CIVIL CONSTRUCTION DRAWINGS:

THE JUNCTION

CITY OF MANOR

STREET, DRAINAGE, WATER, AND WASTEWATER IMPROVEMENTS

AUGUST 2023

ZONING INFORMATION

BASE ZONING: TH - (TOWNHOMES)

AQUIFER NOTE

THIS PROJECT IS NOT LOCATED IN THE EDWARD'S AQUIFER CONTRIBUTING OR RECHARGE ZONE

CONTRACTOR NOTES

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

2. THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS HAS BEEN BASED UPON RECORD INFORMATION ONLY, AND MAY NOT MATCH LOCATIONS AND/OR DEPTHS AS CONSTRUCTED. THE CONTRACTOR SHALL CONTACT THE AUSTIN "ONE CALL" SYSTEM 1-800-245-4545, OR THE OWNER OF EACH INDIVIDUAL UTILITY, FOR ASSISTANCE IN DETERMINING EXISTING UTILITY LOCATIONS AND DEPTHS PRIOR TO BEGINNING ANY CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF ALL UTILITY CROSSING PRIOR TO CONSTRUCTION.

3. ENVIRONMENTAL INSPECTION HAS THE AUTHORITY TO MODIFY/CHANGE EROSION CONTROLS TO KEEP THE PROJECT IN COMPLIANCE.

LAND USE SUMMARY

PROPOSED USE: TOWNHOMES
NUMBER OF DWELLING UNITS: 95
TOTAL SITE AREA: 9.2 ACRES
AREA WITHIN LIMITS OF CONSTRUCTION: 9.7 ACRES
PROPOSED IMPERVIOUS COVER: 4.53 ACRES (49%)
PROPOSED BUILDING COVERAGE: 116,740.8 SF
CODES USED: 2023 MANOR MUNICODE AND 2015 INTERNATIONAL FIRE CODE

SITE ADDRESS:
301 LANE AVE
MANOR, TEXAS 78653

BUILDING SUMMARY

BUILDING NUMBER	CONSTRUCTION TYPE	TOTAL BUILDING (SF)	BUILDING HEIGHT (FT)
1	TYPE V-B	8,142	21.25
2	TYPE V-B	8,142	21.25
3	TYPE V-B	12,088	22.90
4	TYPE V-B	12,088	22.90
5	TYPE V-B	12,088	22.90
6	TYPE V-B	8,142	21.25
7	TYPE V-B	10,405	22.90
8	TYPE V-B	10,405	22.90
9	TYPE V-B	10,405	22.90
10	TYPE V-B	10,405	22.90
11	TYPE V-B	12,088	22.90
12	TYPE V-B	6,459	21.25
13	TYPE V-B	8,142	22.90
14	TYPE V-B	12,088	22.90
15	TYPE V-B	8,142	21.25
16	TYPE V-B	6,459	21.25
17	TYPE V-B	8,142	21.25
18	TYPE V-B	10,405	22.90
19	TYPE V-B	10,405	22.90
20	TYPE V-B	10,405	22.90

FLOODPLAIN INFORMATION

A PORTION OF THIS SITE IS WITHIN THE BOUNDARIES OF THE 100-YEAR FLOODPLAIN AS DELINEATED ON THE FLOOD INSURANCE RATE MAP COMMUNITY PANEL NUMBER 48453C0485J, EFFECTIVE DATE AUGUST 18, 2014

LEGAL DESCRIPTION:

LOTS 6-10, BLOCK 15, ALL OF BLOCKS 17, 18, 19 & 20 AND PORTIONS OF THE RIGHTS-OF-WAY OF E. LANE AVE. AND SAN MARCOS STREET,, A.E. LANE ADDITION REPLAT, VOL. 2, PG. 223, P.R.T.C. ALL LOTS 1-5, BLOCK 74, AND A PORTION OF THE RECTOR STREET, THE CITY OF MANOR, VOL. V, PG. 796, P.R.T.C. AND PLATTING OF A CALLED 0.397 OF ONE ACRE TRACT OF LAND, DOC. NO. 2022114493, O.P.R.T.C., AND A REMNANT TRACT OF LAND AS SHOWN ON VOL V, PG. 796, P.R.T.C

GENERAL NOTES

ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN REVIEWING THESE PLANS, THE CITY OF A MANOR AND TRAVIS COUNTY ESD NO. 12 MUST RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER, REVIEW OF THE SUBMITTED MATERIALS DOES NOT CONSTITUTE A VERIFICATION OF ALL DATA, INFORMATION AND COMPLETENESS, ACCURACY AND ADEQUACY OF HIS/HER SUBMITTAL, WHETHER OR NOT THE APPLICATION IS REVIEWED FOR ORDINANCE COMPLIANCE B THE CITY ENGINEER.

CONTROL POINTS

NOTES

BEARING ORIENTATION IS BASED ON THE TEXAS STATE PLANE COORDINATE
SYSTEM, CENTRAL ZONE, NAD 83.
VERTICAL DATUM: NAVD 88 (GEOID 18)
ALL POINTS SHOWN ARE 1/2-INCH IRON RODS WITH "BGE INC" CONTROL CAPS
ELEVATIONS SHOWN HEREON WERE DERIVED FROM MULTIPLE RTK GPS OBSERVATIONS, AND NOT DIFFERENTIAL LEVELING.

CONTROL POINT #1 - NORTHING: 10,101,344.02 EASTING: 3,173,571.57 ELEVATION: 524.85
CONTROL POINT #2 - NORTHING: 10,101,140.86 EASTING: 3,173,301.90 ELEVATION: 539.71
CONTROL POINT #3 - NORTHING: 10,101,816.12 EASTING: 3,173,095.71 ELEVATION: 548.74
CONTROL POINT #4 - NORTHING: 10,101,344.02 EASTING: 3,173,571.57 ELEVATION: 525.76

REVIEWED B Y

DIRECTOR OF DEVELOPMENT SERVICES — DATE

DEPARTMENT OF PUBLIC WORKS — DATE

CITY ENGINEER — DATE

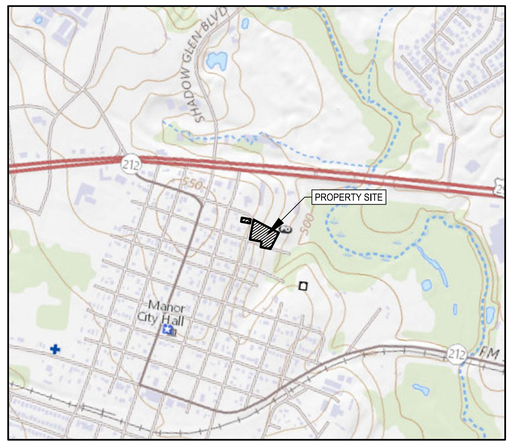
TRAVIS COUNTY ESD NO. 12, FIRE MARSHAL — DATE

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

THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

VICINITY MAP

SCALE: 1" = 2000'



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ORIGINAL SUBMITTAL DATE: APRIL 19, 2023

SUMMARY NOTES

PROPERTY OWNER: LEGACY PERFORMANCE CAPITAL, 2101 LAKEWAY BLVD, SUITE 130, AUSTIN, TEXAS 78734, (512) 496-4070, JJALUFKA@LEGACYIRP.COM, WWW.LAGACYIRP.COM

ENGINEER / APPLICANT/SURVEYOR: BGE, INC., TBPE F-1046, 7330 SAN PEDRO, SUITE 202, SAN ANTONIO, TEXAS 78716, (210) 581-3600, ANEUMANN@BGEINC.COM, WWW.BGEINC.COM

DEVELOPER: LEGACY PERFORMANCE CAPITAL, 2101 LAKEWAY BLVD, SUITE 130, AUSTIN, TEXAS 78734, (512) 496-4070, JJALUFKA@LEGACYIRP.COM, WWW.LAGACYIRP.COM

ARCHITECT: DTJ DESIGN, 3101 IRIS AVE, STE 130, BOULDER, COLORADO 80301, (303) 443-7533, WWW.DTJDESIGN.COM

EMERGENCY SERVICE : TRAVIS COUNTY ESD # 12, 11200 GREG LANE, MANOR, TEXAS 78653, (512) 272-4502, WWW.TCESD12.COM

WATER PROVIDER: CITY OF MANOR, 105 E. EGGLESTON STREET P.O. BOX 387, MANOR, TEXAS 78653, (512)-272-5555, WWW.CITYOFMANOR.COM

WASTEWATER PROVIDER: CITY OF MANOR, 105 E. EGGLESTON STREET P.O. BOX 387, MANOR, TEXAS 78653, (512)-272-5555, WWW.CITYOFMANOR.COM

ELECTRIC PROVIDER: BLUEBONNET ELECTRIC COOPERATIVE , INC., 810 LEXINGTON ST, MANOR, TEXAS 78653, (800)-842-7708, NEWSERVICE@BLUEBONNET.COOP

LANDSCAPE ARCHITECT: DTJ DESIGN, 3101 IRIS AVE, STE 130, BOULDER, COLORADO 80301, (303) 443-7533, WWW.DTJDESIGN.COM

REVIEW DEPARTMENT : CITY OF MANOR PUBLIC WORKS, 416 GREG LANE, MANOR, TEXAS 78653, (512) 272-5555, WWW.CITYOFMANOR.COM

TRAVIS COUNTY ESD NO. 12 FIRE MARSHAL

REVIEWED BY FIRE PREVENTION DIVISION

APPROVAL EXPIRES AFTER 365 DAYS OF INACTIVITY

APPROVAL SUBJECT TO FIELD INSPECTION AND REQUIRED TEST(S), NOTATIONS HERON, CONDITIONS NOTED IN CORRESPONDENCE AND CONFORMANCE WITH APPLICABLE CODES AND REGULATIONS.

THE STAMPING AND APPROVAL OF THESE PLANS SHALL NOT BE CONSTRUED TO BE A PERMIT FOR, OR AN APPROVAL OF, ANY VIOLATIONS OF ANY OF THE PROVISIONS OF APPLICABLE CODES OR OF ANY OTHER ORDINANCE OF THIS JURISDICTION.

ANY REVISIONS MADE AFTER SIGNATURE DATE ARE NOT VALID UNTIL APPROVED BY TCESD NO. 12 WRITING.

PLAN TYPE: _____

REVIEWED TYPE: _____

DATE: _____

ONLY STAMPED SHEETS REVIEWED BY TCESD NO. 12

NOTES: _____

NO.	DATE IMAGED	REVISIONS/ CORRECTIONS DESCRIPTION	ADD (D) VOID (V) SHEET NO.'s	TOTAL # SHEETS IN PLAN SET	NET CHANGE IN IMPER. COVER	TOTAL IMPER. COVER	SITE TOTAL IMPER. COVER %	APPROVAL DATE	APPROVED BY

SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE
01	COVER SHEET
02	GENERAL NOTES (SHEET 1 OF 2)
03	GENERAL NOTES (SHEET 2 OF 2)
04	EXISTING CONDITIONS
05	DEMOLITION PLAN
06	FINAL PLAT (SHEET 1 OF 5)
07	FINAL PLAT (SHEET 2 OF 5)
08	FINAL PLAT (SHEET 3 OF 5)
09	FINAL PLAT (SHEET 4 OF 5)
10	OVERALL SITE PLAN
11	DIMENSIONAL CONTROL PLAN (SHEET 1 OF 2)
12	DIMENSIONAL CONTROL PLAN (SHEET 2 OF 2)
13	EROSION CONTROL PLAN
14	EROSION CONTROL DETAILS (SHEET 1 OF 2)
15	EROSION CONTROL DETAILS (SHEET 2 OF 2)
16	FIRE PROTECTION PLAN
17	FIRE PROTECTION PLAN NOTES
18	OFFSITE DRAINAGE MAP
19	OFFSITE DRAINAGE CALCULATIONS
20	PROPOSED DRAINAGE MAP
21	PROPOSED DRAINAGE CALCULATIONS (SHEET 1 OF 2)
22	PROPOSED DRAINAGE CALCULATIONS (SHEET 2 OF 2)
23	OVERALL GRADING PLAN
24	DETAILED GRADING PLAN (SHEET 1 OF 2)
25	DETAILED GRADING PLAN (SHEET 2 OF 2)
26	ONSITE OVERALL STORM PLAN
27	CHANNEL D & G PLAN & PROFILE
28	CHANNEL I PLAN AND PROFILE
29	STORM DRAIN A PLAN & PROFILE
30	STORM DRAIN B PLAN & PROFILE
31	STORM DRAIN C PLAN & PROFILE
32	STORM DRAIN D PLAN & PROFILE
33	STORM DRAIN F PLAN & PROFILE
34	STORM A LATERALS PLAN & PROFILE
35	STORM B LATERALS PLAN & PROFILE
36	STORM C LATERALS PLAN & PROFILE
37	STORM D LATERALS PLAN & PROFILE
38	STREET & DRAINAGE DETAILS (SHEET 1 OF 7)
39	STREET & DRAINAGE DETAILS (SHEET 2 OF 7)
40	STREET & DRAINAGE DETAILS (SHEET 3 OF 7)
41	STREET & DRAINAGE DETAILS (SHEET 4 OF 7)
42	STREET & DRAINAGE DETAILS (SHEET 5 OF 7)
43	STREET & DRAINAGE DETAILS (SHEET 6 OF 7)
44	STREET & DRAINAGE DETAILS (SHEET 7 OF 7)
45	OVERALL UTILITY PLAN
46	OVERALL WATER PLAN
47	DETAILED WATER PLAN (SHEET 1 OF 2)
48	DETAILED WATER PLAN (SHEET 2 OF 2)
49	WATER UTILITY DETAILS (SHEET 1 OF 3)
50	WATER UTILITY DETAILS (SHEET 2 OF 3)
51	WATER UTILITY DETAILS (SHEET 3 OF 3)
52	OVERALL SEWER PLAN
53	SEWER A PLAN & PROFILE
54	SEWER B PLAN & PROFILE
55	SEWER C PLAN & PROFILE
56	SEWER D & E PLAN & PROFILE
57	SEWER F PLAN & PROFILE
58	SEWER G PLAN & PROFILE
59	SEWER H PLAN & PROFILE
60	SEWER I PLAN & PROFILE
61	SEWER J & K PLAN & PROFILE
62	SEWER L PLAN & PROFILE
63	WASTEWATER UTILITY DETAILS (SHEET 1 OF 3)
64	WASTEWATER UTILITY DETAILS (SHEET 2 OF 3)
65	WASTEWATER UTILITY DETAILS (SHEET 3 OF 3)
PLANS BY OTHERS	
-	RETAINING WALL PLANS
-	BUILDING PLANS
-	LANDSCAPE PLANS

UNDER SEPARATE COVERS

RETAINING WALL:

PROJECT NO.:
DATE ISSUED:

SUBMITTED BY

AARON J. NEUMANN, P.E.
BGE,INC. TBPE NO.F-1046
7330 SAN PEDRO AVENUE
SUITE 202
SAN ANTONIO, TEXAS 78216
(210) 581-3600 (MAIN)

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TBPE Registration No. F-1046

This Document Is Released Under The Authority Of Aaron J. Neumann, PE Texas Licensed Professional Engineer 114451 For Internal Review Purposes. BGE, Inc. TBPE Registration No. F-1046

G:\TXC\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Shts\C00.00 1065900 TITLE.dwg Layout: COVER SHEET Plotted: 8/17/2023 12:08:02 PM By: Calderon

GENERAL NOTES :

1. ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS AND APPLICABLE STATUTES AND U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS (O.S.H.A.). COPIES OF O.S.H.A. STANDARDS MAY BE PURCHASED FROM THE U.S. GOVERNMENT PRINTING OFFICE. INFORMATION AND RELATED REFERENCE MATERIALS MAY BE OBTAINED FROM O.S.H.A. @ 611 EAST 6TH STREET, ROOM 303, AUSTIN, TEXAS.
2. THE CONTRACTOR SHALL CONTACT THE 1-800-DIG—TESS AND CITY OF MANOR FOR EXISTING UTILITY LOCATIONS 48 HOURS PRIOR TO ANY EXCAVATION. PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES THAT ARE TO BE EXTENDED, TIED-TO, CROSSED, OR ALTERED; OR SUBJECT TO DAMAGE/INCONVENIENCE BY THE CONSTRUCTION OPERATIONS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION BETWEEN HIMSELF AND OTHER CONTRACTORS AND UTILITIES IN THE VICINITY OF THIS PROJECT. THIS INCLUDES GAS, WATER, WASTEWATER, ELECTRICAL, TELEPHONE, CABLE TELEVISION, PETROLEUM PIPELINES AND STREET & DRAINAGE WORK. ONCE THE CONTRACTOR BECOMES AWARE OF POSSIBLE CONFLICT, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT INSPECTOR WITHIN TWENTY-FOUR (24) HOURS.
4. THE RAISING OF MANHOLE FRAMES, COVER, AND WATER VALVE TO THE FINISHED PAVEMENT GRADE WILL NOT BE MEASURED AND PAID FOR, BUT WILL BE SUBSIDIARY TO OTHER BID ITEMS, UNLESS LISTED SEPARATELY AS A BID ITEM. ALL UTILITY ADJUSTMENTS WILL BE COMPLETED AND INSPECTED PRIOR TO FINAL PAVING OPERATIONS.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSING OF ALL SPOILS MATERIAL FROM THE CONSTRUCTION SITE. ALL SPOILS MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR AT AN APPROVED SPOIL SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SECURING APPROVAL FOR THE SITE; AND SHALL NOTIFY THE CITY AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO DISPOSAL OF THE MATERIAL. THIS ITEM WILL NOT BE PAID FOR DIRECTLY, BUT SHALL BE SUBSIDIARY TO THE VARIOUS BID ITEMS.
6. THE CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN BARRICADES, WARNING SIGNS, FLASHERS AND OTHER DEVICES OF THE TYPE AND SIZE AS INDICATED IN THE LATEST EDITION OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, OR AS DIRECTED BY THE ENGINEER.
7. ANY VARIATION FROM THE APPROVED PLANS MUST BE APPROVED BY THE CITY ENGINEER IN WRITING FIRST.
8. THE CONTRACTOR IS RESPONSIBLE FOR CONDUCTING AND FUNDING SUFFICIENT TESTING TO ESTABLISH ACCEPTABLE LEVELS OF EFFORT FOR CONFORMANCE WITH SPECIFICATIONS FOR DENSITIES. THE CITY OF MANOR RESERVES THE RIGHT TO PERFORM ADDITIONAL DENSITY TESTING TO CONFIRM CONTRACTOR'S TEST RESULTS.

STANDARD ENVIRONMENTAL NOTES :

1. TEMPORARY EROSION/SEDIMENTATION CONTROL AND TREE/NATURAL AREA PROTECTION MEASURES:
   A. THE CONTRACTOR SHALL INSTALL EROSION/SEDIMENTATION CONTROLS AND TREE/NATURAL AREA PROTECTIVE FENCING PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING, GRADING OR EXCAVATION).
   B. THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS SHALL BE ACCORDANCE WITH THE EROSION AND SEDIMENTATION CONTROL PLAN.
   C. ANY SIGNIFICANT VARIATION IN MATERIALS OR LOCATIONS OF CONTROLS OR FENCES FROM THAT SHOWN ON THE PLANS MUST BE APPROVED BY THE CITY ENGINEER.
   D. THE CONTRACTOR IS TO INSPECT THE CONTROLS AND FENCES AT WEEKLY INTERVALS OR AFTER EVERY 1" OR MORE RAINFALL TO INSURE THEY HAVE NOT BEEN SUBSTANTIALLY DISTURBED. THE PERSON(S) OR FIRM(S) RESPONSIBLE FOR MAINTENANCE OF CONTROLS AND FENCES SHALL BE IMMEDIATELY DIRECTED TO MAKE ANY NECESSARY REPAIRS.
   E. ANY SEDIMENT BUILD-UP OCCURRING AFTER A SIGNIFICANT RAIN SHALL BE REMOVED AND PLACED IN THE DESIGNATED SPOIL DISPOSAL SITE.
   F. THE CITY WILL INSPECT THE EROSION CONTROLS BIWEEKLY AND AFTER AND AFTER EVERY 1" OR GREATER RAINFALL EVENT. MS4 VIOLATIONS WILL NEED TO BE CORRECTED/FIXED WITHIN 5 BUSINESS DAYS.
2. PERMANENT EROSION CONTROL
   A. ALL DISTURBED AREAS SHALL BE RESTORED AS NOTED BELOW.
   B. THE CONTRACTOR SHALL HYDROMULCH OR SOD ALL EXPOSED CUTS AND FILLS UPON COMPLETION OF CONSTRUCTION, EXCEPT WHERE CUTS ARE MADE IN SOLID ROCK.
   C. THE SEEDING FOR EROSION CONTROL SHALL BE APPLIED OVER AREAS DISTURBED BY CONSTRUCTION AS FOLLOWS:
      I. FROM SEPTEMBER 15 TO MARCH 1, SEEDING SHALL BE WITH A COMBINATION OF 1 POUND OF UNHULLED BERMUDA AND 7 POUNDS OF WINTER RYE PER 1000 SQUARE FEET WITH A PURITY OF WITH 95% WITH 90% GERMINATION.
      II. FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERMUDA GRASS (CYNODEN DACTOLYN) AT A RATE OF 1 POUND PER 1000 SQUARE FEET WITH A PURITY OF 95% WITH 85% GERMINATION.
   D. FERTILIZER SHALL HAVE AN ANALYSIS OF 15-15-15 AND SHALL BE APPLIED AT THE RATE OF 288 POUNDS PER ACRE.
   E. THE PLANTED AREA MUST BE IRRIGATED USING A PERMANENT OR TEMPORARY IRRIGATION SYSTEM UTILIZING SPRINKLER HEADS, DRIP IRRIGATION OR ANOTHER ACCEPTABLE DISTRIBUTION SYSTEM THAT WILL NOT ERODE THE TOPSOIL, BUT WILL SUFFICIENTLY SOAK THE SOIL TO A DEPTH OF SIX INCHES. THE IRRIGATION SHALL OCCUR AT TEN DAY INTERVALS DURING THE FIRST TWO MONTHS. RAINFALL OCCURRENCES OF 1/2 INCH OR GREATER SHALL POSTPONE THE WATERING SCHEDULE ONE WEEK.
   F. MULCH TYPE USED SHALL BE EITHER CELLULOSE FIBER MULCH APPLIED AT A RATE OF 2000 POUNDS PER ACRE, OR WOOD FIBER MULCH APPLIED AT A RATE OF 2500 POUNDS PER ACRE.
   G. RESTORATION SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1-1/2" HIGH WITH 95% COVERAGE, PROVIDED THAT NO BARE SPOTS LARGER THAN 16 SQUARE FEET EXIST (SEE ITEM 604.7 OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS).

TRAFFIC CONTROL PLAN NOTES :

1. THE CONTRACTOR SHALL CONTACT THE CITY A MINIMUM OF TWO (2) WORKING DAYS IN ADVANCE OF BLOCKING TRAFFIC LANES AND A MINIMUM OF SIX (6) DAYS IN ADVANCE OF SCHEDULED DETOURING OF TRAFFIC LANES.
2. THE CONTRACTOR SHALL NOTIFY ALL OTHER GOVERNMENTAL AGENCIES WHO'S RIGHT-OF-WAYS ARE AFFECTED BY HIS WORK ZONE TRAFFIC CONTROLS. THE CONTRACTOR SHALL PROVIDE ANY ADDITIONAL TRAFFIC CONTROL DEVICES THAT THEY MAY REQUIRE.
3. THE CONTRACTOR SHALL MAINTAIN TWO-WAY TRAFFIC AT ALL TIMES WHILE CROSSING EXISTING ROADWAYS UNLESS OTHERWISE NOTED ON THE PLANS.
4. THE CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS AT ALL TIMES. IF ACCESS CAN NOT BE MAINTAINED, AT LEAST 24 HOUR WRITTEN NOTICE WILL BE GIVEN TO AFFECTED PROPERTY OWNERS.
5. ALL TRENCHES SHALL BE EITHER BACKFILLED, PLATED OR FENCED WITH SAFETY FENCING.
6. THE CONTRACTOR SHALL MAKE INSPECTION OF ALL TRAFFIC CONTROL DEVICES AT LEAST TWO TIMES A DAY (ONCE AT THE BEGINNING OF THE DAY AND ONCE AT THE END OF THE WORK DAY) INCLUDING NON- WORKING DAYS. TO ENSURE THAT ALL DEVICES ARE IN PROPER WORKING ORDER.
7. ALL TRAFFIC CONTROL DEVICES USED SHALL CONFORM TO THE CURRENT EDITION OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
8. ALL SIGNS USED AT NIGHT SHALL BE REFLECTORIZED AND SHALL HAVE A TYPE A FLASHER LIGHT.
9. ALL CHANNELIZING DEVICES USED AT NIGHT SHALL HAVE A TYPE C STEADY BURN LIGHT.
10. SIGN MOUNTING HEIGHTS SHALL BE ONE (1) FOOT MINIMUM ABOVE THE GROUND FOR DAYTIME OPERATIONS AND THREE (3) FEET MINIMUM ABOVE THE GROUND FOR NIGHTTIME OPERATIONS.
11. ALL PERSONS WORKING WITHIN THE RIGHT-OF-WAY SHALL WEAR AN ORANGE COLORED SAFETY VEST. THE SAFETY VEST SHALL BE REFLECTORIZED WHILE WORKING AT NIGHT.
12. ALL FLAGGERS SHALL WEAR ORANGE COLORED SAFETY VESTS AND SHALL HAVE EITHER AN ORANGE FLAG OR A SIGN PADDLE WHILE ON DUTY. FLAGGERS SHALL NOT PERFORM ANY WORK NOT RELATED TO FLAGGING WHILE ON DUTY.
13. A TRAFFIC CONTROL PLAN MUST BE SUBMITTED AND REVIEWED BY THE CITY OF MANOR CITY ENGINEER PRIOR TO CONSTRUCTION IN ANY RIGHT OF WAY.

STREET AND DRAINAGE NOTES :

1. STREET AND DRAINAGE SYSTEMS MUST BE CONSTRUCTED IN ACCORDANCE WITH ADOPTED CITY OF MANOR STANDARDS AND GEOTECHNICAL REPORT RECOMMENDATIONS.
2. ALL MATERIAL AND DENSITY TESTING MUST BE PERFORMED BY AN INDEPENDENT LABORATORY, ACCEPTABLE TO THE CITY AND FUNDED BY THE DEVELOPER. ANY RETESTING SHALL BE PAID FOR THE CONTRACTOR. THE CITY INSPECTOR MUST BE NOTIFIED AT LEAST TWENTY-FOUR (24) HOURS IN ADVANCE OF ANY TESTING.
3. BACKFILL BEHIND THE CURB SHALL BE COMPACTED TO OBTAIN A MINIMUM OF OF MAXIMUM DENSITY TO WITHIN 3" OF TOP OF CURB. BACKFILL MATERIAL SHALL BE GRANULAR MATERIAL WITH NO ROCKS LARGER THAN 6" IN THE GREATEST DIMENSION. THE TOP 3" OF BACKFILL SHALL BE CLEAN TOPSOIL, FREE FROM CLODS AND ROCKS AND BE CAPABLE OF SUSTAINING PLANT LIFE.
4. DEPTH OF COVER FOR ALL CROSSINGS UNDER PAVEMENT, INCLUDING GAS, ELECTRIC, TELEPHONE, CABLE, WATER AND WASTEWATER SERVICE MUST BE A MINIMUM OF 30" BELOW SUBGRADE.
5. STREET RIGHT OF WAY SHALL BE GRADED AT A SLOPE OF 1/4" PER FOOT TOWARD THE CURB UNLESS OTHERWISE INDICATED. IN NO CASE SHALL THE WIDTH OF THE SLOPED RIGHT OF WAY OUTSIDE THE CURB BE LESS THAN 10 FEET.
6. BARRICADES MUST BE INSTALLED AT ALL DEAD END STREETS AND AS NECESSARY DURING CONSTRUCTION TO MAINTAIN SITE AND PUBLIC SAFETY.
7. ALL STORM SEWER PIPE MUST BE CLASS III RCP IN CONFORMANCE WITH ASTM C-76.
8. ALL STORM SEWER MANHOLES MUST BE MINIMUM 48" DIAMETER RCP IN ACCORDANCE WITH ASTM C-478. MANHOLE RINGS AND COVERS TO BE 32" DIAMETER MARKED STORM SEWER.
9. ALL STREET AND DRAINAGE IMPROVEMENTS MUST CONFORM TO APPLICABLE CITY OF MANOR ORDINANCES.

WATER & WASTEWATER CONSTRUCTION NOTES:

1. GBA TEAM ENGINEERING COMPANY, INC. (737-247-7500) AND CITY OF MANOR (512-272-5555) MUST BE CONTACTED WHEN THE CONTRACTOR MAKES A TAP, AND/OR ASSOCIATES TEST. A MINIMUM OF TWO (2) WORKING DAYS IS REQUIRED.
2. WHEN AN EXISTING WATERLINE INTERRUPTION OF SERVICE IS NECESSARY AND POSSIBLE, THE CONTRACTOR SHALL NOTIFY THE MANOR DIRECTOR OF PUBLIC WORKS. THE CITY REQUIRES A MINIMUM OF SEVENTY-TWO (72) HOURS ADVANCE NOTICE FOR ALL INTERRUPTIONS OF WATER SERVICE.
3. FIRE HYDRANTS ON MAINS UNDER CONSTRUCTION SHALL BE SECURELY WRAPPED WITH A POLYETHYLENE WRAP BAG AND TAPED INTO PLACE. THE POLYETHYLENE WRAP WILL BE REMOVED WHEN THE MAINS ARE ACCEPTED AND PLACED IN SERVICE. ALL FIRE HYDRANTS SHALL BE PAINTED WITH HIGH GLOSS ENAMEL, RED COLOR, OR APPROVED EQUAL PRIOR TO ACCEPTANCE FOR OPERATION & MAINTENANCE ALL FIRE HYDRANTS MUST BE NATIONAL STANDARD HOSE THREAD.
4. THE ALIGNMENT SHOWN ON THE PLANS SHALL BE ACHIEVED BY DEFLECTION, EXCEPT WHERE SPECIFIC FITTINGS ARE CALLED FOR ON THE PLANS. THERE WILL BE NO ADDITIONAL PAYMENTS FOR FITTINGS USED FOR DEFLECTION PURPOSES. UNDER NO CONDITIONS SHALL THE CONTRACTOR EXCEED THE MAXIMUM DEFLECTION ANGLE RECOMMENDED BY THE PIPE MANUFACTURER.
5. THE CONTRACTOR SHALL NOTIFY CITY OF MANOR @ 512-272-5555 SEVENTY TWO (72) HOURS PRIOR TO RELOCATING ANY DOMESTIC OR FIRE DEMAND WATER METER. THE CONTRACTOR SHALL CAREFULLY REMOVE ALL METERS AND METER BOXES WHICH ARE INDICATED TO BE RELOCATED OR SALVAGED. THE CONTRACTOR SHALL INSTALL THE REMOVED METER AND METER BOX OR THE CITY PROVIDED METER AND METER BOX AT THE LOCATION INDICATED ON THE CONSTRUCTION PLANS. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF THE EXISTING SERVICE LINE OR FIRE LINE TO THE RELOCATED METER.
6. THE CONTRACTOR SHALL RECORD AND SUPPLY TO THE CITY ENGINEER THE FOLLOWING INFORMATION:
   1. ANY UTILITY LINE OR MANHOLE LOCATION/ELEVATION THAT DIFFERS FROM THE PLANS.
   2. HOUSE CONNECTION LOCATIONS, INCLUDING DISTANCE FROM PROPERTY LINE, DISTANCE FROM NEAREST PROPERTY CORNER, AND ELEVATION AND DEPTH OF STUB FLOW LINE.
   3. AS-BUILT MANHOLE TOP AND FLOW LINE ELEVATIONS.
   4. AS-BUILT PLAN AND PROFILE OF ALL RELOCATED AND/OR ADJUSTED UTILITY LINES OR STORM SEWERS, WITH FLOW LINE ELEVATIONS GIVEN AT FIFTY FT. INTERVALS.
7. BEFORE DISCONNECTING ANY WASTEWATER LINE, CONTRACTOR MUST PROVIDE AN ALTERNATE MEANS OF WASTEWATER CONVEYANCE FOR THE INTERRUPTED SECTION.
8. ANY EXISTING IMPROVEMENTS, INCLUDING DRAINAGE FACILITIES, DISTURBED BY CONSTRUCTION SHALL BE RESTORED BY THE CONTRACTOR, AT HIS EXPENSE, TO A CONDITION EQUAL TO, OR BETTER THAN, PRECONSTRUCTION CONDITION.
9. THE CONE SECTION OF MANHOLES ALONG EXISTING WASTEWATER LINES THAT WILL BE ABANDONED SHALL BE REMOVED BY THE CONTRACTOR. ALL PIPE OPENINGS IN THE MANHOLE SHALL BE SEALED WITH CONCRETE OR OTHER MATERIAL APPROVED BY THE ENGINEER. THE MANHOLES SHALL THEN BE FILLED WITH SAND AND BROUGHT TO GRADE WITH BACKFILL IN ACCORDANCE WITH SPECIFICATIONS.
10. ANY PORTION OF THIS PROJECT WHICH IS IMPROPERLY PLACED AND/OR CONFLICTS WITH ANY ROADWAY STRUCTURE SHALL BE REMOVED AND CORRECTLY PLACED. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL ASSOCIATED COSTS.
11. CONSTRUCTION OPERATIONS SHALL BE CONDUCTED IN SUCH A MANNER AS TO PROTECT ROADWAY FACILITIES AT ALL TIMES.
12. PIPES INDICATED TO BE ABANDONED SHALL BE CUT AND PLUGGED.
13. ALL VALVE COVER LIDS TO BE PAINTED SAFETY BLUE.
14. PIPE MATERIAL FOR WATER MAINS TO BE AWWA C-900 PVC DR-18 PRESSURE CLASS 160, OR C-100 DUCTILE IRON CLASS 50.
15. ALL VALVES MUST BE LOCATED OPPOSITE THE TANGENT POINT OF THE STREET CURB RADIUS.
16. PIPE MATERIAL FOR FIRE HYDRANT LEADS TO BE AWWA C--100 DUCTILE IRON CLASS 50.
17. MINIMUM CLEARANCE BETWEEN WATER LINES AND SEWER LINES IN NINE (9) FEET MEASURED BETWEEN OUTSIDE PIPE DIAMETERS.
18. LINE FLUSHING OR ANY ACTIVITY USING LARGE QUANTITIES OF WATER MUST BE SCHEDULED WITH THE DIRECTOR OF PUBLIC WORKS.
19. THE CONTRACTOR, AT HIS EXPENSE, SHALL PERFORM STERILIZATION OF ALL POTABLE WATER LINE CONSTRUCTED AND SHALLPROVIDE ALL EQUIPMENT (INCLUDING TEST GAUGES), SUPPLIES (INCLUDING CONCENTRATED CHLORINE DISINFECTING MATERIALS), AND NECESSARY LABOR REQUIRED FOR THE STERILIZATION PROCEDURE. THE STERILIZATION PROCEDURE SHALL BE MONITORED BY THE CITY OF MANOR PERSONNEL. WATER SAMPLES (BAC-T) WILL BE COLLECTED BY THE CONTRACTOR TO VERIFY EACH TESTED LINE HAS ATTAINED AN INITIAL CHLORINE CONCENTRATION OF 50 PM UNDER OBSERVATION BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER TREATMENT AND DISPOSAL OF ANY CHLORINATED WATER.

SAMPLING TAPS SHALL BE BROUGHT UP TO THREE (3) FEET ABOVE GRADE AND SHALL BE EASILY ACCESSIBLE. AT THE CONTRACTOR'S REQUEST, AND IN HIS PRESENCE, SAMPLES FOR BACTERIOLOGICAL TESTING WILL BE COLLECTED BY THE CITY OF MANOR NO LESS THAN 24 HOURS AFTER THE TREATED LINE HAS BEEN FLUSHED OF THE CONCENTRATED CHLORINE SOLUTION AND CHARGED WITH WATER APPROVED BY THE CITY. THE CONTRACTOR SHALL SUPPLY A CHECK OR MONEY ORDER, PAYABLE TO THE TEXAS DEPARTMENT OF HEALTH TO COVER THE FEE CHARGED FOR ANALYZING THE WATER SAMPLES.

THE WATER LINES WILL BE PLACED IN SERVICE ONLY AFTER ANALYTICAL RESULTS OF THE WATER SAMPLES SHOWING THE WATER IS FREE OF FECAL COLIFORMS HAVE BEEN SUBMITTED TO THE CITY OF MANOR FOR REVIEW.

20. PIPE MATERIAL FOR GRAVITY WASTEWATER MAINS MUST BE SDR--26 PVC, ASTM 3034. PIPE MATERIAL FOR WASTEWATER FORCE MAINS MUST BE SDR-26 PCV, PRESSURE CLASS , 160 PSI, PER ASTM 2241.
21. TESTING OF ALL PUBLIC UTILITY LINES AND APPURTENANCES FOR CONFORMANCE WITH CITY REQUIREMENTS SHALL BE CONDUCTED AFTER THE INSTALLATION AND BACKFILLING OF ALL PUBLIC UTILITIES WITHIN A RIGHT--OF--WAY OR EASEMENT.
22. ALL WATER LINES SHALL BE TESTED AT A PRESSURE OF 200 PSI FOR A SUFFICIENT PERIOD (APPROXIMATELY 10 MINUTES) TO DISCOVER ALL LEAKING OR DEFFECTIVE MATERIALS. A LEAKAGE TEST WILL FOLLOW THE PRESSURE TEST AND BE CONDUCTED ON THE ENTIRE PROJECT OR EACH VALVED SECTION. THE LEAKAGE TEST SHALL BE AT 150 PSI FOR AT LEAST 1 HOUR. ALLOWABLE LEAKAGE SHALL BE DEFINED AS THE QUANTITY OF WATER THAT MUST BE SUPPLIED INTO ANY TEST SECTION OF PIPE TO MAINTAIN THE SPECIFIED LEAKAGE TEST PRESSURE AFTER THE AIR IN THE PIPELINE HAS BEEN EXPELLED AND THE PIPE HAS BEEN FILLED WITH WATER. NO PIPE INSTALLATION WILL BE ACCEPTED IF THE LEAKAGE EXCEEDS THE LIMIT AS CALCULATED BY THE FORMULA WHERE Q=QUANTITY OF MAKEUP WATER IN GALLONS PER HOUR; L=LENGTH OF PIPE BEING TESTED IN OF PIPE IN INCHES; AND P=AVERAGE TEST PRESSURE DURING THE HYDROSTATIC TEST IN POUNDS PER SQUARE INCH.

IF THE PRESSURE PIPE LEAKAGE TEST DISCLOSES LEAKAGE IN EXCESS OF THE SPECIFIED ALLOWABLE, THE CONTRACTOR, AT HIS EXPENSE, SHALL LOCATE AND CORRECT ALL DEFECTS IN THE PIPE UNTIL THE LEAKAGE IS WITHIN THE INDICATED ALLOWANCE. ALL VISIBLE LEAKAGE IN PIPE SHALL ALSO BE CORRECTED BY THE CONTRACTOR AT HIS EXPENSE.

23. STEEL ENCASEMENT PIPE FOR BORES OR TRENCHED ENCASEMENT MUST BE A MINIMUM OF TWO PIPE SIZES LARGER THAN THE CARRIER PIPE AND IN ACCORDANCE WITH ASTM A134. CASING SPACERS MUST BE STAINLESS STEEL AND INSTALLED PER MANUFACTURERS RECOMMENDATIONS. ENCASEMENT PIPE ENDS MUST BE SEALED WITH END SEALS.
24. BEDDING FOR WATER MAIN OR SEWER MAIN PIPE MUST BE CLEAN GRAVEL, CRUSHED GRAVEL OR CRUSHED LIMESTONE, FREE OF MUD, CLAY, VEGETATION OR OTHER DEBRIS, CONFORMING TO ASTM C33 FOR STONE QUALITY. SIZE GRADATION SHALL CONFORM TO ASTM C-33 NO. 57 OR NO. 67.
25. WASTEWATER MANHOLES MUST CONFORM TO ASTM C-478 AND BE COATED PER CITY OF AUSTIN STANDARDS
26. ALLOWABLE LEAKAGE SHALL BE 50 GALLONS PER 24 HOURS PER INCH OF INSIDE DIAMETER PER MILE OF PIPELINE. AFTER COMPLETING BACKFILL OF EACH SECTION OF WASTEWATER LINE CONTRACTOR SHALL, AT HIS EXPENSE, CONDUCT A LINE ACCEPTANCE TEST USING LOW-PRESSURE AIR. PERFORM TEST USING EQUIPMENT AND PROCEDURES SPECIFIED BELOW, UNDER SUPERVISION OF OWNER.

1. EQUIPMENT - MINIMUM REQUIREMENTS.
   A. PNEUMATIC PLUGS SHALL HAVE A SEALING LENGTH TO OR GREATER THAN DIAMETER OF PIPE TO BE INSPECTED.
   B. PNEUMATIC PLUGS SHALL RESIST INTERNAL TEST PRESSURE WITHOUT REQUIRING EXTERNAL BRACING OR BLOCKING.
   C. AIR SHALL PASS THROUGH A SINGLE CONTROL PANEL.
   D. THREE INDIVIDUAL HOSES SHALL BE USED FOR THE FOLLOWING CONNECTIONS.
      1) FROM CONTROL PANEL TO PNEUMATIC PLUGS FOR INFLATION.
      2) FROM CONTROL PANEL TO SEALED LINE FOR INTRODUCING LOW-PRESSURE AIR.
      3) FROM SEALED LINE TO CONTROL PANEL FOR CONTINUALLY MONITORING AIR PRESSURE RISE IN SEALED LINE

2. PROCEDURES-
   A. PNEUMATIC PLUG SHALL BE SEAL-TESTED BEFORE BEING USED IN ACTUAL TEST INSTALLATION. LAY ON LENGTH OF PIPE ON GROUND AND SEAL AT BOTH ENDS WITH PNEUMATIC PLUGS TO BE CHECKED. INFLATE AIR PLUGS TO 25 PSIG. PRESSURIZE SEALED PIPE TO 5 PSIG. PLUGS SHALL HOLD AGAINST THIS PRESSURE WITHOUT BRACING AND WITHOUT MOVEMENT OF PLUGS OUT OF PIPE.
   B. AFTER A MANHOLE-TO-MANHOLE SECTION OF PIPE HAS BEEN BACKFILLED AND CLEANED, AND PNEUMATIC PLUGS HAVE BEEN CHECKED BY ABOVE PROCEDURES, PLACE PLUGS IN LINE AT EACH MANHOLE AND INFLATE PLUGS TO 25 PSIG. INTRODUCE LOW PRESSURE AIR INTO THIS SEALED LINE UNTIL INTERNAL AIR PRESSURE REACHES 4 PSIG GREATER THAN AVERAGE BACK PRESSURE OF GROUND WATER THAT MAY BE OVER PIPE. ALLOW AT LEAST 2 MINUTES FOR AIR PRESSURE TO STABILIZE. AFTER THE STABILIZATION PERIOD (3.5 PSIG MINIMUM PRESSURE IN THE PIPE), DISCONNECT AIR HOSE FROM CONTROL PANEL TO AIR SUPPLY. TERM PORTION OF LINE BEING TESTED "ACCEPTABLE" IF TIME REQUIRED FOR PRESSURE DROP FROM 3.5 TO 2.5 PSIG GREATER THAN AVERAGE BACK PRESSURE OF GROUND WATER THAT MAY BE OVER PIPE IS NOT THAN SHOWN IN THE FOLLOWING TABLE.

PIPE SIZE	MINIMUM TIME	
	MINUTES	SECONDS
4"	2	0
6"	3	0
8"	4	0
10"	5	0
12"	5	30
15"	7	5
18"	8	30
21"	9	50
24"	11	20

   C. IN AREAS WHERE GROUND WATER IS KNOWN TO EXIST, INSTALL A 1/2" DIAMETER CAPPED PIPE NIPPLE, APPROXIMATELY 10" LONG, THROUGH MANHOLE WALL ON TOP OF ONE WASTEWATER LINE ENTERING MANHOLE. IMMEDIATELY PRIOR TO PERFORMANCE OF LINE ACCEPTANCE TEST, DETERMINE GROUND WATER BY REMOVING PIPE CAP, BLOWING AIR THROUGH PIPE NIPPLE TO CLEAR IT, AND CONNECTING A CLEAR PLASTIC TUBE TO PIPE NIPPLE. SUPPORT HOSE VERTICALLY AND MEASURE HEIGHT (IN FEET) OF WATER OVER INVERT OF PIPE AFTER WATER STOPS RISING IN PLASTIC TUBE. DIVIDE THIS HEIGHT BY 2.3 FEET TO ESTABLISH PSI TO BE ADDED READINGS.

3. REPAIR OR REPLACEMENT - IF TEST DETERMINES INSTALLATION UNACCEPTABLE, CONTRACTOR SHALL LOCATE SOURCE OF LEAKAGE AND REPAIR OR REPLACE DEFECTIVE MATERIALS AND/OR WORKMANSHIP TO PROVIDE SATISFACTORY INSTALLATION.

1. FOLLOWING LEAKAGE TESTING, THE PIPES WILL BE TV INSPECTED. WATER SHALL BE FLOWED INTO THE PIPE TO PROVIDE MEANINGFUL INSPECTION FOR SETTLEMENT. ANY PIPE SETTLEMENT WHICH CAUSES EXCESSIVE PONDING OF WATER IN THE PIPE SHALL BE CAUSE FOR REJECTION. EXCESSIVE PONDING SHALL BE DEFINED AS A GOLF BALL (1 3/4" DIAMETER) SUBMERGED AT ANY POINT.
2. MANDREL TESTING: ALL GRAVITY LINES UTILIZING FLEXIBLE PIPE MUST BE TESTED FOR DEFLECTION BY PULLING A RIGID MANDREL THROUGH THE INSTALLED PIPE. THE TEST MUST BE CONDUCTED AT LEAST 30 DAYS AFTER PLACEMENT AND COMPACTION OF FINAL BACKFILL. NO PIPE SHALL EXCEED A DEFLECTION OF 5%. THE TEST MUST BE PERFORMED WITHOUT MECHANICAL PULLING DEVICES. THE TEST MANDREL MUST HAVE AN OUTSIDE DIAMETER EQUAL TO OF THE PIPE INSIDE DIAMETER. SHOULD THE MANDREL REACH AN IMPASSE, THE LINE SHALL BE UNCOVERED AND REPAIRED. A TELEVISION TEST IS NOT AN ACCEPTABLE SUBSTITUTE FOR THE DEFLECTION TEST. DEFLECTOMETERS MAY BE APPROVED FOR USE ON A CASE BY CASE BASIS.
3. ALL WATER AND WASTEWATER IMPROVEMENTS MUST CONFORM TO APPLICABLE CITY OF MANOR ORDINANCES.

TRENCH SAFETY NOTES :

1. IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS AND THE US OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS, ALL TRENCHES OVER FIVE (5) FEET IN DEPTH IN EITHER HARD AND COMPACT OR SOFT AND UNSTABLE SOILS SHALL BE SLOPED, SHORED, SHEETED, BRACED OR OTHERWISE SUPPORTED. FURTHERMORE, ALL TRENCHES LESS THAN FIVE (5) FEET IN DEPTH SHALL ALSO BE EFFECTIVELY PROTECTED WHEN HAZARDOUS GROUND MOVEMENT MAY BE EXPECTED.
2. IN ACCORDANCE WITH THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS, WHEN EMPLOYEES ARE REQUIRED TO BE IN TRENCHES FOUR (4) FEET DEEP OR MORE, ADEQUATE MEANS OF EXIT, SUCH AS A LADDER OR STEPS, MUST BE PROVIDED AND LOCATED SO AS TO REQUIRE NO MORE THAN TWENTY-FIVE (25) FEET OF LATERAL TRAVEL.
3. TRENCH SAFETY PLANS, SEALED BY A LICENSED PROFESSIONAL ENGINEER MUST BE SUBMITTED FOR ALL CONSTRUCTION ACTIVITIES WHERE EXCAVATION DEPTHS ARE FIVE (5) FEET OR GREATER. IF A TRENCH SAFETY PLAN WAS NOT PROVIDED WITH THE PLANS BECAUSE TRENCHES WERE ANTICIPATED TO BE LESS THAN FIVE (5) FEET IN DEPTH AND DURING CONSTRUCTION IT WAS FOUND THAT TRENCHES ARE IN FACT FIVE (5) FEET OR MORE IN DEPTH, OR ARE IN AN AREA WHERE HAZARDOUS GROUND MOVEMENT IS EXPECTED, ALL CONSTRUCTION SHALL CEASE, THE TRENCHED AREA SHALL BE BARRICADED AND THE CITY NOTIFIED IMMEDIATELY. CONSTRUCTION SHALL NOT RESUME UNTIL A TRENCH SAFETY PLAN IS SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

STAGING AREA FOR CONSTRUCTION :

ALL CONSTRUCTION ACTIVITIES, INCLUDING MATERIAL STORAGE AND STAGING AREA, SHALL BE WITHIN THE PROPERTY AND EASEMENTS INDICATED ON THE DRAWINGS. ANY ADDITIONAL AREAS REQUIRED FOR CONSTRUCTION AT THIS PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND MUST BE APPROVED BY THE ENGINEER.

CRITERIA FOR ACCEPTANCE :

THE PROCEDURE FOR ACCEPTANCE REQUIRES THAT ALL IMPROVEMENTS FIRST BE COMPLETED TO THE SATISFACTION OF THE CITY ENGINEER. ONCE ALL IMPROVEMENTS HAVE BEEN SATISFACTORILY COMPLETED, THE FOLLOWING DOCUMENTS MUST BE SUBMITTED FOR REVIEW:

1. PDF COPY OF RECORD DRAWINGS (AS-BUILT PLANS.)
2. ELECTRONIC COPY OF ALL PUBLIC IMPROVEMENTS SHOWN ON THE CONSTRUCTION PLANS (AUTOCAD FORMAT.)
3. DESIGN ENGINEER'S CERTIFICATION OF SUBSTANTIAL COMPLIANCE, STATING THAT ALL IMPROVEMENTS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS AND APPROVED CHANGES THERETO. THE DESIGN ENGINEER'S CERTIFICATION SHOULD BE SUBMITTED PRIOR TO SCHEDULING THE WALK THROUGH.
4. COPIES OF ALL INSPECTION REPORTS, SHOP DRAWINGS AND CERTIFIED TEST RESULTS OF CONSTRUCTION MATERIALS.
5. COPIES OF ALL FIELD-TESTING RESULTS INCLUDING DENSITIES, BACTERIOLOGICAL AND LINE/MANHOLE TESTING.
6. ORIGINAL COPIES OF THE REQUIRED WARRANTEE AND MAINTENANCE BONDS.
7. FINAL PAY APPLICATION FOR CONSTRUCTED IMPROVEMENTS.
8. PROOF OF PAYMENT OF ALL APPLICABLE FEES.
9. TAX CERTIFICATES AS OF DATE OF FILING FOR ACCEPTANCE.
10. AFFIDAVIT OF ALL BILLS PAID.
11. SEPARATION OF COSTS FORM.
12. DOCUMENTATION FRO

TRAVIS COUNTY EMERGENCY SERVICE DISTRICT No. 12

FIRE DEPARTMENT

TRAVIS COUNTY EMERGENCY SERVICE DISTRICT NO.12 (TCESD No.12) SITE PLAN NOTES

1. THE OWNER AND/OR DEVELOPER SHALL BE RESPONSIBLE FOR CONTACTING TRAVIS COUNTY ESD NO. 12 TO ENSURE COMPLIANCE WITH ALL CODES, ORDINANCES, STATUTES AND PERMITTING REQUIREMENTS PRIOR TO CONSTRUCTION.
2. PRIOR TO BEGINNING ANY CONSTRUCTION, THE APPROPRIATE TRAVIS COUNTY ESD NO. 12 PERMIT/APPROVAL SHALL BE OBTAINED. THE APPROVED PERMIT SHALL BE READILY AVAILABLE ON SITE TO TRAVIS COUNTY ESD NO. 12.
3. PHASED OCCUPANCY SHALL BE PERMITTED ONLY WITH PRIOR APPROVAL FROM TRAVIS COUNTY ESD NO. 12, THE BUILDING DEPARTMENT, AND OTHER RELATED AGENCIES, AS APPLICABLE. REQUESTS FOR PHASED OCCUPANCY SHALL BE MADE PRIOR TO START OF CONSTRUCTION ONLY.
4. PHASED INSTALLATION OF FIRE ACCESS ROADS SHALL REQUIRE AN ACCESS PHASING PLAN APPROVED BY TRAVIS COUNTY ESD NO. 12.
5. PHASED CONSTRUCTION OF BUILDINGS SHALL REQUIRE A CONSTRUCTION PHASING PLAN APPROVED TRAVIS COUNTY ESD NO. 12.
6. AN ALL-WEATHER FIRE LANE/FIRE APPARATUS ACCESS ROAD SHALL BE CONSTRUCTED TO SUPPORT THE IMPOSED LOAD OF A FIRE APPARATUS WEIGHING 75,000 POUNDS.
7. THE FIRE LANE/FIRE APPARATUS ACCESS ROAD SHALL PROVIDE FIRE DEPARTMENT ACCESS TO ALL PARTS OF COMBUSTIBLE STRUCTURES WITHIN 150 FEET OF THE FIRE LANE. THE APPROVED FIRE LANE/FIRE APPARATUS ACCESS ROAD MUST BE INSTALLED PRIOR TO AND MAINTAINED DURING CONSTRUCTION OF ANY COMBUSTIBLE STRUCTURE, UNLESS OTHERWISE APPROVED BY TRAVIS COUNTY ESD NO. 12.
8. WHERE A FIRE HYDRANT IS LOCATED ON A FIRE LANE/FIRE APPARATUS ACCESS ROAD, THE MINIMUM ROAD WIDTH SHALL BE 26 FEET, EXCLUSIVE OF SHOULDERS, IF NO FIRE HYDRANT IS PROVIDED, THE MINIMUM FIRE LANE/FIRE APPARATUS ACCESS ROAD WIDTH SHALL BE 25 FEET.
9. FIRE LANE WIDTH IS MEASURED FROM TOP FACE OF CURB TO TOP FACE OF CURB FOR FIRE LANES WITH STANDARD CURBS AND GUTTERS AND FROM FLOW- LINE TO FLOW-LINE FOR FIRE LANES WITH MODIFIED CURB DESIGNS (E.G. ROLLED, RAMPED).
10. THE DEVELOPER IS RESPONSIBLE TO VERIFY THAT ALL APPROVED PUBLIC WORKS, STREET IMPROVEMENT AND PRECISE GRADING PLANS CONFORM TO THE MINIMUM STREET WIDTH REQUIREMENTS SET FORTH BY THE FIRE CODE AND ADOPTED BY TRAVIS COUNTY ESD NO. 12.
11. A MINIMUM VERTICAL CLEARANCE OF 14' SHALL BE PROVIDED FOR ALL FIRE LANES/FIRE APPARATUS ACCESS ROADS.
12. INSIDE TURNING RADIUS OF FIRE LANES/FIRE APPARATUS ACCESS ROADS SHALL BE A MINIMUM OF 25 FEET. THE OUTSIDE RADIUS SHALL BE 50 FEET.
13. DEAD-END FIRE LANES/FIRE APPARATUS ACCESS ROADS IN EXCESS OF 150 FEET SHALL BE PROVIDED WITH APPROVED TURNAROUND PER 2015 IFC APPENDIX D, TABLE D103.4.
14. THE DIAMETER OF A CUL-DE-SAC SHALL BE 100 FEET MINIMUM PER CITY OF MANOR SPECIFICATIONS.
15. ACCESS GATES SHALL BE APPROVED BY TRAVIS COUNTY ESD NO. 12 PRIOR TO INSTALLATION.
16. ALL GATES IN CONSTRUCTION FENCING SHALL BE EQUIPPED WITH A KNOX OR BREAKAWAY PADLOCK.
17. IF BUILDING EXCEEDS 30 FEET IN HEIGHT FROM GRADE PLANE, AN AERIAL FIRE APPARATUS ROAD, 15-30 FEET PARALLEL TO ONE ENTIRE SIDE OF THE BUILDING SHALL BE IN PLACE. (2015 IFC, APPENDIX D105)
18. FIRE LANES SHALL BE MARKED WITH FIRE LANE - TOW AWAY ZONE. THE CURBS SHALL BE PAINTED RED AND THE LETTERING SHALL BE 4" IN HEIGHT AND PAINTED WHITE. THE STENCIL SHALL BE PLACED AT INTERVALS OF 35 FEET.
19. THE MINIMUM REQUIRED FIRE FLOW SHALL MEET OR EXCEED THE REQUIREMENTS OF APPENDIX B OF THE 2015 INTERNATIONAL FIRE CODE.
20. THE MAXIMUM FIRE FLOW REDUCTION FOR A SPRINKLER SYSTEM SHALL BE 50%.
21. ALL FIRE HYDRANTS THAT ARE APPROVED AND INSTALLED AS A PART OF THE PROPOSED PROJECT SHALL BE PART OF A FIRE PROTECTION SYSTEM.
22. THE UTILITY CONTRACTOR SHALL CONSULT TRAVIS COUNTY ESD NO. 12 REGARDING ANY REQUIREMENTS FOR UTILITY CONTRACTORS.
23. THE APPROPRIATE INDIVIDUAL SHALL CONSULT WITH TRAVIS COUNTY ESD NO. 12 FOR REQUIREMENTS RELATED TO THE UNDERGROUND WATER MAIN LINE AND SUBSEQUENT INSTALLATION OF THE WATER MAIN/FIRE HYDRANT LINE.
24. THE SUBMISSION OF AN UNDERGROUND WATER LINE (UTILITY) PLAN SHEET WITH THE SITE PLAN DOES NOT ALLEVIATE THE NEED TO HAVE A SEPARATE UNDERGROUND PLAN SUBMITTED AND APPROVED BY TRAVIS COUNTY ESD NO. 12. THE APPROVAL OF A SITE PLAN DOES NOT CONSTITUTE THE APPROVAL OF AN UNDERGROUND SYSTEM.
25. UNDERGROUND MAINS FEEDING HYDRANTS SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH NFPA 24, THE FIRE CODE AND TRAVIS COUNTY ESD NO. 12 ADOPTED AMENDMENTS, BY A CONTRACTOR LICENSED TO PERFORM THE INSTALLATION. THE ENTIRE MAIN MUST BE HYDROSTATICALLY TESTED AT ONE TIME UNLESS ISOLATION VALVES ARE PROVIDED BETWEEN TESTED SECTIONS.
26. TRAVIS COUNTY ESD NO. 12 CONSIDERS THE PIPING FROM THE POINT OF CONNECTION AT THE MUNICIPAL WATER SUPPLY TO THE FIRE HYDRANTS AND THE BASE OF ANY FIRE SPRINKLER RISER PART OF A FIRE PROTECTION SYSTEM.
27. THE PRESENCE OF DOMESTIC WATER SUPPLY TAPS OFF OF THE MAIN WATER LINE OR A SHARED SUPPLY LINE WITH FIRE SPRINKLER RISER DOES NOT OVERRIDE ANY REQUIREMENTS OF TRAVIS COUNTY ESD NO. 12 OR NFPA 24. NFPA 24 SHALL APPLY TO ALL UNDERGROUND INSTALLATIONS AND INSTALLATIONS SHALL BE PERMITTED AND INSPECTED BY TRAVIS COUNTY ESD NO. 12.
28. FIRE HYDRANTS SHALL MEET THE MINIMUM STANDARD OF THE CITY OF MANOR AND TRAVIS COUNTY ESD NO. 12. (M511S-17A) AND PAINTED RED.
29. THE 4.5" FIRE HYDRANT OUTLET MUST FACE THE FIRE LANE.
30. THE HYDRANTS SHALL BE INSTALLED WITH THE CENTER OF THE 4.5" OPENING AT LEAST 18" ABOVE FINISHED GRADE.
31. HYDRANTS SHALL BE PLACED WITHIN 100 FEET OF AN FDC.
32. HYDRANTS SHALL BE LOCATED SO THAT A HOSE LINE RUNNING BETWEEN THE HYDRANT AND THE FIRE DEPARTMENT CONNECTION(S) WILL NOT CROSS DRIVEWAYS, OBSTRUCT ROADS OR FIRE LANES, OR OTHERWISE INTERFERE WITH EMERGENCY VEHICLE RESPONSE AND EVACUATION OF A SITE.
33. ALL FIRE HYDRANTS SHALL HAVE A "BLUE REFLECTIVE PAVEMENT MARKER" INDICATING THEIR LOCATION.
34. HYDRANTS SHALL BE PLACED AT NO MORE THAN 500 FEET APART, UNLESS OTHERWISE APPROVED BY TRAVIS COUNTY ESD NO. 12. (2015 IFC, TABLE C102.1)
35. HYDRANTS AND FIRE DEPARTMENT CONNECTIONS SHALL NOT BE LOCATED BEHIND PARKING STALLS OR IN OTHER LOCATIONS WHERE THEY ARE LIKELY TO BE BLOCKED BY VEHICLES OR OTHER OBJECTS. WHENEVER POSSIBLE, HYDRANTS SHALL BE PLACED IN LANDSCAPE ISLANDS/PENINSULAS, STREET AND DRIVE AISLE INTERSECTIONS IN PREFERENCE TO MID-BLOCK LOCATIONS.
36. HYDRANTS MUST BE LOCATED WITHIN THREE TO SIX FEET OF THE EDGE OF A FIRE ACCESS ROADWAY.
37. HYDRANTS SHALL NOT BE LOCATED IN AREAS WHERE THEY WILL BE VISUALLY OR OPERATIONALLY OBSTRUCTED (BEHIND FENCES OR WALLS, IN BUSHES, BEHIND PARKING SPACES, ETC).
38. A MINIMUM 3-FOOT CLEARANCE SHALL BE PROVIDED AROUND THE CIRCUMFERENCE OF THE HYDRANT.
39. APPROVED FIRE HYDRANTS ARE TO BE CONSIDERED PART OF A FIRE PROTECTION SYSTEM AND SHALL NOT BE REMOVED OR TAMPERED WITH UNLESS APPROVED BY TRAVIS COUNTY ESD NO. 12. TAMPERING SHALL INCLUDE, BUT IS NOT LIMITED TO, PAINTING, MODIFYING, AND OBSTRUCTING ACCESS.
40. FIRE SPRINKLER RISER ROOMS SHALL BE PROVIDED WITH EXTERIOR ACCESS. NO INTERIOR ACCESS SHALL BE PROVIDED. THE EXTERIOR ACCESS DOOR SHALL FACE A DESIGNATED FIRE LANE, UNLESS OTHERWISE APPROVED BY TRAVIS COUNTY ESD NO. 12.
41. ANY FIRE HYDRANTS THAT HAVE NOT PASSED AN ACCEPTANCE TEST IN THE PRESENCE OF A TRAVIS COUNTY ESD NO. 12 INSPECTOR OR TEMPORARILY INOPERATIVE SHOULD BE WRAPPED WITH A BLACK BAG.
42. THE BUILDING ADDRESS SHALL BE CLEARLY VISIBLE FROM THE STREET TO WHICH IT IS ADDRESSED. FINAL NUMBERS HAVE TO BE AT LEAST 6" IN HEIGHT AND OF CONTRASTING COLOR WITH THE BACKGROUND UPON WHICH THEY ARE PLACED.
43. TEMPORARY FUEL TANKS OF 60 OR MORE GALLONS SHALL BE INSPECTED BY TRAVIS COUNTY ESD NO. 12 TO ENSURE THE APPROPRIATE REQUIREMENTS ARE MET.
44. PRIOR TO OCCUPANCY, A CLOSE OUT INSPECTION TEST OF FIRE HYDRANT FLOW IS REQUIRED BY TRAVIS COUNTY ESD NO. 12. THE CONTRACTOR SHALL CONTACT TRAVIS COUNTY ESD NO. 12 TO SCHEDULE THE ACCEPTANCE TEST. IF ANY HYDRANT FAILS THE FIRE FLOW TEST, THE ENTIRE SYSTEM FAILS THE FIRE FLOW TEST.
45. APPROVAL OF THIS PLAN SUBMITTAL DOES NOT CONSTITUTE A VERIFICATION OF ALL DATA, CODES, INFORMATION, AND CALCULATIONS SUPPLIED BY THE APPLICANT. THE LICENSED DESIGNER AND/OR PROFESSIONAL ENGINEER OF RECORD IS SOLELY RESPONSIBLE FOR THE COMPLETENESS, ACCURACY, AND ADEQUACY OF THE SUBMITTAL WHETHER OR NOT THE PLAN SUBMITTAL IS REVIEWED AND APPROVED FOR CODE COMPLIANCE BY TRAVIS COUNTY EMERGENCY SERVICES DISTRICT NO. 12.

TRAVIS COUNTY EMERGENCY DISTRICT NO. 12 (TCESD No.12) UNDERGROUND FIRE LINE NOTES

1. THE UNDERGROUND FIRE LINE PLAN SHALL BE APPROVED BY TRAVIS COUNTY ESD NO. 12 PRIOR TO THE INSTALLATION OF ANY UNDERGROUND COMPONENTS.
2. THE APPROVED UNDERGROUND FIRE LINE PLAN SHALL BE ON SITE AT ALL TIMES FOR TRAVIS COUNTY ESD NO. 12 INSPECTIONS. THE TRAVIS COUNTY ESD NO. 12 INSPECTOR WILL NOT PERFORM THE UNDERGROUND FIRE LINE INSPECTION WITHOUT THE TRAVIS COUNTY ESD NO. 12 APPROVED UNDERGROUND FIRE LINE PLAN.
3. ALL FIRE HYDRANTS THAT ARE APPROVED AND INSTALLED AS A PART OF THE PROPOSED PROJECT SHALL BE CONSIDERED TO BE PART OF A FIRE PROTECTION SYSTEM AND INSTALLED FOR THE PURPOSE OF PROVIDING FIRE PROTECTION.
4. A WATER LINE THAT SUPPLIES ANY NUMBER OF HYDRANTS AND/OR ANY PART OF A FIRE SPRINKLER SYSTEM SHALL BE CONSIDERED TO BE FOR THE PURPOSE OF PROVIDING FIRE PROTECTION.
5. UNDERGROUND MAINS FEEDING NFPA 13 OR NFPA 13R SPRINKLER SYSTEMS MUST BE INSTALLED AND TESTED IN ACCORDANCE WITH NFPA 13 OR NFPA 13R, THE INTERNATIONAL FIRE CODE AND TRAVIS COUNTY ESD NO. 12 ADOPTED AMENDMENTS, BY A LICENSED SPRINKLER CONTRACTOR WITH A PLUMBING PERMIT. THE ENTIRE MAIN MUST BE HYDROSTATICALLY TESTED AT ONE TIME, UNLESS ISOLATION VALVES ARE PROVIDED BETWEEN TESTED SECTIONS. TRAVIS COUNTY ESD NO. 12 REQUIRES (1) PERMITS, (2) AN UNDERGROUND FIRE LINE PLAN TO BE SUBMITTED FOR APPROVAL, AND (3) INSPECTIONS TO ENSURE INSTALLATION COMPLIANCE.
6. UNDERGROUND MAINS FEEDING HYDRANTS SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH NFPA 24, THE INTERNATIONAL FIRE CODE AND TRAVIS COUNTY ESD NO. 12 ADOPTED AMENDMENTS, BY A CONTRACTOR LICENSED TO PERFORM THE INSTALLATION. THE ENTIRE MAIN MUST BE HYDROSTATICALLY TESTED AT ONE TIME UNLESS ISOLATION VALVES ARE PROVIDED BETWEEN TESTED SECTIONS.
7. TRAVIS COUNTY ESD NO. 12 CONSIDERS THE PIPING FROM THE POINT OF CONNECTION AT THE MUNICIPAL WATER SUPPLY TO THE FIRE HYDRANTS AND THE BASE OF ANY FIRE SPRINKLER RISER PART OF A FIRE PROTECTION SYSTEM.
8. THE PRESENCE OF DOMESTIC WATER SUPPLY TAPS OFF OF THE MAIN WATER LINE OR A SHARED SUPPLY LINE WITH FIRE SPRINKLER RISER DOES NOT OVERRIDE ANY REQUIREMENTS OF TRAVIS COUNTY ESD NO. 12 OR NFPA 24. NFPA 24 SHALL APPLY TO ALL UNDERGROUND INSTALLATIONS AND INSTALLATIONS SHALL BE PERMITTED AND INSPECTED BY TRAVIS COUNTY ESD NO. 12.
9. THE UTILITY CONTRACTOR SHALL CONSULT TRAVIS COUNTY ESD NO. 12 REGARDING ANY JURISDICTION REQUIREMENTS FOR UTILITY CONTRACTORS.
10. THE APPROPRIATE INDIVIDUAL SHALL CONSULT WITH TRAVIS COUNTY ESD NO. 12 (THE AHJ) FOR REQUIREMENTS RELATED TO THE UNDERGROUND WATER MAIN PIPE AND INSTALLATION OF THE WATER MAIN/FIRE HYDRANT LINE.
11. UNDERGROUND FIRE LINE INSTALLATIONS SHALL BE PERFORMED BY INDIVIDUALS LICENSED BY THE STATE OF TEXAS TO INSTALL FIRE PROTECTION SYSTEMS. IT SHALL BE CONSIDERED UNACCEPTABLE FOR A LICENSED COMPANY TO SUB-CONTRACT INSTALLATION WORK TO NON-LICENSED COMPANIES.
12. A REGISTERED FIRM MAY NOT SUBCONTRACT WITH AN UNREGISTERED FIRM TO ALLOW THE UNREGISTERED FIRM AS AN INDEPENDENT CONTRACTOR TO PERFORM ANY ACT OF A FIRE PROTECTION SPRINKLER CONTRACTOR.
13. THE SPRINKLER SYSTEM PIPING SHALL NOT HAVE A SEPARATE CONTROL VALVE UNLESS SUPERVISED BY AN APPROVED METHOD FOUND IN NFPA 13 OR NFPA 13R.
14. A MINIMUM OF THREE TRAVIS COUNTY ESD NO. 12 INSPECTIONS ARE REQUIRED FOR UNDERGROUND PIPING SERVING SPRINKLER SYSTEMS AND/OR PRIVATE HYDRANTS: THRUST BLOCK, HYDROSTATIC TEST, AND FLUSH INSPECTION.
15. ANY ADDITIONAL INSPECTIONS BEYOND THE ALLOTTED UNDERGROUND FIRE LINE INSPECTIONS SHALL INCUR A REINSPECTION FEE. IF ADDITIONAL INSPECTIONS ARE NECESSARY, REINSPECTION FEES SHALL BE PAID PRIOR TO ANY ADDITIONAL TRAVIS COUNTY ESD NO. 12 INSPECTIONS.

THRUST BLOCK INSPECTION:

A VISUAL INSPECTION WILL BE REQUIRED BEFORE THE FIRE MAINS ARE COVERED TO VERIFY LOCATION OF VALVES, PIPE TYPE, SIZE, WRAPPED JOINTS AND PROPER INSTALLATION OF RESTRAINTS. IF THE PIPE IS COVERED UP PRIOR TO THE INSPECTION, THE INSPECTION WILL BE TERMINATED, AND THE PIPE WILL BE REQUIRED TO BE UNCOVERED.

1. A 6-INCH BED OF CLEAN FILL SAND SHALL BE PROVIDED BELOW THE PIPE AND 12-INCHES ABOVE THE PIPE (TOTAL OF 18 INCHES PLUS OUTER DIAMETER OF THE PIPE).
2. PIPE SHALL BE BURIED AT LEAST 36" WHERE SUBJECT TO LOADING (E.G., DRIVEWAYS, PARKING LOTS) AND AT LEAST 30" ELSEWHERE. TRENCHES SHALL BE OF SUFFICIENT DEPTH TO ACCOUNT FOR POTENTIAL FREEZING CONDITIONS AND TO ALLOW THE REQUIRED COVER ABOVE THE PIPE.
3. ALL PIPE SHALL BE APPROVED FOR USE IN FIRE SERVICE SYSTEMS. THE PIPE USED MUST MEET THE MINIMUM STANDARDS OF THE WATER PURVEYOR SUPPLYING THE WATER FOR THE PROJECT. CLASS 150 WILL BE USED AT A MINIMUM, AND CLASS 200 PIPE SHALL BE USED WHERE THE WATER PRESSURE EXCEEDS 150 PSI. THE USE OF GALVANIZED PIPE IS PROHIBITED WHEN A PORTION OF THE SYSTEM IS BURIED.
4. ALL FERROUS PIPE AND FITTINGS SHALL BE PROTECTED WITH A LOOSE 8-MIL POLYETHYLENE SHEETING APPROVED FOR UNDERGROUND USE. USE OF ANY POLYETHYLENE MATERIAL WITHOUT ANSI/AWWA INFORMATION LISTED ON THE PRODUCT WILL NOT BE ACCEPTED. THE ENDS OF THE POLYETHYLENE SHEETING AND ANY SPLICES MADE FOR TEES OR OTHER PIPING COMPONENTS SHALL BE TIGHTLY SEALED WITH TWO-INCH TAPE THAT IS APPROVED FOR UNDERGROUND USE. DUCT TAPE AND OTHER COMMON HOUSEHOLD OR INDUSTRIAL TAPE WILL NOT BE ACCEPTED WITHOUT MANUFACTURER SPECIFICATIONS INDICATING THE TAPE IS APPROVED FOR UNDERGROUND USE.
5. BOLTS USED FOR UNDERGROUND CONNECTIONS, INCLUDING T BOLTS, SHALL BE CLEANED AND THOROUGHLY COATED WITH ASPHALT OR OTHER CORROSION RETARDING MATERIAL AFTER ASSEMBLY AND PRIOR TO THE INSTALLATION OF POLYETHYLENE SHEETING.
6. SECTIONAL VALVES SHALL BE PROVIDED AT APPROPRIATE POINTS WITHIN PIPING SECTIONS SUCH THAT THE NUMBER OF FIRE PROTECTION CONNECTIONS BETWEEN SECTIONAL VALVES DOES NOT EXCEED SIX. REV. 210111
7. SECTIONAL VALVES ARE NECESSARY TO ALLOW ISOLATION OF PIPING SECTIONS TO LIMIT THE NUMBER OF FIRE PROTECTION CONNECTIONS IMPAIRED IN THE EVENT OF A BREAK OR TO MAKE REPAIRS OR EXTENSIONS TO THE SYSTEM. FIRE PROTECTION CONNECTIONS CAN CONSIST OF SPRINKLER SYSTEM LEAD-INS, HYDRANTS, OR OTHER FIRE PROTECTION CONNECTIONS.
8. THRUST BLOCKS, OR ANOTHER APPROVED METHOD OF THRUST RESTRAINT, SHALL BE PROVIDED WHEREVER PIPE CHANGES DIRECTION.
9. CARE SHALL BE TAKEN WHEN FORMING AND POURING THRUST BLOCKS SO THAT FITTINGS AND JOINTS ARE NOT BURIED IN CONCRETE.
10. A MINIMUM TWO-INCH CLEARANCE SHALL BE PROVIDED BETWEEN THE FIRE RISER PIPE AND THE CONCRETE SLAB. THE TWO-INCH SPACE SHALL BE FILLED WITH A COMPRESSIBLE MATERIAL THAT ALLOWS MOVEMENT. A MINIMUM TWO-INCH CLEARANCE SHALL BE PROVIDED WHERE THE PIPE PASSES THROUGH WALLS.
11. UNDERGROUND SYSTEM SHALL TERMINATE AT THE RISER FLANGE AND PLACED A MAXIMUM OF 18 INCHES FROM AN EXTERIOR WALL AND 6 INCHES ABOVE THE SLAB.
12. PIPE RUNNING UNDER A BUILDING OR BUILDING FOUNDATION SHALL BE STAINLESS STEEL AND SHALL NOT CONTAIN MECHANICAL JOINTS.

