

LENNAR HOMES OF TEXAS LAND AND CONSTRUCTION, LTD
100 NE LOOP, SUITE 1155
SAN ANTONIO, TEXAS 78216

FRIENDSHIP OAKS, UNIT 4
CIVIL SITE CONSTRUCTION PLANS




SITE TBM #54	SITE TBM #55
SET HMT 12 CONTROL	SET HMT 12
N: 10058455.245	N: 10057943.811
E: 2759244.727	E: 2758458.655
ELEV: 1685.09	ELEV: 1700.68

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


A circular professional engineer seal for the State of Texas. The outer ring contains the text "STATE OF TEXAS" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by stars. The center features a five-pointed star above the name "ZOE F. JASSO" and the license number "131964". Below the license number, the word "LICENSED" is written in a smaller font.

JUNE 2025

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.

 06/30/2025
Zoe F. Jasso
P.E. Registration No. 131964

PREPARED BY:



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ENGINEERING & SURVEYING

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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.

Drawing Name: M:_Projects\337 - Lennar Homes\128 - Friendship Oaks Unit 4\CIs\337.128_COVER.dwg User: joshuak Jun 30, 2025 - 9:53am

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.

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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).

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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 PERMITEE 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. IF THE ERROR IS 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:

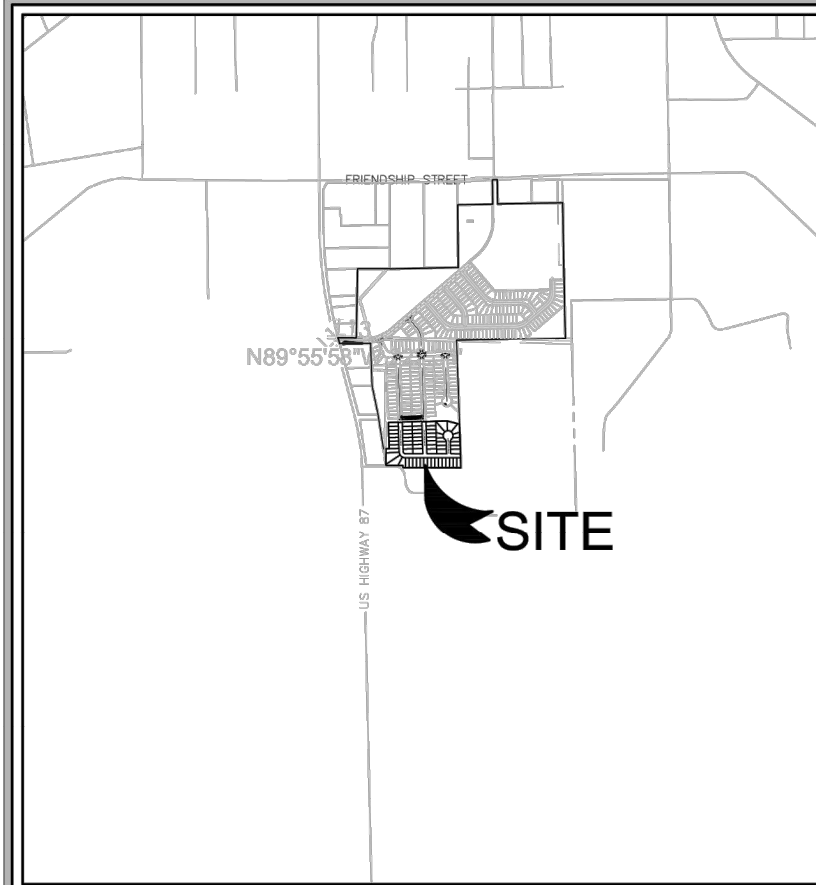
- A. PRE-CONSTRUCTION MEETINGS;
- B. BEGINNING EACH PHASE OF CONSTRUCTION;
- C. TESTING OF WATER AND/OR WASTEWATER LINES; AND,
- D. FINAL WALK-THROUGH OF FACILITIES.

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 UTILITY COMPANY AT THE CONTRACTOR'S EXPENSE. CONTRACTOR SHALL NOTIFY APPROPRIATE UTILITY COMPANIES AND GOVERNMENTAL AGENCIES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION AT:

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



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.

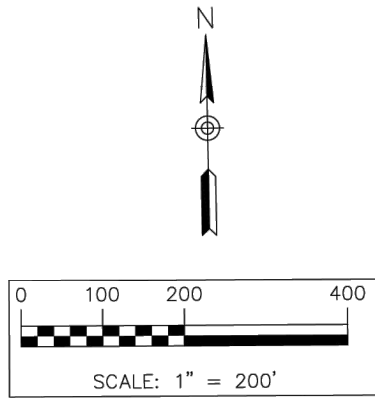
LICENSED PROFESSIONAL ENGINEER

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

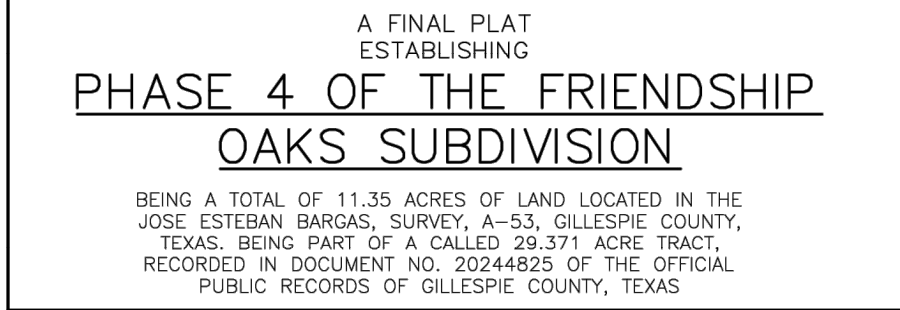
APPROVED

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: _____

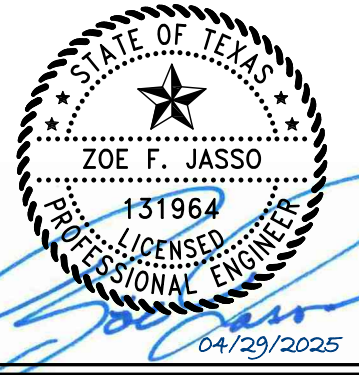
PLAT (1 OF 2)

FRIENDSHIP OAKS, UNIT 4
FREDERICKSBURG, TEXAS

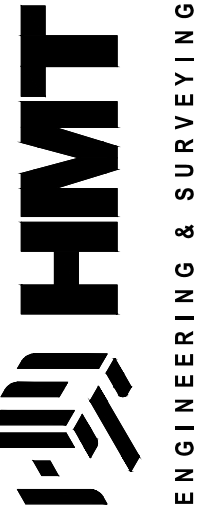
NO.	REVISION	DESCRIPTION	DATE

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

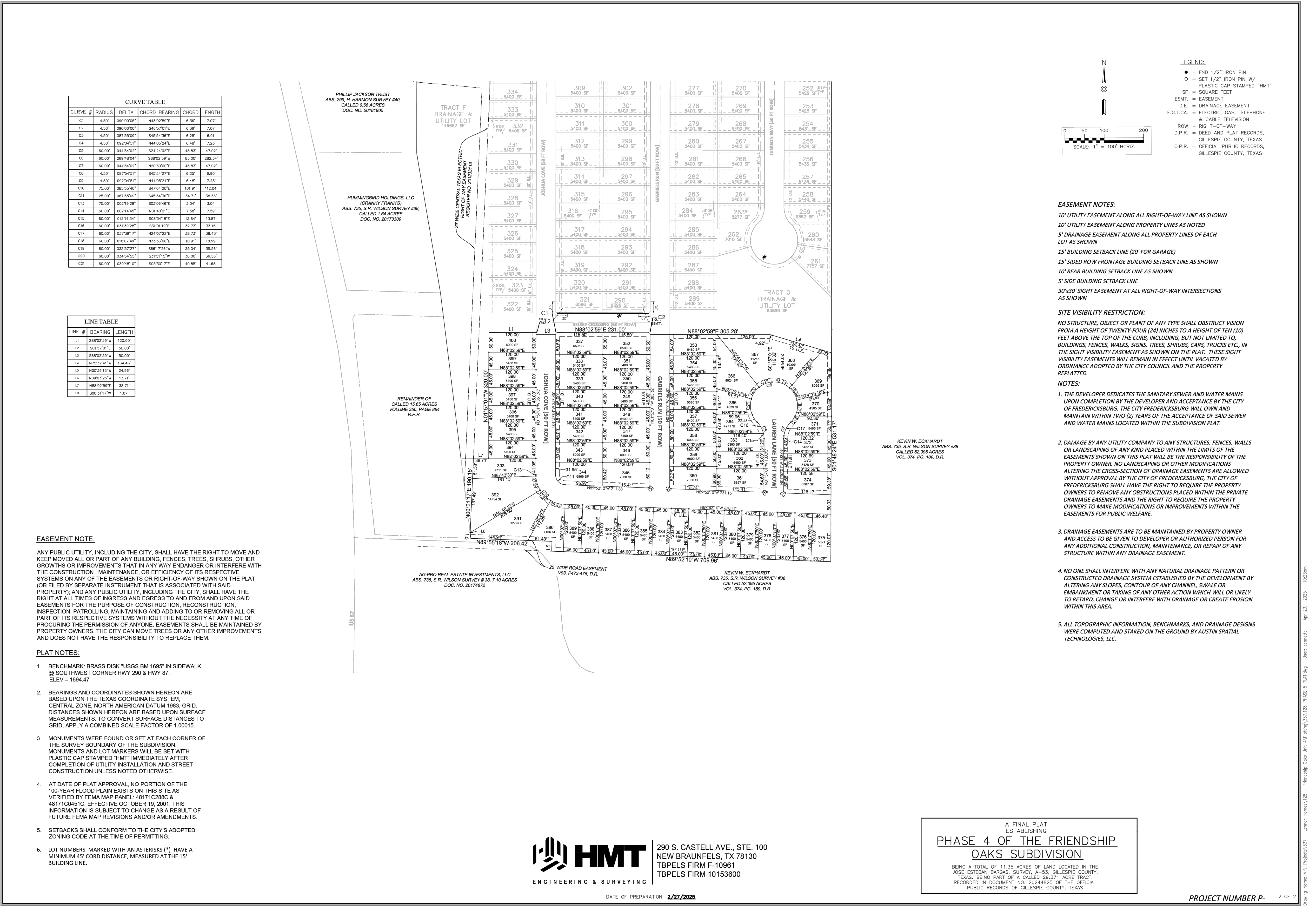
SHEET
C0.2



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°39'12"W	24.98'
L6	N09°03'22"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.



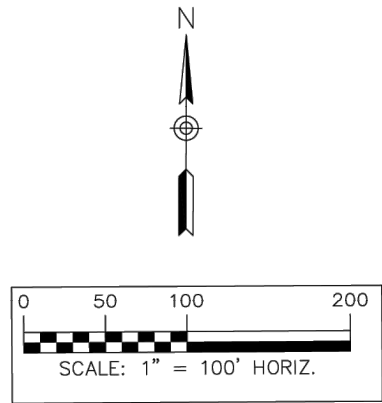
DATE OF PREPARATION: 2/27/2025

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)

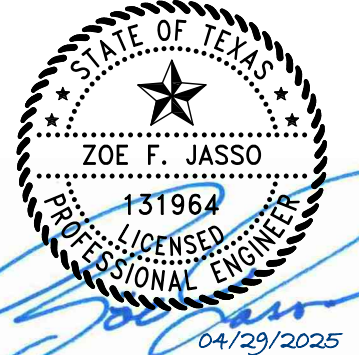
FRIENDSHIP OAKS, UNIT 4
FREDERICKSBURG, TEXAS

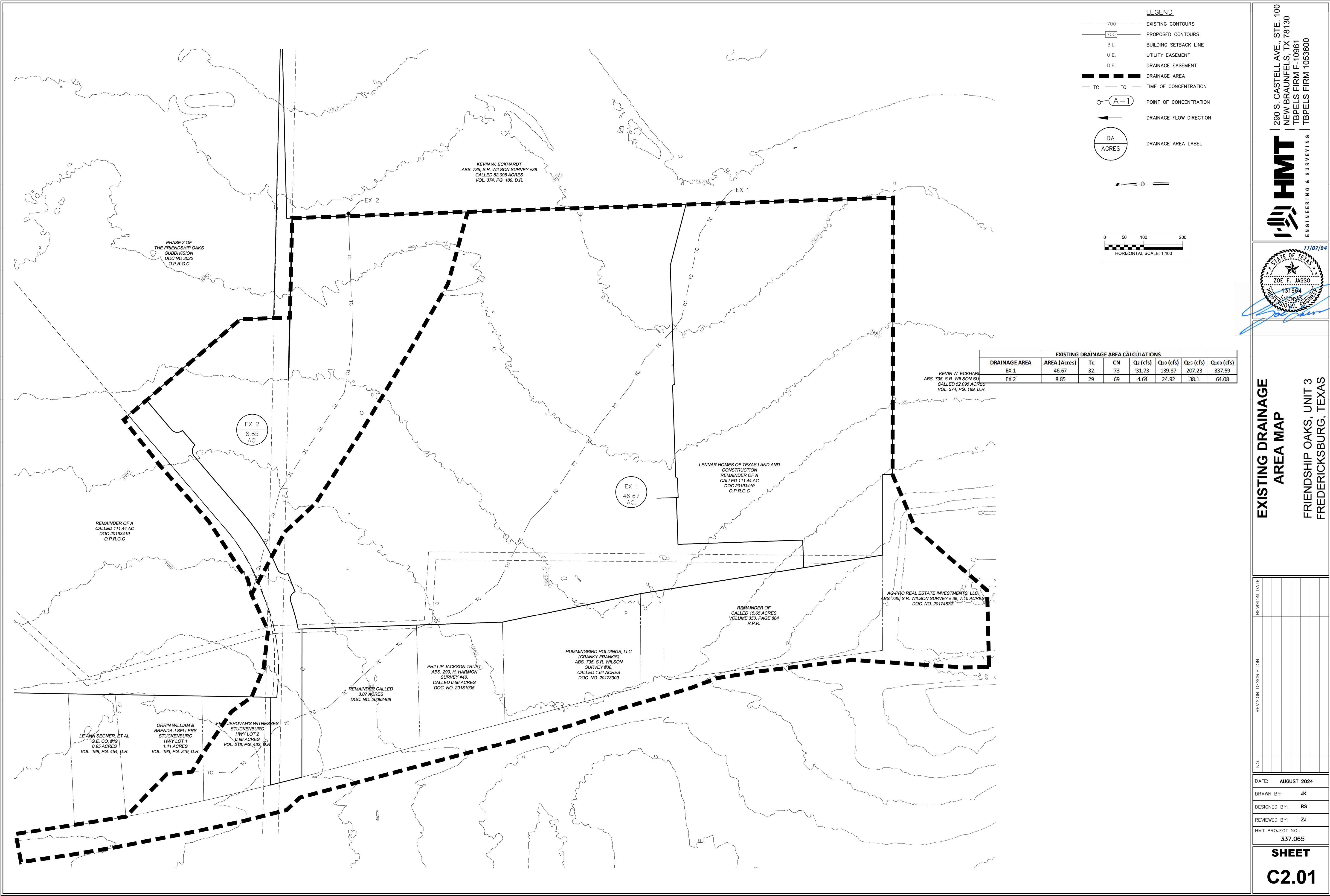
NO.	REVISION DESCRIPTION	REVISION DATE

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





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

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

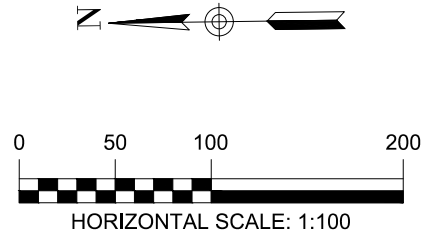
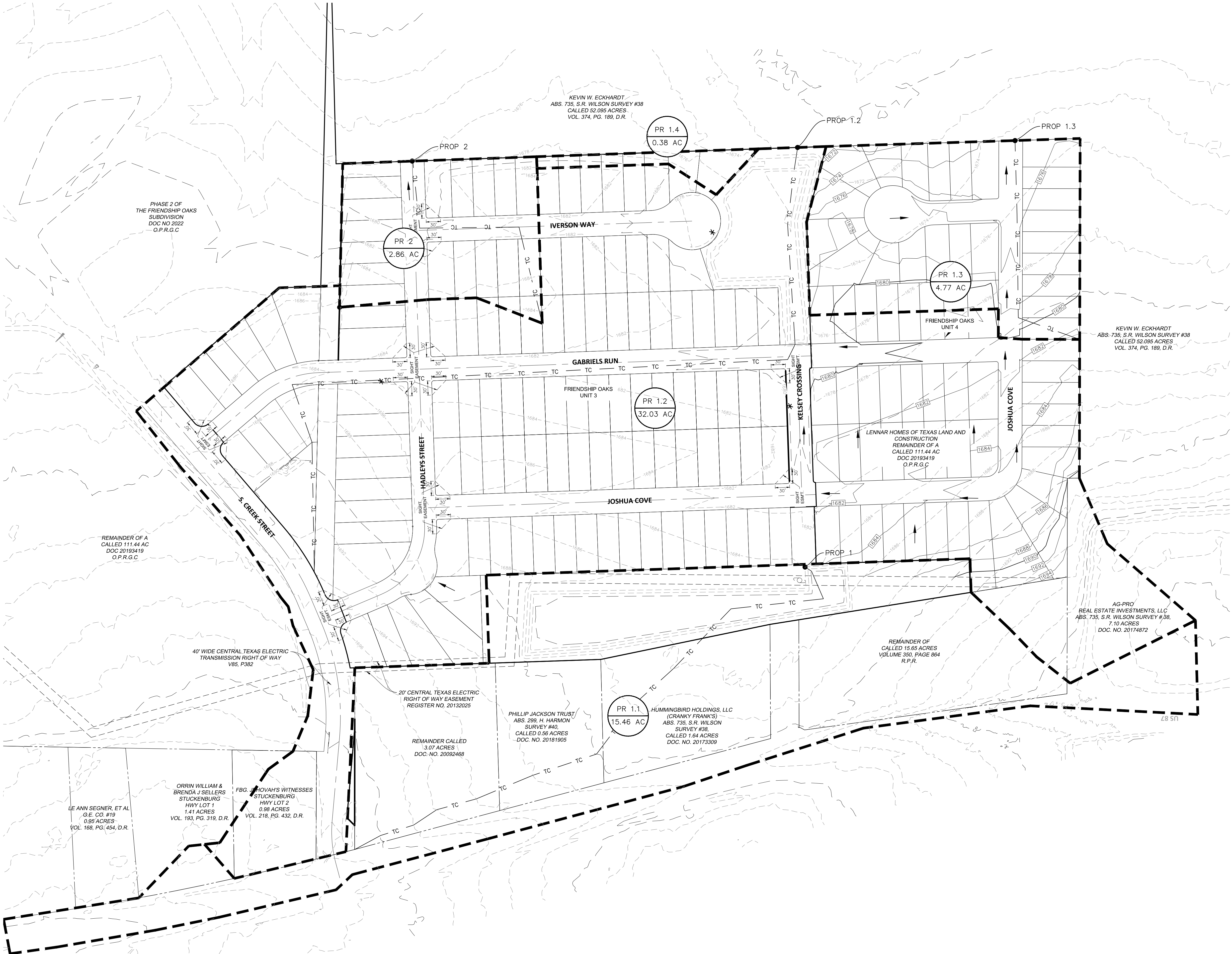
REVIEWED BY: ZJ

