

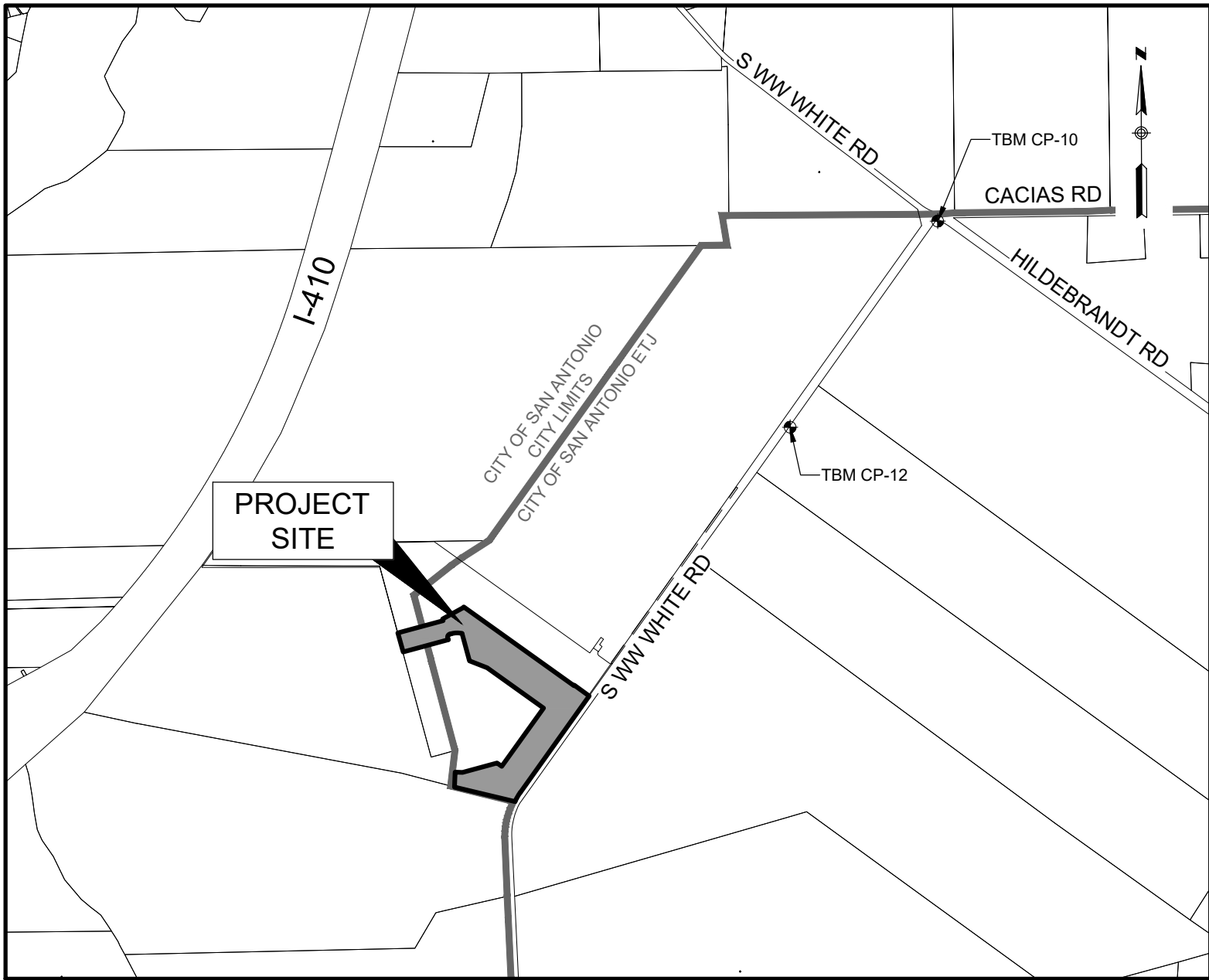
AGAVE SUBDIVISION UNIT 7A

PAVING, DRAINAGE, WATER, AND WASTEWATER IMPROVEMENTS

LAND-PLAT-24-11800230

SAN ANTONIO, TEXAS 78223

BEXAR COUNTY



LOCATION MAP

(N.T.S.)

SUBMITTAL DATE: MAY 2024

SHEET NO.	DESCRIPTION
1	COVER
2	GENERAL NOTES
3	UTILITY LAYOUT (SHEET 1 OF 2)
4	UTILITY LAYOUT (SHEET 2 OF 2)
--	WATER COVER
5	WATER LAYOUT (SHEET 1 OF 2)
6	WATER LAYOUT (SHEET 2 OF 2)
--	WASTEWATER COVER
7	WASTEWATER LAYOUT (SHEET 1 OF 2)
8	WASTEWATER LAYOUT (SHEET 2 OF 2)
9	WASTEWATER LINE 'A' PLAN & PROFILE STA. 1+00 TO STA. 9+50
10	WASTEWATER LINE 'A' PLAN & PROFILE STA. 9+50 TO END
11	WASTEWATER LINE 'B' PLAN & PROFILE STA. 1+00 TO END
12	WASTEWATER LINE 'C' PLAN & PROFILE STA. 1+00 TO END
13	GRADING PLAN (SHEET 1 OF 2)
14	GRADING PLAN (SHEET 2 OF 2)
15	EXISTING DRAINAGE AREA MAP
17	DRAIN 'A' PLAN & PROFILE STA. 1+00 TO END
18	DRAINAGE DETAILS (SHEET 1 OF 1)
19	ARTICHOKE FLDS & SOLSTICE STREET PLAN & PROFILE
20	PRICKLY PEAR PLACE & MOJAVE TERRACE PLAN & PROFILE
21	OCOTILLO RDG PLAN & PROFILE STA. 2+94.85 TO END
22	DESERT BLOOM DRIVE PLAN & PROFILE STA. 1+00 TO END
23	SIGNAGE LAYOUT
24	TRAFFIC DETAILS (SHEET 1 OF 2)
25	TRAFFIC DETAILS (SHEET 2 OF 2)
26	STORMWATER POLLUTION PREVENTION PLAN
27	STORMWATER POLLUTION PREVENTION PLAN DETAILS
28	CPS ENERGY DETAILS

PROPERTY DESCRIPTION

BEING A PROPOSED 15.47 ACRE TRACT LYING IN AND BEING A PART OF A CALLED 55.323 ACRE TRACT OF LAND CONVEYED TO TEXAS WASTE SYSTEMS, INC., DESCRIBED AND RECORDED IN VOLUME 4620, PAGE 789, OFFICIAL PUBLIC RECORDS OF REAL PROPERTY OF BEXAR COUNTY, TEXAS (O.P.R.P.B.C.TX), SITUATED IN THE ADAM STAFFORD SURVEY NO. 49, ABSTRACT NO. 667, BEXAR COUNTY, TEXAS.

BENCHMARK INFORMATION:

TBM CP-10: CP 3/4" IR W/ ALUM LJA CAP  
N: 13674492.26 E: 2163485.508  
ELEVATION = 594.116

TBM CP-11: CP 3/4" IR W/ ALUM LJA CAP  
N: 13670193.52 E: 2169379.512  
ELEVATION = 577.312

TBM CP-12: CP 3/4" IR W/ ALUM LJA CAP  
N: 13672607.32 E: 2162070.362  
ELEVATION = 590.163

VERTICAL DATUM: TX83-SCF.  
SURFACE SCALE FACTOR = 1.00013

THIS INFORMATION PROVIDED BY LJA SURVEYING

DEVELOPER: CENTURY LAND HOLDINGS II, LLC  
CONTACT: RUDY MUNOZ  
2330 N LOOP 1604 W ACCESS ROAD, SUITE 112  
SAN ANTONIO, TX 78248  
PHONE: (210) 797-7205

ENGINEER: LJA ENGINEERING, INC.  
9830 COLONNADE BLVD, SUITE 300  
SAN ANTONIO, TEXAS 78230  
CONTACT PERSON: PRISCILLA FLORES, PE  
PHONE # (210) 503-2700  
FAX # (210) 503-2749

SURVEYOR: LJA SURVEYING  
9830 COLONNADE BLVD, SUITE 300  
SAN ANTONIO, TEXAS 78230  
CONTACT PERSON: GORDON ANDERSON  
PHONE # (512) 439-4700

REVISIONS			
NO.	DESCRIPTION	BY	DATE

LOCATION OF EXISTING UNDERGROUND AND OVERHEAD UTILITIES ARE APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO BEGINNING WORK AND SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT OCCUR.



Know what's below.  
Call before you dig.

LJA JOB NO. SA199-0403C-426

LJA Engineering, Inc.



9830 Colonnade Blvd  
Suite 300  
San Antonio, Texas 78230

Phone 210.503.2700  
LJA.COM  
FRN-F-1386

GENERAL NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF SAN ANTONIO STANDARD SPECIFICATIONS FOR CONSTRUCTION JUNE 2008, OR LATEST.
2. NO EXTRA PAYMENT SHALL BE ALLOWED FOR WORK CALLED FOR ON THE PLANS, BUT NOT INCLUDED IN THE BID PROPOSAL. THIS INCIDENTAL WORK WILL BE REQUIRED AND SHALL BE INCLUDED IN THE PAY ITEM TO WHICH IT RELATES.
3. THE CONTRACTOR SHALL PROVIDE ACCESS FOR THE DELIVERY OF MAIL BY THE U.S. POSTAL SERVICE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL OR BETTER CONDITION ANY DAMAGE DONE TO EXISTING FENCES, CONCRETE SIGNS, STREET PAVING, CURBS, SHRUBS, BUSHES, EXISTING WOODEN FENCES, ORNAMENTAL STONE PLANTERS, OR DRIVEWAYS. (NO SEPARATE PAY ITEM).
5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SEE THAT ALL SIGNS AND BARRICADES ARE PROPERLY INSTALLED AND MAINTAINED. ALL LOCATIONS AND DISTANCES WILL BE DECIDED UPON IN THE FIELD BY THE CONTRACTOR, USING THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. THE CITY'S CONSTRUCTION INSPECTOR AND TRAFFIC ENGINEERING REPRESENTATIVE WILL ONLY BE RESPONSIBLE TO INSPECT BARRICADES AND SIGNS. IF, IN THE OPINION OF THE TRAFFIC ENGINEERING REPRESENTATIVE AND THE CONSTRUCTION INSPECTOR, THE BARRICADES AND SIGNS DO NOT CONFORM TO ESTABLISHED STANDARDS OR ARE INCORRECTLY PLACED OR ARE INSUFFICIENT IN QUANTITY TO PROTECT THE GENERAL PUBLIC, THE CONSTRUCTION INSPECTOR SHALL HAVE THE OPTION TO STOP OPERATIONS UNTIL SUCH TIME AS THE CONDITIONS ARE CORRECTED.
6. IF THE NEED ARISES, ADDITIONAL BARRICADES AND DIRECTIONAL DEVICES MAY BE ORDERED BY THE TRAFFIC ENGINEERING REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.
7. DUE TO FEDERAL REGULATIONS TITLE 49, PART 192.171 C.P.S. MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.
8. CONTRACTOR SHALL PRESERVE ALL CONSTRUCTION STAKES, MARKS, ETC. IF ANY ARE DESTROYED OR REMOVED BY THE CONTRACTOR OR HIS EMPLOYEES, THEY SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
9. CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION TO DETERMINE THE LOCATION OF EXISTING UTILITIES. CONTRACTOR SHALL NOTIFY THE FOLLOWING AT LEAST FORTY- EIGHT (48) HOURS PRIOR TO EXCAVATION OPERATION:

- SAN ANTONIO WATER SYSTEM (SAWS) 235-2010  
- COSA DRAINAGE 207-4048  
- COSA SIGNAL OPERATIONS 207-7720 / 207-7765  
- TEXAS STATE WIDE ONE CALL LOCATOR 1-800-344-8377  
- CITY PUBLIC SERVICE ENERGY SPECTRUM (TIME WARNER)  
- AT&T  
- MCI

10. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM AVAILABLE RECORDS AND ARE NOT GUARANTEED, BUT SHALL BE INVESTIGATED AND VERIFIED BY THE CONTRACTOR BEFORE STARTING WORK. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY DAMAGE TO AND FOR THE MAINTENANCE AND PROTECTION OF THE EXISTING UTILITIES EVEN IF THEY ARE NOT SHOWN ON THE PLANS. LOCATION AND DEPTH OF EXISTING UTILITIES SHOWN HERE ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION AND HE SHALL BE RESPONSIBLE FOR PROTECTION OF SAME DURING CONSTRUCTION.
11. ALL WASTE MATERIAL SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE HIS SOLE RESPONSIBILITY TO DISPOSE OF THIS MATERIAL OFF THE LIMITS OF THE PROJECT. NO WASTE MATERIAL SHALL BE PLACED IN EXISTING LOWS THAT WILL BLOCK OR ALTER FLOW LIMITS OF EXISTING ARTIFICIAL OR NATURAL DRAINAGE.
12. THE CONTRACTOR SHALL NOT PLACE ANY WASTE MATERIAL IN THE 100-YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN DEVELOPMENT PERMIT.
13. THE CONTRACTOR SHALL MAINTAIN ALL ADJOINING STREETS AND TRAVELED ROUTES FREE FROM SPILLED AND / OR TRACKED CONSTRUCTION MATERIALS AND / OR DEBRIS.
14. IF THE CONTRACTOR ENCOUNTERS ANY ARCHAEOLOGICAL DEPOSITS DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR MUST STOP EXCAVATION IMMEDIATELY, CONTACT THE CITY INSPECTOR, AND CALL THE CITY HISTORIC PRESERVATION OFFICE AT 207-7306 OR 207-3327 FOR AN ARCHAEOLOGICAL INVESTIGATION. THE CONTRACTOR CANNOT BEGIN EXCAVATION AGAIN WITHOUT WRITTEN PERMISSION FROM THE CITY. IF MORE THAN THREE (3) DAYS ARE REQUIRED FOR INVESTIGATION (NOT INCLUDING HOLIDAY AND WEEKENDS) AND IF THE CONTRACTOR IS UNABLE TO WORK IN OTHER AREAS, THEN THE CONTRACTOR WILL BE ALLOWED TO NEGOTIATE FOR ADDITIONAL CONSTRUCTION TIME UPON WRITTEN REQUEST WITHIN TEN (10) DAYS AFTER THE FIRST NOTICE TO THE CITY OF ARCHAEOLOGICAL INVESTIGATION FOR EACH EVENT. IF THE TIME REQUIRED FOR INVESTIGATION IS LESS THAN OR EQUAL TO THREE (3) DAYS FOR EACH EVENT, CONTRACT DURATION WILL NOT BE EXTENDED.
15. IF SUSPECTED CONTAMINATION IS ENCOUNTERED DURING CONSTRUCTION OPERATIONS, C.O.S.A. SHALL BE NOTIFIED IMMEDIATELY WHEN CONTAMINATED SOILS AND / OR GROUNDWATER ARE ENCOUNTERED AT LOCATIONS NOT IDENTIFIED IN THE PLANS. THE NOTIFICATION SHOULD INCLUDE THE STATION NUMBER, TYPE OF CONTAMINATED MEDIA, EVIDENCE OF CONTAMINATION AND MEASURES TAKEN TO CONTAIN THE CONTAMINATED MEDIA AND PREVENT PUBLIC ACCESS. THE CONTAMINATED SOIL AND / OR GROUNDWATER SHALL NOT BE REMOVED FROM THE LOCATION WITHOUT PRIOR C.O.S.A. APPROVAL. THE CONTRACTOR MUST STOP THE EXCAVATION IMMEDIATELY AND CONTACT THE C.O.S.A. INSPECTOR. THE CONTRACTOR CANNOT BEGIN EXCAVATION ACTIVITIES WITHOUT WRITTEN PERMISSION FROM THE CITY.
16. CONTRACTOR IS TO INCLUDE A MAILBOX POST BLOCKOUT FOR VACANT LOTS AND ALL RESIDENCES WHICH DO NOT HAVE MAILBOXES AT THE CURB. BLOCKOUTS ARE PROVIDED FOR FUTURE USE BY THE POST OFFICE.
17. CONTRACTOR SHALL NOT REMOVE OR ADJUST ANY VIA FACILITIES. THE CONTRACTOR MUST CONTACT VIA FOURTEEN DAYS PRIOR, FOR THE REMOVAL OF BENCHES, STOP POLES OR ANY OTHER VIA FACILITIES THAT MAY BE PRESENT. PLEASE PROVIDE THIRTY DAYS PRIOR NOTICE FOR SHELTER REMOVAL. (TELEPHONE NOS: (210) 362-2155 OR (210) 362-2098). THE CONTRACTOR WILL BE LIABLE FOR ANY DAMAGES TO VIA FACILITIES NOT REMOVED BY VIA. THE CONTRACTOR IS REQUIRED TO REPLACE ALL FLATWORK REMOVED OR DAMAGED IN THE COURSE OF EXECUTING THE CONTRACT UNLESS OTHERWISE NOTED BY VIA. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING VIA FACILITIES IF ADJACENT TO WORK AREA.

TREE PROTECTION AND PRESERVATION GENERAL NOTES

1. NO UTILITY OR STREET EXCAVATION WORK SHALL BEGIN IN AREAS WHERE TREE PRESERVATION AND TREATMENT MEASURES HAVE NOT BEEN COMPLETED AND APPROVED.
2. TREE PROTECTION FENCING SHALL BE REQUIRED. TREE PROTECTION FENCING SHALL BE INSTALLED, MAINTAINED AND REPAIRED BY THE CONTRACTOR DURING SITE CONSTRUCTION. DURING CONSTRUCTION ACTIVITY, AT LEAST A SIX-INCH LAYER OF COARSE MULCH SHALL BE PLACED AND MAINTAINED OVER THE ROOT PROTECTION ZONE (NO SEPARATE PAY ITEM).
3. THE CONTRACTOR SHALL AVOID CUTTING ROOTS LARGER THAN ONE INCH IN DIAMETER WHEN EXCAVATING NEAR EXISTING TREES. EXCAVATION IN THE VICINITY OF TREES SHALL PROCEED WITH CAUTION. THE CONTRACTOR SHALL CONTACT THE CITY INSPECTOR FOR GUIDANCE.
4. ROOTS WILL BE CUT WITH A ROCK SAW OR BY HAND, NOT BY AN EXCAVATOR OR OTHER ROAD CONSTRUCTION EQUIPMENT.
5. ALL CURB AND SIDEWALK WORK SHALL USE ALTERNATIVE CONSTRUCTION METHODS TO MINIMIZE EXTENSIVE ROOT DAMAGE TO TREES (REFER TO DETAILS).
6. EXPOSED ROOTS SHALL BE COVERED AT THE END OF THE DAY USING TECHNIQUES SUCH AS COVERING WITH SOIL, MULCH, OR WET BURLAP.
7. NO EQUIPMENT, VEHICLES OR MATERIALS SHALL OPERATE OR BE STORED WITHIN THE ROOT PROTECTION ZONE OF ANY TREE NEAR THE PROJECT. ROOT PROTECTION ZONE IS 1 FOOT OF RADIUS PER INCH OF TREE'S DIAMETER. A 10-INCH DIAMETER TREE WOULD HAVE A 10 FOOT RADIUS ROOT PROTECTION ZONE AROUND THE TREE. ROOTS OR BRANCHES IN CONFLICT WITH THE CONSTRUCTION SHALL BE CUT CLEANLY ACCORDING TO PROPER PRUNING METHODS. OAK WOUNDS SHALL BE PAINTED OVER WITHIN 30 MINUTES TO PREVENT OAK WILT.
8. SAPLINGS, SHRUBS OR BUSHES TO BE CLEARED FROM THE PROTECTED ROOT ZONE AREA OF A LARGE TREE SHALL BE REMOVED BY HAND AS DESIGNATED BY THE INSPECTOR.
9. NO WIRES, NAILS OR OTHER MATERIAL MAY BE ATTACHED TO PROTECTED TREES.
10. TREES, TREE LIMBS, BUSHES AND SHRUBS LOCATED IN THE CITY STREET OR ALLEY RIGHT-OF-WAY OR PERMANENT EASEMENTS WHICH INTERFERE WITH PROPOSED CONSTRUCTION ACTIVITIES SHALL BE PROPERLY PRUNED FOLLOWING THE ANSI A-300 STANDARDS FOR PRUNING. ALL TREE PRUNING SHALL BE COMPLETED BY A CITY OF SAN ANTONIO TREE MAINTENANCE LICENSED CONTRACTOR (ARTICLE 21-171, CITY CODE) ONLY AFTER APPROVAL FROM THE CAPITAL PROJECTS MANAGEMENT THROUGH THE INSPECTOR.
11. NO EXCESSIVE TREE TRIMMING WILL BE PERMITTED.
12. ALL DEBRIS GENERATED BY THE PRUNING AND TRIMMING OF THE TREES AND / OR BUSHES SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF PROPERLY (NO SEPARATE PAY ITEM).
13. TREES MUST BE MAINTAINED IN GOOD HEALTH THROUGHOUT THE CONSTRUCTION PROCESS. MAINTENANCE MAY INCLUDE, BUT NOT LIMITED TO: WATERING THE ROOT PROTECTION ZONE, WASHING FOLIAGE, FERTILIZATION, PRUNING, ADDITIONAL MULCH APPLICATIONS AND OTHER MAINTENANCE AS NEEDED ON THE PROJECT.
14. ANY TREE REMOVAL SHALL BE APPROVED BY THE CITY ARBORIST. (210) 207-0278
15. TREES WHICH ARE DAMAGED OR LOST DUE TO THE CONTRACTOR'S NEGLIGENCE DURING CONSTRUCTION SHALL BE MITIGATED TO THE CITY'S SATISFACTION.
16. TREE PLANTING FOR MITIGATION OR ENHANCEMENT. ALL PLANTED TREES SHALL BE MAINTAINED IN A HEALTHY CONDITION AT ALL TIMES. THIS INCLUDES IRRIGATION, FERTILIZING, PRUNING AND OTHER MAINTENANCE AS NEEDED ON THE PROJECT. TREES THAT DIE WITHIN TWELVE (12) MONTHS SHALL BE REPLACED WITH A TREE OF EQUAL SIZE AND SPECIES.

ACCESSIBILITY REQUIREMENTS

1. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN VEHICULAR AND PEDESTRIAN ACCESS AT ALL TIMES TO LOCAL RESIDENCES AND BUSINESSES.
2. WHEN THE WORK REQUIRES THE EXCAVATION OF THE STREET AND THE REMOVAL OF THE EXISTING DRIVEWAY APPROACHES AND SIDEWALKS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY ALL-WEATHER ACCESS TO THE BUSINESSES AND RESIDENCES. THE TEMPORARY DRIVEWAY APPROACHES SHALL BE CONSTRUCTED WITH FLEXIBLE BASE OR GRAVEL MATERIAL AT NO SEPARATE COST TO THE CITY.
3. PRIOR TO INITIATING THE CONSTRUCTION OF NEW DRIVEWAY APPROACHES, THE CONTRACTOR SHALL GIVE ADVANCE WARNING IN PERSON, OR IN WRITING, OF AT LEAST 48 HOURS TO EACH RESIDENCE THAT WILL BE IMMEDIATELY AFFECTED, SO THAT ALTERNATE PLANS MAY BE MADE BY THE RESIDENTS.
4. FOR BUSINESSES WITH MORE THAN ONE DRIVEWAY, AT LEAST ONE DRIVEWAY SHALL REMAIN OPEN WHILE THE OTHER NEW DRIVEWAY APPROACHES ARE CONSTRUCTED. FOR BUSINESSES WITH ONLY ONE DRIVEWAY, THE NEW DRIVEWAY APPROACH SHALL BE CONSTRUCTED IN HALF WIDTHS, UNLESS A TEMPORARY ASPHALT DRIVEWAY IS FIRST INSTALLED AT NO SEPARATE COST TO THE CITY.

Revised January 2022

SAWS CONSTRUCTION NOTES  
COUNTER PERMIT AND GENERAL CONSTRUCTION PERMIT

General Section

1. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL BE APPROVED BY THE SAN ANTONIO WATER SYSTEM (SAWS) AND COMPLY WITH THE PLANS, SPECIFICATIONS, GENERAL CONDITIONS AND WITH THE FOLLOWING AS APPLICABLE:
- A. CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEM, TEXAS ADMINISTRATIVE CODE (TAC) TITLE 30 PART 1 CHAPTER 217 AND PUBLIC DRINKING WATER, TAC TITLE 30 PART 1 CHAPTER 290
- B. CURRENT TXDOT "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND DRAINAGE"
- C. CURRENT "SAN ANTONIO WATER SYSTEM STANDARD SPECIFICATIONS FOR WATER AND SANITARY SEWER CONSTRUCTION"
- D. CURRENT CITY OF SAN ANTONIO "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION"
- E. CURRENT CITY OF SAN ANTONIO "UTILITY EXCAVATION CRITERIA MANUAL" (UECM).
2. THE CONTRACTOR SHALL NOT PROCEED WITH ANY PIPE INSTALLATION WORK UNTIL THEY OBTAIN A COPY OF THE APPROVED COUNTER PERMIT OR GENERAL CONSTRUCTION PERMIT (GCP) FROM THE CONSULTANT AND HAS BEEN NOTIFIED BY SAWS CONSTRUCTION INSPECTION DIVISION TO PROCEED WITH THE WORK AND HAS ARRANGED A MEETING WITH THE INSPECTOR AND CONSULTANT FOR THE WORK REQUIREMENTS. WORK COMPLETED BY THE CONTRACTOR WITHOUT AN APPROVED COUNTER PERMIT AND/OR A GCP WILL BE SUBJECT TO REMOVAL AND REPLACEMENT AT THE EXPENSE OF THE CONTRACTORS AND/OR THE DEVELOPER.
3. THE CONTRACTOR SHALL OBTAIN THE SAWS STANDARD DETAILS FROM THE SAWS WEBSITE: [HTTP://WWW.SAWS.ORG/BUSINESS\\_CENTERSPECS](http://www.saws.org/business_centerspecs). UNLESS OTHERWISE NOTED WITHIN THE DESIGN PLANS.
4. THE CONTRACTOR IS TO MAKE ARRANGEMENTS WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT (210) 233-2973, ON NOTIFICATION PROCEDURES THAT WILL BE USED TO NOTIFY AFFECTED HOME RESIDENTS AND/OR PROPERTY OWNERS 48 HOURS PRIOR TO BEGINNING ANY WORK.
5. LOCATION AND DEPTH OF EXISTING UTILITIES AND SERVICE LATERALS SHOWN ON THE PLANS ARE UNDERSTOOD TO BE APPROXIMATE. ACTUAL LOCATIONS AND DEPTHS MUST BE FIELD VERIFIED BY THE CONTRACTOR AT LEAST 1 WEEK PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITY SERVICE LINES AS REQUIRED FOR CONSTRUCTION AND TO PROTECT THEM DURING CONSTRUCTION AT NO COST TO SAWS.
6. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UNDERGROUND UTILITIES AND DRAINAGE STRUCTURES AT LEAST 1-2 WEEKS PRIOR TO CONSTRUCTION WHETHER SHOWN ON PLANS OR NOT. PLEASE ALLOW UP TO 1 BUSINESS DAYS FOR LOCATES REQUESTING PIPE LOCATION MARKERS ON SAWS FACILITIES. THE FOLLOWING CONTACT INFORMATION ARE SUPPLIED FOR VERIFICATION PURPOSES:
- SAWS UTILITY LOCATES: [HTTP://WWW.SAWS.ORG/SERVICE/LOCATES](http://www.saws.org/service/locates)
  - COSA DRAINAGE (210) 207-0724 OR (210) 207-6026
  - COSA TRAFFIC SIGNAL OPERATIONS (210) 206-8480
  - COSA TRAFFIC SIGNAL DAMAGES (210) 207-3951
  - TEXAS STATE WIDE ONE CALL LOCATOR 1-800-445-6005 OR 811
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING EXISTING FENCES, CURBS, STREETS, DRIVEWAYS, SIDEWALKS, LANDSCAPING AND STRUCTURES TO ITS ORIGINAL OR BETTER CONDITION IF DAMAGES ARE MADE AS A RESULT OF THE PROJECT'S CONSTRUCTION.
8. ALL WORK IN TEXAS DEPARTMENT OF TRANSPORTATION (TXDOT) AND/OR BEXAR COUNTY RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH RESPECTIVE CONSTRUCTION SPECIFICATIONS AND PERMIT REQUIREMENTS.
9. THE CONTRACTOR SHALL COMPLY WITH CITY OF SAN ANTONIO OR OTHER GOVERNING MUNICIPALITY'S TREE ORDINANCES WHEN EXCAVATING NEAR TREES.
10. THE CONTRACTOR SHALL NOT PLACE ANY WASTE MATERIALS IN THE 100-YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN PERMIT.
11. HOLIDAY WORK: CONTRACTORS WILL NOT BE ALLOWED TO PERFORM SAWS WORK ON SAWS RECOGNIZED HOLIDAYS. REQUEST SHOULD BE SENT TO [CONSTWORKREQ@SAWS.ORG](mailto:CONSTWORKREQ@SAWS.ORG).
- WEEKEND WORK: CONTRACTORS ARE REQUIRED TO NOTIFY THE SAWS INSPECTION CONSTRUCTION DEPARTMENT 48 HOURS IN ADVANCE TO REQUEST WEEKEND WORK. REQUEST SHOULD BE SENT TO [CONSTWORKREQ@SAWS.ORG](mailto:CONSTWORKREQ@SAWS.ORG).
- ANY AND ALL SAWS UTILITY WORK INSTALLED WITHOUT HOLIDAY/WEEKEND APPROVAL WILL BE SUBJECT TO BE UNCOVERED FOR PROPER INSPECTION.
12. COMPACTION NOTE (ITEM 804): THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING THE COMPACTION REQUIREMENTS ON ALL TRENCH BACKFILL AND FOR PAYING FOR THE TESTS PERFORMED BY A THIRD PARTY. COMPACTION TESTS WILL BE DONE AT ONE LOCATION POINT RANDOMLY SELECTED, OR AS INDICATED BY THE SAWS INSPECTOR AND/OR THE TEST ADMINISTRATOR, PER EACH 12-INCH LOOSE LIFT PER 400 LINEAR FEET AT A MINIMUM. THIS PROJECT WILL NOT BE ACCEPTED AND FINALED BY SAWS WITHOUT THIS REQUIREMENT BEING MET AND VERIFIED BY PROVIDING ALL NECESSARY DOCUMENTED TEST RESULTS.
13. A COPY OF ALL TESTING REPORTS SHALL BE FORWARDED TO SAWS CONSTRUCTION INSPECTION DIVISION.
- WATER SECTION
1. PRIOR TO TIE-INS, ANY SHUTDOWNS OF EXISTING MAINS OF ANY SIZE MUST BE COORDINATED WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT LEAST ONE WEEK IN ADVANCE OF THE SHUTDOWN. THE CONTRACTOR MUST ALSO PROVIDE A SEQUENCE OF WORK AS RELATED TO THE TIE-INS. THIS IS AT NO ADDITIONAL COST TO SAWS OR THE PROJECT AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEQUENCE THE WORK ACCORDINGLY.
- FOR WATER MAINS 12" OR HIGHER, SAWS EMERGENCY OPERATIONS CENTER (210) 233-2014
2. ASBESTOS CEMENT (AC) PIPE, ALSO KNOWN AS TRANSITE PIPE WHICH IS KNOWN TO CONTAIN ASBESTOS-CONTAINING MATERIAL (ACM), MAY BE LOCATED WITHIN THE PROJECT LIMITS. SPECIAL WASTE MANAGEMENT PROCEDURES AND HEALTH AND SAFETY REQUIREMENTS WILL BE APPLICABLE WHEN REMOVAL AND/OR DISTURBANCE OF THIS PIPE OCCURS. SUCH WORK IS TO BE MADE UNDER SPECIAL SPECIFICATION ITEM NO. 3000, "SPECIAL SPECIFICATION FOR HANDLING ASBESTOS CEMENT PIPE".
3. VALVE REMOVAL: WHERE THE CONTRACTOR IS TO ABANDON A WATER MAIN, THE CONTROL VALVE LOCATED ON THE ABANDONING BRANCH WILL BE REMOVED AND REPLACED WITH A CAP/PLUG (NSP).
4. SUITABLE ANCHORAGE/THRUST BLOCKING OR JOINT RESTRAINT SHALL BE PROVIDED AT ALL OF THE FOLLOWING MAIN LOCATIONS: DEAD ENDS, PLUGS, CAPS, TEES, CROSSES, VALVES, AND BENDS, IN ACCORDANCE WITH THE STANDARD DRAWINGS DD-839 SERIES AND ITEM NO. 839, IN THE SAWS STANDARD SPECIFICATIONS FOR CONSTRUCTION.
5. ALL VALVES SHALL READ "OPEN RIGHT".

6. PRVS REQUIRED: CONTRACTOR TO VERIFY THAT NO PORTION OF THE TRACT IS BELOW GROUND ELEVATION OF 265 FEET WHERE THE STATIC PRESSURE WILL NORMALLY EXCEED 80 PSI. AT ALL SUCH LOCATIONS WHERE THE GROUND LEVEL IS BELOW 265 FEET, THE DEVELOPER OR BUILDER SHALL INSTALL AT EACH LOT, ON THE CUSTOMER'S SIDE OF THE METER, AN APPROVED TYPE PRESSURE REGULATOR IN CONFORMANCE WITH THE PLUMBING CODE OF THE CITY OF SAN ANTONIO. NO DUAL SERVICES ALLOWED FOR ANY LOT(S) IF "PRV" IS/ARE REQUIRED FOR SUCH LOT(S). ONLY SINGLE SERVICE CONNECTIONS SHALL BE ALLOWED. NOTE: A PRESSURE REGULATOR IS ALSO KNOWN AS A PRESSURE REDUCING VALVE (PRV).
7. PIPE DISINFECTION WITH DRY HTH FOR PROJECTS LESS THAN 800 LINEAR FEET (ITEM NO. 847.3): MAINS SHALL BE DISINFECTED WITH DRY HTH WHERE SHOWN IN THE CONTRACT DOCUMENTS OR AS DIRECTED BY THE INSPECTOR, AND SHALL NOT EXCEED A TOTAL LENGTH OF 800 FEET. THIS METHOD OF DISINFECTION WILL ALSO BE FOLLOWED FOR MAIN REPAIRS. THE CONTRACTOR SHALL UTILIZE ALL APPROPRIATE SAFETY MEASURE TO PROTECT HIS PERSONNEL DURING DISINFECTION OPERATIONS.
8. BACKFLOW PREVENTION DEVICES:
- ALL IRRIGATION SERVICES WITHIN RESIDENTIAL AREAS ARE REQUIRED TO HAVE BACKFLOW PREVENTION DEVICES.
  - ALL COMMERCIAL BACKFLOW PREVENTION DEVICES MUST BE APPROVED BY SAWS PRIOR TO INSTALLATION.
9. FINAL CONNECTION TO THE EXISTING WATER MAIN SHALL NOT BE MADE UNTIL THE WATER MAIN HAS BEEN PRESSURE TESTED, CHLORINATED, AND SAWS HAS RELEASED THE MAIN FOR TIE-IN AND USE.
10. DIVISION VALVES: DIVISION VALVES SHOWN ON PLANS OR NOT SHOWN ON PLANS BUT FOUND IN THE FIELD SHALL ONLY BE OPERATED BY SAWS DISTRIBUTION AND COLLECTION STAFF, AND ONLY WITH PRIOR WRITTEN APPROVAL OF THE SAWS DIRECTOR OF PRODUCTION AND OPERATIONS AND PROPER COORDINATION WITH ALL SAWS DEPARTMENTS. CONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO THE INSPECTOR A MINIMUM OF TWO WEEKS IN ADVANCE TO START THE COORDINATION PROCESS AND WILL INFORMED BY THE INSPECTOR WHEN THE DIVISION VALVE WILL BE OPERATED BY THE SAWS DISTRIBUTION AND COLLECTION STAFF. THE DIVISION VALVE CAN ONLY BE OPERATED BY SAWS DISTRIBUTION AND COLLECTIONS STAFF MEMBER NOT THE INSPECTOR OR THE CONTRACTOR. OPERATION OF A DIVISION VALVE WITHOUT THE EXPRESS PRIOR WRITTEN APPROVAL OF THE SAWS DISTRIBUTION AND COLLECTION STAFF WILL CONTINUE A MATERIAL BREACH OF ANY WRITTEN SAWS CONTRACT OR PERMIT IN ADDITION TO SUBJECTING THE CONTRACTOR TO LIABILITY FOR ANY AND ALL FINES, FEES, OR OTHER DAMAGES, DIRECT OR CONSEQUENTIAL, THAT MAY ARISE FROM OR BE CAUSED BY THE OPERATIONS OF THE VALVE WITHOUT PRIOR WRITTEN PERMISSION. PLEASE BE INFORMED THAT THE APPROVAL OF THE OPERATION OR OPENING OR CLOSING OF A DIVISION VALVE CAN TAKE SEVERAL WEEKS FOR APPROVAL. DIVISION VALVES WILL ALSO HAVE A VALVE LID LABELED DIVISION VALVE AND A LOCKING MECHANISM INSTALLED WITH A KEY. THE LOCK AND KEY MECHANISM WILL BE PAD FOR BY THE CONTRACTOR BUT WILL BE INSTALLED BY SAWS DISTRIBUTION AND COLLECTION STAFF.

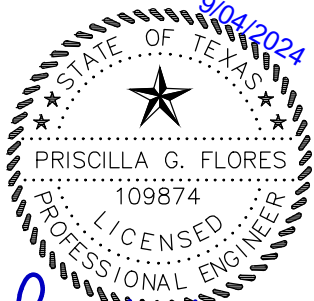
SEWER NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT NO SANITARY SEWER OVERFLOW (SSO) OCCURS AS A RESULT OF THEIR WORK. ALL CONTRACTOR PERSONNEL RESPONSIBLE FOR SSO PREVENTION AND CONTROL SHALL BE TRAINED ON PROPER RESPONSE. SHOULD AN SSO OCCUR, THE CONTRACTOR SHALL:
- A. IDENTIFY THE SOURCE OF THE SSO AND NOTIFY SAWS EMERGENCY OPERATIONS CENTER (EOC) IMMEDIATELY AT (210) 233-2014. PROVIDE THE ADDRESS OF THE SPILL AND AN ESTIMATED VOLUME OR FLOW.
- B. ATTEMPT TO ELIMINATE THE SOURCE OF THE SSO.
- C. CONTAIN SEWAGE FROM THE SSO TO THE EXTENT OF PREVENTING A POSSIBLE CONTAMINATION OF WATERWAYS.
- D. CLEAN UP SPILL SITE (RETURN CONTAINED SEWAGE TO THE COLLECTION SYSTEM IF POSSIBLE) AND PROPERLY DISPOSE OF CONTAMINATED SOLID MATERIALS.
- E. CLEAN THE AFFECTED SEWER MAINS AND REMOVE ANY DEBRIS.
- F. MEET ALL POST-SSO REQUIREMENTS AS PER THE EPA CONSENT DECREE, INCLUDING LINE CLEANING AND TELEVISIONING THE AFFECTED SEWER MAINS (AT SAWS DIRECTION) WITHIN 24 HOURS.
- SHOULD THE CONTRACTOR FAIL TO ADDRESS AN SSO IMMEDIATELY AND TO SAWS SATISFACTION, THEY WILL BE RESPONSIBLE FOR ALL COSTS INCURRED BY SAWS, INCLUDING ANY FINES FROM EPA, TCEQ AND/OR ANY OTHER FEDERAL, STATE OR LOCAL AGENCIES.
- NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE FOR THIS WORK. ALL WORK SHALL BE DONE ACCORDING TO GUIDELINES SET BY THE TCEQ AND SAWS.
2. IF BYPASS PUMPING IS REQUIRED, THE CONTRACTOR SHALL PERFORM SUCH WORK IN ACCORDANCE WITH SAWS STANDARD SPECIFICATION FOR WATER AND SANITARY SEWER CONSTRUCTION, ITEM NO. 854, "BYPASS PUMPING".
3. PRIOR TO TIE-INS, ANY SHUTDOWNS OF EXISTING FORCE MAINS OF ANY SIZE MUST BE COORDINATED WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT (210) 233-2973 AT LEAST ONE WEEK IN ADVANCE OF THE SHUTDOWN. THE CONTRACTOR MUST ALSO PROVIDE A SEQUENCE OF WORK AS RELATED TO THE TIE-INS. THIS IS AT NO ADDITIONAL COST TO SAWS OR THE PROJECT AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEQUENCE THE WORK ACCORDINGLY.
4. SEWER PIPE WHERE WATER LINE CROSSES SHALL BE 180 PSI AND MEET THE REQUIREMENTS OF ASTM D2241, TAC 217.53 AND TCEQ 290.44E(4)(b). CONTRACTOR SHALL CENTER A 20" JOINT OR 16-180 PSI PRESSURE RATED PVC AT THE PROPOSED WATER CROSSING.
5. ELEVATIONS POSTED FOR TOP OF MANHOLES ARE FOR REFERENCE ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE ALLOWANCES AND ADJUSTMENTS FOR TOP OF MANHOLES TO MATCH THE FINISHED GRADE OF THE PROJECT'S IMPROVEMENTS. (NSP).
6. SPILLS, OVERFLOWS, OR DISCHARGES OF WASTEWATER: ALL SPILLS, OVERFLOWS, OR DISCHARGES OF WASTEWATER, RECYCLED WATER, PETROLEUM PRODUCTS, OR CHEMICALS MUST BE REPORTED IMMEDIATELY TO THE SAWS INSPECTOR ASSIGNED TO THE COUNTER PERMIT OR GENERAL CONSTRUCTION PERMIT (GCP). THIS REQUIREMENT APPLIES TO EVERY SPILL, OVERFLOW, OR DISCHARGE REGARDLESS OF SIZE.
7. MANHOLE AND ALL PIPE TESTING (INCLUDING THE TV INSPECTION) MUST BE PERFORMED AND PASSED PRIOR TO FINAL FIELD ACCEPTANCE BY SAWS CONSTRUCTION INSPECTION DIVISION, AS PER THE SAWS SPECIFICATIONS FOR WATER AND SANITARY SEWER CONSTRUCTION.
8. ALL PVC PIPE OVER 14 FEET OF COVER SHALL BE EXTRA STRENGTH WITH MINIMUM PIPE STIFFNESS OF 115 PSI.