HYDROSTATIC TESTING:
THRUST BLOCKS SHALL BE POURED AND IN PLACE. PIPE SHALL BE CENTER-LOADED WITH CLEAN SAND TO PREVENT UPLIFT, BUT ALL JOINTS SHALL REMAIN EXPOSED.

1. THE UNDERGROUND MAIN SHALL BE ABLE TO BE ISOLATED OFF THE EXISTING MAIN AND AT THE POINT IT TERMINATES TO THE BUILDING.
2. ALL PIPING AND ATTACHED APPURTENANCES SUBJECTED TO SYSTEM WORKING PRESSURE SHALL BE HYDROSTATICALLY TESTED AT 200 PSI OR 50 PSI IN EXCESS OF THE SYSTEM WORKING PRESSURE, WHICHEVER IS GREATER, AND SHALL MAINTAIN THAT PRESSURE +/- 5 PSI FOR 2 HOURS.
3. THE HYDROSTATIC TEST SHALL COMMENCE UPON THE ARRIVAL OF THE TRAVIS COUNTY ESD NO. 12 INSPECTOR AND SHALL END UPON THE RETURN OF THE TRAVIS COUNTY ESD NO. 12 INSPECTOR. UNWITNESSED HYDROSTATIC TESTS WILL NOT BE ACCEPTED.

FLUSH INSPECTION: ALL PORTIONS OF THE UNDERGROUND SYSTEM SHALL BE FLUSHED TO REMOVE DEBRIS PRIOR TO CONNECTION TO OVERHEAD PIPING IN COMPLIANCE WITH NFPA 13.

1. UNDERGROUND PIPING, FROM THE WATER SUPPLY TO THE SYSTEM RISER, AND LEAD-IN CONNECTIONS TO THE SYSTEM RISER SHALL BE COMPLETELY FLUSHED BEFORE THE CONNECTION IS MADE TO DOWNSTREAM FIRE PROTECTION SYSTEM PIPING.
2. FLOW SHALL BE THROUGH A MINIMUM OF A 4-INCH HOSE, PIPE OR OUTLET, UNLESS OTHERWISE APPROVED BY TRAVIS COUNTY ESD NO. 12 PRIOR TO SCHEDULING THE FLUSH. HYDRANTS SHALL BE FLUSHED THROUGH THE 4.5-INCH OUTLET.
3. HOSE OR PIPE SHALL BE RESTRAINED TO PREVENT INJURY AND DAMAGE. DISCHARGED WATER SHALL BE COLLECTED OR DIVERTED IN ACCORDANCE WITH APPLICABLE WATER COLLECTION PROVISIONS, THE LOCAL PUBLIC WORKS DEPARTMENT, WATER DISTRICT, AND/OR OTHER APPLICABLE AGENCY SHALL BE NOTIFIED OF THE SCHEDULED FLUSH BY THE CONTRACTOR.
4. THE MINIMUM RATE OF FLOW SHALL BE NOT LESS THAN ONE OF THE FOLLOWING:
   (1) THE HYDRAULICALLY CALCULATED WATER DEMAND RATE OF THE SYSTEM INCLUDING ANY HOSE REQUIREMENTS,
   (2) FLOW NECESSARY TO PROVIDE A VELOCITY OF 10 FEET/SECOND. (4-INCH LINES – 390 GPM),
   (3) THE MAXIMUM FLOW RATE AVAILABLE TO THE SYSTEM UNDER FIRE CONDITIONS.
5. IF UNDERGROUND PIPING IS CONNECTED TO OVERHEAD SPRINKLER PIPING WITHOUT AN APPROVED TRAVIS COUNTY ESD NO. 12 FLUSH INSPECTION, THE OVERHEAD SPRINKLER SYSTEM WILL REQUIRE EXTENSIVE TESTING TO ENSURE NO OBSTRUCTIONS ARE PRESENT. THIS INCLUDES, BUT IS NOT LIMITED TO, REMOVAL AND REPLACEMENT OF SPRINKLER HEADS, BACKFLUSHING THE SYSTEM AND DENIAL OF OCCUPANCY UNTIL THE ISSUE IS RESOLVED TO NFPA STANDARDS AND THE REQUIREMENTS SET FORTH BY TRAVIS COUNTY ESD NO. 12.
6. PER NFPA 24, THE INSTALLING CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETING AND SIGNING THE CONTRACTOR'S MATERIAL AND TEST CERTIFICATE FOR UNDERGROUND PIPING. THE COMPLETED AND SIGNED CERTIFICATE SHALL BE PROVIDED TO ALL REQUIRED PARTIES, INCLUDING TRAVIS COUNTY ESD NO. 12. THIS CERTIFICATE CERTIFIES THE INSTALLATION WAS IN ACCORDANCE WITH CHAPTER 6003 OF THE TEXAS INSURANCE CODE AND GUIDELINES SET FORTH BY THE SFMO.
7. APPROVAL OF THIS PLAN SUBMITTAL DOES NOT CONSTITUTE A VERIFICATION OF ALL DATA, CODES, INFORMATION, AND CALCULATIONS SUPPLIED BY THE APPLICANT. THE LICENSED DESIGNER AND/OR PROFESSIONAL ENGINEER OF RECORD IS SOLELY RESPONSIBLE FOR THE COMPLETENESS, ACCURACY, AND ADEQUACY OF THE SUBMITTAL WHETHER OR NOT THE PLAN SUBMITTAL IS REVIEWED AND APPROVED FOR CODE COMPLIANCE BY TRAVIS COUNTY ESD NO. 12.

						APR
						DATE
						DESCRIPTION
◁	◁	◁	◁	◁	◁	REV

DESIGNED BY: OR
REVIEWED BY: AJN
DRAWN BY: AMC

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THE JUNCTION

GENERAL NOTES (SHEET 2 OF 2)

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SHEET
03

G:\TXC\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Shts\C01.00 1065900 GENERAL NOTES.dwg Layout: GENERAL NOTES (SHEET 2 OF 2) Plotted: 8/17/2023 12:08:13 PM By: jclifton

	NORTHING	EASTING	ELEVATION
CONTROL POINT #1	10,101,344.02	3,173,571.57	524.85
CONTROL POINT #2	10,101,140.86	3173301.9000	539.71
CONTROL POINT #3	10,101,816.12	3173095.7100	548.74
CONTROL POINT #4	10,101,344.02	3,173,571.57	525.76

0 30' 60' 120'

SCALE: 1" = 60'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR 5' CONTOUR
- EXISTING MINOR 1' CONTOUR
- EXISTING OVERHEAD POWERLINE
- EXISTING CHAIN LINK FENCE
- EXISTING FENCE LINE
- EXISTING SEWER LINE
- EXISTING WATER LINE
- EXISTING WATER STRUCTURES
- EXISTING SEWER STRUCTURES
- EXISTING POWER LINE STRUCTURES
- EXISTING EDGE OF PAVEMENT
- EXISTING STORM CENTERLINE
- 100 YEAR FEMA FLOODPLAIN

	APR	DATE	DESCRIPTION	REV

DESIGNED BY: SAR

REVIEWED BY: ACR

DRAWN BY: SAR

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THE JUNCTION

EXISTING CONDITIONS

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SHEET 04

G:\TX\CI\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Shts\C01.10 10659000 EXISTING CONDITIONS SURVEY.dwg Layout: EXISTING CONDITIONS Plotted: 8/17/2023 12:08:27 PM By: Calderon

KEY NOTE	
1	CONCRETE PADS TO BE REMOVED
2	GRAVEL DRIVEWAYS TO BE REMOVED
3	SEWER MANHOLES TO BE REMOVED
4	TRASH PILES TO BE REMOVED
5	EXISTING SHEDS TO BE REMOVED
6	TELEPHONE POLES TO BE REMOVED
7	WATER METERS TO BE REMOVED
8	TELEPHONE BOX TO BE REMOVED
9	POWER LINE TO BE REMOVED
10	SEWER LINE TO BE REMOVED
11	WATER LINE TO BE REMOVED
12	WATER VALVES TO BE REMOVED
13	GAS STRUCTURES TO BE REMOVED
14	WATER BLOW OFF VALVES TO BE REMOVED
15	ELECTRICAL GUYS TO BE REMOVED
16	STORM CULVERTS TO BE REMOVED

LEGEND

- PROPERTY BOUNDARY
- EXISTING WATER LINES TO BE DEMOED
- EXISTING SEWER LINES TO BE DEMOED
- EXISTING OVERHEAD POWER LINES
- EXISTING CHAINLINK FENCE
- EXISTING FENCE LINE
- EXISTING WATER STRUCTURES
- EXISTING SEWER STRUCTURES
- EXISTING ELECTRICAL STRUCTURES
- 100 YEAR FEMA FLOODPLAIN

0 20' 40' 80'

SCALE: 1" = 40'

KUSUM HOSPITALITY LLC

CONTROL POINT #4

MANOR VILLAGE CONDOMINIUMS LTD

LEAVITT LUMBER COMPANY INC

COUPLAND STATE BANK

± 597 SY EXISTING PAVEMENT TO BE REMOVED

COUPLAND STATE BANK

CONTROL POINT #3

MURRAY AVENUE
60' ROW
VOL. 2, PG. 223, P.R.T.C.

± 144 SY EXISTING STRUCTURE TO BE REMOVED

± 51 SY EXISTING CONCRETE SIDEWALK TO BE REMOVED

PROPERTY BOUNDARY

EXISTING BARRICADE ±54 LF TO BE REMOVED

SEWER LINE TO BE REMOVED ONCE NEW SEWER IS INSTALLED AND APPROVED

EXISTING BARRICADE ± 76 LF TO BE REMOVED

MARTINIANO P. & BLANCA E. MEJIA

JULIA K. BAUMGART & JAMES A. POEHL

GARY M. WILLIAMS

SEWER LINE TO BE REMOVED ONCE NEW SEWER IS INSTALLED AND APPROVED

30' ELECTRICAL EASEMENT TO BE REMOVED

20' ELECTRICAL EASEMENT TO BE REMOVED

30' ELECTRICAL EASEMENT TO BE REMOVED

20' ELECTRICAL EASEMENT TO BE REMOVED

20' ALLEY TO BE REMOVED

±40 LF EXISTING BARRICADE TO BE REMOVED

±356 LF

±137 LF

±105 LF

±178 LF

±143 LF

±178 LF

±264 LF

±111 LF

PROPERTY BOUNDARY

100 YR FEMA FLOODPLAIN

±49 SY

±49 SY

±79 SY

EXISTING CISTERN TO BE REMOVED AND FILLED

20' ALLEY TO BE REMOVED

±118 LF

±598 LF

15' ELECTRICAL EASEMENT TO BE REMOVED

± 517 SY EXISTING ASPHALT PAVEMENT TO BE REMOVED

CONTROL POINT #1

±522 LF

±304 LF

20' ALLEY

±106 LF

±213 LF

±195 LF

±29 LF

SEWER LINE TO BE REMOVED ONCE NEW SEWER IS INSTALLED AND APPROVED

PROPERTY BOUNDARY

PROPERTY BOUNDARY

PROPERTY BOUNDARY

E. LANE AVENUE
60' ROW
VOL. 2, PG. 223, P.R.T.C.

LIZETH MONDRAGON

JOSE LUIS FONSECA

NICHOLE ELIZABETH BURSE

MARIA E. PORTALES

LA GRANGE STREET
60' ROW
VOL. 2, PG. 223, P.R.T.C.

BURNET STREET
60' ROW
VOL. 2, PG. 223, P.R.T.C.

WALTER D. & LOIS K. RANDIG

CONTROL POINT #2

RECTOR STREET
CALLED 60' ROW
DOC. NO. 20180087, O.P.R.T.C.
VARIABLE WIDTH AS MONUMENTED

VALERIE ANN DYE

MICHAEL E. DYE

MELITON LOPEZ BENITES

							APR
							DATE
							DESCRIPTION
1	2	3	4	5	6		REV
DESIGNED BY: SAR							
REVIEWED BY: AJN							
DRAWN BY: SAR							

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THE JUNCTION

DEMOLITION PLAN

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SHEET 05

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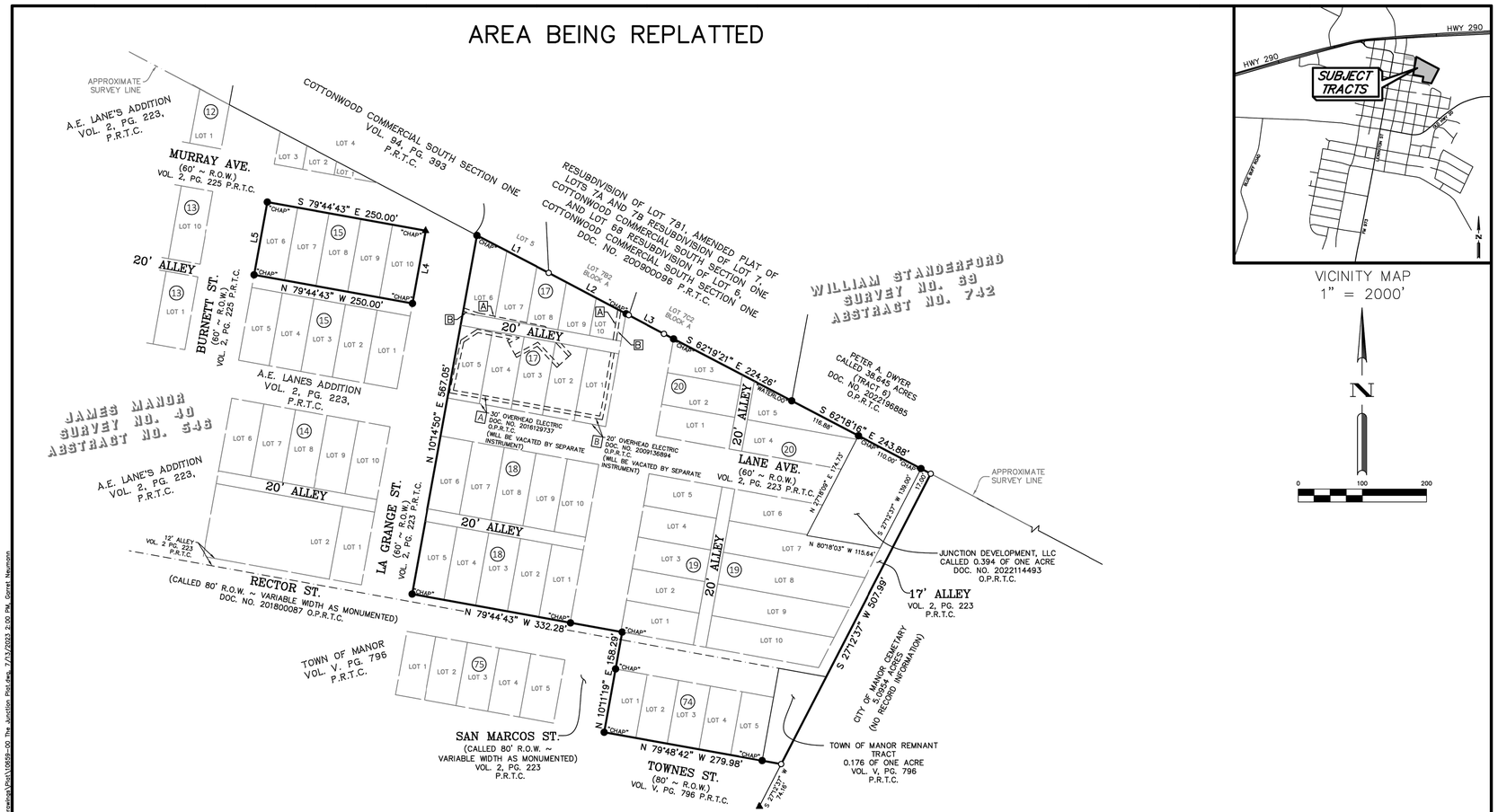

VICINITY MAP
1" = 2000'

N

0 100 200

SHORT FORM FINAL PLAT:

THE JUNCTION

RESUBDIVISION OF ALL OF LOTS 6–10, BLOCK 15, ALL OF BLOCKS 17, 18, 19 & 20 AND PORTIONS OF THE RIGHTS–OF–WAY OF E. LANE AVE. AND SAN MARCOS STREET., A.E. LANE ADDITION REPLAT, VOL. 2, PG. 223, P.R.T.C. RESUBDIVISION OF ALL LOTS 1–5, BLOCK 74, AND A PORTION OF RECTOR STREET, THE CITY OF MANOR, VOL. V, PG. 796, P.R.T.C. AND PLATTING OF A CALLED 0.397 OF ONE ACRE TRACT OF LAND, DOC. NO. 2022114493, O.P.R.T.C., AND A REMNANT TRACT OF LAND AS SHOWN ON VOL V, PG. 796, P.R.T.C.

A SUBDIVISION OF 9.202 ACRES OF LAND
LOCATED IN THE JAMES MANOR SURVEY NO. 40 ABSTRACT NO. 546
TRAVIS COUNTY, TEXAS

LEGEND

B.S.L.	BUILDING SETBACK LINE
O.P.R.T.C.	OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY
P.O.B.	POINT OF BEGINNING
P.O.C.	POINT OF COMMENCING
P.R.T.C.	PLAT RECORD TRAVIS COUNTY
R.O.W.	RIGHT–OF–WAY
●	FOUND 1/2" IRON ROD
●"CHAP"	FOUND 1/2" IRON ROD W/CAP STAMPED "CHAPARRAL"
●"WATERLOO"	FOUND 1/2" IRON ROD W/CAP STAMPED "WATERLOO"
▲	FOUND MAG NAIL W/WASHER STAMPED MANOR CEMETERY S/W CORNER
▲"CHAP"	FOUND MAG NAIL WITH CAP STAMPED "CHAPARRAL"
○	SET 1/2" IRON ROD WITH CAP STAMPED "BGE INC"
△	CALCULATED POINT
[A]	DENOTES SAME REFERENCE

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TBPELS Licensed Surveying Firm No. 10194490

	APR	DATE	DESCRIPTION	REV

DESIGNED BY: BAH
REVIEWED BY: AJN
DRAWN BY: BAH

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THE JUNCTION

FINAL PLAT (SHEET 1 OF 4)

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SHEET 06

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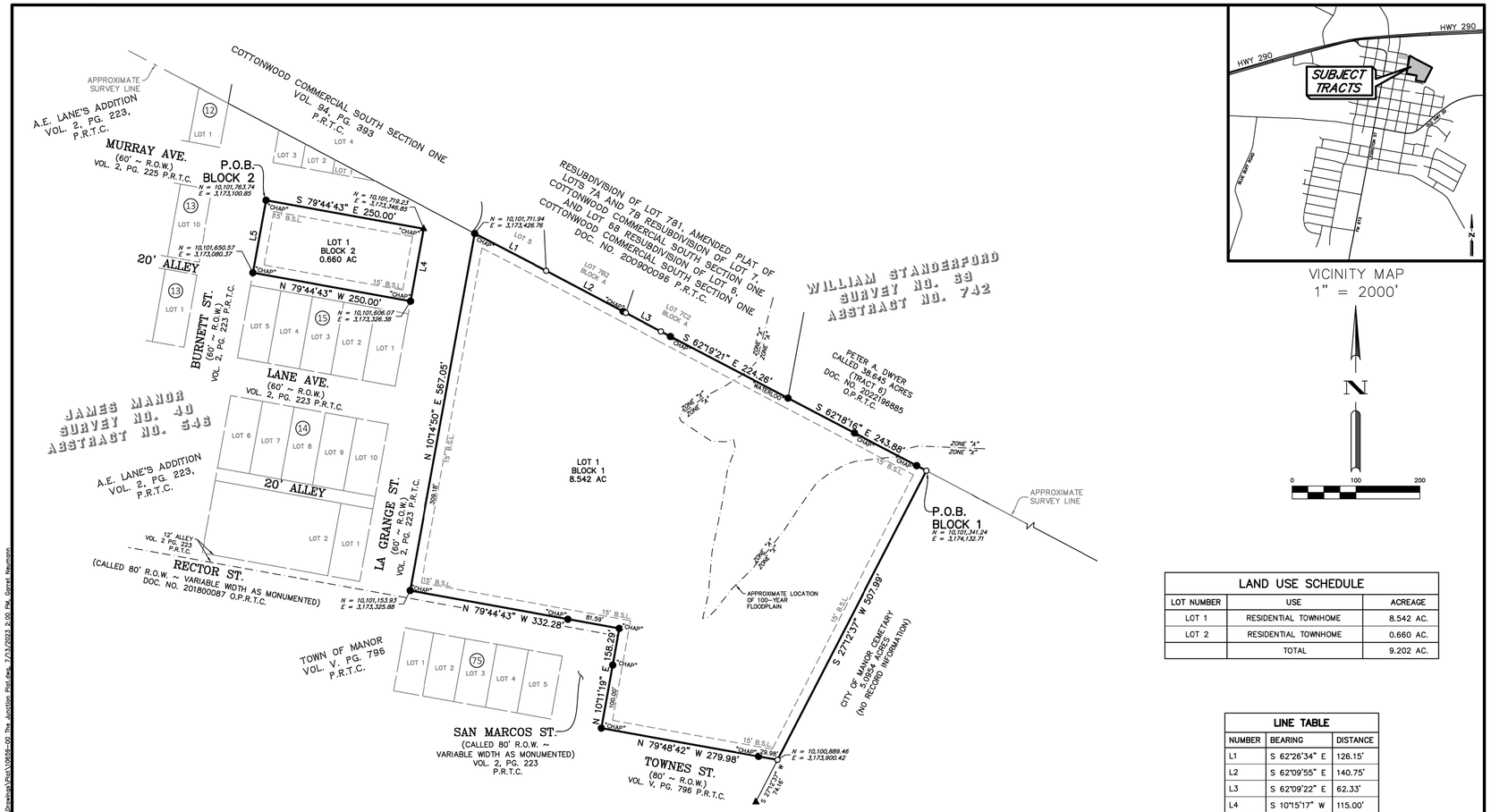

VICINITY MAP
1" = 2000'

N

0 100 200

LAND USE SCHEDULE		
LOT NUMBER	USE	ACREAGE
LOT 1	RESIDENTIAL TOWNHOME	8.542 AC.
LOT 2	RESIDENTIAL TOWNHOME	0.660 AC.
	TOTAL	9.202 AC.

LINE TABLE		
NUMBER	BEARING	DISTANCE
L1	S 62°26'34" E	126.15'
L2	S 62°09'55" E	140.75'
L3	S 62°09'22" E	62.33'
L4	S 10°15'17" W	115.00'
L5	N 10°15'17" E	115.00'

SHORT FORM FINAL PLAT:

THE JUNCTION

RESUBDIVISION OF ALL OF LOTS 6–10, BLOCK 15, ALL OF BLOCKS 17, 18, 19 & 20 AND PORTIONS OF THE RIGHTS–OF–WAY OF E. LANE AVE. AND SAN MARCOS STREET., A.E. LANE ADDITION REPLAT, VOL. 2, PG. 223, P.R.T.C. RESUBDIVISION OF ALL LOTS 1–5, BLOCK 74, AND A PORTION OF RECTOR STREET, THE CITY OF MANOR, VOL. V, PG. 796, P.R.T.C. AND PLATTING OF A CALLED 0.397 OF ONE ACRE TRACT OF LAND, DOC. NO. 2022114493, O.P.R.T.C., AND A REMNANT TRACT OF LAND AS SHOWN ON VOL V, PG. 796, P.R.T.C.

A SUBDIVISION OF 9.202 ACRES OF LAND
LOCATED IN THE JAMES MANOR SURVEY NO. 40 ABSTRACT NO. 546
TRAVIS COUNTY, TEXAS

LEGEND

B.S.L.	BUILDING SETBACK LINE
O.P.R.T.C.	OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY
P.O.B.	POINT OF BEGINNING
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△	CALCULATED POINT
[A]	DENOTES SAME REFERENCE

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TBPELS Licensed Surveying Firm No. 10194490

							APR
							DATE
							DESCRIPTION
◁	◁	◁	◁	◁	◁		REV

DESIGNED BY: BAH
REVIEWED BY: AJN
DRAWN BY: BAH

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THE JUNCTION

FINAL PLAT (SHEET 2 OF 4)

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SHEET 07

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G:\TX\C\Projects\Legacy Performance Capital\10659-00-The Junction\05_Survey\04_Field\Drawings\Plat\10659-00 The Junction Plat.dwg, 7/31/2023 2:00 PM, Garret Neumann

METES & BOUNDS DESCRIPTION

FIELD NOTES FOR A 9.202 ACRE TRACT OF LAND IN THE JAMES MANOR SURVEY NO. 40, ABSTRACT NO. 546, TRAVIS COUNTY, TEXAS; BEING ALL OF LOTS 6–10, BLOCK 15, ALL OF BLOCKS 17, 18, 19 & 20 AND PORTIONS OF THE RIGHTS–OF–WAY OF LANE AVE. AND SAN MARCOS STREET, AS SHOWN ON THE PLAT OF A.E. LANE'S ADDITION AS RECORDED IN VOLUME 2, PAGE 223 OF THE PLAT RECORDS OF TRAVIS COUNTY, TEXAS, (TRACT 1); ALL LOTS 1–5, BLOCK 74, AND A PORTION OF RECTOR STREET AS SHOWN ON THE PLAT OF THE CITY OF MANOR AS RECORDED IN VOLUME "V", PAGE 796 OF THE PLAT RECORDS OF TRAVIS COUNTY, TEXAS, (TRACT 2), A CALLED 0.394 OF ONE ACRE TRACT OF LAND (TRACT 3), ALL CONVEYED UNTO JUNCTION DEVELOPMENT, LLC IN DOCUMENT NUMBER 2022114493 OF THE OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS, AND A CALLED 0.176 OF ONE ACRE TRACT OF LAND AS CONVEYED UNTO JUNCTION DEVELOPMENT, LLC IN DOCUMENT XXXXXX OF THE OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS; SAID 9.202 ACRES OF LAND BEING DESCRIBED AS BLOCK 1 AND BLOCK 2 AS FOLLOWS:

BLOCK 1

BEGINNING AT A 1/2–INCH IRON ROD WITH A CAP STAMPED "BGE INC"SET ON THE SOUTH LINE OF A CALLED 38.645 ACRE TRACT OF LAND (TRACT 6) AS CONVEYED UNTO PETER A. DWYER IN DOCUMENT NUMBER 2022196885 OF THE OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS AT THE COMMON CORNER OF A CALLED 5.0954 ACRE TRACT OF LAND KNOWN AS THE CITY OF MANOR CEMETERY, NO REFERENCE FOUND AND A 17–FOOT ALLEY SHOWN ON SAID PLAT OF A.E. LANE'S ADDITION, FOR THE NORTHEAST CORNER AND POINT OF BEGINNING OF THE HEREIN DESCRIBED TRACT;

THENCE, S 27° 12' 37" W, COINCIDENT WITH THE COMMON LINE OF SAID ALLEY AND SAID CEMETERY TRACT AND SAID 0.176 OF ONE ACRE TRACT, A DISTANCE OF 507.99 FEET TO A 1/2–INCH IRON ROD WITH A CAP STAMPED "BGE INC"SET AT THE SOUTHEAST CORNER OF THE 0.176 OF ONE ACRE TRACT FOR THE SOUTHEAST CORNER OF THE HEREIN DESCRIBED TRACT, FROM WHICH A MAG NAIL WITH A WASHER STAMPED "MANOR CEMETERY S/W CORNER"FOUND BEARS S 27° 12' 37" W, A DISTANCE OF 74.16 FEET;

THENCE, N 79° 48' 42" W, COINCIDENT WITH THE SOUTH LINE OF THE 0.176 OF ONE ACRE TRACT, PASSING AT A DISTANCE OF 29.98 FEET A 1/2–INCH IRON ROD WITH A CAP STAMPED "CHAPARRAL"FOUND AT THE COMMON CORNER OF THE 0.176 OF ONE ACRE TRACT, THE NORTHEAST CORNER OF THE RIGHT–OF–WAY OF TOWNES STREET (R.O.W. ~ CALLED 80') AS SHOWN ON THE AFOREMENTIONED PLAT OF THE CITY OF MANOR AND THE SOUTHEAST CORNER OF THE AFOREMENTIONED BLOCK 74, AND CONTINUING COINCIDENT WITH THE COMMON LINE SAID RIGHT–OF–WAY AND SAID BLOCK 74, A TOTAL DISTANCE OF 279.98 FEET TO A 1/2–INCH IRON ROD WITH A CAP STAMPED "CHAPARRAL"FOUND AT THE INTERSECTION OF THE EAST RIGHT–OF–WAY LINE SAN MARCOS STREET (R.O.W. ~ CALLED 80') AS SHOWN ON THE AFOREMENTIONED PLAT OF A.E. LANE'S ADDITION AND THE NORTH RIGHT–OF–WAY LINE OF TOWNE STREET AT THE SOUTHWEST CORNER OF BLOCK 74 FOR A SOUTH CORNER OF THE HEREIN DESCRIBED TRACT;

THENCE, N 10° 11' 19" E, COINCIDENT WITH THE COMMON LINE OF BLOCK 74 AND THE EAST RIGHT–OF–WAY LINE OF SAID SAN MARCOS STREET, PASSING AT A DISTANCE OF 100.00 FEET A 1/2–INCH IRON ROD WITH A CAP STAMPED "CHAPARRAL"FOUND ON THE SOUTH RIGHT–OF–WAY LINE OF RECTOR STEET (R.O.W. ~ 80') AS SHOWN ON SAID PLAT OF THE CITY OF MANOR AT THE NORTHWEST CORNER OF BLOCK 74 AND CONTINUING OVER AND ACROSS THE RIGHT–OF–WAY FOR RECTOR STREET A TOTAL DISTANCE OF 158.29 FEET TO A 1/2–INCH IRON ROD WITH A CAP STAMPED "CHAPARRAL"FOUND AT THE NORTHEAST INTERSECTION OF THE RIGHT–OF–WAY OF SAID RECTOR STREET AND SAN MARCOS STREET AT THE SOUTHWEST CORNER OF THE AFOREMENTIONED BLOCK 19 FOR A RE–ENTRANT CORNER OF THE HEREIN DESCRIBED TRACT;

THENCE N 79° 44' 43" W, OVER AND ACROSS THE RIGHT–OF–WAY OF SAN MARCOS STREET, PASSING AT A DISTANCE OF 81.59 FEET A 1/2–INCH IRON ROD WITH A CAP STAMPED "CHAPARRAL"FOUND AT THE SOUTHEAST CORNER OF THE AFOREMENTIONED BLOCK 18 AND CONTINUING COINCIDENT WITH THE COMMON LINE OF SAID BLOCK 18 AND SAID RIGHT–OF–WAY A TOTAL DISTANCE OF 332.28 FEET A 1/2–INCH IRON ROD WITH A CAP STAMPED "CHAPARRAL"FOUND AT THE NORTHEAST INTERSECTION OF THE RIGHT–OF–WAY LINE OF RECTOR STREET AND LA GRANGE STREET (R.O.W. ~ CALLED 60') AS SHOWN ON THE AFOREMENTIONED PLAT OF A.E. LANE'S ADDITION FOR THE SOUTHWEST CORNER OF BLOCK 18 AND THE HEREIN DESCRIBED TRACT;

THENCE, N 10° 14' 50" E, COINCIDENT WITH THE COMMON LINE OF BLOCK 18 AND SAID RIGHT–OF–WAY OF LA GRANGE STREET, PASSING AT A DISTANCE OF 250.00 FEET THE NORTHWEST CORNER OF BLOCK 18, CONTINUING OVER AND ACROSS THE RIGHT–OF–WAY OF LANE AVENUE (R.O.W. ~ CALLED 60') AS SHOWN ON SAID PLAT OF A.E. LANE'S ADDITION, PASSING A DISTANCE OF 310.00 FEET THE SOUTHWEST CORNER OF THE AFOREMENTIONED BLOCK 17 AND CONTINUING COINCIDENT WITH THE COMMON LINE OF SAID BLOCK 17 AND SAID EAST RIGHT–OF–WAY OF LA GRANGE STREET, A TOTAL DISTANCE OF 567.05 FEET TO A 1/2–INCH IRON ROD WITH A CAP STAMPED "CHAPARRAL"FOUND ON THE COMMON LINE OF A.E. LANE'S ADDITION AND COTTONWOOD COMMERCIAL SOUTH SECTION ONE AS RECORDED IN VOLUME 94, PAGE 393 OF THE PLAT RECORDS OF TRAVIS COUNTY, TEXAS FOR THE NORTHWEST CORNER OF BLOCK 17 AND THE HEREIN DESCRIBED TRACT;

THENCE, IN A SOUTHEASTERLY DIRECTION, COINCIDENT WITH THE COMMON LINE OF A.E. LANE'S ADDITION, THE AFOREMENTIONED 0.394 OF ONE ACRE TRACT, SAID COTTONWOOD SOUTH SECTION ONE, THE RESUBDIVISION OF LOT 781, AMENDED PLAT OF LOTS 7A AND 7B, RESUBDIVISION OF LOT 7 COTTONWOOD COMMERCIAL SOUTH SECTION ONE AND LOT 68 RESUBDIVISION OF LOT 6 COTTONWOOD COMMERCIAL SOUTH SECTION ONE AS RECORDED IN DOCUMENT NUMBER 200900096 OF THE PLAT RECORDS OF TRAVIS COUNTY, TEXAS, AND THE AFOREMENTIONED 38.645 ACRE TRACT THE FOLLOWING FIVE (5) COURSES:

1) S 62° 26' 34" E, A DISTANCE OF 126.15 FEET TO A 1/2–INCH IRON ROD WITH A CAP STAMPED "BGE INC"SET FOR AN ANGLE POINT OF THE HEREIN DESCRIBED TRACT;

2) S 62° 09' 55" E, A DISTANCE OF 140.75 FEET TO A 1/2–INCH IRON ROD WITH A CAP STAMPED "BGE INC"SET FOR AN ANGLE POINT OF THE HEREIN DESCRIBED TRACT;

3) S 62° 09' 22" E, A DISTANCE OF 62.33 FEET TO A 1/2–INCH IRON ROD WITH A CAP STAMPED "BGE INC"SET FOR AN ANGLE POINT OF THE HEREIN DESCRIBED TRACT;

4) S 62° 19' 21" E, A DISTANCE OF 224.26 FEET TO A 1/2–INCH IRON ROD WITH A CAP STAMPED "WATERLOO"FOUND FOR AN ANGLE POINT OF THE HEREIN DESCRIBED TRACT;

5) S 62° 18' 16" E, A DISTANCE OF 243.88 FEET TO THE POINT OF BEGINNING AND CONTAINING 8.542 ACRES OF LAND, MORE OR LESS.

BLOCK 2

BEGINNING A 1/2–INCH IRON ROD WITH A CAP STAMPED "CHAPARRAL"FOUND AT THE SOUTHEAST CORNER OF THE INTERSECTION OF THE SOUTH RIGHT–OF–WAY LINE OF MURRAY AVENUE (R.O.W. ~ CALLED 60') AND THE EAST RIGHT–OF–WAY LINE OF BURNETT STREET (R.O.W. ~ CALLED 60') BOTH SHOWN ON THE AFOREMENTIONED PLAT OF A.E. LANE'S ADDITION AT THE NORTHWEST CORNER OF THE AFOREMENTIONED BLOCK 15 FOR THE NORTHWEST CORNER AND POINT OF BEGINNING OF THE HEREIN DESCRIBED TRACT;

THENCE, S 79° 44' 43" E, COINCIDENT WITH THE SOUTH RIGHT–OF–WAY LINE OF SAID MURRAY AVENUE AND SAID BLOCK 15, A DISTANCE OF 250.00 FEET TO A MAG NAIL WITH A WASHER STAMPED "CHAPARRAL"FOUND AT THE SOUTHWEST CORNER OF THE INTERSECTION OF THE SOUTH RIGHT–OF–WAY LINE OF MURRAY AVENUE AND THE WEST RIGHT–OF–WAY LINE LA GRANGE STREET (R.O.W. ~ 60') AS SHOWN ON SAID PLAT OF A.E. LANE'S ADDITION FOR THE NORTHEAST CORNER OF BLOCK 15 AND THE HEREIN DESCRIBED TRACT;

THENCE, S 10° 15' 17" W, COINCIDENT WITH THE COMMON LINE OF BLOCK 15 AND SAID WEST RIGHT–OF–WAY LINE A DISTANCE OF 115.00 FEET TO A 1/2–INCH IRON ROD WITH A CAP STAMPED "CHAPARRAL"FOUND AT THE COMMON CORNER OF BLOCK 15 AND A 20' ALLEY AS SHOWN ON THE PLAT OF A.E. LANE'S ADDITION FOR THE SOUTHEAST CORNER OF BLOCK 15 AND THE HEREIN DESCRIBED TRACT;

THENCE, N 79° 44' 43" W, COINCIDENT WITH THE COMMON LINE OF BLOCK 15 AND SAID ALLEY, A DISTANCE OF 250.00 FEET TO A 1/2–INCH IRON ROD WITH A CAP STAMPED "CHAPARRAL"FOUND ON THE AFOREMENTIONED WEST RIGHT–OF–WAY LINE OF BURNETT STREET FOR THE SOUTHWEST CORNER OF BLOCK 15 AND THE HEREIN DESCRIBED TRACT;

THENCE, N 10° 15' 17" E, COINCIDENT WITH THE COMMON LINE OF BLOCK 15 AND SAID RIGHT–OF–WAY LINE A DISTANCE OF 115.00 FEET TO THE POINT OF BEGINNING AND CONTAINING 0.660 OF ONE ACRE (28,750 SQ. FT.) OF LAND, MORE OR LESS.

THE RESULTANT NET ACREAGE BEING 9.202 ACRES OF LAND, MORE OR LESS.

SHORT FORM FINAL PLAT:

THE JUNCTION

RESUBDIVISION OF ALL OF LOTS 6–10, BLOCK 15, ALL OF BLOCKS 17, 18, 19 & 20 AND PORTIONS OF THE RIGHTS–OF–WAY OF E. LANE AVE. AND SAN MARCOS STREET., A.E. LANE ADDITION REPLAT, VOL. 2, PG. 223, P.R.T.C. RESUBDIVISION OF ALL LOTS 1–5, BLOCK 74, AND A PORTION OF RECTOR STREET, THE CITY OF MANOR, VOL. V, PG. 796, P.R.T.C. AND PLATTING OF A CALLED 0.397 OF ONE ACRE TRACT OF LAND, DOC. NO. 2022114493, O.P.R.T.C., AND A REMNANT TRACT OF LAND AS SHOWN ON VOL V, PG. 796, P.R.T.C.

A SUBDIVISION OF 9.202 ACRES OF LAND
LOCATED IN THE JAMES MANOR SURVEY NO. 40 ABSTRACT NO. 546
TRAVIS COUNTY, TEXAS

BGE, Inc.
7330 San Pedro Ave., Suite 202
San Antonio, TX 78216
Tel: 210-581-3600 ● www.bgeinc.com
TBPELS Registration No. F-1046
TBPELS Licensed Surveying Firm No. 10194490

							APR
							DATE
							DESCRIPTION
◁	◁	◁	◁	◁	◁		REV

DESIGNED BY: BAH
REVIEWED BY: AJN
DRAWN BY: BAH

BGE, INC.
7330 San Pedro, Suite 202
San Antonio, TX 78216
TEL: 210-581-3600 www.bgeinc.com
TBPE Registration No. F-1046

THE JUNCTION

FINAL PLAT (SHEET 3 OF 4)

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SHEET 08

G:\TXO\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Shts\C01.30 1065900 FINAL PLAT.dwg Layout: FINAL PLAT (SHEET 3 OF 5) Plotted: 8/17/2023 12:08:51 PM By: Calderon
G:\TXO\Projects\Legacy Performance Capital\10659-00-The Junction\05_Survey\04_Field\Viewers\Plat\10659-00 The Junction Plat.dwg 7/13/2023 2:00 PM Grant Neumann

STATE OF TEXAS §
COUNTY OF TRAVIS §

KNOW ALL MEN BY THESE PRESENTS:

THAT JUNCTION DEVELOPMENT, LLC, BEING THE OWNER OF LOTS 6, 7, 8, 9 AND 10, BLOCK 15; LOTS 1, 2, 3, 4, 5, 6, 7, 8, 9, AND 10, BLOCK 17; LOTS 1, 2, 3, 4, 5, 6, 7, 8, 9, AND 10, BLOCK 18; LOTS 1, 2, 3, 4, 5, 6, 7, 8, 9, AND 10, BLOCK 19; AND LOTS 1, 2, 3, 4 AND 5, BLOCK 20, AND PORTIONS OF THE RIGHT OF WAYS OF E. LANE AVENUE AND SAN MARCOS STREET, A.E. LANE'S ADDITION, (TRACT 1) A SUBDIVISION RECORDED IN VOLUME 2, PAGE 223 OF THE PLAT RECORDS OF TRAVIS COUNTY, TEXAS; LOTS 1, 2, 3, 4, AND 5, BLOCK 74, A PORTION OF RECTOR STREET, TOWN OF MANOR, (TRACT 2) A SUBDIVISION RECORDED IN VOLUME V, PAGE 796 OF THE DEED RECORDS OF TRAVIS COUNTY, TEXAS; AND 0.397 OF ONE ACRE TRACT (TRACT 3), AS CONVEYED TO THEM BY SPECIAL WARRANTY DEED RECORDED IN DOCUMENT NUMBER 2022114493 OF THE OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS, AND A CALLED 0.176 OF ONE ACRE TRACT CONVEYED TO JUNCTION DEVELOPMENT, LLC IN DOCUMENT NUMBER XXXXXXX OFFICIAL PUBLIC RECORDS TRAVIS COUNTY, TEXAS, DO HEREBY SUBDIVIDE 9.202 ACRES OF LAND IN ACCORDANCE WITH THE MAP OR PLAT SHOWN HEREON, PURSUANT TO CHAPTER 212 AND 232 OF THE TEXAS LOCAL GOVERNMENT CODE, TO BE KNOWN AS:

THE JUNCTION

AND DO HEREBY DEDICATE TO THE PUBLIC THE USE OF EASEMENTS SHOWN HEREON, SUBJECT TO ANY RESTRICTIONS HERETOFORE GRANTED AND NOT RELEASED.

WITNESS MY HAND THIS _____ DAY OF _____, 20__.

OWNER:

JUNCTION DEVELOPMENT, LLC, A TEXAS LIMITED LIABILITY COMPANY

BY: VTC TX INVESTEMENTS, INC.
ITS MANAGER

_____
JAVIER ALDRETE, VICE PRESIDENT
JUNCTION DEVELOPMENT, LLC
14747 N NORTHSIGHT BLVD, SUITE 111-431
SCOTTSDALE, AZ 85260-2631

STATE OF TEXAS §
COUNTY OF TRAVIS §

BEFORE ME, THE UNDERSIGNED AUTHORITY, A NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS, ON THIS DAY PERSONALLY APPEARED JAVIER ALDRETE, KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSE AND CONSIDERATIONS THEREIN EXPRESSED.

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

_____
NOTARY PUBLIC, STATE OF TEXAS

_____
PRINT NOTARY'S NAME
MY COMMISSION EXPIRES _____

I, DION P. ALBERTSON, AM AUTHORIZED UNDER THE LAWS OF THE STATE OF TEXAS TO PRACTICE THE PROFESSION OF LAND SURVEYING AND DO HEREBY CERTIFY THAT THIS PLAT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND WAS PREPARED FROM AN ACTUAL ON THE GROUND SURVEY OF THE PROPERTY UNDER MY SUPERVISION AND SHALL COMPLY WITH CHAPTER 482, TRAVIS COUNTY SUBDIVISION REGULATIONS.

PRELIMINARY PENDING FINAL REVIEW

_____ _____
DION P. ALBERTSON, R.P.L.S. DATE
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 4963
BGE, INC.
7330 SAN PEDRO AVE., SUITE 202
SAN ANTONIO, TEXAS 78216

THE PROPERTY LIES IN UNSHADED ZONE "X" (AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN) AND ZONE "A" (SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY 1% ANNUAL CHANCE FLOODING) AS DELINEATED ON THE FLOOD INSURANCE RATE MAP FOR TRAVIS COUNTY, TEXAS AND INCORPORATED AREAS, MAP NUMBER 48453C0485J, REVISED AUGUST 18, 2014.

I, AARON J. NEUMANN, AM AUTHORIZED UNDER THE LAWS OF THE STATE OF TEXAS TO PRACTICE THE PROFESSION OF ENGINEERING AND DO HEREBY CERTIFY THAT THIS PLAT IS FEASIBLE FROM AN ENGINEERING STANDPOINT, AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND SHALL COMPLY WITH CHAPTER 482, TRAVIS COUNTY SUBDIVISION REGULATIONS.

PRELIMINARY PENDING FINAL REVIEW

_____ _____
AARON J. NEUMANN DATE
REGISTERED PROFESSIONAL ENGINEER NO. 114451
BGE, INC.
7330 SAN PEDRO AVE., SUITE 202
SAN ANTONIO, TEXAS 78216

GENERAL NOTES:

1. THIS SUBDIVISION IS LOCATED WITHIN THE CITY OF MANOR CORPORATE CITY LIMITS AS OF THIS DATE. WITNESS MY HAND AND SEAL OF OFFICE OF THE COUNTY CLERK, THIS _____ DAY OF _____, 20__, A.D.
2. BEARING ORIENTATION IS BASED ON THE TEXAS STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE 4203, NAD83. COMBINED SCALE FACTOR = 0.99992562
3. A CITY OF MANOR DEVELOPMENT PERMIT IS REQUIRED PRIOR TO ANY SITE DEVELOPMENT.
4. ALL DRAINAGE EASEMENTS ON PRIVATE PROPERTY SHALL BE MAINTAINED BY THE PROPERTY OWNER OR ASSIGNS.
5. PROPERTY OWNER SHALL PROVIDE FOR ACCESS TO DRAINAGE EASEMENTS AS MAY BE NECESSARY AND SHALL NOT PROHIBIT ACCESS BY GOVERNMENTAL AUTHORITIES.
6. SETBACKS SHALL COMPLY WITH THE CITY'S ZONING ORDINANCE.
7. WATER SERVICE WILL BE PROVIDED BY CITY OF MANOR.
8. WASTEWATER SERVICE WILL BE PROVIDED BY CITY OF MANOR.
9. PERFORMANCE AND MAINTENANCE GUARANTEES AS REQUIRED BY THE CITY.
10. NO BUILDINGS SHALL BE CONSTRUCTED OR MAINTAINED WITHIN THE PUBLIC UTILITIES EASEMENTS OR THE UNDERGROUND STORMWATER FACILITIES EASEMENT WITHOUT THE PRIOR WRITTEN APPROVAL OF THE CITY OF MANOR. THE CITY OF MANOR IS NOT RESPONSIBLE FOR THE DAMAGE TO OR REPLACING ANY PORTIONS OF ANY FENCING, LANDSCAPING OR OTHER IMPROVEMENTS CONSTRUCTED WITHIN ANY OF SUCH EASEMENTS WHICH WERE NOT APPROVED BY THE CITY OF MANOR BEFORE THEIR CONSTRUCTION DUE TO THE NECESSARY AND CUSTOMARY WORK BY THE CITY OF MANOR IN REPAIRING, MAINTAINING, OR REPLACING THE UNDERGROUND PIPES AND RELATED FACILITIES WITHIN SUCH EASEMENTS.
11. PROPERTY OWNERS OF THE LOTS ON WHICH THE PUBLIC UTILITY EASEMENT OR THE UNDERGROUND STORM WATER DRAINAGE FACILITIES EASEMENT ARE LOCATED AS SHOWN ON THIS PLAT SHALL PROVIDE ACCESS TO THE CITY OF MANOR IN ORDER FOR THE CITY OF MANOR TO INSPECT AND MAINTAIN THE UNDERGROUND FACILITIES LOCATED WITHIN ANY OF SUCH EASEMENTS.

ACCEPTED AND AUTHORIZED FOR RECORD BY THE PLANNING AND ZONING COMMISSION OF THE CITY OF MANOR, TEXAS, ON THIS THE _____ DAY OF _____, 20__, A.D.

APPROVED: ATTEST:

_____ _____ _____
LAKESHA SMALL, CHAIRPERSON LLUVIA T. ALMARAZ, CITY SECRETARY

ACCEPTED AND AUTHORIZED FOR RECORD BY THE CITY COUNCIL OF THE CITY OF MANOR, TEXAS, ON THIS THE _____ DAY OF _____, 20__, A.D.

APPROVED: ATTEST:

_____ _____ _____
HONORABLE DR. CHRISTOPHER HARVEY LLUVIA T. ALMARAZ, CITY SECRETARY
MAYOR OF THE CITY OF MANOR, TEXAS

STATE OF TEXAS §
COUNTY OF TRAVIS §

I, DYANA LIMON-MERCADO, CLERK OF TRAVIS COUNTY, TEXAS DO HEREBY CERTIFY THAT THE FOREGOING INSTRUMENT OF WRITING AND ITS CERTIFICATE OF AUTHENTICATION WAS FILED FOR RECORD IN MY OFFICE ON THE _____ DAY OF _____, 20__, A.D.,

AT _____ O'CLOCK __.M., DULY RECORDED ON THE _____ DAY OF _____, 20__, A.D., AT _____ O'CLOCK __.M., IN THE PLAT RECORDS OF SAID COUNTY AND STATE IN DOCUMENT NUMBER _____, OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS.

WITNESS MY HAND AND SEAL OF OFFICE OF THE COUNTY CLERK, THIS _____ DAY OF _____, 20__, A.D.

DYANA LIMON-MERCADO, COUNTY CLERK,
TRAVIS COUNTY, TEXAS

_____
DEPUTY

SHORT FORM FINAL PLAT:

THE JUNCTION

RESUBDIVISION OF ALL OF LOTS 6-10, BLOCK 15, ALL OF BLOCKS 17, 18, 19 & 20 AND PORTIONS OF THE RIGHTS-OF-WAY OF E. LANE AVE. AND SAN MARCOS STREET., A.E. LANE ADDITION REPLAT, VOL. 2, PG. 223, P.R.T.C. RESUBDIVISION OF ALL LOTS 1-5, BLOCK 74, AND A PORTION OF RECTOR STREET, THE CITY OF MANOR, VOL. V, PG. 796, P.R.T.C. AND PLATTING OF A CALLED 0.397 OF ONE ACRE TRACT OF LAND, DOC. NO. 2022114493, O.P.R.T.C., AND A REMNANT TRACT OF LAND AS SHOWN ON VOL V, PG. 796, P.R.T.C.

A SUBDIVISION OF 9.202 ACRES OF LAND
LOCATED IN THE JAMES MANOR SURVEY NO. 40 ABSTRACT NO. 546
TRAVIS COUNTY, TEXAS

BGE, Inc.
7330 San Pedro Ave., Suite 202
San Antonio, TX 78216
Tel: 210-581-3600 • www.bgeinc.com
TBPELS Registration No. F-1046
TBPELS Licensed Surveying Firm No. 10194490

REV	DESCRIPTION	DATE	APR

DESIGNED BY: BAH
REVIEWED BY: AJN
DRAWN BY: BAH

BGE, INC.
7330 San Pedro, Suite 202
San Antonio, TX 78216
TEL: 210-581-3600 www.bgeinc.com
TBPE Registration No. F-1046

THE JUNCTION

FINAL PLAT (SHEET 4 OF 4)

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SHEET 09

G:\TX\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Shts\C01.30 1065900 FINAL PLAT.dwg Layout: FINAL PLAT (SHEET 4 OF 5) Plotted: 8/17/2023 12:08:54 PM By: Calderon
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PROJECT SUMMARY	
MULTI-FAMILY AREA (ACRES)	9.2
NUMBER OF UNITS	95
TOTAL NUMBER OF PARKING SPACES	294
NUMBER OF ADA CAR PARKING SPACES	6
NUMBER OF ADA VAN PARKING SPACES	1
ROW (LF)	3,127
ROW AREA (ACRES)	2.00
TOTAL ACREAGE	9.2

PARKING CALCS	
TOWNHOMES REQUIRE 2 SPACES PER UNIT PLUS 20% SINCE THIS IS A COMMON LOT	
#UNITS * 2 : (95*2)	190
+ ADDITIONAL 20% : (190+(190*20))	228
ADA REQUIRED (BASED ON TABLE 208.2 AT ADA.GOV)	7
VAN PARKING REQUIRED (BASED ON SECTION 208.2.4 AT ADA.GOV)	1
AVAILABLE PARKING 3 PER UNIT PLUS OFF STREET : (95*3+14)	299

N

0 20' 40' 80'

SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- 100-YR FEMA FLOODPLAIN
- CONCRETE SIDEWALK/DRIVEWAY
- FACE OF CURB
- PROPOSED EASEMENT
- PROPOSED LIGHT
- PROPOSED RETAINING WALL (BY OTHERS)
- PROPOSED RETAINING WALL RAIL (BY OTHERS)
- ± 1.28 ACRES OPEN SPACE

CONTROL POINT 3

COUPLAND STATE BANK

COUPLAND STATE BANK

MURRAY AVENUE
60' ROW
VOL. 2, PG. 223, P.R.T.C.

PROPOSED CONNECTION TO EXISTING DRIVEWAY

EXISTING DRIVEWAY

KUSUM HOSPITALITY LLC

CONTROL POINT 4

MANOR VILLAGE CONDOMINIUMS LTD

PROPOSED ENTRANCE GATE (BY OTHERS)

25' WATER EASEMENT

MATCH LINE SEE SHEET 11

MATCH LINE SEE SHEET 12

PROPERTY BOUNDARY

RETAINING WALL (BY OTHERS)

LEAVITT LUMBER COMPANY INC

15' STORM EASEMENT

MAIN AMENITY AREA:
-FIRE FEATURE
-SEATING TABLES AND BBQ AREAS
-HAMMOCK GROVE
-LAWN SPACE FOR GAMES
-CORN HOLE
-FESTOON LIGHTING
-SHADE ELEMENTS
-SCREENING ELEMENTS

BUILDING 1
100' X 56' (8,142 SF)
4 RESIDENTIAL UNITS
3 STORIES

BUILDING 2
100' X 56' (8,142 SF)
4 RESIDENTIAL UNITS
3 STORIES

PROPERTY BOUNDARY

BURNETT STREET
80' ROW
VOL. 2, PG. 223, P.R.T.C.

15' WASTEWATER EASEMENT

BUILDING 3
141' X 56' (12,088 SF)
6 RESIDENTIAL UNITS
3 STORIES

15' STORM EASEMENT

GARY M. WILLIAMS

JULIA K. BAUMGART & JAMES A. POEHL

MARTINIANO P. & BLANCA E. MEJIA

LUE (LIVING UNIT EQUIVALENT) ARE USED TO DETERMINE THE DEMAND FOR WATER AND SEWER SERVICES. 1 TOWNHOUSE UNIT IS EQUAL TO 1 LUE			
UTILITY PROVIDERS			
		TOTAL LUE'S	REQUIRED LUE'S
WATER:	CITY OF MANOR	95	67
SEWER:	CITY OF MANOR	95	67
ELECTRIC:	BLUEBONNET ELECTRIC COOPERATIVE, INC		

FOR TOWNHOMES THE REQUIRED LUE'S IS 70% OF THE TOTAL LUE'S FOR THE SITE ROUNDED TO THE NEAREST WHOLE NUMBER (95*0.7=66.5).

E. LANE AVENUE
60' ROW
VOL. 2, PG. 223, P.R.T.C.

2 SPACES

BUILDING 4
141' X 56' (12,088 SF)
6 RESIDENTIAL UNITS
3 STORIES

BUILDING 6
100' X 56' (8,142 SF)
4 RESIDENTIAL UNITS
3 STORIES

BUILDING 10
124' X 56' (10,405 SF)
5 RESIDENTIAL UNITS
3 STORIES

3 SPACES

RETAINING WALL (BY OTHERS)

PETER A. DWYER

PROPERTY BOUNDARY

NEIGHBORHOOD NODE
-LAWN FOR GAMES
-SEATING BENCH
-SHADE ELEMENT

2 SPACES

15' STORM EASEMENT

LIZETH MONDRAGON

LA GRANGE STREET
80' ROW
VOL. 2, PG. 223, P.R.T.C.

RETAINING WALL (BY OTHERS)

WALTER D. & LOIS K. RANDIG

BUILDING 5
141' X 56' (12,088 SF)
6 RESIDENTIAL UNITS
3 STORIES

BUILDING 7
124' X 56' (10,405 SF)
5 RESIDENTIAL UNITS
3 STORIES

BUILDING 8
124' X 56' (10,405 SF)
5 RESIDENTIAL UNITS
3 STORIES

BUILDING 9
124' X 56' (10,405 SF)
5 RESIDENTIAL UNITS
3 STORIES

RETAINING WALL (BY OTHERS)

RETAINING WALL

BUILDING 11
141' X 56' (12,088 SF)
6 RESIDENTIAL UNITS
3 STORIES

15' STORM EASEMENT

BUILDING 12
80' X 56' (6,459 SF)
3 RESIDENTIAL UNITS
2 STORIES

BUILDING 13
108' X 56' (8,722 SF)
4 RESIDENTIAL UNITS
3 STORIES

BUILDING 14
141' X 56' (12,088 SF)
6 RESIDENTIAL UNITS
3 STORIES

15' WASTEWATER EASEMENT

PRESERVE OVERLOOK AREA
-SEATING BENCHES
-OVERLOOK AREA WITH RAILING
-TRELLIS
-SHADE ELEMENT

100 YR FEMA FLOODPLAIN

NEIGHBORHOOD NODE:
-OVERLOOK AREA

RETAINING WALL (BY OTHERS)

BUILDING 15
100' X 56' (8,142 SF)
4 RESIDENTIAL UNITS
3 STORIES

BUILDING 16
80' X 56' (4,459 SF)
3 RESIDENTIAL UNITS
2 STORIES

BUILDING 17
108' X 56' (8,142 SF)
4 RESIDENTIAL UNITS
3 STORIES

3 SPACES

RETAINING WALL

PROPERTY BOUNDARY

VARIABLE WIDTH UTILITY EASEMENT

CITY OF MANOR CEMETARY

RECTOR STREET
60' ROW
DOC. NO. 201800087, O.P.R.T.C.
VARIABLE WIDTH AS MONUMENTED

CONTROL POINT 2

PROPERTY BOUNDARY

RETAINING WALL (BY OTHERS)

BUILDING 18
124' X 56' (10,405 SF)
5 RESIDENTIAL UNITS
3 STORIES

BUILDING 19
124' X 56' (10,405 SF)
5 RESIDENTIAL UNITS
3 STORIES

BUILDING 20
124' X 56' (10,405 SF)
5 RESIDENTIAL UNITS
3 STORIES

4 SPACES

MICHAEL E. DYE

VALERIE ANN DYE

MATCH LINE SEE SHEET 11

MATCH LINE SEE SHEET 12

BUILDING NUMBER	CONSTRUCTION TYPE	TOTAL BUILDING (SF)	BUILDING HEIGHT (FT)
1	TYPE V-B	8,142	21.25
2	TYPE V-B	8,142	21.25
3	TYPE V-B	12,088	22.90
4	TYPE V-B	12,088	22.90
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6	TYPE V-B	8,142	21.25
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8	TYPE V-B	10,405	22.90
9	TYPE V-B	10,405	22.90
10	TYPE V-B	10,405	22.90
11	TYPE V-B	12,088	22.90
12	TYPE V-B	6,459	21.25
13	TYPE V-B	8,142	22.90
14	TYPE V-B	12,088	22.90
15	TYPE V-B	8,142	21.25
16	TYPE V-B	6,459	21.25
17	TYPE V-B	8,142	21.25
18	TYPE V-B	10,405	22.90
19	TYPE V-B	10,405	22.90
20	TYPE V-B	10,405	22.90

OWNER/DEVELOPER:
JAKE JALUFKA
LEGACY PERFORMANCE CAPITAL
2101 LAKEWAY BLVD, SUITE 130
AUSTIN, TEXAS 78734

ENGINEER:
AARON NEUMANN, P.E.
BGE, INC., TBPE-1046
7330 SAN PEDRO AVENUE, SUITE 202 SAN ANTONIO, TEXAS 78216

FEMA FIRM PANEL:
48453C0485J, EFF. AUG. 18, 2014.

BLUEBONNET ELECTRIC COOPERATIVE:
690 TEXAS 71 W., BLDG 1
BASTROP, TEXAS 78602

CITY OF MANOR:
105 E. EGGLESTON ST.
MANOR, TEXAS 78653

	APR	DATE	DESCRIPTION	REV

DESIGNED BY: JDC
REVIEWED BY: AJN
DRAWN BY: JDC

BGE

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San Antonio, TX 78216
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TBPE Registration No. F-1046

THE JUNCTION

OVERALL SITE PLAN

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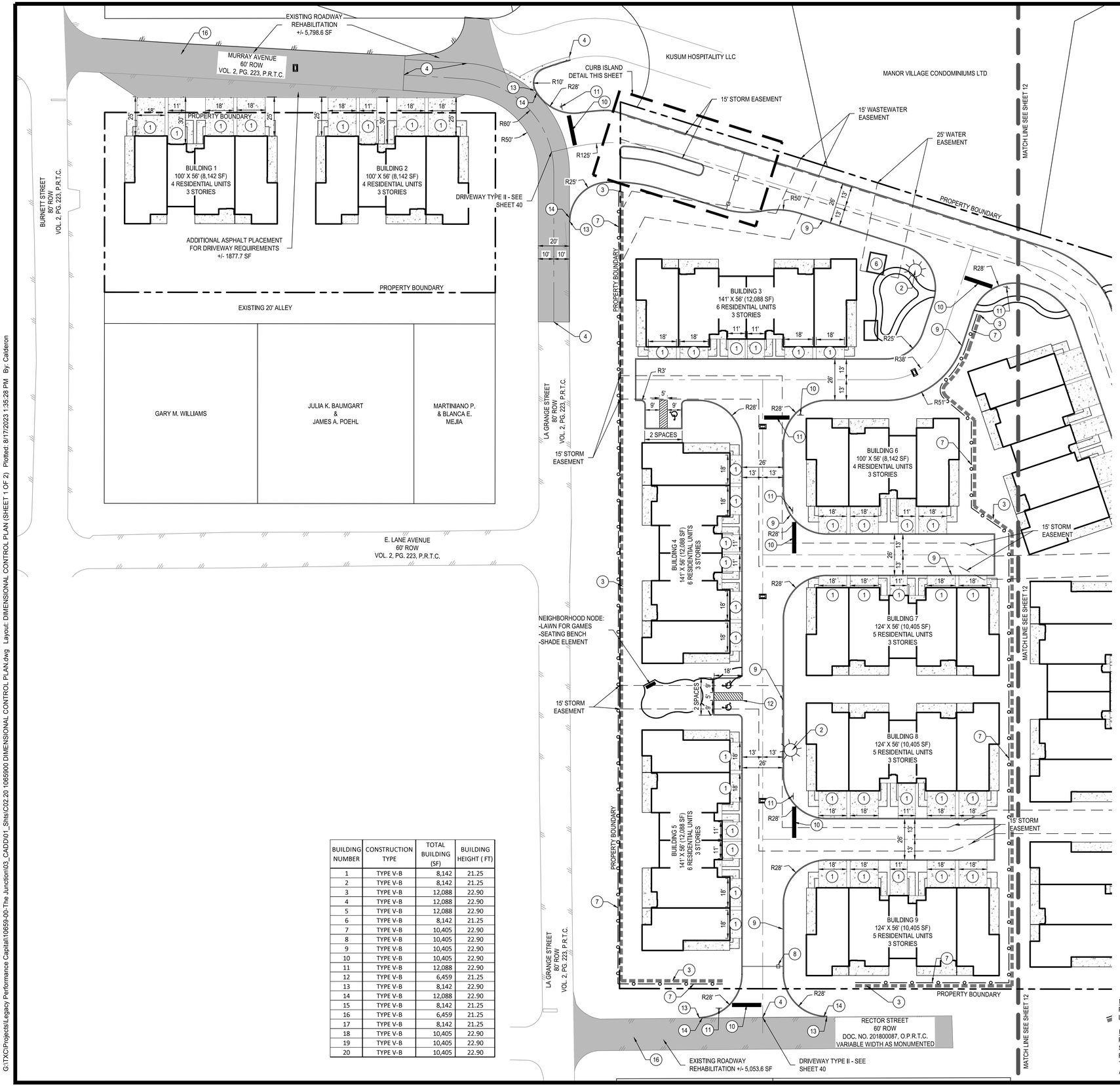
SHEET
10

G:\TX\C\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Shts\C02.00 1065900 OVERALL SITE PLAN.dwg Layout: OVERALL SITE PLAN Plotted: 8/17/2023 1:35:23 PM By: Calderon



0 15' 30' 60'

SCALE: 1" = 30'

LEGEND

- PROPERTY BOUNDARY
- 100-YR FEMA FLOODPLAIN
- CONCRETE SIDEWALK/DRIVEWAY
- FACE OF CURB
- PROPOSED EASEMENT
- PROPOSED LIGHT
- PROPOSED RETAINING WALL (BY OTHERS)
- PROPOSED RETAINING WALL RAIL (BY OTHERS) PAVEMENT TO BE REHABILITATED (SEE NOTE BELOW)
- PROPOSED PAVEMENT OUTSIDE PROPERTY

KEY NOTES

1	CONCRETE DRIVEWAY SEE SHEET 40	13	BEGIN TRANSITION TO FLUSH CURB SEE SHEET 38
2	STREET LIGHT (BY OTHERS)	14	END TRANSITION TO FLUSH CURB SEE SHEET 38
3	RETAINING WALL (BY OTHERS)	15	26' LF - SAWTOOTH CURB - SEE SHEET 41
4	SAWCUT AND TIE INTO EXISTING PAVEMENT	16	EXISTING PAVEMENT TO BE REHABILITATED - SEE NOTE THIS SHEET
5	END OF ROAD BARRICADE - SEE SHEET 38	17	CONCRETE - PAVEMENT TRANSITION - SEE SHEET 41
6	10'X12' WATER VAULT - SEE SHEET 50	18	FIRE CONNECTION
7	RETAINING WALL HAND RAIL (BY OTHERS)	19	
8	KNOX BOX (BY OTHERS)	20	
9	CONCRETE CURB - SEE SHEET 38	21	
10	WHITE 24" STOP BAR - SEE SHEET 38	22	
11	STOP SIGN - SEE SHEET 40	23	
12	PARKING STRIPING	24	

BUILDING NUMBER	CONSTRUCTION TYPE	TOTAL BUILDING (SF)	BUILDING HEIGHT (FT)
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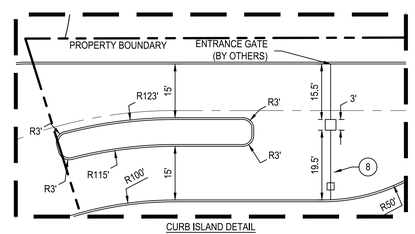
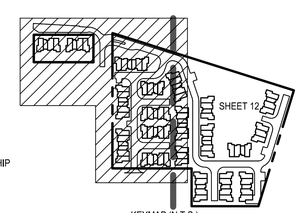
CITY OF MANOR:
105 E. EGGLESTON ST.
MANOR, TEXAS 78653



CURB ISLAND DETAIL
1" = 20'



KEYMAP (N.T.S.)

NOTE*
PLEASE REFERENCE OTHERS FOR RETAINING WALL AND LANDSCAPE ARCHITECTURE PLANS.

PAVEMENT REHABILITATION:
PAVEMENT REHABILITATION SHALL BE CONDUCTED VIA CHIP SEAL RESURFACING. A TWO STEP PROCESS WHICH FEATURES AN APPLICATION OF ASPHALT EMULSION AND THEN A LAYER OF CRUSHED ROCK TO THE EXISTING ASPHALT PAVEMENT SURFACE.

APR | DATE | DESCRIPTION | REV

DESIGNED BY: JDC
REVIEWED BY: AJN
DRAWN BY: JDC

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TBPE Registration No. F-1046

THE JUNCTION
DIMENSIONAL CONTROL PLAN (SHEET 1 OF 2)

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SHEET 11

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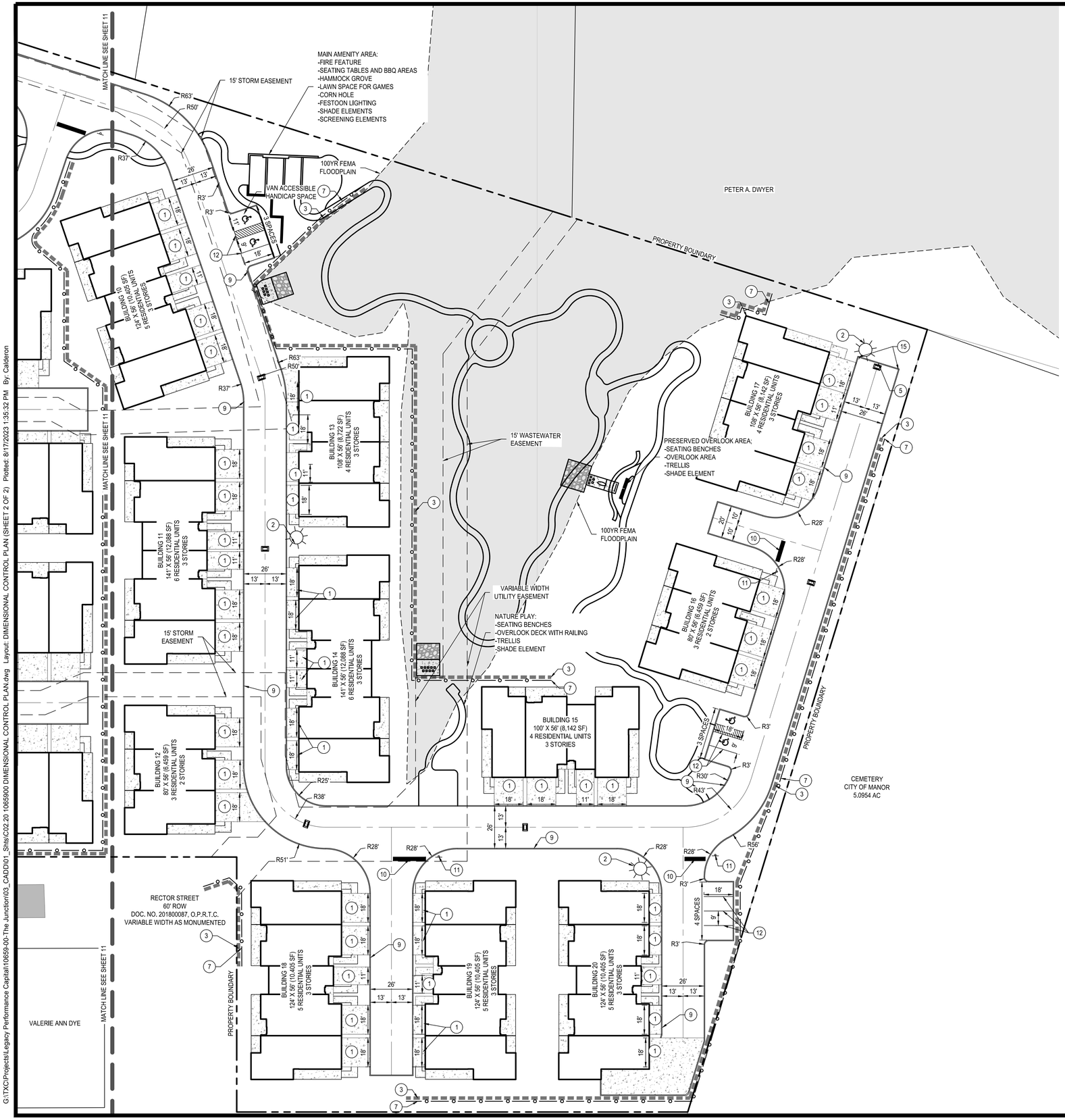

0 15' 30' 60'

SCALE: 1" = 30'

LEGEND

- PROPERTY BOUNDARY
- 100-YR FEMA FLOODPLAIN
- CONCRETE SIDEWALK/DRIVEWAY
- FACE OF CURB
- PROPOSED EASEMENT
- PROPOSED LIGHT
- PROPOSED RETAINING WALL (BY OTHERS)
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BUILDING NUMBER	CONSTRUCTION TYPE	TOTAL BUILDING (SF)	BUILDING HEIGHT (FT)
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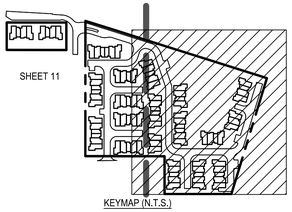

KEYMAP (N.T.S.)

							APR
							DATE
							DESCRIPTION
◁	◁	◁	◁	◁	◁		REV

DESIGNED BY: JDC
REVIEWED BY: AJN
DRAWN BY: JDC

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THE JUNCTION
DIMENSIONAL CONTROL PLAN (SHEET 2 OF 2)

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SHEET 12

G:\TXC\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Shts\C02.20 1065900 DIMENSIONAL CONTROL PLAN.dwg Layout: DIMENSIONAL CONTROL PLAN (SHEET 2 OF 2) Plotted: 8/17/2023 1:35:32 PM By: Calderon

COMPLIANCE CHECKLIST:

1. PERIMETER CONTROLS: INSTALL ESC'S (EROSION SEDIMENT CONTROLS) ALONG THE BACK OF THE CURB AND ALONG THE LOT LINE OF ADJACENT PROPERTIES, WHICH ARE DOWNHILL AND RECEIVE RUNOFF FROM YOUR LOT. FOLLOWING SIDEWALK INSTALLATION, ESC'S SHOULD BE REMOVED TO THE BACK OF THE SIDEWALK TO PREVENT SEDIMENT FROM REACHING THE SIDEWALK. MAINTAIN ESC'S TO ENSURE PROPER FUNCTION, INCLUDING REPAIR OR REPLACEMENT OF TORN, DEGRADED OR OTHERWISE INEFFECTIVE MATERIALS. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE PROTECTION.