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

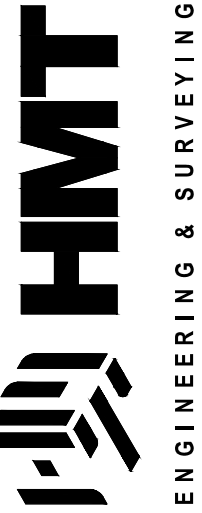
NO.	REVISION DESCRIPTION	REVISION DATE

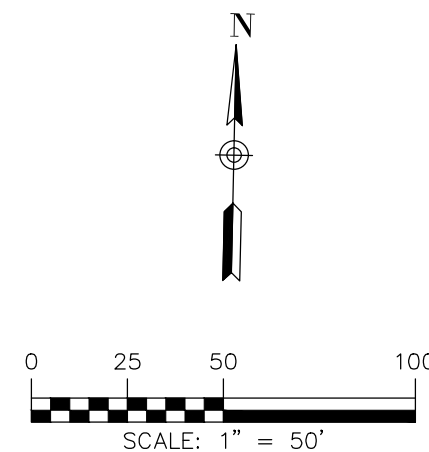
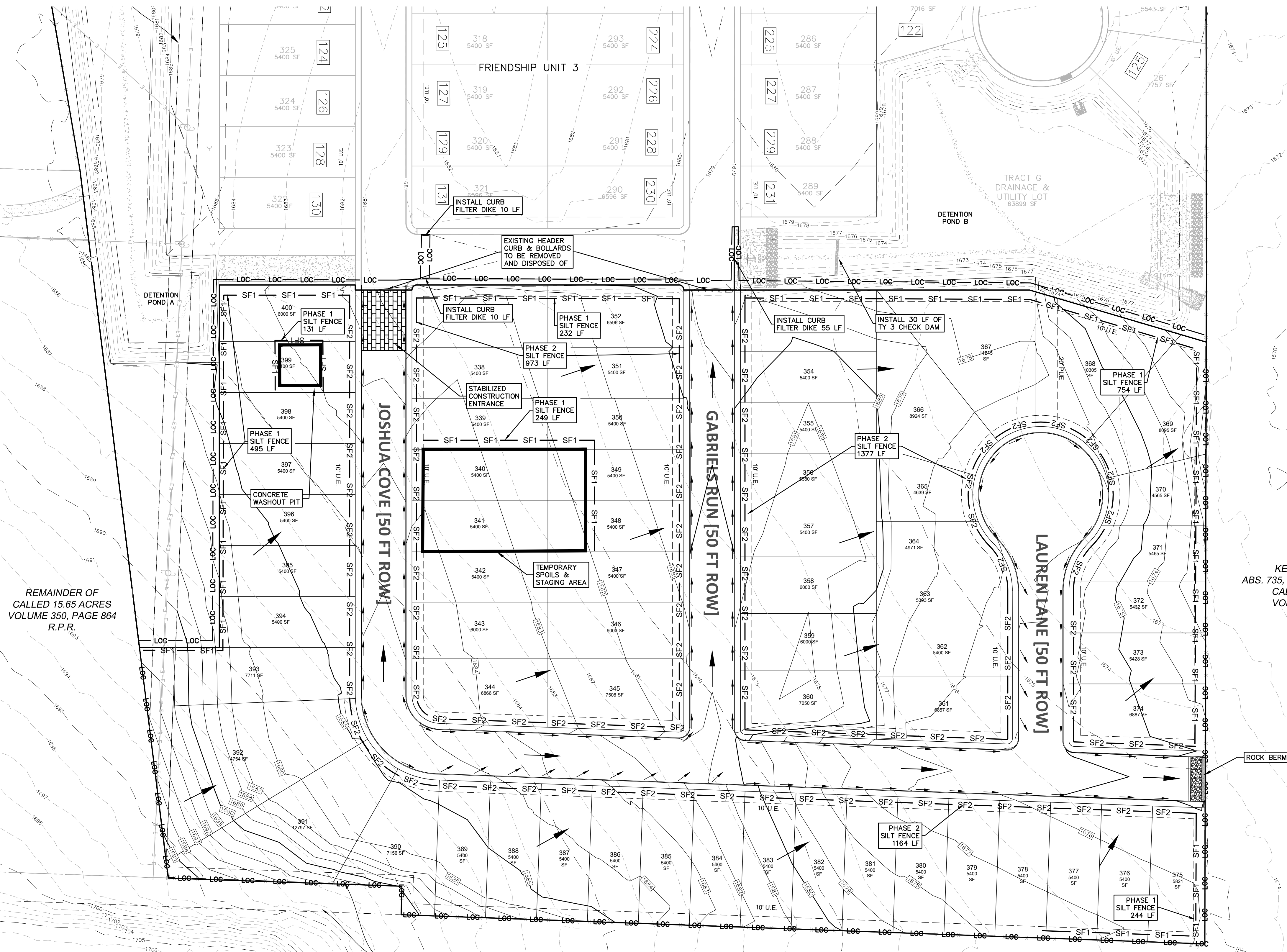
DATE:	JANUARY 2025
DRAWN BY:	RR
DESIGNED BY:	JK
REVIEWED BY:	ZJ
HMT PROJECT NO.:	337.128

SHEET
C2.2



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LEGEND

- 700 EXISTING CONTOURS
- 700 PROPOSED CONTOURS
- B.L. BUILDING SETBACK LINE
- U.E. UTILITY EASEMENT
- D.E. DRAINAGE EASEMENT
- DRAINAGE FLOW DIRECTION
- SF1 SF1 SILT FENCE - PHASE 1
- SF2 SF2 SILT FENCE - PHASE 2
- LOC LOC LIMITS OF CONSTRUCTION
- STABILIZED CONSTRUCTION ENTRANCE
- FILTER DIKE CURB INLET PROTECTION
- ROCK BERM (TYPE 2)

NOTE:

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

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

SEQUENCE OF CONSTRUCTION

1. INSTALL EROSION CONTROLS PER APPROVED PLAN.
2. TEMPORARY CONTROLS TO BE INSPECTED AND MAINTAINED WEEKLY AND PRIOR TO ANTICIPATED RAINFALL EVENTS, AND AFTER RAINFALL EVENTS, AS NEEDED. CONTRACTOR/OWNER SHALL PROVIDE A CONTACT NAME AND NUMBER FOR EROSION CONTROL ISSUES.
3. CONDUCT DEMOLITION ACTIVITIES, IF APPLICABLE.
4. CONSTRUCT DRAINAGE IMPROVEMENTS, IF APPLICABLE.
5. CONSTRUCT CURB INLET PROTECTION AT THE TIME OF CURB INLET INSTALLATION.
6. CONSTRUCT DEVELOPMENT PER APPROVED PLANS.
7. INSTALL STREETSCAPE AND/OR LANDSCAPING IMPROVEMENTS.
8. CONTRACTOR TO VEGETATE ANY DISTURBED AREAS ONCE FINAL GRADING IS COMPLETE, AND ESTABLISH A MIN OF 70% VEGETATION PRIOR TO COMPLETION. PER TPDES REQUIREMENTS, DISTURBED AREAS ON WHICH CONSTRUCTION ACTIVITIES HAVE CEASED (TEMPORARILY OR PERMANENTLY) SHALL BE STABILIZED WITHIN 14 DAYS UNLESS ACTIVITY RESUMES WITHIN 21 DAYS. SEEDING DOES NOT CONSTITUTE AS STABILIZATION.
9. REMOVE ALL PH 1 TEMPORARY EROSION CONTROL MEASURES.

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

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.

EROSION & SEDIMENT CONTROL PLAN

FRIENDSHIP OAKS, UNIT 4
FREDERICKSBURG, TEXAS

NO.	REVISION DESCRIPTION	REVISION DATE
1	ADDED EROSION CONTROL PLAN TO PLANSET	6/20/2025

DATE: JANUARY 2025

DRAWN BY: RR

DESIGNED BY: JK

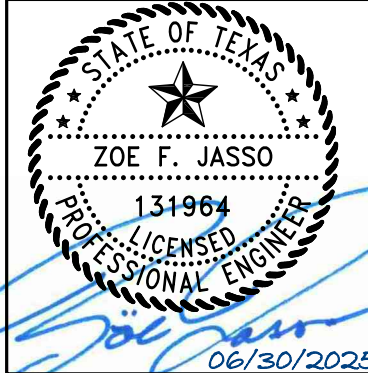
REVIEWED BY: ZJ

HMT PROJECT NO.:

337.128

SHEET

C1.1

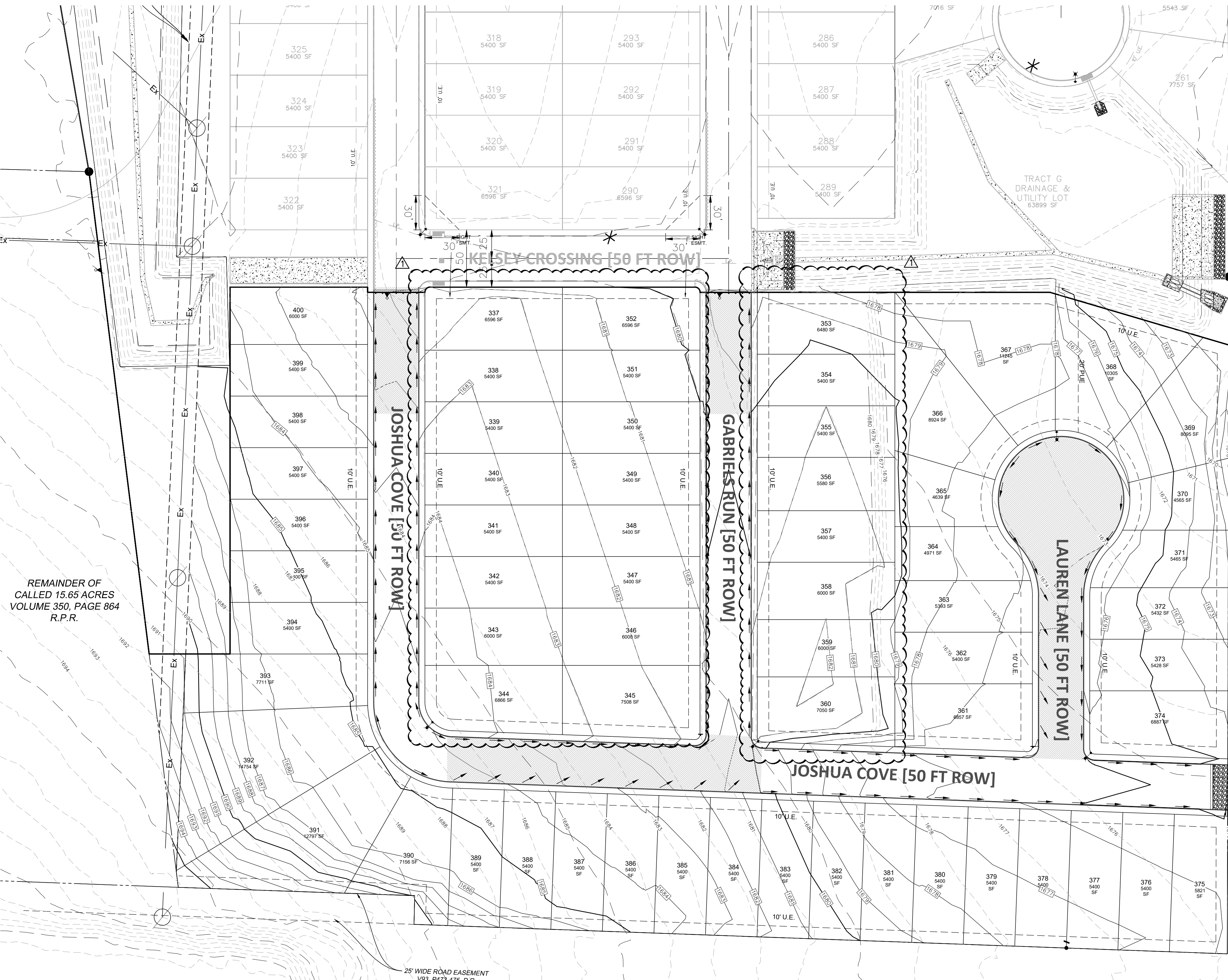


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TBPELS FIRM 1053600



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.

Drawing Name: M:_Projects\337 - Friendship Oaks Unit A\Draws\337_128_GRD.dwg User: joshua.k Jun 30, 2025 - 9:55am

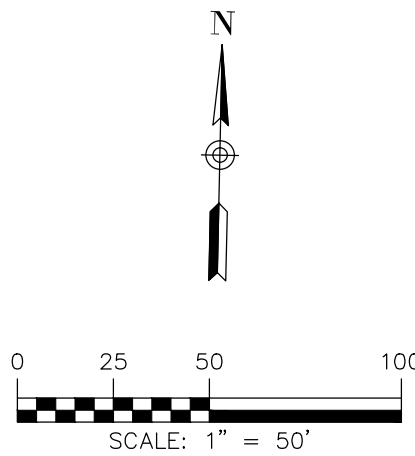


REMAINDER OF
CALLED 15.65 ACRES
VOLUME 350, PAGE 864
R.P.R.

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



LEGEND	
	EXISTING CONTOURS
	PROPOSED CONTOURS
	B.L. BUILDING SETBACK LINE
	U.E. UTILITY EASEMENT
	D.E. DRAINAGE EASEMENT
	LOT GRADING SEE DETAILS SHEET C3.03
	DRAINAGE FLOW DIRECTION
	GRADE BREAK
	FF=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

NO.	REVISION DESCRIPTION	REVISION DATE
1	REVISED EXISTING SURFACE TO REFLECT ENHANCEMENT OF UNIT 3 SPOLS	6/20/2025

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

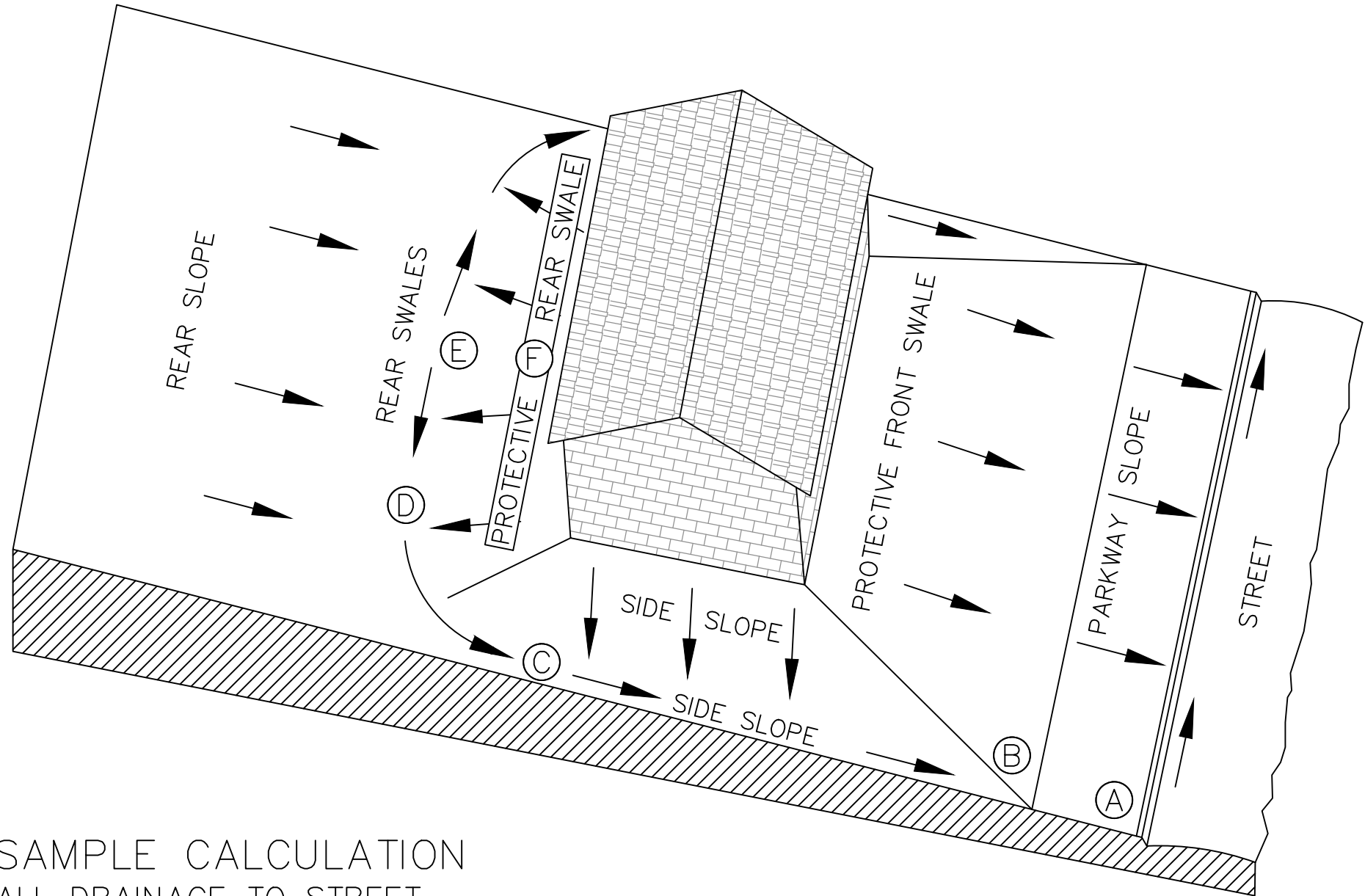
SHEET
C3.1

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.



