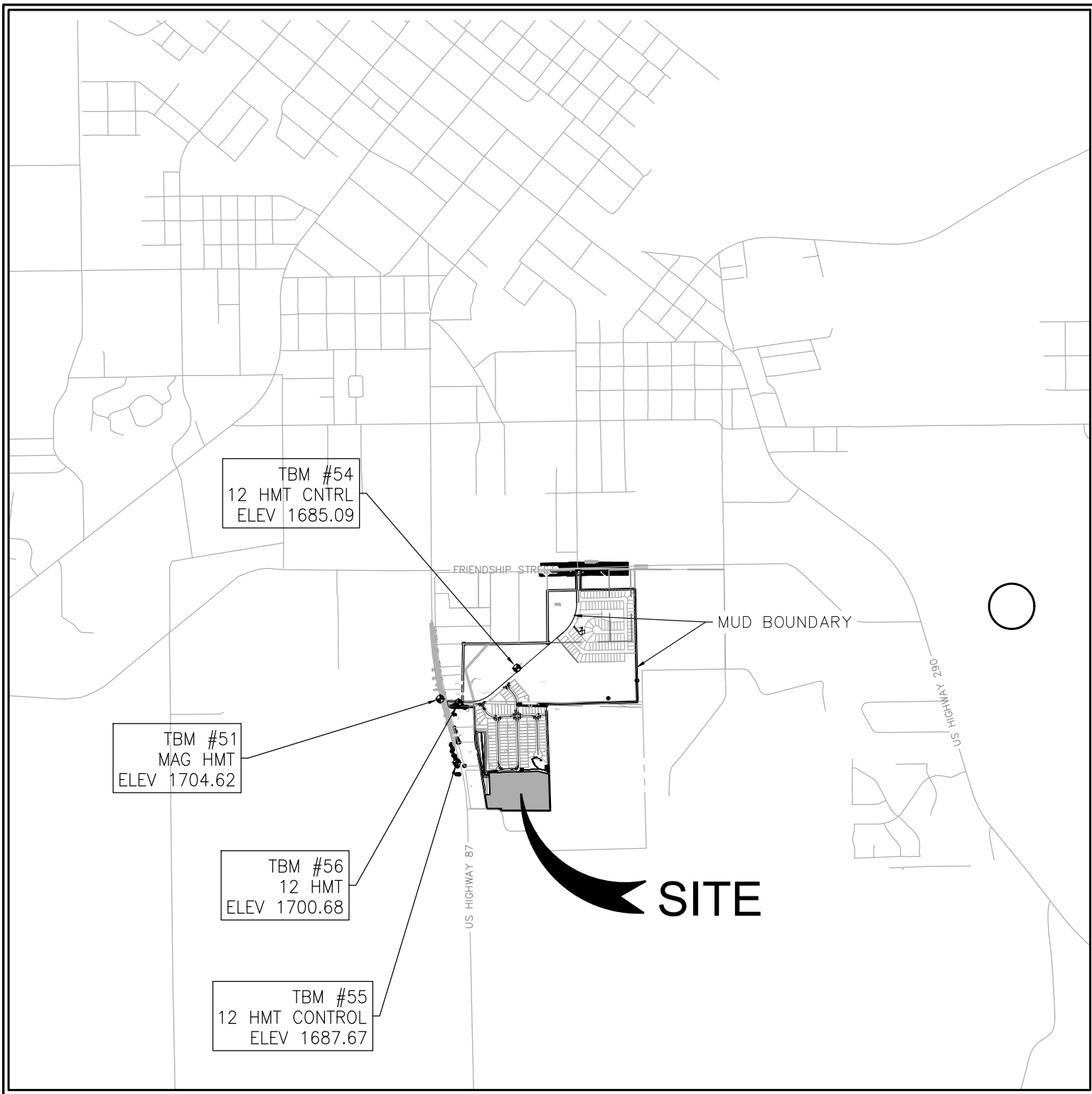


Drawing Name: M:_Projects\137 - Lennar Homes\128 - Friendship Oaks Unit 4\CDs\137.128_COVER.dwg User: jpatluk Apr 23, 2025 - 5:23pm



PROJECT LOCATION MAP

SCALE: N.T.S.

PROJECT BENCHMARK

SITE TBM #51
SET HMT MAG
N: 10058002.712
E: 2758189.998
ELEV: 1704.62

SITE TBM #55
SET HMT 12
N: 10057943.811
E: 2758458.655
ELEV: 1700.68

SITE TBM #54
SET HMT 12 CONTROL
N: 10058455.245
E: 2759244.727
ELEV: 1685.09

SITE TBM #55
SET HMT 12
N: 10057943.811
E: 2758458.655
ELEV: 1700.68

LEGAL DESCRIPTION

BEING A TOTAL OF 11.35 ACRES OF LAND LOCATED IN THE JOSE ESTEBAN BARGAS, SURVEY, A-53, GILLESPIE COUNTY, TEXAS, BEING PART OF A CALLED 29.371 ACRE TRACT, RECORDED IN DOCUMENT NO. 20244825 OF THE OFFICIAL PUBLIC RECORDS OF GILLESPIE COUNTY, TEXAS

Marcelo R. Rubio

DISTRICT ENGINEER

05.28.2025

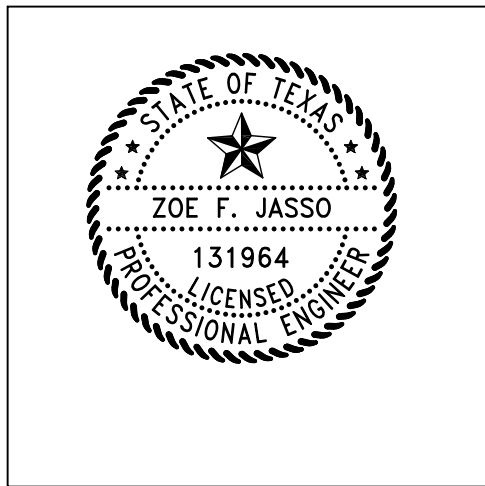
DATE

DISCLAIMER:

THE DISTRICT'S REVIEW OF THE PLANS IS LIMITED TO ASPECTS CONCERNING WATER, WASTEWATER, DRAINAGE, AND ROADS. THIS REVIEW DOES NOT ENCOMPASS AN ASSESSMENT OF THE OVERALL ADEQUACY OF THE DESIGN FOR THE FACILITIES. IN APPROVING THESE PLANS, THE DISTRICT RELIES SOLELY ON THE ADEQUACY OF THE WORK PERFORMED BY THE DESIGN ENGINEER.

GENERAL NOTES:

- IF CONSTRUCTION HAS NOT COMMENCED WITHIN ONE-YEAR OF CITY APPROVAL FOR CONSTRUCTION INSPECTION, THAT APPROVAL IS NO LONGER VALID.
- THE MOST CURRENT EDITIONS OF THE CITY OF SAN ANTONIO 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 CITY OF FREDERICKSBURG STANDARD DETAILS.
- ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER OF RECORD. IN ACCEPTING THESE PLANS, THE CITY OF FREDERICKSBURG MUST RELY UPON THE ADEQUACY OF THE WORK OF THE ENGINEER IN RECORD.
- PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL CONTACT THE CITY OF FREDERICKSBURG TO SET A PRE-CONSTRUCTION MEETING. A 48-HOUR ADVANCED NOTIFICATION IS REQUIRED FOR ALL INSPECTION AND MEETING REQUESTS.
 - ALL INSPECTIONS ARE TO BE CALLED IN AT 830-990-2009 OR,
 - 4.2 4.3 E-MAILED AT E.WILLIAMSON@FBGTX.ORG.
- 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 THE NEED ARISES, ADDITIONAL TEMPORARY TRAFFIC CONTROL DEVICES MAY BE ORDERED BY THE ENGINEERING REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.
- DRAINAGE IMPROVEMENTS SUFFICIENT TO MITIGATE OFFSITE IMPACT OF CONSTRUCTION MUST BE COMPLETED AND IN PLACE PRIOR TO ADDING IMPERVIOUS COVER TO THE SITE.
- NO PORTION OF THE SUBDIVISION IS LOCATED WITHIN ANY SPECIAL FLOOD HAZARD AREA (100 YR. FLOOD), AS DEFINED BY THE GILLESPIE COUNTY, TEXAS, FIRM PANEL NUMBER 48171C0288C EFFECTIVE DATE OCTOBER, 19, 2001, AS PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.
- THIS PROJECT IS NOT LOCATED WITHIN THE EDWARDS AQUIFER RECHARGE, TRANSITION OR CONTRIBUTING ZONE.
- GAS UTILITIES ARE NOT INCLUDED IN THE CIVIL CONSTRUCTION PLANS. FINAL GAS UTILITY DESIGN SHALL BE APPROVED BY THE CITY FOR ANY WORK WITHIN PUBLIC RIGHT-OF-WAY, IF APPLICABLE.
- THE ENGINEER OF RECORD ACKNOWLEDGES THAT ALL PROPOSED WATER AND WASTEWATER IMPROVEMENTS MUST COMPLY WITH TCEQ AND THE CITY OF FREDERICKSBURG WATER CONNECTION POLICY, SOUND ENGINEERING JUDGEMENT AND ANY OTHER GOVERNING ENTITY ORDINANCES OR CODES.



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.

Zoe F. Jasso
Zoe F. Jasso
P.E. Registration No. 131964

04/29/2025

PREPARED BY:



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NEW BRAUNFELS, TX 78130
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 EXISTS, 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 EXISTS, 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.

FRIENDSHIP OAKS UNIT 4 FREDERICKSBURG, TEXAS CIVIL SITE CONSTRUCTION PLANS GILLESPIE COUNTY MUD 1 LENNAR HOMES OF TEXAS LAND AND CONSTRUCTION, LTD 100 NE LOOP, SUITE 1155 SAN ANTONIO, TEXAS 78216

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FRIENDSHIP OAKS, UNIT 4
CIVIL SITE CONSTRUCTION PLANS

HMT # 337.128

TCEQ WATER DISTRIBUTION SYSTEM
GENERAL CONSTRUCTION NOTES

1.

This water distribution system must be constructed in accordance with the current Texas Commission on Environmental Quality (TCEQ) Rules and Regulations for Public Water Systems 30 Texas Administrative Code (TAC) Chapter 290 Subchapter D. When conflicts are noted with local standards, the more stringent requirement shall be applied. At a minimum, construction for public water systems must always meet TCEQ's "Rules and Regulations for Public Water Systems."
2.

All newly installed pipes and related products must conform to American National Standards Institute (ANSI)/NSF International Standard 61 and must be certified by an organization accredited by ANSI [§290.44(a)(1)].
3.

Plastic pipe for use in public water systems must bear the NSF International Seal of Approval (NSF-pw) and have an ASTM design pressure rating of at least 150 psi or a standard dimension ratio of 26 or less [§290.44(a)(2)].
4.

No pipe which has been used for any purpose other than the conveyance of drinking water shall be accepted or relocated for use in any public drinking water supply [§290.44(a)(3)].
5.

All water line crossings of wastewater mains shall be perpendicular [§290.44(e)(4)(B)].
6.

Water transmission and distribution lines shall be installed in accordance with the manufacturer's instructions. However, the top of the water line must be located below the frost line and in no case shall the top of the water line be less than 24 inches below ground surface [§290.44(a)(4)].
7.

The maximum allowable lead content of pipes, pipe fittings, plumbing fittings, and fixtures is 0.25 percent [§290.44(b)].
8.

The contractor shall install appropriate air release devices with vent openings to the atmosphere covered with 16-mesh or finer, corrosion resistant screening material or an acceptable equivalent [§290.44(d)(1)].
9.

The contractor shall not place the pipe in water or where it can be flooded with water or sewage during its storage or installation [§290.44(f)(1)].
10.

When waterlines are laid under any flowing or intermittent stream or semi-permanent body of water the waterline shall be installed in a separate watertight pipe encasement. Valves must be provided on each side of the crossing with facilities to allow the underwater portion of the system to be isolated and tested [§290.44(f)(2)].

11.

Pursuant to 30 TAC §290.44(a)(5), the hydrostatic leakage rate shall not exceed the amount allowed or recommended by the most current AWWA formulas for PVC pipe, cast iron and ductile iron pipe. Include the formulas in the notes on the plans.

o

The hydrostatic leakage rate for polyvinyl chloride (PVC) pipe and appurtenances shall not exceed the amount allowed or recommended by formulas in America Water Works Association (AWWA) C-605 as required in 30 TAC §290.44(a)(5). Please ensure that the formula for this calculation is correct and most current formula is in use;

$$Q = \frac{LD\sqrt{P}}{148,000}$$

Where:

- Q = the quantity of makeup water in gallons per hour,

▪

L = the length of the pipe section being tested, in feet,

▪

D = the nominal diameter of the pipe in inches, and

▪

P = the average test pressure during the hydrostatic test in pounds per square inch (psi).

o

The hydrostatic leakage rate for ductile iron (DI) pipe and appurtenances shall not exceed the amount allowed or recommended by formulas in America Water Works Association (AWWA) C-600 as required in 30 TAC §290.44(a)(5). Please ensure that the formula for this calculation is correct and most current formula is in use;

$$L = \frac{SD\sqrt{P}}{148,000}$$

Where:

- L = the quantity of makeup water in gallons per hour,

▪

S = the length of the pipe section being tested, in feet,

▪

D = the nominal diameter of the pipe in inches, and

▪

P = the average test pressure during the hydrostatic test in pounds per square inch (psi).

12.

The contractor shall maintain a minimum separation distance in all directions of nine feet between the proposed waterline and wastewater collection facilities including manholes. If this distance cannot be maintained, the contractor must immediately notify the project engineer for further direction. Separation distances, installation methods, and materials utilized must meet §290.44(e)(1)-(4).
13.

The separation distance from a potable waterline to a wastewater main or lateral manhole or cleanout shall be a minimum of nine feet. Where the nine-foot separation distance cannot be achieved, the potable waterline shall be encased in a joint of at least 150 psi pressure class pipe at least 18 feet long and two nominal sizes larger than the new conveyance. The space around the carrier pipe shall be supported at five-foot intervals with spacers or be filled to the springline with washed sand. The encasement pipe shall be centered on the crossing and both ends sealed with cement grout or manufactured sealant [§290.44(e)(5)].
14.

Fire hydrants shall not be installed within nine feet vertically or horizontally of any wastewater line, wastewater lateral, or wastewater service line regardless of construction [§290.44(e)(6)].

15.

Suction mains to pumping equipment shall not cross wastewater mains, wastewater laterals, or wastewater service lines. Raw water supply lines shall not be installed within five feet of any tile or concrete wastewater main, wastewater lateral, or wastewater service line [§290.44(e)(7)].
16.

Waterlines shall not be installed closer than ten feet to septic tank drainfields [§290.44(e)(8)].
17.

The contractor shall disinfect the new waterlines in accordance with AWWA Standard C-651-14 or most recent, then flush and sample the lines before being placed into service. Samples shall be collected for microbiological analysis to check the effectiveness of the disinfection procedure which shall be repeated if contamination persists. A minimum of one sample for each 1,000 feet of completed waterline will be required or at the next available sampling point beyond 1,000 feet as designated by the design engineer [§290.44(f)(3)].
18.

Dechlorination of disinfecting water shall be in strict accordance with current AWWA Standard C655-09 or most recent.

GENERAL NOTES

ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL COMPLY WITH:

- A.

CURRENT CITY OF FREDERICKSBURG CONSTRUCTION SPECIFICATIONS AND STANDARDS AS OF THE DATE OF THIS CONTRACT
- B.

THE MOST CURRENT EDITION OF TEXAS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS, AND BRIDGES".

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MOST CURRENT TEXAS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS, AND BRIDGES." ALONG WITH CURRENT CITY OF FREDERICKSBURG AND GILLESPIE COUNTY SPECIFICATIONS. ANY DISCREPANCIES BETWEEN SPECIFICATIONS SHALL BE RESOLVED BY THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.

CONTRACTOR SHALL PROCURE ALL PERMITS AND LICENSES, PAY ALL CHARGES, FEES, AND TAXES AREA AND GIVE ALL NOTICES NECESSARY AND INCIDENTAL TO THE DUE AND LAWFUL PROSECUTION OF THE WORK.

ANY EXISTING OFF-SITE IMPROVEMENTS THAT ARE DAMAGED OR UNDERCUT BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE ENGINEER AND APPROVED BY THE OWNER OF THE EXISTING IMPROVEMENT AT THE CONTRACTOR'S EXPENSE. (NO SEPARATE PAY ITEM)

WORK COMPLETED BY THE CONTRACTOR WHICH HAS NOT RECEIVED A WORK ORDER OR CONSENT OF THE OWNER OR ENGINEER WILL BE SUBJECT TO REMOVAL AND REPLACEMENT BY AND AT THE EXPENSE OF THE CONTRACTOR.

CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL WASTE MATERIALS UPON PROJECT COMPLETION. THE CONTRACTOR SHALL NOT PLACE ANY WASTE MATERIAL IN THE 100YR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN DEVELOPMENT PERMIT.

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 PROVIDING CONTINUOUS TRAFFIC FLOW AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL DEVICES DURING CONSTRUCTION.

CONTRACTOR IS REQUIRED TO VERIFY PROJECT ELEVATIONS. THE TERM "MATCH EXISTING" SHALL BE UNDERSTOOD TO SIGNIFY BOTH HORIZONTAL AND VERTICAL ALIGNMENT.

WHEN MATCHING EXISTING PAVEMENTS, CURBS, DRIVES, AND WALKS, THEY SHALL BE SAW CUT FULL DEPTH AND REMOVED TO ALLOW FOR PROPOSED CONSTRUCTION. IF ANY EXISTING JOINT IS ENCOUNTERED, PRECAUTION SHALL BE TAKEN DURING REMOVAL OF CONCRETE SO AS NOT TO DAMAGE EXISTING DOWELS. ALL EXISTING DOWELS SHALL BE EXPOSED AND CLEANED.

ITEM OF WORK DESIGNATED "BY OTHERS" SHALL NOT BE CONSIDERED PART OF THIS CONTRACT.

ALL "COMPACTED SUBGRADE" SHALL CONSIST OF NATIVE MATERIAL SCARIFIED TO A MINIMUM DEPTH OF SIX INCHES AND COMPACTED TO 95% DENSITY ACCORDING TO DENSITY TEST METHOD TEX-115E OR ACCORDING TO ASTM D-698 AND TESTED BY ASTM D-2922.

ALL "FLEXIBLE BASE" SHALL BE TYPE "A", GRADE 4, ACCORDING TO TxDOT ITEM 247, COMPACTED TO 95% MODIFIED DENSITY AT A MOISTURE CONTENT BETWEEN -2 AND +3 OF OPTIMUM PERCENT MOISTURE ACCORDING TO ASTM D-1557 (MODIFIED PROCTOR) AND TESTED BY ASTM D-2922.

ASPHALT PAVEMENT SHALL BE THE TYPE SPECIFIED ON THE PLANS AND ACCORDING TO TxDOT ITEM 340 "HOT MIX ASPHALT CONCRETE PAVEMENT".

PRIME COAT USING MC-30 AT A RATE OF 0.2 GALLONS PER SQUARE YARD SHALL BE PLACED OVER PREPARED BASE AT LEAST ONE DAY PRIOR TO LAYING ASPHALTIC CONCRETE PAVEMENT. ANY NECESSARY TACK COAT SHALL BE MC-30 AT 0.05 GALLONS PER SQUARE YARD. IT IS REQUIRED THAT BOTH THE PRIME COAT AND THE TACK COAT BE APPLIED AT THE TEMPERATURE SPECIFIED UNDER TxDOT ITEM 300.3.

CONCRETE SHALL BE CLASS "A" ACCORDING TO TxDOT ITEM 421 UNLESS OTHERWISE ON PLANS.

REINFORCING STEEL SHALL BE FROM NEW BILLET AND SHALL CONFORM TO TxDOT ITEM 440. ALL DIMENSIONS RELATING TO REINFORCING STEEL ARE TO CENTER OF BARS EXCEPT WHEN REFERRING TO CLEARANCE.

ALL SAWED JOINTS SHALL BE SAWED WITHIN 24 HOURS OF POURING,

ABSOLUTELY NO WELDING OF REINFORCING BARS OR TORCHING TO BEND REINFORCING BARS SHALL BE ALLOWED WITHOUT THE SPECIFIC APPROVAL OF THE ENGINEER.

ORDINARY COMPACTION CONTROL IS REQUIRED ON THIS PROJECT.

ALL ROLLING FOR COMPACTION OF ASPHALTIC CONCRETE PAVEMENT SHALL BE COMPLETED BEFORE THE MIXTURE TEMPERATURE DROPS BELOW 175 DEG. (F).

ALL FILL MATERIAL SHALL BE SUBJECT TO THE ENGINEER'S APPROVAL.

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, THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO THE NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNERS AND THE ENGINEER AND HIS EMPLOYEES, PARTNERS, OFFICES, 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.

CONTRACTOR WILL BE RESPONSIBLE FOR ALL CONSTRUCTION TESTING PER CURRENT CITY OF FREDERICKSBURG REQUIREMENTS. ALL TEST RESULTS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL. ENGINEER AND OWNER RESERVE THE RIGHT TO HAVE THE CONTRACTOR REMOVE AND REPLACE ANY MATERIAL THAT WAS NOT TESTED OR FAILED TESTING. ALL COST ASSOCIATED WITH THE REMOVAL, REPLACEMENT AND TESTING SHALL BE PAID BY THE CONTRACTOR.

ALL PVC SLEEVES SHALL BE INSTALLED 3 FEET BELOW FINISHED GRADE UNLESS OTHERWISE SPECIFIED, AND ENDS SHALL BE MARKED SO THAT LOCATIONS OF SLEEVES CAN BE EASILY IDENTIFIED.

PRE-CONSTRUCTION CONFERENCE IS REQUIRED. ENGINEER WILL ARRANGE SUCH CONFERENCE IN COORDINATION WITH CITY OF FREDERICKSBURG STREET INSPECTOR & FREDERICKSBURG UTILITIES INSPECTOR. NO CONSTRUCTION MAY BEGIN PRIOR TO THE PRE-CONSTRUCTION CONFERENCE.

CONTRACTOR SHALL COORDINATE WITH DRY UTILITY INSTALLERS AND SHARED TRENCHING SHALL BE UTILIZED. CUTTING THE STREETS AFTER COMPLETION BY DRY UTILITIES SHALL NOT BE ACCEPTABLE.

AS PER PLATTING ORDINANCE SECTION 118-38M: WHEN ALL IMPROVEMENTS ARE FOUND TO BE CONSTRUCTED AND COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AND WITH THE CITY'S STANDARDS, AND UPON RECEIPT OF ONE SET OF "RECORD DRAWINGS" PLANS, AND A DIGITAL COPY OF ALL PLANS (AUTOCAD 2000 MINIMUM) THE CITY ENGINEER SHALL ACCEPT SUCH IMPROVEMENTS FOR THE CITY OF FREDERICKSBURG, SUBJECT TO THE GUARANTY OF MATERIAL AND WORKMANSHIP PROVISIONS IN THIS SECTION.

EROSION / SEDIMENTATION CONTROL

AT A MINIMUM, THESE CONTROLS SHALL CONSIST OF ROCK BERMS AND/OR SILT FENCES CONSTRUCTED PARALLEL TO AND DOWN GRADIENT FROM THE TRENCHES. THE ROCK BERM OR SILT FENCES SHALL BE INSTALLED IN A MANNER SUCH THAT ANY RAINFALL RUNOFF SHALL BE FILTERED. HAY BALES SHALL NOT BE USED FOR TEMPORARY EROSION AND SEDIMENTATION CONTROLS.

ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS MUST BE INSTALLED PRIOR TO CONSTRUCTION AND SHALL BE MAINTAINED DURING CONSTRUCTION BY THE CONTRACTOR. THE CONTRACTOR SHALL REMOVE THE CONTROLS WHEN VEGETATION IS ESTABLISHED AND THE CONSTRUCTION AREA IS STABILIZED [31 TAC 313.5 (c)(12)]. ADDITIONAL PROTECTION MAY BE REQUIRED IF EXCESSIVE SOLIDS ARE BEING DISCHARGED FROM THE SITE.

ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS SHALL BE REMOVED BY THE CONTRACTOR AT FINAL ACCEPTANCE OF THE PROJECT BY THE OWNER/ENGINEER.

PLACEMENT OF TEMPORARY EROSION AND SEDIMENTATION CONTROLS SHALL BE IN ACCORDANCE WITH THE CONSTRUCTION PLANS. ACTUAL LOCATIONS MAY VARY SLIGHTLY FROM THE PLANS, BUT WILL BE VERIFIED BY THE ENGINEER/INSPECTOR IN THE FIELD PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL INSPECT THE CONTROLS AT WEEKLY INTERVALS AND AFTER EVERY SIGNIFICANT RAINFALL TO INSURE DISTURBANCE OF THE STRUCTURES HAS NOT OCCURRED. SEDIMENT DEPOSITED AFTER A RAINFALL SHALL BE REMOVED FROM THE SITE OR PLACED IN AN ENGINEER APPROVED DESIGNATED DISPOSAL AREA.

CONTRACTOR SHALL BE RESPONSIBLE TO INSURE THAT NO EROSION CONTROL MEASURES BLOCK THE DRAINAGE SYSTEM FROM WORKING AS DESIGNED.

CITY OF FREDERICKSBURG GENERAL NOTES

010. DEFINITIONS

AGREEMENT- THE WRITTEN INSTRUMENT, EXECUTED BY OWNER AND CONTRACTOR, THAT SETS FORTH THE CONTRACT PRICE AND CONTRACT TIME, IDENTIFIES THE PARTIES AND THE ENGINEER, AND DESIGNATES THE SPECIFIC ITEMS THAT ARE CONTRACTS DOCUMENTS.

AUTHORITY- THE CITY, COUNTY, AND/ OR UTILITY OPERATOR HAVING AUTHORITY TO REVIEW AND APPROVE, OR RELEASE, PLANS OR PERMITS RELATED TO WORK.

CONTRACT - THE ENTIRE AND INTEGRATED WRITTEN CONTRACT BETWEEN OWNER AND CONTRACTOR CONCERNING THE WORK.

CONTRACTOR- THE INDIVIDUAL, PARTNERSHIP, CORPORATION, JOINT VENTURE, OR OTHER LEGAL ENTITY HAVING A CONTRACT WITH THE OWNER TO PERFORM THE WORK. IN THE CASE OF WORK BEING DONE UNDER PERMIT ISSUED BY THE OWNER, THE PERMITTEE SHALL BE CONSTRUED TO BE THE CONTRACTOR. THE TERM "PRIME CONTRACTOR" SHALL MEAN CONTRACTOR.

CONTRACT DOCUMENTS- INCLUDES BUT IS NOT LIMITED TO CONTRACT ADDENDA (WHICH PERTAIN TO THE CONTRACT DOCUMENTS); SOLICITATION, ADVERTISEMENT OR INVITATION FOR BIDS OR REQUEST FOR PROPOSALS; INSTRUCTION TO BIDDERS; SUBMITTED BID/PROPOSAL INCLUDING DOCUMENTATION ACCOMPANYING THE BID/PROPOSAL AND ANY POST-BID DOCUMENTATION WHEN ATTACHED AS AN EXHIBIT TO THE CONTRACT; BONDS; GENERAL AND SUPPLEMENTAL CONDITIONS; PERMITS FROM OTHER AGENCIES; SPECIAL PROVISIONS; PLANS; CHANGE DIRECTIVES AND CHANGE ORDERS; AND ALL MODIFICATIONS ISSUED AFTER THE EXECUTION OF THE CONTRACT.

CONTRACTOR- THE INDIVIDUAL OR ENTITY WITH WHICH OWNER HAS CONTRACTED FOR PERFORMANCE OF THE WORK.

CITY- THE CITY POSSESSING JURISDICTIONAL AUTHORITY FOR DEVELOPMENT AND / CONSTRUCTION PERMITTING.

COUNTY- THE COUNTY POSSESSING JURISDICTIONAL AUTHORITY FOR DEVELOPMENT AND/ CONSTRUCTION PERMITTING.

DRAWINGS- THOSE PORTIONS OF THE CONTRACT DOCUMENTS WHICH ARE GRAPHIC REPRESENTATIONS OF THE SCOPE, EXTENT AND CHARACTER OF THE WORK TO BE FURNISHED AND PERFORMED BY CONTRACTOR AND WHICH HAVE BEEN APPROVED BY OWNER. DRAWINGS MAY INCLUDE STANDARD PLANS, ELEVATIONS, SECTIONS, DETAILS, SCHEDULES AND DIAGRAM. SHOP DRAWINGS ARE NOT DRAWINGS AS SO DEFINED.

ENGINEER- THE ENGINEER OF RECORD OR HIS DULY AUTHORIZED REPRESENTATIVE.

OWNER- THE INDIVIDUAL OR ENTITY WITH WHICH CONTRACTOR HAS CONTRACTED REGARDING THE WORK, AND WHICH HAS AGREED TO PAY CONTRACTOR FOR THE PERFORMANCE OF THE WORK, PURSUANT TO THE TERMS OF THE CONTRACT.

PLANS- THE DRAWINGS, PROFILES, CROSS SECTIONS, WORKING DRAWINGS, AND SUPPLEMENTAL DRAWINGS, OR REPRODUCTIONS THEREOF, APPROVED BY THE ENGINEER, WHICH SHOW THE LOCATION; CHARACTER, DIMENSIONS OR DETAILS OF THE WORK.

PROJECT- THE TOTAL UNDERTAKING TO BE ACCOMPLISHED FOR OWNER BY ENGINEERS, CONTRACTORS, AND OTHERS, INCLUDING PLANNING, STUDY, DESIGN, CONSTRUCTION, TESTING, COMMISSIONING, AND START-UP, AND OF WHICH THE WORK TO BE PERFORMED UNDER THE CONTRACT DOCUMENTS IS A PART.

SHOP DRAWINGS- ALL DRAWINGS, DIAGRAMS, ILLUSTRATIONS, SCHEDULES AND OTHER DATA OR INFORMATION WHICH ARE SPECIFICALLY PREPARED OR ASSEMBLED BY OR FOR CONTRACTOR AND SUBMITTED BY CONTRACTOR AS REQUIRED BY THE CONTRACT DOCUMENTS.

SPECIFICATIONS- THE PART OF THE CONTRACT THAT CONSISTS OF WRITTEN REQUIREMENTS FOR MATERIALS, EQUIPMENT, SYSTEMS, STANDARDS, AND WORKMANSHIP AS APPLIED TO THE WORK, AND CERTAIN ADMINISTRATIVE REQUIREMENTS AND PROCEDURAL MATTERS APPLICABLE TO THE WORK.

PLANS- INSTRUCTIONS, DRAWINGS, DETAILS, AND SPECIFICATIONS.

SITE- LANDS OR AREAS INDICATED IN THE CONTRACT DOCUMENTS AS BEING FURNISHED BY OWNER UPON WHICH THE WORK IS TO BE PERFORMED, INCLUDING RIGHTS-OF-WAY AND EASEMENTS, AND SUCH OTHER LANDS OR AREAS FURNISHED BY OWNER WHICH ARE DESIGNATED FOR THE USE OF CONTRACTOR.

SUBCONTRACTOR- AN INDIVIDUAL OR ENTITY HAVING A DIRECT CONTRACT WITH CONTRACTOR OR WITH ANY OTHER SUBCONTRACTOR FOR THE PERFORMANCE OF A PART OF THE WORK.

SUBMITTAL - A WRITTEN OR GRAPHIC DOCUMENT, PREPARED BY OR FOR CONTRACTOR, WHICH THE CONTRACT DOCUMENTS REQUIRE CONTRACTOR TO SUBMIT TO ENGINEER, OR THAT IS INDICATED AS A SUBMITTAL IN THE SCHEDULE OF SUBMITTALS ACCEPTED BY ENGINEER. SUBMITTALS MAY INCLUDE SHOP DRAWINGS AND SAMPLES; SCHEDULES; PRODUCT DATA; OWNER-DELEGATED DESIGNS; SUSTAINABLE DESIGN INFORMATION; INFORMATION ON SPECIAL PROCEDURES; TESTING PLANS; RESULTS OF TESTS AND EVALUATIONS, SOURCE QUALITY-CONTROL TESTING AND INSPECTIONS, AND FIELD OR SITE QUALITY-CONTROL TESTING AND INSPECTIONS; WARRANTIES AND CERTIFICATIONS; SUPPLIERS' INSTRUCTIONS AND REPORTS; RECORDS OF DELIVERY OF SPARE PARTS AND TOOLS; OPERATIONS AND MAINTENANCE DATA; PROJECT PHOTOGRAPHIC DOCUMENTATION; RECORD DOCUMENTS; AND OTHER SUCH DOCUMENTS REQUIRED BY THE CONTRACT DOCUMENTS. SUBMITTALS, WHETHER OR NOT APPROVED OR ACCEPTED BY ENGINEER, ARE NOT CONTRACT DOCUMENTS. CHANGE PROPOSALS, CHANGE ORDERS, CLAIMS, NOTICES, APPLICATIONS FOR PAYMENT, AND REQUESTS FOR INTERPRETATION OR CLARIFICATION ARE NOT SUBMITTALS.

UNDERGROUND FACILITIES- ALL ACTIVE OR NOT-IN-SERVICE UNDERGROUND LINES, PIPELINES, CONDUITS, DUCTS, ENCASEMENTS, CABLES, WIRES, MANHOLES, VAULTS, TANKS, TUNNELS, OR OTHER SUCH FACILITIES OR SYSTEMS AT THE SITE, INCLUDING BUT NOT LIMITED TO THOSE FACILITIES OR SYSTEMS THAT PRODUCE, TRANSMIT, DISTRIBUTE, OR CONVEY TELEPHONE OR OTHER COMMUNICATIONS, CABLE TELEVISION, FIBER OPTIC TRANSMISSIONS, POWER, ELECTRICITY, LIGHT, HEAT, GASES, OIL, CRUDE OIL PRODUCTS, LIQUID PETROLEUM PRODUCTS, WATER, STEAM, WASTE, WASTEWATER, STORM WATER, OTHER LIQUIDS IDS OR CHEMICALS, OR TRAFFIC OR OTHER CONTROL SYSTEMS. AN ABANDONED FACILITY OR SYSTEM IS NOT AN UNDERGROUND FACILITY.

UTILITY OPERATOR- THE WATER, WASTEWATER, OR DRY-UTILITY OPERATOR PROVIDING UTILITY SERVICE TO THE PROJECT.

WORK- THE ENTIRE CONSTRUCTION OR THE VARIOUS SEPARATELY IDENTIFIABLE PARTS THEREOF REQUIRED TO BE PROVIDED UNDER THE CONTRACT DOCUMENTS. WORK INCLUDES AND IS THE RESULT OF PERFORMING OR PROVIDING ALL LABOR, SERVICES, AND DOCUMENTATION NECESSARY TO PRODUCE SUCH CONSTRUCTION; FURNISHING, INSTALLING, AND INCORPORATING ALL MATERIALS AND EQUIPMENT INTO SUCH CONSTRUCTION, AND MAY INCLUDE RELATED SERVICES SUCH AS TESTING, START-UP, AND COMMISSIONING, ALL AS REQUIRED BY THE CONTRACT DOCUMENTS.

015. GENERAL

015.01 THE BIDDER/PROPOSER OR CONTRACTOR SHALL NOT TAKE ADVANTAGE OF ANY ERROR IN THE BIDDING OR CONTRACT DOCUMENTS. ANYTHING MENTIONED IN THE SPECIFICATIONS AND NOT SHOWN ON THE DRAWINGS, OR SHOWN ON THE DRAWINGS AND NOT MENTIONED IN THE SPECIFICATIONS, SHALL BE LIKE EFFECT AS IF SHOWN OR MENTIONED IN BOTH. IN CASE OF ANY APPARENT DIFFERENCE BETWEEN THE DRAWINGS AND SPECIFICATIONS, OR ANY OTHER APPARENT ERROR WHICH THE BIDDER OR CONTRACTOR MAY DISCOVER, SAID BIDDER/PROPOSER OR CONTRACTOR SHALL REFER THE MATTER AT ONCE TO THE OWNER AS TO WHICH, IN ACCORDANCE WITH THE INTENT OF THE CONTRACT DOCUMENTS, THE OWNER SHALL HAVE THE RIGHT TO CORRECT THE ERROR. DISCOVERED THROUGH AN ADDENDUM TO THE SOLICITATION (IF THE BIDS/PROPOSALS HAVE NOT YET BEEN OPENED) 015.02 ANYTHING IN THE SPECIFICATIONS AND NOT ON THE DRAWINGS, OR ON THE DRAWINGS AND NOT IN THE SPECIFICATIONS, SHALL BE AS THOUGH SHOWN OR MENTIONED IN BOTH. WHILE IT IS BELIEVED THAT MUCH OF THE INFORMATION PERTAINING TO CONDITIONS WHICH MAY AFFECT THE COST OF THE WORK WILL BE SHOWN ON THE DRAWINGS OR INDICATED IN THE SPECIFICATIONS, THE OWNER DOES NOT WARRANT THE COMPLETENESS OR ACCURACY OF SUCH INFORMATION. THE CONTRACTOR SHALL ASCERTAIN THE EXISTENCE OF ANY CONDITIONS AFFECTING THE COST OF THE WORK, WHICH WOULD HAVE BEEN DISCLOSED BY REASONABLE EXAMINATION OF THE SITE. EXISTING IMPROVEMENTS VISIBLE AT THE JOB SITE, FOR WHICH NO SPECIFIC DISPOSITION IS MADE ON THE DRAWINGS, BUT WHICH COULD REASONABLY BE ASSUMED TO INTERFERE WITH THE SATISFACTORY COMPLETION OF THE IMPROVEMENTS COMTEMPLATED BY THE PLANS, SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL, UPON DISCOVERING ANY ERROR OR OMISSION IN THE PLANS AND SPECIFICATIONS, IMMEDIATELY CALL IT TO THE ATTENTION OF THE ENGINEER.