AGAVE SUBDIVISION UNIT 7A  
LAND-PLAT-24-11800230  
GENERAL NOTES

REVISIONS	DATE	DESCRIPTION	BY
NO			

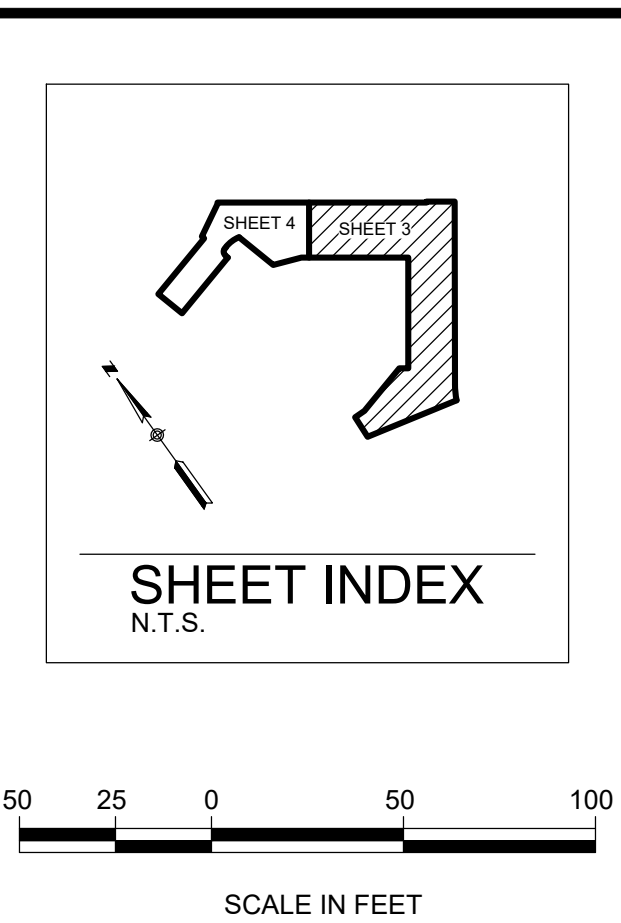
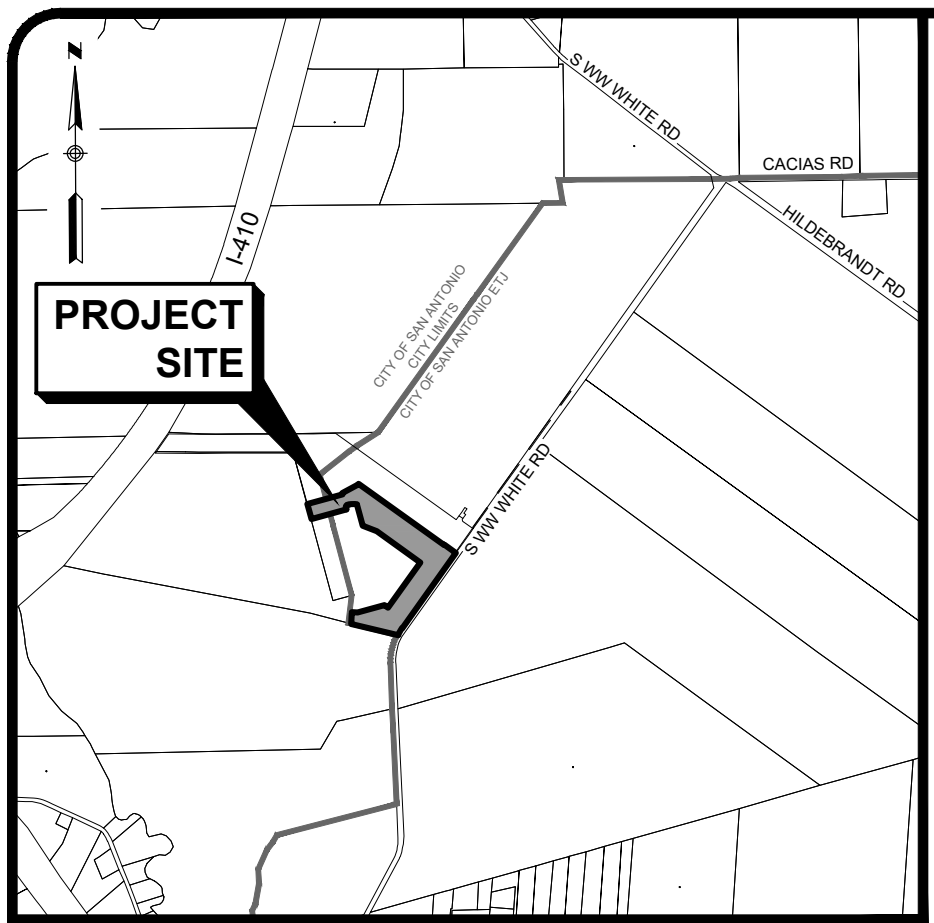
DATE: 02/20/2024	DESIGNED BY: SM	DRAWN BY: MAP	CHECKED BY: PF
DRAWING NAME: an_GeneralNotes.dwg			



**LJA Engineering, Inc.**  
9830 Colonnade Blvd  
Suite 300  
San Antonio, Texas 78230  
Phone 210.503.2700  
LJA.COM  
TEPE No. T-1586

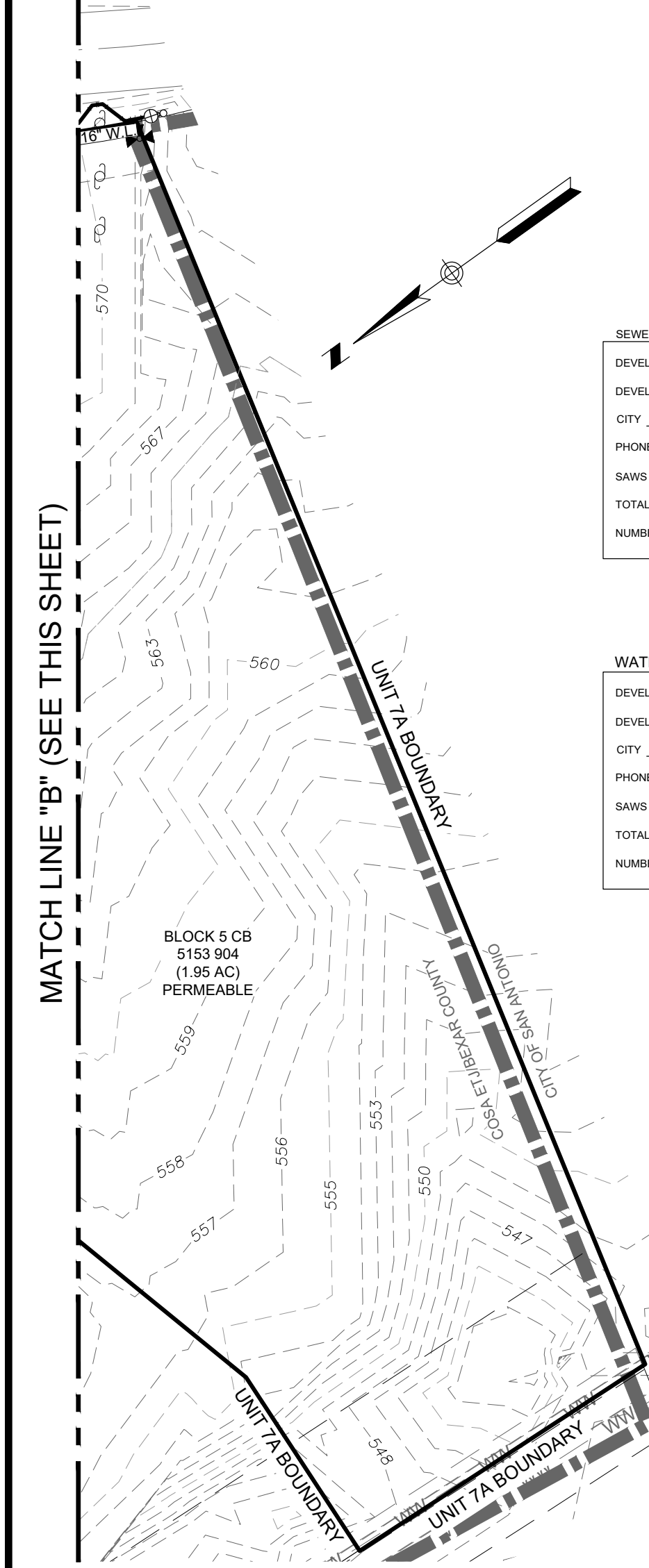
JOB NUMBER:  
SA199-0403C-426

SHEET NO.



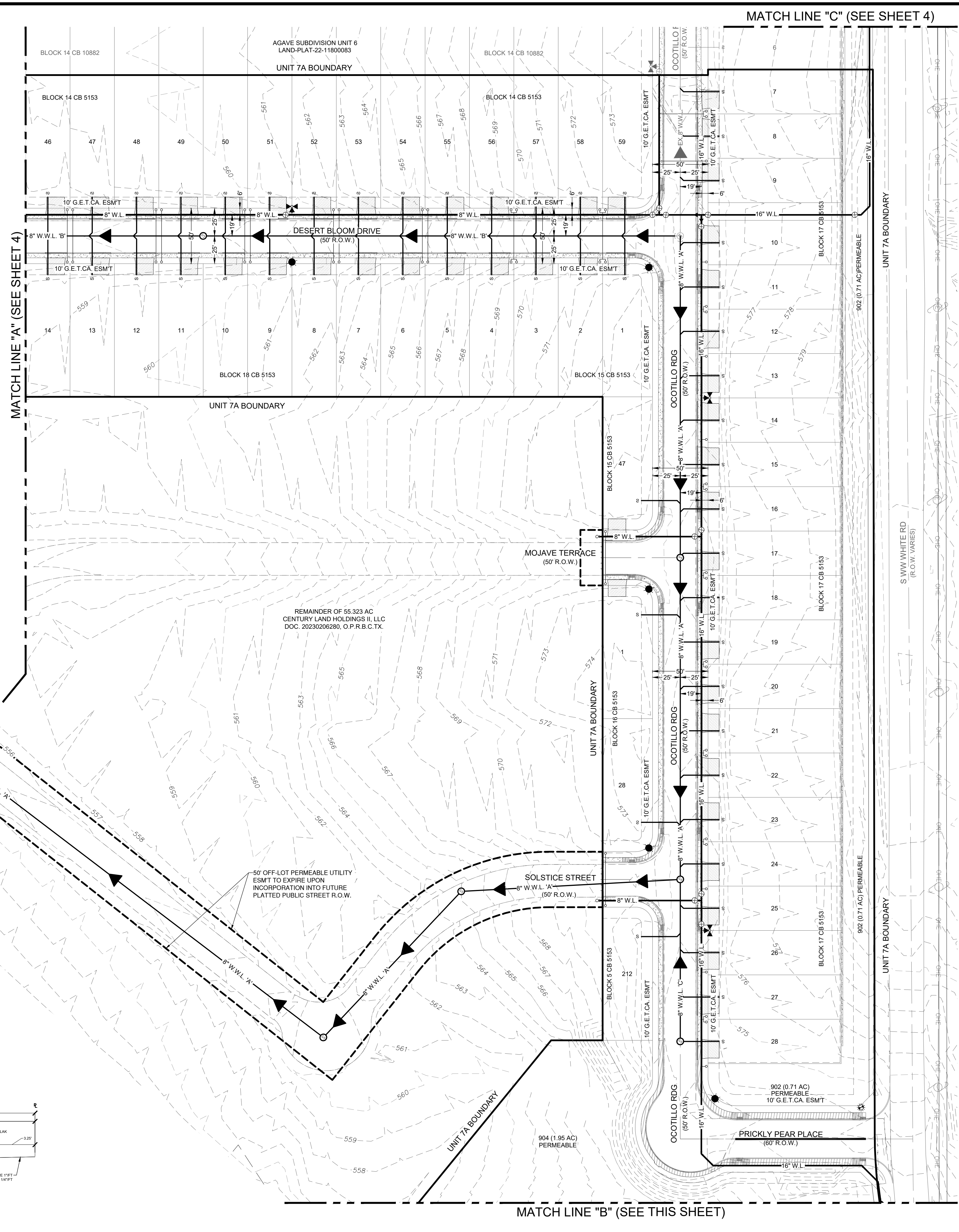
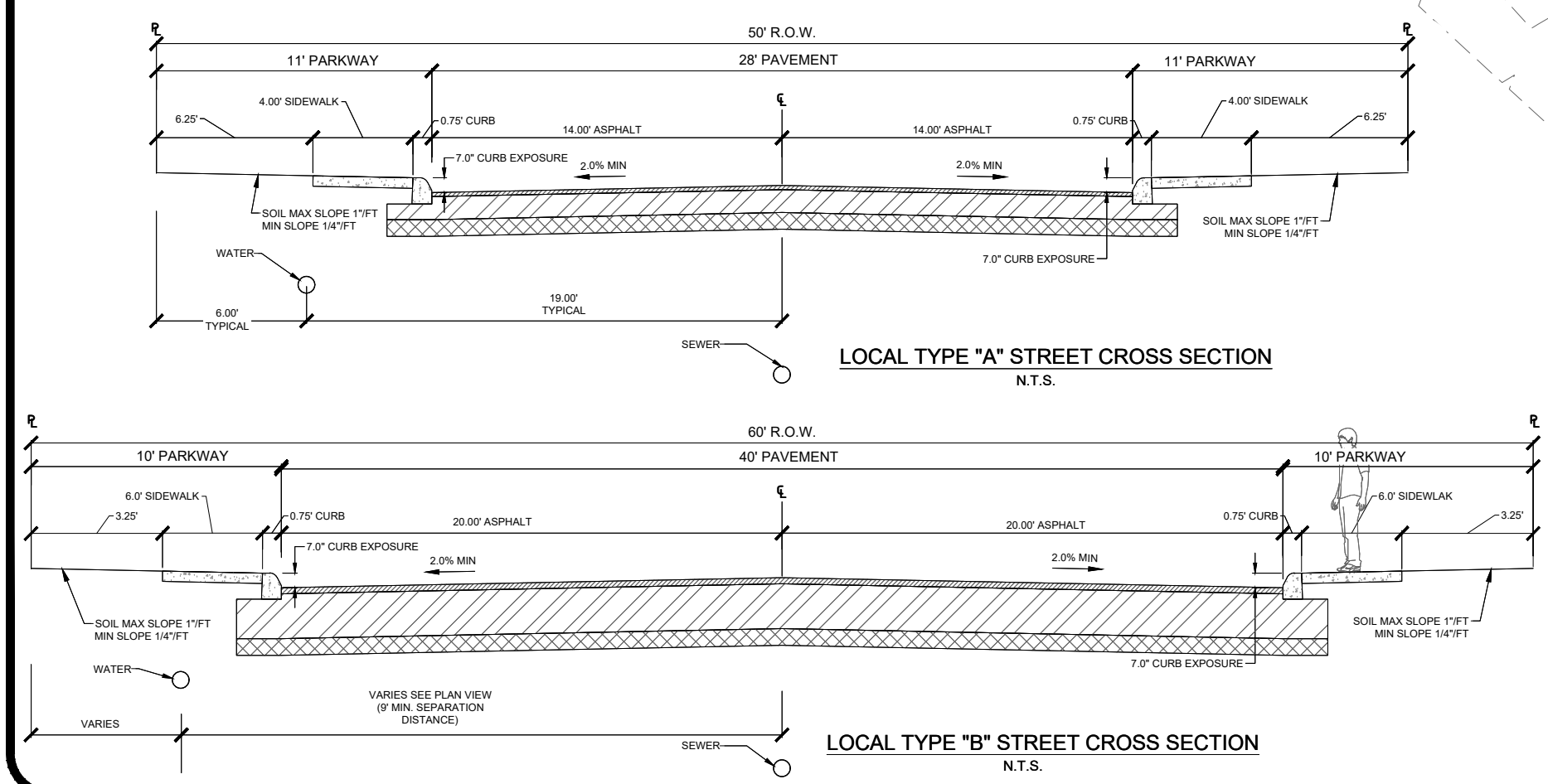
SCALE IN FEET  
SCALE: 1"=50'

LOCATION MAP  
N.T.S.



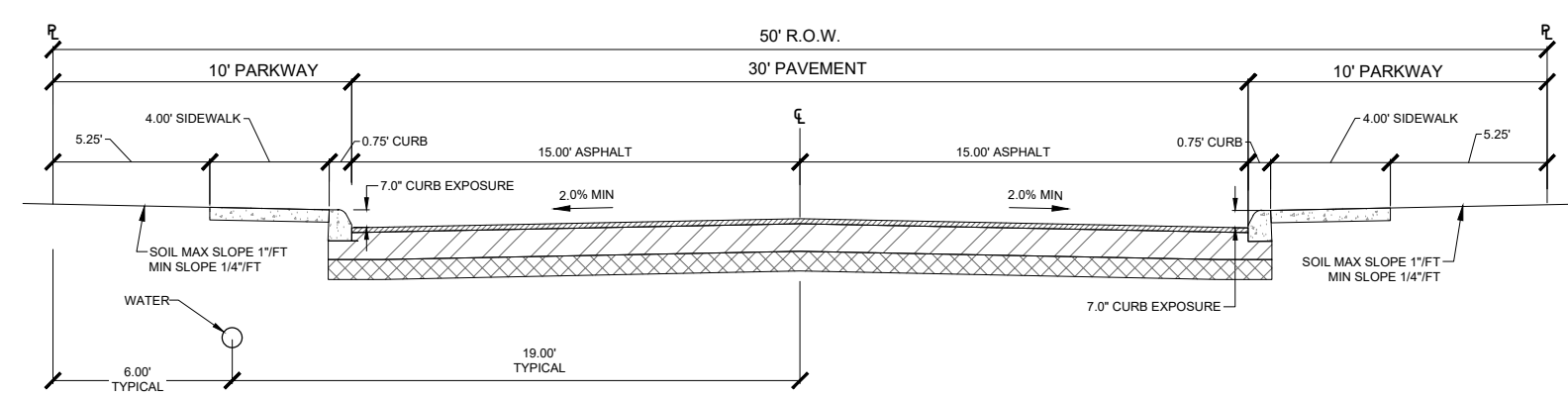
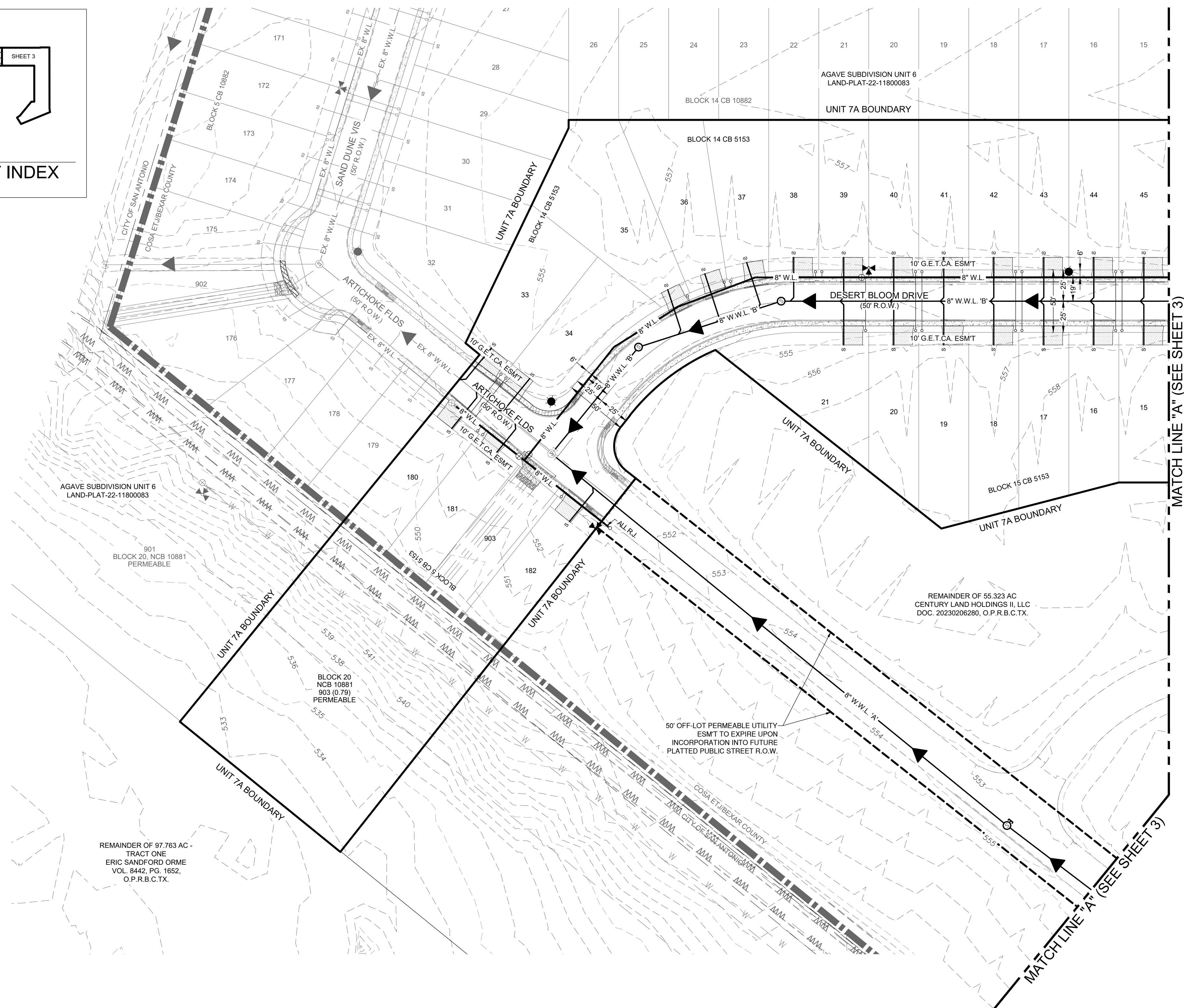
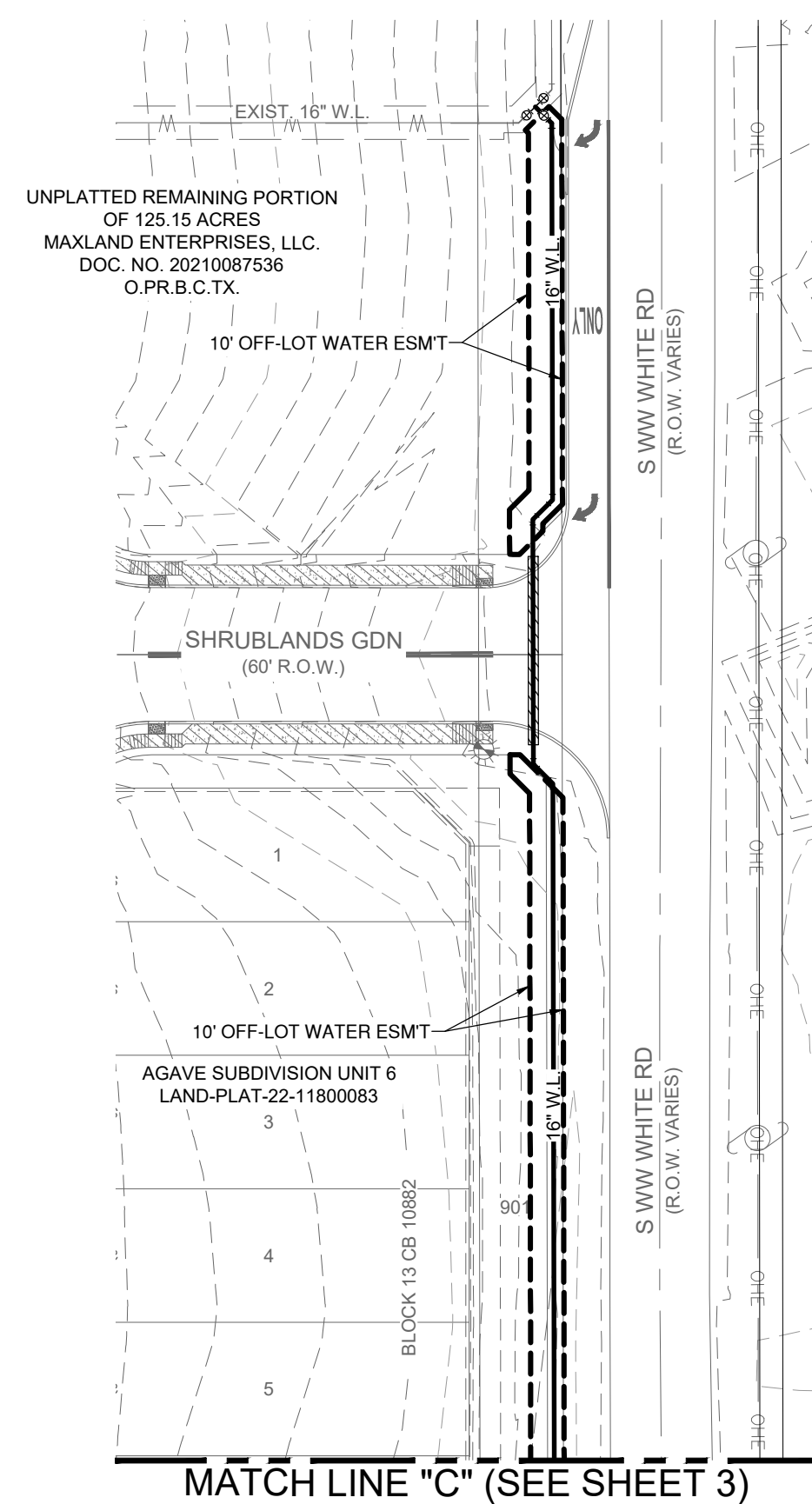
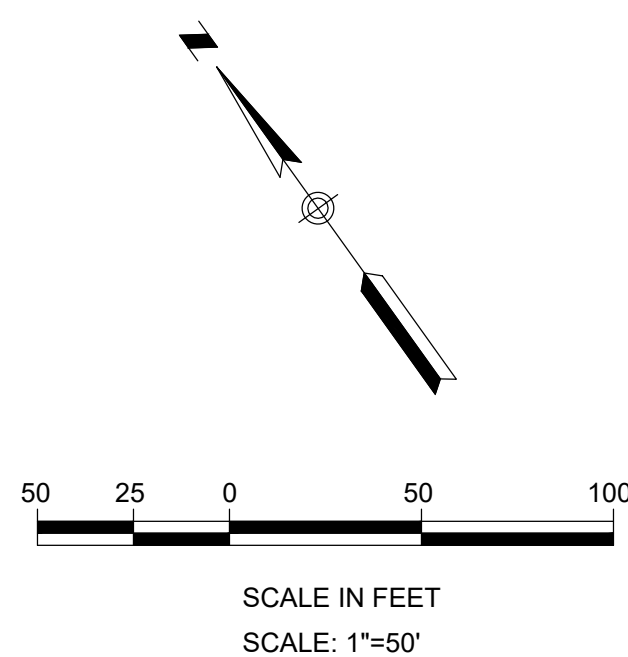
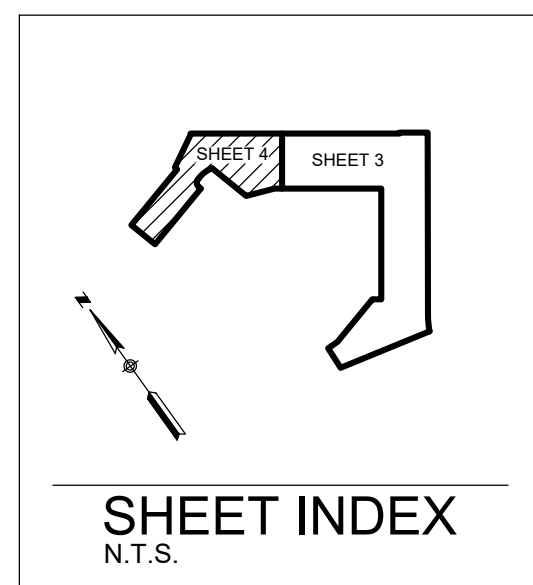
SEWER: EAST SEWERSHED  
DEVELOPER'S NAME: CENTURY LAND HOLDINGS II, LLC  
DEVELOPER'S ADDRESS: 2330 N LOOP 1804 W ACCESS ROAD, SUITE 112  
CITY: SAN ANTONIO STATE: TEXAS ZIP: 78248  
PHONE #: (210) 797-7205 FAX #: N/A  
SAWS BLOCK MAP #: 192546 192548 TOTAL EDUS: 77 TOTAL ACREAGE: 15.47 AC  
TOTAL LINEAR FOOTAGE OF PIPE: 3,173 L.F. 8" PLAT NO.: 24-1190230  
NUMBER OF LOTS: 77 SAWS JOB NO.: 24-1584

WATER: SAWS PRESSURE ZONE 2  
DEVELOPER'S NAME: CENTURY LAND HOLDINGS II, LLC  
DEVELOPER'S ADDRESS: 2330 N LOOP 1804 W ACCESS ROAD, SUITE 112  
CITY: SAN ANTONIO STATE: TEXAS ZIP: 78248  
PHONE #: (210) 797-7205 FAX #: N/A  
SAWS BLOCK MAP #: 192546 192548 TOTAL EDUS: 79 TOTAL ACREAGE: 15.47 AC  
TOTAL LINEAR FOOTAGE OF PIPE: 2,683 L.F. 8" PLAT NO.: 24-1190230  
NUMBER OF LOTS: 77 SAWS JOB NO.: 24-1110

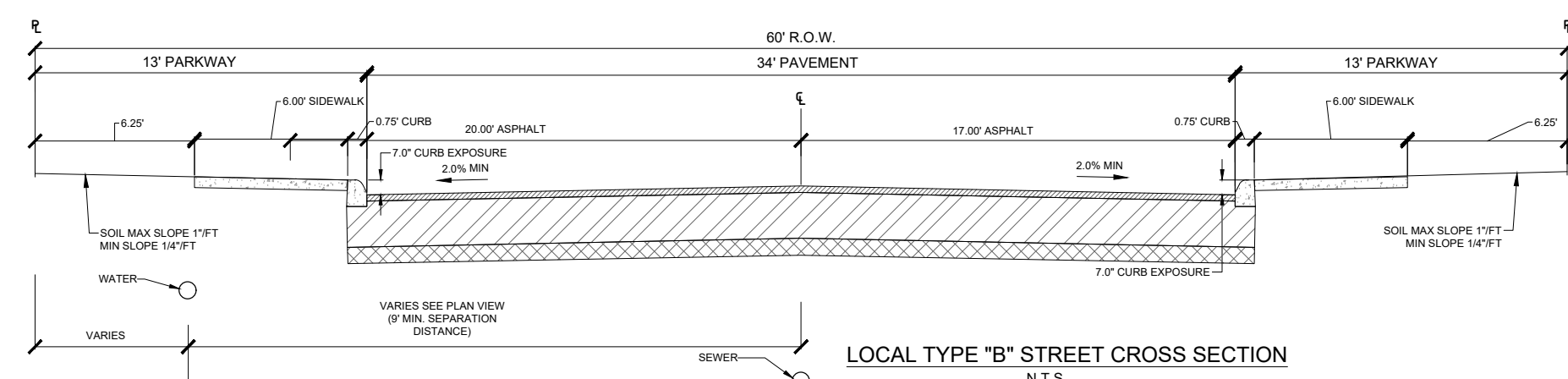


LEGEND	
PROPOSED	EXISTING

LOCATION MAP  
N.T.S.



LOCAL TYPE "A" STREET CROSS SECTION  
N.T.S.



LOCAL TYPE "B" STREET CROSS SECTION  
N.T.S.

PROPOSED	EXISTING	
		SANITARY SEWER MANHOLE
		SANITARY SEWER LINE
		WATER LINE
		SANITARY SEWER LATERAL
		WATER VALVE
		SINGLE WATER SERVICE
		DUAL WATER SERVICE
		FIRE HYDRANT
		1\"-3\" (IPS) 2\"-4\" CONDUITS (ATT/SPECTRUM)
		WATER METER
		GAS VALVE
		GAS LINE
		STORM SEWER MANHOLE
		CURB INLET
		POWER POLE
		STREET LIGHT (100 WATT LED)
		STREET LIGHT (250 WATT LED)
		GUY WIRE
		OVERHEAD ELECTRIC
		BENCHMARK
	TMH	TOP OF MANHOLE
	EX.	EXISTING
	G.E.T.CA	GAS, ELEC. TELE & CABLE TV ESMT.
	ESMT.	EASEMENT
	VOL	VOLUME
	PG	PAGE
		4\" CONDUIT FOR WATER SERVICE

## GENERAL NOTES

1. FIRE HYDRANT SHALL BE LOCATED BEHIND SIDEWALK IN ACCORDANCE WITH THE FIRE HYDRANT INSTALLATION DETAIL DD-834-01.
2. CONTRACTOR TO FIELD VERIFY EXACT LOCATIONS OF ALL EXISTING UTILITIES HORIZONTALLY AND VERTICALLY PRIOR TO CONSTRUCTION.
3. ALL VALVES SHALL READ "OPEN RIGHT".
4. ALL FIRE HYDRANTS SHALL BE PAINTED APPROPRIATE SAWS COLORS.
5. FIRE HYDRANTS AND VALVE BOXES TO BE RAISED TO THE PROPOSED TOP OF PAVEMENT OR GROUND ELEVATION.
6. ALL WATER PIPE TO BE C-900, DR-18, CLASS 150 UNLESS OTHERWISE NOTED.
7. CONTRACTOR SHALL VERIFY GRAVITY INVERTS PRIOR TO CONSTRUCTION AND NOTIFY CIVIL ENGINEER IN WRITING OF ANY DISCREPANCIES.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING 98% COMPACTION ON ALL UTILITY TRENCHES. OWNER WILL BE PAYING FOR THE TESTS TO BE PERFORMED BY A THIRD PARTY. COMPACTION TESTS WILL BE DONE AT ONE LOCATION POINT RANDOMLY SELECTED OR AS INDICATED BY THE SAWS INSPECTOR/TEST ADMINISTRATOR. PER EACH 12-INCH LOOSE LIFT PER 40 LINEAR FEET AT A MINIMUM, THIS PROJECT WILL NOT BE ACCEPTED AND FINALIZED BY SAWS WITHOUT THIS REQUIREMENT BEING MET AND VERIFIED BY PROVIDING ALL NECESSARY DOCUMENTED TEST RESULTS.
9. CONTRACTOR TO REFERENCE MOST CURRENT SAWS DETAILS & SPECIFICATIONS. FOR SEWER MANHOLES REFERENCE SAWS STANDARD SPECIFICATION ITEM NO. 852.
10. PROJECT DESIGNED IN TX8-SCF GRID. CONVERSION FACTOR TO SURFACE = 1.00013
11. CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING SAWS STANDARD SPECIFICATION 814 FOR EXCAVATION, TRENCHING AND BACKFILLING REQUIREMENTS AND STANDARD SPECIFICATION 812 FOR WATER/SEWER SEPARATION REQUIREMENTS.

## SAWS CONSTRUCTION NOTES

CONTRACTOR SHALL REFERENCE THE CURRENT SAW  
CONSTRUCTION SPECIFICATIONS & DETAILS AT THE TIME  
THE DATED PLAN SHEET. SEE BELOW FOR REFERENCED  
SPECIFICATIONS.

**SAWS SEWER ITEM NUMBERS:**

804 EXCAVATION TRENCHING AND BACKFILL

848 SANITARY SEWER

851 EXISTING MANHOLE ADJUSTMENT

852 SANITARY SEWER MANHOLES

854 SANITARY SEWER LATERALS

855 RECONSTRUCTION OF EXISTING MANHOLES

858 CONCRETE ENCASEMENT, CRADLES, SADDLES &amp; COLLARS

860 VERTICAL STACKS

## SAWS WATER ITEM NUMBERS:

812 WATER MAIN INSTALLATION

824 WATER SERVICE SUPPLY LINES

828 GATE VALVES

831 CUT-IN TEE

834 FIRE HYDRANTS

839 JOINT RESTRAINTS

840 WATER TIE-INS

841 HYDROSTATIC TESTING

844 TEMP AND PER

847 DISINFECTION

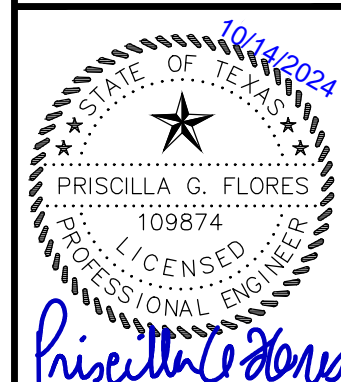
856 JACKING, BORING OR TUNNELING PIPE

---

AGAVE SUBDIVISION UNIT 7A  
LAND-PLAT-24-11800230  
UTILITY LAYOUT (SHEET 2 OF 2)

[illegible]

DATE:	10/14/2024
DESIGNED BY:	SM
DRAWN BY:	MAP
CHECKED BY:	PF
DRAWING NAME:	sh_UtilityLayout.dwg



**LJA Engineering, Inc.**

9830 Colonnade Blvd  
Suite 300  
San Antonio, Texas 78230

**LJA**

Phone 210.503.2700  
LJA.COM  
TBPE No. F-1386

JOB NUMBER:  
SA199-0403C-426

SHEET NO.

4  
OF 28 SHEETS

# AGAVE SUBDIVISION UNIT 7A

## WATER CONSTRUCTION PLANS

LAND-PLAT-24-11800230

SAN ANTONIO, TEXAS 78223

BEXAR COUNTY

Revised January 2022

### SAWS CONSTRUCTION NOTES COUNTER PERMIT AND GENERAL CONSTRUCTION PERMIT

#### General Section

1. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL BE APPROVED BY THE SAN ANTONIO WATER SYSTEM (SAWS) AND COMPLY WITH THE PLANS, SPECIFICATIONS, GENERAL CONDITIONS AND WITH THE FOLLOWING AS APPLICABLE:

- CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEM, TEXAS ADMINISTRATIVE CODE (TAC) TITLE 30 PART 1 CHAPTER 217 AND "PUBLIC DRINKING WATER," TAC TITLE 30 PART 1 CHAPTER 299.
- CURRENT TxDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND DRAINAGE.
- CURRENT "SAN ANTONIO WATER SYSTEM STANDARD SPECIFICATIONS FOR WATER AND SANITARY SEWER CONSTRUCTION".
- CURRENT CITY OF SAN ANTONIO "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION".
- CURRENT CITY OF SAN ANTONIO "UTILITY EXCAVATION CRITERIA MANUAL" (UECM).

2. THE CONTRACTOR SHALL NOT PROCEED WITH ANY PIPE INSTALLATION WORK UNTIL THEY OBTAIN A COPY OF THE APPROVED COUNTER PERMIT OR GENERAL CONSTRUCTION PERMIT (GCP) FROM THE CONSULTANT AND HAS BEEN NOTIFIED BY SAWS CONSTRUCTION INSPECTION DIVISION TO PROCEED WITH THE WORK AND HAS ARRANGED A MEETING WITH THE INSPECTOR AND CONSULTANT FOR THE WORK REQUIREMENTS. WORK COMPLETED BY THE CONTRACTOR WITHOUT AN APPROVED COUNTER PERMIT AND/OR A GCP WILL BE SUBJECT TO REMOVAL AND REPLACEMENT AT THE EXPENSE OF THE CONTRACTORS AND/OR THE DEVELOPER.

3. THE CONTRACTOR SHALL OBTAIN THE SAWS STANDARD DETAILS FROM THE SAWS WEBSITE, [HTTP://WWW.SAWS.ORG/BUSINESS\\_CENTERS/SPECS](http://www.saws.org/business_centers/specs). UNLESS OTHERWISE NOTED WITHIN THE DESIGN PLANS.

4. THE CONTRACTOR IS TO MAKE ARRANGEMENTS WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT (210) 233-2973. ON NOTIFICATION PROCEDURES THAT WILL BE USED TO NOTIFY AFFECTED HOME RESIDENTS AND/OR PROPERTY OWNERS 48 HOURS PRIOR TO BEGINNING ANY WORK.

5. LOCATION AND DEPTH OF EXISTING UTILITIES AND SERVICE LATERALS SHOWN ON THE PLANS ARE UNDERSTOOD TO BE APPROXIMATE. ACTUAL LOCATIONS AND DEPTHS MUST BE FIELD VERIFIED BY THE CONTRACTOR AT LEAST 1 WEEK PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITY SERVICE LINES AS REQUIRED FOR CONSTRUCTION AND TO PROTECT THEM DURING CONSTRUCTION AT NO COST TO SAWS.

6. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UNDERGROUND UTILITIES AND DRAINAGE STRUCTURES AT LEAST 1-2 WEEKS PRIOR TO CONSTRUCTION WHETHER SHOWN ON PLANS OR NOT. PLEASE ALLOW UP TO 7 BUSINESS DAYS FOR LOCATES REQUESTING PIPE LOCATION MARKERS ON SAWS FACILITIES. THE FOLLOWING CONTACT INFORMATION ARE SUPPLIED FOR VERIFICATION PURPOSES:

- SAWS UTILITY LOCATES: [HTTP://WWW.SAWS.ORG/SERVICE/LOCATES](http://www.saws.org/service/locates)
- COSA DRAINAGE (210) 207-0724 OR (210) 207-6026
- COSA TRAFFIC SIGNAL OPERATIONS (210) 206-8480
- COSA TRAFFIC SIGNAL DAMAGES (210) 207-3591
- TEXAS STATE WIDE ONE CALL LOCATOR 1-800-545-6005 OR 811

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING EXISTING FENCES, CURBS, STREETS, DRIVEWAYS, SIDEWALKS, LANDSCAPING AND STRUCTURES TO ITS ORIGINAL OR BETTER CONDITION IF DAMAGES ARE MADE AS A RESULT OF THE PROJECT'S CONSTRUCTION.

8. ALL WORK IN TEXAS DEPARTMENT OF TRANSPORTATION (TXDOT) AND/OR BEXAR COUNTY RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH RESPECTIVE CONSTRUCTION SPECIFICATIONS AND PERMIT REQUIREMENTS.

9. THE CONTRACTOR SHALL COMPLY WITH CITY OF SAN ANTONIO OR OTHER GOVERNING MUNICIPALITY'S TREE ORDINANCES WHEN EXCAVATING NEAR TREES.

10. THE CONTRACTOR SHALL NOT PLACE ANY WASTE MATERIALS IN THE 100-YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN PERMIT.

11. HOLIDAY WORK: CONTRACTORS WILL NOT BE ALLOWED TO PERFORM SAWS WORK ON SAWS RECOGNIZED HOLIDAYS. REQUEST SHOULD BE SENT TO [CONSTWORKEQ@SAWS.ORG](mailto:CONSTWORKEQ@SAWS.ORG).

WEEKEND WORK: CONTRACTORS ARE REQUIRED TO NOTIFY THE SAWS INSPECTION CONSTRUCTION DEPARTMENT 48 HOURS IN ADVANCE TO REQUEST WEEKEND WORK. REQUEST SHOULD BE SENT TO [CONSTWORKEQ@SAWS.ORG](mailto:CONSTWORKEQ@SAWS.ORG).

ANY AND ALL SAWS UTILITY WORK INSTALLED WITHOUT HOLIDAY/WEEKEND APPROVAL WILL BE SUBJECT TO BE UNCOVERED FOR PROPER INSPECTION.

12. COMPACTION NOTE (ITEM 804): THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING THE COMPACTION REQUIREMENTS ON ALL TRENCH BACKFILL AND FOR PAYING FOR THE TESTS PERFORMED BY A THIRD PARTY. COMPACTION TESTS WILL BE DONE AT ONE LOCATION POINT RANDOMLY SELECTED, OR AS INDICATED BY THE SAWS INSPECTOR AND/OR THE TEST ADMINISTRATOR, PER EACH 12-INCH LOOSE LIFT PER 400 LINEAR FEET AT A MINIMUM. THIS PROJECT WILL NOT BE ACCEPTED AND FINALED BY SAWS WITHOUT THIS REQUIREMENT BEING MET AND VERIFIED BY PROVIDING ALL NECESSARY DOCUMENTED TEST RESULTS.

13. A COPY OF ALL TESTING REPORTS SHALL BE FORWARDED TO SAWS CONSTRUCTION INSPECTION DIVISION.

#### WATER SECTION

1. PRIOR TO TIE-INS, ANY SHUTDOWNS OF EXISTING MAINS OF ANY SIZE MUST BE COORDINATED WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT LEAST ONE WEEK IN ADVANCE OF THE SHUTDOWN. THE CONTRACTOR MUST ALSO PROVIDE A SEQUENCE OF WORK AS RELATED TO THE TIE-INS. THIS IS AT NO ADDITIONAL COST TO SAWS OR THE PROJECT AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEQUENCE THE WORK ACCORDINGLY.

- FOR WATER MAINS 12" OR HIGHER: SAWS EMERGENCY OPERATIONS CENTER (210) 233-2014

2. ASBESTOS CEMENT (AC) PIPE, ALSO KNOWN AS TRANSITE PIPE WHICH IS KNOWN TO CONTAIN ASBESTOS-CONTAINING MATERIAL (ACM), MAY BE LOCATED WITHIN THE PROJECT LIMITS. SPECIAL WASTE MANAGEMENT PROCEDURES AND HEALTH AND SAFETY REQUIREMENTS WILL BE APPLICABLE WHEN REMOVAL AND/OR DISTURBANCE OF THIS PIPE OCCURS. SUCH WORK IS TO BE MADE UNDER SPECIAL SPECIFICATION ITEM NO. 3000, "SPECIAL SPECIFICATION FOR HANDLING ASBESTOS CEMENT PIPE".

3. VALVE REMOVAL: WHERE THE CONTRACTOR IS TO ABANDON A WATER MAIN, THE CONTROL VALVE LOCATED ON THE ABANDONING BRANCH WILL BE REMOVED AND REPLACED WITH A CAP/PLUG (NSP).

4. SUITABLE ANCHORAGE/THRUST BLOCKING OR JOINT RESTRAINT SHALL BE PROVIDED AT ALL OF THE FOLLOWING MAIN LOCATIONS: DEAD ENDS, PLUGS, CAPS, TEES, CROSSES, VALVES, AND BENDS. IN ACCORDANCE WITH THE STANDARD DRAWINGS 10-150 SERIES AND ITEM NO. 839, IN THE SAWS STANDARD SPECIFICATIONS FOR CONSTRUCTION.

