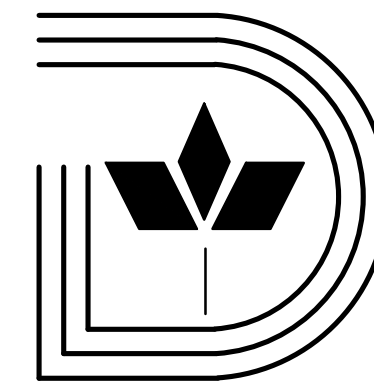


WHITE ROCK NORTH TRANSMISSION MAIN AIR VALVE IMPROVEMENTS AT VARIOUS LOCATIONS



Dallas Water Utilities City Of Dallas, Texas

Contract No. : 20 - 001/002
May, 2020

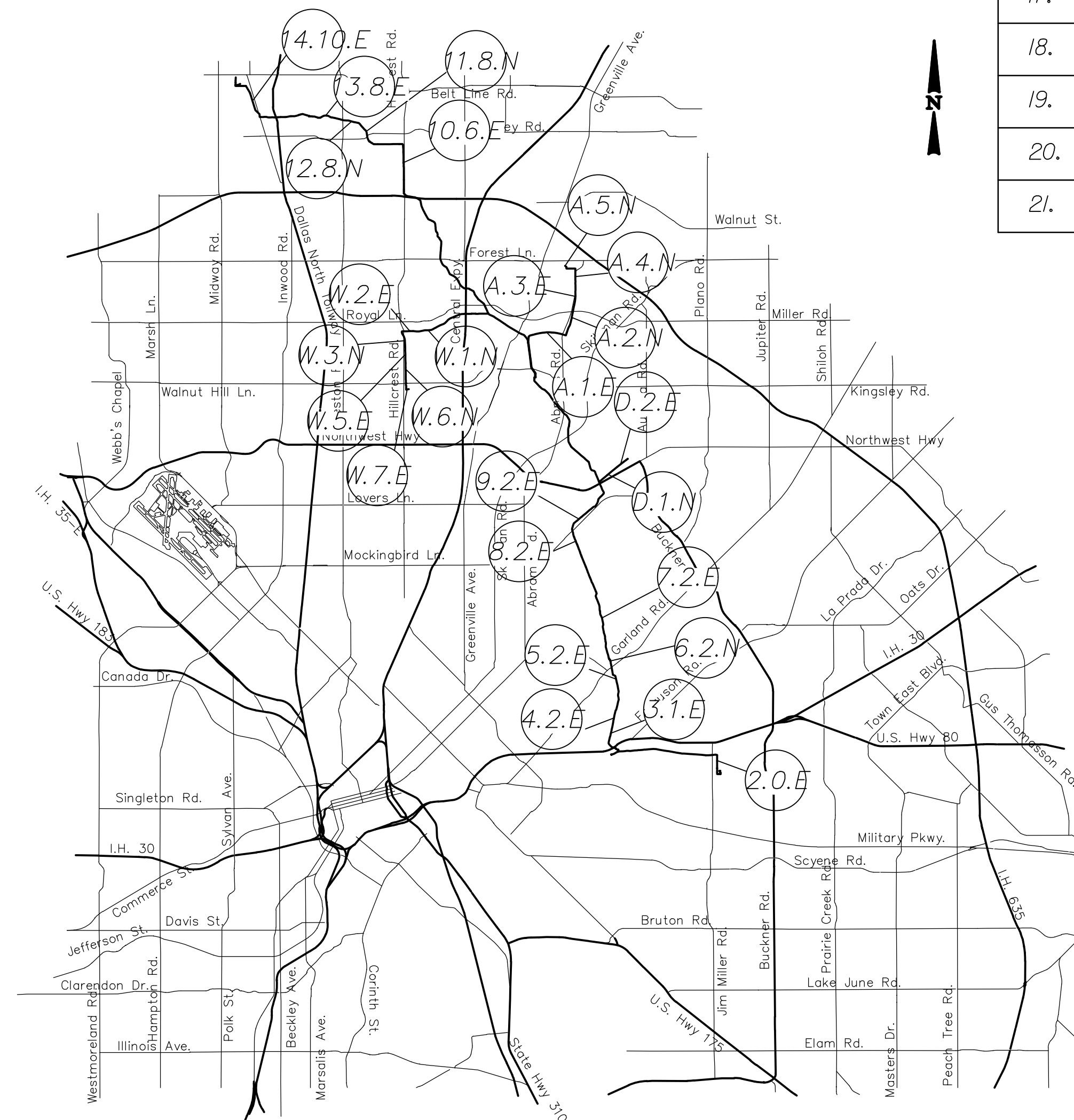
ISSUED FOR BID

SHEET INDEX

NO.	DESCRIPTION	DESIGN SHEET
1.	Title sheet, Location Map, Drawings Index	685W - 660 Sht. 24
2.	General Notes and Legend	685W - 660 Sht. 25
3.	Project specific notes	685W - 660 Sht. 26
4.	Valves Location Map and Valves schedule	685W - 660 Sht. 27
5.	SWPPP Plan and Details	685W - 660 Sht. 28
6.	Valve 2.0.E, Sta. 6+83 - valve 3.1.E, Sta. 113+04	685W - 660 Sht. 29
7.	Valve 4.2.E, Sta. 143+95 - valve 5.2.E, Sta. 162+50	685W - 660 Sht. 30
8.	Valve 6.2.N, Sta. 174+00 - valve 7.2.E, Sta. 184+60	685W - 660 Sht. 31
9.	Valve 8.2.E, Sta. 194+40 - valve 9.2.E, Sta. 208+60	685W - 660 Sht. 32
10.	Valve 10.6.E, Sta. 042+41 - valve 11.8.N, Sta. 140+00	685W - 660 Sht. 33
11.	Valve 12.8.N, Sta. 150+00 - valve 13.8.E, Sta. 167+00	685W - 660 Sht. 34
12.	Valve 14.10.E, Sta. 033+90	685W - 660 Sht. 35

SHEET INDEX

NO.	DESCRIPTION	DESIGN SHEET
13.	Valve D.1.N, Sta. 027+50 AND valve D.2.E, Sta. 032+19	685W - 660 Sht. 36
14.	Valve A.1.E, Sta. 020+75 AND valve A.2.N, Sta. 043+50	685W - 660 Sht. 37
15.	Valve A.3.E, Sta. 049+00 AND A.4.N, Sta. 086+00 AND A.5.N Sta. 095+50	685W - 660 Sht. 38
16.	W.1.N Sta. 036+20, W.2.E Sta. 048+00 W.3.N Sta. 005+50, W.4.E Sta. 011+00	685W - 660 Sht. 39
17.	Valve W.5.E, Sta. 025+00, W.6.N Sta. 040+0, W.7.E Sta. 049+40	685W - 660 Sht. 40
18.	New ARV Installation Details I	685W - 660 Sht. 41
19.	New ARV Installation Details II	685W - 660 Sht. 42
20.	New ARV Installation Details III	685W - 660 Sht. 43
21.	Pipe Joint Replacement and Tapping Details	685W - 660 Sht. 44



DATE: 05/07/2020

GENERAL LEGENDS

GENERAL NOTES

GENERAL

- EXIST. PARCEL LINE
 - - - - - EXIST. EASEMENT
- ### WATER MAINS & APPURTENANCES
- - - - - EXIST. WATER MAIN
 - EXIST. 90°, 84°, 54° WHITE ROCK NORTH TRANSMISSION MAIN
 - AIR VENT LOCATION
 - EXISTING COMBINATION AIR RELEASE VALVE
 - PROP. VACUUM RELIEF/AIR RELEASE VALVE

WASTEWATER MAINS & APPURTENANCES

- EXIST. WASTEWATER MAIN
- ⊙ EXIST. WASTEWATER MANHOLE

PROJECT CONTACTS

DWU PROJECT MANAGER: JAMES MCOJERY (214) 671-8030
 DWU DISTRIBUTION DIVISION: - (214) 670-8042
 DWU WASTEWATER COLLECTION DIVISION: - (214) 670-8331
 CITY OF DALLAS PW&T - STREET CUTS: - (214) 670-4491
 CITY OF DALLAS PW&T - STORMWATER: - (214) 948-4014
 CITY OF DALLAS PW&T - TRAFFIC CONTROL: ROBERT SHERRON (214) 948-4149

GENERAL

1. CONTRACTOR SHALL NOTIFY AND COORDINATE TREE CUT AND RESTORATION WITH THE CITY OF DALLAS PARKS AND RECREATION DEPARTMENT.
2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS (NCTCOG) STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (5TH EDITION) AND CITY OF DALLAS ADDENDUM (OCTOBER, 2011) TO THESE SPECIFICATIONS.
3. REFERENCE TO STANDARD DRAWINGS SHALL MEAN THOSE SHOWN IN THE DWU STANDARD DRAWINGS FOR WATER & WASTEWATER CONSTRUCTION (OCTOBER, 2017).
4. ALL ITEMS OF WORK REQUIRED TO COMPLETE THE WORK AS SHOWN OR IMPLIED BY THE PLANS AND AS SPECIFIED IN THE CONTRACT DOCUMENTS WHICH ARE NOT LISTED AS A PAY ITEM IN THE PROPOSAL SHALL BE CONSIDERED SUBSIDIARY.
5. THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES SHOWN ON THE PLANS AS OBTAINED FROM THE CITY OF DALLAS ARE CONSIDERED APPROXIMATE. THE ENGINEER DOES NOT CERTIFY THAT ALL UTILITIES ARE SHOWN. THE CONTRACTOR SHALL VERIFY EXACT LOCATIONS, SIZES AND DEPTHS OF EXISTING UTILITIES BEFORE BEGINNING CONSTRUCTION (INCLUDING ORDERING PRE-CAST MANHOLES AND CONCRETE PIPE IF APPLICABLE). NO SEPARATE PAY ITEM.
6. THE CONTRACTOR SHALL CONTACT TEXAS EXCAVATION SAFETY SYSTEM (800-DIG-TESS; 800-344-8377) AND RELEVANT UTILITY COMPANIES 48 HOURS PRIOR TO LOCATING EXISTING UTILITIES AND/OR CONSTRUCTION ACTIVITIES.
7. THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING UTILITIES AT ALL TIMES DURING CONSTRUCTION. ANY DAMAGE TO UTILITIES RESULTING FROM THE CONTRACTOR'S OPERATION SHALL BE RESTORED AT HIS EXPENSE.
8. THE CONTRACTOR SHALL SUPPORT TELEPHONE CONDUITS, STORM DRAINS, WATER AND WASTEWATER MAINS WHEN GOING UNDER SAID UTILITIES. NO SEPARATE PAY ITEM.
9. POWER POLES MAY HAVE TO BE BRACED AT THE CONTRACTOR'S EXPENSE.
10. NO MACHINERY, CONSTRUCTION ACCESS OR STORAGE SHALL BE ALLOWED ON PARK PROPERTY BEYOND THE LIMITS OF THE TEMPORARY WORKSPACE AS DEFINED BY THE CITY OF DALLAS INSPECTOR.

TRAFFIC CONTROL

1. THE CONTRACTOR SHALL DEVELOP A TRAFFIC CONTROL PLAN IN ACCORDANCE WITH THE CITY OF DALLAS TRAFFIC BARRICADE MANUAL, LATEST EDITION AND THE TXDOT TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD), LATEST VERSION AS NECESSARY. NO SEPARATE PAY ITEM. CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLAN IN THE ROW MANAGEMENT SYSTEM.
2. THE DIVERSION OF PEDESTRIANS AND VEHICLES DURING THE PROGRESS OF THE WORK SHALL BE IN A MANNER SATISFACTORY TO THE CITY OF DALLAS INSPECTOR.
3. THE CONTRACTOR SHALL COORDINATE ALL TRAFFIC VARIANCES WITH TRAFFIC SAFETY COORDINATORS ASSIGNED BY THE, CITY OF DALLAS PUBLIC WORKS & TRANSPORTATION.
4. TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES AND FLAGMEN SHOULD BE USED TO MAINTAIN TWO-WAY TRAFFIC AS NECESSARY.
5. ALL BARRICADES, WARNING SIGNS AND TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE CITY OF DALLAS STANDARDS. NO SEPARATE PAY ITEM.
6. WHEN CLOSING SIDE STREETS, TWO WORKING DAYS NOTIFICATION IS REQUIRED FOR FIRE, POLICE, STREETS AND SANITATION DEPARTMENTS. PLEASE CONTACT DEPARTMENT OF TRANSPORTATION AT 214-670-6904 AND DEPARTMENT OF PUBLIC WORKS AT 214-670-4491.
7. CONTRACTOR SHALL MAINTAIN ACCESS TO PRIVATE DRIVEWAYS AT ALL TIMES DURING CONSTRUCTION. NO SEPARATE PAY ITEM.
8. VEHICULAR INGRESS AND EGRESS (ENTRANCE AND EXIT) TO A BUSINESS PROPERTY SHALL BE MAINTAINED AT ALL TIME. IF NOT, SPECIFIC SIGNS ALONG WITH BUSINESS NAME AND DIRECTION (ARROWS) SHALL BE USED FOR ANY TEMPORARY ACCESS LOCATIONS. ADDITIONAL SIGNS MAY BE NECESSARY IF THERE IS A DETOUR. NO SEPARATE PAY ITEM.

PAVEMENT REPLACEMENT

1. CONTRACTOR SHALL SUBMIT REQUEST FOR PERMIT TO CUT IN THE ROW MANAGEMENT SYSTEM.
2. SAWCUT, REMOVAL AND REPLACEMENT OF PAVEMENTS, SIDEWALKS, CURBS AND GUTTERS SHALL CONFORM TO CITY OF DALLAS PUBLIC WORKS & TRANSPORTATION, PAVEMENT CUTS & REPAIR STANDARDS MANUAL, LATEST EDITION.
3. ALL DISTURBED PAVEMENT MARKINGS INCLUDING, BUT NOT LIMITED TO, STRIPING, TRAFFIC BUTTONS AND CROSSWALKS SHALL BE RESTORED TO THE SAME OR IMPROVED CONDITION AS PER CITY OF DALLAS SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION STANDARD CONSTRUCTION DETAILS AND ALL ADDENDA THERE TO. NO SEPARATE PAY ITEM.

TREES AND LANDSCAPING

1. CONTRACTOR SHALL NOT DAMAGE OR REMOVE ANY TREES OR LANDSCAPING UNLESS OTHERWISE AUTHORIZED BY THE CITY OF DALLAS INSPECTOR. ANY TREES OR LANDSCAPING THAT ARE DAMAGED OR REMOVED DURING THE CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

ADVANCE METERING INFRASTRUCTURE

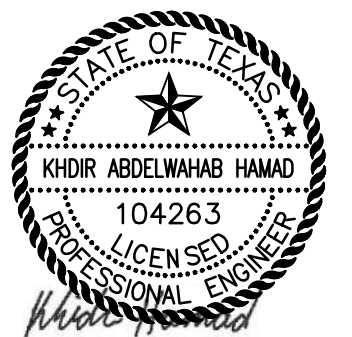
1. CAUTION! ADVANCED METERING INFRASTRUCTURE (AMI) METERS IN THE AREA. CONTRACTOR SHALL NOT REMOVE, DAMAGE, OR OTHERWISE DISTURB AMI METER ENDPOINT COMPONENTS UNLESS OTHERWISE DIRECTED BY THE DWU METER READING OPERATION (MRO) TECHNICIAN.
2. CONTRACTOR SHALL CONTACT MRO FIVE (5) WORKING DAYS IN ADVANCE AT 214-670-5537 AND EMAIL: DMUMRO@dallascityhall.com, IF ANY AMI COMPONENTS SHALL BE DISCONNECTED, RECONNECTED, REMOVED OR INSTALLED.
3. ALL DAMAGED AMI METERS AS A RESULT OF CONSTRUCTION SHALL BE RESTORED OR REPLACE BY THE CONTRACTOR PER DWU STANDARDS. NO SEPARATE PAY ITEM.
4. FOR METERS 3" OR LARGER, THE CONTRACTOR SHALL EITHER CONNECT TO THE EXISTING METER VAULT OR CONSTRUCT A NEW METER VAULT AS SPECIFIED ON THE PLANS.
5. CONTRACTOR SHALL BE LIABLE FOR THE REPLACEMENT COST OF ANY LOST OR DAMAGED AMI COMPONENTS.
6. ALL METERS IN THE PROPOSED AND EXISTING AMI AREA SHALL BE AMI-READY METER AS FURNISHED BY DWU. A NON AMI-READY METER SHALL BE REPLACED WITH AN AMI-READY METER BY DWU.

WATER MAIN AND APPURTENANCES

1. THE CONTRACTOR WILL ENSURE THAT FIRE HYDRANTS ARE ACCESSIBLE TO FIRE TRUCKS AT ALL TIMES. NO SEPARATE PAY ITEM.

WASTEWATER MAIN AND APPURTENANCES

1. THE CONTRACTOR SHALL MAINTAIN EXISTING WASTEWATER FLOW AT ALL TIMES. NO SEPARATE PAY ITEM.



DATE: 05/07/2020



1240 Coit Road, Suite 400
Dallas, TX, 75231
Tel: (214) 346-2800
TBPE Firm Registration No. F-3043

CONTRACT NO. 20-001/002		PID: -			
WRNTM AIR VALVE IMPROVEMENTS					
GENERAL NOTES AND LEGEND					
DALLAS WATER UTILITIES					
CITY OF DALLAS, TEXAS					
DESIGN	DRAWN	DATE	FILE	NUMBER	SHEET
KH	AG	MAY 2020	685W	660	25

PROJECT NOTES:

1. THE WORK COVERED BY THIS CONTRACT INCLUDES REPLACEMENT OF EXISTING AIR VALVES ASSEMBLIES AT SELECTED LOCATIONS AND INSTALLATION OF A COMPLETE NEW AIR VALVE (GATE VALVES, VACUUM RELIEF VALVES, AIR RELEASE VALVES, VENT PIPING, MANHOLE AND OTHER INCIDENTALS) AT SELECTED LOCATIONS. ALL WORK, WHETHER REPLACEMENT OF EXISTING AIR VALVES OR INSTALLATION OF NEW AIR VALVES, IS TIME-CRITICAL AS PORTIONS OF THE SYSTEM WILL BE OUT OF SERVICE DURING THIS WORK. MULTIPLE CREWS MAY BE REQUIRED TO COMPLETE THE WORK WITHIN THE ALLOTED CONTRACT TIME. CONTRACTOR WILL SUBMIT A DETAILED PLAN IDENTIFYING PROPOSED WORK ACTIVITIES, CREWS, SCHEDULE FOR EACH SITE.
2. THE CONTRACTOR SHALL INCLUDE ALL NECESSARY SUPERVISION, EQUIPMENT, LABOR, AND MATERIAL TO COMPLETE WORK AS SHOWN ON THESE DRAWINGS.
3. ALL MATERIAL AND WORKMANSHIP SHALL CONFORM TO THE LATEST EDITIONS OF THE FOLLOWING SPECIFICATIONS UNLESS OTHERWISE INDICATED IN THE PROJECT DRAWINGS AND/OR SPECIFICATIONS.
 - A. CITY OF DALLAS - WATER DEPARTMENT - STANDARD DRAWINGS FOR WATER AND WASTEWATER CONSTRUCTION
 - B. NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS - STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 4TH EDITION
 - C. CITY OF DALLAS - DALLAS WATER UTILITIES - ADDENDUM TO NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENT STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION
 - D. AWWA AND ASTM STANDARDS AS APPLICABLE.
4. COORDINATES SHOWN ARE APPROXIMATE HORIZONTAL PROJECTION FROM GIS MAPPING FOR THE GENERAL LOCATION OF WORK SITES.
5. CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF SAFETY SYSTEMS DURING CONSTRUCTION TO PROTECT EMPLOYEES, AGENTS, REPRESENTATIVES, AND VISITORS IN THE PERFORMANCE OF THE WORK.
6. CONTRACTOR SHALL DISPOSE OF EXISTING UTILITIES REMOVED DURING CONSTRUCTION (NO EXTRA PAY ITEM).
7. NOT ALL UTILITIES ARE SHOWN ON THE PLANS. LOCATIONS OF ALL UTILITIES, IF SHOWN ON THE PLANS, ARE APPROXIMATE AND BASED ON THE INFORMATION AVAILABLE TO THE ENGINEER. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION, ELEVATIONS, AND DIMENSIONS OF ALL EXISTING FACILITIES ABOVE OR BELOW GROUND PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITIES FOR LOCATING FACILITIES ALONG THE VICINITY OF THIS PROJECT. THE COST OF LOCATING THESE UTILITIES IN ADVANCE OF CONSTRUCTION SHALL BE SUBSIDIARY TO THE BID PRICES. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES SUFFICIENTLY IN ADVANCE OF THE CONSTRUCTION TO ALLOW TIME FOR CONFLICT RESOLUTION WITH NO IMPACT TO THE CONTRACT SCHEDULE.
8. WATER USED TO PERFORM WORK AS REQUIRED IN THIS CONTRACT AND FOR TESTING IS CONSIDERED SUBSIDIARY. CONTRACTOR SHALL INSTALL A METER. WATER USED FOR CONSTRUCTION OR TESTING SHALL NOT BE A SEPARATED PAY ITEM.
9. CONTRACTOR SHALL ALLOCATE BOTH MANPOWER AND EQUIPMENT TO THE PROJECT ON A CONTINUOUS BASIS EACH AND EVERY WORKDAY TO COMPLY WITH SHUT DOWN SCHEDULE AND PROJECT COMPLETION DATE WITHOUT DELAY. NIGHTTIME, WEEKENDS, AND /OR EXTENDED HOURS MAY BE REQUIRED TO COMPLY WITH SHUT DOWN SCHEDULE.
10. CONTRACTOR SHALL PROVIDE A STORM WATER POLLUTION PREVENTION PLAN FOR THIS PROJECT IN ACCORDANCE WITH ALL FEDERAL AND STATE REGULATIONS. THE COST OF THE PLAN SHALL BE A BID ITEM.
11. SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS AND THE APPROVED STORM WATER POLLUTION PREVENTION PLAN PRIOR TO ANY EXCAVATION WORK ON THIS PROJECT. SEDIMENT AND EROSION CONTROL DEVICES AND ACCUMULATED SEDIMENT SHALL BE REMOVED FROM THE PROJECT AND DISPOSED OF IN AN APPROVED MANNER AFTER THE PROJECT IS COMPLETED AND STABILIZED.
12. THE CONTRACTOR SHALL VERIFY ALL EXISTING FACILITIES, CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE OWNER'S REPRESENTATIVE OF ANY OMISSIONS, DISCREPANCIES, OR DIMENSIONAL ERRORS IN THESE DRAWINGS OR SPECIFICATIONS PRIOR TO BEGINNING OR FABRICATING ANY WORK OR MATERIALS. OTHERWISE THE CORRECTIONS AND ASSOCIATED COST WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. NO SEPARATE PAY ITEM.
13. THE CONTRACTOR'S ACTIVITIES ALONG THE PIPELINE ROUTE SHALL BE LIMITED TO THE RIGHTS-OF-WAY AND CONSTRUCTION LIMITS SHOWN ON THE DRAWINGS. CONTRACTOR SHALL MAINTAIN CONSTRUCTION FOOTPRINT TO THE MINIMUM LIMIT TO PERFORM THE WORK. DAMAGES RESULTING FROM THE CONTRACTOR'S USE OF RIGHTS OF INGRESS AND EGRESS SHALL BE PAID FOR BY THE CONTRACTOR. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE FOR ADDITIONAL AREAS THAT MAY BE REQUIRED FOR HIS OPERATIONS INCLUDING ACCESS ROADS TO WORK AREAS OR TO LINK UP WITH ANY ROAD WITHIN THE LIMITS OF OPERATION, AND THE CONTRACTOR SHALL BEAR ALL COSTS, LIABILITIES, AND RESPONSIBILITIES IN CONNECTION WITH SUCH ACTIVITIES.
14. INGRESS AND EGRESS OF OWNERS AND LEASES OF PROPERTY ADJACENT TO THE CONSTRUCTION RIGHTS-OF-WAY SHALL BE MAINTAINED BY THE CONTRACTOR AT ALL TIMES DURING CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH IMPACTED BUSINESSES AND RESIDENTS TWO WEEKS PRIOR TO BEGINNING CONSTRUCTION.
15. ALL EXISTING MONUMENT, PROPERTY PINS, OR IRON RODS SHALL BE PRESERVED BY THE CONTRACTOR. IF ANY OF THESE ITEMS NEEDS TO BE REMOVED OR DISRUPTED TO ACCOMMODATE CONSTRUCTION, THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR REPLACING IT BACK TO ITS ORIGINAL LOCATION AND/OR ELEVATION AT THE CONTRACTOR'S EXPENSE.
16. EXISTING PAVING, BUILDINGS, AND OTHER ITEMS SHOWN ON THESE PLANS THAT ARE NOT SPECIFICALLY RELATED TO THE WORK OF THE CONTRACTOR, ARE FOR INFORMATION ONLY.
17. THE CONTRACTOR IS TO COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REQUIREMENTS REGARDING EXCESS AND WASTE MATERIAL, INCLUDING METHODS OF HANDLING AND DISPOSAL.
18. THE CONTRACTOR SHALL REMOVE FROM THE PROJECT AREA ALL TRASH, DEBRIS, UNSUITABLE AND EXCESS MATERIAL, DEMOLISHED PIPE, REMOVED FENCING AND GATES, ETC. ALL SUCH MATERIAL SHALL BE DISPOSED OF OFF THE PROJECT UNLESS OTHER AGREEMENTS ARE MADE BETWEEN THE PROPERTY OWNERS AND THE CONTRACTOR.
19. THE CONTRACTOR MUST HAVE A WRITTEN AGREEMENT WITH THE PROPERTY OWNER ON FILE WITH THE CITY BEFORE THE CONTRACTOR MAY USE OR PLACE ANY MATERIAL OR EQUIPMENT ON PRIVATE PROPERTY. LETTERS OF FINAL APPROVAL AND RELEASE FROM THE AFFECTED PROPERTY OWNERS MUST BE SUBMITTED TO THE CITY BEFORE FINAL PAYMENT WILL BE AUTHORIZED ON THIS PROJECT.
20. MATERIAL MAY NOT BE STOCKPILED IN EXCESS OF DAILY USE REQUIREMENTS WITHIN THE 100-YEAR FLOODPLAIN.
21. INTENTIONAL RELEASE OF VEHICLE OR EQUIPMENT FLUIDS ONTO THE GROUND IS NOT ALLOWED. CONTAMINATED SOIL RESULTING FROM AN ACCIDENTAL SPILL IS TO BE REMOVED AND DISPOSED OF PROPERLY AT THE CONTRACTOR'S EXPENSE.
22. CONTRACTOR SHALL PROVIDE ALL WARNING LIGHTS, BARRICADES AND OTHER ITEMS REQUIRED FOR THE PROTECTION OF LIVESTOCK, PERSONNEL AND THE PUBLIC.
23. IT IS THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY AND FIELD VERIFY ALL FENCES, MONUMENTS, FEATURES, CREEKS, PONDS, STRUCTURES, (HOUSES, BARN, ETC) AND OTHER OBSTRUCTIONS THAT COULD IMPACT SITE ACCESS. ALL FEATURES SHALL BE RESTORED TO ORIGINAL CONDITION UPON CONSTRUCTION COMPLETION.
24. STORAGE YARDS OR STAGING AREAS FOR CONTRACTOR USE SHALL BE CONFINED TO THE INDIVIDUAL WORK SITES OR CONTRACTOR'S OWN SITE OWNED BY THE CONTRACTOR. SUCH YARDS AND AREAS ARE CONSIDERED SUBSIDIARY TO THE WORK.
25. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING REQUIRED SECURITY TO PROTECT MATERIALS, EQUIPMENT AND WORK COMPLETED OR IN PROGRESS.
26. NO HEAVY CONSTRUCTION EQUIPMENT WILL BE ALLOWED TO CROSS OR BE ALLOWED OVER THE EXISTING 90-INCH, 84-INCH AND 54-INCH TRANSMISSION LINES. NO PILE DRIVING OR USE OF VIBRATORY HAMMERS WILL BE PERMITTED.
27. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN A MANNER SUCH THAT TRUCKS AND OTHER VEHICLES DO NOT CREATE A DIRT NUISANCE OR SAFETY HAZARD IN ANY STREETS OR ROADWAYS, PUBLIC OR PRIVATE.
28. THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE OF STORMWATER RUNOFF THROUGHOUT CONSTRUCTION AND AT THE COMPLETION OF CONSTRUCTION. THE CONTRACTOR IS TO LEVEL WASHES, RUTS, DEPRESSIONS, AND MOUNDS TO GIVE THE AREA A SMOOTH FINISH.
29. WATER AND SEWER AS-BUILT RECORDS ARE AVAILABLE AND CAN BE PROVIDED TO CONTRACTOR UPON REQUEST.
30. ANY WORK REQUIRED TO COMPLETE THIS JOB, WHERE THERE IS NO PAY ITEM, SHALL BE INCIDENTAL TO THE CONTRACT.
31. FOR WORK PERFORMED UNDER AND IN THE VICINITY OF POWER LINES, THE CONTRACTOR MUST COMPLY WITH HEALTH AND SAFETY CODE-TITLE 9, SAFETY-SUBTITLE A, PUBLIC SAFETY-CHAPTER 752, HIGH VOLTAGE OVERHEAD LINES, THE NATIONAL ELECTRICAL CODE, AND ONCOR ELECTRIC DELIVERY COMPANY'S CLEARANCE REQUIREMENTS.
32. NO CONSTRUCTION EQUIPMENT OR CONSTRUCTION TRAFFIC ARE ALLOWED TO CROSS ANY RAILROADS NOR WITHIN THE RAILROAD EASEMENTS OR RIGHTS-OF-WAY.

COORDINATION

1. THE CONTRACTOR SHALL LOCATE EXISTING UTILITIES NEAR THE CONSTRUCTION SITE. NO UTILITY PLANS WERE OBTAINED FROM THE CITY OF DALLAS OR UTILITY COMPANIES. THE CONTRACTOR SHALL VERIFY EXACT LOCATIONS, SIZES, AND DEPTHS OF EXISTING UTILITIES BEFORE BEGINNING OF CONSTRUCTION.
2. THE CONTRACTOR SHALL NOTIFY ONE-CALL BOARD OF TEXAS (800-545-6005), DIG-TESS (800-DIG-TESS), AND ANY OTHER UTILITY OWNERS AT LEAST 72 HOURS PRIOR TO BEGINNING ANY WORK INVOLVING EXCAVATION OR DIGGING.
3. THE CONTRACTOR SHALL COORDINATE ALL ACTIVITIES WITH OWNER BEFORE CONSTRUCTION.
4. THE CONTRACTOR SHALL ARRANGE FOR OTHERS TO COMPLETE ALL GAS, TELEPHONE, CABLE AND POWER LINE ADJUSTMENTS. THE TIME REQUIRED TO COMPLETE THESE ADJUSTMENTS SHALL NOT BE CONSIDERED AS SUFFICIENT BASIS FOR A CLAIM TO ADJUST PAY QUANTITIES OR THE TIME ALLOTTED FOR COMPLETION OF THE PROJECT.
5. THE CONTRACTOR SHALL COORDINATE SHUTDOWNS WITH THE DALLAS WATER UTILITIES.
6. THE CONTRACTOR SHALL COORDINATE ANY STREET OR PEDESTRIAN TRAIL CLOSURE WITH THE CITY OF DALLAS, AND SHALL RECEIVE PRIOR WRITTEN APPROVAL FOR ANY LANE CLOSURES (NO EXTRA PAY ITEM).

7. THE CONTRACTOR SHALL COORDINATE SITE ACCESS WITH OWNER.
8. THE CONTRACTOR SHALL ATTEND WEEKLY MEETINGS WITH DWU PIPELINE PROGRAM, ENGINEERING SERVICES, AND DISTRIBUTION DURING CONSTRUCTION.
9. THE CONTRACTOR IS RESPONSIBLE FOR ACQUISITION OF ANY USAGE, ACCESS, STREET CUT, TRAFFIC CONTROL, OR ANY OTHER PERMITS FROM THE CITY OF DALLAS NECESSARY TO COMPLETE WORK.
10. THE CONTRACTOR IS RESPONSIBLE FOR ACQUISITION OF ANY USAGE, ACCESS, CONSTRUCTION, OR ANY OTHER PERMITS FROM ONCOR FOR ANY WORK WITHIN ONCOR EASEMENTS OR RIGHTS-OF-WAY.

PIPE

1. AT THE END OF EACH DAY, ALL EXCAVATIONS SHALL BE SAFELY COVERED AND SECURED.
2. THE CONTRACTOR SHALL IMMEDIATELY REPORT ANY DAMAGE TO THE PIPE EITHER BEFORE OR AFTER INSTALLATION TO THE OWNER AND ENGINEER. THE OWNER AND ENGINEER SHALL REVIEW AND APPROVE ALL REPAIR METHODS BEFORE THE CONTRACTOR INITIATES ANY REPAIRS. THE OWNER AND ENGINEER RESERVE THE RIGHT TO DETERMINE AND ACCEPT METHOD OF REPAIR OR MAY REQUIRE THE CONTRACTOR TO REMOVE THE DAMAGED PIPE SEGMENT AND REPLACING DAMAGED PIPE WITH NEW PIPE. PIPE HANDLING SHALL BE PER MANUFACTURER'S RECOMMENDATIONS.
3. ALL PIPELINES AND COATINGS SHALL BE PREPARED AS REQUIRED BY THE MANUFACTURER AND SPECIFIED ON THE PLANS.
4. PIPES REMOVAL IS CONSIDERED SUBSIDIARY. NO SEPARATE PAY ITEM.
5. ALL PIPE WITH LESS THAN 16 FEET OF COVER SHALL HAVE "CLASS C" EMBEDMENT. PIPE WITH GREATER THAN 16 FEET OF COVER SHALL HAVE "CLASS B" EMBEDMENT (AS PER DWU STD DWG #14 & #16, NO SEPARATE PAY ITEM).

SEQUENCING:

1. PRIOR TO BEGINNING OF CONSTRUCTION, CONTRACTOR SHALL SUBMIT A CONSTRUCTION SCHEDULE TO THE ENGINEER FOR APPROVAL.
2. CONSTRUCTION SCHEDULE SHALL INCORPORATE PLANNED SHUTDOWNS.

SURVEY AND BENCHMARK NOTES:

1. NO TOPOGRAPHIC SURVEY WAS PERFORMED FOR THIS PROJECT. INFORMATION CONTAINED ON THE DRAWINGS WAS OBTAINED FROM AERIAL IMAGING AND GIS INFORMATION. ACCURACY OF THIS INFORMATION IS NOT GUARANTEED. PLANS MAY NOT SHOW ALL CURRENTLY EXISTING STRUCTURES AND UTILITIES ABOVE OR BELOW THE GROUND IN THE PROJECT CONSTRUCTION AREA.
2. GPS COORDINATES ARE APPROXIMATE BASED ON GIS DATA. COORDINATES ARE GIVEN TO INDICATE THE GENERAL LOCATION OF THE WORK AND ARE NOT INTENDED TO GIVE EXACT LOCATION OF THE VALVES.
3. STATIONS AND TOP OF PIPE ELEVATIONS ARE FROM RECORD DRAWINGS. LIST OF RECORD DRAWINGS FOR EACH LOCATION IS SHOWN ON SHEET 27.
4. EXISTING PIPE LOCATION IS FROM GIS INFORMATION AND SHOULD BE CONSIDERED APPROXIMATE ONLY YO SHOW THE GENERAL LOCATION OF THE PIPELINE.
5. DWU MAINTAINS NUMEROUS BENCHMARKS ACROSS THE CITY. CONTRACTOR MAY TIE IN TO THE BENCHMARK CLOSEST TO THE WORK SITE AS FOUND IN THE DWU BENCHMARKS 2014 LISTING. THE LATEST LISTING CAN BE DOWNLOADED FROM DWU DESIGN AND CONSTRUCTION STANDARDS WEB PAGE. CONTRACTOR SHALL FIELD-LOCATE NECESSARY BENCHMARKS AND CONTROL POINTS AT COMMENCEMENT OF CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER AND DWU OF ANY ERRORS OR DISCREPANCIES.
6. THE CONTRACTOR IS RESPONSIBLE TO VISIT THE PROJECT SITES AND LOCATE ALL EXISTING UTILITIES IN THE AREA AND ACQUAINT HIMSELF WITH ACTUAL TOPOGRAPHIC CONDITIONS. CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION IN THE PROJECT'S AREA WITH OWNER'S REPRESENTATIVE BEFORE COMMENCEMENT OF WORK.
7. RIGHT OF WAY LINES ARE APPROXIMATE FROM GIS SHAPE FILES.

CONSTRUCTION

1. CONTRACTOR SHALL PROVIDE TEMPORARY ENTRANCES AND TEMPORARY CONSTRUCTION ROADS AS NECESSARY FOR CONSTRUCTION OF THE PROJECT. NO EXTRA PAY ITEM.
2. UPON COMPLETION OF CONSTRUCTION, FINISHED GRADE WILL BE BROUGHT BACK TO PRE-CONSTRUCTION CONDITIONS INCLUDING SOD, LANDSCAPE, RETAINING WALLS, SCREENING WALLS, ETC.
3. RETAINING WALLS, FENCES AND OTHER STRUCTURES WITHIN THE EXISTING EASEMENT OR PROPERTY MAY BE REMOVED FOR CONSTRUCTION, BUT MUST BE REPLACED AND RETURNED TO ORIGINAL, PRE-CONSTRUCTION CONDITION.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ALL EXISTING SERVICES LINES CROSSED OR EXPOSED BY HIS CONSTRUCTION OPERATIONS. WHERE EXISTING SERVICE LINES ARE CUT, BROKEN OR DAMAGED, THE CONTRACTOR SHALL IMMEDIATELY REPLACE THE SERVICE LINE WITH THE SAME TYPE OF ORIGINAL CONSTRUCTION OR BETTER. THERE SHALL BE NO SEPARATE PAY FOR THIS WORK.
5. THE CONTRACTOR SHALL PROTECT EXISTING BUILDINGS, STRUCTURES, AND IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO, FENCES, LANDSCAPING, IRRIGATION DEVICES OR PROPERTY FROM DAMAGE DUE TO CONSTRUCTION ACTIVITIES. ALL DAMAGED AREAS, IMPROVEMENTS, OR PROPERTY SHALL BE RESTORED TO A CONDITION EQUAL TO ORIGINAL AT THE EXPENSE OF THE CONTRACTOR.
6. TOPSOIL SHALL BE STOCKPILED AND REPLACED TO A MINIMUM DEPTH OF 12-INCHES AND DISC HARROWED TO A DEPTH OF 6-INCHES. THERE SHALL BE NO MORE ROCKS GREATER THAN 1-INCH IN DIAMETER THAN THE SURROUNDING UNDISTURBED AREA. THE AREA SHALL BE SEEDED AND MAINTAINED UNTIL VEGETATIONS RETURNED TO PRE-CONSTRUCTION CONDITIONS.
7. IT MAY BE NECESSARY TO REMOVE OR TRIM TREES INSIDE THE PIPELINE RIGHT-OF-WAY. THESE ACTIVITIES WILL BE DONE AT THE CONTRACTOR'S EXPENSE. ANY TREE TO BE REMOVED SHALL BE COORDINATED WITH PROPERTY OWNER AND/OR CITY OFFICIALS. CONTRACTOR SHALL ABIDE BY ALL LOCAL, STATE, AND FEDERAL LAWS ON THE REMOVAL OF TREES. NO SEPARATE PAY ITEM.
8. NO OPEN TRENCH OR SHAFT WILL BE PERMITTED AT THE END OF EACH WORKING DAY UNLESS SPECIFICALLY APPROVED BY THE OWNER AND ENGINEER. OPEN TRENCH SHALL BE EITHER COVERED OR SURROUNDED WITH A TEMPORARY SECURITY FENCE. NO SEPARATE PAY ITEM FOR THIS WORK.
9. ALL EXCAVATED MATERIAL DEEMED UNSUITABLE OR EXCESS SHALL BE DISPOSED OF BY CONTRACTOR. NO EXTRA PAY ITEM.
10. DEWATERING OF EXISTING 84" AND 54" TRANSMISSION MAINS SHALL BE INCIDENTAL TO THE WORK.
11. EXISTING VALVE ASSEMBLIES ARE LOCATED WITHIN EXISTING ROW AND UTILITY EASEMENTS. CONTRACTOR TO VERIFY EXISTING EASEMENT BEFORE WORK STARTS AND TO MAINTAIN WORK WITHIN THE EASEMENT AREAS.