HMT
ENGINEERING & SURVEYING

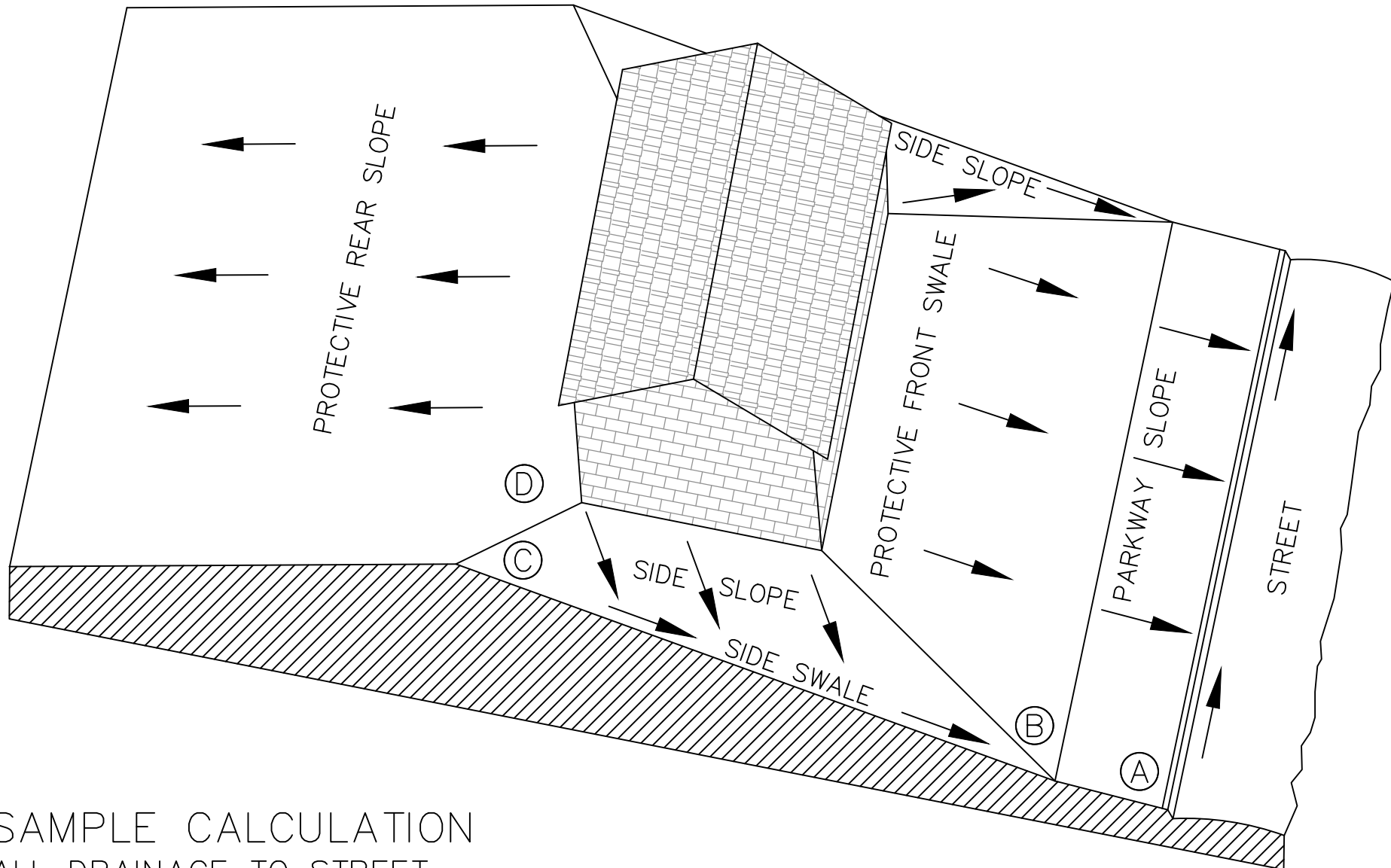
290 S. CASTELL AVE., STE. 100
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TBPELS FIRM 1053600



SAMPLE CALCULATION
ALL DRAINAGE TO STREET

SAMPLE COMPUTATION OF GRADING CONTROL LINE AF FOR A 60' WIDE LOT WITH A 25' BUILDING LINE, 0.5% STREET, WITH 60' BUILDING DEPTH AND 2% SWALES.					RESULTS OF 1% SWALES		
A	CURB—TOP ON LOT LINE EXTENSION AT HIGH LOT CORNER						
AB	PARKWAY SLOPE: 15' GRASS AND WALK AT 1/4"/FT. (2%)	4" (0.3')	2" (0.2')				<u>CALCULATIONS FOR 2% SWALES</u>
BC	SIDE SWALE: 85' GRASS AT 1/4"/FT. (2%)	21" (1.8')	11" (0.9')				15 x 0.25' = 3½"
CD	SWALE TURN WITH 10' RADIUS:16' GRASS AT 1/4"/FT. (2%)	4" (0.3')	2" (0.2')				85 x 0.25' = 21½"
DE**	REAR SWALE: 13' GRASS AT 1/4"/FT. (2%)	3" (0.3')	2" (0.2')				16 x 0.25' = 4"
EF*	PROTECTIVE REAR SLOPE UP FROM HIGH POINT OF SWALES	3" (0.3')	3" (0.3')				13 x 0.25' = 3½"
SUB—TOTAL AF FROM CURB TOP TO GROUND AT REAL BLDG WALL		35" (3.0')	20" (1.7')				10 x 0.25' = 2½"
MINIMUM RISE FROM CURB TOP TO SLAB FLOOR: 35" + 8"		43" (3.6')	28" (2.3')				
MINIMUM RISE FOR WOOD FLOOR USING 8" JOISTS: 35" + 9"		54" (4.5')	39" (3.3')				
CALCULATIONS USE 0.25" PER FOOT GRADIENT FOR A 2% SWALE.							
* WHERE THERE IS A HIGH BANK NEARBY OR A LONG SLOPE TOWARD HOUSE, A MINIMUM 6" PROTECTIVE SLOPE IS REQUIRED.							
** LENGTH DE = [1/2(LOT WIDTH - (2x SWALE TURN RADIUS))] - [LOT WIDTH x (STREET GRADIENT x SWALE GRADIENT)]							

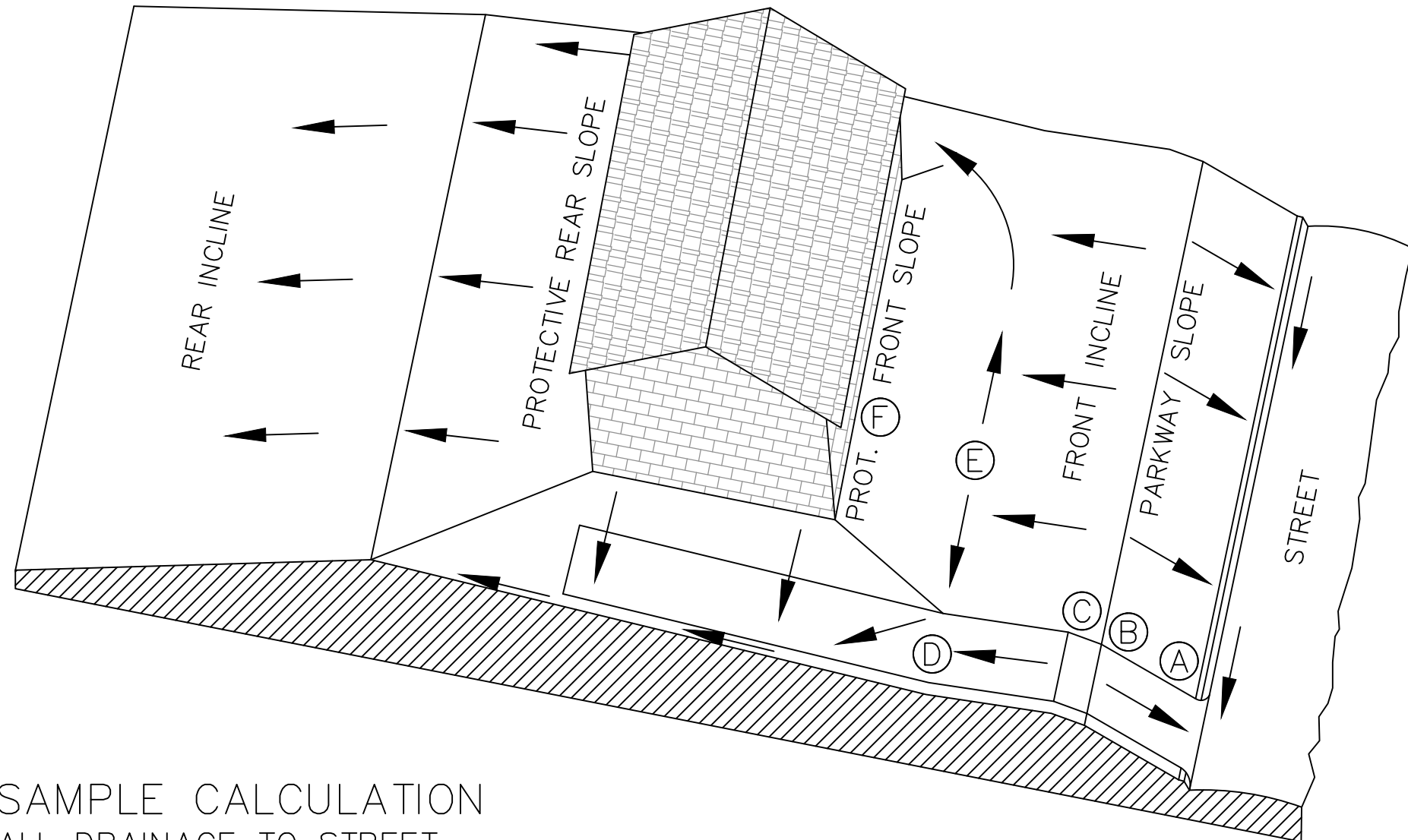
LOT TYPE ①



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')			$15 \times 0.25' = 3\frac{3}{4}"$
BC	SIDE SWALE: 85' GRASS AT 1/4"/FT. (2%)	21" (1.8')	11" (0.9')			$85 \times 0.25' = 21\frac{1}{4}"$
CD*	PROTECTIVE SIDE SLOPE @ REAR BLDG. WALL EXTENSION	3" (0.3')	3" (0.3')			$6 \times 0.25' = 1\frac{1}{2}"$
SUB-TOTAL AD FROM CURB TOP TO GROUND AT REAL BLDG WALL			27" (2.4')	16" (1.4')	26\frac{1}{2}"	
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					$15 \times 0.25' = 3\frac{1}{2}"$
\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 18"/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')		-7 $\frac{1}{2}"$	
SUB—TOTAL \overline{AF} FROM CURB TOP TO GROUND AT FRONT BLDG WALL		-7" (-1.0')	-11" (1.3')		CALCULATION:	
MINIMUM RISE FROM CURB TOP TO SLAB FLOOR: -7" + 8"		1" (-0.3')	-3" (0.7')		USE 0.25" PER FOOT GRADIENT FOR A 2% SWALE.	
MINIMUM RISE FOR WOOD FLOOR USING 8" JOISTS: -7" + 19"		12" (-0.6')	8" (0.3')		USE 1.625" PER FOOT GRADIENT FOR A 13.5% SWALE.	
* WHERE THERE IS A HIGH BANK NEARBY OR A LONG SLOPE TOWARD HOUSE, A MINIMUM 6" PROTECTIVE SLOPE IS REQUIRED.						

LOT TYPE 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.

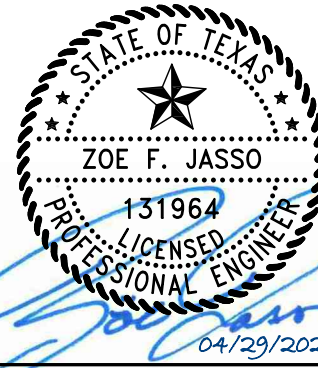
HUD 79-G

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

REVISION		DATE
NO.	DESCRIPTION	

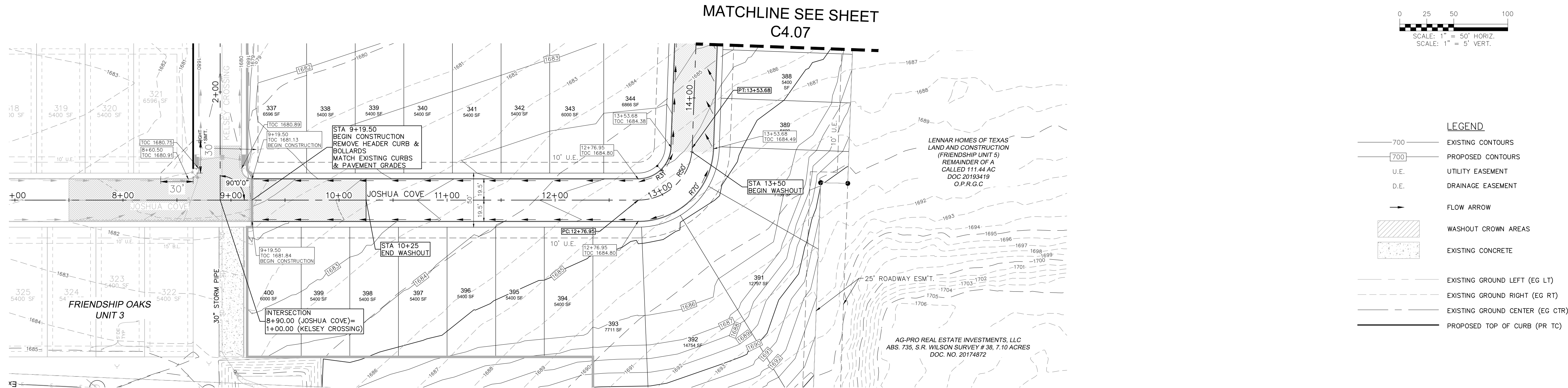
DATE:	JANUARY 2025
DRAWN BY:	RR
DESIGNED BY:	JK
REVIEWED BY:	ZJ
HMT PROJECT NO.:	337.128

SHEET
C3.2

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

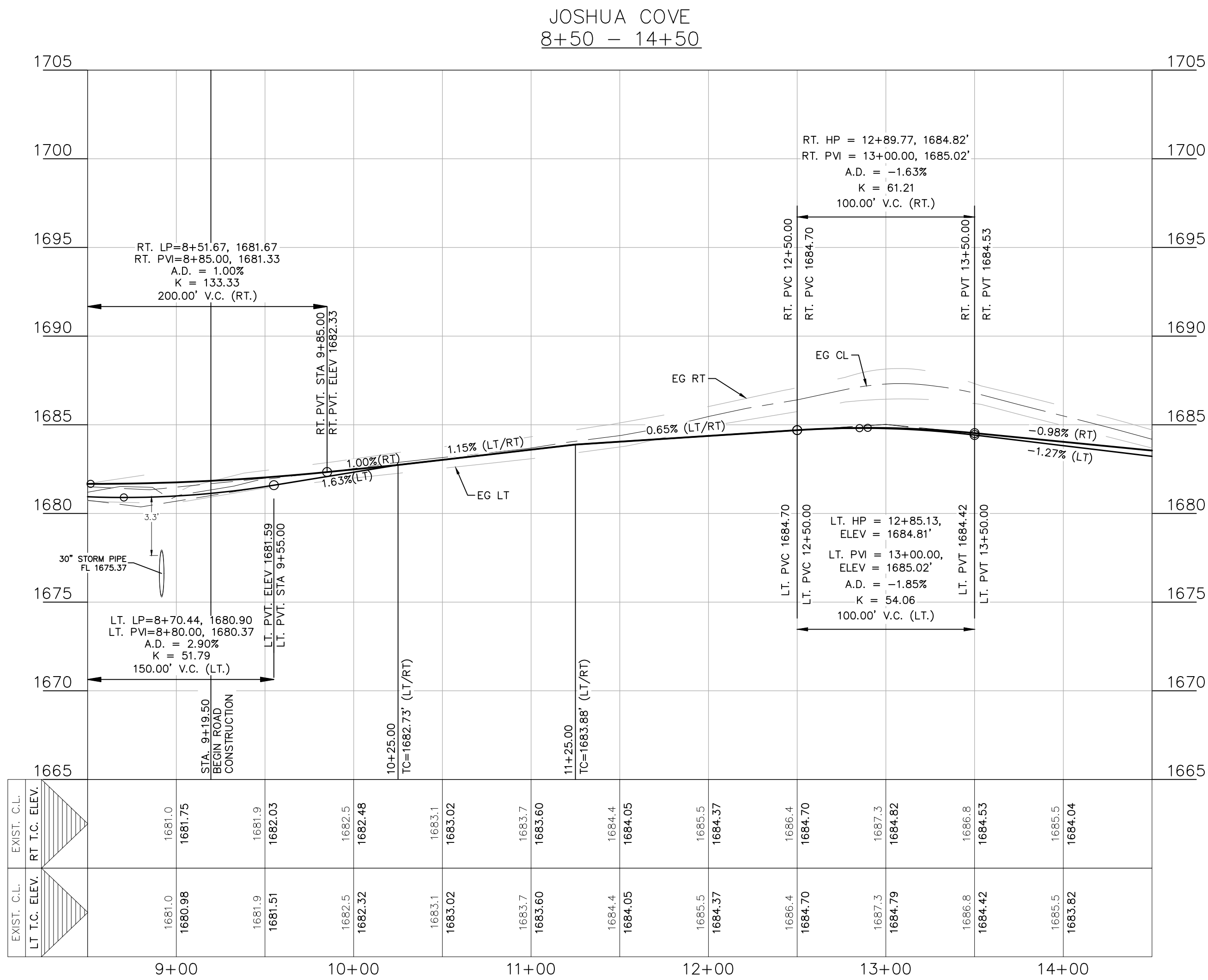


Drawing Name: W:_Projects\337 - Friendship Oaks Unit 3\337_128_JOSHUA COVE.dwg User: janhuk Apr 23, 2025 - 5:25pm