5. ALL VALVES SHALL READ "OPEN RIGHT".

6. PRVS REQUIRED: CONTRACTOR TO VERIFY THAT NO PORTION OF THE TRACT IS BELOW GROUND ELEVATION OF 565 FEET WHERE THE STATIC PRESSURE WILL NORMALLY EXCEED 80 PSI. AT ALL SUCH LOCATIONS WHERE THE GROUND LEVEL IS BELOW 565 FEET, THE DEVELOPER OR BUILDER SHALL INSTALL AT EACH LOT, ON THE CUSTOMER'S SIDE OF THE METER, AN APPROVED TYPE PRESSURE REGULATOR IN CONFORMANCE WITH THE PLUMBING CODE OF THE CITY OF SAN ANTONIO. NO DUAL SERVICES ALLOWED FOR ANY LOTS IF PRV IS/ARE REQUIRED FOR SUCH LOTS). ONLY SINGLE SERVICE CONNECTIONS SHALL BE ALLOWED. NOTE: A PRESSURE REGULATOR IS ALSO KNOWN AS A PRESSURE REDUCING VALVE (PRV).

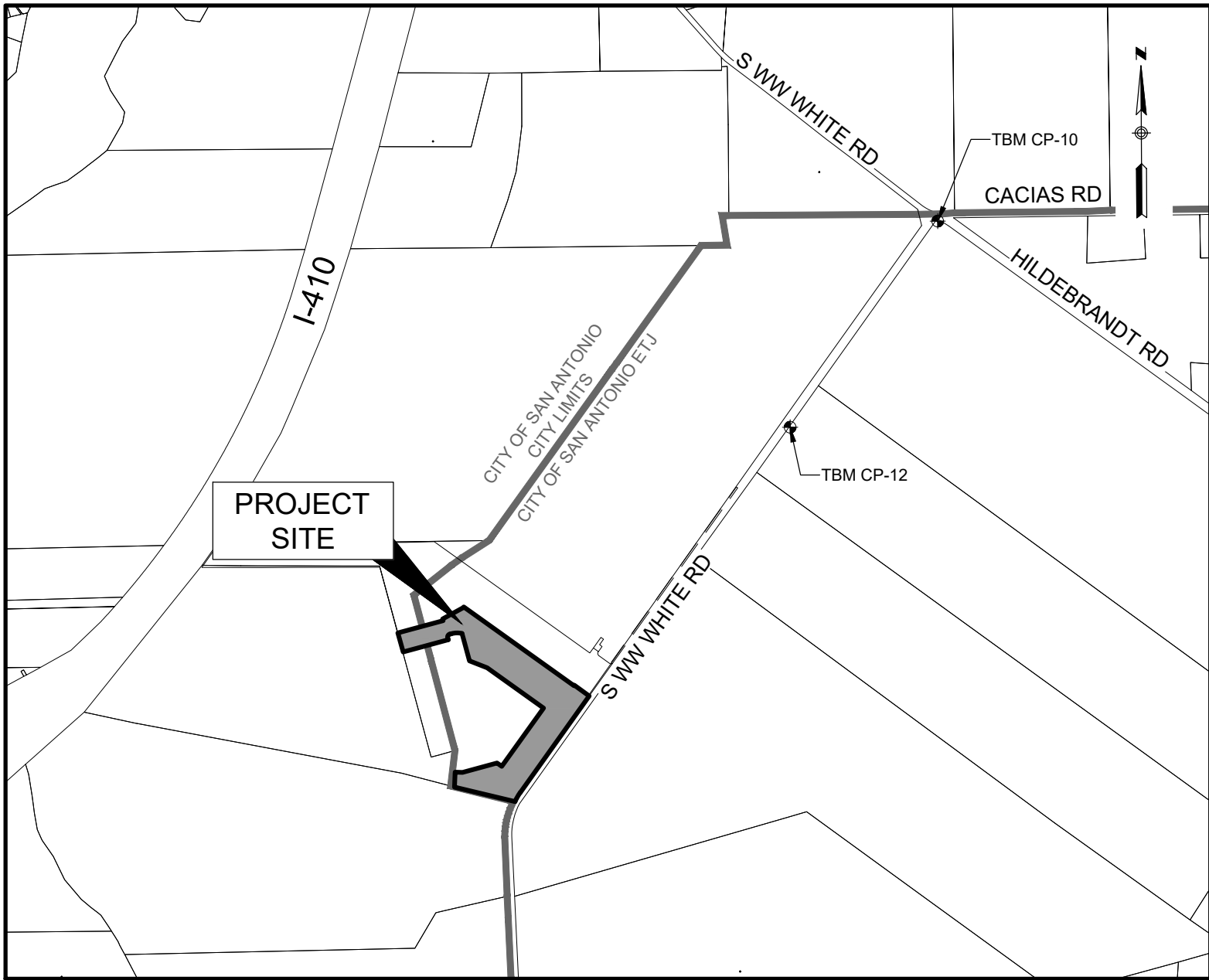
7. PIPE DISINFECTION WITH DRY HTH FOR PROJECTS LESS THAN 800 LINEAR FEET. (ITEM NO. 847.3) MAINS SHALL BE DISINFECTED WITH DRY HTH WHERE SHOWN IN THE CONTRACT DOCUMENTS OR AS DIRECTED BY THE INSPECTOR. AND SHALL NOT EXCEED A TOTAL LENGTH OF 800 FEET. THIS METHOD OF DISINFECTION WILL ALSO BE FOLLOWED FOR MAIN REPAIRS. THE CONTRACTOR SHALL UTILIZE ALL APPROPRIATE SAFETY MEASURE TO PROTECT HIS PERSONNEL DURING DISINFECTION OPERATIONS.

8. BACKFLOW PREVENTION DEVICES:

- ALL IRRIGATION SERVICES WITHIN RESIDENTIAL AREAS ARE REQUIRED TO HAVE BACKFLOW PREVENTION DEVICES.
- ALL COMMERCIAL BACKFLOW PREVENTION DEVICES MUST BE APPROVED BY SAWS PRIOR TO INSTALLATION.

9. FINAL CONNECTION TO THE EXISTING WATER MAIN SHALL NOT BE MADE UNTIL THE WATER MAIN HAS BEEN PRESSURE TESTED, CHLORINATED, AND SAWS HAS RELEASED THE MAIN FOR TIE-IN AND USE.

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



LOCATION MAP

(N.T.S.)

SUBMITTAL DATE: SEPTEMBER 2024

#### BENCHMARK INFORMATION:

TBM CP-10: CP 5" IR W/ ALUM LJA CAP  
N: 13674492.26 E: 2163485.508  
ELEVATION = 594.116

TBM CP-11: CP 5" IR W/ ALUM LJA CAP  
N: 13670193.52 E: 2169379.512  
ELEVATION = 577.312

TBM CP-12: CP 5" IR W/ ALUM LJA CAP  
N: 13672607.32 E: 2162070.362  
ELEVATION = 590.163

VERTICAL DATUM: TX83-SCF.  
SURFACE SCALE FACTOR = 1.00013

THIS INFORMATION PROVIDED BY LJA SURVEYING

#### PROPERTY DESCRIPTION

BEING A PROPOSED 15.47 ACRE TRACT LYING IN AND BEING A PART OF A CALLED 55.323 ACRE TRACT OF LAND CONVEYED TO TEXAS WASTE SYSTEMS, INC., DESCRIBED AND RECORDED IN VOLUME 4620, PAGE 789, OFFICIAL PUBLIC RECORDS OF REAL PROPERTY OF BEXAR COUNTY, TEXAS (O.P.R.P.B.C.TX), SITUATED IN THE ADAM STAFFORD SURVEY NO. 49, ABSTRACT NO. 667, BEXAR COUNTY, TEXAS.

**DEVELOPER:** CENTURY LAND HOLDINGS II, LLC  
CONTACT: RUDY MUNOZ  
2330 N LOOP 1604 W ACCESS ROAD, SUITE 112  
SAN ANTONIO, TX 78248  
PHONE: (210) 797-7205

**ENGINEER:** LJA ENGINEERING, INC.  
9830 COLONNADE BLVD, SUITE 300  
SAN ANTONIO, TEXAS 78230  
CONTACT PERSON: PRISCILLA FLORES, PE  
PHONE # (210) 503-2700  
FAX # (210) 503-2749

**SURVEYOR:** LJA SURVEYING  
9830 COLONNADE BLVD, SUITE 300  
SAN ANTONIO, TEXAS 78230  
CONTACT PERSON: GORDON ANDERSON  
PHONE # (512) 439-4700



LOCATION OF EXISTING UNDERGROUND AND OVERHEAD UTILITIES ARE APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO BEGINNING WORK AND SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT OCCUR.



#### SHEET NO.

#### DESCRIPTION

- COVER
- GENERAL NOTES
- UTILITY LAYOUT (SHEET 1 OF 2)
- UTILITY LAYOUT (SHEET 2 OF 2)
- WATER COVER
- WATER LAYOUT (SHEET 1 OF 2)
- WATER LAYOUT (SHEET 2 OF 2)
- WASTEWATER COVER
- WASTEWATER LAYOUT (SHEET 1 OF 2)
- WASTEWATER LAYOUT (SHEET 2 OF 2)
- WASTEWATER LINE 'A' PLAN & PROFILE STA. 1+00 TO STA. 9+50
- WASTEWATER LINE 'A' PLAN & PROFILE STA. 9+50 TO END
- WASTEWATER LINE 'B' PLAN & PROFILE STA. 1+00 TO END
- WASTEWATER LINE 'C' PLAN & PROFILE STA. 1+00 TO END
- GRADING PLAN (SHEET 1 OF 2)
- GRADING PLAN (SHEET 2 OF 2)
- EXISTING DRAINAGE AREA MAP
- DRAIN 'A' PLAN & PROFILE STA. 1+00 TO END
- DRAINAGE DETAILS (SHEET 1 OF 1)
- ARTICHOKE FLDS & SOLSTICE STREET PLAN & PROFILE
- PRICKLY PEAR PLACE & MOJAVE TERRACE PLAN & PROFILE
- OCOTILLO RDG PLAN & PROFILE STA. 2+94.85 TO END
- DESERT BLOOM DRIVE PLAN & PROFILE STA. 1+00 TO END
- SIGNAGE LAYOUT
- TRAFFIC DETAILS (SHEET 1 OF 2)
- TRAFFIC DETAILS (SHEET 2 OF 2)
- STORMWATER POLLUTION PREVENTION PLAN
- STORMWATER POLLUTION PREVENTION PLAN DETAILS
- CPS ENERGY DETAILS

REVISIONS			
NO.	DESCRIPTION	BY	DATE

LJA JOB NO. SA199-0403C-426

**LJA Engineering, Inc.**

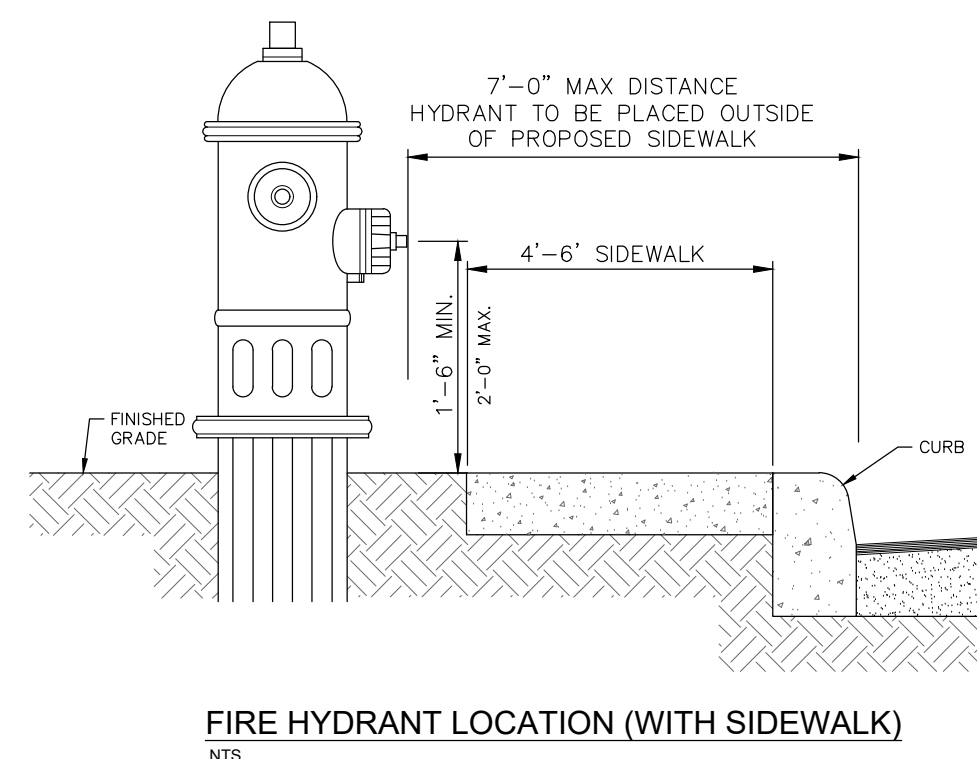
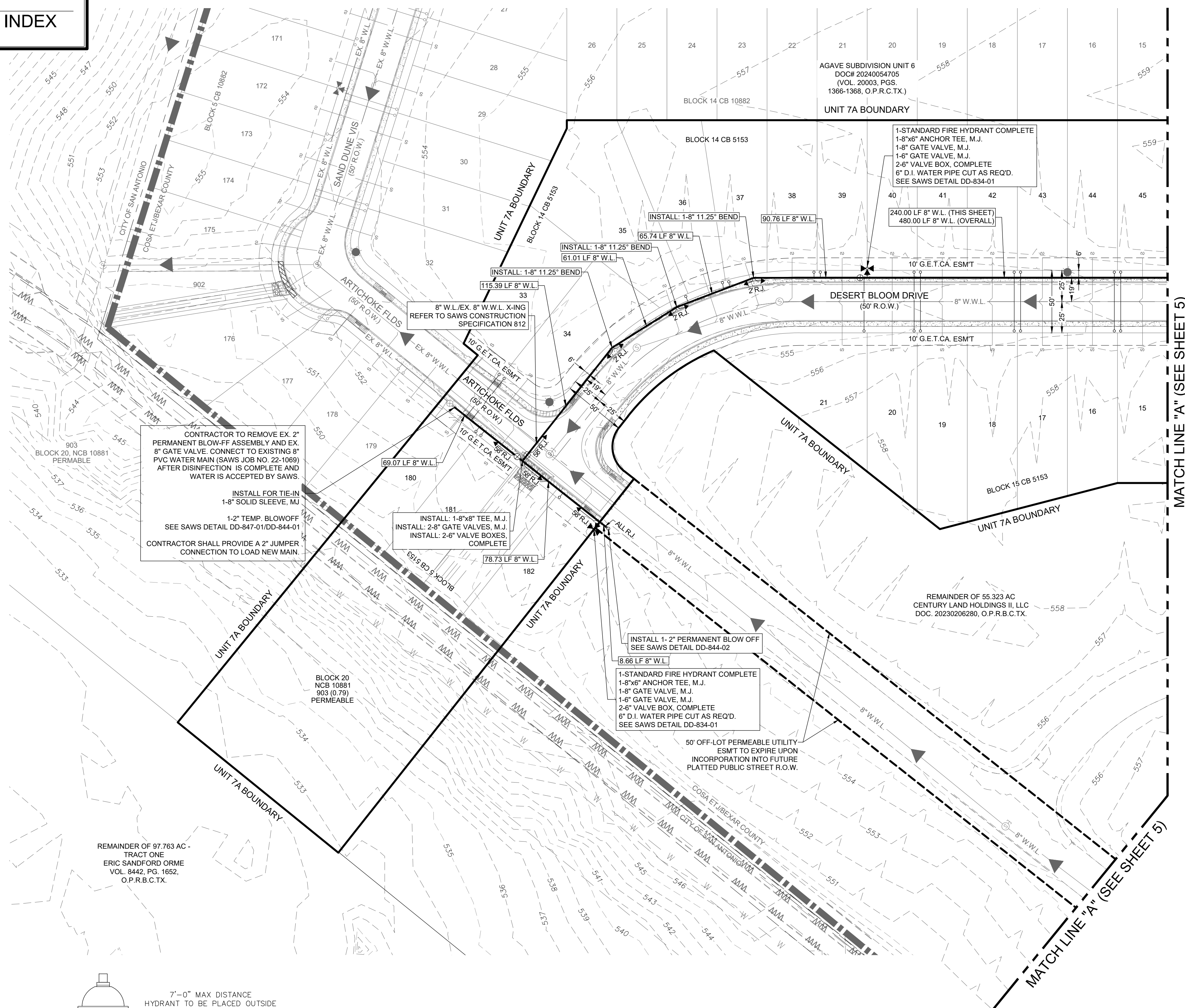
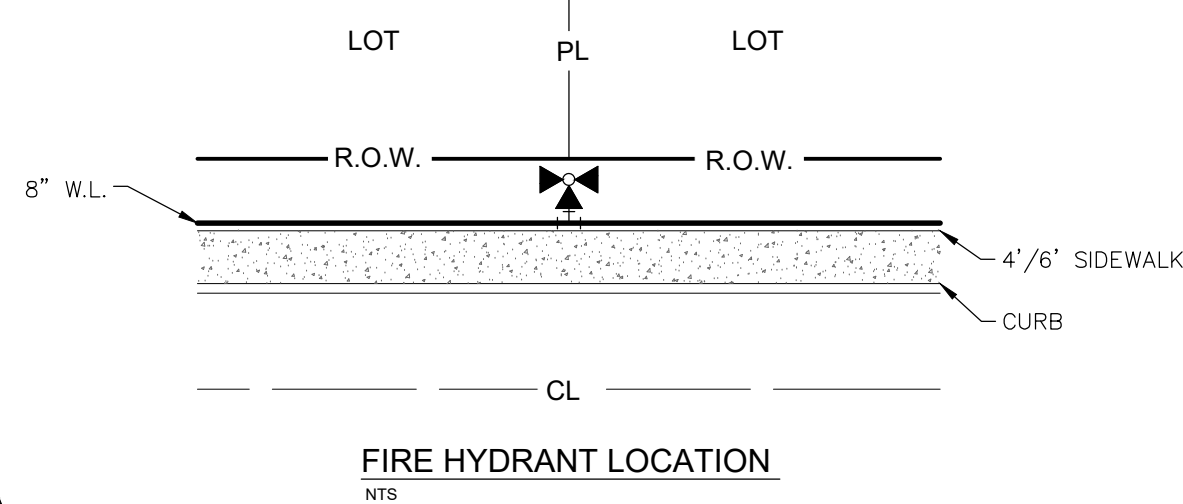
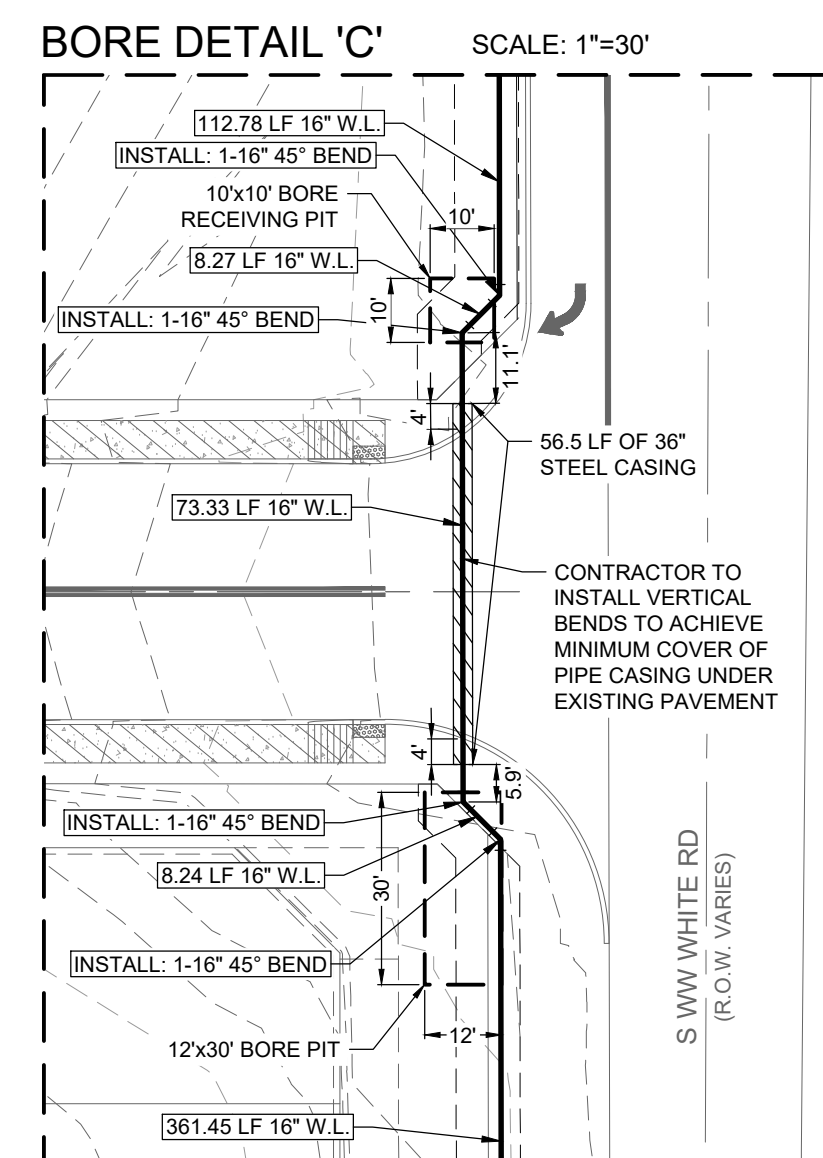
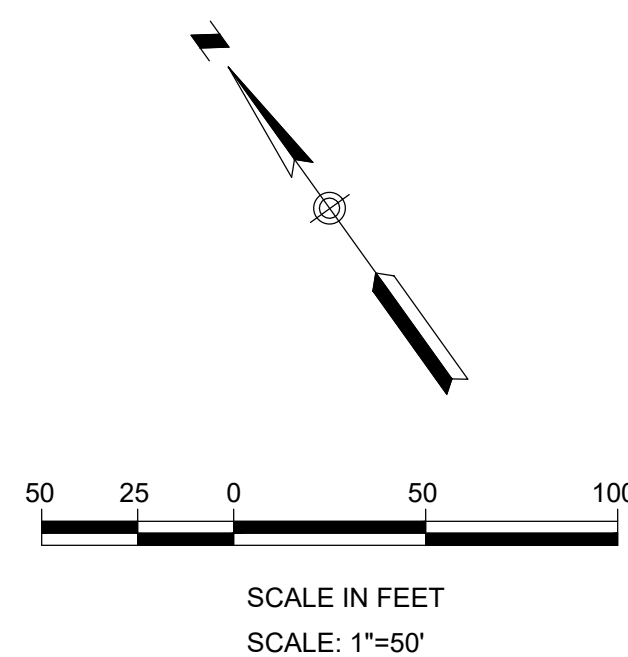
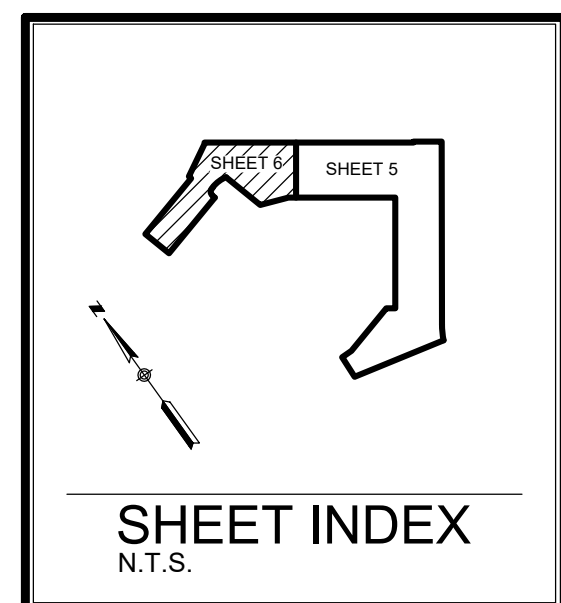


9830 Colonnade Blvd  
Suite 300  
San Antonio, Texas 78230

Phone 210.503.2700  
LJA.COM  
FRN-F-1386



LOCATION MAP  
N.T.S.



PROPOSED	EXISTING	
		SANITARY SEWER MANHOLE
		SANITARY SEWER LINE
		WATER LINE
		SANITARY SEWER LATERAL
		WATER VALVE
		SINGLE WATER SERVICE
		DUAL WATER SERVICE
		FIRE HYDRANT
		1\"-8\" (CPS) 2\"-4\" CONDUITS (ATT/SPECTRUM)
		WATER METER
		GAS VALVE
		GAS LINE
		STORM SEWER MANHOLE
		CURB INLET
		POWER POLE
		STREET LIGHT (100 WATT LED)
		STREET LIGHT (250 WATT LED)
		GUY WIRE
		OVERHEAD ELECTRIC
		BENCHMARK
	TMH	TOP OF MANHOLE
	EX.	EXISTING
	G,E,T,CA	GAS, ELEC, TEL & CABLE TV ESMT.
	ESMT.	EASEMENT
	VOL	VOLUME
	PG	PAGE
		4\" CONDUIT FOR WATER SERVICE

## GENERAL NOTES

1. FIRE HYDRANT SHALL BE LOCATED BEHIND SIDEWALK & CURB IN ACCORDANCE WITH THE FIRE HYDRANT INSTALLATION DETAIL DD-834-01.
2. CONTRACTOR TO FIELD VERIFY EXACT LOCATIONS OF ALL EXISTING UTILITIES HORIZONTALLY AND VERTICALLY PRIOR TO CONSTRUCTION.
3. ALL VALVES SHALL READ "OPEN RIGHT".
4. ALL FIRE HYDRANTS SHALL BE PAINTED APPROPRIATE SAWS COLORS.
5. FIRE HYDRANTS AND VALVE BOXES TO BE RAISED TO THE PROPOSED TOP OF PAVEMENT OR GROUND ELEVATION.
6. ALL WATER PIPE TO BE C-900, DR-18, CLASS 235 UNLESS OTHERWISE NOTED.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING SAWS STANDARD SPECIFICATION 804 FOR EXCAVATION, TRENCHING AND BACKFILLING REQUIREMENTS AND STANDARD SPECIFICATION 812 FOR WATER/SEWER SEPARATION REQUIREMENTS.
8. WATER VALVES SHALL BE LOCATED WITHIN PAVEMENT OR AT PLANTING STRIP.

## SAWS CONSTRUCTION NOTES

CONTRACTOR SHALL REFERENCE THE CURRENT SAW  
CONSTRUCTION SPECIFICATIONS & DETAILS AT THE TIME OF  
THE DATED PLAN SHEET. SEE BELOW FOR REFERENCED  
SPECIFICATIONS.

## SAWS WATER ITEM NUMBERS:

- 812 WATER MAIN INSTALLATION
- 824 WATER SERVICE SUPPLY LINES
- 828 GATE VALVES
- 831 CUT-IN TEE
- 834 FIRE HYDRANTS
- 839 JOINT RESTRAINTS
- 840 WATER TIE-INS
- 841 HYDROSTATIC TESTING
- 844 TEMP AND PERMANENT BLOW OFF ASSEMBLIES
- 847 DISINFECTION
- 856 JACKING, BORING OR TUNNELING PIPE

WATER: SAWS PRESSURE ZONE 2				
DEVELOPER'S NAME:		CENTURY LAND HOLDINGS II, LLC		
DEVELOPER'S ADDRESS:		2330 N LOOP 1604 W ACCESS ROAD, SUITE 112		
CITY	SAN ANTONIO	STATE	TEXAS	ZIP 78248
PHONE #	(210) 787-7205	FAX #	N/A	
SAWS BLOCK MAP # 192546.192546		TOTAL EDUS	79	TOTAL ACREAGE 15.47 AC
TOTAL LINEAR FOOTAGE OF PIPE 1,654.1 LF		PLAT NO.	24-11000230	
TOTAL LINEAR FOOTAGE OF PIPE 1,804.1 LF, 16"				
NUMBER OF LOTS: 77		SAWS JOB NO.		24-1110

[illegible]

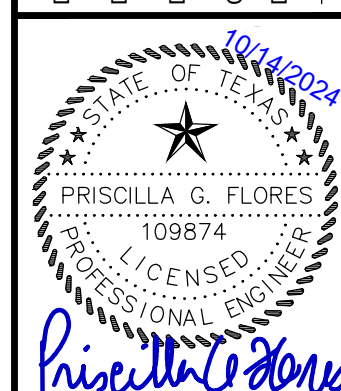
DATE: 10/14/2024

DESIGNED BY: SM

DRAWN BY: MAP

CHECKED BY: PF

DRAWING NAME: sh\_WaterLayout.dwg



# AGAVE SUBDIVISION UNIT 7A

## WATER CONSTRUCTION PLANS

LAND-PLAT-24-11800230

SAN ANTONIO, TEXAS 78223

BEXAR COUNTY

Revised January 2022

### SAWS CONSTRUCTION NOTES COUNTER PERMIT AND GENERAL CONSTRUCTION PERMIT

#### General Section

1. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL BE APPROVED BY THE SAN ANTONIO WATER SYSTEM (SAWS) AND COMPLY WITH THE PLANS, SPECIFICATIONS, GENERAL CONDITIONS AND WITH THE FOLLOWING AS APPLICABLE:

- A. CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEM, TEXAS ADMINISTRATIVE CODE (TAC) TITLE 30 PART 1 CHAPTER 217 AND "PUBLIC DRINKING WATER," TAC TITLE 30 PART 1 CHAPTER 299.
- B. CURRENT TXDOT "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND DRAINAGE".
- C. CURRENT "SAN ANTONIO WATER SYSTEM STANDARD SPECIFICATIONS FOR WATER AND SANITARY SEWER CONSTRUCTION".
- D. CURRENT CITY OF SAN ANTONIO "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION".
- E. CURRENT CITY OF SAN ANTONIO "UTILITY EXCAVATION CRITERIA MANUAL" (UECM).

2. THE CONTRACTOR SHALL NOT PROCEED WITH ANY PIPE INSTALLATION WORK UNTIL THEY OBTAIN A COPY OF THE APPROVED COUNTER PERMIT OR GENERAL CONSTRUCTION PERMIT (GCP) FROM THE CONSULTANT AND HAS BEEN NOTIFIED BY SAWS CONSTRUCTION INSPECTION DIVISION TO PROCEED WITH THE WORK AND HAS ARRANGED A MEETING WITH THE INSPECTOR AND CONSULTANT FOR THE WORK REQUIREMENTS. WORK COMPLETED BY THE CONTRACTOR WITHOUT AN APPROVED COUNTER PERMIT AND/OR A GCP WILL BE SUBJECT TO REMOVAL AND REPLACEMENT AT THE EXPENSE OF THE CONTRACTORS AND/OR THE DEVELOPER.

3. THE CONTRACTOR SHALL OBTAIN THE SAWS STANDARD DETAILS FROM THE SAWS WEBSITE, [HTTP://WWW.SAWS.ORG/BUSINESS\\_CENTERS/SPECS](http://www.saws.org/business_centers/specs). UNLESS OTHERWISE NOTED WITHIN THE DESIGN PLANS.

4. THE CONTRACTOR IS TO MAKE ARRANGEMENTS WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT (210) 233-2973. ON NOTIFICATION PROCEDURES THAT WILL BE USED TO NOTIFY AFFECTED HOME RESIDENTS AND/OR PROPERTY OWNERS 48 HOURS PRIOR TO BEGINNING ANY WORK.

5. LOCATION AND DEPTH OF EXISTING UTILITIES AND SERVICE LATERALS SHOWN ON THE PLANS ARE UNDERSTOOD TO BE APPROXIMATE. ACTUAL LOCATIONS AND DEPTHS MUST BE FIELD VERIFIED BY THE CONTRACTOR AT LEAST 1 WEEK PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITY SERVICE LINES AS REQUIRED FOR CONSTRUCTION AND TO PROTECT THEM DURING CONSTRUCTION AT NO COST TO SAWS.

6. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UNDERGROUND UTILITIES AND DRAINAGE STRUCTURES AT LEAST 1-2 WEEKS PRIOR TO CONSTRUCTION WHETHER SHOWN ON PLANS OR NOT. PLEASE ALLOW UP TO 7 BUSINESS DAYS FOR LOCATES REQUESTING PIPE LOCATION MARKERS ON SAWS FACILITIES. THE FOLLOWING CONTACT INFORMATION ARE SUPPLIED FOR VERIFICATION PURPOSES:

- SAWS UTILITY LOCATES: [HTTP://WWW.SAWS.ORG/SERVICE/LOCATES](http://www.saws.org/service/locates)
- COSA DRAINAGE (210) 207-0724 OR (210) 207-6026
- COSA TRAFFIC SIGNAL OPERATIONS (210) 206-8480
- COSA TRAFFIC SIGNAL DAMAGES (210) 207-3591
- TEXAS STATE WIDE ONE CALL CALLOR 1-800-545-6005 OR 811

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING EXISTING FENCES, CURBS, STREETS, DRIVEWAYS, SIDEWALKS, LANDSCAPING AND STRUCTURES TO ITS ORIGINAL OR BETTER CONDITION IF DAMAGES ARE MADE AS A RESULT OF THE PROJECT'S CONSTRUCTION.

8. ALL WORK IN TEXAS DEPARTMENT OF TRANSPORTATION (TXDOT) AND/OR BEXAR COUNTY RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH RESPECTIVE CONSTRUCTION SPECIFICATIONS AND PERMIT REQUIREMENTS.

9. THE CONTRACTOR SHALL COMPLY WITH CITY OF SAN ANTONIO OR OTHER GOVERNING MUNICIPALITY'S TREE ORDINANCES WHEN EXCAVATING NEAR TREES.

10. THE CONTRACTOR SHALL NOT PLACE ANY WASTE MATERIALS IN THE 100-YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN PERMIT.

11. HOLIDAY WORK: CONTRACTORS WILL NOT BE ALLOWED TO PERFORM SAWS WORK ON SAWS RECOGNIZED HOLIDAYS. REQUEST SHOULD BE SENT TO [CONSTWORKEQ@SAWS.ORG](mailto:CONSTWORKEQ@SAWS.ORG).

WEEKEND WORK: CONTRACTORS ARE REQUIRED TO NOTIFY THE SAWS INSPECTION CONSTRUCTION DEPARTMENT 48 HOURS IN ADVANCE TO REQUEST WEEKEND WORK. REQUEST SHOULD BE SENT TO [CONSTWORKEQ@SAWS.ORG](mailto:CONSTWORKEQ@SAWS.ORG).

ANY AND ALL SAWS UTILITY WORK INSTALLED WITHOUT HOLIDAY/WEEKEND APPROVAL WILL BE SUBJECT TO BE UNCOVERED FOR PROPER INSPECTION.

12. COMPACTION NOTE (ITEM 804): THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING THE COMPACTION REQUIREMENTS ON ALL TRENCH BACKFILL AND FOR PAYING FOR THE TESTS PERFORMED BY A THIRD PARTY. COMPACTION TESTS WILL BE DONE AT ONE LOCATION POINT RANDOMLY SELECTED, OR AS INDICATED BY THE SAWS INSPECTOR AND/OR THE TEST ADMINISTRATOR, PER EACH 12-INCH LOOSE LIFT PER 400 LINEAR FEET AT A MINIMUM. THIS PROJECT WILL NOT BE ACCEPTED AND FINISHED BY SAWS WITHOUT THIS REQUIREMENT BEING MET AND VERIFIED BY PROVIDING ALL NECESSARY DOCUMENTED TEST RESULTS.

13. A COPY OF ALL TESTING REPORTS SHALL BE FORWARDED TO SAWS CONSTRUCTION INSPECTION DIVISION.

#### WATER SECTION

1. PRIOR TO TIE-INS, ANY SHUTDOWNS OF EXISTING MAINS OF ANY SIZE MUST BE COORDINATED WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT LEAST ONE WEEK IN ADVANCE OF THE SHUTDOWN. THE CONTRACTOR MUST ALSO PROVIDE A SEQUENCE OF WORK AS RELATED TO THE TIE-INS. THIS IS AT NO ADDITIONAL COST TO SAWS OR THE PROJECT AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEQUENCE THE WORK ACCORDINGLY.

- FOR WATER MAINS 12" OR HIGHER: SAWS EMERGENCY OPERATIONS CENTER (210) 233-2014

2. ASBESTOS CEMENT (AC) PIPE, ALSO KNOWN AS TRANSITE PIPE WHICH IS KNOWN TO CONTAIN ASBESTOS-CONTAINING MATERIAL (ACM), MAY BE LOCATED WITHIN THE PROJECT LIMITS. SPECIAL WASTE MANAGEMENT PROCEDURES AND HEALTH AND SAFETY REQUIREMENTS WILL BE APPLICABLE WHEN REMOVAL AND/OR DISTURBANCE OF THIS PIPE OCCURS. SUCH WORK IS TO BE MADE UNDER SPECIAL SPECIFICATION ITEM NO. 3000, "SPECIAL SPECIFICATION FOR HANDLING ASBESTOS CEMENT PIPE".

3. VALVE REMOVAL: WHERE THE CONTRACTOR IS TO ABANDON A WATER MAIN, THE CONTROL VALVE LOCATED ON THE ABANDONING BRANCH WILL BE REMOVED AND REPLACED WITH A CAP/PLUG (NSP).

4. SUITABLE ANCHORAGE/THRUST BLOCKING OR JOINT RESTRAINT SHALL BE PROVIDED AT ALL OF THE FOLLOWING MAIN LOCATIONS: DEAD ENDS, PLUGS, CAPS, TEES, CROSSES, VALVES, AND BENDS. IN ACCORDANCE WITH THE STANDARD DRAWINGS 10-150 SERIES AND ITEM NO. 839, IN THE SAWS STANDARD SPECIFICATIONS FOR CONSTRUCTION.

5. ALL VALVES SHALL READ "OPEN RIGHT".

6. PRVS REQUIRED: CONTRACTOR TO VERIFY THAT NO PORTION OF THE TRACT IS BELOW GROUND ELEVATION OF 565 FEET WHERE THE STATIC PRESSURE WILL NORMALLY EXCEED 80 PSI. AT ALL SUCH LOCATIONS WHERE THE GROUND LEVEL IS BELOW 565 FEET, THE DEVELOPER OR BUILDER SHALL INSTALL AT EACH LOT, ON THE CUSTOMER'S SIDE OF THE METER, AN APPROVED TYPE PRESSURE REGULATOR IN CONFORMANCE WITH THE PLUMBING CODE OF THE CITY OF SAN ANTONIO. NO DUAL SERVICES ALLOWED FOR ANY LOTS IF PRV IS/ARE REQUIRED FOR SUCH LOTS). ONLY SINGLE SERVICE CONNECTIONS SHALL BE ALLOWED. NOTE: A PRESSURE REGULATOR IS ALSO KNOWN AS A PRESSURE REDUCING VALVE (PRV).

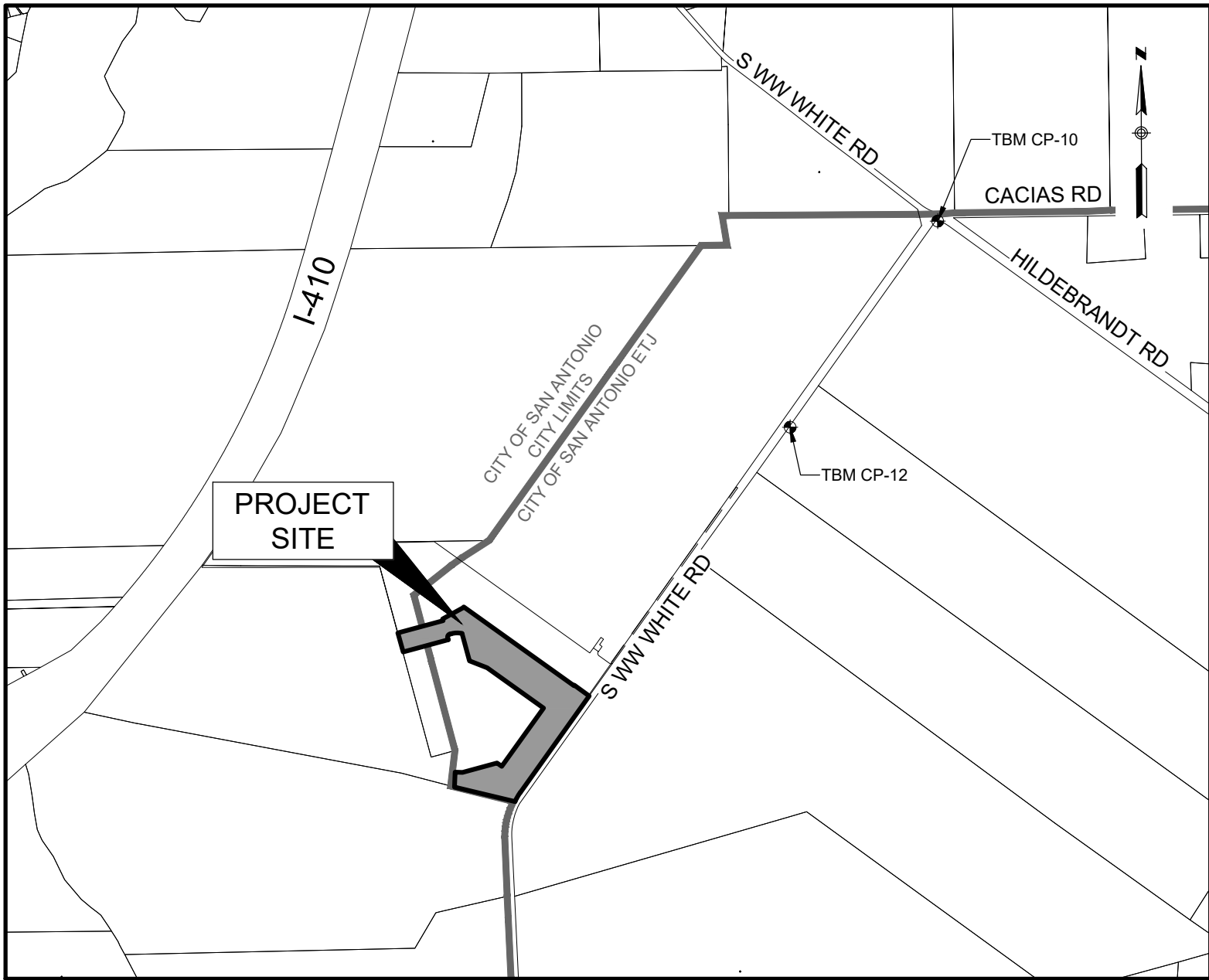
7. PIPE DISINFECTION WITH DRY HTH FOR PROJECTS LESS THAN 800 LINEAR FEET. (ITEM NO. 847.3) MAINS SHALL BE DISINFECTED WITH DRY HTH WHERE SHOWN IN THE CONTRACT DOCUMENTS OR AS DIRECTED BY THE INSPECTOR. AND SHALL NOT EXCEED A TOTAL LENGTH OF 800 FEET. THIS METHOD OF DISINFECTION WILL ALSO BE FOLLOWED FOR MAIN REPAIRS. THE CONTRACTOR SHALL UTILIZE ALL APPROPRIATE SAFETY MEASURE TO PROTECT HIS PERSONNEL DURING DISINFECTION OPERATIONS.

8. BACKFLOW PREVENTION DEVICES:

- ALL IRRIGATION SERVICES WITHIN RESIDENTIAL AREAS ARE REQUIRED TO HAVE BACKFLOW PREVENTION DEVICES.
- ALL COMMERCIAL BACKFLOW PREVENTION DEVICES MUST BE APPROVED BY SAWS PRIOR TO INSTALLATION.

9. FINAL CONNECTION TO THE EXISTING WATER MAIN SHALL NOT BE MADE UNTIL THE WATER MAIN HAS BEEN PRESSURE TESTED, CHLORINATED, AND SAWS HAS RELEASED THE MAIN FOR TIE-IN AND USE.