020.03 IF THERE IS A CONFLICT BETWEEN CONTRACT DOCUMENTS, THE DOCUMENT HIGHEST IN PRECEDENCE SHALL CONTROL. THE PRECEDENCE SHALL BE:

- (1)

THE EXECUTED CONTRACT BETWEEN THE CITY AND OWNER ALONG WITH ANY PROPERLY EXECUTED CHANGE ORDERS
- (2)

PERMITS AND LICENSES FROM OTHER AGENCIES AS MAY BE REQUIRED BY LAW
- (3)

SPECIAL PROJECT PROVISIONS
- (4)

DRAWINGS
- (5)

DETAILS
- (6)

SPECIFICATIONS

020.04 CONTRACTOR AND SUBCONTRACTOR SHALL LOCATE ACTUAL LOCATION OF ALL EXISTING FACILITIES AND NOTIFY ENGINEER IF LOCATION OF EXISTING FACILITIES DIFFERS FROM LOCATION SHOWN IN PLANS. CONTRACTOR AND SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL FACILITY LOCATES AND COORDINATING CONSTRUCTION ACTIVITIES WITH EXISTING FACILITY OWNERS AND/ OR OPERATORS.

020 PRIVATE, DEVELOPMENT, OR CITY PROJECTS

020.01 PROJECTS MUST BE APPROVED BY THE AUTHORITY.

020.02 THESE STANDARD SPECIFICATIONS FOR CONSTRUCTION GENERAL PROVISIONS ARE PART OF THE CONTRACT BY WHICH THE CONTRACTOR HAS COMMITTED TO COMPLETE A SPECIFIC SCOPE OF WORK, IN COMPLIANCE WITH THE DRAWINGS, DETAILS, SPECIFICATIONS, AND ALL APPLICABLE LAWS, RULES AND REGULATIONS. COMPENSATION FOR SAID WORK SHALL BE MADE AS DESCRIBED IN THE AGREED UPON PROPOSAL.

020.03 ALL WORK MUST COMPLY WITH APPLICABLE STANDARD SPECIFICATIONS FOR CONSTRUCTION AND THE MANUAL OF STANDARD DETAILS. ANY REQUEST FOR CHANGE TO THE DESIGN FOR THIS PORTION OF PRIVATE PROJECTS MUST BE APPROVED BY THE DESIGN ENGINEER OF RECORD, AND APPROVED PRIOR TO IMPLEMENTATION. SUBMITTALS FOR THIS PORTION OF THE WORK SHALL BE FORWARDED TO, AND APPROVED BY, THE DESIGN ENGINEER OF RECORD, AND FORWARDED TO THE AUTHORITY.

025 SUBMITTALS

025.01 FOR DEVELOPMENT PROJECTS; ALL INFORMATION ASSOCIATED WITH THE COMPLETION OF THE WORK SHALL BE SUBMITTED TO NECESSARY ENTITIES FOR REVIEW.

030. COMPLETION OF THE WORK

030.01 THE CONTRACTOR SHALL MAINTAIN A WORK FORCE ADEQUATE TO ACCOMPLISH THE WORK WITHIN THE CONTRACT TIME. THE CONTRACTOR AGREES TO EMPLOY ONLY ORDERLY, COMPETENT, AND KNOWLEDGEABLE WORKERS, SKILLFUL IN PERFORMANCE OF THE TYPE OF WORK REQUIRED UNDER THIS CONTRACT.

035. CHANGE MANAGEMENT - CITY & DEVELOPMENT PROJECTS

035.01 CHANGES TO ANY ASPECT OF THE PROJECT (MATERIALS, DESIGN, CONSTRUCTION METHODS, ETC.) SHALL BE REVIEWED AND EXECUTED BY THE OWNER/AUTHORITY AND/OR DESIGN ENGINEER OF RECORD.

035.02 THE CONTRACTOR MAY REQUEST, IN WRITING, A CHANGE IN MATERIALS SPECIFIED IN CONTRACT DOCUMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SUBMIT THE NECESSARY INFORMATION IN SUCH A TIMELY MANNER AS TO AVOID ANY ADVERSE IMPACTS TO THE CONTRACT SCHEDULE. THE CONTRACTOR MAY REQUEST, IN WRITING, A DEVIATION FROM THE SPECIFIED MATERIALS USING THE SAME PROCEDURE OUTLINED ABOVE.

035.03 THE CONTRACTOR MAY REQUEST A DEVIATION FROM THE DESIGN OF THE WORK. THE CONTRACTOR SHALL SUBMIT, IN WRITING, THE NECESSARY INFORMATION IN SUCH A TIMELY MANNER AS TO AVOID ANY ADVERSE IMPACTS TO THE CONTRACT SCHEDULE. THE MODIFICATION TO THE DESIGN MAY BE UTILIZED UPON RECEIPT OF WRITTEN APPROVAL BY THE OWNER OR ENGINEER.

035.04 IF A SPECIFIC MEANS, METHOD, TECHNIQUE, SEQUENCE, OR PROCEDURE OF CONSTRUCTION IS REQUIRED BY THE CONTRACT DOCUMENTS, THE CONTRACTOR MAY REQUEST A SUBSTITUTE. THE CONTRACTOR SHALL SUBMIT, IN WRITING, THE NECESSARY INFORMATION IN SUCH A TIMELY MANNER AS TO AVOID ANY ADVERSE IMPACTS TO THE CONTRACT SCHEDULE. THE SUBSTITUTE MEANS OR METHODS MAY BE UTILIZED UPON RECEIPT OF WRITTEN APPROVAL BY THE OWNER OR ENGINEER.

040. ENVIRONMENTAL AND SAFETY PLANS

040.01 THE CONTRACTOR SHALL SUBMIT FOR APPROVAL ALL REQUIRED ENVIRONMENTAL AND SAFETY PLANS FOR THE COMPLETION OF THE WORK. THE WORK WILL NOT BE PERMITTED TO BEGIN UNTIL ALL RELATED PLANS HAVE BEEN REVIEWED AND RELEASED.

045. TRENCH SAFETY PLAN (TSP)

045.01 WHEN REQUIRED BY THE WORK, THE CONTRACTOR SHALL SUBMIT A TRENCH SAFETY PLAN FOR REVIEW. THE PLAN SHALL INCLUDE THE RECOMMENDED SAFETY PROTECTION MEASURES WITH THE APPROPRIATE LOADING REQUIREMENTS.

045.02 THE CONTRACTOR SHALL ENSURE THAT ALL PROTECTIVE MEASURES LOCATED ON SITE AND ALL PROCEDURES ON THE PROJECT ARE IN COMPLIANCE WITH ALL ASPECTS OF THE PLAN.

045.03 THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE RULES AND REGULATIONS. THE CONTRACTOR SHALL PROVIDE COPIES OF ALL RELATED DOCUMENTATION TO THE OWNER AND/OR AUTHORITY UPON REQUEST.

045.04 THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE OWNER, ENGINEER, UTILITY OPERATOR, AND THE CITY, ITS FEES, COURT COSTS, AND THE COST OF INVESTIGATION), JUDGMENTS OR CLAIMS BY ANYONE FOR INJURY OR DEATH OF PERSONS RESULTING FROM THE COLLAPSE OR FAILURE OF TRENCHES CONSTRUCTED UNDER THIS CONTRACT.

050. CONFINED SPACE PLAN (CSP)

050.01 WHEN REQUIRED BY THE WORK; THE CONTRACTOR SHALL SUBMIT A CONFINED SPACE PLAN FOR REVIEW.

050.02 THE CONTRACTOR SHALL ENSURE THAT ALL PROCEDURES EMPLOYED ON THE PROJECT ARE IN COMPLIANCE WITH PLAN.

050.03 THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE RULES AND REGULATIONS. ALL RELATED DOCUMENTATION WILL BE MADE AVAILABLE TO THE INSPECTOR ON A DAILY BASIS. THE CONTRACTOR SHALL PROVIDE COPIES OF ALL RELATED DOCUMENTATION TO THE OWNER UPON REQUEST.

055. EROSION CONTROL PLAN (SW3P)

055.01 WHEN REQUIRED BY THE WORK, THE CONTRACTOR S. HALL SUBMIT, AN EROSION CONTROL PLAN FOR REVIEW. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING SW3P PERMITS, INSTALLING REQUIRED BMPs, AND MAINTAINING PROJECT SITE TO COMPLY WITH SW3P PERMITS.

060. TEMPORARY TRAFFIC CONTROL PLAN (TTCP)

060.01 WHEN REQUIRED BY THE WORK, THE CONTRACTOR SHALL SUBMIT A TEMPORARY TRAFFIC CONTROL PLAN FOR REVIEW. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY TRAFFIC CONTROL PLANS AND SHALL SUBMIT AND COORDINATE TEMPORARY TRAFFIC CONTROL PLANS WITH CITY, COUNTY, AND/ OR TxDOT. THE PLAN SHALL BE BASED UPON APPLICABLE CITY, STATE, AND MUTCD REQUIREMENTS AND ESTABLISHED STANDARDS.

a) IN THE EVENT A TTCP HAS BEEN INCLUDED WITH THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL COMPLY WITH THE TTCP. THE CONTRACTOR IS RESPONSIBLE TO MONITOR THE PLAN AS THE WORK PROGRESSES AND SUBMIT MODIFICATIONS FOR APPROVAL AS NEEDED.

b) THE CONTRACTOR IS ALSO RESPONSIBLE TO PROVIDE THE INSPECT COPY OF THE SIGNED PLAN PRIOR TO BEGINNING WORK. THE CONTRACTOR IS RESPONSIBLE TO MONITOR THE PLAN AS THE WORK PROGRESSES AND SUBMIT MODIFICATIONS FOR APPROVAL AS NEEDED. THE CONTRACTOR IS ALSO RESPONSIBLE TO PROVIDE THE INSPECTOR A COPY OF THE SIGNED PLAN PRIOR TO BEGINNING WORK.

090. PROJECT MEETINGS

090.01 A PRECONSTRUCTION CONFERENCE SHALL BE HELD AS SOON AFTER THE AWARD AND EXECUTION OF THE CONTRACT AS POSSIBLE AND BEFORE ANY WORK AT THE SITE IS STARTED. THE CITY DEVELOPMENT ENGINEER SHALL PREPARE AND DISTRIBUTE THE MEETING AGENDA, PRESIDE OVER THE CONFERENCE, AND MAY DISTRIBUTE MEETING MINUTES.

090.02 PROGRESS MEETINGS SHALL BE HELD AS DEEMED NECESSARY BY THE ENGINEER/ARCHITECT OR OWNER OR AS REQUESTED BY THE CONTRACTOR THROUGHOUT THE DURATION OF THE PROJECT. THE MEETINGS SHALL BE HELD AT A LOCATION SELECTED BY OR APPROVED BY THE OWNER'S REPRESENTATIVE.

090.03 WHEN NECESSARY, A MANDATORY PROJECT CLOSE-OUT MEETING FOLLOWING FINAL COMPLETION OF THE WORK. THE CONTRACTOR WILL ENSURE ALL NECESSARY PERSONNEL ATTEND THE CLOSE-OUT MEETING TO SUBMIT AND REVIEW ALL CONTRACT CLOSE-OUT DOCUMENTATION. FOLLOW UP MANDATORY MEETINGS WILL BE SCHEDULED AS NEEDED TO COMPLETE THE CLOSE-OUT PROCESS. APPROVAL OF THE FINAL INVOICE IS DEPENDANT UPON RECEIPT OF CLOSE-OUT DOCUMENTATION.

MUNICIPAL UTILITY DISTRICT (MUD) NOTES:

1.

THE DISTRICT ENGINEER, JONES-HEROY & ASSOCIATES, INC. (KEN HEROY, PH:512-989-2200) SHALL BE CONTACTED 48 HOURS PRIOR TO:

- A.

PRE-CONSTRUCTION MEETINGS;
- B.

BEGINNING EACH PHASE OF CONSTRUCTION;
- C.

TESTING OF WATER AND /OR WASTEWATER LINES; AND,
- D.

FINAL WALK-THROUGH OF FACILITIES.

2.

THE DISTRICT OPERATOR SHALL BE CONTACTED 48 HOURS PRIOR TO:

- A.

PRE-CONSTRUCTION MEETINGS;
- B.

BEGINNING EACH PHASE OF CONSTRUCTION;
- C.

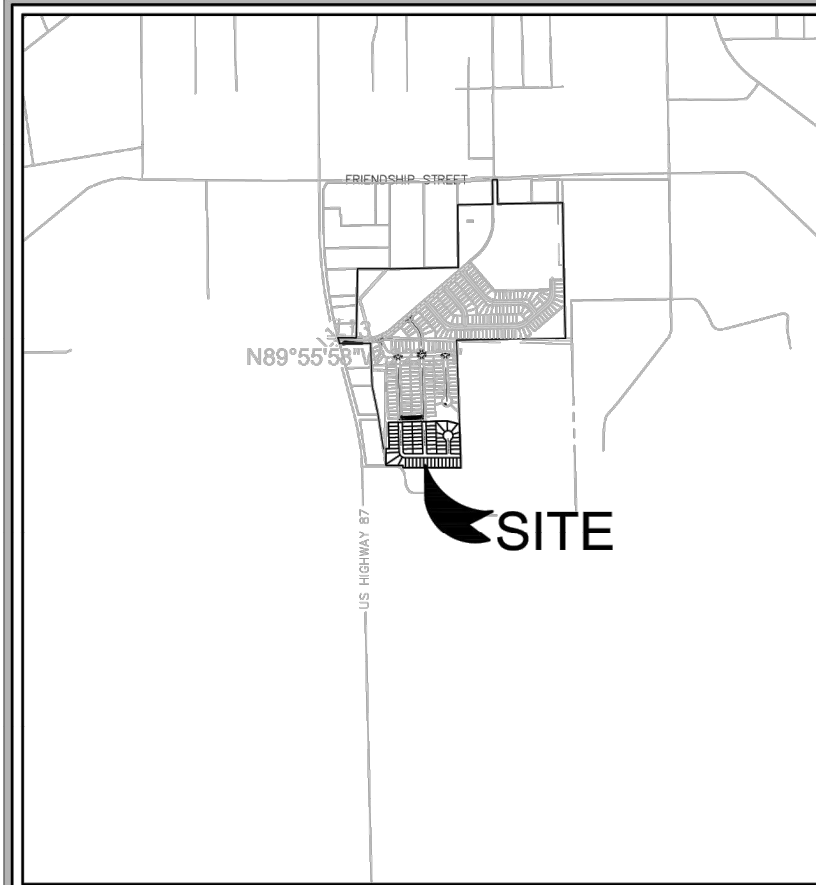
TESTING OF WATER AND/OR WASTEWATER LINES; AND,
- D.

FINAL WALK-THROUGH OF FACILITIES.

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



CERTIFICATE OF SURVEYOR

STATE OF TEXAS §
COUNTY OF GILLESPIE §

I, THE UNDERSIGNED, A LICENSED PROFESSIONAL ENGINEER/REGISTERED PROFESSIONAL SURVEYOR IN THE STATE OF TEXAS, HEREBY CERTIFY THAT THIS PLAT IS TRUE AND CORRECT AND WAS PREPARED FROM AN ACTUAL SURVEY OF THE PROPERTY MADE UNDER MY SUPERVISION ON THE GROUND.

LICENSED PROFESSIONAL ENGINEER OR
REGISTERED PROFESSIONAL SURVEYOR

Date

STATE OF TEXAS §
COUNTY OF GILLESPIE §

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED, KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATION THEREIN STATED. GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS ____ DAY OF ____.

NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS

TYPE OR PRINT NOTARY'S NAME

MY COMMISSION EXPIRES: _____

EASEMENT NOTE:

ANY PUBLIC UTILITY, INCLUDING THE CITY, SHALL HAVE THE RIGHT TO MOVE AND KEEP MOVED ALL OR PART OF ANY BUILDING, FENCES, TREES, SHRUBS, OTHER GROWTHS OR IMPROVEMENTS THAT IN ANY WAY ENDANGER OR INTERFERE WITH THE CONSTRUCTION, MAINTENANCE, OR EFFICIENCY OF ITS RESPECTIVE SYSTEMS ON ANY OF THE EASEMENTS OR RIGHT-OF-WAY SHOWN ON THE PLAT (OR FILED BY SEPARATE INSTRUMENT THAT IS ASSOCIATED WITH SAID PROPERTY); AND ANY PUBLIC UTILITY, INCLUDING THE CITY, SHALL HAVE THE RIGHT AT ALL TIMES OF INGRESS AND EGRESS TO AND FROM AND UPON SAID EASEMENTS FOR THE PURPOSE OF CONSTRUCTION, RECONSTRUCTION, INSPECTION, PATROLLING, MAINTAINING AND ADDING TO OR REMOVING ALL OR PART OF ITS RESPECTIVE SYSTEMS WITHOUT THE NECESSITY AT ANY TIME OF PROCURING THE PERMISSION OF ANYONE. EASEMENTS SHALL BE MAINTAINED BY PROPERTY OWNERS. THE CITY CAN MOVE TREES OR ANY OTHER IMPROVEMENTS AND DOES NOT HAVE THE RESPONSIBILITY TO REPLACE THEM.

ENGINEERS CERTIFICATE

I, THE UNDERSIGNED, A LICENSED PROFESSIONAL ENGINEER/REGISTERED PROFESSIONAL SURVEYOR IN THE STATE OF TEXAS, HEREBY CERTIFY THAT PROPER ENGINEERING CONSIDERATION HAS BEEN GIVEN TO THIS PLAT; AND THAT ALL ASPECTS OF IT ARE IN ACCORDANCE TO THE CITY OF FREDERICKSBURG'S SUBDIVISION ORDINANCES. EXCEPT FOR ANY VARIANCES GRANTED BY THE CITY COUNCIL.

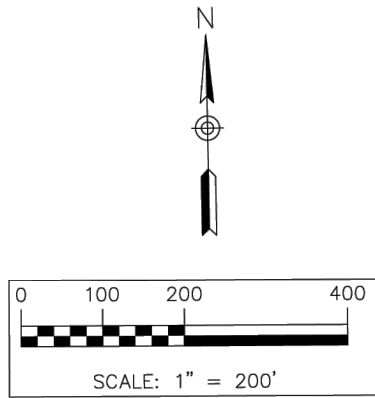
LICENSED PROFESSIONAL ENGINEER

Date



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

DATE OF PREPARATION: 2/27/2025



LEGEND:
● = FND 1/2" IRON PIN
○ = SET 1/2" IRON PIN W/
PLASTIC CAP STAMPED "HMT"
SF = SQUARE FEET
ESMT. = EASEMENT
D.E. = DRAINAGE EASEMENT
E.G.T.C.A. = ELECTRIC, GAS, TELEPHONE
& CABLE TELEVISION
ROW = RIGHT-OF-WAY
D.P.R. = DEED AND PLAT RECORDS,
GILLESPIE COUNTY, TEXAS
O.P.R. = OFFICIAL PUBLIC RECORDS,
GILLESPIE COUNTY, TEXAS

EASEMENT NOTES:

- 10' UTILITY EASEMENT ALONG ALL RIGHT-OF-WAY LINE AS SHOWN
- 10' UTILITY EASEMENT ALONG PROPERTY LINES AS NOTED
- 5' DRAINAGE EASEMENT ALONG ALL PROPERTY LINES OF EACH LOT AS SHOWN
- 15' FRONT BUILDING SETBACK LINE (20' FOR GARAGE)
- 15' SIDE STREET BUILDING SETBACK LINE AS SHOWN
- 10' REAR BUILDING SETBACK LINE AS SHOWN
- 5' SIDE BUILDING SETBACK LINE
- 30'x30' SIGHT EASEMENT AT ALL RIGHT-OF-WAY INTERSECTIONS AS SHOWN

SITE VISIBILITY RESTRICTION:

NO STRUCTURE, OBJECT OR PLANT OF ANY TYPE SHALL OBSTRUCT VISION FROM A HEIGHT OF TWENTY-FOUR (24) INCHES TO A HEIGHT OF TEN (10) FEET ABOVE THE TOP OF THE CURB, INCLUDING, BUT NOT LIMITED TO, BUILDINGS, FENCES, WALKS, SIGNS, TREES, SHRUBS, CARS, TRUCKS ETC., IN THE SIGHT VISIBILITY EASEMENT AS SHOWN ON THE PLAT. THESE SIGHT VISIBILITY EASEMENTS WILL REMAIN IN EFFECT UNTIL VACATED BY ORDINANCE ADOPTED BY THE CITY COUNCIL AND THE PROPERTY REPLANTED.

NOTES:

1. THE DEVELOPER DEDICATES THE SANITARY SEWER AND WATER MAINS UPON COMPLETION BY THE DEVELOPER AND ACCEPTANCE BY THE CITY OF FREDERICKSBURG. THE CITY OF FREDERICKSBURG WILL OWN AND MAINTAIN WITHIN TWO (2) YEARS OF THE ACCEPTANCE OF SAID SEWER AND WATER MAINS LOCATED WITHIN THE SUBDIVISION PLAT.
2. DAMAGE BY ANY UTILITY COMPANY TO ANY STRUCTURES, FENCES, WALLS OR LANDSCAPING OF ANY KIND PLACED WITHIN THE LIMITS OF THE EASEMENTS SHOWN ON THIS PLAT WILL BE THE RESPONSIBILITY OF THE PROPERTY OWNER. NO LANDSCAPING OR OTHER MODIFICATIONS ALTERING THE CROSS-SECTION OF DRAINAGE EASEMENTS ARE ALLOWED WITHOUT APPROVAL BY THE CITY OF FREDERICKSBURG. THE CITY OF FREDERICKSBURG SHALL HAVE THE RIGHT TO REQUIRE THE PROPERTY OWNERS TO REMOVE ANY OBSTRUCTIONS PLACED WITHIN THE PRIVATE DRAINAGE EASEMENTS AND THE RIGHT TO REQUIRE THE PROPERTY OWNERS TO MAKE MODIFICATIONS OR IMPROVEMENTS WITHIN THE EASEMENTS FOR PUBLIC WELFARE.
3. DRAINAGE EASEMENTS ARE TO BE MAINTAINED BY PROPERTY OWNER AND ACCESS TO BE GIVEN TO DEVELOPER OR AUTHORIZED PERSON FOR ANY ADDITIONAL CONSTRUCTION, MAINTENANCE, OR REPAIR OF ANY STRUCTURE WITHIN ANY DRAINAGE EASEMENT.
4. NO ONE SHALL INTERFERE WITH ANY NATURAL DRAINAGE PATTERN OR CONSTRUCTED DRAINAGE SYSTEM ESTABLISHED BY THE DEVELOPMENT BY ALTERING ANY SLOPES, CONTOUR OF ANY CHANNEL, SWALE OR EMBANKMENT OR TAKING OF ANY OTHER ACTION WHICH WILL OR LIKELY TO RETARD, CHANGE OR INTERFERE WITH DRAINAGE OR CREATE EROSION WITHIN THIS AREA.
5. ALL TOPOGRAPHIC INFORMATION, BENCHMARKS, AND DRAINAGE DESIGNS WERE COMPUTED AND STAKED ON THE GROUND BY AUSTIN SPATIAL TECHNOLOGIES, LLC.

CERTIFICATE OF COMPLETION, ACCEPTANCE, AND AUTHORIZATION TO FILE

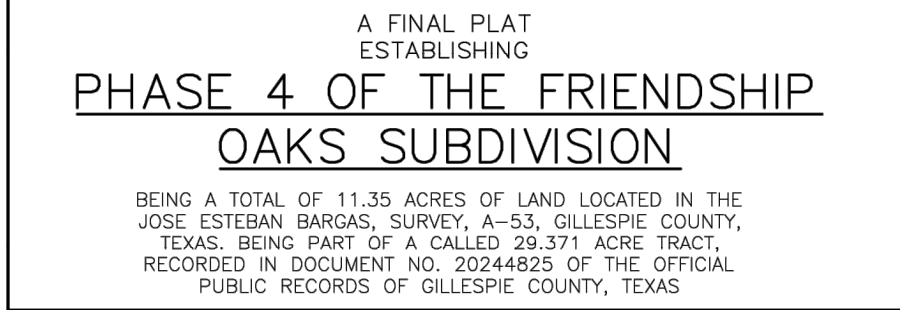
APPROVED

CHAIRMAN, PLANNING AND ZONING COMMISSION DATE
CITY OF FREDERICKSBURG, TEXAS

THE UNDERSIGNED, THE CITY SECRETARY OF THE CITY OF FREDERICKSBURG, TEXAS, HEREBY CERTIFIES THAT THE FOREGOING FINAL PLAT OF THE SUBDIVISION OR ADDITION TO THE CITY OF FREDERICKSBURG WAS SUBMITTED TO THE PLANNING AND ZONING COMMISSION ON THE ____ DAY OF ____, AND THE COMMISSION, BY FORMAL ACTION, THEN AND THERE ACCEPTED THE DEDICATIONS, CONVEYANCES OF LAND, IMPROVEMENTS AND ANY OTHER PROPERTY NECESSARY TO SERVE THE PLAT AND TO IMPLEMENT THE REQUIREMENTS OF THE PLATTING ORDINANCES, RULES, AND REGULATIONS AS SHOWN AND SET FORTH IN AND UPON SAID PLAT, THAT THE PUBLIC WORKS AND INFRASTRUCTURE IMPROVEMENTS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE CONSTRUCTION PLANS, HAVE BEEN TESTED AND HAVE BEEN ACCEPTED BY THE CITY, THAT THE FINAL PLAT IS NOW ACCEPTABLE FOR FILING WITH GILLESPIE COUNTY AND SAID COMMISSION FURTHER AUTHORIZED THE CHAIRMAN OF THE PLANNING AND ZONING COMMISSION TO NOTE THE ACCEPTANCE ON BEHALF OF THE CITY THEREOF BY SIGNING HIS/HER NAME AS HEREINAbove SUBSCRIBED.

WITNESS BY HAND ON THIS ____ DAY OF ____, 20__.

CITY SECRETARY
CITY OF FREDERICKSBURG, TEXAS



PROJECT NUMBER P- 1 OF 2

CERTIFICATE OF FINAL PLAT APPROVAL
(FOR FINAL PLATS WITH REQUIRED PUBLIC IMPROVEMENTS INSTALLED AFTER APPROVAL)

APPROVED

CHAIRMAN, PLANNING AND ZONING COMMISSION DATE
CITY OF FREDERICKSBURG, TEXAS

THE UNDERSIGNED, THE CITY SECRETARY OF THE CITY OF FREDERICKSBURG, TEXAS, HEREBY CERTIFIES THAT THE FOREGOING FINAL PLAT OF THE PHASE 3 OF THE FRIENDSHIP OAKS SUBDIVISION OR ADDITION TO THE CITY OF FREDERICKSBURG WAS SUBMITTED TO THE PLANNING AND ZONING COMMISSION ON THE ____ DAY OF ____, AND THE COMMISSION, BY FORMAL ACTION, THEN AND THERE ACCEPTED THE FINAL PLAT AND HEREBY AUTHORIZES THE DEVELOPER TO PROCEED WITH THE CONSTRUCTION OF PUBLIC WORKS IMPROVEMENTS AND INFRASTRUCTURE AS INDICATED ON THE ACCOMPANYING CONSTRUCTION PLANS, AND SAID COMMISSION FURTHER AUTHORIZES THE CHAIRMAN OF THE PLANNING AND ZONING COMMISSION TO NOTE THE ACCEPTANCE THEREOF BY SIGNING HIS/HER NAME AS HEREINAbove SUBSCRIBED.

WITNESS BY HAND THIS ____ DAY OF ____, 20__.

CITY SECRETARY
CITY OF FREDERICKSBURG, TEXAS

OWNER'S ACKNOWLEDGEMENT AND DEDICATION

STATE OF TEXAS §
COUNTY OF GILLESPIE §

I, (WE), THE UNDERSIGNED, OWNER(S) OF THE LAND SHOWN ON THIS PLAT WITHIN THE AREA DESCRIBED BY DOC #20193419 OFFICIAL PUBLIC RECORDS OF GILLESPIE COUNTY.

AND DESIGNATED HEREIN AS THE FRIENDSHIP OAKS, PHASE 2 SUBDIVISION TO THE CITY OF FREDERICKSBURG, TEXAS, AND WHOSE NAME IS SUBSCRIBED HERETO, HEREBY DEDICATE TO THE PUBLIC USE FOREVER BY FEE SIMPLE TITLE, FREE AND CLEAR OF ALL LIENS AND ENCUMBRANCES, ALL STREETS, THOROUGHFARES, ALLEYS, PARKS, AND TRAILS, AND TO THE PUBLIC USE FOREVER EASEMENTS FOR SIDEWALKS, STORM DRAINAGE FACILITIES, FLOODWAYS, WATER MAINS, WASTEWATER MAINS AND OTHER UTILITIES, AND ANY OTHER PROPERTY NECESSARY TO SERVE THE PLAT AND TO IMPLEMENT THE REQUIREMENTS OF THE PLATTING ORDINANCES, RULES, AND REGULATIONS THEREON SHOWN FOR THE PURPOSE OF CONSIDERATION THEREIN EXPRESSED.

OWNER: _____
DATE: _____

STATE OF TEXAS §
COUNTY OF GILLESPIE §

BEFORE ME, THE UNDERSIGNED AUTHORITY IN AND FOR ____, COUNTY, TEXAS, ON THIS DAY PERSONALLY APPEARED ____, KNOWN TO ME TO BE THE PERSON AND OFFICER WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE IS ____, AND THAT HE/SHE IS AUTHORIZED TO EXECUTE THE FOREGOING INSTRUMENT FOR THE PURPOSES AND CONSIDERATION THEREIN EXPRESSED, AND IN THE CAPACITY THEREIN STATED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, THIS THE ____ DAY OF ____, 20__.

NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS

TYPE OR PRINT NOTARY'S NAME

MY COMMISSION EXPIRES: _____

LIENHOLDER'S RATIFICATION OF PLAT DEDICATION

STATE OF TEXAS §
COUNTY OF GILLESPIE §

WHEREAS, _____, ACTING BY AND THROUGH THE UNDERSIGNED, ITS DULY AUTHORIZED AGENT, IS THE LIENHOLDER OF THE PROPERTY DESCRIBED HEREON, DOES HEREBY RATIFY ALL DEDICATIONS AND PROVISIONS OF THIS PLAT AS SHOWN.

LIENHOLDER: _____
DATE: _____

STATE OF TEXAS §
COUNTY OF GILLESPIE §

BEFORE ME, THE UNDERSIGNED AUTHORITY IN AND FOR ____, COUNTY, TEXAS, ON THIS DAY PERSONALLY APPEARED ____, KNOWN TO ME TO BE THE PERSON AND OFFICER WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE IS ____, AND THAT HE/SHE IS AUTHORIZED TO EXECUTE THE FOREGOING INSTRUMENT FOR THE PURPOSES AND CONSIDERATION THEREIN EXPRESSED, AND IN THE CAPACITY THEREIN STATED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, THIS THE ____ DAY OF ____, 20__.

NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS

TYPE OR PRINT NOTARY'S NAME

MY COMMISSION EXPIRES: _____

PLAT (1 OF 2)

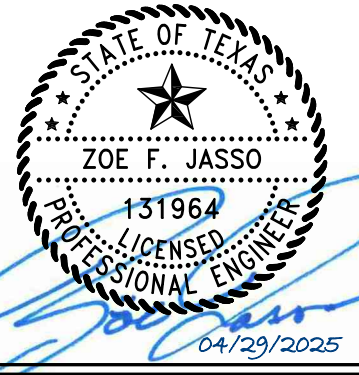
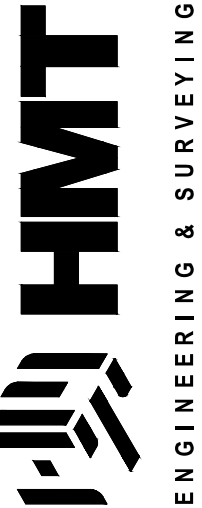
FRIENDSHIP OAKS, UNIT 4
FREDERICKSBURG, TEXAS

NO.	REVISION	DESCRIPTION	DATE

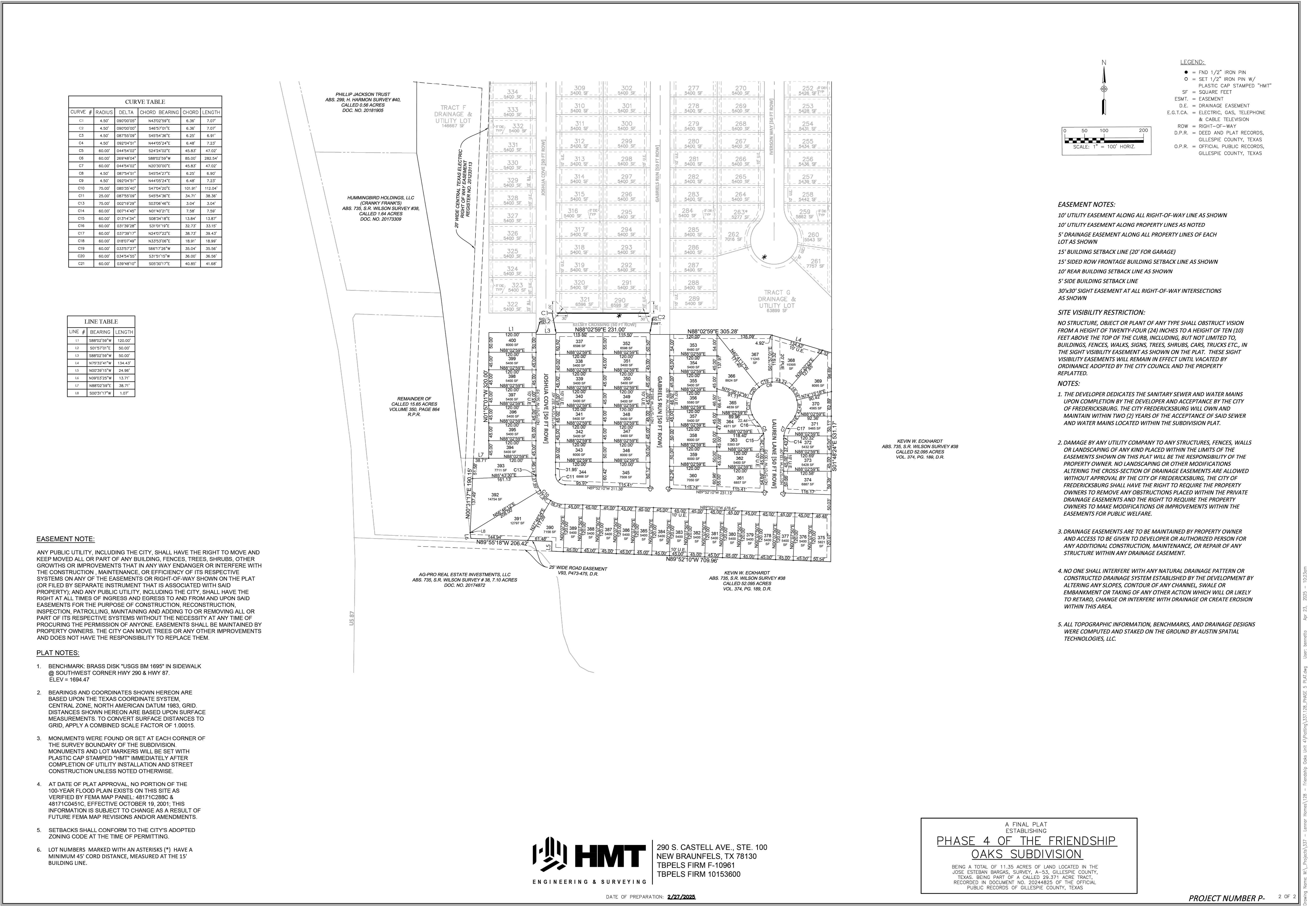
DATE: JANUARY 2025
DRAWN BY: RR
DESIGNED BY: JK
REVIEWED BY: ZJ
HMT PROJECT NO.: 337.128

SHEET
C0.2

290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 1053600



FOR REFERENCE ONLY



CURVE TABLE					
CURVE #	RADIUS	DELTA	CHORD BEARING	CHORD	LENGTH
C1	4.50'	090°00'00"	N43°52'58"E	6.36'	7.07'
C2	4.50'	090°00'00"	S46°57'00"E	6.36'	7.07'
C3	4.50'	087°50'00"	S45°54'58"E	6.25'	6.91'
C4	4.50'	092°04'00"	N44°05'24"E	6.48'	7.23'
C5	60.00'	044°54'00"	S24°24'02"E	45.83'	47.02'
C6	60.00'	269°48'04"	S88°02'59"W	85.00'	282.54'
C7	60.00'	044°54'00"	N20°50'00"E	45.83'	47.02'
C8	4.50'	087°54'51"	S45°54'12"E	6.25'	6.90'
C9	4.50'	092°04'51"	N44°05'24"E	6.48'	7.23'
C10	75.00'	085°35'40"	S47°04'20"E	101.31'	112.04'
C11	25.00'	087°58'00"	S45°54'58"E	34.71'	36.36'
C13	75.00'	002°19'28"	S03°06'46"E	3.04'	3.04'
C14	60.00'	007°14'48"	N01°40'21"E	7.58'	7.59'
C15	60.00'	013°14'34"	S08°34'18"E	13.84'	13.87'
C16	60.00'	031°39'28"	S31°01'19"E	32.73'	33.15'
C17	60.00'	037°39'17"	N24°57'22"E	38.73'	39.43'
C18	60.00'	018°07'48"	N33°53'08"E	18.91'	18.99'
C19	60.00'	033°57'27"	S88°17'28"W	35.04'	35.56'
C20	60.00'	034°54'20"	S37°31'15"W	38.20'	38.56'
C21	60.00'	039°48'10"	S09°30'17"E	40.82'	41.68'

LINE TABLE		
LINE #	BEARING	LENGTH
L1	S88°02'59"W	120.00'
L2	S01°57'01"E	50.00'
L3	S88°02'59"W	50.00'
L4	N75°32'41"W	134.43'
L5	N00°39'15"W	24.98'
L6	N09°03'25"W	13.71'
L7	N88°02'59"E	38.71'
L8	S00°31'12"W	1.07'

EASEMENT NOTE:

ANY PUBLIC UTILITY, INCLUDING THE CITY, SHALL HAVE THE RIGHT TO MOVE AND KEEP MOVED ALL OR PART OF ANY BUILDING, FENCES, TREES, SHRUBS, OTHER GROWTHS OR IMPROVEMENTS THAT IN ANY WAY ENDANGER OR INTERFERE WITH THE CONSTRUCTION, MAINTENANCE, OR EFFICIENCY OF ITS RESPECTIVE SYSTEMS ON ANY OF THE EASEMENTS OR RIGHT-OF-WAY SHOWN ON THE PLAT (OR FILED BY SEPARATE INSTRUMENT THAT IS ASSOCIATED WITH SAID PROPERTY); AND ANY PUBLIC UTILITY, INCLUDING THE CITY, SHALL HAVE THE RIGHT AT ALL TIMES OF INGRESS AND EGRESS TO AND FROM AND UPON SAID EASEMENTS FOR THE PURPOSE OF CONSTRUCTION, RECONSTRUCTION, INSPECTION, PATROLLING, MAINTAINING AND ADDING TO OR REMOVING ALL OR PART OF ITS RESPECTIVE SYSTEMS WITHOUT THE NECESSITY AT ANY TIME OF PROCURING THE PERMISSION OF ANYONE. EASEMENTS SHALL BE MAINTAINED BY PROPERTY OWNERS. THE CITY CAN MOVE TREES OR ANY OTHER IMPROVEMENTS AND DOES NOT HAVE THE RESPONSIBILITY TO REPLACE THEM.

