

Detail Design Plans

Flintstone Drive Street Improvements

CDBG NO. B-24-UC-48-0500

FOR THE CITY OF
UNIVERSAL CITY, TEXAS

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UTILITY COMPANY CONTACT INFORMATION

<u>Electric</u> CPS Energy Melissa Cox 145 Navarro St. San Antonio, Texas 78205 Tel: (210) 353-3023	<u>Water & Sewer</u> City of Universal City Utilities Administration Randy Luensmann 265 Kitty Hawk Road Universal City, Texas 78148 Tel: (210) 658-5364
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<u>Cable</u> Time Warner Cable Joel Gonzales 1900 Bluecrest Lane San Antonio, Texas 78246 Tel: (210) 582-9357	<u>Telephone</u> AT&T David Wilkes 4119 Broadway St., Rm 760-B-03 San Antonio, Texas 78209 Tel: (210) 283-1716
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<u>Local Gas</u> Centerpoint Energy Robert Sanders 290 South Castell Avenue New Braunfels, Texas 78130 Tel: (830) 643-6903	<u>Gas Transmission</u> Enterprise Products Jared Satter 5436 Old Pearsall Road San Antonio, Texas 78242 Tel: (210) 781-9346
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GENERAL SITE LOCATION MAP (NTS)



LOCAL SITE LOCATION MAP (NTS)

GENERAL NOTES

MISCELLANEOUS

1. CONTRACTOR SHALL PERFORM ALL WORK REQUIRED BY THE PLANS AND CONTRACT IN CONFORMANCE WITH THE ACCOMPANYING SPECIFICATIONS. THE ENGINEER SHALL MAKE ALL FINAL DECISIONS AND JUDGMENTS ON APPARENT CONFLICTS BETWEEN THE PLANS AND SPECIFICATIONS AND ON MATTERS NOT SPECIFICALLY COVERED BY THE PLANS AND SPECIFICATIONS.
2. FOR SITE VISIT REQUESTS, CONTRACTOR SHALL NOTIFY ENGINEER 24 HOURS IN ADVANCE OF BEGINNING CONSTRUCTION, SUBGRADE PREPARATION, BASE PLACEMENT, CONCRETE PLACEMENT, AND ALL TESTING.
3. "TXDOT" INDICATES THE TEXAS DEPARTMENT OF TRANSPORTATION 2014 STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND BRIDGES.
4. COMPLY WITH APPLICABLE REGULATIONS INCLUDING, BUT NOT LIMITED TO, BUILDING CODES, SAFETY CODES, AND INSPECTION REQUIREMENTS.
5. SECURE REQUIRED PERMITS.
6. PROVIDE ON-SITE RESTROOM FACILITIES FOR CONTRACTOR'S EMPLOYEES PRIOR TO COMMENCING WORK.
7. REMOVE AND DISPOSE OF ALL EXCESS MATERIALS.
8. NO BLASTING WILL BE PERMITTED FOR THIS PROJECT.
9. THERE WILL BE NO SEPARATE PAY FOR ROCK EXCAVATION.
10. REPAIR OR REPLACE ALL ITEMS DAMAGED BY CONTRACTOR, INCLUDING ITEMS NOT SHOWN ON PLANS. REPAIR TO SATISFACTION OF ENGINEER AND OWNER OF DAMAGED ITEM. DOCUMENT THE ORIGINAL CONDITION OF THE WORK AREA BY VIDEO OR PHOTO. PROVIDE A COPY OF THE RECORDS TO THE ENGINEER PRIOR TO COMMENCING WORK.
11. PROVIDE 1 COPY OF SUBMITTAL DATA AND OBTAIN ENGINEER'S APPROVAL BEFORE BEGINNING WORK, WHERE REQUIRED.
12. CITY WILL PAY FOR PROJECT MATERIAL TESTING.
13. ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS, INCLUDING SAFETY OF PERSONS AND PROPERTY, CONTINUOUSLY THROUGHOUT THE DURATION OF THE PROJECT. THIS REQUIREMENT SHALL NOT BE LIMITED TO WORKING HOURS.
14. SECURE RESIDENTIAL YARDS (WHERE EXISTING FENCES ARE TO BE REMOVED) AND ENTIRE PERIMETER OF EXCAVATION WITH SAFETY FENCE DURING NON-WORKING HOURS. SECURE END OF CHANNEL WITH TEMPORARY FENCING AT THE END OF EACH WORK DAY.
15. TO THE FULLEST EXTENT PERMITTED BY LAW, HOLD OWNER AND ENGINEER HARMLESS FROM ALL DAMAGES, LOSSES OR EXPENSES, INCLUDING ATTORNEYS' FEES, FROM ANY CLAIMS OR DAMAGES FOR BODILY INJURY, SICKNESS, DISEASE OR DEATH OR FROM CLAIMS FOR DAMAGE TO TANGIBLE PROPERTY, OTHER THAN THE WORK ITSELF. THIS INDEMNIFICATION SHALL EXTEND TO THOSE CLAIMS RESULTING FROM PERFORMANCE OF THIS CONTRACT AND SHALL APPLY ONLY TO THE EXTENT SUCH CLAIM OR LOSS IS CAUSED IN WHOLE OR IN PART BY ANY NEGLIGENT ACT OR OMISSION OF CONTRACTOR OR ANY OF ITS AGENTS, EMPLOYEES OR SUBCONTRACTORS. THIS INDEMNITY SHALL BE EFFECTIVE REGARDLESS OF WHETHER THE CLAIM OR LOSS IS CAUSED IN SOME PART BY A PARTY TO BE INDEMNIFIED HEREUNDER; SAVE AND EXCEPT ONLY THAT CONTRACTOR SHALL NOT INDEMNIFY OR HOLD ENGINEER HARMLESS FOR DAMAGES CAUSED BY: (A) DEFECTS IN PLANS OR SPECIFICATIONS PREPARED BY ENGINEER FOR THIS PROJECT; OR (B) NEGLIGENCE OF ENGINEER IN THE RENDITION OF PROFESSIONAL DUTIES FOR THIS CONSTRUCTION CONTRACT.

TRAFFIC MAINTENANCE AND PROTECTION

16. MAINTAIN TRAFFIC, PROTECT TRAFFIC AND PROVIDE ACCESS FOR LOCAL TRAFFIC THROUGHOUT THE DURATION OF THE PROJECT. ALL PROJECT BARRICADES AND WARNING SIGNS SHALL CONFORM TO THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. LOCATE ALL PROJECT BARRICADES AND WARNING SIGNS SO AS TO PROVIDE MAXIMUM PROTECTION TO THE PUBLIC, CONSTRUCTION PERSONNEL AND EQUIPMENT AND TO ASSURE AN EXPEDITIOUS FLOW OF TRAFFIC THROUGHOUT THE DURATION OF THE PROJECT. COORDINATE SIGNS AND BARRICADES WITH THE SEQUENCE OF CONSTRUCTION AND DETOUR PLAN, CITY PUBLIC WORKS DEPARTMENT, POLICE DEPARTMENT, AND FIRE DEPARTMENT.
17. MINIMIZE DRIVEWAY BLOCKAGE. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SAFE DRIVEWAY ACCESS FOR LANDOWNERS. NOTIFY HOMEOWNERS 24 HOURS IN ADVANCE OF BLOCKING DRIVEWAYS. DO NOT BLOCK DRIVEWAYS ON WEEKENDS. PROVIDE ACCESS FOR MAIL DELIVERY & TRASH PICK UP.
18. REMOVE AND RELOCATE TRAFFIC SIGNS AS NEEDED (NO SEPARATE PAY ITEM).

ELEVATIONS AND DIMENSIONS

19. VERIFY PROJECT ELEVATIONS AND DIMENSIONS. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK.

EXCAVATION, BACKFILL, GRANULAR FILL, AND TOPSOIL

20. OBTAIN APPROVAL OF FILL MATERIAL FROM ENGINEER BEFORE COMMENCING PLACEMENT.
21. FILL BEHIND EXPOSED WALLS TO TOP OF WALL AT A SLOPE NOT TO EXCEED 10 TO 1 AND WITH A MINIMUM OF 4 INCHES OF CLEAN TOPSOIL FREE OF ROCKS AND DEBRIS.
22. PERFORM EXCAVATION WORK IN A SAFE MANNER. COMPLY WITH SUBPART "P" OF OSHA SAFETY AND HEALTH REGULATIONS. DEVELOP TRENCH SAFETY PLAN SEALED BY PROFESSIONAL ENGINEER, NO SEPARATE PAY ITEM. PRESENT TRENCH SAFETY PLAN AT PRE-CONSTRUCTION CONFERENCE.
23. PROTECT EXISTING UTILITY MAINS, CURBS, DRIVEWAYS, AND EXISTING STRUCTURES.
24. ALL EXCAVATION IS UNCLASSIFIED WITH NO SEPARATE PAYMENT FOR VARYING MATERIALS.
25. "GRANULAR FILL" SHALL BE SAND CONFORMING TO ASTM C-33 FINE AGGREGATE AS SHOWN:

SIEVE	% PASSING
3/4"	100
NO. 4	95 TO 100
NO. 8	80 TO 100
NO. 16	50 TO 85
NO. 30	25 TO 60
NO. 50	5 TO 30
NO. 100	0 TO 10
NO. 200	0 TO 5

26. PROTECT EXISTING PAVEMENT FROM SCRAPES AND GOUGES. RESTORE DAMAGED PAVEMENT, AT CONTRACTOR EXPENSE.
27. COMPACT GRANULAR FILL IN 9" MAX. LIFTS.
28. SECONDARY BACKFILL MATERIAL FOR USE OUTSIDE OF PAVED AREAS ONLY MAY BE MATERIAL EXCAVATED FROM THE TRENCH. IT MUST BE LOAM, SANDY CLAY, GRAVELLY CLAY, OR SOFT SHALE AND MAY NOT BE A POROUS MATERIAL SUCH AS SAND OR GRAVEL. 100% OF THE MATERIAL BY WEIGHT MUST PASS A 3" SIEVE AND BE FREE OF LARGE CLOUDS AND STONES.

CONCRETE

29. CONCRETE SHALL CONFORM TO TXDOT ITEM 421 WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4,000 PSI INSIDE THE ENTERPRISE GAS EASEMENT, OR 3,000 PSI OUTSIDE THE ENTERPRISE GAS EASEMENT.
30. REINFORCING STEEL SHALL BE FROM NEW BILLET AND SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS:

A-615.....GRADE 60 BARS AND DOWELS

A-185 WELDED WIRE FABRIC
31. ALL DIMENSIONS RELATING TO REINFORCING STEEL ARE TO CENTER OF BARS, EXCEPT WHERE REFERRING TO CLEARANCE.
32. CURE CONCRETE WITH IMPERVIOUS MEMBRANE METHOD.
33. TEST A MINIMUM OF ONE SET OF CYLINDERS FOR EACH 25 CY OF CONCRETE, WITH AT LEAST ONE SET OF CYLINDERS FOR EACH SEPARATE CONSTRUCTION ITEM.
34. SAND BLAST OR JET BLAST ALL OLD CONCRETE WHICH WILL TOUCH NEW CONCRETE.
35. DRILL DOWEL HOLE DIA. 1/4 INCH LARGER THAN DOWEL DIA.
36. CLEAN DOWEL HOLES AND GROUT BOND END WITH EPOXY OR NON-SHRINK CEMENT GROUT.
37. BAR SPLICE LENGTHS:

#4-12 INCHES

#5-15 INCHES

#6-18 INCHES
38. REBAR CLEARANCE SHALL BE 2 INCHES MINIMUM.

UTILITIES

39. UTILITY LOCATIONS SHOWN ARE APPROXIMATE AND NOT COMPREHENSIVE. AT LEAST 48 HOURS PRIOR TO BEGINNING WORK, NOTIFY ALL UTILITY COMPANIES THROUGH THE TEXAS EXCAVATION SAFETY SYSTEM (811) AT (800) 344-8377, VERIFY THE EXACT LOCATION OF UTILITIES, AND COORDINATE RELOCATION AND ADJUSTMENT OF UTILITIES WITH THE PROPER UTILITY REPRESENTATIVE. CONTACT CITY OF UNIVERSAL CITY PUBLIC WORKS DEPARTMENT AT (210) 658-5365 FOR WATER AND SEWER LOCATES.
40. THIS PROJECT INVOLVES WORKING AROUND UTILITIES. ENSURE THAT ANY REQUIRED NEW SERVICE HAS BEEN ESTABLISHED PRIOR TO DISTURBING EXISTING SANITARY SEWER, GAS, WATER OR OTHER UTILITIES.
41. DUE TO FEDERAL REGULATIONS TITLE 49, PART 192.181, CENTERPOINT ENERGY MUST MAINTAIN ACCESS TO GAS VALVES THAT ARE IN THE PROJECT AREA. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.
42. SEE SHEET 19 NOTES FOR ENTERPRISE PRODUCTS GUIDELINES FOR WORK WITHIN GAS LINE EASEMENT. ENCR OACHMENT GUIDELINES CAN ALSO BE OBTAINED FROM WWW.ENTERPRISEENCROACHMENTS.COM.

VEGETATION

43. STABILIZE ALL DISTURBED UNPAVED AREAS WITH LIVE GRASS USING SOD THAT MATCHES THE EXISTING VEGETATION TYPE. RESTORE TO EXISTING CONDITIONS OR BETTER.
44. SOD ALL DISTURBED AREAS TO DEVELOP AT LEASE 75% VEGETATION COVERAGE BY FINAL COMPLETION REVIEW.
45. PLACE 4" OF CLEAN TOPSOIL; FREE OF ROCK AND DEBRIS PRIOR TO PLANTING GRASS.
46. REPAIR CONTRACTOR'S DAMAGE TO TREES IMMEDIATELY. APPLY PRUNING PAINT TO LIVE OAK WOUNDS WITHIN 30 MINUTES OF DAMAGE. TRIM ROOTS THAT ARE EXPOSED DURING CONSTRUCTION CLEANLY. TREAT CUT TREE ROOTS, WHICH ARE AT LEAST 1.5 INCHES IN DIAMETER, WITH AN EMULSIFIED ASPHALT FORMULATED FOR USE ON DAMAGED PLANT TISSUES. TEMPORARILY COVER EXPOSED ROOTS WITH WET BURLAP TO MAINTAIN MOISTURE. COVER WITH EARTH AS SOON AS POSSIBLE. (NO SEPARATE PAY ITEM)
47. PROTECT TREES AND OTHER VEGETATION FROM UNNECESSARY CUTTING, BREAKING OR SKINNING OF ROOTS; SKINNING AND BRUISING OF BARK; STOCKPILING OF CONSTRUCTION MATERIALS WITHIN DRIPLINES; VEHICULAR TRAFFIC AND PARKING OF VEHICLES WITHIN THE DRIP LINE. (NO SEPARATE PAY ITEM)
48. THE ROOT PROTECTION ZONE (RPZ) EXTENDS RADIALLY FROM THE TRUNK 1 FOOT PER INCH OF TRUNK DIA. THE MINIMUM RPZ RADIUS SHALL BE 5 FEET.
49. MAINTAIN THE RPZ IN A NATURAL STATE, FREE FROM VEHICULAR AND MECHANICAL TRAFFIC UNLESS INDICATED OTHERWISE. PLACE NO FILL, EQUIPMENT, CONSTRUCTION DEBRIS OR LIQUIDS OTHER THAN WATER WITHIN THE RPZ UNLESS INDICATED OTHERWISE.
50. MAINTAIN PROPOSED GRADES WITHIN THE RPZ WITHIN 3 INCHES OF EXISTING GROUND UNLESS INDICATED OTHERWISE.
51. MAINTAIN A PERVIOUS CONDITION WITHIN THE RPZ UNLESS INDICATED OTHERWISE.
52. REMOVAL OF TREES AND SHRUBS WITHIN CONSTRUCTION FOOTPRINT INCLUDES CLEARING. GRUBBING IS INCLUDED IN EXCAVATION.
- EROSION AND SEDIMENT CONTROL
53. SUBMIT NOTICE OF INTENT TO CITY OF UNIVERSAL CITY. PROVIDE 3 COPIES OF PLAN AND NOI TO ENGINEER.
54. IMPLEMENT STORM WATER POLLUTION PREVENTION PLAN. MINIMIZE EROSION, SCOUR, AND DISCHARGE OF SEDIMENT.
55. REPAIR AREAS THAT BECOME ERODED, INCLUDING IN ALL ADJOINING PROPERTIES.
56. THE EXISTING BUSINESS PARK SITE IS AVAILABLE TO BE USED AS STAGING AREA (SEE SHEET 26). REPAIR ALL DAMAGE TO EXISTING PROPERTIES INCLUDING GRASS.
- DIVERSION & CARE OF STORM WATER
57. KEEP EXCAVATION FREE-FLOWING FOR STORM WATER RUNOFF AT ALL TIMES.
58. DO NOT DIVERT RUNOFF SO AS TO FLOOD ADJOINING PROPERTIES.
59. WHEN THE WORK AREA BECOMES SATURATED, DEWATER AND DRAIN TO ACCEPTABLE MOISTURE LEVELS PRIOR TO RESUMING WORK.
60. CONTRACTOR SHALL KEEP A COPY OF THE SWPPP ON SITE AT ALL TIMES.



TX Registration #F-002573
515 Busby Drive
San Antonio, Texas 78209
Phone: (210) 342-3991

CLIENT:

CITY OF UNIVERSAL CITY

PROJECT NAME:

Flintstone Drive Street Improvements

PHASE:

DETAIL DESIGN

PROJECT LOCATION:

PARKVIEW ESTATES
UNIVERSAL CITY, TX

PROJECT NUMBER:

UNIV-013C

DESIGNED BY:

CRM

CHECKED BY:

RJB

DRAWN BY:

CRM

DATE:

5/29/2025

SHEET TITLE:

GENERAL NOTES

SHEET NUMBER:

02

OF

26

UNIVERSAL CITY NOTES

REVISED FEBRUARY 3, 2021

CITY OF UNIVERSAL CITY WATER SYSTEM GENERAL NOTES

- ALL WORK IS TO BE INSTALLED IN ACCORDANCE WITH THE STANDARDS OF THE CITY OF UNIVERSAL CITY MATERIALS AND CONSTRUCTION PROCEDURES WITH THE CONTRACT AND SHALL CONFORM TO APPLICABLE CITY OF UNIVERSAL CITY SUBDIVISION REGULATIONS AND, STANDARD SPECIFICATIONS AND DETAILS. MATERIAL AND CONSTRUCTION PROCEDURES SHALL COMPLY WITH THE FOLLOWING STANDARDS WHERE REFERENCED AND/OR WHEN APPLICABLE: A) TEXAS COMMISSION OF ENVIRONMENTAL QUALITY (T.C.E.Q.) "PUBLIC DRINKING WATER" TAC TITLE 30 PART 1 CHAPTER 290 AND "DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEMS" TAC TITLE 30 PART 1 CHAPTER 217 AND/OR B) SAN ANTONIO WATER SYSTEM (SAWS) STANDARD SPECIFICATIONS FOR WATER AND SANITARY SEWER CONSTRUCTION", LATEST EDITION OR PUBLICATION UNLESS OTHERWISE SPECIFIED IN THE CITY OF UNIVERSAL CITY STANDARD SPECIFICATIONS AND DETAILS. THE CONTRACTOR SHALL CONTACT THE CITY OF UNIVERSAL CITY DIRECTOR OF PUBLIC WORKS 72 HOURS PRIOR TO COMMENCING WORK ON EACH SECTION OF THE PROJECT AND 24 HOURS PRIOR TO THE NEED TO CLOSE ANY UTILITY VALVE OR MAIN.

- LAY WATER MAINS SIX FEET (6') OFF PROPERTY LINE UNLESS OTHERWISE NOTED.

- MACHINE CHLORINATION WILL BE BY THE CONTRACTOR UNLESS OTHERWISE NOTED.

- ALL NECESSARY WATER APPURTENANCES OR MATERIALS NEEDED TO MAINTAIN HYDROSTATIC TESTS SHALL BE FURNISHED BY THE CONTRACTOR AS SPECIFIED IN SAWS ITEM NO. 841.

- CONTRACTOR TO DISINFECT AND HYDROSTATICALLY TEST ALL MAINS IN ACCORDANCE WITH SAN ANTONIO WATER SYSTEM (SAWS) STANDARD ITEM NUMBERS 841 AND 847. MICROBIOLOGICAL SAMPLING SHALL BE IN STRICT ACCORDANCE WITH CITY OF UNIVERSAL CITY WATER SYSTEM, SAN ANTONIO WATER SYSTEM (SAWS), AMERICAN WATER WORKS (AWWA) AND TEXAS COMMISSION OF ENVIRONMENTAL QUALITY (TCEQ) STANDARDS OF THE LATEST REVISION. THE CONTRACTOR SHALL NOTIFY THE CITY OF UNIVERSAL CITY DIRECTOR OF PUBLIC WORKS AT LEAST 48 HOURS PRIOR TO CONDUCTING ALL SAMPLING AND TESTING. THE CONTRACTOR SHALL FURNISH THE TEST RESULTS TO CITY OF UNIVERSAL CITY DIRECTOR OF PUBLIC WORKS BEFORE CONNECTING TO EXISTING MAIN. THE CONTRACTOR SHALL PROVIDE AT LEAST 24 HOURS NOTICE TO HOMEOWNERS AND 48 HOURS NOTICE TO THE CITY OF UNIVERSAL CITY DIRECTOR OF PUBLIC WORKS PRIOR TO CONDUCTING ALL SAMPLING AND TESTING. THE SERVICE OUTAGE SHALL BE LIMITED TO THE PERIOD OF 12:00 A.M. TO 6:00 A.M. THE CITY OF UNIVERSAL CITY DIRECTOR OF PUBLIC WORKS OR HIS AUTHORIZED REPRESENTATIVES SHALL BE PRESENT DURING ALL SAMPLING, TESTING, TIE-INS OR WHEN VALVES ARE OPENED OR CLOSED BY THE CONTRACTOR (NO EXCEPTIONS).

- ALL WATER MAINS SHALL BE PVC C909 PRESSURE CLASS 235 AND BE INSTALLED IN ACCORDANCE WITH CITY OF UNIVERSAL CITY STANDARD SPECIFICATIONS AND DETAILS.

- MAXIMUM PIPE DEFLECTION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION GUIDE.

- CONTRACTOR SHALL FURNISH THE ENGINEER AND/OR THE CITY OF UNIVERSAL CITY DIRECTOR OF PUBLIC WORKS WITH AS-BUILTS THAT SHALL HAVE THE FINAL MEASUREMENTS FOR ALL PIPE INSTALLED AND ALL TAPS AND LENGTH OF SERVICE CONNECTIONS WITH BLUE MARKED HUBS AT EACH SERVICE.

- THE LOT CORNERS SHALL BE SET BY THE ENGINEER FOR WATER SERVICES. LOT CORNERS WILL BE CAREFULLY PRESERVED BY CONTRACTOR SO THAT THE METER BOXES CAN BE SET. ANY LOT CORNER DESTROYED OR REMOVED BY THE CONTRACTOR OR HIS EMPLOYEES WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

- STREETS SHALL HAVE BEEN EXCAVATED DOWN TO SUBGRADE, AND THE PARKWAY WILL BE CUT DOWN TO THE TOP OF THE CURB BY THE STREET CONTRACTOR PRIOR TO CONSTRUCTION OF THE WATER MAINS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE A PAD FOR THEIR EQUIPMENT IF NECESSARY.

- WATER METER BOXES WILL BE INSTALLED ONE FOOT (1') BEHIND THE CURB, AND SHALL BE EITHER A PLASTIC OR CAST IRON METER BOX WITH A HOLE CUT IN THE LID FOR A TOUCH TONE READER AND SET AT FINAL GRADE LEVEL. TO SUPPORT THE REQUIRED SPACE NEEDED (8") FOR INSTALLATION OF THE TOUCH READ METER AND THE R800 RADIO READ TRANSMITTER MOUNTED ON TOP LID, THE CONTRACTOR SHALL FURNISH APPROVAL FOR CITY APPROVAL PRIOR TO ANY METER BOX. THE METER BOXES SHALL BE SUPPORTED WITH BRICKS. ALL METER BOXES ARE TO HAVE THE CITY OF UNIVERSAL CITY LOGO ON THE BOX LID.

- CONTRACTOR IS RESPONSIBLE FOR BRINGING VALVES AND METER BOXES TO MATCH FINISHED GRADE, ELEVATION SPECIFIED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER DURING WATERLINE AND/OR ROADWAY RECONSTRUCTION.

- ALL WATER SERVICES SHALL BE ONE-INCH (1") MINIMUM UP TO THE CURB STOP IN ACCORDANCE WITH CITY OF UNIVERSAL CITY STANDARD SPECIFICATIONS AND DETAILS. USE 1" X 1/2" CURB STOP WHEN NECESSARY FOR METER LESS THAN ONE-INCH (1").

- EXCESS MATERIAL SHALL BE DISPOSED OF AS DIRECTED BY THE PROJECT ENGINEER. NO EXCESS MATERIAL SHALL BE DUMPED OR ALLOWED TO ENTER ANY WATERWAY, CULVERT OR OTHER DRAINAGE STRUCTURE. THE CONTRACTOR SHALL NOT PLACE ANY MATERIAL IN THE 100-YEAR FLOODPLAIN WITH OUT OBTAINING AN APPROVED FLOODPLAIN PERMIT. UNACCEPTABLE MATERIAL SHALL BE DEFINED AS EXISTING UNSTABLE MATERIALS AND LAYING CONDITIONS ENCOUNTERED ANY TIME DURING EXCAVATION, TRENCHING OR BACKFILLING. SUCH MATERIALS INCLUDE AND ARE NOT LIMITED TO THE FOLLOWING:

A. ANY SHARP ABRASIVE OBJECT, WATER, SILT, MUCK, TRASH OR DEBRIS, ROCK IN LEDGE, COARSE GRAVEL WITH PARTICLE SIZE LARGER THAN 1-1/2 INCH DIAMETER DURING INITIAL BACKFILL, ROCKS OR BouldERS GREATER THAN ONE-HALF (1/2) THE TRENCH WIDTH DURING SECONDARY BACKFILL, AND ANY SUCH MATERIAL SHALL BE REMOVED FROM THE TRENCH AND THE JOB SITE.

B. THERE SHALL BE NO EXTRA COMPENSATION OR TIME ALLOWANCE FOR ENCOUNTERING ROCK, REMOVAL OF ROCK, DEBRIS OR ANY UNACCEPTABLE MATERIAL.

- ANY CAVERNS OR SOLUTION CHANNELS ENCOUNTERED DURING CONSTRUCTION WILL BE REPORTED TO THE ENGINEER AND THE CITY OF UNIVERSAL CITY WITH A REQUEST FOR ADESION REVISION WHEN THE STRENGTH OF THE PIPE, IS NOT SUFFICIENT TO BRIDGE THE GAP. THE CONTRACTOR SHALL ALSO REPORT THE FINDINGS TO THE CITY OF THE CAVERN TO THE APPROPRIATE REGULATORY AGENCIES AND STOP WORK UNTIL AUTHORIZATION TO CONTINUE IS RECEIVED.

- THRUST BLOCKS SHALL BE INSTALLED AS REQUIRED BY THE CITY OF UNIVERSAL CITY STANDARD SPECIFICATIONS AND DETAILS, AND/OR AS DIRECTED BY THE PUBLIC WORKS DIRECTOR OR HIS AUTHORIZED REPRESENTATIVE OR THE PROJECT ENGINEER.

- 2-1/8-INCH POST TYPE FIRE HYDRANTS ARE TO BE INSTALLED IN LIEU OF PERMANENT BLOWOFFS.

- ALL FITTINGS, PIPES, AND SERVICES SHALL BE ENCASED WITH SIX-INCHES (6") OF PIT RUN SAND UNDER THE BOTTOM OF THE PIPE AND TWELVE-INCHES (12") ABOVE THE TOP OF THE PIPE.

- THE DIRECTOR OF PUBLIC WORKS OR HIS AUTHORIZED REPRESENTATIVE WILL INSPECT PIT RUN SAND BEDDING BEFORE PIPE IS LAID, INITIAL BACKFILL, AND SECONDARY BACK FILL IS INSTALLED. PROVIDE MATERIAL SUBMITTAL FOR PIT RUN SAND TO THE CITY FOR REVIEW AND APPROVAL 2 WEEKS PRIOR TO ONSITE DELIVERY. PIT RUN SAND SHALL BE FROM GEN MATERIALS OR APPROVED EQUAL. ALL BEDDING PLACED IN THE WATER TRENCH SHALL BE COMPACTED IN MAXIMUM EIGHT-INCH (8") LIFTS TO 96% DENSITY OF TXDOT'S TEST METHOD TEX-113-E. PROVIDE TESTING ON EACH EIGHT-INCH (8") COMPACTED LIFT. SUBGRADE MOISTURE DENSITY TESTING SHALL BE AT THE MINIMUM FREQUENCY OF THREE (3) PER BLOCK AND SHALL NOT EXCEED 500 FOOT SPACING.

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MATERIALS AND WORKMANSHIP AFTER PRELIMINARY ACCEPTANCE BY CITY AND UNTIL FINAL ACCEPTANCE BY CITY. AFTER FINAL ACCEPTANCE OF CONSTRUCTION IS ISSUED, THE CONTRACTOR SHALL PROVIDE A ONE (1) YEAR WARRANTY IN ACCORDANCE WITH THE SPECIFICATIONS SPECIAL CONDITIONS. THE CONTRACTOR SHALL REPAIR ANY AREAS WITHIN ONE (1) WEEK OF WRITTEN NOTIFICATION DURING WARRANTY PERIOD.

- CONTRACTOR SHALL PROVIDE THE FOLLOWING SUPPORT ACTIVITY:

A. ATTEND PRE-CONSTRUCTION CONFERENCE WITH CITY AND SECURE CITY PERMIT.
B. ATTEND PRELIMINARY AND FINAL ACCEPTANCE INSPECTIONS WITH CITY AND PROVIDE SUPPORT MANPOWER AS NEEDED FOR TESTING AND INSPECTIONS.

- FIRE HYDRANTS SHALL BE MOST CURRENT MUELLER OR AMERICAN DARLING NO. B-84-B: FIRE HYDRANTS TO OPEN LEFT AND INSTALLED IN ACCORDANCE WITH CITY OF UNIVERSAL STANDARD SPECIFICATIONS AND DETAILS.

- ALL GATE VALVES SHALL BE MOST CURRENT AWWA APPROVED RESILIENT SEAT VALVES, LEFT HAND OPEN, AS MANUFACTURED BY EAST JORDAN IRON WORKS, MUELLER (A-2370-20) AMERICAN DARLING OR CLOW VALVES AND INSTALLED IN

ACCORDANCE WITH THE CITY OF UNIVERSAL CITY STANDARD SPECIFICATIONS AND DETAILS.

- 8 MIL POLYETHYLENE SLEEVE WRAPPING WITH RUST PREVENTIVE SHALL BE REQUIRED ON ALL DUCTILE IRON OR CAST IRON PIPE OR FITTINGS.

- ALL FITTINGS SHALL BE MECHANICAL JOINT WITH CONCRETE BLOCKING UNLESS OTHERWISE NOTED IN ACCORDANCE WITH THE CITY OF UNIVERSAL CITY STANDARD SPECIFICATIONS AND DETAILS.

- CONTRACTOR WILL NOTIFY ALL UTILITY COMPANIES AT LEAST 72 HOURS PRIOR TO EXCAVATION. THE LIST PROVIDED BELOW IS A COURTESY AND SHALL NOT BE CONSTRUED AS TO INCLUDE ALL UTILITY COMPANIES THAT MAY BE ENCOUNTERED.

CITY OF UNIVERSAL CITY	(210) 658-5364
WATER AND SANITARY SEWER	(210) 658-5365
STORM DRAIN	(210) 658-5364
TRAFFIC SIGNAL OPERATIONSTXDOT	(210) 615-5975
CITY OF UNIVERSAL CITY	(210) 658-5364
DIG TESS811	
TEXAS STATE WIDE ONE CALL LOCATORS	811
CITY PUBLIC SERVICE	(210) 353-3333
TIME WARNER CABLE	811
AT&T	811
MCI	1-800-MCU-WORK
CENTERPOINT GAS	1-800-427-7142

- THE LOCATION AND DEPTH OF EXISTING UTILITIES SHOWN ON THE PLANS OR MARKED IN THE FIELD ARE UNDERSTOOD TO BE APPROXIMATE ONLY AND ALL UTILITIES MAY NOT BE SHOWN PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND DEPTHS OF ALL UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ALL UTILITIES DURING CONSTRUCTION AND SHALL REPAIR ANY DAMAGE TO OTHER UTILITIES AT NO EXPENSE TO THE CITY OF UNIVERSAL CITY. THE TEXAS UTILITY CODE REQUIRES A CONTRACTOR TO CONTACT A NOTIFICATION CENTER AT LEAST 48 HOURS (BUSINESS DAYS) PRIOR TO DIGGING DEEPER THAN 16-INCHES, WITH LIMITED EXCEPTIONS.

- CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGNING/GEOTECHNICAL/SAFETY EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE

ANTICIPATED INSTALLATION SITE (S) WITHIN THE PROJECT WORK AREA IN ORDER TO DEVELOP THE CONTRACTOR'S PLANS TO IMPLEMENT THE PROJECT AS DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S PLANS SHALL PROVIDE FOR AN ADEQUATE TRENCH SAFETY SYSTEM THAT COMPLIES WITH AS A MINIMUM OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANTS WILL DEVELOP AND IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN

AND AROUND TRENCH EXCAVATION. TRENCH SAFETY REQUIREMENTS PERTAIN TO ALL WORK.

- CONTRACTOR TO VERIFY HORIZONTAL LOCATION AND TOP OF CURB ELEVATION AT FIRE HYDRANT LOCATIONS WITH THE DIRECTOR OF PUBLIC WORKS OR HIS DESIGNEE BEFORE INSTALLATION OF ANY FIRE HYDRANT.

- WATER SERVICES IN ROADWAY OR UTILITY EASEMENTS AND CUL-DE-SACS SHALL BE ENCASED IN 3" SCHEDULE 40" PVC PIPES MEETING ASTM D-1785 AND D-2685.

- NO BLASTING IS ALLOWED.

- NO WATER JETTING IS ALLOWED.