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



LOCATION MAP

(N.T.S.)

SUBMITTAL DATE: MAY 2024

#### BENCHMARK INFORMATION:

TBM CP-10: CP 5" IR W/ ALUM LJA CAP  
N: 13674492.26 E: 2163485.508  
ELEVATION = 594.116

TBM CP-11: CP 5" IR W/ ALUM LJA CAP  
N: 13670193.52 E: 2169379.512  
ELEVATION = 577.312

TBM CP-12: CP 5" IR W/ ALUM LJA CAP  
N: 13672607.32 E: 2162070.362  
ELEVATION = 590.163

VERTICAL DATUM: TX83-SCF.  
SURFACE SCALE FACTOR = 1.00013

THIS INFORMATION PROVIDED BY LJA SURVEYING

#### PROPERTY DESCRIPTION

BEING A PROPOSED 15.47 ACRE TRACT LYING IN AND BEING A PART OF A CALLED 55.323 ACRE TRACT OF LAND CONVEYED TO TEXAS WASTE SYSTEMS, INC., DESCRIBED AND RECORDED IN VOLUME 4620, PAGE 789, OFFICIAL PUBLIC RECORDS OF REAL PROPERTY OF BEXAR COUNTY, TEXAS (O.P.R.P.B.C.TX), SITUATED IN THE ADAM STAFFORD SURVEY NO. 49, ABSTRACT NO. 667, BEXAR COUNTY, TEXAS.

**DEVELOPER:** CENTURY LAND HOLDINGS II, LLC  
CONTACT: RUDY MUNOZ  
2330 N LOOP 1604 W ACCESS ROAD, SUITE 112  
SAN ANTONIO, TEXAS 78248  
PHONE: (210) 797-7205

**ENGINEER:** LJA ENGINEERING, INC.  
9830 COLONNADE BLVD, SUITE 300  
SAN ANTONIO, TEXAS 78230  
CONTACT PERSON: PRISCILLA FLORES, PE  
PHONE # (210) 503-2700  
FAX # (210) 503-2749

**SURVEYOR:** LJA SURVEYING  
9830 COLONNADE BLVD, SUITE 300  
SAN ANTONIO, TEXAS 78230  
CONTACT PERSON: GORDON ANDERSON  
PHONE # (512) 439-4700

#### WATER: SAWS PRESSURE ZONE 2

DEVELOPER'S NAME: CENTURY LAND HOLDINGS II, LLC  
DEVELOPER'S ADDRESS: 2330 N LOOP 1604 W ACCESS ROAD, SUITE 112  
CITY: SAN ANTONIO STATE: TEXAS ZIP: 78248  
PHONE # (210) 797-7205 FAX # N/A  
SAWS BLOCK MAP # 102646.102648 TOTAL EDUS 79 TOTAL ACREAGE 15.47 AC  
TOTAL LINEAR FOOTAGE OF PIPE: 2,861 L.F. 9" 56 L.F. 10" PLAT NO. 24-11800230  
NUMBER OF LOTS: 77 SAWS JOB NO. 24-1119

#### SHEET NO.

#### DESCRIPTION

- COVER
- GENERAL NOTES
- UTILITY LAYOUT (SHEET 1 OF 2)
- UTILITY LAYOUT (SHEET 2 OF 2)
- WATER COVER
- WATER LAYOUT (SHEET 1 OF 2)
- WATER LAYOUT (SHEET 2 OF 2)
- WASTEWATER COVER
- WASTEWATER LAYOUT (SHEET 1 OF 2)
- WASTEWATER LAYOUT (SHEET 2 OF 2)
- WASTEWATER LINE 'A' PLAN & PROFILE STA. 1+00 TO STA. 9+50
- WASTEWATER LINE 'A' PLAN & PROFILE STA. 9+50 TO END
- WASTEWATER LINE 'B' PLAN & PROFILE STA. 1+00 TO END
- WASTEWATER LINE 'C' PLAN & PROFILE STA. 1+00 TO END
- GRADING PLAN (SHEET 1 OF 2)
- GRADING PLAN (SHEET 2 OF 2)
- EXISTING DRAINAGE AREA MAP
- DRAIN 'A' PLAN & PROFILE STA. 1+00 TO END
- DRAINAGE DETAILS (SHEET 1 OF 1)
- ARTICHOKE FLDS & SOLSTICE STREET PLAN & PROFILE
- PRICKLY PEAR PLACE & MOJAVE TERRACE PLAN & PROFILE
- OCOTILLO RDG PLAN & PROFILE STA. 2+94.85 TO END
- DESERT BLOOM DRIVE PLAN & PROFILE STA. 1+00 TO END
- SIGNAGE LAYOUT
- TRAFFIC DETAILS (SHEET 1 OF 2)
- TRAFFIC DETAILS (SHEET 2 OF 2)
- STORMWATER POLLUTION PREVENTION PLAN
- STORMWATER POLLUTION PREVENTION PLAN DETAILS
- CPS ENERGY DETAILS

REVISIONS			
NO.	DESCRIPTION	BY	DATE

LJA JOB NO. SA199-0403C-426

LOCATION OF EXISTING UNDERGROUND AND OVERHEAD UTILITIES ARE APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO BEGINNING WORK AND SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT OCCUR.



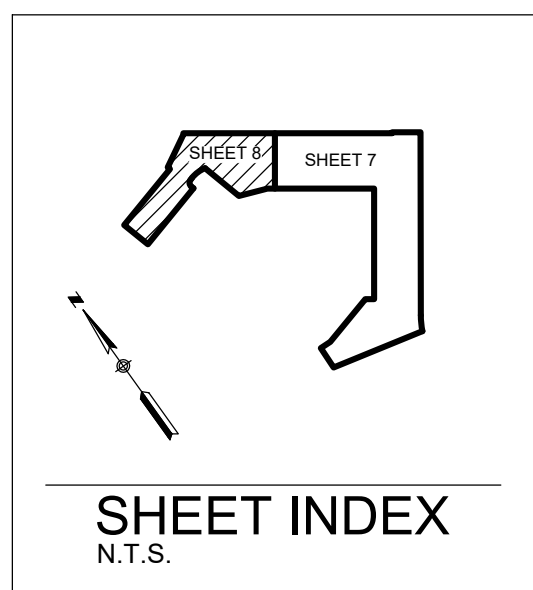
**LJA Engineering, Inc.**

9830 Colonnade Blvd  
Suite 300  
San Antonio, Texas 78230

**LJA**  
Phone 210.503.2700  
LJA.COM  
FRN-F-1386



LOCATION MAP  
N.T.S.



## GENERAL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTING AND TESTING THE SANITARY SEWER SYSTEM IN ACCORDANCE WITH 30 TAC 217 (AND 213.5 FOR PROJECTS IN THE ERZD), THE DESIGN PLANS AND SAWS SPECIFICATIONS.
2. THE CONTRACTOR MUST PROVIDE CERTIFICATION UPON REQUEST OF THE ENGINEER THAT ALL MATERIALS FOR THE CONSTRUCTION OF THE SANITARY SEWER SYSTEM MEET TCEQ AND SAWS SPECIFICATIONS.
3. THE CONTRACTOR IS TO NOTIFY THE ENGINEER AT LEAST THREE (3) DAYS PRIOR TO BEGINNING WATER CONSTRUCTION AND TESTING SCHEDULE.
4. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST THREE (3) DAYS PRIOR TO ALL TESTING ON THE SANITARY SEWER SYSTEM.
5. ANY TESTING PERFORMED WITHOUT THE PRESENCE OF THE ENGINEER WILL BE REDONE AT THE CONTRACTOR'S EXPENSE.
6. THE CONTRACTOR MUST PROVIDE THE ENGINEER WITH COPIES OF TV-VIDEO INSPECTIONS WHEN COMPLETED AND COMPACTION TESTING RESULTS PRIOR TO FINAL TESTING OBSERVATION BY THE ENGINEER.
7. AFTER ALL SANITARY SEWER CONSTRUCTION HAS BEEN COMPLETED, FINAL STABILIZATION OF THE CONSTRUCTION AREA ON ALL UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES SHALL BE COMPLETED BY EVENLY DISTRIBUTING SEEDING AND WATERING TO A MINIMUM OF 70% OF THE NATIVE BACKGROUND VEGETATIVE COVER.
8. ALL RESIDENTIAL SEWER SERVICE LATERALS ARE 6" DIA. AND 35 FEET FOR 0.50 FEET/FOOT, 40 FT. FOR 0.60 FEET/FOOT IN LENGTH UNLESS NOTED OTHERWISE.
9. ALL RESIDENTIAL SEWER SERVICE LATERALS SHALL BE EXTENDED TO THE 10' G.E.T.V.E. EASEMENT AND CAPPED AND SEALED.
10. LATERALS TO LOTS THAT SLOPE AWAY FROM STREET SHALL BE SLOPED FROM THE TEE OR STACK AT 2% TO THE PROPERTY LINE.
11. CONTRACTOR TO FIELD VERIFY ALL MATCH EXISTING ELEVATIONS, SEWER MANHOLE INVERTS, STORM DRAIN INVERTS, AND ALL OTHER UTILITIES PRIOR TO UTILITY WORK AND NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES.
12. REFER TO THIS SHEET FOR STANDARD WATER/ WASTE WATER CROSSING DETAILS.
13. RIM ELEVATIONS OF PROPOSED MANHOLES THAT ARE NOT WITHIN STREET RIGHT-OF-WAY ARE TO BE APPROXIMATELY 6" ABOVE NATURAL GROUND.
14. DAMAGE TO EXISTING PAVEMENT SHALL BE REPLACED BY CONTRACTOR AT ADDITIONAL COST.
15. COORDINATES ARE BASED ON STATE PLANE TX83-SCF. SURFACE. SCALE FACTOR: 1.00013.
17. CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING SAWS STANDARD SPECIFICATION 804 FOR EXCAVATION, TRENCHING AND BACKFILLING REQUIREMENTS AND STANDARD SPECIFICATION 812 FOR WATER/SEWER SEPARATION REQUIREMENTS.

**SAWS CONSTRUCTION NOTES**  
CONTRACTOR SHALL REFERENCE THE CURRENT SAWS  
CONSTRUCTION SPECIFICATIONS & DETAILS AT THE TIME OF  
THE DATED PLAN SHEET. SEE BELOW FOR REFERENCED  
SPECIFICATIONS.

## SAWS SEWER ITEM NUMBERS:

804 EXCAVATION TRENCHING AND BACKFILL

848 SANITARY SEWER

851 EXISTING MANHOLE ADJUSTMENT

852 SANITARY SEWER MANHOLES

854 SANITARY SEWER LATERALS

855 RECONSTRUCTION OF EXISTING MANHOLES

858 CONCRETE ENCASEMENT, CRADLES, SADDLES & COLLARS

860 VERTICAL STACKS

SEWER: EAST SEWERSHED

DEVELOPERS NAME: CENTURY LAND HOLDINGS II, LLC

DEVELOPERS ADDRESS: 2330 N LOOP 1604 W ACCESS ROAD, SUITE 112

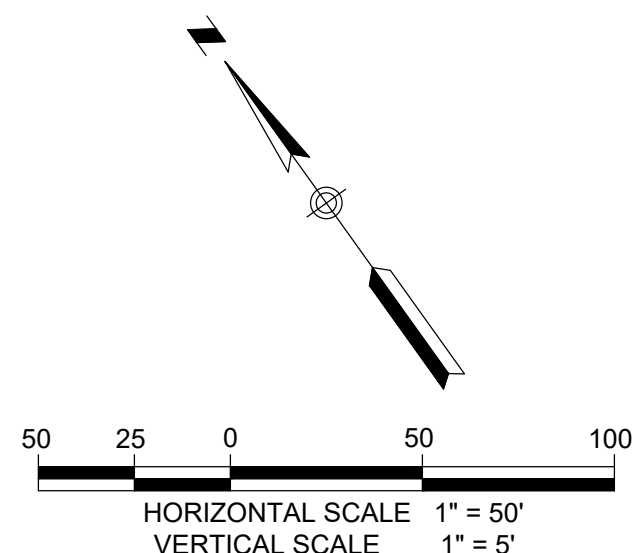
CITY SAN ANTONIO STATE TEXAS ZIP 78248

PHONE # (210) 797.7205 FAX # N/A







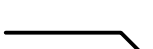

















102550,  
SAWS BLOCK MAP # 194545,194548 TOTAL EDU'S 77 TOTAL ACREAGE 15.47 AC

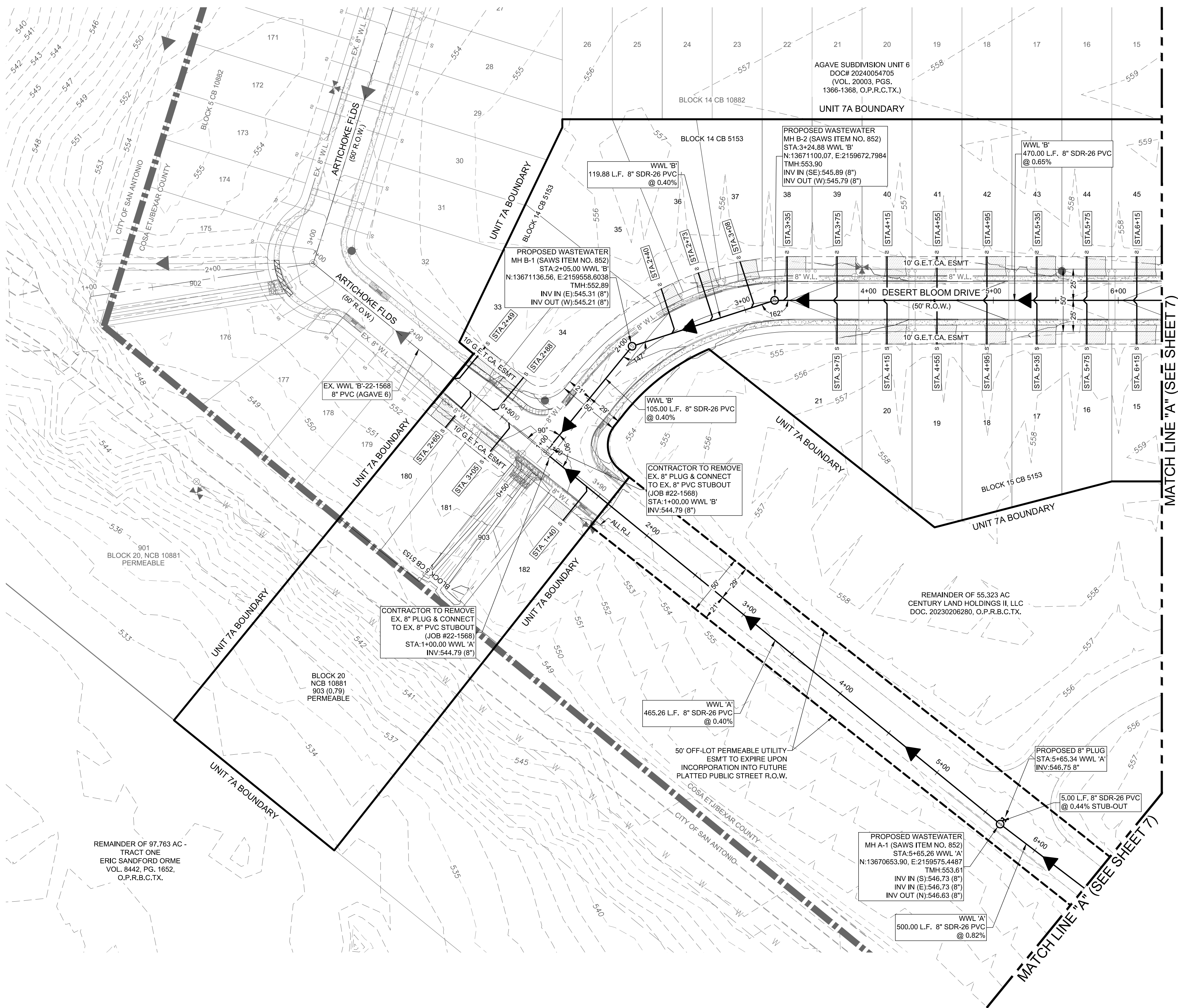
TOTAL LINEAR FOOTAGE OF PIPE: 3,173 L.F. 8" PLAT NO. 24-11800230

NUMBER OF LOTS: 77 SAWS JOB NO. 24-1584



## LEGEND

PROPOSED	EXISTING	
		SANITARY SEWER MANHOLE
		SANITARY SEWER LINE
		WATER LINE
		SANITARY SEWER LATERAL
		WATER VALVE
		SINGLE WATER SERVICE
		DUAL WATER SERVICE
		FIRE HYDRANT
		POWER POLE
		STREET LIGHT (100 WATT LED)
		STREET LIGHT (250 WATT LED)
		GUY WIRE
		OVERHEAD ELECTRIC
	TMH	TOP OF MANHOLE
	EX.	EXISTING
	G.E.T.CA	GAS, ELEC. TELE & CABLE TV ESMT.
	ESMT.	EASEMENT
	VOL	VOLUME
	PG	PAGE



**CAUTION:**

**CAUTION:** CONTRACTOR TO NOTIFY TEXAS  
ONE CALL AT 1-800-245-4545 48 HOURS PRIOR TO CONSTRUCTION  
FOR UTILITY LINE LOCATE. CONTRACTOR SHALL VERIFY  
HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES  
PRIOR TO CONSTRUCTION. ENGINEER SHALL BE NOTIFIED  
IMMEDIATELY OF ANY SIGNIFICANT DISCREPANCIES OR REQUIRED  
DESIGN CHANGES. EXISTING UTILITIES SHOWN HEREON ARE FOR  
INFORMATIONAL PURPOSES ONLY. ENGINEER ASSUMES NO  
RESPONSIBILITY FOR THE ACCURACY OF THIS INFORMATION.

LOCATION OF EXISTING UNDERGROUND AND OVERHEAD UTILITIES ARE APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO BEGINNING WORK AND SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT OCCUR.



Know what's below.  
Call before you dig.

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

AGAVE SUBDIVISION UNIT 7A  
LAND-PLAT-24-11800230  
WASTEWATER LAYOUT (SHEET 2 OF 2)

[illegible]

DATE:	10/11/2024
DESIGNED BY:	SM
DRAWN BY:	MAP
CHECKED BY:	PF
DRAWING NAME:	sh_WastewaterLayout.dwg



**LJA**  
Phone 210.503.2700  
LJA.COM  
TTBPE No. F-1386

**LJA Engineering, Inc.**

9830 Colonnade Blvd  
Suite 300  
San Antonio, Texas 78203

JOB NUMBER:  
SA199-0403C-426

SHEET NO.

8

OF 28 SHEETS,

GENERAL NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING 98% COMPACTION ON ALL UTILITY TRENCH BACKFILL AND PAYING FOR THE TESTS TO BE PERFORMED BY A THIRD PARTY. COMPACTION TESTS WILL BE DONE AT ONE LOCATION POINT RANDOMLY SELECTED OR AS INDICATED BY THE SAWS INSPECTOR/TEST ADMINISTRATOR, PER EACH 12-INCH LOOSE LIFT PER 400 LINEAR FEET AT A MINIMUM. THIS PROJECT WILL NOT BE ACCEPTED AND FINALIZED BY SARA WITHOUT THIS REQUIREMENT BEING MET AND VERIFIED BY PROVIDING ALL NECESSARY DOCUMENTED TEST RESULTS.
2. THE CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTING AND TESTING THE SANITARY SEWER SYSTEM IN ACCORDANCE WITH 30 TAC 217 (AND 213.5 FOR PROJECTS IN THE ERZD), THE DESIGN PLANS AND SARA SPECIFICATIONS.
3. THE CONTRACTOR MUST PROVIDE CERTIFICATION UPON REQUEST OF THE ENGINEER THAT ALL MATERIALS FOR THE CONSTRUCTION OF THE SANITARY SEWER SYSTEM MEET TCEQ AND SARA SPECIFICATIONS.
4. THE CONTRACTOR IS TO NOTIFY THE ENGINEER AT LEAST THREE (3) DAYS PRIOR TO BEGINNING CONSTRUCTION AND TESTING SCHEDULE.
5. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST THREE (3) DAYS PRIOR TO ALL TESTING ON THE SANITARY SEWER SYSTEM.
6. ANY TESTING PERFORMED WITHOUT THE PRESENCE OF THE ENGINEER WILL BE REDONE AT THE CONTRACTOR'S EXPENSE.
7. THE CONTRACTOR MUST PROVIDE THE ENGINEER WITH COPIES OF TV-VIDEO INSPECTIONS WHEN COMPLETED AND COMPACTION TESTING RESULTS PRIOR TO FINAL TESTING OBSERVATION BY THE ENGINEER.
8. AFTER ALL SANITARY SEWER CONSTRUCTION HAS BEEN COMPLETED, FINAL STABILIZATION OF THE CONSTRUCTION AREA ON ALL UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES SHALL BE COMPLETED BY EVENLY DISTRIBUTING SEEDING AND WATERING TO A MINIMUM OF 70% OF THE NATIVE BACKGROUND VEGETATIVE COVER.
9. ALL RESIDENTIAL SEWER SERVICE LATERALS ARE 6" DIA. AND 35 FEET IN LENGTH UNLESS NOTED OTHERWISE.
10. ALL RESIDENTIAL SEWER SERVICE LATERALS SHALL BE EXTENDED TO THE 10' G.E.T.CA. EASEMENT AND CAPPED AND SEALED.
11. LATERALS TO LOTS THAT SLOPE AWAY FROM STREET SHALL BE SLOPED FROM THE TEE OR STACK AT 1% TO THE 10' G.E.T.CA.

TRENCH EXCAVATION SAFETY PROTECTION

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

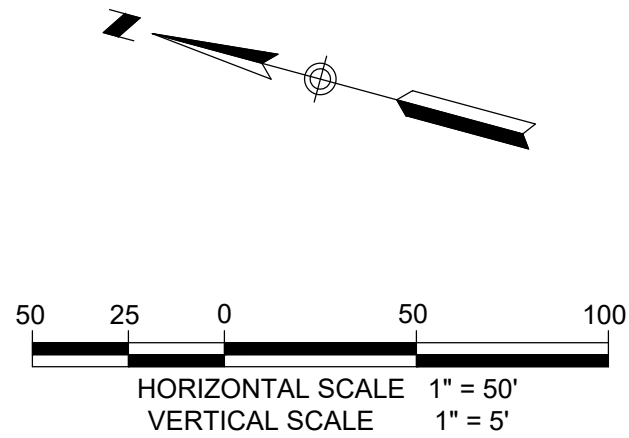
SAWS CONSTRUCTION NOTES

CONTRACTOR SHALL REFERENCE THE CURRENT SAWS CONSTRUCTION SPECIFICATIONS & DETAILS AT THE TIME OF THE DATED PLAN SHEET. SEE BELOW FOR REFERENCED SPECIFICATIONS.

SAWS SEWER ITEM NUMBERS:

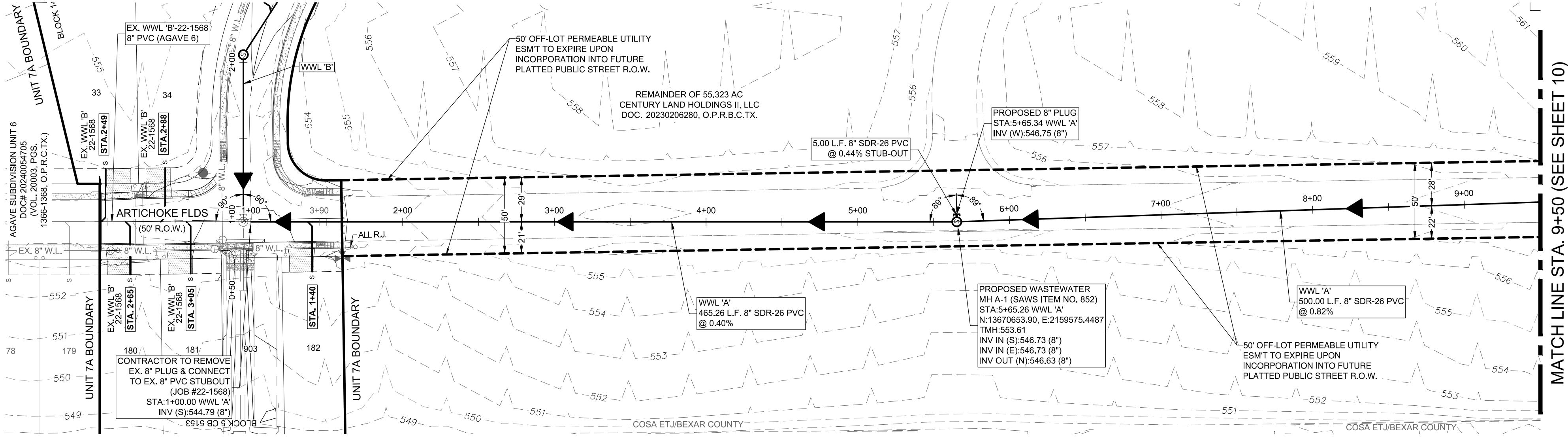
- 848 SANITARY SEWER
- 851 EXISTING MANHOLE ADJUSTMENT
- 852 SANITARY SEWER MANHOLES
- 854 SANITARY SEWER LATERALS
- 855 RECONSTRUCTION OF EXISTING MANHOLES
- 858 CONCRETE ENCASUREMENT, CRADLES, SADDLES & COLLARS
- 860 VERTICAL STACKS

SEWER: EAST SEWERSHED			
DEVELOPER'S NAME:	CENTURY LAND HOLDINGS II, LLC		
DEVELOPER'S ADDRESS:	2330 N LOOP 1604 W ACCESS ROAD, SUITE 112		
CITY:	SAN ANTONIO	STATE:	TEXAS
PHONE #:	(210) 797-7255	FAX #:	N/A
SAWS BLOCK MAP #:	102550	TOTAL EDITS:	77
TOTAL LINEAR FOOTAGE OF PIPE:	3,173 L.F. 8"	PLAT NO.:	24-11800230
NUMBER OF LOTS:	77	SAWS JOB NO.:	24-1584



LEGEND

PROPOSED	EXISTING	
		SANITARY SEWER MANHOLE
		SANITARY SEWER LINE
		WATER LINE
		SANITARY SEWER LATERAL
		WATER VALVE
		SINGLE WATER SERVICE
		DUAL WATER SERVICE
		FIRE HYDRANT
		POWER POLE
		STREET LIGHT (100 WATT LED)
		STREET LIGHT (250 WATT LED)
		GUY WIRE
		OVERHEAD ELECTRIC
		TOP OF MANHOLE
		EXISTING
		G.E.T.CA.
		EASEMENT
		VOL
		PG

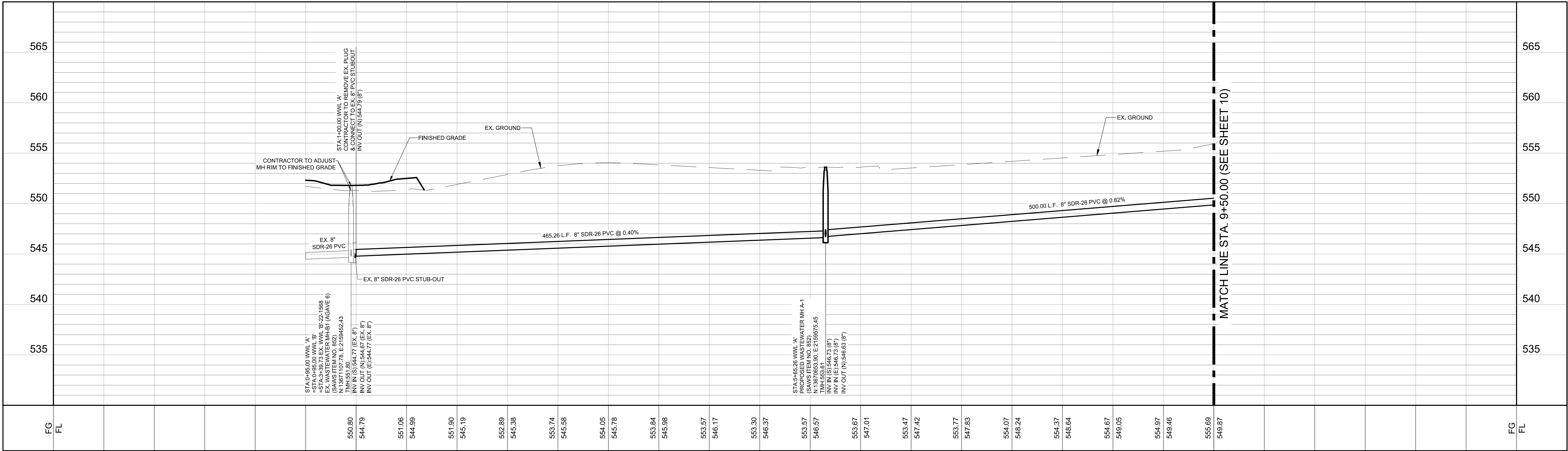


LOCATION OF EXISTING UNDERGROUND AND OVERHEAD UTILITIES ARE APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO BEGINNING WORK AND SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT OCCUR.



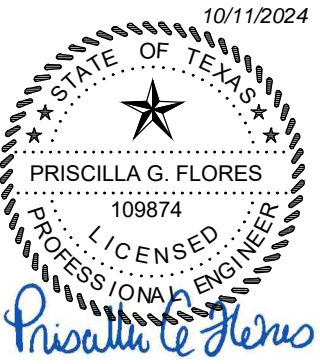
**CAUTION:** CONTRACTOR TO NOTIFY TEXAS ONE CALL AT 1-800-245-4545 48 HOURS PRIOR TO CONSTRUCTION FOR UTILITY LINE LOCATE. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY SIGNIFICANT DISCREPANCIES OR REQUIRED DESIGN CHANGES. EXISTING UTILITIES SHOWN HEREON ARE FOR INFORMATIONAL PURPOSES ONLY. ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THIS INFORMATION.

WASTEWATER LINE 'A' STA. 1+00 TO STA. 9+50



AGAVE SUBDIVISION UNIT 7A  
LAND-PLAT-24-11800230  
WASTEWATER LINE 'A' PLAN & PROFILE  
STA. 1+00 TO STA. 9+50

REVISIONS		NO	DESCRIPTION	BY	DATE
		1			
		2			
		3			
		4			
		5			
		6			
		7			
		8			
		9			
		10			
		11			
		12			
		13			
		14			
		15			
		16			
		17			
		18			
		19			
		20			
		21			
		22			
		23			
		24			
		25			
		26			
		27			
		28			
		29			
		30			
		31			
		32			
		33			
		34			
		35			
		36			
		37			
		38			
		39			
		40			
		41			
		42			
		43			
		44			
		45			
		46			
		47			
		48			
		49			
		50			
		51			
		52			
		53			
		54			
		55			
		56			
		57			
		58			
		59			
		60			
		61			
		62			
		63			
		64			
		65			
		66			
		67			
		68			
		69			
		70			
		71			
		72			
		73			
		74			
		75			
		76			
		77			
		78			
		79			
		80			
		81			
		82			
		83			
		84			
		85			
		86			
		87			
		88			
		89			
		90			
		91			
		92			
		93			
		94			
		95			
		96			
		97			
		98			
		99			
		100			



**LJA Engineering, Inc.**  
Phone 210.503.2700  
8930 Colonnade Blvd  
Suite 300  
San Antonio, Texas 78230  
TYPE No. F-1986

JOB NUMBER:  
SA199-0403C-426

SHEET NO.

9

OF 28 SHEETS

1. CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING 98% COMPACTION ON ALL UTILITY TRENCH BACKFILL AND PAYING FOR THE TESTS TO BE PERFORMED BY A THIRD PARTY. COMPACTION TESTS WILL BE DONE AT ONE LOCATION POINT RANDOMLY SELECTED OR AS INDICATED BY THE SUBMITTER. CONTRACTOR SHALL TEST AND RECORD DEPTH OF EACH TRENCH AT 400' LINEAR FEET AT A MINIMUM. THIS PROJECT WILL NOT BE ACCEPTED AND FINALIZED BY SARA WITHOUT THIS REQUIREMENT BEING MET AND VERIFIED BY PROVIDING ALL NECESSARY DOCUMENTED TEST RESULTS.
2. THE CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTING AND TESTING THE SANITARY SEWER SYSTEM IN ACCORDANCE WITH 30 TAC 217 [AND 213.5 FOR PROJECTS IN THE ERZD], THE DESIGN PLANS AND SARA SPECIFICATIONS.
3. THE CONTRACTOR MUST PROVIDE CERTIFICATION UPON REQUEST OF THE ENGINEER THAT ALL MATERIALS FOR THE CONSTRUCTION OF THE SANITARY SEWER SYSTEM MEET TCEE AND SARA SPECIFICATIONS.
4. THE CONTRACTOR IS TO NOTIFY THE ENGINEER AT LEAST THREE (3) DAYS PRIOR TO BEGINNING CONSTRUCTION AND TESTING SCHEDULE.
5. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST THREE (3) DAYS PRIOR TO ALL TESTING ON THE SANITARY SEWER SYSTEM.
6. ANY TESTING PERFORMED WITHOUT THE PRESENCE OF THE ENGINEER WILL BE REDONE AT THE CONTRACTOR'S EXPENSE.
7. THE CONTRACTOR MUST PROVIDE THE ENGINEER WITH COPIES OF TV-VIDEO INSPECTIONS WHEN COMPLETED AND COMPACTION TESTING RESULTS PRIOR TO FINAL TESTING OBSERVATION BY THE ENGINEER.
8. AFTER ALL SANITARY SEWER CONSTRUCTION HAS BEEN COMPLETED, FINAL STABILIZATION OF THE CONSTRUCTION AREA ON ALL UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES SHALL BE COMPLETED BY EVENLY DISTRIBUTING SEEDING AND WATERING TO A MINIMUM OF 70% OF THE NATIVE BACKGROUND VEGETATIVE COVER.
9. ALL RESIDENTIAL SEWER SERVICE LATERALS ARE 6" DIA. AND 35 FEET IN LENGTH UNLESS NOTED OTHERWISE.
10. ALL RESIDENTIAL SEWER SERVICE LATERALS SHALL BE EXTENDED TO THE 10' G.E.T.CA. EASEMENT AND CAPPED AND SEALED.
11. LATERALS TO LOTS THAT SLOPE AWAY FROM STREET SHALL BE SLOPED FROM THE TEE OR STACK AT 1% TO THE 10' G.E.T.CA.

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF THE TRENCH 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. THE CONTRACTOR'S SUPERVISOR SHALL BE RESPONSIBLE FOR THE IMPLEMENTATION OF THE PROGRAM AND THE CONTRACTOR SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION, SAFETY PROTECTION THAT COMPLIES WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR CONSULTANT SHALL BE RESPONSIBLE FOR THE DESIGN OF THE PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

848 SANITARY SEWER

851 EXISTING MANHOLE ADJUSTMENT

852 SANITARY SEWER MANHOLES

854 SANITARY SEWER LATERALS

855 RECONSTRUCTION OF EXISTING MANHOLES

858 CONCRETE ENCASEMENT, CRADLES, SADDLES & COLLARS

860 VERTICAL STACKS

DEVELOPER'S NAME: CENTURY LAND HOLDINGS II, LLC

DEVELOPER'S ADDRESS: 2330 N LOOP 1604 W ACCESS ROAD, SUITE 112

CITY: SAN ANTONIO STATE: TEXAS ZIP: 78248

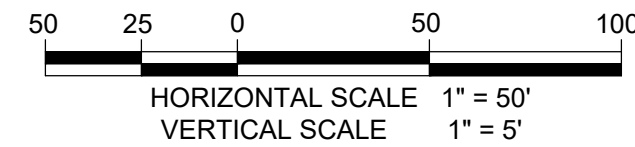
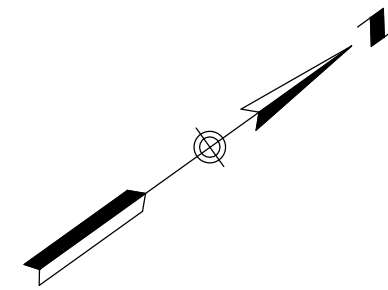
PHONE #: (210) 797-7206 FAX #: N/A

192550

SAWS BLOOM MAP #: 194548.194548 TOTAL EDU'S: 77 TOTAL ACREAGE: 15.47 AC

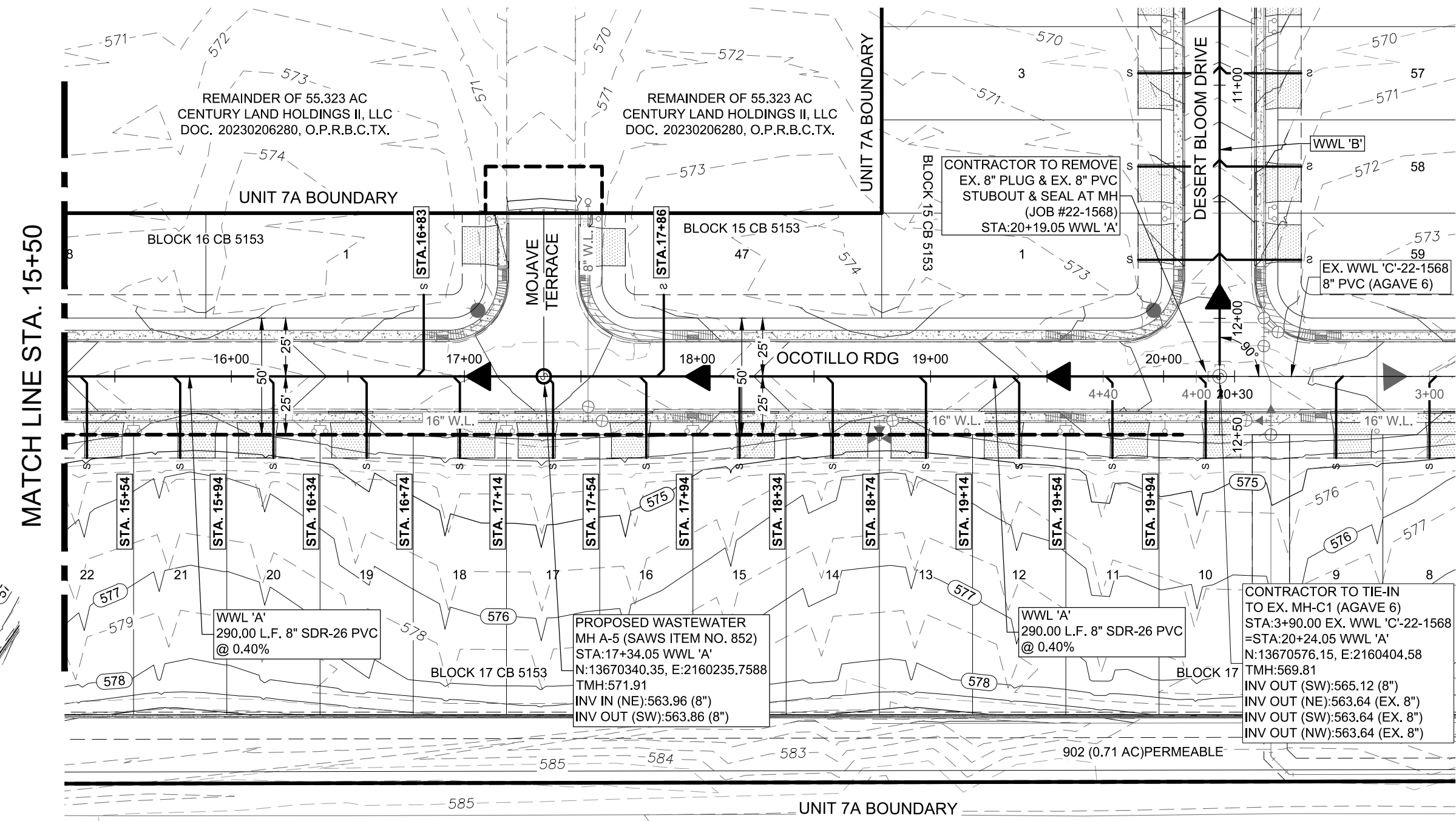
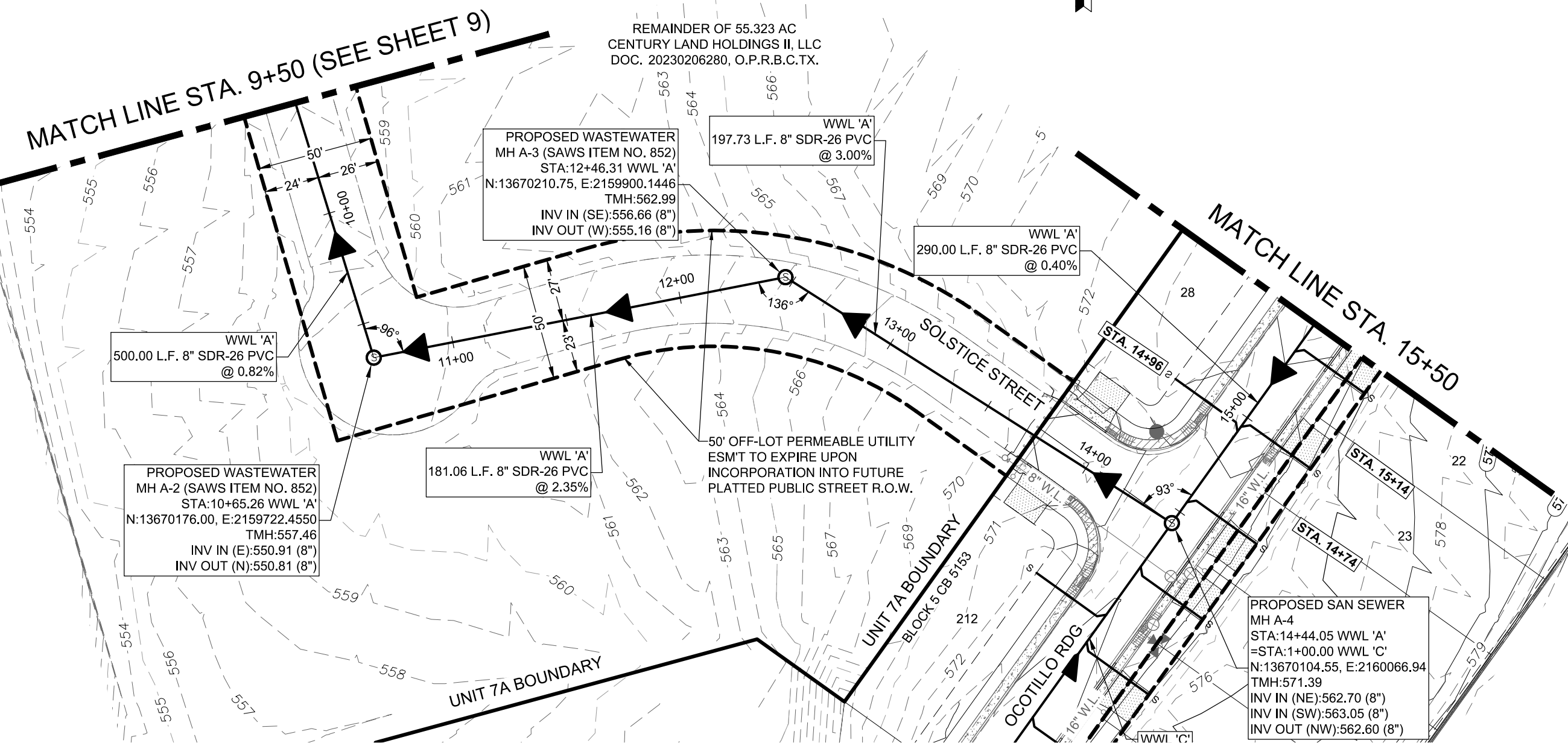
TOTAL LINEAR FOOTAGE OF PP: 3,173.71 FT. PLAT NO. 24-11800230

NUMBER OF LOTS: 77 SAWS JOB NO. 24-1584

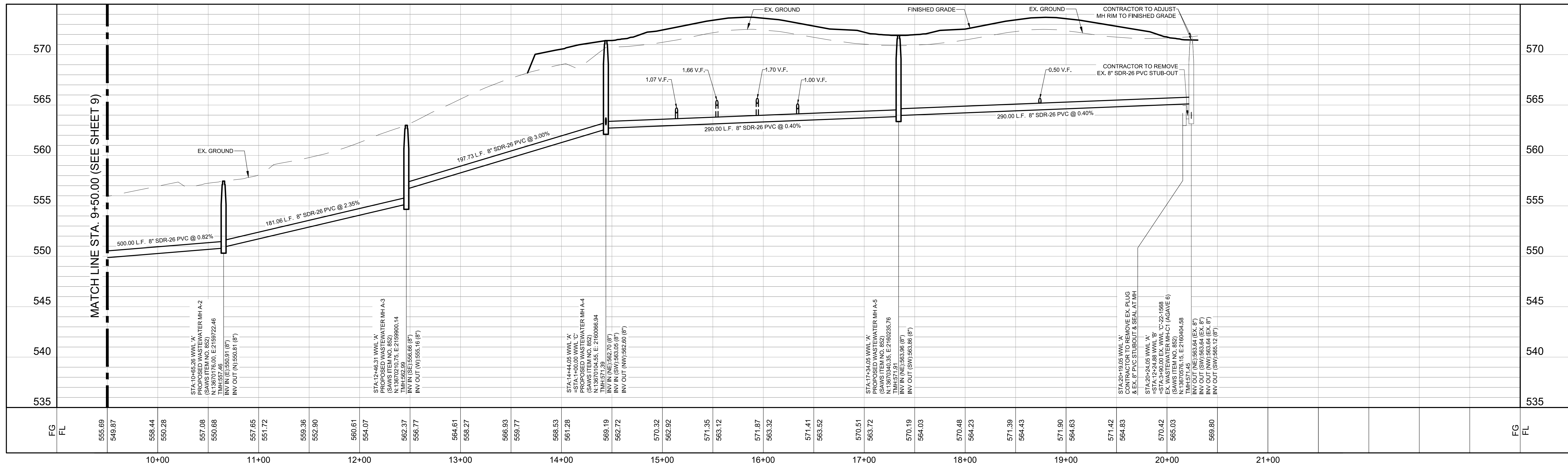


PROPOSED	EXISTING	
		SANITARY SEWER MANHOLE
		SANITARY SEWER LINE
		WATER LINE
		SANITARY SEWER LATERAL
		WATER VALVE
		SINGLE WATER SERVICE
		DUAL WATER SERVICE
		FIRE HYDRANT
		POWER POLE
		STREET LIGHT (100 WATT LED)
		STREET LIGHT (250 WATT LED)
		GUY WIRE
		OVERHEAD ELECTRIC
	TMH	TOP OF MANHOLE
	EX.	EXISTING
	G.E.T.CA.	GAS, ELEC. TELE & CABLE TV ESMT.
	ESMT.	EASEMENT
	VOL	VOLUME
	PG	PAGE

**CAUTION:** CONTRACTOR TO NOTIFY TEXAS ONE CALL AT 1-800-245-4545 48 HOURS PRIOR TO CONSTRUCTION FOR UTILITY LINE LOCATE. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY SIGNIFICANT DISCREPANCIES OR REQUIRED DESIGN CHANGES. EXISTING UTILITIES SHOWN HEREON ARE FOR INFORMATIONAL PURPOSES ONLY. ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THIS INFORMATION.