PLAT NOTES:

- BENCHMARK: BRASS DISK "USGS BM 1695" IN SIDEWALK @ SOUTHWEST CORNER HWY 290 & HWY 87. ELEV = 1694.47
- BEARINGS AND COORDINATES SHOWN HEREON ARE BASED UPON THE TEXAS COORDINATE SYSTEM, CENTRAL ZONE, NORTH AMERICAN DATUM 1983. GRID. DISTANCES SHOWN HEREON ARE BASED UPON SURFACE MEASUREMENTS. TO CONVERT SURFACE DISTANCES TO GRID, APPLY A COMBINED SCALE FACTOR OF 1.00015.
- MONUMENTS WERE FOUND OR SET AT EACH CORNER OF THE SURVEY BOUNDARY OF THE SUBDIVISION. MONUMENTS AND LOT MARKERS WILL BE SET WITH PLASTIC CAP STAMPED "HMT" IMMEDIATELY AFTER COMPLETION OF UTILITY INSTALLATION AND STREET CONSTRUCTION UNLESS NOTED OTHERWISE.
- AT DATE OF PLAT APPROVAL, NO PORTION OF THE 100-YEAR FLOOD PLAIN EXISTS ON THIS SITE AS VERIFIED BY FEMA MAP PANEL: 48171C288C & 48171C0451C, EFFECTIVE OCTOBER 19, 2001. THIS INFORMATION IS SUBJECT TO CHANGE AS A RESULT OF FUTURE FEMA MAP REVISIONS AND/OR AMENDMENTS.
- SETBACKS SHALL CONFORM TO THE CITY'S ADOPTED ZONING CODE AT THE TIME OF PERMITTING.
- LOT NUMBERS MARKED WITH AN ASTERISK (*) HAVE A MINIMUM 45' CORD DISTANCE, MEASURED AT THE 15' BUILDING LINE.



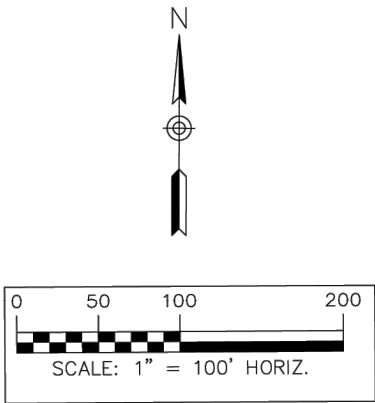
DATE OF PREPARATION: 2/27/2025

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

PHASE 4 OF THE FRIENDSHIP
OAKS SUBDIVISION

BEING A TOTAL OF 11.35 ACRES OF LAND LOCATED IN THE
JOSE ESTEBAN BARGAS, SURVEY, A-53, GILLESPIE COUNTY,
TEXAS, BEING PART OF A CALLED 29.371 ACRE TRACT,
RECORDED IN DOCUMENT NO. 20244825 OF THE OFFICIAL
PUBLIC RECORDS OF GILLESPIE COUNTY, TEXAS

PROJECT NUMBER P- 2 OF 2



- LEGEND:
- = FND 1/2" IRON PIN
 - = SET 1/2" IRON PIN W/
PLASTIC CAP STAMPED "HMT"
 - SF = SQUARE FEET
 - ESMT. = EASEMENT
 - D.E. = DRAINAGE EASEMENT
 - E.G.T.C.A. = ELECTRIC, GAS, TELEPHONE
& CABLE TELEVISION
 - ROW = RIGHT-OF-WAY
 - D.P.R. = DEED AND PLAT RECORDS,
GILLESPIE COUNTY, TEXAS
 - O.P.R. = OFFICIAL PUBLIC RECORDS,
GILLESPIE COUNTY, TEXAS

EASEMENT NOTES:

- 10' UTILITY EASEMENT ALONG ALL RIGHT-OF-WAY LINE AS SHOWN
- 10' UTILITY EASEMENT ALONG PROPERTY LINES AS NOTED
- 5' DRAINAGE EASEMENT ALONG ALL PROPERTY LINES OF EACH LOT AS SHOWN
- 15' BUILDING SETBACK LINE (20' FOR GARAGE)
- 15' SIDED ROW FRONTAGE BUILDING SETBACK LINE AS SHOWN
- 10' REAR BUILDING SETBACK LINE AS SHOWN
- 5' SIDE BUILDING SETBACK LINE
- 30'x30' SIGHT EASEMENT AT ALL RIGHT-OF-WAY INTERSECTIONS AS SHOWN

SITE VISIBILITY RESTRICTION:

NO STRUCTURE, OBJECT OR PLANT OF ANY TYPE SHALL OBSTRUCT VISION FROM A HEIGHT OF TWENTY-FOUR (24) INCHES TO A HEIGHT OF TEN (10) FEET ABOVE THE TOP OF THE CURB, INCLUDING, BUT NOT LIMITED TO, BUILDINGS, FENCES, WALKS, SIGNS, TREES, SHRUBS, CARS, TRUCKS ETC., IN THE SIGHT VISIBILITY EASEMENT AS SHOWN ON THE PLAT. THESE SIGHT VISIBILITY EASEMENTS WILL REMAIN IN EFFECT UNTIL VACATED BY ORDINANCE ADOPTED BY THE CITY COUNCIL AND THE PROPERTY REPLANTED.

NOTES:

- THE DEVELOPER DEDICATES THE SANITARY SEWER AND WATER MAINS UPON COMPLETION BY THE DEVELOPER AND ACCEPTANCE BY THE CITY OF FREDERICKSBURG. THE CITY FREDERICKSBURG WILL OWN AND MAINTAIN WITHIN TWO (2) YEARS OF THE ACCEPTANCE OF SAID SEWER AND WATER MAINS LOCATED WITHIN THE SUBDIVISION PLAT.
- DAMAGE BY ANY UTILITY COMPANY TO ANY STRUCTURES, FENCES, WALLS OR LANDSCAPING OF ANY KIND PLACED WITHIN THE LIMITS OF THE EASEMENTS SHOWN ON THIS PLAT WILL BE THE RESPONSIBILITY OF THE PROPERTY OWNER. NO LANDSCAPING OR OTHER MODIFICATIONS ALTERING THE CROSS-SECTION OF DRAINAGE EASEMENTS ARE ALLOWED WITHOUT APPROVAL BY THE CITY OF FREDERICKSBURG, THE CITY OF FREDERICKSBURG SHALL HAVE THE RIGHT TO REQUIRE THE PROPERTY OWNERS TO REMOVE ANY OBSTRUCTIONS PLACED WITHIN THE PRIVATE DRAINAGE EASEMENTS AND THE RIGHT TO REQUIRE THE PROPERTY OWNERS TO MAKE MODIFICATIONS OR IMPROVEMENTS WITHIN THE EASEMENTS FOR PUBLIC WELFARE.
- DRAINAGE EASEMENTS ARE TO BE MAINTAINED BY PROPERTY OWNER AND ACCESS TO BE GIVEN TO DEVELOPER OR AUTHORIZED PERSON FOR ANY ADDITIONAL CONSTRUCTION, MAINTENANCE, OR REPAIR OF ANY STRUCTURE WITHIN ANY DRAINAGE EASEMENT.
- NO ONE SHALL INTERFERE WITH ANY NATURAL DRAINAGE PATTERN OR CONSTRUCTED DRAINAGE SYSTEM ESTABLISHED BY THE DEVELOPMENT BY ALTERING ANY SLOPES, CONTOUR OF ANY CHANNEL, SWALE OR EMBANKMENT OR TAKING OF ANY OTHER ACTION WHICH WILL OR LIKELY TO RETARD, CHANGE OR INTERFERE WITH DRAINAGE OR CREATE EROSION WITHIN THIS AREA.
- ALL TOPOGRAPHIC INFORMATION, BENCHMARKS, AND DRAINAGE DESIGNS WERE COMPUTED AND STAKED ON THE GROUND BY AUSTIN SPATIAL TECHNOLOGIES, LLC.

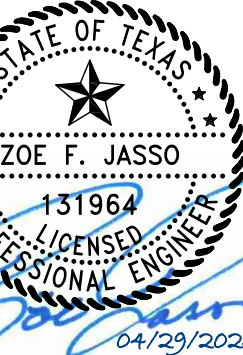
PLAT (2 OF 2)

FRIENDSHIP OAKS, UNIT 4
FREDERICKSBURG, TEXAS

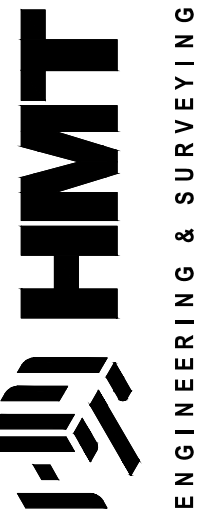
NO.	REVISION DESCRIPTION	REVISION DATE

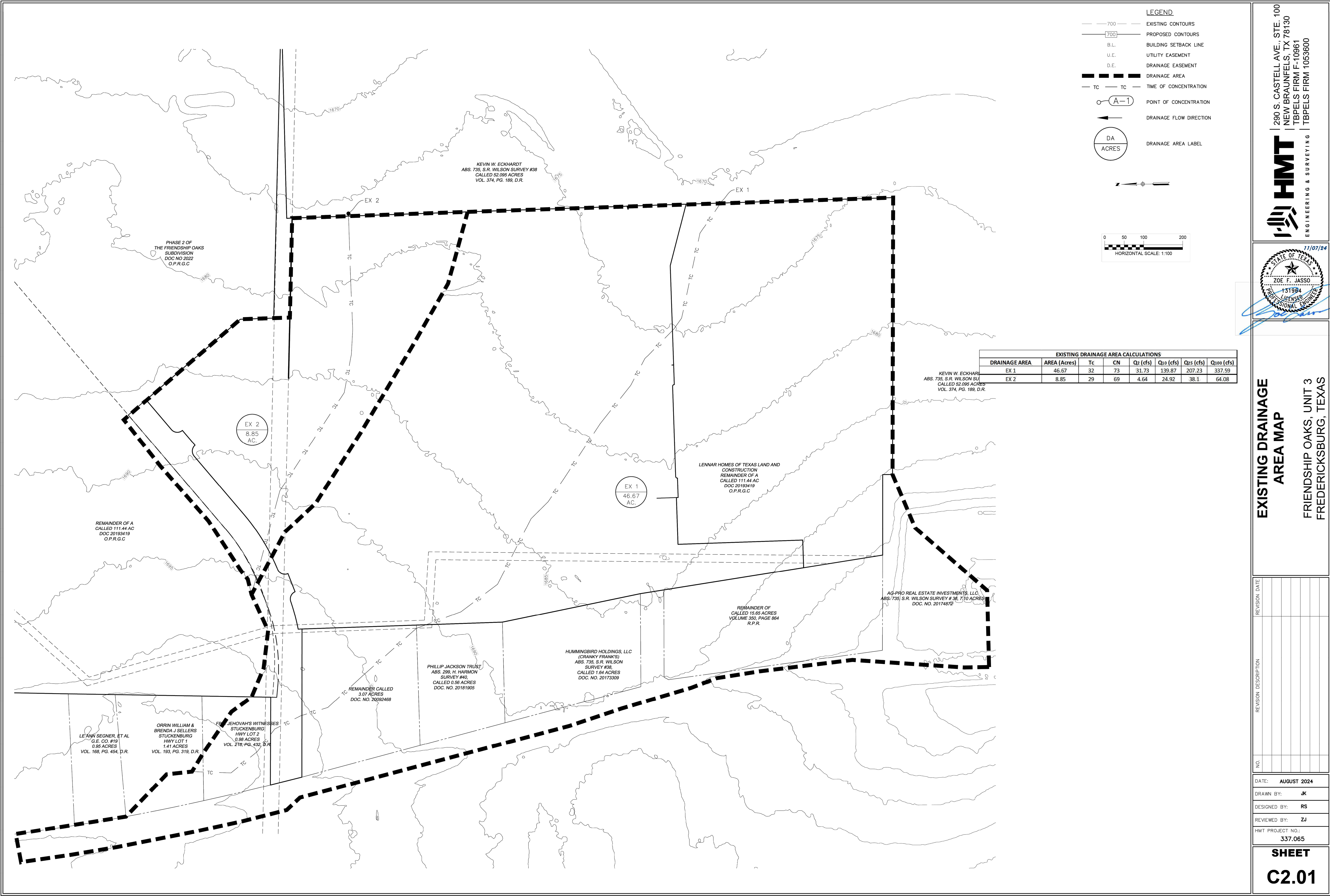
DATE:	JANUARY 2025
DRAWN BY:	RR
DESIGNED BY:	JK
REVIEWED BY:	ZJ
HMT PROJECT NO.:	337.128

SHEET
C0.3



290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 1053600





HMT
ENGINEERING & SURVEYING

290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 1053600

**EXISTING DRAINAGE
AREA MAP**
FRIENDSHIP OAKS, UNIT 3
FREDERICKSBURG, TEXAS

NO.	REVISION DESCRIPTION	REVISION DATE

DATE: **AUGUST 2024**
DRAWN BY: **JK**
DESIGNED BY: **RS**
REVIEWED BY: **ZJ**
HMT PROJECT NO.: **337.065**

**SHEET
C2.01**

HMT
ENGINEERING & SURVEYING

290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 1053600

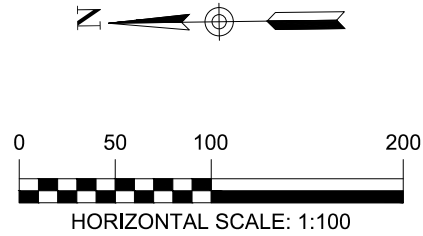
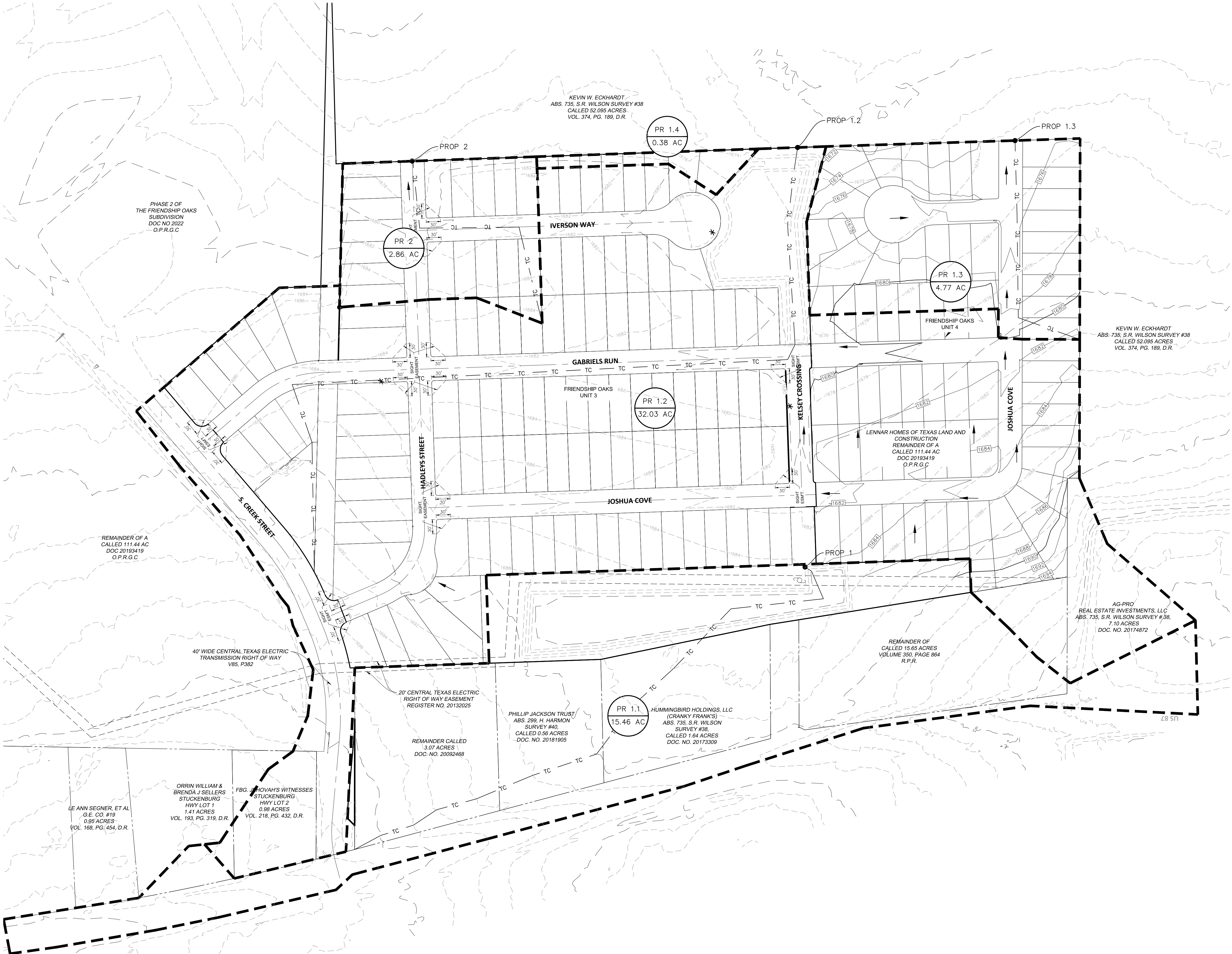
**EXISTING DRAINAGE
AREA MAP**
FRIENDSHIP OAKS, UNIT 4
FREDERICKSBURG, TEXAS

NO.	REVISION DESCRIPTION	REVISION DATE

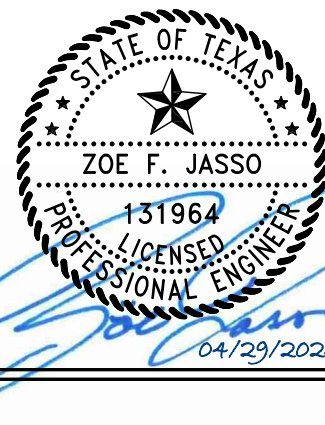
DATE: **JANUARY 2025**
DRAWN BY: **RR**
DESIGNED BY: **JK**
REVIEWED BY: **ZJ**
HMT PROJECT NO.: **337.128**

**SHEET
C2.1**

PROPOSED DRAINAGE AREA CALCULATIONS							
DRAINAGE AREA	AREA (Acres)	Tc	CN	Q2 (cfs)	Q10 (cfs)	Q25 (cfs)	Q100 (cfs)
PR 1.1	15.46	23.81	86	25.54	72.5	98.55	147.18
PR 1.2	32.03	34.8	85	43	122.75	167.08	249.88
PR 1.3	4.77	14.9	88	11.13	29.63	39.78	58.7
PR 1.4	0.38	15.4	61	0.116	1.102	1.81	3.26
COMBINED PR 1 W/ POND				27.94	138.37	192.62	287.68
PR 2	2.86	25.7	85	4.51	13.16	17.99	27.01



- 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
 - — PROPERTY BOUNDARY



**PROPOSED DRAINAGE
AREA MAP**

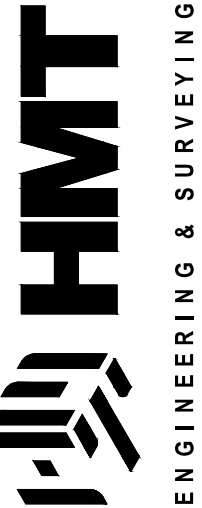
FRIENDSHIP OAKS, UNIT 4
FREDERICKSBURG, TEXAS

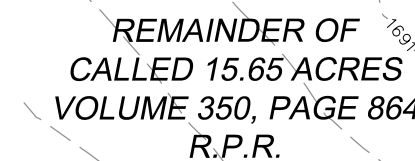
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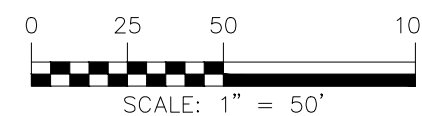




AG-PRO REAL ESTATE INVESTMENTS, LLC
ABS. 735, S.R. WILSON SURVEY # 38, 7.10 ACRES
DOC. NO. 20174872

KEVIN W. ECKHARDT
ABS. 735, S.R. WILSON SURVEY #38
CALLED 52.095 ACRES
VOL. 374, PG. 189, D.R.

KEVIN W. ECKHARDT
ABS. 735, S.R. WILSON SURVEY #38
CALLED 52.095 ACRES
VOL. 374, PG. 189, D.R.



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 C3.03

➔ DRAINAGE FLOW DIRECTION

— — — GRADE BREAK

EF=XXX.X MINIMUM FINISHED FLOOR ELEVATION

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. HUD DETAILS SHOWN ON SHEET C3.03.
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.

GRADING PLAN

FRIENDSHIP OAKS, UNIT 4
FREDERICKSBURG, TEXAS

[illegible]

DATE: JANUARY 2025

DRAWN BY: RR

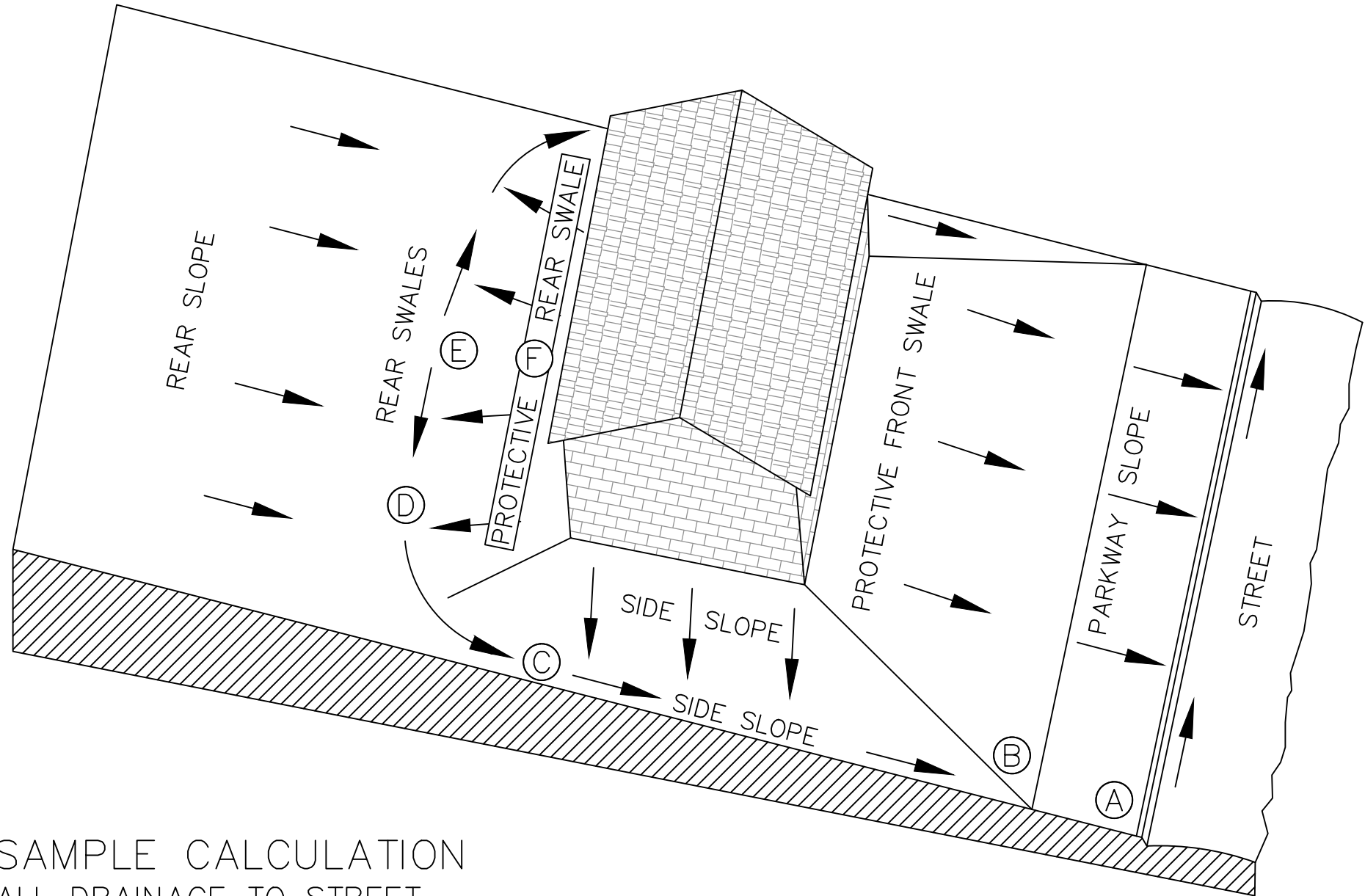
DESIGNED BY: JK

REVIEWED BY: ZJ

HMT PROJECT NO.:
337.128

SHEET
C3.1

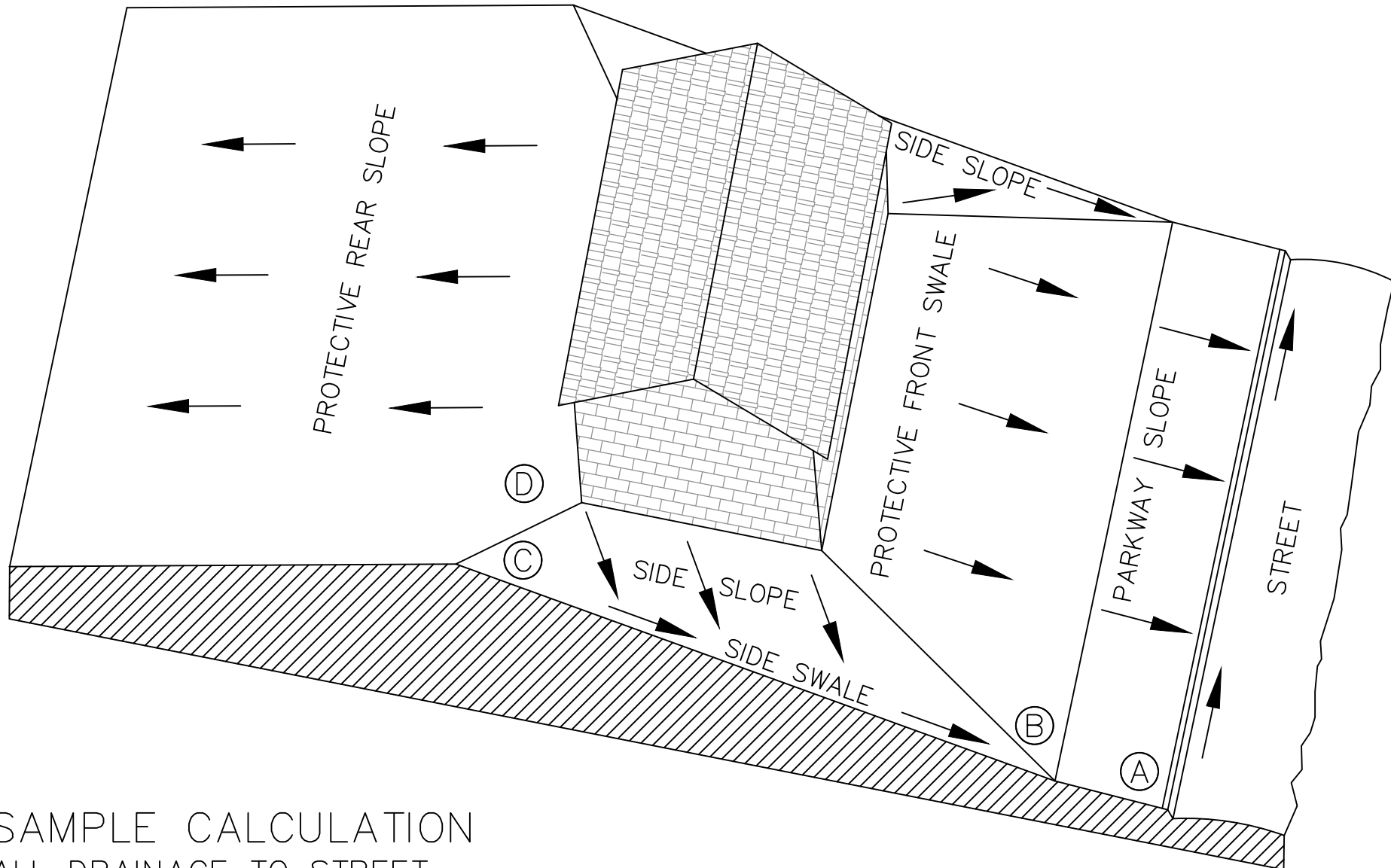
THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR WILL AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE INCURRED BY THEIR FAILURE 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.



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		CALCULATIONS FOR 2% SWALES
A	CURB-TOP ON LOT LINE EXTENSION AT HIGH LOT CORNER					
AB	PARKWAY SLOPE: 15' GRASS AND WALK AT 1/4"/FT. (2%)	4"	(0.3')	2"	(0.2')	CALCULATIONS FOR 2% SWALES 15 x 0.25' = 3¾" 85 x 0.25' = 21¾" 16 x 0.25' = 4" 13 x 0.25' = 3¾" 10 x 0.25' = 2½" 34¾"
BC	SIDE SWALE: 85' GRASS AT 1/4"/FT. (2%)	21"	(1.8')	11"	(0.9')	
CD	SWALE TURN WITH 10' RADIUS:16' GRASS AT 1/4"/FT. (2%)	4"	(0.3')	2"	(0.2')	
DE**	REAR SWALE: 13' GRASS AT 1/4"/FT. (2%)	3"	(0.3')	2"	(0.2')	
EF*	PROTECTIVE REAR SLOPE UP FROM HIGH POINT OF SWALES	3"	(0.3')	3"	(0.3')	
SUB-TOTAL AF FROM CURB TOP TO GROUND AT REAL BLDG WALL		35"	(3.0')	20"	(1.7')	34¾"
MINIMUM RISE FROM CURB TOP TO SLAB FLOOR: 35" + 8"		43"	(3.6')	28"	(2.3')	CALCULATIONS USE 0.25" PER FOOT GRADIENT FOR A 2% SWALE.
MINIMUM RISE FOR WOOD FLOOR USING 8" JOISTS: 35" + 9"		54"	(4.5')	39"	(3.3')	
* WHERE THERE IS A HIGH BANK NEARBY OR A LONG SLOPE TOWARD HOUSE, A MINIMUM 6" PROTECTIVE SLOPE IS REQUIRED.						
** LENGTH DE = [1/2(LOT WIDTH - (2x SWALE TURN RADIUS))] - [LOT WIDTH x (STREET GRADIENT x SWALE GRADIENT)]						

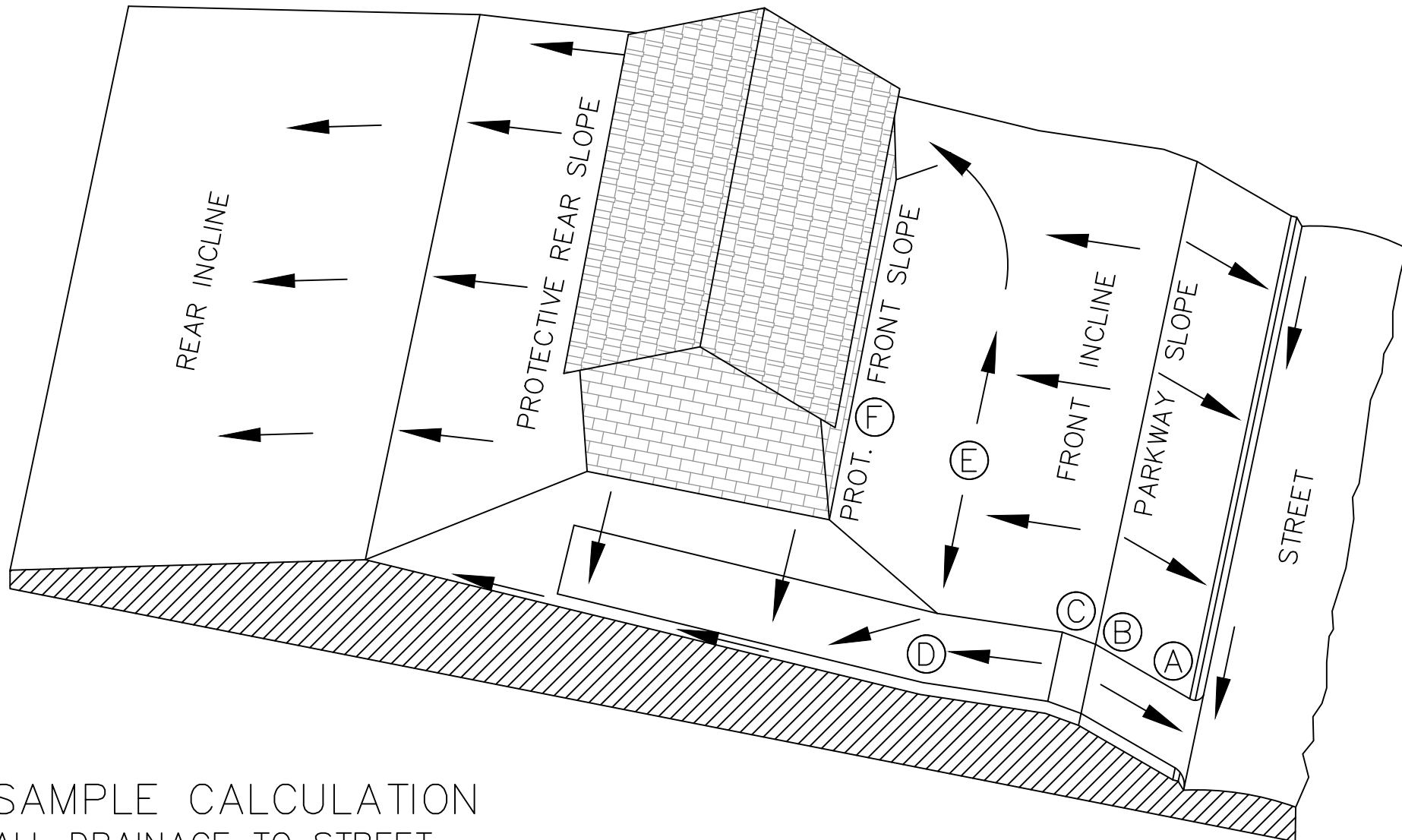
LOT TYPE ①



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		CALCULATIONS FOR 2% SWALES
A	CURB-TOP ON LOT LINE EXTENSION AT HIGH LOT CORNER					
AB	PARKWAY SLOPE: 15' GRASS AND WALK AT 1/4"/FT. (2%)	4"	(0.3')	2"	(0.2')	15 x 0.25' = 3 3/4" 85 x 0.25' = 21 3/4" 6 x 0.25' = 1 1/2" 26 1/2"
BC	SIDE SWALE: 85' GRASS AT 1/4"/FT. (2%)	21"	(1.8')	11"	(0.9')	
CD*	PROTECTIVE SIDE SLOPE @ REAR BLDG. WALL EXTENSION	3"	(0.3')	3"	(0.3')	
SUB-TOTAL 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')	CALCULATIONS USE 0.25" PER FOOT GRADIENT FOR A 2% SWALE.
MINIMUM RISE FOR WOOD FLOOR USING 8" JOISTS: 35" + 9"		46"	(3.8')	35"	(2.9')	
* WHERE THERE IS A HIGH BANK NEARBY OR A LONG SLOPE TOWARD HOUSE, A MINIMUM 6" PROTECTIVE SLOPE IS REQUIRED.						

