No.	REVISION DESCRIPTION	SHEETS	REV DATE

PARKSIDE SOUTH UNIT 1

NEW BRAUNFELS, TEXAS

CIVIL SITE CONSTRUCTION PLANS

REQUIRED PERMITS	NUMBER
1. GUADALUPE COUNTY	#
2. GBRA	#
3. SPRINGS HILL SUD	#

LENNAR HOMES

100 NE LOOP 410, SUITE 1155
SAN ANTONIO, TX 78216

APRIL 2026



PROJECT LOCATION MAP 1" = 1,000'

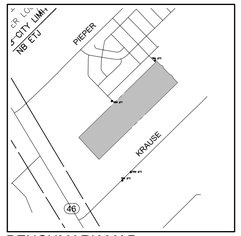
PROJECT BENCHMARK

SITE TBM #70
SET BM– MAG HMT TBM IN SW
N: 13789731.1645
E: 2274090.2675
ELEV: 621.05

SITE TBM #71
SET BM–MAG HMT TBM IN SW
N: 13788796.6876
E: 2273096.6106
ELEV: 614.63

SITE TBM #72
SET BM–MAG HMT TBM IN ASPHALT
N: 13786968.1296
E: 2273337.0182
ELEV: 602.30

SITE TBM #73
SET BM–MAG HMT TBM IN ASPHALT
N: 13787160.2184
E: 2273533.3897
ELEV: 603.92



BENCHMARK MAP
N.T.S.

SPRINGS HILL SPECIAL UTILITY DISTRICT _____ Date

Note: The Springs Hill Water Supply Corporation (SHSUD) signature above indicates that SHSUD has reviewed this document for general conformance with SHSUD requirements. SHSUD assumes no responsibility for the completeness and/or accuracy of these documents. Responsibility for the engineering adequacy of the facilities depicted in this document lies solely with the Texas Licensed Professional Engineer whose seal and signature is affixed to this document.

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PARKSIDE SOUTH UNIT 1
CIVIL SITE CONSTRUCTION PLANS
HMT # 337.130

LEGAL DESCRIPTION

BEING ALL OF LOT 1, BLOCK 1 AND LOT 2, BLOCK 1 OF THE GRUENEFIELD, UNIT 1, RECORD IN DOCUMENT NO. 202306032113, OFFICIAL PUBLIC RECORDS, COMAL COUNTY, TEXAS.

GUADALUPE COUNTY NOTES:

1. THE COUNTY DOES NOT MAINTAIN SIDEWALKS, CURB AND GUTTER, OR CURB RAMPS.
2. PRIOR TO COMMENCEMENT OF ANY WORK, THE COUNTY SHALL ATTEND A PRECONSTRUCTION MEETING INCLUDING (BUT NOT LIMITED TO) THE ENGINEER, CONTRACTOR, DEVELOPER'S INSPECTION REPRESENTATIVE, AND DEVELOPER'S CONSTRUCTION MATERIAL TESTING REPRESENTATIVE.
3. DURING CONSTRUCTION, NOTIFY THE COUNTY AT CONSTRUCTION@CO.GUADALUPE.TX.US AT LEASE 48 HOURS IN ADVANCE OF ANY WORK TO BE PERFORMED AFFECTING SUBGRADE, BASE, OR PAVEMENT INCLUDING BACKFILL OF ANY PROPOSED UTILITIES UNDERNEATH THE PAVEMENT AND FILL AREAS UPON WHICH PAVEMENT IS PROPOSED TO BE PLACED. SUCH NOTIFICATION IS ALSO REQUIRED BEFORE IMPLEMENTING ANY APPROVED TRAFFIC CONTROL PLANS ON EXISTING COUNTY-MAINTAINED ROADS.
4. FULL CLOSURE OF COUNTY ROADS REQUIRES AT LEASE ONE MONTH ADVANCE NOTICE AND IS SUBJECT TO THE DISCRETION OF THE COUNTY ENGINEER AND MAY REQUIRE APPROVAL BY THE GUADALUPE COUNTY COMMISSIONERS COURT PER TRANSPORTATION CODE, CHAPTER 251.
5. DURING CONSTRUCTION, PROVIDE ALL INSPECTION AND TESTING REPORTS TO THE COUNTY AT CONSTRUCTION@CO.GUADALUPE.TX.US.
6. AT THE COMPLETION OF CONSTRUCTION, PROVIDE AS-BUILT DRAWINGS AND A LETTER SIGNED AND SEALED BY THE ENGINEER OF RECORD CERTIFYING THAT:
   - 6.1. ALL IMPROVEMENTS WERE MADE IN ACCORDANCE WITH THE APPROVED IMPROVEMENTS PLANS AND COUNTY REGULATIONS.
   - 6.2. ANY CHANGED IMPROVEMENTS WERE MADE IN ACCORDANCE WITH THE COUNTY'S REGULATIONS. THE ELEVATIONS AND GRADES WERE TAKEN BY AN ON-SITE SURVEY ON A DATE SPECIFIED TO ENSURE THAT ALL PAVEMENT, INLETS, MANHOLES AND APPURTENANCES ARE CONSTRUCTED TO GRADE AS SHOWN ON THE RECORD DRAWINGS AND ARE IN COMPLIANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.
   - 6.3. ALL TRUNK STORM SEWERS AND LEADS ARE OF THE PROPER SIZE AND THAT ALL IMPROVEMENTS ARE CAPABLE OF PERFORMANCE AS DESIGNED AND APPROVED.

GENERAL NOTES:

1. IF CONSTRUCTION HAS NOT COMMENCED WITHIN ONE-YEAR OF CITY APPROVAL FOR CONSTRUCTION INSPECTION, THAT APPROVAL IS NO LONGER VALID.
2. THE MOST CURRENT EDITIONS OF THE CITY OF NEW BRAUNFELS STANDARD SPECIFICATIONS AND THE TEXAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND BRIDGES SHALL BE FOLLOWED FOR ALL CONSTRUCTION EXCEPT AS AMENDED BY THE COUNTY OF COMAL STANDARD DETAILS.
3. ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER OF RECORD. IN ACCEPTING THESE PLANS, THE COUNTY OF GUADALUPE AND CITY OF NEW BRAUNFELS MUST RELY UPON THE ADEQUACY OF THE WORK OF THE ENGINEER IN RECORD.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SEE THAT ALL TEMPORARY AND PERMANENT TRAFFIC CONTROL DEVICES ARE PROPERLY INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE PLANS AND LATEST EDITION OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. IF, IN THE OPINION OF THE ENGINEERING REPRESENTATIVE AND THE CONSTRUCTION INSPECTOR, THE BARRICADES AND SIGNS DO NOT CONFORM TO ESTABLISHED STANDARDS OR ARE INCORRECTLY PLACED OR ARE INSUFFICIENT IN QUANTITY TO PROTECT THE GENERAL PUBLIC, THE CONSTRUCTION INSPECTOR SHALL HAVE THE OPTION TO STOP OPERATIONS UNTIL SUCH TIME AS THE CONDITIONS ARE CORRECTED. IF THE NEED ARISES, ADDITIONAL TEMPORARY TRAFFIC CONTROL DEVICES MAY BE ORDERED BY THE ENGINEERING REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.
5. A TXDOT TYPE II B-B BLUE REFLECTIVE RAISED PAVEMENT MARKER SHALL BE INSTALLED IN THE CENTER OF THE ROADWAY ADJACENT TO ALL FIRE HYDRANTS. IN LOCATIONS WHERE HYDRANTS ARE SITUATED ON CORNERS, BLUE REFLECTIVE RAISED PAVEMENT MARKERS SHALL BE INSTALLED ON BOTH APPROACHES WHICH FRONT THE HYDRANT. THE RAISED PAVEMENT MARKER SHALL MEET TXDOT MATERIAL, EPOXY AND ADHESIVE SPECIFICATIONS.
6. NO PORTION OF THE SITE IS LOCATED WITHIN ANY SPECIAL FLOOD HAZARD AREA (100 YR. FLOOD), AS DEFINED BY THE COMAL COUNTY, TEXAS, FIRM PANEL NUMBER 48091C0455G EFFECTIVE DATE MAY, 08, 2024, AS PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.
7. NO PORTION OF THE SITE IS LOCATED WITHIN ANY EDWARDS AQUIFER JURISDICTIONAL BOUNDARY.
8. GAS UTILITIES ARE NOT INCLUDED IN THE CIVIL CONSTRUCTION PLANS. FINAL GAS UTILITY DESIGN SHALL BE APPROVED BY THE COUNTY FOR ANY WORK WITHIN PUBLIC RIGHT-OF-WAY, IF APPLICABLE.

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDE
93047
LICENSED
PROFESSIONAL ENGINEER

04/13/2026

ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER OF RECORD. IN ACCEPTING THESE PLANS, THE CITY OF NEW BRAUNFELS MUST RELY UPON THE ADEQUACY OF THE WORK OF THE ENGINEER OF RECORD.

Christopher P. Van Heerde, P.E., License No. 93047

PREPARED BY:

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HMTNB.COM
P(830)625-8555*F(830)625-8556
TBPELS FIRM F-10961
TBPELS FIRM 1053600

NOTE TO CONTRACTOR:

BY THE ACT OF SUBMITTING A BID FOR THIS PROPOSED CONTRACT, THE BIDDER WARRANTS THAT THE BIDDER, AND ALL SUBCONTRACTORS AND MATERIAL SUPPLIERS HE INTENDS TO USE HAVE CAREFULLY AND THOROUGHLY REVIEWED THE DRAWINGS, SPECIFICATIONS AND ALL OTHER CONTRACT DOCUMENTS AND HAVE FOUND THEM COMPLETE AND FREE FROM ANY AMBIGUITIES AND SUFFICIENT FOR THE PURPOSE INTENDED. THE BIDDER FURTHER WARRANTS THAT TO THE BEST OF HIS OR HIS SUBCONTRACTORS' AND MATERIAL SUPPLIERS' KNOWLEDGE, ALL MATERIALS AND PRODUCTS SPECIFIED OR INDICATED HEREIN ARE ACCEPTABLE FOR ALL APPLICABLE CODES AND AUTHORITIES.

THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS HAS BEEN BASED UPON RECORD INFORMATION ONLY AND MAY NOT MATCH LOCATIONS AND/OR DEPTHS AS CONSTRUCTED. THE CONTRACTOR SHALL CONTACT EACH OF THE INDIVIDUAL UTILITIES FOR ASSISTANCE IN DETERMINING EXISTING UTILITY LOCATIONS AND DEPTHS PRIOR TO BEGINNING ANY CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF ALL UTILITY CROSSINGS PRIOR TO BEGINNING ANY CONSTRUCTION.

ANY QUANTITIES PROVIDED BY HMT OR OWNER ON THE PLANS, OPINION OF PROBABLE COST, BID SUMMARIES, ETC. ARE FOR CURSORY USE ONLY. CONTRACTOR IS RESPONSIBLE FOR BIDDING SIGNED AND SEALED CONSTRUCTION PLANS. IF A DISCREPANCY EXIST, CONTRACTOR SHALL CONTACT ENGINEER IMMEDIATELY.

CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THE LOCATION AND ELEVATION OF ALL DOWNSTREAM CONNECTION POINTS PRIOR TO CONSTRUCTION. IF A DISCREPANCY EXIST, CONTRACTOR SHALL CONTACT ENGINEER IMMEDIATELY.

CONTRACTOR SHALL INSTALL ALL GRAVITY SEWER, GRAVITY STORM SEWER, CURBS AND PAVEMENT FROM THE MOST DOWNSTREAM POINT OF CONNECTION. IF IMPROVEMENTS ARE CONSTRUCTED FROM UPSTREAM TO DOWNSTREAM, THEN THE CONTRACTOR WILL TAKE FULL RISK AND LIABILITY OF ANY ISSUES THAT MIGHT ARISE FROM FLOWLINE ELEVATION DISCREPANCIES, UTILITY CONFLICTS, ETC.

CONTRACTOR IS RESPONSIBLE FOR THE STOCKPILING OF ANY EXCESS DIRT. ALL BIDS FROM CONTRACTOR SHOULD ACCOUNT FOR THE REMOVAL AND PLACEMENT OF ALL EARTHWORK TO INCLUDE STOCKPILING, EXPORT, IMPORT, ETC. IF A LOCATION OF PLACEMENT OF EXCESS DIRT IS NOT SHOWN ON THE PLANS, THEN CONTRACTOR SHALL CONTACT ENGINEER IMMEDIATELY TO DETERMINE THE MOST SUITABLE STOCKPILE LOCATION.

Drawing Name: N:_Projects\337 - Lennar\130 - Parkside South Unit 1\CDs\337.130_COVER.dwg User: jonm Apr 16, 2026 - 5:43pm

GUADALUPE COUNTY SUBDIVISION REGULATIONS, APPROVED FEBRUARY 2025

SUBGRADE PREPARATION

1. SUBGRADE PREPARATION SHALL CONSIST OF CLEARING, ESTABLISH ROUGH GRADE, SCARIFYING, WETTING, GRADING, ROLLING, AND FINAL GRADING TO ACHIEVE A 6–INCHES THICK SUBGRADE STRUCTURE WITH UNIFORM MATERIAL, PROPERLY PREPARED TO DEVELOP UNIFORM DENSITY, AND GRADE IN ORDER TO ACCEPT THE FOLLOWING BASE LAYER.
2. CLEARING, GRUBBING, OR DEMOLITION OPERATIONS SHALL BE COMPLETED FOR NEW SUBGRADES OR THE SUBGRADE EXPOSED (ON EXISTING ROADWAYS) BEFORE BEGINNING SUBGRADE PREPARATION. NEW SUBGRADES SHALL BE ROUGH GRADED TO +/– 0.1 TENTH FOOT OF FINISHED SUBGRADE ELEVATION. NEW OR EXISTING SUBGRADES SHALL BE SCARIFIED TO SUFFICIENT DEPTH TO ACHIEVE A FINAL MOISTURE CONDITIONED SUBGRADE SECTION AND THEN SHAPED TO THE LINES AND GRADES OF THE SUBGRADE SURFACE ESTABLISHED BY THE DESIGN ENGINEER. WHEN WORKING WITH AN EXISTING SUBGRADE, THE LINES AND GRADES MUST BE DETERMINED RELEVANT TO THE FINISH ELEVATION OF THE PAVED SURFACE. ALL UNSUITABLE MATERIALS SHALL BE REMOVED AND REPLACED WITH APPROVED FILL MATERIAL AS NEEDED.
3. ANY FOUNDATIONS, WALLS, STUMPS OR OTHER OBJECTIONABLE MATERIALS SHALL BE REMOVED TO A MINIMUM DEPTH OF 18–INCHES BENEATH A STRUCTURE, TO THE BOTTOM OF THE ROOT BALL FOR STUMPS, AND 12–INCHES BENEATH AREAS TO BE VEGETATED. ALL HOLES, RUTS AND DEPRESSIONS SHALL BE SCARIFIED AND FILLED WITH APPROVED FILL MATERIAL. SUBGRADE FINISHED SURFACE SHALL BE FINISHED TO THE LINES AND GRADES ESTABLISHED IN THE DESIGN TYPICAL SECTIONS. ANY DEVIATION MORE THAN 0.5–INCH CROSS SECTION AND IN A LENGTH OF 10–FEET MEASURED LONGITUDINALLY SHALL BE CORRECTED BY LOOSENING, ADDING OR MOVING MATERIAL, AND RESHAPING AND COMPACTING BY SPRINKLING AND ROLLING. SUBGRADE PREPARATION SHALL BE PERFORMED IN A MANNER TO ENSURE THE PROGRESSION OF WORK WITHOUT CAUSING DELAY.
4. ALL MATERIAL SUITABLE FOR REUSE AND/OR FILL MAY BE UTILIZED IN THE SUBGRADE WITH THE COUNTY ENGINEER'S APPROVAL . IMPORT MATERIAL REQUIRED TO ESTABLISH SUBGRADE ELEVATIONS SHALL ARE SUBJECT TO COUNTY.
5. COMPACTION OF THE SUBGRADE SHALL BE WITH EQUIPMENT DESIGNATED FOR SUCH USE TO MINIMUM OPTIMUM DRY DENSITY OF 95 PERCENT OF THE STANDARD PROCTOR AS DETERMINED BY TXDOT TEST METHOD TEX–114–
6. DENSITY TESTING SHALL OCCUR AS SOON AS POSSIBLE AFTER COMPLETION OF COMPACTING OPERATIONS. MATERIAL FAILING TO MEET SPECIFIED DENSITY SHALL BE REWORKED UNTIL COMPACTION SPECIFICATIONS ARE MET. IMMEDIATELY BEFORE PLACING AGGREGATE BASE MATERIAL, DENSITY AND MOISTURE CONTENT OF THE TOP 6–INCHES OF COMPACTED SUBGRADE SHALL BE CHECKED AND IF TESTS SHOW THE DENSITY TO BE MORE THAN 2 PERCENT BELOW THE SPECIFIED MINIMUM OR THE MOISTURE CONTENT TO BE MORE THAN 3 PERCENT ABOVE OR BELOW THE OPTIMUM, THE SUBGRADE SHALL BE REWORKED AS NECESSARY TO OBTAIN THE SPECIFIED COMPACTION AND MOISTURE CONTENT.
7. WHEN REQUIRED, FILL SHALL BE PLACED IN UNIFORM LIFTS COVERING THE ENTIRE CROSS SECTION WITH LAYERS THAT SHALL NOT EXCEED A DEPTH OF 6–INCHES. EACH COMPACTED LIFT SHALL MEET THE REQUIRED DENSITY AND MOISTURE CONTENT BEFORE PLACEMENT OF SUBSEQUENT AND TESTED BY CERTIFIED MATERIALS TESTING TECHNICIAN.
8. WHERE UTILITIES CROSS A ROAD OR STREET, THEY SHALL BE PROPERLY INSTALLED PRIOR TO THE CONSTRUCTING THE PREPARED SUBGRADE.
9. THE SUBGRADE SHALL BE INSPECTED AND APPROVED BY THE COUNTY, OR ITS DESIGNATED REPRESENTATIVE, PRIOR TO DENSITY TESTS BEING TAKEN. SHOULD THE APPROVED SUBGRADE FOR ANY REASON LOSES THE REQUIRED DENSITY OR FINISH BEFORE IT IS COVERED WITH BASE, THE DEVELOPER'S CONTRACTOR SHALL REWORK THE SUBGRADE IN ACCORDANCE HEREWITH AND RETEST PRIOR TO PLACING BASE.

AGGREGATE BASE MATERIAL

1. ALL PAVEMENT SECTIONS FOR ROADS AND STREETS, UNLESS OTHERWISE SPECIFIED, SHALL BE PERFORMED WITH AGGREGATE BASE MATERIAL (BASE)WITH MINIMUM COMPACTED THICKNESS AS PRESCRIBED IN SECTION X (C).
2. SUBGRADE SHALL BE APPROVED BY THE COUNTY, OR ITS DESIGNATED REPRESENTATIVE BEFORE THE PLACEMENT OF ANY BASE.
3. AGGREGATE BASE SHALL CONFORM TO THE CURRENT REQUIREMENTS OF THE TXDOT STANDARD SPECIFICATION FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS; NO OTHER BASE IS APPROVED FOR USE.
4. THE QUANTITY OF BASE PLACED SHALL BE DETERMINED IN A MANNER ACCEPTABLE TO THE COUNTY. THE FOLLOWING METHODS ARE SUGGESTED:
   a. CERTIFIED TRUCK TICKETS
   b. CORE SAMPLES AT SELECTED INTERVALS
   c. PICK AND SHOVEL SAMPLES AT SELECTED LOCATIONS
5. THE INSTALLED BASE LAYER SHALL BE INSPECTED AND APPROVED, IN WRITING BY THE COUNTY OR ITS DESIGNATED REPRESENTATIVE, BEFORE PLACEMENT OF ANY ASPHALT OR CONCRETE PAVEMENT.

CONSTRUCTION METHODS FOR BASE APPLICATION

1. BASE SHALL NOT BE PLACED UNTIL THE CERTIFICATION THAT THE SUBGRADE HAS BEEN PREPARED AND COMPACTED COMPLIANT WITH SECTION X (E).
2. THE CONTRACTOR SHALL SET FINISHED BASE ELEVATIONS 'BLUE TOPS' AT THE CROWN OR CENTERLINE AT WITH OPPOSING SIDES OF PAVEMENT AT INTERVALS NOT EXCEEDING 100 FEET..
3. FIRST COURSE– IMMEDIATELY BEFORE PLACING THE BASE, THE SUBGRADE GRADE AND SECTION SHALL BE VERIFIED. EACH BASE COURSE SHALL NOT EXCEED 6–INCHES LOOSE THICKNESS AND BE PLACED IN EQUAL INCREMENTS OF THE TOTAL DEPTH.
   a. MATERIAL PLACED ON THE SUBGRADE SHALL BE INSTALLED THE SAME DAY UNLESS APPROVED BY THE COUNTY.. THE BASE MATERIAL SHALL BE WETTED, AS NEEDED, AND SHALL BE GRADED AND SHAPED TO CONFORM WITH TYPICAL SPECIFIED SECTIONS. ALL AREAS OF SEGREGATED COURSE OR FINE MATERIAL SHALL BE REWORKED TO ACHIEVE CONFORMANCE WITH SPECIFICATIONS.
   b. THE INSTALLED COURSE SHALL BE WETTED TO ACHIEVE BOTH OPTIMUM MOISTURE CONTENT AND COMPACTED DENSITY AS SPECIFIED.
   c. WHEN INSTALLED MATERIAL FAILS TO MEET MOISTURE/DENSITY REQUIREMENTS, UNTIL THE REQUIREMENTS ARE MET. WHERE PAVEMENT WILL BE PLACED, DEVIATION EXCEEDING 0.25–INCH CROSS SECTION IN A 16 FEET LENGTH MEASURED LONGITUDINALLY SHALL BE CORRECTED. ALL IRREGULARITIES, DEPRESSIONS, OR WEAK SPOTS, WHICH DEVELOP, SHALL BE CORRECTED IMMEDIATELY BY SCARIFYING THE AREAS AFFECTED, ADDING SUITABLE MATERIAL AS REQUIRED, RESHAPING AND RE–COMPACTING. SHOULD THE SURFACE LOSE THE REQUIRED STABILITY, DENSITY AND FINISH BEFORE THE SURFACING IS COMPLETE, IT SHALL BE RE–COMPACTED AND REFINISHED IN ACCORDANCE HEREWITH.
4. SUCCEEDING COURSES SHALL BE CONSTRUCTED REPEATING THE FIRST COURSE INSTALLATION PROCESS. THE APPROVED AND TESTED FINAL BASE COURSE SHALL BE PRIMED WITHIN 24–HOURS OR WILL BE RE–TESTED BEFORE APPLYING THE PRIME COAT.
5. DENSITY EACH COURSE OF FLEXIBLE BASE SHALL BE COMPACTED TO NOT LESS THAN 98 PERCENT DENSITY WHEN TESTED IN ACCORDANCE WITH TXDOT TEST METHOD TEX–113–E. FIELD DENSITY DETERMINATION SHALL BE MADE IN ACCORDANCE WITH APPROVED METHODS. THE COMPLETED FLEXIBLE BASE WILL BE TESTED BY PROOF ROLLING IN CONFORMITY WITH ITEM NO.216 "ROLLING (PROOF)".

PAVEMENT

ALL ROADS AND STREETS SHALL BE PAVED AS FOLLOWS:

1. PRIME COAT / TACK COAT
   a. THE PRIME COAT SHALL BE APPLIED AS DIRECTED BY THE COUNTY, WITH AN APPROVED SPRAYER, AT A RATE NOT TO EXCEED 0.35 GALLON PER YARD OF SURFACE.
   b. THE ASPHALT MATERIAL FOR TACK COAT SHALL MEET THE REQUIREMENTS FOR COAT ITEM 340.6 PAR. 2 THDS DATED 1995. TACK COAT SHALL BE APPLIED WHEN AND AS DIRECTED BY THE COUNTY, WITH AN APPROVED SPRAYER, AT A RATE NOT TO EXCEED 0.10 GALLON PER YARD OF SURFACE.

GBRA CONSTRUCTION NOTES

MATERIALS

1. GRAVITY WASTEWATER PIPE AND FITTINGS SHALL BE GREEN COLOR GASKETED ASTM D3034 SDR26. AT WATER CROSSINGS INCLUDING FIRE HYDRANT LEADS, WHITE COLOR GASKETED ASTM D2241 SDR26 PIPE AND FITTINGS SHALL BE USED FOR MAINS AND LATERALS. SANITARY TAPPING SADDLES ARE NOT ALLOWED.
2. ALL OTHER FASTENERS SHALL BE TYPE 304 STAINLESS STEEL (E.G. HARDWARE, SCREWS, ANCHOR BOLTS, RODS, BOLTS, NUTS, ETC. FOR PIPING, VALVES, PUMPS, MOTORS, EQUIPMENT, ETC.) INCLUDING THOSE FOR FACTORY ASSEMBLY OF COMPONENTS. ALL BOLTS AND NUTS SHALL BE HEAVY HEX. ANCHOR BOLTS INSTALLED WITHIN HYDRAULIC STRUCTURES SHALL BE EPOXY TYPE. FIELD APPLY NICKEL ANTI–SEIZE COMPOUND TO THREADS PRIOR TO ASSEMBLY. STAINLESS STEEL ITEMS SHALL NOT BE PAINTED.
3. PVC MALE ADAPTERS ARE NOT ALLOWED.

TESTING NOTES

1. ALL OTHER UTILITIES MUST BE COMPLETE PRIOR TO PERFORMING ANY WATER OR WASTEWATER TESTING.
2. ALL TESTING MUST BE COMPLETE PRIOR TO PAVING STREETS.
3. ALL TESTING MUST BE COMPLETE PRIOR TO PERFORMING TIE–INS TO EXISTING WATER OR WASTEWATER SYSTEMS.
4. CONTRACTOR SHALL PERFORM PRE–TESTING TO VERIFY PASSING RESULTS PRIOR TO REQUESTING GBRA INSPECTION. PROVIDE CONNECTION POINT FOR GBRA DIGITAL TEST GAUGE.
5. ALL TESTING SHALL BE PERFORMED BY THE CONTRACTOR AND WITNESSED BY GBRA.
6. PERFORM TRENCH BACKFILL DENSITY TESTING AT INTERVALS SPECIFIED BY THE DESIGN ENGINEER, EXACT LOCATIONS TO BE DESIGNATED BY INSPECTOR. SCHEDULE GBRA TO WITNESS TESTING. PROVIDE COPIES OF REPORTS TO GBRA.
7. ALL GRAVITY WASTEWATER PIPING SHALL BE SUBJECT TO LOW PRESSURE AIR TESTING IN ACCORDANCE WITH TCEQ REQUIREMENTS. INFILTRATION AND EXFILTRATION TESTING ARE NOT ALLOWED.
8. MANDREL TESTING SHALL BE PERFORMED FOR ALL GRAVITY WASTEWATER MAINS PRIOR TO INSTALLATION OF CORROSION RESISTANT MANHOLE LINING.
9. ALL MANHOLES, REGARDLESS OF VEHICULAR TRAFFIC DETOURING, SHALL BE VACUUM TESTED AFTER COMPLETION OF BACKFILL, COMPACTION, AND FINAL GRADING OF ROAD BASE BUT PRIOR TO PAVING STREETS AND PRIOR TO CORROSION RESISTANT MANHOLE LINING. VACUUM TESTING SHALL BE PERFORMED WITH A PLATE TYPE TEST HEAD PLACED ON TOP OF COMPLETED MANHOLE METAL CASTING RING WHICH HAS BEEN INSTALLED AND ENCASED IN CONCRETE AT FINAL GRADE. MANHOLES SHALL BE TESTED AT 10 INCHES OF MERCURY FOR 2 MINUTES DURATION. ALLOWABLE LOSS IS 1 INCH OF MERCURY. INFILTRATION AND EXFILTRATION TESTING ARE NOT ALLOWED.
10. PERFORM VIDEO INSPECTION AND GOLF BALL TESTING OF GRAVITY WASTEWATER PIPING AFTER CORROSION RESISTANT MANHOLE LINING BUT PRIOR TO PAVING STREETS. PIPE AND MANHOLES MUST BE CLEANED FREE OF DIRT, ROCKS, SCALE, MUD, SILT, AND ANY OTHER FOREIGN MATTER PRIOR TO PERFORMING VIDEO INSPECTION AND GOLF BALL TESTING. FLOOD SYSTEM WITH WATER IMMEDIATELY PRIOR TO PERFORMING VIDEO INSPECTION. HANG AND DRAG A GOLF BALL IN FRONT OF CAMERA. PIPE GRADE IS OUT OF TOLERANCE IF GOLF BALL BECOMES FULLY SUBMERGED. SCHEDULE GBRA TO WITNESS VIDEO INSPECTION. PROVIDE DVD'S AND WRITTEN REPORTS TO GBRA.

CONSTRUCTION NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH GBRA STANDARDS AS PUBLISHED AT THE FOLLOWING WEBSITE: HTTP://WWW.GBRA.ORG/PUBLIC/WATERWASTEWATERSERVICES.ASPX
2. COPIES OF EACH CONSTRUCTION SUBMITTAL (SHOP DRAWINGS, PRODUCT DATA, ETC.) SHALL BE PROVIDED FOR GBRA REVIEW AND APPROVAL PRIOR TO FABRICATION. USE CLOUDS, BOXES, ARROWS, ETC., TO CLEARLY
3. ALL WATER AND WASTEWATER INSTALLATIONS MUST BE INSPECTED AND APPROVED BY GBRA PRIOR TO BACKFILLING OR OTHERWISE COVERING THE WORK. THIS INCLUDES CROSSINGS OF WATER AND WASTEWATER BY OTHER UTILITIES. GBRA WILL PERFORM A MINIMUM OF ONE (1) INSPECTION DAILY FOR ONE (1) HOUR DURATION BETWEEN 8:00AM AND 5:00PM EXCLUDING WEEKENDS AND HOLIDAYS. CALL 830–379–5822 TO SCHEDULE INSPECTIONS (48 HOURS ADVANCE NOTICE IS REQUIRED FOR ALL INSPECTIONS).
4. TRENCH EXCAVATION AND PIPE INSTALLATION WILL NOT BE PERMITTED UNTIL SUBGRADE HAS BEEN ESTABLISHED. SURVEY STAKING MUST BE INSTALLED PRIOR TO AND MAINTAINED DURING TRENCH EXCAVATION AND PIPE INSTALLATION. SURVEY STAKING SHALL INCLUDE HORIZONTAL AND VERTICAL CONTROL AT A MINIMUM OF 50 FOOT STATION INTERVALS. HORIZONTAL OFFSETS SHALL BE 15 FEET MAXIMUM. INSTALL PROPERTY PINS AND STAKES. MARK FINISH GRADE LINES WITH CUT/FILL ON OFFSET STAKES AND PROPERTY STAKES. ALL MARKS SHALL FACE THE PIPELINE. SURVEY STAKING SHALL BE PERFORMED BY THE CONTRACTOR.
5. PVC MALE ADAPTERS ARE NOT ALLOWED.
6. SANITARY TAPPING SADDLES ARE NOT ALLOWED.
7. MANHOLE INTERNAL DROPS ARE NOT ALLOWED.
8. PIPE BELLS SHALL BE INSTALLED IN UPSTREAM DIRECTION.
9. ALL PIPING SHALL BE DESIGNED IN STRAIGHT ALIGNMENT VERTICALLY AND HORIZONTALLY. PIPE CURVATURE AND/OR DEFLECTION ARE NOT ALLOWED.
10. MAINTAIN A MINIMUM OF 10 FEET HORIZONTAL AND 12 INCHES VERTICAL CLEARANCE BETWEEN WATER AND WASTEWATER AND OTHER UTILITIES. SHARED TRENCHES ARE NOT ALLOWED.
11. WATER AND WASTEWATER PIPE LENGTHS SHALL BE CENTERED AT CROSSINGS WITH ALL OTHER UTILITIES, INCLUDING DRY UTILITY SERVICES. BOTH PIPES SHALL BE CENTERED AT WATER AND WASTEWATER CROSSINGS, INCLUDING WASTEWATER SERVICE LATERALS AND FIRE HYDRANT LEADS.
12. WATER AND WASTEWATER PIPING (INCLUDING MAINS, SERVICES, AND LATERALS) SHALL BE SLEEVED IF LOCATED UNDER CONCRETE CHANNELS, BOX CULVERTS, OR MULTIPLE BARREL STORM SEWER CROSSINGS REGARDLESS OF SIZE AND SINGLE BARRELS 30" OR LARGER.
13. ALL EXPOSED VERTICAL AND HORIZONTAL CONCRETE EDGES SHALL BE FORMED WITH ¾" CHAMFER STRIPS.
14. EXISTING FACILITIES THAT ARE DISTURBED SHALL BE RESTORED AND TESTED TO BE IN FULL COMPLIANCE WITH CURRENT GBRA STANDARDS. THE CONTRACTOR SHALL ADJUST EXISTING WATER AND WASTEWATER FACILITIES TO PROPOSED FINISH GRADES INCLUDING BUT NOT LIMITED TO MANHOLES, CLEANOUTS, VALVES, HYDRANTS, APPURTENANCES, ETC.
15. EXISTING MANHOLES THAT ARE DISTURBED SHALL BE RESTORED TO BE IN FULL COMPLIANCE WITH CURRENT GBRA STANDARDS INCLUDING TESTING, CORROSION RESISTANT LINING, RINGS AND COVERS, ETC.
16. THE CONTRACTOR SHALL MAINTAIN SERVICE TO EXISTING WATER AND WASTEWATER SYSTEMS AT ALL TIMES DURING CONSTRUCTION. ANY WORK INVOLVING POWER OUTAGES, BYPASS PUMPING, PUMP AND HAUL, OR ANY OTHER INTERRUPTION OF FLOW MUST BE PERFORMED BETWEEN 8:00AM AND 5:00PM EXCLUDING WEEKENDS AND HOLIDAYS. ALL NECESSARY TEMPORARY POWER, BYPASS PUMPING, PUMP AND HAUL, TEMPORARY PLUGS, ETC., SHALL BE FURNISHED AND PERFORMED BY THE CONTRACTOR. COORDINATE AND SCHEDULE ANY SUCH ACTIVITIES WITH GBRA AT LEAST TWO (2) WEEKS IN ADVANCE.

EXPLOSIVES AND BLASTING ARE NOT ALLOWED

CONSTRUCTION METHODS FOR PAVEMENT

1. GENERAL METHODS– IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER'S CONTRACTOR TO PRODUCE, TRANSPORT, PLACE AND COMPACT THE SPECIFIED PAVING MIXTURE IN ACCORDANCE WITH THESE SPECIFICATIONS AND PROVIDE A SAFE ENVIRONMENT TO ENABLE INSPECTION FORCES TO TAKE SAMPLES AND CHECK THE PLANT.
   a. PRIOR TO PLACING HMAC, THE BASE SHALL BE PROOF ROLLED AND ANY SOFT SPOTS REPAIRED, AND THE AREA PROOF ROLLED AGAIN.
   b. ALL ASPHALTIC MIXTURES SHALL BE PLACED WITH A SPREADING AND FINISHING MACHINE. IF, AFTER BEING REMOVED FROM THE MIXER AND PRIOR TO PLACING, THE TEMPERATURE OF THE ASPHALTIC MIXTURE IS 50°DEGREES OR MORE BELOW THE TEMPERATURE ESTABLISHED, ALL OR ANY PART OF THE LOAD MAY BE REJECTED. ANY MATERIAL PLACED WHICH IS TOO COOL TO COMPACT PROPERLY SHALL BE REMOVED AND REPLACED WITH MATERIAL THAT MEETS THE SPECIFICATIONS.
   c. ADJACENT TO FLUSH CURBS, GUTTERS, LINERS AND STRUCTURES, THE ASPHALT SURFACE SHALL BE FINISHED SO THAT WHEN COMPACTED IT WILL BE SLIGHTLY ABOVE THE EDGE OF THE CURB. THE COMPACTED THICKNESS OF THE ASPHALTIC CONCRETE COURSES SHALL BE AS INDICATED. WHERE THE THICKNESS OF THE SURFACE COURSE IS SPECIFIED TO BE MORE THAN 2–INCHES, THE WORK SHALL BE ACCOMPLISHED IN EQUAL LIFTS, UNLESS OTHERWISE INDICATED. WHEN THE SURFACE IS TO BE IN STAGES AND TRAFFIC IS PERMITTED ON THE INITIAL LAYER, EACH LAYER SHALL BE NOT LESS THAN 1–INCHES.
2. COMPACTING– THE MIX SHALL BE COMPRESSED THOROUGHLY AND UNIFORMLY COMPACTED TO THE REQUIRED DENSITY IMMEDIATELY AFTER PLACING. ALL COMPACTION ROLLING SHALL BE COMPLETE BEFORE THE MATERIAL COOLS BELOW 175° F. MINOR POLISHING ROLLING MAY BE UNDERTAKEN ON THE MATERIAL BELOW THE ABOVE TEMPERATURE. ALL ROLLERS MUST BE IN GOOD MECHANICAL CONDITION. NECESSARY PRECAUTIONS SHALL BE TAKEN TO PREVENT THE DROPPING OF GASOLINE, OIL, GREASE, OR OTHER FOREIGN MATTER ON THE PAVEMENT, EITHER WHEN THE ROLLERS ARE IN OPERATION OR WHEN STANDING.
3. SURFACE TESTS– THE SURFACE OF THE PAVEMENT, AFTER COMPACTION, SHALL BE SMOOTH AND TRUE TO THE ESTABLISHED LINE, GRADE AND CROSS SECTION, AND WHEN TESTED WITH A 10 FEET STRAIGHT EDGE PLACED PARALLEL TO THE CENTERLINE OF THE STREET OR TESTED BY OTHER EQUIVALENT AND ACCEPTABLE MEANS, EXCEPT AS PROVIDED HEREIN, THE MAXIMUM DEVIATION SHALL NOT EXCEED 1/16–INCH IN 10 FEET AT ANY POINT. THE COMPLETED SURFACE SHALL MEET THE APPROVAL OF THE DEVELOPER'S ENGINEER FOR RIDING SURFACE, FINISH AND APPEARANCE.
4. DENSITY– HMAC SHALL BE COMPACTED AS SPECIFIED IN ITEM 340 TXDOT STANDARD SPECIFICATIONS 1995. TESTS WILL BE TAKEN AS DIRECTED BY THE COUNTY OR ITS DESIGNATED REPRESENTATIVE.

TRAFFIC SIGNS AND GUARD POSTS

1. SIGNS AND GUARD POSTS SHALL BE INSTALLED BY THE DEVELOPER IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND AS DIRECTED BY THE COUNTY.
2. THE DEVELOPER SHALL CONSULT WITH THE COUNTY PRIOR TO THE PLACEMENT OF ANY TRAFFIC SIGNS OR GUARD POSTS.

STREET NAME SIGNS

ENGINEER GRADE REFLECTIVE SHEETING ON FLAT BLADE ALUMINUM AS FOLLOWS:

1. WHITE LETTERING ON GREEN BACKGROUND FOR COUNTY ROADS
2. WHITE LETTERING ON RED BACKGROUND FOR PRIVATE ROADS WITH SIGN TOPPER READING "PRIVATE STREET"
3. USE 4–INCHES SERIES C OR B UPPER–CASE LETTERS ON 6–INCHES STREET NAME SIGN BLANK (FLAT BLADE)
4. USE 2–INCHES SERIES C OR B UPPER–CASE LETTERS FOR STREET, LANE, ROAD, ETC..

RIGHT–OF–WAY EROSION CONTROL

THIS ITEM SHALL CONSIST OF PREPARING A SEED BED TO THE LINES AND GRADES INDICATED, SOWING OF SEEDS, FERTILIZING, MULCHING WITH STRAW, CELLULOSE FIBER, AND OTHER MANAGEMENT PRACTICES IN THE ROW FROM STREET TO PROPERTY LINE AND ACROSS SUCH AREAS AS ARE INDICATED OR AS DIRECTED BY THE COUNTY OR ITS DESIGNATED REPRESENTATIVE.

1. ANY DISTURBANCE OF VEGETATED SURFACES SHALL BE REPAIRED (SOWING OF GRASS OR SODDED) AND MAINTAINED (WATERED AND/OR REPAIRED DUE TO EROSION OCCURRING BEFORE GROWTH IS ESTABLISHED) UNTIL 100% DENSITY COVERAGE OF THE DAMAGE OR DISTURBED AREA IS ACCOMPLISHED. THE CONTRACTOR SHALL OBTAIN IN WRITING FROM THE COUNTY ACCEPTANCE OF REESTABLISHED VEGETATION.
2. PREPARING THE SEED BED– AFTER THE DESIGNATED AREAS HAVE BEEN ROUGH GRADED TO THE LINES, GRADES AND TYPICAL SECTIONS INDICATED ON THE PLANS AND ANY OTHER SOIL AREA DISTURBED BY THE CONSTRUCTION, A SUITABLE SEEDBED SHALL BE PREPARED. THE SEEDBED SHALL CONSIST OF EITHER 4–INCHES OF APPROVED TOPSOIL OR 4–INCHES OF APPROVED SALVAGED TOPSOIL CULTIVATED AND ROLLED SUFFICIENTLY TO A STATE OF GOOD TILTH, WHICH COULD PREVENT THE SEED FROM BEING COVERED TOO DEEP FOR OPTIMUM GERMINATION. THE OPTIMUM DEPTH FOR SEEDING SHALL BE 0.25–INCH. WATER SHALL BE APPLIED AS REQUIRED TO PREPARE THE SEEDBED. SEEDING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS HEREIN AFTER DESCRIBED.
3. WATERING– THE SEEDED AREAS SHALL IMMEDIATELY BE WATERED WITH A MINIMUM OF 5 GALLONS OF WATER PER SQUARE YARD OR AS NEEDED. WATER SHALL BE APPLIED AT A MINIMUM RATE OF 10 GALLONS PER SQUARE YARD WEEKLY, EXCEPT WHEN RAINFALL OF 0.5–INCH OR GREATER OCCURS ON THE SITE, UNTIL THE GRASS IS UNIFORMLY 1.5–INCHES IN HEIGHT.
4. BROADCAST SEEDING– THE SEED OR SEED MIXTURE IN THE QUANTITY SPECIFIED SHALL BE UNIFORMLY DISTRIBUTED OVER THE PREPARED SEED BED AREAS INDICATED OR WHERE DIRECTED. IF THE SOWING OF SEED IS BY HAND, RATHER THAN MY MECHANICAL METHODS, THE SEED SHALL BE SOWN IN TWO DIRECTIONS AT RIGHT ANGLES TO EACH OTHER. IF MECHANICAL EQUIPMENT IS USED, ALL VARIETIES OF SEED, AS WELL AS FERTILIZER, MAY BE DISTRIBUTED AT THE SAME TIME, PROVIDED THAT EACH COMPONENT IS UNIFORMLY APPLIED AT THE SPECIFIED RATE. AFTER PLANTING, THE PLANTED AREA SHALL BE ROLLED WITH A CORRUGATED ROLLER OF THE "CULTIPACKER" TYPE. ALL ROLLING OF THE SLOPE AREAS SHALL BE ON THE CONTOUR.

UTILITIES

LOCATION AND DEPTH OF EXISTING UTILITIES SHOWN HERE ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ALL EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION, INCLUDING THOSE NOT SHOWN ON THE DRAWINGS. ANY EXISTING UTILITIES, ON OR OFF THE SITE, THAT ARE DAMAGED OR UNDERCUT BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE ENGINEER AND APPROVED BY THE RESPECTIVE UTILITY COMPANY AT THE CONTRACTOR'S EXPENSE.
CONTRACTOR SHALL NOTIFY APPROPRIATE UTILITY COMPANIES AND GOVERNMENTAL AGENCIES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION AT:

THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES 48 HOURS PRIOR TO EXCAVATION

SPRINGS HILLS WATER (WATER)	(830) 379–7683
GUADALUPE–BLANCO RIVER AUTHORITY (SEWER)	(830) 379–5822
GVEC (ELECTRIC)	(800) 223–4832
TIME WARNER CABLE	(830) 625–3408
CENTERPOINT ENERGY (GAS)	(830) 643–6434
AT&T	(830) 303–1333
TEXAS ONE CALL SYSTEM	(800) 245–4545
ENERGY TRANSFER (PETROLEUM PIPELINE)	(210) 262–2486

CONTRACTOR SHALL REFERENCE NEW BRAUNFELS UTILITIES PLANS FOR FINAL ELECTRICAL LINE DESIGNS AND LAYOUT.

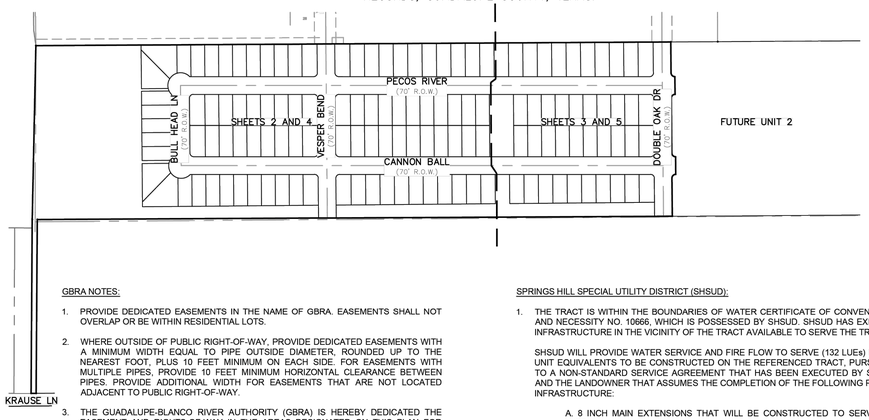
REVISED 11/24

SPRINGS HILL SPECIAL UTILITY DISTRICT NOTES:

1. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THE PROJECT SHALL BE APPROVED BY SHSUD AND COMPLY WITH ALL APPLICABLE STANDARDS AND REGULATIONS.
2. THE CONTRACTOR SHALL NOT PROCEED WITH ANY WORK UNTIL WRITTEN APPROVAL IS OBTAINED FROM SHSUD. WORK COMPLETED BY THE CONTRACTOR, WHICH HAS NOT RECEIVED AN APPROVAL WILL BE SUBJECT TO REMOVAL AND REPLACEMENT BY AND AT THE EXPENSE OF THE CONTRACTOR AT THE PREROGATIVE OF SHSUD.
3. THE DEVELOPER DEDICATES THE WATER MAINS UPON COMPLETION BY THE DEVELOPER AND ACCEPTANCE BY SHSUD. SHSUD WILL OWN AND MAINTAIN SAID WATER MAINS WHICH ARE LOCATED WITHIN SAID SUBDIVISION (AS APPLICABLE).
4. CONTRACTOR AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNERS AND THE ENGINEER AND HIS EMPLOYEES, PARTNERS OFFICERS, DIRECTORS, OR CONSULTANTS HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF THE WORK ON THIS PROJECT, EXCEPTING FROM LIABILITY ARISING FROM SOLE NEGLIGENCE OF THE OWNER OR ENGINEER, ENGINEER'S DIRECTORS, OFFICERS, EMPLOYEES, OR CONSULTANTS.
5. 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.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL OR BETTER CONDITION, ANY DAMAGES DONE TO EXISTING FENCES, CURBS, STREETS, DRIVEWAYS, LANDSCAPING AND STRUCTURES, AND EXISTING UTILITIES (NOT ADJUSTED ON PLANS). COST OF RESTORATIONS, IF ANY, SHALL BE THE CONTRACTOR'S ENTIRE EXPENSE.
7. THE CONTRACTOR SHALL AVOID CUTTING ROOTS LARGER THAN ONE INCH IN DIAMETER WHEN EXCAVATING NEAR EXISTING TREES. EXCAVATION IN VICINITY OF TREES SHALL PROCEED WITH CAUTION.
8. THE CONTRACTOR SHALL PROCURE ALL PERMITS AND LICENSES, PAY ALL CHARGES, FEES AND TAXES AND GIVE ALL NOTICES NECESSARY AND INCIDENTAL TO THE DUE AND LAWFUL PROSECUTION OF THE WORK.
9. NO EXTRA PAYMENT SHALL BE ALLOWED FOR WORK CALLED FOR ON THE PLANS BUT NOT INCLUDED ON THE BID SCHEDULE. THIS INCIDENTAL WORK WILL BE REQUIRED AND SHALL BE INCLUDED UNDER THE PAY ITEM TO WHICH IT RELATES.
10. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL WASTE MATERIALS UPON PROJECT COMPLETION. THE CONTRACTOR SHALL NOT PERMANENTLY PLACE ANY WASTE MATERIALS IN THE 100–YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN DEVELOPMENT PERMIT.
11. THE CONTRACTOR SHALL NOT PLACE ANY MATERIALS ON THE RECHARGE ZONE OF THE EDWARDS AQUIFER WITHOUT AN APPROVED WATER POLLUTION ABATEMENT PLAN FROM THE TCEQ 31 TAC 313.4 AND 31 TAC 313.9.
12. BARRICADES AND WARNING SIGNS SHALL CONFORM TO THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND SHALL BE LOCATED TO PROVIDE MAXIMUM PROTECTION TO THE PUBLIC AS WELL AS CONSTRUCTION PERSONNEL AND EQUIPMENT WHILE ALWAYS PROVIDING CONTINUOUS TRAFFIC FLOW DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL DEVICES DURING CONSTRUCTION.
13. CONTRACTORS ARE REQUIRED TO VERIFY PROJECT ELEVATIONS. TH

FINAL PLAT ESTABLISHING PARKSIDE SOUTH UNIT 1 SUBDIVISION

BEING 40.321 ACRES OF LAND LOCATED IN THE A.M. ESNAURIZAR SURVEY, ABSTRACT NO. 20, GUADALUPE COUNTY, TEXAS BEING OUT OF A CALLED 70.657 ACRE TRACT, "TRACT I", LOCATED IN THE A.M. ESNAURIZAR SURVEY, AND ALL OF A CALLED 0.315 ACRE TRACT, "TRACT II", LOCATED IN THE A.M. ESNAURIZAR SURVEY, RECORDED IN DOCUMENT NO. 202599001437, OFFICIAL PUBLIC RECORDS, GUADALUPE COUNTY, TEXAS.





LOCATION MAP
NOT TO SCALE

PLAT NOTES:

1. ALL LOTS WITHIN THE SUBDIVISION WILL HAVE SERVICES PROVIDED BY THE FOLLOWING:
   WATER - SPRINGS HILL WSC
   SEWER - GUADALUPE-BLANCO RIVER AUTHORITY (GBRA)
   ELECTRIC - GUADALUPE VALLEY ELECTRIC COOPERATIVE (GVEC)
   TELEPHONE & CABLE - AT&T COMMUNICATIONS AND/OR SPECTRUM
2. THIS SUBDIVISION IS NOT WITHIN THE EDWARDS AQUIFER RECHARGE ZONE.
3. THIS SUBDIVISION IS WITHIN THE CITY OF NEW BRAUNFELS ETJ.
4. THIS SUBDIVISION IS WITHIN THE SEGUIN INDEPENDENT SCHOOL DISTRICT.
5. THIS PROPERTY DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD AREA, ZONE "X", THE 100-YEAR FLOOD ZONE, AS DEFINED BY THE FLOOD INSURANCE RATE MAP FOR GUADALUPE COUNTY, TEXAS ON COMMUNITY PANEL NO. 48187C0120G, EFFECTIVE DATE MARCH 27, 2024 AS PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY. NO STRUCTURE OR LAND IN THE PLAT SHALL HEREAFTER BE LOCATED OR ALTERED WITHOUT FIRST OBTAINING A FLOODPLAIN DEVELOPMENT PERMIT FROM THE GUADALUPE COUNTY FLOODPLAIN ADMINISTRATOR.
6. NO STRUCTURES, WALLS, OR OTHER OBSTRUCTION OF ANY KIND SHALL BE PLACED WITHIN THE BOUNDARIES OF DRAINAGE EASEMENTS. NO LANDSCAPING, FENCES, OR OTHER TYPES OF MODIFICATIONS WHICH ALTER THE CROSS SECTIONS OF THE DRAINAGE EASEMENT OR DECREASE THE HYDRAULIC CAPACITY OF THE EASEMENT SHALL BE ALLOWED.
7. LAND USE FOR THIS SUBDIVISION IS SINGLE-FAMILY RESIDENTIAL.
8. THE ELEVATION OF THE LOWEST FLOOR OF A STRUCTURE SHALL BE AT LEAST 10 INCHES ABOVE THE FINISHED GRADE OF THE SURROUNDING GROUND, WHICH SHALL BE SLOPED IN A FASHION SO AS TO DIRECT STORMWATER AWAY FROM THE STRUCTURE. PROPERTIES ADJACENT TO STORMWATER CONVEYANCE STRUCTURES MUST HAVE A FLOOR SLAB ELEVATION OR BOTTOM OF FLOOR JOISTS A MINIMUM OF ONE FOOT ABOVE THE 100-YEAR WATER FLOW ELEVATION OF THE SURFACE DRAINAGE FACILITY. DRIVEWAYS SERVING HOUSES ON THE DOWNHILL SIDE OF THE STREET SHALL HAVE A PROPERLY SIZED CROSS SWALE PREVENTING RUNOFF FROM ENTERING THE GARAGE AND SHALL PREVENT WATER FROM LEAVING THE STREET.
9. THIS UNIT CONTAINS 132 BUILDABLE RESIDENTIAL LOTS AND 3 DRAINAGE LOTS.
10. 1044 VISTA PARK LLC, BY FILLING THIS RECORD DOCUMENT, AND ALL FUTURE OWNERS OF THIS PROPERTY, BY PURCHASING SUCH PROPERTY, ACKNOWLEDGE AND AGREE THAT GUADALUPE COUNTY SHALL HAVE NO OBLIGATION WHATSOEVER TO REPAIR OR ACCEPT MAINTENANCE OF THE STREETS SHOWN ON THIS APPROVED DEVELOPMENT PLAT UNTIL AND UNLESS 1044 VISTA PARK LLC AND/OR THE PROPERTY OCCUPANTS OR TENANTS HAVE IMPROVED THE STREETS TO THE THEN CURRENT STANDARDS REQUIRED BY GUADALUPE COUNTY AND THE STREETS HAVE BEEN ACCEPTED FOR MAINTENANCE BY FORMAL WRITTEN ACTION OF THE COUNTY COMMISSIONS COURT AND THE STREETS, WITH ALL REQUIRED RIGHT-OF-WAY AND BUILDING SETBACKS, HAVE BEEN DEDICATED BY OWNERS THEREOF, AND ACCEPTED BY THE COUNTY, AS PUBLIC STREETS. UNTIL SUCH TIME, 1044 VISTA PARK LLC AND ALL FUTURE OWNERS OF PROPERTY WITHIN THE LIMITS OF THE APPROVED DEVELOPMENT PLAT SHALL LOOK SOLELY TO THE OWNER, DEVELOPER OR ENTITY CREATED FOR THAT PURPOSE FOR FUTURE MAINTENANCE AND REPAIR OF THE STREETS INCLUDED IN THE DEVELOPMENT PLAT.
11. IN ORDER TO PROMOTE SAFE USE OF STREETS AND PRESERVE THE CONDITION OF PUBLIC STREETS, NO DRIVEWAY CONSTRUCTED ON ANY LOT WITHIN THIS SUBDIVISION SHALL BE PERMITTED ACCESS ONTO A PUBLICLY DEDICATED COUNTY RIGHT-OF-WAY UNLESS A DRIVEWAY PERMIT HAS BEEN ISSUED BY THE GUADALUPE COUNTY ROAD AND BRIDGE DEPARTMENT. THE DRIVEWAY SHALL BE CONSTRUCTED TO MEET THE GUADALUPE COUNTY ROAD AND BRIDGE DEPARTMENT SPECIFICATIONS WHICH SHALL BE STATED ON THE PERMIT.
12. NO FENCING OF STRUCTURE THAT WILL INTERFERE WITH ADEQUATE DRAINAGE FLOW WILL BE ALLOWED ON OR ACROSS SUCH LINES.
13. EASEMENTS TO EXPIRE UPON INCORPORATION INTO PLATTED PUBLIC STREET RIGHT-OF-WAY.
14. NO STRUCTURES/HOMES ARE TO BE BUILT OR BROUGHT ONTO THE LOT UNTIL AN ON-SITE SEWAGE FACILITY PERMIT HAS BEEN ISSUED OR PUBLIC SEWER HAS BEEN PROVIDED, AND ROAD CONSTRUCTION IS COMPLETED AND APPROVED.
15. THIS SUBDIVISION IS LOCATED WITHIN THE PRECINCT 2.
17. LOT 901, BLOCK 2 (DRAINAGE), LOT 902, BLOCK 5 (DRAINAGE) AND LOT 903, BLOCK 4 (DRAINAGE) SHALL BE OWNED AND MAINTAINED BY THE MUNICIPAL UTILITY DISTRICT, ITS SUCCESSORS AND/OR ASSIGNS.
18. ROW ACREAGE FOR THIS UNIT IS AS FOLLOWS:
    DOUBLE OAK DR = (50636.3)
    CANNON BALL DR = (127243.03)
    PECOS DR = (127220.04)
    VESPER BEND = 48265.58
    BULL HEAD LN = (23762.3)

STATE OF TEXAS
COUNTY OF GUADALUPE

I, DOROTHY J. TAYLOR, REGISTERED PROFESSIONAL LAND SURVEYOR NO. 6295, DO HEREBY STATE THAT THIS PLAT REPRESENTS AN ACTUAL SURVEY COMPLETED ON THE GROUND UNDER MY DIRECTION, TO THE BEST OF MY KNOWLEDGE AND ABILITY. I DO HEREBY CERTIFY THAT THE INFORMATION CONTAINED ON THIS PLAT COMPLIES WITH THE SUBDIVISION REGULATIONS ADOPTED BY GUADALUPE COUNTY, TEXAS.

PRELIMINARY, THIS DOCUMENT SHALL NOT BE RECORDED FOR ANY PURPOSE.

DOROTHY J. TAYLOR
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 6295
290 S. CASTELL AVE., SUITE 100, NEW BRAUNFELS, TEXAS 78130

STATE OF TEXAS
COUNTY OF _____;

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON THIS

_____ DAY OF _____, 20__,

BY _____

_____
NOTARY PUBLIC, STATE OF TEXAS

MY COMMISSION EXPIRES:_____

ENGINEER/SURVEYOR:
HMT ENGINEERING & SURVEYING
290 S. CASTELL AVE., SUITE 100
NEW BRAUNFELS, TX 78130
PH: (830) 625-8555

OWNER:
1044 VISTA PARK LLC.
130 S. SEGUIN AVE., STE. 100
NEW BRAUNFELS, TX 78130

DEVELOPER:
LENNAR HOMES OF TEXAS
LAND & CONSTRUCTION, LTD
100 NE INTERSTATE 410 LOOP, SUITE 1155
SAN ANTONIO, TX 78216

PREPARATION DATE 02/26/26
REVISED DATE 03/05/26

HMT ENGINEERING & SURVEYING
290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 10153600

GBRA NOTES:

1. PROVIDE DEDICATED EASEMENTS IN THE NAME OF GBRA. EASEMENTS SHALL NOT OVERLAP OR BE WITHIN RESIDENTIAL LOTS.
2. WHERE OUTSIDE OF PUBLIC RIGHT-OF-WAY, PROVIDE DEDICATED EASEMENTS WITH A MINIMUM WIDTH EQUAL TO PIPE OUTSIDE DIAMETER, ROUNDED UP TO THE NEAREST FOOT, PLUS 10 FEET MINIMUM ON EACH SIDE. FOR EASEMENTS WITH MULTIPLE PIPES, PROVIDE 10 FEET MINIMUM HORIZONTAL CLEARANCE BETWEEN PIPES. PROVIDE ADDITIONAL WIDTH FOR EASEMENTS THAT ARE NOT LOCATED ADJACENT TO PUBLIC RIGHT-OF-WAY.
3. THE GUADALUPE-BLANCO RIVER AUTHORITY (GBRA) IS HEREBY DEDICATED THE EASEMENT AND RIGHTS-OF-WAY IN THE AREAS DESIGNATED ON THIS PLAN FOR WASTEWATER FACILITIES FOR THE PURPOSE OF INSTALLING, CONSTRUCTING, RECONSTRUCTING, OPERATING, MAINTAINING, INSPECTING, REPAIRING, REMOVING, AND RELOCATING BURIED AND/OR EXPOSED WASTEWATER FACILITIES AND APPURTENANCES.
4. TOGETHER WITH THE RIGHT OF INGRESS AND EGRESS, GBRA SHALL HAVE THE RIGHT TO REMOVE SAID LANDS OF ALL TREES OR PARTS THEREOF, OR ANY OTHER OBSTRUCTIONS WHICH MAY ENDANGER, OR INTERFERE WITH MAINTENANCE OF THE FACILITIES AND APPURTENANCES.
5. OTHER UTILITIES, STRUCTURES, GRADING, DRAINAGE, DETENTION/RETENTION PONDS, LANDSCAPING, TREES, ROADS, PARKING LOTS, FENCES, WALLS, CONSTRUCTION OF ANY TYPE, OR ANY OTHER IMPROVEMENTS OR OBSTRUCTIONS, ARE NOT ALLOWED WITHIN GBRA EASEMENTS.
6. DESIGNS FOR ANY PROPOSED ALTERATIONS OR CROSSINGS OF GBRA EASEMENTS MUST BE APPROVED IN WRITING BY GBRA AND THE INSTALLATION OF SUCH MUST BE INSPECTED AND APPROVED BY GBRA.
7. MAINTENANCE OF EASEMENTS IS THE RESPONSIBILITY OF THE PROPERTY OWNER.
8. THE PROPERTY OWNER MUST INSTALL 16-FOOT GATES IN ANY FENCES THAT CROSS GBRA UTILITIES; GATES MUST BE CENTERED ACROSS GBRA UTILITIES.
9. CUSTOMER WASTEWATER SERVICES SHALL NOT BE INSTALLED WITHIN FENCED AREAS.

THIS PLAT OF PARKSIDE SOUTH UNIT 1 HAS BEEN SUBMITTED AND APPROVED BY SPRINGS HILL SPECIAL UTILITY DISTRICT FOR EASEMENTS.

_____ _____
AUTHORIZED AGENT DATE
GUADALUPE-BLANCO RIVER AUTHORITY

STATE OF TEXAS
COUNTY OF _____;

I (WE) THE UNDERSIGNED OWNER(S) OF THE LAND SHOWN ON THIS PLAT, AND DESIGNATED HEREIN AS THE PARKSIDE SOUTH UNIT 1 SUBDIVISION TO THE COUNTY OF GUADALUPE, TEXAS, AND WHOSE NAME IS SUBSCRIBED HERETO, DO HEREBY SUBDIVIDE SUCH PROPERTY AND DEDICATE TO THE USE OF THE PUBLIC ALL STREETS, ALLEYS, PARKS, DRAINS, EASEMENTS, AND PUBLIC PLACES THEREON SHOWN FOR THE PURPOSES AND CONSIDERATION THEREIN EXPRESSED.