REPLACEMENT OF EXISTING AIR VALVES

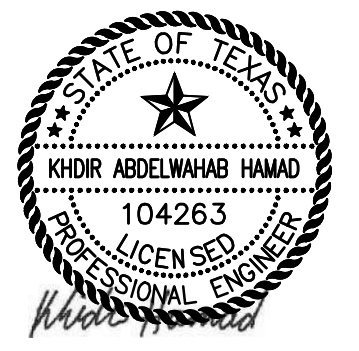
1. REPLACEMENT OF EXISTING AIR VALVES GENERALLY INCLUDES REMOVAL OF THE EXISTING COMBINATION AIR AND VACUUM VALVE, AIR RELEASE VALVE AND PORTIONS OF THE VENT PIPING. AT SOME LOCATIONS, IT MAY BE REQUIRED TO REMOVE AND REPLACE THE EXISTING GATE VALVE, MANHOLE AND VENT PIPING, BASED ON EXISTING CONDITIONS. REPLACEMENT OF THE MANHOLE AND VENT PIPING WILL REQUIRE ADDITIONAL EXCAVATION, BACKFILL AND RESTORATION. FINAL DECISION WHETHER TO REPLACE OR REMOVE ANY EXISTING COMPONENT IS UP TO THE OWNER.
2. REPLACEMENTS OF GATE VALVES, MANHOLES AND VENT PIPING ARE CALLED OUT ON THE PLANS IN LOCATIONS WHERE IT HAS BEEN DETERMINED THAT THESE ARE NEEDED; HOWEVER, THERE MAY BE OTHER LOCATIONS WHERE FIELD CONDITIONS REQUIRE REPLACEMENT OF THESE COMPONENTS WHICH WERE NOT CALLED OUT ON THE PLANS. SEPARATE BID ITEMS ARE INCLUDED FOR THESE CONTINGENCY ITEMS AND SO NO ADDITIONAL PAYMENT WILL BE MADE TO CONTRACTOR FOR THESE FIELD CHANGES. NO WARRANTY IS EXPRESSED OR IMPLIED OF THE CONDITIONS OF EXISTING GATE VALVES, MANHOLES AND VENTS.

NEW AIR VALVE INSTALLATION BY PIPE TAP METHOD

1. UNLESS OTHERWISE NOTED, ALL NEW AIR VALVES ARE INTENDED TO BE INSTALLED BY PIPE TAPPING METHODS, IN ACCORDANCE WITH THE SPECIFICATIONS, DETAILS AND DRAWINGS. THE PIPE WILL BE TAKEN OUT OF SERVICE DURING THE TAPPING INSTALLATION; HOWEVER, THE PIPELINE WILL BE FULL OF WATER.
2. PIPE TAPPING TO BE COMPLETED BY DWU APPROVED CONTRACTORS; SEE DWU APPROVED _____ LIST.
3. CONTRACTOR SHALL ARRANGE TO HAVE PIPE MANUFACTURER'S REPRESENTATIVE ON-SITE PRIOR TO PIPE TAP TO CONFIRM PIPE IS PROPERLY SUPPORTED, TAPPING SLEEVE IS PLACED AND INSTALLED PROPERLY AND SHALL REMAIN ON-SITE DURING THE TAPPING INSTALLATION TO INSPECT AND CONFIRM PIPE'S INTEGRITY.
4. PIPE EMBEDMENT AT NEW AIR VALVE LOCATIONS TO BE EMBEDDED WITH FLOWABLE FILL, PER _____

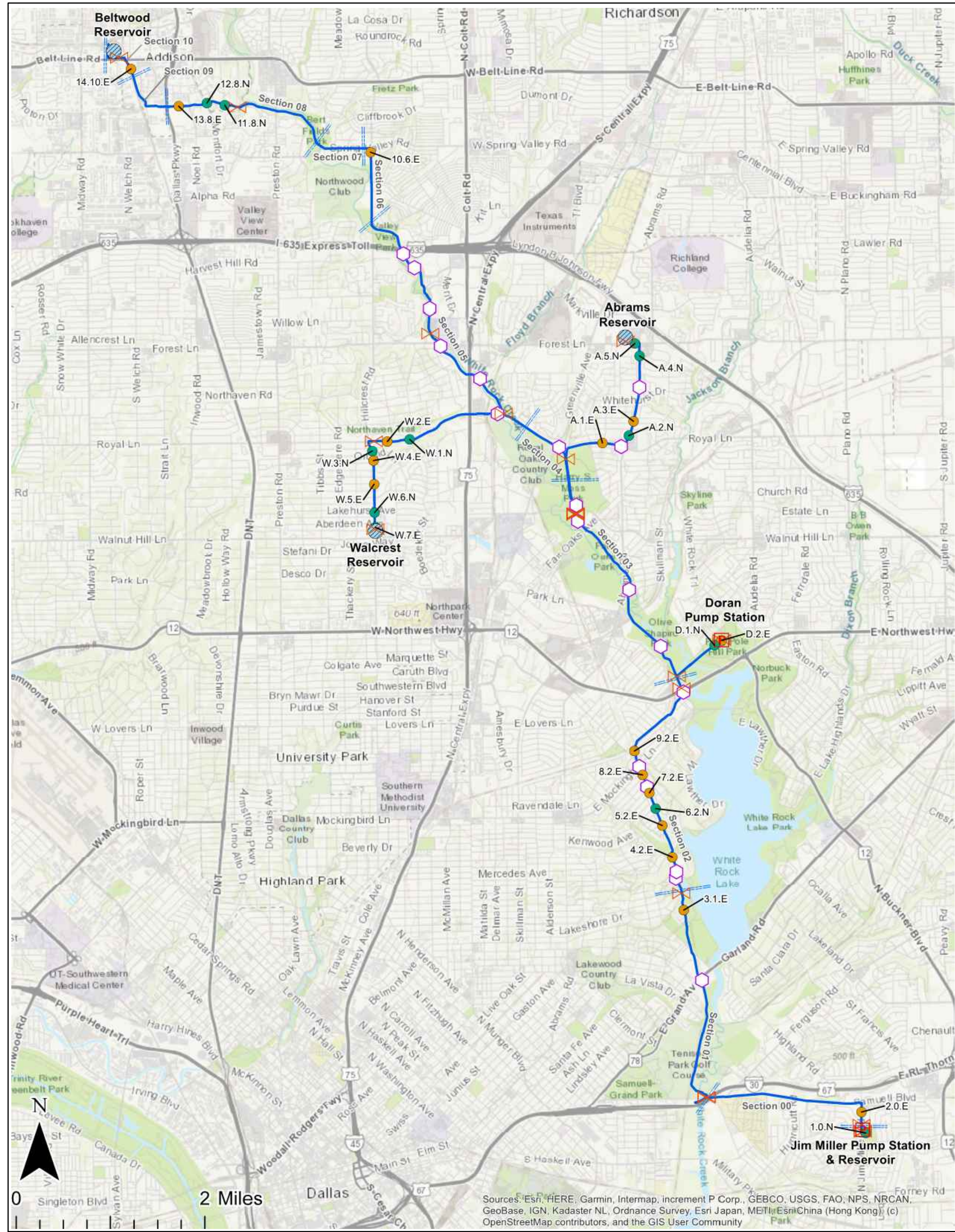
NEW AIR VALVE INSTALLATION BY PIPE CUT-IN METHOD

1. AS NOTED IN PLANS, SOME LOCATIONS FOR NEW AIR VALVES WILL REQUIRE REMOVAL OF THE EXISTING PCCP SEGMENT AND REPLACEMENT WITH NEW PIPE SEGMENTS WITH OUTLETS FOR THE NEW AIR VALVE ASSEMBLY, IN ACCORDANCE WITH THE SPECIFICATIONS, DETAILS AND DRAWINGS. FOR PIPE CUT-IN INSTALLATION METHOD, THE PIPELINE WILL BE OUT OF SERVICE AND CONTRACTOR WILL BE RESPONSIBLE FOR DEWATERING OF A PORTION OF THE PIPELINE AND DISPOSAL OF THE REMOVED WATER PER ALL RULES AND REGULATIONS.
2. BASED ON FIELD CONDITIONS, THERE MAY BE LOCATIONS WHERE CUT-IN INSTALLATION IS REQUIRED IN LIEU OF PIPE TAP. CONTINGENCY BID ITEMS ARE INCLUDED FOR THIS WORK AND NO ADDITIONAL PAYMENT WILL BE ALLOWED.



DATE: 05/07/2020

		1240 Coit Road, Suite 400 Dallas, TX, 75231 Tel: (214) 346-2800 TBPE Firm Registration No. F-3043				
		CONTRACT NO. 20-001/002	PID: -			
WRNTM AIR VALVE IMPROVEMENTS						
PROJECT SPECIFIC NOTES						
DALLAS WATER UTILITIES CITY OF DALLAS, TEXAS						
DESIGN	DRAWN	DATE	FILE	NUMBER	SHEET	
KH	AG	MAY 2020	685W	660	26	

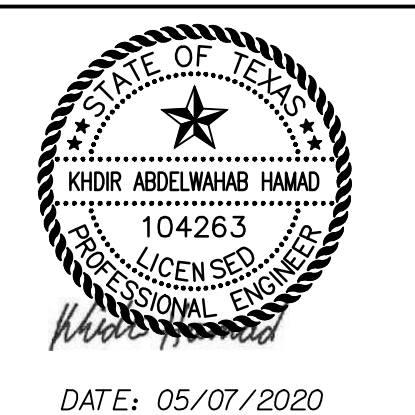


AIR VALVES TAGGING SYSTEM IS AS FOLLOWS:

1. FOR VALVES ON THE WHITE ROCK NORTH TRANSMISSION MAIN:
 - A. 1ST NUMBER: SEQUENTIAL NUMBERING STARTING DOWNSTREAM.
 - B. 2ND NUMBER: PIPE SECTION NUMBER FROM THE PROVIDED AS-BUILT DRAWINGS.
 - C. 3RD LETTER: EXISTING (E) OR NEW (N)
2. FOR VALVES ALONG OTHER SYSTEMS:
 - D. 1ST LETTER: SYSTEM- DORAN (D), ABRAMS (A), WALCREST (W)
 - E. 2ND NUMBER: SEQUENTIAL NUMBERING, STARTING DOWNSTREAM
 - F. 3RD LETTER: EXISTING (E) OR NEW (N)

AIR RELEASE VALVES SCHEDULE								
Valve Tag Number	Station	Record Drawing Sheet Number	Section Number	Pipe Diameter (In)	Valve TYPE	Air Inlet Diameter (In)	Air Outlet Diameter (In)	Minimum Required Pressure Rating (psi)
From Jim Miller Pump Station to Belwood Reservoir								
2.0.E	006+83	685W 549 Sh 01	JIM MILLER PUMP STATION	90	VACUUM RELIEF/ AIR RELEASE	8	0.375	175
3.1.E	113+04	685W 660 Sh 11	SECTION 01	84	VACUUM RELIEF/ AIR RELEASE	6	0.375	175
4.2.E	143+95	685W 660 Sh 14	SECTION 02	84	VACUUM RELIEF/ AIR RELEASE	6	0.375	175
5.2.E	162+50	685W 660 Sh 15	SECTION 02	84	VACUUM RELIEF/ AIR RELEASE	6	0.375	175
6.2.N	174+00	685W 660 Sh 16	SECTION 02	84	VACUUM RELIEF/ AIR RELEASE	6	0.375	175
7.2.E	184+60	685W 660 Sh 17	SECTION 02	84	VACUUM RELIEF/ AIR RELEASE	6	0.375	175
8.2.E	194+40	685W 660 Sh 18	SECTION 02	84	VACUUM RELIEF/ AIR RELEASE	6	0.375	175
9.2.E	208+60	685W 660 Sh 19	SECTION 02	84	VACUUM RELIEF/ AIR RELEASE	6	0.375	175
10.6.E	042+41	685W 660A Sh 26	SECTION 06	84	VACUUM RELIEF/ AIR RELEASE	6	0.375	100
11.8.N	140+00	685W 660B Sh 12	SECTION 08	84	VACUUM RELIEF/ AIR RELEASE	6	0.375	60
12.8.N	150+00	685W 660B Sh 12	SECTION 08	84	VACUUM RELIEF/ AIR RELEASE	6	0.375	60
13.8.E	167+00	685W 660B Sh 14	SECTION 08	84	VACUUM RELIEF/ AIR RELEASE	10	0.375	60
14.0.E	033+90	685W 660C Sh 04	SECTION 09	84	VACUUM RELIEF/ AIR RELEASE	6	0.375	60
Doran PS Branch From 84-inch White Rock North Transmission Main to Doran Pump Station								
D.1.N	027+50	685W 660 Sh 37	DORAN	54	VACUUM RELIEF/ AIR RELEASE	6	0.375	175
D.2.E	032+19	685W 660 Sh 37	DORAN	54	VACUUM RELIEF/ AIR RELEASE	6	0.375	175
Abrams Branch From 84-inch White Rock North Transmission Main to Abrams Reservoir								
A.1.E	020+75	685W 660D Sh 02	ABRAMS	54	VACUUM RELIEF/ AIR RELEASE	8	0.375	150
A.2.N	040+50	685W 660D Sh 04	ABRAMS	54	VACUUM RELIEF/ AIR RELEASE	6	0.375	125
A.3.E	049+00	685W 660D Sh 05	ABRAMS	54	VACUUM RELIEF/ AIR RELEASE	8	0.375	125
A.4.N	086+00	685W 660D Sh 08	ABRAMS	54	VACUUM RELIEF/ AIR RELEASE	6	0.375	125
A.5.N	095+50	685W 660D Sh 08	ABRAMS	54	VACUUM RELIEF/ AIR RELEASE	6	0.375	125
Walcrest Branch From 84-inch White Rock North Transmission Main to Walcrest Reservoir								
W.1.N	036+20	685W 822 Sh 06	WALCREST	54	VACUUM RELIEF/ AIR RELEASE	6	0.375	100
W.2.E	048+00	685W 822 Sh 07	WALCREST	54	VACUUM RELIEF/ AIR RELEASE	6	0.375	100
W.3.N	005+50	685W 822 Sh 08	WALCREST	54	VACUUM RELIEF/ AIR RELEASE	6	0.375	100
W.4.E	011+00	685W 822 Sh 08	WALCREST	54	VACUUM RELIEF/ AIR RELEASE	6	0.375	100
W.5.E	025+00	685W 822 Sh 10	WALCREST	54	VACUUM RELIEF/ AIR RELEASE	6	0.375	100
W.6.N	040+00	685W 822 Sh 11	WALCREST	54	VACUUM RELIEF/ AIR RELEASE	6	0.375	100
W.7.E	049+40	685W 822 Sh 12	WALCREST	54	VACUUM RELIEF/ AIR RELEASE	6	0.375	100

- Pump Stations
- Isolation Valves
- Reservoirs
- New Air Valve
- Replace Existing Air Valve
- Blowoff Valves
- Section Marker
- Transmission



CDM Smith		1240 Coit Road, Suite 400 Dallas, TX, 75231 Tel: (214) 346-2800 TBPE Firm Registration No. F-3043	
CONTRACT NO. 20-001/002		PID: -	
WRNTM AIR VALVE IMPROVEMENTS VALVES LOCATION MAP & VALVES SCHEDULE DALLAS WATER UTILITIES CITY OF DALLAS, TEXAS			
DESIGN	DRAWN	DATE	FILE NUMBER SHEET
KH	AG	MAY 2020	685W 660 27

A. GENERAL SITE DATA

SITE DESCRIPTION

- PROJECT LIMITS:**
SEE CIVIL SHEETS FOR PROJECT LIMITS OF CONSTRUCTION.
- PROJECT DESCRIPTION:**
INSTALLATION OF AIR RELEASE AND VACUUM RELIEF VALVES IN VARIOUS LOCATIONS.
- MAJOR SOIL DISTURBING ACTIVITIES:**
EXCAVATION AND BACKFILL IN UNPAVED AREAS.
- TOTAL PROJECT AREA:**
LESS THAN 0.1 AC
- TOTAL AREA TO BE DISTURBED:**
LESS THAN 0.1 AC

B. SOIL AND SEDIMENT CONTROL

SOIL STABILIZATION PRACTICES: (SELECT T - TEMPORARY OR P - PERMANENT, AS APPLICABLE)

T	TEMPORARY SEEDING	P	PRESERVATION OF NATURAL RESOURCES
T	MULCHING (HAY OR STRAW)	P	FLEXIBLE CHANNEL LINER
T	BUFFER ZONES	P	RIGID CHANNEL LINER
P	PLANTING	P	SOIL RETENTION BLANKET
P	SEEDING	P	COMPOST MANUFACTURED TOPSOIL
P	SODDING	T/P	(SPECIFY PRACTICE)

OTHER: CONCRETE RIP RAP

STRUCTURAL PRACTICES: (SELECT T - TEMPORARY OR P - PERMANENT, AS APPLICABLE)

T	SILT FENCES	P	TIMBER MATTING AT CONSTRUCTION EXIT
T	EROSION CONTROL COMPOST LOGS	T	CHANNEL LINERS
T	ROCK FILTER DAMS	P	SEDIMENT TRAPS
T	DIVERSION, INTERCEPTOR, OR PERIMETER DIKES	T	SEDIMENT BASINS
T	DIVERSION, INTERCEPTOR, OR PERIMETER SWALES	P	STORM INLET SEDIMENT TRAP
T	DIVERSION DIKE AND SWALE COMBINATIONS	P	STONE OUTLET STRUCTURES
T/P	PAVED FLUMES	P	CURBS AND GUTTERS
T	ROCK BEDDING AT CONSTRUCTION EXIT	P	STORM SEWERS
		T/P	VELOCITY CONTROL DEVICES

C. STORM WATER POLLUTION PREVENTION NOTES:

- THE CONTRACTOR SHALL PREPARE A STORM WATER POLLUTION PREVENTION PLAN FOR THE PROJECT.
- STORM WATER POLLUTION PREVENTION BMP'S SHOWN ON THESE DOCUMENTS ARE NOT ALL INCLUSIVE AND REPRESENT MINIMUM REQUIREMENTS. IF ADDITIONAL BMP'S ARE REQUIRED AS CONDITIONS OF THE PERMIT OR TO CONTROL RUNOFF FROM SPECIFIC CONSTRUCTION ACTIVITIES, SUCH BMP'S SHALL BE IMPLEMENTED AT NO ADDITIONAL COST. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DEVELOP AND MAINTAIN A COMPREHENSIVE SWPPP FOR THE WORK SITE COMPLYING WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.
- COPIES OF THE STORM WATER POLLUTION PREVENTION PLAN SHALL BE SUBMITTED TO THE CITY ENGINEER AND THE CITY SITE INSPECTOR.

NARRATIVE - SEQUENCE OF CONSTRUCTION (STORM WATER MANAGEMENT) ACTIVITIES:

- INSTALL STRUCTURAL CONTROLS AT THE PERIMETER OF CONSTRUCTION AREA PRIOR TO DISTURBANCE OF EXISTING TOPSOIL.
- INSTALL SILT FENCES:
 - AROUND TOPSOIL STOCKPILES AND AT EMBANKMENT AND EXCAVATION LOCATIONS.
 - AROUND EXISTING INLETS AFFECTED BY CONSTRUCTION.
 - OTHER AREAS AS DIRECTED BY THE CITY INSPECTOR.
- CLEAR AND GRUB VARIOUS STAGES OF THE PROJECT TO MINIMIZE DISTURBANCE AS MUCH AS PRACTICABLE. TEMPORARILY SEED OR MULCH THE DISTURBED AREAS UNLESS CONSTRUCTION ACTIVITY IS TO RESUME WITHIN 7 DAYS.
- CONSTRUCT IMPROVEMENTS WITHIN THE VARIOUS CONSTRUCTION ZONES AND APPLY PERMANENT SEEDING WHEN CONSTRUCTION IS COMPLETE IN THAT ZONE.
- WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED AND APPROVED BY THE CITY, REMOVE ALL TEMPORARY STRUCTURAL CONTROLS, REMOVE AND DISPOSE OF ACCUMULATED SEDIMENT AND RE-SEED ANY AREAS DISTURBED BY THEIR REMOVAL. PERIMETER CONTROLS SHALL REMAIN IN PLACE UNTIL FINAL STABILIZATION OF THE AREA.

D. OTHER EROSION AND SEDIMENT NOTES:

- MAINTENANCE:**
ALL EROSION AND SEDIMENT CONTROLS SHALL BE MAINTAINED IN GOOD WORKING ORDER. IF A REPAIR IS NECESSARY, IT SHALL BE PERFORMED AT THE EARLIEST DATE POSSIBLE BUT NO LATER THAN 7 CALENDAR DAYS AFTER THE SURROUNDING EXPOSED GROUND HAS DRIED SUFFICIENTLY TO PREVENT FURTHER DAMAGE FROM HEAVY EQUIPMENT. DISTURBED AREAS ON WHICH CONSTRUCTION ACTIVITIES HAVE CEASED TEMPORARILY SHALL BE STABILIZED WITHIN 7 CALENDAR DAYS UNLESS THEY ARE SCHEDULED TO AND DO RESUME WITHIN 14 CALENDAR DAYS. THE AREAS ADJACENT TO CREEKS AND DRAINAGE WAYS SHALL HAVE PRIORITY FOLLOWED BY DEVICES PROTECTING STORM SEWER INLETS.
- INSPECTION:**
INSPECTIONS SHALL BE PERFORMED BY THE CONTRACTOR'S QUALIFIED INSPECTOR EVERY 7 CALENDAR DAYS AND AFTER EACH HALF INCH RAIN, OR MORE, AS RECORDED ON A NON-FREEZING RAIN GAUGE LOCATED AT THE PROJECT SITE. AN INSPECTION AND MAINTENANCE REPORT SHALL BE FILED FOR EACH INSPECTION AND THE CONTROLS REVISED OR REPAIRED, AS MAY BE REQUIRED, PER THE INSPECTION REPORT.

3. WASTE MATERIALS:

ALL WASTE MATERIALS SHALL BE COLLECTED IN A METAL DUMPSTER HAVING A SECURE COVER. THE DUMPSTER SHALL MEET ALL STATE AND LOCAL CITY SOLID WASTE MANAGEMENT REGULATIONS. ALL TRASH AND DEBRIS FROM CONSTRUCTION SHALL BE DEPOSITED IN THE DUMPSTER. THE DUMPSTER SHALL BE EMPTIED, AS NECESSARY OR AS REQUIRED BY LOCAL REGULATION, AND HAULED TO A LOCAL APPROVED LAND FILL SITE. THE BURYING OF CONSTRUCTION WASTE ON THE PROJECT SITE SHALL NOT BE PERMITTED.

4. HAZARDOUS WASTE (INCLUDING SPILL REPORTING):

AS A MINIMUM, ANY PRODUCTS IN THE FOLLOWING CATEGORIES ARE CONSIDERED TO BE HAZARDOUS: PAINTS, ACIDS, SOLVENTS, ASPHALT PRODUCTS, CHEMICAL ADDITIVES FOR SOIL STABILIZATION AND CONCRETE CURING COMPOUNDS OR ADDITIVES. IN THE EVENT OF A SPILL WHICH MAY BE HAZARDOUS, THE SPILL COORDINATOR SHALL BE CONTACTED IMMEDIATELY. FEDERAL, STATE, AND LOCAL SPILL RESPONSE SHALL BE FOLLOWED AS APPLICABLE.

5. SANITARY WASTE:

ALL SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS, AS NECESSARY OR AS REQUIRED BY LOCAL REGULATIONS, BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

6. OFFSITE VEHICLE TRACKING:

THE CONTRACTOR SHALL BE REQUIRED, ON A REGULAR BASIS OR AS MAY BE DIRECTED BY THE CITY INSPECTOR, TO DAMPEN HAUL ROADS FOR DUST CONTROL, STABILIZE CONSTRUCTION ENTRANCES AND TO REMOVE EXCESS DIRT FROM THE ROADWAY.

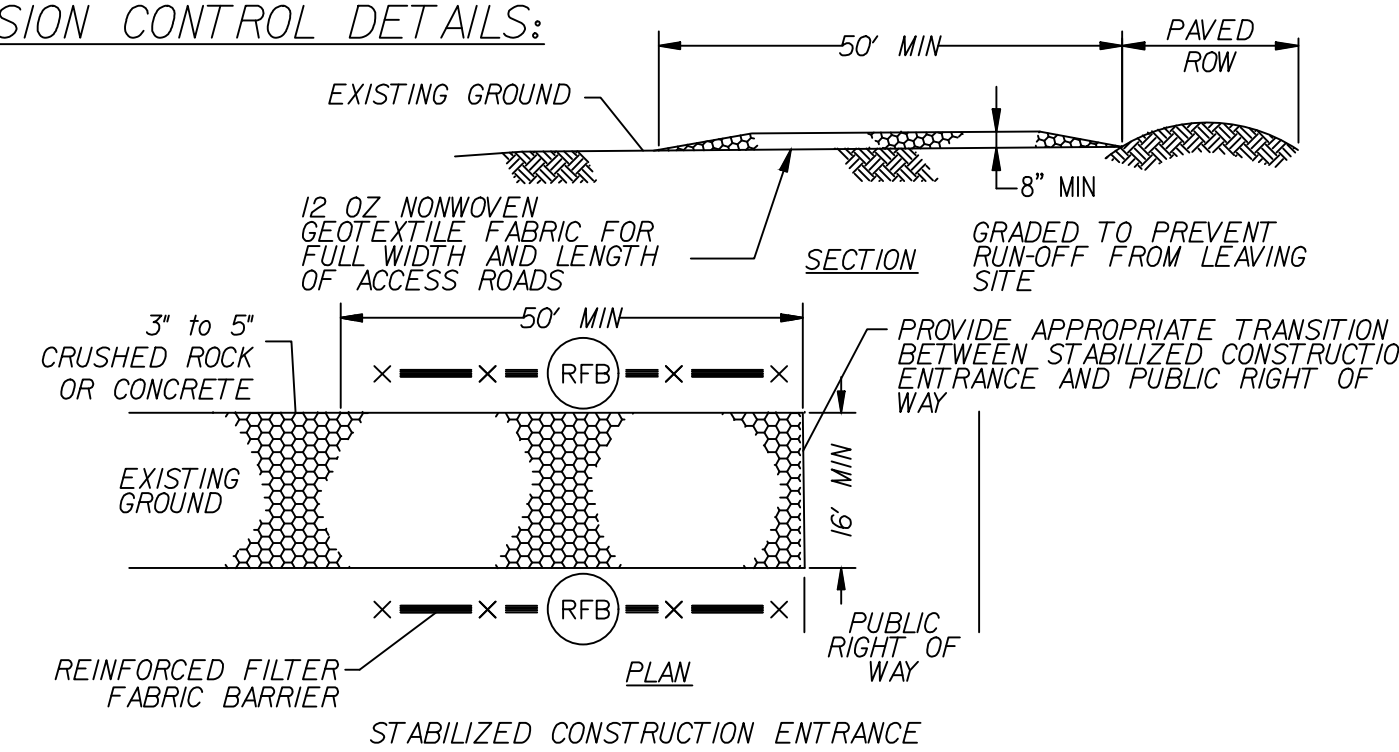
7. MANAGEMENT PRACTICES:

DISPOSAL AREAS, STOCKPILES, AND HAUL ROADS SHALL BE CONSTRUCTED IN A MANNER THAT WILL MINIMIZE AND CONTROL THE AMOUNT OF SEDIMENT THAT MAY ENTER RECEIVING WATERS. DISPOSAL AREAS SHALL NOT BE LOCATED IN ANY WETLAND, WATER BODY, OR STREAM BED. CONSTRUCTION STAGING AREAS AND HAUL ROADS SHALL BE CONSTRUCTED IN A MANNER TO MINIMIZE THE RUNOFF OF POLLUTANTS. ALL WATERWAYS SHALL BE CLEARED AS SOON AS PRACTICAL OF TEMPORARY EMBANKMENTS, TEMPORARY BRIDGES, MATTING, FALSE WORK, PILING, DEBRIS OR OTHER OBSTRUCTIONS PLACED DURING CONSTRUCTION OPERATIONS THAT ARE NOT A PART OF THE FINISHED WORK.

8. GENERAL NOTES:

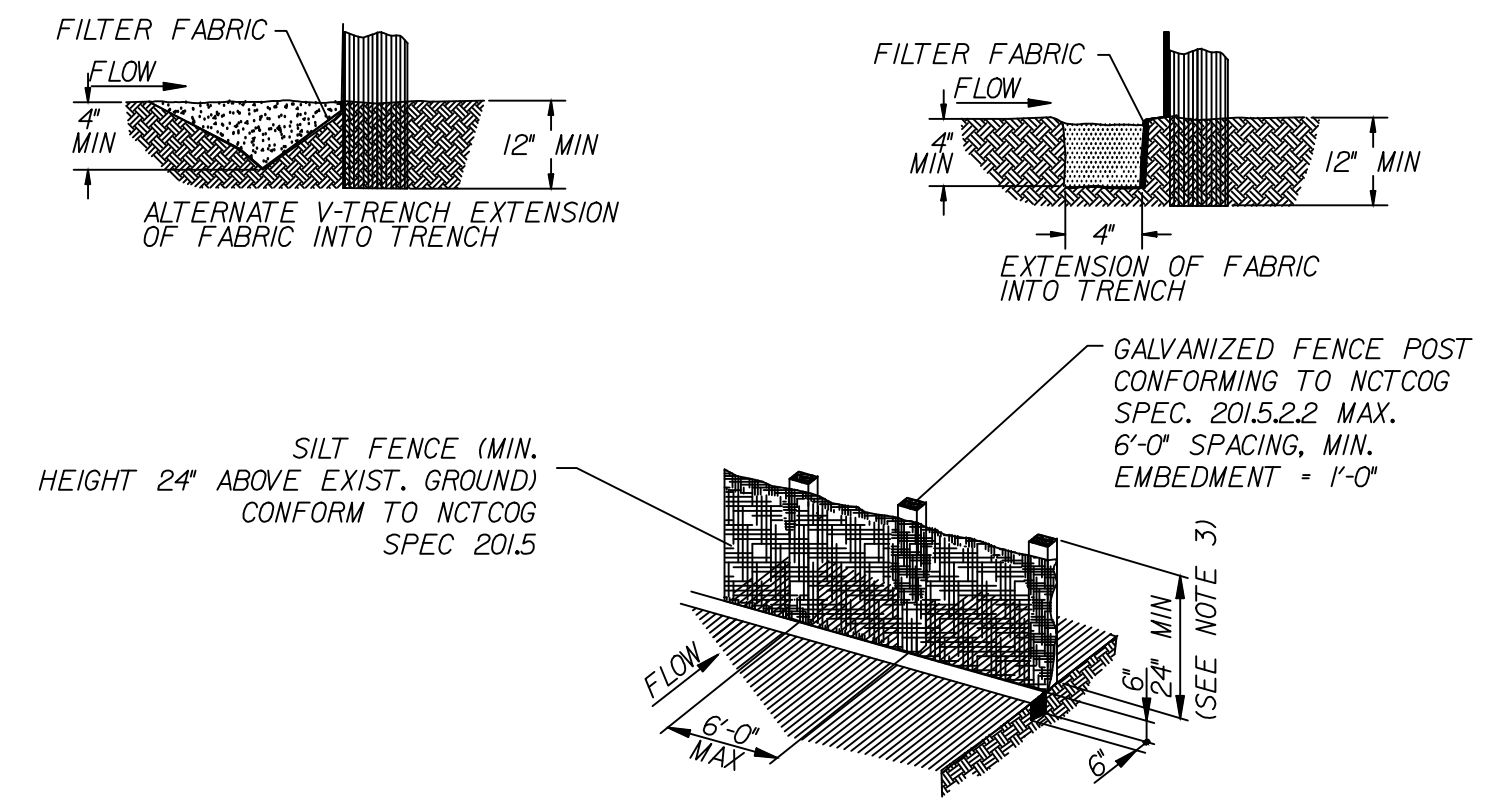
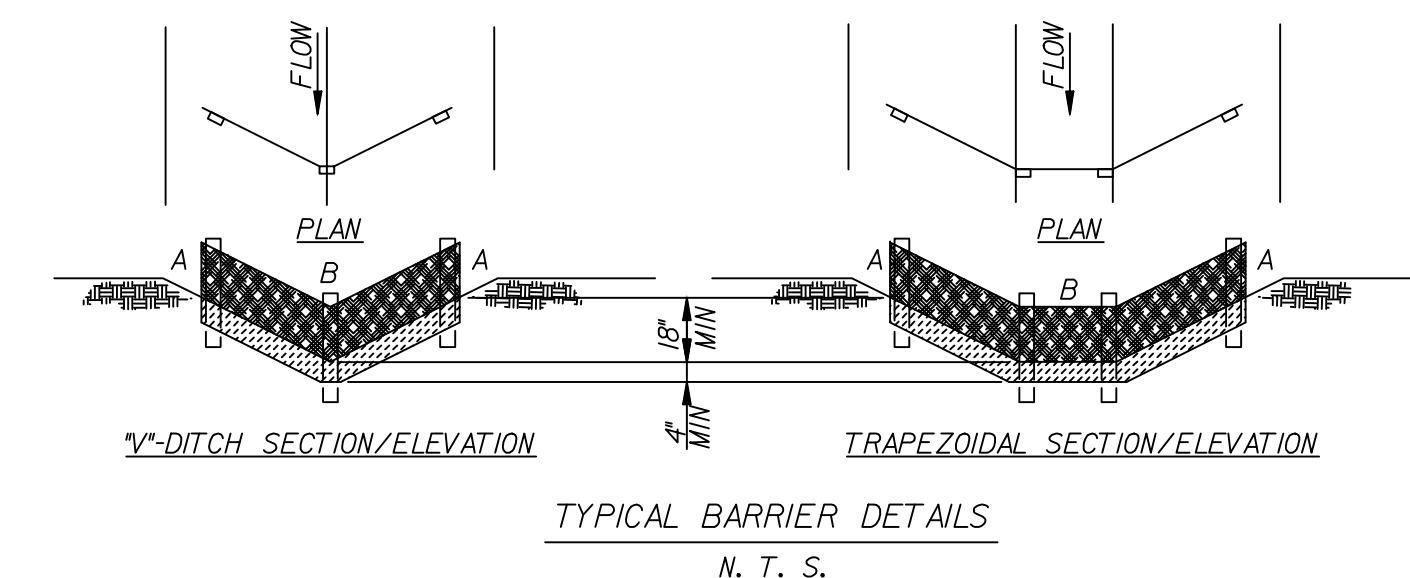
- STEEL POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF ONE FOOT.
- THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN, SO THAT THE DOWN SLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN (E.G. PAVEMENT), WEIGHT FABRIC FLAP WITH ROCK ON UPHILL SIDE TO PREVENT FLOW FROM SEEPING UNDER FABRIC.
- THE TRENCH MUST BE A MINIMUM OF 6' DEEP AND 6' WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
- SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR WOVEN WIRE WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POST. THERE SHALL BE A 3 FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.
- INSPECTION SHALL BE MADE WEEKLY AND WITHIN 24 HOURS AFTER EACH HALF INCH RAINFALL OR MORE. REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
- ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF HALF THE HEIGHT OF THE FENCE OR OTHERWISE DECREASES THE EFFECTIVENESS OF THE FENCE. SILT SHALL BE DISPOSED OF AT THE APPROVED SITE IN SUCH A MANNER AS NOT TO CONTRIBUTE TO ADDITIONAL SILTATION.
- SILT FENCE SHALL BE COMPLETELY REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

E. EROSION CONTROL DETAILS:



CONSTRUCTION NOTES:

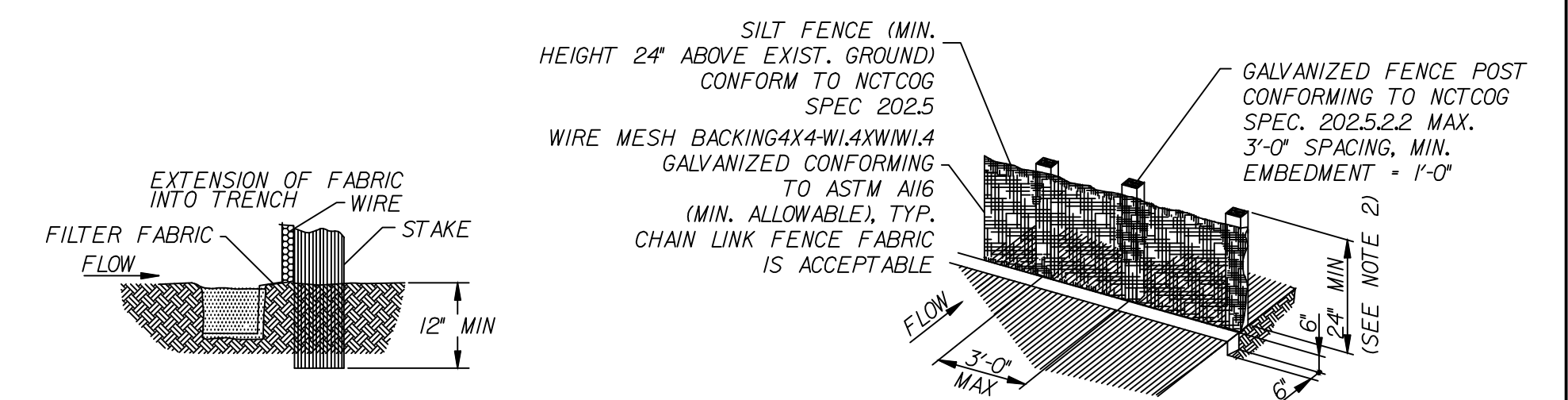
- ENTRANCE LENGTH SHALL BE MINIMIZED, BUT NOT LESS THAN 50 FEET, AS PERMITTED BY SITE GEOMETRY.
- THICKNESS SHALL NOT BE LESS THAN 8 INCHES.
- WIDTH SHALL NOT BE LESS THAN THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
- STABILIZATION FOR OTHER AREAS SHALL HAVE THE SAME AGGREGATE THICKNESS AND WIDTH REQUIREMENTS AS THE STABILIZED CONSTRUCTION EXIT, UNLESS OTHERWISE SHOWN ON THE CONSTRUCTION DRAWINGS.
- STABILIZED AREA MAY BE WIDENED OR LENGTHENED TO ACCOMMODATE A TRUCK WASHING AREA. AN OUTLET SEDIMENT TRAP MUST BE PROVIDED FOR THE TRUCK WASHING AREA.
- MAINTAIN ENTRANCE TO PREVENT TRACKING OR FLOWING OF SEDIMENT INTO PAVED SURFACES. PROVIDE PERIODIC TOP DRESSING AS NECESSARY TO MAINTAIN FUNCTION OF THE FACILITY.
- GRADE TO AVOID RUNOFF FROM THE SITE. RESTORE STREAM BOTTOMS TO ORIGINAL CHANNEL ELEVATIONS AT PROJECT COMPLETION.



