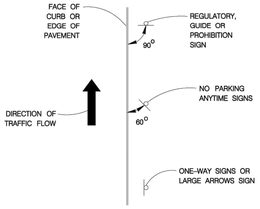


TABLE – D3 SIGNS

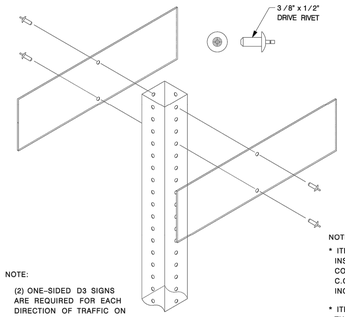
A	B	C	D	E	F	T
24"	9"	1 /2"	3 /4"	8"	12"	0.125"
30"	9"	1 /2"	3 /4"	8"	15"	0.125"
36"	9"	1 /2"	3 /4"	8"	18"	0.125"
42"	9"	1 /2"	3 /4"	8"	21"	0.125"
48"	9"	1 /2"	3 /4"	8"	24"	0.125"
54"	9"	1 /2"	3 /4"	8"	27"	0.125"

NOTE: A 30" LONG OR GREATER PLATE SHALL BE USED WHEN A "DEAD END" OR "NO OUTLET" SUPPLEMENT IS REQUIRED.

HEIGHT	9" (228 mm)
LENGTH	24" (600 MM) MIN. 54 (1350 MM) MAX. 6" (150 MM) INCREMENTS OF LENGTH
THICKNESS	0.125" (3MM)
SUBSTRATE	ALUMINUM ALLOY, 5052-H38 (ASTM B-209) GOLD CHROMATE FINISH
SIGN FACE MATERIALS	BLUE FILM OVER HIGH INTENSITY FP-85, SECTION 718 AND L-S-300C
LEGENDS AND SYMBOLS	SERIES D (USUAL) SERIES C OR B FOR MAXIMUM LENGTH SIGN BLANK, IF NECESSARY
COLOR	WHITE LEGEND ON BLUE BACKGROUND
LETTER TRACKING	10%



TYPICAL GROUND MOUNTED SIGN PLACEMENT



NOTE:
(2) ONE-SIDED D3 SIGNS ARE REQUIRED FOR EACH DIRECTION OF TRAFFIC ON EACH POLE.

D3 SIGN TO POLE INSTALLATION

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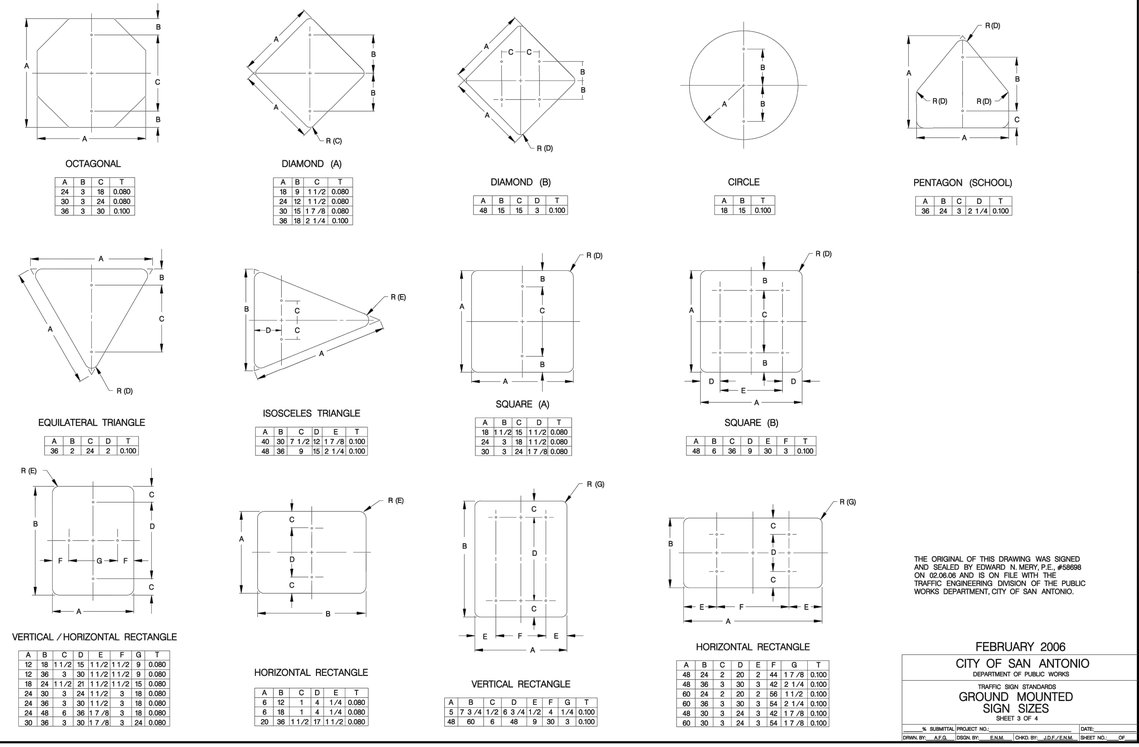
JULY 2010
CITY OF SAN ANTONIO
DEPARTMENT OF PUBLIC WORKS
TRAFFIC SIGN STANDARDS
D3 STREET NAME SIGN AND SIGN MOUNTING
SHEET 2 OF 4

% SUBMITTAL	PROJECT NO.:	DATE:
DRAWN BY: A.F.S.	DESIGN BY: E.N.M.	CHKD. BY: J.D.F./E.N.M.

STREET SIGN ASSEMBLY EXAMPLES	PAY ITEMS			
	ITEM	UNIT	DESCRIPTION	QUANTITY
STOP SIGN WITH 2 STREET NAMES	531.3	EA.	R1-1 STOP	1
	531.57-P	EA.	9-IN STREET NAME PLATE (4 PLATES)	2
YIELD SIGN WITH 1 STREET NAME	531.4	EA.	R1-2 YIELD	1
	531.57-P	EA.	9-IN STREET NAME PLATE (2 PLATES)	1
2 STREET SIGNS	531.57	EA.	9-IN STREET NAME SIGN (2 PLATES)	1
	531.57-P	EA.	9-IN STREET NAME PLATE (2 PLATES)	1

NOTE:
* ITEM 531.57 "9-INCH STREET NAME" SIGN (1-EA.) INCLUDES THE INSTALLATION OF (2) ONE-SIDED D3 SIGNS. THIS SHALL BE FULL COMPENSATION FOR MATERIALS AND LABOR AS DESCRIBED IN C.O.S.A. STANDARD SPECIFICATIONS AND GROUND SIGN MOUNTING STANDARD DETAIL.
* ITEM 531.57-P "9-INCH STREET NAME PLATE" (1-EA.) INCLUDES THE INSTALLATION OF (2) ONE-SIDED D3 SIGNS ON TOP OF EXISTING SIGN (I.E., STOP SIGN OR YIELD SIGN), EXTRA LENGTH POLE AND APPURTENANCES REQUIRED TO MEET SPECIFICATIONS.



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FEBRUARY 2006
CITY OF SAN ANTONIO
DEPARTMENT OF PUBLIC WORKS
TRAFFIC SIGN STANDARDS
GROUND MOUNTED SIGN SIZES
SHEET 3 OF 4

% SUBMITTAL	PROJECT NO.:	DATE:
DRAWN BY: A.F.S.	DESIGN BY: E.N.M.	CHKD. BY: J.D.F./E.N.M.

NO.	DATE	BY	REVISIONS

Kimley»Horn

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TBPE: FIRM NO. 928

STATE OF TEXAS
MICHAEL A. SCHOLZE
131737
LICENSED PROFESSIONAL ENGINEER
8/12/2022

SCALE	DESIGNED BY	DRAWN BY	CHECKED BY
AS NOTED	MAS	ATR	MAS

SIGNAGE DETAILS

ROSILLO RANCH
PHASES 5 & 6
MDP-LAND-21-11100067
LAND-PLAT-21-11800632
SAN ANTONIO, TEXAS

DATE	PROJECT NO.	SHEET NUMBER
8/12/2022	068706708	C3.10

Plotted By: Reed, Andrew August 11, 2022 03:31:17pm K:\SNA_Civil\068706708-HeartwoodRosilloPh5_6\CAD\PlanSheets\C-DETL-068706708.dwg
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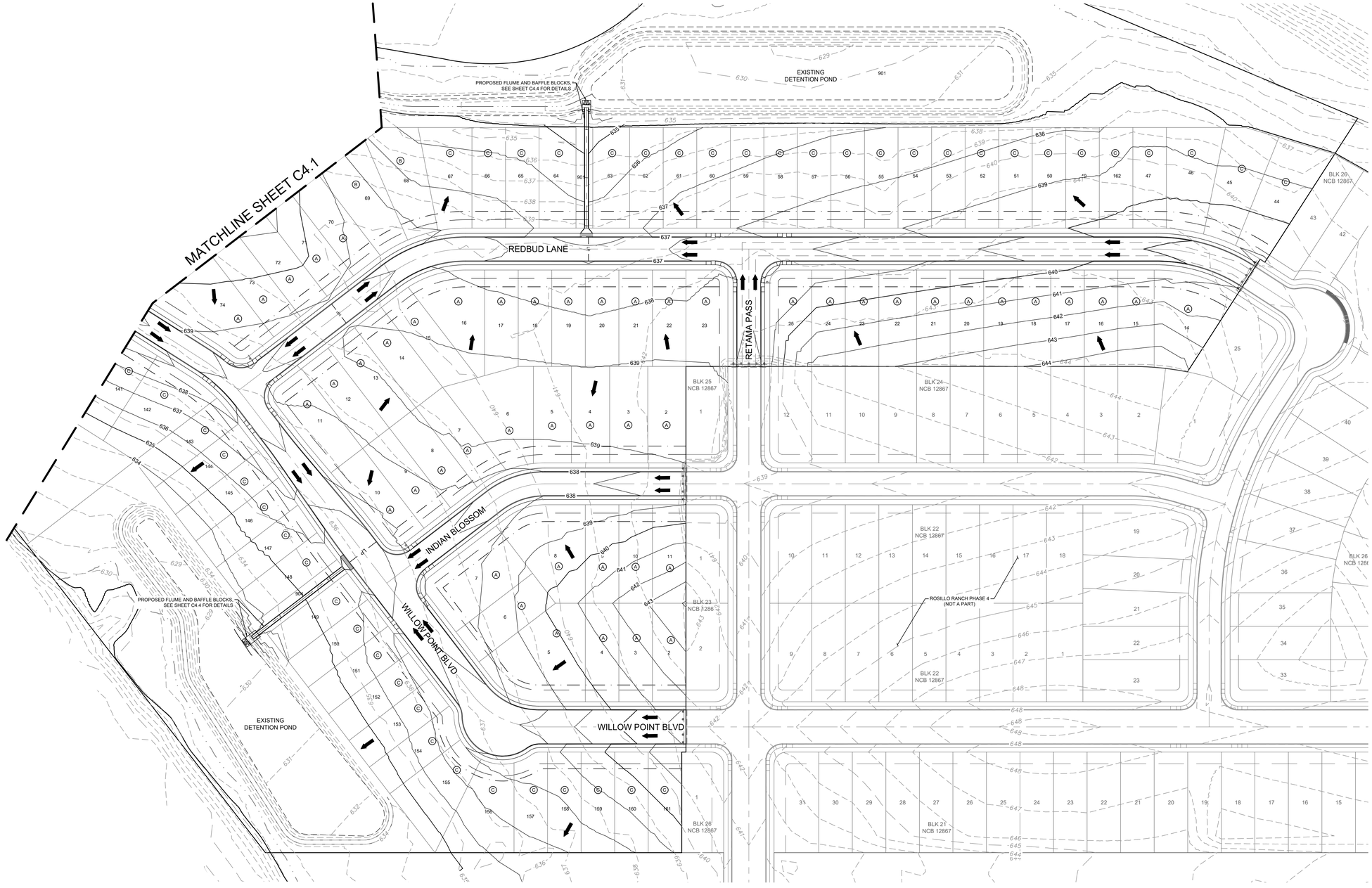


NORTH

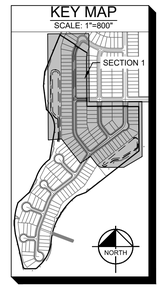
GRAPHIC SCALE IN FEET
0 30 60 120

LEGEND

650	EXISTING CONTOURS
650	PROPOSED CONTOURS
HP	HIGH POINT
LP	LOW POINT
A	LOT GRADING TYPE
	FLOW ARROWS

LOT GRADING	
TYPE	DESCRIPTION
A	ALL DRAINAGE TO STREET
B	DRAINAGE TO STREET & REAR LOT LINE
C	ALL DRAINAGE TO REAR LOT LINE

KEY MAP
SCALE: 1"=800'



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STATE OF TEXAS
MICHAEL A. SCHOLZE
131737
LICENSED PROFESSIONAL ENGINEER
8/10/2022

SCALE	AS NOTED
DESIGNED BY	JFK
DRAWN BY	CAM
CHECKED BY	MGS

GRADING PLAN (1 OF 2)

ROSILLO RANCH
PHASES 5 & 6
MDP-LAND-21-11100067
LAND-PLAT-21-11800632
SAN ANTONIO, TEXAS

DATE	8/12/2022
PROJECT NO.	068706708
SHEET NUMBER	C4.0

Plotted By:Reed, Andrew August 11, 2022 03:31:46pm K:\SNA_Civil\068706708-HeartwoodRealtiPh5-6\C4D\PlanSheets\C-GRAD-068706708.dwg
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NORTH

GRAPHIC SCALE IN FEET
0 30 60 120

LEGEND

650	EXISTING CONTOURS
650	PROPOSED CONTOURS
HP	HIGH POINT
LP	LOW POINT
A	LOT GRADING TYPE
	FLOW ARROWS

LOT GRADING	
TYPE	DESCRIPTION
A	ALL DRAINAGE TO STREET
B	DRAINAGE TO STREET & REAR LOT LINE
C	ALL DRAINAGE TO REAR LOT LINE

KEY MAP
SCALE: 1"=800'

811
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TBPE: FIRM NO. 928

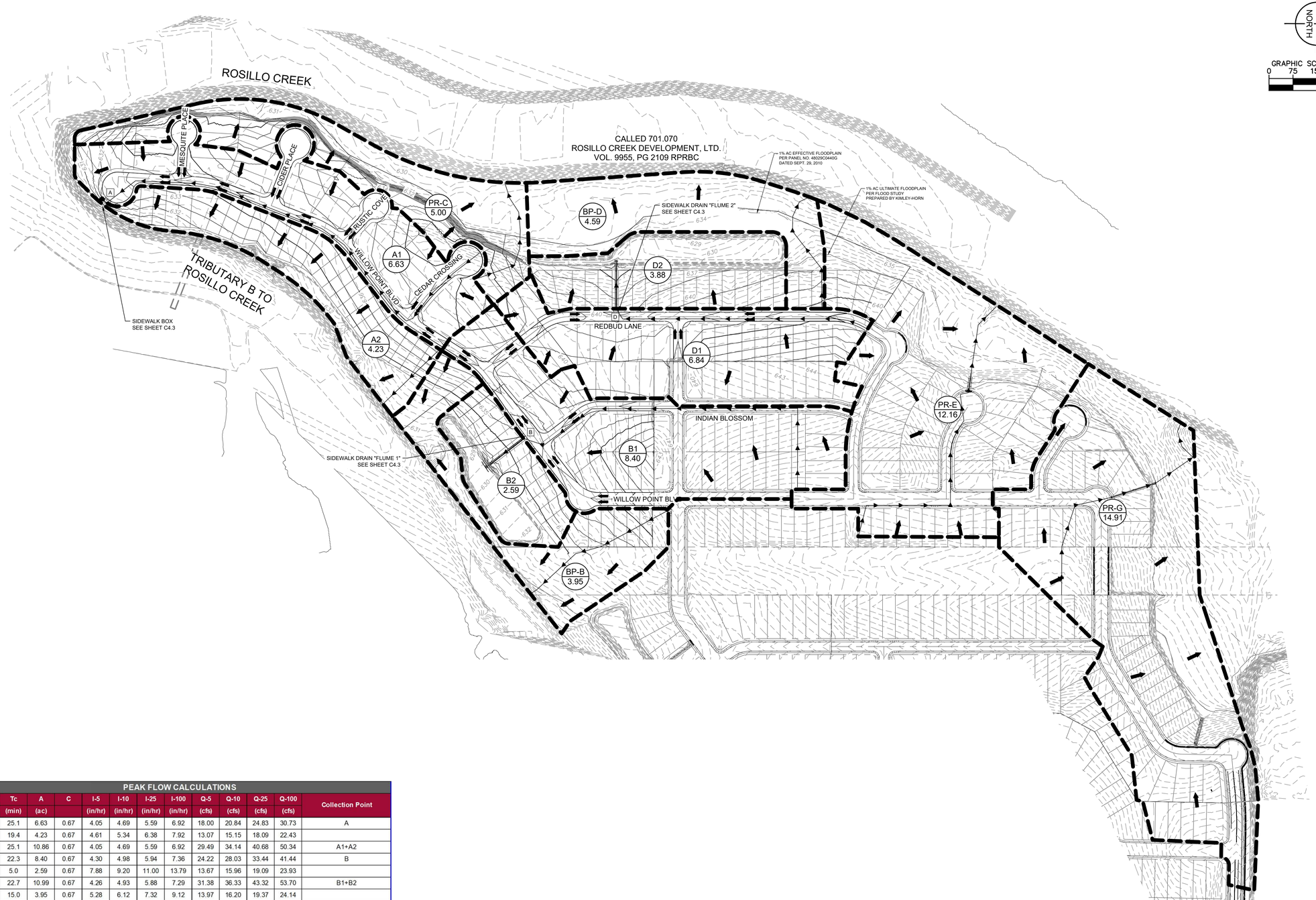
STATE OF TEXAS
MICHAEL A. SCHOLZE
131737
LICENSED PROFESSIONAL ENGINEER
8/12/2022

SCALE	AS NOTED
DESIGNED BY	JFK
DRAWN BY	CAM
CHECKED BY	MAS

GRADING PLAN (2 OF 2)

ROSILLO RANCH
PHASES 5 & 6
MDP-LAND-21-11100067
LAND-PLAT-21-11800632
SAN ANTONIO, TEXAS

DATE
8/12/2022
PROJECT NO.
068706708
SHEET NUMBER
C4.1



PEAK FLOW CALCULATIONS

Basin	Tc	A	C	I-5	I-10	I-25	I-100	Q-5	Q-10	Q-25	Q-100	Collection Point
	(min)	(ac)		(in/hr)	(in/hr)	(in/hr)	(in/hr)	(cfs)	(cfs)	(cfs)	(cfs)	
A1	25.1	6.63	0.67	4.05	4.69	5.59	6.92	18.00	20.84	24.83	30.73	A
A2	19.4	4.23	0.67	4.61	5.34	6.38	7.92	13.07	15.15	18.09	22.43	
PR-A	25.1	10.86	0.67	4.05	4.69	5.59	6.92	29.49	34.14	40.68	50.34	A1+A2
B1	22.3	8.40	0.67	4.30	4.98	5.94	7.36	24.22	28.03	33.44	41.44	B
B2	5.0	2.59	0.67	7.88	9.20	11.00	13.79	13.67	15.96	19.09	23.93	
PR-B	22.7	10.99	0.67	4.26	4.93	5.88	7.29	31.38	36.33	43.32	53.70	B1+B2
BP-B	15.0	3.95	0.67	5.28	6.12	7.32	9.12	13.97	16.20	19.37	24.14	
PR-C	8.8	5.00	0.67	6.59	7.73	9.24	11.58	22.09	25.90	30.96	38.81	
D1	20.5	6.84	0.67	4.49	5.20	6.20	7.69	20.56	23.81	28.42	35.25	D
D2	5.0	3.88	0.67	7.88	9.20	11.00	13.79	20.48	23.92	28.60	35.85	
PR-D	21.0	10.72	0.67	4.44	5.14	6.13	7.60	31.86	36.89	44.01	54.58	D1+D2
BP-D	15.8	4.59	0.53	5.14	5.96	7.13	8.87	12.51	14.50	17.34	21.57	
PR-E	17.6	12.16	0.67	4.86	5.62	6.72	8.35	39.57	45.79	54.72	68.00	
PR-G	11.1	14.91	0.67	6.00	7.02	8.40	10.50	59.90	70.14	83.87	104.85	

SAG CURB INLET CULCULATIONS

DESIGN STORM: 25

Analysis Point	Contributing Drainage Area	Upstream Bypass Analysis Point	Basin Q (cfs)	Upstream Q (cfs)	No. of Inlets	Total Q Per Inlet (cfs)	a (in)	Depth (in)	Throat (in)	h_{weir} (in)	$h_{orifice}$ (in)	$L_{required}$ Weir Eq	$L_{required}$ Orifice Eq	L_{chosen} (ft)	Inlet Summary	Analysis Point
A	A1	N/A	24.83	0.00	1	24.83	2.5	7.0	6.25	9.50	6.38	11.4	11.6	15	(1) 15' Curb Inlet	A
B	B1	N/A	33.44	0.00	1	33.44	2.5	7.0	6.25	9.50	6.38	15.4	15.7	20	(1) 20' Curb Inlet	B
D	D1	N/A	28.42	0.00	1	28.42	2.5	7.0	6.25	9.50	6.38	13.1	13.3	15	(1) 15' Curb Inlet	D

LEGEND

- 635 — EXISTING CONTOURS
- 635 — PROPOSED CONTOURS
- PR-A 8.48 — DRAINAGE AREA NAME / DRAINAGE AREA ACREAGE
- DRAINAGE BOUNDARY
- TIME OF CONCENTRATION FLOWPATH
- FLOW DIRECTION
- A — ANALYSIS POINT

DRAINAGE CALCULATIONS WERE PERFORMED IN ACCORDANCE WITH "THE CITY OF SAN ANTONIO TCI STORMWATER DESIGN CRITERIA MANUAL."