_____
1044 VISTA PARK LLC.
FRED HEIMER, AUTHORIZED AGENT
130 S. SEGUIN AVE., STE. 100
NEW BRAUNFELS, TEXAS 78130

STATE OF TEXAS
COUNTY OF _____;

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON THIS

_____ DAY OF _____, 20__,

BY _____

_____
NOTARY PUBLIC, STATE OF TEXAS

MY COMMISSION EXPIRES:_____

SPRINGS HILL SPECIAL UTILITY DISTRICT (SHSUD):

1. THE TRACT IS WITHIN THE BOUNDARIES OF WATER CERTIFICATE OF CONVENIENCE AND NECESSITY NO. 10666, WHICH IS POSSESSED BY SHSUD. SHSUD HAS EXISTING INFRASTRUCTURE IN THE VICINITY OF THE TRACT AVAILABLE TO SERVE THE TRACT.

   SHSUD WILL PROVIDE WATER SERVICE AND FIRE FLOW TO SERVE (132 LUEs) LIVING UNIT EQUIVALENTS TO BE CONSTRUCTED ON THE REFERENCED TRACT, PURSUANT TO A NON-STANDARD SERVICE AGREEMENT THAT HAS BEEN EXECUTED BY SHSUD AND THE LANDOWNER THAT ASSUMES THE COMPLETION OF THE FOLLOWING PUBLIC INFRASTRUCTURE:

   A. 8 INCH MAIN EXTENSIONS THAT WILL BE CONSTRUCTED TO SERVE 132 LUES
2. SHSUD WILL POSSESS A 5'X5' UTILITY EASEMENT DESIGNATED FOR THE INSTALLATION, OPERATION, AND MAINTENANCE OF EACH METER. SHSUD SHALL HAVE ACCESS TO METER LOCATIONS FROM THE FRONT YARD WITH THE LOCATION NOT BEING WITHIN A FENCED AREA.
3. ANY EASEMENTS DESIGNATED AS SHSUD UTILITY EASEMENTS SHALL REMAIN OPEN FOR ACCESS AT ALL TIMES AND SHALL NOT BE WITHIN A FENCED AREA.
4. NO CONCRETE OR PAVEMENT MAY BE PLACED OVER A SHSUD WATER UTILITY LINE WITHOUT CONTACTING AND GETTING APPROVAL FROM SHSUD FIRST.
5. ALL SHSUD EASEMENTS ARE FOR CONSTRUCTION, MAINTENANCE (INCLUDING, BUT NOT LIMITED TO, REMOVAL OF TREES AND OTHER OBSTRUCTIONS), READING OF METERS, AND REPAIR OF ANY SHSUD FACILITY LOCATED WITHIN SAID EASEMENT.

THIS PLAT OF PARKSIDE SOUTH UNIT 1 HAS BEEN SUBMITTED AND APPROVED BY SPRINGS HILL SPECIAL UTILITY DISTRICT FOR EASEMENTS.

_____ _____
AUTHORIZED AGENT DATE
SPRINGS HILL SPECIAL UTILITY DISTRICT

GVEC NOTES:

1. GVEC WILL POSSESS A 5-FOOT WIDE EASEMENT TO THE SERVICE METER LOCATION. EASEMENT TO FOLLOW SERVICE LINE AND WILL VARY DEPENDING ON LOCATION OF BUILDING OR STRUCTURE.
2. WHERE UNDERGROUND SERVICES ARE UTILIZED GVEC WILL POSSESS A 5-FOOT-WIDE EASEMENT TO THE SERVICE METER LOCATION. EASEMENT TO FOLLOW SERVICE LINE AND WILL VARY DEPENDING ON LOCATION OF BUILDING OR STRUCTURE.
3. ALL LOTS ADJOINING UTILITY LOT OR PRIVATE, CITY, COUNTY, OR STATE RIGHT-OF-WAY ARE SUBJECT TO A 5'X30' GUY WIRE EASEMENT ALONG SIDE AND REAR LOT LINES.
4. GVEC SHALL HAVE ACCESS TO METER LOCATIONS FROM THE FRONT YARD WITH THE LOCATION NOT BEING WITHIN A FENCED AREA.
5. ANY EASEMENT DESIGNED AS A GVEC 20'X20' UTILITY EASEMENT SHALL REMAIN OPEN FOR ACCESS AT ALL TIMES AND SHALL NOT BE WITHIN A FENCED AREA.
6. ALL UTILITY EASEMENTS AREA FOR CONSTRUCTION, UPGRADE, MAINTENANCE (INCLUDING BUT NOT LIMITED TO REMOVAL OF TREES AND OTHER OBSTRUCTIONS), READING OF METERS, AND REPAIR OF ALL OVERHEAD AND UNDERGROUND UTILITIES AND SHALL REMAIN AT FINAL GRADE.
7. ALL ELECTRIC EASEMENTS, FOR BOTH PRIMARY AND SECONDARY ELECTRIC SERVICE, INCLUDE RIGHTS OF INGRESS AND EGRESS ACROSS THE SUBDIVISION FOR THE PURPOSE INSTALLING, SERVICING, UPGRADING, AND MAINTAINING THE ELECTRICAL FACILITIES AND SHALL REMAIN AT FINAL GRADE.
8. ANY REQUEST TO SUBSEQUENTLY RELOCATE ANY PORTION OF THE ELECTRICAL FACILITIES INSTALLED SHALL BE SUBJECT TO THE COOPERATIVE'S REASONABLE DISCRETION AND THE REQUESTING PARTY SHALL BEAR ALL COSTS ASSOCIATED WITH SUCH RELOCATION.
9. THE COOPERATIVE SHALL ONLY BE REQUIRED TO FILL, GRADE, AND RESTORE GROUND COVER BACK TO ORIGINAL GRADE AS A RESULT OF ANY EXCAVATION BY OR ON BEHALF OF THE COOPERATIVE.

THIS PLAT OF PARKSIDE SOUTH UNIT 1 SUBDIVISION HAS BEEN SUBMITTED TO AND APPROVED BY GUADALUPE VALLEY ELECTRIC COOPERATIVE, INC. FOR EASEMENTS.

_____
AUTHORIZED AGENT DATE
GUADALUPE VALLEY ELECTRIC COOP, INC.

GUADALUPE COUNTY NOTES:

1. ALL PERMITS MUST BE OBTAINED FROM THE COUNTY PRIOR TO COMMENCING ANY WORK WITHIN GUADALUPE COUNTY ROW.
2. NO FURTHER IMPROVEMENTS ARE PROPOSED OR WILL BE CONTEMPLATED WITHOUT ADDITIONAL APPROVAL OF THE GUADALUPE COUNTY ENGINEER.
3. FUTURE IMPROVEMENTS WILL BE CONSIDERED CUMULATIVELY WITH PRIOR AND EXISTING STRUCTURES ON SITE FOR THE PURPOSES OF DRAINAGE IMPACT.
4. SUBSEQUENT SUBDIVISION OF THE PROPERTY INTO SMALLER TRACTS WILL NULLIFY THIS APPROVAL AND WILL REQUIRE SUBMITTAL OF A DRAINAGE STUDY FOR REVIEW IN ADDITION TO APPLICABLE PLATTING REQUIREMENTS. DETENTION OR OTHER MITIGATION MAY BE REQUIRED PER PROPOSED TRACT AND ACCOUNT FOR EXISTING IMPROVEMENTS.
5. CHANGE IN USE OF THE IMPROVEMENTS REQUIRES APPROVAL BY GUADALUPE COUNTY AND DETENTION OR OTHER DRAINAGE MITIGATION MAY BE REQUIRED AT THAT TIME.
6. TRANSFER OF PROPERTY OWNERSHIP DOES NOT RELEASE SUBSEQUENT OWNER(S) FROM THE OBLIGATIONS IMPOSED HEREIN.
7. THE MAINTENANCE OF ALL PUBLIC STREETS, OPEN SPACE, GREEN BELTS, PARKS, TREE SAVE AREAS, DRAINAGE EASEMENTS, AND EASEMENTS OF ANY OTHER NATURE WITHIN THE SUBDIVISION SHALL BE THE RESPONSIBILITY OF THE GUADALUPE COUNTY MUD 11, OR ITS SUCCESSORS OR ASSIGNS AND NOT THE RESPONSIBILITY OF THE CITY OF NEW BRAUNFELS OR GUADALUPE COUNTY.
8. ROW WIDTH IS 70'. FOR PAVEMENT DIMENSION DATA AND DESIGN PLEASE REFER TO THE ENGINEERING CONSTRUCTION PLANS FOR PARKSIDE SOUTH UNIT 1.
9. TOTAL LENGTH OF PROPOSED STREETS FOR THIS UNIT IS 5,513'. TOTAL SQUARE FOOTAGE OF PROPOSED ROW FOR THIS UNIT IS 377,127.25 SQ. FT.

STATE OF TEXAS
COUNTY OF GUADALUPE

THE PLAT OF PARKSIDE SOUTH UNIT 1 SUBDIVISION HAS BEEN SUBMITTED TO AND APPROVED BY THE COMMISSIONERS COURT OF GUADALUPE COUNTY, TEXAS, WHICH COURT ACKNOWLEDGES THAT THE PLAT CONFORMS TO THE SUBDIVISION REGULATIONS OF SAID COUNTY AND DOES HEREBY APPROVE SUCH PLAT ON THIS _____ DAY OF _____ _____, 20_____.

_____ _____
KYLE KUTSCHER DATE
COUNTY JUDGE

_____ _____
TERESA KIEL DATE
COUNTY CLERK

_____ _____
JACQUELINE OTT DATE
COMMISSIONER PCT 1

_____ _____
DREW ENGELKE DATE
COMMISSIONER PCT 2

_____ _____
JIM WOLVERTON DATE
COMMISSIONER PCT 3

_____ _____
STEPHEN GERMANN DATE
COMMISSIONER PCT 4

1 OF 3

FOR REFERENCE ONLY

PLAT STATUS: THIS PLAT IS RECORDED.

290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 10153600
HMT ENGINEERING & SURVEYING

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDEN
93047
LICENSED
PROFESSIONAL ENGINEER
04/13/2026

PLAT (1 OF 3)

PARKSIDE SOUTH UNIT 1

NO.	REVISION DESCRIPTION	DATE

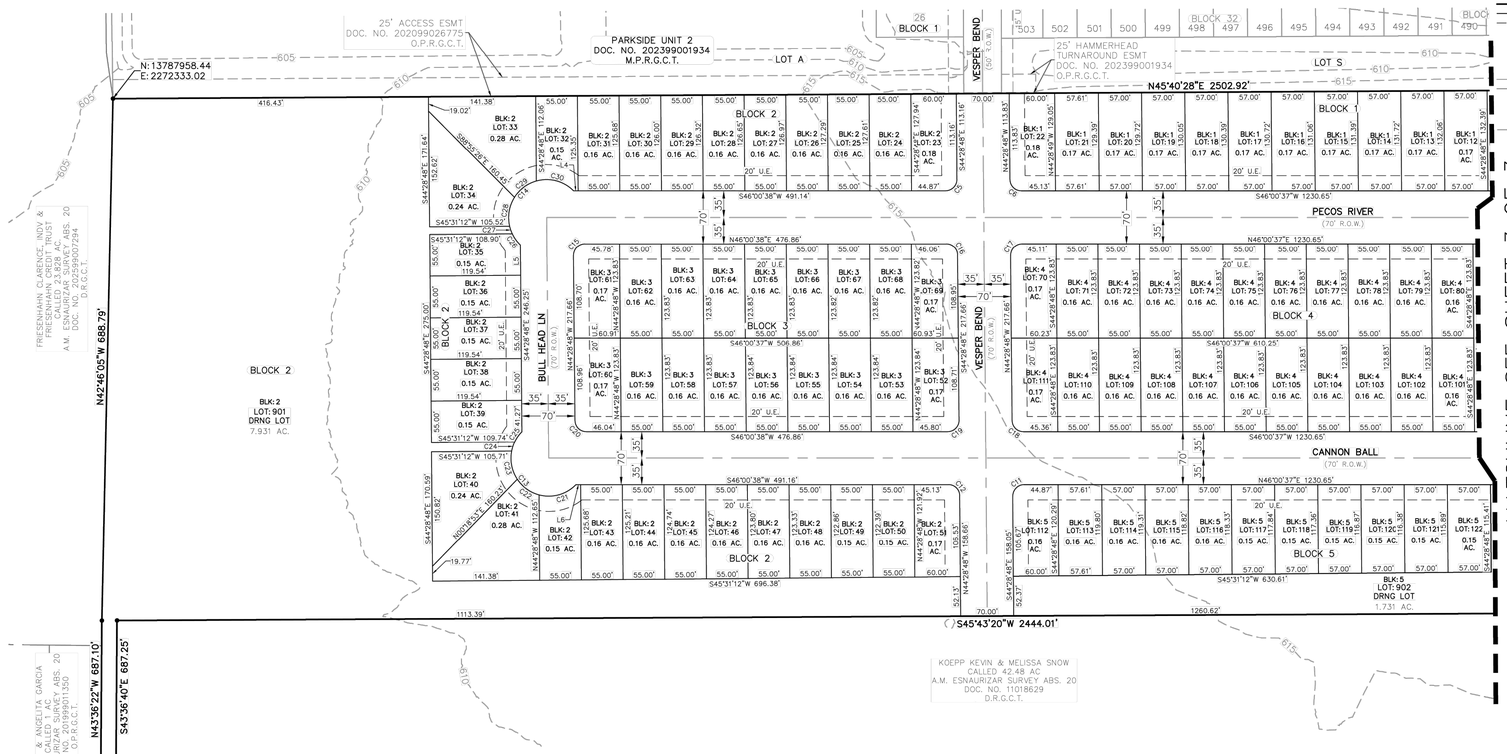
DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C0.2

Drawing Name: N:_Projects\337 - Lennar\130 - Parkside South Unit 1\02b\337.130_COVER.dwg User: jonm Apr 16, 2026 - 5:43pm
Drawing Name: T:\337 - Lennar Homes\130-PARKSIDE SOUTH UNIT 1\Plat\337.130 PARKSIDE SOUTH UNIT 1_02-09-26.dwg User: rebsd Mar 13, 2026 - 8:35am

FINAL PLAT ESTABLISHING
PARKSIDE SOUTH UNIT 1 SUBDIVISION

BEING 40.321 ACRES OF LAND LOCATED IN THE A.M. ESNAURIZAR SURVEY, ABSTRACT NO. 20, GUADALUPE COUNTY, TEXAS BEING OUT OF A CALLED 70.657 ACRE TRACT, "TRACT I", LOCATED IN THE A.M. ESNAURIZAR SURVEY, AND ALL OF A CALLED 0.315 ACRE TRACT, "TRACT II", LOCATED IN THE A.M. ESNAURIZAR SURVEY, RECORDED IN DOCUMENT NO. 202599001437, OFFICIAL PUBLIC RECORDS, GUADALUPE COUNTY, TEXAS.



LEGEND:

- ● = FND 1/2" IRON PIN W/ PLASTIC CAP STAMPED "HMT" (UNLESS NOTED OTHERWISE)
- ○ = SET 1/2" IRON PIN W/ PLASTIC CAP STAMPED "HMT"
- U.E. = UTILITY EASEMENT
- DRNG = DRAINAGE
- R.O.W. = RIGHT-OF-WAY
- M.P.R.G.C.T. = MAP AND PLAT RECORDS, GUADALUPE COUNTY, TEXAS
- O.P.R.G.C.T. = OFFICIAL PUBLIC RECORDS, GUADALUPE COUNTY, TEXAS
- = PLAT BOUNDARY
- = LOT LINE
- = EASEMENT LINE
- AC = ACRE
- DOC = DOCUMENT
- NO = NUMBER
- VOL = VOLUME
- PG = PAGE
- = CENTER LINE
- = AJOINING PROPERTIES
- D.R.G.C.T. = DEED RECORD GUADALUPE COUNTY, TEXAS
- ABS = ABSTRACT
- = EXST CONTOUR

PREPARATION DATE 02/26/26
REVISED DATE 03/05/26

HMT ENGINEERING & SURVEYING
290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 10153600

2 OF 3

FOR REFERENCE ONLY

PLAT STATUS: THIS PLAT IS RECORDED.

HMT ENGINEERING & SURVEYING
290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 10153600

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDE
93047
LICENSED
PROFESSIONAL ENGINEER
04/13/2026

PLAT (2 OF 3)

PARKSIDE SOUTH UNIT 1

NO.	REVISION DESCRIPTION	DATE

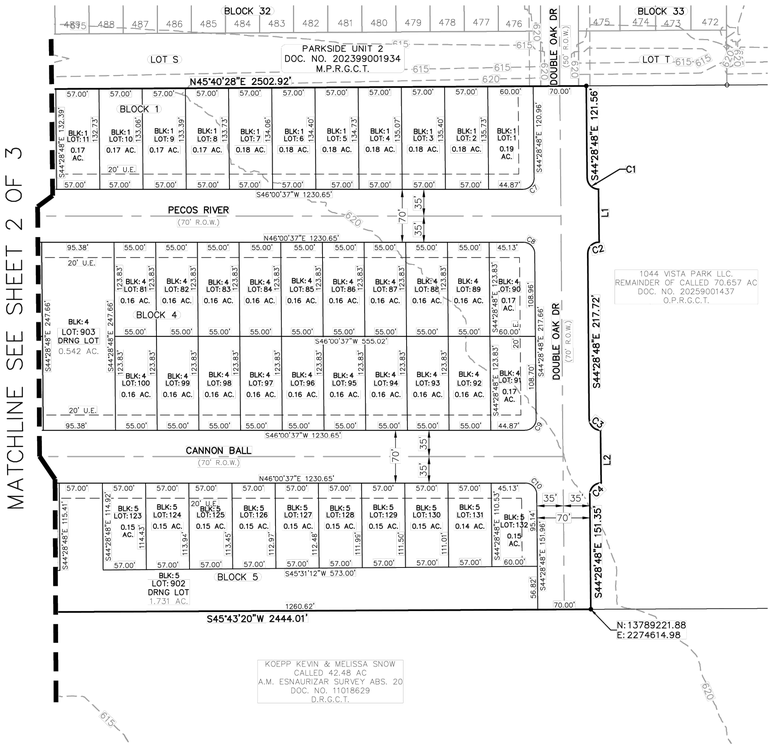
DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C0.3

Drawing Name: N:_Projects\337 - Lennar\130 - Parkside South Unit 1\COs\337.130_COVER.dwg User: jonm Apr 16, 2026 - 5:43pm
Drawing Name: T:\337 - Lennar Homes\130-PARKSIDE SOUTH UNIT 1\Plat\337.130 PARKSIDE SOUTH UNIT 1_02-09-26.dwg User: reloyd Mar 13, 2026 - 8:34am

FINAL PLAT ESTABLISHING
PARKSIDE SOUTH UNIT 1 SUBDIVISION

BEING 40.321 ACRES OF LAND LOCATED IN THE A.M. ESNAURIZAR SURVEY, ABSTRACT NO. 20, GUADALUPE COUNTY, TEXAS BEING OUT OF A CALLED 70.657 ACRE TRACT, "TRACT I", LOCATED IN THE A.M. ESNAURIZAR SURVEY, AND ALL OF A CALLED 0.315 ACRE TRACT, "TRACT II", LOCATED IN THE A.M. ESNAURIZAR SURVEY, RECORDED IN DOCUMENT NO. 202599001437, OFFICIAL PUBLIC RECORDS, GUADALUPE COUNTY, TEXAS.



MATCHLINE SEE SHEET 2 OF 3

CURVE TABLE				
CURVE	LENGTH	RADIUS	CHORD LENGTH	CHORD BEARING
C1	23.43'	15.00'	21.12'	S89°14'02"E
C2	23.69'	15.00'	21.30'	S00°45'58"W
C3	23.43'	15.00'	21.12'	S89°14'06"E
C4	23.69'	15.00'	21.30'	S00°45'54"W
C5	23.69'	15.00'	21.30'	S00°45'57"W
C6	23.43'	15.00'	21.12'	N89°14'03"W
C7	23.69'	15.00'	21.30'	N00°45'54"E
C8	23.43'	15.00'	21.12'	N89°14'06"W
C9	23.69'	15.00'	21.30'	N00°45'54"E
C10	23.43'	15.00'	21.12'	N89°14'06"W
C11	23.69'	15.00'	21.30'	N00°45'54"E
C12	23.43'	15.00'	21.12'	N89°14'06"W
C13	157.64'	50.00'	99.99'	S89°34'33"E
C14	158.52'	50.00'	100.00'	S00°25'13"W
C15	23.69'	15.00'	21.30'	S00°45'54"W
C16	23.43'	15.00'	21.12'	S89°14'06"E
C17	23.69'	15.00'	21.30'	N00°45'54"E
C18	23.43'	15.00'	21.12'	N89°14'06"W
C19	23.69'	15.00'	21.30'	S00°45'54"W
C20	23.43'	15.00'	21.12'	N89°14'06"W
C21	53.17'	50.00'	50.70'	N30°33'51"E
C22	36.06'	50.00'	35.28'	N81°41'32"E
C23	38.77'	50.00'	37.81'	S55°25'57"E
C24	12.69'	50.00'	12.66'	S25°56'45"E
C25	16.95'	50.00'	16.87'	S08°57'40"E
C26	18.51'	50.00'	18.41'	S79°47'32"E
C27	10.57'	50.00'	10.55'	S63°07'43"E
C28	39.71'	50.00'	38.68'	S34°19'02"E
C29	36.72'	50.00'	35.90'	S09°28'30"W
C30	53.00'	50.00'	50.55'	S60°52'33"W

0 50 100 200
HORIZONTAL SCALE: 1:100

LEGEND:
- ● = FND 1/2" IRON PIN W/ PLASTIC CAP STAMPED "HMT" (UNLESS NOTED OTHERWISE)
- o = SET 1/2" IRON PIN W/ PLASTIC CAP STAMPED "HMT"
- U.E. = UTILITY EASEMENT
- DRNG = DRAINAGE
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- M.P.R.G.C.T. = MAP AND PLAT RECORDS, GUADALUPE COUNTY, TEXAS
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- D.R.G.C.T. = DEED RECORD GUADALUPE COUNTY, TEXAS
- ABS = ABSTRACT
- = EXST CONTOUR

LINE TABLE		
LINE #	LENGTH	DIRECTION
L1	70.01'	S44°41'28"E
L2	70.01'	S44°41'25"E
L3	20.06'	S46°10'16"W
L4	6.25'	S46°00'38"W
L5	39.98'	N44°28'48"W
L6	6.02'	S46°00'38"W

PREPARATION DATE 02/26/26
REVISED DATE 03/05/26

HMT ENGINEERING & SURVEYING
290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 10153600

3 OF 3

FOR REFERENCE ONLY

PLAT STATUS: THIS PLAT IS RECORDED.

HMT ENGINEERING & SURVEYING
290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 10153600

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDE
93047
LICENSED
PROFESSIONAL ENGINEER
Christopher P. Van Heerde, P.E.
04/13/2026

PLAT (3 OF 3)

PARKSIDE SOUTH UNIT 1

NO.	REVISION DESCRIPTION	DATE

DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C0.4

Drawing Name: N:_Projects\337 - Lennar\130 - Parkside South Unit 1\02ds\337.130_COVER.dwg User: jonm Apr 16, 2026 - 5:43pm
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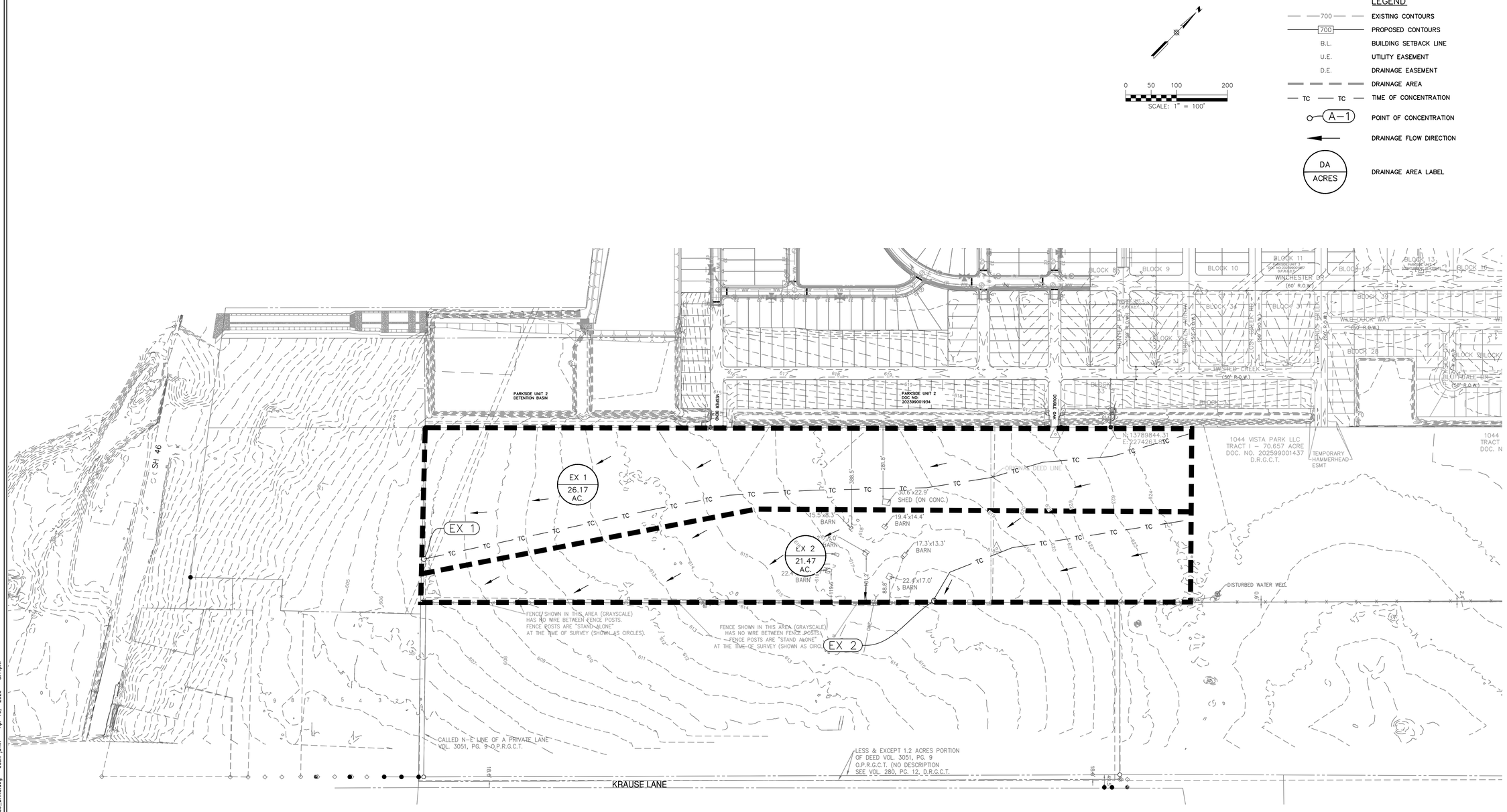


Table 1 - Existing Conditions Hydrology Calculations - City of New Braunfels SCS Method

Point of Concentration	Description	Drainage Area	Area	T_c	Curve Number	Q_2 (cfs)	Q_{10} (cfs)	Q_{25} (cfs)	Q_{100} (cfs)
EX 1	SCS Method Calc To Northeast of Property	EX 1	26.17	55.3	79.9	19.51	42.68	61.00	96.39
EX 2	SCS Method Calc To Northeast of Property	EX 2	21.47	34.1	79.8	21.05	45.84	65.39	103.09

290 S. CASTELL AVE., STE. 100
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HMT ENGINEERING & SURVEYING

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDE
93047
LICENSED
PROFESSIONAL ENGINEER
04/13/2026

EXISTING DRAINAGE MAP

PARKSIDE SOUTH
UNIT 1

NO.	REVISION DESCRIPTION	DATE

DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C1.1

Drawing Name: N:_Projects\337 – Lennar\130 – Parkside South Unit 1\CDs\337.130_DRNG.dwg User: jonm Apr 16, 2026 – 5:44pm

Table 2 - Ultimate Proposed Conditions Hydrology Calculations - City of New Braunfels SCS Method									
Point of Concentration	**Description**	**Drainage Area**	**Area**	**T_c**	**Curve Number**	**Q_2 (cfs)**	**Q_{10} (cfs)**	**Q_{25} (cfs)**	**Q_{100} (cfs)**
PR 1	SCS Method Calc To Northeast of Property	PR 1	47.18	21.0	90.8	85.83	156.89	210.65	313.33

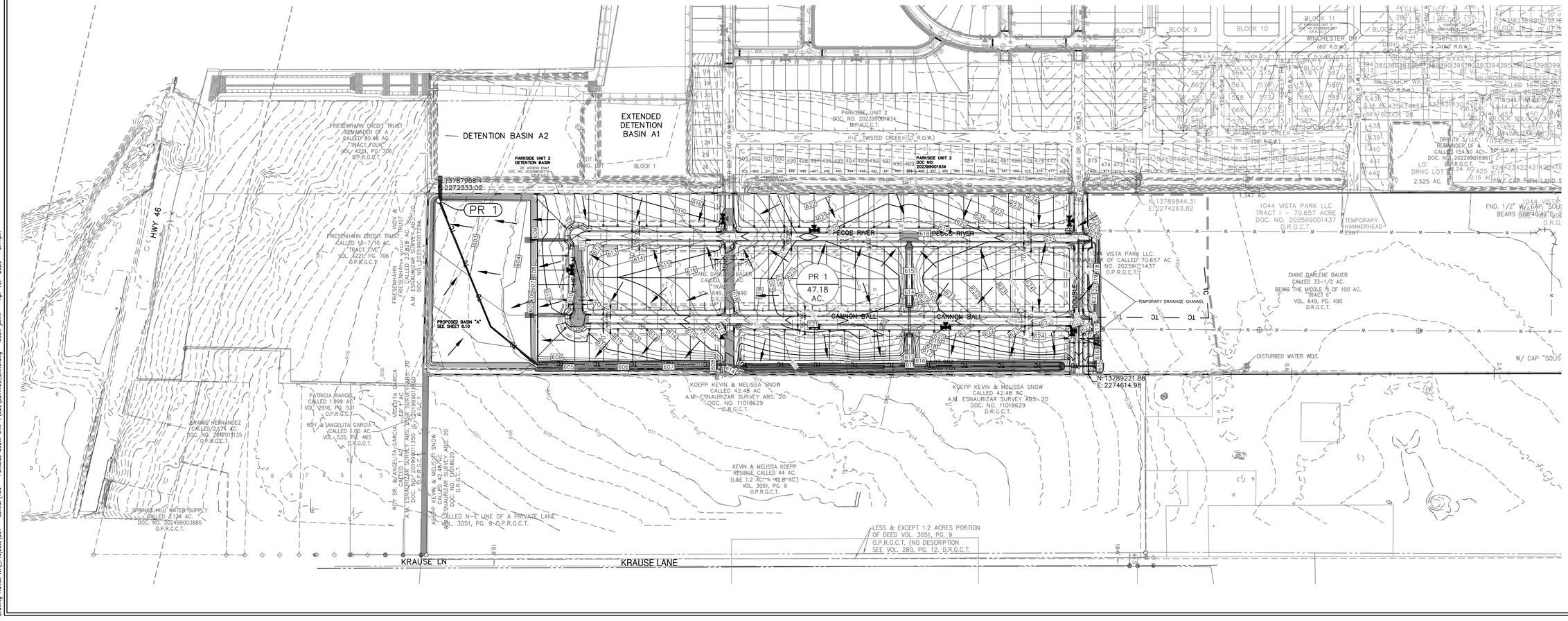
Table 3 - Onsite Existing to Proposed Basin Comparison					
Point of Concentration	Drainage Area	Q_2 (cfs)	Q_{10} (cfs)	Q_{25} (cfs)	Q_{100} (cfs)
EX 1	EX 1	19.51	42.68	61.00	96.39
PR 1 After Detention	PR 1	3.18	14.01	24.53	44.31
Proposed is Less Than or Equal to Existing		YES	YES	YES	YES

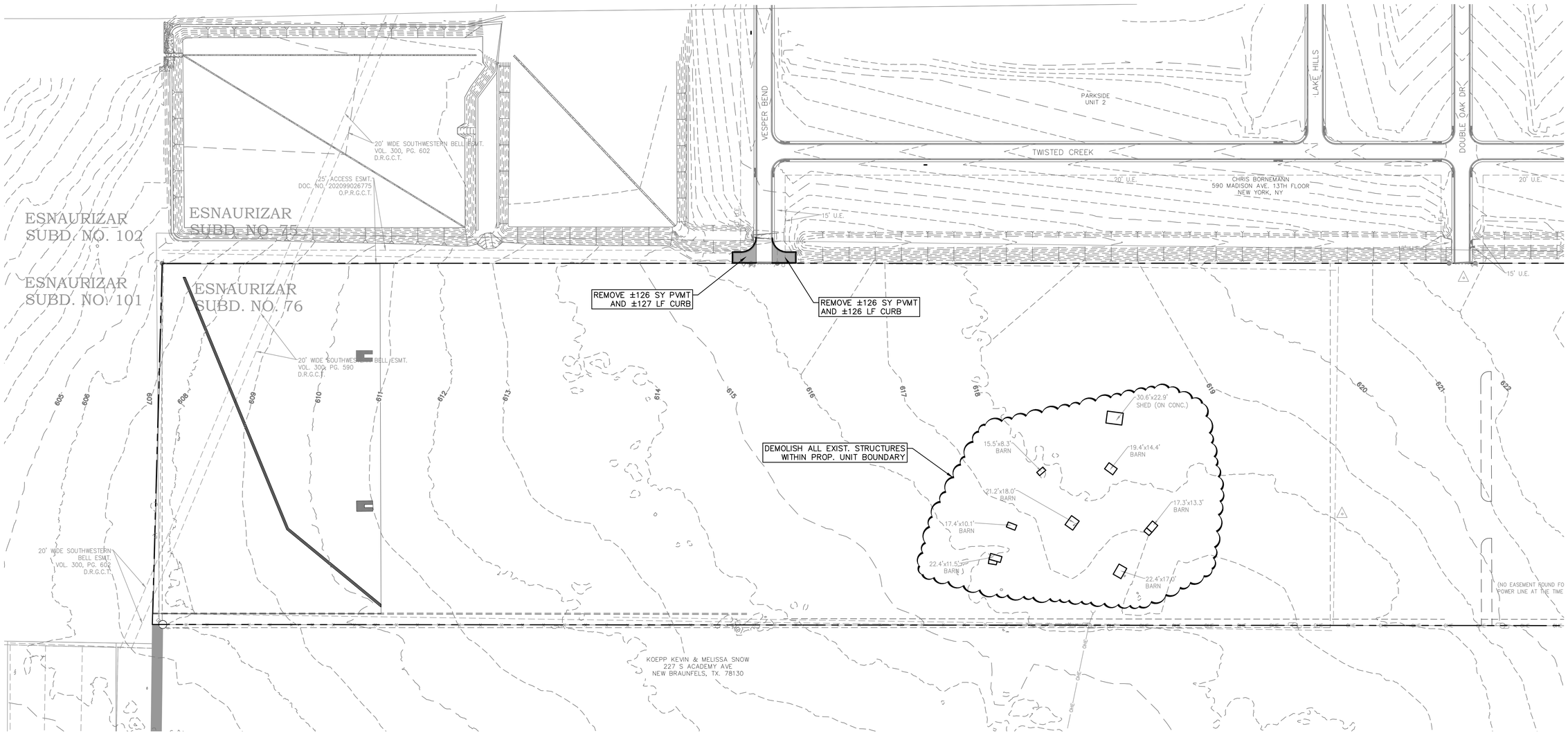
Table 4 - Basin A Summary				
	Q_2 (cfs)	Q_{10} (cfs)	Q_{25} (cfs)	Q_{100} (cfs)
Discharge (cfs)	3.18	14.01	24.53	44.31
Time to Drain (hrs)	13.27	22.73	25.10	28.43
Volume (cu-ft)	524,365	985,558	1,343,893	2,039,420
Water Surface Elevation (ft)	605.18	606.07	606.72	608

0 50 100 200
SCALE: 1" = 100'

LEGEND

- 700 EXISTING CONTOURS
- 700 PROPOSED CONTOURS
- B.L. BUILDING SETBACK LINE
- U.E. UTILITY EASEMENT
- D.E. DRAINAGE EASEMENT
- DRAINAGE AREA
- TC TC TIME OF CONCENTRATION
- A–1 POINT OF CONCENTRATION
- DRAINAGE FLOW DIRECTION
- DA / ACRES DRAINAGE AREA LABEL


DETENTION BASIN A2
EXTENDED DETENTION BASIN A1
PR 1
47.18 AC.
PROPOSED BASIN "A" SEE SHEET 6.10
PARKSIDE UNIT 2 DETENTION BASIN
PARKSIDE UNIT 2 DOC. NO. 202399001934 O.P.R.G.C.T.
TWISTED CREEK (152' R.O.W.)
COMANCHE TRACE (60' R.O.W.)
WINCHESTER DR (60' R.O.W.)
HINTON DR (50' R.O.W.)
DOUBLE CROSS DR (50' R.O.W.)
CANNON BALL
CODE RIVER
PECOS RIVER
TEMPORARY DRAINAGE CHANNEL
TEMPORARY HAMMERHEAD EASEMENT
DISTURBED WATER WELL
KRAUSE LN
KRAUSE LANE
HWY 46
FRIESENHAHN CREDIT TRUST REMAINDER OF A CALLED 80.48 AC. TRACT FOUR VOL. 4221, PG. 706 O.P.R.G.C.T.
FRIESENHAHN CREDIT TRUST CALLED 18–7/10 AC. TRACT FIVE VOL. 4221, PG. 706 O.P.R.G.C.T.
FRIESENHAHN CREDIT TRUST CALLED 2.238 AC. A.M. ESNAURIZAR SURVEY A-20 DOC. NO. 202299072844 O.P.R.G.C.T.
DIANE DARLENE BAUER CALLED 33–1/2 AC. BEING THE MIDDLE ⅓ OF 100 AC. "TRACT II" VOL. 649, PG. 490 D.R.G.C.T.
1044 VISTA PARK LLC TRACT I – 70.657 ACRE DOC. NO. 202599001437 D.R.G.C.T.
1044 VISTA PARK LLC REMAINDER OF CALLED 70.657 AC DOC. NO. 202599001437 O.P.R.G.C.T.
DRNG LOT 24 0.425 AC. 0.16 AC.
DRNG LOT 23 2.525 AC.
DRNG LOT 22 1.347 AC.
DRNG LOT 25 0.48 AC.
DRNG LOT 26 0.13 AC.
DRNG LOT 27 0.14 AC.
DRNG LOT 28 0.11 AC.
DRNG LOT 29 0.14 AC.
DRNG LOT 30 0.14 AC.
DRNG LOT 31 0.14 AC.
DRNG LOT 32 0.14 AC.
DRNG LOT 33 0.14 AC.
DRNG LOT 34 0.14 AC.
DRNG LOT 35 0.14 AC.
DRNG LOT 36 0.14 AC.
DRNG LOT 37 0.14 AC.
DRNG LOT 38 0.14 AC.
DRNG LOT 39 0.14 AC.
DRNG LOT 40 0.14 AC.
DRNG LOT 41 0.14 AC.
DRNG LOT 42 0.14 AC.
DRNG LOT 43 0.14 AC.
DRNG LOT 44 0.14 AC.
DRNG LOT 45 0.14 AC.
DRNG LOT 46 0.14 AC.
DRNG LOT 47 0.14 AC.
DRNG LOT 48 0.14 AC.
DRNG LOT 49 0.14 AC.
DRNG LOT 50 0.14 AC.
DRNG LOT 51 0.14 AC.
DRNG LOT 52 0.14 AC.
DRNG LOT 53 0.14 AC.
DRNG LOT 54 0.14 AC.
DRNG LOT 55 0.14 AC.
DRNG LOT 56 0.14 AC.
DRNG LOT 57 0.14 AC.
DRNG LOT 58 0.14 AC.
DRNG LOT 59 0.14 AC.
DRNG LOT 60 0.48 AC.
DRNG LOT 61 0.14 AC.
DRNG LOT 62 0.14 AC.
DRNG LOT 63 0.14 AC.
DRNG LOT 64 0.14 AC.
DRNG LOT 65 0.14 AC.
DRNG LOT 66 0.14 AC.
DRNG LOT 67 0.14 AC.
DRNG LOT 68 0.14 AC.
DRNG LOT



REFER TO COVER SHEET FOR BENCHMARK INFORMATION

THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR WILL AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE INCURRED BY THEIR FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES, STRUCTURES OR FACILITIES. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES 24--HOURS PRIOR TO COMMENCING CONSTRUCTION.

290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 10153600
HMT ENGINEERING & SURVEYING

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDE
93047
LICENSED PROFESSIONAL ENGINEER
04/13/2026

DEMOLITION PLAN

PARKSIDE SOUTH UNIT 1

NO.	REVISION DESCRIPTION	DATE

DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C2.0

Drawing Name: K:_Projects\337 - Lennar\130 - Parkside South Unit 1\Cds\337.130_DEMO.dwg User: jonm Apr 16, 2026 - 5:44pm

NOTE:

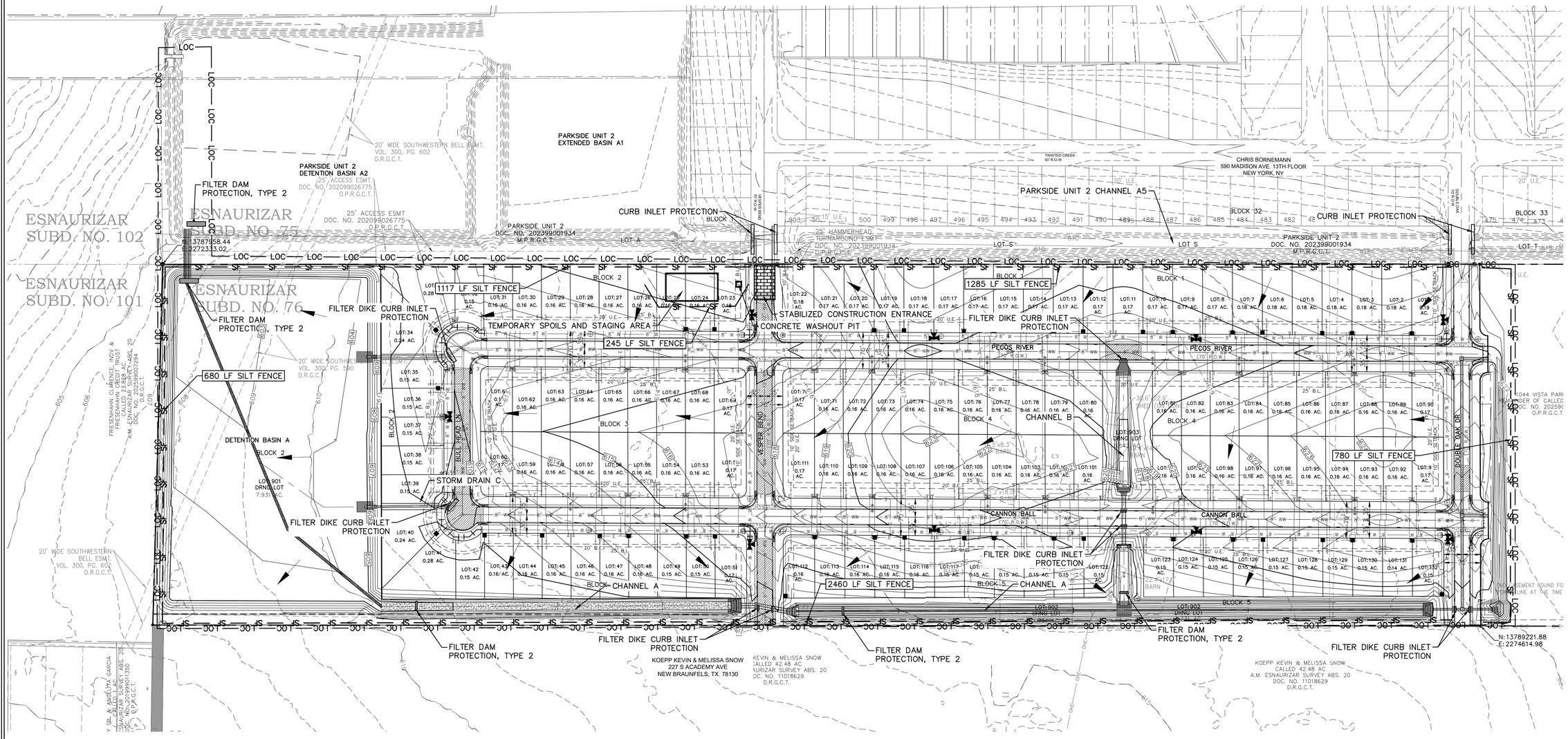
PER TPDES REQUIREMENTS, DISTURBED AREAS ON WHICH CONSTRUCTION ACTIVITIES HAVE CEASED (TEMPORARILY OR PERMANENT) SHALL BE STABILIZED WITHIN 14 DAYS UNLESS ACTIVITY RESUMES WITHIN 21 DAYS. SEEDING DOES NOT CONSTITUTE AS STABILIZATION.

SILT FENCE AT PROPERTY LINE MAY BE SHOWN GRAPHICALLY OFFSET FROM PROPERTY LINE TO AVOID OVERLAP OF LINEWORK. CONTRACTOR SHALL NOT INSTALL EROSION CONTROL MEASURES BEYOND LIMITS OF CONSTRUCTION REGARDLESS OF GRAPHIC REPRESENTATION.

0 50 100 200
SCALE: 1" = 100'

LEGEND

- 700 EXISTING CONTOURS
- 700 PROPOSED CONTOURS
- B.L. BUILDING SETBACK LINE
- U.E. UTILITY EASEMENT
- D.E. DRAINAGE EASEMENT
- DRAINAGE FLOW DIRECTION
- SF SILT FENCE
- LOC LIMIT OF CONSTRUCTION
- STABILIZED CONSTRUCTION ENTRANCE
- FILTER DIKE CURB INLET PROTECTION
- FILTER DAM PROTECTION, TYPE 2



REFER TO COVER SHEET FOR BENCHMARK INFORMATION

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290 S. CASTELL AVE., STE. 100
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TBPELS FIRM F-10961
TBPELS FIRM 10153600
HMT ENGINEERING & SURVEYING

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDE
93047
LICENSED PROFESSIONAL ENGINEER
04/13/2026

EROSION CONTROL PLAN

PARKSIDE SOUTH UNIT 1

NO.	REVISION DESCRIPTION	DATE

DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C3.0

Drawing Name: N:_Projects\337 - Lennar\130 - Parkside South Unit 1\CDs\337.130_EROS.dwg User: jonm Apr 16, 2026 - 5:44pm

CONCRETE WASHOUT AREAS

THE PURPOSE OF CONCRETE WASHOUT AREAS IS TO PREVENT OR REDUCE THE DISCHARGE OF POLLUTANTS TO STORMWATER FROM CONCRETE WASTE BY CONDUCTING WASHOUT OFFSITE, PERFORMING ONSITE WASHOUT IN A DESIGNATED AREA, AND TRAINING EMPLOYEES AND SUBCONTRACTORS.

THE FOLLOWING STEPS WILL HELP REDUCE STORMWATER POLLUTION FROM CONCRETE WASTES:

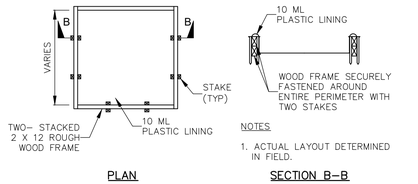
- INCORPORATE REQUIREMENTS FOR CONCRETE WASTE MANAGEMENT INTO MATERIAL SUPPLIER AND SUBCONTRACTOR AGREEMENTS.
- AVOID MIXING EXCESS AMOUNTS OF FRESH CONCRETE.
- PERFORM WASHOUT OF CONCRETE TRUCKS IN DESIGNATED AREAS ONLY.
- DO NOT WASH OUT CONCRETE TRUCKS INTO STORM DRAINS, OPEN DITCHES, STREETS, OR STREAMS.
- DO NOT ALLOW EXCESS CONCRETE TO BE DUMPED ONSITE, EXCEPT IN DESIGNATED AREAS.

FOR ONSITE WASHOUT:

- LOCATE WASHOUT AREA AT LEAST 50 FEET FROM SENSITIVE FEATURES, STORM DRAINS, OPEN DITCHES, OR WATER BODIES. DO NOT ALLOW RUNOFF FROM THIS AREA BY CONSTRUCTING A TEMPORARY PIT OR BERMED AREA LARGE ENOUGH FOR LIQUID AND SOLID WASTE.
- WASH OUT WASTES INTO THE TEMPORARY PIT WHERE THE CONCRETE CAN SET, BE BROKEN UP, AND THEN DISPOSED PROPERLY.

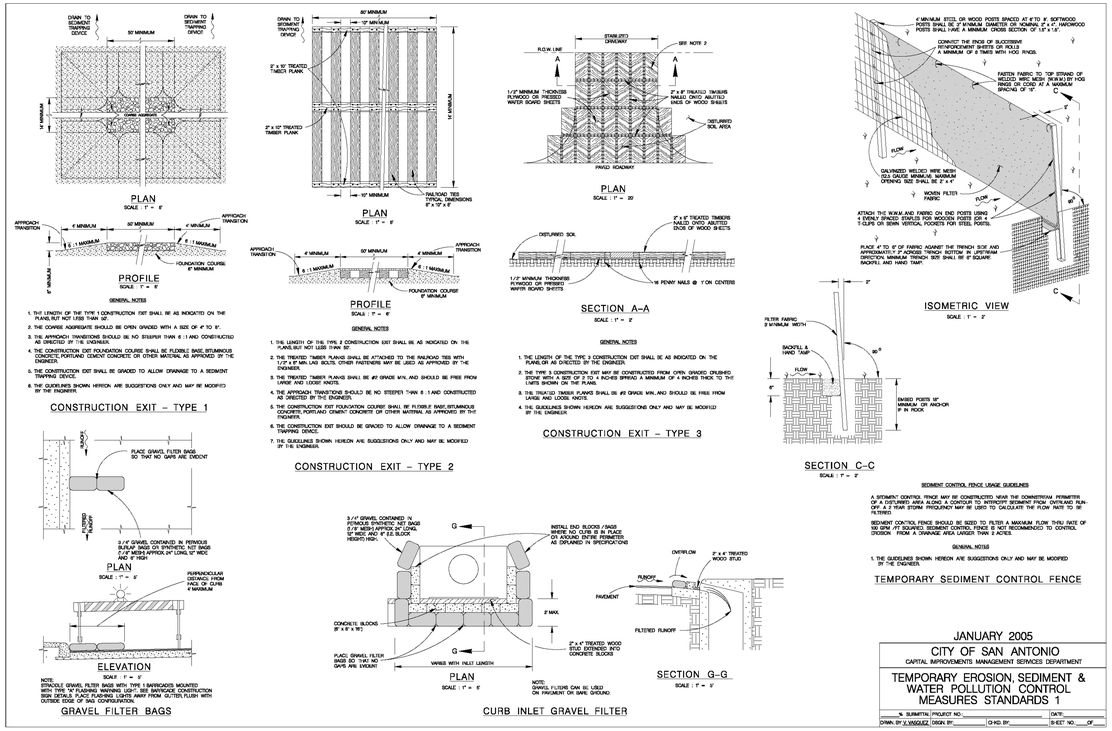
BELOW GRADE CONCRETE WASHOUT FACILITIES ARE TYPICAL. THESE CONSIST OF A LINED EXCAVATION SUFFICIENTLY LARGE TO HOLD EXPECTED VOLUME OF WASHOUT MATERIAL. ABOVE GRADE FACILITIES ARE USED IF EXCAVATION IS NOT PRACTICAL. TEMPORARY CONCRETE WASHOUT FACILITY (TYPE ABOVE GRADE) SHOULD BE CONSTRUCTED AS SHOWN ON THE DETAILS AT THE END OF THIS SECTION, WITH SUFFICIENT QUANTITY AND VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS. PLASTIC LINING MATERIAL SHOULD BE A MINIMUM OF 10 MIL IN POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.

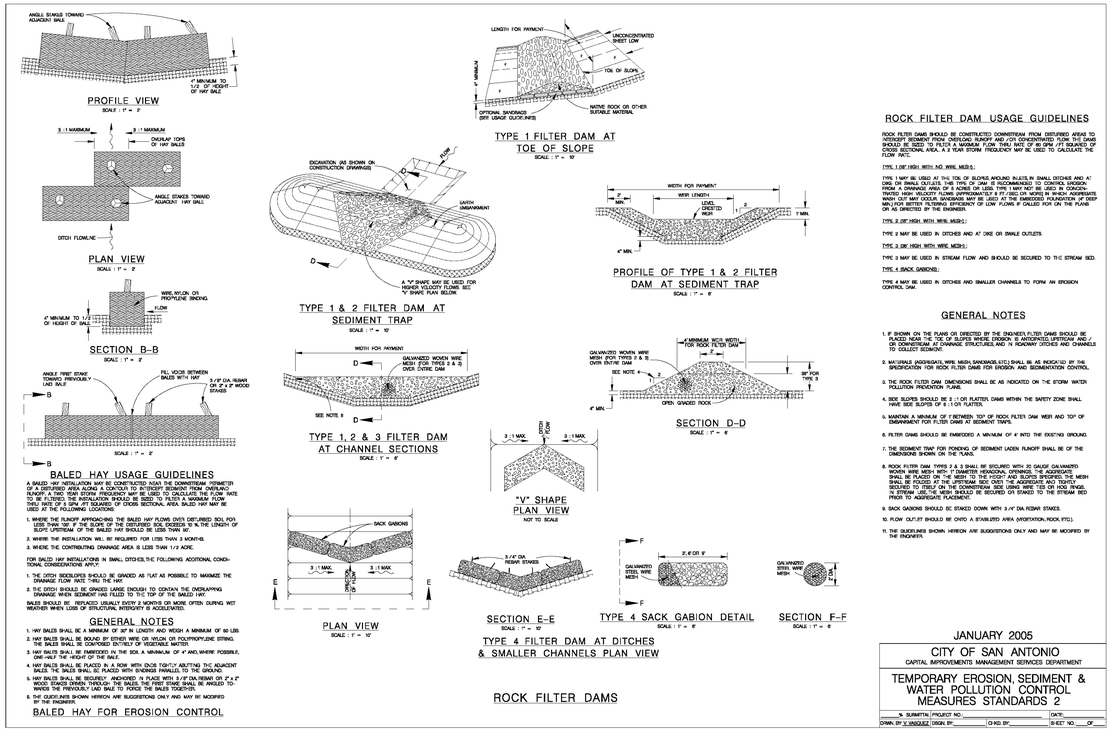
WHEN TEMPORARY CONCRETE WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR THE WORK, THE HARDENED CONCRETE SHOULD BE REMOVED AND DISPOSED OF. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED OF HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE BACKFILLED AND REPAIRED.

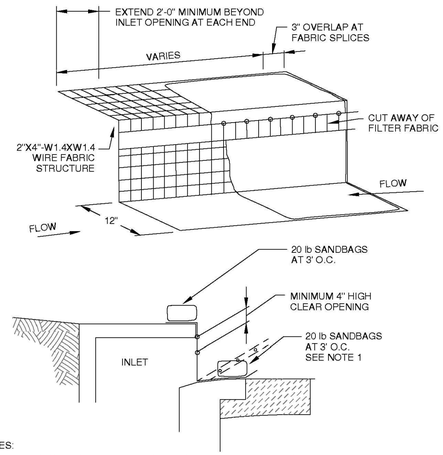


CONCRETE WASHOUT PIT DETAIL

TYPE "ABOVE GRADE"
NOT TO SCALE







NBU
NEW BRAUNFELS UTILITIES
WATER SYSTEMS ENGINEERING

DRAWN BY: H.Shadrock
APPROVED BY:

STANDARD DRAWING:

FILTER DIKE CURB INLET PROTECTION

UPDATED	SCALE	SHEET	DRAWING NO.
4-29-03	N.T.S.	1 OF 1	505

NOTE:

CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DISTURBED AREAS ON WHICH CONSTRUCTION ACTIVITIES HAVE CEASED (TEMPORARILY OR PERMANENT) AND SHALL BE STABILIZED WITHIN 14 DAYS UNLESS ACTIVITY RESUMES IN 21 DAYS, PER TPDES REQUIREMENTS.

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LICENSED
PROFESSIONAL ENGINEER
04/13/2026

EROSION CONTROL DETAILS

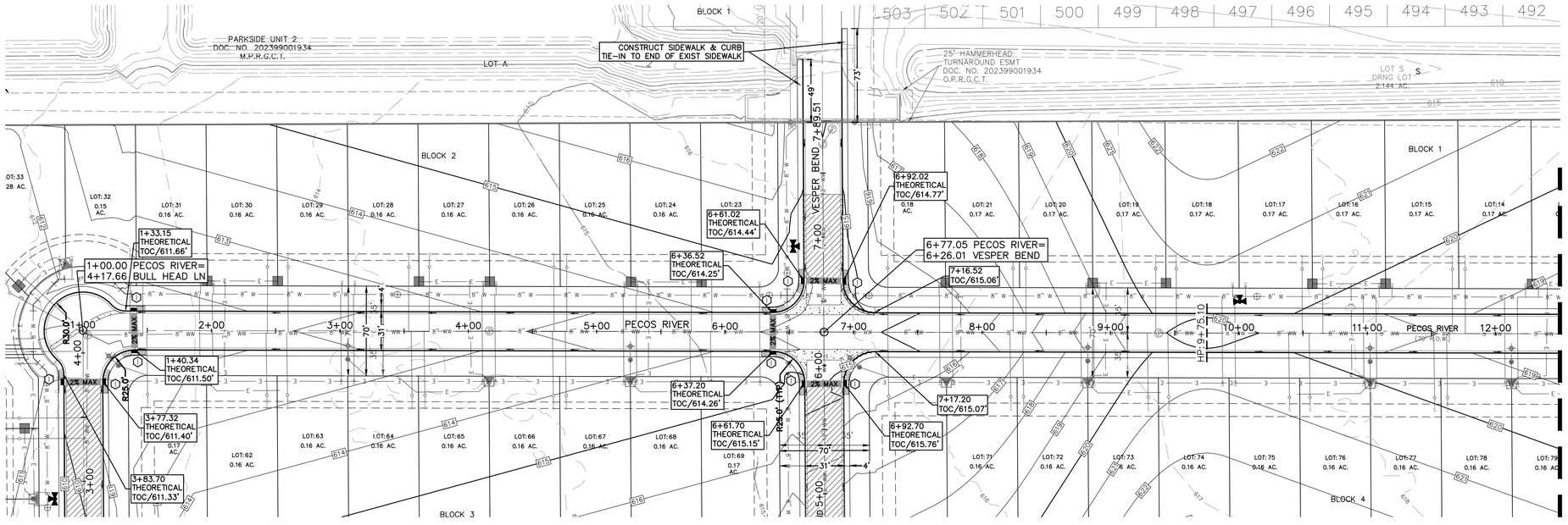
PARKSIDE SOUTH
UNIT 1

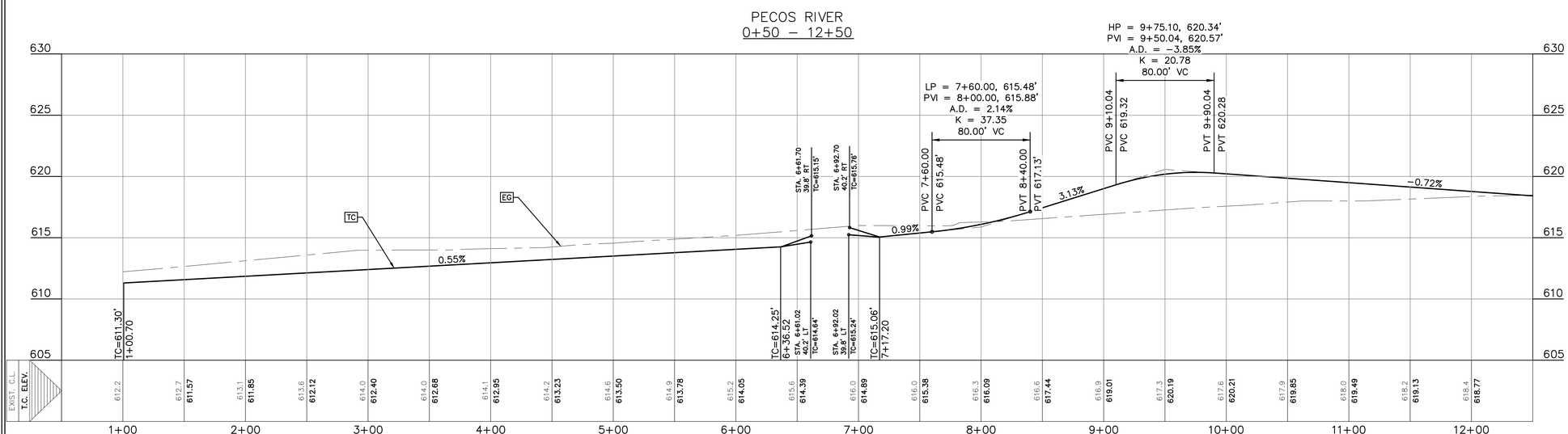
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REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C3.1

Drawing Name: N:_Projects\337 – Lennar\130 – Parkside South Unit 1\Cbr\337.130_EROS.dwg User: jonm Apr 16, 2026 – 5:44pm





0 25 50 100
SCALE: 1" = 50' HORIZ.
SCALE: 1" = 5' VERT.