2. STOCKPILES: INSTALL SEDIMENT CONTROLS AROUND STOCKPILES TO PREVENT SEDIMENT FROM REACHING THE STREET AND ADJACENT PROPERTIES. LOCATE STOCKPILES AWAY FROM THE STREET, PROPERTY LINES AND DRAINAGE WAYS.

3. LOT ACCESS: REQUIRED FOR EACH INDIVIDUAL LOT. MAINTAIN A SURFACE SUITABLE FOR PARKING AND UNLOADING TO PREVENT THE TRACKING OF MUD AND ROCK ONTO THE STREET. A MINIMUM 6-INCH DEPTH OF 3- TO 5-INCH AGGREGATE IS SUGGESTED. ALL VEHICLES THAT ACCESS THE LOT MUST USE THE CONSTRUCTION ENTRANCE. ANY SOILS THAT ARE TRUCKED ONTO THE STREET MUST BE REMOVED BY THE END OF THE DAY.

4. INTERMEDIATE CONTROL: LONG OR STEEP DRAINAGE PATHS MAY REQUIRE INTERMEDIATE OR INTERIOR ESC'S TO HELP SLOW THE FLOW OF RUNOFF. FAILURE OF PERIMETER CONTROLS DUE TO THE FORCE OF RUNOFF OFTEN DETERMINE THE NEED FOR INTERMEDIATE CONTROLS.

5. HOUSEKEEPING: PROVIDE ADEQUATE SANITARY FACILITIES AND TRASH/REFUSE BINS.

EROSION AND SEDIMENTATION NOTES:

1. ALL SWPPP AND BEST MANAGEMENT PRACTICES (BMPS) SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH TEXAS COMMISSION ON ENVIRONMENTAL QUALITY.
2. SWPPP SIGN SHALL BE DISPLAYED AT ENTRANCE/EXIT LOCATION. ENTRANCE/EXIT, CONCRETE WASHOUT PIT AND CONSTRUCTION EQUIPMENT STORAGE AREA ARE TO BE DETERMINED IN THE FIELD.
3. CONTRACTOR MAY MODIFY STORM WATER CONTROLS TO ACHIEVE THE DESIRED INTENT. ANY CHANGES ARE TO BE NOTED, SIGNED AND DATED BY THE RESPONSIBLE PARTY IN THE SWPPP BOOK.
4. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL STORM WATER CONTROLS.
5. CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER OF ANY QUESTIONS REGARDING THE INTENT OF THIS PLAN.
6. CONTRACTOR IS REQUIRED TO FILE NOI'S (NOTICE OF INTENT) AND NOT'S (NOTICE OF TERMINATION) FOR THIS PROJECT. REFER TO NPDES FOR PROPER POSTING REQUIREMENTS AND DOCUMENTS.
7. CONTRACTOR SHALL PERFORM INSPECTIONS OF CONTROLS ONCE EVERY FOURTEEN (14) DAYS AND WITHIN TWENTY-FOUR (24) HOURS OF A STORM EVENT OF 0.5 INCHES OR GREATER OR AS AN ALTERNATIVE METHOD CONTRACTOR SHALL PERFORM INSPECTIONS AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS.
8. A COPY OF THIS PLAN, SWPPP BINDER AND INSPECTION REPORTS MUST REMAIN AT THE CONSTRUCTION SITE AT ALL TIMES.
9. BARE SOILS SHALL HAVE STABILIZATION MEASURES INSTALLED WITHIN 14 CALENDAR DAYS AFTER FINAL GRADING OR WHERE CONSTRUCTION ACTIVITY HAS TEMPORARILY CEASED FOR MORE THAN 21 DAYS.
10. ALL DISTURBED OR EXPOSED AREAS SUBJECT TO EROSION SHALL BE STABILIZED WITH MULCH FOR TEMPORARY VEGETATIVE COVER. NO AREA, SUBJECT TO EROSION SHALL BE LEFT DISTURBED AND UNSUITABLE FOR PERIODS LONGER THAN IS ABSOLUTELY NECESSARY TO CARRY OUT THAT PORTION OF THE CONSTRUCTION WORK, OR 1 WEEK AFTER THE SOIL HAS BEEN DISTURBED, WHICHEVER IS LESS.
11. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM PRODUCTS BASED UPON TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
12. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO ADJACENT ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
13. INSTALL SILT FENCES AS SHOWN ON THE PLANS AND WHEREVER STORM WATER COLLECTS OR EXITS THE PROJECT. INSTALL ROCK BERM DIKES AT ALL CURB NLETS AS SHOWN ON THE PLANS.
14. BACKFILL THE UTILITY TRENCHES IN A TIMELY MANNER TO MINIMIZE EROSION.
15. SOIL STOCKPILES LEFT OVER A PERIOD OF SEVEN DAYS SHALL BE COVERED WITH SOIL RETENTION BLANKETS AND SILT FENCE SHALL BE ERECTED AROUND THE PERIMETER OF STOCKPILE MATERIAL.
16. WHEN THE PROJECT AREA HAS STABILIZED AND ALL CONSTRUCTION IS COMPLETED AND ACCEPTED, REMOVE ALL CONTROLS.
17. FINAL STABILIZATION IS ACCOMPLISHED WHEN VEGETATION AT THE DISTURBED AREAS HAS ACHIEVED 70% OF THE BACKGROUND NATIVE VEGETATION.
18. CONTRACTOR TO COORDINATE WITH THE OWNER'S REPRESENTATIVE FOR LOCATION OF STAGING AREA.
19. ACCESSIBLE SYMBOL IS FOR REFERENCE ONLY. DO NOT PROVIDE MARKING ON SPACE.

CONTRACTOR/BUILDERS RESPONSIBILITY:

1. INSTALL NEEDED EROSION AND SEDIMENT CONTROL PRACTICES PRIOR TO ANY LAND DISTURBANCE TO PREVENT EXCESSIVE SEDIMENT FROM LEAVING THE SITE.
2. CONTACT A T.C.E.Q. INSPECTOR TO ANSWER ANY QUESTIONS REGARDING SITE PLAN AND TO REVIEW A COMPLETED WORKSHEET.
3. PERIODIC INSPECTION AND MAINTENANCE ARE VITAL TO THE PERFORMANCE OF EROSION AND SEDIMENT CONTROLS. IT IS RECOMMENDED THAT ALL TEMPORARY EROSION CONTROLS BE INSPECTED WEEKLY AND AFTER EVERY RAINFALL.
4. MAINTENANCE: ESC (EROSION SEDIMENT CONTROLS) SHOULD BE ROUTINELY INSPECTED AND MAINTAINED UNTIL SITE IS PERMANENTLY VEGETATED. SOMETIMES ROUTINE INSPECTIONS MAY SHOW A NEED FOR ADJUSTMENTS OR ADDITIONAL ESC'S.
5. CONTACT A T.C.E.Q. INSPECTOR WHEN CONSTRUCTION IS COMPLETE AND THE SITE HAS BEEN STABILIZED WITH PERMANENT VEGETATION OR OTHER APPROVED METHODS.
6. REVEGETATE THE SITE: PREVENT EROSION ON INDIVIDUAL LOTS WITH GROUND COVER. EXISTING TREES AND VEGETATION SHOULD BE PROTECTED TO HELP MAINTAIN A STABLE GROUND SURFACE AND PREVENT LOSS OF VALUABLE TOPSOIL. EROSION CONTROL BLANKETS, MATTING AND MULCHES CAN HELP STABILIZE THE AREA UNTIL PERMANENT VEGETATION IS ESTABLISHED. THE SITE NEEDS TO HAVE AT LEAST 80 PERCENT COVER OF PERMANENT VEGETATION BEFORE ESC'S CAN BE REMOVED.

0 30' 60' 120'

SCALE: 1" = 60'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR 5' CONTOUR
- EXISTING MINOR 1' CONTOUR
- PROPOSED MAJOR 5' CONTOUR
- PROPOSED MINOR 1' CONTOUR
- LIMITS OF CONSTRUCTION
- SILT FENCE
- INLET PROTECTION
- ROCK BERM
- FLOW ARROW
- CONSTRUCTION ENTRANCE
- CONCRETE WASHOUT AREA
- CONCRETE STAGING AREA
- 100 YEAR FEMA FLOODPLAIN

ALL DISTURBED AREAS SHALL BE PERMANENTLY SEEDED OR OTHERWISE STABILIZED WITHIN 14 CALENDAR DAYS AFTER FINAL GRADING OR WHERE TEMPORARY CONSTRUCTION ACTIVITY HAS CEASED FOR MORE THAN 21 DAYS

REV	DESCRIPTION	DATE	APR

DESIGNED BY: SAR
REVIEWED BY: AJN
DRAWN BY: SAR

BGE, INC.
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San Antonio, TX 78216
TEL: 210-581-3600 www.browngay.com
TBPE Registration No. F-1046

THE JUNCTION

EROSION CONTROL PLAN

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SHEET 13

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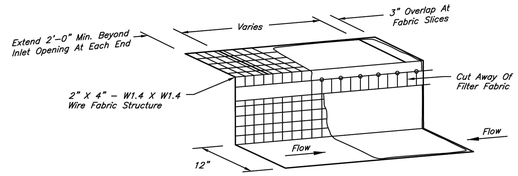

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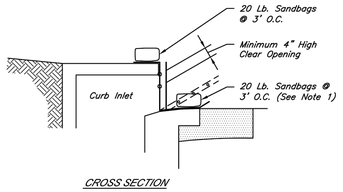
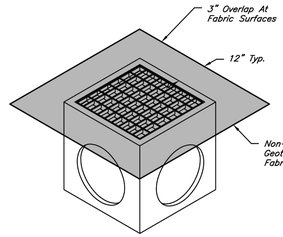


CROSS SECTION

Notes:

1. *Where Minimum Clearances Cause Traffic To Drive In The Gutter, The Contractor May Substitute A 1" X 4" Board Secured With Concrete Nails 3' O.C. Nailed Into The Gutter In Lieu Of Sandbags To Hold The Filter Dike In Place. Upon Removal, Clean Any Dirt/Debris From Nailing Locations, Apply Chemical Sanding Agent And Apply Non-shrink Grout Flush With Surface Of Gutter.*
2. *A Section Of Filter Fabric Shall Be Removed As Shown On This Detail Or As Directed By The Engineer Or Designated Representative. Fabric Must Be Secured To Wire Backing With Clips Or Hog Rings At This Location.*
3. *Daily Inspection Shall Be Made By The Contractor And Silt Accumulation Must Be Removed When Depth Reaches 2".*
4. *Contractor Shall Monitor The Performance Of Inlet Protection During Each Rainfall Event And Immediately Remove The Inlet Protections If The Storm-water Begins To Overtop The Curb.*
5. *Inlet Protections Shall Be Removed As Soon As The Source Of Sediment Is Stabilized.*

Approved 5/5/2021 Date	CITY OF MANOR	Detail No. EC-09
	CURB INLET PROTECTION	EC-09.dwg
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)	CONSTRUCTION STANDARD DETAILS	CITY OF MANOR EST. 1872 TEXAS



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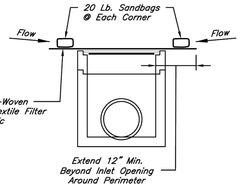
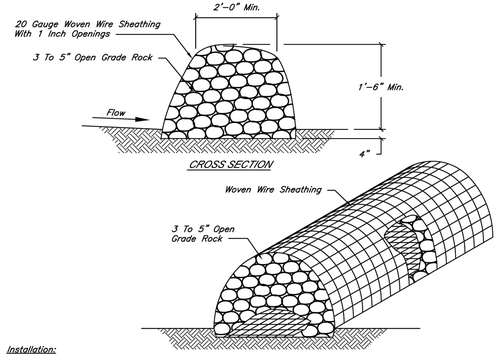


CROSS SECTION

Notes:

1. *Daily Inspection Shall Be Made By The Contractor And Silt Accumulation Must Be Removed When Depth Reaches 2".*
2. *Contractor Shall Monitor The Performance Of Inlet Protection During Each Rainfall Event And Immediately Clean The Inlet Protection If Excessive Ponding Occurs.*
3. *Inlet Protections Shall Be Removed As Soon As The Source Of Sediment Is Stabilized.*

Approved 5/5/2021 Date	CITY OF MANOR	Detail No. EC-10
	AREA INLET PROTECTION	EC-10.dwg
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)	CONSTRUCTION STANDARD DETAILS	CITY OF MANOR EST. 1872 TEXAS



CROSS SECTION

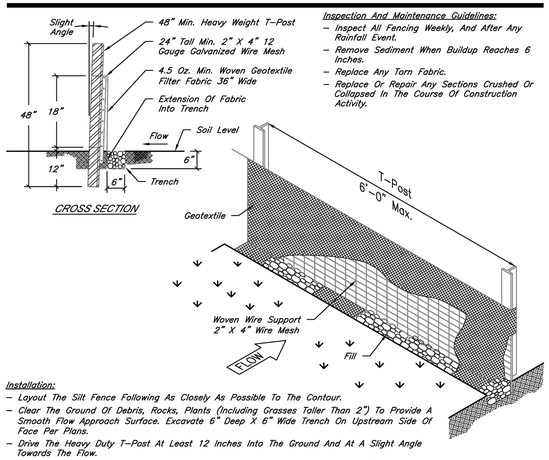
Installation:

- *Layout The Rock Berm Following As Closely As Possible To The Contour.*
- *Clear The Ground Of Debris, Rocks Or Plants That Will Interfere With Installation.*
- *Place Woven Wire Fabric On The Ground Along The Proposed Installation With Enough Overlap To Completely Encircle The Finished Size Of The Berm.*
- *Place The Rock Along The Center Of The Wire To The Designated Height.*
- *Wrap The Structure With The Previously Placed Wire Mesh Secure Enough So That When Walked Across The Structure Retain It's Shape.*
- *Secure With Tie Wire.*
- *The Ends Of The Berm Should Be Tied Into Existing Upslope Grade And The Berm Shall Be Buried In A Trench Approx. 4 Inches Deep To Prevent Failure Of The Control.*
- *The Rock Berm Shall Be Left In Place Until All Upstream Areas Are Stabilized And Accumulated Silt Removed.*

Inspection And Maintenance Guidelines:

- *Inspection Shall Be Made Weekly And After Each Rainfall Event By The Responsible Party. For Installations In Streambeds, Additional Daily Inspections Shall Be Made.*
- *Remove Sediment And Other Debris When Buildup Reaches 6 Inches And Dispose Of The Accumulated Silt In An Approved Manner.*
- *Repair Any Loose Wire Sheathing.*
- *The Berm Shall Be Reshaped As Needed During Inspection.*
- *The Berm Shall Be Replaced When The Structure Ceases To Function As Intended Due To Silt Accumulation Among The Rocks, Washout, Construction Traffic Damage, Etc.*

Approved 5/5/2021 Date	CITY OF MANOR	Detail No. EC-02
	ROCK BERM	EC-02.dwg
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)	CONSTRUCTION STANDARD DETAILS	CITY OF MANOR EST. 1872 TEXAS



CROSS SECTION

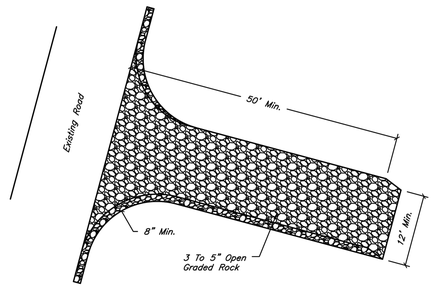
Inspection And Maintenance Guidelines:

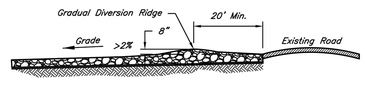
- *Inspect All Fencing Weekly, And After Any Rainfall Event.*
- *Remove Sediment When Buildup Reaches 6 Inches.*
- *Replace Any Torn Fabric.*
- *Replace Or Repair Any Sections Crushed Or Collapsed In The Course Of Construction Activity.*

Installation:

- *Layout The Silt Fence Following As Closely As Possible To The Contour.*
- *Clear The Ground Of Debris, Rocks, Plants (Including Grasses Taller Than 2") To Provide A Smooth Flow Approach Surface. Excavate 6" Deep X 6" Wide Trench On Upstream Side Of Face Per Plans.*
- *Drive The Heavy Duty T-Post At Least 12 Inches Into The Ground And At A Slight Angle Towards The Flow.*
- *Attach The 2" X 4" 12 Gauge Welded Wire Mesh To The T-Post With 11 1/2 Gauge Galvanized T-Post Clips. The Top Of The Wire To Be 18" Min. Above Ground Level. The Welded Wire Mesh To Be Overlapped 6" And Tied At Least 6 Times With Hog Rings.*
- *The Silt Fence Shall Be Securely Fastened To Each Post Or To Wire Mesh, Which In Turn Is Securely Fastened To The Posts.*
- *The Silt Fence Shall Be Installed With A Skirt A Minimum Of 6" Wide Placed On The Uphill Side Of The Fence Inside Excavated Trench. The Fabric To Overlap The Top Of The Wire By 1".*
- *Anchor The Silt Fence By Backfilling With Excavated Dirt And Rocks (Not Larger Than 2").*
- *Geotextile Splices Shall Be A Minimum Of 18" Wide Attached In At Least 6 Places. Splices In Concentrated Flow Areas Will Not Be Accepted.*
- *Silt Fence Shall Be Removed When The Site Is Completely Stabilized So As Not To Block Or Impede Storm Flow Or Drainage.*

Approved 5/5/2021 Date	CITY OF MANOR	Detail No. EC-01
	SILT FENCE	EC-01.dwg
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)	CONSTRUCTION STANDARD DETAILS	CITY OF MANOR EST. 1872 TEXAS





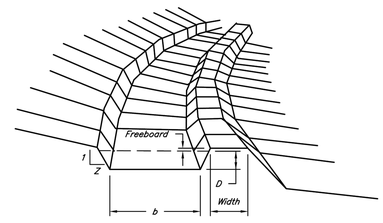
Installation:

- *Clear The Ground Of Debris, Rocks Or Plants That Will Interfere With Installation.*
- *Grade The Area For The Entrance To Flow Back On To The Construction Site.*
- *Place Rock As Approved By The City Engineer.*
- *Entrance Not To Be Less Than 8" Thick.*

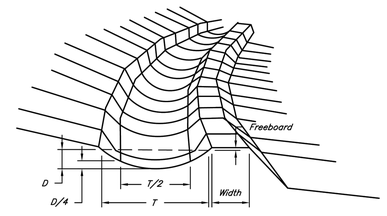
Inspection And Maintenance Guidelines:

- *The Entrance Shall Be Maintained In A Condition, Which Will Prevent Tracking Or Flowing Of Sediment Onto Public Rights-Of-Way. This May Require Periodic Top Dressing With Additional Stone As Conditions Demand And Repair And/Or Cleanout Of Any Measures Used To Trap Sediment.*
- *All Sediment Spilled, Dropped, Washed Or Tracked Onto Public Rights-Of-Way Shall Be Removed Immediately By Contractor.*
- *When Necessary, Wheels Shall Be Cleaned To Remove Sediment Prior To Entrance Onto Public Rights-Of-Way.*
- *When Washing Is Required, It Shall Be Done On An Area Stabilized With Crushed Stone That Drains Into An Approved Sediment Trap Or Sediment Basin.*
- *All Sediment Shall Be Prevented From Entering Any Storm Drain, Ditch Or Water Course By Using Approved Methods.*

Approved 5-5-2021 Date	CITY OF MANOR	Detail No. EC-03
	STABILIZED CONSTRUCTION ENTRANCE	EC-03.dwg
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)	CONSTRUCTION STANDARD DETAILS	CITY OF MANOR EST. 1872 TEXAS



TRAPEZOIDAL CROSS SECTION



PARABOLIC CROSS SECTION

Approved 5-5-2021 Date	CITY OF MANOR	Detail No. EC-05
	DIVERSION	EC-05.dwg
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)	CONSTRUCTION STANDARD DETAILS	CITY OF MANOR EST. 1872 TEXAS

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								DATE
								DESCRIPTION
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DESIGNED BY: JDC

REVIEWED BY: AJN

DRAWN BY: JDC

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TBPE Registration No. F-1046

THE JUNCTION

EROSION CONTROL DETAILS (SHEET 1 OF 2)

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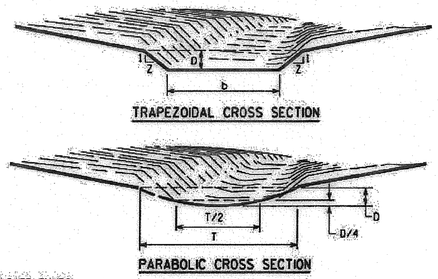
SHEET 14



STANDARD SYMBOL

GW

GENERAL NOTES:

1. EXCEPT AS INDICATED ON THE DRAWINGS OR DIRECTED BY THE ENGINEER OR DESIGNATED REPRESENTATIVE, ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE WATERWAY.

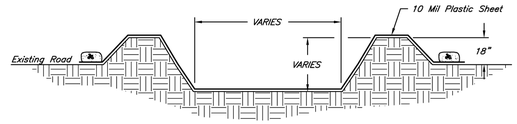
2. THE WATERWAY SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, TYPICAL SECTIONS AND CROSS-SECTION INDICATED ON THE DRAWINGS AND SHALL BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES, WHICH COULD IMPEDE NORMAL FLOW.

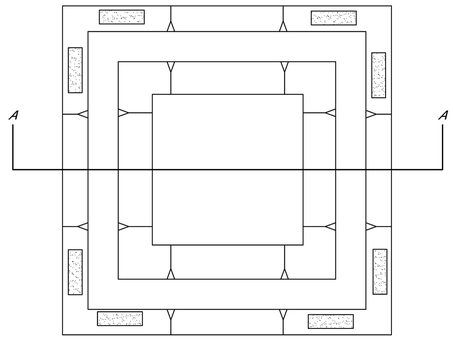
3. FILL SHALL CONFORM TO STANDARD SPECIFICATION ITEM NO. 132S, "EMBANKMENT".

4. EARTHEN CHANNELS SHALL ALWAYS BE STABILIZED WITH THE APPROPRIATE SOIL RETENTION BLANKET WHICH SHALL CONFORM TO STANDARD SPECIFICATION ITEM NO. 60SS, "SOIL RETENTION BLANKET".

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	GRASS LINED SWALE	
10/30/09 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 627S-1

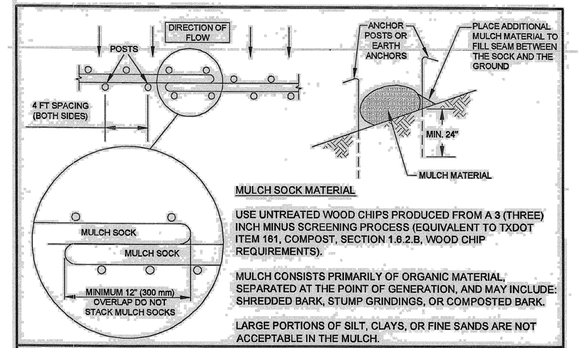
CROSS SECTION A-A





Notes:
1. Set Length And Width As Necessary To Provide Adequate Space For Washout Activities.
2. If Restricted By Depth Due To Below Grade Appurtenances, Place Earthen Berms At Grade.
3. Use Excavated Material To Create Earthen Berms Surrounding The Area To Be Designated As A Concrete Washout.
4. Place 10Mil Or Greater Plastic Sheeting.
5. Secure Sheeting On Outside Of Berm Area Using Sand Bags Or Rock Equivalent.

Approved 5-5-2021 Date	CITY OF MANOR CONCRETE WASHOUT	Detail No. EC-04 EC-04.dwg
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)	CONSTRUCTION STANDARD DETAILS	CITY OF MANOR EST. 1872 TEXAS



MULCH SOCK MATERIAL

USE UNTREATED WOOD CHIPS PRODUCED FROM A 3 (THREE) INCH MINUS SCREENING PROCESS (EQUIVALENT TO TXDOT ITEM 161, COMPOST, SECTION 1.6.2.B, WOOD CHIP REQUIREMENTS).

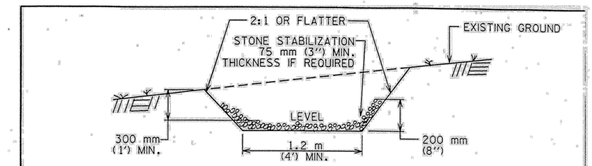
MULCH CONSISTS PRIMARILY OF ORGANIC MATERIAL, SEPARATED AT THE POINT OF GENERATION, AND MAY INCLUDE: SHREDDED BARK, STUMP GRINDINGS, OR COMPOSTED BARK.

LARGE PORTIONS OF SILT, CLAYS, OR FINE SANDS ARE NOT ACCEPTABLE IN THE MULCH.

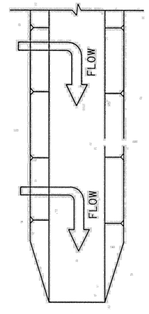
NOTES:

1. STEEL OR WOOD POSTS WHICH SUPPORT THE MULCH SOCK SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 600mm (24 inches). IF WOOD POSTS CANNOT ACHIEVE 600mm (24 inches) DEPTH, USE STEEL POSTS. EARTH ANCHORS ARE ALSO ACCEPTABLE.
2. THE TOE OF THE MULCH SOCK SHALL BE PLACED SO THAT THE MULCH SOCK IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. IN ORDER TO PREVENT WATER FROM FLOWING BETWEEN THE JOINTS OF ADJACENT ENDS OFMULCH SOCKS, LAP THE ENDS OF ADJACENT MULCH SOCKS A MINIMUM OF 300mm (12 inches).
3. MULCH MATERIAL MUST BE FREE OF REFUSE, PHYSICAL CONTAMINANTS, AND MATERIAL TOXIC TO PLANT GROWTH; IT IS NOT ACCEPTABLE FOR THE MULCH MATERIAL TO CONTAIN GROUND CONSTRUCTION DEBRIS, BIOSOLIDS, OR MANURE.
4. SOCK MATERIAL WILL BE 100% BIODEGRADABLE, PHOTODEGRADABLE, OR RECYCLABLE SUCH AS BURLAP, TWINE, UV PHOTOBIODEGRADABLE PLASTIC, POLYESTER, OR ANY OTHER ACCEPTABLE MATERIAL.
5. MULCH SOCKS SHOULD BE USED AT THE BASE OF SLOPES NO STEEPER THAN 2:1 AND SHOULD NOT EXCEED THE MAXIMUM SPACING CRITERIA PROVIDED IN CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL TABLE 1.4.5.F.1 FOR A GIVEN SLOPE CATEGORY.
6. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 150mm (6 Inches). THE SILT SHALL BE DISPOSED OF ON AN APPROVED SITE AND IN SUCH A MANNER THAT WILL NOT CONTRIBUTE TO ADDITIONAL SILTATION.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	MULCH SOCK	
08/24/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 648S-1



CROSS SECTION



PLAN VIEW

GENERAL NOTES:

1. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SWALE.
2. THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE , GRADE, AND CROSS-SECTION AS REQUIRED TO MEET CRITERIA SPECIFIED HEREIN AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
3. ALL EARTH REMOVED AND NOT NEEDED IN CONSTRUCTION SHALL BE DISPOSED OF IN AN APPROVED SPOILS SITE SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE SWALE.
4. INTERCEPTER SWALES SHALL HAVE A MINIMUM GRADE OF 1 PERCENT AND THE BOTTOM SHALL BE LEVEL.
5. DIVERTED RUNOFF FROM A DISTURBED OR EXPOSED UPLAND AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE, SUCH AS A ROCK BERM, BRUSH BERM, STONE OUTLET STRUCTURE, SEDIMENT TRAP, OR SEDIMENT BASIN (SEE STANDARDS FOR THESE DEVICES) OR TO AN AREA PROTECTED BY ANY OF THESE PRACTICES.
6. DIVERTED RUNOFF FROM A PROTECTED OR STABILIZED UPLAND AREA SHALL OUTLET DIRECTLY ONTO AN UNDISTURBED STABILIZED AREA, LEVEL SPREADER, OR INTO A GRADE STABILIZATION STRUCTURE.
7. THE ON-SITE LOCATION MAY NEED TO BE ADJUSTED TO MEET FIELD CONDITION IN ORDER TO UTILIZE THE MOST SUITABLE OUTLET.
8. STABILIZATION, WHEN REQUIRED, SHALL BE OPEN GRADED ROCK 75-125 mm (3-5") DIAMETER PLACED IN A LAYER A MINIMUM OF 75 mm (3") THICKNESS AND SHALL EXTEND ACROSS THE BOTTOM AND UP BOTH SIDES OF THE CHANNEL TO A HEIGHT OF AT LEAST 200 mm (8").

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	INTERCEPTOR SWALE	
3.27.00 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 631S-1

							APR
							DATE
							DESCRIPTION
◁	◁	◁	◁	◁	◁		REV

DESIGNED BY: JDC
REVIEWED BY: AJN
DRAWN BY: JDC

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THE JUNCTION

EROSION CONTROL DETAILS (SHEET 2 OF 2)

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SHEET 15

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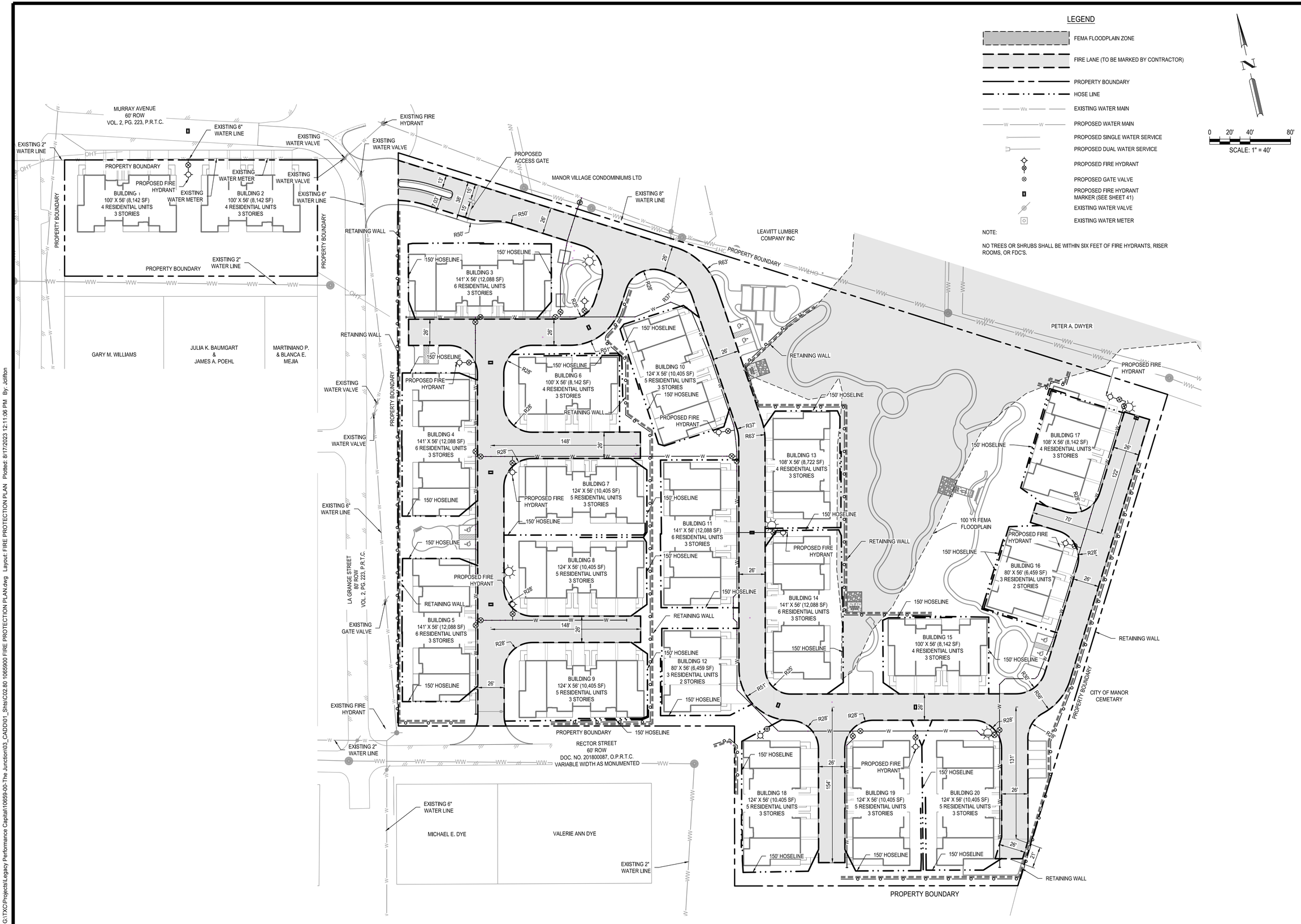

	APR	DATE	DESCRIPTION	REV

DESIGNED BY: BAH
REVIEWED BY: AJN
DRAWN BY: BAH

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THE JUNCTION

FIRE PROTECTION PLAN

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SHEET
16

G:\TX\C\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Shts\C02 80 10659000 FIRE PROTECTION PLAN.dwg Layout: FIRE PROTECTION PLAN Plotted: 8/17/2023 12:11:06 PM By: Jclifton

FIRE LANE MARKING NOTES:

1. FIRE LANE STRIPING TO BE 6" WIDE RED PAINT WITH "FIRE LANE TOW AWAY ZONE" IN 4" TALL WHITE LETTER. WORDING MAY NOT BE SPACED GREATER THAN 30' APART. STRIPING TO BE PAINTED ON THE FACE OF CURB WHEN PRESENT AND PAINTED FLAT ON THE PARKING SURFACE WHEN IT IS NOT. SEE STREET AND DRAINAGE DETAIL SHEET FOR MORE DETAILS.

FDC NOTES:

1. THE FDC(S)SHALL BE LOCATED SO THAT WHEN IN-USE, THE FIRE APPARATUS AND HOSE CONNECTIONS TO THE FDC AND TO THE SUPPLY HYDRANT
2. WILL NOT OBSTRUCT ACCESS TO THE BUILDING FOR OTHER FIRE APPARATUS. (IFC 912.2)
3. FDC(S) SHALL BE LOCATED ON STREET SIDE OF BUILDING OR FACING APPROVED APPARATUS ACCESS ROADS. (IFC 912.2.1)
4. THE FDC(S) SHALL BE WITHIN 100 FEET OF A FIRE HYDRANT AS REQUIRED LOCALLY. (IFC 912.2)
5. THE FDC(S) SHALL BE WALL-MOUNTED ON THE BUILDING IT SERVES OR BE REMOTELY LOCATED (IFC 912.2)
6. FDC(S) SHALL BE INSTALLED AT A HEIGHT BETWEEN 24 INCHES AND 48 ABOVE GRADE (IFC 912.2.1)
7. THE FDC(S) SHALL BE FULLY VISIBLE, AND RECOGNIZABLE FROM THE STREET OR NEAREST POINT OF THE FIRE DEPARTMENT VEHICLE ACCESS OR AS
8. OTHERWISE APPROVED (IFC 912.2.1)
9. WHERE THE FDC(S) IS/ARE SUBJECT TO IMPACT BY A MOTOR VEHICLE, BOLLARDS OR OTHER VEHICLE IMPACT PROTECTION MUST BE PROVIDED
10. IN ACCORDANCE WITH IFC 312. (IFC 912.4.3)
11. THE FDC(S) SHALL BE PROVIDED WITH KNOX LOCKING CAPS AS REQUIRED LOCALLY. (IFC 912.4.1)
12. FOR CONCRETE TILT WALL BUILDINGS, A REMOTE FDC SHALL BE REQUIRED.
13. ALL SIGNAGE FOR REMOTE FDC SHALL COMPLY WITH TRAVIS COUNTY ESD NO. 12 REQUIREMENTS.
14. IT IS PREFERRED THAT THE REMOTE FDC BE LOCATED AT A DISTANCE AWAY FROM THE BUILDING OF AT LEAST 1.5X THE BUILDING HEIGHT AND
15. THE PREFERRED LOCATION IS ONE OF THE CORNERS OF THE BUILDING.
16. SYSTEM DEMAND OF 500 GPM MORE OR LESS: MINIMUM PIPE SIZE OF 4 INCHES, TWO-INLET CONNECTION REQUIRED
17. SYSTEM DEMAND OF 501 TO 750 GPM: MINIMUM PIPE SIZE OF 6 INCHES, THREE-INLET CONNECTION REQUIRED
18. SYSTEM DEMAND GREATER THAN 750 GPM: MINIMUM PIPE SIZE OF 8 INCHES, FOUR-INLET CONNECTION REQUIRED
19. INSTALLATION OF REMOTE FDC SHALL FOLLOW THE SCHEMATIC BELOW:

TCESD #12 GENERAL NOTES:

1. THE BUILDING PLAN SHALL BE APPROVED BY TRAVIS COUNTY ESD NO. 12 PRIOR TO THE INSTALLATION OF ANY BUILDING OR ARCHITECTURAL RELATED COMPONENTS.
2. BUILDINGS UNDER CONSTRUCTION OR DEMOLITION SHALL CONFORM TO IFC CHAPTER 33. NO SMOKING OR COOKING IS ALLOWED IN STRUCTURES WHERE COMBUSTIBLE MATERIALS ARE EXPOSED OR WITHIN 25 FEET OF COMBUSTIBLE MATERIAL STORAGE AREAS. CUTTING, WELDING, OR OTHER HOT WORK SHALL BE IN CONFORMANCE WITH 2015 IFC CHAPTER 35.
3. IN BUILDINGS FOUR OR MORE STORIES IN HEIGHT, STANDPIPES SHALL BE PROVIDED DURING CONSTRUCTION WHEN THE HEIGHT REACHES 40 FEET ABOVE THE LOWEST POINT OF FIRE DEPARTMENT ACCESS. A FIRE DEPARTMENT CONNECTION SHALL BE NO MORE THAN 100 FEET FROM AVAILABLE FIRE DEPARTMENT ACCESS ROADS. A FIRE HYDRANT SHALL BE LOCATED ALONG THE FIRE LANE/FIRE ACCESS ROAD WITHIN 100 FEET OF THE FDC.
4. ADDRESS NUMBERS SHALL BE PROVIDED FOR ALL NEW AND EXISTING BUILDINGS, BE A MINIMUM OF 4-INCHES HIGH FOR INDIVIDUAL DWELLING UNITS AND 6-INCHES HIGH FOR ALL OTHER INSTALLATIONS AND STRUCTURES, CONTRAST WITH THEIR BACKGROUND, AND BE PLAINLY VISIBLE FROM THE ROADWAYTHE BUILDING IS ADDRESSED ON. TEMPORARY ADDRESS NUMBERS SHALL BE PROVIDED ON CONSTRUCTION FENCING OR THE BUILDING UNTIL PERMANENT NUMBERS CAN BE PROVIDED IN ACCORDANCE WITH 2015 IFC 505.1.
5. LOCATIONS AND CLASSIFICATIONS OF EXTINGUISHERS SHALL BE IN ACCORDANCE WITH 2015 IFC 906. AT LEAST ONE EXTINGUISHER SHALL BE PROVIDED DURING CONSTRUCTION ON EACH FLOOR AT EACH STAIRWAY ON ALL FLOOR LEVELS WHERE COMBUSTIBLE MATERIALS HAVE ACCUMULATED, IN EVERYSTORAGE AND CONSTRUCTION SHED, IN LOCATIONS WHERE FLAMMABLE OR COMBUSTIBLE LIQUIDS ARE STORED OR USED OR WHERE SIMILAR SPECIAL HAZARDS ARE PRESENT PER 2015 IFC 3315.1. BEFORE FINAL OCCUPANCY, AT LEAST ONE 2A:10B:C EXTINGUISHER SHALL BE PROVIDED SO THAT NO POINT IS MORE THAN 75 FEET TRAVEL DISTANCE FROM THE EXTINGUISHER. EXTINGUISHERS SHALL BE LOCATED ALONG THE PATH OF EGRESS TRAVEL AND IN A READILY VISIBLE AND ACCESSIBLE LOCATION WITH THE BOTTOM OF THE EXTINGUISHER AT LEAST 4-INCHES ABOVE THE FLOOR. ADDITIONAL EXTINGUISHERS MAY BE REQUIRED BY THE TRAVIS COUNTY ESD NO.12 INSPECTOR DEPENDING ON PROJECT OF SITE CONDITIONS AND FINAL PLACEMENT IS SUBJECT TO THEIR APPROVAL.
6. KNOX BOXES SHALL BE PROVIDED FOR ALL BUILDINGS, POOL ENCLOSURES, GATES IN THE PATH OF FIREFIGHTER TRAVEL TO STRUCTURES, SECURED PARKING LEVELS, DOORS GIVING ACCESS TO ALARM PANELS OR ANNUNCIATORS, DOORS TO FIRE SPRINKLER RISER ROOMS, AND ANY OTHER STRUCTURES OR AREAS WHERE IMMEDIATE ACCESS IS REQUIRED OR IS UNDULY DIFFICULT. TRAVIS COUNTY ESD NO. 12 WILL ASSIST WITH LOCKING GATE KEYS IN KNOX BOXES.
7. APPROVAL OF THIS PLAN SUBMITTAL SHALL NOT PERMIT THE VIOLATION OF ANY CODE OR LAW. APPROVAL OF THIS PLAN SUBMITTAL DOES NOT CONSTITUTE A VERIFICATION OF ALL DATA, CODES, INFORMATION, AND CALCULATIONS SUPPLIED BY THE APPLICANT. THE LICENSED DESIGNER AND/OR PROFESSIONAL ENGINEER OF RECORD IS SOLELY RESPONSIBLE FOR THE COMPLETENESS, ACCURACY, AND ADEQUACY OF THE SUBMITTAL WHETHER OR NOT THE PLAN SUBMITTAL IS REVIEWED AND APPROVED FOR CODE COMPLIANCE BY TRAVIS COUNTY ESD NO. 12. REQUIREMENTS OR FEATURES NOT IDENTIFIED ON THE PLAN MAY APPLY AND THE TRAVIS COUNTY ESD NO. 12 INSPECTOR MAY REQUIRE ADDITIONAL INFORMATION OR ITEMS FROM THOSE ON SHOWN ON THE PLAN DEPENDING ON ACTUAL OR ANTICIPATED FIELD CONDITIONS.
8. THIS PROJECT SHALL COMPLY AT MINIMUM WITH THE 2015 INTERNATIONAL BUILDING CODE, 2015 INTERNATIONAL BUILDING CODE, AND OTHER CURRENTLY ADOPTED CODES, STANDARDS, REGULATIONS, AND REQUIREMENTS AS ADOPTED AND ENFORCED BY TRAVIS COUNTY ESD NO. 12.
9. APPROVAL OF THIS PLAN IS CONTINGENT UPON A CERTIFICATE OF OCCUPANCY BEING ISSUED UPON COMPLETION OF ALL CONSTRUCTION ON THE ENTIRE PROJECT.
10. 1PHASED OCCUPANCY SHALL BE PERMITTED ONLY WITH PRIOR APPROVAL FROM TRAVIS COUNTY ESD NO. 12, THE BUILDING DEPARTMENT, AND OTHER AGENCIES, AS APPLICABLE. REQUESTS FOR PHASED OCCUPANCY SHALL BE MADE PRIOR TO START OF CONSTRUCTION ONLY.
11. 1EXITS, EXIT SIGNS, FIRE ALARM PANELS, FIRE EXTINGUISHER LOCATIONS, AND STANDPIPE CONNECTIONS SHALL NOT BE CONCEALED IN ANY WAY.
12. THE PATH OF EGRESS SHALL REMAIN FREE AND CLEAR OF ALL OBSTRUCTIONS AT ALL TIMES.
13. DOUBLE KEY CYLINDER DEADBOLT LOCKS OR ANY LOCK THAT REQUIRES THE USE OF A KEY, A TOOL OR SPECIAL KNOWLEDGE OR EFFORT SHALL NOT BE PERMITTED TO BE ON ANY DOOR THAT SERVES AS AN EXIT OR ANY DOOR ALONG THE EXIT ACCESS. THE OPENING FORCE FOR INTERIOR DOORS WITHOUT CLOSERS SHALL NOT EXCEED 5 POUNDS. THE UNLATCHING AND OPENING FORCE FOR OTHER DOORS, INCLUDING FIRE DOORS, SHALL NOT EXCEED 15 POUNDS PER 2015 IBC 1010.
14. DOORS SHALL NOT BE PROVIDED WITH THUMB-TURN LOCKS OR DEADBOLTS THAT DO NOT UNLATCH IN TANDEM WITH THE NORMAL OPERATING LEVER. THE UNLATCHING OF ANY DOOR OR LEAF SHALL NOT REQUIRE MORE THAN ONE OPERATION.
15. DOOR HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPERATING DEVICES ON DOORS REQUIRED TO BE ACCESSIBLE BY CHAPTER 11 OF THE INTERNATIONAL BUILDING CODE SHALL NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING OR TWISTING OF THE WRIST TO OPERATE.
16. DOOR SWING SHALL NOT ENCROACH ON ANY REQUIRED EXIT PATH OR PATH OF EXIT TRAVEL.
17. POWER-OPERATED DOORS SHALL BE ABLE TO BE OPENED MANUALLY IN CASE OF POWER FAILURE.
18. DOORS SERVING ROOMS OR SPACES WITH AN OCCUPANT LOAD OF 50 OR MORE IN A GROUP A OR E OCCUPANCY SHALL NOT BE PROVIDED WITH A LATCH OR LOCK OTHER THAN PANIC HARDWARE OR FIRE EXIT HARDWARE.
19. EXIT SIGNS SHALL BE CLEARLY VISIBLE READILY VISIBLE FROM ANY DIRECTION OF EGRESS TRAVEL. THE PATH OF EGRESS TRAVEL TO EXITS AND WITHIN EXITS SHALL BE MARKED BY READILY VISIBLE EXIT SIGNS TO CLEARLY INDICATE THE DIRECTION OF EGRESS TRAVEL IN CASES WHERE THE EXIT OR THE PAGE OF EGRESS TRAVEL IS NOT IMMEDIATELY VISIBLE TO THE OCCUPANTS. ILLUMINATED EXIT SIGNS MUST HAVE 90-MINUTE EMERGENCY BACK UP.
20. THE EXIT PATH SHALL BE ILLUMINATED AT ALL TIMES IN ACCORDANCE WITH 2015 IBC/IFC 1008.REV. 210107
21. EMERGENCY LIGHTING SHALL BE PROVIDED TO ILLUMINATE THE MEANS OF EGRESS SERVING A ROOM OR SPACE AT ALL TIMES THAT THE ROOM OR SPACE IS OCCUPIED. EMERGENCY LIGHTING SHALL ALSO BE PROVIDED IN STORAGE ROOMS, FIRE RISER ROOMS, ADA RESTROOMS AND OUTSIDE OF ALL EXIT DOORS ON THE EXTERIOR OF THE BUILDING. EMERGENCY LIGHTING SHALL BE PROVIDED WITH 90-MINUTE BACK-UP.
22. STAIRS SERVING 3+ STORIES SHALL HAVE STAIRWAY IDENTIFICATION SIGNS CONFORMING TO 2015 IBC 1023.9.
23. IF A NEW BUILDING IS FOUR OR MORE STORIES ABOVE GRADE PLANE SHALL BE PROVIDED WITH A STAIRWAY TO THE ROOF. THE STAIRWAY SHALL BE MARKED AT STREET AND FLOOR LEVELS WITH A SIGN INDICATING THAT THE STAIRWAY CONTINUES TO THE ROOF. THE NECESSARY LANDINGS AND PLATFORMS SHALL BE PROVIDED PER 2015 IFC 504.3.
24. RATED ASSEMBLIES SHALL CONFORM TO APPROVED METHODS AND MATERIALS FOR CONSTRUCTION. PENETRATIONS THROUGH RATED WALLS, CEILINGS, OR FLOORS SHALL BE PROTECTED IN AN APPROVED MANNER IN ACCORDANCE WITH IBC/IFC CHAPTER 7.
25. IN ADDITION TO REQUIRED MEANS OF EGRESS, EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL BE PROVIDED IN GROUP R-2 OCCUPANCIES IN ACCORDANCE WITH 2015 IFC TABLES 1006.3.2(1) AND 1006.3.2(2) AND GROUP R-3 OCCUPANCIES.
26. APPROVED ACCESS WALKWAYS SHALL BE PROVIDED TO ALL REQUIRED OPENINGS AND RESCUE WINDOWS. VEGETATION, TOPOGRAPHY, FENCES/WALLS,AND OTHER OBSTRUCTIONS SHALL NOT IMPEDE LADDERING OF RESCUE OPENINGS OR THE PATH OF FIREFIGHTER TRAVEL FROM THE FIRE LANE TO SUCH OPENINGS PER 2015 IFC 504.1.
27. THE NUMBER OF PROVIDED EXITS OR ACCESS TO EXITS DOES NOT SUPERSEDE THE REQUIREMENTS FOR EMERGENCY ESCAPE AND RESCUE OPENINGS.
28. ALL ELEVATORS AND STAIR LANDINGS SHALL ACCOMMODATE AMBULANCE BACKBOARDS AND STRETCHER (24 INCHES X 84 INCHES) WITH NOT LESS THAN 5-INCH RADIUS CORNERS IN THE HORIZONTAL POSITION PER 2015 IBC 3002.4.

TCESD #12 GENERAL NOTES:

1. THE FIRE SPRINKLER SYSTEM PLAN SUBMITTAL SHALL BE APPROVED BY TRAVIS COUNTY ESD NO. 12 PRIOR TO THE INSTALLATION OF ANY SYSTEM COMPONENTS.
2. THE APPROVED FIRE SPRINKLER SYSTEM PLAN WITH HYDRAULIC CALCULATIONS SHALL BE ON SITE AT ALL TIMES FOR TRAVIS COUNTY ESD NO. 12 INSPECTIONS. THE TRAVIS COUNTY ESD NO, 12 INSPECTOR WILL NOT PERFORM THE INSPECTION WITHOUT THE APPROVED FIRE SPRINKLER PLAN.
3. ALL UNDERGROUND MAINS AND SPRINKLER RISERS SHALL BE FLUSHED IN ACCORDANCE WITH THE STANDARDS OF THE LOCAL WATER JURISDICTION, NFPA 13 AND NFPA 24 PRIOR TO THE CONNECTION TO THE OVERHEAD SPRINKLER SYSTEM. IF THE UNDERGROUND PIPING IS CONNECTED TO THE OVERHEAD SPRINKLER PIPING PRIOR TO A TRAVIS COUNTY ESD NO. 12 WITNESSED FLUSH, THE SYSTEM WILL BE REQUIRED TO BE BACKFLUSHED. ALL INSTALLED SPRINKLER HEADS, PENDANTS AND UPRIGHTS, WILL BE REMOVED AND REPLACED PER NFPA 13.
4. THE INSTALLING SPRINKLER CONTRACTOR IS RESPONSIBLE FOR VERIFYING THAT ALL PORTIONS OF THE UNDERGROUND FIRE LINE HAVE BEEN FLUSHED IN ACCORDANCE WITH NFPA 24 AND TRAVIS COUNTY ESD NO. 12 REQUIREMENTS PRIOR TO CONNECTION TO THE ABOVEGROUND PIPING.
5. THE PRESENCE OF DOMESTIC WATER SUPPLY TAPS OFF OF THE MAIN WATER LINE OR A SHARED SUPPLY LINE WITH FIRE SPRINKLER RISER DOES NOT OVERRIDE ANY REQUIREMENTS OF TRAVIS COUNTY ESD NO. 12 OR APPLICABLE NFPA STANDARDS.
6. THERE SHALL BE NO DEDICATED SHUT OFF FOR THE ISOLATION OF THE FIRE SPRINKLER SYSTEM WATER SUPPLY UNLESS IT MEETS THE REQUIREMENTS FOR SUPERVISION NOTED IN NFPA 13/13R. THE MAIN CONTROL VALVE SHALL SHUT OFF WATER SUPPLY FOR BOTH THE DOMESTIC AND FIRE SYSTEM AND THE DOMESTIC SYSTEM SHALL HAVE A DEDICATED DOMESTIC SHUTOFF VALVE.
7. EACH SPRINKLER SYSTEM SHALL HAVE A TEST CONNECTION. THE TEST CONNECTION PIPE SHALL BE AT LEAST 1-INCH NOMINAL DIAMETER AND TERMINATE IN AN ORIFICE EQUAL TO OR SMALLER THAN THE SAME SIZE AS THE SMALLEST SPRINKLER INSTALLED IN THE SYSTEM.
8. AT LEAST ONE WATER PRESSURE GAUGE SHALL BE INSTALLED ON THE RISER ASSEMBLY.
9. A WEATHERPROOF A/V STROBE DEVICE TO INDICATE A WATERFLOW CONDITION SHALL BE MOUNTED ABOVE THE EXTERIOR RISER DOOR AS AMENDED PER TRAVIS COUNTY ESD NO. 12, ADDITIONAL HORN STROBES MAY BE REQUIRED BY TRAVIS COUNTY ESD NO. 12 NEAR THE ADDRESS SIDE OR FRONT SIDE OF THE STRUCTURE.
10. THE WATERFLOW SWITCH SHALL BE CONNECTED TO THE SERVICE PANEL ON AN UNINTERRUPTIBLE HOUSE CIRCUIT.
11. WATERFLOW SWITCHES SHALL BE PROVIDED ON FIRE SPRINKLER RISER ON EVERY FLOOR OF A MULTI-STORY BUILDING. EACH WATERFLOW SWITCH SHALL REPORT TO THE FACP TO INDICATE THE LOCATION (FLOOR) OF THE WATERFLOW ACTIVATION.
12. FIRE SPRINKLER RISER ROOMS AND FIRE PUMP ROOMS ARE MAINTAINED AT OR ABOVE 40 DEGREES. ANY HEATING UNITS SHALL BE PERMANENTLY INSTALLED. IF FREEZE PROTECTION IS NOT PROVIDED AT THE FINAL INSPECTION, THE FIRE SPRINKLER SYSTEM INSPECTION WILL FAIL THE FINAL TRAVIS COUNTY ESD NO. 12 ACCEPTANCE TEST.
13. SPRINKLER PIPING EXPOSED TO THE EXTERIOR SHALL ALSO BE PROVIDED WITH A METHOD FREEZE PROTECTION. THIS METHOD SHALL BE CLEARLY SHOWN ON THE PLAN AND MAY REQUIRE THE CONSTRUCTION OF INSULATED CHASES TO ENCLOSE AND PROTECT THE PIPING.
14. FIRE SPRINKLER RISER ROOMS AND FIRE PUMP ROOMS SHALL BE A 1-HOUR FIRE-RATED ENCLOSURES AND ALL PENETRATIONS SHALL BE SEALED.
15. FIRE SPRINKLER RISER ROOMS SHALL BE PROVIDED WITH EXTERIOR ACCESS ONLY AND FACE A DESIGNATE FIRE LANE.
16. THE FIRE RISER ROOM SHALL HAVE LIGHTING (INCLUDING EMERGENCY LIGHTING) AND BE LABELED APPROPRIATELY WITH A PERMANENT WEATHERPROOF REFLECTIVE SIGN ON THE OUTSIDE OF THE DOOR.
17. THE FDC SHALL CONTAIN A MINIMUM OF TWO 2 ½" INLETS. WHEN THE SYSTEM DESIGN DEMAND, INCLUDING THE INTERIOR HOSE STREAM DEMAND OR A STANDPIPE, IS A MINIMUM OF 500 GPM, FOUR 2 ½" INLETS SHALL BE PROVIDED. LOCKING KNOX CAPS SHALL BE PROVIDED ON THE INLETS.
18. ALL FIRE SPRINKLER SYSTEM RISERS SHALL BE EQUIPPED WITH A WEATHERPROOF METAL OR RIGID PLASTIC HYDRAULIC DESIGN INFORMATION SIGN. THE INFORMATION SHALL BE PERMANENTLY MARKED BY ETCHING IF A METAL SIGN IS USED. PERMANENT MARKER WILL NOT BE ACCEPTED.
19. ALL SPRINKLER PIPING SHALL REMAIN UNCOVERED UNTIL INSPECTED AND APPROVED BY TRAVIS COUNTY ESD NO. 12. ANY SIGNIFICANT DEVIATION FROM THE APPROVED LAYOUT WILL REQUIRE A RESUBMITTAL AND APPROVAL BY TRAVIS COUNTY ESD NO. 12 BEFORE ANY ADDITIONAL WORK IS COMPLETED.
20. AT ROUGH INSPECTION, IF EXCESSIVE AMOUNTS OF PIPE GLUE ARE OBSERVED ON CPVC SPRINKLER PIPE, THE TRAVIS COUNTY ESD NO. 12 INSPECTOR MAY REQUIRE THE SYSTEM TO BE DRAINED AND THE HEADS INSPECTED TO ENSURE THE HEADS ARE IN OPERABLE CONDITION AND NOT CLOGGED WITH PIPE CEMENT. SECTIONS OF PIPE THAT DISPLAY EXCESSIVE PIPE GLUE SHALL BE REMOVED, REPLACED, AND UNDERGO AN ADDITIONAL HYDROSTATIC INSPECTION IN THE PRESENCE OF A TRAVIS COUNTY ESD NO. 12 FIRE INSPECTOR.
21. SPRINKLERS IN SPACES SUBJECT TO TEMPERATURES OF 100°F (INCLUDING GARAGES AND EXTERIOR CLOSETS) MUST BE INTERMEDIATE TEMPERATURE RATED (175°F OR MORE).
22. AT FINAL INSPECTION, SPRINKLERS SHALL BE PLACED IN THEIR FINAL POSITION IN THE CEILING TILE GRID AND CEILING TILES SHALL BE IN PLACE. HARD LID AND ALL OTHER TYPES OF CEILINGS SHALL HAVE ALL PATCHES, REPAIRS AND FINAL FINISHES COMPLETED. CONCEALED SPRINKLER COVER PLATES SHALL NOT BE INSTALLED REGARDLESS OF CEILING TYPE BUT SHALL BE AVAILABLE ON-SITE FOR INSPECTION. THE CONCEALED COVER PLATES MAY ONLY BE INSTALLED AFTER TRAVIS COUNTY ESD NO. 12 HAS INSPECTED THE INSTALLED SPRINKLERS FOR ANY DAMAGE, PAINT, OR RELATED COATINGS.
23. APPROVAL OF THIS PLAN SUBMITTAL DOES NOT CONSTITUTE A VERIFICATION OF ALL DATA, CODES, INFORMATION, AND CALCULATIONS SUPPLIED BY THE APPLICANT. THE LICENSED DESIGNER AND/OR PROFESSIONAL ENGINEER OF RECORD IS SOLELY RESPONSIBLE FOR THE COMPLETENESS, ACCURACY, AND ADEQUACY OF THE SUBMITTAL WHETHER OR NOT THE PLAN SUBMITTAL IS REVIEWED AND APPROVED FOR CODE COMPLIANCE BY TRAVIS COUNTY ESD NO. 12

TCESD #12 UNDERGROUND FIRE LINE NOTES:

1. THE UNDERGROUND FIRE LINE PLAN SHALL BE APPROVED BY TRAVIS COUNTY ESD NO. 12 PRIOR TO THE INSTALLATION OF ANY UNDERGROUND COMPONENTS.
2. THE APPROVED UNDERGROUND FIRE LINE PLAN SHALL BE ON SITE AT ALL TIMES FOR TRAVIS COUNTY ESD NO. 12 INSPECTIONS. THE TRAVIS COUNTY ESD NO. 12 INSPECTOR WILL NOT PERFORM THE UNDERGROUND FIRE LINE INSPECTION WITHOUT THE TRAVIS COUNTY ESD NO. 12 APPROVED UNDERGROUND FIRE LINE PLAN.
3. ALL FIRE HYDRANTS THAT ARE APPROVED AND INSTALLED AS A PART OF THE PROPOSED PROJECT SHALL BE CONSIDERED TO BE PART OF A FIRE PROTECTION SYSTEM AND INSTALLED FOR THE PURPOSE OF PROVIDING FIRE PROTECTION.
4. A WATER LINE THAT SUPPLIES ANY NUMBER OF HYDRANTS AND/OR ANY PART OF A FIRE SPRINKLER SYSTEM SHALL BE CONSIDERED TO BE FOR THE PURPOSE OF PROVIDING FIRE PROTECTION.
5. UNDERGROUND MAINS FEEDING NFPA 13 OR NFPA 13R SPRINKLER SYSTEMS MUST BE INSTALLED AND TESTED IN ACCORDANCE WITH NFPA 13 OR NFPA 13R, THE INTERNATIONAL FIRE CODE AND TRAVIS COUNTY ESD NO. 12 ADOPTED AMENDMENTS, BY A LICENSED SPRINKLER CONTRACTOR WITH A PLUMBING PERMIT. THE ENTIRE MAIN MUST BE HYDROSTATICALLY TESTED AT ONE TIME, UNLESS ISOLATION VALVES ARE PROVIDED BETWEEN TESTED SECTIONS. TRAVIS COUNTY ESD NO. 12 REQUIRES (1) PERMITS, (2) AN UNDERGROUND FIRE LINE PLAN TO BE SUBMITTED FOR APPROVAL,AND (3) INSPECTIONS TO ENSURE INSTALLATION COMPLIANCE.
6. UNDERGROUND MAINS FEEDING HYDRANTS SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH NFPA 24, THE INTERNATIONAL FIRE CODE AND TRAVIS COUNTY ESD NO. 12 ADOPTED AMENDMENTS, BY A CONTRACTOR LICENSED TO PERFORM THE INSTALLATION. THE ENTIRE MAIN MUST BE HYDROSTATICALLY TESTED AT ONE TIME UNLESS ISOLATION VALVES ARE PROVIDED BETWEEN TESTED SECTIONS.
7. TRAVIS COUNTY ESD NO. 12 CONSIDERS THE PIPING FROM THE POINT OF CONNECTION AT THE MUNICIPAL WATER SUPPLY TO THE FIRE HYDRANTS AND THE BASE OF ANY FIRE SPRINKLER RISER PART OF A FIRE PROTECTION SYSTEM.
8. THE PRESENCE OF DOMESTIC WATER SUPPLY TAPS OFF OF THE MAIN WATER LINE OR A SHARED SUPPLY LINE WITH FIRE SPRINKLER RISER DOES NOT OVERRIDE ANY REQUIREMENTS OF TRAVIS COUNTY ESD NO. 12 OR NFPA 24. NFPA 24 SHALL APPLY TO ALL UNDERGROUND INSTALLATIONS AND INSTALLATIONS SHALL BE PERMITTED AND INSPECTED BY TRAVIS COUNTY ESD NO. 12.
9. THE UTILITY CONTRACTOR SHALL CONSULT TRAVIS COUNTY ESD NO. 12 REGARDING ANY JURISDICTION REQUIREMENTS FOR UTILITY CONTRACTORS.
10. THE APPROPRIATE INDIVIDUAL SHALL CONSULT WITH TRAVIS COUNTY ESD NO. 12 (THE AHJ) FOR REQUIREMENTS RELATED TO THE UNDERGROUND WATER MAIN PIPE AND INSTALLATION OF THE WATER MAIN/FIRE HYDRANT LINE.
11. UNDERGROUND FIRE LINE INSTALLATIONS SHALL BE PERFORMED BY INDIVIDUALS LICENSED BY THE STATE OF TEXAS TO INSTALL FIRE PROTECTION SYSTEMS. IT SHALL BE CONSIDERED UNACCEPTABLE FOR A LICENSED COMPANY TO SUB-CONTRACT INSTALLATION WORK TO NON-LICENSED COMPANIES.
12. A REGISTERED FIRM MAY NOT SUBCONTRACT WITH AN UNREGISTERED FIRM TO ALLOW THE UNREGISTERED FIRM AS AN INDEPENDENT CONTRACTOR TO PERFORM ANY ACT OF A FIRE PROTECTION SPRINKLER CONTRACTOR.
13. THE SPRINKLER SYSTEM PIPING SHALL NOT HAVE A SEPARATE CONTROL VALVE UNLESS SUPERVISED BY AN APPROVED METHOD FOUND IN NFPA 13 OR NFPA 13R.
14. A MINIMUM OF THREE TRAVIS COUNTY ESD NO. 12 INSPECTIONS ARE REQUIRED FOR UNDERGROUND PIPING SERVING SPRINKLER SYSTEMS AND/OR PRIVATE HYDRANTS: THRUST BLOCK, HYDROSTATIC TEST, AND FLUSH INSPECTION.
15. ANY ADDITIONAL INSPECTIONS BEYOND THE ALLOTTED UNDERGROUND FIRE LINE INSPECTIONS SHALL INCUR A REINSPECTION FEE. IF ADDITIONAL INSPECTIONS ARE NECESSARY, REINSPECTION FEES SHALL BE PAID PRIOR TO ANY ADDITIONAL TRAVIS COUNTY ESD NO. 12 INSPECTIONS.