NOTES

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



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

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

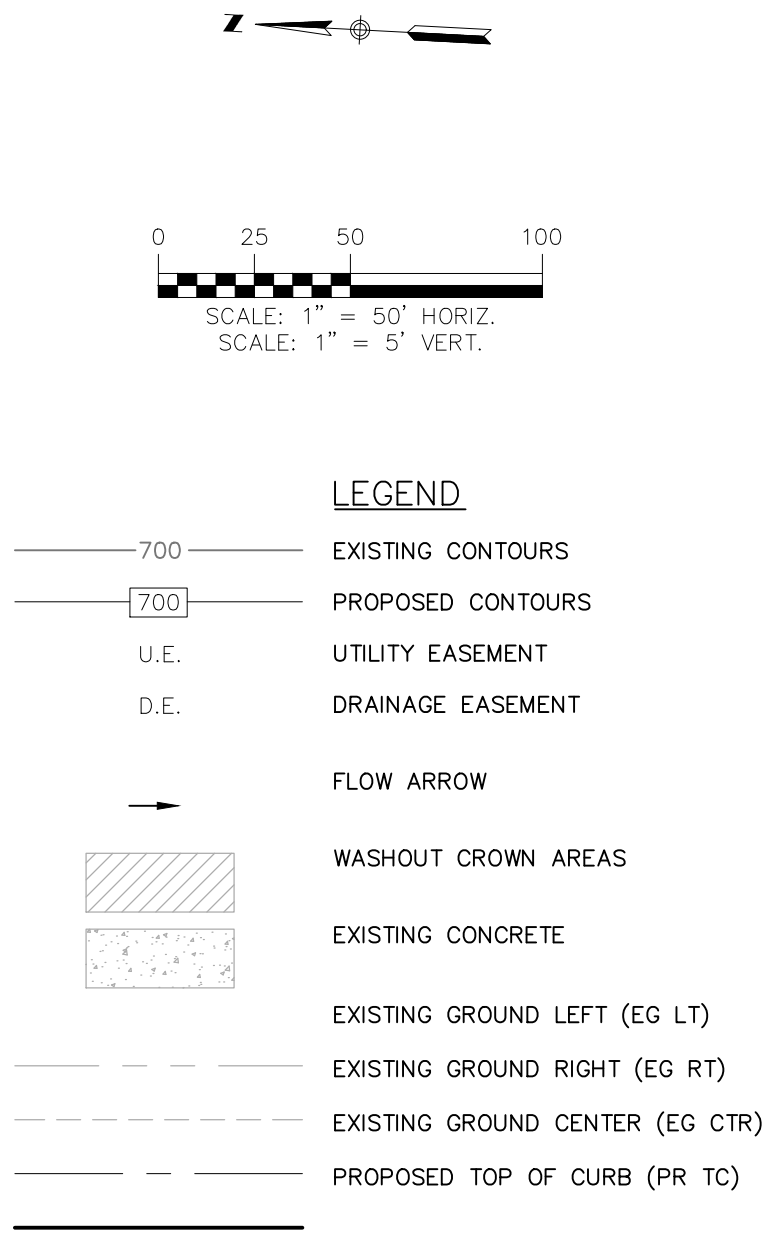
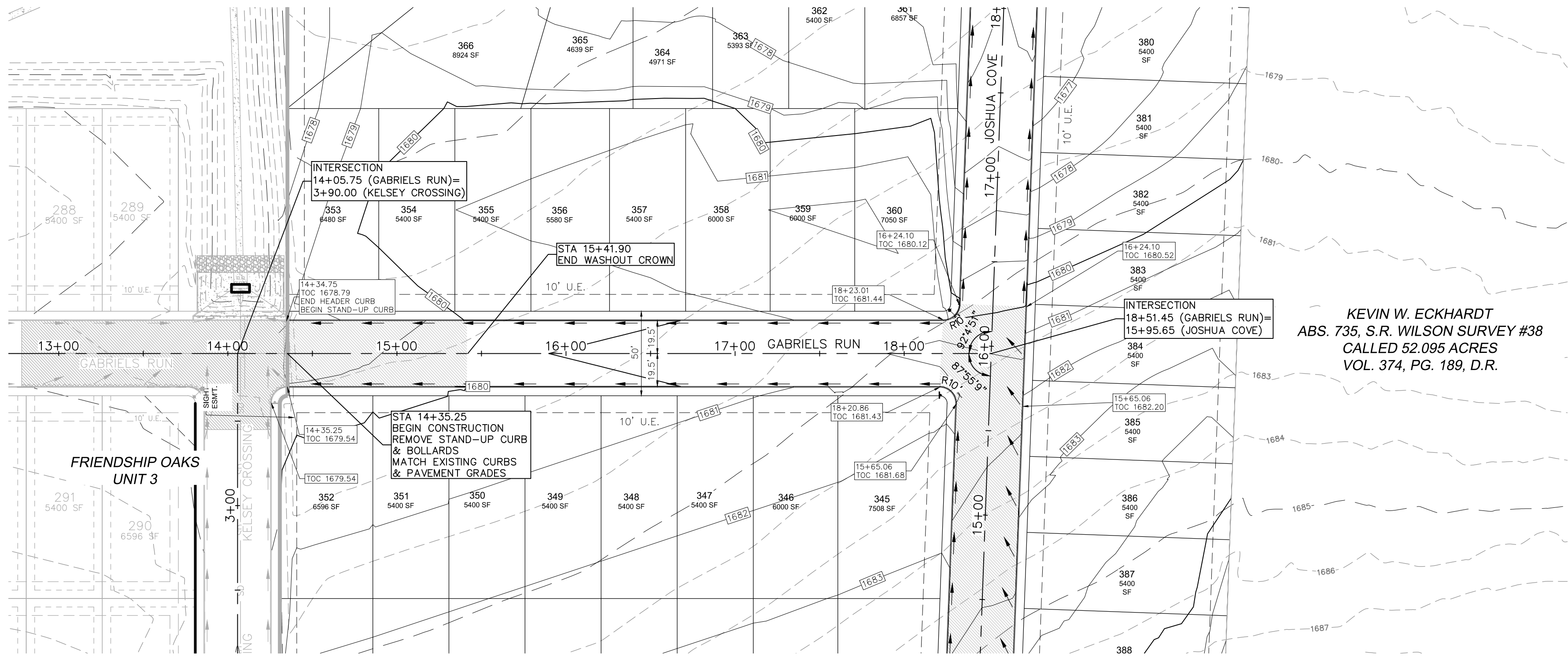


JOSHUA COVE
PLAN & PROFILE
(1 OF 2)
FRIENDSHIP OAKS, UNIT 4
FREDERICKSBURG, TEXAS

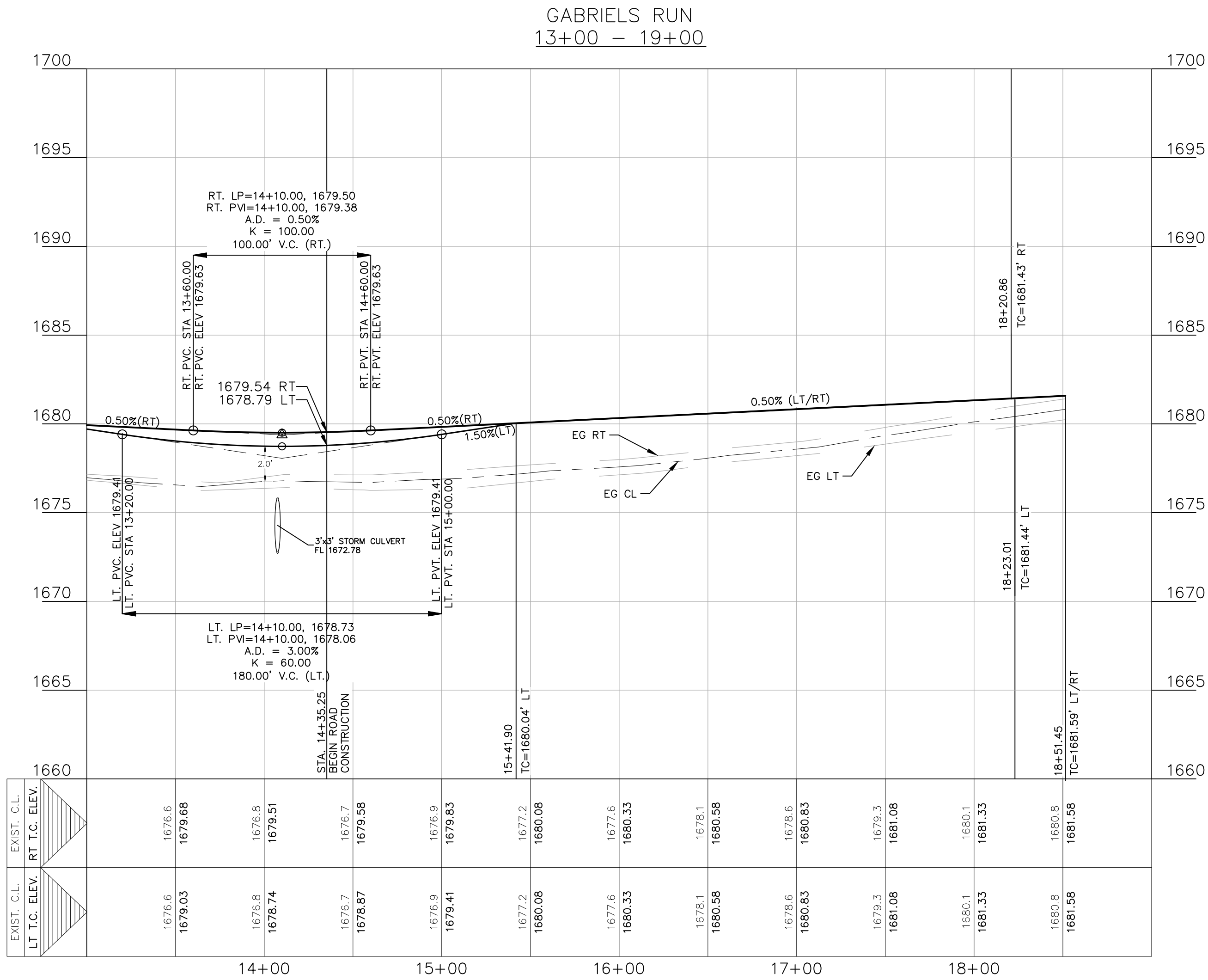
NO.	REVISION DESCRIPTION	REVISION DATE

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

SHEET
C4.1



- NOTES**
1. LOCAL STREETS WERE DESIGNED TO POSTED SPEED LIMIT OF 30 MPH.
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290 S. CASTELL AVE., STE. 100
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TBPELS FIRM 1053600

HMT
ENGINEERING & SURVEYING

GABRIELS RUN
PLAN & PROFILE

FRIENDSHIP OAKS, UNIT 4
FREDERICKSBURG, TEXAS

NO.	REVISION DESCRIPTION	REVISION DATE

DATE: **JANUARY 2025**

DRAWN BY: **RR**

DESIGNED BY: **JK**

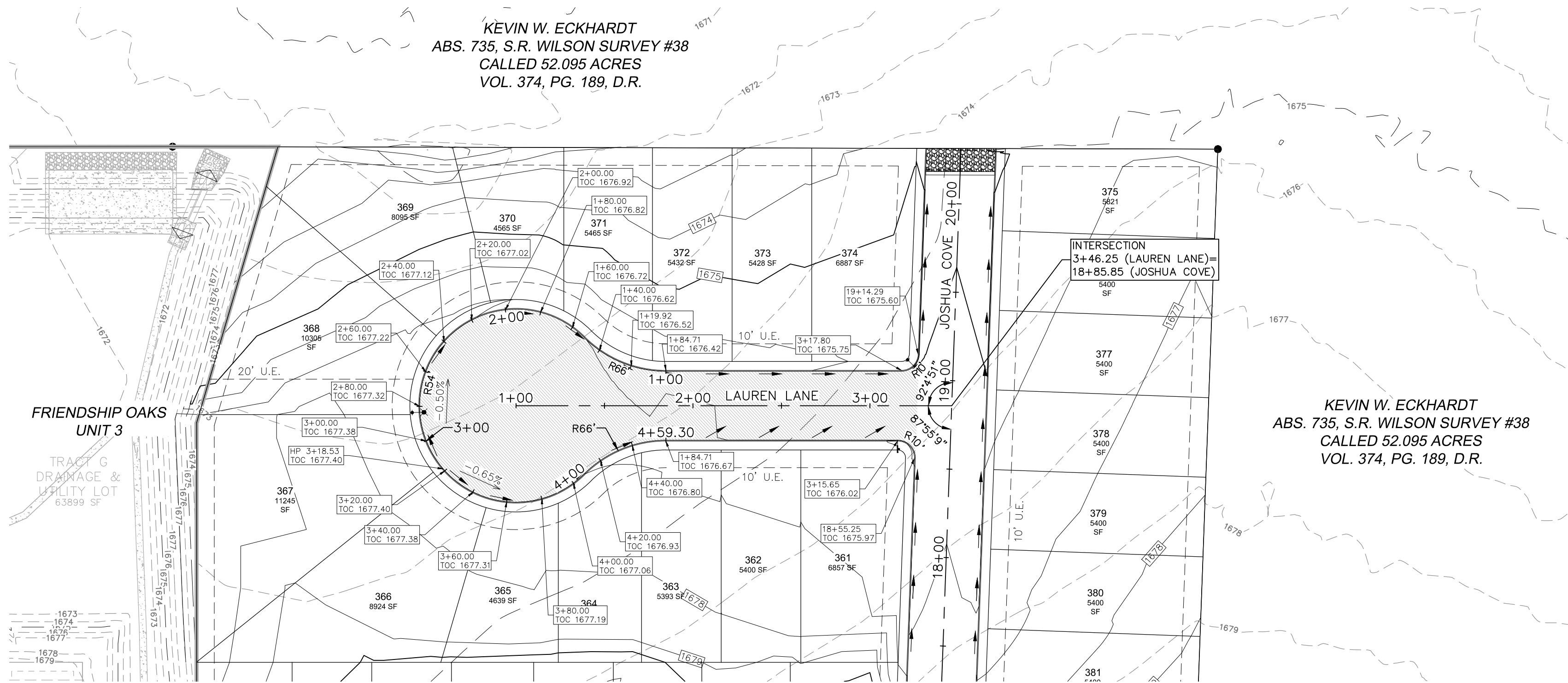
REVIEWED BY: **ZJ**

HMT PROJECT NO.: **337.128**

SHEET

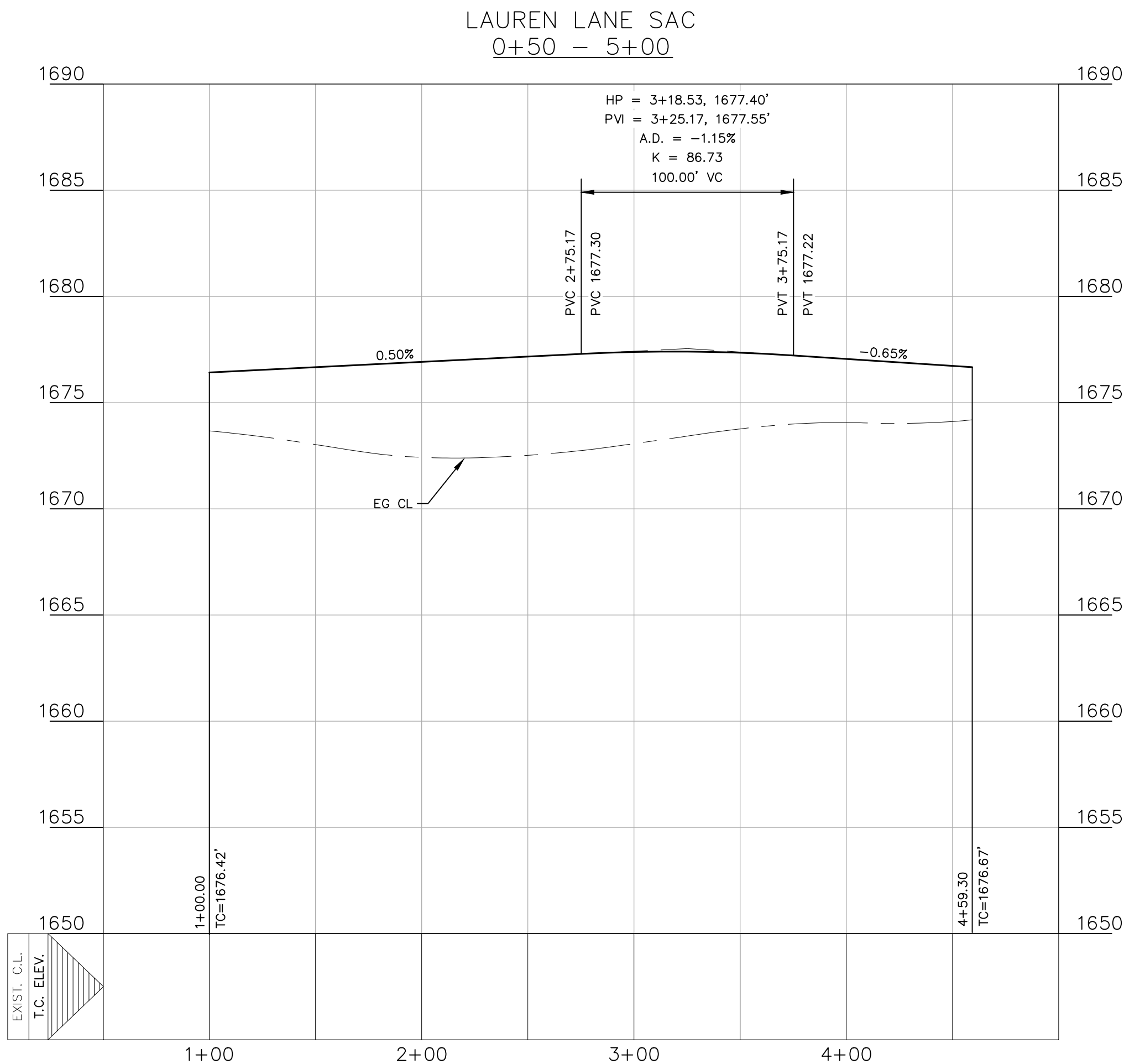
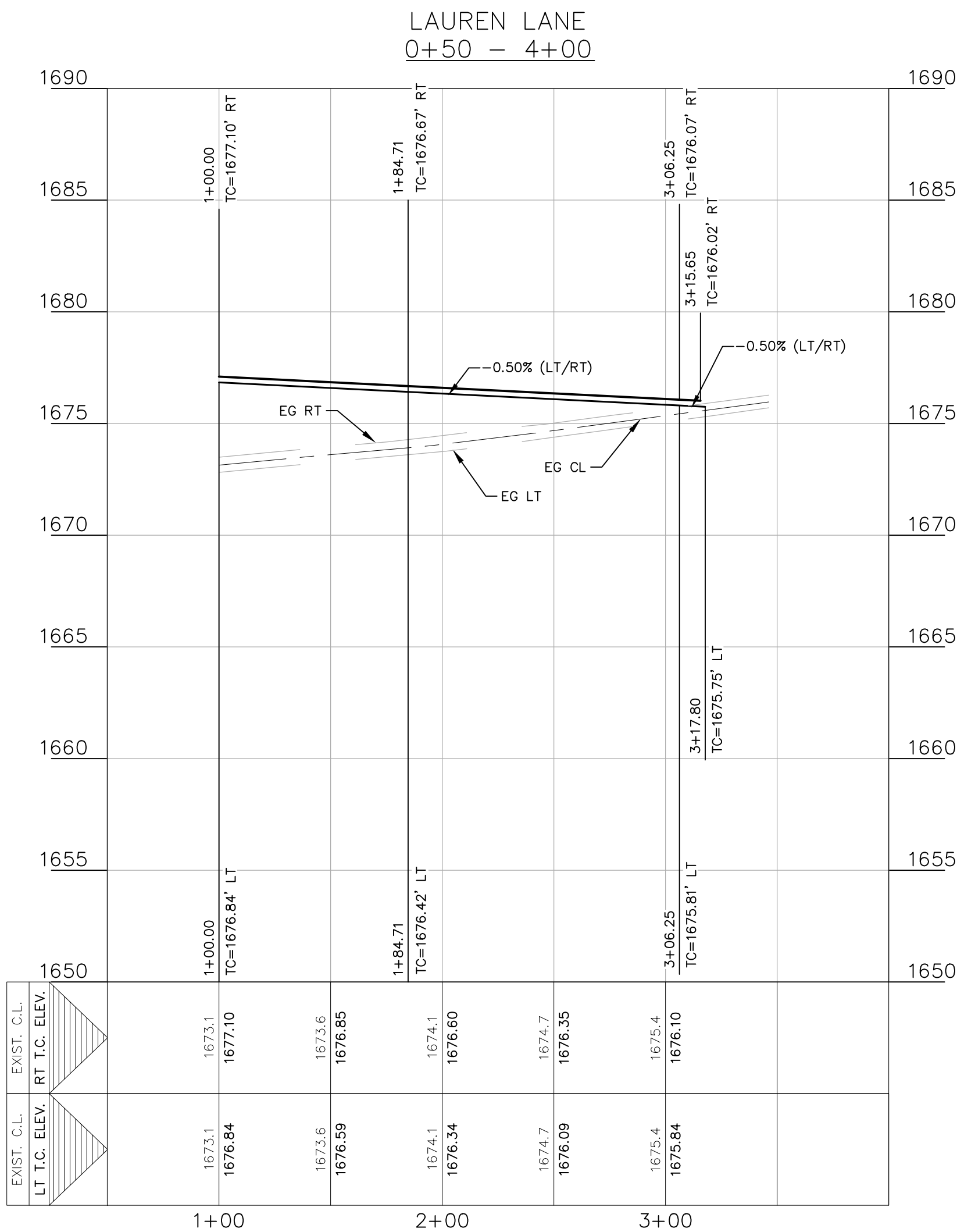
C4.3