LOT TYPE ②



SAMPLE CALCULATION
ALL DRAINAGE TO STREET

SAMPLE COMPUTATION OF GRADING CONTROL LINE $\overline{AF}$ FOR A 60' WIDE LOT WITH A 25' BUILDING LINE, 13.5% DRIVEWAY, AND 16' FRONT SWALE $\overline{DE}$ AT 2.0%.				RESULTS OF 1% SWALES		CALCULATIONS FOR SWALES
A	CURB-TOP HIGH SIDE OF DRIVE NEAR LOW LOT CORNER					$15 \times 0.25' = 3\frac{3}{4}"$
$\overline{AB}$	PARKWAY SLOPE: 15' GRASS AND WALK AT 1/4"/FT. (2%)	4" (0.3')	2" (0.2')			$0 \times 0.25' = 0"$
$\overline{BC}$	DRIVEWAY GRADE CHANGE: 4' VERTICAL CURVE FROM UP-GRADE DRIVE IN STREET TO DOWN-GRADE DRIVE ON LOT	0" (0.0')	0" (0.0')			$-11 \times 1.625' = -17\frac{3}{4}"$
$\overline{CD}$	DRIVEWAY DOWN-GRADE TO POINT 10 FEET OUT FROM FRONT OF BUILDING: -11' AT 1 $\frac{1}{8}$ "/FT (13.5%)	-18" (-1.5')	-18" (-1.5')			$16 \times 0.25' = 4"$
$\overline{DE}$	FRONT SWALE: 16' GRASS AT 1/4"/FT. (2%)	4" (0.3')	2" (0.2')			$10 \times 0.25' = 2\frac{1}{2}"$
$\overline{EF}^*$	PROT. FRONT SLOPE UP FROM HIGH POINT OF SWALES	3" (0.3')	3" (0.3')			$\underline{-7\frac{1}{2}"}$
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')			
* WHERE THERE IS A HIGH BANK NEARBY OR A LONG SLOPE TOWARD HOUSE, A MINIMUM 6" PROTECTIVE SLOPE IS REQUIRED.						

LOT TYPE ③

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 FHWA/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 COMPACTION 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. COMPACTION 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.

- THE LAND TO BE FILLED (PREPARED SUBGRADE) SHALL BE PREPARED AND TESTED AT A FREQUENCY AS DETERMINED BY THE GEOTECHNICAL ENGINEER.
- 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.
- FILLS SHALL BE TESTED AT A MAXIMUM OF EACH TWELVE INCHES (12") OF FILL.
- 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.

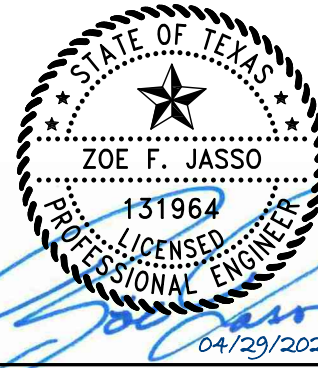
HUD 79-G

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.



GRADING DETAILS

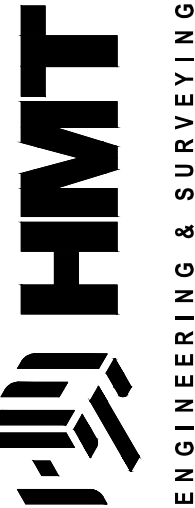
FRIENDSHIP OAKS, UNIT 4
FREDERICKSBURG, TEXAS

NO.	REVISION DESCRIPTION		REVISION DATE	

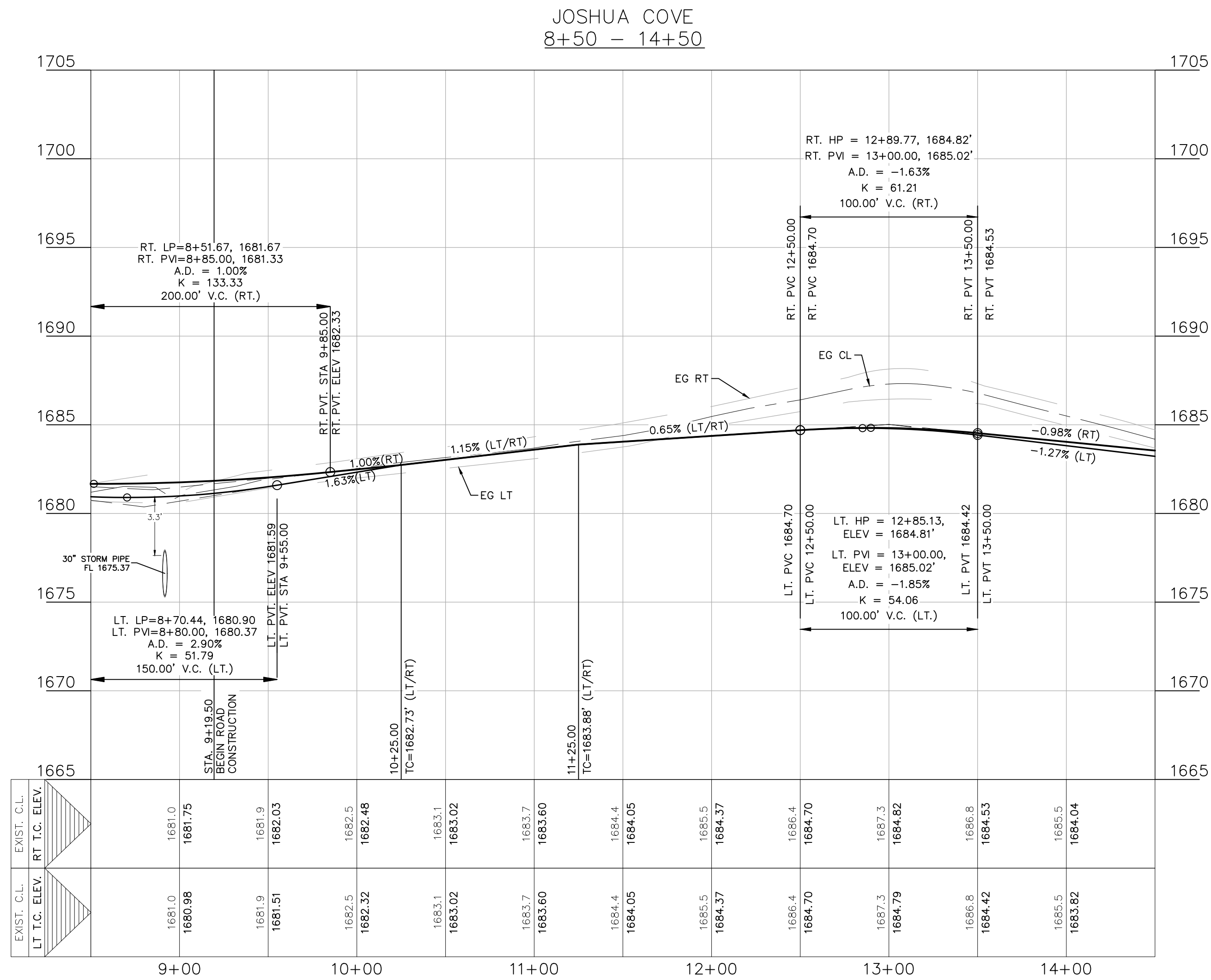
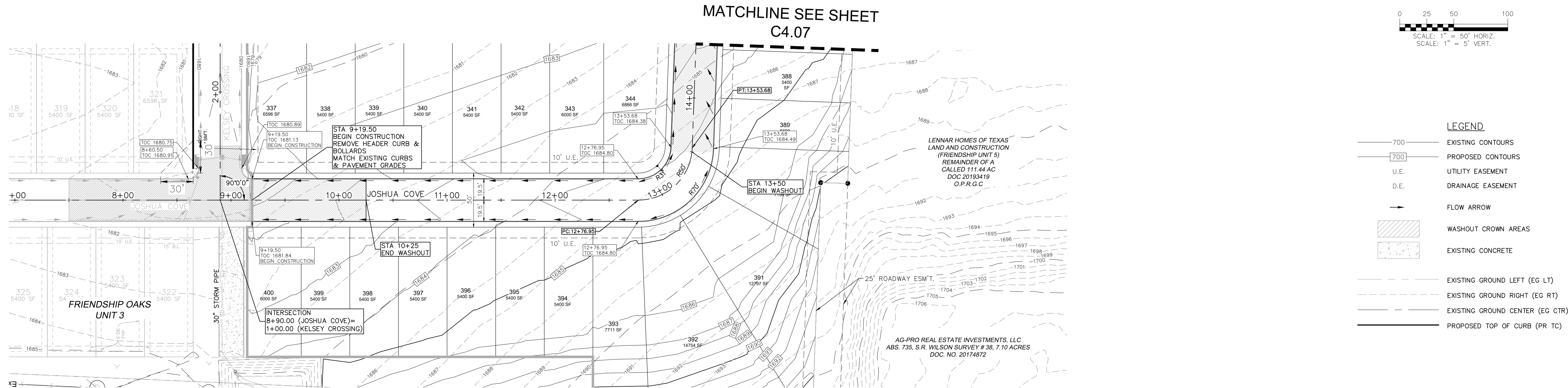
DATE:	JANUARY 2025
DRAWN BY:	RR
DESIGNED BY:	JK
REVIEWED BY:	ZJ
HMT PROJECT NO.:	337.128

SHEET
C3.2

290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 1053600



Drawing Name: W:_Projects\337 - Friendship Oaks Unit 3\337_128_JOSHUA COVE.dwg User: janhuk Apr 23, 2025 - 5:25pm



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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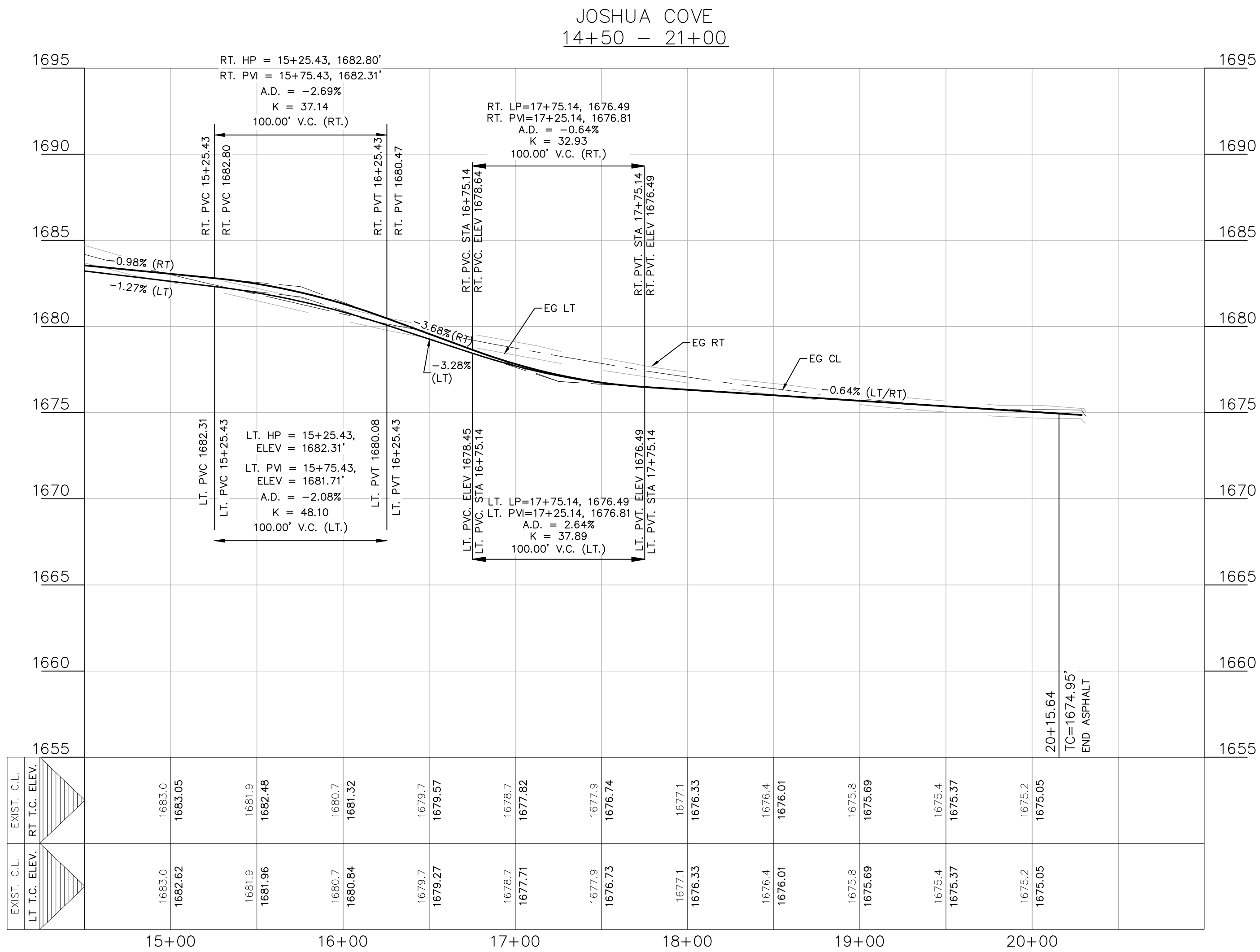


JOSHUA COVE
PLAN & PROFILE
(1 OF 2)
FRIENDSHIP OAKS, UNIT 4
FREDERICKSBURG, TEXAS

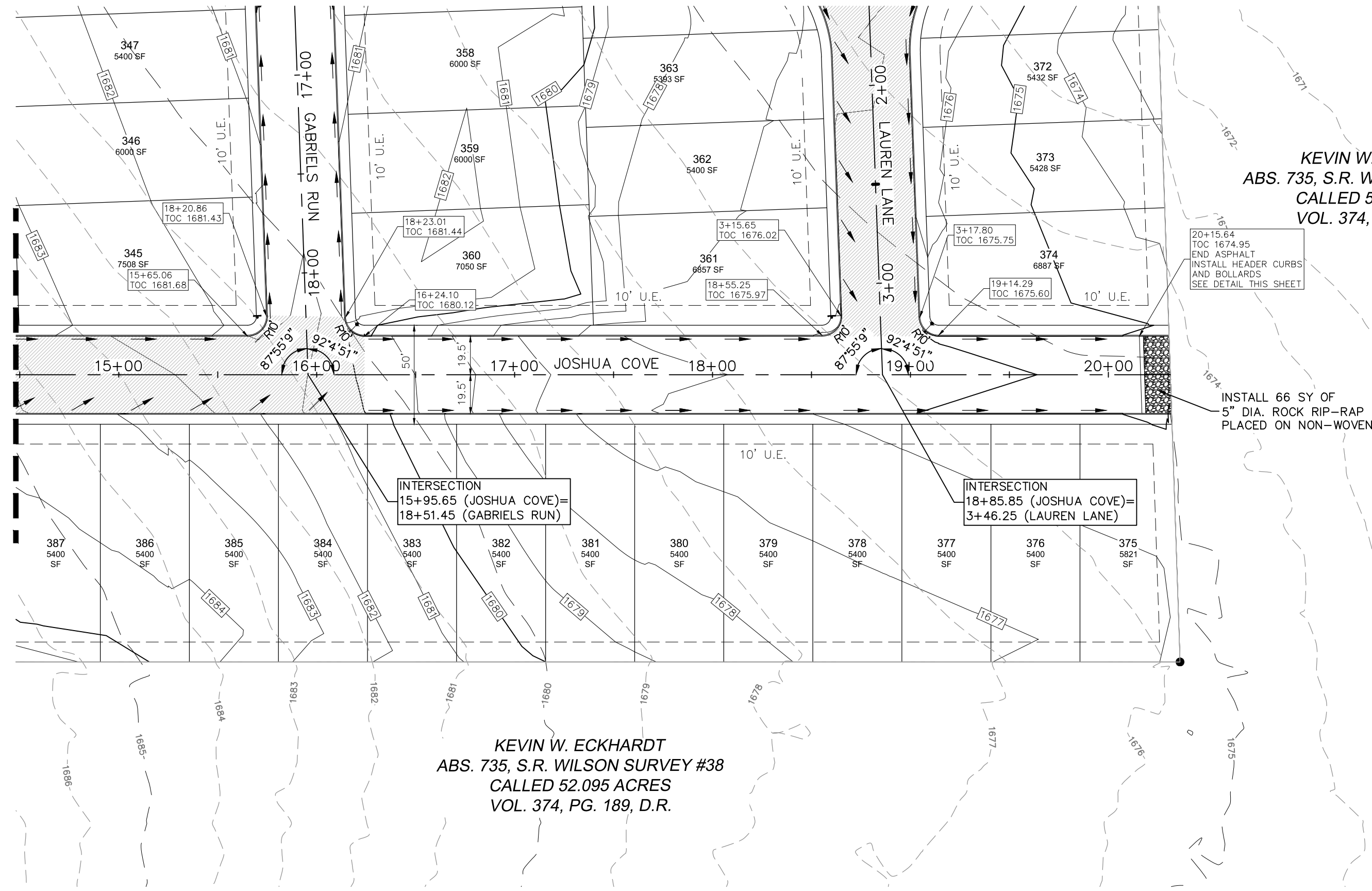
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REVIEWED BY: ZJ
HMT PROJECT NO.: 337.128

SHEET
C4.1

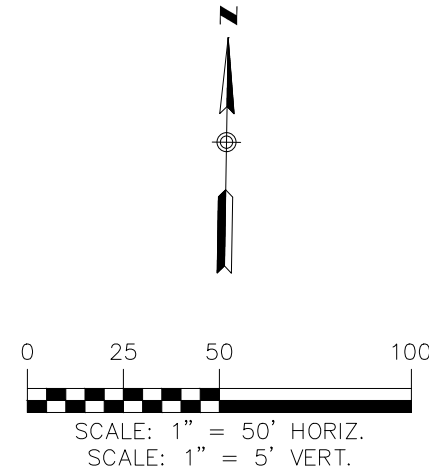


MATCHLINE SEE SHEET
C4.07



KEVIN W. ECKHARDT
ABS. 735, S.R. WILSON SURVEY #38
CALLED 52.095 ACRES
VOL. 374, PG. 189, D.R.

KEVIN W. ECKHARDT
ABS. 735, S.R. WILSON SURVEY #38
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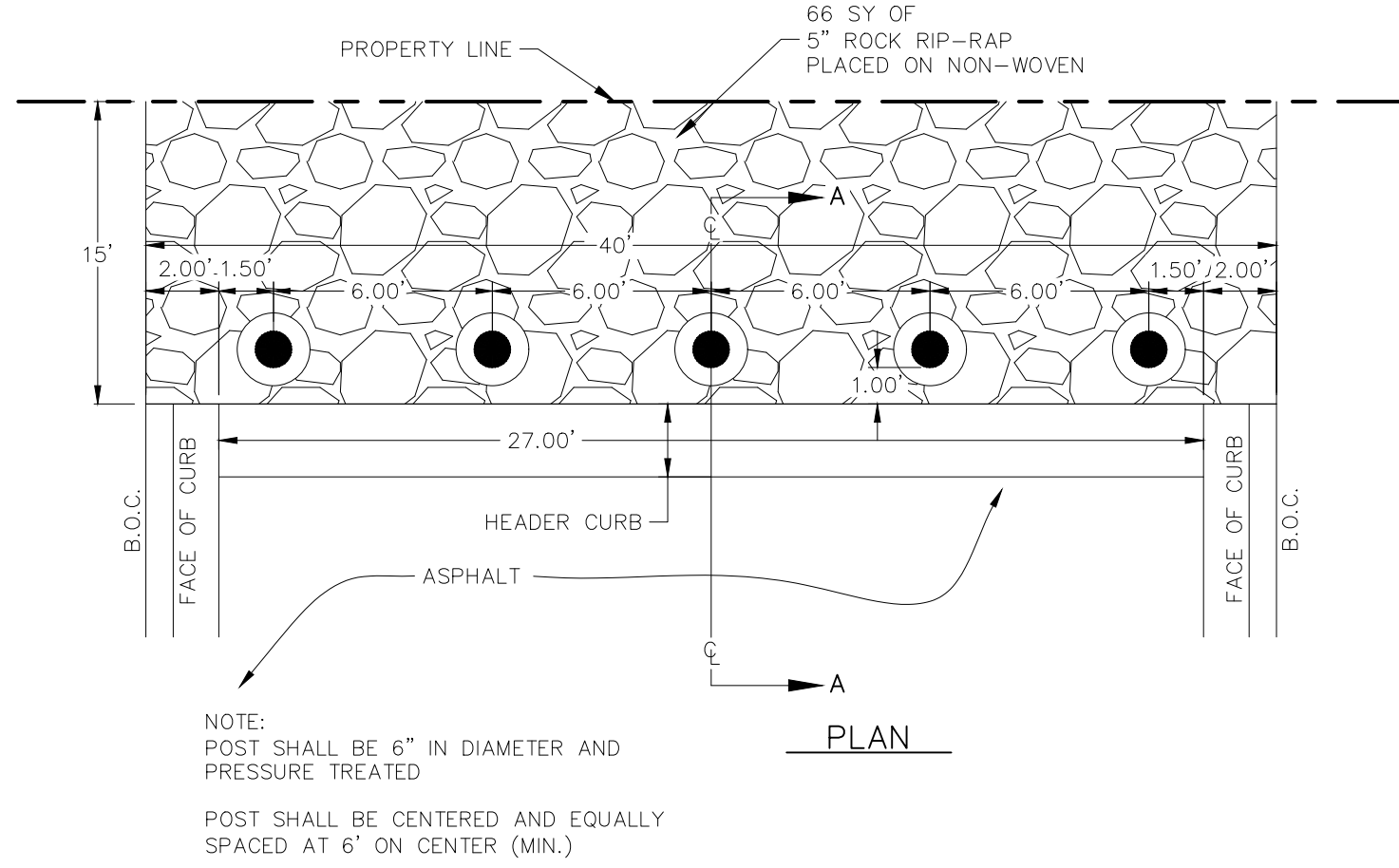


LEGEND

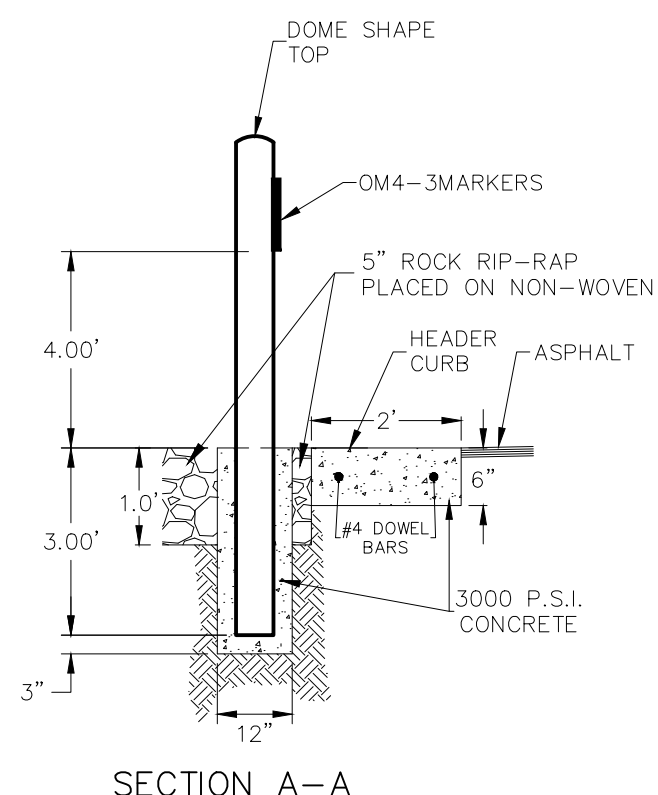
- 700 EXISTING CONTOURS
- 700 PROPOSED CONTOURS
- U.E. UTILITY EASEMENT
- D.E. DRAINAGE EASEMENT
- FLOW ARROW
- WASHOUT CROWN AREAS
- EXISTING CONCRETE
- EXISTING GROUND LEFT (EG LT)
- EXISTING GROUND RIGHT (EG RT)
- EXISTING GROUND CENTER (EG CTR)
- PROPOSED TOP OF CURB (PR TC)

NOTES

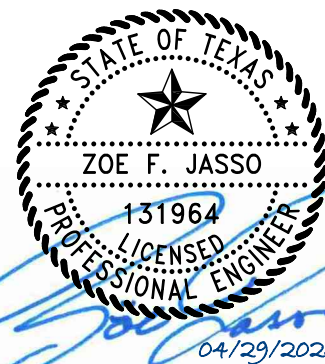
- LOCAL STREETS WERE DESIGNED TO POSTED SPEED LIMIT OF 30 MPH.
- IN WASHOUT CROWN AREAS, THE CURB ON THE HIGH SIDE OF THE STREET SHOULD BE SPILL CURB AS DESIGNATED ON THE PLANS.
- RADIUS ON CURB RETURN IS 10 FT UNLESS OTHERWISE STATED



BOLLARD DETAIL
NOT TO SCALE



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JOSHUA COVE
PLAN & PROFILE
(2 OF 2)
FRIENDSHIP OAKS, UNIT 4
FREDERICKSBURG, TEXAS

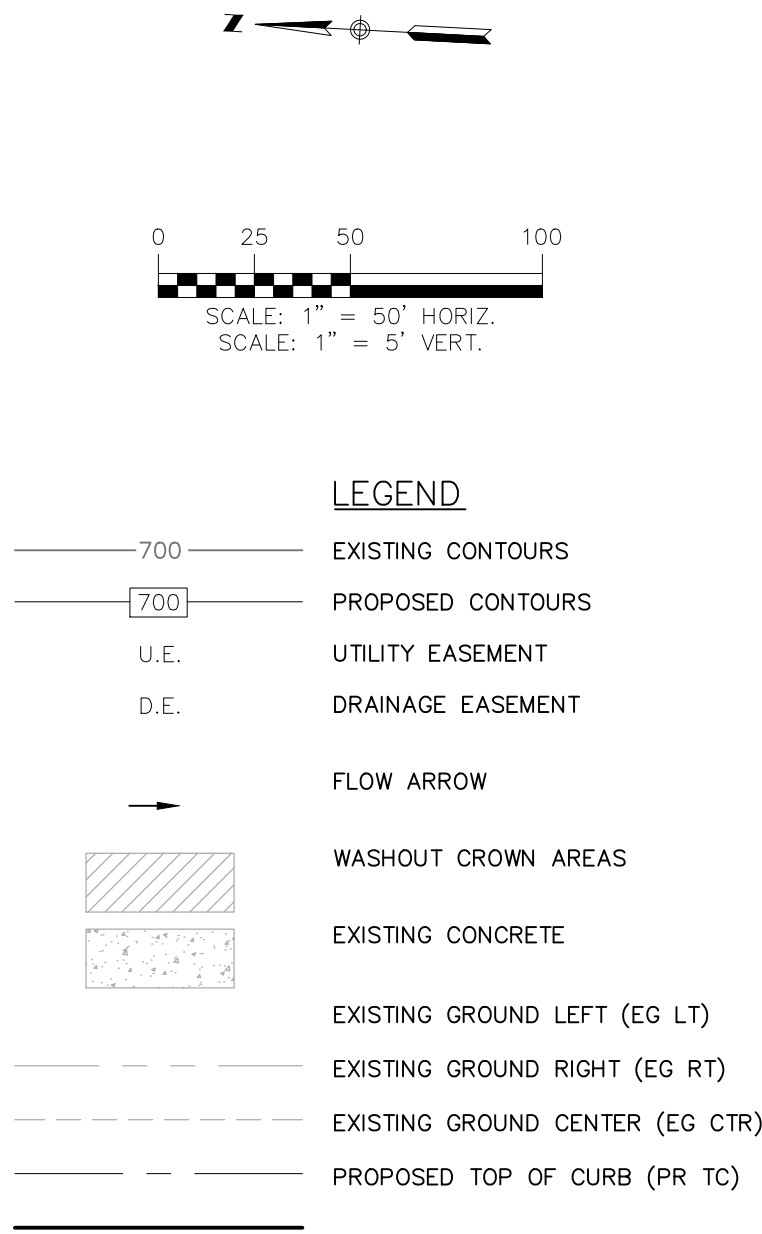
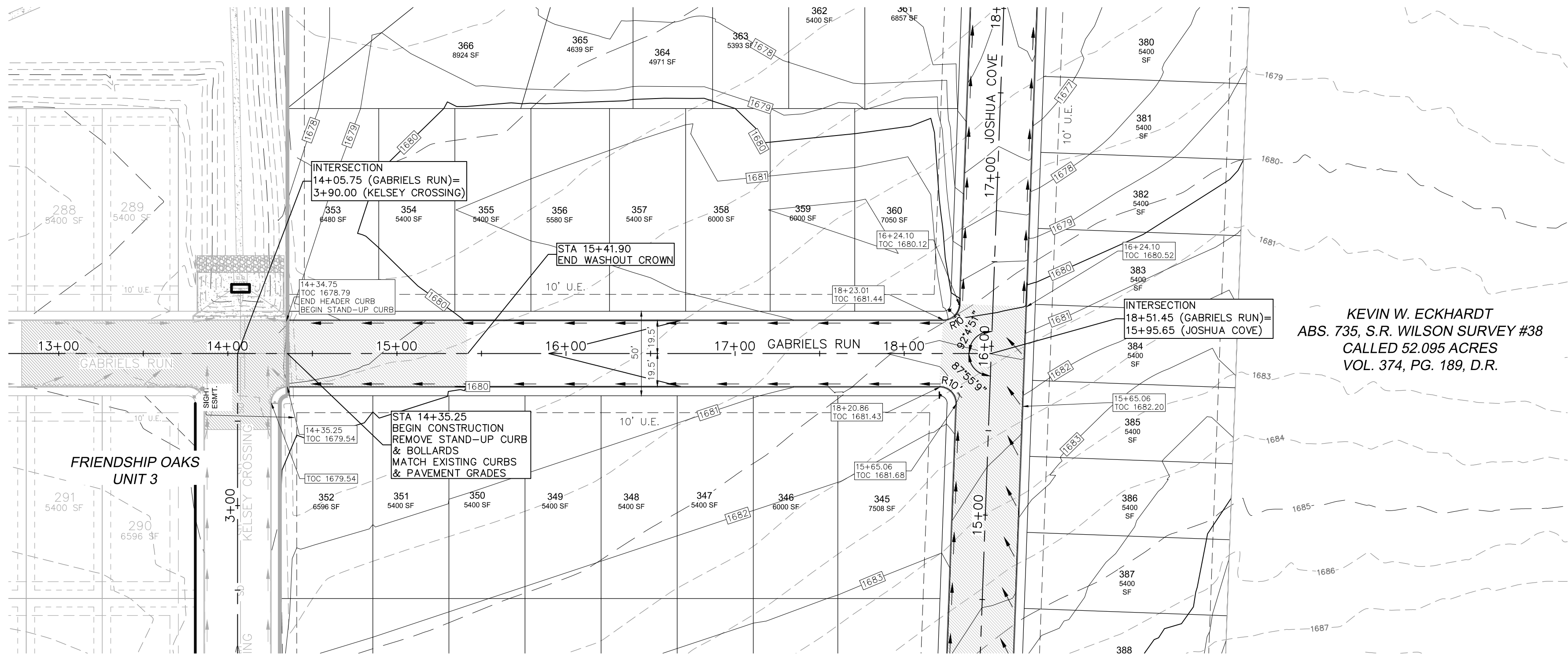
NO.	REVISION	DESCRIPTION	REVISION DATE

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DRAWN BY: RR
DESIGNED BY: JK
REVIEWED BY: ZJ
HMT PROJECT NO.: 337.128

SHEET
C4.2

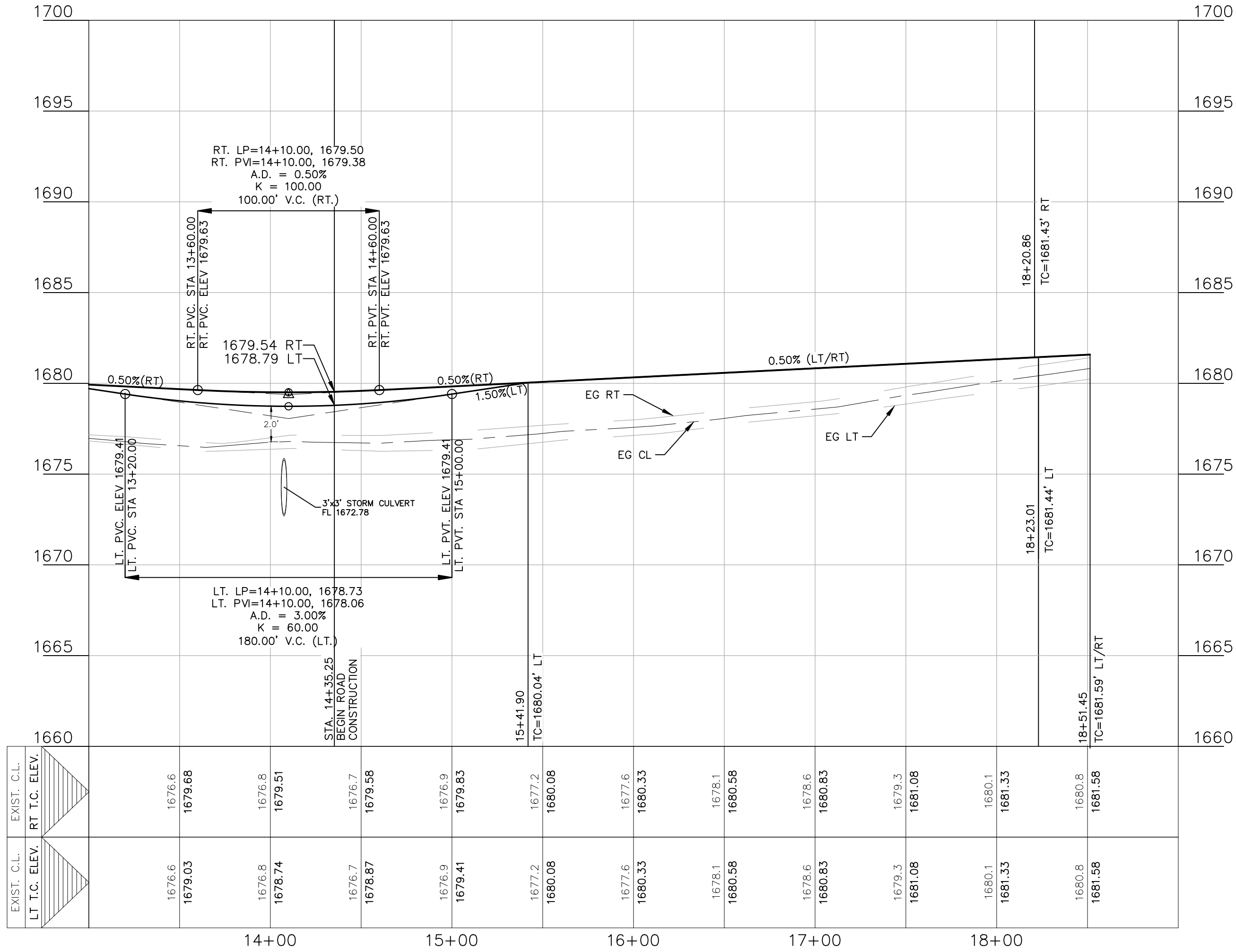
290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 1053600





KEVIN W. ECKHARDT
ABS. 735, S.R. WILSON SURVEY #38
CALLED 52.095 ACRES
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GABRIELS RUN
13+00 - 19+00



- NOTES**
- LOCAL STREETS WERE DESIGNED TO POSTED SPEED LIMIT OF 30 MPH.
 - CONTRACTOR TO ENSURE POSITIVE DRAINAGE AWAY FROM STREET STUB OUT ENDS SO THAT NO "PONDING" OF WATER OCCURS.
 - RADIUS ON CURB RETURN IS 10 FT UNLESS OTHERWISE STATED

