

IMPROVEMENT PLANS FOR ADDISON GROVE TOWN OF ADDISON, TEXAS PUBLIC WORKS #16-02



TODD MEIER
MAYOR

BRUCE ARFSTEN
MAYOR PRO TEMPORE

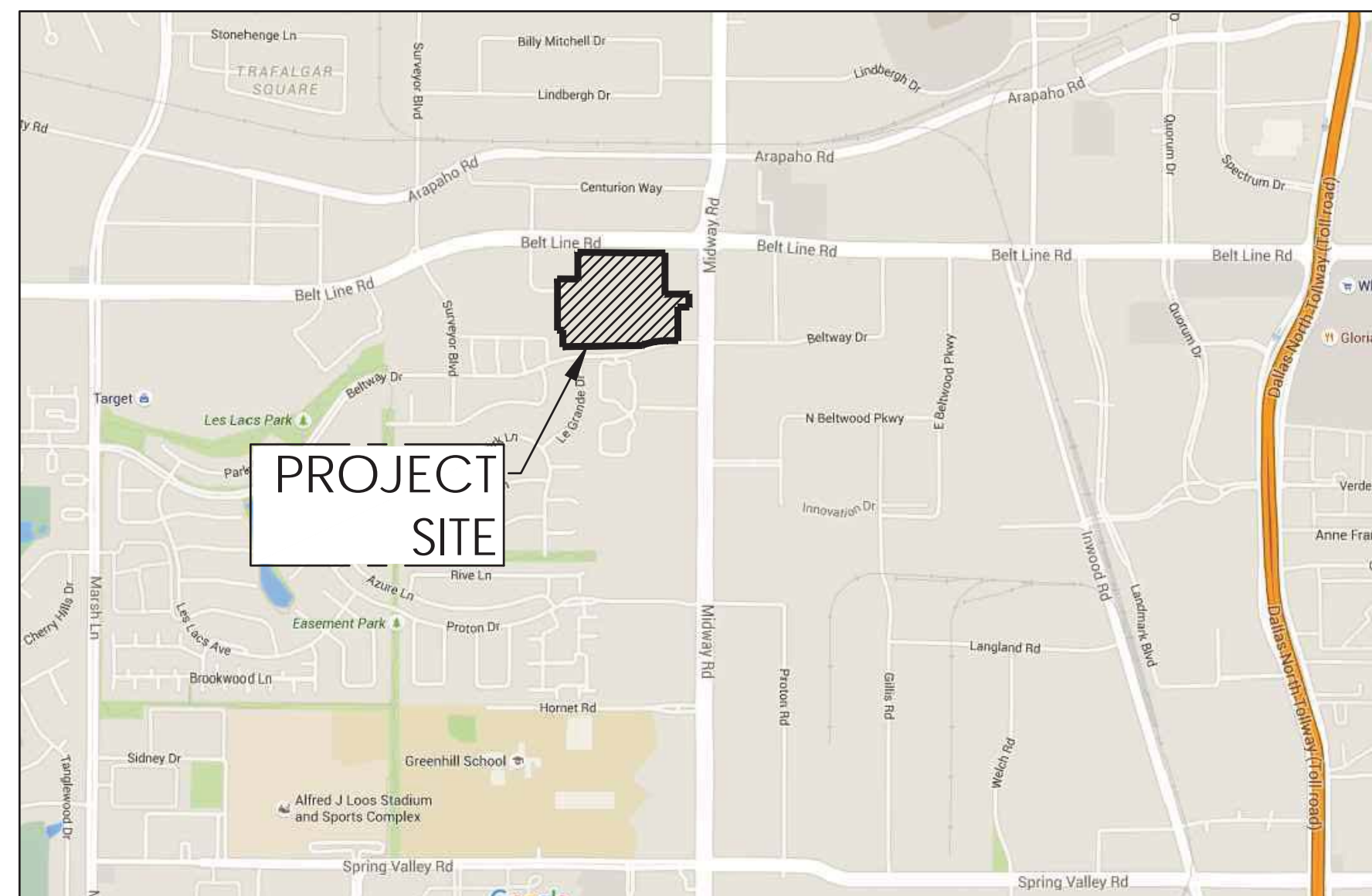
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PAUL WALDEN
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COUNCIL MEMBERS

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CITY MANAGER

LISA PYLES
DIRECTOR OF INFRASTRUCTURE
AND DEVELOPMENT SERVICES

JASON SHROYER
ASSISTANT DIRECTOR - INFRASTRUCTURE
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VICINITY MAP
NOT TO SCALE

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NOTE: THIS PLAN CONFORMS WITH DESIGN STANDARDS INCLUDED IN THE TOWN OF ADDISON TRANSPORTATION PLAN, WATER SYSTEM REQUIREMENTS, WASTE WATER SYSTEM REQUIREMENTS, AND DRAINAGE CRITERIA MANUAL.

SHEET INDEX	
PUBLIC PLANS	
1	COVER SHEET
2	OVERALL PLAN & PROJECT CONTROLS
3	GENERAL CONSTRUCTION NOTES, LEGEND & ABBREVIATIONS
4	OVERALL PAVING & DRAINAGE PLAN & NOTES
5	PAVING CROSS-SECTIONS
6	PAVING PLAN & PROFILE - OAK STREET
7	PAVING PLAN & PROFILE - RUNYON ROAD (WEST)
8	PAVING PLAN & PROFILE - RUNYON ROAD (EAST)
9	PAVING PLAN & PROFILE - HOLLY STREET
10	PAVING PLAN & PROFILE - MAGNOLIA STREET
11	PAVING MARKING & SIGNING PLAN
12	INTERSECTION SIGHT TRIANGLE LAYOUT
13	TRAFFIC CONTROL PLAN
14	PAVING DETAILS
15	PAVING DETAILS
16	PAVING DETAILS
17	PRE-DEVELOPMENT DRAINAGE PLAN
18	DRAINAGE AREA MAP
19	DRAINAGE AREA CALCULATIONS - DRAINAGE SYSTEM "A"
20	DRAINAGE AREA CALCULATIONS - DRAINAGE SYSTEM "B"
21	INLET & DETENTION CALCULATIONS
22	HYDRAULIC CALCULATIONS
23	STORM DRAIN PLAN & PROFILE - OAK STREET
24	STORM DRAIN PLAN & PROFILE - RUNYON ROAD
25	STORM DRAIN PLAN & PROFILE - HOLLY STREET
26	STORM DRAIN PLAN & PROFILE - MAGNOLIA STREET
27	STORM SEWER LATERAL PROFILES
28	STORM SEWER LATERAL PROFILES
29	EROSION & SEDIMENT CONTROL PLAN
30	EROSION & SEDIMENT CONTROL DETAILS
31	STORM SEWER DETAILS
32	STORM SEWER DETAILS
33	OVERALL WATER & SANITARY SEWER LAYOUT & NOTES
34	WATER LINE AND SANITARY SEWER PLAN & PROFILE - OAK STREET
35	WATER LINE AND SANITARY SEWER PLAN & PROFILE - RUNYON ROAD (WEST)
36	WATER LINE AND SANITARY SEWER PLAN & PROFILE - RUNYON ROAD (EAST)
37	WATER LINE AND SANITARY SEWER PLAN & PROFILE - HOLLY STREET
38	WATER LINE AND SANITARY SEWER PLAN & PROFILE - MAGNOLIA STREET
39	PUBLIC WATER LINE BLOCK "A"
40	PUBLIC WATER LINE BLOCK "B" & "C"
41	PUBLIC WATER LINE BLOCK "D"
42	SANITARY SEWER CROSSING PROFILES
43	WATER LINE DETAILS
44	WATER LINE DETAILS
45	SANITARY SEWER DETAILS
PRIVATE PLANS	
46	PRIVATE GRADING LAYOUT BLOCK A
47	PRIVATE GRADING LAYOUT BLOCK B
48	PRIVATE GRADING LAYOUT BLOCK C
49	PRIVATE GRADING LAYOUT BLOCK D
50	PRIVATE UTILITY LAYOUT BLOCK A
51	PRIVATE UTILITY LAYOUT BLOCK B
52	PRIVATE UTILITY LAYOUT BLOCK C
53	PRIVATE UTILITY LAYOUT BLOCK D
54	PRIVATE UTILITY COORDINATES
55	ONCOR LAYOUT
PLAT	
56	REPLAT ADDISON GROVES
57	REPLAT ADDISON GROVES
58	REPLAT ADDISON GROVES
59	REPLAT ADDISON GROVES

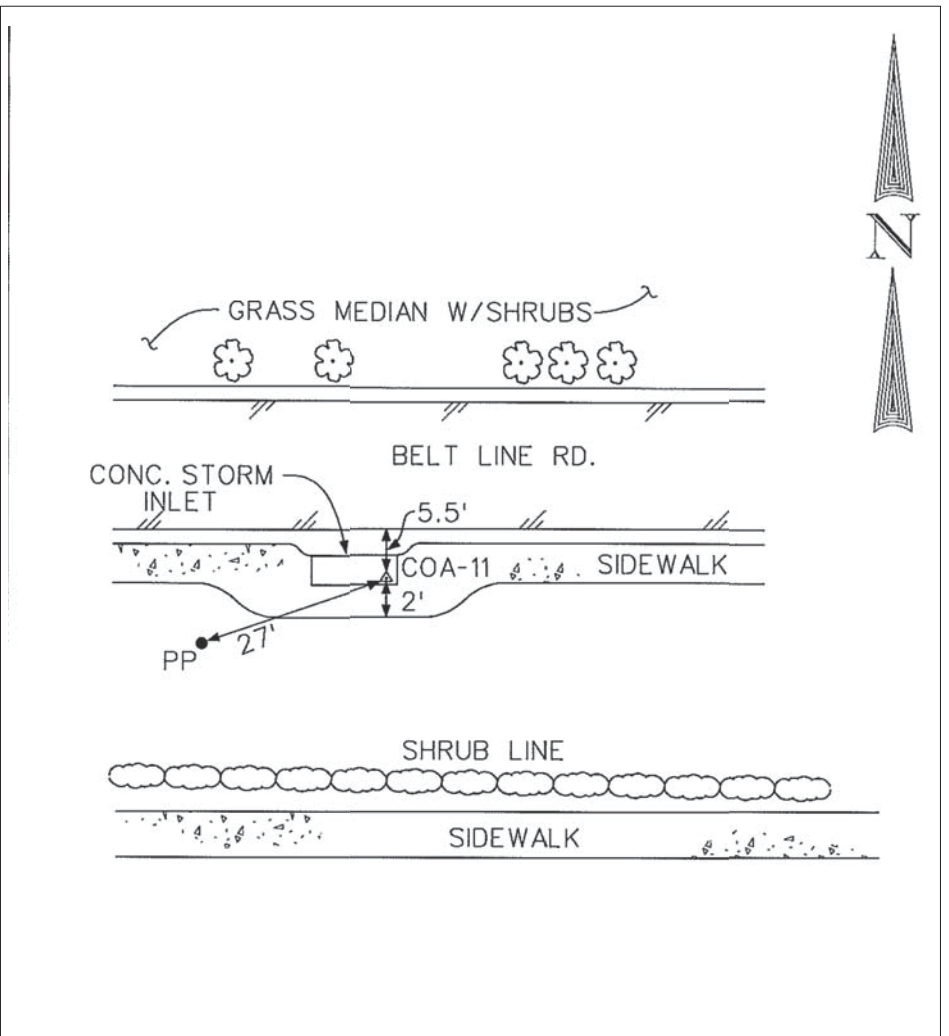
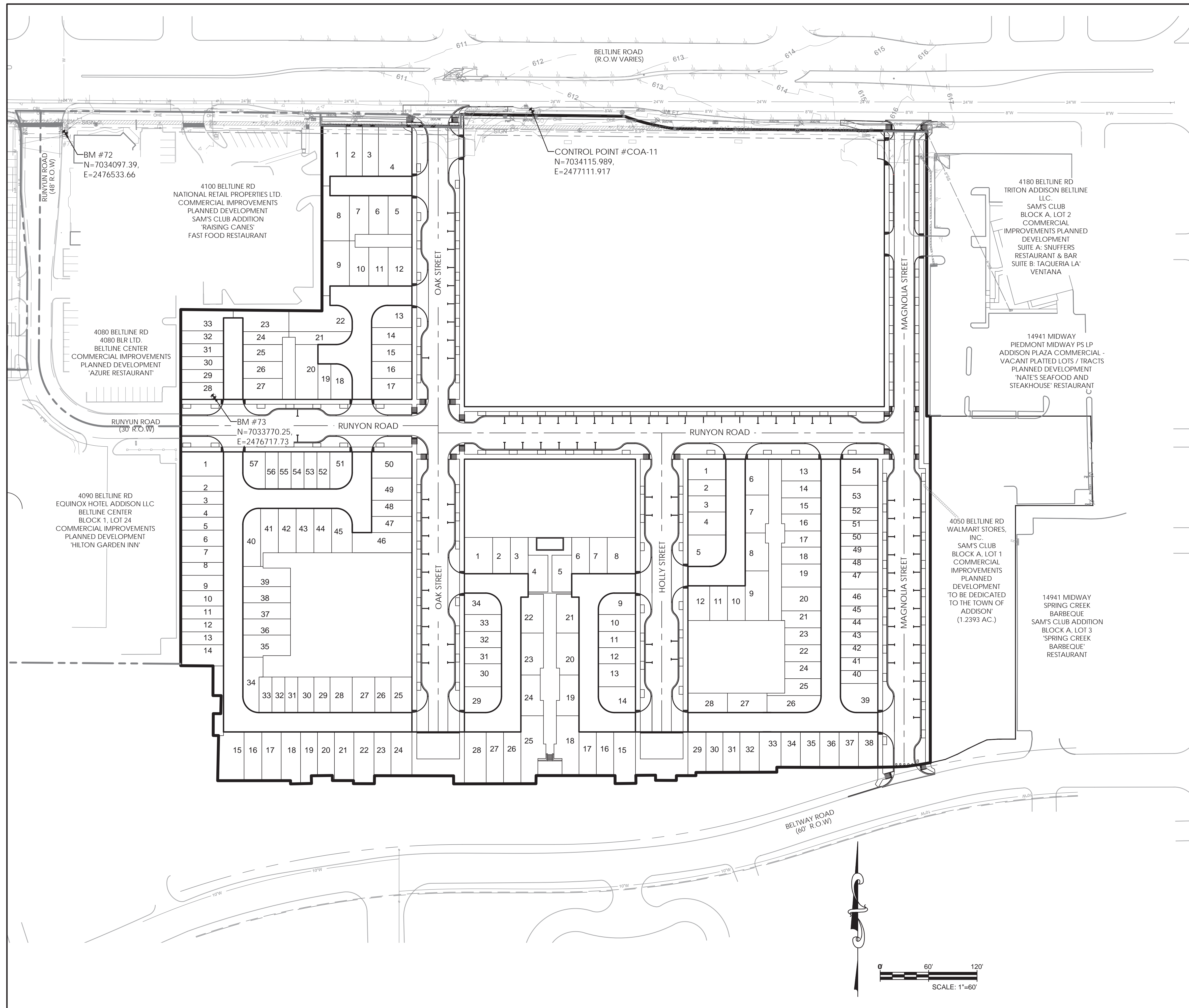
LANDSCAPE REFERENCE PLAN		
L0.0	R.O.W.	LANDSCAPE REFERENCE PLAN
L1.0	R.O.W.	LAYOUT PLAN
L1.1	R.O.W.	LAYOUT PLAN
L1.2	R.O.W.	LAYOUT PLAN
L1.3	R.O.W.	LAYOUT PLAN
L2.0	R.O.W.	HARDSCAPE DETAILS
L2.1	R.O.W.	HARDSCAPE DETAILS
L3.0	R.O.W.	IRRIGATION PLAN
L3.1	R.O.W.	IRRIGATION PLAN
L3.2	R.O.W.	IRRIGATION PLAN
L3.3	R.O.W.	IRRIGATION PLAN
L3.4	R.O.W.	IRRIGATION DETAILS
L3.5	R.O.W.	IRRIGATION DETAILS
L4.0	R.O.W.	LANDSCAPE PLAN
L4.1	R.O.W.	LANDSCAPE PLAN
L4.2	R.O.W.	LANDSCAPE PLAN
L4.3	R.O.W.	LANDSCAPE PLAN
L4.4	R.O.W.	LANDSCAPE DETAILS
L5.0	R.O.W.	SITE FURNISHING AND LIGHTING PLAN
L5.1	R.O.W.	SITE FURNISHING AND LIGHTING PLAN
L5.2	R.O.W.	SITE FURNISHING AND LIGHTING PLAN
L5.3	R.O.W.	SITE FURNISHING AND LIGHTING PLAN
L5.4	R.O.W.	SITE FURNISHING AND LIGHTING DETAILS

PARKS REFERENCE PLAN		
L0.0	PARKS	REFERENCE PLAN
L1.0	PARKS	LAYOUT PLAN
L1.1	PARKS	LAYOUT PLAN
L1.2	PARKS	LAYOUT PLAN
L2.0	PARKS	HARDSCAPE DETAILS
L2.1	PARKS	HARDSCAPE DETAILS
L2.2	PARKS	HARDSCAPE DETAILS
L2.3	PARKS	HARDSCAPE DETAILS
L2.4	PARKS	HARDSCAPE DETAILS
L2.5	PARKS	HARDSCAPE DETAILS
L3.0	PARKS	IRRIGATION PLAN
L3.1	PARKS	IRRIGATION PLAN
L3.2	PARKS	IRRIGATION PLAN
L3.3	PARKS	IRRIGATION PLAN
L3.4	PARKS	IRRIGATION DETAILS
L3.5	PARKS	IRRIGATION DETAILS
L4.0	PARKS	LANDSCAPE PLAN
L4.1	PARKS	LANDSCAPE PLAN
L4.2	PARKS	LANDSCAPE PLAN
L5.0	PARKS	SITE FURNISHING AND LIGHTING PLAN
L5.1	PARKS	SITE FURNISHING AND LIGHTING PLAN
L5.2	PARKS	SITE FURNISHING AND LIGHTING PLAN
L5.3	PARKS	SITE FURNISHING AND LIGHTING DETAILS
L5.4	PARKS	SITE FURNISHING AND LIGHTING DETAILS
L6.0	PARKS	GRADING AND DRAINAGE PLAN
L6.1	PARKS	GRADING AND DRAINAGE PLAN
L6.2	PARKS	GRADING AND DRAINAGE PLAN

GREENSPACE REFERENCE PLAN		
L0.0	GREEN SPACE	LANDSCAPE REFERENCE PLAN
L1.0	GREEN SPACE	LAYOUT PLAN
L1.1	GREEN SPACE	NOT USED
L1.2	GREEN SPACE	LAYOUT PLAN
L1.3	GREEN SPACE	LAYOUT PLAN
L2.0	GREEN SPACE	HARDSCAPE DETAILS
L2.1	GREEN SPACE	HARDSCAPE DETAILS
L2.2	GREEN SPACE	HARDSCAPE DETAILS
L2.3	GREEN SPACE	HARDSCAPE DETAILS
L2.4	GREEN SPACE	HARDSCAPE DETAILS
L2.5	GREEN SPACE	HARDSCAPE DETAILS
L3.0	GREEN SPACE	IRRIGATION PLAN
L3.1	GREEN SPACE	NOT USED
L3.2	GREEN SPACE	IRRIGATION PLAN
L3.3	GREEN SPACE	IRRIGATION PLAN
L3.4	GREEN SPACE	IRRIGATION DETAILS
L3.5	GREEN SPACE	IRRIGATION DETAILS
L4.0	GREEN SPACE	LANDSCAPE PLAN
L4.1	GREEN SPACE	NOT USED
L4.2	GREEN SPACE	LANDSCAPE PLAN
L4.3	GREEN SPACE	LANDSCAPE PLAN
L4.4	GREEN SPACE	LANDSCAPE DETAILS



SAWYER ENGINEERING, LLC
TBPE FIRM NUMBER F-9171



CONTROL POINT NO. COA-11
 APPROXIMATE LOCATION:
 826' WEST FROM THE INTERSECTION OF MIDWAY RD. & BELTLINE RD. THEN 5.5' FROM THE EDGE OF ASPHALT, 2' FROM THE SOUTH EDGE OF SIDEWALK & 27' FROM POWER POLE.
 US SURVEY FEET
 NAVD 88 ELEVATION= 611.74
 DATE SET: FEBRUARY 16, 2007
 MONUMENT: 2" BRASS DISK STAMPED "TXDOT COA-11 GPS"
 STATE PLANE COORDINATES
 NORTHING: 7034115.989
 EASTING: 2477111.917
 DALLAS COUNTY SCALE FACTOR: 1.000136506
 ELEVATIONS ARE NAVD 88 BASED UPON TXDOT VRS NETWORK

BM# 72 * [Symbol] * cut set (3-2016) on the southeast corner of a concrete curb inlet located on the east side of Runyun Road approximately 80 feet south of the centerline of Belt Line Road.
 Elev. = 606.23

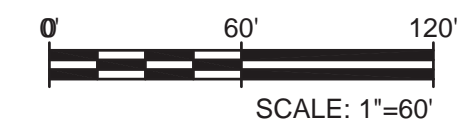
BM# 73 * [Symbol] * cut set (3-2016) on the northwest corner a recessed concrete curb inlet located at the easterly terminus of Runyun Road approximately 400 feet south of the centerline of Belt Line Road.
 Elev. = 615.05



2017/12/19

SAWYER ENGINEERING, LLC
 TBPE FIRM NUMBER F-9171

NO.	REVISION	BY	DATE
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
IMPROVEMENT PLANS ADDISON GROVE			
OVERALL PLAN & PROJECT CONTROL			
SAWYER ENGINEERING, LLC <small>ENGINEERING, LLC TBPE F-9171</small>		<small>1520 OLIVER STREET HOUSTON, TEXAS 77007 (832) 553-5948</small>	
PROJECT	DESIGN	DRAWN	DATE
	CDP	JDS	MAY 2017
FILE	SHEET		
	2		



GENERAL CONSTRUCTION NOTES

1. STANDARDS AND SPECIFICATIONS: ALL MATERIALS, CONSTRUCTION METHODS, WORKMANSHIP, EQUIPMENT, SERVICES AND TESTING FOR ALL PUBLIC IMPROVEMENTS SHALL BE IN ACCORDANCE WITH THE GOVERNING AUTHORITIES' ORDINANCES, REGULATIONS, REQUIREMENTS, STATUTES, SPECIFICATIONS AND DETAILS, LATEST PRINTINGS AND AMENDMENTS THERETO. THE GOVERNING AUTHORITIES' INFRASTRUCTURE DEPARTMENT REQUIREMENTS, PLUMBING CODES, AND FIRE DEPARTMENT REGULATIONS SHALL TAKE PRECEDENCE FOR ALL PUBLIC IMPROVEMENTS WHERE APPLICABLE. ALL OTHER PUBLIC CONSTRUCTION, NOT REGULATED BY THE GOVERNING AUTHORITY, SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, NORTH CENTRAL TEXAS - NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS, LATEST PRINTING AND AMENDMENTS THERETO, EXCEPT AS MODIFIED OR AMENDED BY THE PROJECT CONTRACT DOCUMENTS.
2. EXAMINATION OF SITE: THE CONTRACTOR ACKNOWLEDGES THAT HE HAS INVESTIGATED AND SATISFIED HIMSELF AS TO THE CONDITIONS AFFECTING THE WORK, INCLUDING BUT NOT RESTRICTED TO THOSE BEARING UPON TRANSPORTATION, DISPOSAL, HANDLING, AND STORAGE OF MATERIALS, AVAILABILITY OF LABOR, WATER, ELECTRIC POWER, ROADS AND UNCERTAINTIES OF WEATHER, OR SIMILAR PHYSICAL CONDITIONS AT THE SITE, CONDITIONS OF THE GROUND, THE CHARACTER OF EQUIPMENT AND FACILITIES NEEDED PRELIMINARY TO AND DURING PERFORMANCE OF THE WORK. THE CONTRACTOR ACKNOWLEDGES THAT HE HAS INSPECTED THE SITE OF THE WORK AND IS FAMILIAR WITH THE SOIL CONDITIONS TO BE ENCOUNTERED. ANY FAILURE BY THE CONTRACTOR TO ACQUAINT HIMSELF WITH THE AVAILABLE INFORMATION WILL NOT RELIEVE HIM RESPONSIBILITY FOR ESTIMATING PROPERLY THE DIFFICULTY OR COST OF SUCCESSFULLY PERFORMING THE WORK. THE TOWN OF ADDISON ASSUMES NO RESPONSIBILITY FOR ANY CONCLUSIONS OR INTERPRETATIONS MADE BY THE CONTRACTOR ON THE BASIS OF THE INFORMATION MADE AVAILABLE BY THE TOWN OF ADDISON.
3. SUBSURFACE INVESTIGATION: SUBSURFACE EXPLORATION TO ASCERTAIN THE NATURE OF SOILS, INCLUDING THE AMOUNT OF ROCK, IF ANY, IS THE RESPONSIBILITY OF THE CONTRACTOR. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE SUCH SUBSURFACE INVESTIGATIONS AS HE DEEMS NECESSARY TO DETERMINE THE NATURE OF THE MATERIAL TO BE ENCOUNTERED. SOME SUBSURFACE EXPLORATION HAS BEEN PERFORMED BY THE GEOTECHNICAL ENGINEER OF RECORD ON THE PROJECT AND IS PROVIDED FOR INFORMATIONAL PURPOSES. THE TOWN OF ADDISON AND ENGINEER DISCLAIM ANY RESPONSIBILITY FOR THE ACCURACY, TRUE LOCATION AND EXTENT OF THE SOILS INFORMATION THAT HAS BEEN PREPARED BY OTHERS. THEY FURTHER DISCLAIM RESPONSIBILITY FOR INTERPRETATION OF THAT DATA BY THE CONTRACTOR, AS IN PROJECTING SOIL BEARING VALUES, ROCK PROFILES, SOILS STABILITY AND THE PRESENCE, LEVEL AND EXTENT OF THE UNDERGROUND WATER.
4. TOPOGRAPHIC SURVEY: TOPOGRAPHIC SURVEY INFORMATION SHOWN ON THE PLANS IS PROVIDED FOR INFORMATIONAL PURPOSES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE INFORMATION SHOWN IS CORRECT AND SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY ERRORS, DISCREPANCIES OR OMISSIONS TO THE SURVEY INFORMATION PROVIDED. ANY COST INCURRED AS THE RESULT OF NOT CONFIRMING THE ACTUAL SURVEY SHALL BE BORNE BY THE CONTRACTOR.
5. COMPLIANCE WITH LAWS: THE CONTRACTOR SHALL FULLY COMPLY WITH ALL LOCAL, STATE AND FEDERAL LAWS, INCLUDING ALL CODES, ORDINANCES, AND REGULATIONS APPLICABLE TO THIS CONTRACT AND THE WORK TO BE DONE THEREUNDER, WHICH EXIST OR MAY BE ENACTED LATER BY ALL GOVERNMENTAL BODIES HAVING JURISDICTION OR AUTHORITY FOR SUCH ENACTMENT. ALL WORK REQUIRED UNDER THIS CONTRACT SHALL COMPLY WITH ALL REQUIREMENTS OF LAW, REGULATION, PERMIT OR LICENSE. IF THE CONTRACTOR FINDS THAT THERE IS A VARIANCE, HE SHALL IMMEDIATELY REPORT THIS TO THE TOWN OF ADDISON FOR RESOLUTION.
6. PUBLIC CONVENIENCE AND SAFETY: IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE AT WORK. THE REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. MATERIALS STORED ON THE WORK SITE SHALL BE SO PLACED, AND THE WORK SHALL AT ALL TIMES BE SO CONDUCTED, AS TO CAUSE NO GREATER OBSTRUCTION TO THE TRAVELING PUBLIC THAN IS CONSIDERED ACCEPTABLE BY THE GOVERNING AUTHORITIES. THE MATERIALS EXCAVATED SHALL BE PLACED AS SO NOT TO ENDANGER THE WORK OR PREVENT FREE ACCESS TO ALL FIRE HYDRANTS, WATER VALVES, WATER METERS, GAS VALVES, MANHOLES, AND FIRE ALARM OR POLICE CALL BOXES IN THE VICINITY. THE TOWN OF ADDISON RESERVES THE RIGHT TO REMEDY ANY NEGLIGENCE ON THE PART OF THE CONTRACTOR WITH REGARDS TO THE PUBLIC CONVENIENCE AND SAFETY WHICH MAY COME TO THE TOWN OF ADDISON'S ATTENTION. AFTER 24 HOURS NOTICE IN WRITING TO THE CONTRACTOR, SAVE INANCES OF EMERGENCY, WHEN THE TOWN OF ADDISON SHALL HAVE THE RIGHT TO REMEDY ANY NEGLIGENCE WITHOUT NOTICE; AND, IN EITHER CASE, THE COST OF SUCH WORK DONE BY THE TOWN OF ADDISON SHALL BE DEDUCTED FROM THE MONIES DUE OR TO BECOME DUE TO THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE TOWN OF ADDISON AND THE GOVERNING AUTHORITIES WHEN ANY STREET IS TO BE CLOSED OR OBSTRUCTED; SUCH NOTICE SHALL IN THE CASE OF MAJOR THOROUGHFARES OR STREETS UPON WHICH TRANSIT BY THE GOVERNING AUTHORITIES, KEEP ANY STREET OR STREETS IN CONDITION FOR UNOBSTRUCTED USE BY EMERGENCY SERVICES. WHERE THE CONTRACTOR IS REQUIRED TO CONSTRUCT TEMPORARY BRIDGES OR TO MAKE THE ARRANGEMENTS FOR CROSSING OVER DITCHES OR STREAMS, HIS RESPONSIBILITY FOR ACCIDENTS SHALL INCLUDE THE ROADWAY APPROACHES AS WELL AS THE STRUCTURES OF SUCH CROSSINGS.
7. STORM WATER POLLUTION PREVENTION PLAN (SWP3): THE CONTRACTOR SHALL COMPLY WITH THE CONDITIONS OF THE SWP3 WHILE CONDUCTING HIS ACTIVITIES OF THE PROJECT. IN ADDITION TO CONSTRUCTING THOSE ITEMS INDICATED ON THE PLAN SHEETS, COMPLIANCE WITH THE SWP3 INCLUDES CONFORMANCE TO CERTAIN PRACTICES AND PROCEDURES (IDENTIFIED IN THE SWP3) DURING PROJECT CONSTRUCTION.
8. PERMITS AND LICENSES: THE CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND LICENSES NECESSARY FOR THE EXECUTION OF THE WORK AND SHALL FULLY COMPLY WITH ALL THEIR TERMS AND CONDITIONS. WHENEVER THE WORK UNDER THIS CONTRACT REQUIRES THE OBTAINING OF PERMITS FROM THE GOVERNING AUTHORITIES, THE CONTRACTOR SHALL FURNISH DUPLICATE COPIES OF SUCH PERMITS TO THE ENGINEER BEFORE THE WORK COVERED THEREBY IS STARTED. NO WORK WILL BE ALLOWED TO PROCEED BEFORE SUCH PERMITS ARE OBTAINED.
9. BONDS: PERFORMANCE, PAYMENT AND MAINTENANCE BONDS WILL BE REQUIRED FROM THE CONTRACTOR FOR ALL WORK CONSIDERED BEING "PUBLIC" IMPROVEMENTS. BONDS SHALL BE PAID FOR BY THE CONTRACTOR.
10. VENDOR'S CERTIFICATION: ALL MATERIALS USED IN CONSTRUCTION SHALL HAVE VENDOR'S CERTIFIED TEST REPORT. TEST REPORTS SHALL BE DELIVERED TO THE ENGINEER BEFORE PERMISSION WILL BE GRANTED FOR USE OF THE MATERIAL. ALL VENDORS TEST REPORTS SHALL BE SUBJECT TO REVIEW BY THE ENGINEER, AND SHALL BE SUBJECT TO VERIFICATION BY TESTING OF SAMPLES OF MATERIALS AS RECEIVED FOR USE ON PROJECT. IN THE EVENT ADDITIONAL TESTS ARE REQUIRED, THEY SHALL BE PERFORMED BY AN APPROVED INDEPENDENT TESTING LABORATORY AND SHALL BE PAID FOR BY THE CONTRACTOR.
11. TESTING: THE TESTING AND CONTROL OF ALL MATERIALS USED IN THE WORK SHALL BE DONE BY AN INDEPENDENT TESTING LABORATORY, EMPLOYED AND PAID DIRECTLY BY THE CONTRACTOR.
12. INSPECTION: INSPECTION OF ALL PROPOSED CONSTRUCTION WILL BE PROVIDED BY AND PAID FOR BY THE TOWN OF ADDISON. THE CONTRACTOR SHALL PROVIDE ASSISTANCE BY PROVIDING EXCAVATION, TRENCH SAFETY, OR OTHER WORK NECESSARY TO FACILITATE INSPECTION ACTIVITIES, AND SHALL GIVE SUFFICIENT NOTICE WELL IN ADVANCE OF PENDING CONSTRUCTION ACTIVITIES TO THE TOWN OF ADDISON FOR SCHEDULING OF INSPECTION SERVICES.
13. SHOP DRAWINGS: THE CONTRACTOR SHALL PROVIDE, REVIEW, APPROVE AND SUBMIT ALL SHOP DRAWINGS, PRODUCT DATA AND SAMPLES REQUIRED BY THE GOVERNING AUTHORITIES AND THE PROJECT CONTRACT DOCUMENTS IN ACCORDANCE WITH ITEM 1.28 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS, 2004 EDITION.
14. SURVEYING: ALL SURVEYING REQUIRED FOR CONSTRUCTION STAKING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL EMPLOY A REGISTERED PROFESSIONAL LAND SURVEYOR TO PERFORM ALL SURVEY, LAYOUT AND MEASUREMENT WORK NECESSARY FOR THE COMPLETION OF THE PROJECT.
15. PROTECTION OF PROPERTY CORNERS AND BENCHMARKS: THE CONTRACTOR SHALL PROTECT ALL PROPERTY CORNER MARKERS AND BENCHMARKS, AND WHEN ANY SUCH MARKERS ARE IN DANGER OF BEING DISTURBED, THEY SHALL BE PROPERLY REFERENCED AND IF DISTURBED SHALL BE RESET BY A REGISTERED PUBLIC SURVEYOR AT THE EXPENSE OF THE CONTRACTOR.
16. EXISTING STRUCTURES: THE PLANS SHOW THE LOCATION OF ALL KNOWN SURFACE AND SUBSURFACE STRUCTURES, HOWEVER, THE TOWN OF ADDISON AND ENGINEER ASSUME NO RESPONSIBILITY FOR FAILURE TO SHOW ANY OR ALL OF THESE STRUCTURES IN THE PLANS, OR TO SHOW THEM IN THEIR EXACT LOCATION. SUCH FAILURE SHALL NOT BE CONSIDERED SUFFICIENT BASIS FOR CLAIMS FOR ADDITIONAL COMPENSATION FOR EXTRA WORK OR FOR INCREASING THE PAY QUANTITIES IN ANY MANNER WHATSOEVER, UNLESS THE OBSTRUCTION ENCOUNTERED IS SUCH TO REQUIRE CHANGES IN THE LINES OR GRADES, OR REQUIRE THE CONSTRUCTION OF SPECIAL WORK, FOR WHICH PROVISIONS ARE NOT MADE IN THE PLANS.
17. PROTECTION OF EXISTING UTILITIES: AS REQUIRED BY THE "TEXAS UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT", TEXAS ONE CALL SYSTEM MUST BE CONTACTED (800-245-4545) AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION OPERATION BEING PERFORMED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT TEXAS ONE CALL SYSTEM OR DIGITEST (800-344-8377). THE LOCATION AND DIMENSIONS SHOWN ON THE PLANS RELATIVE TO EXISTING UTILITIES ARE BASED ON THE BEST RECORDS AND/OR FIELD INFORMATION AVAILABLE AND ARE NOT GUARANTEED BY THE TOWN OF ADDISON OR ENGINEER TO BE ACCURATE AS TO LOCATION AND DEPTH. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS OF ADJACENT AND/OR CONFLICTING UTILITIES SUFFICIENTLY IN ADVANCE OF HIS ACTIVITIES IN ORDER THAT HE MAY NEGOTIATE SUCH LOCAL ADJUSTMENTS AS NECESSARY IN THE CONSTRUCTION PROCESS TO PROVIDE ADEQUATE CLEARANCES. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS IN ORDER TO PROTECT ALL EXISTING UTILITIES, SERVICES AND STRUCTURES ENCOUNTERED, WHETHER OR NOT THEY ARE INDICATED ON THE PLANS. ANY DAMAGE TO UTILITIES RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED AT HIS EXPENSE. TO AVOID ANY UNNECESSARY INTERFERENCES OR DELAYS, THE CONTRACTOR SHALL COORDINATE ALL UTILITY REMOVALS, REPLACEMENTS AND CONSTRUCTION WITH THE APPROPRIATE GOVERNING AUTHORITIES. THEN REQUEST WRITTEN AUTHORIZATION FROM THE ENGINEER. THE TOWN OF ADDISON WILL NOT BE LIABLE FOR DAMAGES DUE TO DELAY AS A RESULT OF THE ABOVE.
18. DAMAGE AND EXISTING FACILITIES: ALL UTILITIES, PAVEMENT, SIDEWALKS, WALLS, FENCES, ETC. NOT DESIGNATED TO BE REMOVED BUT THAT ARE DAMAGED DURING CONSTRUCTION ACTIVITIES SHALL BE REPLACED TO A CONDITION AS GOOD AS OR BETTER THAN THE CONDITIONS PRIOR TO STARTING THE WORK, SOLELY AT THE EXPENSE OF THE CONTRACTOR.
19. FIRE AND LIFE SAFETY SYSTEMS: CONTRACTOR SHALL NOT REMOVE, DISABLE, OR DISRUPT EXISTING FIRE OR LIFE SAFETY SYSTEMS WITHOUT WRITTEN PERMISSION FROM THE GOVERNING AUTHORITY.
20. TRENCH SAFETY: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE AND MAINTAIN A VIABLE TRENCH SAFETY SYSTEM AT ALL TIMES DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR IS DIRECTED TO BECOME KNOWLEDGEABLE AND FAMILIAR WITH THE STANDARDS AS SET BY THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND THE STATE OF TEXAS LAW CONCERNING TRENCHING AND SHORING. THE CONTRACTOR SHALL PROVIDE TRENCH SAFETY SYSTEM PLANS, PREPARED AND SEALED BY A PROFESSIONAL ENGINEER, LICENSED IN THE STATE OF TEXAS, FOR THE IMPLEMENTATION OF SAFETY CONTROL MEASURES, MEETING THE REQUIREMENTS OF THE GOVERNING AUTHORITIES THAT WILL BE IN EFFECT DURING THE PERIOD OF CONSTRUCTION OF THE PROJECT.
21. SAFETY RESTRICTIONS - WORK NEAR HIGH VOLTAGE LINES: THE FOLLOWING PROCEDURES WILL BE FOLLOWED REGARDING THE SUBJECT ITEM ON THIS CONTRACT:
 - a. A WARNING SIGN NOT LESS THAN FIVE INCHES BY SEVEN INCHES PAINTED YELLOW WITH BLACK LETTERS THAT ARE LEGIBLE AT 12 FEET SHALL BE PLACED INSIDE AND OUTSIDE VEHICLES SUCH AS CRANES, DERRICKS, POWER SHOVELS, DRILLING RIGS, OIL DRIVER, HOISTING EQUIPMENT OR SIMILAR APPARATUS. THE WARNING SIGN SHALL READ AS FOLLOWS:

WARNING - UNLAWFUL TO OPERATE THIS EQUIPMENT WITHIN SIX FEET OF HIGH VOLTAGE LINES
 - b. EQUIPMENT THAT MAY BE OPERATED WITHIN TEN FEET OF HIGH VOLTAGE LINES SHALL HAVE AN INSULATING CAGE-TYPE OF GUARD ABOUT THE BOOM OR ARM, EXCEPT BACKHOES OR DIPPER, AND INSULATOR LINKS ON THE HOOK CONNECTIONS
 - c. WHEN NECESSARY TO WORK WITHIN SIX FEET OF HIGH VOLTAGE ELECTRIC LINES, NOTIFY THE POWER COMPANY WHO WILL ERECT TEMPORARY MECHANICAL BARRIERS, DE-ENERGIZE THE LINE OR RAISE OR LOWER THE LINE. THE WORK DONE BY THE POWER COMPANY SHALL BE AT THE EXPENSE OF THE CONTRACTOR. THE NOTIFYING DEPARTMENT SHALL MAINTAIN AN ACCURATE LOG OF ALL SUCH CALLS TO THE POWER COMPANY AND SHALL RECORD ACTION TAKEN IN EACH CASE.
 - d. THE CONTRACTOR IS REQUIRED TO MAKE ARRANGEMENTS WITH THE POWER COMPANY FOR THE TEMPORARY RELOCATION OR RAISING OF HIGH VOLTAGE LINES AT THE CONTRACTOR'S SOLE COST AND EXPENSE.
 - e. NO PERSON SHALL WORK WITHIN SIX FEET OF A HIGH VOLTAGE LINE WITHOUT PROTECTION HAVING BEEN TAKEN AS OUTLINED IN PARAGRAPH C. ABOVE
22. TRAFFIC CONTROL: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DEVELOP AND SUBMIT FOR APPROVAL BY THE GOVERNING AUTHORITIES, A TRAFFIC CONTROL PLAN, PREPARED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF TEXAS, OUTLINING TRAFFIC MANAGEMENT PROCEDURES TO BE PROVIDED DURING CONSTRUCTION. TRAFFIC CONTROL MEASURES SHALL BE PROVIDED IN ACCORDANCE WITH THE FOLLOWING ADDITIONAL REQUIREMENTS:
 - a. CONSTRUCTION OF SIGNING AND BARRICADES SHALL CONFORM WITH THE LATEST VERSION OF "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", AS CURRENTLY AMENDED, TEXAS DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION.
 - b. THE CONTRACTOR SHALL BE REQUIRED TO FURNISH BARRICADES, FLARES, FLAGMEN, ETC., FOR THE PROTECTION OF THE PUBLIC, EMPLOYEES AND THE WORK
 - c. THE CONTRACTOR SHALL PERFORM HIS WORK IN SUCH A MANNER AS TO CREATE A MINIMUM OF INTERRUPTION TO TRAFFIC ALONG ADJACENT ROADWAYS. TWO WAY TRAFFIC MUST BE MAINTAINED ON ALL ROADWAYS AT ALL TIMES THROUGHOUT CONSTRUCTION UNLESS WRITTEN PERMISSION IS GRANTED BY THE GOVERNING AUTHORITIES.
 - d. ALL SIGNAGE, MARKINGS, LIGHTING, BARRICADES, FLAGMEN AND OTHER DEVICES AND PERSONNEL REQUIRED FOR TRAFFIC CONTROL DURING CONSTRUCTION OF THE PROJECT WILL BE INCLUDED IN THE CONTACT AMOUNT.
 - e. ALL TRAFFIC CONTROL DEVICES USED DURING NIGHTTIME SHALL BE REFLECTORIZED, ILLUMINATED FROM WITHIN OR EXTERNALLY ILLUMINATED.
 - f. THE CONTRACTOR SHALL NOT REMOVE ANY REGULATORY SIGN, INSTRUCTIONAL SIGN, WARNING SIGN, STREET NAME SIGN OR ANY SIGNAL, WHICH CURRENTLY EXIST, WITHOUT THE CONSENT OF THE GOVERNING AUTHORITIES.
 - g. THE CONTRACTOR SHALL MAINTAIN AND REPLACE WHERE NECESSARY ALL SIGNS, LIGHTS, MARKINGS AND TEMPORARY PAVEMENT THROUGHOUT THE CONSTRUCTION PERIOD.
 - h. THE CONTRACTOR SHALL REMOVE ALL TRAFFIC CONTROL MEASURES AT THE END OF CONSTRUCTION AND RESTORE UNIMPROVED PAVEMENT AND OTHER DISTURBED AREAS TO THEIR ORIGINAL CONDITION.
23. ACCESS TO ADJACENT PROPERTIES: ACCESS TO ADJACENT PROPERTIES SHALL BE MAINTAINED AT ALL TIMES UNLESS OTHERWISE DIRECTED BY THE GOVERNING AUTHORITIES.
24. ACCESS ROUTES, STAGING, AREAS AND STORAGE AREAS: ALL PRIVATE HAUL ROADS AND ACCESS ROUTES AND THE LOCATION OF ALL STAGING AREAS AND STORAGE AREAS SHALL BE SUBJECT TO THE APPROVAL OF THE TOWN OF ADDISON. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND REPAIRING ALL ROADS AND OTHER FACILITIES USED DURING CONSTRUCTION. UPON COMPLETION OF THE PROJECT, ALL HAUL ROADS, ACCESS ROADS, STAGING AREAS AND STORAGE AREAS SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THAT AT THE TIME THE CONTRACTOR COMMENCES WORK ON THE PROJECT.
25. PARKING OF CONSTRUCTION EQUIPMENT: AT NIGHT AND DURING ALL OTHER PERIODS OF TIME WHEN EQUIPMENT IS NOT BEING ACTIVELY USED FOR THE CONSTRUCTION WORK, THE CONTRACTOR SHALL PARK THE EQUIPMENT AT LOCATIONS, WHICH ARE APPROVED BY THE TOWN OF ADDISON. DURING THE CONSTRUCTION OF THE PROJECT, THE CONTRACTOR SHALL COMPLY WITH THE PRESENT ZONING REQUIREMENTS OF THE GOVERNING AUTHORITIES IN THE USE OF VACANT PROPERTY FOR STORAGE PURPOSES. THE CONTRACTOR SHALL ALSO PROVIDE ADEQUATE BARRICADES, MARKERS AND LIGHTS TO PROTECT THE TOWN OF ADDISON, THE GOVERNING AUTHORITIES, THE PUBLIC AND THE OTHER WORK. ALL BARRICADES, LIGHTS, AND MARKERS MUST MEET THE REQUIREMENTS OF THE GOVERNING AUTHORITIES' REGULATIONS
26. WATER FOR CONSTRUCTION: THE CONTRACTOR SHALL MAKE THE NECESSARY ARRANGEMENTS FOR PURCHASING WATER FROM THE GOVERNING AUTHORITY FOR HIS USE ON THE PROJECT SITE. COSTS ASSOCIATED WITH THESE SERVICES SHALL BE INCLUDED IN THE CONTRACT AMOUNT.
27. TEMPORARY ELECTRIC AND COMMUNICATIONS FOR CONSTRUCTION: THE CONTRACTOR SHALL MAKE THE NECESSARY ARRANGEMENTS FOR INSTALLATION AND PURCHASING OF TEMPORARY ELECTRIC AND COMMUNICATIONS SERVICES FROM THE GOVERNING AUTHORITIES FOR HIS USE ON THE PROJECT SITE. COSTS ASSOCIATED WITH THESE SERVICES SHALL BE INCLUDED IN THE CONTRACT AMOUNT.
28. FENCES: ALL FENCES ENCOUNTERED AND REMOVED DURING CONSTRUCTION, EXCEPT THOSE DESIGNATED TO BE REMOVED OR RELOCATED, SHALL BE RESTORED TO THE ORIGINAL OF BETTER THAN CONDITION UPON COMPLETION OF THE PROJECT. WHERE WIRE FENCING, EITHER WIRE MESH OR BARBED WIRE, IS TO BE CROSSED, THE CONTRACTOR SHALL SET CROSS-BRACED POSTS ON EITHER SIDE OF THE CROSSING. TEMPORARY FENCING SHALL BE ERECTED IN PLACE OF THE FENCING REMOVED WHENEVER THE WORK IS NOT IN PROGRESS, AND WHEN THE SITE IS VACATED OVER NIGHT AND/OR AT ALL TIMES TO PREVENT PERSONS AND/OR LIVESTOCK FROM ENTERING THE CONSTRUCTION AREA. THE COST OF FENCE REMOVAL, TEMPORARY CLOSURES AND REPLACEMENT SHALL BE INCLUDED IN THE CONTRACT.
29. DRAINAGE CHANNELS: WHERE EXISTING DRAINAGE CHANNELS ARE TEMPORARILY DISTURBED OR BLOCKED DURING CONSTRUCTION, IT SHALL BE RESTORED TO THE ORIGINAL CONDITION, GRADE AND CROSS SECTION AS SOON AS POSSIBLE AFTER CONSTRUCTION IS COMPLETED
30. COORDINATION WITH OTHERS: IN THE EVENT THAT OTHER CONTRACTORS ARE DOING WORK IN THE SAME AREA SIMULTANEOUSLY WITH THE PROJECT, THE CONTRACTOR SHALL COORDINATE HIS PROPOSED CONSTRUCTION WITH THAT OF THE OTHER CONTRACTORS.
31. CONDITION OF SITE DURING CONSTRUCTION: DURING CONSTRUCTION OF THE WORK, THE CONTRACTOR SHALL, AT ALL TIMES, KEEP THE SITE OF THE WORK AND ADJACENT PREMISES AS FREE FROM MATERIAL, DEBRIS AND RUBBISH AS IS PRACTICABLE AND SHALL REMOVE SAME FROM ANY PORTION OF THE SITE IF, IN THE OPINION OF THE TOWN OF ADDISON, SUCH MATERIAL, DEBRIS OR RUBBISH CONSTITUTES A NUISANCE OR IS OBJECTIONABLE. IN CASE OF FAILURE TO DO THE PART OF THE CONTRACTOR UNDER HIS CONTRACT, OR WHERE SUFFICIENT CONTRACT FUNDS ARE UNAVAILABLE FOR THIS PURPOSE, THE CONTRACTOR OR HIS SURETY SHALL REIMBURSE THE TOWN OF ADDISON FOR ALL SUCH COSTS.
32. EXISTING ROADWAYS: THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE CLEANLINESS OF EXISTING PAVED ROADS. ALL COSTS ASSOCIATED WITH MAINTAINING THE CLEANLINESS OF EXISTING ROADS SHALL BE INCLUDED IN THE CONTRACT AMOUNT.
33. DUST CONTROL: THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO CONTROL DUST ON THE PROJECT SITE BY SPRINKLING OF WATER, OR ANY OTHER METHODS APPROVED BY THE GOVERNING AUTHORITIES, AND SHALL PROVIDE ALL EQUIPMENT AND PERSONNEL REQUIRED TO PREVENT DUST FROM BECOMING A NUISANCE
34. CLEAN-UP FOR FINAL ACCEPTANCE: THE CONTRACTOR SHALL MAKE A FINAL CLEAN UP OF ALL PARTS OF THE WORK BEFORE ACCEPTANCE BY THE TOWN OF ADDISON. THIS CLEAN UP SHALL INCLUDE REMOVAL OF ALL OBJECTIONABLE MATERIALS AND, IN GENERAL, PREPARING THE SITE OF THE WORK IN AN ORDERLY MANNER OF APPEARANCE.
35. REMOVAL OF DEFECTIVE AND UNAUTHORIZED WORK: ALL WORK WHICH HAS BEEN REJECTED OR CONDEMNED SHALL BE REPAIRED, OR IF IT CANNOT BE REPAIRED SATISFACTORILY, IT SHALL BE REMOVED FROM THE WORK SITE. WORK DONE BEYOND THE LINE OR NOT IN CONFORMITY WITH THE GRADES SHOWN IN DRAWINGS OR AS PROVIDED, WORK DONE WITHOUT REQUIRED INSPECTION, OR ANY EXTRA UNCLASSIFIED WORK DONE WITHOUT WRITTEN AUTHORITY AND PRIOR AGREEMENT IN WRITING AS TO PRICES, SHALL BE AT THE CONTRACTOR'S RISK, AND WILL BE CONSIDERED UNAUTHORIZED. AND AT THE OPTION OF THE TOWN OF ADDISON MAY NOT BE MEASURED AND PAID FOR AND MAY BE ORDERED REMOVED AT THE CONTRACTOR'S EXPENSE. UPON FAILURE OF THE CONTRACTOR TO REPAIR SATISFACTORILY OR TO REMOVE AND REPLACE, IF SO DIRECTED, REJECTED, UNAUTHORIZED OR CONDEMNED WORK OR MATERIALS IMMEDIATELY AFTER RECEIVING NOTICE FROM THE TOWN OF ADDISON, THE TOWN OF ADDISON WILL, AFTER GIVING WRITTEN NOTICE TO THE CONTRACTOR, HAVE THE AUTHORITY TO CAUSE DEFECTIVE WORK TO BE REMEDIED OR REMOVED AND REPLACED, OR TO CAUSE UNAUTHORIZED WORK TO BE REMOVED AND DEDUCT THE COST THEREOF FROM ANY MONIES DUE OR TO BECOME DUE TO THE CONTRACTOR.
36. DISPOSITION AND DISPOSAL OF EXCESS AND UNSUITABLE MATERIALS: ALL MATERIALS TO BE REMOVED FROM THE SITE INCLUDING BUT NOT LIMITED TO EXCESS MATERIAL AND UNSUITABLE MATERIALS SUCH AS LARGE ROCKS, REFUSE, AND OTHER DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE PROJECT AT THE CONTRACTOR'S EXPENSE. CONTRACTOR SHALL ALSO COMPLY WITH APPLICABLE LAWS GOVERNING SPILLAGE OF DEBRIS WHILE TRANSPORTING TO A DISPOSAL SITE.
37. SEEDING: THE CONTRACTOR SHALL PROVIDE SEEDING, WATERING, FERTILIZATION, AND REQUIRED MAINTENANCE FOR THE GRASSING OF ALL UNPAVED AREAS OF DEDICATED RIGHT-OF-WAY, EASEMENTS, AND ALL OTHER DISTURBED AREAS OF CONSTRUCTION FOR THE PROJECT. SEEDING SHALL ALSO BE PROVIDED IN CONFORMANCE WITH THE REQUIREMENTS OF THE PROJECT STORM WATER POLLUTION PREVENTION PLAN IN ORDER TO ESTABLISH A GRASS COVER ON DISTURBED AREAS SUBJECT TO THE EROSION OF THE SOIL SURFACE.
38. RECORD DRAWINGS: THE CONTRACTOR SHALL MAINTAIN AN ACCURATE RECORD OF THE INSTALLATION OF ALL MATERIALS AND SYSTEMS COVERED BY THE PROJECT CONTRACT DOCUMENTS. THESE RECORD PRINTS WILL BE REVIEWED BY THE ENGINEER EACH MONTH PRIOR TO THE PRELIMINARY REVIEW OF CONTRACTORS REQUEST FOR PAYMENT. IF THE DRAWINGS ARE NOT COMPLETE ACCURATE AND UP-TO DATE, THE ENGINEER WILL NOT ACCEPT THE PAYMENT REQUEST. THE COMPLETED SET OF "RECORD" DRAWINGS MUST BE DELIVERED TO THE ENGINEER AND TOWN OF ADDISON BEFORE REQUESTING FINAL PAYMENT.

ABBREVIATIONS

(ALL ABBREVIATIONS SHOWN ARE NOT NECESSARILY USED ON DRAWINGS)

APPROX APPROXIMATELY	GM GAS METER	R RADIUS
ASPH ASPHALT	HDPE HIGH DENSITY POLYETHYLENE	RCB REINFORCED CONCRETE BOX
BC BACK OF CURB	PIPE	RCI RECESSED CURB INLET
B-B BACK TO BACK OF CURB	HDWL HEADWALL	RCP REINFORCED CONCRETE PIPE
BM BENCHMARK	HMAC HOT MIX ASPHALTIC CONCRETE	RCCP REINFORCED CONCRETE
BW BOTTOM OF WALL	HORIZ HORIZONTAL	RCY CYLINDRICAL PIPE
CATV CABLE TV	HP HIGH POINT	REC RECESSED
CFS CUBIC FEET PER SECOND	HVAC HEATING, VENTILATION AND AIR CONDITIONING	REINF REINFORCED
CI CURB INLET	IRR IRRIGATION	RL RIDGE LINE
CMP CORRUGATED METAL PIPE	JB JUNCTION BOX	ROW RIGHT OF WALL
CO CLEANOUT	JT JOINT	RT RIGHT
CONC CONCRETE	LF LINEAR FEET	SF SQUARE FEET
CONST CONSTRUCT	LP LOW POINT	SD STORM DRAIN
CL CENTER LINE	LT LEFT	SQ SQUARE
DCO DOUBLE CLEANOUT	MH MANHOLE	SS SANITARY SEWER
DIA DIAMETER	N/A NOT APPLICABLE	STA STATION
DIP DUCTILE IRON PIPE	NG NATURAL GROUND	SW SIDEWALK
DW DOMESTIC WATER	P PAVEMENT ELEVATION	SY SQUARE YARD
EL ELEVATION	PC POINT OF CURVATURE	T TELEPHONE
EMH ELECTRIC MANHOLE	PCC POINT OF COMPOUND CURVATURE	TC TOP OF CURB
EP EDGE OF PAVEMENT	PGL PAVEMENT GRADE LINE	TG TOP OF GROUND
EX EXISTING	PI POINT OF INTERSECTION	TMH TELEPHONE MANHOLE
FC FACE OF CURB	PIV POST INDICATOR VALVE	TOB TOP OF BANK
F-F FACE TO FACE OF CURB	PL PROPERTY LINE	TOS TOP OF SLOPE
FFE FINISHED FLOOR ELEVATION	PP POWER POLE	TP TOP OF PAVEMENT
FH FIRE HYDRANT	PRC POINT OF REVERSE CURVATURE	TIPIE TOP OF PIPE
FM FORCE MAIN	PR PROPOSED	TW TOP OF WALL
FO FIBER OPTIC	PT POINT OF TANGENCY	TYP TYPICAL
FP FINISHED PAD	PUB PUBLIC	UGE UNDERGROUND ELECTRIC
FPS FEET PER SECOND	PVC POLYVINYL CHLORIDE PIPE	VCP VITRIFIED CLAY PIPE
FL FLOW LINE	PVMT PAVEMENT	W WATER
FUT FUTURE	PVT PRIVATE	WV WATER VALVE
FW FIRE WATER	OCEW ON CENTER EACH WAY	
G GAS	OHE OVERHEAD ELECTRIC	
GI GRATE INLET		

STANDARD LEGEND

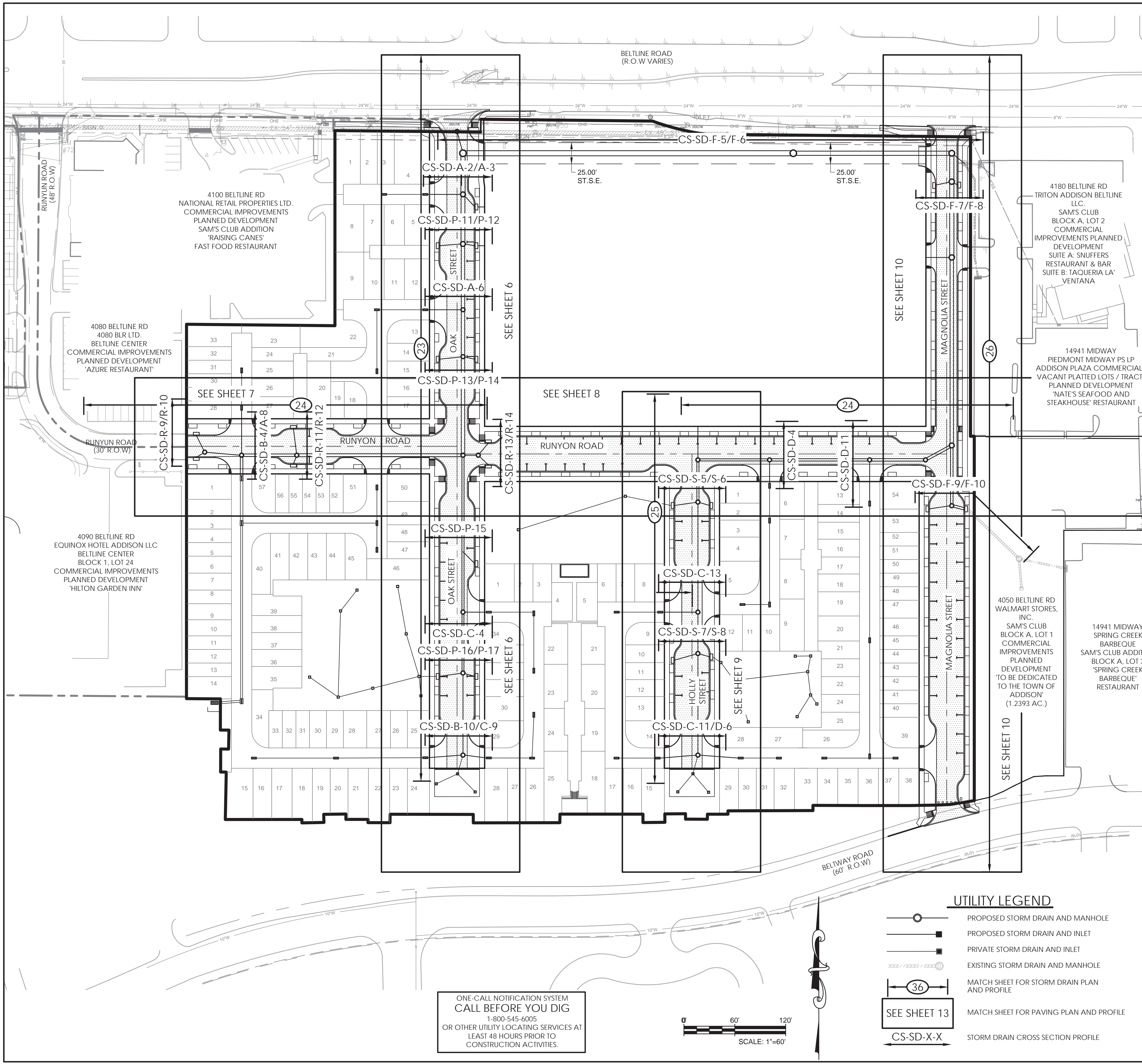
● MONUMENT FOUND	◆ SQUARE METAL LID	— W — WATER LINE	— FM — FORCE MAIN	TS ● TRAFFIC POLE
○ MONUMENT SET	○ FUEL TANK LID	○ W WATER MANHOLE	○ CO CLEAN OUT	● TRAFFIC SIGNAL
○ P.X. NAIL FOUND	○ FLAG POLE	○ WATER VALVE	○ SD STORM DRAIN LINE	○ TRAFFIC MANHOLE
○ P.X. NAIL SET	○ UNKNOWN MANHOLE	○ WATER METER	○ STORM DRAIN MANHOLE	○ TRAFFIC SIGNAL BOX
⊗ MAG NAIL FOUND	○ FROZEN MANHOLE	○ HYDRANT	○ SI STORM INLET	○ TRM TRAFFIC VAULT
⊗ MAG NAIL SET	○ UNKNOWN VAULT	○ BACK FLOW PREVENTOR	○ CATCH BASIN	○ STOP SIGN
⊗ FOUND X MARK	○ UNKNOWN VAULT METAL	○ FIRE DEPARTMENT CONNECTION	○ CURB INLET	○ SIGN
⊗ SET X MARK	○ UNKNOWN VALVE	○ FIRE PROTECTION VALVE	○ PAY PHONE	○ GUARD RAIL
▲ R.R. SPIKE FOUND	○ MAIL BOX	○ HOSE BIBB	○ TELEPHONE BOX	○ FENCE
▲ R.R. SPIKE SET	○ BOLLARD	○ CONTROL VALVE	○ TELEPHONE PEDESTAL	
⊕ BENCHMARK	○ BORE HOLE	○ IRRIGATION CONTROL VALVE	○ TELEPHONE MANHOLE	
⊕ CONC. R/W MARKER	○ MONITORING WELL	○ RECLAIMED WATER VALVE	○ TELEPHONE POLE	
(R) RECORD DATA	○ POWERPOLE	○ GUY WIRE	○ T TELEPHONE LINE	
(M) MEASURED DATA	○ LIGHT POLE	○ GAS VALVE	○ O/HT OVERHEAD TELEPHONE	
(C) CALCULATED DATA	○ GROUND LIGHT	○ GAS METER	○ U UNDERGROUND TELEPHONE MARKER	
R/W RIGHT OF WAY	○ STREET LIGHT POLE	○ GAS MARKER	○ C CABLE TELEVISION	
BSL BACK SET LINE	○ ELEC. TRANSFORMER	○ GAS PEDESTAL	○ FO FIBER OPTIC CABLE	
RCP REINFORCED CONC PIPE	○ AIR CONDITIONER	○ GAS MANHOLE	○ O/H OVERHEAD CABLE	
CMP CORRUGATED METAL PIPE	○ BURIED ELECTRIC	○ GAS LINE	○ CB CABLE BOX	
PVC PLASTIC PIPE	○ OVERHEAD ELECTRIC	○ PROPANE TANK	○ CP CABLE PEDESTAL	
MTL METAL	○ ELECTRIC MANHOLE	○ UNDERGROUND OIL MARKER	○ UG UNDERGROUND CABLE MARKER	
AGL ABOVE GROUND LEVEL	○ ELECTRIC METER	○ SAN. SEWER LINE	○ TCM TELECOMMUNICATIONS MANHOLE	
F.P. FOOTPRINT	○ ELECTRIC BOX	○ SEWER MANHOLE	○ TCD TELECOMMUNICATIONS PEDESTAL	
○ DECIDUOUS TREE	○ GENERATOR	○ GREASE TRAP	○ TS TRAFFIC POLE	
L/S LANDSCAPING	○ ELECTRICAL VAULT			
● CONIFER TREE	○ ELECTRICAL PEDESTAL			



NO		REVISION	BY		DATE
TOWN OF ADDISON DALLAS COUNTY, TEXAS					
IMPROVEMENT PLANS ADDISON GROVE					
GENERAL CONSTRUCTION NOTES, LEGEND & ABBREVIATIONS					
SAWYER		ENGINEERING, LLC TBPE: F-9171	1520 OLIVER STREET HOUSTON, TEXAS 77007 (832) 553-5948		
PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
	CDP	JDS	MAY 2017		3

GRADING & PAVING GENERAL NOTES:

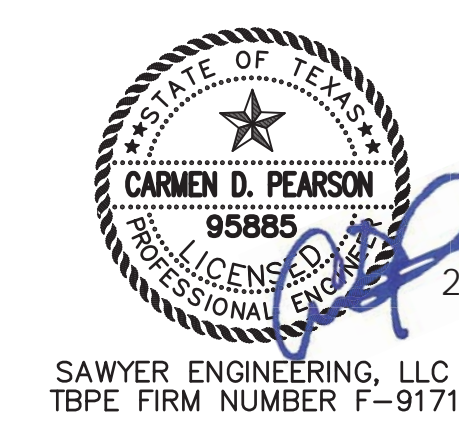
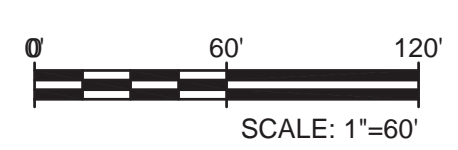
- REFER TO SHEET 3 "GENERAL CONSTRUCTION NOTES, LEGEND AND ABBREVIATIONS" FOR THE GENERAL CONSTRUCTION NOTES FOR THIS PROJECT.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH STANDARD SPECIFICATIONS AS PUBLISHED BY NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS, AND ANY AND ALL AMENDMENTS BY THE TOWN OF ADDISON, AS WELL AS STANDARD CONSTRUCTION DETAILS OF THE TOWN OF ADDISON.
- PRIOR TO COMMENCING CONSTRUCTION, THE TOWN OF ADDISON, THE CONSULTING ENGINEERS, THE SUCCESSFUL CONTRACTOR, UTILITY COMPANIES, AND ANY OTHER AFFECTED PARTIES, SHALL CONVENE FOR A PRE-CONSTRUCTION CONFERENCE AT LEAST 48 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- THE CONTRACTOR SHALL OBTAIN A RIGHT-OF-WAY PERMIT FROM THE TOWN OF ADDISON PRIOR TO WORKING WITHIN THE PUBLIC RIGHT-OF-WAY.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ANY PUBLIC UTILITY COMPANIES FOR LOCATION OF EXISTING FACILITIES IN OR NEAR THE WORK AREAS. THESE INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:
TOWN OF ADDISON (WATER, SEWER, SIGNALS) ATMOS ENERGY (GAS)
ONCOR ELECTRIC DELIVERY VERIZON/MCI
AT&T (SOUTHWESTERN BELL) TIME-WARNER CABLE
- THE CONTRACTOR SHALL SUPPLY SUBMITTALS TO THE ENGINEER (SIX SETS EACH), FOR APPROVAL OF ALL MATERIALS TO BE ADDED TO THE PUBLIC INFRASTRUCTURE, PRIOR TO INCORPORATING MATERIALS INTO THE JOB.
- THE CONTRACTOR SHALL EXECUTE AN "EXCAVATION PERFORMANCE AND MAINTENANCE BOND" PRIOR TO COMMENCING EXCAVATION WORK.
- THE CONTRACTOR SHALL PROVIDE A MAINTENANCE BOND FOR PUBLIC INFRASTRUCTURE WORK IN THE FOLLOWING AMOUNTS:
100% FOR VALUATIONS LESS THAN OR EQUAL TO \$5,000.
\$5,000 FOR VALUATION GREATER THAN \$5,000 AND LESS THAN \$50,000.
10% FOR VALUATIONS GREATER THAN \$50,000.
- THE CONTRACTOR SHALL FULLY COMPLY WITH, AND SUPPLEMENT AS NECESSARY, THE CONDITIONS OF THE STORM WATER POLLUTION PREVENTION PLAN WHILE CONDUCTING HIS ACTIVITIES ON THIS PROJECT.
- THE TOWN OF ADDISON INFRASTRUCTURE DEPARTMENT WILL APPROVE THE TRAFFIC CONTROL PLAN AND WORKING HOURS. CONTACT THE CITY ENGINEER AT (972) 450-2849 OR THE INFRASTRUCTURE DEPARTMENT INSPECTOR AT (972) 450-2847. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO IMPLEMENT, AND SUPPLEMENT AS NECESSARY, THE TRAFFIC CONTROL MEASURES ON THIS PROJECT, INCLUDING PROVIDING ADEQUATE FLAGMEN, SIGNAGE, STRIPING AND WARNING DEVICES, ETC., DURING CONSTRUCTION IN ACCORDANCE WITH THE TEXAS "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD). THE CONTRACTOR SHALL MAINTAIN AT LEAST ONE LANE OF TRAFFIC IN EACH DIRECTION DURING WORKING HOURS OR PROVIDE AN ALL-WEATHER DETOUR AROUND THE CONSTRUCTION SITE. INCLUDING PUBLIC NOTIFICATION AND SIGNING.
- TEMPORARY OR PERMANENT BARRICADES SHALL REMAIN AT ALL POINTS OF INGRESS OR EGRESS TO PREVENT PUBLIC USE UNTIL THE WORK RECEIVES FINAL ACCEPTANCE.
- THE CONTRACTOR WILL PROVIDE A GEOTECHNICAL LABORATORY TO PERFORM APPROPRIATE TESTING DURING CONSTRUCTION ACTIVITIES. ALL EARTHWORK OPERATIONS SHALL BE OBSERVED AND TESTED ON A CONTINUING BASIS BY THE GEOTECHNICAL ENGINEER FOR CONFORMANCE WITH THE REQUIREMENTS SET FORTH IN THE GEOTECHNICAL STUDY WHICH IS MADE A PART OF THESE CONSTRUCTION DOCUMENTS. ANY TEST THAT FAILS TO MEET CITY REQUIREMENTS SHALL BE RETESTED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ADEQUATE DRAINAGE AT ALL TIMES DURING CONSTRUCTION. INCLUDING PROVIDING ALL TEMPORARY STRUCTURES OR IMPROVEMENTS AS NECESSARY FOR THE SAFETY OF THE PUBLIC.
- ANY ADJACENT PROPERTIES AFFECTED BY THE CONTRACTOR'S CONSTRUCTION OPERATIONS SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITIONS, OR BETTER.
- AREAS TO BE PAVED AND ALL AREAS THAT ARE TO RECEIVE FILL MATERIAL SHALL BE STRIPPED OF VEGETATION, TREES, ROOTS, STUMPS, DEBRIS AND OTHER ORGANIC MATERIAL. THE ACTUAL STRIPPING DEPTH SHALL BE BASED ON FIELD OPERATIONS. STRIPPED TOPSOIL SHALL BE STOCKPILED IN A LOCATION ON-SITE APPROVED BY THE ENGINEER. ALL TREES, INCLUDING STUMPS AND ROOT SYSTEMS, VEGETATION, DEBRIS AND OTHER OBJECTIONABLE MATERIALS SHALL BE REMOVED AND DISPOSED OFF-SITE. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS GOVERNING SPILLAGE OF DEBRIS WHILE TRANSPORTING TO A DISPOSAL SITE. ALL COST ASSOCIATED WITH DISPOSAL OF MATERIAL SHALL BE INCLUDED IN THE CONTRACT AMOUNT.
- BURNING SHALL NOT BE PERMITTED ON THE PROJECT SITE UNLESS APPROVED IN WRITING BY THE GOVERNING AUTHORITIES.
- UPON COMPLETION OF STRIPPING OPERATIONS, AND PRIOR TO PLACEMENT OF ANY FILL MATERIALS THAT WOULD ADVERSELY AFFECT THE PLACEMENT, THE SUBGRADE SHOULD BE FIRM AND ABLE TO SUPPORT CONSTRUCTION EQUIPMENT WITHOUT DISPLACEMENT. SOFT OR YIELDING SUBGRADE SHOULD BE CORRECTED AND MADE STABLE BEFORE CONSTRUCTION PROCEEDS. PROOF ROLLING SHOULD BE PERFORMED USING HEAVY PNEUMATIC TIRE ROLLER, LOADED DUMP TRUCK, OR SIMILAR PIECE OF EQUIPMENT WEIGHING 25 TONS. THE PROOF ROLLING OPERATIONS SHOULD BE OBSERVED BY THE GEOTECHNICAL ENGINEER OR HIS REPRESENTATIVE.
- WHEN CLAY OR OTHER UNSTABLE MATERIAL IS PRESENT IN AREAS OF PROPOSED PAVED AREAS, THE GEOTECHNICAL ENGINEER SHALL OBSERVE THE STABILITY OF ANY EXISTING CLAY OR WEATHERED MATERIAL THAT IS PRESENT IN THE SUBBASE, AND SHALL DETERMINE IF WHETHER ADDITIONAL EXCAVATION OF THESE MATERIALS WILL BE REQUIRED. IF THIS MATERIAL IS DEEMED SUITABLE FOR SUBBASE MATERIAL, THE SUBGRADE SHALL BE SCARIFIED TO A DEPTH OF SIX (6) INCHES, ITS MOISTURE CONTENT ADJUSTED AS NECESSARY AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER, AND THEN RECOMPACTED TO BETWEEN NINETY-FIVE (95) PERCENT TO ONE HUNDRED (100) PERCENT OF THE OPTIMUM DENSITY DETERMINED BY THE STANDARD PROCTOR TEST, ASTM C-698 PRIOR TO PLACEMENT OF FILL MATERIALS.
- THE PROPOSED CONTOURS INDICATED ON THE GRADING PLAN ARE FINISHED GRADES AND ARE SHOWN AT ONE-FOOT INTERVALS. SPOT ELEVATIONS SHOWN IN PAVED AREAS ARE TOP OF PAVEMENT, UNLESS NOTED OTHERWISE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MASS GRADING OF THE SITE TO THE FOLLOWING ELEVATIONS:
10' BELOW FINISHED GRADE FOR ALL STREET PAVEMENT AREAS.
4' BELOW FINISHED GRADE FOR ALL SIDEWALK PAVEMENT AREAS
6' BELOW FINISHED GRADE FOR ALL LANDSCAPED AREAS
- A TOLERANCE OF +/- 0.10 FEET OF THE FINISHED GRADE WILL BE ALLOWED FOR ALL AREAS UNDER PROPOSED PAVEMENT. ALL LANDSCAPED AREAS ARE TO BE GRADED WITHIN +/- 0.30 FEET OF THE FINISHED GRADE.
- ALL LANDSCAPE AREAS AND OTHER DISTURBED AREAS WITHIN THE LIMITS OF THE PROPERTY NOT DESIGNATED TO BE PAVED SHALL RECEIVE SIX (6) INCHES OF TOPSOIL. REFER TO THE EROSION AND SEDIMENT CONTROL PLANS AND/OR LANDSCAPE PLANS FOR LIMITS OF TOPSOIL PLACEMENT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALCULATING THE EARTHWORK QUANTITIES BASED ON THE EXISTING AND PROPOSED CONTOURS AND SPOT ELEVATIONS SHOWN ON THESE PLANS. ALL EARTHWORK SHALL BE CONSIDERED UNCLASSIFIED EXCAVATION AND BID ON A LUMP SUM BASIS, UNLESS NOTED OTHERWISE.
- THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS FOR THE SUPPORT AND PROTECTION OF ALL UTILITY POLES, FENCE, TREES, SHRUBS, UTILITY SERVICES, BUILDING FOUNDATIONS AND ALL OTHER UTILITIES AND STRUCTURES BOTH ABOVE AND BELOW THE GROUND. THE COST OF WHICH SHALL BE INCLUDED IN THE CONTRACT AMOUNT.
- THE CONTRACTOR SHALL VERIFY THE ELEVATION, CONFIGURATION, AND ANGLICULATION OF EXISTING PAVEMENT PRIOR TO CONSTRUCTION OF THE MATERIALS. NO EXPOSED REBAR DUE TO FULL DEPTH SAWING REQUIREMENTS. USE EXPANSION JOINT OR STREET HEADER.
- NO PERSON SHALL OPEN, TURN OFF, INTERFERE WITH, OR TAP ANY WATER MAIN BELONGING TO THE TOWN OF ADDISON. CONTACT TOWN INFRASTRUCTURE DEPARTMENT FOR ALL VALVE OPERATIONS.
- ALL EXISTING AND PROPOSED IMPROVEMENTS (MANHOLE RIMS, CLEAN-OUTS, FIRE HYDRANTS, VALVE BOXES, WATER METER AND VALVES, ETC.) SHALL BE ADJUSTED TO FINAL FINISHED GRADE BY THE CONTRACTOR AT THE TIME OF PAVING AND/OR PRIOR TO FINAL ACCEPTANCE.
- PREPARATION OF SUBGRADE UNDER PAVED AREAS SHALL BE PERFORMED IN ACCORDANCE WITH THE TOWN OF ADDISON SPECIFICATIONS OR THE GEOTECHNICAL REPORT. THE MORE RESTRICTIVE REQUIREMENTS SHALL APPLY. PREPARATION OF THE SUBGRADE FOR PAVING WITHIN RIGHT-OF-WAY, STREET USE EASEMENTS AND/OR FIRE LANES SHALL NOT BE INITIATED UNTIL ALL TESTING AND UNDERGROUND UTILITIES HAS BEEN COMPLETED AND VERIFIED TO MEET THE SPECIFICATIONS AND AUTHORIZATION TO PROCEED HAS BEEN RECEIVED FROM THE INSPECTOR.
- ALL FILL UNDER PAVEMENT AREAS SHALL BE COMPACTED TO A DENSITY OF AT LEAST NINETY-FIVE (95) PERCENT STANDARD PROCTOR AS PER ASTM D698 AT OR ABOVE OPTIMUM MOISTURE CONTENT (+3%). LETTS SHALL BE AS SPECIFIED IN THE GEOTECHNICAL REPORT AND AS APPROVED BY THE TOWN OF ADDISON. ALL FILL MATERIAL SHALL BE TESTED AS INSTALLED AND CERTIFIED BY AN APPROVED SOILS LABORATORY.
- THE SUBGRADE SHALL BE PROOF-ROLLED WITH HEAVY PNEUMATIC EQUIPMENT. ANY SOFT OR PUMPING AREAS SHALL BE EXCAVATED TO FIRM SUBGRADE AND BACKFILLED AND RE-COMPACTED IN CONFORMANCE WITH THE GEOTECHNICAL REPORT. PAVEMENT SUBGRADE SHOULD NOT BE ALLOWED TO RETAIN WATER. WET MATERIAL SHALL BE REMOVED TO DRY, SOUND MATERIAL AND APPROPRIATE DENSITY ACHIEVED PRIOR TO PAVING OPERATIONS.
- CONCRETE SHOULD BE PORTLAND CEMENT CONCRETE. CONFORMING TO THE REQUIREMENTS OF TxDOT ITEM 421, PORTLAND CEMENT CONCRETE CLASS "P", 4200 PSI.
- HYDRATED LIME (IF REQUIRED) SHALL MEET REQUIREMENTS OF TxDOT ITEM 260, LIME TREATMENT AS SUBGRADE. LIME SHALL BE APPLIED AT THE RATE AND THICKNESS AS RECOMMENDED IN THE GEOTECHNICAL REPORT, THOROUGHLY MIXED AND BLENDED WITH THE SUBGRADE AND UNIFORMLY COMPACTED TO A MINIMUM OF 95-100 PERCENT OF STANDARD PROCTOR (ASTM D698) DETERMINED BY THAT TEST. LIME STABILIZATION SHALL EXTEND ONE (1) FOOT OUTSIDE THE LIMITS OF THE PAVED AREA. IT SHOULD BE PROTECTED AND MAINTAINED IN A MOIST CONDITION UNTIL THE PAVEMENT IS PLACED.
- THE CONTRACTOR SHALL SCHEDULE AND COORDINATE HIS WORK WITH TRENCHING OPERATIONS FOR OTHER UTILITIES INCLUDING GAS, TELEPHONE, AND ELECTRIC SERVICES, LANDSCAPE IRRIGATION CONDUITS, LIGHTING CONDUIT, STREETSCAPE IMPROVEMENTS, ETC. AND SHALL PROVIDE BLOCKOUTS AND/OR FINAL ADJUSTMENT TO FINISHED GRADE FOR ALL IMPROVEMENTS, EXISTING AND PROPOSED, WITHIN THE LIMITS OF THE PAVING WORK.
- ALL CURB SHOWN IS TO BE SIX (6) INCHES HIGH.
- EXPANSION JOINT MATERIAL SHALL EXTEND COMPLETELY THROUGH THE CURB.
- ALL REINFORCING BARS SHALL BE GRADE 40 KSI DEFORMED REINFORCING STEEL. SIZE AND SPACING SHALL BE IN ACCORDANCE WITH THE DETAILS. WHERE BARS ARE SPLICED, A 30" OR 30 DIAMETER LAP SHALL BE USED.
- ALL REINFORCING STEEL AND DOWEL BARS IN PAVEMENT SHALL BE SUPPORTED AND MAINTAINED AT THE CORRECT CLEARANCES BY THE USE OF BAR CHAIRS OR OTHER APPROVED SUPPORTS.
- THE CONTRACTOR SHALL PROCEED WITH PAVING NO MORE THAN SEVENTY-TWO (72) HOURS AFTER DENSITY/MOISTURE TESTS HAVE BEEN TAKEN AND PASSED BY THE TESTING FIRM. COPIES OF THE TEST RESULTS SHALL BE FURNISHED TO THE CITY. IN THE EVENT PAVING OPERATIONS HAVE NOT BEEN COMMENCED WITHIN THE SEVENTY-TWO (72) HOUR LIMIT, A RETEST SHALL BE REQUIRED AT THE CONTRACTOR'S EXPENSE.
- CONCRETE SHALL NOT BE PLACED WHEN THE TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT AND FALLING, BUT MAY BE PLACED WHEN THE TEMPERATURE IS ABOVE 35 DEGREES AND RISING. THE TEMPERATURE READING SHALL BE TAKEN IN THE SHADE AND AWAY FROM ARTIFICIAL HEAT.
- CONSTRUCTION OF SIDEWALKS, WHEELCHAIR RAMP AND ACCESSIBLE ROUTES SHALL BE IN ACCORDANCE WITH THE TEXAS ACCESSIBILITY STANDARDS (TAS) AND/OR THE AMERICAN DISABILITY ACT (ADA) OR PROWAG, JULY 26, 2011. ALL CONCRETE FOR HANDICAP RAMPS SHALL HAVE TRUNCATED DOMES.
- PAVEMENT MARKINGS SHALL BE PROVIDED IN ACCORDANCE WITH THE TEXAS "UNIFORM TRAFFIC MANUAL FOR PAVEMENT MARKINGS". FIRE LANES SHALL BE STRIPPED IN ACCORDANCE WITH THE TOWN OF ADDISON'S REQUIREMENTS. ALL HANDICAP SYMBOLS, SIGNAGE AND PAVEMENT MARKINGS SHALL COMPLY WITH TAS AND/OR ADA STANDARDS.
- MEMBRANE CURING TYPE 2, WHITE PIGMENTED, SHALL BE USED FOR CURING ALL CONCRETE SURFACES IMMEDIATELY AFTER FINISHING OF SURFACES AND SHALL BE IN ACCORDANCE WITH THE TxDOT ITEM #526.
- THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR REPAIRS TO ALL EXISTING FACILITIES DAMAGED BY HIS ACTIVITIES.
- THE CONTRACTOR SHALL PROVIDE PAVEMENT JOINTING IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:
A. SAW CUTTING SHALL BE DONE WITHIN EIGHT (8) HOURS OF POUR OR AS SOON AS CONCRETE CAN SUPPORT WEIGHT. LOCATE A NEAT CUT WHICH IS TRUE IN ALIGNMENT.
B. CONTRACTOR SHALL MARK JOINT LOCATIONS AT THE CENTERLINE OF DOWEL LENGTH DURING HIS PAVING OPERATIONS.
C. ALL JOINTS ARE TO CONTINUE THROUGH THE CURB.
D. RADIAL JOINTS SHALL BE NO SHORTER THAN EIGHTEEN (18) INCHES.
E. ALL CONSTRUCTION JOINTS SHALL BE SAWN, CLEANED OF DEBRIS, BROWN DRY AND IMMEDIATELY SEALED AFTER CONCRETE HAS FULLY CURED.
F. ODD SHAPED PANELS SHALL BE REINFORCED WITH #3 BARS AT LEAST 18" EACH WAY. AN ODD SHAPED PANEL IS CONSIDERED TO BE ONE IN WHICH THE SLAB TAPERS TO A SHARP ANGLE WHEN THE LENGTH TO WIDTH RATIO EXCEEDS 3 TO 1 OR WHEN A SLAB IS NEITHER SQUARE NOR RECTANGULAR.
G. THE CONTRACTOR SHALL SUBMIT HIS DESIRED JOINT LAYOUT PLAN TO THE ENGINEER FOR APPROVAL PRIOR TO BEGINNING WORK.
- THE CONTRACTOR SHALL PROVIDE VERIFICATION OF COMPLETION AND COMPLIANCE OF ANY AND ALL REQUIRED TESTS TO THE TOWN OF ADDISON.
- THE CONTRACTOR SHALL CALL (972) 450-2847 TO REQUEST A FINAL WALK-THROUGH INSPECTION OF THE PUBLIC INFRASTRUCTURE WORK.