FILTER FABRIC BARRIER DETAILS
N. T. S.

FILTER FABRIC BARRIER CONSTRUCTION NOTES:

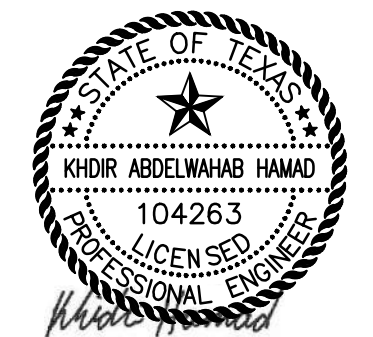
- SET POSTS SPACED A MAXIMUM OF 6 FEET APART AND EMBEDDED A MINIMUM OF 12 INCHES. IF PRE ASSEMBLED FENCE WITH SUPPORT NETTING IS USED, SPACING OF POST MAY BE INCREASED TO 8 FEET MAXIMUM.
- ATTACH FILTER FABRIC TO POSTS. FILTER FABRIC FENCE SHALL HAVE A MINIMUM HEIGHT OF 24 INCHES AND A MAXIMUM HEIGHT OF 36 INCHES ABOVE NATURAL GROUND.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHOULD BE OVERLAPPED 3 FEET AT THE POSTS, AND FOLDED AND SEALED SECURELY.



REINFORCED FILTER FABRIC BARRIER DETAILS
N. T. S.

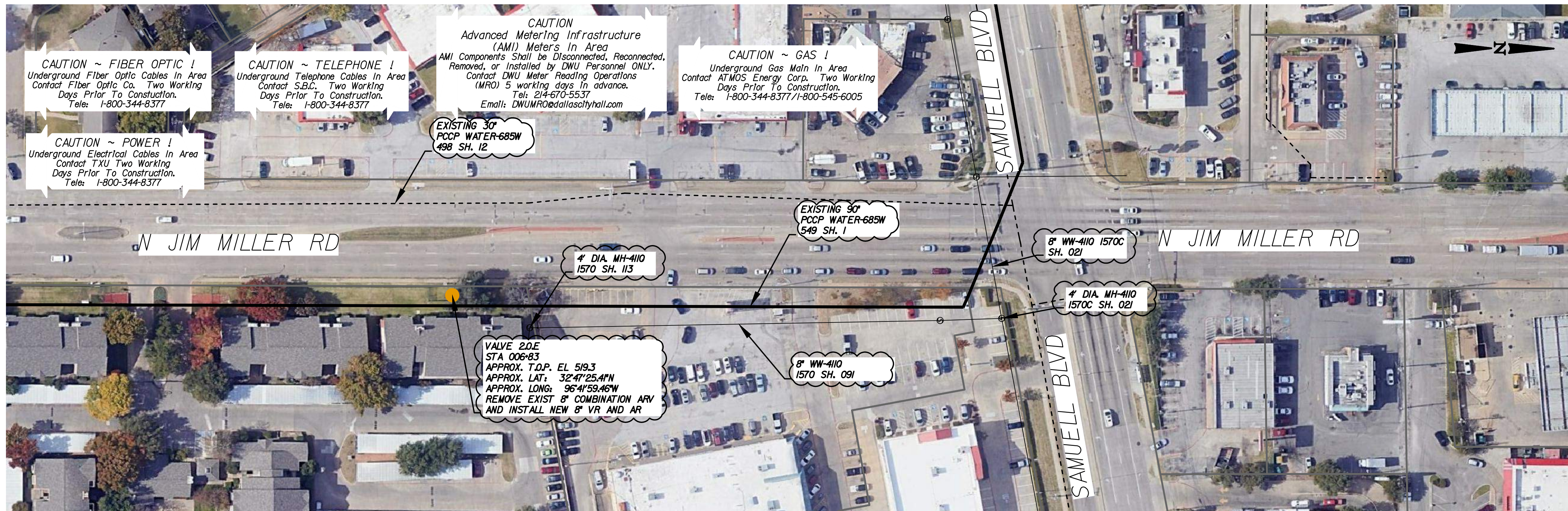
REINFORCED FILTER FABRIC BARRIER CONSTRUCTION NOTES:

- WOVEN WIRE FABRIC TO BE FASTENED SECURELY TO FENCE POSTS.
- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE, WITH TIES SPACED EVERY 24 INCHES AT TOP AND MIDSECTION.
- MINIMUM HEIGHT OF FILTER SHALL BE 24 INCHES AND A MAXIMUM OF 36 INCHES ABOVE NATURAL GROUND.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED 3 FEET AT THE POSTS, AND FOLDED AND SEALED SECURELY.



DATE: 05/07/2020

CDM Smith		1240 Colt Road, Suite 400 Dallas, TX, 75231 Tel: (214) 346-2800 TBPE Firm Registration No. F-3043	
CONTRACT NO. 20-001/002		PID: -	
WRNTM AIR VALVE IMPROVEMENTS SWPPP PLAN AND DETAILS			
DALLAS WATER UTILITIES CITY OF DALLAS, TEXAS			
DESIGN	DRAWN	DATE	FILE
KH	AG	MAY 2020	685W
			NUMBER
			660
			SHEET
			28



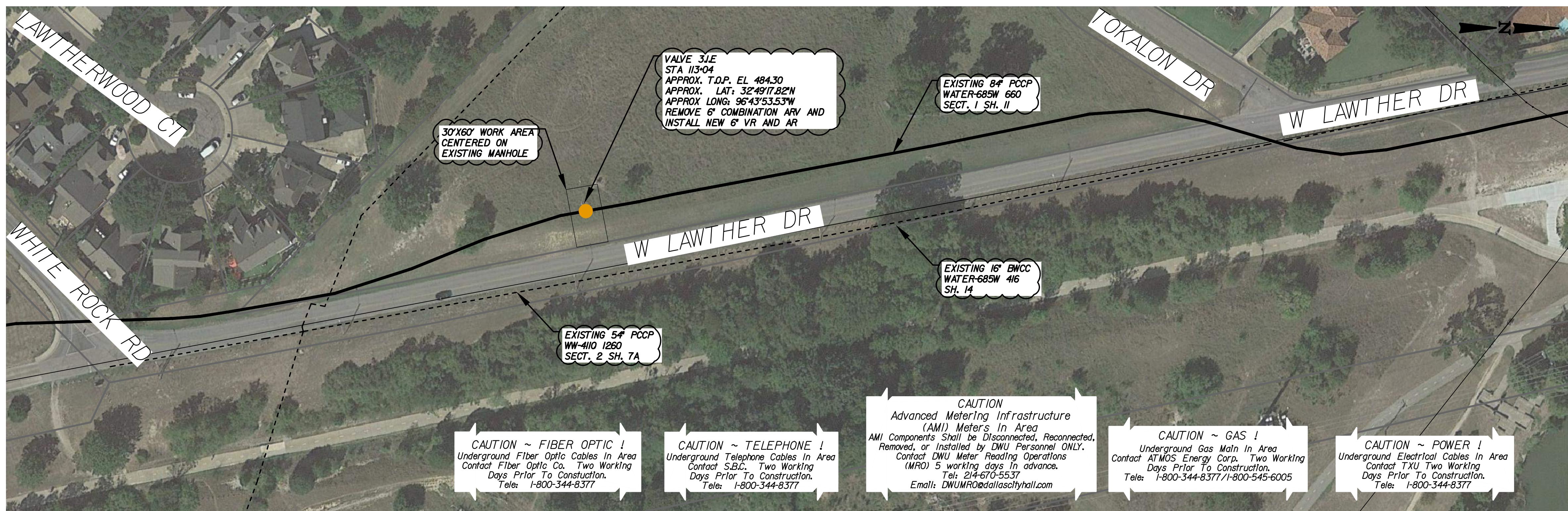
VALVE 2.0.E, STA 6+83

VALVE 2.0.E NOTES:

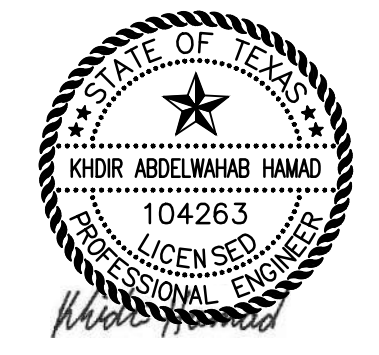
1. MAINTAIN EXISTING 8" GATE VALVE. REPLACE FLANGE BOLTS.
2. REMOVE EXISTING MANHOLE COVER, FRAME, AND CONE SECTION. REMOVE EXISTING BRICK MANHOLE. REMOVE EXISTING 8" COMBINATION AIR RELEASE VALVE ASSEMBLY.
3. INSTALL NEW 8" VACUUM RELIEF, AIR RELEASE VALVES AND 8" DIA. MANHOLE PER DETAIL 1, SHEET 41. NEW GATE VALVE IS NOT REQUIRED.
4. MAINTAIN EXISTING VENT PIPING.
5. ADJUST HEIGHT OF BURIED HORIZONTAL RUN OF VENT PIPING AS NECESSARY.
6. REMOVE EXISTING WOODEN SUPPORT. INSTALL NEW 6" DI. PIPE SUPPORT FILLED WITH CONCRETE. 5-FT MIN. BURY DEPTH.
7. TRAFFIC CONTROL AND LANE CLOSURE ARE REQUIRED.
8. MAINTAIN FENCE AND REPLACE IN KIND IF DAMAGED. NO ADDITIONAL PAY.
9. COORDINATE AND NOTIFY BRIGADEPORT APARTMENTS 214-388-5425.

VALVE 3.J.E NOTES:

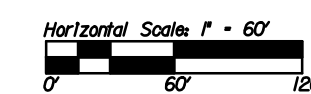
1. MAINTAIN EXISTING 6" GATE VALVE AND 60" DIA. MANHOLE FRAME, AND COVER.
2. REMOVE EXISTING 6" COMBINATION AIR RELEASE VALVE ASSEMBLY.
3. INSTALL NEW 6" VACUUM RELIEF AND AIR RELEASE VALVES PER DETAIL 2, SHEET 41. NEW GATE VALVE, MANHOLE, FRAME AND COVER ARE NOT REQUIRED.
4. MAINTAIN EXISTING VENT PIPING AND VAULT.
5. ADJUST HEIGHT OF BURIED HORIZONTAL RUN OF VENT PIPING AS NECESSARY.
6. NEW MANHOLE PENETRATIONS ARE REQUIRED FOR NEW VENT PIPING PER THE DETAIL.
7. PROTECT CATHODIC PROTECTION CABINET.
8. CONFINE WORK AREA TO THE LIMITS SHOWN ON THE PLANS.
9. COORDINATE AND NOTIFY DALLAS PARKS AND RECREATION DEPARTMENT.



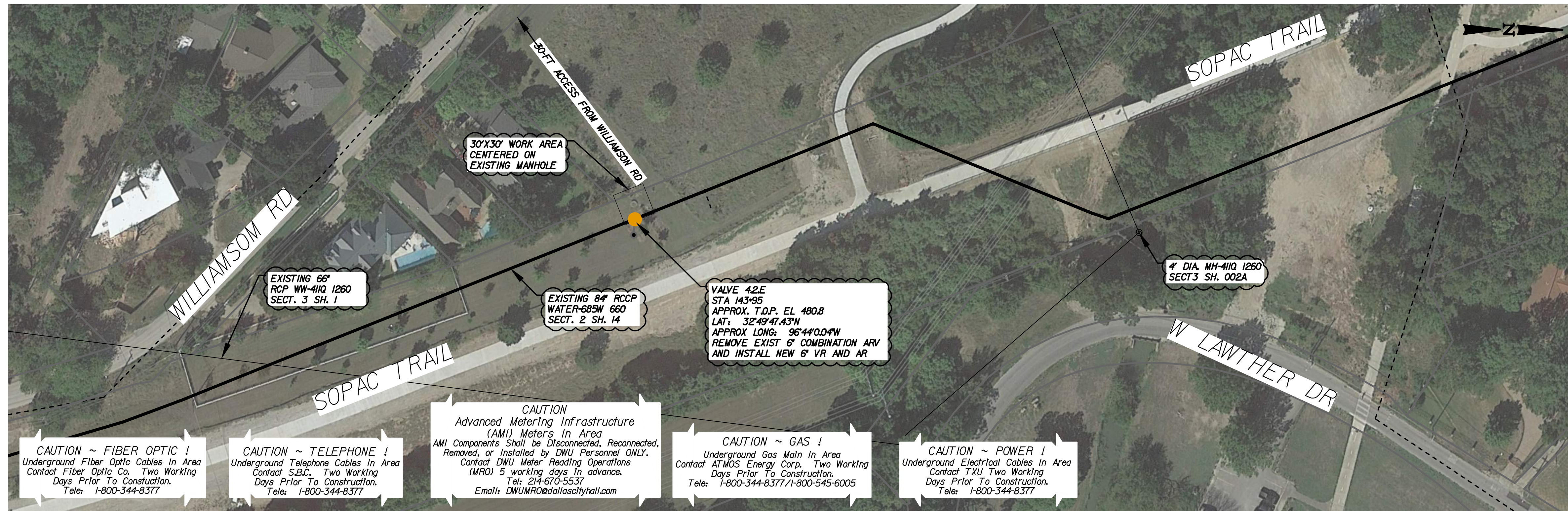
VALVE 3.J.E, STA 113+04



DATE: 05/07/2020

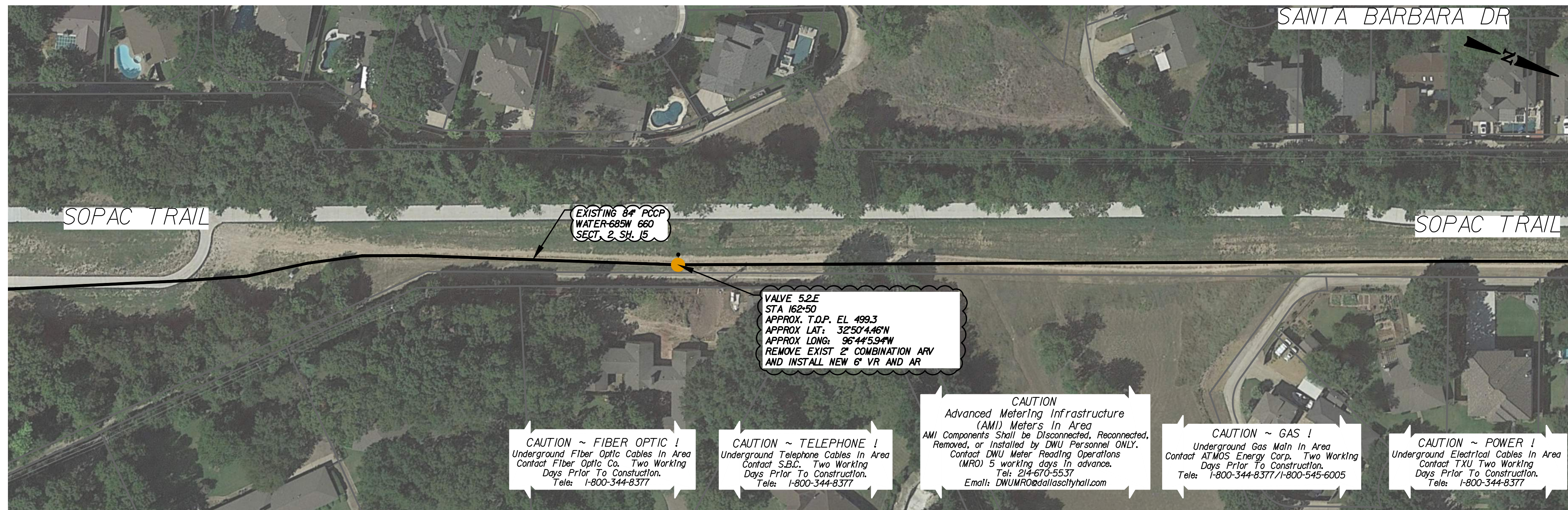


CDM Smith					
1240 Coit Road, Suite 400 Dallas, TX, 75231 Tel: (214) 346-2800 TBPE Firm Registration No. F-3043					
CONTRACT NO. 20-001/002			PID: -		
WRNTM AIR VALVE IMPROVEMENTS					
VALVE 2.0.E, STA 6+83					
VALVE 3.J.E, STA 113+04					
DALLAS WATER UTILITIES					
CITY OF DALLAS, TEXAS					
DESIGN	DRAWN	DATE	FILE	NUMBER	SHEET
KH	AG	MAY 2020	685W	660	29

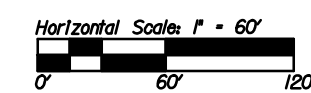
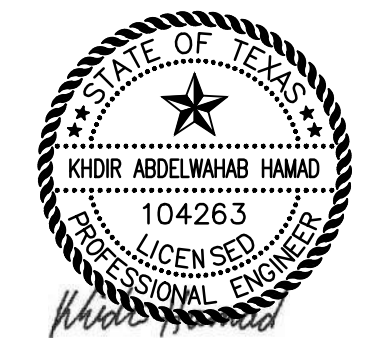


VALVE 4.2.E, STA 143+95

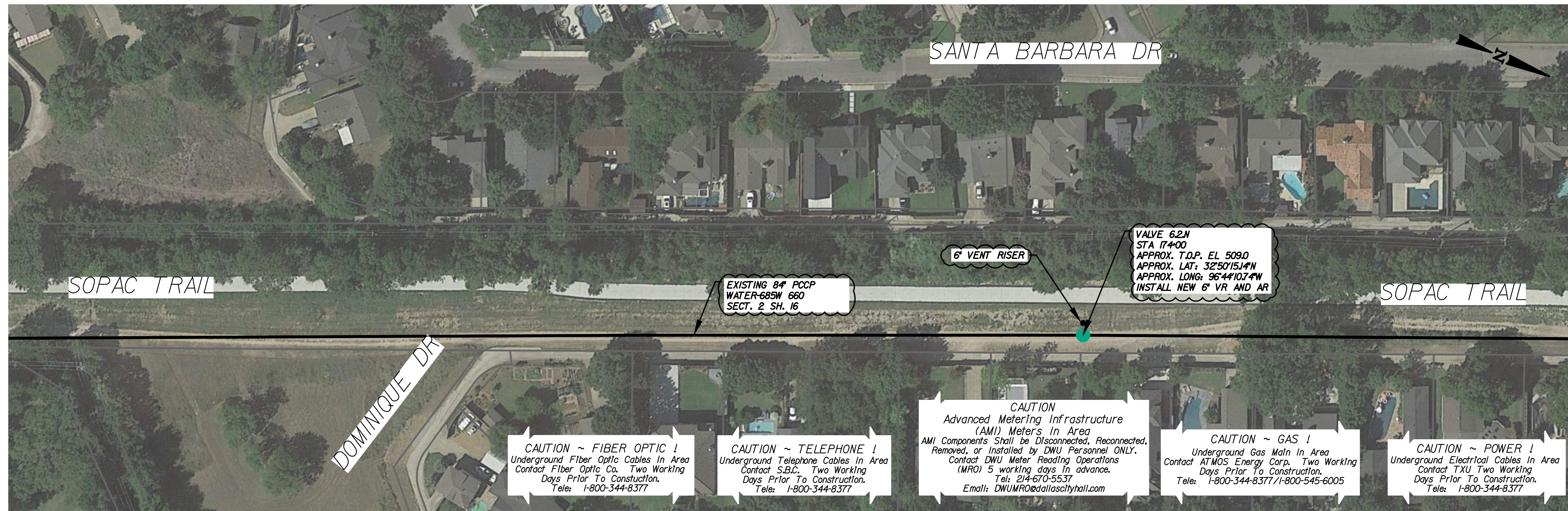
- VALVE 4.2.E NOTES:**
1. MAINTAIN EXISTING 6" GATE VALVE, 60" DIA. MANHOLE, FRAME, AND COVER. REPLACE FLANGE BOLTS.
 2. REMOVE EXISTING 6" COMBINATION AIR RELEASE VALVE ASSEMBLY.
 3. INSTALL NEW 6" VACUUM RELIEF AND AIR RELEASE VALVES PER DETAIL 2, SHEET 4L. NEW GATE VALVE, MANHOLE, FRAME, AND COVER ARE NOT REQUIRED.
 4. MAINTAIN EXISTING VENT PIPING AND VAULT.
 5. ADJUST HEIGHT OF BURIED HORIZONTAL RUN OF VENT PIPING AS NECESSARY.
 6. NEW MANHOLE PENETRATIONS ARE REQUIRED FOR NEW VENT PIPING PER THE DETAIL. PLUG EXISTING PENETRATIONS.
 7. CONFINE WORK AREA TO THE LIMITS SHOWN ON THE PLANS.
 8. NOTIFY HOUSE OWNER AT 7277 WILLIAMSON ROAD, DALLAS, TX 75214
- VALVE 5.2.E NOTES:**
1. REMOVE EXISTING 2" TYPE I AIR RELEASE VALVE ASSEMBLY, MANHOLE, AND VENT PIPING. REFER TO TYPE I AIR RELEASE VALVE DETAIL PAGE 208 OF THE DWU STANDARD DRAWINGS FOR WATER AND WASTEWATER CONSTRUCTION.
 2. REMOVE EXISTING 8"x2" THREADED OUTLET REDUCING FLANGE.
 3. INSTALL NEW 8"x6" REDUCING FLANGE CLASS 175 WITH FLANGE INSULATION KIT.
 4. INSTALL NEW 6" VACUUM RELIEF, AIR RELEASE, AND GATE VALVES PER DETAIL 2, SHEET 4L.
 5. INSTALL NEW 6" VENT PIPING.
 6. INSTALL NEW 7-FT DIA. MANHOLE, GRADE RINGS, AND 40" CJFRAME AND COVER PER DETAIL.
 7. INSTALL CONCRETE ENCASUREMENT.
 8. COORDINATE AND NOTIFY DALLAS PARKS AND RECREATION DEPARTMENT.



VALVE 5.2.E, STA 162+50



CDM Smith					
1240 Coit Road, Suite 400 Dallas, TX, 75231 Tel: (214) 348-2800 TBPE Firm Registration No. F-3043					
CONTRACT NO. 20-001/002			PID: -		
WRNTM AIR VALVE IMPROVEMENTS					
VALVE 4.2.E, STA 143+95					
VALVE 5.2.E, STA 162+50					
DALLAS WATER UTILITIES					
CITY OF DALLAS, TEXAS					
DESIGN	DRAWN	DATE	FILE	NUMBER	SHEET
KH	AG	MAY 2020	685W	660	30



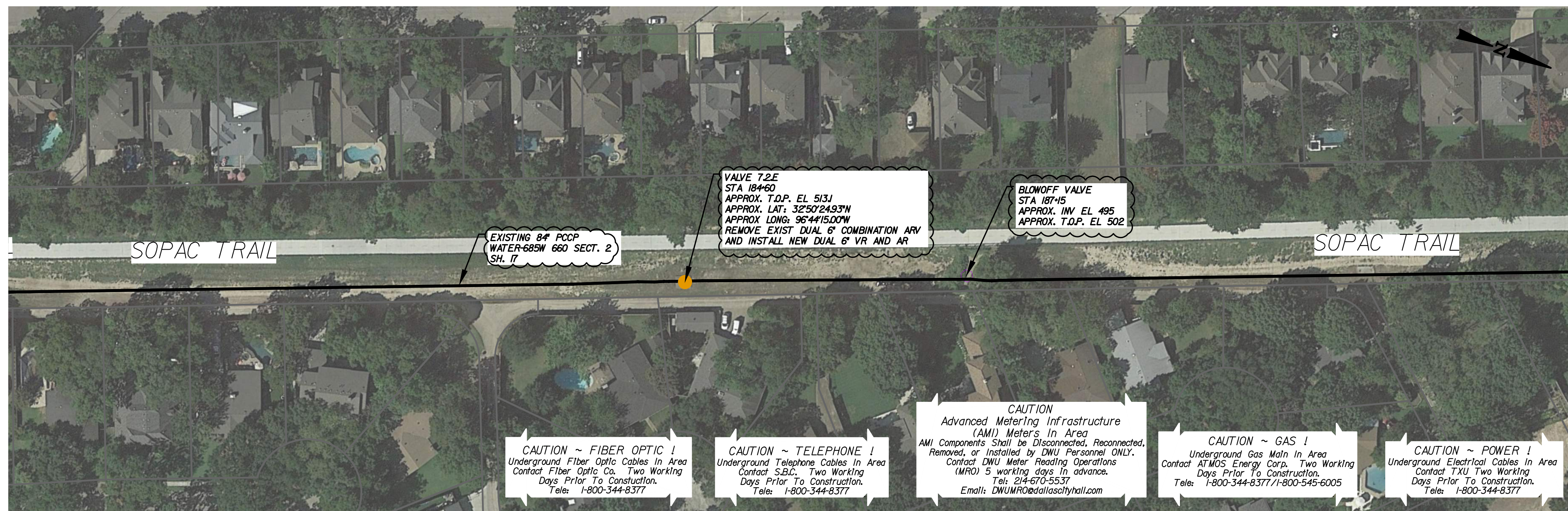
VALVE 6.2.N, STA 174+00

VALVE 6.2.N NOTES:

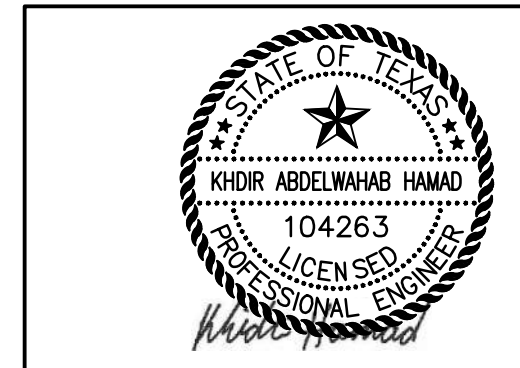
1. REPLACE ONE JOINT OF EXISTING PCCP MAIN WITH NEW PCCP JOINT WITH 2-18" FLANGED OUTLETS WITH 18"x6" REDUCED FLANGE (DRILLED AND TAPPED) FOR 6" FLANGE WITH FLANGE INSULATING KIT.
2. INSTALL NEW 2-6" VACUUM RELIEF, AIR RELEASE, AND GATE VALVES PER DETAIL 3, SHEET 42.
3. INSTALL NEW 6" VENT PIPING AND 10-FT DIA. MANHOLE PER DETAIL 4.
4. EXACT LOCATION TO BE APPROVED BY ENGINEER BASED ON FIELD-VERIFIED LOCATION OF PIPE JOINTS. VERIFY VENT LOCATIONS WITH DWU FIELD INSPECTOR.

VALVE 7.2.E NOTES:

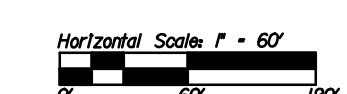
1. REMOVE EXISTING 2-6" HIGH CAPACITY VACUUM BREAKING VALVES, 2-AIR RELEASE VALVES, AND GATE VALVES.
2. REMOVE EXISTING GATE VALVE OPERATOR STEM, VALVE SUPPORT BRACKET, MANUAL OPERATOR, 6" GATE VALVE, FAUCET, AND BLIND FLANGE ON THE EXISTING 18" FLANGED OUTLET.
3. INSTALL NEW BLIND FLANGE DRILLED AND TAPPED FOR PRESSURE AND TRANSIENT MONITOR ON EXISTING 18" FLANGED OUTLET.
4. INSTALL NEW INSULATION KIT, 6" GATE VALVE, VACUUM RELIEF VALVE, AND AIR RELEASE VALVE ON EACH 6" FLANGED OUTLET PER DETAIL 4, SHEET 42.
5. MAINTAIN EXISTING VENT PIPING AND CONNECT ALL VALVES TO EXISTING VENT PIPING PER DETAIL. ADJUST HEIGHT OF HORIZONTAL RUN OF 10" VENT PIPING AND CORE NEW OPENINGS IF NECESSARY. SEAL AND REPAIR EXISTING WALL PENETRATIONS.



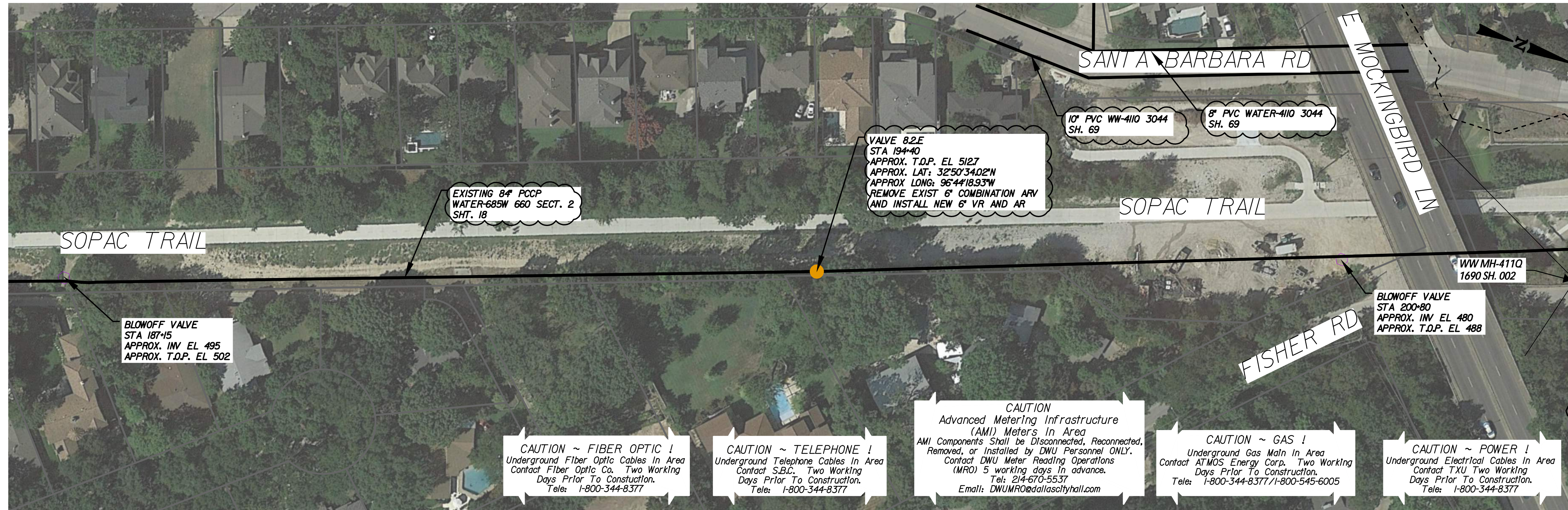
VALVE 7.2.E, STA 184+60



DATE: 05/07/2020



CDM Smith 1240 Coit Road, Suite 400 Dallas, TX, 75231 Tel: (214) 346-2800 TBPE Firm Registration No. F-3043					
CONTRACT NO. 20-001/002			PID: -		
WRNTM AIR VALVE IMPROVEMENTS					
VALVE 6.2.N STA 174+00					
VALVE 7.2.E, STA 184+60					
DALLAS WATER UTILITIES					
CITY OF DALLAS, TEXAS					
DESIGN	DRAWN	DATE	FILE	NUMBER	SHEET
KH	AG	MAY 2020	685W	660	31



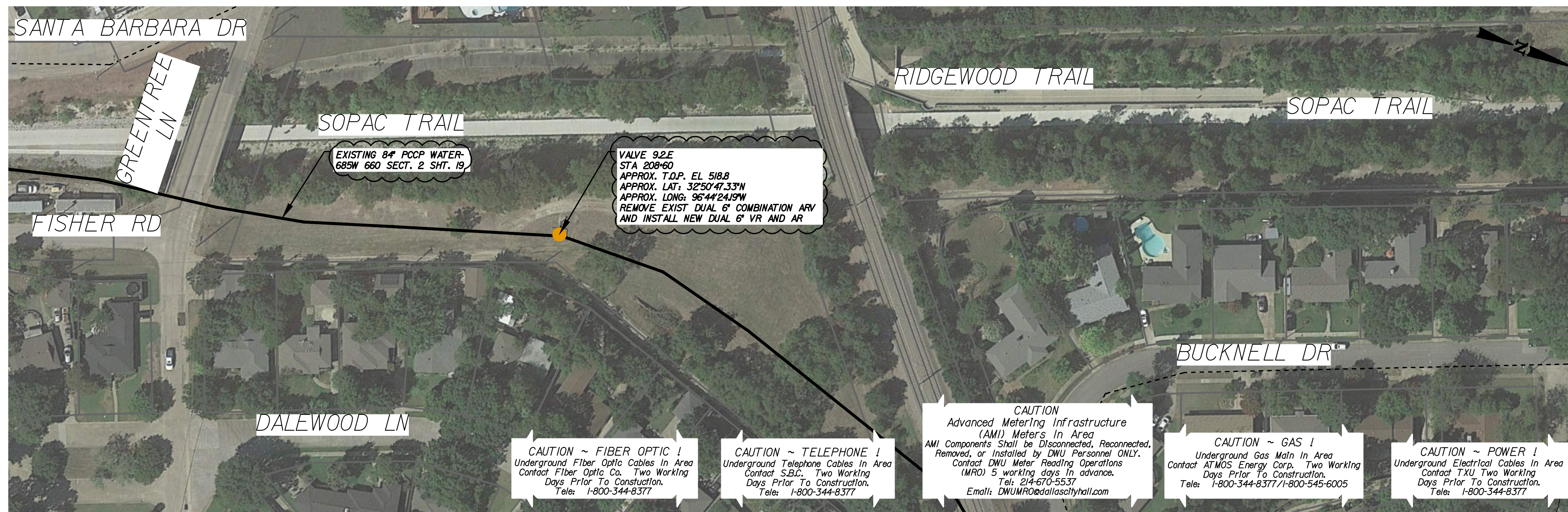
VALVE 8.2.E, STA 194+40

VALVE 8.2.E NOTES:

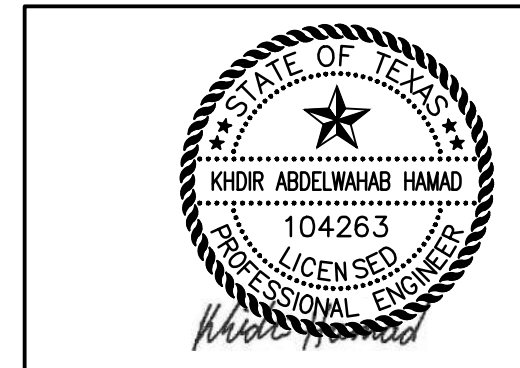
1. MAINTAIN EXISTING 6" GATE VALVE AND 60" DIA. MANHOLE, FRAME, AND COVER.
2. REMOVE EXISTING 6" COMBINATION AIR RELEASE VALVE ASSEMBLY.
3. INSTALL NEW 6" VACUUM RELIEF AND AIR RELEASE VALVES PER DETAIL 2, SHEET 41. NEW GATE VALVE, MANHOLE, FRAME, AND COVER ARE NOT REQUIRED.
4. MAINTAIN EXISTING VENT PIPING.
5. ADJUST HEIGHT OF BURIED HORIZONTAL RUN OF VENT PIPING AS NECESSARY.
6. NEW MANHOLE PENETRATIONS ARE REQUIRED FOR NEW VENT PIPING PER THE DETAIL PLUG EXISTING PENETRATIONS.

VALVE 9.2.E NOTES:

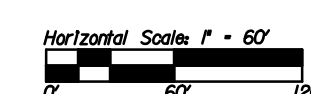
1. REMOVE EXISTING 2-6" HIGH CAPACITY VACUUM BREAKING VALVES, 2-AIR RELEASE VALVES, AND GATE VALVES.
2. REMOVE EXISTING GATE VALVE OPERATOR STEM, VALVE SUPPORT BRACKET, MANUAL OPERATOR, 6" GATE VALVE, FAUCET, AND BLIND FLANGE ON THE EXISTING 18" FLANGED OUTLET.
3. INSTALL NEW BLIND FLANGE DRILLED AND TAPPED FOR PRESSURE AND TRANSIENT MONITOR ON EXISTING 18" FLANGED OUTLET.
4. INSTALL NEW INSULATION KIT, 6" GATE VALVE, VACUUM RELIEF VALVE, AND AIR RELEASE VALVE ON EACH 6" FLANGED OUTLET PER DETAIL 4, SHEET 42.
5. MAINTAIN EXISTING VENT PIPING AND CONNECT ALL VALVES TO EXISTING VENT PIPING PER DETAIL. ADJUST HEIGHT OF HORIZONTAL RUN OF 10" VENT PIPING AND CORE NEW OPENINGS IF NECESSARY. SEAL AND REPAIR EXISTING WALL PENETRATIONS.