**GABRIELS RUN
PLAN & PROFILE**

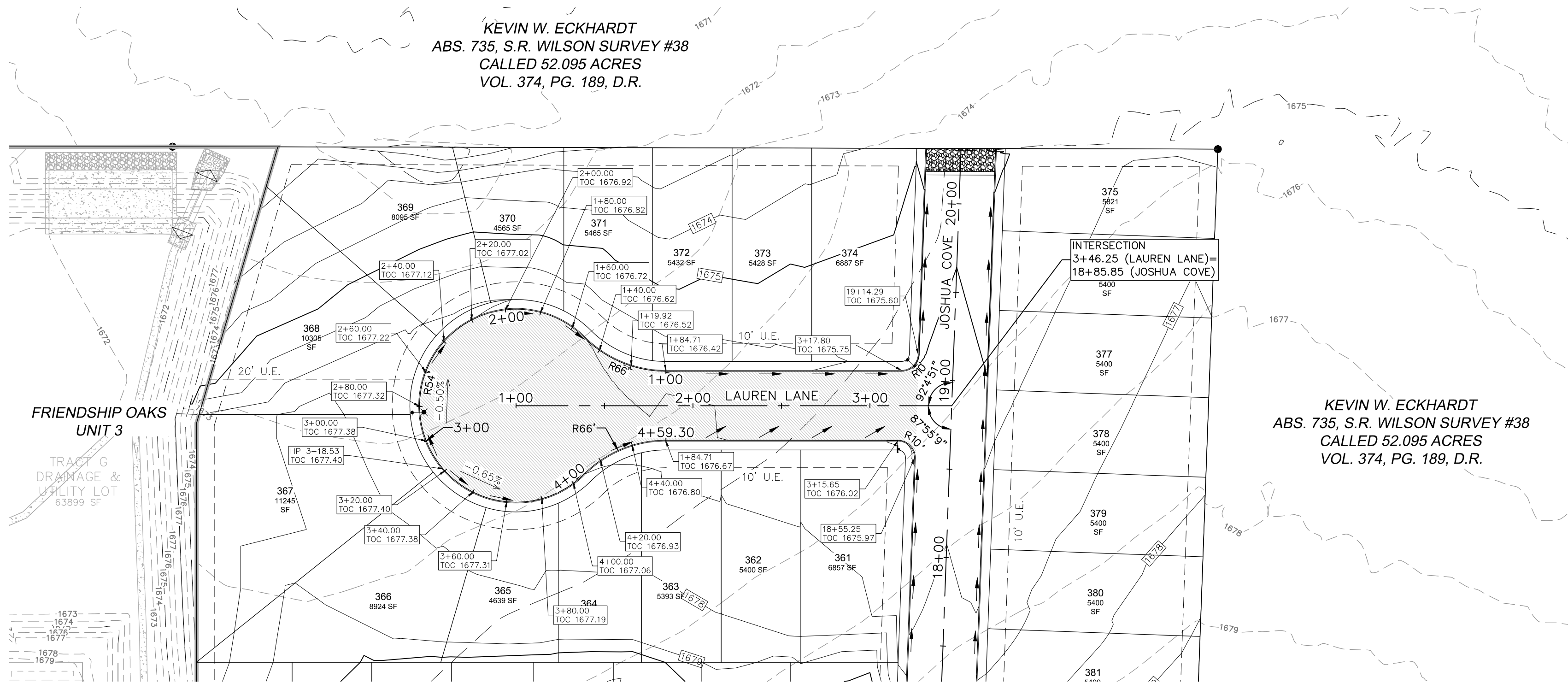
FRIENDSHIP OAKS, UNIT 4
FREDERICKSBURG, TEXAS

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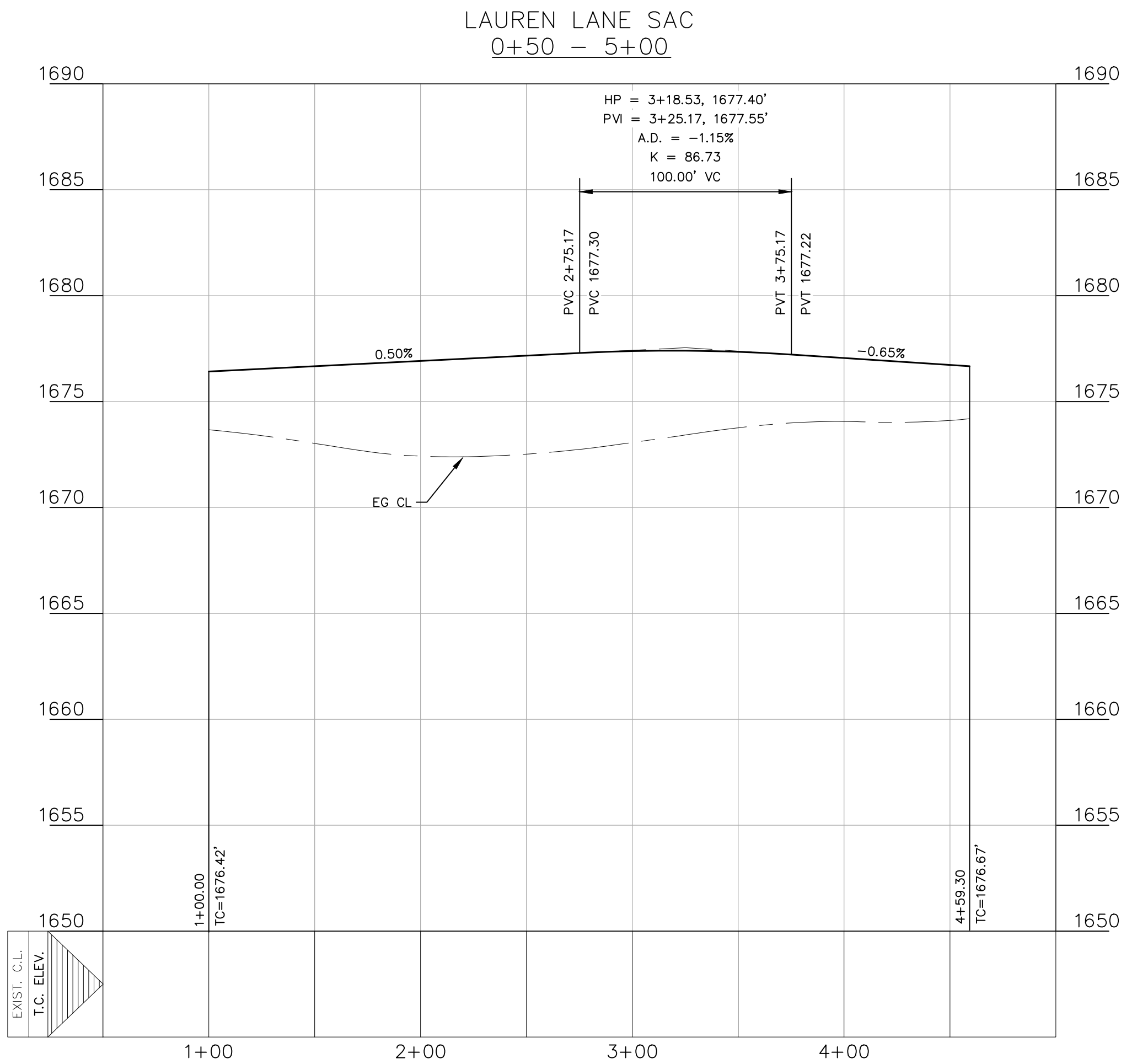
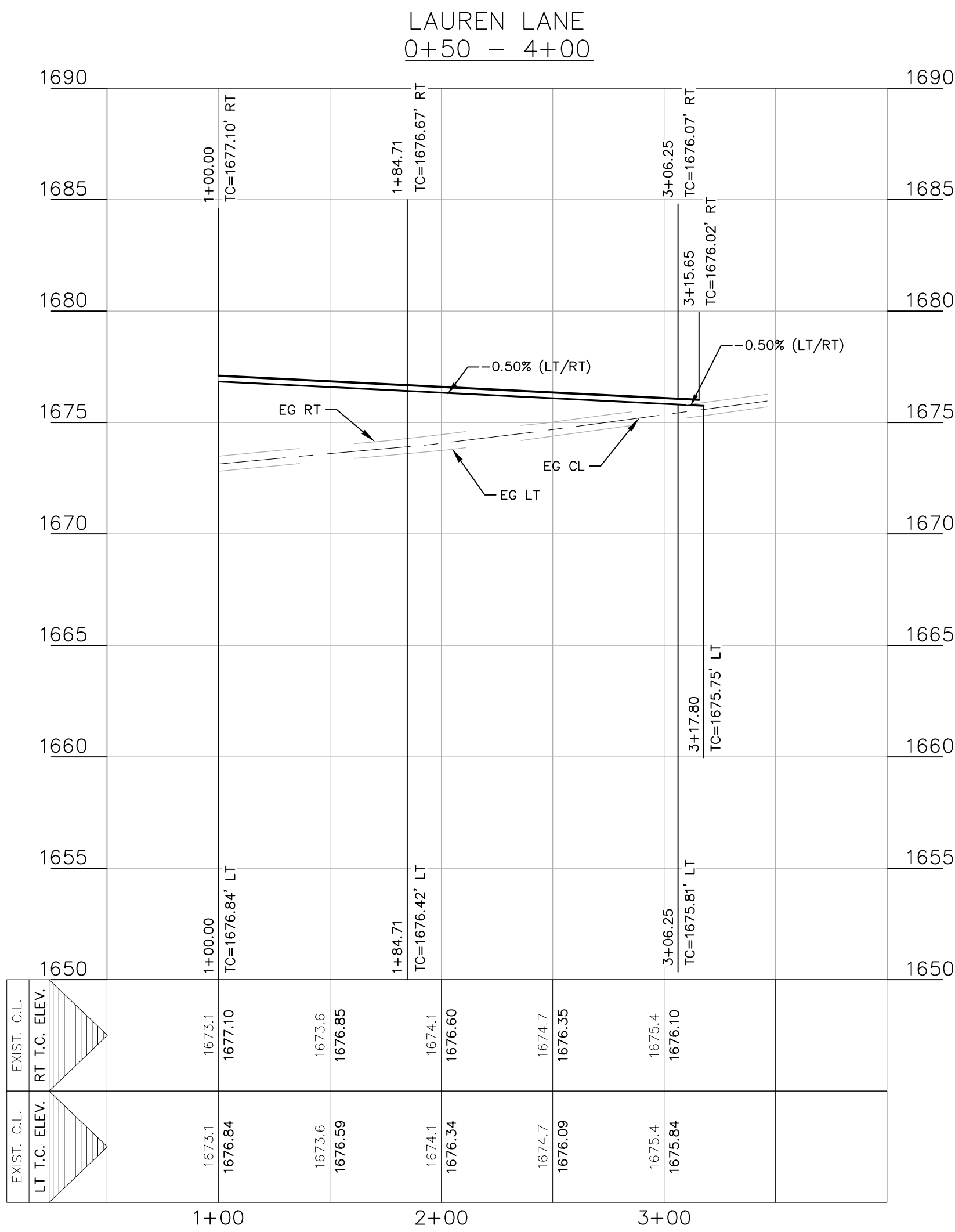
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Drawing Name: W:_Projects\337 - Lennor Homes\128 - Friendship Oaks Unit 3\337\128\LAUREN LANE.dwg User: jathuck Apr 23, 2025 - 5:26pm



NOTES

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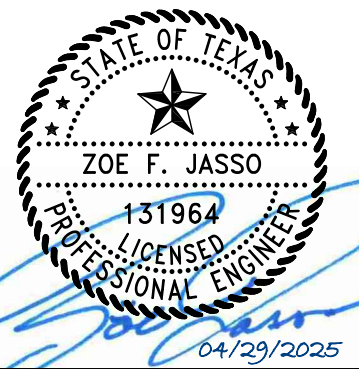
LAUREN LANE
PLAN & PROFILE
FRIENDSHIP OAKS, UNIT 4
FREDERICKSBURG, TEXAS

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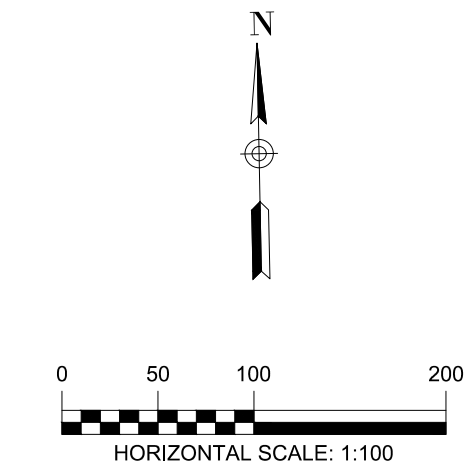
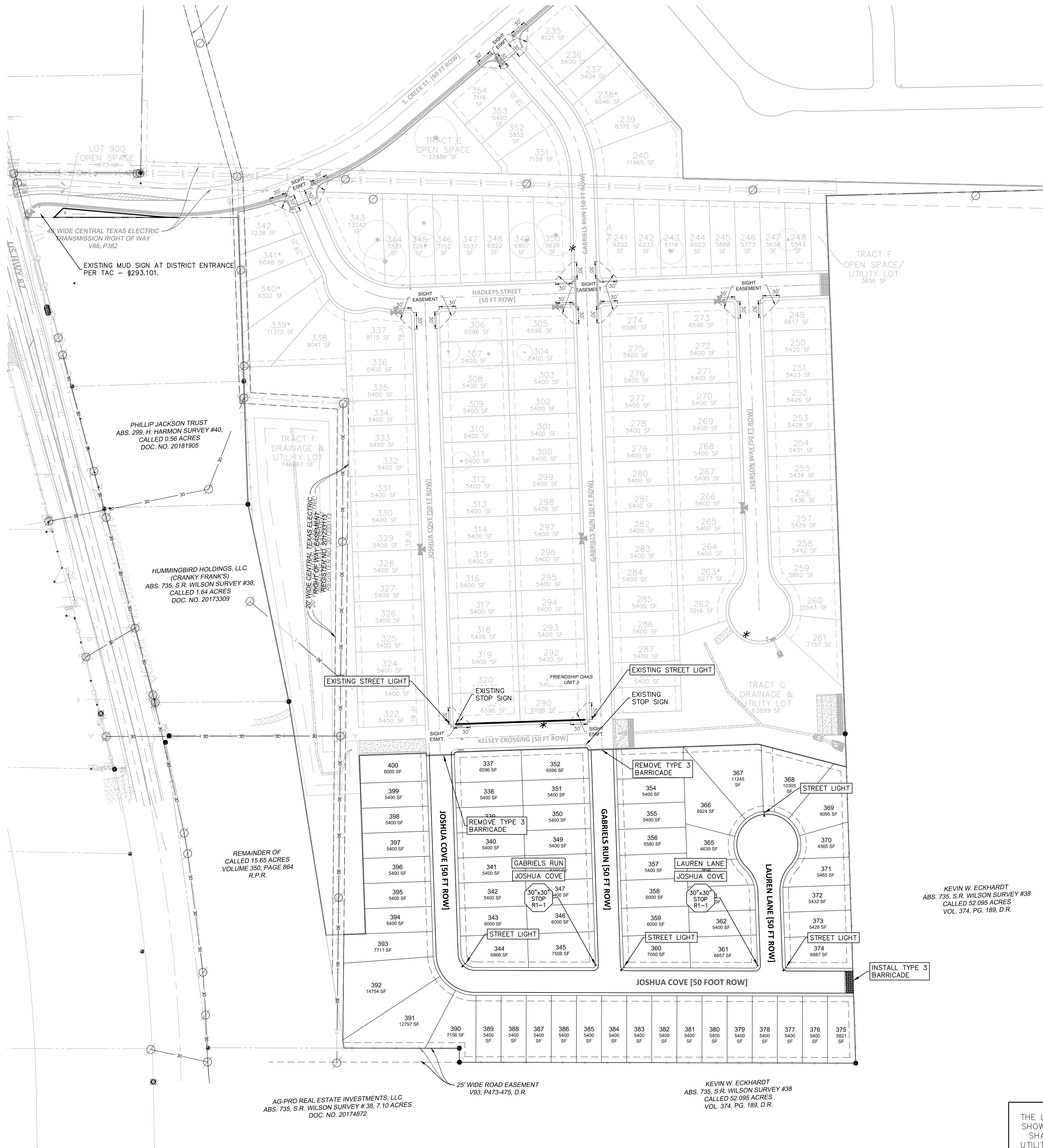
DATE: JANUARY 2025
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REVIEWED BY: ZJ

HMT PROJECT NO.: 337.128

SHEET
C4.4



290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 1053600



NOTES

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2. CONTRACTOR TO ENSURE POSITIVE DRAINAGE AWAY FROM STREET STUB OUT ENDS SO THAT NO "PONDING" OF WATER OCCURS.
3. ALL SIGNAGE MUST COMPLY WITH T&MUTCD

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.

STREET NAME SIGN

- STREET NAME SIGNS ARE FLAT, GREEN BLANKS WITH 9" CROSS BLADES AND 9" X 1 3/4" SQUARE POST CAP
- FONT - ROADGEEK 2005 SERIES 18
- LETTERS - 4.5" HIGH, ONLY THE FIRST LETTER IN EACH NAME IS CAPITALIZED
- BLOCK RANGE NUMBERS IN THE BOTTOM LEFT AND RIGHT CORNERS
- VEREINS KIRCHE STICKER IS 5'X7"
- ONLY REQUIRED TO BE CONSISTENT WITH EXISTING SIGNS IN THE SUBDIVISION.

POLE

- 12'X 1 3/4" TELESAR POST
- 3' X 2' TELESAR ANCHOR
- 18" X 2 1/4" TELESAR SLEEVE

BRACKETS

- SQUARE CAP SIGN BRACKETS

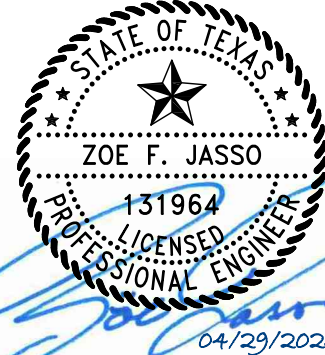
STOP SIGN

- 30" STOP SIGN (HIP GRADE) OR 30" YIELD SIGN (HIP GRADE)
- BOTTOM OF SIGN 7 FEET FROM THE GROUND

KEVIN W. ECKHARDT
ABS. 735, S.R. WILSON SURVEY #38
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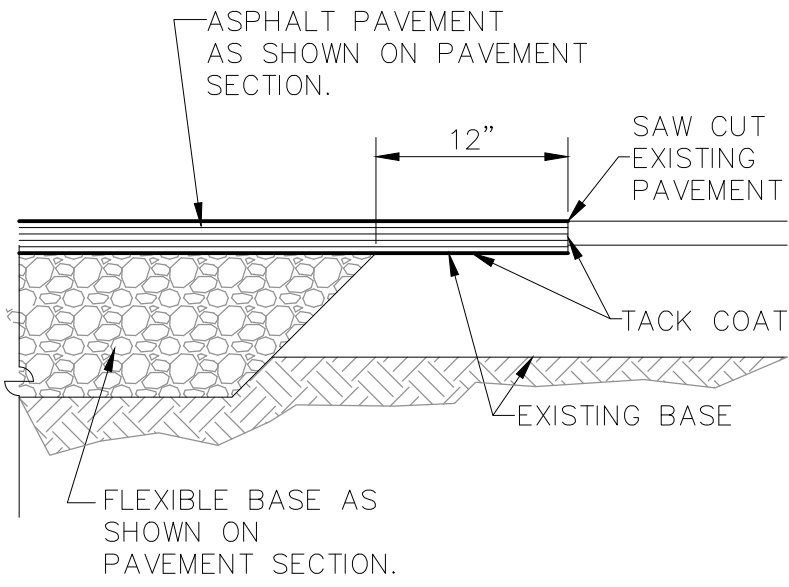
SIGNAGE & LIGHTING
PLAN

FRIENDSHIP OAKS, UNIT 4
FREDERICKSBURG, TEXAS

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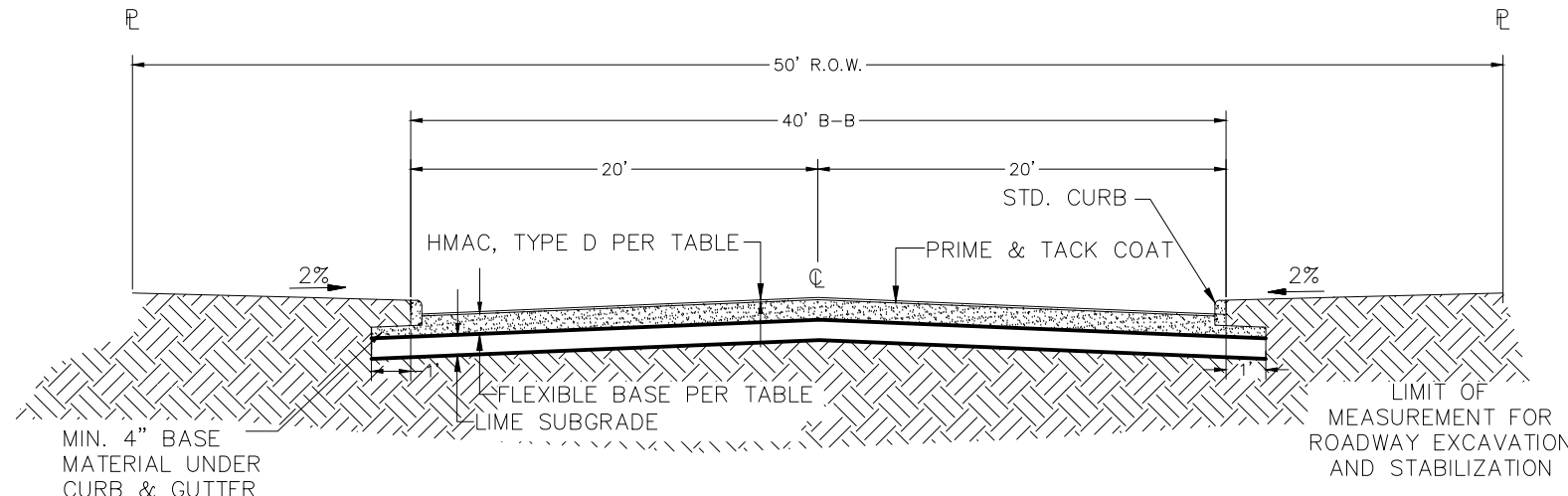
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SHEET
C4.5



NEW PAVEMENT TO EXISTING

NOT TO SCALE



TYPICAL 40' B-B CURB & GUTTER STREET SECTION

ASPHALTIC CONCRETE PAVEMENT

N.T.S.

FLEXIBLE PAVEMENTS RESIDENTIAL COLLECTOR	
PAVEMENT MATERIAL	
TYPE "D" OR TYPE "C" HMA	2.0"
CRUSHED LIMESTONE FLEXIBLE BASE, IN.	6.0"
TENSAR TRIAX TX5 GEOGRID	YES
MOISTURE CONDITIONED SUBGRADE	YES

NOTE:

1. ALL PAVEMENT CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE TO THE "PRELIMINARY FOUNDATION AND PAVEMENT DESIGN REPORT, FRIENDSHIP OAKS SUBDIVISION, FRIENDSHIP LANE AND SOUTH CREEK STREET, FREDERICKSBURG, GILLESPIE COUNTY, TEXAS, TTL PROJECT NO. 00310900833.00", BY TTL, INC, DATED APRIL 16, 2021.
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 THE FOLLOWING:
 - 3.1. PLASTICITY INDEX, REFER TO SECTION 4.2 COMPACTED FILL MATERIALS
4. THE SUBGRADE SOILS SHOULD BE TESTED FOR SOLUBLE SULPHATE CONTENT PRIOR TO INSTALLATION OF THE LIME OR CEMENT.
5. REFERENCE GEOTECHNICAL REPORT FOR LIME STABILIZATION NOTES
6. CONTRACTOR SHALL BE RESPONSIBLE TO ATTAIN A COPY OF THE GEOTECH REPORT AND THE CONTENTS OF THE REPORT.

TYPICAL PAVEMENT SECTION

STREET DETAILS
(1 OF 2)

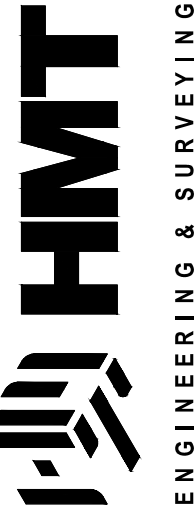
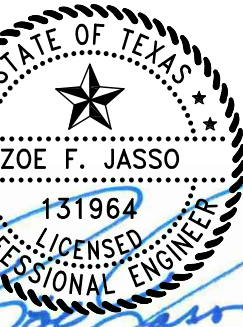
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SHEET

C4.6



290 S. CASTELL AVE., STE. 100
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TYPICAL STREET LIGHTING

HIGH PRESSURE SODIUM:

100 WATT	9,500 LUMEN
250 WATT	25,500 LUMEN

URD POLE:

Valmont 30" total steel pole with simplex fitting: EM50-730A300-05-HH-GAL.
6" X 2" steel arm with one bolt simplex attachment: 70820-Y17G.
#10 solid copper white and black.
#6-2 URD wire duplex (Clafin-Southwire).
Fuse kit (KTK 15 or 30 AMP midget fuse, HEB-CC fuse holder, 1A0512 rubber boots.
2" duct cone.

OVERHEAD:

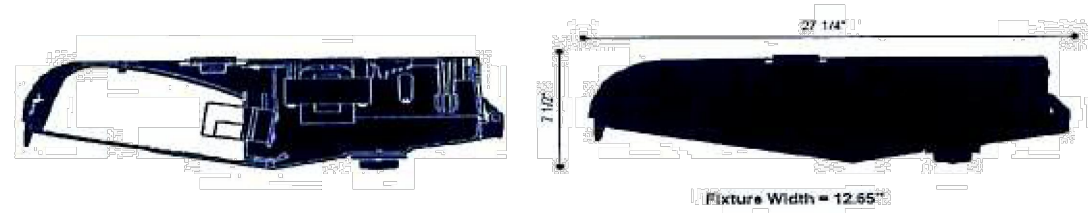
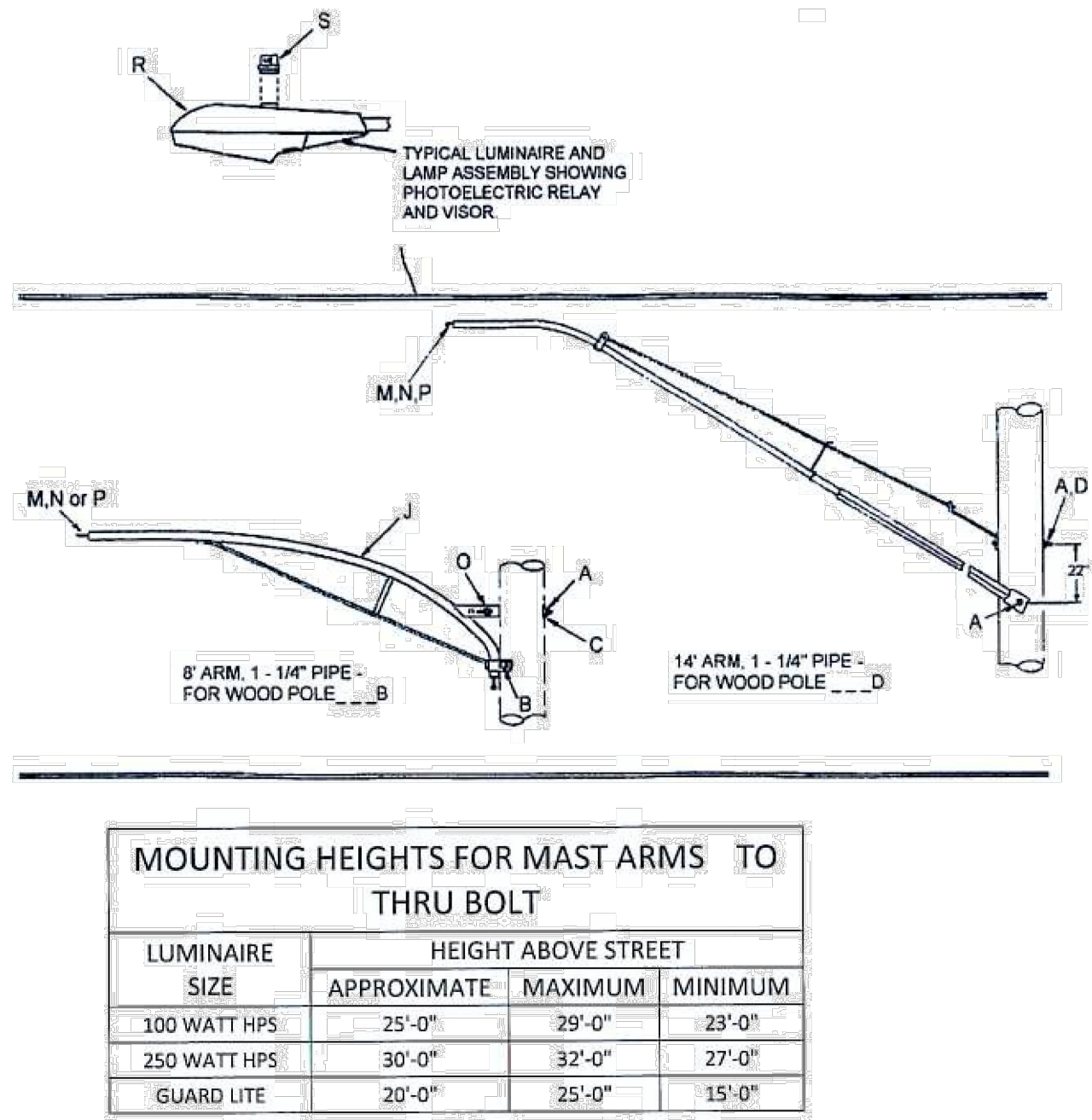
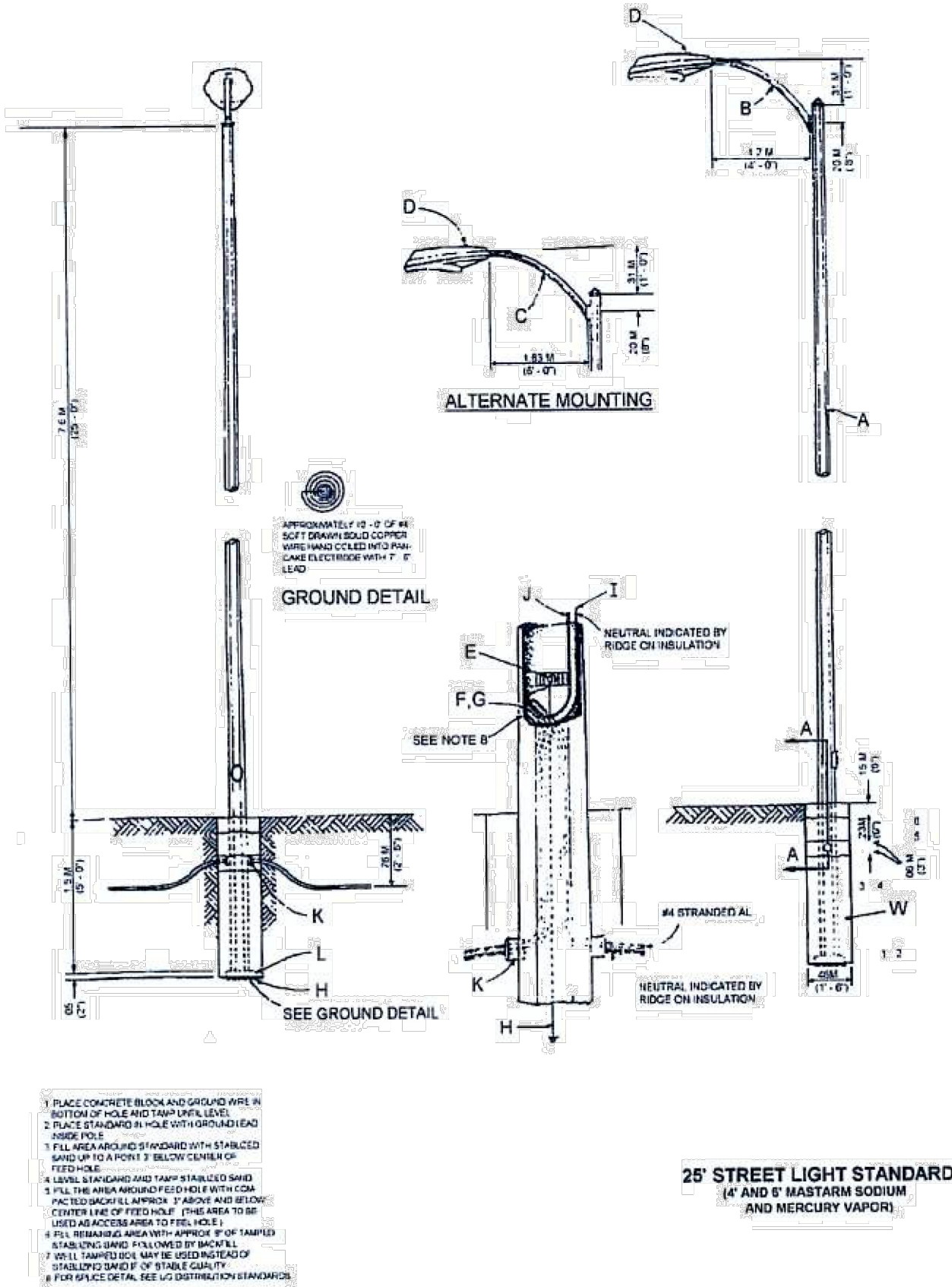
8" aluminum arm X 1 1/4"; A-125-8-UB aluminum Mastarm.
14" steel arm X 1 1/4"; D125S140.
#10 solid copper white and black.

ROADWAY LIGHTING:

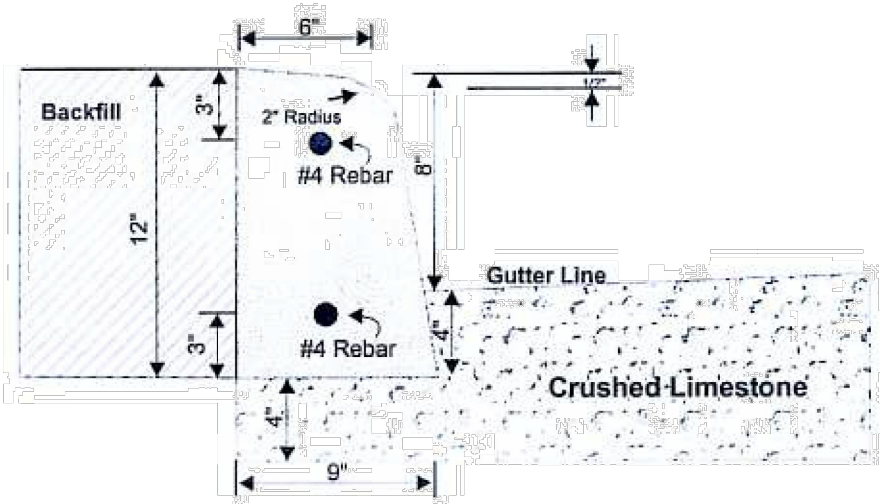
Residential Intersections:
Cooper 100HPS OVZ10SR22DF4 (Flat Glass) or equivalent.

State Highway Intersections:
Cooper 250HPS OVZ25SWW2D4F (Flat Glass) or equivalent.

Residential Area Lighting:
Cooper 100HPS OVZ10SR22DU1431 (Flat Glass) or equivalent.



Typical Machine Laid Stand-Up Curb

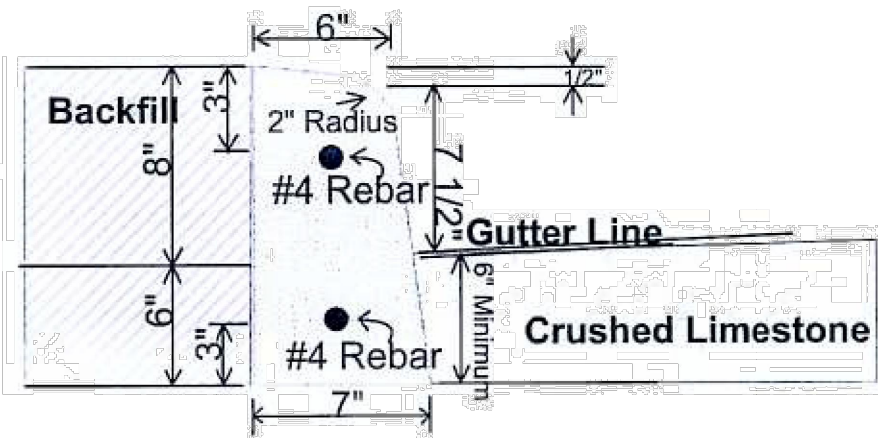


Construction Notes:

- Concrete - 3,000 P.S.I. (5 sack)
- Dummy Joints - Dummy joints shall be tooled into curb at 10 ft. intervals using a grooving tool to a minimum depth of 1/2". Saw cutting dummy joints is not permitted.
- Expansion Joints - Place asphalt impregnated fiber board approved by the City at all cold joints. Place 2 - #4 Smooth bars, 18" long, 3" from the top and 3" from the bottom of curb.
- Top of curb to have 1/2" drop from back to front of curb.
- Curbs must be brushed to a smooth and uniform finish.