WASTEWATER LINE 'A' STA. 9+50 TO END



AGAVE SUBDIVISION UNIT 7A  
LAND-PLAT-24-11800230  
WASTEWATER LINE 'A' PLAN & PROFILE  
STA. 9+50 TO END

REVISIONS				
NO.	DESCRIPTION	BY	DATE	
	DATE: 10/1/2024			
	DESIGNED BY: SM			
	DRAWN BY: MJP			
	CHECKED BY: PJF			
	DRAWING NAME: sta_WWL_XI.P&C.dwg			



**LJA Engineering, Inc.** 

9830 Colonnade Blvd  
Suite 300  
San Antonio, Texas 78230

Phone 210-503-3700  
LJA.COM  
TBPE No. F-0386

JOB NUMBER:  
SA199-0403C-426

SHEET NO

10

OF 28 SHEETS

1. CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING 98% COMPACTION ON ALL UTILITY TRENCH BACKFILL AND PAYING FOR THE TESTS TO BE PERFORMED BY A THIRD PARTY. COMPACTION TESTS WILL BE DONE AT ONE LOCATION POINT RANDOMLY SELECTED OR AS INDICATED BY THE SAVES INSPECTOR. TESTS MUST ADHERE TO PER PER EACH 12" DEEP LAYER PER 400 LINEAL FEET AT A MINIMUM. THIS PROJECT WILL NOT BE ACCEPTED AND FINALIZED BY SARA WITHOUT THIS REQUIREMENT BEING MET AND VERIFIED BY PROVIDING ALL NECESSARY DOCUMENTED TEST RESULTS.
2. THE CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTING AND TESTING THE SANITARY SEWER SYSTEM IN ACCORDANCE WITH 30 TAC 217 [AND 213] FOR PROJECTS IN THE ERZD. THE DESIGN PLANS AND SARA SPECIFICATIONS.
3. THE CONTRACTOR MUST PROVIDE CERTIFICATION UPON REQUEST OF THE ENGINEER THAT ALL MATERIALS FOR THE CONSTRUCTION OF THE SANITARY SEWER SYSTEM MEET TCEQ AND SARA SPECIFICATIONS.
4. THE CONTRACTOR IS TO NOTIFY THE ENGINEER AT LEAST THREE (3) DAYS PRIOR TO BEGINNING CONSTRUCTION AND TESTING SCHEDULE.
5. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST THREE (3) DAYS PRIOR TO ALL TESTING ON THE SANITARY SEWER SYSTEM.
6. ANY TESTING PERFORMED WITHOUT THE PRESENCE OF THE ENGINEER WILL BE REDONE AT THE CONTRACTOR'S EXPENSE.
7. THE CONTRACTOR MUST PROVIDE THE ENGINEER WITH COPIES OF TV-VIDEO INSPECTIONS WHEN COMPLETED AND COMPACTION TESTING RESULTS PRIOR TO FINAL TESTING OBSERVATION BY THE ENGINEER.
8. AFTER ALL SANITARY SEWER CONSTRUCTION HAS BEEN COMPLETED, FINAL STABILIZATION OF THE CONSTRUCTION AREA ON ALL UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES SHALL BE COMPLETED BY EVENLY DISTRIBUTING SEEDING AND WATERING TO A MINIMUM OF 70% OF THE NATIVE BACKGROUND VEGETATIVE COVER.
9. ALL RESIDENTIAL SEWER SERVICE LATERALS ARE 6" DIA. AND 35 FEET IN LENGTH UNLESS NOTED OTHERWISE.
10. ALL RESIDENTIAL SEWER SERVICE LATERALS SHALL BE EXTENDED TO THE 10' G.E.T.C. EASEMENT AND CAPPED AND SEALED.
11. LATERALS TO LOTS THAT SLOPE AWAY FROM STREET SHALL BE SLOPED FROM THE TEE OR STACK AT 1% TO THE 10' G.E.T.C. EASEMENT.

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF THE TRENCH 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. THE CONTRACTOR'S SUPERVISOR SHALL BE RESPONSIBLE FOR THE IMPLEMENTATION OF THE PROGRAM AND THE CONTRACTOR SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION, SAFETY PROTECTION THAT COMPLIES WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR CONSULTANT SHALL BE RESPONSIBLE FOR THE DESIGN OF THE PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

CONTRACTOR SHALL REFERENCE THE CURRENT SWS  
CONSTRUCTION SPECIFICATIONS & DETAILS AT THE TIME OF  
THE DATED PLAN SHEET. SEE BELOW FOR REFERENCED  
SPECIFICATIONS.

## 804 EXCAVATION TRENCHING AND BACKFILL

848 SANITARY SEWER

851 EXISTING MANHOLE ADJUSTMENT

852 SANITARY SEWER MANHOLES

854 SANITARY SEWER LATERALS

855 RECONSTRUCTION OF EXISTING MANHOLES

858 CONCRETE ENCASEMENT, CRADLES, SADDLES & COLLARS

860 VERTICAL STACKS

SEWER: EAST SEWERSHED

DEVELOPER'S NAME: \_\_\_\_\_ CENTURY LAND HOLDINGS II, LLC

DEVELOPER'S ADDRESS: 2330 N LOOP 1604 W ACCESS ROAD, SUITE 112

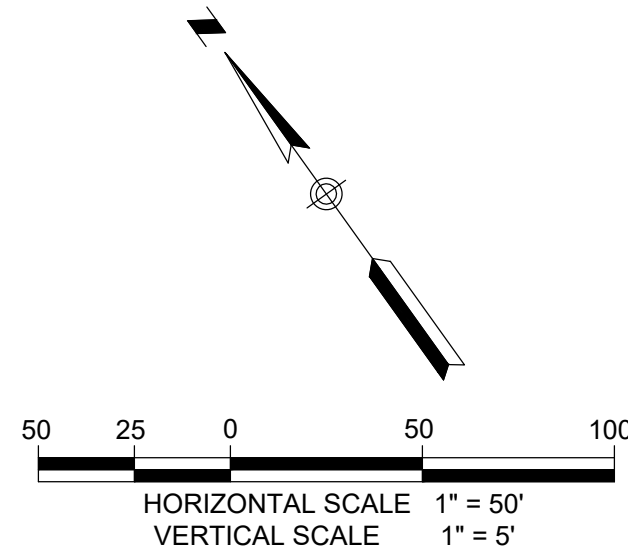
CITY \_\_\_\_\_ SAN ANTONIO \_\_\_\_\_ STATE \_\_\_\_\_ TEXAS \_\_\_\_\_ ZIP \_\_\_\_\_ 78248

PHONE # \_\_\_\_\_ (210) 797-7205 \_\_\_\_\_ FAX # \_\_\_\_\_ N/A \_\_\_\_\_

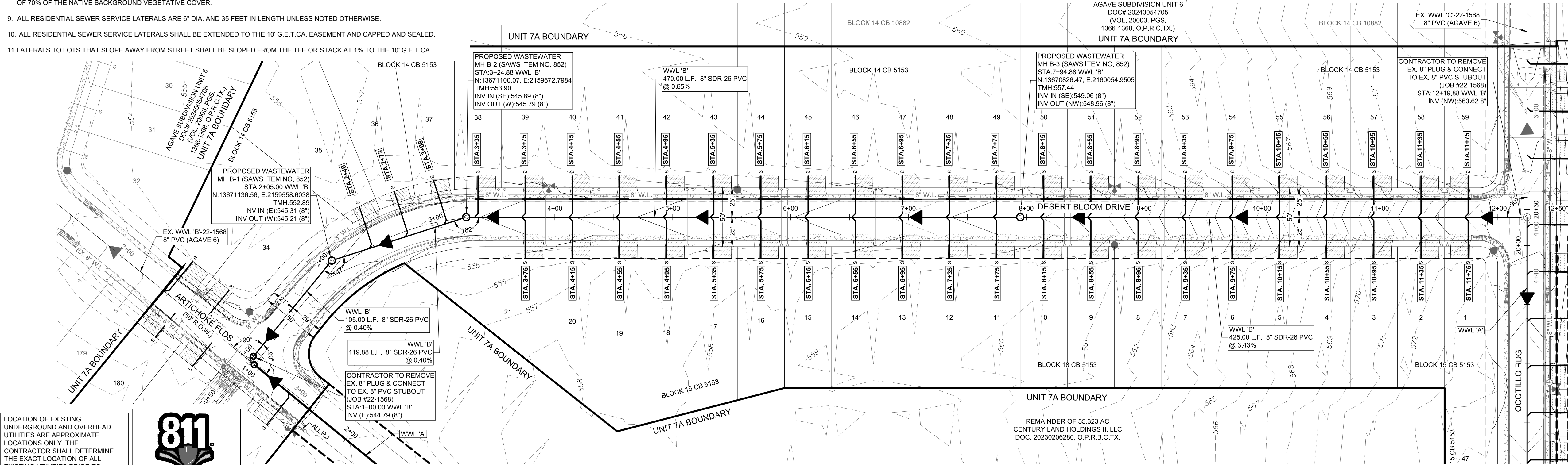
SAWS BLOCK MAP # \_\_\_\_\_ 19A545, 19A548 \_\_\_\_\_ TOTAL EDUS \_\_\_\_\_ 77 \_\_\_\_\_ TOTAL ACREAGE \_\_\_\_\_ 15.47 AC

TOTAL LINEAR FOOTAGE OF PIPE: \_\_\_\_\_ 3,173 L.F. 8" \_\_\_\_\_ PLAT NO. \_\_\_\_\_ 24-11800230

NUMBER OF LOTS: \_\_\_\_\_ 77 \_\_\_\_\_ SAWS JOB NO. \_\_\_\_\_ 24-1504



PROPOSED	EXISTING	
		SANITARY SEWER MANHOLE
		SANITARY SEWER LINE
— 8" W.L. —	— EX. 8" W.L. —	WATER LINE
		SANITARY SEWER LATERAL
		WATER VALVE
		SINGLE WATER SERVICE
		DUAL WATER SERVICE
		FIRE HYDRANT
		POWER POLE
		STREET LIGHT (100 WATT LED)
		STREET LIGHT (250 WATT LED)
		GUY WIRE
	— OU —	OVERHEAD ELECTRIC
	TMH	TOP OF MANHOLE
	EX.	EXISTING
	G.E.T.C.A.	GAS, ELEC. TELE & CABLE TV ESMT.
	ESMT.	EASEMENT
	VOL	VOLUME
	PG	PAGE

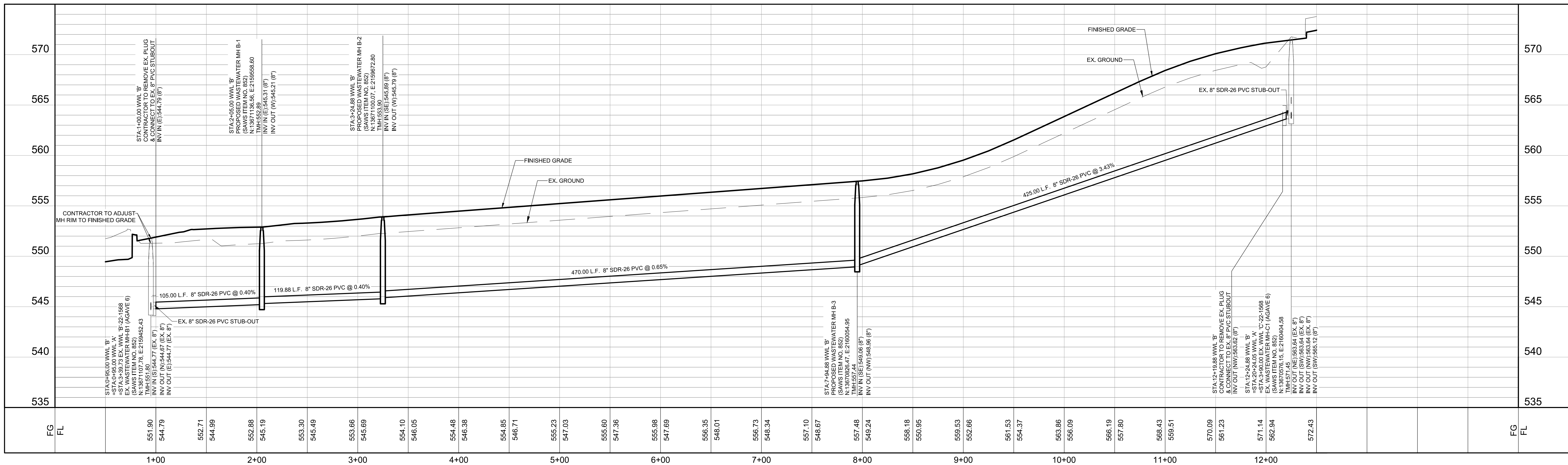


LOCATION OF EXISTING UNDERGROUND AND OVERHEAD UTILITIES ARE APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO BEGINNING WORK AND SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT OCCUR



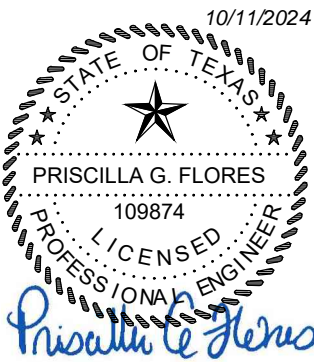
WASTEWATER LINE 'B' STA. 1+00 TO END

**CAUTION:** CONTRACTOR TO NOTIFY TEXAS  
ONE CALL AT 1-800-245-4545 48 HOURS PRIOR TO CONSTRUCTION  
FOR UTILITY LINE LOCATE. CONTRACTOR SHALL VERIFY  
HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES  
PRIOR TO CONSTRUCTION. ENGINEER SHALL BE NOTIFIED  
IMMEDIATELY OF ANY SIGNIFICANT DISCREPANCIES OR REQUIRED  
DESIGN CHANGES. EXISTING UTILITIES SHOWN HEREON ARE FOR  
INFORMATIONAL PURPOSES ONLY. ENGINEER ASSUMES NO  
RESPONSIBILITY FOR THE ACCURACY OF THIS INFORMATION.



AGAVE SUBDIVISION UNIT 7A  
LAND-PLAT-24-11800230  
WASTEWATER LINE 'B' PLAN & PROFILE  
STA. 1+00 TO END

DATE:		10/1/2024	
DESIGNED BY:	SM		
DRAWN BY:	MAP		
CHECKED BY:	PF		
DRAWING NAME:		sh_wml 'B' P&P 4x6.dwg	



**LJA**  
Phone 210.503.2700  
LJA.COM  
TRPE No. E-1386

**LJA Engineering, Inc.**

JOB NUMBER:  
SA199-0403C-426

SHEET NC

11

OF 28 SHEETS

1. CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING 98% COMPACTION ON ALL UTILITY TRENCH BACKFILL AND PAYING FOR THE TESTS TO BE PERFORMED BY A THIRD PARTY. COMPACTION TESTS WILL BE DONE AT ONE LOCATION POINT RANDOMLY SELECTED OR AS INDICATED BY THE SAWN INDUCTORTEST ADMINISTRATOR. PER EACH 12-INCH LOSS 1 FT PER 400 LINEAR FEET AT A MINIMUM. THE CONTRACT WILL NOT BE ACCEPTED AND FINALIZED BY SARA WITHOUT THIS REQUIREMENT BEING MET AND VERIFIED BY PROVIDING ALL NECESSARY DOCUMENTED TEST RESULTS.
2. THE CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTING AND TESTING THE SANITARY SEWER SYSTEM IN ACCORDANCE WITH 30 TAC 217 [AND 213.5 FOR PROJECTS IN THE ERZD], THE DESIGN PLANS AND SARA SPECIFICATIONS.
3. THE CONTRACTOR MUST PROVIDE CERTIFICATION UPON REQUEST OF THE ENGINEER THAT ALL MATERIALS FOR THE CONSTRUCTION OF THE SANITARY SEWER SYSTEM MEET TCEQ AND SARA SPECIFICATIONS.
4. THE CONTRACTOR IS TO NOTIFY THE ENGINEER AT LEAST THREE (3) DAYS PRIOR TO BEGINNING CONSTRUCTION AND TESTING SCHEDULE.
5. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST THREE (3) DAYS PRIOR TO ALL TESTING ON THE SANITARY SEWER SYSTEM.
6. ANY TESTING PERFORMED WITHOUT THE PRESENCE OF THE ENGINEER WILL BE REDONE AT THE CONTRACTOR'S EXPENSE.
7. THE CONTRACTOR MUST PROVIDE THE ENGINEER WITH COPIES OF TV-VIDEO INSPECTIONS WHEN COMPLETED AND COMPACTION TESTING RESULTS PRIOR TO FINAL TESTING OBSERVATION BY THE ENGINEER.
8. AFTER ALL SANITARY SEWER CONSTRUCTION HAS BEEN COMPLETED, FINAL STABILIZATION OF THE CONSTRUCTION AREA ON ALL UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURE SHALL BE COMPLETED BY EVENLY DISTRIBUTING SEEDING AND WATERING TO A MINIMUM OF 70% OF THE NATIVE BACKGROUND VEGETATIVE COVER.
9. ALL RESIDENTIAL SEWER SERVICE LATERALS ARE 6" DIA. AND 35 FEET IN LENGTH UNLESS NOTED OTHERWISE.
10. ALL RESIDENTIAL SEWER SERVICE LATERALS SHALL BE EXTENDED TO THE 10' G.E.T. CA. EASEMENT AND CAPPED AND SEALED.
11. LATERALS TO LOTS THAT SLOPE AWAY FROM STREET SHALL BE SLOPED FROM THE TEE OR STACK AT 1% TO THE 10' G.E.T. CA.

CONTRACTOR AND/OR CONTRACTORS INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL BE RESPONSIBLE FOR IDENTIFYING AND MARKING ALL EXISTING UTILITIES IN 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. THE CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION, SAFETY PROTECTION THAT COMPLIES WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS SPECIFICALLY. CONTRACTOR AND/OR CONTRACTORS INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL SAFETY/EQUIPMENT CONSULTANT PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

CONTRACTOR SHALL REFERENCE THE CURRENT SWS  
CONSTRUCTION SPECIFICATIONS & DETAILS AT THE TIME OF  
THE DATED PLAN SHEET. SEE BELOW FOR REFERENCED  
SPECIFICATIONS.

## 804 EXCAVATION TRENCHING AND BACKFILL

848 SANITARY SEWER

851 EXISTING MANHOLE ADJUSTMENT

852 SANITARY SEWER MANHOLES

854 SANITARY SEWER LATERALS

855 RECONSTRUCTION OF EXISTING MANHOLES

858 CONCRETE ENCASEMENT, CRADLES, SADDLES & COLLARS

860 VERTICAL STACKS

DEVELOPER'S NAME: CENTURY LAND HOLDINGS II, LLC

DEVELOPER'S ADDRESS: 2330 N LOOP 1604 W ACCESS ROAD, SUITE 112

CITY SAN ANTONIO STATE TEXAS ZIP 78248

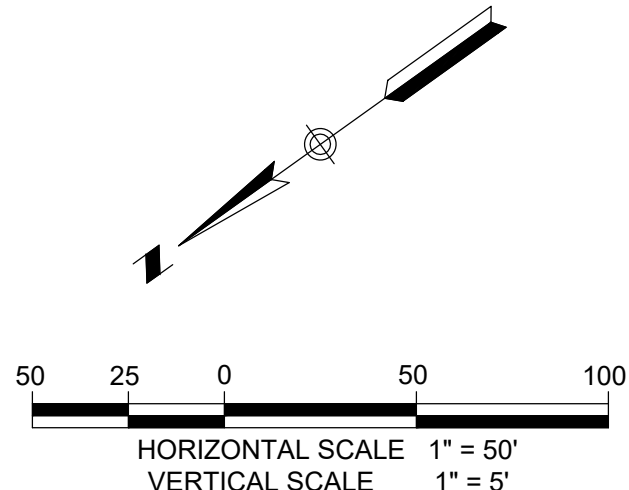
PHONE # (210) 797-7205 FAX # N/A

192550,

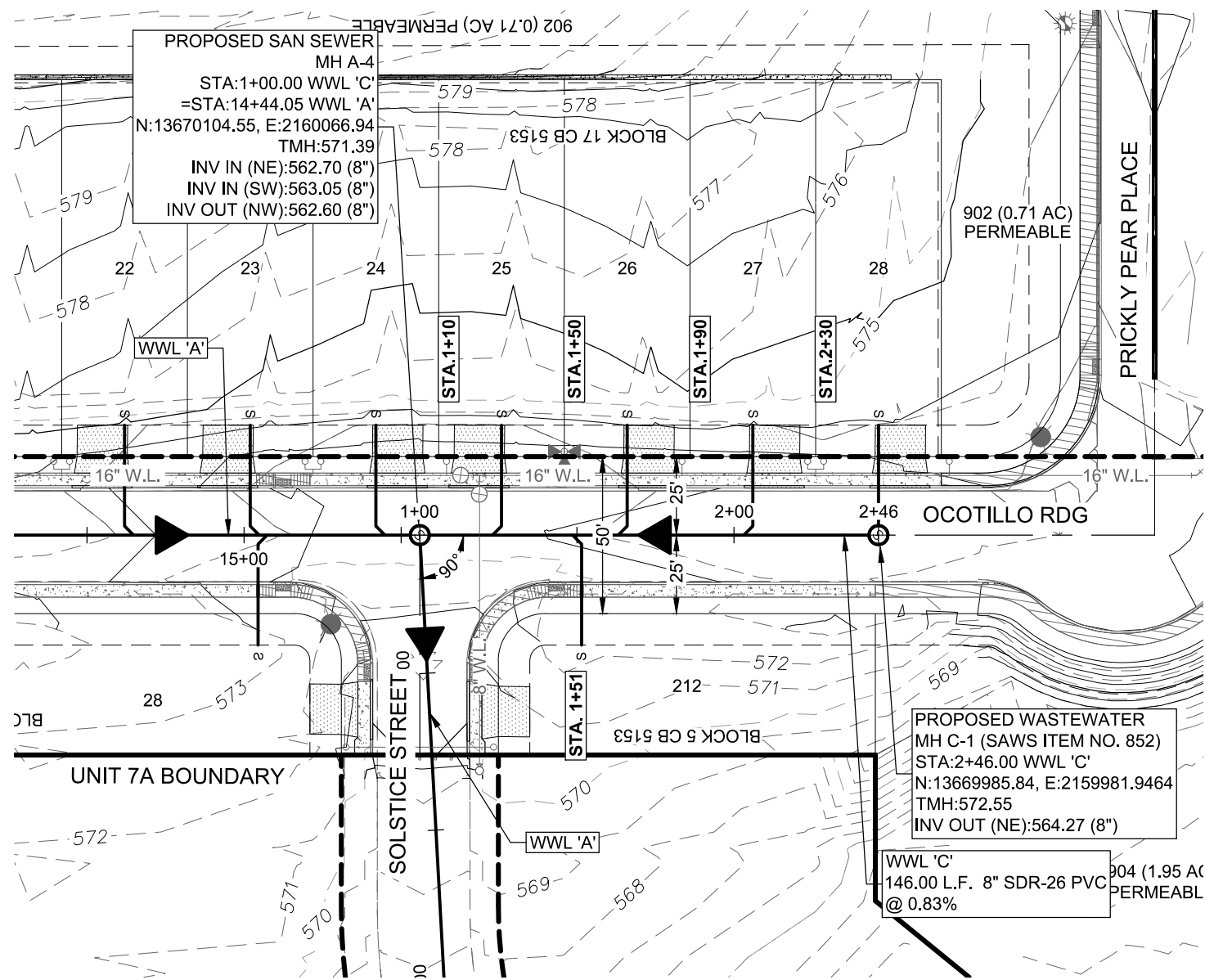
SAWS BLOCK MAP # 194548.194548 TOTAL EDUS 77 TOTAL ACREAGE 15.47 AC

TOTAL LINEAR FOOTAGE OF PIPE: 3,173 L.F. 8" PLAT NO. 24-11800230

NUMBER OF LOTS: 77 SAWS JOB NO. 24-11584



PROPOSED	EXISTING	
		SANITARY SEWER MANHOLE
		SANITARY SEWER LINE
— 8" W.L. —	— EX. 8" W.L. —	WATER LINE
		SANITARY SEWER LATERAL
		WATER VALVE
		SINGLE WATER SERVICE
		DUAL WATER SERVICE
		HYDRANT
		POWER POLE
		STREET LIGHT (100 WATT LED)
		STREET LIGHT (250 WATT LED)
		GUY WIRE
		OVERHEAD ELECTRIC
TMH		TOP OF MANHOLE
EX		EXISTING
G.E.T.CA.		GAS, ELEC, TELE & CABLE TV ESMT.
ESMT.		EASEMENT
VOL		VOLUME
PG		PAGE



**CAUTION: CONTRACTOR TO NOTIFY TEXAS**  
ONE CALL AT 1-800-245-4545 48 HOURS PRIOR TO CONSTRUCTION  
FOR UTILITY LINE LOCATE. CONTRACTOR SHALL VERIFY  
HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES  
PRIOR TO CONSTRUCTION. ENGINEER SHALL BE NOTIFIED  
IMMEDIATELY OF ANY SIGNIFICANT DISCREPANCIES OR REQUIRED  
DESIGN CHANGES. EXISTING UTILITIES SHOWN HEREON ARE FOR  
INFORMATIONAL PURPOSES ONLY. ENGINEER ASSUMES NO  
RESPONSIBILITY FOR THE ACCURACY OF THIS INFORMATION.



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

[illegible]

AGAVE SUBDIVISION UNIT 7A  
LAND-PLAT-24-11800230  
WASTEWATER LINE 'C' PLAN & PROFILE  
STA. 1+00 TO END

[illegible]

DATE:	10/11/2024
DESIGNED BY:	SM
DRAWN BY:	MAP
CHECKED BY:	PF
DRAWING NAME:	sh_wwl 'C'.dwg



**LJA Engineering, Inc.**  
9830 Colonnade Blvd  
Suite 300  
San Antonio, Texas 78230  
Phone 210.503.2700  
LJA.COM  
TBEF No. F-1386

JOB NUMBER:  
SA199-0403C-426

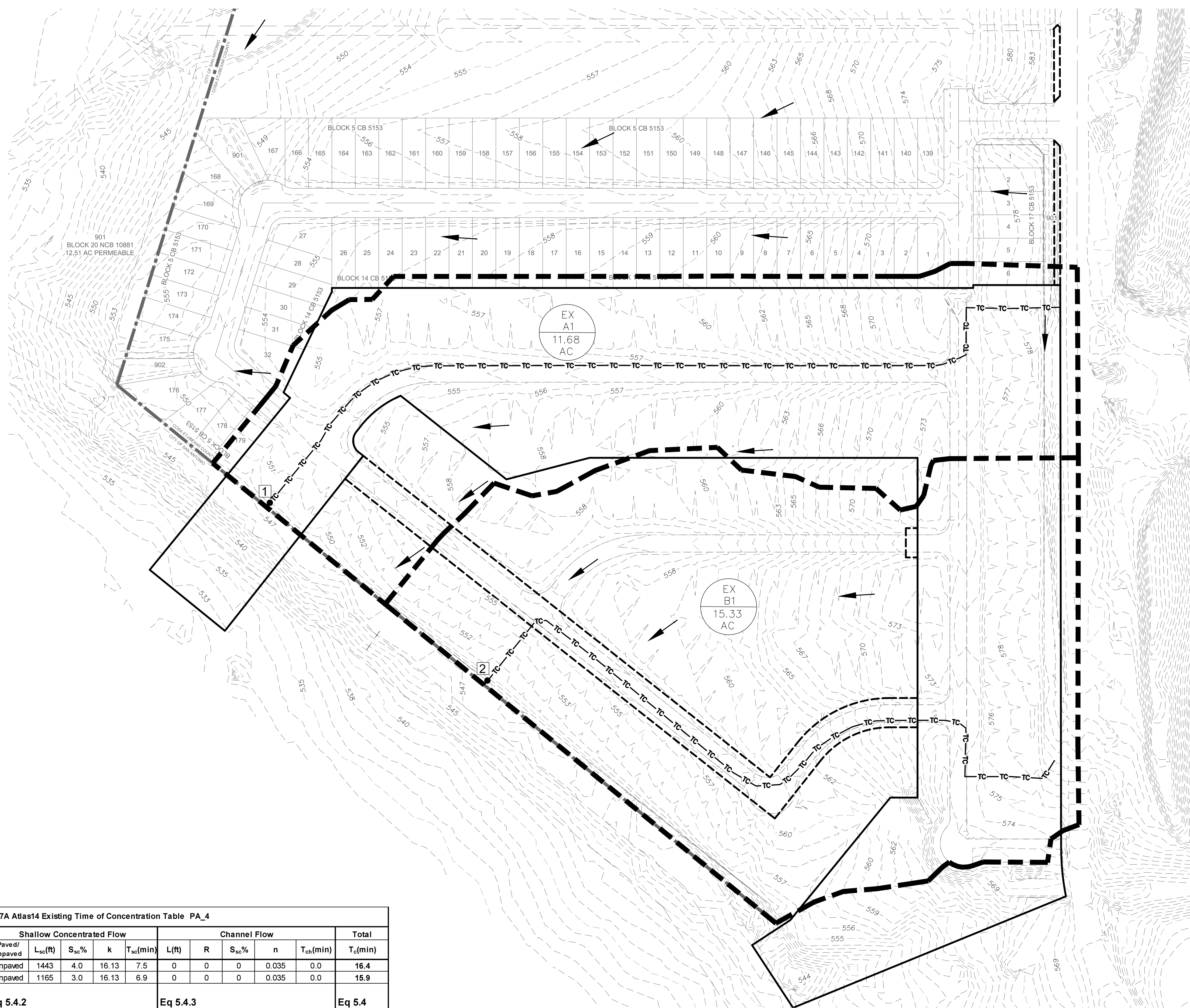
SHEET NO.

12

OF 28 SHEETS

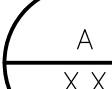














Agave Subdivision Unit 7A Atlas14 Existing Time of Concentration Table PA_4																
Drainage Basin(s)/ Analysis Points	Sheet Flow (max length = 100')					Shallow Concentrated Flow					Channel Flow				Total	
	n	L <sub>i</sub> (ft)	P <sub>2</sub> (in)	S <sub>i</sub> %	T <sub>i</sub> (min)	Paved/ Unpaved	L <sub>sc</sub> (ft)	S <sub>sc</sub> %	k	T <sub>sc</sub> (min)	L(ft)	R	S <sub>sc</sub> %	n	T <sub>ch</sub> (min)	T <sub>c</sub> (min)
EX A1 (POINT 1)	0.24	100	3.91	5.0	8.9	Unpaved	1443	4.0	16.13	7.5	0	0	0	0.035	0.0	16.4
EX B1 (POINT 2)	0.24	100	3.91	5.0	8.9	Unpaved	1165	3.0	16.13	6.9	0	0	0	0.035	0.0	15.9
	Eq. 5.4.1 $T_i = \frac{0.007(nL_i)^{0.8}}{(P_2)^{0.5} S_i^{0.4}}$					Eq 5.4.2 $T_{sc} = \frac{L_{sc}}{3600K_{Sc}^{0.5}}$					Eq 5.4.3 $T_{ch} = \frac{L_{ch}}{3600 \cdot 1.49/n \cdot R^{2/3} \cdot Sch^{1/2}}$				Eq 5.4 $T_i + T_{sc} + T_{ch}$	
Agave Subdivision Unit 7A Atlas14 Existing Q Flow Table PA_4																
Drainage Area		Coefficient	Intensity			Flow										
Area(s)	A (ac.)		I <sub>5</sub> (in/hr)	I <sub>25</sub> (in/hr)	I <sub>100</sub> (in/hr)	Q <sub>5</sub> (ft³/s)	Q <sub>25</sub> (ft³/s)	Q <sub>100</sub> (ft³/s)								
EX A1 (POINT 1)	11.68	0.67	5.00	6.90	8.59	39.13	53.97	67.23								
EX B1 (POINT 2)	15.33	0.67	5.08	7.01	8.74	52.20	72.04	89.76								
Eq 5.3.1																
Q = CIA																

# LEGEND

	AREA (BASIN) ACREAGE
	EXISTING CONTOUR
	PROPOSED CONTOUR
	DRAINAGE AREA LIMITS
	TIME OF CONCENTRATION PATH
	FLOW ARROWS
	PROPOSED BOUNDARY
	EXISTING LOT LINES
	REFERENCE POINT

AGAVE SUBDIVISION UNIT 7A  
LAND-PLAT-24-11800230  
EXISTING DRAINAGE AREA MAP

[illegible]

DATE:	10/11/2024
DESIGNED BY:	SM
DRAWN BY:	SM
CHECKED BY:	PF
DRAWING NAME:	sh_ExistingDMAP.dwg



**LJA Engineering, Inc.**

**LJA**

9830 Colomade Blvd  
Suite 300  
San Antonio, Texas 78230

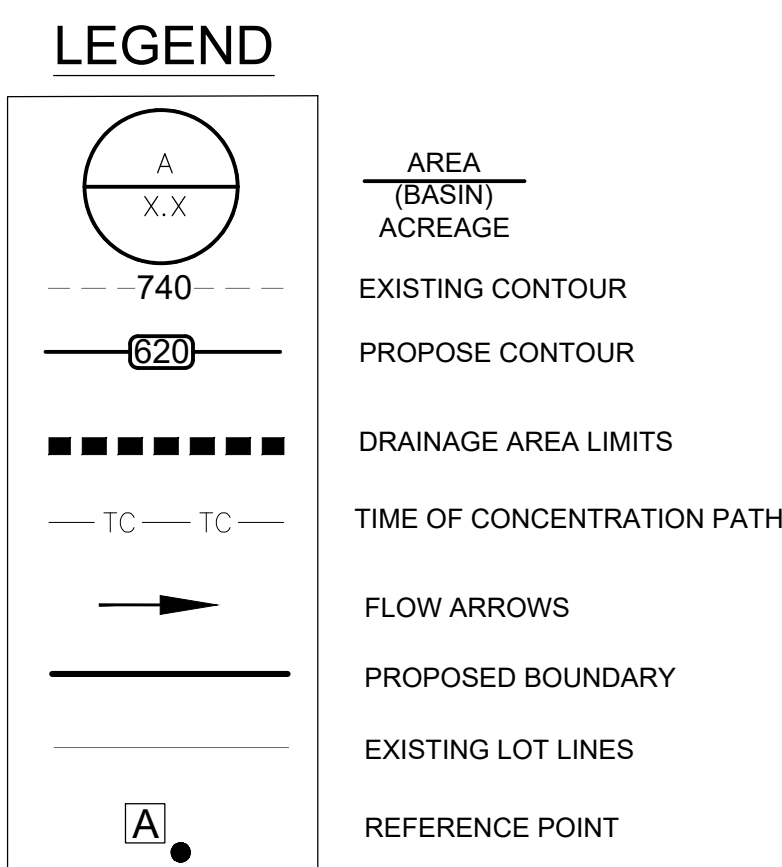
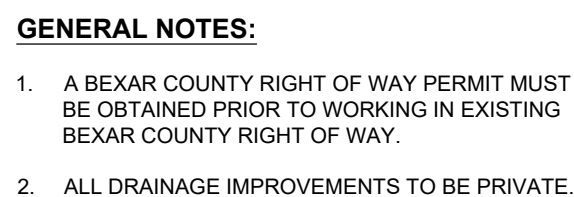
Phone 210.503.2700  
LJA.COM  
TBPE No. F-1386

JOB NUMBER:  
SA199-0403C-426

SHEET NO.