UTILITY LEGEND

- PROPOSED STORM DRAIN AND MANHOLE
- PROPOSED STORM DRAIN AND INLET
- PRIVATE STORM DRAIN AND INLET
- EXISTING STORM DRAIN AND MANHOLE
- MATCH SHEET FOR STORM DRAIN PLAN AND PROFILE
- MATCH SHEET FOR PAVING PLAN AND PROFILE
- CS-SD-X-X STORM DRAIN CROSS SECTION PROFILE

ONE-CALL NOTIFICATION SYSTEM
CALL BEFORE YOU DIG
1-800-545-6005
OR OTHER UTILITY LOCATING SERVICES AT
LEAST 48 HOURS PRIOR TO
CONSTRUCTION ACTIVITIES.



NO.	REVISION	BY	DATE

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

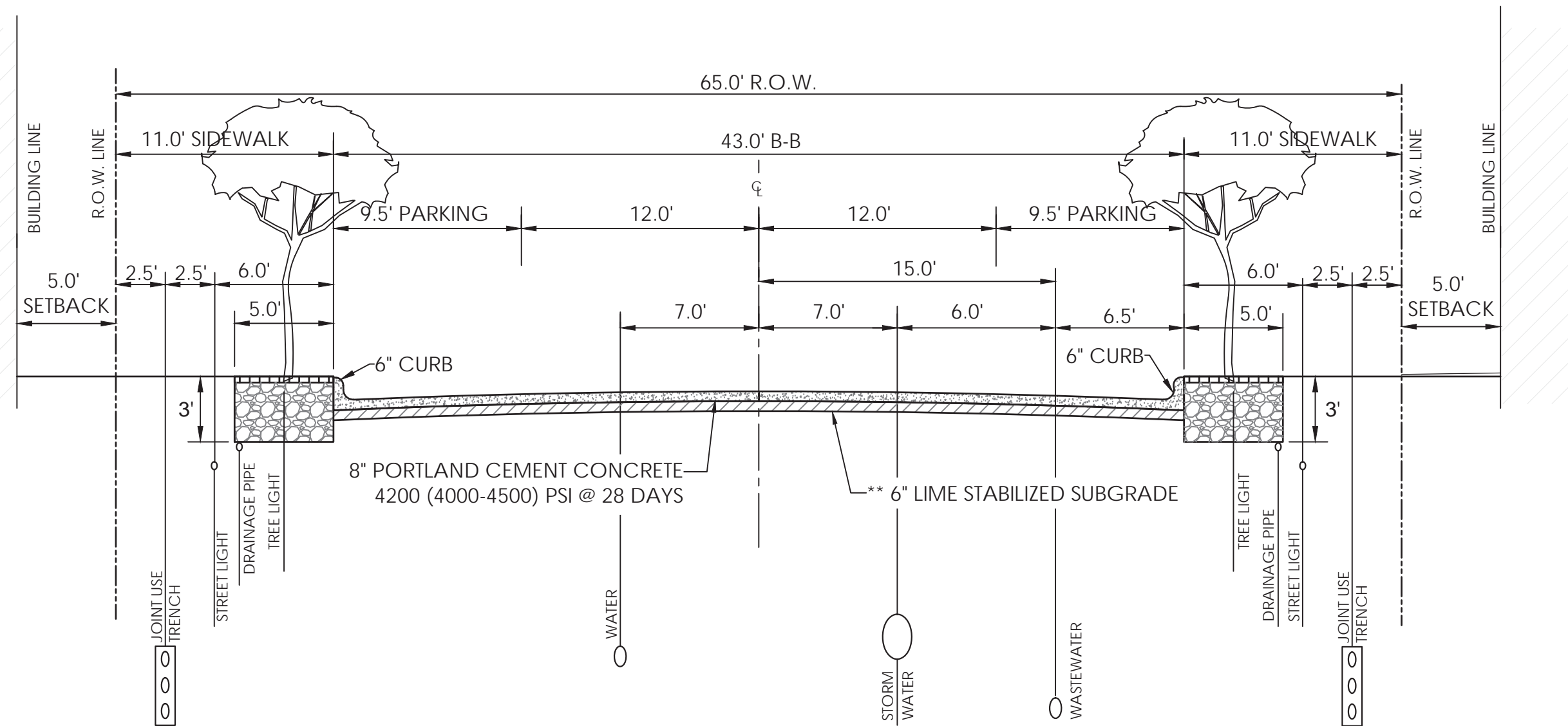
IMPROVEMENT PLANS
ADDISON GROVE

OVERALL PAVING & DRAINAGE PLAN
& NOTES

SAWYER ENGINEERING, LLC
TBPE FIRM NUMBER F-9171

1520 OLIVER STREET
HOUSTON, TEXAS 77007
(832) 553-5948

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
CDP	JDS	MAY 2017			4



PROPOSED PUBLIC STREET

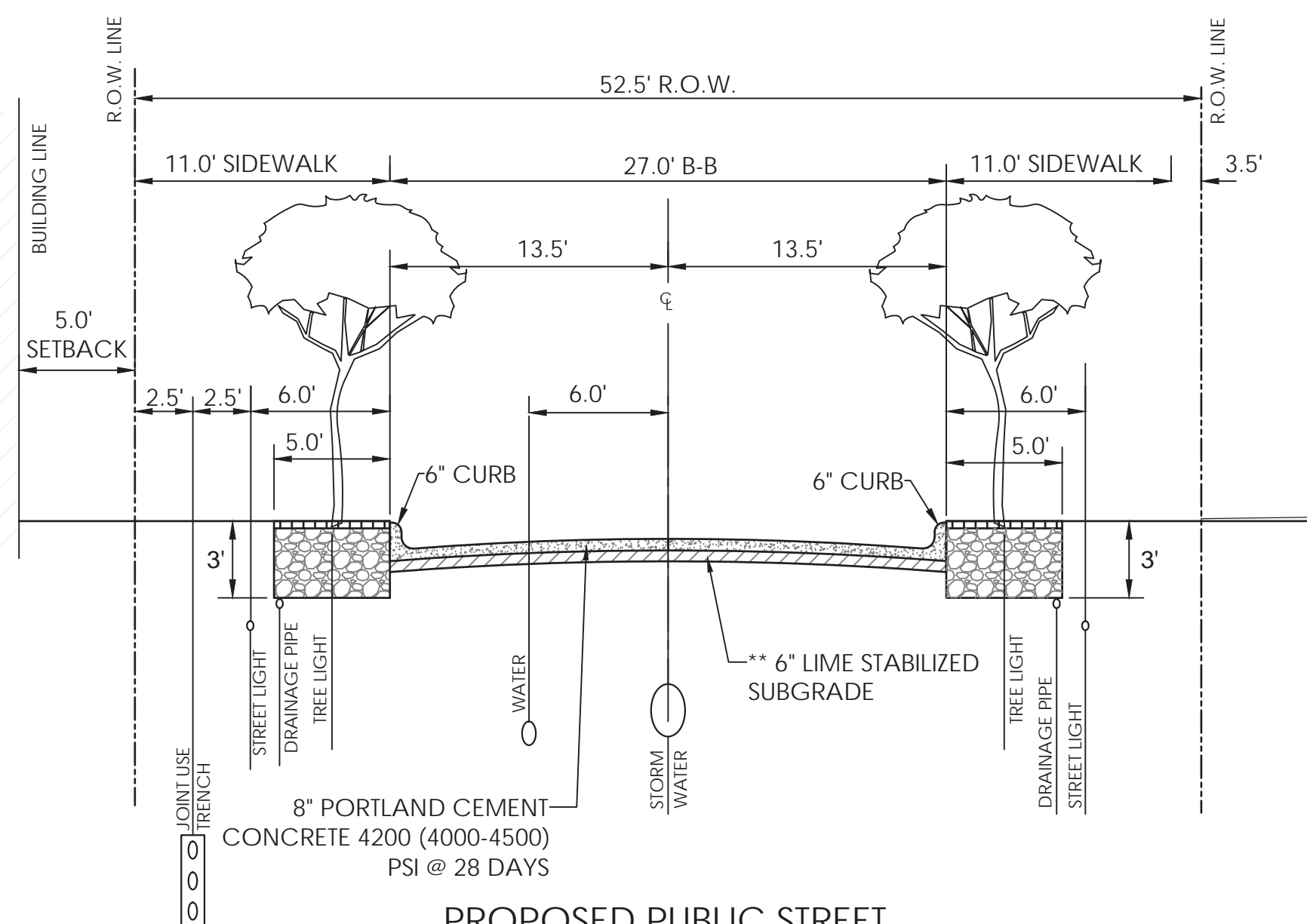
OAK STREET: STA. 0+80 TO STA. 8+50
 RUNYON STREET (WEST): STA. 1+00 TO STA. 3+85
 RUNYON STREET (EAST): STA. 1+33 TO STA. 6+44
 HOLLY STREET: STA. 1+33 TO STA. 4+70
 MAGNOLIA STREET: STA. 4+50 TO STA. 9+06

WATER VALVES SHALL NOT BE LOCATED WITHIN PARKING SPACES
 VALVES TO BE ACCESSIBLE AT ALL TIMES

** SUBGRADE SHALL BE SCARIFIED TO A DEPTH OF 6", LIME STABILIZED AND RECOMPACTED TO 95% OF MAX. DENSITY AS DETERMINED BY A.S.T.M. D-698. SUBGRADE SHALL BE STABILIZED WITH 8%, APPROXIMATELY, BY WEIGHT OF HYDRATED LIME (MIN. 30 LB/SQ YD).

NOTES:

1. CURB DETAILS, REBAR SPACING, AND STREET DESIGN BY TOWN OF ADDISON STANDARD DETAILS. SEE SHEETS 14 AND 15.
2. STREETScape DETAILS PER LANDSCAPE ARCHITECTS PLANS.
3. STRUCTURAL SOILS DETAIL BY OTHERS.



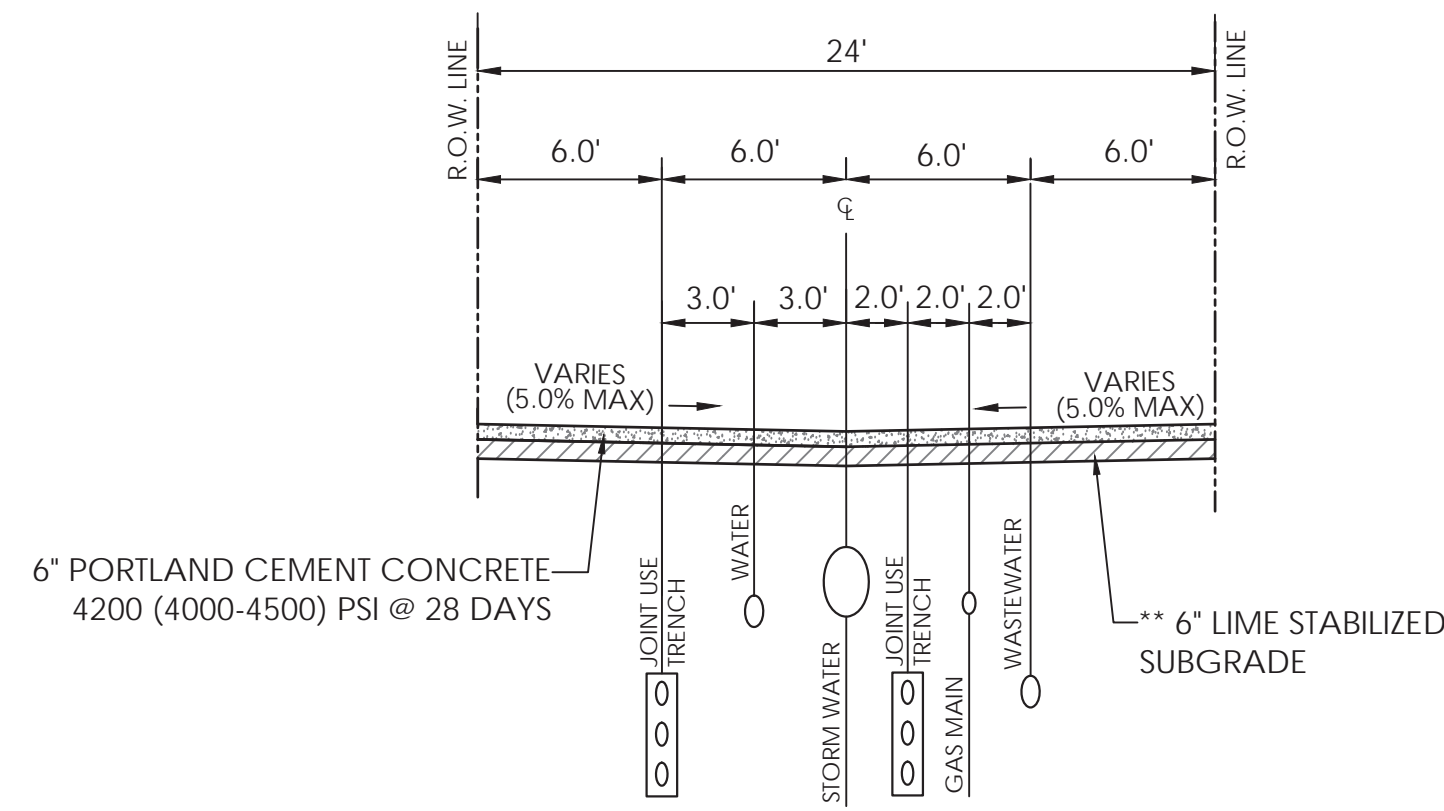
PROPOSED PUBLIC STREET

MAGNOLIA STREET STA. 1+00 TO STA. 4+50
 WATER VALVES SHALL NOT BE LOCATED WITHIN PARKING SPACES
 VALVES TO BE ACCESSIBLE AT ALL TIMES

** SUBGRADE SHALL BE SCARIFIED TO A DEPTH OF 6", LIME STABILIZED AND RECOMPACTED TO 95% OF MAX. DENSITY AS DETERMINED BY A.S.T.M. D-698. SUBGRADE SHALL BE STABILIZED WITH 8%, APPROXIMATELY, BY WEIGHT OF HYDRATED LIME (MIN. 30 LB/SQ YD).

NOTES:

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2. STREETScape DETAILS PER LANDSCAPE ARCHITECTS PLANS.
3. STRUCTURAL SOILS DETAIL BY OTHERS.



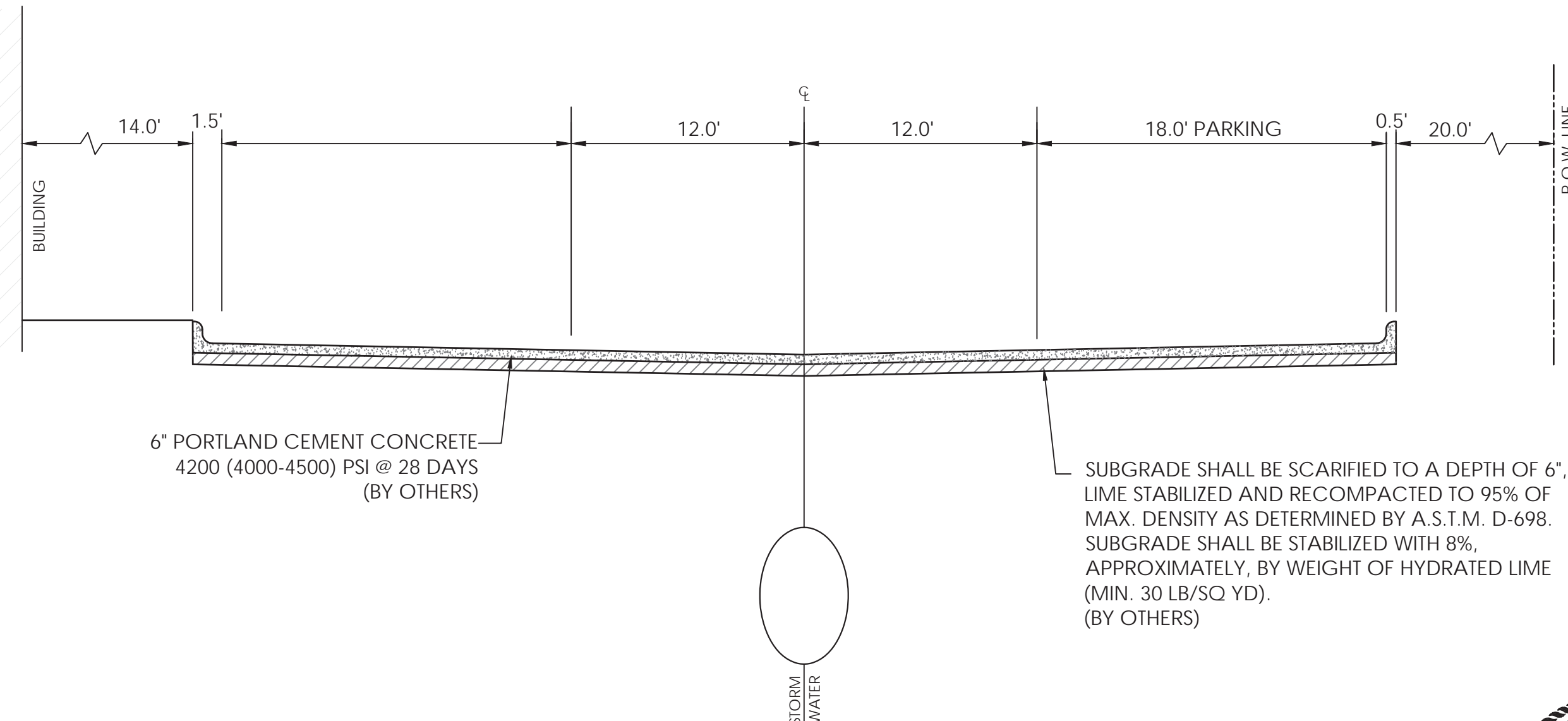
PROPOSED PRIVATE DRIVE

24.00' FIRE LANE ACCESS
 AND UTILITY EASEMENT

** SUBGRADE SHALL BE SCARIFIED TO A DEPTH OF 6", LIME STABILIZED AND RECOMPACTED TO 95% OF MAX. DENSITY AS DETERMINED BY A.S.T.M. D-698. SUBGRADE SHALL BE STABILIZED WITH 8%, APPROXIMATELY, BY WEIGHT OF HYDRATED LIME (MIN. 30 LB/SQ YD).

NOTES:

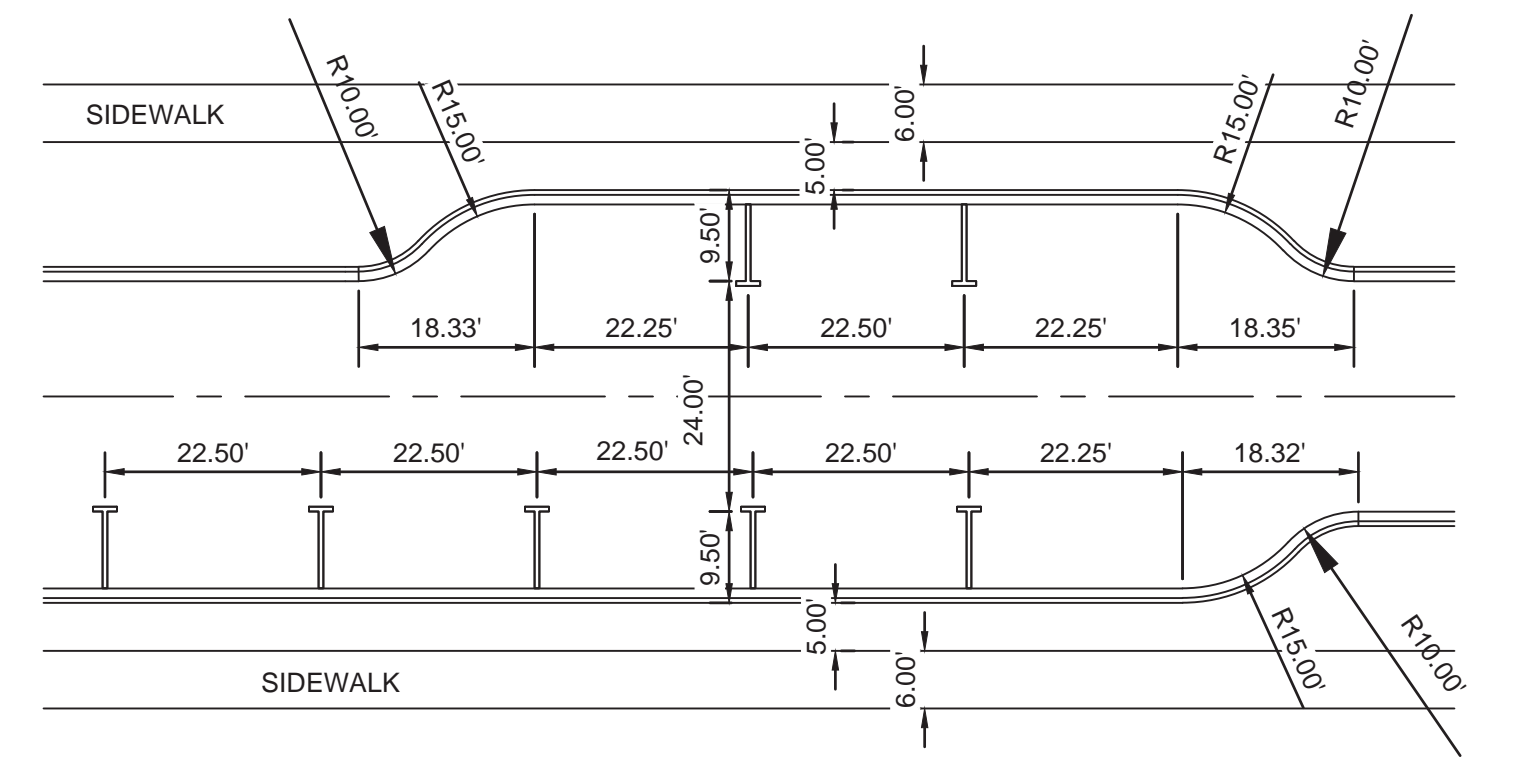
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2. STREETScape DETAILS PER LANDSCAPE ARCHITECTS PLANS.
3. STRUCTURAL SOILS DETAIL BY OTHERS.



FUTURE PRIVATE COMMERCIAL STREET (SD-D-8)

NOTES:

1. CURB DETAILS, REBAR SPACING, AND STREET DESIGN BY TOWN OF ADDISON STANDARD DETAILS. SEE SHEETS 14 AND 15.
2. STREETScape DETAILS PER LANDSCAPE ARCHITECTS PLANS.
3. STRUCTURAL SOILS DETAIL BY OTHERS.



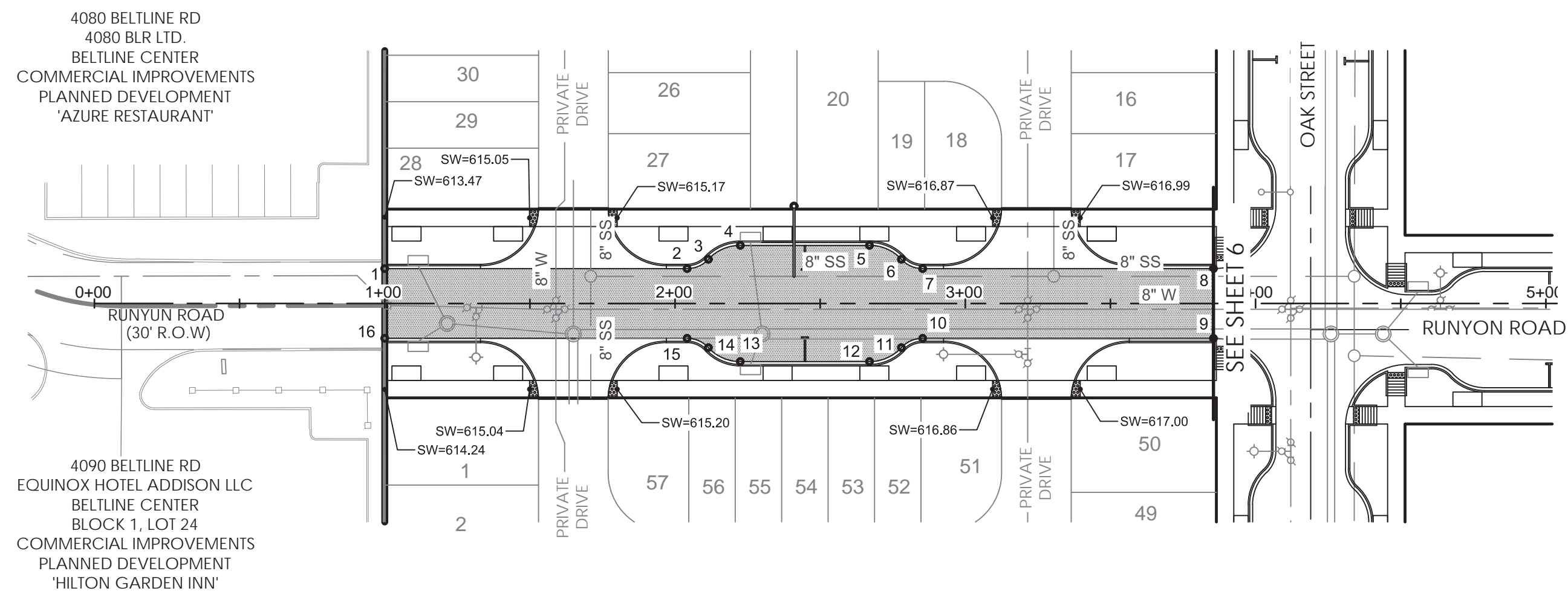
ON-STREET PARKING DETAIL (TYPICAL)



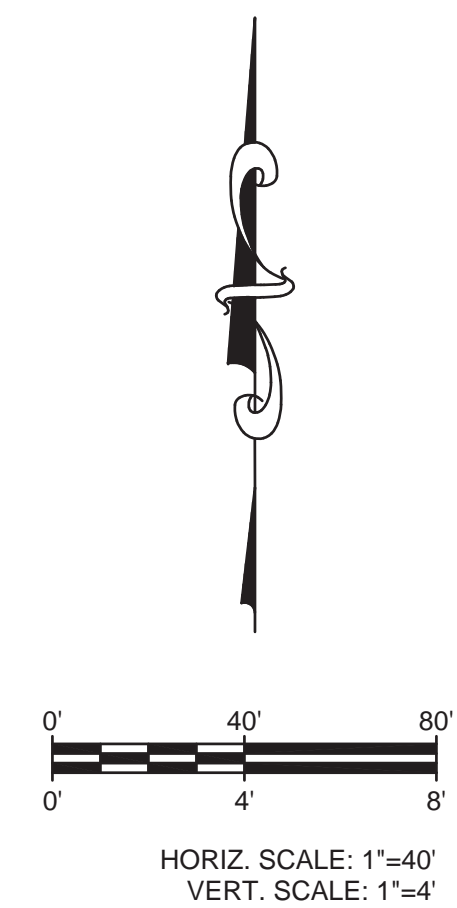
SAWYER ENGINEERING, LLC
 TBPE FIRM NUMBER F-9171

ONE-CALL NOTIFICATION SYSTEM
CALL BEFORE YOU DIG
 1-800-545-6005
 OR OTHER UTILITY LOCATING SERVICES AT
 LEAST 48 HOURS PRIOR TO
 CONSTRUCTION ACTIVITIES.

NO.	REVISION	BY	DATE
 TOWN OF ADDISON DALLAS COUNTY, TEXAS			
IMPROVEMENT PLANS ADDISON GROVE			
STREET CROSS SECTIONS			
SAWYER ENGINEERING, LLC TBPE FIRM NUMBER F-9171		1520 OLIVER STREET HOUSTON, TEXAS 77007 (832) 553-5948	
PROJECT	DESIGN	DRAWN	DATE
	CDP	JDS	MAY 2017
FILE	SHEET		
	5		

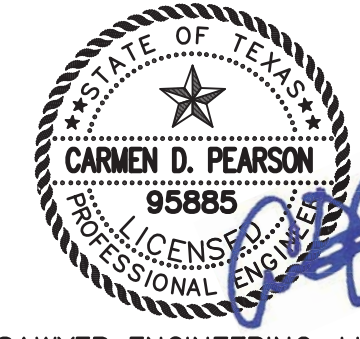
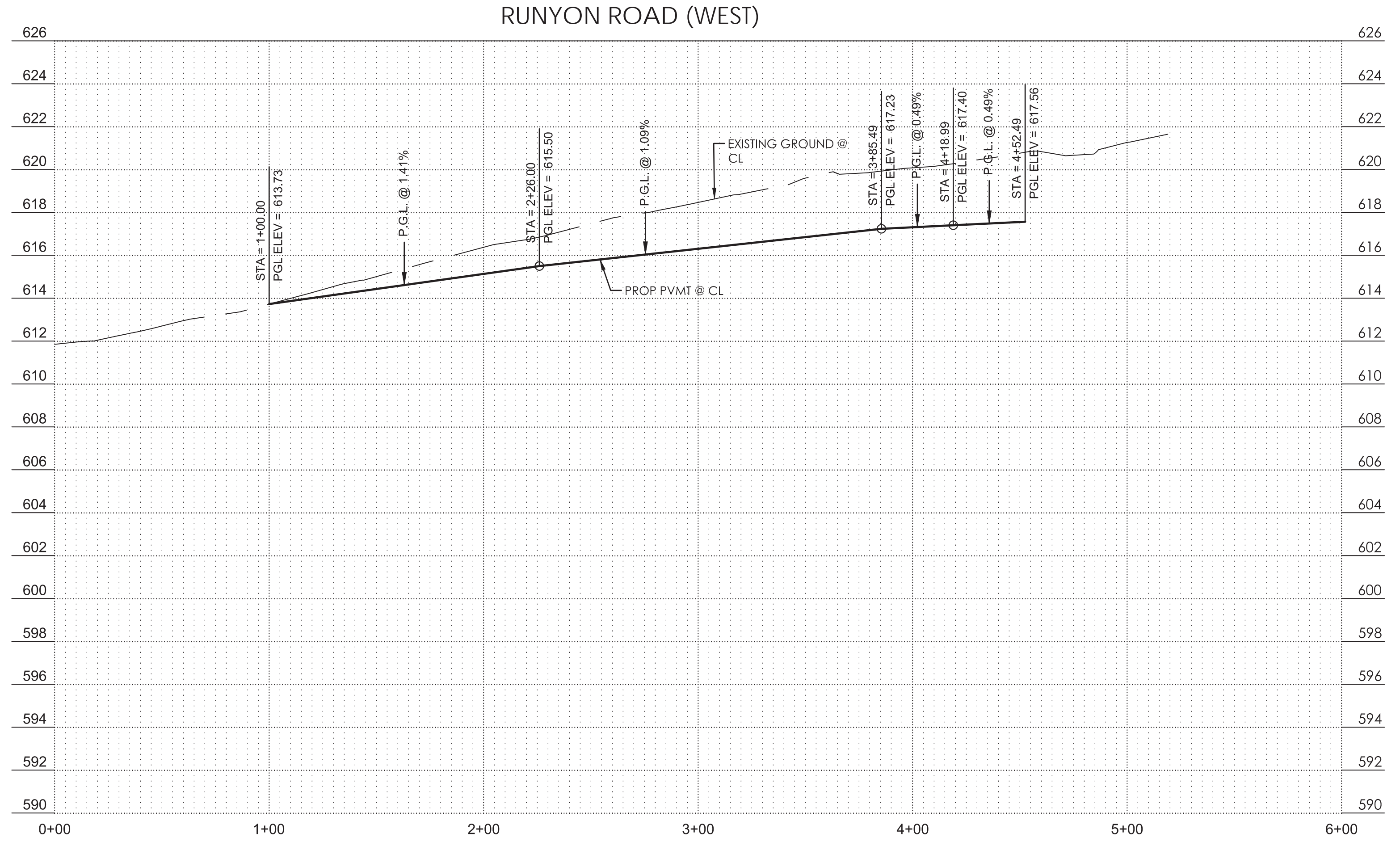
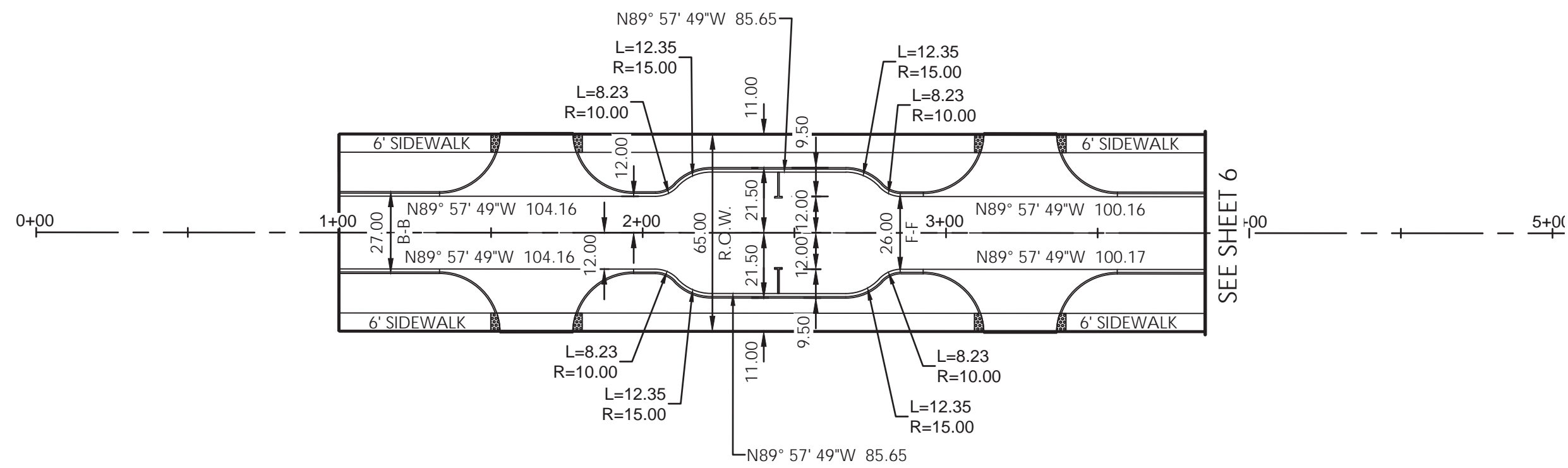


Point	Station	Offset	Side	TP Elevation
1	1+00.00	12.0	Lt.	613.44
2	2+04.16	12.0	Lt.	614.90
3	2+11.49	15.2	Lt.	614.93
4	2+22.49	20.0	Lt.	614.97
5	2+66.99	20.0	Lt.	615.47
6	2+77.99	15.2	Lt.	615.70
7	2+85.32	12.0	Lt.	615.86
8	3+85.49	12.0	Lt.	616.95
9	3+85.49	12.0	Rt.	616.95
10	2+85.32	12.0	Rt.	615.86
11	2+77.99	15.2	Rt.	615.70
12	2+66.99	20.0	Rt.	615.47
13	2+22.49	20.0	Rt.	614.97
14	2+11.49	15.2	Rt.	614.93
15	2+04.16	12.0	Rt.	614.90
16	1+00.00	12.0	Rt.	613.44



PAVING LEGEND

- SANITARY SEWER AND MANHOLE
- SANITARY SEWER AND CLEANOUT
- EXISTING SANITARY SEWER AND MANHOLE
- PROPOSED FIRE HYDRANT ASSEMBLY
- PROPOSED WATERLINE WITH GATE VALVE AND BOX WITH 10' W.L.E.
- EXISTING WATERLINE WITH GATE VALVE AND BOX
- PROPOSED STORM SEWER WITH MANHOLE AND INLETS
- PROPOSED PRIVATE STORM SEWER
- EXISTING STORM SEWER AND MANHOLE
- EXISTING INLET
- PROPOSED TREE WELL
- 2x6 TRUNCATED DOME PANEL
- LIMITS OF PARABOLIC PAVEMENT CROWN
- AREA OF NON-STANDARD PARABOLIC PAVEMENT CROWN

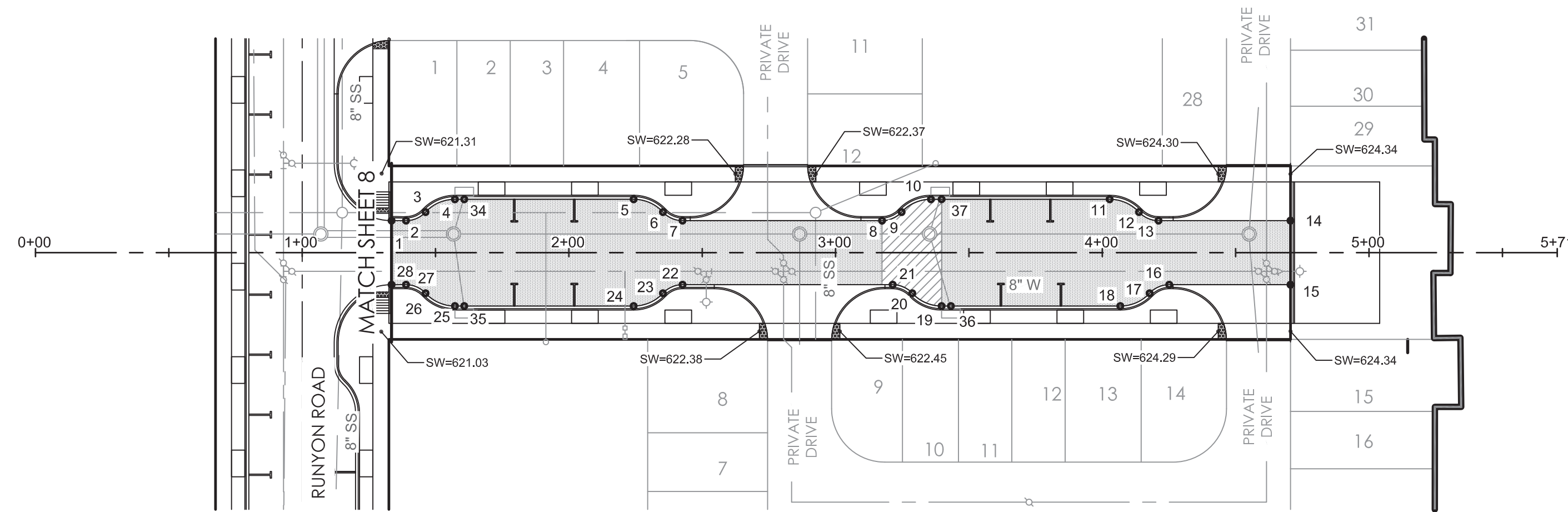


2017/12/19

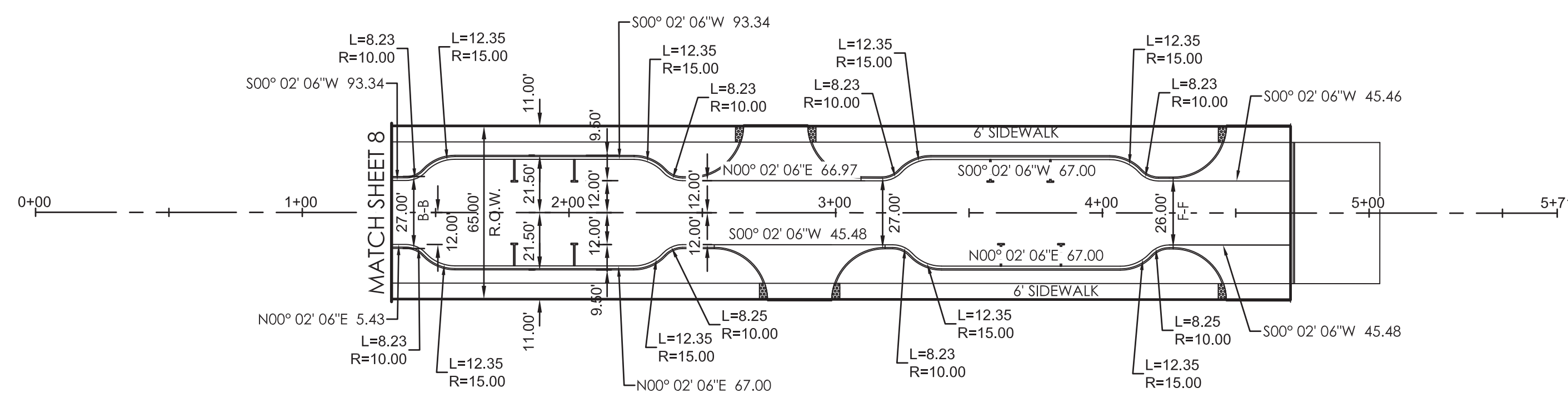
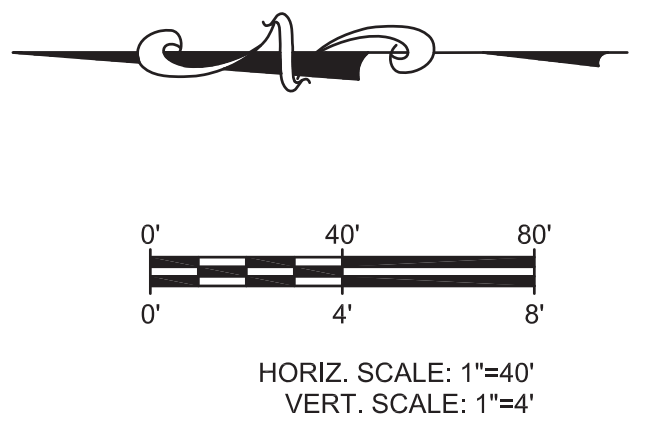
SAWYER ENGINEERING, LLC
TBPE FIRM NUMBER F-9171

ONE-CALL NOTIFICATION SYSTEM
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1-800-545-6005
OR OTHER UTILITY LOCATING SERVICES AT
LEAST 48 HOURS PRIOR TO
CONSTRUCTION ACTIVITIES.

NO.	REVISION	BY	DATE
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
IMPROVEMENT PLANS ADDISON GROVE PAVING PLAN & PROFILE - RUNYON ROAD (WEST)			
SAWYER ENGINEERING, LLC TBPE F-9171		1520 OLIVER STREET HOUSTON, TEXAS 77007 (832) 553-5948	
PROJECT	DESIGN	DRAWN	DATE
	CDP	JDS	MAY 2017
FILE	SHEET		
	7		



Point	Station	Offset	Side	TP Elevation
1	1+33.50	12.00	Lt.	620.25
2	1+38.93	12.00	Lt.	620.23
3	1+46.26	15.20	Lt.	620.13
4	1+57.26	20.00	Lt.	620.00
5	2+24.26	20.00	Lt.	620.55
6	2+35.26	15.20	Lt.	620.80
7	2+42.59	12.00	Lt.	620.97
8	3+17.40	12.00	Lt.	621.87
9	3+24.73	15.20	Lt.	621.90
10	3+35.73	20.00	Lt.	621.96
11	4+02.73	20.00	Lt.	622.71
12	4+13.73	15.20	Lt.	622.95
13	4+21.06	12.00	Lt.	623.12
14	4+70.54	12.00	Lt.	623.73
15	4+70.54	12.00	Rt.	623.73
16	4+25.08	12.00	Rt.	623.17
17	4+17.73	15.20	Rt.	623.00
18	4+06.73	20.00	Rt.	622.76
19	3+39.73	20.00	Rt.	621.97
20	3+28.73	15.20	Rt.	621.92
21	3+21.40	12.00	Rt.	621.89
22	2+42.61	12.00	Rt.	620.97
23	2+35.26	15.20	Rt.	620.80
24	2+24.26	20.00	Rt.	620.55
25	1+57.26	20.00	Rt.	620.00
26	1+46.26	15.20	Rt.	620.13
27	1+38.93	15.20	Rt.	620.23
28	1+33.50	12.00	Rt.	620.25
34	1+60.76	20.00	Lt.	620
35	1+60.76	20.00	Rt.	620
36	3+43.23	20.00	Rt.	621.97
37	3+39.73	20.00	Lt.	621.96



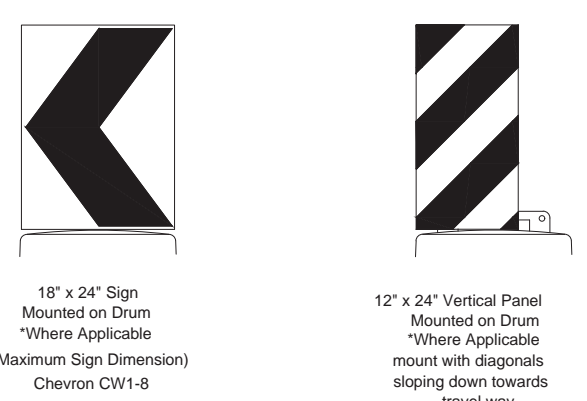
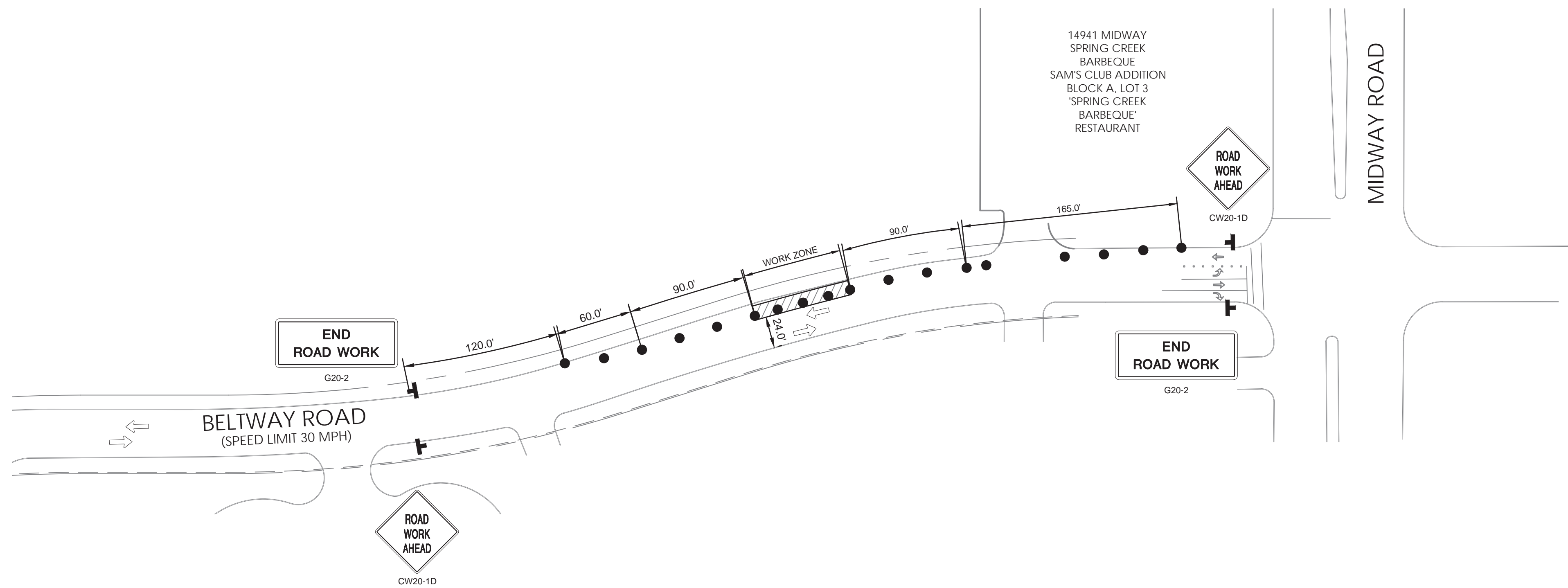
- PAVING LEGEND**
- SANITARY SEWER AND MANHOLE
 - SANITARY SEWER AND CLEANOUT
 - EXISTING SANITARY SEWER AND MANHOLE
 - PROPOSED FIRE HYDRANT ASSEMBLY
 - PROPOSED WATERLINE WITH GATE VALVE AND BOX WITH 10' W.L.E.
 - EXISTING WATERLINE WITH GATE VALVE AND BOX
 - PROPOSED STORM SEWER WITH MANHOLE AND INLETS
 - PROPOSED PRIVATE STORM SEWER
 - EXISTING STORM SEWER AND MANHOLE
 - EXISTING INLET
 - PROPOSED TREE WELL
 - 2x6 TRUNCATED DOME PANEL
 - LIMITS OF PARABOLIC PAVEMENT CROWN
 - AREA OF NON-STANDARD PARABOLIC PAVEMENT CROWN

2017/12/22

SAWYER ENGINEERING, LLC
 TBPE FIRM NUMBER F-9171

ONE-CALL NOTIFICATION SYSTEM
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 OR OTHER UTILITY LOCATING SERVICES AT
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NO.	REVISION	BY	DATE
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
IMPROVEMENT PLANS ADDISON GROVE			
PAVING PLAN & PROFILE - HOLLY STREET			
SAWYER		ENGINEERING, LLC TBPE: F-9171	1520 OLIVER STREET HOUSTON, TEXAS 77007 (832) 553-5948
PROJECT	DESIGN	DRAWN	DATE
	CDP	JDS	MAY 2017
FILE	SHEET		
	9		



SPACING FOR CHANNELIZING DEVICES
 PLASTIC DRUMS ON MERGING TAPER @ 30' c-c WITH CHEVRON SIGN @ 60' c-c AND TYPE "C" WARNING LIGHT (FOR OVERNIGHT CLOSURE)

PLASTIC DRUMS ON DOWNSTREAM TAPER @ 35' c-c.

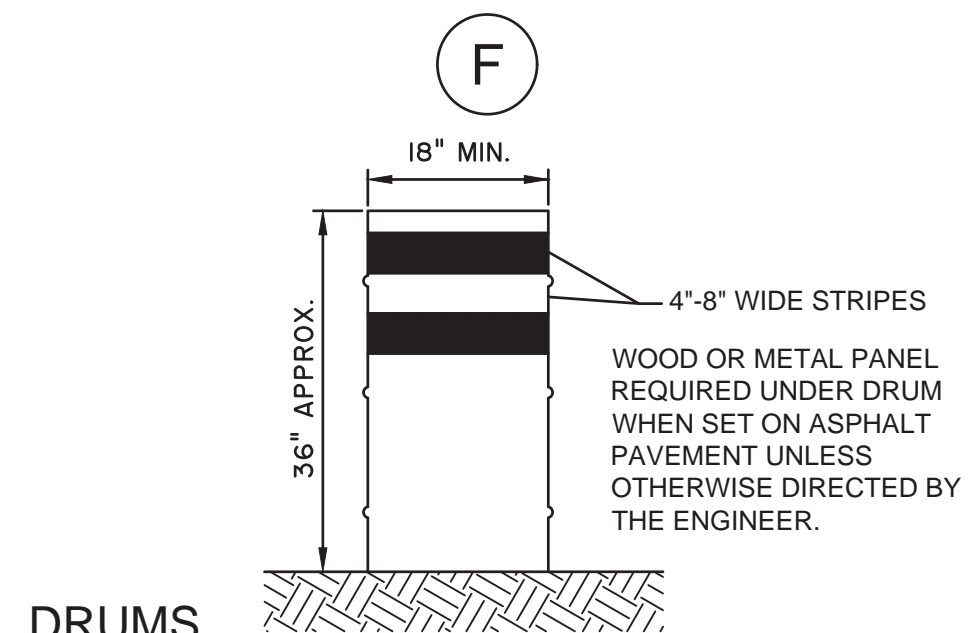
PLASTIC DRUMS ON RADII @ 5' c-c.

PLASTIC DRUMS ON TANGENT @ 35' c-c WITH VERTICAL PANEL @ 70' c-c AND TYPE "C" WARNING LIGHT @ 70' c-c (FOR OVERNIGHT CLOSURE)

PLASTIC DRUMS IN FRONT OF CONSTRUCTION ZONE @ 20' c-c WITH VERTICAL PANEL @ 40' c-c AND TYPE "A" WARNING LIGHT @ 40' c-c (FOR OVERNIGHT CLOSURE)

CONCRETE TRAFFIC BARRIER (C.T.B.) OR LOW PROFILE CONCRETE TRAFFIC BARRIER (L.P.C.T.B.) WITH REFLECTORS @ 10' c-c IF PAVEMENT DROP IS MORE THAN TWELVE INCHES (12').

SPACINGS MAY BE ADJUSTED TO PROVIDE DRIVEWAYS, INTERSECTIONS AND/OR MEDIAN OPENINGS.



DRUMS
 DRUMS, SET ON END, AND USED FOR TRAFFIC WARNING OR CHANNELIZATION SHALL BE APPROX. 36" IN HEIGHT AND A MIN. 18" IN DIAMETER. THE CONTRACTOR, AT HIS OPTION, MAY USE DRUMS MADE FROM STEEL BARRELS OR BLACK POLYETHYLENE PLASTIC DRUMS LINERS WEIGHING APPROX. EIGHT POUNDS EACH. THE MARKINGS ON DRUMS SHALL BE HORIZONTAL, CIRCUMFERENTIAL, REFLECTORIZED ORANGE AND REFLECTORIZED WHITE STRIPES, 4 TO 8 INCHES WIDE. THE FIRST REFLECTORIZED STRIPE SHOULD START WITHIN TWO (2) INCHES OF THE TOP OF THE DRUM. THERE SHALL BE AT LEAST TWO ORANGE AND TWO WHITE STRIPES ON EACH DRUM. IF THERE ARE NON-REFLECTORIZED SPACES BETWEEN THE HORIZONTAL ORANGE AND WHITE STRIPES, THEY SHALL BE NO MORE THAN 2 INCHES WIDE. METAL DRUMS SHALL BE PAINTED BLACK OR ORANGE BEFORE REFLECTORIZED STRIPES ARE ADDED. ALL DRUMS ON PROJECT WILL BE THE SAME COLOR. WHEN DRUMS ARE PLACED IN THE ROADWAY, APPROPRIATE WARNING SIGNS SHOULD BE USED. DURING HOURS OF DARKNESS, A FLASHING WARNING LIGHT SHOULD BE PLACED ON DRUMS USED SINGLY AS A WARNING DEVICE. STEADY BURN ELECTRIC LIGHTS OR DELINEATORS SHOULD BE PLACED ON DRUMS USED IN SERIES FOR TRAFFIC CHANNELIZATION. DRUMS SHALL BE WEIGHTED WITH SAND TO THE EXTENT INDICATED IN THE PLANS.

CW1-8 CHEVRON SIGNS, CW1-6A ARROW SIGNS OR VP-1 VERTICAL PANELS MOUNTED ABOVE DRUMS MAY BE USED AS SUPPLEMENTS TO DRUM DELINEATION.

DISCLAIMER: The use of this standard is governed by the Texas Engineering Practice Act. No warranty of any kind is made by the State of Texas or any agency thereof for the use of this standard for any purpose other than that intended by the State of Texas.

DATE FILED

LEGEND	
	Type 3 Barricade
	Heavy Work Vehicle
	Trailer Mounted Flashing Arrow Board
	Sign
	Flag
	Channelizing Devices
	Truck Mounted Attenuator (TMA)
	Portable Changeable Message Sign (PCMS)
	Traffic Flow
	Flagger

Posted Speed	Formula	Minimum Desirable Taper Lengths			Suggested Maximum Spacing of Channelizing Devices		Minimum Sign Spacing Distance	Suggested Longitudinal Buffer Space
		On a Tangent	On a Curve	On a Taper	On a Tangent			
30	L = 150'	150'	165'	180'	30'	60'	120'	90'
35	L = 50	205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45		435'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55	L=WS	550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* Conventional Roads Only
 ** Taper lengths have been rounded off.
 L=Length of Taper (FT) W=Width of Offset (FT) S=Posted Speed (MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
		✓		

GENERAL NOTES

- Flags attached to signs where shown are REQUIRED.
- All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
- Inoperative work vehicles or other equipment should be parked near the right-of-way line and not parked on the paved shoulder.
- A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
- Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect vider work spaces.
- See TCP (1-1) for shoulder work on divided highways, expressways and freeways.
- CW1-6 "SHOULDER WORK" signs may be used in place of CW20-1D "ROAD WORK AHEAD" signs for shoulder work on conventional roadways.

For construction or maintenance contract work, specific project requirements for shadow vehicles can be found in the project GENERAL NOTES for Items 502, Barricades, Signs and Traffic Handling.

Texas Department of Transportation
 Traffic Operations Division

TRAFFIC CONTROL PLAN
 CONVENTIONAL ROAD
 SHOULDER WORK

TCP (1-1)-12

DATE	REVISION	BY	CHKD	DATE	JOB	SHEET
2-94	2-12					
8-95						
1-97						
4-98						

LEGEND

- SF SILT FENCE
- SIGN
- DRUM

SAWYER ENGINEERING, LLC
 TBPE FIRM NUMBER F-9171

NO.	REVISION	BY	DATE

ADDISON

TOWN OF ADDISON
 DALLAS COUNTY, TEXAS

IMPROVEMENT PLANS
 ADDISON GROVE

TRAFFIC CONTROL PLAN

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
	CDP	JDS	MAY 2017		13

SAWYER ENGINEERING, LLC
 TBPE: F-9171

1520 OLIVER STREET
 HOUSTON, TEXAS 77007
 (832) 553-5948

GENERAL NOTES FOR PEDESTRIAN FACILITIES

1. ALL SLOPES ARE MAXIMUM ALLOWABLE. THE LEAST POSSIBLE SLOPE THAT WILL STILL DRAIN PROPERLY SHOULD BE USED. ADJUST CURB RAMP LENGTH OR GRADE OF APPROACH SIDEWALKS AS DIRECTED.
2. LANDINGS SHALL BE 5'x5' MINIMUM WITH A MAXIMUM 2% SLOPE IN ANY DIRECTION. MANEUVERING SPACE AT THE BOTTOM OF CURB RAMP SHALL BE A MINIMUM OF 4'x4' WHOLLY CONTAINED WITHIN THE CROSSWALK AND WHOLLY OUTSIDE THE PARALLEL VEHICULAR TRAVEL PATH.
3. MAXIMUM ALLOWABLE CROSS SLOPE ON SIDEWALK AND CURB RAMP SURFACES IS 2% CURB RAMP WITH RETURNED CURBS MAY BE USED ONLY WHERE PEDESTRIANS WOULD NOT NORMALLY WALK ACROSS THE RAMP. EITHER BECAUSE THE ADJACENT SURFACE IS PLANTING OR OTHER NON-WALKING SURFACE OR BECAUSE THE SIDE APPROACH IS SUBSTANTIALLY OBSTRUCTED. OTHERWISE, PROVIDE FLARED SIDES.
4. ADDITIONAL INFORMATION ON CURB RAMP LOCATION, DESIGN, LIGHT REFLECTIVE VALUE AND TEXTURE MAY BE FOUND IN THE CURRENT EDITION OF THE TEXAS ACCESSIBILITY STANDARDS (TAS) AND 16 TAC §68.102.
5. CURB RAMP SHALL BE ALIGNED WITH THEORETICAL CROSSWALKS, OR AS DIRECTED BY THE TOWN ENGINEER.
6. HANDRAILS ARE NOT REQUIRED ON CURB RAMP. PROVIDE CURB RAMP WHEREVER ON ACCESSIBLE ROUTE CROSSES (PENETRATES) A CURB.
7. FLARE SLOPE SHALL NOT EXCEED 10% MEASURED ALONG CURB LINE.
8. BARRIER FREE RAMP SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT EDITION OF THE TEXAS ACCESSIBILITY STANDARDS (TAS).
9. ALL BARRIER FREE RAMP MUST PASS AN INDEPENDENT INSPECTION. A LETTER OF COMPLIANCE ACCEPTANCE IS REQUIRED PRIOR TO FINAL ACCEPTANCE BY THE TOWN OF ADDISON.
10. STREETS ON STEEP GRADE WILL REQUIRE LONGER TRANSITION ON UPGRADE SIDE.
11. MAXIMUM SLOPE ON RAMP PORTION SHALL NOT EXCEED 1" PER FOOT AT ANY LOCATION. VERTICAL DISTANCE BETWEEN STREET AND RAMP SHALL NOT EXCEED 1/4".
12. CONTRACTOR TO COMPLY WITH PROWAG STANDARD DESIGN REQUIREMENTS DATED JULY 26, 2011 OR MOST CURRENT.

GENERAL NOTES FOR DETECTABLE WARNINGS

1. CURB RAMP MUST CONTAIN A DETECTABLE WARNING SURFACE THAT CONSIST OF RAISED TRUNCATED DOMES COMPLYING WITH SECTION 4.29 OF THE TEXAS ACCESSIBILITY STANDARDS (TAS). THE SURFACE MUST CONTRAST VISUALLY WITH THE ADJOINING SURFACES, INCLUDING SIDE FLARES. FURNISH DARK RED COLORED DETECTABLE WARNING SURFACE ADJACENT TO UNCOLORED CONCRETE AND DREAM COLORED DETECTABLE WARNING SURFACE ADJACENT TO DARK RED COLORED BRICK PAVERS.
2. DETECTABLE WARNING SURFACES MUST BE SLIP RESISTANT AND NOT ALLOW WATER TO ACCUMULATE.
3. ALIGN TRUNCATED DOMES IN THE DIRECTION OF PEDESTRIAN TRAVEL WHEN ENTERING THE STREET.
4. DETECTABLE WARNING SURFACES SHALL BE A MINIMUM OF 24" IN DEPTH IN THE DIRECTION OF PEDESTRIAN TRAVEL, AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR LANDING WHERE THE PEDESTRIAN ACCESS ROUTE ENTERS THE STREET.
5. DETECTABLE WARNING SURFACES SHALL BE LOCATED SO THAT THE EDGE NEAREST THE CURB LINE IS A MINIMUM OF 6" AND A MAXIMUM OF 8" FROM THE EXTENSION OF THE FACE OF CURB AND SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE. DETECTABLE WARNING SURFACES MAY BE CURVED ALONG THE CORNER RADIUS.

GENERAL NOTES FOR DETECTABLE WARNING PAVER UNITS

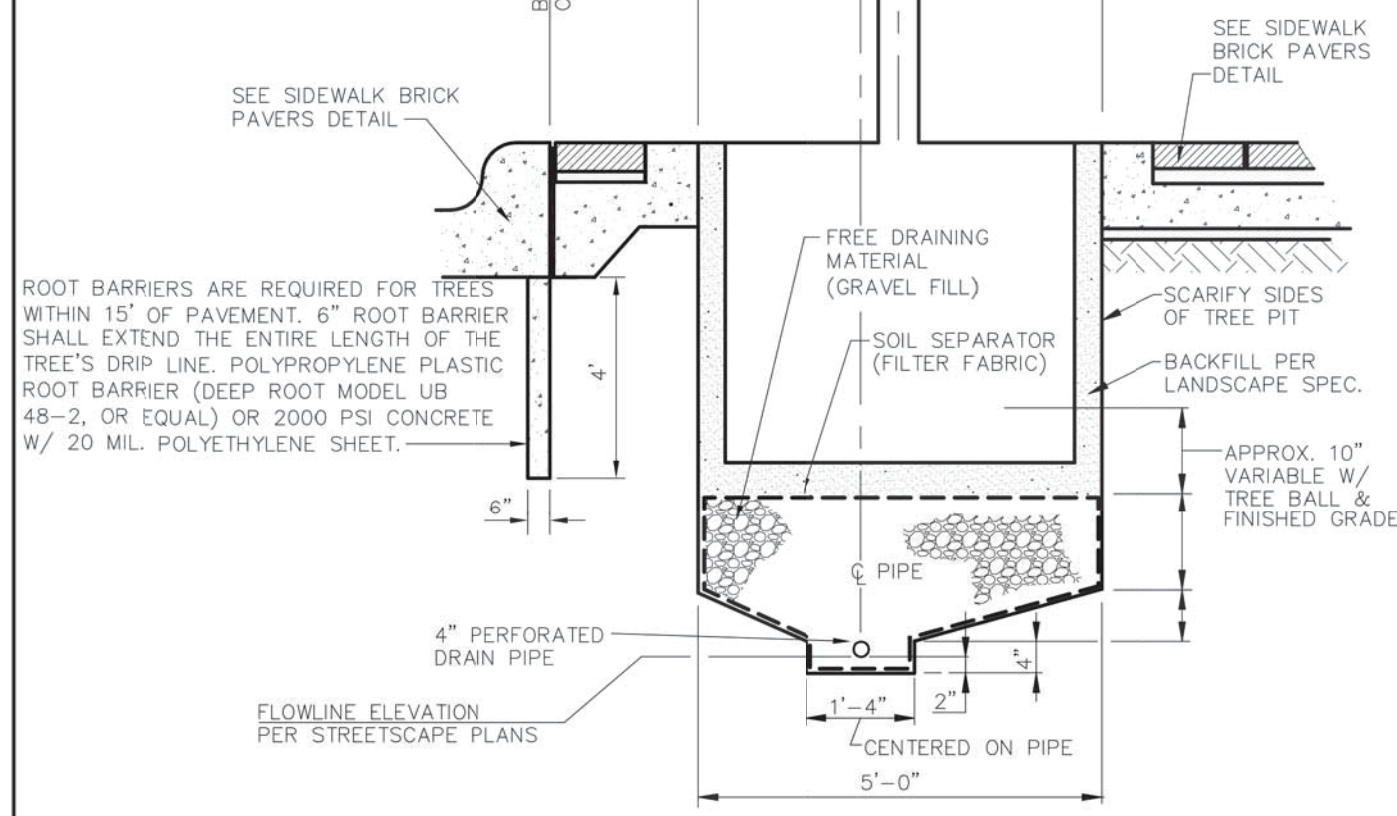
1. DETECTABLE WARNING PAVER UNITS SHALL MEET OR EXCEED ALL REQUIREMENTS OF ASTM C-936, C-33, AND BE LAID IN A TWO BY TWO UNIT BASKET WEAVE PATTERN OR AS DIRECTED.
2. LAY FULL-SIZE UNITS FIRST FOLLOWED BY CLOSURE UNITS CONSISTING OF AT LEAST 25 PERCENT OF A FULL UNIT. CUT DETECTABLE WARNING PAVER UNITS USING A POWER SAW.



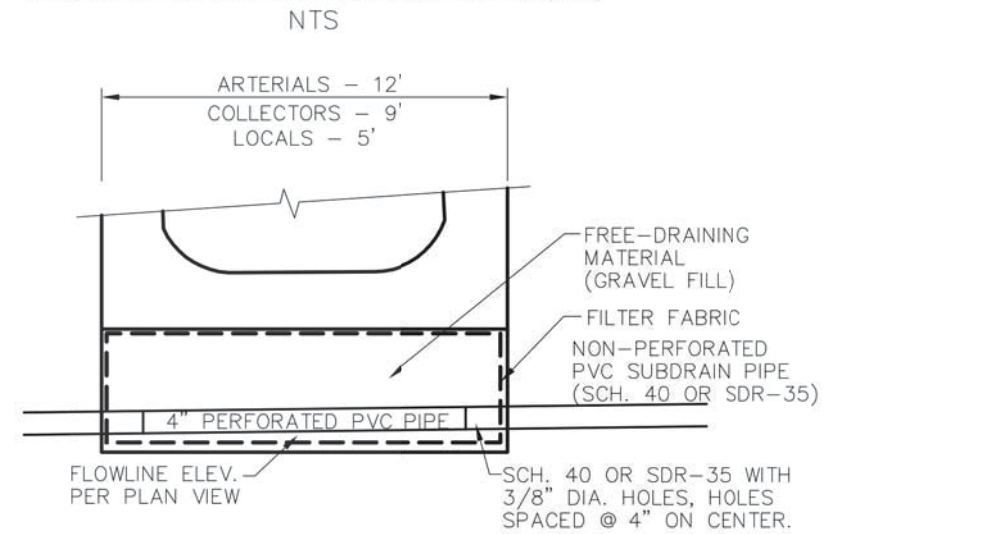
PEDESTRIAN FACILITIES
GENERAL NOTES

STANDARD CONSTRUCTION DETAILS PAVING	
DATE: AUGUST, 2010	SHEET: 30-P37

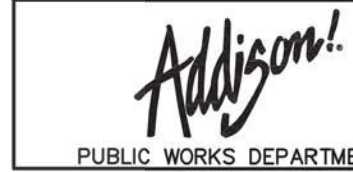
* DRAIN PIPE MAY BE OFFSET FURTHER FROM CENTER IF DESIRED. OFFSET IS TO AVOID CONFLICT WITH LIGHT POLE GROUNDING ROD WHEN TREES ARE IN LINE WITH LIGHTS.