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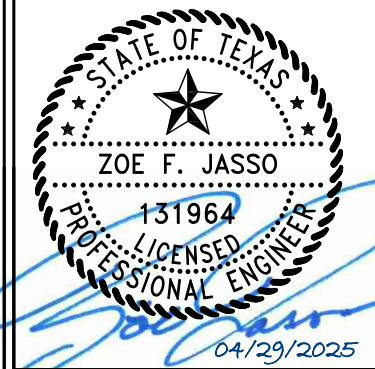
LAUREN LANE
PLAN & PROFILE
FRIENDSHIP OAKS, UNIT 4
FREDERICKSBURG, TEXAS

NO.	REVISION DESCRIPTION	REVISION DATE

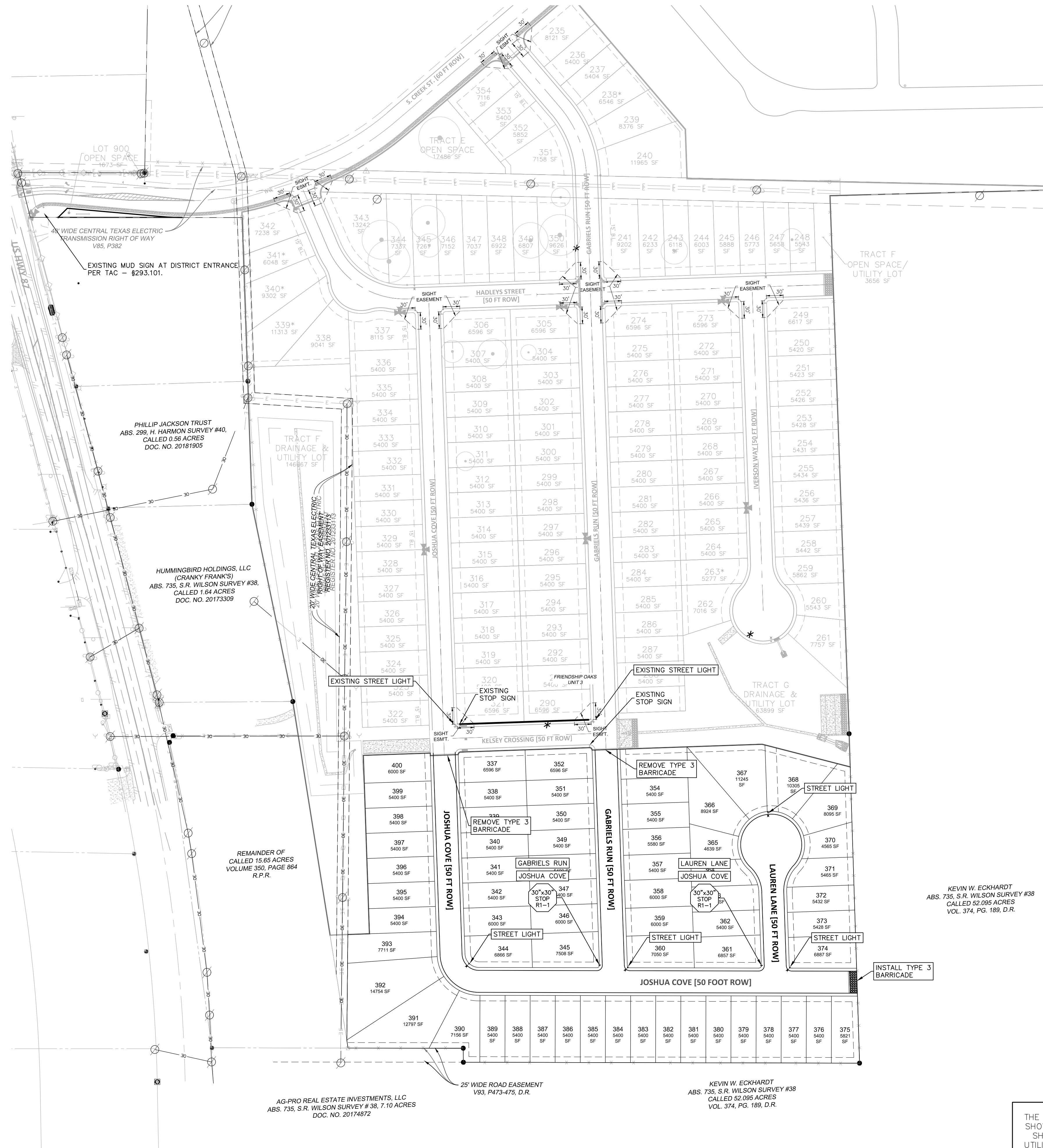
DATE: JANUARY 2025
DRAWN BY: RR
DESIGNED BY: JK
REVIEWED BY: ZJ

HMT PROJECT NO.: 337.128

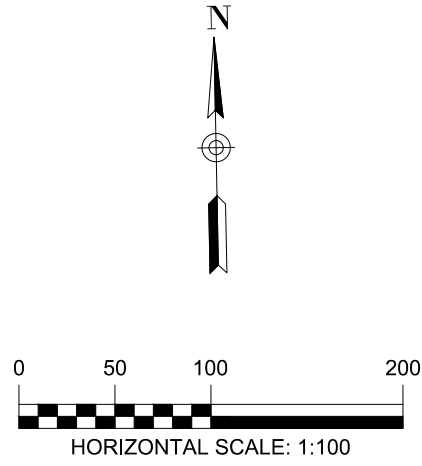
SHEET
C4.4



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



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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 TxMUTCD

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 1B
- 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"
- A. 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

[illegible]

DATE: JANUARY 2025

DRAWN BY: RR

DESIGNED BY: JK

REVIEWED BY: ZJ

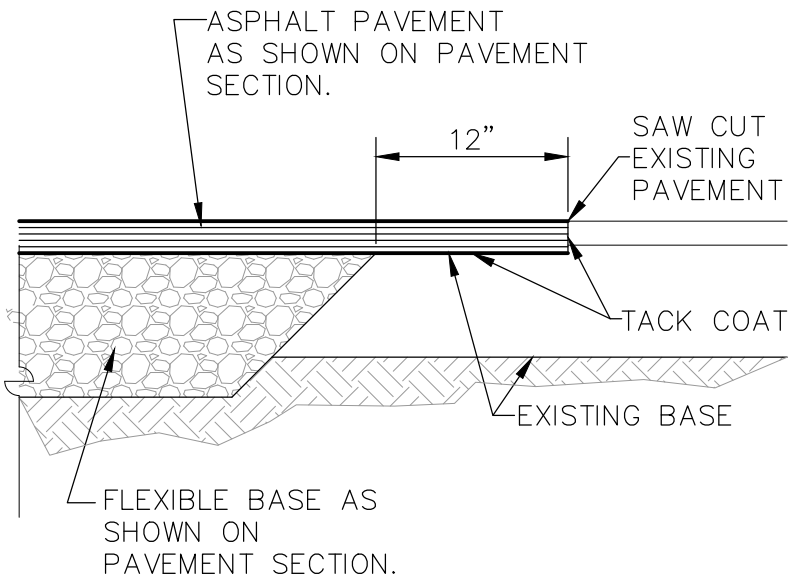
HMT PROJECT NO.:
337.128

SHEET

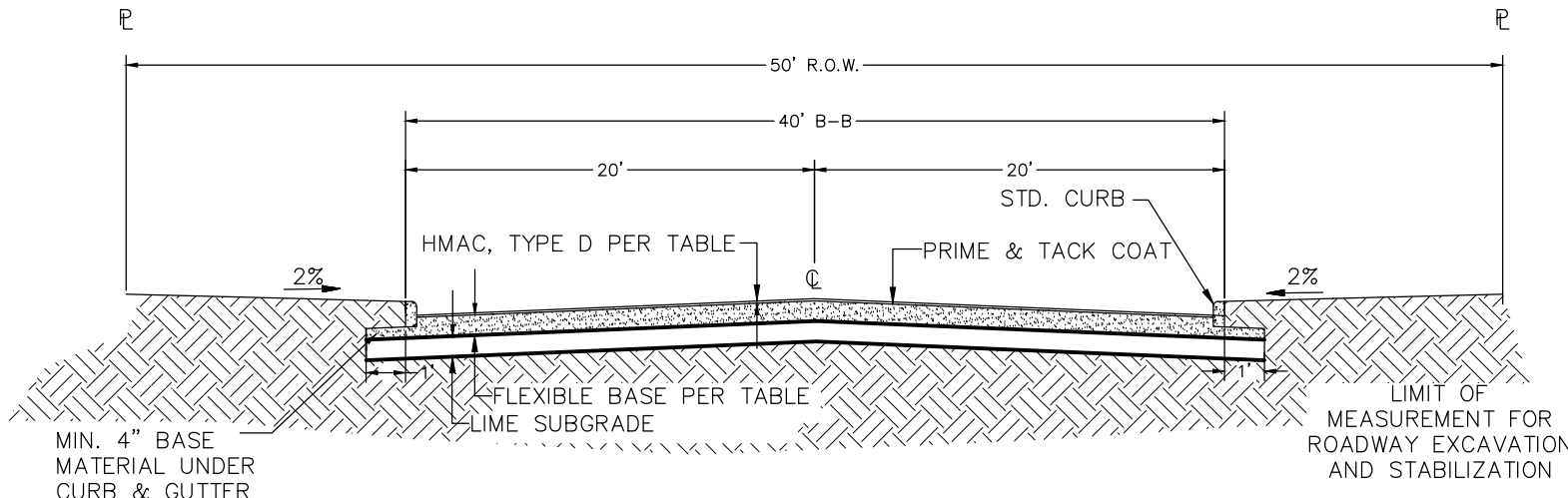
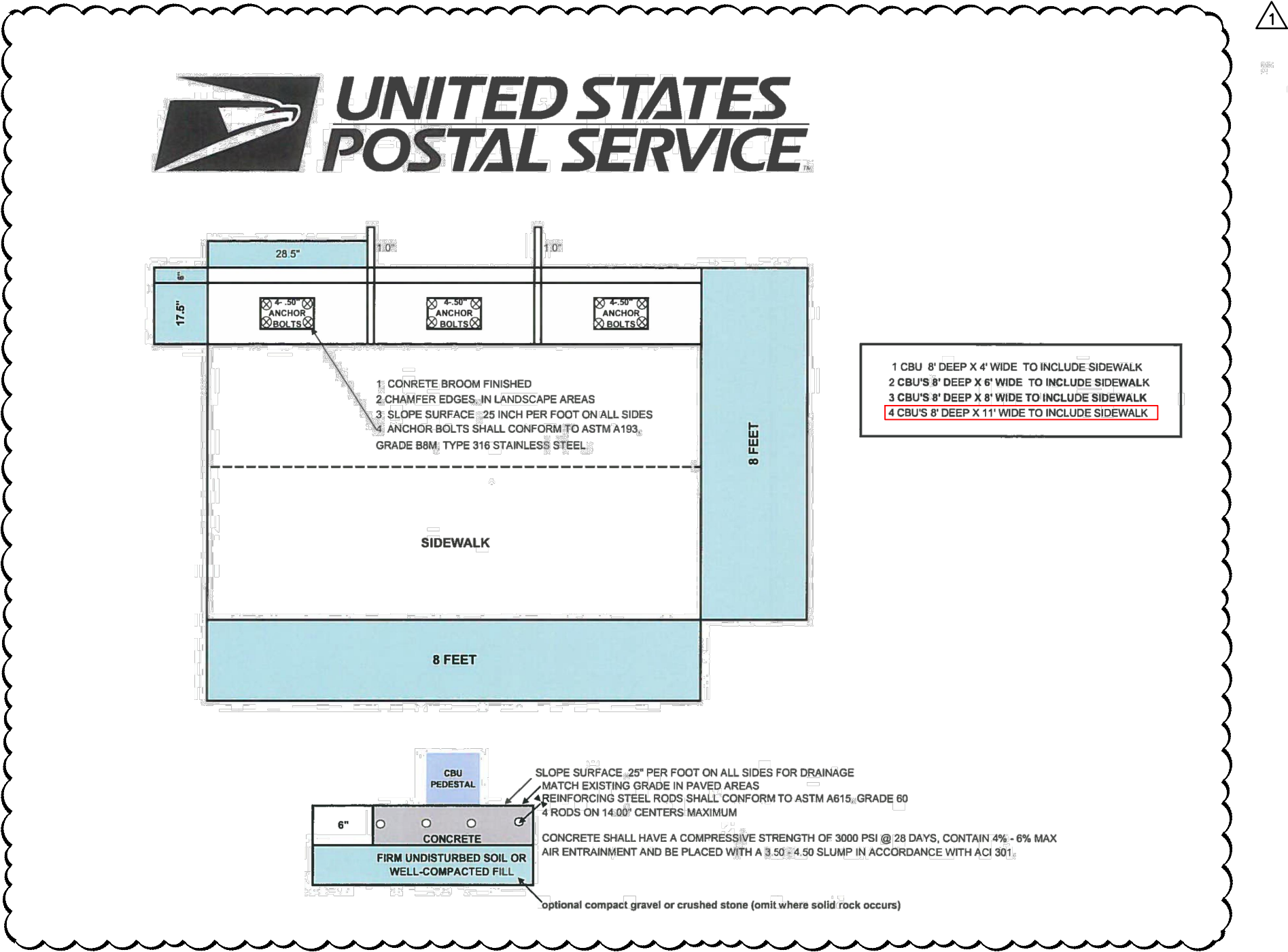
C4.5



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



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" HMAC	2.0"
CRUSHED LIMESTONE FLEXIBLE BASE, IN.	6.0"
TENSAR TRIAX TX5 GEOGRID	YES
MOISTURE CONDITIONED SUBGRADE	YES

- NOTE:
- 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.
 - ALL PAVEMENT SECTIONS SHOWN ON THE ABOVE TABLE SHALL SUPERCEDE ANY STANDARD DETAILS WITH RESPECT TO DEPTH OF MATERIALS ASSOCIATED WITH THIS PROJECT.
 - THE SUBGRADE SHOULD BE STABILIZED USING LIME IN ACCORDANCE WITH THE GEOTECHNICAL REPORT IN ORDER TO ACHIEVE THE FOLLOWING:
 - PLASTICITY INDEX, REFER TO SECTION 4.2 COMPACTED FILL MATERIALS
 - THE SUBGRADE SOILS SHOULD BE TESTED FOR SOLUBLE SULPHATE CONTENT PRIOR TO INSTALLATION OF THE LIME OR CEMENT.
 - REFERENCE GEOTECHNICAL REPORT FOR LIME STABILIZATION NOTES
 - 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)

FRIENDSHIP OAKS, UNIT 4
FREDERICKSBURG, TEXAS

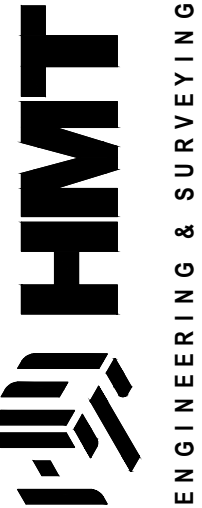
NO.	REVISION DESCRIPTION	REVISION DATE
A	ADDED MAILBOX PAD DETAIL	6/30/2025

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

SHEET
C4.6



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



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

25' STREET LIGHT STANDARD
(4' AND 6' MASTARM SODIUM
AND MERCURY VAPOR)

INSPECTION IS REQUIRED BEFORE PLACEMENT OF CONCRETE!