DRAINAGE CALCULATIONS

BY RATIONAL METHOD:
Q =CIA

Know what's **below.**
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No.	REVISIONS	DATE	BY

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TBPE: FIRM NO. 928

STATE OF TEXAS
MICHAEL A. SCHOLZE
131737
LICENSED PROFESSIONAL ENGINEER
8/15/2022

SCALE: AS NOTED
DESIGNED BY: MAS
DRAWN BY: JPK
CHECKED BY: MAS

DRAINAGE AREA MAP PROPOSED & ULTIMATE

ROSILLO RANCH
PHASES 5 & 6
MDP-LAND-21-11100067
LAND-PLAT-21-11800632
SAN ANTONIO, TEXAS

DATE
8/12/2022

PROJECT NO.
068706708

SHEET NUMBER
C4.2

Plotted By: Reed, Andrew August 11, 2022 03:32:06pm K:\SNA_Civil\068706708-Heartland\Roll\Ph5-6\CAD\Exhibits\Phase 5 & 6\C-DMAP--068706708--Interior.dwg
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Plotted By:Reed, Andrew August 11, 2022 03:33:14pm K:\SNA_Civil\068706708-Heartwood\Rosillo\Ph5-6\CAD\PlotSheets\C-STRM-068706708.dwg
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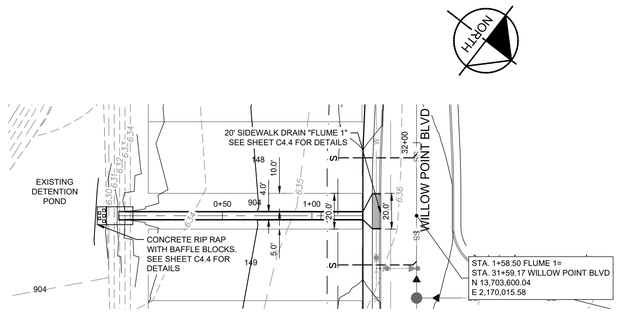
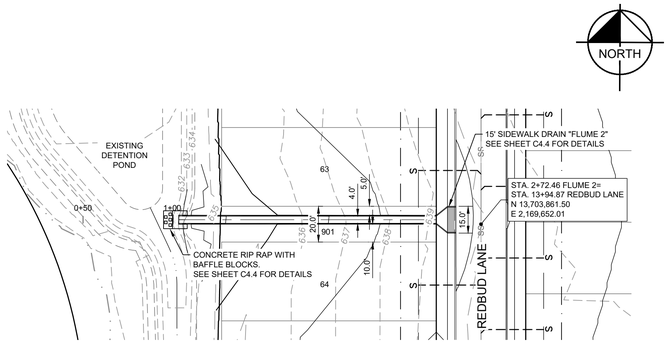
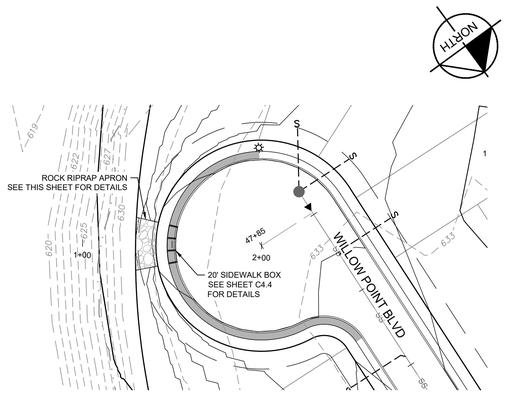






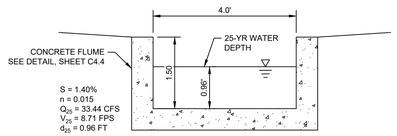
GRAPHIC SCALE IN FEET
0 20 40 80

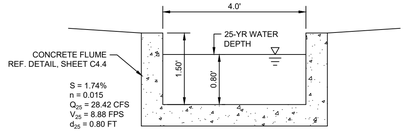
LEGEND

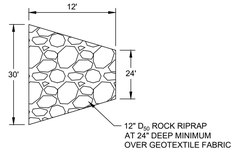
- PROPERTY LINE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- SS — PROPOSED SANITARY SEWER LINE
- W — EXISTING WATER LINE
- PROPOSED SIDEWALK TO BE CONSTRUCTED BY CONTRACTOR

NOTES:

1. REFERENCE THE DRAINAGE REPORT DONE FOR "ROSILLO RANCH - PHASES 5 & 6 (MDP# 21-11100067)" DATED MARCH 2022.
2. ALL DIMENSIONS ARE TO CENTERLINE OF DRAIN UNLESS NOTED OTHERWISE.
3. REFERENCE SHEET C4.4 FOR DRAINAGE DETAILS.
4. CONTRACTOR TO FIELD VERIFY LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTACT ENGINEER IF FIELD CONDITIONS VARY.
5. CONTRACTOR TO FIELD VERIFY WATER MAIN LOCATION AND ADJUST WATER LINE PER WATER LOWERING DETAIL AS NECESSARY. REFERENCE SHEET C5.2 FOR WATER LOWERING DETAIL.
6. IMPROVED EARTHEN CHANNELS AND DETENTION PONDS WILL BE VEGETATED BY SEEDING OR SIDING. EIGHTY FIVE PERCENT (85%) OF THE CHANNEL SURFACE AREA MUST HAVE ESTABLISHED VEGETATION BEFORE THE CITY OF SAN ANTONIO WILL ACCEPT THE CHANNEL FOR MAINTENANCE.
7. ALL CONCRETE LINING SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF NOT LESS THAN 3,000 PSI IN 28 DAYS.

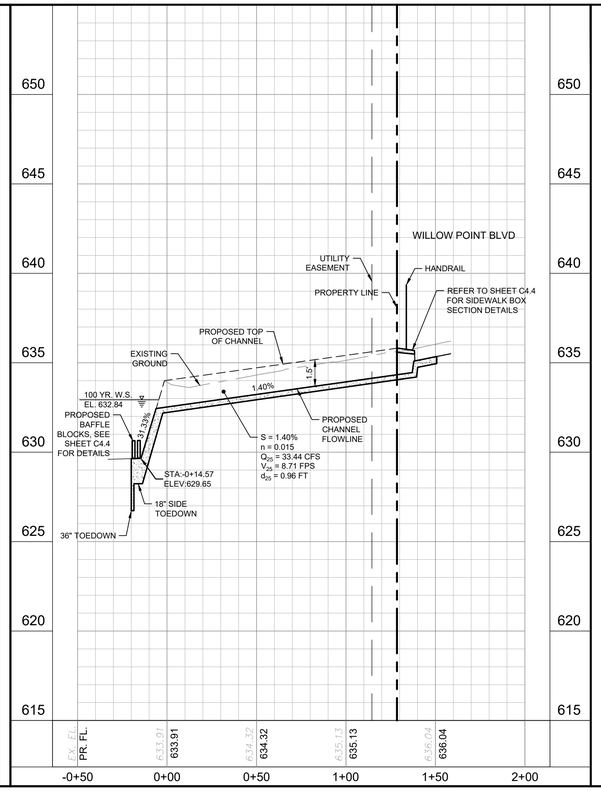




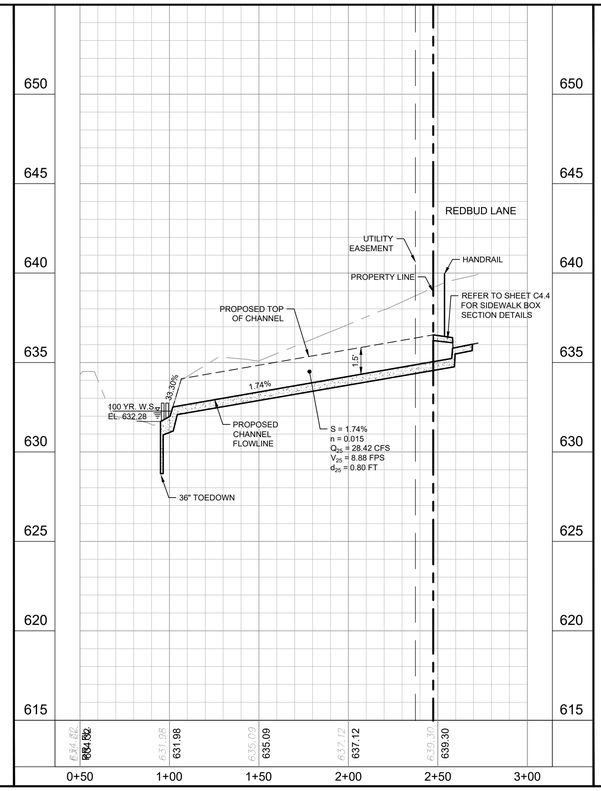


ROCK RIPRAP APRON DETAIL

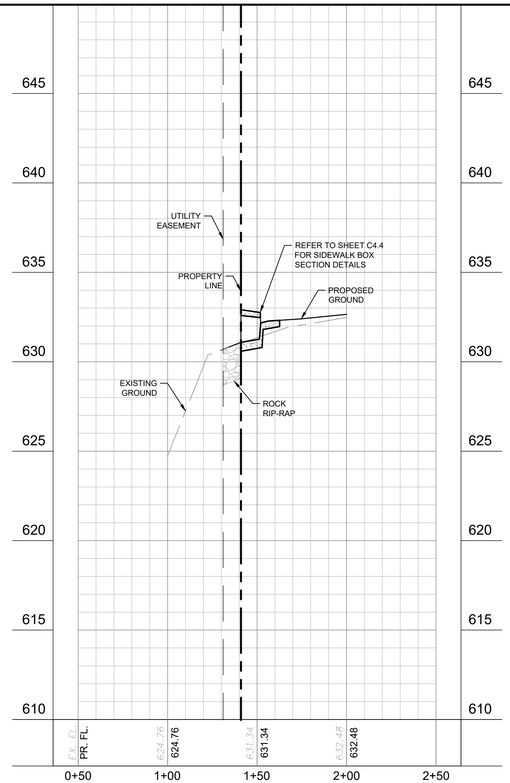
FLUME 1



FLUME 2

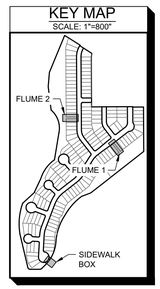


SIDEWALK BOX



PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

KEY MAP
SCALE: 1"=800'



BENCHMARK LIST

BM #50 CP MAGNAIL W/ WASHER
N: 13705110 E: 2170235
ELEVATION: 646.51'
BM #51 CP MAGNAIL W/ WASHER
N: 13705307 E: 2169932
ELEVATION: 639.13'

CAUTION!!
EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING UTILITIES DUE TO DAMAGE INCURRED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.

811
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TBPE: FIRM NO. 928

STATE OF TEXAS
MICHAEL A. SCHOLZE
131737
LICENSED PROFESSIONAL ENGINEER
8/10/2022

SCALE	AS NOTED
DESIGNED BY	MAS
DRAWN BY	ATR
CHECKED BY	MAS

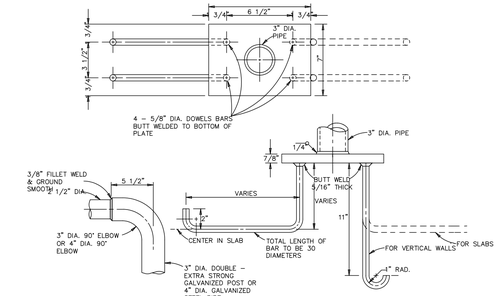
DRAINAGE PLAN & PROFILE FLUMES 1 & 2 AND SIDEWALK BOX

ROSILLO RANCH
PHASES 5 & 6
MDP-LAND-21-11100067
LAND-PLAT-21-11800632
SAN ANTONIO, TEXAS

DATE
8/12/2022

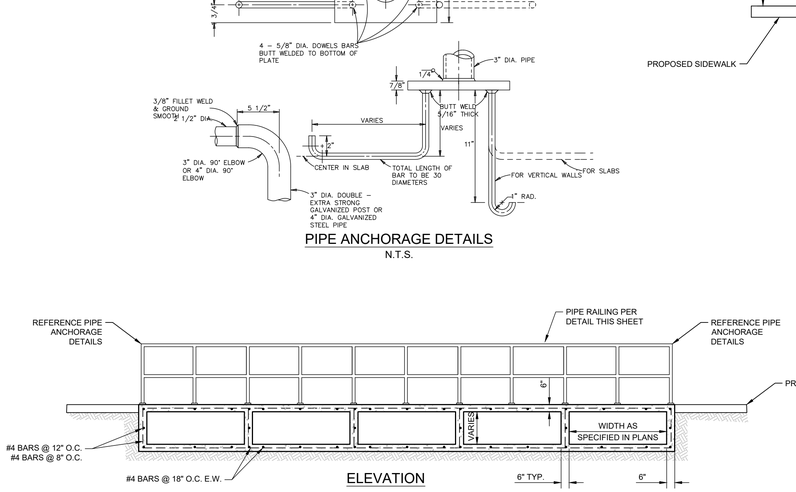
PROJECT NO.
068706708

SHEET NUMBER
C4.3

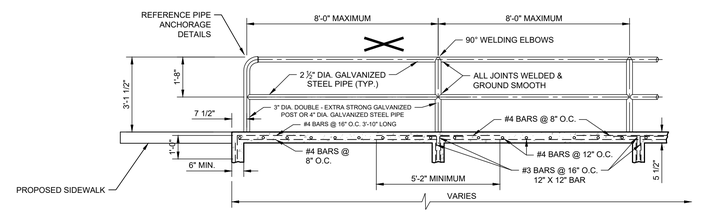


PIPE ANCHORAGE DETAILS

N.T.S.



ELEVATION

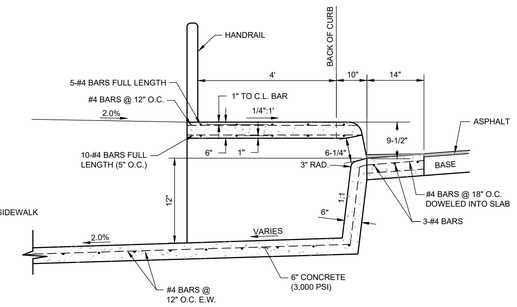


GENERAL NOTES:

1. A NEAT END SECTION, SATISFACTORY TO THE ENGINEER, FROM SUBMITTED SHOP DRAWINGS, MAY BE USED IN LIEU OF THE 90° WELDING ELBOW SHOWN.

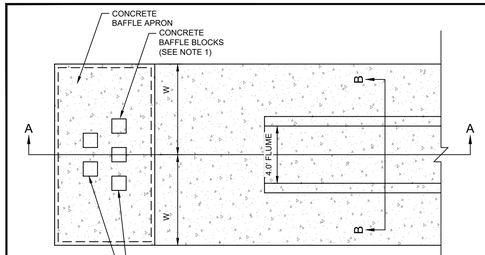
TYPICAL SIDEWALK BRIDGE & SIDEWALK PIPE RAILING SECTION

N.T.S.

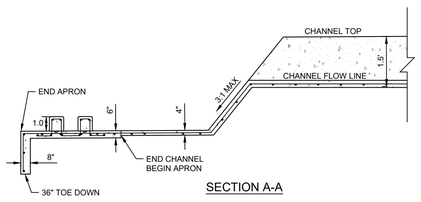


SECTION

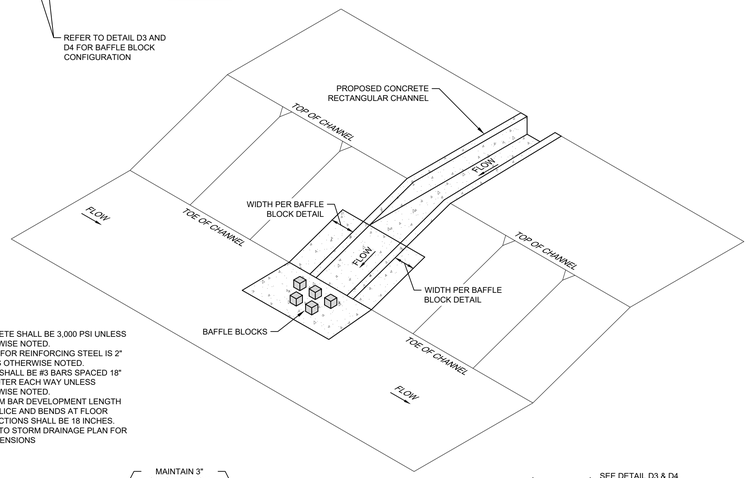
SIDEWALK BOX SECTION DETAIL | A4



PLAN VIEW



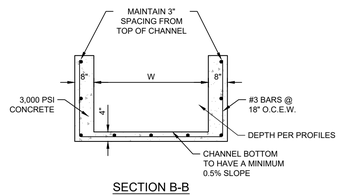
SECTION A-A



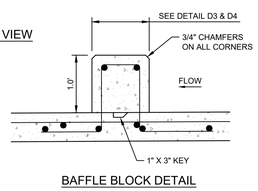
ISOMETRIC VIEW

NOTES:

1. CONCRETE SHALL BE 3,000 PSI UNLESS OTHERWISE NOTED.
2. COVER FOR REINFORCING STEEL IS 2" UNLESS OTHERWISE NOTED.
3. REBAR SHALL BE #3 BARS SPACED 18" ON CENTER EACH WAY UNLESS OTHERWISE NOTED.
4. MINIMUM BAR DEVELOPMENT LENGTH FOR SPLICE AND BENDS AT FLOOR CONNECTIONS SHALL BE 18 INCHES.
5. REFER TO STORM DRAINAGE PLAN FOR "W" DIMENSIONS



SECTION B-B



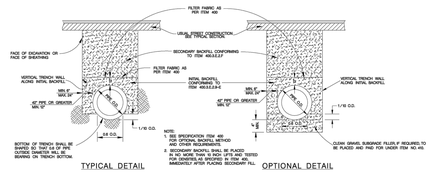
BAFFLE BLOCK DETAIL

D1 RECTANGULAR CONCRETE CHANNEL WITH BAFFLE BLOCK OUTFALL

N.T.S.

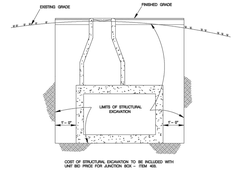
C4

N.T.S.



TYPICAL DETAIL

OPTIONAL DETAIL

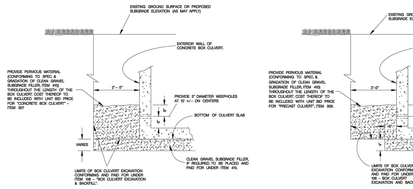


COST OF STRUCTURAL EXCAVATION TO BE INCLUDED WITH UNIT BID PRICE FOR JUNCTION BOX – ITEM 465.

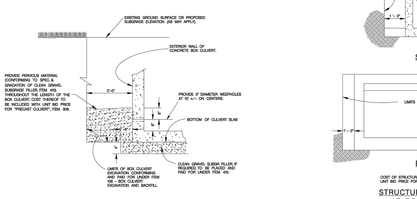
STRUCTURAL EXCAVATION AT JUNCTION BOXES

NO SCALE

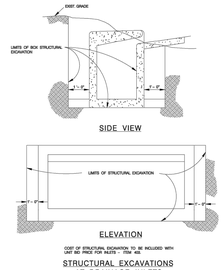
PIPE BEDDING & BACKFILL DETAILS



CAST–IN–PLACE BOX CULVERT



PRECAST BOX CULVERT



COST OF STRUCTURAL EXCAVATION TO BE INCLUDED WITH UNIT BID PRICE FOR INLETS – ITEM 465.

STRUCTURAL EXCAVATIONS AT DRAINAGE INLETS

NO SCALE

CONCRETE BOX CULVERT

MAY 2009

CITY OF SAN ANTONIO

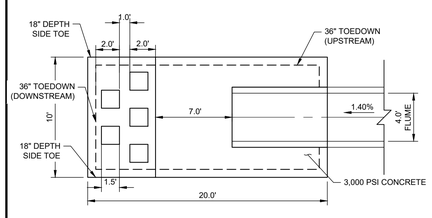
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

PIPE BEDDING & MISCELLANEOUS DRAINAGE DETAILS

No.	SUBMITTAL	PROJECT NO.	DATE
DRAWN BY:	DESIGN BY:	CHKD BY:	SHEET NO.: OF

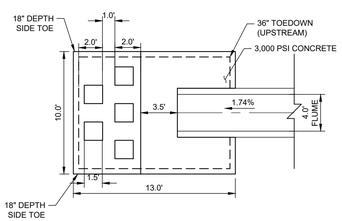
C2

N.T.S.



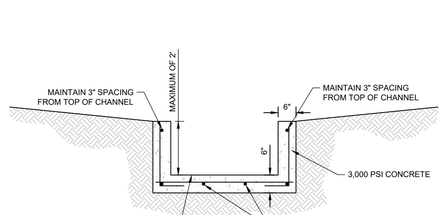
D3 BAFFLE BLOCK DETAIL - FLUME 1

N.T.S.



D4 BAFFLE BLOCK DETAIL - FLUME 2

N.T.S.



D5 CONCRETE RECTANGULAR CHANNEL

N.T.S.