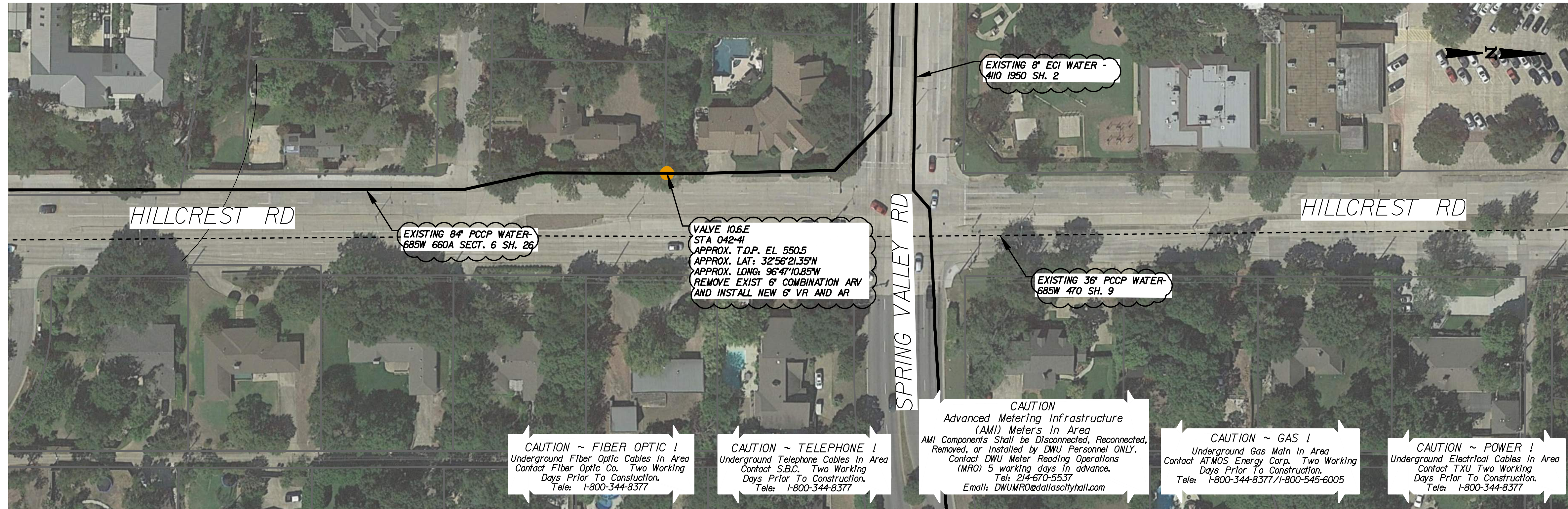
VALVE 9.2.E, STA 208+60



DATE: 05/07/2020



CDM Smith					
1240 Coit Road, Suite 400 Dallas, TX, 75231 Tel: (214) 346-2800 TBPE Firm Registration No. F-3043					
CONTRACT NO. 20-001/002			PID: -		
WRNTM AIR VALVE IMPROVEMENTS					
VALVE 8.2.E STA 194+40					
VALVE 9.2.E, STA 208+60					
DALLAS WATER UTILITIES					
CITY OF DALLAS, TEXAS					
DESIGN	DRAWN	DATE	FILE	NUMBER	SHEET
KH	AG	MAY 2020	685W	660	32



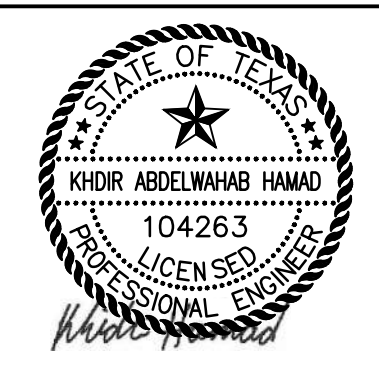
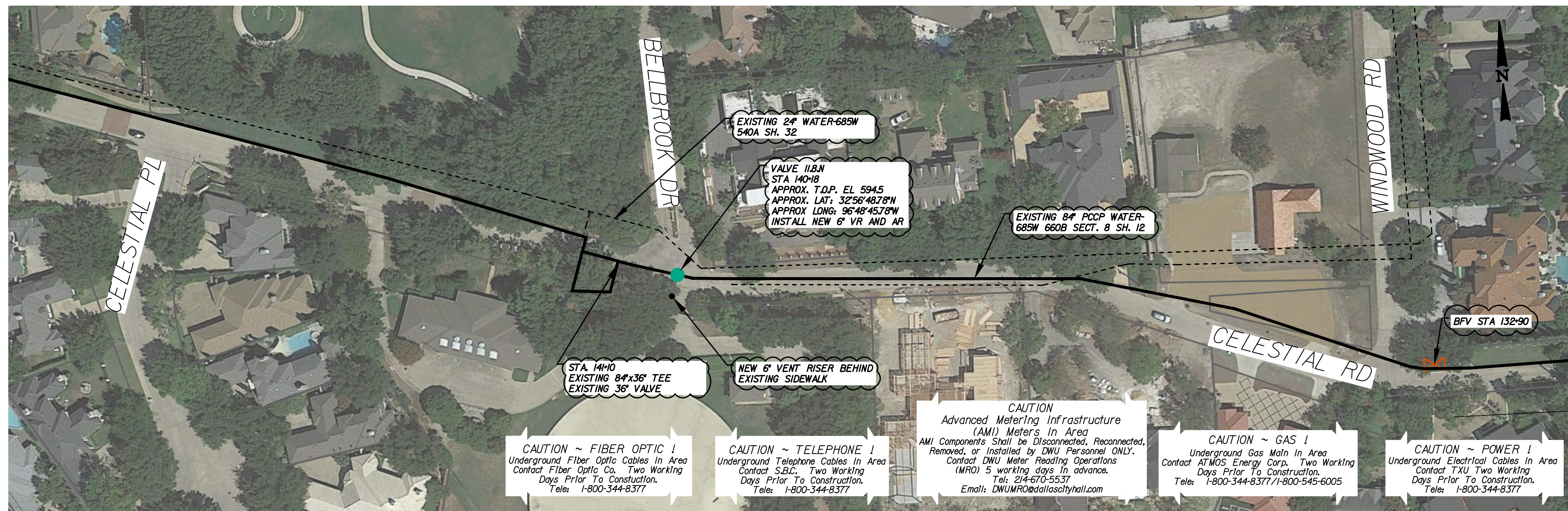
VALVE 10.6.E NOTES:

1. REMOVE EXISTING 2-6" HIGH CAPACITY VACUUM BREAKING VALVES AND 2-AIR RELEASE VALVES.
2. MAINTAIN EXISTING GATE VALVES.
3. REMOVE EXISTING GATE VALVE OPERATOR STEM, VALVE SUPPORT BRACKET, MANUAL OPERATOR, 6" GATE VALVE, FAUCET, AND BLIND FLANGE ON THE EXISTING 18" FLANGED OUTLET.
4. INSTALL NEW BLIND FLANGE DRILLED AND TAPPED FOR PRESSURE AND TRANSIENT MONITOR ON EXISTING 18" FLANGED OUTLET.
5. INSTALL NEW INSULATION KIT, VACUUM RELIEF VALVE, AND AIR RELEASE VALVE ON EACH 6" FLANGED OUTLET PER DETAIL 5, SHEET 43 EXCEPT THAT NEW GATE VALVE ARE NOT REQUIRED.
6. MAINTAIN EXISTING VENT PIPING AND CONNECT ALL VALVES TO EXISTING VENT PIPING PER DETAIL ADJUST HEIGHT OF HORIZONTAL RUN OF 8" VENT PIPING AND CORE NEW OPENINGS IF NECESSARY. SEAL AND REPAIR EXISTING WALL PENETRATIONS.
7. TRAFFIC CONTROL WILL BE REQUIRED.
8. MAINTAIN ACCESS TO HOUSES AT ALL TIMES.
9. TREE PRUNING IS REQUIRED.

VALVE 11.8.N NOTES:

1. TAP EXISTING 8" PCCP AND INSTALL 18" FLANGED OUTLET WITH 18"x6" REDUCING FLANGE (DRILLED AND TAPPED) FOR 6" FLANGE WITH FLANGE INSULATING KIT.
2. INSTALL NEW 6" VACUUM RELIEF, AIR RELEASE, AND GATE VALVES PER DETAIL 2, SHEET 41.
3. INSTALL 6" VENT PIPING AND 7-FT DIA. MANHOLE.
4. COORDINATE WORK WITH THE TOWN OF ADDISON PUBLIC WORKS AND ENGINEERING DEPARTMENT AND ACQUIRE ANY NECESSARY PERMITS. TRAFFIC CONTROL, CONSTRUCTION SITE MANAGEMENT, AND SITE RESTORATION SHALL CONFORM TO TOWN OF ADDITION CODE OF ORDINANCES CHAPTER 70 AND CHAPTER 71
PHONE : 972-450-2871
PHYSICAL ADDRESS:
ADDISON SERVICE CENTER
16801 WESTGROVE DRIVE
ADDISON, TX 75001
5. PREVENT DISRUPTIONS TO THE CELESTIAL PUMP STATION OPERATIONS. IN CASE OF EMERGENCY, CALL 972-450-7155
6. EXACT TAP LOCATION TO BE APPROVED BY ENGINEER BASED ON FIELD-VERIFIED LOCATION OF PIPE JOINTS. VERIFY VENT LOCATIONS WITH DWU FIELD INSPECTOR.

VALVE 10.6.E, STA 042+41



DATE: 05/07/2020

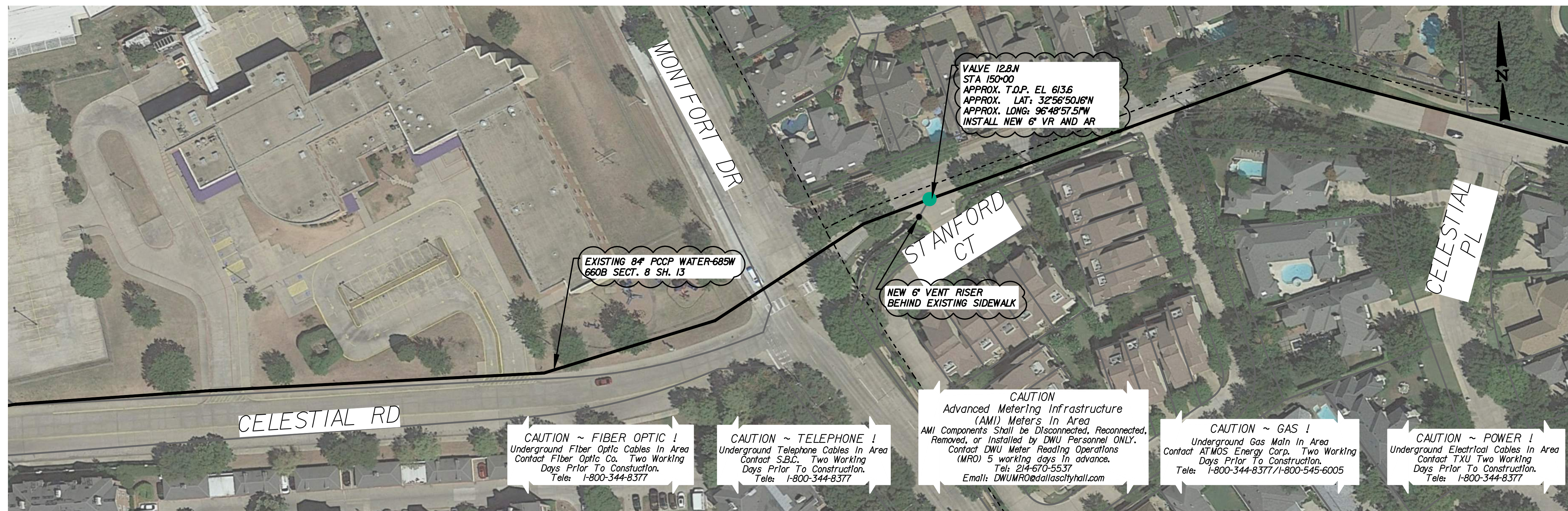


CDM Smith

1240 Coit Road, Suite 400
Dallas, TX, 75231
Tel: (214) 346-2800
TBPE Firm Registration No. F-3043

CONTRACT NO. 20-001/002		PID: -	
WRNTM AIR VALVE IMPROVEMENTS			
VALVE 10.6.E STA 042+41			
VALVE 11.8.N, STA 140+00			
DALLAS WATER UTILITIES			
CITY OF DALLAS, TEXAS			
DESIGN	DRAWN	DATE	FILE
KH	AG	MAY 2020	685W
			NUMBER
			660
			SHEET
			33

VALVE 11.8.N, STA 140+00



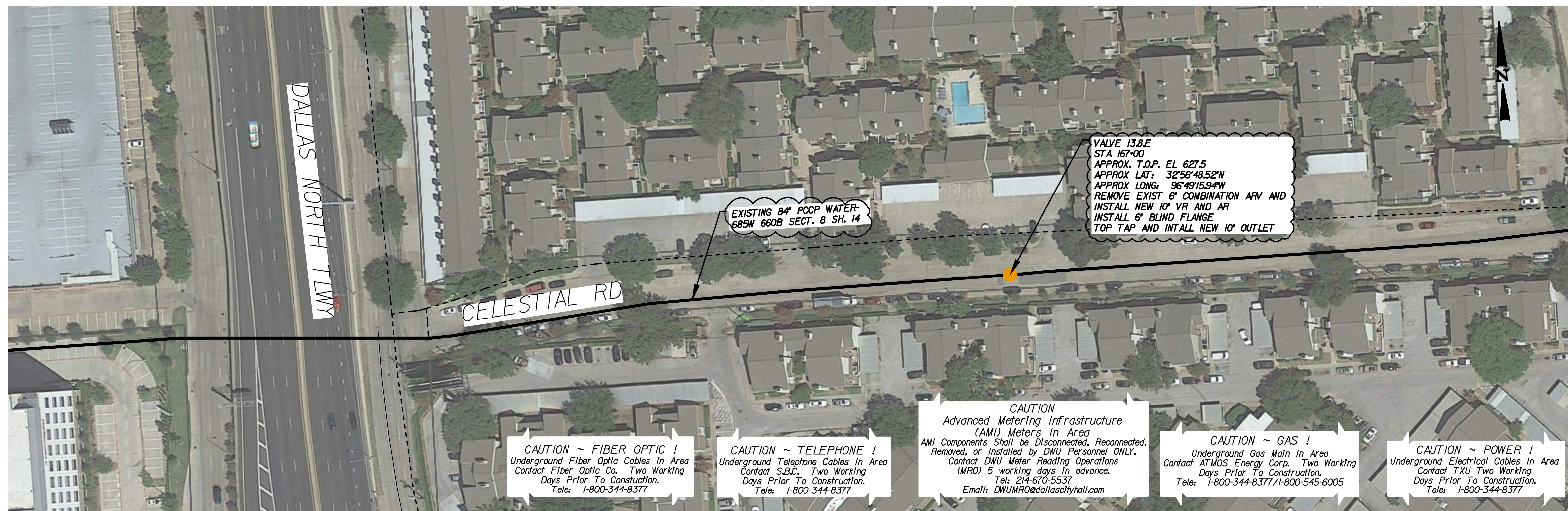
VALVE 12.8.N, STA 150+00

VALVE 12.8.N NOTES:

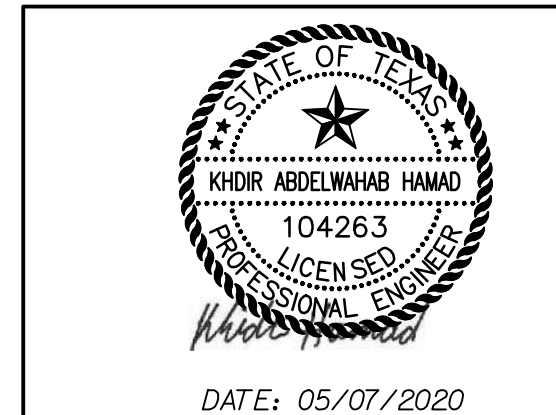
1. TAP EXISTING 8" PCCP AND INSTALL 18" FLANGED OUTLET WITH 18"x6" REDUCING FLANGE (DRILLED AND TAPPED) FOR 6" FLANGE WITH FLANGE INSULATING KIT.
2. INSTALL NEW 6" VACUUM RELIEF, AIR RELEASE, AND GATE VALVES PER DETAIL 2, SHEET 41.
3. INSTALL 6" VENT PIPING AND 7-FT DIA. MANHOLE.
4. LANE CLOSURE ON CELESTIAL RD IS NOT ALLOWED.
5. COORDINATE WORK WITH THE TOWN OF ADDISON PUBLIC WORKS AND ENGINEERING DEPARTMENT AND ACQUIRE ANY NECESSARY PERMITS. TRAFFIC CONTROL, CONSTRUCTION SITE MANAGEMENT, AND SITE RESTORATION SHALL CONFORM TO TOWN OF ADDITION CODE OF ORDINANCES CHAPTER 70 AND CHAPTER 71. PHONE: 972-450-2871 PHYSICAL ADDRESS: ADDISON SERVICE CENTER 16801 WESTGROVE DRIVE ADDISON, TX 75001
6. MAINTAIN ACCESS TO HOUSES AT ALL TIMES.
7. EXACT TAP LOCATION TO BE APPROVED BY ENGINEER BASED ON FIELD-VERIFIED LOCATION OF PIPE JOINTS. VERIFY VENT LOCATIONS WITH DWU FIELD INSPECTOR.

VALVE 13.8.E NOTES:

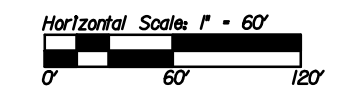
1. REMOVE EXISTING 2-6" HIGH CAPACITY VACUUM BREAKING VALVES, 2-AIR RELEASE VALVES, AND 2-6" GATE VALVES ON THE EXISTING 2-6" FLANGED OUTLETS.
2. REMOVE 6" PIPING AND 10"x6" CROSS AS CALLED.
3. INSTALL NEW 10" PIPING 90-BEND, 10"x10" CROSS, AND 10"x6" REDUCER.
4. REMOVE EXISTING VALVE OPERATOR STEM, SUPPORT BRACKET, MANUAL ACTUATOR, 6" GATE VALVE, AND HOSE BIB FAUCET.
5. REMOVE EXISTING 18" FLANGED OUTLET AND REPLACE WITH NEW 18"x10" FLANGED OUTLET.
6. INSTALL FLANGE INSULATING KIT.
7. INSTALL NEW 2-6" VACUUM RELIEF, 1-0" VACUUM RELIEF, AND AIR RELEASE VALVES PER DETAIL 6, SHEET 43.
8. MAINTAIN EXISTING 10" AND 6" VENT PIPING AND CONNECT ALL VALVES TO EXISTING 10" VENT PIPING AND MAKE NECESSARY CHANGES.
9. TRAFFIC CONTROL PLAN IS REQUIRED.
10. NOTIFY DAVENPORT APARTMENT MANAGEMENT OF CONSTRUCTION AT LEAST 7 DAYS BEFORE WORK STARTS. PHONE: (972) 233-7200 PHYSICAL ADDRESS: 14500 DALLAS PKWY DALLAS, TX 75254
11. DISTRIBUTE FLYERS PREVENTING PARKING ON BOTH SIDES OF THE ROAD ALONG THE LIMITS OF CONSTRUCTION.
12. MAINTAIN ACCESS TO APARTMENTS PARKING AT ALL TIMES.
13. MAINTAIN AND PRESERVE EXISTING CATHODIC PROTECTION TEST STATION.



VALVE 13.8.E, STA 167+00

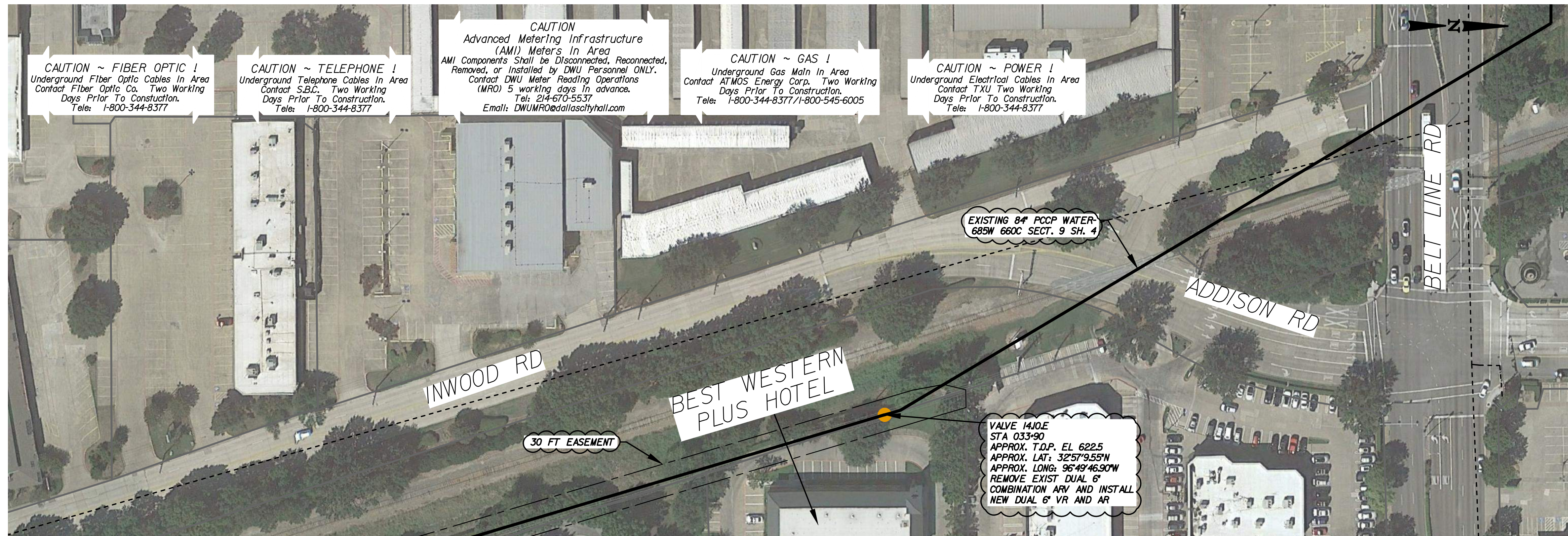


DATE: 05/07/2020



1240 Coit Road, Suite 400
Dallas, TX, 75231
Tel: (214) 346-2800
TBPE Firm Registration No. F-3043

CONTRACT NO. 20-001/002		PID: -			
WRNTM AIR VALVE IMPROVEMENTS					
VALVE 12.8.N STA 150+00					
VALVE 13.8.E, STA 167+00					
DALLAS WATER UTILITIES					
CITY OF DALLAS, TEXAS					
DESIGN	DRAWN	DATE	FILE	NUMBER	SHEET
KH	AG	MAY 2020	685W	660	34



CAUTION ~ FIBER OPTIC !
Underground Fiber Optic Cables In Area
Contact Fiber Optic Co. Two Working
Days Prior To Construction.
Tele: 1-800-344-8377

CAUTION ~ TELEPHONE !
Underground Telephone Cables In Area
Contact S.B.C. Two Working
Days Prior To Construction.
Tele: 1-800-344-8377

CAUTION
Advanced Metering Infrastructure
(AMI) Meters In Area
AMI Components Shall be Disconnected, Reconnected,
Removed, or Installed by DWU Personnel ONLY.
Contact DWU Meter Reading Operations
(MRO) 5 working days in advance.
Tel: 214-670-5537
Email: DWUMRO@dallaswater.com

CAUTION ~ GAS !
Underground Gas Main In Area
Contact AT&S Energy Corp. Two Working
Days Prior To Construction.
Tele: 1-800-344-8377/1-800-545-6005

CAUTION ~ POWER !
Underground Electrical Cables In Area
Contact TXU Two Working
Days Prior To Construction.
Tele: 1-800-344-8377

EXISTING 8" PCP WATER
685W 660C SECT. 9 SH. 4

VALVE 14.10.E
STA 033+90
APPROX. T.D.P. EL 6225
APPROX. LAT: 32°57'9.55"N
APPROX. LONG: 96°49'46.90"W
REMOVE EXIST DUAL 6"
COMBINATION ARV AND INSTALL
NEW DUAL 6" VR AND AR

30 FT EASEMENT

BEST WESTERN PLUS HOTEL

INWOOD RD

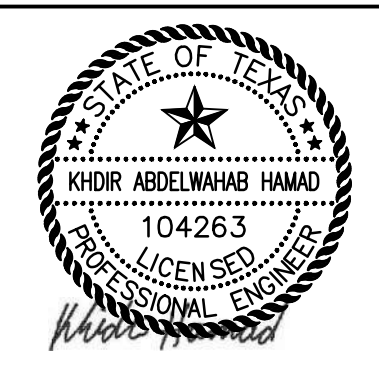
ADDISON RD

BELT LINE RD

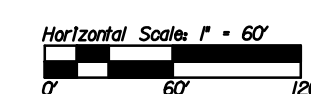
VALVE 14.10.E NOTES:

1. REMOVE EXISTING 2-6" HIGH CAPACITY VACUUM BREAKING VALVES, 2-AIR RELEASE VALVES, AND 6" GATE VALVES.
2. REMOVE EXISTING GATE VALVE OPERATOR STEM, VALVE SUPPORT BRACKET, MANUAL OPERATOR, 6" GATE VALVE, FAUCET, AND BLIND FLANGE ON THE EXISTING 18" FLANGED OUTLET.
3. INSTALL NEW BLIND FLANGE DRILLED AND TAPPED FOR PRESSURE AND TRANSIENT MONITOR ON EXISTING 18" FLANGED OUTLET.
4. INSTALL NEW INSULATION KIT, 6" GATE VALVE, VACUUM RELIEF VALVE, AND AIR RELEASE VALVE ON EACH 6" FLANGED OUTLET PER DETAIL 5, SHEET 43.
5. MAINTAIN EXISTING 6" VENT PIPING AND CONNECT ALL VALVES TO EXISTING 6" VENT PIPING PER DETAIL. ADJUST HEIGHT OF HORIZONTAL 10" VENT PIPING AND CORE NEW IF NECESSARY. SEAL AND REPAIR EXISTING WALL PENETRATIONS.
6. COORDINATE WORK AND NOTIFY MANAGEMENT OF BEST WESTERN PLUS HOTEL AT LEAST 7 DAYS BEFORE WORK STARTS.
CALL: (972) 701-0881
PHYSICAL ADDRESS:
14975 LANDMARK BLVD
DALLAS, TX 75254
7. TREE PRUNING IS REQUIRED. COORDINATE WITH HOTEL MANAGEMENT.
8. MAINTAIN EXISTING IRRIGATION SYSTEM AND REPAIR/REPLACE IF DAMAGED DURING CONSTRUCTION. NO ADDITIONAL COMPENSATION.
9. ALL WORK SHALL BE MAINTAINED WITHIN THE EXISTING 30-FT EASEMENT.
10. CONFINE WORK AREA AS DIRECTED BY THE HOTEL MANAGEMENT.

VALVE 14.10.E, STA 033+90

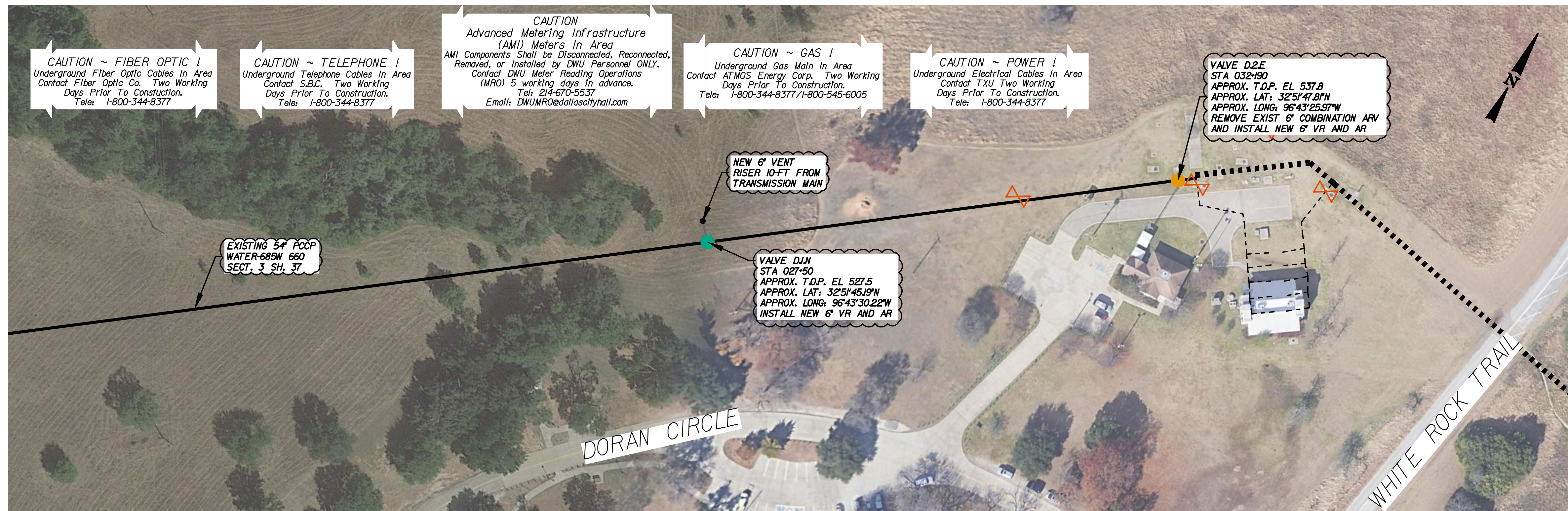


DATE: 05/07/2020



1240 Coit Road, Suite 400
Dallas, TX, 75231
Tel: (214) 346-2800
TBPE Firm Registration No. F-3043

CONTRACT NO. 20-001/002		PID: -			
WRNTM AIR VALVE IMPROVEMENTS					
VALVE 14.10.E STA 033+90					
DALLAS WATER UTILITIES					
CITY OF DALLAS, TEXAS					
DESIGN	DRAWN	DATE	FILE	NUMBER	SHEET
KH	AG	MAY 2020	685W	660	35



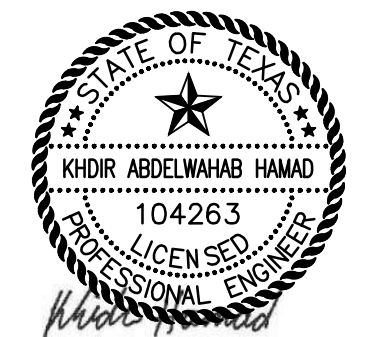
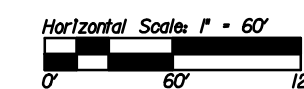
VALVE D.I.N, STA 027+50 AND
VALVE D.2.E, STA 032+19

VALVE D.I.N NOTES:

1. TAP EXISTING 54" PCCP AND INSTALL 18" FLANGED OUTLET WITH 18"X6" REDUCING FLANGE (DRILLED AND TAPPED) FOR 6" FLANGE WITH FLANGE INSULATING KIT.
2. INSTALL NEW 6" VACUUM RELIEF, AIR RELEASE, AND GATE VALVES PER DETAIL 2, SHEET 41.
3. INSTALL 6" VENT PIPING AND 7-FT DIA. MANHOLE.
4. WORK AREA RESTORATION SHALL INCLUDE RESEEDING WITH NATIVE GRASS OR AS DIRECTED BY CITY OF DALLAS PARKS AND RECREATION DEPARTMENT.
5. EXACT TAP LOCATION TO BE APPROVED BY ENGINEER BASED ON FIELD-VERIFIED LOCATION OF PIPE JOINTS. VERIFY VENT LOCATIONS WITH DWU FIELD INSPECTOR.

VALVE D.2.E NOTES:

1. MAINTAIN EXISTING 6" GATE VALVE AND 60" DIA. MANHOLE, FRAME, AND COVER.
2. REMOVE EXISTING 6" COMBINATION AIR RELEASE VALVE ASSEMBLY.
3. INSTALL NEW 6" VACUUM RELIEF AND AIR RELEASE VALVES PER DETAIL 2, SHEET 41. NEW GATE VALVE, MANHOLE, FRAME, AND COVER ARE NOT REQUIRED.
4. MAINTAIN EXISTING VENT PIPING.
5. ADJUST HEIGHT OF BURIED HORIZONTAL RUN OF VENT PIPING AS NECESSARY.
6. NEW MANHOLE PENETRATIONS ARE REQUIRED FOR NEW VENT PIPING PER THE DETAIL PLUG EXISTING PENETRATIONS.

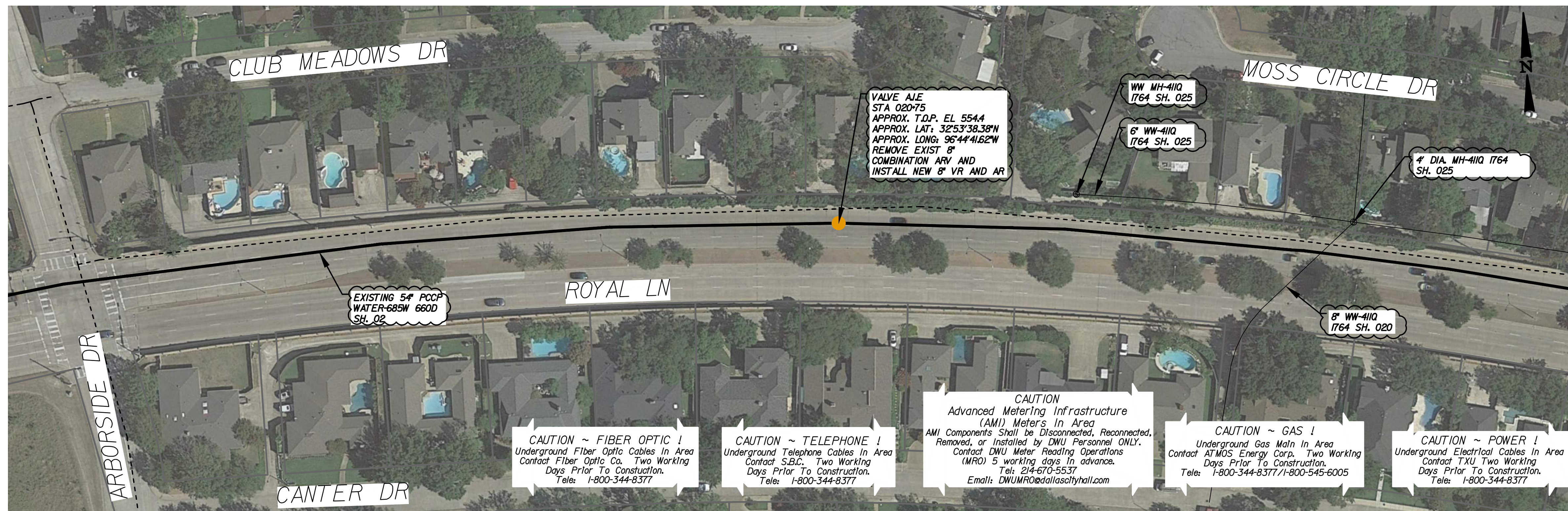


DATE: 05/07/2020



1240 Coit Road, Suite 400
Dallas, TX, 75231
Tel: (214) 349-2800
TBPE Firm Registration No. F-3043

CONTRACT NO. 20-001/002		PID: -			
WRNTM AIR VALVE IMPROVEMENTS					
VALVE D.I.N, STA 027+50 AND					
VALVE D.2.E, STA 032+19					
DALLAS WATER UTILITIES					
CITY OF DALLAS, TEXAS					
DESIGN	DRAWN	DATE	FILE	NUMBER	SHEET
KH	AG	MAY 2020	685W	660	36



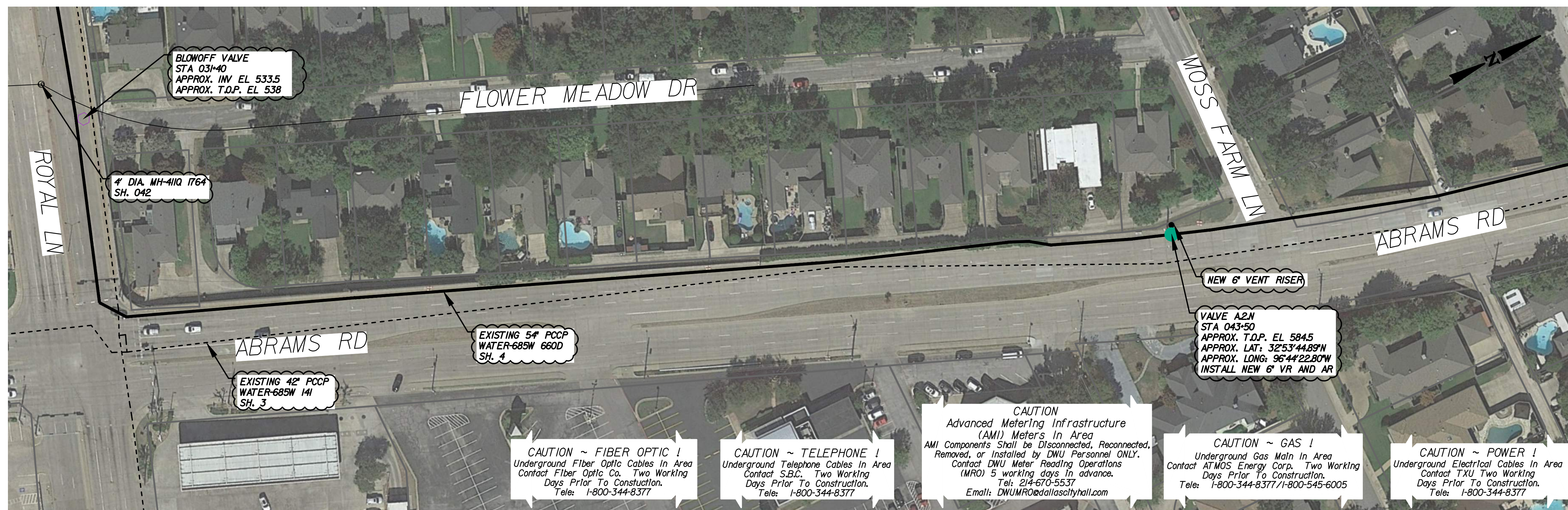
VALVE A.I.E, STA 020+75

VALVE A.I.E. NOTES:

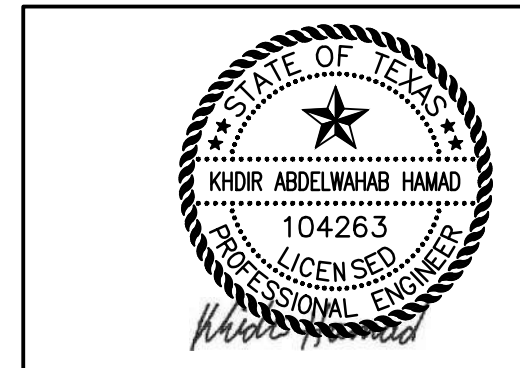
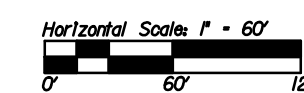
1. REMOVE EXISTING 8" GATE VALVE. MAINTAIN EXISTING 70" DIA. MANHOLE, FRAME, AND COVER.
2. REMOVE EXISTING 8" COMBINATION AIR RELEASE VALVE ASSEMBLY.
3. INSTALL NEW 8" GATE VALVE, VACUUM RELIEF AND AIR RELEASE VALVES PER DETAIL 1, SHEET 41. MANHOLE, FRAME, AND COVER ARE NOT REQUIRED.
4. MAINTAIN EXISTING 8" VENT PIPING.
5. ADJUST HEIGHT OF BURIED HORIZONTAL RUN OF VENT PIPING AS NECESSARY.
6. NEW MANHOLE PENETRATIONS ARE REQUIRED FOR NEW VENT PIPING PER THE DETAIL PLUG EXISTING PENETRATIONS.

VALVE A.2.N. NOTES:

1. TAP EXISTING 54" PCCP AND INSTALL 18" FLANGED OUTLET WITH 18"x6" REDUCING FLANGE (DRILLED AND TAPPED) FOR 6" FLANGE WITH FLANGE INSULATING KIT.
2. INSTALL NEW 6" VACUUM RELIEF, AIR RELEASE, AND GATE VALVES PER DETAIL 2, SHEET 41.
3. INSTALL 6" VENT PIPING AND 7-FT DIA. MANHOLE.
4. EXACT TAP LOCATION TO BE APPROVED BY ENGINEER BASED ON FIELD-VERIFIED LOCATION OF PIPE JOINTS. VERIFY VENT LOCATIONS WITH DWU FIELD INSPECTOR.