LEGEND

- 700 — EXISTING CONTOURS
- 700 — PROPOSED CONTOURS
- B.L. — BUILDING SETBACK LINE
- U.E. — UTILITY EASEMENT
- D.E. — DRAINAGE EASEMENT
- A.D.A. RAMP
- FLOW ARROW
- WASHOUT CROWN AREAS
- SPILL CURB
- EXISTING GROUND CENTER (EG CTR)
- PROPOSED TOP OF CURB (PR TC)
- 2.0% MAX — ACCESSIBLE CROSSING AREA CONTRACTOR TO ENSURE MAX 2% CROSS SLOPE IN THESE AREAS
- SIDEWALK RAMP TYPE TO BE CONSTRUCTED AT TIME OF STREET CONSTRUCTION (SEE DETAIL SHEET C4.12)
- SIDEWALK TO BE CONSTRUCTED BY SITE DEVELOPMENT CONTRACTOR

NOTES

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2. IN WASHOUT CROWN AREAS, THE CURB ON THE HIGH SIDE OF THE STREET SHOULD BE SPILL CURB AS DESIGNATED ON THE PLANS.
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PROFESSIONAL ENGINEER
04/13/2026

PECOS RIVER PLAN & PROFILE (1 OF 2)

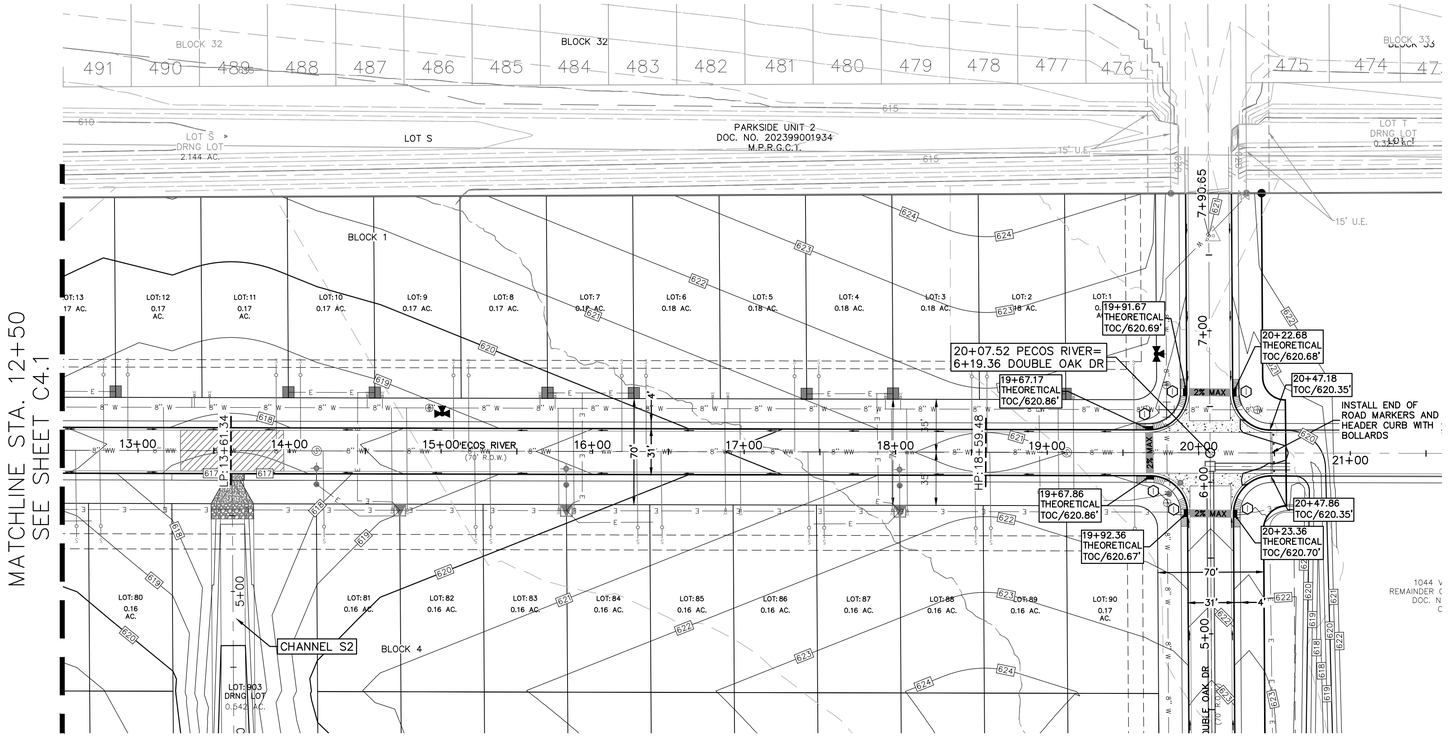
PARKSIDE SOUTH
UNIT 1

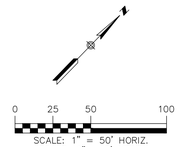
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SHEET
C4.1

Drawing Name: N:_Projects\337 - Lennar\130 - Parkside South Unit 1\Cdx\337.130_STREET P&P.dwg User: jonm Apr 16, 2026 - 5:45pm



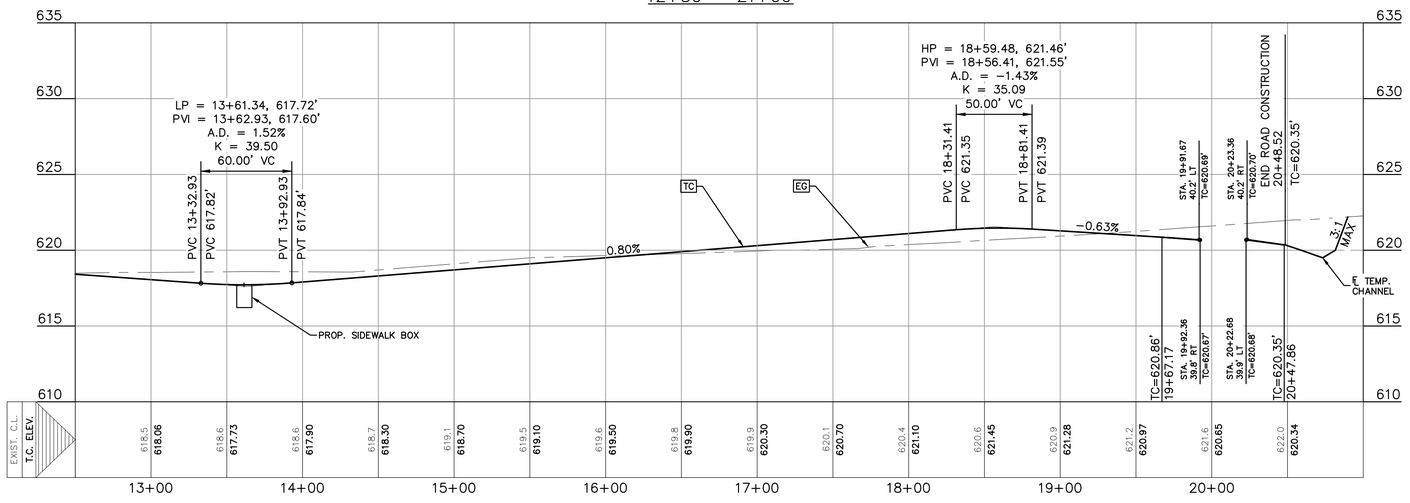


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PECOS RIVER PLAN & PROFILE (2 OF 2)

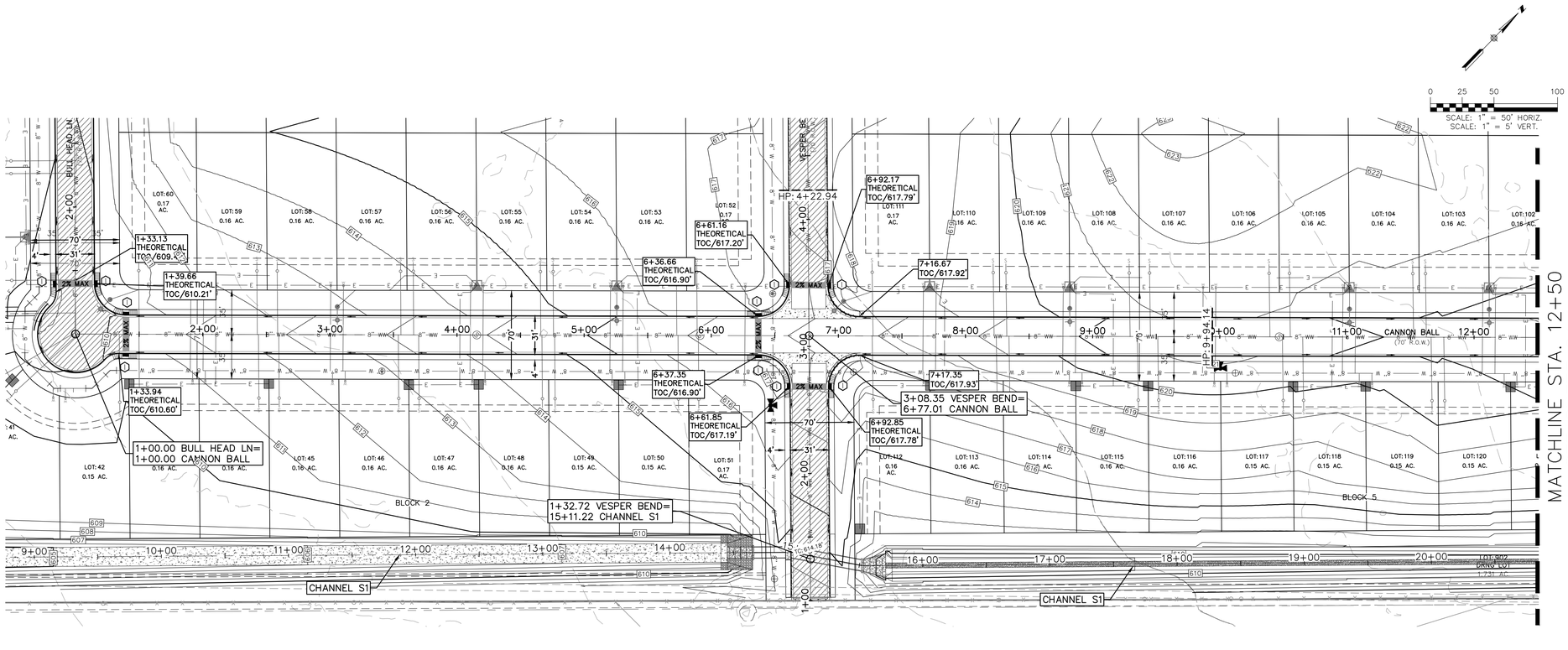
PARKSIDE SOUTH UNIT 1

NO.	REVISION DESCRIPTION	DATE

DATE: APRIL 2026
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HMT PROJECT NO.: 337.130

SHEET
C4.2

Drawing Name: K:_Projects\337 - Lennar\130 - Parkside South Unit 1\Cbs\337.130_STREET P&P.dwg User: jonm Apr 16, 2026 - 5:45pm

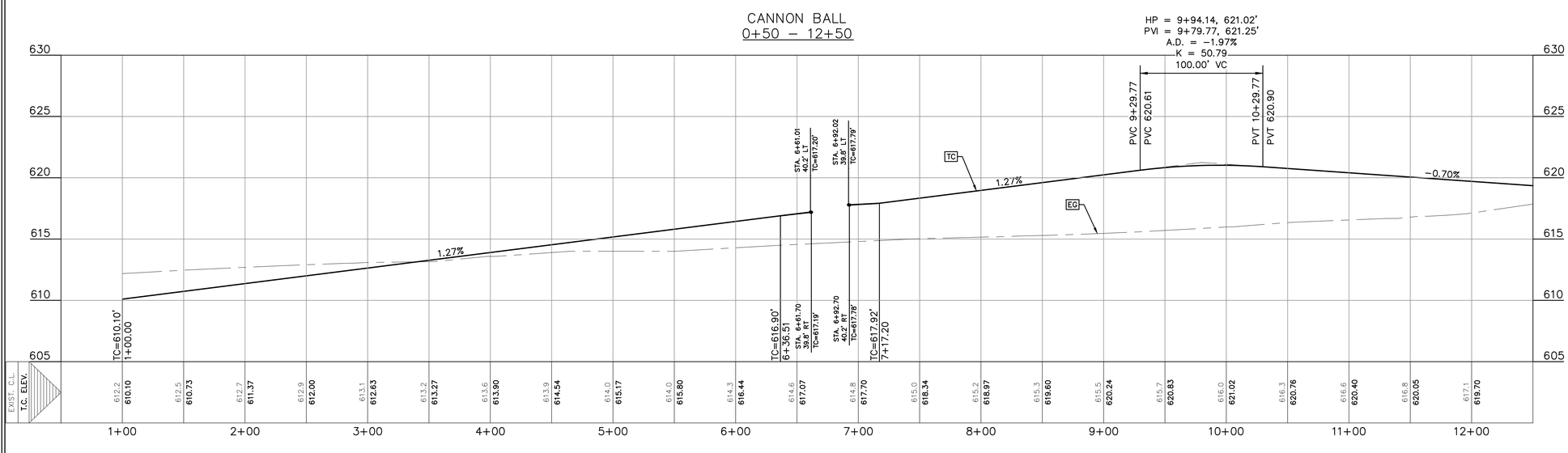


LEGEND

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- B.L. — BUILDING SETBACK LINE
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CANNON BALL PLAN & PROFILE (1 OF 2)

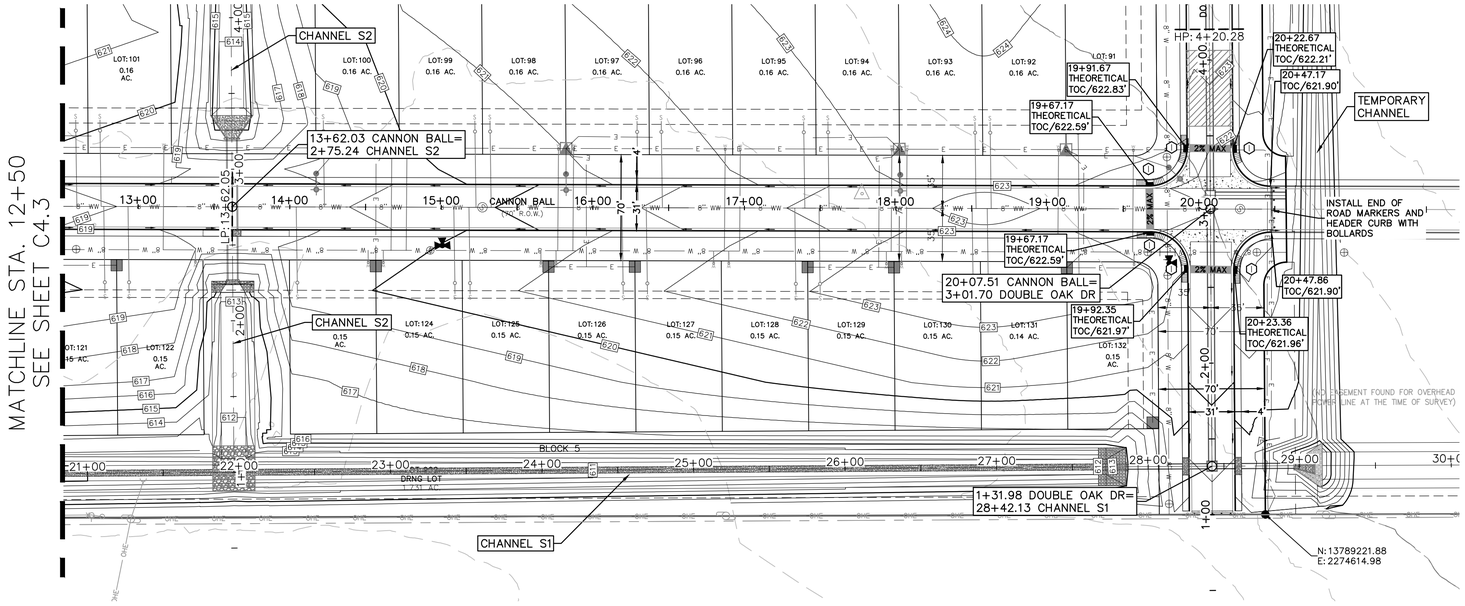
PARKSIDE SOUTH
UNIT 1

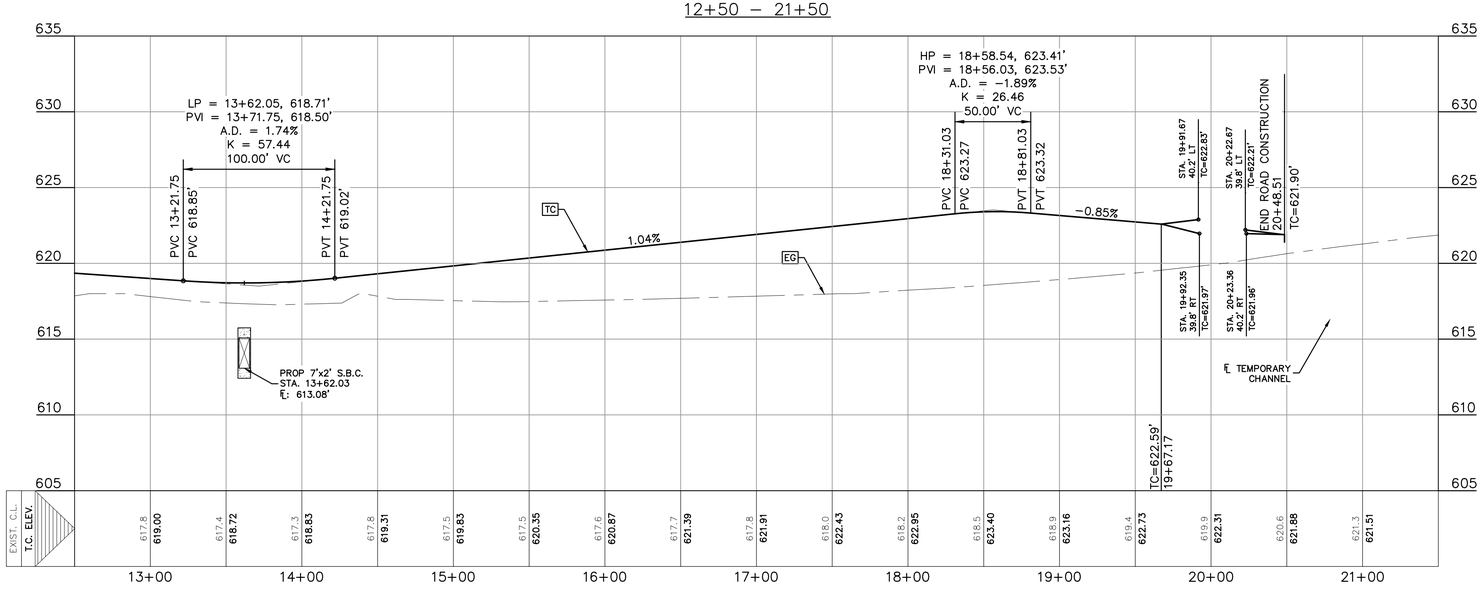
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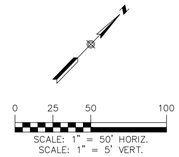
DATE: APRIL 2026
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DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C4.3

Drawing Name: N:_Projects\337 - Lennar\130 - Parkside South Unit 1\Cds\337-130_STREET P&P.dwg User: jonm Apr 16, 2026 - 5:45pm







LEGEND

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CANNON BALL PLAN & PROFILE (2 OF 2)

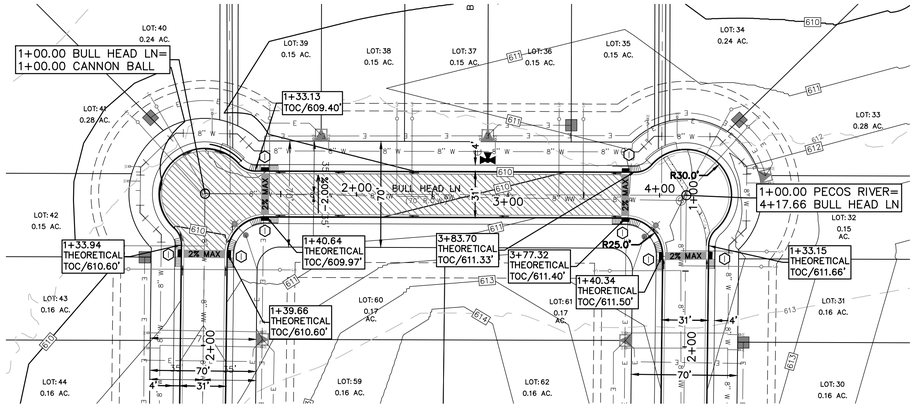
PARKSIDE SOUTH
UNIT 1

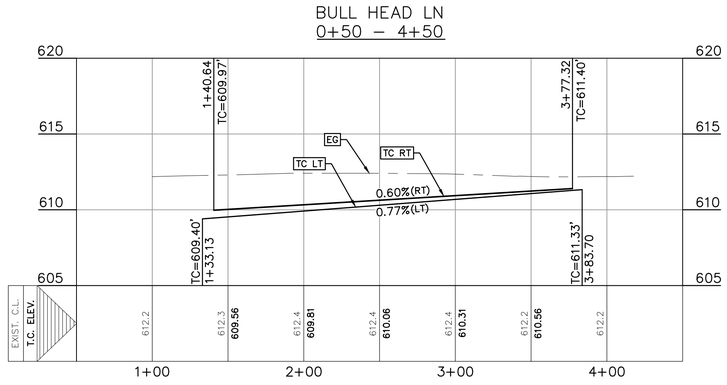
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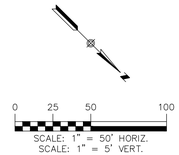
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SHEET
C4.4

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LEGEND

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3. CONTRACTOR TO CONSTRUCT SIDEWALK RAMPS WITH STREETS.
4. CONTRACTOR TO ENSURE POSITIVE DRAINAGE AWAY FROM STREET STUB OUT ENDS SO THAT NO "PONDING" OF WATER OCCURS.

REFER TO COVER SHEET FOR BENCHMARK INFORMATION

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290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 10153600
HMT ENGINEERING & SURVEYING

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDE
93047
LICENSED
PROFESSIONAL ENGINEER
04/13/2026

BULL HEAD LN PLAN & PROFILE

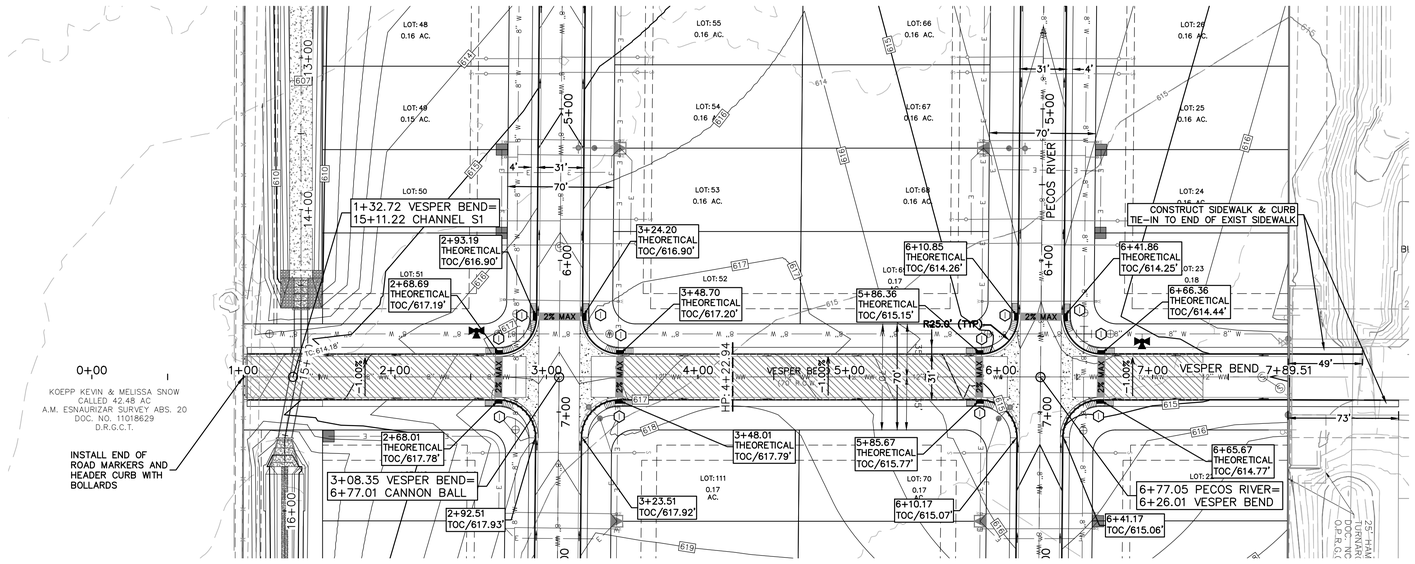
PARKSIDE SOUTH
UNIT 1

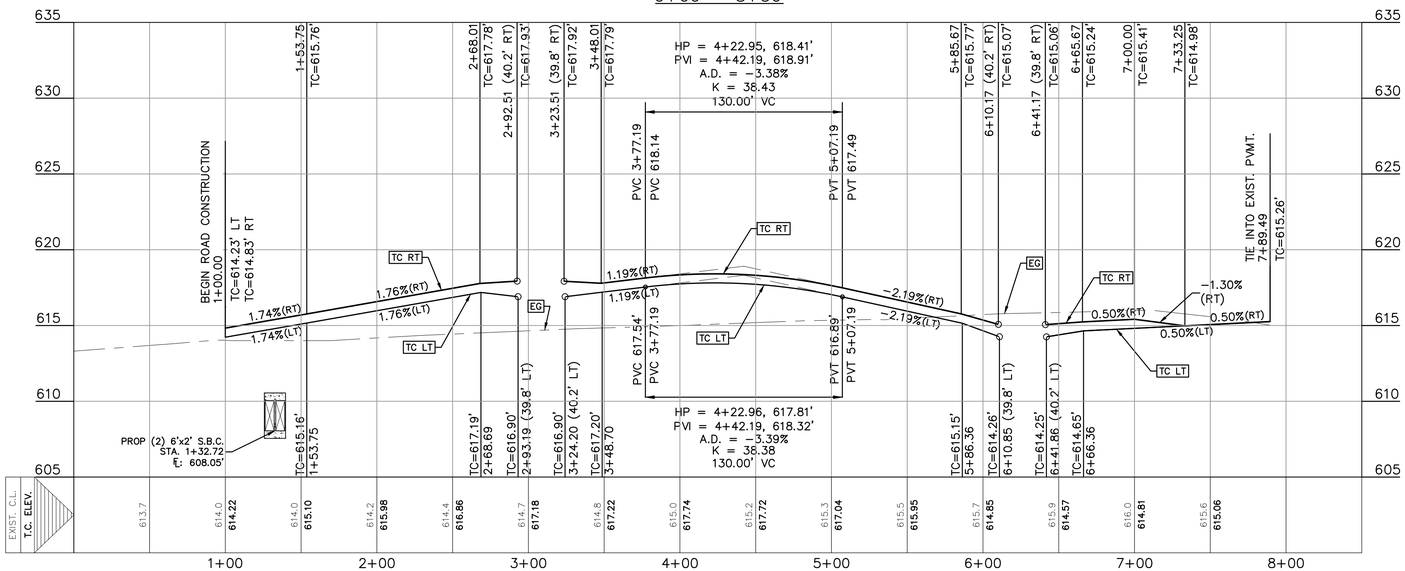
NO.	REVISION DESCRIPTION	DATE

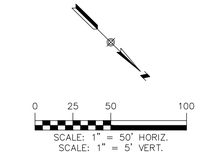
DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C4.5

Drawing Name: N:_Projects\337 - Lennar\130 - Parkside South Unit 1\CDs\337.130_STREET P&P.dwg User: jonm Apr 16, 2026 - 5:45pm







LEGEND

- EXISTING CONTOURS
- PROPOSED CONTOURS
- B.L. BUILDING SETBACK LINE
- U.E. UTILITY EASEMENT
- D.E. DRAINAGE EASEMENT
- A.D.A. RAMP
- FLOW ARROW
- WASHOUT CROWN AREAS
- SPILL CURB
- EXISTING GROUND CENTER (EG CTR)
- PROPOSED TOP OF CURB (PR TC)
- 2.0% MAX — ACCESSIBLE CROSSING AREA CONTRACTOR TO ENSURE MAX 2% CROSS SLOPE IN THESE AREAS
- SIDEWALK RAMP TYPE TO BE CONSTRUCTED AT TIME OF STREET CONSTRUCTION (SEE DETAIL SHEET C4.12)
- SIDEWALK TO BE CONSTRUCTED BY SITE DEVELOPMENT CONTRACTOR

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STATE OF TEXAS
CHRISTOPHER P. VAN HEERDE
93047
LICENSED
PROFESSIONAL ENGINEER
04/13/2026

VESPER BEND PLAN & PROFILE

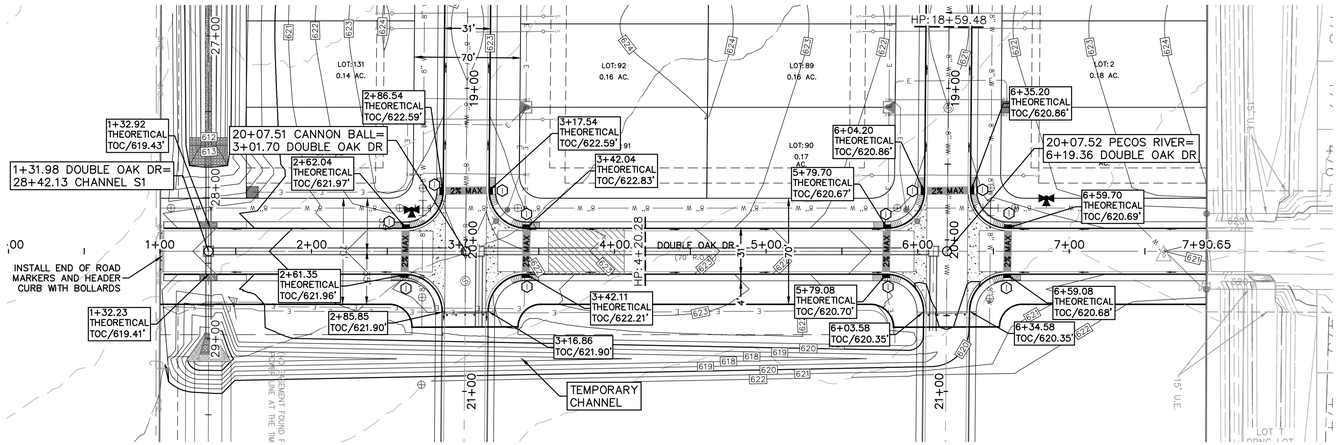
PARKSIDE SOUTH
UNIT 1

NO.	REVISION DESCRIPTION	DATE

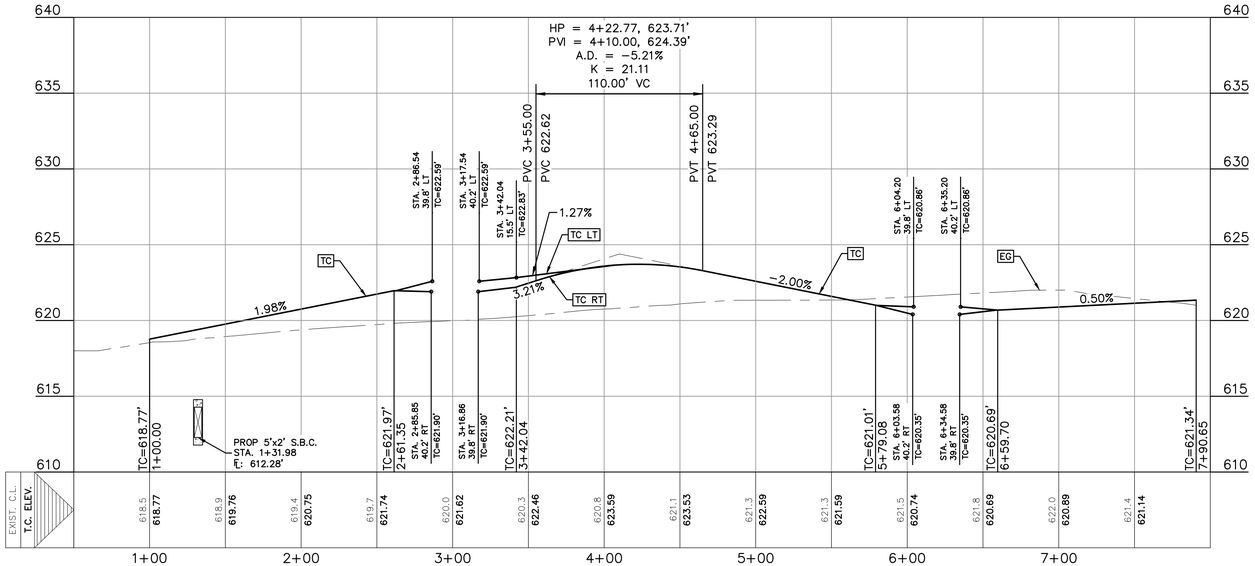
DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C4.6

Drawing Name: N:_Projects\337 - Lennar\130 - Parkside South Unit 1\CDs\337.130_STREET P&P.dwg User: jonm Apr 16, 2026 - 5:45pm



DOUBLE OAK DR
0+50 – 8+00





LEGEND

- EXISTING CONTOURS
- PROPOSED CONTOURS
- B.L. — BUILDING SETBACK LINE
- U.E. — UTILITY EASEMENT
- D.E. — DRAINAGE EASEMENT
- A.D.A. RAMP
- FLOW ARROW
- WASHOUT CROWN AREAS
- SPILL CURB
- EXISTING GROUND CENTER (EG CTR)
- PROPOSED TOP OF CURB (PR TC)
- 2.0% MAX — ACCESSIBLE CROSSING AREA CONTRACTOR TO ENSURE MAX 2% CROSS SLOPE IN THESE AREAS
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HMT ENGINEERING & SURVEYING

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDEN
93047
LICENSED
PROFESSIONAL ENGINEER
04/13/2026

DOUBLE OAK DR PLAN & PROFILE

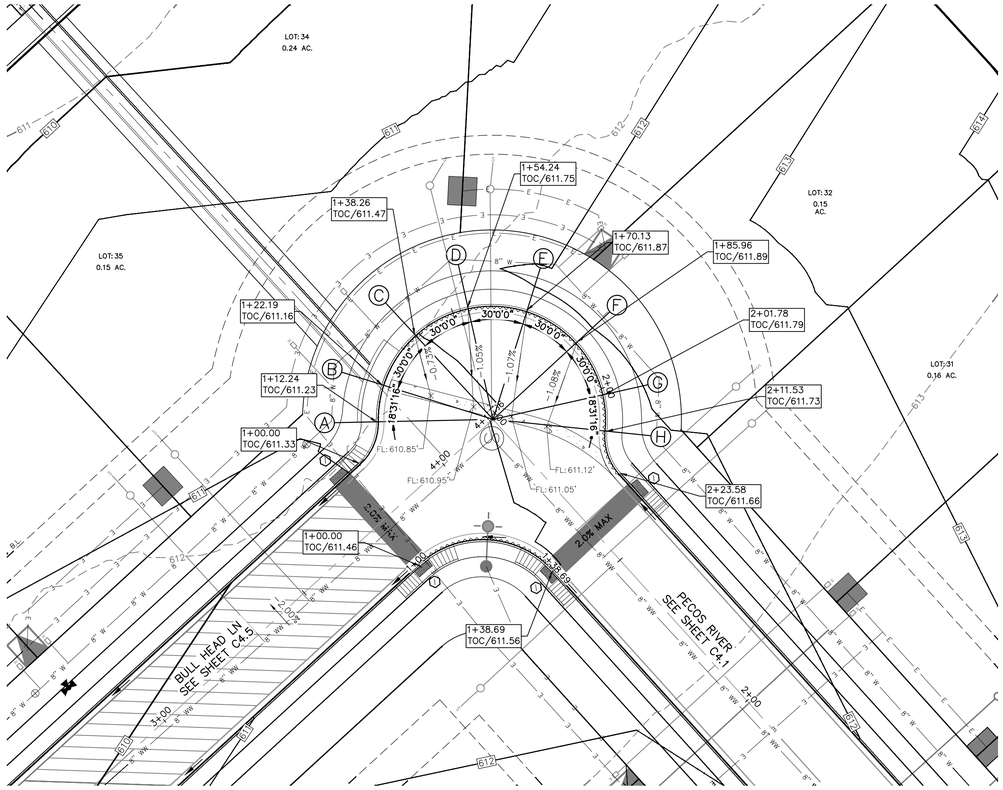
PARKSIDE SOUTH
UNIT 1

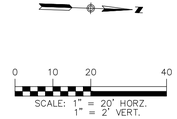
NO.	REVISION DESCRIPTION	DATE

DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C4.7

Drawing Name: N:_Projects\337 - Lennar\130 - Parkside South Unit 1\Cds\337.130_STREET P&P.dwg User: jonm Apr 16, 2026 - 5:46pm





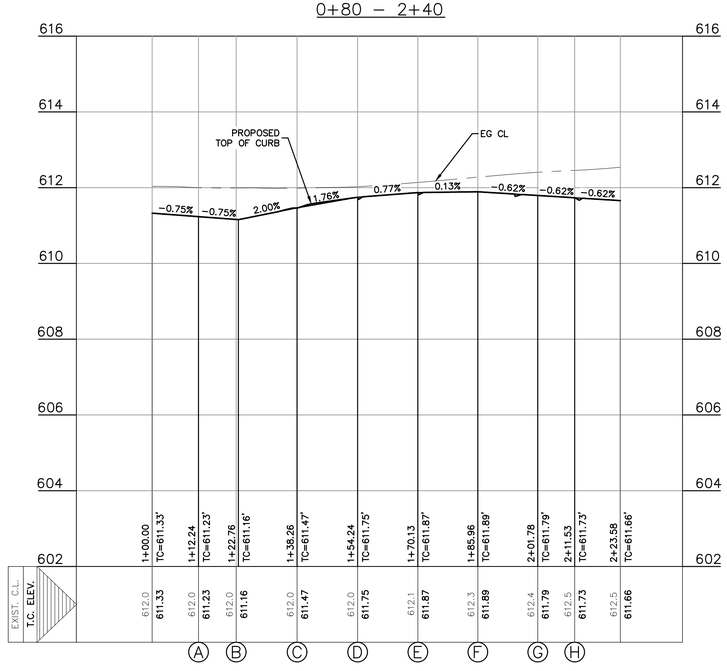
LEGEND

- 700 — EXISTING CONTOURS
- 700 — PROPOSED CONTOURS
- B.L. — BUILDING SETBACK LINE
- U.E. — UTILITY EASEMENT
- D.E. — DRAINAGE EASEMENT
- A.D.A. RAMP
- FLOW ARROW
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- EXISTING GROUND LEFT (EG LT)
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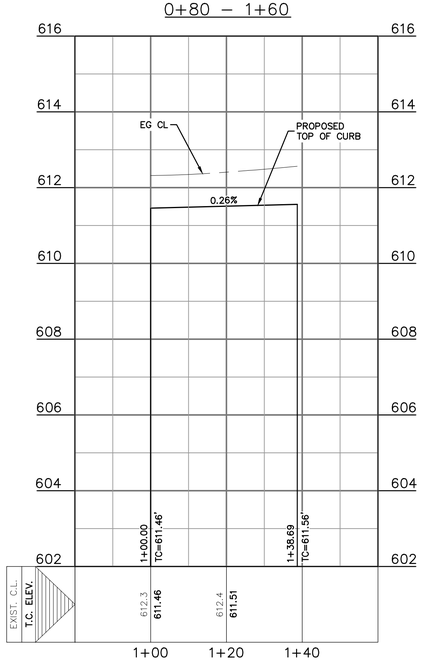
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PECOS–BULL OUTER
0+80 – 2+40



PECOS–BULL INNER
0+80 – 1+60



REFER TO COVER SHEET FOR BENCHMARK INFORMATION

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TBPELS FIRM 10153600

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDE
93047
LICENSED
PROFESSIONAL ENGINEER
04/13/2026

KNUCKLE SACK PECOS RIVER @ BULLHEAD LN

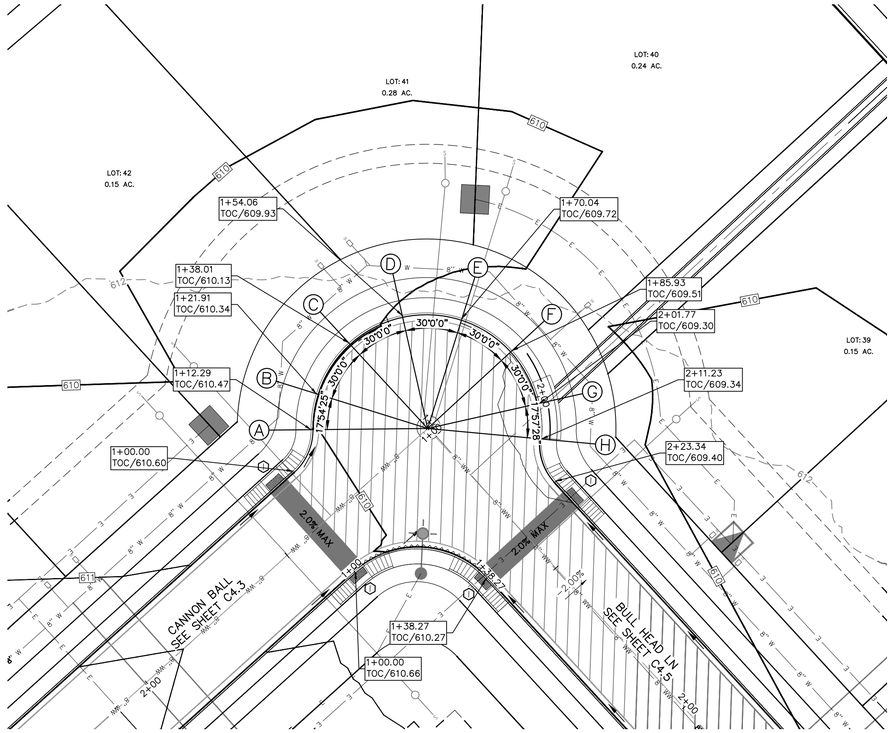
PARKSIDE SOUTH
UNIT 1

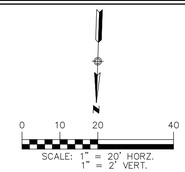
NO.	REVISION DESCRIPTION	DATE

DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C4.8

Drawing Name: N:_Projects\337 – Lennar\130 – Parkside South Unit 1\CDs\337.130_KNUCKLE SACKS.dwg User: jonm Apr 16, 2026 – 5:46pm





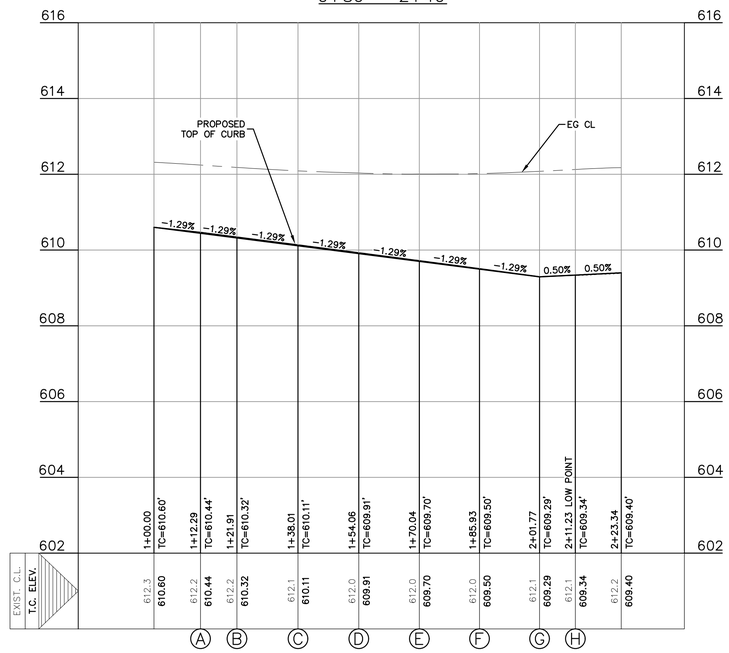
LEGEND

- 700 — EXISTING CONTOURS
- 700 — PROPOSED CONTOURS
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- D.E. — DRAINAGE EASEMENT
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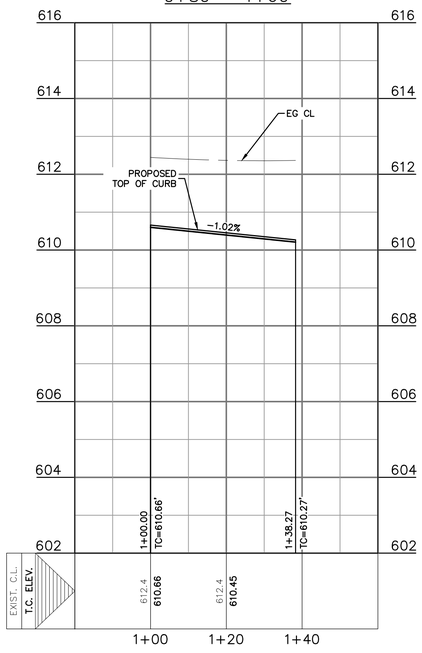
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CANNON–BULL OUTER
0+80 – 2+40



CANNON–BULL INNER
0+80 – 1+60



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NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 10153600

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDE
93047
LICENSED
PROFESSIONAL ENGINEER
04/13/2026

KNUCKLE SACK CANNON BALL @ BULLHEAD LN

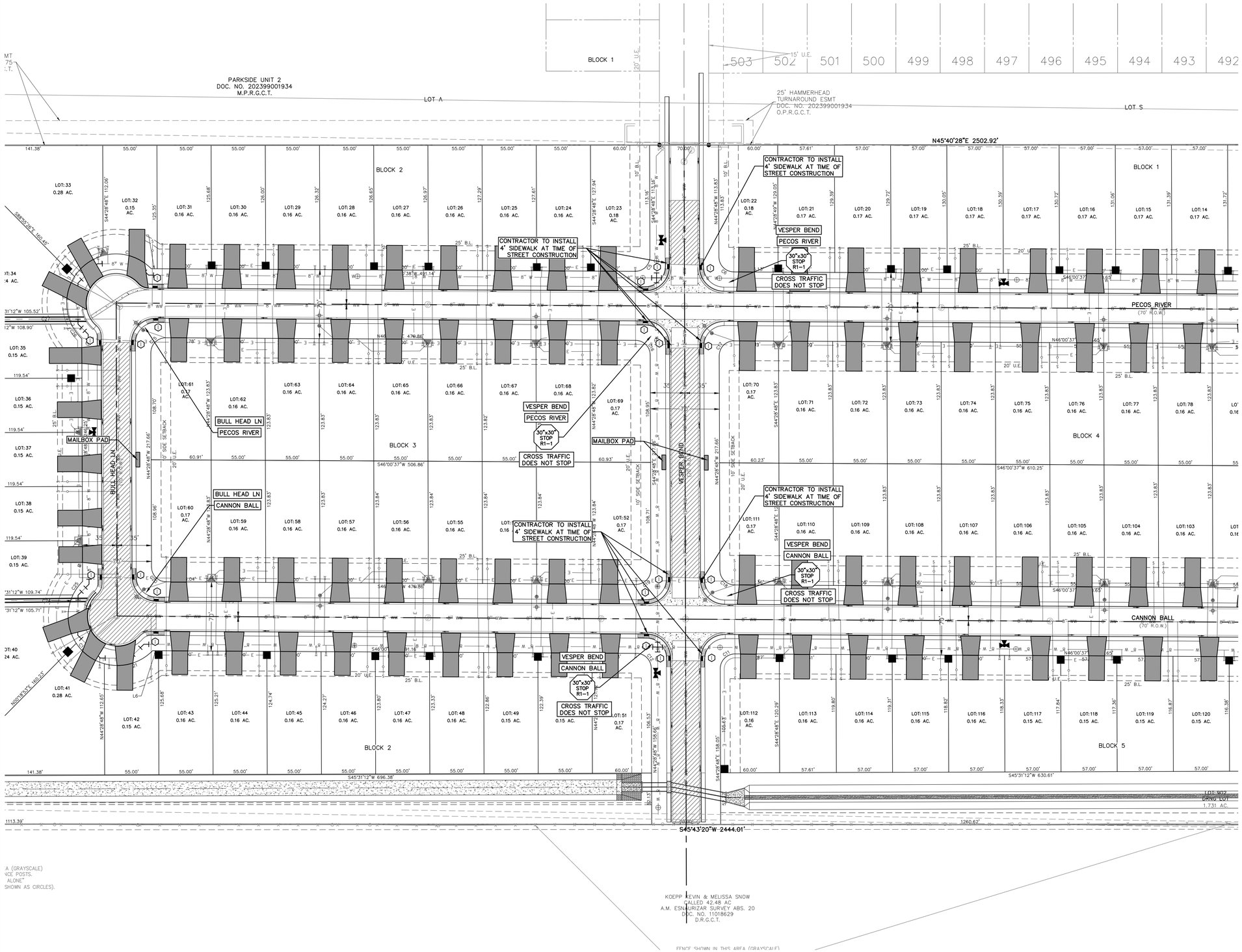
PARKSIDE SOUTH
UNIT 1

NO.	REVISION DESCRIPTION	DATE

DATE: **APRIL 2026**
DRAWN BY: **PMM**
DESIGNED BY: **RCD**
REVIEWED BY: **CVH**
HMT PROJECT NO.: **337.130**

SHEET
C4.9

Drawing Name: N:_Projects\337 – Lennar\130 – Parkside South Unit 1\Cds\337.130_KNUCKLE SACKS.dwg User: jonm Apr 16, 2026 – 5:46pm



LEGEND

B.L.	BUILDING SETBACK LINE
U.E.	UTILITY EASEMENT
D.E.	DRAINAGE EASEMENT
	A.D.A. RAMP
2.0% MAX	ACCESSIBLE CROSSING AREA CONTRACTOR TO ENSURE MAX 2% CROSS SLOPE IN THESE AREAS
①	SIDEWALK RAMP TYPE TO BE CONSTRUCTED AT TIME OF STREET CONSTRUCTION (SEE DETAIL SHEET C4.##)
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5. PER NEW BRAUNFELS ORDINANCE SEC. 114-98(a)(6) ALL DRIVEWAY LOCATED ON A SINGLE FAMILY RESIDENCE ON A LOCAL STREET SHALL HAVE A MINIMUM SPACING OF 20'

0 25 50 100
SCALE: 1" = 50'

SIGNAGE NOTES

INSTALLATION

THE CONTRACTOR SHALL FURNISH AND INSTALL ALL REGULATORY, WARNING AND STREET NAME SIGNS AND SIGN MOUNTS IN ACCORDANCE WITH APPROVED ENGINEERING PLANS.

MOUNTING

THE WEDGE ANCHOR STEEL SYSTEM AND THIN-WALLED TUBING POST SHALL BE USED FOR SIGNS WITH UP TO 10 SQUARE FEET OF SIGN AREA. MATERIALS AND INSTALLATION SHOULD FOLLOW THE TEXAS DEPARTMENT OF TRANSPORTATION (TXDOT) TRAFFIC STANDARDS SMD (GEN) - 08 AND SMD (TWT) - 08.

THE TRIANGULAR SLIP BASE SYSTEM AND 10 BWG TUBING POST SHALL BE USED FOR SIGNS THAT HAVE 10 TO 16 SQUARE FEET OF SIGN AREA. MATERIALS AND INSTALLATION SHOULD FOLLOW THE TXDOT TRAFFIC STANDARDS SMD (GEN) - 08 AND SMD (SLIP-1-3)- 08.

OBJECT MARKERS MATERIALS AND INSTALLATION SHOULD FOLLOW THE TXDOT TRAFFIC STANDARDS D & OM (1 - 5) - 10.

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04/13/2026

SIGNAGE PLAN (1 OF 2)

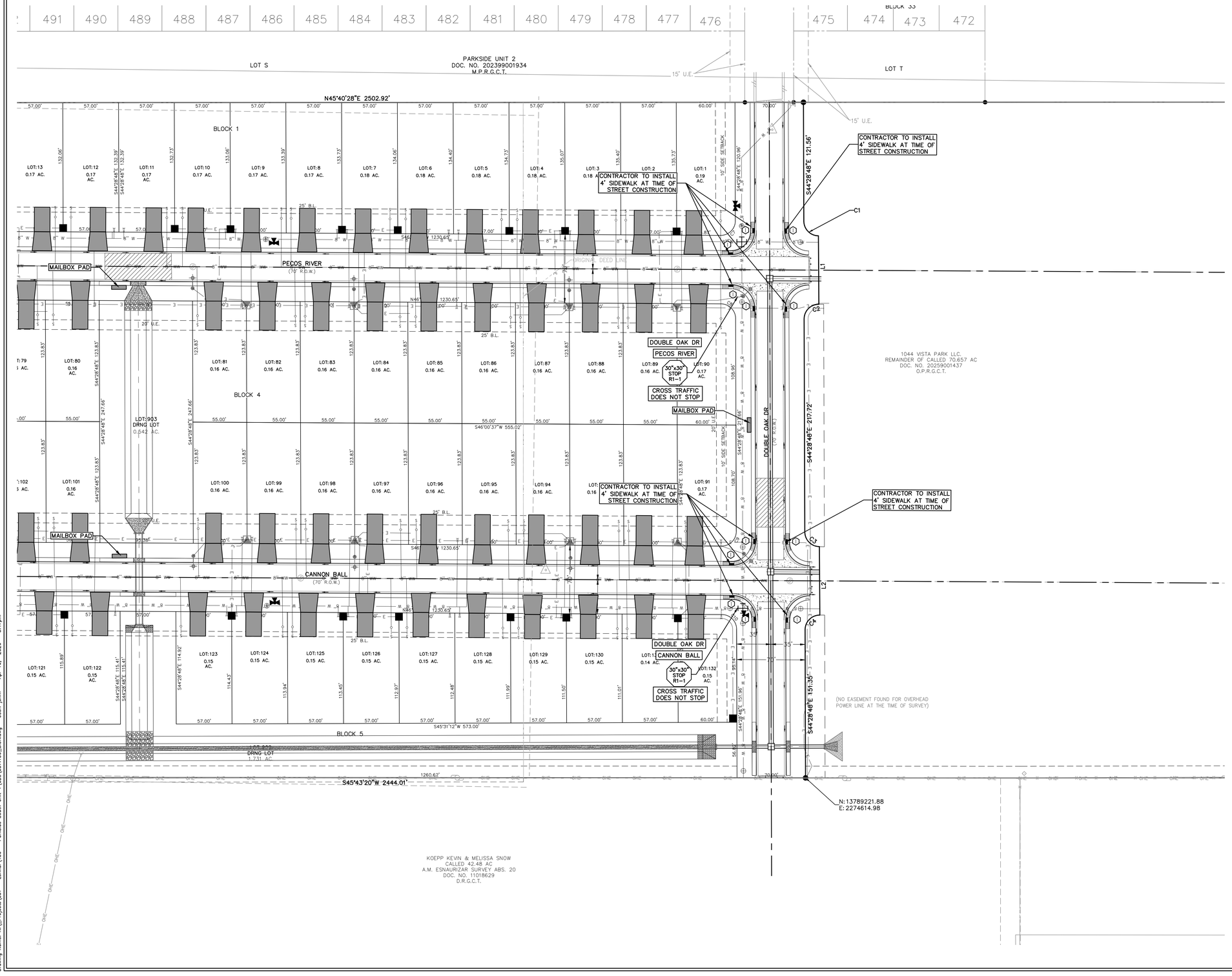
PARKSIDE SOUTH
UNIT 1

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DATE: APRIL 2026
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REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C4.10

Drawing Name: K:_Projects\337 - Lennar\130 - Parkside South Unit 1\CDs\337.130_SIGN.dwg User: jonm Apr 16, 2026 - 5:47pm



LEGEND

B.L.	BUILDING SETBACK LINE
U.E.	UTILITY EASEMENT
D.E.	DRAINAGE EASEMENT
	A.D.A. RAMP
2.0% MAX	ACCESSIBLE CROSSING AREA CONTRACTOR TO ENSURE MAX 2% CROSS SLOPE IN THESE AREAS
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04/13/2026

SIGNAGE PLAN (2 OF 2)

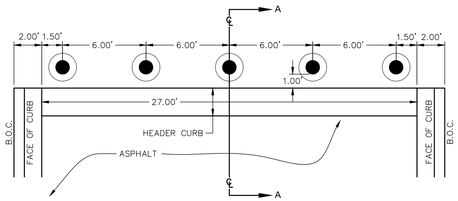
PARKSIDE SOUTH UNIT 1

NO.	REVISION DESCRIPTION	DATE

DATE: **APRIL 2026**
DRAWN BY: **PMM**
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SHEET **C4.11**

Drawing Name: K:_Projects\337 - Lennar\130 - Parkside South Unit 1\Cds\337.130_SIGN.dwg User: jonm Apr 16, 2026 - 5:47pm

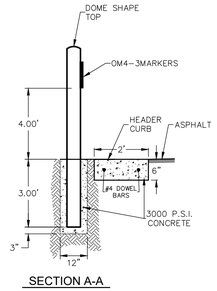


NOTE:
POST SHALL BE 6" IN DIAMETER AND PRESSURE TREATED

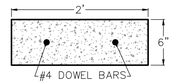
POST SHALL BE CENTERED AND EQUALLY SPACED AT 6' ON CENTER (MIN.)

PLAN

BOLLARD DETAIL
NOT TO SCALE

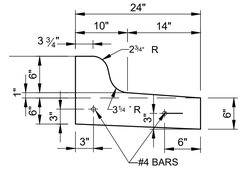


SECTION A-A

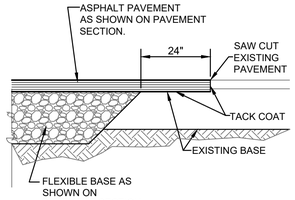


1. MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO THE CITY OF NEW BRAUNFELS STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
2. DOWEL BARS IF REQUIRED SHALL BE PLACED AS SHOWN.
3. EXPANSION JOINTS SHALL BE INSTALLED AT INTERVALS NOT TO EXCEED 40 FEET.

RIBBON CURB DETAIL
NOT TO SCALE



SPILL CURB DETAIL
NOT TO SCALE



NEW PAVEMENT TO EXISTING
NOT TO SCALE

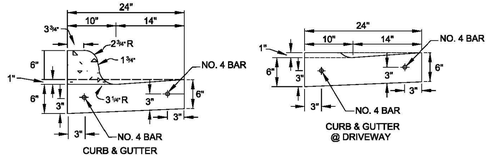
RESIDENTIAL FLEXIBLE PAVEMENTS	
PAVEMENT MATERIAL	
TYPE "D" HMAC	3"
CRUSHED LIMESTONE FLEXIBLE BASE, IN.	12"
COMPACTED SUBGRADE	-
LIME SUBGRADE	8"

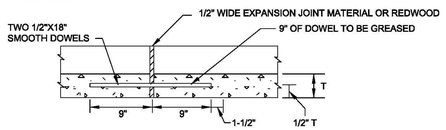
NOTE:

1. ALL PAVEMENT CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE TO THE "BAUER TRACT UNITS 1 & 2 - LENNAR", BY TTL, INC, DATED MARCH 12, 2025.
2. ALL PAVEMENT SECTIONS SHOWN ON THE ABOVE TABLE SHALL SUPERCEDE ANY STANDARD DETAILS WITH RESPECT TO DEPTH OF MATERIALS ASSOCIATED WITH THIS PROJECT.
3. THE SUBGRADE SHOULD BE STABILIZED USING LIME IN ACCORDANCE WITH THE GEOTECHNICAL REPORT IN ORDER TO ACHIEVE A PH OF 12.4 OR GREATER.
4. THE SUBGRADE SOILS SHOULD BE TESTED FOR SOLUBLE SULPHATE CONTENT PRIOR TO INSTALLATION OF THE LIME OR CEMENT.

TYPICAL PAVEMENT SECTION

CURB AND GUTTER



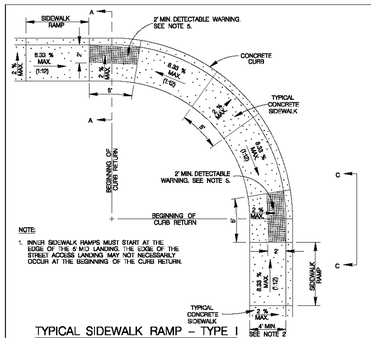


LONGITUDINAL SECTION THRU CURB AND GUTTER
SHOWING TYPICAL EXPANSION JOINT DETAILS.
REINFORCING STEEL SHALL NOT CROSS EXPANSION JOINTS.
STEEL SHALL BE TERMINATED 3" (+ OR -) 1" FROM FACE OF THE JOINT.

NOTES:

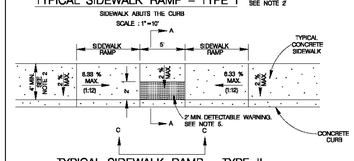
1. REINFORCING BARS SHALL BE LAPPED A MINIMUM OF 18".
2. CURB AND GUTTER SHALL HAVE FORMED TOOLED OR SAWED CONTRACTION JOINTS AT ± 10'. THE DEPTH OF THESE JOINTS SHALL BE SUFFICIENT TO ENSURE CRACKING AT THE JOINTS.
3. CURB OR CURB AND GUTTER SHALL HAVE EXPANSION JOINTS AT POINTS OF CURVATURE, AT INTERVALS NO GREATER THAN 100' AND AT ALL ADJACENT STRUCTURES.
4. UNLESS OTHERWISE SHOWN, TRANSITIONS BETWEEN CURBS OR CURBS AND GUTTER OF DIFFERING CROSS SECTION SHALL BE ACCOMPLISHED OVER A 10' LENGTH OR AS APPROVED BY THE CITY ENGINEER.
5. ALL CONCRETE TO BE CLASS "A" 3000 PSI CONCRETE.
6. ALL EXPOSED CONCRETE SURFACES TO BE BRUSHED SMOOTH AND UNIFORM.

DATE APPROVED: 07/2008	DWG. NO: ST-013	SCALE: N.T.S.	City of New Braunfels ENGINEERING DEPARTMENT
DRAWN BY: RAS	SHEET: 1 OF 1		
FILENAME: CURB & GUTTER			



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

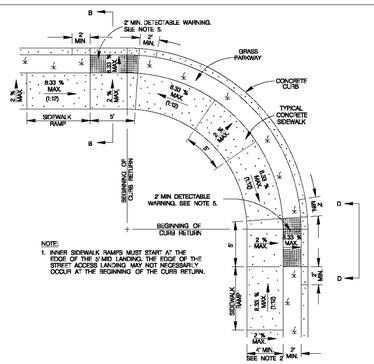
TYPICAL SIDEWALK RAMP – TYPE I
SIDEWALK ABUTS THE CURB
SCALE : 1" = 10'



TYPICAL SIDEWALK RAMP – TYPE II
USED AT TEE INTERSECTIONS WHERE SIDEWALK ABUTS CURB
SCALE : 1" = 10'

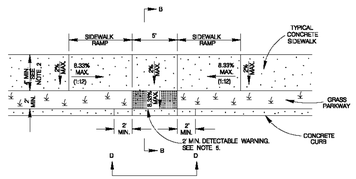
GENERAL NOTES

1. WHEN POSSIBLE SIDEWALKS SHOULD BE PLACED NEXT TO THE PROPERTY LINE, ALLOWING A MINIMUM OF 1 FOOT BUFFER. DONATION OF THE PAT-MARY 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 BE 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 9' 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 WIDE (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 DIAMETER OF A NOMINAL 0.9 INCHES (23 MM), A HEIGHT OF NOMINAL 0.2 INCHES (5 MM) 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 OR PAVING CONFORMING TO TXDOT STANDARD PED-06, 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 ROW/ROAD TO CONSTRUCT TYPE I OR TYPE III RAMPS.
8. CONSTRUCTION OF ALL WHEELCHAIR RAMPS TO BE INCLUDED UNDER ITEMS "500 – CONCRETE CURB, GUTTER, AND CONCRETE "CURB AND GUTTER" AND / OR "502 – CONCRETE SIDEWALKS". RAMP SURFACE SHALL BE BRUSH FINISHED.
9. THESE DETAILS ARE FOR REFERENCE ONLY. ACTUAL LOCATIONS OF WHEELCHAIR RAMPS TO BE SHOWN ON CONSTRUCTION PLANS. CITY CONSTRUCTION INSPECTOR CAN ADJUST LOCATIONS FOR SAFETY OR UTILITY CLEARANCE.
10. SIDEWALKS LESS THAN 5 FEET IN WIDTH SHALL BE PROVIDED WITH A PASSING SPACE AT A MAXIMUM SPACING OF 200 FEET.
11. WHEELCHAIR RAMP SHALL BE CONSTRUCTED WITH 4" CLASS "A" CONCRETE AND 2" MINIMUM GRAVEL, CRUSHED ROCK OR FLEXIBLE BASE MATERIAL.
12. REINFORCING STEEL SHALL BE #3 BARS AT 18" O.C.E.W. OR 6" x 6" – W2.9 x W2.9 WIRE MESH.
13. SIDEWALK GRADES SHALL NOT EXCEED THE GRADE ESTABLISHED FOR THE ADJACENT ROADWAY. ANY SIDEWALK CONSTRUCTION THAT DEVIATES FROM THE NATURAL GRADE OF THE ROADWAY TO CREATE A GRADE STEEPER THAN THE EXISTING ROADWAY WILL REQUIRE RAMPS, HANDRAILS AND RESTING PLATFORMS TO BE CONSTRUCTED IN ACCORDANCE WITH ADA AND TAS STANDARDS.
14. SIDEWALK CROSS GRADE SHALL HAVE A MAXIMUM SLOPE OF 2%. LANDINGS SHALL HAVE A MAXIMUM SLOPE OF 2% IN ANY DIRECTION.
15. THE CHANGE OF GRADE BETWEEN ADJACENT SURFACES SHALL BE LESS THAN 11%. THE CHANGE OF GRADE SHALL BE DEFINED AS THE ALGEBRAIC DIFFERENCE OF THE ADJACENT SURFACE SLOPES. IN THE CASE OF A STREET ACCESS RAMP DESIGNED AT THE 8.33% MAXIMUM SLOPE THE ADJACENT PAVEMENT CROSS SLOPE SHALL BE LESS THAN 2.67% (I.E. 8.33 -(-2.67)=11). IN ADDITION, THE ADJACENT PAVEMENT CROSS SLOPE SHALL BE LESS THAN OR EQUAL TO 5%.
16. IF THE CHANGE OF GRADE BETWEEN ADJACENT SURFACES IS GREATER THAN OR EQUAL TO 11%, A LEVELING STRIP, 5 FEET IN LENGTH, SHALL BE PROVIDED TO TRANSITION THE ADJACENT SURFACES.
17. ADA COMPLIANCE IN ALTERATIONS INCLUDE ONLY THAT WORK WITHIN THE LIMITS, BOUNDARIES OR SCOPE OF A PLANNED PROJECT.