- THE WATER LINES WILL BE SET FROM THE STREET HUBS BEFORE THIS CONTRACT BEGINS. STREET CUT SHEETS WILL BE SUPPLIED TO THE CONTRACTOR. THERE SHOULD BE NO ADDITIONAL STAKES REQUIRED AND IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO INSPECT THE SITE AND VERIFY THAT ALL STAKES REQUIRED FOR HIS WORK ARE IN PLACE AT THE TIME THE CONSTRUCTION BEGINS. IF ANY STAKES ARE MISSING, THE ENGINEER SHOULD BE NOTIFIED IMMEDIATELY. AFTER CONSTRUCTION BEGINS, ALL CONSTRUCTION STAKES, MARKS, ETC., SHALL BE CAREFULLY PRESERVED BY THE CONTRACTOR. HIS EMPLOYEE OR SUBCONTRACTOR BY ANY MEANS NECESSARY. ANY SUCH STAKES, MARKS, ETC. THAT ARE DAMAGED OR MISSING, SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

- CONTRACTOR SHALL MAINTAIN TWO-WAY TRAFFIC IN EXISTING STREETS AT ALL TIMES, EXCEPT AS NOTED. PAVEMENT CUTS ACROSS AN EXISTING STREET ARE TO BE MADE ONE-HALF (1/2) AT A TIME AND THE PAVEMENT SHALL BE SAWCUT. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ACCESS FOR CHILDREN, RESIDENTS, BUSINESSSES, CITY REPRESENTATIVES AND MAINTAIN ONE-HALF (1/2) OF ALL STREETS OPEN TO THRU TRAFFIC AT ALL TIMES. THE CONTRACTOR SHALL PROVIDE STEEL PLATE TRAFFIC COVERS OVER THE TRENCH AT STREETS, SIDEWALKS, AND AT DRIVEWAYS AS REQUIRED. THE CONTRACTOR SHALL MAINTAIN ACCESS FOR THE US POSTAL SERVICE CARRIERS. ANY DAMAGES INCURRED TO MAILBOXES SHALL BE AT THE CONTRACTOR'S EXPENSE AND SHALL BE RESTORED TO THEIR ORIGINAL OR IMPROVED CONDITION. BARRICADES AND FLAG MEN SHALL BE PROVIDED FOR THE PROTECTION OF CHILDREN, PEDESTRIANS AND TO PROVIDE SMOOTH TRAFFIC FLOW ACCORDING TO THE TEXAS DEPARTMENT OF TRANSPORTATION (TXDOT) STANDARDS AND TO THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (LATEST VERSION AT TIME OF CONSTRUCTION).

- IT IS THE CONTRACTOR'S RESPONSIBILITY TO SET 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 OR THE TRAFFIC ENGINEERING REPRESENTATIVE SHALL ONLY BE RESPONSIBLE TO INSPECT BARRICADES AND SIGNS. IF IN THE OPINION OF THE TRAFFIC ENGINEERING REPRESENTATIVE, OR THE CONSTRUCTION INSPECTOR, THE TRAFFIC CONTROL DEVICES DO NOT CONFORM TO ESTABLISHED STANDARDS, ARE INCORRECTLY PLACED, OR INSUFFICIENT IN QUANTITY TO PROTECT THE GENERAL PUBLIC, THE CONSTRUCTION

INSPECTOR OR TRAFFIC ENGINEERING REPRESENTATIVE SHALL HAVE THE OPTION OF STOPPING THE OPERATIONS UNTIL SUCH TIME AS THE CONDITIONS ARE CORRECTED AT NO EXPENSE TO THE CITY OF UNIVERSAL CITY.

- CONTRACTOR SHALL PLACE AN INSULATED 14 GAUGE WIRE DIRECTLY ON TOP OF THE WATER MAIN WITH PLASTIC WARNING TAPE ONE-FOOT (1') ABOVE THE TOP OF PIPE. WIRE SPLICE CONNECTIONS TO BE WITH APPROVED GEL CAPS.

- DUE TO FEDERAL REGULATIONS, TITLE 49, PART 192.181, CPS 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.

- WHENEVER POWER POLES ARE ADJACENT TO THE PROPOSED TRENCH, THE CONTRACTOR SHALL PROVIDE PROPER SHORING OR BRACING DURING CONSTRUCTION OF THE TRENCH, ACCORDING TO THE METHODS APPROVED BY THE APPROPRIATE UTILITY COMPANY. ANY DAMAGES INCURRED SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE AND RESORED TO ITS ORIGINAL OR IMPROVED CONDITION TO THE SATISFACTION OF THE UTILITY OWNER.

- THE CONTRACTOR SHALL MARK THE LOCATION OF METER BOXES ON THE CURB WITH BLUE PAINT. WATER VALVES SHALL NOT BE PLACED IN WHEEL CHAIR RAMPS OR CURBS.

- THE CONTRACTOR SHALL PROTECT THE EXISTING WATER LINE UNTIL IT IS ABANDONED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING CONTINUOUS SERVICE AS THE PROPOSED WATER MAIN IS BEING LAID.

- NO PIPE WHICH HAS BEEN USED FOR ANY PREVIOUS PURPOSE SHALL BE ACCEPTED OR RELOCATED FOR USE IN THIS PROJECT. ALL WATER LINES INSTALLED SHALL MEET AMERICAN WATER WORKS ASSOCIATION (AWWA) AND NATIONAL SANITATION FOUNDATION (NSF) STANDARDS WITH PUSH ON JOINTS.

- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE PROPER CLEARANCE REQUIRED BY THE NATIONAL ELECTRICAL CODE, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), TEXAS STATE LAW VERNONS ANNOTATED TEXAS STATUES ARTICLE 1436 (C) PERTAINING TO CLEARANCES WHEN WORKING IN CLOSE PROXIMITY TO OVERHEAD ELECTRICAL LINES AND EQUIPMENT; AND TEXAS STATE LAW HEALTH AND SAFETY CODE-CHAPTER 752 HIGH VOLTAGE OVERHEAD LINES. ALL COSTS INCURRED BY THE CITY OF UNIVERSAL CITY AND/OR A UTILITY PROVIDER, BECAUSE OF FAILURE TO COMPLY WITH THE REQUIRED CLEARANCE WILL BE THE RESPONSIBILITY OF THE CONTRACTOR FOR NOT FOLLOWING EFFECTIVE PRECAUTIONARY MEASURES.

- THE CONTRACTOR'S STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SHALL INCLUDE EROSION AND SEDIMENTATION CONTROLS FOR ALL SOIL STAGING AND STORAGE AREAS.

- PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL INSTALL ALL EROSION AND SEDIMENTATION CONTROLS.

- ALL DISTURBED EXCAVATED AREAS WITHIN THE CITY RIGHT-OF-WAY SHALL BE RESODDED TO MATCH THE EXISTING SITE CONDITIONS.

- ALL BACKFLOWS ARE TO BE TESTED UPON INSTALLATION AND YEARLY THEREAFTER BY AN APPROVED TESTER. THE ORIGINAL INSTALLATION TEST FORMS WILL BE IMMEDIATELY SUBMITTED TO CITY OF UNIVERSAL CITY DIRECTOR OF PUBLIC WORKS.

- ALL TRENCHES IN TRAFFIC AREAS ARE TO BE BACKFILLED WITH FLOWABLE FILL FROM THE TOP OF BEDDING TO WITHIN 2 INCHES OF TOP GRADE FOR SURFACE HOT MIX, WARM MIX, OR CONCRETE.

- METERS 11" OR LARGER SHALL BE THE COMPOUND TYPE AND INSTALLED WITH A METER STRAINER UNLESS OTHERWISE APPROVED BY THE DIRECTOR OF PUBLIC WORKS.

- INLINE PRVS INSTALLED WILL HAVE A PRESSURE RANGE SETTING OF 15 TO 150 PSIG AND HAVE A MINIMUM WORKING PRESSURE OF AT LEAST 150 PSIG.

- ALL METER VAULT LIDS ARE TO HAVE A 2-1/2" HOLE FOR THE RADIO READ TRANSMITTER.

- CONTRACTOR SHALL PAY FOR HYDRANT METER DEPOSIT (REFUNDABLE UPON RETURN) AND FOR WATER USED DURING CONSTRUCTION. AN APPROVED BACKFLOW DEVICE SHALL BE INSTALLED ON ALL HOORUPS TO FIRE HYDRANTS. (SEE CITY UTILITY ADMINISTRATION 658-0330 EXT.710). BACKFLOW DEVICE PROVIDED BY CONTRACTOR.

- WHERE WATER AND SEWER LINES ARE INSTALLED WITH A SEPARATION DISTANCE OF LESS THAN NINE (9) FEET AS MEASURED FROM OUTSIDE TO OUTSIDE, THE INSTALLATION MUST MEET THE REQUIREMENTS OF TAC TITLE 30 CHAPTERS 217.53(d) AND 290.44(e).

- ANY WORK COMPLETED WITHOUT PRIOR AUTHORIZATION, WHETHER INCLUDED IN THE PLANS AND SPECIFICATIONS OR NOT, SHALL NOT BE COMPENSATED BY THE CITY OF UNIVERSAL CITY.

- THE CONTRACTOR SHALL EXERCISE CARE WHEN EXCAVATING AROUND AND PROTECT ALL SPECIES OF OAK TREES.

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL OR BETTER CONDITION, ANY DAMAGES DONE TO EXISTING FENCES, CONCRETE ISLANDS, STREET PAVING, CURBS OR DRIVEWAYS, FIRE HYDRANTS, VALVES, RIGHT OF WAY MONUMENTS, GATES, ETC (NO SEPARATE PAY ITEM).

REVISED: FEBRUARY 3, 2021

CITY OF UNIVERSAL CITY STREET GENERAL NOTES

- ALL WORK IS TO BE INSTALLED IN ACCORDANCE WITH STANDARDS OF THE CITY OF UNIVERSAL CITY. MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT WILL CONFORM TO APPLICABLE CITY OF UNIVERSAL CITY SUBDIVISION REGULATIONS AND, STANDARD SPECIFICATIONS AND DETAILS.

- FOR ALL REFERENCES TO THE TEXAS DEPARTMENT OF TRANSPORTATION (TXDOT), THE CONTRACTOR SHALL SEE THEIR CURRENT STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS, STREETS, AND BRIDGES, WHICH IS ALSO LOCATED AT WWW.TXDOT.GOV.

- ALL CONCRETE SHALL BE AS DETAILED ON THE PLAN SHEETS AND MEET MATERIAL REQUIREMENTS OF TXDOT ITEM 421, "HYDRAULIC CEMENT CONCRETE".

- ALL REINFORCING STEEL SHALL BE GRADE 60, MEET THE MATERIAL AND CONSTRUCTION REQUIREMENTS OF TXDOT ITEM 440, "REINFORCING STEEL", AND BE LISTED ON THE TXDOT APPROVED LIST OF SUPPLIERS WHICH IS LOCATED AT WWW.TXDOT.GOV.

- CONCRETE CURING SHALL BE WITH AN IMPERVIOUS MEMBRANE APPLICATION AND SHALL MEET THE MATERIAL AND APPLICATION REQUIREMENTS OF THE CITY OF SAN ANOTNIO "MEMBRANE CURING" AND BE LISTED ON THE TXDOT APPROVED LIST OF SUPPLIERS WHICH IS LOCATED AT WWW.TXDOT.GOV. IN ADDITION TO THE CONTRACTOR APPLYING THE CURING COMPOUND THEY ARE TO INSTALL CONTRACTION/EXPANSION JOINTS ON CONCRETE WORK.

- ALL CONCRETE CONSTRUCTION AND FINISHING SHALL MEET THE REQUIREMENTS OF TXDOT ITEM 420 "CONCRETE STRUCTURES" FOR PUBLIC WORKS CONSTRUCTION.

- THE CONTRACTOR IS REQUIRED TO ATTEND A PRE-CONSTRUCTION CONFERENCE AND SHALL SCHEDULE IT WITH THE CITY PUBLIC WORKS DEPARTMENT (RANDY LUENSMANN AT (210) 658-5364) A MINIMUM OF ONE (1) WEEK PRIOR TO BEGINNING CONSTRUCTION.

- MANHOLES SHALL BE BROKEN BELOW THE FINISH GRADE LEVEL UNTIL THE BASE IS COMPLETED AND THEN RESTORED.

- THE ENGINEER WILL STAKE THE STREET ONE TIME ONLY AND FURNISH CUT SHEETS TO THE STREET CONTRACTOR; ANY CONSTRUCTION STAKES REMOVED OR DESTROYED BY THE CONTRACTOR OR HIS EMPLOYEES WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

- AN INDEPENDENT TESTING LABORATORY APPROVED BY THE CITY OF UNIVERSAL CITY SHALL PERFORM ALL "FIELD AND LABORATORY TESTING". THE CITY REQUIRES ALL INSPECTION AND/OR TESTING FIRMS TO BE ACCREDITED, QUALIFIED, AND IN COMPLIANCE WITH THE REQUIREMENTS OF ASTM E329, "STANDARD SPECIFICATION FOR AGENCIES ENGAGED IN STREET GENERAL NOTES REVISED FEBRUARY 03, 2021 CONSTRUCTION INSPECTION AND/OR TESTING". FIRMS MUST PRESENT A COPY OF THEIR CURRENT, OFFICIAL ACCREDITATION BY THE AMERICAN ASSOCIATION FOR LABORATORY ACCREDITATION (A2LA) OR THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) AND CURRENT AMRL AND CORL PROFICIENCY RESULTS. THE FIRMS SHALL BE ACCREDITED IN ALL MATERIAL TEST PROCEDURES REQUIRED TO BE PERFORMED FOR EACH PROJECT.

- THE CITY SHALL PAY ALL TESTING FOR PUBLIC WORKS PROJECTS UNLESS OTHERWISE AGREED UPON AND APPROVED BY THE CITY. FOR NON-PUBLIC WORKS PROJECTS OR PRIVATE DEVELOPMENTS, THE CONTRACTOR SHALL PAY ALL COSTS OF TESTING. THE FOLLOWING TEST SCHEDULE SHALL BE ADHERED TO:

A. ALL IMPORT FILL PLACED IN THE STREET'S SUBGRADE SHALL BE SELECT MATERIAL, WITH A PLASTICITY INDEX LESS THAN FIFTEEN (15), AND COMPACTED IN MAXIMUM EIGHT (8) INCH LIFTS TO 88% DENSITY OF TXDOT'S TEST METHOD TEX 113-E. PROVIDE TESTING ON EACH EIGHT (8) INCH COMPACTED LIFT. SUBGRADE MOISTURE DENSITY TESTING SHALL BE AT THE MINIMUM FREQUENCY OF THREE (3) PER BLOCK AND SHALL NOT TO EXCEED FIVE HUNDRED (500) FOOT SPACING.

B. THE RATE OF LIME TREATED/STABILIZED OF THE SUBGRADE SHALL REDUCE THE PLASTICITY INDEX TO 20 OR LESS OR IN ACCORDANCE WITH THE GEOTECHNICAL RECOMMENDATIONS AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH TXDOT ITEM 260, LIME TREATMENT (ROAD-MIXED).

C. FLEXIBLE BASE TESTING SHALL INCLUDE - P, I, L, L, GRADATION, AND WET BALL MILL OF MATERIAL SHALL BE TESTED UPON DELIVERY TO THE PROJECT AND AS DIRECTED BY THE CITY. MOISTURE DENSITY TESTING SHALL BE AT THE MINIMUM RATE OF THREE (3) PER BLOCK AND SHALL NOT TO EXCEED FIVE HUNDRED (500) FOOT SPACING. THE QUALITY CONTROL TEST ON THE MATERIALS SHALL BE PERFORMED BY THE CONTRACTOR'S CITY APPROVED TESTING FIRM. IN-PLACE DENSITY SHALL MEET THE REQUIREMENTS DETAILED IN THE CITY'S SUBDIVISION REGULATIONS.

D. HOT AND WARM MIX ASPHALTIC CONCRETE (HMAC/WMAC) DENSITY - IN PLACE DENSITY TESTING SHALL RESULT BETWEEN 92% AND 97% OF THE MAXIMUM THEORETICAL GRAVITY PER TEX 207-F. A SET OF TWO (2) CORES SHALL BE RANDOMLY SAMPLED AT A DISTANCE NOT TO EXCEED FIVE HUNDRED (500) FOOT SPACING PER BLOCK. ALL QUALITY CONTROL NUCLEAR TESTING OF THE IN-PLACE HMAC/WMAC IS FOR QUALITY CONTROL INFORMATION ONLY. THE HMAC/WMAC THICKNESS ARE TO BE MEASURED BY CORE. FIELD QUALITY CONTROL PERSONNEL SHALL BE TXDOT LEVEL II CERTIFIED AND BE PRESENT AT START AND THROUGH THE DURATION OF THE PLACEMENT OPERATIONS OF THE HMAC/WMAC TO DOCUMENT DENSITY, THICKNESS, AND COMPACTION AND PLACEMENT OPERATIONS. THE CITY WILL STREET GENERAL NOTES REVISED FEBRUARY 03, 2021 DETERMINE THE REMOVAL AND REPLACEMENT OF ALL FAILED PRODUCTION AND PLACEMENT HMAC/WMAC TEST RESULTS.

E. RECYCLED ASPHALT SHINGLES (RAS) SHALL NOT BE USED IN ANY HMAC OR WMAC MIXES. F. CONCRETE STRUCTURES - A MINIMUM OF ONE (1) SET OF COMPRESSIVE CONCRETE STRENGTH TEST OF 4, SIX (6) INCH DIAMETER CYLINDERS EACH WILL BE TESTED PER EACH STRUCTURE AND THE FREQUENCY SHALL BE NO LESS THAN ONE (1) SET PER SIXTY (60) CUBIC YARDS OF CONCRETE PLACED AND AT LEAST ONE (1) SET PER DAY.

F. CONCRETE CURB AND SIDEWALK - PROVIDE ONE (1) SET OF FOUR (4), SIX (6) INCH DIAMETER CYLINDERS PER EACH 500 LINEAR FEET OF CURB AND/OR SIDEWALK AND AT LEAST ONE (1) SET PER DAY.

G. THE CONTRACTOR SHALL SUBMIT CONCRETE, WMAC, AND HMAC DESIGNS A MINIMUM OF 2 WEEKS PRIOR TO THE PLACEMENT OF THE MATERIAL.

- ALL SUBGRADE AND FLEXIBLE BASE MATERIALS SHALL BE PROOF ROLLED WITH A HEAVY PNEUMATIC ROLLER (MINIMUM 25 TONS) IN CONFORMANCE WITH TXDOT ITEM 216, "PROOF ROLLING" AND COMPACTED TO THE DENSITY REQUIREMENT SHOWN IN THE CITY OF UC ITEM 200, "FLEXIBLE BASE". TESTS FOR DENSITY WILL BE PERFORMED WITHIN TWENTY-FOUR (24) HOURS AFTER PLACEMENT. IF THE DENSITY REQUIREMENT OF THE MATERIAL FAILS TO MEET THE DENSITY SPECIFIED, IT SHALL BE REWORKED AS NECESSARY TO OBTAIN THE DENSITY REQUIRED. THE CONTRACTOR SHALL MAINTAIN A MOIST BASE SURFACE AFTER IT HAS BEEN TESTED UNTIL THE NEXT PAVEMENT LAYER IS CONTRUCTED. SOFT AND YIELDING AREAS DISCOVERED SHALL BE CORRECTED BY THE CONTRACTOR AT THEIR EXPENSE.

- SURFACE STRUCTURES SUCH AS MAILBOXES, STREET SIGNS, FENCES, DRIVEWAYS, SIDEWALKS, LANDSCAPING, CONCRETE ISLANDS, CURBS OR CONCRETE DRIVEWAYS, ETC., VISIBLE AT THE TIME OF THE SURVEY ARE SHOWN ON THE PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SAFEGUARD AND MAINTAIN ANY AND ALL SURFACE STRUCTURES DURING THE COURSE OF WORK AND TO REPLACE OR REPAIR THOSE ITEMS WHICH ARE DAMAGED BY THE CONTRACTOR WITH LIKE OR BETTER QUALITY AND SHALL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL OR BETTER CONDITION (NO SEPARATE PAY ITEM).

- LOCATIONS AND DEPTHS OF EXISTING UTILITIES SHOWN ON THE PLANS ARE UNDERSTOOD TO BE APPROXIMATE. ACTUAL LOCATIONS MUST BE VERIFIED BY THE CONTRACTOR AT LEAST 48 HOURS PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES, PROTECT THEM DURING CONSTRUCTION AND REPAIR ANY DAMAGE TO OTHER UTILITIES AT NO COST TO THE CITY OF UNIVERSAL CITY. STREET GENERAL NOTES REVISED FEBRUARY 03, 2021

- 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/TRAFFIC ENGINEERING REPRESENTATIVE WILL ONLY BE RESPONSIBLE TO INSPECT BARRICADES AND SIGNS. IF IN THE OPINION OF THE TRAFFIC ENGINEERING REPRESENTATIVE/ CONSTRUCTION INSPECTOR, THE TRAFFIC CONTROL DEVICES DO NOT CONFORM TO ESTABLISHED STANDARDS, ARE INCORRECTLY PLACED OR INSUFFICIENT IN QUANTITY TO PROTECT THE TRAVELING GENERAL PUBLIC, THE CONSTRUCTION INSPECTOR WILL HAVE THE OPTION OF STOPPING THE OPERATIONS UNTIL SUCH TIME AS THE CONDITIONS ARE CORRECTED AT NO EXPENSE TO THE CITY OF UNIVERSAL CITY.

- CITY TO FURNISH AND INSTALL STREET NAME SIGNS, STOP SIGNS, SPEED LIMIT, YIELD SIGNS, ETC. DEVELOPER SHALL REIMBURSE CITY FOR MATERIAL AND LABOR COSTS.

- THE STREET CONTRACTOR IS REQUIRED TO ADJUST ALL EXISTING MANHOLES (SEE "ADJUSTING EXISTING MANHOLES" OF THE SPECIFICATION) AND WATER VALVES TO MATCH THE GRADE OF THE STREET SECTION OR THE ELEVATION SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

- DUE TO FEDERAL REGULATIONS TITLE 49, PART 192.181 ACCESS TO GAS VALVES MUST BE MAINTAINED AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.

- CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UNDERGROUND UTILITIES AND OTHER UNDERGROUND STRUCTURES WHETHER SHOWN ON THE PLANS OR NOT. CONTRACTOR WILL NOTIFY ALL UTILITY COMPANIES AT LEAST 72 HOURS PRIOR TO EXCAVATION.

CITY OF UNIVERSAL CITY	(210) 658-5364
WATER AND SANITARY SEWER	(210) 658-5365
STORM DRAIN	(210) 658-5364

DIG TESS 1-800-344-8377

TEXAS STATE WIDE ONE CALL LOCATORS 1-800-545-6005 OR 811

COSA TRAFFIC SIGNAL OPERATIONS 210-207-7720

CITY PUBLIC SERVICE (ELECTRIC AND GAS) (210) 353-3333

TIME WARNER CABLE 811

AT&T 811

MCI 1-800-MCU-WORK

VERIZON

- CONCRETE CURB SHALL BE CONSTRUCTED WITH A MAXIMUM OF EIGHTY (80) FEET BETWEEN EXPANSION JOINTS AND MARKED AT 20 FOOT INTERVALS WITH APPROVED STEEL MARKING TOOLS. EXPANSION JOINTS SHALL BE STREET GENERAL NOTES REVISED FEBRUARY 03, 2021 PLACED AT THE BEGINNING OF ALL RADII AND AT A MAXIMUM OF EIGHTY (80) FOOT INTERVALS AS DIRECTED BY THE ENGINEER.

- THE CONTRACTOR SHALL NOTIFY THE CITY PUBLIC WORKS DEPARTMENT (PUBLIC WORKS DIRECTOR OR HIS

AUTHORIZED REPRESENTATIVE AT 658- 5364) PRIOR TO PLACING BACKFILL OR CONCRETE AND PRIOR TO ANY TESTING. CONTRACTOR SHALL REQUEST INSPECTIONS A MINIMUM OF 24 HOURS IN ADVANCE. NO INSPECTIONS ARE AVAILABLE BETWEEN 12:00 P.M. AND 1:00 P.M. OR AFTER 4:00 P.M. DAILY, ON WEEKENDS, OR ON CITY HOLIDAYS.

- CONCRETE SIDEWALKS SHALL HAVE TOOLED WEAKENED PLANE JOINTS EVERY FOUR (4) FEET AND DOWELED EXPANSION JOINT WITH ONE QUARTER INCH (1/4) BITUMASTIC MATERIAL SEVENTY FIVE FEET (75) ON CENTER AND ABUTTING EXISTING STRUCTURES.

- ALL WORKMANSHIP AND MATERIAL SHALL CONFORM TO THE CITY OF UNIVERSAL CITY ORDINANCES FOR PUBLIC WORKS CONSTRUCTION AND TXDOT ITEMS S AND 6.

- CONTRACTOR SHALL INSTALL CURB FOR HANDICAP RAMPS AS SHOWN ON THE PLANS AND ADA STANDARD PLAN SHEETS.

- CONTRACTOR SHALL PROVIDE BRASS KEYS TO BE USED TO OPEN LOCKING MANHOLE COVERS ON DRAINAGE STRUCTURES DURING PRELIMINARY INSPECTION FOR ACCEPTANCE OF PROJECT.

- ALL TRENCHES PART OF A ROADWAY RECONSTRUCTION OR PROPOSED ROADWAY PROJECT ARE TO BE BACKFILLED AND COMPACTED AS NOTED IN UNIVERSAL CITY STANDARD SPECIFICATIONS AND STANDARD DRAWINGS.

- WHEN UNDER PAVEMENT, ALL UTILITY TRENCHES NOT PART OF A ROADWAY RECONSTRUCTION OR PROPOSED ROADWAY PROJECT ARE TO BE BACKF

UNIVERSAL CITY NOTES

REVISED FEBRUARY 3, 2021
CITY OF UNIVERSAL CITY WASTEWATER SYSTEM GENERAL NOTES

1.

ALL WORK IS TO BE INSTALLED IN ACCORDANCE WITH THE STANDARDS OF THE CITY OF UNIVERSAL CITY MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT AND SHALL CONFORM TO APPLICABLE CITY OF UNIVERSAL CITY SUBDIVISION REGULATIONS AND, STANDARD SPECIFICATIONS AND DETAILS. MATERIAL AND CONSTRUCTION PROCEDURES SHALL COMPLY WITH THE FOLLOWING STANDARDS WHERE REFERENCED AND/OR WHEN APPLICABLE: A) TEXAS COMMISSION OF ENVIRONMENTAL QUALITY (T.C.E.Q.) DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEM" TAC TITLE 30 PART 1 CHAPTER 217 AND "PUBLIC DRINKING WATER" TAC TITLE 30 PART 1 CHAPTER 290 AND/OR B) SAN ANTONIO WATER SYSTEM (SAWS) "STANDARD SPECIFICATIONS FOR WATER AND SANITARY SEWER CONSTRUCTION, LATEST EDITION OR PUBLICATION UNLESS OTHERWISE SPECIFIED IN THE CITY OF UNIVERSAL CITY STANDARD SPECIFICATIONS AND DETAILS. THE CONTRACTOR SHALL CONTACT THE CITY OF UNIVERSAL CITY DIRECTOR OF PUBLIC WORKS 72 HOURS PRIOR TO COMMENCING WORK ON EACH SECTION OF THE PROJECT AND 24 HOURS PRIOR TO THE NEED TO TIE INTO ANY SEWER MAIN.
2.

EXCESS MATERIAL SHALL BE DISPOSED OF AS DIRECTED BY THE PROJECT ENGINEER. NO EXCESS MATERIAL SHALL BE DUMPED OR ALLOWED TO ENTER ANY WATERWAY, CULVERT OR DRAINAGE STRUCTURE. THE CONTRACTOR SHALL NOT PLACE ANY MATERIAL IN THE 100-YEAR FLOODPLAIN WITHOUT OBTAINING AN APPROVED FLOODPLAIN PERMIT. UNACCEPTABLE MATERIAL SHALL BE DEFINED AS EXISTING UNSTABLE MATERIALS AND LAYING CONDITIONS ENCOUNTERED ANY TIME DURING EXCAVATION, TRENCHING OR BACKFILLING. SUCH MATERIALS INCLUDE AND ARE NOT LIMITED TO THE FOLLOWING:

A. ANY SHARP ABRASIVE OBJECT, WATER, SILT, MUCK, TRASH OR DEBRIS, ROCK IN LEDGE, COARSE GRAVEL WITH PARTICLE SIZE LARGER THAN 1-1/4 INCH DIAMETER DURING INITIAL BACKFILL, ROCKS OR BOULDERS GREATER THAN ONE-HALF (1/2) THE TRENCH WIDTH DURING SECONDARY BACKFILL, AND ANY SUCH MATERIAL SHALL BE REMOVED FROM THE TRENCH AND THE JOB SITE.

B. THERE SHALL BE NO EXTRA COMPENSATION OR TIME ALLOWANCE FOR ENCOUNTERING ROCK, REMOVAL OF ROCK, DEBRIS OR ANY UNACCEPTABLE MATERIAL.
3.

ALL SEWER LINES MUST PASS AN AIR TEST PER ITEM NO. 849 OF THE SAN ANTONIO WATER SYSTEM CONSTRUCTION SPECIFICATIONS, PRIOR TO ACCEPTANCE BY THE CITY OF UNIVERSAL CITY. ALL NEW MANHOLES ARE MUST PASS A VACUUM TEST CONDUCTED IN ACCORDANCE WITH SAN ANTONIO WATER SYSTEM CONSTRUCTION SPECIFICATIONS ITEM NO. 852 PRIOR TO ACCEPTANCE BY THE CITY OF UNIVERSAL CITY.
4.

THE CONTRACTOR SHALL PROVIDE AT LEAST 24 HOURS NOTICE TO HOMEOWNERS AND AT LEAST 48 HOURS NOTICE TO THE CITY OF UNIVERSAL CITY PUBLIC WORKS DIRECTOR PRIOR TO INTERRUPTING SERVICE TO MAKE CONNECTIONS OR EXTEND OWNERS SERVICE. THE SERVICE OUTAGE WILL BE LIMITED TO THE PERIOD OF 9:00 A.M. TO 4:00 P.M.

THE CITY OF UNIVERSAL CITY DIRECTOR OF PUBLIC WORKS OR HIS AUTHORIZED REPRESENTATIVE SHALL BE PRESENT WHEN THE DISCONNECTION AND RECONNECTION IS MADE. PROPERTY OWNERS SHALL BE NOTIFIED PRIOR TO THE NEED TO OPEN ANY FENCE GATES, PRIOR TO THE REMOVAL OF ANY FENCES OR ANY LANDSCAPING STRUCTURES REQUIRED DUE TO THE TRENCHING. TYPES AND LOCATION OF ANY LANDSCAPING STRUCTURES, TREES, BUSHES OR SCRUBS SHALL BE FIELD VERIFIED PRIOR TO EXCAVATION AND AVOIDED WHERE POSSIBLE.
5.

ALL SEWER LINES MUST PASS A DEFLECTION TEST IN COMPLIANCE WITH SAN ANTONIO WATER SYSTEM ITEM NO.849, PRIOR TO ACCEPTANCE BY THE CITY OF UNIVERSAL CITY. THE MANHOLE SHALL MEET THE REQUIREMENTS OF SAN ANTONIO WATER SYSTEM ITEM NO. 848. THE TEST SHALL BE PERFORMED WITHOUT MECHNICAL DEVICES. ALL SANITARY SEWER MAINS SHALL BE LAID TO GRADE AND SHALL NOT SAG OR OTHERWISE STAND WATER IN THE MAIN OR IN THE MANHOLE INVERT SECTION.
6.

SEWER SERVICE LATERALS SHALL BE SIX-INCH (6") PVC, SDR 26, AND BE INSTALLED PER CITY OF UNIVERSAL CITY STANDARD SPECIFICATIONS AND DETAILS AND NOT PROTRUDE INTO THE SEWER MAIN. FINAL APPROVAL FOR SEWER CONSTRUCTION BY THE CITY SHALL NOT BE GIVEN UNTIL ALL SERVICE LATERALS ARE INSTALLED AS SHOWN IN THE DRAWINGS. CONTRACTOR SHALL FURNISH THE ENGINEER AND CITY OF UNIVERSAL CITY DIRECTOR OF PUBLIC WORKS WITH AN AS-BUILT PLAN SHOWING THE LOCATION, LENGTH AND DEPTH OF EACH SEWER LATERAL.
7.

CLEANOUT FOR SEWER SERVICE LATERALS SHALL BE INSTALLED ONE FOOT (1') BEHIND PROPERTY LINE WITH DUCTILE OR CAST IRON SEWER LID PER THE CITY OF UNIVERSAL CITY DET-854-01.
8.

MANHOLE TOPS SHALL BE SET TO THE ELEVATION PROVIDED BY THE ENGINEER. MANHOLES SHALL NOT HAVE MORE THAN FIVE (5) THROAT RINGS FOR ADJUSTMENT THAT MAY BE MADE BY THE STREET CONTRACTOR. ALL MANHOLE COVERS SHALL BE MOUNTED FLUSH WITH TOP OF FINISHED PAVEMENT. BOLT DOWN MANHOLES ARE REQUIRED OUTSIDE PAVEMENT AREA. MANHOLES SHALL MEET TCEQ CRITERIA AND HAVE THE UNIVERSAL CITY LOGO ON THE LID.
9.

CONTRACTOR SHALL PRESERVE ALL CONSTRUCTION STAKES, MARKS, ETC. IF ANY STAKE, MARK, ETC. IS DESTROYED OR REMOVED BY THE CONTRACTOR OR THEIR EMPLOYEES, THEY WILL BE REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
10.

STREETS ARE TO BE EXCAVATED TO SUBGRADE AND THE PARKWAY SHALL BE CUT TO TOP OF CURB BY THE STREET CONTRACTOR PRIOR TO CONSTRUCTION OF THE SEWER MAINS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE A PAD FOR HIS EQUIPMENT IF NECESSARY.
11.

THE MINIMUM RADIUS OF CURVATURE FOR ANY PIPE SHALL BE EITHER 200 FEET, OR THE MANUFACTURER'S RECOMMENDATION, WHICHEVER IS GREATER. THIS REQUIREMENT IS NO WAY INTENDED TO RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO SUCCESSFULLY PASS THE AIR AND MANHOLE TESTING REQUIREMENTS. IF SEWER LINES ARE LAID ON A CURVE, THE MANHOLE SPACING SHALL BE REDUCED TO A MINIMUM OF 300 FEET.
12.

WHERE WATER AND SEWER LINES ARE INSTALLED WITH A SEPARATION DISTANCE OF LESS THAN NINE (9) FEET AS MEASURED FROM OUTSIDE TO OUTSIDE, THE INSTALLATION MUST MEET THE REQUIREMENTS OF TAC TITLE 30 PART1 CHAPTERS 217.53(d) AND 290.44(e).
13.

THE VERTICAL ANGLE OF CONNECTION INTO A SEWER MAIN FOR ALL SERVICE CONNECTIONS SHALL BE 45 OR LESS DEGREES. CONNECTION COUPLINGS WILL BE STAINLESS STEEL BAND TYPE. SERVICE LATERALS SHALL HAVE A COVER OF AT LEAST THREE FEET (3') UNDER THE SUBGRADE. A TWO-WAY CLEANOUT SHALL BE INSTALLED AT THE PROPERTY LINE.
14.

ALL SANITARY SEWER PIPE SHALL BE NEW, COMPRESSION JOINT PVC SDR 26 PIPE.
15.

WYE'S (Y) OR TEE'S (T) SHALL BE MANUFACTURED WYE'S OR TEE'S SUITABLE FOR USE IN SEWER SERVICE. NO FIELD FABRICATED TURNS OR ADAPTERS SHALL BE ALLOWED.
16.

NO BLASTING WILL BE ALLOWED.
17.

MANHOLES SHALL BE EITHER MONOLITHIC CAST IN-PLACE OR PRECAST. NO FIBERGLASS MANHOLES ARE ALLOWED. MANHOLES, INCLUDING RINGS AND COVERS, SHALL BE CONSTRUCTED, SO THAT THEY ARE WATERTIGHT. IF PRECAST MANHOLES ARE USED, THE CONTRACTOR SHALL PROVIDE A SUBMITTAL ON THE PRODUCT, GROUT, CONNECTION BOOT, SEALANT AND ANY OTHER APPURTENANCES TO THE CITY OF UNIVERSAL CITY DIRECTOR OF PUBLIC WORKS FOR APPROVAL PRIOR TO INSTALLATION.
18.

ALL NEW MANHOLE INTERIOR WALLS SHALL BE COATED WITH A CITY OF UNIVERSAL CITY APPROVED SEWER STRUCTURAL COATING.