Plotted By:Reed, Andrew August 11, 2022 03:33:27pm K:\SNA_Civil\068706708-Heartwood\Roll\PhE-F\LAD\PlotSheet\LC-DET_-STRM-068706708.dwt
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No.	REVISIONS	DATE	BY

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TBPE: FIRM NO. 928

STATE OF TEXAS
MICHAEL A. SCHOLZE
131737
LICENSED PROFESSIONAL ENGINEER
8/12/2022

SCALE	AS NOTED
DESIGNED BY	MAS
DRAWN BY	ATR
CHECKED BY	MAS

DRAINAGE DETAILS

ROSILLO RANCH
PHASES 5 & 6
MDP-LAND-21-11100067
LAND-PLAT-21-11800632
SAN ANTONIO, TEXAS

DATE
8/12/2022

PROJECT NO.
068706708

SHEET NUMBER
C4.4

PUBLIC WATER PLANS

FOR

ROSILLO RANCH PHASES 5 & 6

SAN ANTONIO, TEXAS

PROJECT TEAM:

OWNER
HDC FOSTER RD, LLC
100 NE LOOP 410, SUITE 1080
SAN ANTONIO, TEXAS 78216
PH. (210) 838-6784
CONTACT: BRYAN SIMS

CIVIL ENGINEER
KIMLEY-HORN AND ASSOCIATES, INC.
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SAN ANTONIO, TEXAS 78216
PH: (210) 541-9166
CONTACT: JOHN GREG MOSIER, R.P.L.S.
TBPLS FIRM REGISTRATION NO. 10193973

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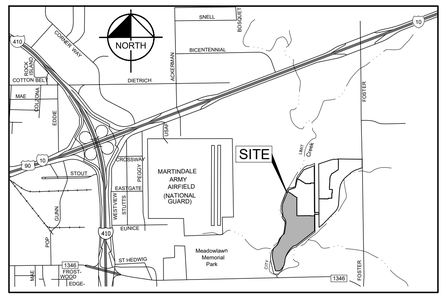
2800 U.S. HWY. 281 NORTH
SAN ANTONIO, TX 78212
PH. (210) 233-2009

TELEPHONE
AT&T COMMUNICATIONS
4119 BROADWAY, SUITE 760-A
SAN ANTONIO, TX 78209
PH. (210) 283-1935

STORM SEWER
CITY OF SAN ANTONIO
PUBLIC WORKS
1901 S. ALAMO, 2ND FLOOR
SAN ANTONIO, TX 78283
PH. (210) 207-8498

ELECTRIC
CPS ENERGY
17281 N. GREEN MOUNTAIN
SAN ANTONIO, TX 78247
PH. (210) 353-4524



LOCATION MAP
NOT TO SCALE

INDEX OF SHEETS

SHEET NUMBER	SHEET TITLE	REVISION
C5.0	WATER COVER SHEET	
C5.1	GENERAL WATER NOTES	
C5.2	WATER PLAN (1 OF 3)	
C5.3	WATER PLAN (2 OF 3)	
C5.4	WATER PLAN (3 OF 3)	
C7.0	OVERALL UTILITY PLAN	

POST PERMIT REVISION LOG

NO.	DATE	DESCRIPTION

SUBMITTAL REVIEW LOG

1ST SUBMITTAL	5/3/2022
2ND SUBMITTAL	7/26/2022
3RD SUBMITTAL	10/10/2022

WATER: PRESSURE ZONE 3 (HGL 828)

DEVELOPER'S NAME: HDC FOSTER RD, LLC
DEVELOPER'S ADDRESS: 100 NE LOOP 410 SUITE 1080
CITY SAN ANTONIO STATE TX ZIP 78216
PHONE # DEVELOPER EMAIL paul@hdc-group.com
SAWS BLOCK MAP # 200578 & 200580 TOTAL EDU'S 172
TOTAL ACREAGE 93.78 NUMBER OF LOTS 162
TOTAL LINEAR FOOTAGE OF PIPE 5165 LF - 8" PVC PIPE C900.
PLAT NO. LAND-PLAT-21-11800632 SAWS JOB NO. 22-1106

811 Know what's **below.** **Call** before you dig.

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10101 REUNION PLACE, SAN ANTONIO, TX 78216
PHONE: 210-541-9166 FAX: 210-541-8699
WWW.KIMLEY-HORN.COM
TBPE FIRM NO. 928

STATE OF TEXAS
MICHAEL A. SCHOLZE
131737
LICENSED PROFESSIONAL ENGINEER
10/10/2022

NO.	REVISIONS	DATE	BY

SCALE: AS NOTED
DESIGNED BY: JPK
DRAWN BY: JPK
CHECKED BY: MAS

WATER COVER SHEET

ROSILLO RANCH
PHASES 5 & 6
MDP-LAND-21-11100067
LAND-PLAT-21-11800632
SAN ANTONIO, TEXAS

DATE
10/10/2022

PROJECT NO.
068706708

SHEET NUMBER
C5.0

Plotted By:Flores-Kelly, Jenny October 10, 2022 10:09:30am K:\SNA_Civil\068706708-HeartwoodRealtyPh6-8\Civil\Sheets\C-COVR-WATR-068706708.dwg
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GENERAL CONSTRUCTION NOTES

1. ALL MATERIAL AND CONSTRUCTION SHALL CONFORM TO THE CITY'S DESIGN STANDARDS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE TO FURNISH ALL MATERIAL AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN THE CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH THE APPROPRIATE APPROVING AUTHORITIES, SPECIFICATIONS AND REQUIREMENTS.
3. THE CONTRACTOR SHALL CONTACT ALL FRANCHISED UTILITY COMPANIES TO HAVE THEM LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION AND DEPTH OF ALL FRANCHISED UTILITY SERVICES AND ANY REQUIRED RELOCATION AND/OR EXTENSIONS. SERVICES SHOWN ON THE PLANS ARE CONCEPTUAL.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL PUBLIC UTILITIES IN THE CONSTRUCTION OF THIS PROJECT. ALL MANHOLES, CLEANOUTS, VALVE BOXES, FIRE HYDRANTS, ETC., MUST BE ADJUSTED TO PROPER GRADE BY THE CONTRACTOR PRIOR TO AND AFTER PLACING OF PERMANENT PAVING. UTILITIES MUST BE MAINTAINED TO PROPER LINE AND GRADE DURING CONSTRUCTION OF THE PAVING FOR THIS PROJECT.
5. BRACING OF UTILITY POLES MAY BE REQUIRED BY UTILITY COMPANIES WHEN TRENCHING OR EXCAVATION IS IN CLOSE PROXIMITY TO THE POLES. THE COST OF BRACING POLES WILL BE BORNE BY THE CONTRACTOR. THERE IS NO SEPARATE PAY ITEM FOR THIS WORK. THE COST IS INCIDENTAL TO THE VARIOUS PAY ITEMS FOR INSTALLATION OF PIPE.
6. THE LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES SHOWN ON THE PLANS WERE OBTAINED FROM AVAILABLE UTILITY COMPANY RECORDS AND PLANS AND ARE CONSIDERED APPROXIMATE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS, ELEVATIONS, AND DIMENSIONS OF ADJACENT AND/OR CONFLICTING UTILITIES SUFFICIENTLY IN ADVANCE OF CONSTRUCTION IN ORDER THAT ADJUSTMENTS CAN BE MADE TO PROVIDE ADEQUATE CLEARANCES. THE CONTRACTOR SHALL PRESERVE AND PROTECT PUBLIC UTILITIES AT ALL TIMES DURING CONSTRUCTION. ANY DAMAGE TO UTILITIES RESULTING FROM CONTRACTOR'S OPERATIONS SHALL BE RESTORED AT THEIR EXPENSE. THE ENGINEER SHALL BE NOTIFIED WHEN PROPOSED FACILITY GRADES CONFLICT WITH EXISTING UTILITY GRADES.
7. THE CONTRACTOR SHALL IMMEDIATELY REPAIR OR REPLACE ANY PHYSICAL DAMAGE TO PRIVATE PROPERTY, INCLUDING, BUT NOT LIMITED TO FENCES, WALLS, PAVEMENT, GRASS, TREES, AND LAWN SPRINKLER AND IRRIGATION SYSTEMS AT NO COST TO THE OWNER. THIS WORK SHALL BE SUBSIDIARY TO THE CONTRACT (UNLESS OTHERWISE NOTED) AND IS NOT A SEPARATE PAY ITEM.
8. THE CONTRACTOR SHALL REMOVE SURPLUS MATERIAL FROM THE PROJECT AREA. THIS WORK SHALL BE SUBSIDIARY TO THE CONTRACT AND IS NOT A SEPARATE PAY ITEM.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS PRIOR TO CONSTRUCTION.
10. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE COPY OF THE CONTRACT DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, AND SPECIAL CONDITIONS. COPIES OF ANY REQUIRED CONSTRUCTION PERMITS, EROSION CONTROL PLANS, SWPPP AND INSPECTION REPORTS.
11. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND NOTIFICATION TO THE ENGINEER. NO CONSIDERATION WILL BE GIVEN TO CHANGE ORDERS FOR WHICH THE OWNER AND ENGINEER WERE NOT CONTACTED PRIOR TO CONSTRUCTION OF THE AFFECTED ITEM.
12. ALL COPIES OF COMPACTION, CONCRETE AND OTHER REQUIRED TEST RESULTS ARE TO BE SENT TO THE ARCHITECT, CIVIL ENGINEER AND CITY ENGINEER OF RECORD DIRECTLY FROM THE TESTING AGENCY.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING TO THE ENGINEER A CERTIFIED RECORD SURVEY SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF TEXAS DEPICTING THE ACTUAL FIELD LOCATION OF ALL CONSTRUCTED IMPROVEMENTS THAT ARE REQUIRED BY THE JURISDICTIONAL AGENCIES FOR THE CERTIFICATION PROCESS.
14. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES, JURISDICTIONAL AGENCIES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES.
15. CONTRACTOR SHALL VERIFY BENCHMARKS AND DATUM PRIOR TO COMMENCING CONSTRUCTION OR STAKING OF IMPROVEMENTS.
16. CONTRACTOR SHALL THOROUGHLY CHECK COORDINATION OF CIVIL, LANDSCAPE, MEP, ARCHITECTURAL, STRUCTURAL, AND OTHER PLANS PRIOR TO COMMENCING CONSTRUCTION. OWNER AND ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCY PRIOR TO COMMENCING WITH CONSTRUCTION.
17. ALL HORIZONTAL DIMENSIONS GIVEN ARE TO FACE OF CURB AND TO PIPE CENTERLINES UNLESS OTHERWISE NOTED ON PLANS.
18. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING RELOCATION AND INSTALLATION OF FRANCHISED UTILITIES NECESSARY FOR ON AND OFF SITE CONSTRUCTION.
19. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED SMOOTH. THE AREAS SHALL THEN BE SEEDED, IRRIGATED, AND STABILIZED AS SPECIFIED IN THE PLANS, AND MAINTAINED UNTIL SOIL IS STABILIZED IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE JOB SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. ALL EARTHEN AREAS WILL BE STABILIZED AND MULCHED AS SHOWN ON THE LANDSCAPE, GRADING, AND EROSION CONTROL PLANS.
20. ALL CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE SHOWN.
21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
22. SOD OR SEED MUST BE INSTALLED AND MAINTAINED ON EXPOSED SLOPES WITHIN 48 HOURS OF COMPLETING FINAL GRADING AND AT ANY OTHER TIME AS NECESSARY TO PREVENT EROSION, SEDIMENTATION OR TURBID DISCHARGES.
23. THE CONTRACTOR MUST REVIEW AND MAINTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN WITH ALL CONDITIONS, ATTACHMENTS, EXHIBITS, AND PERMIT MODIFICATIONS IN GOOD CONDITION AT THE CONSTRUCTION SITE. THE COMPLETE PERMIT MUST BE AVAILABLE FOR REVIEW UPON REQUEST BY WATER MANAGEMENT DISTRICT REPRESENTATIVES.
24. THE CONTRACTOR MUST CONSTRUCT AND MAINTAIN A PERMANENT STABLE PROTECTIVE COVER (GRASS) FOR EROSION AND SEDIMENT CONTROL ON ALL LAND SURFACES EXPOSED OR DISTURBED BY CONSTRUCTION OF THE PERMITTED PROJECT. THE PROTECTIVE COVER MUST BE INSTALLED WITHIN FOURTEEN DAYS AFTER FINAL GRADING OF THE AFFECTED LAND SURFACE. A PERMANENT STABLE COVER MUST BE ESTABLISHED WITHIN 60 DAYS OF IT'S INSTALLATION.
25. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE THE CIVIL ENGINEER A COPY OF AS-BUILT PLANS IDENTIFYING ALL DEVIATIONS OR VARIATIONS FROM THE ORIGINAL PLANS.
26. ALL EXISTING PAVEMENT, ADJACENT UTILITIES, STRUCTURES, ETC., DISTURBED AS A RESULT OF THE NEW CONSTRUCTION, SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
27. ALL WORK REQUIRED BY THESE PLANS SHALL BE CONDUCTED IN CONFORMANCE WITH CURRENT SAFETY CODES AND STANDARDS WITH JURISDICTION OVER THIS PROJECT.

SAN ANTONIO WATER SYSTEMS NOTES

SAWS GENERAL CONSTRUCTION NOTES
COUNTER PERMIT AND GENERAL CONSTRUCTION PERMIT

GENERAL SECTION

1. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL BE APPROVED BY THE SAN ANTONIO WATER SYSTEM (SAWS) AND COMPLY WITH THE PLANS, SPECIFICATIONS, GENERAL CONDITIONS AND WITH THE FOLLOWING AS APPLICABLE:
   A. CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) "DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEM", TEXAS CODE ADMINISTRATIVE (TAC) TITLE 30 PART 1 CHAPTER 217 AND "PUBLIC DRINKING WATER", TAC TITLE 30 PART 1 CHAPTER 290.
   B. CURRENT TXDOT "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND DRAINAGE".
   C. CURRENT "SAN ANTONIO WATER SYSTEM STANDARD SPECIFICATIONS FOR WATER AND SANITARY SEWER CONSTRUCTION"
   D. CURRENT CITY OF SAN ANTONIO "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION".
   E. CURRENT CITY OF SAN ANTONIO "UTILITY EXCAVATION CRITERIA MANUAL" (UECM).
2. THE CONTRACTOR SHALL NOT PROCEED WITH ANY PIPE INSTALLATION WORK UNTIL THEY OBTAIN A COPY OF THE APPROVED COUNTER PERMIT OR GENERAL CONSTRUCTION PERMIT (GCP) FROM THE CONSULTANT AND HAS BEEN NOTIFIED BY SAWS CONSTRUCTION INSPECTION DIVISION TO PROCEED WITH THE WORK AND HAS ARRANGED A MEETING WITH THE INSPECTOR AND CONSULTANT FOR THE WORK REQUIREMENTS. WORK COMPLETED BY THE CONTRACTOR WITHOUT AN APPROVED COUNTER PERMIT AND/OR A GCP WILL BE SUBJECT TO REMOVAL AND REPLACEMENT AT THE EXPENSE OF THE CONTRACTORS AND/OR THE DEVELOPER.
3. THE CONTRACTOR SHALL OBTAIN THE SAWS STANDARD DETAILS FROM THE SAWS WEBSITE, HTTP://WWW.SAWS.ORG/BUSINESS_CENTER/SPECS. UNLESS OTHERWISE NOTED WITHIN THE DESIGN PLANS.
4. THE CONTRACTOR IS TO MAKE ARRANGEMENTS WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT (210) 233-2973, ON NOTIFICATION PROCEDURES THAT WILL BE USED TO NOTIFY AFFECTED HOME RESIDENTS AND/OR PROPERTY OWNERS 48 HOURS PRIOR TO BEGINNING ANY WORK.
5. LOCATION AND DEPTH OF EXISTING UTILITIES AND SERVICE LATERALS SHOWN ON THE PLANS ARE UNDERSTOOD TO BE APPROXIMATE. ACTUAL LOCATIONS AND DEPTHS MUST BE FIELD VERIFIED BY THE CONTRACTOR AT LEAST 1 WEEK PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITY SERVICE LINES AS REQUIRED FOR CONSTRUCTION AND TO PROTECT THEM DURING CONSTRUCTION AT NO COST TO SAWS.
6. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UNDERGROUND UTILITIES AND DRAINAGE STRUCTURES AT LEAST 1-2 WEEKS PRIOR TO CONSTRUCTION WHETHER SHOWN ON PLANS OR NOT. PLEASE ALLOW UP TO 7 BUSINESS DAYS FOR LOCATES REQUESTING PIPE LOCATION MARKERS ON SAWS FACILITIES. THE FOLLOWING CONTACT INFORMATION ARE SUPPLIED FOR VERIFICATION PURPOSES:
   §SAWS UTILITY LOCATES: HTTP://WWW.SAWS.ORG/SERVICE/LOCATES
   §COSA DRAINAGE (210) 207-0724 OR (210) 207-6026
   §COSA TRAFFIC SIGNAL OPERATIONS (210) 206-8480
   §COSA TRAFFIC SIGNAL DAMAGES (210) 207-3951
   §TEXAS STATE WIDE ONE CALL LOCATOR 1-800-545-6005 OR 811
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING EXISTING FENCES, CURBS, STREETS, DRIVEWAYS, SIDEWALKS, LANDSCAPING AND STRUCTURES TO ITS ORIGINAL OR BETTER CONDITION IF DAMAGES ARE MADE AS A RESULT OF THE PROJECT'S CONSTRUCTION.
8. ALL WORK IN TEXAS DEPARTMENT OF TRANSPORTATION (TXDOT) AND/OR BEXAR COUNTY RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH RESPECTIVE CONSTRUCTION SPECIFICATIONS AND PERMIT REQUIREMENTS.
9. THE CONTRACTOR SHALL COMPLY WITH CITY OF SAN ANTONIO OR OTHER GOVERNING MUNICIPALITY'S TREE ORDINANCES WHEN EXCAVATING NEAR TREES.
10. THE CONTRACTOR SHALL NOT PLACE ANY WASTE MATERIALS IN THE 100-YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN PERMIT.
11. HOLIDAY WORK: CONTRACTORS WILL NOT BE ALLOWED TO PERFORM SAWS WORK ON SAWS RECOGNIZED HOLIDAYS. REQUEST SHOULD BE SENT TO CONSTWORKREQ@SAWS.ORG.

    WEEKEND WORK: CONTRACTORS ARE REQUIRED TO NOTIFY THE SAWS INSPECTION CONSTRUCTION DEPARTMENT 48 HOURS IN ADVANCE TO REQUEST WEEKEND WORK. REQUEST SHOULD BE SENT TO CONSTWORKREQ@SAWS.ORG.

    ANY AND ALL SAWS UTILITY WORK INSTALLED WITHOUT HOLIDAY/WEEKEND APPROVAL WILL BE SUBJECT TO BE UNCOVERED FOR PROPER INSPECTION.
12. COMPACTION NOTE (ITEM 804): THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING THE COMPACTION REQUIREMENTS ON ALL TRENCH BACKFILL AND FOR PAYING FOR THE TESTS PERFORMED BY A THIRD PARTY. COMPACTION TESTS WILL BE DONE AT ONE LOCATION POINT RANDOMLY SELECTED, OR AS INDICATED BY THE SAWS INSPECTOR AND/OR THE TEST ADMINISTRATOR, PER EACH 12-INCH LOOSE LIFT PER 400 LINEAR FEET AT A MINIMUM. THIS PROJECT WILL NOT BE ACCEPTED AND FINALIZED BY SAWS WITHOUT THIS REQUIREMENT BEING MET AND VERIFIED BY PROVIDING ALL NECESSARY DOCUMENTED TEST RESULTS.
13. A COPY OF ALL TESTING REPORTS SHALL BE FORWARDED TO SAWS CONSTRUCTION INSPECTION DIVISION.

SAWS NOTE:
DIVISION VALVES: DIVISION VALVES SHOWN ON PLANS OR NOT SHOWN ON PLANS BUT FOUND IN THE FIELD SHALL ONLY BE OPERATED BY SAWS DISTRIBUTION AND COLLECTION STAFF AND ONLY WITH PRIOR WRITTEN APPROVAL OF THE SAWS DIRECTOR OF PRODUCTION AND OPERATIONS AND PROPER COORDINATION WITH ALL SAWS DEPARTMENTS. CONTRACTOR SHALL PROVIDE WRITTEN NOTIFICATION TO THE INSPECTOR A MINIMUM OF TWO WEEKS IN ADVANCE TO START THE COORDINATION PROCESS AND WILL BE INFORMED BY THE INSPECTOR WHEN THE DIVISION VALVE WILL BE OPERATED BY THE SAWS DISTRIBUTION AND COLLECTION STAFF. THE DIVISION VALVE CAN ONLY BE OPERATED BY A SAWS DISTRIBUTION AND COLLECTION STAFF MEMBER NOT THE INSPECTOR OR THE CONTRACTOR. OPERATION OF A DIVISION VALVE WITHOUT THE EXPRESS PRIOR WRITTEN APPROVAL OF THE SAWS DISTRIBUTION AND COLLECTION STAFF WILL CONSTITUTE A MATERIAL BREACH OF ANY WRITTEN SAWS CONTRACT OR PERMIT IN ADDITION TO SUBJECTING THE CONTRACTOR TO LIABILITY FOR ANY AND ALL FINES, FEES, OR OTHER DAMAGES, DIRECT OR CONSEQUENTIAL THAT MAY ARISE FROM OR BE CAUSED BY THE OPERATION OF THE VALVE WITHOUT PRIOR WRITTEN PERMISSION. PLEASE BE INFORMED THAT THE APPROVAL OF THE OPERATION OR OPENING OR CLOSING OF A DIVISION VALVE CAN TAKE SEVERAL WEEKS FOR APPROVAL. DIVISION VALVES WILL ALSO HAVE A VALVE LID LABELED DIVISION VALVE AND A LOCKING MECHANISM INSTALLED WITH A KEY. THE LOCK AND KEY MECHANISM WILL BE PAID FOR BY THE CONTRACTOR BUT WILL BE INSTALLED BY SAWS DISTRIBUTION AND COLLECTION STAFF.

SAN ANTONIO WATER SYSTEMS NOTES

SAWS CONSTRUCTION NOTES
COUNTER PERMIT AND GENERAL CONSTRUCTION PERMIT

WATER SECTION

1. PRIOR TO TIE-INS, ANY SHUTDOWNS OF EXISTING MAINS OF ANY SIZE MUST BE COORDINATED WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT LEAST ONE WEEK IN ADVANCE OF THE SHUTDOWN. THE CONTRACTOR MUST ALSO PROVIDE A SEQUENCE OF WORK AS RELATED TO THE TIE-INS; THIS IS AT NO ADDITIONAL COST TO SAWS OR THE PROJECT AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEQUENCE THE WORK ACCORDINGLY.
   - FOR WATER MAINS 12" OR HIGHER: SAWS EMERGENCY OPERATIONS CENTER (210) 233-2014
2. ASBESTOS CEMENT (AC) PIPE, ALSO KNOWN AS TRANSITE PIPE WHICH IS KNOWN TO CONTAIN ASBESTOSCONTAINING MATERIAL (ACM), MAY BE LOCATED WITHIN THE PROJECT LIMITS. SPECIAL WASTE MANAGEMENT PROCEDURES AND HEALTH AND SAFETY REQUIREMENTS WILL BE APPLICABLE WHEN REMOVAL AND/OR DISTURBANCE OF THIS PIPE OCCURS. SUCH WORK IS TO BE MADE UNDER SPECIAL SPECIFICATION ITEM NO. 3000, "SPECIAL SPECIFICATION FOR HANDLING ASBESTOS CEMENT PIPE".
3. VALVE REMOVAL: WHERE THE CONTRACTOR IS TO ABANDON A WATER MAIN, THE CONTROL VALVE LOCATED ON THE ABANDONING BRANCH WILL BE REMOVED AND REPLACED WITH A CAP/PLUG. (NSPI)
4. SUITABLE ANCHORAGE/THRUST BLOCKING OR JOINT RESTRAINT SHALL BE PROVIDED AT ALL OF THE FOLLOWING MAIN LOCATIONS: DEAD ENDS, PLUGS, CAPS, TEES, CROSSES, VALVES, AND BENDS, IN ACCORDANCE WITH THE STANDARD DRAWINGS DD-839 SERIES AND ITEM NO. 839, IN THE SAWS STANDARD SPECIFICATIONS FOR CONSTRUCTION.
5. ALL VALVES SHALL READ "OPEN RIGHT".
6. PRVS REQUIRED: CONTRACTOR TO VERIFY THAT NO PORTION OF THE TRACT IS BELOW GROUND ELEVATION OF 643 FEET WHERE THE STATIC PRESSURE WILL NORMALLY EXCEED 80 PSI. AT ALL SUCH LOCATIONS WHERE THE GROUND LEVEL IS BELOW 643 FEET, THE DEVELOPER OR BUILDER SHALL INSTALL AT EACH LOT, ON THE CUSTOMER'S SIDE OF THE METER, AN APPROVED TYPE PRESSURE REGULATOR IN CONFORMANCE WITH THE PLUMBING CODE OF THE CITY OF SAN ANTONIO. NO DUAL SERVICES ALLOWED FOR ANY LOT(S) IF "PRV IS/ARE REQUIRED FOR SUCH LOT(S), ONLY SINGLE SERVICE CONNECTIONS SHALL BE ALLOWED. "NOTE: A PRESSURE REGULATOR IS ALSO KNOWN AS A PRESSURE REDUCING VALVE (PRV).
7. PIPE DISINFECTION WITH DRY HTH FOR PROJECTS LESS THAN 800 LINEAR FEET. (ITEM NO. 847.3): MAINS SHALL BE DISINFECTED WITH DRY HTH WHERE SHOWN IN THE CONTRACT DOCUMENTS OR AS DIRECTED BY THE INSPECTOR, AND SHALL NOT EXCEED A TOTAL LENGTH OF 800 FEET. THIS METHOD OF DISINFECTION WILL ALSO BE FOLLOWED FOR MAIN REPAIRS. THE CONTRACTOR SHALL UTILIZE ALL APPROPRIATE SAFETY MEASURE TO PROTECT HIS PERSONNEL DURING DISINFECTION OPERATIONS.
8. BACKFLOW PREVENTION DEVICES:
   - ALL IRRIGATION SERVICES WITHIN RESIDENTIAL AREAS ARE REQUIRED TO HAVE BACKFLOW PREVENTION DEVICES.
   - ALL COMMERCIAL BACKFLOW PREVENTION DEVICES MUST BE APPROVED BY SAWS PRIOR TO INSTALLATION.
9. FINAL CONNECTION TO THE EXISTING WATER MAIN SHALL NOT BE MADE UNTIL THE WATER MAIN HAS BEEN PRESSURE TESTED, CHLORINATED, AND SAWS HAS RELEASED THE MAIN FOR TIE-IN AND USE.