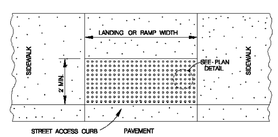


NOTE:
1. INNER SIDEWALK RAMPS MUST START AT THE EDGE OF THE 2' MID. LANDING. THE EDGE OF THE STREET ACCESS LANDING MAY NOT NECESSARILY OCCUR AT THE BEGINNING OF THE CURB RETURN.

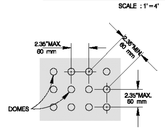
TYPICAL SIDEWALK RAMP – TYPE III
SIDEWALK SEPARATED FROM CURB
SCALE : 1" = 10'



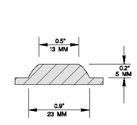
TYPICAL SIDEWALK RAMP – TYPE IV
USED AT TEE INTERSECTIONS WHERE SIDEWALK IS SEPARATED FROM CURB
SCALE : 1" = 10'



DETECTABLE WARNING SURFACE
SCALE : 1" = 4'

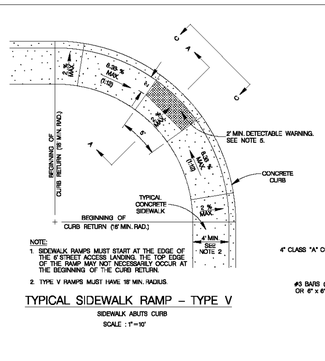


PLAN DETAIL
NO SCALE



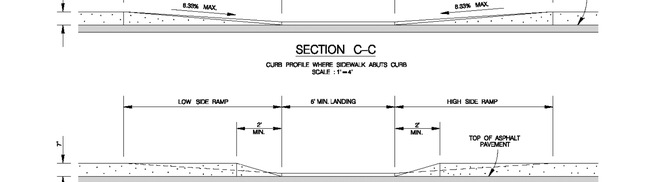
DOME SECTION
NO SCALE

NOTE:
STAMPED CONCRETE TRUNCATED DOMES WILL NOT BE ALLOWED TO BE USED FOR DETECTABLE WARNING ON WHEELCHAIR RAMPS. CONTRACTOR MUST SUBMIT TRUNCATED DOME INFORMATION THAT IS TO BE USED ON WHEELCHAIR RAMPS TO THE PROJECT MANAGER FOR APPROVAL AT LEAST 30 DAYS PRIOR TO INSTALLATION.

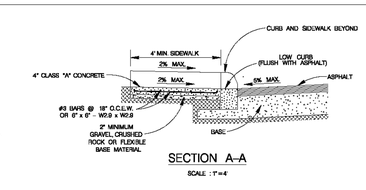


NOTE:
1. SIDEWALK RAMPS MUST START AT THE EDGE OF THE STREET ACCESS LANDING. THE TOP EDGE OF THE RAMP MAY NOT NECESSARILY OCCUR AT THE BEGINNING OF THE CURB RETURN.
2. TYPE V RAMPS MUST HAVE 18' MIN. RADIUS.

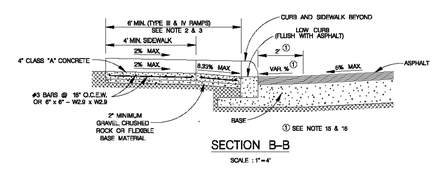
TYPICAL SIDEWALK RAMP – TYPE V
SIDEWALK ABUTS CURB
SCALE : 1" = 10'



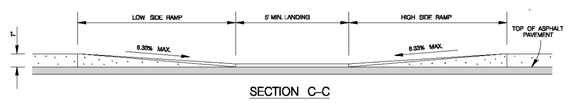
SIDEWALK PASSING SPACE
SCALE : 1" = 10'



SECTION A–A
SCALE : 1" = 4'



SECTION B–B
SCALE : 1" = 4'



SECTION C–C
CURB PROFILE WHERE SIDEWALK ABUTS CURB
SCALE : 1" = 4'

SECTION D–D
CURB PROFILE WHERE SIDEWALK IS SEPARATED FROM CURB
SCALE : 1" = 4'

TABLE 1 (SEE NOTE 4)		
GUTTER SLOPE	SIDEWALK RAMP LENGTH (1:12)	
	LOW SIDE	HIGH SIDE
1%	6'-8"	7'-4"
2%	0'-0"	8'-4"
3%	6'-8"	10'-0"
4%	4'-2"	12'-8"
5%	3'-10"	15'-8"

MAY 2009

CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

WHEELCHAIR RAMP STANDARDS

_____% SUBMITTAL PROJECT NO.: _____ DATE: _____
DRAWN BY: V.VASQUEZ DSGN BY: _____ CHKD. BY: P.S. HOSSEINI, P.E. SHEET NO. ____ OF ____

290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 10153600
HMT ENGINEERING & SURVEYING

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDE
93047
LICENSED PROFESSIONAL ENGINEER
04/13/2026

STREET DETAILS (1 OF 2)

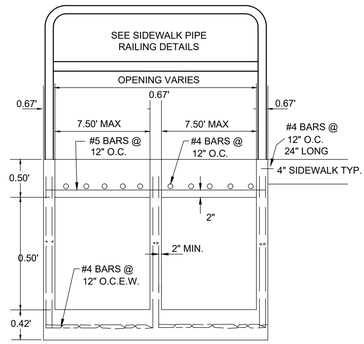
PARKSIDE SOUTH
UNIT 1

NO.	REVISION DESCRIPTION	DATE

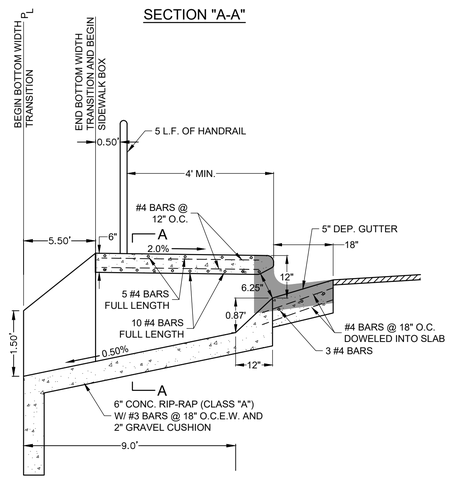
DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C4.12

Drawing Name: N:_Projects\337 – Lennar\130 – Parkside South Unit 1\C0s\337.130_DETAILS.dwg User: joorn Apr 16, 2026 – 5:47pm

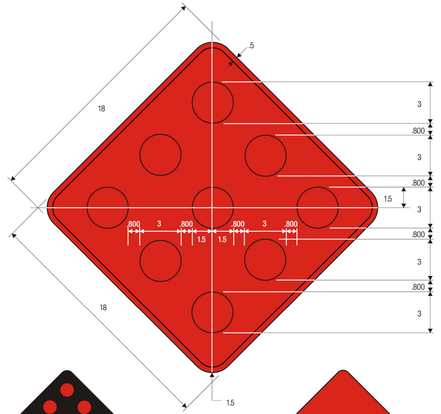


SECTION "A-A"



SIDE VIEW

SIDEWALK BOX DETAIL



OM4-1

OM4-2

OM4-3

OM4-1 COLORS:

REFLECTORS – RED (RETROREFLECTIVE)
BACKGROUND – RED
BORDER – RED (RETROREFLECTIVE)

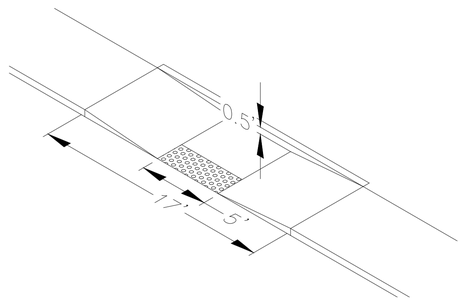
OM4-2 COLORS:

REFLECTORS – RED (RETROREFLECTIVE)
BACKGROUND – BLACK

OM4-3 COLORS:

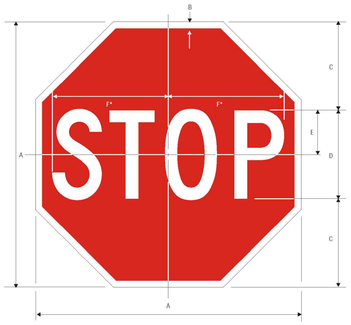
SIGN PANEL – RED (RETROREFLECTIVE)

11-4



STANDARD ADA RAMP WITH WALL

N.T.S.



R1-1
STOP

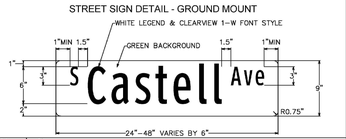
*Reduce spacing 40%

	A	B	C	D	E	F
	18	.375	6	6 C	3	7.75
	24	.625	8	8 C	4	10
C	30	.75	10	10 C	5	12.5
	36	.875	12	12 C	6	15
	48	1.25	16	16 C	8	20

COLORS: LEGEND – WHITE (RETROREFLECTIVE)
BACKGROUND – RED (RETROREFLECTIVE)

1-1

STREET SIGN DETAIL - GROUND MOUNT



Height	9"
Length	24" min 48" max 6" increments in length
Thickness	0.080"
Substrate	Flat aluminum sheeting with ¾" radius circular fillets at corners conforming to the requirements of ASTM B 209, Alloys 6061–T–6, or 5052–H38.
Sign Face Materials	Green film over High Intensity Prismatic sheeting
Legend	Legends shall be Clearview 1–W font style. Reduced spacing between the letters or words should not be used as a means of reducing the overall size of a street name sign unless approved by the City Traffic Engineer.
Color	White legend on green background

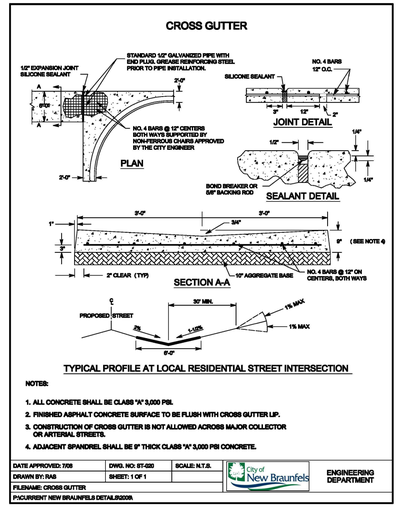
Notes:

1. Street name signs shall be double sided when center mounted on top of sign post. Only one street name sign should be installed on top of sign post with STOP or YIELD sign.
2. When two sets of street name signs are required (e.g. at "T" intersections), one double-sided street name sign shall be mounted on sign post. The sign assembly shall meet minimum height requirements as required in the Texas Manual on Uniform Traffic Control Devices (TMUTCD). When required, DEAD END (W14-1a) or NO OUTLET (W14-2a) signs shall also be mounted on the sign post.
3. Street name signs greater than 36" long and center mounted on top of sign post shall be mounted on post top bracket with 12" slot. All other street name signs center mounted on top of sign post shall be mounted on post top bracket with 5.5" slot.
4. Street name signs mounted on sign post shall be mounted with double-sided round pole brackets. Two holes should be punched in the center of the 9" street name sign blank 1" from edge of the blank with 7"spacing between holes.
5. The lettering for names of streets shall be composed of a combination of lower-case letters with initial upper-case letters. Acceptable abbreviations per TMUTCD may be used except for the street name itself.
6. Red background (red film over High Intensity Prismatic) should be used for private street name signs.

Street Sign Detail - Ground Mount		ENGINEERING DIVISION	
ISSUE DATE: February 2013	DWG. NO:ST-024	SCALE:N.T.S.	424 S. CASTELL AVE. NEW BRAUNFELS, TEXAS 78130 (830) 221-4050 FAX: 830.885.0663
DRAWN BY: RAS	CONTACT: GF	SHEET: 1 OF 1	

P:\2010 ENGINEERING-AUTOCAD\DETAILS\NB-PUBLIC WORKS DETAILS\NB-UNAPPROVED DETAILS-2010\ST-DET\1-ST024 STREET SIGN DETAIL - GROUND MOUNT.DWG

CROSS GUTTER



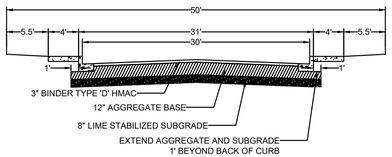
TYPICAL PROFILE AT LOCAL RESIDENTIAL STREET INTERSECTION

NOTES:

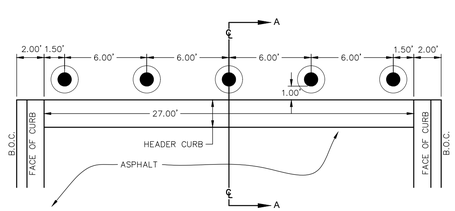
1. ALL CONCRETE SHALL BE CLASS "A" 3,000 PSI.
2. FINISHED ASPHALT CONCRETE SURFACE TO BE FLUSH WITH CROSS GUTTER LIP.
3. CONSTRUCTION OF CROSS GUTTER IS NOT ALLOWED ACROSS MAJOR COLLECTOR OR ARTERIAL STREETS.
4. ADJACENT SPANDREL SHALL BE 8" THICK CLASS "A" 3,000 PSI CONCRETE.

DATE APPROVED: 7/08	DWG. NO: ST-020	SCALE: N.T.S.
DRAWN BY: RAS	SHEET: 1 OF 1	
FILENAME: CROSS GUTTER		
P:\CURRENT NEW BRAUNFELS DETAILS\2020\		

City of New Braunfels — ENGINEERING DEPARTMENT



LOCAL PAVEMENT SECTION

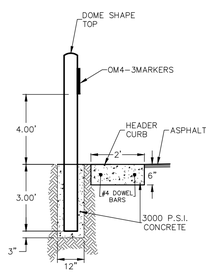


NOTE:
POST SHALL BE 6" IN DIAMETER AND PRESSURE TREATED

POST SHALL BE CENTERED AND EQUALLY SPACED AT 6' ON CENTER (MIN.)

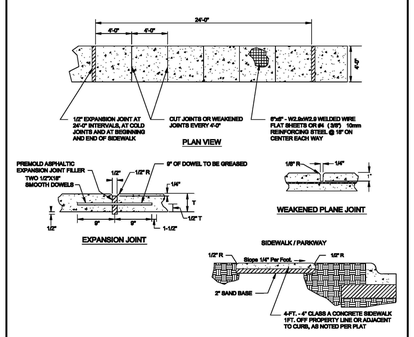
PLAN

BOLLARD DETAIL
NOT TO SCALE



SECTION A-A

SIDEWALK (RESIDENTIAL)



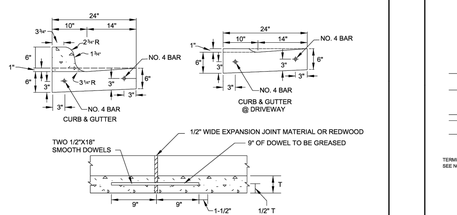
NOTES:

1. EXPANSION JOINTS ARE TO BE USED BETWEEN CONCRETE DRIVEWAY AND SIDEWALK.
2. SCORED JOINTS DENOTE SIDEWALK ACROSS THE DRIVEWAY AND ARE TO BE PLACED AT LEAST 1/3 rd. THROUGH THE SLAB THICKNESS.
3. ALL SIDEWALK AND DRIVEWAY CONSTRUCTION SHALL MEET A.D.A. SPECIFICATIONS.

DATE APPROVED: 7/08	DWG. NO: ST-016	SCALE: N.T.S.
DRAWN BY: RAS	SHEET: 1 OF 1	
FILENAME: SIDEWALK (Residential)		
P:\CURRENT NEW BRAUNFELS DETAILS\2020\		

City of New Braunfels — ENGINEERING DEPARTMENT

CURB AND GUTTER



LONGITUDINAL SECTION THRU CURB AND GUTTER
SHOWING TYPICAL EXPANSION JOINT DETAILS.
REINFORCING STEEL SHALL NOT CROSS EXPANSION JOINTS.
STEEL SHALL BE TERMINATED 3" (+ OR -) 1" FROM FACE OF THE JOINT.

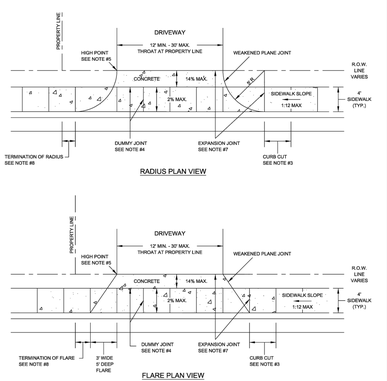
NOTES:

1. REINFORCING BARS SHALL BE LAPPED A MINIMUM OF 18".
2. CURB AND GUTTER SHALL HAVE FORMED TOOLED OR SAWED CONTRACTION JOINTS AT ± 10'. THE DEPTH OF THESE JOINTS SHALL BE SUFFICIENT TO ENSURE CRACKING AT THE JOINTS.
3. CURB OR CURB AND GUTTER SHALL HAVE EXPANSION JOINTS AT POINTS OF CURVATURE, AT INTERVALS NO GREATER THAN 100' AND AT ALL ADJACENT STRUCTURES.
4. UNLESS OTHERWISE SHOWN, TRANSITIONS BETWEEN CURBS OR CURBS AND GUTTER OF DIFFERING CROSS SECTION SHALL BE ACCOMPLISHED OVER A 10' LENGTH OR AS APPROVED BY THE CITY ENGINEER.
5. ALL CONCRETE TO BE CLASS "A" 3000 PSI CONCRETE.
6. ALL EXPOSED CONCRETE SURFACES TO BE BRUSHED SMOOTH AND UNIFORM.

DATE APPROVED: 07/2008	DWG. NO: ST-013	SCALE: N.T.S.
DRAWN BY: RAS	SHEET: 1 OF 1	
FILENAME: CURB & GUTTER		

City of New Braunfels — ENGINEERING DEPARTMENT

DRIVEWAY APRON (RESIDENTIAL - ONE OR TWO FAMILY)



DATE APPROVED: 04/2016	DWG. NO: ST-014.1	SCALE: N.T.S.
DRAWN BY: RAS	SHEET: 1 OF 2	
FILENAME: DRIVEWAY (RESIDENTIAL - ONE OR TWO FAMILY)		

City of New Braunfels — ENGINEERING DEPARTMENT

290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 10153600

HMT
ENGINEERING & SURVEYING

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDE
93047
LICENSED
PROFESSIONAL ENGINEER
04/13/2026

STREET DETAILS (2 OF 2)

PARKSIDE SOUTH
UNIT 1

NO.	REVISION DESCRIPTION	DATE

DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C4.13

Drawing Name: N:_Projects\337 – Lennar\130 – Parkside South Unit 1\CDs\337.130_DETAILS.dwg User: jsonn Apr 16, 2026 – 5:47pm

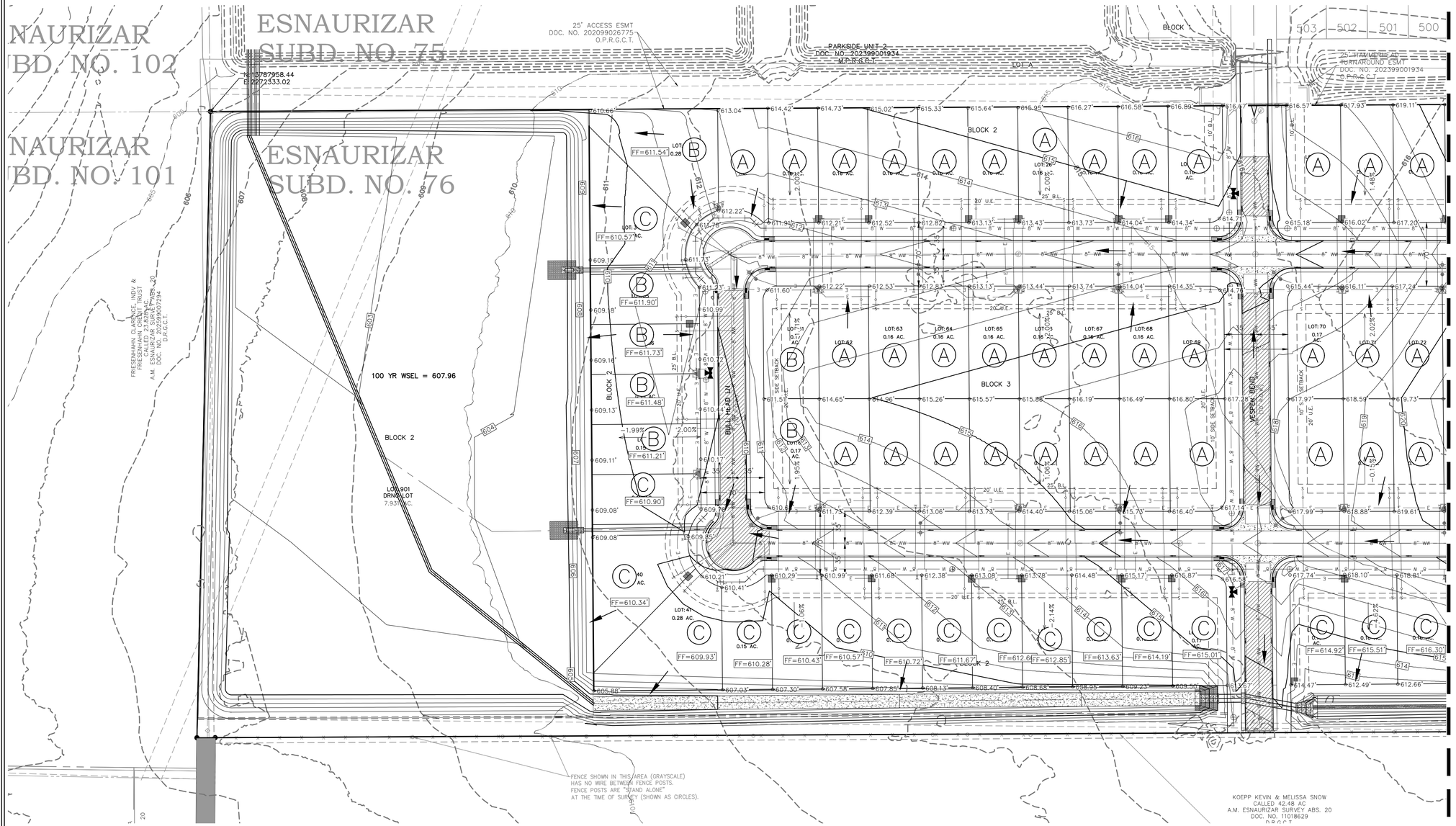
NOTES:

1. DRAINAGE IMPROVEMENTS SUFFICIENT TO MITIGATE OFFSITE IMPACT OF CONSTRUCTION MUST BE COMPLETED AND IN PLACE PRIOR TO ADDING IMPERVIOUS COVER TO THE SITE.
2. ALL FINISHED FLOOR ELEVATIONS SHALL MEET THE FOLLOWING REQUIREMENTS:
   - 2.A. PER NOTE 10 ON PLAT SHEET ###
   - 2.B. HUD DETAILS SHOWN ON SHEET C5.3.
3. WHEN POSSIBLE, CONTRACTOR SHALL PHASE GRADING SO AS TO EXPOSE THE MINIMUM AMOUNT OF AREA TO SOIL EROSION FOR THE SHORTEST PERIOD OF TIME.
4. FOR ANY LOTS ADJACENT TO A DRAINAGE STRUCTURE, HOME BUILDER TO ENSURE FINISHED FLOOR HAS A MINIMUM ELEVATION AS LABELED OR AS PER NOTE 2 ABOVE, WHICHEVER IS GREATER.
5. STRIPPING OF VEGETATION FROM PROJECT SITES SHALL BE PHASED SO AS TO EXPOSE THE MINIMUM AMOUNT OF AREA TO SOIL EROSION FOR THE SHORTEST POSSIBLE PERIOD OF TIME PER THE NEW BRAUNFELS DRAINAGE AND EROSION CONTROL DESIGN MANUAL SEC. 12.2(N).
6. PER TPDES REQUIREMENTS, DISTURBED AREAS ON WHICH CONSTRUCTION ACTIVITIES HAVE CEASED (TEMPORARILY OR PERMANENTLY) SHALL BE STABILIZED WITHIN 14 DAYS UNLESS ACTIVITY RESUMES WITHIN 21 DAYS. SEEDING AND/OR HYDROMULCH DOES NOT CONSTITUTE STABILIZATION, MINIMUM 70 PERCENT VEGETATIVE COVER OF DISTURBED AREAS IS REQUIRED.
7. ALL SIDEWALKS SHALL HAVE A MAX RUNNING SLOPE OF 5%
8. ALL SIDEWALKS SHALL HAVE A MAX CROSS SLOPE OF 2%
9. RAMPS SHALL NOT EXCEED 8.33% RAMPS LONGER THAN 6' REQUIRE HANDRAILS. RAMPS LONGER THAT 30' REQUIRE A LEVEL LANDING.

0 30 60 120
SCALE: 1" = 60'

LEGEND

- 700 — EXISTING CONTOURS
- 700 — PROPOSED CONTOURS
- B.L. BUILDING SETBACK LINE
- U.E. UTILITY EASEMENT
- D.E. DRAINAGE EASEMENT
- (A) LOT GRADING SEE DETAILS SHEET C4.1.
- DRAINAGE FLOW DIRECTION
- FF=XXX.X MINIMUM FINISHED FLOOR ELEVATION



REFER TO COVER SHEET FOR BENCHMARK INFORMATION

THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR WILL AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE INCURRED BY THEIR FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES, STRUCTURES OR FACILITIES. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES 24-HOURS PRIOR TO COMMENCING CONSTRUCTION.

290 S. CASTELL AVE., STE. 100
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CHRISTOPHER P. VAN HEERDEN
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LICENSED
PROFESSIONAL ENGINEER
04/13/2026

GRADING PLAN (1 OF 2)

PARKSIDE SOUTH
UNIT 1

NO.	REVISION DESCRIPTION	DATE

DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C5.1

Drawing Name: N:_Projects\337 - Lennar\130 - Parkside South Unit 1\CDs\GRADING PLAN (2 OF 2).dwg User: jsmm Apr 16, 2026 - 5:47pm

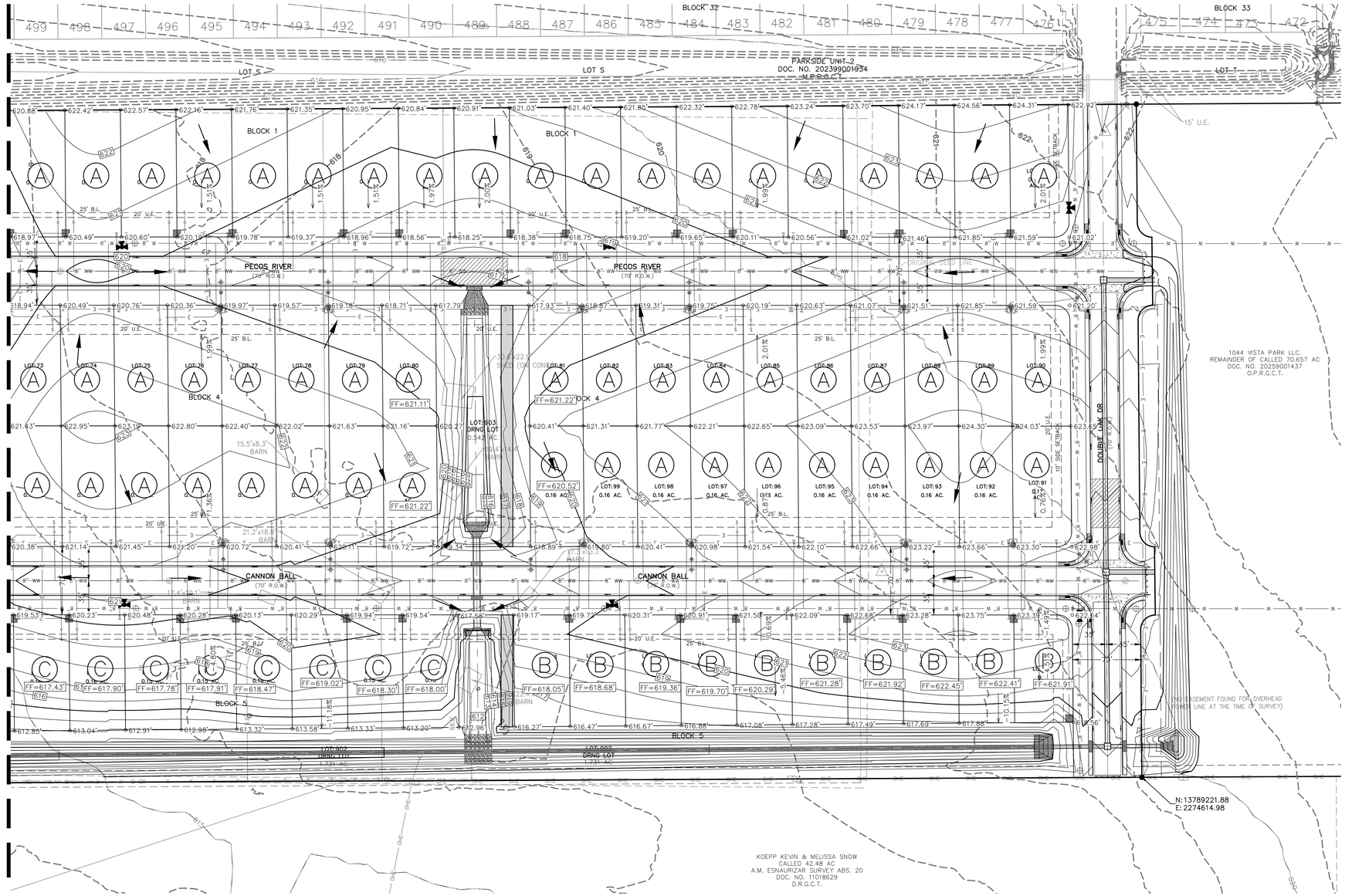
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7. ALL SIDEWALKS SHALL HAVE A MAX RUNNING SLOPE OF 5%.
8. ALL SIDEWALKS SHALL HAVE A MAX CROSS SLOPE OF 2%.
9. RAMPS SHALL NOT EXCEED 8.33% RAMPS LONGER THAN 6' REQUIRE HANDRAILS. RAMPS LONGER THAT 30' REQUIRE A LEVEL LANDING.

0 30 60 120
SCALE: 1" = 60'

LEGEND

- 700 EXISTING CONTOURS
- 700 PROPOSED CONTOURS
- B.L. BUILDING SETBACK LINE
- U.E. UTILITY EASEMENT
- D.E. DRAINAGE EASEMENT
- (A) LOT GRADING SEE DETAILS SHEET C4.1.
- DRAINAGE FLOW DIRECTION
- FF=XXX.X MINIMUM FINISHED FLOOR ELEVATION



REFER TO COVER SHEET FOR BENCHMARK INFORMATION

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GRADING PLAN (2 OF 2)

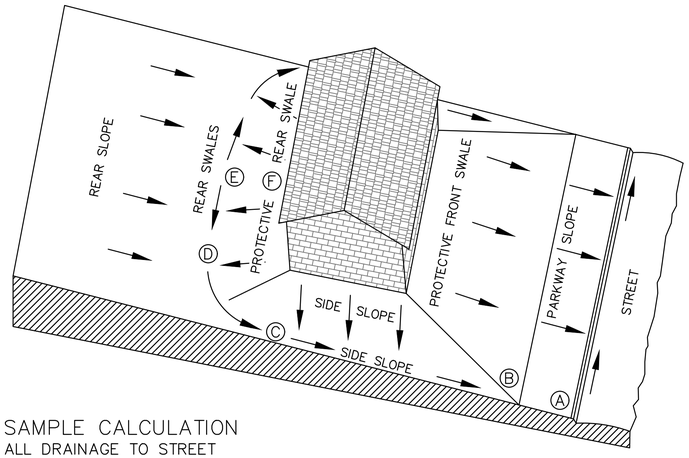
PARKSIDE SOUTH
UNIT 1

NO.	REVISION DESCRIPTION	DATE

DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C5.2

Drawing Name: N:_Projects\337 - Lennar\130 - Parkside South Unit 1\C05\GRADING PLAN (2 OF 2).dwg User: jonm Apr 16, 2026 - 5:47pm



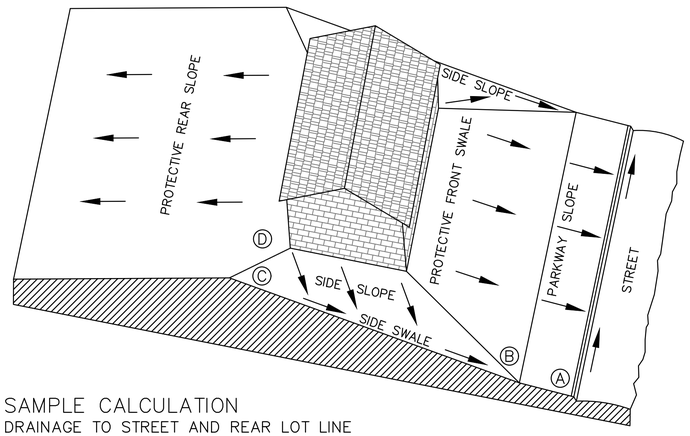
SAMPLE CALCULATION
ALL DRAINAGE TO STREET

SAMPLE COMPUTATION OF GRADING CONTROL LINE AF FOR A 60' WIDE LOT WITH A 25' BUILDING LINE, 0.5% STREET, WITH 60' BUILDING DEPTH AND 2% SWALES.			RESULTS OF 1% SWALES	
A	CURB–TOP ON LOT LINE EXTENSION AT HIGH LOT CORNER			
$\overline{AB}$	PARKWAY SLOPE: 15' GRASS AND WALK AT 1/4"/FT. (2%)	4" (0.3')	2"	(0.2')
$\overline{BC}$	SIDE SWALE: 85' GRASS AT 1/4"/FT. (2%)	21" (1.8')	11"	(0.9')
$\overline{CD}$	SWALE TURN WITH 10' RADIUS:16' GRASS AT 1/4"/FT. (2%)	4" (0.3')	2"	(0.2')
$\overline{DE}$**	REAR SWALE: 13' GRASS AT 1/4"/FT. (2%)	3" (0.3')	2"	(0.2')
$\overline{EF}$*	PROTECTIVE REAR SLOPE UP FROM HIGH POINT OF SWALES	3" (0.3')	3"	(0.3')
SUB–TOTAL $\overline{AF}$ FROM CURB TOP TO GROUND AT REAL BLDG WALL		35" (3.0')	20"	(1.7')
MINIMUM RISE FROM CURB TOP TO SLAB FLOOR: 35" + 8"		43" (3.6')	28"	(2.3')
MINIMUM RISE FOR WOOD FLOOR USING 8" JOISTS: 35" + 9"		54" (4.5')	39"	(3.3')

CALCULATIONS FOR 2% SWALES
15 x 0.25" = 3¾"
85 x 0.25" = 21¼"
16 x 0.25" = 4"
13 x 0.25" = 3¼"
10 x 0.25" = 2½"
34¾"
CALCULATIONS USE 0.25" PER FOOT GRADIENT FOR A 2% SWALE.

* WHERE THERE IS A HIGH BANK NEARBY OR A LONG SLOPE TOWARD HOUSE, A MINIMUM 6" PROTECTIVE SLOPE IS REQUIRED.

** LENGTH $\overline{DE}$ = [1/2(LOT WIDTH – (2x SWALE TURN RADIUS))] – [LOT WIDTH x (STREET GRADIENT x SWALE GRADIENT)]

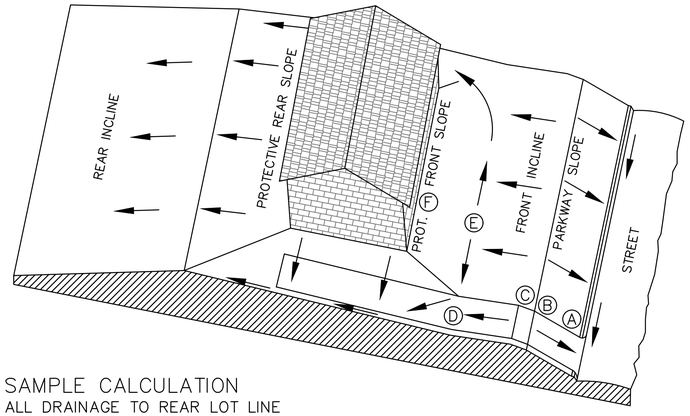


SAMPLE CALCULATION
DRAINAGE TO STREET AND REAR LOT LINE

SAMPLE COMPUTATION OF GRADING CONTROL LINE AF FOR A 60' WIDE LOT WITH A 25' BUILDING LINE, 0.5% STREET, WITH 60' BUILDING DEPTH AND 2% SWALES.			RESULTS OF 1% SWALES	
A	CURB–TOP ON LOT LINE EXTENSION AT HIGH LOT CORNER			
$\overline{AB}$	PARKWAY SLOPE: 15' GRASS AND WALK AT 1/4"/FT. (2%)	4" (0.3')	2"	(0.2')
$\overline{BC}$	SIDE SWALE: 85' GRASS AT 1/4"/FT. (2%)	21" (1.8')	11"	(0.9')
$\overline{CD}$*	PROTECTIVE SIDE SLOPE @ REAR BLDG. WALL EXTENSION	3" (0.3')	3"	(0.3')
SUB–TOTAL $\overline{AD}$ FROM CURB TOP TO GROUND AT REAL BLDG WALL		27" (2.4')	16"	(1.4')
MINIMUM RISE FROM CURB TOP TO SLAB FLOOR: 27" + 8"		35" (2.9')	24"	(2.0')
MINIMUM RISE FOR WOOD FLOOR USING 8" JOISTS: 35" + 9"		46" (3.8')	35"	(2.9')

CALCULATIONS FOR 2% SWALES
15 x 0.25" = 3¾"
85 x 0.25" = 21¼"
6 x 0.25" = 1½"
26½"
CALCULATIONS USE 0.25" PER FOOT GRADIENT FOR A 2% SWALE.

* WHERE THERE IS A HIGH BANK NEARBY OR A LONG SLOPE TOWARD HOUSE, A MINIMUM 6" PROTECTIVE SLOPE IS REQUIRED.



SAMPLE CALCULATION
ALL DRAINAGE TO REAR LOT LINE

SAMPLE COMPUTATION OF GRADING CONTROL LINE AF FOR A 60' WIDE LOT WITH A 25' BUILDING LINE, 13.5% DRIVEWAY, AND 16' FRONT SWALE DE AT 2.0%			RESULTS OF 1% SWALES	
A	CURB–TOP HIGH SIDE OF DRIVE NEAR LOW LOT CORNER			
$\overline{AB}$	PARKWAY SLOPE: 15' GRASS AND WALK AT 1/4"/FT. (2%)	4" (0.3')	2"	(0.2')
$\overline{BC}$	DRIVEWAY GRADE CHANGE: 4' VERTICAL CURVE FROM UP–GRADE DRIVE IN STREET TO DOWN–GRADE DRIVE ON LOT	0" (0.0')	0"	(0.0')
$\overline{CD}$	DRIVEWAY DOWN–GRADE TO POINT 10 FEET OUT FROM FRONT OF BUILDING: –11' AT 1⅜"/FT (13.5%)	–18" (–1.5')	–18"	(–1.5')
$\overline{DE}$	FRONT SWALE: 16' GRASS AT 1/4"/FT. (2%)	4" (0.3')	2"	(0.2')
$\overline{EF}$*	PROT. FRONT SLOPE UP FROM HIGH POINT OF SWALES	3" (0.3')	3"	(0.3')
SUB–TOTAL $\overline{AF}$ FROM CURB TOP TO GROUND AT FRONT BLDG WALL		–7" (–1.0')	–11"	(1.3')
MINIMUM RISE FROM CURB TOP TO SLAB FLOOR: –7" + 8"		1" (–0.3')	–3"	(0.7')
MINIMUM RISE FOR WOOD FLOOR USING 8" JOISTS: –7" + 19"		12" (–0.6')	8"	(0.3')

CALCULATIONS FOR SWALES
15 x 0.25" = 3¾"
0 x 0.25" = 0"
–11 x 1.625" = –17⅞"
16 x 0.25" = 4"
10 x 0.25" = 2½"
–7½"
CALCULATION:
USE 0.25" PER FOOT GRADIENT FOR A 2% SWALE.
USE 1.625" PER FOOT GRADIENT FOR A 13.5% SWALE.

* WHERE THERE IS A HIGH BANK NEARBY OR A LONG SLOPE TOWARD HOUSE, A MINIMUM 6" PROTECTIVE SLOPE IS REQUIRED.

LOT TYPE Ⓐ

LOT TYPE Ⓑ

LOT TYPE Ⓒ

GENERAL SPECIFICATIONS FOR SITE PREPARATION

GENERAL DESCRIPTION
THIS ITEM SHALL CONSIST OF ALL CLEARING AND PREPARATION OF LAND TO BE FILLED, FILLING OF THE LAND, SPREADING, COMPACTION TESTING AND INSPECTION OF THE FILL, AND ALL SUBSIDIARY WORK NECESSARY TO COMPLETE THE GRADING OF THE CUT AND FILL AREAS TO CONFORM WITH THE LINES, GRADES AND SLOPES AS SHOWN ON THE APPROVED PLANS.

SCARIFYING THE AREA TO BE FILLED
ALL ORGANIC MATTER SHALL BE REMOVED FROM THE SURFACE UPON WHICH THE FILL IS TO BE PLACED, AND SURFACE SHALL BE DISKED OR SCARIFIED TO A MINIMUM DEPTH OF SIX INCHES (6"), ALL SURFACE RUTS OR OTHER UNEVEN FEATURES WILL BE LEVELED PRIOR TO FIELD DENSITY TESTING.

COMPACTING THE AREA TO BE FILLED
FOLLOWING THE CLEARING AND DISKING OR SCARIFYING OF THE FILL AREA, IT SHALL BE BLADED UNTIL IT IS UNIFORM AND FREE FROM LARGE CLODS. THE AREA SHALL BE BROUGHT TO ADEQUATE MOISTURE CONTENT AND COMPACTED (TYPICALLY) TO NOT LESS THAN NINETY PERCENT (90%) OF MAXIMUM DENSITY IN ACCORDANCE WITH THE CURRENT ASTM D 1557 COMPACTION PROCEDURE, OR 95% OF MAXIMUM DENSITY IN ACCORDANCE WITH THE THD–TEX–113–E COMPACTION PROCEDURE. ALL AREAS EXCEEDING (6") SIX INCHES IN DEPTH, MUST MEET WITH FHA/HUD HANDBOOK 4140.30 SPECIFICATIONS FOR LAND DEVELOPMENTS ON CONTROLLED EARTHWORK, DATASHEET 79G.

FILL MATERIALS
THE MATERIALS USED SHALL BE FREE FROM ORGANIC MATTER AND OTHER DELETERIOUS SUBSTANCES, SUCH AS TREES, BRUSH AND RUBBISH.

DEPTH AND MIXING OF FILL LAYERS

THE SELECTED FILL MATERIAL SHALL BE PLACED IN LEVEL, UNIFORM LAYERS WHICH, WHEN COMPACTED, SHALL HAVE A DENSITY CONFORMING TO THE STIPULATED ABOVE.
EACH LAYER SHALL BE THOROUGHLY MIXED DURING THE SPREADING TO ENSURE UNIFORMITY OF MATERIAL IN EACH LAYER. COMPACTED LAYER THICKNESS MAY VARY DEPENDING ON THE COMAPCTION EQUIPMENT OF THE DEMONSTRATED CAPABILITY.

ROCK
WHEN FILL MATERIAL INCLUDES ROCK, THE MAXIMUM ROCK SIZE SHALL BE AS APPROVED BY THE GEOTECHNICAL ENGINEER. NO LARGE ROCKS SHALL BE ALLOWED TO NEST AND ALL VOIDS MUST BE FILLED WITH SMALL STONES OR SOIL AND ADEQUATELY COMPACTED.

COMPACTION OF FILL LAYER
COMPACTION EQUIPMENT SHALL BE CAPABLE OF COMPACTING THE FILL TO THE SPECIFIED DENSITY. COMPACTION SHALL BE ACCOMPLISHED WHILE THE FILL MATERIAL IS AT OR NEAR THE APPROPRIATE MOISTURE CONTENT. COMPACTION OF EACH LAYER SHALL BE CONTINUOUS OVER THE ENTIRE STRUCTURAL AREA (BENEATH PROPOSED STRUCTURES).

COMPACTION OF SLOPES
THE FACES OF FILL SLOPES SHALL BE COMPACTED. COMPACTING OPERATIONS SHALL BE CONTINUED UNTIL THE SLOPE FACES ARE STABLE BUT NOT TO DENSE FOR PLANTING ON THE SLOPES. COMPACTION OF THE SLOPE FACE MAY BE DONE PROGRESSIVELY IN INCREMENTS OF THREE TO FIVE FEET (3' TO 5') IN FILL HEIGHT AS THIS FILL PROGRESSES OR AFTER THE FILL HAS BEEN BROUGHT TO ITS TOTAL HEIGHT.

DENSITY TEST
FIELD DENSITY TESTS SHALL BE PERFORMED ON ALL LAYERS OF FILL WHEN THE FILL IS BEING PLACED AS DIRECTED BY THE GEOTECHNICAL ENGINEER. THE MAXIMUM FILL HEIGHT BETWEEN DENSITY TESTING SHALL BE TWELVE INCHES (12"). ALL TESTING SHALL BE REQUESTED BY THE CONTRACTOR TO MEET THE CONTRACTOR'S CONSTRUCTION SCHEDULE. NOTIFICATION BY THE CONTRACTOR TO CONDUCT TESTS SHALL BE AT LEAST THE DAY BEFORE. THIS NOTIFICATION SHALL INCLUDE THE FILL AREA LOCATION (LOT AND BLOCK), THE LIFT OR HEIGHT OF FILL AND APPROXIMATED DESIRED TIME OF TESTING. WHEN THESE TEST INDICATE THAT THE DENSITY OF ANY LAYER OF FILL OR PORTION THEREOF IS BELOW THE REQUIRED DENSITY, THE PARTICULAR LAYER OR PORTION SHALL BE REWORKED AND RETESTED AT THE EXPENSE OF THE CONTRACTOR UNLESS THE CONTRACTOR CAN SHOW EVIDENCE THAT CIRCUMSTANCES BEYOND HIS CONTROL REQUIRED THE RETESTING. GENERALLY, THE SPECIFIC TESTING WILL BE AS FOLLOWS AND CONDUCTED BY A GEO–TECHNICAL ENGINEER OR STAFF.

1. THE LAND TO BE FILLED (PREPARED SUBGRADE) SHALL BE PREPARED AND TESTED AT A FREQUENCY AS DETERMINED BY THE GEOTECHNICAL ENGINEER.
2. THE FIRST LIFT OF COMPACTED FILL (GENERALLY 8–12 IN.) SHALL BE TESTED AS DETERMINED BY THE GEOTECHNICAL ENGINEER. ANY AREAS SUPPORTING THE PROPOSED STRUCTURES REQUIRING FILL SHALL BE TESTED FOR DENSITY COMPLIANCE.
3. FILLS SHALL BE TESTED AT A MAXIMUM OF EACH TWELVE INCHES (12") OF FILL.
4. TEST RESULTS WILL BE PROVIDED BY THE FIELD TECHNICIAN TO THE CONTRACTOR WHEN POSSIBLE: HOWEVER, ALL TEST RESULTS ARE TO BE REVIEWED BY THE GEOTECHNICAL ENGINEER FOR COMPLIANCE. THE ENGINEER WILL NOTIFY THE CONTRACTOR OF ALL TEST RESULTS.

CUT/FILL LOTS
AREAS INVOLVING CUT ON THE PORTION AND FILL ON ANOTHER PORTION OF A SPECIFIC LOT SHALL BE PREPARED TO A MINIMUM DEPTH OF 6 IN., AND WILL BE THE SAME MATERIAL CLASSIFICATION AT THE SAME COMPACTION AND MOISTURE CONTENT. FIELD DENSITY TESTS SHALL BE REQUIRED ON EACH CUT/FILL LOT FOR THE PURPOSE OF DETERMINING UNIFORMITY OF THE AREA SUPPORTING THE PROPOSED STRUCTURES.

HUD 79–G
HUD 79–G REQUIREMENT FOR FILL MATERIAL OF 6 INCHES AND MORE WILL BE CONDUCTED. ALL CUT AREAS WILL ALSO MEET THE REQUIREMENTS FOR HUD 79–G COMPACTION TESTING. IN ADDITION, ENGINEERS MUST PROVIDE VERIFICATION OF ALL AREAS WHICH DO NOT REQUIRE HUD 79–G. AFTER SITE GRADING IS COMPLETED, GEO–TECHNICAL ENGINEER SHALL PROVIDE THE CONTRACTOR AND OWNER A 79–G LETTER.

DRAINAGE NOTE
FINISHED FLOOR ELEVATIONS
THE ELEVATION OF THE LOWEST FLOOR SHALL BE AT LEAST 10 INCHES ABOVE THE FINISHED GRADE OF THE SURROUNDING GROUND, WHICH SHALL BE SLOPED IN A FASHION SO AS TO DIRECT STORMWATER AWAY FROM THE STRUCTURE. PROPERTIES ADJACENT TO STORMWATER CONVEYANCE STRUCTURES MUST HAVE FLOOR SLAB ELEVATION OR BOTTOM OF FLOOR JOISTS A MINIMUM OF ONE FOOT ABOVE THE 100–YEAR WATER FLOW ELEVATION IN THE STRUCTURE. DRIVEWAYS SERVING HOUSES ON THE DOWNHILL SIDE OF THE STREET SHALL HAVE A PROPERLY SIZED CROSS SWALE PREVENTING RUNOFF FROM ENTERING THE GARAGE.

290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 10153600
HMT ENGINEERING & SURVEYING

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDE
93047
LICENSED
PROFESSIONAL ENGINEER
04/13/2026

GRADING DETAILS

PARKSIDE SOUTH
UNIT 1

NO.	REVISION DESCRIPTION	DATE

DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C5.3

Drawing Name: N:_Projects\337 – Lennar\130 – Parkside South Unit 1\Cds\337.130_DETAILS.dwg User: jonm Apr 16, 2026 – 5:48pm

DRAINAGE FEATURES, DETENTION BASIN MAINTENANCE AND EQUIPMENT ACCESS REQUIREMENTS:

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F. MAINTENANCE VEHICLE FOR POND ACCESS SHOULD BE A BOBCAT S175 SKID STEER LOADER OR VEHICLE OF EQUAL TO LESSER SIZE.

0 25 50 100
SCALE: 1" = 50'

LEGEND

700	EXISTING CONTOURS
700	PROPOSED CONTOURS
B.L.	BUILDING SETBACK LINE
U.E.	UTILITY EASEMENT
D.E.	DRAINAGE EASEMENT
S.B.C.	SINGLE BOX CULVERT
	PROPOSED STORM DRAIN LINE
	UTILITY CROSSING

ESNAURIZAR SUBD. NO. 75
ESNAURIZAR SUBD. NO. 76
A.M. ESNAURIZAR SURVEY, ABS. 20
DOC. NO. 202099007294
O.P.R.G.C.T.
25' ACCESS ESMT
DOC. NO. 202099026775
O.P.R.G.C.T.
PARKSIDE UNIT 2
DOC. NO. 202399001934
M.P.R.G.C.T.
LOT A
DRNG. LOT
25' HAMMERHEAD TURNAROUND ESMT
DOC. NO. 202399001934
O.P.R.G.C.T.
LOT S
DRNG. LOT
7.615 AC.
LOT T
DRNG. LOT
1.615 AC.
3787958.44
2272333.02
BLOCK 1
BLOCK 2
BLOCK 3
BLOCK 4
BLOCK 5
BLOCK 32
BLOCK 33
STORM DRAIN D
SEE SHEET C6.8
STORM DRAIN C
SEE SHEET C6.7
DETENTION BASIN
SEE SHEET C6.11
UTILITY CROSSING
PECOS RIVER
(70' R.O.W.)
SIDEWALK BOX
SEE SHEET C6.15
4X3 BOX
TEMPORARY CHANNEL
SEE SHEET C6.5
STORM DRAIN TO BE ACTIVE IN FUTURE DEVELOPMENT
1044 VISTA PARK LLC
REMAINDER OF CALLED 70.627 AC
DOC. NO. 202590014
O.P.R.G.C.T.
DOUBLE OAK DR.
CANNON BALL
(70' R.O.W.)
CHANNEL S2
SEE SHEET C6.6
CHANNEL S1
SEE SHEET C6.1
CHANNEL S1 CULVERT 1
SEE SHEET C6.2
CHANNEL S1 AND CHANNEL S2
CONVERGENCE SEE SHEET C6.3
CHANNEL S1 CULVERT 2
SEE SHEET C6.4
LOT 901
DRNG LOT
7.931 AC.
LOT 902
DRNG LOT
1.4 AC.
N: 13780821.83
E: 2274614.98
KOEPP KEVIN & MELISSA SNOW
227 S ACADEMY AVE.
KOEPP KEVIN NEW BRAUNFELS, TX 78130
CALLED 42.48 AC
KOEPP KEVIN & MELISSA SNOW

REFER TO COVER SHEET FOR BENCHMARK INFORMATION

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TBPELS FIRM F-10961
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HMT ENGINEERING & SURVEYING

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDEN
93047
LICENSED
PROFESSIONAL ENGINEER
04/13/2026

OVERALL STORM PLAN

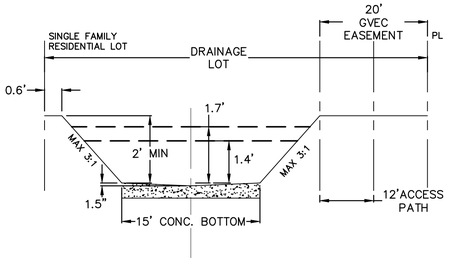
PARKSIDE SOUTH
UNIT 1

NO.	REVISION DESCRIPTION	DATE

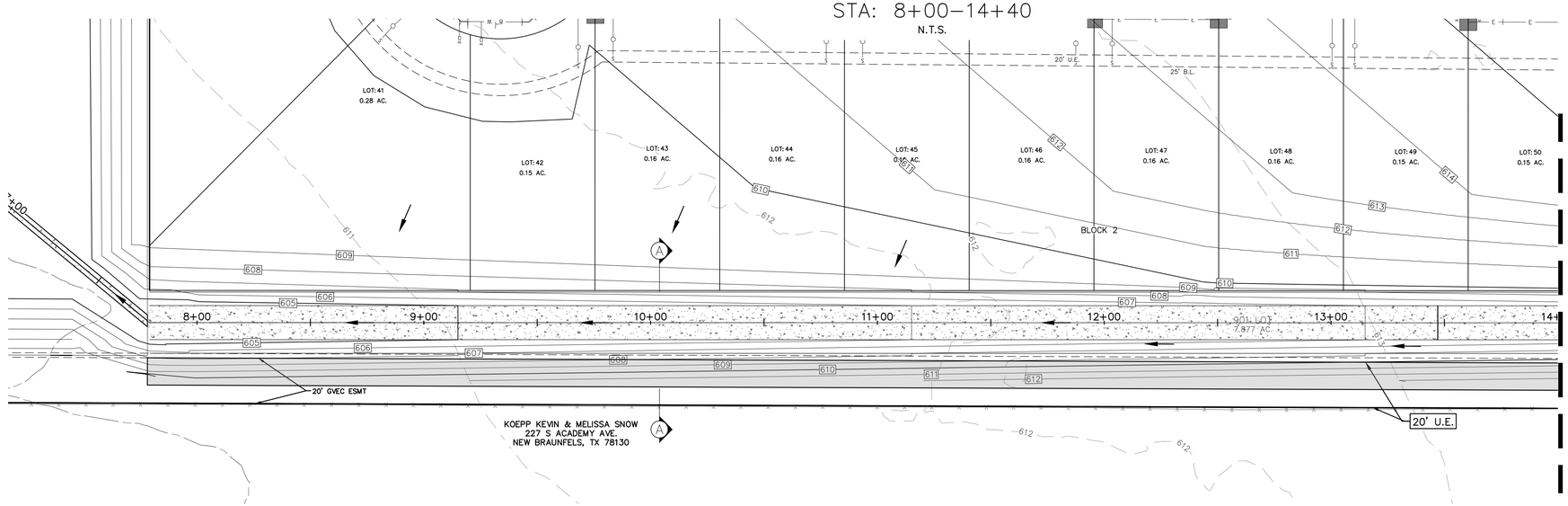
DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C6.0

Drawing Name: N:_Projects\337 - Lennar\130 - Parkside South Unit 1\C0s\OVERALL STORM PLAN.dwg User: jbnm Apr 16, 2026 - 5:48pm

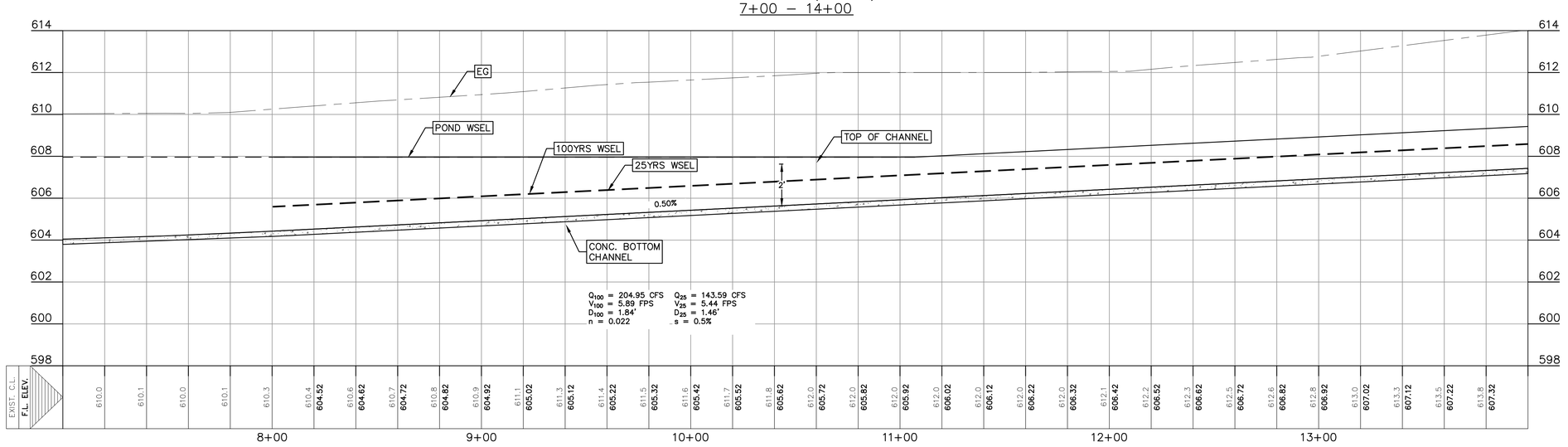


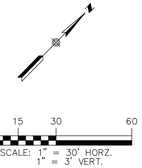
SECTION "A–A"
STA: 8+00–14+40
N.T.S.



MATCHLINE STA. 14+00
SEE SHEET C6.2

CHANNEL S1 (1 OF 4)
7+00 – 14+40





LEGEND

- EXISTING CONTOURS
- PROPOSED CONTOURS
- B.L. BUILDING SETBACK LINE
- U.E. UTILITY EASEMENT
- D.E. DRAINAGE EASEMENT
- S.B.C. SINGLE BOX CULVERT
- PROPOSED STORM DRAIN LINE
- UTILITY CROSSING
- FLOW ARROW

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HMT ENGINEERING & SURVEYING
290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 10153600

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDE
93047
LICENSED PROFESSIONAL ENGINEER
04/13/2026

CHANNEL S1 PLAN & PROFILE (1 OF 4)

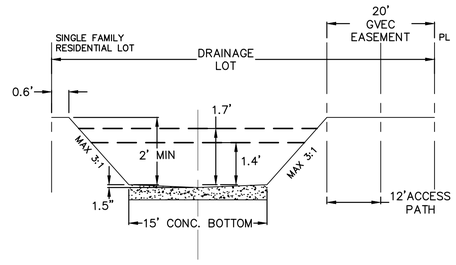
PARKSIDE SOUTH UNIT 1

NO.	REVISION DESCRIPTION	DATE

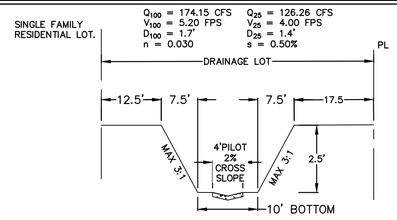
DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C6.1

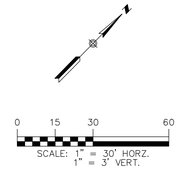
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SECTION "A–A"
STA: 8+00–14+40
N.T.S.