SECTION PERPENDICULAR TO CURB
NTS



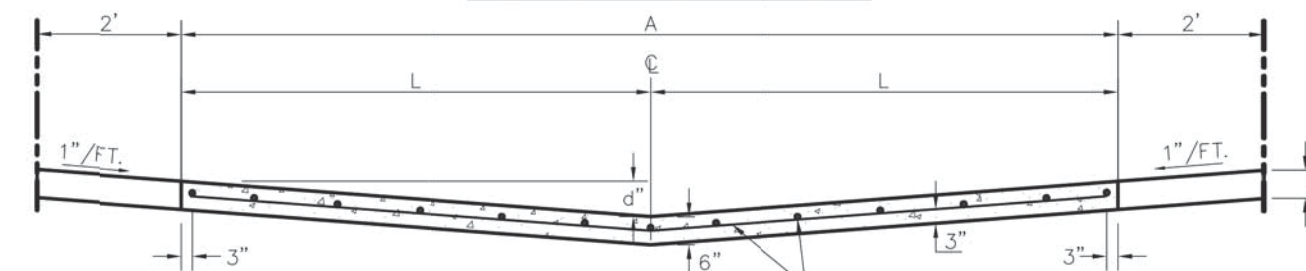
SECTION PARALLEL TO CURB
NTS



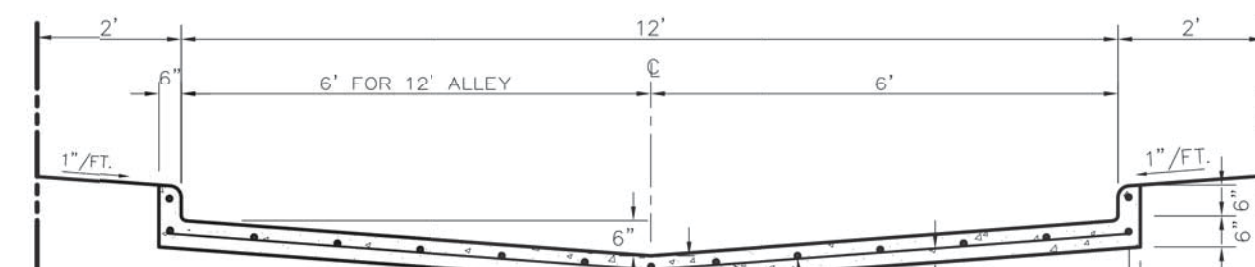
SUBSURFACE DRAIN SYSTEM

STANDARD CONSTRUCTION DETAILS PAVING	
DATE: AUGUST, 2010	SHEET: 30-P38

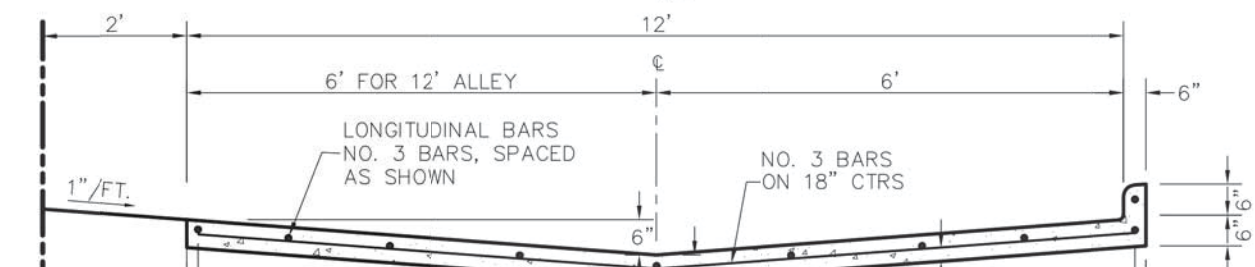
ALLEY WIDTH (A)	HALF SECTION WIDTH (L)	INVERT DEPTH (D)
12'	6'	4"
16'	8'	5"
20'	10'	6"



STANDARD 12', 16', & 20' ALLEY SECTION
NTS

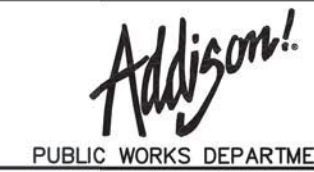


STANDARD ALLEY SECTION WITH CURB
NTS



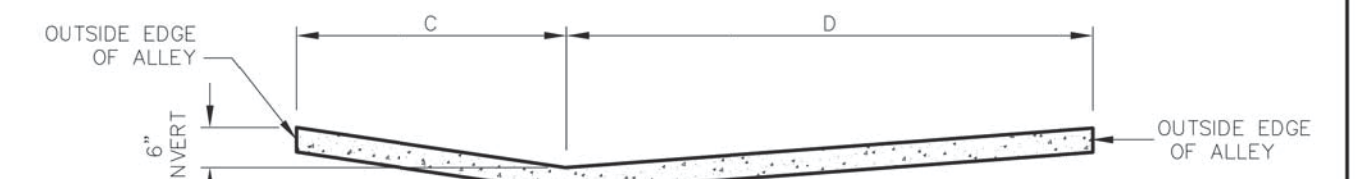
ALTERNATE 12' ALLEY SECTION WITH CURB
NTS

- NOTES:**
1. CURBS NOT ALLOWED IN RESIDENTIAL AREAS EXCEPT AS APPROVED BY THE PUBLIC WORKS DEPT.
 2. NO. 3 BAR CONTINUOUS IN CURB.
 3. ALL ALLEYS TO BE LINED IN ACCORDANCE WITH ITEM 3 ON THE PAVING GENERAL NOTES.

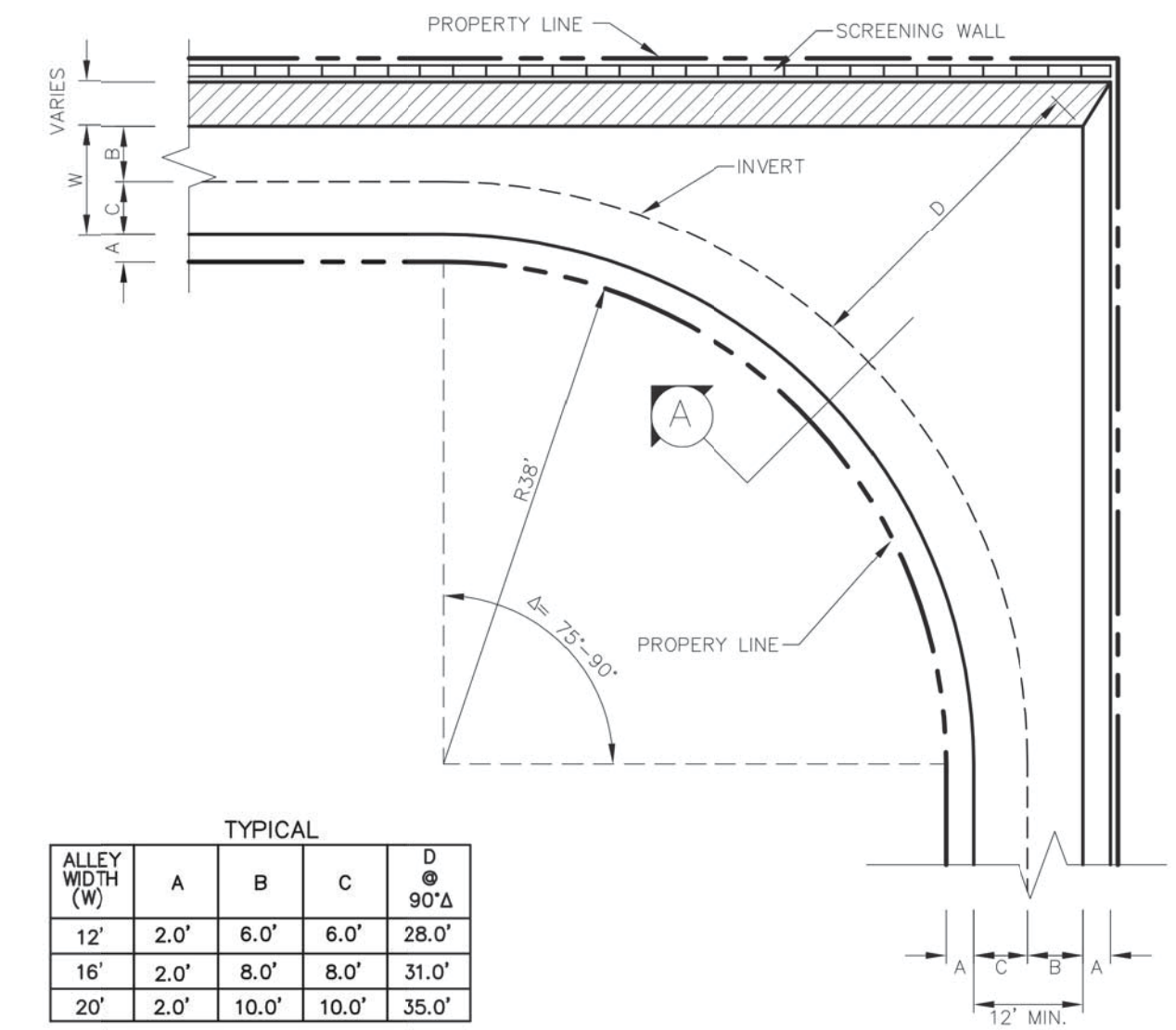


ALLEY SECTION

STANDARD CONSTRUCTION DETAILS PAVING	
DATE: AUGUST, 2010	SHEET: 30-P17



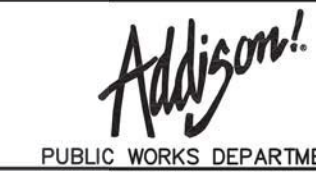
NOTE:
ALLEY PAVING TO BE PLACED IN SHADED AREA WHEN SCREENING WALL IS ALONG PROPERTY LINE.



TYPICAL

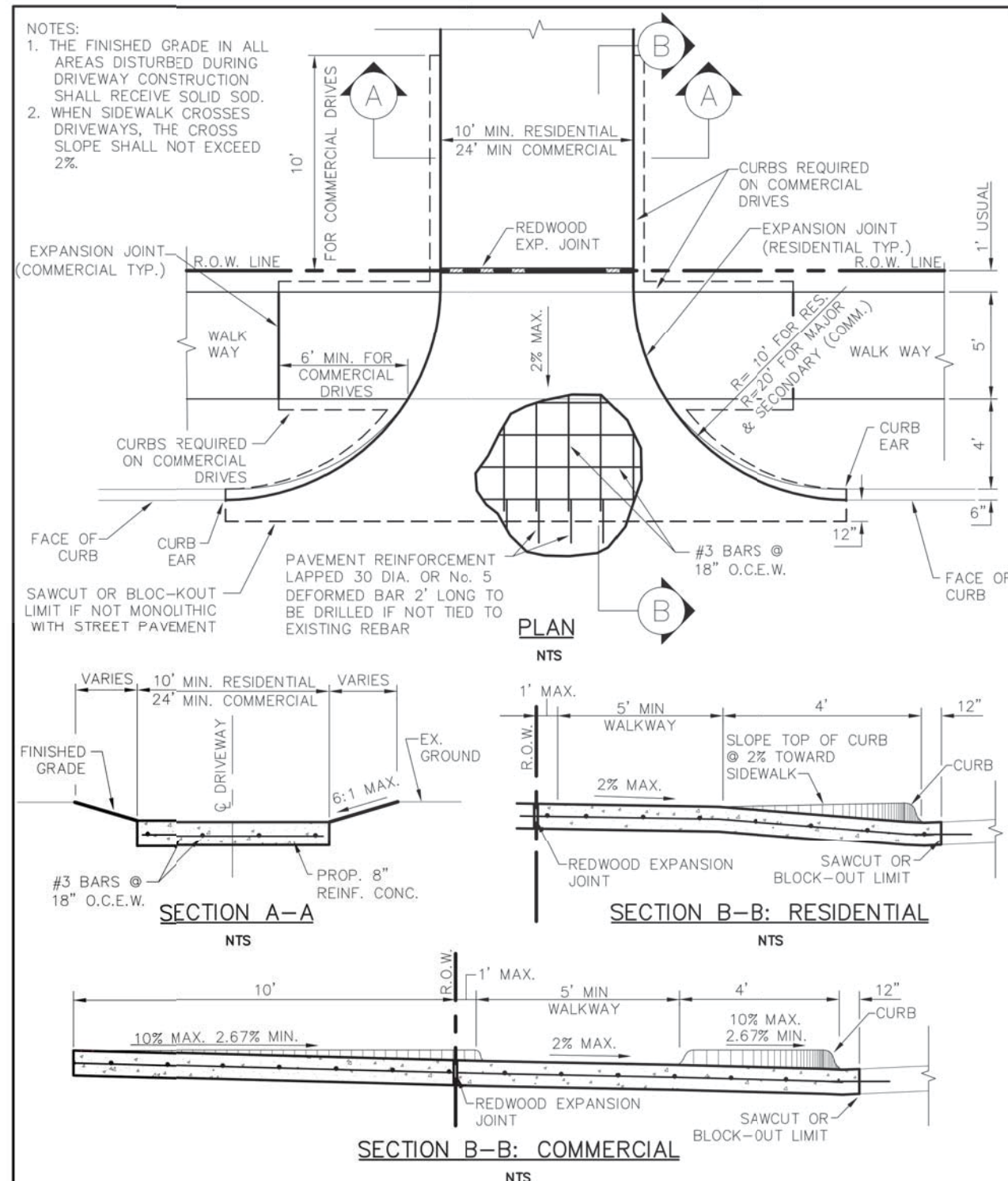
ALLEY WIDTH (W)	A	B	C	D @ 90°
12'	2.0'	6.0'	6.0'	28.0'
16'	2.0'	8.0'	8.0'	31.0'
20'	2.0'	10.0'	10.0'	35.0'

ALLEY TURN 75° OR GREATER
NTS



ALLEY TURN 75° OR GREATER

STANDARD CONSTRUCTION DETAILS PAVING	
DATE: AUGUST, 2010	SHEET: 30-P18



DRIVEWAY RETURN DETAILS

STANDARD CONSTRUCTION DETAILS PAVING	
DATE: AUGUST, 2010	SHEET: 30-P35

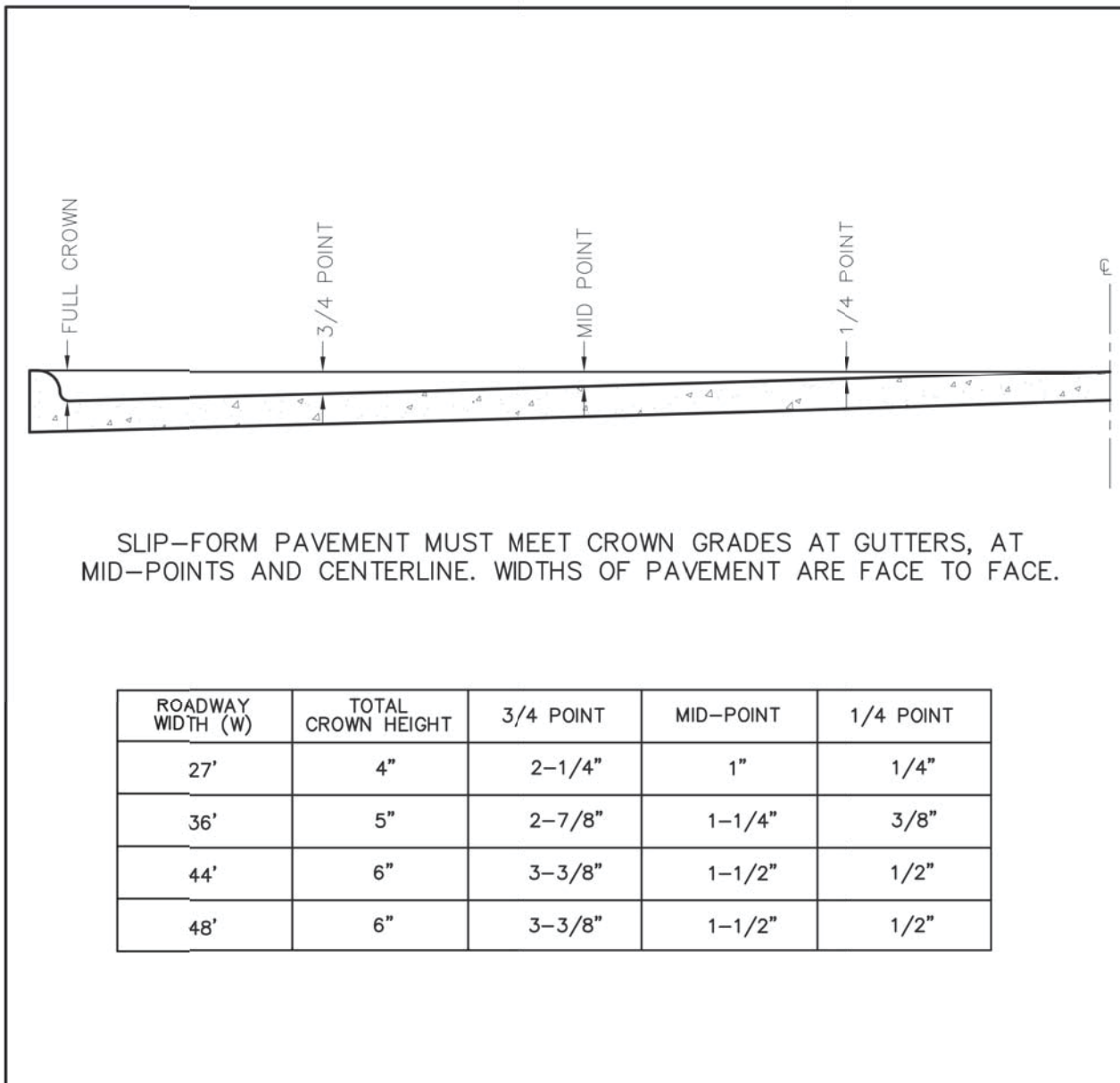
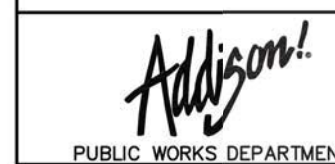
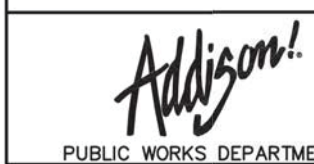
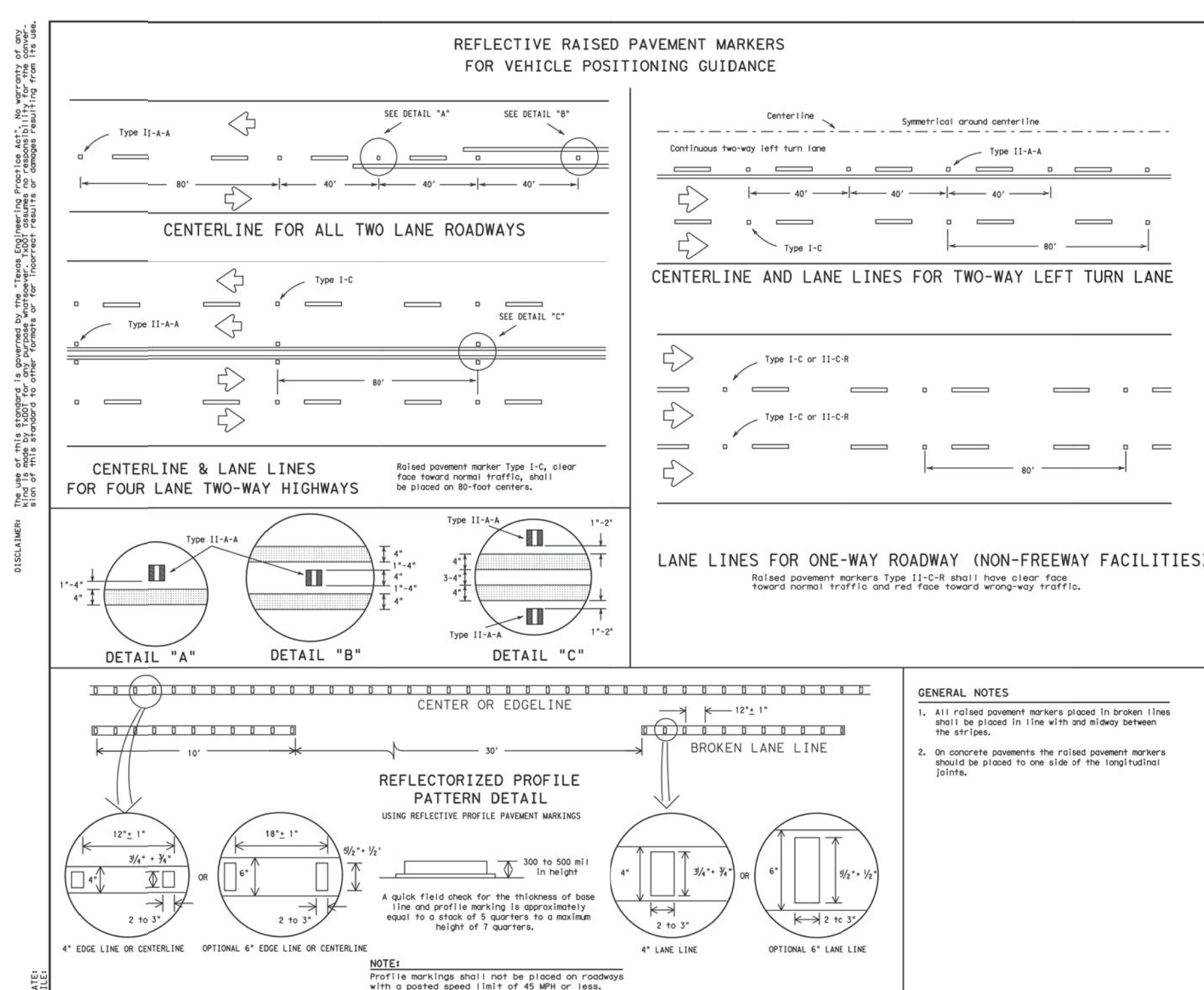


TABLE OF CROWN HEIGHTS AND ORDINATES FOR VARIOUS PARABOLIC SECTIONS
NTS



PARABOLIC PAVEMENT CROWN

STANDARD CONSTRUCTION DETAILS PAVING	
DATE: AUGUST, 2010	SHEET: 30-P33



REFLECTORIZED PROFILE PATTERN DETAIL
USING REFLECTORIZED PROFILE PATTERN MARKERS



REFLECTORIZED PROFILE PATTERN DETAIL

STANDARD CONSTRUCTION DETAILS PAVING	
DATE: AUGUST, 2010	SHEET: 30-P19

MATERIAL SPECIFICATIONS

PAVEMENT MARKERS: REFLECTORIZED	DWG-4200
EPoxy AND ADHESIVES	DWG-4100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DWG-4130
TRAFFIC PAINT	DWG-4200
NOT APPLIED THERMOPLASTIC	DWG-4200
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DWG-4240

All pavement marking materials shall meet the required (Department) Material Specification on specified by the plans.

RAISED PAVEMENT MARKERS

Texas Department of Transportation
Traffic Operations Division

POSITION GUIDANCE USING RAISED MARKERS REFLECTORIZED PROFILE MARKINGS
PM (2) -12

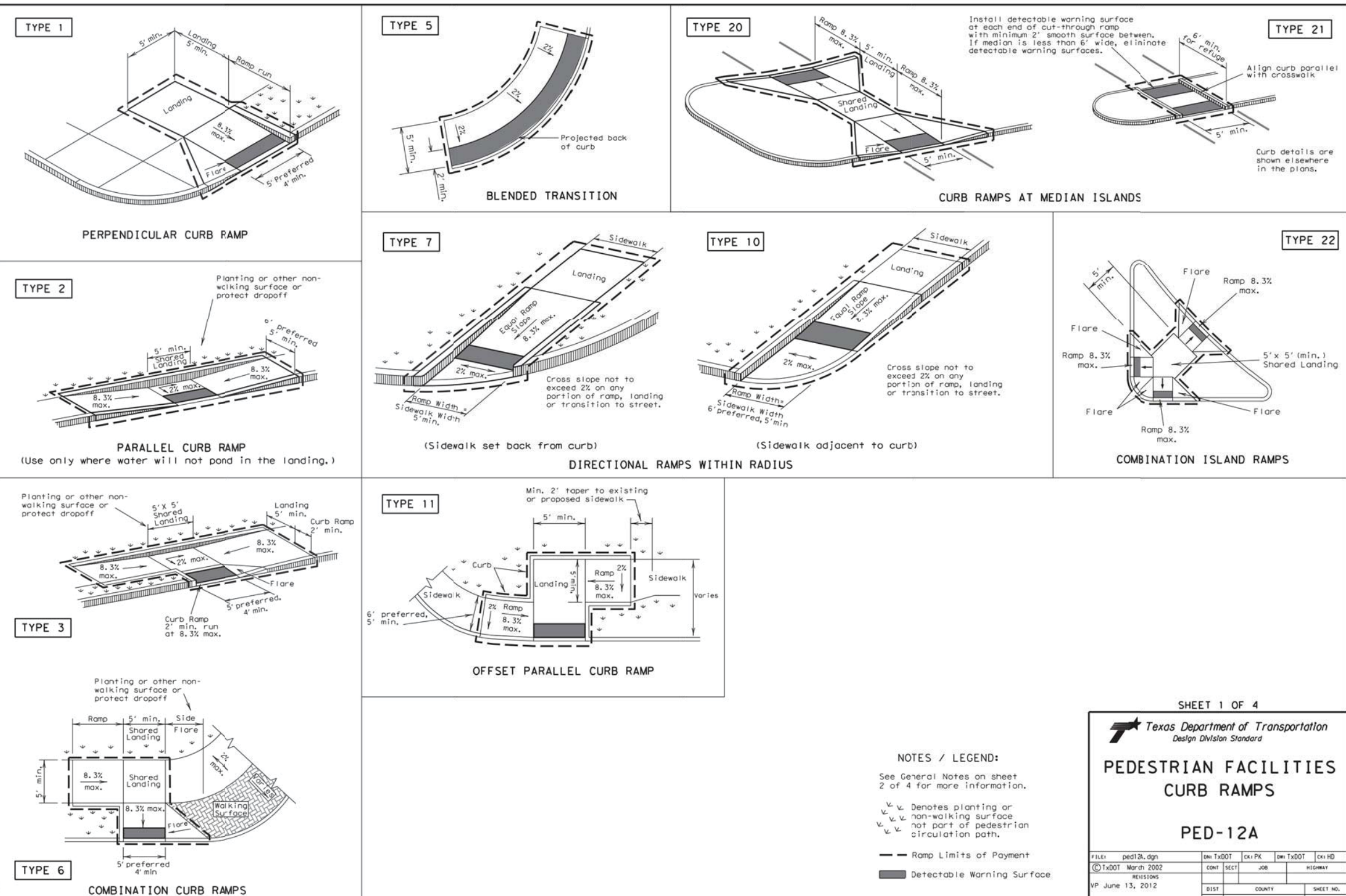
DATE	BY	CHKD	APPD
10/20/11	10/20/11	10/20/11	10/20/11
10/20/11	10/20/11	10/20/11	10/20/11
10/20/11	10/20/11	10/20/11	10/20/11



2017/12/19
SAWYER ENGINEERING, LLC
TBPE FIRM NUMBER F-9171

NO.	REVISION	BY	DATE
<p>TOWN OF ADDISON DALLAS COUNTY, TEXAS</p> <p>IMPROVEMENT PLANS ADDISON GROVE</p> <p>PAVING DETAILS</p>			
SAWYER ENGINEERING, LLC TBPE: F-9171		1520 OLIVER STREET HOUSTON, TEXAS 77007 (832) 553-5948	
PROJECT	DESIGN	DRAWN	DATE
	CDP	JDS	MAY 2017
FILE	SHEET	15	

THE WORK OF THIS PROJECT IS GOVERNED BY THE "Texas Engineering Practice Act". The maximum of 20% of this work shall be done by the engineer or architect. The maximum of 10% of this work shall be done by the engineer or architect. The maximum of 5% of this work shall be done by the engineer or architect.



SHEET 1 OF 4

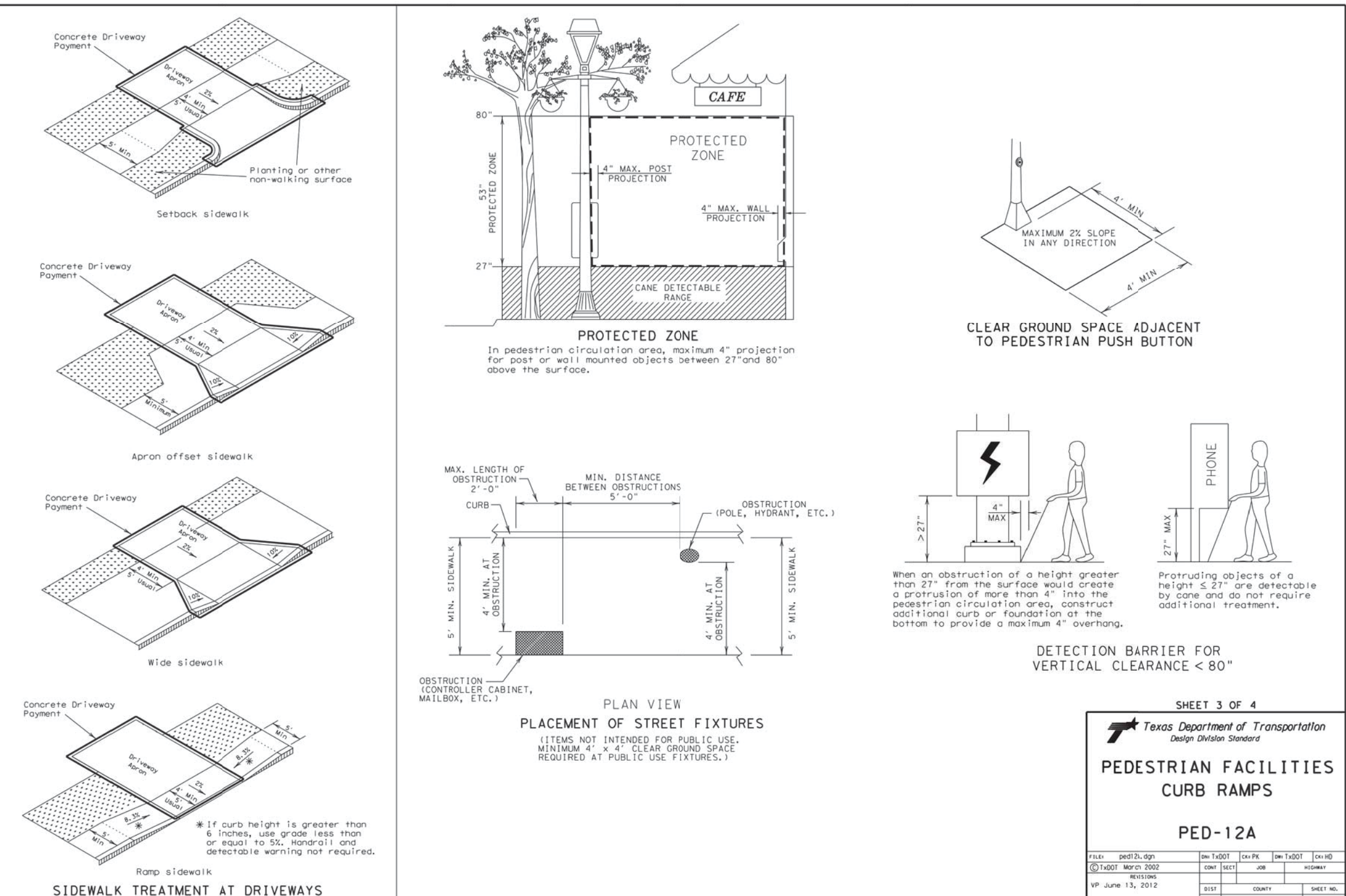
Texas Department of Transportation
Design Division Standard

PEDESTRIAN FACILITIES CURB RAMPS

PED-12A

DATE: 06/13/12	DESIGNER: JDS	CHECKER: JDS	DATE: 06/13/12	DATE: 06/13/12	DATE: 06/13/12
NO.	REV.	BY	DATE	NO.	REV.

THE WORK OF THIS PROJECT IS GOVERNED BY THE "Texas Engineering Practice Act". The maximum of 20% of this work shall be done by the engineer or architect. The maximum of 10% of this work shall be done by the engineer or architect. The maximum of 5% of this work shall be done by the engineer or architect.



SHEET 3 OF 4

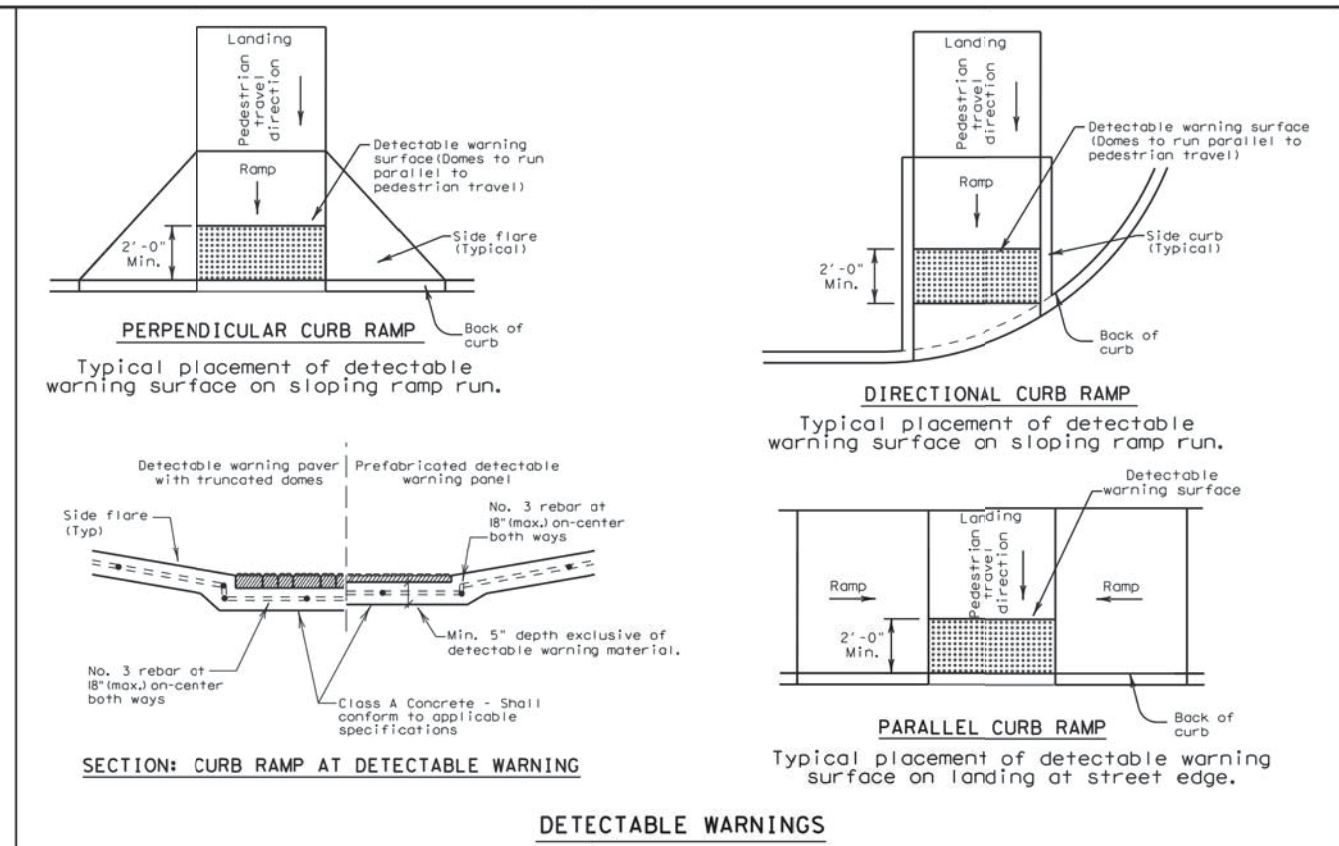
Texas Department of Transportation
Design Division Standard

PEDESTRIAN FACILITIES CURB RAMPS

PED-12A

DATE: 06/13/12	DESIGNER: JDS	CHECKER: JDS	DATE: 06/13/12	DATE: 06/13/12	DATE: 06/13/12
NO.	REV.	BY	DATE	NO.	REV.

- General Notes**
1. Install a curb ramp or blended transition at each pedestrian street crossing.
 2. All slopes shown are maximum allowable. Lesser slopes that will still drain properly should be used. Adjust curb ramp length or grade of approach sidewalks as directed.
 3. The minimum sidewalk width is 5'. Where the sidewalk is adjacent to the back of curb, a 5' sidewalk width is desirable. Where a 5' sidewalk cannot be provided due to site constraints, sidewalk width may be reduced to 4' for short distances. 5' x 5' passing areas at intervals not to exceed 200' are required.
 4. Landings shall be 5' x 5' minimum with a maximum 2% slope in any direction.
 5. Maneuvering space at the bottom of curb ramps shall be a minimum of 4' x 4' wholly contained within the crosswalk and wholly outside the parallel vehicular travel path.
 6. Maximum allowable cross slope on sidewalk and curb ramp surfaces is 2%.
 7. Provide flared sides where the pedestrian circulation path crosses the curb ramp. Flared sides shall be sloped at 10% maximum, measured parallel to the curb. Returned curbs may be used only where pedestrians would not normally walk across the ramp, either because the adjacent surface is planted, substantially obstructed, or otherwise protected.
 8. Additional information on curb ramp location, design, light reflective value and texture may be found in the current edition of the Texas Accessibility Standards (TAS) and 16 TAC 68.102.
 9. To serve as a pedestrian refuge area, the median should be a minimum of 6' wide, measured from back of curb. Medians should be designed to provide accessible passage over or through them.
 10. Small channelization islands, which do not provide a minimum 5' x 5' landing at the top of curb ramps, shall be cut through level with the surface of the street.
 11. Crosswalk dimensions, crosswalk markings and stop bar locations shall be as shown elsewhere in the plans. At intersections where crosswalk markings are not required, curb ramps shall align with theoretical crosswalks unless otherwise directed.
 12. Handrails are not required on curb ramps. Provide curb ramps wherever an accessible route crosses (penetrates) a curb.
 13. Curb ramps and landings shall be constructed and paid for in accordance with Item 531 "Sidewalks".
 14. Place concrete of a minimum depth of 5" for ramps, flares and landings, unless otherwise directed.
 15. Provide a smooth transition where the curb ramps connect to the street.
 16. Curbs shown on sheet 1 within the limits of payment are considered part of the curb ramp for payment, whether it is concrete curb, gutter, or combined curb and gutter.
 17. Existing features that comply with TAS may remain in place unless otherwise shown on the plans.



SHEET 2 OF 4

Texas Department of Transportation
Design Division Standard

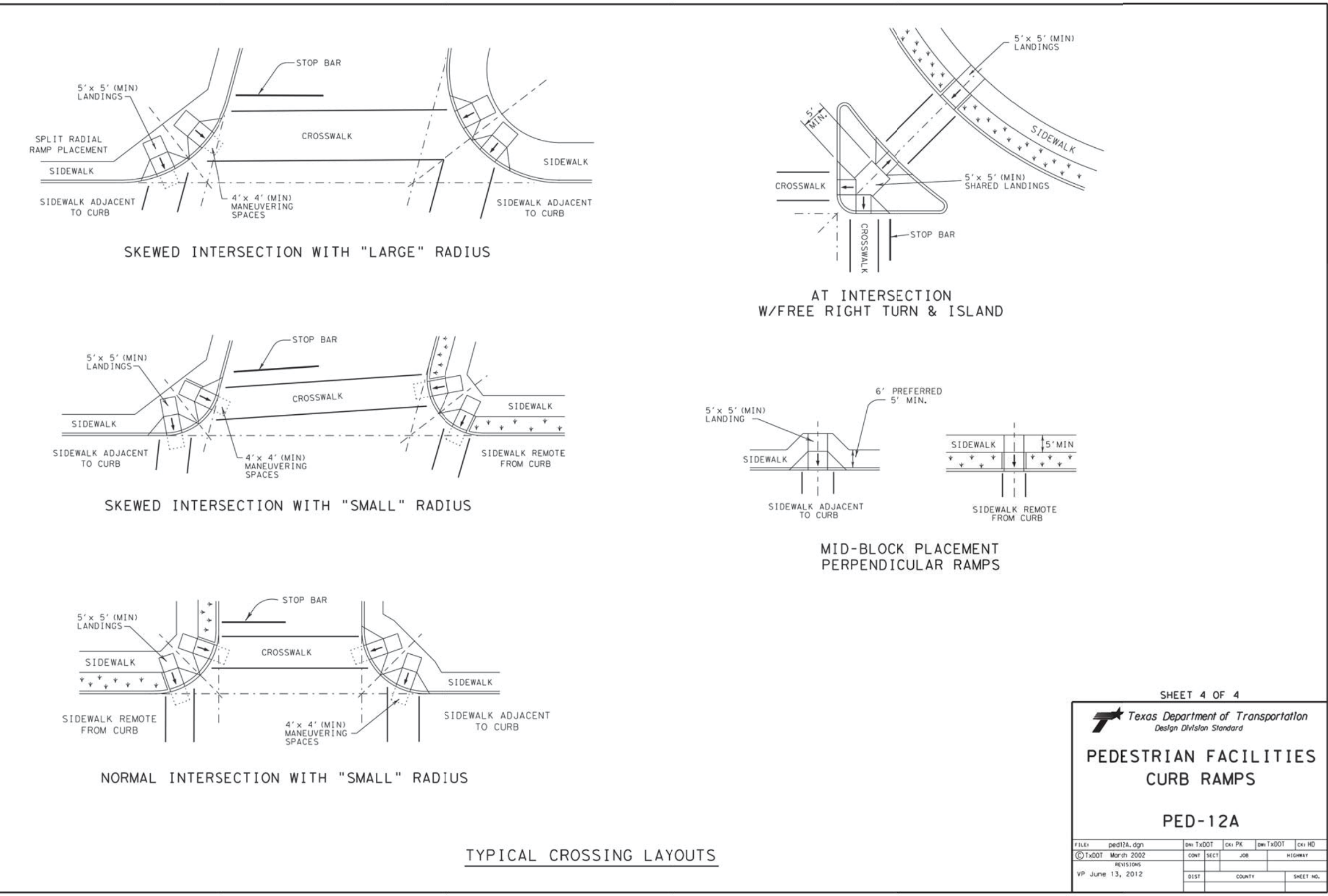
PEDESTRIAN FACILITIES CURB RAMPS

PED-12A

DATE: 06/13/12	DESIGNER: JDS	CHECKER: JDS	DATE: 06/13/12	DATE: 06/13/12	DATE: 06/13/12
NO.	REV.	BY	DATE	NO.	REV.

- Detectable Warning Pavers**
24. Furnish detectable warning paver units meeting all requirements of ASTM C-936, C-33. Lay in a two by two unit basket weave pattern or as directed.
 25. Lay full-size units first followed by closure units consisting of at least 25 percent of a full unit. Cut detectable warning paver units using a power saw.
- Sidewalks**
26. Provide clear ground space at operable parts, including pedestrian push buttons. Operable parts shall be placed within one or more reach ranges specified in TAS 308.
 27. Place traffic signal or illumination poles, ground boxes, controller boxes, signs, drainage facilities and other items so as not to obstruct the pedestrian access route or clear ground space.
 28. Street grades and cross slopes shall be as shown elsewhere in the plans.
 29. Changes in level greater than 1/4 inch are not permitted.
 30. The least possible grade should be used to maximize accessibility. The running slope of sidewalks and crosswalks within the public right of way may follow the grade of the parallel roadway. Where a continuous grade greater than 2% must be provided, handrails may be desirable to improve accessibility. Handrails may also be needed to protect pedestrians from potentially hazardous conditions. If provided, handrails shall comply with TAS 505.
 31. Handrail extensions shall not protrude into the usable landing area or into intersecting pedestrian routes.
 32. Driveways and turnouts shall be constructed and paid for in accordance with Item "Intersections, Driveways and Turnouts". Sidewalks shall be constructed and paid for in accordance with Item "Sidewalks".
 33. Sidewalk details are shown elsewhere in the plans.

THE WORK OF THIS PROJECT IS GOVERNED BY THE "Texas Engineering Practice Act". The maximum of 20% of this work shall be done by the engineer or architect. The maximum of 10% of this work shall be done by the engineer or architect. The maximum of 5% of this work shall be done by the engineer or architect.



SHEET 4 OF 4

Texas Department of Transportation
Design Division Standard

PEDESTRIAN FACILITIES CURB RAMPS

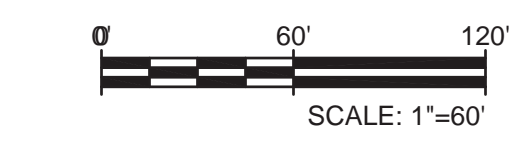
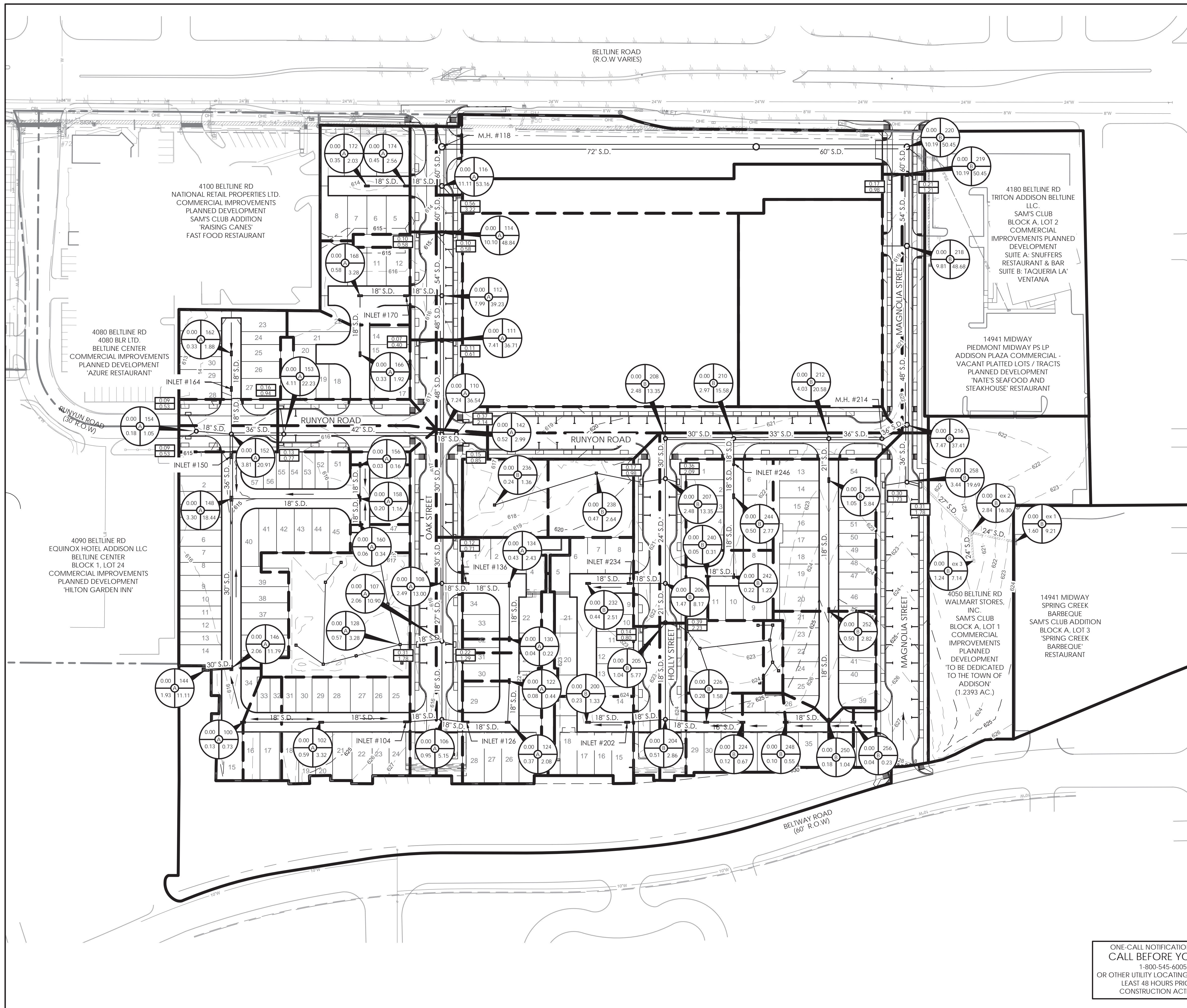
PED-12A

DATE: 06/13/12	DESIGNER: JDS	CHECKER: JDS	DATE: 06/13/12	DATE: 06/13/12	DATE: 06/13/12
NO.	REV.	BY	DATE	NO.	REV.



SAWYER ENGINEERING, LLC
TPEE FIRM NUMBER F-9171

TOWN OF ADDISON DALLAS COUNTY, TEXAS					
IMPROVEMENT PLANS ADDISON GROVE					
PAVING DETAILS					
SAWYER		ENGINEERING, LLC		1520 OLIVER STREET HOUSTON, TEXAS 77007 (832) 553-5948	
PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
	CDP	JDS	MAY 2017		16



DRAINAGE AREA MAP LEGEND

- MAJOR DRAINAGE AREA DIVIDE
- MINOR DRAINAGE AREA DIVIDE
- PROPOSED STORM SEWER, MANHOLE AND INLETS
- EXISTING STORM SEWER, MANHOLE AND INLETS
- DIRECTION OF FLOW
- MANHOLE NUMBER
DRAINAGE SYSTEM
- ACCUMULATED ACREAGE
ACCUMULATED C.F.S.
- ACREAGE IN AREA
C.F.S. IN AREA

FLOOD DATA
 THIS PROPERTY IS IN ZONE X OF THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 48113C0180K WHICH HAS AN EFFECTIVE DATE OF JULY 7, 2014 AND IS NOT IN A SPECIAL FLOOD HAZARD AREA.



SAWYER ENGINEERING, LLC
 TBPE FIRM NUMBER F-9171

ONE-CALL NOTIFICATION SYSTEM
CALL BEFORE YOU DIG
 1-800-545-6005
 OR OTHER UTILITY LOCATING SERVICES AT
 LEAST 48 HOURS PRIOR TO
 CONSTRUCTION ACTIVITIES.

NO.	REVISION	BY	DATE
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
IMPROVEMENT PLANS ADDISON GROVE			
DRAINAGE AREA MAP			
SAWYER		ENGINEERING, LLC TBPE F-9171	1520 OLIVER STREET HOUSTON, TEXAS 77007 (832) 553-5948
PROJECT	DESIGN	DRAWN	DATE
	CDP	JDS	MAY 2017
FILE	SHEET		
	18		

DRAINAGE AREA COMPUTATIONS - SYSTEM A

FROM MH	TO MH	AREA (AC)	TOTAL AREA (AC)	C	Tc (MIN)	I ₁₀ (IN/HR)	Q ₁₀ (CFS)	I ₁₀₀ (IN/HR)	Q ₁₀₀ (CFS)
100	102	0.13	0.13	0.88	10.00	6.54	0.73	9.27	1.03
102	104	0.46	0.59	0.88	10.63	6.40	3.32	9.08	4.71
104	106	0.00	0.59	0.88	11.58	6.20	3.32	8.82	4.58
106	107	0.00	0.95	0.88	11.98	6.12	5.15	8.71	7.32
107	108	0.00	2.06	0.88	12.53	6.02	10.90	8.57	15.51
108	node 2	0.00	2.49	0.88	12.97	5.94	13.00	8.46	18.51
node 2	110	0.00	2.61	0.88	13.42	5.86	13.45	8.35	19.18
110	111	0.00	7.24	0.88	14.11	5.74	36.54	8.18	52.14
111	112	0.00	7.41	0.88	14.78	5.63	38.71	8.04	52.42
112	114	0.00	7.99	0.88	15.09	5.58	39.23	7.97	56.04
114	116	2.11	10.10	0.88	15.82	5.49	48.64	7.86	69.83
116	118	0.56	11.11	0.88	16.01	5.44	53.16	7.78	76.05
118	120	0.00	11.11	0.88	16.31	5.39	53.16	7.72	75.46
inlet 304	111	0.07	0.07	0.88	10.00	6.54	0.40	9.27	0.56
inlet 306	111	0.11	0.11	0.88	10.00	6.54	0.61	9.27	0.86
122	124	0.08	0.08	0.88	10.00	6.54	0.44	9.27	0.63
124	126	0.29	0.37	0.88	10.34	6.47	2.08	9.17	2.95
126	106	0.00	0.37	0.88	10.68	6.39	2.08	9.07	2.91
128	inlet 310	0.57	0.57	0.88	10.00	6.54	3.28	9.27	4.65
inlet 310	107	0.31	0.88	0.88	10.16	6.51	5.04	9.22	7.14
inlet 312	107	0.22	0.22	0.88	10.00	6.54	1.29	9.27	1.82
130	node	0.04	0.04	0.88	10.00	6.54	0.22	9.27	0.31
node	134	0.00	0.15	0.88	10.40	6.45	0.85	9.15	1.21
134	136	0.28	0.43	0.88	10.46	6.44	2.43	9.13	3.45
136	108	0.00	0.43	0.88	10.81	6.36	2.43	9.03	3.42
138	140	0.03	0.03	0.88	10.00	6.54	0.17	9.27	0.24
140	node	0.08	0.11	0.88	10.31	6.47	0.64	9.18	0.90
inlet 308	node 2	0.12	0.12	0.88	10.00	6.54	0.71	9.27	1.00
inlet 314	142	0.37	0.37	0.88	10.00	6.54	2.14	9.27	3.04
142	110	0.00	0.52	0.88	10.02	6.54	2.99	9.27	4.24
inlet 316	142	0.15	0.15	0.88	10.00	6.54	0.85	9.27	1.20
144	146	1.93	1.93	0.88	10.00	6.54	11.11	9.27	15.75
146	148	0.13	2.06	0.88	10.21	6.50	11.79	9.21	16.72
148	150	1.03	3.30	0.88	10.89	6.35	18.44	9.01	26.17
150	152	0.00	3.30	0.88	11.25	6.27	18.44	8.91	25.88
152	153	0.00	3.81	0.88	11.43	6.24	20.91	8.86	29.71
153	110	0.00	4.11	0.88	11.86	6.15	22.23	8.74	31.61
inlet 318	153	0.16	0.16	0.88	10.00	6.54	0.94	9.27	1.33
inlet 320	153	0.13	0.13	0.88	10.00	6.54	0.77	9.27	1.10
inlet 322	154	0.09	0.09	0.88	10.00	6.54	0.53	9.27	0.75
154	152	0.00	0.18	0.88	10.15	6.51	1.05	9.23	1.49
inlet 324	154	0.09	0.09	0.88	10.00	6.54	0.53	9.27	0.75
156	158	0.03	0.03	0.88	10.00	6.54	0.16	9.27	0.22
158	148	0.12	0.20	0.88	10.28	6.48	1.16	9.19	1.65
160	158	0.06	0.06	0.88	10.00	6.54	0.34	9.27	0.49
162	inlet 164	0.33	0.33	0.88	10.00	6.54	1.88	9.27	2.67
inlet 164	152	0.00	0.33	0.88	10.14	6.51	1.88	9.23	2.66
166	168	0.33	0.33	0.88	10.00	6.54	1.92	9.27	2.72
168	170	0.25	0.58	0.88	10.49	6.43	3.28	9.13	4.65
170	112	0.00	0.58	0.88	10.86	6.35	3.28	9.02	4.60
172	174	0.35	0.35	0.88	10.00	6.54	2.03	9.27	2.88
174	116	0.10	0.45	0.88	10.33	6.47	2.56	9.17	3.63

STORM PROFILES - SYSTEM A

FROM MH	TO MH	SLOPE (%)	DESIGN Q (CFS)	Q ₁₀₀ (CFS)	ACTUAL V (FPS)	VELOCITY HEAD (FT)
100	102	0.177	4.4	1.03	0.58	0.01
102	104	0.177	4.4	4.71	2.67	0.11
104	106	0.177	4.4	4.58	2.59	0.10
106	107	0.177	4.4	7.32	4.14	0.27
107	108	0.103	10.0	15.51	3.90	0.24
108	node 2	0.090	12.3	18.51	3.77	0.22
node 2	110	0.090	12.3	19.18	3.91	0.24
110	111	0.048	31.6	52.14	4.15	0.27
111	112	0.048	31.6	52.42	4.17	0.27
112	114	0.048	31.6	56.04	4.46	0.31
114	116	0.041	39.9	69.83	4.39	0.30
116	118	0.036	49.5	76.05	3.87	0.23
118	120	0.180	17.4	75.46	15.37	3.67
inlet 304	111	0.177	4.4	0.56	0.32	0.00
inlet 306	111	0.177	4.4	0.86	0.49	0.00
122	124	0.177	4.4	0.63	0.36	0.00
124	126	0.177	4.4	2.95	1.67	0.04
126	106	0.177	4.4	2.91	1.65	0.04
128	inlet 310	0.177	4.4	4.65	2.63	0.11
inlet 310	107	0.177	4.4	7.14	4.04	0.25
inlet 312	107	0.177	4.4	1.82	1.03	0.02
130	node	0.177	4.4	0.31	0.18	0.00
node	134	0.177	4.4	1.21	0.68	0.01
134	136	0.177	4.4	3.45	1.95	0.06
136	108	0.177	4.4	3.42	1.93	0.06
138	140	0.177	4.4	0.24	0.14	0.00
140	node	0.177	4.4	0.90	0.51	0.00
inlet 308	node 2	0.177	4.4	1.00	0.57	0.01
inlet 314	142	0.177	4.4	3.04	1.72	0.05
142	110	0.177	4.4	4.24	2.40	0.09
inlet 316	142	0.177	4.4	1.20	0.68	0.01
144	146	0.177	4.4	15.75	8.91	1.23
146	148	0.177	4.4	16.72	9.46	1.39
148	150	0.177	4.4	26.17	14.81	3.41
150	152	0.177	4.4	25.88	14.65	3.33
152	153	0.177	4.4	29.71	16.81	4.39
153	110	0.177	4.4	31.61	17.89	4.97
inlet 318	153	0.177	4.4	1.33	0.75	0.01
inlet 320	153	0.177	4.4	1.10	0.62	0.01
inlet 322	154	0.177	4.4	0.75	0.42	0.00
154	152	0.177	4.4	1.49	0.84	0.01
inlet 324	154	0.177	4.4	0.75	0.42	0.00
156	158	0.177	4.4	0.22	0.13	0.00
158	148	0.177	4.4	1.65	0.93	0.01
160	158	0.177	4.4	0.49	0.27	0.00
162	inlet 164	0.177	4.4	2.67	1.51	0.04
inlet 164	152	0.177	4.4	2.66	1.50	0.04
166	168	0.177	4.4	2.72	1.54	0.04
168	170	0.177	4.4	4.65	2.63	0.11
170	112	0.177	4.4	4.60	2.60	0.11
172	174	0.177	4.4	2.88	1.63	0.04
174	116	0.177	4.4	3.63	2.06	0.07

COMPUTATIONS FOR STORM DRAINS SYSTEM A ADDISON GROVES

FROM MH	TO MH	Q ₁₀ (CFS)	REACH (FT)	LINE SIZE (IN)	DESIGN Q (CFS)	Q ₁₀₀ (CFS)	Q Avail Qdesign Q10 Q100 Delta Q Q avail	Street / Alley / Capacity	Frictional Slope (FT / FT)	UPST. H.G.L. (FT)	DNST. H.G.L. (FT)	V1 (Flow In) (fps)	V2 (Flow Out) (fps)	V2^2 (fps)	V1^2 (fps)	Kj (Coeff. of Loss) 1 (const)	Hj1 (HL 1) (FT)	Kj (Coeff. of Loss) 2 (const)	Hj2 (HL 2) (FT)	Hj Total (FT)	Elev of Hyd Grade Line (FT)	Elev Difference TC - HGL (FT)	TC - HGL (FT)	Comments		
100	102	0.73	95	18	4.4	1.03	3.70	0.30	-3.40	158.87	0.0001	611.47	611.46	-	0.58	0.01	-	1.25	0.01	0.11	611.47	616.16	4.69	Inlet at Beginning of Line		
102	104	3.32	107	18	4.4	4.71	1.11	1.39	0.28	87.08	0.0020	611.46	611.25	0.58	2.67	0.11	0.01	-	0.11	0.11	611.36	616.05	4.69	Inlet		
104	106	3.32	45	18	4.4	4.58	1.11	1.25	0.15	42.18	0.0019	611.25	611.16	2.67	2.59	0.10	0.11	-	-0.01	-0.01	611.15	616.48	5.33	Inlet		
106	107	5.15	97	18	4.4	7.32	2.17	2.89	17.03	0.0049	611.16	610.69	2.59	4.14	0.27	0.10	-	0.31	0.31	611.00	616.04	5.04	Incoming Opposing Flows			
107	108	10.90	72	27	10.0	15.51	-0.72	4.61	5.55	39.72	0.0025	610.69	610.51	4.14	3.90	0.24	0.27	0.30	0.16	0.29	0.08	0.23	610.75	616.04	5.29	Manhole with Lateral + Pipe Enlargement
108	node 2	13.00	71	30	12.3	18.51	-0.66	5.51	6.17	55.94	0.0021	610.51	610.37	3.90	3.77	0.22	0.24	0.75	0.04	0.10	0.02	0.07	610.44	616.15	5.71	45" WYE + Pipe Enlargement
node 2	110	13.45	114	30	12.3	19.18	-1.12	5.72	6.84	63.34	0.0022	610.37	610.12	3.77	3.91	0.24	0.22	-	-	-	0.00	610.12	616.15	6.03	NONE	
110	111	36.54	116	48	31.6	52.14	-4.99	15.59	20.59	65.63	0.0013	610.12	609.97	3.91	4.15	0.27	0.24	-	0.59	0.35	0.08	0.67	610.64	617.86	6.79	Incoming Opposing Flows + Pipe Enlargement
111	112	38.71	55	48	31.6	52.42	-5.16	15.71	20.87	39.14	0.0013	609.97	609.90	4.15	4.17	0.27	0.27	-	-	-	0.17	610.07	615.86	5.72	Manhole with Lateral	
112	114	39.23	78	54	39.9	56.04	0.70	16.82	16.12	245.17	0.0008	609.90	609.84	4.17	3.52	0.19	0.27	-	-	-	0.11	609.95	615.86	5.91	Manhole with Lateral	
114	116	48.64	58	60	49.5	69.83	0.70	20.99	20.29	225.64	0.0007	609.84	609.79	3.52	3.56	0.20	0.19	0.36	0.13	0.10	0.02	0.15	609.94	614.43	4.49	Manhole with Lateral + Pipe Enlargement
116	118	53.16	49	60	49.5	76.05	-3.62	22.89	26.51	124.77	0.0009	609.79	609.75	3.56	3.87	0.23	0.20	0.30	0.17	0.10	0.02	0.19	609.95	613.37	3.42	Manhole with Lateral + Pipe Enlargement
118	120	53.16	27	30	54.7	83.02	1.51	29.86	28.35	31.00	0.0413	609.75	609.64	3.87	16.91	4.										

DRAINAGE AREA COMPUTATIONS - SYSTEM B

STORM PROFILES - SYSTEM B

COMPUTATIONS FOR STORM DRAINS SYSTEM B ADDISON GROVES

FROM MH	TO MH	AREA (AC)	TOTAL AREA (AC)	C	Tc (MIN)	I ₁₀ (IN/HR)	Q ₁₀ (CFS)	I ₁₀₀ (IN/HR)	Q ₁₀₀ (CFS)
200	202	0.23	0.23	0.88	10.00	6.54	1.33	9.27	1.89
202	204	0.00	0.23	0.88	10.33	6.47	1.33	9.17	1.87
204	205	0.00	0.51	0.88	10.65	6.40	2.86	9.08	4.05
205	206	0.00	1.04	0.88	11.02	6.32	5.77	8.97	8.19
206	207	0.00	1.47	0.88	11.10	6.30	8.17	8.95	11.61
207	208	0.00	2.48	0.88	11.96	6.13	13.35	8.71	18.99
208	210	0.00	2.48	0.88	12.30	6.06	13.35	8.63	18.80
210	212	0.00	2.97	0.88	12.86	5.96	15.58	8.48	22.19
212	214	0.00	4.03	0.88	13.69	5.81	20.58	8.28	29.34
214	216	0.00	4.03	0.88	14.13	5.73	20.58	8.18	28.98
216	218	0.00	7.47	0.88	14.36	5.69	37.41	8.13	53.40
218	219	2.34	9.81	0.88	14.69	5.64	48.68	8.05	69.50
219	220	0.38	10.19	0.88	14.77	5.63	50.45	8.04	72.05
220	222	0.00	10.19	0.88	14.81	5.62	50.45	8.03	71.97
222	118	0.00	10.19	0.88	16.04	5.43	50.45	7.77	69.63
inlet 350	205	0.14	0.14	0.88	10.00	6.54	0.80	9.27	1.13
224	226	0.12	0.12	0.88	10.00	6.54	0.67	9.27	0.95
226	204	0.16	0.28	0.88	10.10	6.52	1.58	9.24	2.24
232	234	0.44	0.44	0.88	10.00	6.54	2.51	9.27	3.56
234	206	0.00	0.44	0.88	10.35	6.46	2.51	9.17	3.52
236	238	0.24	0.24	0.88	10.00	6.54	1.36	9.27	1.93
238	inlet 354	0.24	0.47	0.88	10.88	6.35	2.64	9.01	3.75
inlet 354	207	0.17	0.64	0.88	11.27	6.27	3.52	8.90	5.01
inlet 356	207	0.36	0.36	0.88	10.00	6.54	2.09	9.27	2.97
240	242	0.05	0.05	0.88	10.00	6.54	0.31	9.27	0.44
242	244	0.16	0.22	0.88	10.21	6.49	1.23	9.21	1.75
244	246	0.28	0.50	0.88	10.87	6.35	2.77	9.01	3.93
246	210	0.00	0.50	0.88	11.14	6.29	2.77	8.94	3.90
248	250	0.10	0.10	0.88	10.00	6.54	0.55	9.27	0.78
250	252	0.05	0.18	0.88	10.35	6.46	1.04	9.17	1.48
252	254	0.32	0.50	0.88	10.69	6.39	2.82	9.07	4.01
254	212	0.55	1.05	0.88	11.10	6.30	5.84	8.95	8.30
inlet 256	250	0.04	0.04	0.88	10.00	6.54	0.23	9.27	0.33
Ex Inlet 1	Ex Inlet 2	1.60	1.60	0.88	10.00	6.54	9.21	9.27	13.06
Ex Inlet 2	258	1.24	2.84	0.88	10.06	6.53	16.30	9.25	23.11
258	216	0.60	3.44	0.88	10.18	6.50	19.69	9.22	27.91

FROM MH	TO MH	SLOPE (%)	DESIGN Q (CFS)	Q ₁₀₀ (CFS)	ACTUAL V (FPS)	VELOCITY HEAD (FT)
200	202	0.177	4.4	1.89	1.07	0.02
202	204	0.177	4.4	1.87	1.06	0.02
204	205	0.177	4.4	4.05	2.29	0.08
205	206	0.177	4.4	8.19	4.64	0.33
206	207	0.177	4.4	11.61	6.57	0.67
207	208	0.177	4.4	18.99	10.74	1.79
208	210	0.177	4.4	18.80	10.64	1.76
210	212	0.177	4.4	22.19	12.56	2.45
212	214	0.177	4.4	29.34	16.60	4.28
214	216	0.177	4.4	28.98	16.40	4.18
216	218	0.177	4.4	53.40	30.22	14.18
218	219	0.177	4.4	69.50	39.33	24.02
219	220	0.177	4.4	72.05	40.77	25.81
220	222	0.177	4.4	71.97	40.73	25.75
inlet 350	205	0.177	4.4	1.89	1.07	0.02
224	226	0.177	4.4	0.95	0.54	0.00
226	204	0.177	4.4	2.24	1.27	0.02
232	234	0.177	4.4	3.56	2.01	0.06
234	206	0.177	4.4	3.52	1.99	0.06
236	238	0.177	4.4	1.93	1.09	0.02
238	inlet 354	0.177	4.4	3.75	2.12	0.07
inlet 354	207	0.177	4.4	5.01	2.83	0.12
inlet 356	207	0.177	4.4	2.97	1.68	0.04
240	242	0.177	4.4	0.44	0.25	0.00
242	244	0.177	4.4	1.75	0.99	0.02
244	246	0.177	4.4	3.93	2.23	0.08
246	210	0.177	4.4	3.90	2.21	0.08
248	250	0.177	4.4	0.78	0.44	0.00
250	252	0.177	4.4	1.48	0.84	0.01
252	254	0.177	4.4	4.01	2.27	0.08
254	212	0.177	4.4	8.30	4.70	0.34
inlet 256	250	0.177	4.4	0.33	0.18	0.00
Ex Inlet 1	Ex Inlet 2	0.177	4.4	13.06	7.39	0.85
Ex Inlet 2	258	0.177	4.4	23.11	13.08	2.65
258	216	0.177	4.4	27.91	15.80	3.87

FROM MH	TO MH	Q ₁₀ (CFS)	REACH (FT)	LINE SIZE (IN)	DESIGN Q (CFS)	Q ₁₀₀ (CFS)	Q Avail Q ₁₀ (CFS)	Delta Q (CFS)	Q req Q avail (CFS)	Street / Alley / Detention Capacity (CFS)	Frictional Slope (FT / FT)	UPST. H.G.L. (FT)	DNST. H.G.L. (FT)	V1 (Flow In) (fps)	V2 (Flow Out) (fps)	V2^2 / 2g (fps)	V1^2 / 2g (fps)	Kj (Coeff. of Loss) 1 (const)	Hf1 (HL 1) (FT)	Kj (Coeff. of Loss) 2 (const)	Hf2 (HL 2) (FT)	Hj Total (FT)	Elev of Hyd Gradeline (FT)	TC - HGL (FT)	TC - HGL (FT)	Comments	
200	202	1.33	50	18	4.4	1.89	3.10	0.56	-2.54	81.63	0.0003	617.01	617.00	1.07	1.06	0.02	0.02	-	1.25	0.02		0.02	617.20	623.88	6.68	Inlet at Beginning of Line	
202	204	1.33	48	18	4.4	1.87	3.10	0.54	-2.56	75.98	0.0003	617.01	617.00	1.07	1.06	0.02	0.02	-	1.25	0.02		0.00	617.00	624.35	7.35	Inlet	
204	205	2.86	120	18	9.7	4.05	6.80	1.20	-5.60	119.84	0.0015	616.07	615.89	1.06	2.29	0.08	0.02	-	1.25	0.08		0.08	615.97	623.67	7.70	Incoming Opposing Flows	
205	206	5.77	49	21	23.6	8.19	17.79	2.42	-15.37	45.63	0.0027	615.38	615.25	2.29	3.41	0.18	0.08	0.36	1.25	0.10	0.01	0.16	615.41	622.11	6.70	Manhole with Lateral + Pipe Enlargement	
206	207	8.17	130	24	7.9	11.61	-0.28	3.43	3.72	76.28	0.0027	615.25	614.91	3.41	3.69	0.21	0.18	0.30	1.25	0.10	0.02	0.18	615.09	621.64	6.55	Manhole with Lateral + Pipe Enlargement	
207	208	13.35	50	30	12.3	18.99	-1.02	5.64	6.65	35.91	0.0022	614.91	614.80	3.69	3.87	0.23	0.21	0.10	1.25	0.10	0.02	0.02	614.83	620.36	5.53	Pipe Enlargement	
208	210	13.35	85	30	12.3	18.80	-1.02	5.45	6.46	51.45	0.0021	614.80	614.63	3.87	3.83	0.23	0.23	0.70	1.25	0.10	0.02	0.16	614.79	620.65	5.86	Change in Direction at Manhole	
210	212	15.58	118	33	14.0	22.19	-1.55	6.61	8.16	100.53	0.0018	614.63	614.42	3.83	3.74	0.22	0.23	0.10	1.25	0.10	0.02	0.02	614.44	620.91	6.47	Pipe Enlargement	
212	214	20.58	66	36	17.7	29.34	-2.89	8.76	11.65	29.83	0.0019	614.42	614.29	3.74	4.15	0.27	0.22	0.10	1.25	0.10	0.02	0.02	614.31	621.59	7.28	Pipe Enlargement	
214	216	20.58	35	36	17.7	28.98	-2.89	8.40	11.29	21.34	0.0019	614.23	614.17	4.15	4.10	0.26	0.27	0.47	1.25	0.10	0.12	0.12	614.29	622.01	7.72	Change in Direction at Manhole	
216	218	37.41	250	48	161.0	53.40	123.59	15.99	-107.60	50.71	0.0014	611.39	611.04	4.10	4.25	0.28	0.26	0.23	1.25	0.06	0.75	0.18	0.25	611.29	622.10	10.81	Pipe Enlargement + 45" WYE
218	219	48.68	61	60	261.1	69.50	212.42	20.83	-191.60	234.99	0.0007	610.88	610.83	4.25	3.54	0.19	0.28	0.10	1.25	0.03		0.03	610.86	618.33	7.47	Pipe Enlargement	
219	220	50.45	33	60	261.1	72.05	210.65	21.60	-189.05	119.97	0.0008	610.83	610.81	3.54	3.67	0.21	0.19	0.30	1.25	0.15		0.15	610.96	617.05	6.09	Manhole with Lateral	
220	222	50.45	187	60	49.5	71.97	-0.91	21.52	22.43	553.83	0.0008	610.81	610.66	3.67	3.67	0.21	0.21	0.70	1.25	0.15		0.15	610.81	616.55	5.74	Change in Direction at Manhole	
222	118	50.45	390	72	71.0	69.63	20.59	19.18	-1.41	4495.10	0.0003	610.66	610.56	3.67	2.46	0.09	0.21	0.15	1.25	0.01		0.01	610.57	616.55	5.98	Manhole	
inlet 350	205	0.80	29	18	4.4	1.13	3.63	0.33	-3.30	73.52	0.0001	615.88	615.88	-	0.84	0.01	-	1.25	0.01			0.01	615.89	622.54	6.65	Inlet at Beginning of Line	
224	226	0.67	45	18	12.9	0.95	12.23	0.28	-11.94	94.44	0.0001	618.34	618.34	-	0.54	0.00	-	1.25	0.01			0.01	618.34	625.01	6.67	Inlet at Beginning of Line	
226	204	1.58	51	18	16.4	2.24	14.84	0.66	-14.18	88.26	0.0005	617.02	617.00	0.54	1.27	0.02	0.00	-	1.25	0.02		0.02	617.02	624.36	7.34	Inlet	
232	234	2.51	53	18	4.4	3.56	1.92	1.05	-0.87	65.80	0.0012	617.95	617.89	-	2.01	0.06	-	1.25	0.08			0.08	617.97	622.10	4.13	Inlet at Beginning of Line	
234	206	2.51	45	18	4.4	3.52	1.92	1.01	-0.91	58.36	0.0011	615.30	615.25	2.01	1.99	0.06	0.06	-	1.25	0.00		0.00	615.25	622.47	7.22	Inlet	
236	238	1.36	132	18	4.4	1.93	3.07	0.57	-2.50	PARK	0.0003	615.09	615.05	-	1.09	0.02	-	1.25	0.02			0.02	615.07	618.00	2.93	Inlet at Beginning of Line	
238	inlet 354	2.64	59	18	4.4	3.75	1.79	1.11	-0.69	PARK	0.0013	615.05	614.97	1.09	2.12	0.07	0.02	-	1.25	0.06		0.06	615.03	618.00	2.97	Inlet	
inlet 354	207	3.52	28	18	4.4	5.01	0.91	1.48	0.57	46.59	0.0023	614.97	614.91	2.12	2.83	0.12	0.07	-	1.25	0.07		0.07	614.				

INLET COMPUTATIONS ADDISON GROVES

SHEET 10 - PEARSON / BLOCK B / BLOCK A

INLET #	INLET LOCATION				AREA (AC)	C	Tc (MIN)	I ₁₀ (IN/HR)	Q ₁₀ (CFS)	STREET SLOPE (%)	STREET XSLOPE (%)	STREET WIDTH (FT)	INLET DEPRESSION (FT)	INLET CAPACITY (CFS/FT)	INLET LENGTH (FT)	INLET CAPACITY* (CFS)
	INLET TYPE	NORTHING	EASTING													
	100	Grate	7033366.5	2476756.66												

SHEET 11 & 12 - RUNYON

INLET #	INLET LOCATION				AREA (AC)	C	Tc (MIN)	I ₁₀ (IN/HR)	Q ₁₀ (CFS)	STREET SLOPE (%)	STREET XSLOPE (%)	STREET WIDTH (FT)	INLET DEPRESSION (FT)	INLET CAPACITY (CFS/FT)	INLET LENGTH (FT)	INLET CAPACITY (CFS)
	INLET TYPE	NORTHING	EASTING													
	I-324	Curb	7033721.03	2476680.67												

Detention Calculations

Modified Rational Method
100-Year Event

SAM'S CLUB SITE = 17.4 AC
OFFSITE AREA (to Bellline) = 12.3 AC
TOTAL DRAINAGE STUDY AREA = 29.7 AC

Ex Sam's Pond	
Area	15.00 acres
Time (T _c)	10.0 minutes
C value	0.78
I	9.27 in/hr
Q _{release}	104.33 cfs

Ex Bypass (Sam's + Offsite)	
Area	14.70 acres
Time (T _c)	10.0 minutes
C value	0.84
I	9.27 in/hr
Q ₂₅	114.6 cfs

Q_{total} = 218.9 cfs

Proposed to Pond (Addison Grove)	
Area	16.11 acres
Time (T _c)	10.0 minutes
C value	0.88
I ₁₀₀	9.27 in/hr
Q ₁₀₀	132.00 cfs

Proposed Bypass (Addison Grove + Off-site)	
Area	13.59 acres
Time (T _c)	10.0 minutes
C value	0.90
I ₁₀₀	9.27 in/hr
Q ₁₀₀	113.41 cfs

Q_{release} = 105.5 cfs

Runoff per Storm Event - Proposed					INFLOW			OUTFLOW			STORAGE
Storm Event Time (min.)	I ₁₀₀	C value	Area (ac)	Runoff (cfs)	Inflow (ft ³)	Time	Release	Outflow (ft ³)	Storage (ft ³)		
10	9.27	0.88	16.11	132.00	79,202	20.0	105.49	63,292	15,910		

0.59 ac-ft

Impervious @ C = 1.00	13.61	Ac
Pervious (0% - 3% Slope) C = 0.25	2.50	Ac
C _{weighted} =	0.88	

INLET COMPUTATIONS ADDISON GROVES

SHEET 13 - SMITH

INLET #	INLET LOCATION				AREA (AC)	C	Tc (MIN)	I ₁₀ (IN/HR)	Q ₁₀ (CFS)	STREET SLOPE (%)	STREET XSLOPE (%)	STREET WIDTH (FT)	INLET DEPRESSION (FT)	INLET CAPACITY (CFS/FT)	INLET LENGTH (FT)	INLET CAPACITY (CFS)
	INLET TYPE	NORTHING	EASTING													
	200	Grate	7033366.5	2477182.66												

SHEET 14 - FOOR / BLOCK D

INLET #	INLET LOCATION				AREA (AC)	C	Tc (MIN)	I ₁₀ (IN/HR)	Q ₁₀ (CFS)	STREET SLOPE (%)	STREET XSLOPE (%)	STREET WIDTH (FT)	INLET DEPRESSION (FT)	INLET CAPACITY (CFS/FT)	INLET LENGTH (FT)	INLET CAPACITY (CFS)
	INLET TYPE	NORTHING	EASTING													
	224	Grate	7033366.5	2477375.66												

* Extrapolated from FHWA-NHI-10-009 (HEC 22) Figure 4-11.