**15**

OF 28 SHEETS



AGAVE SUBDIVISION UNIT 7A  
LAND-PLAT-24-11800230  
ULTIMATE DRAINAGE AREA MAP

[illegible]

DATE:	10/11/2024
DESIGNED BY:	SM
DRAWN BY:	SM
CHECKED BY:	PF
DRAWING NAME:	sh_ProposedDMAI



**LJA Engineering, Inc.** **LJA**  
9830 Colomade Blvd  
Suite 300  
San Antonio, Texas 78230  
Phone 210-503-2700  
LJA.COM  
TBPE No. F-1386

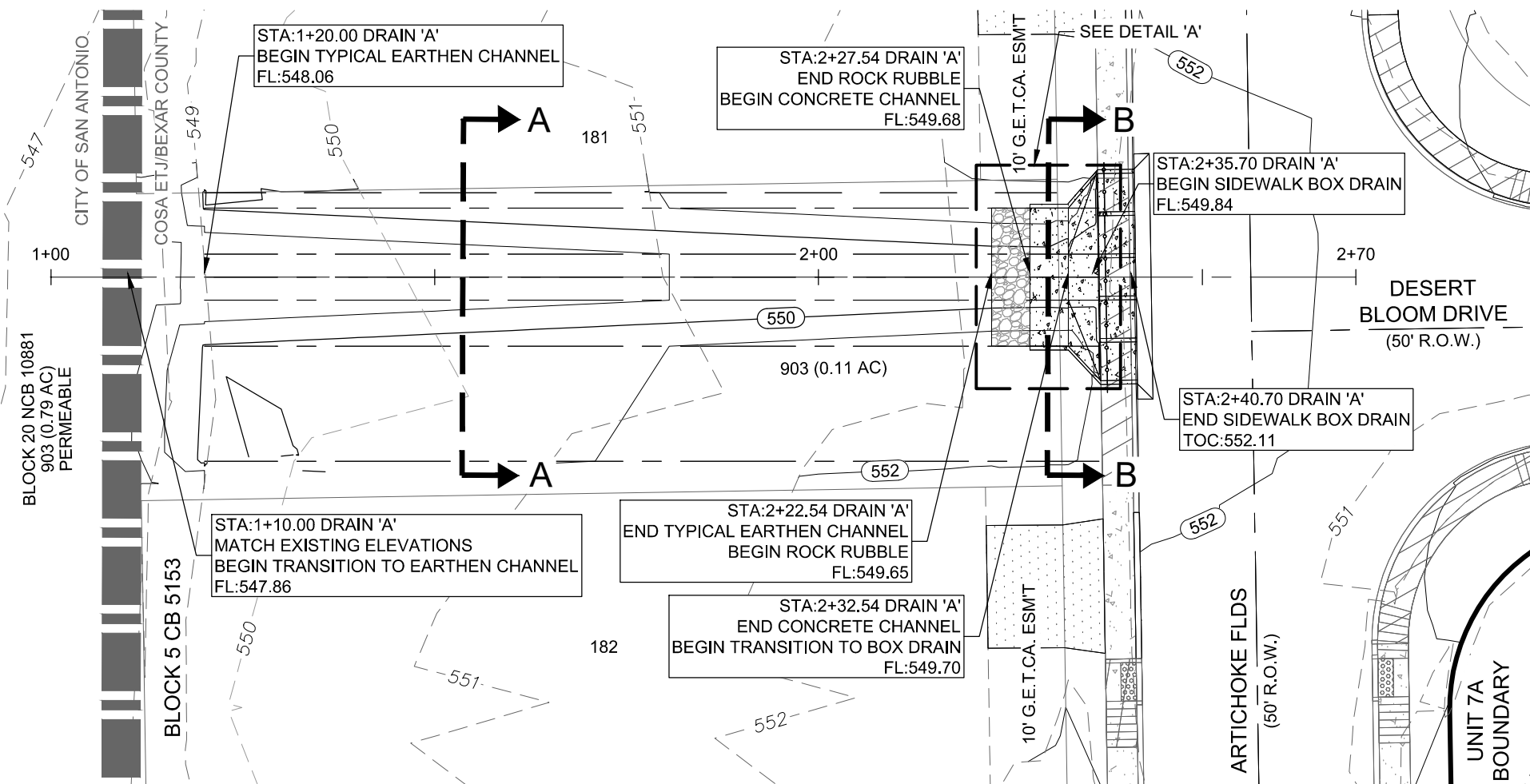
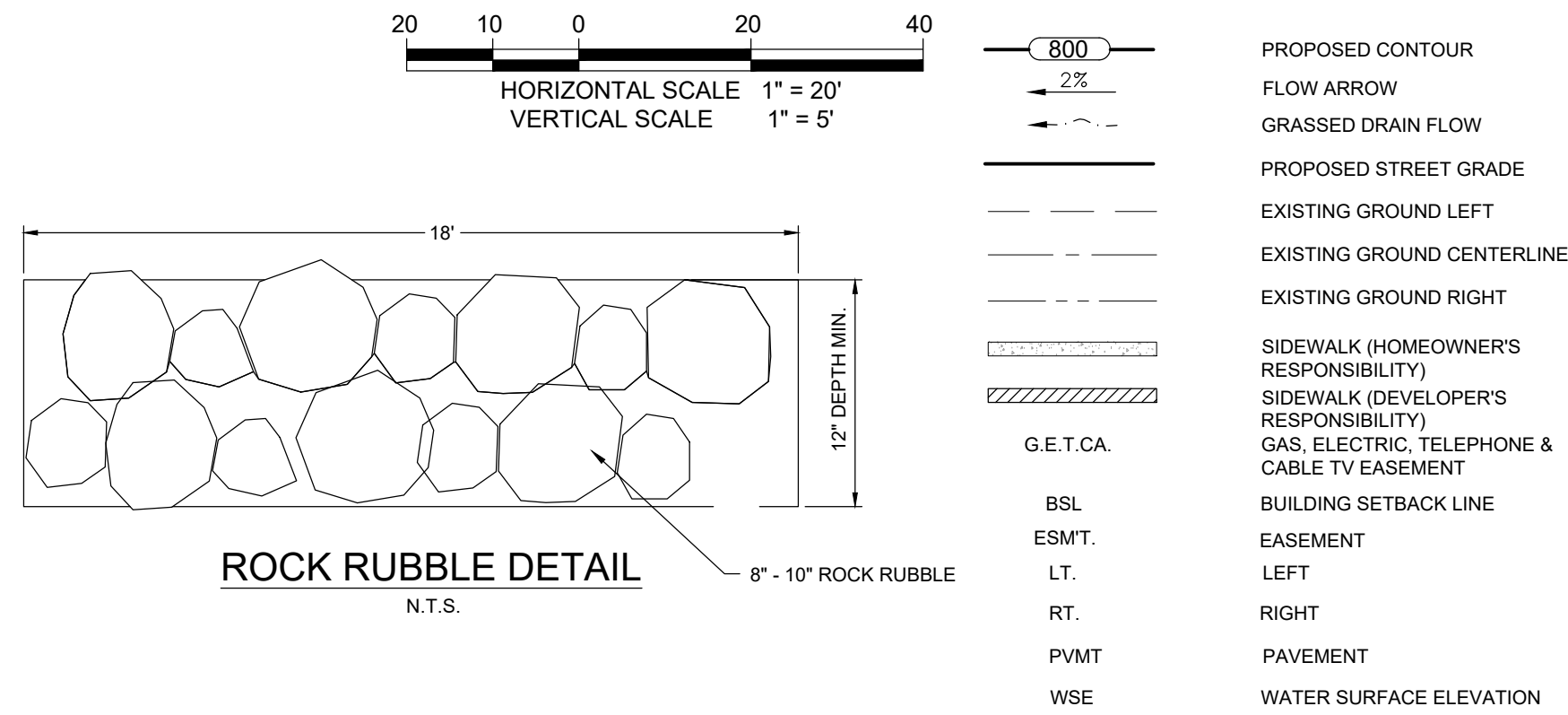
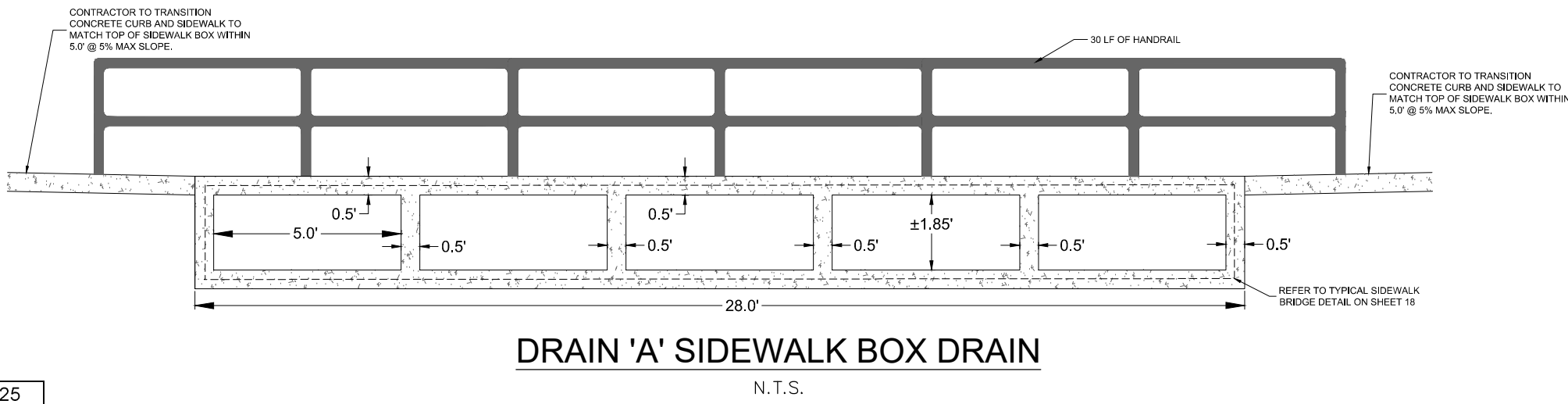
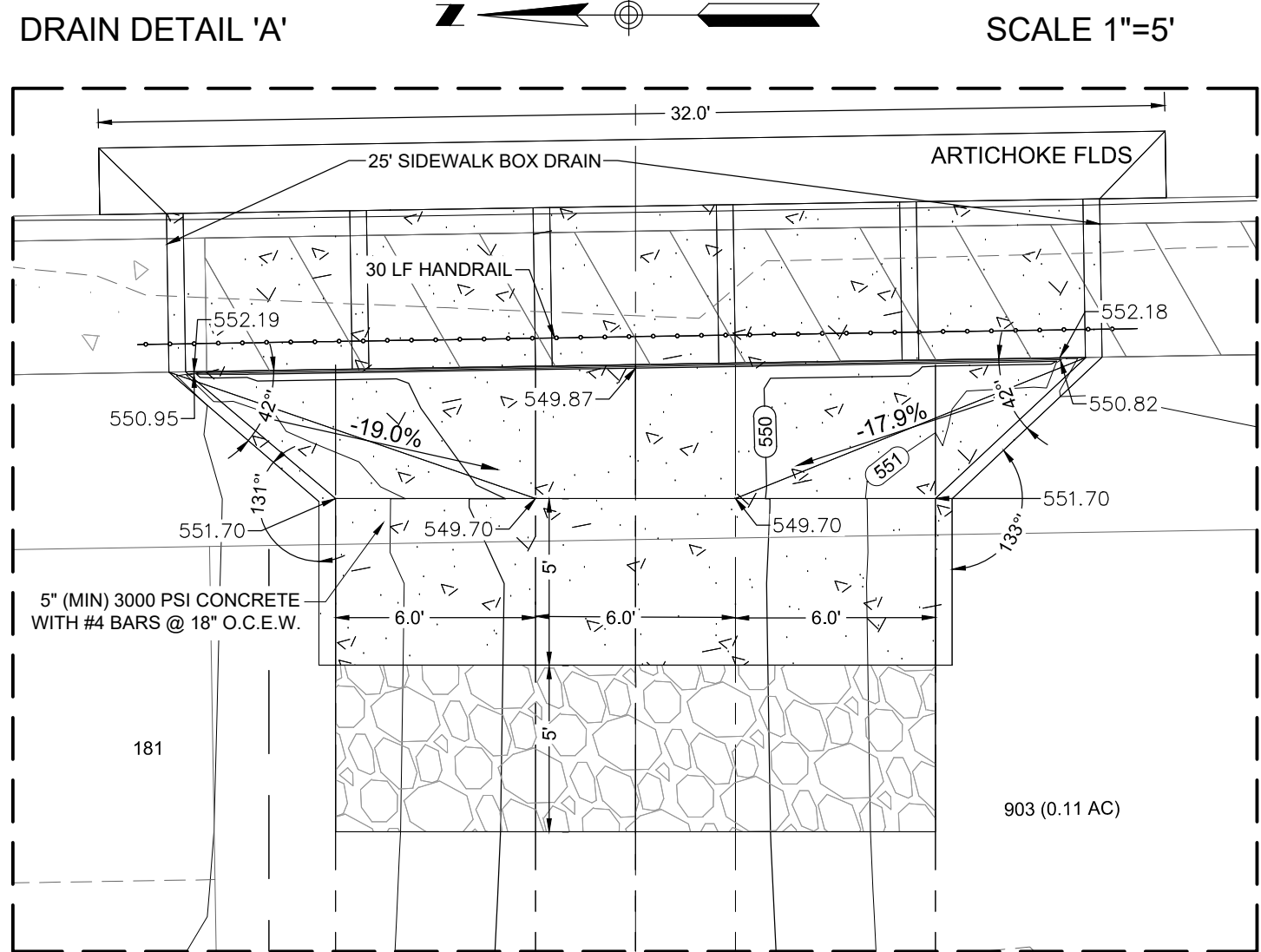
JOB NUMBER:  
SA199-0403C-426

User: jbran  
 Last Modified: Aug. 14, 24 - 10:30  
 Plot Date/Time: Oct. 11, 24 - 08:57:52

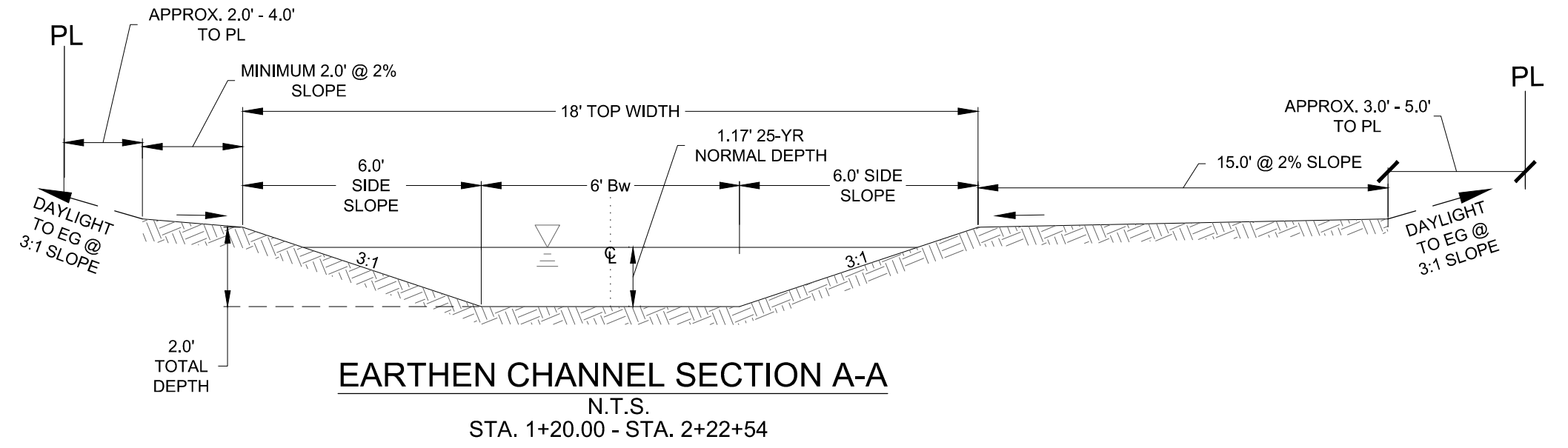
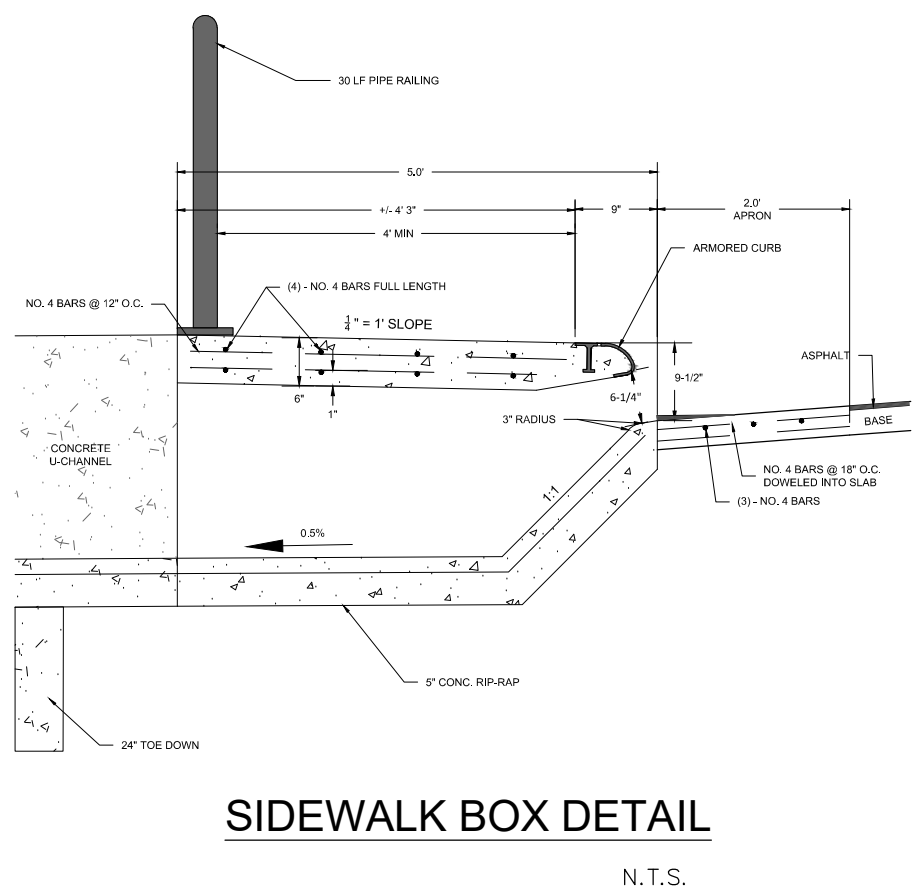
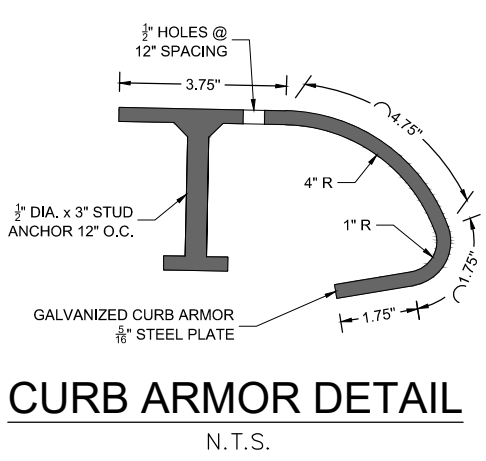
1. ALL CONCRETE LINING SHALL BE A MINIMUM OF FIVE (5) INCHES THICK AND REINFORCED WITH NO. 4 ROUND BARS @ 18 INCHES ON CENTER. EITHER WAY, ALL CONCRETE LINING SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF NOT LESS THAN THREE THOUSAND (3000) POUNDS PER SQUARE INCH IN TWENTY EIGHT (28) DAYS OF CURE. DOWNSTREAM SLOPES SHALL BE 36 INCHES UPSTREAM, 24 INCHES DOWNSTREAM, AND 18 INCHES OF SIDE SLOPES.
2. IMPROVED EARTHEN CHANNELS AND DETENTION PONDS WILL BE VEGETATED BY SEEDING OR SODDING. EIGHTY-FIVE PERCENT OF THE CHANNEL SURFACE AREA MUST HAVE ESTABLISHED VEGETATION BEFORE THE CITY OF SAN ANTONIO WILL ACCEPT THE CHANNEL FOR MAINTENANCE.
3. REFER TO SHEET 18 FOR CONCRETE RIP-RAp DETAILS.
4. ALL DRAINAGE IMPROVEMENTS TO BE PRIVATE.

Name	Q100	Q25	Q100	Q25	Q100	Q25
BEGIN STA	1+10.00	1+10.00	1+20.00	1+20.00	2+27.54	2+27.54
END STA	1+20.00	1+20.00	2+22.54	2+22.54	2+32.54	2+32.54
Q (cfs)	66.26	52.35	66.26	52.35	66.26	52.35
h <sub>u</sub> (ft)	2.00'	2.00'	2.00'	2.00'	2.00'	2.00'
b <sub>u</sub> (ft)	6.00'	6.00'	6.00'	6.00'	6.00'	6.00'
z (-):1 left	3	3	3	3	3	3
z (-):1 right	3	3	3	3	3	3
w <sub>u</sub> (ft)	18.0	18.0	18.0	18.0	18.0	18.0
n	0.035	0.035	0.035	0.035	0.015	0.015
Slope (%)	2.05%	2.05%	1.55%	1.55%	0.50%	0.50%
d <sub>u</sub> (ft)	1.22'	1.09'	1.32'	1.17'	1.14'	1.01'
V (fps)	5.52	5.18	4.99	4.69	6.11	5.73

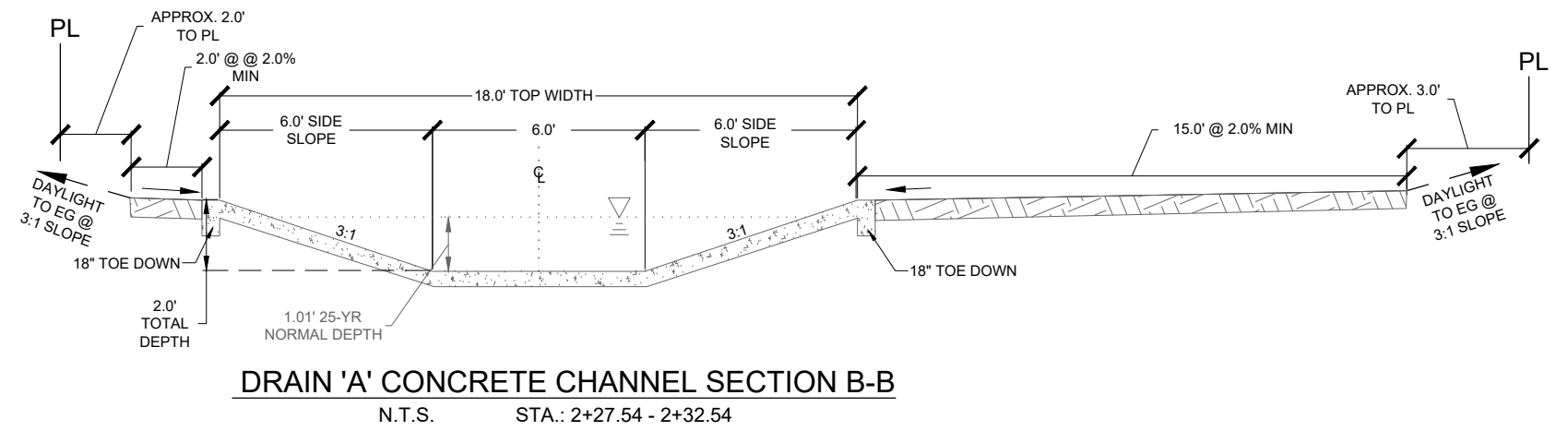
DRAIN 'A' SIDEWALK BOX			
$Q = C(L(h))^{1/2}$ 8.3.2.a			
Amount of flow in CFS =	$Q$ (cfs)		52.35 ft <sup>3</sup> /sec
The Weir coefficient 3.087 =	C		3.087
The length of drop curb opening required in feet =	$L_k$		24.15 ft
Length Provided =	$L_p$		25.00 ft
The head or depth of water at the opening in feet =	$h$		0.79 ft
	$h^{3/2}$ (3/2)		0.70 ft <sup>3/2</sup>
CHECK		52.35 ft <sup>3</sup> /sec	

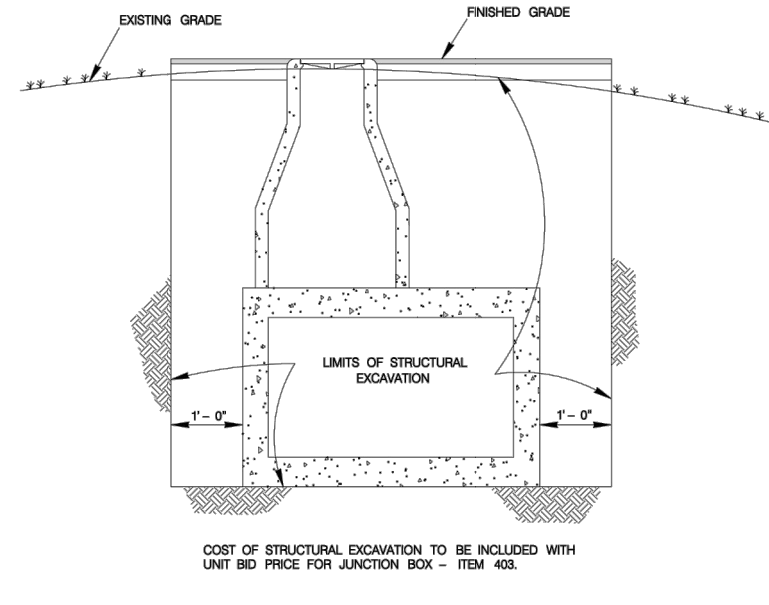


DRAIN 'A' STA. 1+00 TO END

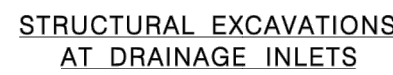


DRAIN 'A'	
$\tau_d = \gamma R S$	Retardance Class 'C' Vegetation
$\tau_d$ = average shear stress at normal depth	$\tau_d = 0.80 \text{ lb/ft}^2$
$\gamma$ = unit weight of water	62.4 lb/ft
$R$ = hydraulic radius	0.83 ft
$S$ = channel slope	$S = 1.55\%$

[illegible]

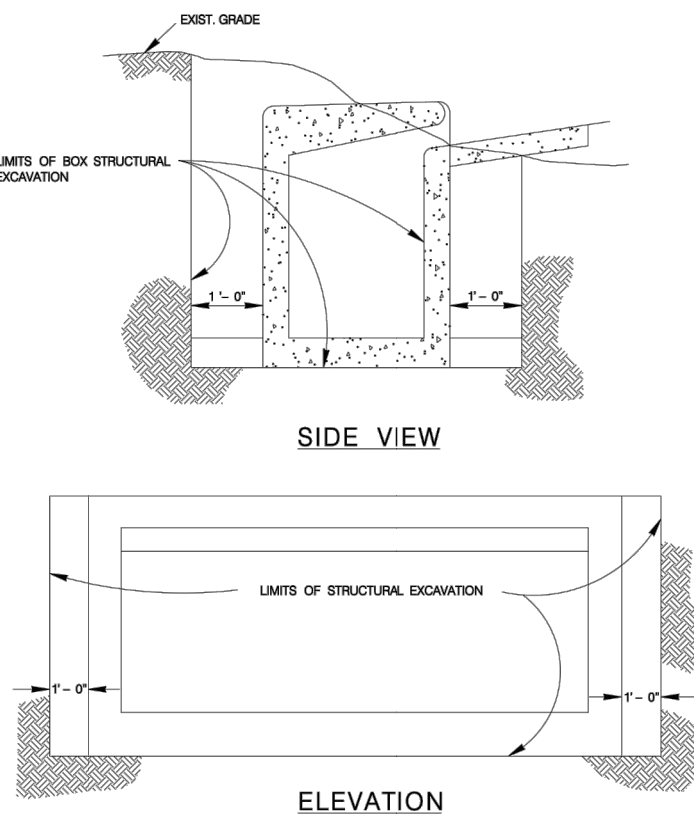


### STRUCTURAL EXCAVATION AT JUNCTION BOXES



PRECAST BOX CULVERT

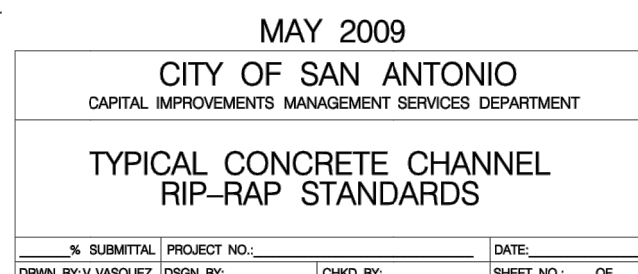
### CONCRETE BOX CULVERT



## STRUCTURAL EXCAVATIONS AT DRAINAGE INLETS

PRECAST BOX CULVERT

### CONCRETE BOX CULVERT

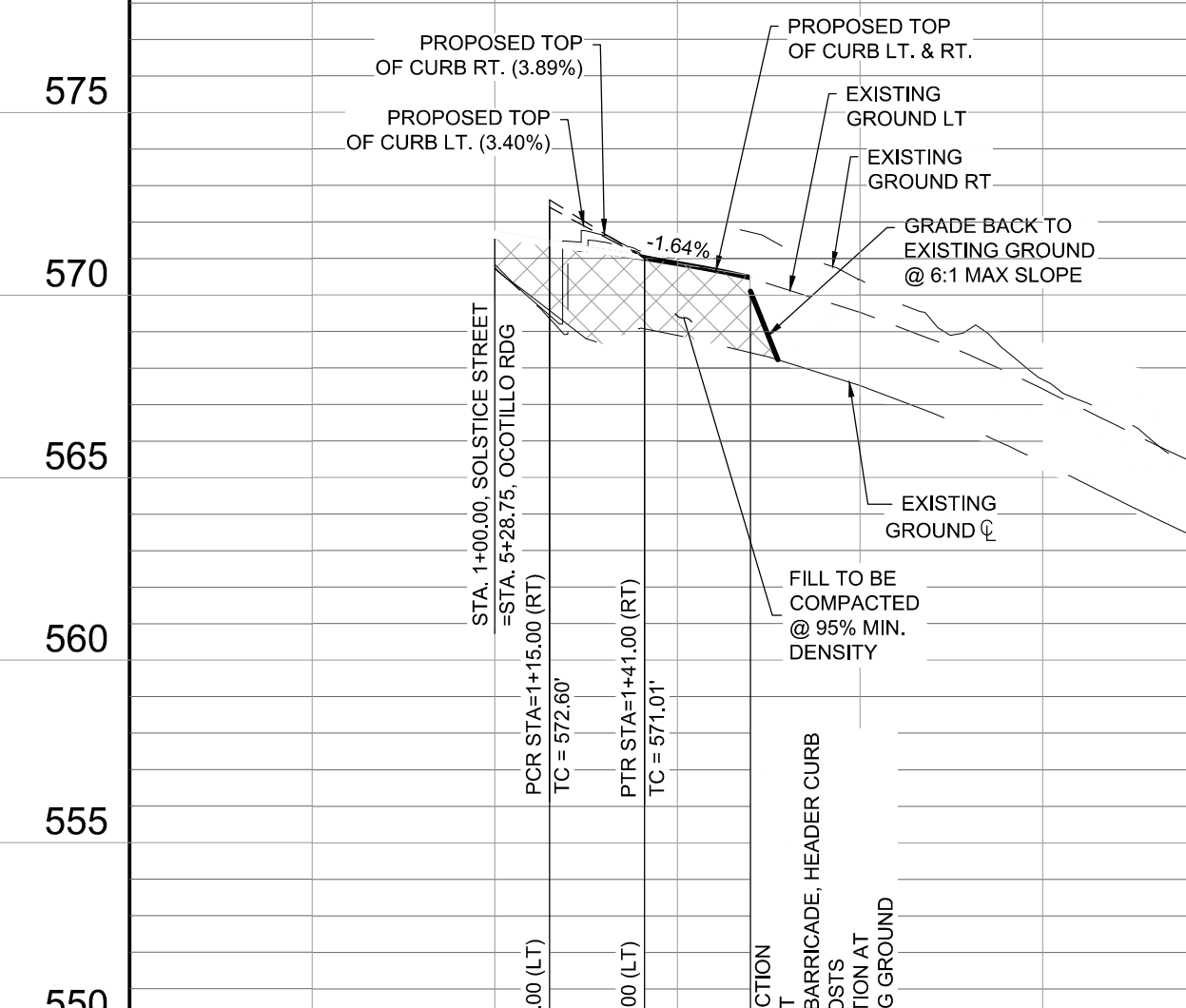
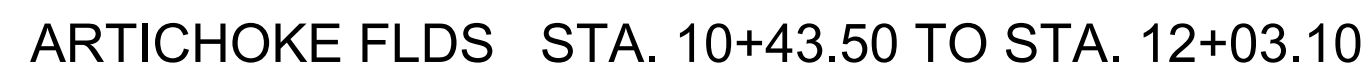


TYPICAL SIDEWALK BRIDGE &  
SIDEWALK PIPE RAILING SECTION

### PIPE ANCHORAGE DETAILS

1. ALL HANDICAP RAMPS TO BE TYPE I OR IF AS NOTED, REFER TO SHEET 25.
2. ALL ELEVATIONS ARE TOP OF CURB UNLESS OTHERWISE NOTED.
3. PROPOSED STREET LIGHTS SHALL BE LOCATED BEHIND THE BACK OF SIDEWALK AND INSTALLED PER THE CPS DESIGN.
4. STREETS AND DRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF SAN ANTONIO STANDARD SPECIFICATIONS FOR CONSTRUCTION.
5. REFER TO SHEET 23 FOR STREET AND PAVEMENT SECTION DETAIL, CONCRETE CURB DETAIL, AND SIDEWALK DETAIL.
6. CONTRACTOR TO FIELD VERIFY ALL MATCH EXISTING ELEVATIONS, SEWER MANHOLE INVERTS, STORM DRAIN INVERTS, AND OTHER UTILITIES PRIOR TO UTILITY WORK AND NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES.
7. CONTRACTOR IS TO MATCH EXISTING PAVEMENT, SIDEWALK, AND CURB ELEVATIONS.

ONE CALL AT 1-800-245-4545 48 HOURS PRIOR TO CONSTRUCTION FOR UTILITY LINE LOCATE. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY SIGNIFICANT DISCREPANCIES OR REQUIRE DESIGN CHANGES. EXISTING UTILITIES SHOWN HEREON ARE FOR INFORMATIONAL PURPOSES ONLY. ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THIS INFORMATION.

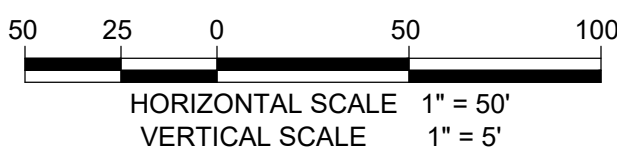


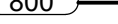



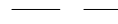
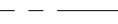






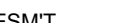
<b>LJA Engineering, Inc.</b> 9830 Colorado Blvd Suite 300 San Antonio, Texas 78230		<b>LJA</b> Phone 210.503.2700 LJA.COM TBPE No. F-1386		10/11/2022 PRISCILLA G. FLORES 108974 LICENSED PROFESSIONAL ENGINEER <i>Priscilla G. Flores</i>		DATE: 10/11/2024 DESIGNED BY: SM DRAWN BY: MAP CHECKED BY: PF DRAWING NAME: art_Sheet P&P - Artichoke Pils.dwg		REVISIONS NO. DESCRIPTION BY DATE		AGAVE SUBDIVISION UNIT 7A LAND-PLAT-24-11800230 ARTICHOKE ELDS STA. 10+43.50 TO STA. 12+03.10 & SOLSTICE STREET STA. 1+00 TO STA. 1+70 PLAN & PROFILE	
JOB NUMBER: SA199-0403C-426				SHEET NO. 19 OF 28				SHEET NO. 19 OF 28			

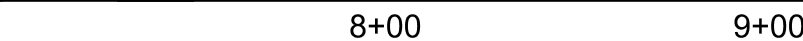
1. ALL HANDICAP RAMPS TO BE TYPE I OR II AS NOTED. REFER TO SHEET 25.
2. ALL ELEVATIONS ARE TOP OF CURB UNLESS OTHERWISE NOTED.
3. PROPOSED STREET LIGHTS SHALL BE LOCATED BEHIND THE BACK OF SIDEWALK AND INSTALLED PER THE CPS DESIGN.
4. STREETS AND DRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF SAN ANTONIO STANDARD SPECIFICATIONS FOR CONSTRUCTION.
5. REFER TO SHEET 23 FOR STREET AND PAVEMENT SECTION DETAIL, CONCRETE CURB DETAIL, AND SIDEWALK DETAIL.
6. CONTRACTOR TO FIELD VERIFY ALL MATCH EXISTING ELEVATIONS, SEWER MAINS, E, INVERTS, AND DRAIN INVERTS, AND ALL OTHER UTILITIES PRIOR TO UTILITY WORK AND NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES.
7. CONTRACTOR IS TO MATCH EXISTING PAVEMENT, SIDEWALK, AND CURB ELEVATIONS.

# CAUTION:

CONTRACTOR TO NOTIFY TEXAS  
ONE CALL AT 1-800-245-4545 48 HOURS PRIOR TO CONSTRUCTION  
FOR UTILITY LINE LOCATE. CONTRACTOR SHALL VERIFY  
HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES  
PRIOR TO CONSTRUCTION. ENGINEER SHALL BE NOTIFIED  
IMMEDIATELY OF ANY SIGNIFICANT DISCREPANCIES OR REQUIRED  
DESIGN CHANGES. EXISTING UTILITIES SHOWN HEREON ARE FOR  
INFORMATIONAL PURPOSES ONLY. ENGINEER ASSUMES NO  
RESPONSIBILITY FOR THE ACCURACY OF THIS INFORMATION.



	PROPOSED CONTOUR
	FLOW ARROW
	GRASSED DRAIN FLOW
	PROPOSED STREET GRADE
	EXISTING GROUND LEFT
	EXISTING GROUND CENTERLINE
	EXISTING GROUND RIGHT
	SIDEWALK (HOMEOWNER'S RESPONSIBILITY)
	SIDEWALK (DEVELOPER'S RESPONSIBILITY)
G.E.T.CA.	GAS, ELECTRIC, TELEPHONE & CABLE TV EASEMENT
BSL	BUILDING SETBACK LINE
ESMT.	EASEMENT
LT.	LEFT
RT.	RIGHT
	WITHOUT CROWN
	WITHOUT FLOW ARROW
	TYPE I SIDEWALK RAMP DEVELOPER RESPONSIBLE
	TYPE II SIDEWALK RAMP DEVELOPER RESPONSIBLE



AGAVE SUBDIVISION UNIT 7A  
LAND-PLAT-24-11800230  
MOJAVE TERRACE STA. 8+02.32 TO END &  
PRICKLY PEAR PLACE STA. 1+19.62 TO 2+94.85 PLAN & PROFILE

[illegible]

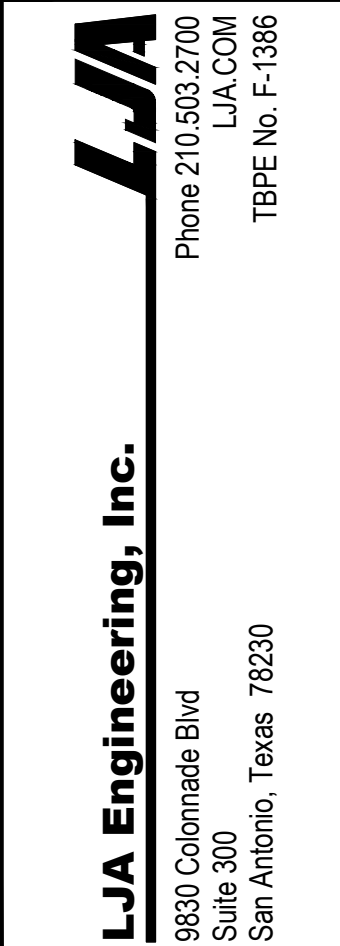
DATE: 10/11/2024

DESIGNED BY: SM

DRAWN BY: MAP

CHECKED BY: PF

DRAWING NAME:  
sh\_Street P&P\_Prickly Pear Place.dwg



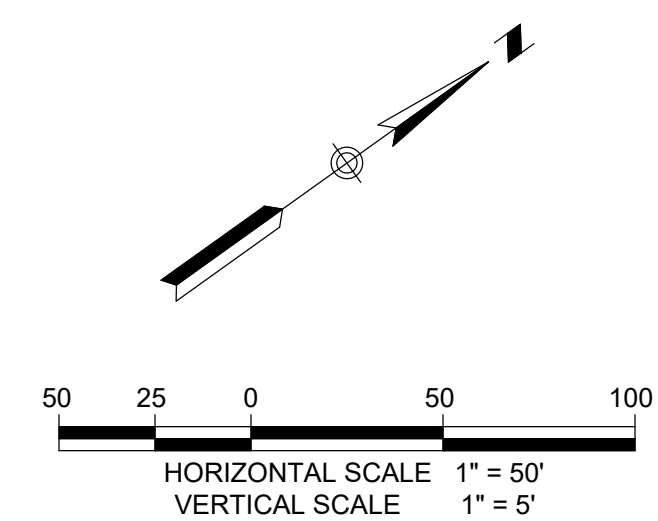
JOB NUMBER:  
SA199-0403C-426

SHEET NO.

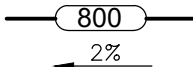




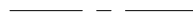


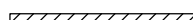
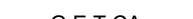








20  
OF 28 SHEETS

1. ALL HANDICAP RAMPS TO BE TYPE I OR II AS NOTED, REFER TO SHEET 25.
2. ALL ELEVATIONS ARE TOP OF CURB UNLESS OTHERWISE NOTED.
3. PROPOSED STREET LIGHTS SHALL BE LOCATED BEHIND THE BACK OF SIDEWALK AND INSTALLED PER THE CPS DESIGN.
4. STREETS AND DRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF SAN ANTONIO STANDARD SPECIFICATIONS FOR CONSTRUCTION.
5. REFER TO SHEET 23 FOR STREET AND PAVEMENT SECTION DETAIL, CONCRETE CURB DETAIL, AND SIDEWALK DETAIL.
6. CONTRACTOR TO FIELD VERIFY ALL MATCH EXISTING ELEVATIONS, SEWER MANHOLE INVERTS, STREET DRAIN INVERTS, AND ALL OTHER UTILITIES PRIOR TO UTILITY WORK AND NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES.
7. CONTRACTOR IS TO MATCH EXISTING PAVEMENT, SIDEWALK, AND CURB ELEVATIONS.

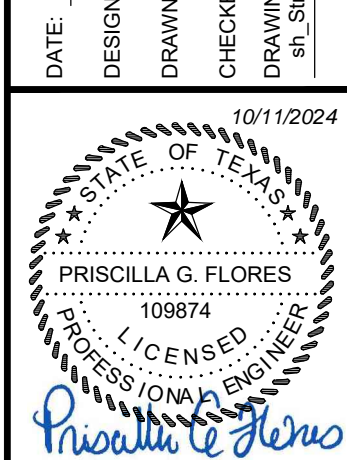
**CAUTION:** CONTRACTOR TO NOTIFY TEXAS ONE CALL AT 1-800-245-4545 48 HOURS PRIOR TO CONSTRUCTION FOR UTILITY LINE LOCATE. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY SIGNIFICANT DISCREPANCIES OR REQUIRE DESIGN CHANGES. EXISTING UTILITIES SHOWN HEREON ARE FOR INFORMATIONAL PURPOSES ONLY. ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THIS INFORMATION.



# LEGEND

	PROPOSED CONTOUR
	FLOW ARROW
	GRASSED DRAIN FLOW
	PROPOSED STREET GRADE
	EXISTING GROUND LEFT
	EXISTING GROUND CENTERLINE
	EXISTING GROUND RIGHT
	SIDEWALK (HOMEOWNER'S RESPONSIBILITY)
	SIDEWALK (DEVELOPER'S RESPONSIBILITY)
	GAS, ELECTRIC, TELEPHONE & CABLE TV EASEMENT
	BUILDING SETBACK LINE
	EASEMENT
	LEFT
	RIGHT
	WASHOUT CROWN
	WASHOUT FLOW ARROW
	TYPE I SIDEWALK RAMP
	TYPE II SIDEWALK RAMP

## OCOTILLO RDG STA. 2+94.85 TO END



**LJA Engineering, Inc.**  
9830 Colomade Blvd  
Suite 300  
San Antonio, Texas 78230  
PH

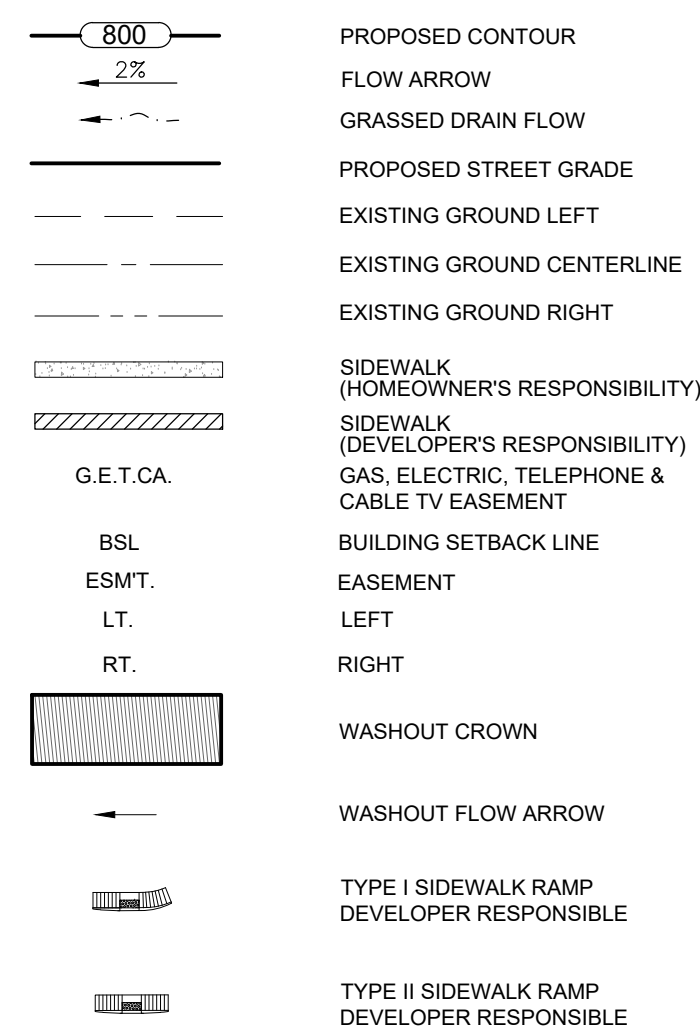
SHEET NO. **21**  
OF 28 SHEETS

AGAVE SUBDIVISION UNIT 7A  
LAND-PLAT-24-11800230  
OCOTILLO RDG PLAN & PROFILE  
STA. 2+94.85 TO END

1. ALL HANDICAP RAMPS TO BE TYPE I OR II AS NOTED, REFLECT TO SHEET 25.
2. ALL ELEVATIONS ARE TOP OF CURB UNLESS OTHERWISE NOTED.
3. PROPOSED STREET LIGHTS SHALL BE LOCATED BEHIND THE BACK OF SIDEWALK AND INSTALLED PER THE CPS DESIGN.
4. STREETS AND DRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF SAN ANTONIO STANDARD SPECIFICATIONS FOR CONSTRUCTION.
5. REFER TO SHEET 23 FOR STREET AND PAVEMENT SECTION DETAIL, CONCRETE CURB DETAIL, AND SIDEWALK DETAIL.
6. CONTRACTOR TO FIELD VERIFY ALL MATCH EXISTING ELEVATIONS, SEWER MANHOLE INVERTS, STORM DRAIN INVERTS, AND ALL OTHER UTILITIES PRIOR TO UTILITY WORK AND NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES.
7. CONTRACTOR IS TO MATCH EXISTING PAVEMENT, SIDEWALK, AND CURB ELEVATIONS.

**CAUTION:** CONTRACTOR TO NOTIFY TEXAS ONE CALL AT 1-800-245-4545 48 HOURS PRIOR TO CONSTRUCTION FOR UTILITY LINE LOCATE. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY SIGNIFICANT DISCREPANCIES OR REQUIRED DESIGN CHANGES. EXISTING UTILITIES SHOWN HEREON ARE FOR INFORMATIONAL PURPOSES ONLY. ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THIS INFORMATION.

ONE CALL AT 1-800-245-4545 48 HOURS PRIOR TO CONSTRUCTION FOR UTILITY LINE LOCATE. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY SIGNIFICANT DISCREPANCIES OR REQUIRED DESIGN CHANGES. EXISTING UTILITIES SHOWN HEREON ARE FOR INFORMATIONAL PURPOSES ONLY. ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THIS INFORMATION.