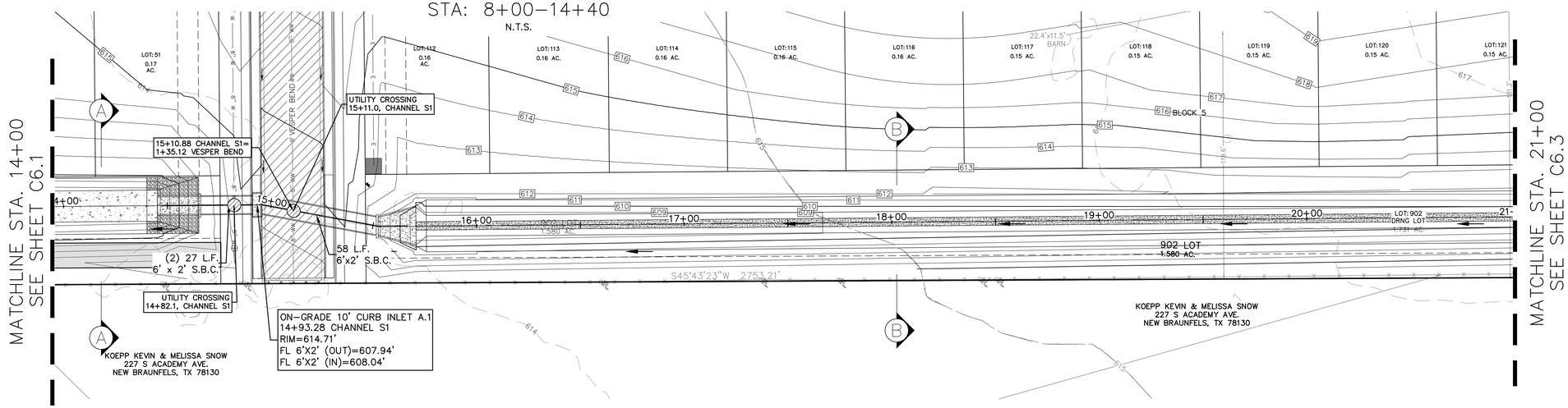


SECTION "B–B"
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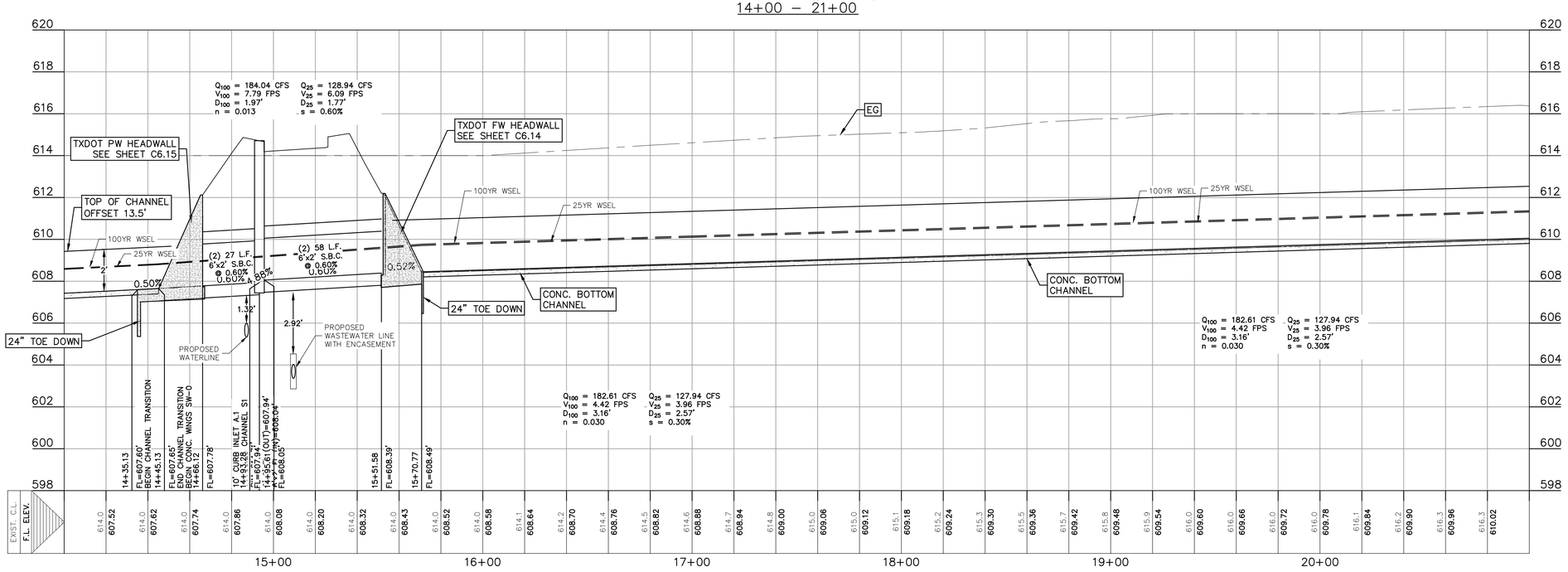


LEGEND

- 700 — EXISTING CONTOURS
- 700 — PROPOSED CONTOURS
- B.L. BUILDING SETBACK LINE
- U.E. UTILITY EASEMENT
- D.E. DRAINAGE EASEMENT
- S.B.C. SINGLE BOX CULVERT
- PROPOSED STORM DRAIN LINE
- UTILITY CROSSING
- FLOW ARROW



CHANNEL S1 (2 OF 4)
14+00 – 21+00



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HMT ENGINEERING & SURVEYING
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TBPELS FIRM F-10961
TBPELS FIRM 10153600

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDE
93047
LICENSED PROFESSIONAL ENGINEER
04/13/2026

CHANNEL S1 PLAN & PROFILE (2 OF 4)

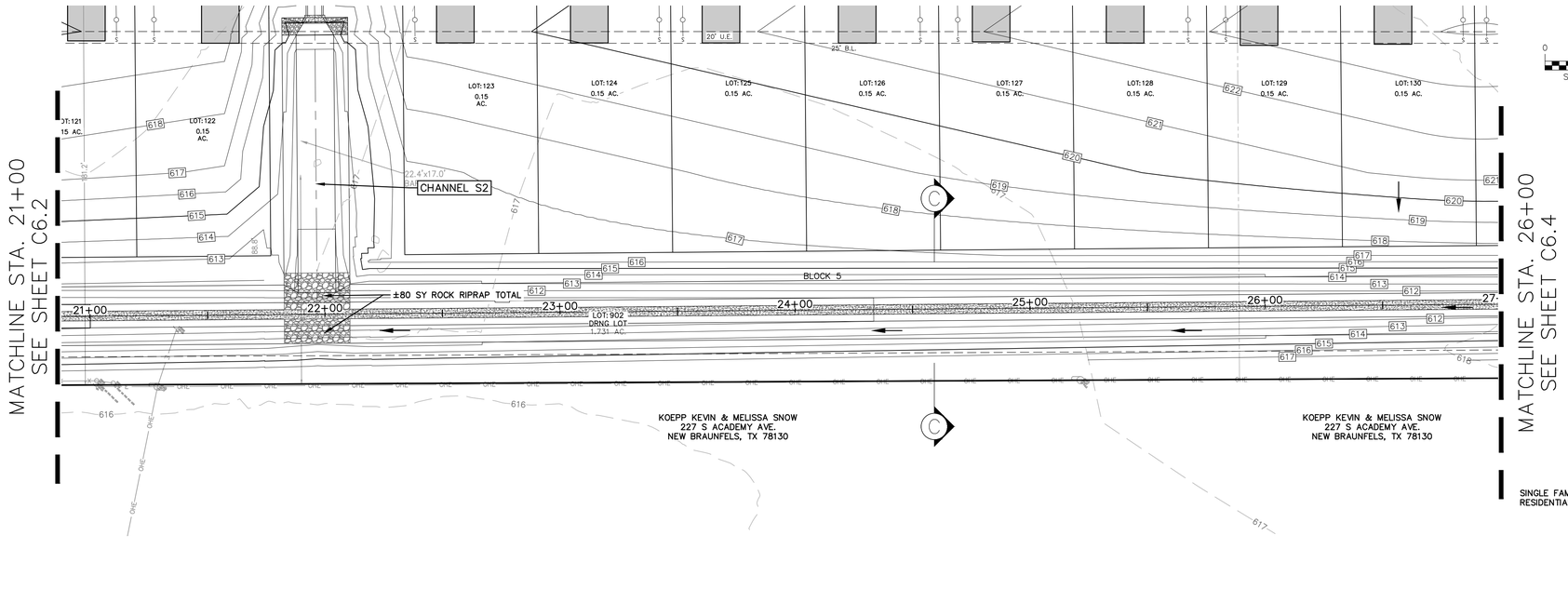
PARKSIDE SOUTH UNIT 1

NO.	REVISION DESCRIPTION	DATE

DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C6.2

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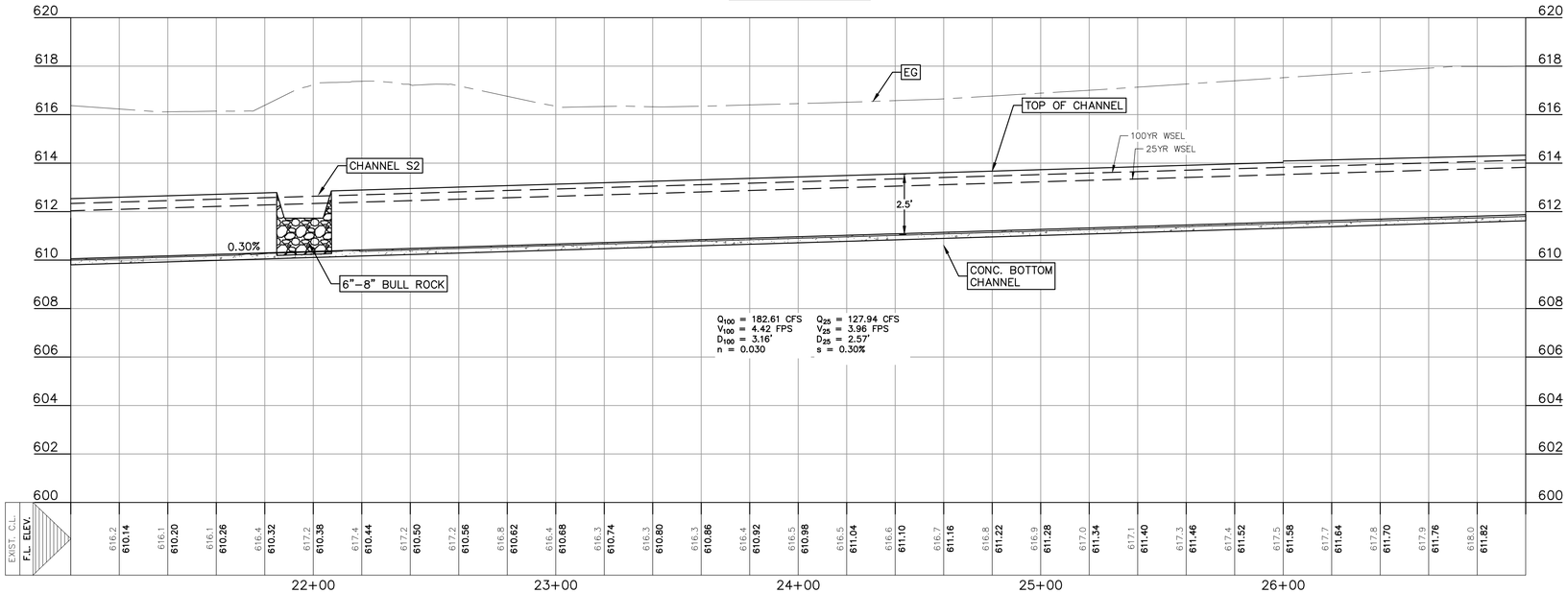


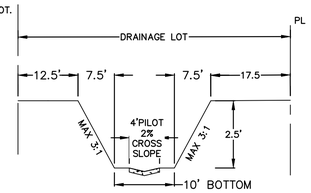
0 15 30 60
SCALE: 1" = 30' HORZ.
1" = 3' VERT.

LEGEND

700	EXISTING CONTOURS
700	PROPOSED CONTOURS
B.L.	BUILDING SETBACK LINE
U.E.	UTILITY EASEMENT
D.E.	DRAINAGE EASEMENT
S.B.C.	SINGLE BOX CULVERT
	PROPOSED STORM DRAIN LINE
	UTILITY CROSSING
	FLOW ARROW

CHANNEL S1 (3 OF 4)
21+00 – 27+00





SECTION "C–C"
STA: 15+67.41 TO END
N.T.S.

Q_{100} = 182.61 CFS Q_{25} = 127.94 CFS
V_{100} = 4.42 FPS V_{25} = 3.96 FPS
D_{100} = 3.16' D_{25} = 2.57'
n = 0.030 s = 0.30%

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HMT ENGINEERING & SURVEYING

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDE
93047
LICENSED
PROFESSIONAL ENGINEER
04/13/2026

CHANNEL S1 PLAN & PROFILE (3 OF 4)

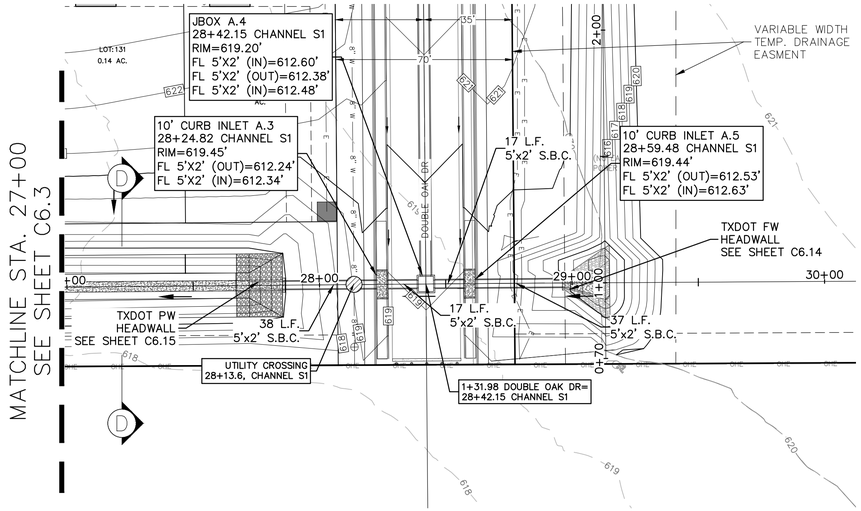
PARKSIDE SOUTH
UNIT 1

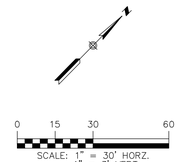
NO.	REVISION DESCRIPTION	DATE

DATE:	APRIL 2026
DRAWN BY:	PMM
DESIGNED BY:	RCD
REVIEWED BY:	CVH
HMT PROJECT NO.:	337.130

SHEET
C6.3

Drawing Name: N:_Projects\337 - Lennar\130 - Parkside South Unit 1\C0s\337.130_CHANNEL S1.dwg User: jonn Apr 16, 2026 - 5:49pm

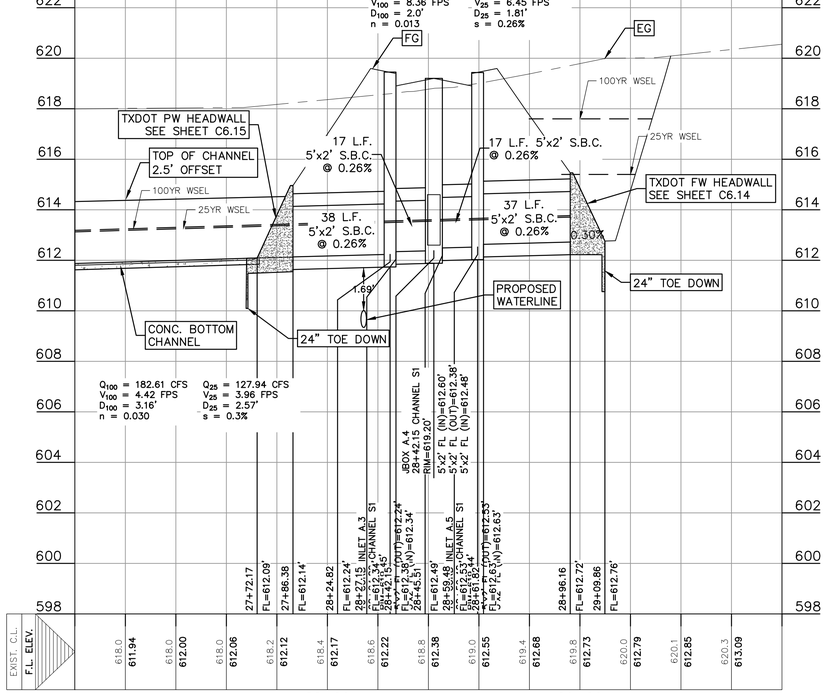


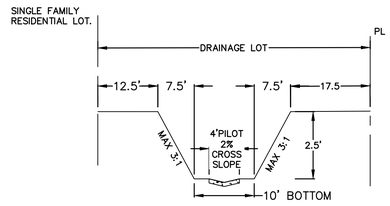


LEGEND

700	EXISTING CONTOURS
700	PROPOSED CONTOURS
B.L.	BUILDING SETBACK LINE
U.E.	UTILITY EASEMENT
D.E.	DRAINAGE EASEMENT
S.B.C.	SINGLE BOX CULVERT
	PROPOSED STORM DRAIN LINE
	UTILITY CROSSING
	FLOW ARROW

CHANNEL S1 (4 OF 4)
27+00 – 29+80





SECTION "D–D"
STA: 15+67.41 TO END
N.T.S.

Q_{100} = 182.61 CFS
V_{100} = 4.42 FPS
D_{100} = 3.16'
n = 0.030

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D_{25} = 2.57'
s = 0.30%

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REFER TO COVER SHEET FOR BENCHMARK INFORMATION

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290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 10153600
HMT ENGINEERING & SURVEYING

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDE
93047
LICENSED
PROFESSIONAL ENGINEER
04/13/2026

CHANNEL S1 PLAN & PROFILE (4 OF 4)

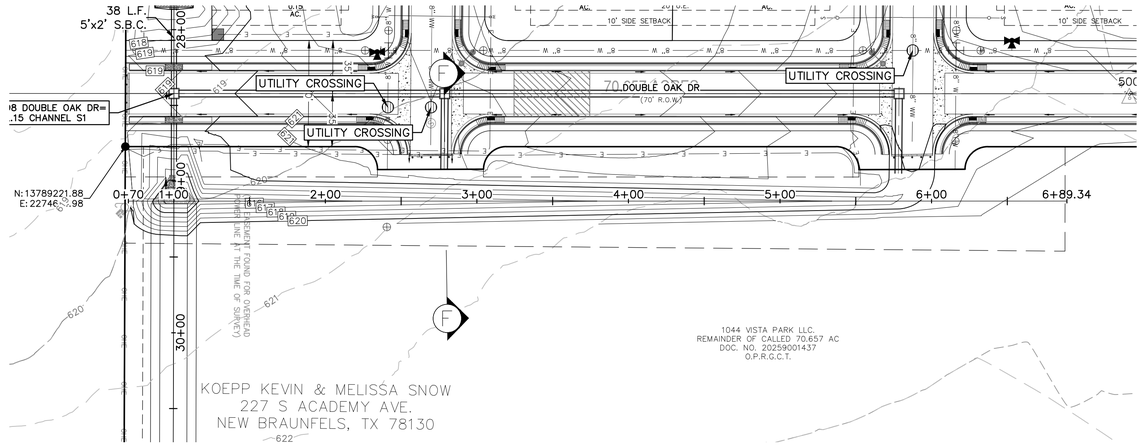
PARKSIDE SOUTH
UNIT 1

NO.	REVISION DESCRIPTION	DATE

DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C6.4

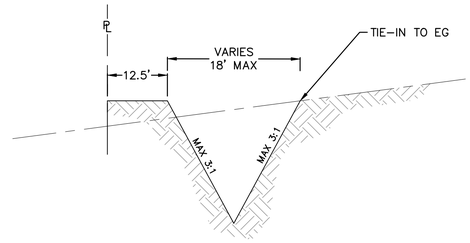
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LEGEND

700	EXISTING CONTOURS
700	PROPOSED CONTOURS
B.L.	BUILDING SETBACK LINE
U.E.	UTILITY EASEMENT
D.E.	DRAINAGE EASEMENT
S.B.C.	SINGLE BOX CULVERT
	PROPOSED STORM DRAIN LINE
	UTILITY CROSSING
	FLOW ARROW

TEMPORARY CHANNEL
0+50 – 7+00



TEMPORARY CHANNEL
STA: 0+70 TO 6+89.34
CROSS-SECTION
"F-F"
N.T.S.

DRAINAGE FEATURES, DETENTION BASIN MAINTENANCE AND EQUIPMENT ACCESS REQUIREMENTS:

SILT SHALL BE REMOVED AND THE BASIN RETURNED TO ORIGINAL LINES AND GRADES WHEN STANDING WATER CONDITIONS OCCUR OR THE BASIN STORAGE VOLUME IS REDUCED BY MORE THAN 10%.

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C. BASINS SHALL BE MOWED ANNUALLY BETWEEN THE MONTHS OF JUNE AND SEPTEMBER.

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NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 10153600
HMT ENGINEERING & SURVEYING

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDE
93047
LICENSED
PROFESSIONAL ENGINEER
04/13/2026

TEMPORARY CHANNEL PLAN & PROFILE

PARKSIDE SOUTH
UNIT 1

NO.	REVISION DESCRIPTION	DATE

DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C6.5

Drawing Name: N:_Projects\337 - Lennar\130 - Parkside South Unit 1\02bs\337.130_CHANNEL S1.dwg User: jonn Apr 16, 2026 - 5:49pm

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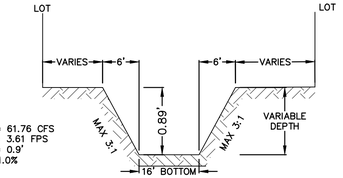
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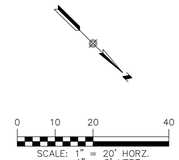
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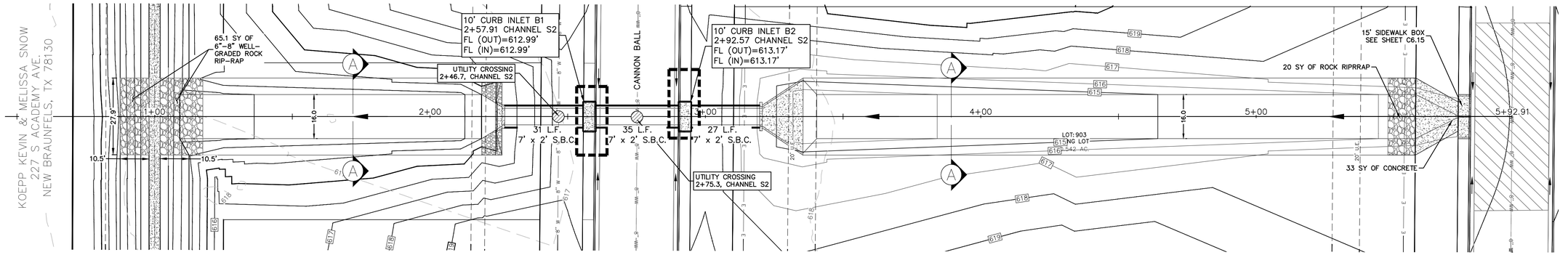


SECTION "A–A"
STA: 1+09.3 TO END
N.T.S.

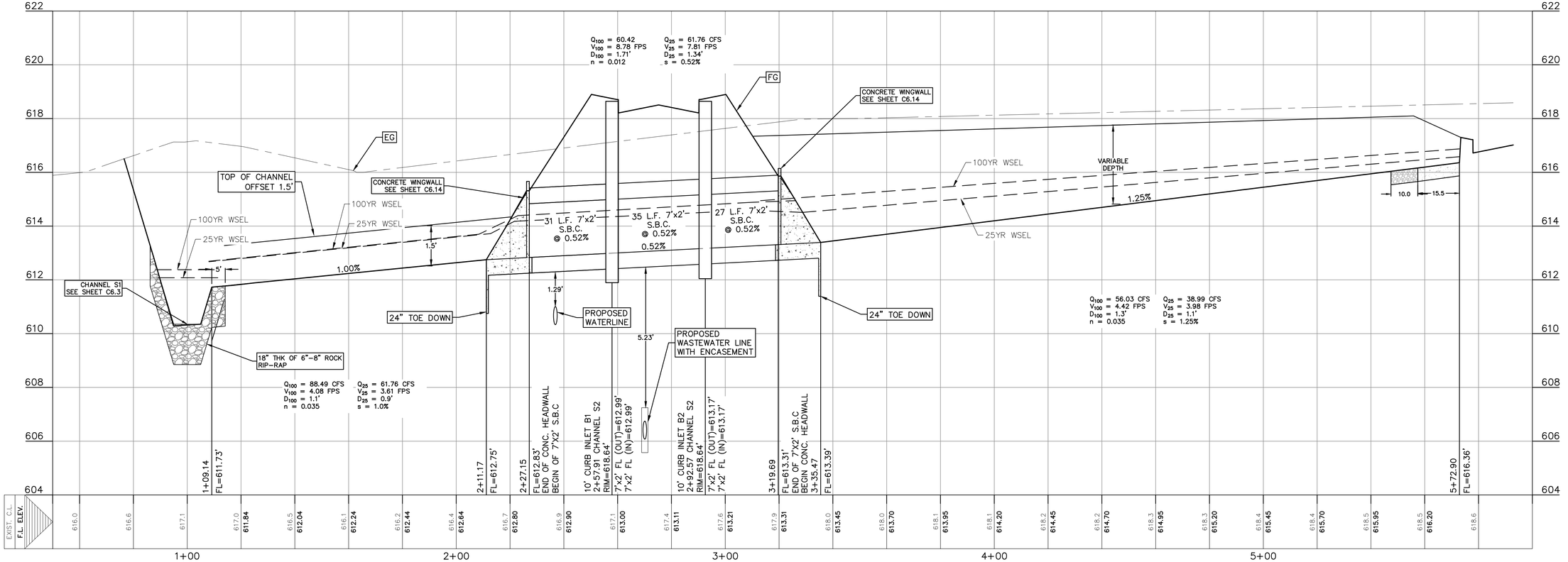


LEGEND

- 700 — EXISTING CONTOURS
- 700 — PROPOSED CONTOURS
- B.L. — BUILDING SETBACK LINE
- U.E. — UTILITY EASEMENT
- D.E. — DRAINAGE EASEMENT
- S.B.C. — SINGLE BOX CULVERT
- PROPOSED STORM DRAIN LINE
- UTILITY CROSSING
- FLOW ARROW
- CONCRETE HATCH
- ROCK RIPRAP HATCH



CHANNEL S2
0+50 – 6+00



290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 10153600
HMT ENGINEERING & SURVEYING

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDEN
93047
LICENSED PROFESSIONAL ENGINEER
04/13/2026

CHANNEL S2 PLAN & PROFILE

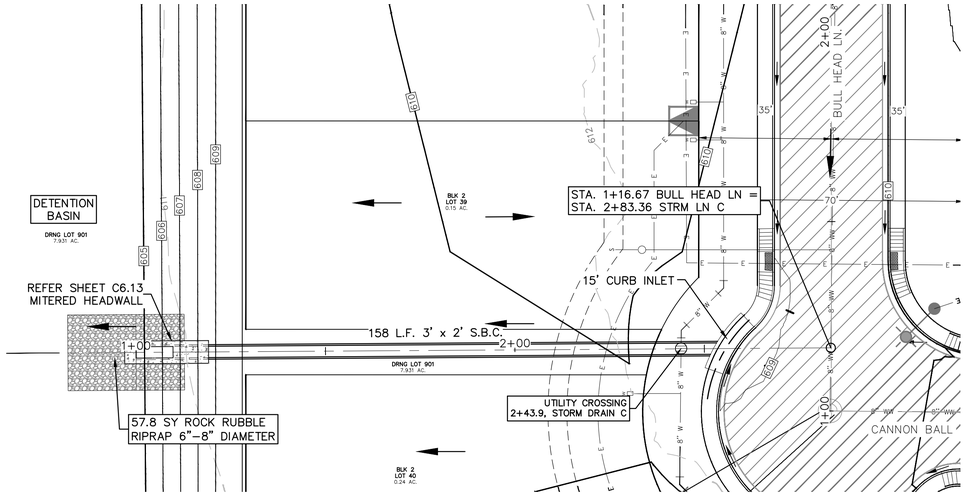
PARKSIDE SOUTH
UNIT 1

NO.	REVISION DESCRIPTION	DATE

DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C6.6

Drawing Name: N:_Projects\337 – Lennon\130 – Parkside South Unit 1\C0s\337.130_CHAN S2.dwg User: jonm Apr 16, 2026 – 5:50pm

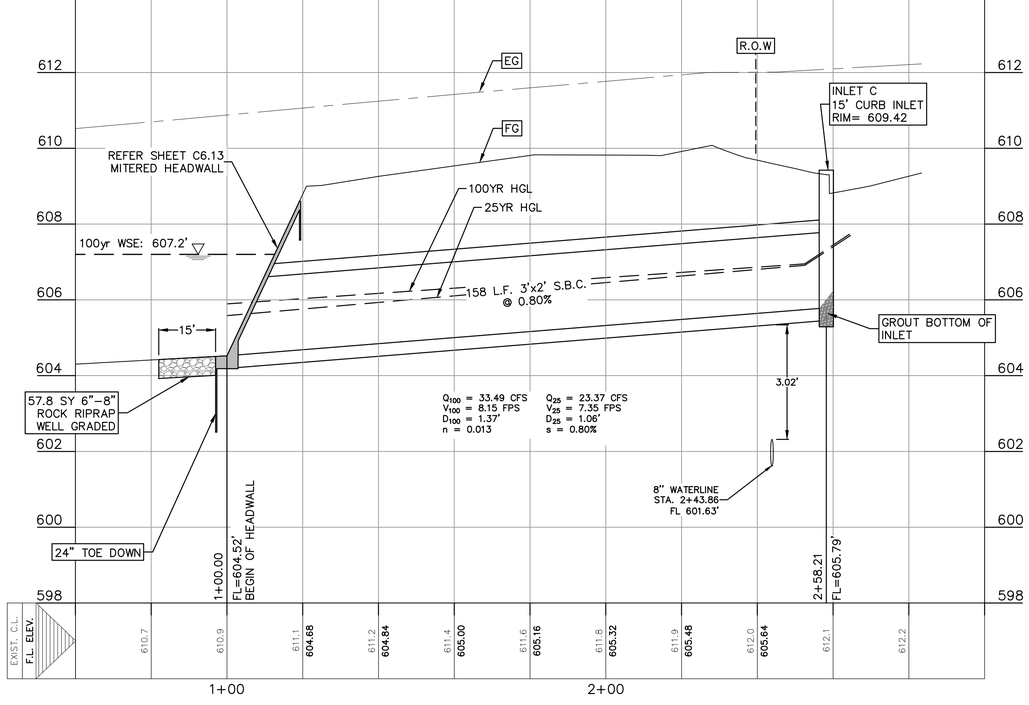




LEGEND

700	EXISTING CONTOURS
700	PROPOSED CONTOURS
B.L.	BUILDING SETBACK LINE
U.E.	UTILITY EASEMENT
D.E.	DRAINAGE EASEMENT
S.B.C.	SINGLE BOX CULVERT
	PROPOSED STORM DRAIN LINE
	UTILITY CROSSING
	FLOW ARROW

STORM LINE C
0+60 – 3+00



DRAINAGE FEATURES, DETENTION BASIN MAINTENANCE AND EQUIPMENT ACCESS REQUIREMENTS:

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HMT ENGINEERING & SURVEYING
290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 10153600

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDE
93047
LICENSED
PROFESSIONAL ENGINEER
Chris Van Heerde, P.E.
04/13/2026

STORM LINE C PLAN & PROFILE

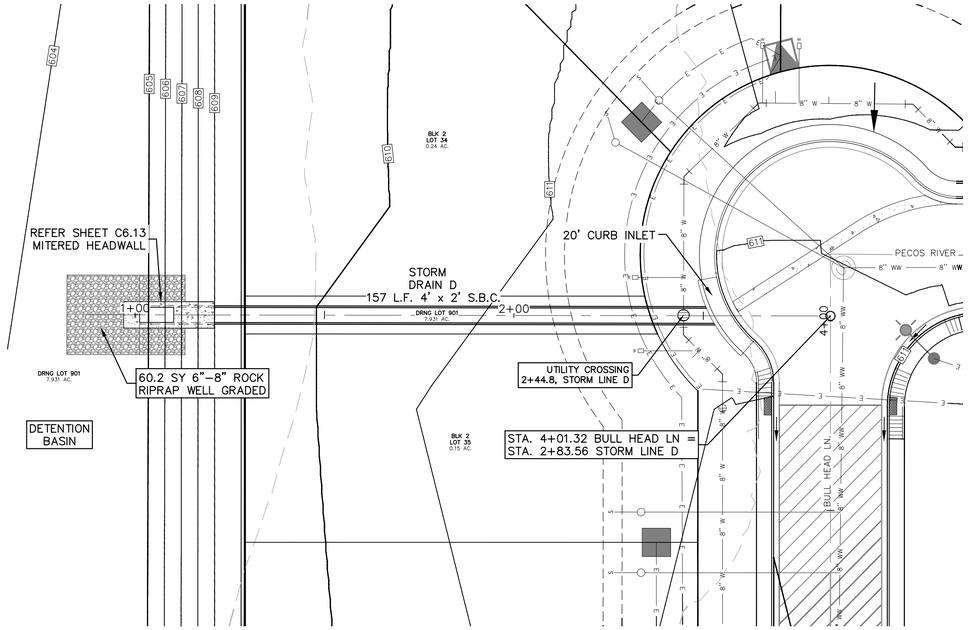
PARKSIDE SOUTH
UNIT 1

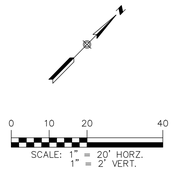
NO.	REVISION DESCRIPTION	DATE

DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C6.7

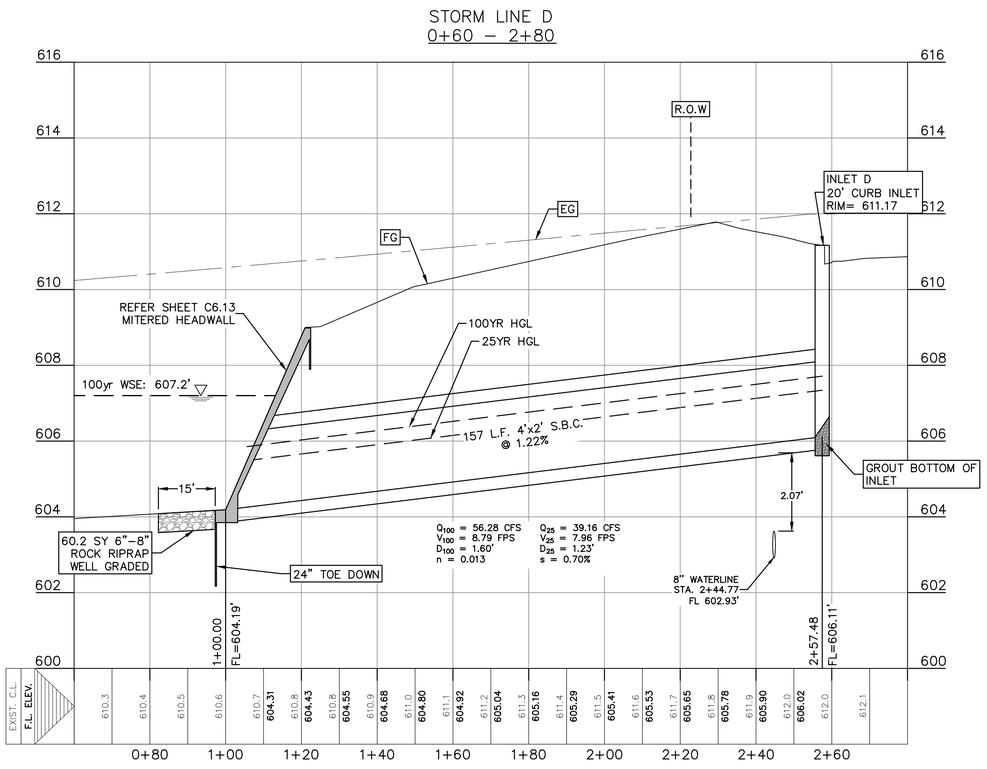
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LEGEND

700	EXISTING CONTOURS
700	PROPOSED CONTOURS
B.L.	BUILDING SETBACK LINE
U.E.	UTILITY EASEMENT
D.E.	DRAINAGE EASEMENT
S.B.C.	SINGLE BOX CULVERT
	PROPOSED STORM DRAIN LINE
	UTILITY CROSSING
	FLOW ARROW



DRAINAGE FEATURES, DETENTION BASIN MAINTENANCE AND EQUIPMENT ACCESS REQUIREMENTS:

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290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 10153600

HMT
ENGINEERING & SURVEYING

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDE
93047
LICENSED
PROFESSIONAL ENGINEER
Christopher Van Heerde, P.E.
04/13/2026

STORM LINE D PLAN & PROFILE

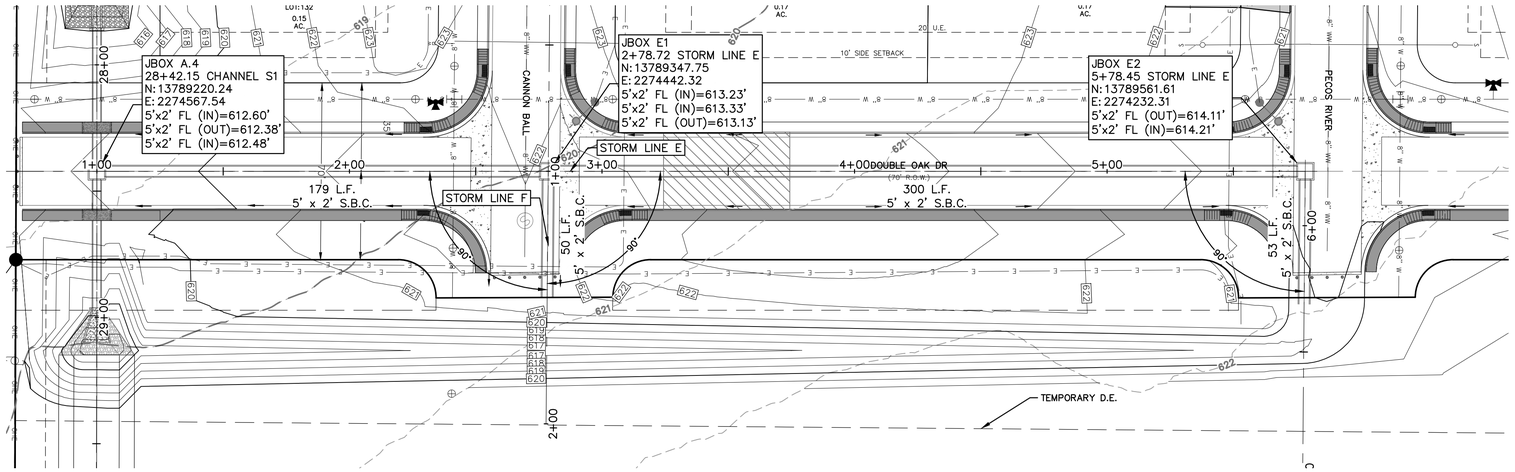
PARKSIDE SOUTH
UNIT 1

NO.	REVISION DESCRIPTION	DATE

DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C6.8

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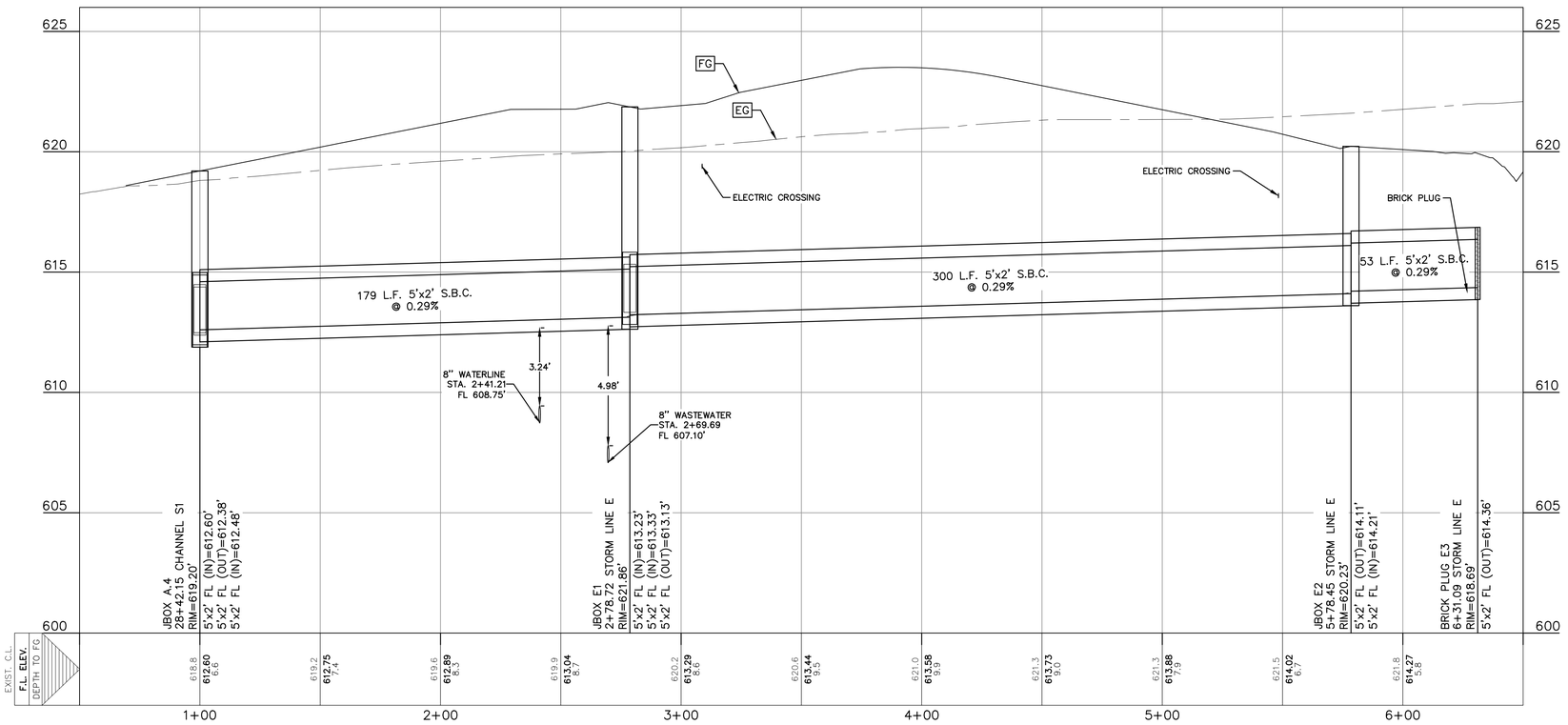




LEGEND

700	EXISTING CONTOURS
700	PROPOSED CONTOURS
B.L.	BUILDING SETBACK LINE
U.E.	UTILITY EASEMENT
D.E.	DRAINAGE EASEMENT
S.B.C.	SINGLE BOX CULVERT
	PROPOSED STORM DRAIN LINE
	UTILITY CROSSING

STORM LINE E
0+50 – 6+50



DRAINAGE FEATURES, DETENTION BASIN MAINTENANCE AND EQUIPMENT ACCESS REQUIREMENTS:

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HMT
ENGINEERING & SURVEYING

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDE
93047
LICENSED
PROFESSIONAL ENGINEER

04/13/2026

STORM LINE E PLAN & PROFILE

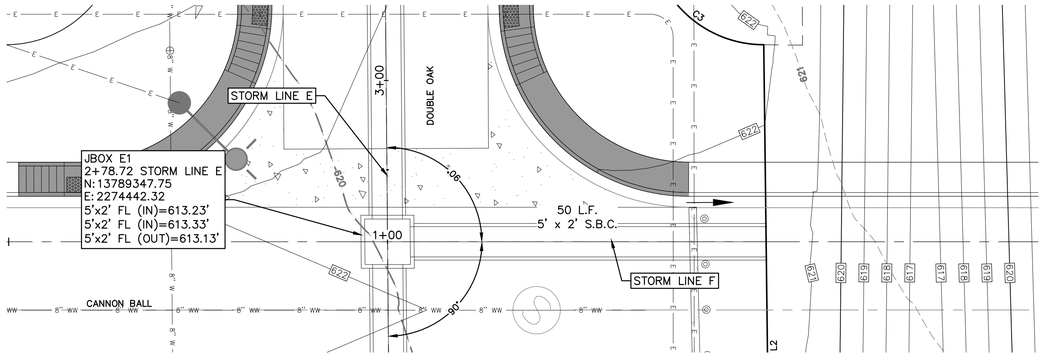
PARKSIDE SOUTH
UNIT 1

NO.	REVISION DESCRIPTION	DATE

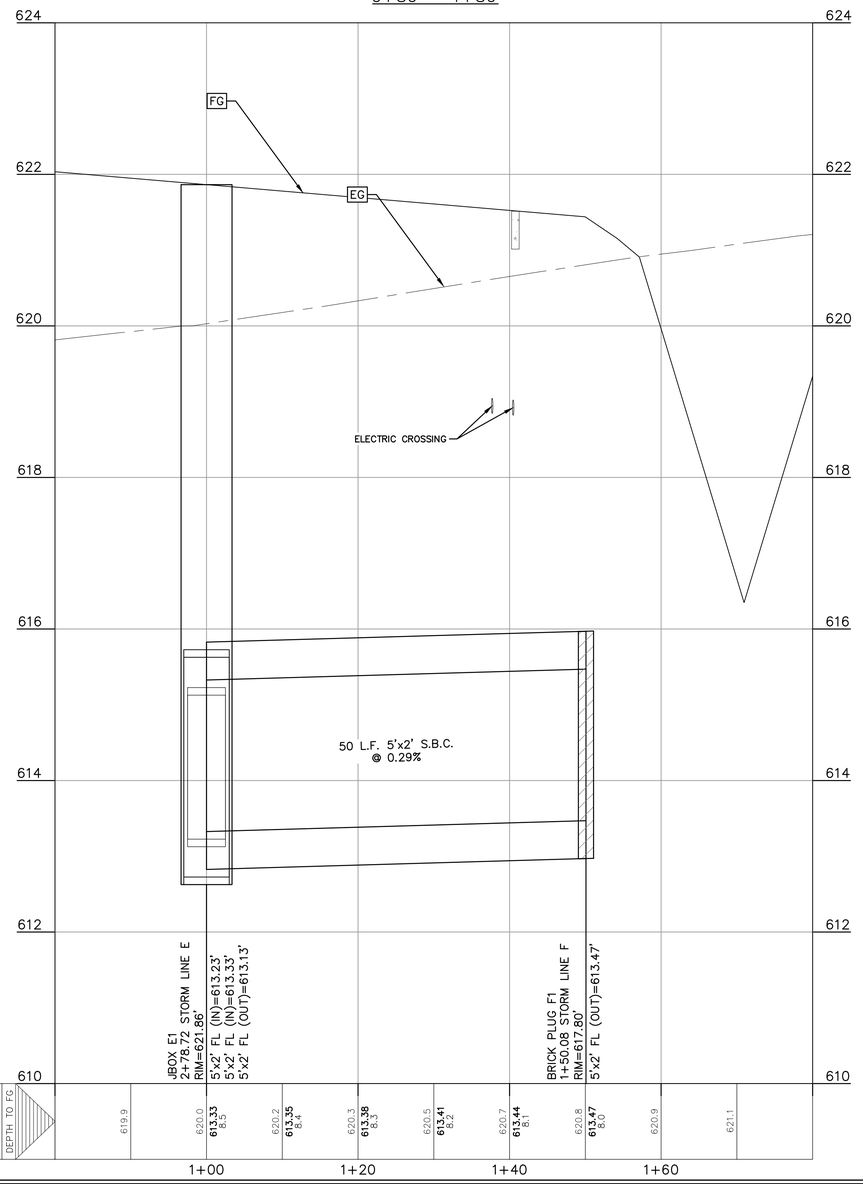
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DRAWN BY:	PMM
DESIGNED BY:	RCD
REVIEWED BY:	CVH
HMT PROJECT NO.:	337.130

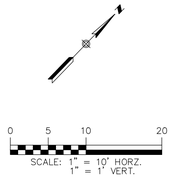
SHEET
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Drawing Name: N:_Projects\337 – Lennar\130 – Parkside South Unit 1\CDs\337.130_STRM E-F.dwg User: jonm Apr 16, 2026 – 5:52pm



STORM LINE F
0+80 – 1+80





LEGEND

700	EXISTING CONTOURS
700	PROPOSED CONTOURS
B.L.	BUILDING SETBACK LINE
U.E.	UTILITY EASEMENT
D.E.	DRAINAGE EASEMENT
S.B.C.	SINGLE BOX CULVERT
	PROPOSED STORM DRAIN LINE
	UTILITY CROSSING

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NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
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HMT ENGINEERING & SURVEYING

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDE
93047
LICENSED
PROFESSIONAL ENGINEER

04/13/2026

STORM LINE F PLAN & PROFILE

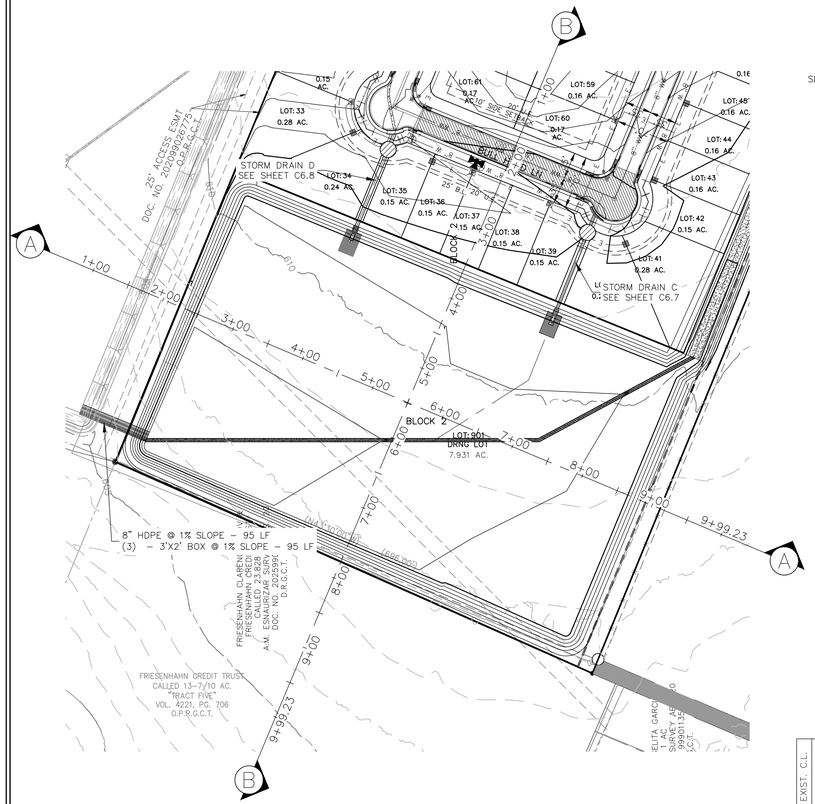
PARKSIDE SOUTH
UNIT 1

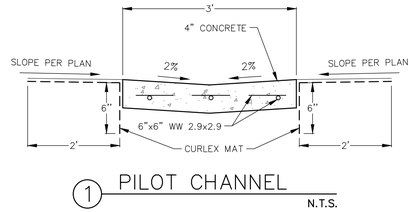
NO.	REVISION DESCRIPTION	DATE

DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C6.10

Drawing Name: N:_Projects\337 - Lennar\130 - Parkside South Unit 1\CDs\337.130_STRM E-F.dwg User: jonm Apr 16, 2026 - 5:52pm





1 PILOT CHANNEL

N.T.S.

DRAINAGE FEATURES, DETENTION BASIN MAINTENANCE AND EQUIPMENT ACCESS REQUIREMENTS:

SILT SHALL BE REMOVED AND THE BASIN RETURNED TO ORIGINAL LINES AND GRADES WHEN STANDING WATER CONDITIONS OCCUR OR THE BASIN STORAGE VOLUME IS REDUCED BY MORE THAN 10%.

A. TO LIMIT EROSION, NO UNVEGETATED AREA SHALL EXCEED 10 SQ. FT. IN EXTENT.

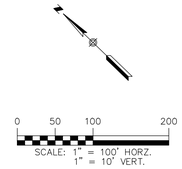
B. ACCUMULATED PAPER, TRASH, AND DEBRIS SHALL BE REMOVED EVERY 6 MONTHS OR AS NECESSARY TO MAINTAIN PROPER OPERATION.

C. BASINS SHALL BE MOWED ANNUALLY BETWEEN THE MONTHS OF JUNE AND SEPTEMBER.

D. CORRECTIVE MAINTENANCE IS REQUIRED ANY TIME A BASIN DOES NOT DRAIN COMPLETELY WITHIN 60 HOURS OR CESSATION OF INFLOW (IE: NO STANDING WATER IS ALLOWED).

E. STRUCTURAL INTEGRITY OF BASINS SHALL BE MAINTAINED AT ALL TIMES.

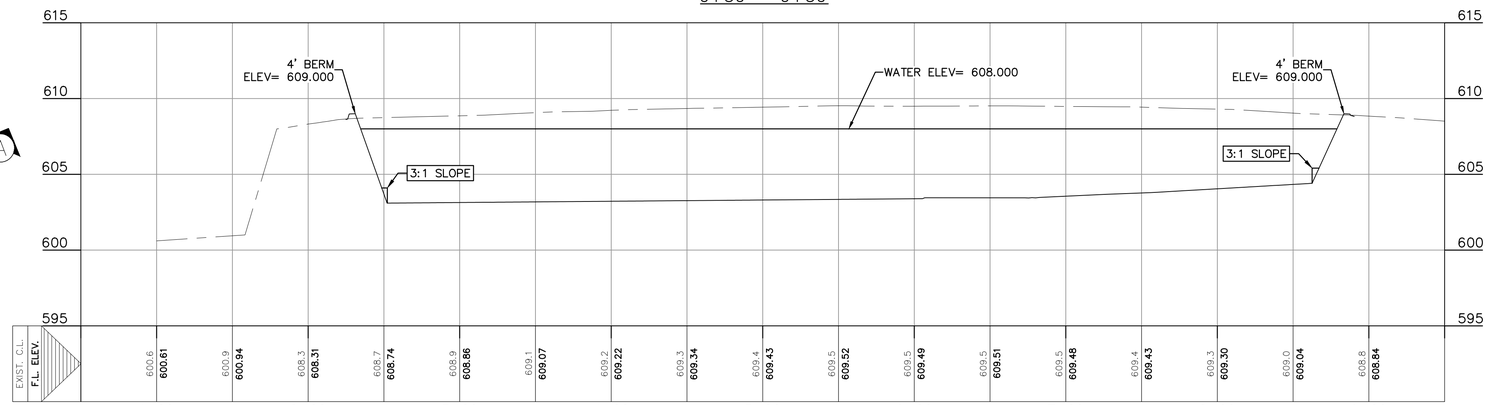
F. MAINTENANCE VEHICLE FOR POND ACCESS SHOULD BE A BOBCAT S175 SKID STEER LOADER OR VEHICLE OF EQUAL TO LESSER SIZE.



LEGEND

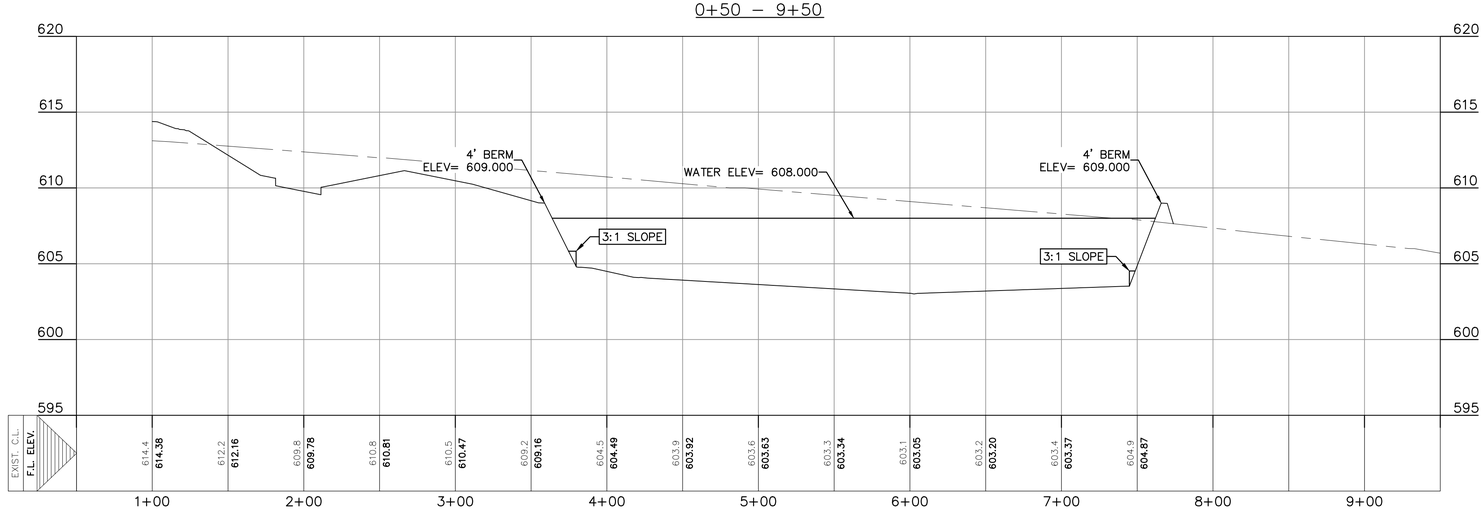
700	EXISTING CONTOURS
700	PROPOSED CONTOURS
B.L.	BUILDING SETBACK LINE
U.E.	UTILITY EASEMENT
D.E.	DRAINAGE EASEMENT
S.B.C.	SINGLE BOX CULVERT
	PROPOSED STORM DRAIN LINE
	UTILITY CROSSING

SECTION A–A
0+50 – 9+50

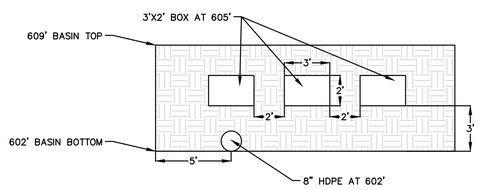


PROFILE SECTION A–A

SECTION B–B
0+50 – 9+50



PROFILE SECTION B–B



REFER TO COVER SHEET FOR BENCHMARK INFORMATION

THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR WILL AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE INCURRED BY THEIR FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES, STRUCTURES OR FACILITIES. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES 24–HOURS PRIOR TO COMMENCING CONSTRUCTION.

290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 10153600
HMT ENGINEERING & SURVEYING

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDE
93047
LICENSED
PROFESSIONAL ENGINEER
04/13/2026

STORM BASIN

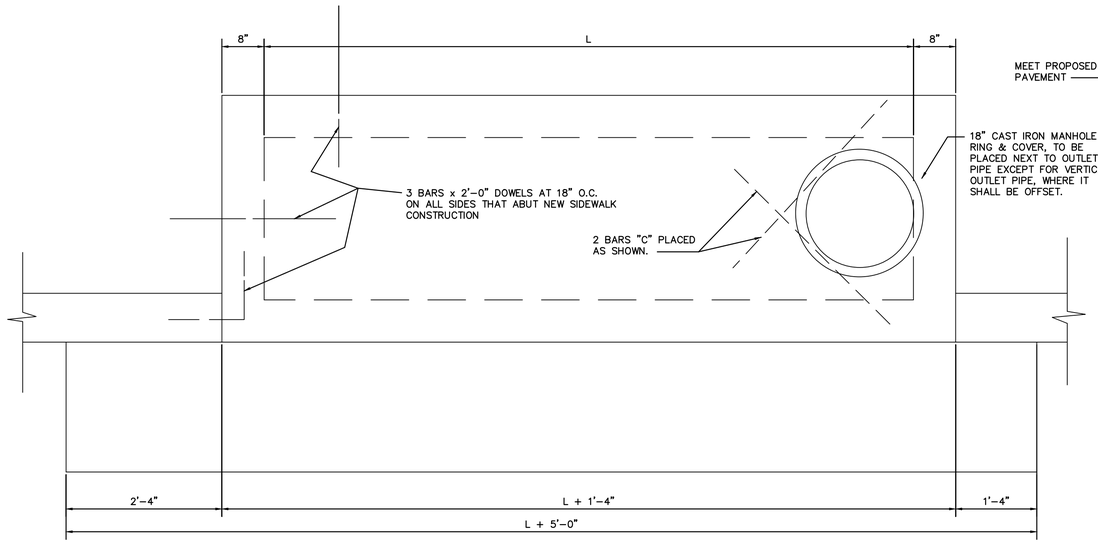
PARKSIDE SOUTH
UNIT 1

NO.	REVISION DESCRIPTION	DATE

DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

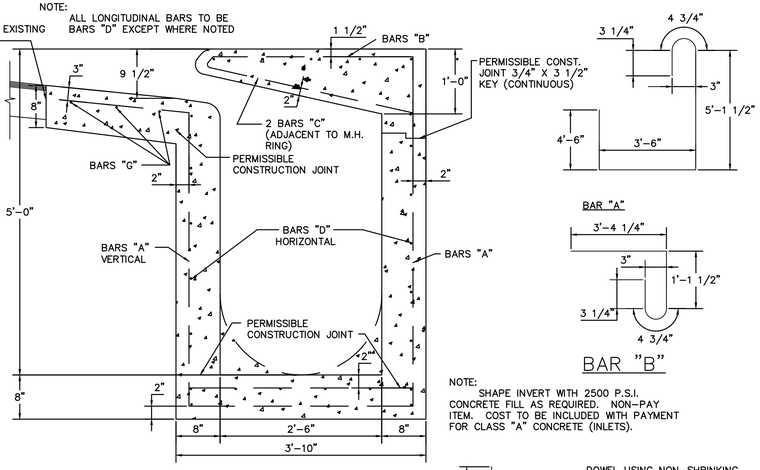
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C6.11

Drawing Name: N:_Projects\337 – Lennar\130 – Parkside South Unit 1\C6s\OVERALL STORM PLAN.dwg User: jonm Apr 16, 2026 – 5:52pm



PLAN VIEW

SCALE: N.T.S.

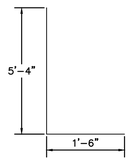


SECTION A–A

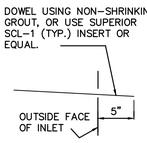
SCALE: N.T.S.