UNDERGROUND DETENTION

ADDITIONAL VOLUME IN STORM PIPES	
DRAINAGE SYSTEM "A"	3136 CF
DRAINAGE SYSTEM "B"	7224 CF
(including Box Culvert)	
TOTAL IN PIPES AND BOXES	10360 CF
VOLUME PROVIDED IN STRUCTURAL SOIL	
LENGTH	4150 FT
WIDTH	5 FT
DEPTH	3 FT
	62250 CF
Per Using Porous Asphalt and CU-Structural Soil® Urban Horticulture Institute, Cornell University "Reservoir depths of CU Structural Soil® between 24" to 36" will mitigate between 6.25" and 9.36" of rain in a 24 hour period" (26%)	
VOLUME MITIGATED	62250 CF * 26% = 16185 CF
TOTAL DETENTION VOLUME PROVIDED (CF)	9529 + 16185 = 26545 CF



SAWYER ENGINEERING, LLC
TBPE FIRM NUMBER F-9171

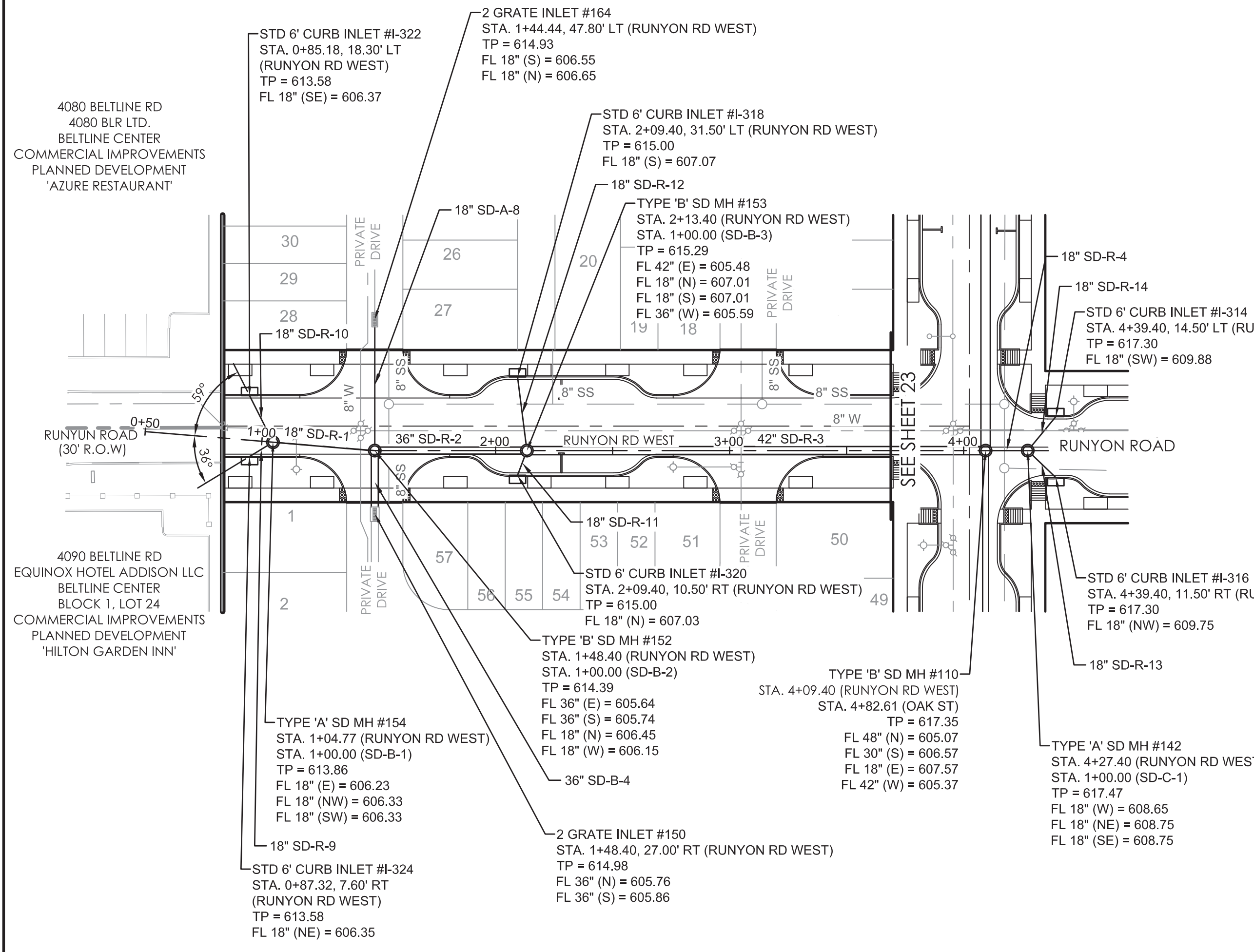
TOWN OF ADDISON DALLAS COUNTY, TEXAS					
IMPROVEMENT PLANS ADDISON GROVE					
DRAINAGE AREA CALCULATIONS - INLET & DETENTION CALCULATIONS					
SAWYER		ENGINEERING, LLC		1520 OLIVER STREET HOUSTON, TEXAS 77007 (832) 553-5948	
PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
	CDP	JDS	MAY 2017		21

HYDRAULIC COMPUTATIONS ADDISON GROVES

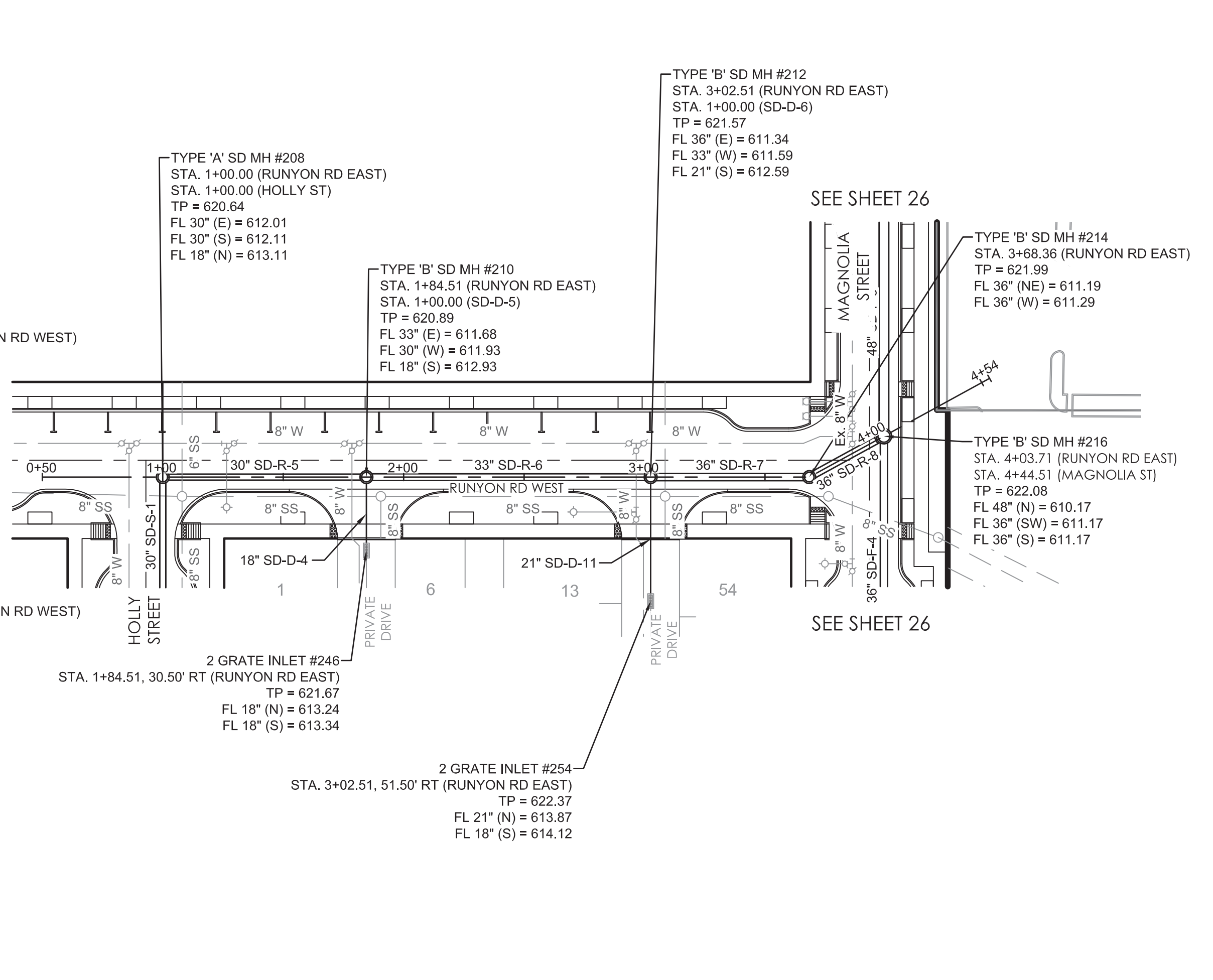
RUNOFF COLLECTION POINT (Inlet or Manhole)		Distance Between Collection Points (ft)	INCREMENTAL DRAINAGE AREA				Accumulated 'CA'	Time at Upstream Station (minutes)	Intensity 'i ₁₀ ' (in/hr)	Storm Water Runoff 'Q ₁₀ ' (cfs)	Slope of Hydraulic Gradient 'S'	Pipe Diameter (in)	Velocity in Sewer Between Collection Points 'V' (fps)	Velocity Head at Upstream Station (ft)	Flow Time in Sewer (min)	Time at Downstream Station	Hydraulic Grade Line Elevation Downstream (elev)	Hydraulic Grade Line Elevation Upstream (elev)
UPSTREAM STATION	DOWNSREAM STATION		Area No	Drainage Area 'A' (Acres)	Runoff Coeff. 'C'	Incremental 'CA'												
100	102	95	100	0.13	0.88	0.11	0.11	10.00	6.54	0.73	0.00010	18	0.41	0.0092	3.85	13.85	610.06	610.22
102	104	107	102	0.46	0.88	0.41	0.52	10.63	6.40	3.32	0.00204	18	1.88	0.2179	0.95	11.58	609.82	610.03
104	106	45	104	0.00	0.88	0.00	0.52	11.58	6.20	3.32	0.00192	18	1.88	0.0863	0.40	11.98	609.60	609.69
106	107	97	106	0.365	0.88	0.32	0.84	11.98	6.12	5.15	0.00491	18	2.91	0.4760	0.56	12.53	609.52	610.00
107	108	72	107	1.10	0.88	0.97	1.81	12.53	6.02	10.90	0.00253	27	2.74	0.1821	0.44	12.97	609.40	609.58
108	node 2	71	108	0.43	0.88	0.38	2.19	12.97	5.94	13.00	0.00205	30	2.65	0.1457	0.45	13.42	609.24	609.39
node 2	110	114	node 2	0.12	0.88	0.11	2.30	13.42	5.86	13.45	0.00220	30	2.74	0.2511	0.69	14.11	609.09	609.34
110	111	116	110	4.63	0.88	4.07	6.37	14.11	5.74	36.54	0.00132	48	2.91	0.1535	0.66	14.78	609.35	609.50
111	112	55	111	0.17	0.88	0.15	6.52	14.78	5.63	36.71	0.00134	48	2.92	0.0736	0.31	15.09	608.97	609.05
112	114	78	112	0.58	0.88	0.51	7.03	15.09	5.58	39.23	0.00082	54	2.47	0.0636	0.53	15.62	608.81	608.88
114	116	58	114	2.11	0.88	1.85	8.89	15.62	5.49	48.84	0.00072	60	2.49	0.0418	0.39	16.01	608.81	608.85
116	118	49	116	1.01	0.88	0.89	9.78	16.01	5.44	53.16	0.00086	60	2.71	0.0419	0.30	16.31	608.81	608.85
118	120	27	118	0.00	0.88	0.00	9.78	16.31	5.39	53.16	0.04128	30	10.83	1.1146	0.04	16.35	607.81	608.92
inlet 304	111	28	inlet 304	0.07	0.88	0.06	0.06	10.00	6.54	0.40	0.00003	18	0.22	0.0008	2.08	12.08	608.93	608.97
inlet 306	111	14	inlet 306	0.11	0.88	0.09	0.09	10.00	6.54	0.61	0.00007	18	0.34	0.0010	0.68	10.68	608.93	608.94
122	124	51	122	0.08	0.88	0.07	0.07	10.00	6.54	0.44	0.00004	18	0.25	0.0019	3.38	13.38	609.94	610.03
124	126	51	124	0.29	0.88	0.25	0.32	10.34	6.47	2.08	0.00079	18	1.18	0.0405	0.72	11.06	609.75	609.84
126	106	31	126	0.00	0.88	0.00	0.32	10.68	6.39	2.08	0.00078	18	1.18	0.0241	0.44	11.12	609.60	609.64
128	inlet 310	24	128	0.57	0.88	0.50	0.50	10.00	6.54	3.28	0.00198	18	1.86	0.0475	0.22	10.22	609.50	609.55
inlet 310	107	28	inlet 310	0.31	0.88	0.27	0.77	10.16	6.51	5.04	0.00467	18	2.85	0.1308	0.16	10.32	609.46	609.59
inlet 312	107	15	inlet 312	0.22	0.88	0.20	0.20	10.00	6.54	1.29	0.00031	18	0.73	0.0046	0.34	10.34	609.38	609.39
130	node 134	60	130	0.04	0.88	0.03	0.03	10.00	6.54	0.22	0.00001	18	0.12	0.0005	8.01	18.01	609.71	609.82
node 134	9	9	node 134	0.11	0.88	0.10	0.13	10.40	6.45	0.85	0.00013	18	0.48	0.0012	0.31	10.71	609.70	609.71
134	136	53	134	0.28	0.88	0.25	0.38	10.46	6.44	2.43	0.00109	18	1.38	0.0579	0.64	11.10	609.42	609.49
136	108	30	136	0.00	0.88	0.00	0.38	10.81	6.36	2.43	0.00107	18	1.38	0.0321	0.36	11.17	609.28	609.31
inlet 308	node 2	21	inlet 308	0.12	0.88	0.11	0.11	10.00	6.54	0.71	0.00009	18	0.40	0.0019	0.87	10.87	609.21	609.22
inlet 314	142	19	inlet 314	0.37	0.88	0.33	0.33	10.00	6.54	2.14	0.00085	18	1.21	0.0161	0.26	10.26	610.28	611.38
142	110	18	142	0.15	0.88	0.13	0.46	10.02	6.54	2.99	0.00165	18	1.69	0.0296	0.18	10.20	609.10	610.15
inlet 316	142	17	inlet 316	0.15	0.88	0.13	0.13	10.00	6.54	0.85	0.00013	18	0.48	0.0022	0.59	10.59	611.16	611.19
144	146	31	144	1.93	0.88	1.70	1.70	10.00	6.54	11.11	0.00149	30	2.26	0.0460	0.23	10.23	609.87	609.92
146	148	210	146	0.13	0.88	0.12	1.82	10.21	6.50	11.79	0.00167	30	2.40	0.3516	1.46	11.66	609.32	609.68
148	150	53	148	1.24	0.88	1.09	2.91	10.89	6.35	18.44	0.00155	36	2.61	0.0821	0.34	11.23	609.29	609.37
150	152	27	150	0.00	0.88	0.00	2.91	11.25	6.27	18.44	0.00152	36	2.61	0.0409	0.17	11.42	609.25	609.29
152	153	65	152	0.51	0.88	0.45	3.35	11.43	6.24	20.91	0.00200	36	2.96	0.1298	0.37	11.79	609.36	609.49
153	110	196	153	0.30	0.88	0.26	3.62	11.86	6.15	22.23	0.00099	42	2.31	0.1945	1.41	13.27	609.10	609.30
inlet 318	153	32	inlet 318	0.16	0.88	0.14	0.14	10.00	6.54	0.94	0.00016	18	0.53	0.0052	1.01	11.01	609.19	609.20
inlet 320	153	11	inlet 320	0.13	0.88	0.12	0.12	10.00	6.54	0.77	0.00011	18	0.44	0.0012	0.42	10.42	609.19	609.19
inlet 322	154	22	inlet 322	0.09	0.88	0.08	0.08	10.00	6.54	0.53	0.00005	18	0.30	0.0011	1.23	11.23	609.25	609.26
154	152	44	154	0.09	0.88	0.08	0.16	10.15	6.51	1.05	0.00020	18	0.59	0.0089	1.24	11.38	609.25	609.26
inlet 324	154	12	inlet 324	0.09	0.88	0.08	0.08	10.00	6.54	0.53	0.00005	18	0.30	0.0006	0.67	10.67	609.25	609.25
156	158	42	156	0.03	0.88	0.02	0.02	10.00	6.54	0.16	0.00000	18	0.09	0.0002	7.90	17.90	609.33	609.33
158	148	160	158	0.18	0.88	0.16	0.18	10.28	6.48	1.16	0.00025	18	0.66	0.0397	4.06	14.34	609.31	609.35
160	158	31	160	0.06	0.88	0.05	0.05	10.00	6.54	0.34	0.00002	18	0.19	0.0007	2.67	12.67	609.33	609.33
162	164	44	162	0.33	0.88	0.29	0.29	10.00	6.54	1.88	0.00065	18	1.07	0.0287	0.69	10.69	609.29	609.32
164	152	56	164	0.00	0.88	0.00	0.29	10.14	6.51	1.88	0.00065	18	1.07	0.0362	0.88	11.01	609.25	609.28
166	168	73	166	0.33	0.88	0.29	0.29	10.00	6.54	1.92	0.00068	18	1.08	0.0494	1.12	11.12	610.08	610.19
168	170	57	168	0.25	0.88	0.22	0.51	10.49	6.43	3.28	0.00198	18	1.86	0.1131	0.51	11.00	609.90	610.02
170	112	44	170	0.00	0.88	0.00	0.51	10.86	6.35	3.28	0.00194	18	1.86	0.0852	0.39	11.26	608.80	609.76
172	174	49	172	0.35	0.88	0.31	0.31	10.00	6.54	2.03	0.00076	18	1.15	0.0371	0.71	10.71	608.79	608.83
174	116	44	174	0.10	0.88	0.09	0.40	10.33	6.47	2.56	0.00121	18	1.45	0.0533	0.51	10.83	608.75	608.81

HYDRAULIC COMPUTATIONS ADDISON GROVES

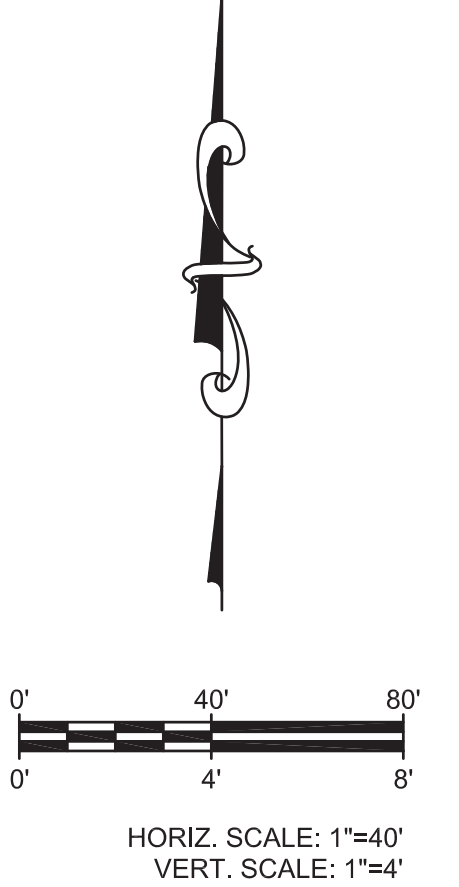
RUNOFF COLLECTION POINT (Inlet or Manhole)		Distance Between Collection Points (ft)	INCREMENTAL DRAINAGE AREA				Accumulated 'CA'	Time at Upstream Station (minutes)	Intensity 'i ₁₀ ' (in/hr)	Storm Water Runoff 'Q ₁₀ ' (cfs)	Slope of Hydraulic Gradient 'S'	Pipe Diameter (in)	Velocity in Sewer Between Collection Points 'V' (fps)	Velocity Head at Upstream Station (ft)	Flow Time in Sewer (min)	Time at Downstream Station	Hydraulic Grade Line Elevation Downstream (elev)	Hydraulic Grade Line Elevation Upstream (elev)
UPSTREAM STATION	DOWNSREAM STATION		Area No	Drainage Area 'A' (Acres)	Runoff Coeff. 'C'	Incremental 'CA'												
200	202	50	200	0.23	0.88	0.20	0.20	10.00	6.54	1.33	0.00033	18	0.75	0.0164	1.10	11.10	617.19	617.27
202	204	48	202	0.00	0.88	0.00	0.20	10.33	6.47	1.33	0.00032	18	0.75	0.0154	1.06	11.39	617.00	617.08
204	205	120	204	0.28	0.88	0.24	0.45	10.65	6.40	2.86	0.00150	18	1.62	0.1805	1.24	11.89	615.93	616.90
205	206	49	205	0.53	0.88	0.47	0.91	11.02	6.32	5.77	0.00270	21	2.40	0.1323	0.34	11.36	614.91	615.89
206	207	130	206	0.44	0.88	0.38	1.30	11.10	6.30	8.17	0.00266	24	2.60	0.3452	0.83	11.93	614.75	615.09
207	208	50	207	1.00	0.88	0.88	2.18	11.96	6.13	13.35	0.00216	30	2.72	0.1080	0.31	12.27	614.62	614.73
208	210	85	208	0.00	0.88	0.00	2.18	12.30	6.06	13.35	0.00212	30	2.72	0.1799	0.52	12.82	614.54	614.72
210	212	118	210	0.50	0.88	0.44	2.62	12.86	5.96	15.58	0.00177	33	2.62	0.2091	0.75	13.61	614.37	614.58
212	214	66	212	1.05	0.88	0.93	3.54	13.69	5.81	20.58	0.00195	36	2.91	0.1285	0.38	14.07	614.30	614.43
214	216	35	214	0.00	0.88	0.00	3.54	14.13	5.73	20.58	0.00190	36	2.91	0.0665	0.20	14.33	614.23	614.30
216	218	250	216	3.44	0.88	3.03	6.57	14.36	5.69	37.41	0.00139	48	2.98	0.3470	1.40	15.76	611.28	614.17
218	219	61	218	2.34	0.88	2.06	8.63	14.69	5.64	48.68	0.00071	60	2.48	0.0436	0.41	15.10	610.45	610.49
219	220	33	219	0.38	0.88	0.33	8.96	14.77	5.63	50.45	0.00077	60	2.57	0.0253	0.21	14.98	610.08	610.10
220	222	187	220	0.00	0.88													



RUNYON ROAD WEST



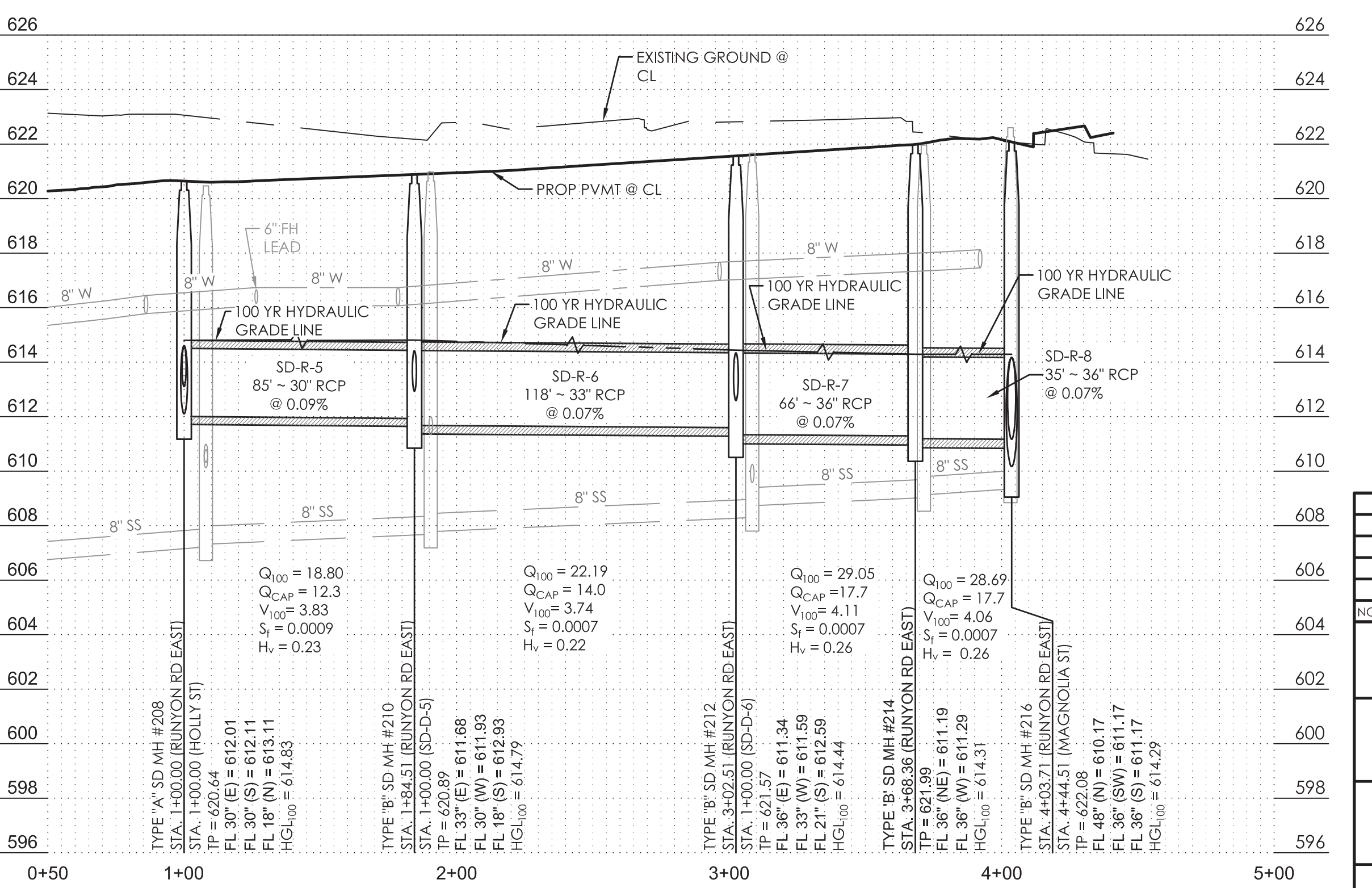
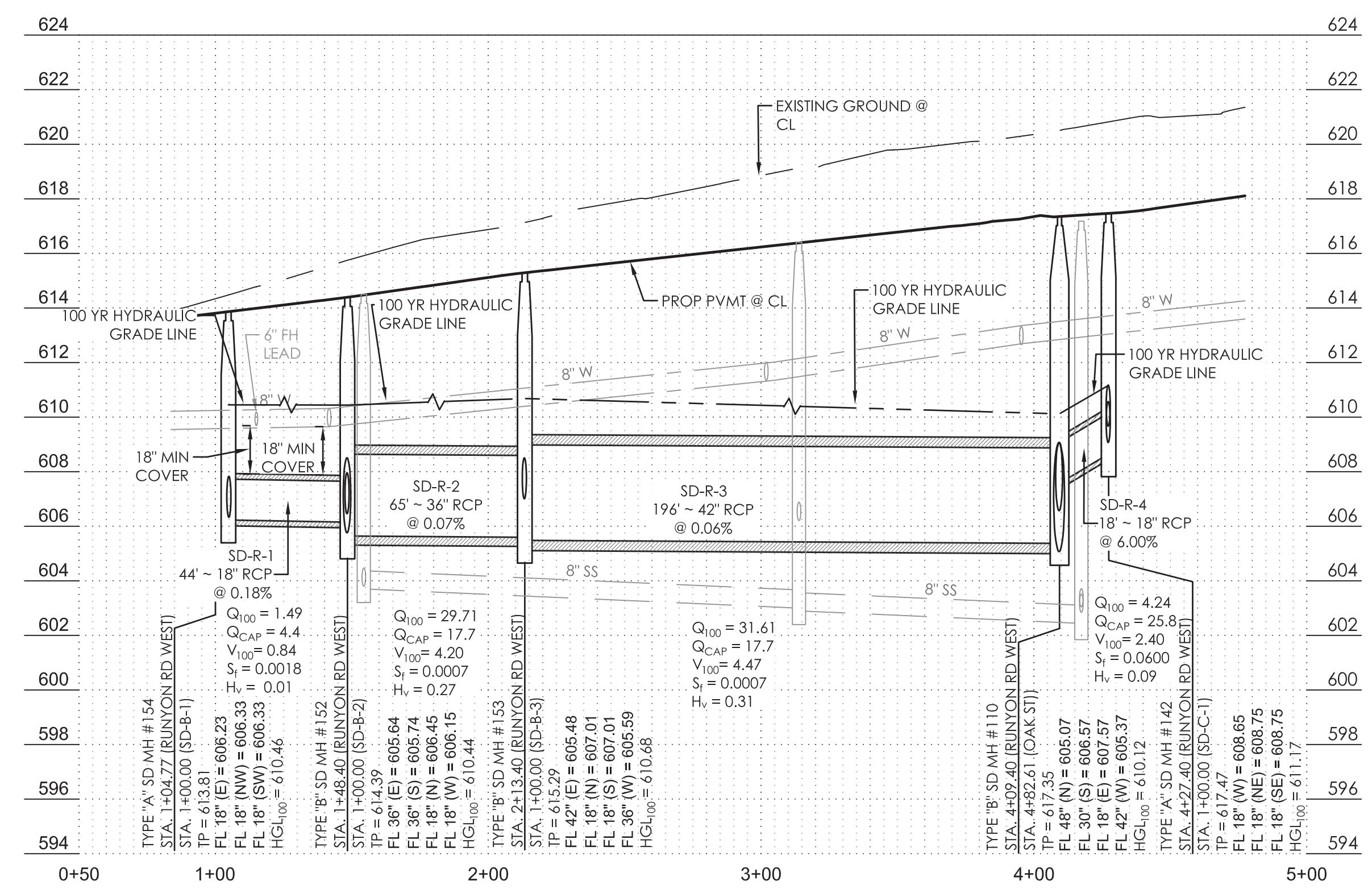
RUNYON ROAD EAST



STORM DRAIN LEGEND

- SANITARY SEWER AND MANHOLE
- SANITARY SEWER AND CLEANOUT
- EXISTING SANITARY SEWER AND MANHOLE
- PROPOSED FIRE HYDRANT ASSEMBLY
- PROPOSED WATERLINE WITH GATE VALVE AND BOX WITH 10' W.L.E.
- EXISTING WATERLINE WITH GATE VALVE AND BOX
- PROPOSED STORM SEWER WITH MANHOLE AND INLETS
- PROPOSED PRIVATE STORM SEWER
- EXISTING STORM SEWER AND MANHOLE
- EXISTING INLET
- PROPOSED TREE WELL
- 2x6 TRUNCATED DOME PANEL

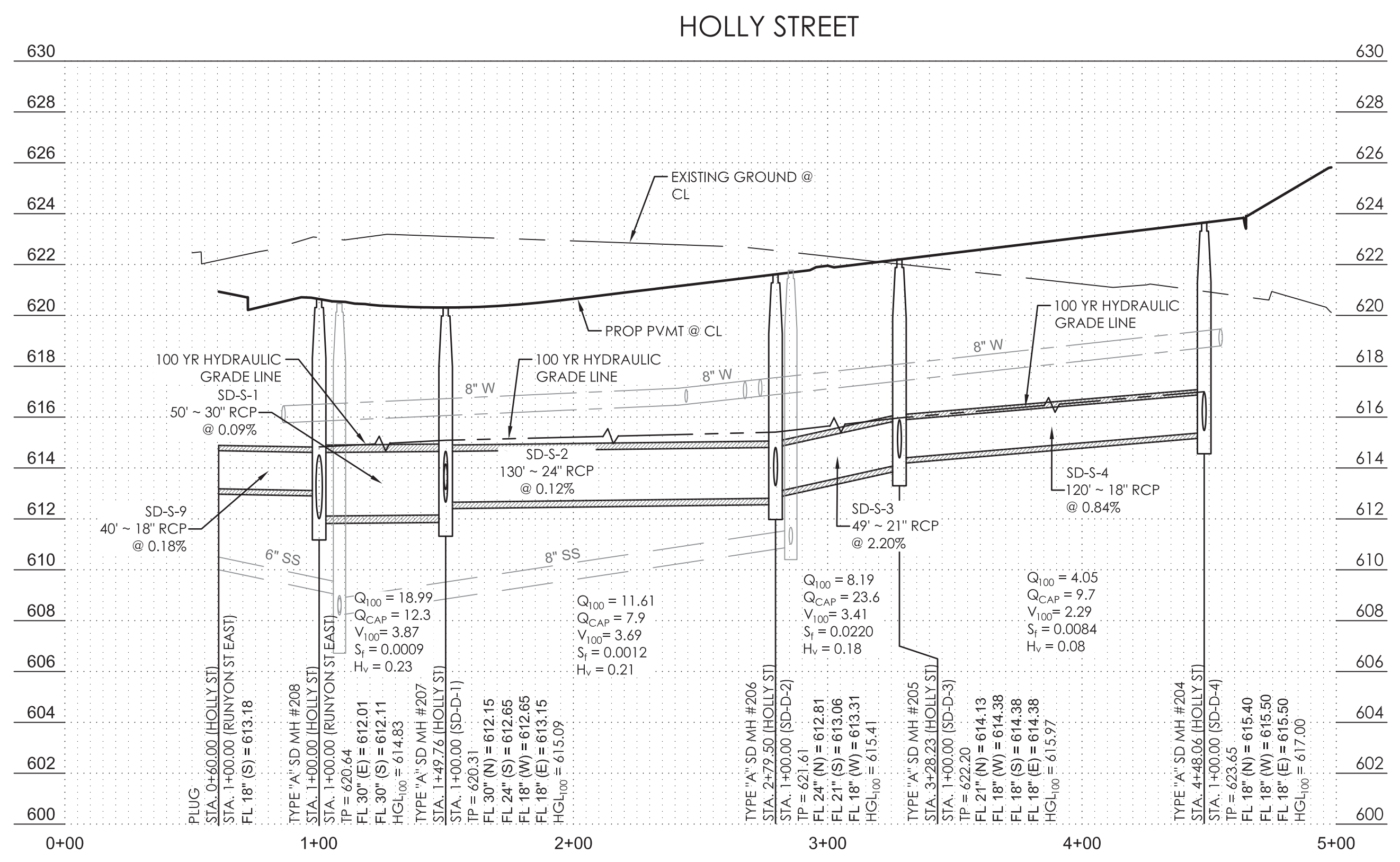
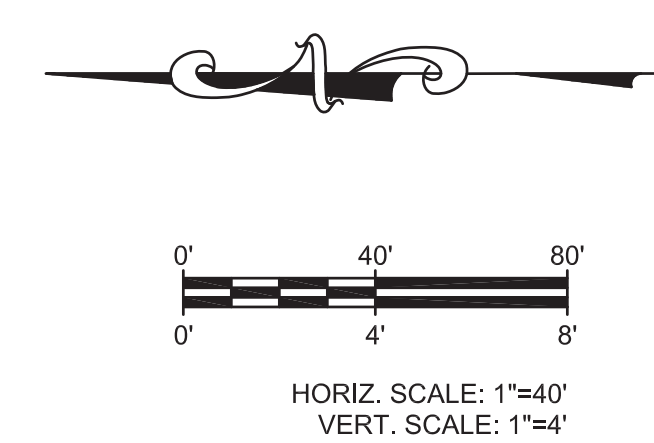
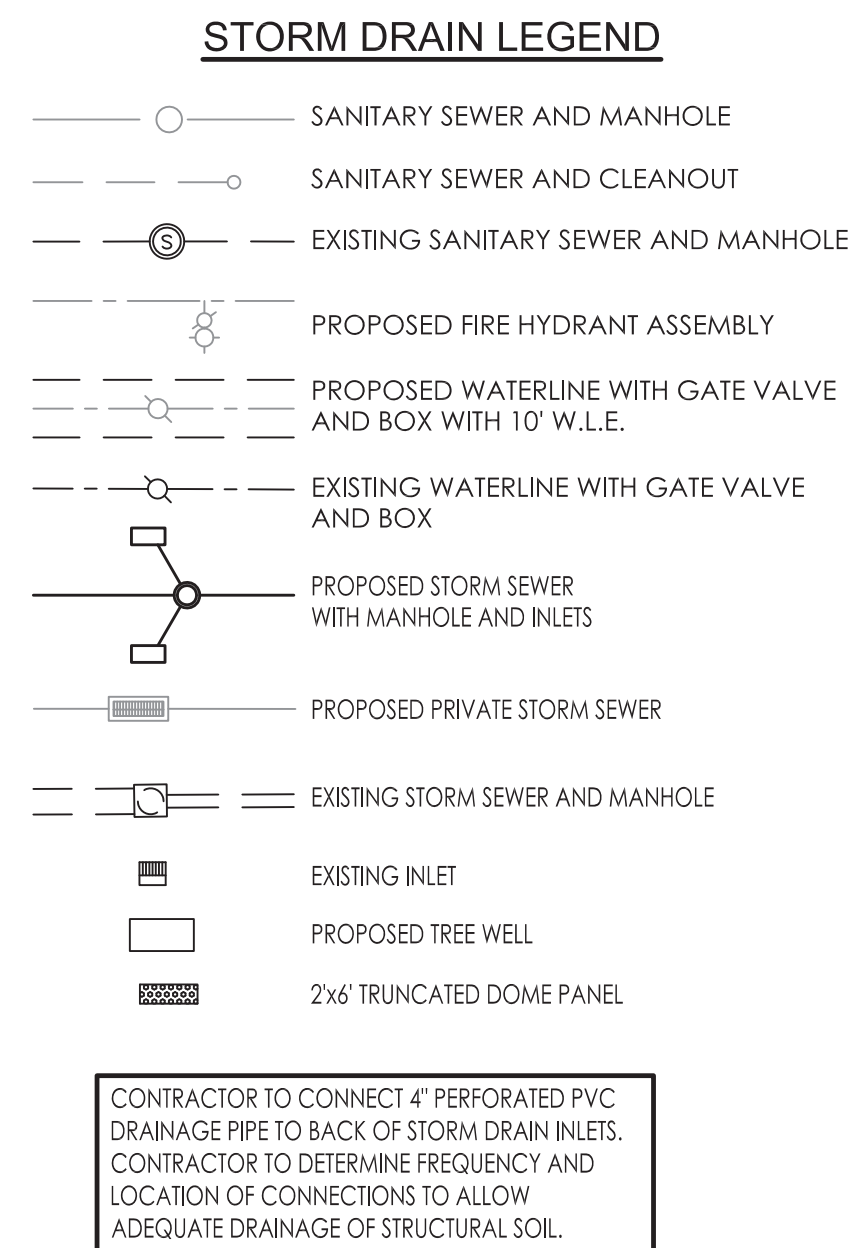
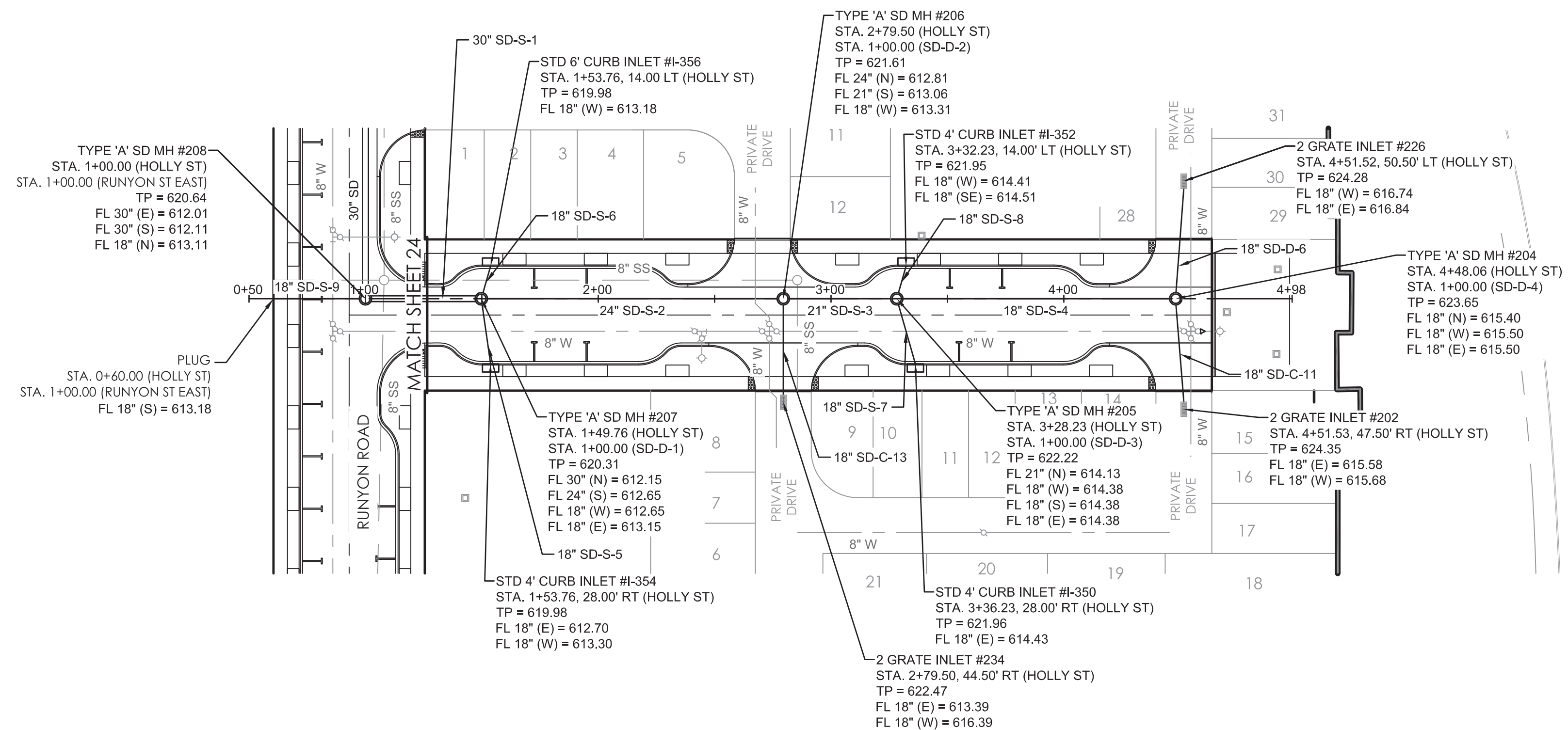
CONTRACTOR TO CONNECT 4" PERFORATED PVC DRAINAGE PIPE TO BACK OF STORM DRAIN INLETS. CONTRACTOR TO DETERMINE FREQUENCY AND LOCATION OF CONNECTIONS TO ALLOW ADEQUATE DRAINAGE OF STRUCTURAL SOIL.



2017/12/22
SAWYER ENGINEERING, LLC
TBPE FIRM NUMBER F-9171

ONE-CALL NOTIFICATION SYSTEM
CALL BEFORE YOU DIG
1-800-545-6005
OR OTHER UTILITY LOCATING SERVICES AT
LEAST 48 HOURS PRIOR TO
CONSTRUCTION ACTIVITIES.

NO.		REVISION	BY	DATE
TOWN OF ADDISON DALLAS COUNTY, TEXAS				
IMPROVEMENT PLANS ADDISON GROVE				
STORM DRAIN PLAN & PROFILE - RUNYON ROAD				
SAWYER ENGINEERING, LLC TBPE: F-9171		1520 OLIVER STREET HOUSTON, TEXAS 77007 (832) 553-5948		
PROJECT	DESIGN	DRAWN	DATE	FILE
	CDP	JDS	MAY 2017	
				SHEET
				24



SAWYER ENGINEERING, LLC
 TBPE FIRM NUMBER F-9171

ONE-CALL NOTIFICATION SYSTEM
CALL BEFORE YOU DIG
 1-800-545-6005
 OR OTHER UTILITY LOCATING SERVICES AT
 LEAST 48 HOURS PRIOR TO
 CONSTRUCTION ACTIVITIES.

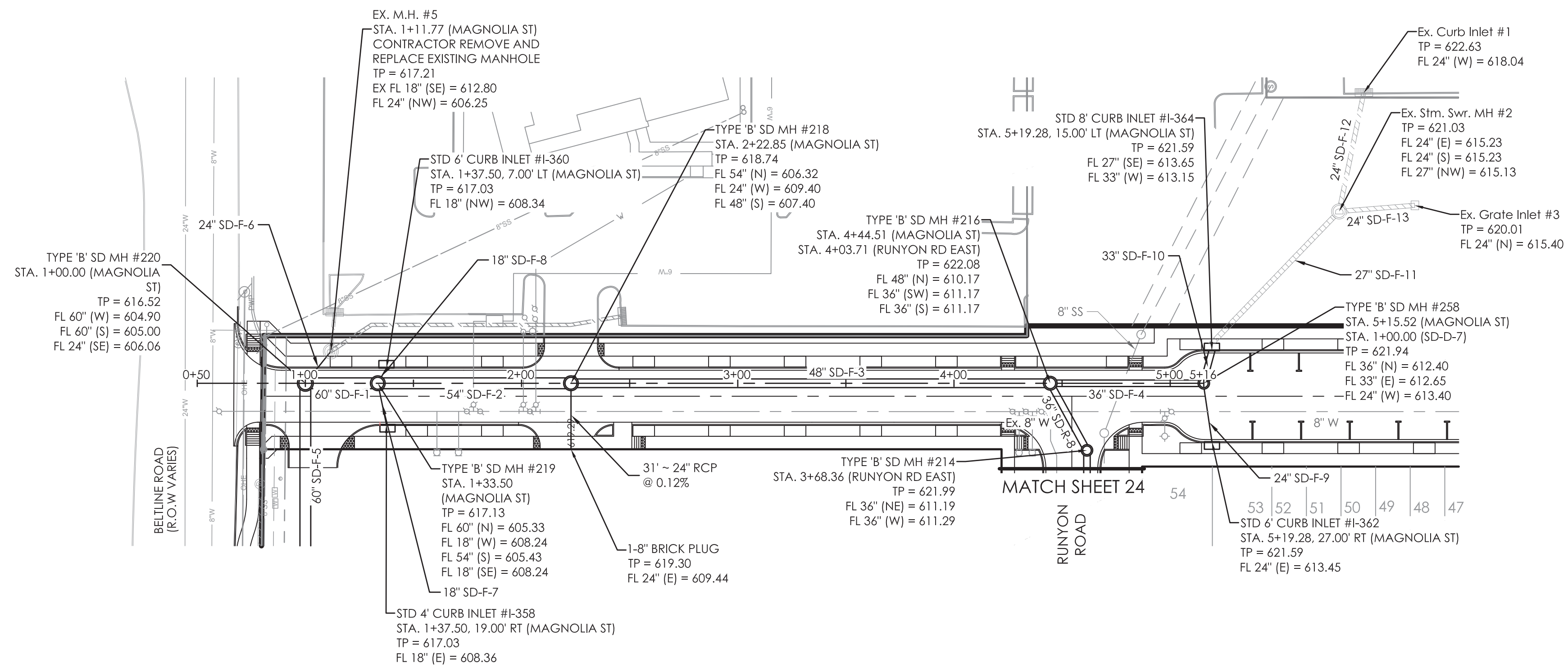
NO.	REVISION	BY	DATE

TOWN OF ADDISON
 DALLAS COUNTY, TEXAS

IMPROVEMENT PLANS
 ADDISON GROVE

STORM DRAIN PLAN &
 PROFILE - HOLLY STREET

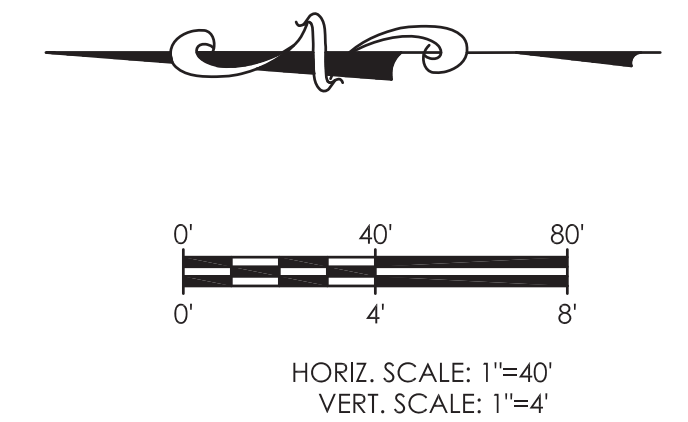
SAWYER		ENGINEERING, LLC TBPE: F-9171	1520 OLIVER STREET HOUSTON, TEXAS 77007 (832) 553-5948
PROJECT	DESIGN	DRAWN	DATE
	CDP	JDS	MAY 2017
FILE	SHEET		
	25		



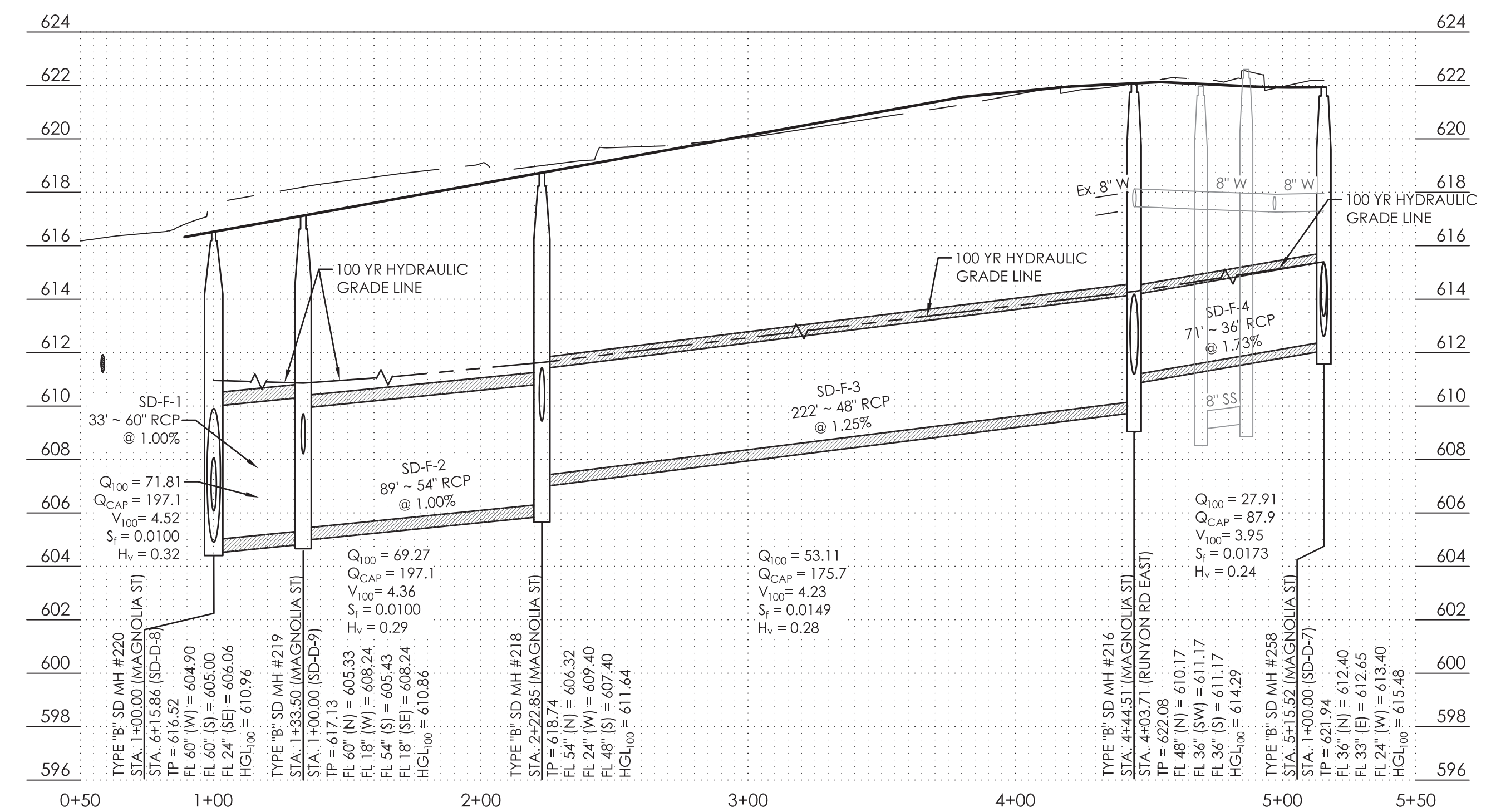
STORM DRAIN LEGEND

- SANITARY SEWER AND MANHOLE
- SANITARY SEWER AND CLEANOUT
- EXISTING SANITARY SEWER AND MANHOLE
- PROPOSED FIRE HYDRANT ASSEMBLY
- PROPOSED WATERLINE WITH GATE VALVE AND BOX WITH 10' W.L.E.
- EXISTING WATERLINE WITH GATE VALVE AND BOX
- PROPOSED STORM SEWER WITH MANHOLE AND INLETS
- PROPOSED PRIVATE STORM SEWER
- EXISTING STORM SEWER AND MANHOLE
- EXISTING INLET
- PROPOSED TREE WELL
- 2x6 TRUNCATED DOME PANEL

CONTRACTOR TO CONNECT 4" PERFORATED PVC DRAINAGE PIPE TO BACK OF STORM DRAIN INLETS. CONTRACTOR TO DETERMINE FREQUENCY AND LOCATION OF CONNECTIONS TO ALLOW ADEQUATE DRAINAGE OF STRUCTURAL SOIL.



MAGNOLIA STREET



2018/04/04
SAWYER ENGINEERING, LLC
TBPE FIRM NUMBER F-9171

ONE-CALL NOTIFICATION SYSTEM
CALL BEFORE YOU DIG
1-800-545-6005
OR OTHER UTILITY LOCATING SERVICES AT
LEAST 48 HOURS PRIOR TO
CONSTRUCTION ACTIVITIES.

NO.	REVISION	BY	DATE

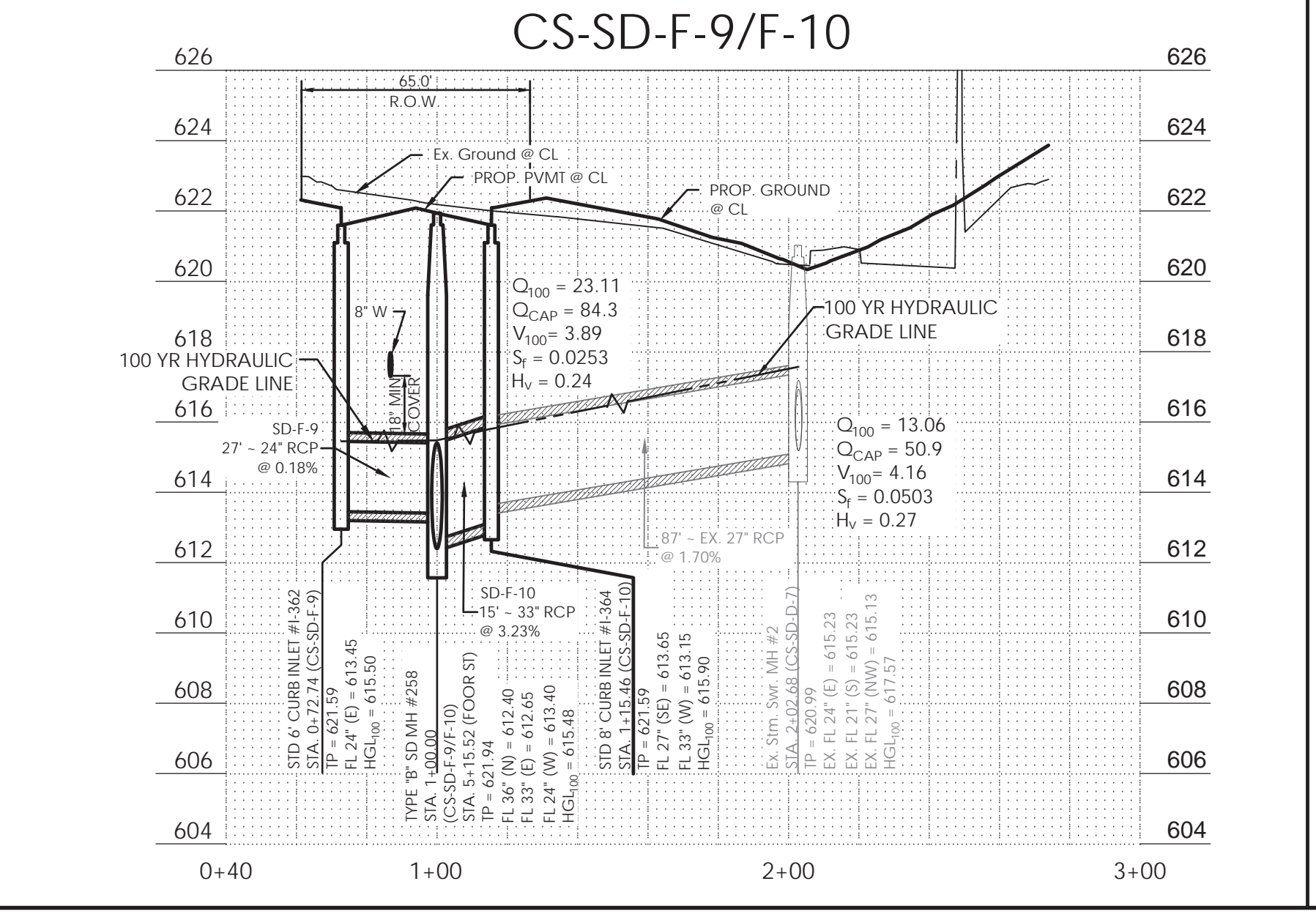
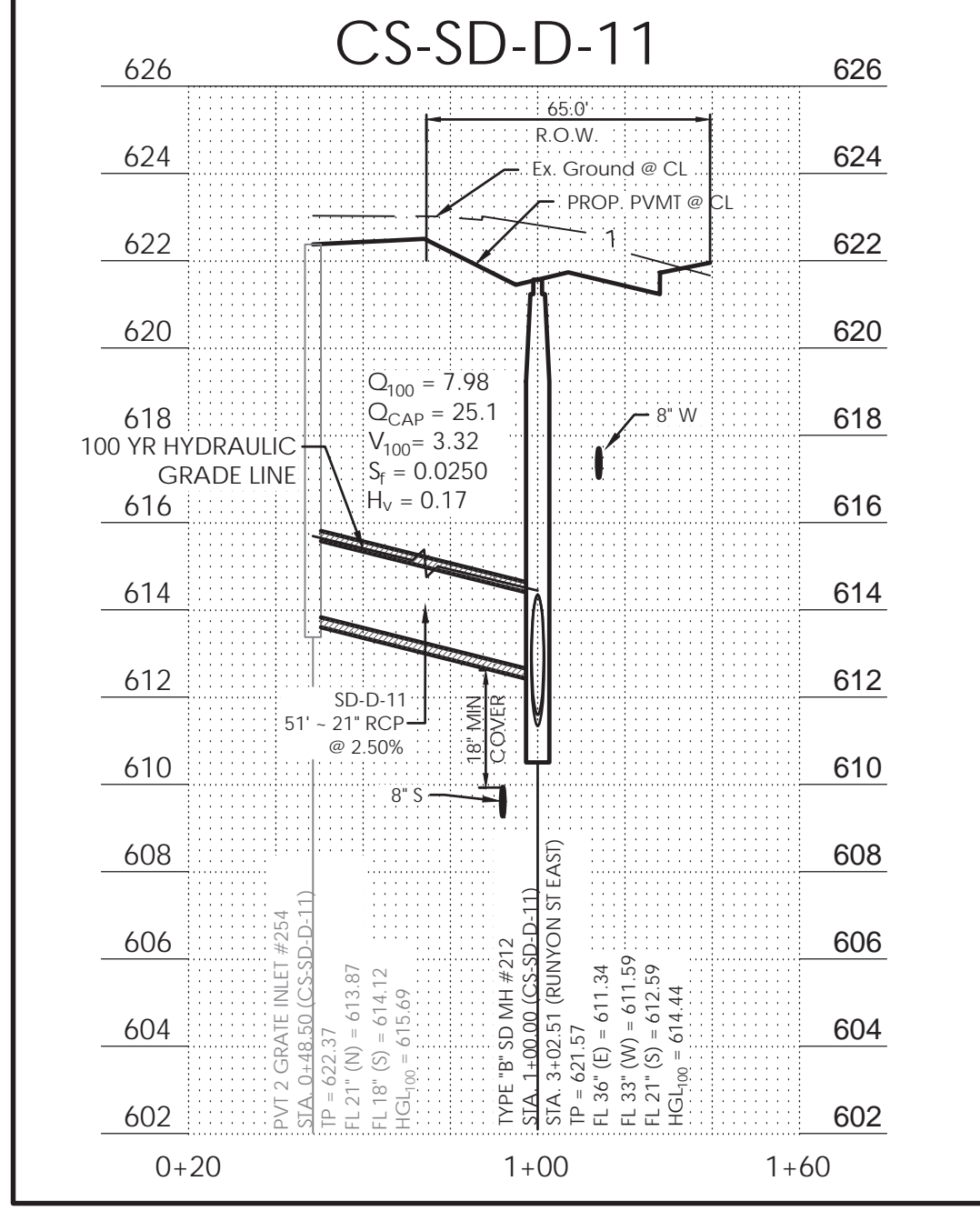
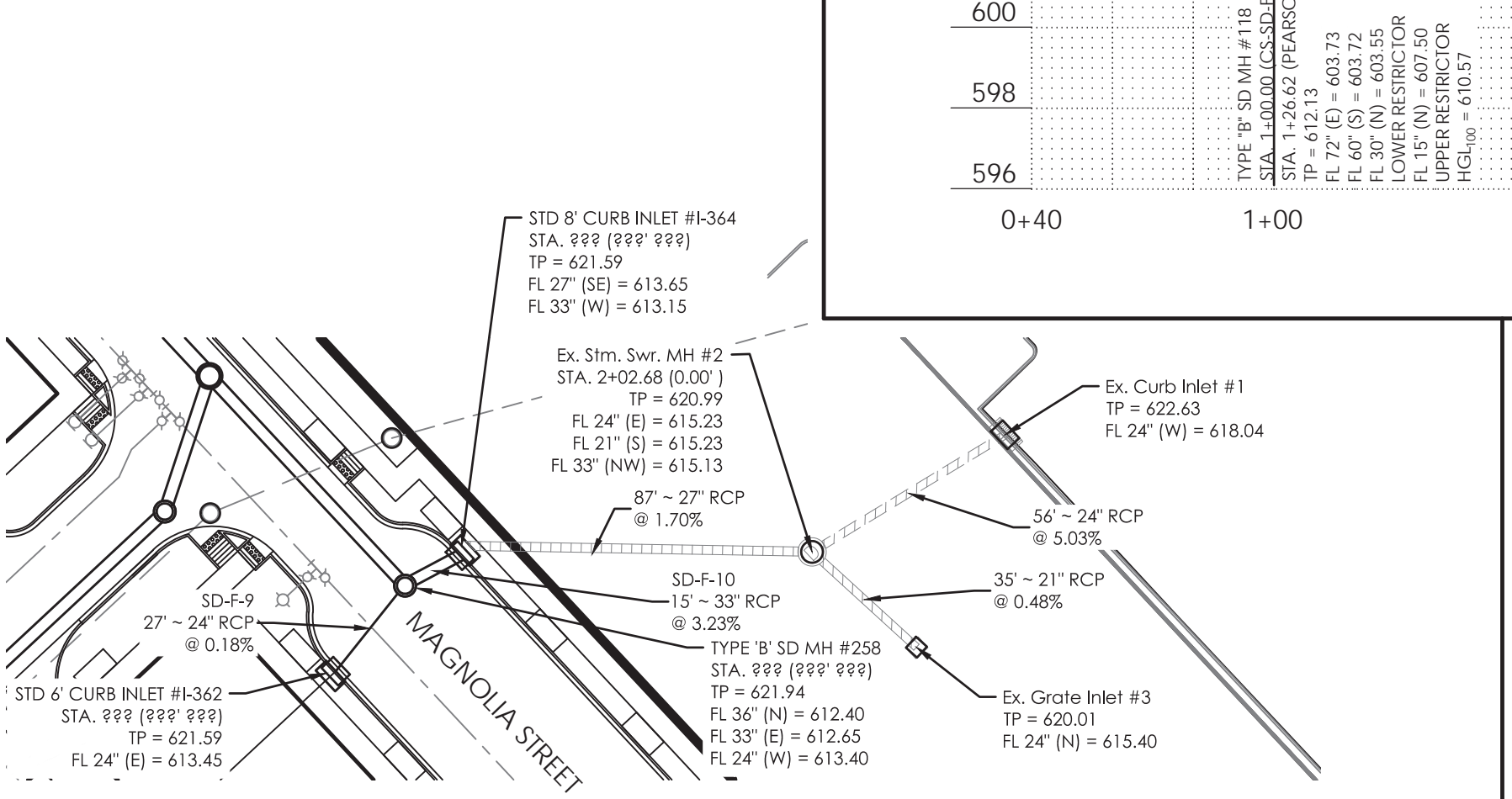
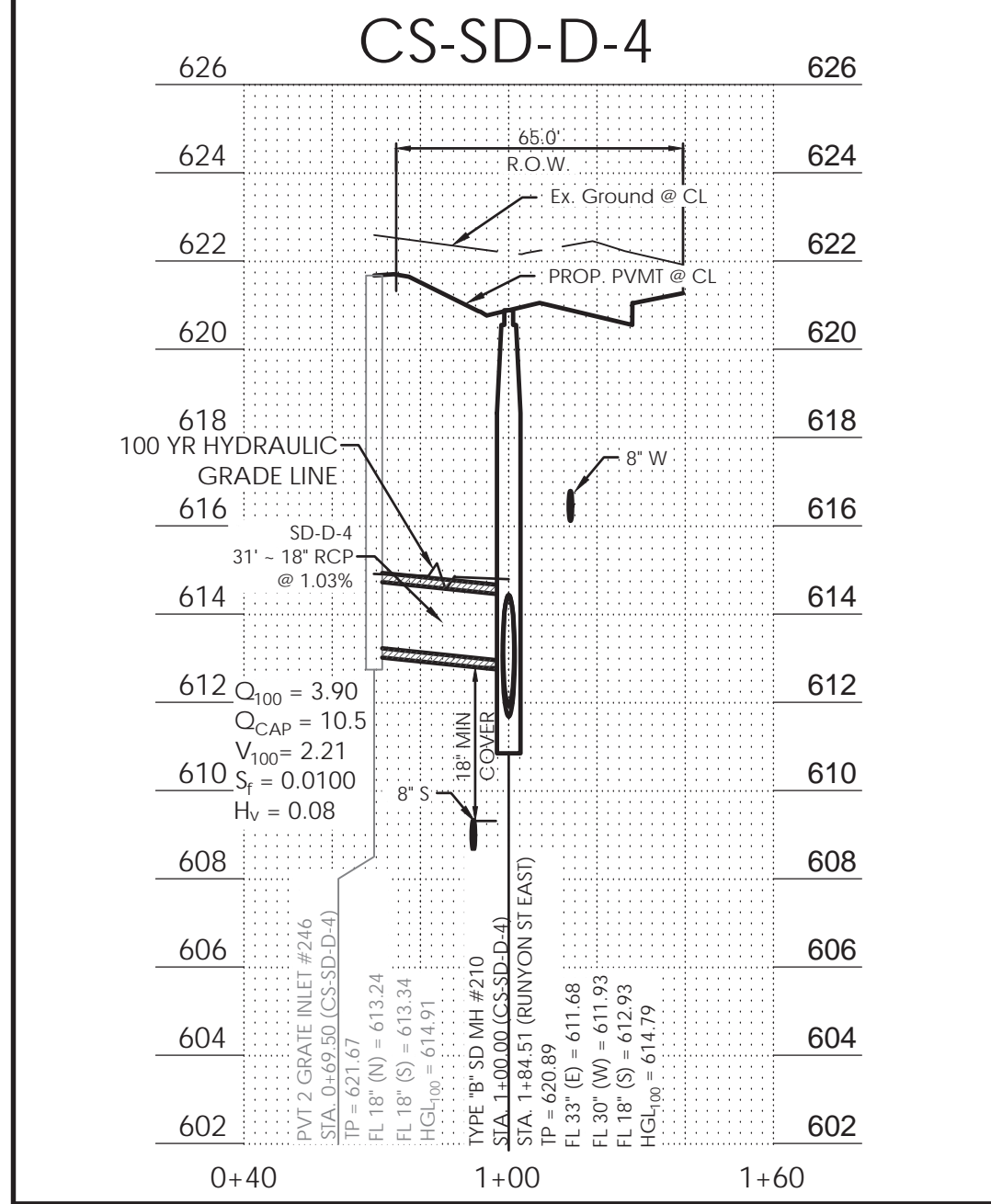
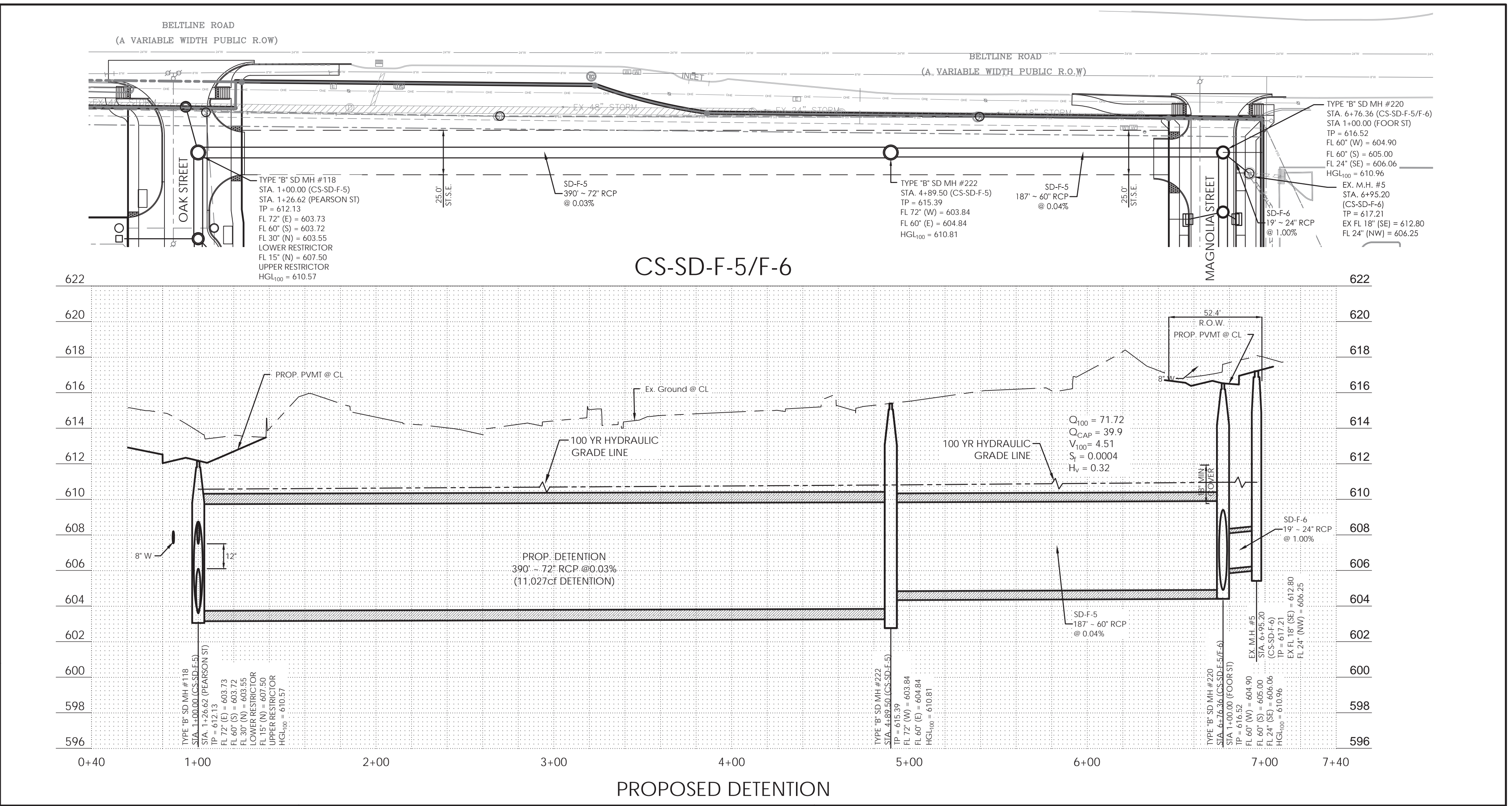
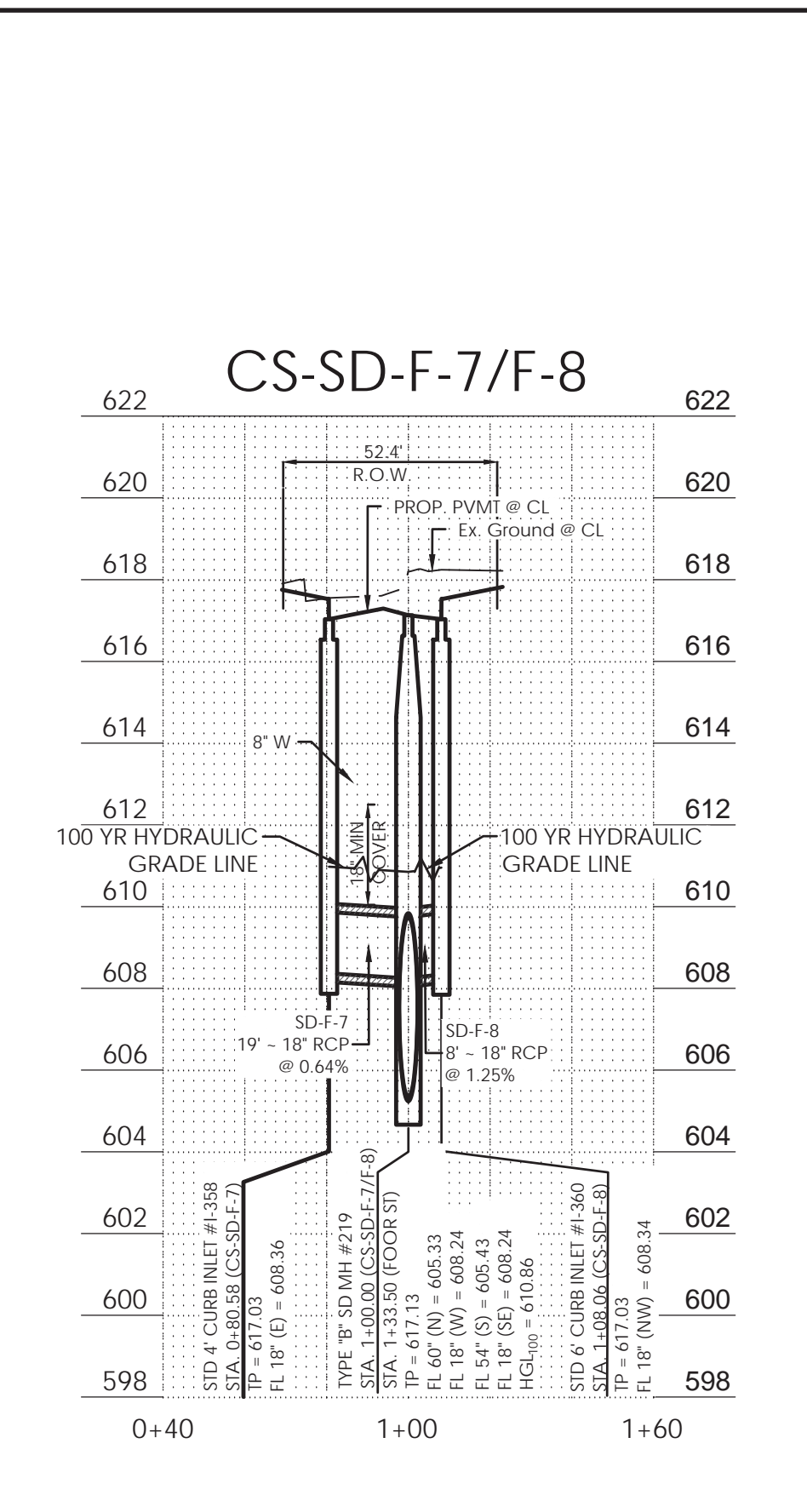
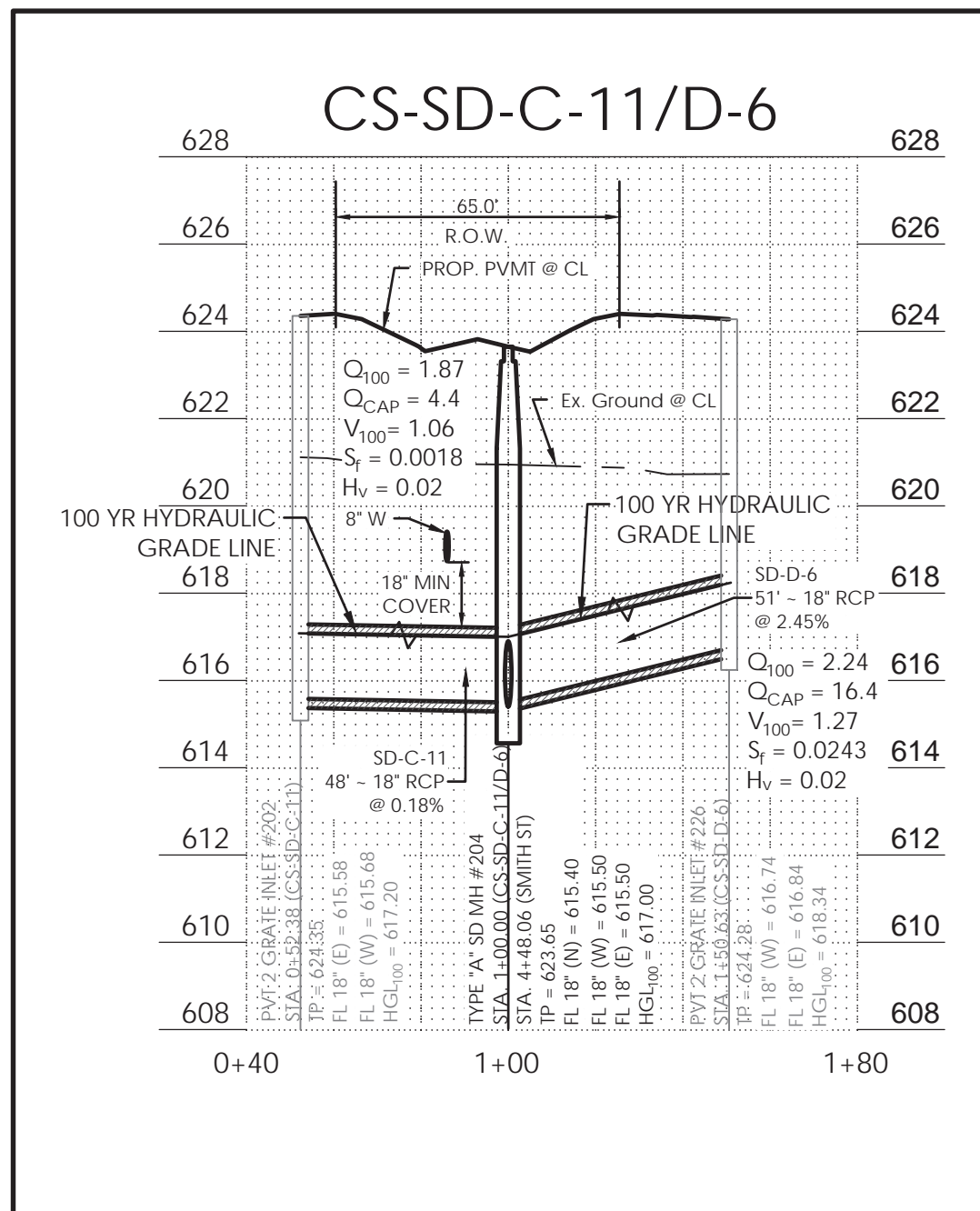
TOWN OF ADDISON
DALLAS COUNTY, TEXAS

IMPROVEMENT PLANS
ADDISON GROVE

STORM DRAIN PLAN &
PROFILE - MAGNOLIA STREET

SAWYER ENGINEERING, LLC
1520 OLIVER STREET
HOUSTON, TEXAS 77007
(832) 553-5948

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
	CDP	JDS	MAY 2017		26



Restrictor Calcs - 100 YR

Total Area	21.260 AC
Q _{release}	105.5 cfs
Maximum Ponding (WSE)	611.70 FT
Flowline Restrictor	603.51 FT
h ₁₀₀ = 611.70 FT - 603.55 FT	8.19 FT
Restrictor Size	
D = Q ^{0.5} / (2.25 * h ₁₀₀ ^{0.25})	2.699 FT
	32.382 IN
	Use 30" Pipe
Pipe Size	30.0 IN
Area	4.91 FT ²
Flow through restrictor when the pipes are full.	
h ₁₀₀ = 8.15 - 1.25'	6.94 FT
Q = 0.8*A*(2*32.2*h) ^{0.5}	83.02 CFS
Q Remainder	22.48 CFS
Flow through Secondary Restrictor	
WSE	611.70
FL of Secondary Restrictor	607.50
Head	3.867 FT
High Level Restrictor Size	
D = Q ^{0.5} / (2.25 * h ^{0.25})	1.503 FT
	18.033 IN
	Use 18" Pipe



NO.	REVISION	BY	DATE

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

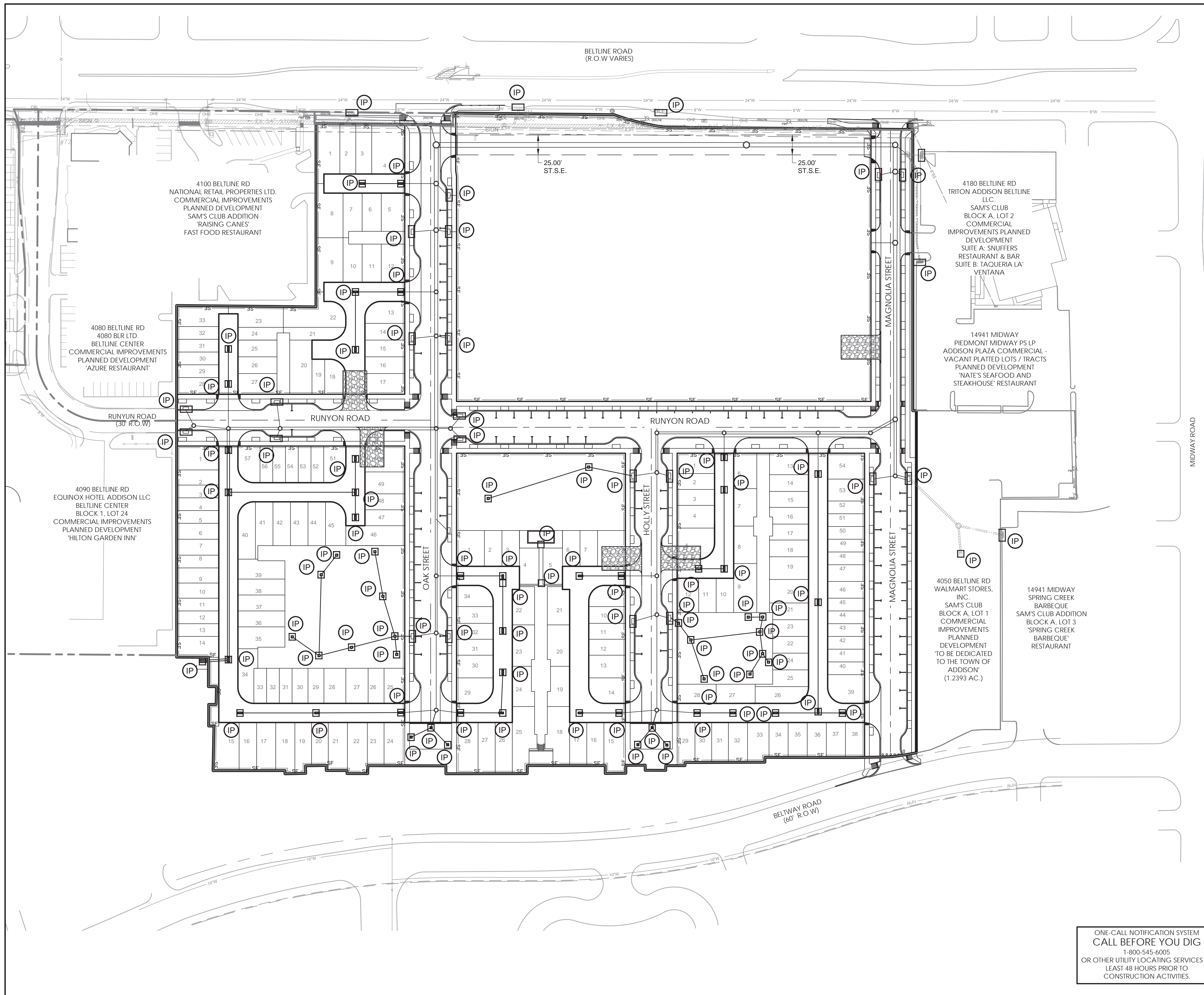
IMPROVEMENT PLANS
ADDISON GROVE

STORM DRAIN LATERAL
PROFILES

SAWYER ENGINEERING, LLC
TBPE FIRM NUMBER F-9171

1520 OLIVER STREET
HOUSTON, TEXAS 77007
(832) 553-5948

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
	CDP	JDS	MAY 2017		28



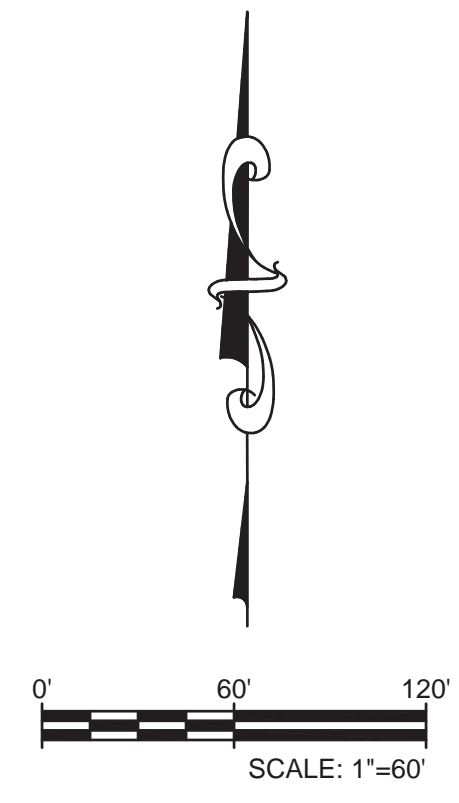
LEGEND
SEE DETAILS ON SHEET 30

SF ——— SF ——— SILT FENCE

CE [Symbol] STABILIZED CONSTRUCTION EXIT

IP [Symbol] INLET PROTECTION

--- INDICATES DOUBLE ROW OF 16" WIDE SOD OR REINFORCED FILTER FABRIC FENCE (AT OWNER'S OPTION) TO BE USED FOR SEDIMENT CONTROL BEHIND CURB.