• EPOXY COATING WITH SPECIFIED THICKNESS APPLICATION;

• RAVEN 405 SERIES HIGH BUILD EPOXY LINER; REQUIRED THICKNESS 125 MILS.

• FINISH COLOR SHALL BE LIGHT BLUE
19.

IF CAST-IN-PLACE MANHOLES ARE USED, THE CONTRACTOR SHALL PROVIDE A SUBMITTAL ON THE CONCRETE MIX DESIGN, REINFORCING DETAILS AND ANY OTHER APPURTENANCES TO THE CITY OF UNIVERSAL CITY DIRECTOR OF PUBLIC WORKS PRIOR TO INSTALLATION.
20.

ANY SEWER PIPE LAID AT TEN PERCENT (10%) SLOPE OR GREATER SHALL HAVE CONCRETE RETARDS A MINIMUM OF EVERY 20 FEET INSTALLED ACROSS THE ENTIRE WIDTH OF THE TRENCH.
21.

ANY CAVERNS OR SOLUTION CHANNELS ENCOUNTERED DURING CONSTRUCTION WILL BE REPORTED TO THE ENGINEER AND THE CITY OF UNIVERSAL CITY WITH A REQUEST FOR A DESIGN REVISION WHEN THE STRENGTH OF THE PIPE IS NOT SUFFICIENT TO BRIDGE THE GAP. THE CONTRACTOR SHALL ALSO REPORT THE FINDING OF THE CAVERN TO THE APPROPRIATE REGULATORY AGENCIES AND STOP WORK UNTIL AUTHORIZATION TO CONTINUE IS RECEIVED.
22.

NO WATER JETTING IS ALLOWED.
23.

THE CONTRACTOR SHALL NOTIFY THE DIRECTOR OF PUBLIC WORKS AT LEAST 48 HOURS PRIOR TO BACKFILL OR TESTING SO THAT HE OR HIS AUTHORIZED REPRESENTATIVE MAY WITNESS ANY BACKFILLING OR TESTING.

24.

CONTRACTOR WILL NOTIFY ALL UTILITY COMPANIES AT LEAST 72 HOURS PRIOR TO EXCAVATION. THE LIST PROVIDED BELOW IS A COURTESY AND SHALL NOT BE CONSTRUED AS TO INCLUDE ALL UTILITY COMPANIES THAT MAY BE ENCOUNTERED.
- CITY OF UNIVERSAL CITY

(210) 658-5364

WATER AND SANITARY SEWER

(210) 658-5365

STORM DRAIN

(210) 658-5364

TRAFFIC SIGNAL OPERATIONS TxDOT

(210) 615-5975

CITY OF UNIVERSAL CITY

(210) 658-5364

DIG TESS

811

TEXAS STATE WIDE ONE CALL LOCATORS

(210) 353-3333

CITY PUBLIC SERVICE

(210) 353-3333

TIME WARNER CABLE

811

AT&T

811

CENTERPOINT ENERGY GAS

1-800-427-7142

MCI

1-800-MCI-WORK
25.

ALL TRENCHES IN TRAFFIC AREAS ARE TO BE BACKFILLED WITH FLOWABLE FILL FROM THE TOP OF BEDDING TO WITHIN TWO-INCHES (2") OF TOP GRADE FOR SURFACE HOT MIX, WARM MIX, OR CONCRETE.
26.

CONTRACTOR SHALL PAY A HYDRANT METER DEPOSIT (REFUNDABLE UPON RETURN) AND FOR WATER USED DURING CONSTRUCTION. AN APPROVED BACKFLOW DEVICE SHALL BE ON ALL HOOKUPS TO FIRE HYDRANTS. (SEE CITY UTILITY ADMINISTRATION 659-0333, EX.1710)
27.

CONTRACTOR SHALL FURNISH THE ENGINEER AND/OR THE CITY OF UNIVERSAL CITY DIRECTOR OF PUBLIC WORKS WITH AN AS-BUILT PLAN THAT SHALL HAVE THE FINAL MEASUREMENTS FOR ALL PIPE INSTALLED AND ALL MANHOLES AND SERVICES BY STATION AND END ELEVATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MATERIALS AND WORKMANSHIP AFTER PRELIMINARY ACCEPTANCE BY CITY AND UNTIL FINAL ACCEPTANCE BY CITY. AFTER FINAL ACCEPTANCE OF CONSTRUCTION IS ISSUED, THE CONTRACTOR SHALL PROVIDE A ONE (1) YEAR WARRANTY IN ACCORDANCE WITH THE SPECIFICATIONS SPECIAL CONDITIONS. THE CONTRACTOR SHALL REPAIR ANY AREAS WITH IN ONE (1) WEEK OF WRITTEN NOTIFICATION DURING THE WARRANTY PERIOD.
28.

THE CONTRACTOR SHALL PROVIDE THE FOLLOWING SUPPORT ACTIVITY:

A. ATTEND PRE-CONSTRUCTION CONFERENCE WITH CITY AND SECURE CITY PERMIT.

B. ATTEND PRELIMINARY AND FINAL ACCEPTANCE INSPECTIONS WITH CITY AND PROVIDE SUPPORT AND MAN POWER AS NEEDED FOR TESTING AND INSPECTIONS.
29.

THE CONTRACTOR SHALL MAINTAIN TWO-WAY TRAFFIC IN EXISTING STREETS AT ALL TIMES, EXCEPT AS NOTED. PAVEMENT CUTS ACROSS AN EXISTING STREET ARE TO BE MADE ONE-HALF (1/2) AT A TIME AND THE PAVEMENT SHALL BE SAWCUT. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ACCESS FOR CHILDREN, RESIDENTS, BUSINESSES, CITY REPRESENTATIVES AND MAINTAIN ONE-HALF (1/2) OF ALL STREETS OPEN TO THRU TRAFFIC AT ALL TIMES. THE CONTRACTOR SHALL PROVIDE STEEL PLATE TRAFFIC COVERS OVER THE TRENCH AT STREETS, SIDEWALKS, AND AT DRIVEWAYS AS REQUIRED. THE CONTRACTOR SHALL MAINTAIN ACCESS FOR THE US POSTAL SERVICE CARRIERS, ANY DAMAGES INCURRED TO MAILBOXES SHALL BE AT THE CONTRACTOR'S EXPENSE AND SHALL BE RESTORED TO THEIR ORIGINAL OR IMPROVED CONDITION. BARRICADES AND FLAG MEN SHALL BE PROVIDED FOR THE PROTECTION OF CHILDREN, PEDESTRIANS AND TO PROVIDE SMOOTH TRAFFIC FLOW ACCORDING TO THE TEXAS DEPARTMENT OF TRANSPORTATION (TxDOT) STANDARDS AND TO THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (LATEST VERSION AT TIME OF CONSTRUCTION).
30.

WHENEVER POWER POLES ARE ADJACENT TO THE PROPOSED TRENCH, THE CONTRACTOR SHALL PROVIDE PROPER SHORING OR BRACING DURING CONSTRUCTION OF THE TRENCH ACCORDING TO THE METHODS APPROVED BY THE APPROPRIATE UTILITY COMPANY. ANY DAMAGES INCURRED SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE AND RESTORED TO ITS ORIGINAL OR IMPROVED CONDITION TO THE SATISFACTION OF THE UTILITY OWNER.
31.

THE CONTRACTOR SHALL PROTECT THE EXISTING SANITARY SEWER LINE UNTIL IT IS ABANDONED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING CONTINUOUS SERVICE AS THE PROPOSED SANITARY SEWER MAIN IS BEING LAID.
32.

NO PIPE WHICH HAS BEEN USED FOR ANY PREVIOUS PURPOSE SHALL BE ACCEPTED OR RELOCATED FOR USE IN THIS PROJECT.
33.

THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE PROPER CLEARANCE REQUIRED BY THE NATIONAL ELECTRICAL CODE, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), TEXAS STATE LAW VERNONS ANNOTATED TEXAS STATUES ARTICLE 1436 (C) PERTAINING TO CLEARANCES WHEN WORKING IN CLOSE PROXIMITY TO OVERHEAD ELECTRICAL LINES AND EQUIPMENT, AND TEXAS STATE LAW HEALTH AND SAFETY CODE-CHAPTER 752, HIGH VOLTAGE OVERHEAD LINES. ALL COSTS INCURRED BY THE CITY OF UNIVERSAL CITY AND/OR A UTILITY PROVIDER BECAUSE OF THE FAILURE OF THE CONTRACTOR TO COMPLY WITH THE REQUIRED CLEARANCE WILL BE THE RESPONSIBILITY OF THE CONTRACTOR FOR NOT FOLLOWING EFFECTIVE PRECAUTIONARY MEASURES.
34.

THE CONTRACTOR'S STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SHALL INCLUDE EROSION AND SEDIMENTATION CONTROLS FOR ALL SOIL STAGING AND STORAGE AREAS.
35.

PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL INSTALL ALL EROSION AND SEDIMENTATION CONTROLS.
36.

THE LOCATION AND DEPTH OF EXISTING UTILITIES SHOWN ON THE PLANS OR MARKED IN THE FIELD ARE UNDERSTOOD TO BE APPROXIMATE ONLY AND ALL UTILITIES MAY NOT BE SHOWN. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND DEPTHS OF ALL UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL BE REPOSIBLE FOR PROTECTION OF ALL UTILITIES DURING CONSTRUCTION AND SHALL REPAIR ANY DAMAGE TO ANY UTILITIES AT NO EXPENSE TO THE CITY OF UNIVERSAL CITY. THE TEXAS UTILITY CODE REQUIRES A CONTRACTOR TO
- CONTACT A NOTIFICATION CENTER AT LEST 48 HOURS (BUSINESS DAYS) PRIOR TO DIGGING DEEPER THAN 16-INCHES, WITH LIMITED EXCEPTIONS.
37.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL OR BETTER CONDITION, ANY DAMAGES DONE TO EXISTING FENCES, CONCRETE ISLANDS, STREET PAVING, CURBS OR DRIVEWAYS, FIRE HYDRANTS, VALVES, RIGHT OF WAY MONUMENTS, GATES, ETC (NO SEPARATE PAY ITEM).
38.

DUE TO FEDERAL REGULATIONS, TITLE 49, PART 192.181, CPS 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.
39.

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO DEVELOP THE CONTRACTOR'S PLAN TO IMPLEMENT THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S PLAN SHALL PROVIDE FOR AN ADEQUATE TRENCH SAFETY SYSTEM THAT COMPLIES WITH AS A MINIMUM OSHA STANDARDS FOR TRENCH EXCAVATIONS, SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT WILL DEVELOP AND IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION. TRENCH SAFETY REQUIREMENTS PERTAINS TO ALL WORK.
40.

ALL SEWER LINES SHALL RECEIVE A POST CONSTRUCTION VIDEO INSPECTION IN ACCORDANCE WITH THE SAN ANTONIO WATER SYSTEM ITEM NO. 886 AND 888. IN ADDITION, THE CONTRACTOR SHALL NOTIFY THE CITY OF UNIVERSAL CITY DIRECTOR OF PUBLIC WORKS SO THAT HE OR HIS AUTHORIZED REPRESENTATIVE MAY BE PRESENT DURING THE VIDEO INSPECTION, AND THE SEWER LINE SHALL HAVE THE VIDEO CONDUCTED WITH A CONSTANT FLOW OF CLEAN WATER.
41.

ALL SERVICES THAT ENTER MANHOLES WILL BE INSTALLED A MINIMUM OF EIGHT-INCHES (8") AND A MAXIMUM OF 24-INCHES (24") ABOVE THE INVERT.
42.

30 TAC TITLE 30 CHAPTER 27 SUBCHAPTER C - SEPARATION DISTANCES. THE FOLLOWING RULES APPLY TO SEPARATION DISTANCES BETWEEN POTABLE WATER AND SANITARY SEWER LINES.
- (A)

WHEN SANITARY SEWERS ARE INSTALLED, THEY WILL BE INSTALLED NO CLOSER TO WATERLINES THAN NINE FEET (9') IN ALL DIRECTIONS. SEWERS THAT PARALLEL WATERLINES MUST BE INSTALLED IN SEPARATE TRENCHES, WHERE THE NINE-FOOT (9') SEPARATION DISTANCE CANNOT BE ACHIEVED, THE FOLLOWING GUIDELINES SHALL APPLY:

(1)

WHERE A SANITARY SEWER PARALLELS A WATERLINE, THE SEWER WILL BE CONSTRUCTED OF CAST IRON, DUCTILE IRON OR PVC MEETING ASTM SPECIFICATIONS WITH A PRESSURE RATING FOR BOTH THE PIPE AND JOINTS OF 150 PSI. THE VERTICAL SEPARATION WILL BE A MINIMUM OF TWO FEET BETWEEN OUTSIDE DIAMETER AND THE HORIZONTAL SEPARATION WILL BE A MINIMUM OF

FOUR FEET BETWEEN OUTSIDE DIAMETERS. THE SEWER MUST BE LOCATED BELOW THE WATERLINE.
- (2)

WHERE A SANITARY SEWER CROSSES A WATERLINE AND THE SEWER IS CONSTRUCTED OF CAST IRON, DUCTILE IRON OR PVC WITH A MINIMUM PRESSURE RATING OF 150 PSI, AN ABSOLUTE MINIMUM DISTANCE OF SIX-INCHES (6") BETWEEN OUTSIDE DIAMETERS WILL BE MAINTAINED. IN ADDITION, THE SEWER MUST BE LOCATED BELOW THE WATERLINE AND ONE LENGTH OF THE SEWER PIPE MUST BE CENTERED ON THE WATERLINE.
- (3)

WHERE A SEWER CROSSES UNDER A WATERLINE AND THE SEWER IS CONSTRUCTED OF ABS TRUSS PIPE, SIMILAR SEMI-RIGID PLASTIC COMPOSITE PIPE, CLAY PIPE OR CONCRETE PIPE WITH GASKETED JOINTS, A

- MINIMUM OF TWO-FEET (2') SEPARATION DISTANCE MUST BE MAINTAINED. THE INITIAL BACKFILL WILL BE CEMENT STABILIZED SAND COMPRISED OF TWO (2) OR MORE 80 POUND BAGS OF CEMENT PER CUBIC YARD OF SAND FOR ALL SECTIONS OF SEWER WITHIN NINE FEET (9') OF THE WATERLINE. THIS INITIAL BACKFILL WILL BE FROM ONE QUARTER (1/4) DIAMETER BELOW THE CENTERLINE OF THE PIPE TO ONE PIPE DIAMETER (BUT NOT LESS THAN 12") ABOVE THE TOP OF THE PIPE.
- (4)

WHERE A SEWER CROSSES OVER A WATERLINE ALL PORTIONS OF THE SEWER WITHIN NINE FEET (9') OF THE WATERLINE WILL BE CONSTRUCTED OF CAST IRON, DUCTILE IRON, OR PVC PIPE WITH A PRESSURE RATING OF AT LEAST 150 PSI USING APPROPRIATE ADAPTERS. IN LIEU OF THIS PROCEDURE THE NEW CONVEYANCE MAY BE ENCASED IN A JOINT OF 150 PSI PRESSURE CLASS PIPE AT LEAST 18 FEET LONG AND TWO (2) NOMINAL SIZES LARGER THAN THE NEW CONVEYANCE. THE SPACE AROUND THE CARRIER PIPE WILL BE SUPPORTED AT FIVE FOOT (5') INTERVALS WITH SPACERS OR BE FILLED TO THE SPRING LINE WITH WASHED SAND.
- (5)

THE ENCASEMENT PIPE SHOULD BE CENTERED ON THE CROSSING AND BOTH ENDS SEALED WITH NON SHRINK CEMENT GROUT OR A MANUFACTURED SEAL.
- (B)

WATERLINE/MANHOLE SEPARATION. UNLESS SANITARY SEWER MANHOLES AND THE CONNECTING SEWERS CAN BE MADE WATERTIGHT AND TESTED FOR NO LEAKAGE, THEY MUST BE INSTALLED SO AS TO PROVIDE A MINIMUM OF NINE FEET (9') OF HORIZONTAL CLEARANCE FROM AN EXISTING OR PROPOSED WATERLINE. WHERE THE NINE-FOOT (9') SEPARATION DISTANCE CANNOT BE ACHIEVED, THE SEWER PIPE SHALL BE INSTALLED IN ACCORDANCE WITH PARAGRAPH A ITEMS 1-4 IN THE PRECEDING PARAGRAPH.
43.

ALL BEDDING PLACED IN THE SEWER TRENCHES SHALL BE COMPACTED IN MAXIMUM EIGHT-INCH (8") LIFTS TO 95% DENSITY OF TxDOT'S TEST METHOD TEX 113-E. PROVIDE TESTING ON EACH EIGHT-INCH (8") COMPACTED LIFT. SUBGRADE MOISTURE DENSITY TESTING SHALL BE AT THE MINIMUM FREQUENCY OF THREE (3) PER BLOCK AND SHALL NOT EXCEED A FIVE HUNDRED-FOOT (500') SPACING.
44.

THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT NO OVERFLOWS OR SPILLAGE OF SEWAGE OCCURS. THE PERSON IDENTIFIED WITH THIS RESPONSIBILITY SHALL BE ON-SITE WHEN ACTIVITIES THAT COULD RESULT IN A SPILL OR OVERFLOW ARE
- BEING PERFORMED. THE CONTRACTOR SHALL NOTIFY THE CITY OF UNIVERSAL CITY DIRECTOR OF PUBLIC WORKS WITH THE NAME AND PHONE NUMBER WHERE THIS PERSON CAN BE REACHED. SHOULD AN OVERFLOW OR SPILL OCCUR, THE CONTRACTOR SHALL IMMEDIATELY: 1) IDENTIFY THE SOURCE OF THE SPILL, ATTEMPT TO STOP AND ELIMINATE ANY ADDITIONAL SPILLAGE OR OVERFLOW, 2) NOTIFY THE CITY OF UNIVERSAL CITY PUBLIC WORKS DEPARTMENT, 3) CONTAIN THE SPILL IN PLACE AND PREVENT CONTAMINATION OF STREAMS AND WATERWAYS, 4) CLEAN UP THE SPILL AND DISPOSE OF CONTAMINATED MATERIALS, 5) DISINFECT THE AREA WITH A MIXTURE OF HTH CHLORINE AND WATER, 6) IDENTIFY AND TRAIN CONTRACTOR'S PERSONNEL RESPONSIBLE FOR SPILL PREVENTION AND CONTROL, 7) ALL WORK PERFORMED IN RELATION TO A SPILL SHALL BE IN CONFORMANCE WITH TCEQ REGULATIONS AND AT NO ADDITIONAL COST TO THE CITY OF UNIVERSAL CITY.
45.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO SEE THAT ALL SIGNS AND BARRICADES ARE PROPERLY INSTALLED AND MAINTAINED. ALL LOCATIONS AND DISTANCES SHALL BE DECIDED UPON IN THE FIELD BY THE CONTRACTOR, USING THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. THE CITY'S CONSTRUCTION INSPECTOR/TRAFFIC ENGINEERING REPRESENTATIVE SHALL ONLY BE RESPONSIBLE TO INSPECT BARRICADES AND SIGNS. IF IN THE OPINION OF THE TRAFFIC ENGINEERING REPRESENTATIVE/ CONSTRUCTION INSPECTOR, THE TRAFFIC CONTROL DEVICES DO NOT CONFORM TO ESTABLISHED STANDARDS, ARE INCORRECTLY PLACED OR INSUFFICIENT IN QUANTITY TO PROTECT THE TRAVELING GENERAL PUBLIC, THE CONSTRUCTION INSPECTOR SHALL HAVE THE OPTION OF STOPPING THE OPERATIONS UNTIL SUCH TIME AS THE CONDITIONS ARE CORRECTED AT NO EXPENSE TO THE CITY OF UNIVERSAL CITY.
46.

THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN CONTINUOUS SEWER SERVICE FOR ALL ACTIVE SERVICE CONNECTIONS DURING CONSTRUCTION. WHEN BYPASS PUMPING IS NECESSARY, THE CONTRACTOR SHALL PROVIDE BYPASS PUMPING IN ACCORDANCE WITH SAN ANTONIO WATER SYSTEM ITEM NO. 884. IN ADDITION, PRIOR TO IMPLEMENTING ANY BYPASS PUMPING, THE CONTRACTOR SHALL PROVIDE IN WRITING A SEQUENCE OF BYPASS PUMPING FOR REVIEW AND APPROVAL BY THE PUBLIC WORKS DEPARTMENT. THE PROCEDURE SHALL INCLUDE AS A MINIMUM 1) SKETCH OF THE PROPOSED LOCATION(S) OF THE PUMPS, PIPING AND TRAFFIC CONTROL DEVICES FOR EACH SEGMENT WHERE BYPASS PUMPING IS TO OCCUR, 2) PUMP EQUIPMENT TYPE, SIZE, CAPACITY AND NUMBER OF PUMPS WHICH DEMONSTRATE THAT THE BYPASS PUMPING CAN HANDLE WET WEATHER FLOWS, 3) TYPE OF JOINING FOR PIPE MATERIALS, 4) SPILL CONTROL AND PREVENTION MEASURES, 5) CONTRACTOR AFTER HOURS MONITORING PROCEDURES AND 6) AFTER HOURS CONTACT INFORMATION FOR THE RESPONSIBLE CONTRACTOR PERSONNEL.
47.

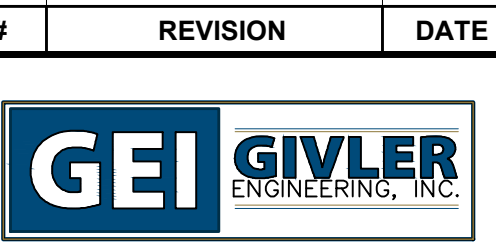
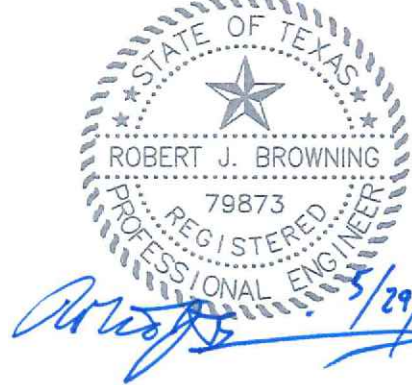
DISTURBED EXCAVATED AREAS WITHIN THE CITY RIGHT-OF-WAY SHALL BE RESODDED TO MATCH THE EXISTING SITE CONDITIONS.
48.

ANY WORK COMPLETED WITHOUT PRIOR AUTHORIZATION WHETHER INCLUDED IN THE PLANS AND SPECIFICATIONS OR NOT, SHALL NOT BE COMPENSATED BY THE CITY OF UNIVERSAL CITY.
49.

THE CONTRACTOR SHALL EXERCISE CARE WHEN EXCAVATING AROUND AND PROTECT ALL SPECIES OF OAK TREES.
50.

CONTRACTOR IS REQUIRED TO ADJUST ALL MANHOLES DURING ROAD CONSTRUCTION TO MATCH FINISHED GRADE, ELEVATION SPECIFIED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER. NO SEPARATE PAY ITEM FOR THIS WORK.
51.

CONTRACTOR SHALL COAT AND PAINT ANY EXISTING MANHOLE RELATED TO SEWER LINE RECONSTRUCTION WORK.



TX Registration #F-002573
515 Busby Drive
San Antonio, Texas 78209
Phone: (210) 342-3991

CITY OF UNIVERSAL CITY

PROJECT NAME:
Flintstone Drive Street Improvements

PHASE:
DETAIL DESIGN

PROJECT LOCATION:
PARKVIEW ESTATES
UNIVERSAL CITY, TX

PROJECT NUMBER:
UNIV-013C

DESIGNED BY: CRM
CHECKED BY: RJB
DATE: 5/29/2025
DRAWN BY: CRM

SHEET TITLE:
UNIVERSAL CITY
SANITARY SEWER NOTES

SHEET NUMBER:
04 OF 26

MATCH LINE (SEE SHEET 2)

MB □ =MAILBOX
WM □ =WATER METER
WV ○ =WATER VALVE
GV ○ =GAS VALVE
SP =SIGN POST
UP ○ =UTILITY POLE
UPW ○ =UTILITY POLE & GUY WIRE

CONCRETE PAVEMENT
OHU =OVERHEAD UTILITY LINE
SS =UNDERGROUND SANITARY SEWER LINE(AS MARKED BY UTILITY)
G =UNDERGROUND GAS LINE(AS MARKED BY UTILITY)
W =UNDERGROUND WATER LINE(AS MARKED BY UTILITY)
=EDGE OF ASPHALT PAVEMENT
=CONCRETE CURB
900 =CONTOUR LINE WITH ELEVATION
=WOOD FENCE
=WIRE FENCE
=CHAIN LINK FENCE
8" O.D. 10' =TREE TYPE AND SIZE WITH NUMBERED METAL TAG
SPOT =SPOT ELEVATION
BTM =BOTTOM

LEGEND

BLOCK 4
NORTHVIEW PARK SUBDIVISION
UNIT NO. 2
(VOL. 4700, PG. 26, D.P.R.)

GRAPHIC SCALE
SCALE: 1" = 10'



TX Registration #F-002573
515 Busby Drive
San Antonio, Texas 78209
Phone: (210) 342-3951

CLIENT:
CITY OF UNIVERSAL CITY

PROJECT NAME:
Flintstone Drive Street
Improvements

PHASE:
DETAIL DESIGN

PROJECT LOCATION:
PARKVIEW ESTATES
UNIVERSAL CITY, TX

PROJECT NUMBER:
UNIV-013C

SHEET NUMBER:
05 OF 26

LOT 4

LOT 3

LOT 2

LOT 1

FLINTSTONE LANE
(PLAT = MAGNOLIA LANE)

ASPHALT PAVEMENT
(50.0' R.O.W.)
(49.25' MEASURED AVERAGE WIDTH)
(VOL. 4700, PG. 26, D.P.R.)

FLINTSTONE LANE
(PLAT = MAGNOLIA LANE)

ASPHALT PAVEMENT
(50.0' R.O.W.)
(49.25' MEASURED AVERAGE WIDTH)
(VOL. 4700, PG. 26, D.P.R.)

PARKVIEW DRIVE
ASPHALT PAVEMENT
(50.0' R.O.W.)
(49.25' MEASURED AVERAGE WIDTH)
(VOL. 4700, PG. 26, D.P.R.)

LOT 4

LOT 3

LOT 2

LOT 1

BLOCK 3
NORTHVIEW PARK SUBDIVISION
UNIT NO. 2
(VOL. 4700, PG. 26, D.P.R.)

RESTRICTIONS:
VOL. 4700, PG. 26, DPR
VOL. 4900, PG. 183, DPR

- DIRECTIONAL CONTROL LINE = ALIGNMENT OF FOUND LOT CORNERS ALONG PROJECT ALIGNMENT.
- ALL DIMENSIONS & ELEVATIONS REPRESENTED HEREON ARE IN U.S. SURVEY FEET.
- BEARING BASIS = NAD 83 TEXAS STATE PLANE COORDINATED SYSTEM ZONE 4204
SOURCE: GPS OBSERVATIONS.
- ELEVATIONS ARE BASED ON NAVD 88 (GEOID 18) SOURCE: GPS OBSERVATIONS.
- POINT COORDINATES AND DRAWING LOCATION ARE AT STATE PLANE GROUND/SURFACE ADJUSTMENT. POINT COORDINATES AND DRAWING CAN BE SCALED TO STATE PLANE GRID BY APPLYING A SCALE FACTOR OF 0.999836615 AT COORDINATE (0,0).
- TEXAS 811 LOCATE REQUEST MADE SEPTEMBER 19, 2024, TICKET# 2476396144.
- THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. UNDERGROUND UTILITIES SHOWN ARE BASED ON THE LOCATION OF ABOVE GROUND PHYSICAL EVIDENCE, AVAILABLE MAPS AND/OR MARKS MADE BY RESPONDENTS OF THE TEXAS811 UTILITY LOCATE SERVICE.

PLAT REFERENCE: DEED & PLAT RECORDS (DPR)
NORTHVIEW PARK SUBDIVISION UNIT NO. 2
VOL. 4700, PAGE 26, DATE MARCH 14, 1962

PLAT REFERENCE: DEED & PLAT RECORDS (DPR)
NORTHVIEW PARK SUBDIVISION UNIT NO. 2
VOL. 4900, PAGE 183, DATE MAY 10, 1963

CONTROL POINT TABLE

PT. NO.	NORTHING	EASTING	ELEVATION(NAVD 88)	DESCRIPTION
TBM6	13748887.0360	2192050.2441	777.65	COTTON SPINDLE SET IN U.P.
TBM7	13749119.7342	2192506.1109	780.29	COTTON SPINDLE SET IN U.P.
5010	13748811.3502	2193092.9203	774.46	SET MAG NAIL IN ASPHALT
5011	13748566.7110	2192761.3631	778.29	SET 1/2" IRON ROD W/TRAV. CAP
5012	13748402.1378	2192378.0838	778.54	SET 1/2" IRON ROD W/TRAV. CAP IN ASPHALT
5013	13748307.8199	2192335.7032	779.19	SET 1/2" IRON ROD W/TRAV. CAP
5014	13748603.2420	2192267.1988	780.26	SET 1/2" IRON ROD W/TRAV. CAP

NO.	DATE	BY	REVISION	CKD.	APPD.

Maverick
Land Surveying Co.
1856 Lockhill-Selma, Suite 105
San Antonio, Texas 78213
PH. 210-342-9455
FAX 210-342-9524
© 2023, Maverick Land Surveying Co.
TSPS 5, TSPM 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

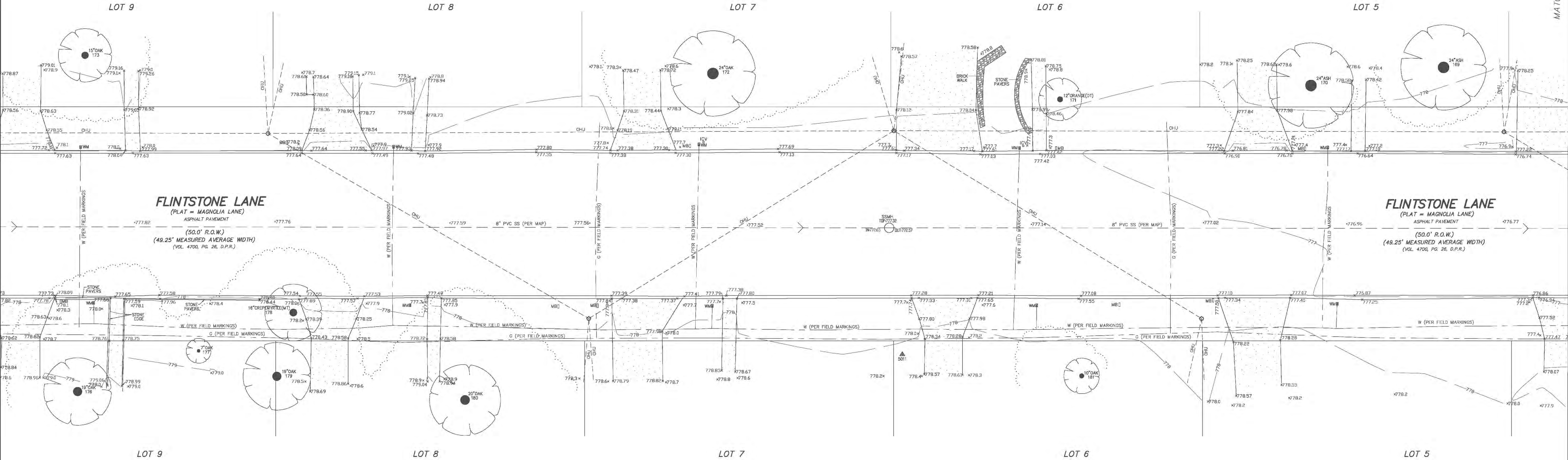
TREE, TOPOGRAPHIC & IMPROVEMENT SURVEY OF:
**FLINTSTONE LANE
RIGHT OF WAY**
NORTHVIEW PARK SUBDIVISION
UNIT NO. 2
UNIVERSAL CITY, BEXAR COUNTY, TEXAS

DRAWN BY: D.D./J.S. CHKD BY: F.G. APPROVED BY: J.W.O.
SCALE: 1" = 10' DATE: 10-02-24 SHEET 1 OF 4
SHEET SIZE: 22"x34" JOB NO. 59301-0001



PRINTED: 1-23-2025

MATCH LINE (SEE SHEET 3)



LOT 9

LOT 8

LOT 7

LOT 6

LOT 5

BLOCK 3
NORTHVIEW PARK SUBDIVISION
UNIT NO. 2
(VOL. 4700, PG. 26, D.P.R.)

RESTRICTIONS:
VOL. 4700, PG. 26, DPR
VOL. 4900, PG. 183, DPR

- DIRECTIONAL CONTROL LINE = ALIGNMENT OF FOUND LOT CORNERS ALONG PROJECT ALIGNMENT.
- ALL DIMENSIONS & ELEVATIONS REPRESENTED HEREON ARE IN U.S. SURVEY FEET.
- BEARING BASIS = NAD 83 TEXAS STATE PLANE COORDINATED SYSTEM ZONE 4204 SOURCE: GPS OBSERVATIONS.
- ELEVATIONS ARE BASED ON NAVD 88 (GEOID 18) SOURCE: GPS OBSERVATIONS.
- POINT COORDINATES AND DRAWING LOCATION ARE AT STATE PLANE GROUND/SURFACE ADJUSTMENT. POINT COORDINATES AND DRAWING CAN BE SCALED TO STATE PLANE GRID BY APPLYING A SCALE FACTOR OF 0.999836615 AT COORDINATE (0,0).
- TEXAS 811 LOCATE REQUEST MADE SEPTEMBER 19, 2024, TICKET# 2476396144.
- THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. UNDERGROUND UTILITIES SHOWN ARE BASED ON THE LOCATION OF ABOVE GROUND PHYSICAL EVIDENCE, AVAILABLE MAPS AND/OR MARKS MADE BY RESPONDENTS OF THE TEXAS811 UTILITY LOCATE SERVICE.