AGAVE SUBDIVISION UNIT 7A  
LAND-PLAT-24-11800230  
DESERT BLOOM DRIVE PLAN & PROFILE  
STA. 1+00 TO END

[illegible]

DATE: 10/11/2024

DESIGNED BY: SM

DRAWN BY: MAP

CHECKED BY: PF

DRAWING NAME:  
Street P&P\_Desert Bloom Drive.dwg



**LJA**  
Phone 210.503.2700  
LJA.COM  
TTBPE No. F-1386

**LJA Engineering, Inc.**

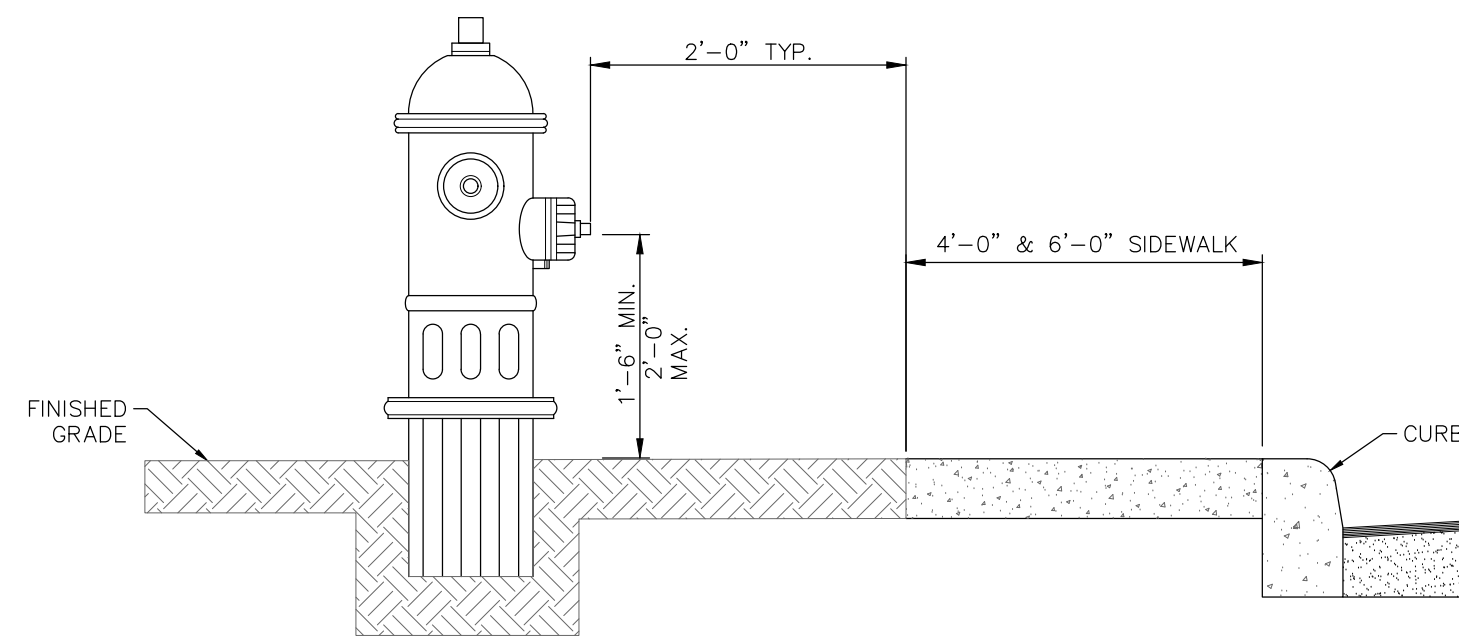
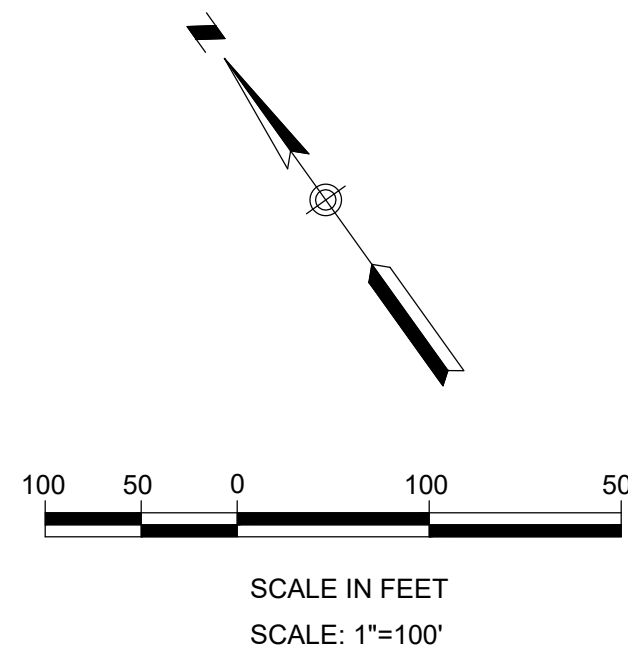
JOB NUMBER:  
SA199-0403C-426

SHEET NO.

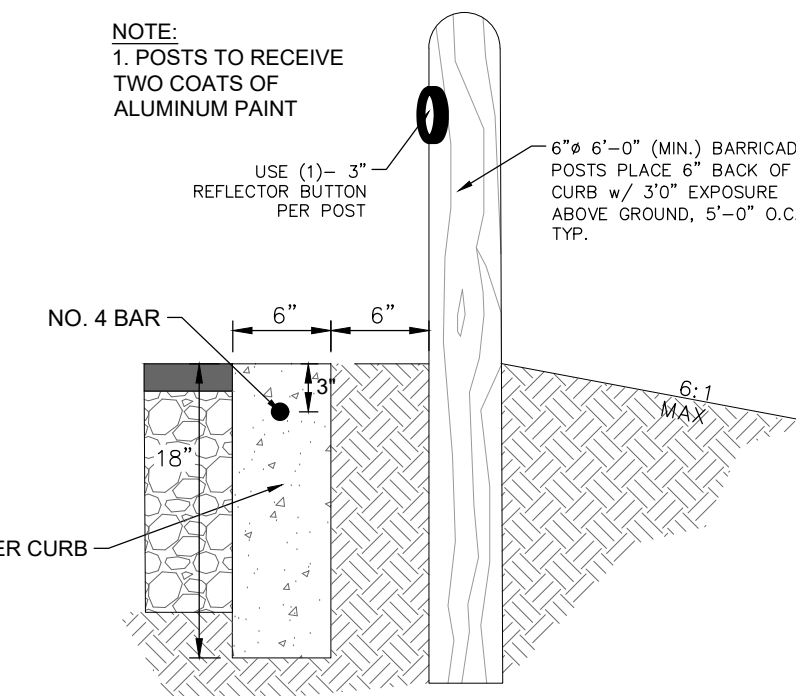
22

OF 28 SHEETS

User: jaron  
 Oct. 08, 24 - 10:31  
 Last Modified:  
 Plot Date/Time: Oct. 11, 24 - 09:03:04



FIRE HYDRANT LOCATION (WITH SIDEWALK)



### HEADER CURB & BARRICADE POST DETAIL

A BEXAR COUNTY RIGHT OF WAY PERMIT MUST BE OBTAINED PRIOR TO WORKING IN EXISTING BEXAR COUNTY RIGHT OF WAY.

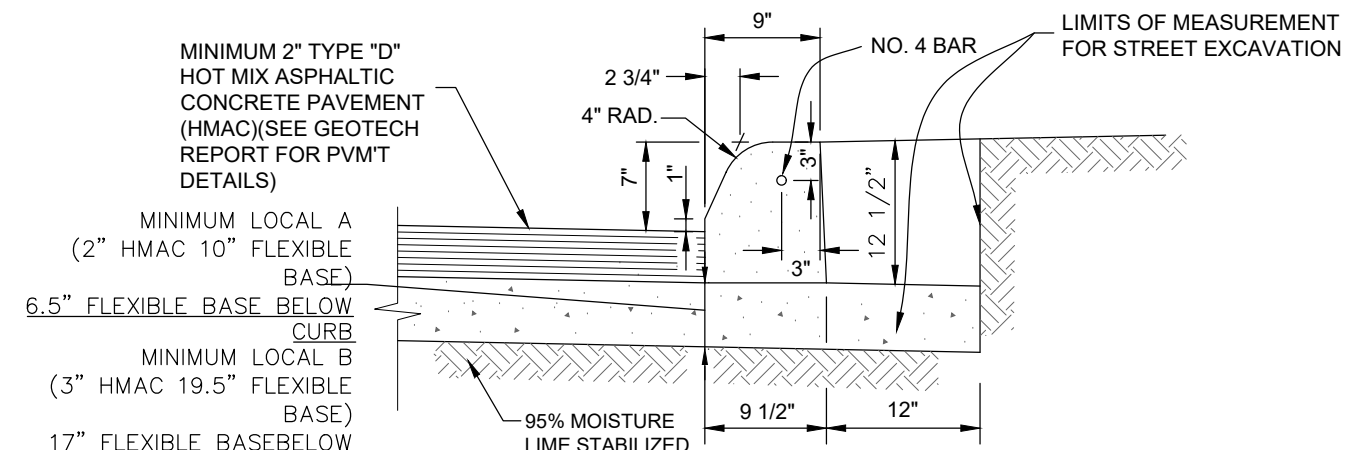
**CONSTRUCTION VERIFICATION NOTES:**

FOR CONSTRUCTION VERIFICATION THE FOLLOWING SHALL BE CONDUCTED IN THE FIELD:

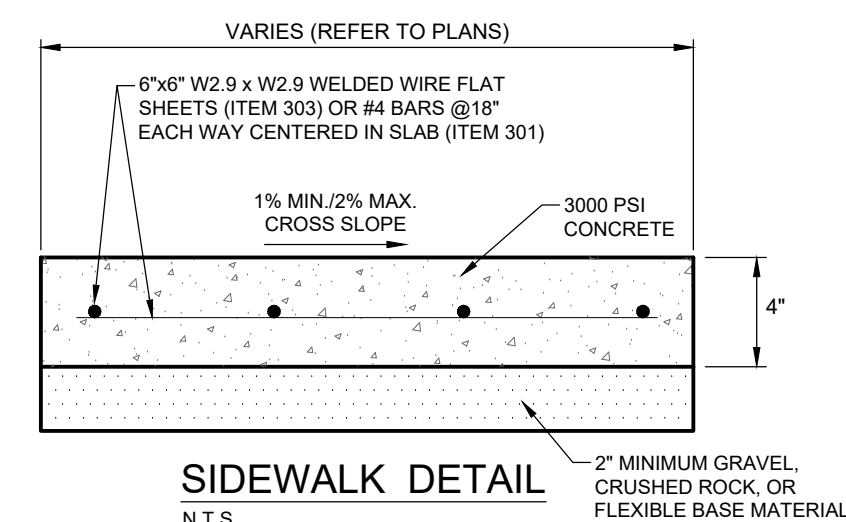
- AFTER MIXING THE SOIL-LIME MIXTURE SHALL ALLOW FOR A PERIOD OF 2 TO THREE (2-3) DAYS, MAINTAIN MOISTURE DURING MELLOWING.
- AFTER ALLOWING THE MIXTURE TO MELLOW, THE POLYMERIZATION SHALL BE CHECKED USING THE FOLLOWING CRITERIA (REMOVE NON-SLAKING AGGREGATES RETAINED ON THE 3/4" SIEVE FROM SAMPLE)
- 2.1. MINIMUM PASSING 1 1/2" SIEVE: 100%
  - 2.2. MINIMUM PASSING 3/4" SIEVE: 85%
  - 2.3. MINIMUM PASSING NO. 4 SIEVE: 60%
3. SAMPLE SOIL-LIME MIXTURE FOR DETERMINATION OF MAXIMUM DRY DENSITY (MDD). IN THE LABORATORY, MOLD SPECIMENS TO 95% OF MDD AT OPTIMUM MOISTURE CONTENT AND VERIFY USE TO 100% OF MDD FOR FIELD DRY DENSITY. (NOTE: 95% OF MDD IS THE MINIMUM DRY DENSITY FOR MIXTURE DESIGN. COMPACT AND CHECK FIELD DENSITY (MINIMUM OF 95% OF MDD REQUIRED).
4. CURE FOR AN ADDITIONAL 20 TO 50 DAYS (TOTAL MELLOWING AND CURING TIME SHOULD TOTAL AT LEAST 5 DAYS).
5. VERIFY DEPTH OF LIME STABILIZED LAYER TO DEPTH AS NOTED ON PLAN TO WITHIN +/- 1.0 INCH.

PAVEMENT SECTION TABLE CBR = 2.5	LOCAL A	LOCAL B
HOT MIX ASPHALT CONCRETE (TYPE "D") DEPTH:	2.0"	TYPE D = 3"
AGGREGATE BASE (TYPE A GRADE 1 AND 2) DEPTH:	10.00"	19.50"
LIME STABILIZED SUBGRADE (SEE NOTE 3):	6.00"	8.00"

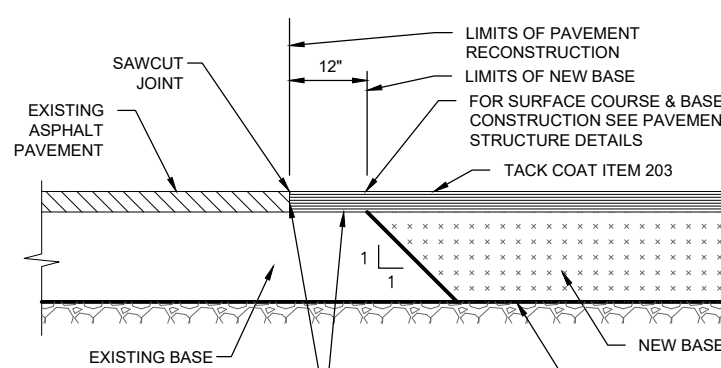
1. CONTRACTOR TO REFER TO GEOTECHNICAL ENGINEERING BY INTEC TESTING DATED JANUARY 15, 2021 FOR PAVEMENT DESIGN SPECIFICATIONS, INTEC REPORT NO. S201467.
2. MINIMUM OF 4" FLEXIBLE BASE OR 2" OF ASPHALT TREATED BASE IS REQUIRED UNDERNEATH THE CURB (REFER TO PAVEMENT & CURB DETAILS).
3. HYDRATED LIME SHOULD BE MIXED WITH THE SUBGRADE SOILS IN ACCORDANCE WITH TxDOT ITEM 280. LIME STABILIZED TO A MINIMUM DEPTH OF 8 AS NOTED ABOVE ON AN APPLICATION RATE OF 7 PERCENT OF THE DRY WEIGHT OF THE SOIL TO BE TREATED. THE SUBGRADE SOILS SHOULD BE TESTED FOR SOIL SULFATE CONTENT PRIOR TO STABILIZATION. IF THE SOIL SULFATE CONTENT IS HIGH, AND ALTERNATE PROCEDURE WILL BE NEEDED. LIME APPLICATION RATE OF 31.0 LBS PER SQ YARD FOR 8-INCH DEPTH OF STABILIZATION IS RECOMMENDED. LIME APPLICATION RATE OF 42 LBS PER SQ YARD FOR 8-INCH DEPTH OF STABILIZATION IS RECOMMENDED.
4. GEOTECHNICAL ENGINEER TO BE ON SITE TO MAKE FINAL SUBGRADE DETERMINATION. CHANGES TO THIS PAVEMENT DESIGN SHALL BE SUBMITTED TO COSA-SDSD AND BEXAR COUNTY PRIOR TO PLACEMENT OF BASE MATERIAL.
5. BASED ON THE THICKNESS OF THE CLAYS ENCOUNTERED IN THE BORINGS, THE ANTICIPATED FINAL PAVEMENT SUBGRADE PLASTICITY INDEX VALUE IS TO BE LESS THAN OR EQUAL TO 20 OR GREATER THAN 20.
  - IF THE SUBGRADE PLASTICITY INDEX VALUES ARE LESS THAN OR EQUAL TO 20, AS PER CITY OF SAN ANTONIO OR BEXAR COUNTY REQUIREMENTS, SUBGRADE STABILIZATION IS NOT REQUIRED.
  - IF THE FINAL STRAIGHT SUBGRADE PLASTICITY INDEX VALUES ARE GREATER THAN 20, THEN THE SUBGRADE SHOULD BE STABILIZED USING LIME OR CEMENT. LIME APPLICATION RATES ARE SHOWN IN NOTE 3.
6. SUBGRADE SOILS SHOULD BE TESTED FOR SOIL SULFATE CONTENT PRIOR TO STABILIZATION. IF THE SOIL SULFATE CONTENT IS HIGHER THAN 3,000 PPM, AN ALTERNATE PROCEDURE WILL BE NEEDED.
7. THE FINAL PAVEMENT SUBGRADE SHOULD BE VERIFIED BY INTEC.
8. PAVEMENT SECTION RECOMMENDATIONS ARE BASED ON A SUBGRADE CBR VALUE OF 2.5. THE PAVEMENT RECOMMENDATIONS ARE NOT BASED ON THE SHRINK/SWELL CHARACTERISTICS OF THE UNDERLYING SOILS.
9. THE FINAL PAVEMENT SUBGRADE SHOULD BE VERIFIED BY INTEC.
10. IF FILL IS USED TO RAISE THE GRADE, FILL MATERIAL UNDERNEATH THE PAVEMENT SHOULD BE APPROVED FILL MATERIAL, FREE OF DELETERIOUS MATERIAL, WITH A MINIMUM CBR VALUE OF 2.5 AND A MAXIMUM PLASTICITY INDEX VALUE OF 55. LIME APPLICATION RATES SHOULD BE RE-EVALUATED AND TESTED FOR SULFATE CONTENT PRIOR TO USE OF THE FILL MATERIAL. THE MATERIAL SHOULD BE PLACED AS PER APPLICABLE CITY OR COUNTY GUIDELINES.



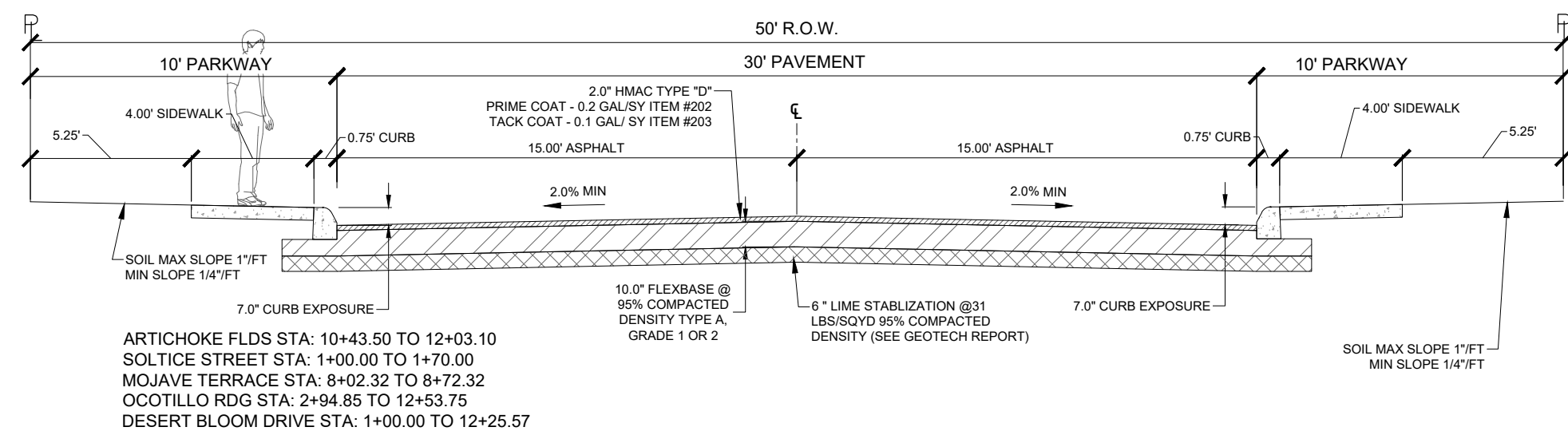
(SEE GEOTECH REPORT FOR PAVEMENT DETAILS) 7" MACHINE LAID CURB DETAIL  
N.T.S.



SIDEWALK DETAIL

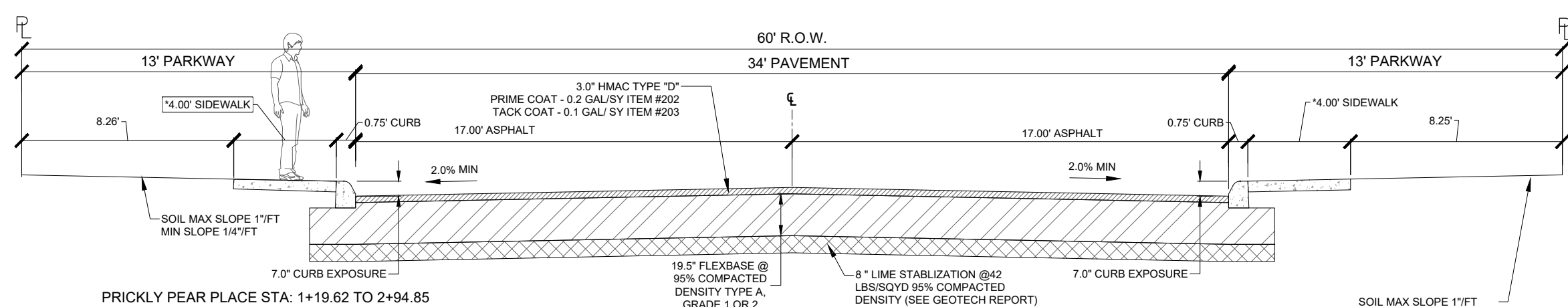


PAVEMENT TIE-IN DETAIL



### LOCAL TYPE "A" STREET CROSS SECTION

N.T.S.



### LOCAL TYPE "B" STREET CROSS SECTION

N.T.S.

Path: \\s\199 Century Communities\0403C Above Subdivision 07A\426 Site Development Plans\DMC-Sheets\sh\_SignageLayout.dwg  
User: jdrun  
Created: Oct. 09, 24 - 08:08  
Last Modified: Oct. 11, 24 - 09:03:42  
Plot Date/Time: Oct. 11, 24 - 09:03:42

AGAVE SUBDIVISION UNIT 7A  
LAND-PLAT-24-11800230  
SIGNAGE LAYOUT

[illegible]

DATE: 10/11/2024

DESIGNED BY: SM

DRAWN BY: MAP

CHECKED BY: PF

DRAWING NAME:  
sh\_SignageLayout.dwg



**LJA**  
Phone 210.503.2700  
LJA.COM  
TBPE No. F-1386

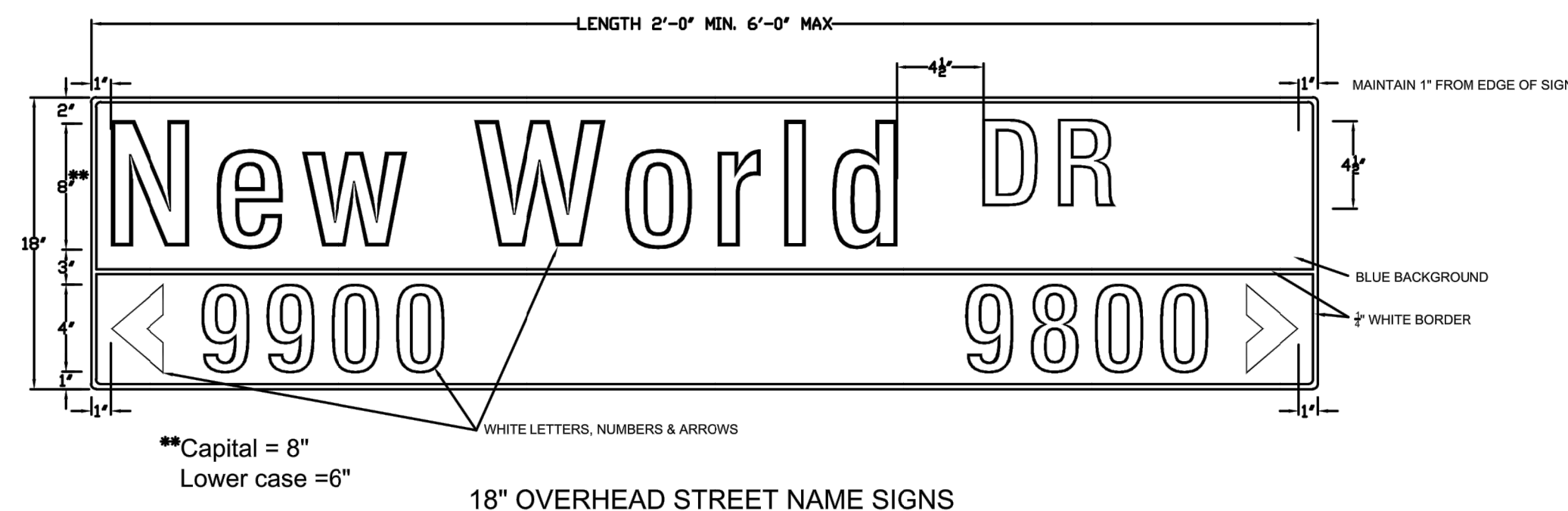
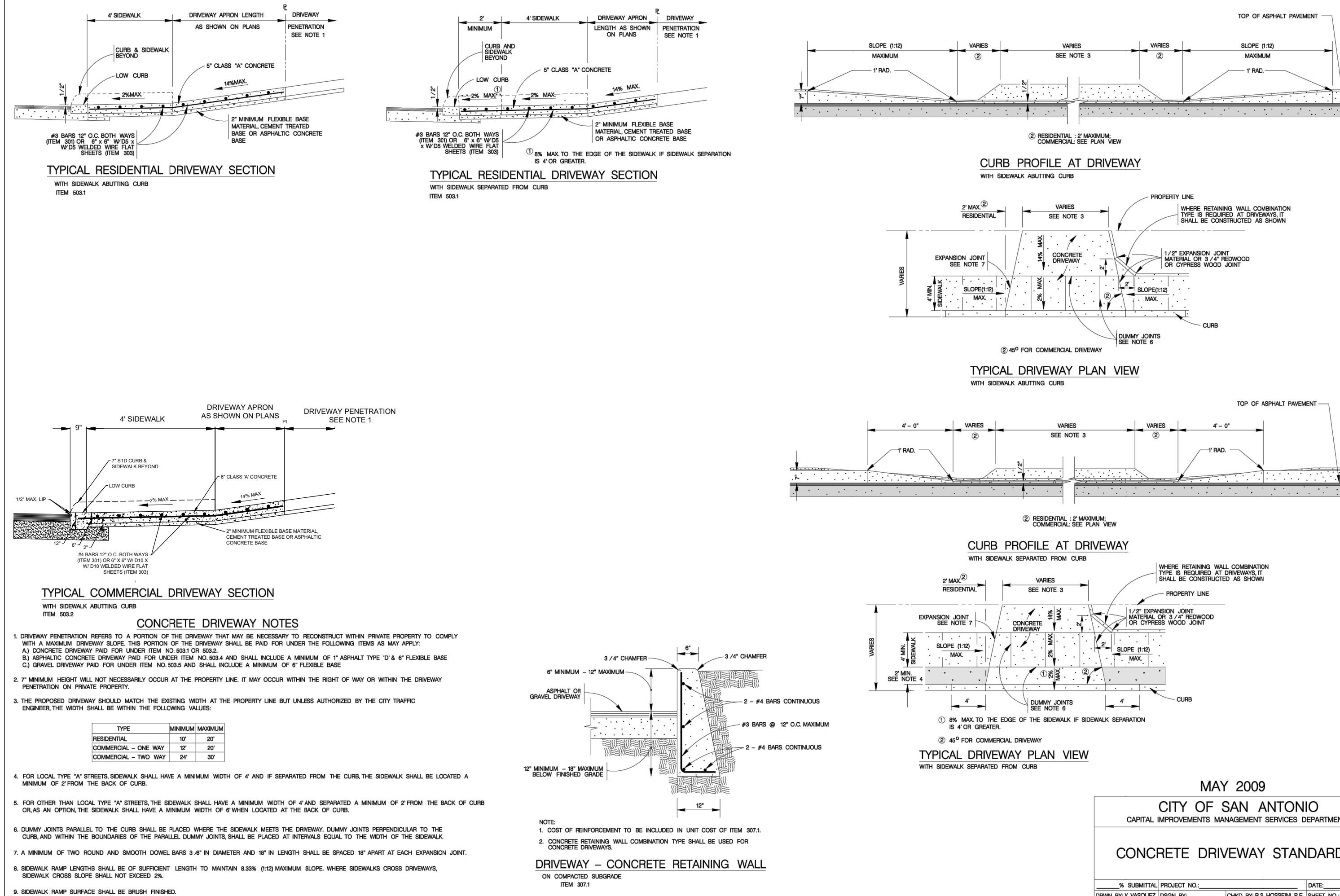
**LJA Engineering, Inc.**

JOB NUMBER:  
SA199-0403C-426

SHEET NO.

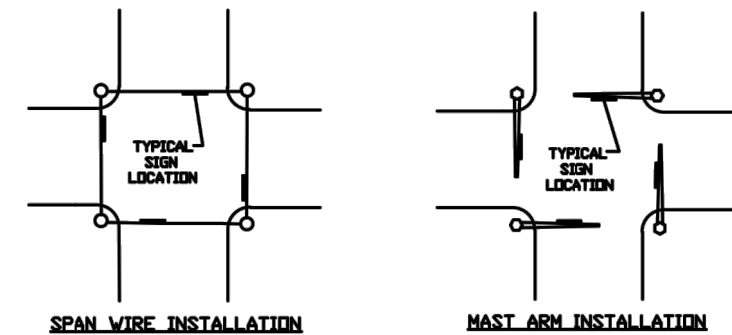
23  
OF 28 SHEETS





	16' OVERHEAD SIGNS	6' GROUND MOUNT SIGNS
HEIGHT	18" (381 mm)	9" (228 mm)
LENGTH	48" (1200 mm) MIN. 72" (1800 mm) MAX. * (100mm) INCREMENTS OF LENGTH	24" (600 mm) MIN. 48" (1200 mm) MAX. * (100mm) INCREMENTS OF LENGTH
THICKNESS	0.125" (3 mm)	
SUBSTRATE	ALUMINUM ALLOY, 5052-H38 (ASTM B-209) GOLD CHROMATE FINISH	
SIGN FACE MATERIALS	OVER DIAMOND GRADE -ASTM Type XI Non-Fluorescent	BLUE FILM ✱ OVER HIGH INTENSITY PRISMATIC-ASTM Type IV
LEGENDS AND SYMBOLS	SERIES D, B OR C IF NAME OTHERWISE EXCEEDS MAXIMUM SIGN LENGTH	
COLOR	WHITE LEGEND ON BLUE BACKGROUND	
LETTER TRACKING	17% (USUAL) 10% (MIN.)	10%

\* ACRYLIC ELECTRONIC CUTTABLE FILM



SIGN FACE MATERIAL  
SHALL CONFORM TO

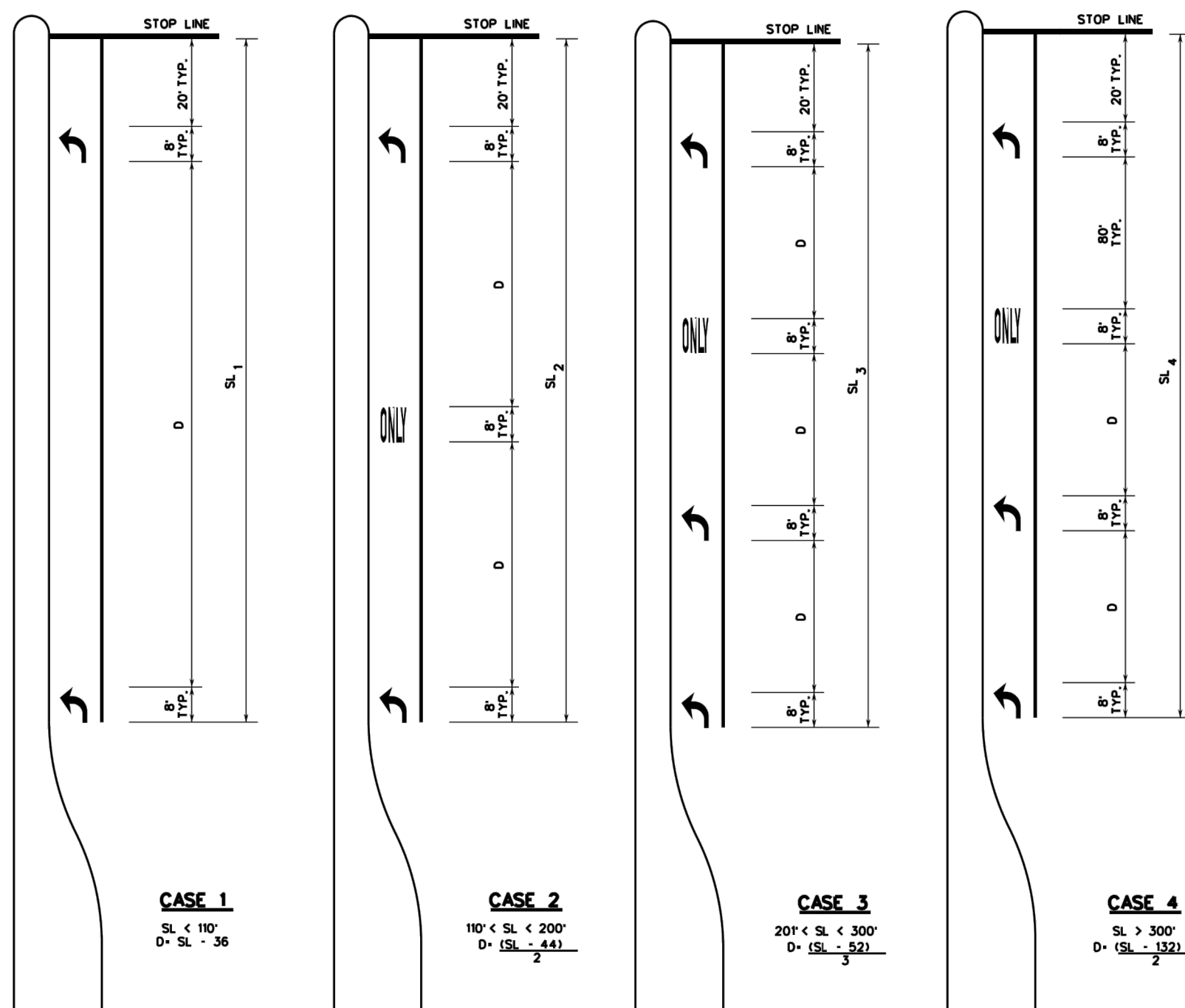
1. STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS & BRIDGES ON FEDERAL HIGHWAY PROJECTS - FP-03 U.S. CUSTOMARY UNITS SECTION 710
2. GENERAL SERVICES ADMINISTRATION FEDERAL SPECIFICATIONS L-S-300C
3. ASTM D 4956 - 09e1

KEY:

SL - STORAGE LENGTH (FEET)

D - DISTANCE BETWEEN ARROWS AND LEGENDS (FEET)

- GENERAL NOTES:
1. THESE DETAILS ALSO APPLY TO RIGHT-TURN LANES.
  2. FOR DUAL-TURN LANES, DIMENSIONS SHALL BE THE SAME FOR EACH LANE.
  3. SL DIMENSION IS FROM STOP LINE TO END OF TURN LANE, WHICH DOES NOT INCLUDE TAPER LENGTH.
  4. PAVEMENT ARROWS AND "ONLY" LEGEND MARKINGS ARE TYPIC FOR UNPAVED INTERSECTIONS AND AT UNSIGNALIZED INTERSECTIONS WHERE A DEMONSTRATED NEED EXISTS.
  5. MINIMUM SL: 110'. SL MAY BE LESS THAN 110 FEET AS DIRECTED BY THE CITY TRAFFIC ENGINEER.



SEPTEMBER 2009					
CITY OF SAN ANTONIO					
DEPARTMENT OF PUBLIC WORKS					
TRAFFIC ENGINEERING STANDARDS					
LEFT-TURN "ONLY" AND ARROW					
SPACING WORKSHEET					
SHEET 1 OF 16					
PROJECT NO.		DATE			
DRAWN BY	LAN	CHECK BY	CEV	IN-CH BY	ME
SHEET NO.					

LOCATION OF EXISTING UNDERGROUND AND OVERHEAD UTILITIES ARE APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO BEGINNING WORK AND SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT OCCUR.



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

AGAVE SUBDIVISION UNIT 7A  
LAND-PLAT-24-11800230  
TRAFFIC DETAILS (SHEET 2 OF 2)

Bexar County Public Works



### Street Name Sian Details

[illegible]

10/11/2024

STATE OF TEXAS

PRISCILLA G. FLORES

109874

LICENSED PROFESSIONAL ENGINEER

*Priscilla G. Flores*

**LJA**  
Phone 210.503.2700  
LJA.COM  
TBPE No. F-1386

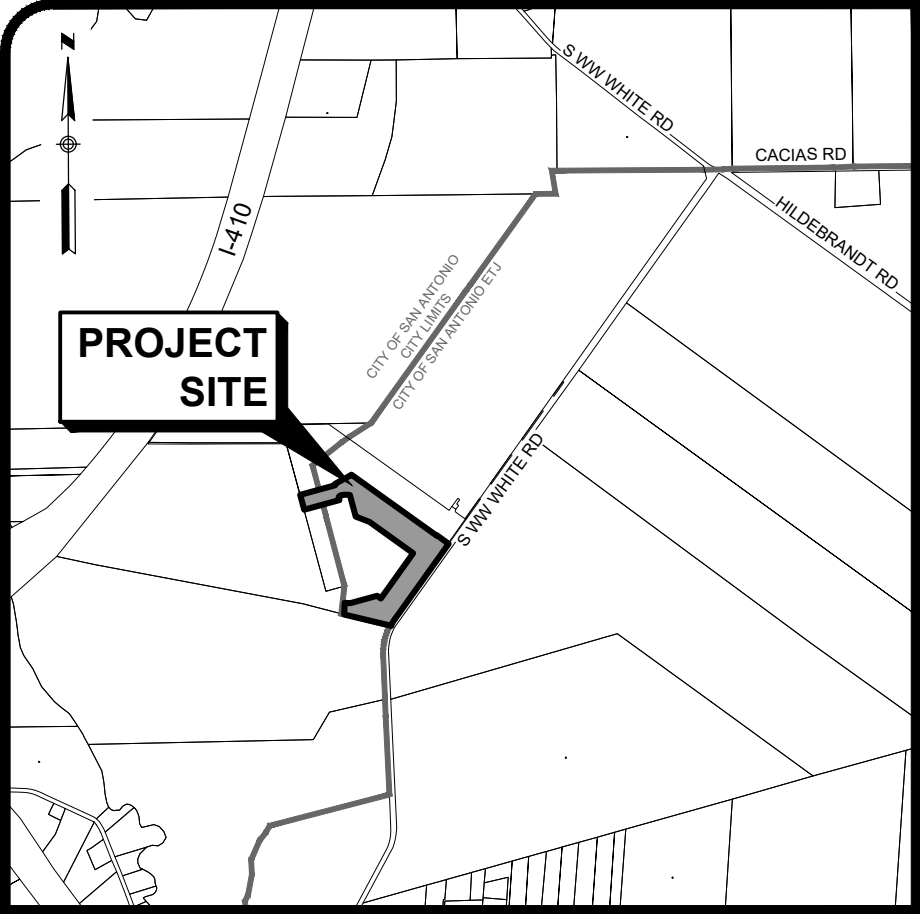
**LJA Engineering, Inc.**

JOB NUMBER:  
SA199-0403C-426

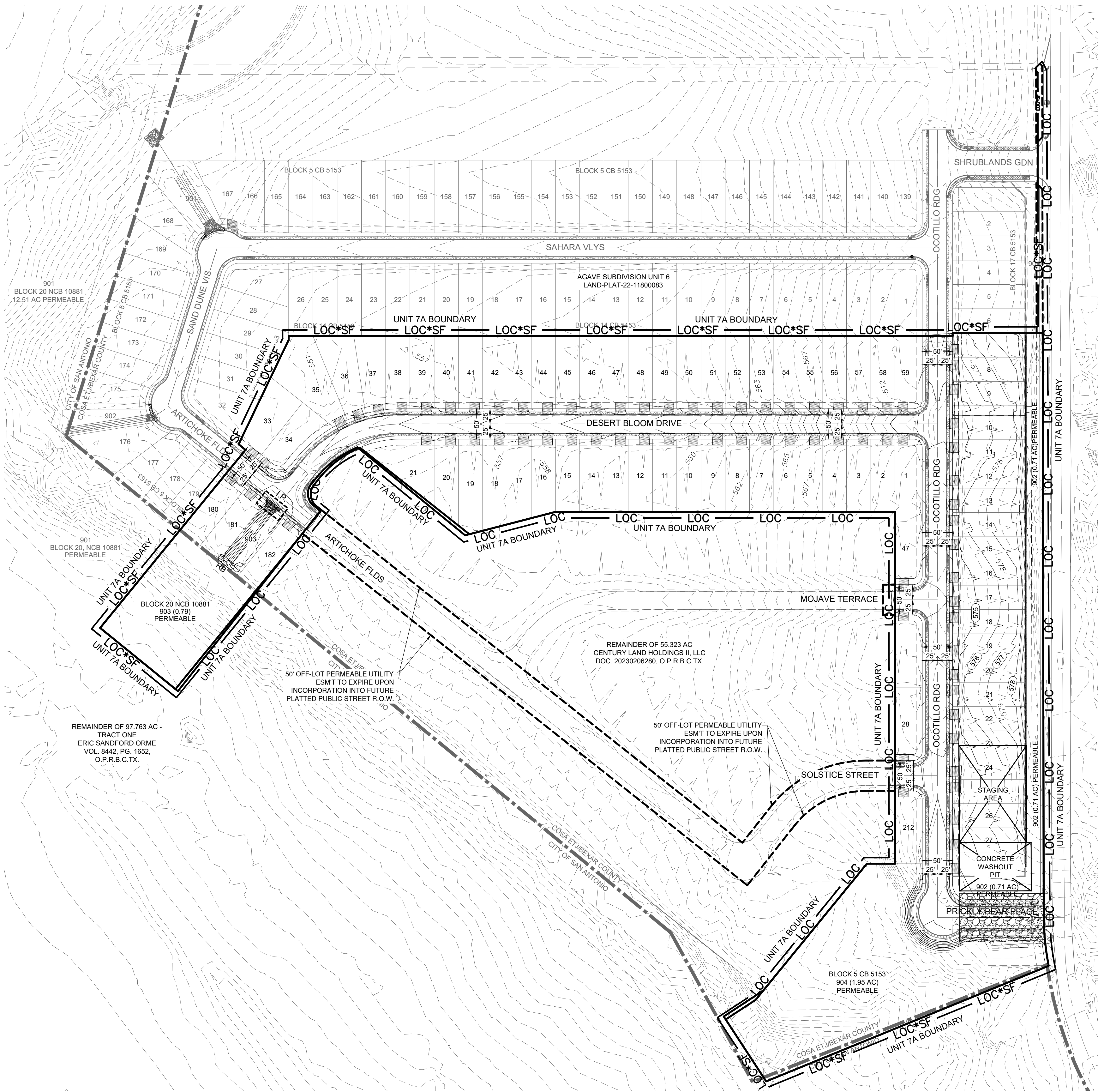
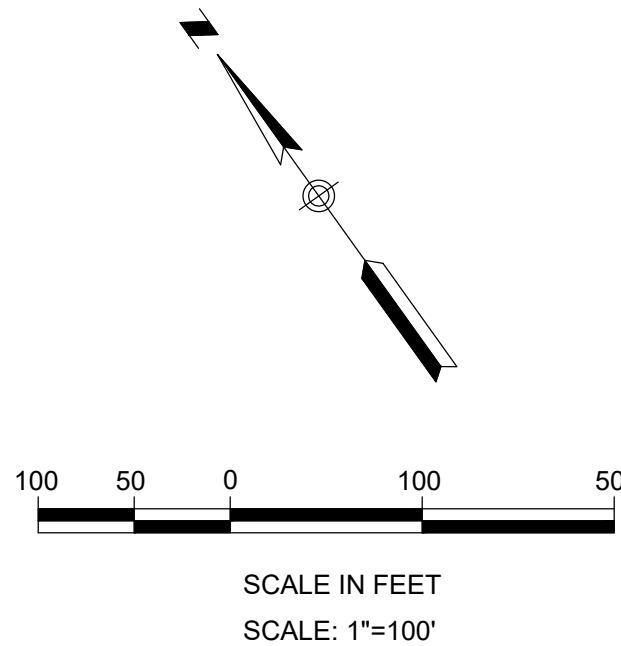
SHEET NO.

25

OF 28 SHEETS



LOCATION MAP  
N.T.S.