NOTE:
AS LANDSCAPE DRAINS, INLET, & STORM STRUCTURES ARE CONSTRUCTED, INLET PROTECTION SHALL BE INCLUDED THROUGHOUT CONSTRUCTION UNTIL FINAL GRADES, PAVEMENT, AND GROUND COVER ARE ESTABLISHED.



2017/12/19

SAWYER ENGINEERING, LLC
TBPE FIRM NUMBER F-9171

ONE-CALL NOTIFICATION SYSTEM
CALL BEFORE YOU DIG
1-800-545-6005
OR OTHER UTILITY LOCATING SERVICES AT
LEAST 48 HOURS PRIOR TO
CONSTRUCTION ACTIVITIES.

NO.	REVISION	BY	DATE
 TOWN OF ADDISON DALLAS COUNTY, TEXAS			
IMPROVEMENT PLANS ADDISON GROVE			
EROSION & SEDIMENT CONTROL PLAN (PUBLIC AND PRIVATE UTILITIES)			
SAWYER		ENGINEERING, LLC TBPE: F-9171	1520 OLIVER STREET HOUSTON, TEXAS 77007 (832) 553-5948
PROJECT	DESIGN	DRAWN	DATE
	CDP	JDS	MAY 2017
FILE	SHEET		
	29		

EROSION CONTROL PLAN NOTES

1. ALL OPERATORS AND/OR CONTRACTORS SHALL CONFORM TO THE TERMS AND CONDITIONS OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ), TPDES GENERAL PERMIT NO. TXR 150000 ISSUED AND DATED MARCH 5, 2003.
2. THE NOTICE OF INTENT (NOI), AS REQUIRED BY THE GENERAL PERMIT, MUST BE PROPERLY DISPLAYED ON SITE AT ALL TIMES BY EACH OPERATOR.
3. ALL RELEASES OF THE REPORTABLE QUANTITIES OF HAZARDOUS SUBSTANCES SHALL BE REPORTED IMMEDIATELY TO THE FACILITY OPERATOR, EPA AND TCEQ.
4. QUALIFIED OPERATOR PERSONNEL MUST INSPECT THE SITE AT LEAST ONCE EVERY 14 DAYS AND WITHIN 24 HOURS OF A STORM EVENT OF 0.5 INCHES OR GREATER. AS AN ALTERNATIVE, AN INSPECTION CAN BE CONDUCTED ONCE EVERY SEVEN (7) CALENDAR DAYS ON A DEFINED DAY. A DECISION ON WHICH METHOD TO USE MUST BE DECIDED BEFORE WORK BEGINS AND MUST BE FOLLOWED THROUGHOUT THE PROJECT.
5. MODIFICATIONS TO THE STORM WATER POLLUTION PREVENTION PLAN SHALL BE IMPLEMENTED AND BE IN-PLACE WITHIN A SEVEN CALENDAR DAY PERIOD.
6. IF ANY CONTRACTOR SEES A VIOLATION BY AN OPERATOR OR ANOTHER CONTRACTOR, THAT OPERATOR OR CONTRACTOR IN VIOLATION SHALL BE NOTIFIED AS WELL AS THE FACILITY OPERATOR.
7. EROSION CONTROL SHALL BE INSTALLED PRIOR TO GRADING.
8. ACCUMULATED SILT DEPOSITS SHALL BE REMOVED FROM SILT FENCES AND HAY BALE DIKES WHEN SILT DEPTH REACHES THREE INCHES OR 25%.
9. THE CONTRACTOR SHALL ADD OR DELETE EROSION PROTECTION AT THE REQUEST AND DIRECTION OF THE OPERATOR OR TOWN.
10. AFTER INSTALLATION OF PAVEMENT, FINAL LOT BENCHING AND GENERAL CLEANUP, THE CONTRACTOR SHALL ESTABLISH GRASS GROUNDCOVER IN ALL STREET PARKWAYS, LOT AND ALL OTHER DISTURBED AREAS. SOODING SHALL BE DONE AS SPECIFIED BY SECTION 202.5 AND SEEDING AS SPECIFIED BY SECTION 202.6 OF THE OCTOBER 2004 OR LATEST EDITION OF NCTCOG STANDARD SPECIFICATION.
11. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTROL AND LIMIT SILT AND SEDIMENT LEAVING THE SITE. SPECIFICALLY, THE CONTRACTOR SHALL PROTECT ALL PUBLIC STREETS, ALLEYS, STREAMS AND STORM DRAINAGE SYSTEMS FROM EROSION DEPOSITS.
12. A DRAINAGE AREA MAP WILL BE INCLUDED WITH THE EROSION CONTROL PLAN.
13. CONSTRUCTION WASTE DISPOSAL CONTAINERS SHALL BE PROVIDED ON THE SITE FOR DISPOSAL OF ALL NON-HAZARDOUS CONSTRUCTION WASTE MATERIALS. THE CONTAINERS SHALL BE HAULED TO LANDFILL BY THE CONTRACTOR.
14. ALL HAZARDOUS MATERIALS SHALL BE HANDLED AND DISPOSED OF BY THE CONTRACTOR IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

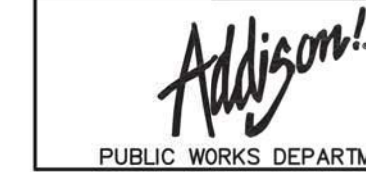
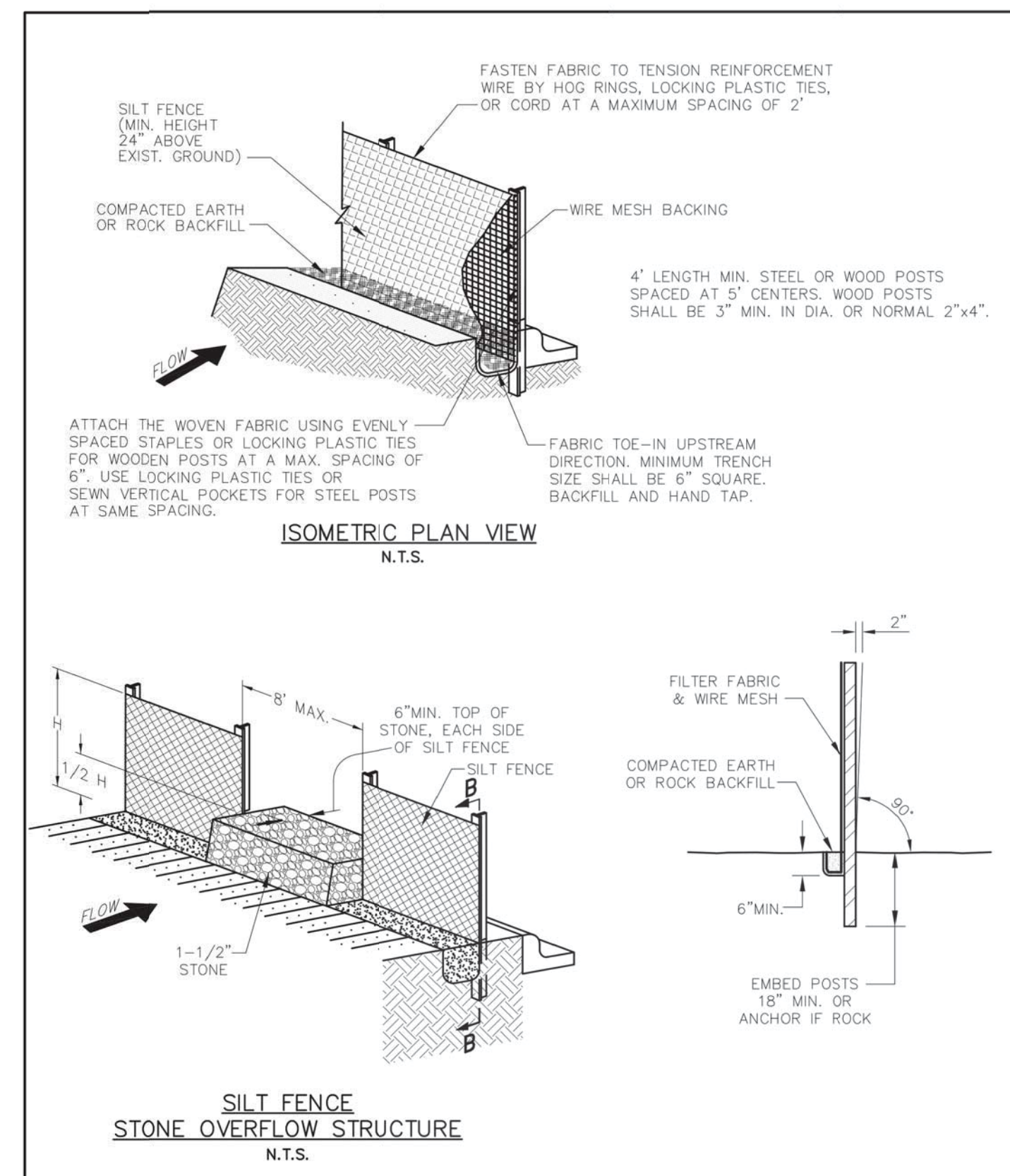
SILT FENCE NOTES

1. POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. THE POST MUST BE EMBEDDED A MINIMUM OF 18 INCHES.
2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWN-SLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN (E.G. PAVEMENT), WEIGHT FABRIC FLAP WITH WASHED GRAVEL ON THE UPHILL SIDE TO PREVENT FLOW UNDER FENCE.
3. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
4. SILT FENCE SHALL BE SECURELY FASTENED TO EACH SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE SUPPORT POST. THERE SHALL BE A 6 INCH DOUBLE OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.
5. INSPECTION SHALL BE MADE EVERY TWO WEEKS OR AFTER EACH RAINFALL. REPAIR OR REPLACEMENT SHALL BE PROMPTLY AS NEEDED.
6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 3 INCHES. THE SILT SHALL BE DISPOSED OF AT AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.



EROSION CONTROL & SILT FENCE NOTES

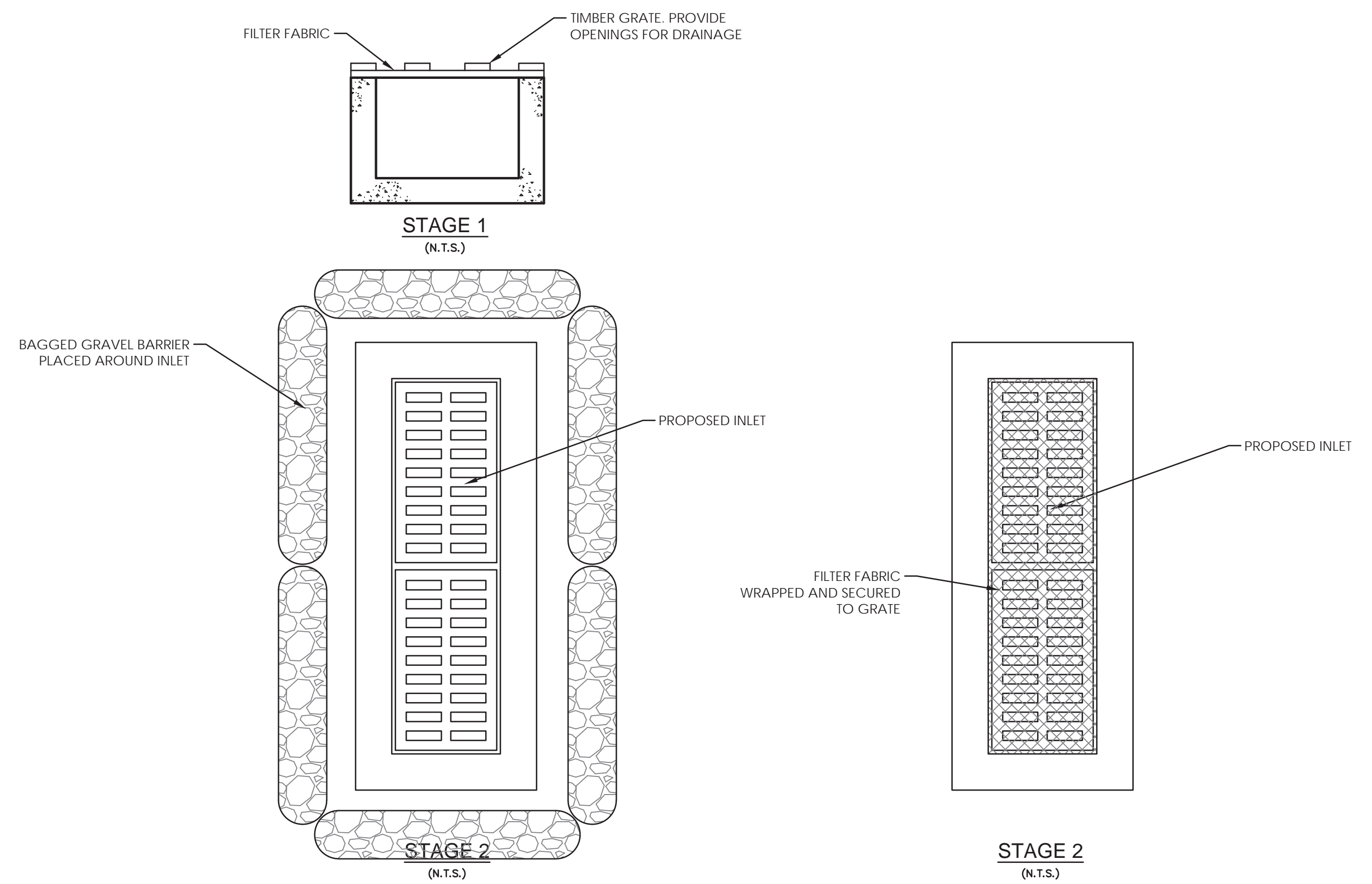
STANDARD CONSTRUCTION DETAILS EROSION CONTROL		
DATE:	REV DATE:	SHEET:
AUGUST, 2010		SD-EC01



SILT FENCE DETAIL

STANDARD CONSTRUCTION DETAILS EROSION CONTROL		
DATE:	REV DATE:	SHEET:
AUGUST, 2010		SD-EC02

NOTE:
GRATE AND FILTER FABRIC SHALL BE REMOVED PRIOR TO SECOND STAGE OF INLET CONSTRUCTION

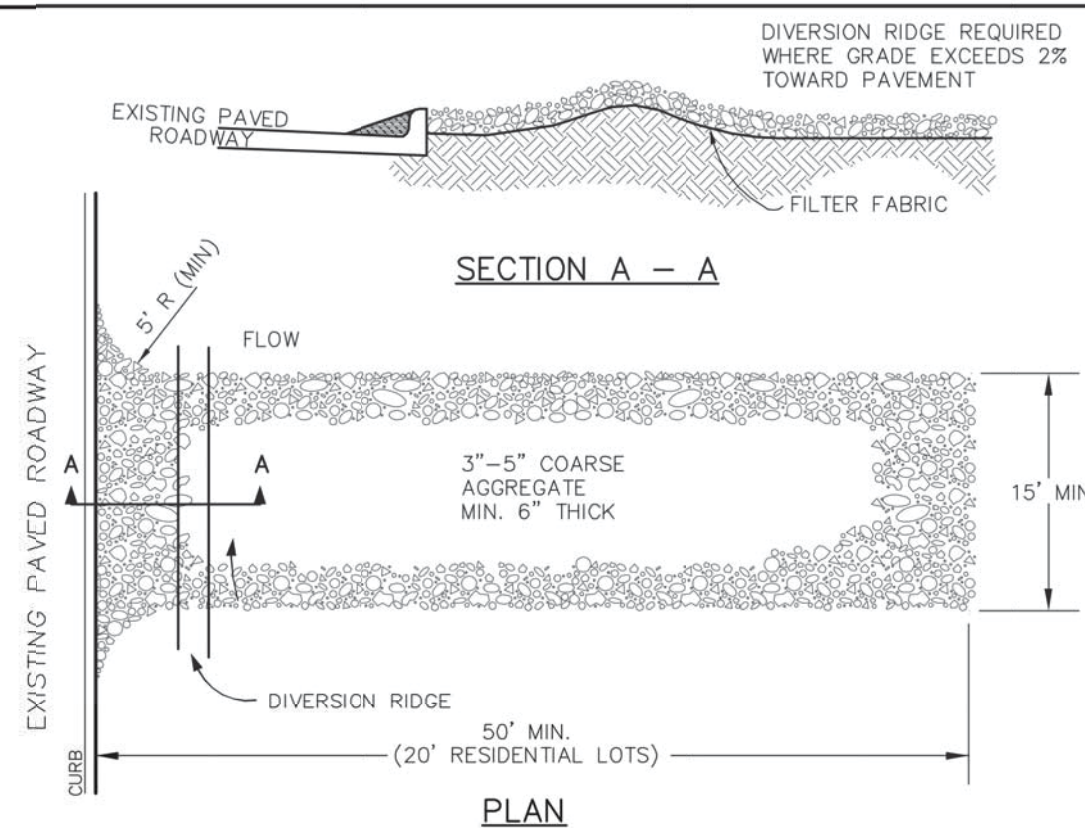


INLET PROTECTION BARRIER

FOR PROPOSED INLETS IN PAVEMENT
PRIOR TO COMPLETION OF PAVEMENT

INLET PROTECTION BARRIER

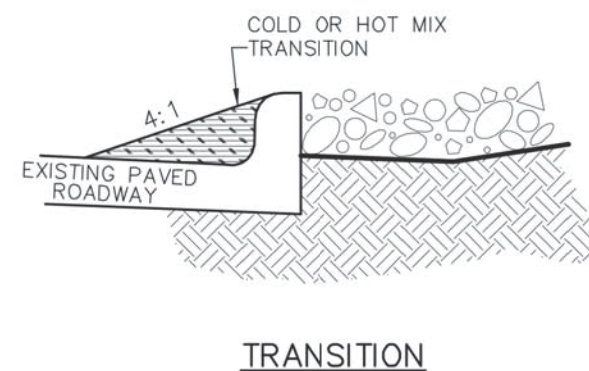
FOR PROPOSED INLETS IN PAVEMENT
AFTER COMPLETION OF PAVEMENT FOR
DURATION OF CONSTRUCTION



**TEMPORARY STONE CONSTRUCTION
ENTRANCE/EXIT**
N.T.S.

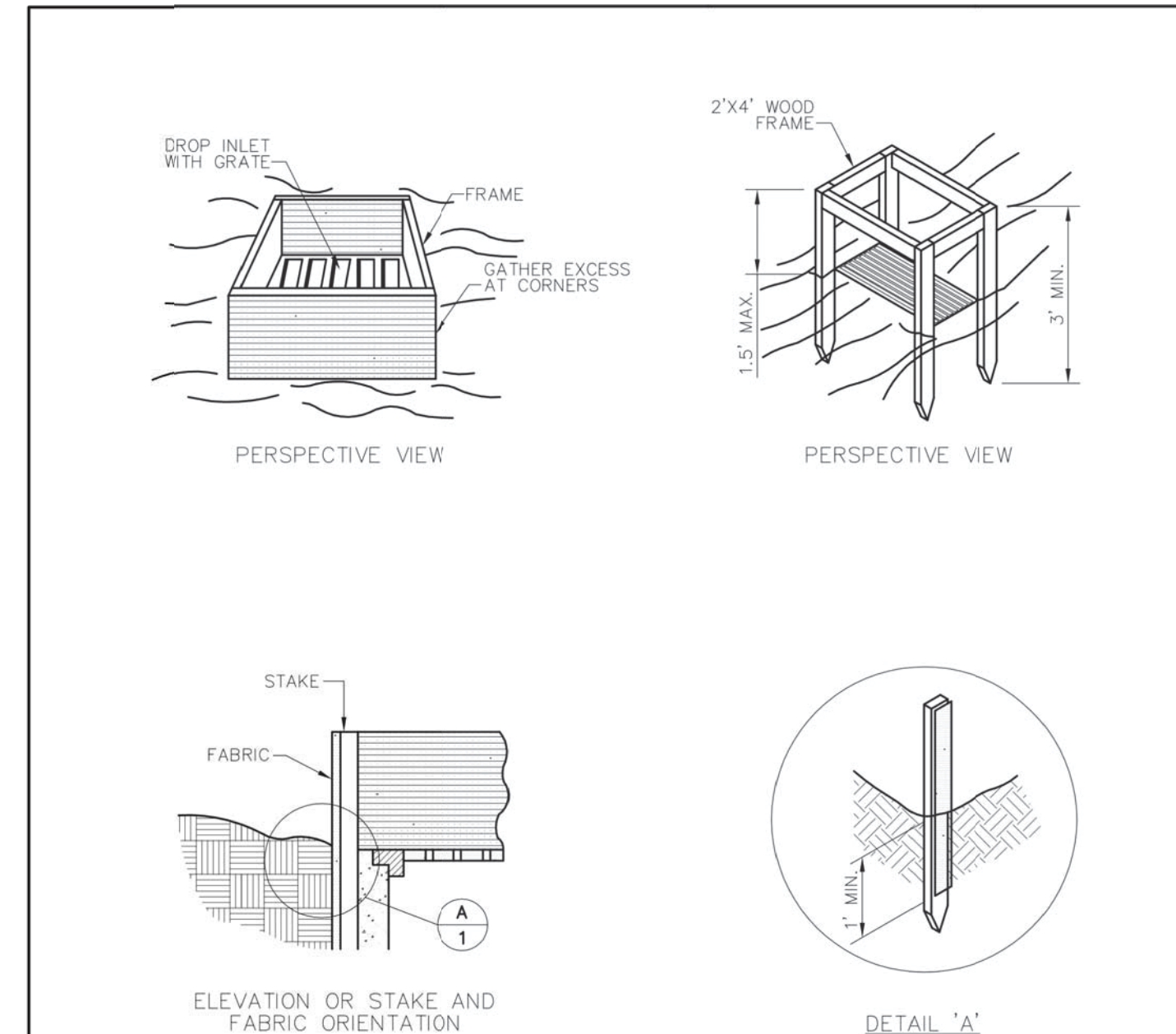
STABILIZED CONSTRUCTION ENTRANCE GENERAL NOTES:

1. WHEN NECESSARY, VEHICLES SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO A PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AREA STABILIZED WITH CRUSHED STONE WITH DRAINAGE FLOWING AWAY FROM BOTH THE STREET AND THE STABILIZED ENTRANCE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
2. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PAVED SURFACES. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PAVED SURFACES MUST BE REMOVED IMMEDIATELY.
3. THE ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.
4. WHEN SEDIMENT HAS SUBSTANTIALLY CLOGGED THE VOID AREA BETWEEN THE ROCKS, THE AGGREGATE MAT MUST BE WASHED DOWN OR REPLACED. PERIODIC RE-GRADE AND TOP DRESSING WITH ADDITIONAL STONE MUST BE DONE TO KEEP THE EFFICIENCY OF THE ENTRANCE FROM DIMINISHING.



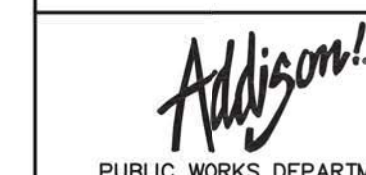
TEMPORARY STONE CONSTRUCTION ENTRANCE/EXIT

STANDARD CONSTRUCTION DETAILS EROSION CONTROL		
DATE:	REV DATE:	SHEET:
AUGUST, 2010		SD-EC03



SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPE NO GREATER THAN 5%) WHERE THE INLET SHEET OR OVER-LAND FLOWS (NOT TO EXCEED 1 C.F.S.) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS SUCH AS IN STREETS OR HIGHWAY MEDIANS.



GRATE AND WYE INLET PROTECTION

STANDARD CONSTRUCTION DETAILS EROSION CONTROL		
DATE:	REV DATE:	SHEET:
AUGUST, 2010		SD-EC04



2017/12/19

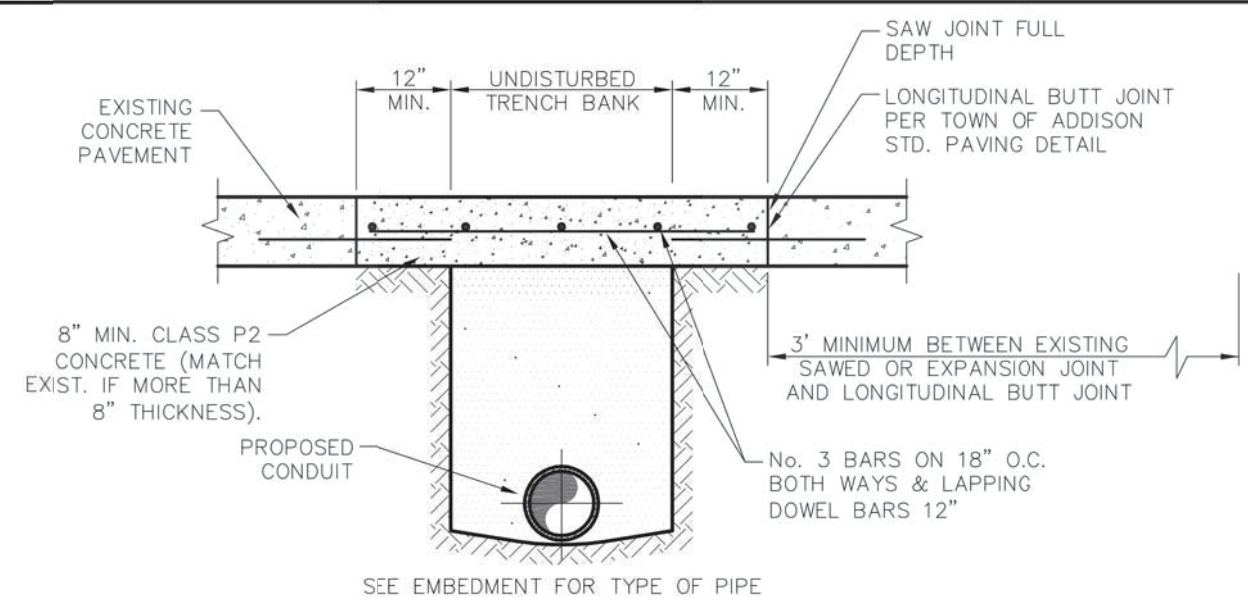
SAWYER ENGINEERING, LLC
TBPE FIRM NUMBER F-9171

NO.	REVISION	BY	DATE
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
IMPROVEMENT PLANS ADDISON GROVE			
EROSION & SEDIMENT CONTROL DETAILS			
SAWYER ENGINEERING, LLC TBPE: F-9171		1520 OLIVER STREET HOUSTON, TEXAS 77007 (832) 553-5948	
PROJECT	DESIGN	DRAWN	DATE
	CDP	JDS	MAY 2017
FILE	SHEET		
	30		

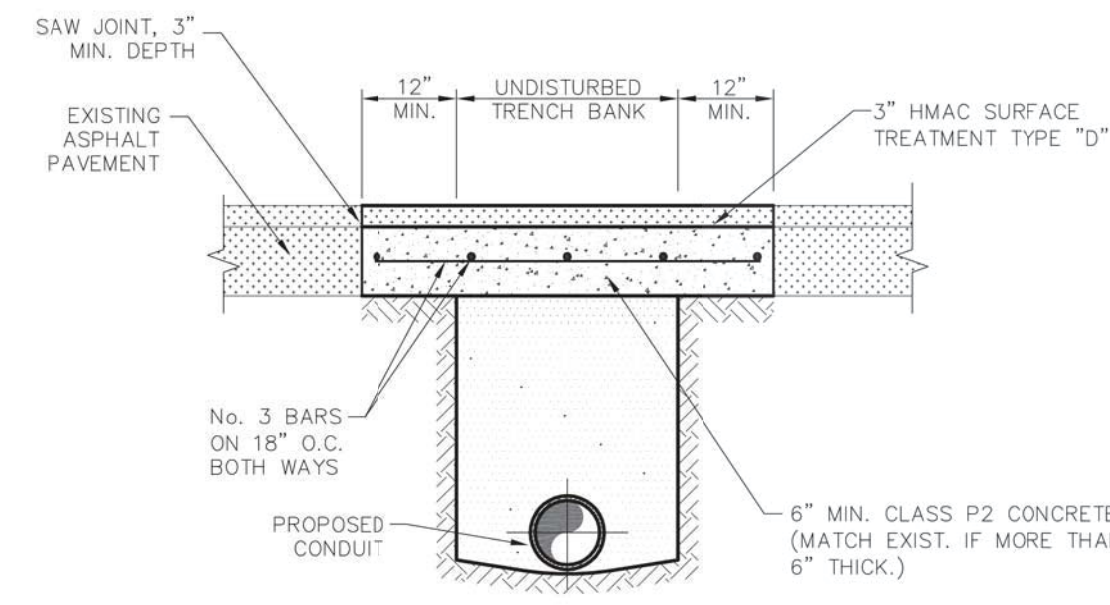
STORM SEWER – GENERAL NOTES:

1. ALL CONCRETE DRAINAGE STRUCTURES SHALL BE CLASS C CONCRETE MINIMUM.
2. ALL CRUSHED STONE SHALL BE 3/4", PASSING #4 SIEVE (GRADE 4).
3. ALL FIELD JOINTS WILL BE APPROVED BY THE TOWN ENGINEER IF NECESSARY. FIELD JOINTS SHALL BE WIPED ON THE INSIDE AND OUTSIDE TO PROVIDE FOR SMOOTH FLOW OF WATER.
4. RAMNECK COMPOUND OR APPROVED EQUAL SHALL BE USED FOR JOINT SEALS.
5. ALL STORM SEWER PIPE SHALL BE CAMERA INSPECTED AFTER THE INSTALLATION OF ALL PAVING AND UTILITIES AND PRIOR TO FINAL ACCEPTANCE OF THE PROJECT.

 PUBLIC WORKS DEPARTMENT	STORM SEWER GENERAL NOTES	STANDARD CONSTRUCTION DETAILS STORM DRAINAGE
		DATE: AUGUST, 2010 REV DATE: - SHEET: SD-001



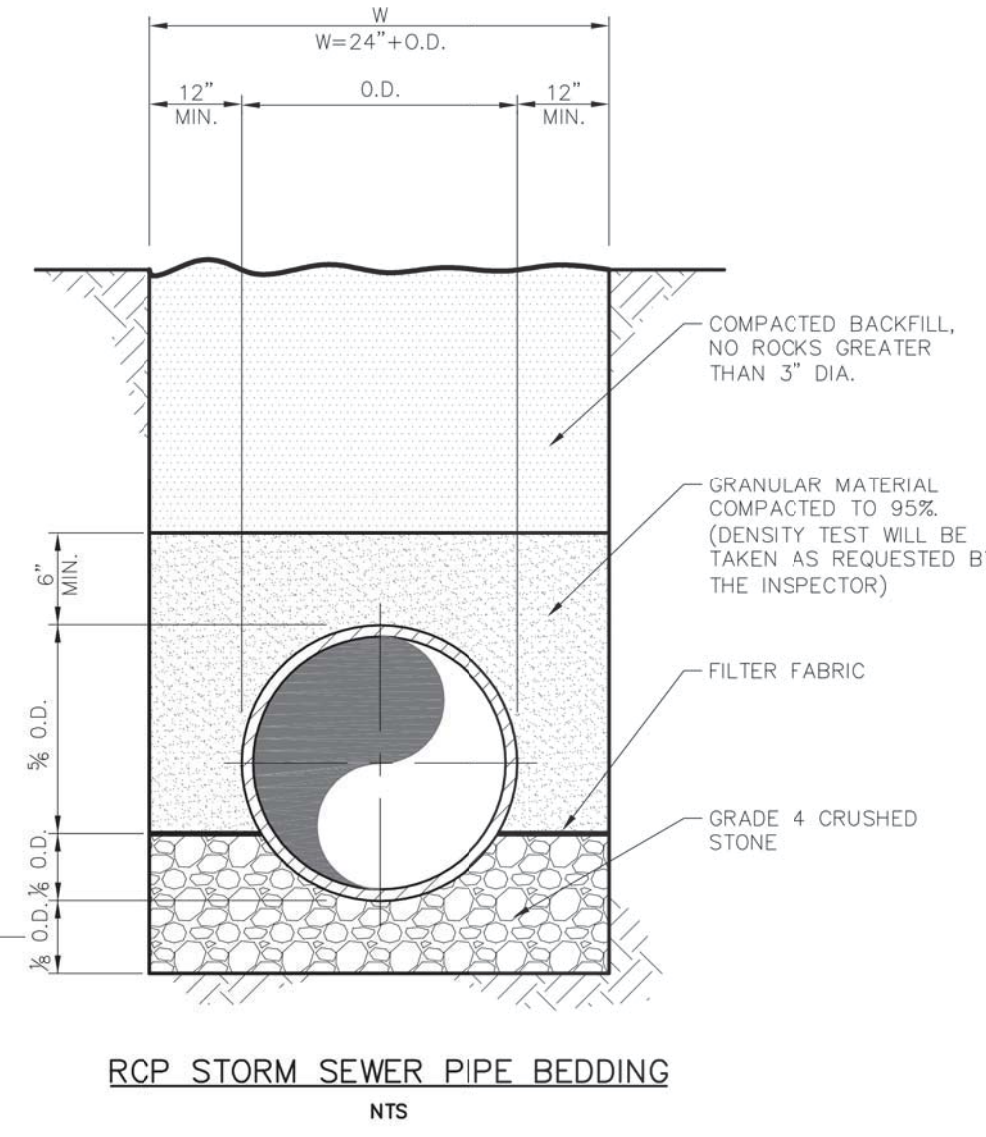
CONCRETE STREET OR DRIVE REPAIR
NTS



ASPHALT STREET OR DRIVE REPAIR
NTS

- NOTES:
1. ALL JOINTS SHALL BE PARALLEL OR PERPENDICULAR TO THE DIRECTION OF TRAVEL.

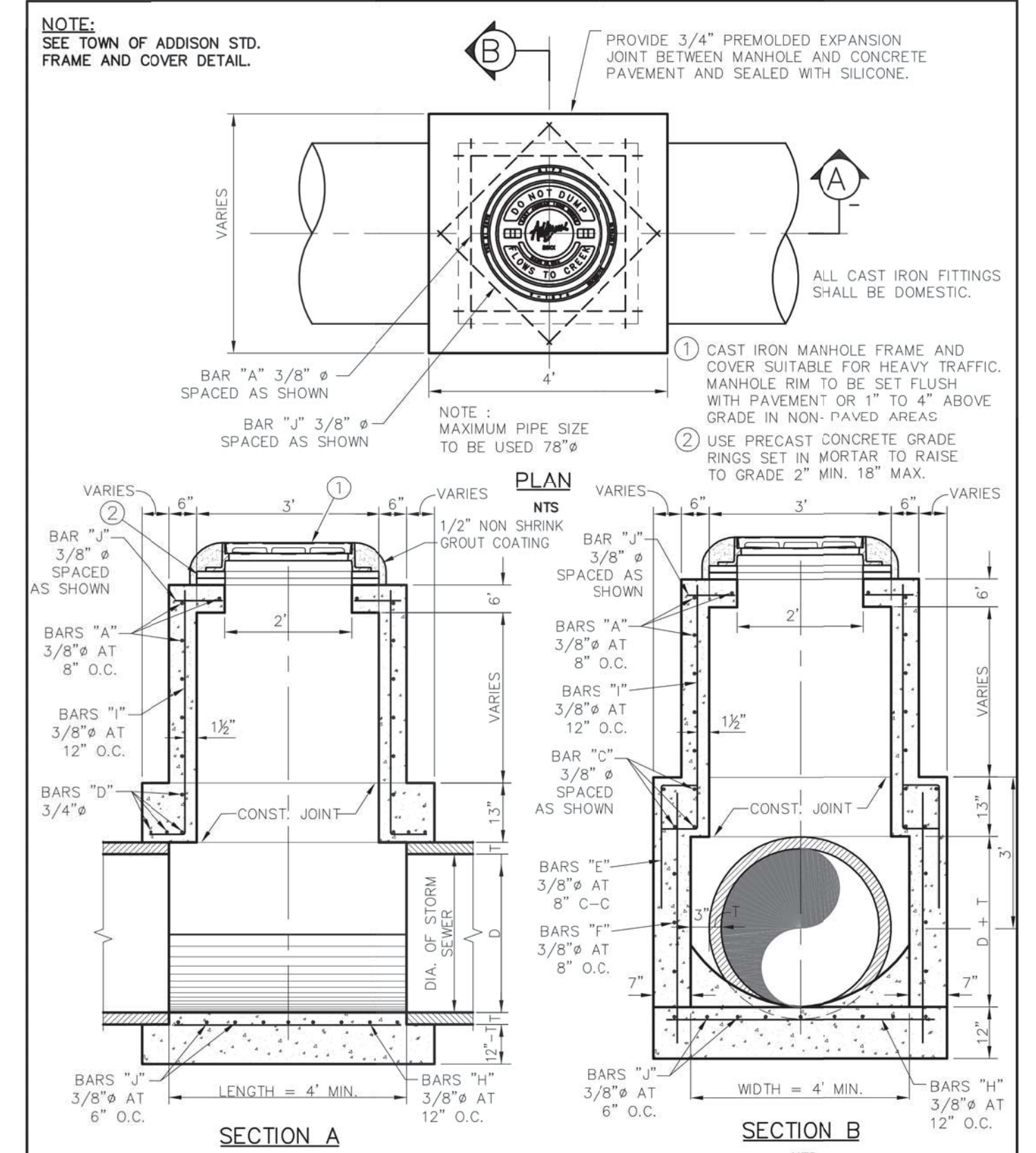
 PUBLIC WORKS DEPARTMENT	CONCRETE & ASPHALT STREET & DRIVE REPAIR	STANDARD CONSTRUCTION DETAILS STORM DRAINAGE
		DATE: AUGUST, 2010 REV DATE: - SHEET: SD-002



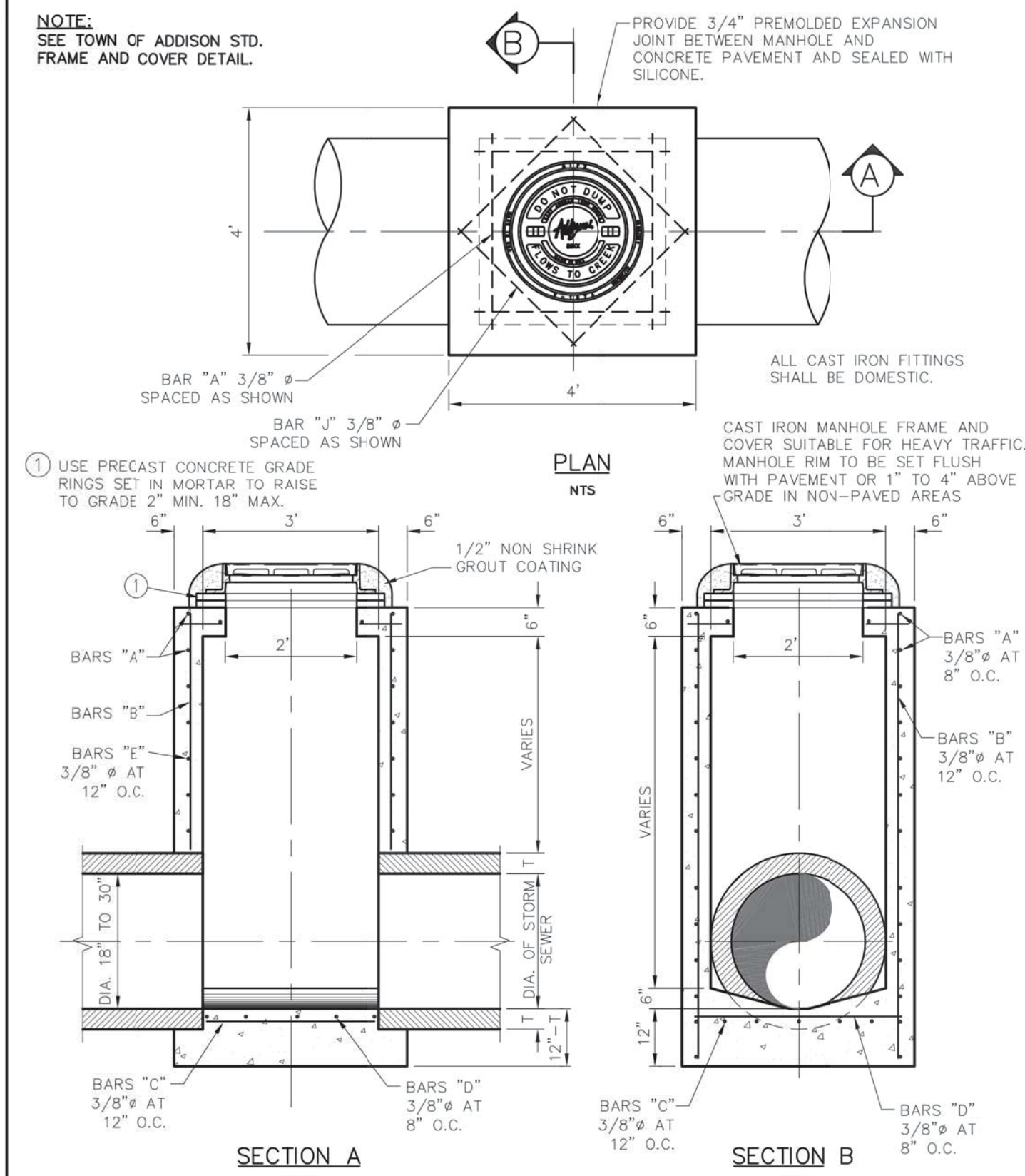
RCP STORM SEWER PIPE BEDDING
NTS

- NOTE:
1. THE DEPTH OF TRENCH BELOW THE PROPOSED CONDUIT SHALL BE AS FOLLOWS:
- 3" MIN. FOR 27" PIPE & SMALLER.
- 4" MIN. FOR 30" TO 60" PIPE.
- 6" MIN. FOR 66" PIPE OR LARGER.

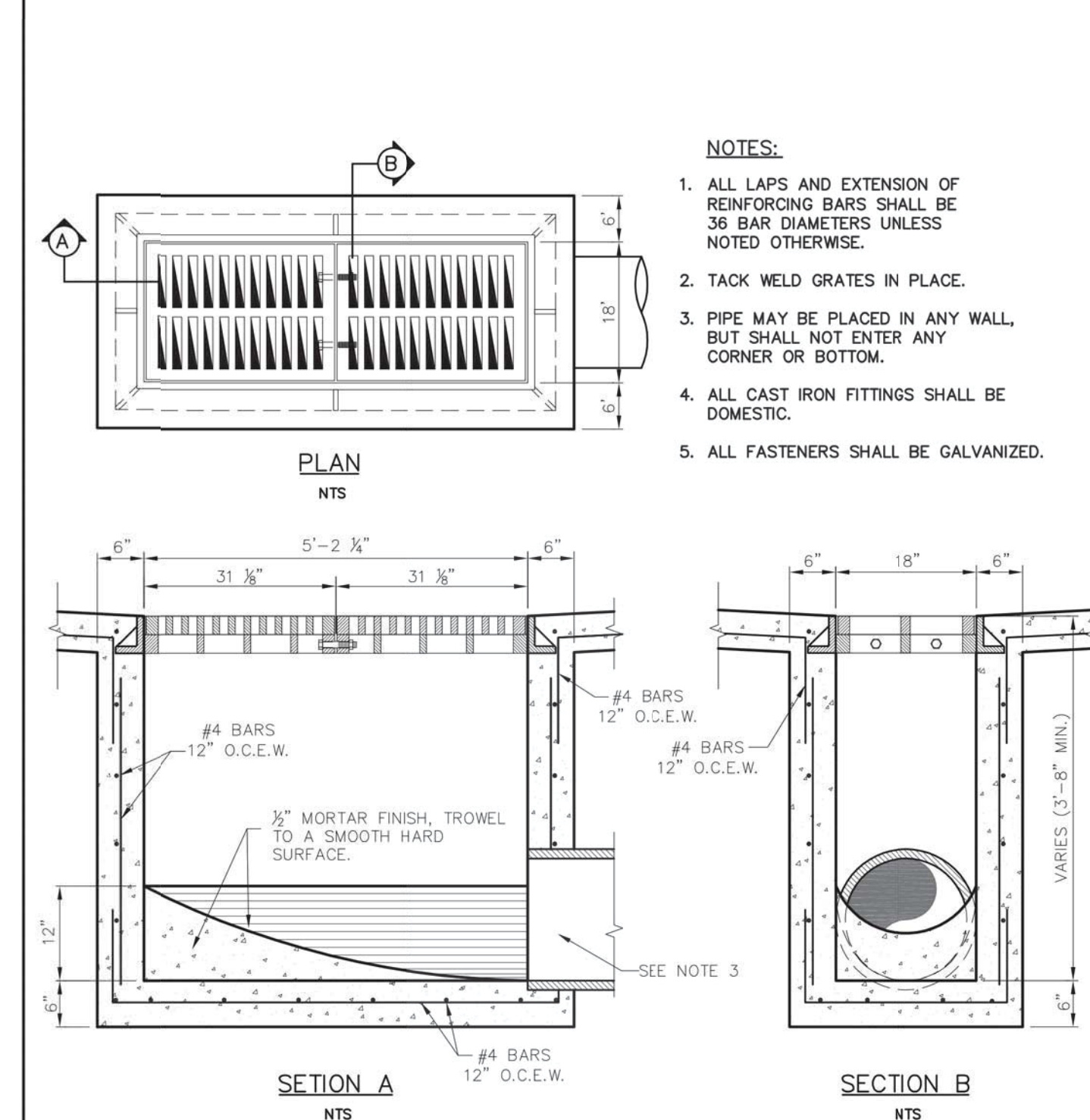
 PUBLIC WORKS DEPARTMENT	RCP STORM SEWER PIPE BEDDING	STANDARD CONSTRUCTION DETAILS STORM DRAINAGE
		DATE: AUGUST, 2010 REV DATE: - SHEET: SD-003



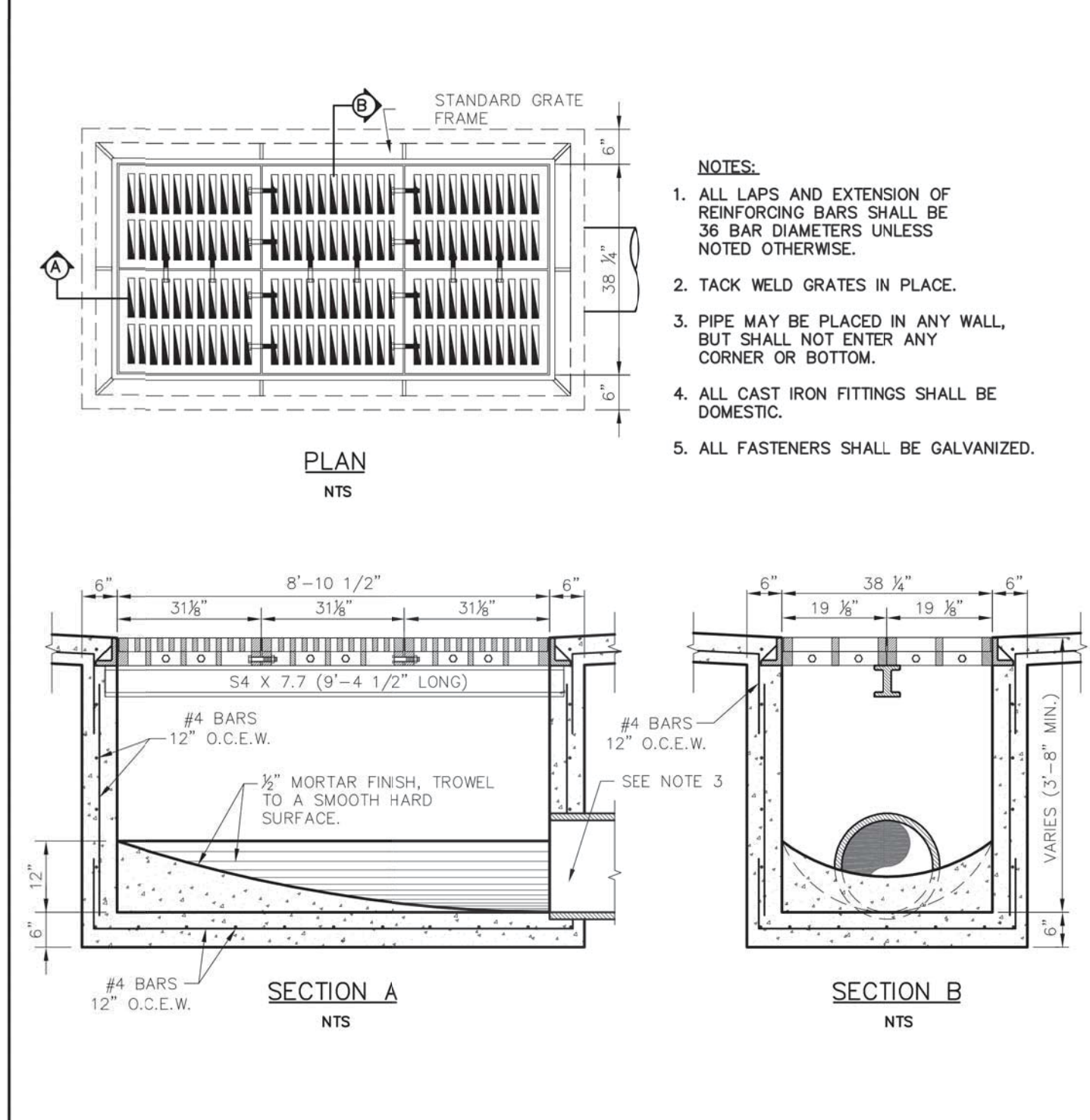
 PUBLIC WORKS DEPARTMENT	TYPE "B" STORM SEWER MANHOLE (FOR 33" TO 78" RCP)	STANDARD CONSTRUCTION DETAILS STORM DRAINAGE
		DATE: AUGUST, 2010 REV DATE: - SHEET: SD-007



 PUBLIC WORKS DEPARTMENT	TYPE "A" STORM SEWER MANHOLE (FOR 18" TO 30" RCP)	STANDARD CONSTRUCTION DETAILS STORM DRAINAGE
		DATE: AUGUST, 2010 REV DATE: - SHEET: SD-006



 PUBLIC WORKS DEPARTMENT	TWO GRATE INLET	STANDARD CONSTRUCTION DETAILS STORM DRAINAGE
		DATE: AUGUST, 2010 REV DATE: - SHEET: SD-030



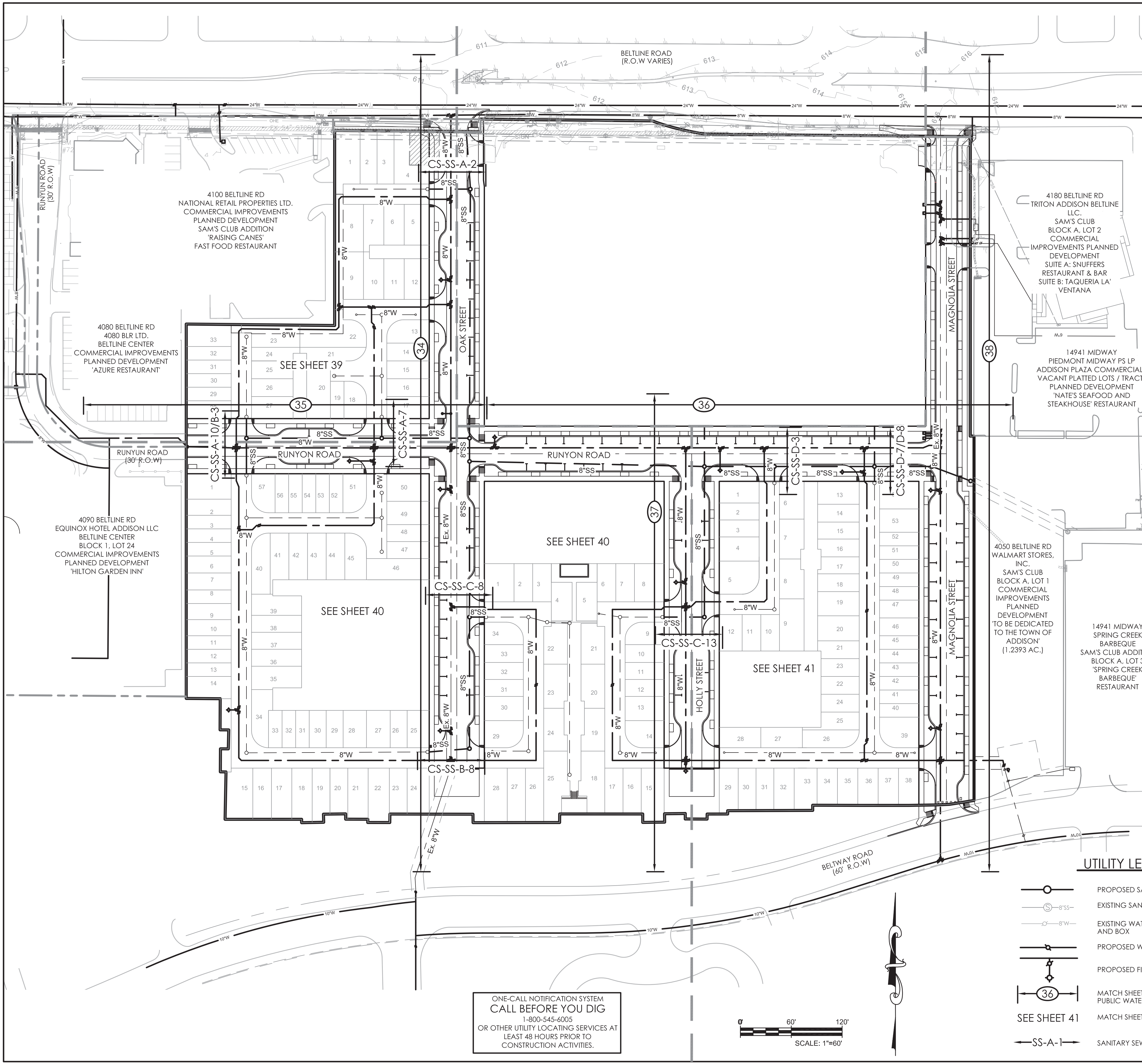
 PUBLIC WORKS DEPARTMENT	SIX GRATE INLET	STANDARD CONSTRUCTION DETAILS STORM DRAINAGE
		DATE: AUGUST, 2010 REV DATE: - SHEET: SD-033

STATE OF TEXAS
 CARMEN D. PEARSON
 95885
 LICENSED PROFESSIONAL ENGINEER
 2017/12/19
 SAWYER ENGINEERING, LLC
 TBPE FIRM NUMBER F-9171

NO.		REVISION		BY		DATE	
TOWN OF ADDISON DALLAS COUNTY, TEXAS IMPROVEMENT PLANS ADDISON GROVE STORM DRAIN DETAILS							
SAWYER		ENGINEERING, LLC TBPE: F-9171		1520 OLIVER STREET HOUSTON, TEXAS 77007 (832) 553-5948			
PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET		
	CDP	JDS	MAY 2017		31		

GENERAL WATER & SEWER NOTES

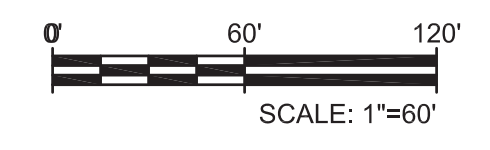
- REFER TO SHEET 3 "GENERAL CONSTRUCTION NOTES, LEGEND AND ABBREVIATIONS" FOR THE GENERAL CONSTRUCTION NOTES FOR THIS PROJECT.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR WATER AND SANITARY SEWER CONSTRUCTION AS PUBLISHED BY NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS AND ANY AND ALL AMENDMENTS BY THE TOWN OF ADDISON, AS WELL AS STANDARD CONSTRUCTION DETAILS OF THE TOWN OF ADDISON.
- PRIOR TO COMMENCING CONSTRUCTION, THE TOWN OF ADDISON, THE CONSULTING ENGINEERS, THE SUCCESSFUL CONTRACTOR, UTILITY COMPANIES, AND ANY OTHER AFFECTED PARTIES SHALL CONVENE FOR PRE-CONSTRUCTION CONFERENCE AT LEAST 48 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- THE CONTRACTOR SHALL OBTAIN A RIGHT-OF-WAY PERMIT FROM THE TOWN OF ADDISON PRIOR TO WORKING WITHIN THE PUBLIC RIGHT-OF-WAY.
- IF THE CONTRACTORS RESPONSIBILITY TO CONTACT ANY PUBLIC UTILITY COMPANIES FOR LOCATION OF EXISTING FACILITIES IN OR NEAR THE WORK AREAS, THESE INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:
 TOWN OF ADDISON (WATER, SEWER, SIGNALS) ATMOS ENERGY (GAS)
 ONCOR ELECTRIC DELIVERY VERIZON MCI
 AT&T (SOUTHWESTERN BELL) TIME-WARNER CABLE
- THE CONTRACTOR SHALL PROVIDE SUBMITTALS TO THE ENGINEER (5X SETS EACH), FOR APPROVAL OF ALL MATERIALS TO BE ADDED TO THE PUBLIC INFRASTRUCTURE, PRIOR TO INCORPORATING MATERIALS INTO THE JOB.
- THE CONTRACTOR SHALL PROVIDE AND SUBMIT TO THE TOWN OF ADDISON (FOUR SETS EACH), AN APPROVED TRENCH SAFETY PLAN, SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF TEXAS, FOR THE INSTALLATION OF UTILITIES GREATER THAN FIVE (5) FEET IN DEPTH.
- AT TIME OF COMPLETION AND FINAL ACCEPTANCE THE CONTRACTOR SHALL PROVIDE A MAINTENANCE BOND FOR PUBLIC INFRASTRUCTURE WORK IN THE FOLLOWING AMOUNTS:
 *100% FOR VALUATIONS LESS THAN OR EQUAL TO \$50,000
 *50,000 FOR VALUATIONS GREATER THAN \$5,000 AND LESS THAN \$50,000
 *10% FOR VALUATIONS GREATER THAN \$50,000
- THE CONTRACTOR SHALL FULLY COMPLY WITH, AND SUPPLEMENT AS NECESSARY, THE CONDITIONS OF THE STORM WATER POLLUTION PREVENTION PLAN WHILE CONDUCTING HIS ACTIVITIES ON THIS PROJECT.
- THE TOWN OF ADDISON INFRASTRUCTURE DEPARTMENT WILL APPROVE THE TRAFFIC CONTROL PLAN AND WORKING HOURS, CONTACT THE CITY ENGINEER OR THE INFRASTRUCTURE INSPECTOR AT (972) 450-2847
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO IMPLEMENT, AND SUPPLEMENT AS NECESSARY, THE TRAFFIC CONTROL MEASURES ON THIS PROJECT, INCLUDING PROVIDING ADEQUATE FLAGMEN, SIGNAGE, STRIPING AND WARNING DEVICES, ETC., DURING CONSTRUCTION IN ACCORDANCE WITH "TEXAS MANUAL OF UNIFORM CONTROL DEVICES", THE CONTRACTOR SHALL MAINTAIN AT LEAST ONE LANE OF TRAFFIC IN EACH DIRECTION DURING WORKING HOURS OR PROVIDE AN ALL-WEATHER DETOUR AROUND THE CONSTRUCTION SITE, INCLUDING PUBLIC NOTIFICATION AND SIGNING.
- TEMPORARY OR PERMANENT BARRICADES SHALL REMAIN AT ALL POINTS OF INGRESS OR EGRESS TO PREVENT PUBLIC USE UNTIL THE WORK RECEIVES FINAL ACCEPTANCE.
- THE CONTRACTOR SHALL COVER ALL OPEN EXCAVATIONS WITH ANCHORED STEEL PLATING, DURING NON-WORKING HOURS, WHEN IN EXISTING ROADWAYS AND TRAFFIC AREAS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ADEQUATE DRAINAGE AT ALL TIMES DURING CONSTRUCTION, INCLUDING PROVIDING TEMPORARY STRUCTURES OR IMPROVEMENTS AS NECESSARY FOR THE SAFETY OF THE PUBLIC.
- THE CONTRACTOR WILL PROVIDE A GEOTECHNICAL LABORATORY TO PERFORM APPROPRIATE TESTING DURING CONSTRUCTION ACTIVITIES, ANY TEST THAT FAILS TO MEET CITY REQUIREMENTS SHALL BE RETESTED AT THE CONTRACTOR'S EXPENSE.
- ROUGH GRADING SHALL BE COMPLETED PRIOR TO CONSTRUCTION OF WATER AND SANITARY SEWER FACILITIES.
- THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS FOR THE SUPPORT AND PROTECTION OF ALL UTILITY POLES, FENCES, TREES, SHRUBS, GAS MAINS, TELEPHONE CABLES, ELECTRIC CABLES, DRAINAGE PIPES, UTILITY SERVICES, AND ALL OTHER UTILITIES AND STRUCTURES BOTH ABOVE GROUND AND BELOW GROUND, THE COST OF WHICH SHALL BE INCLUDED IN THE CONTRACT AMOUNT.
- THE CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND TO ASSURE PROPER DEPTHS AND ALL CLEARANCES ARE ACHIEVED, IN THE EVENT OF CONFLICT BETWEEN WATER LINES AND STORM DRAIN OR SANITARY SEWER PIPING, THE CONTRACTOR SHALL ADJUST THE WATER LINE DOWNWARDS IN SUCH A MANNER SO THAT THE PIPE MANUFACTURER'S RECOMMENDATIONS ON THE PIPE DEFLECTION AND JOINT STRESS ARE NOT EXCEEDED.
- THE CONTRACTOR SHALL VERIFY THE SIZE, TYPE, ELEVATION, CONFIGURATION, AND ANGLE OF EXISTING WATER, SANITARY SEWER AND UTILITY LINES PRIOR TO CONSTRUCTION OF THE NEW MATERIALS, THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR REPAIRS TO EXISTING FACILITIES DAMAGED BY HIS ACTIVITIES.
- ALL WATER MAIN MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TOWN OF ADDISON'S WATER SYSTEM REQUIREMENTS.
- ALL WATER MAINS TWELVE-INCH (12") DIAMETER AND SMALLER SHALL BE ANSI/AWWA C-900 PVC PRESSURE PIPE WITH CAST IRON (CI) JOINTS. WHEN PIPE PENETRATES WATER VALVE WALLS SHALL BE DUCTILE IRON, PIPE JOINTS SHALL BE RUBBER RING AND INTEGRAL THICKENED BELL ASSEMBLED WITH A FACTORY SUPPLIED LUBRICANT. WATER MAINS SHALL HAVE A MINIMUM CLASS RATING OF 150 PSI FOR DOMESTIC USE AND A MINIMUM CLASS RATING OF 200 PSI FOR FIRE LINE/HYDRANT LEAD APPLICATIONS. JOINT MATERIAL FOR PVC SHALL CONFORM TO ASTM F471.
- EMBEDMENT FOR WATER AND SEWER MAINS SHALL COMPLY WITH NCTCOG CLASS B+ EMBEDMENT OF CRUSHED STONE TO THE SPRING LINE OF THE PIPE, WITH SAND (1/2" MIN) OVER THE PIPE. THE LAYER OF GEO-TEXTILE FABRIC SHALL BE PLACED ON TOP OF THE STONE PRIOR TO THE PLACEMENT OF THE SAND.
- THE MINIMUM COVER BELOW THE TOP OF CURB AT STREET TO TOP OF THE PIPE SHOULD BE AS FOLLOWS:
 a. LINES LARGER THAN SIXTEEN-INCH (16") SHALL HAVE A MINIMUM OF SIX FEET (6') OF COVER WHICH IS SUFFICIENT TO ALLOW WATER AND SEWER AND OTHER UTILITIES TO GO OVER THE LARGE MAIN.
 b. SIXTEEN-INCH (16") MAINS SHALL HAVE A MINIMUM COVER OF FIVE FEET (5').
 c. TWELVE-INCH (12") AND SMALLER MAINS SHALL HAVE A MINIMUM COVER OF FOUR FEET (4').
- THE CONTRACTOR SHALL SUPPLY AND INSTALL ANY ADDITIONAL BENDS WITH THRUST BLOCKING AND OTHER APPURTENANCES REQUIRED TO ASSURE PROPER INSTALLATION OF WATER MAINS AND LATERALS. THE CONTRACTOR MAY FULL PIPE AS NEEDED AT THE BENDS WHERE THE DEFLECTION ANGLE OF THE PIPE DOES NOT MATCH THE ANGLE OF THE BEND PROVIDED THE PIPE DEFLECTION IS WITHIN TOLERABLE MANUFACTURERS LIMITS, THE COST FOR ADDITIONAL BENDS AND BLOCKING SHALL BE INCLUDED IN THE CONTRACT AMOUNT.
- ALL VALVES AND DUCTILE IRON FITTINGS SHALL BE POLYETHYLENE WRAPPED.
- HORIZONTAL BLOCKING FOR WATER LINES HAS BEEN OMITTED FOR CLARITY; HOWEVER, BLOCKING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE GOVERNING AUTHORITIES' STANDARD DETAILS.
- ALL FITTINGS SHALL BE DUCTILE IRON, FULL BODIED, MECHANICAL JOINT TYPE WITH RESTRAINING GLANDS, AND HAVE A MINIMUM RATED WORKING PRESSURE OF 250 PSI. FITTINGS SHALL BE WRAPPED WITH 3-MIL POLY PRIOR TO BACKFILL.
- ALL VALVES AND FITTINGS SHALL HAVE CONCRETE THRUST BLOCKS INSTALLED. THRUST BLOCKING SHALL BE MINIMUM 3000 PSI CONCRETE AND SHALL BE ABLE TO WITHSTAND A MINIMUM 200 PSI TEST PRESSURE.
- THRUST BLOCKING SHALL BE CONSTRUCTED IN ACCORDANCE WITH GOVERNING AUTHORITIES' STANDARD DETAILS. DO NOT COVER BELLS OR FLANGES WITH CONCRETE. THE CONTRACTOR SHALL REMOVE EXISTING THRUST BLOCKING OR RESTRAINTS WHERE NECESSARY TO ALLOW THE WORK TO PROCEED, AND SHALL REPLACE THE THRUST BLOCKS WHERE REQUIRED, THE COST TO REMOVE, REPLACE OR PROVIDE THRUST BLOCKING SHALL BE INCLUDED IN THE CONTRACT AMOUNT.
- TRACER WIRE SHALL BE PLACED ON PIPE PRIOR TO EMBEDMENT, WIRE SHALL BE #12 PLASTIC COATED COPPER WIRE, TIED TO ALL VALVES AND FIRE HYDRANTS, AND EXTENDING TO SIX (6) INCHES ABOVE FINISHED GRADE ALONG THE OUTSIDE OF ALL VALVE STACKS AND HYDRANTS.
- FINISH BACKFILL SHALL BE NATIVE SOIL FREE OF ALL ROCKS AND CLOCS GREATER THAN THREE INCHES IN DIAMETER, COMPACTED TO 95% STANDARD PROCTOR DENSITY, IN SIX (6) INCH MAXIMUM LOOSE LIFTS, WITH ZERO TO PLUS THREE (3) OPTIMUM MOISTURE.
- NO PERSON SHALL OPEN, TURN OFF, INTERFERE WITH, ATTACH ANY HOSE TO, OR TAP ANY WATER MAIN BELONGING TO THE TOWN OF ADDISON. CALL THE TOA INFRASTRUCTURE DEPARTMENT TO SCHEDULE ALL VALVE OPERATIONS (972-450-2847).
- THE TOWN OF ADDISON WILL REMOVE EXISTING WATER METERS NOT USED FOR PROPOSED DEVELOPMENT. CONTRACTOR SHALL REMOVE ALL SERVICES TO THE MANS AS DIRECTED BY THE INFRASTRUCTURE DEPARTMENT. REMOVE METERS AND METER UNITS IN A WAY AS TO NOT DAMAGE THE METER OR LID AND DESTROY THE SALVAGED METERS TO THE TOWN OF ADDISON. CONTRACTOR SHALL KILL EXISTING DEADHEAD SERVICE FOR REMOVED METERS AT THE MAIN LINE.
- THE CONTRACTOR SHALL COMPLETELY REMOVE AND DEPOSE OF EXISTING 8" WATER MAIN AFTER FINAL COMPLETION AND ACCEPTANCE OF NEW 12" WATER MAIN.
- THE CONTRACTOR SHALL REPLACE EXISTING SERVICE LINES, DESIGNATED TO REMAIN, FROM THE EXISTING METERS TO NEW WATER MAIN WITH NEW COPPER (TYPE K ONLY) LINES. NEW SIZES TO BE THE SAME AS EXISTING WITH A MINIMUM OF 1" DIAMETER.
- ALL WASTEWATER MAIN PIPING SHALL MEET THE EXTRA STRENGTH REQUIREMENTS OF ASTM SPECIFICATION D3034 (SDR-35). PIPE SHALL HAVE BELL AND SPIGOT TYPE JOINTS, CONSISTING OF INTEGRAL WALL SECTION WITH FACTORY INSTALLED COMPRESSION RUBBER RING GASKET, SECURELY LOCKED IN BELL GROOVE TO PROVIDE POSITIVE SEAL UNDER ALL INSTALLATION CONDITIONS. PIPE SHALL BE LAID WITH THE BELL END IN THE UPSTREAM SIDE.
- ALL SEWER MANHOLES WITH PRESSURE TYPE FRAME AND COVERS SHALL HAVE THE INTERIOR SURFACE COATED WITH AN EPOXY COATING (RAVEN 405 OR APPROVED EQUAL), MINIMUM 40 MILS THICKNESS, INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
- ALL EXISTING AND PROPOSED IMPROVEMENTS (VALVES, MANHOLES, FIRE HYDRANTS, WATER METERS, ETC.) SHALL BE ADJUSTED TO FINAL FINISHED GRADE BY THE CONTRACTOR.
- THE CONTRACTOR SHALL STAMP A 2-INCH "W" AND A 2-INCH "S" IN THE CURB AT THE LOCATION OF THE WATER AND SEWER SERVICE LINES RESPECTIVELY. A 2-INCH "C" SHALL MARK CONDUITS CROSSING PAVEMENT, AND A 2-INCH "V" SHALL MARK WATER VALVES, WITH THE "POINT" OF THE "V" TOWARD THE VALVE.
- WATER LINES SHALL BE TESTED BOTH BACTERIOLOGICALLY AND HYDROSTATICALLY. WATER MAINS SHALL BE HYDROSTATICALLY TESTED AT 150PSI FOR FOUR (4) HOURS. FIRE LINES SHALL BE HYDROSTATICALLY TESTED AT 200PSI FOR TWO (2) HOURS. ALL BLEEDER LINES SHALL BE REMOVED UPON COMPLETION OF TESTING (USUALLY 24 HOURS) UNLESS OTHERWISE NOTED.
- HEAVILY CHLORINATED WATER (3.5 MG/L OR GREATER FREE CHLORINE) RESULTING FROM WATER LINE STERILIZATION SHALL BE DIRECTED TO THE SANITARY SEWER AFTER MANDATORY CHLORINE RESIDUE TIME (USUALLY 24 HOURS) UNLESS OTHERWISE NOTED.
- ALL WASTEWATER MAINS SHALL BE CAMERA INSPECTED BY THE CONTRACTOR AFTER THE INSTALLATION OF ALL UTILITIES AND PRIOR TO FINAL ACCEPTANCE OF NEW WASTEWATER FACILITIES.
- THE CONTRACTOR SHALL PROVIDE VERIFICATION OF COMPLETION AND COMPLIANCE OF ALL REQUIRED TESTS (PRESSURE, BACTERIOLOGICAL, BACKFLOW, VACUUM, MANHOLE, VHS VIDEO OF SANITARY SEWER ETC.) TO THE TOWN OF ADDISON.
- THE CONTRACTOR SHALL CALL (972) 450-2847 TO REQUEST A FINAL WALK-THROUGH INSPECTION OF THE PUBLIC INFRASTRUCTURE WORK.
- ANY ADJACENT PROPERTIES AFFECTED BY THE CONSTRUCTION SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITIONS, OR BETTER.
- BLUE REFLECTORIZED BUTTONS ARE TO BE INSTALLED IN THE CENTER OF THE DRIVE LANE NEAREST THE OUTSIDE CURB OPPOSITE ALL FIRE HYDRANTS.