FDC NOTES:

1. THE OWNER AND/OR DEVELOPER SHALL BE RESPONSIBLE FOR CONTACTING TRAVIS COUNTY ESD NO. 12 TO ENSURE COMPLIANCE WITH ALL CODES, ORDINANCES, STATUTES AND PERMITTING REQUIREMENTS PRIOR TO CONSTRUCTION.
2. PRIOR TO BEGINNING ANY CONSTRUCTION, THE APPROPRIATE TRAVIS COUNTY ESD NO. 12 PERMIT/APPROVAL SHALL BE OBTAINED. THE APPROVED PERMIT SHALL BE READILY AVAILABLE ON SITE TO TRAVIS COUNTY ESD NO. 12.
3. PHASED OCCUPANCY SHALL BE PERMITTED ONLY WITH PRIOR APPROVAL FROM TRAVIS COUNTY ESD NO. 12, THE BUILDING DEPARTMENT, AND OTHER RELATED AGENCIES, AS APPLICABLE. REQUESTS FOR PHASED OCCUPANCY SHALL BE MADE PRIOR TO START OF CONSTRUCTION ONLY.
4. PHASED INSTALLATION OF FIRE ACCESS ROADS SHALL REQUIRE AN ACCESS PHASING PLAN APPROVED BY TRAVIS COUNTY ESD NO. 12.
5. PHASED CONSTRUCTION OF BUILDINGS SHALL REQUIRE A CONSTRUCTION PHASING PLAN APPROVED TRAVIS COUNTY ESD NO. 12.
6. AN ALL-WEATHER FIRE LANE/FIRE APPARATUS ACCESS ROAD SHALL BE CONSTRUCTED TO SUPPORT THE IMPOSED LOAD OF A FIRE APPARATUS WEIGHING 75,000 POUNDS.
7. THE FIRE LANE/FIRE APPARATUS ACCESS ROAD SHALL PROVIDE FIRE DEPARTMENT ACCESS TO ALL PARTS OF COMBUSTIBLE STRUCTURES WITHIN 150 FEET OF THE FIRE LANE. THE APPROVED FIRE LANE/FIRE APPARATUS ACCESS ROAD MUST BE INSTALLED PRIOR TO AND MAINTAINED DURING CONSTRUCTION OF ANY COMBUSTIBLE STRUCTURE, UNLESS OTHERWISE APPROVED BY TRAVIS COUNTY ESD NO. 12.
8. WHERE A FIRE HYDRANT IS LOCATED ON A FIRE LANE/FIRE APPARATUS ACCESS ROAD, THE MINIMUM ROAD WIDTH SHALL BE 26 FEET, EXCLUSIVE OF SHOULDERS. IF NO FIRE HYDRANT IS PROVIDED, THE MINIMUM FIRE LANE/FIRE APPARATUS ACCESS ROAD WIDTH SHALL BE 25 FEET.
9. FIRE LANE WIDTH IS MEASURED FROM TOP FACE OF CURB TO TOP FACE OF CURB FOR FIRE LANES WITH STANDARD CURBS AND GUTTERS AND FROM FLOW LINE TO FLOW-LINE FOR FIRE LANES WITH MODIFIED CURB DESIGNS (E.G. ROLLED, RAMPED).
10. THE DEVELOPER IS RESPONSIBLE TO VERIFY THAT ALL APPROVED PUBLIC WORKS, STREET IMPROVEMENT AND PRECISE GRADING PLANS CONFORM TO THE MINIMUM STREET WIDTH REQUIREMENTS SET FORTH BY THE FIRE CODE AND ADOPTED BY TRAVIS COUNTY ESD NO. 12.
11. A MINIMUM VERTICAL CLEARANCE OF 14' SHALL BE PROVIDED FOR ALL FIRE LANES/FIRE APPARATUS ACCESS ROADS.
12. INSIDE TURNING RADIUS OF FIRE LANES/FIRE APPARATUS ACCESS ROADS SHALL BE A MINIMUM OF 25 FEET. THE OUTSIDE RADIUS SHALL BE 50 FEET.
13. DEAD-END FIRE LANES/FIRE APPARATUS ACCESS ROADS IN EXCESS OF 150 FEET SHALL BE PROVIDED WITH APPROVED TURNAROUND PER 2015 IFC APPENDIX D, TABLE D103.4.
14. THE DIAMETER OF A CUL-DE-SAC SHALL BE 100 FEET MINIMUM PER CITY OF MANOR SPECIFICATIONS.
15. ACCESS GATES SHALL BE APPROVED BY TRAVIS COUNTY ESD NO. 12 PRIOR TO INSTALLATION.
16. ALL GATES IN CONSTRUCTION FENCING SHALL BE EQUIPPED WITH A KNOX OR BREAKAWAY PADLOCK
17. IF BUILDING EXCEEDS 30 FEET IN HEIGHT FROM GRADE PLANE, AN AERIAL FIRE APPARATUS ROAD, 15-30 FEET PARALLEL TO ONE ENTIRE SIDE OF THE BUILDING SHALL BE IN PLACE. (2015 IFC, APPENDIX D105)
18. FIRE LANES SHALL BE MARKED WITH FIRE LANE - TOW AWAY ZONE. THE CURBS SHALL BE PAINTED RED AND THE LETTERING SHALL BE 4" IN HEIGHT AND PAINTED WHITE. THE STENCIL SHALL BE PLACED AT INTERVALS OF 35 FEET.
19. THE MINIMUM REQUIRED FIRE FLOW SHALL MEET OR EXCEED THE REQUIREMENTS OF APPENDIX B OF THE 2015 INTERNATIONAL FIRE CODE.
20. THE MAXIMUM FIRE FLOW REDUCTION FOR A SPRINKLER SYSTEM SHALL BE 50%.
21. ALL FIRE HYDRANTS THAT ARE APPROVED AND INSTALLED AS A PART OF THE PROPOSED PROJECT SHALL BE PART OF A FIRE PROTECTION SYSTEM.
22. THE UTILITY CONTRACTOR SHALL CONSULT TRAVIS COUNTY ESD NO. 12 REGARDING ANY REQUIREMENTS FOR UTILITY CONTRACTORS.
23. THE APPROPRIATE INDIVIDUAL SHALL CONSULT WITH TRAVIS COUNTY ESD NO. 12 FOR REQUIREMENTS RELATED TO THE UNDERGROUND WATER MAIN LINE AND SUBSEQUENT INSTALLATION OF THE WATER MAIN/FIRE HYDRANT LINE.
24. THE SUBMISSION OF AN UNDERGROUND WATER LINE (UTILITY) PLAN SHEET WITH THE SITE PLAN DOES NOT ALLEVIATE THE NEED TO HAVE A SEPARATE UNDERGROUND PLAN SUBMITTED AND APPROVED

0 50' 100' 200'

SCALE: 1" = 100'

LEGEND

- PROPERTY BOUNDARY
- TIME OF CONCENTRATION (TOC)
- OFFSITE WATERSHED BOUNDARY
- EXISTING 2' CONTOURS
- EXISTING 10' CONTOURS
- PERVIOUS COVER
- FLOW ARROW
- WATERSHED IDENTIFICATION (WS # / ACRES)
- COMPUTATION POINT (CP-1)

REV	DESCRIPTION	DATE	APR

DESIGNED BY: AMC

REVIEWED BY: AJN

DRAWN BY: AMC

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THE JUNCTION

OFFSITE DRAINAGE MAP

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SHEET 18

G:\TXC\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Shts\C03.00 10659000 OFFSITE EXISTING DRAINAGE MAP.dwg Layout: OFFSITE DRAINAGE MAP Plotted: 8/17/2023 12:11:30 PM By: Calderon

G:\TX\C\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Shts\C03.01 1065900 OFFSITE EXISTING DRAINAGE CALCULATIONS.dwg Layout: OFFSITE DRAINAGE CALCULATIONS Plotted: 8/17/2023 12:11:37 PM By: Calderon

TIME OF CONCENTRATION
OS-#: OFFSITE DRAINAGE AREA
WA-#: EXISTING DRAINAGE AREA

			OS-A	OS-B	OS-C	OS-D	OS-E	OS-F	WS-1
SHEET FLOW	LENGTH	FT	100	40	100	100	100	100	100
	MANNING'S N		0.24	0.24	0.24	0.24	0.24	0.24	0.24
	SLOPE	FT/FT	0.010	0.010	0.010	0.010	0.010	0.012	0.056
	TIME OF CONCENTRATION	MINUETS	16.72	8.03	16.72	16.72	16.72	15.54	8.39
SHALLOW CONCENTRATED FLOW (PAVED)	LENGTH	FT	611	643	550	613	840	535	0
	SLOPE	FT/FT	0.017	0.024	0.02	0.023	0.02	0.02	0.08
	TIME OF CONCENTRATION	MINUETS	3.84	3.40	3.19	3.32	4.87	3.10	0.00
SHALLOW CONCENTRATED FLOW (UNPAVED)	LENGTH	FT	0	0	23	124	114	205	313
	SLOPE	FT/FT	0.017	0.017	0.020	0.008	0.001	0.020	0.076
	TIME OF CONCENTRATION	MINUETS	0.00	0.00	0.17	1.43	3.72	1.50	1.17
CHANNEL FLOW	LENGTH	FT	0	0	0	0	0	691	429
	SLOPE	FT/FT	0.003	0.003	0.003	0.003	0.003	0.021	0.021
	VELOCITY	FT/SEC	6	6	6	6	6	6	6
	TIME OF CONCENTRATION	MINUETS	0.00	0.00	0.00	0.00	0.00	1.92	1.19
t		**MINUETS**	**20.56**	**11.44**	**20.07**	**21.46**	**25.31**	**22.06**	**10.76**

SHEET FLOW =	(.42(NI)^0.8)/(P^0.5(S)^0.4)
P = 4.06	2 year 24hr rainfall depth for
From Table 2-4 Mannings for dense grass is 0.24	

PAVED =	L/(60*20.32*S^0.5)

UNPAVED =	L/(60*16.13*S^0.5)

CHANNEL =	L/(60*V)

RUNOFF COEFFICIENTS
OS-#: OFFSITE EXISTING DRAINAGE AREA
WA-#: EXISTING DRAINAGE AREA

A: ACREAGE BREAKDOWN							
	OS-A	OS-B	OS-C	OS-D	OS-E	OS-F	WH-1
ASPHALT ACRE	1.75	0.55	0.80	1.82	1.74	7.86	0.22
GRASS ACRE	0.35	0.10	1.48	3.28	3.00	20.98	8.32
TOTAL ACRE	2.10	0.65	2.28	5.10	4.74	28.84	8.54

Table 2-3 RATIONAL METHOD RUNOFF COEFFICIENTS FOR COMPOSITE ANALYSIS						
RUNOFF COEFFICIENT						
CHARACTER OF SURFACE	RETURN PERIOD					
	2 YEARS	5 YEARS	10 YEARS	25 YEARS	50 YEARS	100 YEARS
ASPHALIC	0.73	0.77	0.81	0.86	0.9	0.95
GRASS AREA (LAWNS, PARKS, ECT.)						
FAIR CONDITION**						
AVERAGE, 2-7%	0.33	0.36	0.38	0.42	0.45	0.49

C: WEIGHTED RUNOFF COEFFICIENTS, (A1*C1+A2*C2)/ATOTAL						
	2 yr	5 yr	10 yr	25 yr	50 yr	100 yr
OS-A	0.66	0.70	0.74	0.79	0.83	0.87
OS-B	0.67	0.71	0.75	0.79	0.83	0.88
OS-C	0.47	0.50	0.53	0.57	0.61	0.65
OS-D	0.47	0.51	0.53	0.58	0.61	0.65
OS-E	0.48	0.51	0.54	0.58	0.62	0.66
OS-F	0.44	0.47	0.50	0.54	0.57	0.62
WS-1	0.34	0.37	0.39	0.43	0.46	0.50

RAINFALL INTENSITY(SITE LOCATED IN ZONE 2)
OS-#: OFFSITE EXISTING DRAINAGE AREA
WA-#: EXISTING DRAINAGE AREA

TABEL 2-2B INTENSITY-DURATION-FREQUANCY CURVE COEFFICIENTS (ZONE 2)			
Recurrence Interval	Fitting parameters for IDF Equation 2-1		
	a	b	c
2-year	46.99	9.58	0.75
5-year	56.57	9.18	0.74
10-year	60.75	8.36	0.72
25-year	64.56	7.38	0.68
50-year	70.73	7.02	0.67
100-year	76.90	6.73	0.66

I: INTENSITY CALCULATIONS							
I=a/(t+b)^c, IDF EQUATION 2-1							
	OS-A	OS-B	OS-C	OS-D	OS-E	OS-F	WS-1
2 yr	3.37	3.36	3.40	3.29	3.04	3.50	4.88
5 yr	4.26	4.24	4.30	4.17	3.85	4.43	6.18
10 yr	5.03	5.01	5.07	4.91	4.54	5.22	7.29
25 yr	6.21	6.18	6.26	6.07	5.62	6.44	8.96
50 yr	7.18	7.14	7.23	7.02	6.50	7.44	10.34
100 yr	8.20	8.16	8.26	8.02	7.44	8.50	11.79

EXISTING FLOW
OS-#: OFFSITE EXISTING DRAINAGE AREA
WA-#: EXISTING DRAINAGE AREA

Q=ICA							
	OS-A (CP-a)	OS-B (CP-b)	OS-C (CP-c)	OS-D (CP-d)	OS-E (CP-e)	OS-F (CP-f)	WS-1 (Cp-1)
2 yr	5.09	2.01	3.95	8.57	7.36	44.34	14.20
5 yr	6.81	2.68	5.35	11.60	9.97	60.24	19.55
10 yr	8.45	3.33	6.64	14.41	12.39	74.88	24.37
25 yr	11.09	4.36	8.86	19.23	16.41	100.30	33.03
50 yr	13.44	5.28	10.83	23.51	20.24	122.93	40.79
100 yr	16.24	6.37	13.25	28.76	24.77	150.89	50.56

							APR
							DATE
							DESCRIPTION
◁	◁	◁	◁	◁	◁		REV

DESIGNED BY: AMC
REVIEWED BY: AJN
DRAWN BY: AMC

BGE
BGE, INC.
7330 San Pedro, Suite 202
San Antonio, TX 78216
TEL: 210-581-3600 www.bgeinc.com
TBPE Registration No. F-1046

THE JUNCTION

OFFSITE DRAINAGE CALCULATIONS

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Texas Licensed Professional Engineer 114451
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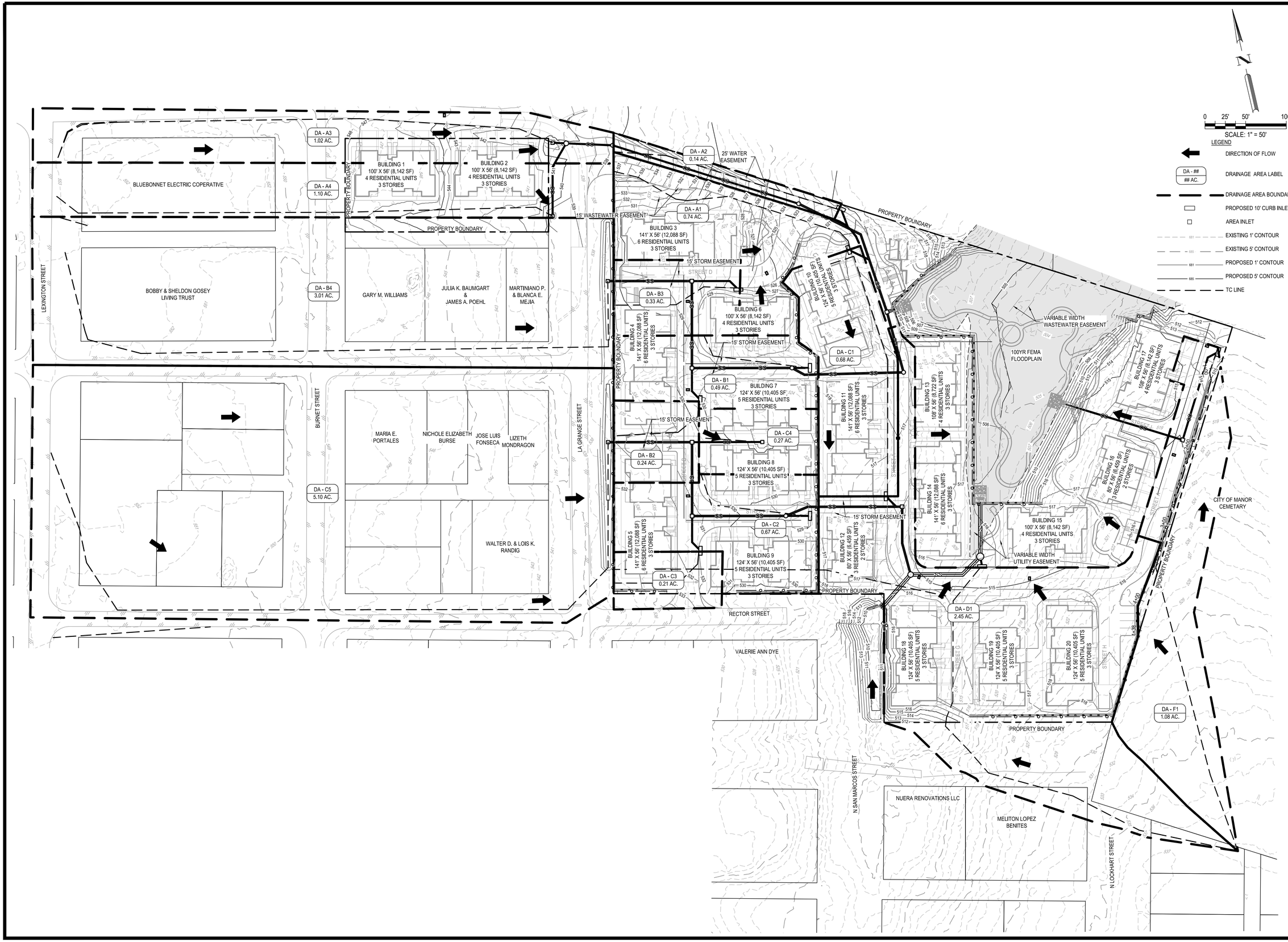
TBPE Registration No. F-1046

SHEET
19


DA - A3
1.02 AC.
DA - A4
1.10 AC.
DA - B4
3.01 AC.
DA - A2
0.14 AC.
DA - A1
0.74 AC.
DA - B3
0.33 AC.
DA - B1
0.49 AC.
DA - B2
0.24 AC.
DA - C1
0.68 AC.
DA - C4
0.27 AC.
DA - C2
0.67 AC.
DA - C3
0.21 AC.
DA - C5
5.10 AC.
DA - D1
2.45 AC.
DA - F1
1.08 AC.
BUILDING 1
100' X 56' (8,142 SF)
4 RESIDENTIAL UNITS
3 STORIES
BUILDING 2
100' X 56' (8,142 SF)
4 RESIDENTIAL UNITS
3 STORIES
BUILDING 3
141' X 56' (12,088 SF)
6 RESIDENTIAL UNITS
3 STORIES
BUILDING 4
141' X 56' (12,088 SF)
6 RESIDENTIAL UNITS
3 STORIES
BUILDING 5
141' X 56' (12,088 SF)
6 RESIDENTIAL UNITS
3 STORIES
BUILDING 6
100' X 56' (8,142 SF)
4 RESIDENTIAL UNITS
3 STORIES
BUILDING 7
124' X 56' (10,405 SF)
5 RESIDENTIAL UNITS
3 STORIES
BUILDING 8
124' X 56' (10,405 SF)
5 RESIDENTIAL UNITS
3 STORIES
BUILDING 9
124' X 56' (10,405 SF)
5 RESIDENTIAL UNITS
3 STORIES
BUILDING 10
124' X 56' (10,405 SF)
5 RESIDENTIAL UNITS
3 STORIES
BUILDING 11
141' X 56' (12,088 SF)
6 RESIDENTIAL UNITS
3 STORIES
BUILDING 12
80' X 56' (6,459 SF)
3 RESIDENTIAL UNITS
2 STORIES
BUILDING 13
108' X 56' (8,722 SF)
4 RESIDENTIAL UNITS
3 STORIES
BUILDING 14
141' X 56' (12,088 SF)
6 RESIDENTIAL UNITS
3 STORIES
BUILDING 15
100' X 56' (8,142 SF)
4 RESIDENTIAL UNITS
3 STORIES
BUILDING 16
80' X 56' (6,459 SF)
3 RESIDENTIAL UNITS
2 STORIES
BUILDING 17
108' X 56' (8,142 SF)
4 RESIDENTIAL UNITS
3 STORIES
BUILDING 18
124' X 56' (10,405 SF)
5 RESIDENTIAL UNITS
3 STORIES
BUILDING 19
124' X 56' (10,405 SF)
5 RESIDENTIAL UNITS
3 STORIES
BUILDING 20
124' X 56' (10,405 SF)
5 RESIDENTIAL UNITS
3 STORIES
BUILDING

COMPOSITE C VALUES																						
STREET								IMPERVIOUS							GRASS							
Drainage Area	Total Area (Ac)	Total Area (sf)	Street Width (ft)	Sidewalk Width (ft)	% of Street	Street Length (lf)	Sidewalk Length (lf)	Area Street (sf)	Area Street (Ac)	Area Street (%)	Num Homes in Area	Area Imper. (sf)	Area Imper. (Ac)	Area Imper. (%)	Area Grass (sf)	Area Grass (Ac)	Area Grass (%)	Composite 2 Yr "C"	Composite 10 Yr "C"	Composite 25 Yr "C"	Composite 100 Yr "C"
A1	0.74	32,234	26	0	100%	331	0	8,606	0.20	26.7%	7	11,200	0.26	34.7%	12,428	0.29	38.6%	**0.59**	**0.65**	**0.71**	**0.79**
A2	0.14	6,098	26	0	50%	300	0	3,900	0.09	64.0%	0	0	0.00	0.0%	2,198	0.05	36.0%	**0.59**	**0.65**	**0.71**	**0.79**
A3-OFFSITE	1.02	44,431	26	0	100%	122	0	3,172	0.07	7.1%	2	3,200	0.07	7.2%	38,059	0.87	85.7%	**0.40**	**0.43**	**0.50**	**0.57**
A4-OFFSITE	1.10	47,916	26	0	100%	67	0	1,742	0.04	3.6%	8	12,800	0.29	26.7%	33,374	0.77	69.7%	**0.46**	**0.51**	**0.57**	**0.65**
B1	0.49	21,344	26	0	50%	226	0	2,938	0.07	13.8%	9	14,400	0.33	67.5%	4,006	0.09	18.8%	**0.67**	**0.74**	**0.79**	**0.88**
B2	0.24	10,454	26	0	0%	100	0	0	0.00	0.0%	2	3,200	0.07	30.6%	7,254	0.17	69.4%	**0.47**	**0.51**	**0.57**	**0.65**
B3	0.33	14,375	26	0	100%	230	0	5,980	0.14	41.6%	4	6,400	0.15	44.5%	1,995	0.05	13.9%	**0.68**	**0.76**	**0.81**	**0.90**
B4-OFFSITE	3.01	131,116	26	0	100%	400	0	10,400	0.24	7.9%	0	0	0.00	0.0%	120,716	2.77	92.1%	**0.37**	**0.40**	**0.47**	**0.54**
C1	0.68	29,621	26	0	50%	313	0	4,069	0.09	13.7%	11	17,600	0.40	59.4%	7,952	0.18	26.8%	**0.64**	**0.70**	**0.76**	**0.84**
C2	0.67	29,185	26	0	50%	232	0	3,016	0.07	10.3%	0	0	0.00	0.0%	26,169	0.60	89.7%	**0.38**	**0.42**	**0.48**	**0.56**
C3	0.21	9,148	26	0	100%	70	0	1,820	0.04	19.9%	4	6,400	0.15	70.0%	928	0.02	10.1%	**0.70**	**0.78**	**0.83**	**0.92**
C4	0.27	11,761	26	0	100%	0	0	0	0.00	0.0%	5	8,000	0.18	68.0%	3,761	0.09	32.0%	**0.62**	**0.68**	**0.74**	**0.82**
C5- OFFSITE	5.09	221,720	26	0	100%	910	0	23,660	0.54	10.7%	15	24,000	0.55	10.8%	174,060	4.00	78.5%	**0.43**	**0.47**	**0.53**	**0.61**
D1	2.45	106,722	26	0	100%	790	0	20,540	0.47	19.2%	18	28,800	0.66	27.0%	57,382	1.32	53.8%	**0.53**	**0.58**	**0.64**	**0.72**
F1	1.08	47,045	26	0	50%	244	0	3,172	0.07	6.7%	0	0	0.00	0.0%	43,873	1.01	93.3%	**0.37**	**0.40**	**0.47**	**0.54**

Inlet Flow Calculations

Basin		Area	Area	Sheet Flow (Max 100 feet)						Grass Shallow Conc. Flow						Street Shallow Conc. Flow						Channel Flow				2-year			10-year			25-year			100-year		
				L	Elev 1	Elev 2		S	T_c	L	Elev 1	Elev 2		S	T_c	L	Elev 1	Elev 2		S	T_c	L	V	T_c	T_c	C	I	Q	C	I	Q	C	I	Q	C	I	Q
From	To	(Ac)	(sf)	(ft)			n	(%)	(min)	(ft)			n	(%)	(min)	(ft)			n	(%)	(min)	(ft)	(ft/s)	(min)	(min)		(in/hr)	(cfs)		(in/hr)	(cfs)		(in/hr)	(cfs)		(in/hr)	(cfs)
A1	INLET	0.74	32,234	98	536	531	0.240	5.1%	8.55	50	531	529	0.240	4.00%	0.26	0	0	0	0.015	0.00%	0.00	170.00	6.00	0.47	9.28	0.59	5.17	2.24	0.65	7.73	3.70	0.71	9.49	4.95	0.79	12.49	7.28
A2	INLET	0.14	6,098	0	0	0	0.240	0.0%	0.00	0	0	0	0.240	0.00%	0.00	63	536	532	0.015	6.35%	0.20	222.00	6.00	0.62	0.82	0.59	8.08	0.67	0.65	12.35	1.13	0.71	15.39	1.53	0.79	20.45	2.27
A3-OFFSITE	4-WAY	1.02	44,431	96	553	552	0.240	1.0%	15.88	0	0	0	0.240	0.00%	0.00	0	0	0	0.015	0.00%	0.00	571.00	6.00	1.59	17.46	0.40	3.94	1.60	0.43	5.87	2.60	0.50	7.23	3.70	0.57	9.53	5.58
A4-OFFSITE	4-WAY	1.10	47,916	33	554	552	0.240	6.1%	3.34	28	552	551	0.240	3.57%	0.15	0	0	0	0.015	0.00%	0.00	558.00	6.00	1.55	5.04	0.46	6.26	3.19	0.51	9.41	5.27	0.57	11.60	7.31	0.65	15.28	10.91
B1	SUMP	0.49	21,344	28	530	529	0.240	3.6%	3.62	0	0	0	0.240	0.00%	0.00	0	0	0	0.015	0.00%	0.00	118.00	6.00	0.33	3.95	0.67	6.63	2.18	0.74	10.01	3.63	0.79	12.35	4.81	0.88	16.29	7.03
B2	INLET	0.24	10,454	74	537	533	0.240	5.4%	6.67	0	0	0	0.240	0.00%	0.00	31	533	530	0.015	9.68%	0.08	20.00	6.00	0.06	6.81	0.47	5.74	0.64	0.51	8.61	1.06	0.57	10.59	1.46	0.65	13.94	2.18
B3	INLET	0.33	14,375	74	536	532	0.240	5.4%	6.67	0	0	0	0.240	0.00%	0.00	40	532	530	0.015	5.00%	0.15	74.00	6.00	0.21	7.03	0.68	5.69	1.29	0.76	8.52	2.13	0.81	10.48	2.80	0.90	13.80	4.09
B4-OFFSITE	4-WAY	3.01	131,116	40	553	552	0.240	2.5%	5.55	138	552	551	0.240	0.72%	1.67	0	0	0	0.015	0.00%	0.00	656.00	6.00	1.82	9.05	0.37	5.22	5.82	0.40	7.80	9.50	0.47	9.58	13.66	0.54	12.61	20.68
C1	INLET	0.68	29,621	0	0	0	0.015	0.0%	0.00	0	0	0	0.240	0.00%	0.00	47	520	519	0.015	2.13%	0.26	301.00	6.00	0.84	1.10	0.64	7.92	3.43	0.70	12.09	5.78	0.76	15.04	7.76	0.84	19.97	11.46
C2	SUMP	0.67	29,185	0	0	0	0.240	0.0%	0.00	40	532	531	0.240	2.50%	0.26	0	0	0	0.015	0.00%	0.00	120.00	6.00	0.33	0.59	0.38	8.22	2.09	0.42	12.57	3.50	0.48	15.68	5.08	0.56	20.86	7.76
C3	INLET	0.21	9,148	76	537	533	0.240	5.3%	6.89	0	0	0	0.240	0.00%	0.00	33	533	531	0.015	6.06%	0.11	17.00	6.00	0.05	7.05	0.70	5.68	0.84	0.78	8.51	1.39	0.83	10.47	1.83	0.92	13.78	2.66
C4	GRATE	0.27	11,761	65	531	527	0.240	6.2%	5.71	0	0	0	0.240	0.00%	0.00	0	0	0	0.015	0.00%	0.00	68.00	6.00	0.19	5.90	0.62	5.99	1.00	0.68	9.00	1.66	0.74	11.08	2.21	0.82	14.59	3.24
C5- OFFSITE	4-WAY	5.09	221,720	87	553	552	0.240	1.1%	14.11	126	552	551	0.240	0.79%	1.46	0	0	0	0.015	0.00%	0.00	780.00	6.00	2.17	17.74	0.43	3.91	8.48	0.47	5.83	13.85	0.53	7.18	19.45	0.61	9.46	29.22
D1	SUMP	2.45	106,722	100	538	537	0.240	1.0%	16.68	375	537	514	0.240	6.13%	1.56	0	0	0	0.015	0.00%	0.00	177.00	6.00	0.49	18.73	0.53	3.81	4.90	0.58	5.68	8.05	0.64	6.99	10.95	0.72	9.22	16.23
F1	INLET	1.08	47,045	100	538	536	0.240	2.0%	12.64	264	536	525	0.240	4.17%	1.34	0	0	0	0.015	0.00%	0.00	275.00	6.00	0.76	14.74	0.37	4.27	1.69	0.40	6.37	2.75	0.47	7.83	3.96	0.54	10.31	6.01

G:\TXC\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Shts\C03.11 1065900 OFFSITE PROPOSED DRAINAGE CALCULATIONS.dwg Layout: PROPOSED DRAINAGE CALCULATIONS (SHEET 1 OF 2) Plotted: 8/17/2023 12:12:04 PM By: Calderon

| | | | | | | | | | | | | | | | | | | |

STREET FLOW AND INLET CALCULATIONS

2 YEAR STORM

						STREET CAPACITY							INLET ON GRADE CAPACITY										SUMP INLET CAPACITY							
Drainage Area	Inlet	Area (Ac)	$Q_{(2)}$ (cfs)	$Q_{(pass)}$ (cfs)	$Q_{(total)}$ (cfs)	Street Width (ft)	Crown Type	Street Slope (ft/ft)	a (ft)	Z	Y_o (ft)	Ponded Width (ft)	Reduction Factor	Q_a/L_a (ft)	L_a (ft)	Length (ft)	L/L_a	a/Y_o	Q/Q_a	Q_a (cfs)	$Q_{(pass)}$ (cfs)	Pass to Inlet #	Clogging Factor	$Q_{(total)}$ (cfs)	Length (ft)	W (ft)	Opening Height	C_w	C_o	h (ft)
A1	INLET	0.74	2.24	0.00	2.24	26	S	0.017	0.5325	50	0.17	8.62	0%	0.85	2.63	10	3.81	3.09	0.26	8.5	0.00									
A2	INLET	0.14	0.67	0.00	0.67	26	S	0.035	0.5325	50	0.10	4.78	0%	0.77	0.86	10	11.61	5.57	0.09	7.7	0.00									
A3-OFFSITE	4-WAY	1.02	1.60	0.00	1.60																		10%	1.6	16	2	0.58	2.3	0.67	0.04
A4-OFFSITE	4-WAY	1.10	3.19	0.00	3.19																		10%	3.2	16	2	0.58	2.3	0.67	0.07
B1	SUMP	0.49	2.18	0.00	2.18	26	S	0.007	0.5325	50	0.20	10.07	0%	0.88	2.46	10	4.06	2.64	0.25	8.8	0.00									
B2	INLET	0.24	0.64	0.00	0.64	26	S	0.010	0.5325	50	0.12	5.96											10%	0.6	10	2	0.58	2.3	0.67	0.08
B3	INLET	0.33	1.29	0.00	1.29	26	S	0.033	0.5325	50	0.12	6.18											10%	1.3	10	2	0.58	2.3	0.67	0.13
B4-OFFSITE	4-WAY	3.01	5.82	0.00	5.82																		10%	5.8	16	2	0.58	2.3	0.67	0.13
C1	INLET	0.68	3.43	0.00	3.43	26	S	0.017	0.5325	50	0.20	10.12	0%	0.89	3.88	10	2.58	2.63	0.39	8.9	0.00									
C2	SUMP	0.67	2.09	0.00	2.09	26	S	0.020	0.5325	50	0.16	8.15	0%	0.84	2.48	10	4.03	3.27	0.25	8.4	0.00									
C3	INLET	0.21	0.84	0.00	0.84	26	S	0.020	0.5325	50	0.12	5.79											10%	0.8	10	2	0.58	2.3	0.67	0.10
C4	GRATE	0.27	1.00	0.00	1.00																		10%	1.0	10	2	0.58	2.3	0.67	0.11
C5- OFFSITE	4-WAY	5.09	8.48	0.00	8.48																		10%	8.5	16	2	0.58	2.3	0.67	0.20
D1	SUMP	2.45	4.90	0.00	4.90	26	S	0.020	0.5325	50	0.22	11.22											10%	4.9	10	2	0.58	2.3	0.67	0.31
F1	INLET	1.08	1.69	0.00	1.69	26	S	0.012	0.5325	50	0.17	8.28											10%	1.7	10	2	0.58	2.3	0.67	0.15

STREET FLOW AND INLET CALCULATIONS

10 YEAR STORM

						STREET CAPACITY							INLET ON GRADE CAPACITY										SUMP INLET CAPACITY							
Drainage Area	Inlet	Area (Ac)	$Q_{(10)}$ (cfs)	$Q_{(pass)}$ (cfs)	$Q_{(total)}$ (cfs)	Street Width (ft)	Crown Type	Street Slope (ft/ft)	a (ft)	Z	Y_o (ft)	Ponded Width (ft)	Reduction Factor	Q_a/L_a (ft)	L_a (ft)	Length (ft)	L/L_a	a/Y_o	Q/Q_a	Q_a (cfs)	$Q_{(pass)}$ (cfs)	Pass to Inlet #	Clogging Factor	$Q_{(total)}$ (cfs)	Length (ft)	W (ft)	Opening Height	C_w	C_o	h (ft)
A1	INLET	0.74	3.70	0.00	3.70	26	S	0.017	0.5325	50	0.21	10.40	0%	0.89	4.15	10	2.41	2.56	0.41	8.9	0.00									
A2	INLET	0.14	1.13	0.00	1.13	26	S	0.035	0.5325	50	0.12	5.82	0%	0.80	1.42	10	7.06	4.58	0.14	8.0	0.00									
A3-OFFSITE	4-WAY	1.02	2.60	0.00	2.60																		10%	2.6	16	2	0.58	2.3	0.67	0.06
A4-OFFSITE	4-WAY	1.10	5.27	0.00	5.27																		10%	5.3	16	2	0.58	2.3	0.67	0.12
B1	SUMP	0.49	3.63	0.00	3.63	26	S	0.007	0.5325	50	0.24	12.20	0%	0.93	3.90	10	2.56	2.18	0.39	9.3	0.00									
B2	INLET	0.24	1.06	0.00	1.06	26	S	0.010	0.5325	50	0.14	7.18											10%	1.1	10	2	0.58	2.3	0.67	0.11
B3	INLET	0.33	2.13	0.00	2.13	26	S	0.033	0.5325	50	0.15	7.47											10%	2.1	10	2	0.58	2.3	0.67	0.18
B4-OFFSITE	4-WAY	3.01	9.50	0.00	9.50																		10%	9.5	16	2	0.58	2.3	0.67	0.22
C1	INLET	0.68	5.78	0.00	5.78	26	S	0.017	0.5325	50	0.25	12.30	0%	0.93	6.20	10	1.61	2.16	0.62	9.3	0.00									
C2	SUMP	0.67	3.50	0.00	3.50	26	S	0.020	0.5325	50	0.20	9.88	0%	0.88	3.97	10	2.52	2.69	0.40	8.8	0.00									
C3	INLET	0.21	1.39	0.00	1.39	26	S	0.020	0.5325	50	0.14	7.00											10%	1.4	10	2	0.58	2.3	0.67	0.13
C4	GRATE	0.27	1.66	0.00	1.66																		10%	1.7	10	2	0.58	2.3	0.67	0.15
C5- OFFSITE	4-WAY	5.09	13.85	0.00	13.85																		10%	13.9	16	2	0.58	2.3	0.67	0.32
D1	SUMP	2.45	8.05	0.00	8.05	26	S	0.020	0.5325	50	0.27	13.51											10%	8.0	10	2	0.58	2.3	0.67	0.43
F1	INLET	1.08	2.75	0.00	2.75	27	S	0.012	0.5325	50	0.20	9.93											10%	2.7	10	2	0.58	2.3	0.67	0.21

STREET FLOW AND INLET CALCULATIONS

25 YEAR STORM

						STREET CAPACITY							INLET ON GRADE CAPACITY										SUMP INLET CAPACITY							
Drainage Area	Inlet	Area (Ac)	$Q_{(25)}$ (cfs)	$Q_{(pass)}$ (cfs)	$Q_{(total)}$ (cfs)	Street Width (ft)	Crown Type	Street Slope (ft/ft)	a (ft)	Z	Y_o (ft)	Ponded Width (ft)	Reduction Factor	Q_a/L_a (ft)	L_a (ft)	Length (ft)	L/L_a	a/Y_o	Q/Q_a	Q_a (cfs)	$Q_{(pass)}$ (cfs)	Pass to Inlet #	Clogging Factor	$Q_{(total)}$ (cfs)	Length (ft)	W (ft)	Opening Height	C_w	C_o	h (ft)
A1	INLET	0.74	4.95	0.00	4.95	26	S	0.017	0.5325	50	0.23	11.61	0%	0.92	5.40	10	1.85	2.29	0.54	9.2	0.00									
A2	INLET	0.14	1.53	0.00	1.53	26	S	0.035	0.5325	50	0.13	6.52	0%	0.81	1.88	10	5.31	4.08	0.19	8.1	0.00									
A3-OFFSITE	4-WAY	1.02	3.70	0.00	3.70																		10%	3.7	16	2	0.58	2.3	0.67	0.09
A4-OFFSITE	4-WAY	1.10	7.31	0.00	7.31																		10%	7.3	16	2	0.58	2.3	0.67	0.17
B1	SUMP	0.49	4.81	0.00	4.81	26	S	0.007	0.5325	50	0.27	13.56	0%	0.96	5.01	10	2.00	1.96	0.50	9.6	0.00									
B2	INLET	0.24	1.46	0.00	1.46	26	S	0.010	0.5325	50	0.16	8.11											10%	1.5	10	2	0.58	2.3	0.67	0.14
B3	INLET	0.33	2.80	0.00	2.80	26	S	0.033	0.5325	50	0.17	8.28											10%	2.8	10	2	0.58	2.3	0.67	0.21
B4-OFFSITE	4-WAY	3.01	13.66	0.00	13.66																		10%	13.7	16	2	0.58	2.3	0.67	0.32
C1	INLET	0.68	7.76	0.00	7.76	26	S	0.017	0.5325	50	0.27	13.74	0%	0.96	8.05	10	1.24	1.94	0.80	9.6	0.00									
C2	SUMP	0.67	5.08	0.00	5.08	26	S	0.020	0.5325	50	0.23	11.36	0%	0.91	5.57	10	1.80	2.34	0.56	9.1	0.00									
C3	INLET	0.21	1.83	0.00	1.83	26	S	0.020	0.5325	50	0.15	7.75											10%	1.8	10	2	0.58	2.3	0.67	0.16
C4	GRATE	0.27	2.21	0.00	2.21																		10%	2.2	10	2	0.58	2.3	0.67	0.18
C5- OFFSITE	4-WAY	5.09	19.45	0.00	19.45																		10%	19.5	16	2	0.58	2.3	0.67	0.45
D1	SUMP	2.45	10.95	0.00	10.95	26	S	0.020	0.5325	50	0.30	15.16											10%	11.0	10	2	0.58	2.3	0.67	0.53
F1	INLET	1.08	3.96	0.00	3.96	27	S	0.012	0.5325	50	0.23	11.39											10%	4.0	10	2	0.58	2.3	0.67	0.27

STREET FLOW AND INLET CALCULATIONS

100 YEAR STORM

						STREET CAPACITY							INLET ON GRADE CAPACITY										SUMP INLET CAPACITY							
Drainage Area	Inlet	Area (Ac)	$Q_{(100)}$ (cfs)	$Q_{(pass)}$ (cfs)	$Q_{(total)}$ (cfs)	Street Width (ft)	Crown Type	Street Slope (ft/ft)	a (ft)	Z	Y_o (ft)	Ponded Width (ft)	Reduction Factor	Q_a/L_a (ft)	L_a (ft)	Length (ft)	L/L_a	a/Y_o	Q/Q_a	Q_a (cfs)	$Q_{(pass)}$ (cfs)	Pass to Inlet #	Clogging Factor	$Q_{(total)}$ (cfs)	Length (ft)	W (ft)	Opening Height	C_w	C_o	h (ft)
A1	INLET	0.74	7.28	0.00	7.28	26	S	0.017	0.5325	50	0.27	13.41	0%	0.96	7.60	10	1.32	1.99	0.76	9.6	0.00									
A2	INLET	0.14	2.27	0.00	2.27	26	S	0.035	0.5325	50	0.15	7.56	0%	0.83	2.72	10	3.67	3.52	0.27	8.3	0.00									
A3-OFFSITE	4-WAY	1.02	5.58	0.00	5.58																		10%	5.6	16	2	0.58	2.3	0.67	0.13
A4-OFFSITE	4-WAY	1.10	10.91	0.00	10.91																		10%	10.9	16	2	0.58	2.3	0.67	0.25
B1	SUMP	0.49	7.03	0.00	7.03	26	S	0.007	0.5325	50	0.31	15.63	0%	1.01	6.98	10	1.43	1.70	0.70	10.1	0.00									
B2	INLET	0.24	2.18	0.00	2.18	26	S	0.010	0.5325	50	0.19	9.42											10%	2.2	10	2	0.58	2.3	0.67	0.18
B3	INLET	0.33	4.09	0.00	4.09	26	S	0.033	0.5325	50	0.19	9.54											10%	4.1	10	2	0.58	2.3	0.67	0.28
B4-OFFSITE	4-WAY	3.01	20.68	0.00	20.68																		10%	20.7	16	2	0.58	2.3	0.67	0.48
C1	INLET	0.68	11.46	0.00	11.46	26	S	0.017	0.5325	50	0.32	15.89	0%	1.01	11.31	10	0.88	1.68	1.13	10.1	1.33									
C2	SUMP	0.67	7.76	0.00	7.76	26	S	0.020	0.5325	50	0.27	13.32	0%	0.96	8.13	10	1.23	2.00	0.81	9.6	0.00									
C3	INLET	0.21	2.66	0.00	2.66	26	S	0.020	0.5325	50	0.18	8.92											10%	2.7	10	2	0.58	2.3	0.67	0.21
C4	GRATE	0.27	3.24	0.00	3.24																		10%	3.2	10	2	0.58	2.3	0.67	0.24
C5- OFFSITE	4-WAY	5.09	29.22	0.00	29.22																		10%	29.2	16	2	0.58	2.3	0.67	0.68
D1	SUMP	2.45	16.23	1.33	17.56	26	S	0.020	0.5325	50	0.36	18.09											10%	17.6	10	2	0.58	2.3	0.67	0.68
F1	SUMP	1.08	6.01	0.00	6.01	26	S	0.012	0.5325	50	0.27	13.32											10%	6.0	10	2	0.58	2.3	0.67	0.36

	APR
	DATE
	DESCRIPTION
◁ ◁ ◁ ◁ ◁ ◁	REV

DESIGNED BY: AMC

REVIEWED BY: AJN

DRAWN BY: AMC

BGE, INC.
7330 San Pedro, Suite 202
San Antonio, TX 78216
TEL: 210-581-3600 www.bgeinc.com
TBPE Registration No. F-1046

THE JUNCTION

PROPOSED DRAINAGE CALCULATIONS
(SHEET 2 OF 2)

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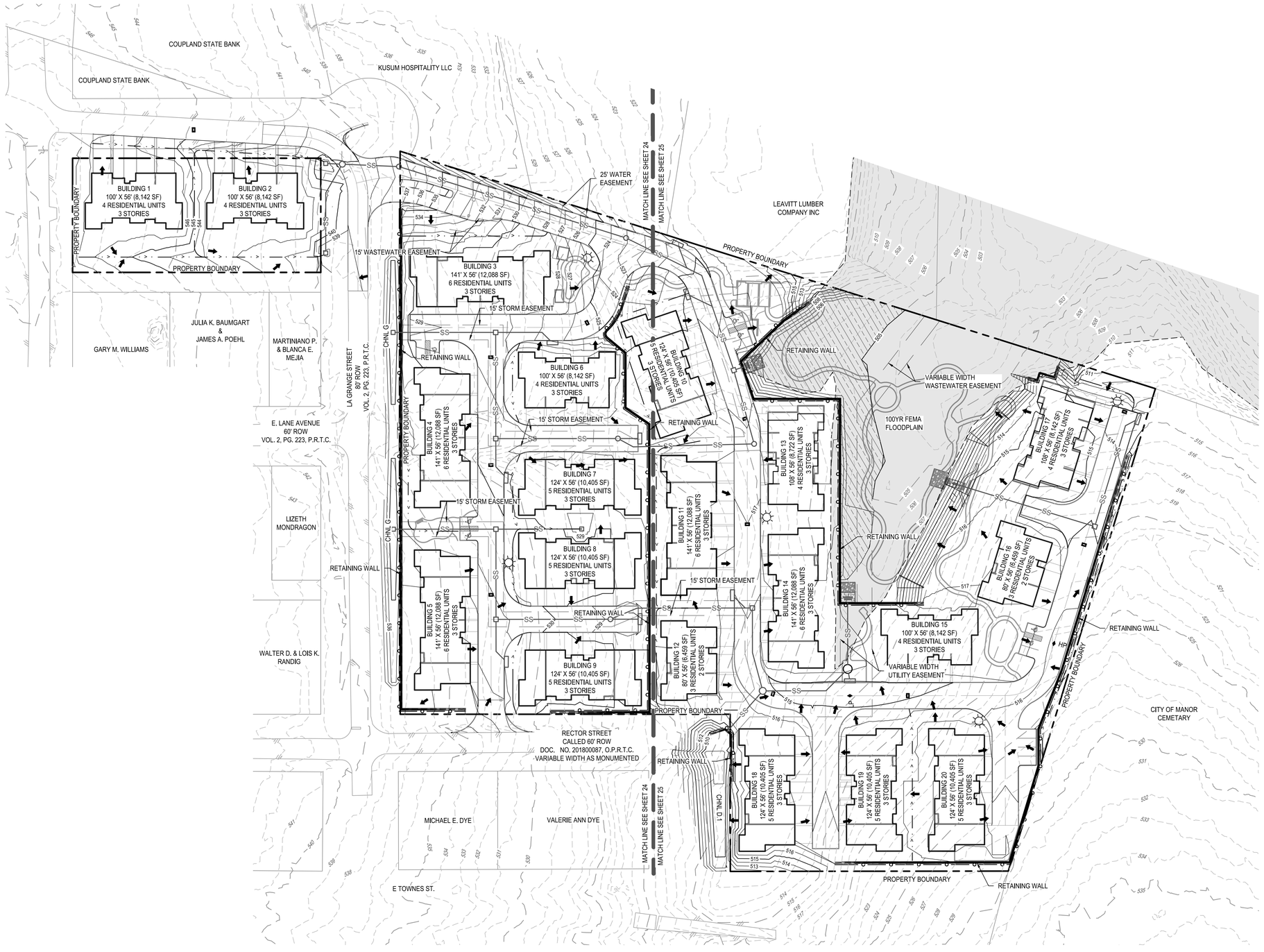
SHEET
22

G:\TXC\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Shts\C03.11 1065900 OFFSITE PROPOSED DRAINAGE CALCULATIONS.dwg Layout: PROPOSED DRAINAGE CALCULATIONS (SHEET 2 OF 2) Plotted: 8/17/2023 12:12:05 PM By: Calderon



GENERAL NOTES:

1. CONTRACTOR SHALL REFER TO PLAT TO CONFIRM ALL BUILDING SETBACKS PRIOR TO ANY FOUNDATION WORK.
2. AS SOON AS PRACTICAL, CONTRACTOR SHALL ESTABLISH VEGETATION (HYDROMULCH, SEEDING, SODDING, ETC...) TO PREVENT EROSION FROM OCCURRING.
3. CONTRACTOR SHALL CONTACT ENGINEER REGARDING ANY QUESTIONS ON THE INTENT OF THIS PLAN.
4. POSITIVE DRAINAGE SHALL BE MAINTAINED ON ALL SURFACE AREAS WITHIN THE SCOPE OF THIS PROJECT. DRAINAGE SHALL BE DIRECTED AWAY FROM ALL BUILDING FOUNDATIONS AND TOWARDS THE PROPER DRAINAGE EASEMENT OF STREET RIGHT OF WAY ACCORDING TO THE MASTER DRAINAGE PLAN FOR THE PROJECT. CONTRACTOR SHOULD TAKE PRECAUTIONS NOT TO ALLOW PONDING OF WATER.
5. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE IN ALL SWALES.
6. EARTHEN GRADING SLOPES SHALL BE NO GREATER THAN 3:1.

LOT FILL NOTES:

1. ALL AREAS WITH FILL SHALL BE COMPACTED IN ACCORDANCE WITH THE 79G PROCEDURE THAT MEETS THE REQUIREMENTS OF THE FHA DATA SHEET. DOCUMENTATION AND THE EVIDENCE OF COMPACTED SHALL BE FURNISHED TO THE ENGINEER & OWNER.

FINISHED FLOOR ELEVATIONS

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

							APR
							DATE
							DESCRIPTION
							REV

DESIGNED BY: ACR
REVIEWED BY: AJN
DRAWN BY: ACR

BGE
BGE, INC.
7330 San Pedro, Suite 202
San Antonio, TX 78216
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TBPE Registration No. F-1046

THE JUNCTION

OVERALL GRADING PLAN

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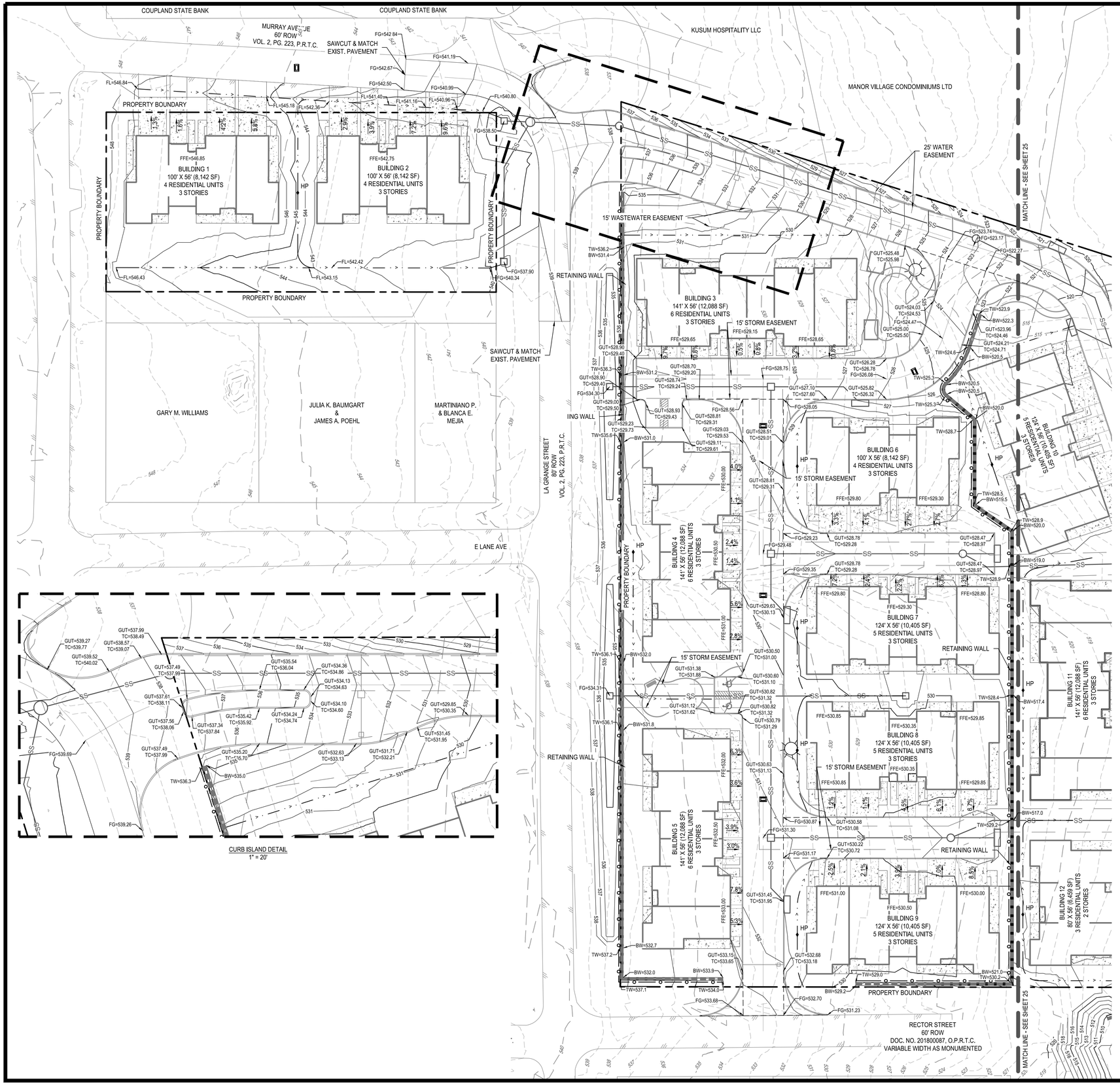
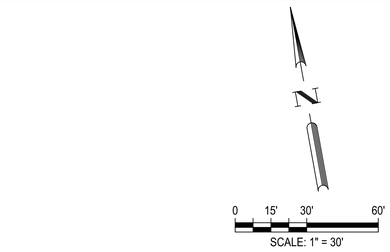
SHEET
23

G:\TXC\Projects\Legacy Performance Capital\10659-00-The Junction\03_CAD\D01_Shts\C04.00 10659000 OVERALL GRADING PLAN.dwg Layout: OVERALL GRADING PLAN Plotted: 8/17/2023 12:12:24 PM By: jclifton





LEGEND

- PROPERTY BOUNDARY
- PROPOSED 1' CONTOUR
- PROPOSED 5' CONTOUR
- EXISTING 1' CONTOUR
- EXISTING 5' CONTOUR
- DIRECTION OF FLOW
- DRIVEWAY/SIDEWALK
- RAMP (SEE SHEET 38)
- LP / HP
- LOW POINT/HIGH POINT
- RETAINING WALL
- 100 YEAR FEMA FLOODPLAIN
- FLOODPLAIN VOLUME REPLACEMENT EXCAVATION AREA (±520 CY REQ'D, ±722 CY PROVIDED).
- EASEMENT
- PROPOSED STORM DRAIN
- PROPOSED STORM INLET
- PROPOSED STORM JUNCTION BOX
- PROPOSED STORM MANHOLE
- PROPOSED STORM HEADWALL

GENERAL NOTES:

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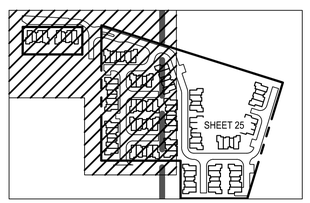

KEYMAP (N.T.S.)

	APR
	DATE
	DESCRIPTION
	REV
DESIGNED BY:	ACR
REVIEWED BY:	AJN
DRAWN BY:	ACR

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San Antonio, TX 78216
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THE JUNCTION

DETAILED GRADING PLAN (SHEET 1 OF 2)

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SHEET
24

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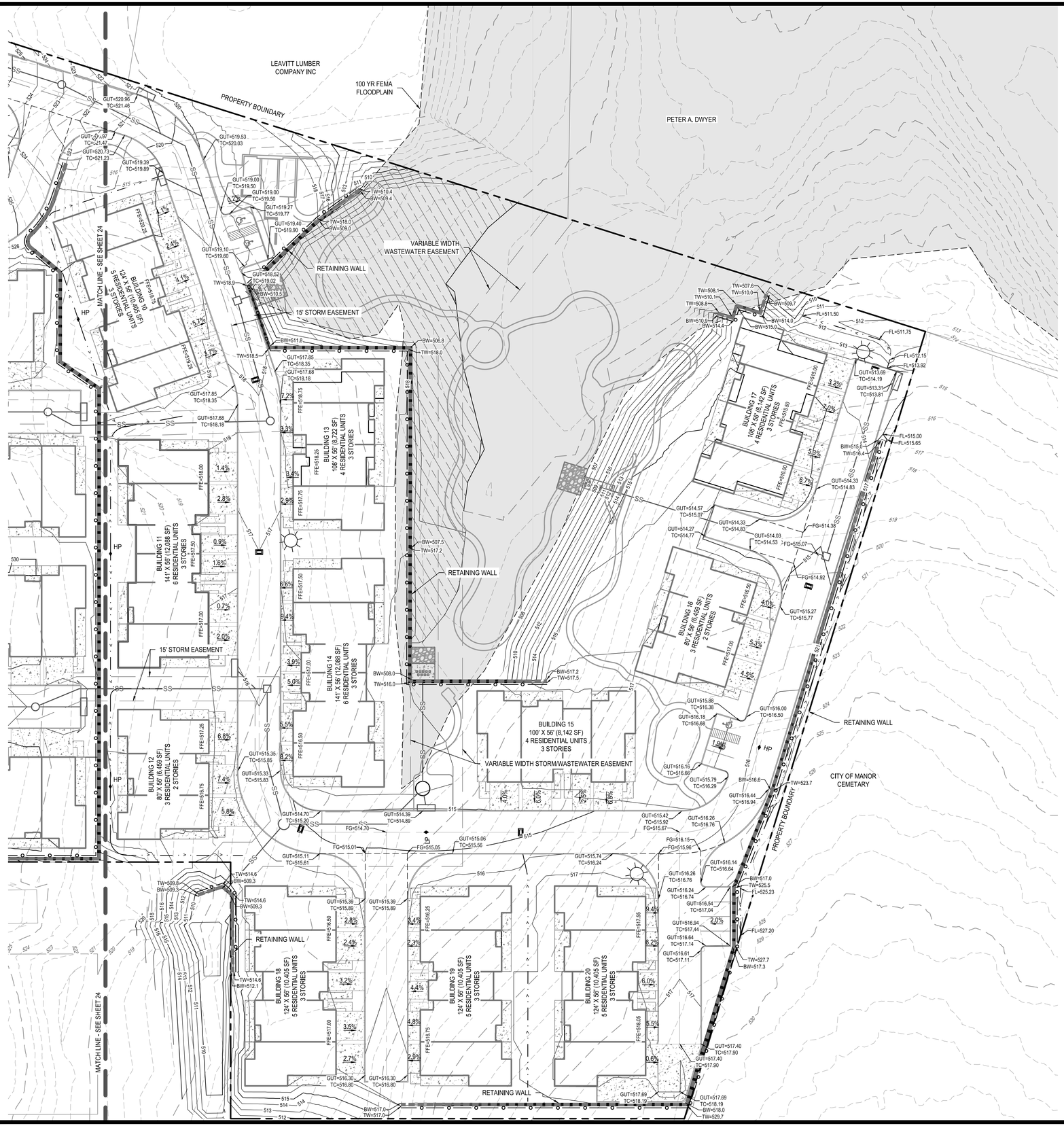

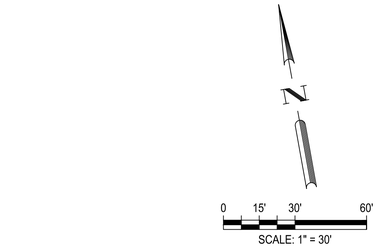

LEGEND

- PROPERTY BOUNDARY
- 831 PROPOSED 1' CONTOUR
- 830 PROPOSED 5' CONTOUR
- 831 EXISTING 1' CONTOUR
- 830 EXISTING 5' CONTOUR
- DIRECTION OF FLOW
- DRIVEWAY/SIDEWALK
- RAMP (SEE SHEET 38)
- LP / HP LOW POINT/HIGH POINT
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- FLOODPLAIN VOLUME REPLACEMENT EXCAVATION AREA (±520 CY REQ'D, ±722 CY PROVIDED).
- EASEMENT
- SS SS PROPOSED STORM DRAIN
- PROPOSED STORM INLET
- PROPOSED STORM JUNCTION BOX
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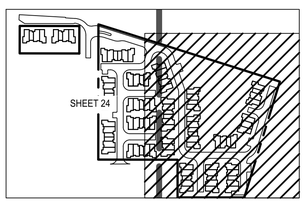

KEYMAP (N.T.S.)

	APR	DATE	DESCRIPTION	REV

DESIGNED BY: ACR
REVIEWED BY: AJN
DRAWN BY: ACR

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San Antonio, TX 78216
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THE JUNCTION

DETAILED GRADING PLAN (SHEET 2 OF 2)

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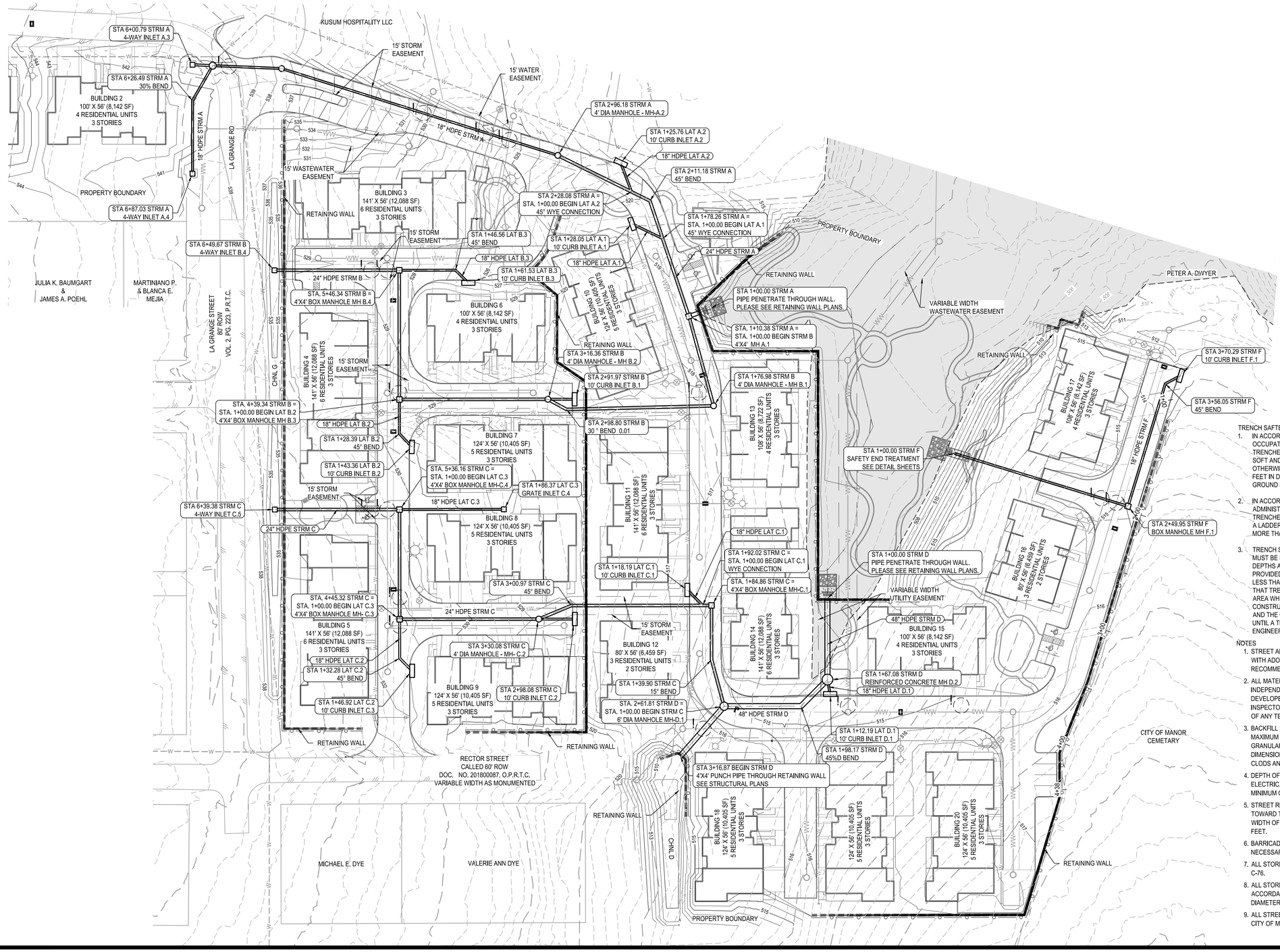
SHEET 25

G:\TXCI\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Shts\C04 10 1065900 DETAILED GRADING PLAN.dwg Layout: DETAILED GRADING PLAN (SHEET 2 OF 2) Plotted: 8/17/2023 1:35:45 PM By: Calderon



0 20' 40' 80'

SCALE: 1" = 40'

LEGEND

- STORM DRAIN LINE
- PROPOSED NEW MANHOLE
- PROPOSED WASTEWATER LINE
- PROPOSED WATER LINE
- EXISTING MINOR 1' CONTOUR
- EXISTING MAJOR 5' CONTOUR
- PROPOSED MINOR 1' CONTOUR
- PROPOSED MAJOR 5' CONTOUR
- PROPOSED SINGLE W.W. SERVICE CONN.
- PROPOSED DOUBLE W.W. SERVICE CONN.
- PROPOSED SINGLE WATER SERVICE
- PROPOSED DUAL WATER SERVICE
- DIRECTION OF FLOW
- UTILITY CROSSING
- PROPERTY BOUNDARY
- RETAINING WALL
- EASEMENT
- 100 YEAR FEMA FLOODPLAIN
- PROPOSED 10' CURB INLET

ALL WATER/WASTEWATER SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES. REFER TO DETAILS SHOWN IN THIS PLAN SET.

TRENCH SAFTEY

1. IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS AND THE US OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS, ALL TRENCHES OVER FIVE (5) FEET IN DEPTH IN EITHER HARD AND COMPACT OR SOFT AND UNSTABLE SOILS SHALL BE SLOPED, SHORED, SHEETED, BRACED OR OTHERWISE SUPPORTED. FURTHERMORE, ALL TRENCHES LESS THAN FIVE (5) FEET IN DEPTH SHALL ALSO BE EFFECTIVELY PROTECTED WHEN HAZARDOUS GROUND MOVEMENT MAY BE EXPECTED.
2. IN ACCORDANCE WITH THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS, WHEN EMPLOYEES ARE REQUIRED TO BE IN TRENCHES FOUR (4) FEET DEEP OR MORE, ADEQUATE MEANS OF EXIT, SUCH AS A LADDER OR STEPS, MUST BE PROVIDED AND LOCATED SO AS TO REQUIRE NO MORE THAN TWENTY-FIVE (25) FEET OF LATERAL TRAVEL.
3. TRENCH SAFETY PLANS, SEALED BY A LICENSED PROFESSIONAL ENGINEER MUST BE SUBMITTED FOR ALL CONSTRUCTION ACTIVITIES WHERE EXCAVATION DEPTHS ARE FIVE (5) FEET OR GREATER. IF A TRENCH SAFETY PLAN WAS NOT PROVIDED WITH THE PLANS BECAUSE TRENCHES WERE ANTICIPATED TO BE LESS THAN FIVE (5) FEET IN DEPTH AND DURING CONSTRUCTION IT WAS FOUND THAT TRENCHES ARE IN FACT FIVE (5) FEET OR MORE IN DEPTH, OR ARE IN AN AREA WHERE HAZARDOUS GROUND MOVEMENT IS EXPECTED, ALL CONSTRUCTION SHALL CEASE, THE TRENCHED AREA SHALL BE BARRICADED AND THE CITY NOTIFIED IMMEDIATELY. CONSTRUCTION SHALL NOT RESUME UNTIL A TRENCH SAFETY PLAN IS SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

NOTES

1. STREET AND DRAINAGE SYSTEMS MUST BE CONSTRUCTED IN ACCORDANCE WITH ADOPTED CITY OF MANOR STANDARDS AND GEOTECHNICAL REPORT RECOMMENDATIONS.
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3. BACKFILL BEHIND THE CURB SHALL BE COMPACTED TO OBTAIN A MINIMUM OF OF MAXIMUM DENSITY TO WITHIN 3" OF TOP OF CURB. BACKFILL MATERIAL SHALL BE GRANULAR MATERIAL WITH NO ROCKS LARGER THAN 6" IN THE GREATEST DIMENSION. THE TOP 3" OF BACKFILL SHALL BE CLEAN TOPSOIL, FREE FROM CLODS AND ROCKS AND BE CAPABLE OF SUSTAINING PLANT LIFE.
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9. ALL STREET AND DRAINAGE IMPROVEMENTS MUST CONFORM TO APPLICABLE CITY OF MANOR ORDINANCES.

	APR	DATE	DESCRIPTION	REV

DESIGNED BY: AMC

REVIEWED BY: AJN

DRAWN BY: AMC

BGE, INC.
7330 San Pedro, Suite 202
San Antonio, TX 78216
TEL: 210-581-3600 www.browngay.com
TBPE Registration No. F-1046

THE JUNCTION

ONSITE OVERALL STORM PLAN

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Engineer 114451
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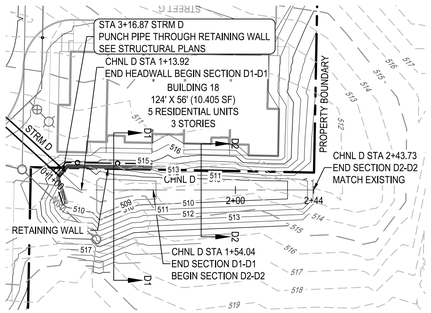
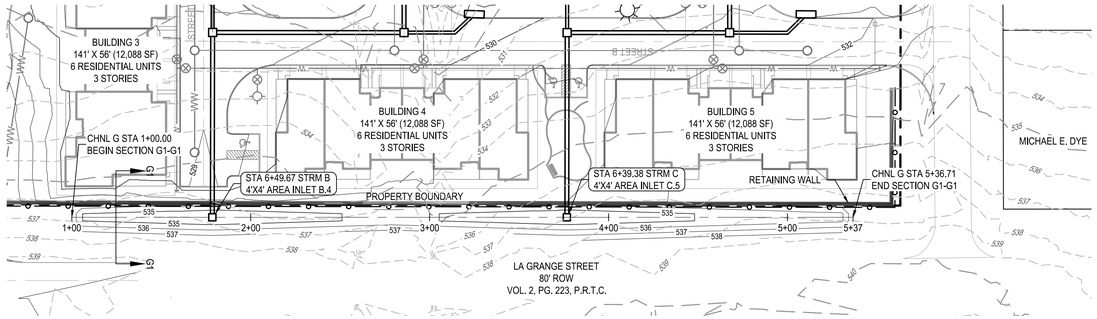
SHEET
26

G:\TX\C\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Shts\C06.00 1065900 ONSITE OVERALL STORM PLAN.dwg Layout: ONSITE OVERALL STORM PLAN Plotted: 8/17/2023 12:12:59 PM By: Calderon





0 20' 40' 80'

SCALE: 1" = 40'

CAPACITY VERIFICATION:STA 1+00 TO STA 2+45

Q_{25} = 51 cfs	Q_{25} = 70 cfs	Q_{25} = 115 cfs	Q_{25} = 175 cfs
n = 0.04	n = 0.04	n = 0.04	n = 0.04
S = 1.36%	S = 1.36%	S = 1.36%	S = 1.36%
Dn_{25} = 1.00 ft	Dn_{25} = 1.20 ft	Dn_{25} = 1.60 ft	Dn_{25} = 2.00 ft
Vn_{25} = 3.91fps	Vn_{25} = 4.32 fps	Vn_{25} = 5.01 fps	Vn_{25} = 5.65 fps
D = 2.5 ft	D = 2.5 ft	D = 2.5 ft	D = 2.5 ft
Bw = 10 ft	Bw = 10 ft	Bw = 10 ft	Bw = 10 ft

CAPACITY VERIFICATION:STA 1+00 TO STA 5+37

Q_{25} = 16 cfs	Q_{25} = 21 cfs	Q_{25} = 36 cfs	Q_{25} = 55 cfs
n = 0.04	n = 0.04	n = 0.04	n = 0.04
S = 1.00%	S = 1.00%	S = 1.00%	S = 1.00%
Dn_{25} = 0.92 ft	Dn_{25} = 1.05 ft	Dn_{25} = 1.36 ft	Dn_{25} = 1.65 ft
Vn_{25} = 3.02 fps	Vn_{25} = 3.25 fps	Vn_{25} = 3.75 fps	Vn_{25} = 3.97 fps
D = 2 ft	D = 2 ft	D = 2 ft	D = 2 ft
Bw = 6 ft	Bw = 6 ft	Bw = 6 ft	Bw = 6 ft

LEGEND

- STORM DRAIN LINE
- PROPOSED NEW MANHOLE
- WW — PROPOSED WASTEWATER LINE
- W — PROPOSED WATER LINE
- 681 — EXISTING MINOR 1' CONTOUR
- 685 — EXISTING MAJOR 5' CONTOUR
- 681 — PROPOSED MINOR 1' CONTOUR
- 685 — PROPOSED MAJOR 5' CONTOUR
- PROPOSED SINGLE W.W. SERVICE CONN.
- PROPOSED DOUBLE W.W. SERVICE CONN.
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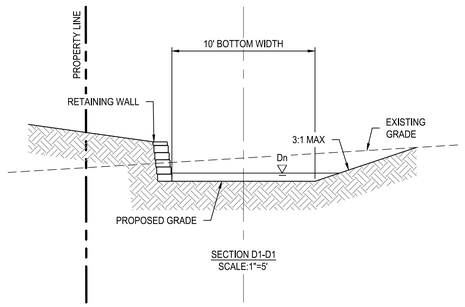
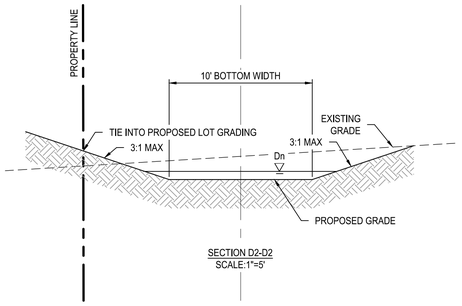


SECTION D1-D1
SCALE:1"=5'



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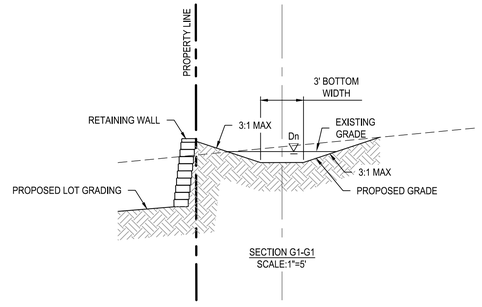
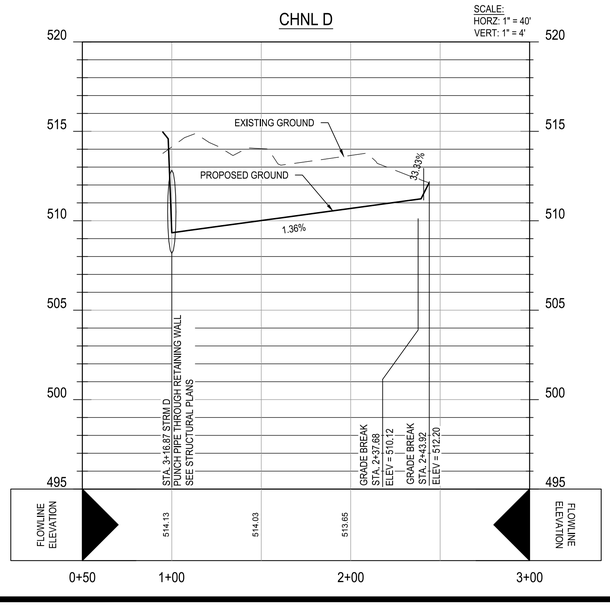
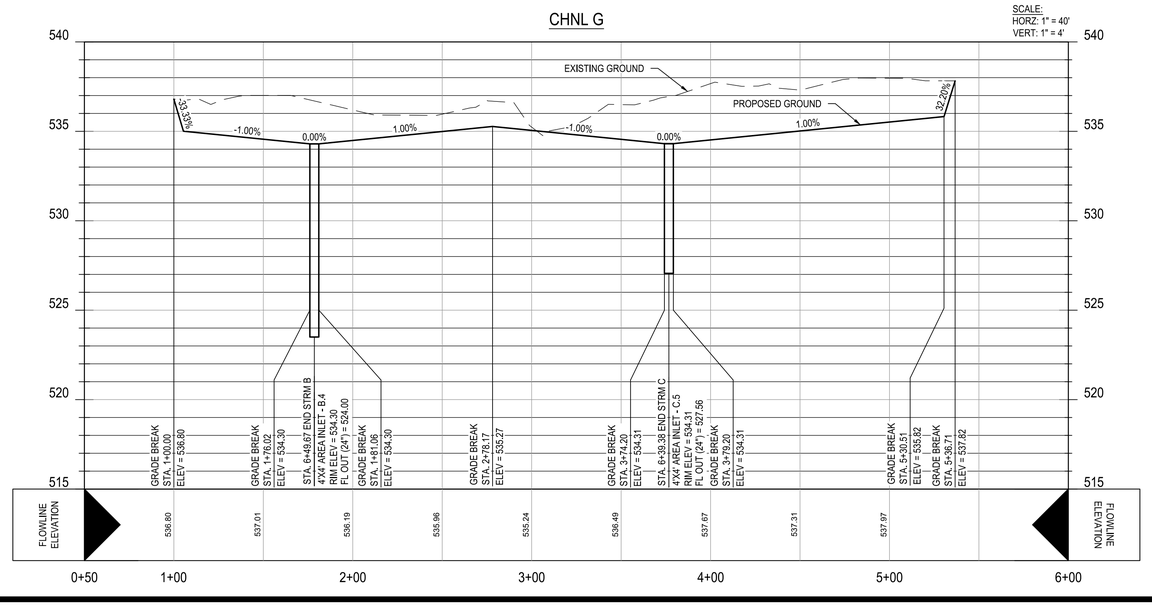


SECTION G1-G1
SCALE:1"=5'





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REVIEWED BY: AJN
DRAWN BY: AMC

BGE, INC.
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THE JUNCTION

CHANNEL D & G PLAN & PROFILE

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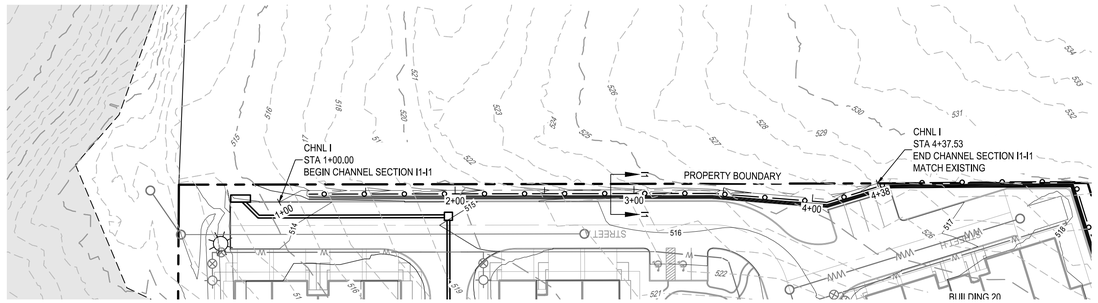
SHEET
27

G:\TXCI\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Shts\C04.20 1065900 CHANNEL D & G.dwg Layout: CHANNEL D & G PLAN & PROFILE Plotted: 8/17/2023 12:13:24 PM By: Calderon



CAPACITY VERIFICATION:STA 1+00 TO STA 2+50

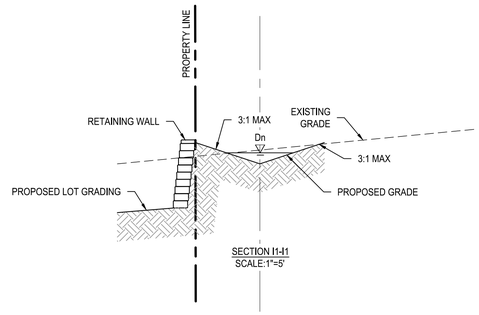
Q_{cap} = 1.69 cfs	Q_{cap} = 2.75 cfs	Q_{cap} = 3.96 cfs	Q_{cap} = 6.01 cfs
n = 0.04	n = 0.04	n = 0.04	n = 0.04
S = 4.42%	S = 4.42%	S = 4.42%	S = 4.42%
Dn_n = 0.40 ft	Dn_n = 0.50 ft	Dn_n = 0.60 ft	Dn_n = 0.60 ft
Vn_n = 3.46 fps	Vn_n = 3.91 fps	Vn_n = 4.28 fps	Vn_n = 4.75 fps
D = 1.00 ft	D = 1.00 ft	D = 1.00 ft	D = 1.00 ft

CAPACITY VERIFICATION:STA 2+50 TO STA 4+07

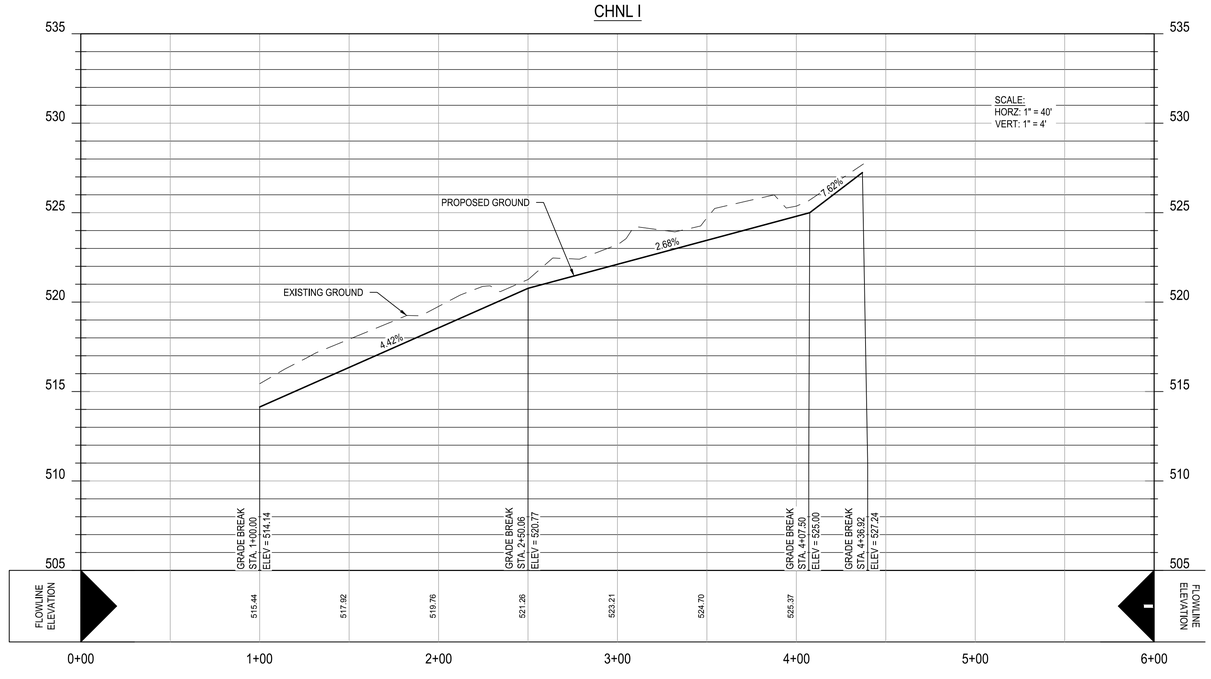
Q_{cap} = 1.69 cfs	Q_{cap} = 2.75 cfs	Q_{cap} = 3.96 cfs	Q_{cap} = 6.01 cfs
n = 0.04	n = 0.04	n = 0.04	n = 0.04
S = 3.98%	S = 3.98%	S = 3.98%	S = 3.98%
Dn_n = 0.40 ft	Dn_n = 0.50 ft	Dn_n = 0.60 ft	Dn_n = 0.70 ft
Vn_n = 3.33 fps	Vn_n = 3.76 fps	Vn_n = 4.11 fps	Vn_n = 4.57 fps
D = 1.00 ft	D = 1.00 ft	D = 1.00 ft	D = 1.00 ft

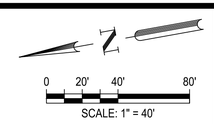
CAPACITY VERIFICATION:STA 4+07 TO STA 4+37

Q_{cap} = 1.69 cfs	Q_{cap} = 2.75 cfs	Q_{cap} = 3.96 cfs	Q_{cap} = 6.01 cfs
n = 0.04	n = 0.04	n = 0.04	n = 0.04
S = 7.62%	S = 7.62%	S = 7.62%	S = 7.62%
Dn_n = 0.40 ft	Dn_n = 0.40 ft	Dn_n = 0.50 ft	Dn_n = 0.60 ft
Vn_n = 4.24 fps	Vn_n = 4.79 fps	Vn_n = 5.25 fps	Vn_n = 5.83 fps
D = 1.00 ft	D = 1.00 ft	D = 1.00 ft	D = 1.00 ft



SECTION I1-I1
SCALE:1"=5'





LEGEND

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◁	◁	◁	◁	◁	◁		REV

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THE JUNCTION

CHANNEL I PLAN AND PROFILE

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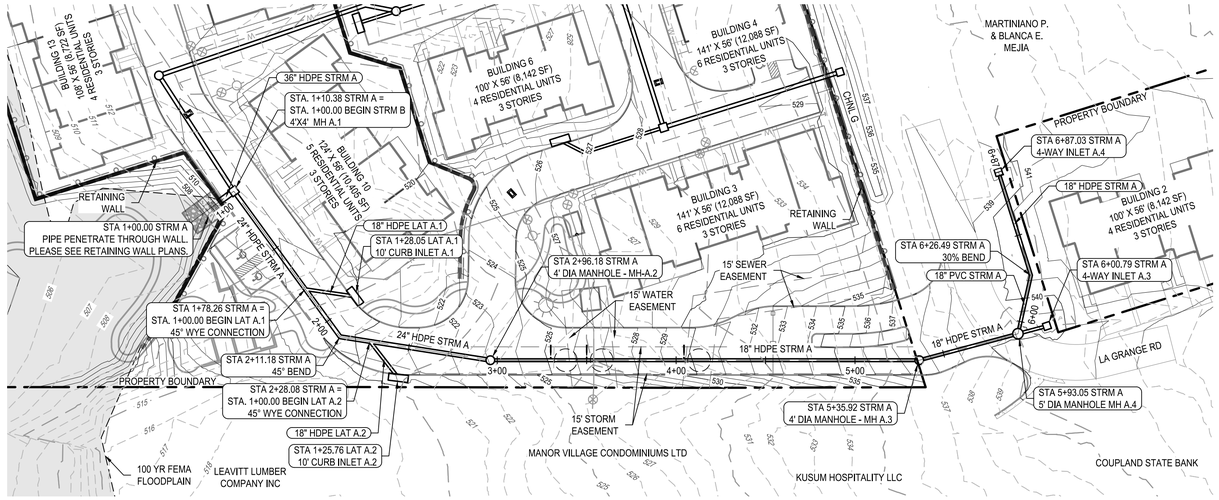
SHEET
28

G:\TX\Cl\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Shts\C04.20 1065900 CHANNEL D & G.dwg Layout: CHANNEL I PLAN AND PROFILE Plotted: 8/17/2023 12:13:29 PM By: Calderon

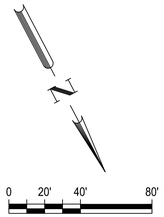


STORM LINE A - 2 YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
STRM A-A	16.13	12.34	1.00
STRM A-B	6.78	10.08	1.28
STRM A-C	5.45	9.51	0.92
STRM A-D	5.45	9.7	0.57
STRM A-E	5.08	9.23	0.83
STRM A-F	5.13	12.83	0.42
STRM A-G	5.14	12.83	0.44
STRM A-H	4.48	8.99	0.87
STRM A-I	4.5	8.74	0.53

STORM LINE A - 10 YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
STRM A-A	23.21	13.7	1.24
STRM A-B	9.66	11.14	1.55
STRM A-C	7.91	10.59	1.11
STRM A-D	7.91	10.79	0.71
STRM A-E	7.42	10.29	1.00
STRM A-F	7.48	14.27	0.51
STRM A-G	7.49	14.28	0.55
STRM A-H	6.46	9.95	1.06
STRM A-I	6.48	9.66	0.66

STORM LINE A - 25 YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
STRM A-A	28.94	14.58	1.40
STRM A-B	11.96	11.83	1.74
STRM A-C	9.92	11.29	1.24
STRM A-D	9.92	11.51	0.82
STRM A-E	9.35	10.99	1.13
STRM A-F	9.41	15.2	0.57
STRM A-G	9.43	15.21	0.63
STRM A-H	8.3	10.64	1.19
STRM A-I	8.34	10.33	0.77

STORM LINE A - 100 YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
STRM A-A	37.75	15.69	1.64
STRM A-B	15.48	12.69	2
STRM A-C	13.02	12.17	1.42
STRM A-D	13.03	12.41	0.96
STRM A-E	12.33	11.87	1.3
STRM A-F	12.41	16.37	0.67
STRM A-G	12.43	16.38	0.75
STRM A-H	10.94	11.41	1.33
STRM A-I	10.98	11.06	0.91



LEGEND

- STORM DRAIN LINE
- PROPOSED NEW MANHOLE
- PROPOSED WASTEWATER LINE
- PROPOSED WATER LINE
- EXISTING MINOR 1' CONTOUR
- EXISTING MAJOR 5' CONTOUR
- PROPOSED MINOR 1' CONTOUR
- PROPOSED MAJOR 5' CONTOUR
- PROPOSED SINGLE W.W. SERVICE CONN.
- PROPOSED DOUBLE W.W. SERVICE CONN.
- PROPOSED SINGLE WATER SERVICE
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- DIRECTION OF FLOW
- UTILITY CROSSING
- PROPERTY BOUNDARY
- RETAINING WALL
- EASEMENT
- 100 YEAR FEMA FLOODPLAIN
- PROPOSED 10' CURB INLET
- ALL WATER/WASTEWATER SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES. REFER TO DETAILS SHOWN IN THIS PLAN SET.