INSPECTION IS REQUIRED BEFORE PLACEMENT OF CONCRETE!!

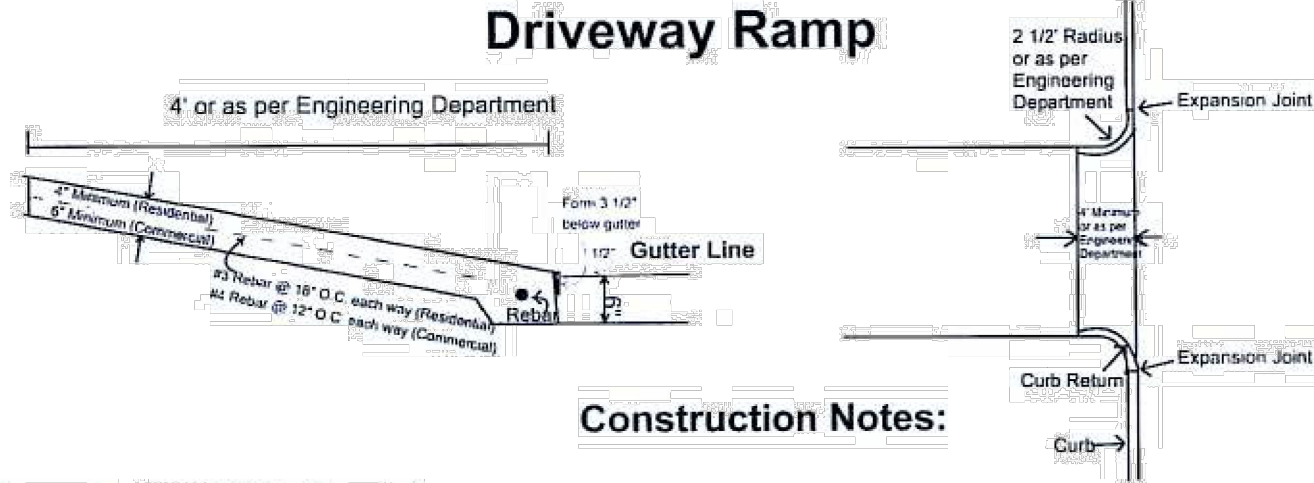
Hand Formed Stand-Up Curb



Construction Notes:

- Concrete - 3,000 P.S.I. (5 sack)
- Dummy Joints - Dummy joints shall be tooled into curb at 10 ft. intervals using a grooving tool to a minimum depth of 1/2". Saw cutting dummy joints is not permitted.
- Expansion Joints - Place asphalt impregnated fiber board approved by the City at all cold joints. Place 2 - #4 Smooth bars, 18" long, 3" from the top and bottom of curb.
- Top of curb to have 1/2" drop from back to front of curb.
- Front face of curb to be fully formed from top of curb to 6" below the street gutter elevation. Back of curb to be formed a minimum of 6" down from top of curb.
- Forms must be removed the same day the curb is poured and curbs must be plastered with mortar or brushed to a smooth and uniform finish.
- Curb radii at street corners shall be 2 1/2 ft. on back of curb or as specified by the City Engineering Department.

INSPECTION IS REQUIRED BEFORE PLACEMENT OF CONCRETE!!



Construction Notes:

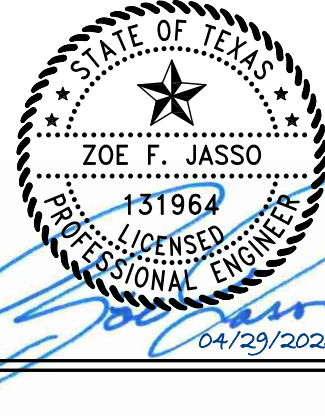
- Concrete - 3,000 P.S.I. (5 sack)
- Driveway construction shall meet street pavement 1/2" above established gutter elevation.
- Face of driveway apron must be formed a minimum of 3 1/2" below the street gutter line. CAUTION: The City does NOT guarantee vehicle clearances on driveway construction. This is the responsibility of the contractor.
- Where curbs are cut for driveway placement, cuts shall be vertical and neat.
- A minimum of 1' of reinforcing steel must be remaining in existing curb to be tied to steel in drive or dowels must be drilled and placed.
- When breaking out curbs, the entire curb must be removed and a thickened section poured in drive to bottom of curb.
- Expansion joints shall be provided where curb returns meet curb lines.

INSPECTION IS REQUIRED BEFORE PLACEMENT OF CONCRETE!!

STREET DETAILS

(2 OF 2)

FRIENDSHIP OAKS, UNIT 4
FREDERICKSBURG, TEXAS



290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 1053600



NO.	REVISION	DESCRIPTION	DATE

DATE:	JANUARY 2025
DRAWN BY:	RR
DESIGNED BY:	JK
REVIEWED BY:	ZJ
HMT PROJECT NO.:	337.128

SHEET
C4.7

REMAINDER OF
CALLED 15.65 ACRES
VOLUME 350, PAGE 864
R.P.R.

AG-PRO REAL ESTATE INVESTMENTS, LLC
ABS. 735, S.R. WILSON SURVEY #38, 7.10 ACRES
DOC. NO. 20174872

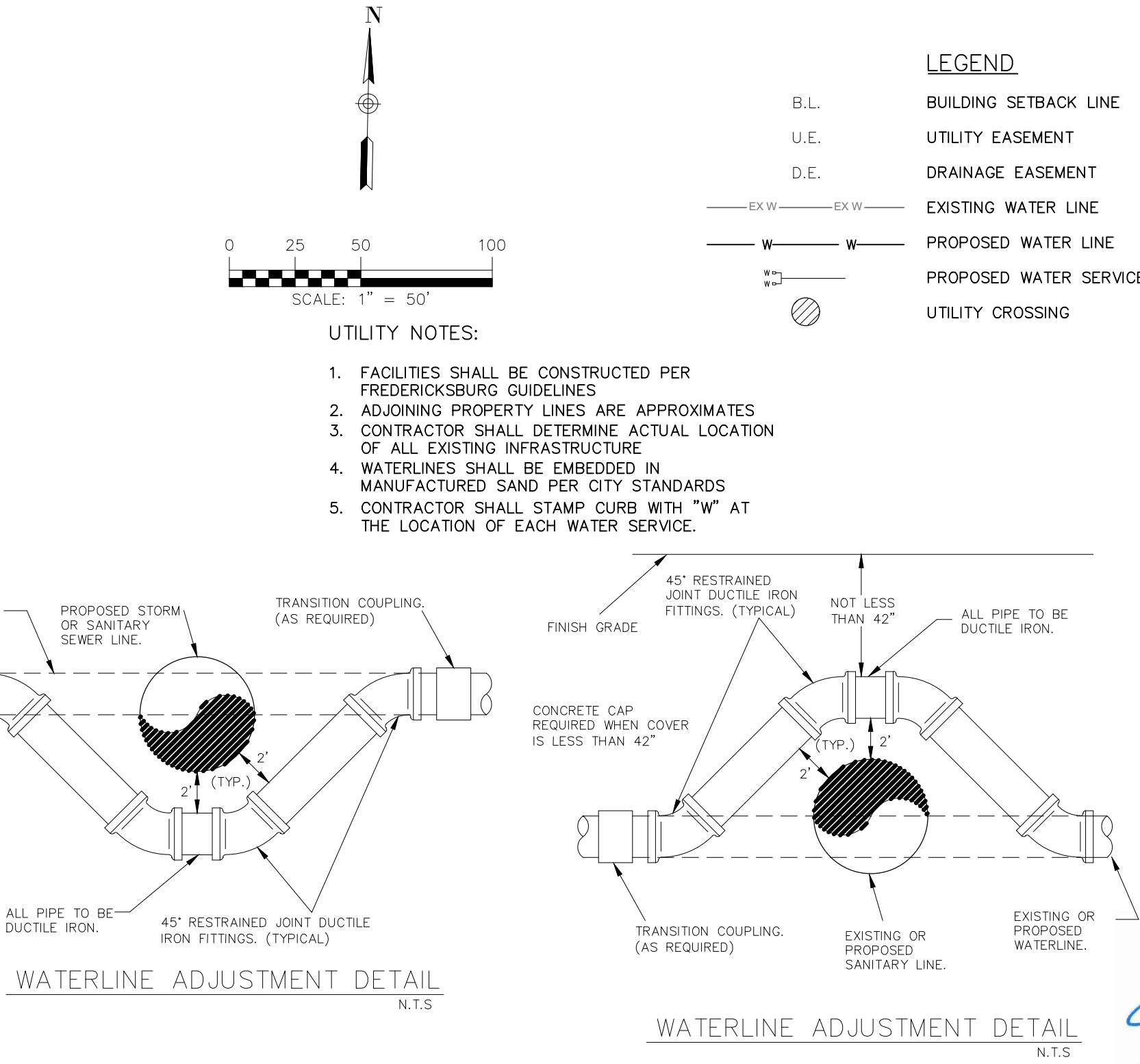
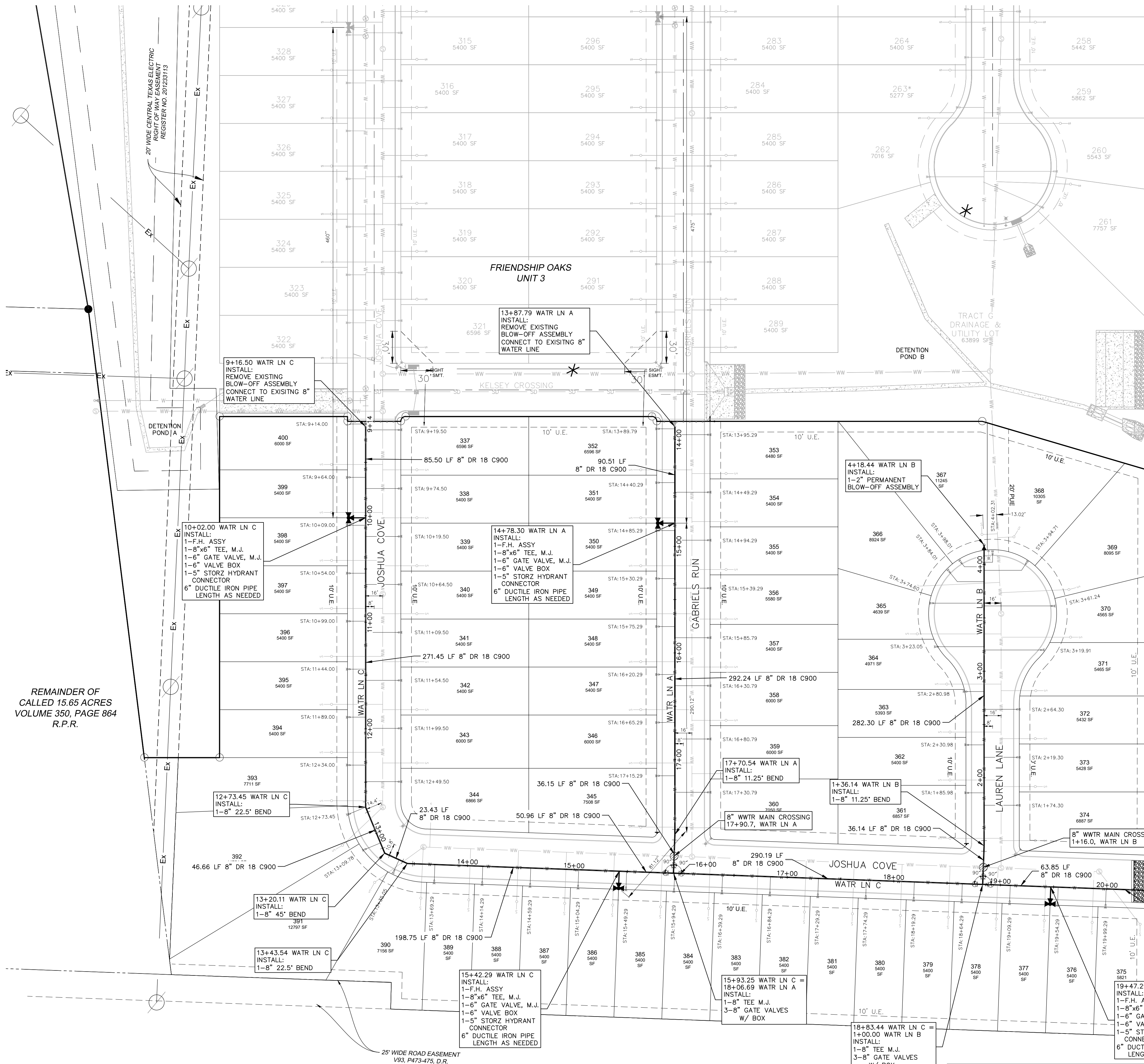
KEVIN W. ECKHARDT
ABS. 735, S.R. WILSON SURVEY #38
CALLED 52.095 ACRES
VOL. 374, PG. 189, D.R.

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.

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.

REFER TO THE 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.



- RESTRAINED LENGTH NOTES:
1. CONTRACTOR TO COORDINATE WITH CITY OF FREDERICKSBURG UTILITIES FOR WATER SERVICE TO THE SITE.
 2. ALL IN-LINE VALVES, BENDS & PLUGS SHALL BE RESTRAINED, RESTRAINT TO BE PROVIDED ON EACH SIDE OF THE VALVE, FITTING OR ANY REQUIRED JOINT.
 3. RL=RESTRAINT LENGTH
 4. CONTRACTOR SHALL DETERMINE RESTRAINT LENGTH REQUIRED FOR HORIZONTAL VERTICAL FITTINGS BASED ON RESTRAINT LENGTH TABLE SHOWN BELOW.

RESTRAINED LENGTH FOR PIPE												
PIPE INSIDE DIAMETER	MATERIAL	HORIZONTAL BENDS				VERTICAL BENDS						DEAD END/ INLINE VALVES
						UPPER			LOWER			
		90°	45°	22.5°	11.25°	45°	22.5°	11.25°	45°	22.5°	11.25°	
8"	PVC	32	14	7	4	37	18	9	10	5	3	88

TEE				FT.
PIPE INSIDE DIAMETER OF RUN	PIPE INSIDE DIAMETER OF BRANCH	MATERIAL		
8"	8"	PVC	77	

- NOTES:
- 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 EIGHT INCHES (8") THICK. 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 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 STREET INSPECTOR WITH ALL TESTING DOCUMENTATION AND A CERTIFICATION STATING THAT THE PLACEMENT OF FILL MATERIAL HAS BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.

DEEP TRENCH COMPACTION TESTING

OVERALL WATER PLAN

FRIENDSHIP OAKS, UNIT 4
FREDERICKSBURG, TEXAS

NO.	REVISION	DESCRIPTION	DATE

DATE: JANUARY 2025
DRAWN BY: RR
DESIGNED BY: JK
REVIEWED BY: ZJ
HMT PROJECT NO.: 337.128

SHEET
C6.1

290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 1053600

HMT
ENGINEERING & SURVEYING

STATE OF TEXAS
ZOE F. JASSO
131964
LICENSED PROFESSIONAL ENGINEER
05/19/2025

Drawing Name: M:_Projects\337 - Friendship Oaks Unit A\CDs\337.128_WDR_DETAILS.dwg User: jashuck Apr 23, 2025 - 5:27pm

CONDITIONS:

No work requiring inspection shall be done between the hours of 6:00 pm and 7:00 am, Monday through Friday, at any time on Saturdays, Sundays, or legal holidays without the written approval of the City of Fredericksburg in each case, except for such work as may be necessary for the proper care and protection of work already done or of equipment or in the case of an emergency.

The CONTRACTOR shall at all times take precautions to keep all utilities within the area of construction operational. The CONTRACTOR shall notify the OWNER of existing utilities at least 24 hours before crossing existing underground utilities.

The CONTRACTOR shall maintain the utilities in service during construction and will be responsible for any damage he may inflict on a utility. All damages resulting from the CONTRACTOR'S operations shall be repaired by the CONTRACTOR immediately at the CONTRACTOR'S expense to the satisfaction of the owner of such a utility.

The location of existing utilities shown on any attached drawings does not necessarily indicate all of or the exact location of utilities that may be encountered during construction. The CONTRACTOR shall be responsible for locating all existing underground utilities and customer service taps and shall proceed with work in accordance with the information found.

Whenever existing utilities are encountered whose present grade would conflict with the new construction, the CONTRACTOR shall notify the City of Fredericksburg who shall arrange revisions without unreasonable delay.

If the work requires shut-off of any part of the existing water system, these shut-offs will be made by the City of Fredericksburg Water Department upon reasonable notice by the CONTRACTOR requesting same. The time and schedule of all shut-offs must be approved by the City of Fredericksburg Water Department prior to beginning such work.

SAW CUTTING:

Before trenching within paved streets, the CONTRACTOR will saw cut the pavement to a width of at least one (1) foot wider than the width of the trench (six inches on each side of trench) to prevent the pavement from lifting loose along the trench. Only such width necessary shall be removed.

BEDDING:

A four (4) inch minimum of sand or pea gravel bedding material shall be deposited uniformly in the bottom of the trench, on both sides of the pipe, for the full width of the trench and to a height of six (6) inches above the top of the pipe. The backfill material shall contain no rocks, stones, or objectionable material larger than three (3) inches in diameter and shall be free from material that

may decompose. All backfill material is to be placed in six (6) inch (maximum) compacted layers. Compaction is to be accomplished with a gasoline or air driven trench compactor, or backhoe mounted sheep foot or vibratory trench compactor. Water jetting will not be allowed. The top eight (8) inches (minimum) of the trench will be backfilled with crushed limestone base material approved by the City of Fredericksburg and compacted in two (2), four (4) inch layers with a gasoline or air driven trench compactor. See attached drawing for details.

REPAVING:

After clean up is completed, the CONTRACTOR will apply a two (2) course surface treatment.

BARRICADES:

The CONTRACTOR shall, at his own expense, furnish, erect, and maintain such barricades, fences, lights, and danger signals to keep pedestrians away from being driven on or into any work or construction area and shall take such other precautionary measures necessary for the protection of persons or property along the work or construction area. Streets must be open to through traffic at night. Every reasonable and proper precaution shall be taken by the CONTRACTOR to ensure the safety of the work and employed personnel, the public and adjacent property whether publicly or privately owned.

To protect persons from injury and to avoid property damage, barricades, signs, lanterns or lights and guards as required shall be placed and maintained by the CONTRACTOR during the progress of the construction. **Traffic control devices shall be installed according to the Texas Manual on Uniform Traffic Control Devices, Part VI, Traffic Controls for Street and Highway Construction and Maintenance operations.**

BLOCKING:

Concrete thrust blocks shall be installed at the CONTRACTOR'S expense at all fittings. Thrust blocks shall be of concrete, poured in place. The block shall be of sufficient depth to brace the entire diameter of the fitting and of sufficient size to entirely fill the space between the fitting and the other side of the trench. The block shall rest upon and against the undisturbed soil only. Blocks shall be constructed in such a manner that it is possible to re-caulk any joint. The concrete shall extend under the fittings in such a way that the fitting is entirely embedded in concrete. The concrete shall be at least four (4) inches in depth under the lowest part of the fitting. Concrete shall be four (4) bag mix with minimum twenty-eight (28) day compressed strength of two thousand eight hundred (2,800) PSI.

See Figure 18-A on page 18 for minimum blocking requirements.

STERILIZATION OF POTABLE WATER LINES:

The CONTRACTOR shall protect all piping material from contamination during storage, handling, and installation. Prior to disinfection, the pipeline interior shall be clean, dry, and unobstructed. All dirt, debris, gasket lubrication, etc., shall be washed from the line by swabbing with hypochlorite solution and/or flushing with clean water.

The CONTRACTOR, at his expense, will supply the test gauges and the concentrated disinfecting material, and the City personnel shall supervise and direct the overall sterilization procedure. The CONTRACTOR, at his expense, will provide all other equipment, supplies, and necessary labor to perform the sterilization under general supervision by the City.

PROCEDURE AND DOSAGE:

All valves shall be arranged to prevent the strong disinfecting dosage from flowing back into the existing water supply piping, or into the existing distribution piping. The new pipeline shall then be completely filled with disinfecting solution by feeding the concentrated chlorine and approved water from the solution supply system uniformly into the new piping in such proportions that every part of the line has minimum concentration of 50 PPM (parts per million or milligrams per liter) available chlorine.

Unless otherwise directed, all quantities called for herein refer to measurements by the testing procedures in the current edition of "Standard Methods". The chlorine concentration of each step in the sterilization procedure shall be verified by chlorine residual determinations. The disinfecting solution shall be retained in the piping for at least 24 hours and all valves, hydrants, etc., shall be operated to disinfect all of their parts. After this retention period, the water shall contain no less than 25 PPM chlorine residual throughout the treated section of the pipeline.

This heavily chlorinated water shall then be carefully flushed from the lines until the chlorine concentration is no higher than the residual generally prevailing in the existing distribution system, or approximately one (1) part per million. Proper planning and appropriate preparation to handle, dilute, and dispose of this strong chlorine solution without causing injury or damage to the public, the water system, or the environment, must be approved by the City before flushing of the line may begin, and the flushing shall be witnessed by an authorized representative of the City.

BACTERIOLOGICAL TESTING:

After final flushing of the strong disinfecting solution, water samples from the line shall be tested for bacteriological quality by the City and must be found free of coliform organisms before the pipeline may be placed in service. One test sample shall be drawn from the end of the main and additional samples collected at intervals of not more than 3,000 feet along the pipeline.

The CONTRACTOR, at his expense, shall install sufficient sampling taps at proper locations along the pipeline. Each sampling tap shall consist of a standard corporation cock installed in the line and extended with a copper tubing goose neck assembly. After samples have been collected, the goose neck assembly may be removed and retained for future use.

Samples for bacteriological analysis shall be collected only from suitable sampling taps in sterile bottles, treated with sodium thiosulfate. Samples shall not be drawn from hoses, fire hydrants, etc. The CONTRACTOR, at his expense, will furnish the sterile sample bottoms, and may, at his discretion, collect the test samples with City personnel.

If the initial disinfection fails to produce acceptable sample tests, the disinfection procedure shall be repeated (without additional or extra compensation) until satisfactory tests have been obtained before the piping may be placed in service.

INTERCONNECTION TO EXISTING CITY WATER SYSTEM:

The CONTRACTOR is required to, upon reasonable notice, arrange for the City of Fredericksburg Water Department to valve off portions of the existing water systems necessary for the CONTRACTOR to make the interconnections. The existing water system will not be valved by the CONTRACTOR. Interconnections made by the CONTRACTOR shall include cutting out, providing temporary blocking as required, and making up all connections to the new and old system. All work by the CONTRACTOR shall be subject to inspection and approval by the City of Fredericksburg.

PRESSURE TESTING:

The CONTRACTOR will be required to water test water lines and pressure test sanitary sewer lines according to the City of Fredericksburg specifications.

WATER PIPE MATERIALS:

1. Pipe: C-900 DR18 Gasket type, 8" minimum diameter.
2. Valves: Mueller resilient seat valves, M.J. both ends; catalogue # A-2370-20.
3. Six (6) inch blow-off will be provided by the City. The blow-off line will then be filled with water over night, then blow off again the next day.
4. Taps: no direct taps. Use 8" X 1" C.C. Thread bronze saddles with 1" C.C. Thread Corporation stop.
5. 1" type "K" copper tubing to be used for all service connections with 1" X 3/4" angle stops.

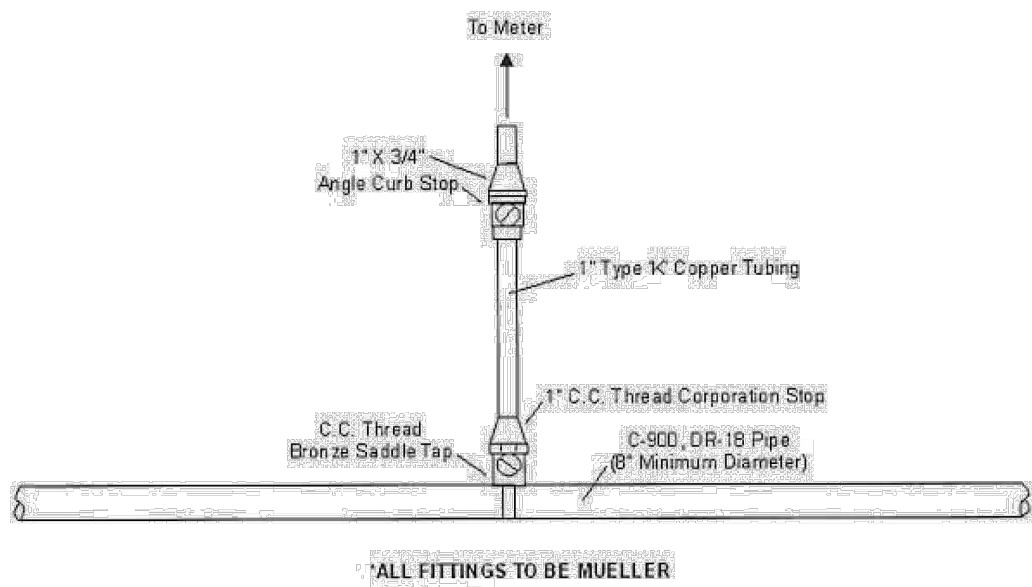
TYPICAL SERVICE CONNECTIONS:

All water service connections shall be single services as shown in the detail below and located near the center of each lot.

PLACEMENT OF WATER METERS:

After the street contractor has completed street construction and has bladed and cleaned up back slopes behind curb, a water meter box (City approved) shall be placed over each water service. This box shall be located 6" back of curb and the top at finished grade elevation. The top at finished end of the water service shall be located within 8" from the top of box.

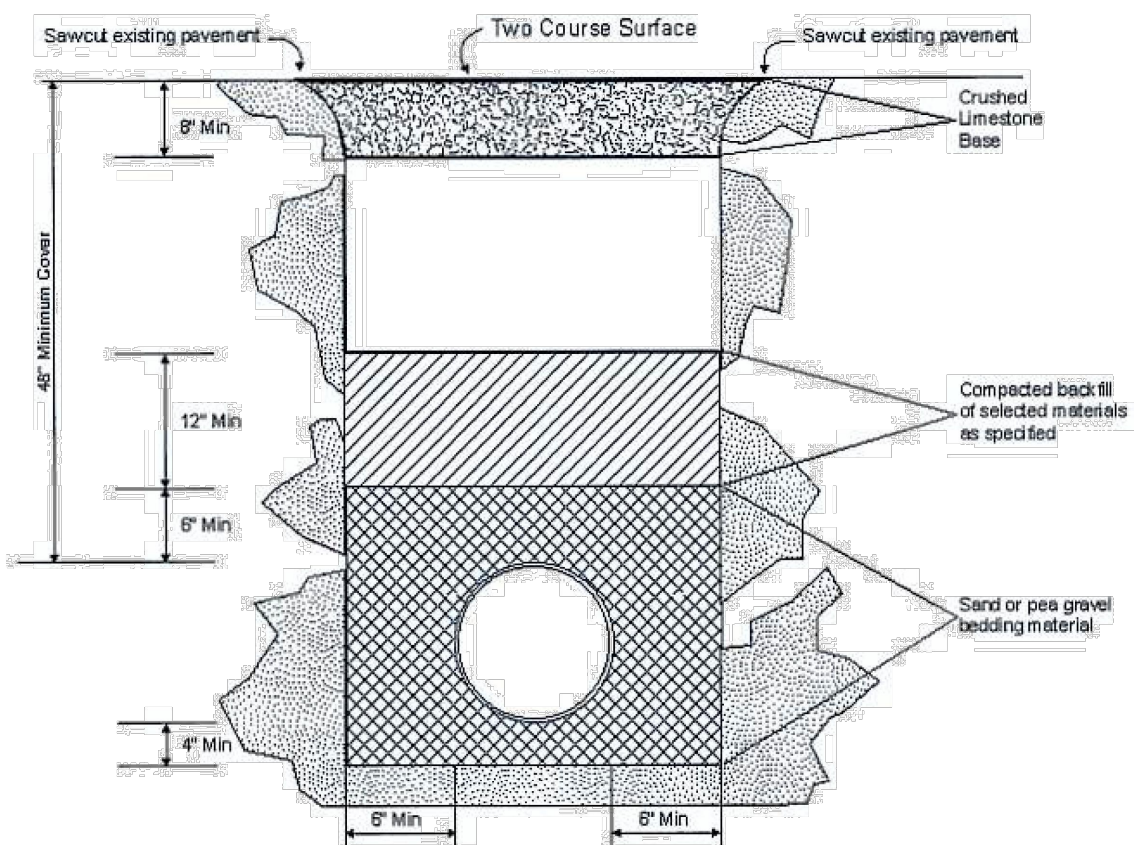
Single Service Connection



NOTE: MUNIPEX POLY PIPE MAY BE USED AS SUBSTITUTE FOR COPPER SERVICE

TRENCH & BACKFILL DETAIL:

To be used to backfill all open cuts in City Streets

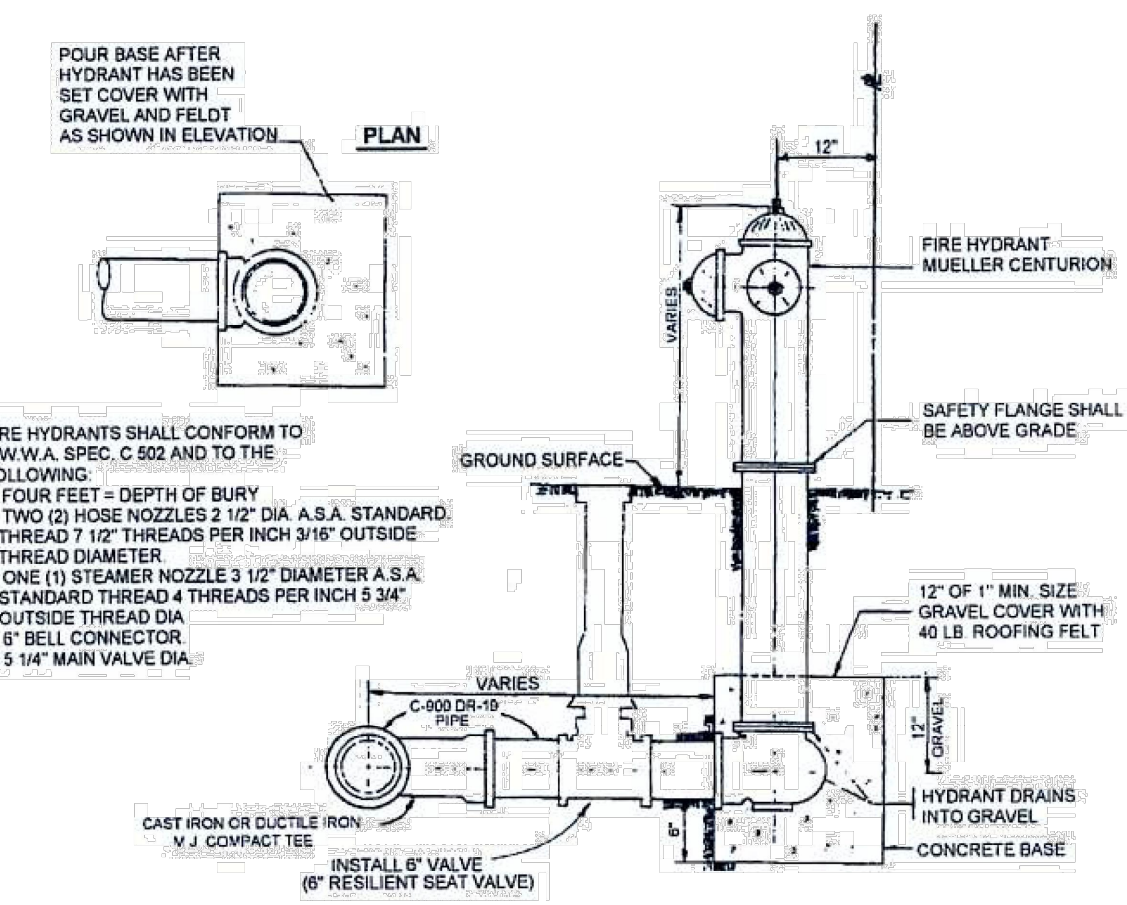


NOTES:

1. All backfill to be placed in 6" (maximum) compacted layers. Compaction to be accomplished with a gasoline or air driven trench compactor. Water jetting will not be allowed.
2. The top 8" (minimum) of the trench will be backfilled with crushed limestone base material approved by the City of Fredericksburg and compacted in two 4" layers with a gasoline or air driven trench compactor.
3. The end of the pipe shall be plugged daily. No trench may remain open over night.

Note: Compaction may be accomplished with backhoe mounted sheep foot or vibratory trench compactor.

TYPICAL FIRE HYDRANT CONNECTION:



NOTES:

1. Embed all exterior metal surpluses in silica sand.
2. All reinforcing bars in the concrete reaction block shall be #4.