UTILITY LEGEND

- PROPOSED SANITARY SEWER AND MANHOLE
- EXISTING SANITARY SEWER AND MANHOLE
- EXISTING WATERLINE WITH GATE VALVE AND BOX
- PROPOSED WATER LINE AND VALVE
- PROPOSED FIRE HYDRANT ASSEMBLY
- MATCH SHEET FOR PLAN AND PROFILE OF PUBLIC WATERLINE AND SANITARY SEWER
- MATCH SHEET FOR PUBLIC WATERLINE ONLY
- SANITARY SEWER CROSS SECTION PROFILE

ONE-CALL NOTIFICATION SYSTEM
CALL BEFORE YOU DIG
 1-800-545-6005
 OR OTHER UTILITY LOCATING SERVICES AT
 LEAST 48 HOURS PRIOR TO
 CONSTRUCTION ACTIVITIES.



2017/12/22

SAWYER ENGINEERING, LLC
 TBPE FIRM NUMBER F-9171

NO.		REVISION		BY	DATE
TOWN OF ADDISON DALLAS COUNTY, TEXAS IMPROVEMENT PLANS ADDISON GROVE OVERALL WATER & SANITARY SEWER LAYOUT & NOTES					
SAWYER		ENGINEERING, LLC TBPE: F-9171	1520 OLIVER STREET HOUSTON, TEXAS 77007 (832) 553-5948		
PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
CDP	JDS	JDS	MAY 2017		33

4080 BELTLINE RD
4080 BLR LTD.
BELTLINE CENTER
COMMERCIAL IMPROVEMENTS
PLANNED DEVELOPMENT
'AZURE RESTAURANT'

4090 BELTLINE RD
EQUINOX HOTEL ADDISON LLC
BELTLINE CENTER
BLOCK 1, LOT 24
COMMERCIAL IMPROVEMENTS
PLANNED DEVELOPMENT
'HILTON GARDEN INN'

SEE SHEET 39

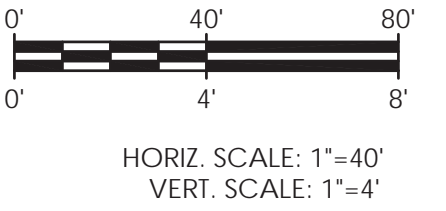
SEE SHEET 34

SEE SHEET 40

SEE SHEET 36

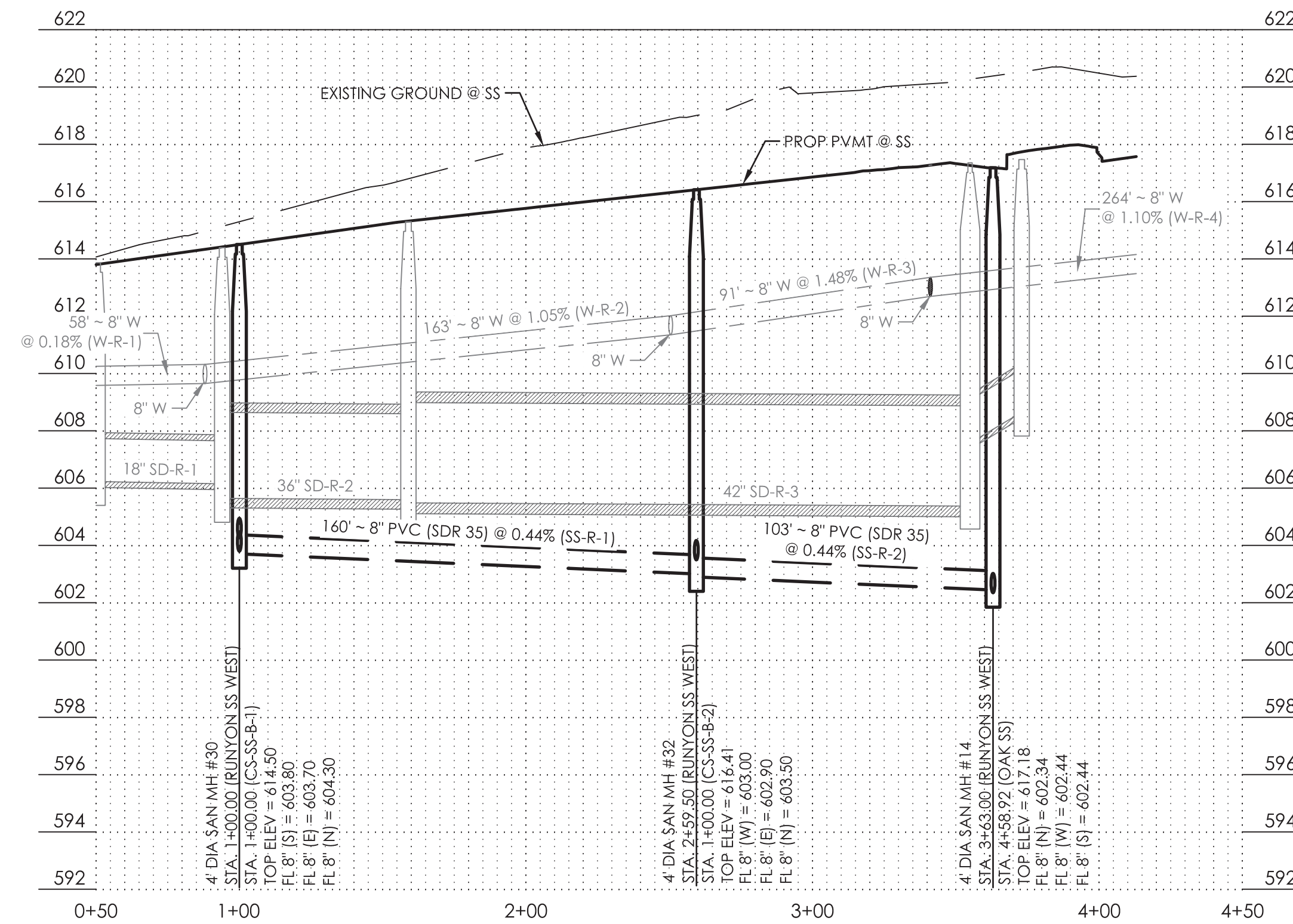
SANITARY SEWER AND WATERLINE LEGEND

- SANITARY SEWER AND MANHOLE
- SANITARY SEWER AND CLEANOUT
- EXISTING SANITARY SEWER AND MANHOLE
- PROPOSED FIRE HYDRANT ASSEMBLY
- PROPOSED WATERLINE WITH GATE VALVE AND BOX WITH 10' W.L.E.
- EXISTING WATERLINE WITH GATE VALVE AND BOX
- PROPOSED STORM SEWER WITH MANHOLE AND INLETS
- PROPOSED PRIVATE STORM SEWER
- EXISTING STORM SEWER AND MANHOLE
- EXISTING INLET
- PROPOSED TREE WELL
- 2x6 TRUNCATED DOME PANEL
-



CONSTRUCTION OF SANITARY SEWER AND STORM SEWER WITHIN THE RIGHT-OF-WAY TO BE CONSIDERED PUBLIC UTILITIES INCLUDING THE TRUNK LINE EXTENDING TO THE FIRST MANHOLE OR INLET OUTSIDE THE RIGHT-OF-WAY. THE MANHOLE OR INLET OUTSIDE OF THE RIGHT-OF-WAY IS TO BE CONSIDERED PRIVATE.

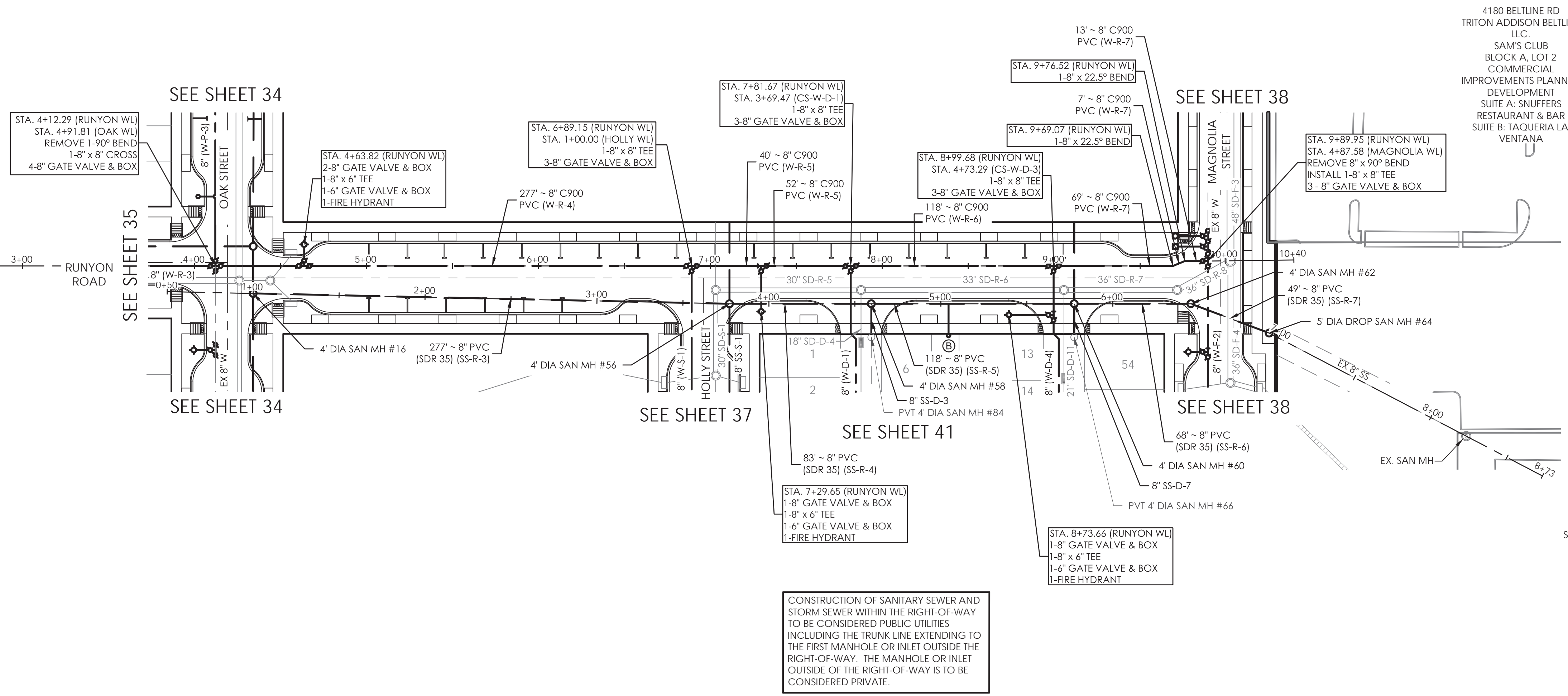
RUNYON ROAD (WEST)



STATE OF TEXAS
CARMEN D. PEARSON
95885
LICENSED PROFESSIONAL ENGINEER
2017/12/22
SAWYER ENGINEERING, LLC
TBPE FIRM NUMBER F-9171

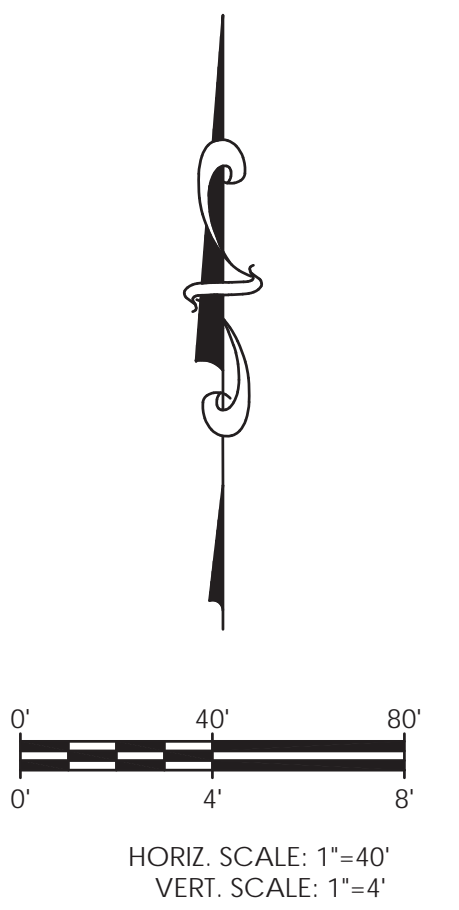
ONE-CALL NOTIFICATION SYSTEM
CALL BEFORE YOU DIG
1-800-545-6005
OR OTHER UTILITY LOCATING SERVICES AT
LEAST 48 HOURS PRIOR TO
CONSTRUCTION ACTIVITIES.

NO.	REVISION	BY	DATE
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
IMPROVEMENT PLANS ADDISON GROVE			
WATER LINE AND SANITARY SEWER PLAN & PROFILE- RUNYON ROAD (WEST)			
SAWYER ENGINEERING, LLC TBPE F-9171		1520 OLIVER STREET HOUSTON, TEXAS 77007 (832) 553-5948	
PROJECT	DESIGN	DRAWN	DATE
	CDP	JDS	MAY 2017
FILE	SHEET		
	35		



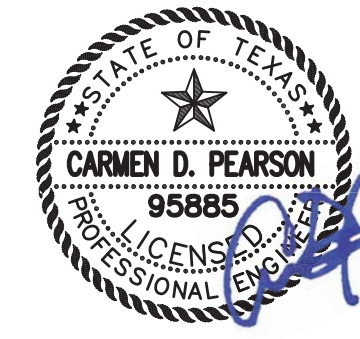
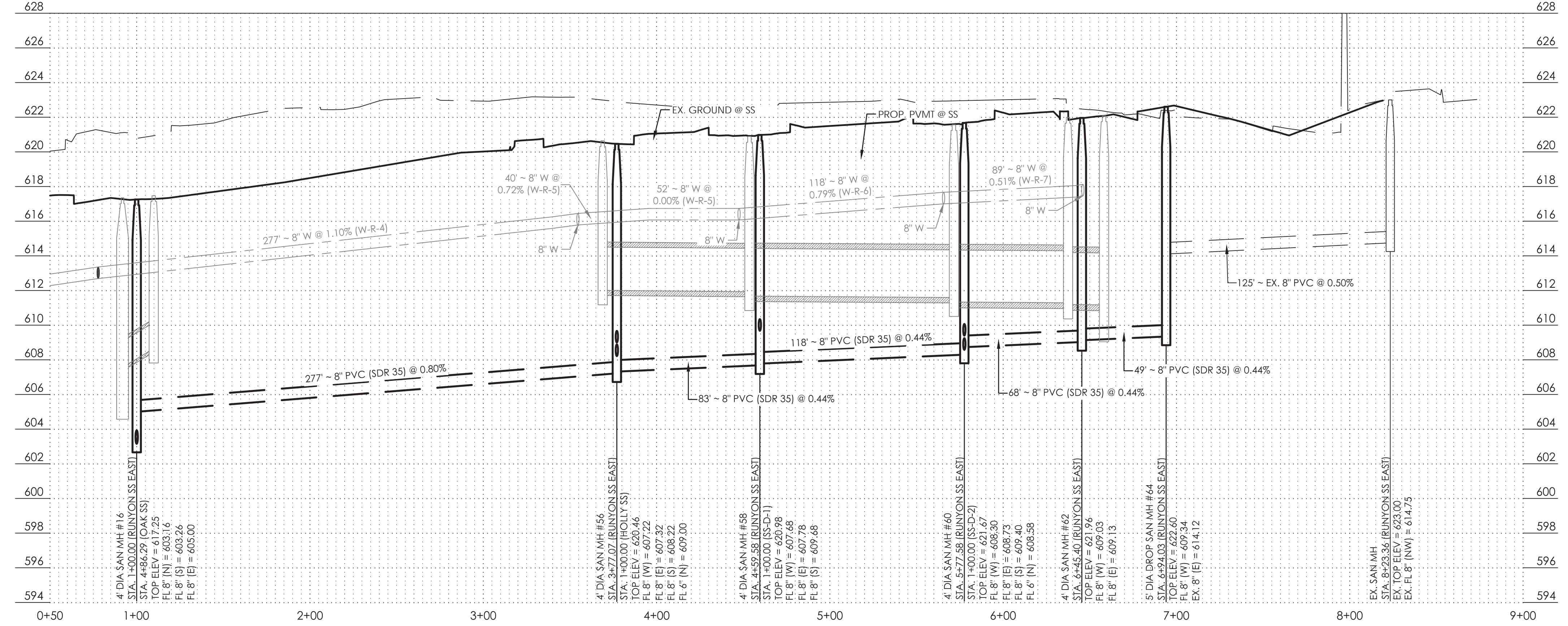
SANITARY SEWER AND WATERLINE LEGEND

- SANITARY SEWER AND MANHOLE
- SANITARY SEWER AND CLEANOUT
- EXISTING SANITARY SEWER AND MANHOLE
- PROPOSED FIRE HYDRANT ASSEMBLY
- PROPOSED WATERLINE WITH GATE VALVE AND BOX WITH 10' W.L.E.
- EXISTING WATERLINE WITH GATE VALVE AND BOX
- PROPOSED STORM SEWER WITH MANHOLE AND INLETS
- PROPOSED PRIVATE STORM SEWER
- EXISTING STORM SEWER AND MANHOLE
- EXISTING INLET
- PROPOSED TREE WELL
- 2x6 TRUNCATED DOME PANEL
-



CONSTRUCTION OF SANITARY SEWER AND STORM SEWER WITHIN THE RIGHT-OF-WAY TO BE CONSIDERED PUBLIC UTILITIES INCLUDING THE TRUNK LINE EXTENDING TO THE FIRST MANHOLE OR INLET OUTSIDE THE RIGHT-OF-WAY. THE MANHOLE OR INLET OUTSIDE OF THE RIGHT-OF-WAY IS TO BE CONSIDERED PRIVATE.

RUNYON ROAD (EAST)



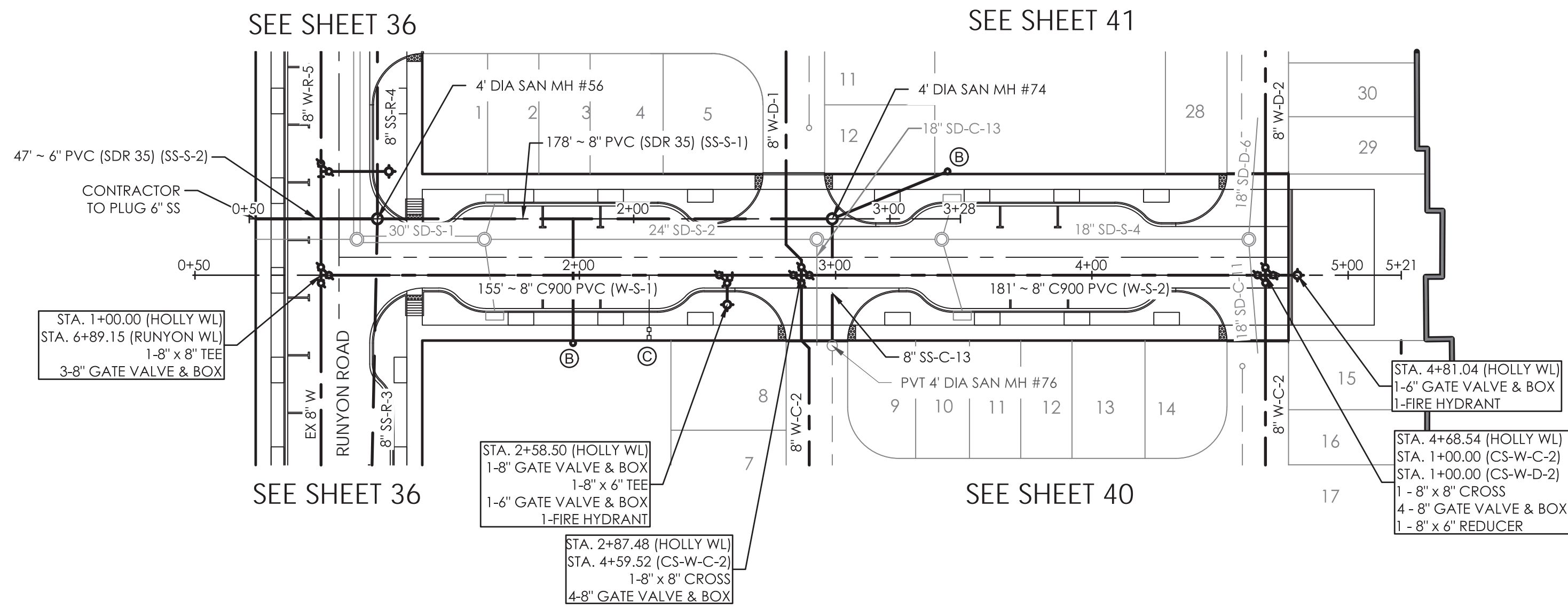
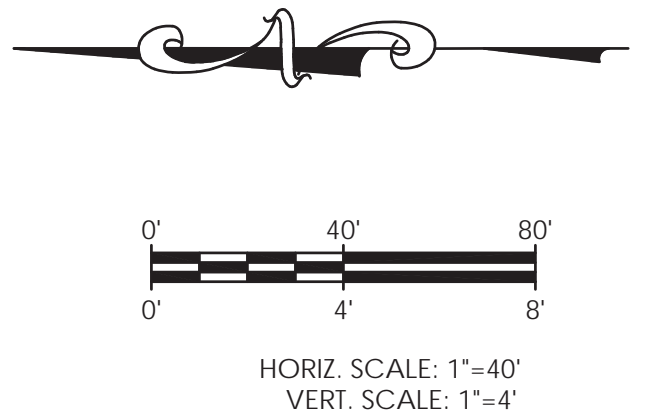
SAWYER ENGINEERING, LLC
TBPE FIRM NUMBER F-9171

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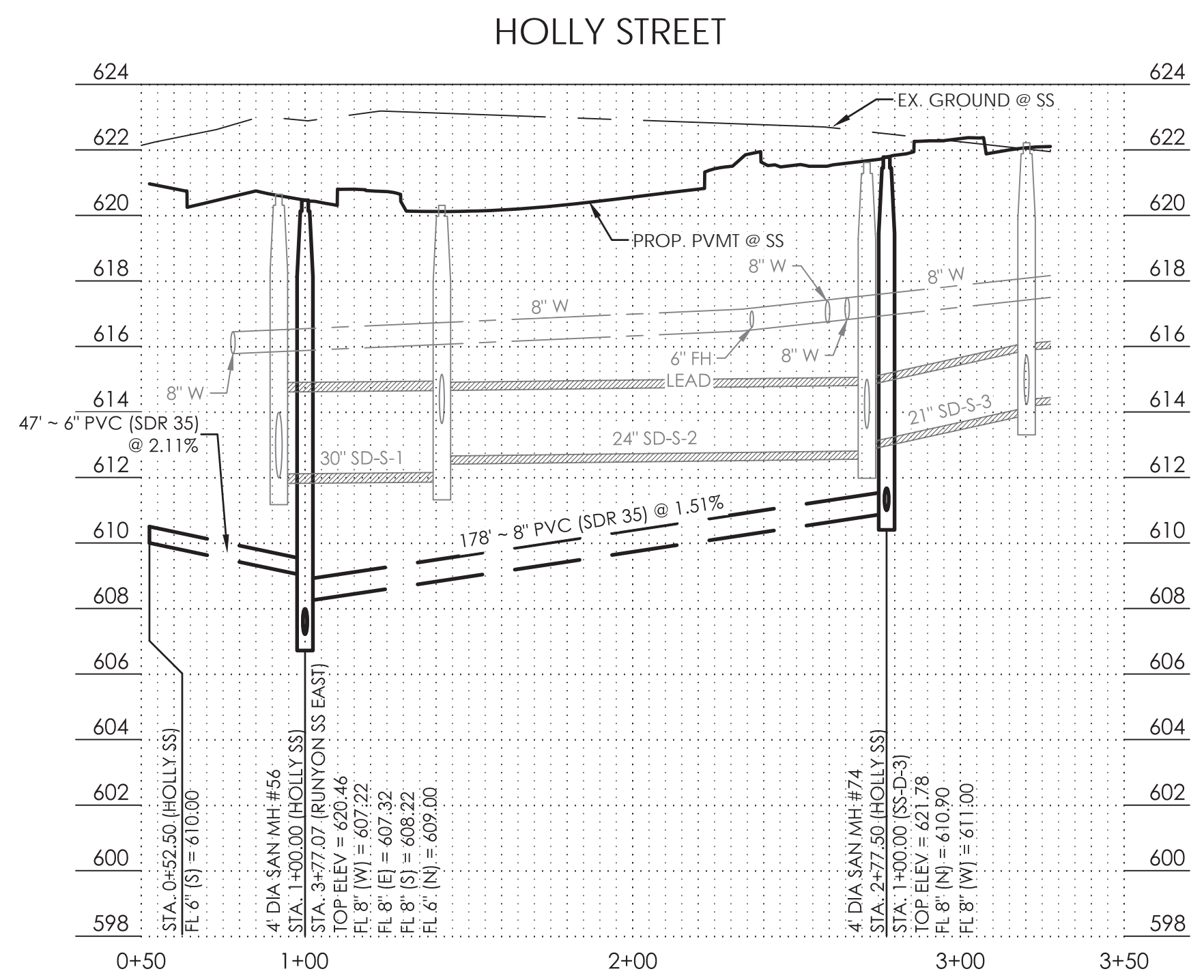
NO.		REVISION		BY	DATE
TOWN OF ADDISON DALLAS COUNTY, TEXAS					
IMPROVEMENT PLANS ADDISON GROVE					
WATER LINE AND SANITARY SEWER PLAN & PROFILE- RUNYON ROAD (EAST)					
SAWYER		ENGINEERING, LLC		1520 OLIVER STREET HOUSTON, TEXAS 77007 (832) 553-5948	
PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
	CDP	JDS	MAY 2017		36

SANITARY SEWER AND WATERLINE LEGEND

- SANITARY SEWER AND MANHOLE
- SANITARY SEWER AND CLEANOUT
- EXISTING SANITARY SEWER AND MANHOLE
- PROPOSED FIRE HYDRANT ASSEMBLY
- PROPOSED WATERLINE WITH GATE VALVE AND BOX WITH 10' W.L.E.
- EXISTING WATERLINE WITH GATE VALVE AND BOX
- PROPOSED STORM SEWER WITH MANHOLE AND INLETS
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-



CONSTRUCTION OF SANITARY SEWER AND STORM SEWER WITHIN THE RIGHT-OF-WAY TO BE CONSIDERED PUBLIC UTILITIES INCLUDING THE TRUNK LINE EXTENDING TO THE FIRST MANHOLE OR INLET OUTSIDE THE RIGHT-OF-WAY. THE MANHOLE OR INLET OUTSIDE OF THE RIGHT-OF-WAY IS TO BE CONSIDERED PRIVATE.



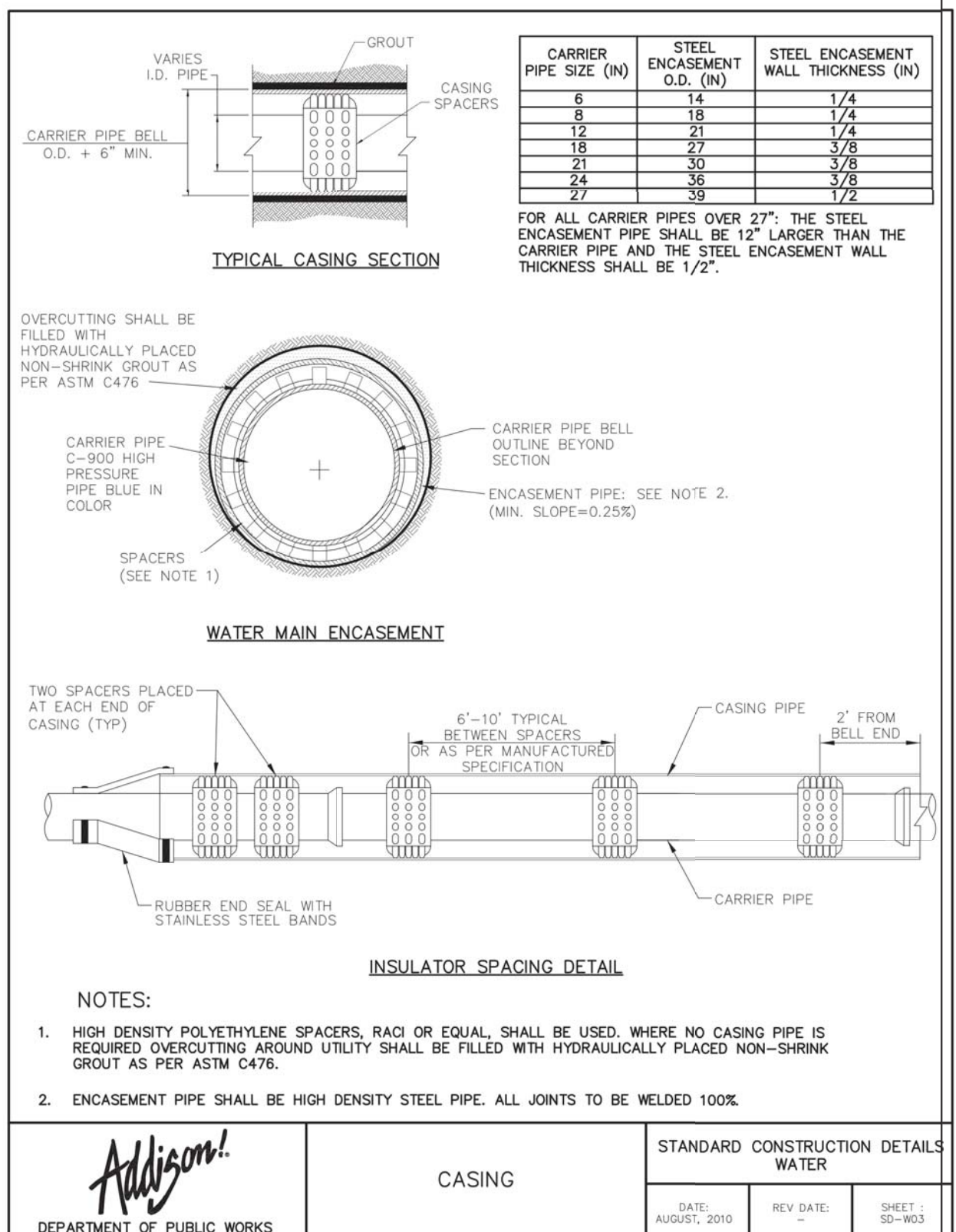
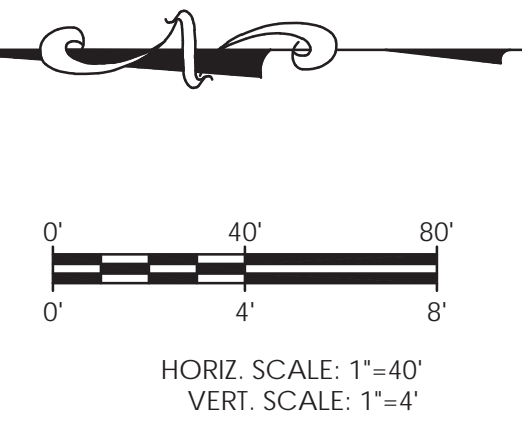
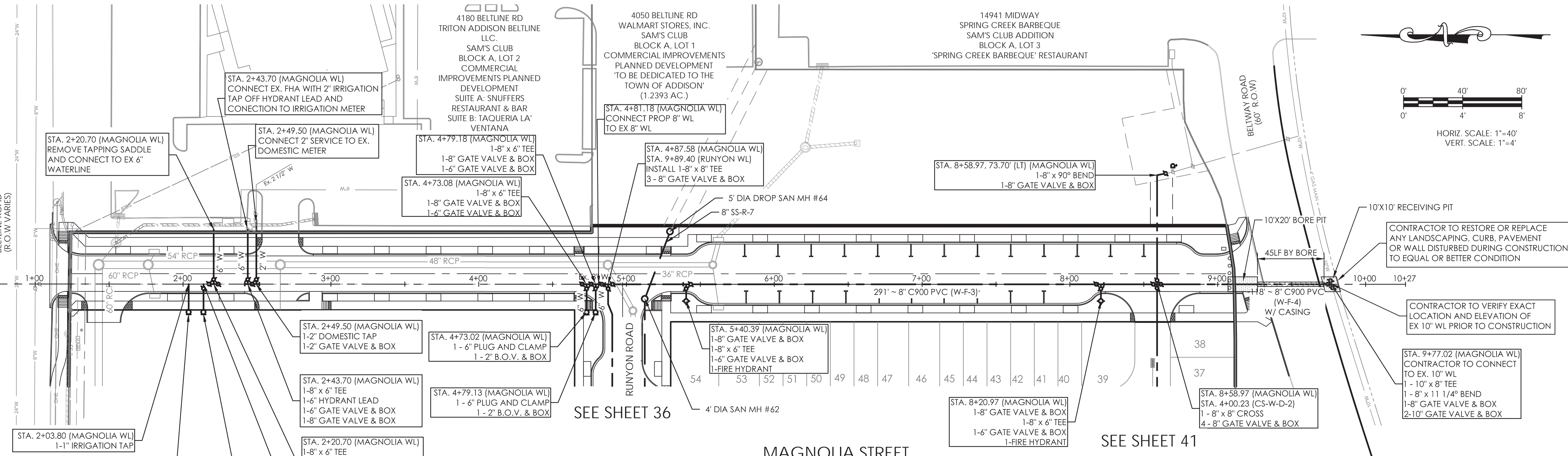
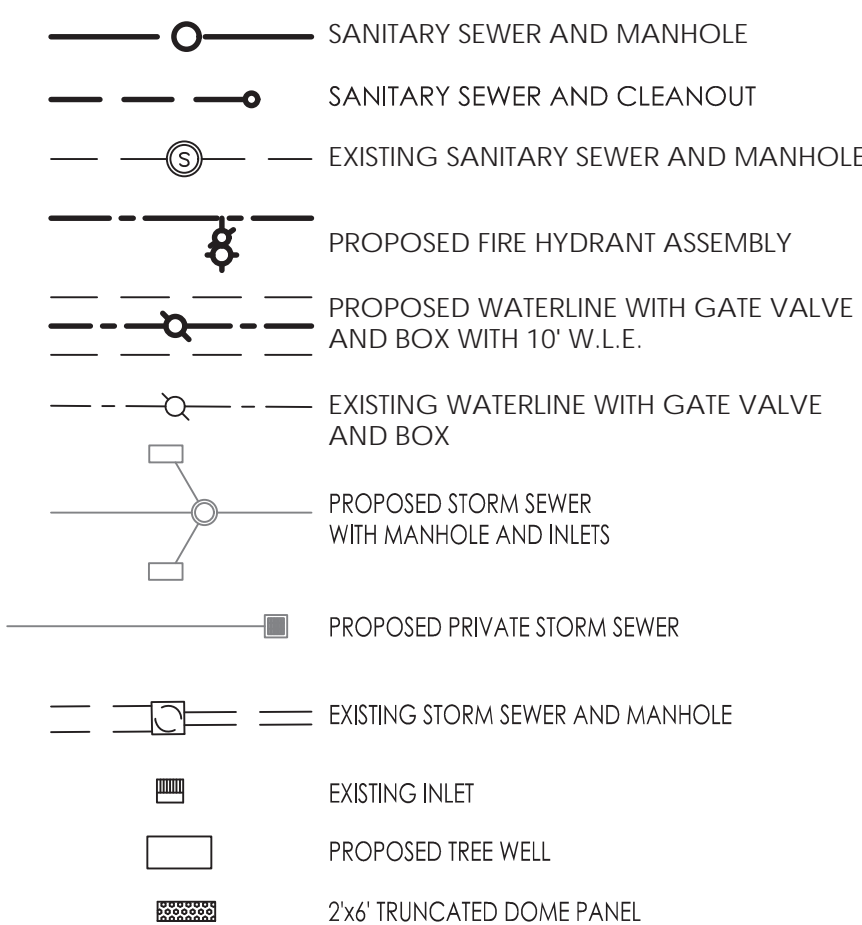
SAWYER ENGINEERING, LLC
TBPE FIRM NUMBER F-9171

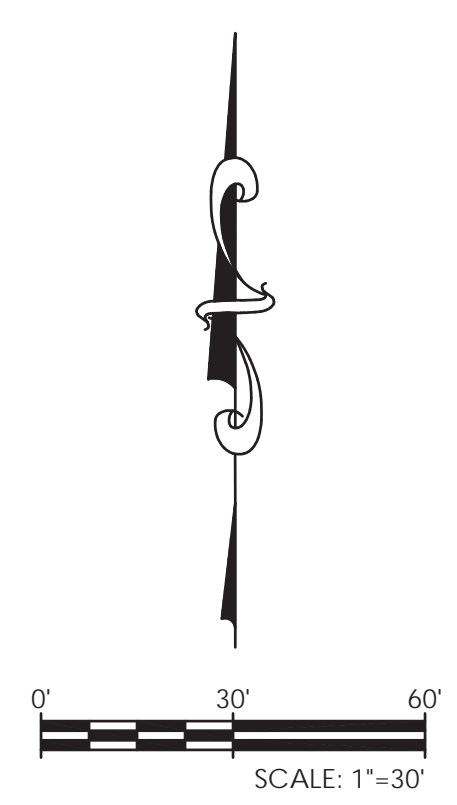
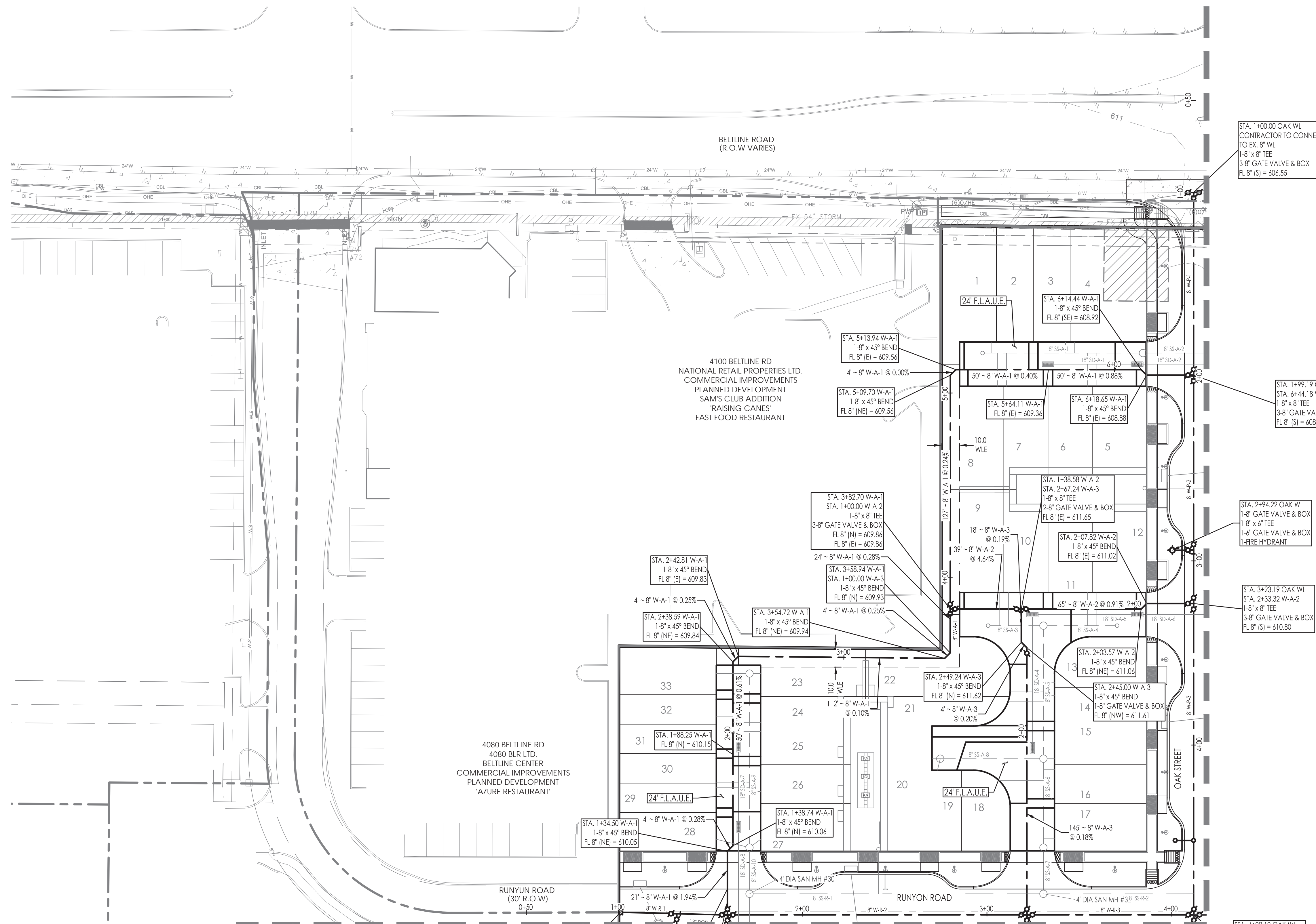
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NO.	REVISION	BY	DATE
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
IMPROVEMENT PLANS ADDISON GROVE			
WATER LINE AND SANITARY SEWER PLAN & PROFILE - HOLLY STREET			
SAWYER ENGINEERING, LLC TBPE: F-9171		1520 OLIVER STREET HOUSTON, TEXAS 77007 (832) 553-5948	
PROJECT	DESIGN	DRAWN	DATE
	CDP	JDS	MAY 2017
FILE	SHEET		
	37		

- UTILITY RELOCATION NOTES:
- AFTER UTILITY RELOCATION IS COMPLETE, LICENSED PLUMBING CONTRACTOR TO CONNECT NEW UTILITY LOCATION TO EX UTILITY LINES SERVICING SNUFFER/LA VENTANA
 - CONTRACTOR TO PERFORM UTILITY RELOCATION DURING NON-BUSINESS HOURS ONLY.
 - CONTRACTOR TO PROVIDE UN-INTERRUPTED SERVICE FOR SNUFFERS/LA VENTANA DURING BUSINESS HOURS

SANITARY SEWER AND WATERLINE LEGEND





- WATERLINE LEGEND**
- SANITARY SEWER AND MANHOLE
 - SANITARY SEWER AND CLEANOUT
 - EXISTING SANITARY SEWER AND MANHOLE
 - PROPOSED FIRE HYDRANT ASSEMBLY
 - PROPOSED WATERLINE WITH GATE VALVE AND BOX WITH 10' W.L.E.
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 - EXISTING INLET
 - PROPOSED TREE WELL
 - 2x6 TRUNCATED DOME PANEL

2017/12/22
 SAWYER ENGINEERING, LLC
 TBPE FIRM NUMBER F-9171

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NO.	REVISION	BY	DATE

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

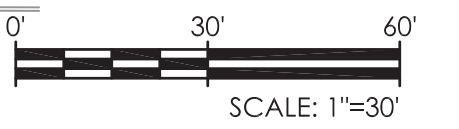
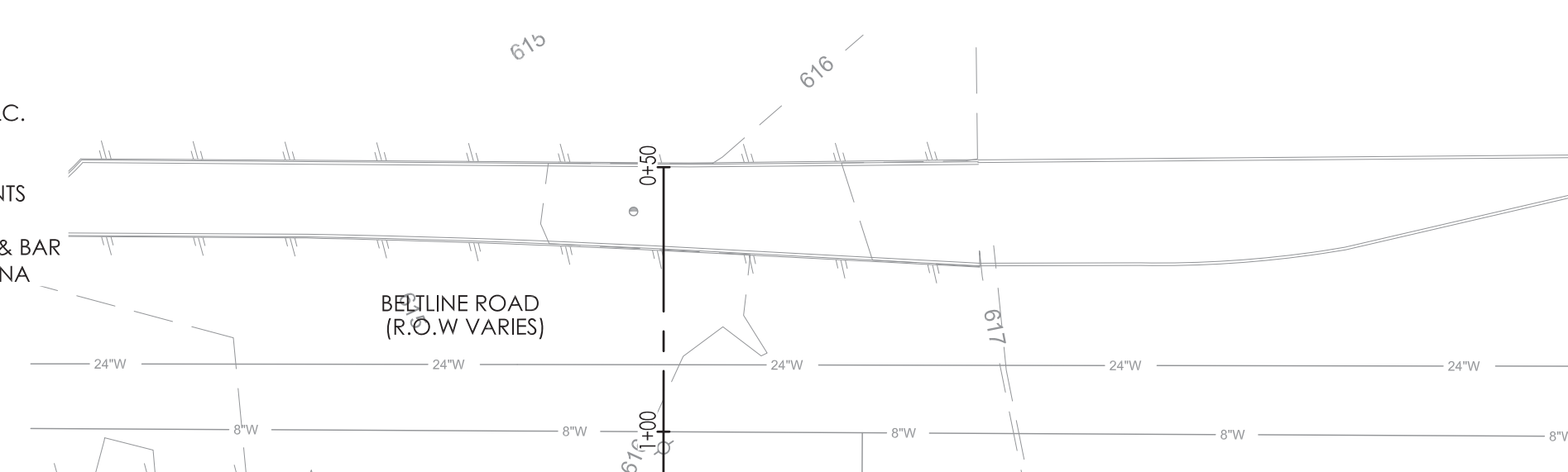
IMPROVEMENT PLANS
ADDISON GROVE

PUBLIC WATER BLOCK A

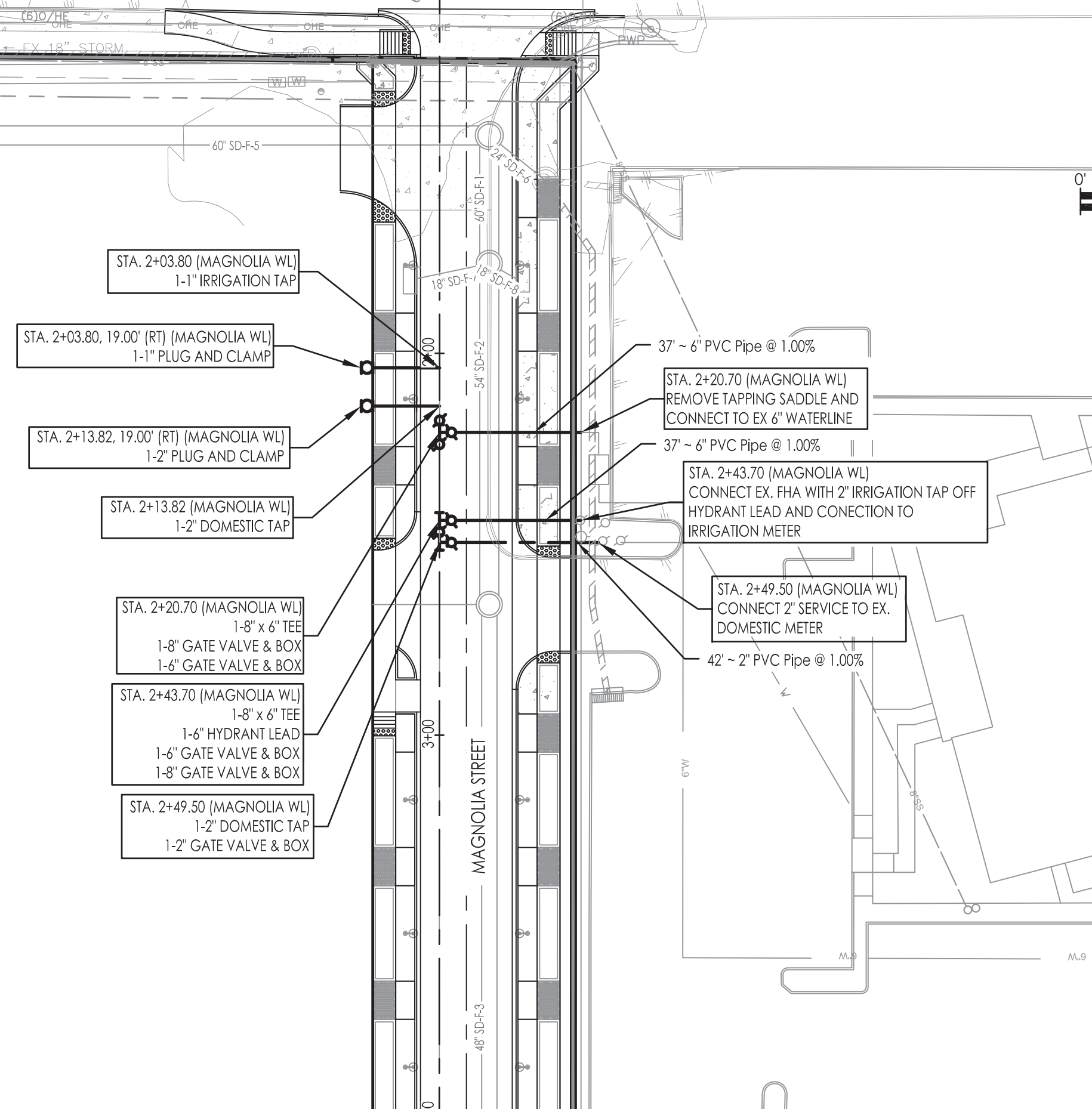
SAWYER	ENGINEERING, LLC TBPE: F-9171	1520 OLIVER STREET HOUSTON, TEXAS 77007 (832) 553-5948			
PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
	CDP	JDS	MAY 2017		39

MATCH RIGHT

4180 BELTLINE RD
TRITON ADDISON BELTLINE LLC.
SAM'S CLUB
BLOCK A, LOT 2
COMMERCIAL IMPROVEMENTS
PLANNED DEVELOPMENT
SUITE A: SNUFFERS RESTAURANT & BAR
SUITE B: TAQUERIA LA VENTANA



MATCH LEFT



WATERLINE LEGEND

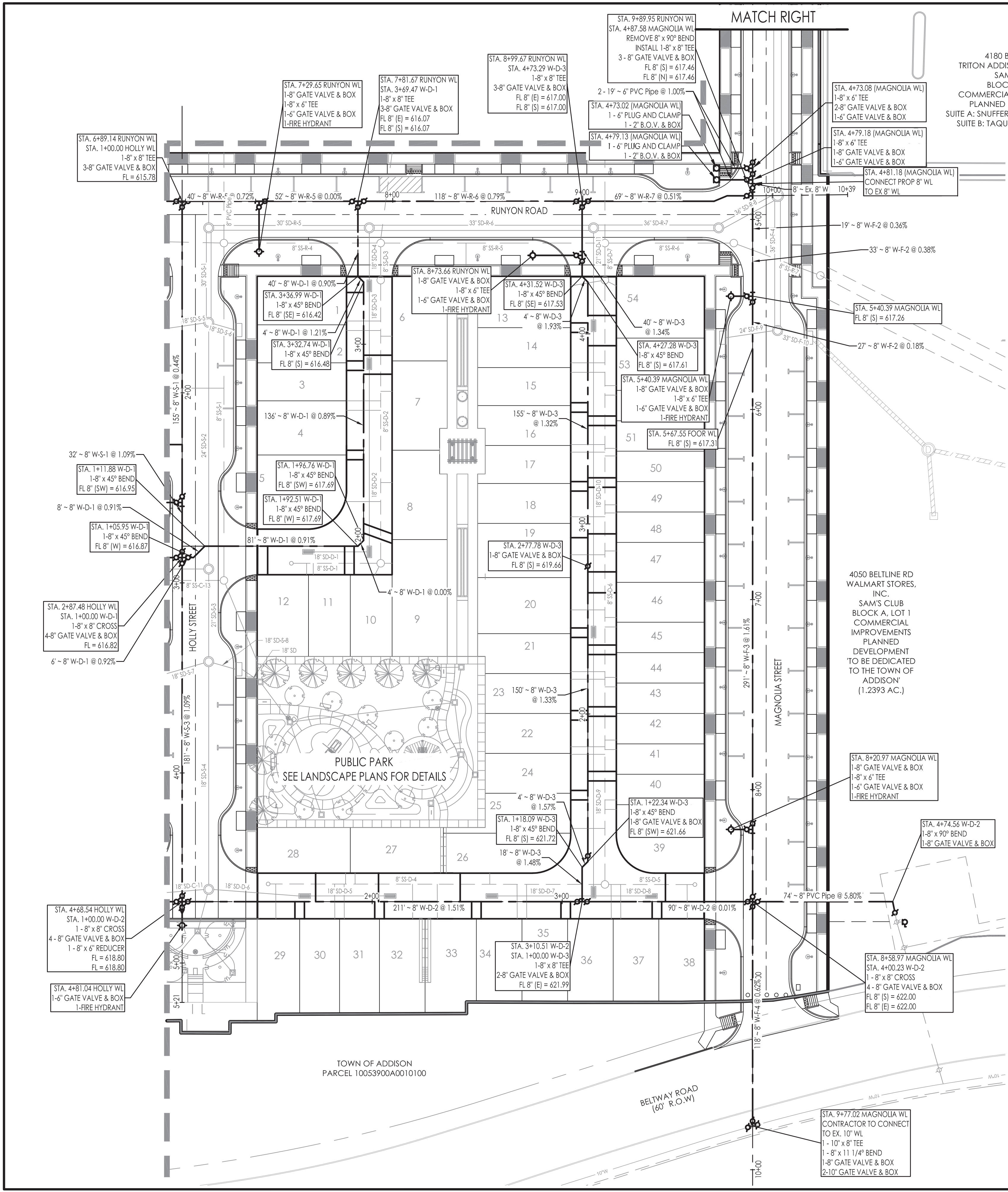
- SANITARY SEWER AND MANHOLE
- SANITARY SEWER AND CLEANOUT
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- EXISTING INLET
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- 2x6 TRUNCATED DOME PANEL



SAWYER ENGINEERING, LLC
TPE FIRM NUMBER F-9171

2018/04/04

NO.	REVISION	BY	DATE
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
IMPROVEMENT PLANS ADDISON GROVE			
PUBLIC WATER BLOCK D			
SAWYER ENGINEERING, LLC TPE: F-9171		1520 OLIVER STREET HOUSTON, TEXAS 77007 (832) 553-5948	
PROJECT	DESIGN	DRAWN	DATE
	CDP	JDS	MAY 2017
FILE	SHEET		
	41		



PUBLIC PARK
SEE LANDSCAPE PLANS FOR DETAILS

TOWN OF ADDISON
PARCEL 10053900A0010100

BELTWAY ROAD
(60' R.O.W.)

STA. 9+77.02 MAGNOLIA WL
CONTRACTOR TO CONNECT
TO EX. 10" WL
1-10" x 8" TEE
1-8" x 11 1/4" BEND
1-8" GATE VALVE & BOX
2-10" GATE VALVE & BOX

STA. 8+20.97 MAGNOLIA WL
1-8" GATE VALVE & BOX
1-8" x 6" TEE
1-6" GATE VALVE & BOX
1-FIRE HYDRANT

4050 BELTLINE RD
WALMART STORES,
INC.
SAM'S CLUB
BLOCK A, LOT 1
COMMERCIAL IMPROVEMENTS
PLANNED DEVELOPMENT
TO BE DEDICATED TO THE TOWN OF
ADDISON
(1.2393 AC.)

STA. 3+10.51 W-D-2
STA. 1+00.00 W-D-3
1-8" x 8" TEE
2-8" GATE VALVE & BOX
FL 8" (E) = 621.99

STA. 8+58.97 MAGNOLIA WL
STA. 4+00.23 W-D-2
1-8" x 8" CROSS
4-8" GATE VALVE & BOX
FL 8" (S) = 622.00
FL 8" (E) = 622.00

STA. 4+74.56 W-D-2
1-8" x 90" BEND
1-8" GATE VALVE & BOX

STA. 1+18.09 W-D-3
1-8" x 45" BEND
FL 8" (S) = 621.72

STA. 1+22.34 W-D-3
1-8" x 45" BEND
1-8" GATE VALVE & BOX
FL 8" (SW) = 621.66

STA. 2+77.78 W-D-3
1-8" GATE VALVE & BOX
FL 8" (S) = 619.66

STA. 5+67.55 FLOOR WL
FL 8" (S) = 617.31

STA. 5+40.39 MAGNOLIA WL
1-8" GATE VALVE & BOX
1-8" x 6" TEE
1-6" GATE VALVE & BOX
1-FIRE HYDRANT

STA. 4+27.28 W-D-3
1-8" x 45" BEND
FL 8" (S) = 617.61

STA. 4+31.52 W-D-3
1-8" x 45" BEND
FL 8" (SE) = 617.53

STA. 8+73.66 RUNYON WL
1-8" GATE VALVE & BOX
1-8" x 6" TEE
1-6" GATE VALVE & BOX
1-FIRE HYDRANT

STA. 7+81.67 RUNYON WL
STA. 3+69.47 W-D-1
1-8" x 8" TEE
3-8" GATE VALVE & BOX
FL 8" (E) = 617.00
FL 8" (S) = 617.00

STA. 7+29.65 RUNYON WL
1-8" GATE VALVE & BOX
1-8" x 6" TEE
1-6" GATE VALVE & BOX
1-FIRE HYDRANT

STA. 4+79.13 (MAGNOLIA WL)
1-6" PLUG AND CLAMP
1-2" B.O.V. & BOX

STA. 4+73.02 (MAGNOLIA WL)
1-6" PLUG AND CLAMP
1-2" B.O.V. & BOX

STA. 9+89.95 RUNYON WL
STA. 4+87.58 MAGNOLIA WL
REMOVE 8" x 90" BEND
INSTALL 1-8" x 8" TEE
3-8" GATE VALVE & BOX
FL 8" (S) = 617.44
FL 8" (N) = 617.44

STA. 6+89.14 RUNYON WL
STA. 1+00.00 HOLLY WL
1-8" x 8" TEE
3-8" GATE VALVE & BOX
FL = 615.78

STA. 2+87.48 HOLLY WL
STA. 1+00.00 W-D-1
1-8" x 8" CROSS
4-8" GATE VALVE & BOX
FL = 616.82

STA. 1+05.95 W-D-1
1-8" x 45" BEND
FL 8" (W) = 616.87

STA. 1+11.88 W-D-1
1-8" x 45" BEND
FL 8" (SW) = 616.95

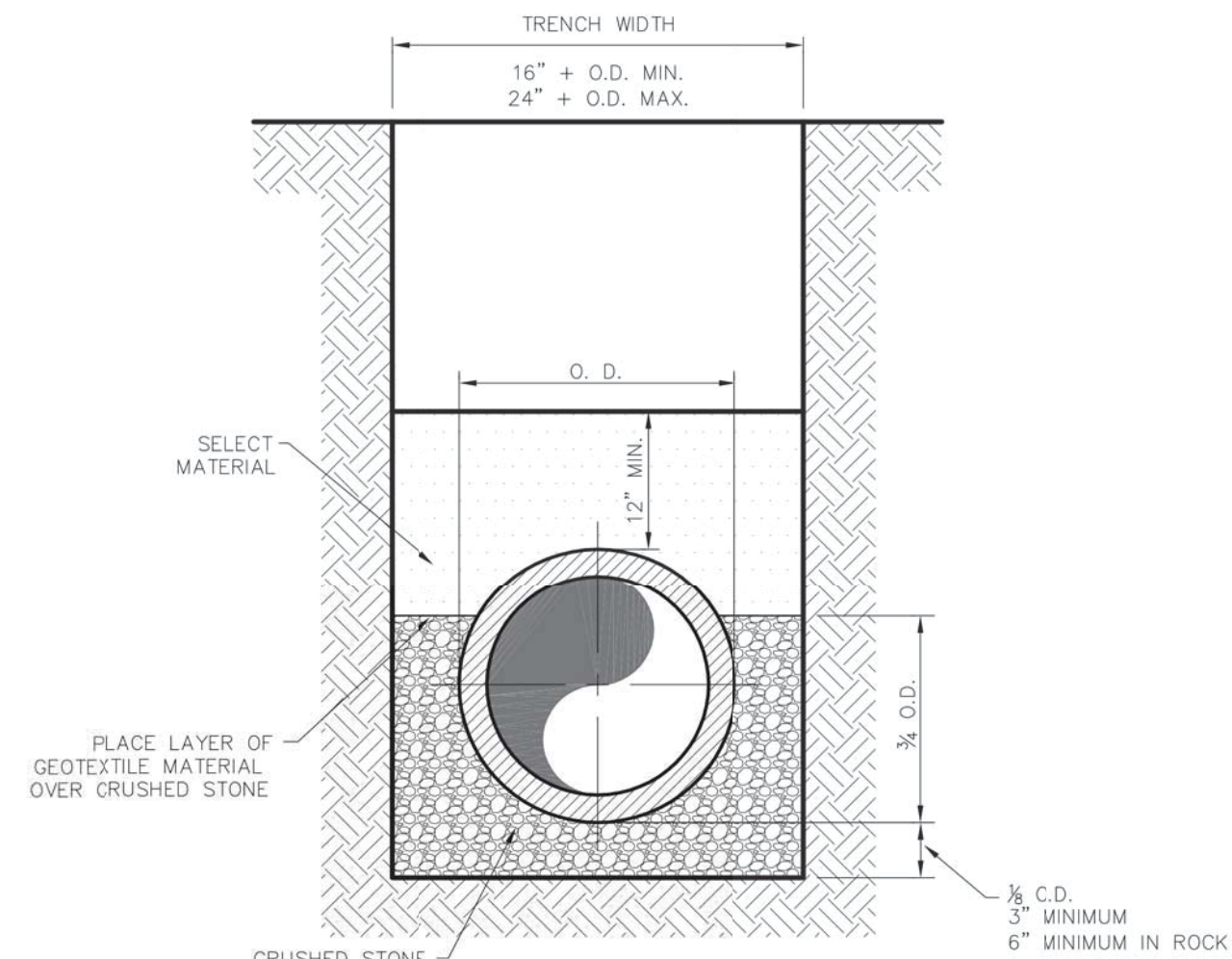
STA. 1+92.51 W-D-1
1-8" x 45" BEND
FL 8" (W) = 617.69

STA. 1+96.76 W-D-1
1-8" x 45" BEND
FL 8" (SW) = 617.69

STA. 3+32.74 W-D-1
1-8" x 45" BEND
FL 8" (S) = 616.48

STA. 3+36.99 W-D-1
1-8" x 45" BEND
FL 8" (SE) = 616.42

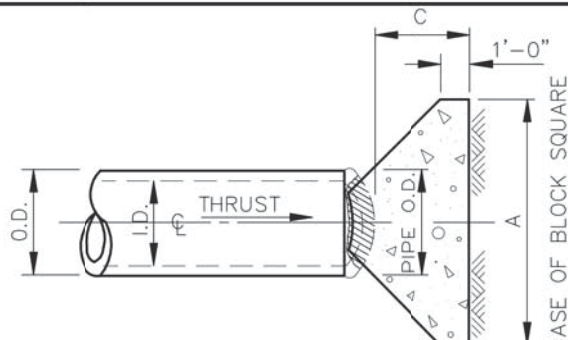
STA. 7+81.67 RUNYON WL
STA. 3+69.47 W-D-1
1-8" x 8" TEE
3-8" GATE VALVE & BOX
FL 8" (E) = 617.00
FL 8" (S) = 617.00



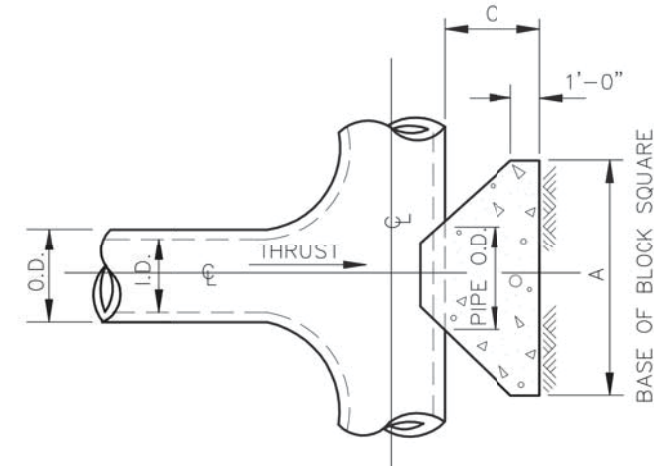
CLASS "B+" EMBEDMENT

CRUSHED STONE SHALL BE 3/4", PASSING # 4 SIEVE

TYPICAL P.V.C. WATER MAIN EMBEDMENT



PLAN OF PLUG THRUST BLOCK

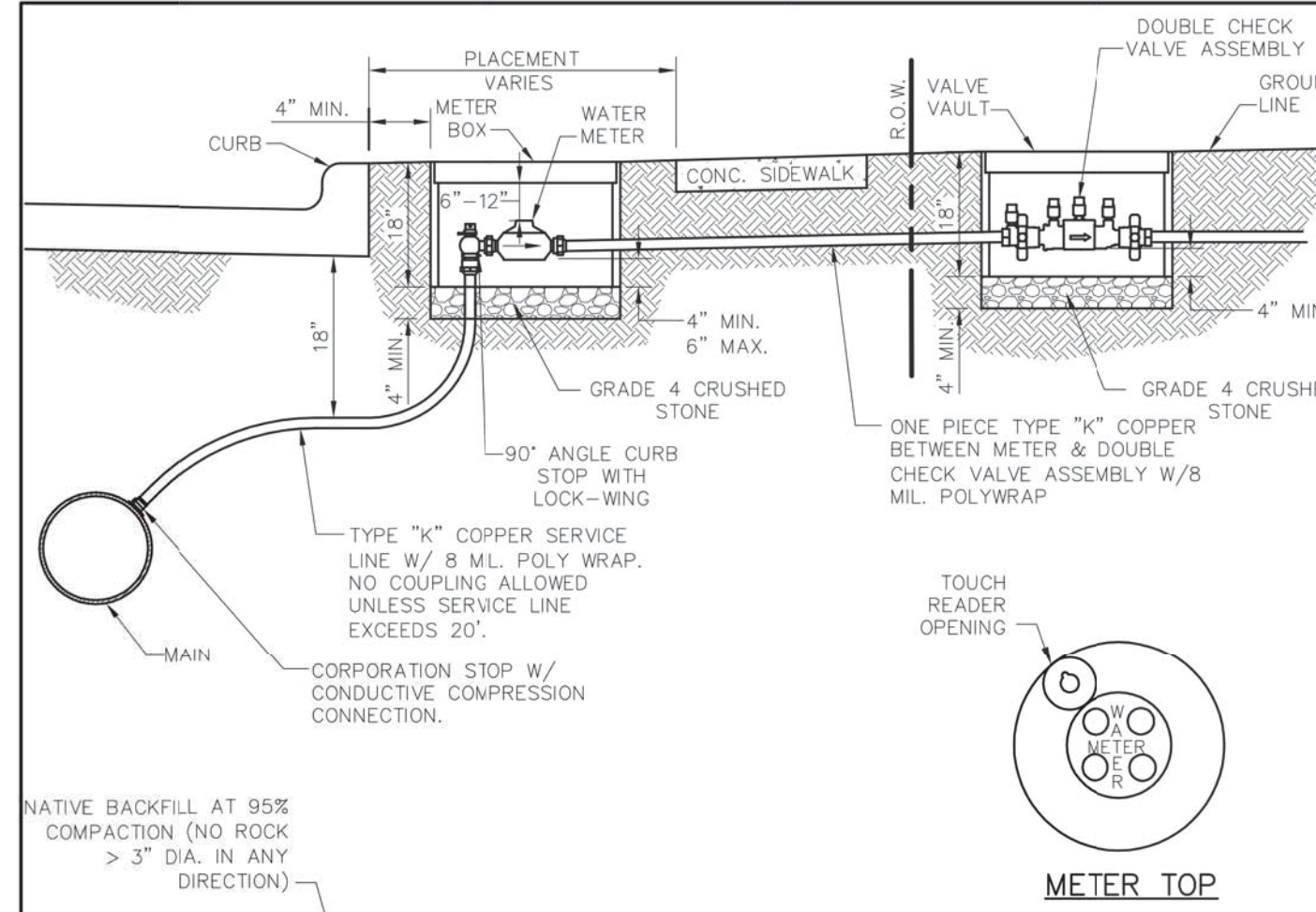


PLAN OF TEE THRUST BLOCK

I.D. (IN.)	THRUST (TONS)	EARTH			ROCK		
		G (FT.)	A (FT.)	VOL. (C.Y.)	G (FT.)	A (FT.)	VOL. (C.Y.)
4,6,8	5.1	1.5	2.5	0.3	2.0	0.2	
10,12	11.3	1.5	3.5	0.6	2.5	0.3	
16,18	25.5	2.0	5.5	1.6	4.0	0.9	
20	31.5	2.0	6.0	1.9	4.0	0.9	
24	45.2	2.5	7.0	3.1	5.0	1.7	
30	53.0	3.0	7.5	4.1	5.5	2.4	
36	76.3	4.0	9.0	7.3	6.5	4.2	
42	104.0	4.5	10.5	11.0	7.5	6.2	
48	136.0	5.0	12.0	15.6	8.5	8.7	

TABLES OF DIMENSIONS AND QUANTITIES

HORIZONTAL THRUST BLOCK AT TEES & PLUGS



- GENERAL INSTALLATION NOTES:
1. WATER METER SHALL BE PLACED IN CENTER OF LOT WITH THE SANITARY SEWER SERVICE TO BE LOCATED 10' DOWNSTREAM.
 2. METER AND BOX SHALL BE SET BY THE CONTRACTOR TO ADDISON STANDARDS IN ALL CASES.
 3. THE METER BOX SHALL BE SET WITHIN THE R.O.W. OR A DEDICATED UTILITY EASEMENT. IN ALL CASES, THE METER BOX SHALL BE PROTECTED FROM VEHICULAR TRAFFIC.
 4. WATER SERVICES SHALL NOT BE CONNECTED TO DEAD END LINES OR FIRE HYDRANT LEADS.
 5. ALL MATERIALS SHALL CONFORM TO THE TOWN OF ADDISON WATER SYSTEM REQUIREMENTS.

Type "K" Copper Service Pipe	Double Strap Bronze Service Saddle with C.G. Threads	East Jordan Iron Works Galvanized Meter Box With Iron Ring & Cover				
		Min. Dia.	Covers & Rigs	Min. Ht.	Min. Can Weight	Min. Total Weight
3/4 inch	3/4 inch	18 inches	12 1/2 inches	18 inches	13 lbs.	42 lbs.
1 inch	1 inch	24 inches	20 1/2 inches	18 inches	17 lbs.	98 lbs.
1 1/2 inch	1 1/2 inch	28 inches	20 1/2 inches	18 inches	20 lbs.	127 lbs.
2 inch	2 inch	28 inches	20 1/2 inches	18 inches	20 lbs.	127 lbs.