PLAT REFERENCE: DEED & PLAT RECORDS (DPR)
NORTHVIEW PARK SUBDIVISION UNIT NO. 2
VOL. 4700, PAGE 26, DATE MARCH 14, 1982

PLAT REFERENCE: DEED & PLAT RECORDS (DPR)
NORTHVIEW PARK SUBDIVISION UNIT NO. 2
VOL. 4900, PAGE 183, DATE MAY 10, 1983



TX Registration #F-002573
515 Busby Drive
San Antonio, Texas 78209
Phone: (210) 342-3991

CLIENT:
CITY OF UNIVERSAL CITY

PROJECT NAME:
Flintstone Drive Street Improvements

PHASE:
DETAIL DESIGN

PROJECT LOCATION:
PARKVIEW ESTATES
UNIVERSAL CITY, TX

PROJECT NUMBER:
UNIV-013C

SHEET NUMBER:
06 OF 26



GRAPHIC SCALE
SCALE: 1" = 10'

MB = MAILBOX
WM = WATER METER
WV = WATER VALVE
GV = GAS VALVE
SP = SIGN POST
UP = UTILITY POLE
UPGW = UTILITY POLE & GUY WIRE

CP = CONCRETE PAVEMENT
OHU = OVERHEAD UTILITY LINE
SS = UNDERGROUND SANITARY SEWER LINE (AS MARKED BY UTILITY)
G = UNDERGROUND GAS LINE (AS MARKED BY UTILITY)
W = UNDERGROUND WATER LINE (AS MARKED BY UTILITY)
EAP = EDGE OF ASPHALT PAVEMENT
CC = CONCRETE CURB
CL = CONTOUR LINE WITH ELEVATION
WF = WOOD FENCE
WF = WIRE FENCE
CLF = CHAIN LINK FENCE
TT = TREE TYPE AND SIZE WITH NUMBERED METAL TAG
SE = SPOT ELEVATION
BTM = BOTTOM

LEGEND

MATCH LINE (SEE SHEET 1)

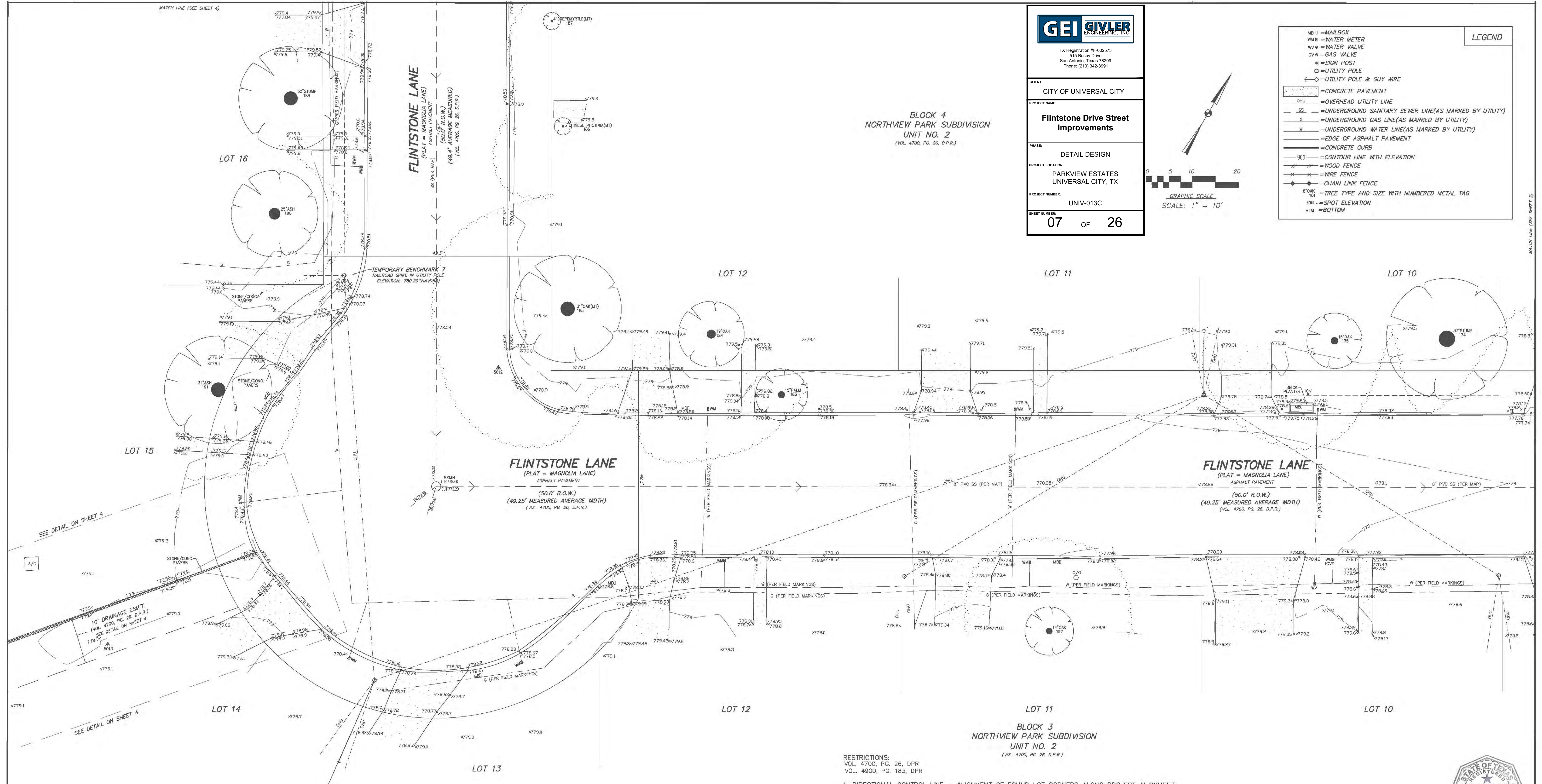
CONTROL POINT TABLE

PT. NO.	NORTHING	EASTING	ELEVATION (NAVD 88)	DESCRIPTION
TBM6	13748887.0360	2192050.2441	777.65	COTTON SPINDLE SET IN U.P.
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5014	13748603.2420	2192267.1988	780.26	SET 1/2" IRON ROD W/TRAV. CAP



PRINTED 1-23-2025

NO.	DATE	BY	REVISION	CKD.	APPD.
Maverick Land Surveying Co. 1856 Lockhill-Selma, Suite 105 San Antonio, Texas 78213 PH. 210-342-9455 FAX 210-342-9524 © 1996-2023, Maverick Land Surveying Co. TSP: 8, 7160, 116, 1013/1002					
TREE, TOPOGRAPHIC & IMPROVEMENT SURVEY OF: FLINTSTONE LANE RIGHT OF WAY NORTHVIEW PARK SUBDIVISION UNIT NO. 2 UNIVERSAL CITY, BEXAR COUNTY, TEXAS					
DRAWN BY: <u>D.D./J.S.</u>		CHKD BY: <u>F.C.</u>		APPROVED BY: <u>JWO</u>	
SCALE: <u>1" = 10'</u>		DATE: <u>10-02-24</u>		SHEET <u>2</u> OF <u>4</u>	
SHEET SIZE: <u>22"x34"</u>		JOB NO. <u>59301-0001</u>		2	



GEI GIVLER

ENGINEERING, INC.

TX Registration #F-002573
515 Busby Drive
San Antonio, Texas 78209
Phone: (210) 342-3991

CLIENT:
CITY OF UNIVERSAL CITY

PROJECT NAME:
Flintstone Drive Street Improvements

PHASE:
DETAIL DESIGN

PROJECT LOCATION:
PARKVIEW ESTATES
UNIVERSAL CITY, TX

PROJECT NUMBER:
UNIV-013C

SHEET NUMBER:
07 OF 26

MB = MAILBOX
WM = WATER METER
WV = WATER VALVE
GV = GAS VALVE
SP = SIGN POST
UP = UTILITY POLE
UPG = UTILITY POLE & GUY WIRE

CONCRETE PAVEMENT
OHU = OVERHEAD UTILITY LINE
SS = UNDERGROUND SANITARY SEWER LINE(AS MARKED BY UTILITY)
G = UNDERGROUND GAS LINE(AS MARKED BY UTILITY)
W = UNDERGROUND WATER LINE(AS MARKED BY UTILITY)
E = EDGE OF ASPHALT PAVEMENT
C = CONCRETE CURB
900 = CONTOUR LINE WITH ELEVATION
W = WOOD FENCE
X = WIRE FENCE
CL = CHAIN LINK FENCE
T = TREE TYPE AND SIZE WITH NUMBERED METAL TAG
SE = SPOT ELEVATION
BTM = BOTTOM

LEGEND

CONTROL POINT TABLE				
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RESTRICTIONS:
VOL. 4700, PG. 26, DPR
VOL. 4900, PG. 183, DPR

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2. ALL DIMENSIONS & ELEVATIONS REPRESENTED HEREON ARE IN U.S. SURVEY FEET.
3. BEARING BASIS = NAD 83 TEXAS STATE PLANE COORDINATED SYSTEM ZONE 4204
SOURCE: GPS OBSERVATIONS.
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6. TEXAS 811 LOCATE REQUEST MADE SEPTEMBER 19, 2024, TICKET# 2476396144.
7. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. UNDERGROUND UTILITIES SHOWN ARE BASED ON THE LOCATION OF ABOVE GROUND PHYSICAL EVIDENCE, AVAILABLE MAPS AND/OR MARKS MADE BY RESPONDENTS OF THE TEXAS811 UTILITY LOCATE SERVICE.

PLAT REFERENCE: DEED & PLAT RECORDS (DPR)
NORTHVIEW PARK SUBDIVISION UNIT NO. 2
VOL. 4700, PAGE 26, DATE MARCH 14, 1962

PLAT REFERENCE: DEED & PLAT RECORDS (DPR)
NORTHVIEW PARK SUBDIVISION UNIT NO. 2
VOL. 4900, PAGE 183, DATE MAY 10, 1963

STATE OF TEXAS
JACOB W. ODER
5846
PROFESSIONAL
LAND SURVEYOR

PRINTED: 1-23-2025

NO.	DATE	BY	REVISION	CKD.	APPD.

Maverick
Land Surveying Co.
1856 Lockhill-Selma, Suite 105
San Antonio, Texas 78213
PH. 210-342-9455
FAX 210-342-9524
© 2025-2023, Maverick Land Surveying Co.
TSPS 5, TSPM 10, 1013/21/22

TREE, TOPOGRAPHIC & IMPROVEMENT SURVEY OF:
FLINTSTONE LANE
RIGHT OF WAY
NORTHVIEW PARK SUBDIVISION
UNIT NO. 2
UNIVERSAL CITY, BEXAR COUNTY, TEXAS

DRAWN BY: D.D./J.S. CHKD BY: F.G. APPROVED BY: J.W.O.
SCALE: 1" = 10' DATE: 10-02-24 SHEET 3 OF 4
SHEET SIZE: 22"x34" JOB NO. 59301-0001

3

MB □ =MAILBOX

WM □ =WATER METER

WV □ =WATER VALVE

GV □ =GAS VALVE

SP □ =SIGN POST

UP □ =UTILITY POLE

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=EDGE OF ASPHALT PAVEMENT

=CONCRETE CURB

900 =CONTOUR LINE WITH ELEVATION

==WOOD FENCE

==WIRE FENCE

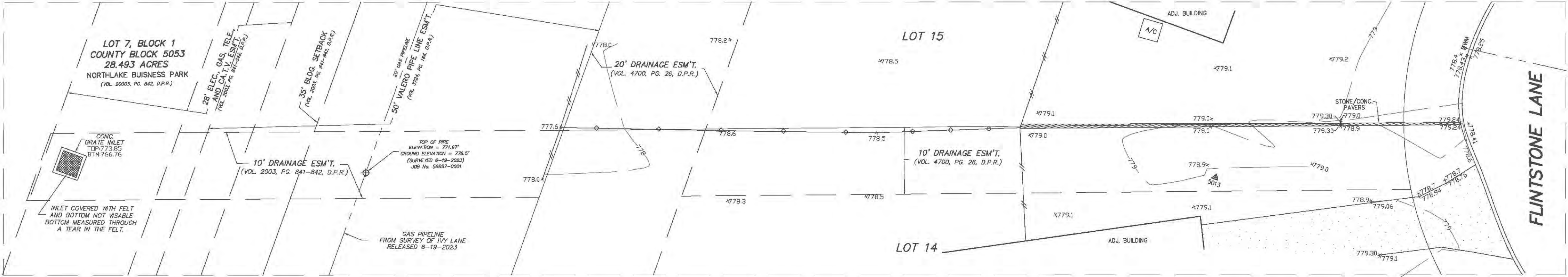
=CHAIN LINK FENCE

STOK 101 =TREE TYPE AND SIZE WITH NUMBERED METAL TAG

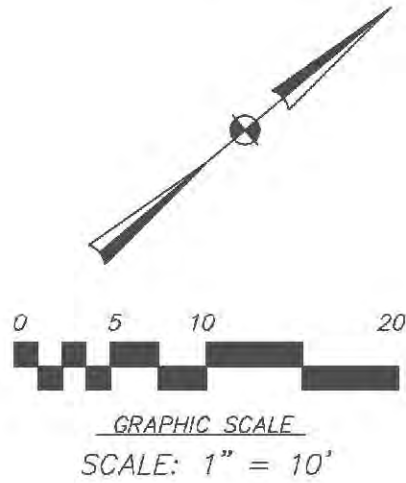
SPOT =SPOT ELEVATION

BTM =BOTTOM

LEGEND



DETAIL



515 Buddy Drive
San Antonio, Texas 78209
Phone: (210) 342-3991

CLIENT:
CITY OF UNIVERSAL CITY

PROJECT NAME:
Flintstone Drive Street Improvements

PHASE:
DETAIL DESIGN

PROJECT LOCATION:
PARKVIEW ESTATES
UNIVERSAL CITY, TX

PROJECT NUMBER:
UNIV-013C

SHEET NUMBER:
08 OF **26**

CONTROL POINT TABLE

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VOL. 4700, PG. 26, DPR
VOL. 4900, PG. 183, DPR

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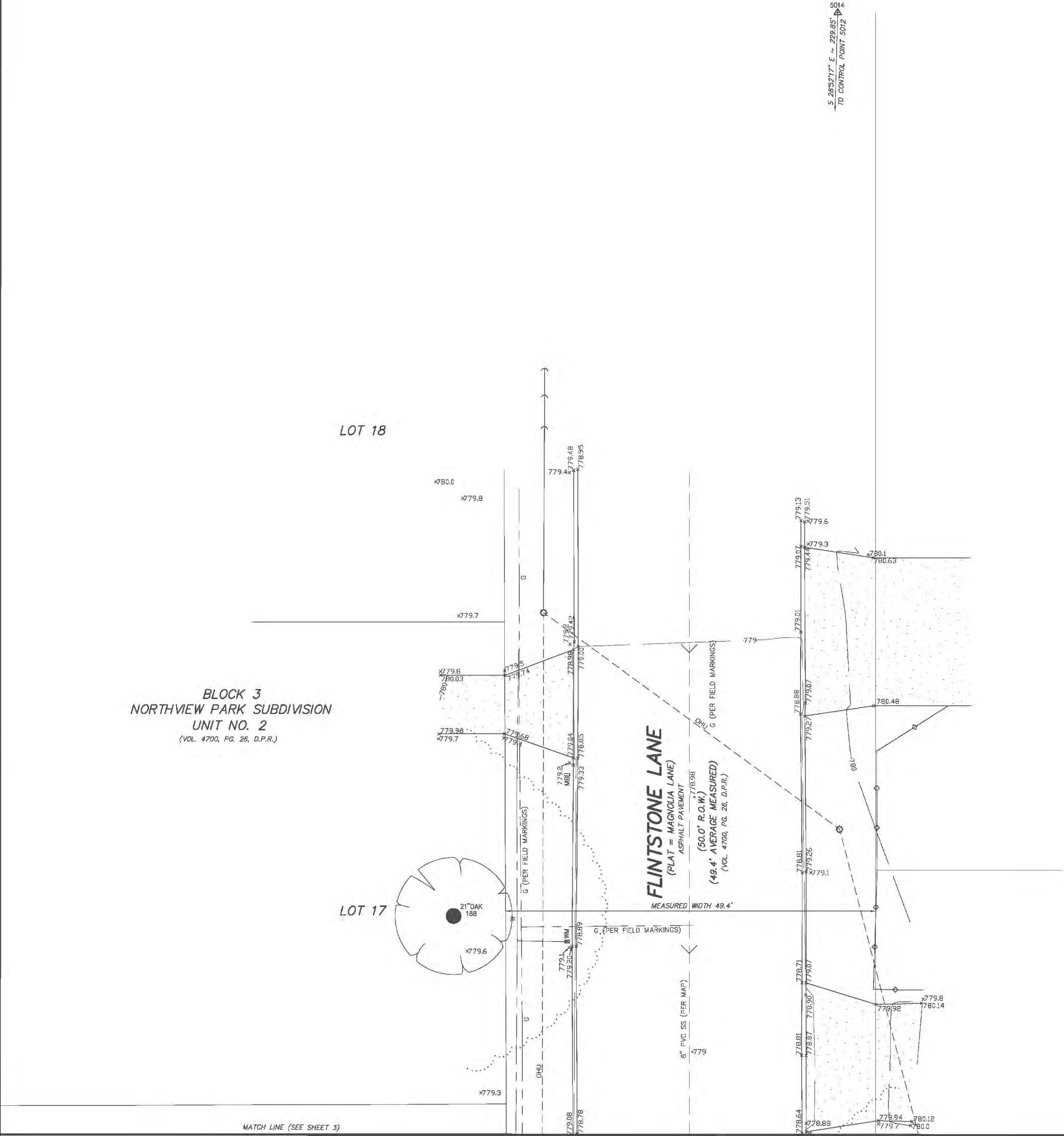
PLAT REFERENCE: DEED & PLAT RECORDS (DPR)
NORTHVIEW PARK SUBDIVISION UNIT NO. 2
VOL. 4700, PAGE 26, DATE MARCH 14, 1962

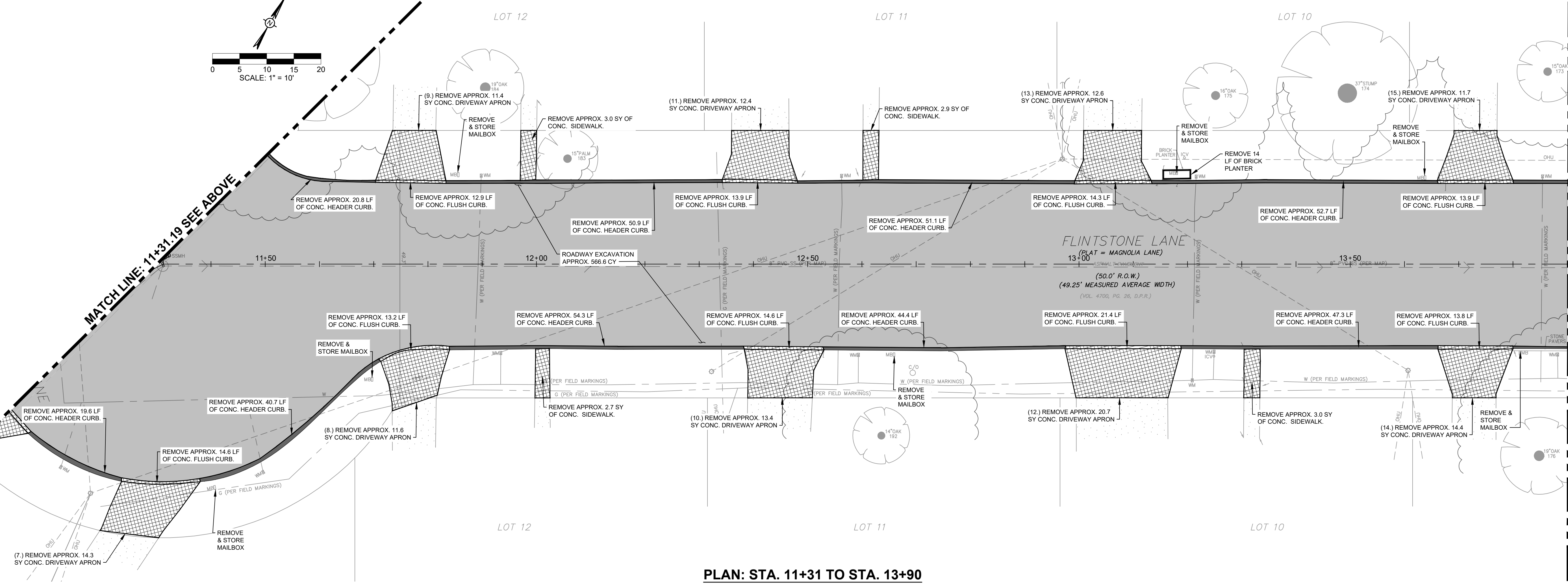
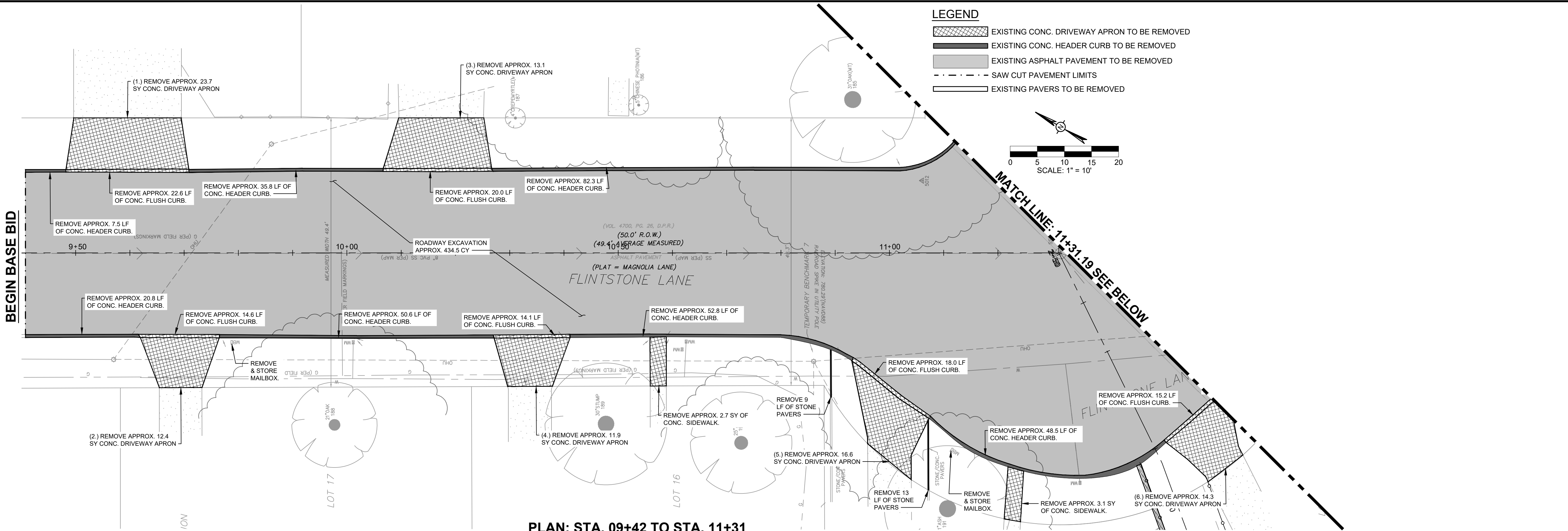
PLAT REFERENCE: DEED & PLAT RECORDS (DPR)
NORTHVIEW PARK SUBDIVISION UNIT NO. 2
VOL. 4900, PAGE 183, DATE MAY 10, 1963



PRINTED: 1-23-2025

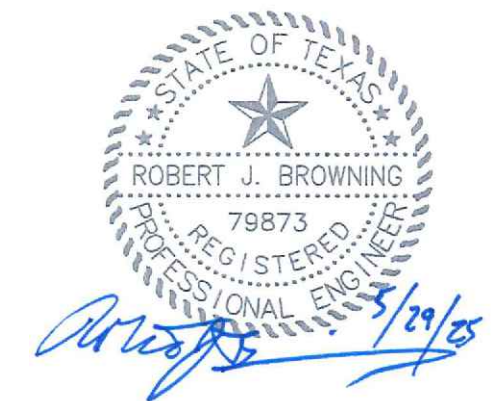
NO.	DATE	BY	REVISION	CKD.	APPD.
Maverick Land Surveying Co. 1856 Lockhill-Selma, Suite 105 San Antonio, Texas 78213 PH. 210-342-9455 FAX 210-342-9524 © 2003-2025, Maverick Land Surveying Co. TSPS 5.0 TSPS Rev. 10/20/2002 TREE, TOPOGRAPHIC & IMPROVEMENT SURVEY OF: FLINTSTONE LANE RIGHT OF WAY NORTHVIEW PARK SUBDIVISION UNIT NO. 2 UNIVERSAL CITY, BEXAR COUNTY, TEXAS DRAWN BY: <u>D.D./J.S.</u> CHKD BY: <u>F.G.</u> APPROVED BY: <u>J.W.O.</u> SCALE: <u>1" = 10'</u> DATE: <u>10-02-24</u> SHEET <u>4</u> OF <u>4</u> SHEET SIZE: <u>22"x34"</u> JOB NO. <u>59301-0001</u> 4					



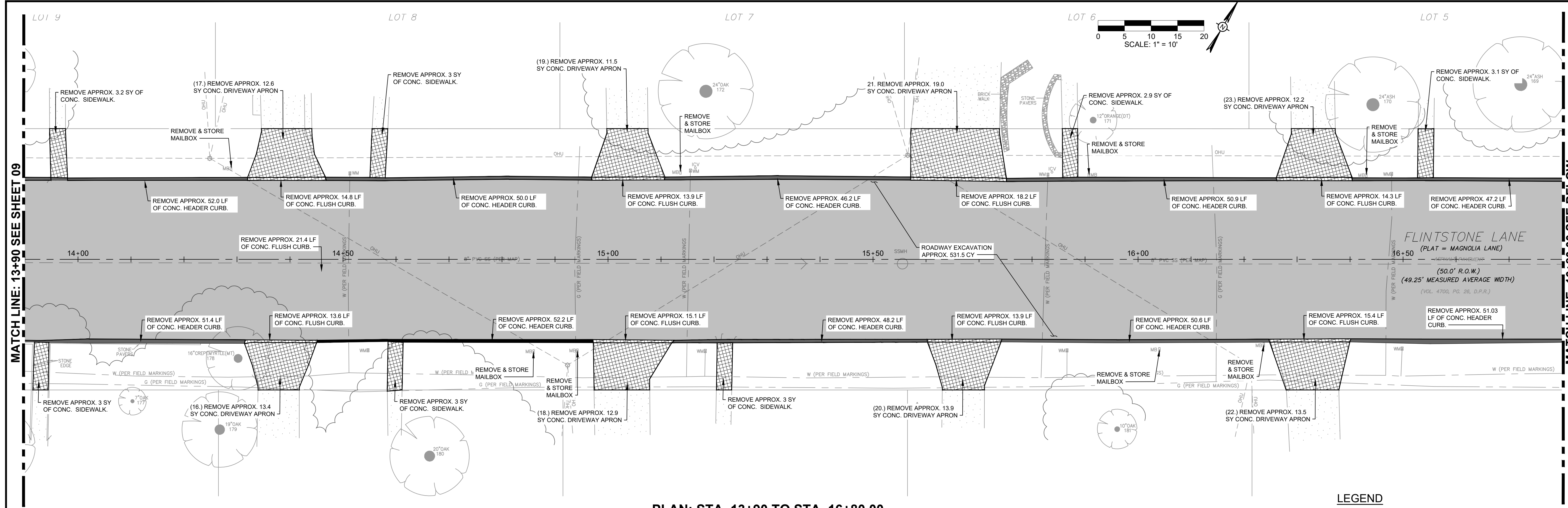


- LEGEND**
- EXISTING CONC. DRIVEWAY APRON TO BE REMOVED
 - EXISTING CONC. HEADER CURB TO BE REMOVED
 - EXISTING ASPHALT PAVEMENT TO BE REMOVED
 - SAW CUT PAVEMENT LIMITS
 - EXISTING PAVERS TO BE REMOVED

- NOTES:**
- ORIGINAL SURVEY COMPLETED BY MAVERICK LAND SURVEYING DATED 10/02/2024 SEALED ON 1/23/2025.
 - UTILITIES ARE SHOWN BASED ON INFORMATION PROVIDED BY OTHERS. THE INFORMATION MAY BE INCOMPLETE AND MAY BE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL UTILITY LOCATIONS AND FOR CORRECTING ANY DAMAGE CAUSED BY BREAKING OR DISTURBING A UTILITY.
 - CONFIRM THE LOCATIONS & DEPTHS OF ALL UTILITIES & CALL FOR UTILITY LOCATES PRIOR TO COMMENCING DEMOLITION.
 - REPAIR OR REPLACE ALL PORTIONS OF IRRIGATION DAMAGED BY CONSTRUCTION.
 - COORDINATE STREET SIGN STORAGE WITH CITY.
 - COORDINATE MAILBOX STORAGE WITH PROPERTY OWNER
 - COORDINATE PAVER STORAGE WITH PROPERTY OWNER

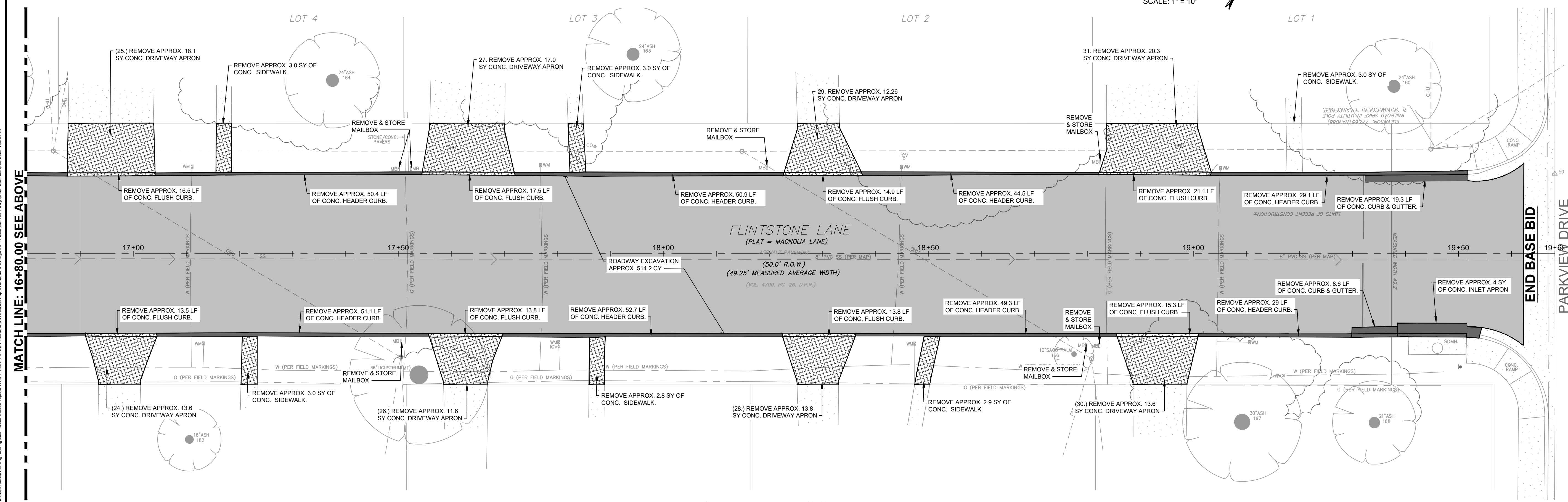


#	REVISION	DATE
GEI GIVLER ENGINEERING, INC.		
TX Registration #F-002573 515 Busby Drive San Antonio, Texas 78209 Phone: (210) 342-3991		
CLIENT: CITY OF UNIVERSAL CITY		
PROJECT NAME: Flintstone Drive Street Improvements		
PHASE: DETAIL DESIGN		
PROJECT LOCATION: PARKVIEW ESTATES UNIVERSAL CITY, TX		
PROJECT NUMBER: UNIV-013C		
DESIGNED BY: CRM	CHECKED BY: RJB	DRAWN BY: CRM
DATE: 5/29/2025		
SHEET TITLE: STREET DEMOLITION PLAN STA. 9+42 TO STA. 13+90		
SHEET NUMBER: 09 OF 26		



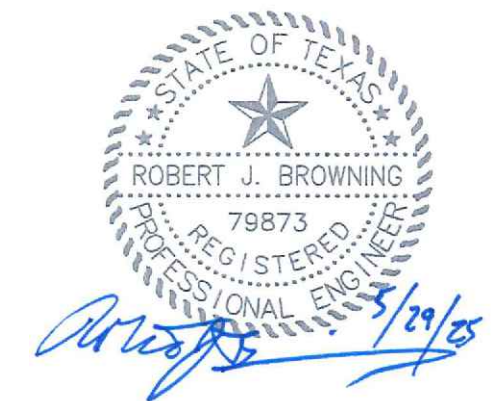
PLAN: STA. 13+90 TO STA. 16+80.00

- LEGEND**
- [Hatched Pattern] EXISTING CONC. DRIVEWAY APRON TO BE REMOVED
 - [Solid Black] EXISTING CONC. HEADER CURB TO BE REMOVED
 - [Solid Grey] EXISTING ASPHALT PAVEMENT TO BE REMOVED
 - [Dashed Line] SAW CUT PAVEMENT LIMITS



PLAN: STA. 16+80.00 TO STA. 19+62

- NOTES:**
1. ORIGINAL SURVEY COMPLETED BY MAVERICK LAND SURVEYING DATED 10/02/2024 SEALED ON 1/23/2025.
 2. UTILITIES ARE SHOWN BASED ON INFORMATION PROVIDED BY OTHERS. THE INFORMATION MAY BE INCOMPLETE AND MAY BE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL UTILITY LOCATIONS AND FOR CORRECTING ANY DAMAGE CAUSED BY BREAKING OR DISTURBING A UTILITY.
 3. CONFIRM THE LOCATIONS & DEPTHS OF ALL UTILITIES & CALL FOR UTILITY LOCATES PRIOR TO COMMENCING DEMOLITION.
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 5. COORDINATE STREET SIGN STORAGE WITH CITY.
 6. COORDINATE MAILBOX STORAGE WITH PROPERTY OWNER
 7. COORDINATE PAVER STORAGE WITH PROPERTY OWNER

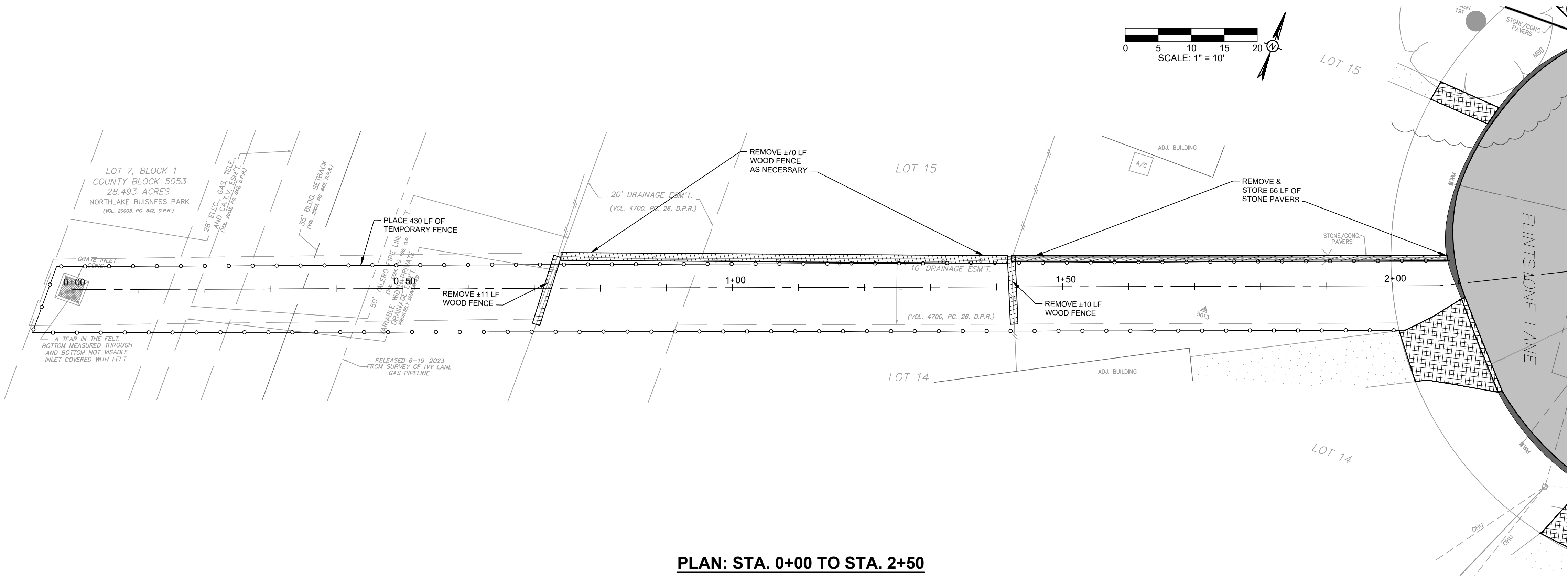


#	REVISION	DATE

TX Registration #F-002573
515 Busby Drive
San Antonio, Texas 78209
Phone: (210) 342-3991

CLIENT:		
CITY OF UNIVERSAL CITY		
PROJECT NAME:		
Flintstone Drive Street Improvements		
PHASE:		
DETAIL DESIGN		
PROJECT LOCATION:		
PARKVIEW ESTATES UNIVERSAL CITY, TX		
PROJECT NUMBER:		
UNIV-013C		
DESIGNED BY:	CHECKED BY:	DRAWN BY:
CRM	RJB	CRM
DATE:		
5/29/2025		
SHEET TITLE:		
STREET DEMOLITION PLAN STA. 13+90 TO STA. 19+62		
SHEET NUMBER:		
10	OF	26

C:\Users\Chad\OneDrive\Engineering\GEI - Documents\Projects\TX\UNIV\UNIV-013C Flintstone Drive Street Improvements\Drawings\911 DEMOLITION.dwg, Chris Manning, 5/29/2025, 10:52 AM



PLAN: STA. 0+00 TO STA. 2+50

NOTES:

1. ORIGINAL SURVEY COMPLETED BY MAVERICK LAND SURVEYING DATED 10/02/2024 SEALED ON 1/23/2025.
2. UTILITIES ARE SHOWN BASED ON INFORMATION PROVIDED BY OTHERS. THE INFORMATION MAY BE INCOMPLETE AND MAY BE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL UTILITY LOCATIONS AND FOR CORRECTING ANY DAMAGE CAUSED BY BREAKING OR DISTURBING A UTILITY.
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5. COORDINATE STREET SIGN STORAGE WITH CITY.
6. COORDINATE MAILBOX STORAGE WITH PROPERTY OWNER
7. COORDINATE PAVER STORAGE WITH PROPERTY OWNER

LEGEND

- EXISTING CONC. DRIVEWAY APRON TO BE REMOVED SEE SHEETS 10 & 11
- EXISTING CONC. HEADER CURB TO BE REMOVED SEE SHEETS 10 & 11
- EXISTING ASPHALT PAVEMENT TO BE REMOVED SEE SHEETS 10 & 11
- SAW CUT PAVEMENT LIMITS
- REMOVE FENCE
- EXISTING PAVERS TO BE REMOVED
- TEMPORARY FENCE

ENTERPRISE NOTES:

1. ENTERPRISE DEFINES THE TOLERANCE ZONE AS 18 INCHES FROM THE OUTER EDGE OF THE PIPE (IN ALL DIRECTIONS), OR AS DEFINED BY STATE REGULATIONS, WHICHEVER IS GREATER.
2. MECHANIZED EQUIPMENT IS NOT ALLOWED WITHIN THE TOLERANCE ZONE.
3. ANY EXCAVATION TAKING PLACE WITH THE TOLERANCE ZONE MUST BE DONE BY HAND.
- 4.
5. ALWAYS MAKE A ONE-CALL PRIOR TO PERFORMING ACTIVITIES. DIAL 811 OR GO TO WWW.CALL811.COM.
6. DO NOT PERFORM ANY EXCAVATION ACTIVITIES ON ENTERPRISE RIGHTS-OF-WAY WITHOUT APPROVAL FROM ENTERPRISE. ENTERPRISE WILL REVIEW YOUR PLANS FOR EXCAVATION WITHIN ENTERPRISE'S GAS RIGHTS-OF-WAY. LOCATE AND MARK THE PIPELINE ASSETS (IF NECESSARY) AND AN ENTERPRISE REPRESENTATIVE WILL BE ON-SITE TO MONITOR THE EXCAVATION ACTIVITY.
7. NO HEAVY EQUIPMENT IS ALLOWED TO WORK DIRECTLY OVER THE PIPELINE. THE RIGHT-OF-WAY BOUNDARY SHOULD BE MARKED WITH TEMPORARY FENCING OR WHITE LINE TO ASSIST THE OPERATOR WITH POSITIONING OF HEAVY EQUIPMENT.
8. ALL MECHANICAL DIGGING EQUIPMENT MUST DIG PARALLEL TO THE PIPELINES AND HAVE THE TEETH REMOVED OR BARRED WITH A PLATE WELDED ACROSS THE BUCKET.
9. AN ENTERPRISE REPRESENTATIVE HAS THE AUTHORITY TO SUSPEND EXCAVATION ACTIVITIES IF AN EQUIPMENT OPERATOR APPEARS TO BE UNQUALIFIED OR EQUIPMENT MAINTENANCE IS NOT IN ACCORDANCE WITH APPLICABLE REGULATIONS.