BAR "B"

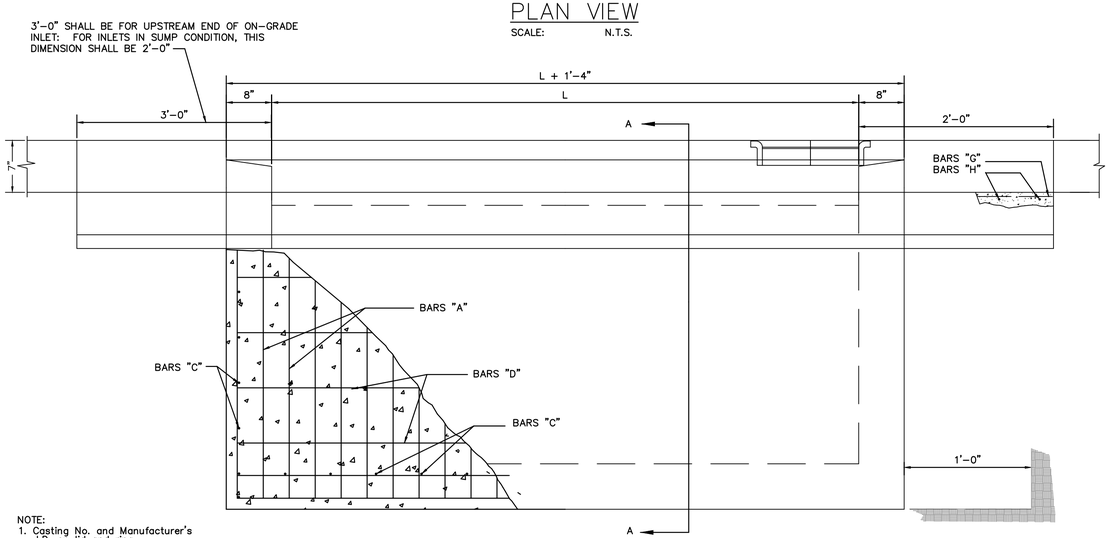
NOTE:
SHAPE INVERT WITH 2500 P.S.I. CONCRETE FILL AS REQUIRED. NON-PAY ITEM. COST TO BE INCLUDED WITH PAYMENT FOR CLASS "A" CONCRETE (INLETS).



BAR "E"



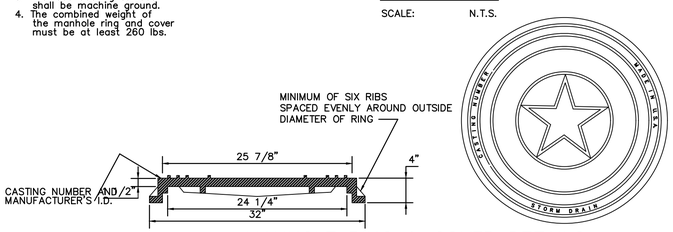
BAR "F"



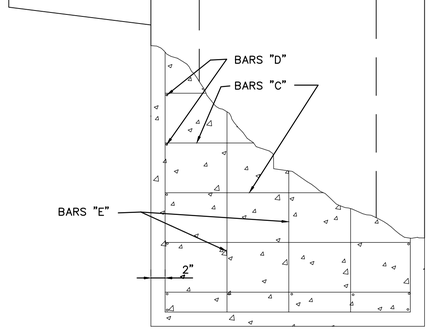
FRONT VIEW

SCALE: N.T.S.

NOTE:
1. Casting No. and Manufacturer's I.D. on lid and ring.
2. Load bearing capability of N-20 minimum.
3. The load bearing surface shall be machine ground.
4. The combined weight of the manhole ring and cover must be at least 260 lbs.

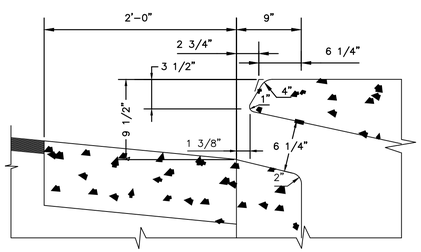


MANHOLE RING & COVER DETAILS

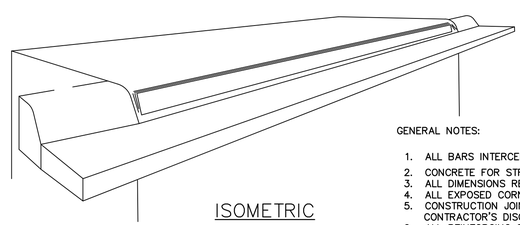


SIDE VIEW

SCALE: N.T.S.



OPENING DETAIL FOR CURB SECTION



ISOMETRIC

GENERAL NOTES:

1. ALL BARS INTERCEPTING MANHOLE RING & REINFORCING CONCRETE PIPE SHALL BE FIELD CUT.
2. CONCRETE FOR STRUCTURES SHALL BE CLASS "A", 3000 P.S.I. IN 28 DAYS.
3. ALL DIMENSIONS RELATING TO REINFORCING STEEL ARE TO CENTER OF BARS.
4. ALL EXPOSED CORNERS SHALL BE CHAMFERED TO 3/4"
5. CONSTRUCTION JOINT SHOWN AT FLOWLINE MAY BE RAISED A MAXIMUM OF 6" AT THE CONTRACTOR'S DISCRETION. ADJUST LENGTH OF VERTICAL STEEL AS REQUIRED.
6. ALL REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF A.S.T.M. A-615, GRADE 60.

Reinforcing Steel Schedule

	BAR	NO.	SIZE	SPA.	LENGTH	WEIGHT
L=5'-00"	A	15	4	5"OC	13"-9 1/2"	138
	B	15	4	5"	5'-1"	52
	C	23	4	9"	3'-6"	54
	D	22	4	10"	6'-1"	89
	E	10	4	10 1/2"	6'-10"	46
	F	6	5	12"	2'-3"	14
	G	3	4	12"	9'-8"	20
	H	5	5	12"	1'-8"	9
*CONCRETE TOTAL=3.53 CY. MANHOLE CASTING=100 LBS. STEEL TOTAL=422 LBS.						
10'	A	27	4	5"OC	13"-9 1/2"	249
	B	27	4	5"	5'-1"	93
	C	30	4	9"	3'-6"	70
	D	22	4	10"	11'-1"	163
	E	10	4	10 1/2"	6'-10"	46
	F	12	5	12"	2'-3"	27
	G	3	4	12"	14'-8"	30
	H	5	5	12"	1'-8"	9
*CONCRETE TOTAL=5.75CY MANHOLE CASTING=100LBS. STEEL TOTAL=687LBS						
15'	A	39	4	5"OC	13"-9 1/2"	359
	B	39	4	5"	5'-1"	134
	C	36	4	9"	3'-6"	84
	D	22	4	10"	16'-1"	236
	E	10	4	10 1/2"	6'-10"	46
	F	17	5	12"	2'-3"	38
	G	3	4	12"	19'-8"	40
	H	5	5	12"	1'-8"	9
*CONCRETE TOTAL=7.97CY. MANHOLE CASTING=100LBS STEEL TOTAL=946LBS						
20'	A	51	4	5"OC	13"-9 1/2"	470
	B	51	4	5"	5'-1"	175
	C	43	4	9"	3'-6"	101
	D	22	4	10"	6'-1"	310
	E	10	4	10 1/2"	6'-10"	46
	F	22	5	12"	2'-3"	50
	G	3	4	12"	9'-8"	50
	H	5	5	12"	1'-8"	9
*CONCRETE TOTAL=10.19CY MANHOLE CASTING=100LBS STEEL TOTAL=1211LBS						
25'	A	63	4	5"OC	13"-9 1/2"	580
	B	63	4	5"	5'-1"	217
	C	50	4	9"	3'-6"	117
	D	22	4	10"	6'-1"	383
	E	10	4	10 1/2"	6'-10"	46
	F	27	5	12"	2'-3"	61
	G	3	4	12"	9'-8"	60
	H	5	5	12"	1'-8"	9
*CONCRETE TOTAL=12.41CY. MANHOLE CASTING=100LBS STEEL TOTAL=1473LB						
30'	A	75	4	5"OC	13"-9 1/2"	691
	B	75	4	5"	5'-1"	258
	C	56	4	9"	3'-6"	131
	D	22	4	10"	6'-1"	457
	E	10	4	10 1/2"	6'-10"	46
	F	32	5	12"	2'-3"	72
	G	3	4	12"	9'-8"	70
	H	5	5	12"	1'-8"	9
*CONCRETE TOTAL=14.63CY MANHOLE CASTING=100LBS STEEL TOTAL=1734LB						

*These figures do not exclude concrete and steel intercepted by Manhole and Reinforced Concrete Pipe.
*Includes concrete gutter for on-grade inlet. Reduce by .05 cy for inlets in sump.

HMT ENGINEERING & SURVEYING
290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 10153600

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDE
93047
LICENSED
PROFESSIONAL ENGINEER

04/13/2026

STORM DETAILS (1 OF 4)

PARKSIDE SOUTH
UNIT 1

NO.	REVISION DESCRIPTION	DATE

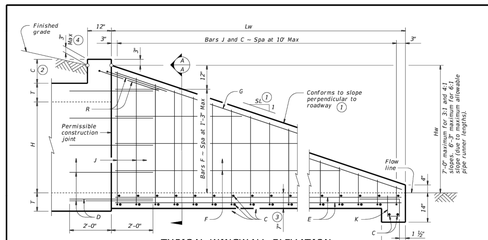
DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

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Drawing Name: K:_Projects\337 - Lennar\130 - Parkside South Unit 1\C0s\337.130_DETAILS.dwg User: jonm Apr 16, 2026 - 5:52pm

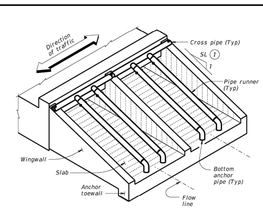
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DATE:
FILE:



TYPICAL WINGWALL ELEVATION

(Pipe runners not shown for clarity.)



ISOMETRIC VIEW OF TYPICAL INSTALLATION

WING DIMENSION CALCULATIONS:

$Hw = H + T + C - 0.250$

$Lw = (Hw - 0.333') (SL)$

For cast-in-place culverts:

$Atw = (N) (S) + (N + 1) (U)$

For precast culverts:

$Atw = (N) (2U + S) + (N - 1) (0.500')$

Total Wingwall Area (SF)
$= (0.5) (Hw + 0.333') (Lw) (N + 1)$

Total Concrete Volume (CY)
$= ((Wingwall Area) (0.583') +$
$(Lw) (Atw) (0.583') +$
$(Atw) (1.167') (1.167' - 0.583')) \div (27)$

PIPE RUNNER DIMENSION CALCULATIONS:

Pipe Runner Length
$= (Lw) (X1) - (1.917')$

Total Reinforcing (Lb)
$= (1.55) (Lw) (Atw) +$
$(4.43) (Atw) +$
$(K2) (Hw) (N + 1) + (Lw)$

C = Height of curb above top of top slab (feet)
Hw = Height of wingwall (feet)
K = Constant value for use in formulas

Slope	SL:1	K1	K2
3:1	–	1.054	7.45
4:1	–	1.031	8.49
6:1	–	1.014	10.30

Atw = Anchor toewall length (feet)
Lw = Length of wingwall (feet)
N = Number of culvert barrels
SL:1 = Side slope ratio (horizontal : 1 vertical)

See applicable box culvert standard for H, S, T, and U values.

MATERIAL NOTES:

Provide Grade 60 reinforcing steel.

Provide galvanized reinforcing steel if required elsewhere in the plans.

Adjust reinforcing as necessary to provide a minimum clear cover of 1 ½".

Provide Class "C" concrete (f'c = 3,600 psi).

Provide pipe runners, cross pipes, and anchor pipes meeting the requirements of ASTM A53 (Type E or S, Gr B), ASTM A500 Gr B, or API 5L Gr B.

Provide ASTM A307 bolts.

Galvanize all steel components, except the concrete reinforcing, unless required elsewhere in the plans, after fabrication.

Repair galvanizing damaged during transport or construction in accordance with the Item 445, "Galvanizing."

GENERAL NOTES:

Designed according to AASHTO LRFD Bridge Design Specifications. The safety end treatments shown herein are intended for use in those installations where out of control vehicles are likely to traverse the openings approximately perpendicular to the pipe runners.

Pipe runners are designed for a traversing load of 1,800 pounds at yield as determined by Research Report 280-1, "Safety Evaluation of Nonblock-Out Sign Design Structures", Texas Transportation Institute, March 1982.

The quantities for pipe runners, reinforcing steel, and concrete resulting from the formulas given herein are for Contractor's information only.

See the Box Culvert Supplement (BCS) standard sheet for additional dimensions and information.

Alternate design drawings bearing the seal of a professional engineer will be acceptable for precast construction of the safety end treatments.

Cover dimensions are clear dimensions, unless noted otherwise. Reinforcing dimensions are out-to-out of bars.

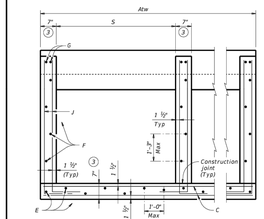
SHEET 1 OF 2

Texas Department of Transportation | Bridge Division Standard

SAFETY END TREATMENT
FOR 0° SKEW BOX CULVERTS
(MAXIMUM Hw = 7'-0")
TYPE I – CROSS DRAINAGE

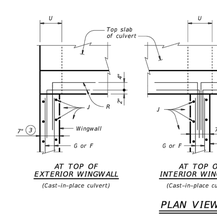
SETB-CD

FILE: CD-SETBCD-20.dgn	DN: CxT	CK: CxT	DW: TxDOT	CK: TxDOT
©TxDOT February 2020 REVISIONS	CONT	SECT	JOB	HIGHWAY
	DIST	COUNTY		SHEET NO.



SECTION A-A

(Showing typical wingwall and wing slab reinforcing. Pipe runners not shown for clarity.)



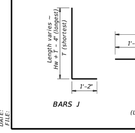
AT TOP OF EXTERIOR WINGWALL (Cast-in-place culvert)

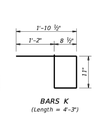
AT TOP OF INTERIOR WINGWALL (Cast-in-place culvert)

AT OUTSIDE OF BOTTOM SLAB (Cast-in-place culvert)

AT INTERIOR WINGWALL (Precast culvert)

PLAN VIEWS OF CORNER DETAILS





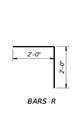


TABLE OF REINFORCING BAR SIZES AND SPACING		
Bar	Size	Spacing
C	#4	10" Max
D	#4	Match F and E
E	#4	1'-0" Max
F	#4	1'-3" Max
G	#6	As shown
J	#4	10" Max
K	#4	1'-0" Max
R	#4	As shown

1. Recommended values of slope are: 3:1, 4:1, and 6:1. Provide 3:1 or flatter slope.
2. 0" Min to 5'-0" Max. Estimated curb heights are shown elsewhere in the plans. For structures without railing and curbs taller than 1'-0", refer to the Extended Curb Details (ECD) standard sheet.
3. Wingwall and slab thicknesses may be the same as the culvert cut-and-cover wall and slab thicknesses (7" minimum). If thicknesses greater than the minimum (7") are used, no changes will be made in quantities and no additional compensation will be allowed.
4. For vehicle safety, reduce curb height, if necessary, to provide a maximum 3" projection. No changes will be made in quantities and no additional compensation will be allowed for this work.
5. For culverts with C = 0", the precast culvert reinforcing can extend 3" minimum into wingwall. Wingwall Bars D and R may be omitted. Otherwise, refer to the Wingwall Connection detail on the Box Culvert Precast Miscellaneous Details (SCP-MD) standard sheet.

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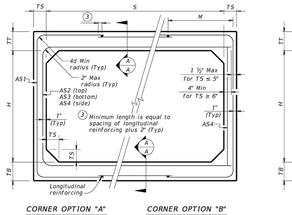
DATE:
FILE:

BOX DATA

SECTION DIMENSIONS					Fill Height	H (Min)	REINFORCING (sq. in. / ft.) ②							① Lift Weight (tons)
S (ft.)	H (ft.)	TT (in.)	TB (in.)	TS (in.)	(ft.)	(in.)	AS1	AS2	AS3	AS4	AS5	AS7	AS8	
7	3	8	8	8	< 2	–	0.23	0.31	0.22	0.19	0.19	0.19	0.19	9.6
7	3	8	8	8	2 < 3	47	0.27	0.25	0.24	0.19	–	–	–	9.6
7	3	8	8	8	3 – 5	43	0.19	0.19	0.19	0.19	–	–	–	9.6
7	3	8	8	8	10	43	0.21	0.20	0.21	0.19	–	–	–	9.6
7	3	8	8	8	15	43	0.28	0.26	0.27	0.19	–	–	–	9.6
7	3	8	8	8	20	43	0.36	0.34	0.35	0.19	–	–	–	9.6
7	3	8	8	8	25	43	0.45	0.42	0.43	0.19	–	–	–	9.6
7	3	8	8	8	30	43	0.54	0.50	0.51	0.19	–	–	–	9.6
7	4	8	8	8	< 2	–	0.21	0.34	0.25	0.19	0.19	0.19	0.19	10.4
7	4	8	8	8	2 < 3	43	0.23	0.28	0.28	0.19	–	–	–	10.4
7	4	8	8	8	3 – 5	43	0.19	0.22	0.19	0.19	–	–	–	10.4
7	4	8	8	8	10	43	0.19	0.23	0.23	0.19	–	–	–	10.4
7	4	8	8	8	15	41	0.24	0.30	0.30	0.19	–	–	–	10.4
7	4	8	8	8	20	41	0.31	0.38	0.39	0.19	–	–	–	10.4
7	4	8	8	8	25	41	0.38	0.47	0.48	0.19	–	–	–	10.4
7	4	8	8	8	30	41	0.46	0.57	0.57	0.19	–	–	–	10.4
7	5	8	8	8	< 2	–	0.19	0.36	0.27	0.19	0.19	0.19	0.19	11.2
7	5	8	8	8	2 < 3	47	0.23	0.31	0.31	0.19	–	–	–	11.2
7	5	8	8	8	3 – 5	43	0.19	0.24	0.21	0.19	–	–	–	11.2
7	5	8	8	8	10	43	0.19	0.25	0.26	0.19	–	–	–	11.2
7	5	8	8	8	15	41	0.21	0.32	0.33	0.19	–	–	–	11.2
7	5	8	8	8	20	41	0.27	0.41	0.42	0.19	–	–	–	11.2
7	5	8	8	8	25	41	0.33	0.51	0.52	0.19	–	–	–	11.2
7	5	8	8	8	30	41	0.40	0.61	0.62	0.19	–	–	–	11.2
7	6	8	8	8	< 2	–	0.19	0.38	0.30	0.19	0.19	0.19	0.19	12.0
7	6	8	8	8	2 < 3	59	0.19	0.33	0.34	0.19	–	–	–	12.0
7	6	8	8	8	3 – 5	47	0.19	0.25	0.23	0.19	–	–	–	12.0
7	6	8	8	8	10	43	0.19	0.26	0.27	0.19	–	–	–	12.0
7	6	8	8	8	15	41	0.19	0.34	0.35	0.19	–	–	–	12.0
7	6	8	8	8	20	41	0.24	0.43	0.45	0.19	–	–	–	12.0
7	6	8	8	8	25	41	0.29	0.53	0.55	0.19	–	–	–	12.0
7	6	8	8	8	30	41	0.35	0.64	0.65	0.19	–	–	–	12.0
7	7	8	8	8	< 2	–	0.19	0.40	0.33	0.19	0.19	0.19	0.19	12.8
7	7	8	8	8	2 < 3	59	0.19	0.36	0.37	0.19	–	–	–	12.8
7	7	8	8	8	3 – 5	59	0.19	0.27	0.25	0.19	–	–	–	12.8
7	7	8	8	8	10	47	0.19	0.27	0.29	0.19	–	–	–	12.8
7	7	8	8	8	15	43	0.19	0.35	0.37	0.19	–	–	–	12.8
7	7	8	8	8	20	43	0.22	0.44	0.46	0.19	–	–	–	12.8
7	7	8	8	8	25	43	0.27	0.54	0.57	0.19	–	–	–	12.8
7	7	8	8	8	30	41	0.32	0.65	0.67	0.19	–	–	–	12.8

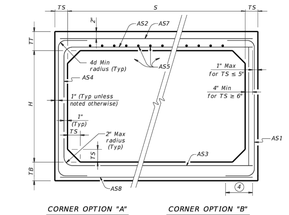
① For box length = 8'-0"

② AS1 thru AS4, AS7 and AS8 are minimum required areas of reinforcement per linear foot of box length. AS5 is minimum required area of reinforcement per linear foot of box width.



CORNER OPTION "A" CORNER OPTION "B"

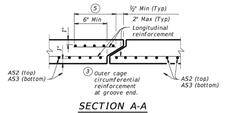
FILL HEIGHT 2 FT AND GREATER



CORNER OPTION "A" CORNER OPTION "B"

FILL HEIGHT LESS THAN 2 FT

④ Length is equal to spacing of longitudinal reinforcing plus 2". (10" Min) (Typ)



SECTION A-A

(Showing top and bottom slab joint reinforcement.)

MATERIAL NOTES:

Provide 0.03 sq. in./ft. minimum longitudinal reinforcement at each face in slabs and walls. This minimum requirement may be met by the transverse wires when wire mesh reinforcement is used.

Provide Class H concrete (f'c = 5,000 psi).

GENERAL NOTES:

Designs shown conform to ASTM C1577. Refer to ASTM C1577 for information or details not shown.

See Box Culverts Precast Miscellaneous Details (SCP-MD) standard sheet for details and notes not shown.

In lieu of furnishing the designs shown on this sheet, the contractor may furnish an alternate design that is equal to or exceeds the box design for the design fill height in the table. Submit shop plans for alternate designs in accordance with Item "Precast Concrete Structural Members (Fabrication)."

HL93 LOADING

Texas Department of Transportation | Bridge Division Standard

SINGLE BOX CULVERTS PRECAST
7'-0" SPAN

SCP-7

FILE: CD-SCP07-20.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
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	DIST	COUNTY		SHEET NO.

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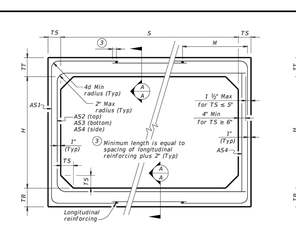
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BOX DATA

SECTION DIMENSIONS					Fill Height	H (Min)	REINFORCING (sq. in. / ft.) ②							① Lift Weight (tons)
S (ft.)	H (ft.)	TT (in.)	TB (in.)	TS (in.)	(ft.)	(in.)	AS1	AS2	AS3	AS4	AS5	AS7	AS8	
4	2	7.5	6	5	< 2	–	0.18	0.27	0.15	0.12	0.18	0.18	0.14	4.5
4	2	5	5	5	2 < 3	38	0.18	0.19	0.17	0.12	–	–	–	3.6
4	2	5	5	5	3 – 5	38	0.13	0.13	0.13	0.12	–	–	–	3.6
4	2	5	5	5	10	38	0.12	0.12	0.12	0.12	–	–	–	3.6
4	2	5	5	5	15	38	0.14	0.16	0.16	0.12	–	–	–	3.6
4	2	5	5	5	20	38	0.18	0.20	0.21	0.12	–	–	–	3.6
4	2	5	5	5	25	38	0.23	0.25	0.25	0.12	–	–	–	3.6
4	2	5	5	5	30	38	0.28	0.30	0.30	0.12	–	–	–	3.6
4	3	7.5	6	5	< 2	–	0.18	0.31	0.18	0.12	0.18	0.18	0.14	5.0
4	3	5	5	5	2 < 3	38	0.15	0.23	0.20	0.12	–	–	–	4.1
4	3	5	5	5	3 – 5	38	0.12	0.16	0.16	0.12	–	–	–	4.1
4	3	5	5	5	10	38	0.12	0.14	0.14	0.12	–	–	–	4.1
4	3	5	5	5	15	38	0.12	0.18	0.18	0.12	–	–	–	4.1
4	3	5	5	5	20	38	0.14	0.23	0.24	0.12	–	–	–	4.1
4	3	5	5	5	25	38	0.17	0.29	0.29	0.12	–	–	–	4.1
4	3	5	5	5	30	38	0.21	0.35	0.35	0.12	–	–	–	4.1
4	4	7.5	6	5	< 2	–	0.18	0.33	0.20	0.12	0.18	0.18	0.14	5.5
4	4	5	5	5	2 < 3	38	0.12	0.26	0.23	0.12	–	–	–	4.6
4	4	5	5	5	3 – 5	38	0.12	0.18	0.18	0.12	–	–	–	4.6
4	4	5	5	5	10	38	0.12	0.15	0.15	0.12	–	–	–	4.6
4	4	5	5	5	15	38	0.12	0.19	0.20	0.12	–	–	–	4.6
4	4	5	5	5	20	38	0.12	0.25	0.25	0.12	–	–	–	4.6
4	4	5	5	5	25	38	0.14	0.31	0.31	0.12	–	–	–	4.6
4	4	5	5	5	30	38	0.17	0.37	0.37	0.12	–	–	–	4.6

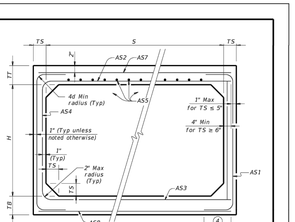
① For box length = 8'-0"

② AS1 thru AS4, AS7 and AS8 are minimum required areas of reinforcement per linear foot of box length. AS5 is minimum required area of reinforcement per linear foot of box width.



CORNER OPTION "A" CORNER OPTION "B"

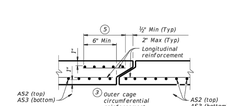
FILL HEIGHT 2 FT AND GREATER



CORNER OPTION "A" CORNER OPTION "B"

FILL HEIGHT LESS THAN 2 FT

④ Length is equal to spacing of longitudinal reinforcing plus 2". (10" Min) (Typ)



SECTION A-A

(Showing top and bottom slab joint reinforcement.)

MATERIAL NOTES:

Provide 0.03 sq. in./ft. minimum longitudinal reinforcement at each face in slabs and walls. This minimum requirement may be met by the transverse wires when wire mesh reinforcement is used.

Provide Class H concrete (f'c = 5,000 psi).

GENERAL NOTES:

Designs shown conform to ASTM C1577. Refer to ASTM C1577 for information or details not shown.

See Box Culverts Precast Miscellaneous Details (SCP-MD) standard sheet for details and notes not shown.

In lieu of furnishing the designs shown on this sheet, the contractor may furnish an alternate design that is equal to or exceeds the box design for the design fill height in the table. Submit shop plans for alternate designs in accordance with Item "Precast Concrete Structural Members (Fabrication)."

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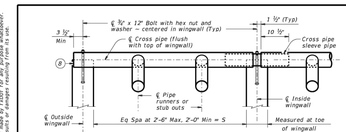
Texas Department of Transportation | Bridge Division Standard

SINGLE BOX CULVERTS PRECAST
4'-0" SPAN

SCP-4

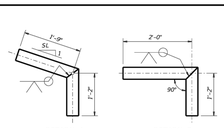
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	DIST	COUNTY		SHEET NO.

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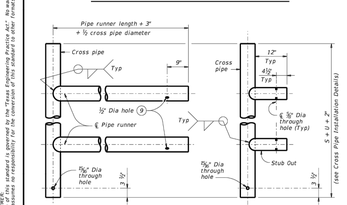
NOTE: At Contractor's option, make the cross pipe continuous across the inside wingwalls. If option is selected, omit the sleeve pipe and make a ⅝" diameter through hole in the cross pipe to accept the anchor bolt at the centerline of each inside wingwall.

CROSS PIPE INSTALLATION DETAILS



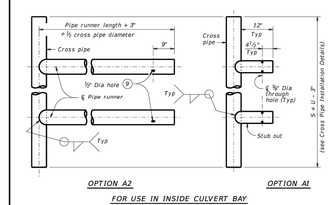
OPTION A OPTION B 10

BOTTOM ANCHOR PIPE DETAILS



OPTION A2 OPTION A1

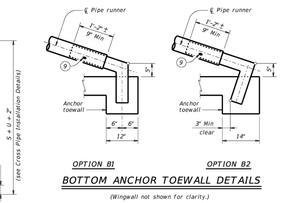
FOR USE IN OUTSIDE CULVERT BAY



OPTION A2 OPTION A1

FOR USE IN INSIDE CULVERT BAY

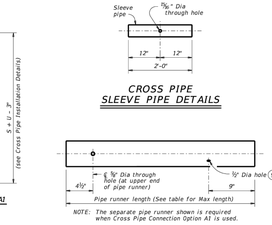
CROSS PIPE AND CONNECTIONS DETAILS



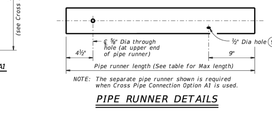
OPTION B1 OPTION B2

BOTTOM ANCHOR TOEWALL DETAILS

(Wingwall not shown for clarity.)



CROSS PIPE SLEEVE PIPE DETAILS



NOTE: The separate pipe runner shown is required when Cross Pipe Connection Option A1 is used.

PIPE RUNNER DETAILS

6 Cross pipe is the same size as the pipe runner. Cross pipe stub out is the same size as the anchor pipe.

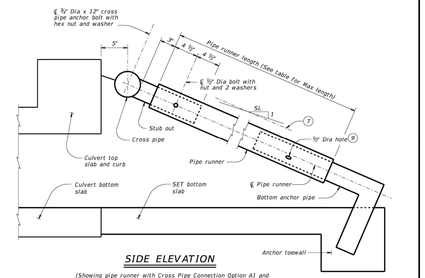
7 Note that actual slope of safety pipe runner may vary slightly from side slope.

8 Take care to ensure that riprap concrete does not flow into the cross pipe so as to permit disassembly of the bolted connection to allow cleanout access.

9 After installation, inspect the 1"#2" hole to ensure that the lap of the safety pipe runner with the bottom anchor pipe is adequate.

10 At Fabricator's option, a heat bend to a smooth 5" radius or a manufactured elbow (of the same material as the runner) may be substituted for the mitered and welded joint in the bottom anchor pipe.

MAXIMUM PIPE RUNNER LENGTHS AND ⑥ REQUIRED PIPE RUNNER AND ANCHOR PIPE SIZES							
Maximum Pipe Runner Length	Required Pipe Runner Size			Required Anchor Pipe Size			
	Pipe Size	Pipe O.D.	Pipe I.D.	Pipe Size	Pipe O.D.	Pipe I.D.
10'- 0"	3" STD	3.500"	3.068"	2" STD	2.375"	2.067"
19'- 8"	4" STD	4.500"	4.026"	3" STD	3.500"	3.068"
34'- 2"	5" STD	5.563"	5.047"	4" STD	4.500"	4.026"



SIDE ELEVATION

(Showing pipe runner with Cross Pipe Connection Option A1 and Bottom Anchor Toewall Option B2. Wingwall not shown for clarity.)

SHEET 2 OF 2

Texas Department of Transportation | Bridge Division Standard

SAFETY END TREATMENT
FOR 0° SKEW BOX CULVERTS
(MAXIMUM Hw = 7'-0")
TYPE I – CROSS DRAINAGE

SETB-CD

FILE: CD-SETBCD-20.dgn	DN: CxT	CK: CxT	DW: TxDOT	CK: TxDOT
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	DIST	COUNTY		SHEET NO.

290 S. CASTELL AVE., STE. 100
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TBPELS FIRM F-10961
TBPELS FIRM 10153600

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ENGINEERING & SURVEYING

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDEN
93047
LICENSED
PROFESSIONAL ENGINEER

04/13/2026

STORM DETAILS (2 OF 4)

PARKSIDE SOUTH
UNIT 1

NO.	REVISION DESCRIPTION	DATE

DATE: APRIL 2026

DRAWN BY: PMM

DESIGNED BY: RCD

REVIEWED BY: CVH

HMT PROJECT NO.: 337.130

SHEET
C6.13

Drawing Name: N:_Projects\337 – Lennar\130 – Parkside South Unit 1\Cds\337.130_DETAILS.dwg User: jonm Apr 16, 2026 – 5:52pm

TABLE OF DIMENSIONS AND REINFORCING STEEL
(Wings for one structure end)

Maximum Wingwall Height Hw	Dimensions W	X	Y	Z	Variable Reinforcing Bars J1 Size	Bars J1 Spa	Bars J2 Size	Bars J2 Spa	Estimated Quantities per Ft of wing length (2-wings) ② Reinf (lb/Ft)	Conc (CY/Ft)
2'-6"	2'-5"	1'-0"	9"	7"	#4	1'-0"	#4	1'-0"	33.73	0.248
3'-0"	2'-5"	1'-0"	9"	7"	#4	1'-0"	#4	1'-0"	37.02	0.261
3'-6"	2'-5"	1'-0"	9"	7"	#4	1'-0"	#4	1'-0"	37.74	0.273
4'-0"	2'-5"	1'-0"	9"	7"	#4	1'-0"	#4	1'-0"	38.41	0.285
4'-6"	3'-2"	1'-6"	1'-0"	7"	#4	1'-0"	#4	1'-0"	41.75	0.330
5'-0"	3'-2"	1'-6"	1'-0"	7"	#4	1'-0"	#4	1'-0"	45.09	0.343
5'-6"	3'-2"	1'-6"	1'-0"	7"	#4	1'-0"	#4	1'-0"	45.75	0.355
6'-0"	3'-2"	1'-6"	1'-0"	7"	#4	1'-0"	#4	1'-0"	46.42	0.367
7'-0"	3'-8"	1'-9"	1'-3"	7"	#4	1'-0"	#4	1'-0"	52.77	0.414
8'-0"	4'-2"	2'-0"	1'-6"	8"	#5	1'-0"	#4	1'-0"	60.19	0.486
9'-0"	4'-8"	2'-3"	1'-9"	8"	#4	6"	#4	6"	81.49	0.533
10'-0"	5'-2"	2'-6"	2'-0"	8"	#5	6"	#4	6"	97.25	0.584
11'-0"	5'-8"	2'-9"	2'-3"	8"	#6	6"	#5	6"	133.65	0.634
12'-0"	6'-2"	3'-0"	2'-6"	9"	#7	6"	#5	6"	162.29	0.721
13'-0"	6'-8"	3'-3"	2'-9"	11"	#7	6"	#5	6"	178.80	0.856
14'-0"	7'-2"	3'-6"	3'-0"	1'-0"	#8	6"	#5	6"	216.78	0.959
15'-0"	7'-8"	4'-0"	3'-0"	1'-1"	#9	6"	#6	6"	283.06	1.068
16'-0"	8'-2"	4'-6"	3'-0"	1'-3"	#9	6"	#6	6"	297.02	1.234

TABLE OF WINGWALL REINFORCING (2-wings)

Bar	Size	No.	Spa
D	#5	–	1'-0"
E	#4	–	1'-0"
F	#4	–	1'-0"
G	#6	4	–
M	#4	4	–
P	#4	–	1'-0"
R	#5	6	–
V	#4	–	1'-0"

TABLE OF ESTIMATED CULVERT TOEWALL QUANTITIES

Bar	Size	No.	Spa
L	#4	–	1'-0"
Q	#4	1	–
Reinf (lb/Ft)			2.45
Conc (CY/Ft)			0.037

WING DIMENSION FORMULAS:
(All values are in feet.)

Hw = H + T + C - 0.250
A = (Hw - 0.333') (5)
B = (A) tangent (30°)
Lw = (A) ÷ cosine (30°)

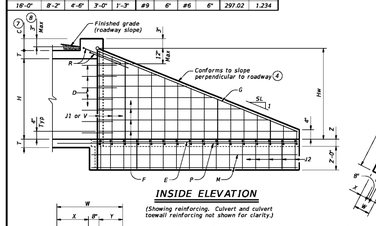
For cast-in-place culverts:
Ltw = (N) (S) + (N + 1) (t)

For precast culverts:
Ltw = (N) (2D + S) + (N - 1) (0.5')

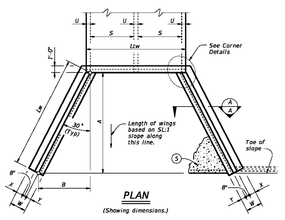
Total wingwall area (two wings - SF) = (Hw + 0.3333) (Lw)

Hw = Height of wingwall
SL:1 = Side slope ratio (horizontal:1 vertical)
Lw = Length of wingwall
Ltw = Culvert toewall length
N = Number of culvert spans

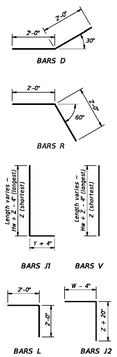
See applicable box culvert standard sheet for H, S, T, and U values.

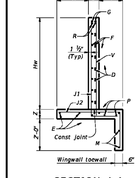


INSIDE ELEVATION
(Showing reinforcing. Culvert and culvert toewall reinforcing not shown for clarity.)

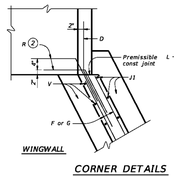


PLAN
(Showing dimensions.)

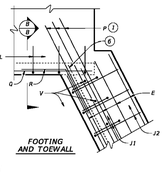




SECTION A-A

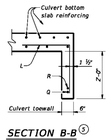


WINGWALL



FOOTING AND TOEWALL

CORNER DETAILS
(Culvert and culvert toewall reinforcing not shown for clarity.)



SECTION B-B ③

① Extend Bars P 3'-0" minimum into bottom slab of box culvert.

② Adjust as necessary to maintain 1 1/4" clear cover and 4" minimum between bars.

③ Quantities shown are based on an average wing height for two wings (one structure end). To determine total quantities for two wings, multiply the tabulated values by Lw.

④ Recommended values of side slope are: 2:1, 3:1, 4:1, and 6:1.

⑤ When shown elsewhere on the plans, construct 9" deep concrete riprap. Payment for riprap is as required by Item 432, "Riprap," unless otherwise shown elsewhere on the plans. The Engineer, provide a 6" wide by 1'-6" deep reinforced concrete toewall along all edges of the riprap adjacent to natural ground; reinforce the toewall by extending typical riprap reinforcing into the toewall; and extend construction joints or grooved joints oriented in the direction of flow across the full distance of the riprap at intervals of approximately 20'. When such riprap is provided, the culvert toewall shown in SECTION B-B will not be required.

⑥ At Contractor's option, culvert toewall may be ended flush with wingwall toewall. Adjust reinforcing as needed.

⑦ 0" Min to 5'-0" Max. Estimated curb heights are shown elsewhere in the plans. For structures with pedestrian rail or curbs taller than 7'-0, refer to the Extended Curb Details (ECD) standard sheet. For structures with TX31 or TX31LS bridge rail, refer to the Mounting Details for TX31 & TX31LS Rails (TX31-CM) standard sheet. Refer to the Box Culvert Rail Mounting Details (RAC) standard sheet for structures with bridge rail other than TX31 or TX31LS.

⑧ For vehicle safety, the following requirements must be met:
- For structures without bridge rail, construct curbs no more than 2" above finished grade.
- For structures with bridge rail, construct curbs flush with finished grade.

Reduce curb heights, if necessary, to meet the above requirements. No changes will be made in quantities and no additional compensation will be allowed for this work.

MATERIAL NOTES:
Provide Class C concrete (f'c=3,600 psi).
Provide Grade 60 reinforcing steel.
Provide galvanized reinforcing steel if required elsewhere in the plans.
In riprap concrete synthetic fibers listed on the "Fibers for Concrete" Material Producer List (MPL) may be used in lieu of steel reinforcing unless noted otherwise.

GENERAL NOTES:
Designed according to AASHTO LRFD Bridge Design Specifications.
When structure is founded on solid rock, depth of toewalls for culverts and wingwalls may be reduced or eliminated as directed by the Engineer.
See Box Culvert Supplement (BCS) standard sheet for additional dimensions and information.
The quantities for concrete and reinforcing steel resulting from the formulas given on this sheet are for Contractor's information only.

Cover dimensions are clear dimensions, unless noted otherwise. Reinforcing dimensions are out-to-out of bars.

Texas Department of Transportation | Bridge Division Standard

CONCRETE WINGWALLS WITH FLARED WINGS FOR 0° SKEW BOX CULVERTS

FW-0

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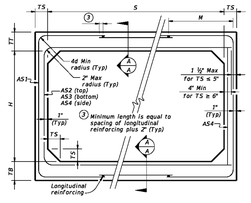
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BOX DATA

SECTION DIMENSIONS S (Ft.)	H (Ft.)	TT (In.)	TB (In.)	TS (In.)	Fill Height (Ft.)	M (Min) (In.)	REINFORCING (sq. In. / Ft.) ② AS1	AS2	AS3	AS4	AS5	AS7	AS8	① Lift Weight (tons)
3	2	7	6	4	< 2	-	0.17	0.25	0.16	0.10	0.17	0.17	0.14	3.3
3	2	4	4	4	2 < 3	31	0.13	0.19	0.16	0.10	-	-	-	2.4
3	2	4	4	4	3 - 5	31	0.10	0.11	0.12	0.10	-	-	-	2.4
3	2	4	4	4	10	31	0.10	0.10	0.10	0.10	-	-	-	2.4
3	2	4	4	4	15	31	0.10	0.13	0.13	0.10	-	-	-	2.4
3	2	4	4	4	20	31	0.11	0.17	0.17	0.10	-	-	-	2.4
3	2	4	4	4	25	31	0.14	0.21	0.21	0.10	-	-	-	2.4
3	2	4	4	4	30	31	0.17	0.25	0.25	0.10	-	-	-	2.4
3	2	4	4	4	35	31	0.20	0.29	0.30	0.10	-	-	-	2.4
3	3	7	6	4	< 2	-	0.17	0.27	0.17	0.10	0.17	0.17	0.14	3.7
3	3	4	4	4	2 < 3	31	0.10	0.22	0.21	0.10	-	-	-	2.8
3	3	4	4	4	3 - 5	31	0.10	0.14	0.14	0.10	-	-	-	2.8
3	3	4	4	4	10	31	0.10	0.11	0.11	0.10	-	-	-	2.8
3	3	4	4	4	15	31	0.10	0.14	0.15	0.10	-	-	-	2.8
3	3	4	4	4	20	31	0.10	0.18	0.19	0.10	-	-	-	2.8
3	3	4	4	4	25	31	0.10	0.23	0.23	0.10	-	-	-	2.8
3	3	4	4	4	30	31	0.12	0.27	0.28	0.10	-	-	-	2.8
3	3	4	4	4	35	31	0.14	0.32	0.32	0.10	-	-	-	2.8

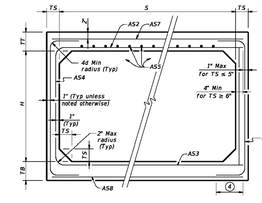
① For box length = 8'-0"

② AS1 thru AS4, AS7 and AS8 are minimum required areas of reinforcement per linear foot of box length. AS5 is minimum required area of reinforcement per linear foot of box width.



CORNER OPTION "A" CORNER OPTION "B"

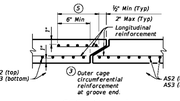
FILL HEIGHT 2 FT AND GREATER



CORNER OPTION "A" CORNER OPTION "B"

FILL HEIGHT LESS THAN 2 FT

④ Length is equal to spacing of longitudinal reinforcing plus 2". (10" Min) (Typ)



SECTION A-A
(Showing top and bottom slab joint reinforcement.)

MATERIAL NOTES:
Provide 0.03 sq. in./Ft. minimum longitudinal reinforcement at each face in slabs and walls. This minimum requirement may be met by the transverse wires when wire mesh reinforcement is used.
Provide Class H concrete (f'c = 5,000 psi).

GENERAL NOTES:
Designs shown conform to ASTM C1577. Refer to ASTM C1577 for information or details not shown.
See Box Culverts Precast Miscellaneous Details (SCP-MD) standard sheet for details and notes not shown.
In lieu of furnishing the designs shown on this sheet, the contractor may furnish an alternate design that is equal to or exceeds the box design for the design fill height in the table. Submit shop plans for alternate designs in accordance with item "Precast Concrete Structural Members (Fabrication)."

HL93 LOADING

Texas Department of Transportation | Bridge Division Standard

SINGLE BOX CULVERTS PRECAST
3'-0" SPAN

SCP-3

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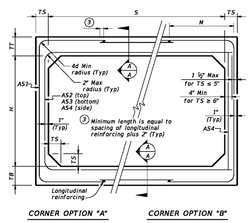
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BOX DATA

SECTION DIMENSIONS S (Ft.)	H (Ft.)	TT (In.)	TB (In.)	TS (In.)	Fill Height (Ft.)	M (Min) (In.)	REINFORCING (sq. In. / Ft.) ② AS1	AS2	AS3	AS4	AS5	AS7	AS8	① Lift Weight (tons)
5	2	8	7	6	< 2	-	0.19	0.27	0.18	0.14	0.19	0.19	0.17	6.0
5	2	6	6	6	2 < 3	44	0.22	0.20	0.16	0.14	-	-	-	5.1
5	2	6	6	6	3 - 5	44	0.16	0.14	0.14	0.14	-	-	-	5.1
5	2	6	6	6	10	36	0.15	0.14	0.14	0.14	-	-	-	5.1
5	2	6	6	6	15	36	0.20	0.18	0.18	0.14	-	-	-	5.1
5	2	6	6	6	20	36	0.26	0.23	0.24	0.14	-	-	-	5.1
5	2	6	6	6	25	36	0.33	0.29	0.29	0.14	-	-	-	5.1
5	2	6	6	6	30	36	0.39	0.34	0.35	0.14	-	-	-	5.1
5	3	8	7	6	< 2	-	0.19	0.31	0.21	0.14	0.19	0.19	0.17	6.6
5	3	6	6	6	2 < 3	45	0.18	0.24	0.19	0.14	-	-	-	5.7
5	3	6	6	6	3 - 5	36	0.14	0.17	0.16	0.14	-	-	-	5.7
5	3	6	6	6	10	36	0.14	0.16	0.17	0.14	-	-	-	5.7
5	3	6	6	6	15	35	0.16	0.21	0.22	0.14	-	-	-	5.7
5	3	6	6	6	20	35	0.21	0.27	0.28	0.14	-	-	-	5.7
5	3	6	6	6	25	35	0.26	0.34	0.34	0.14	-	-	-	5.7
5	3	6	6	6	30	35	0.31	0.41	0.41	0.14	-	-	-	5.7
5	4	8	7	6	< 2	-	0.19	0.33	0.24	0.14	0.19	0.19	0.17	7.2
5	4	6	6	6	2 < 3	45	0.16	0.27	0.22	0.14	-	-	-	6.3
5	4	6	6	6	3 - 5	45	0.14	0.19	0.18	0.14	-	-	-	6.3
5	4	6	6	6	10	36	0.14	0.18	0.18	0.14	-	-	-	6.3
5	4	6	6	6	15	35	0.14	0.23	0.24	0.14	-	-	-	6.3
5	4	6	6	6	20	35	0.17	0.30	0.31	0.14	-	-	-	6.3
5	4	6	6	6	25	35	0.21	0.37	0.38	0.14	-	-	-	6.3
5	4	6	6	6	30	35	0.25	0.44	0.45	0.14	-	-	-	6.3
5	5	8	7	6	< 2	-	0.19	0.35	0.26	0.14	0.19	0.19	0.17	7.8
5	5	6	6	6	2 < 3	45	0.14	0.29	0.24	0.14	-	-	-	6.9
5	5	6	6	6	3 - 5	45	0.14	0.21	0.20	0.14	-	-	-	6.9
5	5	6	6	6	10	45	0.14	0.19	0.20	0.14	-	-	-	6.9
5	5	6	6	6	15	36	0.14	0.24	0.25	0.14	-	-	-	6.9
5	5	6	6	6	20	35	0.15	0.31	0.32	0.14	-	-	-	6.9
5	5	6	6	6	25	35	0.18	0.38	0.39	0.14	-	-	-	6.9
5	5	6	6	6	30	35	0.21	0.46	0.47	0.14	-	-	-	6.9

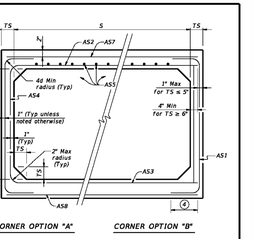
① For box length = 8'-0"

② AS1 thru AS4, AS7 and AS8 are minimum required areas of reinforcement per linear foot of box length. AS5 is minimum required area of reinforcement per linear foot of box width.



CORNER OPTION "A" CORNER OPTION "B"

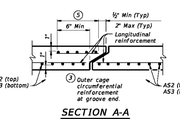
FILL HEIGHT 2 FT AND GREATER



CORNER OPTION "A" CORNER OPTION "B"

FILL HEIGHT LESS THAN 2 FT

④ Length is equal to spacing of longitudinal reinforcing plus 2". (10" Min) (Typ)



SECTION A-A
(Showing top and bottom slab joint reinforcement.)

MATERIAL NOTES:
Provide 0.03 sq. in./Ft. minimum longitudinal reinforcement at each face in slabs and walls. This minimum requirement may be met by the transverse wires when wire mesh reinforcement is used.
Provide Class H concrete (f'c = 5,000 psi).

GENERAL NOTES:
Designs shown conform to ASTM C1577. Refer to ASTM C1577 for information or details not shown.
See Box Culverts Precast Miscellaneous Details (SCP-MD) standard sheet for details and notes not shown.
In lieu of furnishing the designs shown on this sheet, the contractor may furnish an alternate design that is equal to or exceeds the box design for the design fill height in the table. Submit shop plans for alternate designs in accordance with item "Precast Concrete Structural Members (Fabrication)."

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Texas Department of Transportation | Bridge Division Standard

SINGLE BOX CULVERTS PRECAST
5'-0" SPAN

SCP-5

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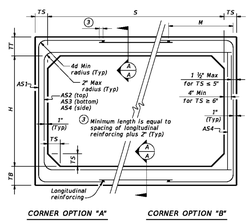
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BOX DATA

SECTION DIMENSIONS S (Ft.)	H (Ft.)	TT (In.)	TB (In.)	TS (In.)	Fill Height (Ft.)	M (Min) (In.)	REINFORCING (sq. In. / Ft.) ② AS1	AS2	AS3	AS4	AS5	AS7	AS8	① Lift Weight (tons)
6	2	8	7	7	< 2	-	0.23	0.27	0.19	0.17	0.19	0.19	0.17	7.2
6	2	7	7	7	2 < 3	43	0.25	0.21	0.17	0.17	-	-	-	6.8
6	2	7	7	7	3 - 5	43	0.20	0.17	0.17	0.17	-	-	-	6.8
6	2	7	7	7	10	39	0.20	0.17	0.17	0.17	-	-	-	6.8
6	2	7	7	7	15	39	0.26	0.20	0.20	0.17	-	-	-	6.8
6	2	7	7	7	20	39	0.34	0.25	0.26	0.17	-	-	-	6.8
6	2	7	7	7	25	39	0.43	0.32	0.32	0.17	-	-	-	6.8
6	2	7	7	7	30	39	0.52	0.38	0.39	0.17	-	-	-	6.8
6	3	8	7	7	< 2	-	0.20	0.31	0.22	0.17	0.19	0.19	0.17	7.9
6	3	7	7	7	2 < 3	43	0.21	0.24	0.19	0.17	-	-	-	7.5
6	3	7	7	7	3 - 5	39	0.17	0.18	0.17	0.17	-	-	-	7.5
6	3	7	7	7	10	39	0.17	0.18	0.19	0.17	-	-	-	7.5
6	3	7	7	7	15	38	0.22	0.24	0.24	0.17	-	-	-	7.5
6	3	7	7	7	20	38	0.28	0.31	0.31	0.17	-	-	-	7.5
6	3	7	7	7	25	38	0.35	0.38	0.39	0.17	-	-	-	7.5
6	3	7	7	7	30	38	0.42	0.46	0.46	0.17	-	-	-	7.5
6	4	8	7	7	< 2	-	0.19	0.34	0.25	0.17	0.19	0.19	0.17	8.6
6	4	7	7	7	2 < 3	43	0.19	0.27	0.21	0.17	-	-	-	8.2
6	4	7	7	7	3 - 5	39	0.17	0.21	0.19	0.17	-	-	-	8.2
6	4	7	7	7	10	39	0.17	0.20	0.21	0.17	-	-	-	8.2
6	4	7	7	7	15	38	0.18	0.27	0.27	0.17	-	-	-	8.2
6	4	7	7	7	20	38	0.24	0.34	0.35	0.17	-	-	-	8.2
6	4	7	7	7	25	38	0.29	0.43	0.42	0.17	-	-	-	8.2
6	4	7	7	7	30	38	0.35	0.51	0.52	0.17	-	-	-	8.2
6	5	8	7	7	< 2	-	0.19	0.37	0.28	0.17	0.19	0.19	0.17	9.3
6	5	7	7	7	2 < 3	43	0.17	0.30	0.24	0.17	-	-	-	8.9
6	5	7	7	7	3 - 5	43	0.17	0.23	0.21	0.17	-	-	-	8.9
6	5	7	7	7	10	39	0.17	0.22	0.23	0.17	-	-	-	8.9
6	5	7	7	7	15	38	0.17	0.28	0.29	0.17	-	-	-	8.9
6	5	7	7	7	20	38	0.20	0.37	0.38	0.17	-	-	-	8.9
6	5	7	7	7	25	38	0.25	0.45	0.46	0.17	-	-	-	8.9
6	5	7	7	7	30	38	0.30	0.54	0.55	0.17	-	-	-	8.9
6	6	8	7	7	< 2	-	0.19	0.38	0.30	0.17	0.19	0.19	0.17	10
6	6	7	7	7	2 < 3	52	0.17	0.32	0.26	0.17	-	-	-	9.6
6	6	7	7	7	3 - 5	52	0.17	0.24	0.22	0.17	-	-	-	9.6
6	6	7	7	7	10	43	0.17	0.23	0.24	0.17	-	-	-	9.6
6	6	7	7	7	15	39	0.17	0.29	0.31	0.17	-	-	-	9.6
6	6	7	7	7	20	39	0.18	0.38	0.39	0.17	-	-	-	9.6
6	6	7	7	7	25	38	0.23	0.46	0.48	0.17	-	-	-	9.6
6	6	7	7	7	30	38	0.27	0.55	0.57	0.17	-	-	-	9.6

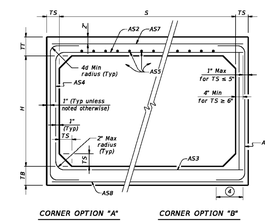
① For box length = 8'-0"

② AS1 thru AS4, AS7 and AS8 are minimum required areas of reinforcement per linear foot of box length. AS5 is minimum required area of reinforcement per linear foot of box width.



CORNER OPTION "A" CORNER OPTION "B"

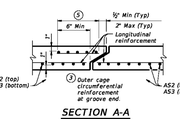
FILL HEIGHT 2 FT AND GREATER



CORNER OPTION "A" CORNER OPTION "B"

FILL HEIGHT LESS THAN 2 FT

④ Length is equal to spacing of longitudinal reinforcing plus 2". (10" Min) (Typ)



SECTION A-A
(Showing top and bottom slab joint reinforcement.)

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In lieu of furnishing the designs shown on this sheet, the contractor may furnish an alternate design that is equal to or exceeds the box design for the design fill height in the table. Submit shop plans for alternate designs in accordance with item "Precast Concrete Structural Members (Fabrication)."

HL93 LOADING

Texas Department of Transportation | Bridge Division Standard

SINGLE BOX CULVERTS PRECAST
6'-0" SPAN

SCP-6

FILE: CD-SCP06-20.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT February 2020 REVISIONS	CONT	SECT	JOB	HIGHWAY
	DIST	COUNTY		SHEET NO.

290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 10153600
HMT ENGINEERING & SURVEYING

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDEN
93047
LICENSED PROFESSIONAL ENGINEER
04/13/2026

STORM DETAILS (3 OF 4)

PARKSIDE SOUTH UNIT 1

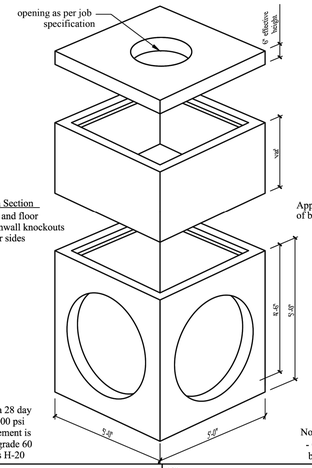
NO.	REVISION DESCRIPTION	DATE

DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C6.14

Drawing Name: N:_Projects\337 - Lennar\130 - Parkside South Unit 1\C6s\337.130_DETAILS.dwg User: jsnm Apr 16, 2026 - 5:53pm

4' x 4' x var Junction Box



Bottom Section
6" walls and floor
48" dia. thinwall knockouts all four sides

Approximate weight of base: 5,900 lbs

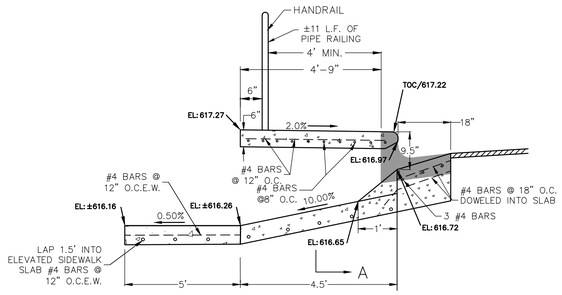
Specifications:
- Concrete has a 28 day strength of 5,000 psi
- Steel reinforcement is ASTM A615 grade 60
- Load design is H-20

Notes:
- Consult manufacturer before handling

Capital Precast

CAPITAL PRECAST, INC.
6905 SOUTH OLD BASTROP HWY
SAN MARCOS, TEXAS 78666
PH. (830) 606-6200

FOR	4' x 4' x var Junction Box		
JOB			
DRAWN: RW	DATE: 12/1/2015	Rev. No.	SHEET: 1 OF 1
TITLE:	catalog/junction boxes/4x4JB		



SIDEWALK BOX SECTION

NOT-TO-SCALE

TABLE OF DIMENSIONS AND REINFORCING STEEL
(Wings for one structure end)

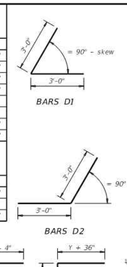
Maximum Wingwall Height Hw	Dimensions W	X	Y	Z	Variable Reinforcing Bars J1 Size	Bars J1 Spa	Bars J2 Size	Bars J2 Spa	Estimated Quantities per Ft of wing (2-wings) ④ Reinf Lb/Ft	Conc (CY/Ft)	Estimated Quantities per Ft of Toewall (1-toewall) Reinf (Lb/Ft)	Conc (CY/Ft)
2'-6"	2'-10"	10"	1'-0"	7"	#4	1'-0"	#4	1'-0"	48.64	0.406	6.85	0.071
2'-9"	2'-10"	10"	1'-0"	7"	#4	1'-0"	#4	1'-0"	49.31	0.424	6.85	0.071
3'-0"	2'-10"	10"	1'-0"	7"	#4	1'-0"	#4	1'-0"	49.98	0.444	6.85	0.071
3'-3"	2'-10"	10"	1'-0"	7"	#4	1'-0"	#4	1'-0"	53.32	0.462	6.85	0.071
3'-6"	2'-10"	10"	1'-0"	7"	#4	1'-0"	#4	1'-0"	53.98	0.480	6.85	0.071
4'-0"	3'-2"	1'-2"	1'-0"	7"	#4	1'-0"	#4	1'-0"	55.77	0.532	6.85	0.071
4'-6"	3'-2"	1'-2"	1'-0"	7"	#4	1'-0"	#4	1'-0"	59.77	0.568	6.85	0.071
5'-0"	3'-9"	1'-7"	1'-2"	7"	#4	1'-0"	#4	1'-0"	63.45	0.632	6.96	0.075
5'-6"	3'-9"	1'-7"	1'-2"	7"	#4	1'-0"	#4	1'-0"	67.46	0.668	6.96	0.075
6'-0"	4'-4"	2'-0"	1'-4"	7"	#5	1'-0"	#5	1'-0"	80.67	0.730	7.07	0.078
6'-6"	4'-4"	2'-0"	1'-4"	7"	#5	1'-0"	#5	1'-0"	85.05	0.768	7.07	0.078
7'-0"	5'-0"	2'-3"	1'-9"	8"	#5	1'-0"	#5	1'-0"	92.15	0.864	8.07	0.093
7'-6"	5'-0"	2'-3"	1'-9"	8"	#5	1'-0"	#5	1'-0"	96.54	0.902	8.07	0.093
8'-0"	5'-6"	2'-8"	1'-10"	8"	#5	6"	#5	6"	139.04	0.962	8.13	0.095
8'-6"	5'-6"	2'-8"	1'-10"	8"	#5	6"	#5	6"	144.47	1.000	8.13	0.095
9'-6"	6'-0"	2'-10"	2'-2"	9"	#5	6"	#5	6"	156.93	1.136	8.41	0.110
10'-6"	6'-5"	3'-0"	2'-5"	9"	#6	6"	#5	6"	196.27	1.234	8.51	0.117
11'-6"	7'-2"	3'-6"	2'-8"	11"	#6	6"	#6	6"	230.13	1.438	9.52	0.140
12'-6"	7'-8"	3'-9"	2'-11"	1'-0"	#7	6"	#6	6"	283.41	1.592	9.74	0.157
13'-6"	8'-2"	4'-0"	3'-2"	1'-2"	#8	6"	#6	6"	348.72	1.804	10.02	0.186
14'-6"	8'-10"	4'-5"	3'-5"	1'-4"	#9	6"	#6	6"	432.94	2.046	10.30	0.218
15'-6"	9'-6"	4'-10"	3'-8"	1'-6"	#9	6"	#7	6"	489.53	2.302	11.24	0.253
16'-0"	9'-11"	5'-0"	3'-11"	1'-7"	#9	6"	#7	6"	505.72	2.448	11.47	0.279

TABLE OF WINGWALL REINFORCING
(2-wings)

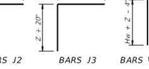
Bar	Size	No.	Spa
D1	#6	~	1'-0"
D2	#6	~	1'-0"
E1	#4	~	1'-0"
F	#4	~	1'-0"
G	#6	~	8"
M1	#4	4	~
P	#4	~	1'-0"
V	#4	~	1'-0"

TABLE OF TOEWALL REINFORCING

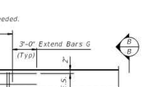
Bar	Size	No.	Spa
J3	#4	~	1'-0"
M2	#4	2	~
E2	#4	~	1'-0"



BARS D1



BARS D2



BARS J1 BARS J2 BARS J3 BARS V

WING DIMENSION FORMULAS:

(All values are in feet.)

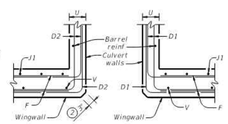
Hw = H + T + C
Lw = (Hw / (SL) + cosine (θ) for Type PW-1
= (Hw - 1') (SL) + cosine (θ) for Type PW-2 and Hw ≥ 4'
= (Hw - 0.5') (SL) + cosine (θ) for Type PW-2 and Hw < 4'

For cast-in-place culverts:
Ltw = [(N) (S) + (N + 1) (U)] ÷ cosine (θ)

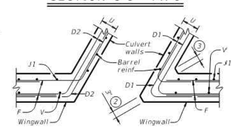
For precast culverts:
Ltw = [(N) (2 U + S) + (N - 1) (0.5)] ÷ cosine (θ)
Total Wingwall Area (two wings - SF)
= (2)(Hw)(Lw) for Type PW-1
= (2)(Hw)(Lw) - 6 SF for Type PW-2 and Hw ≥ 4'
= (2)(Hw)(Lw) - 1.5 SF for Type PW-2 and Hw < 4'

Hw = Height of wingwall
Lw = Length of wingwall
Ltw = Culvert toewall length
N = Number of culvert spans
SL:1 = Channel slope ratio. (horizontal: 1 vertical, usual value is 2:1)
θ = Culvert skew

See applicable box culvert standard sheet for S, H, T, and U values.