SERVICE CONNECTION WITH METER BOX

Addison!
PUBLIC WORKS DEPARTMENT

P.V.C. WATER MAIN EMBEDMENT

STANDARD CONSTRUCTION DETAILS WATER

DATE: AUGUST, 2010 REV DATE: SHEET: SD-W01

Addison!
PUBLIC WORKS DEPARTMENT

HORIZONTAL THRUST BLOCK AT TEES & PLUGS

STANDARD CONSTRUCTION DETAILS WATER

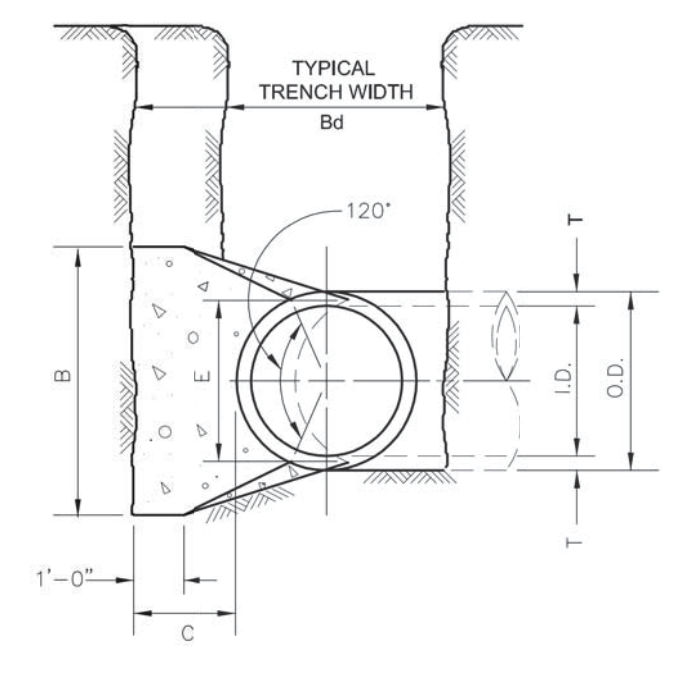
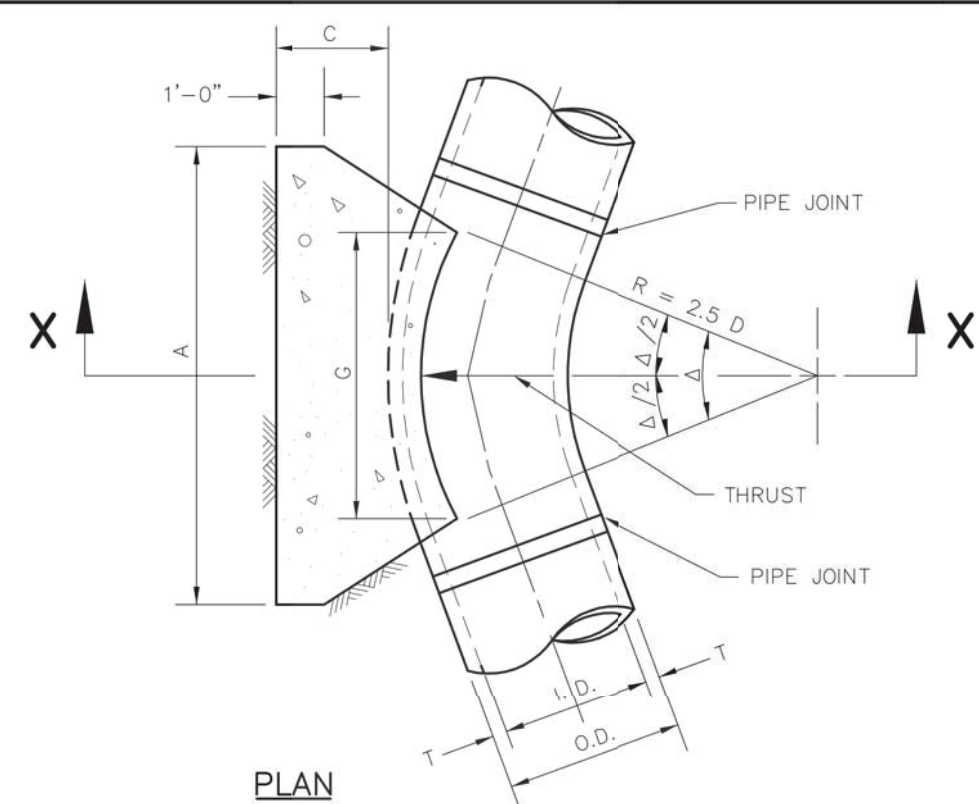
DATE: AUGUST, 2010 REV DATE: SHEET: SD-W07

Addison!
PUBLIC WORKS DEPARTMENT

SERVICE CONNECTION WITH METER BOX

STANDARD CONSTRUCTION DETAILS WATER

DATE: AUGUST, 2010 REV DATE: SHEET: SD-W20



I.D. (IN.)	T (IN.)	Δ = 11.25°		Δ = 22.50°		E (FT.)
		A (FT.)	B (FT.)	A (FT.)	B (FT.)	
4,6,8	0.4	1.5	1.5	1.5	0.9	
10,12	0.5	1.5	1.5	1.5	1.2	
16,18	0.6	1.5	1.5	1.5	1.6	
20	0.7	1.5	1.5	1.5	1.8	
24	0.9	1.5	1.5	1.5	2.1	
30	2.9	1.5	1.9	2.6		
36	4.5	1.5	2.3	3.3		
42	5.0	1.8	2.6	3.8		
48	5.5	2.0	3.0	4.3		
54	6.0	2.3	3.4	4.8		
60	6.5	2.5	3.8	5.3		
66	6.8	2.8	4.1	5.7		
72	7.5	3.0	4.5	6.3		
78	7.5	3.3	4.9	6.7		
84	8.0	3.5	5.3	7.2		
90	8.5	3.8	5.6	7.7		
96	9.0	4.0	6.0	8.2		

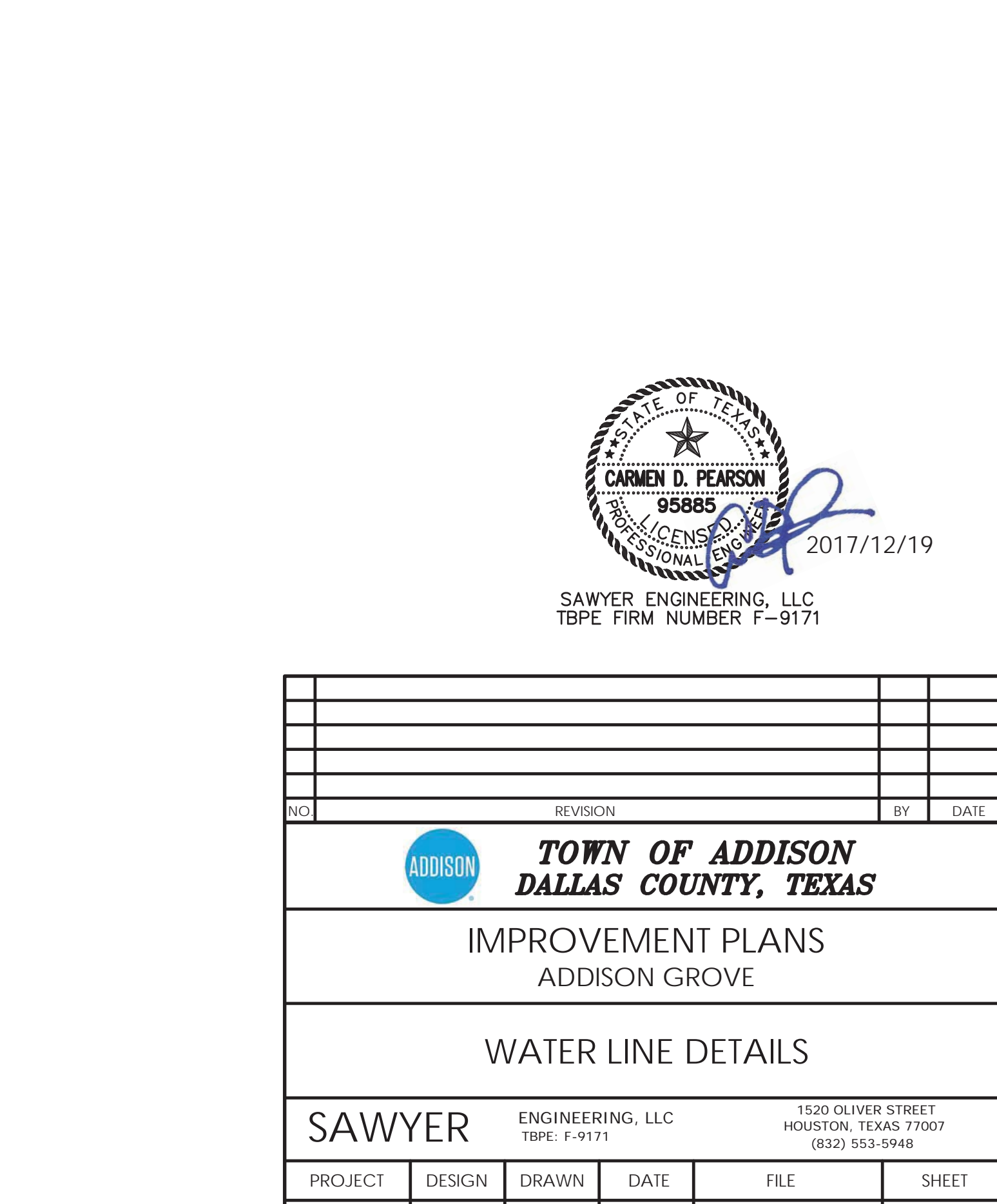
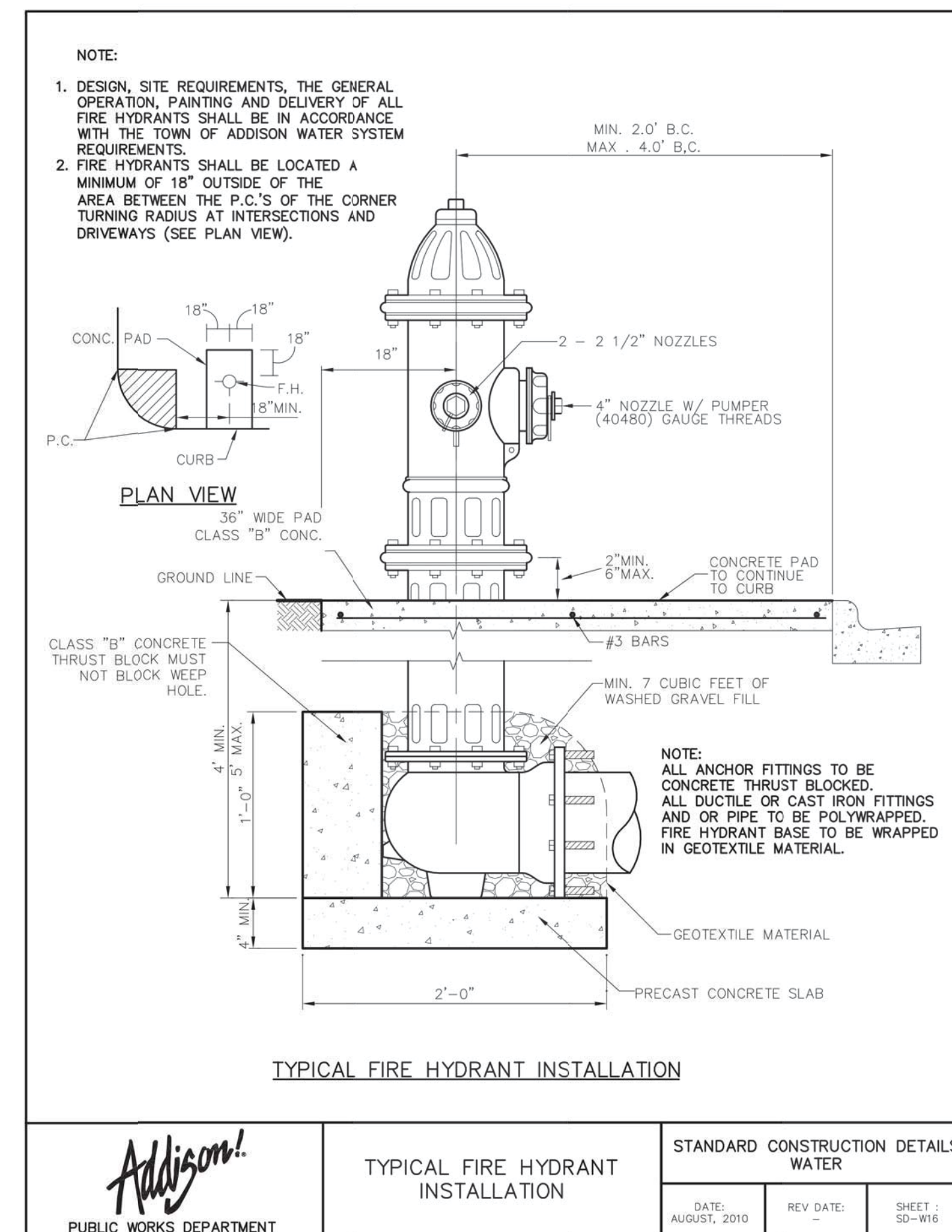
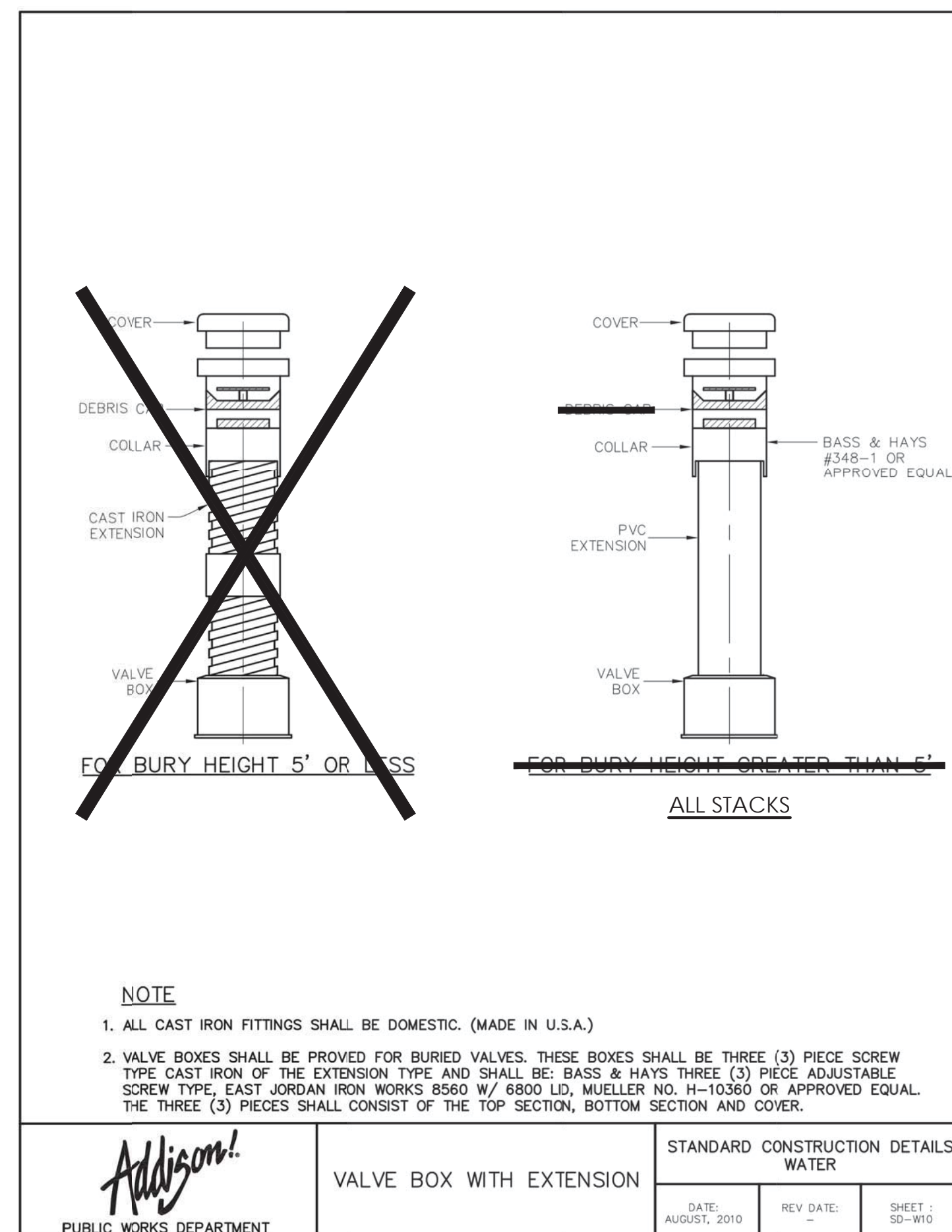
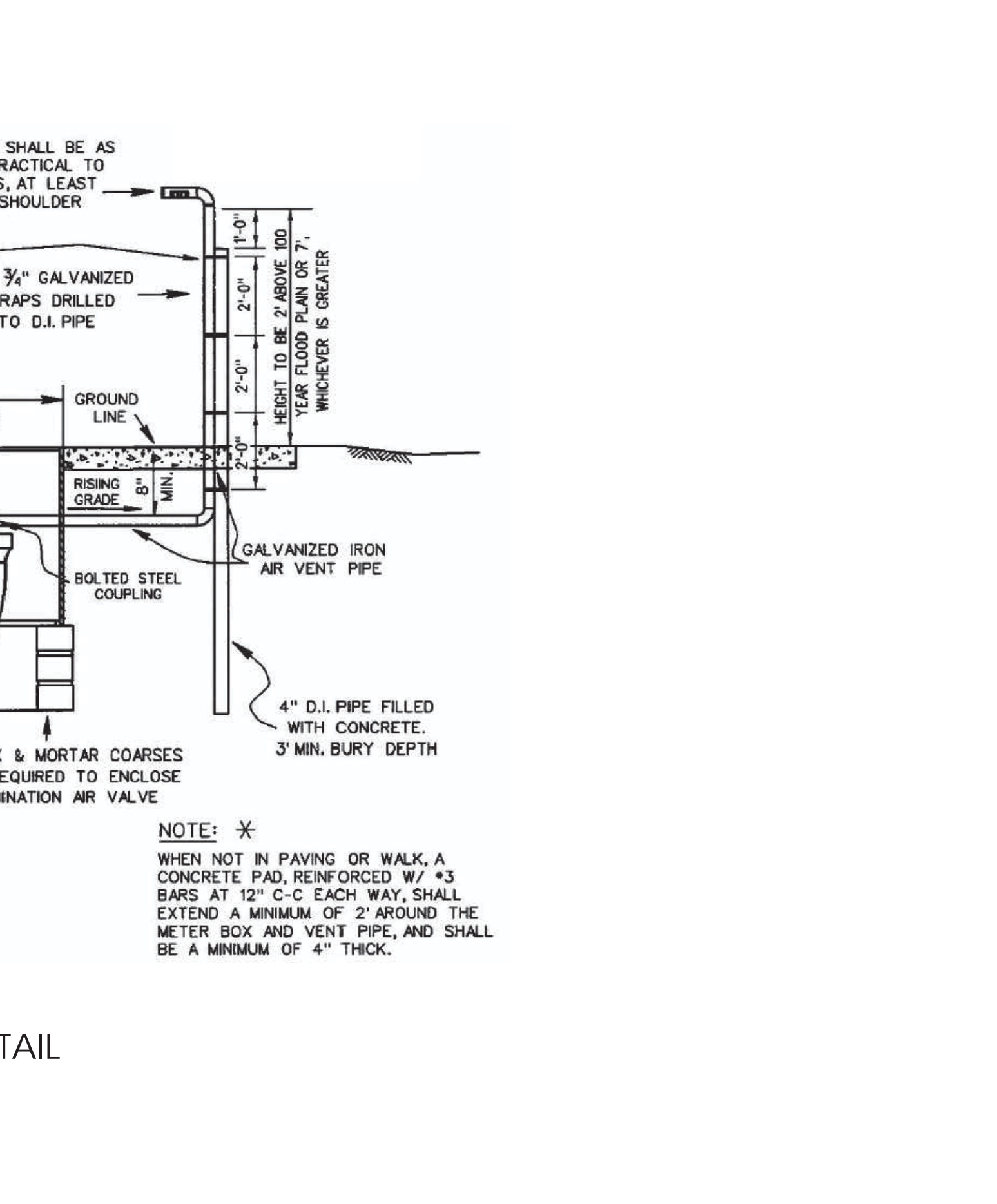
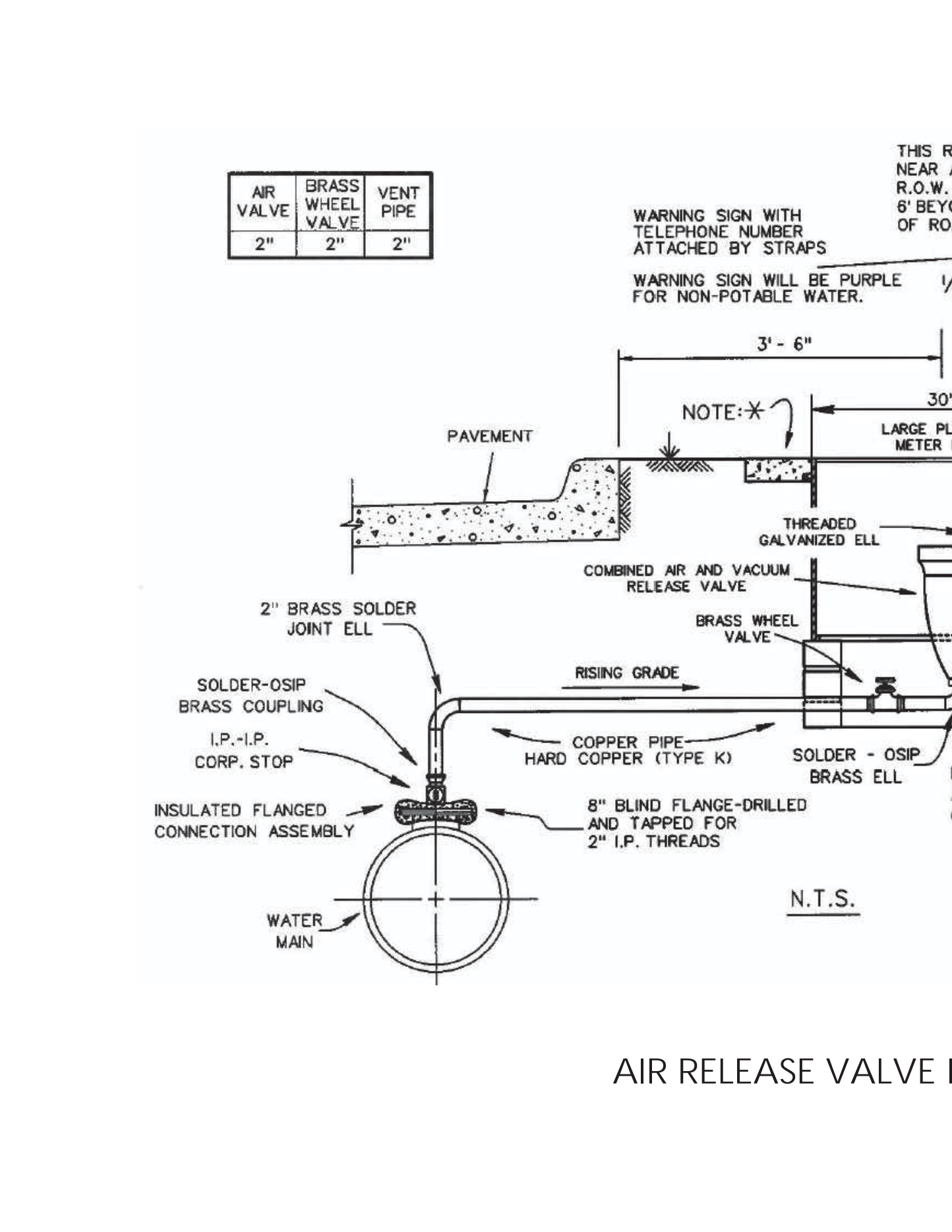
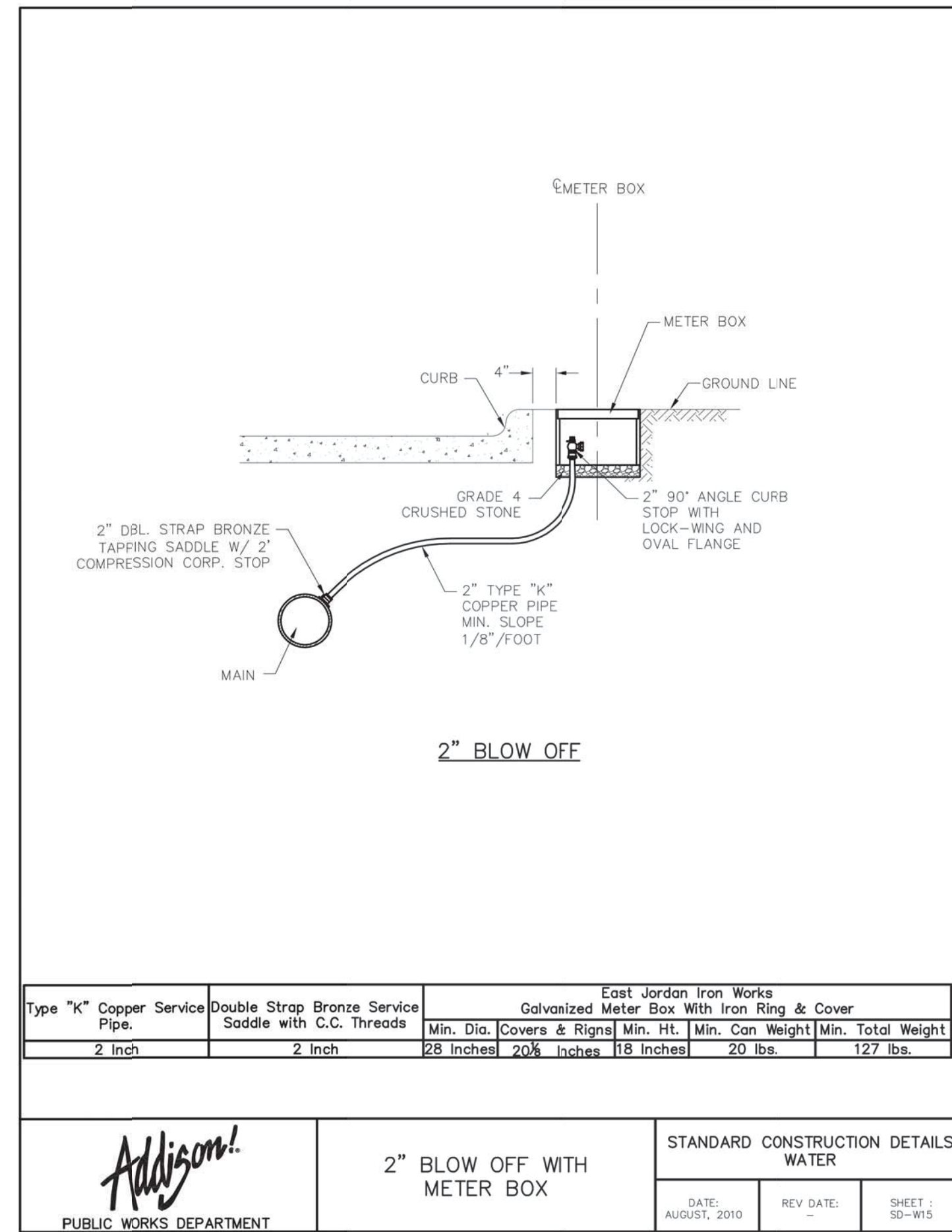
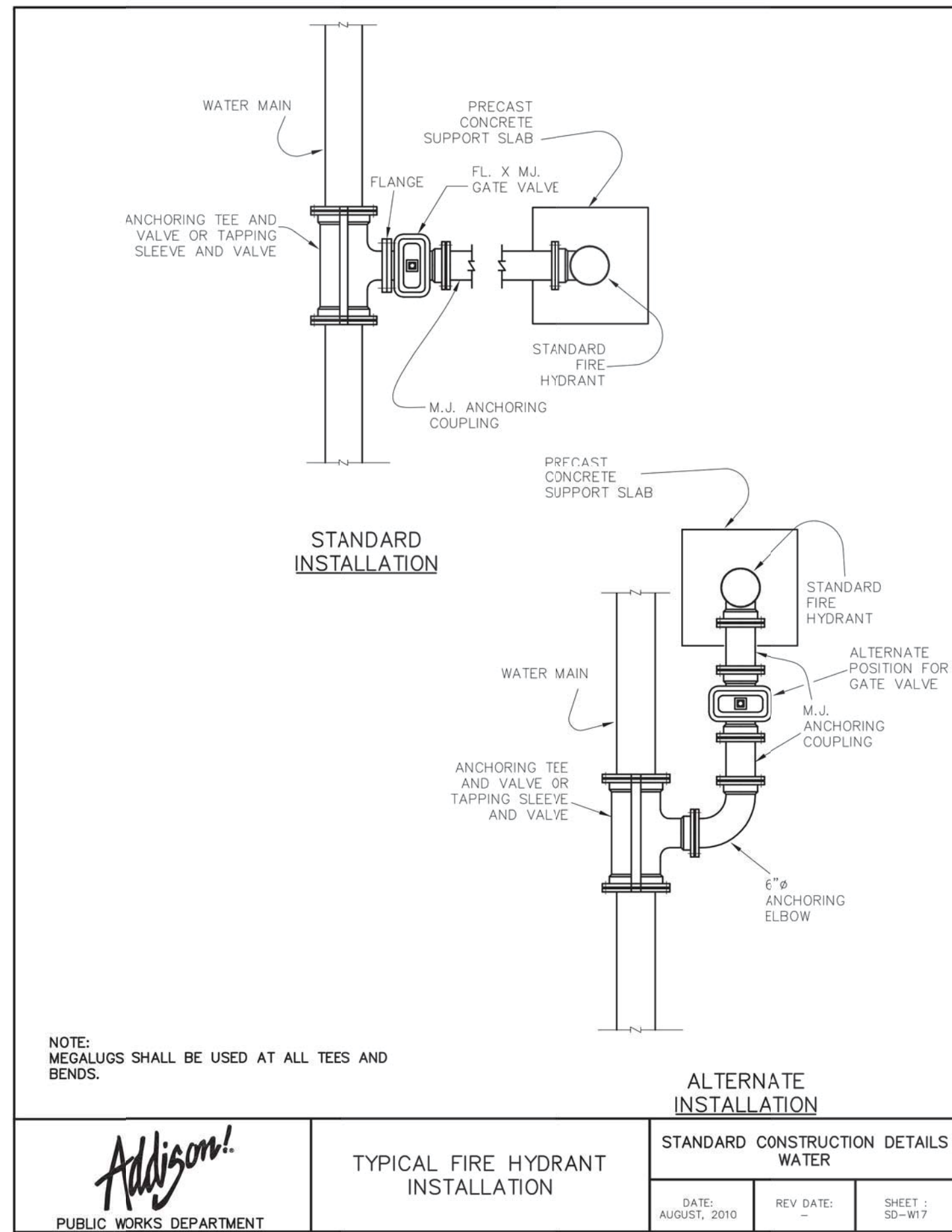
I.D. (IN.)	G (FT.)	THRUST (TONS)	EARTH			ROCK			I.D. (IN.)	G (FT.)	THRUST (TONS)	EARTH			ROCK			
			A (FT.)	B (FT.)	VOL. (C.Y.)	A (FT.)	B (FT.)	VOL. (C.Y.)				A (FT.)	B (FT.)	VOL. (C.Y.)	A (FT.)	B (FT.)	VOL. (C.Y.)	
4,6,8	0.4	1.0	1.0	1.5	0.1	1.0	0.1	4,6,8	0.8	2.0	1.5	1.5	0.1	1.0	0.1	1.0	0.1	
10,12	0.6	2.2	1.5	1.5	0.1	1.0	0.1	10,12	1.1	4.4	2.0	2.5	0.3	1.5	1.5	0.1	1.0	0.1
16,18	0.8	5.0	2.0	2.5	0.3	1.5	0.2	16,18	1.6	9.9	3.0	3.5	0.6	2.0	2.5	0.3	1.5	0.1
20	0.9	6.2	2.0	3.5	0.4	1.5	0.3	20	1.8	12.3	3.5	3.5	0.7	2.0	3.0	0.4	1.5	0.1
24	1.1	8.9	3.0	3.5	0.5	1.5	0.3	24	2.2	17.7	4.0	4.5	1.0	3.0	3.5	0.5	1.5	0.1
30	1.4	10.4	3.0	3.5	0.5	2.0	0.4	30	2.7	20.7	5.0	4.5	1.5	3.0	4.0	0.8	1.5	0.1
36	1.7	15.0	3.5	4.5	0.9	2.0	0.5	36	3.3	29.8	5.5	5.5	2.3	4.0	4.0	1.3	1.5	0.1
42	1.9	20.4	4.5	5.0	1.5	2.5	0.8	42	3.8	40.5	7.0	6.0	3.9	4.5	5.0	2.1	1.5	0.1
48	2.2	26.6	4.5	6.0	2.0	2.5	1.1	48	4.4	52.9	8.0	7.0	5.7	4.5	6.0	2.8	1.5	0.1
54	2.5	33.7	6.0	6.0	3.0	3.0	1.4	54	4.9	67.0	9.0	8.0	8.0	6.0	6.0	4.1	1.5	0.1
60	2.7	41.6	6.0	7.0	3.8	3.0	1.8	60	5.5	82.7	9.5	9.0	10.6	6.0	7.0	5.3	1.5	0.1
66	3.0	50.3	6.5	8.0	5.1	3.5	2.7	66	6.0	100.1	10.5	10.0	14.1	6.5	8.0	7.2	1.5	0.1
72	3.3	59.9	7.5	8.0	6.3	4.0	3.3	72	6.6	119.1	11.0	11.0	17.6	7.5	8.0	9.1	1.5	0.1
78	3.6	70.2	8.0	9.0	8.1	4.0	3.9	78	7.1	139.8	12.0	12.0	22.5	8.0	9.0	11.7	1.5	0.1
84	3.8	81.5	8.5	10.0	10.3	4.5	4.5	84	7.6	162.1	13.0	12.5	27.2	8.5	10.0	14.8	1.5	0.1
90	4.1	93.5	9.5	10.0	12.2	5.0	5.0	90	8.2	186.1	14.0	13.5	33.7	9.5	10.0	17.7	1.5	0.1
96	4.4	106.4	10.0	11.0	15.3	5.0	5.0	96	8.7	211.7	15.0	14.5	41.2	10.0	11.0	21.8	1.5	0.1

TABLES OF DIMENSIONS AND QUANTITIES

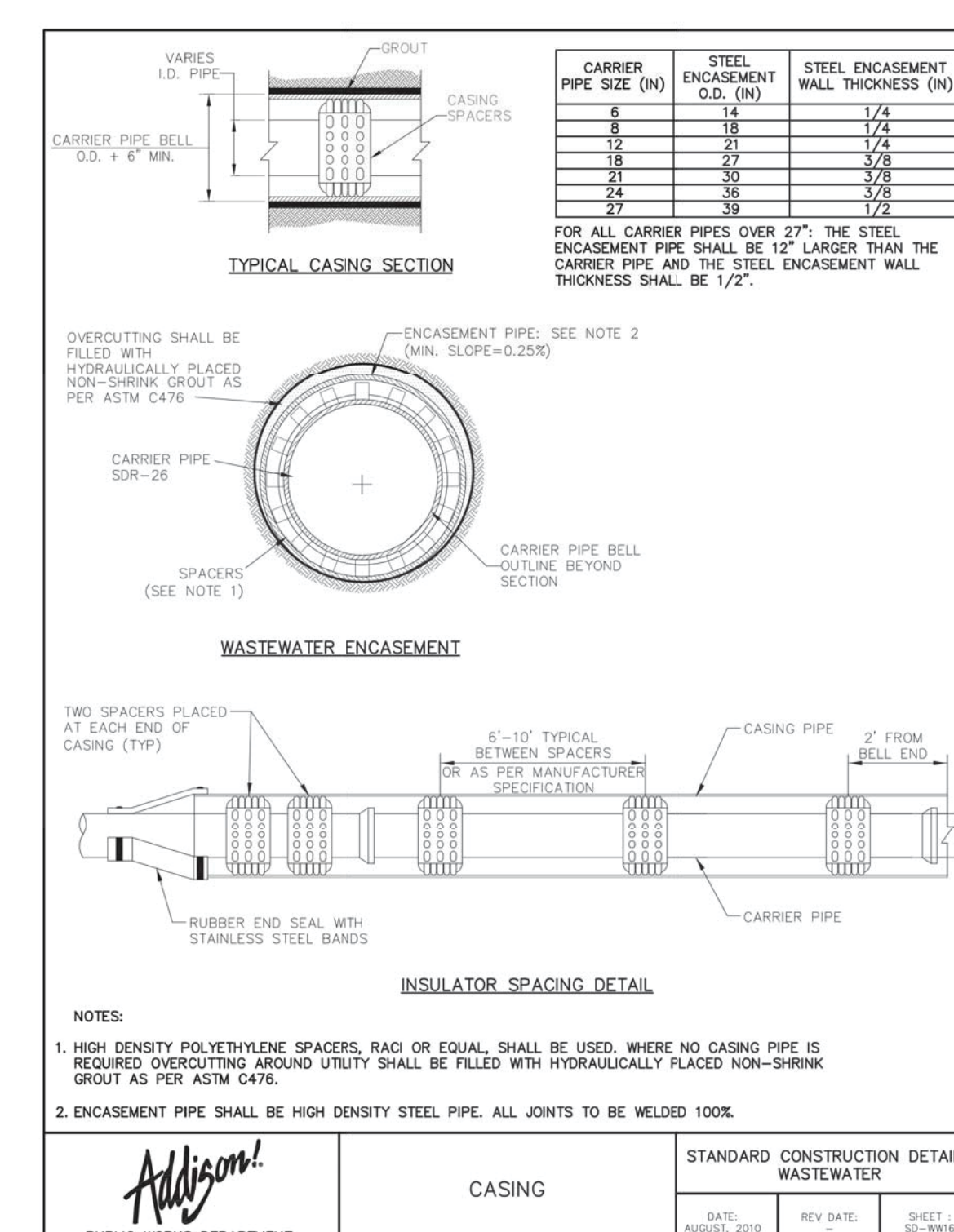
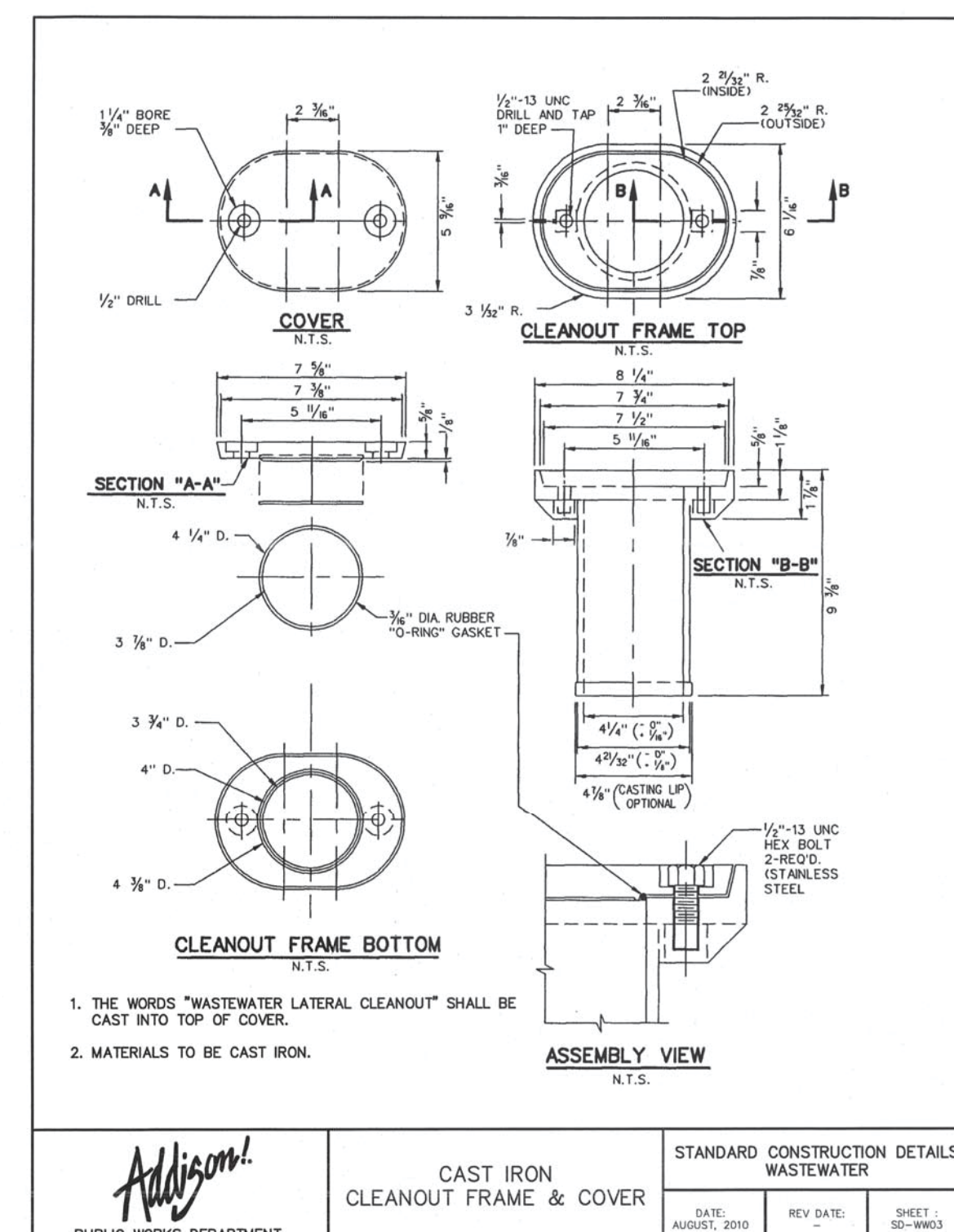
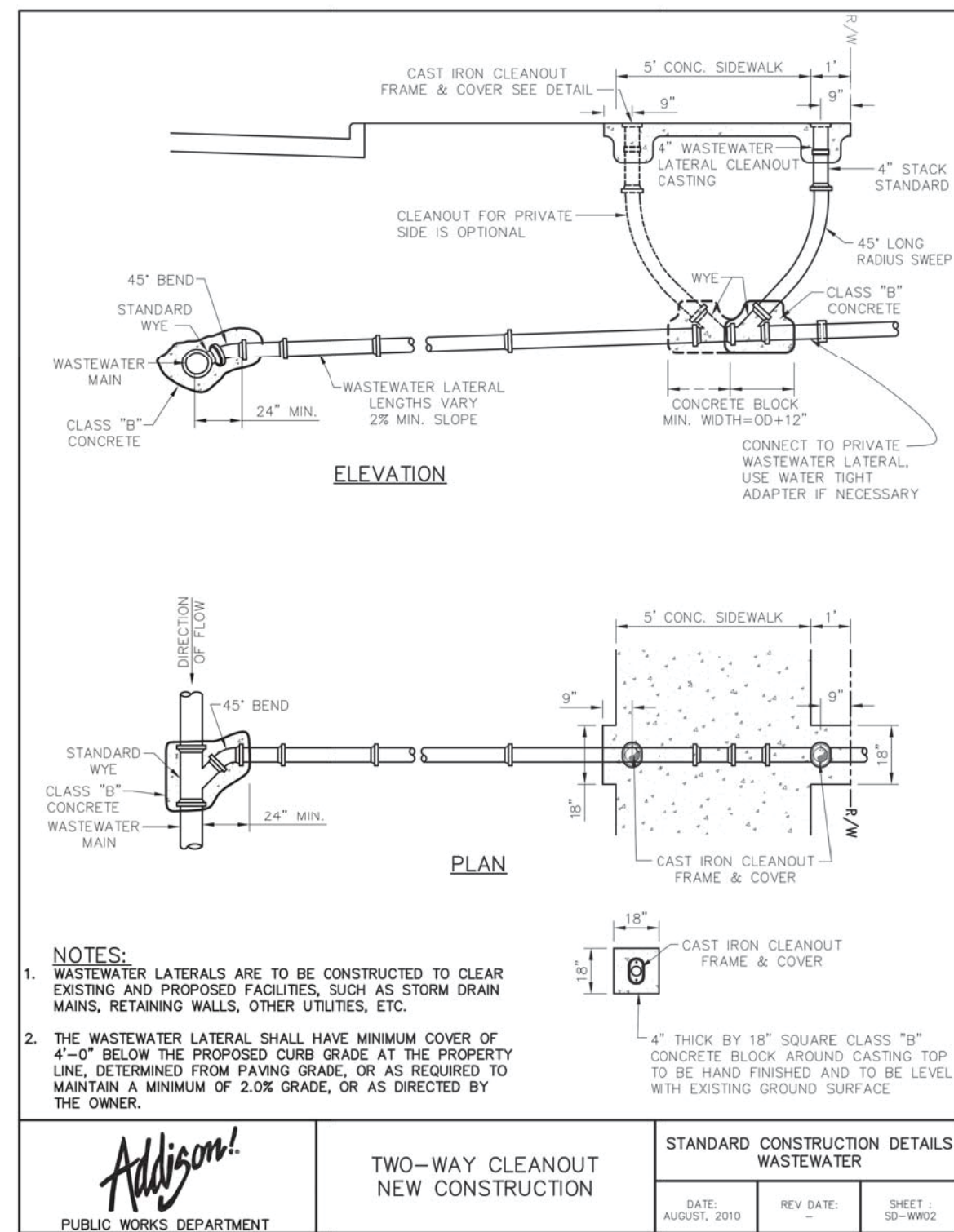
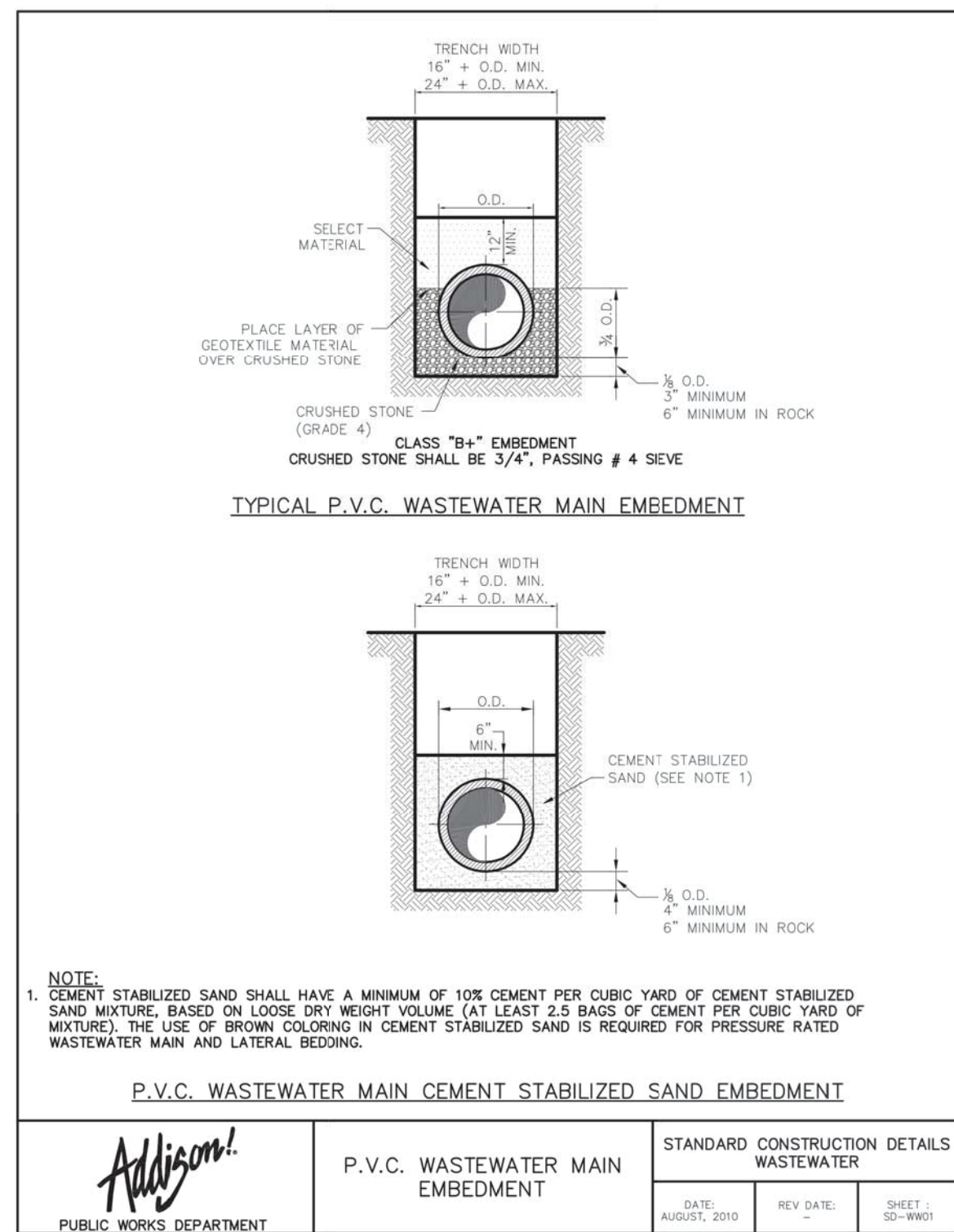
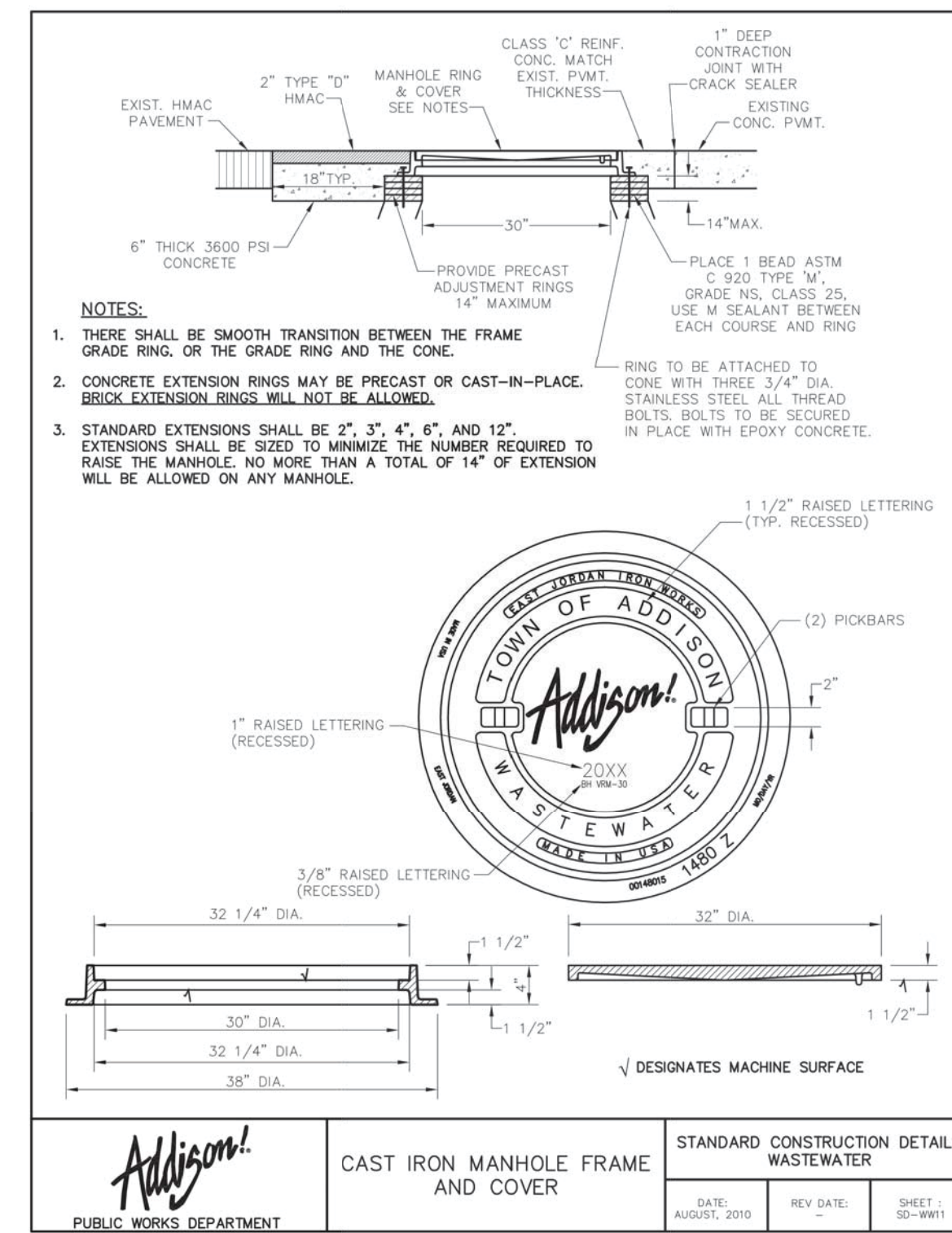
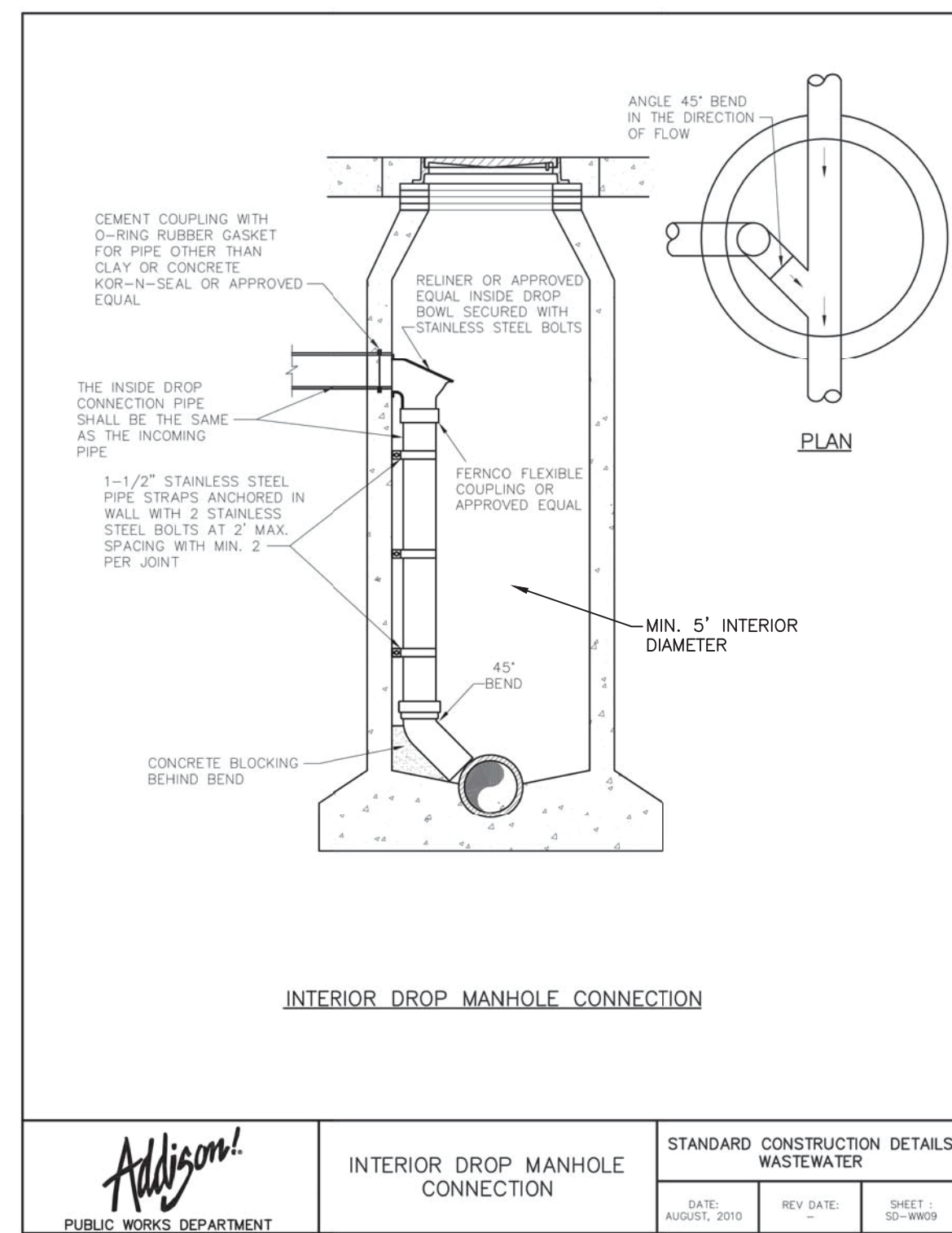
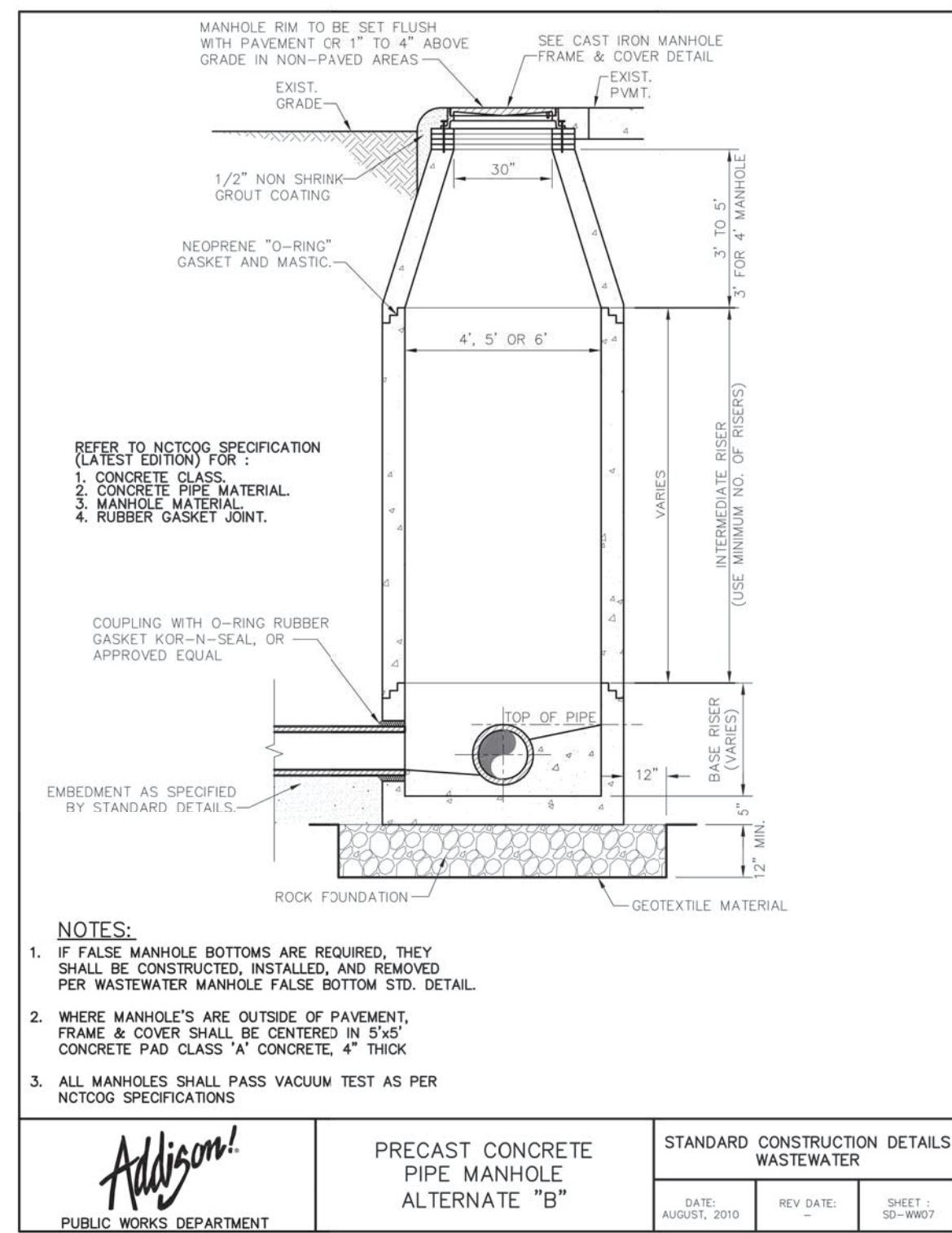
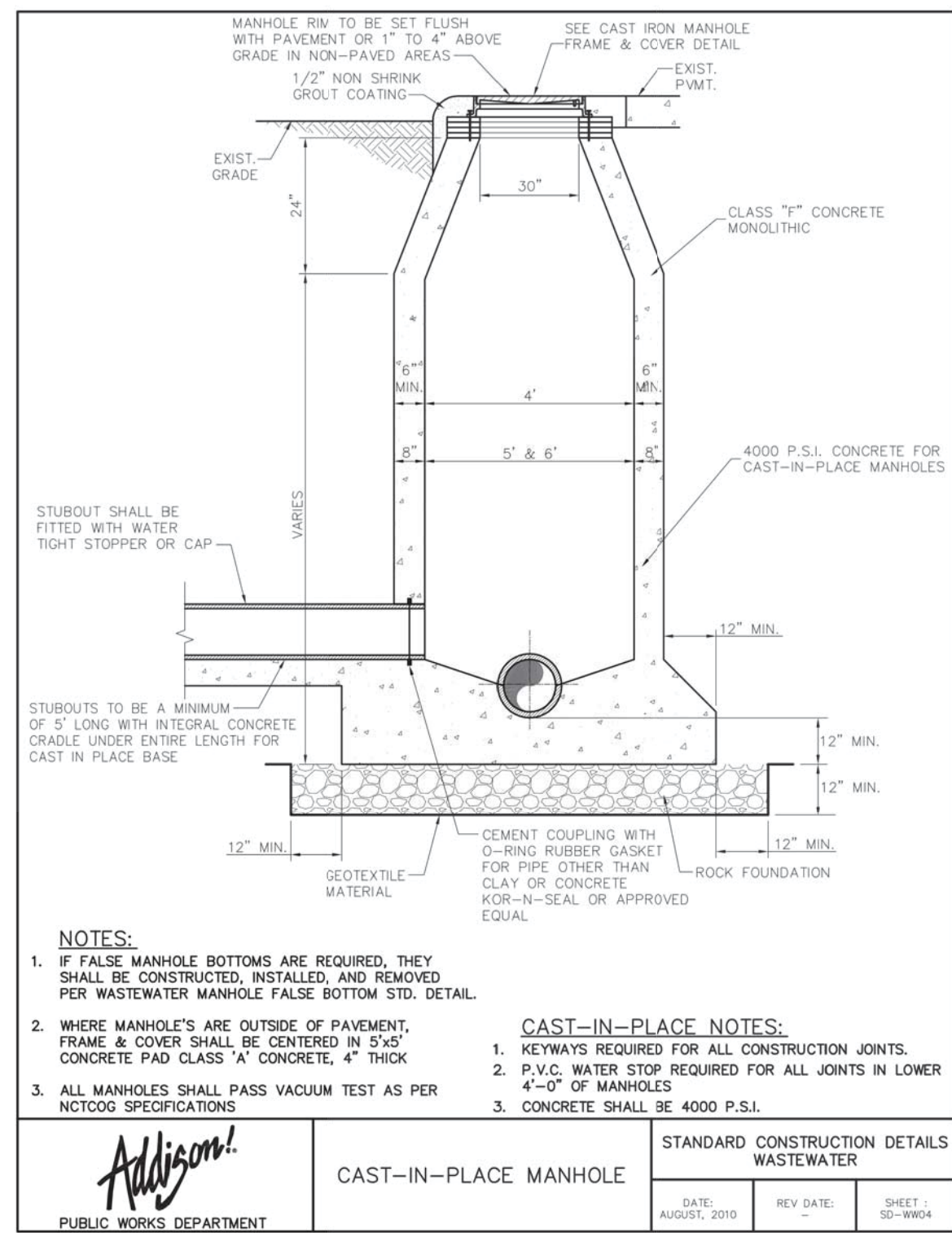
HORIZONTAL THRUST BLOCK DIMENSIONS & QUANTITIES

I.D. (IN.)	G (FT.)	THRUST (TONS)	EARTH			ROCK			I.D. (IN.)	G (FT.)	THRUST (TONS)	EARTH			ROCK		
			A (FT.)	B (FT.)	VOL. (C.Y.)	A (FT.)	B (FT.)	VOL. (C.Y.)				A (FT.)	B (FT.)	VOL. (C.Y.)	A (FT.)	B (FT.)	VOL. (C.Y.)
4,6,8	1.0	2.6	2.0	1.5	0.2	1.0	1.5	0.1	4,6,8	1.5	3.9	2.0	2.0	0.2	1.5	1.5	0.1
10,12	1.5	5.9	2.5	2.5	0.3	2.0	1.5	0.2	10,12	2.2	8.7	3.5	2.5	0.5	2.0	2.5	0.3
16,18	2.2	13.2	3.5	4.0	0.3	2.5	3.0	0.4	16,18	3.2	19.5	4.5	4.5	1.2	3.0	3.5	0.6
20	2.4	16.3	4.5	4.0	1.0	3.0	3.0	0.5	20	3.6	24.1	5.5	4.5	1.5	3.5	3.5	0.7
24	2.9	23.4	6.0	4.0	1.4	3.5	3.5	0.7	24	4.3	34.6	8.0	4.5	2.3	4.5	4.0	1.1
30	3.6	27.5	6.5	5.0	1.9	3.5	4.0	0.9	30	5.4	40.6	8.5	5.0	3.2	5.5	4.0	1.6
36	4.4	39.5	7.0	6.0	3.4	4.5	4.5	1.6	36	6.5	58.5	10.0	6.0	5.3	6.5	4.5	2.6
42	5.1	53.8	8.0	7.0	5.1	5.5	5.0	2.5	42	7.5	79.6	11.5	7.0	8.1	8.0	5.0	4.2
48	5.8	70.3	9.0	8.0	7.4	6.0	6.0	3.7	48	8.8	104.0	13.0	8.0	11.9	9.0	6.0	6.3
54	6.5	89.0	10.0	9.0	10.3	7.0	6.5	5.3	54	9.7	131.5	15.0	9.0	17.1	10.5	6.5	8.9
60	7.3	110.0	11.0	10.0	13.3	7.5	7.5	7.3	60	10.7	162.4	16.5	10.0	23.1	11.0	7.5	12.0
66	8.0	132.9	12.5	11.0	18.3	8.5	8.0	9.6	66	11.8	196.5	18.0	11.0	30.1	12.0	8.5	16.2
72	8.7	158.2	13.5	12.0	24.0	9.0	9.0	12.3	72	12.9	233.9	19.5	12.0	38.6	14.0	8.5	20.7
78	9.4	185.6	14.5	13.0	30.0	10.0	9.5	15.6	78	13.9	274.5	21.5	13.0	49.8	14.5	9.5	25.9
84	10.1	215.3	15.5	14.0	37.1	10.5	10.5	19.5	84	15.0	318.4	23.0	14.0	61.2	15.5	10.5	32.6
90	10.9	247.1	16.5	15.0	45.0	11.5	11.0	23.9	90	16.1	365.5	24.5	15.0	74.5	17.5	10.5	39.6
96	11.6	281.2	18.0	16.0	55.5	12.5	11.5	28.9	96	17.1	415.6	26.0	16.0	89.5	18.5	11.5	48.5

I.D. (IN.)	G (FT.)	THRUST (TONS)	EARTH			ROCK			I.D. (IN.)	G (FT.)	THRUST (TONS)	EARTH			ROCK		
			A (FT.)	B (FT.)	VOL. (C.Y.)	A (FT.)	B (FT.)	VOL. (C.Y.)				A (FT.)	B (FT.)	VOL. (C.Y.)	A (FT.)	B (FT.)	VOL. (C.Y.)
4,6,8	2.1	5.6	3.0	2.0	0.3	2.0	1.5	0.2	4,6,8	2.7	7.1	5.0	1.5	0.4	2.0	2.0	0.2
10,12	3.1	12.6	5.5	2.5	0.3	3.5	2.0	0.4	10,12	4.0	16.0	6.5	2.5	1.0	3.5	2.5	0.5
16,18	4.7	28.3	7.5	4.0	1.9	5.5	3.0	0.9	16,18	6.0	36.0	9.0	4.0	2.4	4.5	4.0	1.0
20	5.2	34.9	9.0	4.0	2.3	5.5	3.5	1.2	20	6.6	44.4	10.0	4.5	3.1	6.0	4.0	1.5
24	6.2	50.3	11.5	4.5	3.5	6.5	4.0	1.6	24	7.9	64.0	14.5	4.5	5.0	8.0	4.0	2.1
30	7.8	58.9	12.0	5.0	4.3	7.5	4.0	2.2	30	9.9	75.0	15.0	5.0	6.7	10.0	4.0	3.3
36	9.4	84.9	14.5	6.0	8.2	9.5	4.5	3.8	36	11.9	108.0	18.0	6.0	11.4	12.0	4.5	5.3
42	10.9	115.5	17.0	7.0	12.3	11.0	5.5	6.3	42	13.9	147.0	21.0	7.0	17.8	14.0	5.5	8.7
48	12.5	150.9	19.0	8.0	18.4	13.0	6.0	9.2	48	15.9	192.0	24.0	8.0	26.2	16.0	6.0	12.4
54	14.0	191.0	21.5	9.0	26.0	15.0	6.5	12.9	54	17.9	243.0	27.0	9.0	36.9	18.0	7.0	18.1
60	15.6	235.8	24.0	10.0	35.6	16.0	7.5	17.6	60	19.9	299.8	30.0	10.0	50.3	20.0	7.5	24.0
66	17.1	285.3	26.0	11.0	46.0	18.0	8.0	23.0	66	21.8	362.8	33.0	11.0	66.2	22.0		



 TOWN OF ADDISON DALLAS COUNTY, TEXAS					
IMPROVEMENT PLANS					
ADDISON GROVE					
WATER LINE DETAILS					
SAWYER		ENGINEERING, LLC		1520 OLIVER STREET HOUSTON, TEXAS 77007 (832) 553-5948	
PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
	CDP	JDS	MAY 2017		44



NO.	REVISION	BY	DATE

ADDISON TOWN OF ADDISON DALLAS COUNTY, TEXAS

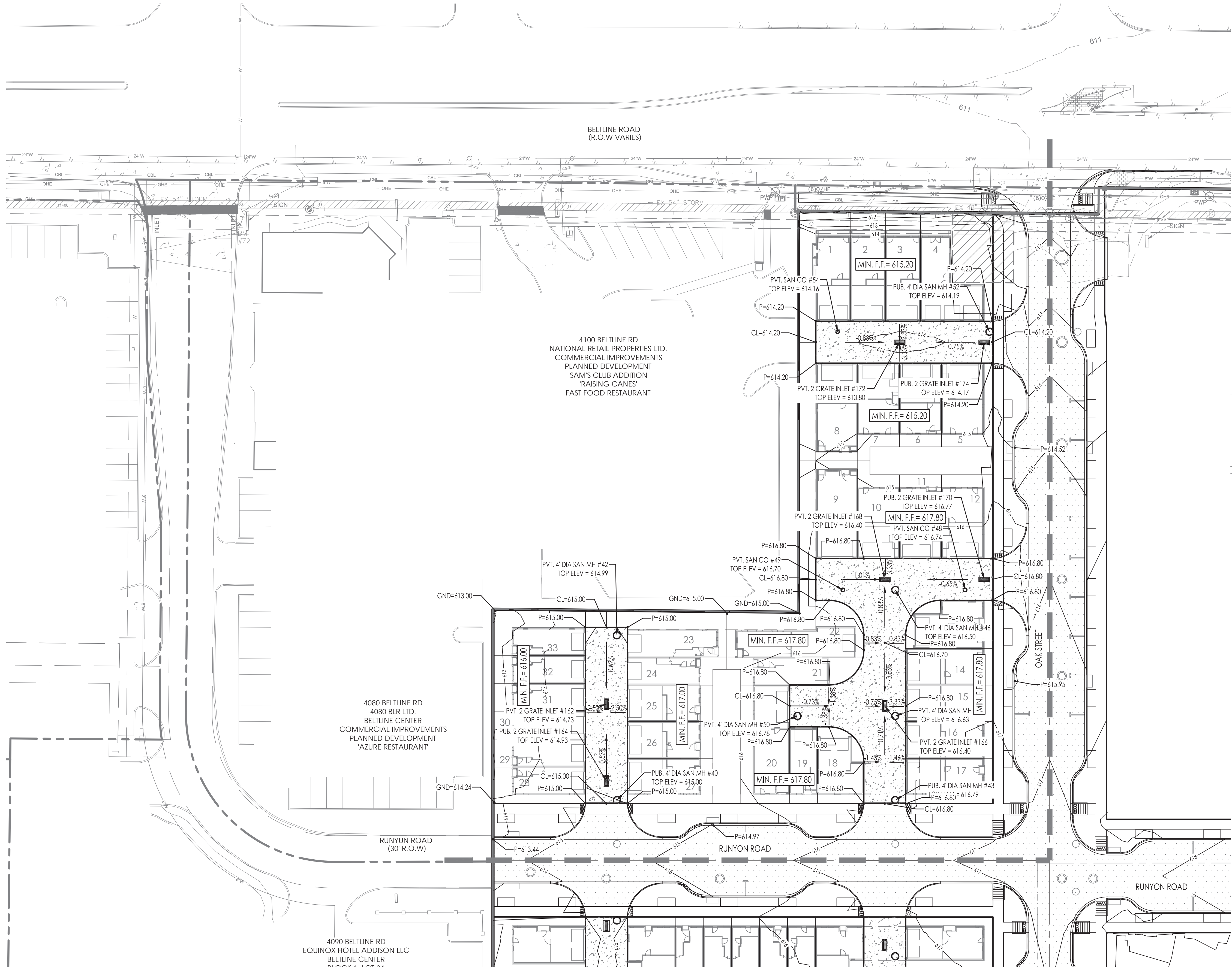
IMPROVEMENT PLANS

ADDISON GROVE

SANITARY SEWER DETAILS

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
	CDP	JDS	MAY 2017		45

SAWYER ENGINEERING, LLC
TBPE FIRM NUMBER F-9171
1520 OLIVER STREET
HOUSTON, TEXAS 77007
(832) 553-5948

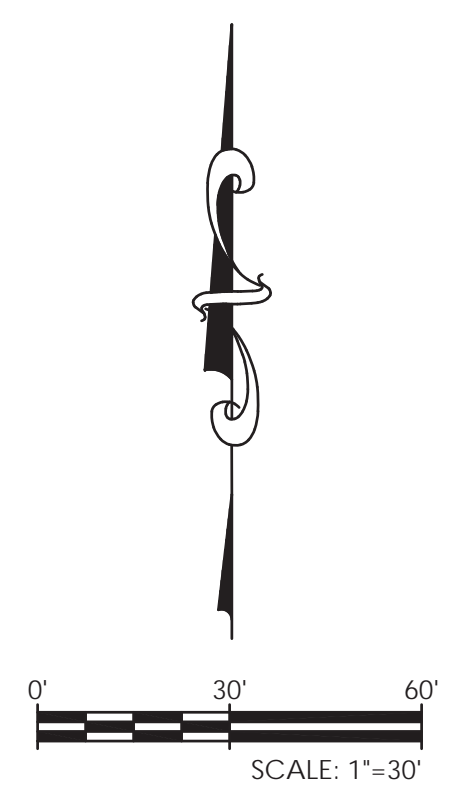


BELTLINE ROAD
(R.O.W VARIES)

4100 BELTLINE RD
NATIONAL RETAIL PROPERTIES LTD.
COMMERCIAL IMPROVEMENTS
PLANNED DEVELOPMENT
SAM'S CLUB ADDITION
'RAISING CANES'
FAST FOOD RESTAURANT

4080 BELTLINE RD
4080 BLR LTD.
BELTLINE CENTER
COMMERCIAL IMPROVEMENTS
PLANNED DEVELOPMENT
'AZURE RESTAURANT'

4090 BELTLINE RD
EQUINOX HOTEL ADDISON LLC
BELTLINE CENTER
BLOCK 1, LOT 24
COMMERCIAL IMPROVEMENTS
PLANNED DEVELOPMENT
'HILTON GARDEN INN'



PAVING LEGEND

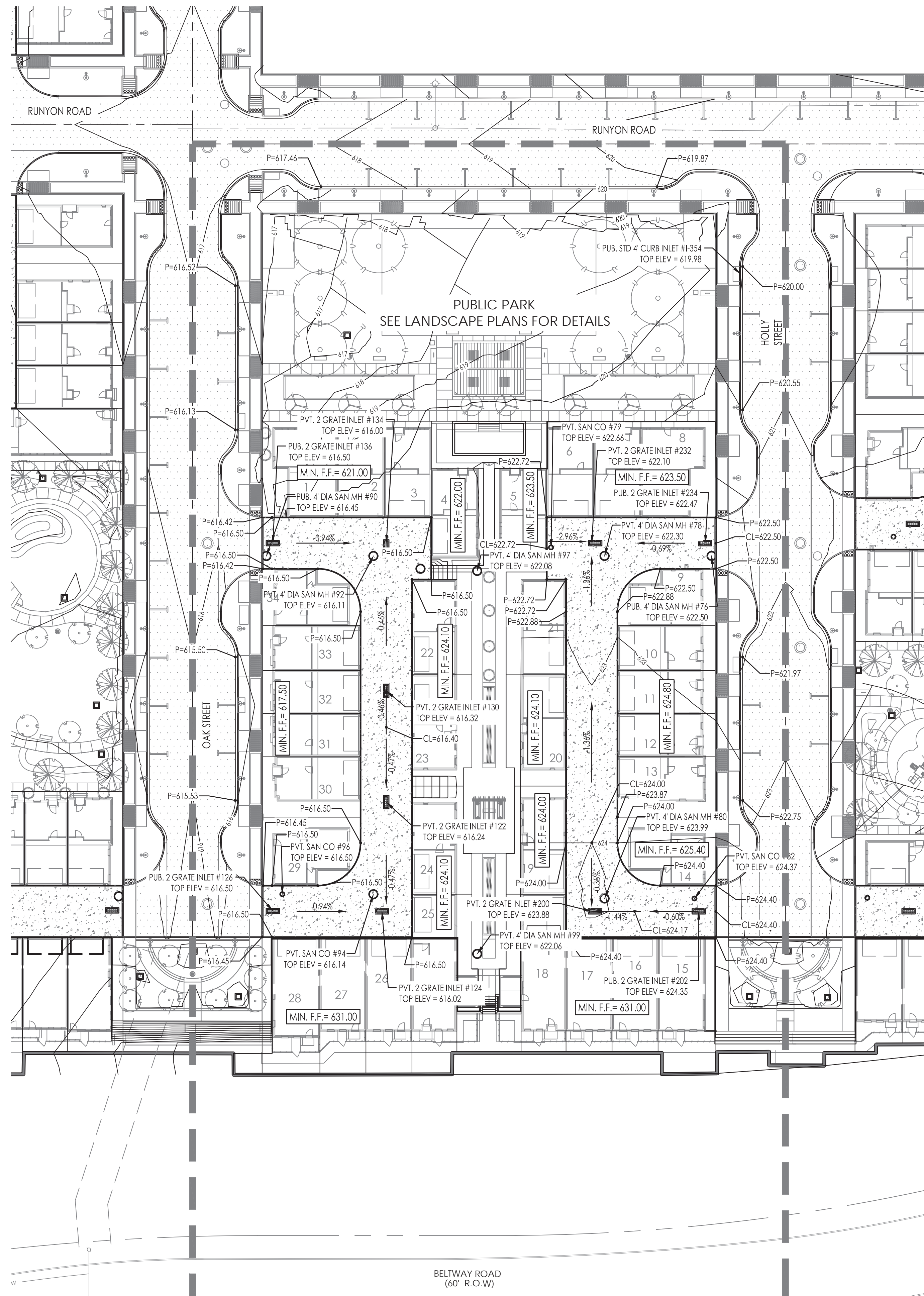
- PUBLIC SANITARY SEWER MANHOLE
- ◉ PRIVATE SANITARY SEWER MANHOLE
- PRIVATE SANITARY SEWER CLEANOUT
- ⊙ EXISTING SANITARY SEWER MANHOLE
- PUBLIC STORM SEWER MANHOLE
- PUBLIC STORM SEWER INLET
- PRIVATE STORM SEWER INLET
- ⊖ EXISTING STORM SEWER AND MANHOLE
- EXISTING INLET
- PROPOSED TREE WELL
- ▨ PUBLIC R.O.W. FIRE LANE ACCESS
- ▩ CONCRETE PRIVATE DRIVE-24.00' FIRE LANE ACCESS AND UTILITY EASEMENT
- ▧ 2x6' TRUNCATED DOME PANEL

BLOCK A	
LOT	PVMT ELEV. @ GARAGE
1	614.20
2	614.20
3	614.20
4	614.20
5	614.20
6	614.20
7	614.20
8	614.20
9	616.80
10	616.80
11	616.80
12	616.80
13	616.80
14	616.80
15	616.80
16	616.80
17	616.80
18	616.80
19	616.80
20	616.80
21	616.80
22	616.80
23	615.00
24	615.00
25	615.00
26	615.00
27	615.00
28	615.00
29	615.00
30	615.00
31	615.00
32	615.00
33	615.00

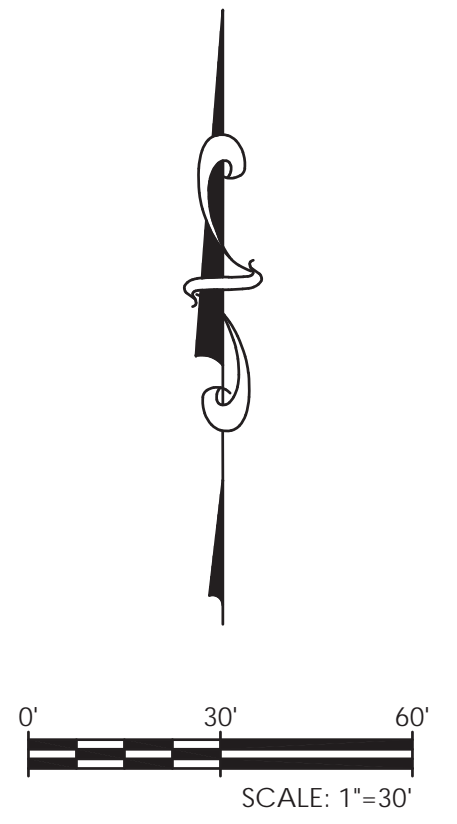
2017/12/19
 SAWYER ENGINEERING, LLC
 TBPE FIRM NUMBER F-9171

ONE-CALL NOTIFICATION SYSTEM
CALL BEFORE YOU DIG
 1-800-545-6005
 OR OTHER UTILITY LOCATING SERVICES AT
 LEAST 48 HOURS PRIOR TO
 CONSTRUCTION ACTIVITIES.