SITE SPECIFIC NOTES:

1. CONTRACTOR TO FIELD VERIFY LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTACT ENGINEER IF FIELD CONDITIONS VARY.
2. ALL 8" WASTEWATER PIPE AND FITTINGS IN THIS PROJECT ARE P.V.C. SDR-26, ASTM D3034, D-3212, F-477. AT WATERLINE CROSSINGS AND WHERE WATER AND WASTEWATER MAINS OR LATERALS ARE PARALLEL AND SEPARATION DISTANCE CAN NOT BE ACHIEVED AS PER 30 TAC §217.53, PRESSURE RATED PIPE ASTM D2241 FOR GRAVITY SEWER 12 INCH AND SMALLER.
3. HORIZONTAL AND VERTICAL SEPARATION BETWEEN WASTEWATER MAINS OR LATERALS AND WATER MAINS SHALL BE 9 FOOT MINIMUM (O.D. TO O.D.). IF THIS SEPARATION IS NOT POSSIBLE, CONTRACTOR SHALL COMPLY WITH MORE CONSERVATIVE REQUIREMENTS AS LISTED IN TAC 290.44(E)(4)(B) (DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEMS] AND/OR TAC 217.53(D) [PUBLIC DRINKING WATER]. FOR VERTICAL SEPARATION LESS THAN 9 FEET THE FOLLOWING APPLIES:
   - DOMESTIC WATER MAIN OVER NON-PRESSURE RATED WASTEWATER MAIN OR LATERAL
     2 FOOT MINIMUM VERTICAL SEPARATION WITH WASTEWATER MAIN STABILIZED WITH CEMENT STABILIZED SAND OR WITH CASING PIPE
   - DOMESTIC WATER MAIN OVER PRESSURE RATED WASTEWATER MAIN OR LATERAL
     6 INCH MINIMUM VERTICAL SEPARATION WITH PRESSURE RATED WASTEWATER MAIN STABILIZED WITH CEMENT STABILIZED SAND.
   - NON PRESSURE RATED WASTEWATER MAIN OR LATERAL OVER DOMESTIC WATER MAIN
     1 FOOT MINIMAL VERTICAL WITH WASTEWATER PIPE ENCASED IN CASING PIPE AND DOMESTIC WATER LINE CONSTRUCTED OF DI OR STEEL PIPE
   - PRESSURE RATED WASTEWATER MAIN OR LATERAL OVER DOMESTIC WATER MAIN
     1 FOOT MINIMAL VERTICAL WITH PRESSURE RATED WASTEWATER PIPE AND DOMESTIC WATER LINE CONSTRUCTED OF DI OR STEEL PIPE
5. ALL SERVICE CONNECTIONS SHALL BE REQUIRED TO HAVE A CONCRETE ENCASED BLOCK AROUND THE SERVICE CONNECTION. SEE SAWS GUIDELINES FOR MORE INFORMATION.
6. ALL UTILITIES TO BE CONSTRUCTED PRIOR TO STREETS.
7. NO VALVES, HYDRANTS, ETC. SHALL BE CONSTRUCTED WITHIN CURBS, SIDEWALKS, OR DRIVEWAYS.

WATER: PRESSURE ZONE 3 (HGL 828)

DEVELOPER'S NAME: HDC FOSTER RD, LLC
DEVELOPER'S ADDRESS: 100 NE LOOP 410 SUITE 1080
CITY SAN ANTONIO STATE TX ZIP 78216
PHONE # DEVELOPER EMAIL paul@hdc-group.com
SAWS BLOCK MAP # 200578 & 200580 TOTAL EDU'S 172
TOTAL ACREAGE 93.78 NUMBER OF LOTS 162
TOTAL LINEAR FOOTAGE OF PIPE 5165 LF ~ 8" PVC PIPE C900.
PLAT NO. LAND-PLAT-21-11800632 SAWS JOB NO. 22-1106

GEOTECHNICAL REPORT
PROJECT NO. S221093
MARCH 17, 2022
INTEGRATED TESTING AND ENGINEERING COMPANY OF SAN ANTONIO, L.P.

REFER TO TNRCC/TCEQ DESIGN GUIDELINES (CHAPTER 290) FOR ALL UTILITY CROSSINGS.

811
Know what's **below.**
Call before you dig.

No.	REVISIONS	DATE	BY

Kimley»Horn
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TBPE: FIRM NO. 928

STATE OF TEXAS
MICHAEL A. SCHOLZE
131737
LICENSED PROFESSIONAL ENGINEER
10/10/2022

SCALE	DESIGNED BY	DRAWN BY	CHECKED BY
AS NOTED	JFK	JFK	MAS

GENERAL WATER NOTES

ROSILLO RANCH
PHASES 5 & 6
MDP-LAND-21-11100067
LAND-PLAT-21-11800632
SAN ANTONIO, TEXAS

DATE
10/10/2022
PROJECT NO.
068706708
SHEET NUMBER
C5.1

Plotted By:Flores-Kelly, Jenny October 10, 2022 10:09:34am K:\SNA_Civil\068706708-HeartwoodRosilloPhs5-6\CAD\PlotSheets\C-GENN-WATR-068706708.dwg
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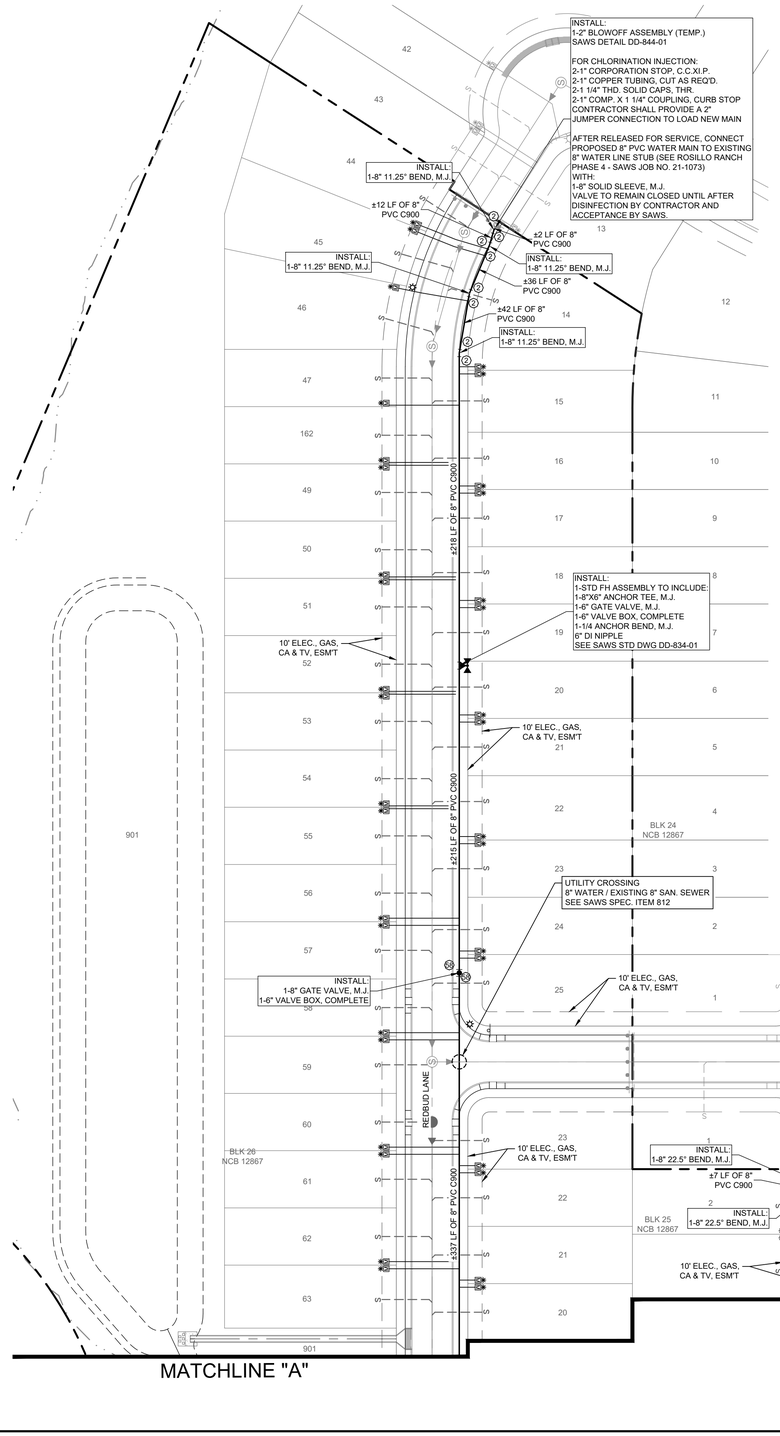
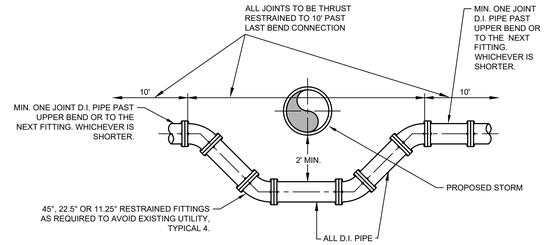
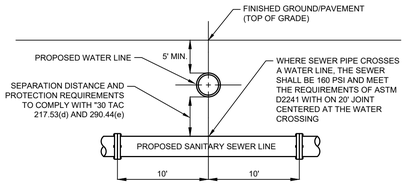




NOTE: ROUTE WATER LINE & FIRE HYDRANT LINES AS NECESSARY TO AVOID OTHER UTILITIES. MAINTAIN MINIMUM 48" COVER.

WATER LOWERING DETAIL

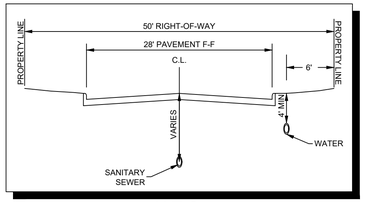
N.T.S.



TYPICAL SANITARY SEWER/WATER CROSSING DETAIL

N.T.S.

TYPICAL UTILITY LOCATION - LOCAL TYPE "A"



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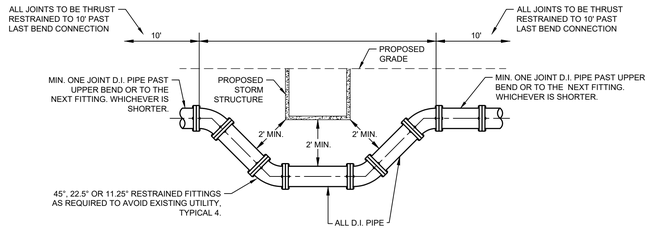

NOTE: ROUTE WATER LINE & FIRE HYDRANT LINES AS NECESSARY TO AVOID OTHER UTILITIES. MAINTAIN MINIMUM 48" COVER.

WATER/STORM STRUCTURE CROSSING DETAIL

N.T.S.

TRENCH EXCAVATION SAFETY PROTECTION
CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

JOINT RESTRAINT NOTE:
CONTRACTOR SHALL INSTALL RETAINER GLANDS AT ALL FITTINGS AND PROVIDE JOINT RESTRAINING HARNESSES OR FIELD LOCK GASKETS AT ALL JOINTS WITHIN THE LENGTH SHOWN.
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AND DISPOSING OF THIS PIPE. PAYMENT FOR SUCH WORK IS TO BE MADE UNDER SPECIAL SPECIFICATION ITEM NO 3000, "SPECIAL SPECIFICATION FOR HANDLING ASBESTOS CEMENT PIPE."

NORTH

GRAPHIC SCALE IN FEET
0 25 50 100

LEGEND

	PROPERTY RIGHT-OF-WAY LINE
	EXISTING SANITARY SEWER LINE
	PROPOSED SANITARY SEWER LINE
	PROPOSED WATER LINE
	EXISTING WATER LINE
UGE	UNDERGROUND ELECTRIC
GAS	UNDERGROUND GAS
	PROPOSED SANITARY SEWER MANHOLE WITH FLOW ARROWS
	EXISTING SANITARY SEWER MANHOLE
	PROPOSED FIRE HYDRANT
	UTILITY CROSSING
	PROPOSED GATE VALVE
	PROPOSED SINGLE/INDIVIDUAL SERVICE
	LOT REQUIRES PRV BY HOME BUILDER
	PROPOSED DUAL SERVICE
	PROPOSED WATER METER
4	JOINT RESTRAINT LENGTH

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4. REFERENCE WATER AND SANITARY SEWER NOTES ON SHEET C5.1 FOR ADDITIONAL REQUIREMENTS.

WATER: PRESSURE ZONE 3 (HGL 828)

DEVELOPER'S NAME: HDC FOSTER RD, LLC
DEVELOPER'S ADDRESS: 100 NE LOOP 410 SUITE 1080
CITY SAN ANTONIO STATE TX ZIP 78216
PHONE # DEVELOPER EMAIL paul@hdc-group.com
SAWS BLOCK MAP # 200578 & 200580 TOTAL EDU'S 172
TOTAL ACREAGE 93.78 NUMBER OF LOTS 162
TOTAL LINEAR FOOTAGE OF PIPE 5165 LF ~ 8" PVC PIPE C900.
PLAT NO. LAND-PLAT-21-11800632 SAWS JOB NO. 22-1106

* 25 PROPOSED SERVICES TO TIE INTO EXISTING 12" WATER MAIN SEE ROSILLO RANCH PHASE 2 & 3 SAWS JOB NO. 20-1107

BENCHMARK LIST

BM #50 CP MAGNAIL W/ WASHER
N: 13705110 E: 2170235
ELEVATION: 646.51'
BM #51 CP MAGNAIL W/ WASHER
N: 13705307 E: 2169932
ELEVATION: 639.13'

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No.	REVISIONS	DATE	BY

Kimley»Horn
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10101 REUNION PLACE, SUITE 400, SAN ANTONIO, TX 78216
PHONE: 210-541-9166 FAX: 210-541-1699
WWW.KIMLEY-HORN.COM
TBPE: FIRM NO. 928

STATE OF TEXAS
MICHAEL A. SCHOLZE
131737
LICENSED PROFESSIONAL ENGINEER
10/10/22

SCALE	DESIGNED BY	DRAWN BY	CHECKED BY
AS NOTED	JFK	JFK	MAS

WATER PLAN (1 OF 3)

ROSILLO RANCH
PHASES 5 & 6
MDP-LAND-21-11100067
LAND-PLAT-21-11800632
SAN ANTONIO, TEXAS

DATE
10/10/2022

PROJECT NO.
068706708

SHEET NUMBER
C5.2

Plotted By:Flores-Kelly, Jenny October 10, 2022 10:09:39am K:\SNA_Civil\068706708-HeartwoodRosilloPh5-6\CAD\PlotSheets\C-SAWS-OVRL-WATR.dwg
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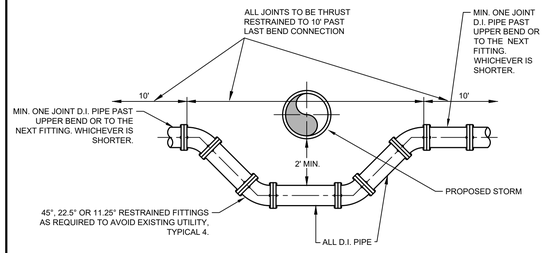
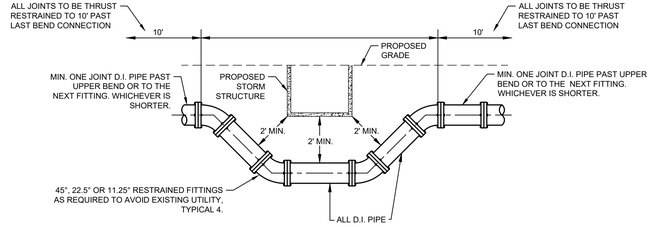


NOTE: ROUTE WATER LINE & FIRE HYDRANT LINES AS NECESSARY TO AVOID OTHER UTILITIES. MAINTAIN MINIMUM 48" COVER.

WATER LOWERING DETAIL
N.T.S.

TYPICAL UTILITY LOCATION - LOCAL TYPE "A"

N.T.S.



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WATER/STORM STRUCTURE CROSSING DETAIL
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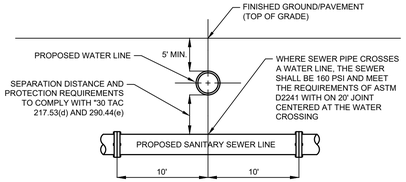

TYPICAL SANITARY SEWER/WATER CROSSING DETAIL
N.T.S.

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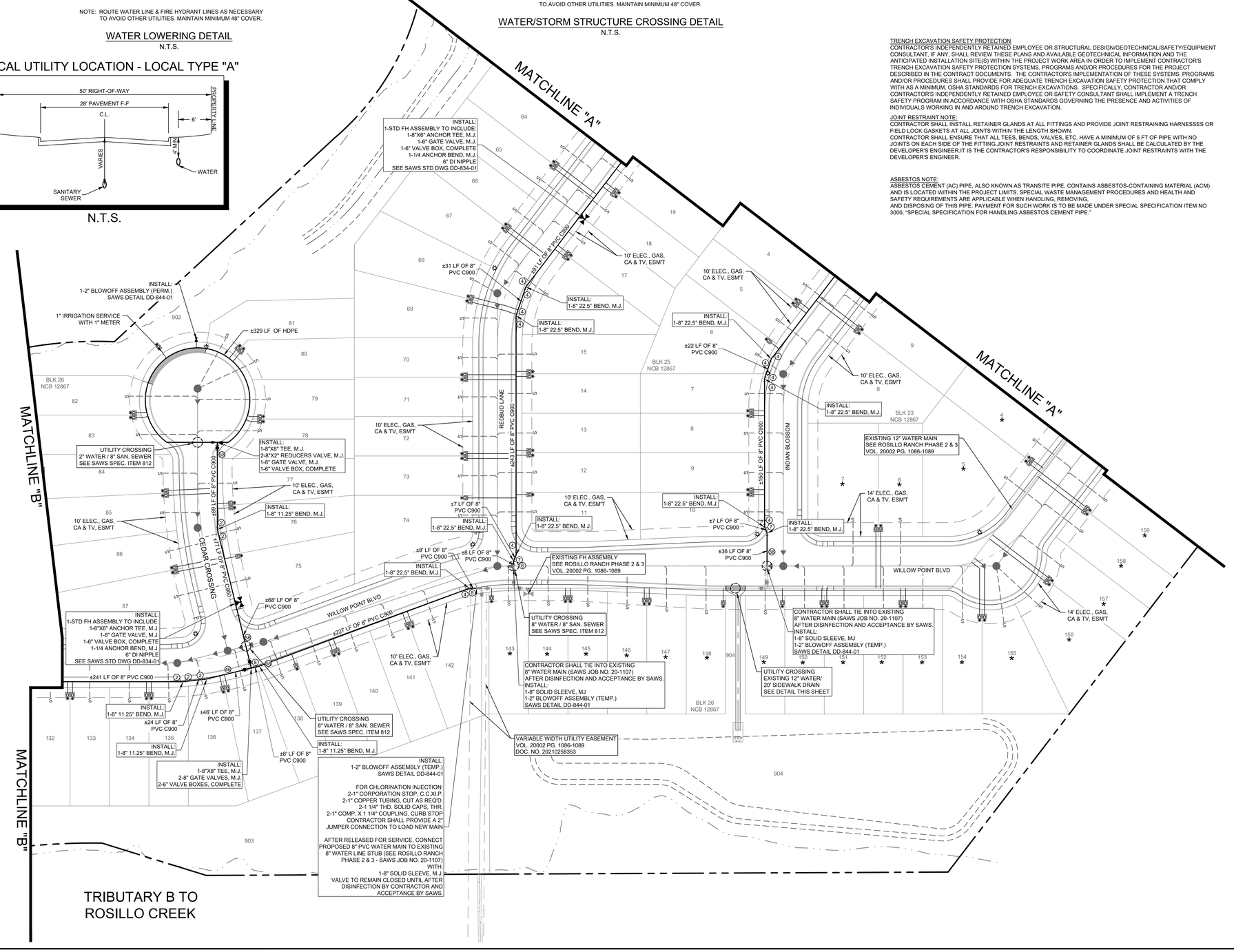

LEGEND

	PROPERTY RIGHT-OF-WAY LINE
	EXISTING SANITARY SEWER LINE
	PROPOSED SANITARY SEWER LINE
	PROPOSED WATER LINE
	EXISTING WATER LINE
UGE	UNDERGROUND ELECTRIC
GAS	UNDERGROUND GAS
	PROPOSED SANITARY SEWER MANHOLE WITH FLOW ARROWS
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4	JOINT RESTRAINT LENGTH

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WATER: PRESSURE ZONE 3 (HGL 828)

DEVELOPER'S NAME: HDC FOSTER RD, LLC
DEVELOPER'S ADDRESS: 100 NE LOOP 410 SUITE 1080
CITY SAN ANTONIO STATE TX ZIP 78216
PHONE # DEVELOPER EMAIL paul@hdc-group.com
SAWS BLOCK MAP # 200578 & 200580 TOTAL EDU'S 172
TOTAL ACREAGE 93.78 NUMBER OF LOTS 162
TOTAL LINEAR FOOTAGE OF PIPE 5165 LF ~ 8" PVC PIPE C900.
PLAT NO. LAND-PLAT-21-11800632 SAWS JOB NO. 22-1106

GRAPHIC SCALE IN FEET
0 25 50 100

★ 25 PROPOSED SERVICES TO TIE INTO EXISTING 12" WATER MAIN SEE ROSILLO RANCH PHASE 2 & 3 SAWS JOB NO. 20-1107

BENCHMARK LIST

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10101 REUNION PLACE, SUITE 400, SAN ANTONIO, TX 78216
PHONE: 210-541-9166 FAX: 210-541-4699
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TBPE: FIRM NO. 928

STATE OF TEXAS
MICHAEL A. SCHOLZE
131737
LICENSED PROFESSIONAL ENGINEER
10/10/2022

SCALE	DESIGNED BY	DRAWN BY	CHECKED BY
AS NOTED	JFK	JFK	MAS

WATER PLAN (2 OF 3)

ROSILLO RANCH
PHASES 5 & 6
MDP-LAND-21-11100067
LAND-PLAT-21-11800632
SAN ANTONIO, TEXAS

DATE 10/10/2022
PROJECT NO. 068706708
SHEET NUMBER C5.3

Plotted By:Flores-Kelly, Jenny October 10, 2022 10:09:46am K:\SNA_Civil\068706708-HoorbaceBasilioPhs5-6\CAD\PrintSheets\C-SANS-OVRL-WATR.dwg
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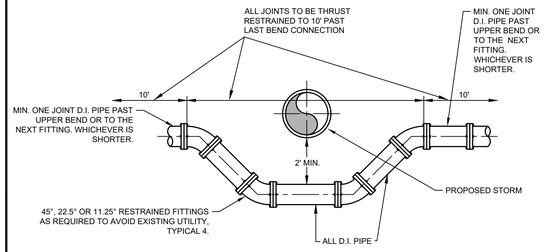