STRM A

SCALE:
HORZ: 1" = 40'
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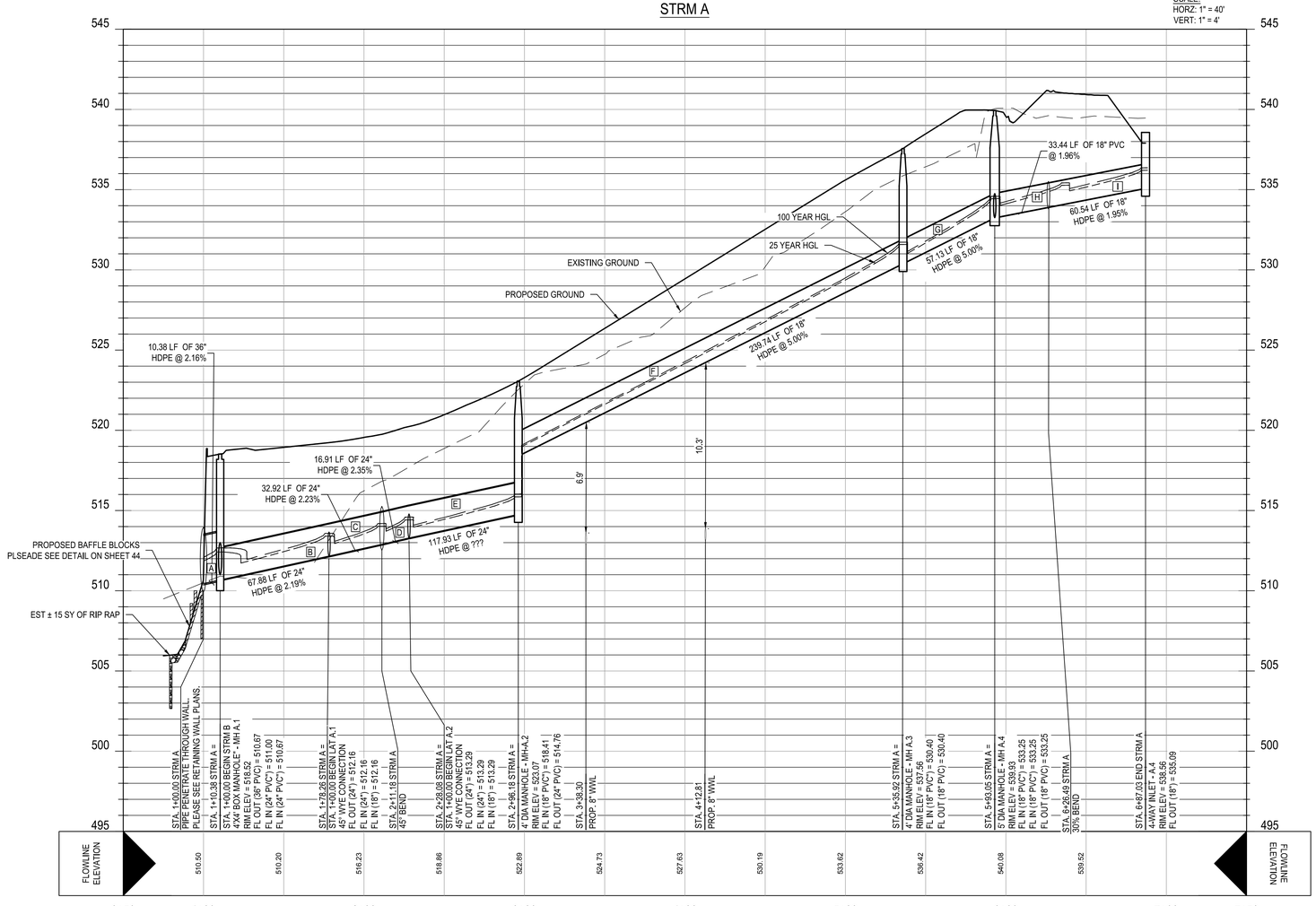

TRENCH SAFTEY

1. IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS AND THE US OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS, ALL TRENCHES OVER FIVE (5) FEET IN DEPTH IN EITHER HARD AND COMPACT OR SOFT AND UNSTABLE SOILS SHALL BE SLOPED, SHORED, SHEETED, BRACED OR OTHERWISE SUPPORTED. FURTHERMORE, ALL TRENCHES LESS THAN FIVE (5) FEET IN DEPTH SHALL ALSO BE EFFECTIVELY PROTECTED WHEN HAZARDOUS GROUND MOVEMENT MAY BE EXPECTED.
2. IN ACCORDANCE WITH THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS, WHEN EMPLOYEES ARE REQUIRED TO BE IN TRENCHES FOUR (4) FEET DEEP OR MORE, ADEQUATE MEANS OF EXIT, SUCH AS A LADDER OR STEPS, MUST BE PROVIDED AND LOCATED SO AS TO REQUIRE NO MORE THAN TWENTY-FIVE (25) FEET OF LATERAL TRAVEL.
3. TRENCH SAFETY PLANS, SEALED BY A LICENSED PROFESSIONAL ENGINEER MUST BE SUBMITTED FOR ALL CONSTRUCTION ACTIVITIES WHERE EXCAVATION DEPTHS ARE FIVE (5) FEET OR GREATER. IF A TRENCH SAFETY PLAN WAS NOT PROVIDED WITH THE PLANS BECAUSE TRENCHES WERE ANTICIPATED TO BE LESS THAN FIVE (5) FEET IN DEPTH AND DURING CONSTRUCTION IT WAS FOUND THAT TRENCHES ARE IN FACT FIVE (5) FEET OR MORE IN DEPTH, OR ARE IN AN AREA WHERE HAZARDOUS GROUND MOVEMENT IS EXPECTED, ALL CONSTRUCTION SHALL CEASE, THE TRENCHED AREA SHALL BE BARRICADED AND THE CITY NOTIFIED IMMEDIATELY. CONSTRUCTION SHALL NOT RESUME UNTIL A TRENCH SAFETY PLAN IS SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

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1. STREET AND DRAINAGE SYSTEMS MUST BE CONSTRUCTED IN ACCORDANCE WITH ADOPTED CITY OF MANOR STANDARDS AND GEOTECHNICAL REPORT RECOMMENDATIONS.
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3. BACKFILL BEHIND THE CURB SHALL BE COMPACTED TO OBTAIN A MINIMUM OF OF MAXIMUM DENSITY TO WITHIN 3" OF TOP OF CURB. BACKFILL MATERIAL SHALL BE GRANULAR MATERIAL WITH NO ROCKS LARGER THAN 6" IN THE GREATEST DIMENSION. THE TOP 3" OF BACKFILL SHALL BE CLEAN TOPSOIL, FREE FROM CLODS AND ROCKS AND BE CAPABLE OF SUSTAINING PLANT LIFE.
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							DATE
							DESCRIPTION
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DESIGNED BY: AMC
REVIEWED BY: AJN
DRAWN BY: AMC

BGE

BGE, INC.
7330 San Pedro, Suite 202
San Antonio, TX 78216
TEL: 210-581-3600 www.bgeinc.com
TBPE Registration No. F-1046

THE JUNCTION

STORM DRAIN A PLAN & PROFILE

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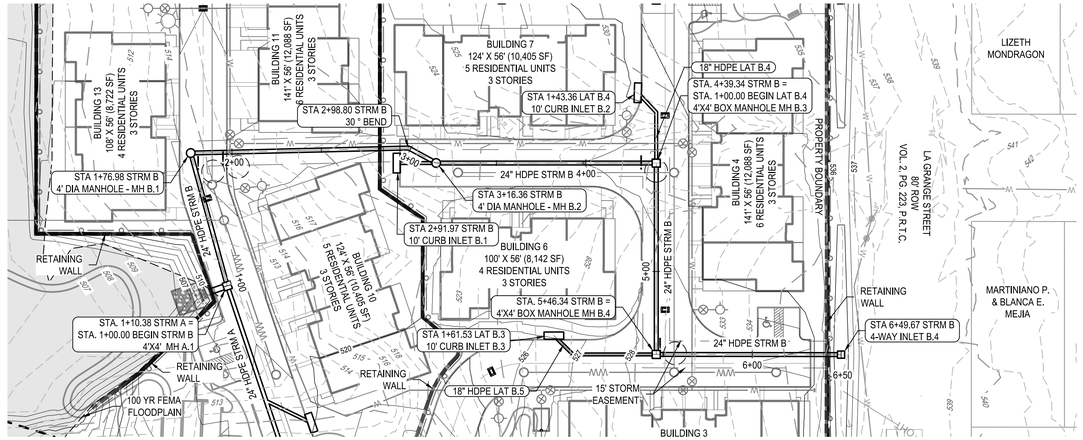
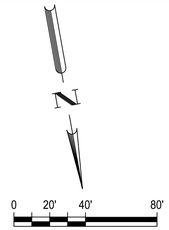


STORM LINE B - 2 YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
STRM B-A	12.1	9.7	0.89
STRM B-B	12.25	6.45	1.16
STRM B-C	12.28	7.03	1.15
STRM B-D	10.02	9.88	0.73
STRM B-E	9.47	5.67	1.05
STRM B-F	8.54	6.86	1.10

STORM LINE B - 10 YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
STRM B-A	17.43	10.66	1.11
STRM B-B	17.63	6.9	1.51
STRM B-C	17.66	7.59	1.52
STRM B-D	14.28	10.87	0.90
STRM B-E	13.56	6.14	1.32
STRM B-F	12.36	7.54	1.33

STORM LINE B - 25 YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
STRM B-A	22.01	11.25	1.28
STRM B-B	22.26	7.09	1.68
STRM B-C	22.3	7.7	1.97
STRM B-D	17.93	11.52	1.04
STRM B-E	17.09	6.33	1.49
STRM B-F	15.7	7.97	1.60

STORM LINE B - 100 YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
STRM B-A	28.93	11.85	1.54
STRM B-B	29.18	9.29	1.85
STRM B-C	29.22	9.3	2.64
STRM B-D	23.33	12.27	1.23
STRM B-E	22.32	7.1	1.69
STRM B-F	20.66	8.39	2.06



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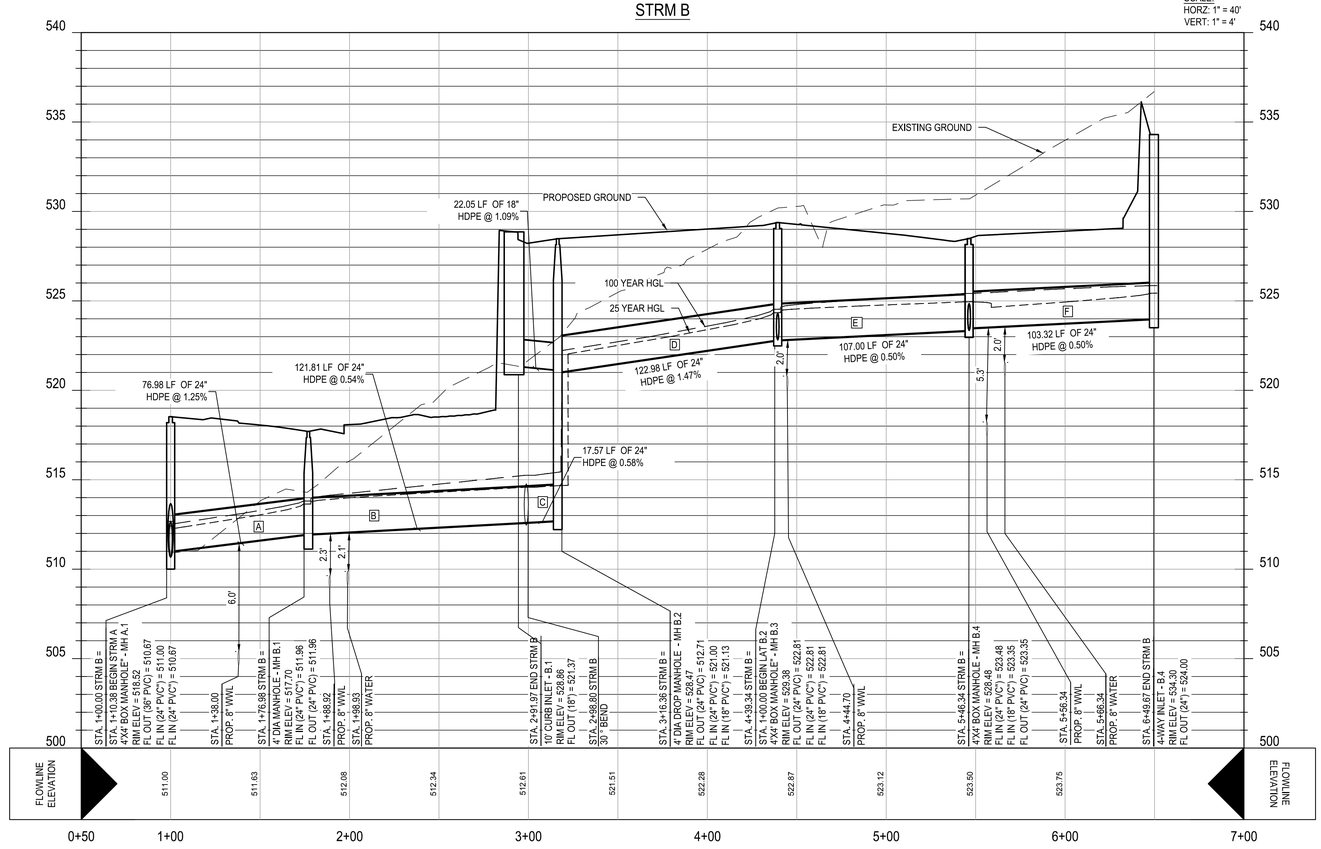

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DESIGNED BY: AMC
REVIEWED BY: AJN
DRAWN BY: AMC

BGE, INC.
7330 San Pedro, Suite 202
San Antonio, TX 78216
TEL: 210-581-3600 www.browngay.com
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THE JUNCTION

STORM DRAIN B PLAN & PROFILE

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Texas Licensed Professional Engineer 114451
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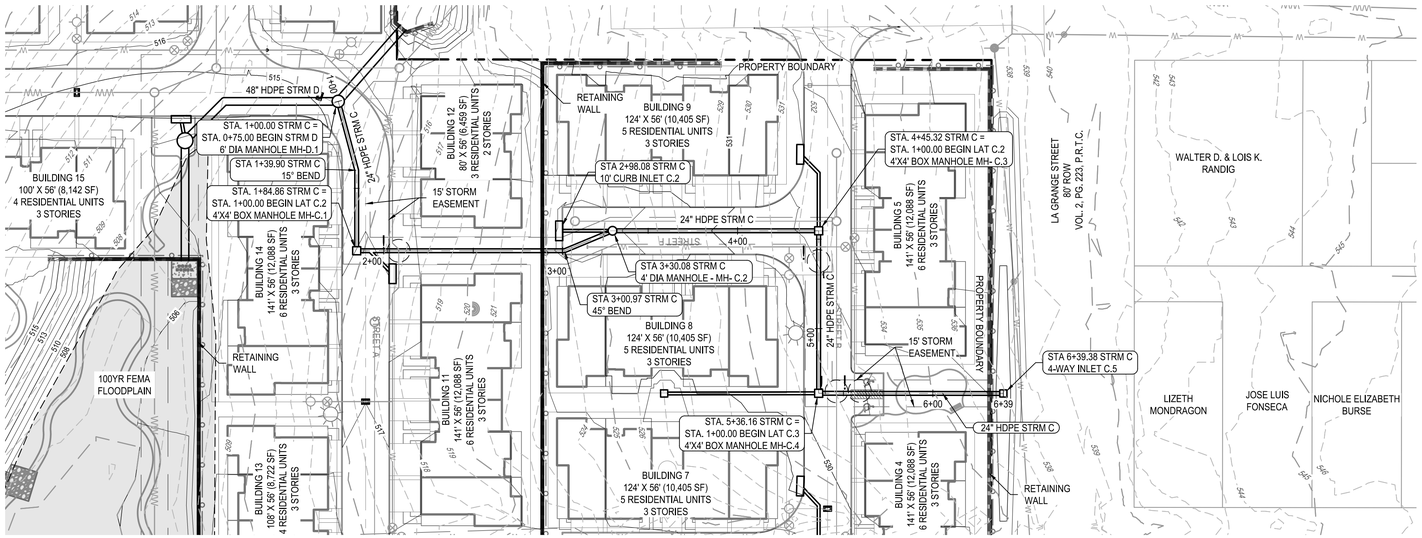

STORM LINE C - 2YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
STRM C-A	16.55	11.22	1.09
STRM C-B	16.58	11.23	1.08
STRM C-C	16.58	10.04	1.30
STRM C-D	15.11	19.24	1.47
STRM C-E	15.15	4.82	11.88
STRM C-F	13.63	7.26	1.36
STRM C-G	13.11	7.14	1.33
STRM C-H	12.27	13.59	0.69

STORM LINE C - 10 YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
STRM C-A	23.83	7.58	2.35
STRM C-B	23.87	12.26	2.01
STRM C-C	23.87	10.89	1.59
STRM C-D	21.92	27.91	1.73
STRM C-E	21.96	6.99	24.95
STRM C-F	19.68	6.26	6.03
STRM C-G	19.03	6.06	5.93
STRM C-H	17.89	5.7	5.49

STORM LINE C - 25 YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
STRM C-A	30.01	11.25	1.97
STRM C-B	27.71	35.29	1.95
STRM C-C	27.75	8.83	39.78
STRM C-D	24.77	7.88	6.03
STRM C-E	23.98	7.63	6.23
STRM C-F	22.52	7.17	5.99
STRM C-G	24.86	7.91	1.76
STRM C-H	24.07	7.66	2.04

STORM LINE C - 100 YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
STRM C-A	39.42	12.55	4.07
STRM C-B	39.48	12.57	4.19
STRM C-C	39.49	12.57	3.6
STRM C-D	36.7	46.73	3.65
STRM C-E	36.74	11.7	70.89
STRM C-F	32.63	10.39	6.03
STRM C-G	31.66	10.08	6.84
STRM C-H	29.68	9.45	5.99

N

0 20' 40' 80'

SCALE: 1" = 40'

LEGEND

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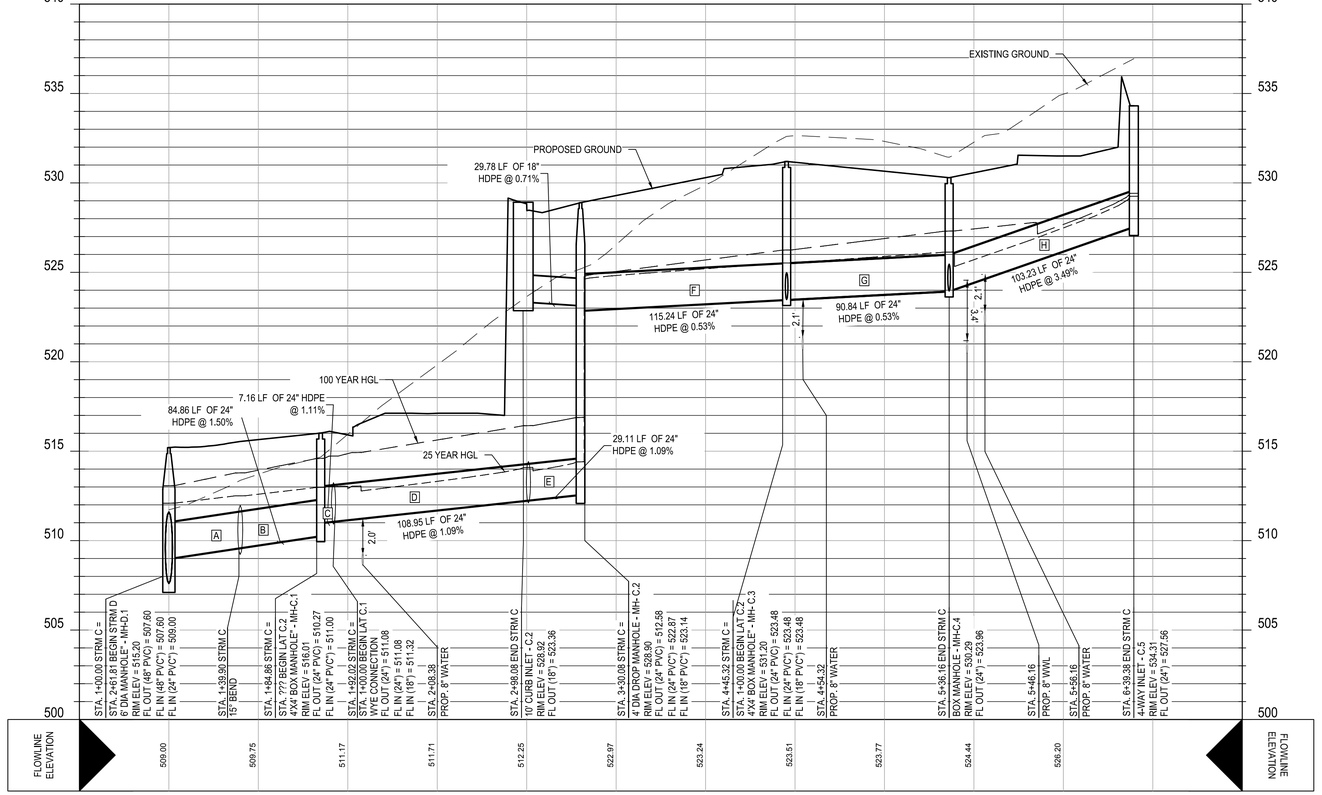

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							DATE
							DESCRIPTION
							REV

DESIGNED BY: AMC
REVIEWED BY: AJN
DRAWN BY: AMC

BGE

BGE, INC.
7330 San Pedro, Suite 202
San Antonio, TX 78216
TEL: 210-581-3600 www.browngay.com
TBPE Registration No. F-1046

THE JUNCTION

STORM DRAIN C PLAN & PROFILE

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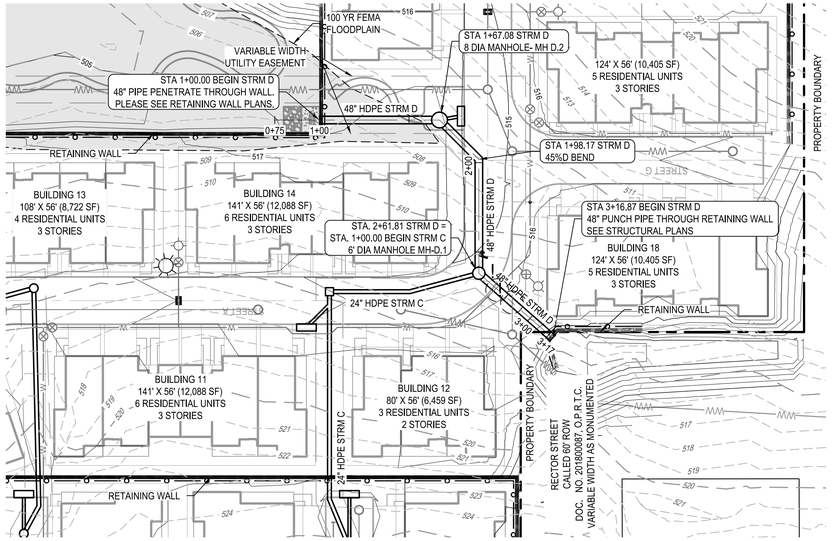
SHEET 31

G:\TXC\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Shts\C06.10 1065900 STORM DRAIN C PLAN & PROFILE.dwg Layout: STORM DRAIN C PLAN & PROFILE Plotted: 8/17/2023 12:14:36 PM By: Calderon



STORM LINE D - 2 YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
STRM D-A	91.99	10.41	2.71
STRM D-B	84.34	9.63	2.91
STRM D-C	84.55	9.81	2.63
STRM D-D	69.49	16.45	2.79

STORM LINE D - 10 YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
STRM D-A	134.93	10.74	3.46
STRM D-B	123.25	9.81	3.70
STRM D-C	123.55	9.83	3.72
STRM D-D	101.68	18.21	3.75

STORM LINE D - 25 YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
STRM D-A	169.99	13.53	3.73
STRM D-B	154.85	12.32	4.17
STRM D-C	155.16	12.35	4.28
STRM D-D	127.82	19.3	4.49

STORM LINE D - 100 YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
STRM D-A	224.79	17.89	3.9
STRM D-B	204.17	16.25	4.67
STRM D-C	204.47	16.27	4.94
STRM D-D	168.72	13.43	5.47

0 20' 40' 80'

SCALE: 1" = 40'

LEGEND

- STORM DRAIN LINE
- PROPOSED NEW MANHOLE
- PROPOSED WASTEWATER LINE
- PROPOSED WATER LINE
- EXISTING MINOR 1' CONTOUR
- EXISTING MAJOR 5' CONTOUR
- PROPOSED MINOR 1' CONTOUR
- PROPOSED MAJOR 5' CONTOUR
- PROPOSED SINGLE W.W. SERVICE CONN.
- PROPOSED DOUBLE W.W. SERVICE CONN.
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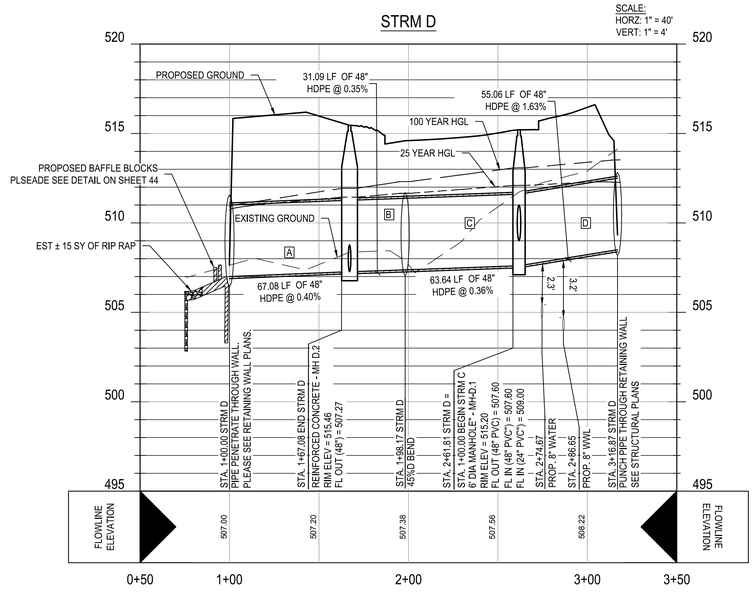

TRENCH SAFTEY

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3. TRENCH SAFETY PLANS, SEALED BY A LICENSED PROFESSIONAL ENGINEER MUST BE SUBMITTED FOR ALL CONSTRUCTION ACTIVITIES WHERE EXCAVATION DEPTHS ARE FIVE (5) FEET OR GREATER. IF A TRENCH SAFETY PLAN WAS NOT PROVIDED WITH THE PLANS BECAUSE TRENCHES WERE ANTICIPATED TO BE LESS THAN FIVE (5) FEET IN DEPTH AND DURING CONSTRUCTION IT WAS FOUND THAT TRENCHES ARE IN FACT FIVE (5) FEET OR MORE IN DEPTH, OR ARE IN AN AREA WHERE HAZARDOUS GROUND MOVEMENT IS EXPECTED, ALL CONSTRUCTION SHALL CEASE, THE TRENCHED AREA SHALL BE BARRICADED AND THE CITY NOTIFIED IMMEDIATELY. CONSTRUCTION SHALL NOT RESUME UNTIL A TRENCH SAFETY PLAN IS SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

NOTES

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6. BARRICADES MUST BE INSTALLED AT ALL DEAD END STREETS AND AS NECESSARY DURING CONSTRUCTION TO MAINTAIN SITE AND PUBLIC SAFETY.
7. ALL STORM SEWER PIPE MUST BE CLASS III RCP IN CONFORMANCE WITH ASTM C-76.
8. ALL STORM SEWER MANHOLES MUST BE MINIMUM 48" DIAMETER RCP IN ACCORDANCE WITH ASTM C-478. MANHOLE RINGS AND COVERS TO BE 32" DIAMETER MARKED STORM SEWER.
9. ALL STREET AND DRAINAGE IMPROVEMENTS MUST CONFORM TO APPLICABLE CITY OF MANOR ORDINANCES.

	APR	DATE	DESCRIPTION	REV

DESIGNED BY: AMC

REVIEWED BY: AJN

DRAWN BY: AMC

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THE JUNCTION

STORM DRAIN D PLAN & PROFILE

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SHEET 32

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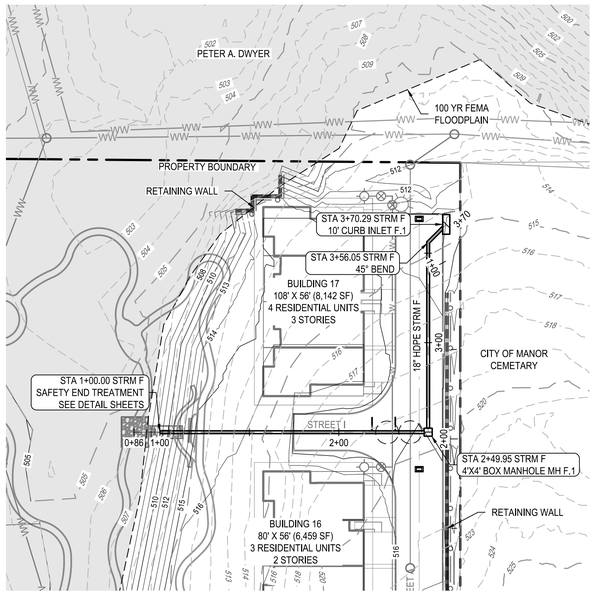
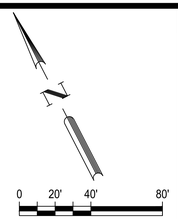


STORM LINE F - 2 YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
STRM F-A	2.48	4.58	0.52
STRM F-B	2.51	4.68	0.51
STRM F-C	2.52	3.31	0.60

STORM LINE F - 10 YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
STRM F-A	3.62	5.07	0.64
STRM F-B	3.66	5.19	0.63
STRM F-C	3.66	3.63	0.73

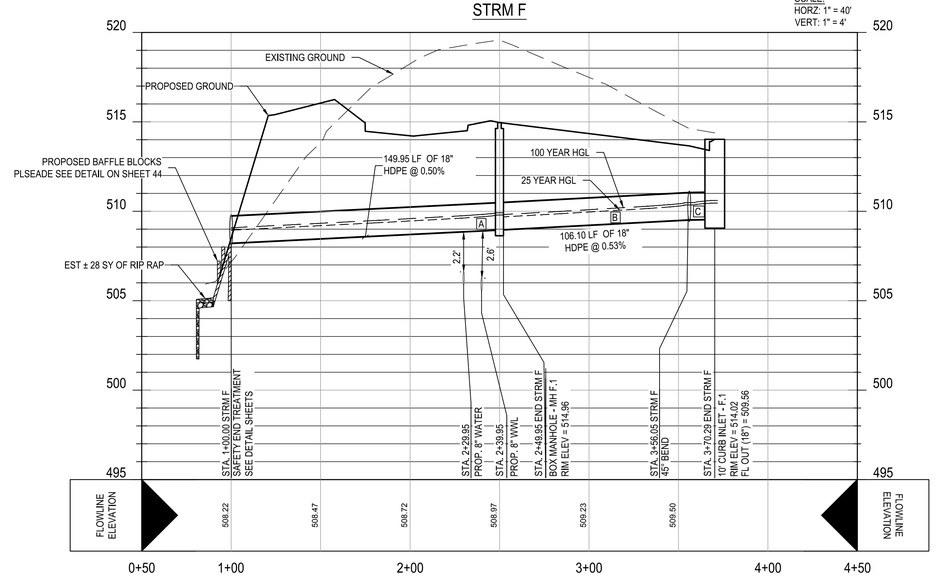
STORM LINE F - 25 YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
STRM F-A	4.56	5.39	0.73
STRM F-B	4.61	5.51	0.72
STRM F-C	4.62	3.82	0.83

STORM LINE F - 100 YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
STRM F-A	6.01	5.76	0.86
STRM F-B	6.07	5.9	0.85
STRM F-C	6.08	3.97	0.95



STRM F

SCALE:
HORZ: 1" = 40'
VERT: 1" = 4'



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THE JUNCTION

STORM DRAIN F PLAN & PROFILE

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SHEET
33

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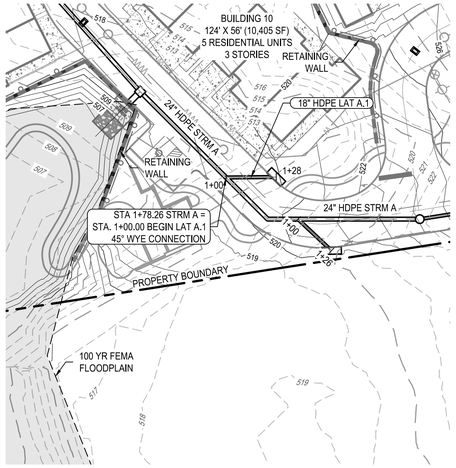

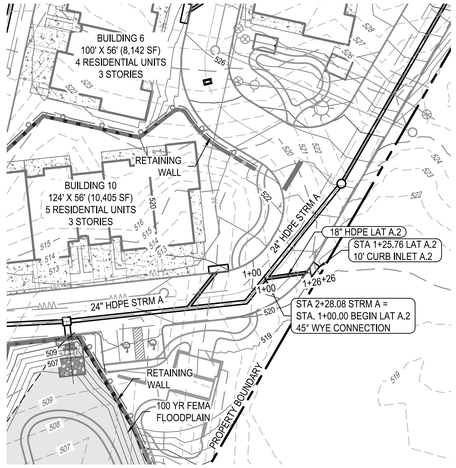

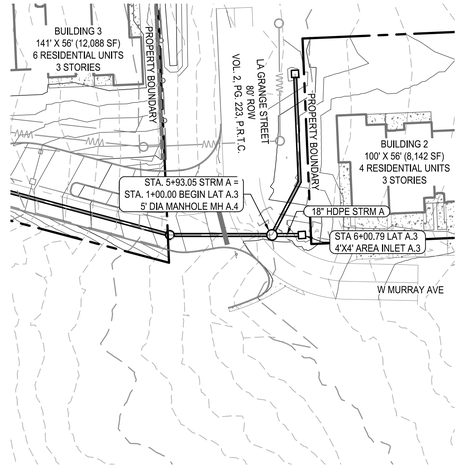

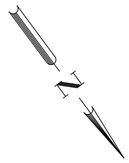

STORM LATERALS - 2YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
LAT A.1	1.79	11.29	0.92
LAT A.2	0.62	8.31	0.82
LAT A.3	2.31	10.16	0.87

STORM LATERALS - 10 YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
LAT A.1	2.33	12.2	1.11
LAT A.2	0.82	9.01	1.00
LAT A.3	3.37	11.36	1.06

STORM LATERALS - 25 YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
LAT A.1	2.74	12.81	1.24
LAT A.2	0.98	9.51	1.13
LAT A.3	4.24	12.15	1.19

STORM LATERALS - 100 YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
LAT A.1	3.29	13.52	1.42
LAT A.2	1.19	10.07	1.3
LAT A.3	5.58	13.15	1.33

LEGEND

- STORM DRAIN LINE
- PROPOSED NEW MANHOLE
- WW PROPOSED WASTEWATER LINE
- W PROPOSED WATER LINE
- 681 EXISTING MINOR 1' CONTOUR
- 685 EXISTING MAJOR 5' CONTOUR
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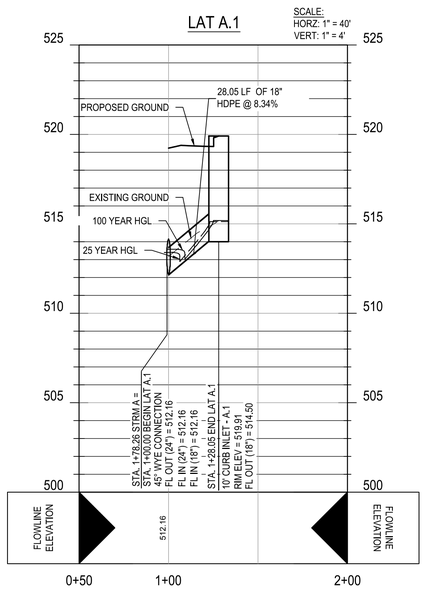

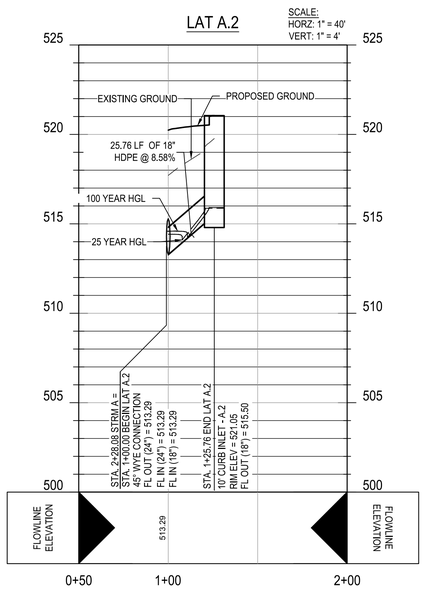

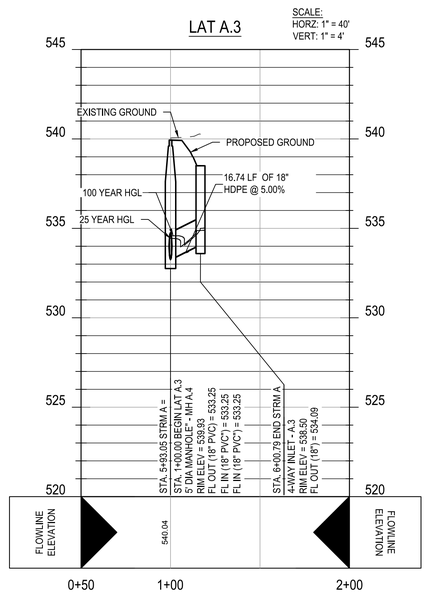

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0 20' 40' 80'
SCALE: 1" = 40'

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REVIEWED BY: AJN
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STORM A LATERALS PLAN & PROFILE

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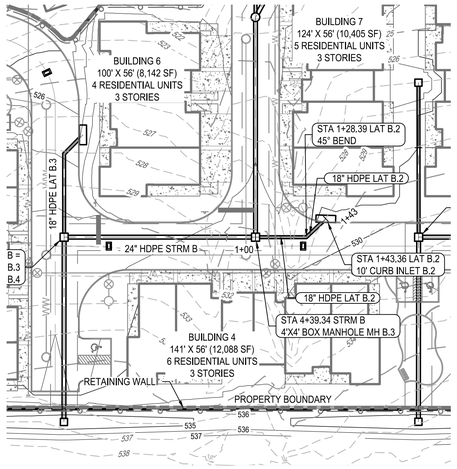
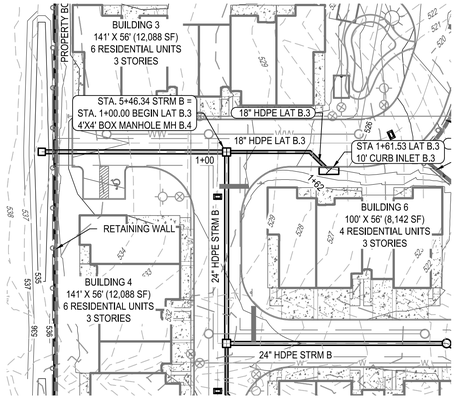
SHEET
34

G:\TXC\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Shts\C06.16 10659000 STORM LATERALS P&P.dwg Layout: STORM A LATERALS P&P Plotted: 8/17/2023 12:15:45 PM By: Calderon





STORM LATERALS - 2YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
LAT B.1	2.89	5.96	0.51
LAT B.2A	0.75	5.72	1.13
LAT B.2B	0.75	4.95	0.34
LAT B.3A	1.12	4.6	1.10
LAT B.3B	1.12	4.92	0.63

STORM LATERALS - 10 YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
LAT B.1	4.28	6.64	0.63
LAT B.2A	0.98	6.18	1.36
LAT B.2B	0.98	5.36	0.63
LAT B.3A	1.43	4.95	1.33
LAT B.3B	1.44	5.3	0.87

STORM LATERALS - 10 YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
LAT B.1	4.28	6.64	0.63
LAT B.2A	0.98	6.18	1.36
LAT B.2B	0.98	5.36	0.63
LAT B.3A	1.43	4.95	1.33
LAT B.3B	1.44	5.3	0.87

STORM LATERALS - 100 YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
LAT B.1	7.53	7.68	0.88
LAT B.2A	1.4	6.88	1.72
LAT B.2B	1.4	5.96	1
LAT B.3A	2.02	1.14	2.06
LAT B.3B	2.02	5.86	1.62

LEGEND

- STORM DRAIN LINE
- PROPOSED NEW MANHOLE
- PROPOSED WASTEWATER LINE
- PROPOSED WATER LINE
- EXISTING MINOR 1' CONTOUR
- EXISTING MAJOR 5' CONTOUR
- PROPOSED MINOR 1' CONTOUR
- PROPOSED MAJOR 5' CONTOUR
- PROPOSED SINGLE W.W. SERVICE CONN.
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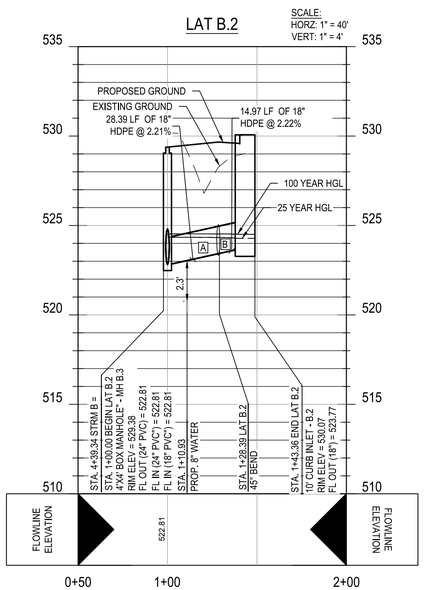
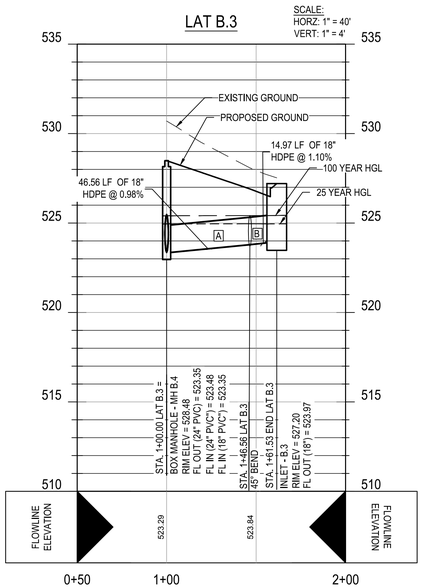
0 20' 40' 80'

SCALE: 1" = 40'





TRENCH SAFTEY

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2. IN ACCORDANCE WITH THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS, WHEN EMPLOYEES ARE REQUIRED TO BE IN TRENCHES FOUR (4) FEET DEEP OR MORE, ADEQUATE MEANS OF EXIT, SUCH AS A LADDER OR STEPS, MUST BE PROVIDED AND LOCATED SO AS TO REQUIRE NO MORE THAN TWENTY-FIVE (25) FEET OF LATERAL TRAVEL.
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8. ALL STORM SEWER MANHOLES MUST BE MINIMUM 48" DIAMETER RCP IN ACCORDANCE WITH ASTM C-478. MANHOLE RINGS AND COVERS TO BE 32" DIAMETER MARKED STORM SEWER.
9. ALL STREET AND DRAINAGE IMPROVEMENTS MUST CONFORM TO APPLICABLE CITY OF MANOR ORDINANCES.

	APR	DATE	DESCRIPTION	REV

DESIGNED BY: AMC
REVIEWED BY: AJN
DRAWN BY: AMC

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TBPE Registration No. F-1046

THE JUNCTION

STORM B LATERALS PLAN & PROFILE

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SHEET
35

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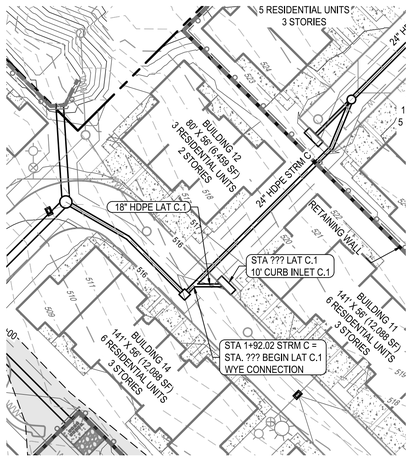
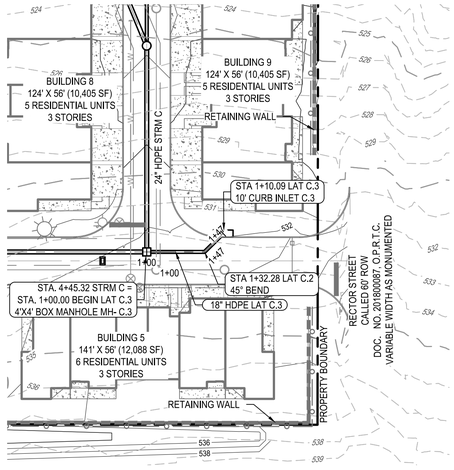
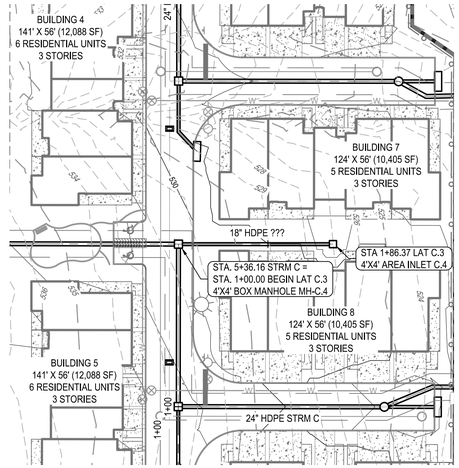






STORM LATERALS - 2YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
LAT C.1	2.48	5.22	1.23
LAT C.2	2.63	5.29	0.50
LAT C.3A	0.88	8.46	1.33
LAT C.3B	0.88	8.68	0.17
LAT C.4	1.35	3.96	0.96

STORM LATERALS - 10 YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
LAT C.1	3.24	5.62	1.50
LAT C.2	3.94	5.91	0.63
LAT C.3A	1.14	9.17	1.60
LAT C.3B	1.14	9.37	0.20
LAT C.4	1.95	4.4	1.23

STORM LATERALS - 25 YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
LAT C.1	3.86	2.18	1.71
LAT C.2	5.19	6.36	0.74
LAT C.3A	1.34	9.62	2.04
LAT C.3B	1.34	9.87	0.22
LAT C.4	2.5	4.72	1.83

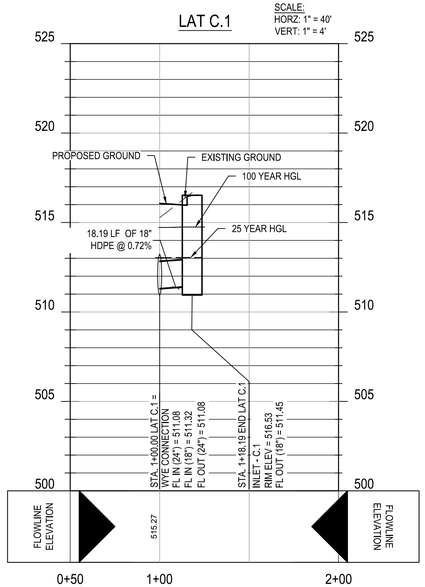
STORM LATERALS - 100 YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
LAT C.1	4.65	2.63	3.41
LAT C.2	7.01	6.84	0.88
LAT C.3A	1.61	10.16	2.77
LAT C.3B	1.62	10.42	0.25
LAT C.4	3.29	1.86	3

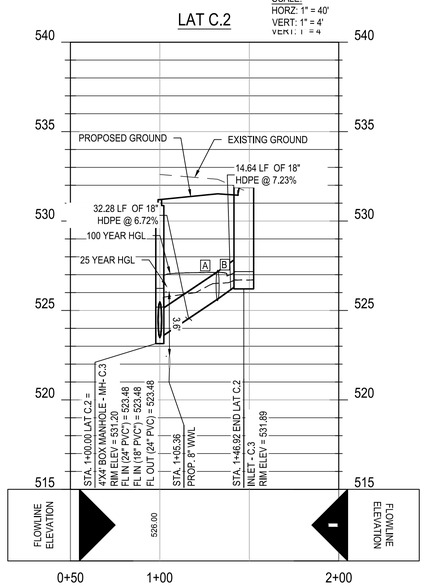
LEGEND

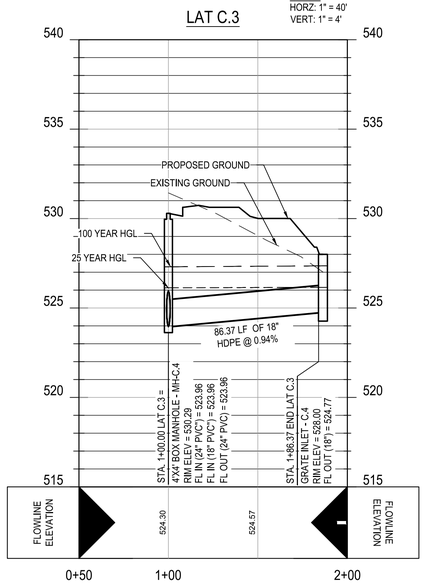
- STORM DRAIN LINE
- PROPOSED NEW MANHOLE
- WW — PROPOSED WASTEWATER LINE
- W — PROPOSED WATER LINE
- 681 — EXISTING MINOR 1' CONTOUR
- 685 — EXISTING MAJOR 5' CONTOUR
- 681 — PROPOSED MINOR 1' CONTOUR
- 685 — PROPOSED MAJOR 5' CONTOUR
- PROPOSED SINGLE W.W. SERVICE CONN.
- PROPOSED DOUBLE W.W. SERVICE CONN.
- PROPOSED SINGLE WATER SERVICE
- PROPOSED DUAL WATER SERVICE
- DIRECTION OF FLOW
- UTILITY CROSSING
- PROPERTY BOUNDARY
- RETAINING WALL
- EASEMENT
- 100 YEAR FEMA FLOODPLAIN
- PROPOSED 10' CURB INLET
- ALL WATER/WASTEWATER SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES. REFER TO DETAILS SHOWN IN THIS PLAN SET.

0 20' 40' 80'
SCALE: 1" = 40'

SCALE:
HORZ: 1" = 40'
VERT: 1" = 4'







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	APR	DATE	DESCRIPTION	REV

DESIGNED BY: AMC
REVIEWED BY: AJN
DRAWN BY: AMC

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7330 San Pedro, Suite 202
San Antonio, TX 78216
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TBPE Registration No. F-1046

THE JUNCTION

STORM C LATERALS PLAN & PROFILE

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SHEET
36

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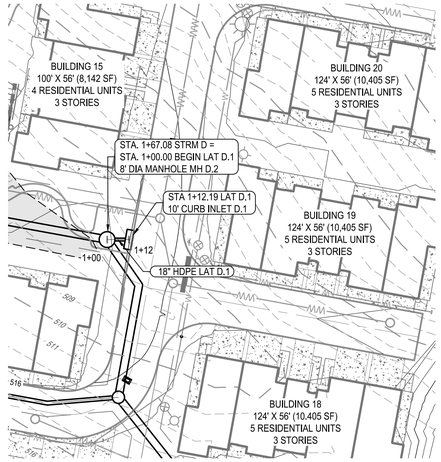

STORM LATERALS - 2YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
LAT D.1	8.48	7.27	1.02

STORM LATERALS - 10 YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
LAT D.1	12.89	7.3	1.35

STORM LATERALS - 25 YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
LAT D.1	16.66	9.43	1.67

STORM LATERALS - 100 YR			
PIPE SEGMENT	Q (CF/S)	V (FT/S)	D (FT)
LAT D.1	22.6	12.79	2.17

LEGEND

- STORM DRAIN LINE
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- PROPOSED WASTEWATER LINE
- PROPOSED WATER LINE
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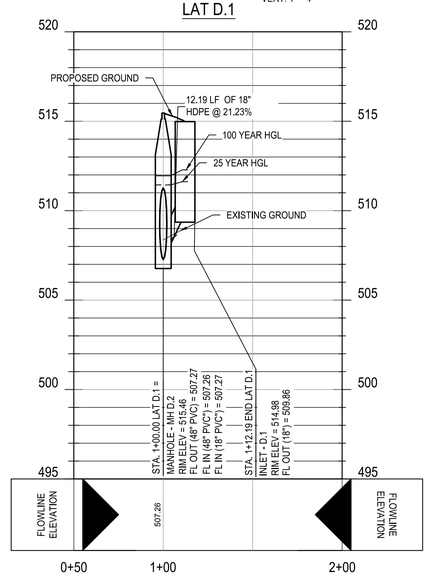

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							APR
							DATE
							DESCRIPTION
◁	◁	◁	◁	◁	◁		REV

DESIGNED BY:	AMC
REVIEWED BY:	AJN
DRAWN BY:	AMC

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THE JUNCTION

STORM D LATERALS PLAN & PROFILE

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SHEET
37

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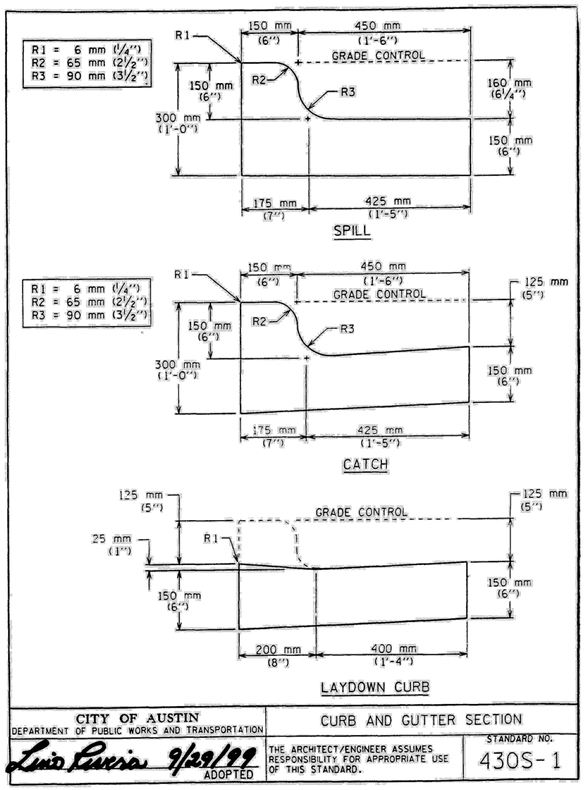

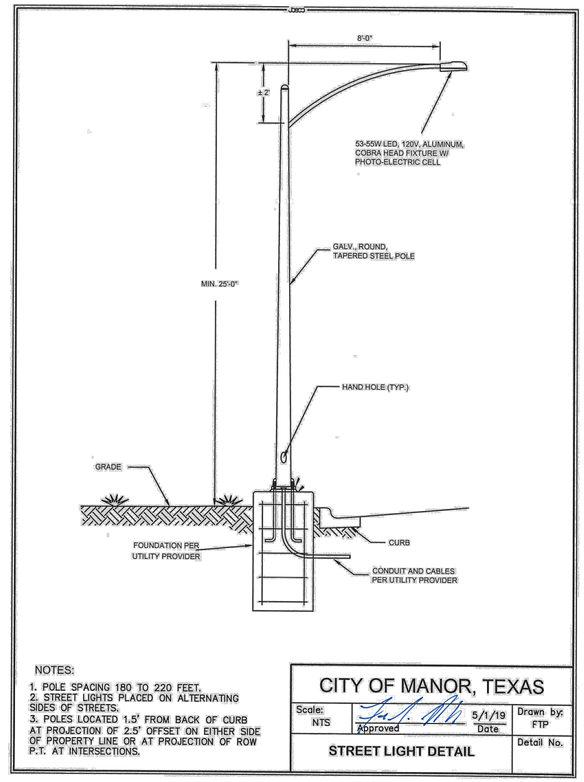

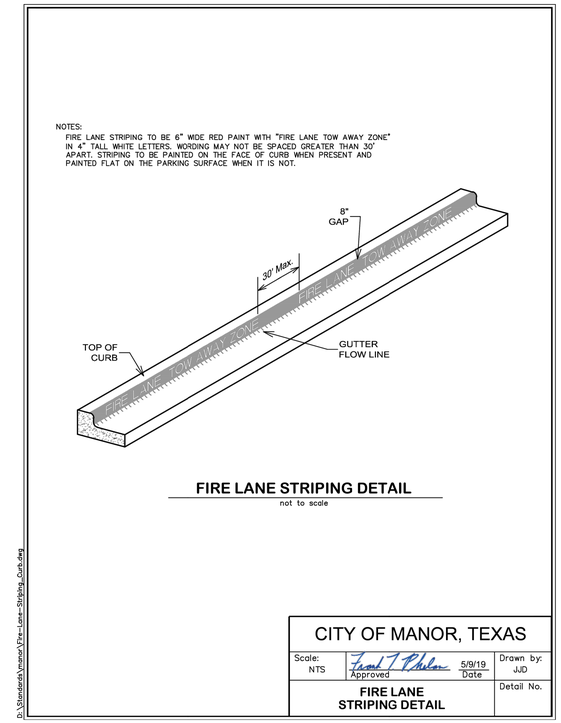

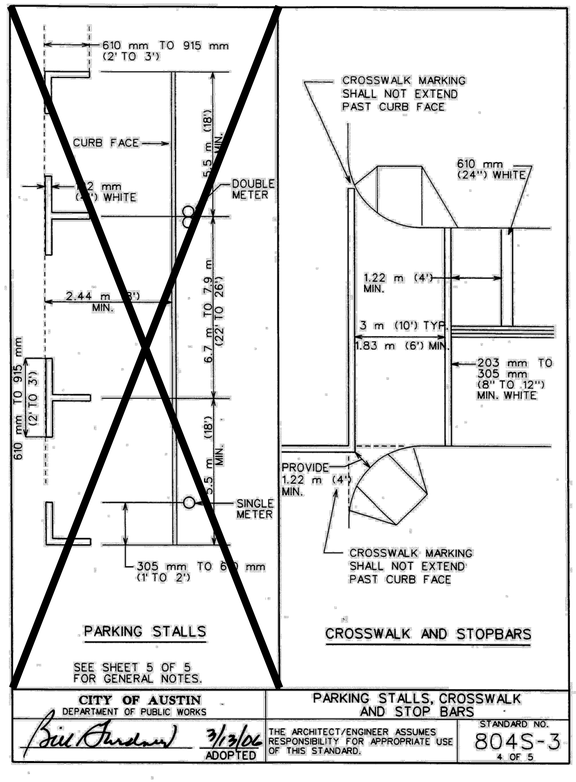

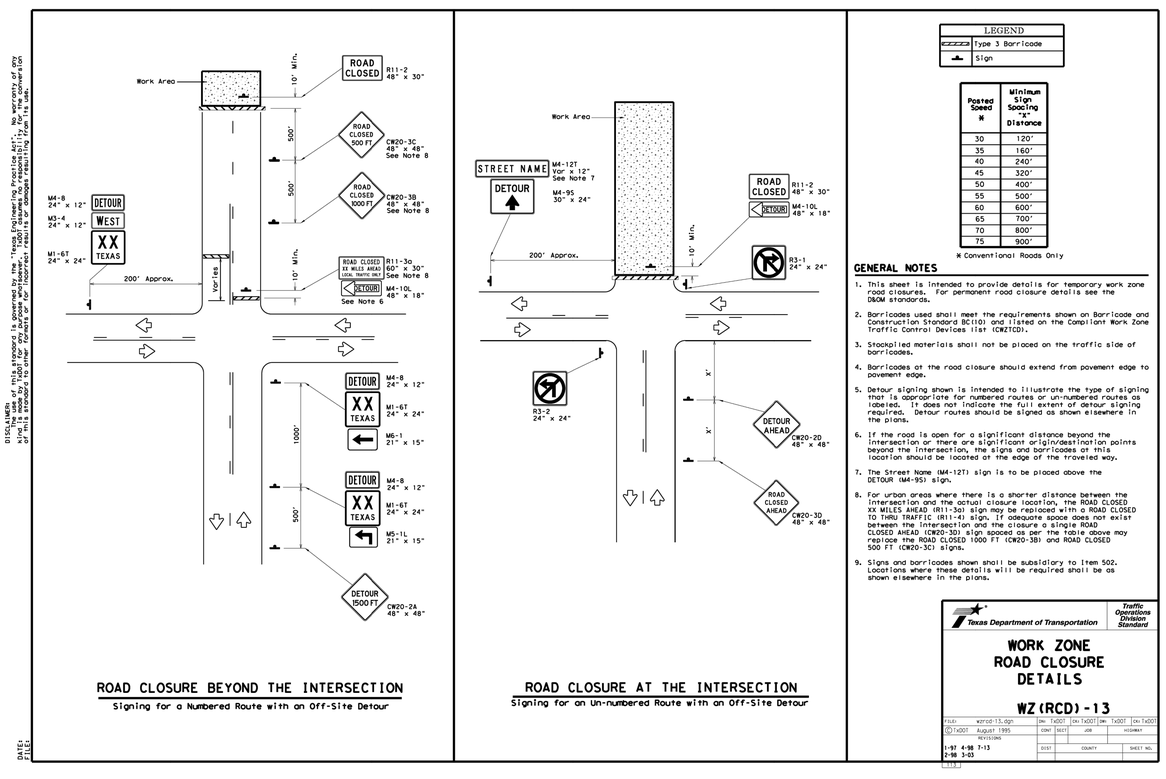

	APR	DATE	DESCRIPTION	REV

DESIGNED BY: JDC
REVIEWED BY: AJN
DRAWN BY: JDC

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San Antonio, TX 78216
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THE JUNCTION

STREET & DRAINAGE DETAILS (SHEET 1 OF 7)

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SHEET 38

G:\TXCI\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Shts\C06 20 1065900 STREET & DRAINAGE DETAILS.dwg Layout: STREET & DRAINAGE DETAILS (SHEET 1 OF 7) Plotted: 8/17/2023 12:17:05 PM By: Calderon

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NOTES:

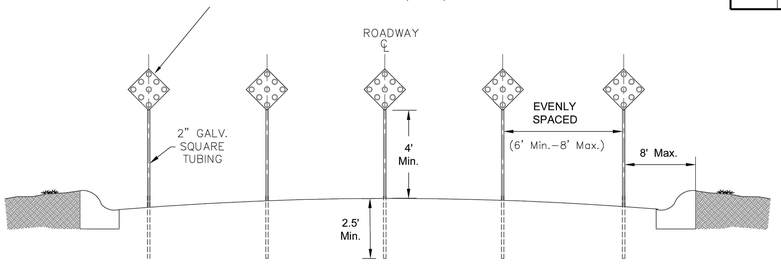
1. A MINIMUM OF THREE BARRICADES ARE REQUIRED FOR MINOR STREET SECTIONS.
2. BARRICADES ARE TO BE INSTALLED DIRECTLY ADJACENT TO THE END OF PAVEMENT.

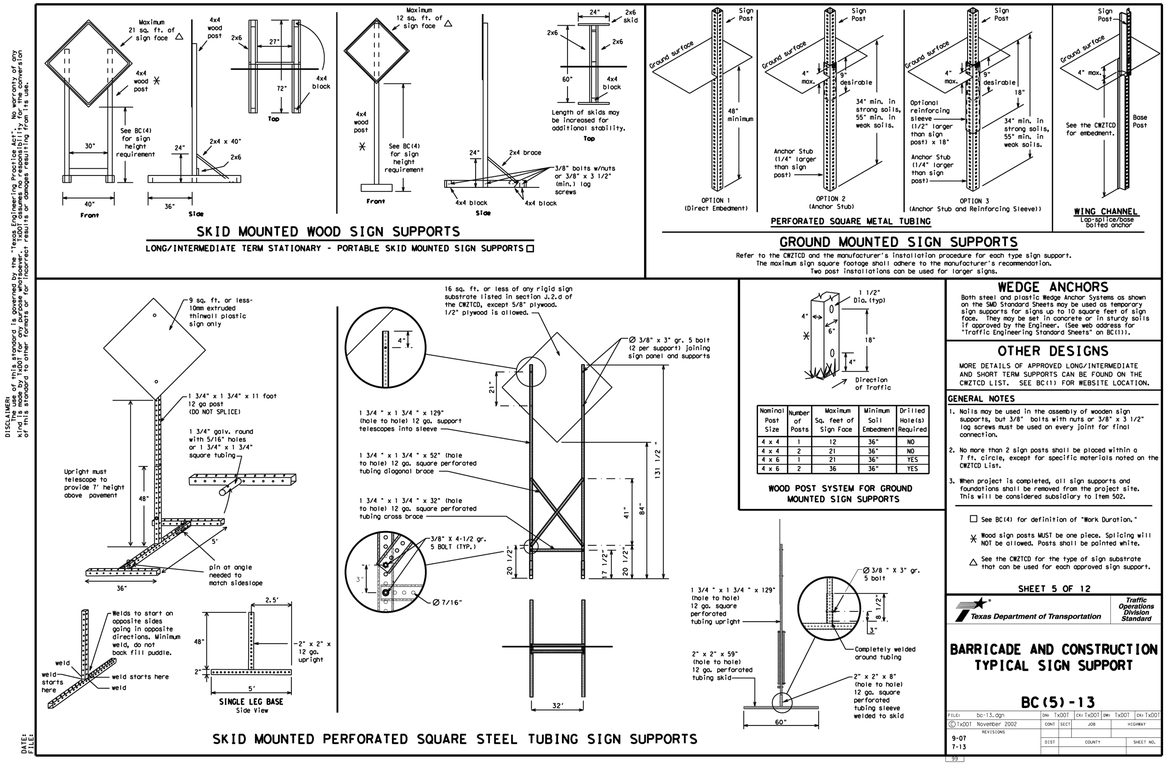
CITY OF MANOR, TEXAS

Scale: NTS | Drawn by: PMG | Detail No.
Approved | Date: 12/05/17

END OF ROAD BARRICADE

MARKERS SHALL BE ONE OF THE FOLLOWING: A MARKER CONSISTING OF NINE RED RETROREFLECTORS, EACH WITH A MINIMUM DIAMETER OF 75MM (3 in.), MOUNTED SYMMETRICALLY ON A RED OR BLACK DIAMOND PANEL 450MM (18 in.) OR MORE ON A SIDE; OR ON A RETROREFLECTIVE RED DIAMOND PANEL 450 mm (18 in.) OR MORE ON A SIDE.





SKID MOUNTED WOOD SIGN SUPPORTS

LONG/INTERMEDIATE TERM STATIONARY - PORTABLE SKID MOUNTED SIGN SUPPORTS □

GROUND MOUNTED SIGN SUPPORTS

PERFORATED SQUARE METAL TUBING

Refer to the CMZTCD and the manufacturer's installation procedure for each type sign support.
The maximum sign square footage shall adhere to the manufacturer's recommendation.
Two post installations can be used for larger signs.

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SKID MOUNTED PERFORATED SQUARE STEEL TUBING SIGN SUPPORTS

Nominal Post Size	Number of Posts	Maximum Sq. feet of Sign Face	Minimum Soil Embedment	Drilled Hole(s) Required
4 x 4	1	12	36"	NO
4 x 4	2	21	36"	NO
4 x 6	1	21	36"	YES
4 x 6	2	36	36"	YES

WOOD POST SYSTEM FOR GROUND MOUNTED SIGN SUPPORTS

WEDGE ANCHORS

Both steel and plastic Wedge Anchor Systems as shown on the SMD Standard Sheets may be used as temporary sign supports for signs up to 10 square feet of sign face. They may be set in concrete or in sturdy soils if approved by the Engineer. (See web address for "Traffic Engineering Standard Sheets" on BC(1)).

OTHER DESIGNS

MORE DETAILS OF APPROVED LONG/INTERMEDIATE AND SHORT TERM SUPPORTS CAN BE FOUND ON THE CMZTCD LIST. SEE BC(1) FOR WEBSITE LOCATION.

GENERAL NOTES

1. Nails may be used in the assembly of wooden sign supports, but 3/8" bolts with nuts or 3/8" x 3 1/2" lag screws must be used on every joint for final connection.
2. No more than 2 sign posts shall be placed within a 7 ft. circle, except for specific materials noted on the CMZTCD List.
3. When project is completed, all sign supports and foundations shall be removed from the project site. This will be considered subsidiary to Item 502.