SECTION C-C - PW-1



SECTION C-C - PW-2

1. Skew = 0°
2. At discharge end, chamfer may be ¾" minimum.
3. For 15° skew ~ 1'
   For 30° skew ~ 2"
   For 45° skew ~ 3"
4. Quantities shown are for two Type PW-1 wings. Adjust concrete volume for Type PW-2 wings. To determine estimated quantities for two wings, multiply the tabulated values by Lw. Quantities shown do not include weight of Bars D.
5. Provide weepholes for Hw = 5'-0" and greater. Fill around weepholes with coarse gravel.
6. Extend Bars E2 1'-6" minimum into the wingwall footing.
7. Lap Bars M1 1'-6" minimum with Bars M2.
8. Place Bars G as shown, equally spaced at 8" maximum. Provide at least two pairs of Bars G per wing.
9. 0" Min to 5'-0" Max. Estimated curb heights are shown elsewhere in the plans. For structures with pedestrian rail or curbs taller than 1'-0, refer to the Extended Curb Details (ECD) standard sheet. For structures with T631 or T631LS bridge rail, refer to the Mounting Details for T631 & T631LS Rails (T631-CM) standard sheet. Refer to the Box Culvert Rail Mounting Details (RAC) standard sheet for structures with bridge rail other than T631 or T631LS.
10. For vehicle safety, the following requirements must be met:
    - For structures without bridge rail, construct curbs no more than 3" above finished grade.
    - For structures with bridge rail, construct curbs flush with finished grade.

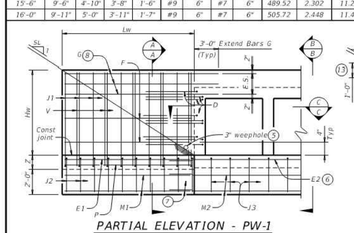
    Reduce curb heights, if necessary, to meet the above requirements. No changes will be made in quantities and no additional compensation will be allowed for this work.
11. 1'-0" typical. 2'-3" when the Box Culvert Rail Mounting Details (RAC) standard sheet is referred to elsewhere in the plans.
12. 3'-0" for Hw < 4'.
13. 6" for Hw < 4'.

DESIGNER NOTES:
Type PW-1 can be used for all applications and must be used if railing is to be mounted to the wingwall.
Type PW-2 can only be used for applications without a railing mounted to the wingwall.

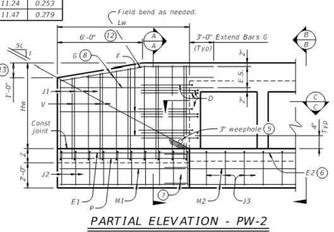
MATERIAL NOTES:
- Provide Class C concrete (f'_c=3,600 psi).
- Provide Grade 60 reinforcing steel.
- Provide galvanized reinforcing steel if required elsewhere in the plans.

GENERAL NOTES:
Designed in accordance with AASHTO LRFD Bridge Design Specifications.
Depth of toewalls for wingwalls and culverts may be reduced or eliminated when founded on solid rock, when directed by the Engineer.
See Box Culvert Supplement (BCS) standard sheet for wingwall type and additional dimensions and information.
Quantities for concrete and reinforcing steel resulting from the formulas given on this sheet are for the Contractor's information only.

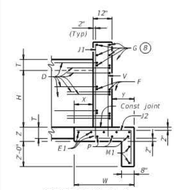
Cover dimensions are clear dimensions, unless noted otherwise. Reinforcing dimensions are out-to-out of bars.



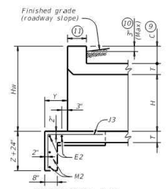
PARTIAL ELEVATION - PW-1



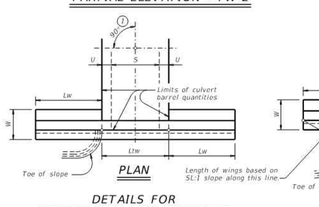
PARTIAL ELEVATION - PW-2



SECTION A-A
(Showing wing reinforcement.)

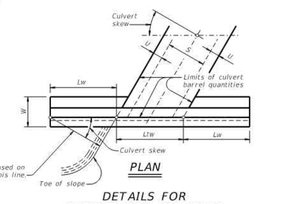


SECTION B-B
(Showing wing reinforcement.)



PLAN

DETAILS FOR NON-SKEWED BOX CULVERTS



PLAN

DETAILS FOR SKEWED BOX CULVERTS
(Showing 30° skew.)

DISCLAIMER:
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DATE:
FILE:

Texas Department of Transportation — Bridge Division Standard

CONCRETE WINGWALLS
WITH PARALLEL WINGS FOR BOX CULVERTS
TYPES PW-1 AND PW-2

PW

FILE: CD-PW-20.dgn	DN: CAP	CK: CAP	DW: TxDOT	CK: TxDOT
©TxDOT February 2020	CONT	SECT	JOB	HIGHWAY
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STATE OF TEXAS
CHRISTOPHER P. VAN HEERDE
93047
LICENSED PROFESSIONAL ENGINEER

04/13/2026

STORM DETAILS (4 OF 4)

PARKSIDE SOUTH
UNIT 1

NO.	REVISION DESCRIPTION	DATE

DATE: **APRIL 2026**
DRAWN BY: **PMM**
DESIGNED BY: **RCD**
REVIEWED BY: **CVH**
HMT PROJECT NO.: **337.130**

SHEET
C6.15

Drawing Name: K:_Projects\337 - Lennar\130 - Parkside South Unit 1\CDs\337-130_DETAILS.dwg User: jonm Apr 16, 2026 - 5:53pm

TRENCH EXCAVATION SAFETY PROTECTION

CONTRACTOR AND/OR 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 CONTRACTORS 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 EXCAVATIONS.

DEEP TRENCH COMPACTION TESTING

CITY REQUIREMENTS FOR TESTING SHALL BE ADHERED TO, IN CASES WHERE TRENCH DEPTHS DO NOT ALLOW TECHNICIANS ACCESS, METHODS FOR TESTING SHALL BE PROPOSED AND APPROVED PRIOR TO CONSTRUCTION COMMENCING.

THIS PROJECT INCLUDES UTILITY INSTALLATIONS GREATER THAN 5-FEET IN DEPTH LOCATED IN PUBLIC RIGHT-OF-WAY OR EASEMENTS. DEEP TRENCHES POSE COMPACTION TESTING AND CONSTRUCTION CHALLENGES AND CITY METHODS FOR TESTING AND COMPACTION MAY NOT BE ACHIEVABLE.

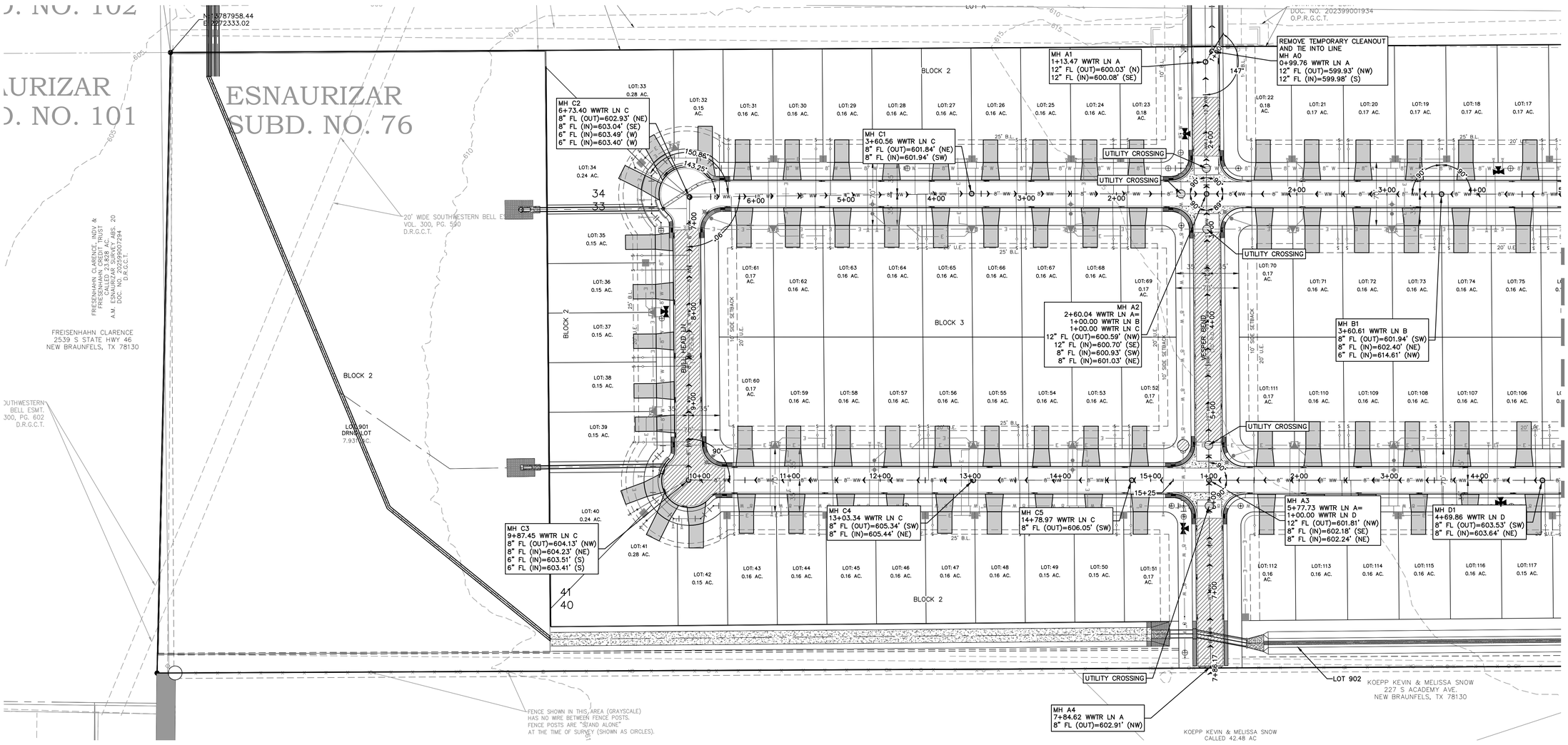
0 30 60 120
SCALE: 1" = 60'

LEGEND

- 700 — EXISTING CONTOURS
- 700 — PROPOSED CONTOURS
- B.L. — BUILDING SETBACK LINE
- U.E. — UTILITY EASEMENT
- D.E. — DRAINAGE EASEMENT
- EX WW — EXISTING WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE
- WW — PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER SERVICE
- UTILITY CROSSING

UTILITY NOTES:

1. ALL UTILITIES TO BE CONSTRUCTED PRIOR TO THE STREETS.
2. NO VALVES, HYDRANTS, CLEANOUTS, ECT. SHALL BE CONSTRUCTED WITHIN CURBS, SIDEWALK OR DRIVEWAYS.



UTILITY TRENCH COMPACTION (DEEP)

THIS PROJECT INCLUDES UTILITY INSTALLATIONS GREATER THAN 5-FEET IN DEPTH LOCATED IN PUBLIC RIGHT-OF-WAY OR EASEMENTS. DEEP TRENCHES POSE COMPACTION TESTING AND CONSTRUCTION CHALLENGES AND CITY METHODS FOR TESTING AND COMPACTION MAY NOT BE ACHIEVABLE. A UTILITY COMPACTION PLAN WILL BE REQUIRED AND MUST BE SUBMITTED FOR APPROVAL TO CITY PRIOR TO UTILITY INSTALLATION.

REFER TO COVER SHEET FOR BENCHMARK INFORMATION

THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR WILL AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE INCURRED BY THEIR FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES, STRUCTURES OR FACILITIES. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES 24-HOURS PRIOR TO COMMENCING CONSTRUCTION.

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TBPELS FIRM F-10961
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STATE OF TEXAS
CHRISTOPHER P. VAN HEERDEN
93047
LICENSED PROFESSIONAL ENGINEER
04/13/2026

OVERALL WASTEWATER (1 OF 2)

PARKSIDE SOUTH
UNIT 1

NO.	REVISION DESCRIPTION	DATE

DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C7.0

Drawing Name: N:_Projects\337 - Lennar\130 - Parkside South Unit 1\Cds\OVERALL WASTEWATER.dwg User: jonm Apr 16, 2026 - 5:53pm

TRENCH EXCAVATION SAFETY PROTECTION

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DEEP TRENCH COMPACTION TESTING

CITY REQUIREMENTS FOR TESTING SHALL BE ADHERED TO, IN CASES WHERE TRENCH DEPTHS DO NOT ALLOW TECHNICIANS ACCESS, METHODS FOR TESTING SHALL BE PROPOSED AND APPROVED PRIOR TO CONSTRUCTION COMMENCING.

THIS PROJECT INCLUDES UTILITY INSTALLATIONS GREATER THAN 5-FEET IN DEPTH LOCATED IN PUBLIC RIGHT-OF-WAY OR EASEMENTS. DEEP TRENCHES POSE COMPACTION TESTING AND CONSTRUCTION CHALLENGES AND CITY METHODS FOR TESTING AND COMPACTION MAY NOT BE ACHIEVABLE.

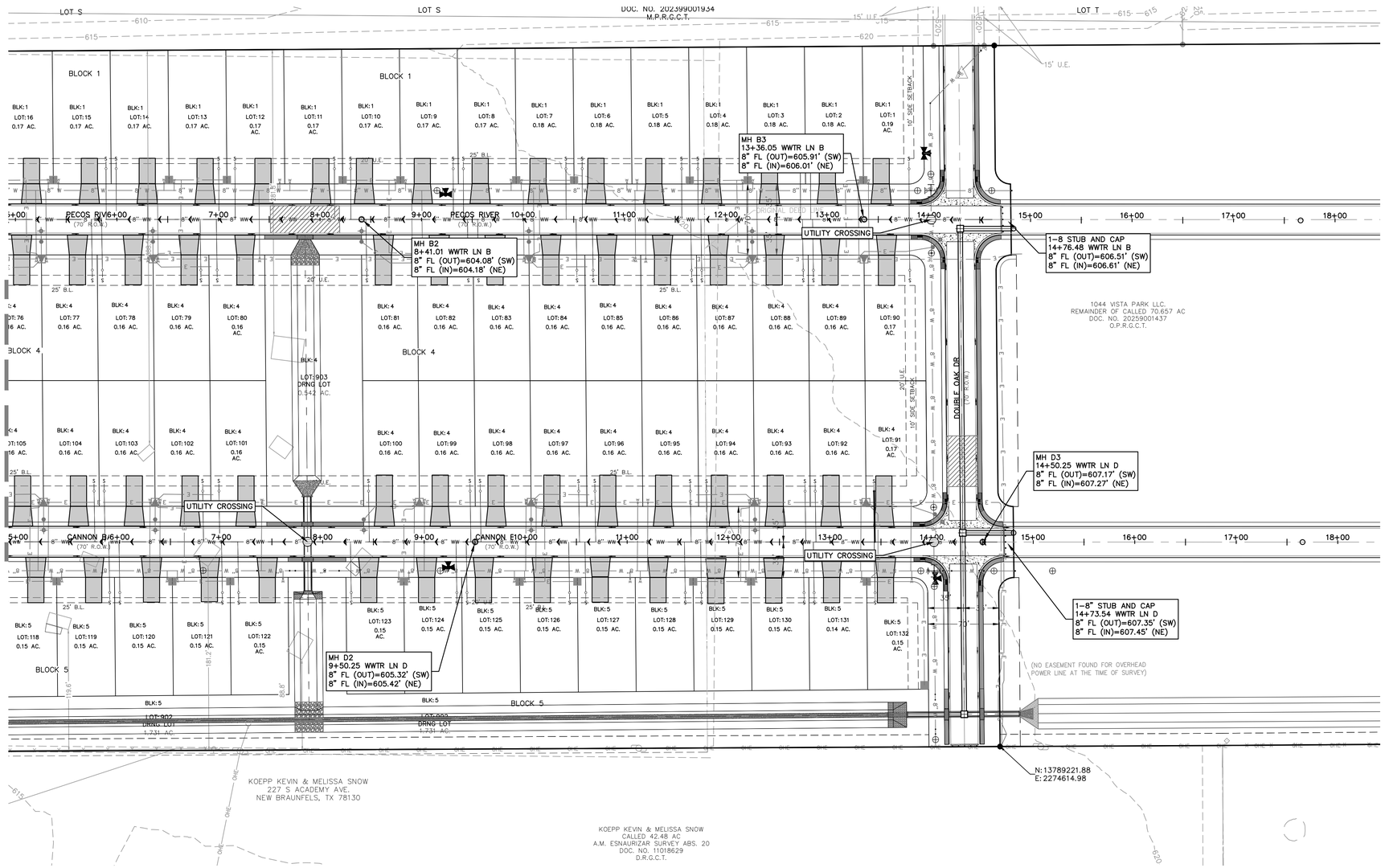
0 30 60 120
SCALE: 1" = 60'

LEGEND

700	EXISTING CONTOURS
700	PROPOSED CONTOURS
B.L.	BUILDING SETBACK LINE
U.E.	UTILITY EASEMENT
D.E.	DRAINAGE EASEMENT
EX WW	EXISTING WASTEWATER LINE
	PROPOSED WASTEWATER MANHOLE
WW	PROPOSED WASTEWATER LINE
	PROPOSED WASTEWATER SERVICE
	UTILITY CROSSING

UTILITY NOTES:

1. ALL UTILITIES TO BE CONSTRUCTED PRIOR TO THE STREETS.
2. NO VALVES, HYDRANTS, CLEANOUTS, ECT. SHALL BE CONSTRUCTED WITHIN CURBS, SIDEWALK OR DRIVEWAYS.



UTILITY TRENCH COMPACTION (DEEP)

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TBPELS FIRM F-10961
TBPELS FIRM 10153600
HMT ENGINEERING & SURVEYING

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDE
93047
LICENSED
PROFESSIONAL ENGINEER
04/13/2026

OVERALL WASTEWATER (2 OF 2)

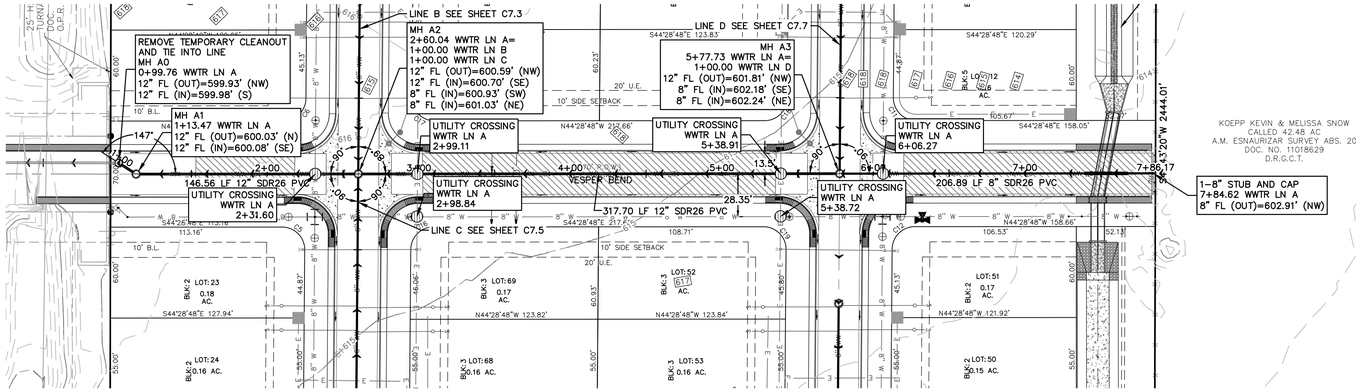
PARKSIDE SOUTH
UNIT 1

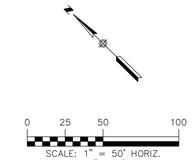
NO.	REVISION DESCRIPTION	DATE

DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C7.1

Drawing Name: N:_Projects\337 - Lennon\130 - Parkside South Unit 1\Cds\OVERALL WASTEWATER.dwg User: jonm Apr 16, 2026 - 5:53pm





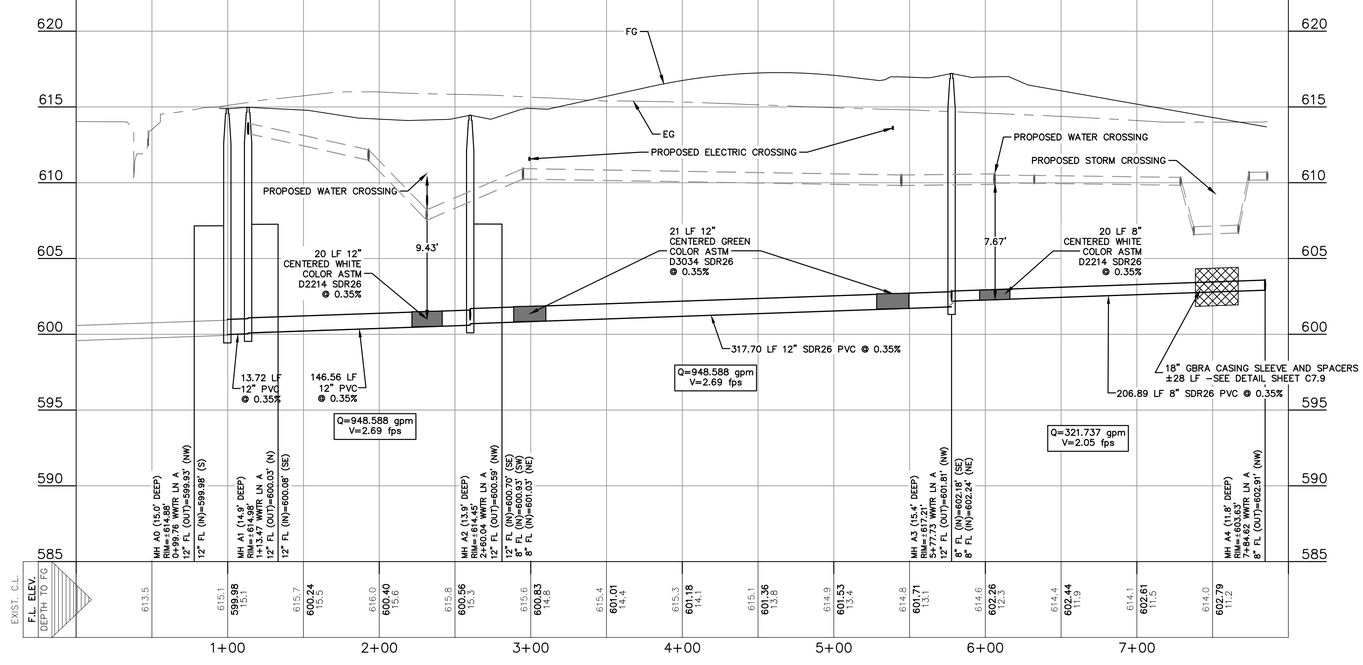
LEGEND

- 700 — EXISTING CONTOURS
- 700 — PROPOSED CONTOURS
- B.L. — BUILDING SETBACK LINE
- U.E. — UTILITY EASEMENT
- D.E. — DRAINAGE EASEMENT
- EX WW — EXISTING WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE
- WW — PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER SERVICE
- UTILITY CROSSING

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WWTR LN A
0+00 – 8+00



TRENCH EXCAVATION SAFETY PROTECTION

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LICENSED
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WASTEWATER LN A PLAN & PROFILE

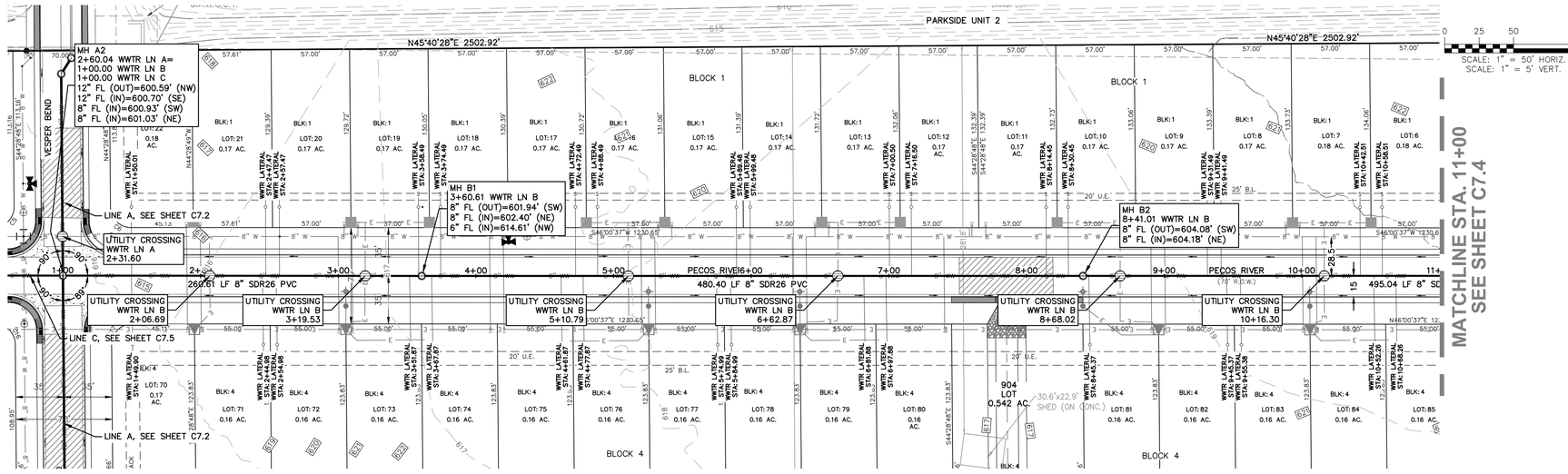
PARKSIDE SOUTH UNIT 1

NO.	REVISION DESCRIPTION	DATE

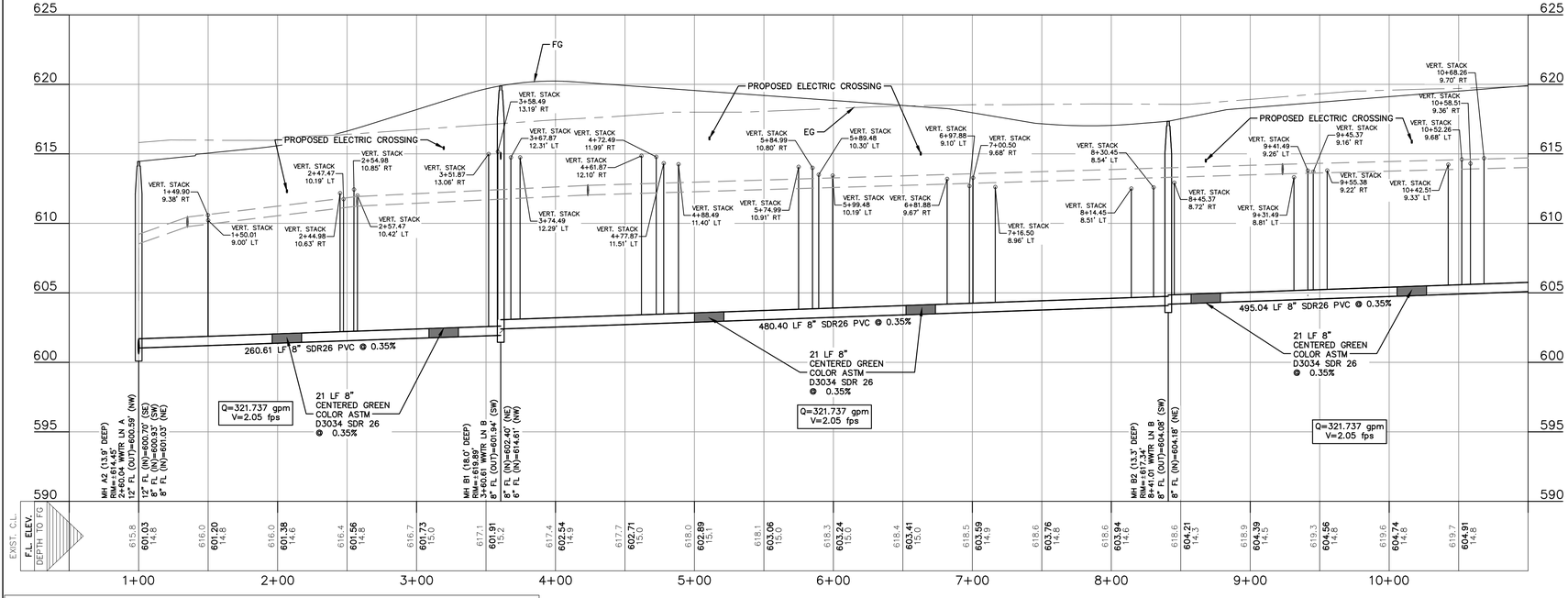
DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C7.2

Drawing Name: N:_Projects\337 – Lennar\130 – Parkside South Unit 1\CDs\OVERALL WASTEWATER.dwg User: jonn Apr 16, 2026 – 5:53pm



WWTR LN B
0+50 – 11+00



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WASTEWATER LN B PLAN & PROFILE (1 OF 2)

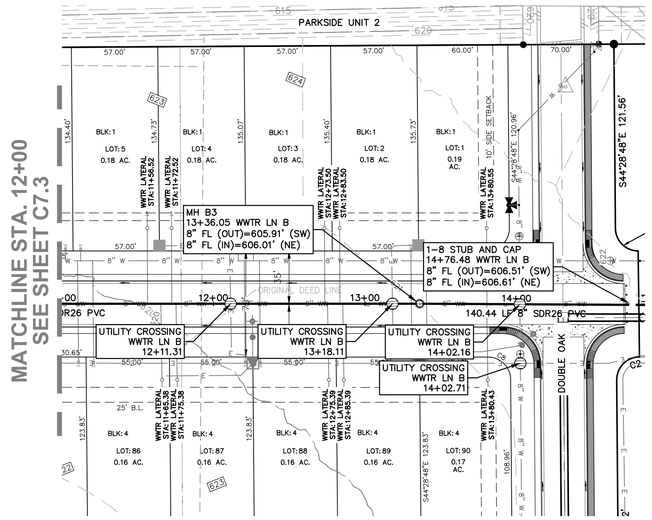
PARKSIDE SOUTH UNIT 1

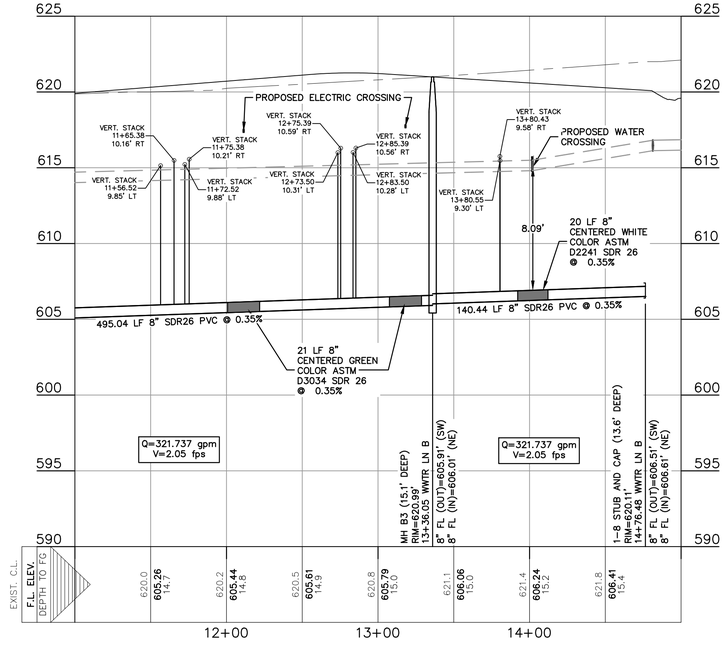
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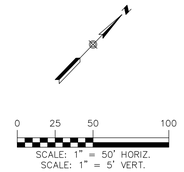
DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C7.3

Drawing Name: N:_Projects\337 - Lennar\130 - Parkside South Unit 1\CDs\OVERALL WASTEWATER.dwg User: jonm Apr 16, 2026 - 5:53pm







LEGEND

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WASTEWATER LN B
PLAN & PROFILE (2 OF 2)

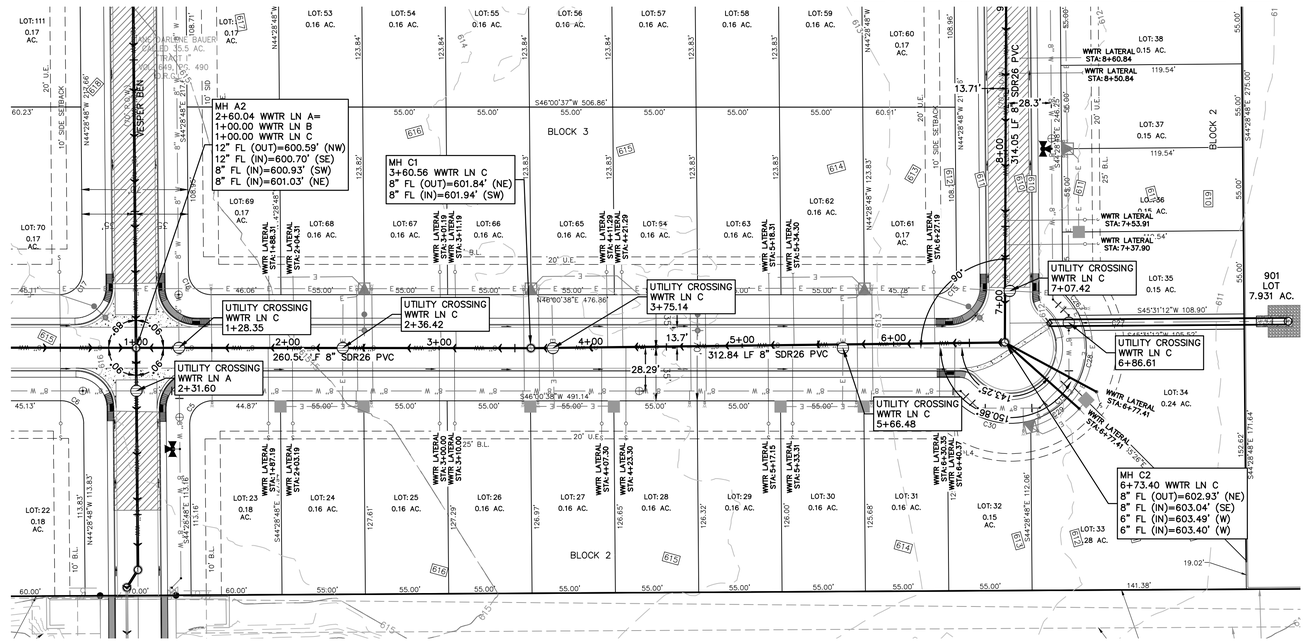
PARKSIDE SOUTH
UNIT 1

NO.	REVISION DESCRIPTION	DATE

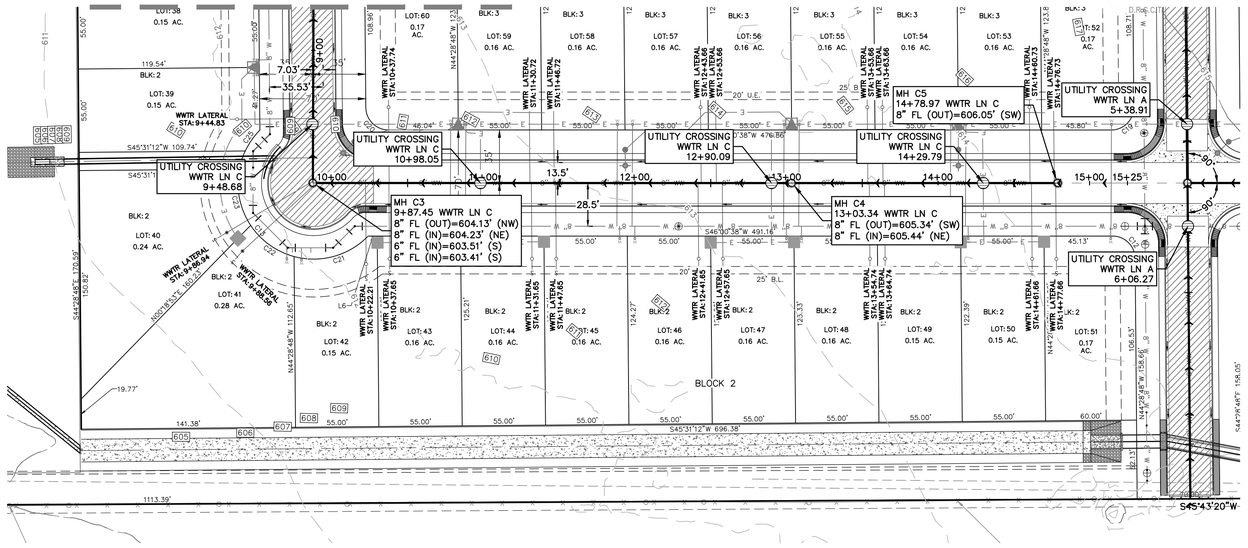
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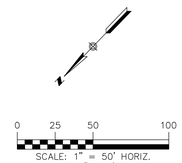
SHEET
C7.4

Drawing Name: N:_Projects\337 - Lennar\130 - Parkside South Unit 1\CDs\OVERALL WASTEWATER.dwg User: jonm Apr 16, 2026 - 5:54pm


MATCHLINE STA. 9+00
SEE SHEET C7.6
MH A2
2+60.04 WWTR LN A=
1+00.00 WWTR LN B
1+00.00 WWTR LN C
12" FL (OUT)=600.59' (NW)
12" FL (IN)=600.70' (SE)
8" FL (IN)=600.93' (SW)
8" FL (IN)=601.03' (NE)
MH C1
3+60.56 WWTR LN C
8" FL (OUT)=601.84' (NE)
8" FL (IN)=601.94' (SW)
MH C2
6+73.40 WWTR LN C
8" FL (OUT)=602.93' (NE)
8" FL (IN)=603.04' (SE)
6" FL (IN)=603.49' (W)
6" FL (IN)=603.40' (W)
UTILITY CROSSING WWTR LN A 2+31.60
UTILITY CROSSING WWTR LN C 1+28.35
UTILITY CROSSING WWTR LN C 2+36.42
UTILITY CROSSING WWTR LN C 3+75.14
UTILITY CROSSING WWTR LN C 5+66.48
UTILITY CROSSING WWTR LN C 6+86.61
UTILITY CROSSING WWTR LN C 7+07.42
260.56 LF 8" SDR26 PVC
312.84 LF 8" SDR26 PVC
314.05 LF 8" SDR26 PVC
BLOCK 2
BLOCK 3
901 LOT 7.931 AC.
WWTR LATERAL STA:1+88.31
WWTR LATERAL STA:2+04.31
WWTR LATERAL STA:3+01.19
WWTR LATERAL STA:3+11.19
WWTR LATERAL STA:4+11.29
WWTR LATERAL STA:4+21.29
WWTR LATERAL STA:5+18.31
WWTR LATERAL STA:5+33.31
WWTR LATERAL STA:6+27.19
WWTR LATERAL STA:6+40.37
WWTR LATERAL STA:7+53.91
WWTR LATERAL STA:7+37.90
WWTR LATERAL STA:8+50.84
WWTR LATERAL STA:8+60.84
WWTR LATERAL STA:1+87.19
WWTR LATERAL STA:2+03.19
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MATCHLINE STA. 9+00
SEE SHEET C7.5





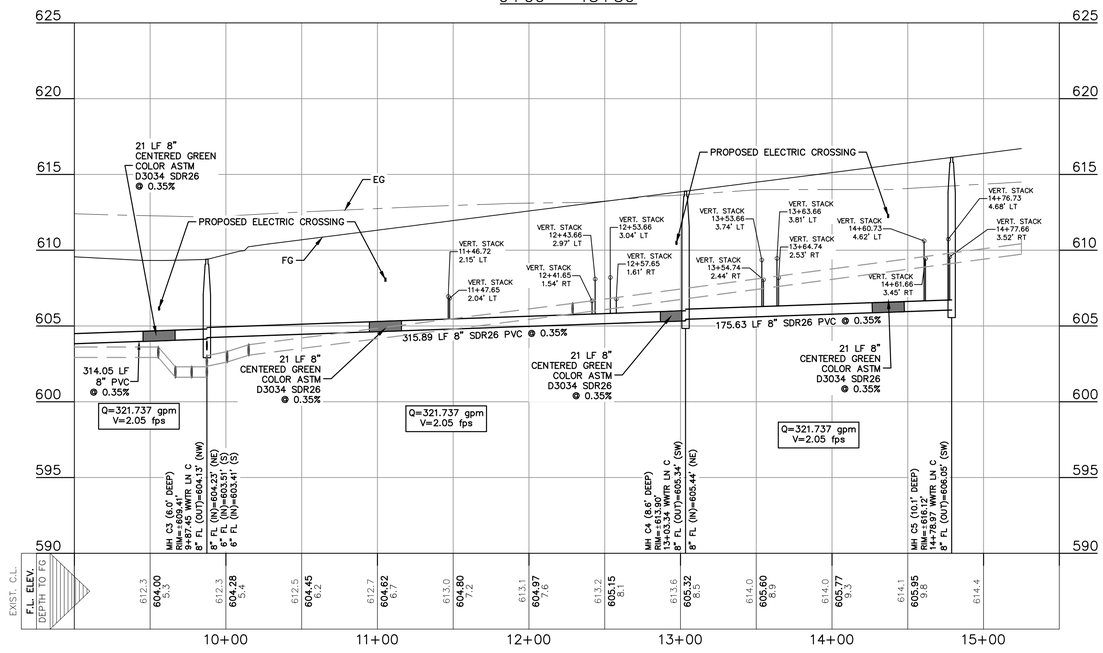
LEGEND

- 700 — EXISTING CONTOURS
- 700 — PROPOSED CONTOURS
- B.L. — BUILDING SETBACK LINE
- U.E. — UTILITY EASEMENT
- D.E. — DRAINAGE EASEMENT
- EX WW — EXISTING WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE
- WW — PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER SERVICE
- UTILITY CROSSING

UTILITY NOTES:

1. ALL UTILITIES TO BE CONSTRUCTED & TESTED PRIOR TO THE STREETS.
2. ALL SEWER PIPE ASTM D3034(TYPICAL OF OTHER SHEETS) (115 PSI) SDR 26 UNLESS CALLED OUT OTHERWISE.
3. REFER TO THE COVER SHEET FOR BENCHMARK INFORMATION.
4. AT WATER CROSSINGS INCLUDING FIRE HYDRANT LEADS, WHITE COLOR GASKETED ASTM D2241 SDR 26 PIPE AND FITTINGS SHALL BE USED FOR MAINS AND LATERALS.
5. REFER TO ALL GBRA NOTES ON SHEET C0.1.
6. ELECTRIC DESIGN AS SHOWN IN PLANS ARE FOR REFERENCE ONLY, REFER TO APPROVED NBU ELECTRIC DESIGN.

WWTR LN C
9+00 – 15+50



TRENCH EXCAVATION SAFETY PROTECTION

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290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 10153600
HMT ENGINEERING & SURVEYING

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDE
93047
LICENSED
PROFESSIONAL ENGINEER
04/13/2026

WASTEWATER LN C PLAN & PROFILE (2 OF 2)

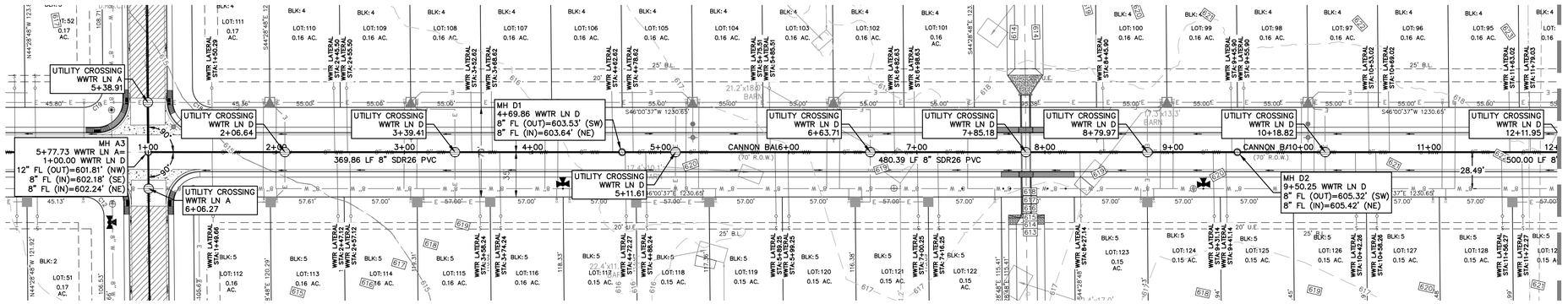
PARKSIDE SOUTH UNIT 1

NO.	REVISION DESCRIPTION	DATE

DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C7.6

Drawing Name: N:_Projects\337 - Lennar\130 - Parkside South Unit 1\CDs\OVERALL WASTEWATER.dwg User: jonm Apr 16, 2026 - 5:54pm



MATCHLINE STA. 12+00
SEE SHEET C7.8

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SCALE: 1" = 50' HORIZ.
SCALE: 1" = 5' VERT.

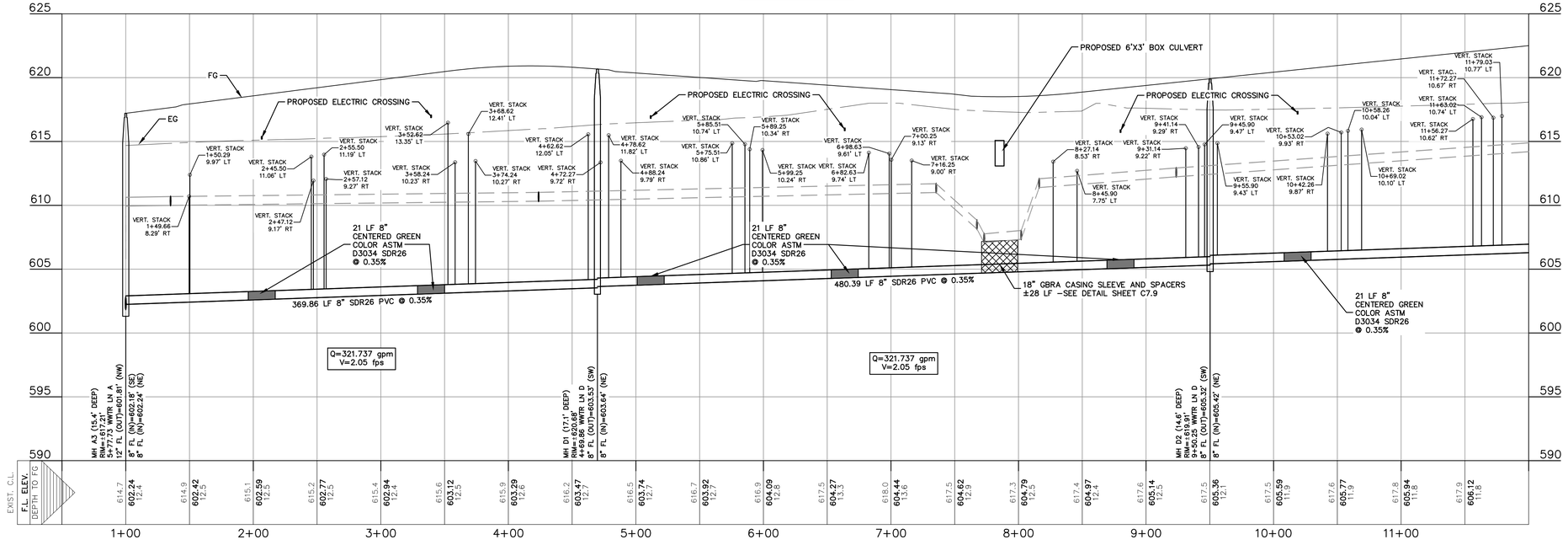
LEGEND

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- B.L. — BUILDING SETBACK LINE
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WWTR LN D
0+50 – 12+00



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TBPELS FIRM F-10961
TBPELS FIRM 10153600

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDEN
93047
LICENSED
PROFESSIONAL ENGINEER
04/13/2026

WASTEWATER LN D PLAN & PROFILE (1 OF 2)

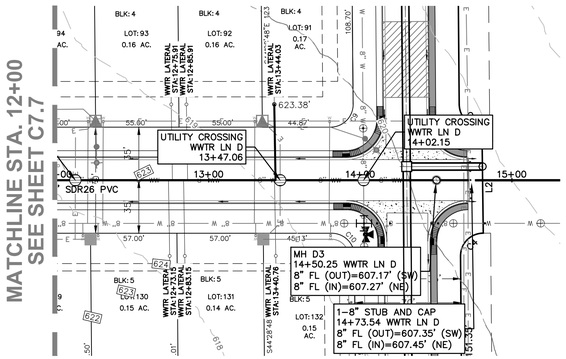
PARKSIDE SOUTH UNIT 1

NO.	REVISION DESCRIPTION	DATE

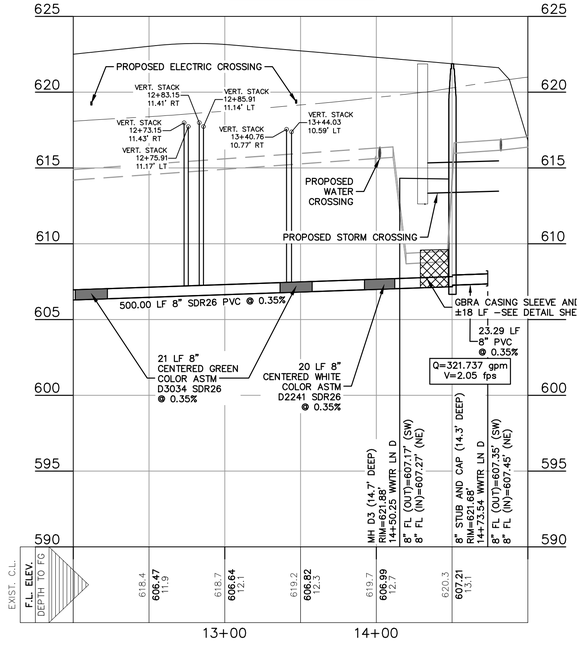
DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

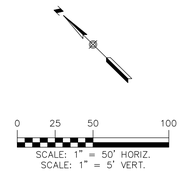
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C7.7

Drawing Name: N:_Projects\337 - Lennar\130 - Parkside South Unit 1\CDs\OVERALL WASTEWATER.dwg User: jonm Apr 16, 2026 - 5:54pm



WWTR LN D
12+00 – 15+00





LEGEND

700	EXISTING CONTOURS
700	PROPOSED CONTOURS
B.L.	BUILDING SETBACK LINE
U.E.	UTILITY EASEMENT
D.E.	DRAINAGE EASEMENT
EX WW	EXISTING WASTEWATER LINE
	PROPOSED WASTEWATER MANHOLE
WW	PROPOSED WASTEWATER LINE
	PROPOSED WASTEWATER SERVICE
	UTILITY CROSSING

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WASTEWATER LN D
PLAN & PROFILE (2 OF 2)

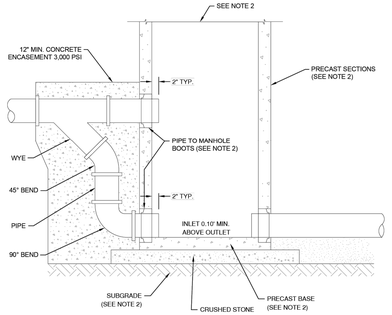
PARKSIDE SOUTH
UNIT 1

NO.	REVISION DESCRIPTION	DATE

DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C7.8

Drawing Name: N:_Projects\337 - Lennar\130 - Parkside South Unit 1\CDs\OVERALL WASTEWATER.dwg User: jonm Apr 16, 2026 - 5:54pm



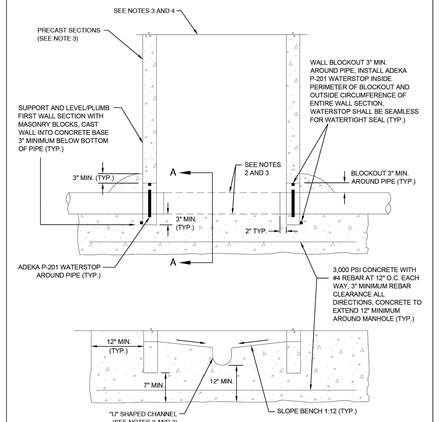
NOTES:
1. A WASTEWATER COLLECTION SYSTEM PIPE, INCLUDING SERVICE LATERALS, ENTERING A MANHOLE MORE THAN 24" ABOVE THE MANHOLE OUT INVERT MUST HAVE AN EXTERNAL DROP PIPE. INTERNAL DROPS ARE NOT ALLOWED.
2. REFERENCE DETAIL 620 FOR ADDITIONAL REQUIREMENTS.

GBRA Guadalupe-Blanco River Authority

WASTEWATER DROP MANHOLE

REVISED	SCALE
JUL. 28, 2025	NONE
DETAIL NO. 560	

Page 165



SECTION "A-A"

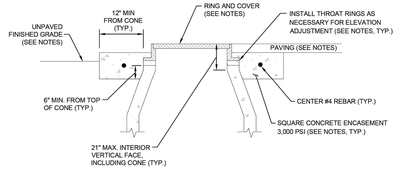
NOTES:
1. THIS DETAIL SHALL BE USED TO INSTALL MANHOLES ON EXISTING MAINS ONLY.
2. AFTER SUCCESSFUL VACUUM TESTING, REMOVE EXISTING PIPE FULL CIRCUMFERENCE AND SHAPE CHANNELS FOR NEW AND EXISTING PIPES.
3. REFERENCE DETAIL 620 FOR CHEMICAL RESISTANT MATERIAL REQUIREMENTS.
4. REFERENCE DETAIL 620 FOR ADDITIONAL REQUIREMENTS.

GBRA Guadalupe-Blanco River Authority

WASTEWATER MANHOLE CAST IN PLACE BASE

REVISED	SCALE
JUL. 28, 2025	NONE
DETAIL NO. 590	

Page 168



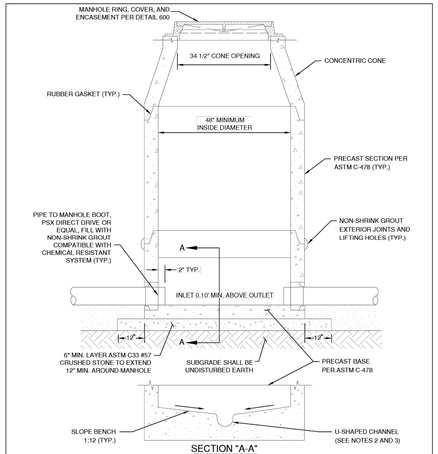
NOTES:
1. MANHOLE RING CONCRETE ENCASEMENT IS REQUIRED FOR ALL MANHOLES.
2. INSTALL CONCRETE ENCASEMENT SQUARE WITH CURB.
3. MANHOLE RIM ELEVATIONS SHOWN IN PLAN AND PROFILE VIEWS ARE APPROXIMATE.
4. IN UNPAVED AREAS, ASSEMBLY SHALL BE INSTALLED PLUMB/LEVEL, TOP OF CONCRETE ENCASEMENT SHALL BE 2" ABOVE FINISHED GRADE, COVERS SHALL BE 2" ABOVE TOP OF CONCRETE ENCASEMENT, ALL EXPOSED VERTICAL AND HORIZONTAL CONCRETE EDGES SHALL BE FORMED WITH 3/4" CHAMFER STRIPS.
5. IN PAVED AREAS, RINGS AND COVERS SHALL BE FLUSH WITH PAVING AND SLOPED TO MATCH PAVING.
6. THROAT RINGS SHALL BE PRECAST CONCRETE. ALL INTERIOR SURFACES OF MANHOLES SHALL BE CHEMICAL RESISTANT INCLUDING THROAT. UTILIZE NON-SHRINK GROUT FOR INSTALLATION OF THROAT RINGS. GROUT SHALL BE COMPATIBLE WITH THE CHEMICAL RESISTANT SYSTEM.
7. MANHOLE RINGS AND COVERS SHALL BE EJCO PRODUCT NUMBER 4243210SW01, SIP INDUSTRIES ITEM NUMBER 4087, OR EQUAL.
8. SCHEDULE GBRA INSPECTOR TO WITNESS FINAL BOLTING OF MANHOLE COVERS.

GBRA Guadalupe-Blanco River Authority

WASTEWATER MANHOLE RING ENCASEMENT

REVISED	SCALE
JUL. 28, 2025	NONE
DETAIL NO. 600	

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SECTION "A-A"
TYPICAL PRECAST BASE

NOTES:
1. UNLESS INDICATED OTHERWISE, INSTALL COMPONENTS PLUMB/LEVEL.
2. ALL INTERIOR SURFACES SHALL BE CHEMICAL RESISTANT INCLUDING THROAT RINGS, BENCH, AND CHANNEL INVERTS. REFERENCE GBRA STANDARDS FOR CHEMICAL RESISTANT MATERIAL REQUIREMENTS.
3. IF CHEMICAL RESISTANT LINING IS UTILIZED, ADJUST CHANNEL INVERTS TO ACCOMMODATE THICKNESS OF LINING SUCH THAT CHANNEL INVERTS, AFTER LINING, MATCH PIPE INVERTS.
4. PROVIDE 6" MINIMUM CLEARANCE BETWEEN CONCRETE PENETRATIONS, AND BETWEEN CONCRETE PENETRATIONS AND CONCRETE JOINTS, AS MEASURED FROM NEAREST EDGE TO NEAREST EDGE.

GBRA Guadalupe-Blanco River Authority

WASTEWATER PRECAST MANHOLE

REVISED	SCALE
JUL. 28, 2025	NONE
DETAIL NO. 620	

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NOTES:
1. ALL VALVES SHALL OPEN COUNTER-CLOCKWISE, EXCEPT RECLAIMED SHALL OPEN CLOCKWISE.
2. ALL VALVES SHALL HAVE RESTRAINED MECHANICAL JOINT END CONNECTIONS UNLESS NOTED OTHERWISE.
3. FOR WATER, PROVIDE RESILIENT WEDGE GATE VALVES, AMERICAN FLOW CONTROL SERIES 2500 OR EQUAL.
4. FOR WASTEWATER, PROVIDE EPOXY LINED AND COATED ROUND PORT PLUG VALVES BY CRISPIN, GA, MILLIKEN, OR PRATT. PLUG VALVES SHALL BE HORIZONTAL SHAFT CLOSING DOWNWARD. INSTALL ORIENTATION OF SEAT END ("SE") AS SHOWN ON DRAWINGS OR AS DIRECTED BY GBRA INSPECTOR.
5. INSTALL ASSEMBLY PLUMB/LEVEL.

GBRA Guadalupe-Blanco River Authority

BURIED VALVE

REVISED	SCALE
JUL. 28, 2025	NONE
DETAIL NO. 220	

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NOTES:
1. CLEANOUTS (C.O.) ARE NOT ALLOWED WITHIN DRIVEWAYS.
2. PROVIDE SINGLE WASTEWATER SERVICES 5 FT FROM LOW LOT CORNER (TYPICAL). PROVIDE 8 FT WHERE LOT CORNER IS SHARED WITH DRY UTILITIES AND 10 FT WHERE LOT CORNER IS SHARED WITH A FIRE HYDRANT OR AIR RELEASE VALVE.
3. PIPE AND FITTINGS SHALL BE 6" DIAMETER, GREEN COLOR, GASKETED ASTM D3034 SDR26, UNLESS NOTED OTHERWISE. AT WATER CROSSINGS PIPE AND FITTINGS SHALL BE WHITE COLOR, GASKETED, AND 150 PSI MINIMUM PRESSURE RATED.
4. UTILIZE SANITARY TEES FOR NEW CONSTRUCTION. UTILIZE TAPPING SADDLES FOR EXISTING MAINS (NAPCO PART H4308 6R OR EQUAL, ADJUST PART NUMBER FOR SIZE REQUIRED). TAPPING SADDLES ARE NOT ALLOWED FOR NEW CONSTRUCTION.
5. INSTALL PIPE BETWEEN FITTINGS IF NECESSARY. INSTALL PER VERTICAL STACK DETAIL 580 IF NECESSARY OR WHERE SHOWN.
6. CLEANOUT RISER AND SHROUD SHALL BE INSTALLED PLUMB/LEVEL. CENTERLINE (CL) OF CLEANOUT RISER SHALL BE 3 FT FROM PROPERTY LINE (PL).
7. ENTIRE ASSEMBLY SHALL BE FURNISHED AND INSTALLED BY THE STREET UTILITY CONTRACTOR, WITH EXCEPTION OF CUSTOMER'S SERVICE LINE. CUSTOMER'S PLUMBER SHALL REMOVE PLUG, INSTALL CUSTOMER'S SERVICE LINE, VERIFY ANY FINISHED GRADE MODIFICATIONS AND ADJUST ASSEMBLY ACCORDINGLY, AND RESTORE ANY DISTURBED WORK.

GBRA Guadalupe-Blanco River Authority

WASTEWATER LATERAL AND CLEANOUT

REVISED	SCALE
JUL. 28, 2025	NONE
DETAIL NO. 570	

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NOTES:
THE MATERIALS SHOWN APPLY TO JACK AND BORE INSTALLATIONS AND STREAM/RIVER CROSSING. FOR ROAD CROSSINGS, CASING SHALL EXTEND 5 FEET MINIMUM BEYOND ROW ON EACH END. OPEN CUT SLEEVING OF SUBDIVISION UTILITIES UNDER STORM SEWER MAY BE C900 DR18 CASING (COLOR TO MATCH CARRIER PIPE) AND ADVANCE PRODUCTS & SYSTEMS MODEL CI SPACERS, OR EQUAL, WITH STAINLESS STEEL HARDWARE. REFERENCE GBRA STANDARDS AND DESIGN GUIDELINES FOR ADDITIONAL SLEEVE REQUIREMENTS. THE CLEARANCE AND DIMENSIONS SHOWN APPLY TO ALL INSTALLATIONS.

GBRA Guadalupe-Blanco River Authority

CASING AND SPACERS

REVISED	SCALE
JUL. 28, 2025	NONE
DETAIL NO. 230	

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NOTES:
1. CONCRETE ENCASEMENT SHALL BE PLACED, UPON AND AGAINST UNDISTURBED EARTH.
2. REFERENCE DETAIL 570 FOR ADDITIONAL REQUIREMENTS.
3. REFERENCE DETAIL 420 FOR ADDITIONAL REQUIREMENTS.
4. UNLESS INDICATED OTHERWISE, INSTALL COMPONENTS PLUMB/LEVEL.

GBRA Guadalupe-Blanco River Authority

WASTEWATER LATERAL VERTICAL STACK

REVISED	SCALE
JUL. 28, 2025	NONE
DETAIL NO. 580	

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290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 10153600
HMT ENGINEERING & SURVEYING

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDE
93047
LICENSED
PROFESSIONAL ENGINEER
04/13/2026

WASTEWATER DETAILS GBRA

PARKSIDE SOUTH
UNIT 1

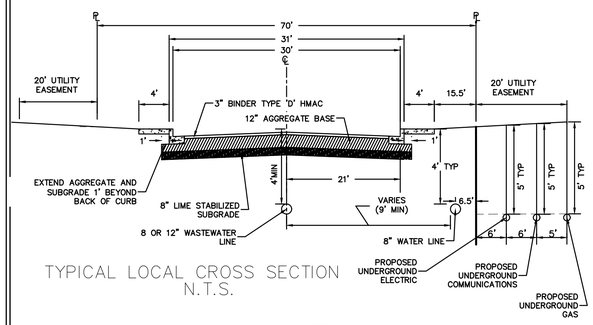
NO.	REVISION DESCRIPTION	DATE

DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C7.9

Drawing Name: K:_Projects\337 - Lennar\130 - Parkside South Unit 1\Cds\337.130_DETAILS.dwg User: jonm Apr 16, 2026 - 5:54pm

5' CLEAR SEPARATION FOR ALL STREET LIGHTS AND DRY UTILITIES OF WATER LINE.