#	REVISION	DATE
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TX Registration #F-002573
515 Busby Drive
San Antonio, Texas 78209
Phone: (210) 342-3991

CLIENT:
CITY OF UNIVERSAL CITY

PROJECT NAME:
Flintstone Drive Street Improvements

PHASE:
DETAIL DESIGN

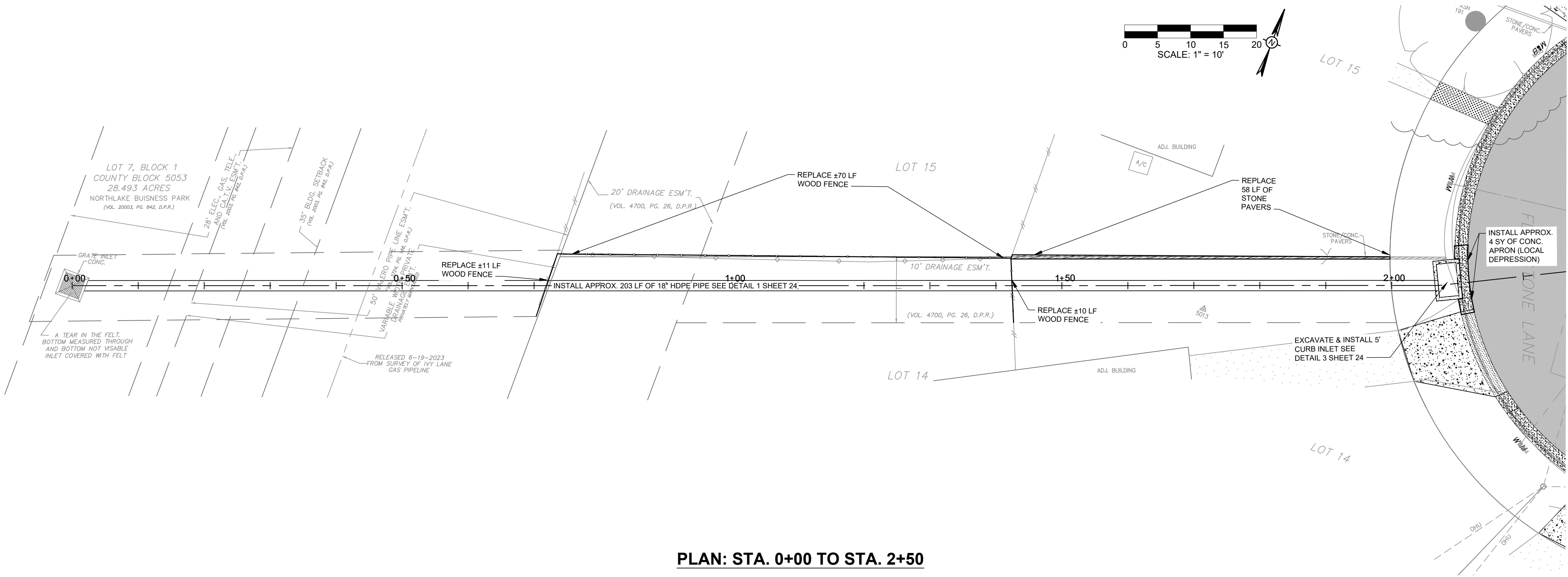
PROJECT LOCATION:
PARKVIEW ESTATES
UNIVERSAL CITY, TX

PROJECT NUMBER:
UNIV-013C

DESIGNED BY: CRM
CHECKED BY: RJB
DRAWN BY: CRM
DATE:
5/29/2025

SHEET TITLE:
**EASEMENT
DEMOLITION PLAN
STA. 0+00 TO STA. 2+50**

SHEET NUMBER:
11 OF 26



PLAN: STA. 0+00 TO STA. 2+50

ENTERPRISE NOTES:

- ENTERPRISE DEFINES THE TOLERANCE ZONE AS 18 INCHES FROM THE OUTER EDGE OF THE PIPE (IN ALL DIRECTIONS), OR AS DEFINED BY STATE REGULATIONS, WHICHEVER IS GREATER.
- MECHANIZED EQUIPMENT IS NOT ALLOWED WITHIN THE TOLERANCE ZONE.
- ANY EXCAVATION TAKING PLACE WITH THE TOLERANCE ZONE MUST BE DONE BY HAND.
- ALWAYS MAKE A ONE-CALL PRIOR TO PERFORMING ACTIVITIES. DIAL 811 OR GO TO WWW.CALL811.COM.
- DO NOT PERFORM ANY EXCAVATION ACTIVITIES ON ENTERPRISE RIGHTS-OF-WAY WITHOUT APPROVAL FROM ENTERPRISE. ENTERPRISE WILL REVIEW YOUR PLANS FOR EXCAVATION WITHIN ENTERPRISE'S GAS RIGHTS-OF-WAY. LOCATE AND MARK THE PIPELINE ASSETS (IF NECESSARY) AND AN ENTERPRISE REPRESENTATIVE WILL BE ON-SITE TO MONITOR THE EXCAVATION ACTIVITY.
- NO HEAVY EQUIPMENT IS ALLOWED TO WORK DIRECTLY OVER THE PIPELINE. THE RIGHT-OF-WAY BOUNDARY SHOULD BE MARKED WITH TEMPORARY FENCING OR WHITE LINE TO ASSIST THE OPERATOR WITH POSITIONING OF HEAVY EQUIPMENT.
- ALL MECHANICAL DIGGING EQUIPMENT MUST DIG PARALLEL TO THE PIPELINES AND HAVE THE TEETH REMOVED OR BARRED WITH A PLATE WELDED ACROSS THE BUCKET.
- AN ENTERPRISE REPRESENTATIVE HAS THE AUTHORITY TO SUSPEND EXCAVATION ACTIVITIES IF AN EQUIPMENT OPERATOR APPEARS TO BE UNQUALIFIED OR EQUIPMENT MAINTENANCE IS NOT IN ACCORDANCE WITH APPLICABLE REGULATIONS.

NOTES:

- CONFIRM THE LOCATIONS & LIMITS OF ALL PROPOSED WORK.
- NOTIFY ENGINEER, CITY AND RESIDENTS OF ANY ROAD CLOSURE AT LEAST 48 HOURS PRIOR TO ALLOW RESIDENTS TO BE NOTIFIED TO RELOCATE VEHICLES TO ALTERNATIVE PARKING SITES.
- CONFIRM THE LOCATION & DEPTHS OF ALL UTILITIES AND CALL FOR UTILITY LOCATORS PRIOR TO COMMENCING CONSTRUCTION. FOR WATER AND SEWER LOCATES CONTACT UNIVERSAL CITY PUBLIC WORKS, (210) 658-5364.

LEGEND

	PROPOSED ASPHALT PAVEMENT
	PROPOSED CONC. DRIVEWAY SEE DETAIL 5 SHEET 23
	PROPOSED CONC. SIDEWALK SEE DETAIL 8 & 9 SHEET 23
	PROPOSED CONC. CURB & GUTTER SEE DETAIL 2 SHEET 23
	PROPOSED CONC. LAYDOWN SEE DETAIL 4 SHEET 23
	PROPOSED CONC. SPILL CURB SEE DETAIL 3 SHEET 23
	REPLACE MAILBOX DETAIL 6 SHEET 23
	ADJUST WATER METER TO GRADE



#	REVISION	DATE
---	----------	------



TX Registration #F-002573
515 Busby Drive
San Antonio, Texas 78209
Phone: (210) 342-3991

CLIENT:
CITY OF UNIVERSAL CITY

PROJECT NAME:
Flintstone Drive Street Improvements

PHASE:
DETAIL DESIGN

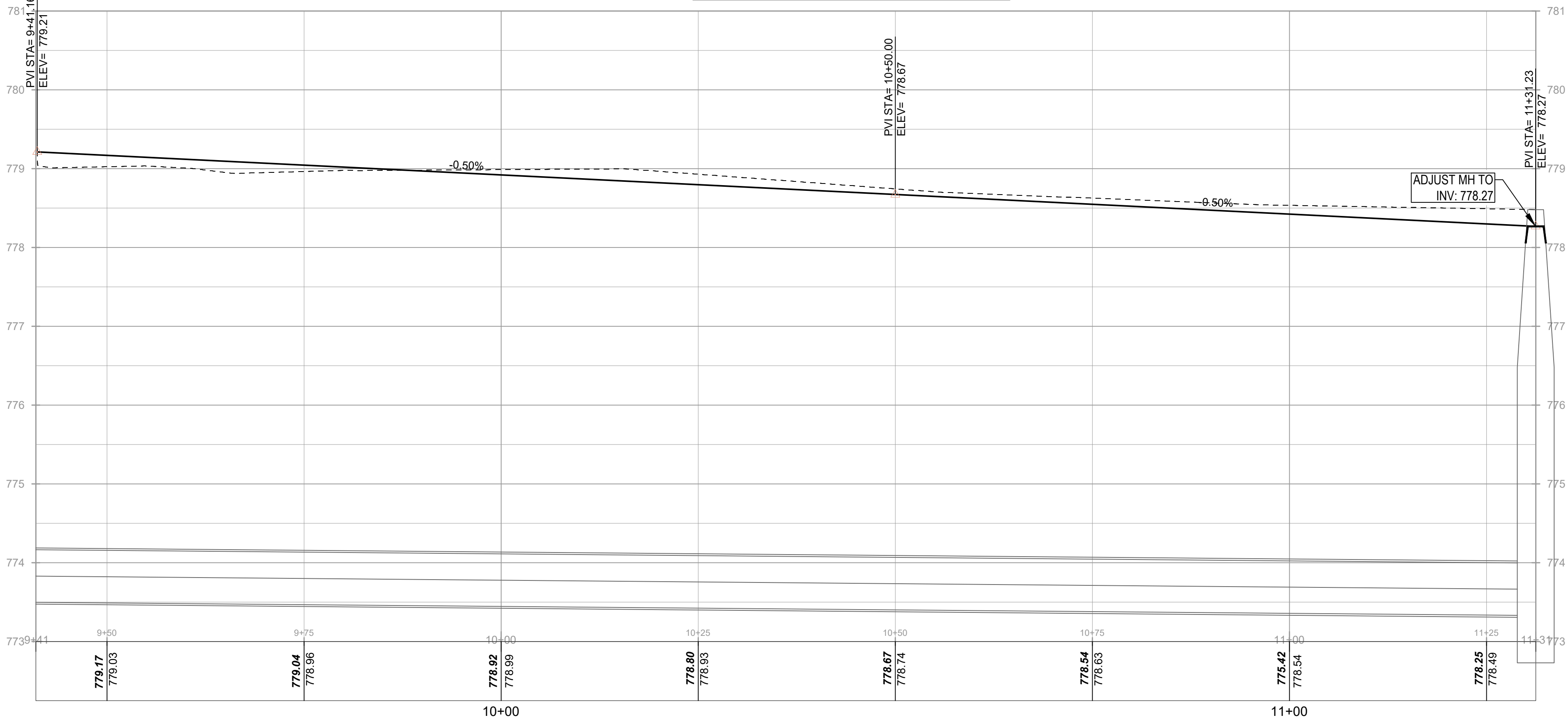
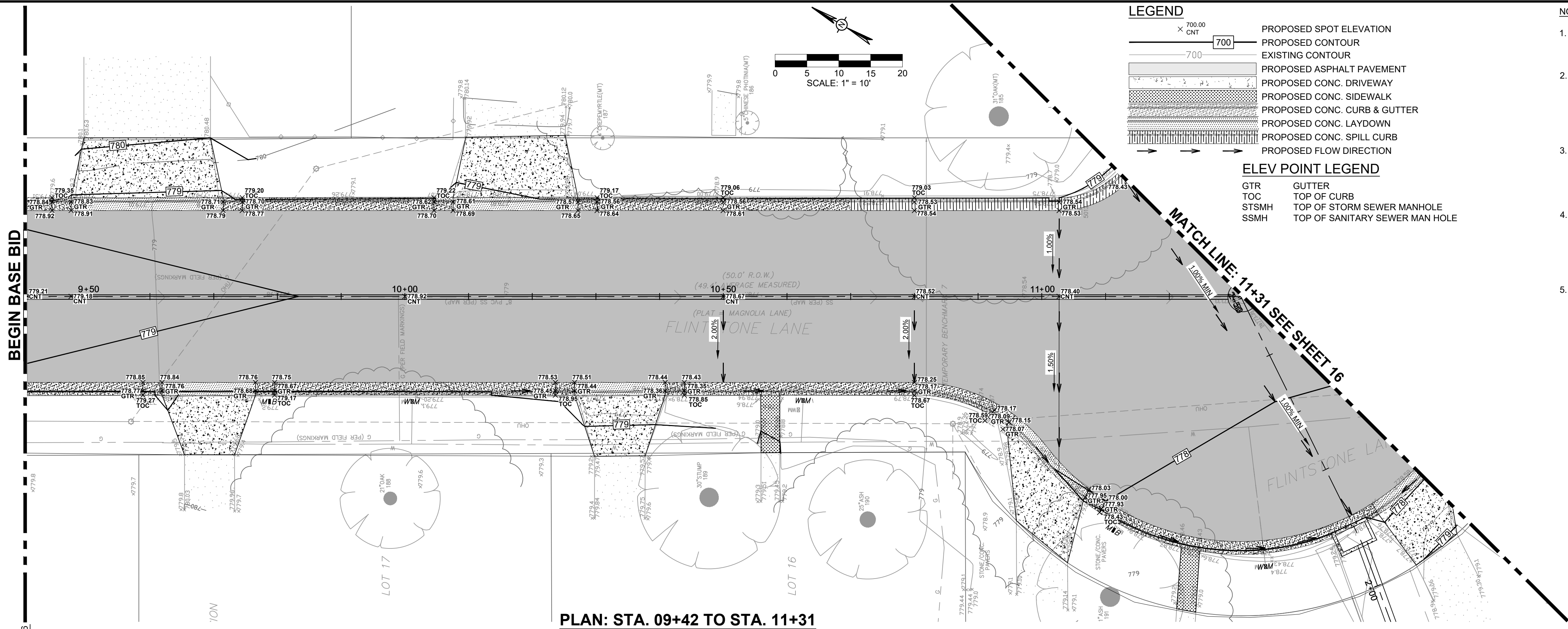
PROJECT LOCATION:
PARKVIEW ESTATES
UNIVERSAL CITY, TX

PROJECT NUMBER:
UNIV-013C

DESIGNED BY: CRM
CHECKED BY: RJB
DATE: 5/29/2025

SHEET TITLE:
EASEMENT
DIMENSIONAL PLAN
STA. 0+00 TO STA. 2+50

SHEET NUMBER:
14 OF 26



#	REVISION	DATE
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TX Registration #F-002573
515 Busby Drive
San Antonio, Texas 78209
Phone: (210) 342-3991

CLIENT:
CITY OF UNIVERSAL CITY

PROJECT NAME:
Flintstone Drive Street Improvements

PHASE:
DETAIL DESIGN

PROJECT LOCATION:
PARKVIEW ESTATES
UNIVERSAL CITY, TX

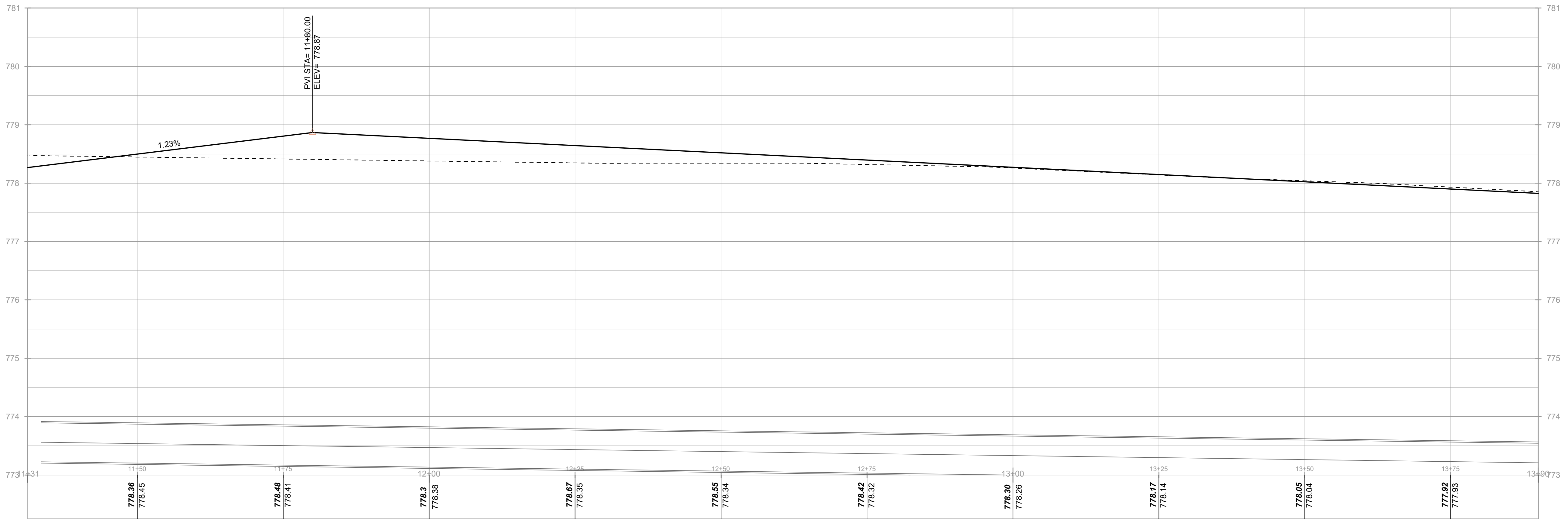
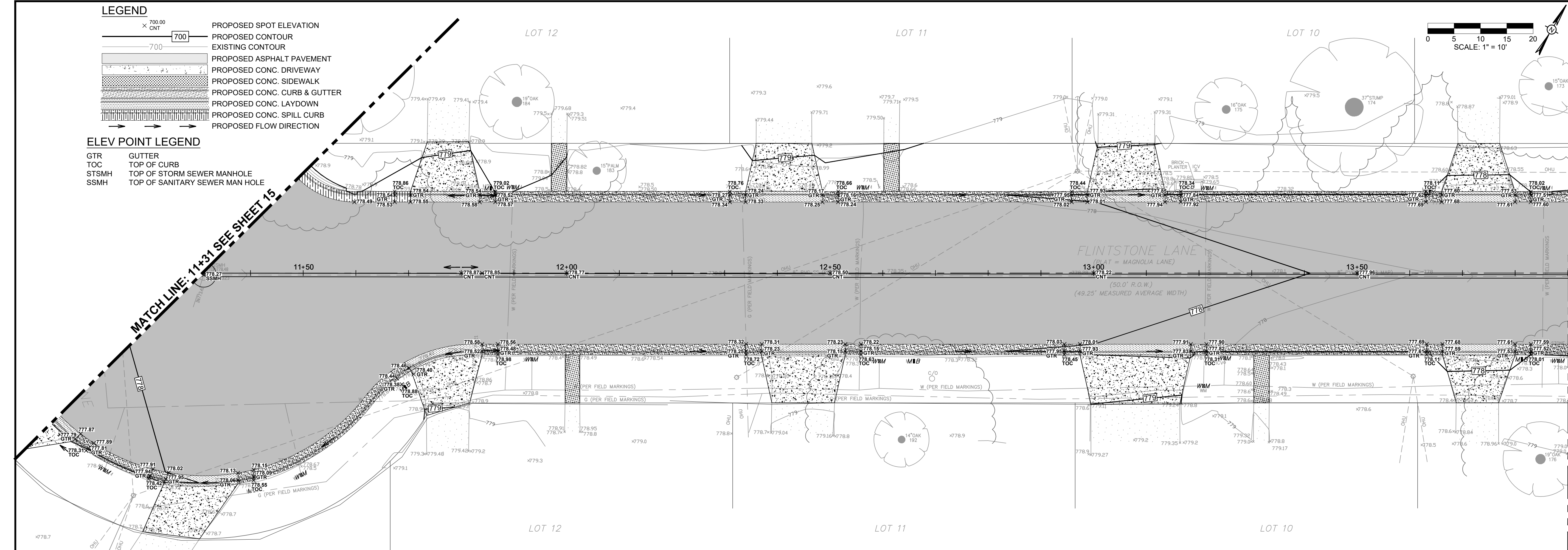
PROJECT NUMBER:
UNIV-013C

DESIGNED BY: CRM
CHECKED BY: RJB
DATE: 5/29/2025

SHEET TITLE:
**STREET PLAN &
PROFILE STA. 9+42
TO STA. 11+31**

SHEET NUMBER:
15 OF 26

C:\Users\Chad\OneDrive\Engineering\GEI - Documents\Projects\TX\UNIVERSAL\1100 Flintstone Drive Street Improvements\Drawings\15-PLAN & PROFILE.dwg, Chris Martinez, 5/29/2025, 10:53 AM



STATE OF TEXAS
ROBERT J. BROWNING
79873
REGISTERED PROFESSIONAL ENGINEER
5/29/25

#	REVISION	DATE

GEI GIVLER
ENGINEERING, INC.

TX Registration #F-002573
515 Busby Drive
San Antonio, Texas 78209
Phone: (210) 342-3991

CLIENT:
CITY OF UNIVERSAL CITY

PROJECT NAME:
Flintstone Drive Street Improvements

PHASE:
DETAIL DESIGN

PROJECT LOCATION:
PARKVIEW ESTATES
UNIVERSAL CITY, TX

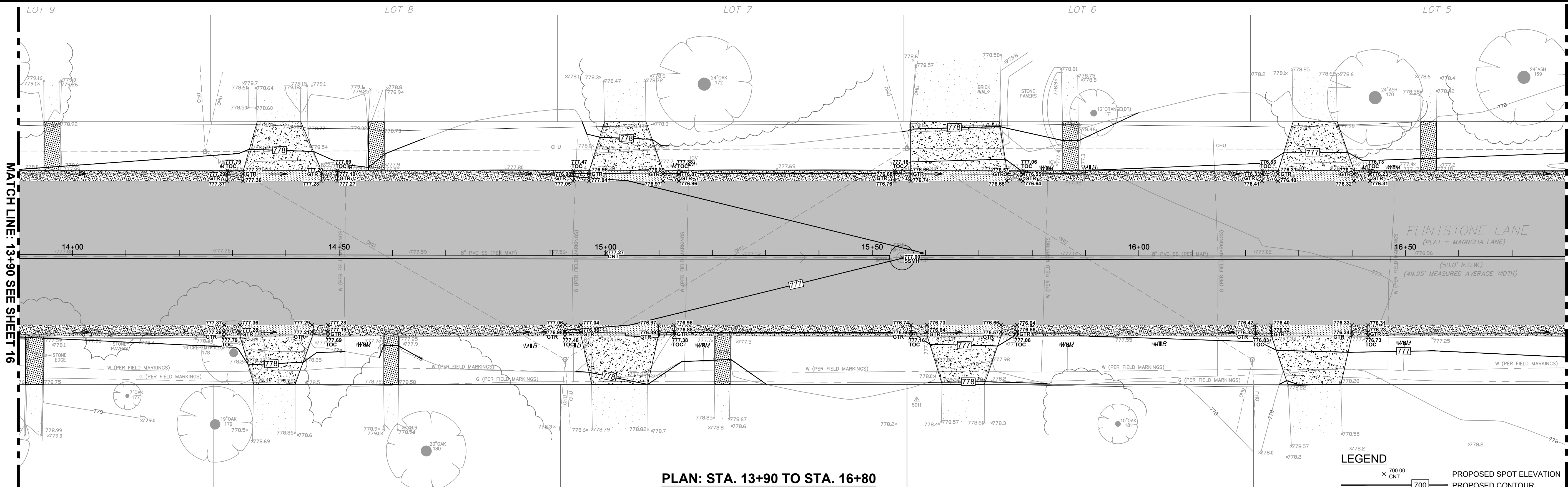
PROJECT NUMBER:
UNIV-013C

DESIGNED BY: CRM
CHECKED BY: RJB
DRAWN BY: CRM

DATE:
5/29/2025

SHEET TITLE:
**STREET PLAN &
PROFILE STA. 11+31
TO STA. 13+90**

SHEET NUMBER:
16 OF **26**

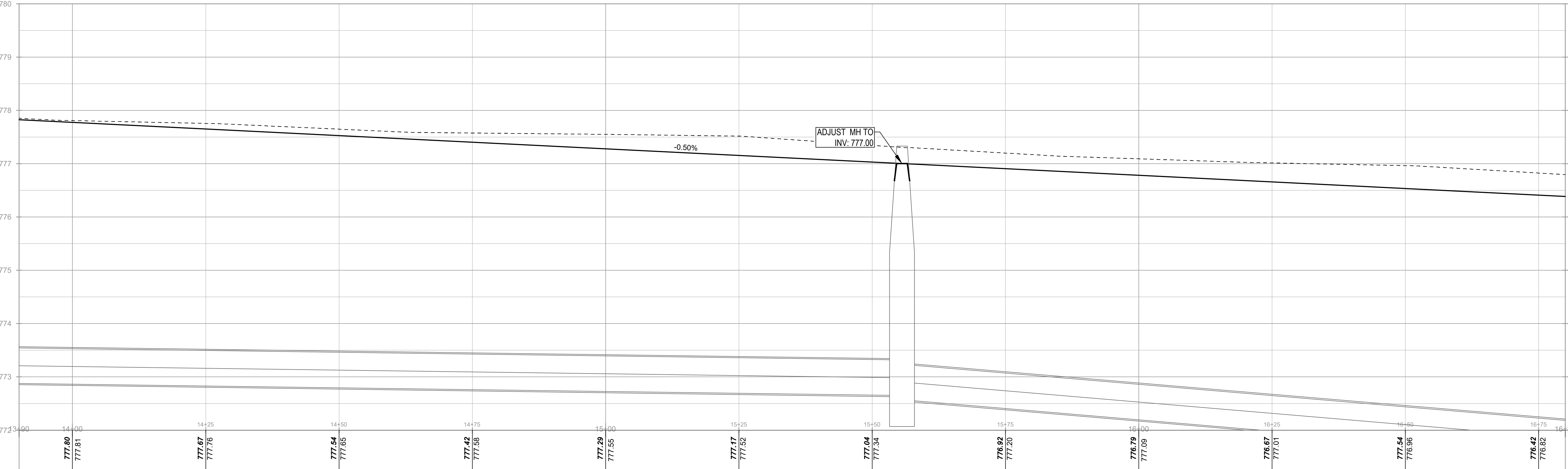


PLAN: STA. 13+90 TO STA. 16+80

ELEV POINT LEGEND
GTR GUTTER
TOC TOP OF CURB
SSMH TOP OF STORM SEWER MANHOLE
SSMH TOP OF SANITARY SEWER MAN HOLE

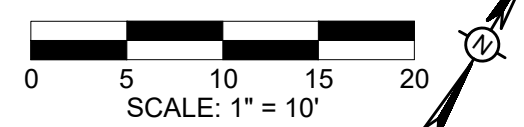
LEGEND

- PROPOSED SPOT ELEVATION
- PROPOSED CONTOUR
- EXISTING CONTOUR
- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONC. DRIVEWAY
- PROPOSED CONC. SIDEWALK
- PROPOSED CONC. CURB & GUTTER
- PROPOSED CONC. LAYDOWN
- PROPOSED CONC. SPILL CURB
- PROPOSED FLOW DIRECTION



PROFILE: STA. 13+90 TO STA. 16+80
HORZ. SCALE: 1"=10'
VERT. SCALE: 1"=1'

- NOTES:**
- ORIGINAL SURVEY COMPLETED BY MAVERICK LAND SURVEYING DATED 10/02/2024.
 - VERTICAL DATUM IS BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). HORIZONTAL DATUM IS BASED ON NORTH AMERICAN DATUM OF 1983 (NAD83) TEXAS STATE PLANE SOUTH CENTRAL (4204).
 - NOTIFY ENGINEER, CITY AND RESIDENTS OF ANY ROAD CLOSURE AT LEAST 48 HOURS PRIOR TO ALLOW RESIDENTS TO BE NOTIFIED TO RELOCATE VEHICLES TO ALTERNATIVE PARKING SITES.
 - CONFIRM THE LOCATION & DEPTHS OF ALL UTILITIES AND CALL FOR UTILITY LOCATORS PRIOR TO COMMENCING CONSTRUCTION. FOR WATER AND SEWER LOCATES CONTACT UNIVERSAL CITY PUBLIC WORKS, (210) 658-5364.
 - ADJUST WATER METERS TO GRADE.