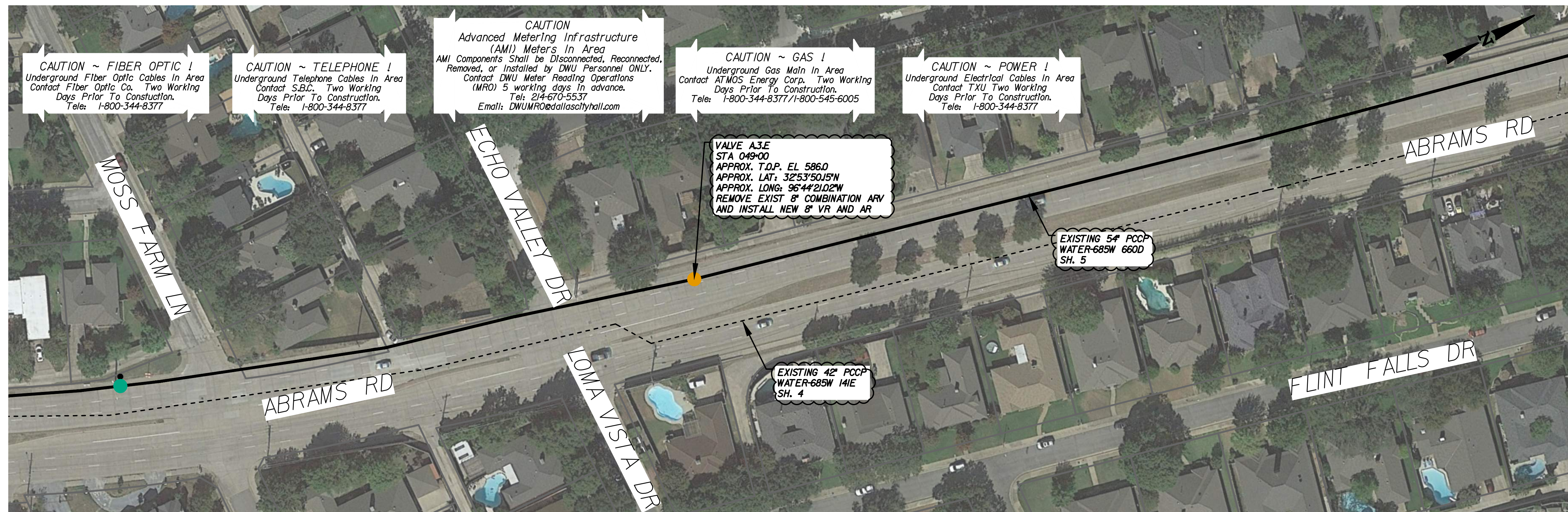


VALVE A.2.N, STA 043+50



DATE: 05/07/2020

CDM Smith		1240 Coit Road, Suite 400 Dallas, TX, 75231 Tel: (214) 346-2800 TBPE Firm Registration No. F-3043	
CONTRACT NO. 20-001/002		PID: -	
WRNTM AIR VALVE IMPROVEMENTS			
VALVE A.I.E. STA 020+75 AND			
VALVE A.2.N. STA 043+50			
DALLAS WATER UTILITIES			
CITY OF DALLAS, TEXAS			
DESIGN	DRAWN	DATE	FILE
KH	AG	MAY 2020	685W
			NUMBER
			660
			SHEET
			37



VALVE A.3.E, STA 049+00

VALVE A.3.E NOTES:

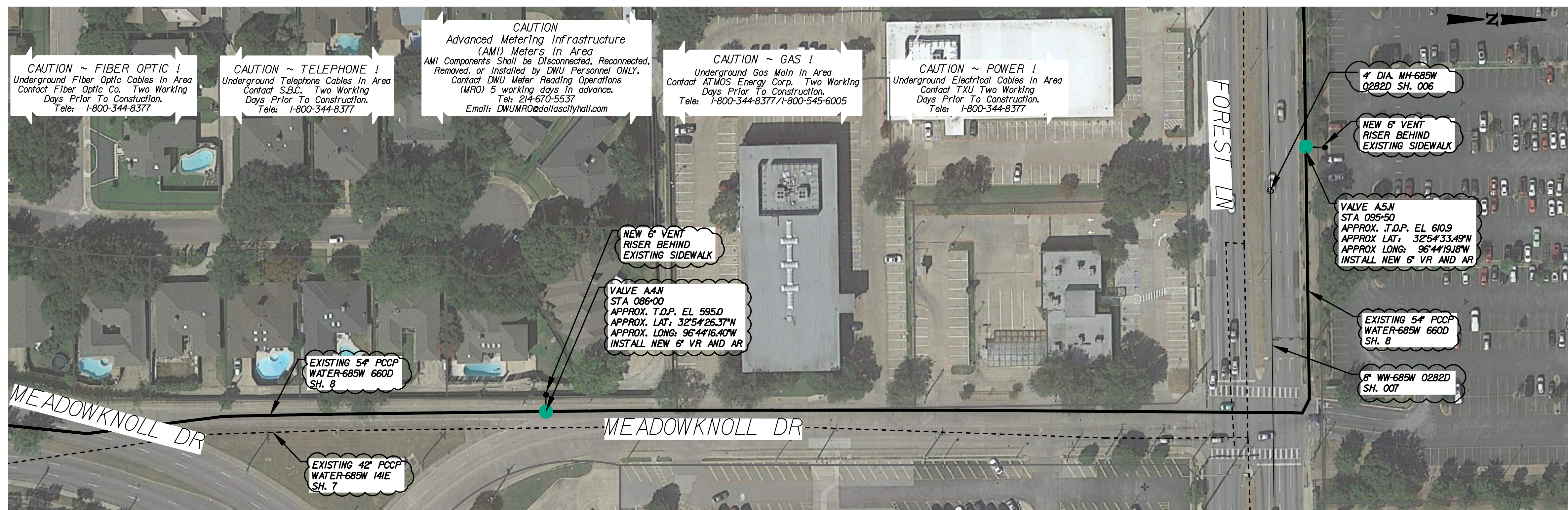
1. REMOVE EXISTING 2" BALL VALVE, AND 2" VENT PIPING, MAINTAIN EXISTING 70" DIA. MANHOLE, FRAME, AND COVER.
2. REMOVE EXISTING 2" COMBINATION AIR RELEASE VALVE ASSEMBLY.
3. INSTALL NEW 8" GATE VALVE, VACUUM RELIEF AND AIR RELEASE VALVES PER DETAIL 1, SHEET 41.
4. REPLACE EXISTING 2" AIR VENT ASSEMBLY AND PIPING WITH NEW 8" VENT PIPING PER DETAIL.
5. NEW MANHOLE PENETRATIONS ARE REQUIRED FOR NEW VENT PIPING PER THE DETAIL, PLUS EXISTING PENETRATIONS.
6. TRAFFIC CONTROL AND LANE CLOSURE ARE REQUIRED.
7. SIDEWALK REPLACEMENT IS REQUIRED.

VALVE A.4.N NOTES:

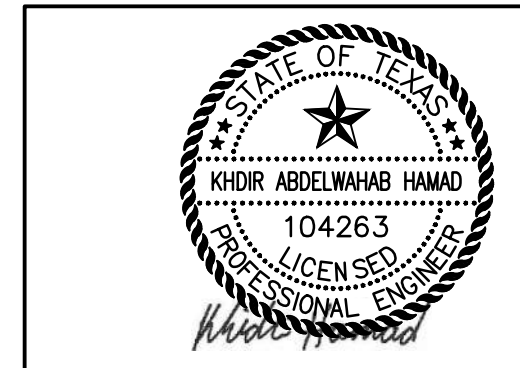
1. TAP EXISTING 54" PCCP AND INSTALL 18" FLANGED OUTLET WITH 18"x6" REDUCING FLANGE (DRILLED AND TAPPED) FOR 6" FLANGE WITH FLANGE INSULATING KIT.
2. INSTALL NEW 6" VACUUM RELIEF, AIR RELEASE, AND GATE VALVES PER DETAIL 2, SHEET 41.
3. INSTALL 6" VENT PIPING AND 7-F" DIA. MANHOLE.
4. TRAFFIC CONTROL AND LANE CLOSURE ARE REQUIRED.
5. EXACT TAP LOCATION TO BE APPROVED BY ENGINEER BASED ON FIELD-VERIFIED LOCATION OF PIPE JOINTS.

VALVE A.5.N NOTES:

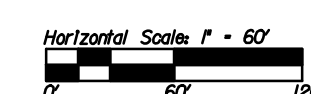
1. TAP EXISTING 54" PCCP AND INSTALL 18" FLANGED OUTLET WITH 18"x6" REDUCING FLANGE (DRILLED AND TAPPED) FOR 6" FLANGE WITH FLANGE INSULATING KIT.
2. INSTALL NEW 6" VACUUM RELIEF, AIR RELEASE, AND GATE VALVES PER DETAIL 2, SHEET 41.
3. INSTALL 6" VENT PIPING AND 7-F" DIA. MANHOLE.
4. TRAFFIC CONTROL AND LANE CLOSURE ARE REQUIRED.
5. PROTECT AND MAINTAIN POWER POLES.
6. SIDEWALK REPLACEMENT IS REQUIRED.
7. RESTORE LANDSCAPING TO ORIGINAL CONDITION.
8. MAINTAIN EXISTING IRRIGATION SYSTEM AND REPAIR IF DAMAGED AT NO ADDITIONAL COST.
9. EXACT TAP LOCATION TO BE APPROVED BY ENGINEER BASED ON FIELD-VERIFIED LOCATION OF PIPE JOINTS AND POWER POLES. VERIFY VENT LOCATIONS WITH DWU FIELD INSPECTOR.



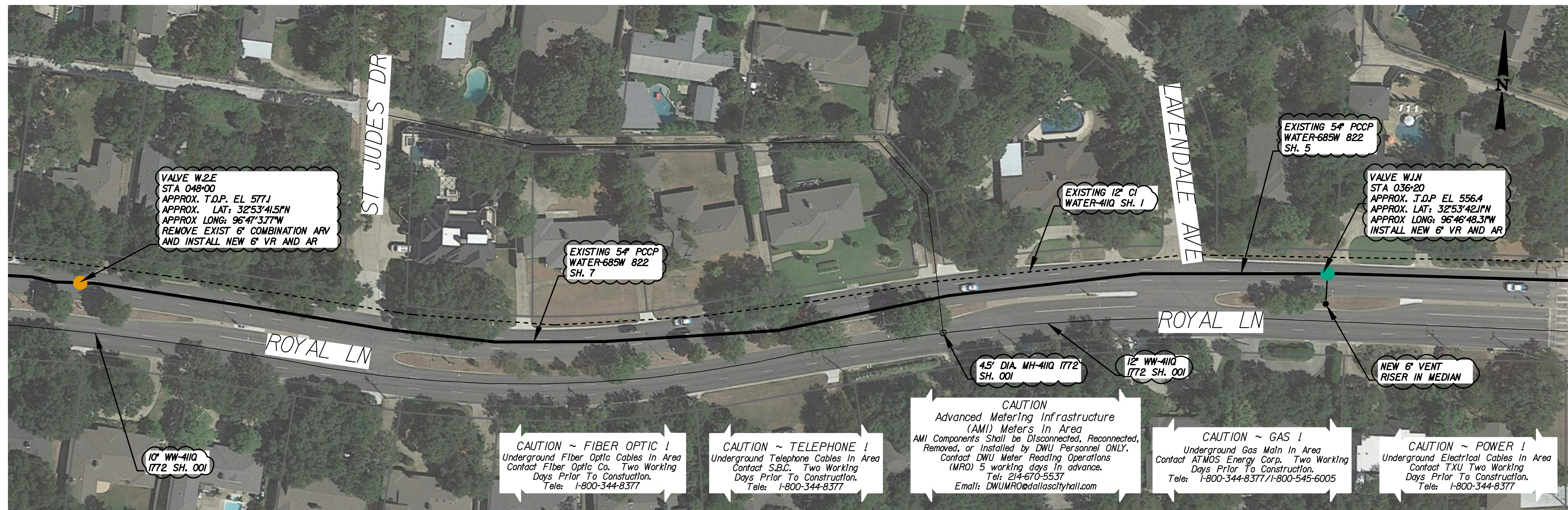
VALVE A.4.N, STA 086+00 AND VALVE A.5.N STA 095+50



DATE: 05/07/2020



		1240 Coit Road, Suite 400 Dallas, TX, 75231 Tel: (214) 346-2800 TBPE Firm Registration No. F-3043			
		CONTRACT NO. 20-001/002	PID: -		
WRNTM AIR VALVE IMPROVEMENTS					
VALVE A.3.E STA 049+00 AND A.4.N STA 086+00 AND A.5.N STA 095+50					
DALLAS WATER UTILITIES					
CITY OF DALLAS, TEXAS					
DESIGN	DRAWN	DATE	FILE	NUMBER	SHEET
KH	AG	MAY 2020	685W	660	38



VALVE W.I.N, STA 036+20 AND
VALVE W.2.E, STA 048+00

VALVE W.I.N NOTES:

1. TAP EXISTING 5" PCWP AND INSTALL 18" FLANGED OUTLET WITH 18"x6" REDUCING FLANGE (DRILLED AND TAPPED) FOR 6" FLANGE WITH FLANGE INSULATING KIT.
2. INSTALL NEW 6" VACUUM RELIEF, AIR RELEASE, AND GATE VALVES PER DETAIL 2, SHEET 4I.
3. INSTALL 6" VENT PIPING AND 7-FT DIA. MANHOLE.
4. TRAFFIC CONTROL AND LANE CLOSURE ARE REQUIRED.
5. EXACT TAP LOCATION TO BE APPROVED BY ENGINEER BASED ON FIELD-VERIFIED LOCATION OF PIPE JOINTS. VERIFY VENT LOCATIONS WITH DWU FIELD INSPECTOR.

VALVE W.2.E NOTES:

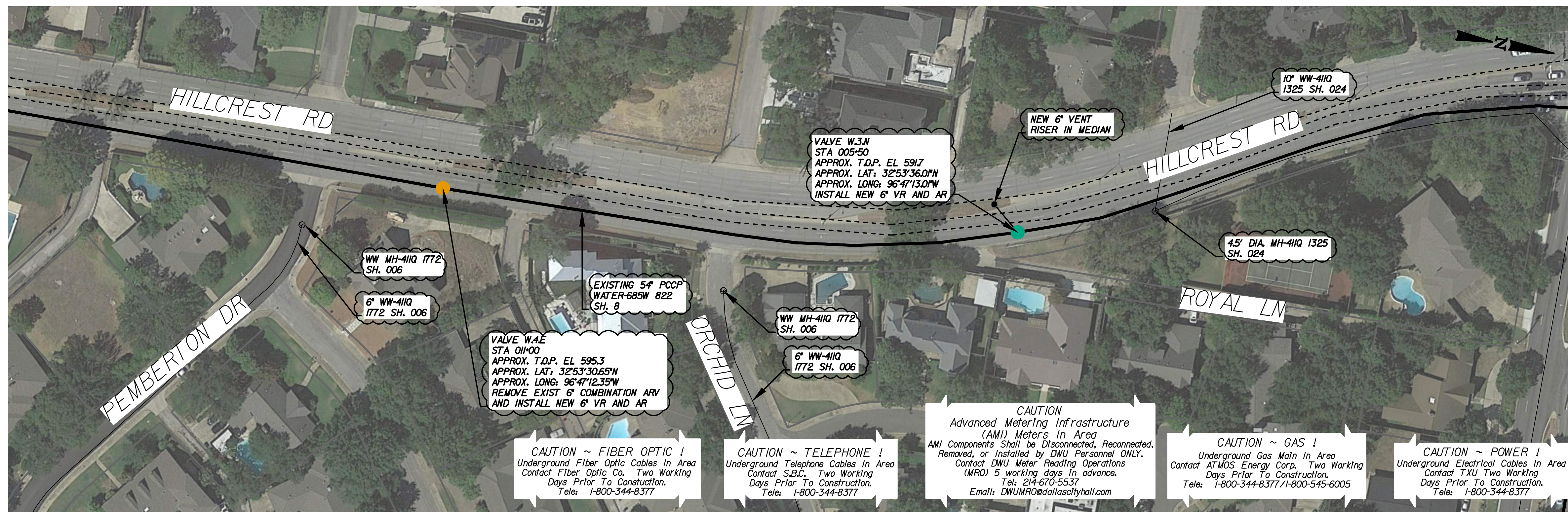
1. MAINTAIN EXISTING 6" GATE VALVE, MAINTAIN EXISTING 90" DIA. MANHOLE, FRAME, AND COVER.
2. REMOVE EXISTING 6" COMBINATION AIR RELEASE VALVE ASSEMBLY.
3. INSTALL NEW 6" VACUUM RELIEF AND AIR RELEASE VALVES PER DETAIL 2, SHEET 4I. GATE VALVE, MANHOLE, FRAME, AND COVER ARE NOT REQUIRED.
4. MAINTAIN EXISTING 6" AIR VENT ASSEMBLY AND PIPING.
5. ADJUST HEIGHT OF BURIED HORIZONTAL RUN OF VENT PIPING AS NECESSARY.
6. NEW MANHOLE PENETRATIONS ARE REQUIRED FOR NEW VENT PIPING PER THE DETAIL PLUG EXISTING PENETRATIONS.
7. TRAFFIC CONTROL AND LANE CLOSURE ARE REQUIRED.

VALVE W.3.N NOTES:

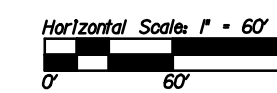
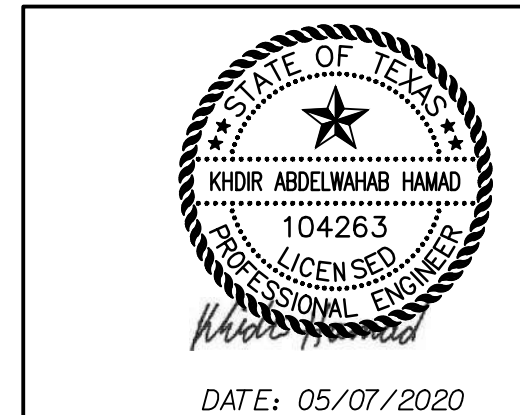
1. TAP EXISTING 5" PCWP AND INSTALL 18" FLANGED OUTLET WITH 18"x6" REDUCING FLANGE (DRILLED AND TAPPED) FOR 6" FLANGE WITH FLANGE INSULATING KIT.
2. INSTALL NEW 6" VACUUM RELIEF, AIR RELEASE, AND GATE VALVES PER DETAIL 2, SHEET 4I.
3. INSTALL 6" VENT PIPING AND 7-FT DIA. MANHOLE.
4. TRAFFIC CONTROL AND LANE CLOSURE ARE REQUIRED.
5. EXACT TAP LOCATION TO BE APPROVED BY ENGINEER BASED ON FIELD-VERIFIED LOCATION OF PIPE JOINTS. VERIFY VENT LOCATIONS WITH DWU FIELD INSPECTOR.

VALVE W.4.E NOTES:

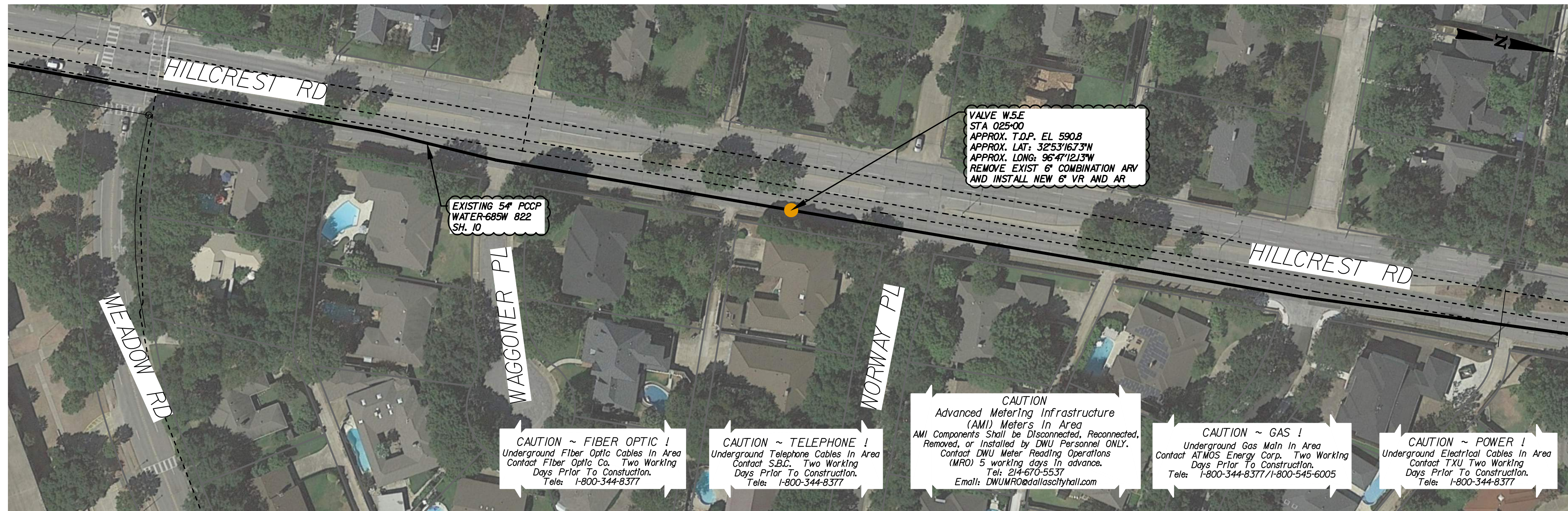
1. MAINTAIN EXISTING 6" GATE VALVE, MAINTAIN EXISTING 90" DIA. MANHOLE, FRAME, AND COVER.
2. REMOVE EXISTING 6" COMBINATION AIR RELEASE VALVE ASSEMBLY.
3. INSTALL NEW 6" VACUUM RELIEF AND AIR RELEASE VALVES PER DETAIL 2, SHEET 4I. GATE VALVE, MANHOLE, FRAME, AND COVER ARE NOT REQUIRED.
4. MAINTAIN EXISTING 6" AIR VENT ASSEMBLY AND PIPING.
5. ADJUST HEIGHT OF BURIED HORIZONTAL RUN OF VENT PIPING AS NECESSARY.
6. NEW MANHOLE PENETRATIONS ARE REQUIRED FOR NEW VENT PIPING PER THE DETAIL PLUG EXISTING PENETRATIONS.
7. TRAFFIC CONTROL AND LANE CLOSURE ARE REQUIRED.



VALVE W.3.N, STA 005+50
AND VALVE W.4.E, STA 011+00



CDM Smith		1240 Coit Road, Suite 400 Dallas, TX, 75231 Tel: (214) 346-2800 TBPE Firm Registration No. F-3043	
CONTRACT NO. 20-001/002		PID: -	
WRNTM AIR VALVE IMPROVEMENTS			
W.I.N STA 036+20, W.2.E STA 048+00			
W.3.N STA 005+50, W.4.E STA 011+00			
DALLAS WATER UTILITIES			
CITY OF DALLAS, TEXAS			
DESIGN	DRAWN	DATE	FILE
KH	AG	MAY 2020	685W
			NUMBER
			660
			SHEET
			39



VALVE W.5.E STA 025+00

VALVE W.5.E NOTES:

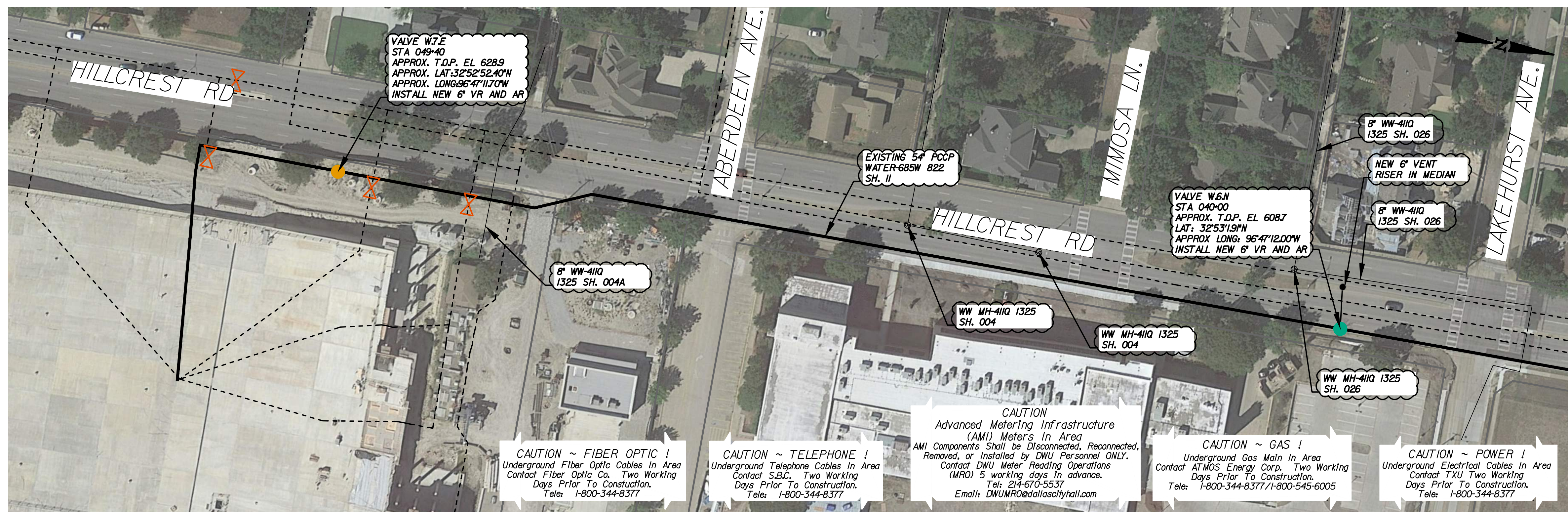
1. REMOVE 6" GATE VALVE. MAINTAIN EXISTING 70" DIA. MANHOLE, FRAME, AND COVER.
2. REMOVE EXISTING 6" COMBINATION AIR RELEASE VALVE ASSEMBLY.
3. INSTALL NEW 6" GATE VALVE VACUUM RELIEF AND AIR RELEASE VALVES PER DETAIL 2, SHEET 41. MANHOLE, FRAME, AND COVER ARE NOT REQUIRED.
4. MAINTAIN EXISTING 6" AIR VENT ASSEMBLY AND PIPING.
5. ADJUST HEIGHT OF BURIED HORIZONTAL RUN OF VENT PIPING AS NECESSARY.
6. NEW MANHOLE PENETRATIONS ARE REQUIRED FOR NEW VENT PIPING PER THE DETAIL PLUG EXISTING PENETRATIONS.

VALVE W.6.N NOTES:

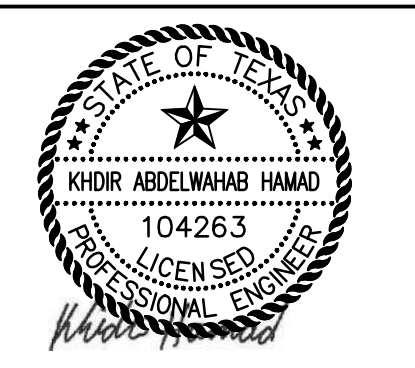
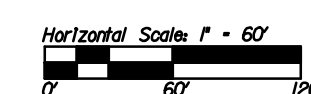
1. TAP EXISTING 54" PCCP AND INSTALL 18" FLANGED OUTLET WITH 18"x6" REDUCING FLANGE (DRILLED AND TAPPED) FOR 6" GATE VALVE WITH FLANGE INSULATING KIT.
2. INSTALL NEW 6" VACUUM RELIEF, AIR RELEASE, AND GATE VALVES PER DETAIL 2, SHEET 41.
3. INSTALL 6" VENT PIPING AND 7-FT DIA. MANHOLE.
4. TRAFFIC CONTROL AND LANE CLOSURE ARE REQUIRED.
5. EXACT TAP LOCATION TO BE APPROVED BY ENGINEER BASED ON FIELD-VERIFIED LOCATION OF PIPE JOINTS. VERIFY VENT LOCATIONS WITH DWU FIELD INSPECTOR.

VALVE W.7.E NOTES:

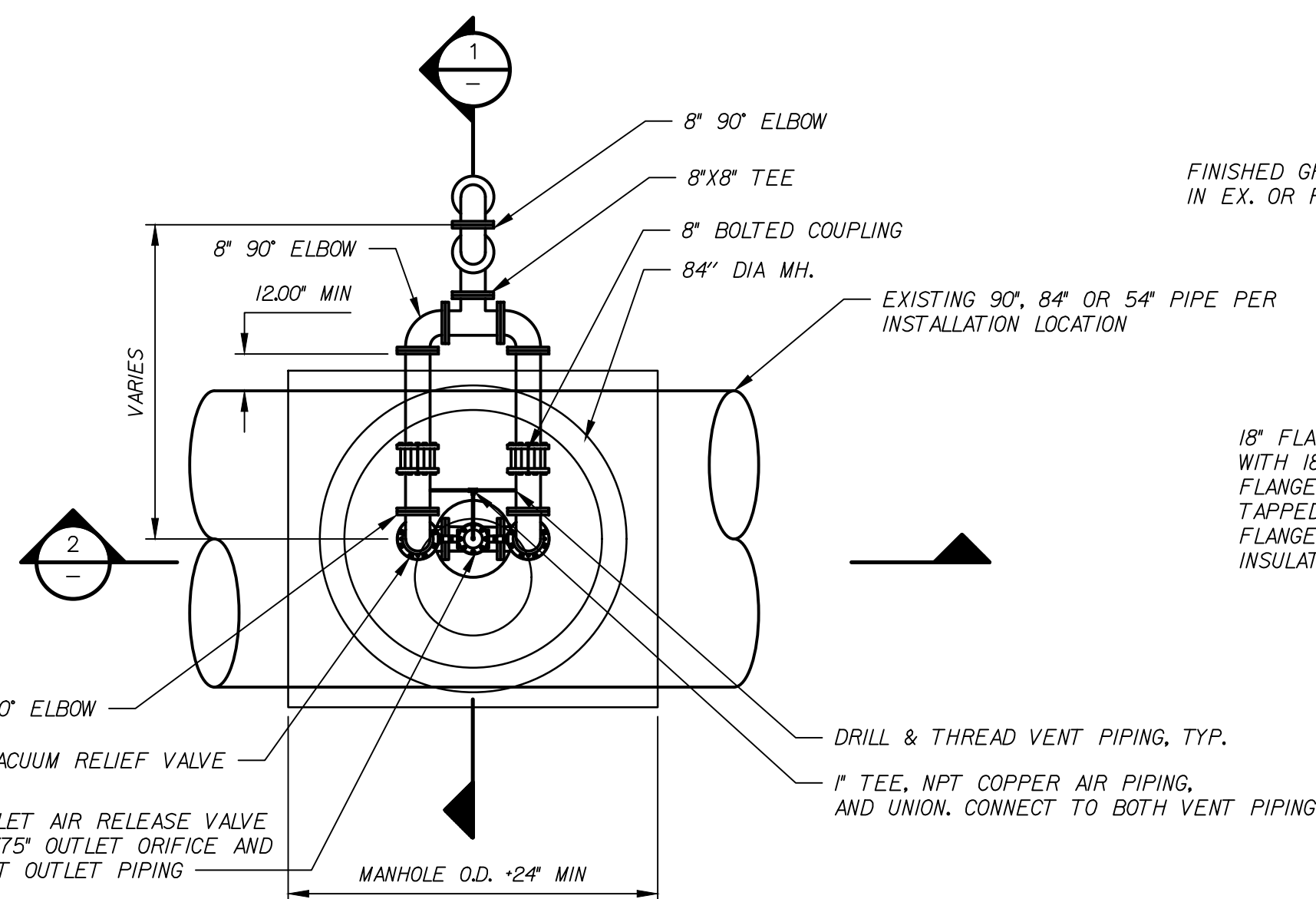
1. REMOVE 6" GATE VALVE AND MANHOLE, FRAME, AND COVER.
2. REMOVE EXISTING 6" COMBINATION AIR RELEASE VALVE ASSEMBLY.
3. INSTALL NEW 6" GATE VALVE, VACUUM RELIEF, AND AIR RELEASE VALVES PER DETAIL 2, SHEET 41.
4. INSTALL NEW 7" DIA. MANHOLE.
5. MAINTAIN EXISTING 6" AIR VENT ASSEMBLY AND PIPING.
6. ADJUST HEIGHT OF BURIED HORIZONTAL RUN OF VENT PIPING AS NECESSARY.
7. NEW MANHOLE PENETRATIONS ARE REQUIRED FOR NEW VENT PIPING PER DETAIL.



VALVE W.6.N STA 040+00
 AND VALVE W.7.E STA 049+40

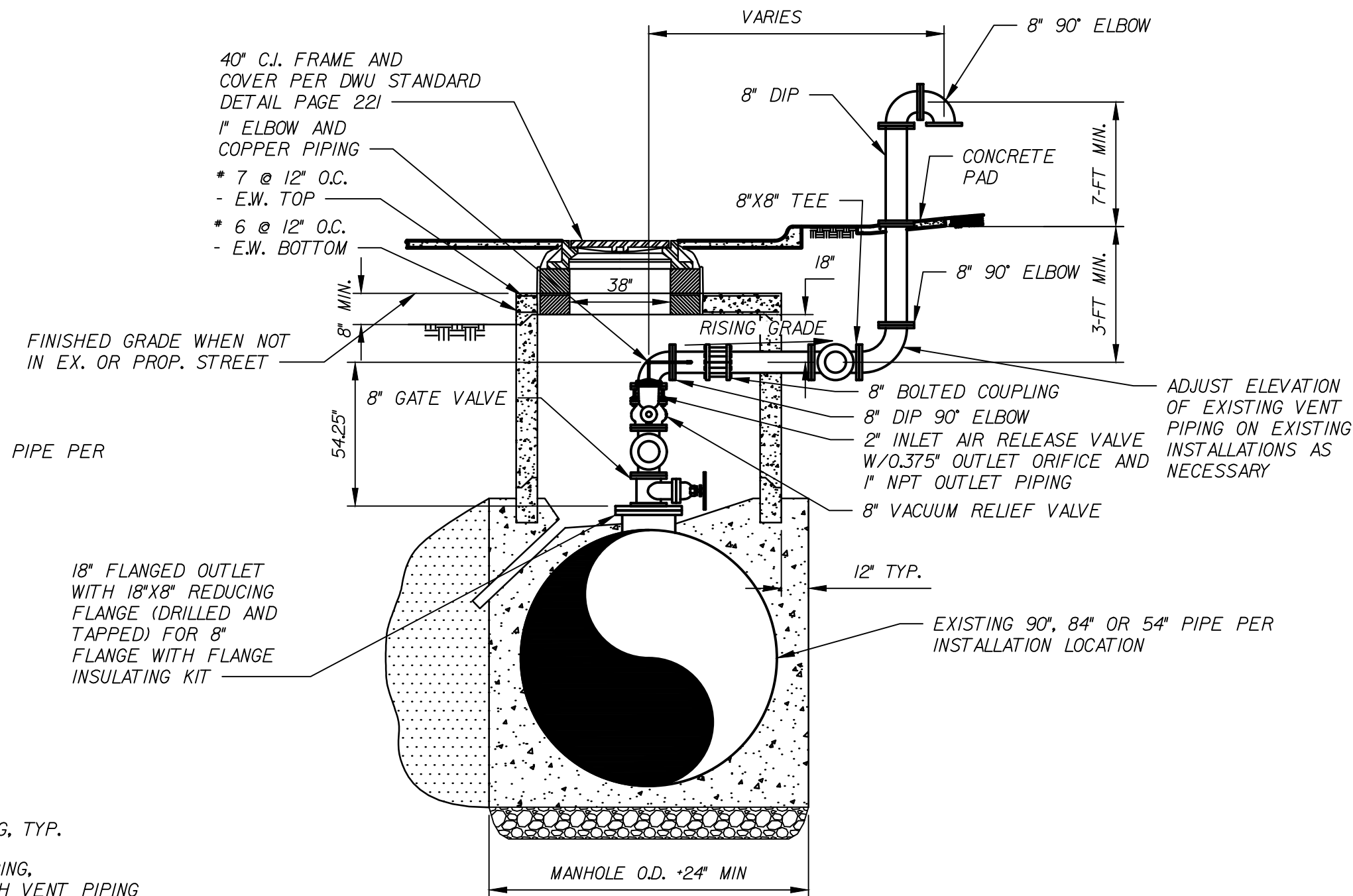


CDM Smith		1240 Coit Road, Suite 400 Dallas, TX, 75231 Tel: (214) 346-2800 TBPE Firm Registration No. F-3043	
CONTRACT NO. 20-001/002		PID: -	
WRNTM AIR VALVE IMPROVEMENTS			
VALVE W.5.E STA 025+00, W.6.N STA 040+00, W.7.E STA 049+40			
DALLAS WATER UTILITIES			
CITY OF DALLAS, TEXAS			
DESIGN	DRAWN	DATE	FILE
KH	AG	MAY 2020	685W
			NUMBER
			660
			SHEET
			40