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WATER LOWERING DETAIL

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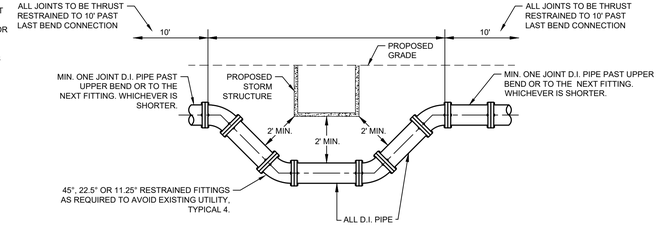

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WATER/STORM STRUCTURE CROSSING DETAIL

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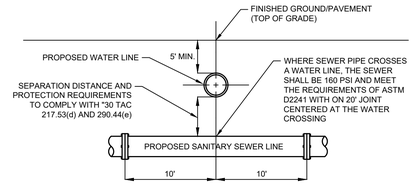

TYPICAL SANITARY SEWER/WATER CROSSING DETAIL

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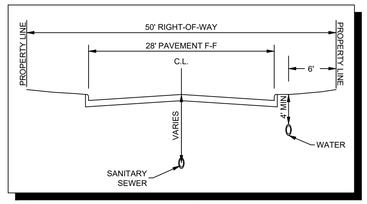

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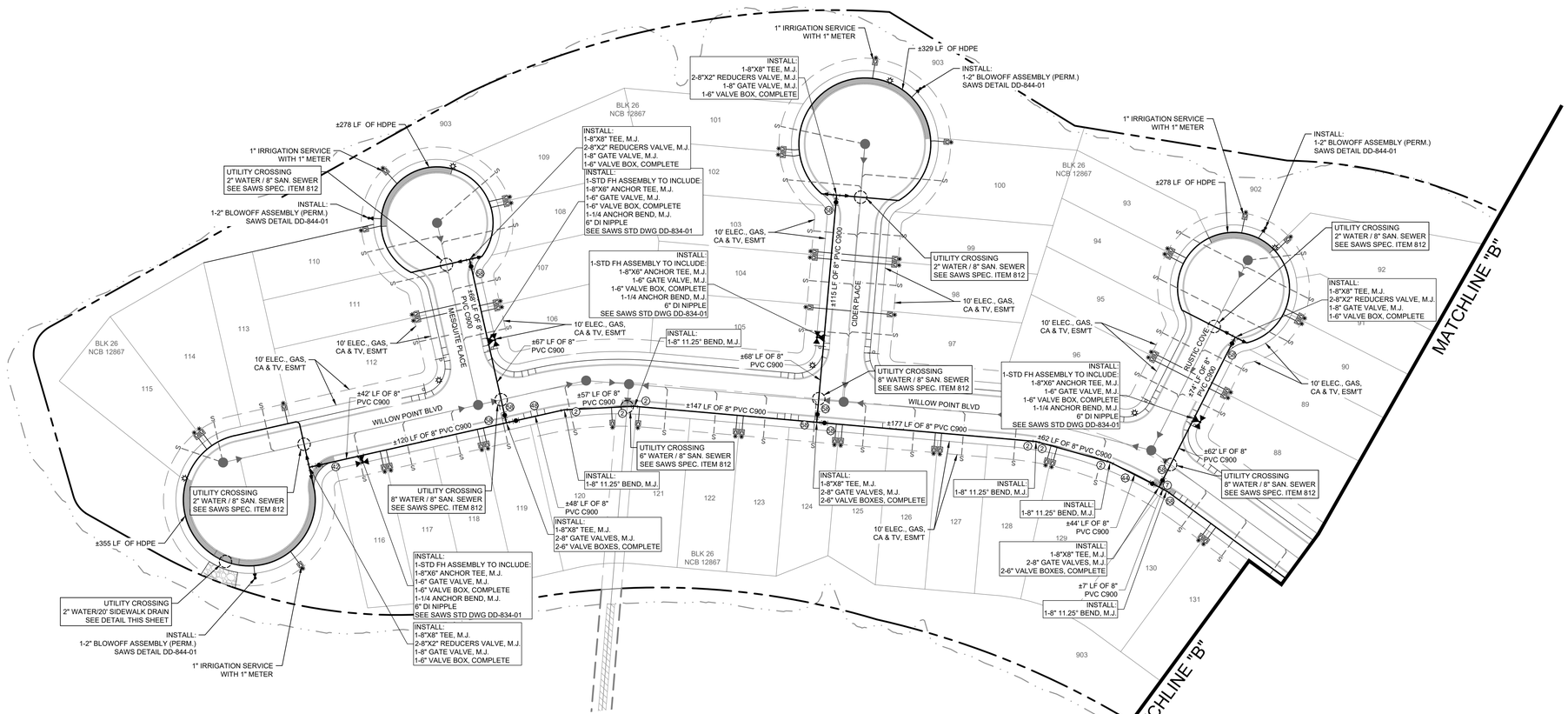

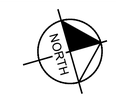

GRAPHIC SCALE IN FEET
0 25 50 100

LEGEND

	PROPERTY RIGHT-OF-WAY LINE
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	PROPOSED SANITARY SEWER LINE
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10/10/2022

SCALE	DESIGNED BY	DRAWN BY	CHECKED BY
AS NOTED	JFK	JFK	MAS

WATER PLAN (3 OF 3)

ROSILLO RANCH
PHASES 5 & 6
MDP-LAND-21-11100067
LAND-PLAT-21-11800632
SAN ANTONIO, TEXAS

DATE
10/10/2022

PROJECT NO.
068706708

SHEET NUMBER
C5.4

Plotted By:Flores-Kelly, Jenny October 10, 2022 10:09:52am K:\SNA_Civil\068706708-HeartwoodRealtyPH5-6\CAD\PlotSheet\C-SANE-OVRL-WATR.dwg
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PUBLIC ON-SITE & OFFSITE SANITARY SEWER PLANS

FOR

ROSILLO RANCH
PHASES 5 & 6

SAN ANTONIO, TEXAS

PROJECT TEAM:

OWNER
HDC FOSTER RD, LLC
100 NE LOOP 410, SUITE 1080
SAN ANTONIO, TEXAS 78216
PH. (210) 838-6784
CONTACT: BRYAN SIMS

CIVIL ENGINEER
KIMLEY-HORN AND ASSOCIATES, INC.
10101 REUNION PLACE, SUITE 400
SAN ANTONIO, TEXAS 78216
PH. (210) 705-9447
FAX (210) 541-8699
CONTACT: MICHAEL A. SCHOLZE, P.E.

SURVEYOR
KIMLEY-HORN AND ASSOCIATES, INC.
10101 REUNION PLACE, SUITE 400
SAN ANTONIO, TEXAS 78216
PH: (210) 541-9166
CONTACT: JOHN GREG MOSIER, R.P.L.S.
TBPLS FIRM REGISTRATION NO. 10193973

LIST OF CONTACTS:

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AT&T COMMUNICATIONS
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SAN ANTONIO, TX 78209
PH. (210) 283-1935

STORM SEWER
CITY OF SAN ANTONIO
PUBLIC WORKS
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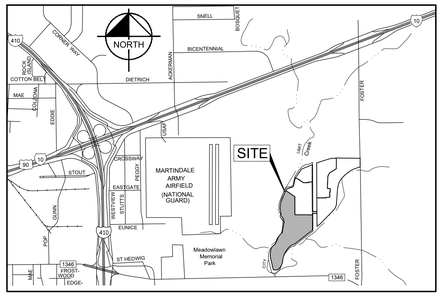
SAN ANTONIO, TX 78283
PH. (210) 207-8498

ELECTRIC
CPS ENERGY
17281 N. GREEN MOUNTAIN
SAN ANTONIO, TX 78247
PH. (210) 353-4524



LOCATION MAP
NOT TO SCALE

INDEX OF SHEETS

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C7.0	OVERALL UTILITY PLAN	

POST PERMIT REVISION LOG

NO.	DATE	DESCRIPTION

SUBMITTAL REVIEW LOG

1ST SUBMITTAL	5/3/2022
2ND SUBMITTAL	8/2/2022

SEWER: EAST SEWERSHED - DOS RIOS W.R.C.

DEVELOPER'S NAME: HDC FOSTER, RD LLC
DEVELOPER'S ADDRESS: 100 NE LOOP 410 SUITE 1080
CITY SAN ANTONIO STATE TX ZIP 78216
PHONE # FAX #
SAWS BLOCK MAP # 200578 & 200580 TOTAL EDU'S 162
TOTAL ACREAGE 35.17 NUMBER OF LOTS 162
TOTAL LINEAR FOOTAGE OF PIPE 4271 LF ~ 8" PVC PIPE SDR-26
PLAT NO. LAND-PLAT-21-11800632 SAWS JOB NO. 22-1604

Know what's **below.**
Call before you dig.

NO.	DATE	REVISIONS	BY

Kimley»Horn
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TBPE FIRM NO. 928

STATE OF TEXAS
MICHAEL A. SCHOLZE
131737
LICENSED PROFESSIONAL ENGINEER
8/2/2022

SCALE	AS NOTED
DESIGNED BY	MAS
DRAWN BY	ATR
CHECKED BY	MAS

SANITARY SEWER COVER SHEET

ROSILLO RANCH
PHASES 5 & 6
MDP-LAND-21-11100067
LAND-PLAT-21-11800632
SAN ANTONIO, TEXAS

DATE 8/2/2022
PROJECT NO. 068706708
SHEET NUMBER C6.0

Plotted By: Ortiz, Dani - August 02, 2022 - 05:43:43pm - K:\SNA_Civil\068706708-HeartwoodRosilloPhs-A\CAD\PlanSheets\C-COVR-SSWR-068706708.dwg
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GENERAL CONSTRUCTION NOTES

1. ALL MATERIAL AND CONSTRUCTION SHALL CONFORM TO THE CITY'S DESIGN STANDARDS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE TO FURNISH ALL MATERIAL AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN THE CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH THE APPROPRIATE APPROVING AUTHORITIES, SPECIFICATIONS AND REQUIREMENTS.
3. THE CONTRACTOR SHALL CONTACT ALL FRANCHISED UTILITY COMPANIES TO HAVE THEM LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION AND DEPTH OF ALL FRANCHISED UTILITY SERVICES AND ANY REQUIRED RELOCATION AND/OR EXTENSIONS. SERVICES SHOWN ON THE PLANS ARE CONCEPTUAL.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL PUBLIC UTILITIES IN THE CONSTRUCTION OF THIS PROJECT. ALL MANHOLES, CLEANOUTS, VALVE BOXES, FIRE HYDRANTS, ETC., MUST BE ADJUSTED TO PROPER GRADE BY THE CONTRACTOR PRIOR TO AND AFTER PLACING OF PERMANENT PAVING. UTILITIES MUST BE MAINTAINED TO PROPER LINE AND GRADE DURING CONSTRUCTION OF THE PAVING FOR THIS PROJECT.
5. BRACING OF UTILITY POLES MAY BE REQUIRED BY UTILITY COMPANIES WHEN TRENCHING OR EXCAVATION IS IN CLOSE PROXIMITY TO THE POLES. THE COST OF BRACING POLES WILL BE BORNE BY THE CONTRACTOR. THERE IS NO SEPARATE PAY ITEM FOR THIS WORK. THE COST IS INCIDENTAL TO THE VARIOUS PAY ITEMS FOR INSTALLATION OF PIPE.
6. THE LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES SHOWN ON THE PLANS WERE OBTAINED FROM AVAILABLE UTILITY COMPANY RECORDS AND PLANS AND ARE CONSIDERED APPROXIMATE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS, ELEVATIONS, AND DIMENSIONS OF ADJACENT AND/OR CONFLICTING UTILITIES SUFFICIENTLY IN ADVANCE OF CONSTRUCTION IN ORDER THAT ADJUSTMENTS CAN BE MADE TO PROVIDE ADEQUATE CLEARANCES. THE CONTRACTOR SHALL PRESERVE AND PROTECT PUBLIC UTILITIES AT ALL TIMES DURING CONSTRUCTION. ANY DAMAGE TO UTILITIES RESULTING FROM CONTRACTOR'S OPERATIONS SHALL BE RESTORED AT THEIR EXPENSE. THE ENGINEER SHALL BE NOTIFIED WHEN PROPOSED FACILITY GRADES CONFLICT WITH EXISTING UTILITY GRADES.
7. THE CONTRACTOR SHALL IMMEDIATELY REPAIR OR REPLACE ANY PHYSICAL DAMAGE TO PRIVATE PROPERTY, INCLUDING, BUT NOT LIMITED TO FENCES, WALLS, PAVEMENT, GRASS, TREES, AND LAWN SPRINKLER AND IRRIGATION SYSTEMS AT NO COST TO THE OWNER. THIS WORK SHALL BE SUBSIDIARY TO THE CONTRACT (UNLESS OTHERWISE NOTED) AND IS NOT A SEPARATE PAY ITEM.
8. THE CONTRACTOR SHALL REMOVE SURPLUS MATERIAL FROM THE PROJECT AREA. THIS WORK SHALL BE SUBSIDIARY TO THE CONTRACT AND IS NOT A SEPARATE PAY ITEM.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS PRIOR TO CONSTRUCTION.
10. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE COPY OF THE CONTRACT DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, AND SPECIAL CONDITIONS, COPIES OF ANY REQUIRED CONSTRUCTION PERMITS, EROSION CONTROL PLANS, SWPPP AND INSPECTION REPORTS.
11. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND NOTIFICATION TO THE ENGINEER. NO CONSIDERATION WILL BE GIVEN TO CHANGE ORDERS FOR WHICH THE OWNER AND ENGINEER WERE NOT CONTACTED PRIOR TO CONSTRUCTION OF THE AFFECTED ITEM.
12. ALL COPIES OF COMPACTION, CONCRETE AND OTHER REQUIRED TEST RESULTS ARE TO BE SENT TO THE ARCHITECT, CIVIL ENGINEER AND CITY ENGINEER OF RECORD DIRECTLY FROM THE TESTING AGENCY.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING TO THE ENGINEER A CERTIFIED RECORD SURVEY SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF TEXAS DEPICTING THE ACTUAL FIELD LOCATION OF ALL CONSTRUCTED IMPROVEMENTS THAT ARE REQUIRED BY THE JURISDICTIONAL AGENCIES FOR THE CERTIFICATION PROCESS.
14. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES, JURISDICTIONAL AGENCIES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES.
15. CONTRACTOR SHALL VERIFY BENCHMARKS AND DATUM PRIOR TO COMMENCING CONSTRUCTION OR STAKING OF IMPROVEMENTS.
16. CONTRACTOR SHALL THOROUGHLY CHECK COORDINATION OF CIVIL, LANDSCAPE, MEP, ARCHITECTURAL, STRUCTURAL, AND OTHER PLANS PRIOR TO COMMENCING CONSTRUCTION. OWNER AND ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCY PRIOR TO COMMENCING WITH CONSTRUCTION.
17. ALL HORIZONTAL DIMENSIONS GIVEN ARE TO FACE OF CURB AND TO PIPE CENTERLINES UNLESS OTHERWISE NOTED ON PLANS.
18. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING RELOCATION AND INSTALLATION OF FRANCHISED UTILITIES NECESSARY FOR ON AND OFF SITE CONSTRUCTION.
19. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED SMOOTH. THE AREAS SHALL THEN BE SEEDED, IRRIGATED, AND STABILIZED AS SPECIFIED IN THE PLANS, AND MAINTAINED UNTIL SOIL IS STABILIZED IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE JOB SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. ALL EARTHEN AREAS WILL BE STABILIZED AND MULCHED AS SHOWN ON THE LANDSCAPE, GRADING, AND EROSION CONTROL PLANS.
20. ALL CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE SHOWN.
21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
22. SOD OR SEED MUST BE INSTALLED AND MAINTAINED ON EXPOSED SLOPES WITHIN 48 HOURS OF COMPLETING FINAL GRADING AND AT ANY OTHER TIME AS NECESSARY TO PREVENT EROSION, SEDIMENTATION OR TURBID DISCHARGES.
23. THE CONTRACTOR MUST REVIEW AND MAINTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN WITH ALL CONDITIONS, ATTACHMENTS, EXHIBITS, AND PERMIT MODIFICATIONS IN GOOD CONDITION AT THE CONSTRUCTION SITE. THE COMPLETE PERMIT MUST BE AVAILABLE FOR REVIEW UPON REQUEST BY WATER MANAGEMENT DISTRICT REPRESENTATIVES.
24. THE CONTRACTOR MUST CONSTRUCT AND MAINTAIN A PERMANENT STABLE PROTECTIVE COVER (GRASS) FOR EROSION AND SEDIMENT CONTROL ON ALL LAND SURFACES EXPOSED OR DISTURBED BY CONSTRUCTION OF THE PERMITTED PROJECT. THE PROTECTIVE COVER MUST BE INSTALLED WITHIN FOURTEEN DAYS AFTER FINAL GRADING OF THE AFFECTED LAND SURFACE. A PERMANENT STABLE COVER MUST BE ESTABLISHED WITHIN 60 DAYS OF IT'S INSTALLATION.
25. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE THE CIVIL ENGINEER A COPY OF AS-BUILT PLANS IDENTIFYING ALL DEVIATIONS OR VARIATIONS FROM THE ORIGINAL PLANS.
26. ALL EXISTING PAVEMENT, ADJACENT UTILITIES, STRUCTURES, ETC., DISTURBED AS A RESULT OF THE NEW CONSTRUCTION, SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
27. ALL WORK REQUIRED BY THESE PLANS SHALL BE CONDUCTED IN CONFORMANCE WITH CURRENT SAFETY CODES AND STANDARDS WITH JURISDICTION OVER THIS PROJECT.

SAN ANTONIO WATER SYSTEMS NOTES

SAWS GENERAL CONSTRUCTION NOTES
COUNTER PERMIT AND GENERAL CONSTRUCTION PERMIT

GENERAL SECTION

1. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL BE APPROVED BY THE SAN ANTONIO WATER SYSTEM (SAWS) AND COMPLY WITH THE PLANS, SPECIFICATIONS, GENERAL CONDITIONS AND WITH THE FOLLOWING AS APPLICABLE:
   A. CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) "DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEM", TEXAS CODE ADMINISTRATIVE (TAC) TITLE 30 PART 1 CHAPTER 217 AND "PUBLIC DRINKING WATER", TAC TITLE 30 PART 1 CHAPTER 290.
   B. CURRENT TXDOT "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND DRAINAGE".
   C. CURRENT "SAN ANTONIO WATER SYSTEM STANDARD SPECIFICATIONS FOR WATER AND SANITARY SEWER CONSTRUCTION".
   D. CURRENT CITY OF SAN ANTONIO "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION".
   E. CURRENT CITY OF SAN ANTONIO "UTILITY EXCAVATION CRITERIA MANUAL" (UECM).
2. THE CONTRACTOR SHALL NOT PROCEED WITH ANY PIPE INSTALLATION WORK UNTIL THEY OBTAIN A COPY OF THE APPROVED COUNTER PERMIT OR GENERAL CONSTRUCTION PERMIT (GCP) FROM THE CONSULTANT AND HAS BEEN NOTIFIED BY SAWS CONSTRUCTION INSPECTION DIVISION TO PROCEED WITH THE WORK AND HAS ARRANGED A MEETING WITH THE INSPECTOR AND CONSULTANT FOR THE WORK REQUIREMENTS. WORK COMPLETED BY THE CONTRACTOR WITHOUT AN APPROVED COUNTER PERMIT AND/OR A GCP WILL BE SUBJECT TO REMOVAL AND REPLACEMENT AT THE EXPENSE OF THE CONTRACTORS AND/OR THE DEVELOPER.
3. THE CONTRACTOR SHALL OBTAIN THE SAWS STANDARD DETAILS FROM THE SAWS WEBSITE, HTTP://WWW.SAWS.ORG/BUSINESS_CENTER/SPECS. UNLESS OTHERWISE NOTED WITHIN THE DESIGN PLANS.
4. THE CONTRACTOR IS TO MAKE ARRANGEMENTS WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT (210) 233-2973, ON NOTIFICATION PROCEDURES THAT WILL BE USED TO NOTIFY AFFECTED HOME RESIDENTS AND/OR PROPERTY OWNERS 48 HOURS PRIOR TO BEGINNING ANY WORK.
5. LOCATION AND DEPTH OF EXISTING UTILITIES AND SERVICE LATERALS SHOWN ON THE PLANS ARE UNDERSTOOD TO BE APPROXIMATE. ACTUAL LOCATIONS AND DEPTHS MUST BE FIELD VERIFIED BY THE CONTRACTOR AT LEAST 1 WEEK PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITY SERVICE LINES AS REQUIRED FOR CONSTRUCTION AND TO PROTECT THEM DURING CONSTRUCTION AT NO COST TO SAWS.
6. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UNDERGROUND UTILITIES AND DRAINAGE STRUCTURES AT LEAST 1-2 WEEKS PRIOR TO CONSTRUCTION WHETHER SHOWN ON PLANS OR NOT. PLEASE ALLOW UP TO 7 BUSINESS DAYS FOR LOCATES REQUESTING PIPE LOCATION MARKERS ON SAWS FACILITIES. THE FOLLOWING CONTACT INFORMATION ARE SUPPLIED FOR VERIFICATION PURPOSES:
   §SAWS UTILITY LOCATES: HTTP://WWW.SAWS.ORG/SERVICE/LOCATES
   §COSA DRAINAGE (210) 207-0724 OR (210) 207-6026
   §COSA TRAFFIC SIGNAL OPERATIONS (210) 206-8480
   §COSA TRAFFIC SIGNAL DAMAGES (210) 207-3951
   §TEXAS STATE WIDE ONE CALL LOCATOR 1-800-545-6005 OR 811
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING EXISTING FENCES, CURBS, STREETS, DRIVEWAYS, SIDEWALKS, LANDSCAPING AND STRUCTURES TO ITS ORIGINAL OR BETTER CONDITION IF DAMAGES ARE MADE AS A RESULT OF THE PROJECT'S CONSTRUCTION.
8. ALL WORK IN TEXAS DEPARTMENT OF TRANSPORTATION (TXDOT) AND/OR BEXAR COUNTY RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH RESPECTIVE CONSTRUCTION SPECIFICATIONS AND PERMIT REQUIREMENTS.
9. THE CONTRACTOR SHALL COMPLY WITH CITY OF SAN ANTONIO OR OTHER GOVERNING MUNICIPALITY'S TREE ORDINANCES WHEN EXCAVATING NEAR TREES.
10. THE CONTRACTOR SHALL NOT PLACE ANY WASTE MATERIALS IN THE 100-YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN PERMIT.
11. HOLIDAY WORK. CONTRACTORS WILL NOT BE ALLOWED TO PERFORM SAWS WORK ON SAWS RECOGNIZED HOLIDAYS. REQUEST SHOULD BE SENT TO CONSTWORKREQ@SAWS.ORG.

    WEEKEND WORK: CONTRACTORS ARE REQUIRED TO NOTIFY THE SAWS INSPECTION CONSTRUCTION DEPARTMENT 48 HOURS IN ADVANCE TO REQUEST WEEKEND WORK. REQUEST SHOULD BE SENT TO CONSTWORKREQ@SAWS.ORG.