#	REVISION	DATE
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TX Registration #F-002573
515 Busby Drive
San Antonio, Texas 78209
Phone: (210) 342-3991

CLIENT:
CITY OF UNIVERSAL CITY

PROJECT NAME:
Flintstone Drive Street Improvements

PHASE:
DETAIL DESIGN

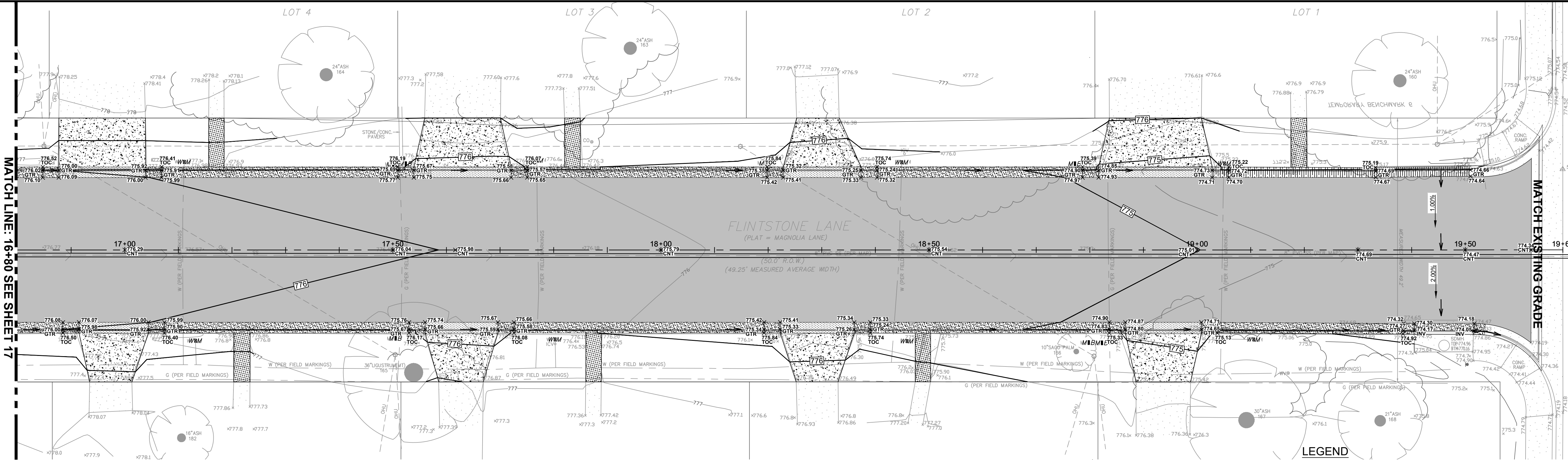
PROJECT LOCATION:
PARKVIEW ESTATES
UNIVERSAL CITY, TX

PROJECT NUMBER:
UNIV-013C

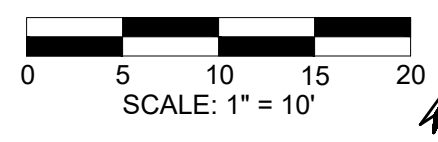
DESIGNED BY: CRM
CHECKED BY: RJB
DRAWN BY: CRM
DATE: 5/29/2025

SHEET TITLE:
STREET PLAN & PROFILE STA. 13+90 TO STA. 16+80

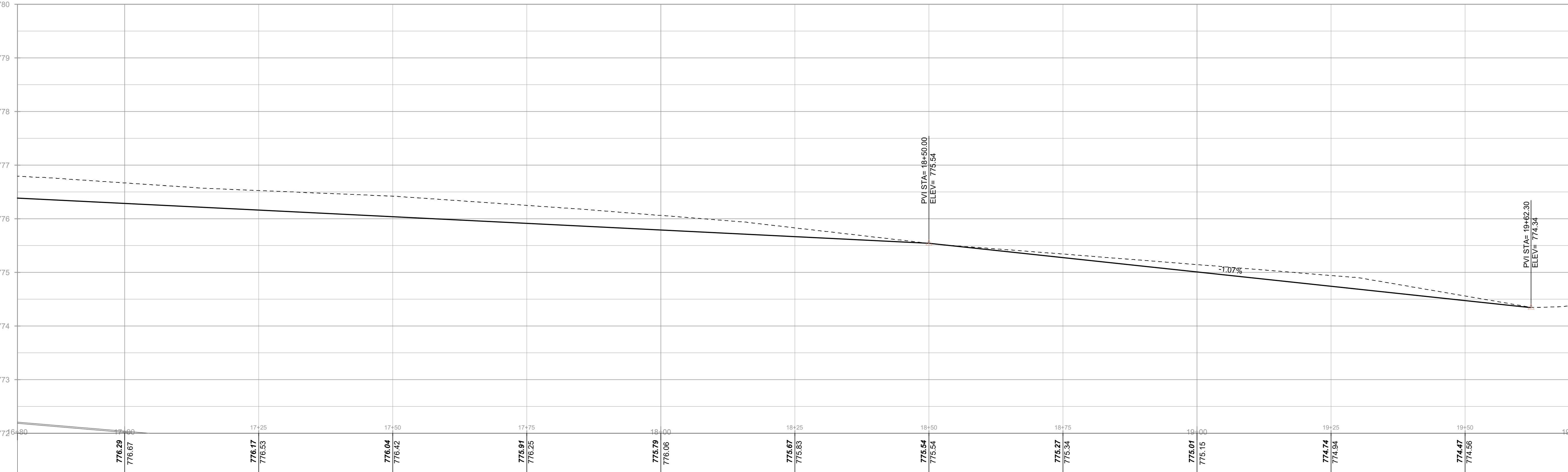
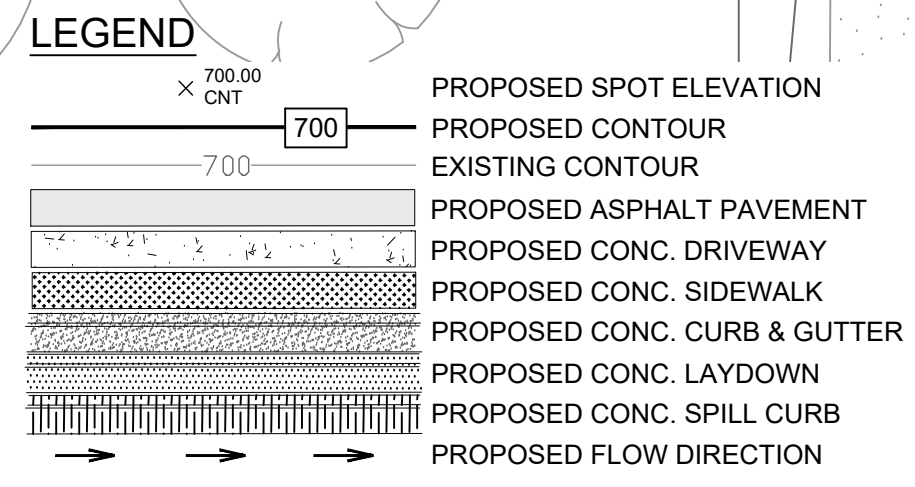
SHEET NUMBER:
17 OF 26



PLAN: STA. 16+80.00 TO STA. 19+62



ELEV POINT LEGEND	
GTR	GUTTER
TOC	TOP OF CURB
STSMH	TOP OF STORM SEWER MANHOLE
SSMH	TOP OF SANITARY SEWER MAN HOLE



PROFILE: STA. 16+80.00 TO STA. 19+62

HORZ. SCALE: 1"=10'
VERT. SCALE: 1"=1'

- NOTES:
1. ORIGINAL SURVEY COMPLETED BY MAVERICK LAND SURVEYING DATED 10/02/2024.
 2. VERTICAL DATUM IS BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). HORIZONTAL DATUM IS BASED ON NORTH AMERICAN DATUM OF 1983 (NAD83) TEXAS STATE PLANE SOUTH CENTRAL (4204).
 3. NOTIFY ENGINEER, CITY AND RESIDENTS OF ANY ROAD CLOSURE AT LEAST 48 HOURS PRIOR TO ALLOW RESIDENTS TO BE NOTIFIED TO RELOCATE VEHICLES TO ALTERNATIVE PARKING SITES.
 4. CONFIRM THE LOCATION & DEPTHS OF ALL UTILITIES AND CALL FOR UTILITY LOCATORS PRIOR TO COMMENCING CONSTRUCTION. FOR WATER AND SEWER LOCATES CONTACT UNIVERSAL CITY PUBLIC WORKS, (210) 658-5364.
 5. ADJUST WATER METERS TO GRADE.

#	REVISION	DATE

GEI GIVLER
ENGINEERING, INC.
TX Registration #F-002573
515 Busby Drive
San Antonio, Texas 78209
Phone: (210) 342-3991

CLIENT: CITY OF UNIVERSAL CITY

PROJECT NAME: **Flintstone Drive Street Improvements**

PHASE: DETAIL DESIGN

PROJECT LOCATION: PARKVIEW ESTATES
UNIVERSAL CITY, TX

PROJECT NUMBER: UNIV-013C

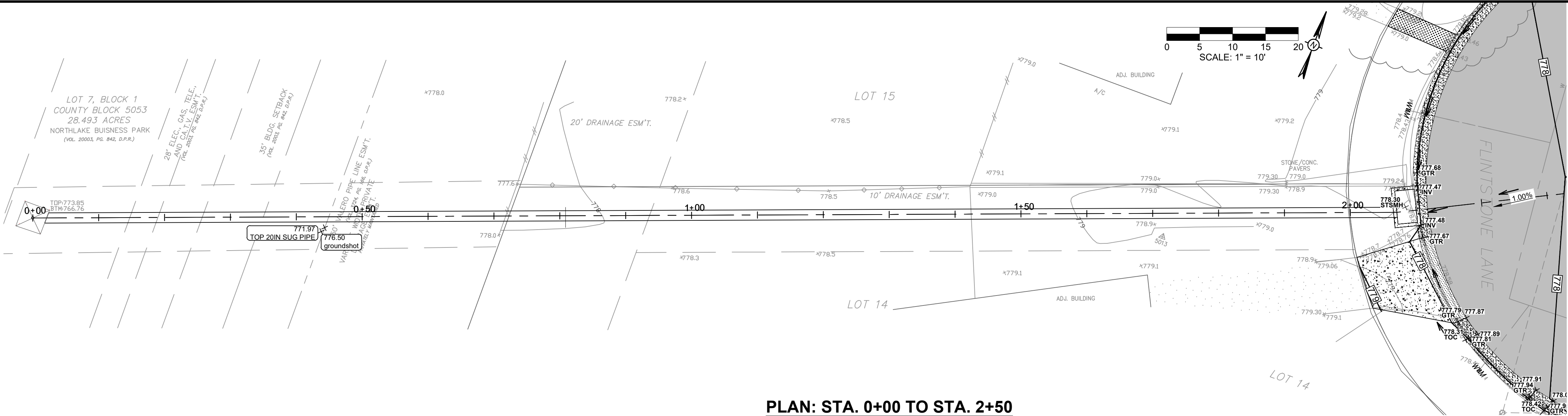
DESIGNED BY: CRM	CHECKED BY: RJB	DRAWN BY: CRM
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DATE: 5/29/2025

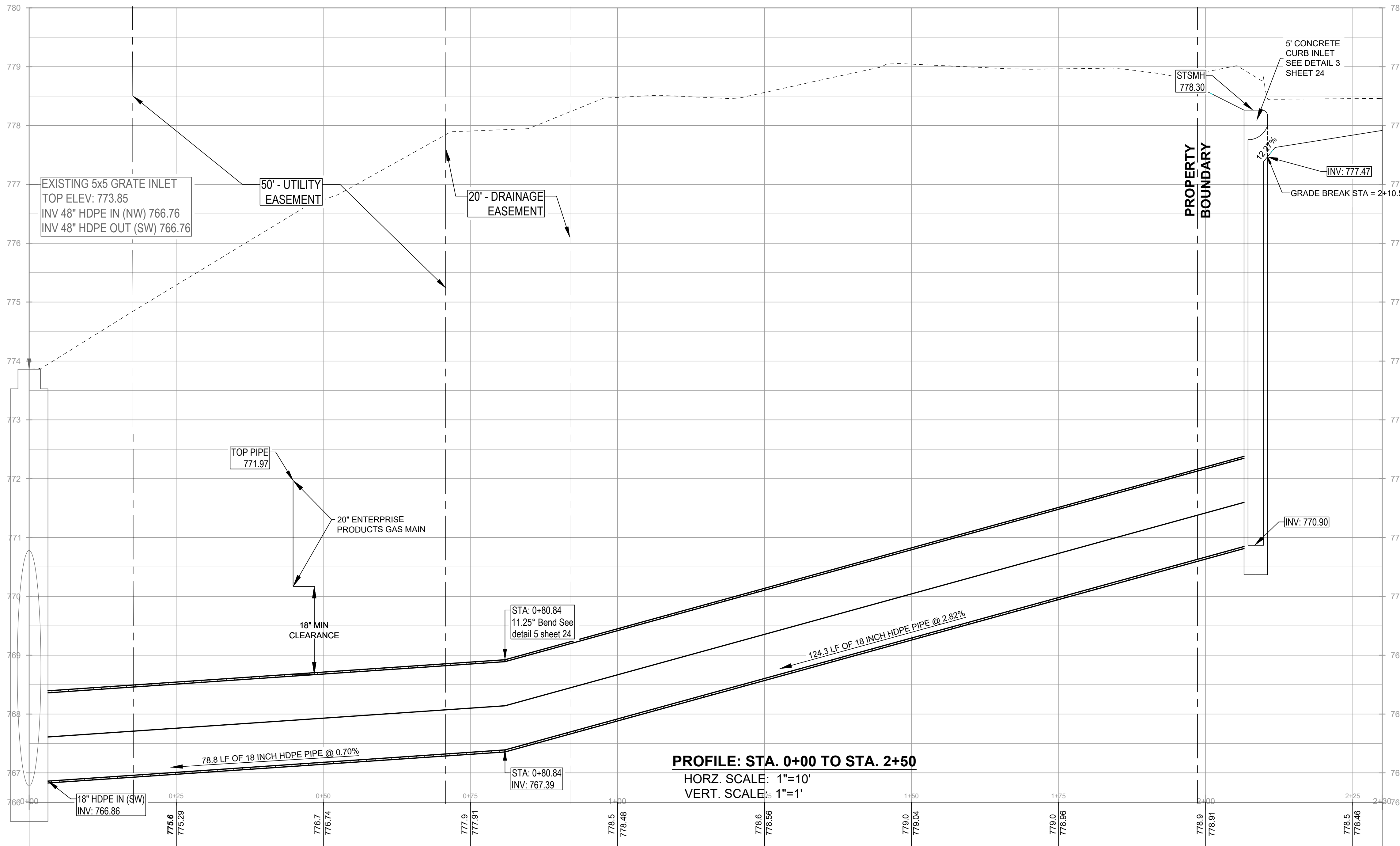
SHEET TITLE: **STREET PLAN & PROFILE STA. 16+80 TO STA. 19+62**

SHEET NUMBER: **18** OF **26**

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PLAN: STA. 0+00 TO STA. 2+50



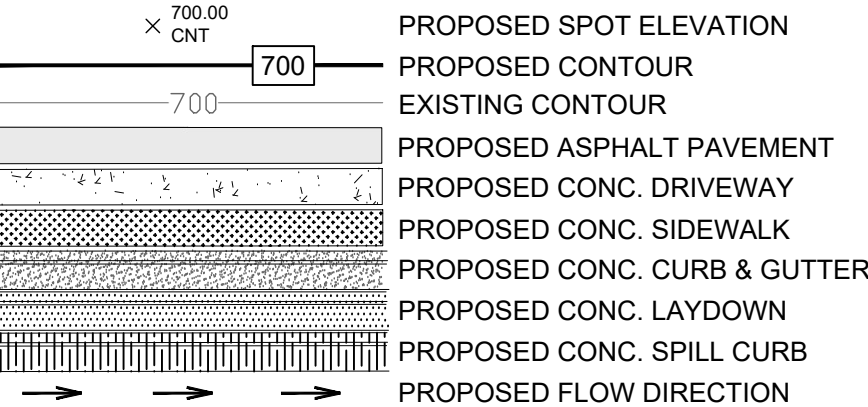
PROFILE: STA. 0+00 TO STA. 2+50

HORZ. SCALE: 1"=10'
VERT. SCALE: 1"=1'

NOTES:

1. ORIGINAL SURVEY COMPLETED BY MAVERICK LAND SURVEYING DATED 10/02/2024.
2. POTHOLE OF SUMP PIPE PERFORMED BY MAVERICK LAND SURVEYING DATED 06/08/2023.
3. VERTICAL DATUM IS BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88), HORIZONTAL DATUM IS BASED ON NORTH AMERICAN DATUM OF 1983 (NAD83) TEXAS STATE PLANE SOUTH CENTRAL (4204).
4. NOTIFY ENGINEER, CITY AND RESIDENTS OF ANY ROAD CLOSURE AT LEAST 48 HOURS PRIOR TO ALLOW RESIDENTS TO BE NOTIFIED TO RELOCATE VEHICLES TO ALTERNATIVE PARKING SITES.
5. CONFIRM THE LOCATION & DEPTHS OF ALL UTILITIES AND CALL FOR UTILITY LOCATORS PRIOR TO COMMENCING CONSTRUCTION. FOR WATER AND SEWER LOCATES CONTACT UNIVERSAL CITY PUBLIC WORKS, (210) 658-5364.

LEGEND



ELEV POINT LEGEND

GTR	GUTTER
TOC	TOP OF CURB
STSMH	TOP OF STORM SEWER MANHOLE
SSMH	TOP OF SANITARY SEWER MAN HOLE
INV	INVERT

ENTERPRISE NOTES:

1. ENTERPRISE DEFINES THE TOLERANCE ZONE AS 18 INCHES FROM THE OUTER EDGE OF THE PIPE (IN ALL DIRECTIONS), OR AS DEFINED BY STATE REGULATIONS, WHICHEVER IS GREATER.
2. MECHANIZED EQUIPMENT IS NOT ALLOWED WITHIN THE TOLERANCE ZONE.
3. ANY EXCAVATION TAKING PLACE WITH THE TOLERANCE ZONE MUST BE DONE BY HAND.
4. ALWAYS MAKE A ONE-CALL PRIOR TO PERFORMING ACTIVITIES. DIAL 811 OR GO TO WWW.CALL811.COM.
6. DO NOT PERFORM ANY EXCAVATION ACTIVITIES ON ENTERPRISE RIGHTS-OF-WAY WITHOUT APPROVAL FROM ENTERPRISE. ENTERPRISE WILL REVIEW YOUR PLANS FOR EXCAVATION WITHIN ENTERPRISE'S GAS RIGHTS-OF-WAY. LOCATE AND MARK THE PIPELINE ASSETS (IF NECESSARY) AND AN ENTERPRISE REPRESENTATIVE WILL BE ON-SITE TO MONITOR THE EXCAVATION ACTIVITY.
7. NO HEAVY EQUIPMENT IS ALLOWED TO WORK DIRECTLY OVER THE PIPELINE. THE RIGHT-OF-WAY BOUNDARY SHOULD BE MARKED WITH TEMPORARY FENCING OR WHITE LINE TO ASSIST THE OPERATOR WITH POSITIONING OF HEAVY EQUIPMENT.
8. ALL MECHANICAL DIGGING EQUIPMENT MUST DIG PARALLEL TO THE PIPELINES AND HAVE THE TEETH REMOVED OR BARRED WITH A PLATE WELDED ACROSS THE BUCKET.
9. AN ENTERPRISE REPRESENTATIVE HAS THE AUTHORITY TO SUSPEND EXCAVATION ACTIVITIES IF AN EQUIPMENT OPERATOR APPEARS TO BE UNQUALIFIED OR EQUIPMENT MAINTENANCE IS NOT IN ACCORDANCE WITH APPLICABLE REGULATIONS.



#	REVISION	DATE
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TX Registration #F-002573
515 Busby Drive
San Antonio, Texas 78209
Phone: (210) 342-3991

CLIENT:
CITY OF UNIVERSAL CITY

PROJECT NAME:
Flintstone Drive Street Improvements

PHASE:
DETAIL DESIGN

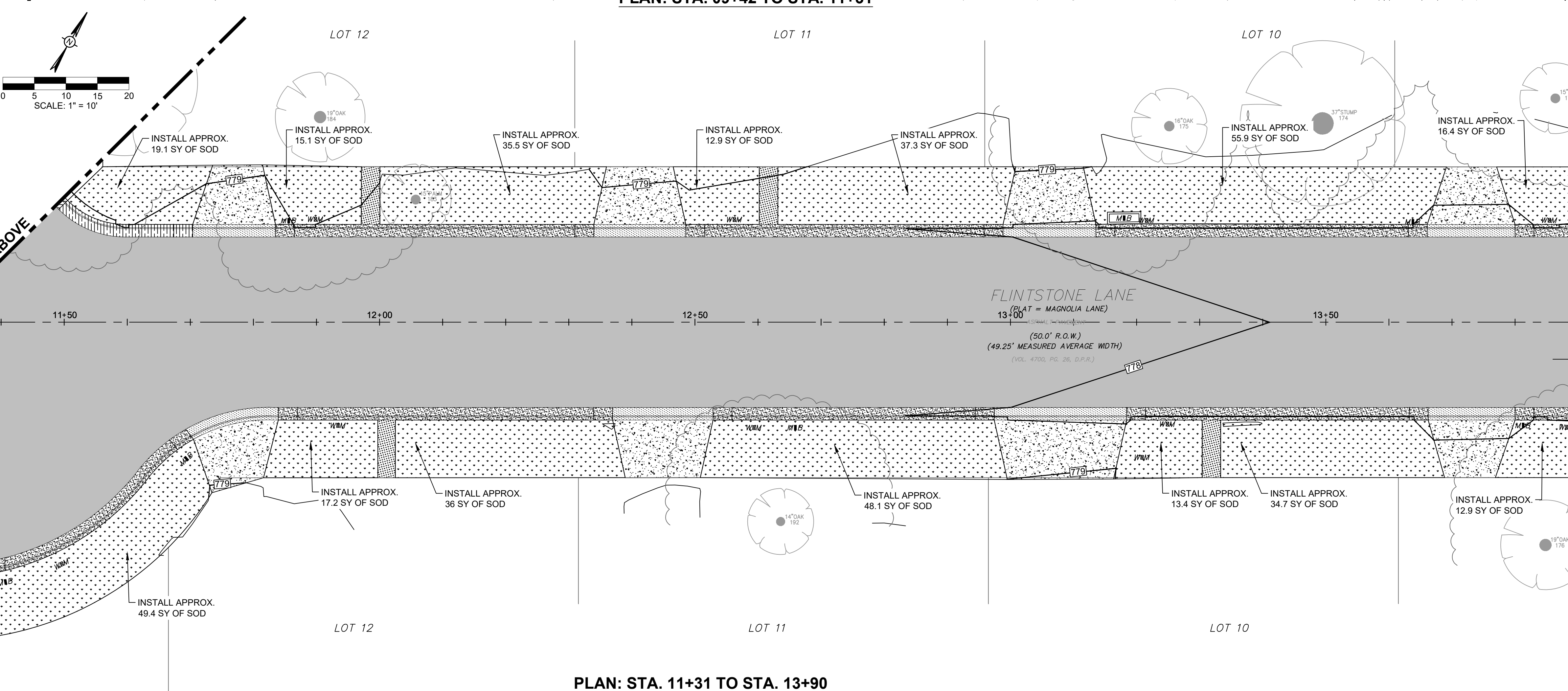
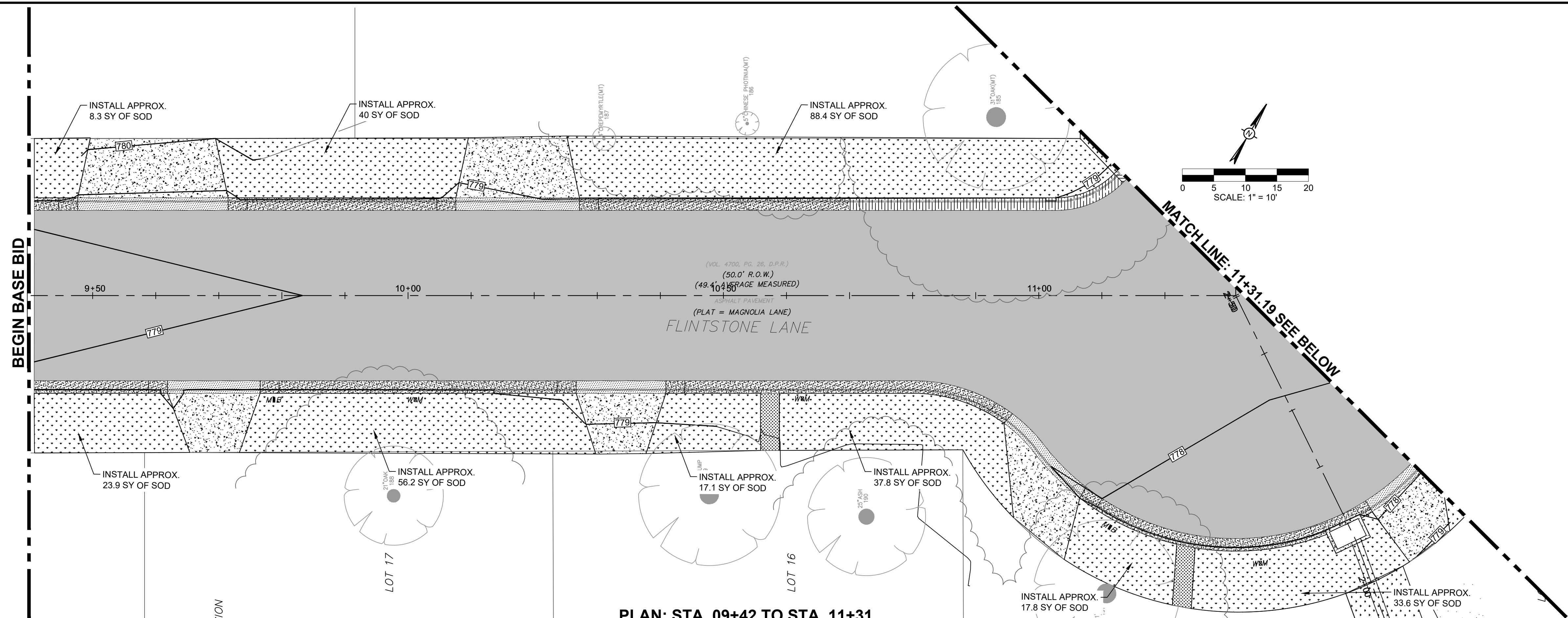
PROJECT LOCATION:
PARKVIEW ESTATES
UNIVERSAL CITY, TX

PROJECT NUMBER:
UNIV-013C

DESIGNED BY: CRM
CHECKED BY: RJB
DRAWN BY: CRM
DATE:
5/29/2025

SHEET TITLE:
EASEMENT PLAN & PROFILE STA. 0+00 TO STA. 2+50

SHEET NUMBER:
19 OF **26**



- NOTES:**
1. MATCH EXISTING GRASS TYPE WHEN PLACING SOD.
 2. REPAIR OR REPLACE ALL PORTIONS OF IRRIGATION DAMAGED BY CONSTRUCTION PRIOR TO PLACING SOD.
 3. DO NOT COVER CLEANOUTS OR WATER METERS.

LEGEND

 PROPOSED SOD & TOPSOIL LIMITS



#	REVISION	DATE
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TX Registration #F-002573
515 Busby Drive
San Antonio, Texas 78209
Phone: (210) 342-3991

CLIENT

CITY OF UNIVERSAL CITY

PROJECT NAME:

Flintstone Drive Street Improvements

PHASE:

DETAIL DESIGN

PROJECT LOCATION

PARKVIEW ESTATES
UNIVERSAL CITY, TX

UNIVERSAL CITY, TX

PROJECT NUMBER:

UNIV-013C

DESIGNED BY

ED BY

CHECKED BY

WORKED BY

DRAWN BY:

AWN BY

DATE: _____

5/29/2025

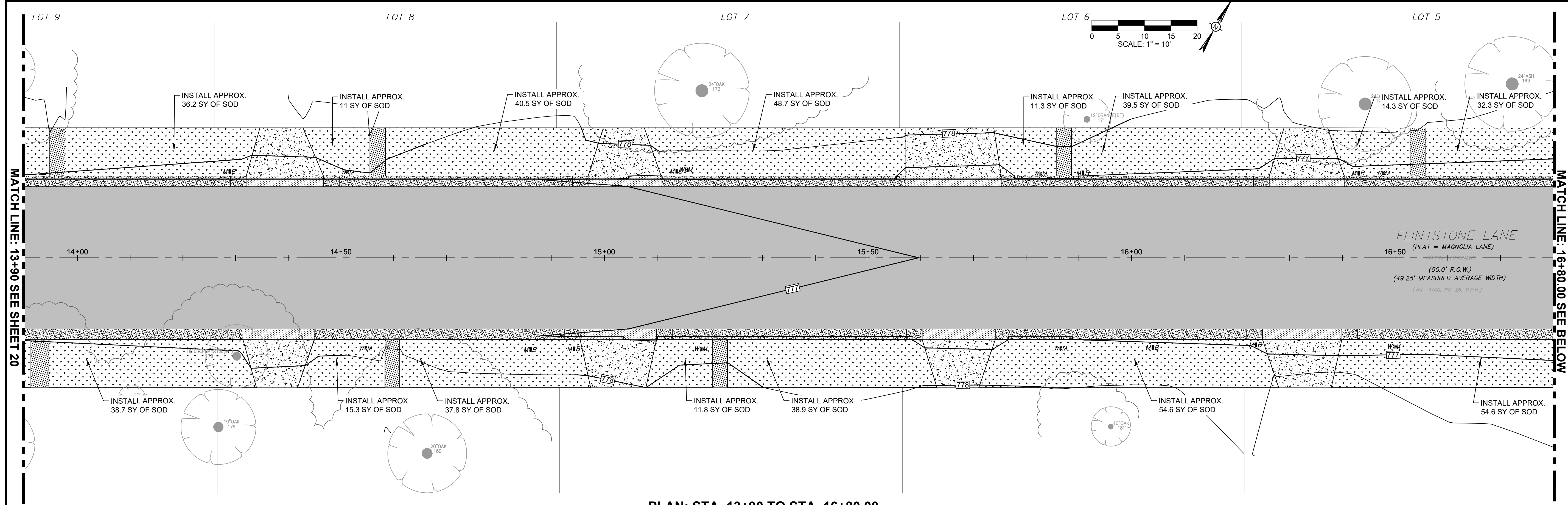
SHEET TITLE

SHEET TITLE:
STREET SOD &
LANDSCAPING PLAN
STA. 9+42 TO STA.13+90

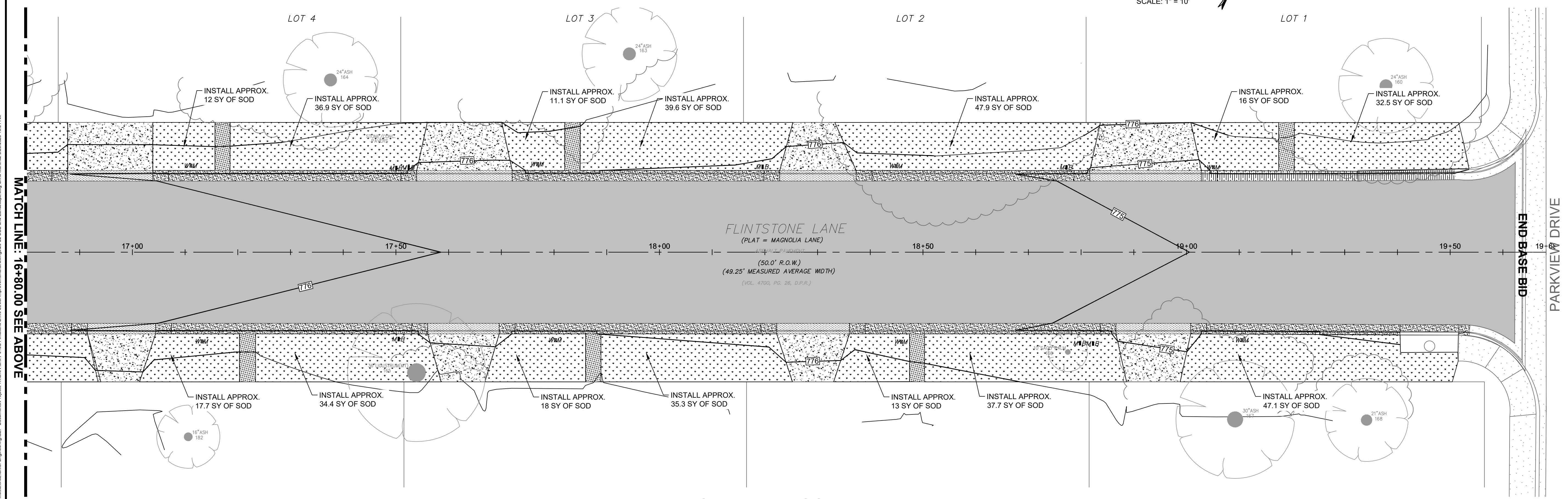
STA. 9+42 TO STA. 13+90

SHEET NUMB

20 OF 26



PLAN: STA. 13+90 TO STA. 16+80.00



PLAN: STA. 16+80.00 TO STA. 19+62

- NOTES:
1. MATCH EXISTING GRASS TYPE WHEN PLACING SOD.
 2. REPAIR OR REPLACE ALL PORTIONS OF IRRIGATION DAMAGED BY CONSTRUCTION PRIOR TO PLACING SOD.
 3. DO NOT COVER CLEANOUTS OR WATER METERS.
- LEGEND
- PROPOSED SOD & TOPSOIL LIMITS

#	REVISION	DATE

TX Registration #F-002573
515 Busby Drive
San Antonio, Texas 78209
Phone: (210) 342-3991

CLIENT: CITY OF UNIVERSAL CITY

PROJECT NAME: **Flintstone Drive Street Improvements**

PHASE: DETAIL DESIGN

PROJECT LOCATION: PARKVIEW ESTATES
UNIVERSAL CITY, TX

PROJECT NUMBER: UNIV-013C

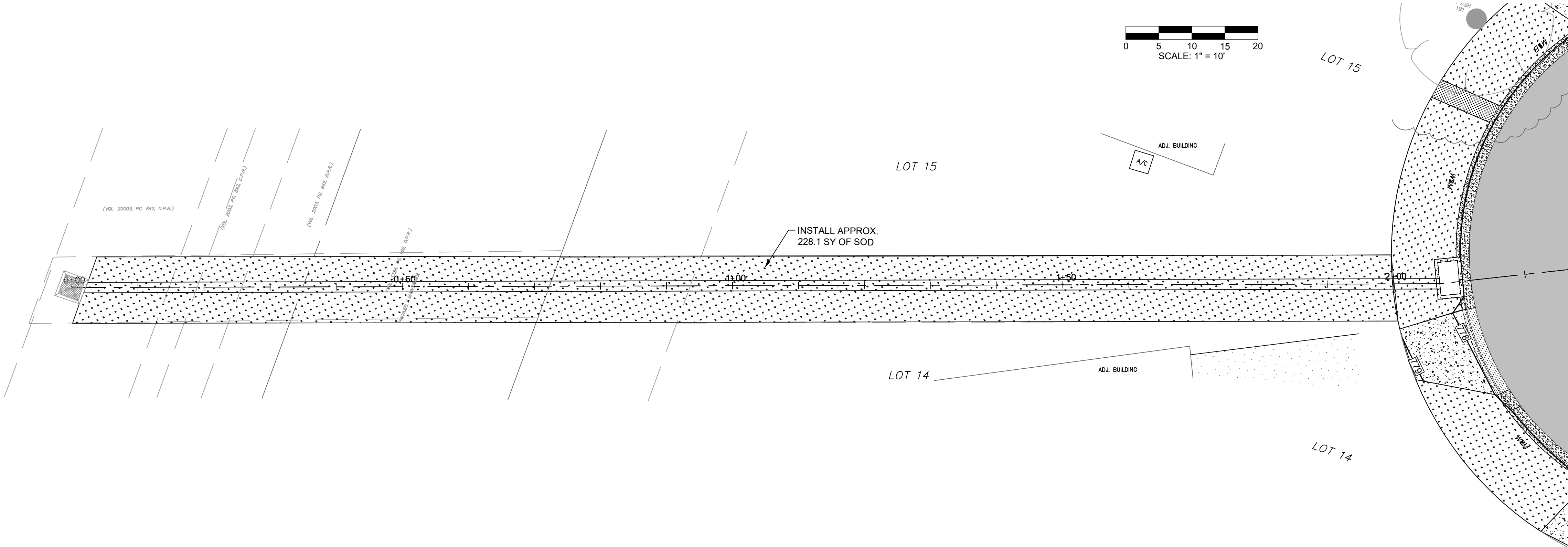
DESIGNED BY: CRM	CHECKED BY: RJJB	DRAWN BY: CRM
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DATE: 5/29/2025

SHEET TITLE: **SOD & LANDSCAPE
PLAN STA. 13+90 TO
STA. 19+62**

SHEET NUMBER: **21** OF **26**

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PLAN: STA. 0+00 TO STA. 2+50

NOTES:

1. MATCH EXISTING GRASS TYPE WHEN PLACING SOD.
2. REPAIR OR REPLACE ALL PORTIONS OF IRRIGATION DAMAGED BY CONSTRUCTION PRIOR TO PLACING SOD.
3. DO NOT COVER CLEANOUTS OR WATER METERS.