NO.	REVISION	BY	DATE
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
IMPROVEMENT PLANS ADDISON GROVE			
PRIVATE GRADING LAYOUT BLOCK A			
SAWYER ENGINEERING, LLC TBPE: F-9171		1520 OLIVER STREET HOUSTON, TEXAS 77007 (832) 553-5948	
PROJECT	DESIGN	DRAWN	DATE
	CDP	JDS	MAY 2017
FILE	SHEET		
	46		



BLOCK C	
LOT	PVMT ELEV. @ GARAGE
1	616.50
2	616.50
3	616.50
4	616.50
5	622.70
6	622.70
7	622.70
8	622.60
9	622.90
10	623.20
11	623.40
12	623.60
13	623.80
14	624.20
15	624.40
16	624.40
17	624.40
18	624.40
19	624.20
20	623.40
21	623.20
22	616.50
23	616.50
24	616.50
25	616.50
26	616.50
27	616.50
28	616.50
29	616.50
30	616.50
31	616.50
32	616.50
33	616.50
34	616.50



PAVING LEGEND

- PUBLIC SANITARY SEWER MANHOLE
- PRIVATE SANITARY SEWER MANHOLE
- PRIVATE SANITARY SEWER CLEANOUT
- EXISTING SANITARY SEWER MANHOLE
- PUBLIC STORM SEWER MANHOLE
- PUBLIC STORM SEWER INLET
- PRIVATE STORM SEWER INLET
- EXISTING STORM SEWER AND MANHOLE
- EXISTING INLET
- PROPOSED TREE WELL
- PUBLIC R.O.W. FIRE LANE ACCESS
- CONCRETE PRIVATE DRIVE-24'00" FIRE LANE ACCESS AND UTILITY EASEMENT
- 2'x6' TRUNCATED DOME PANEL

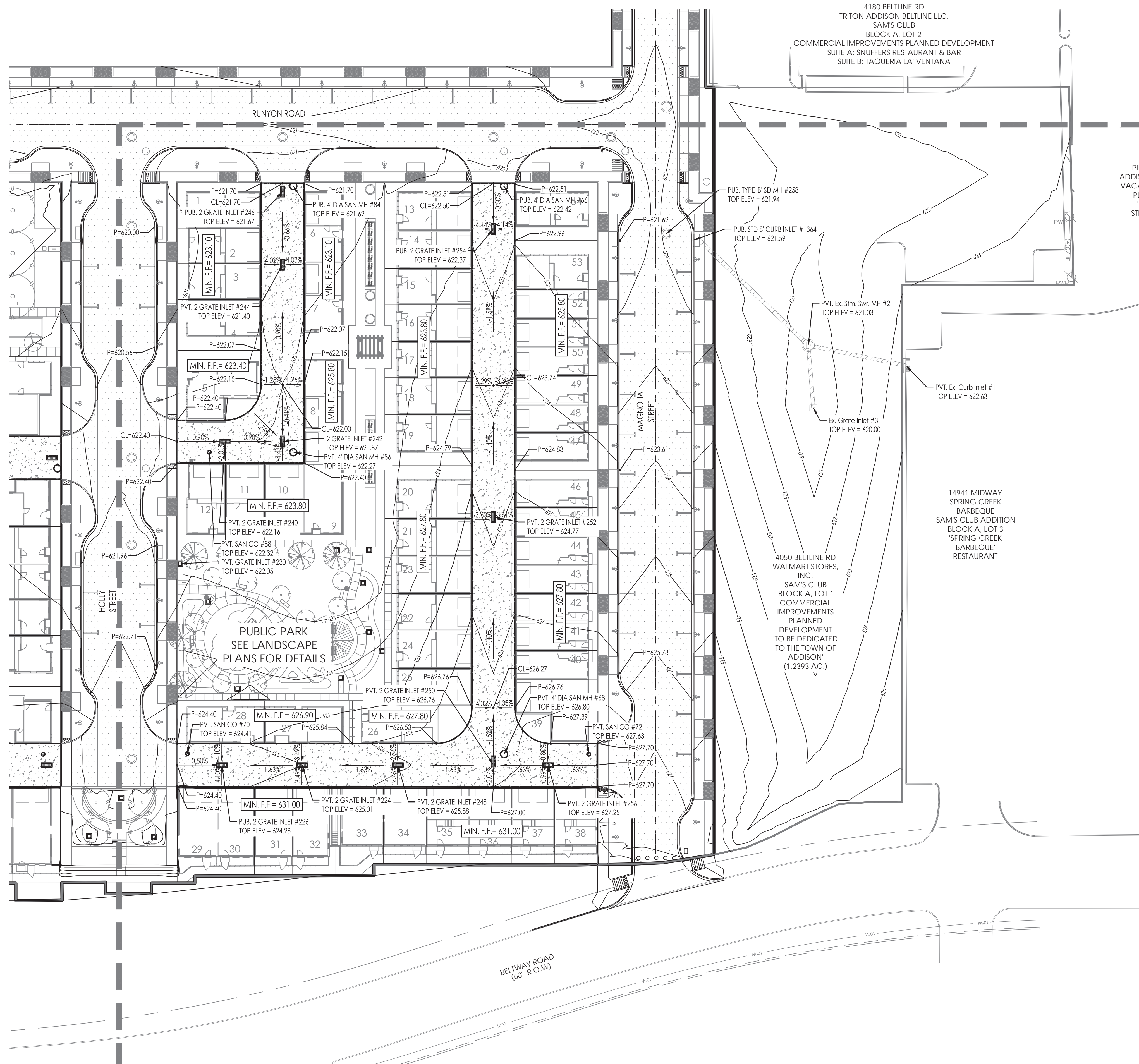


2017/12/19

SAWYER ENGINEERING, LLC
TBPE FIRM NUMBER F-9171

ONE-CALL NOTIFICATION SYSTEM
CALL BEFORE YOU DIG
1-800-545-6005
OR OTHER UTILITY LOCATING SERVICES AT
LEAST 48 HOURS PRIOR TO
CONSTRUCTION ACTIVITIES.

NO.	REVISION	BY	DATE
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
IMPROVEMENT PLANS ADDISON GROVE			
PRIVATE GRADING LAYOUT BLOCK C			
SAWYER ENGINEERING, LLC <small>1-800-545-6005 HOUSTON, TEXAS 77007 (832) 553-5948</small>		<small>1520 OLIVER STREET HOUSTON, TEXAS 77007 (832) 553-5948</small>	
PROJECT	DESIGN	DRAWN	DATE
	CDP	JDS	MAY 2017
FILE	SHEET		
	48		



4180 BELTLINE RD
TRITON ADDISON BELTLINE LLC.
SAM'S CLUB
BLOCK A, LOT 2
COMMERCIAL IMPROVEMENTS PLANNED DEVELOPMENT
SUITE A: SNUFFERS RESTAURANT & BAR
SUITE B: TAQUERIA LA VENTANA

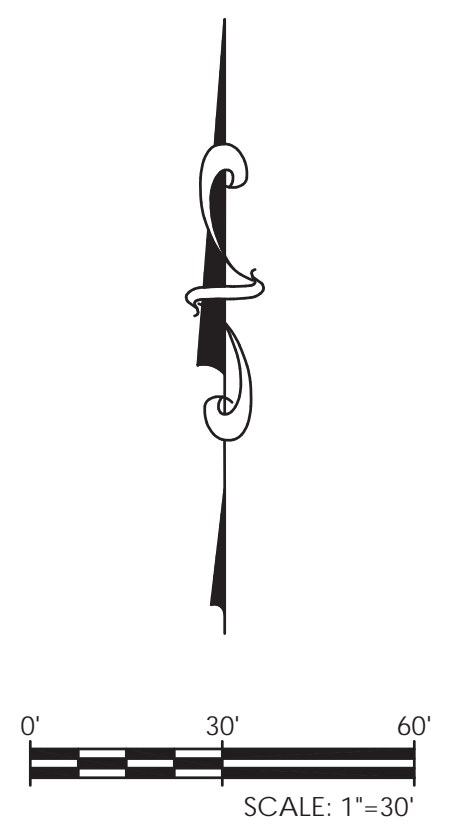
14941 MIDWAY
PIEDMONT MIDWAY PS LP
ADDISON PLAZA COMMERCIAL -
VACANT PLATTED LOTS / TRACTS
PLANNED DEVELOPMENT
'NATE'S SEAFOOD AND
STEAKHOUSE' RESTAURANT

14941 MIDWAY
SPRING CREEK
BARBEQUE
SAM'S CLUB ADDITION
BLOCK A, LOT 3
'SPRING CREEK
BARBEQUE'
RESTAURANT

4050 BELTLINE RD
WALMART STORES,
INC.
SAM'S CLUB
BLOCK A, LOT 1
COMMERCIAL
IMPROVEMENTS
PLANNED
DEVELOPMENT
TO BE DEDICATED
TO THE TOWN OF
ADDISON
(1.2393 AC.)

PUBLIC PARK
SEE LANDSCAPE
PLANS FOR DETAILS

BLOCK D	
LOT	PVMT ELEV. @ GARAGE
1	621.80
2	621.90
3	622.00
4	622.00
5	622.20
6	621.80
7	622.00
8	622.30
9	622.40
10	622.40
11	622.40
12	622.40
13	622.90
14	623.20
15	623.50
16	623.80
17	624.10
18	624.40
19	624.70
20	625.20
21	625.50
22	625.80
23	626.10
24	626.40
25	626.70
26	626.50
27	625.80
28	624.70
29	624.70
30	625.00
31	625.30
32	625.60
33	626.10
34	626.40
35	626.70
36	627.00
37	627.30
38	627.60
39	626.80
40	626.50
41	626.30
42	626.10
43	625.80
44	625.60
45	625.40
46	625.10
47	624.70
48	624.50
49	624.30
50	624.10
51	623.80
52	623.60
53	623.40
54	622.80



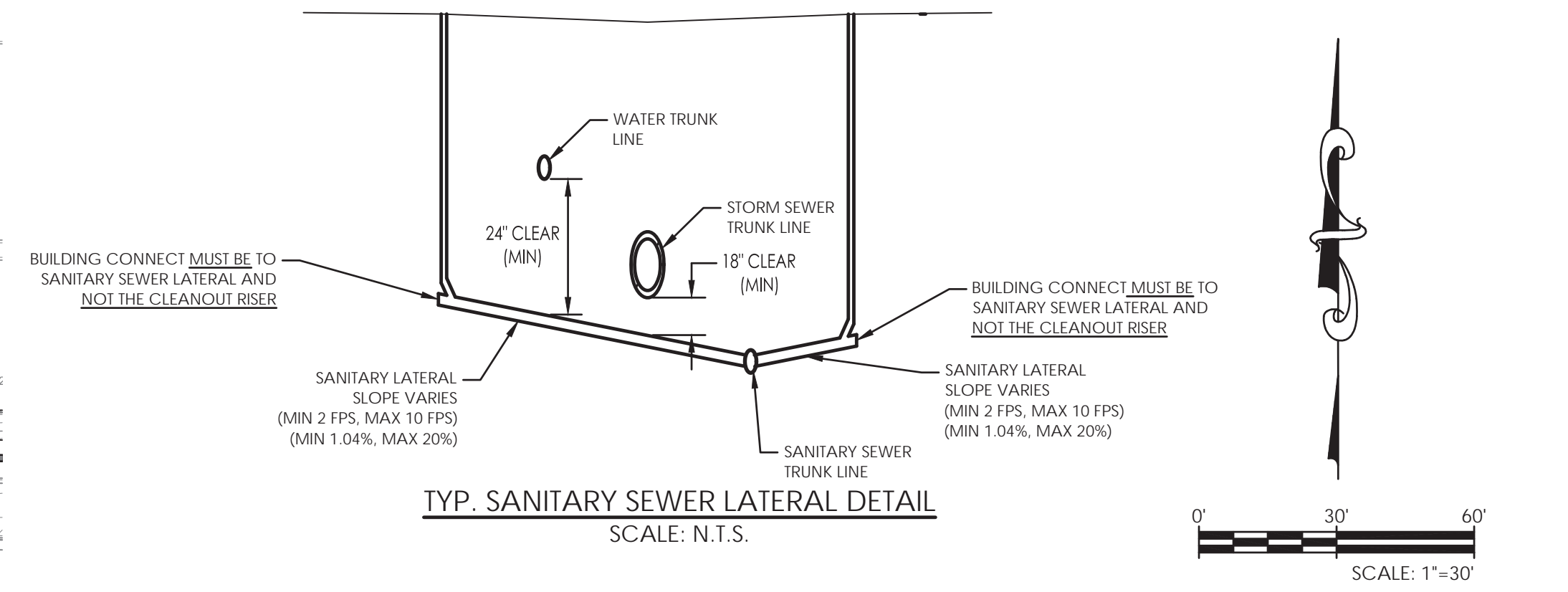
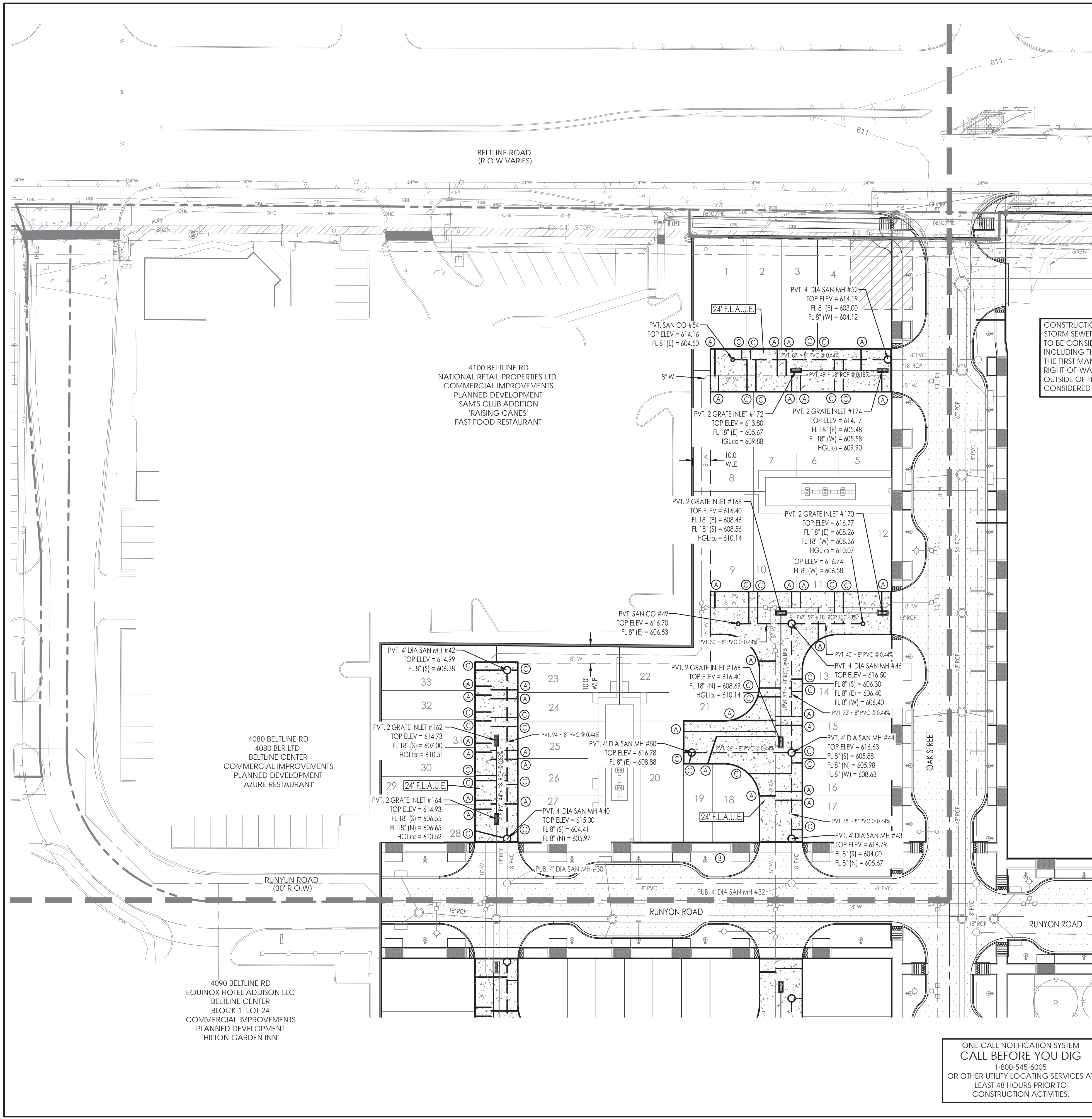
PAVING LEGEND

- PUBLIC SANITARY SEWER MANHOLE
- PRIVATE SANITARY SEWER MANHOLE
- PRIVATE SANITARY SEWER CLEANOUT
- EXISTING SANITARY SEWER MANHOLE
- PUBLIC STORM SEWER MANHOLE
- PRIVATE STORM SEWER INLET
- EXISTING STORM SEWER AND MANHOLE
- EXISTING INLET
- PROPOSED TREE WELL
- PUBLIC R.O.W. FIRE LANE ACCESS
- CONCRETE PRIVATE DRIVE-24.00' FIRE LANE ACCESS AND UTILITY EASEMENT
- 2'x6' TRUNCATED DOME PANEL



SAWYER ENGINEERING, LLC
TBPE FIRM NUMBER F-9171

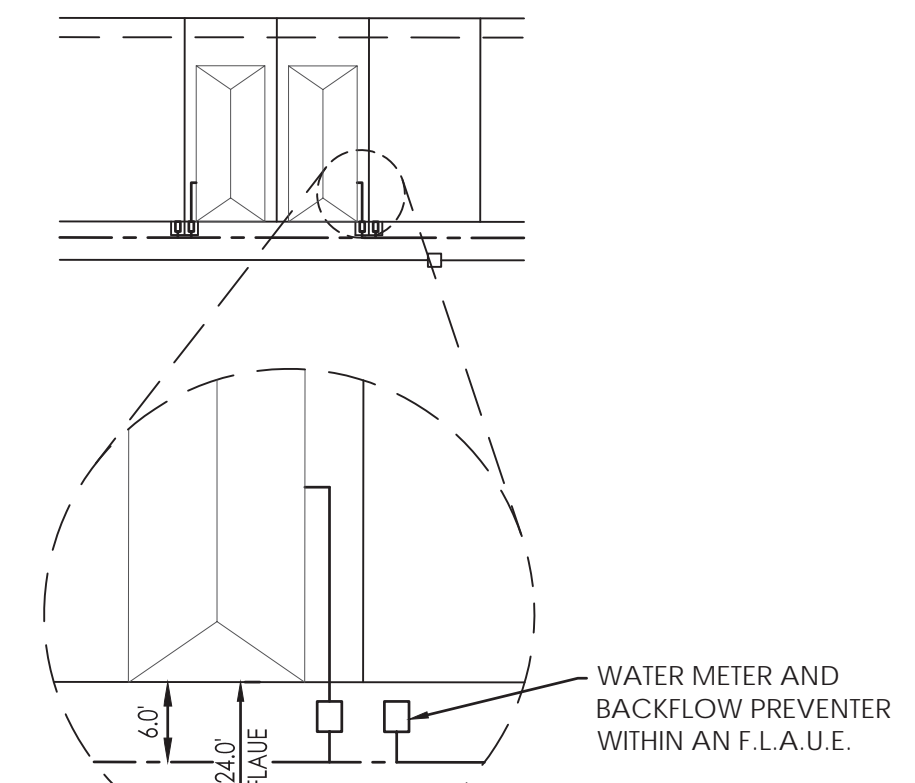
NO.	REVISION	BY	DATE
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
IMPROVEMENT PLANS ADDISON GROVE			
PRIVATE GRADING LAYOUT BLOCK D			
SAWYER ENGINEERING, LLC		1520 OLIVER STREET HOUSTON, TEXAS 77007 (832) 553-5948	
PROJECT	DESIGN	DRAWN	DATE
	CDP	JDS	MAY 2017
FILE	SHEET		
	49		



CONSTRUCTION OF SANITARY SEWER AND STORM SEWER WITHIN THE RIGHT-OF-WAY TO BE CONSIDERED PUBLIC UTILITIES INCLUDING THE TRUNK LINE EXTENDING TO THE FIRST MANHOLE OR INLET OUTSIDE THE RIGHT-OF-WAY. THE MANHOLE OR INLET OUTSIDE OF THE RIGHT-OF-WAY IS TO BE CONSIDERED PRIVATE.

UTILITY LEGEND

- PUBLIC SANITARY SEWER AND MANHOLE
- SANITARY SEWER AND MANHOLE
- SANITARY SEWER AND CLEANOUT
- EXISTING SANITARY SEWER AND MANHOLE
- PROPOSED FIRE HYDRANT ASSEMBLY
- PROPOSED WATERLINE WITH GATE VALVE AND BOX WITH 10' W.L.E.
- EXISTING WATERLINE WITH GATE VALVE AND BOX
- PUBLIC STORM SEWER WITH MANHOLE AND INLETS
- PROPOSED PRIVATE STORM SEWER
- EXISTING STORM SEWER AND MANHOLE
- EXISTING INLET
- PROPOSED TREE WELL
- PUBLIC R.O.W. FIRE LANE ACCESS
- CONCRETE PRIVATE DRIVE- 24.00' FIRE LANE ACCESS AND UTILITY EASEMENT
- 2x6' TRUNCATED DOME PANEL
- F.L.A.U.E. 24' (MIN.) VARIABLE WIDTH FIRE LANE AND UTILITY EASEMENT
- W.E. OR ALLEY 2" WATER LINE TYPE "K" COPPER 2" ANGLE CURB STOP W/ TRAFFIC RATED METER BOX WATER MAIN
- SEE LANDSCAPE PLAN FOR FUTURE CONNECTION 2" WATER LINE TYPE "K" COPPER FOR LANDSCAPING 2" ANGLE CURB STOP W/ TRAFFIC RATED METER BOX WATER MAIN
- 4" SAN. LEAD @ 1.04% CONTRACTOR TO MAINTAIN A MINIMUM VERTICAL SEPARATION FROM ANY OTHER UNDERGROUND UTILITY SEE TYP. SANITARY SEWER LATERAL DETAIL.



TYP. WATER METER DETAIL

1. METER BOX TO BE PLACED OUTSIDE OF WHEEL PATH AND NOT CENTERED IN DRIVEWAYS.
2. WATER METERS SHALL BE MUELLER SYSTEMS MODEL RFM 1-1/2" RESIDENTIAL FIRE METER INSTALLED WITHIN THE 5'x5' W.M.E. IN AN OLDCASTLE B1017 TRAFFIC RATED METER BOX.
3. BACKFLOW PREVENTERS SHALL BE AMES SERIES LF2008B 1-1/2" DOUBLE CHECK VALVE ASSEMBLY INSTALLED A MINIMUM OF 18" DOWNSTREAM OF THE WATER METER WITHIN THE 5'x5' W.M.E. IN A OLDCASTLE B1324 TRAFFIC RATED BOX.



ONE-CALL NOTIFICATION SYSTEM
CALL BEFORE YOU DIG
1-800-545-6005
OR OTHER UTILITY LOCATING SERVICES AT
LEAST 48 HOURS PRIOR TO
CONSTRUCTION ACTIVITIES.

NO.	REVISION	BY	DATE
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
IMPROVEMENT PLANS ADDISON GROVE			
PRIVATE UTILITY LAYOUT BLOCK A			
SAWYER ENGINEERING, LLC TBPE: F-9171		1520 OLIVER STREET HOUSTON, TEXAS 77007 (832) 553-5948	
PROJECT	DESIGN	DRAWN	DATE
	CDP	JDS	MAY 2017
FILE	SHEET		
	50		

SANITARY SEWER

MANHOLE OR CLEANOUT		
NUMBER	Northing (ft)	Eastng (ft)
10	7034102.16	2477007.50
12	7034037.03	2477012.16
14	7033743.41	2477011.16
16	7033716.04	2477011.16
18	7033532.52	2477011.16
20	7033377.50	2477011.16
22	7033373.53	2476961.66
24	7033372.50	2476748.15
26	7033649.53	2476748.16
28	7033699.53	2476748.16
30	7033743.41	2476748.16
32	7033743.41	2476907.66
34	7033649.53	2476907.66
36	7033679.03	2476907.67
38	7033609.53	2476907.66
40	7033768.53	2476748.16
42	7033863.03	2476748.16
43	7033768.53	2476907.66
44	7033816.78	2476907.66
46	7033889.03	2476907.66
48	7033889.03	2476947.66
49	7033889.03	2476877.66
50	7033816.78	2476851.66
52	7034037.03	2476961.66
54	7034037.03	2476874.66
56	7033710.04	2477288.16
58	7033710.04	2477370.68
60	7033710.04	2477488.68
62	7033710.04	2477556.49
64	7033693.00	2477602.04
66	7033690.54	2477488.68
68	7033372.58	2477488.68
70	7033372.83	2477311.43
72	7033372.51	2477536.02
74	7033532.54	2477288.16
76	7033532.54	2477238.66
78	7033532.54	2477188.66
79	7033536.54	2477163.66
80	7033372.50	2477188.66
82	7033372.50	2477230.66
84	7033690.54	2477370.68
86	7033541.55	2477370.68
88	7033541.55	2477323.66
90	7033532.52	2477030.66
92	7033532.52	2477080.66
93	7033526.54	2477102.66
94	7033374.50	2477080.66
96	7033374.50	2477038.11
97	7033525.54	2477129.16
99	7033346.62	2477129.16

STORM SEWER

STORM SEWER MANHOLES AND INLETS		
NUMBER	Northing (ft)	Eastng (ft)
Ex. 1	7033589.72	2477713.22
Ex. 2	7033601.12	2477658.49
Ex. 3	7033566.24	2477661.28
Ex. 5	7034067.49	2477594.11
100	7033366.77	2476756.08
102	7033366.71	2476851.57
104	7033367.09	2476958.08
106	7033370.09	2477002.58
107	7033466.92	2477002.65
108	7033538.63	2477002.69
110	7033723.65	2477002.81
111	7033839.86	2477002.89
112	7033895.14	2477002.92
114	7033972.71	2477002.92
116	7034031.14	2477003.01
118	7034079.65	2477003.04
120	7034105.33	2476996.06
122	7033417.60	2477086.11
124	7033366.56	2477084.08
126	7033366.80	2477033.08
128	7033462.96	2477065.79
130	7033469.60	2477086.15
134	7033538.58	2477086.19
136	7033538.61	2477033.19
138	7033597.70	2477134.23
142	7033723.64	2477020.81
144	7033431.83	2476710.27
146	7033433.81	2476741.61
148	7033643.81	2476741.76
150	7033696.81	2476741.79
152	7033723.82	2476741.81
153	7033723.78	2476806.81
154	7033727.44	2476698.34
156	7033685.71	2476901.29
158	7033643.71	2476901.26
160	7033612.21	2476901.24
162	7033823.81	2476741.88
164	7033779.82	2476741.85
166	7033822.71	2476901.38
168	7033895.21	2476901.43
170	7033895.17	2476958.42
172	7034031.20	2476910.01
174	7034031.17	2476958.51

STORM SEWER

STORM SEWER MANHOLES AND INLETS		
NUMBER	Northing (ft)	Eastng (ft)
200	7033366.50	2477182.08
202	7033366.47	2477232.09
204	7033369.92	2477279.58
205	7033489.75	2477279.66
206	7033538.48	2477279.69
207	7033668.22	2477279.78
208	7033717.98	2477279.81
210	7033717.92	2477364.33
212	7033717.84	2477482.33
214	7033717.80	2477548.17
216	7033734.76	2477579.18
218	7033984.93	2477579.34
219	7034045.83	2477579.38
220	7034079.32	2477579.40
222	7034079.40	2477392.54
224	7033366.37	2477375.08
226	7033366.42	2477330.09
228	7033447.41	2477419.37
230	7033479.06	2477306.78
232	7033538.54	2477182.19
234	7033538.50	2477235.19
236	7033635.74	2477067.98
238	7033675.18	2477194.18
240	7033547.45	2477332.20
242	7033547.43	2477364.22
244	7033646.42	2477364.28
246	7033687.42	2477364.31
248	7033366.34	2477428.60
250	7033366.30	2477482.10
252	7033505.19	2477482.19
254	7033666.34	2477512.60
256	7033366.29	2477512.60
258	7033663.75	2477579.13
298	7034016.35	2477017.00
300	7033970.68	2476974.97
302	7033970.65	2477016.97
304	7033836.88	2476974.88
306	7033836.85	2477016.88
308	7033595.77	2477016.73
310	7033462.94	2476974.64
312	7033462.91	2477016.64
314	7033738.13	2477032.82
316	7033712.13	2477032.80
318	7033755.27	2476802.83
320	7033713.27	2476802.80
322	7033747.35	2476688.34
324	7033721.35	2476688.33
350	7033481.76	2477251.66
352	7033485.74	2477293.66
354	7033664.23	2477251.77
356	7033664.21	2477293.77
358	7034041.79	2477560.38
360	7034041.78	2477586.38
362	7033660.01	2477552.13
364	7033659.98	2477594.13

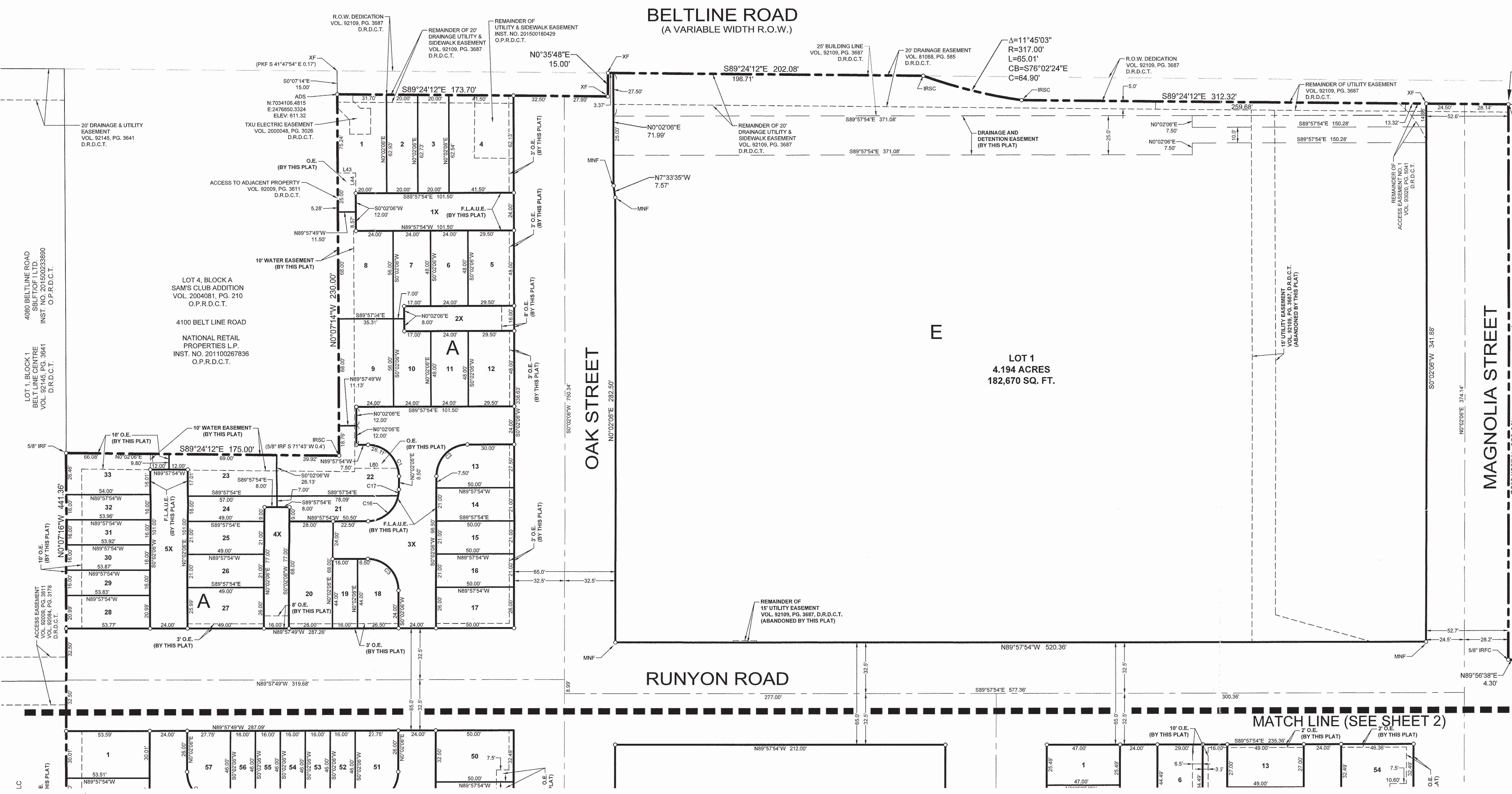
SANITARY SEWER LEADS

Block A							
Lot #	base elevation	Elevation at trunk line	Length of Lead	Slope	Elevation at lot line	Pavement Elevation	Cover
1	606.35	606.52	6	10.00%	607.12	614.20	7.08
2	606.33	606.50	6	10.00%	607.10	614.20	7.10
3	606.17	606.34	6	10.00%	606.94	614.20	7.26
4	606.15	606.32	6	10.00%	606.92	614.20	7.28
5	606.10	606.27	18	10.00%	608.07	614.20	6.13
6	606.12	606.29	18	10.00%	608.09	614.20	6.11
7	606.31	606.48	18	10.00%	608.28	614.20	5.92
8	606.33	606.50	18	10.00%	608.30	614.20	5.90
9	607.36	607.53	18	10.00%	609.33	616.80	7.47
10	607.33	607.50	18	10.00%	609.30	616.80	7.50
11	607.16	607.33	18	10.00%	609.13	616.80	7.67
12	607.18	607.35	18	10.00%	609.15	616.80	7.65
13	606.82	606.99	6	10.00%	607.59	616.80	9.21
14	606.79	606.96	6	10.00%	607.56	616.80	9.24
15	608.63	608.80	6	10.00%	609.40	616.80	7.40
16	606.50	606.67	6	10.00%	607.27	616.80	9.53
17	606.36	606.53	6	10.00%	607.13	616.80	9.67
18	606.36	606.53	18	10.00%	608.33	616.80	8.47
19	608.88	609.05	6	10.00%	609.65	616.80	7.15
20	608.88	609.05	4	10.00%	609.45	616.80	7.35
21	606.77	606.94	19	10.00%	608.84	616.80	7.96
22	606.79	606.96	18	10.00%	608.76	616.80	8.04
23	606.36	606.53	6	10.00%	607.13	615.00	7.87
24	606.33	606.50	6	10.00%	607.10	615.00	7.90
25	606.19	606.36	6	10.00%	606.96	615.00	8.04
26	606.17	606.34	6	10.00%	606.94	615.00	8.06
27	605.99	606.16	6	10.00%	606.76	615.00	8.24
28	606.05	606.22	18	10.00%	608.02	615.00	6.98
29	606.07	606.24	18	10.00%	608.04	615.00	6.96
30	606.18	606.35	18	10.00%	608.15	615.00	6.85
31	606.22	606.39	18	10.00%	608.19	615.00	6.81
32	606.33	606.50	18	10.00%	608.30	615.00	6.70
33	606.36	606.53	18	10.00%	608.33	615.00	6.67

SANITARY SEWER LEADS

Block C							
Lot #	base elevation	Elevation at trunk line	Length of Lead	Slope	Elevation at lot line	Pavement Elevation	Cover
1	606.36	606.53	18	10.00%	608.33	616.50	8.17
2	606.63	606.80	16	10.00%	608.40	616.50	8.10
3	606.63	606.80	18	10.00%	608.60	616.50	7.90
4	606.66	606.83	27	10.00%	609.53	616.50	6.97
5	614.75	614.92	14	10.00%	616.32	622.72	6.40
6	614.75	614.92	16	10.00%	616.52	622.72	6.20
7	614.47	614.64	18	10.00%	616.44	622.70	6.26
8	614.45	614.62	18	10.00%	616.42	622.56	6.14
9	614.77	614.94	6	10.00%	615.54	622.95	7.41
10	614.80	614.97	6	10.00%	615.57	622.95	7.38
11	614.96	615.13	6	10.00%	615.73	623.39	7.66
12	614.98	615.15	6	10.00%	615.75	623.39	7.64
13	615.17	615.34	6	10.00%	615.94	623.87	7.93
14	615.19	615.36	6	10.00%	615.96	623.87	7.91
15	615.62	615.79	18	10.00%	617.59	624.40	6.81
16	615.47	615.64	18	10.00%	617.44	624.40	6.96
17	615.44	615.61	18	10.00%	617.41	624.40	6.99
18	613.33	613.50	21	10.00%	615.60	624.40	8.80
19	611.20	611.37	21	10.00%	613.47	624.40	10.53
20	611.24	611.41	21	10.00%	613.51	622.09	8.58
21	613.12	613.29	21	10.00%	615.39	622.06	6.67
22	613.12	613.29	9	10.00%	614.19	622.06	7.87
23	611.24	611.41	9	10.00%	612.31	622.09	9.78
24	611.20	611.37	9	10.00%	612.27	622.09	9.82
25	613.33	613.50	9	10.00%	614.40	622.06	7.66
26	607.43	607.60	18	10.00%	609.40	616.50	7.10
27	607.46	607.63	20	10.00%	609.63	616.50	6.87
28	607.59	607.76	20	10.00%	609.76	616.50	6.74
29	607.18	607.35	6	10.00%	607.95	616.50	8.55
30	607.16	607.33	6	10.00%	607.93	616.50	8.57
31	606.97	607.14	6	10.00%	607.74	616.50	8.76
32	606.95	6					

BELTLINE ROAD
(A VARIABLE WIDTH R.O.W.)



LOT 1
4.194 ACRES
182,670 SQ. FT.

OAK STREET

RUNYON ROAD

MAGNOLIA STREET

- LEGEND:**
- Δ = DELTA ANGLE OR CENTRAL ANGLE
 - P.O.B. = POINT OF BEGINNING
 - D.R.D.C.T. = DEED RECORDS OF DALLAS COUNTY, TEXAS
 - O.P.R.D.C.T. = OFFICIAL PUBLIC RECORDS, DALLAS COUNTY, TEXAS
 - VOL. = VOLUME
 - PG. = PAGE
 - R.O.W. = RIGHT-OF-WAY
 - INST. NO. = INSTRUMENT NUMBER
 - XF = "X" IN CONCRETE FOUND
 - IRSC = 5/8" IRON ROD WITH PLASTIC CAP STAMPED "KHA" SET
 - U.E. = UTILITY EASEMENT
 - A.E. = ACCESS EASEMENT
 - A.U.E. = ACCESS AND UTILITY EASEMENT
 - F.L.A.U.E. = FIRE LANE, ACCESS AND UTILITY EASEMENT
 - O.E. = ONCOR ELECTRIC DELIVERY COMPANY LLC EASEMENT

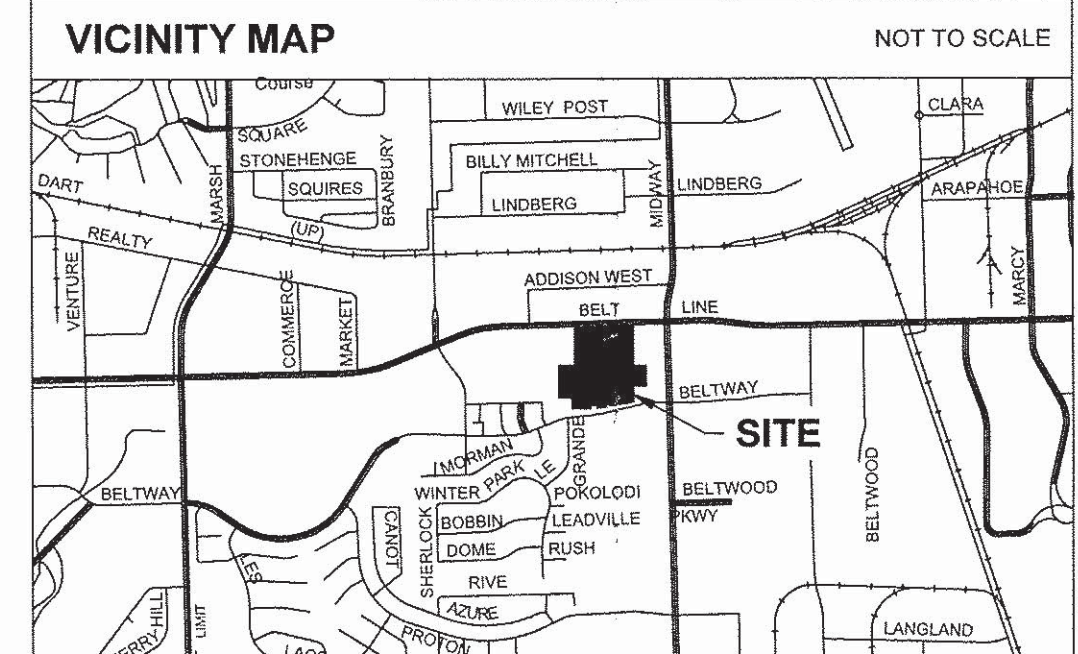
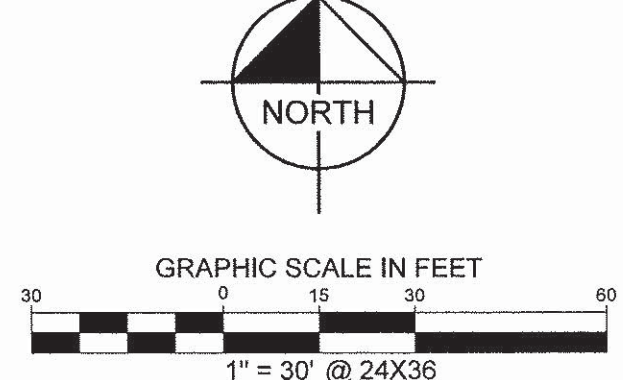
THE PURPOSE OF THIS REPLAT IS TO CREATE 258 LOTS, 17 COMMON AREAS AND DEDICATE RIGHT-OF-WAY.

REPLAT
ADDISON GROVE ADDITION
BLOCK A, LOTS 1-33, BLOCK B, LOTS 1-57
BLOCK C, LOTS 1-34, BLOCK D, LOTS 1-54
BLOCK E, LOT 1, BLOCK F, LOT 18X
OPEN SPACE LOTS 1X-17X
BEING A REPLAT OF LOT 1, BLOCK A

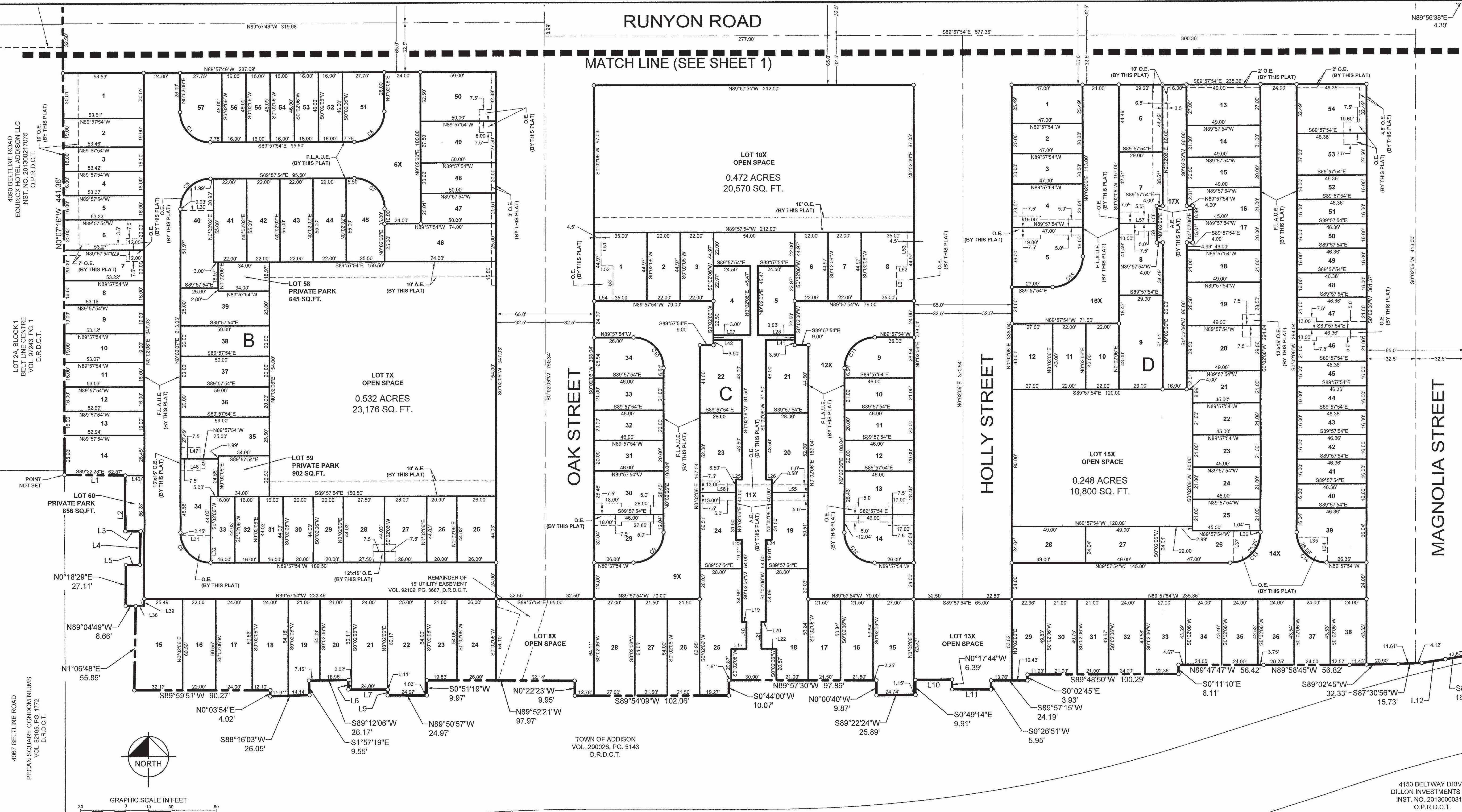
Kimley»Horn

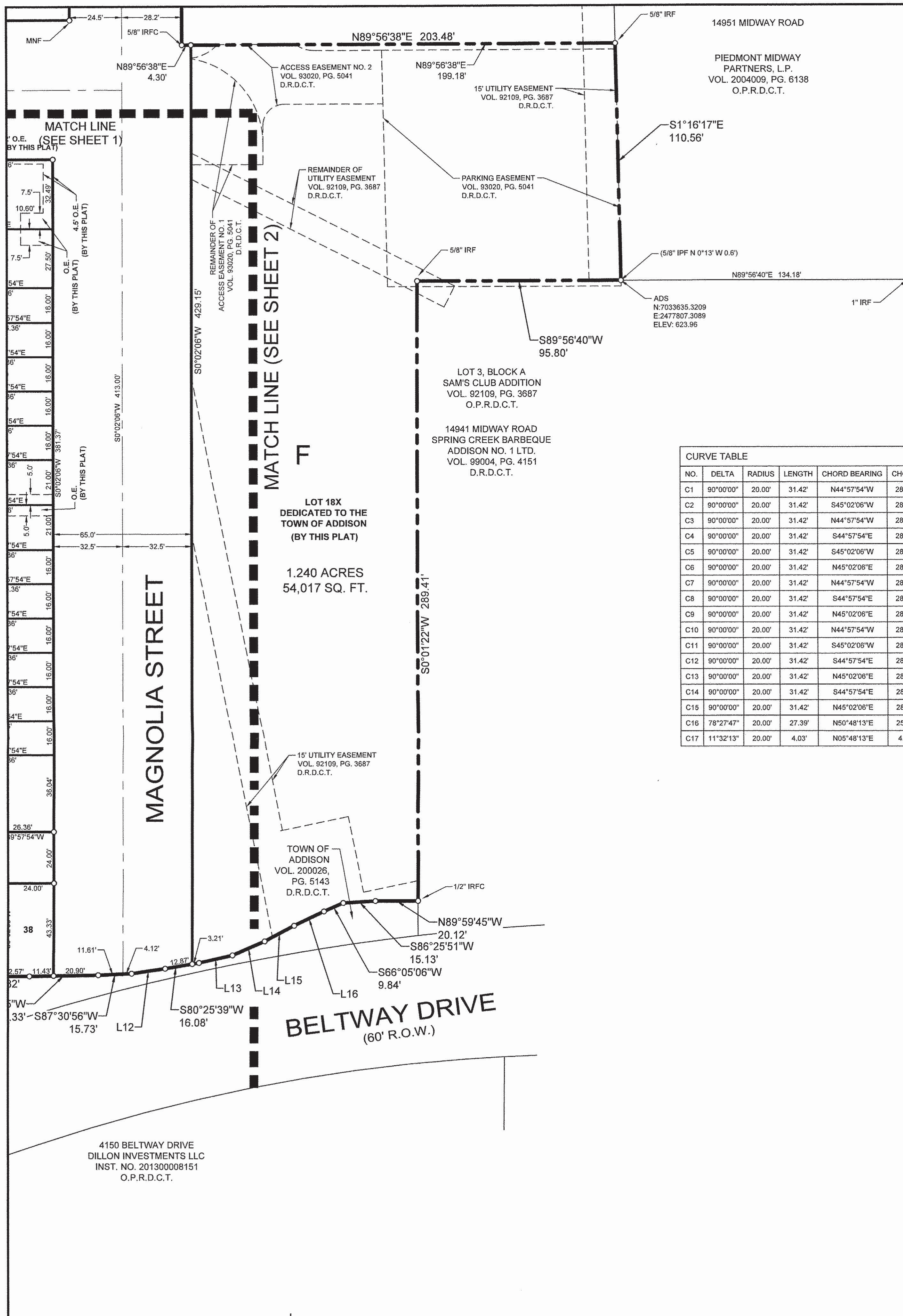
13455 Noel Road, Two Galleria Office
Tower, Suite 700, Dallas, Texas 75240 FIRM # 10115500 Tel. No. (972) 241-1111 Fax No. (972) 241-1112

Scale	Drawn by	Checked by	Date	Project No.
1" = 30'	SRD	DAB	Dec. 2017	064488001



RUNYON ROAD
MATCH LINE (SEE SHEET 1)





MIDWAY ROAD
(VARIABLE WIDTH R.O.W.)

CURVE TABLE

NO.	DELTA	RADIUS	LENGTH	CHORD BEARING	CHORD
C1	90°00'00"	20.00'	31.42'	N44°57'54"W	28.28'
C2	90°00'00"	20.00'	31.42'	S45°02'06"W	28.28'
C3	90°00'00"	20.00'	31.42'	N44°57'54"W	28.28'
C4	90°00'00"	20.00'	31.42'	S44°57'54"E	28.28'
C5	90°00'00"	20.00'	31.42'	S45°02'06"W	28.28'
C6	90°00'00"	20.00'	31.42'	N45°02'06"E	28.28'
C7	90°00'00"	20.00'	31.42'	N44°57'54"W	28.28'
C8	90°00'00"	20.00'	31.42'	S44°57'54"E	28.28'
C9	90°00'00"	20.00'	31.42'	N45°02'06"E	28.28'
C10	90°00'00"	20.00'	31.42'	N44°57'54"W	28.28'
C11	90°00'00"	20.00'	31.42'	S45°02'06"W	28.28'
C12	90°00'00"	20.00'	31.42'	S44°57'54"E	28.28'
C13	90°00'00"	20.00'	31.42'	N45°02'06"E	28.28'
C14	90°00'00"	20.00'	31.42'	S44°57'54"E	28.28'
C15	90°00'00"	20.00'	31.42'	N45°02'06"E	28.28'
C16	78°27'47"	20.00'	27.39'	N50°48'13"E	25.30'
C17	11°32'13"	20.00'	4.03'	N05°48'13"E	4.02'

LINE TABLE

NO.	BEARING	LENGTH	NO.	BEARING	LENGTH
L1	N89°22'28"W	40.30'	L57	S89°57'54"E	25.00'
L2	N00°13'28"E	36.84'	L58	N00°02'06"E	11.49'
L3	N89°41'31"W	10.26'	L59	N00°02'06"E	12.51'
L4	N01°13'10"E	22.36'	L60	N89°57'54"W	27.86'
L5	S89°41'31"E	9.26'	L61	S00°02'06"W	22.80'
L6	N00°02'44"W	6.29'	L62	N89°57'54"W	7.00'
L7	N89°49'51"W	26.13'	L63	N00°02'06"E	22.17'
L8	N01°14'11"E	3.78'	L64		
L9	S89°29'58"W	24.40'	L65		
L10	N89°41'07"W	25.76'	L66		
L11	S81°22'40"W	15.88'	L67		
L12	S77°20'26"W	16.07'	L68		
L13	S66°53'41"W	16.43'	L69		
L14	S62°33'01"W	15.64'	L70		
L15	S64°24'55"W	15.43'	L71		
L16	N89°57'54"W	10.00'	L72		
L17	N00°02'07"E	18.00'	L73		
L18	S89°57'54"E	3.00'	L74		
L19	N89°57'54"W	3.00'	L75		
L20	N00°00'02"W	18.00'	L76		
L21	S89°57'54"E	9.99'	L77		
L22	N89°57'54"W	4.00'	L78		
L23	S89°57'54"E	4.00'	L79		
L24	N89°57'54"W	4.00'	L80		
L25	S89°57'54"E	4.00'	L81		
L26	N89°57'54"W	4.00'	L82		
L27	S89°57'54"E	24.50'	L83		
L28	N89°57'54"W	24.50'	L84		
L29	S89°57'54"E	21.99'	L85		
L30	N89°57'54"W	19.88'	L86		
L31	S00°02'06"W	18.08'	L87		
L32	S00°02'06"W	16.68'	L88		
L33	N89°57'54"W	20.28'	L89		
L34	S89°57'54"E	17.94'	L90		
L35	S00°02'06"W	20.94'	L91		
L36	S89°57'54"E	5.63'	L92		
L37	N00°02'02"E	4.70'	L93		
L38	S89°22'28"E	12.57'	L94		
L39	N89°57'54"W	19.00'	L95		
L40	S89°57'54"E	19.00'	L96		
L41	N89°57'54"E	11.56'	L97		
L42	N00°02'06"E	13.00'	L98		
L43	N89°57'54"W	13.00'	L99		
L44	S89°57'54"E	13.00'	L100		
L45	N00°02'07"E	15.00'	L101		
L46	S00°02'08"W	21.85'	L102		
L47	S89°57'55"E	7.96'	L103		
L48	S00°02'04"W	23.12'	L104		
L49	N89°57'55"W	12.46'	L105		
L50	S89°57'54"E	24.00'	L106		
L51	S89°57'54"E	24.00'	L107		

BLOCK A

LOT NO.	ACRES	SQ. FT.
1	0.049	2,132
2	0.029	1,257
3	0.029	1,253
4	0.059	2,587
5	0.033	1,416
6	0.026	1,152
7	0.028	1,208
8	0.049	2,119
9	0.048	2,107
10	0.028	1,208
11	0.026	1,152
12	0.033	1,416
13	0.030	1,289
14	0.024	1,050
15	0.024	1,050
16	0.024	1,050
17	0.030	1,300
18	0.025	1,080
19	0.016	704
20	0.044	1,904
21	0.025	1,099
22	0.054	2,336
23	0.037	1,622
24	0.019	840
25	0.024	1,029
26	0.024	1,029
27	0.029	1,274
28	0.026	1,129
29	0.020	862
30	0.020	862
31	0.020	863
32	0.020	864
33	0.035	1,534

BLOCK B

LOT NO.	ACRES	SQ. FT.
1	0.037	1,607
2	0.023	1,016
3	0.020	855
4	0.020	854
5	0.020	854
6	0.024	1,066
7	0.024	1,065
8	0.020	851
9	0.023	1,010
10	0.023	1,009
11	0.019	849
12	0.019	848
13	0.019	847
14	0.032	1,385
15	0.043	1,888
16	0.031	1,332
17	0.033	1,453
18	0.034	1,498
19	0.029	1,274
20	0.026	1,145
21	0.033	1,443
22	0.037	1,599
23	0.026	1,146
24	0.032	1,406
25	0.026	1,145
26	0.020	881
27	0.028	1,233
28	0.028	1,211
29	0.020	881
30	0.020	881
31	0.016	704
32	0.016	704
33	0.016	704
34	0.032	1,408
35	0.036	1,554
36	0.027	1,180
37	0.027	1,180
38	0.027	1,180
39	0.032	1,407
40	0.036	1,548

BLOCK C

LOT NO.	ACRES	SQ. FT.
1	0.036	1,574
2	0.023	989
3	0.023	989
4	0.026	1,114
5	0.026	1,114
6	0.023	989
7	0.023	989
8	0.036	1,574
9	0.026	1,135
10	0.022	966
11	0.021	920
12	0.030	1,309
13	0.032	1,388
14	0.039	1,694
15	0.027	1,158
16	0.027	1,158
17	0.045	1,976
18	0.030	1,288
19	0.033	1,422
20	0.033	1,422
21	0.030	1,313
22	0.030	1,313
23	0.030	1,288
24	0.030	1,288
25	0.050	2,171
26	0.032	1,375
27	0.032	1,376
28	0.040	1,730
29	0.032	1,388
30	0.030	1,309
31	0.021	920
32	0.021	920
33	0.022	966
34	0.026	1,135

BLOCK D

LOT NO.	ACRES	SQ. FT.
1	0.028	1,198
2	0.022	940
3	0.022	940
4	0.031	1,340
5	0.040	1,740
6	0.030	1,290
7	0.030	1,317
8	0.030	1,313
9	0.041	1,784
10	0.022	946
11	0.022	946
12	0.027	1,161
13	0.030	1,323
14	0.024	1,029
15	0.022	980
16	0.023	993
17	0.021	920
18	0.024	1,029
19	0.032	1,396
20	0.033	1,445
21	0.023	993
22	0.022	945
23	0.022	945
24	0.022	945
25	0.022	945
26	0.032	1,390
27	0.027	1,178
28	0.027	1,178
29	0.027	1,156
30	0.024	1,046
31	0.024	1,044
32	0.027	1,191
33	0.030	1,309
34	0.024	1,042
35	0.024	1,044
36	0.024	1,045
37	0.024	1,045
38	0.024	1,044
39	0.036	1,585
40	0.017	742

H.O.A. LOTS

LOT NO.	ACRES	SQ. FT.
1X	0.056	
2X	0.026	
3X	0.151	
4X	0.028	
5X	0.056	
6X	0.446	
7X	0.169	
8X	0.307	
9X	0.169	
10X	0.130	
11X	0.169	
12X	0.307	
13X	0.114	
14X	0.078	
15X	0.078	
16X	0.114	
17X	0.078	

THE PURPOSE OF THIS REPLAT IS TO CREATE 258 LOTS, 17 COMMON AREAS AND DEDICATE RIGHT-OF-WAY.

REPLAT
ADDISON GROVE ADDITION
BLOCK A, LOTS 1-33, BLOCK B, LOTS 1-57
BLOCK C, LOTS 1-34, BLOCK D, LOTS 1-54
BLOCK E, LOT 1, BLOCK F, LOT 18X
OPEN SPACE LOTS 1X-17X
BEING A REPLAT OF LOT 1, BLOCK A

Kimley»Horn

13455 Noel Road, Two Galleria Office
Tower, Suite 700, Dallas, Texas 75240 FIRM # 10115500 Tel. No. (972) 241-1111 Fax No. (972) 241-1112

Scale 1" = 30'	Drawn by SRD	Checked by DAB	Date Dec. 2017	Project No. 064488001
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OWNERS CERTIFICATE

WHEREAS URBAN INTOWNHOMES, LTD., AND BELTLINE BELTWAY INVESTMENTS, LTD., are the owners of a tract of land situated in the Thomas L. Chenoweth Survey, Abstract No.273, Town of Addison, Dallas County, Texas and being all of Lot 1, Block A, of Sam's Club Addition, an addition to the Town of Addison, Texas according to the plat recorded in Volume 2004081, Page 210, Official Public Records of Dallas County, Texas and all of a tract of land described in Special Warranty Deed to Beltline Beltway Investments, Ltd. recorded in Instrument No. 201600029149, Official Public Records of Dallas County, Texas and all of a tract of land described in Special Warranty Deed to Urban Intownhomes, LLC, recorded in Instrument No. 201600028422, Official Public Records of Dallas County, Texas and being more particularly described as follows:

BEGINNING at a 5/8" iron rod with plastic cap stamped "RPLS 5199" found in the south right-of-way line of Bellline Road (a variable width right-of-way) at the northwest corner of Lot 2, Block A, of Sam's Club Addition, an addition to the Town of Addison, Texas according to the plat recorded in Instrument No. 92109, Page 3687, Official Public Records of Dallas County, Texas.

THENCE departing said south right-of-way line and with the west line of said Lot 2, Block A, South 0°01'29" West, a distance of 353.00 feet to a 5/8" iron rod with plastic cap found at the southwest corner of said Lot 2, Block A;

THENCE with the south line of said Lot 2, Block A, North 89°56'38" East, a distance of 203.48 feet to a 5/8" iron rod found in the west line of a tract of land described in Special Warranty Deed to Piedmont Midway Partners, L.P., recorded in Volume 2004009, Page 6138, Official Public Records of Dallas County, Texas at the southeast corner of said Lot 2, Block A;

THENCE with said west line of the Piedmont Midway Partners, L.P. tract, South 1°16'17" East, a distance of 110.56 feet to an 5/8" iron rod with aluminum disk set in concrete in the north line of Lot 3 of said Block A at the southwest corner of said Piedmont Midway Partners, L.P. tract;

THENCE with said north line, South 89°56'40" West, a distance of 95.80 feet to a 5/8" iron rod found at the northwest corner of said Lot 3, Block A;

THENCE with the west line of said Lot 3, Block A, South 0°01'22" West, a distance of 289.41 feet to a 1/2" iron rod found at the northeast corner of a tract of land described in Special Warranty Deed to the Town of Addison, recorded in Volume 200026, Page 5143, Deed Records of Dallas County, Texas;

THENCE departing said west line, North 89°59'45" West, a distance of 20.12 feet to a point at the bottom of a wall for corner;

THENCE with the south side of said wall, the following courses and distances to wit:

- South 86°25'51" West, a distance of 15.13 feet to a point at the bottom of a wall for corner;
South 66°05'06" West, a distance of 9.84 feet to a point at the bottom of a wall for corner;
South 64°24'55" West, a distance of 15.43 feet to a point at the bottom of a wall for corner;
South 62°33'01" West, a distance of 15.64 feet to a point at the bottom of a wall for corner;
South 66°53'41" West, a distance of 16.43 feet to a point at the bottom of a wall for corner;
South 77°20'26" West, a distance of 16.07 feet to a point at the bottom of a wall for corner;
South 80°25'39" West, a distance of 16.08 feet to a point at the bottom of a wall for corner;
South 81°22'40" West, a distance of 15.88 feet to a point at the bottom of a wall for corner;
South 87°30'56" West, a distance of 15.73 feet to a point at the bottom of a wall for corner;
South 89°02'45" West, a distance of 32.33 feet to a point at the bottom of a wall for corner;
North 89°58'45" West, a distance of 56.82 feet to a point at the bottom of a wall for corner;
North 89°47'47" West, a distance of 56.42 feet to a point at the bottom of a wall for corner;
South 0°11'10" East, a distance of 6.11 feet to a point at the bottom of a wall for corner;
South 89°48'50" West, a distance of 100.29 feet to a point at the bottom of a wall for corner;
South 0°02'45" East, a distance of 3.93 feet to a point at the bottom of a wall for corner;
South 89°57'15" West, a distance of 24.19 feet to a point at the bottom of a wall for corner;
South 0°26'51" West, a distance of 5.95 feet to a point at the bottom of a wall for corner;
North 89°41'07" West, a distance of 25.76 feet to a point at the bottom of a wall for corner;
North 0°17'44" West, a distance of 6.39 feet to a point at the bottom of a wall for corner;
South 89°29'58" West, a distance of 24.40 feet to a point at the bottom of a wall for corner;
South 0°49'14" East, a distance of 9.91 feet to a point at the bottom of a wall for corner;
South 89°22'24" West, a distance of 25.89 feet to a point at the bottom of a wall for corner;
North 0°00'40" West, a distance of 9.87 feet to a point at the bottom of a wall for corner;
North 89°57'30" West, a distance of 97.86 feet to a point at the bottom of a wall for corner;
South 0°44'00" West, a distance of 10.07 feet to a point at the bottom of a wall for corner;
South 89°54'09" West, a distance of 102.06 feet to a point at the bottom of a wall for corner;
North 0°22'23" West, a distance of 9.95 feet to a point at the bottom of a wall for corner;
North 89°52'21" West, a distance of 97.97 feet to a point at the bottom of a wall for corner;
South 0°51'19" West, a distance of 9.97 feet to a point at the bottom of a wall for corner;
North 89°50'57" West, a distance of 26.00 feet to a point at the bottom of a wall for corner;
North 1°14'11" East, a distance of 3.78 feet to a point at the bottom of a wall for corner;
North 89°49'51" West, a distance of 26.13 feet to a point at the bottom of a wall for corner;
North 0°02'44" West, a distance of 6.29 feet to a point at the bottom of a wall for corner;
South 89°12'06" West, a distance of 26.17 feet to a point at the bottom of a wall for corner;
South 1°57'19" East, a distance of 9.55 feet to a point at the bottom of a wall for corner;
South 88°16'03" West, a distance of 26.05 feet to a point at the bottom of a wall for corner;
North 0°03'54" East, a distance of 4.02 feet to a point at the bottom of a wall for corner;
South 89°59'51" West, a distance of 90.27 feet to a point at the bottom of a wall for corner;
North 1°06'48" East, a distance of 55.89 feet to a point at the bottom of a wall for corner;
North 89°04'49" West, a distance of 6.66 feet to a point at the bottom of a wall for corner;
North 0°18'29" East, a distance of 27.11 feet to a point at the bottom of a wall for corner;
South 89°41'31" East, a distance of 9.26 feet to a point at the bottom of a wall for corner;
North 1°13'10" East, a distance of 22.36 feet to a point at the bottom of a wall for corner;
North 89°41'31" West, a distance of 10.26 feet to a point at the bottom of a wall for corner;
North 0°13'28" East, a distance of 36.84 feet to a point at the bottom of a wall for corner;

THENCE departing said wall, North 89°22'28" West, a distance of 40.30 feet to a 5/8" iron rod with aluminum disk set in the east line of Pecan Square Condominiums, an addition to the Town of Flower Mound, Texas according to the plat recorded in Volume 82165, Page 1772, Deed Records of Dallas County, Texas;

THENCE with said east line and the east line of Lot 2A, Block 1, Belt Line Center, an addition to the Town of Addison, Texas according to the plat recorded in Volume 97243, Page 1, Deed Records of Dallas County, Texas, North 0°07'16" West, at a distance of 296.77 feet passing a "PK" nail found at the northeast corner of said Lot 2A, Block 1 and the southeast corner of Lot 1, Block 1, Belt Line Centre, an addition to the Town of Addison, Texas according to the plat recorded in Cabinet 92145, Page 3641, Deed Records of Dallas County, Texas, continuing with the west line of said Lot 1, Block 1, in all a total distance of 441.36 feet to a 5/8" iron rod found at the southwest corner of Lot 4 of said Block A, Sam's Club Addition;

THENCE departing said east line and with the south line of said Lot 4, Block A, South 89°24'12" East, a distance of 175.00 feet to a 5/8" iron rod with plastic cap stamped "KHA" set at the southeast corner of said Lot 4, Block A, from which a 5/8" iron rod found bears South 71°43' West, a distance of 0.4 feet;

THENCE with the east line of said Lot 4, Block A, North 0°07'14" West, a distance of 230.00 feet to a 5/8" iron rod with aluminum disk set in concrete in said south right-of-way line of Beltline Road at the northwest corner of said Lot 1, Block A, Sam's Club Addition;

THENCE with said south right-of-way line, the following courses and distances to wit:

- South 89°24'12" East, a distance of 173.70 feet to a "X" cut in concrete found for corner;
North 0°35'48" East, a distance of 15.00 feet to a "X" cut in concrete found for corner;
South 89°24'12" East, a distance of 202.08 feet to a 5/8" iron rod with plastic cap stamped "KHA" set at the beginning of a non-tangent curve to the left having a central angle of 11°45'03", a radius of 317.00 feet, a chord bearing and distance of South 76°02'24" East, 64.90 feet;
In a southeasterly direction, with said curve to the left, an arc distance of 65.01 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;
South 89°24'12" East, a distance of 312.32 feet to the POINT OF BEGINNING and containing 17.357 acres or 756,073 square feet of land.

OWNERS DEDICATION

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS:

That URBAN INTOWNHOMES, LTD., AND BELTLINE BELTWAY INVESTMENTS, LTD. ("Owners") do hereby adopt this plat designating the hereinabove property as ADDISON GROVE ADDITION, an addition to the Town of Addison, Texas, and subject to the conditions, restrictions and reservations stated hereinafter, owner dedicates to the public use the streets and alleys shown thereon.

This plat is approved by the Town of Addison and accepted by the owners(s), subject to the following conditions which shall be binding upon the owner(s), his heirs, grantees, successors, and assigns:

The easement shown on this plat are hereby reserved for the purposes as indicated, including, but not limited to, the installation and maintenance of water, sanitary sewer, storm drainage, election, telephone, gas and cable television. Owner shall have the right to use these easements, provided, however, that it does not unreasonably interfere or impede the provision of the services to others. Said utility easements are hereby being reserved by mutual use and accommodation of all public utilities using or desiring to use the express easement of ingress and egress is hereby expressly granted on, over and across all such easements for the benefit of the provider of services for which easements are reserved.

The proposed detention area easement(s) within the limits of this addition, will remain as detention area(s) to the line and grade shown on the plans at all times and will be maintained by the individual owner(s) of the lot or lots that are traversed by or adjacent to the detention area(s). The Town of Addison will not be responsible for the maintenance and operation of the detention area(s) or any damage or injury to private property or person that results from the flow of water along, into or out of said detention area(s), or for the control of erosion.

No obstruction to the natural flow of storm water run-off shall be permitted by filling or construction of any type of dam, building, bridge, fence, walkway or any other structure which would impede the flow of water in the detention area(s) unless approved by the Director of Public Works, provided; however, it is understood that in the event it becomes necessary for the Town of Addison to erect any type of drainage structure in order to improve the storm drainage that may be occasioned by the streets and alleys in or adjacent to the subdivisions, then, in such event, the Town of Addison shall have the right to enter upon the detention area(s) at any point, or points, to erect, construct and maintain any drainage facility deemed necessary for the purposes. Each property owner shall keep the detention area(s) traversing or adjacent to his property clean and free of debris, silt and any substance which would result in conditions or blockage of the drainage. The Town of Addison shall have the right of ingress and egress for the purpose of inspection and supervision of maintenance work on the detention area(s), or to alleviate any undesirable conditions, which may occur.

The detention area(s) as in the case of all detention areas are subject to storm water overflow(s) to an extent which cannot be clearly defined. The Town of Addison shall not be liable for any damages of any nature resulting from the occurrences of these natural phenomena, nor resulting from the failure of any structure or structures, within the detention area(s) or subdivision storm drainage system.

The detention area easement line identified on this plat shows the detention area(s) serving this addition.

Water main and sanitary sewer easements shall also include additional area of working space for construction and maintenance of the systems. Additional easement area conveyed for installation and maintenance of manholes, cleanouts, fire hydrants, water service and sewer services from the main to curb or pavement line, and the description of additional easements herein granted shall be determined by their locations as installed.

This plat is approved subject to all platting ordinances, rules, regulations and resolutions of the Town of Addison, Texas.

WITNESS, my hand, this 4th day of December, 2017.

URBAN INTOWNHOMES, LTD., a Texas limited partnership

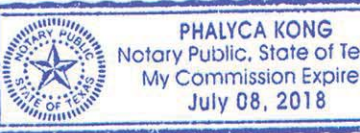
By: URBAN INTOWNHOMES GP, LLC, a Texas limited liability company (its Manager) STATE OF TEXAS \$
COUNTY OF HARRIS \$

By: Carmen Pearson Vice President

BEFORE ME, the undersigned Authority, A Notary Public in and for said county and state, on personally appeared Carmen Pearson, the Vice President of Urban Intownhomes, GP, LLC, limited liability company acting as Manager of Urban Intownhomes, Ltd., a Texas limited partnership on behalf of said limited partnership.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS 4th DAY OF December, 2017.

NOTARY PUBLIC in and for the STATE OF TEXAS



BELTLINE BELTWAY INVESTMENTS, LTD., a Texas limited partnership

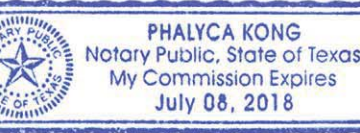
By: Country Lane GP, LLC, a Texas limited liability company (its General Partner) STATE OF TEXAS \$
COUNTY OF HARRIS \$

By: David Foor Vice President

BEFORE ME, the undersigned Authority, A Notary Public in and for said county and state, on personally appeared David Foor, Vice President of Country Lane GP, LLC, a Texas limited liability company acting as General Partner of Beltline Beltway Investments, Ltd., a Texas limited partnership on behalf of said limited partnership.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS 4th DAY OF December, 2017.

NOTARY PUBLIC in and for the STATE OF TEXAS



The lien holder or mortgagee concurs with the Owner's Certificate and agrees to subordinate its interests to the provisions of the Owner's Dedication.

Lien holder:

Texas Capital Bank, N.A.

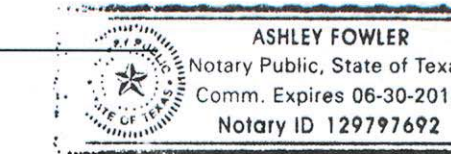
By: Sabrina Chou Vice President

Title:

STATE OF TEXAS
COUNTY OF HARRIS

This instrument was acknowledged before me on December 4, 2017 by Sabrina Chou, as Vice President, of Texas Capital Bank, a National Association, on behalf of said national banking association.

Notary Public in and for the State of Texas



APPROVED BY THE PLANNING AND ZONING COMMISSION OF THE TOWN OF ADDISON, TEXAS ON August 15, 2017.

Kristy McWhorter Vice Chair, Planning and Zoning Commission

Christie Wilson City Secretary



THE PURPOSE OF THIS REPLAT IS TO CREATE 258 LOTS, 17 COMMON AREAS AND DEDICATE RIGHT-OF-WAY.

REPLAT ADDISON GROVE ADDITION

BLOCK A, LOTS 1-33, BLOCK B, LOTS 1-57 BLOCK C, LOTS 1-34, BLOCK D, LOTS 1-54 BLOCK E, LOT 1, BLOCK F, LOT 18X OPEN SPACE LOTS 1X-17X

BEING A REPLAT OF LOT 1, BLOCK A SAM'S CLUB ADDITION

Conformed Copy Official Public Records John F. Warren, County Clerk Dallas County, TEXAS 12/19/2017 02:33:47 PM \$139.00



201700353297

NOTES:

Notice: Selling a portion of this addition by metes and bounds is a violation of Town ordinance and state law and is subject to fines and withholding of utilities and building permits.

Zoning: PD-324-Townhome; Built to Patio Home Standards

All driveways shall access the alleys; no driveways may access streets

Placement of street trees shall not interfere with the placement of traffic control devices or visibility at intersections. Existing and future traffic control devices may require the removal or preclude the planting of street trees.

Development standards of this plat shall comply with Appendix A of the Addison Code of Ordinances.

No floodplain exists on the site

SURVEYORS CERTIFICATION

KNOW ALL MEN BY THESE PRESENTS:

I, DANA BROWN, a Registered Professional Land Surveyor in the State of Texas, do hereby declare that I have prepared this plat from an actual on the ground survey of the land, and that the corner monuments shown thereon were properly placed under my personal supervision in accordance with Subdivision Regulations of the Town of Addison, Texas.

Dana Brown Registered Professional Land Surveyor #5336 Kimley-Horn and Associates, Inc. 13455 Noel Road, Two Galleria Office Tower, Suite 700 Dallas, Texas 75240 972-770-1300

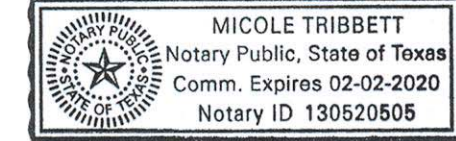


STATE OF TEXAS \$
COUNTY OF DALLAS \$

BEFORE ME, the undersigned authority, a Notary Public, on this day personally appeared Dana Brown, known to me to be the person whose name is subscribed to the foregoing instruments, and acknowledged to me that he executed the same for the purpose and considerations therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 4th day of December, 2017.

Notary Public in and for the STATE OF TEXAS



Kimley-Horn

13455 Noel Road, Two Galleria Office Tower, Suite 700, Dallas, Texas 75240 FIRM # 10115500 Tel. No. (972) 770-1300 Fax No. (972) 770-1300

Table with 5 columns: Scale, Drawn by, Checked by, Date, Project No. Values: n/a, SRD, DAB, Dec. 2017, 064488001