    ANY AND ALL SAWS UTILITY WORK INSTALLED WITHOUT HOLIDAY/WEEKEND APPROVAL WILL BE SUBJECT TO BE UNCOVERED FOR PROPER INSPECTION.
12. COMPACTION NOTE (ITEM 804): THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING THE COMPACTION REQUIREMENTS ON ALL TRENCH BACKFILL AND FOR PAYING FOR THE TESTS PERFORMED BY A THIRD PARTY. COMPACTION TESTS WILL BE DONE AT ONE LOCATION POINT RANDOMLY SELECTED, OR AS INDICATED BY THE SAWS INSPECTOR AND/OR THE TEST ADMINISTRATOR, PER EACH 12-INCH LOOSE LIFT PER 400 LINEAR FEET AT A MINIMUM. THIS PROJECT WILL NOT BE ACCEPTED AND FINALIZED BY SAWS WITHOUT THIS REQUIREMENT BEING MET AND VERIFIED BY PROVIDING ALL NECESSARY DOCUMENTED TEST RESULTS.
13. A COPY OF ALL TESTING REPORTS SHALL BE FORWARDED TO SAWS CONSTRUCTION INSPECTION DIVISION.

SITE SPECIFIC NOTES

1. CONTRACTOR TO FIELD VERIFY LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTACT ENGINEER IF FIELD CONDITIONS VARY.
2. ALL 8" WASTEWATER PIPE AND FITTINGS IN THIS PROJECT ARE P.V.C. SDR-26, ASTM D3034, D-3212, F-477. AT WATERLINE CROSSINGS AND WHERE WATER AND WASTEWATER MAINS OR LATERALS ARE PARALLEL AND SEPARATION DISTANCE CAN NOT BE ACHIEVED AS PER 30 TAC §217.53, PRESSURE RATED PIPE ASTM D2241 FOR GRAVITY SEWER 12 INCH AND SMALLER.
3. HORIZONTAL AND VERTICAL SEPARATION BETWEEN WASTEWATER MAINS OR LATERALS AND WATER MAINS SHALL BE 9 FOOT MINIMUM (O.D. TO O.D.). IF THIS SEPARATION IS NOT POSSIBLE, CONTRACTOR SHALL COMPLY WITH MORE CONSERVATIVE REQUIREMENTS AS LISTED IN TAC 290.44(E)(4)(B) [DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEMS] AND/OR TAC 217.53(D) [PUBLIC DRINKING WATER]. FOR VERTICAL SEPARATION LESS THAN 9 FEET THE FOLLOWING APPLIES:
   - DOMESTIC WATER MAIN OVER NON-PRESSURE RATED WASTEWATER MAIN OR LATERAL
     2 FOOT MINIMUM VERTICAL SEPARATION WITH WASTEWATER MAIN STABILIZED WITH CEMENT STABILIZED SAND OR WITH CASING PIPE
   - DOMESTIC WATER MAIN OVER PRESSURE RATED WASTEWATER MAIN OR LATERAL
     6 INCH MINIMUM VERTICAL SEPARATION WITH PRESSURE RATED WASTEWATER MAIN STABILIZED WITH CEMENT STABILIZED SAND.
   - NON PRESSURE RATED WASTEWATER MAIN OR LATERAL OVER DOMESTIC WATER MAIN
     1 FOOT MINIMAL VERTICAL WITH WASTEWATER PIPE ENCASED IN CASING PIPE AND DOMESTIC WATER LINE CONSTRUCTED OF DI OR STEEL PIPE
   - PRESSURE RATED WASTEWATER MAIN OR LATERAL OVER DOMESTIC WATER MAIN
     1 FOOT MINIMAL VERTICAL WITH PRESSURE RATED WASTEWATER PIPE AND DOMESTIC WATER LINE CONSTRUCTED OF DI OR STEEL PIPE
4. ALL 6" SANITARY SEWER LATERALS SHALL BE CONSTRUCTED WITH A SLOPE OF 2% MINIMUM.
5. CONTRACTORS TO ADJUST TOP OF MANHOLES TO MATCH FINISHED GROUND ELEVATIONS.
6. CONTRACTOR TO ENSURE NO MANHOLES ARE INSTALLED WITHIN CURB OR SIDEWALKS.
7. CONTRACTOR TO ADD SERVICES TO EXISTING WASTEWATER LINE USING A TEE WITH KNOCK-ON COUPLERS.
8. ALL SERVICE CONNECTIONS SHALL BE REQUIRED TO HAVE A CONCRETE ENCASED BLOCK AROUND THE SERVICE CONNECTION. SEE SAWS GUIDELINES FOR MORE INFORMATION.
9. ALL SEWER TESTING REQUIREMENTS WILL BE PLACED ON WASTEWATER PIPE THAT HAS SERVICE CONNECTIONS ADDED.
10. ALL UTILITIES TO BE CONSTRUCTED PRIOR TO STREETS.
11. NO VALVES, HYDRANTS, ETC. SHALL BE CONSTRUCTED WITHIN CURBS, SIDEWALKS, OR DRIVEWAYS.

SAN ANTONIO WATER SYSTEMS NOTES

SAWS CONSTRUCTION NOTES
COUNTER PERMIT AND GENERAL CONSTRUCTION PERMIT

SEWER NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT NO SANITARY SEWER OVERFLOW (SSO) OCCURS AS A RESULT OF THEIR WORK. ALL CONTRACTOR PERSONNEL RESPONSIBLE FOR SSO PREVENTION AND CONTROL SHALL BE TRAINED ON PROPER RESPONSE. SHOULD AN SSO OCCUR, THE CONTRACTOR SHALL:
   A. IDENTIFY THE SOURCE OF THE SSO AND NOTIFY SAWS EMERGENCY OPERATIONS CENTER (EOC) IMMEDIATELY AT (210) 233-2014. PROVIDE THE ADDRESS OF THE SPILL AND AN ESTIMATED VOLUME OR FLOW.
   B. ATTEMPT TO ELIMINATE THE SOURCE OF THE SSO.
   C. CONTAIN SEWAGE FROM THE SSO TO THE EXTENT OF PREVENTING A POSSIBLE CONTAMINATION OF WATERWAYS.
   D. CLEAN UP SPILL SITE (RETURN CONTAINED SEWAGE TO THE COLLECTION SYSTEM IF POSSIBLE) AND PROPERLY DISPOSE OF CONTAMINATED SOIL/MATERIALS.
   E. CLEAN THE AFFECTED SEWER MAINS AND REMOVE ANY DEBRIS.
   F. MEET ALL POST-SSO REQUIREMENTS AS PER THE EPA CONSENT DECREE, INCLUDING LINE CLEANING AND TELEVISING THE AFFECTED SEWER MAINS (AT SAWS DIRECTION) WITHIN 24 HOURS.

   SHOULD THE CONTRACTOR FAIL TO ADDRESS AN SSO IMMEDIATELY AND TO SAWS SATISFACTION, THEY WILL BE RESPONSIBLE FOR ALL COSTS INCURRED BY SAWS, INCLUDING ANY FINES FROM EPA, TCEQ AND/OR ANY OTHER FEDERAL, STATE OR LOCAL AGENCIES.

   NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE FOR THIS WORK. ALL WORK SHALL BE DONE ACCORDING TO GUIDELINES SET BY THE TCEQ AND SAWS.
2. IF BYPASS PUMPING IS REQUIRED, THE CONTRACTOR SHALL PERFORM SUCH WORK IN ACCORDANCE WITH SAWS STANDARD SPECIFICATION FOR WATER AND SANITARY SEWER CONSTRUCTION, ITEM NO. 864, "BYPASS PUMPING".
3. PRIOR TO TIE-INS, ANY SHUTDOWNS OF EXISTING FORCE MAINS OF ANY SIZE MUST BE COORDINATED WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT (210) 233-2973 AT LEAST ONE WEEK IN ADVANCE OF THE SHUTDOWN. THE CONTRACTOR MUST ALSO PROVIDE A SEQUENCE OF WORK AS RELATED TO THE TIE-INS; THIS IS AT NO ADDITIONAL COST TO SAWS OR THE PROJECT AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEQUENCE THE WORK ACCORDINGLY.
4. SEWER PIPE WHERE WATER LINE CROSSES SHALL BE 160 PSI AND MEET THE REQUIREMENTS OF ASTM D2241, TAC 217.53 AND TCEQ 290.44(E)(4)(B). CONTRACTOR SHALL CENTER A 20' JOINT OF 160 PSI PRESSURE RATED PVC AT THE PROPOSED WATER CROSSING.
5. ELEVATIONS POSTED FOR TOP OF MANHOLES ARE FOR REFERENCE ONLY: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE ALLOWANCES AND ADJUSTMENTS FOR TOP OF MANHOLES TO MATCH THE FINISHED GRADE OF THE PROJECT'S IMPROVEMENTS. (NSPI)
6. SPILLS, OVERFLOWS, OR DISCHARGES OF WASTEWATER: ALL SPILLS, OVERFLOWS, OR DISCHARGES OF WASTEWATER, RECYCLED WATER, PETROLEUM PRODUCTS, OR CHEMICALS MUST BE REPORTED IMMEDIATELY TO THE SAWS INSPECTOR ASSIGNED TO THE COUNTER PERMIT OR GENERAL CONSTRUCTION PERMIT (GCP). THIS REQUIREMENT APPLIES TO EVERY SPILL, OVERFLOW, OR DISCHARGE REGARDLESS OF SIZE.
7. MANHOLE AND ALL PIPE TESTING (INCLUDING THE TV INSPECTION) MUST BE PERFORMED AND PASSED PRIOR TO FINAL FIELD ACCEPTANCE BY SAWS CONSTRUCTION INSPECTION DIVISION, AS PER THE SAWS SPECIFICATIONS FOR WATER AND SANITARY SEWER CONSTRUCTION.
8. ALL PVC PIPE OVER 14 FEET OF COVER SHALL BE EXTRA STRENGTH WITH MINIMUM PIPE STIFFNESS OF 115 PSI.

GEOTECHNICAL REPORT
PROJECT NO. S221093
MARCH 17, 2022
INTEGRATED TESTING AND ENGINEERING
COMPANY OF SAN ANTONIO, L.P.

REFER TO TNRCC/TCEQ DESIGN GUIDELINES (CHAPTER 290) FOR ALL UTILITY CROSSINGS.

SEWER: EAST SEWERSHED - DOS RIOS W.R.C.

DEVELOPER'S NAME: HDC FOSTER, RD LLC
DEVELOPER'S ADDRESS: 100 NE LOOP 410 SUITE 1080
CITY SAN ANTONIO STATE TX ZIP 78216
PHONE # _____ FAX # _____
SAWS BLOCK MAP # 200578 & 200580 TOTAL EDU'S 162
TOTAL ACREAGE 35.17 NUMBER OF LOTS 162
TOTAL LINEAR FOOTAGE OF PIPE 4271 LF ~ 8" PVC PIPE SDR-26
PLAT NO. LAND-PLAT-21-11800632 SAWS JOB NO. 22-1604

811 Know what's **below.** **Call** before you dig.

No.	REVISIONS	DATE	BY

Kimley»Horn
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STATE OF TEXAS
MICHAEL A. SCHOLZE
131737
LICENSED PROFESSIONAL ENGINEER
8/2/2022

SCALE	DESIGNED BY	DRAWN BY	CHECKED BY
AS NOTED	MAS	ATR	MAS

GENERAL SANITARY SEWER NOTES

ROSILLO RANCH
PHASES 5 & 6
MDP-LAND-21-11100067
LAND-PLAT-21-11800632
SAN ANTONIO, TEXAS

DATE 8/2/2022
PROJECT NO. 068706708
SHEET NUMBER C6.1

Plotted By: Vertex, Date: August 02, 2022 05:42:55pm K:\SNA_Civil\068706708-HeartwoodRanch5-6\CAD\PlanSheets\C-GENN-SSWR-068706708.dwg
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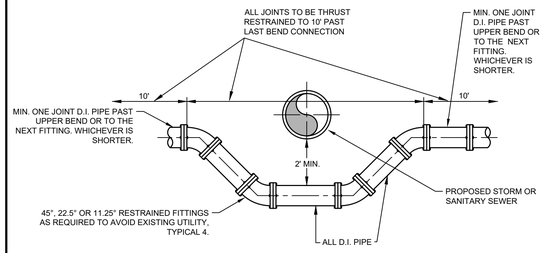
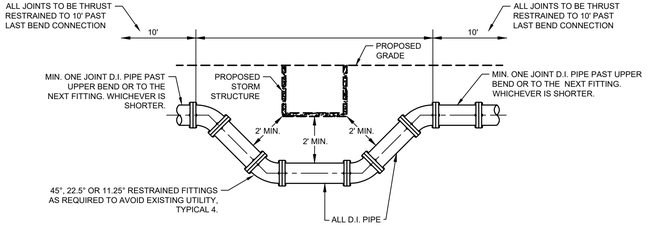


NOTE: ROUTE WATER LINE & FIRE HYDRANT LINES AS NECESSARY TO AVOID OTHER UTILITIES. MAINTAIN MINIMUM 48" COVER.

WATER LOWERING DETAIL

N.T.S.



NOTE: ROUTE WATER LINE & FIRE HYDRANT LINES AS NECESSARY TO AVOID OTHER UTILITIES. MAINTAIN MINIMUM 48" COVER.

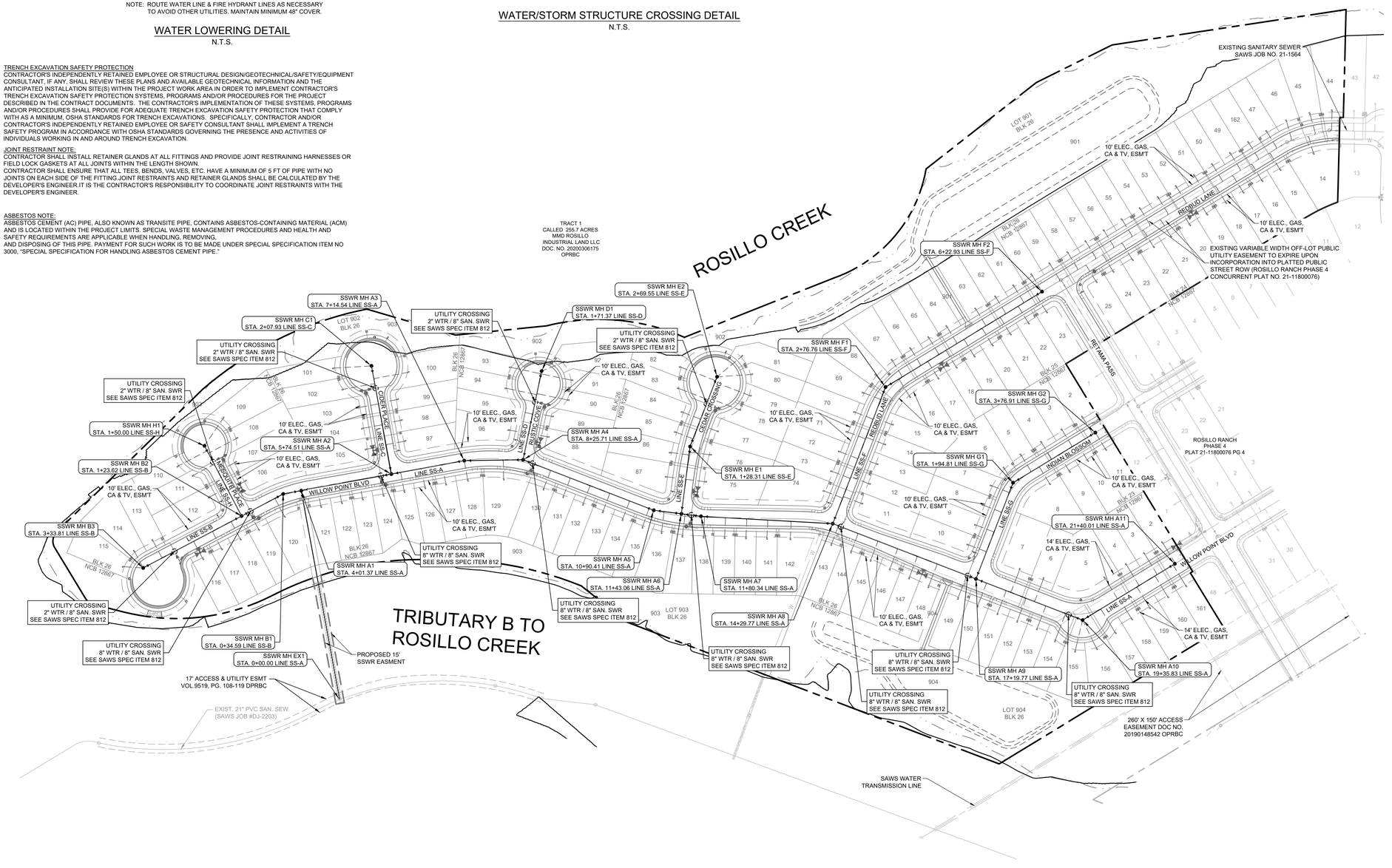
WATER/STORM STRUCTURE CROSSING DETAIL

N.T.S.

TRENCH EXCAVATION SAFETY PROTECTION
CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

JOINT RESTRAINT NOTE:
CONTRACTOR SHALL INSTALL RETAINER GLANDS AT ALL FITTINGS AND PROVIDE JOINT RESTRAINING HARNESSES OR FIELD LOCK GASKETS AT ALL JOINTS WITHIN THE LENGTH SHOWN.
CONTRACTOR SHALL ENSURE THAT ALL TEES, BENDS, VALVES, ETC. HAVE A MINIMUM OF 5 FT OF PIPE WITH NO JOINTS ON EACH SIDE OF THE FITTING.JOINT RESTRAINTS AND RETAINER GLANDS SHALL BE CALCULATED BY THE DEVELOPER'S ENGINEER.IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE JOINT RESTRAINTS WITH THE DEVELOPER'S ENGINEER.

ASBESTOS NOTE:
ASBESTOS CEMENT (AC) PIPE, ALSO KNOWN AS TRANSITE PIPE, CONTAINS ASBESTOS-CONTAINING MATERIAL (ACM) AND IS LOCATED WITHIN THE PROJECT LIMITS. SPECIAL WASTE MANAGEMENT PROCEDURES AND HEALTH AND SAFETY REQUIREMENTS ARE APPLICABLE WHEN HANDLING, REMOVING,
AND DISPOSING OF THIS PIPE. PAYMENT FOR SUCH WORK IS TO BE MADE UNDER SPECIAL SPECIFICATION ITEM NO 3000, "SPECIAL SPECIFICATION FOR HANDLING ASBESTOS CEMENT PIPE."



LEGEND

- PROPERTY RIGHT-OF-WAY LINE
- EXISTING SANITARY SEWER LINE
- PROPOSED SANITARY SEWER LINE
- PROPOSED WATER LINE
- EXISTING WATER LINE
- UGE — UNDERGROUND ELECTRIC
- GAS — UNDERGROUND GAS
- PROPOSED SANITARY SEWER MANHOLE WITH FLOW ARROWS
- EXISTING SANITARY SEWER MANHOLE
- PROPOSED FIRE HYDRANT
- UTILITY CROSSING
- PROPOSED GATE VALVE
- PROPOSED VERTICAL STACK SERVICE
- PROPOSED SEWER LATERAL

NOTES

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4. REFERENCE SANITARY SEWER NOTES ON SHEET C6.1 FOR ADDITIONAL REQUIREMENTS.

SEWER: EAST SEWERSHED - DOS RIOS W.R.C.

DEVELOPER'S NAME: HDC FOSTER, RD LLC
DEVELOPER'S ADDRESS: 100 NE LOOP 410 SUITE 1080
CITY SAN ANTONIO STATE TX ZIP 78216
PHONE # FAX #
SAWS BLOCK MAP # 200578 & 200580 TOTAL EDU'S 162
TOTAL ACREAGE 35.17 NUMBER OF LOTS 162
TOTAL LINEAR FOOTAGE OF PIPE 4271 LF ~ 8" PVC PIPE SDR-26.
PLAT NO. LAND-PLAT-21-11800632 SAWS JOB NO. 22-1604

BENCHMARK LIST

BM #50 CP MAGNAIL W/ WASHER
N: 13705110 E: 2170235
ELEVATION: 646.51'
BM #51 CP MAGNAIL W/ WASHER
N: 13705307 E: 2169932
ELEVATION: 639.13'

CAUTION!!
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No.	REVISIONS	DATE	BY

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PHONE: 210-541-9166 FAX: 210-366-8999
WWW.KIMLEY-HORN.COM
TBPE FIRM NO. 928

STATE OF TEXAS
MICHAEL A. SCHOLZE
131737
LICENSED PROFESSIONAL ENGINEER
8/2/2022

SCALE	AS NOTED	DESIGNED BY	MAS	DRAWN BY	ATR	CHECKED BY	MAS

OVERALL SANITARY SEWER

ROSILLO RANCH
PHASES 5 & 6
MDP-LAND-21-11100067
LAND-PLAT-21-11800632
SAN ANTONIO, TEXAS

DATE
8/2/2022
PROJECT NO.
068706708
SHEET NUMBER
C6.2

Plotted By:Valdez, Dani - August 02, 2022 - 05:43:20pm - K:\SNA_Civil\068706708-HeartwoodRosilloPh4-6\CAD\PlotSheets\C-SANS-OVRL-SSWR.dwg
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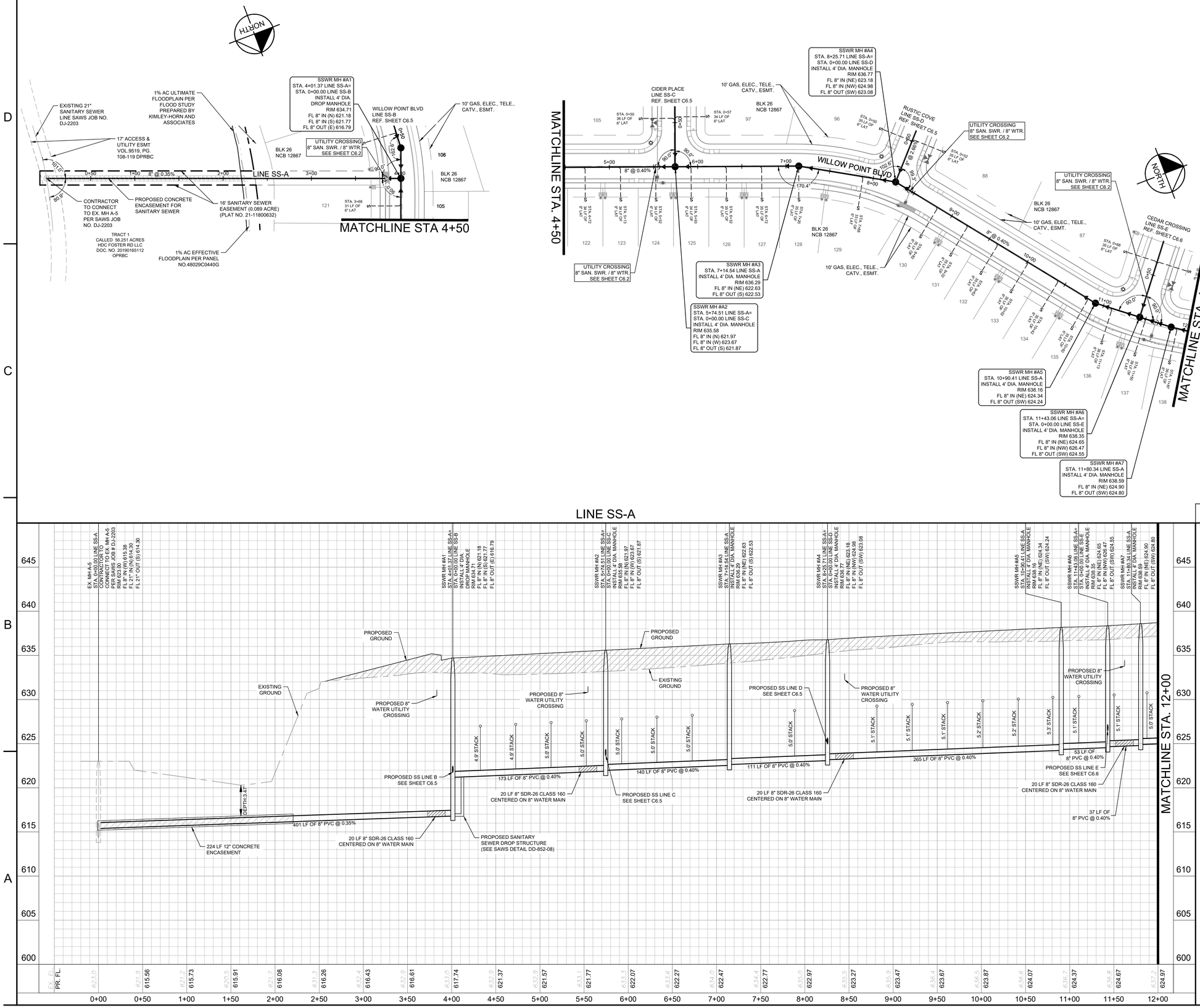