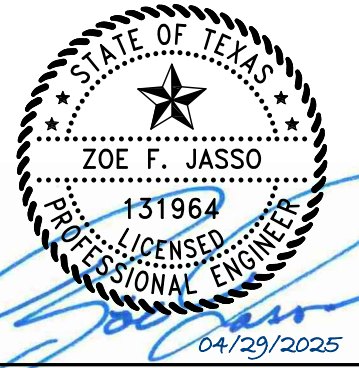
WATER DETAILS
(1 OF 2)

FRIENDSHIP OAKS, UNIT 4
FREDERICKSBURG, TEXAS

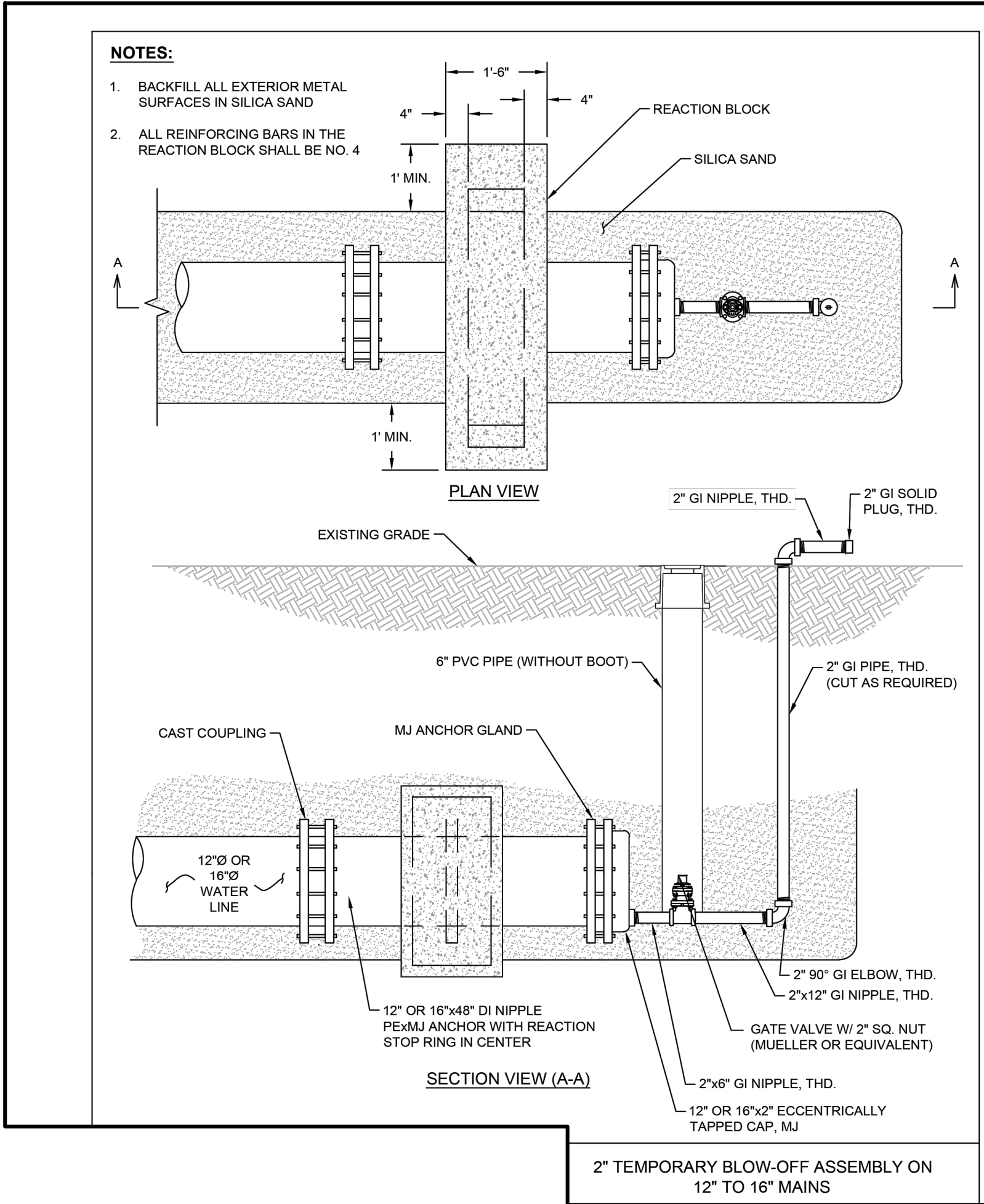
NO.	REVISION	DESCRIPTION	REVISION DATE

DATE:	JANUARY 2025
DRAWN BY:	RR
DESIGNED BY:	JK
REVIEWED BY:	ZJ
HMT PROJECT NO.:	337.128

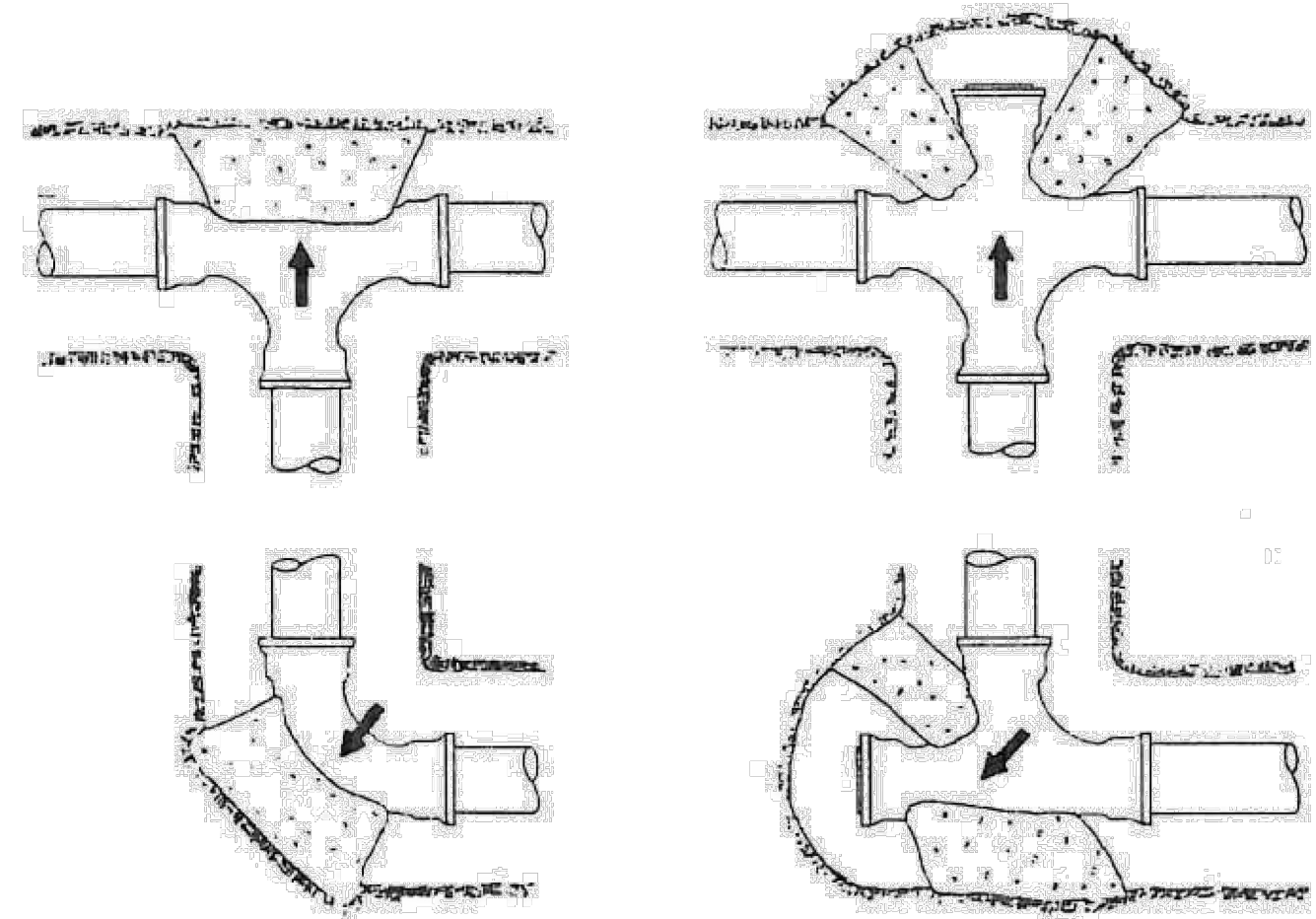
SHEET
C6.2



290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 1053600



THRUST BLOCK INSTALLATIONS:

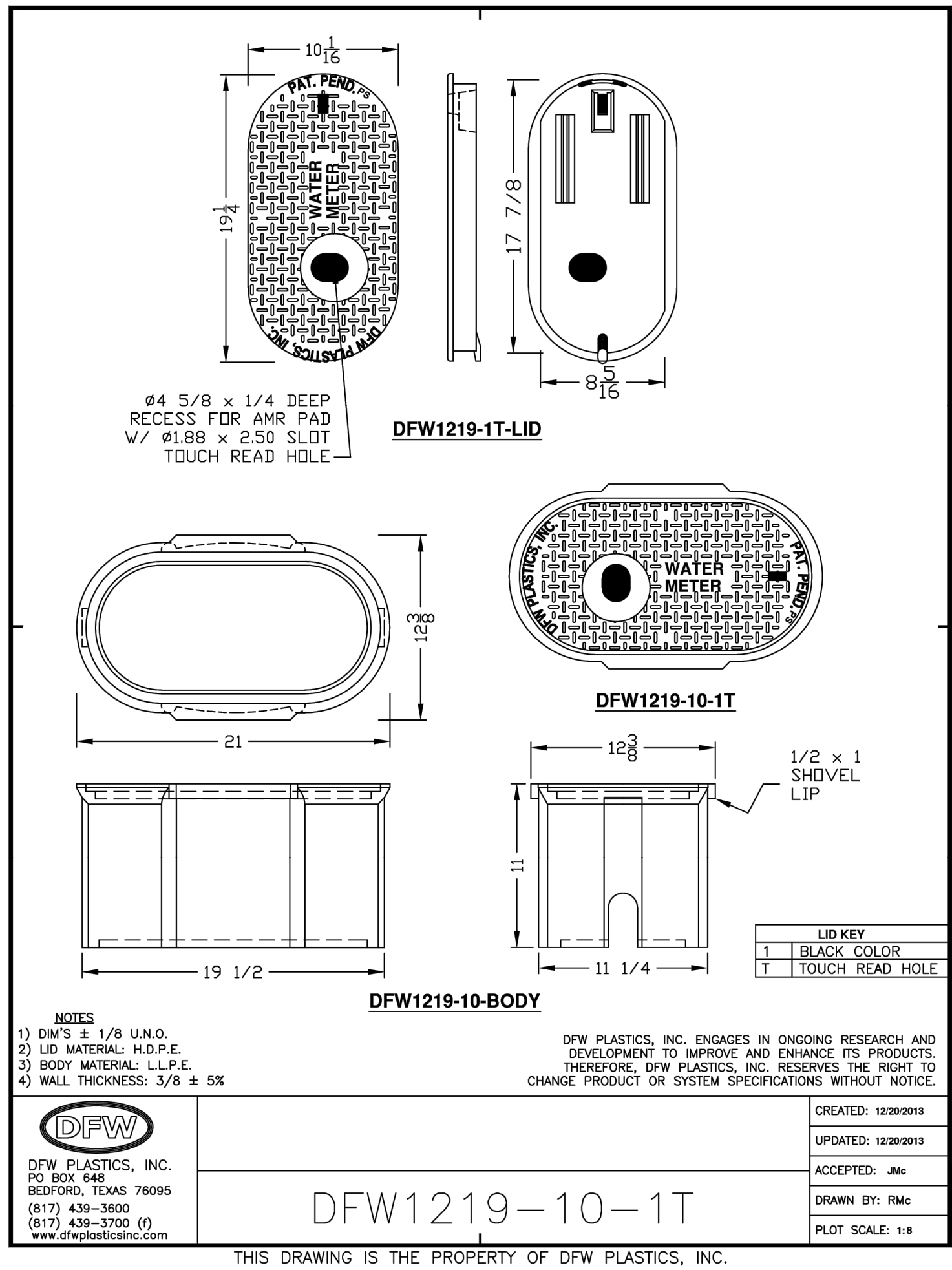
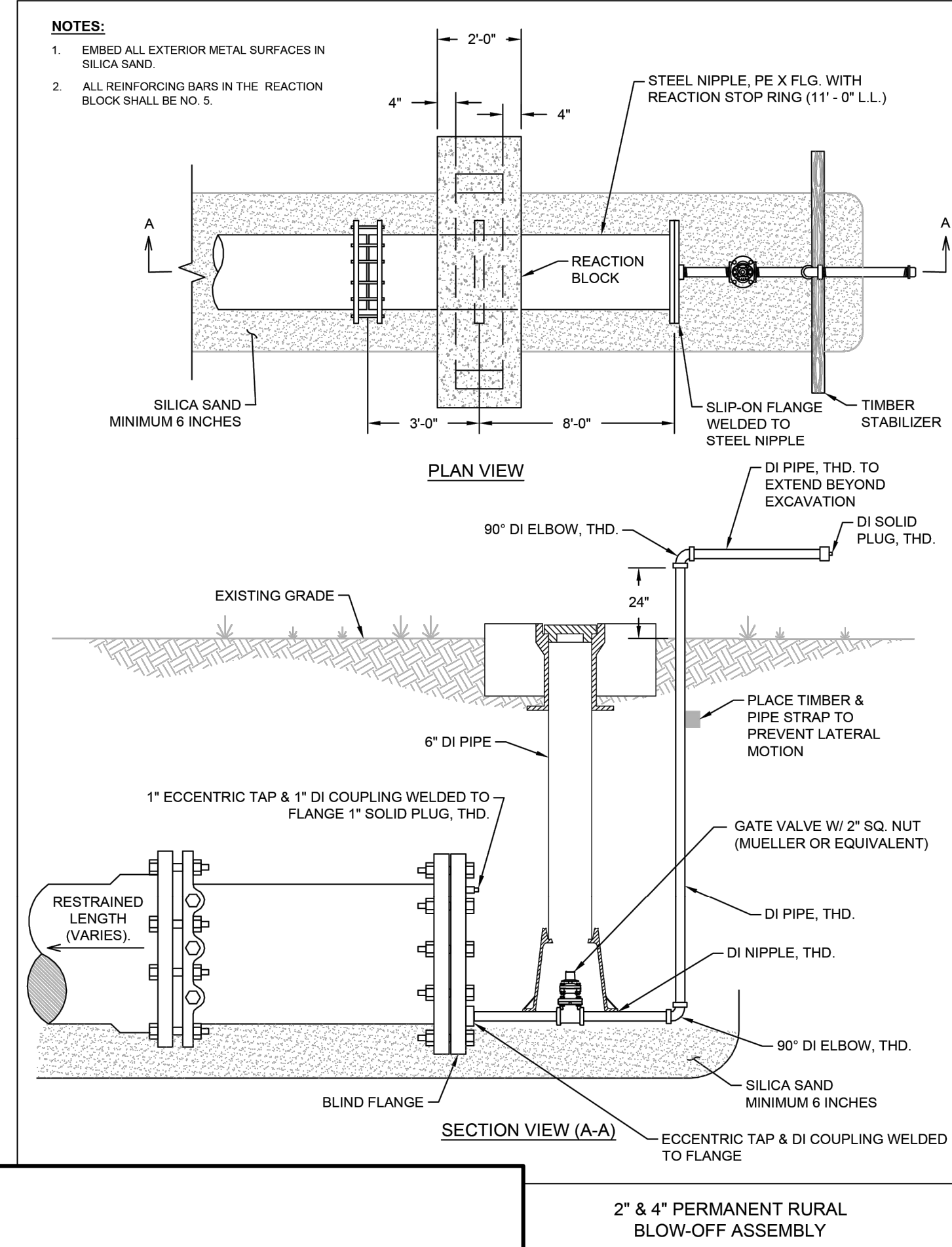


ALL FITTINGS TO BE MECHANICAL JOINT

Figure 18-A:

MINIMUM SQUARE FEET OF REQUIRED BLOCKING				
Size Pipe	Tees & Dead Ends	90° Bends	45° Bends	22 1/2° Bends
6"	3	4	2	2
8"	4	6	4	4
12"	10	14	8	8
16"	18	25	14	14

18

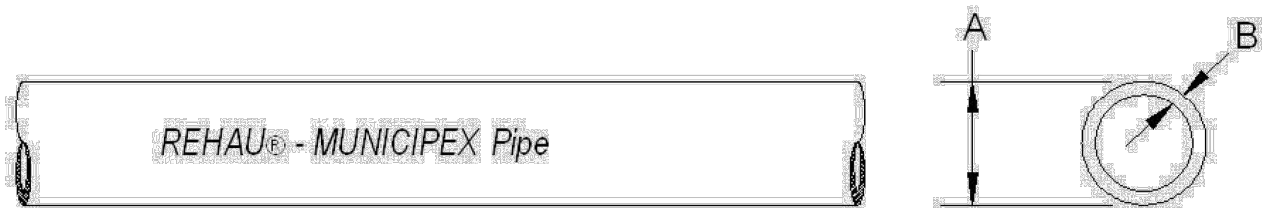


Construction
Automotive
Industry



PRODUCT SUBMITTAL 110

Product: MUNICIPEX® Pipe
Date: 01 January 2017 (supersedes 24 August 2015)



Article No.	Nominal Diameter in	Average OD A in (mm)	Wall Thickness B in (mm)	Weight lb/ft (kg/m)	Capacity gal/ft (l/m)
261056	3/4	0.875 (22.22)	0.097 (2.47)	0.10 (0.15)	0.0189 (0.2356)
261076	1	1.125 (28.582)	0.125 (3.18)	0.17 (0.26)	0.0316 (0.3939)
261096	1 1/4	1.375 (34.92)	0.153 (3.88)	0.25 (0.37)	0.0467 (0.5827)
261116	1 1/2	1.625 (41.28)	0.181 (4.59)	0.35 (0.52)	0.0650 (0.8118)
261136	2	2.125 (53.98)	0.236 (6.00)	0.60 (0.90)	0.1114 (1.3906)

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PS110, 01-Jan-17, Page 1 of 2

**WATER DETAILS
(2 OF 2)**

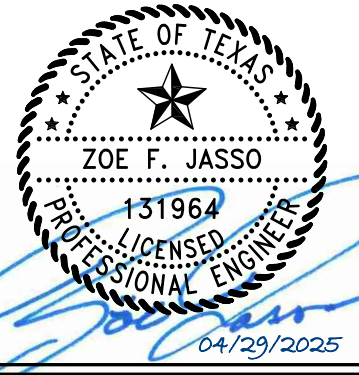
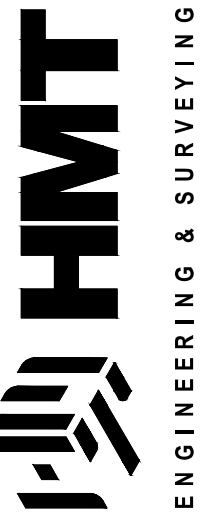
FRIENDSHIP OAKS, UNIT 4
FREDERICKSBURG, TEXAS

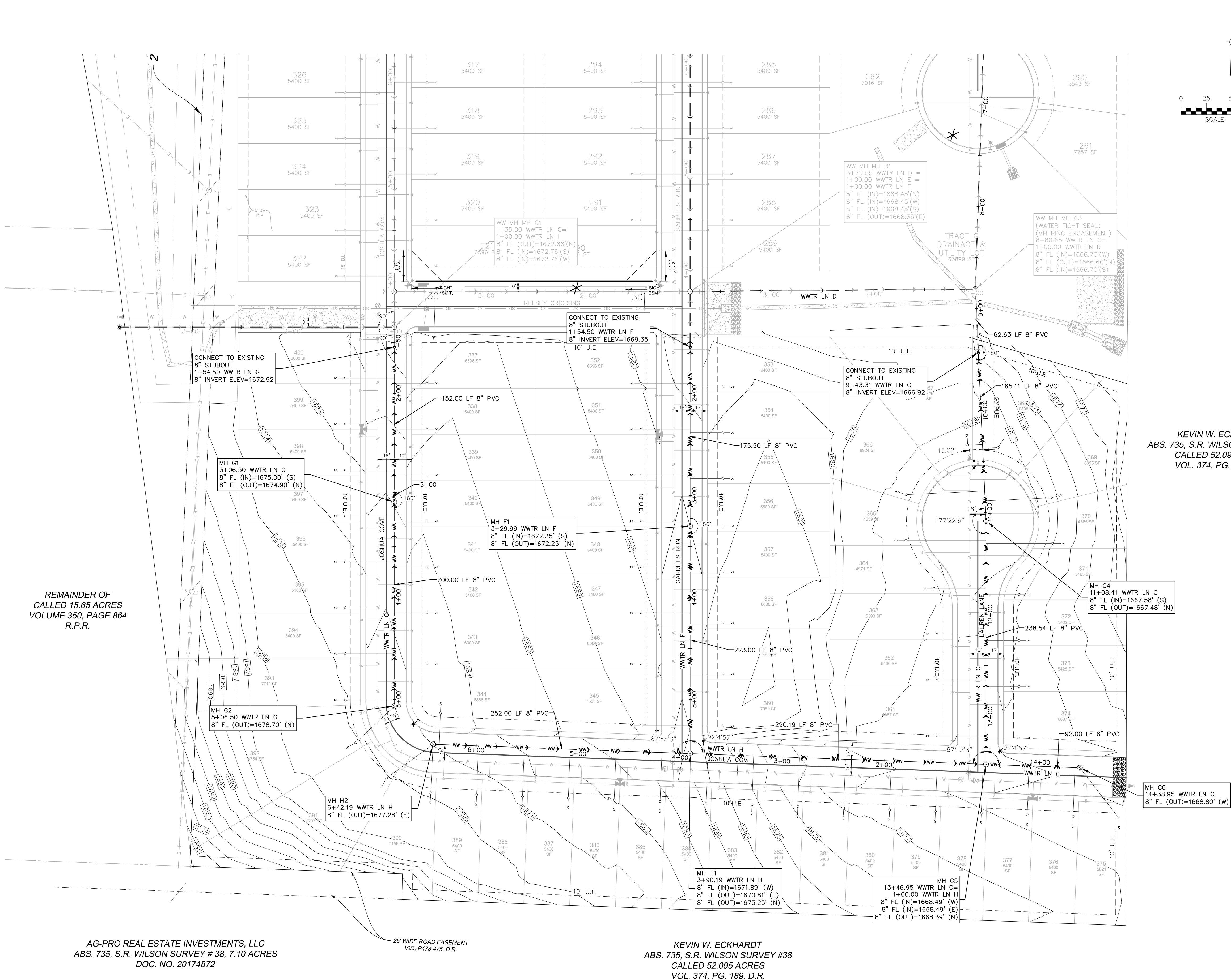
NO.	REVISION	DESCRIPTION	DATE

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HMT PROJECT NO.: 337.128

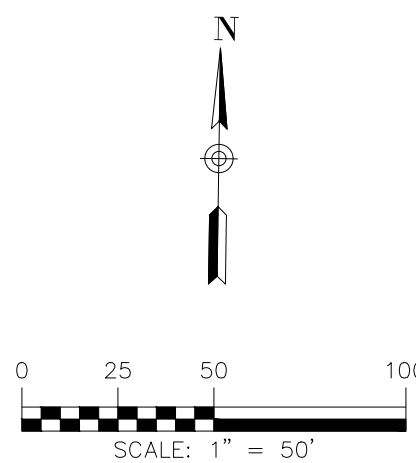
**SHEET
C6.3**

290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 1053600





- LEGEND**
- EXISTING CONTOURS
 - PROPOSED CONTOURS
 - B.L. BUILDING SETBACK LINE
 - U.E. UTILITY EASEMENT
 - D.E. DRAINAGE EASEMENT
 - EXISTING WASTEWATER LINE
 - EXISTING WASTEWATER MANHOLE
 - EXISTING WASTEWATER SERVICE
 - PROPOSED WASTEWATER LINE
 - PROPOSED WASTEWATER MANHOLE
 - PROPOSED WASTEWATER SERVICE
 - UTILITY CROSSING



KEVIN W. ECKHARDT
ABS. 735, S.R. WILSON SURVEY #38
CALLED 52.095 ACRES
VOL. 374, PG. 189, D.R.

UTILITY TRENCH COMPACTION

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DEEP TRENCH COMPACTION TESTING

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- ALL RING AND COVER SHALL MEET CITY STANDARDS.
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- ALL DIMENSIONS ARE FROM FACE OF CURB.
- MANHOLES MUST BE BOLTED UNLESS WAIVED BY UTILITY ENGINEER.
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TRENCH EXCAVATION SAFETY PROTECTION
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FOR BENCHMARK INFORMATION.

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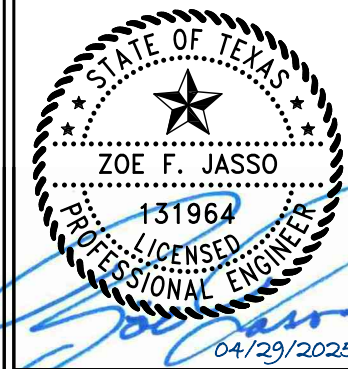
REMAINDER OF
CALLED 15.65 ACRES
VOLUME 350, PAGE 864
R.P.R.

AG-PRO REAL ESTATE INVESTMENTS, LLC
ABS. 735, S.R. WILSON SURVEY # 38, 7.10 ACRES
DOC. NO. 20174872

25' WIDE ROAD EASEMENT
V93, P473-475, D.R.

KEVIN W. ECKHARDT
ABS. 735, S.R. WILSON SURVEY #38
CALLED 52.095 ACRES
VOL. 374, PG. 189, D.R.

290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 1053600



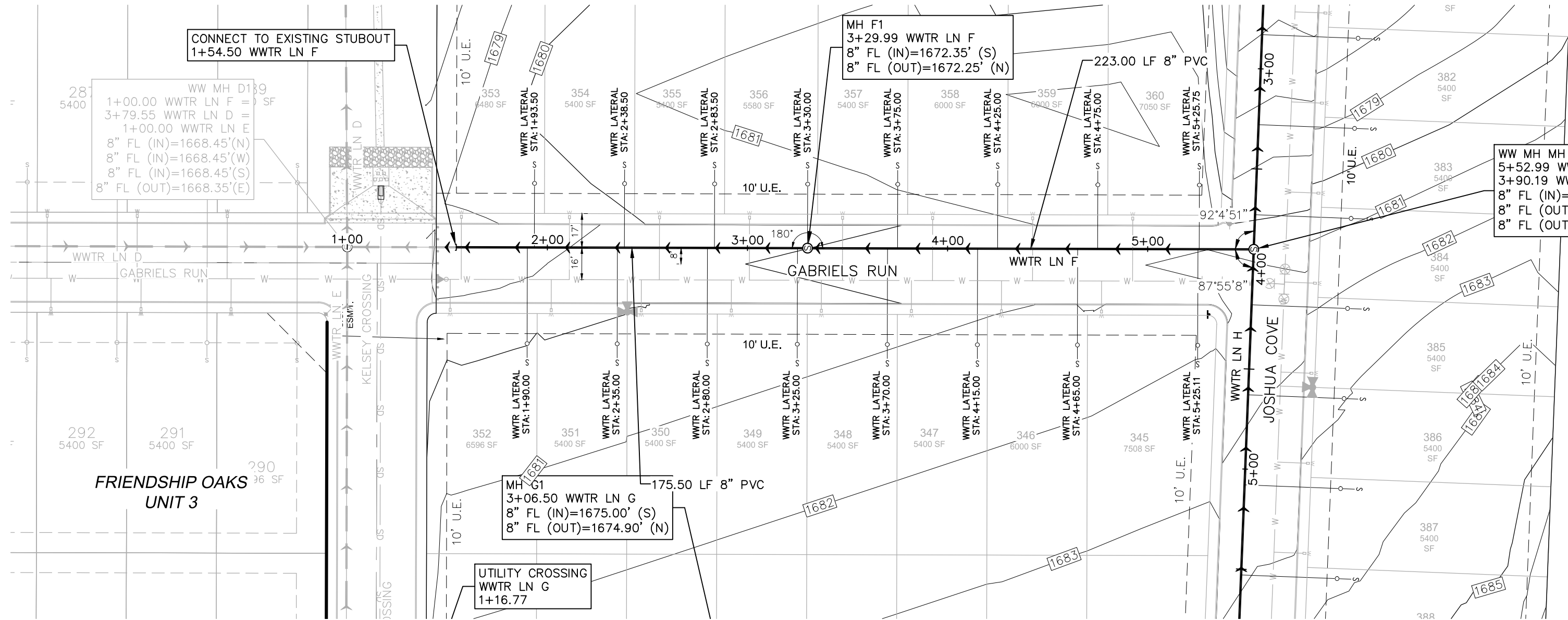
OVERALL WASTEWATER
PLAN
FRIENDSHIP OAKS, UNIT 4
FREDERICKSBURG, TEXAS

REVISION	DATE
NO.	

DATE: JANUARY 2025
DRAWN BY: RR
DESIGNED BY: JK
REVIEWED BY: ZJ

HMT PROJECT NO.: 337.128

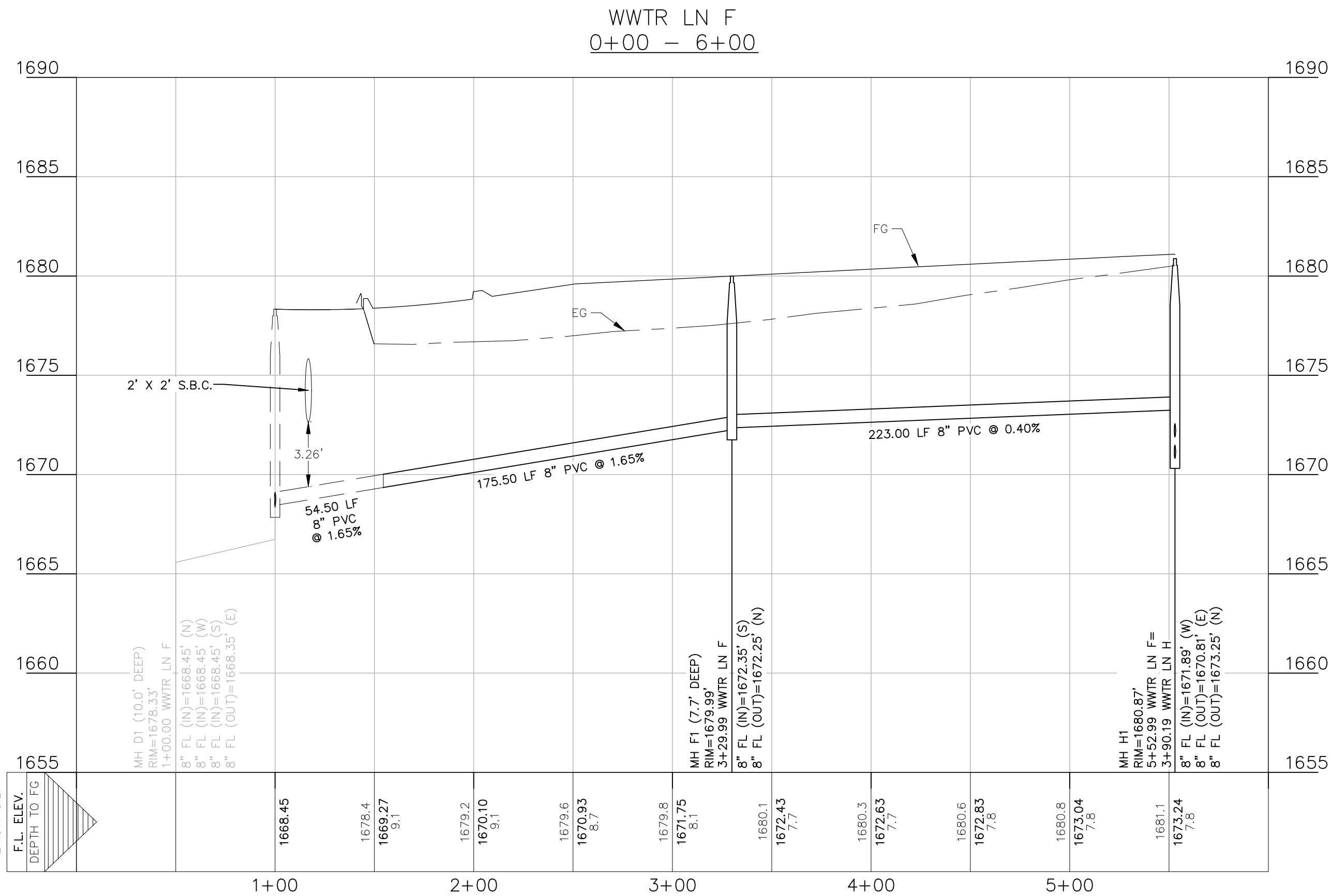
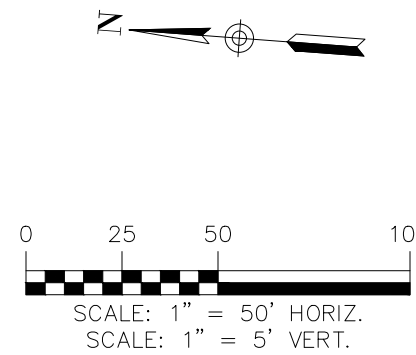
SHEET
C7.1



KEVIN W. ECKHARDT
ABS. 735, S.R. WILSON SURVEY #38
CALLED 52.095 ACRES
VOL. 374, PG. 189, D.R.

CEMENT
D.R.

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



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WASTEWATER LINE F
PLAN & PROFILE

FRIENDSHIP OAKS, UNIT 3
FREDERICKSBURG, TEXAS



290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 1053600



NO.	REVISION	DESCRIPTION	REVISION DATE

DATE: AUGUST 2024

DRAWN BY: JK

DESIGNED BY: RS

REVIEWED BY: ZJ

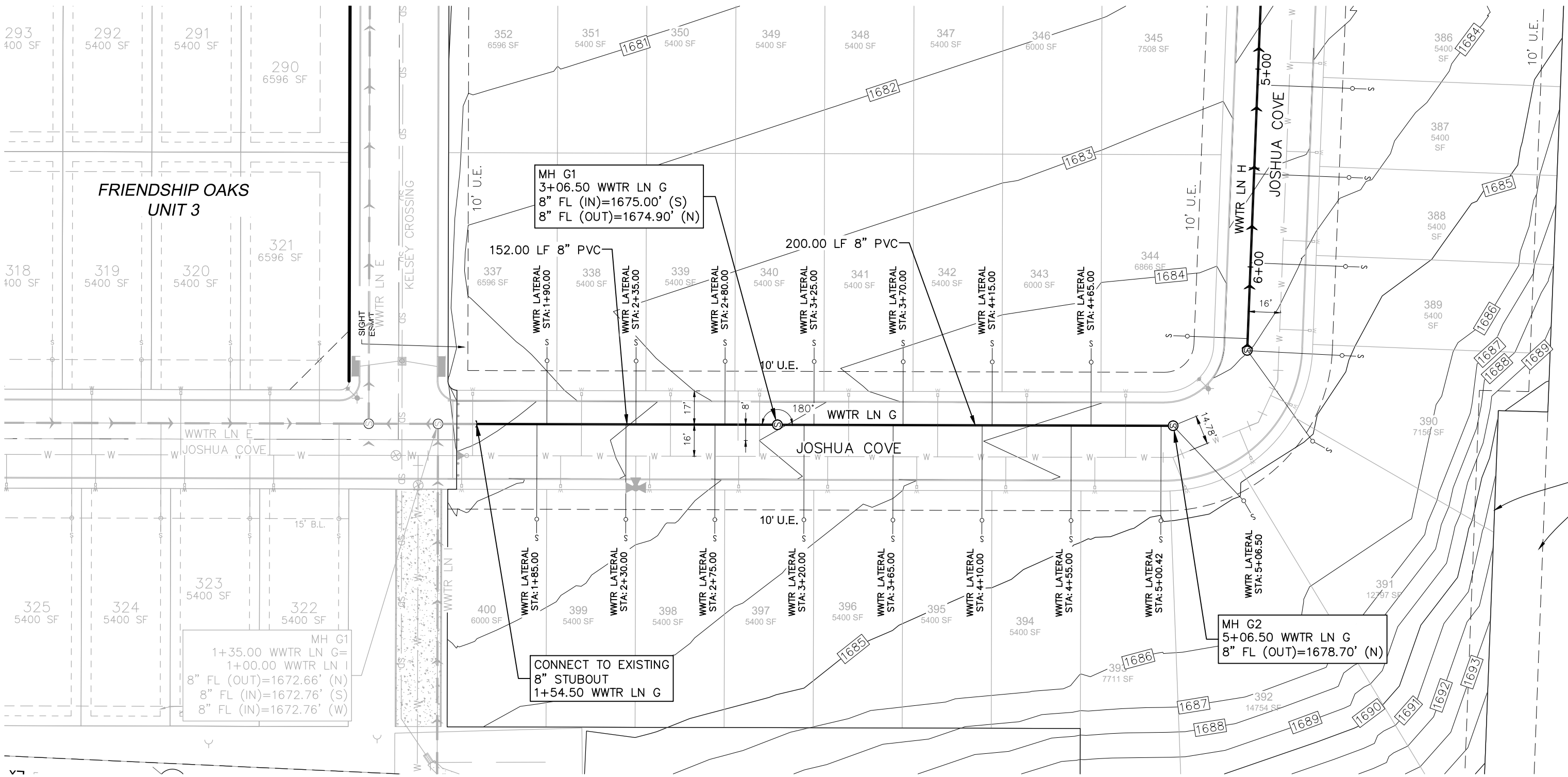
HMT PROJECT NO.:

337.065

SHEET

C7.3

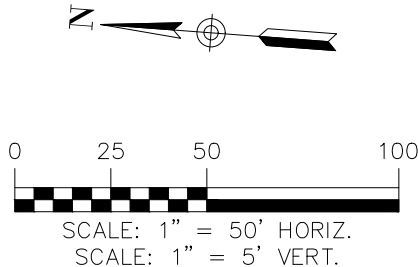
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STMENTS, LLC
38, 7.10 ACRES
172

AG-PRO REAL ESTATE INVESTMENTS, LLC
ABS. 135, S.R. WILSON SURVEY # 38, 7.10 ACRES
DOC. NO. 20174872

- LEGEND**
- EXISTING CONTOURS
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WASTEWATER LINE G
PLAN & PROFILE

FRIENDSHIP OAKS, UNIT 3
FREDERICKSBURG, TEXAS

NO.	REVISION DESCRIPTION	REVISION DATE

DATE: AUGUST 2024

DRAWN BY: JK

DESIGNED BY: RS

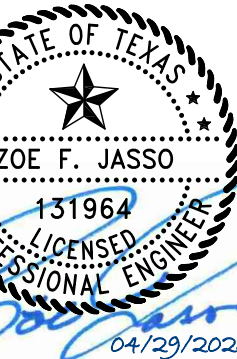
REVIEWED BY: ZJ

HMT PROJECT NO.:

337.065

SHEET

C7.4

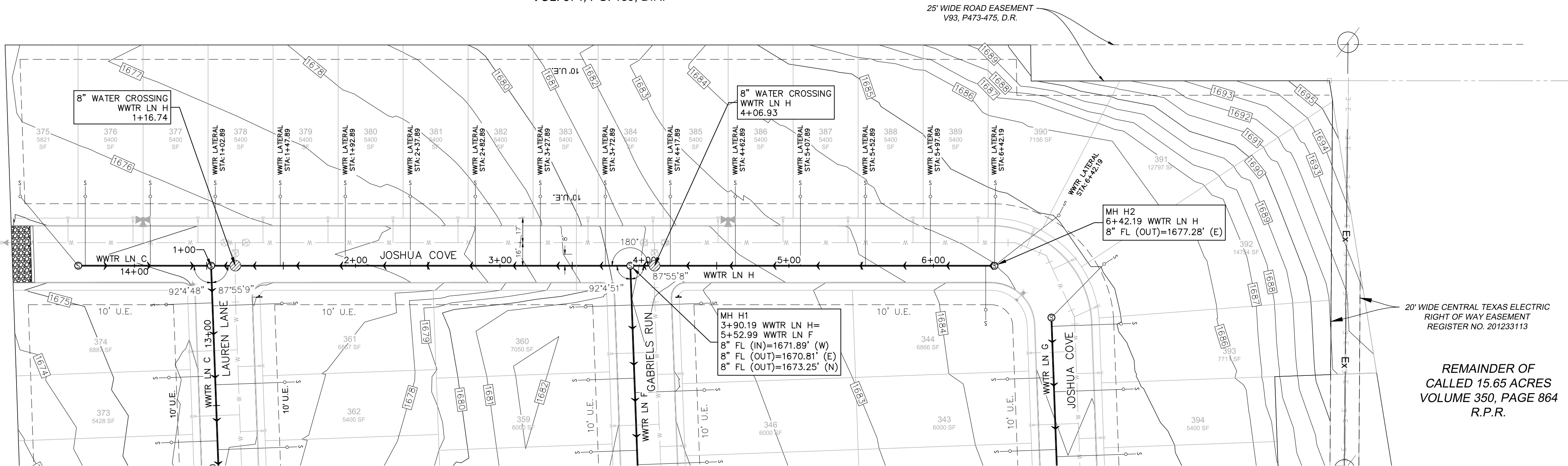


HMT
ENGINEERING & SURVEYING

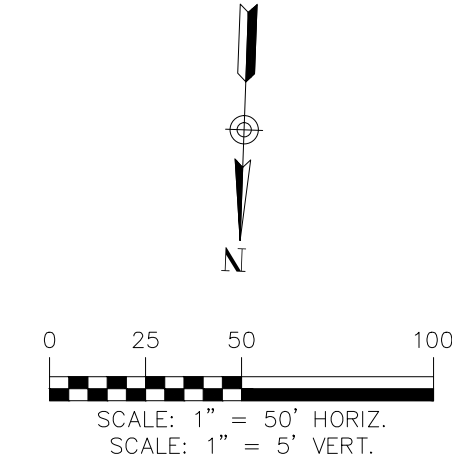
290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 1053600

KEVIN W. ECKHARDT
ABS. 735, S.R. WILSON SURVEY #38
CALLED 52.095 ACRES
VOL. 374, PG. 189, D.R.