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

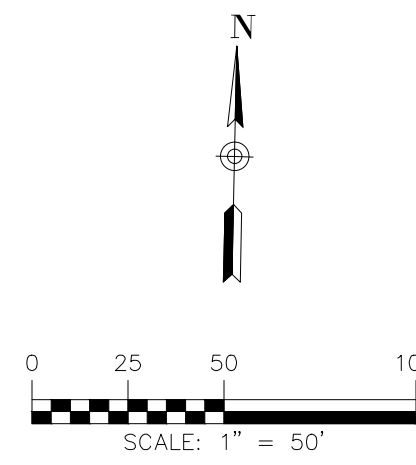
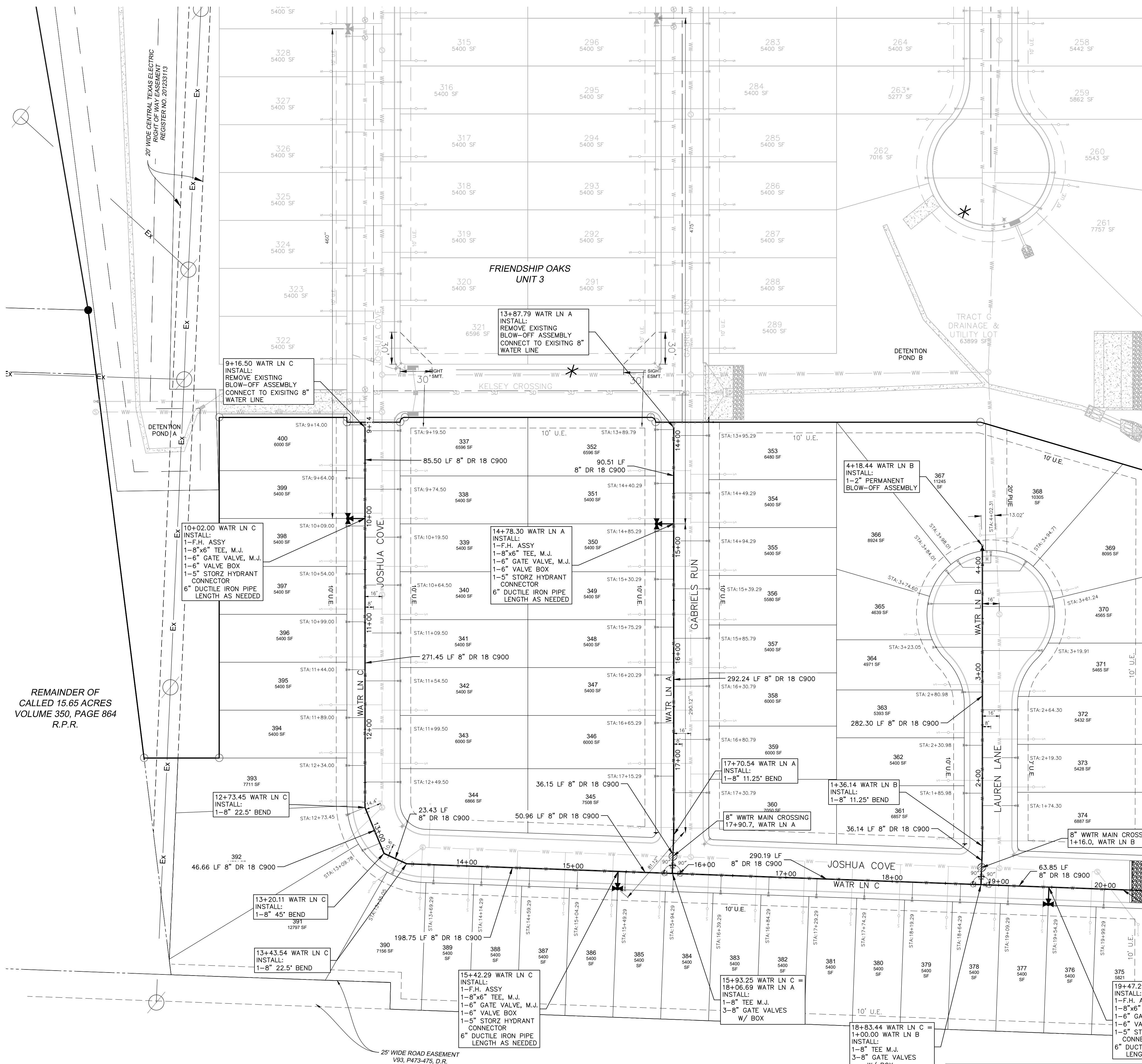
AG-PRO REAL ESTATE INVESTMENTS, LLC
ABS. 735, S.R. WILSON SURVEY #38, 7.10 ACRES
DOC. NO. 20174872

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.

REFER TO THE COVER SHEET
FOR BENCHMARK INFORMATION.

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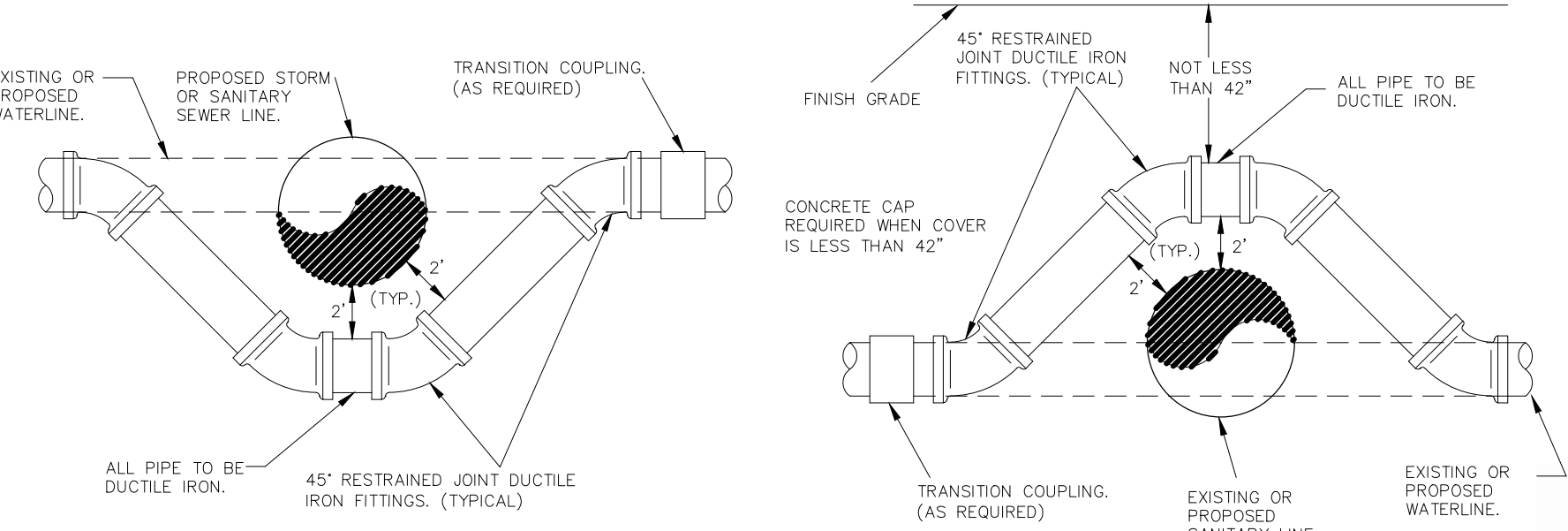


UTILITY NOTES:

1. FACILITIES SHALL BE CONSTRUCTED PER FREDERICKSBURG GUIDELINES
2. ADJOINING PROPERTY LINES ARE APPROXIMATES
3. CONTRACTOR SHALL DETERMINE ACTUAL LOCATION OF ALL EXISTING INFRASTRUCTURE
4. WATERLINES SHALL BE EMBEDDED IN MANUFACTURED SAND PER CITY STANDARDS
5. CONTRACTOR SHALL STAMP CURB WITH "W" AT THE LOCATION OF EACH WATER SERVICE.

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
W W PROPOSED WATER SERVICE
UTILITY CROSSING



WATERLINE ADJUSTMENT DETAIL

N.T.S.

WATERLINE ADJUSTMENT DETAIL

N.T.S.

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

PIPE INSIDE DIAMETER OF RUN	TEE		FT.
	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

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OVERALL WATER PLAN

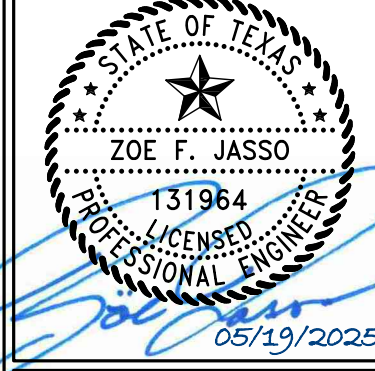
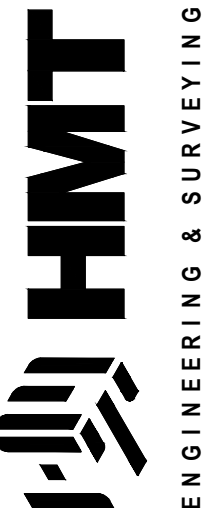
FRIENDSHIP OAKS, UNIT 4
FREDERICKSBURG, TEXAS

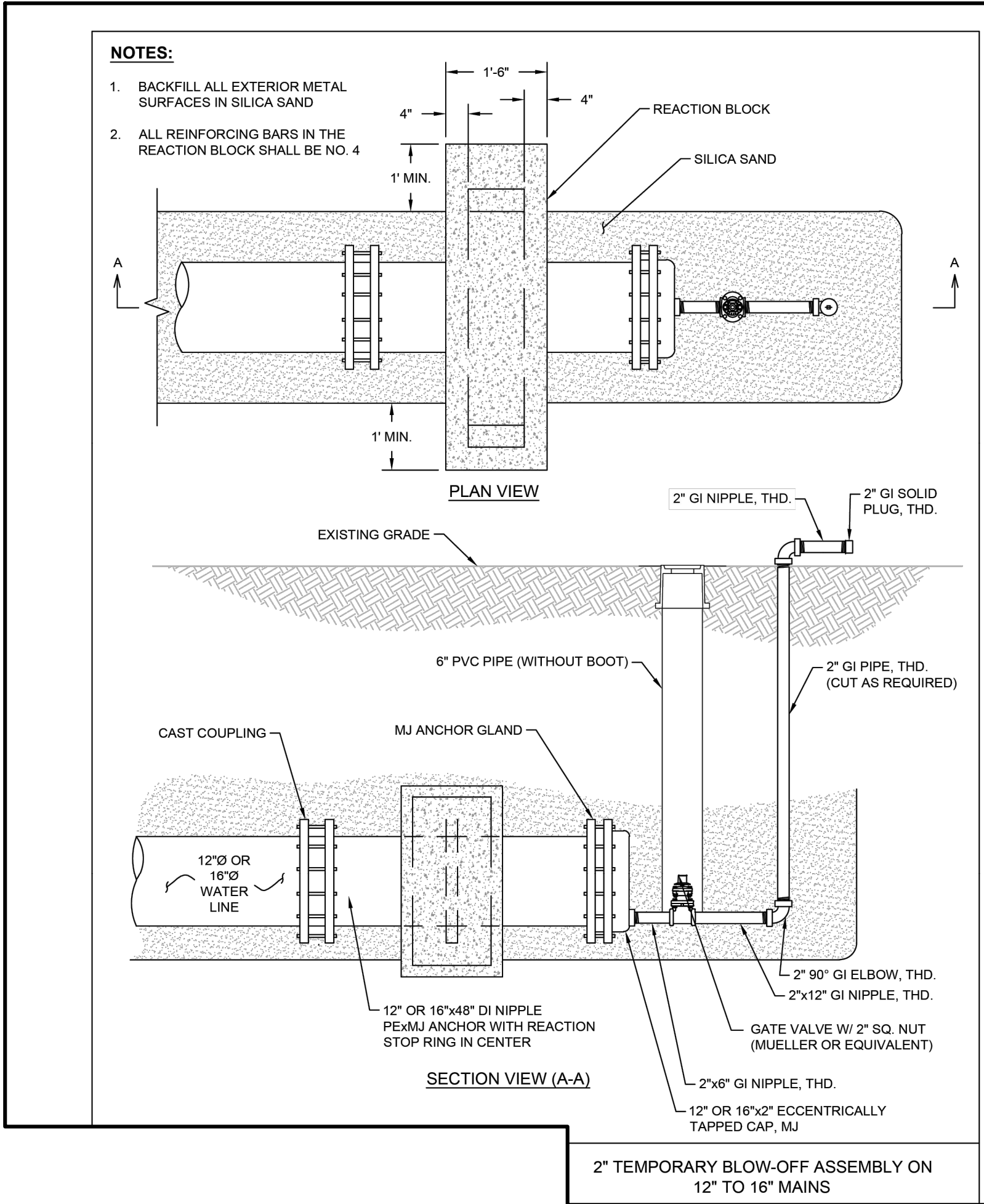
NO.	REVISION	DESCRIPTION	DATE

DATE:	JANUARY 2025
DRAWN BY:	RR
DESIGNED BY:	JK
REVIEWED BY:	ZJ
HMT PROJECT NO.:	337-128

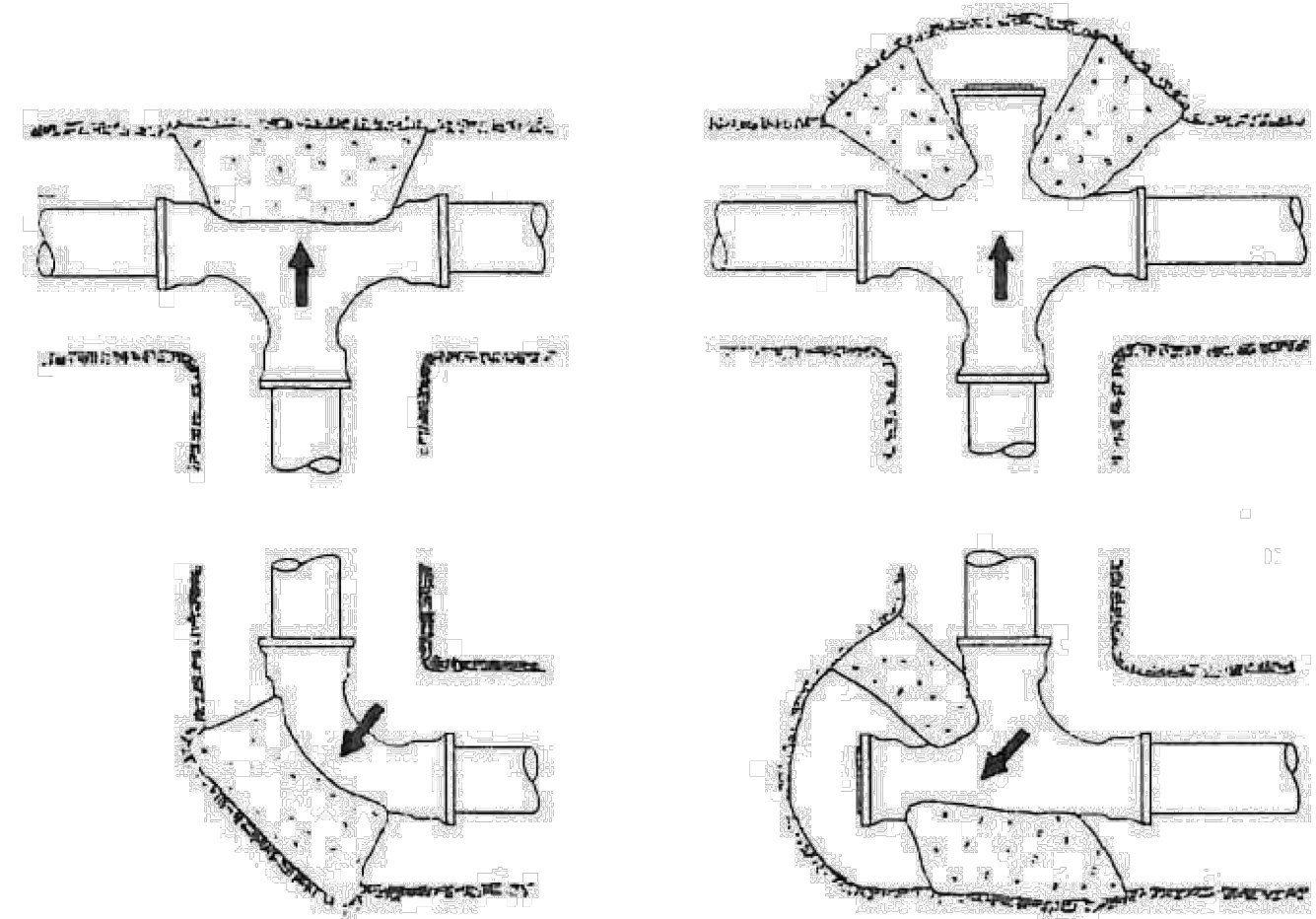
SHEET
C6.1

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





THRUST BLOCK INSTALLATIONS:

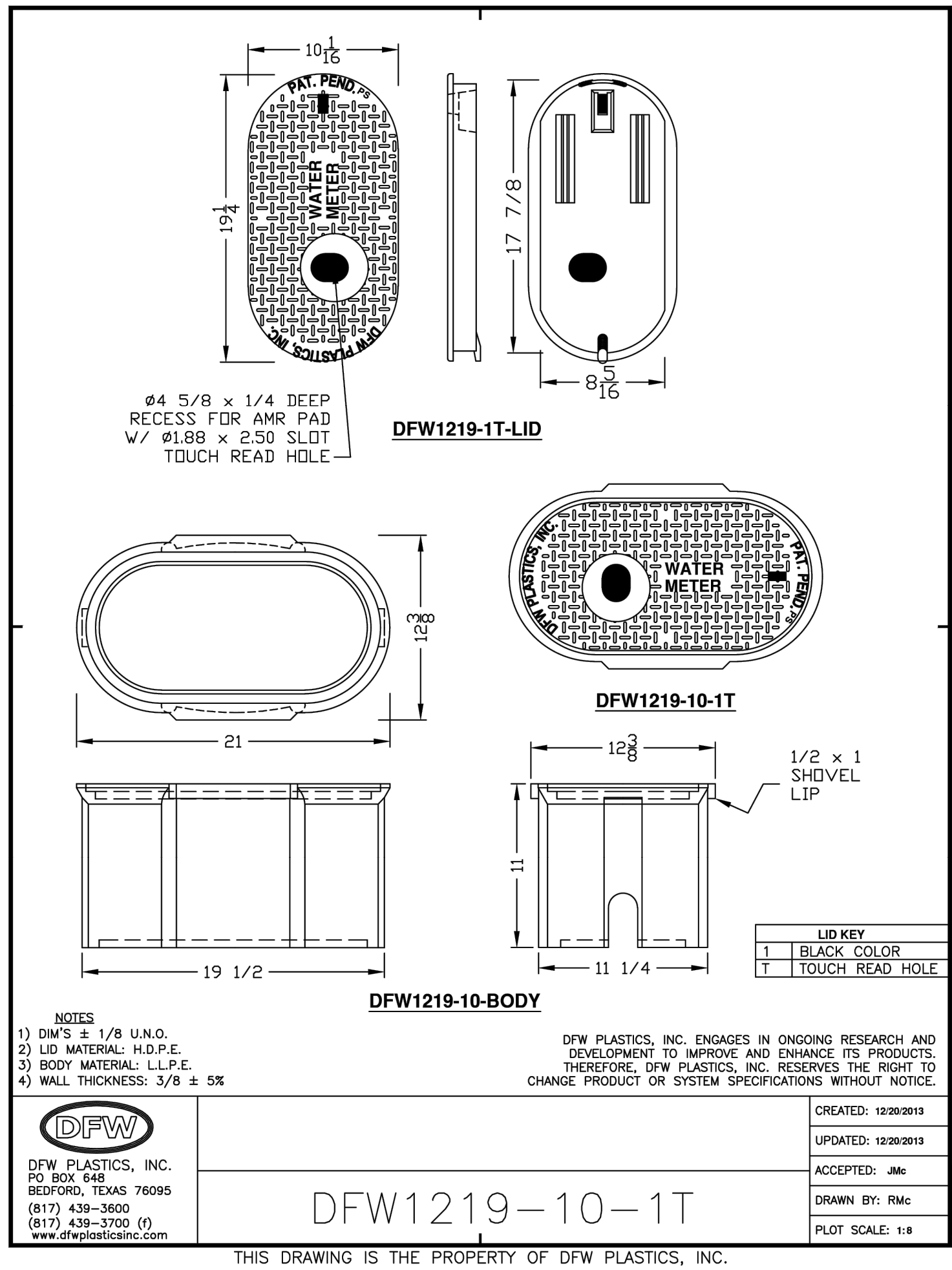
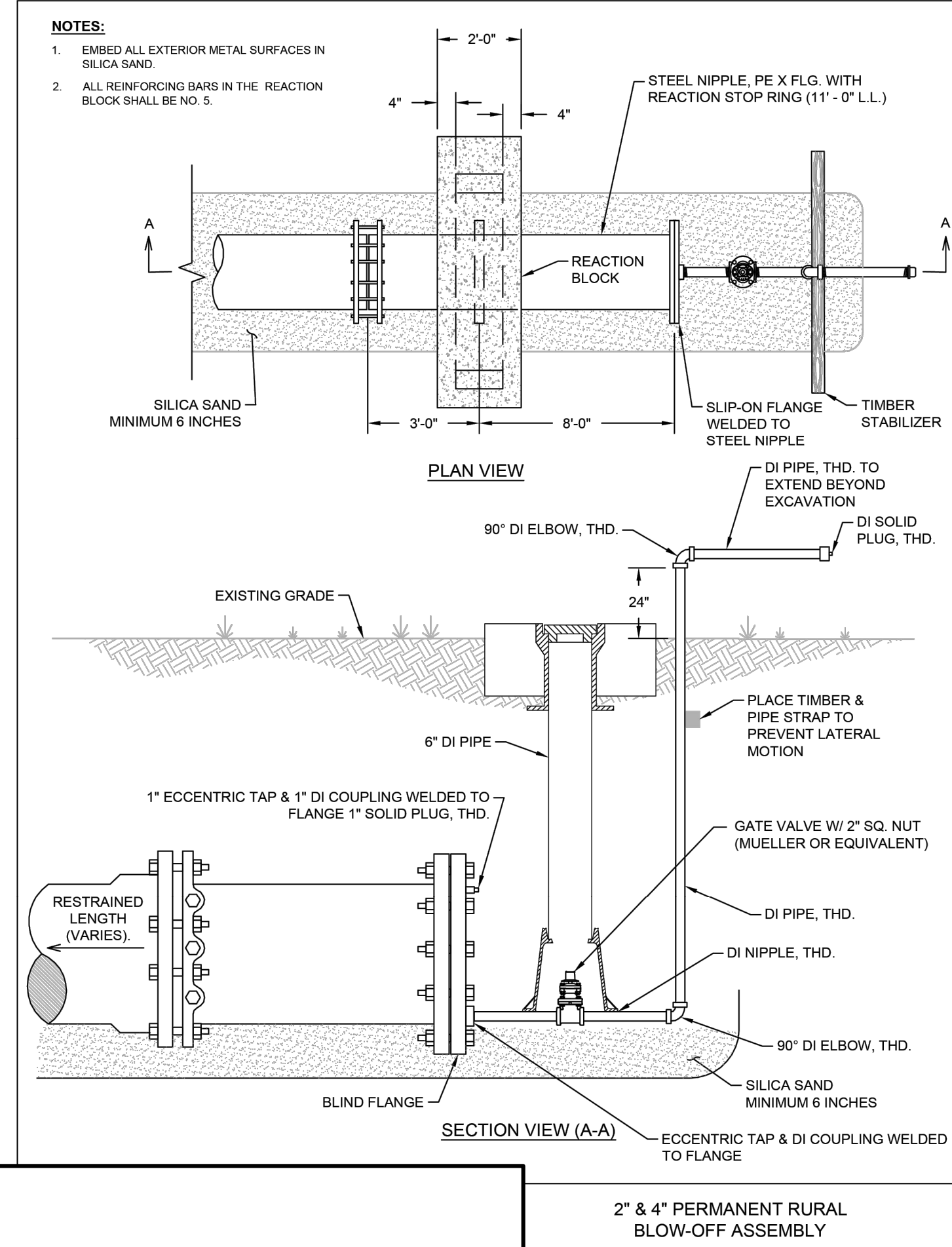


ALL FITTINGS TO BE MECHANICAL JOINT

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

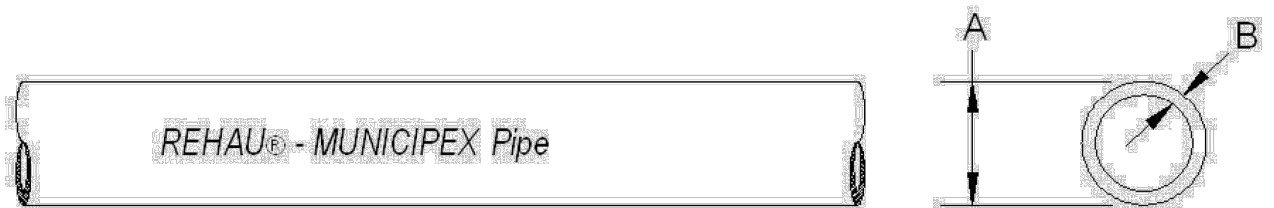


Construction
Automotive
Industry



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)

For updates to this publication, visit na.rehau.com/resourcescenter
The information contained herein is believed to be reliable, but no representations, warranties or statements of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained therefrom. Before using, the user will determine suitability of the information for user's intended use and shall assume all risk and liability in connection therewith. © 2017 REHAU

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

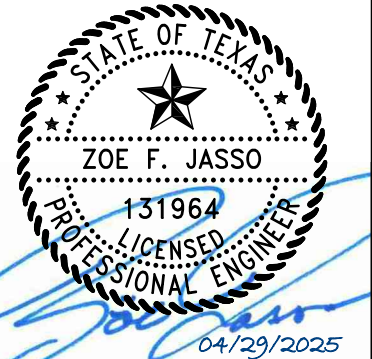
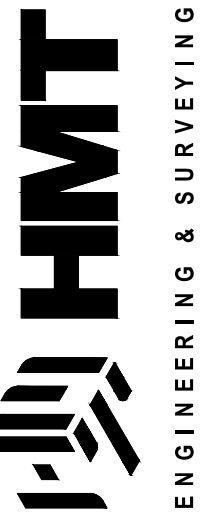
**WATER DETAILS
(2 OF 2)**

NO.	REVISION	DESCRIPTION	DATE

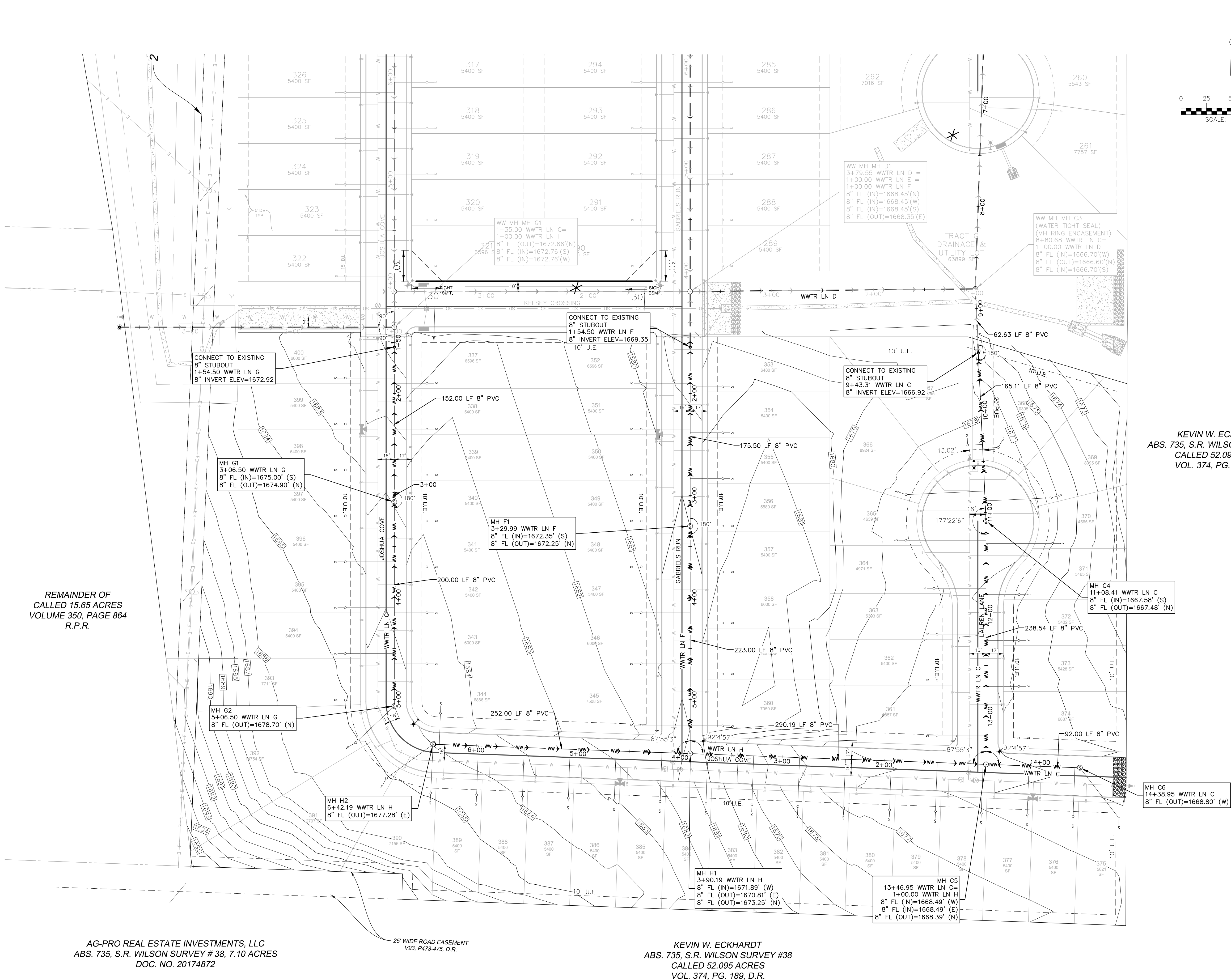
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DRAWN BY:	RR
DESIGNED BY:	JK
REVIEWED BY:	ZJ
HMT PROJECT NO.:	337.128

**SHEET
C6.3**

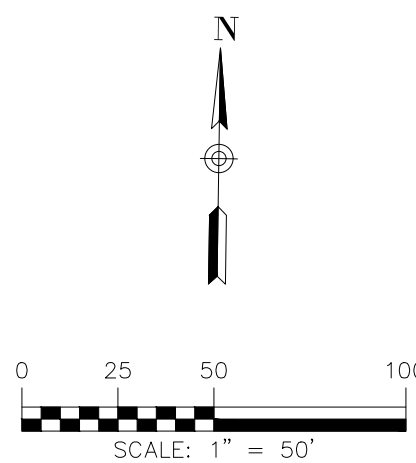
290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPELS FIRM F-10961
TBPELS FIRM 1053600



FRIENDSHIP OAKS, UNIT 4
FREDERICKSBURG, TEXAS



- 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.

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- CONTRACTOR TO INSTALL SEWER LATERALS AT MINIMUM SLOPE OF 2%

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 CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATIONS.

REFER TO THE COVER SHEET
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

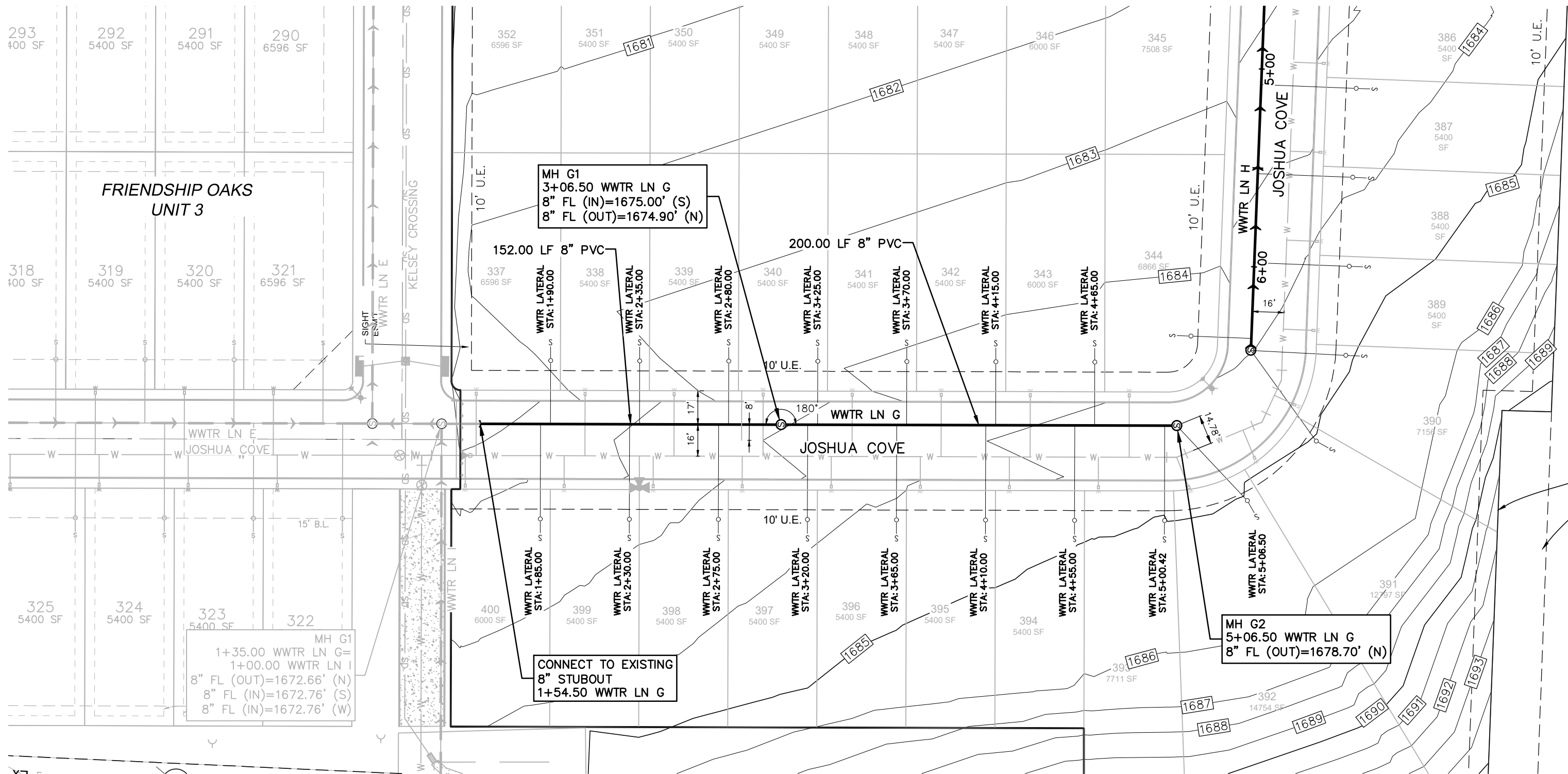
FRIENDSHIP OAKS, UNIT 4
FREDERICKSBURG, TEXAS

REVISION	DATE	DESCRIPTION
NO.		

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

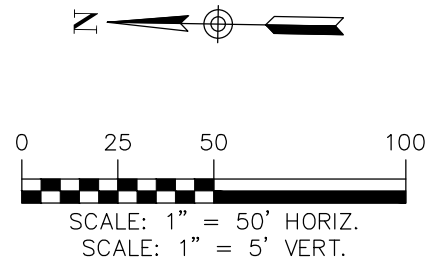
SHEET
C7.1

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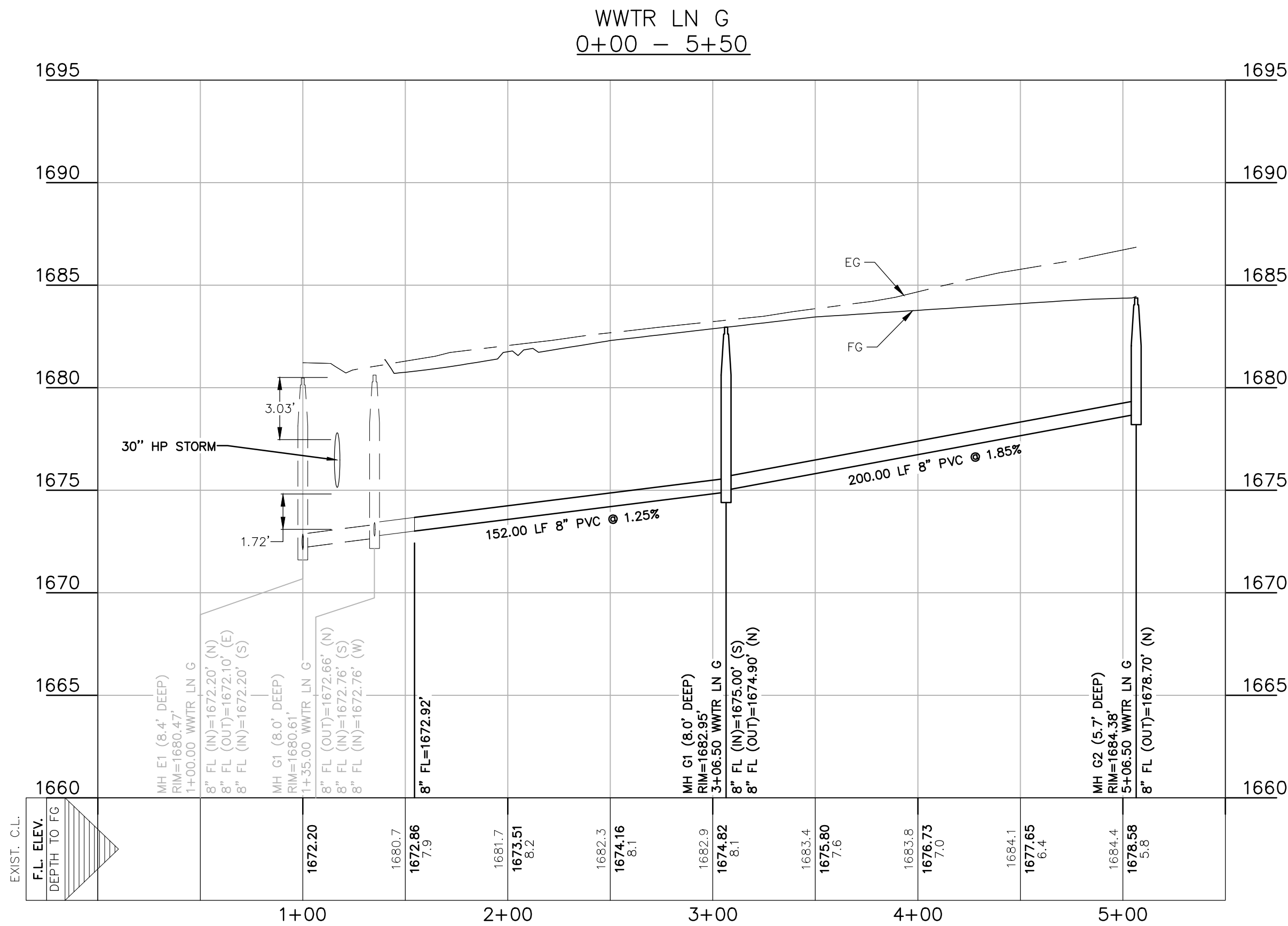