**LEGEND**

- Grassed Drain Flow
- Pavement Drain Flow
- Existing Contour
- Proposed Contour
- Concrete Washout Pit
- Stabilized Construction Exit
- Silt Fence
- Limits of Construction
- COSA/ETJ Limits
- Rock Berm
- Inlet Protection  
See Detail C25.09, Sheet C25

LOCATION OF EXISTING UNDERGROUND AND OVERHEAD UTILITIES ARE APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO BEGINNING WORK AND SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT OCCUR.

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

SWPPP MODIFICATIONS		
DATE	SIGNATURE	MODIFICATIONS

**AGAVE SUBDIVISION UNIT 7A  
LAND-PLAT-24-11800230  
STORMWATER POLLUTION PREVENTION PLAN**

NO.	REVISIONS DESCRIPTION	BY	DATE

DATE:	10/1/2024
DESIGNED BY:	SM
DRAWN BY:	MAP
CHECKED BY:	PF
DRAWING NAME:	SWPPPplan.dwg

**LJA Engineering, Inc.**  
Phone 210.503.2700  
9830 Colonnade Blvd  
Suite 300  
San Antonio, Texas 78230

JOB NUMBER:  
SA199-0403C-426

SHEET NO.  
**26**  
OF 28 SHEETS

K:\SA199 Century Communities\0403C Agave Subdivision Unit 7A\26 SW Development Plans\DWG-Sheet\A\A\_SWPPPplan.dwg  
User: jkron  
Last Modified: Sep, 27, 24 - 14:24  
Plot Date/Time: Oct, 11, 24 - 08:54:49

SEDIMENTATION AND EROSION CONTROLS

- A. SILT FENCE
- FENCE POSTS SHOULD BE MADE OF HOT ROLLED STEEL, AT LEAST 4 FEET LONG WITH TEE OR YBAR CROSS SECTION. SURFACE PAINTED OR GALVANIZED, MINIMUM NOMINAL WEIGHT 1.25 LB/FT, AND BRINDLELL HARDNESS EXCEEDING 140.
  - WOVEN WIRE BACKING TO SUPPORT THE FABRIC SHOULD BE GALVANIZED 2" X 4" WELDED WIRE, 12 GAUGE MINIMUM.
  - STEEL POSTS, WHICH SUPPORT THE SILT FENCE, SHOULD BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 1-FOOT DEEP AND SPACED NOT MORE THAN 8 FEET ON CENTER. WHERE WATER CONCENTRATES, THE MAXIMUM SPACING SHOULD BE 6 FEET.
  - LAY OUT FENCING DOWN-SLOPE OF DISTURBED AREA FOLLOWING THE CONTOUR AS CLOSELY AS POSSIBLE. THE FENCE SHOULD BE SITED SO THAT THE MAXIMUM DRAINAGE AREA IS 1/4 ACRE/100 FEET OF FENCE.
  - THE TOP OF THE SILT FENCE SHOULD BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWN-SLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW, WHERE FENCE CANNOT BE TRENCHED IN (E.G., PAVEMENT OR ROCK OUTCROPS), WEIGHT FABRIC FLAT WITH 3 INCHES OF PEA GRAVEL ON UP-HILL SIDE TO PREVENT FLOW FROM SEEPING UNDER FENCE.
  - THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
  - SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POST. THERE SHOULD BE A 3-FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.
  - INSPECT ALL FENCING WEEKLY, AND AFTER EACH RAINFALL. REMOVE SEDIMENT WHEN BUILDUP REACHES 6 INCHES. REPLACE ANY TORN FABRIC OR INSTALL A SECOND LINE OF FENCING PARALLEL TO THE TORN SECTION.
- B. TRIANGULAR SEDIMENT FILTER DIKE
- THE DIKE STRUCTURE SHALL BE CONSTRUCTED OF 6" X 6" 6 GAUGE WELDED WIRE MESH, 18 INCHES PER SIDE, AND WRAPPED WITH GEOTEXTILE FABRIC THE SAME COMPOSITION AS THAT USED FOR SILT FENCES.
  - FILTER FABRIC SHOULD LAP OVER ENDS SIX (6) INCHES TO COVER DIKE TO DIKE JUNCTION; EACH JUNCTION SHOULD BE SECURED BY SHOAT RINGS.
  - POSITION DIKE PARALLEL TO THE CONTOURS, WITH THE END OF EACH SECTION CLOSELY ABUTTING THE ADJACENT SECTIONS.
  - FASTENING - THE FABRIC SKIRT MAY BE TOED-IN WITH 6 INCHES OF COMPACTED MATERIAL, OR 12 INCHES OF THE FABRIC SKIRT SHOULD EXTEND UP-HILL AND BE SECURED WITH A MINIMUM OF 3 INCHES OF OPEN GRADED ROCK, OR WITH STAPLES OR NAILS. IF THESE TWO OPTIONS ARE NOT FEASIBLE, THE DIKE STRUCTURE MAY BE TRENCHED IN 4 INCHES.
  - TRIANGULAR SEDIMENT FILTER DIKES SHOULD BE INSTALLED ACROSS EXPOSED SLOPES DURING CONSTRUCTION WITH ENDS OF THE DIKE TIED INTO EXISTING GRADINGS TO PREVENT FAILURE AND SHOULD INTERCEPT NO MORE THAN ONE-FOURTH OF RUNOFF.
  - WHEN MOVED TO ALLOW VEHICULAR ACCESS, THE DIKES SHOULD BE REINSTALLED AS SOON AS POSSIBLE, BUT ALWAYS AT THE END OF THE WORKDAY.
  - INSPECTION SHOULD BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHOULD BE MADE PROMPTLY AS NEEDED BY THE CONTRACTOR. INSPECT AND REALIGN DIKES AS NEEDED TO PREVENT GAPS BETWEEN SECTIONS.
  - ACCUMULATED SILT SHOULD BE REMOVED AFTER EACH RAINFALL, AND DISPOSED OF IN A MANNER WHICH WILL NOT CAUSE ADDITIONAL SILTATION.

- C. TEMPORARY CONSTRUCTION ENTRANCE/EXIT
- AGGREGATE SIZE - 4 TO 8 INCHES WASHED, COARSE STONE.
  - LENGTH - AT LEAST 50 FEET.
  - THICKNESS - MINIMUM 8 INCHES.
  - WIDTH - MINIMUM WIDTH SHALL BE 12 FEET OR THE FULL WIDTH OF EXIT ROADWAY, WHICHEVER IS GREATER.
  - WASHING - WHEN NECESSARY, IF A WASHING FACILITY IS REQUIRED, A LEVEL AREA WITH A MINIMUM 4 INCH DIAMETER WASHED STONE OR COMMERCIAL RACK SHALL BE INSTALLED WHICH DRAINS INTO AN APPROVED TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
  - MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.
  - DRAINAGE - IF THE SLOPE TOWARD THE ROAD EXCEEDS 2%, CONSTRUCT A RIDGE 6 TO 8 INCHES HIGH WITH 3:1 (H:V) SIDE SLOPES. ACROSS THE FOUNDATION APPROXIMATELY 15 FEET FROM THE ENTRANCE TO DIVERT RUNOFF AWAY FROM THE PUBLIC ROAD. INSTALL PIPE UNDER PAD AS NEEDED TO MAINTAIN PROPER PUBLIC ROAD DRAINAGE.
  - FABRIC - PLACE GEOTEXTILE FABRIC AND GRADE FOUNDATION TO IMPROVE STABILITY, ESPECIALLY WHERE WET CONDITIONS ARE ANTICIPATED.

- D. INTERCEPTOR SWALE
- MAXIMUM DEPTH OF FLOW IN THE SWALE SHALL BE 1 FOOT.
  - THE MINIMUM BOTTOM WIDTH OF THE SWALE SHALL BE 2 FEET.
  - SIDE SLOPES OF THE SWALE SHALL BE 3:1 OR FLATTER.
  - MINIMUM DESIGN CHANNEL FREEBOARD SHALL BE 6 INCHES.
  - SWALES MUST MAINTAIN POSITIVE GRADE TO AN ACCEPTABLE OUTLET.
  - INTERCEPTOR SWALES MUST BE STABILIZED IMMEDIATELY UPON EXCAVATION SO AS NOT TO CONTRIBUTE TO THE EROSION PROBLEM THEY ARE ADDRESSING.
  - ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS AND OTHER MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SWALE.
  - ALL EARTH REMOVED AND NOT NEEDED IN CONSTRUCTION SHALL BE DISPOSED OF IN AN APPROPRIATE SPOILS SITE.
  - INSPECTION MUST BE MADE AFTER EACH RAIN EVENT TO LOCATE AND REPAIR ANY DAMAGE TO THE CHANNEL OR TO CLEAR DEBRIS OR OTHER OBSTRUCTIONS SO AS NOT TO DIMINISH FLOW CAPACITY. DAMAGES WHICH RESULT FROM NORMAL CONSTRUCTION ACTIVITIES SHALL BE REPAIRED AT THE END OF EACH WORK DAY.
- E. ROCK BERMS
- LAY OUT THE WOVEN WIRE SHEATHING PERPENDICULAR TO THE FLOW LINE. THE SHEATHING SHOULD BE 20 GAUGE WOVEN WIRE MESH WITH 1" HOLE OPENINGS.
  - BERM SHOULD HAVE A TOP WIDTH OF 2 FEET MINIMUM WITH SIDE SLOPES BEING 2:1 (H:V) OR FLATTER.
  - PLACE THE ROCK ALONG THE SHEATHING AS SHOWN IN THE DIAGRAM (FIGURE 1-28), TO A HEIGHT NOT LESS THAN 18".
  - WRAP THE WIRE SHEATHING AROUND THE ROCK AND SECURE WITH THE WIRE SO THAT THE ENDS OF THE SHEATHING OVERLAP AT LEAST 2 INCHES, AND THE BERM RETAINS ITS SHAPE WHEN WALKED UPON.
  - BERM SHOULD BE BUILT ALONG THE CONTOUR AT ZERO PERCENT GRADE OR AS NEAR AS POSSIBLE. THE ENDS OF THE BERM SHOULD BE TIED INTO EXISTING UPSLOPE GRADE AND THE BERM SHOULD BE BURIED IN A TRENCH APPROXIMATELY 3 TO 4 INCHES DEEP TO PREVENT FAILURE OF THE CONTROL.
  - INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL BY THE RESPONSIBLE PARTY. FOR INSTALLATIONS IN STREAMBEDS, ADDITIONAL DAILY INSPECTIONS SHOULD BE MADE.
  - REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6 INCHES AND DISPOSE OF THE ACCUMULATED SILT IN AN APPROVED MANNER THAT WILL NOT CAUSE ANY ADDITIONAL SILTATION.
  - REPAIR ANY LOOSE WIRE SHEATHING. THE BERM SHOULD BE RESHAPED AS NEEDED DURING INSPECTION. THE BERM SHOULD BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
  - THE ROCK BERM SHOULD BE LEFT IN PLACE UNTIL ALL UPSTREAM AREAS ARE STABILIZED AND ACCUMULATED SILT REMOVED.

- F. SANDBAG BERMS
- THE BAG LENGTH SHOULD BE 24 TO 30 INCHES, WIDTH SHOULD BE 16 TO 18 INCHES AND THICKNESS SHOULD BE 6 TO 8 INCHES. (3) SANDBAGS SHOULD BE FILLED WITH COARSE GRADE SAND, FREE FROM DELETERIOUS MATERIAL. ALL SAND SHOULD PASS THROUGH A NO. 10 SIEVE. THE FILLED BAG SHOULD HAVE AN APPROXIMATE WEIGHT OF 40 POUNDS.
  - THE BERM SHOULD BE A MINIMUM HEIGHT OF 18 INCHES, MEASURED FROM THE TOP OF THE EXISTING GROUND AT THE UPSLOPE TOE TO THE TOP OF THE BERM.
  - THE BERM SHOULD BE SIZED AS SHOWN IN THE PLANS BUT SHOULD HAVE A MINIMUM WIDTH OF 48 INCHES MEASURED AT THE BOTTOM OF THE BERM AND 16 INCHES MEASURED AT THE TOP OF THE BERM.
  - RUNOFF WATER SHOULD FLOW OVER THE TOPS OF THE SANDBAGS OR THROUGH 4-INCH DIAMETER PVC PIPES EMBEDDED BELOW THE TOP LAYER OF BAGS AS SHOWN.
  - SANDBAGS SHOULD BE STACKED IN AT LEAST THREE ROWS ABUTTING EACH OTHER, AND IN STAGGERED ARRANGEMENT.
  - THE BASE OF THE BERM SHOULD HAVE AT LEAST 3 SANDBAGS. THESE CAN BE REDUCED TO 2 AND 1 BAG IN THE SECOND AND THIRD ROWS RESPECTIVELY. FOR EACH ADDITIONAL 6 INCHES OF HEIGHT, AN ADDITIONAL SANDBAG MUST BE ADDED TO EACH ROW WIDTH.
  - THE SAND BAG BERM SHOULD BE INSPECTED WEEKLY AND AFTER EACH RAIN. THE SANDBAGS SHOULD BE RESHAPED OR REPLACED AS NEEDED DURING INSPECTION.
  - WHEN THE SILT REACHES 6 INCHES, THE ACCUMULATED SILT SHOULD BE REMOVED AND DISPOSED OF AT AN APPROVED SITE IN A MANNER THAT WILL NOT CONTRIBUTE TO ADDITIONAL SILTATION.

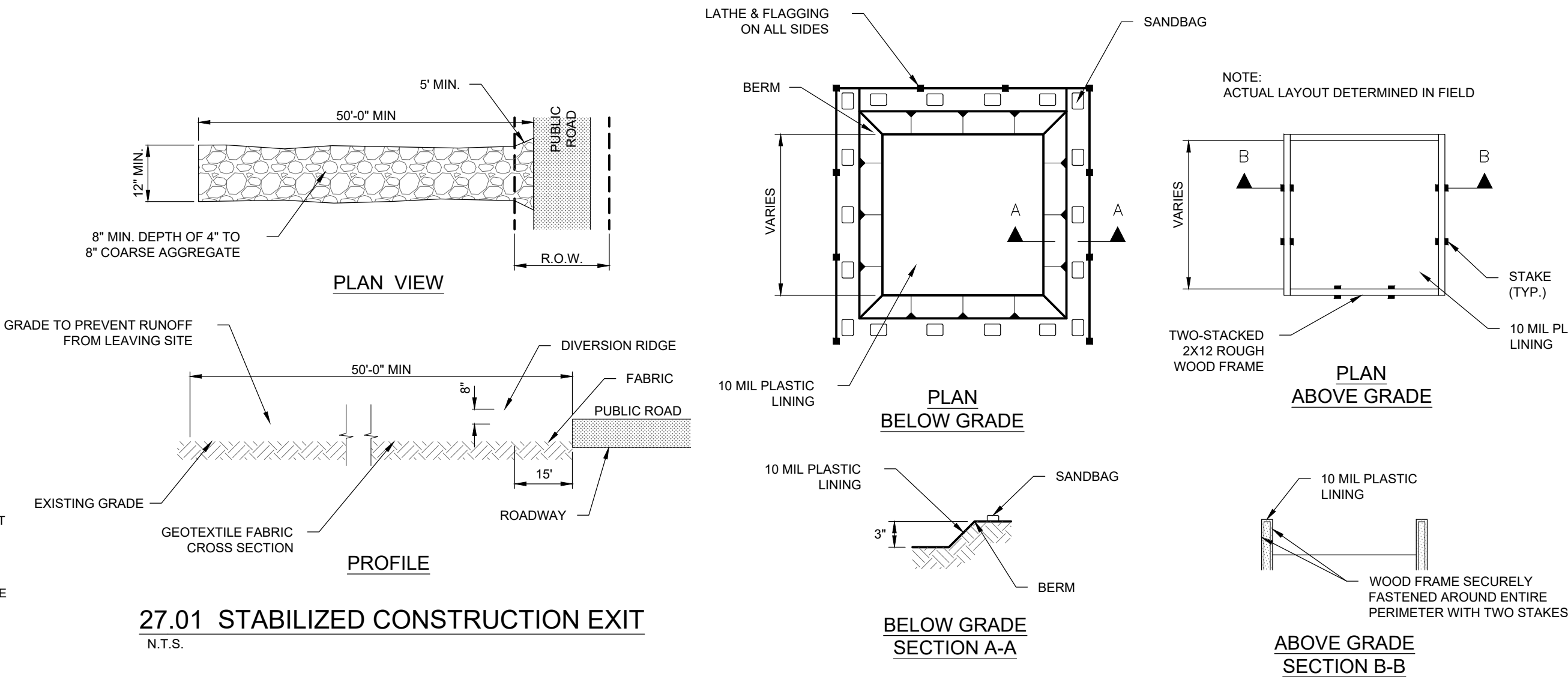
- G. STONE OUTLET SEDIMENT TRAP
- ALL AGGREGATE SHOULD BE AT LEAST 3 INCHES IN DIAMETER AND SHOULD NOT EXCEED A VOLUME OF 0.5 CUBIC FOOT.
  - EARTH EMBANKMENT: PLACE FILL MATERIAL IN LAYERS NOT MORE THAN 8 INCHES IN LOOSE DEPTH. BEFORE COMPACTION, MOISTEN OR AERATE EACH LAYER AS NECESSARY TO PROVIDE THE OPTIMUM MOISTURE CONTENT OF THE MATERIAL. COMPACT EACH LAYER TO 95 PERCENT STANDARD PROCTOR DENSITY. DO NOT PLACE MATERIAL ON SURFACES THAT ARE MUDDY OR FROZEN. SIDE SLOPES FOR THE EMBANKMENT ARE TO BE 3:1. THE MINIMUM WIDTH OF THE EMBANKMENT SHOULD BE 3 FEET.
  - A GAP IS TO BE LEFT IN THE EMBANKMENT IN THE LOCATION WHERE THE NATURAL CONFLUENCE OF RUNOFF CROSSES THE EMBANKMENT LINE. THE GAP IS TO HAVE A WIDTH IN FEET EQUAL TO 6 TIMES THE DRAINAGE AREA IN ACRES.
  - GEOTEXTILE COVERED ROCK CORE: A CORE OF FILTER STONE HAVING A MINIMUM HEIGHT OF 1.5 FEET AND A MINIMUM WIDTH AT THE BASE OF 3 FEET SHOULD BE PLACED ACROSS THE OPENING OF THE EARTH SHOULDER. THE EMBANKMENT SHOULD BE COVERED WITH FABRIC WHICH SHOULD EXTEND A MINIMUM DISTANCE OF 2 FEET IN EITHER DIRECTION FROM THE BASE OF THE FILTER STONE CORE.
  - FILTER STONE EMBANKMENT: FILTER STONE SHOULD BE PLACED OVER THE GEOTEXTILE AND IS TO HAVE A SIDE SLOPE WHICH MATCHES THAT OF THE EARTH EMBANKMENT OF 3:1 AND SHOULD COVER THE GEOTEXTILE/ROCK CORE A MINIMUM OF INCHES WHEN INSTALLATION IS COMPLETE. THE CREST OF THE OUTLET SHOULD BE AT LEAST 1 FOOT BELOW THE TOP OF THE EMBANKMENT.
  - INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL. CHECK THE EMBANKMENT, SPILLWAYS, AND OUTLET FOR EROSION DAMAGE, AND INSPECT THE EMBANKMENT FOR PIPING AND SETTLEMENT. REPAIR SHOULD BE MADE PROMPTLY AS NEEDED BY THE CONTRACTOR.
  - TRASH AND OTHER DEBRIS SHOULD BE REMOVED AFTER EACH RAINFALL TO PREVENT CLOGGING OF THE OUTLET STRUCTURE. SEDIMENT SHOULD BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO HALF OF THE DESIGN DEPTH OF THE TRAP.

- H. SEDIMENT BASINS
- THE DRAINAGE AREA FOR A SEDIMENT BASIN SHALL BE LESS THAN 100 ACRES.
  - THE BASIN SHOULD INCLUDE A PERMANENT STAKE TO INDICATE THE SEDIMENT LEVEL IN THE POOL AND MARKED TO INDICATE WHEN THE SEDIMENT OCCUPIES 50% OF THE BASIN VOLUME (NOT THE TOP OF THE STAKE). SEDIMENT SHALL BE REMOVED WHEN SEDIMENT REACHES 50% STORAGE CAPACITY.
  - PLACE FILL MATERIAL IN LAYERS NOT MORE THAN 8 INCHES IN LOOSE DEPTH. BEFORE COMPACTION, MOISTEN OR AERATE EACH LAYER AS NECESSARY TO PROVIDE THE OPTIMUM MOISTURE CONTENT OF THE MATERIAL. COMPACT EACH LAYER TO 95 PERCENT STANDARD PROCTOR DENSITY. DO NOT PLACE MATERIAL ON SURFACES THAT ARE MUDDY OR FROZEN. SIDE SLOPES FOR THE EMBANKMENT SHOULD BE 3:1 (H:V). MINIMUM WIDTH OF THE EMBANKMENT AT THE TOP SHALL BE 8 FEET.
  - AN EMERGENCY SPILLWAY SHOULD BE INSTALLED ADJACENT TO THE EMBANKMENT ON UNDISTURBED SOIL AND SHOULD BE SIZED TO CARRY THE FULL AMOUNT OF FLOW GENERATED BY A 10-YEAR, 3-HOUR STORM WITH 1 FOOT OF FREEBOARD LESS THE AMOUNT WHICH CAN BE CARRIED BY THE PRINCIPAL OUTLET CONTROL DEVICE. THE EMERGENCY SPILLWAY SHOULD BE LINED WITH RIPRAP AS SHOULD THE SWALE LEADING FROM THE SPILLWAY TO THE NORMAL WATERCOURSE AT THE BASE OF THE EMBANKMENT.
  - INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL. CHECK THE EMBANKMENT, SPILLWAYS, AND OUTLET FOR EROSION DAMAGE, AND INSPECT THE EMBANKMENT FOR PIPING AND SETTLEMENT. REPAIR SHOULD BE MADE PROMPTLY AS NEEDED BY THE CONTRACTOR. TRASH AND OTHER DEBRIS SHOULD BE REMOVED AFTER EACH RAINFALL TO PREVENT CLOGGING OF THE OUTLET STRUCTURE.
  - ACCUMULATED SILT SHOULD BE REMOVED AND THE BASIN SHOULD BE RE- GRADED TO ITS ORIGINAL DIMENSIONS AT SUCH POINT THAT THE CAPACITY OF THE IMPOUNDMENT HAS BEEN REDUCED TO 75% OF ITS ORIGINAL STORAGE CAPACITY.

- ADDITIONAL NOTES:
- UPON COMPLETION OF CONSTRUCTION ALL DISTURBED AREAS SHALL BE REVEGETATED TO 70% OF EXISTING CONDITIONS IN ACCORDANCE WITH THE SWPPP AND TPDES REQUIREMENTS.
  - THIS SITE IS NOT LOCATED ADJACENT TO ANY SURFACE WATERS.
  - THIS SITE WILL NOT HAVE ANY LOCATIONS WHERE STORM WATER DISCHARGES DIRECTLY TO A SURFACE WATER BODY.

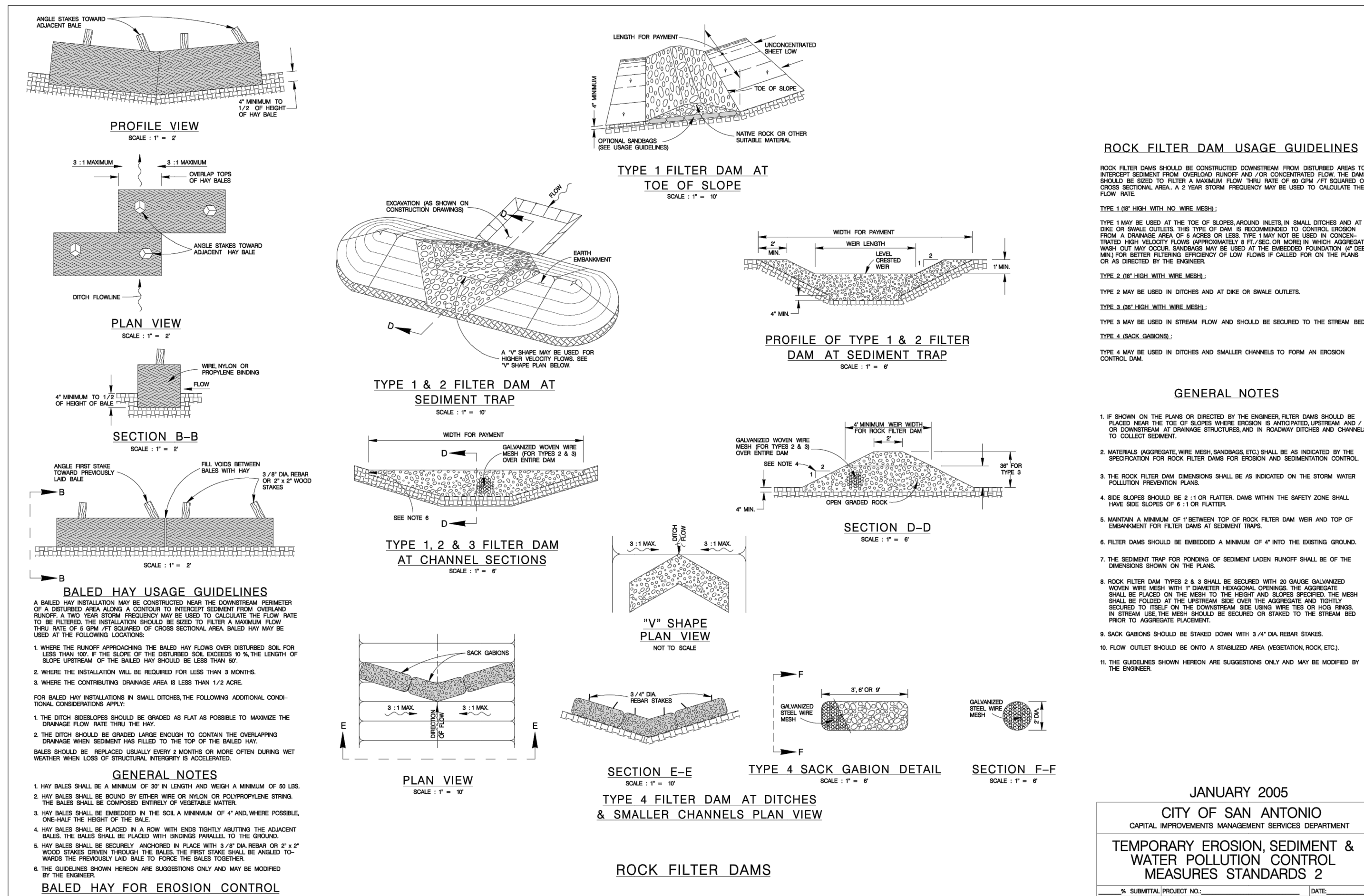
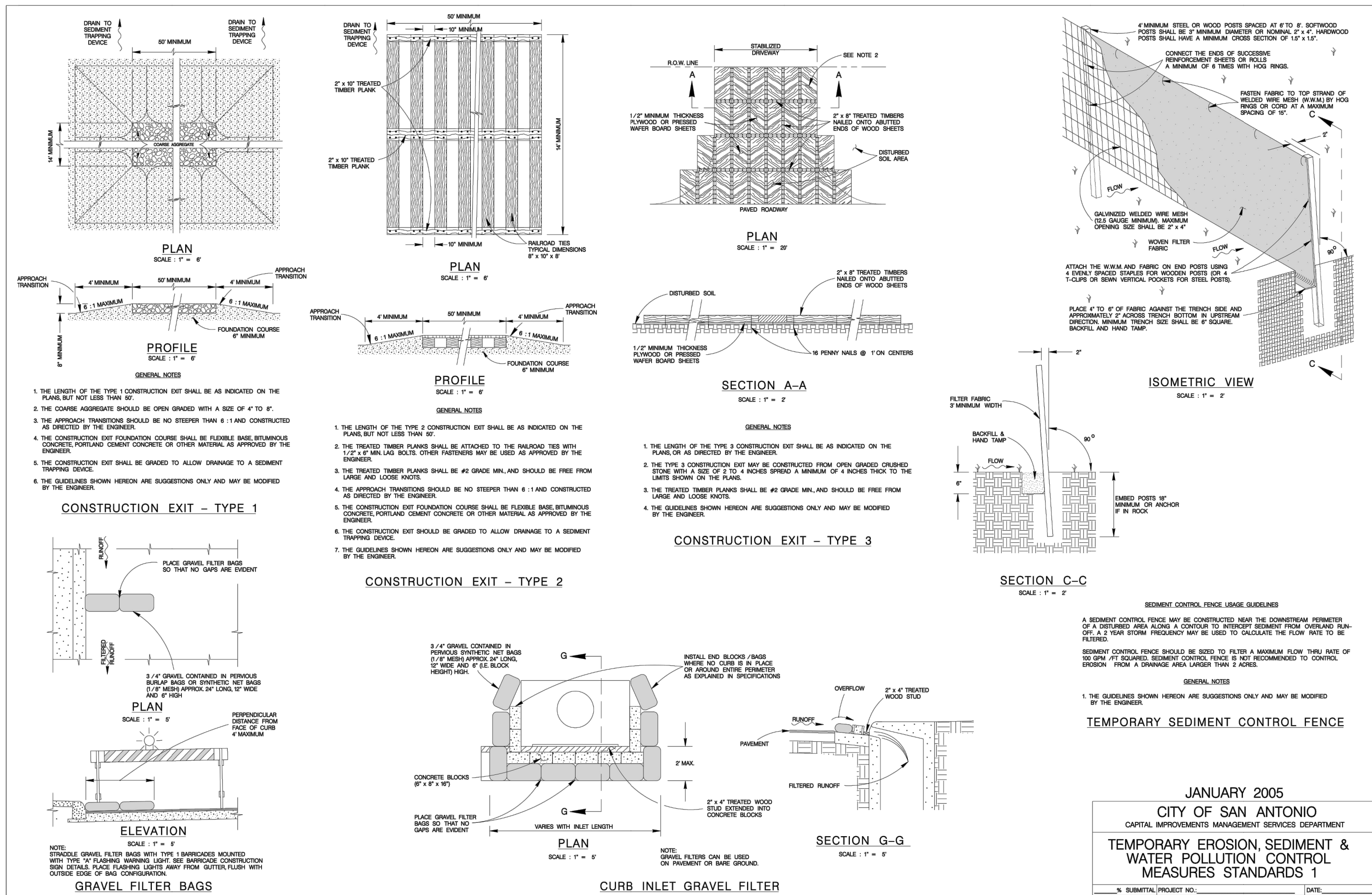
27.01 STABILIZED CONSTRUCTION EXIT

N.T.S.



27.02 CONCRETE WASHOUT AREA

N.T.S.



AGAVE SUBDIVISION UNIT 7A  
LAND-PLAT-24-11800230  
STORMWATER POLLUTION PREVENTION PLAN  
DETAILS

NO.	REVISIONS	DESCRIPTION	BY	DATE

DATE:	10/11/2024
DESIGNED BY:	SM
DRAWN BY:	MAP
CHECKED BY:	PF
DRAWING NAME:	th SWPPPplan.org

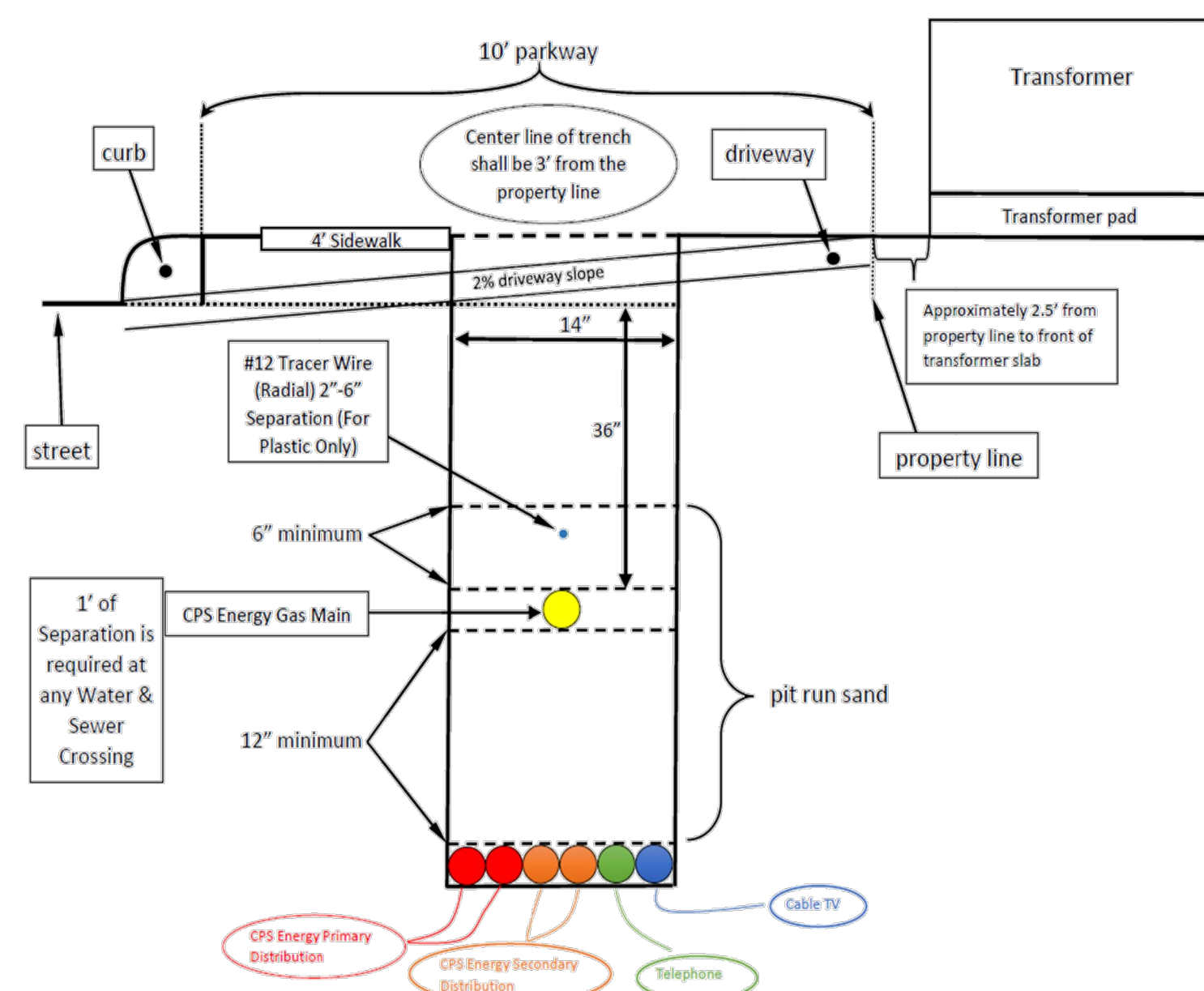


LJA Engineering, Inc.  
Phone 210.503.2700  
Suite 300  
San Antonio, Texas 78230

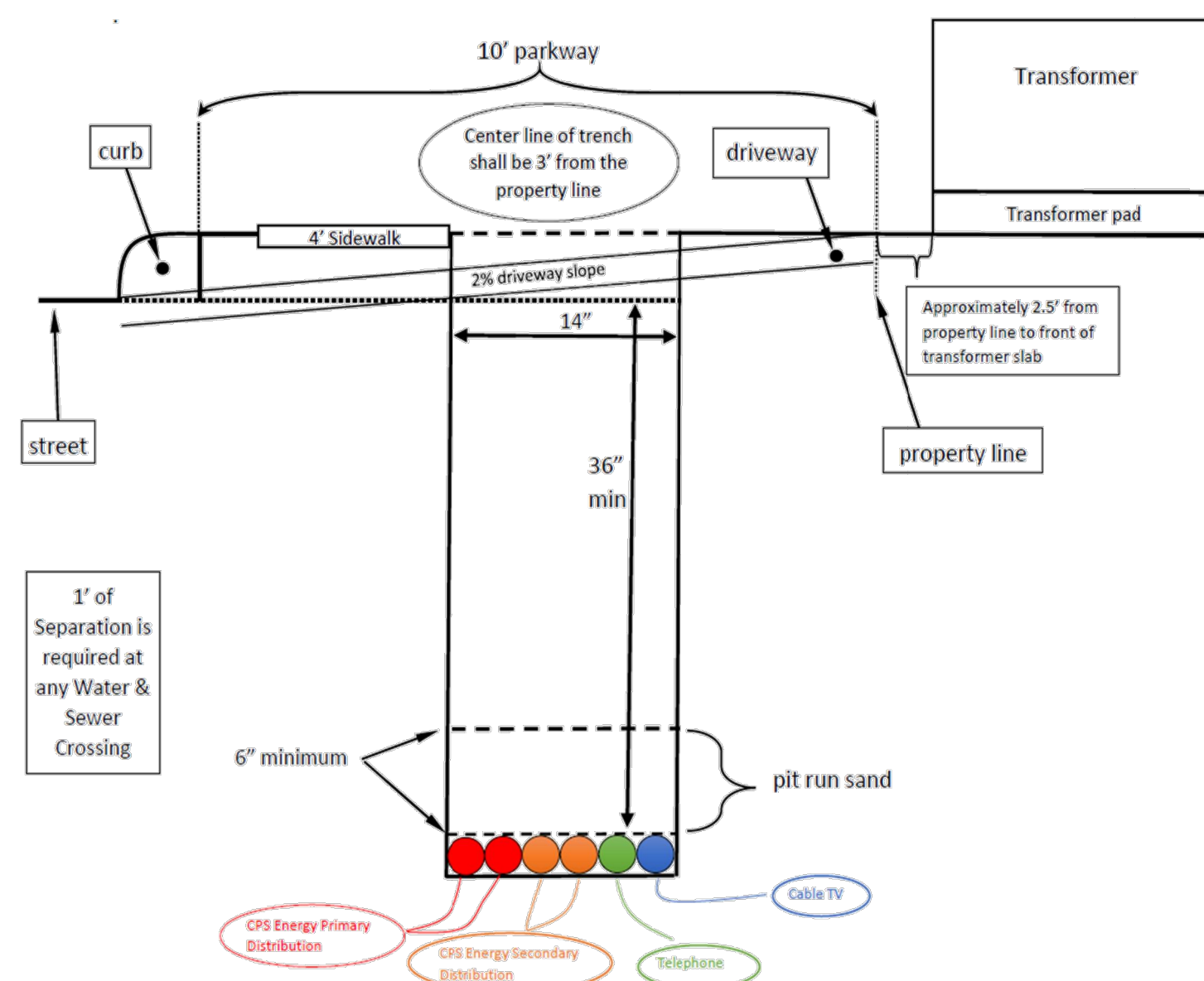
JOB NUMBER:	SA199-0403C-426
SHEET NO.	27
OF 28 SHEETS	



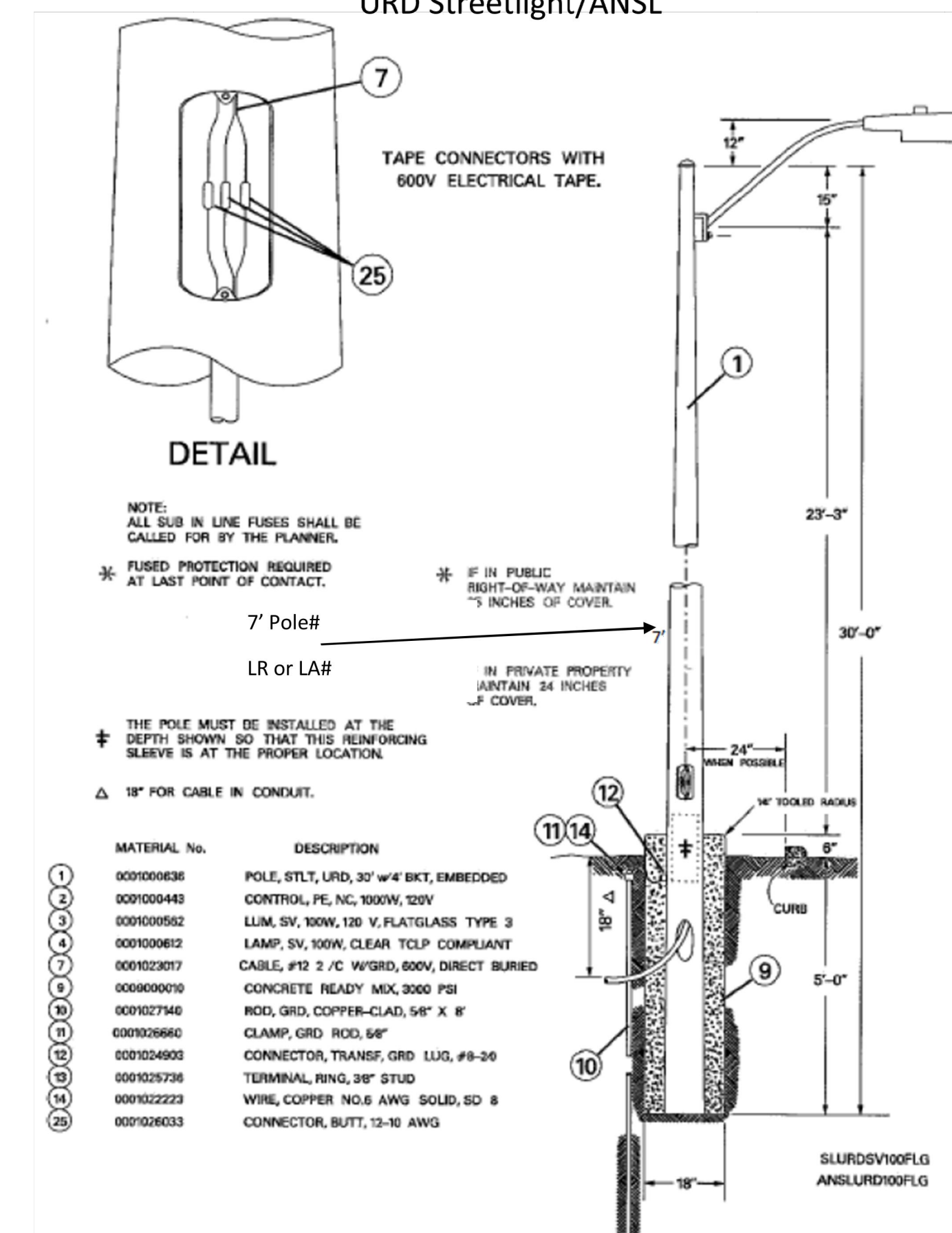
### Gas & Electric Trench Joint with Other Utilities



### Electric Trench with Joint Utilities



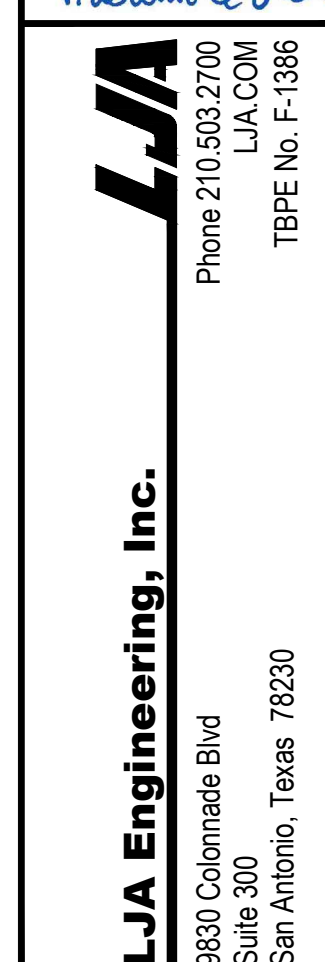
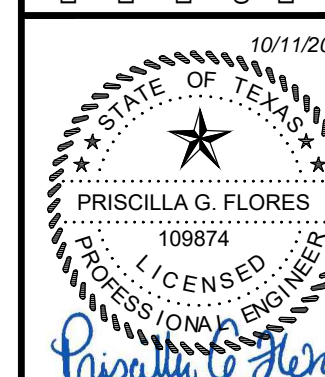
URD Streetlight/ANSL



AGAVE SUBDIVISION UNIT 7A  
LAND-PLAT-24-11800230  
CPS ENERGY DETAILS

[illegible]

DATE: 10/11/2024  
DESIGNED BY: SM  
DRAWN BY: MAP  
CHECKED BY: PF  
DRAWING NAME:  
sh\_CPSEnergyDetails.dwg



JOB NUMBER:  
SA199-0403C-426

SHEET NO.

28

OF 28 SHEET