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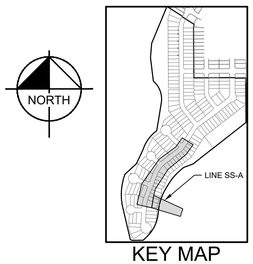
PLAT NO. LAND-PLAT-21-11800632 , SAWS JOB NO. 22-1604

PROFILE SCALE
1" = 50' HORIZONTAL
1" = 5' VERTICAL

LINE SS-A



KEY MAP
SCALE: 1"=800'

BENCHMARK LIST

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PHONE: (210) 541-9166
WWW.KIMLEY-HORN.COM
TBPE FIRM NO. 928

STATE OF TEXAS
MICHAEL A. SCHOLZE
131737
LICENSED PROFESSIONAL ENGINEER
8/2/2022

SCALE	AS NOTED
DESIGNED BY	MAS
DRAWN BY	TGC
CHECKED BY	MAS

SANITARY SEWER PLAN AND PROFILE LINE SS-A (0+00 TO 12+00)

ROSILLO RANCH PHASES 5 & 6

MDP-LAND-21-11100067
LAND-PLAT-21-11800632
SAN ANTONIO, TEXAS

DATE
8/2/2022

PROJECT NO.
068706708

SHEET NUMBER
C6.3

Plotted By:Valdez, Dael August 02, 2022 05:43:38am K:\SNA_Civil\068706708-HeartwoodRealtiePhE-6\CAD\PlotSheet\C-SSPP-068706708.dwg
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Plotted By:Valdez, Dael August 02, 2022 05:43:57pm K:\SNA_Civil\068706708-HeartwoodRealtiePhE-F\CAD\PlanSheets\C-SSP8-068706708.dwg
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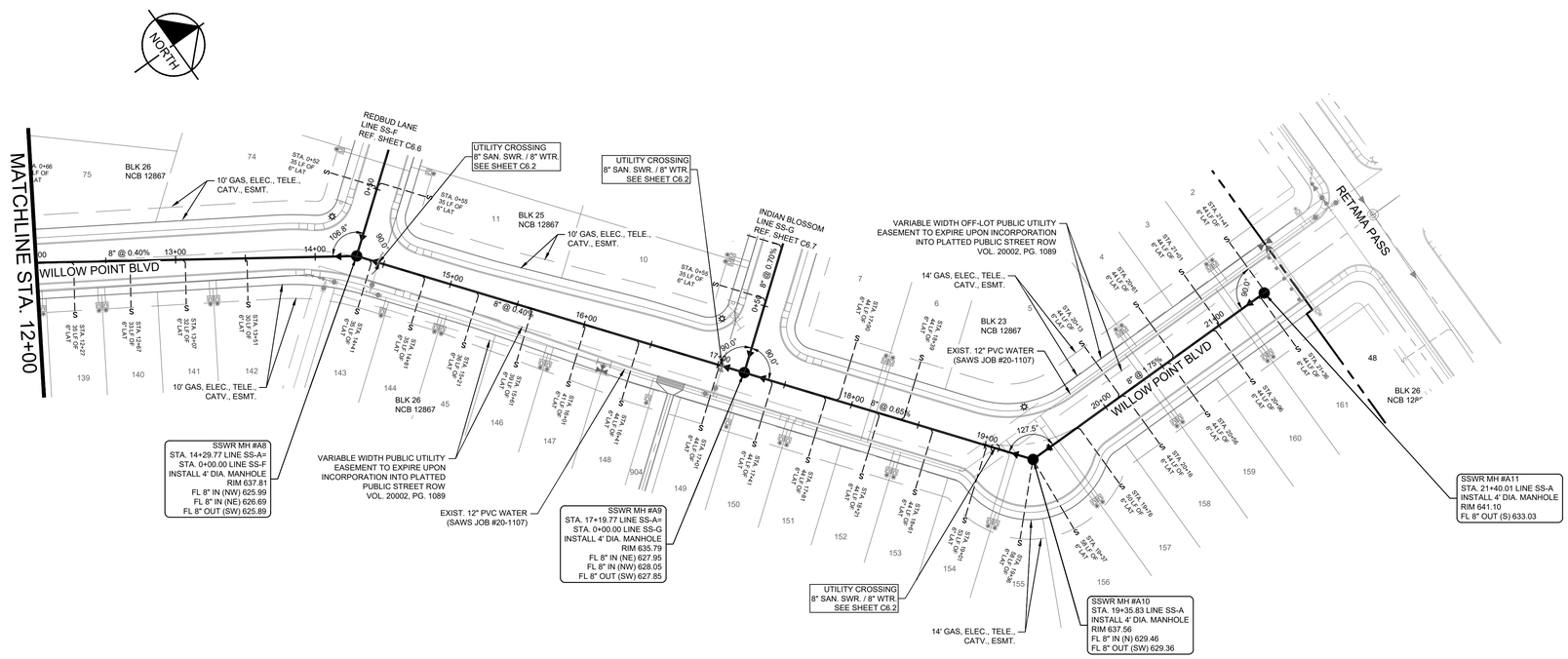

GRAPHIC SCALE IN FEET
0 25 50 100

LEGEND

- RIGHT-OF-WAY LINE
- EXISTING SANITARY SEWER LINE
- PROPOSED SANITARY SEWER LINE
- PROPOSED WATER LINE
- EXISTING WATER LINE
- PROPOSED SANITARY SEWER MANHOLE WITH FLOW ARROWS
- EXISTING SANITARY SEWER MANHOLE
- PROPOSED FIRE HYDRANT
- UTILITY CROSSING
- PROPOSED GATE VALVE
- PROPOSED SEWER LATERAL
- PROPOSED ENCASED SEWER LINE

NOTES

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DEVELOPER'S ADDRESS: 100 NE LOOP 410 SUITE 1080
CITY SAN ANTONIO STATE TX ZIP 78216
PHONE # FAX #
SAWS BLOCK MAP # 200578 & 200580 TOTAL EDU'S 162
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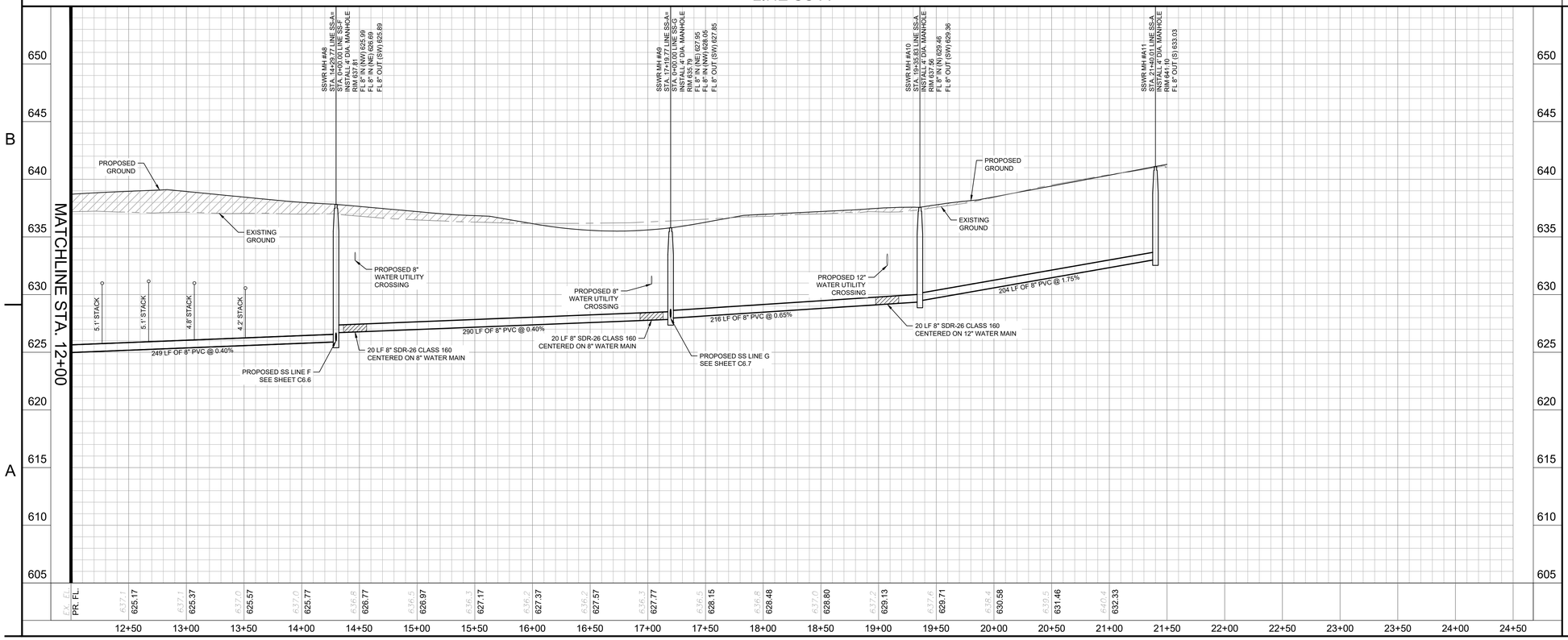
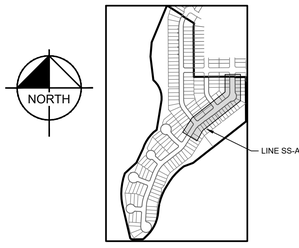
TOTAL LINEAR FOOTAGE OF PIPE 4271 LF ~ 8" PVC PIPE SDR-26.
PLAT NO. LAND-PLAT-21-11800632 , SAWS JOB NO. 22-1604

PROFILE SCALE
1" = 50' HORIZONTAL
1" = 5' VERTICAL

LINE SS-A





KEY MAP
SCALE: 1"=800'

BENCHMARK LIST

BM #50 CP MAGNAIL W/ WASHER
N: 13705110 E: 2170235
ELEVATION: 646.51'
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PHONE: 210-541-9166 FAX: 210-366-8669
WWW.KIMLEY-HORN.COM
TBPE FIRM NO. 928

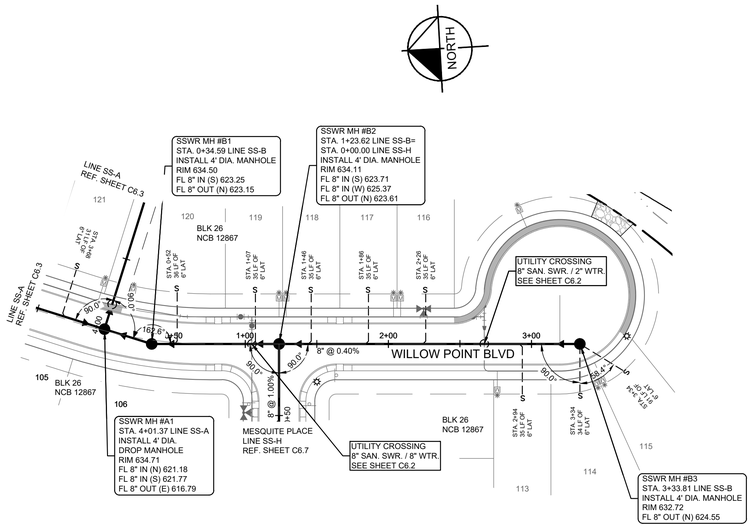
STATE OF TEXAS
MICHAEL A. SCHOLZE
131737
LICENSED PROFESSIONAL ENGINEER
8/2/2022

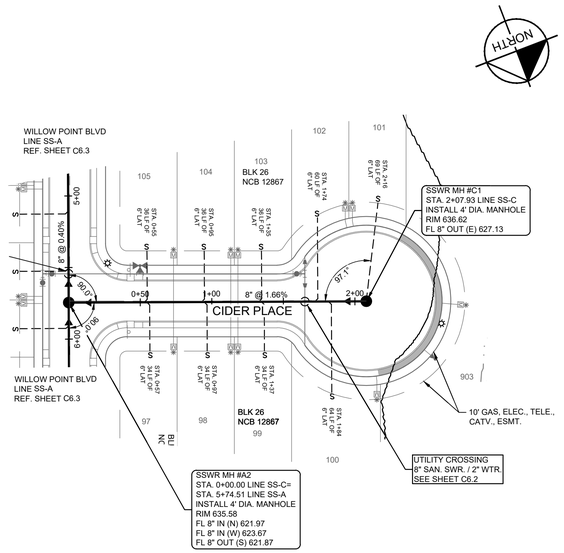
SCALE	AS NOTED
DESIGNED BY	MAS
DRAWN BY	TGC
CHECKED BY	MAS

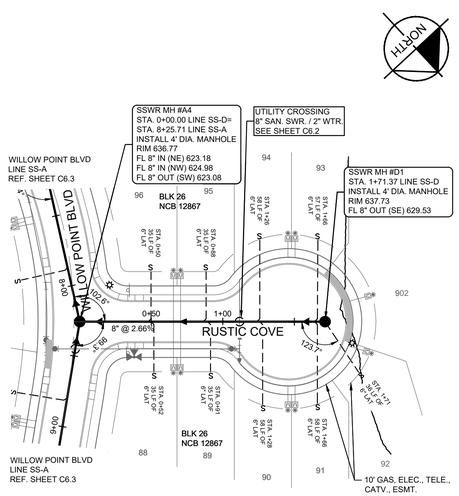
SANITARY SEWER PLAN AND PROFILE LINE SS-A (12+00 TO END)

ROSILLO RANCH
PHASES 5 & 6
MDP-LAND-21-11100067
LAND-PLAT-21-11800632
SAN ANTONIO, TEXAS

DATE
8/2/2022
PROJECT NO.
068706708
SHEET NUMBER
C6.4







GRAPHIC SCALE IN FEET
0 25 50 100

LEGEND

- RIGHT-OF-WAY LINE
- EXISTING SANITARY SEWER LINE
- PROPOSED SANITARY SEWER LINE
- PROPOSED WATER LINE
- EXISTING WATER LINE
- PROPOSED SANITARY SEWER MANHOLE WITH FLOW ARROWS
- EXISTING SANITARY SEWER MANHOLE
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- UTILITY CROSSING
- PROPOSED GATE VALVE
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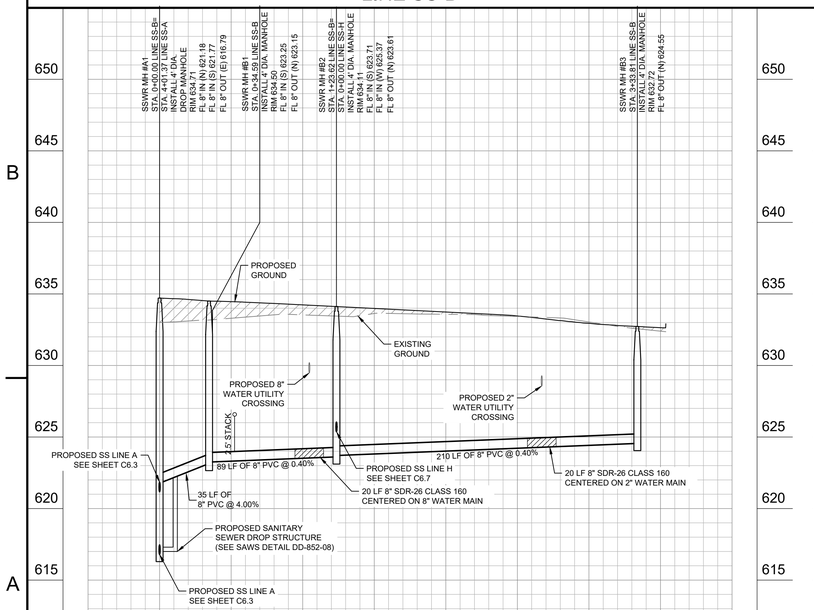
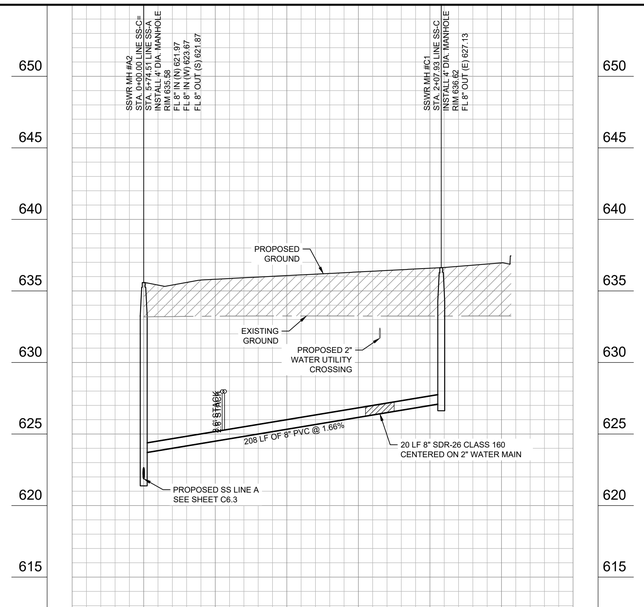
DEVELOPER'S ADDRESS: 100 NE LOOP 410 SUITE 1080
CITY SAN ANTONIO STATE TX ZIP 78216
PHONE # FAX #
SAWS BLOCK MAP # 200578 & 200580 TOTAL EDU'S 162
TOTAL ACREAGE 35.17 NUMBER OF LOTS 162
TOTAL LINEAR FOOTAGE OF PIPE 4271 LF ~ 8" PVC PIPE SDR-26.
PLAT NO. LAND-PLAT-21-11800632 , SAWS JOB NO. 22-1604

PROFILE SCALE
1" = 50' HORIZONTAL
1" = 5' VERTICAL

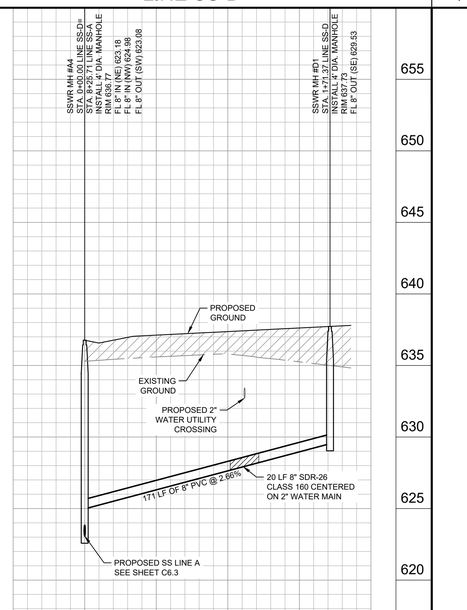
LINE SS-B

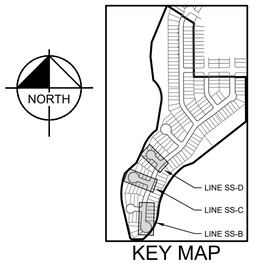


LINE SS-C



LINE SS-D





KEY MAP
SCALE: 1"=800'

BENCHMARK LIST

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N: 13705110 E: 2170235
ELEVATION: 646.51'
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STATE OF TEXAS
MICHAEL A. SCHOLZE
131737
LICENSED PROFESSIONAL ENGINEER
8/2/2022

SCALE	DESIGNED BY	DRAWN BY	CHECKED BY
AS NOTED	MAS	TGC	MAS

SANITARY SEWER PLAN AND PROFILE LINE SS-B, C & D

ROSILLO RANCH
PHASES 5 & 6
MDP-LAND-21-11100067
LAND-PLAT-21-11800632
SAN ANTONIO, TEXAS

DATE
8/2/2022
PROJECT NO.
068706708
SHEET NUMBER
C6.5

Plotted By:Valdez, Dani August 02, 2022 05:44:32pm K:\SNA_Civil\068706708-HeartwoodRosillo\Ph5-6\CAD\PlanSheet\C-SSPP-068706708.dwg
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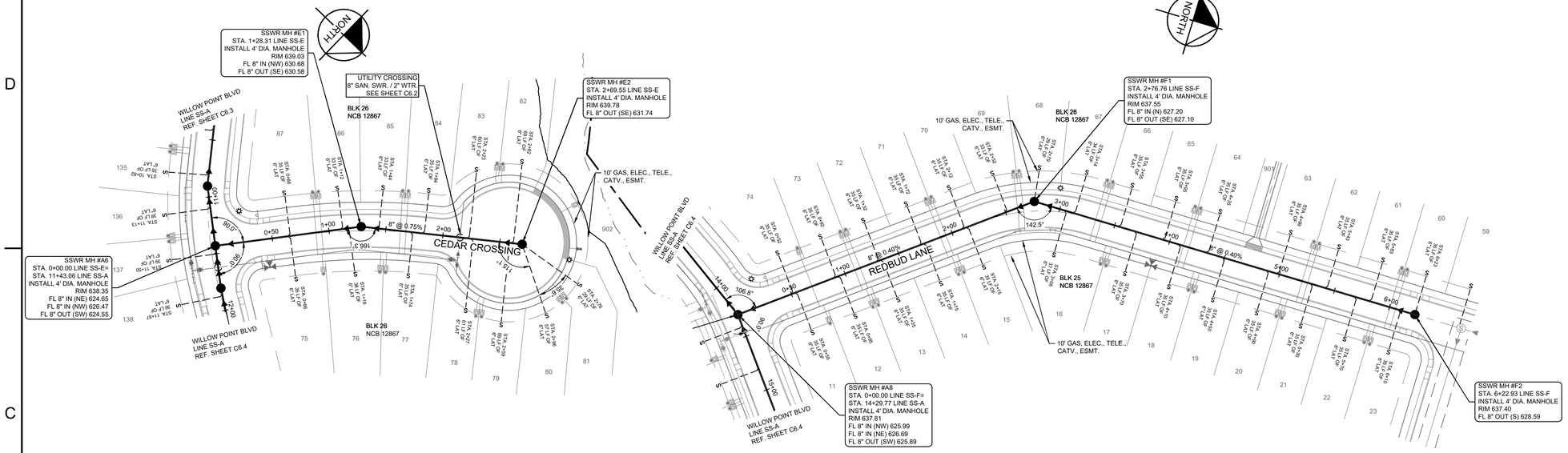