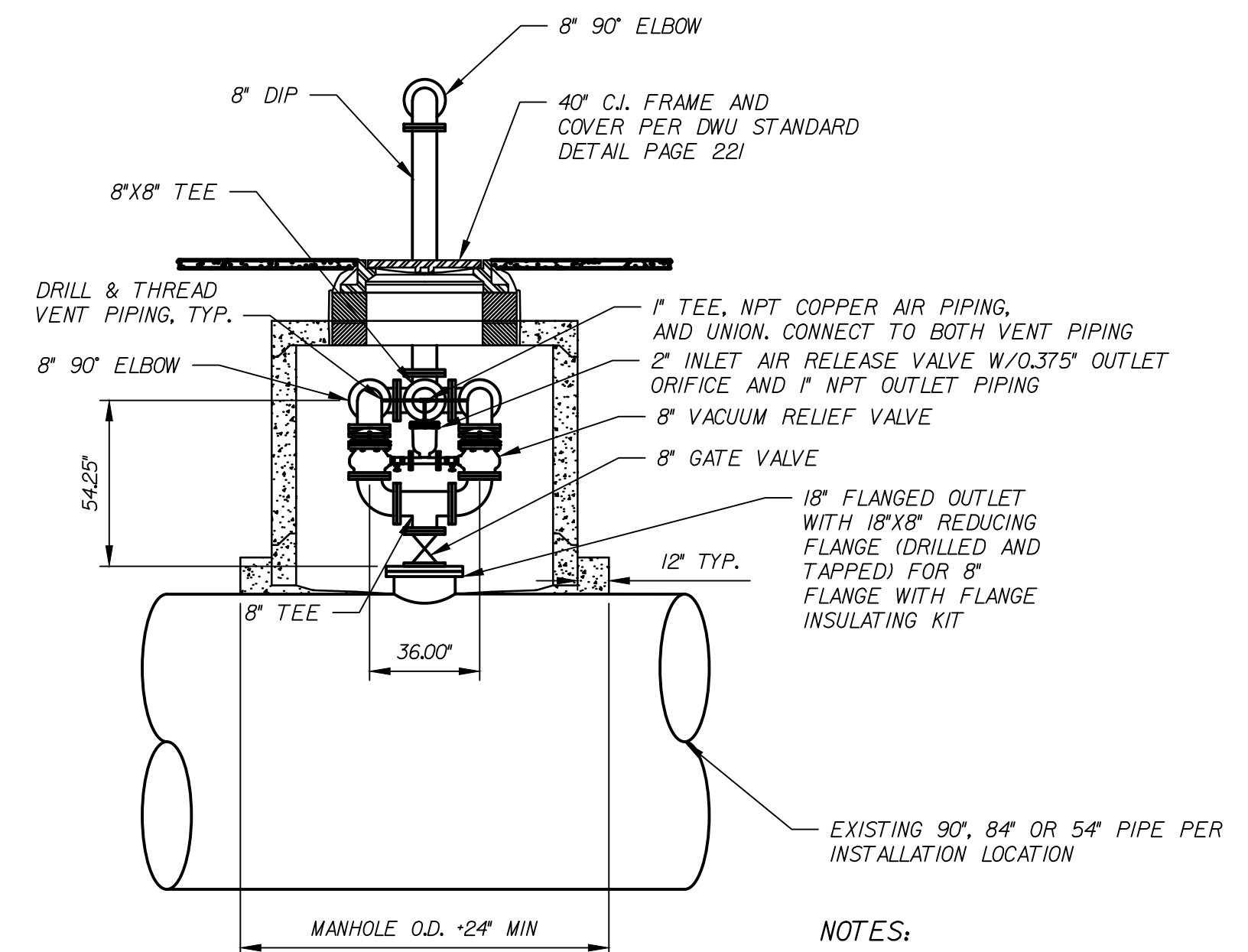


① 8" ARV INSTALLATION (WITH 18" TAPPING SLEEVE FOR NEW INSTALLATIONS) VALVE 2.0.E, A.1.E, A.3.E

PLAN



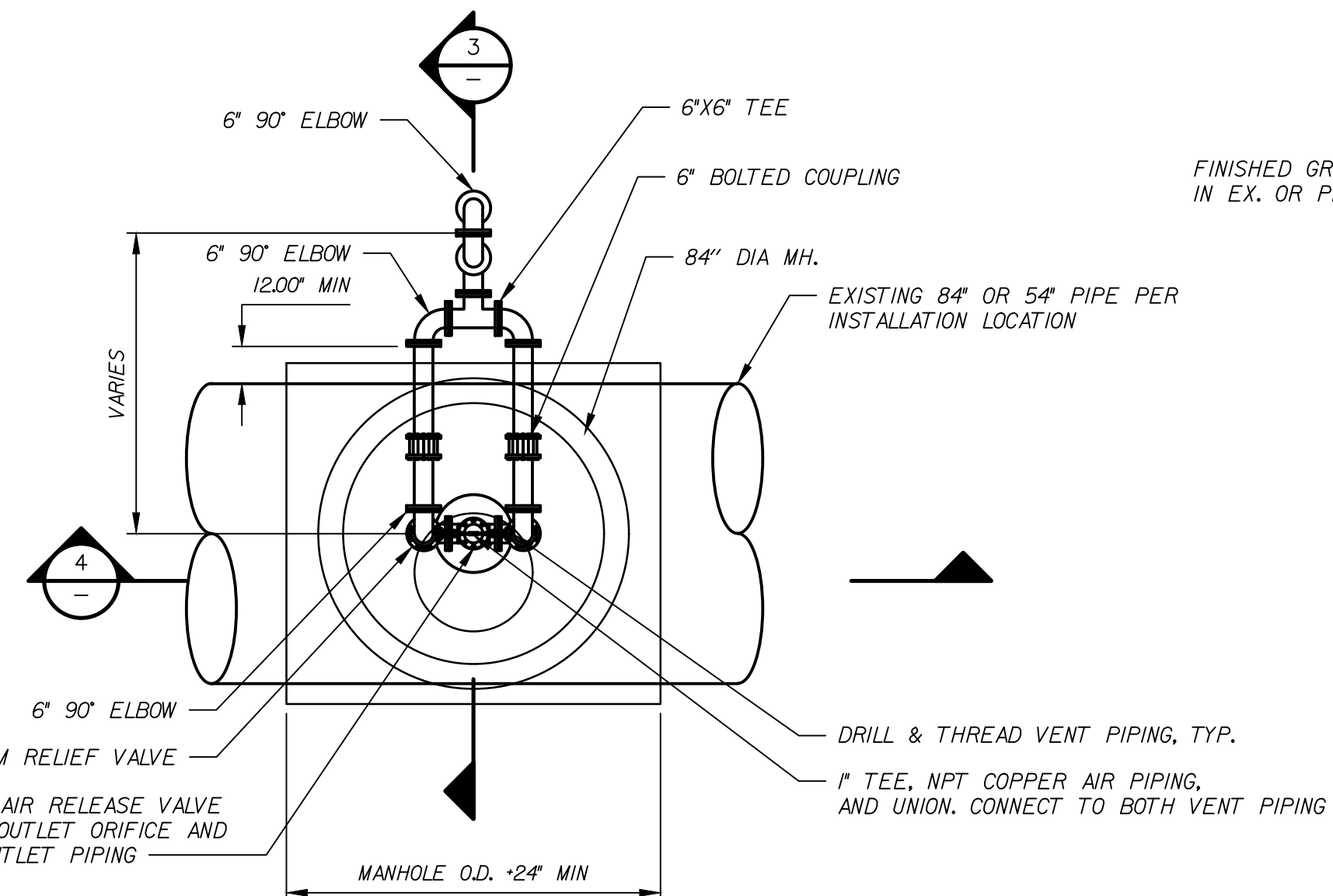
SECTION 1



SECTION 2

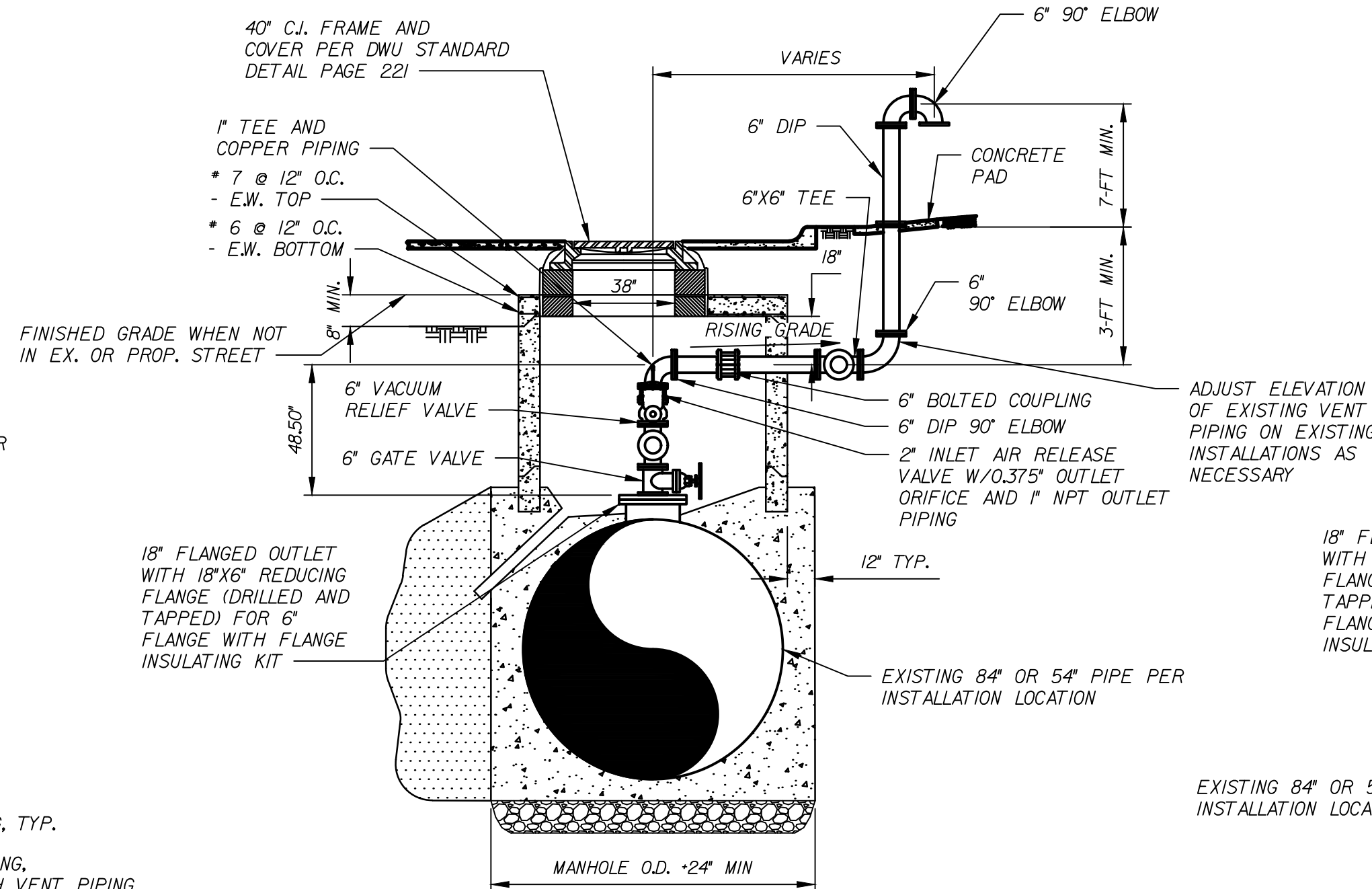
NOTES:

- COORDINATE INSTALLATION AND MATERIAL REQUIREMENTS WITH DWU STANDARD DETAILS 209, 210, AND 211 - AIR RELEASE VALVE TYPE 2 IN THE DWU STANDARD DRAWINGS FOR WATER AND WASTEWATER CONSTRUCTION, OCTOBER 2017.
- SIZES OF VACUUM RELIEF VALVE AND ORIFICE FOR AIR RELEASE VALVE ARE AS SHOWN IN THE VALVE SCHEDULE ON SHEET 27.
- INSTALL FLANGED ASSEMBLIES WITH INSULATION KIT PER DETAIL 223 IN THE DWU STANDARD DRAWINGS FOR WATER AND WASTEWATER CONSTRUCTION, OCTOBER 2017.
- PROVIDE PRECAST MANHOLE AND TOP RATED FOR HS-20 LOADING.
- WARNING SIGN SHALL BE FURNISHED BY DWU AND INSTALLED BY CONTRACTOR ON AIR VENT RISER.
- WHEN NOT IN PAVING OR WALK, A CONCRETE PAD REINFORCED WITH #3 BARS AT 12" C-C EACH WAY, SHALL EXTENDED A MINIMUM OF 2' AROUND THE M.H. AND VENT PIPE, AND SHALL BE A MINIMUM OF 4" THICK.

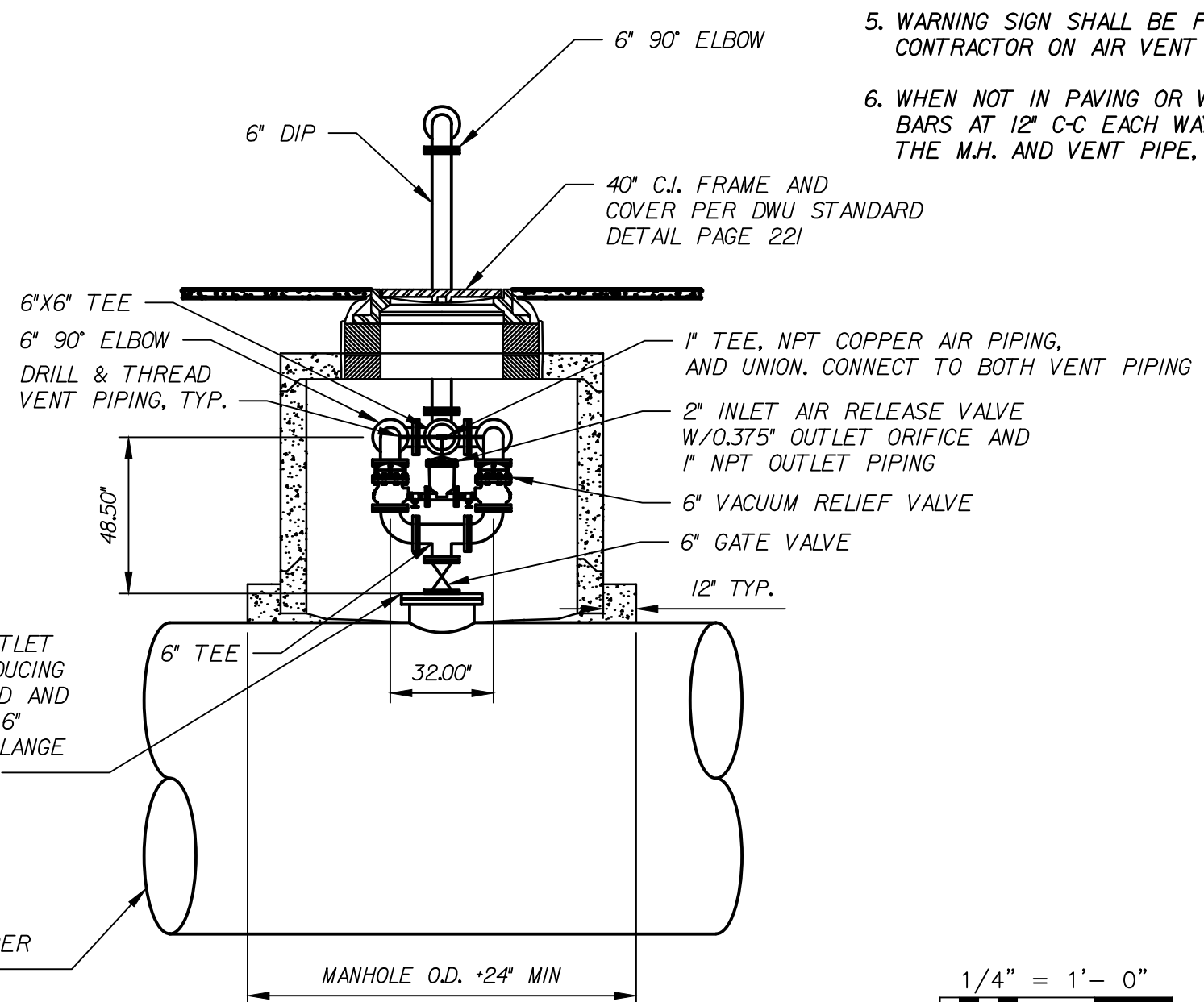


② 6" ARV INSTALLATION (WITH 18" TAPPING SLEEVE FOR NEW INSTALLATIONS) VALVES : 3.1.E, 4.2.E, 5.2.E, 8.2.E, 11.8.N, 12.8.N, D.1.N, D.2.E, A.2.N, A.4.N, A.5.N, W.1.N, W.2.E, W.3.N, W.4.E, W.5.E, W.6.N, W.7.E

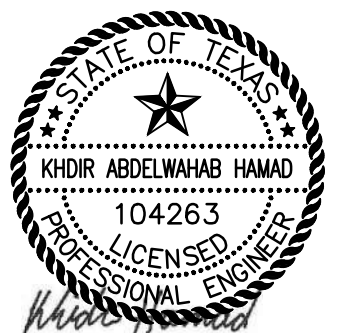
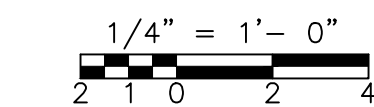
PLAN



SECTION 3

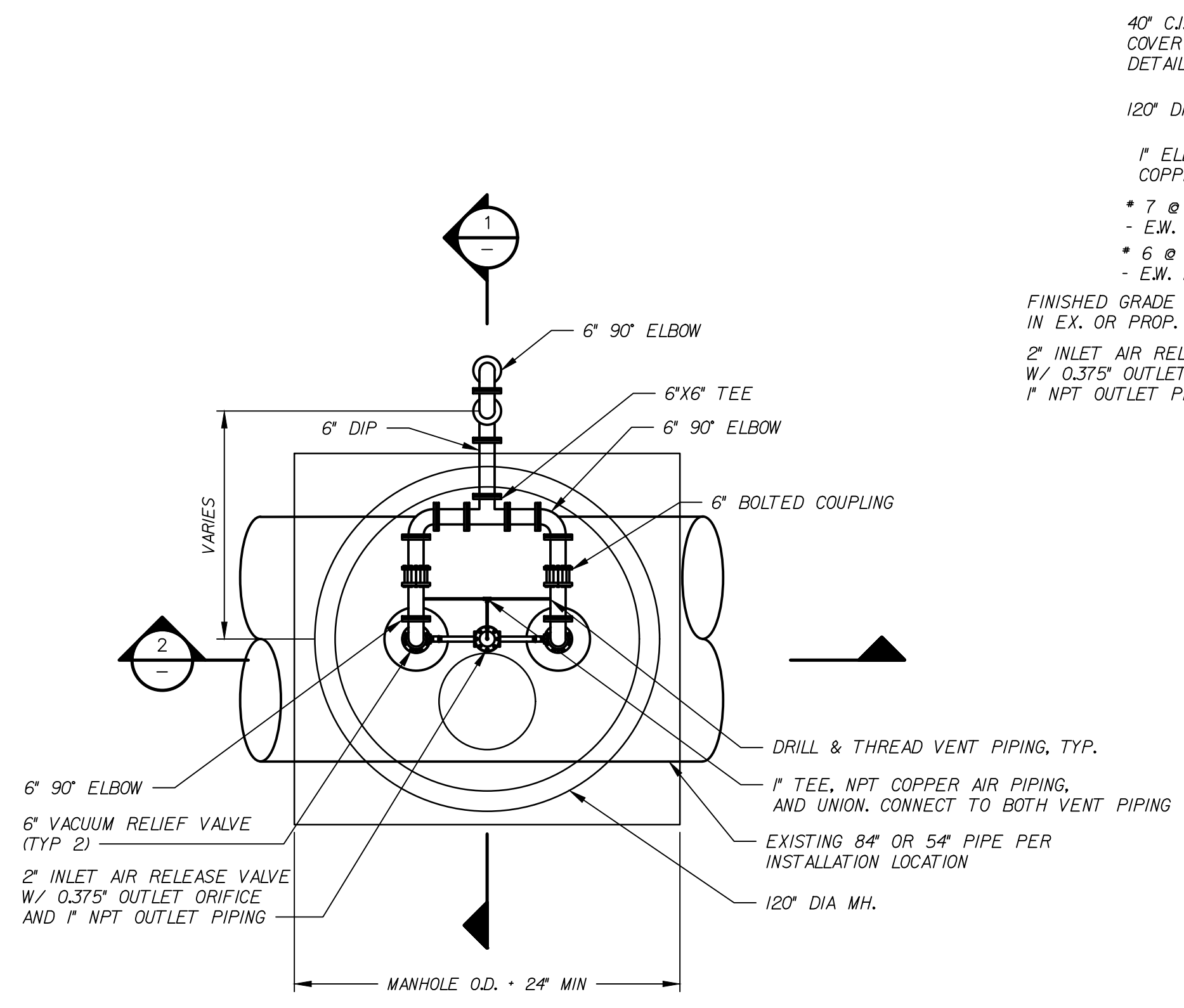


SECTION 4



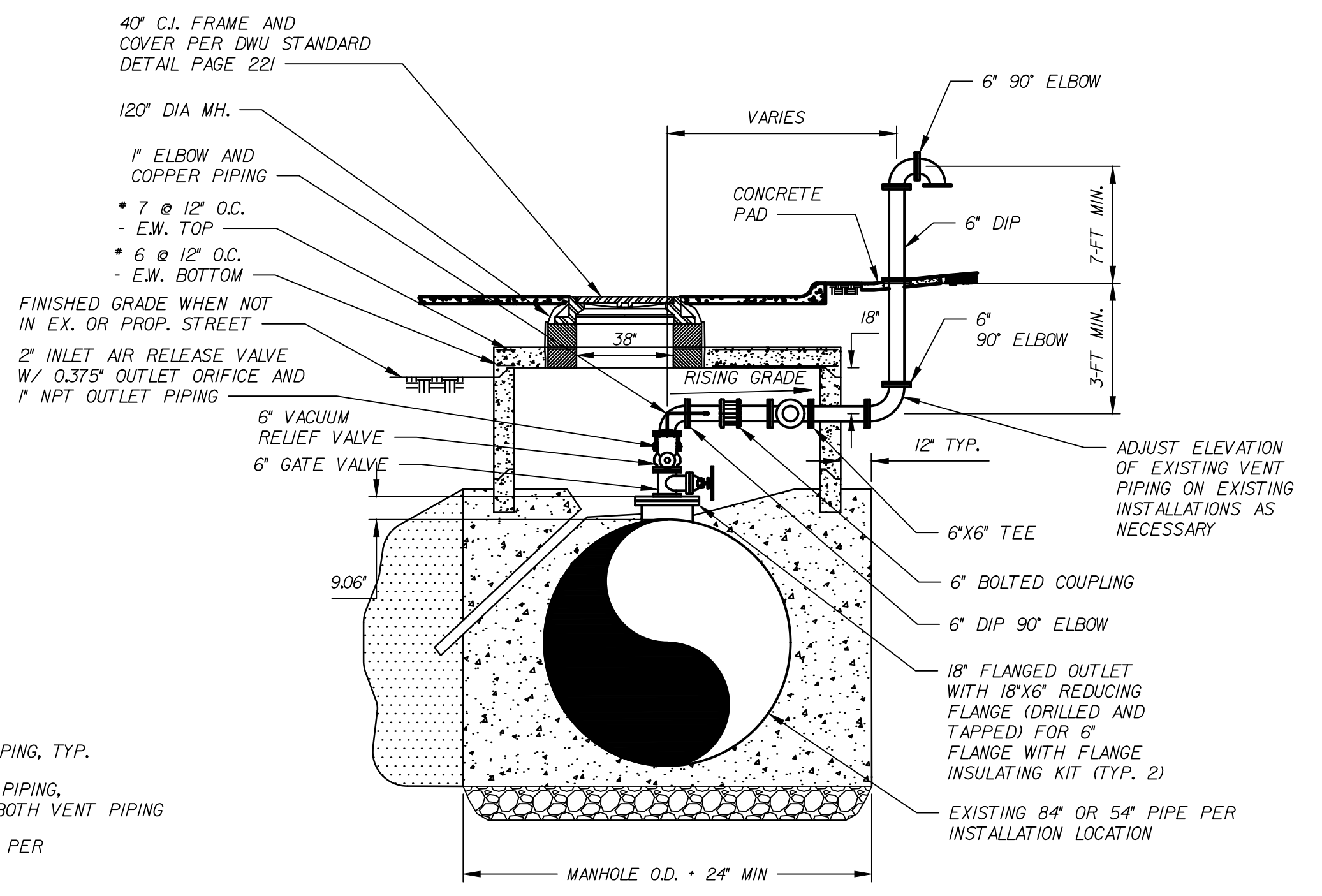
DATE: 05/07/2020

CDM Smith		1240 Coit Road, Suite 400 Dallas, TX, 75231 Tel: (214) 349-2900 TBPE Firm Registration No. F-3043	
CONTRACT NO. 20-001/002		PID: -	
WRNTM AIR VALVE IMPROVEMENTS			
NEW ARV INSTALLATION DETAILS I			
DALLAS WATER UTILITIES CITY OF DALLAS, TEXAS			
DESIGN	DRAWN	DATE	FILE
KH	SG	MAY 2020	685W
			NUMBER
			660
			SHEET
			41

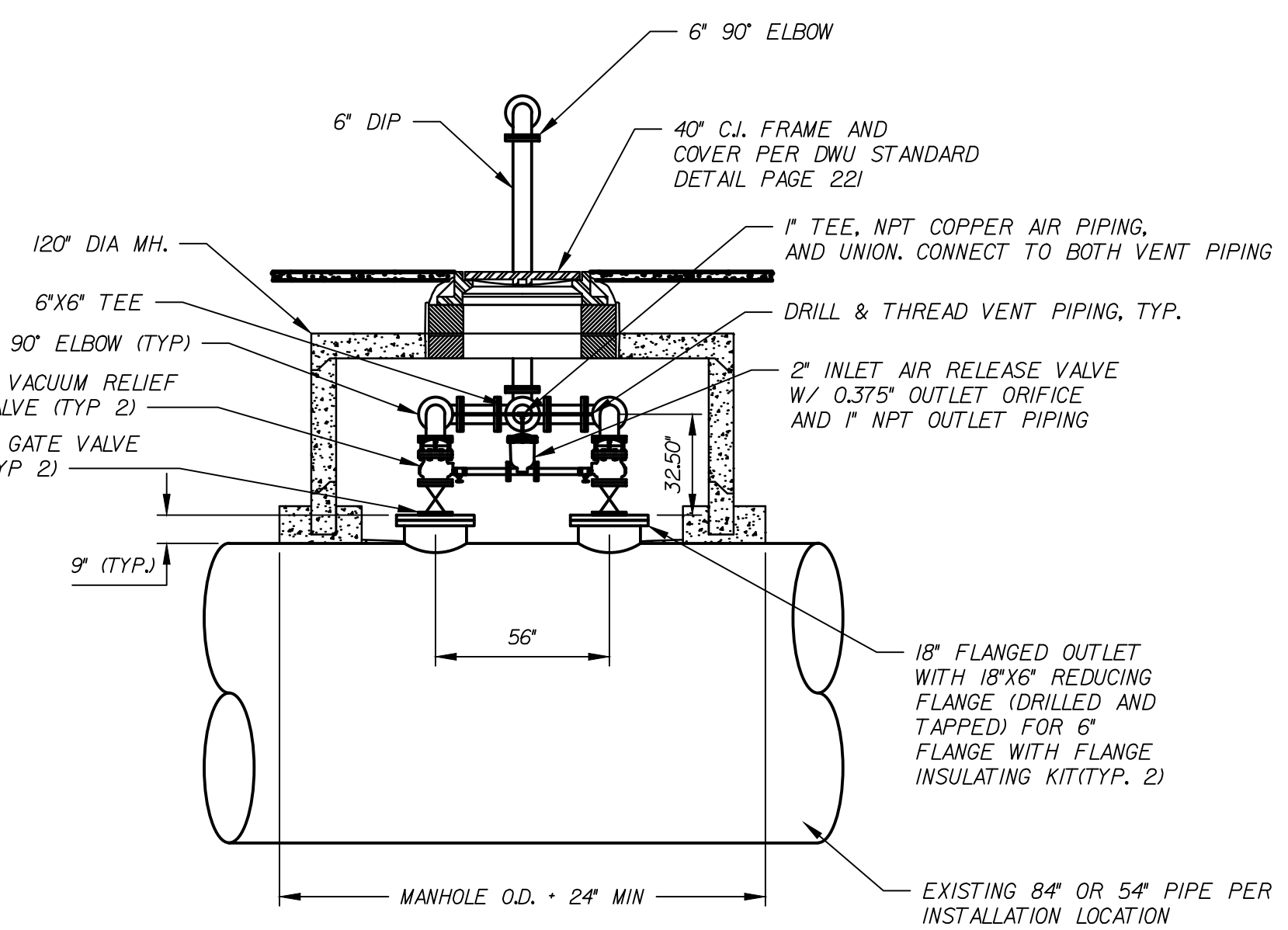


③ VALVE 6.2N, STA 174+00 INSTALLATION
(PIPE JOINT REPLACEMENT)

PLAN
NTS

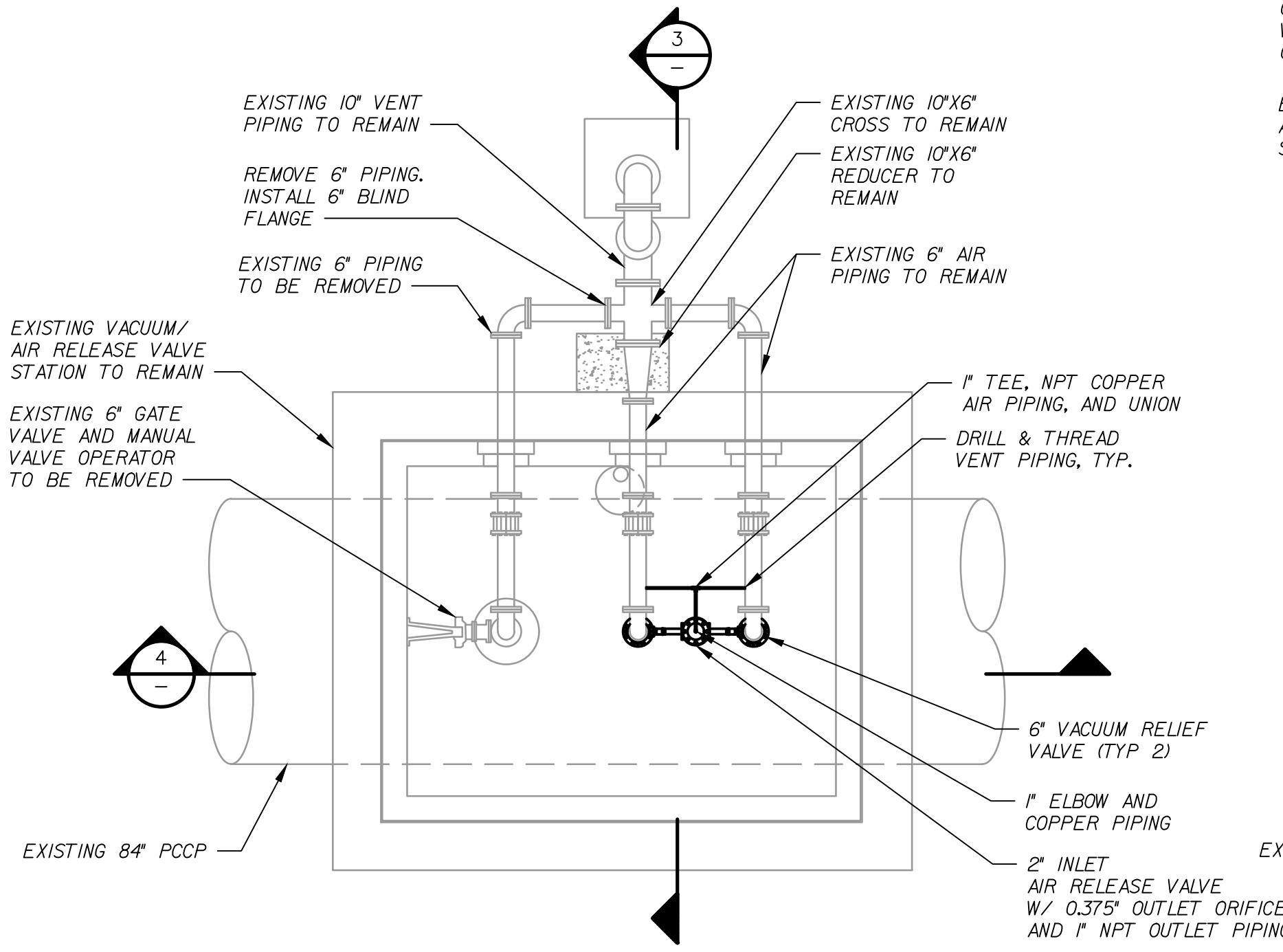


SECTION 1
NTS



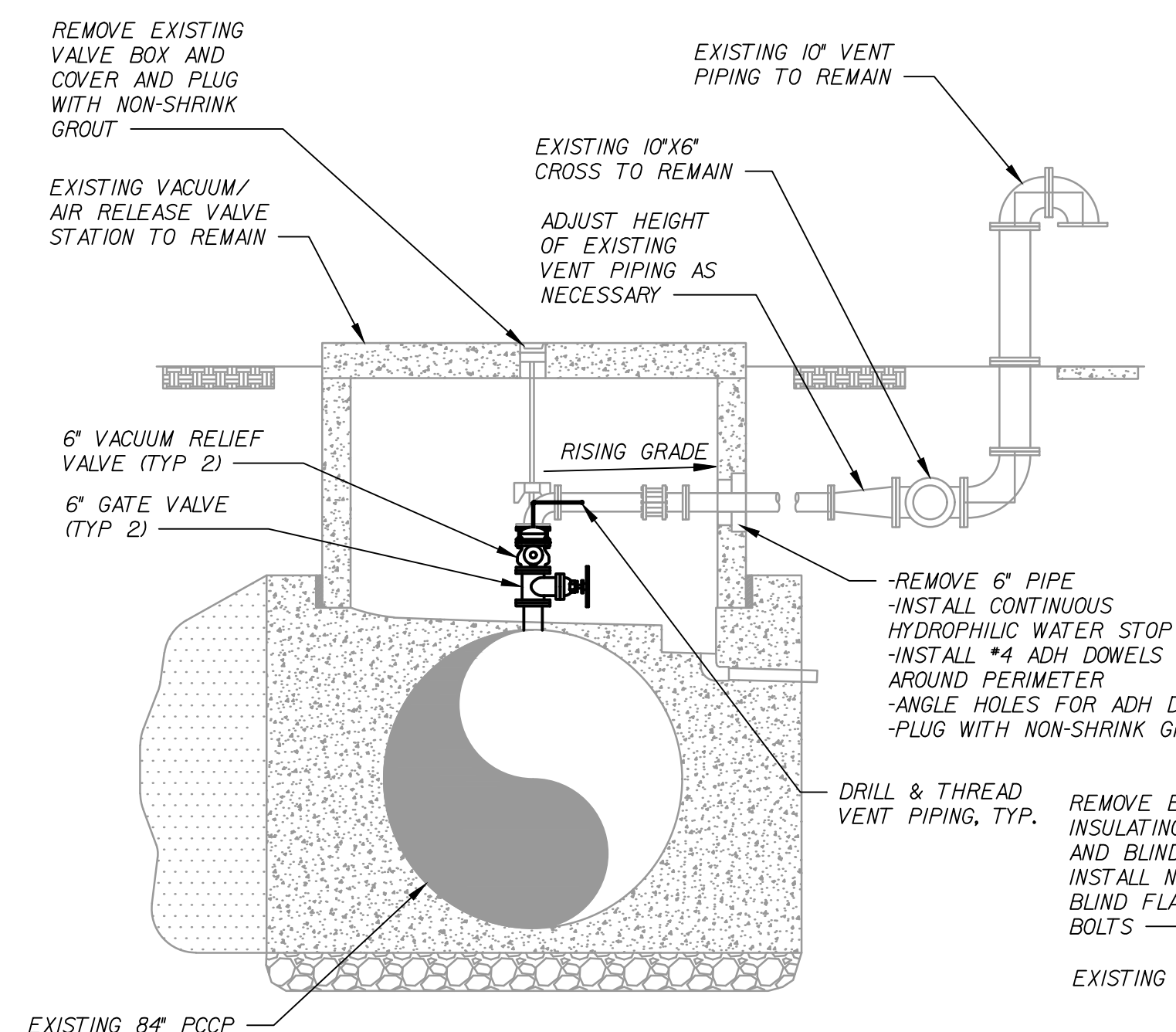
SECTION 2
NTS

- NOTES:
- COORDINATE INSTALLATION AND MATERIAL REQUIREMENTS WITH DWU STANDARD DETAILS 209, 210, AND 211 - AIR RELEASE VALVE TYPE 2 IN THE DWU STANDARD DRAWINGS FOR WATER AND WASTEWATER CONSTRUCTION, OCTOBER 2017.
 - SIZES OF VACUUM RELIEF VALVE AND ORIFICE FOR AIR RELEASE VALVE ARE AS SHOWN IN THE VALVE SCHEDULE ON SHEET 27.
 - INSTALL FLANGED ASSEMBLIES WITH INSULATION KIT PER DETAIL 223 IN THE DWU STANDARD DRAWINGS FOR WATER AND WASTEWATER CONSTRUCTION, OCTOBER 2017.
 - PROVIDE PRECAST MANHOLE AND TOP RATED FOR HS-20 LOADING.
 - WARNING SIGN SHALL BE FURNISHED BY DWU AND INSTALLED BY CONTRACTOR ON AIR VENT RISER.
 - WHEN NOT IN PAVING OR WALK, A CONCRETE PAD REINFORCED WITH #3 BARS AT 12" C-C EACH WAY, SHALL BE EXTENDED A MINIMUM OF 2' AROUND THE M.H. AND VENT PIPE, AND SHALL BE A MINIMUM OF 4" THICK.