□ See BC(4) for definition of "Work Duration."

✱ Wood sign posts MUST be one piece. Splicing will NOT be allowed. Posts shall be painted white.

△ See the CMZTCD for the type of sign substrate that can be used for each approved sign support.

SHEET 5 OF 12

Texas Department of Transportation | Traffic Operations Division Standard

BARRICADE AND CONSTRUCTION TYPICAL SIGN SUPPORT

BC(5)-13

FILE:	bc-13.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
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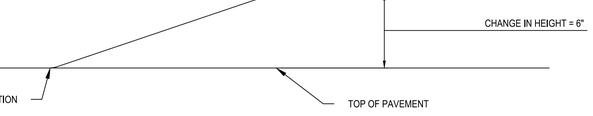
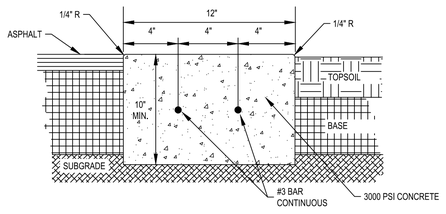
REVISIONS					
9-07		DIST	COUNTY		SHEET NO.
7-13					

DATE: FILE:



CURB TRANSITION
N.T.S



NOTES:

1. REINFORCING STEEL SHALL BE GRADE 60 DEFORMED BARS CONFORMING TO ASTM A 615/A 615M OR ASTM A 706/A 706M.
2. WIRE TIES SHALL BE 16 GAUGE OR HEAVIER BLACK ANNEALED STEEL WIRE.

12" FLUSH CURB
N.T.S.

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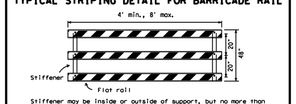
TYPE 3 BARRICADES

1. Refer to the Compliant Work Zone Traffic Control Devices List (CWZTCD) for details of the Type 3 Barricades and a list of all materials used in the construction of Type 3 Barricades.
2. Type 3 Barricades shall be used at each end of construction projects closed to all traffic.
3. Barricades extending across a roadway should have stripes that slope downward in the direction toward which traffic must turn in detouring. When both right and left turns are provided, the chevron striping may slope downward in both directions from the center of the barricade. Where no turns are provided at a closed road, striping should slope downward in both directions toward the center of roadway.
4. Striping of rails, for the right side of the roadway, should slope downward to the left, for the left side of the roadway, striping should slope downward to the right.
5. Identification markings may be shown only on the back of the barricade rails. The maximum height of letters and/or company logos used for identification shall be 1".
6. Barricades shall not be placed parallel to traffic unless an adequate clear zone is provided.
7. Warning lights shall NOT be installed on barricades.
8. Where barricades require the use of weights to keep from turning over, the use of sandbags with dry, cohesionless sand is recommended. The sandbags will be tied shut to keep the sand from spilling and to maintain a constant weight. Sand bags shall not be stacked in a manner that covers any portion of a barricade rails reflective sheeting. Rock, concrete, iron, steel or other solid objects will NOT be permitted. Sandbags should weigh a minimum of 35 lbs and a maximum of 50 lbs. Sandbags shall be made of a durable material that tears upon vehicular impact. Rubber (such as tire inner tubes) shall not be used for sandbags. Sandbags shall only be placed along or upon the base supports of the device and shall not be suspended above ground level or hung with rope, wire, chains or other fasteners.
9. Sheeting for barricades shall be retroreflective Type A or Type B conforming to Departmental Material Specification DMS-8300 unless otherwise noted.

Barricades shall NOT be used as a sign support.

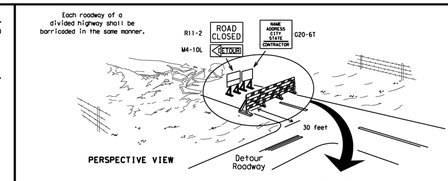
TYPICAL STRIPING DETAIL FOR BARRICADE RAIL



Stiffener may be inside or outside of support, but no more than 2 stiffeners shall be allowed on one barricade.

TYPICAL PANEL DETAIL FOR SKID OR POST TYPE BARRICADES

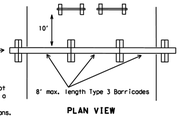
Each roadway of a divided highway shall be barricaded in the same manner.



PERSPECTIVE VIEW

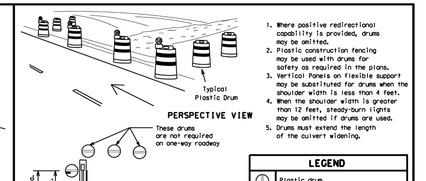
The three rails on Type 3 barricades shall be reflectorized orange and reflective white stripes on one side facing one-way traffic and both sides for two-way traffic.
Barricade striping should slant downward in the direction of detour.

1. Signs should be mounted on independent supports at a 7 foot mounting height in center of roadway. The signs should be a minimum of 10 feet behind Type 3 Barricades.
2. Advance signing shall be as specified elsewhere in the plans.



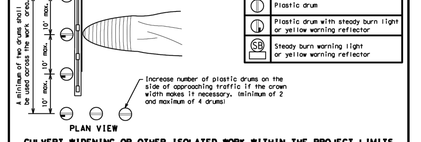
PLAN VIEW

TYPE 3 BARRICADE (POST AND SKID) TYPICAL APPLICATION



PERSPECTIVE VIEW

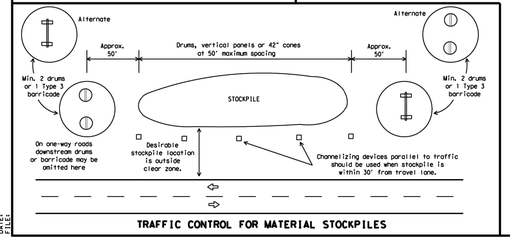
1. Where positive redirectional capability is provided, drums may be omitted.
2. Plastic construction fencing may be used with drums for safety as required in the plans.
3. Vertical Panels on flexible support may be substituted for drums when the shoulder width is less than 4 feet.
4. When the shoulder width is greater than 12 feet, steady-burn lights may be omitted if drums are used.
5. Drums must extend the length of the culvert widening.



LEGEND	
1	Plastic drum
1	Plastic drum with steady burn light or yellow warning reflector
SB	Steady burn warning light or yellow warning reflector

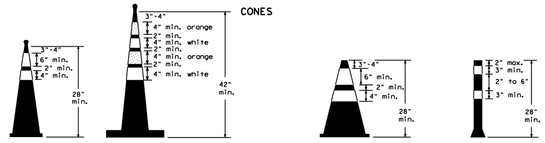
PLAN VIEW

CULVERT WIDENING OR OTHER ISOLATED WORK WITHIN THE PROJECT LIMITS



TRAFFIC CONTROL FOR MATERIAL STOCKPILES

CONES



Two-Piece cones | One-Piece cones | Tubular Marker

28" Cones shall have a minimum weight of 9 1/2 lbs.

42" 2-piece cones shall have a minimum weight of 30 lbs. including base.

1. Traffic cones and tubular markers shall be predominantly orange, and meet the height and weight requirements shown above.
2. One-piece cones have the body and base of the cone molded in one consolidated unit. Two-piece cones have a cone shaped body and a separate rubber base, or ballast, that is added to keep the device upright and in place.
3. Two-piece cones may have a handle or loop extending up to 8" above the minimum height shown, in order to aid in retrieving the device.
4. Cones or tubular markers shall have white or white and orange reflective bands as shown above. The reflective bands shall have a smooth, sealed outer surface and meet the requirements of Departmental Material Specification DMS-8300 Type A or Type B.
5. 28" cones and tubular markers are generally suitable for short duration and short-term stationary work as defined on BC(4). These should not be used for intermediate-term or long-term stationary work unless personnel is on-site to maintain them in their proper upright position.
6. 42" two-piece cones, vertical panels or drums are suitable for all work zone durations.
7. Cones or tubular markers used on each project should be of the same size and shape.

SHEET 10 OF 12

Texas Department of Transportation | Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

BC(10)-21

FILE:	bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT	November 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS					
9-07	8-14	DIST	COUNTY		SHEET NO.
7-13	5-21				

DATE: FILE:

G:\TXC\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Shts\C06.20 10659000 STREET & DRAINAGE DETAILS.dwg Layout: STREET & DRAINAGE DETAILS (SHEET 2 OF 7) Plotted: 8/17/2023 12:17:09 PM By: Calderon

							APR
							DATE
							DESCRIPTION
◁	◁	◁	◁	◁	◁	◁	REV

DESIGNED BY: JDC
REVIEWED BY: AJN
DRAWN BY: JDC

BGE

BGE, INC.
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TBPE Registration No. F-1046

THE JUNCTION

STREET & DRAINAGE DETAILS (SHEET 2 OF 7)

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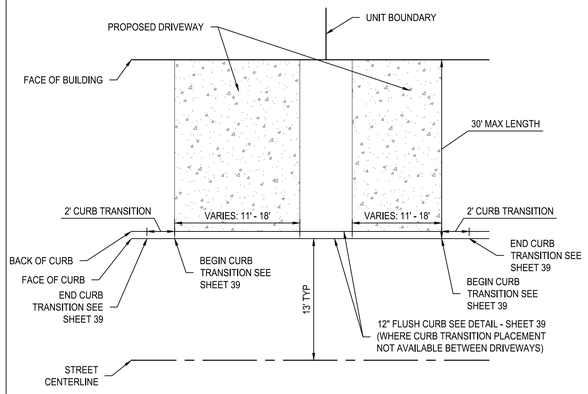
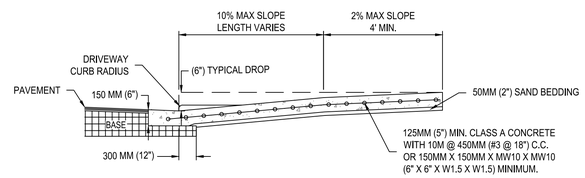
PLAN VIEW

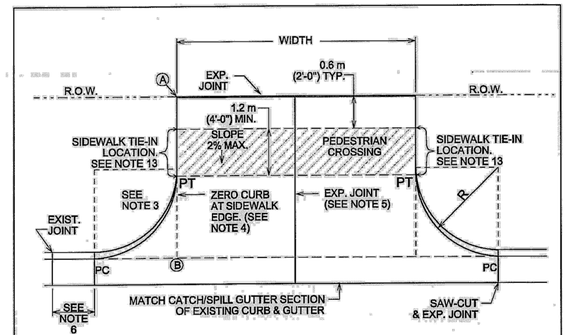


CROSS SECTION



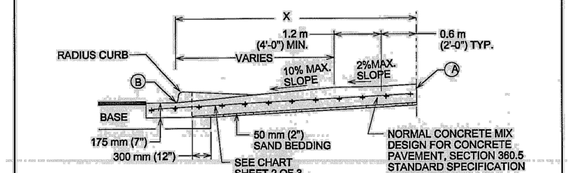
NOTE: REINFORCEMENT SHALL ACCURATELY BE PLACED AT SLAB MID-DEPTH AND HELD FIRMLY IN PLACE BY MEANS OF BAR SUPPORTS OF ADEQUATE STRENGTH AND NUMBER THAT WILL PREVENT DISPLACEMENT AND KEEP THE STEEL AT ITS PROPER POSITION DURING THE PLACEMENT OF THE P.C. CONCRETE. IN NO INSTANCE SHALL THE STEEL BE PLACED DIRECTLY ON THE SUBGRADE OR SAND CUSHION LAYER

TYPICAL DRIVEWAY DETAIL
N.T.S



PLAN

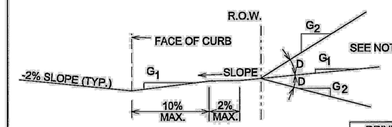
NOTE: ALL DRIVEWAYS SHALL BE SLOPED TOWARDS THE STREET FROM THE R.O.W. LINE. ELEVATION OF POINT Ⓐ ABOVE POINT Ⓑ IS, TYPICALLY A MINIMUM OF 150 mm (6") PLUS 20 mm/m (¼" RISE/FOOT) OVER DISTANCE "X" IN METERS (FEET).



CROSS SECTION

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPE II DRIVEWAY	
2/24/16 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 433S-2 1 OF 2

USE	THICKNESS	REINFORCEMENT
DRIVEWAYS FOR PASSENGER VEHICLE PARKING LOTS	150 mm (6") MIN.	125 mm (5") MIN. CONCRETE WITH ONE LAYER OF 13M (#4) BARS PLACED ON CHAIRS AT MIDDEPTH OF SLAB AT NO MORE THAN 450 mm (18") O.C. BOTH DIRECTIONS
ALL OTHERS	175 mm (7") MIN.	125 mm (5") MIN. CONCRETE WITH ONE LAYER OF 13M (#4) BARS PLACED ON CHAIRS AT MIDDEPTH OF SLAB AT NO MORE THAN 450 mm (18") O.C. BOTH DIRECTIONS



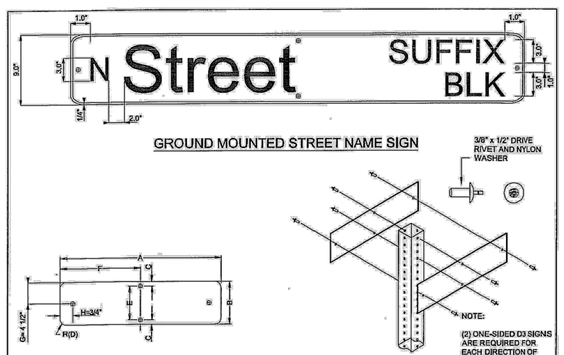
ALLOWABLE GRADES

DRIVEWAY VOLUME (ADT)	D=GRADE CHANGE STD.	MAX
>1500	0%	3%
500-1500	3%	6%
< 500	6%	15%

NOTES:

1. ALL TYPE II DRIVEWAYS SHALL HAVE RADIUS ENDS.
2. DRIVEWAY WIDTHS AND RADII DIMENSIONS, ONE/TWO WAY TRAVEL REQUIREMENTS, AND GEOMETRIC LAY-OUT ARE HIGHLY VARIABLE, SUBJECT TO SITE SPECIFIC CONDITIONS AND REQUIREMENTS. SEE TRANSPORTATION CRITERIA MANUAL, SECTION 5 "DRIVEWAYS".
3. THE DRIVEWAY EDGE SHALL BE SMOOTHLY TRANSITITIONED INTO THE SIDEWALK TIE-IN LOCATION BEGINNING AT THE RADIUS PC LINE.
4. "ZERO" CURB AT PT OR SIDEWALK EDGE, WHICHEVER IS ENCOUNTERED FIRST.
5. PLACE AN EXPANSION JOINT DOWN THE CENTER OF DRIVEWAY ALL DRIVEWAYS.
6. IF DIMENSION IS LESS THAN 1.5 METERS (5 FEET), REMOVE CURB AND GUTTER TO EXISTING JOINT AND POUR MONOLITHICALLY WITH DRIVEWAY.
7. IF THE BASE IS OVER-EXCAVATED WHERE THE CURB AND GUTTER WERE REMOVED, BACKFILL WITH CONCRETE MONOLITHICALLY WITH THE DRIVEWAY.
8. TYPE II DRIVEWAYS ARE TO BE LOCATED NO CLOSER TO THE CORNER OF INTERSECTING RIGHT OF WAY THAN 60% OF PARCEL FRONTAGE AT 30 METERS (100 FEET): WHICHEVER IS LESS.
9. DRIVEWAY SHALL NOT BE CONSTRUCTED WITHIN THE CURB RETURN OF A STREET INTERSECTION.
10. WHILE THE PROPERTY OWNER REMAINS RESPONSIBLE FOR GRADE BREAKS WITHIN PRIVATE PROPERTY, THE FIRE DEPARTMENT SHALL BE CONSULTED WHERE THE DRIVEWAY IS ESSENTIAL TO EMERGENCY VEHICLE ACCESS AND "G2 IS GREATER THAN 15%.
11. USE 12 MM (1/2") ASPHALT BOARD OR OTHER APPROVED MATERIAL FOR CURB AND GUTTER EXPANSION JOINTS. SIDEWALK, AT THE R.O.W. LINE AND AT MIDWIDTH, SEE NOTE 5.
12. SEE TRANSPORTATION CRITERIA MANUAL, SECTION 5 FOR OTHER DRIVEWAY REQUIREMENTS.
13. THE SIDEWALK, REGARDLESS OF ITS LOCATION WITH RESPECT TO THE CURB OR PROPERTY LINE, SHALL BE CONNECTED TO THE DRIVEWAY AT THESE LOCATIONS.
14. WATER METER BOXES AND WASTEWATER CLEAN OUTS ARE PROHIBITED FROM BEING LOCATED IN DRIVEWAY AREAS.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPE II DRIVEWAY	
2/24/16 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 433S-2 2 OF 2



GROUND MOUNTED STREET NAME SIGN

TABLE - D3 SIGNS

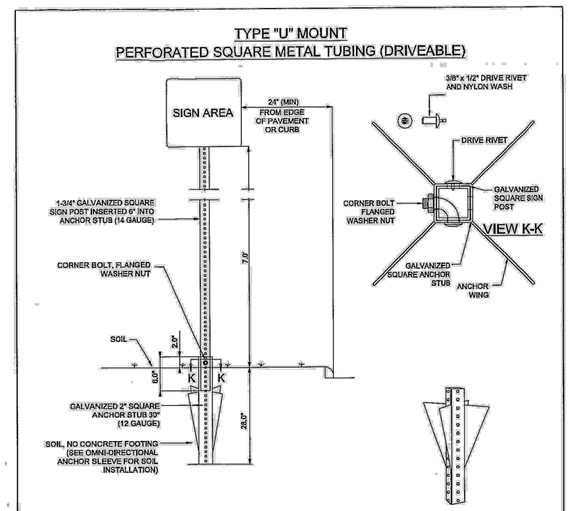
A	B	C	D	E	F	T
24"	9"	1/2"	3/4"	8"	12"	0.08"
30"	9"	1/2"	3/4"	8"	15"	0.08"
36"	9"	1/2"	3/4"	8"	18"	0.08"
42"	9"	1/2"	3/4"	8"	21"	0.08"
48"	9"	1/2"	3/4"	8"	24"	0.08"
54"	9"	1/2"	3/4"	8"	27"	0.08"

SIGN TO POLE INSTALLATION

HEIGHT	9"
LENGTH	24" MIN. 54 MAX. 6" INCREMENTS OF LENGTH
THICKNESS	0.08"
SUBSTRATE	ALUMINUM ALLOY, 6061-T-6, OR TYPE IV 5052-H38 (ASTM B-209)
SIGN FACE MATERIALS	GREEN FILM OVER HIGH INTENSITY PRISMATIC SHEETING
LEGENDS AND SYMBOLS	SERIES D (USUAL) SERIES C OR B FOR MAXIMUM LENGTH SIGN BLANK, IF NECESSARY
COLOR	WHITE LEGEND ON GREEN BACKGROUND WITH ½" WHITE BORDER

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	GROUND MOUNTED TRAFFIC AND STREET NAME SIGNS	
Keri Burchard-Gross 1/4/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 824-2 1 OF 3

TYPE "U" MOUNT
PERFORMED SQUARE METAL TUBING (DRIVEABLE)



MULTI-DIRECTIONAL ANCHOR

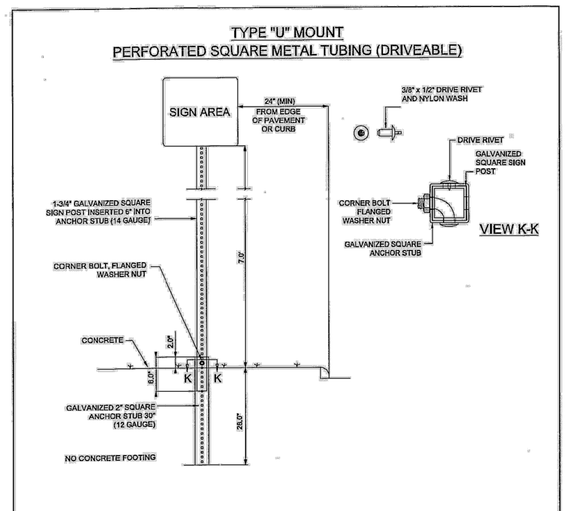
FOR USE IN SOIL.

SIGN POST:
12 GAUGE
2" SQUARE x 20"

WINGS:
10 GAUGE
4" x 12"
ASTM A569 COM. QUALITY WELDED TO ALL 4 CORNERS STARTING 2 1/2" DOWN FROM TOP

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	GROUND MOUNTED TRAFFIC AND STREET NAME SIGNS - SOIL	
Keri Burchard-Gross 1/4/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 824-2 2 OF 3

TYPE "U" MOUNT
PERFORMED SQUARE METAL TUBING (DRIVEABLE)



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	GROUND MOUNTED TRAFFIC AND STREET NAME SIGNS - CONCRETE	
Keri Burchard-Gross 1/4/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 824-2 3 OF 3

	APR	DATE	DESCRIPTION	REV

DESIGNED BY: JDC
REVIEWED BY: AJN
DRAWN BY: JDC

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San Antonio, TX 78216
TEL: 210-581-3600 www.bgeinc.com
TBPE Registration No. F-1046

THE JUNCTION

STREET & DRAINAGE DETAILS (SHEET 3 OF 7)

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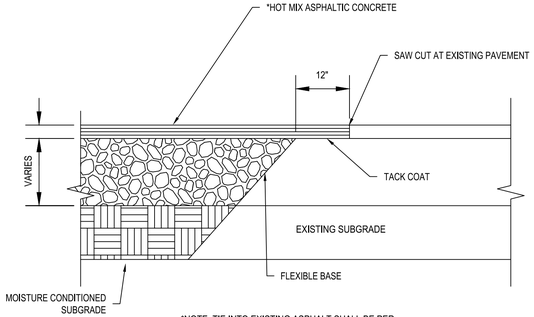
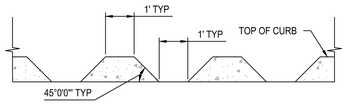
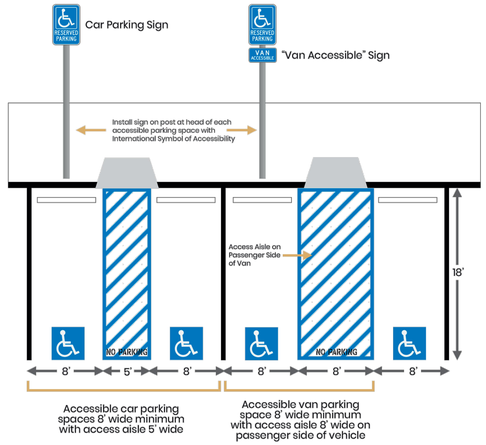


*NOTE: TIE INTO EXISTING ASPHALT SHALL BE PER TXDOT REQUIREMENTS FOR ACCESS CONNECTIONS.

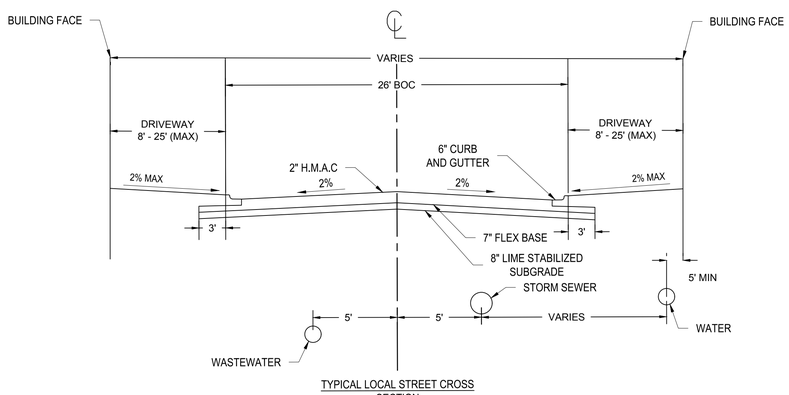
MATCH EXISTING PAVEMENT
N.T.S.



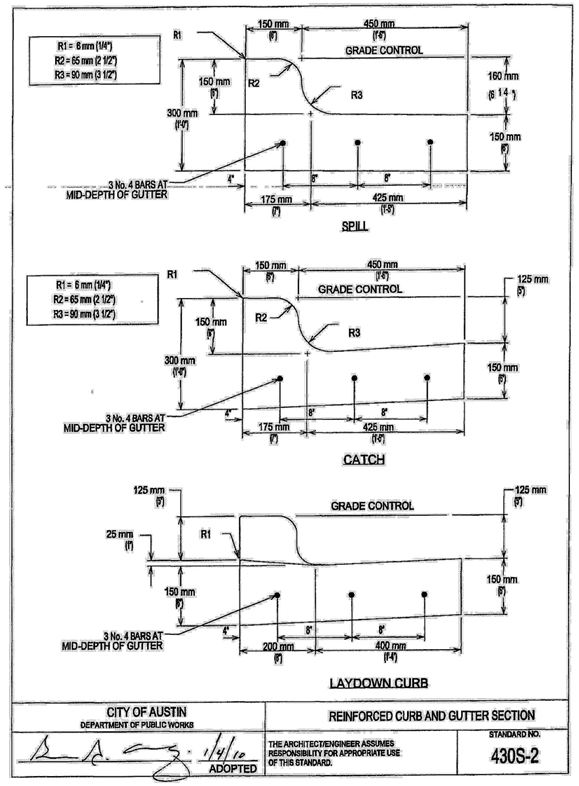
SAWTOOTH CURB DETAIL
N.T.S



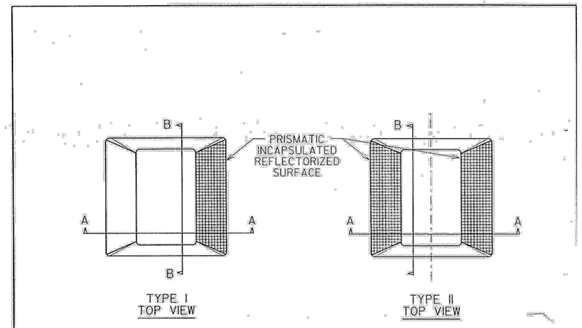
ADA PARKING DETAIL
N.T.S



TYPICAL LOCAL STREET CROSS SECTION
N.T.S.



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	REINFORCED CURB AND GUTTER SECTION	
1/4/10 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 430S-2

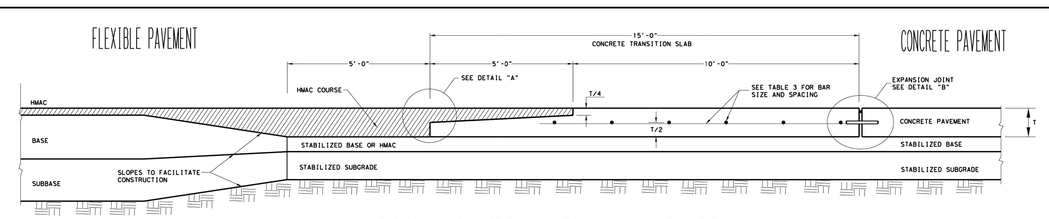


NOTE:
MINIMUM AREA OF MARKER EXPOSED TO TRAFFIC SHALL NOTE BE LESS THAN 8000 SQUARE MILLIMETERS (12.5 SQUARE INCHES).

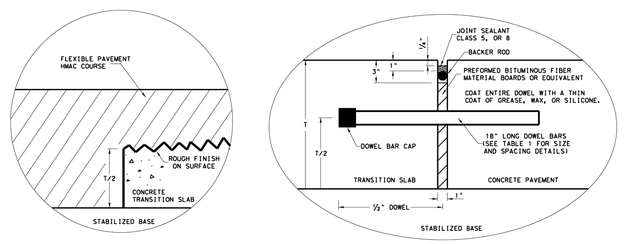
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION	PAVEMENT MARKERS (REFLECTORIZED - TYPE I & II)	
Lino Rivera 9/29/99 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 863S-1

DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE "TEXAS ENGINEERING PRACTICE ACT". NO WARRANTY OF ANY KIND IS MADE BY TXDOT FOR ANY PURPOSE WHATSOEVER. TXDOT ASSUMES NO RESPONSIBILITY FOR THE CONVERSION OF THIS STANDARD TO OTHER FORMATS OR FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

DATE:
FILE:



TYPICAL JUNCTION OF CONCRETE PAVEMENT WITH FLEXIBLE PAVEMENT
(NOT TO SCALE)



GENERAL NOTES

1. FOR FURTHER INFORMATION REGARDING THE PLACEMENT OF CONCRETE AND LOAD TRANSFER DEVICES REFER TO THE GOVERNING SPECIFICATIONS FOR "CONCRETE PAVEMENT" AND "REINFORCING STEEL."
2. DETAILS FOR PAVEMENT WIDTH AND THE CROWN CROSS-SLOPE SHALL BE SHOWN ELSEWHERE IN THE PLANS.
3. MATCH THE LONGITUDINAL JOINTS OF THE CONCRETE TRANSITION SLAB WITH ADJOINING CONCRETE PAVEMENT. PROVIDE EQUIVALENT TIEBARS OR TRANSVERSE BARS AT THESE LONGITUDINAL JOINTS, SEE TABLE NO. 2.
4. REFER TO DMS-6310, "JOINT SEALANTS AND FILLERS" FOR THE CLASSIFICATIONS.
5. TRANSITION SLABS WILL BE PAID UNDER ITEM 360, "CONCRETE PAVEMENTS."

TABLE NO. 1 DOWELS (SMOOTH BARS)		
SLAB THICKNESS T (IN.)	BAR DIA. AND LENGTH	SPACING (IN.)
7 TO 7.5	1" X 18"	12
8 TO 10	1 1/4" X 18"	12
10 TO 13	1 1/2" X 18"	12

TABLE NO. 2 TIE BARS (DEFORMED BARS)		
SLAB THICKNESS T (IN.)	BAR SIZE	SPACING (IN.)
7 TO 7.5	#5	24
8 TO 13	#6	24

TABLE NO. 3 TRANSITION SLAB STEEL (DEFORMED BARS)			
SLAB THICKNESS T (IN.)	BAR SIZE	SPACING (IN.) TRANSVERSE DIRECTION	SPACING (IN.) LONGITUDINAL DIRECTION
7 TO 7.5	#5	24	12
8 TO 13	#6	24	12

ADJUST SPACING OF LONGITUDINAL BARS AS NEEDED TO ACCOMODATE DOWEL BAR SPACING.

Texas Department of Transportation — Design Division Standard

CONCRETE PAVEMENT DETAILS
TRANSITION SLAB
T-7 to 13 INCHES

TRANS-20

FILE: transtsldt20.dgn	DN: TxDOT	CK: TxDOT	DW: AN	CK: KM
©TxDOT NOVEMBER 2020	CONT	SECT	JOB	HIGHWAY
REVISIONS	DIST	COUNTY		SHEET NO.

APR
DATE
DESCRIPTION
REV

DESIGNED BY: JDC
REVIEWED BY: AJN
DRAWN BY: JDC

BGE

BGE, INC.
7330 San Pedro, Suite 202
San Antonio, TX 78216
TEL: 210-581-3600 www.bgeinc.com
TBPE Registration No. F-1046

THE JUNCTION
STREET & DRAINAGE DETAILS
(SHEET 4 OF 7)

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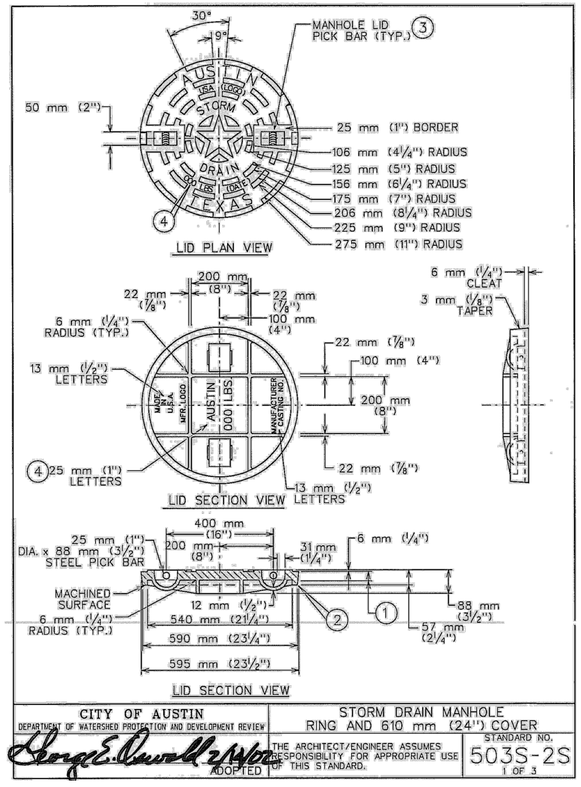
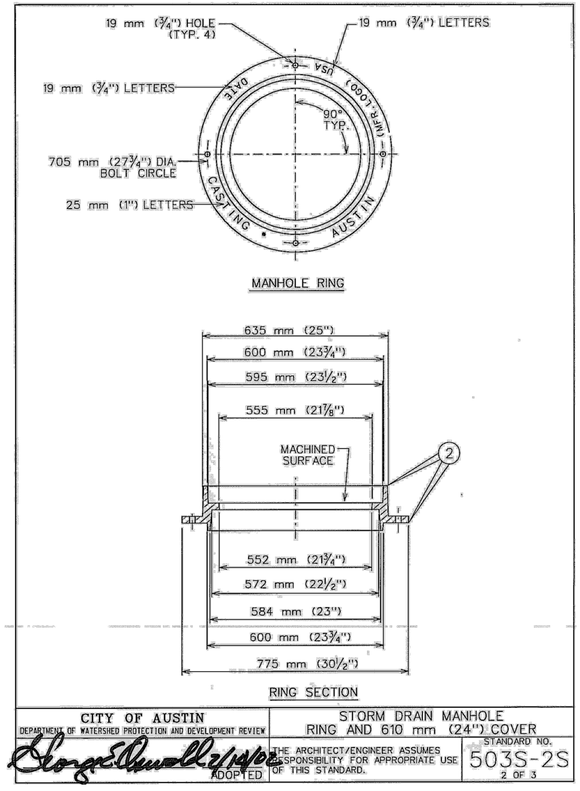
SHEET 41

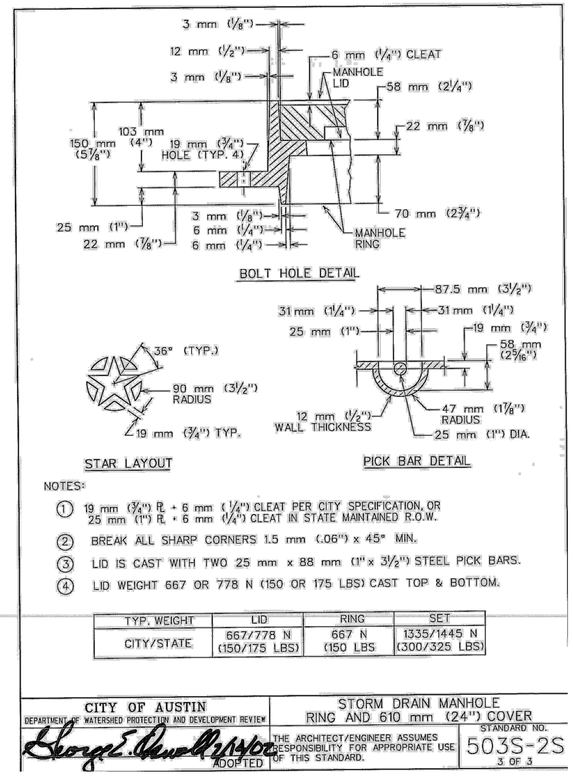
G:\TXDOT\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Shts\C06.20 1065900 STREET & DRAINAGE DETAILS.dwg Layout: STREET & DRAINAGE DETAILS (SHEET 4 OF 7) Plotted: 8/17/2023 12:17:20 PM By: Calderon



CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	STORM DRAIN MANHOLE RING AND 610 mm (24") COVER	STANDARD NO.
George E. Dowdy 2/14/02 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	503S-2S 1 OF 3



CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	STORM DRAIN MANHOLE RING AND 610 mm (24") COVER	STANDARD NO.
George E. Dowdy 2/14/02 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	503S-2S 2 OF 3



NOTES:

1. 19 mm (¾") R. + 6 mm (¼") CLEAT PER CITY SPECIFICATION, OR 25 mm (1") R. + 6 mm (¼") CLEAT IN STATE MAINTAINED R.O.W.
2. BREAK ALL SHARP CORNERS 1.5 mm (.06") x 45° MIN.
3. LID IS CAST WITH TWO 25 mm x 88 mm (1" x 3½") STEEL PICK BARS.
4. LID WEIGHT 667 OR 778 N (150 OR 175 LBS) CAST TOP & BOTTOM.

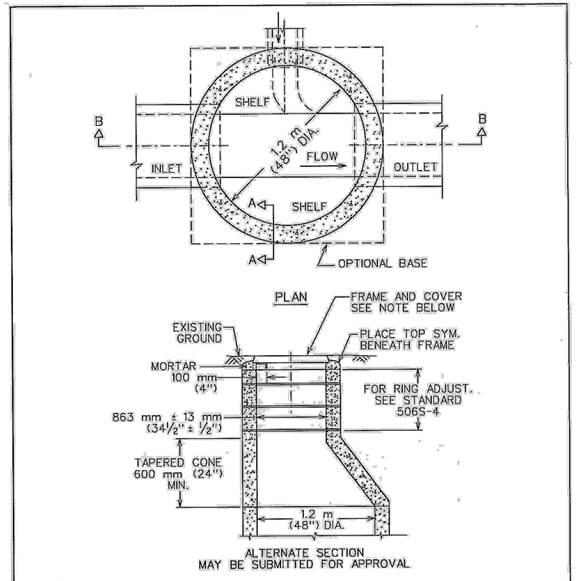
TYP. WEIGHT	LID	RING	SET
CITY/STATE	667/778 N (150/175 LBS)	667 N (150 LBS	1335/1445 N (300/325 LBS)

CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	STORM DRAIN MANHOLE RING AND 610 mm (24") COVER	STANDARD NO.
George E. Dowdy 2/14/02 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	503S-2S 3 OF 3

Notes:

1. *Install 4" Diameter Stainless Steel "No Dumping – Drains To Creek" Marker, Factory Painted Blue As Shown, 2" Above Vertical Face Of Inlet At Midpoint Of All Inlets.*
2. *Marker Shall Be Affixed To Surface With Adhesive Per Manufacturer's Recommendations.*
3. *Marker Shall Be Manufactured By Almetek Industries Or Approved Equal:*
   Almetek Industries, Inc.
   2 Joy Drive
   Hackettstown, NJ 07840
   (800) 248-2080
   www.Almetek.com

Approved 5/5/2021 Date	CITY OF MANOR	Detail No. EC-08 EC-08.dwg
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)	STORM DRAIN MARKERS CONSTRUCTION STANDARD DETAILS	CITY OF MANOR EST. 1872 TEXAS

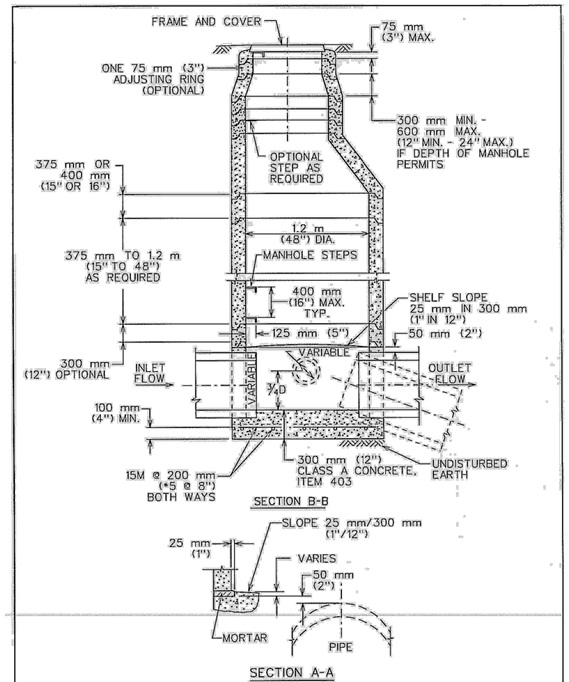


NOTE:
USE 800 mm (32") FRAME AND COVER.

MINIMUM MANHOLE DIA.	MINIMUM PIPE SIZE
1.2 m (4')	450 TO 600 mm (18 TO 24")
1.5 m (5')	750 mm TO 1.1 m (30 TO 42")
1.8 m (6')	1.2 TO 1.4 m (48 TO 54")
2.1 m (7')	1.5 TO 1.7 m (60 TO 66")

SIZE TO BE USED IS DEPENDENT ON DRAIN ANGLES.

CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	PRE-CAST CONCRETE STORM DRAIN MANHOLE	STANDARD NO.
George E. Dowdy 2/14/02 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	506S-3 1 OF 2



CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	PRE-CAST CONCRETE STORM DRAIN MANHOLE	STANDARD NO.
George E. Dowdy 2/14/02 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	506S-3 2 OF 2

REV	DESCRIPTION	DATE	APR

DESIGNED BY: JDC
REVIEWED BY: AJN
DRAWN BY: JDC

BGE, INC.
7330 San Pedro, Suite 202
San Antonio, TX 78216
TEL: 210-581-3600 www.bgeinc.com
TBPE Registration No. F-1046

THE JUNCTION

STREET & DRAINAGE DETAILS (SHEET 5 OF 7)

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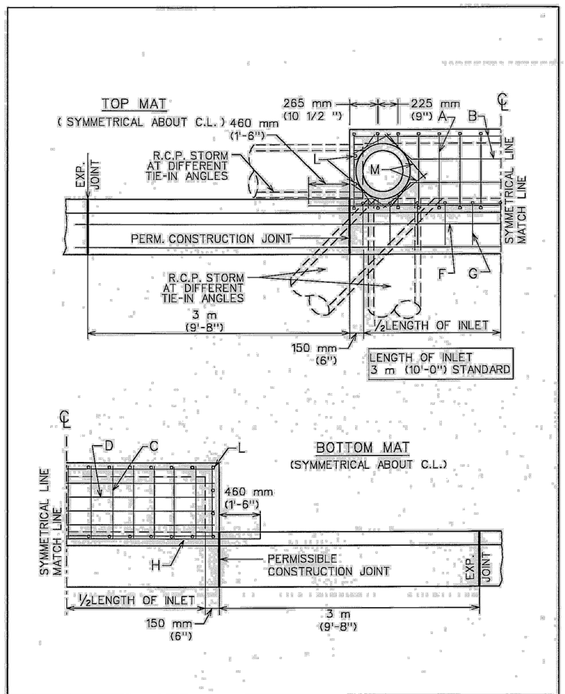
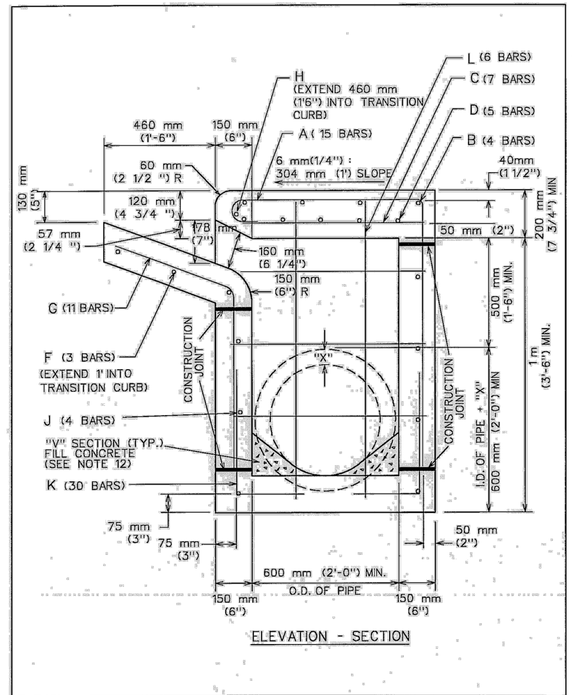
SHEET 42

G:\TX\CO\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Shts\C06 20 1065900 STREET & DRAINAGE DETAILS.dwg Layout: STREET & DRAINAGE DETAILS (SHEET 5 OF 7) Plotted: 8/17/2023 12:17:27 PM By: Calderon



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPICAL DETAILS FOR CURB INLET	
Bill Gardner 12/9/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-3 1 OF 4



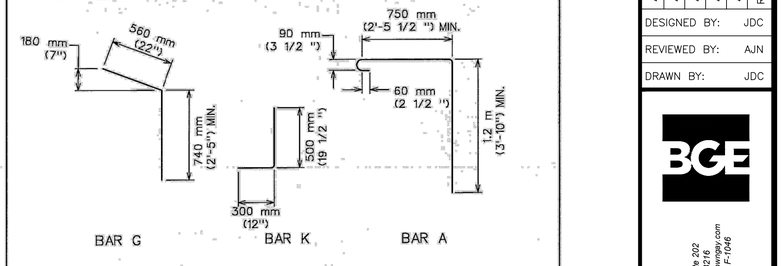
ELEVATION - SECTION

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPICAL DETAILS FOR CURB INLET	
Bill Gardner 12/9/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-3 2 OF 4

TABLE OF QUANTITIES
FOR 18" OUTLET PIPE
REINFORCING STEEL QUANTITIES

BARS	SIZE	SPACING	NUMBER	LENGTH	WEIGHT
A	4	230mm (9")×	15	2 m (7'-0")	73
B	4	250 mm (10")	4	3.25 m (10'-8")	29
C	4	460 mm (18")	7	760 mm (2'-6")	12
D	6	150 mm (6")	5	3.25 m (10'-8")	80
E	4	300 mm (12")	6	760 mm (2'-6")	10
F	4	250 mm (10")	3	4 m (13'-0")	35
G	4	300 mm (12")	11	1.25 m (4'-3")	31
H	6	-	1	4.25 m (14'-0")	20
J	4	300 mm (12")	7	3.25 m (10'-8")	50
K	4	230 mm (9")×	30	800 mm (2'-7 1/2")	52
L	4	300 mm (12")×	6	1.3 m (4'-4")	17
M	4	-	4	500 mm (1'-8") AVG	4
TOTAL STEEL, LB.					413
TOTAL CONCRETE, C.Y.					4.06

× EXCEPT AS SHOWN ON PLAN



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPICAL DETAILS FOR CURB INLET	
Bill Gardner 12/9/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-3 3 OF 4

NOTES:
1. ALL CONCRETE SHALL BE CLASS "A"
2. ALL REINFORCING STEEL SHALL BE GRADE 60
3. DIMENSIONS RELATING TO REINFORCING STEEL ARE TO CENTERS OF BARS.
4. VERTICAL STEEL MAY BE SPLICED (380 mm or 15" MIN. LAP) IN THE LOWER ONE-HALF OF ALL INLET WALLS.5. IN AREAS OF CONFLICT BETWEEN REINFORCING STEEL, PIPES AND MANHOLE FRAME, THE REINFORCEMENT SHALL BE BENT OR ADJUSTED TO CLEAR AS DIRECTED BY THE ENGINEER.
6. QUANTITIES SHOWN HEREON ARE FOR THE CONTRACTOR'S INFORMATION ONLY. PAYMENT WILL BE MADE FOR EACH INLET OF THE TYPE SPECIFIED, COMPLETE IN PLACE INCLUDING MANHOLE FRAME AND OVER.
7. CHAMFER ALL EXPOSED EDGES 20 mm (3/4 ").
8. MANHOLE FRAME AND COVER SHALL BE IN ACCORDANCE WITH CITY OF AUSTIN STANDARD 503S-1.
9. THE CONTRACTOR MAY PROPOSE ALTERNATE PROCEDURES FOR THE CONSTRUCTION OF INLETS, INCLUDING PRECAST UNITS. PLANS FOR SUCH PROPOSED ALTERNATES SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL BEFORE CONSTRUCTION.
10. ALL INLET WALLS SHALL BE FORMED EXCEPT WHERE THE NATURE OF THE SURROUNDING MATERIAL IS SUCH THAT IT CAN BE TRIMMED TO A SMOOTH VERTICAL FACE. WHEN INLET WALLS ARE PLACED TO NEAT EXCAVATION LINES THE WALL THICKNESS SHALL NOT EXCEED 10 INCHES.
11. PAYMENT FOR INLET AT THE CONTRACT PRICE SHALL INCLUDE THE TRANSITION CURB.
12. INVERT OF INLET SHALL BE SLOPED 1:20 WITH FILL CONCRETE, SHAPED AS "V" SECTION
13. NO SPLICING OF REINFORCING STEEL SHALL BE PERMITTED UNLESS OTHERWISE NOTED ON THE PLANS OR PERMITTED IN WRITING BY THE ENGINEER.

REFERENCES:

FOR EXPANSION JOINT DOWEL AND DOWEL LOCATION DETAILS SEE STD. 430S-3, "CURB EXPANSION JOINT DOWEL DETAIL".

FOR 18" MANHOLE FRAME AND COVER DETAILS SEE STD. 503S-1, "18" COVER AND FRAME".

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPICAL DETAILS FOR CURB INLET	
Bill Gardner 12/9/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-3 4 OF 4

REV	DESCRIPTION	DATE	APR

DESIGNED BY: JDC
REVIEWED BY: AJN
DRAWN BY: JDC

BGE, INC.
7330 San Pedro, Suite 202
San Antonio, TX 78216
TEL: 210-581-3600 www.bgeinc.com
TBPE Registration No. F-1046

THE JUNCTION

STREET & DRAINAGE DETAILS (SHEET 6 OF 7)

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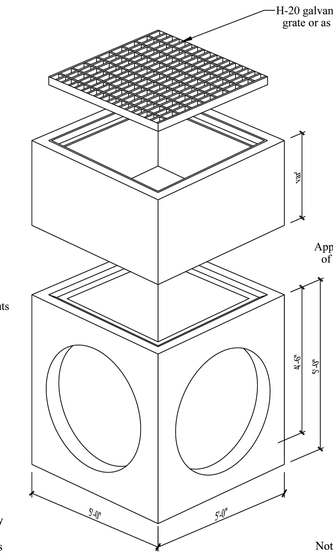
SHEET 43

G:\TX\Cl\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Shts\C06.20 1065900 STREET & DRAINAGE DETAILS.dwg Layout: STREET & DRAINAGE DETAILS (SHEET 6 OF 7) Plotted: 8/17/2023 12:17:32 PM By: Calderon

NOTE* THIS PRODUCT
OR EQUIVALENT

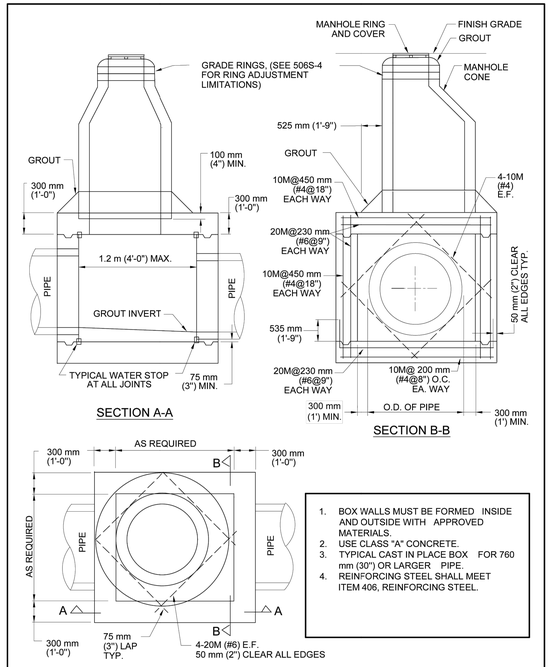
4' x 4' x var Grate Inlet



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

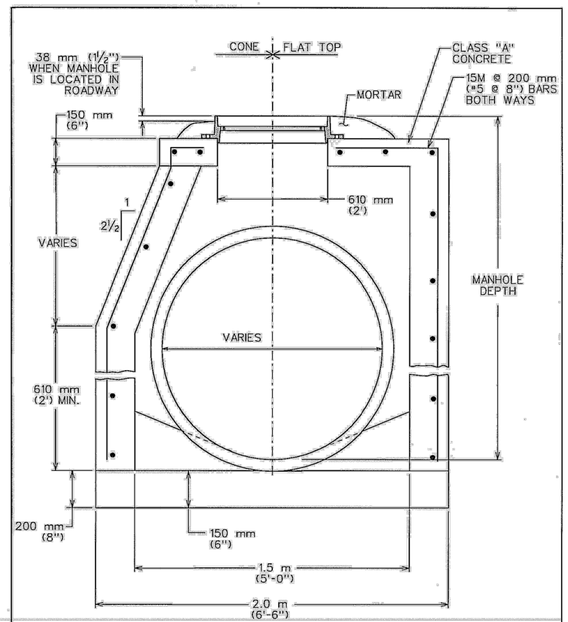
Notes:
- Consult manufacturer before handling

Capital Precast	CAPITAL PRECAST, INC. 6905 SOUTH OLD BASTROP HWY SAN MARCOS, TEXAS 78666 PH. (830) 606-6200	FOR 4' x 4' x var Grate Inlet		
		JOB		
		DRAWN RW	DATE 12/1/2015	Rev. No.
		FILE catalog/grate inlets/4x4 Grate Inlet		SHEET 1 of 1

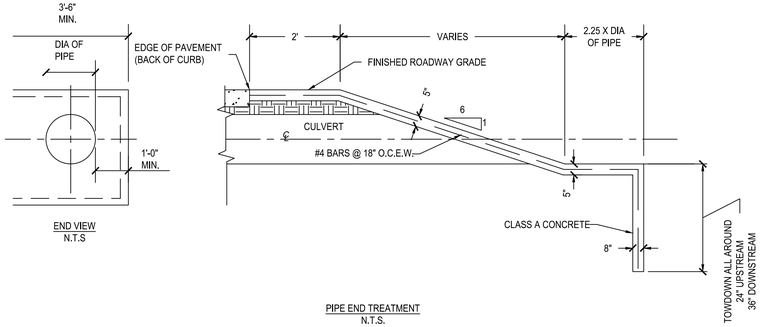


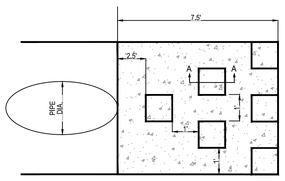
1. BOX WALLS MUST BE FORMED INSIDE AND OUTSIDE WITH APPROVED MATERIALS.
2. USE CLASS "A" CONCRETE.
3. TYPICAL CAST IN PLACE BOX FOR 760 mm (30") OR LARGER PIPE.
4. REINFORCING STEEL SHALL MEET ITEM 406, REINFORCING STEEL.

CITY OF AUSTIN WATER AND WASTEWATER UTILITY	TYPICAL BOX MANHOLE 760 mm (30") & LARGER PIPE	
RECORD COPY SIGNED BY KATHI F. PAYNE 2/17/00 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-5 1 OF 1



CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW George E. Dowell 2/14/02 ADOPTED	STORM DRAIN MANHOLE DETAIL THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-11





OUTFALL DETAIL
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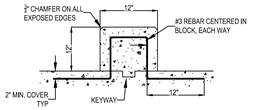
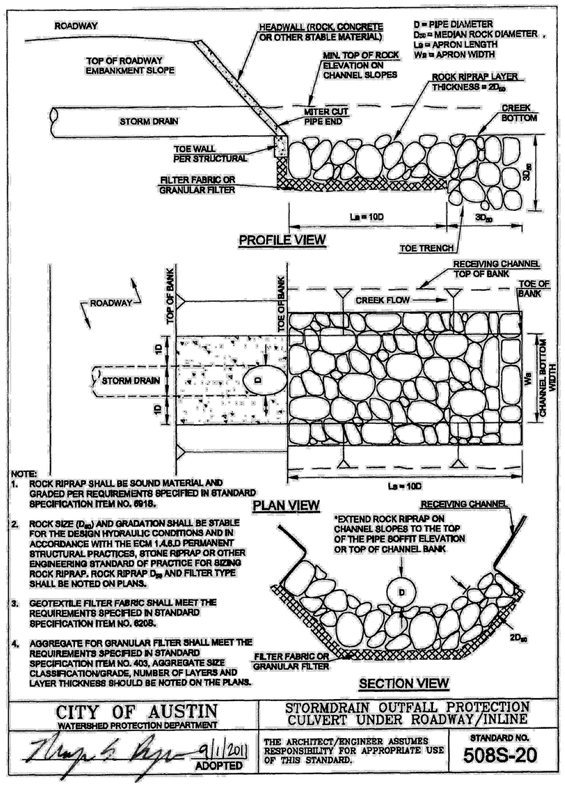


SECTION A-A
BAFFLE BLOCK DETAIL
N.T.S.

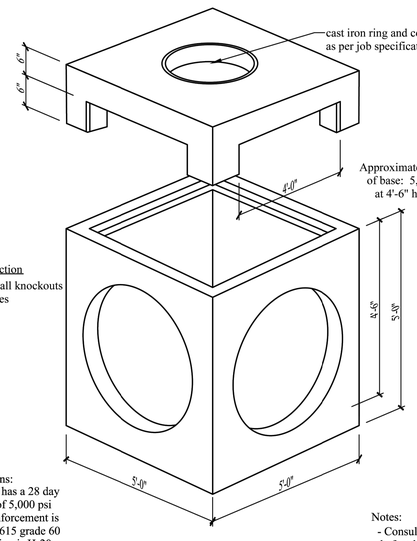


NOTE:
1. ROCK RIPRAP SHALL BE SOUND MATERIAL AND GRADED PER REQUIREMENTS SPECIFIED IN STANDARD SPECIFICATION ITEM NO. 6918.
2. ROCK SIZE (D_{50}) AND GRADATION SHALL BE STABLE FOR THE DESIGN HYDRAULIC CONDITIONS AND IN ACCORDANCE WITH THE ECM 1.4.6.D PERMANENT STRUCTURAL PRACTICES, STONE RIPRAP OR OTHER ENGINEERING STANDARD OF PRACTICE FOR SIZING ROCK RIPRAP. ROCK RIPRAP D_{50} AND FILTER TYPE SHALL BE NOTED ON PLANS.
3. GEOTEXTILE FILTER FABRIC SHALL MEET THE REQUIREMENTS SPECIFIED IN STANDARD SPECIFICATION ITEM NO. 6208.
4. AGGREGATE FOR GRANULAR FILTER SHALL MEET THE REQUIREMENTS SPECIFIED IN STANDARD SPECIFICATION ITEM NO. 403. AGGREGATE SIZE CLASSIFICATION/GRADE, NUMBER OF LAYERS AND LAYER THICKNESS SHOULD BE NOTED ON THE PLANS.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT 9/1/2011 ADOPTED	STORMDRAIN OUTFALL PROTECTION CULVERT UNDER ROADWAY/INLINE THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-20

NOTE* THIS PRODUCT
OR EQUIVALENT

4' x 4' x var 4-Way Inlet



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

Notes:
- Consult manufacturer before handling

Capital Precast	CAPITAL PRECAST, INC. 6905 SOUTH OLD BASTROP HWY SAN MARCOS, TEXAS 78666 PH. (830) 606-6200	FOR 4' x 4' x var 4-Way Inlet		
		JOB		
		DRAWN RW	DATE 12/1/2015	Rev. No.
		FILE catalog/streaminlets/4x4 area inlet		SHEET 1 of 1

		APR
		DATE
		DESCRIPTION
		REV
DESIGNED BY:	JDC	
REVIEWED BY:	AJN	
DRAWN BY:	JDC	

BGE

BGE, INC.
7330 San Pedro, Suite 202
San Antonio, TX 78216
TEL: 210-581-3600 www.bgeinc.com
TBPE Registration No. F-1046

THE JUNCTION

STREET & DRAINAGE DETAILS
(SHEET 7 OF 7)

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Engineer 114451
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SHEET
44

G:\TX\Cl\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Shts\C06.20 1065900 STREET & DRAINAGE DETAILS.dwg Layout: STREET & DRAINAGE DETAILS (SHEET 7 OF 7) Plotted: 8/17/2023 12:17:37 PM By: Calderon

UTILITY TRENCH COMPACTION

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

TRENCH EXCAVATION SAFETY PROTECTION

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS COVERING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATIONS.

LEGEND

- FEMA FLOODPLAIN ZONE
- PROPERTY BOUNDARY
- PROPOSED WATER LINE
- PROPOSED WASTEWATER LINE
- PROPOSED STORM DRAIN
- PROPOSED ELECTRIC
- EXISTING WATER LINE
- EXISTING WASTEWATER LINE
- SINGLE WATER SERVICE
- DUAL WATER SERVICE
- PROPOSED SINGLE SEWER SERVICE CONNECTION
- PROPOSED FIRE HYDRANT
- UTILITY CROSSING
- PROPOSED STREET LIGHT
- EXISTING MANHOLE
- PROPOSED TRANSFORMER PAD

N

0 20' 40' 80'

SCALE: 1" = 40'

MURRAY AVENUE
60' ROW
VOL. 2, PG. 223, P.R.T.C.

KUSUM HOSPITALITY LLC

MANOR VILLAGE CONDOMINIUMS LTD

LEAVITT LUMBER COMPANY INC

BUILDING 1
100' X 56' (8,142 SF)
4 RESIDENTIAL UNITS
3 STORIES

BUILDING 2
100' X 56' (8,142 SF)
4 RESIDENTIAL UNITS
3 STORIES

BUILDING 3
141' X 56' (12,088 SF)
6 RESIDENTIAL UNITS
3 STORIES

BUILDING 4
141' X 56' (12,088 SF)
6 RESIDENTIAL UNITS
3 STORIES

BUILDING 5
141' X 56' (12,088 SF)
6 RESIDENTIAL UNITS
3 STORIES

BUILDING 6
100' X 56' (8,142 SF)
4 RESIDENTIAL UNITS
3 STORIES

BUILDING 7
124' X 56' (10,405 SF)
5 RESIDENTIAL UNITS
3 STORIES

BUILDING 8
124' X 56' (10,405 SF)
5 RESIDENTIAL UNITS
3 STORIES

BUILDING 9
124' X 56' (10,405 SF)
5 RESIDENTIAL UNITS
3 STORIES

BUILDING 10
124' LONG (10,405 SF)
5 RESIDENTIAL UNITS
5 STORIES

BUILDING 11
141' X 56' (12,088 SF)
6 RESIDENTIAL UNITS
3 STORIES

BUILDING 12
80' X 56' (6,459 SF)
3 RESIDENTIAL UNITS
2 STORIES

BUILDING 13
106' X 56' (8,722 SF)
4 RESIDENTIAL UNITS
3 STORIES

BUILDING 14
141' X 56' (12,088 SF)
6 RESIDENTIAL UNITS
3 STORIES

BUILDING 15
100' X 56' (8,142 SF)
4 RESIDENTIAL UNITS
3 STORIES

BUILDING 16
80' X 56' (6,459 SF)
3 RESIDENTIAL UNITS
2 STORIES

BUILDING 17
106' X 56' (8,142 SF)
4 RESIDENTIAL UNITS
3 STORIES

BUILDING 18
124' X 56' (10,405 SF)
5 RESIDENTIAL UNITS
3 STORIES

BUILDING 19
124' X 56' (10,405 SF)
5 RESIDENTIAL UNITS
3 STORIES

BUILDING 20
124' X 56' (10,405 SF)
5 RESIDENTIAL UNITS
3 STORIES

15' STORM EASEMENT

25' WATER EASEMENT

15' WASTEWATER EASEMENT

PROPOSED IRRIGATION

RETAINING WALL

PROPERTY BOUNDARY

100 YR FEME FLOODPLAIN

VARIABLE WIDTH UTILITY EASEMENT

CITY OF MANOR CEMETARY

LA GRANGE STREET
80' ROW
VOL. 2, PG. 223, P.R.T.C.

RECTOR STREET
60' ROW
DOC. NO. 201800087, O.P.R.T.C.
VARIABLE WIDTH AS MONUMENTED

GARY M. WILLIAMS

JULIA K. BAUMGART & JAMES A. POEHL

MARTINIANO P. & BLANCA E. MEJIA

MICHAEL E. DYE

VALERIE ANN DYE

UTILITY GENERAL NOTES

1. 2" WATERLINES SHALL BE ASTM D2241, SDR 21 UNLESS OTHERWISE APPROVED. ALL WATERLINES LARGER THAN 8" SHALL BE AWWA C900 DR 18.
2. ALL MAINS SHALL BE FLUSHED, HYDROSTATICALLY TESTED, AND DISINFECTED BY THE CONTRACTOR. SEE "CONNECTION TO EXISTING WATER SYSTEM" NOTE BELOW

CONTRACTOR TO TIE INTO EXISTING WATER MAIN AFTER ALL NEW MAINS HAVE BEEN DISINFECTED AND PASSED ALL TESTS AND HAVE BEEN APPROVED BY AUQA TEXAS, INC.
FOR CHLORINATION INJECTION:
1 ~ 1" CORPORATION STOP C.C. X I.P.
1 ~ 1" COMP X 1R" CPL. CURB STOP
1 ~ 1" 1/4" THD SOLID CAP FOR MACHINE CHLORINATION
1 ~ 1" COPPER TUBING, CUT AS REQ'D
CONTRACTOR TO PROVIDE A 2" JUMPER CONNECTION TO LOAD NEW MAIN

3. THE LOCATIONS AND DEPTHS OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS OF UTILITIES MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.
4. ALL GARBAGE OR SPOIL MATERIAL FROM THIS WORK SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR, AT HIS EXPENSE.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL PERMITS, TESTS, APPROVALS AND ACCEPTANCES REQUIRED TO COMPLETE CONSTRUCTION OF THIS PROJECT.
6. ALL ITEMS NOT SPECIFICALLY CALLED FOR ON THE PLANS, OR IN THE SPECIFICATIONS, BUT NECESSARY TO REASONABLY CONSTRUCT THE FACILITY OR IMPROVEMENT, SHALL BE CONSIDERED INCIDENTAL TO THE OVERALL PROJECT AND NO SEPARATE PAYMENTS WILL BE MADE FOR THESE ITEMS.
7. DEPTH OF BURY FOR ALL PIPE SHALL BE A MINIMUM OF 4' UNLESS OTHERWISE NOTED OR APPROVED BY THE CITY OF MANOR.
8. CONTRACTOR TO GRADE SITE TO WITHIN ± 0.10' BEFORE THE INSTALLATION OF UTILITIES TO ENSURE PROPER COVER IS ACHIEVED.
9. THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES REGARDING THE LOCATION OF THE EXISTING FACILITIES PRIOR TO CONSTRUCTION.
10. THE CONTRACTOR SHALL EXCAVATE AROUND EXISTING UTILITIES WHICH INTERSECT THE PROPOSED ALIGNMENT OF THE SERVICES AND NOTIFY THE ENGINEER OF POTENTIAL CONFLICTS, PRIOR TO ANY CONSTRUCTION IN THE AREA.
11. ALL DISTURBED AREAS WITHIN THE EASEMENTS SHALL BE HYDRO-MULCHED IN ACCORDANCE WITH TXDOR SPECIFICATIONS.
12. IF THE MAXIMUM STATIC PRESSURE EXCEEDS 80 PSI, A PRV WILL BE REQUIRED ON THE PROPERTY OWNER'S SIDE OF THE WATER METER
13. ALL UTILITIES TO BE CONSTRUCTED PRIOR TO STREETS.
14. NO VALVES, HYDRANTS, ETC. SHALL BE CONSTRUCTED WITHIN CURBS, SIDEWALKS, OR DRIVEWAYS.

ENGINEER:
AARON NEUMANN, P.E.
BGE, INC., TBPE-1046
7330 SAN PEDRO AVENUE, SUITE
202 SAN ANTONIO, TEXAS 78216

CITY OF MANOR:
105 E. EGGLESTON ST.
MANOR, TEXAS 78653

BLUEBONNET ELECTRIC COOPERATIVE:
690 TEXAS 71 W., BLDG 1
BASTROP, TEXAS 78602

OWNER/DEVELOPER:
JAKE JALUFKA
LEGACY PERFORMANCE CAPITAL
2101 LAKEWAY BLVD, SUITE 130
AUSTIN, TEXAS 78734

NOTE:
UTILITY SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES. REFER TO UTILITY DETAIL SHEETS.

NOTE:
*LONG WATER SERVICES SHOULD BE SLEEVED.

FINISHED FLOOR ELEVATIONS

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

REV	DESCRIPTION	DATE	APR

DESIGNED BY: BAH
REVIEWED BY: AJN
DRAWN BY: BAH

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San Antonio, TX 78216
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TBPE Registration No. F-1046

THE JUNCTION

OVERALL UTILITY PLAN

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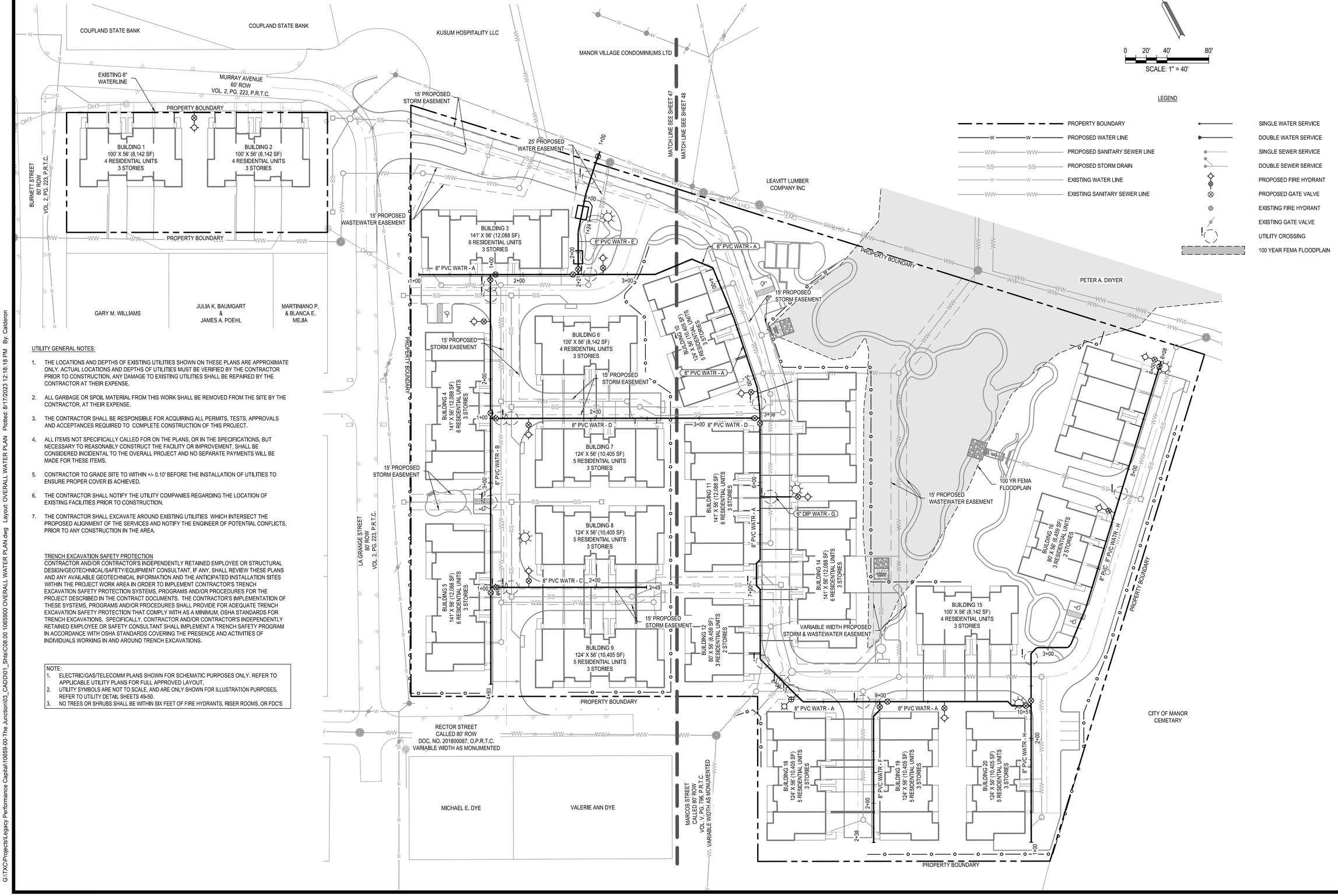
SHEET
45



UTILITY GENERAL NOTES:

1. THE LOCATIONS AND DEPTHS OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS OF UTILITIES MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT THEIR EXPENSE.
2. ALL GARBAGE OR SPOIL MATERIAL FROM THIS WORK SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR, AT THEIR EXPENSE.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL PERMITS, TESTS, APPROVALS AND ACCEPTANCES REQUIRED TO COMPLETE CONSTRUCTION OF THIS PROJECT.
4. ALL ITEMS NOT SPECIFICALLY CALLED FOR ON THE PLANS, OR IN THE SPECIFICATIONS, BUT NECESSARY TO REASONABLY CONSTRUCT THE FACILITY OR IMPROVEMENT, SHALL BE CONSIDERED INCIDENTAL TO THE OVERALL PROJECT AND NO SEPARATE PAYMENTS WILL BE MADE FOR THESE ITEMS.
5. CONTRACTOR TO GRADE SITE TO WITHIN +/- 0.10' BEFORE THE INSTALLATION OF UTILITIES TO ENSURE PROPER COVER IS ACHIEVED.
6. THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES REGARDING THE LOCATION OF EXISTING FACILITIES PRIOR TO CONSTRUCTION.
7. THE CONTRACTOR SHALL EXCAVATE AROUND EXISTING UTILITIES WHICH INTERSECT THE PROPOSED ALIGNMENT OF THE SERVICES AND NOTIFY THE ENGINEER OF POTENTIAL CONFLICTS, PRIOR TO ANY CONSTRUCTION IN THE AREA.

TRENCH EXCAVATION SAFETY PROTECTION

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS COVERING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATIONS.