GRAPHIC SCALE IN FEET
0 25 50 100

LEGEND

- RIGHT-OF-WAY LINE
- EXISTING SANITARY SEWER LINE
- PROPOSED SANITARY SEWER LINE
- PROPOSED WATER LINE
- EXISTING WATER LINE
- PROPOSED SANITARY SEWER MANHOLE WITH FLOW ARROWS
- EXISTING SANITARY SEWER MANHOLE
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- PROPOSED SEWER LATERAL
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PLAT NO. LAND-PLAT-21-11800632 , SAWS JOB NO. 22-1604

LINE SS-E

PROFILE SCALE
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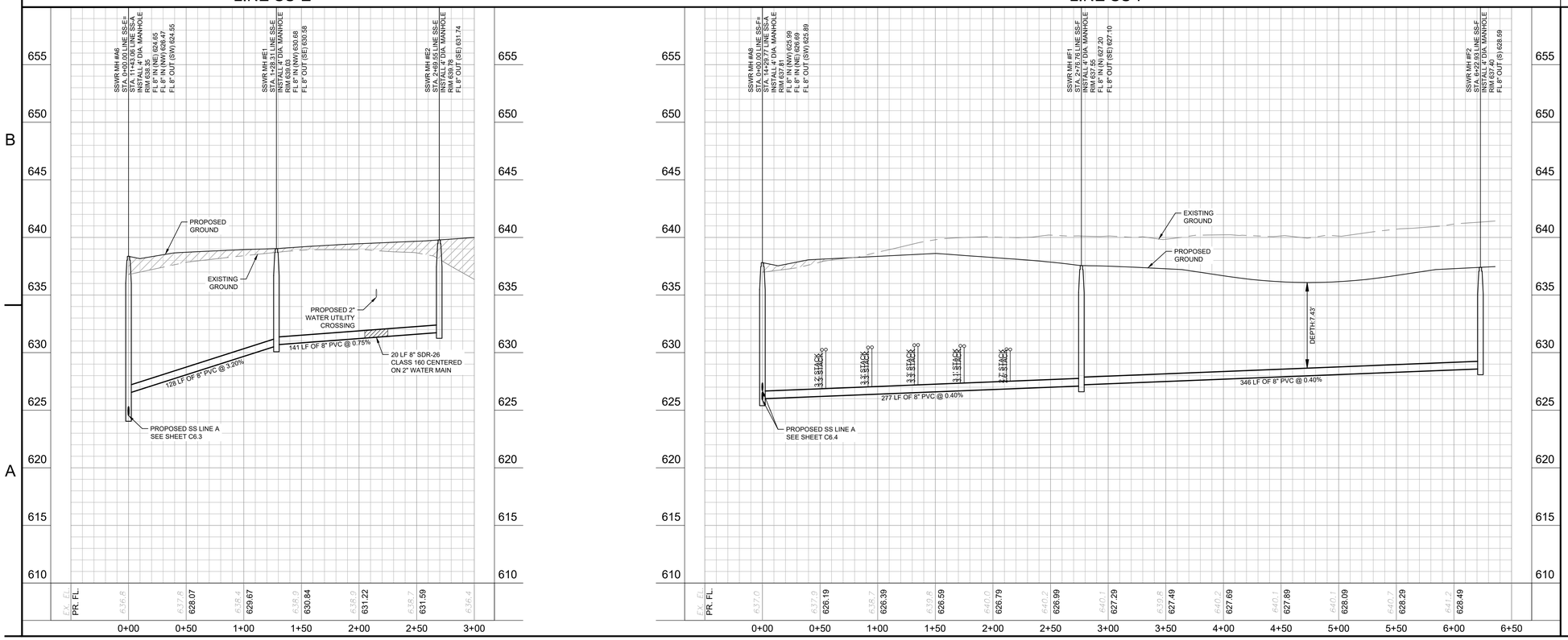
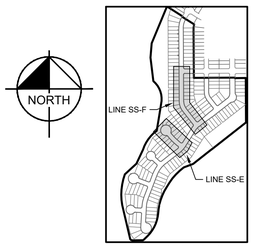
1" = 5' VERTICAL



LINE SS-F



KEY MAP
SCALE: 1"=800'

BENCHMARK LIST

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ELEVATION: 646.51'
BM #51 CP MAGNAIL W/ WASHER
N: 13705307 E: 2169932
ELEVATION: 639.13'

CAUTION!!
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No.	REVISIONS	DATE	BY

Kimley»Horn

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10101 REUNION PLACE, SUITE 400, SAN ANTONIO, TX 78216
PHONE: 210-541-9166 FAX: 210-541-8699
WWW.KIMLEY-HORN.COM
TBPE FIRM NO. 928

STATE OF TEXAS
MICHAEL A. SCHOLZE
131737
LICENSED PROFESSIONAL ENGINEER
8/5/2022

SCALE	AS NOTED	DESIGNED BY	MAS	DRAWN BY	TGC	CHECKED BY	MAS

SANITARY SEWER PLAN AND PROFILE LINE SS-E & F

ROSILLO RANCH
PHASES 5 & 6
MDP-LAND-21-11100067
LAND-PLAT-21-11800632
SAN ANTONIO, TEXAS

DATE
8/2/2022

PROJECT NO.
068706708

SHEET NUMBER
C6.6

Plotted By: Vivitez, Dael - August 02, 2022 - 05:44:59pm K:\SNA_Civil\068706708-HeartwoodRealtiePh5-6\12d\Plan Sheets\C-SSPP-068706708.dwg
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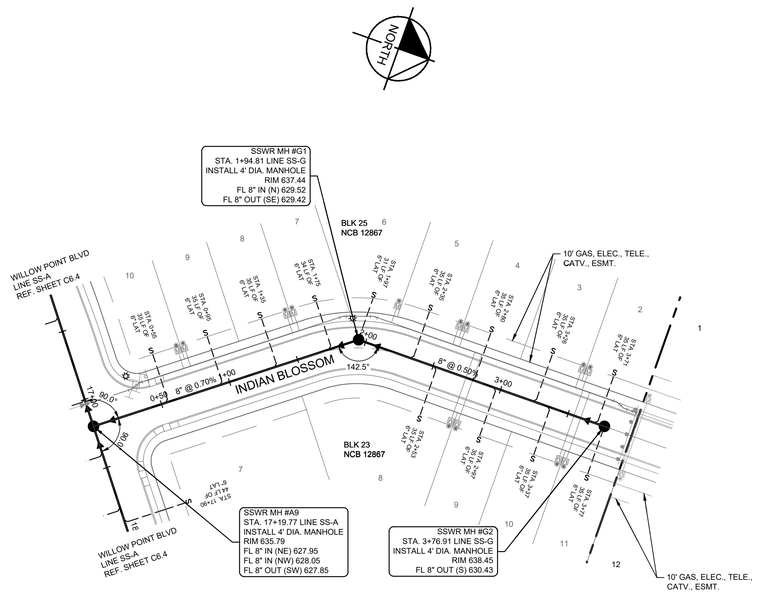
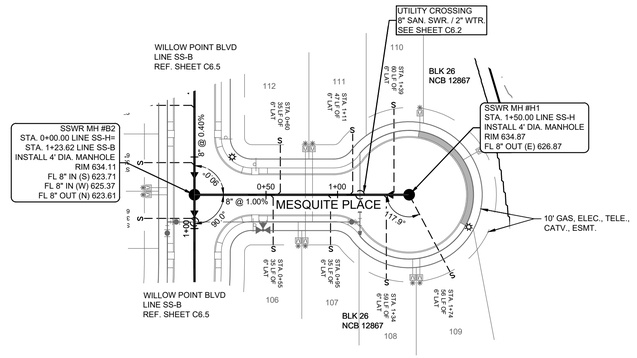




GRAPHIC SCALE IN FEET
0 25 50 100

LEGEND

- RIGHT-OF-WAY LINE
- EXISTING SANITARY SEWER LINE
- PROPOSED SANITARY SEWER LINE
- PROPOSED WATER LINE
- EXISTING WATER LINE
- PROPOSED SANITARY SEWER MANHOLE WITH FLOW ARROWS
- EXISTING SANITARY SEWER MANHOLE
- PROPOSED FIRE HYDRANT
- UTILITY CROSSING
- PROPOSED GATE VALVE
- PROPOSED SEWER LATERAL
- PROPOSED ENCASED SEWER LINE

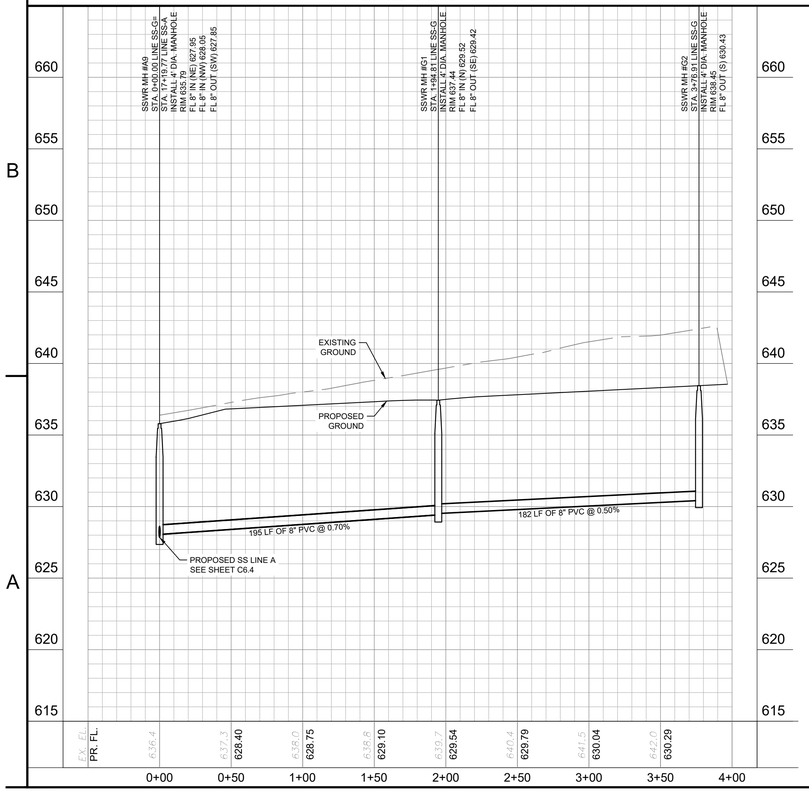
NOTES

1. REFER TO SAWS DESIGN GUIDELINES AND STANDARD CONSTRUCTION DETAILS FOR ALL UTILITY STANDARDS.
2. CONTRACTOR TO FIELD VERIFY LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTACT ENGINEER IF FIELD CONDITIONS VARY.
3. ALL DIMENSIONS ARE TO CENTERLINE OF PIPE UNLESS NOTED OTHERWISE.
4. CONTRACTOR SHALL REFER AND ADHERE TO ALL TCEQ DESIGN GUIDELINES (CHAPTER 217 AND 290) FOR ALL UTILITY CROSSING REQUIREMENTS.
5. REFERENCE SANITARY SEWER NOTES ON SHEET C6.1 FOR ADDITIONAL REQUIREMENTS.

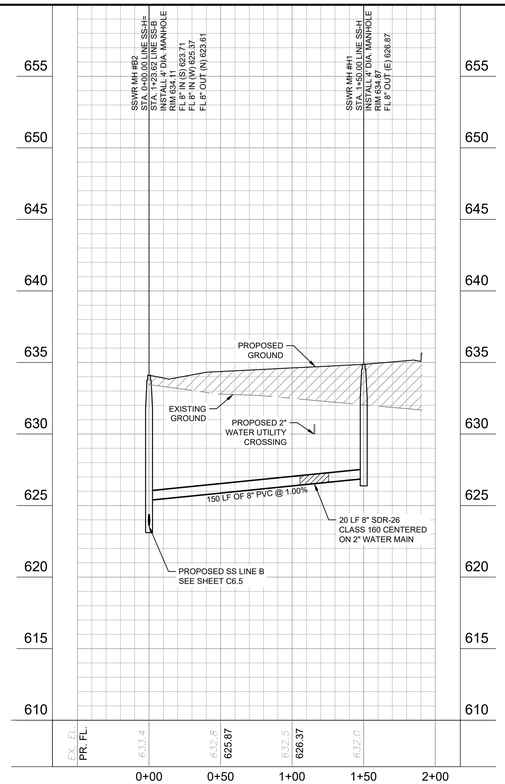
DEVELOPER'S NAME: HDC FOSTER, RD LLC
DEVELOPER'S ADDRESS: 100 NE LOOP 410 SUITE 1080
CITY SAN ANTONIO STATE TX ZIP 78216
PHONE # FAX #
SAWS BLOCK MAP # 200578 & 200580 TOTAL EDU'S 162
TOTAL ACREAGE 35.17 NUMBER OF LOTS 162
TOTAL LINEAR FOOTAGE OF PIPE 4271 LF ~ 8" PVC PIPE SDR-26.
PLAT NO. LAND-PLAT-21-11800632 , SAWS JOB NO. 22-1604

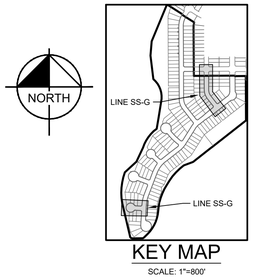
LINE SS-G

PROFILE SCALE
1" = 50' HORIZONTAL
1" = 5' VERTICAL



LINE SS-H





KEY MAP
SCALE: 1"=800'

BENCHMARK LIST

BM #50 CP MAGNAIL W/ WASHER
N: 13705110 E: 2170235
ELEVATION: 646.51'
BM #51 CP MAGNAIL W/ WASHER
N: 13705307 E: 2169932
ELEVATION: 639.13'

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STATE OF TEXAS
MICHAEL A. SCHOLZE
131737
LICENSED PROFESSIONAL ENGINEER
8/2/2022

SCALE	AS NOTED
DESIGNED BY	MAS
DRAWN BY	TGC
CHECKED BY	MAS

SANITARY SEWER PLAN AND PROFILE LINE SS-G & H

ROSILLO RANCH
PHASES 5 & 6
MDP-LAND-21-11100067
LAND-PLAT-21-11800632
SAN ANTONIO, TEXAS

DATE
8/2/2022

PROJECT NO.
068706708

SHEET NUMBER
C6.7

Plotted By:Vivitez, Dael - August 02, 2022 - 05:45:21pm - K:\SNA_Civil\068706708-HeartwoodRealtiePh5-6\C4D\PlanSheets\C-SSPP-068706708.dwg
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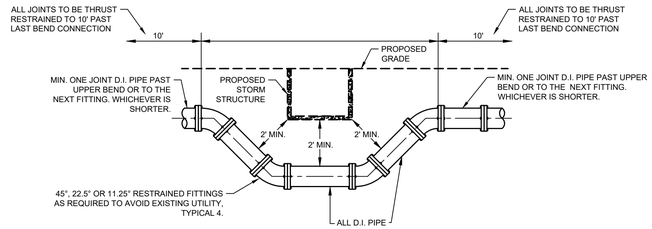
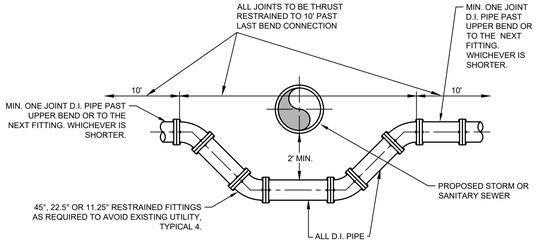


NOTE: ROUTE WATER LINE & FIRE HYDRANT LINES AS NECESSARY TO AVOID OTHER UTILITIES. MAINTAIN MINIMUM 48" COVER.

WATER/STORM STRUCTURE CROSSING DETAIL

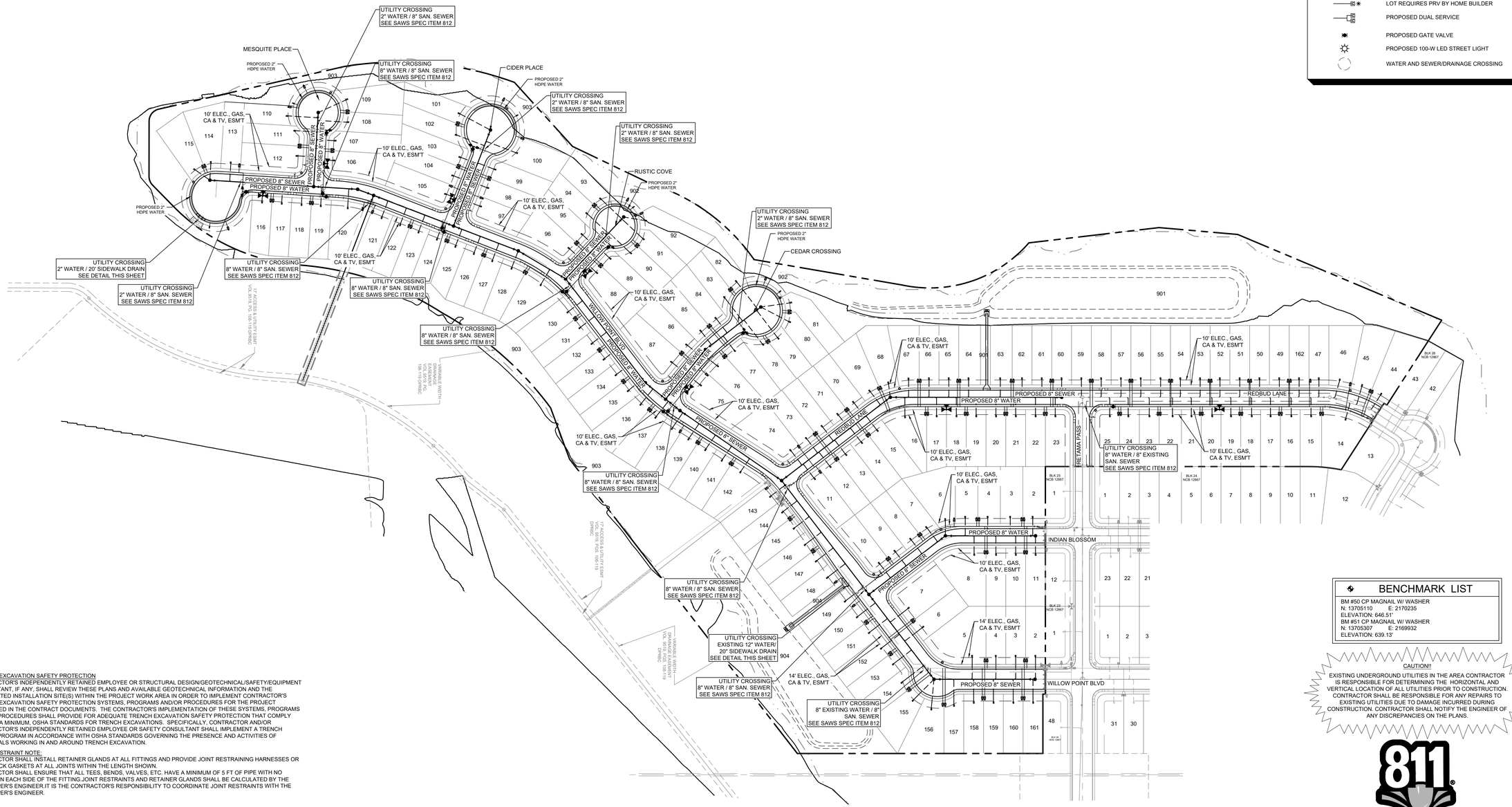
N.T.S.



NOTE: ROUTE WATER LINE & FIRE HYDRANT LINES AS NECESSARY TO AVOID OTHER UTILITIES. MAINTAIN MINIMUM 48" COVER.

WATER LOWERING DETAIL

N.T.S.



TRENCH EXCAVATION SAFETY PROTECTION
CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

JOINT RESTRAINT NOTE:
CONTRACTOR SHALL INSTALL RETAINER GLANDS AT ALL FITTINGS AND PROVIDE JOINT RESTRAINING HARNESSES OR FIELD LOCK GASKETS AT ALL JOINTS WITHIN THE LENGTH SHOWN.
CONTRACTOR SHALL ENSURE THAT ALL TEES, BENDS, VALVES, ETC. HAVE A MINIMUM OF 5 FT OF PIPE WITH NO JOINTS ON EACH SIDE OF THE FITTING.JOINT RESTRAINTS AND RETAINER GLANDS SHALL BE CALCULATED BY THE DEVELOPER'S ENGINEER.IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE JOINT RESTRAINTS WITH THE DEVELOPER'S ENGINEER.

ASBESTOS NOTE:
ASBESTOS CEMENT (AC) PIPE, ALSO KNOWN AS TRANSITE PIPE, CONTAINS ASBESTOS-CONTAINING MATERIAL (ACM) AND IS LOCATED WITHIN THE PROJECT LIMITS. SPECIAL WASTE MANAGEMENT PROCEDURES AND HEALTH AND SAFETY REQUIREMENTS ARE APPLICABLE WHEN HANDLING, REMOVING,
AND DISPOSING OF THIS PIPE. PAYMENT FOR SUCH WORK IS TO BE MADE UNDER SPECIAL SPECIFICATION ITEM NO 3000, "SPECIAL SPECIFICATION FOR HANDLING ASBESTOS CEMENT PIPE."

NORTH

GRAPHIC SCALE IN FEET
0 50 100 200

LEGEND

S	EXISTING SANITARY SEWER MANHOLE
S	PROPOSED SANITARY SEWER MANHOLE
W	EXISTING WATER LINE
SS	EXISTING SANITARY SEWER LINE
	PROPOSED WATER LINE
SS	PROPOSED SANITARY SEWER LINE
	PROPOSED RIGHT-OF-WAY
	PROPOSED CLEANOUT
	PROPOSED WATER METER
	PROPOSED FIRE HYDRANT
	PROPOSED SINGLE/INDIVIDUAL SERVICE
	LOT REQUIRES PRV BY HOME BUILDER
	PROPOSED DUAL SERVICE
	PROPOSED GATE VALVE
	PROPOSED 100-W LED STREET LIGHT
	WATER AND SEWER/DRAINAGE CROSSING

BENCHMARK LIST

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STATE OF TEXAS
MICHAEL A. SCHOLZE
131737
LICENSED PROFESSIONAL ENGINEER
10/10/2022

SCALE	AS NOTED	DESIGNED BY	MAS
DRAWN BY	ATR	CHECKED BY	MAS

OVERALL UTILITY PLAN

ROSILLO RANCH
PHASES 5 & 6
MDP-LAND-21-11100067
LAND-PLAT-21-11800632
SAN ANTONIO, TEXAS

DATE	10/10/2022
PROJECT NO.	068706708
SHEET NUMBER	C7.0

Plotted By: Flores-Kelly, Jenny October 10, 2022 12:37:08pm K:\SNA_Civil\068706708-HeartwoodRealtiePh5-6\CAD\PlotSheets\C-UTIL-068706708.dwg
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