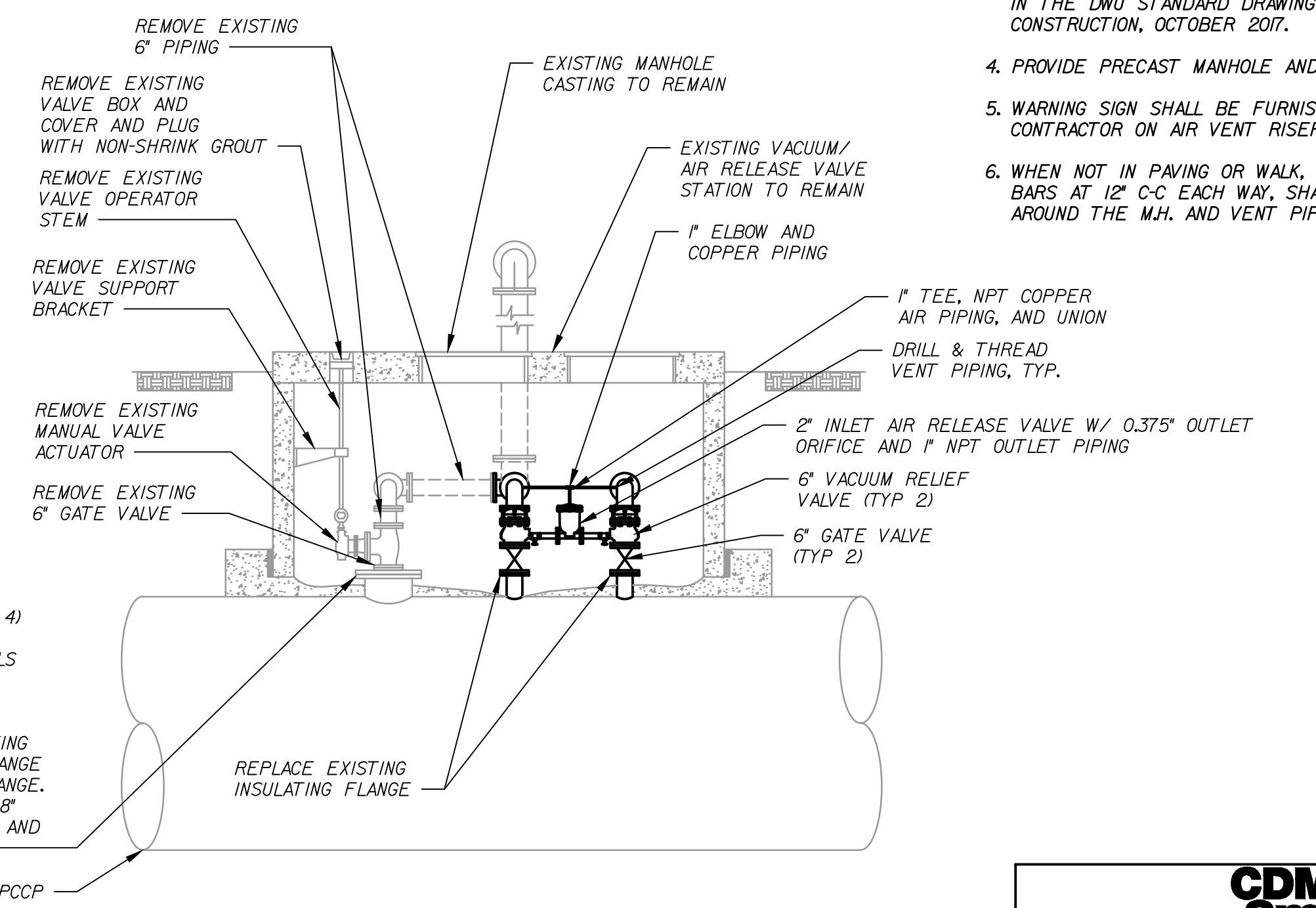


④ VALVE 7.2.E, STA 184+60 AND VALVE 9.2.E, STA 208+60 INSTALLATION

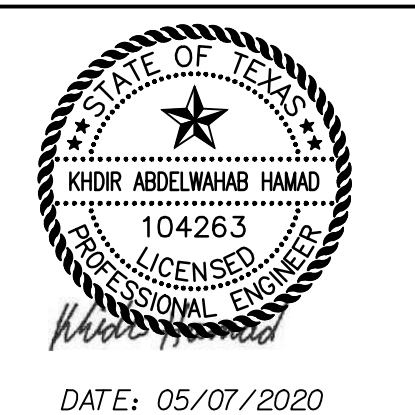
PLAN
NTS



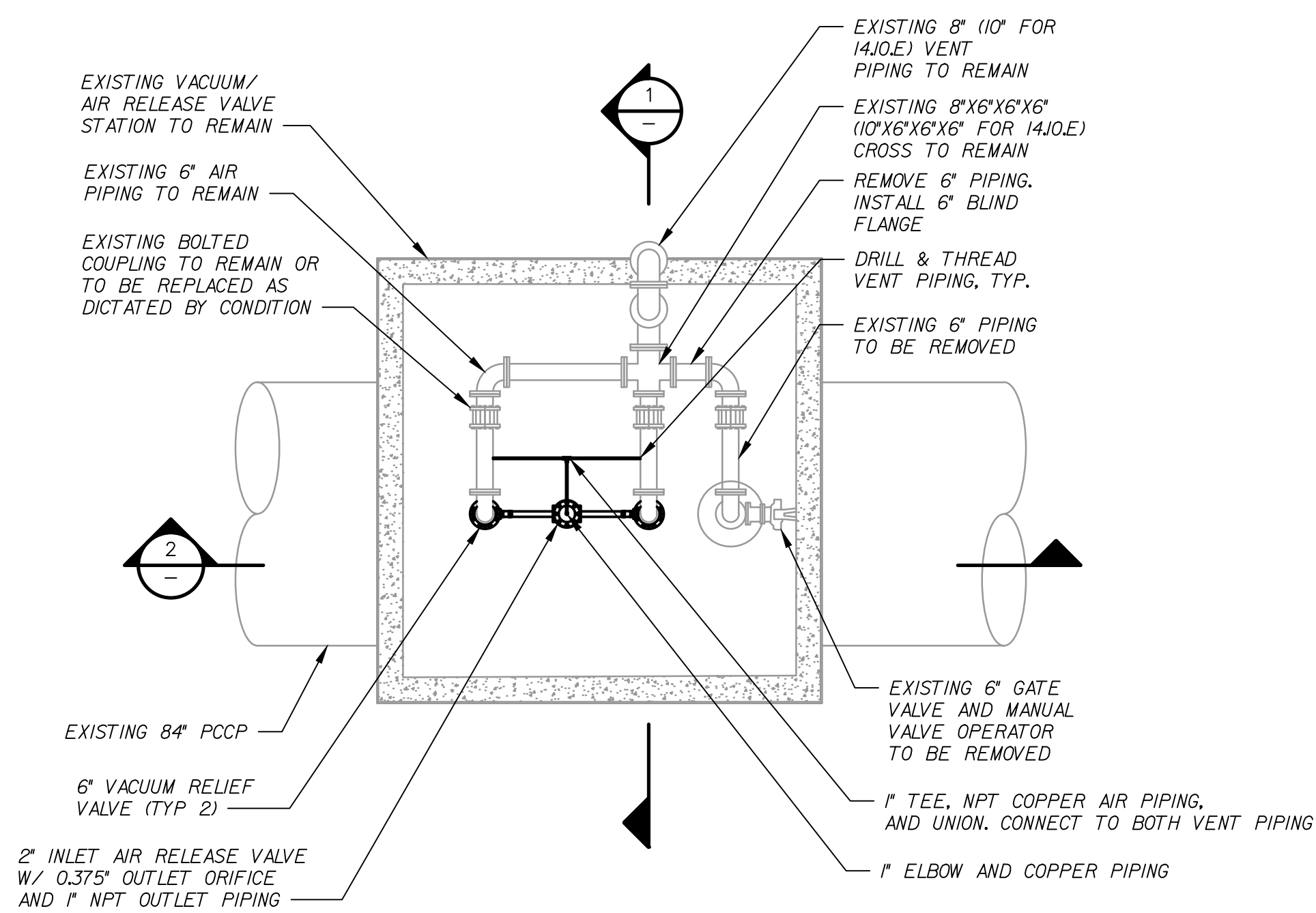
SECTION 3
NTS



SECTION 4
NTS

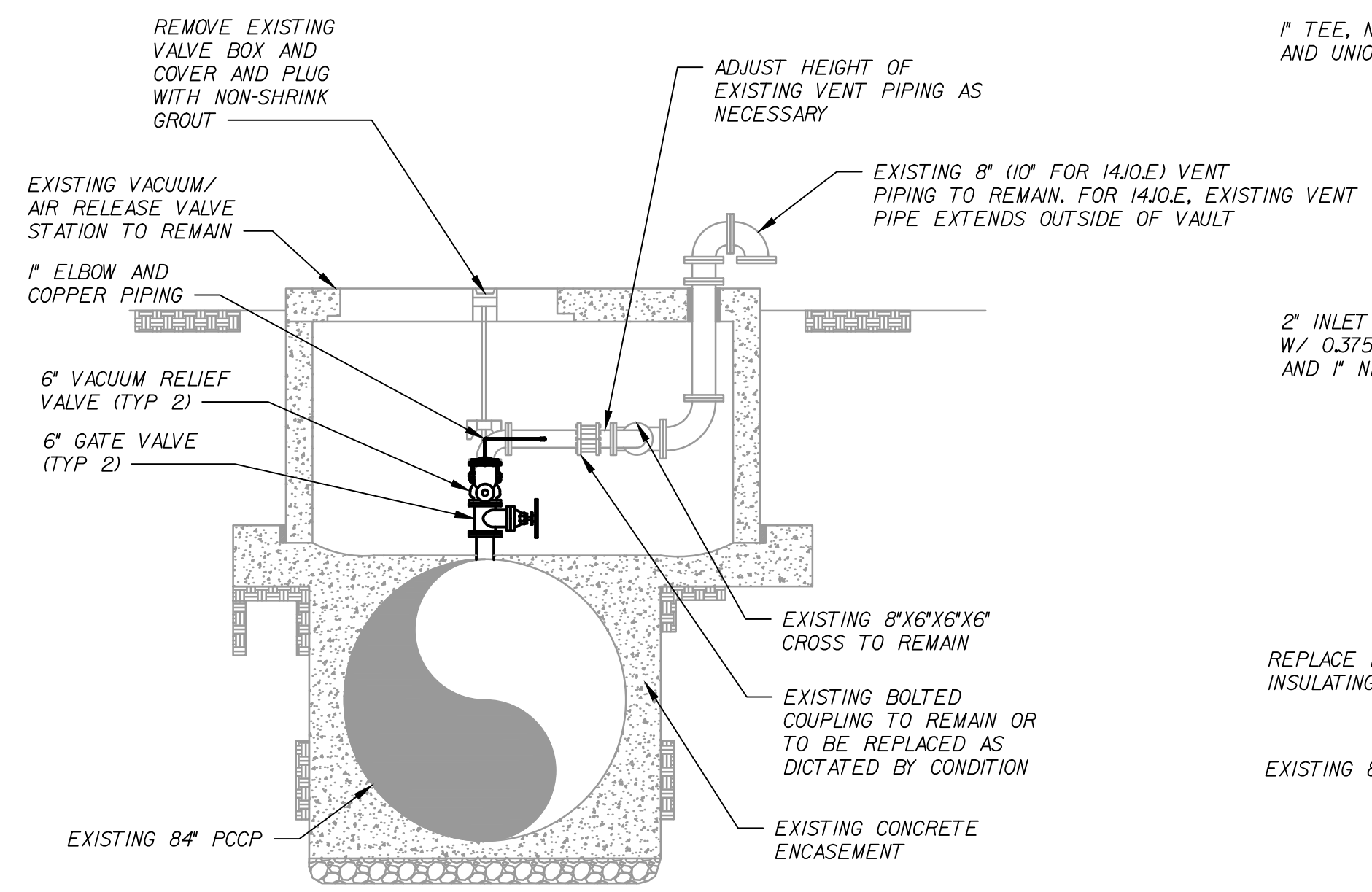


CDM Smith		1240 Coit Road, Suite 400 Dallas, TX, 75231 Tel: (214) 349-2800 TBPE Firm Registration No. F-3043	
CONTRACT NO. 20-001/002		PID: -	
WRNTM AIR VALVE IMPROVEMENTS NEW ARV INSTALLATION DETAILS II			
DALLAS WATER UTILITIES CITY OF DALLAS, TEXAS			
DESIGN	DRAWN	DATE	FILE
KH	SG	MAY 2020	685W
NUMBER		SHEET	
660		42	

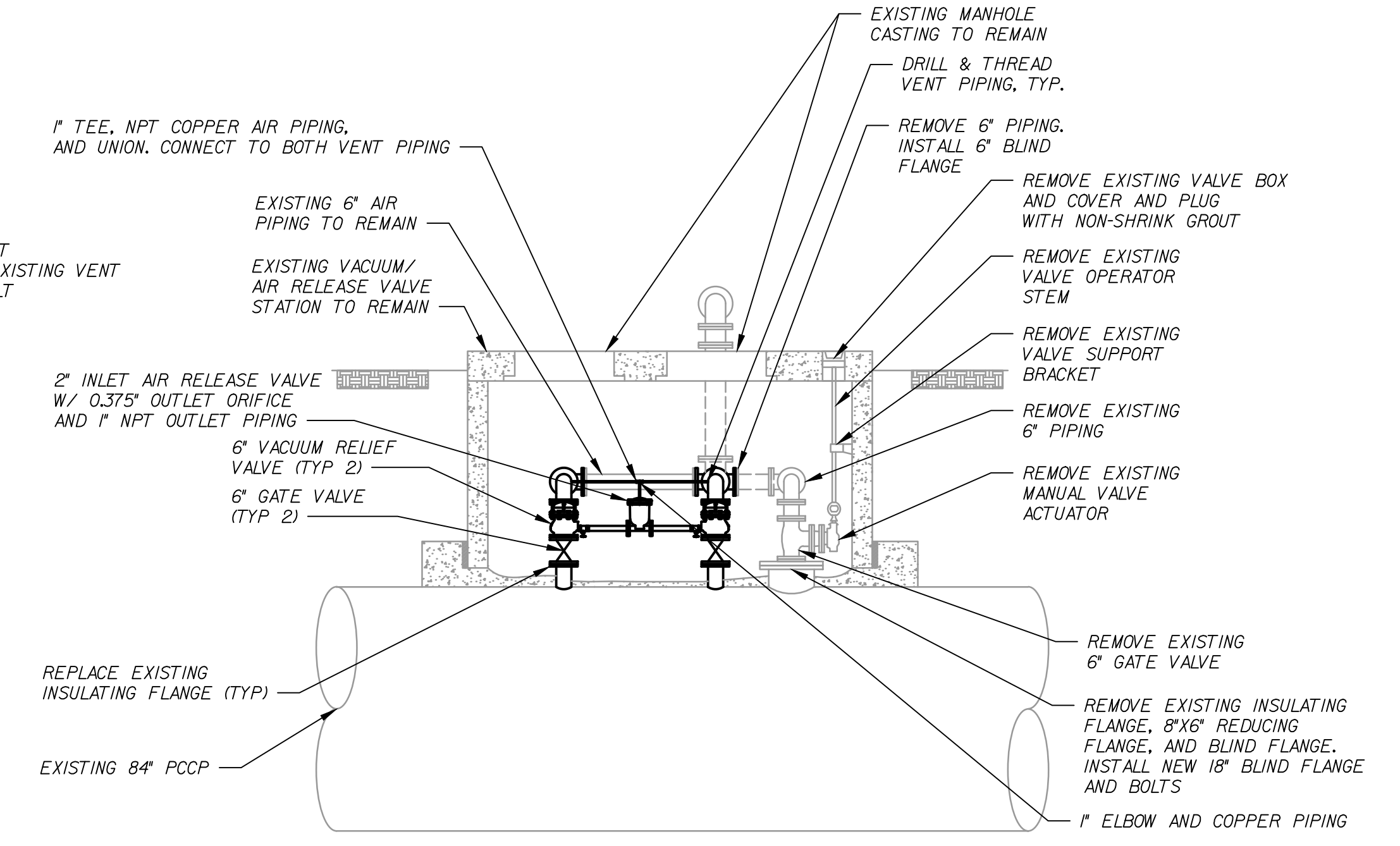


⑤ VALVE 10.6.E, STA 042+41 AND VALVE 14.0.E, STA 033+90 INSTALLATION

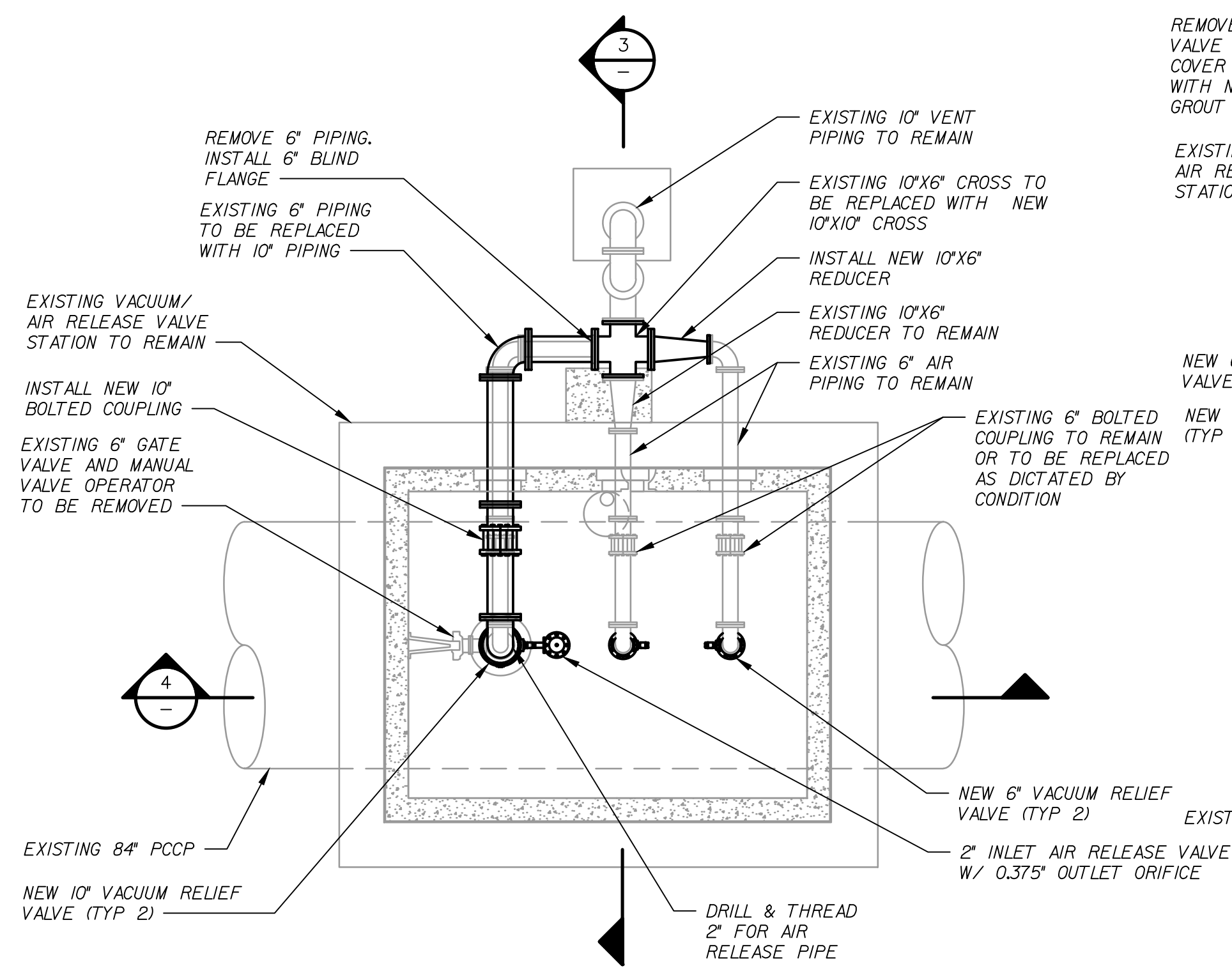
PLAN
NTS



SECTION 1
NTS

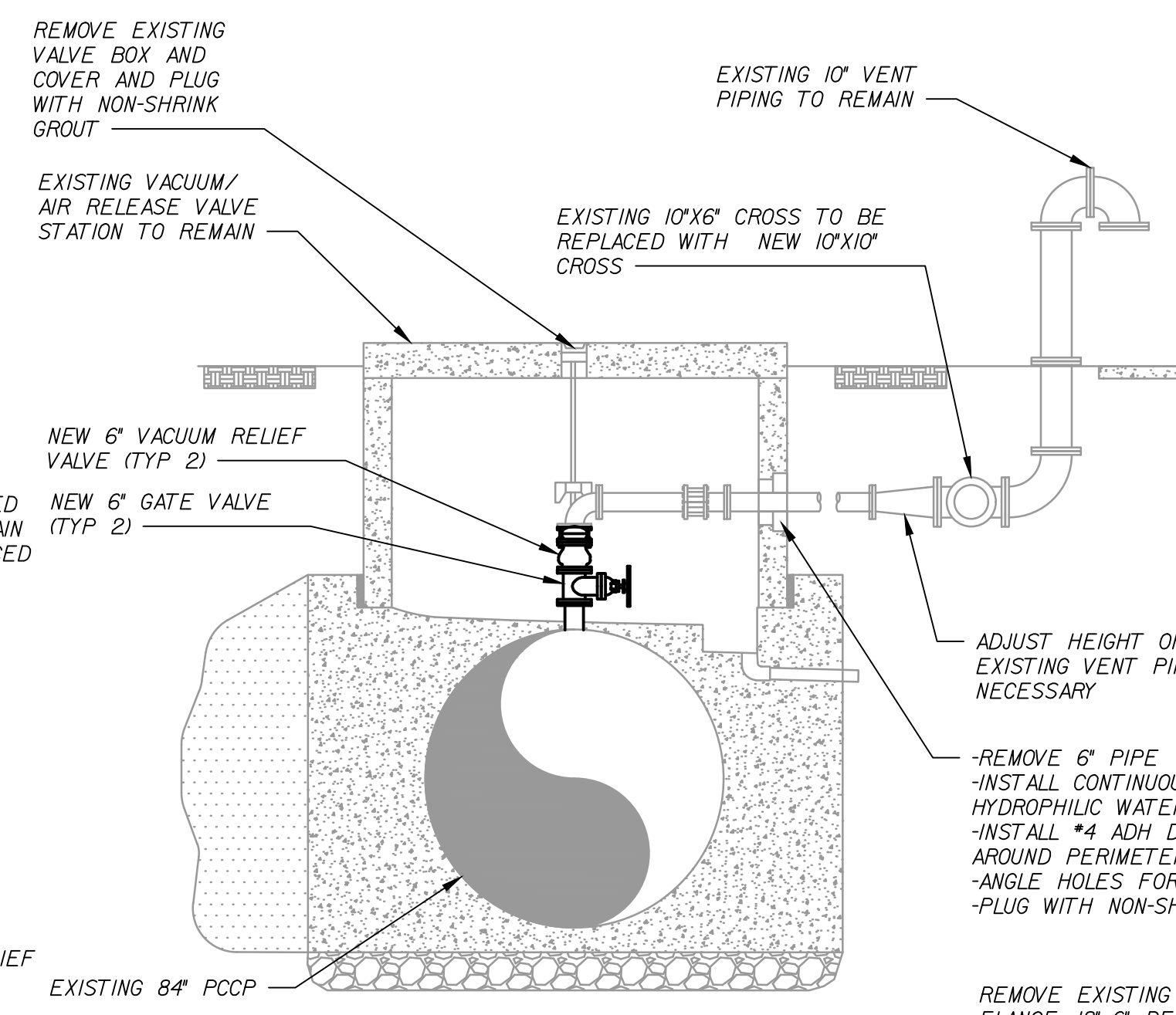


SECTION 2
NTS

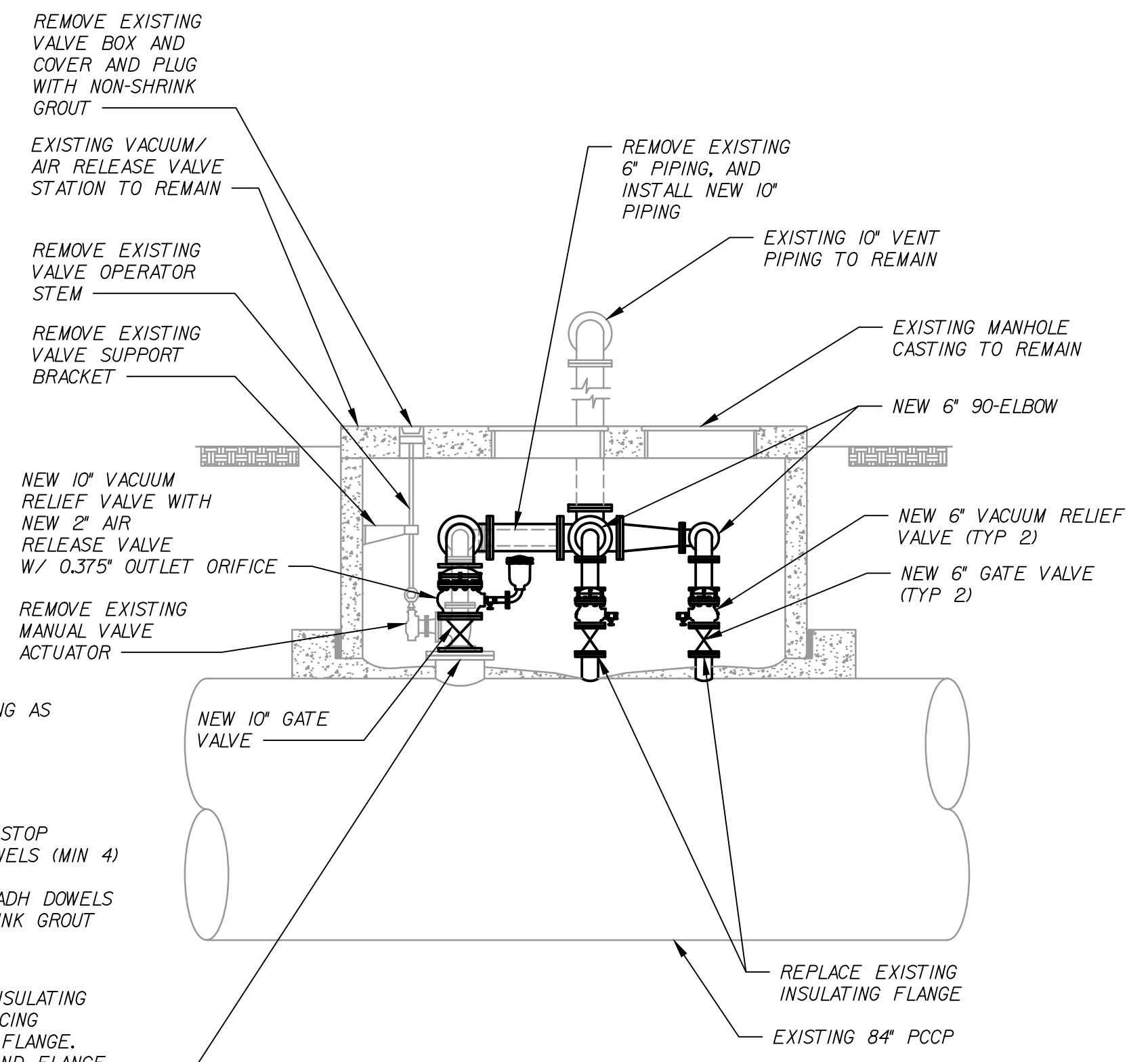


⑥ VALVE 13.8.E., STA 167+00 INSTALLATION

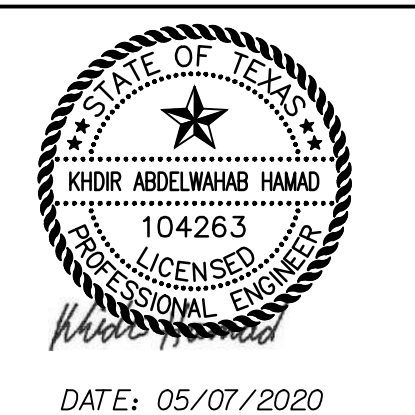
PLAN
NTS



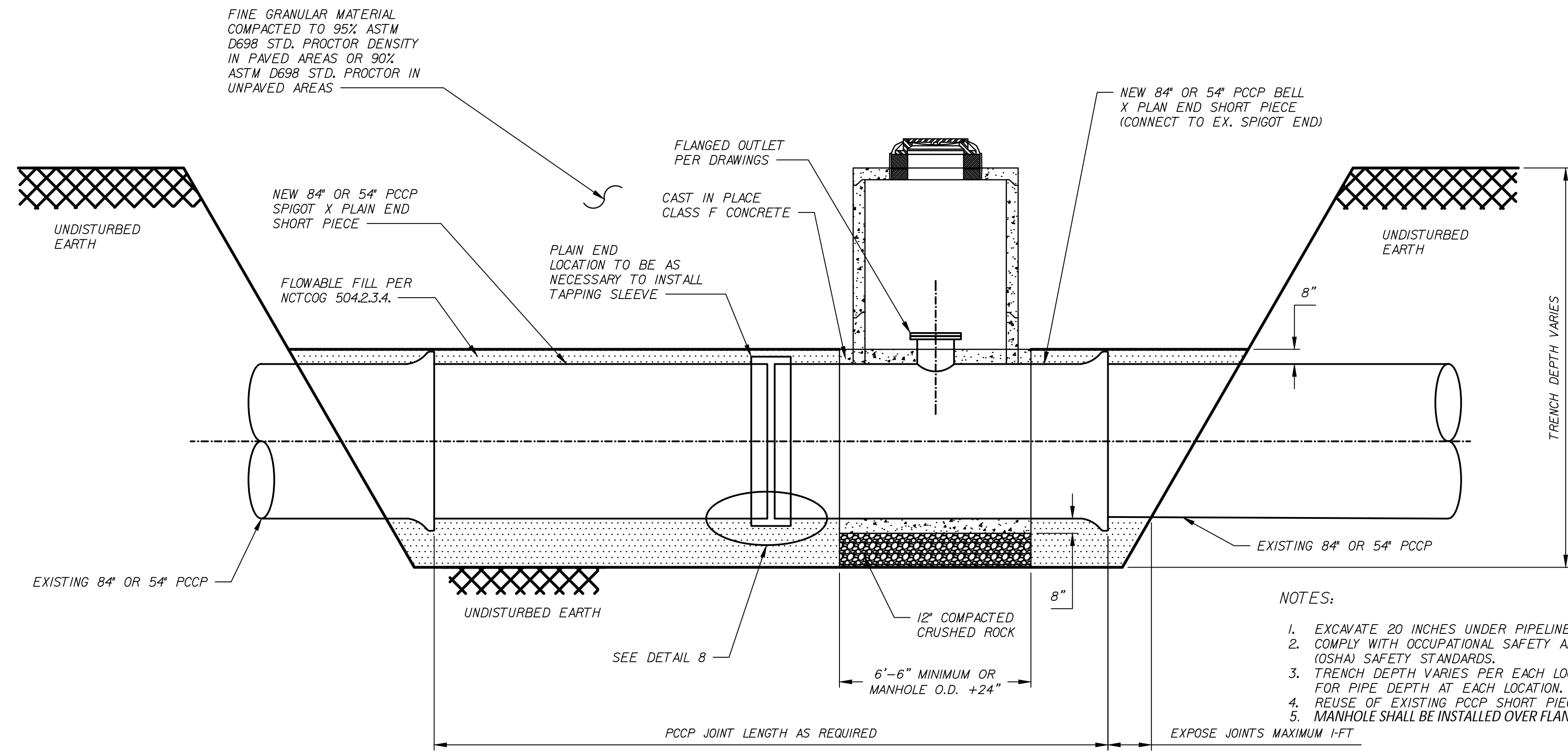
SECTION 3
NTS



SECTION 4
NTS

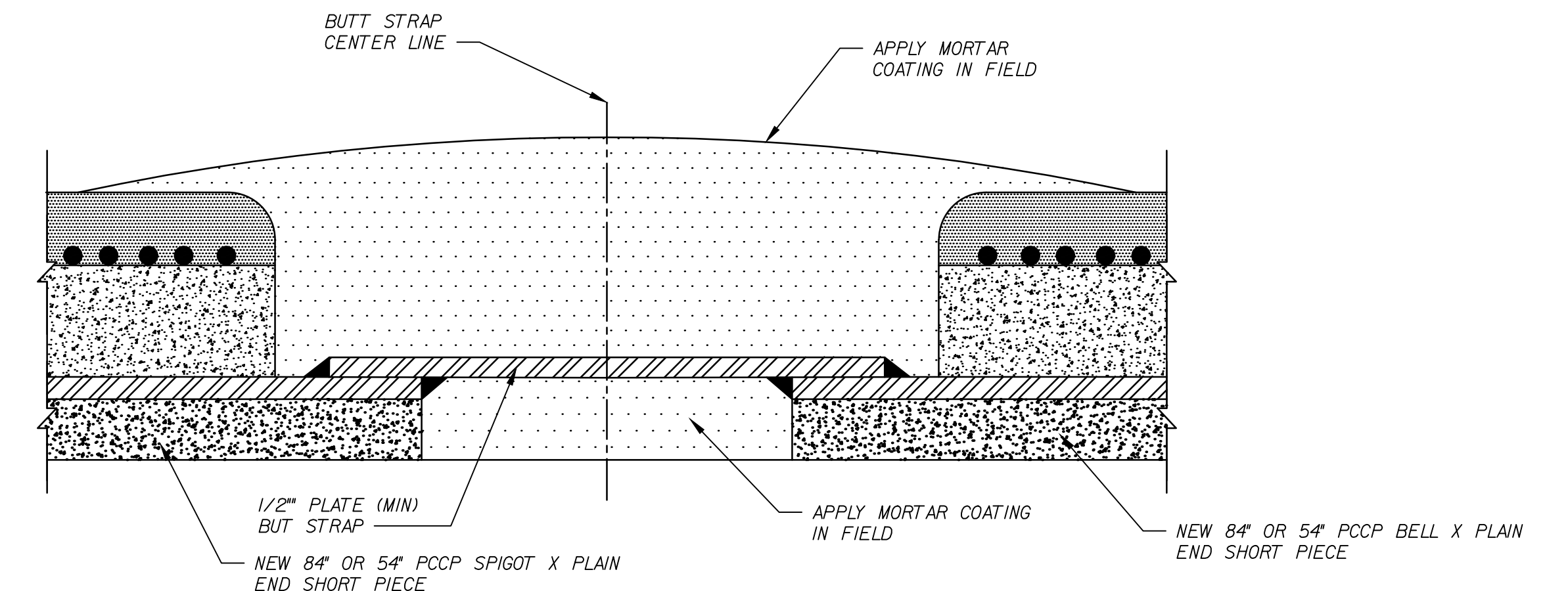


CDM Smith		1240 Colt Road, Suite 400 Dallas, TX, 75231 Tel: (214) 349-2900 TBPE Firm Registration No. F-3043	
CONTRACT NO. 20-001/002		PID: -	
WRNTM AIR VALVE IMPROVEMENTS			
NEW ARV INSTALLATION DETAILS III			
DALLAS WATER UTILITIES CITY OF DALLAS, TEXAS			
DESIGN	DRAWN	DATE	FILE
KH	SG	MAY 2020	685W
			NUMBER
			660
			SHEET
			43



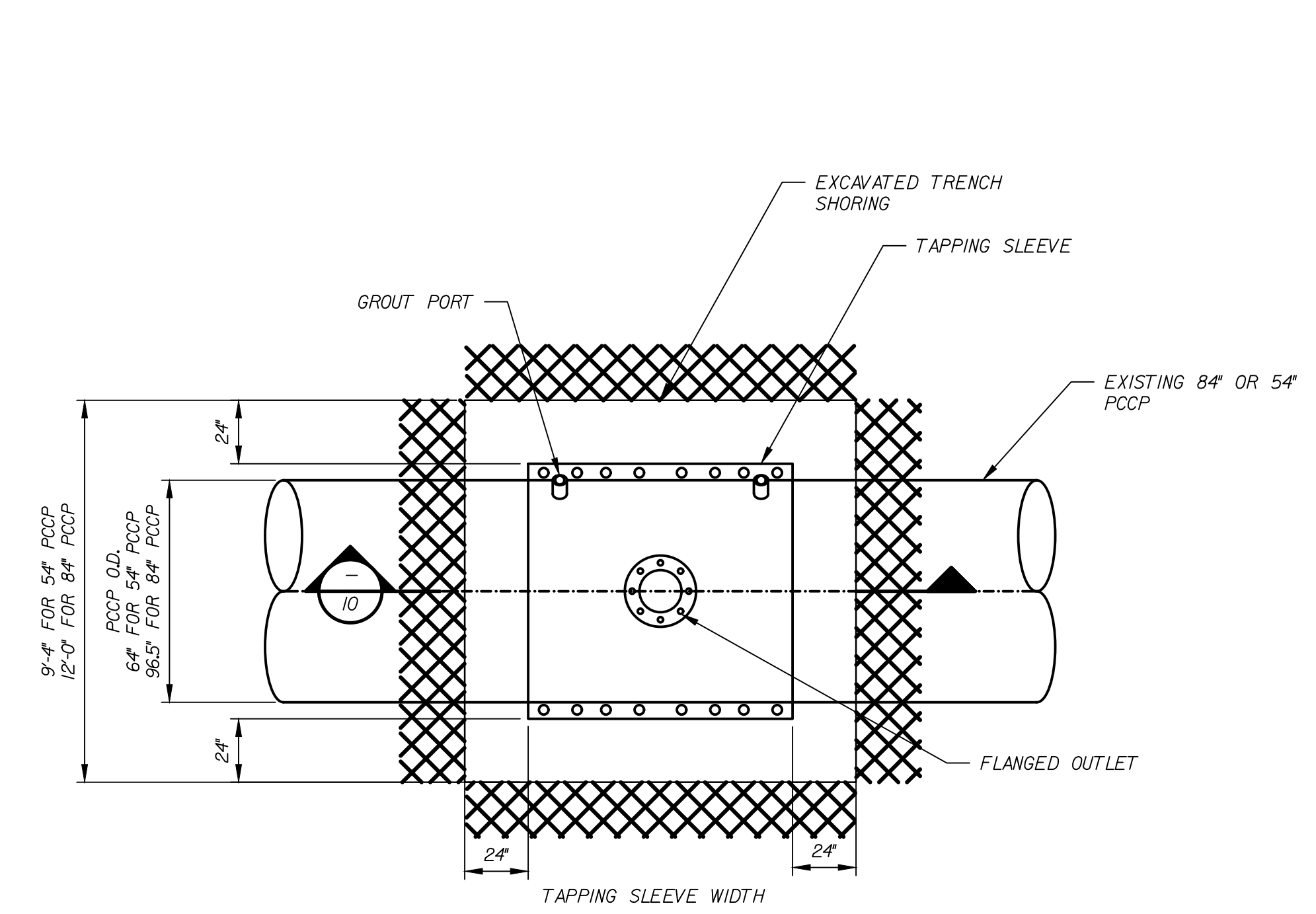
7 PCCP JOINT REPLACEMENT PLAN
NOT TO SCALE

- NOTES:
1. EXCAVATE 20 INCHES UNDER PIPELINE FOR ALL TAPS.
 2. COMPLY WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) SAFETY STANDARDS.
 3. TRENCH DEPTH VARIES PER EACH LOCATION. SEE RECORD DRAWINGS FOR PIPE DEPTH AT EACH LOCATION.
 4. REUSE OF EXISTING PCCP SHORT PIECE SHALL NOT BE ALLOWED.
 5. MANHOLE SHALL BE INSTALLED OVER FLANGED OUTLETS AT THE LOCATIONS SHOWN ON THE PLANS.

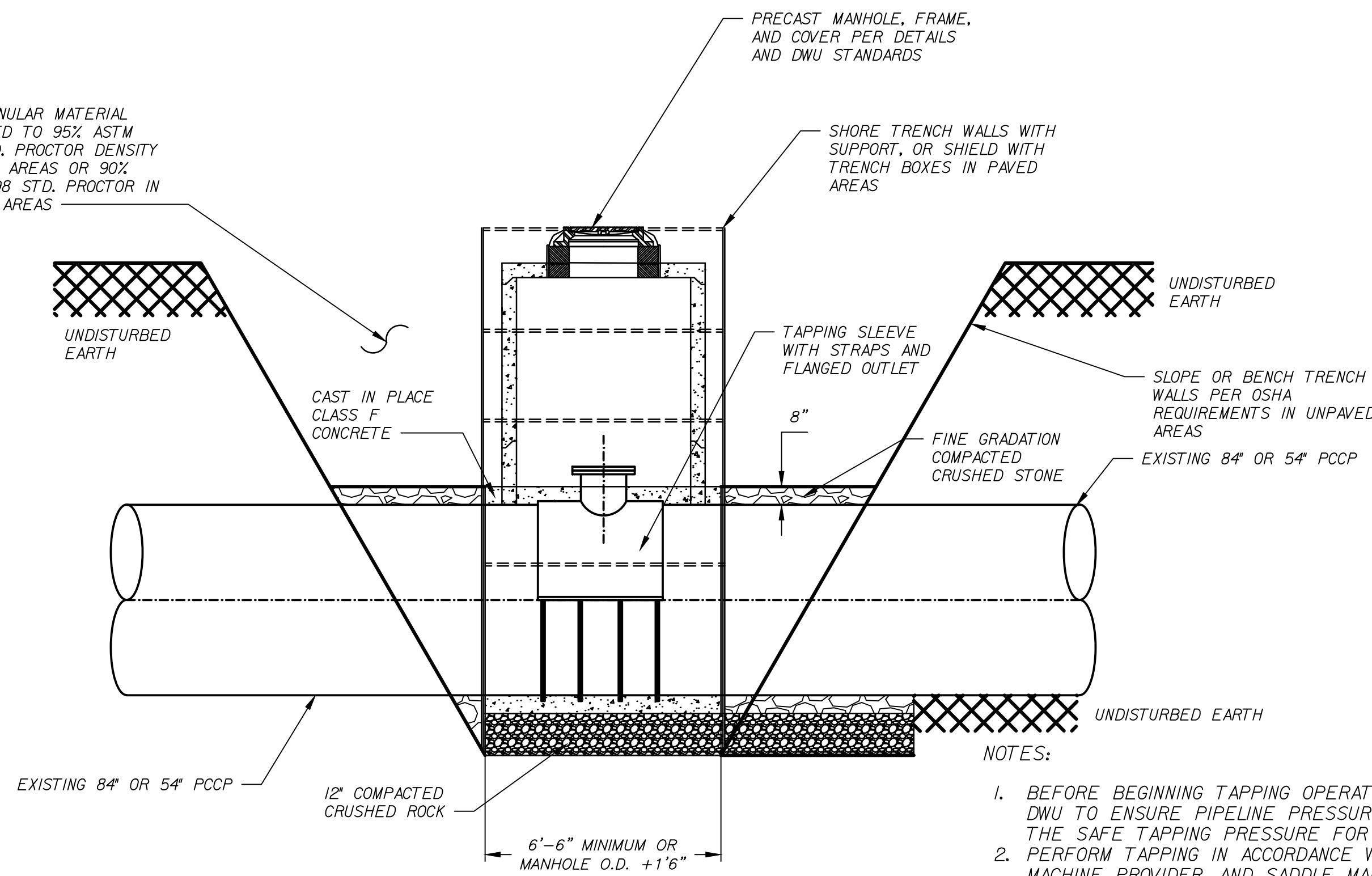


8 BUTT STRAP DETAIL
NOT TO SCALE

- PIPE REPLACEMENT NOTES:
1. INSTALL CLOSURE SECTION WITH FULL FILLET WELD ALL AROUND PER PCCP PIPE MANUFACTURER'S RECOMMENDATIONS.
 2. INSTALL BLIND FLANGE ON OUTLETS PER DWU STANDARD DETAIL *210.
 3. BUTT STRAP MAY BE WELDED EXTERNALLY OR INTERNALLY, BUT NOT REQUIRED TO BE BOTH.
 4. MINIMUM PLATE THICKNESS (T) SHALL BE PER PCCP PIPE MANUFACTURER'S RECOMMENDATIONS, BUT NOT LESS THAN 1/2". TO WITHSTAND PRESSURES SHOWN IN THE VALVES SCHEDULE, CONTRACTOR SHALL SUBMIT PLATE THICKNESS CALCULATIONS.