NOTE:
1. ELECTRIC/GAS/TELECOMM PLANS SHOWN FOR SCHEMATIC PURPOSES ONLY. REFER TO APPLICABLE UTILITY PLANS FOR FULL APPROVED LAYOUT.
2. UTILITY SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES. REFER TO UTILITY DETAIL SHEETS 49-50.
3. NO TREES OR SHRUBS SHALL BE WITHIN SIX FEET OF FIRE HYDRANTS, RISER ROOMS, OR FDC'S

	APR	DATE	DESCRIPTION
REV			
DESIGNED BY:	LNH		
REVIEWED BY:	AJN		
DRAWN BY:	LNH		

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THE JUNCTION

OVERALL WATER PLAN

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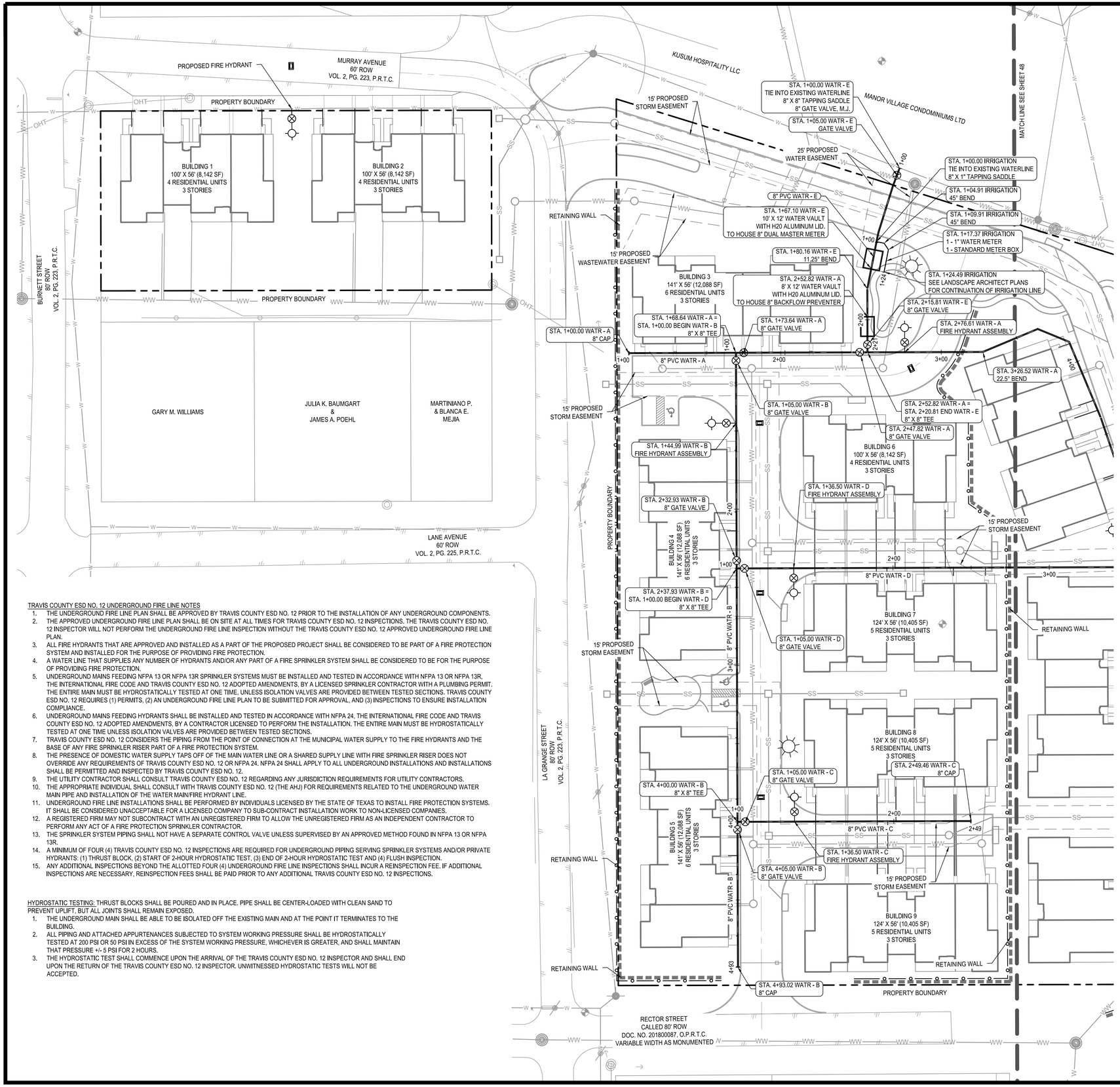
SHEET 46

G:\TX\C\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Shts\C08.00 1065900 OVERALL WATER PLAN Plotted: 8/17/2023 12:18:18 PM By: Calderon Layout: OVERALL WATER PLAN dwg



0 20' 40' 80'

SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED WATER LINE
- PROPOSED SANITARY SEWER LINE
- PROPOSED STORM DRAIN
- EXISTING WATER LINE
- EXISTING SANITARY SEWER LINE
- SINGLE WATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE SEWER SERVICE
- DOUBLE SEWER SERVICE
- PROPOSED FIRE HYDRANT
- PROPOSED GATE VALVE
- EXISTING FIRE HYDRANT
- EXISTING GATE VALVE
- UTILITY CROSSING
- 100 YEAR FEMA FLOODPLAIN
- PROPOSED FIRE HYDRANT MARKER (SEE SHEET 41)

TRAVIS COUNTY ESD NO. 12 UNDERGROUND FIRE LINE NOTES

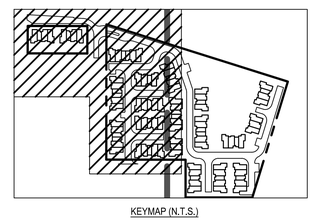
1. THE UNDERGROUND FIRE LINE PLAN SHALL BE APPROVED BY TRAVIS COUNTY ESD NO. 12 PRIOR TO THE INSTALLATION OF ANY UNDERGROUND COMPONENTS.
2. THE APPROVED UNDERGROUND FIRE LINE PLAN SHALL BE ON SITE AT ALL TIMES FOR TRAVIS COUNTY ESD NO. 12 INSPECTIONS. THE TRAVIS COUNTY ESD NO. 12 INSPECTOR WILL NOT PERFORM THE UNDERGROUND FIRE LINE INSPECTION WITHOUT THE TRAVIS COUNTY ESD NO. 12 APPROVED UNDERGROUND FIRE LINE PLAN.
3. ALL FIRE HYDRANTS THAT ARE APPROVED AND INSTALLED AS A PART OF THE PROPOSED PROJECT SHALL BE CONSIDERED TO BE PART OF A FIRE PROTECTION SYSTEM AND INSTALLED FOR THE PURPOSE OF PROVIDING FIRE PROTECTION.
4. A WATER LINE THAT SUPPLIES ANY NUMBER OF HYDRANTS AND/OR ANY PART OF A FIRE SPRINKLER SYSTEM SHALL BE CONSIDERED TO BE FOR THE PURPOSE OF PROVIDING FIRE PROTECTION.
5. UNDERGROUND MAINS FEEDING NFPA 13 OR NFPA 13R SPRINKLER SYSTEMS MUST BE INSTALLED AND TESTED IN ACCORDANCE WITH NFPA 13 OR NFPA 13R. THE INTERNATIONAL FIRE CODE AND TRAVIS COUNTY ESD NO. 12 ADOPTED AMENDMENTS, BY A LICENSED SPRINKLER CONTRACTOR WITH A PLUMBING PERMIT. THE ENTIRE MAIN MUST BE HYDROSTATICALLY TESTED AT ONE TIME, UNLESS ISOLATION VALVES ARE PROVIDED BETWEEN TESTED SECTIONS. TRAVIS COUNTY ESD NO. 12 REQUIRES (1) PERMITS, (2) AN UNDERGROUND FIRE LINE PLAN TO BE SUBMITTED FOR APPROVAL, AND (3) INSPECTIONS TO ENSURE INSTALLATION COMPLIANCE.
6. UNDERGROUND MAINS FEEDING HYDRANTS SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH NFPA 24, THE INTERNATIONAL FIRE CODE AND TRAVIS COUNTY ESD NO. 12 ADOPTED AMENDMENTS, BY A CONTRACTOR LICENSED TO PERFORM THE INSTALLATION. THE ENTIRE MAIN MUST BE HYDROSTATICALLY TESTED AT ONE TIME UNLESS ISOLATION VALVES ARE PROVIDED BETWEEN TESTED SECTIONS.
7. TRAVIS COUNTY ESD NO. 12 CONSIDERS THE PIPING FROM THE POINT OF CONNECTION AT THE MUNICIPAL WATER SUPPLY TO THE FIRE HYDRANTS AND THE BASE OF ANY FIRE SPRINKLER RISER PART OF A FIRE PROTECTION SYSTEM.
8. THE PRESENCE OF DOMESTIC WATER SUPPLY TAPS OFF OF THE MAIN WATER LINE OR A SHARED SUPPLY LINE WITH FIRE SPRINKLER RISER DOES NOT OVERRIDE ANY REQUIREMENTS OF TRAVIS COUNTY ESD NO. 12 OR NFPA 24. NFPA 24 SHALL APPLY TO ALL UNDERGROUND INSTALLATIONS AND INSTALLATIONS SHALL BE PERMITTED AND INSPECTED BY TRAVIS COUNTY ESD NO. 12.
9. THE UTILITY CONTRACTOR SHALL CONSULT TRAVIS COUNTY ESD NO. 12 REGARDING ANY JURISDICTION REQUIREMENTS FOR UTILITY CONTRACTORS.
10. THE APPROPRIATE INDIVIDUAL SHALL CONSULT WITH TRAVIS COUNTY ESD NO. 12 (THE AHJ) FOR REQUIREMENTS RELATED TO THE UNDERGROUND WATER MAIN PIPE AND INSTALLATION OF THE WATER MAIN/FIRE HYDRANT LINE.
11. UNDERGROUND FIRE LINE INSTALLATIONS SHALL BE PERFORMED BY INDIVIDUALS LICENSED BY THE STATE OF TEXAS TO INSTALL FIRE PROTECTION SYSTEMS. IT SHALL BE CONSIDERED UNACCEPTABLE FOR A LICENSED COMPANY TO SUB-CONTRACT INSTALLATION WORK TO NON-LICENSED COMPANIES.
12. A REGISTERED FIRM MAY NOT SUBCONTRACT WITH AN UNREGISTERED FIRM TO ALLOW THE UNREGISTERED FIRM AS AN INDEPENDENT CONTRACTOR TO PERFORM ANY ACT OF A FIRE PROTECTION SPRINKLER CONTRACTOR.
13. THE SPRINKLER SYSTEM PIPING SHALL NOT HAVE A SEPARATE CONTROL VALVE UNLESS SUPERVISED BY AN APPROVED METHOD FOUND IN NFPA 13 OR NFPA 13R.
14. A MINIMUM OF FOUR (4) TRAVIS COUNTY ESD NO. 12 INSPECTIONS ARE REQUIRED FOR UNDERGROUND PIPING SERVING SPRINKLER SYSTEMS AND/OR PRIVATE HYDRANTS: (1) THRUST BLOCK, (2) START OF 2-HOUR HYDROSTATIC TEST, (3) END OF 2-HOUR HYDROSTATIC TEST AND (4) FLUSH INSPECTION.
15. ANY ADDITIONAL INSPECTIONS BEYOND THE ALLOTTED FOUR (4) UNDERGROUND FIRE LINE INSPECTIONS SHALL INCUR A REINSPECTION FEE. IF ADDITIONAL INSPECTIONS ARE NECESSARY, REINSPECTION FEES SHALL BE PAID PRIOR TO ANY ADDITIONAL TRAVIS COUNTY ESD NO. 12 INSPECTIONS.

HYDROSTATIC TESTING: THRUST BLOCKS SHALL BE POURED AND IN PLACE. PIPE SHALL BE CENTER-LOADED WITH CLEAN SAND TO PREVENT UPLIFT, BUT ALL JOINTS SHALL REMAIN EXPOSED.

1. THE UNDERGROUND MAIN SHALL BE ABLE TO BE ISOLATED OFF THE EXISTING MAIN AND AT THE POINT IT TERMINATES TO THE BUILDING.
2. ALL PIPING AND ATTACHED APPURTENANCES SUBJECTED TO SYSTEM WORKING PRESSURE SHALL BE HYDROSTATICALLY TESTED AT 200 PSI OR 50 PSI IN EXCESS OF THE SYSTEM WORKING PRESSURE, WHICHEVER IS GREATER, AND SHALL MAINTAIN THAT PRESSURE +/- 5 PSI FOR 2 HOURS.
3. THE HYDROSTATIC TEST SHALL COMMENCE UPON THE ARRIVAL OF THE TRAVIS COUNTY ESD NO. 12 INSPECTOR AND SHALL END UPON THE RETURN OF THE TRAVIS COUNTY ESD NO. 12 INSPECTOR. UNWITNESSED HYDROSTATIC TESTS WILL NOT BE ACCEPTED.

THRUST BLOCK INSPECTION: A VISUAL INSPECTION WILL BE REQUIRED BEFORE THE FIRE MAINS ARE COVERED TO VERIFY LOCATION OF VALVES, PIPE TYPE, SIZE, WRAPPED JOINTS AND PROPER INSTALLATION OF RESTRAINTS. IF THE PIPE IS COVERED UP PRIOR TO THE INSPECTION, THE INSPECTION WILL BE TERMINATED, AND THE PIPE WILL BE REQUIRED TO BE UNCOVERED.

1. A 6-INCH BED OF CLEAN FILL SAND SHALL BE PROVIDED BELOW THE PIPE AND 12-INCHES ABOVE THE PIPE (TOTAL OF 18 INCHES PLUS OUTER DIAMETER OF THE PIPE).
2. PIPE SHALL BE BURIED AT LEAST 36" WHERE SUBJECT TO LOADING (E.G., DRIVEWAYS, PARKING LOTS) AND AT LEAST 30" ELSEWHERE. TRENCHES SHALL BE OF SUFFICIENT DEPTH TO ACCOUNT FOR POTENTIAL FREEZING CONDITIONS AND TO ALLOW THE REQUIRED COVER ABOVE THE PIPE.
3. ALL PIPE SHALL BE APPROVED FOR USE IN FIRE SERVICE SYSTEMS. THE PIPE USED MUST MEET THE MINIMUM STANDARDS OF THE WATER PURVEYOR SUPPLYING THE WATER FOR THE PROJECT. CLASS 150 WILL BE USED AT A MINIMUM, AND CLASS 200 PIPE SHALL BE USED WHERE THE WATER PRESSURE EXCEEDS 150 PSI. THE USE OF GALVANIZED PIPE IS PROHIBITED WHEN A PORTION OF THE SYSTEM IS BURIED.
4. ALL FERROUS PIPE AND FITTINGS SHALL BE PROTECTED WITH A LOOSE 8-MIL POLYETHYLENE SHEETING APPROVED FOR UNDERGROUND USE. USE OF ANY POLYETHYLENE MATERIAL WITHOUT ANSI/AWWA INFORMATION LISTED ON THE PRODUCT WILL NOT BE ACCEPTED. THE ENDS OF THE POLYETHYLENE SHEETING AND ANY SPLICES MADE FOR TEES OR OTHER PIPING COMPONENTS SHALL BE TIGHTLY SEALED WITH TWO-INCH TAPE THAT IS APPROVED FOR UNDERGROUND USE. DUCT TAPE AND OTHER COMMON HOUSEHOLD OR INDUSTRIAL TAPE WILL NOT BE ACCEPTED WITHOUT MANUFACTURER SPECIFICATIONS INDICATING THE TAPE IS APPROVED FOR UNDERGROUND USE.
5. BOLTS USED FOR UNDERGROUND CONNECTIONS, INCLUDING T BOLTS, SHALL BE CLEANED AND THOROUGHLY COATED WITH ASPHALT OR OTHER CORROSION RETARDING MATERIAL AFTER ASSEMBLY AND PRIOR TO THE INSTALLATION OF POLYETHYLENE SHEETING.
6. SECTIONAL VALVES SHALL BE PROVIDED AT APPROPRIATE POINTS WITHIN PIPING SECTIONS SUCH THAT THE NUMBER OF FIRE PROTECTION CONNECTIONS BETWEEN SECTIONAL VALVES DOES NOT EXCEED SIX.
7. SECTIONAL VALVES ARE NECESSARY TO ALLOW ISOLATION OF PIPING SECTIONS TO LIMIT THE NUMBER OF FIRE PROTECTION CONNECTIONS IMPAIRED IN THE EVENT OF A BREAK OR TO MAKE REPAIRS OR EXTENSIONS TO THE SYSTEM. FIRE PROTECTION CONNECTIONS CAN CONSIST OF SPRINKLER SYSTEM LEAD-INS, HYDRANTS, OR OTHER FIRE PROTECTION CONNECTIONS.
8. THRUST BLOCKS, OR ANOTHER APPROVED METHOD OF THRUST RESTRAINT, SHALL BE PROVIDED WHEREVER PIPE CHANGES DIRECTION.
9. CARE SHALL BE TAKEN WHEN FORMING AND POURING THRUST BLOCKS SO THAT FITTINGS AND JOINTS ARE NOT BURIED IN CONCRETE.
10. A MINIMUM TWO-INCH CLEARANCE SHALL BE PROVIDED BETWEEN THE FIRE RISER PIPE AND THE CONCRETE SLAB. THE TWO-INCH SPACE SHALL BE FILLED WITH A COMPRESSIBLE MATERIAL THAT ALLOWS MOVEMENT. A MINIMUM TWO-INCH CLEARANCE SHALL BE PROVIDED WHERE THE PIPE PASSES THROUGH WALLS.
11. UNDERGROUND SYSTEM SHALL TERMINATE AT THE RISER FLANGE AND PLACED A MAXIMUM OF 18 INCHES FROM AN EXTERIOR WALL AND 6 INCHES ABOVE THE SLAB.
12. PIPE RUNNING UNDER A BUILDING OR BUILDING FOUNDATION SHALL BE STAINLESS STEEL AND SHALL NOT CONTAIN MECHANICAL JOINTS.



KEYMAP (N.T.S.)

	DATE	DESCRIPTION
1	APR	

DESIGNED BY: LNH
REVIEWED BY: AJN
DRAWN BY: LNH

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San Antonio, TX 78216
TEL: 210-581-3600 www.bgeinc.com
TBPE Registration No. F-1046

THE JUNCTION

DETAILED WATER PLAN (SHEET 1 OF 2)

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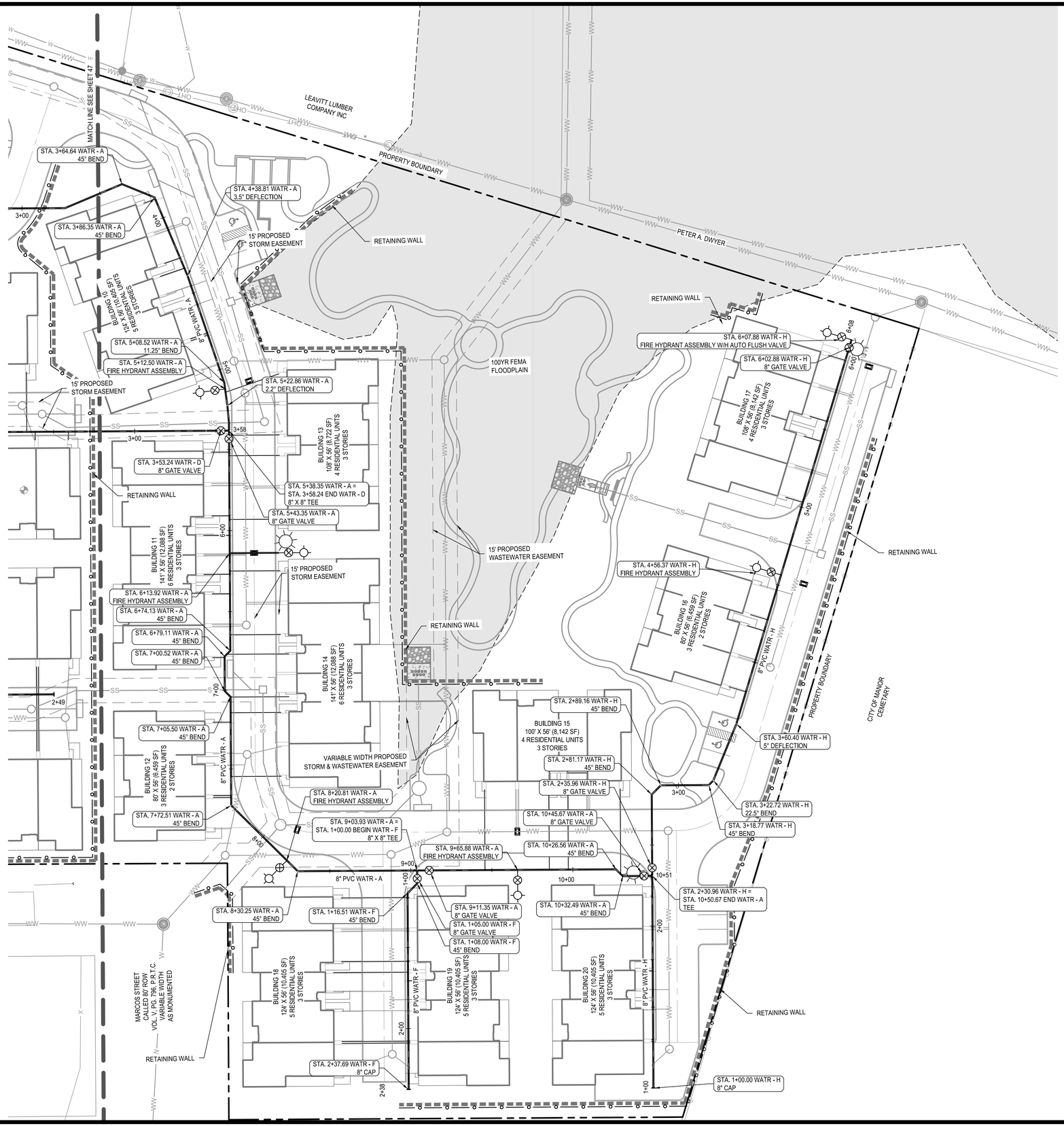
SHEET 47

G:\TX\C\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Shts\C08.01 1065900 DETAILED WATER PLAN.dwg Layout: DETAILED WATER PLAN (SHEET 1 OF 2) Plotted: 8/17/2023 12:18:36 PM By: Calderon



0 20' 40' 80'

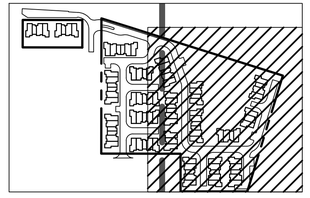
SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED WATER LINE
- PROPOSED SANITARY SEWER LINE
- PROPOSED STORM DRAIN
- EXISTING WATER LINE
- EXISTING SANITARY SEWER LINE
- SINGLE WATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE SEWER SERVICE
- DOUBLE SEWER SERVICE
- PROPOSED FIRE HYDRANT
- PROPOSED GATE VALVE
- EXISTING FIRE HYDRANT
- EXISTING GATE VALVE
- UTILITY CROSSING
- 100 YEAR FEMA FLOODPLAIN
- PROPOSED FIRE HYDRANT MARKER (SEE SHEET 41)

FLUSH INSPECTION: ALL PORTIONS OF THE UNDERGROUND SYSTEM SHALL BE FLUSHED TO REMOVE DEBRIS PRIOR TO CONNECTION TO OVERHEAD PIPING IN COMPLIANCE WITH NFPA 13.

1. UNDERGROUND PIPING, FROM THE WATER SUPPLY TO THE SYSTEM RISER, AND LEAD-IN CONNECTIONS TO THE SYSTEM RISER SHALL BE COMPLETELY FLUSHED BEFORE THE CONNECTION IS MADE TO DOWNSTREAM FIRE PROTECTION SYSTEM PIPING.
2. FLOW SHALL BE THROUGH A MINIMUM OF A 4-INCH HOSE, PIPE OR OUTLET, UNLESS OTHERWISE APPROVED BY TRAVIS COUNTY ESD NO. 12 PRIOR TO SCHEDULING THE FLUSH. HYDRANTS SHALL BE FLUSHED THROUGH THE 4.5-INCH OUTLET.
3. HOSE OR PIPE SHALL BE RESTRAINED TO PREVENT INJURY AND DAMAGE. DISCHARGED WATER SHALL BE COLLECTED OR DIVERTED IN ACCORDANCE WITH APPLICABLE WATER COLLECTION PROVISIONS. THE LOCAL PUBLIC WORKS DEPARTMENT, WATER DISTRICT, AND/OR OTHER APPLICABLE AGENCY SHALL BE NOTIFIED OF THE SCHEDULED FLUSH BY THE CONTRACTOR.
4. THE MINIMUM RATE OF FLOW SHALL BE NOT LESS THAN ONE OF THE FOLLOWING:
   1) THE HYDRAULICALLY CALCULATED WATER DEMAND RATE OF THE SYSTEM INCLUDING ANY HOSE REQUIREMENTS,
   2) FLOW NECESSARY TO PROVIDE A VELOCITY OF 10 FEET/SECOND, (4-INCH LINES - 390 GPM),
   3) THE MAXIMUM FLOW RATE AVAILABLE TO THE SYSTEM UNDER FIRE CONDITIONS.
5. IF UNDERGROUND PIPING IS CONNECTED TO OVERHEAD SPRINKLER PIPING WITHOUT AN APPROVED TRAVIS COUNTY ESD NO. 12 FLUSH INSPECTION, THE OVERHEAD SPRINKLER SYSTEM WILL REQUIRE EXTENSIVE TESTING TO ENSURE NO OBSTRUCTIONS ARE PRESENT. THIS INCLUDES, BUT IS NOT LIMITED TO, REMOVAL AND REPLACEMENT OF SPRINKLER HEADS, BACKFLUSHING THE SYSTEM AND DENIAL OF OCCUPANCY UNTIL THE ISSUE IS RESOLVED TO NFPA STANDARDS AND THE REQUIREMENTS SET FORTH BY TRAVIS COUNTY ESD NO. 12.
6. PER NFPA 24, THE INSTALLING CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETING AND SIGNING THE CONTRACTOR'S MATERIAL AND TEST CERTIFICATE FOR UNDERGROUND PIPING. THE COMPLETED AND SIGNED CERTIFICATE SHALL BE PROVIDED TO ALL REQUIRED PARTIES, INCLUDING TRAVIS COUNTY ESD NO. 12. THIS CERTIFICATE CERTIFIES THE INSTALLATION WAS IN ACCORDANCE WITH CHAPTER 6003 OF THE TEXAS INSURANCE CODE AND GUIDELINES SET FORTH BY THE SFMO.
7. APPROVAL OF THIS PLAN SUBMITTAL DOES NOT CONSTITUTE A VERIFICATION OF ALL DATA, CODES, INFORMATION, AND CALCULATIONS SUPPLIED BY THE APPLICANT. THE LICENSED DESIGNER AND/OR PROFESSIONAL ENGINEER OF RECORD IS SOLELY RESPONSIBLE FOR THE COMPLETENESS, ACCURACY, AND ADEQUACY OF THE SUBMITTAL WHETHER OR NOT THE PLAN SUBMITTAL IS REVIEWED AND APPROVED FOR CODE COMPLIANCE BY TRAVIS COUNTY ESD NO. 12.



KEYMAP (N.T.S.)

	APR	DATE	DESCRIPTION	REV

DESIGNED BY: LNH
REVIEWED BY: AJN
DRAWN BY: LNH

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TBPE Registration No. F-1046

THE JUNCTION

DETAILED WATER PLAN (SHEET 2 OF 2)

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SHEET 48

G:\TXC\Projects\Legacy Performance Capital\10659-00-The Junction\03_CAD\D01_Shts\C08.01 1065900 DETAILED WATER PLAN.dwg Layout: DETAILED WATER PLAN (SHEET 2 OF 2) Plotted: 8/17/2023 12:18:41 PM By: Calderon

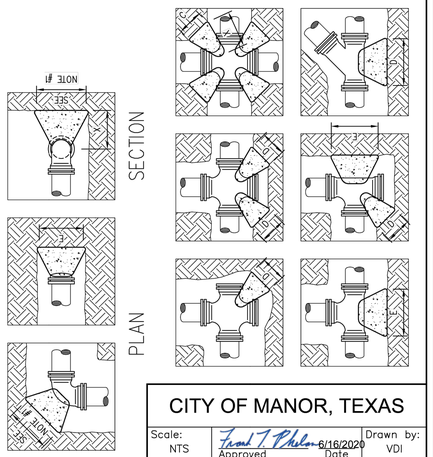
G:\TXC\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Shts\C08.20 10659000 WATER UTILITY DETAILS.dwg Layout: WATER UTILITY DETAILS (SHEET 1 OF 3) Plotted: 8/17/2023 12:19:34 PM By: Calderon

THRUST BLOCKING SCHEDULE

ASSUMPTIONS: LINE PRESSURE = 100 psi, ALLOWABLE BEARING = 4,000 psf, SAFETY FACTOR = 3

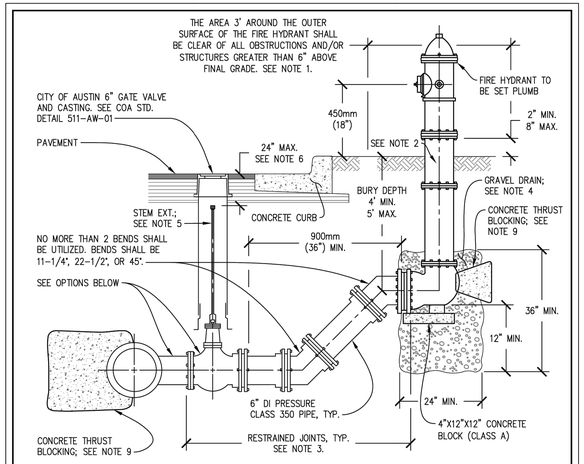
PIPE DIAMETER	PIPE AREA Sq. In.	X	11 1/4° BEND THRUST Lbs.	11 1/4° BEND AREA Sq. Ft.	A	22 1/2° BEND THRUST Lbs.	22 1/2° BEND AREA Sq. Ft.	B	45° BEND THRUST Lbs.	45° BEND AREA Sq. Ft.	C	90° BEND THRUST Lbs.	90° BEND AREA Sq. Ft.	D	TEE & PLUG THRUST Lbs.	TEE & PLUG AREA Sq. Ft.	E
4"-12"	120.8	1.5'	2,367	1.2	1.1'	4,712	2.4	1.5'	9,243	4.6	2.2'	17,078	8.5	2.9'	12,076	6.0	2.5'

NOTES:
1. USE A, B, C, D OR E AS APPROPRIATE. REFER TO SCHEDULE.
2. ALL CONCRETE THRUST BLOCKS SHALL BEAR AGAINST UNDISTURBED TRENCH WALLS. DISTANCE (X) FROM PIPE FITTING TO TRENCH WALL SHALL BE AS SHOWN IN THE SCHEDULE OR A MIN. OF 12" AT THE THRUST BLOCK.
3. VERTICAL WALL OF BEARING AREA AGAINST TRENCH WALL OF THRUST BLOCK SHALL BE EQUAL TO HORIZONTAL DIMENSION OF A, B, C, D, OR E AS APPROPRIATE. REFER TO SCHEDULE AND SECTION DRAWING.
4. ALL JOINTS SHALL BE TEMPORARILY JACKED WHEN CONCRETE THRUST BLOCKING IS USED. JOINTS SHALL BE KEPT FREE OF ANY CONCRETE.
5. ALL CONCRETE THRUST BLOCKS SHALL CONSIST OF A MIXTURE OF 1:2:6 OF CEMENT TO WASHED SAND TO GRAVEL AND SHALL BE CURED FOR A MIN. OF 24 HRS.
6. CONCRETE THRUST BLOCKS SHALL APPLY TO ALL PIPE FITTINGS.



THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL.

CITY OF MANOR, TEXAS		
Scale: NTS	Approved 6/16/2020 Date	Drawn by: VDI
THRUST BLOCKING DETAIL		Detail No. W-11



THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL.

CITY OF MANOR, TEXAS		
Scale: NTS	Approved 10/16/20 Date	Drawn by: VDI
FIRE HYDRANT DETAIL (1 OF 2)		Detail No. W-1

NOTES:
1. DIMENSION FROM GUTTER FACE OF CURB TO OUTERMOST PART OF ANY NOZZLE CAP SHALL BE NOT LESS THAN 3', NOR MORE THAN 6'. NO PART OF A HYDRANT OR ITS NOZZLE CAPS SHALL BE WITHIN 6" OF ANY SIDEWALK OR PEDESTRIAN RAMP. ANY FIRE HYDRANT PLACED NEAR A STREET CORNER SHALL BE LOCATED OUTSIDE THE CURVE RADIUS AND A MINIMUM OF 4' FROM RAMPS.
2. ONE BARREL EXTENSION NOT EXCEEDING 2' LENGTH MAY BE INSTALLED DIRECTLY BELOW THE FIRE HYDRANT IN ORDER TO MEET THE REQUIRED BURY DEPTH OF 4' TO 5'. BREAK AWAY BOLTS (SHOE TYPES) SHALL BE PROPERLY SPACED AND PLACED.
3. FIRE LINE SHALL HAVE ALL JOINTS RESTRAINED FROM MAIN TO FIRE HYDRANT. JOINTS SHOWN MAY VARY. SEE CITY OF AUSTIN SPL WW-27, WW-27A, AND WW-27B FOR RESTRAINT OPTIONS.
4. BELOW EACH HYDRANT, A DRAINAGE PIT 2' IN DIAMETER AND 1' DEEP SHALL BE EXCAVATED AND FILLED WITH COMPACTED COARSE GRAVEL OR BROKEN STONE MIXED WITH COARSE SAND UNDER AND AROUND THE BOWL OF THE HYDRANT, AND TO A LEVEL OF 6" ABOVE THE HYDRANT DRAIN OPENING (SEE COA STD. SPEC. 510). THE HYDRANT DRAINAGE PIT SHALL NOT BE CONNECTED TO A SANITARY SEWER. THE DRAIN GRAVEL SHALL BE COVERED WITH FILTER FABRIC TO PREVENT BLOCKAGE OF VOIDS IN THE GRAVEL BY MIGRATION OF BACKFILL MATERIAL. THE BOWL OF EACH HYDRANT SHALL BE WELL BRACED AGAINST UNEXCAVATED EARTH AT THE END OF THE TRENCH TAKING CARE NOT TO OBSTRUCT THE HYDRANT DRAIN HOLES, IF THE HYDRANT LEAD IS NOT RESTRAINED TO THE MAIN.
5. WELD SOCKET 2-1/2" X 2" TO 1" SCH. 40 ROUND STEM EXTENSION, FIT ON OPERATING NUT. USE SCH. 80 ROUND STEM EXTENSION FOR LENGTHS OVER 10'. VALVE STEM EXTENSIONS SHALL CONSIST OF A SINGLE PIECE OF REQUIRED LENGTH WITH A SOCKET ON ONE END AND A NUT ON THE OTHER.
6. VALVE STEM EXTENSIONS ARE REQUIRED ON ALL VALVES THAT EXCEED 3' DEEP FROM FINISHED GRADE. VALVE STEM EXTENSIONS SHALL BE PLACED SUCH THAT THE EXTENSION NUT IS BETWEEN 18" AND 24" FROM FINISHED GRADE.
7. FOR FIRE HYDRANT LEADS AT A MAIN OUTLET LARGER THAN 6" DIAMETER, OUTLET SHALL BE FLANGED AND A FLANGE X FLANGE REDUCER SHALL BE INSTALLED DIRECTLY ON THE OUTLET.
8. WRAP 8 mil POLY-FILM WRAP ON ALL BURIED PIPE AND FITTINGS.
9. THRUST BLOCKING REQUIRED FOR PIPE SIZE & SOIL CONDITION (SEE STD. DETAIL W-11).
10. STEAMER NOZZLE TO BE 4.5" NST FIRE THREAD CONNECTION.
11. FIRE HYDRANTS SHALL BE PAINTED RED.

THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL.

CITY OF MANOR, TEXAS		
Scale: NTS	Approved 10/16/20 Date	Drawn by: VDI
FIRE HYDRANT DETAIL (2 OF 2)		Detail No. W-1

							APR
							DATE
							DESCRIPTION
△	△	△	△	△	△	△	REV

DESIGNED BY: JDC
REVIEWED BY: AJN
DRAWN BY: JDC

BGE, INC.
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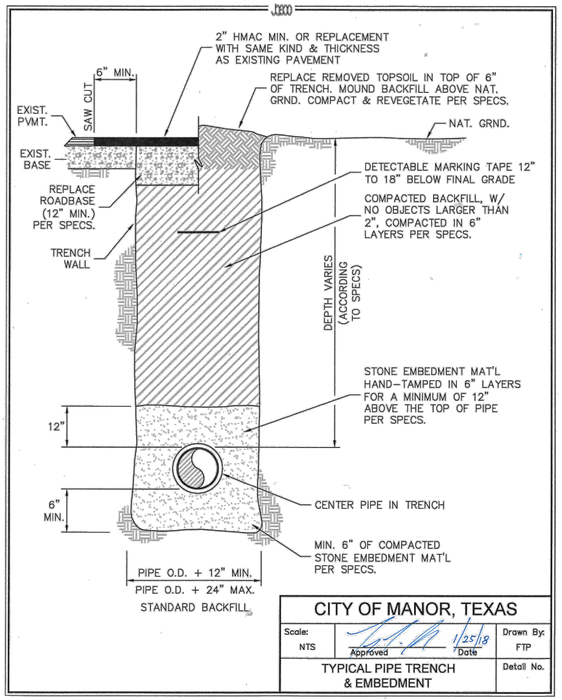
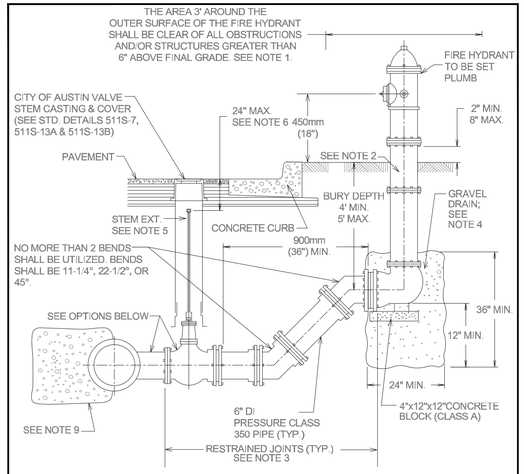


CITY OF MANOR, TEXAS		
Scale: NTS	Approved 11/25/18 Date	Drawn By: FTP
TYPICAL PIPE TRENCH & EMBEDMENT		Detail No.



CITY OF MANOR	FIRE HYDRANT INSTALLATION ON DEEP WATER MAINS	
RECORD COPY SIGNED BY FRANK T. PHELAN, P.E. 11/02/2017	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. M511S-17A 1 OF 2

NOTES:
1. DIMENSION FROM GUTTER FACE OF CURB TO OUTERMOST PART OF ANY NOZZLE CAP SHALL BE NOT LESS THAN 3', NOR MORE THAN 6'. NO PART OF A HYDRANT OR ITS NOZZLE CAPS SHALL BE WITHIN 6" OF ANY SIDEWALK OR PEDESTRIAN RAMP. ANY FIRE HYDRANT PLACED NEAR A STREET CORNER SHALL BE LOCATED OUTSIDE THE CURVE RADIUS AND A MINIMUM OF 4' FROM RAMPS.
2. ONE BARREL EXTENSION NOT EXCEEDING 2' LENGTH MAY BE INSTALLED DIRECTLY BELOW THE FIRE HYDRANT IN ORDER TO MEET THE REQUIRED BURY DEPTH OF 4' TO 5'. BREAK AWAY BOLTS (SHOE TYPES) SHALL BE PROPERLY SPACED AND PLACED.
3. FIRE LINE SHALL HAVE ALL JOINTS RESTRAINED FROM MAIN TO FIRE HYDRANT. JOINTS SHOWN MAY VARY. SEE SPL WW-27, WW-27A, AND WW-27B FOR RESTRAINT OPTIONS.
4. BELOW EACH HYDRANT, A DRAINAGE PIT 2' IN DIAMETER AND 1' DEEP SHALL BE EXCAVATED AND FILLED WITH COMPACTED COARSE GRAVEL OR BROKEN STONE MIXED WITH COARSE SAND UNDER AND AROUND THE BOWL OF THE HYDRANT, AND TO A LEVEL 6" ABOVE THE HYDRANT DRAIN OPENING (SEE STD. SPEC. 510). THE HYDRANT DRAINAGE PIT SHALL NOT BE CONNECTED TO A SANITARY SEWER. THE DRAIN GRAVEL SHALL BE COVERED WITH FILTER FABRIC TO PREVENT BLOCKAGE OF VOIDS IN THE GRAVEL BY MIGRATION OF BACKFILL MATERIAL. THE BOWL OF EACH HYDRANT SHALL BE WELL BRACED AGAINST UNEXCAVATED EARTH AT THE END OF THE TRENCH TAKING CARE NOT TO OBSTRUCT THE HYDRANT DRAIN HOLES, IF THE HYDRANT LEAD IS NOT RESTRAINED TO THE MAIN.
5. WELD SOCKET 2-1/2" X 2" TO 1" SCH. 40 ROUND STEM EXTENSION, FIT ON OPERATING NUT. USE SCH. 80 ROUND STEM EXTENSION FOR LENGTHS OVER 10'. VALVE STEM EXTENSIONS SHALL CONSIST OF A SINGLE PIECE OF REQUIRED LENGTH WITH A SOCKET ON ONE END AND A NUT ON THE OTHER.
6. VALVE STEM EXTENSIONS ARE REQUIRED ON ALL VALVES THAT EXCEED 3' DEEP FROM FINISHED GRADE. VALVE STEM EXTENSIONS SHALL BE PLACED SUCH THAT THE EXTENSION NUT IS BETWEEN 18" AND 24" FROM FINISHED GRADE.
7. FOR FIRE HYDRANT LEADS AT A MAIN OUTLET LARGER THAN 6" DIAMETER, OUTLET SHALL BE FLANGED AND A FLANGE x FLANGE REDUCER SHALL BE INSTALLED DIRECTLY ON THE OUTLET.
8. WRAP 8 mil POLY-FILM WRAP ON ALL BURIED PIPE AND FITTINGS.
9. THRUST BLOCKING REQUIRED FOR PIPE SIZE & SOIL CONDITION (SEE STD. DETAIL 510-6)
10. STEAMER NOZZLE TO BE 4.5 " NST FIRE THREAD CONNECTION.
11. FIRE HYDRANTS SHALL BE PAINTED RED.

CITY OF MANOR	FIRE HYDRANT INSTALLATION ON DEEP WATER MAINS	
RECORD COPY SIGNED BY FRANK T. PHELAN, P.E. 11/02/2017	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. M511S-17A 2 OF 2

THE JUNCTION

WATER UTILITY DETAILS (SHEET 1 OF 3)

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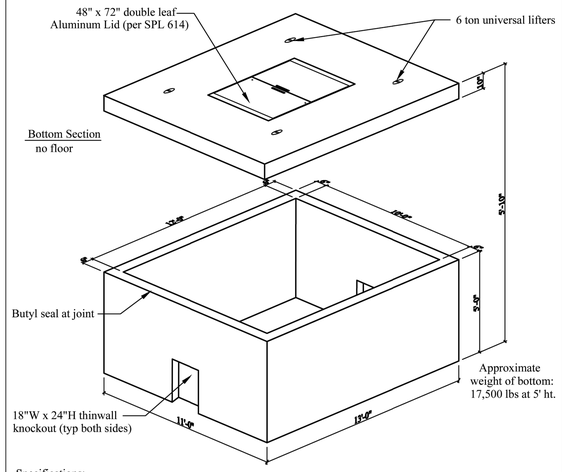
SHEET 49

NOTE* THIS PRODUCT
OR EQUIVALENT

10' x 12' Meter Vault with 48" x 72" H20 Aluminum Lid
(per Austin Specifications)

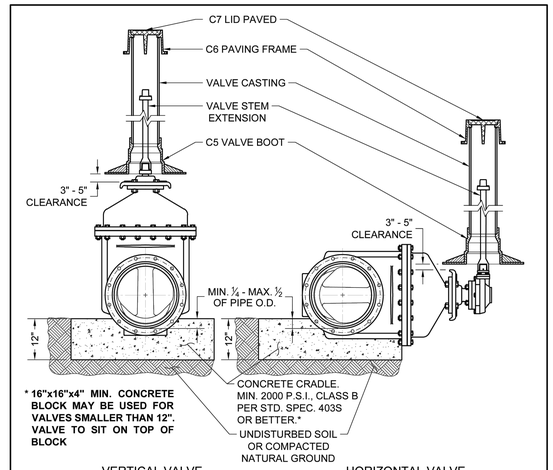


Specifications:
- Concrete has a 28 day strength of 5,000 psi
- Steel reinforcement is ASTM A615 Grade 60
- Load design is H-20

Notes:
- Consult manufacturer before handling

Typical Applications:
- City of Austin 8" fireline meter

Capital Precast	CAPITAL PRECAST, INC. 6905 SOUTH OLD BASTROP HWY SAN MARCOS, TEXAS 78666 PH. (830) 606-6200	FOR 10' x 12' Meter Vault - Austin		
		JOB		
		DRAWN RW	DATE 12/1/2015	Rev. No.
		FILE catalog\vaults\10x12AustinMeterVault		SHEET 1 OF 1



*** 16"x16"x4" MIN. CONCRETE BLOCK MAY BE USED FOR VALVES SMALLER THAN 12". VALVE TO SIT ON TOP OF BLOCK**

VERTICAL VALVE

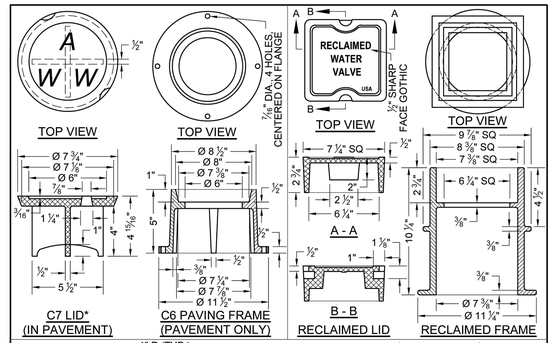
HORIZONTAL VALVE

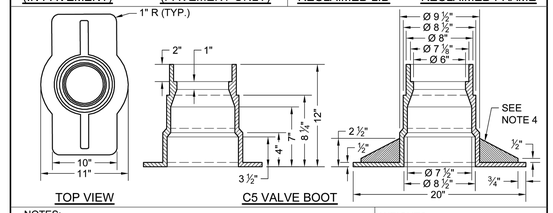
ONLY TO BE USED WHEN CALLED OUT ON THE DRAWINGS.

NOTES:
1. WELD SOCKET 2½" x 2" DEEP TO 1" SCH. 40 CARBON STEEL ROUND STEM EXTENSION, FITTED ON OPERATING NUT, [SCH. 80 FOR LENGTHS OVER 10'.]
2. VALVE CASTING SHALL BE 6" DI PIPE WITH BELL OR COLLAR CENTERED OVER VALVE BOOT.
3. NUT AT TOP OF VALVE EXTENSION ROD SHALL BE SQUARE 2" LONG WELDED TO TOP OF ROD.
4. VALVE STEM EXTENSIONS ARE REQUIRED ON ALL VALVES THAT EXCEED 3' DEEP FROM FINISHED GRADE. VALVE EXTENSIONS SHALL BE PLACED SUCH THAT THE EXTENSION NUT IS BETWEEN 12" AND 18" FROM FINISHED GRADE.

RECLAIMED WATER: ALL RECLAIMED PVC PIPE SHALL BE MANUFACTURED WITH PURPLE STRIPES. ALL OTHER PIPE AND APPURTENANCES SHALL BE MANUFACTURED PURPLE IF AVAILABLE. ALL PIPE AND FITTINGS THAT ARE NOT AVAILABLE FROM THE MANUFACTURER IN PURPLE SHALL BE PAINTED PURPLE PER SPL WW-3C. ALL BURIED DI AND CI PIPE AND FITTINGS SHALL ALSO BE WRAPPED IN PURPLE POLYETHYLENE PER SPL WW-27D. ALL COVERS SHALL HAVE **"RECLAIMED WATER"** CAST INTO THEM.

CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
RECORD COPY SIGNED BY KATHI L FLOWERS 05/18/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-01 1 OF 4





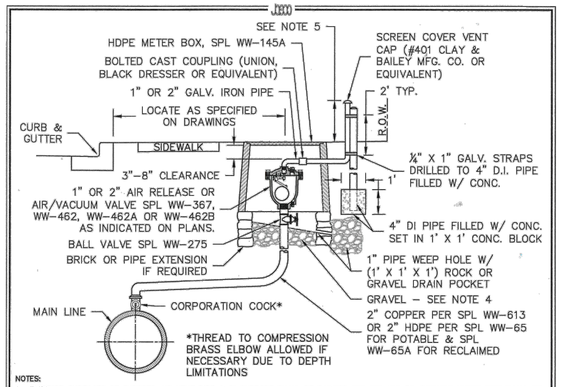
NOTES:
1. MATERIAL SHALL BE GRAY CAST IRON, ASTM A48, GRADE 30B.
2. THE MANUFACTURER'S IDENTIFICATION AND CASTING NUMBER, AND THE COUNTRY WHERE CAST, SHALL BE DISTINCTLY CAST ONTO EACH LID, FRAME, COLLAR AND BASE.
3. DRAFT AND SHRINKAGE ALLOWANCE SHALL BE IN ACCORDANCE WITH NORMAL FOUNDRY PRACTICE.
4. CASTING FINISH BY MANUFACTURER SHALL INCLUDE REMOVAL OF FINS AND FLASHING, AND PAINT WITH BLACK ASPHALT COATING.

WEIGHTS:

C7 LID: 13 LBS
RECLAIMED LID: 15 LBS
C6 FRAME: 23 LBS
RECLAIMED FRAME: 33 LBS
C5 BASE: 78 LBS

* LETTERING SHALL BE 1 ½" 2 PICK BAR SLOTS REQUIRED

CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
RECORD COPY SIGNED BY KATHI L FLOWERS 05/18/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-01 2 OF 4



NOTES:
1. EXTERIOR SURFACES OF EXPOSED AIR VENT PIPE & DI SUPPORT SHALL BE PAINTED PER SPL WW–3C. POTABLE WATER PIPE SHALL BE PAINTED SAFETY BLUE.
2. AIR VENT PIPE INSTALLATION SHALL BE AS NEAR AS PRACTICAL TO RIGHT–OF–WAY LINE WITH MIN. CLEARANCE OF 18" FROM ANY OBSTACLE.
3. HDPE METER BOX PENETRATION SHALL BE CORE BIT DRILLED. VOID SHALL BE FILLED WITH LINKSEAL LS 300 OR APPROVED EQUAL.
4. COMPACTED COARSE GRAVEL OR BROKEN STONE MIXED WITH SAND SLOPED TO DRAIN.
5. IN UNDEVELOPED AREAS, THE AIR VENT PIPE SHALL BE 4" MIN. IN HEIGHT SUPPORTED BY A 4" DIA. DI PIPE WHICH HAS BEEN FILLED WITH CONCRETE (SUPPORT PIPE SHALL BE 6" LONG, BURIED IN CLASS A CONCRETE OR CLSM 3' BELOW FINAL GRADE & EXTENDING 3' ABOVE FINAL GRADE). INSTALL ONE DELINEATOR STAKE WITHIN 3' OF THE VAULT ON THE VEHICULAR ACCESS SIDE OF VAULT OR AS DIRECTED BY AUSTIN WATER. DELINEATOR SHALL BE BLUE FOR POTABLE WATER & SHALL EXTEND AT 60" ABOVE GROUND. DELINEATORS SHALL HAVE 2" WIDE, WHITE IN COLOR, TYPE I REFLECTIVE TAPE MOUNTED DIAGONALLY AT 12" SPACING ON BOTH SIDES. IN DEVELOPED AREAS, THE AIR VENT PIPE SHALL BE 8"–12" IN HEIGHT & LOCATED NOT TO CONFLICT WITH SIDEWALK, DRIVEWAY, OR OTHER PEDESTRIAN TRAFFIC.
6. THE AIR VALVE & ASSOCIATED PIPING SHALL BE INSTALLED ABOVE THE HIGHEST ELEVATION OF THE WATER MAIN. AIR VALVE PIPING, FROM THE WATER TO MAIN TO THE AIR VALVE, SHALL MAINTAIN A CONSTANT RISE, WITH NO DIPS, TO THE TOP OF THE GROUND.

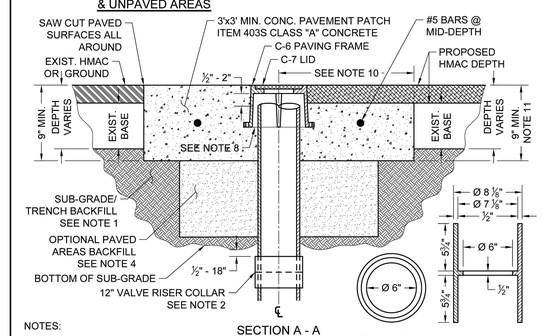
1" – 2" AIR RELEASE OR AIR/VACUUM VALVE INSTALLATION – TYPE I

RECLAIMED WATER: ALL RECLAIMED PVC PIPE SHALL BE MANUFACTURED PURPLE PIPE. HDPE PIPE SHALL BE MANUFACTURED WITH PURPLE STRIPES. ALL OTHER PIPE & APPURTENANCES SHALL BE MANUFACTURED PURPLE IF AVAILABLE. ALL PIPE & FITTINGS THAT ARE NOT AVAILABLE FROM THE MANUFACTURER IN PURPLE SHALL BE PAINTED PURPLE PER SPL WW–3C. ALL BURIED DI & CI PIPE & FITTINGS SHALL ALSO BE WRAPPED IN PURPLE POLYETHYLENE PER SPL WW–27D. ALL COVERS SHALL HAVE A "RECLAIMED WATER" CAST INTO THEM.

CITY OF MANOR		
Scale: NTS	Approved 12/5/18 Date	Drawn By: VDI
AIR RELEASE & AIR/VACUUM VALVE		Detail No.

FULL DEPTH CONCRETE & UNPAVED AREAS

CONCRETE & H.M.A.C.



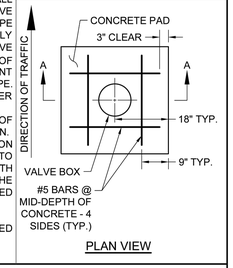
NOTES:
1. SUB-GRADE/TRENCH BACKFILL SHALL BE COMPACTED AS PER ITEM 201S, SUB-GRADE PREPARATION.
2. TO ADJUST VALVE CASTINGS TO FINAL GRADE, REMOVE RISER PIPE BELOW SUB-GRADE AND INSTALL APPROPRIATE LENGTH OF NEW RISER PIPE TO ACHIEVE FINAL GRADE. CONNECT THE TWO PIECES OF RISER PIPE WITH A 6" COLLAR MIN. 12" LENGTH APPROXIMATELY CENTERED ON THE JOINT WITH THE TOP OF SLEEVE LOCATED ½" - 18" BELOW SUB-GRADE. THE INSIDE "LIP" OF COLLAR TO BE PAINTED WITH FLUORESCENT WHITE PAINT OR COVERED WITH FLUORESCENT WHITE TAPE. ALTERNATE: FOR OPTIONAL SINGLE PIECE RISER INSTALLATION SEE SHEET 4 OF 4.
3. CLEAN VALVE BOX OF ALL DEBRIS DOWN TO THE NUT OF THE VALVE; NUT SHALL OPERATE WITH NO OBSTRUCTION.
4. WHERE CASTINGS TO BE REMOVED REQUIRE EXCAVATION GREATER THAN 20" DEEP, CONTRACTOR MAY ELECT TO FILL EXCAVATION WITH CONTROLLED LOW STRENGTH MATERIAL (SPEC. ITEM 402S) TO THE UNDERSIDE OF THE CONCRETE. PAVEMENT PATCH IN LIEU OF COMPACTED BACKFILL.
5. REINFORCING STEEL SHALL MEET SPEC. ITEM 406S.7.
6. NO MORE THAN 2 SECTIONS OF PIPE SHALL BE USED FROM VALVE TO FINAL GRADE.
7. BELL AND SPIGOT IS ACCEPTABLE FOR DEPTH OVER 18'.

SECTION A - A

TOP VIEW COLLAR *

12" VALVE RISER COLLAR

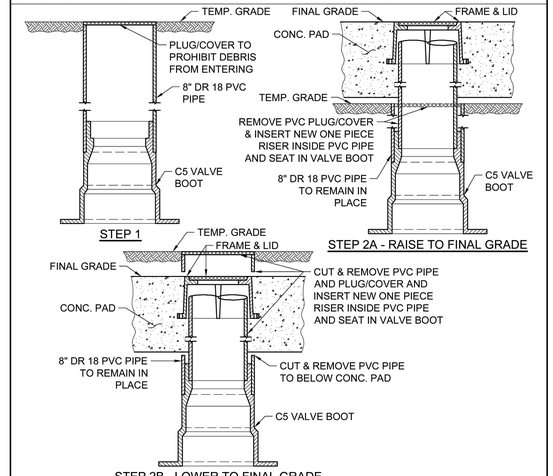
* 12" COLLAR: 39 LBS



PLAN VIEW

CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
RECORD COPY SIGNED BY KATHI L FLOWERS 05/18/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-01 3 OF 4

NOTES (CON'T):
8. PAVING FRAME SHALL BE FLUSH WITH THE CONC. PAD AND PLACED ½" - 2" ABOVE RISER PIPE (FRAME SHALL NOT REST ON RISER.)
9. IN UNPAVED AREAS, INSTALL ONE DELINEATOR STAKE IMMEDIATELY ADJACENT TO THE EDGE OF THE CONCRETE PAD. DELINEATOR SHALL BE BLUE FOR POTABLE WATER AND PURPLE FOR RECLAIMED WATER AND SHALL EXTEND AT LEAST 60" ABOVE GROUND. DELINEATORS SHALL HAVE 2" WIDE, WHITE IN COLOR, TYPE I REFLECTIVE TAPE MOUNTED DIAGONALLY AT 12" SPACING ON BOTH SIDES.
10. VALVE SHALL TYPICALLY BE CENTERED IN CONCRETE DIAMOND BUT MAY BE OFFSET WITH A MIN. OF 12" FROM CENTER OF VALVE LID TO EDGE OF CONCRETE IN ALL DIRECTIONS.
11. MIN. TOTAL DEPTH OF ASPHALT PLUS CONC. IS 9" AND MIN. DEPTH OF CONC. PAD SHALL BE 5"



OPTIONAL ONE PIECE VALVE CASTING INSTALLATION

CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
RECORD COPY SIGNED BY KATHI L FLOWERS 05/18/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-01 4 OF 4

REV	DESCRIPTION	DATE	APR

DESIGNED BY: JDC
REVIEWED BY: AJN
DRAWN BY: JDC

BGE, INC.
7330 San Pedro, Suite 202
San Antonio, TX 78216
TEL: 210-581-3600 www.bgeinc.com
TBPE Registration No. F-1046

THE JUNCTION

WATER UTILITY DETAILS (SHEET 2 OF 3)

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Texas Licensed Professional Engineer 114451
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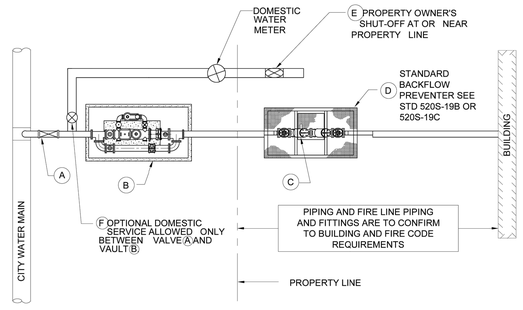
BGE, Inc.
TBPE Registration No. F-1046

SHEET 50

G:\TX\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Shts\C08.20 1065900 WATER UTILITY DETAILS (SHEET 2 OF 3) Plotted: 8/17/2023 12:19:40 PM By: Calderon



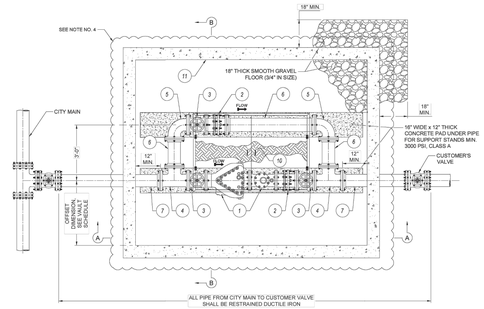
MATERIALS:

- (A) TAPPING, RESTRAINED OR FLANGED VALVE (GATE, IRON BODY WITH MJ OUTLET). SEE SPL WW-243, WW-27, WW-27A, AND/OR WW-27B.
- (B) FIRELINE OR MASTER METER, SEE STD. DETAIL 520S-17.
- (C) CUSTOMER'S BACKFLOW PREVENTION ASSEMBLY AS REQUIRED BY CROSS CONNECTION ORDINANCES. SEE SPL WW-293 OR APPROVEL EQUAL.
- (D) VAULT AND ACCESS DOOR SHALL BE PER SPL WW-298 OR SPL WW-614, RESPECTIVELY, OR APPROVED EQUAL. SEE STD. DETAIL 520S-19B OR 19C. VAULT SHALL NOT BE LOCATED IN A TRAFFIC AREA.
- (E) CUSTOMER'S SHUT-OFF VALVE ON DOMESTIC WATER LINE.
- (F) DOMESTIC WATER SERVICE LINE VALVE.

NOTES:

1. FIRE LINE SHALL BE A MINIMUM OF 150 mm (6") & GREATER THAN OR EQUAL TO METER SIZE IN THE STREET RIGHT-OF-WAY. PLANS SHALL BE PREPARED BY A LICENSED ENGINEER.
2. ALL BURIED PIPE SHALL BE WRAPPED COMPLETELY WITH A MINIMUM OF 0.2 mm (8 MIL) POLYETHYLENE FILM.
3. PIPING AND TUBING IN STREET RIGHT-OF-WAY SHALL BE BEDDED IN GRANULAR MATERIALS AS REQUIRED BY SECTION 510.3 (14) OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS: BACKFILL ABOVE GRANULAR BEDDING AS REQUIRED BY SECTION 510.3 (25).
4. FOR STD. DETAILS 520S-19A, 19B, AND 19C, MASTER METER MEANS METER FOR FIRE AND DOMESTIC SERVICE .5. THE TOP OF THE METER VAULT SHALL BE AT AN ELEVATION SUCH THAT THE SURROUNDING GROUND SLOPES AWAY FROM THE VAULT. ADDITIONAL DRAINAGE CONSIDERATION SUCH AS CONNECTION OF VAULT TO STORM SEWER, LATERAL DRAIN LINES FROM GRAVEL BED OR OTHER MEANS SHALL BE REQUIRED IF CONDITIONS CAUSE WATER TO COLLECT IN VAULT.

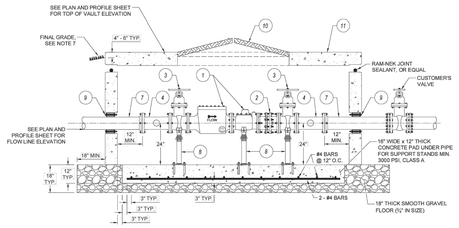
CITY OF AUSTIN AUSTIN WATER UTILITY		STANDARD FIRE LINE INSTALLATION WITH OR WITHOUT MASTER METER	
RECORD COPY SIGNED BY KATHI L FLOWERS	08/31/2011 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 520S-19A 1 OF 1



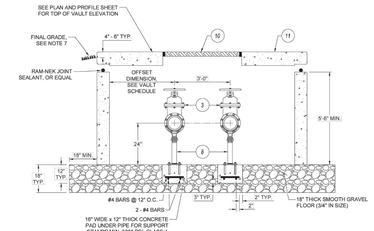
PLAN VIEW

6", 8" OR 10" SENSUS OMNI F2 FIRE LINE METER MATERIAL LIST			
ITEM	DESCRIPTION	SIZE	TYPE
1	FIRE LINE METER AND STRAINER (PROVIDED BY AUSTIN WATER)	6", 8" OR 10"	FLG x FLG
2	DISMANTLING JOINT PER COA SPL WW-271	6", 8" OR 10"	FLG x FLG
3	RESILIENT-SEATED GATE VALVE (w/HAND WHEEL) PER COA SPL WW-700	6", 8" OR 10"	FLG x FLG
4	TEE PER COA SPL WW-27C	6", 8" OR 10"	FLG x FLG
5	90° BEND PER COA SPL WW-27C	6", 8" OR 10"	FLG x FLG
6	DUCTILE IRON CLASS 53 PIPE PER COA SPL WW-27E	6", 8" OR 10"	FLG x FLG
7	DUCTILE IRON CLASS 53 PIPE PER COA SPL WW-27E	6", 8" OR 10"	FLG x PE
8	PIPE SADDLE SUPPORT AND STANCHION PER COA SPL WW-614S (USE 5/8" DIA. x 6" LONG STAINLESS STEEL WEDGE-ALL ANCHOR, TYP.)	NA	NA
9	LINK-SEAL MODULAR SEALS SERIES LS-625 FOR 6" PIPE, LS-500 FOR 8" PIPE AND LS-600 FOR 10" PIPE w/STAINLESS STEEL HARDWARE, OR EQUAL	NA	NA
10	48" x 72" ACCESS HATCH PER COA SPL WW-614A	NA	NA
11	CONCRETE VAULT PER COA SPL WW-298 (SEE VAULT SCHEDULE)	NA	NA

VAULT SCHEDULE		
FIRE LINE METER SIZE	VAULT SIZE (INSIDE DIMENSION)	OFFSET DIMENSION
6"	8' x 12'	3'-0"
8"	10' x 12'	3'-6"
10"	10' x 16'	3'-6"



SECTION A-A VIEW



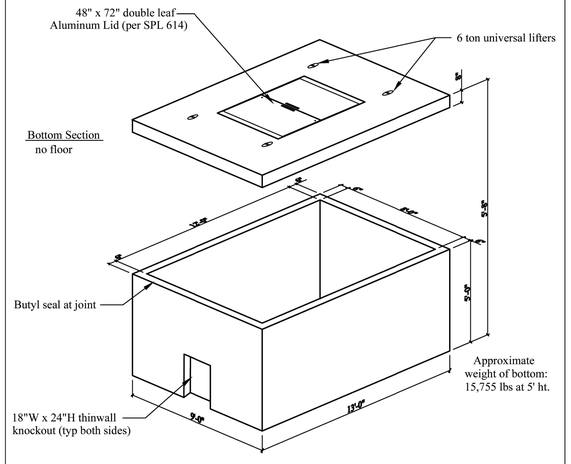
SECTION B-B VIEW

NOTES:

1. CONCRETE VAULT SHALL NOT BE INSTALLED IN A TRAFFIC AREA.
2. HIGH STRENGTH LOW ALLOY (HSLA) BOLTS AND NUTS USED THROUGHOUT ASSEMBLY.
3. FULL FACE 1/8" THICK RED RUBBER GASKETS USED THROUGHOUT ASSEMBLY.
4. ALL ITEMS IN MATERIAL LIST, INCLUDING VAULT AND ALL COMPONENTS WITHIN VAULT, TO BE IN COMPLIANCE WITH ITEM No. 512, PRE-CAST WATER UTILITY VAULTS. ALL PIPING, VALVES AND APPURTENANCES OUTSIDE VAULT TO BE SHOWN IN PLAN AND PROFILE SHEET, AND SHALL BE IN COMPLIANCE WITH ITEM Nos. 510 AND 511.
5. IF NECESSARY, WALL PENETRATION LOCATION IS ALLOWED TO MOVE HORIZONTALLY IN ACCORDANCE WITH SPL WW-298. MINIMUM 18" CLEARANCE SHALL BE PROVIDED BETWEEN VAULT WALL AND BYPASS PIPING OR FIRE LINE METER COMPONENTS, UNLESS NOTED OTHERWISE.
6. ALL BURIED PIPE AND FITTINGS SHALL BE BEDDED, BACKFILLED, AND WRAPPED IN POLYETHYLENE ENCASEMENT IN ACCORDANCE WITH COA STANDARDS.
7. THE TOP OF THE VAULT SHALL BE AT AN ELEVATION SUCH THAT THE SURROUNDING GROUND SLOPES AWAY FROM THE VAULT. ADDITIONAL DRAINAGE CONSIDERATIONS SUCH AS CONNECTION OF VAULT DRAINAGE TO STORM SEWER, LATERAL DRAIN LINES FROM GRAVEL FLOOR, OR OTHER MEANS SHALL BE REQUIRED IF CONDITIONS CAUSE WATER TO COLLECT IN VAULT.
8. BYPASS AND MAIN PIPE SHALL BE SAME DIAMETER.

USE OF THIS STANDARD	CITY OF AUSTIN AUSTIN WATER	6", 8" AND 10" FIRE LINE METER	
THIS STANDARD DRAWING ONLY APPLIES TO FIRE LINE METER VAULTS SATISFYING BOTH OF THE FOLLOWING STIPULATIONS; OTHERWISE, A PROJECT-SPECIFIC DESIGN MUST BE PREPARED. THE VAULT ITSELF MUST BE DESIGNED BY A TEXAS-LICENSED PROFESSIONAL ENGINEER (STRUCTURAL): 1. THE CONDITIONS AT THE SITE OF THE PROPOSED FIRE LINE METER, THE LOADS AFFECTING A PRE-CAST CONCRETE VAULT AT THAT LOCATION, AND THE COMPONENTS AND PHYSICAL FEATURES OF THE VAULT FOR THAT SITE ARE ALL ADEQUATELY AND RELIABLY REPRESENTED BY THE STRUCTURAL DESIGN CRITERIA, DESIGN LOADS, AND DETAILS INCLUDED WITH SPL WW-298. 2. THE PIPING AND VALVE SIZE FOR THE PROPOSED FIRE LINE METER ARE THE SAME MATERIAL, TYPE, SIZE, AND ORIENTATION AS THOSE SHOWN IN THIS STANDARD.	*JEFF A. KYLE* 11/07/2022 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 512-AW-02 1 OF 1

8' x 12' Meter Vault with 48" x 72" H20 Aluminum Lid (per Austin Specifications)

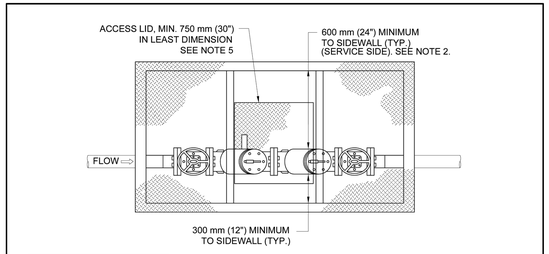


Specifications:
- Concrete has a 28 day strength of 5,000 psi
- Steel reinforcement is ASTM A615 Grade 60
- Load design is H-20

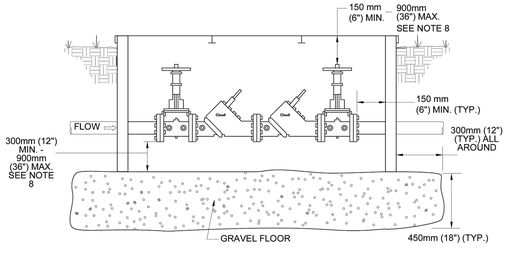
Notes:
- Consult manufacturer before handling

Typical Applications:
- City of Austin 6" fireline meter

Capital Precast	CAPITAL PRECAST, INC. 6905 SOUTH OLD BASTROP HWY SAN MARCOS, TEXAS 78666 PH. (830) 606-6200	FOR 8' x 12' Austin Meter Vault JOB DRAWN RW DATE 12/1/2015 Rev. No. FILE catalog/vaults/8x12 Austin Meter Vault	SHEET 1 OF 1



RESTRAINED DUCTILE IRON PIPE AND FITTINGS REQUIRED FROM BACKFLOW ASSEMBLY TO CITY MAIN. RESTRAIN EACH WAY AS DESIGNED AND REQUIRED BY AN ENGINEER LICENSED BY THE STATE OF TEXAS.



CITY OF AUSTIN AUSTIN WATER UTILITY		STANDARD BACKFLOW PREVENTER ON FIRE LINE WITH MASTER METER	
RECORD COPY SIGNED BY KATHI L FLOWERS	08/31/2011 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 520S-19B 1 OF 2

NOTES:

1. ALL BACKFLOW PREVENTION ASSEMBLIES SHALL HAVE LAB AND FIELD APPROVAL FROM THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH.
2. ALL TEST PORTS SHALL BE DIRECTED UPWARD AND PLUGGED. TEST PORTS ARE LOCATED ON SERVICE SIDE. PLUGS SHALL BE NON-FERROUS.
3. BACKFLOW PREVENTION ASSEMBLIES SHALL BE INSTALLED IN THE UPRIGHT HORIZONTAL POSITION, UNLESS OTHERWISE APPROVED. BACKFLOW PREVENTION ASSEMBLIES SHALL NOT BE ROTATED ON THEIR AXIS.
4. CLEARANCE SHALL BE AS INDICATED,AND IN THE STANDARD CROSS CONNECTION ORDINANCES AND UCM.
5. ACCESS OPENING MUST BE LARGE ENOUGH TO REMOVE LARGEST PORTION OF BACKFLOW PREVENTER, BUT NOT LESS THAN 750 mm (30") IN LEAST DIMENSION.
6. TEST AND MAINTENANCE REPORT SHALL BE RECEIVED BY AUSTIN WATER UTILITY'S SPECIAL SERVICE DIVISION WITHIN 5 DAYS AFTER BEING INSTALLED.
7. VAULT SHALL NOT BE INSTALLED IN TRAFFIC AREA.
8. VAULT DEPTH MAY NOT EXCEED 1.8m (72"), BOTTOM OF LID TO TOP OF FLOOR.
9. HAND WHEELS SHALL BE HORIZONTALLY LOCATED WITHIN 300mm (12") OF ACCESS OPENING.
10. FOR ACCESS DOORS SEE SPL WW-614 OR APPROVED EQUAL (H20 LOADING REQUIRED).
11. FOR VAULT SEE SPL WW-298 OR APPROVED EQUAL (H20 LOADING REQUIRED).
12. VAULT PIPE WALL VOIDS SHALL BE SEALED WITH NON-SHRINK GROUT OR SEALANT PER SPL WW-146A OR APPROVED EQUAL.
13. THE TOP OF THE METER VAULT SHALL BE AT AN ELEVATION SUCH THAT THE SURROUNDING GROUND SLOPES AWAY FROM THE VAULT. ADDITIONAL DRAINAGE CONSIDERATION SUCH AS CONNECTION OF VAULT TO STORM SEWER, LATERAL DRAIN LINES FROM GRAVEL BED OR OTHER MEANS SHALL BE REQUIRED IF CONDITIONS CAUSE WATER TO COLLECT IN VAULT.