TYPICAL LOCAL CROSS SECTION
N.T.S.

CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES 48 HOURS PRIOR TO EXCAVATION:

SPRINGS HILLS WATER (WATER)	(830) 379-7683
GUADALUPE-BLANCO RIVER AUTHORITY (SEWER)	(830) 379-5822
NEW BRAUNFELS UTILITIES (ELECTRIC)	(830) 608-8951
TIME WARNER CABLE	(830) 625-3408
CENTERPOINT ENERGY (GAS)	(830) 643-6434
AT&T	(830) 303-1333
TEXAS ONE CALL SYSTEM	(800) 245-4545
ENERGY TRANSFER (PETROLEUM PIPELINE)	(210) 262-2486

C.P.E. LOCATOR

CALL CENTER POINT ENERGY LOCATOR AT 1-800-545-6005, 48HRS BEFORE BEGINNING ANY EXCAVATION. DUE TO FEDERAL REGULATIONS TITLE 49, PART 192.181, CENTER POINT ENERGY MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.

TELEPHONE LOCATOR

THE EXISTENCE AND LOCATION OF UNDERGROUND CABLE INDICATED ON THE PLANS ARE TAKEN FROM THE BEST RECORDS AVAILABLE AND ARE NOT GUARANTEED TO BE ACCURATE. CONTRACTOR TO CONTACT THE TELEPHONE COMPANY CABLE LOCATOR 48HRS PRIOR TO EXCAVATION AT 1-800-545-6005,; CONTRACTOR HAS THE RESPONSIBILITY TO PROTECT AND SUPPORT TELEPHONE COMPANY DURING CONSTRUCTION.

TRENCH EXCAVATION SAFETY PROTECTION

CONTRACTOR AND/OR 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 CONTRACTORS 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 EXCAVATIONS.

SPRINGS HILL SPECIAL UTILITY DISTRICT NOTES:

1. EXISTING WATER INFRASTRUCTURE IN THE VICINITY OF THE TRACT IS AVAILABLE TO SERVE THE PROPOSED DEVELOPMENT. IF THE DEVELOPMENT EXCEEDS THE CAPACITY OF THE EXISTING WATER INFRASTRUCTURE, THEN IT WILL BE THE DEVELOPER'S RESPONSIBILITY TO MAKE THE NECESSARY IMPROVEMENTS TO THE EXISTING WATER INFRASTRUCTURE TO PROVIDE SUFFICIENT CAPACITY. THE EXTENT OF THE NECESSARY WATER IMPROVEMENTS WILL BE OUTLINED IN A MEMORANDUM OF UNDERSTANDING OR NON-STANDARD SERVICE AGREEMENT PRIOR TO THE APPROVAL OF ANY FINAL PLAT.
2. SHSUD SHALL HAVE ACCESS TO METER LOCATIONS FROM THE FRONT YARD WITH THE LOCATION NOT BEING WITHIN A FENCED AREA.
3. ANY EASEMENT DESIGNATED AS A SHSUD UTILITY EASEMENT SHALL REMAIN OPEN ACCESS AT ALL TIMES AND SHALL NOT BE WITHIN A FENCED AREA.
4. ALL SHSUD EASEMENTS ARE FOR CONSTRUCTION, MAINTENANCE (INCLUDING BUT NOT LIMITED TO REMOVAL OF TREES AND OTHER OBSTRUCTIONS), READING OF METERS, AND REPAIR OF ANY SHSUD FACILITY LOCATED WITHIN SAID EASEMENT.
5. WATER LINE IS TO BE CONSTRUCTED IN ACCORDANCE WITH SPRINGS HILL SPECIAL UTILITY DISTRICT STANDARD DRAWINGS AND SPECIFICATIONS.
6. WATER MAIN SHALL HAVE A MINIMUM OF 48 INCHES OF COVER, OTHERWISE CONCRETE ENCASEMENT WILL BE REQUIRED.
7. CONTRACTOR WILL KEEP THE AREA ON TOP OF AND AROUND THE WATER METER BOX FREE OF ALL OBJECTS AND DEBRIS.
8. NO METER BOXES TO BE SET IN DRIVEWAYS. ANY METER BOX SET IN A DRIVEWAY WILL BE RELOCATED AT THE CONTRACTOR'S AND/OR DEVELOPER'S EXPENSE.
9. NO VALVES, HYDRANTS, ETC. SHALL BE CONSTRUCTED WITHIN CURBS, SIDEWALKS, DRIVEWAYS, OR ROADWAYS. SHSUD WILL NOT BE RESPONSIBLE FOR ANY DAMAGES TO CONCRETE OR PAVED AREAS IF DEVELOPER DOES NOT COMPLY.
10. PERMANENT TIE-INS TO IN-SERVICE MAINS SHALL ONLY BE CONSTRUCTED FOLLOWING FLUSHING, DISINFECTION, TESTING, AND APPROVAL BY SHSUD. TEMPORARY CONNECTIONS FOR FILLING, FLUSHING, AND TESTING MUST BE EQUIPPED WITH SHSUD-PROVIDED BACKFLOW PREVENTION TO MAINTAIN CROSS-CONNECTION CONTROL.
11. A HYDROSTATIC TEST SHALL BE PERFORMED AFTER SERVICES ARE CONNECTED AND FINAL GRADING AND PLACEMENT ARE COMPLETE.
12. WATER SERVICE LINE CROSSINGS OF CURBS SHALL BE INDICATED BY A 'W' STAMPED IN THE FACE OF THE CURB DURING CONCRETE PLACEMENT WITH A TOOL INTENDED FOR THE PURPOSE. VALVE CROSSINGS OF CURBS SHALL BE INDICATED BY A 'V' STAMPED IN THE FACE OF THE CURB DURING CONCRETE PLACEMENT WITH A TOOL INTENDED FOR THE PURPOSE. LETTERING SHALL BE 4" IN HEIGHT AND HAVE BEVELED EDGES TO PREVENT CHIPPING OR SPAWLING OVER TIME.
13. SPRINGS HILL WILL NOT ACCEPT OR PROVIDE SERVICE VIA ANY INFRASTRUCTURE THAT VIOLATES ANY OF THE STANDARDS, CONDITIONS, OR REQUIREMENTS OF THESE NOTES, THE GENERAL NOTES, THE STANDARD DETAILS, STANDARD SPECIFICATIONS, AND/OR ANY APPLICABLE AGREEMENTS REGARDING SERVICE.

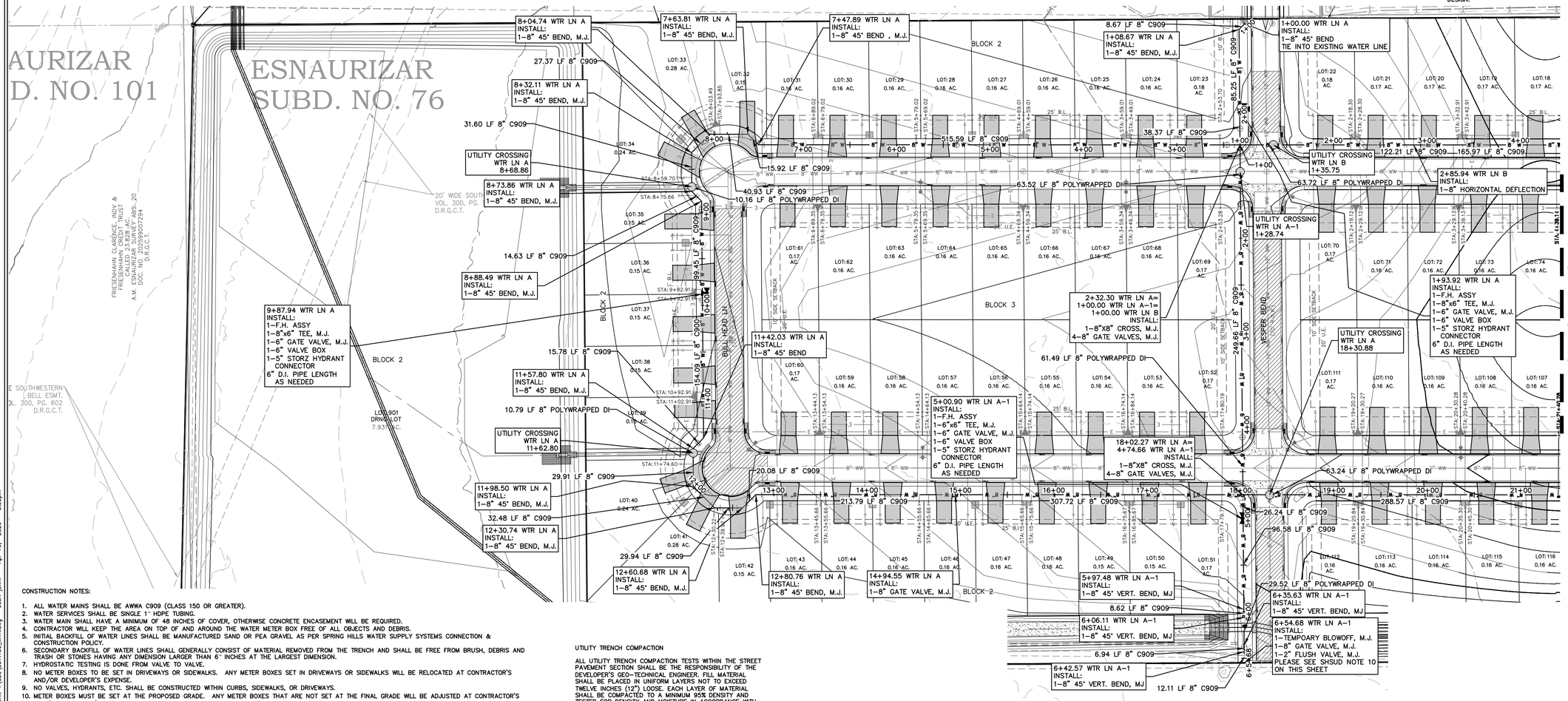


LEGEND

700	EXISTING CONTOURS
700	PROPOSED CONTOURS
B.L.	BUILDING SETBACK LINE
U.E.	UTILITY EASEMENT
D.E.	DRAINAGE EASEMENT
EX W	EXISTING WATER LINE
	PROPOSED WATER LINE
	PROPOSED WATER SERVICE
	UTILITY CROSSING

UTILITY NOTES:

1. ALL UTILITIES TO BE CONSTRUCTED PRIOR TO THE STREETS.
2. NO VALVES, HYDRANTS, ETC. SHALL BE CONSTRUCTED WITHIN CURBS, SIDEWALKS OR DRIVEWAYS.
3. POINT OF DELIVERY SHALL BE IN ACCORDANCE WITH SPRING HILLS WATER SUPPLY WATER AND WASTEWATER DESIGN CRITERIA MANUAL.
4. ELECTRIC DESIGN AS SHOWN IN PLANS ARE FOR REFERENCE ONLY, REFER TO APPROVED NBU ELECTRIC DESIGN.



CONSTRUCTION NOTES:

1. ALL WATER MAINS SHALL BE AWWA C909 (CLASS 150 OR GREATER).
2. WATER SERVICES SHALL BE SINGLE 1" HDPE TUBING.
3. WATER MAIN SHALL HAVE A MINIMUM OF 48 INCHES OF COVER, OTHERWISE CONCRETE ENCASEMENT WILL BE REQUIRED.
4. CONTRACTOR WILL KEEP THE AREA ON TOP OF AND AROUND THE WATER METER BOX FREE OF ALL OBJECTS AND DEBRIS.
5. INITIAL BACKFILL OF WATER LINES SHALL BE MANUFACTURED SAND OR PEA GRAVEL AS PER SPRING HILLS WATER SUPPLY SYSTEMS CONNECTION & CONSTRUCTION POLICY.
6. SECONDARY BACKFILL OF WATER LINES SHALL GENERALLY CONSIST OF MATERIAL REMOVED FROM THE TRENCH AND SHALL BE FREE FROM BRUSH, DEBRIS AND TRASH OR STONES HAVING ANY DIMENSION LARGER THAN 6" INCHES AT THE LARGEST DIMENSION.
7. HYDROSTATIC TESTING IS DONE FROM VALVE TO VALVE.
8. NO METER BOXES TO BE SET IN DRIVEWAYS OR SIDEWALKS. ANY METER BOXES SET IN DRIVEWAYS OR SIDEWALKS WILL BE RELOCATED AT CONTRACTOR'S AND/OR DEVELOPER'S EXPENSE.
9. NO VALVES, HYDRANTS, ETC. SHALL BE CONSTRUCTED WITHIN CURBS, SIDEWALKS, OR DRIVEWAYS.
10. METER BOXES MUST BE SET AT THE PROPOSED GRADE. ANY METER BOXES THAT ARE NOT SET AT THE FINAL GRADE WILL BE ADJUSTED AT CONTRACTOR'S AND/OR DEVELOPER'S EXPENSE.
11. ACCEPTABLE METER BOXES ARE D13-BAMR AND D15-BAMR. NEW RESIDENTIAL LOTS ARE REQUIRED TO USE THE D15-BAMR METER BOXES (DOUBLE AMR). COMMERCIAL LOTS SHOULD CHOOSE WHICH BOX APPLIES TO THE DOMESTIC AND/OR IRRIGATION METER LAYOUT.
12. THRUST BLOCKS WILL NOT BE ALLOWED ON THE SYSTEM WITHOUT SPECIAL APPROVAL. JOINTS WILL BE RESTRAINED WITH RESTRAINING SYSTEMS APPROVED BY SPRING HILLS WATER SUPPLY AND RESTRAINT LENGTH SHALL BE SUBMITTED TO SPRING HILLS WATER SUPPLY AT THE TIME OF PLAN SUBMITTAL.
13. CONTRACTOR SHALL PLACE TRACER WIRE ON TOP OF THE WATER MAINS. TRACER WIRE SHOULD RUN FROM VALVE TO VALVE AND EXIT AT THE VALVE BOX. THE TRACER WIRE SHOULD BE ATTACHED TO THE TOP OF THE PIPE USING TAPE. EXCESS WIRE SHOULD BE LEFT WITHIN VALVE BOXES TO BE PLACED WITHIN LID OF COVER.
14. ALL VALVES, HYDRANTS, AND METERS ARE SHOWN SCHEMATICALLY AND SHALL BE INSTALLED ACCORDING TO THE DETAILS.
15. ALL SERVICES UNDER PAVEMENT SHALL BE SLEEVED. PLEASE REFER TO SHSUD SPECIFICATIONS AND DETAILS.

WATER STRUCTURE TOTAL				
PIPE SIZE	PIPE LENGTH	DOMESTIC METER SIZE	DOMESTIC METERS	FIRE HYDRANTS
8" PVC	5016	5/8"	133	0
8" POLY DI	716	X	0	6

QUANTITIES ARE FOR PERMITTING PURPOSES ONLY. CONTRACTOR SHALL BID PER PLAN

NOTES:

CALCULATIONS ARE PROVIDED FOR REFERENCE. THE RESTRAINED LENGTH SHALL BE DESIGNED BASED UPON THE CONDITIONS ENCOUNTERED DURING INSTALLATION.
LENGTHS SHOWN ABOVE WERE COMPUTED BASED ON THE FOLLOWING VALUES:

1) SAFETY FACTOR = 1.5 TO 1
2) TEST PRESSURE = 200psi.
3) SOIL DESIGNATION = INORGANIC CLAY OF HIGH PLASTICITY (CH, GRAN. FILL)
4) DEPTH OF COVER = 4 FEET (TYPICAL AND UPPER BEND)
5) DEPTH OF COVER = 5 FEET (LOWER BEND)
6) LENGTH ALONG RUN = 2 FEET

UTILITY TRENCH COMPACTION

ALL UTILITY TRENCH COMPACTION TESTS WITHIN THE STREET PAVEMENT SECTION SHALL BE THE RESPONSIBILITY OF THE DEVELOPER'S GEO-TECHNICAL ENGINEER. FILL MATERIAL SHALL BE PLACED IN UNIFORM LAYERS NOT TO EXCEED TWELVE INCHES (12") LOOSE. EACH LAYER OF MATERIAL SHALL BE COMPACTED TO A MINIMUM 95% DENSITY AND TESTED FOR DENSITY AND MOISTURE IN ACCORDANCE WITH TEST METHODS TEX-113-E, TEX-114-E, TEX-115-E. THE NUMBER AND LOCATION OF REQUIRED TESTS SHALL BE DETERMINED BY THE GEOTECHNICAL ENGINEER AND APPROVED BY THE CITY OF SEGUIN STREET INSPECTOR. AT A MINIMUM, TESTS SHALL BE TAKEN EVERY 100LF FOR EACH LIFT. UPON COMPLETION OF TESTING THE GEO-TECHNICAL ENGINEER SHALL PROVIDE THE CITY OF SEGUIN STREET INSPECTOR WITH ALL TESTING DOCUMENTATION AND A CERTIFICATION STATING THAT THE PLACEMENT OF FILL MATERIAL HAS BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.

RESTRAINED LENGTH FOR PIPE													
PIPE INSIDE DIAMETER	MATERIAL	HORIZONTAL BENDS				VERTICAL BENDS						DEAD END/ INCLINE VALVES	TEE/CROSSES
						UPPER			LOWER				
		90°	45°	22.5°	11.25°	45°	22.5°	11.25°	45°	22.5°	11.25°		
8"	PVC	35	15	7	4	32	16	8	12	6	3	78	70
8"	POLY DI	42	18	9	5	50	24	12	14	7	4	120	109

EDU COUNT					
Take 1	Residential	Irrigation Meter 1.5"	Irrigation Meter 2"	Total	NSSC Total EDUs
Parkside South Unit 1	132	0	0	132	133
Parkside South Unit 2	109	0	0	109	117
Total EDU Count				241	250
Total Remaining EDUs					9

REFER TO COVER SHEET FOR BENCHMARK INFORMATION

THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR WILL AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE INCURRED BY THEIR FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES, STRUCTURES OR FACILITIES. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES 24-HOURS PRIOR TO COMMENCING CONSTRUCTION.

290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 10153600
HMT ENGINEERING & SURVEYING

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDE
93047
LICENSED
PROFESSIONAL ENGINEER
04/13/2026

OVERALL WATER (1 OF 2)

PARKSIDE SOUTH UNIT 1

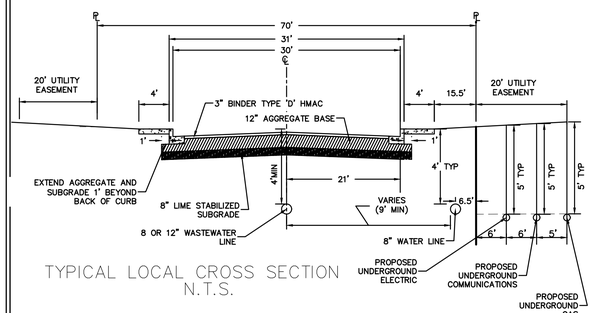
NO.	REVISION DESCRIPTION	DATE

DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C8.0

Drawing Name: K:_Projects\337 - Lennar\130 - Parkside South Unit 1\CDs\337.130_WTR.dwg User: jonn Apr 16, 2026 - 5:55pm

5' CLEAR SEPARATION FOR ALL STREET LIGHTS AND DRY UTILITIES OF WATER LINE.



TYPICAL LOCAL CROSS SECTION
N.T.S.

CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES 48 HOURS PRIOR TO EXCAVATION:

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5. WATER LINE IS TO BE CONSTRUCTED IN ACCORDANCE WITH SPRINGS HILL SPECIAL UTILITY DISTRICT STANDARD DRAWINGS AND SPECIFICATIONS.
6. WATER MAIN SHALL HAVE A MINIMUM OF 48 INCHES OF COVER, OTHERWISE CONCRETE ENCASEMENT WILL BE REQUIRED.
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10. PERMANENT TIE-INS TO IN-SERVICE MAINS SHALL ONLY BE CONSTRUCTED FOLLOWING FLUSHING, DISINFECTION, TESTING, AND APPROVAL BY SHSUD. TEMPORARY CONNECTIONS FOR FILLING, FLUSHING, AND TESTING MUST BE EQUIPPED WITH SHSUD-PROVIDED BACKFLOW PREVENTION TO MAINTAIN CROSS-CONNECTION CONTROL.
11. A HYDROSTATIC TEST SHALL BE PERFORMED AFTER SERVICES ARE CONNECTED AND FINAL GRADING AND PLACEMENT ARE COMPLETE.
12. WATER SERVICE LINE CROSSINGS OF CURBS SHALL BE INDICATED BY A 'W' STAMPED IN THE FACE OF THE CURB DURING CONCRETE PLACEMENT WITH A TOOL INTENDED FOR THE PURPOSE. VALVE CROSSINGS OF CURBS SHALL BE INDICATED BY A 'V' STAMPED IN THE FACE OF THE CURB DURING CONCRETE PLACEMENT WITH A TOOL INTENDED FOR THE PURPOSE. LETTERING SHALL BE 4" IN HEIGHT AND HAVE BEVELED EDGES TO PREVENT CHIPPING OR SPALLING OVER TIME.
13. SPRINGS HILL WILL NOT ACCEPT OR PROVIDE SERVICE VIA ANY INFRASTRUCTURE THAT VIOLATES ANY OF THE STANDARDS, CONDITIONS, OR REQUIRESNTS OF THESE NOTES, THE GENERAL NOTES, THE STANDARD DETAILS, STANDARD SPECIFICATIONS, AND/OR ANY APPLICABLE AGREEMENTS REGARDING SERVICE.

0 50 100 200
SCALE: 1" = 100'

LEGEND

700	EXISTING CONTOURS
700	PROPOSED CONTOURS
B.L.	BUILDING SETBACK LINE
U.E.	UTILITY EASEMENT
D.E.	DRAINAGE EASEMENT
EX W	EXISTING WATER LINE
W	PROPOSED WATER LINE
W	PROPOSED WATER SERVICE
	UTILITY CROSSING

UTILITY NOTES:

1. ALL UTILITIES TO BE CONSTRUCTED PRIOR TO THE STREETS.
2. NO VALVES, HYDRANTS, ETC. SHALL BE CONSTRUCTED WITHIN CURBS, SIDEWALKS OR DRIVEWAYS.
3. POINT OF DELIVERY SHALL BE IN ACCORDANCE WITH SPRING HILLS WATER SUPPLY WATER AND WASTEWATER DESIGN CRITERIA MANUAL.
4. ELECTRIC DESIGN AS SHOWN IN PLANS ARE FOR REFERENCE ONLY, REFER TO APPROVED NBU ELECTRIC DESIGN.

CONSTRUCTION NOTES:

1. ALL WATER MAINS SHALL BE AWWA C909 (CLASS 150 OR GREATER).
2. WATER SERVICES SHALL BE SINGLE 1" HDPE TUBING.
3. WATER MAIN SHALL HAVE A MINIMUM OF 48 INCHES OF COVER, OTHERWISE CONCRETE ENCASEMENT WILL BE REQUIRED.
4. CONTRACTOR WILL KEEP THE AREA ON TOP OF AND AROUND THE WATER METER BOX FREE OF ALL OBJECTS AND DEBRIS.
5. INITIAL BACKFILL OF WATER LINES SHALL BE MANUFACTURED SAND OR PEA GRAVEL AS PER SPRING HILLS WATER SUPPLY SYSTEMS CONNECTION & CONSTRUCTION POLICY.
6. SECONDARY BACKFILL OF WATER LINES SHALL GENERALLY CONSIST OF MATERIAL REMOVED FROM THE TRENCH AND SHALL BE FREE FROM BRUSH, DEBRIS AND TRASH OR STONES HAVING ANY DIMENSION LARGER THAN 6" INCHES AT THE LARGEST DIMENSION.
7. HYDROSTATIC TESTING IS DONE FROM VALVE TO VALVE.
8. NO METER BOXES TO BE SET IN DRIVEWAYS OR SIDEWALKS. ANY METER BOXES SET IN DRIVEWAYS OR SIDEWALKS WILL BE RELOCATED AT CONTRACTOR'S AND/OR DEVELOPER'S EXPENSE.
9. NO VALVES, HYDRANTS, ETC. SHALL BE CONSTRUCTED WITHIN CURBS, SIDEWALKS, OR DRIVEWAYS.
10. METER BOXES MUST BE SET AT THE PROPOSED GRADE. ANY METER BOXES THAT ARE NOT SET AT THE FINAL GRADE WILL BE ADJUSTED AT CONTRACTOR'S AND/OR DEVELOPER'S EXPENSE.
11. ACCEPTABLE METER BOXES ARE D13-BAMR AND D15-BAMR. NEW RESIDENTIAL LOTS ARE REQUIRED TO USE THE D15-BAMR METER BOXES (DOUBLE AMR). COMMERCIAL LOTS SHOULD CHOOSE WHICH BOX APPLIES TO THE DOMESTIC AND/OR IRRIGATION METER LAYOUT.
12. THRUST BLOCKS WILL NOT BE ALLOWED ON THE SYSTEM WITHOUT SPECIAL APPROVAL. JOINTS WILL BE RESTRAINED WITH RESTRAINING SYSTEMS APPROVED BY SPRING HILLS WATER SUPPLY AND RESTRAINT LENGTH SHALL BE SUBMITTED TO SPRING HILLS WATER SUPPLY AT THE TIME OF PLAN SUBMITTAL.
13. CONTRACTOR SHALL PLACE TRACER WIRE ON TOP OF THE WATER MAINS. TRACER WIRE SHOULD RUN FROM VALVE TO VALVE AND EXIT AT THE VALVE BOX. THE TRACER WIRE SHOULD BE ATTACHED TO THE TOP OF THE PIPE USING TAPE. EXCESS WIRE SHOULD BE LEFT WITHIN VALVE BOXES TO BE PLACED WITHIN LID OF COVER.
14. ALL VALVES, HYDRANTS, AND METERS ARE SHOWN SCHEMATICALLY AND SHALL BE INSTALLED ACCORDING TO THE DETAILS.
15. ALL SERVICES UNDER PAVEMENT SHALL BE SLEEVED. PLEASE REFER TO SHSUD SPECIFICATIONS AND DETAILS.

WATER STRUCTURE TOTAL				
PIPE SIZE	PIPE LENGTH	DOMESTIC METER SIZE	DOMESTIC METERS	FIRE HYDRANTS
8" PVC	5016	5/8"	133	0
8" POLY DI	716	X	0	6

QUANTITIES ARE FOR PERMITTING PURPOSES ONLY. CONTRACTOR SHALL BID PER PLAN

NOTES:

CALCULATIONS ARE PROVIDED FOR REFERENCE. THE RESTRAINED LENGTH SHALL BE DESIGNED BASED UPON THE CONDITIONS ENCOUNTERED DURING INSTALLATION.
LENGTHS SHOWN ABOVE WERE COMPUTED BASED ON THE FOLLOWING VALUES:

1) SAFETY FACTOR = 1.5 TO 1
2) TEST PRESSURE = 200psi.
3) SOIL DESIGNATION = INORGANIC CLAY OF HIGH PLASTICITY (CH, GRAN. FILL)
4) DEPTH OF COVER = 4 FEET (TYPICAL AND UPPER BEND)
5) DEPTH OF COVER = 5 FEET (LOWER BEND)
6) LENGTH ALONG RUN = 2 FEET

RESTRAINED LENGTH FOR PIPE													
PIPE INSIDE DIAMETER	MATERIAL	HORIZONTAL BENDS				VERTICAL BENDS						DEAD END/ INCLINE VALVES	TEE/CROSSES
						UPPER			LOWER				
		90°	45°	22.5°	11.25°	45°	22.5°	11.25°	45°	22.5°	11.25°		
8"	PVC	35	15	7	4	32	16	8	12	6	3	78	70
8"	POLY DI	42	18	9	5	50	24	12	14	7	4	120	109

REFER TO COVER SHEET FOR BENCHMARK INFORMATION

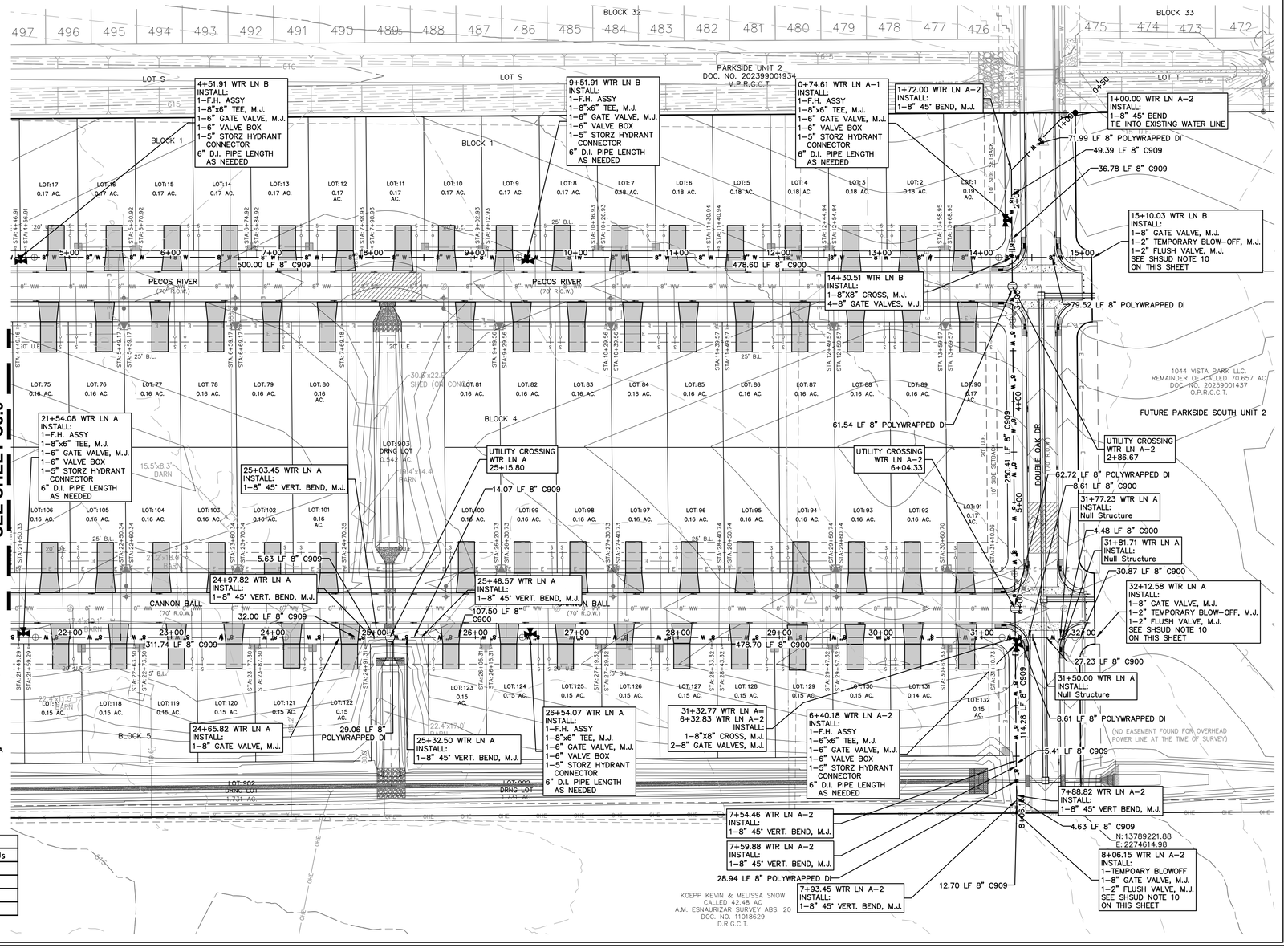
THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR WILL AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE INCURRED BY THEIR FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES, STRUCTURES OR FACILITIES. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES 24-HOURS PRIOR TO COMMENCING CONSTRUCTION.

UTILITY TRENCH COMPACTION

ALL UTILITY TRENCH COMPACTION TESTS WITHIN THE STREET PAVEMENT SECTION SHALL BE THE RESPONSIBILITY OF THE DEVELOPER'S GEO-TECHNICAL ENGINEER. FILL MATERIAL SHALL BE PLACED IN UNIFORM LAYERS NOT TO EXCEED TWELVE INCHES (12") LOOSE. EACH LAYER OF MATERIAL SHALL BE COMPACTED TO A MINIMUM 95% DENSITY AND TESTED FOR DENSITY AND MOISTURE IN ACCORDANCE WITH TEST METHODS TEX-113-E, TEX-114-E, TEX-115-E. THE NUMBER AND LOCATION OF REQUIRED TESTS SHALL BE DETERMINED BY THE GEOTECHNICAL ENGINEER AND APPROVED BY THE CITY OF SEGUIN STREET INSPECTOR. AT A MINIMUM, TESTS SHALL BE TAKEN EVERY 100LF FOR EACH LIFT. UPON COMPLETION OF TESTING THE GEO-TECHNICAL ENGINEER SHALL PROVIDE THE CITY OF SEGUIN STREET INSPECTOR WITH ALL TESTING DOCUMENTATION AND A CERTIFICATION STATING THAT THE PLACEMENT OF FILL MATERIAL HAS BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.

EDU COUNT					
Take 1	Residential	Irrigation Meter 1.5"	Irrigation Meter 2"	Total	NSSC Total EDUs
Parkside South Unit 1	132	0	0	132	133
Parkside South Unit 2	109	0	0	109	117
Total EDU Count				241	250
Total Remaining EDUs					9

SEE SHEET C8.0



HMT ENGINEERING & SURVEYING
290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 10153600

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDEN
93047
LICENSED
PROFESSIONAL ENGINEER
04/13/2026

OVERALL WATER (2 OF 2)

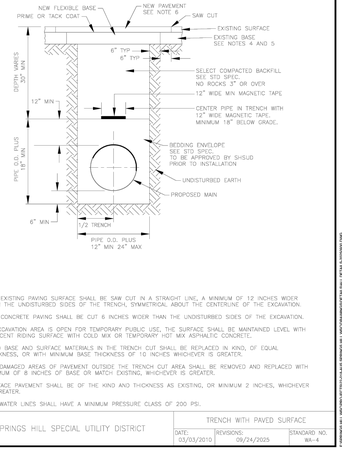
PARKSIDE SOUTH UNIT 1

NO.	REVISION DESCRIPTION	DATE

DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C8.1

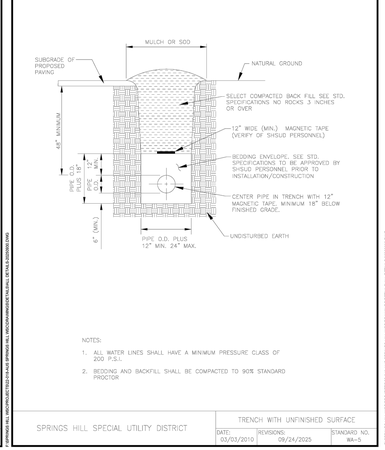
Drawing Name: N:_Projects\337 - Lennar\130 - Parkside South Unit 1\C0s\337.130_WTR.dwg User: jonm Apr 16, 2026 - 5:55pm



NOTES:

1. THE EXISTING PAVING SURFACE SHALL BE SAW CUT IN A STRAIGHT LINE, A MINIMUM OF 12 INCHES WIDER THAN THE UNDISTURBED SIDES OF THE TRENCH, SYMMETRICAL ABOUT THE CENTERLINE OF THE EXCAVATION.
2. ANY CONCRETE PAVING SHALL BE CUT 6 INCHES WIDER THAN THE UNDISTURBED SIDES OF THE EXCAVATION.
3. IF EXCAVATION AREA IS OPEN FOR TEMPORARY PUBLIC USE, THE SURFACE SHALL BE MAINTAINED LEVEL WITH ADJACENT RIDING SURFACE WITH COLD MIX OR TEMPORARY ASPHALT.
4. ROAD BASE AND SURFACE MATERIALS IN THE TRENCH CUT SHALL BE REPLACED IN KIND, OF EQUAL THICKNESS, OR WITH MINIMUM BASE THICKNESS OF 10 INCHES, WHICHEVER IS GREATER.
5. ALL DAMAGED AREAS OF PAVEMENT OUTSIDE THE TRENCH CUT AREA SHALL BE REMOVED AND REPLACED WITH MINIMUM OF 8 INCHES OF BASE OR MATCH EXISTING, WHICHEVER IS GREATER.
6. SURFACE PAVEMENT SHALL BE OF THE KIND AND THICKNESS AS EXISTING, OR MINIMUM 2 INCHES, WHICHEVER IS GREATER.
7. ALL WATER LINES SHALL HAVE A MINIMUM PRESSURE CLASS OF 200 PSI.

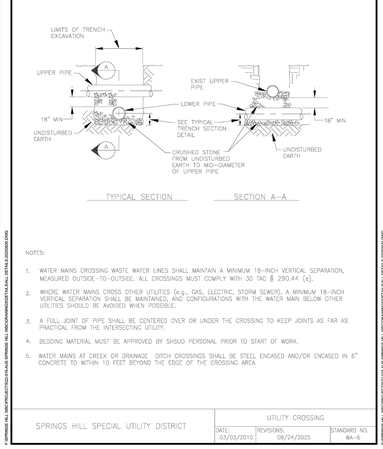
SPRINGS HILL SPECIAL UTILITY DISTRICT | TRENCH WITH PAVED SURFACE | DATE: 03/03/2010 | REVISIONS: 09/24/2025 | STANDARD NO. WA-4



NOTES:

1. ALL WATER LINES SHALL HAVE A MINIMUM PRESSURE CLASS OF 200 P.S.I.
2. BEDDING AND BACKFILL SHALL BE COMPACTED TO 90% STANDARD PROCTOR

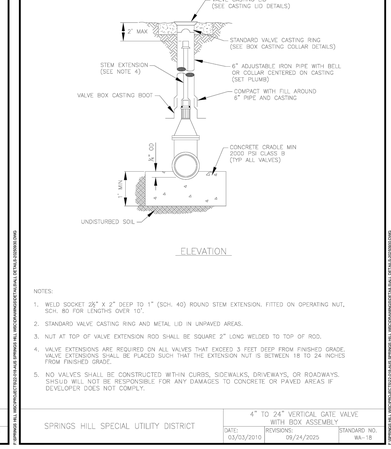
SPRINGS HILL SPECIAL UTILITY DISTRICT | TRENCH WITH UNFINISHED SURFACE | DATE: 03/03/2010 | REVISIONS: 09/24/2025 | STANDARD NO. WA-5



NOTES:

1. WATER MAINS CROSSING WASTE WATER LINES SHALL MAINTAIN A MINIMUM 18-INCH VERTICAL SEPARATION, MEASURED OUTSIDE-TO-OUTSIDE. ALL CROSSINGS MUST COMPLY WITH 30 TAC § 290.44 (e).
2. WHERE WATER MAINS CROSS OTHER UTILITIES (e.g., GAS, ELECTRIC, STORM SEWER), A MINIMUM 18-INCH VERTICAL SEPARATION SHALL BE MAINTAINED, AND CONFIGURATIONS WITH THE WATER MAIN BELOW OTHER UTILITIES SHOULD BE AVOIDED WHEN POSSIBLE.
3. A FULL JOINT OF PIPE SHALL BE CENTERED OVER OR UNDER THE CROSSING TO KEEP JOINTS AS FAR AS PRACTICAL FROM THE INTERSECTING UTILITY.
4. BEDDING MATERIAL MUST BE APPROVED BY SHSUD PERSONAL PRIOR TO START OF WORK.
5. WATER MAINS AT CREEK OR DRAINAGE DITCH CROSSINGS SHALL BE STEEL ENCASED AND/OR ENCASED IN 6" CONCRETE TO WITHIN 10 FEET BEYOND THE EDGE OF THE CROSSING AREA.

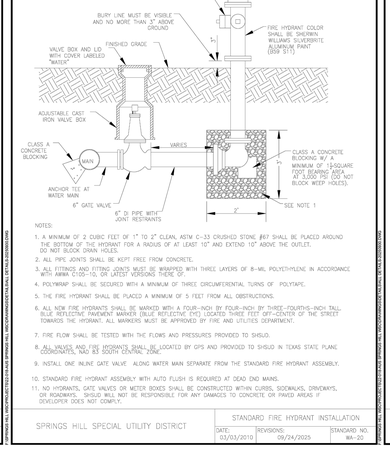
SPRINGS HILL SPECIAL UTILITY DISTRICT | UTILITY CROSSING | DATE: 03/03/2010 | REVISIONS: 09/24/2025 | STANDARD NO. WA-6



NOTES:

1. WELD SOCKET 29" X 2" DEEP TO 1" (SCH. 40) ROUND STEM EXTENSION. FITTED ON OPERATING NUT, SCH. 80 FOR LENGTHS OVER 10'.
2. STANDARD VALVE CASTING RING AND METAL LID IN UNPAVED AREAS.
3. NUT AT TOP OF VALVE EXTENSION ROD SHALL BE SQUARE 2" LONG WELDED TO TOP OF ROD.
4. VALVE EXTENSIONS ARE REQUIRED ON ALL VALVES THAT EXCEED 3 FEET DEEP FROM FINISHED GRADE. VALVE EXTENSIONS SHALL BE PLACED SUCH THAT THE EXTENSION NUT IS BETWEEN 18 TO 24 INCHES FROM FINISHED GRADE.
5. NO VALVES SHALL BE CONSTRUCTED WITHIN CURBS, SIDEWALKS, DRIVEWAYS, OR ROADWAYS. SHSUD WILL NOT BE RESPONSIBLE FOR ANY DAMAGES TO CONCRETE OR PAVED AREAS IF DEVLOPER DOES NOT COMPLY.

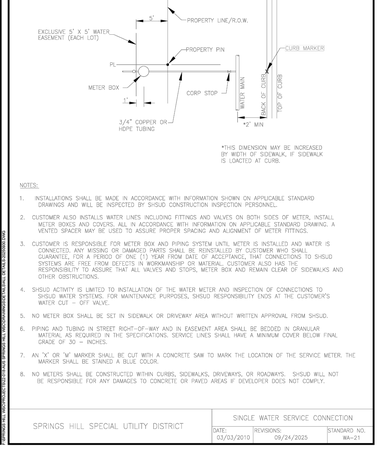
SPRINGS HILL SPECIAL UTILITY DISTRICT | 4" TO 24" VERTICAL GATE VALVE WITH BOX ASSEMBLY | DATE: 03/03/2010 | REVISIONS: 09/24/2025 | STANDARD NO. WA-18



NOTES:

1. A MINIMUM OF 2 CUBIC FEET OF 1" TO 2" CLEAN, ASTM C-33 CRUSHED STONE #67 SHALL BE PLACED AROUND THE BOTTOM OF THE HYDRANT FOR A RADIUS OF AT LEAST 10" AND EXTEND 10" ABOVE THE OUTLET. DO NOT BLOCK DRAIN HOLES.
2. ALL PIPE JOINTS SHALL BE KEPT FREE FROM CONCRETE.
3. ALL FITTINGS AND FITTING JOINTS MUST BE WRAPPED WITH THREE LAYERS OF 8-MIL POLYETHYLENE IN ACCORDANCE WITH AWWA C105-10, OR LATEST VERSIONS THERE OF.
4. POLYWRAP SHALL BE SECURED WITH A MINIMUM OF THREE CIRCUMFERENTIAL TURNS OF POLYTAPE.
5. THE FIRE HYDRANT SHALL BE PLACED A MINIMUM OF 5 FEET FROM ALL OBSTRUCTIONS.
6. ALL NEW FIRE HYDRANTS SHALL BE MARKED WITH A FOUR-INCH BY FOUR-INCH BY THREE-FOURTHS-INCH TALL BLUE REFLECTIVE PAVEMENT MARKER (BLUE REFLECTIVE EYE) LOCATED THREE FEET OFF-CENTER OF THE STREET TOWARDS THE HYDRANT. ALL MARKERS MUST BE APPROVED BY FIRE AND UTILITIES DEPARTMENT.
7. FIRE FLOW SHALL BE TESTED WITH THE FLOWS AND PRESSURES PROVIDED TO SHSUD.
8. ALL VALVES AND FIRE HYDRANTS SHALL BE LOCATED BY GPS AND PROVIDED TO SHSUD IN TEXAS STATE PLANE COORDINATES, NAD 83 SOUTH CENTRAL ZONE.
9. INSTALL ONE INLINE GATE VALVE ALONG WATER MAIN SEPARATE FROM THE STANDARD FIRE HYDRANT ASSEMBLY.
10. STANDARD FIRE HYDRANT ASSEMBLY WITH AUTO FLUSH IS REQUIRED AT DEAD END MAINS.
11. NO HYDRANTS, GATE VALVES OR METER BOXES SHALL BE CONSTRUCTED WITHIN CURBS, SIDEWALKS, DRIVEWAYS, OR ROADWAYS. SHSUD WILL NOT BE RESPONSIBLE FOR ANY DAMAGES TO CONCRETE OR PAVED AREAS IF DEVELOPER DOES NOT COMPLY.

SPRINGS HILL SPECIAL UTILITY DISTRICT | STANDARD FIRE HYDRANT INSTALLATION | DATE: 03/03/2010 | REVISIONS: 09/24/2025 | STANDARD NO. WA-20

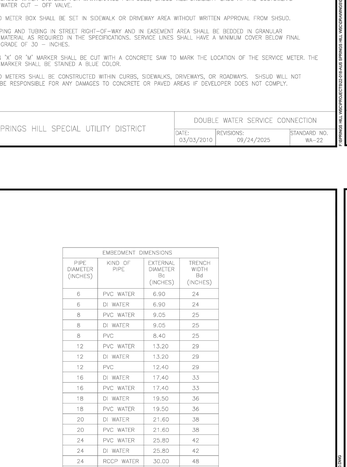


*THIS DIMENSION MAY BE INCREASED BY WIDTH OF SIDEWALK, IF SIDEWALK IS LOACTED AT CURB.

NOTES:

1. INSTALLATIONS SHALL BE MADE IN ACCORDANCE WITH INFORMATION SHOWN ON APPLICABLE STANDARD DRAWINGS AND WILL BE INSPECTED BY SHSUD CONSTRUCTION INSPECTION PERSONNEL.
2. CUSTOMER ALSO INSTALLS WATER LINES INCLUDING FITTINGS AND VALVES ON BOTH SIDES OF METER. INSTALL METER BOXES AND COVERS, ALL IN ACCORDANCE WITH INFORMATION ON APPLICABLE STANDARD DRAWING. A VENTED SPACER MAY BE USED TO ASSURE PROPER SPACING AND ALIGNMENT OF METER FITTINGS.
3. CUSTOMER IS RESPONSIBLE FOR METER BOX AND PIPING SYSTEM UNTIL METER IS INSTALLED AND WATER IS CONNECTED. ANY MISSING OR DAMAGED PARTS SHALL BE REINSTALLED BY CUSTOMER WHO SHALL GUARANTEE, FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE, THAT CONNECTIONS TO SHSUD SYSTEMS ARE FREE FROM DEFECTS IN WORKMANSHIP OR MATERIAL. CUSTOMER ALSO HAS THE RESPONSIBILITY TO ASSURE THAT ALL VALVES AND STOPS, METER BOX AND ROMAN CLEAR OF SIDEWALKS AND OTHER OBSTRUCTIONS.
4. SHSUD ACTIVITY IS LIMITED TO INSTALLATION OF THE WATER METER AND INSPECTION OF CONNECTIONS TO SHSUD WATER SYSTEMS. FOR MAINTENANCE PURPOSES, SHSUD RESPONSIBILITY ENDS AT THE CUSTOMER'S WATER CUT – OFF VALVE.
5. NO METER BOX SHALL BE SET IN SIDEWALK OR DRIVEWAY AREA WITHOUT WRITTEN APPROVAL FROM SHSUD.
6. PIPING AND TUBING IN STREET RIGHT-OF-WAY AND IN EASEMENT AREA SHALL BE BEDDED IN GRANULAR MATERIAL AS REQUIRED IN THE SPECIFICATIONS. SERVICE LINES SHALL HAVE A MINIMUM COVER BELOW FINAL GRADE OF 30" – INCHES.
7. AN "X" OR "M" MARKER SHALL BE CUT WITH A CONCRETE SAW TO MARK THE LOCATION OF THE SERVICE METER. THE MARKER SHALL BE STAINED A BLUE COLOR.
8. NO METERS SHALL BE CONSTRUCTED WITHIN CURBS, SIDEWALKS, DRIVEWAYS, OR ROADWAYS. SHSUD WILL NOT BE RESPONSIBLE FOR ANY DAMAGES TO CONCRETE OR PAVED AREAS IF DEVELOPER DOES NOT COMPLY.

SPRINGS HILL SPECIAL UTILITY DISTRICT | SINGLE WATER SERVICE CONNECTION | DATE: 03/03/2010 | REVISIONS: 09/24/2025 | STANDARD NO. WA-21

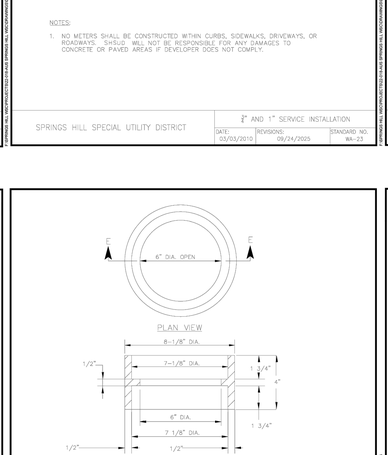


*THIS DIMENSION MAY BE INCREASED BY WIDTH OF SIDEWALK, IF SIDEWALK IS LOACTED AT CURB.

NOTES:

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2. CUSTOMER ALSO INSTALLS WATER LINES INCLUDING FITTINGS AND VALVES ON BOTH SIDES OF METER. INSTALL METER BOXES AND COVERS, ALL IN ACCORDANCE WITH INFORMATION ON APPLICABLE STANDARD DRAWING. A VENTED SPACER MAY BE USED TO ASSURE PROPER SPACING AND ALIGNMENT OF METER FITTINGS.
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4. SHSUD ACTIVITY IS LIMITED TO INSTALLATION OF THE WATER METER AND INSPECTION OF CONNECTIONS TO SHSUD WATER SYSTEMS. FOR MAINTENANCE PURPOSES, SHSUD RESPONSIBILITY ENDS AT THE CUSTOMER'S WATER CUT – OFF VALVE.
5. NO METER BOX SHALL BE SET IN SIDEWALK OR DRIVEWAY AREA WITHOUT WRITTEN APPROVAL FROM SHSUD.
6. PIPING AND TUBING IN STREET RIGHT-OF-WAY AND IN EASEMENT AREA SHALL BE BEDDED IN GRANULAR MATERIAL AS REQUIRED IN THE SPECIFICATIONS. SERVICE LINES SHALL HAVE A MINIMUM COVER BELOW FINAL GRADE OF 30" – INCHES.
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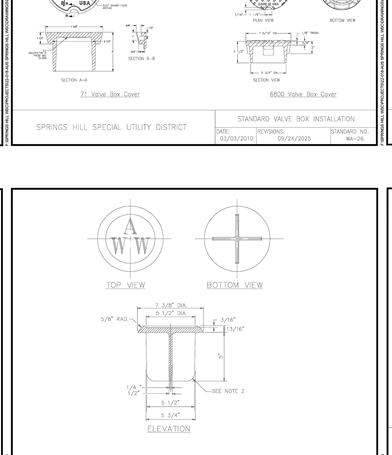
SPRINGS HILL SPECIAL UTILITY DISTRICT | DOUBLE WATER SERVICE CONNECTION | DATE: 03/03/2010 | REVISIONS: 09/24/2025 | STANDARD NO. WA-22



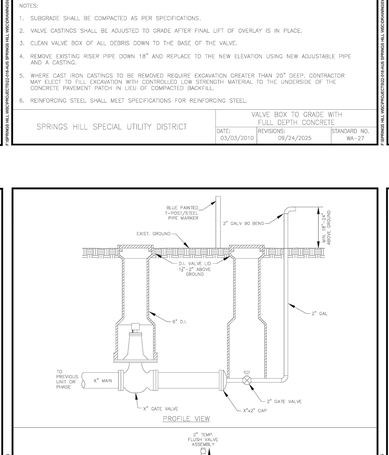
NOTES:

1. NO METERS SHALL BE CONSTRUCTED WITHIN CURBS, SIDEWALKS, DRIVEWAYS, OR ROADWAYS. SHSUD WILL NOT BE RESPONSIBLE FOR ANY DAMAGES TO CONCRETE OR PAVED AREAS IF DEVELOPER DOES NOT COMPLY.

SPRINGS HILL SPECIAL UTILITY DISTRICT | 3" AND 1" SERVICE INSTALLATION | DATE: 03/03/2010 | REVISIONS: 09/24/2025 | STANDARD NO. WA-23



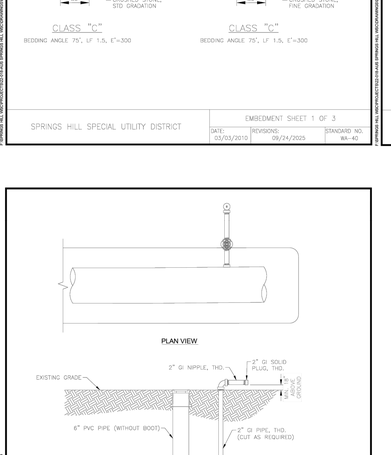
SPRINGS HILL SPECIAL UTILITY DISTRICT | STANDARD VALVE BOX INSTALLATION (NOT IN PAVEMENT) | DATE: 03/03/2010 | REVISIONS: 09/24/2025 | STANDARD NO. WA-26



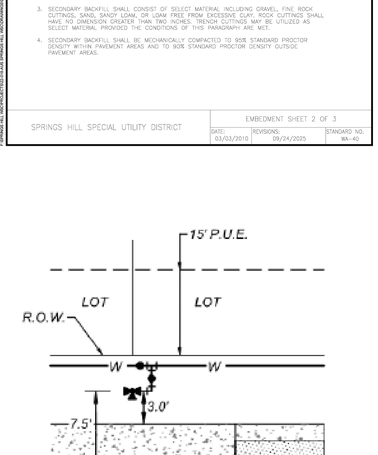
NOTES:

1. SUBGRADE SHALL BE COMPACTED AS PER SPECIFICATIONS.
2. VALVE CASTINGS SHALL BE ADJUSTED TO GRADE AFTER FINAL LIFT OF OVERLAY IS IN PLACE.
3. CLEAN VALVE BOX OF ALL DEBRIS DOWN TO THE BASE OF THE VALVE.
4. REMOVE EXISTING RISER PIPE DOWN 18" AND REPLACE TO THE NEW ELEVATION USING NEW ADJUSTABLE PIPE AND A CASTING.
5. WHERE CAST IRON CASTINGS TO BE REMOVED REQUIRE EXCAVATION GREATER THAN 20" DEEP, CONTRACTOR MAY ELECT TO FILL EXCAVATION WITH CONTROLLED LOW STRENGTH MATERIAL TO THE UNDERSIDE OF THE CONCRETE PAVEMENT PATCH IN LIEU OF COMPACTED BACKFILL.
6. REINFORCING STEEL SHALL MEET SPECIFICATIONS FOR REINFORCING STEEL.

SPRINGS HILL SPECIAL UTILITY DISTRICT | VALVE BOX TO GRADE WITH FULL DEPTH CONCRETE | DATE: 03/03/2010 | REVISIONS: 09/24/2025 | STANDARD NO. WA-27



SPRINGS HILL SPECIAL UTILITY DISTRICT | EMBEDMENT SHEET 1 OF 3 | DATE: 03/03/2010 | REVISIONS: 09/24/2025 | STANDARD NO. WA-40



EMBEDMENT FOR WATER LINES						
TYPE OF PIPE	IN EARTH			IN ROCK		
	0°–8"	8°–16"	>16°	0°–8"	8°–16"	>16°
18" AND SMALLER DUCTILE IRON WATER LINE	D+	C	C	D+	C	B
18" AND LARGER DUCTILE IRON WATER LINE	D+	B	B	D+	B	B
ALL PVC WATER LINE	C+	B+	B+	C+	B+	B+
24" & 30" RCCP	D+	B	B	D+	B	B

NOTES:

1. PIPE EMBEDMENT SHALL CONFORM TO DETAILS SHOWN HEREIN.
2. SECONDARY BACKFILL SHALL EXTEND FROM ABOVE THE EMBEDMENT TO BELOW THE PAVEMENT REPAIR SECTION WITHIN PAVEMENT AREA AND TO BELOW THE TOPSOIL SECTION OUTSIDE PAVEMENT AREAS.
3. SECONDARY BACKFILL SHALL CONSIST OF SELECT MATERIAL INCLUDING GRAVEL, FINE ROCK CUTTINGS, SAND, SANDY LOAM, OR LOAM FREE FROM EXCESSIVE CLAY, ROCK CUTTINGS SHALL HAVE NO DIMENSION GREATER THAN TWO INCHES. TRENCH CUTTINGS MAY BE UTILIZED AS SELECT MATERIAL PROVIDED THE CONDITIONS OF THIS PARAGRAPH ARE MET.
4. SECONDARY BACKFILL SHALL BE MECHANICALLY COMPACTED TO 95% STANDARD PROCTOR DENSITY WITHIN PAVEMENT AREAS AND TO 90% STANDARD PROCTOR DENSITY OUTSIDE PAVEMENT AREAS.

SPRINGS HILL SPECIAL UTILITY DISTRICT | EMBEDMENT SHEET 2 OF 3 | DATE: 03/03/2010 | REVISIONS: 09/24/2025 | STANDARD NO. WA-40

EMBEDMENT DIMENSIONS			
PIPE DIAMETER (INCHES)	KIND OF PIPE	EXTERNAL DIAMETER (in) (INCHES)	TRENCH WIDTH - Bd (INCHES)
6	PVC WATER	6.90	24
6	DI WATER	6.90	24
8	PVC WATER	9.05	25
8	DI WATER	9.05	25
8	PVC	8.40	25
12	PVC WATER	13.20	29
12	DI WATER	13.20	29
12	PVC	12.40	29
16	DI WATER	17.40	33
16	PVC WATER	17.40	33
18	DI WATER	19.50	36
18	PVC WATER	19.50	36
20	DI WATER	21.60	38
20	PVC WATER	21.60	38
24	PVC WATER	25.80	42
24	DI WATER	25.80	42
24	RCCP WATER	30.00	48
30	PVC WATER	32.00	48
30	DI WATER	32.00	48
30	RCCP WATER	32.00	48

NOTES:

1. RCCP = REINFORCED CONCRETE CYLINDER PIPE.
2. EMBEDMENT DIMENSION FOR HDPE PIPE SHALL BE IN ACCORDANCE WITH MANUFACTURE'S RECOMMENDATIONS.

SPRINGS HILL SPECIAL UTILITY DISTRICT | EMBEDMENT SHEET 3 OF 3 | DATE: 03/03/2010 | REVISIONS: 09/24/2025 | STANDARD NO. WA-40

NOTES:

1. MATERIAL SHALL BE GRAY CAST IRON, ASTM A48, GRADE 30B.
2. THE MANUFACTURER'S IDENTIFICATION, CASTING NUMBER, AND THE COUNTRY WHERE CAST, SHALL BE DISTINCTLY CAST ONTO EACH LID.
3. DRAFT AND SHRINKAGE ALLOWANCE SHALL BE IN ACCORDANCE WITH NORMAL FOUNDRY PRACTICE.
4. FINISH BY REMOVING FINS AND FLASHING; PAINT WITH BLACK ASPHALT COATING.
5. WEIGHT: APPROXIMATELY 17 LBS.

SPRINGS HILL SPECIAL UTILITY DISTRICT | VALVE BOX CASTING COLLAR (NOT IN PAVEMENT) | DATE: 03/03/2010 | REVISIONS: 09/24/2025 | STANDARD NO. WA-41

NOTES:

1. MATERIAL SHALL BE GRAY CAST IRON, ASTM A48, GRADE 30B.
2. TYPICAL FILLET IS 3/16" RADIUS.
3. LETTERING SHALL BE 1 1/2" HEIGHT AND LOCATED AS SHOWN.
4. THIS LID FITS INSIDE 6" I.D. PIPE.
5. THE MANUFACTURER'S IDENTIFICATION, CASTING NUMBER, AND THE COUNTRY WHERE CAST, SHALL BE DISTINCTLY CAST ONTO EACH LID.
6. DRAFT AND SHRINKAGE ALLOWANCE SHALL BE IN ACCORDANCE WITH NORMAL FOUNDRY PRACTICE.
7. FINISH BY REMOVING FINS AND FLASHING; PAINT WITH BLACK ASPHALT COATING.
8. WEIGHT: APPROXIMATELY 13 LBS.

SPRINGS HILL SPECIAL UTILITY DISTRICT | VALVE BOX CASTING LID (NOT IN PAVEMENT) | DATE: 03/03/2010 | REVISIONS: 09/24/2025 | STANDARD NO. WA-43

NOTE:
1. BURIED PIPING, FITTINGS, AND FITTINGS JOINTS SHALL BE WRAPPED IN 8-MIL POLY.
2. THE EARTHBEARING SURFACE SHALL BE THE UNDISTURBED TRENCH WALL.
3. ALL PIPE JOINTS SHALL BE KEPT FREE FROM CONCRETE.
4. ALL PIPE SHALL BE SECURED WITH A MINIMUM OF THREE CIRCUMFERENTIAL TURNS OF POLY TAPE.
5. IN LINE VALVES SHOULD BE PLACED AT INTERSECTIONS NEAR DEAD ENDS TO MINIMIZE CUSTOMERS AFFECTED BY FUTURE EXPANSION IF NEEDED.

NOT TO SCALE

SPRINGS HILL SPECIAL UTILITY DISTRICT | TEMPORARY BLOW OFF 8-INCH OR SMALLER | DATE: 03/03/2010 | REVISIONS: 09/24/2025 | STANDARD NO. WA-45

NOT TO SCALE

SPRINGS HILL SPECIAL UTILITY DISTRICT | DRAIN VALVE | DATE: 03/03/2010 | REVISIONS: 09/24/2025 | STANDARD NO. WA-47

TYPICAL FIRE HYDRANT DETAIL

NOT-TO-SCALE

HYDRANT SHALL NOT RESTRICT PEDESTRIAN ACESSIBLE PATH IN RIGHT-OF-WAY

WATER VALVES SHALL NOT BE LOCATED WITHIN THE PUBLIC SIDEWALK.

290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 10153600
HMT ENGINEERING & SURVEYING

STATE OF TEXAS
CHRISTOPHER P. VAN HEERDE
93047
LICENSED PROFESSIONAL ENGINEER
04/13/2026

WATER DETAILS SHSUD

PARKSIDE SOUTH
UNIT 1

NO.	REVISION DESCRIPTION	DATE

DATE: APRIL 2026
DRAWN BY: PMM
DESIGNED BY: RCD
REVIEWED BY: CVH
HMT PROJECT NO.: 337.130

SHEET
C8.2

Drawing Name: N:_Projects\337 - Lennar\130 - Parkside South Unit 1\CDs\337.130_DETAILS.dwg User: jonm Apr 16, 2026 - 5:55pm