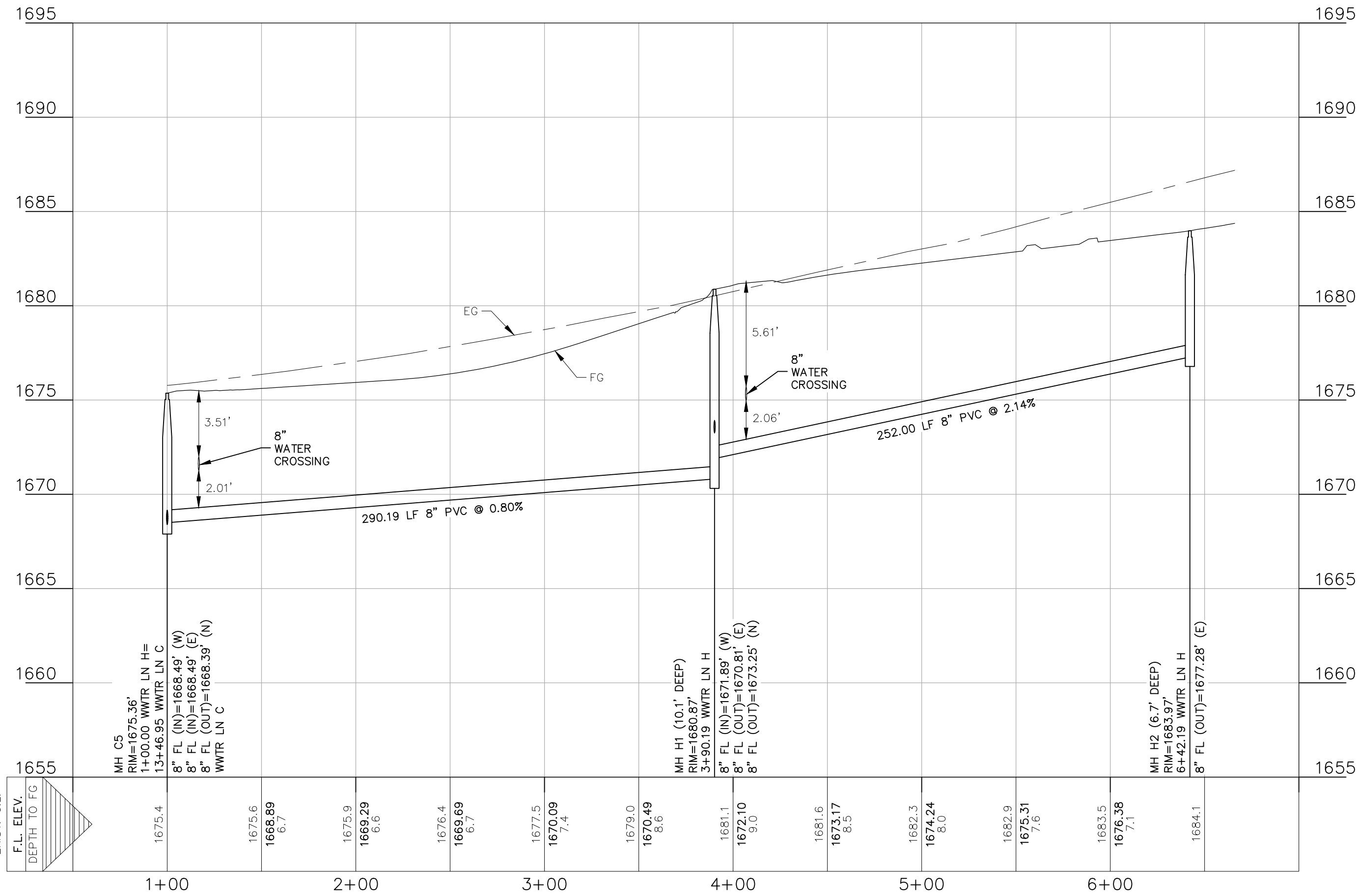
KEVIN W. ECKHARDT
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- LEGEND
- 700 — EXISTING CONTOURS
 - [700] PROPOSED CONTOURS
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 - U.E. UTILITY EASEMENT
 - D.E. DRAINAGE EASEMENT
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 - EXISTING WASTEWATER SERVICE
 - PROPOSED WASTEWATER LINE
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WWTR LN H
0+50 - 7+00



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WASTEWATER LINE H
PLAN & PROFILE

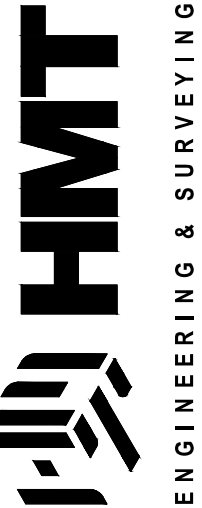
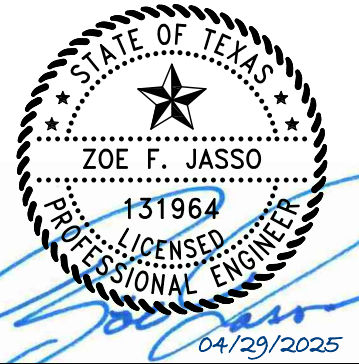
FRIENDSHIP OAKS, UNIT 4
FREDERICKSBURG, TEXAS

NO.	REVISION	DESCRIPTION	REVISION DATE

DATE: JANUARY 2025
DRAWN BY: RR
DESIGNED BY: JK
REVIEWED BY: ZJ

HMT PROJECT NO.: 337.128

SHEET
C7.5



290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 1053600

Drawing Name: W:_Projects\337 - Friendship Oaks Unit 4\CDs\337_128_WWIR DETAILS.dwg User: jashuak Apr 23, 2025 - 5:31pm

SANITARY SEWER PIPE MATERIALS:

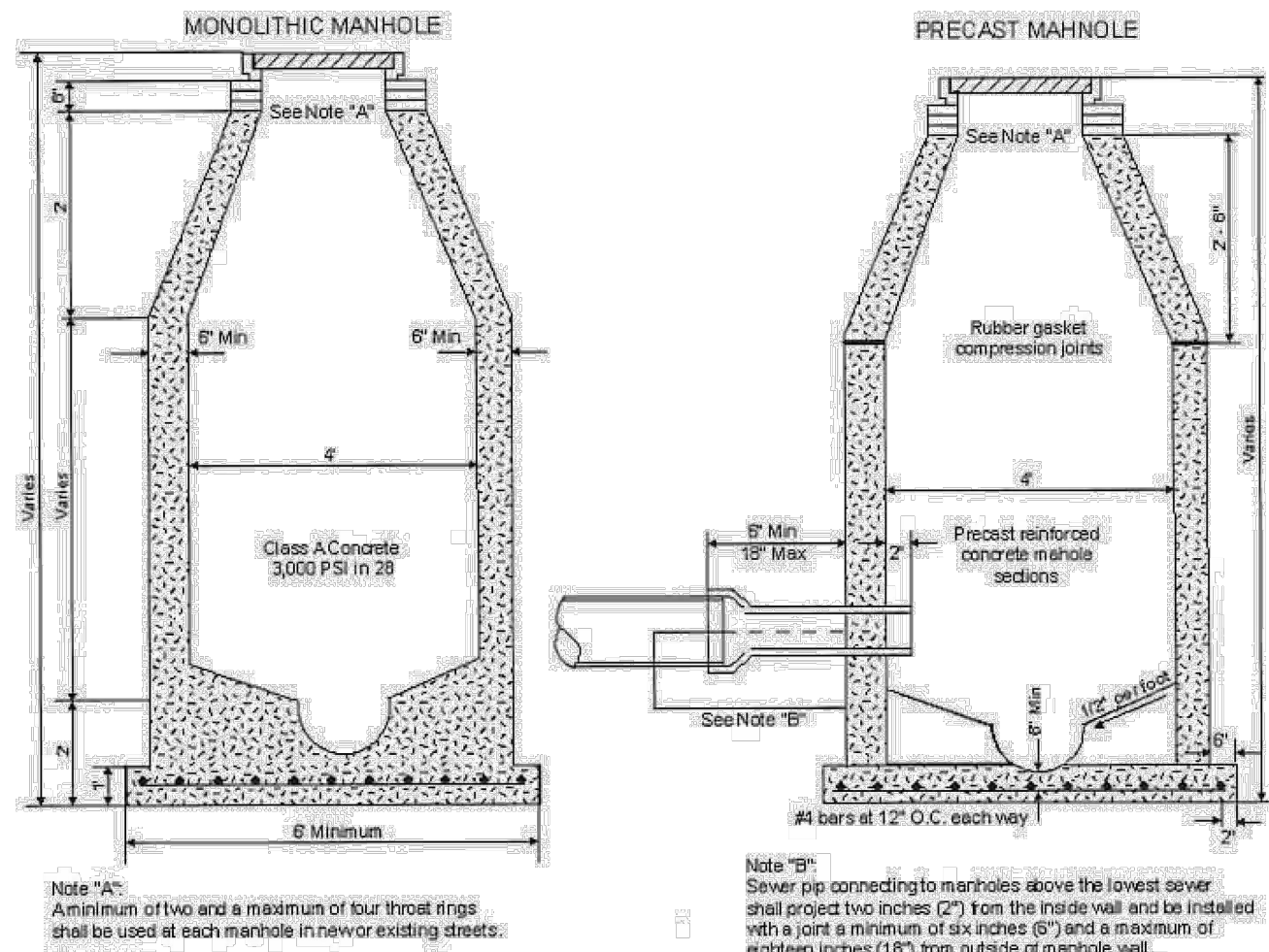
Sewer Pipe: All sewer pipes shall be SDR 26 PVC.

Fittings: All fittings shall be gasketed fittings for SDR 26 PVC pipe.

Manholes: See detail.

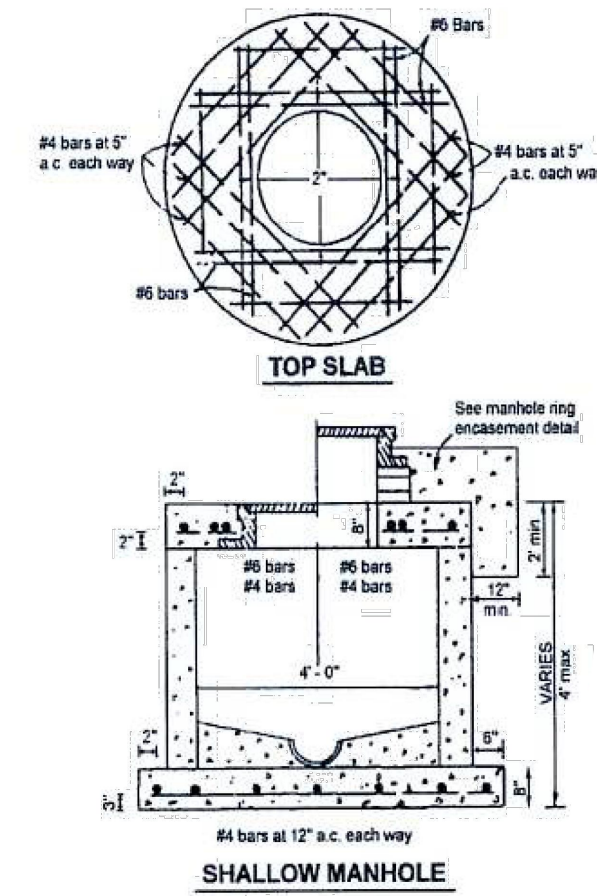
Ring and Cover: See detail.

Service Connections: All service connections shall be 4" diameter PVC and located near the center of each lot and shall extend approximately 1 foot beyond the R.O.W. line. Services shall have a minimum of 36 inches of cover at the end of the service. The end of the service shall be plugged.



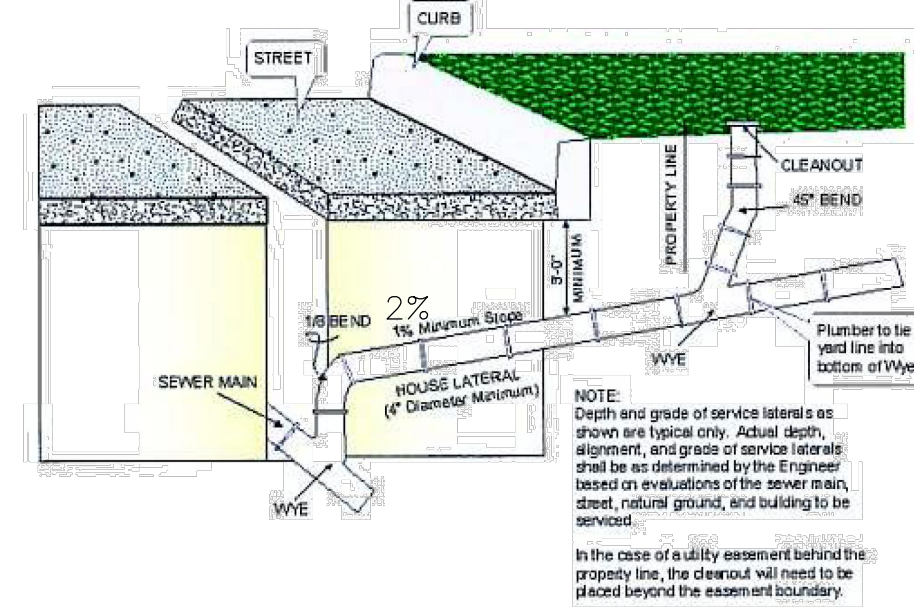
12

RING & COVER DETAIL:



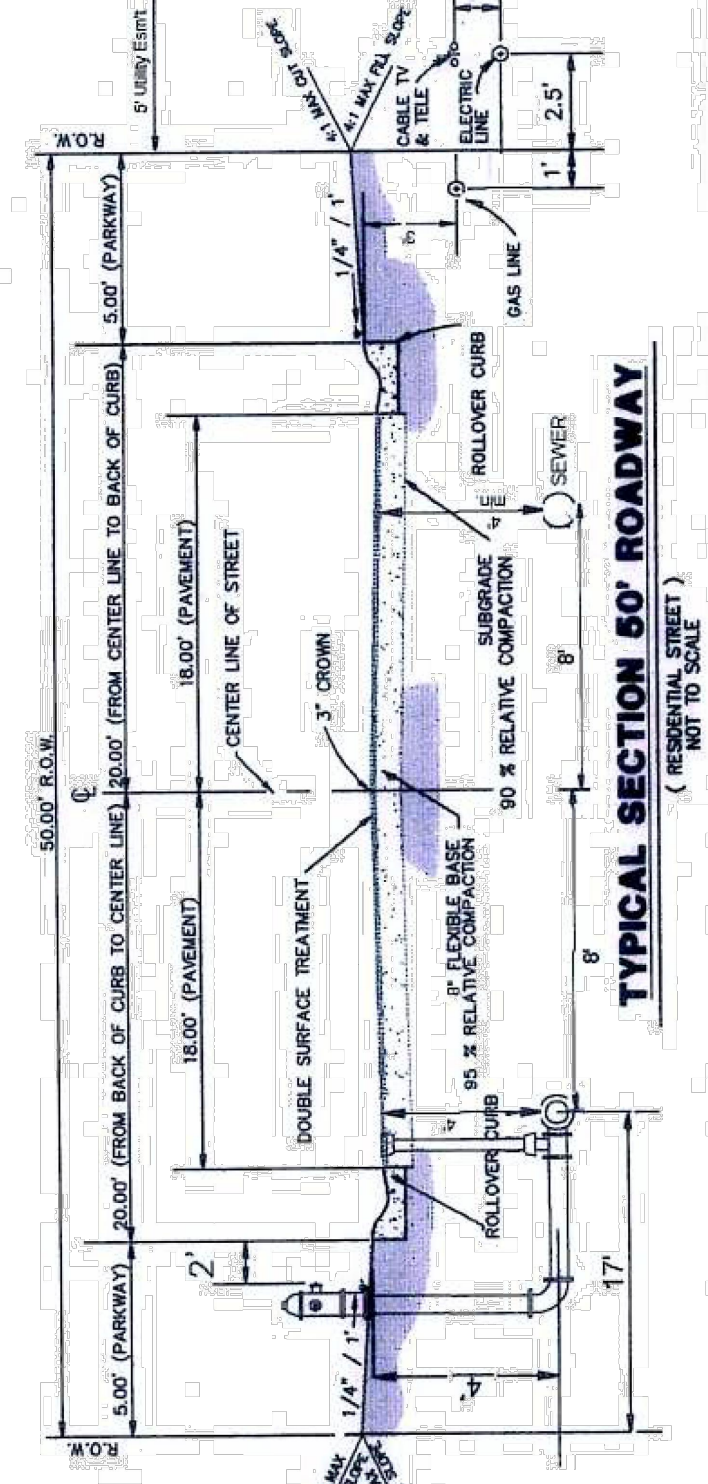
13

TYPICAL HOUSE LATERAL DETAIL:

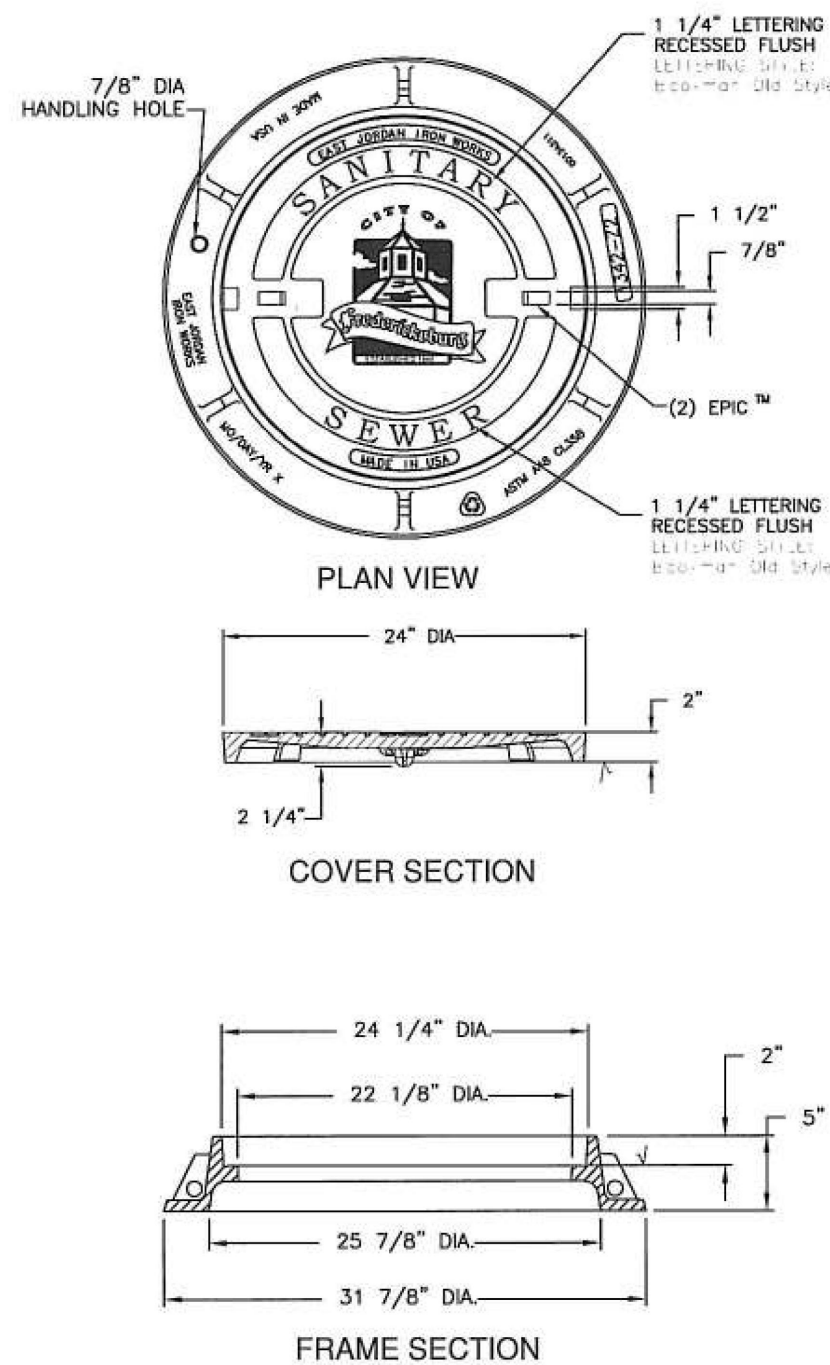


14

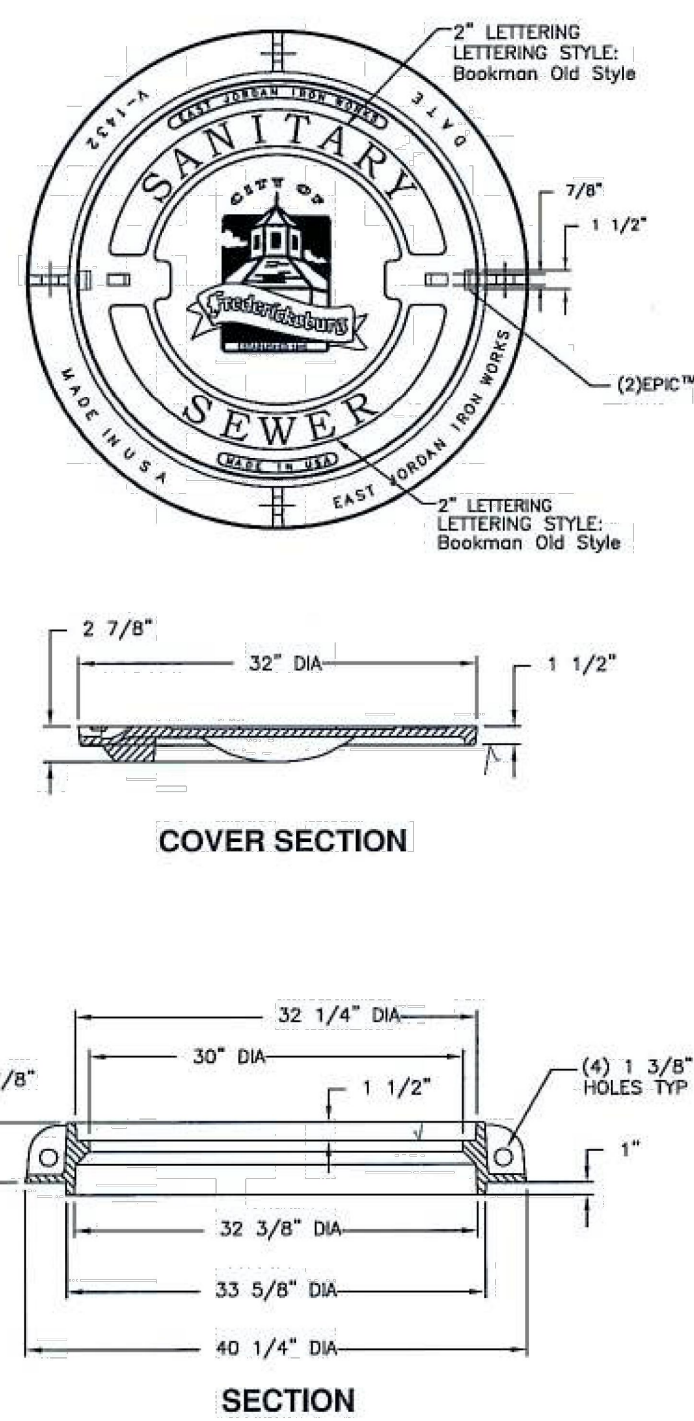
STANDARD UTILITY PLACEMENT (Typical 50' Roadway Section):



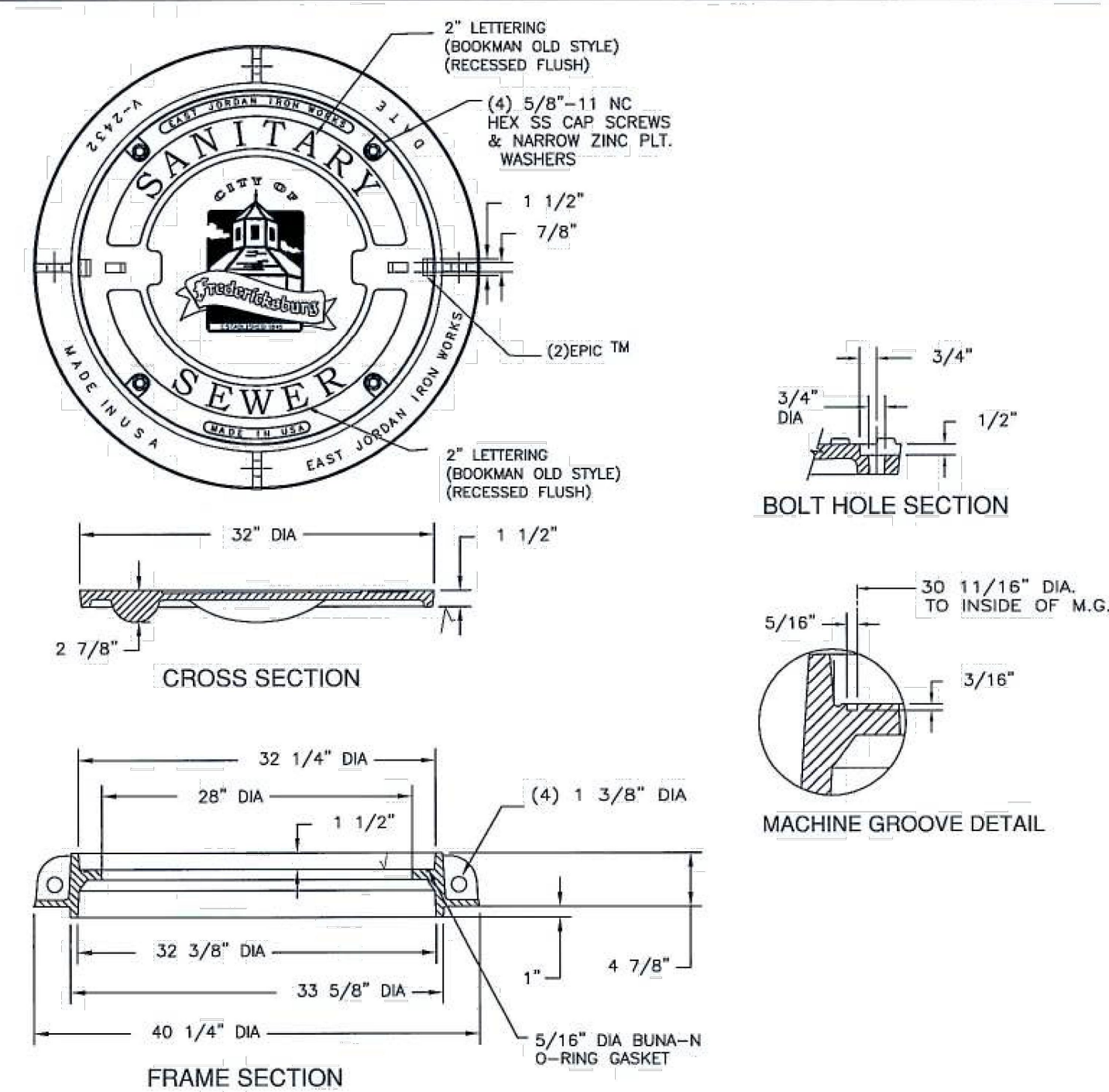
15



EJIW EAST JORDAN IRON WORKS EST. 1883 800-626-4653 www.ejiw.com MADE IN USA	
PRODUCT NUMBER	00134349A01
CATALOG NUMBER	1342A1 1342Z2
MANHOLE ASSEMBLY	
LOAD RATING HEAVY DUTY	
COATING UNDIPPED	
MATERIAL SPECIFICATION COVER - GRAY IRON ASTM A48 CL35B FRAME - GRAY IRON ASTM A48 CL35B	
24" Ring & Cover To be used when specified by City of Fredericksburg	
OPEN AREA N/A	
✓ DESIGNATES MACHINED SURFACE	
DRAWN GAD	DATE 08/12/08
LAST REVISED	DATE
REFERENCE INFORMATION 00134349 00134311	



EJIW EAST JORDAN IRON WORKS EST. 1883 800-626-4653 www.ejiw.com MADE IN USA	
PRODUCT NUMBER	41432001
CATALOG NUMBER	V-1432-3 CV V-1432 FR
ASSEMBLY	
LOAD RATING HEAVY DUTY	
COATING UNDIPPED	
MATERIAL SPECIFICATION COVER - DUCTILE IRON ASTM A536 RING - GRAY IRON ASTM A48 CL35B	
32" Ring & Cover To be used when specified by City of Fredericksburg	
OPEN AREA N/A	
✓ DESIGNATES MACHINED SURFACE	
DRAWN GAD	DATE 08/08/08
LAST REVISED	DATE
REFERENCE INFORMATION 41432010 41432139	



EJIW EAST JORDAN IRON WORKS EST. 1883 800-626-4653 www.ejiw.com MADE IN USA	
PRODUCT NUMBER	42432093
CATALOG NUMBER	V2432-3 DI V-2432
MANHOLE ASSEMBLY	
LOAD RATING HEAVY DUTY	
COATING UNDIPPED	
MATERIAL SPECIFICATION COVER - DUCTILE IRON ASTM A536 FRAME - GRAY IRON ASTM A48 CL35B	
32" Bolted / Water-tight Ring & Cover To be used when specified by City of Fredericksburg	
OPEN AREA N/A	
✓ DESIGNATES MACHINED SURFACE	
DRAWN GAD	DATE 08/08/08
LAST REVISED	DATE
REFERENCE INFORMATION 42432035 42432010	

WASTEWATER DETAILS

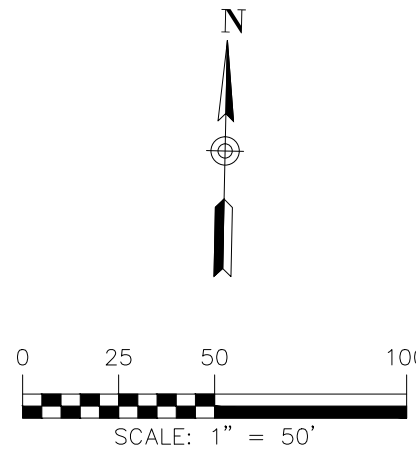
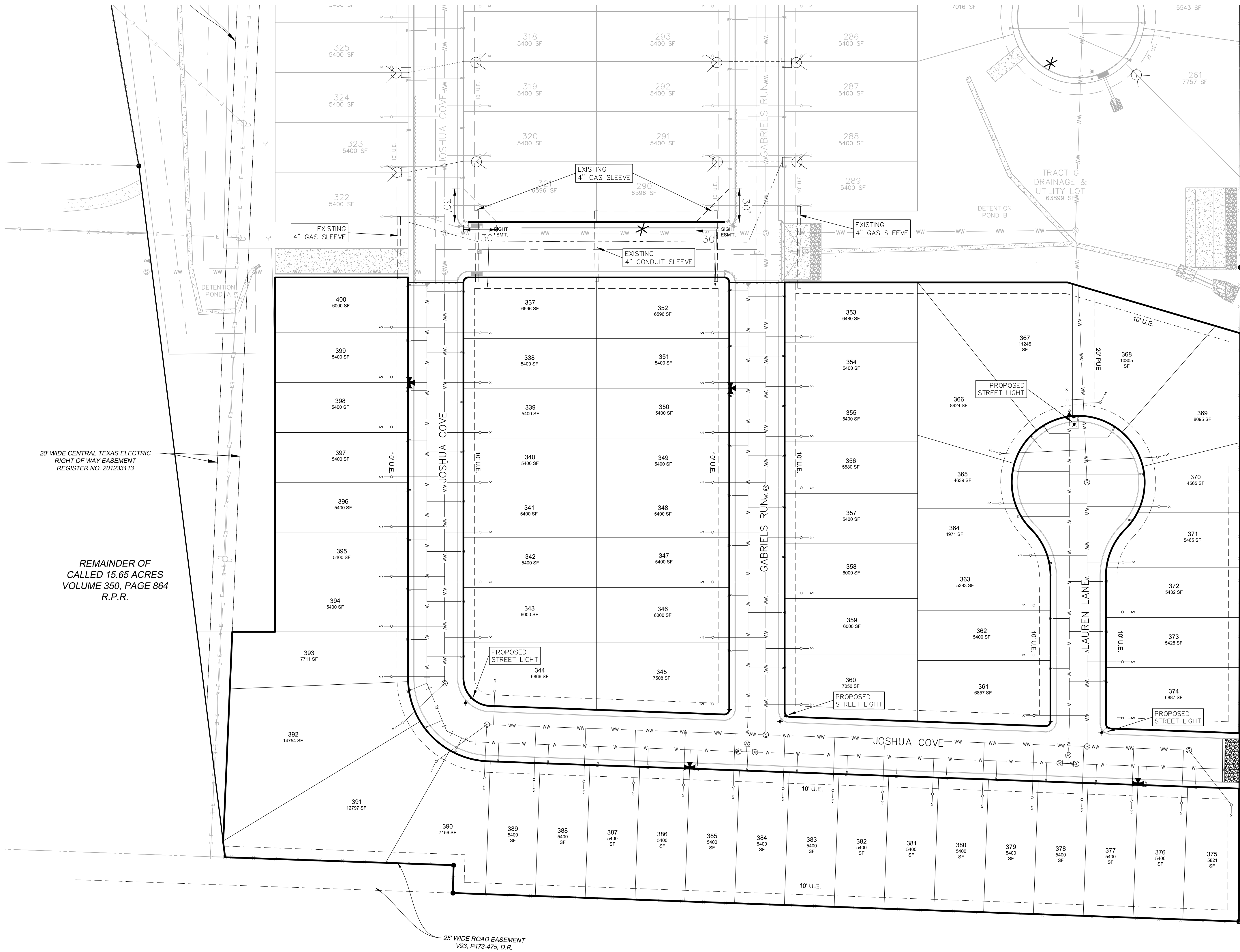
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DESIGNED BY:	JK
REVIEWED BY:	ZJ
HMT PROJECT NO.:	337.128

SHEET
C7.6



290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 1053600



- LEGEND**
- B.L. BUILDING SETBACK LINE
 - U.E. UTILITY EASEMENT
 - D.E. DRAINAGE EASEMENT
 - EX W EX W EXISTING WATER LINE
 - W W PROPOSED WATER LINE
 - PROPOSED WATER SERVICE
 - UTILITY CROSSING
 - PROPOSED GAS CONDUIT
 - PROPOSED PRIMARY TRANSFORMER
 - PROPOSED SECONDARY TRANSFORMER
 - PROPOSED PULL BOX
 - PROPOSED LIGHT POLE
 - PRIMARY ELECTRIC CONDUIT
 - SECONDARY ELECTRIC CONDUIT
 - EXISTING GAS SLEEVE

- UTILITY NOTES:**
1. FACILITIES SHALL BE CONSTRUCTED PER FREDERICKSBURG GUIDELINES
 2. ADJOINING PROPERTY LINES ARE APPROXIMATES
 3. CONTRACTOR SHALL DETERMINE ACTUAL LOCATION OF ALL EXISTING INFRASTRUCTURE

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 EIGHT INCHES (8") 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 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 STREET INSPECTOR WITH ALL TESTING DOCUMENTATION AND A CERTIFICATION STATING THAT THE PLACEMENT OF FILL MATERIAL HAS BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.

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.

KEVIN W. ECKHARDT
ABS. 735, S.R. WILSON SURVEY #38
CALLED 52.095 ACRES
VOL. 374, PG. 189, D.R.

AG-PRO REAL ESTATE INVESTMENTS, LLC
ABS. 735, S.R. WILSON SURVEY # 38, 7.10 ACRES
DOC. NO. 20174872

KEVIN W. ECKHARDT
ABS. 735, S.R. WILSON SURVEY #38
CALLED 52.095 ACRES
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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.

OVERALL UTILITY PLAN

FRIENDSHIP OAKS, UNIT 4
FREDERICKSBURG, TEXAS

NO.	REVISION DESCRIPTION	REVISION DATE

DATE:	JANUARY 2025
DRAWN BY:	RR
DESIGNED BY:	JK
REVIEWED BY:	ZJ
HMT PROJECT NO.:	337.128

SHEET
C8.1



HMT
ENGINEERING & SURVEYING

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