CITY OF AUSTIN AUSTIN WATER UTILITY		STANDARD BACKFLOW PREVENTER ON FIRE LINE WITH MASTER METER	
RECORD COPY SIGNED BY KATHI L FLOWERS	08/31/2011 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 520S-19B 2 OF 2

	APR	DATE	DESCRIPTION	REV
DESIGNED BY:				JDC
REVIEWED BY:				AJN
DRAWN BY:				JDC

BGE, INC.
7330 San Pedro, Suite 202
San Antonio, TX 78216
TEL: 210-581-3600 www.bgeinc.com
TBPE Registration No. F-1046

THE JUNCTION

WATER UTILITY DETAILS (SHEET 3 OF 3)

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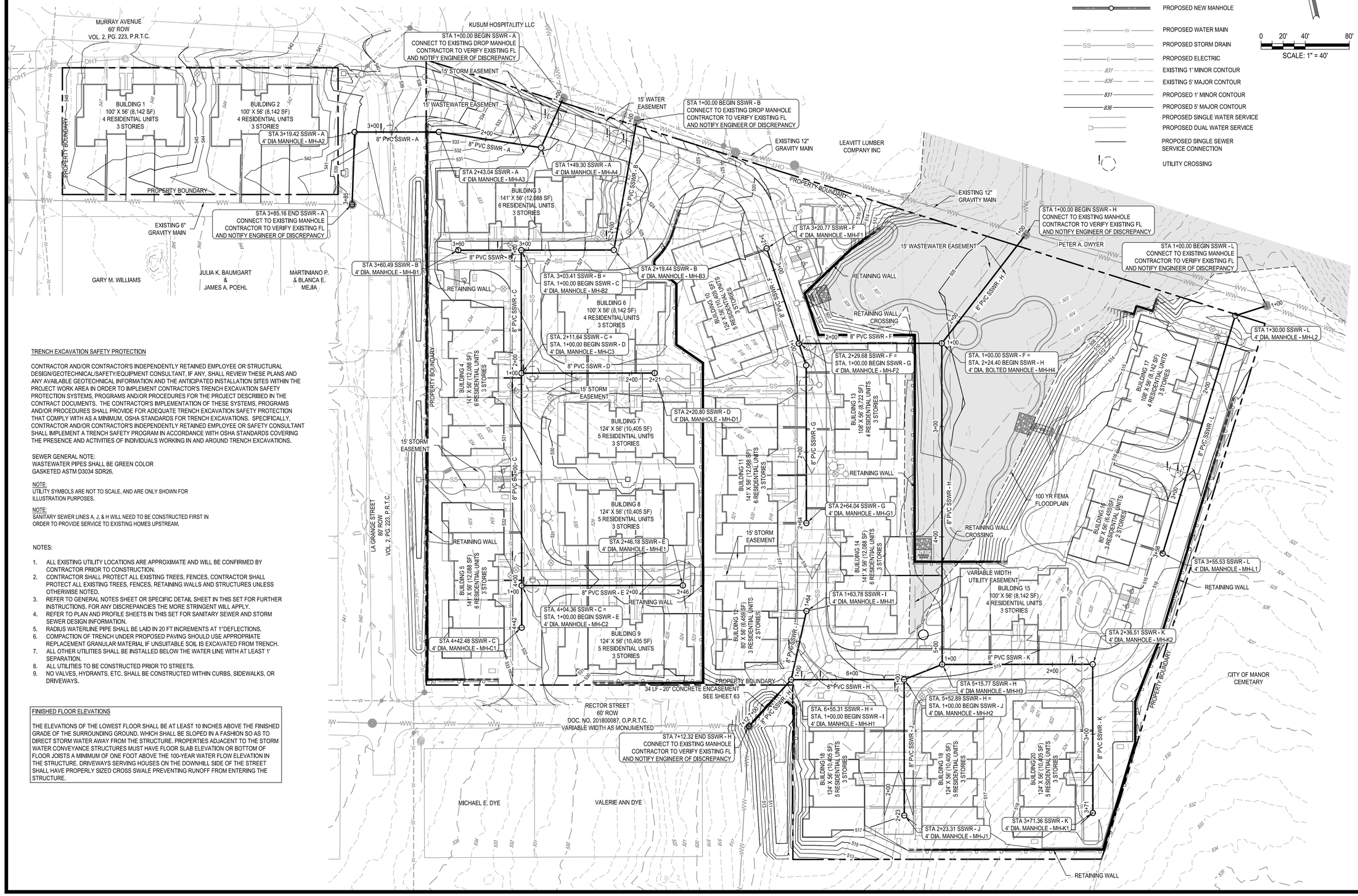
SHEET 51

G:\TXC\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Shts\C08.20 1065900 WATER UTILITY DETAILS.dwg Layout: WATER UTILITY DETAILS (SHEET 3 OF 3) Plotted: 8/17/2023 12:19:45 PM By: Calderon



TRENCH EXCAVATION SAFETY PROTECTION

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS COVERING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATIONS.

SEWER GENERAL NOTE:
WASTEWATER PIPES SHALL BE GREEN COLOR GASKETED ASTM D3034 SDR26.

NOTE:
UTILITY SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

NOTE:
SANITARY SEWER LINES A, J, & H WILL NEED TO BE CONSTRUCTED FIRST IN ORDER TO PROVIDE SERVICE TO EXISTING HOMES UPSTREAM.

NOTES:

1. ALL EXISTING UTILITY LOCATIONS ARE APPROXIMATE AND WILL BE CONFIRMED BY CONTRACTOR PRIOR TO CONSTRUCTION.
2. CONTRACTOR SHALL PROTECT ALL EXISTING TREES, FENCES, CONTRACTOR SHALL PROTECT ALL EXISTING TREES, FENCES, RETAINING WALLS AND STRUCTURES UNLESS OTHERWISE NOTED.
3. REFER TO GENERAL NOTES SHEET OR SPECIFIC DETAIL SHEET IN THIS SET FOR FURTHER INSTRUCTIONS. FOR ANY DISCREPANCIES THE MORE STRINGENT WILL APPLY.
4. REFER TO PLAN AND PROFILE SHEETS IN THIS SET FOR SANITARY SEWER AND STORM SEWER DESIGN INFORMATION.
5. RADIUS WATERLINE PIPE SHALL BE LAID IN 20 FT INCREMENTS AT 1°DEFLECTIONS.
6. COMPACTION OF TRENCH UNDER PROPOSED PAVING SHOULD USE APPROPRIATE REPLACEMENT GRANULAR MATERIAL IF UNSUITABLE SOIL IS EXCAVATED FROM TRENCH.
7. ALL OTHER UTILITIES SHALL BE INSTALLED BELOW THE WATER LINE WITH AT LEAST 1' SEPARATION.
8. ALL UTILITIES TO BE CONSTRUCTED PRIOR TO STREETS.
9. NO VALVES, HYDRANTS, ETC. SHALL BE CONSTRUCTED WITHIN CURBS, SIDEWALKS, OR DRIVEWAYS.

FINISHED FLOOR ELEVATIONS

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

	APR	DATE	DESCRIPTION	REV

DESIGNED BY: BAH
REVIEWED BY: AJN
DRAWN BY: BAH

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San Antonio, TX 78216
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TBPE Registration No. F-1046

THE JUNCTION

OVERALL SEWER PLAN

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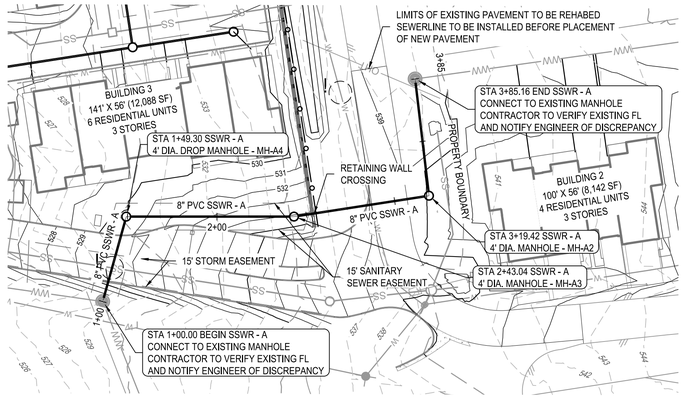
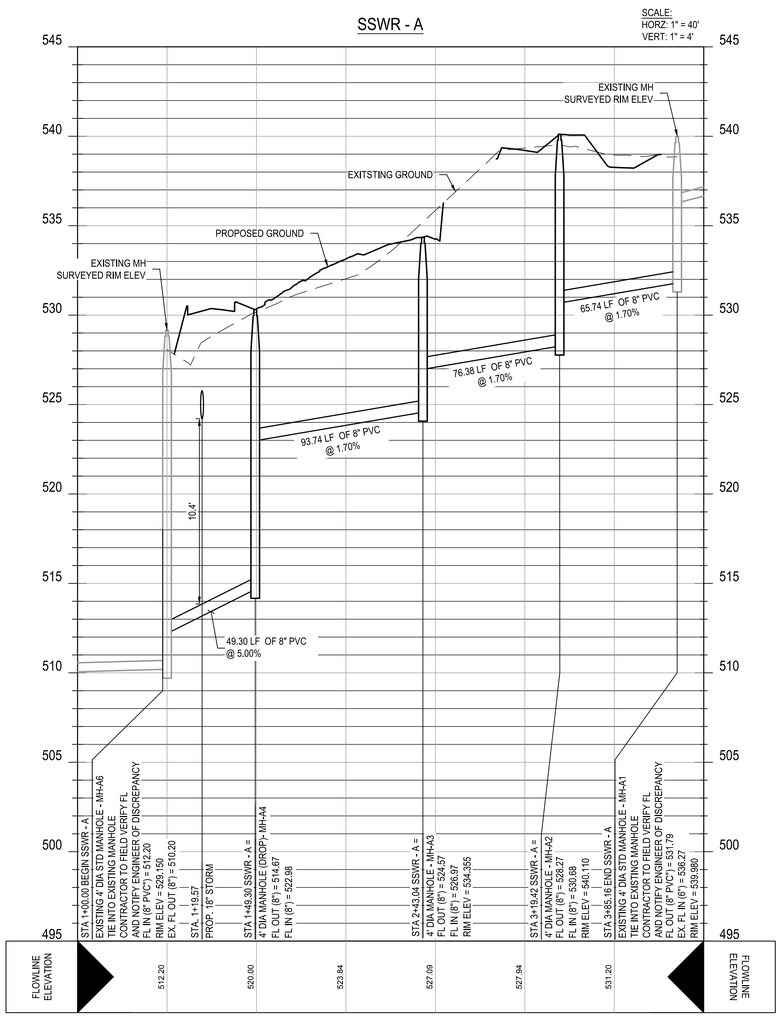
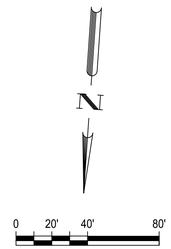
SHEET
52







LEGEND

- FEMA FLOODPLAIN ZONE
- PROPERTY BOUNDARY
- EXISTING WASTEWATER LINE
- EXISTING WATER MAIN
- WASTEWATER LINE
- PROPOSED NEW MANHOLE
- PROPOSED WATER MAIN
- PROPOSED STORM DRAIN
- PROPOSED ELECTRIC
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	DESCRIPTION
	REV
DESIGNED BY:	BAH
REVIEWED BY:	AJN
DRAWN BY:	BAH

BGE, INC.
7330 San Pedro, Suite 202
San Antonio, TX 78216
TEL: 210-581-3600 www.bgeinc.com
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THE JUNCTION

SEWER A PLAN & PROFILE

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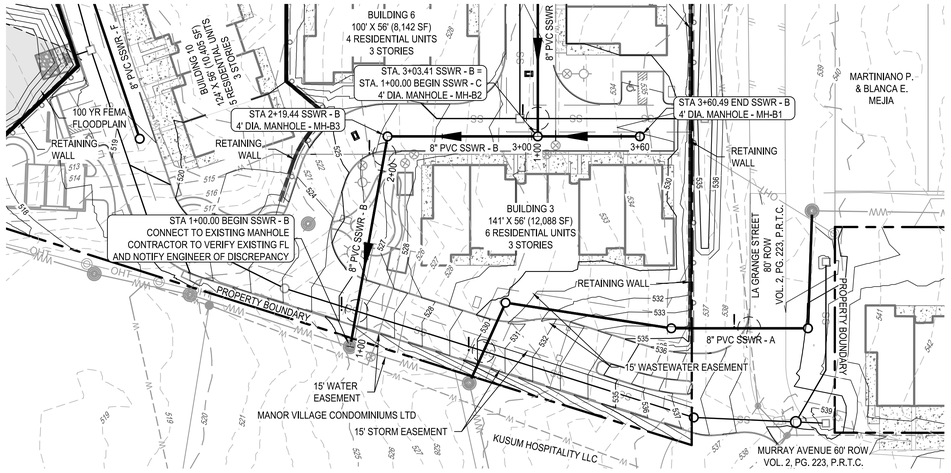

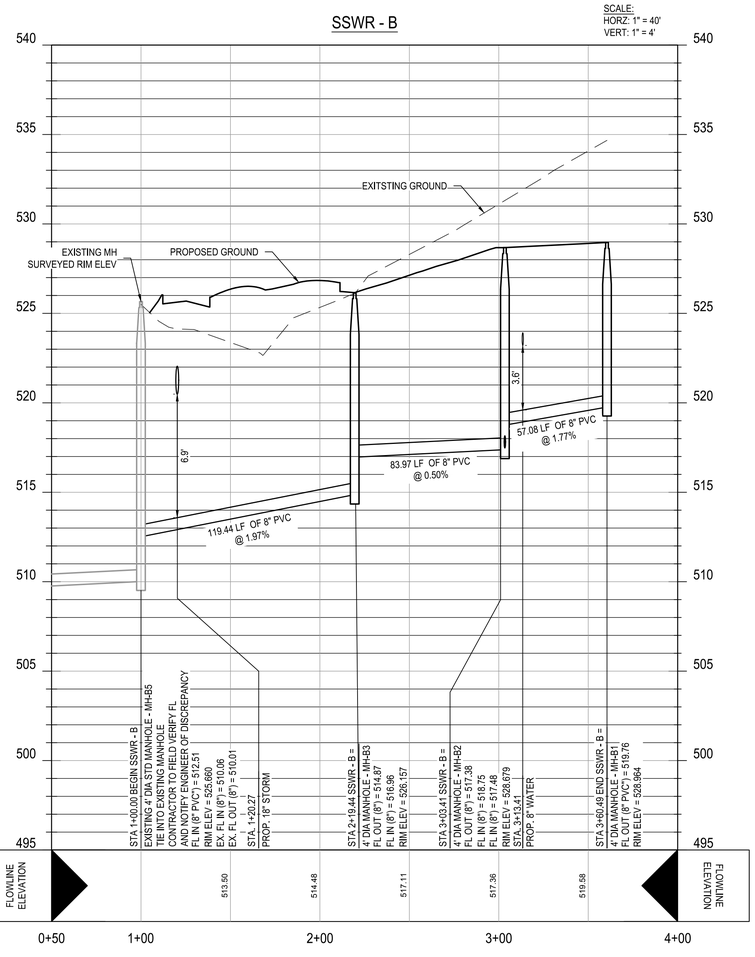

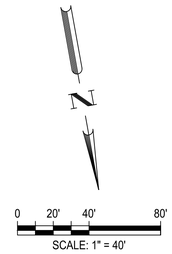

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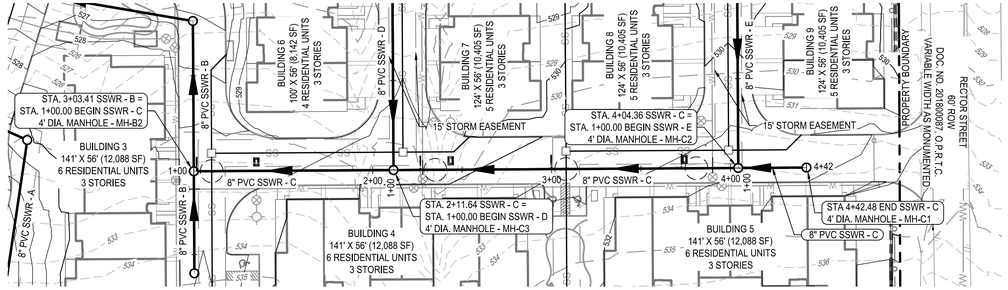

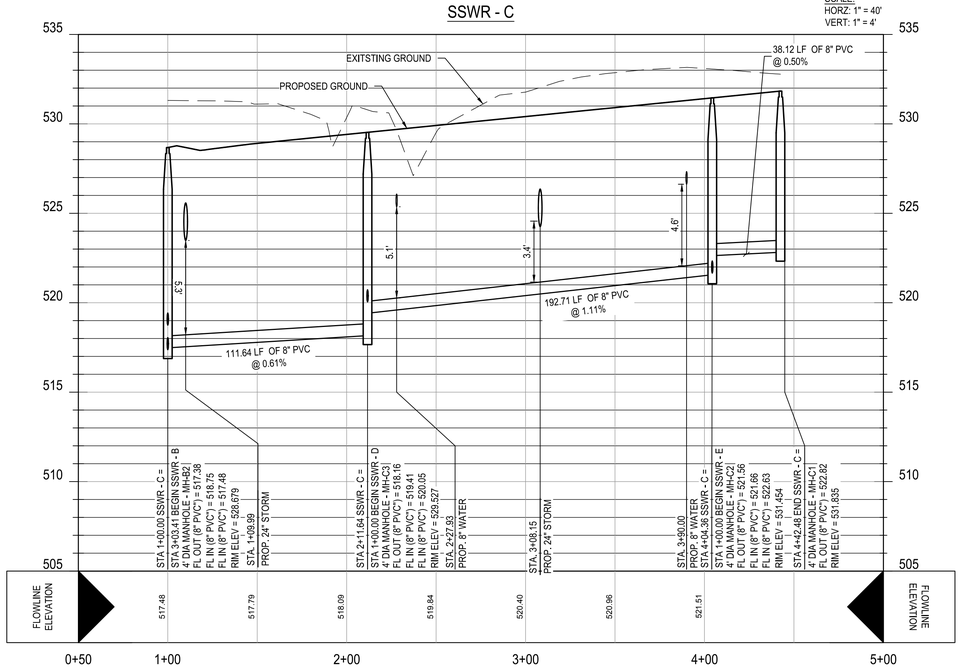

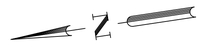

0 20' 40' 80'

SCALE: 1" = 40'

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REV	DESCRIPTION	DATE	APR

DESIGNED BY: BAH

REVIEWED BY: AJN

DRAWN BY: BAH

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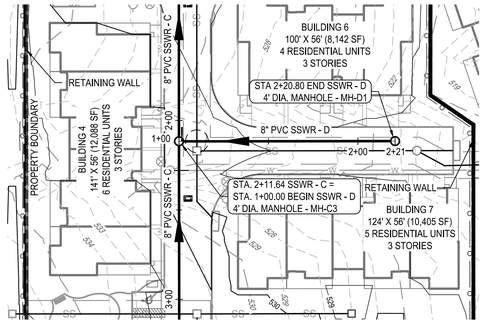

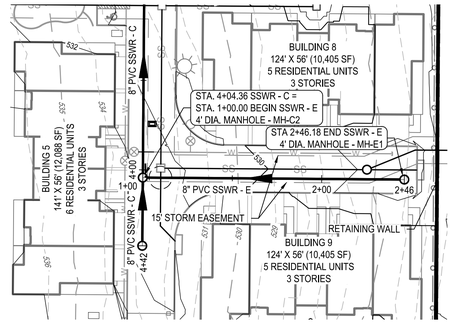

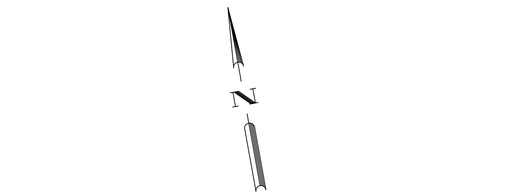

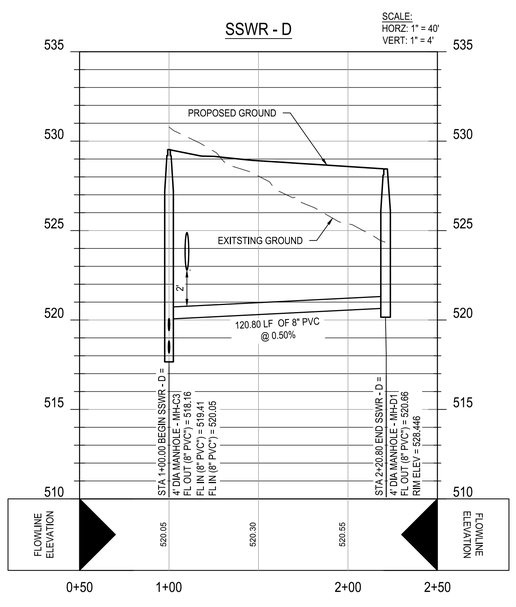

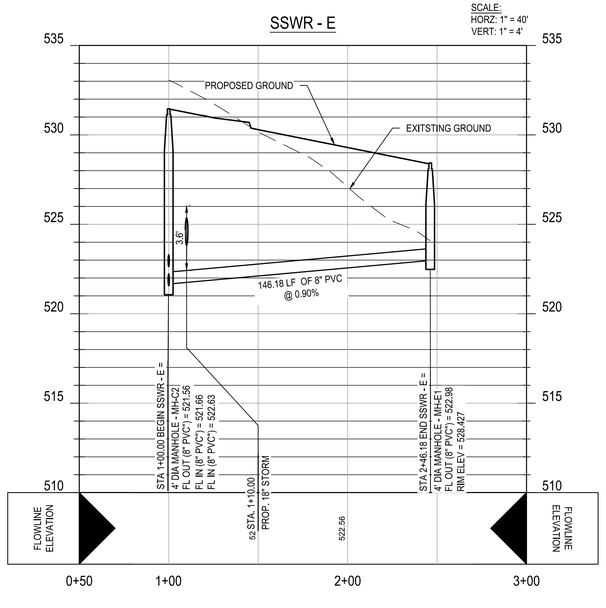

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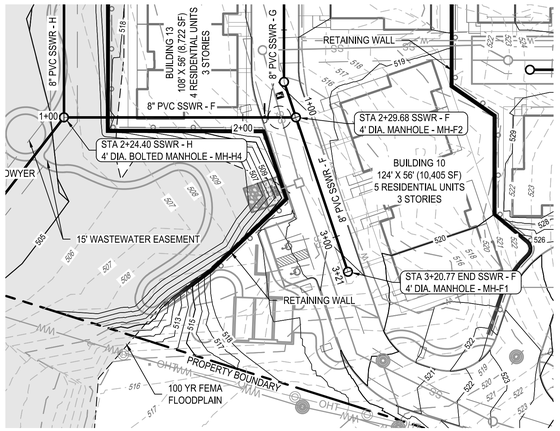

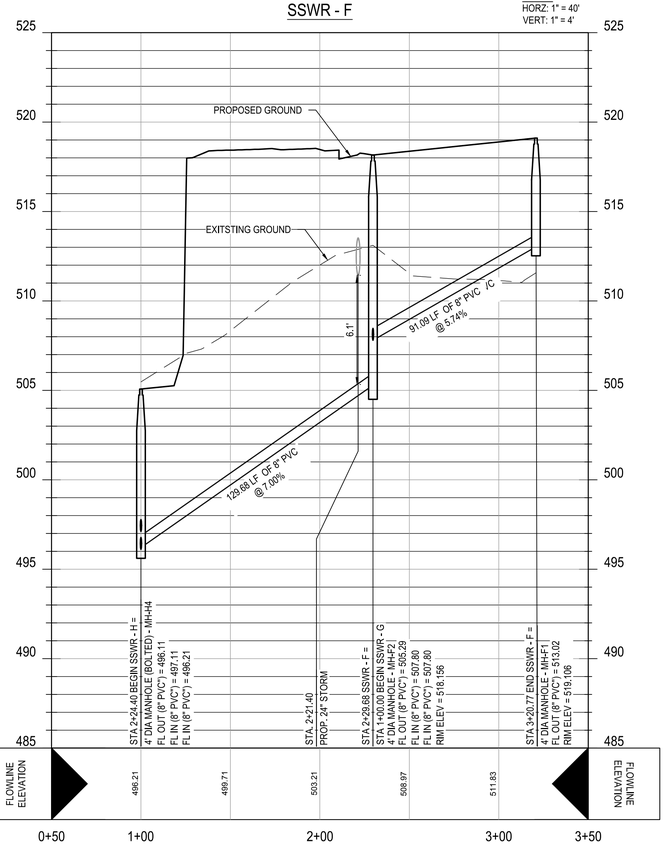

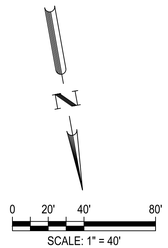

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	APR	DATE	DESCRIPTION	REV

DESIGNED BY:	BAH
REVIEWED BY:	AJN
DRAWN BY:	BAH

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San Antonio, TX 78216
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THE JUNCTION

SEWER F PLAN & PROFILE

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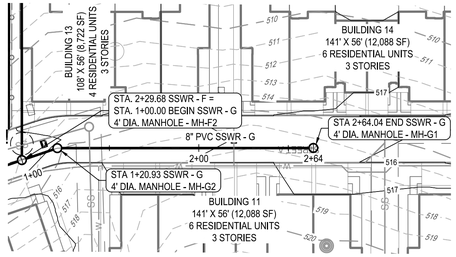

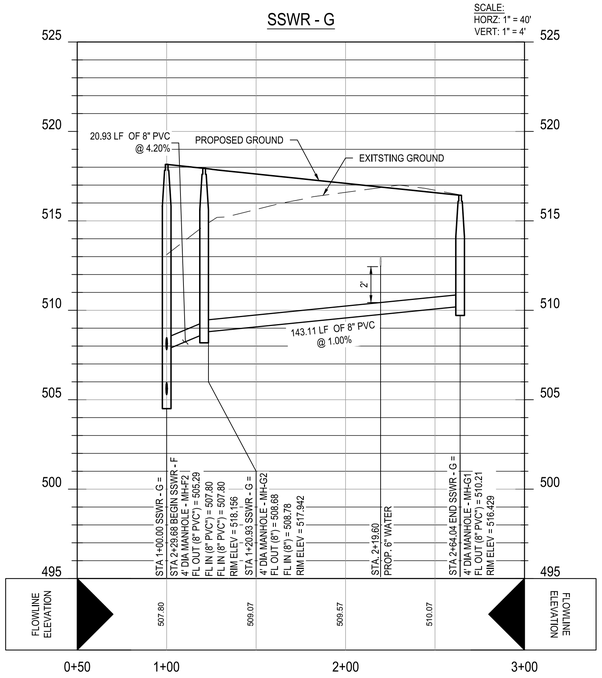

0 20' 40' 80'

SCALE: 1" = 40'

LEGEND

- FEMA FLOODPLAIN ZONE
- PROPERTY BOUNDARY
- EXISTING WASTEWATER LINE
- EXISTING WATER MAIN
- WASTEWATER LINE
- PROPOSED NEW MANHOLE
- PROPOSED WATER MAIN
- PROPOSED STORM DRAIN
- PROPOSED ELECTRIC
- EXISTING 1' MINOR CONTOUR
- EXISTING 5' MAJOR CONTOUR
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- PROPOSED 5' MAJOR CONTOUR
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- PROPOSED DUAL WATER SERVICE
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REVIEWED BY: AJN
DRAWN BY: BAH

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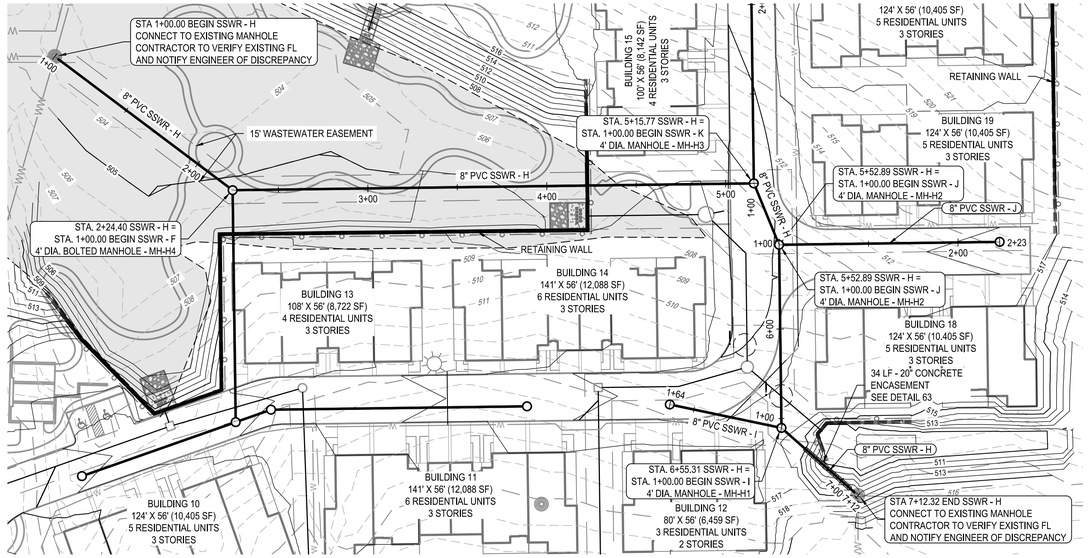

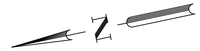

LEGEND

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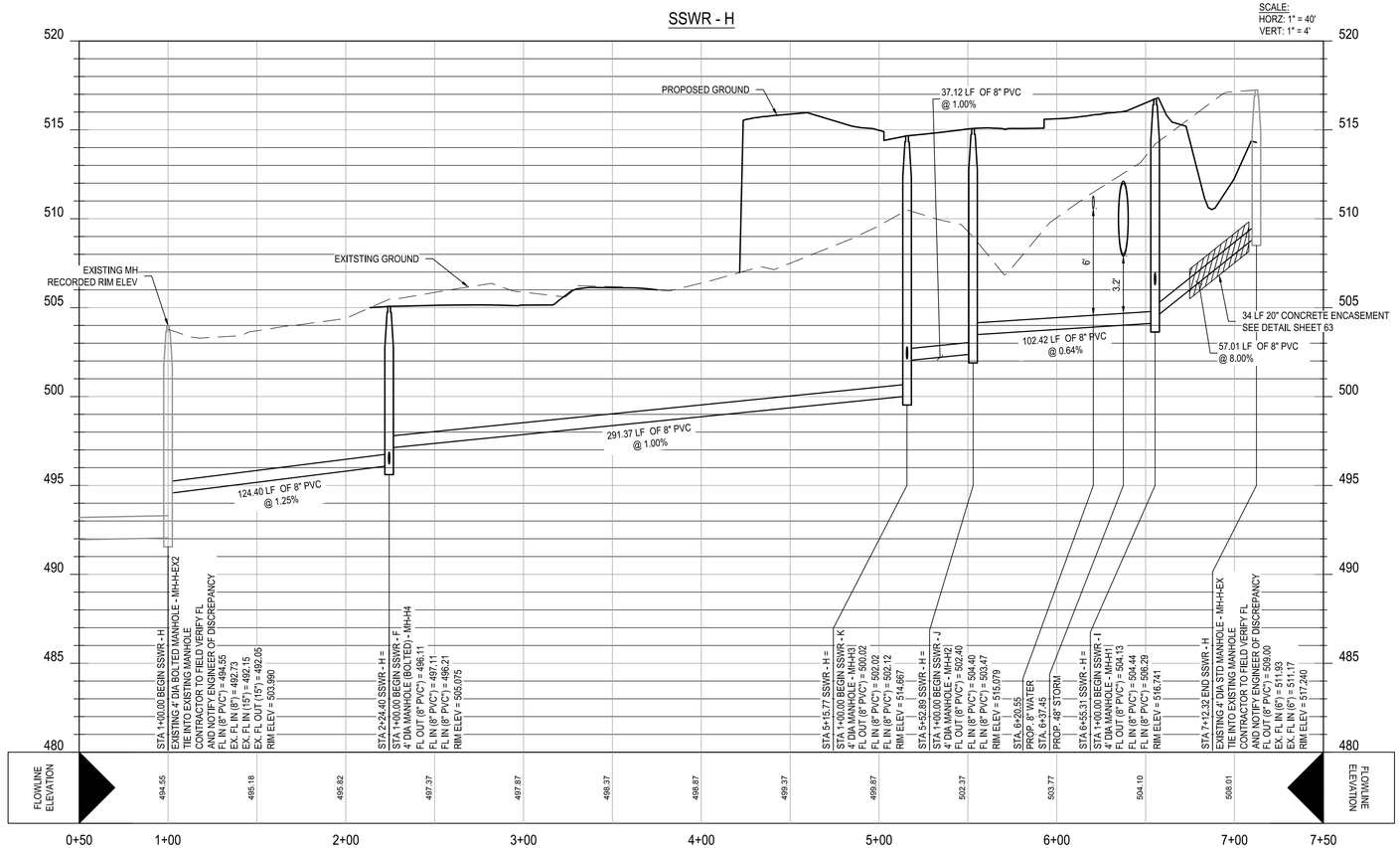

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DESIGNED BY: BAH
REVIEWED BY: AJN
DRAWN BY: BAH

BGE, INC.
7330 San Pedro, Suite 202
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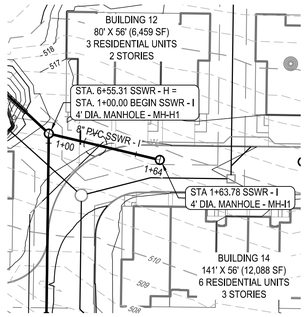

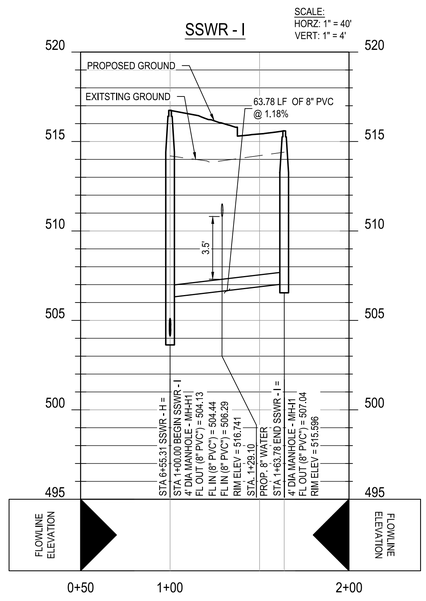

LEGEND

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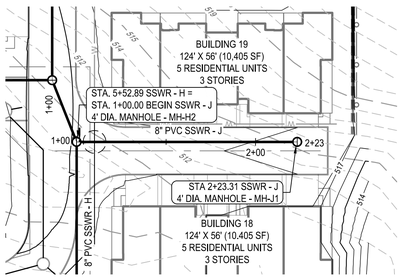

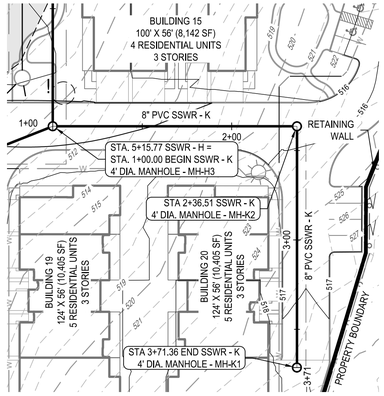

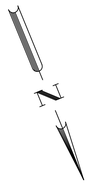

LEGEND

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- PROPERTY BOUNDARY
- EXISTING WASTEWATER LINE (WWx)
- EXISTING WATER MAIN (Wx)
- WASTEWATER LINE
- PROPOSED NEW MANHOLE
- PROPOSED WATER MAIN (W)
- PROPOSED STORM DRAIN (SS)
- PROPOSED ELECTRIC (E)
- EXISTING 1' MINOR CONTOUR (831)
- EXISTING 5' MAJOR CONTOUR (836)
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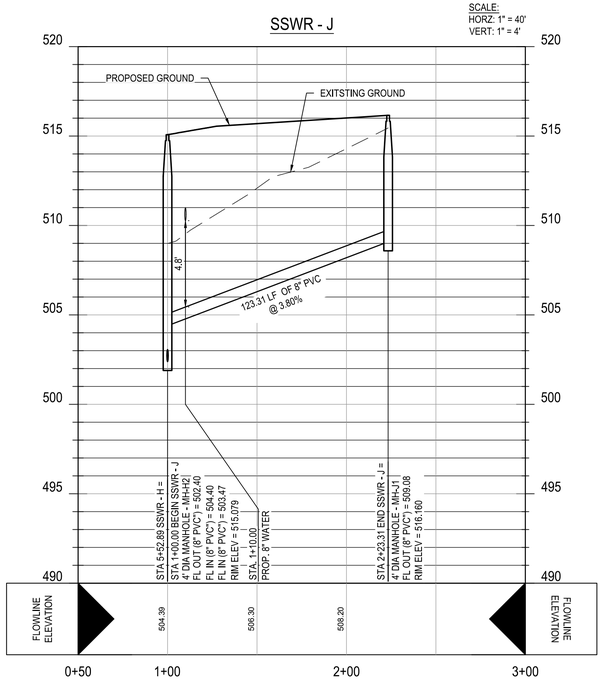

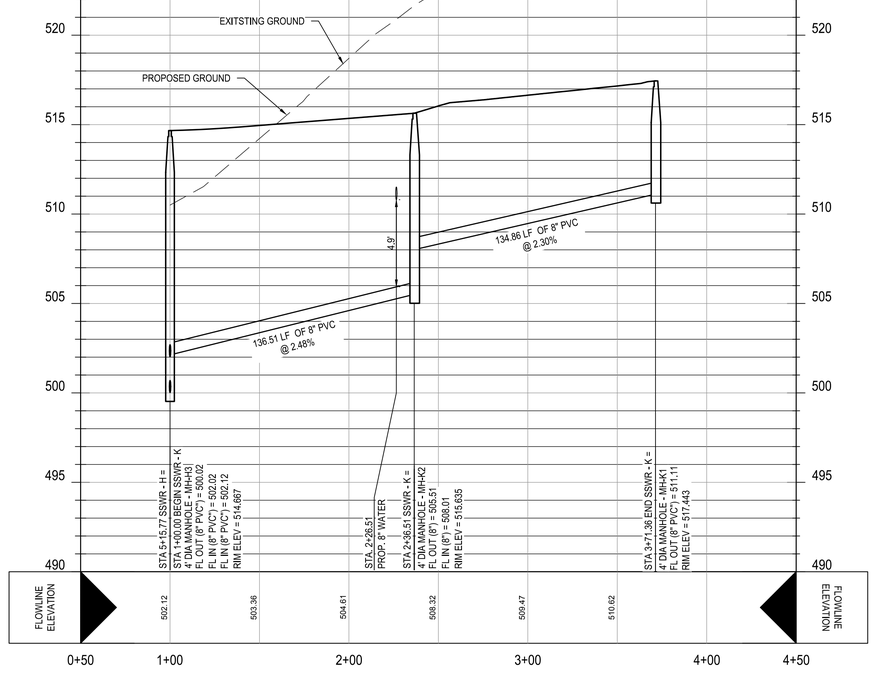

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THE ELEVATIONS OF THE LOWEST FLOOR SHALL BE AT LEAST 10 INCHES ABOVE THE FINISHED GRADE OF THE SURROUNDING GROUND, WHICH SHALL BE SLOPED IN A FASHION SO AS TO DIRECT STORM WATER AWAY FROM THE STRUCTURE. PROPERTIES ADJACENT TO THE STORM WATER CONVEYANCE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

REV	DESCRIPTION	DATE	APR

DESIGNED BY: BAH
REVIEWED BY: AJN
DRAWN BY: BAH

BGE, INC.
7330 San Pedro, Suite 202
San Antonio, TX 78216
TEL: 210-581-3600 www.bgeinc.com
TBPE Registration No. F-1046

THE JUNCTION

SEWER J & K PLAN & PROFILE

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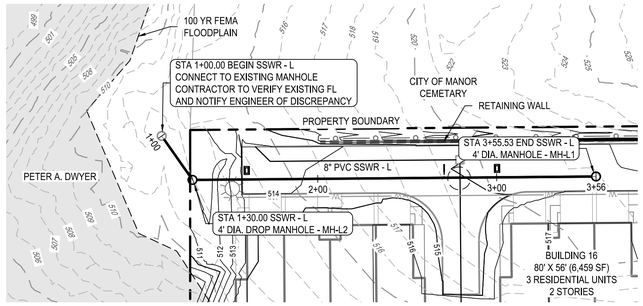
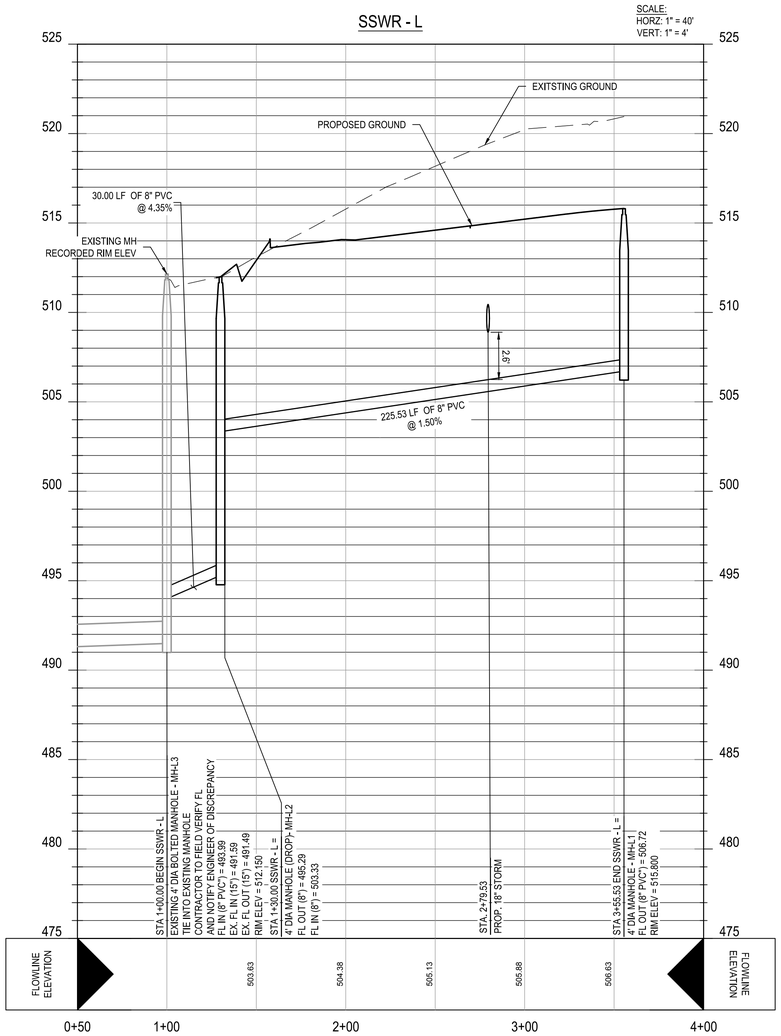
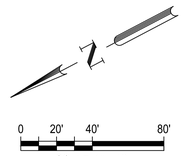
SHEET
61

G:\TXC\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Shts\C09.18 1065900 SEWER D PLAN & PROFILE.dwg Layout: SEWER J & K PLAN & PROFILE Plotted: 8/17/2023 12:22:07 PM By: Calderon







LEGEND

- FEMA FLOODPLAIN ZONE
- PROPERTY BOUNDARY
- EXISTING WASTEWATER LINE
- EXISTING WATER MAIN
- WASTEWATER LINE
- PROPOSED NEW MANHOLE
- PROPOSED WATER MAIN
- PROPOSED STORM DRAIN
- PROPOSED ELECTRIC
- EXISTING 1' MINOR CONTOUR
- EXISTING 5' MAJOR CONTOUR
- PROPOSED 1' MINOR CONTOUR
- PROPOSED 5' MAJOR CONTOUR
- PROPOSED SINGLE WATER SERVICE
- PROPOSED DUAL WATER SERVICE
- PROPOSED SINGLE SEWER SERVICE CONNECTION
- UTILITY CROSSING

TRENCH EXCAVATION SAFETY PROTECTION

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS COVERING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATIONS.

SEWER GENERAL NOTE:
WASTEWATER PIPES SHALL BE GREEN COLOR
GASKETED ASTM D3034 SDR26.

NOTE:
UTILITY SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

NOTES:

1. ALL EXISTING UTILITY LOCATIONS ARE APPROXIMATE AND WILL BE CONFIRMED BY CONTRACTOR PRIOR TO CONSTRUCTION.
2. CONTRACTOR SHALL PROTECT ALL EXISTING TREES, FENCES, CONTRACTOR SHALL PROTECT ALL EXISTING TREES, FENCES, RETAINING WALLS AND STRUCTURES UNLESS OTHERWISE NOTED.
3. REFER TO GENERAL NOTES SHEET OR SPECIFIC DETAIL SHEET IN THIS SET FOR FURTHER INSTRUCTIONS. FOR ANY DISCREPANCIES THE MORE STRINGENT WILL APPLY.
4. REFER TO PLAN AND PROFILE SHEETS IN THIS SET FOR SANITARY SEWER AND STORM SEWER DESIGN INFORMATION.
5. RADIUS WATERLINE PIPE SHALL BE LAID IN 20 FT INCREMENTS AT 1°DEFLECTIONS.
6. COMPACTION OF TRENCH UNDER PROPOSED PAVING SHOULD USE APPROPRIATE REPLACEMENT GRANULAR MATERIAL IF UNSUITABLE SOIL IS EXCAVATED FROM TRENCH.
7. ALL OTHER UTILITIES SHALL BE INSTALLED BELOW THE WATER LINE WITH AT LEAST 1' SEPARATION.
8. ALL UTILITIES TO BE CONSTRUCTED PRIOR TO STREETS.
9. NO VALVES, HYDRANTS, ETC. SHALL BE CONSTRUCTED WITHIN CURBS, SIDEWALKS, OR DRIVEWAYS.

FINISHED FLOOR ELEVATIONS

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

	APR	DATE	DESCRIPTION	REV

DESIGNED BY: BAH
REVIEWED BY: AJN
DRAWN BY: BAH

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San Antonio, TX 78216
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TBPE Registration No. F-1046

THE JUNCTION

SEWER L PLAN & PROFILE

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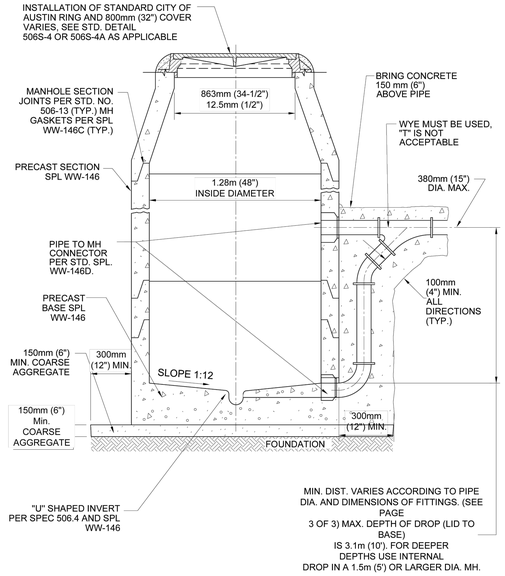
SHEET
62

G:\TX\C\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Site\C09.18 1065900 SEWER E PLAN & PROFILE.dwg Layout: SEWER L PLAN & PROFILE Plotted: 8/17/2023 12:22:30 PM By: Calderon

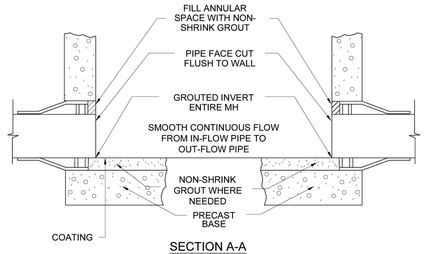


NOTES:

1. THE MANHOLE BASE SHALL BE BEDDED ON 150mm (6") COARSE AGGREGATE. THE CONTRACTOR SHALL LEVEL AND PLUMB THE BASE PRIOR TO SETTING THE PRECAST MANHOLE RISER SECTIONS ON THE PRECAST CONCRETE BASE.
2. MANHOLE FOUNDATION SHALL MEET OR EXCEED STD. SPEC 506.5B.

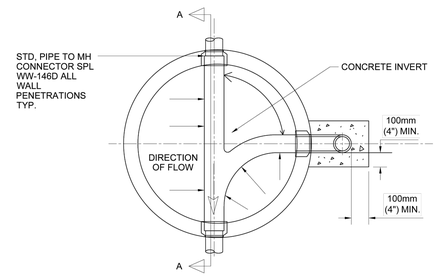
CITY OF AUSTIN AUSTIN WATER UTILITY		PRECAST MANHOLE WITH DROP INLET ON PRECAST BASE	
RECORD COPY SIGNED BY KATHI L FLOWERS	08/31/2011 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-8 1 OF 3

INVERT DETAIL



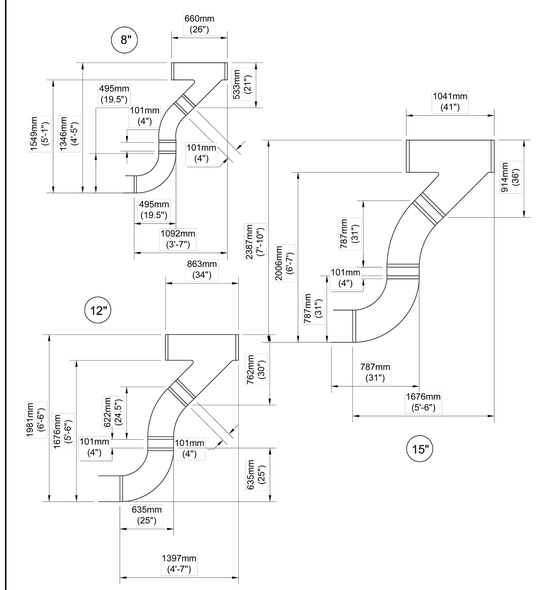
SECTION A-A

INVERT PLAN VIEW

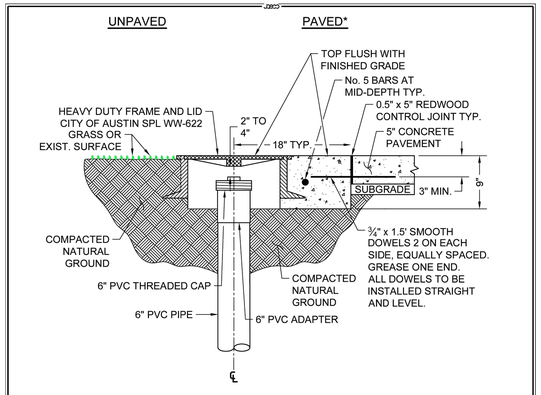


CITY OF AUSTIN AUSTIN WATER UTILITY		PRECAST MANHOLE WITH DROP INLET ON PRECAST BASE	
RECORD COPY SIGNED BY KATHI L FLOWERS	08/31/2011 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-8 2 OF 3

STANDARD DROP CONNECTIONS MINIMUM DIMENSIONS (FOR INFORMATION ONLY)



CITY OF AUSTIN AUSTIN WATER UTILITY		PRECAST MANHOLE WITH DROP INLET ON PRECAST BASE	
RECORD COPY SIGNED BY KATHI L FLOWERS	08/31/2011 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-8 3 OF 3



*** CLEAN-OUTS MAY NOT BE PLACED IN PAVED AREAS - I.E. SIDEWALKS, DRIVEWAYS, OR PARKING LOTS UNLESS APPROVED BY THE CITY OF MANOR AND MUST BE LOCATED A MINIMUM OF 6" FROM ALL PAVED AREAS.**

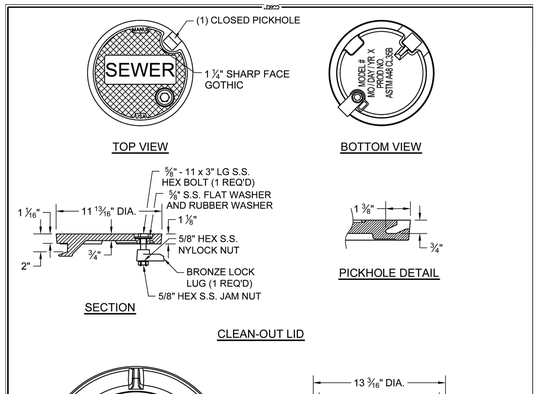
NOTES:

1. SUB-GRADE SHALL BE COMPACTED AS PER STD. SPEC. 201S, SUB-GRADE PREPARATION.
2. REINFORCING STEEL SHALL MEET ITEM 406S, REINFORCING STEEL.
3. CONCRETE SHALL MEET ITEM 403S CLASS "A".
4. ALL PVC SHALL BE SDR 26.

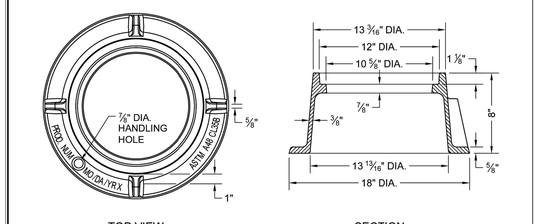
CLEAN-OUT FRAME AND LID

CITY OF MANOR, TEXAS			
Scale: NTS	Approved 1/09/19 Date	Drawn by: PMG	
WASTEWATER CLEANOUT FRAME AND LID		Detail No. WWC	

THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



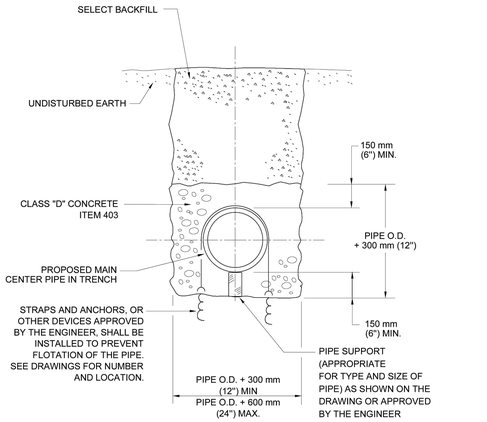
CLEAN-OUT LID



CLEAN-OUT FRAME

CITY OF MANOR, TEXAS			
Scale: NTS	Approved 1/09/19 Date	Drawn by: PMG	
WASTEWATER CLEANOUT FRAME AND LID		Detail No. WWC	

THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



CITY OF AUSTIN WATER AND WASTEWATER UTILITY		CONCRETE ENCASEMENT	
RECORD COPY SIGNED BY KATHI L FLOWERS	08/18/00 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 505S-1 1 OF 1

	APR	DATE	DESCRIPTION	REV
DESIGNED BY:				JDC
REVIEWED BY:				AJN
DRAWN BY:				JDC

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San Antonio, TX 78216
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TBPE Registration No. F-1046

THE JUNCTION

WASTEWATER UTILITY DETAILS (SHEET 1 OF 3)

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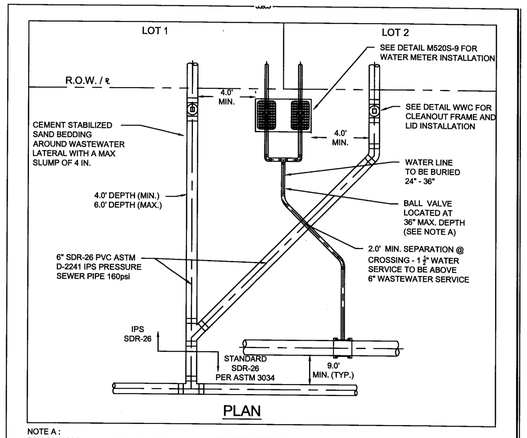
SHEET 63

G:\TX\CP\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Shts\C09.20 1065900 WASTEWATER UTILITY DETAILS.dwg Layout: WASTEWATER UTILITY DETAILS (SHEET 1 OF 3) Plotted: 8/17/2023 12:23:20 PM By: jclifton

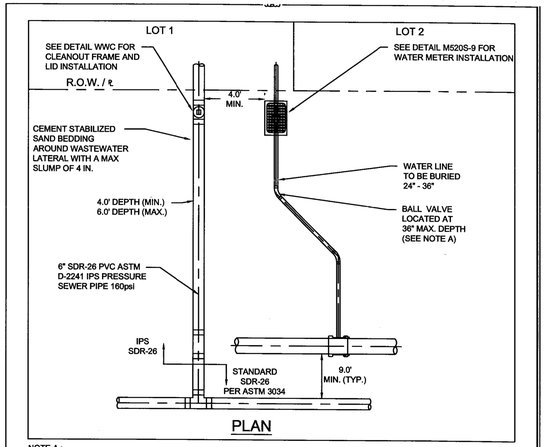


PLAN

NOTE A :
BALL VALVE SHALL NOT BE LOCATED UNDER CURB OR PAVEMENT AND NOT BE LOCATED MORE THAN 24" HORIZONTAL FROM METER BOX.

1. WASTEWATER SERVICE SDR-26 ASTM D-2241 IPS PVC PRESSURE RATED 160 psi.
2. WASTEWATER IN SEPARATE TRENCH FROM WATER WITH WASTEWATER LINE ENCASED WITH CEMENT STABILIZED SAND WITH A SLUMP OF 4-INCHES OR LESS. THE CEMENT STABILIZED SAND SHALL HAVE A MIN. OF 10% CEMENT PER CUBIC YARD OF CEMENT STABILIZED SAND MIXTURE, BASED ON LOOSE DRY WEIGHT VOLUME (AT LEAST 2.5 BAGS OF CEMENT PER CUBIC YARD OF MIXTURE). THE CEMENT STABILIZED SAND BEDDING SHALL BE A MIN. OF 6" ABOVE AND 4" BELOW THE WASTEWATER SERVICE LINE.
3. WATER IS 2.0' ABOVE WASTEWATER AT ALL POINTS EXCEPT CLEANOUT OPENING.
4. WATER METERS PLACED IN TYPICAL SERVICE BOXES WITH LIPS 3" ABOVE CLEANOUT OPENING.
5. IF WATER SERVICE DEPTH IS GREATER THAN 24", WASTEWATER SERVICE DEPTH MUST BE SUFFICIENT TO PROVIDE MINIMUM OF 2.0' VERTICAL SEPARATION.
6. THE WATER SADDLE TAP IS 9.0' FROM THE WASTEWATER SERVICE LATERAL., CROSSING IT AT 90° AND 2.0' ABOVE THE WYE WASTEWATER SERVICE LATERAL.
7. FIRE HYDRANTS SHALL NOT BE INSTALLED WITHIN 9.0' VERTICALLY OR HORIZONTALLY OF ANY WASTEWATER MAIN, WASTEWATER LATERAL, OR WASTEWATER SERVICE LINE REGARDLESS OF CONSTRUCTION.

CITY OF MANOR, TEXAS		
Scale: NTS	Approved 5/11/18 Date	Drawn by: PMG
WATER / WASTEWATER DOUBLE SERVICE DETAIL		Detail No.

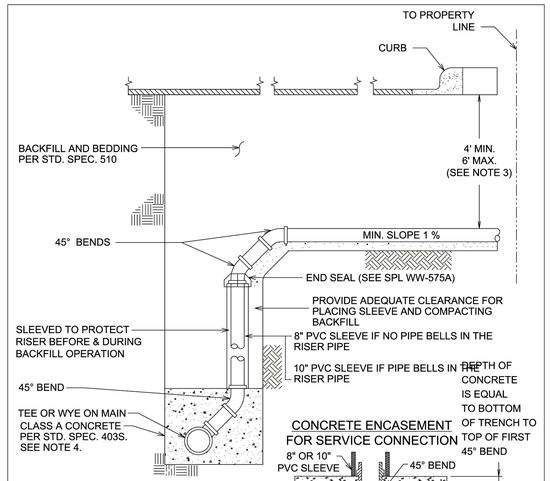


PLAN

NOTE A :
BALL VALVE SHALL NOT BE LOCATED UNDER CURB OR PAVEMENT AND NOT BE LOCATED MORE THAN 24" HORIZONTAL FROM METER BOX.

1. WASTEWATER SERVICE SDR-26 ASTM D-2241 IPS PVC PRESSURE RATED 160 psi.
2. WASTEWATER IN SEPARATE TRENCH FROM WATER WITH WASTEWATER LINE ENCASED WITH CEMENT STABILIZED SAND WITH A SLUMP OF 4-INCHES OR LESS. THE CEMENT STABILIZED SAND SHALL HAVE A MIN. OF 10% CEMENT PER CUBIC YARD OF CEMENT STABILIZED SAND MIXTURE, BASED ON LOOSE DRY WEIGHT VOLUME (AT LEAST 2.5 BAGS OF CEMENT PER CUBIC YARD OF MIXTURE). THE CEMENT STABILIZED SAND BEDDING SHALL BE A MIN. OF 6" ABOVE AND 4" BELOW THE WASTEWATER SERVICE LINE.
3. WATER IS 2.0' ABOVE WASTEWATER AT ALL POINTS EXCEPT CLEANOUT OPENING.
4. WATER METER PLACED IN TYPICAL SERVICE BOX WITH LIP 3" ABOVE CLEANOUT OPENING.
5. IF WATER SERVICE DEPTH IS GREATER THAN 24", WASTEWATER SERVICE DEPTH MUST BE SUFFICIENT TO PROVIDE MINIMUM OF 2.0' VERTICAL SEPARATION.
6. THE WATER SADDLE TAP IS 9.0' FROM THE WASTEWATER SERVICE LATERAL.
7. FIRE HYDRANTS SHALL NOT BE INSTALLED WITHIN 9.0' VERTICALLY OR HORIZONTALLY OF ANY WASTEWATER MAIN, WASTEWATER LATERAL, OR WASTEWATER SERVICE LINE REGARDLESS OF CONSTRUCTION.

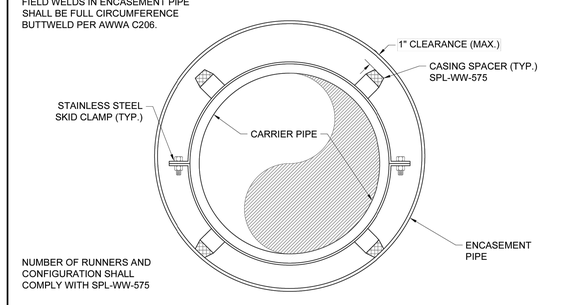
CITY OF MANOR, TEXAS		
Scale: NTS	Approved 7/6/18 Date	Drawn by: PMG
WATER / WASTEWATER SHARED LOT LINE SINGLE SERVICE DETAIL		Detail No.

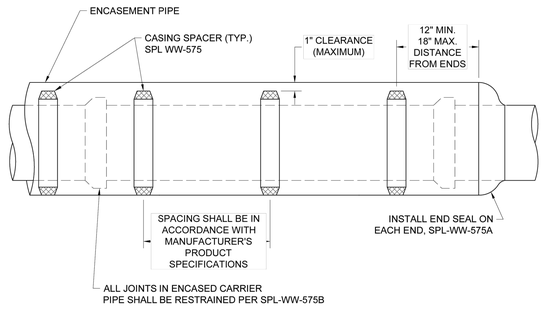


CONCRETE ENCASEMENT FOR SERVICE CONNECTION

NOTES:
1. FOR DETAILS AT PROPERTY LINE, SEE STD. DETAILS 520S-1, 1A, 3 & 3A.
2. BACKFILL AND BEDDING ACCORDING TO ITEM STD. SPEC. 510.
3. VERIFY DEPTH TO ENSURE ADEQUATE SLOPE (1% MIN.) FOR CUSTOMER AND MAINTAIN 4'-6' DEPTH.
4. CONCRETE AT SERVICE CONNECTION SHALL COMPLETELY FILL TRENCH WIDTH TO DEPTH INDICATED ON DETAIL AND EXTEND 6" EACH WAY BEYOND TEE OR WYE JOINTS.

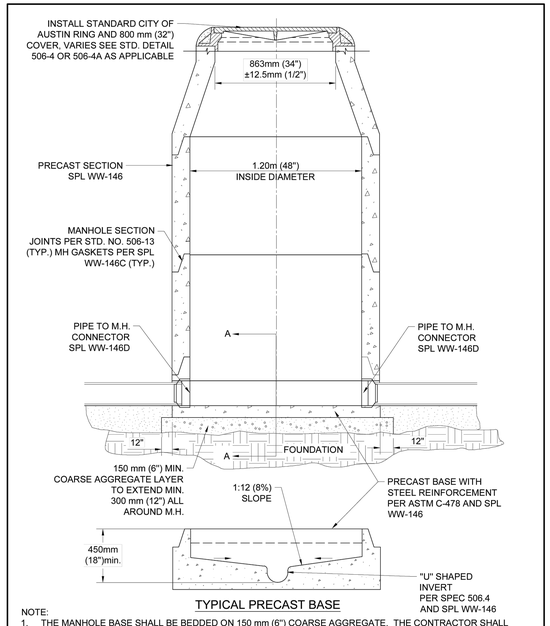
CITY OF AUSTIN AUSTIN WATER UTILITY	WASTEWATER DEEP SERVICE CONNECTION DETAIL	
RECORD COPY SIGNED BY KATHI L FLOWERS 08/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-6





APPLICABLE REFERENCES:
STANDARD SPECIFICATION: ITEM 505.4 & 510.3 (19)

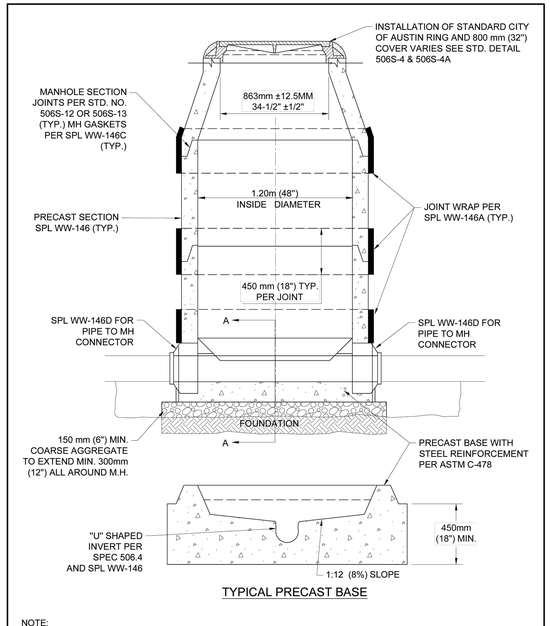
CITY OF AUSTIN AUSTIN WATER	ENCASEMENT PIPE DETAIL WITH CASING SPACERS	
JEFF A. KYLE 02/22/2021 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 501-AW-01 1 OF 1



TYPICAL PRECAST BASE

NOTE:
1. THE MANHOLE BASE SHALL BE BEDDED ON 150 mm (6") COARSE AGGREGATE. THE CONTRACTOR SHALL LEVEL AND PLUMB THE BASE PRIOR TO SETTING THE PRECAST MANHOLE RISER SECTIONS ON THE PRECAST CONCRETE BASE.
2. MH FOUNDATION SHALL MEET OR EXCEED STD. SPEC. 506.5B.

CITY OF AUSTIN AUSTIN WATER UTILITY	WASTEWATER MANHOLE ON PRECAST BASE	
RECORD COPY SIGNED BY KATHI L FLOWERS 08/31/2011 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-10 1 OF 1



TYPICAL PRECAST BASE

NOTE:
1. THE MANHOLE BASE SHALL BE BEDDED ON 150 mm (6") COARSE AGGREGATE. THE CONTRACTOR SHALL LEVEL AND PLUMB THE BASE PRIOR TO SETTING THE PRECAST MANHOLE RISER SECTIONS ON THE PRECAST CONCRETE BASE.2. MANHOLE FOUNDATION SHALL MEET OR EXCEED SPEC. 506.5B.

CITY OF AUSTIN AUSTIN WATER UTILITY	WATER TIGHT WASTEWATER MANHOLE ON PRECAST BASE	
RECORD COPY SIGNED KATHI L FLOWERS 08/31/2011 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-6 1 OF 1

							APR
							DATE
							DESCRIPTION
◁	◁	◁	◁	◁	◁	◁	REV

DESIGNED BY: JDC
REVIEWED BY: AJN
DRAWN BY: JDC

BGE

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San Antonio, TX 78216
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TBPE Registration No. F-1046

THE JUNCTION

WASTEWATER UTILITY DETAILS (SHEET 2 OF 3)

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SHEET 64

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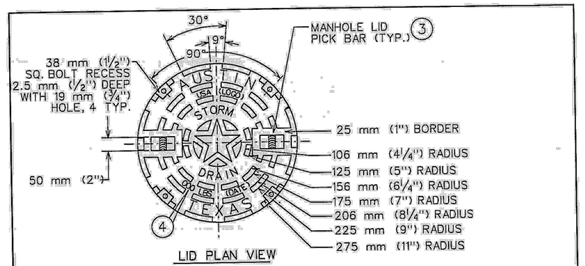


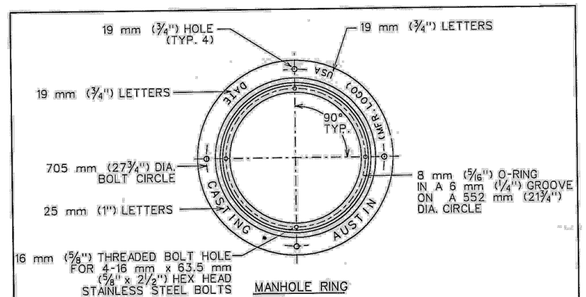
CITY OF AUSTIN
DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW

George E. Dunell 2/14/02
ADOPTED

THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.

BOLTED STORM DRAIN MANHOLE RING AND 610 mm (24") COVER

STANDARD NO. 503S-3S
1 OF 3



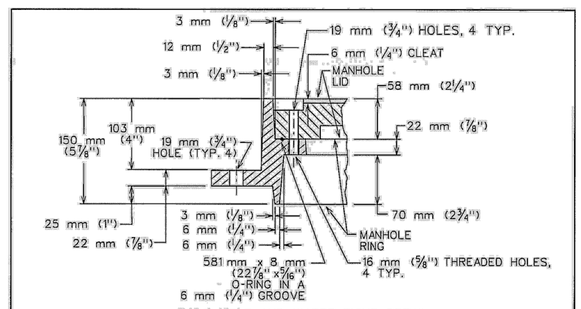
CITY OF AUSTIN
DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW

George E. Dunell 2/14/02
ADOPTED

THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.

BOLTED STORM DRAIN MANHOLE RING AND 610 mm (24") COVER

STANDARD NO. 503S-3S
2 OF 3



NOTES:

1. 19 mm (¾") R. + 6 mm (¼") CLEAT PER CITY SPECIFICATION, OR 25 mm (1") R. + 6 mm (¼") CLEAT IN STATE MAINTAINED R.O.W.
2. BREAK ALL SHARP CORNERS 1.5 mm (.06") x 45° MIN.
3. LID IS CAST WITH TWO 25 mm x 88 mm (1" x 3½") STEEL PICK BARS.
4. LID WEIGHT 667 OR 778 N (150 OR 175 LBS) CAST TOP & BOTTOM.

TYP. WEIGHT	LID	RING	SET
CITY/STATE	667/778 N (150/175 LBS)	667 N (150 LBS	1335/1445 N (300/325 LBS)

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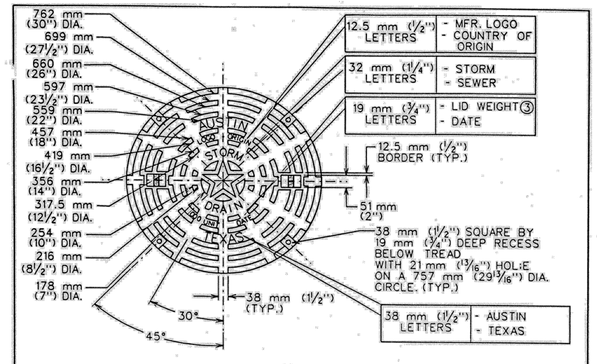
BOLTED STORM DRAIN MANHOLE RING AND 610 mm (24") COVER

STANDARD NO. 503S-3S
3 OF 3



CITY OF AUSTIN
DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW

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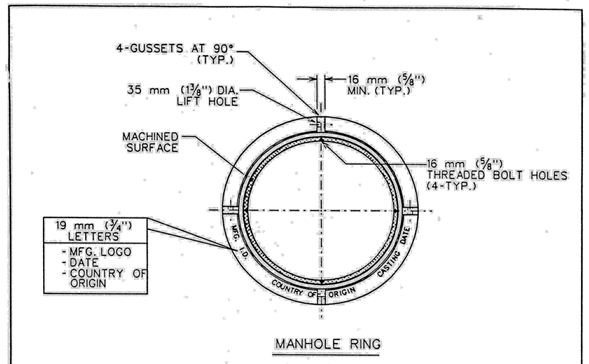
BOLTED STORM DRAIN MANHOLE RING AND 813 mm (32") COVER

STANDARD NO. 503S-5S
1 OF 3



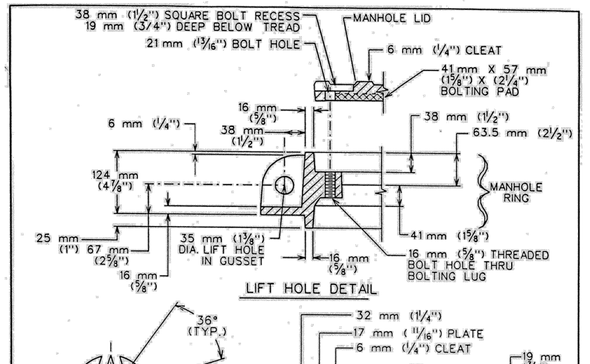
CITY OF AUSTIN
DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW

George E. Dunell 2/14/02
ADOPTED

THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.

BOLTED STORM DRAIN MANHOLE RING AND 813 mm (32") COVER

STANDARD NO. 503S-5S
2 OF 3



NOTES:

1. ALL CORNERS AND EDGES SHALL HAVE A 1.5 mm (1/16") MINIMUM RADIUS.
2. LIDS SHALL BE CAST WITH TWO 25 mm (1") DIA. STEEL PICK BARS.
3. LID WEIGHTS SHALL BE 935 N (210 LBS.) FOR CAST IRON OR 779 N (175 LBS.) FOR DUCTILE IRON. WEIGHT SHALL BE CAST ON BOTH TOP AND BOTTOM OF LID.
4. MANUFACTURER SHALL PROVIDE INDEPENDENT TESTING LABORATORY REPORT ON 25,000 POUND PROOF LOAD TEST CONDUCTED ACCORDING TO AASHTO M-306.
5. FILLETS SHALL BE 6 mm (¼") RADIUS UNLESS OTHERWISE SPECIFIED.
6. MANUFACTURER SHALL REMOVE EXCESS IRON AND MACHINE FINISH SEATING SURFACES TO NOTED DIMENSIONS.
7. BOLTS SHALL BE 16 mm X 44 mm (⅝" x 1¾" x 11 N.C.) STAINLESS STEEL HEX HEAD (TYPE 316).

CITY OF AUSTIN
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BOLTED STORM DRAIN MANHOLE RING AND 813 mm (32") COVER

STANDARD NO. 503S-5S
3 OF 3

	APR	DATE	DESCRIPTION	REV

DESIGNED BY: JDC
REVIEWED BY: AJN
DRAWN BY: JDC

BGE

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San Antonio, TX 78216
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TBPE Registration No. F-1046

THE JUNCTION

WASTEWATER UTILITY DETAILS
(SHEET 3 OF 3)

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Texas Licensed Professional Engineer 114451
For Internal Review Purposes.
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SHEET 65

G:\TX\CP\Projects\Legacy Performance Capital\10659-00-The Junction\03_CADD\01_Site\C09.20 1065900 WASTEWATER UTILITY DETAILS.dwg Layout: WASTEWATER UTILITY DETAILS (SHEET 3 OF 3) Plotted: 8/17/2023 12:23:34 PM By: jclifton