LEGEND

PROPOSED SOD & TOPSOIL LIMITS



#	REVISION	DATE
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TX Registration #F-002573
515 Busby Drive
San Antonio, Texas 78209
Phone: (210) 342-3991

CLIENT:
CITY OF UNIVERSAL CITY

PROJECT NAME:
Flintstone Drive Street Improvements

PHASE:
DETAIL DESIGN

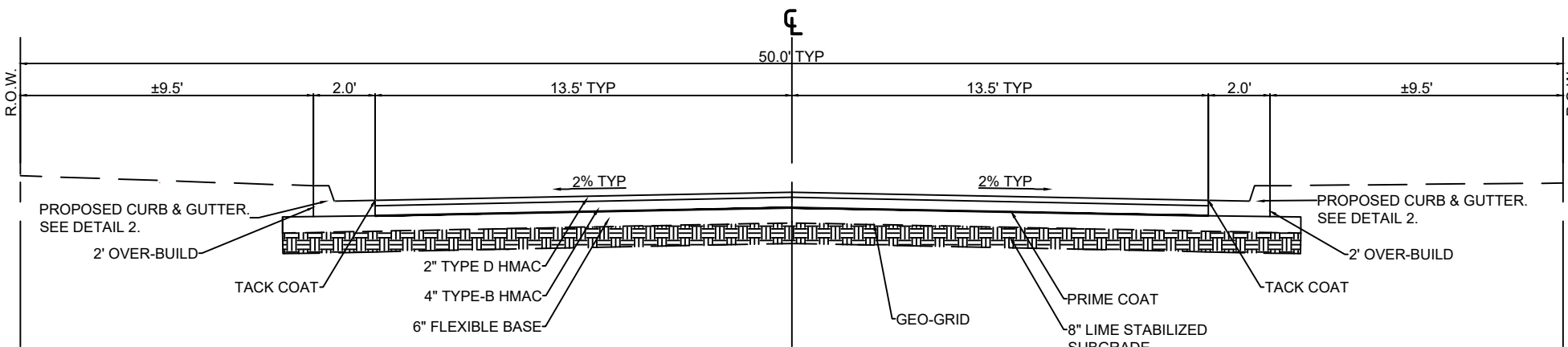
PROJECT LOCATION:
PARKVIEW ESTATES
UNIVERSAL CITY, TX

PROJECT NUMBER:
UNIV-013C

DESIGNED BY: CRM	CHECKED BY: RJB	DRAWN BY: CRM
DATE: 5/29/2025		

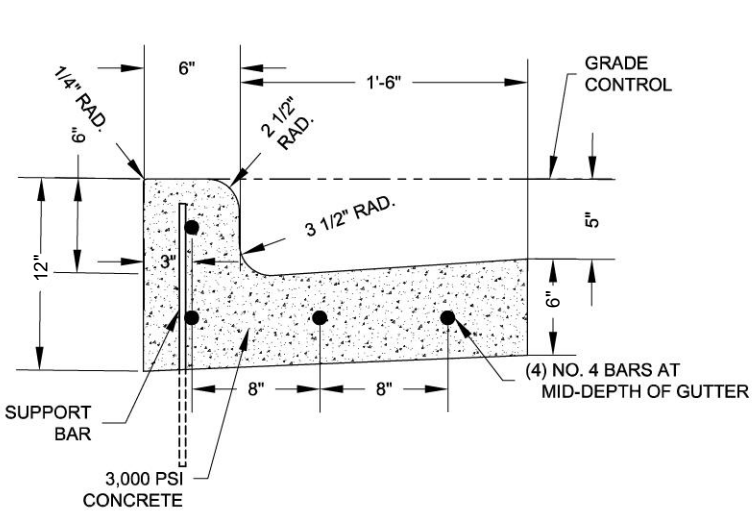
SHEET TITLE:
EASEMENT SOD &
LANDSCAPE PLAN
STA. 0+00 TO STA. 2+50

SHEET NUMBER:
22 OF 26



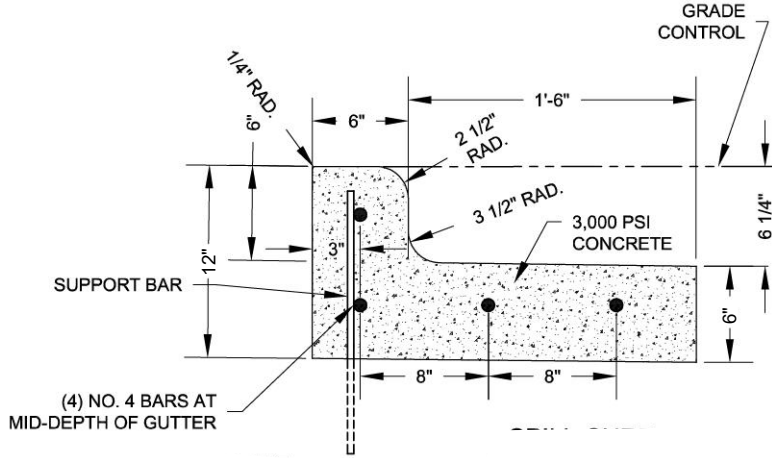
1 PROPOSED TYPICAL ASPHALT PAVEMENT SECTION

- SCALE: 1"=5"
- Notes:
- ALL UNPAVED AREAS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE SODDED OR SEEDED, AS INDICATED ON THE PLANS.
 - SUBGRADE SHALL BE LIME STABILIZED AND MECHANICALLY STABILIZED WITH TENSAR TRIAX GEOGRID.



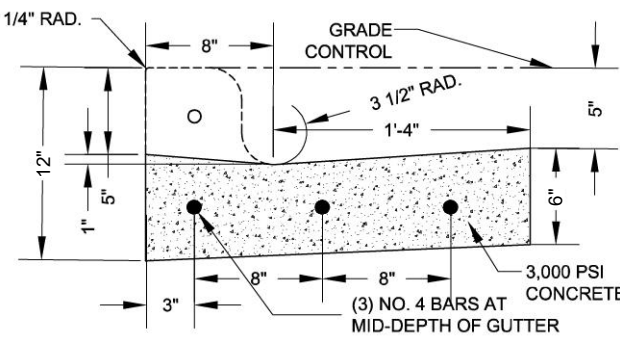
2 CURB & GUTTER

SCALE: 1"=1'



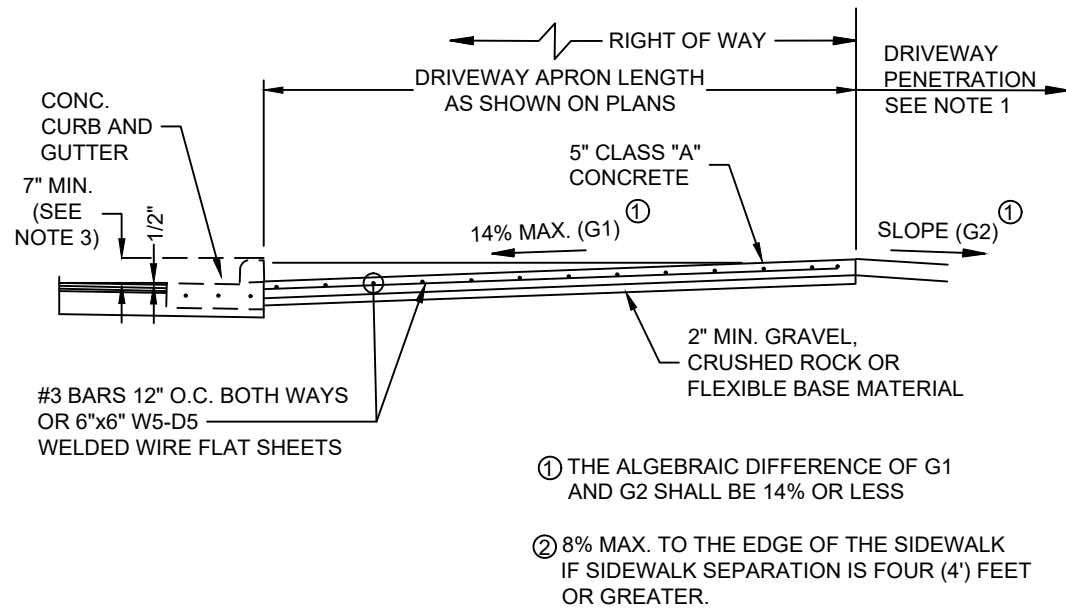
3 SPILL CURB

SCALE: 1"=1'



4 LAYDOWN CURB

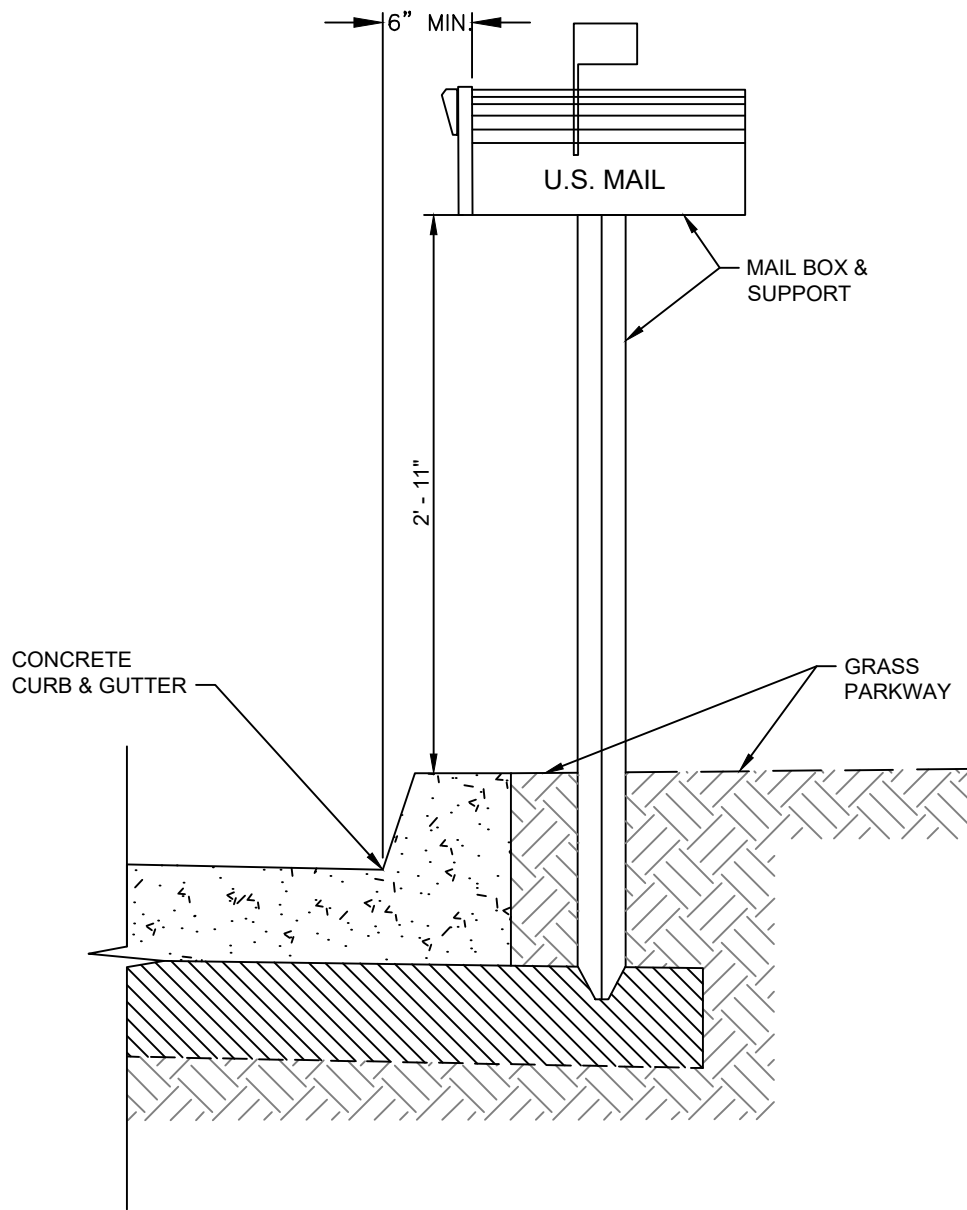
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5 RESIDENTIAL DRIVEWAY SECTION

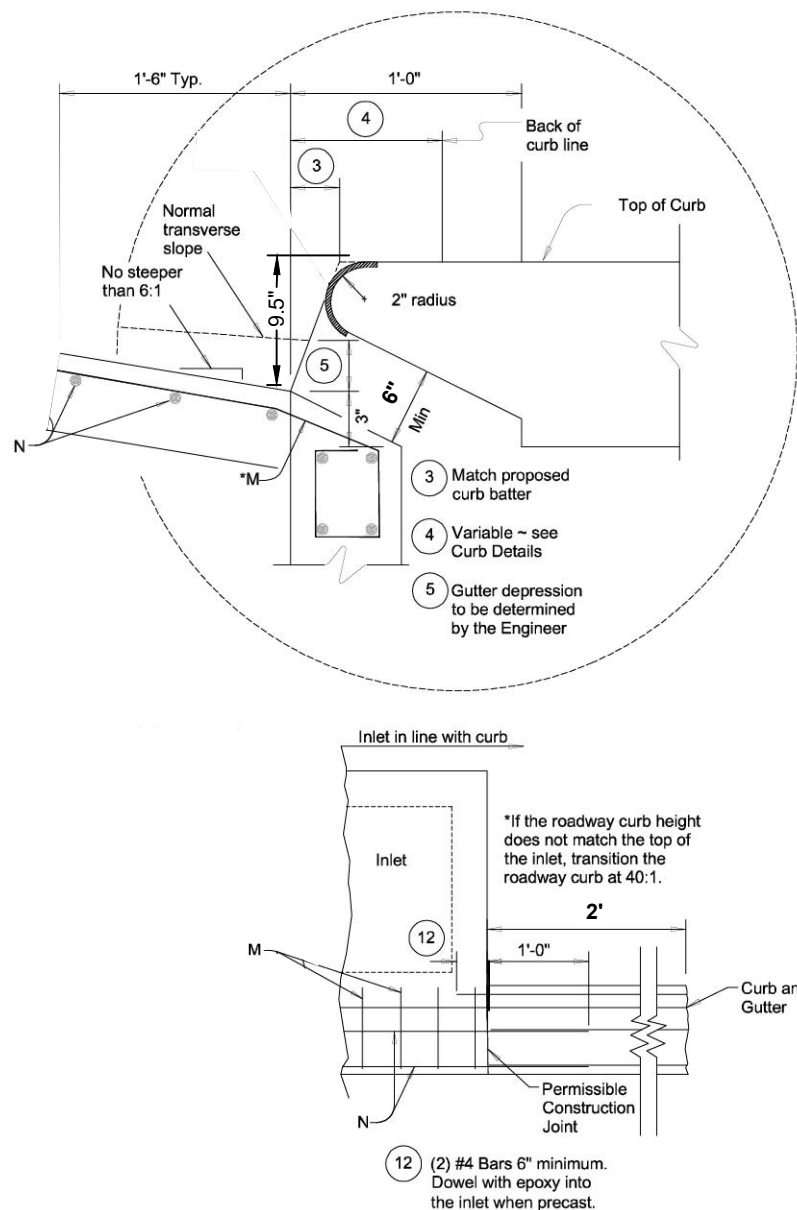
SCALE: 1"=1'

- CONCRETE DRIVEWAY GENERAL NOTES:
- DRIVEWAY PENETRATION REFERS TO A PORTION OF THE DRIVEWAY WITHIN PRIVATE PROPERTY THAT MAY BE NECESSARY FOR RECONSTRUCTION TO COMPLY WITH A MAXIMUM DRIVEWAY SLOPE.
 - FOR TYPICAL RESIDENTIAL TYPE STREETS, SIDEWALKS SHALL HAVE A MINIMUM WIDTH OF FOUR (4) FEET. FOR COMMERCIAL OR STREETS OTHER THAN TYPICAL RESIDENTIAL STREETS, THE SIDEWALK SHALL BE A MINIMUM WIDTH OF SIX (6) FEET. WHERE THE CITY HAS DESIGNATED A BIKE ROUTE, THE CITY MAY REQUIRE AN EIGHT (8) CONCRETE SIDEWALK FOR DUAL PURPOSES.
 - THE MINIMUM SEVEN (7") INCHES HEIGHT WILL NOT NECESSARILY OCCUR AT THE PROPERTY LINE. IT MAY OCCUR WITHIN THE RIGHT OF WAY OR WITHIN THE DRIVEWAY PENETRATION ON PRIVATE PROPERTY.



6 MAILBOX DETAILS

- SCALE: NTS
- Notes:
- MAILBOX SHOULD BE REMOVED, STORED AND RE-INSTALLED AS SHOWN IN THE DETAIL.
 - IF CONTRACTOR DAMAGES MAILBOX, CONTRACTOR SHALL REPLACE AT THEIR EXPENSE ACCORDING TO DETAIL.

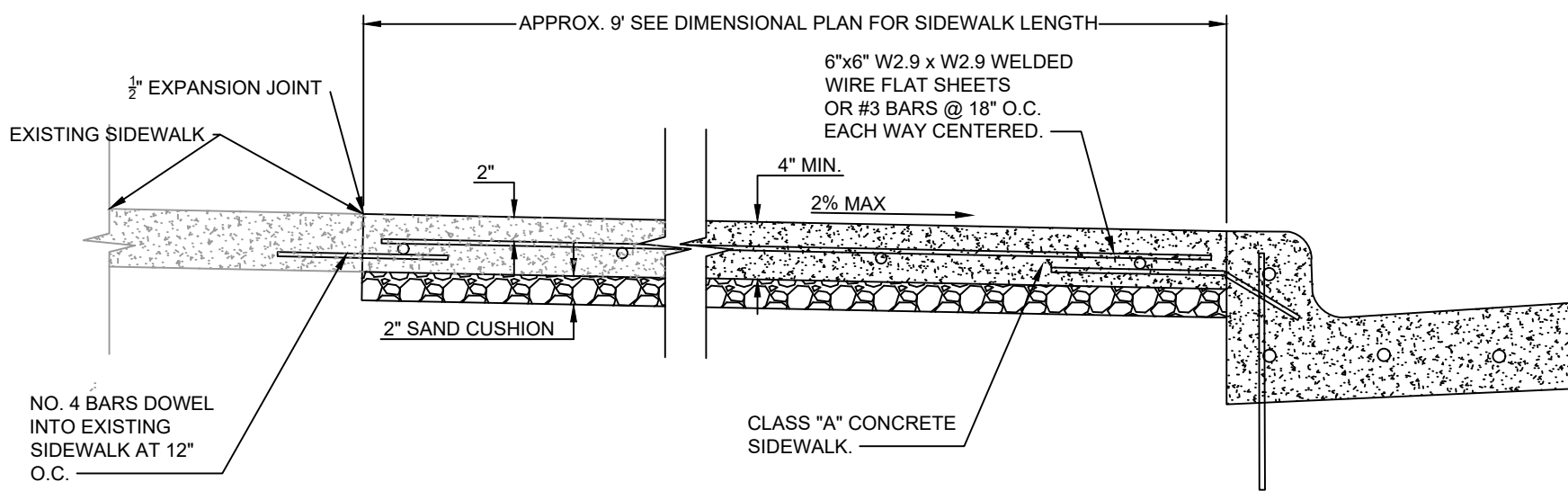


CURB AND GUTTER CONNECTION

7 INLET APRON

SCALE: NTS

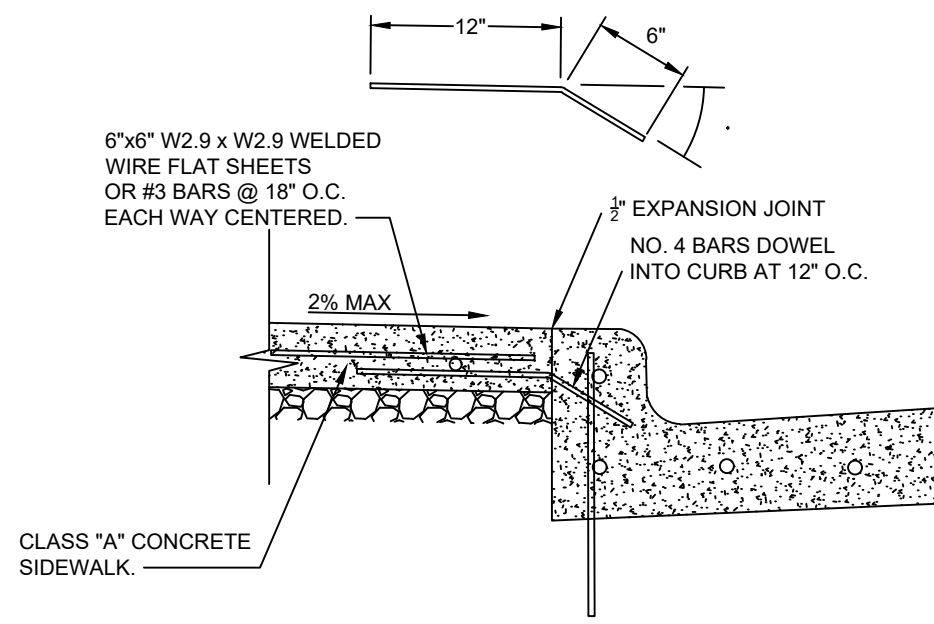
- Notes:
- BARS N = # 4 BARS 9" ON CENTER.
 - BARS M = 4 BARS 12" ON CENTER.



8 CONCRETE ENTRY SIDEWALK

SCALE: 1"=1'

- Notes:
- ENTRY SIDEWALK WIDTH SHOULD MATCH EXISTING SIDEWALK WIDTH.



9 CONCRETE ENTRY SIDEWALK ABUTTING CURB

SCALE: 1"=1'



#	REVISION	DATE
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TX Registration #F-002573
515 Busby Drive
San Antonio, Texas 78209
Phone: (210) 342-3991

CLIENT:
CITY OF UNIVERSAL CITY

PROJECT NAME:
Flintstone Drive Street Improvements

PHASE:
DETAIL DESIGN

PROJECT LOCATION:
PARKVIEW ESTATES
UNIVERSAL CITY, TX

PROJECT NUMBER:
UNIV-013C

DESIGNED BY: CRM
CHECKED BY: RJB
DRAWN BY: CRM
DATE:
5/29/2025

SHEET TITLE:
PAVEMENT DETAILS

SHEET NUMBER:
23 OF 26

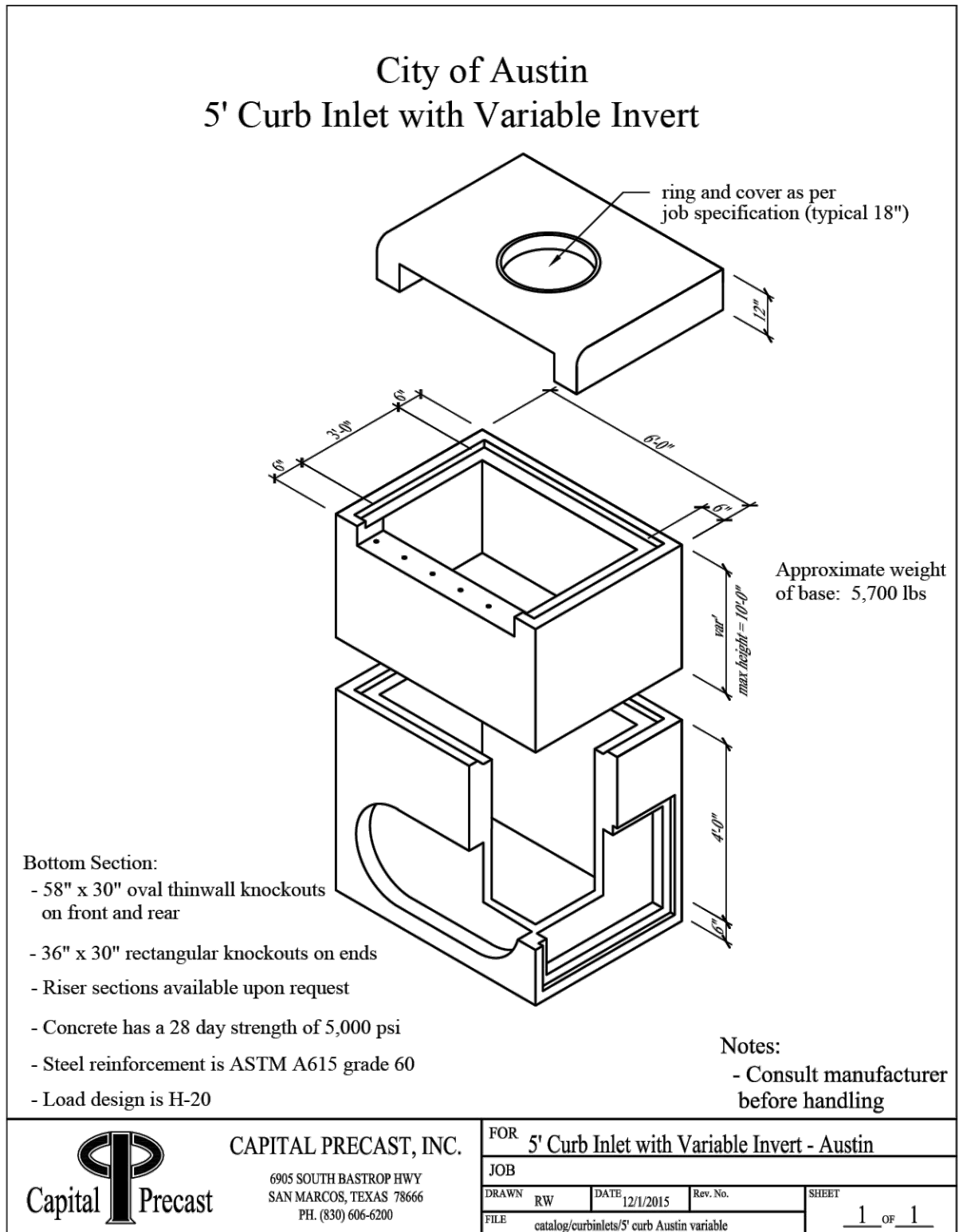
This specification describes 4- through 60-inch (100 to 1500 mm) ADS N-12 plain end pipe (per AASHTO) for use in gravity-flow land drainage applications.

- 4- through 10-inch (100 to 250 mm) pipe shall meet AASHTO M252, Type S or SP.
- 12- through 60-inch (300 to 1500 mm) pipe shall meet AASHTO M294, Type S or SP, or ASTM F2306.
- Manning's "n" value for use in design shall be 0.012.

Gasketed connections shall incorporate a closed-cell synthetic expanded rubber gasket meeting the requirements of ASTM D1056 Grade 2A2. Gaskets, when applicable, shall be installed by the pipe manufacturer.

Material for pipe and fitting production shall be high density polyethylene conforming with the minimum requirements of cell classification 424420C for 4- through 10-inch (100 to 250 mm) diameters, and 435400C for 12- through 60-inch (300 to 1500 mm) diameters, as defined and described in the latest version of ASTM D3350, except that carbon black content should not exceed 4%. The 12- through 60-inch (300 to 1500mm) pipe material shall comply with the notched constant ligament-stress (NCLS) test as specified in Sections 9.5 and 5.1 of AASHTO M294 and ASTM F2306 respectively.

*Pipe O.D. values are provided for reference purposes only, values stated for 12 through 60-inch are ± 1 inch. Contact a sales representative for exact values

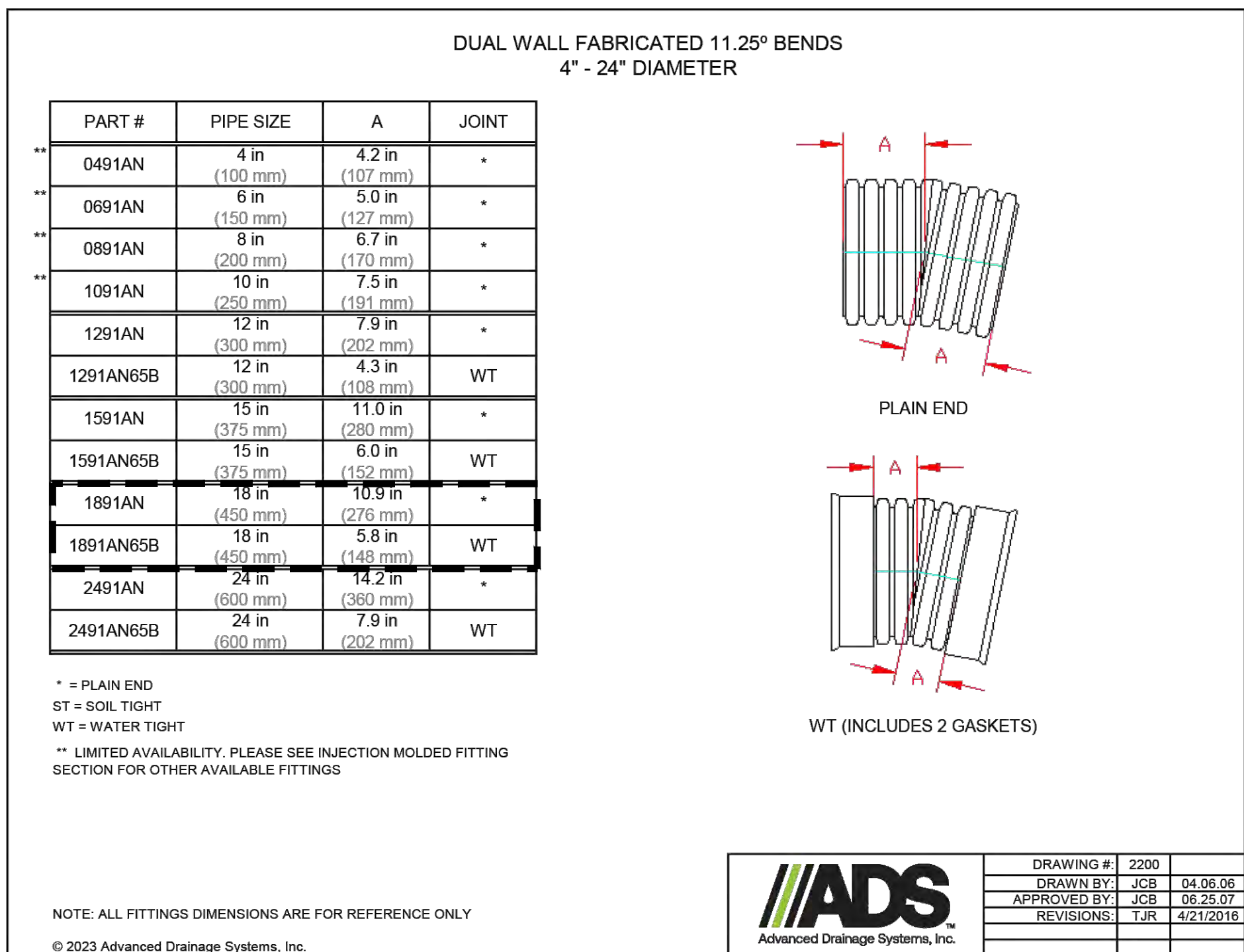


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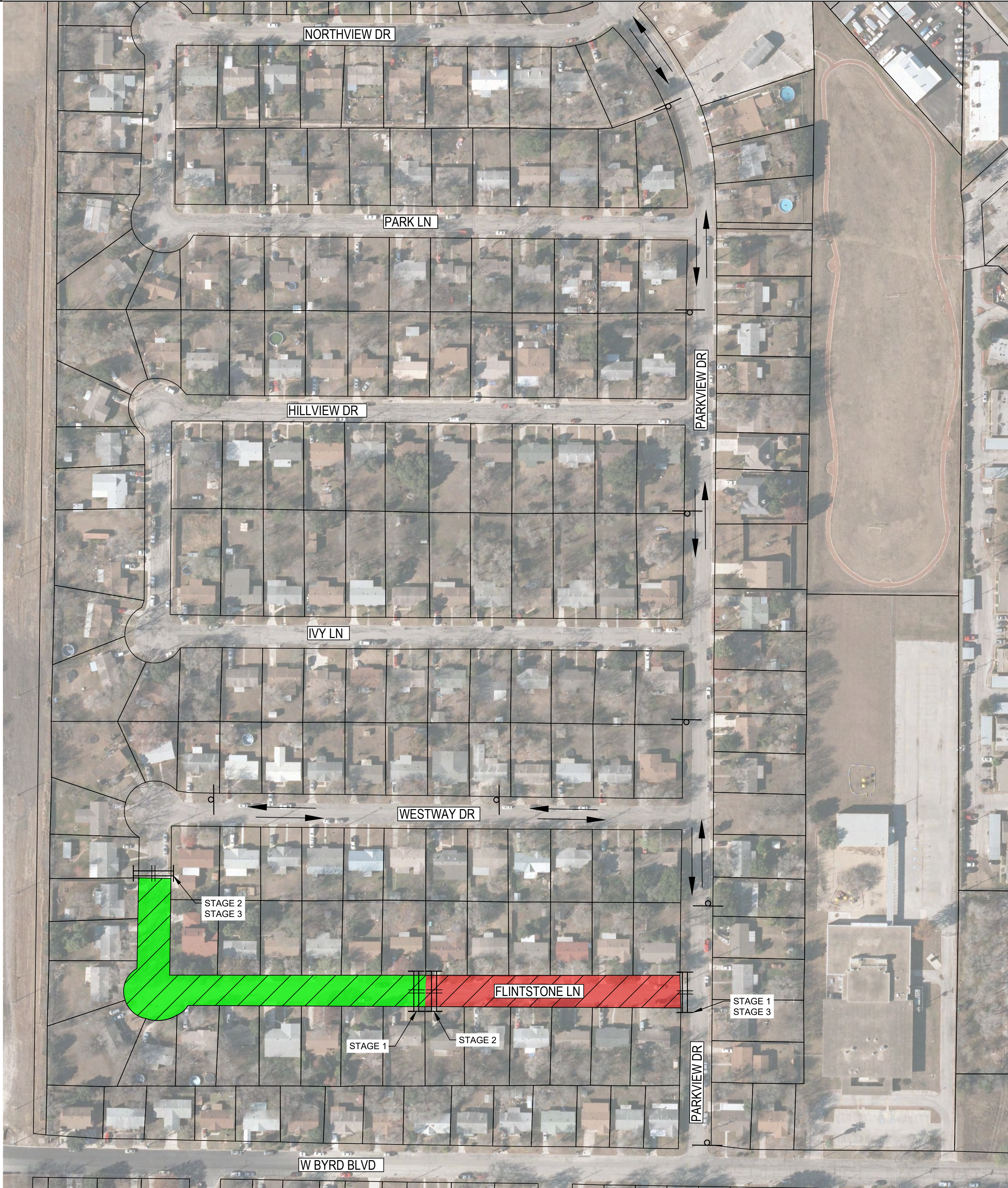
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Notes:

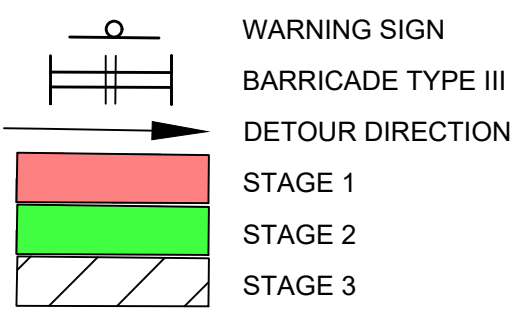
1. BEDDING MATERIAL AND INITIAL BACKFILL SHALL BE ASTM-C-33 SAND COMPACTED IN 9" LIFTS PLEASE SEE SHEET 2 NOTE 25 FOR GRADATION.