AG-PRO REAL ESTATE INVESTMENTS, LLC
ABS. 735, S.R. WILSON SURVEY # 38, 7.10 ACRES
DOC. NO. 20174872

- LEGEND**
- EXISTING CONTOURS
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 - U.E. UTILITY EASEMENT
 - D.E. DRAINAGE EASEMENT
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 - EXISTING WASTEWATER MANHOLE
 - EXISTING WASTEWATER SERVICE
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STMENTS, LLC
38, 7.10 ACRES
'72



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WASTEWATER LINE G
PLAN & PROFILE

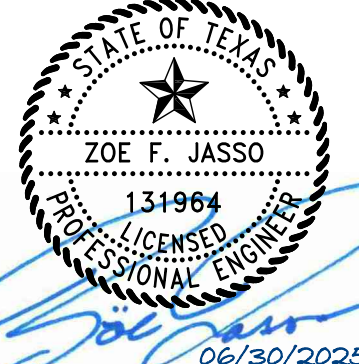
FRIENDSHIP OAKS, UNIT 4
FREDERICKSBURG, TEXAS

NO.	REVISION DESCRIPTION	REVISION DATE
1	REVISED TITLE BLOCK	6/30/2025

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

HMT PROJECT NO.:
337.128

SHEET
C7.4

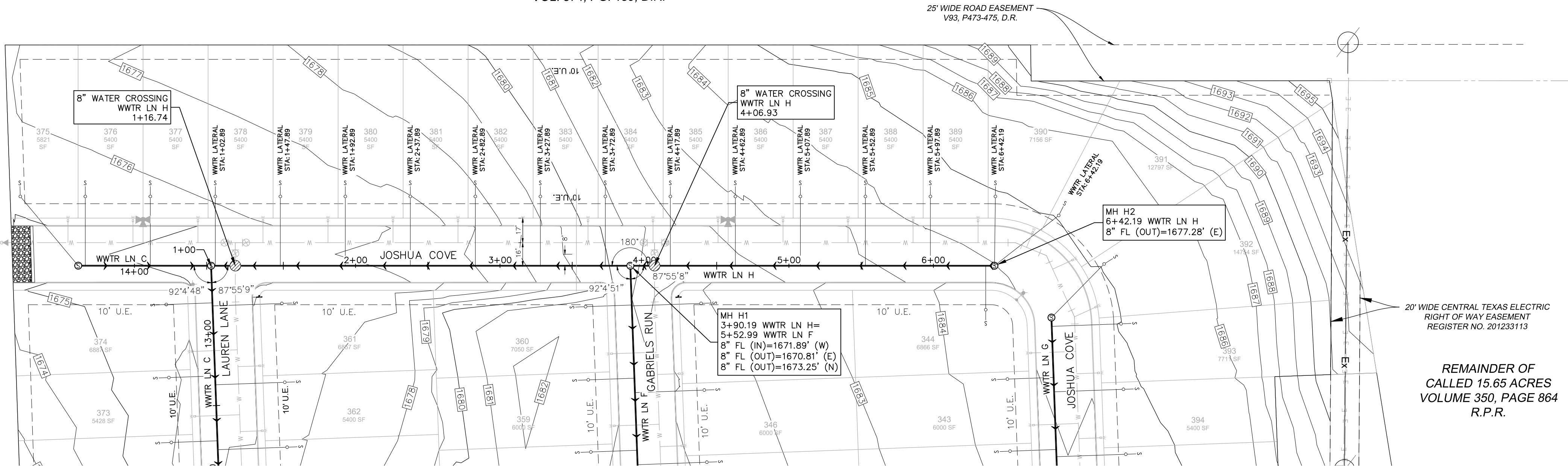


HMT
ENGINEERING & SURVEYING

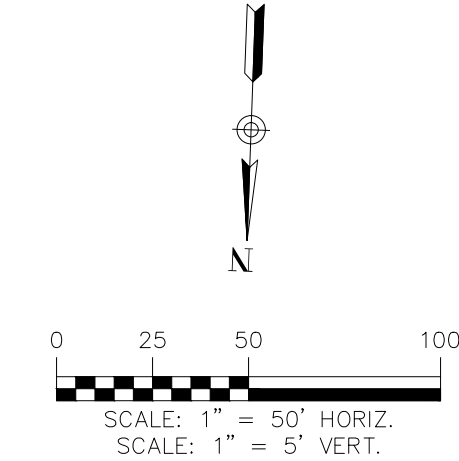
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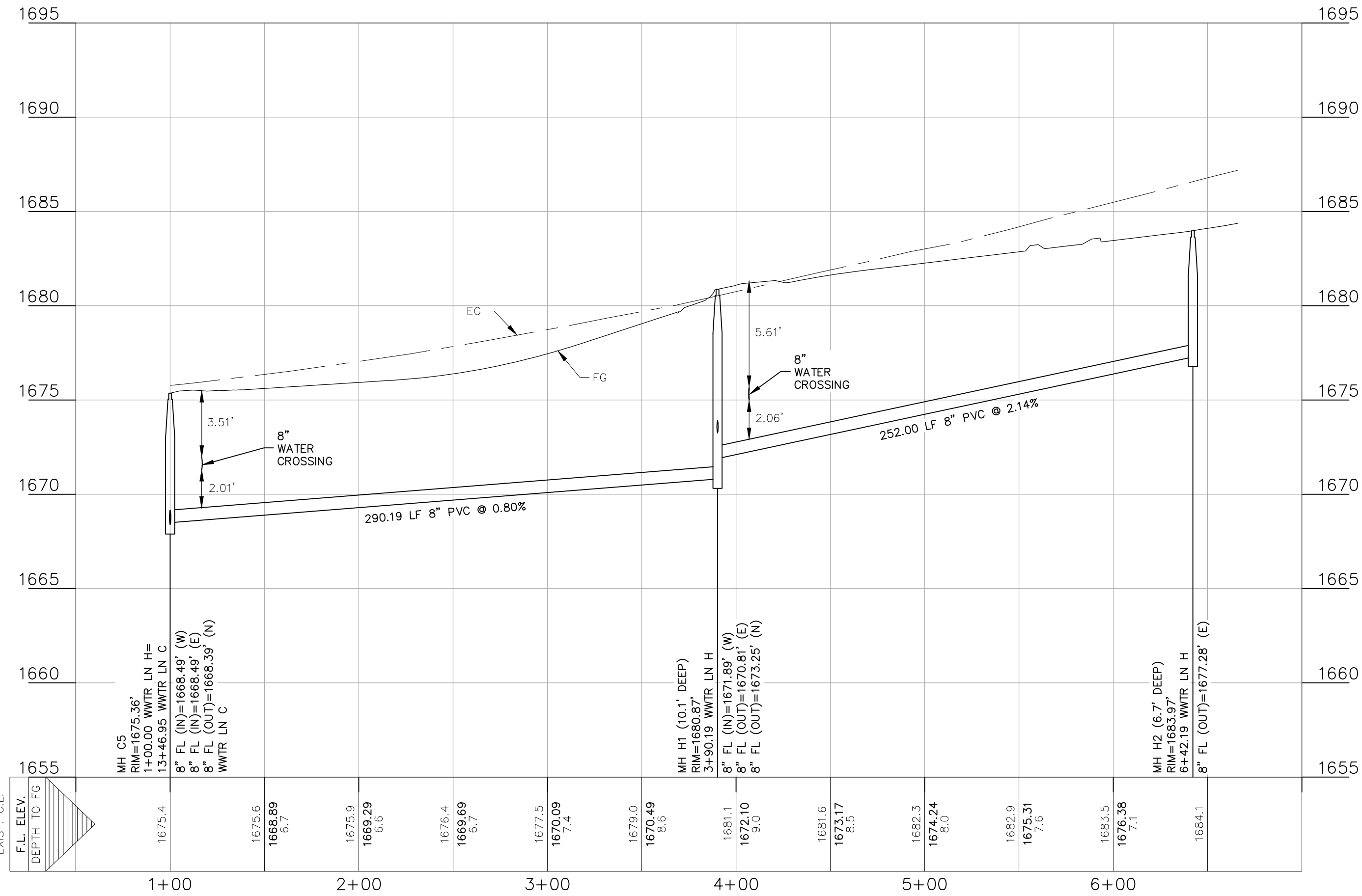
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CALLED 52.095 ACRES
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- LEGEND
- 700 — EXISTING CONTOURS
 - [700] PROPOSED CONTOURS
 - B.L. BUILDING SETBACK LINE
 - U.E. UTILITY EASEMENT
 - D.E. DRAINAGE EASEMENT
 - - - EXISTING WASTEWATER LINE
 - EXISTING WASTEWATER MANHOLE
 - EXISTING WASTEWATER SERVICE
 - PROPOSED WASTEWATER LINE
 - PROPOSED WASTEWATER MANHOLE
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WWTR LN H
0+50 - 7+00



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WASTEWATER LINE H
PLAN & PROFILE

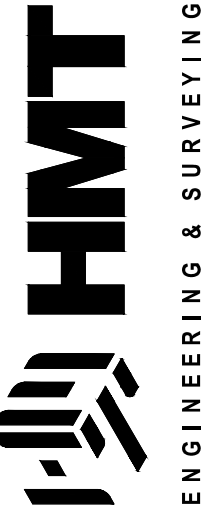
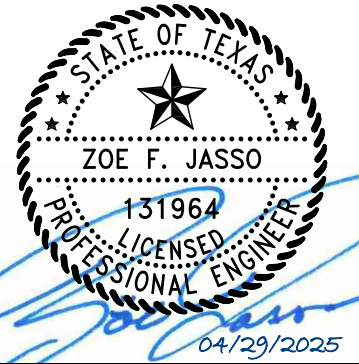
FRIENDSHIP OAKS, UNIT 4
FREDERICKSBURG, TEXAS

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



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.



15

See manhole reinforcement enclosure drawing

4'-0"

5'-0"

12" MIN.

4 bars at 12" a.c. each way

4 bars at 12" a.c. each way

4 bars at 12" a.c. each way

SHALLOW MANHOLE

13

14

[illegible]

19



EJW EAST JORDAN <small>IRON WORKS EST.1983</small> 800-426-4653 www.ejw.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 <i>To be used when specified by City of Fredericksburg</i>	
OPEN AREA N/A	
✓ DESIGNATES MACHINED SURFACE	
DRAWN GAD	DATE 08/12/08
LAST REVISION DATE	
REFERENCE INFORMATION 00134349 00134311	



ETJW EAST JORDAN IRON WORKS EST. 1982 800-426-4653 www.etjw.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 <i>To be used when specified by City of Fredericksburg</i>	
OPEN AREA N/A	
*DESIGNATES MACHINE SURFACE	
DRAWN GAD	DATE 08/08/08
LAST REVISION DATE	DATE
REFERENCE INFORMATION 41432010 41432139	



ETJW EAST TOWNS IRON WORKS ESTABLISHMENT 800-626-4653 www.etjw.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 A535 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	08/08/08
REFERENCE INFORMATION 42432035 42432010	

NO

DATE: JANUARY 2025

DRAWN BY: RR

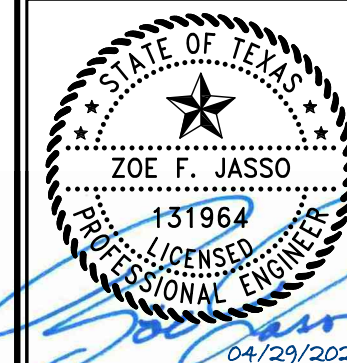
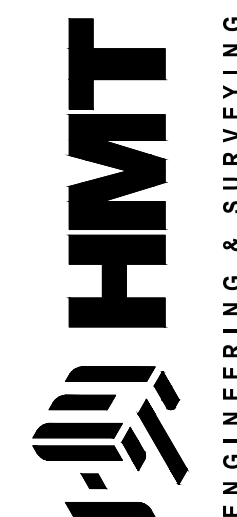
DESIGNED BY: JK

REVIEWED BY: ZJ

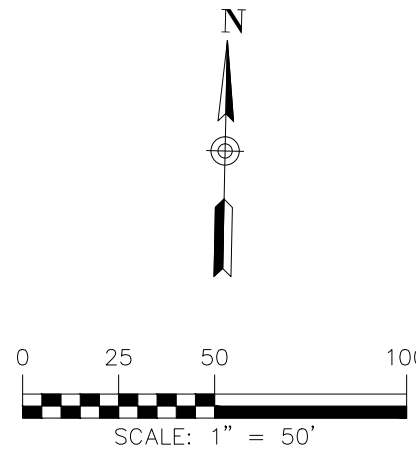
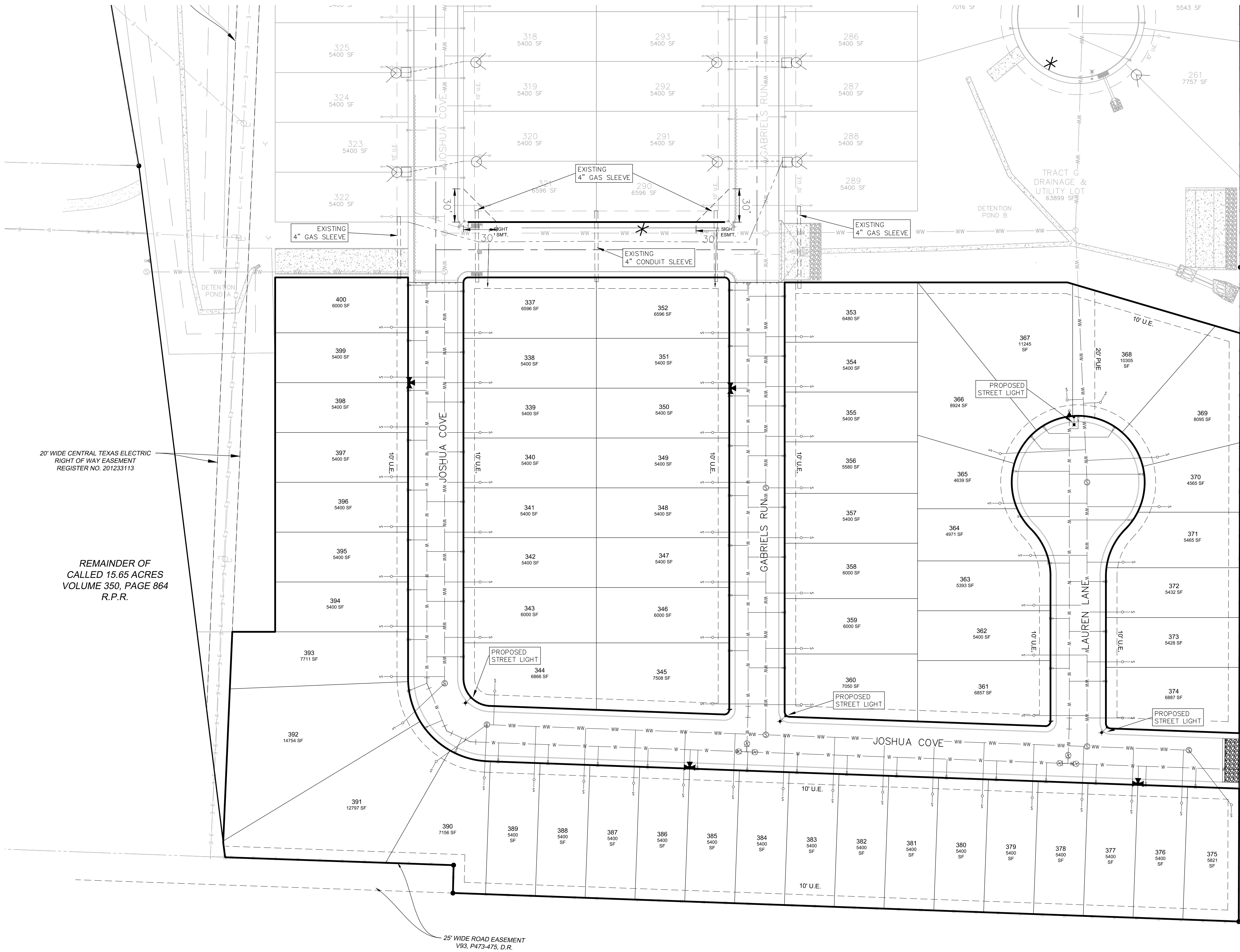
HMT PROJECT NO.:
337.128

SHEET
C7.6

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



FRIENDSHIP OAKS, UNIT 4
FREDERICKSBURG, TEXAS



- LEGEND**
- | | |
|------|--------------------------------|
| B.L. | BUILDING SETBACK LINE |
| U.E. | UTILITY EASEMENT |
| D.E. | DRAINAGE EASEMENT |
| EX W | EXISTING WATER LINE |
| W | PROPOSED WATER LINE |
| WS | PROPOSED WATER SERVICE |
| UC | UTILITY CROSSING |
| GC | PROPOSED GAS CONDUIT |
| PT | PROPOSED PRIMARY TRANSFORMER |
| ST | PROPOSED SECONDARY TRANSFORMER |
| PB | PROPOSED PULL BOX |
| LP | PROPOSED LIGHT POLE |
| PE | PRIMARY ELECTRIC CONDUIT |
| SE | SECONDARY ELECTRIC CONDUIT |
| GS | 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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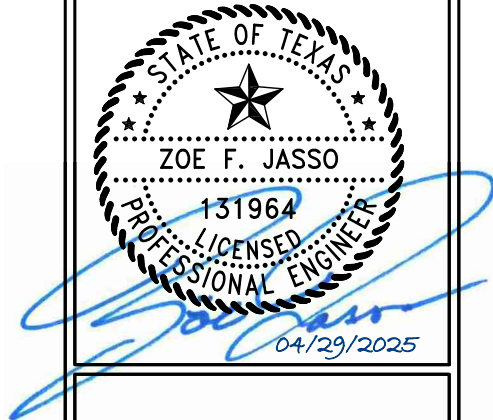
THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR WILL AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE INCURRED BY THEIR FAILURE 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

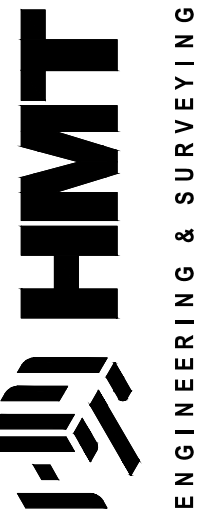
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