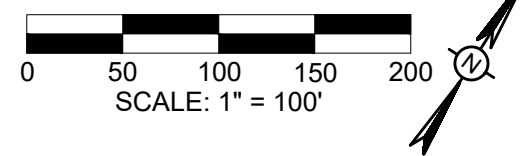
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LEGEND



TRAFFIC CONTROL PLAN



TRAFFIC NOTES

TRENCHING / EXCAVATING

- The following notes shall apply to excavations of trenches or pits that are located in the pavement or are within six (6) feet of the edge of roadway:
- 1.) Trench walls shall not be closer than three (3) feet from the edge of the traveled way at any stage of construction.
 - 2.) Traffic control devices shall be in place before starting any excavation.
 - 3.) Trenches or pits will not be permitted to be bridged by steel plates and open to traffic unless they are temporarily backfilled to finished street grade.
 - 4.) For pits or trenches along or in a roadway that are going to be left open over night that are zero to fifty (0 - 50) feet in length, the following applies. **GUARD RAIL OR CONCRETE BARRIER SHALL BE USED.**
 - 5.) For pits or trenches along or in roadway that are going to be left open over night and are longer than 50 feet in length. **CONCRETE BARRIERS MUST BE USED.**
 - 6.) Plastic construction fencing shall be required for any trench or pit left open over night.
 - 7.) When using any guardrail or concrete barrier, protected end must be used as per the TEXAS-M.U.T.C.D.
 - 8.) For vertical drop-offs greater than two (2) feet along roadway, low profile concrete with appropriate end protection must be installed.
 - 9.) All concrete barriers placed on City R.O.W shall be low profile. No high profile barriers will be allowed.

REFLECTIVE SHEETING

The reflectorized white and reflectorized orange stripes for channelizing devices such as barricade drums and vertical panels shall be constructed of reflective sheeting meeting the color and retro-reflectivity requirements of high intensity, unless otherwise specified in the plans.

MAINTENANCE

- 1.) All traffic signs shall be kept in proper position, clean and legible at all times. Damaged barricades, signs, and other traffic control devices shall be replaced without undue delay.
- 2.) To ensure adequate maintenance, a suitable schedule for inspection, cleaning, and replacement of barricades, lights, and signs shall be established.
- 3.) Special attention and necessary action shall be taken to see that weeds, trees, shrubbery and construction materials do not obscure the face of any sign or barricades.

TRAINING

Each person whose actions affect maintenance and construction zone safety, from the upper-level management personnel through construction and maintenance field personnel, should receive training appropriate to the job decision each individual is required to make. Only those individuals who are qualified by means of adequate training in safe traffic control practices and have a basic understanding of the principles established by applicable standards and regulations, including those of the TEXAS M.U.T.C.D. should supervise the selection, placement, and maintenance of traffic control devices in maintenance and construction areas.

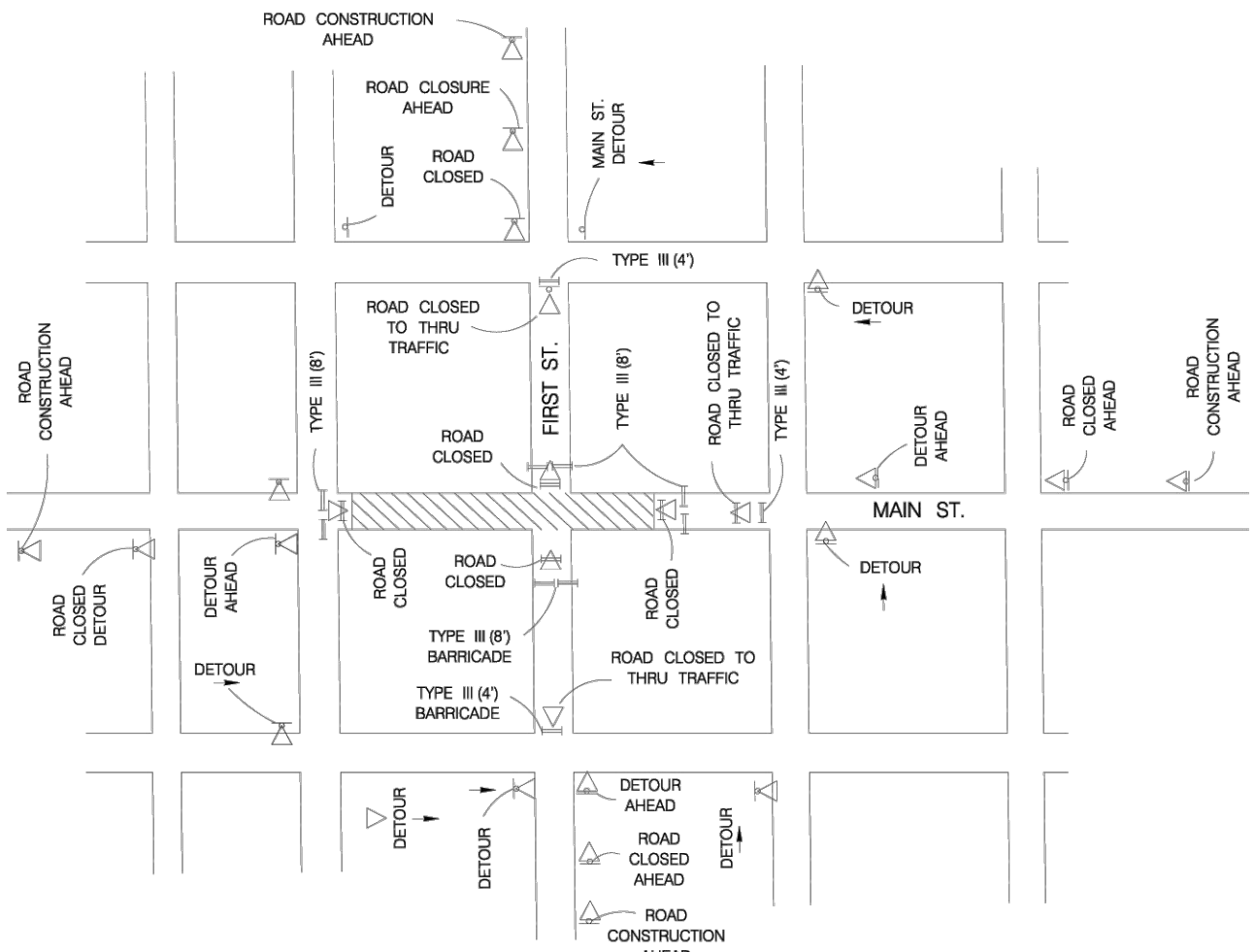
SPECIAL EVENTS BARRICADING

All Type I, (8') barricades used for special events (Dome, Runs, Walks, Parades etc.) shall be a minimum of 42" high and 96" wide. Any necessary signs will require proper sign stands.

USE OF CITY R.O.W.

The City of San Antonio reserves the right to allow contracting and barricading sub-contractors to use the City's R.O.W. The City also reserves the right to advise contractors and barricading sub-contractors to remove stored or unused traffic control devices from the City of San Antonio R.O.W. It is the barricading sub-contractor's responsibility to remove any traffic control device from City's R.O.W. when instructed to do so by a City representative.

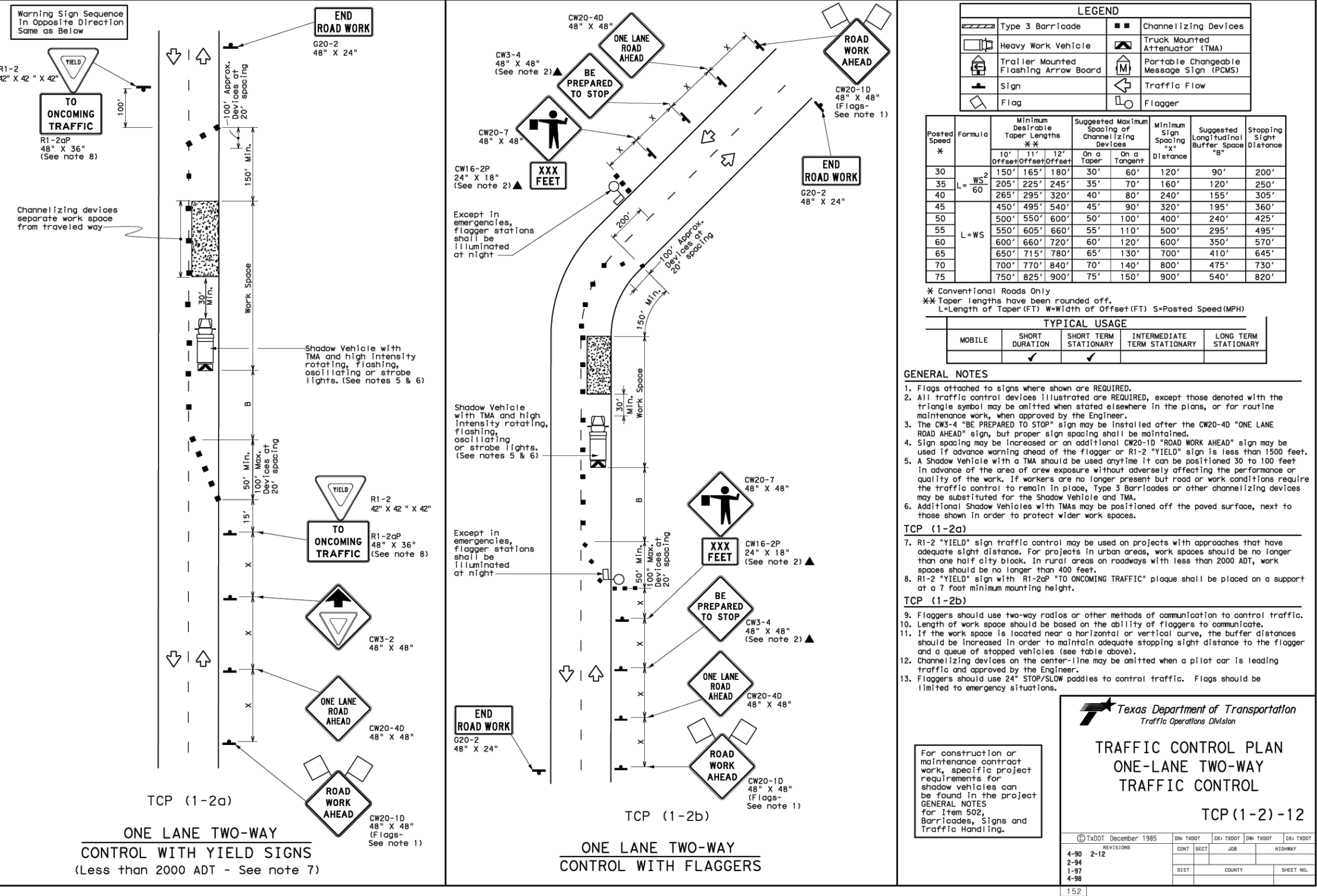
CLOSURE DIAGRAMS



TYPICAL INTERSECTING STREET CLOSURE FOR TWO LANE STREETS

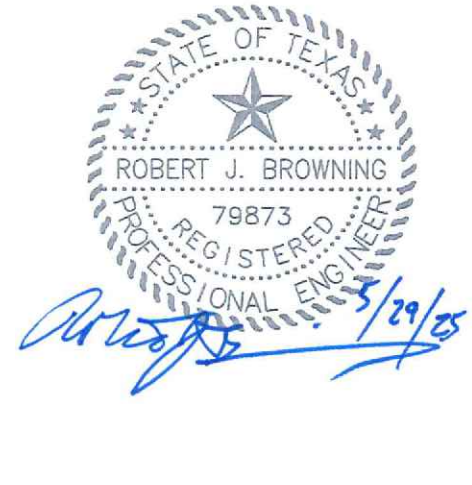
NOTE:
ALL SIGNS WILL BE MOUNTED ON SIGN SUPPORTS ONLY

JUNE 2005
CITY OF SAN ANTONIO
DEPARTMENT OF PUBLIC WORKS
TRAFFIC STANDARDS
BARRICADE AND CONSTRUCTION STANDARDS
SHEET 1 OF 4
% SUBMITTAL PROJECT NO. _____ DATE _____
DRAWN BY: J.A.L. CHECKED BY: J.A.M. DESIGNED BY: J.E.M. SHEET NO. OF _____



NOTES:

1. CONTRACTOR TO PROVIDE ALL SIGNS AND BARRICADES.
2. ALL SIGNS AND BARRICADES SHALL CONFORM TO THE LATEST TMUTCD STANDARDS.
3. NOTIFY ENGINEER, CITY, AND RESIDENTS OF ROAD CLOSURE AND DRIVEWAY APRON REMOVAL AT LEAST 48 HOURS IN ADVANCE. ALLOW RESIDENTS TO RELOCATE VEHICLES OUT OF WORK ZONE.
4. PROJECT STAGES
 1. DEMOLITION AND CONSTRUCTION OF ALL ITEMS EXCEPT TYPE "D" ASPHALT.
 2. DEMOLITION AND CONSTRUCTION OF ALL ITEMS EXCEPT TYPE "D" ASPHALT.
 3. CONTINUOUS TYPE "D" ASPHALT.
5. CONTRACTOR RESPONSIBLE FOR PLACING TRASH CANS AT ONE POINT EITHER ON PARKVIEW OR HILLVIEW TO ALLOW TRASH PICKUP.



REVISION DATE



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San Antonio, Texas 78209
Phone: (210) 342-3991

CLIENT:

CITY OF UNIVERSAL CITY

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Flintstone Drive Street Improvements

PHASE:

DETAIL DESIGN

PROJECT LOCATION:

PARKVIEW ESTATES
UNIVERSAL CITY, TX

PROJECT NUMBER:

UNIV-013C

DESIGNED BY:

CRM

CHECKED BY:

RJB

DRAWN BY:

CRM

DATE:

5/29/2025

SHEET TITLE:

TRAFFIC CONTROL PROTECTION PLAN

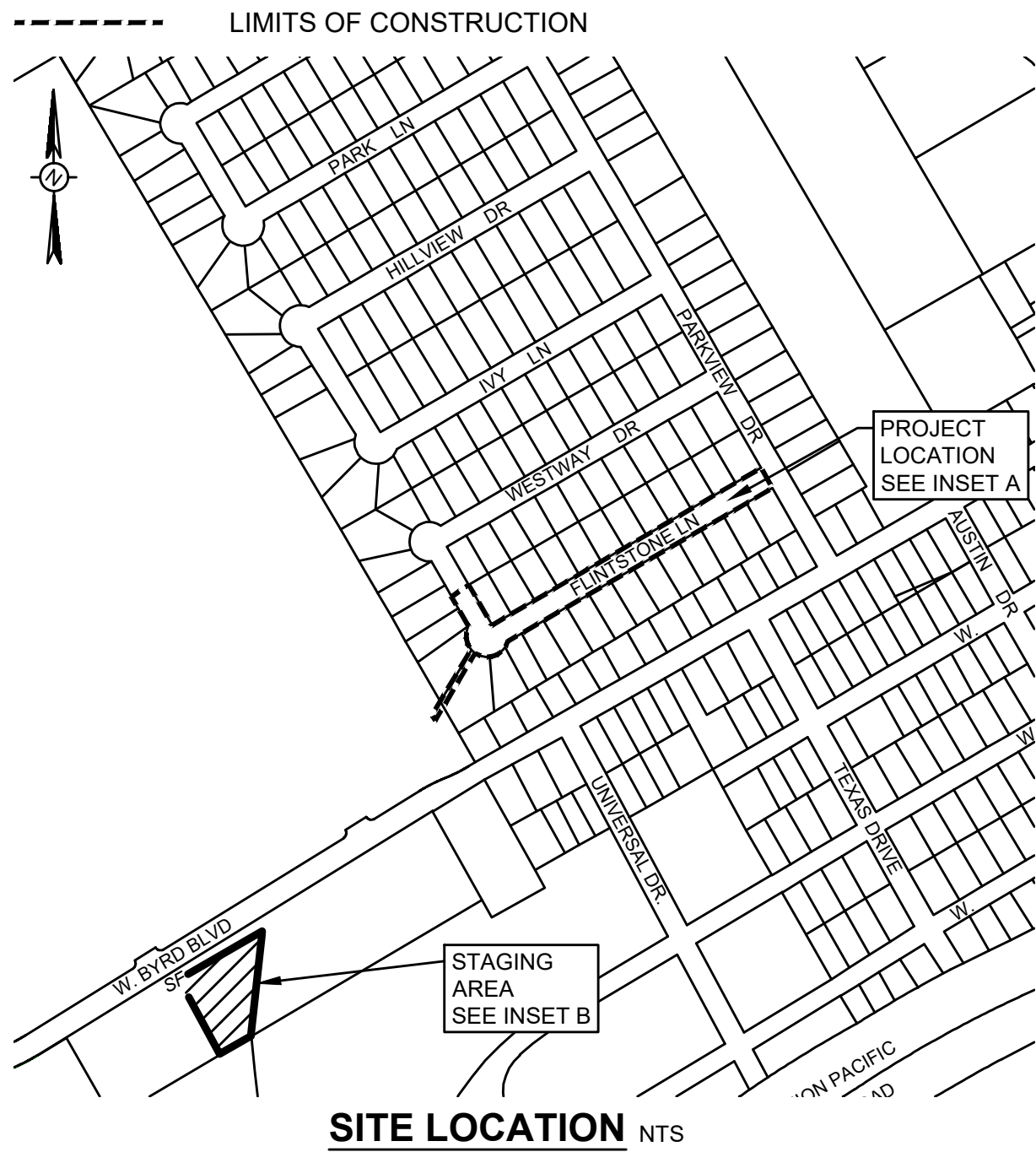
SHEET NUMBER:

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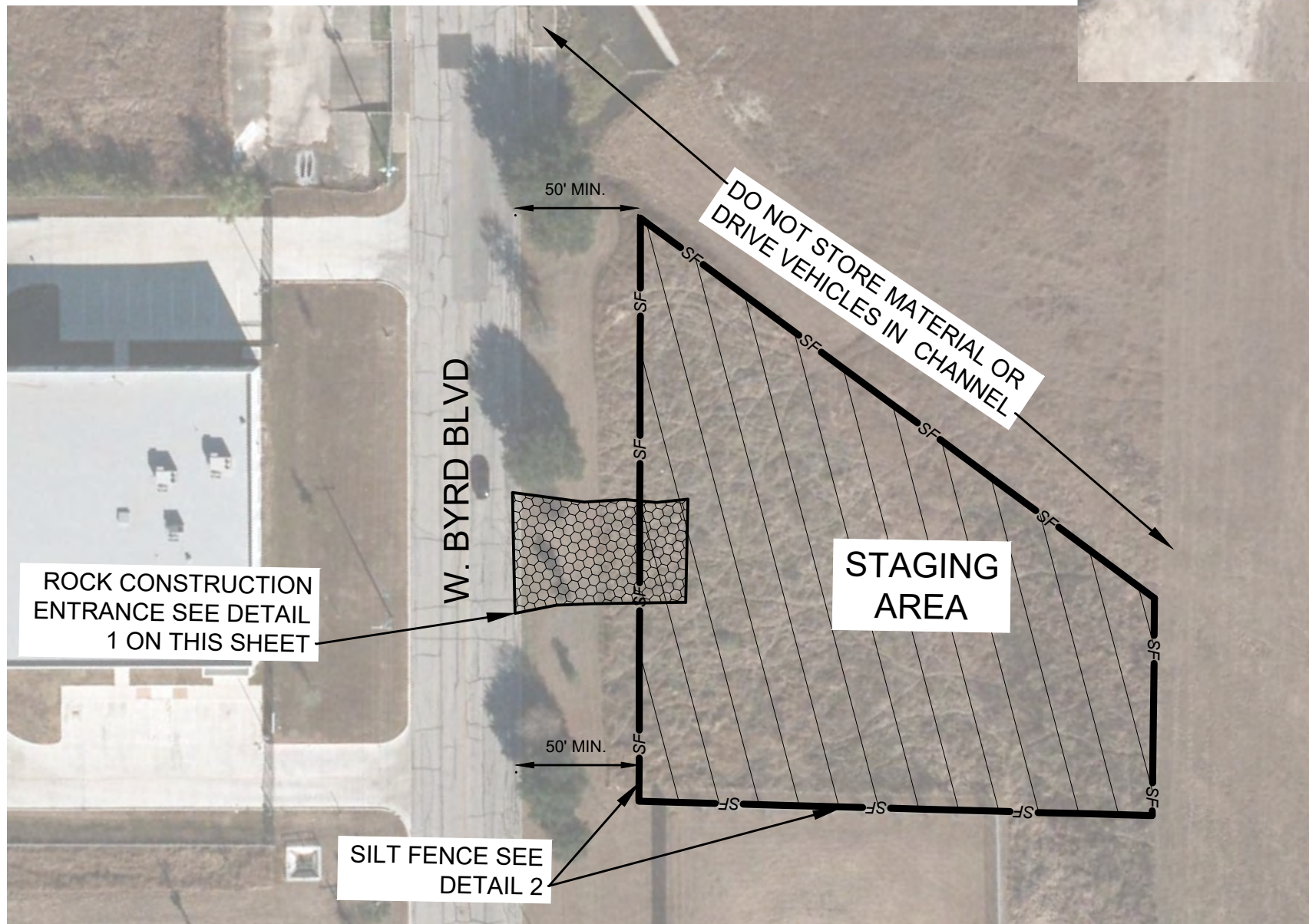
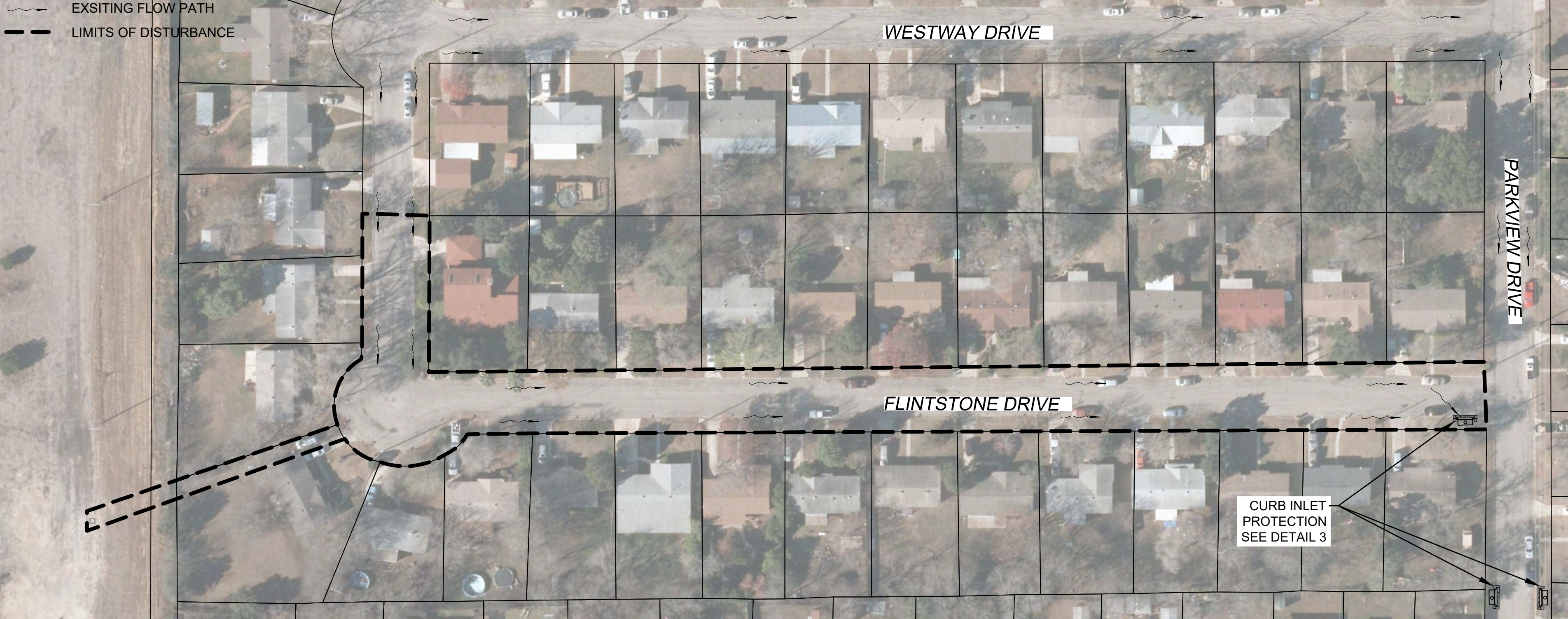
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LEGEND

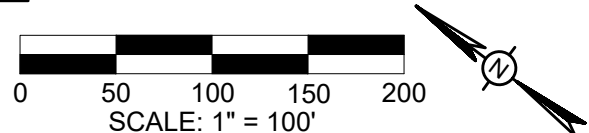


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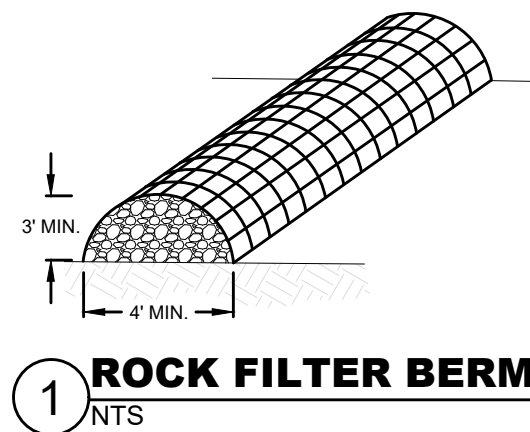
NOTE:

- KEEP STAGING AREA OUTSIDE OF VARIABLE WIDTH UTILITY EASEMENT, AT LEAST 50' FROM BACK OF NEAREST CURB.
- DO NOT STORE MATERIALS OR VEHICLES IN CHANNEL FLOW PATH.



NOTES:

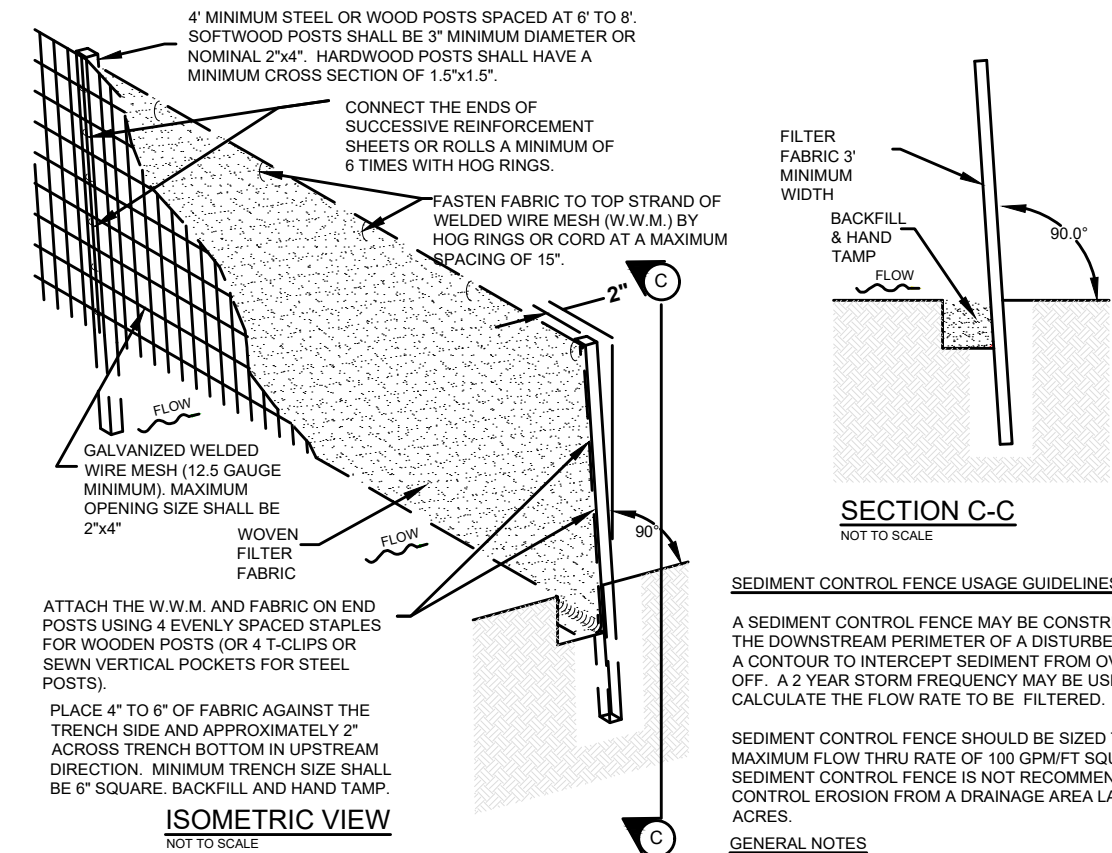
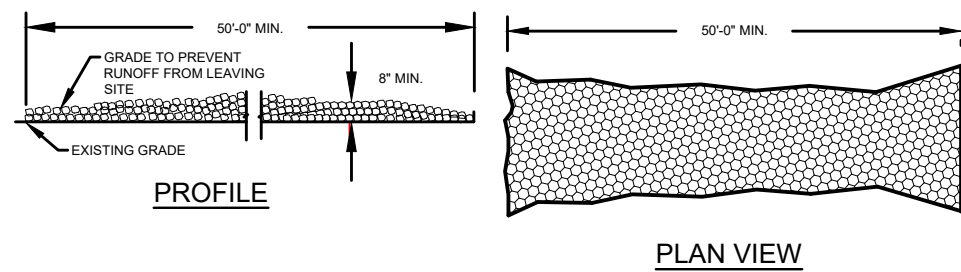
- IF SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER, FILTER DAMS SHOULD BE PLACED NEAR THE TOE OF SLOPES WHERE EROSION IS ANTICIPATED, UPSTREAM AND/OR DOWNSTREAM AT DRAINAGE STRUCTURES, AND IN ROADWAY DITCHES AND CHANNELS TO COLLECT SEDIMENT.
- MATERIALS (AGGREGATE, WIRE MESH, SANDBAGS, ETC.) SHALL BE AS INDICATED BY THE SPECIFICATION FOR ROCK FILTER DAMS FOR EROSION AND SEDIMENTATION CONTROL.
- THE ROCK FILTER DAM DIMENSIONS SHALL BE AS INDICATED ON THE STORM WATER POLLUTION PREVENTION PLANS.
- SIDE SLOPES SHOULD BE 2:1 OR FLATTER. DAMS WITHIN THE SAFETY ZONE SHALL HAVE SIDE SLOPES OF 6:1 OR FLATTER.
- MAINTAIN A MINIMUM OF 1' BETWEEN TOP OF ROCK FILTER DAM WEIR AND TOP OF EMBANKMENT FOR FILTER DAMS AT SEDIMENT TRAPS.
- FILTER DAMS SHOULD BE EMBEDDED A MINIMUM OF 4" INTO THE EXISTING GROUND.
- THE SEDIMENT TRAP FOR PONDING OF SEDIMENT LADEN RUNOFF SHALL BE OF THE DIMENSIONS SHOWN ON THE PLANS.
- ROCK FILTER DAM TYPES 2 & 3 SHALL BE SECURED WITH 20 GAUGE GALVANIZED WOVEN WIRE MESH WITH 1" DIAMETER HEXAGONAL OPENINGS. THE AGGREGATE SHALL BE PLACED ON THE MESH TO THE HEIGHT AND SLOPES SPECIFIED. THE MESH SHALL BE FOLDED AT THE UPSTREAM SIDE OVER THE AGGREGATE AND TIGHTLY SECURED TO ITSELF ON THE DOWNSTREAM SIDE USING WIRE TIES OR HOG RINGS. IN STREAM USE, THE MESH SHOULD BE SECURED OR STAKED TO THE STREAM BED PRIOR TO AGGREGATE PLACEMENT.
- SACK GABIONS SHOULD BE STAKED DOWN WITH 3/8" DIA. REBAR STAKES.
- FLOW OUTLET SHOULD BE ONTO A STABILIZED AREA (VEGETATION, ROCK, ETC.).
- THE GUIDELINES SHOWN HEREON ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.



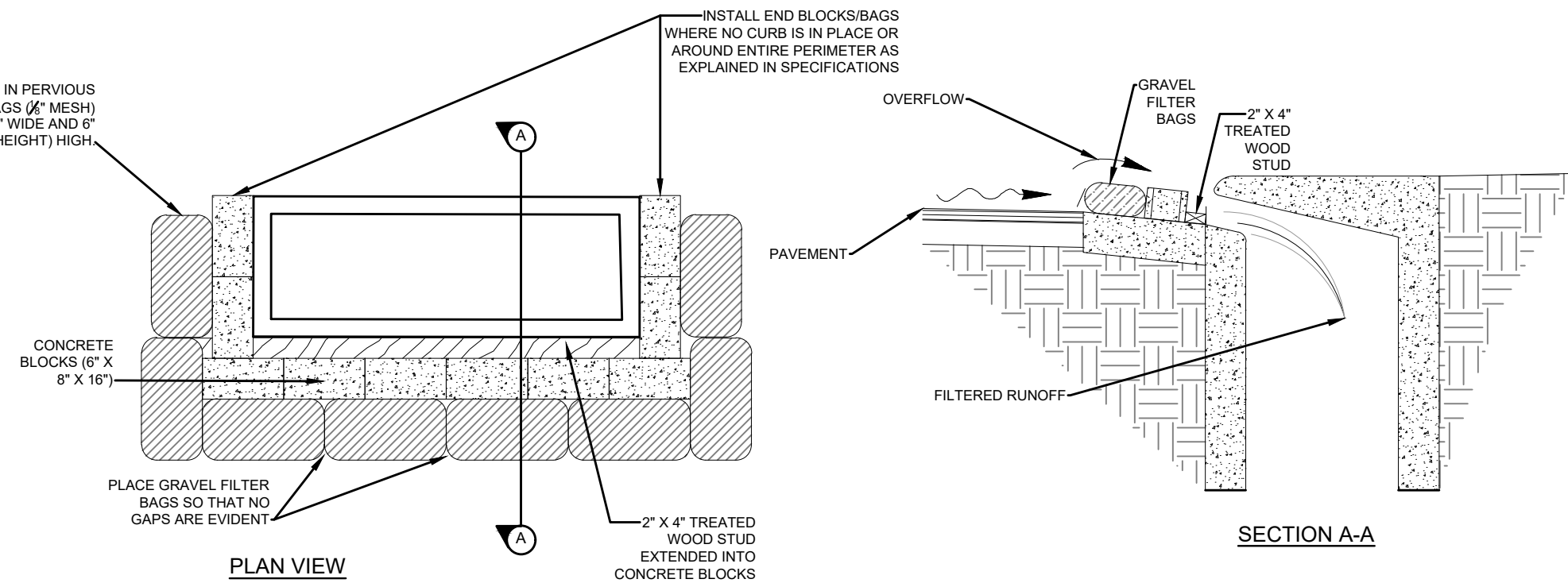
2 ROCK CONSTRUCTION ENTRANCE NTS

CONSTRUCTION ENTRANCE NOTES:

- STONE SIZE: 3" TO 5" OPEN GRADED ROCK.
- LENGTH: AS EFFECTIVE, BUT NOT LESS THAN 50'.
- THICKNESS: NOT LESS THAN 8".
- WIDTH: NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
- WASHING: WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED STRAP 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 A 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 CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.
- DRAINAGE: ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.
- SEE DETAIL A ON THIS SHEET FOR GASLINE PROTECTION.



3 TEMPORARY SEDIMENT CONTROL FENCE NTS



4 CURB INLET PROTECTION NTS



REVISION DATE



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SHEET TITLE:

EROSION SEDIMENTATION CONTROL PLAN

SHEET NUMBER:

26 OF 26