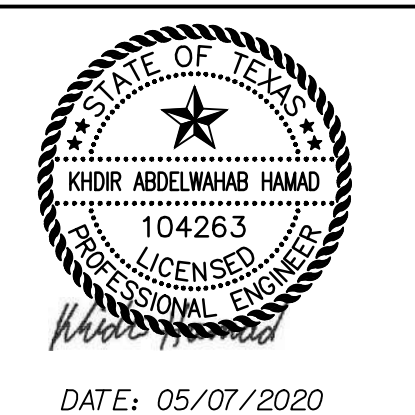


9 TAPPING SLEEVE PLAN
NOT TO SCALE



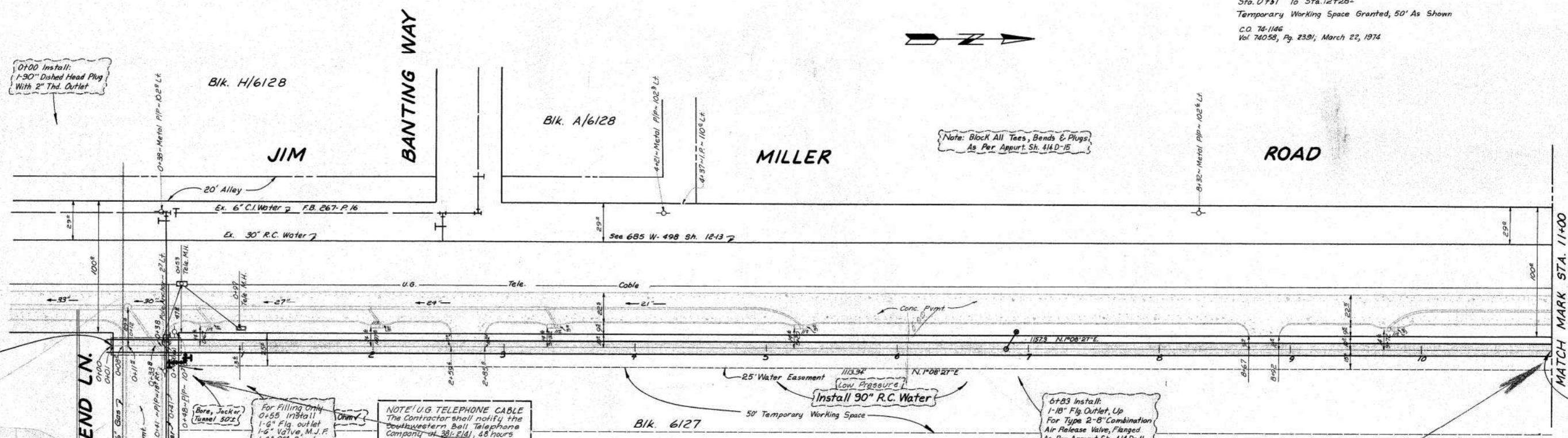
10 TAPPING SLEEVE SECTION
NOT TO SCALE

- NOTES:
1. BEFORE BEGINNING TAPPING OPERATIONS, COORDINATE WITH DWU TO ENSURE PIPELINE PRESSURE DOES NOT EXCEED THE SAFE TAPPING PRESSURE FOR THE CYLINDER.
 2. PERFORM TAPPING IN ACCORDANCE WITH AWWA M9, TAPPING MACHINE PROVIDER, AND SADDLE MANUFACTURER.
 3. SECURELY BOLT THE SADDLE TO THE PIPE PRIOR TO THE REMOVAL OF PRESTRESSING WIRE.
 4. SADDLE LENGTH SHALL BE SUFFICIENT TO PROVIDE ADEQUATE REINFORCEMENT FOR THE TAPPED OPENING.
 5. ENSURE GROUT FULLY FILLS ANNULAR SPACE BETWEEN THE SADDLE AND PIPE. FAST-SETTING, EARLY-STRENGTH PORTLAND CEMENT GROUT IS ALLOWED.
 6. PROVIDE CONTINUOUS SUPPORT FOR VALVE AND TAPPING MACHINE THROUGHOUT AND AFTER THE TAPPING PROCEDURE TO ENSURE SADDLE AND GLAND DON'T CARRY ANY WEIGHT.
 7. FILL SPACE BETWEEN SADDLE AND GLAND WITH GROUT. APPLY PROTECTIVE COATING OF CEMENT MORTAR OVER ENTIRE ASSEMBLY.



CDM Smith		1240 Colt Road, Suite 400 Dallas, TX 75231 Tel: (214) 349-2900 TBPE Firm Registration No. F-3043	
CONTRACT NO. 20-001/002		PID: -	
WRNTM AIR VALVE IMPROVEMENTS			
PIPE JOINT REPLACEMENT AND TAPPING DETAILS			
DALLAS WATER UTILITIES			
CITY OF DALLAS, TEXAS			
DESIGN	DRAWN	DATE	FILE
KH	SG	MAY 2020	685W
			NUMBER
			660
			SHEET
			44

Buckner Baptist Benevolence
Easement Tract 1
A 25' Easement Adj. To & E. of E. Property Line Of
Jim Miller Rd. from Showbend Ln. To Samuel Blvd.
Sta. 0+51 To Sta. 12+28.2
Temporary Working Space Granted, 50' As Shown
C.O. 74-1146
Vol. 74058, Pg. 239; March 22, 1974



Tex. Coord.
N. 409,000
E. 2,246,000

Tex. Coord.
N. 410,100
E. 2,246,000

For Filling Only
0+55 Install
1-6" Flg. outlet
1-6" Valve, M.J.F.
1-6" 45° Bend
1-8" 45° Bend
1-8" x 6" Top
1-6" Valve
2-6" 90° Elbow
Note: 6" Valve on
90° to be closed
when 90° is in
service.

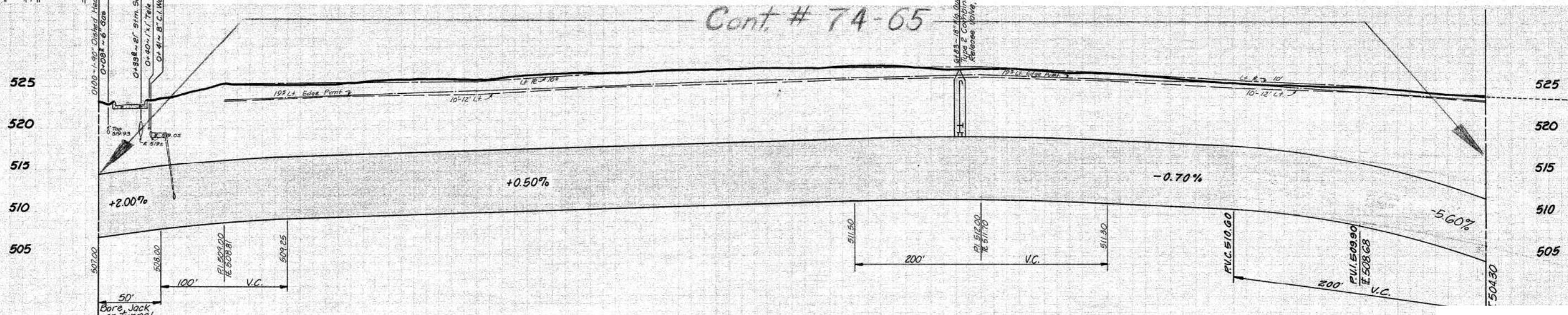
NOTE: U.G. TELEPHONE CABLE
The Contractor shall notify the
Southwestern Bell Telephone
Company at 281-8141, 48 hours
prior to construction that they
may have a representative
present.

0+83 Install:
1-18" Flg. Outlet, Up
For Type 2-8" Combination
Air Release Valve, Flanged
As Per Appurt. Sh. 414D-11

Bridgeport Alley
411 R 1570 Sh. 113

Cont. # 74-65

Cont. # 74-65



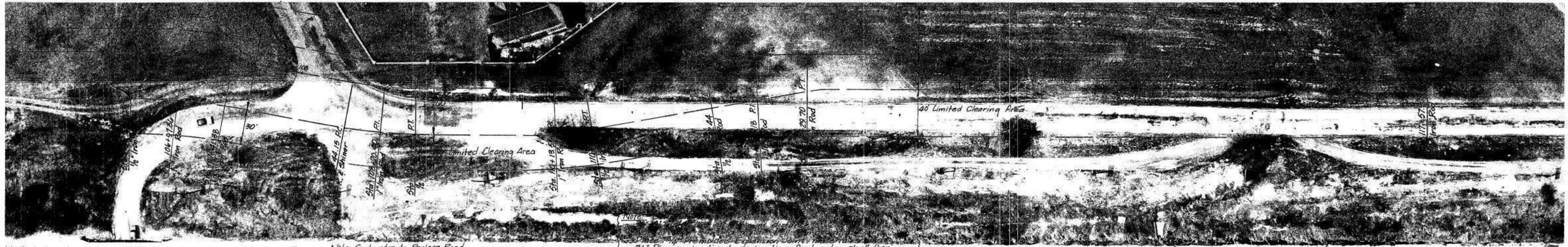
Fill Void Between Carrier
Pipe & Earth or Rock with
1:7 Grout including 5% to
40% Air Entrainment

Valve 2.0.E, STA 006+83

1100 LIN. FT. 90" DIA. PRESTRESSED CONCRETE EMBEDDED CYLINDER PIPE CLASS 150

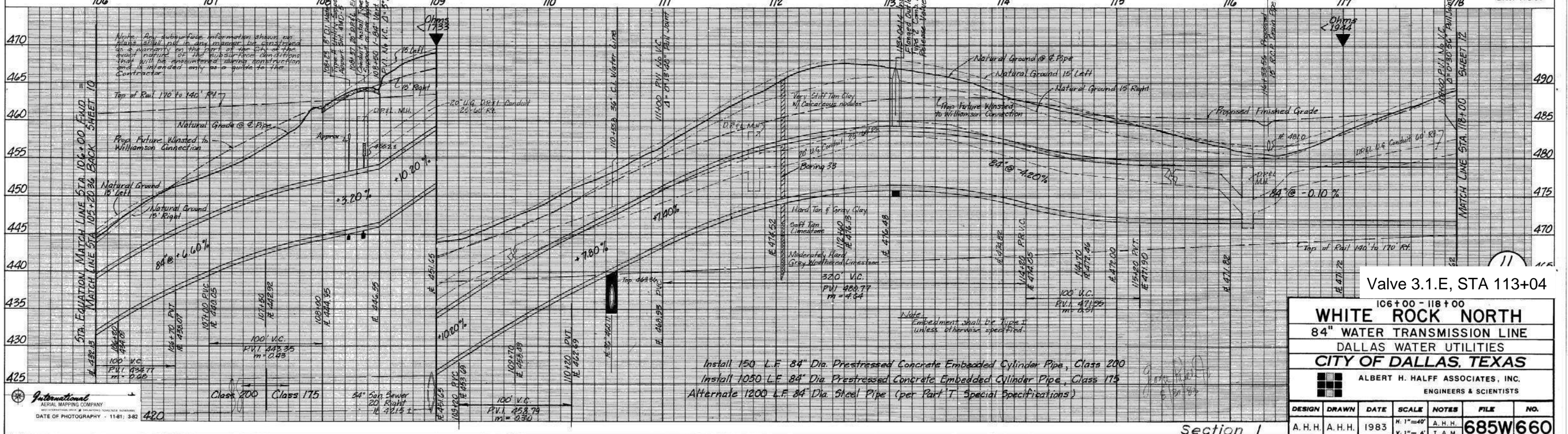
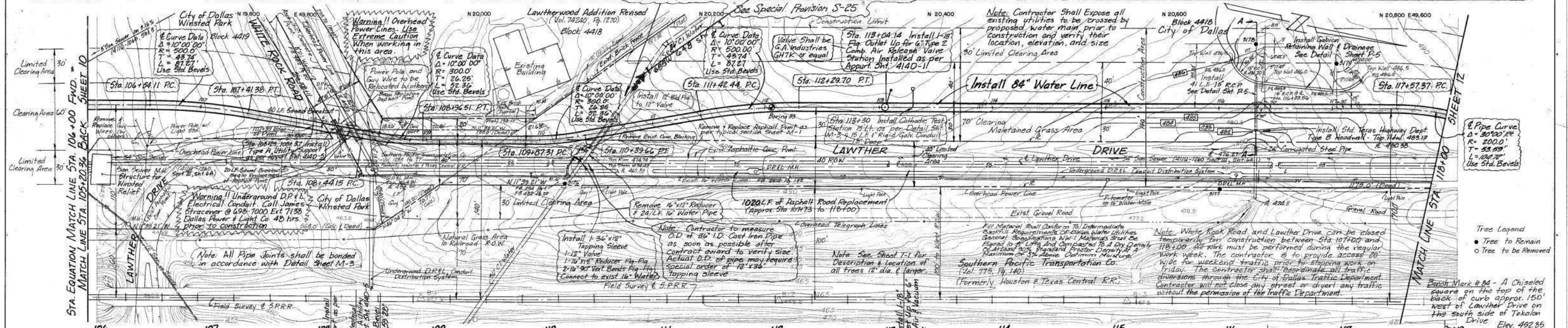
B.M. Standard W.D. B.M. on North concrete
curb of EVERGLADE ROAD 80' West
of E of JIM MILLER ROAD.
ELEV = 614.34

90" WATER MAIN						
IN JIM MILLER RD. & SAMUELL BLVD.						
FROM JIM MILLER PUMP STA. TO BUCKNER						
DALLAS WATER UTILITIES DEPT.						
CITY OF DALLAS, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
Campbell	MAY R. Lara	1-8-74	Hor. 1"=40' Ver. 1"=6'	Coll. 5/67	685-W	549



Note: Contractor to Replace Road Cut-out section for water line as per City of Dallas Street Cut and Excavation Repair Schedule

36" Pipe spring line to spring line. Contractor shall then encase 36" Water Line with 3000 psi concrete a minimum distance of 20' to each side or to the nearest joint. All encasement to be placed in 3000 psi concrete (Distribution)

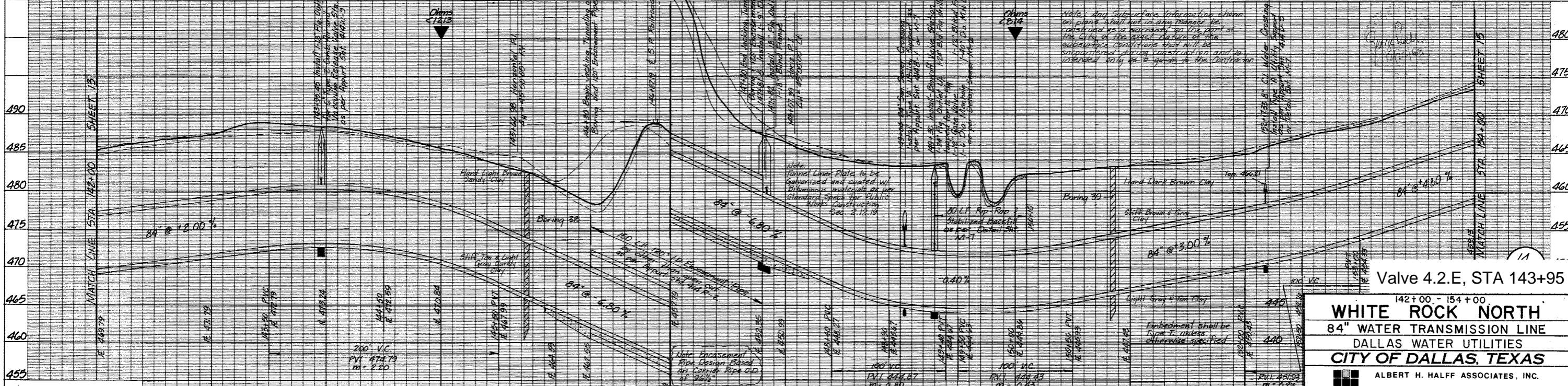
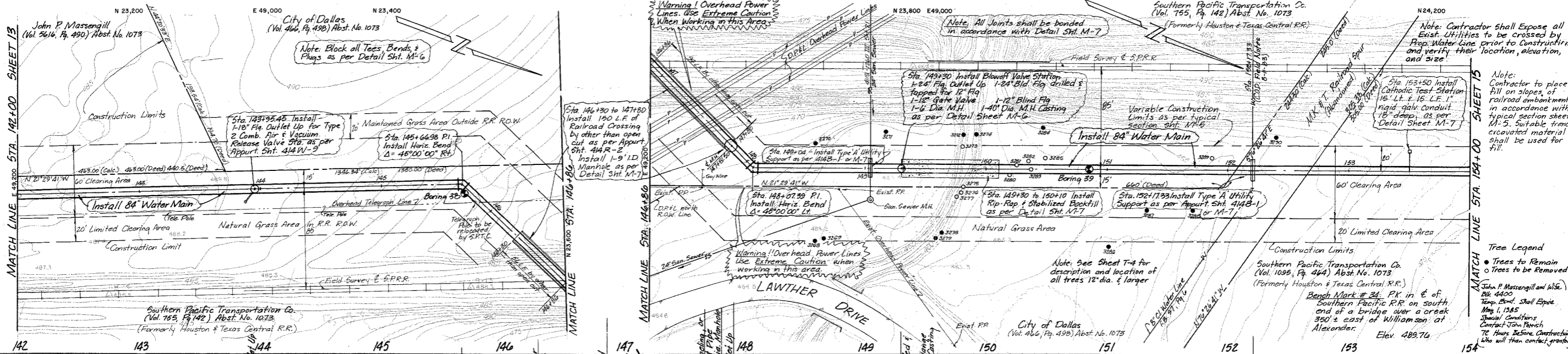
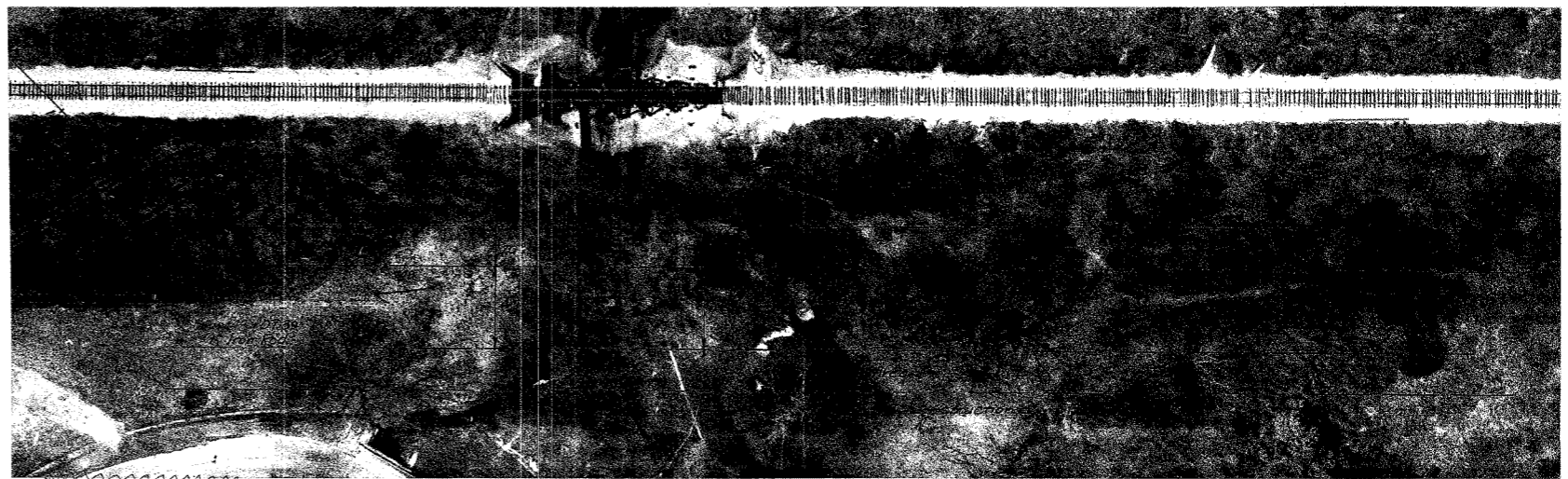
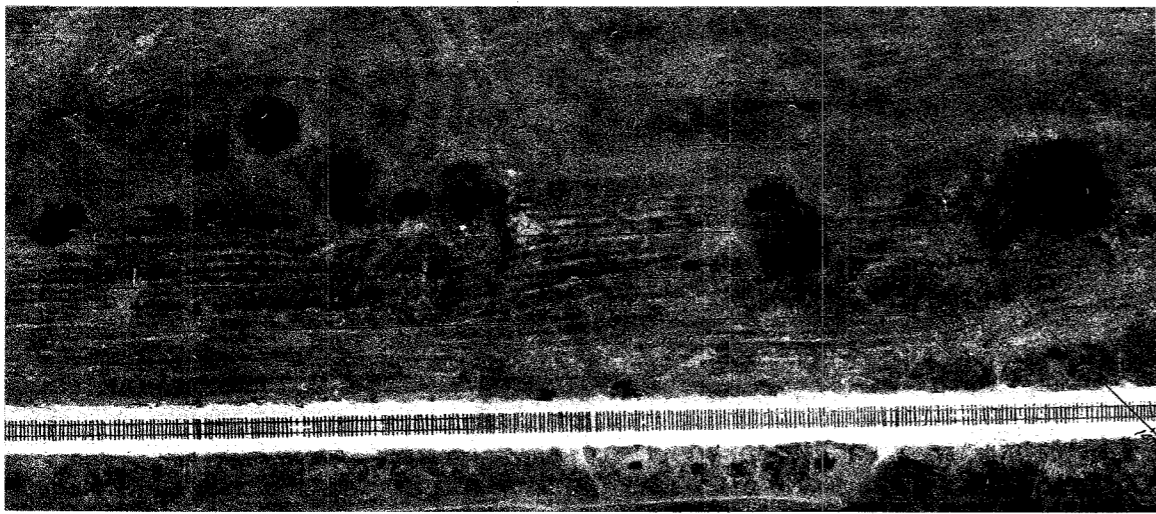


Valve 3.1.E, STA 113+04

106+00 - 118+00
WHITE ROCK NORTH
84" WATER TRANSMISSION LINE
 DALLAS WATER UTILITIES
CITY OF DALLAS, TEXAS
 ALBERT H. HALFF ASSOCIATES, INC.
 ENGINEERS & SCIENTISTS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
A.H.H.	A.H.H.	1983	H. 1"=40' V. 1"=6'	A.H.H.	685W660	

Section 1



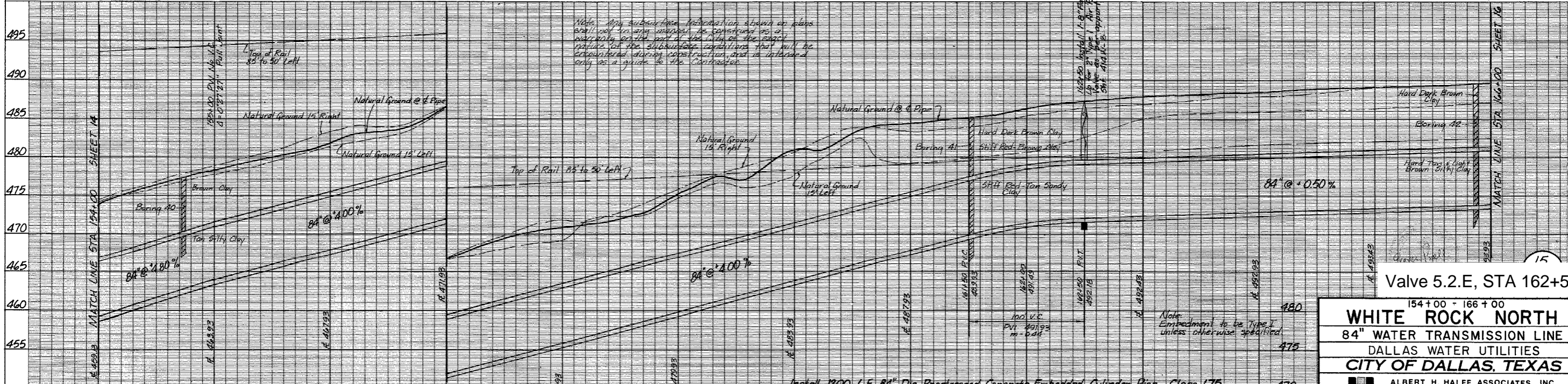
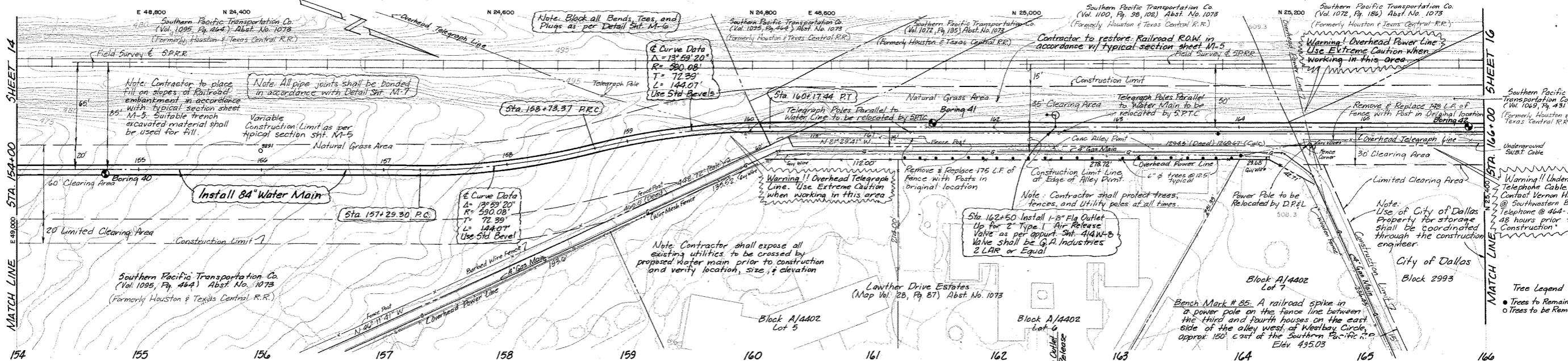
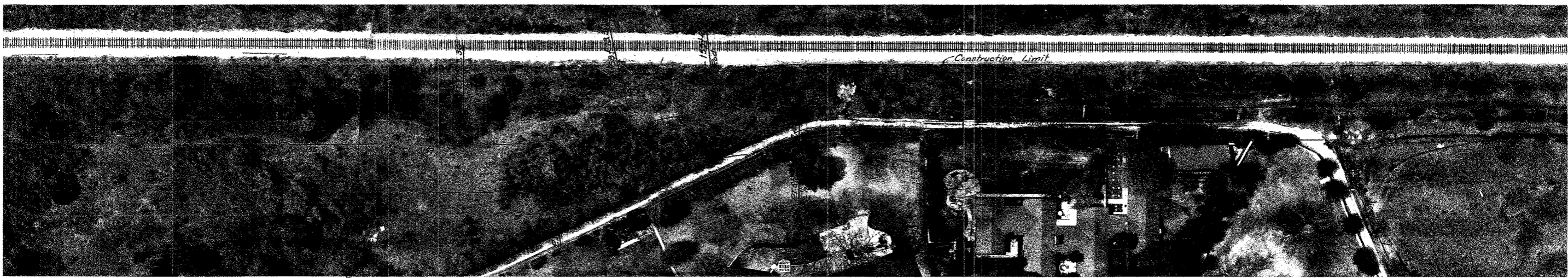
Install 1200 L.F. 84" Dia. Prestressed Concrete Embedded Cylinder Pipe, Class 175
Alternate 1000 L.F. 84" Dia. Steel Pipe (as per Part T, Special Specifications)

Install 150 L.F. 120" I.D. Circular Tunnel Liner Plate - 8 Gauge 2 Flg., 5 Gauge 4 Flg. Plate (16" or 18" Width)

WHITE ROCK NORTH
84" WATER TRANSMISSION LINE
DALLAS WATER UTILITIES
CITY OF DALLAS, TEXAS
ALBERT H. HALFF ASSOCIATES, INC.
ENGINEERS & SCIENTISTS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
A.H.H.	A.H.H.	1983	H: 1" = 40' V: 1" = 6'	A.H.H.		685W660

Section 2
 A.O. 6967 CONTRACT No. 83-503 DWR.



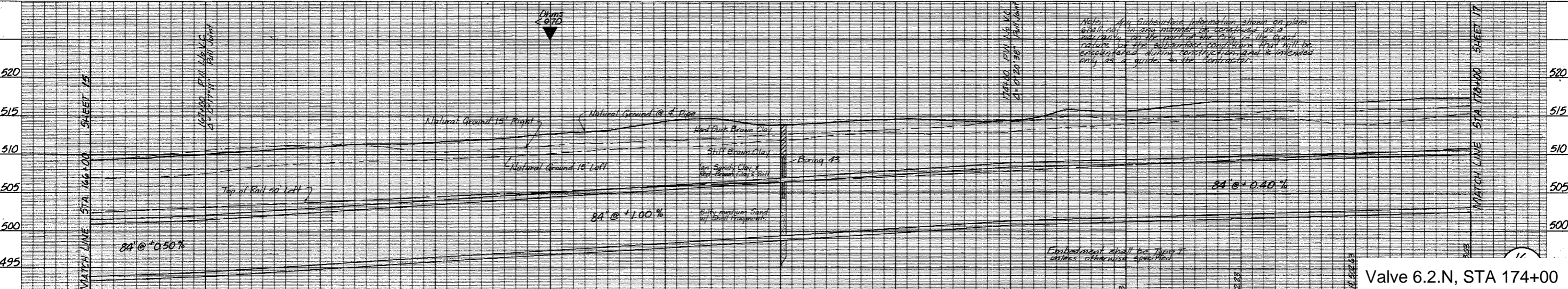
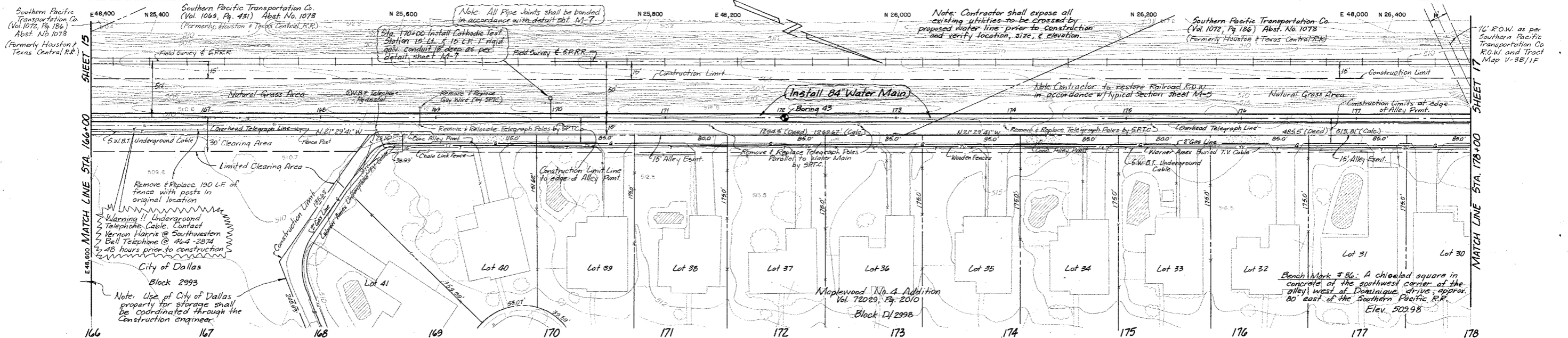
International
AERIAL MAPPING COMPANY
DATE OF PHOTOGRAPHY - 11-81: 3-82

154+00 - 166+00
WHITE ROCK NORTH
84" WATER TRANSMISSION LINE
DALLAS WATER UTILITIES
CITY OF DALLAS, TEXAS
ALBERT H. HALFF ASSOCIATES, INC.
ENGINEERS & SCIENTISTS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
A. H. H.	A. H. H.	1983	H. 1"=40'	A. H. H.		
			V. 1"=6'	J. A. M.		

Section 2

AVO 6967 CONTRACT No. 83-503 DWR



Install 1200 L.F. 84" Dia. Prestressed Concrete Embedded Cylinder Pipe, Class 175
 Alternate: 1200 L.F. 84" Dia. Steel Pipe (per Part 7 Special Specifications)

Valve 6.2.N, STA 174+00

166+00 - 178+00

WHITE ROCK NORTH

84" WATER TRANSMISSION LINE

DALLAS WATER UTILITIES

CITY OF DALLAS, TEXAS

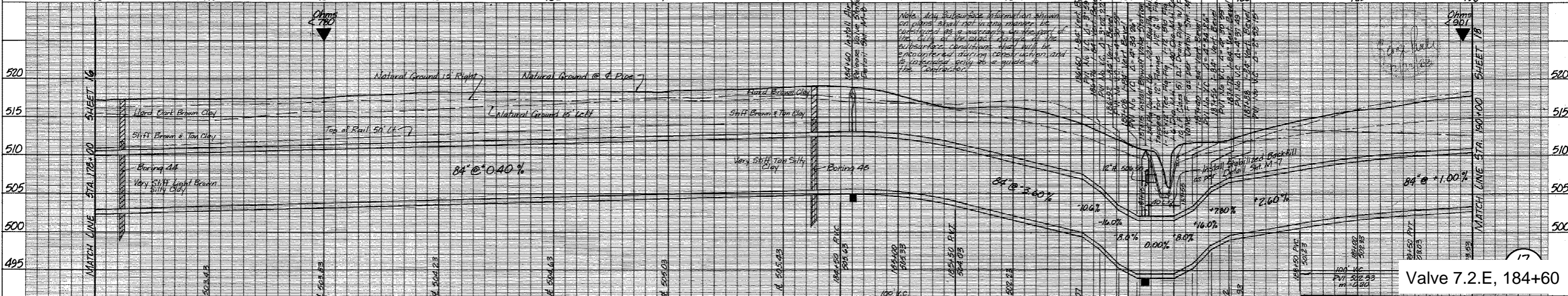
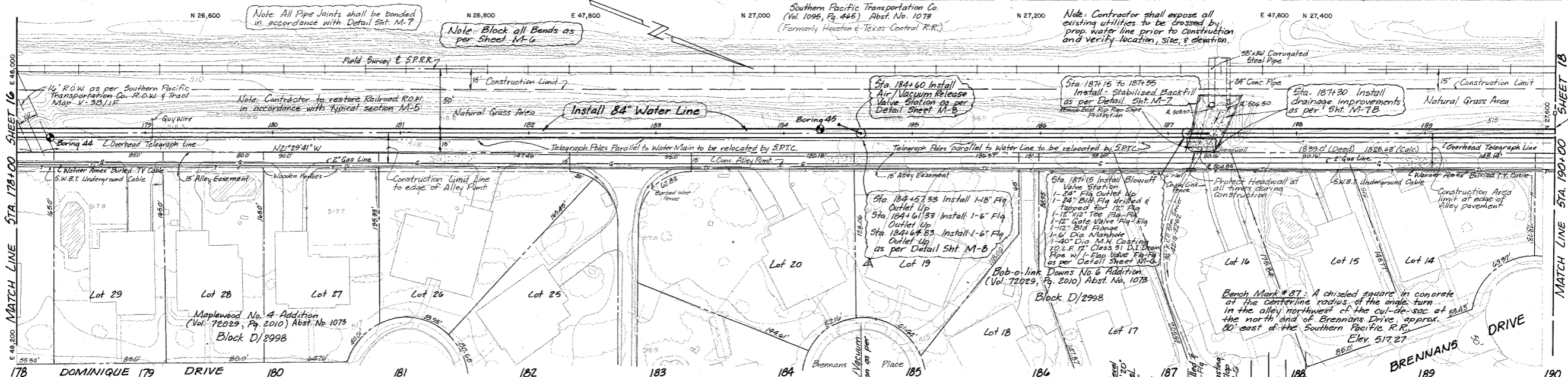
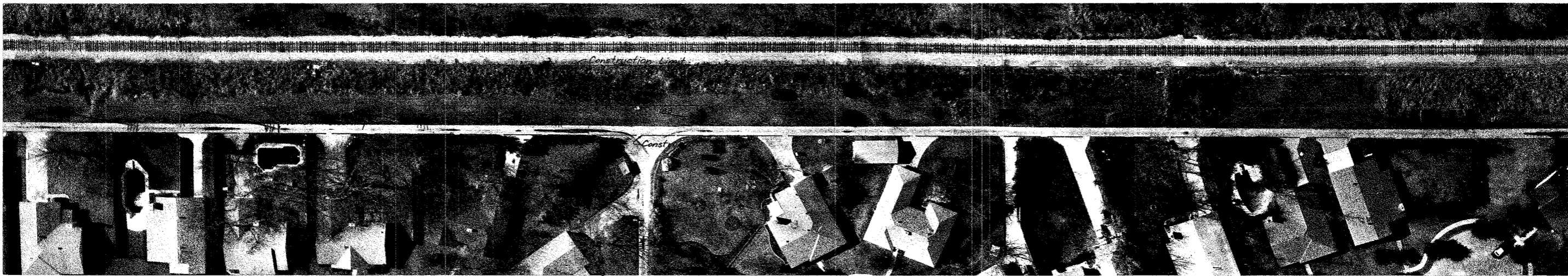
ALBERT H. HALFF ASSOCIATES, INC.

ENGINEERS & SCIENTISTS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
A.H.H.	A.H.H.	1983	H: 1"=40' V: 1"=6'	A.H.H. I.A.M.	685W/660	

International
 AERIAL MAPPING COMPANY
 DATE OF PHOTOGRAPHY - 11-81; 3-82

Section 2
 A.V.O. 6967 CONTRACT No. 83-503 DWR.



Install 1200 L.F. 84" Dia. Prestressed Concrete Embedded Cylinder Pipe, Class 175
 Alternate: 1200 L.F. 84" Dia. Steel Pipe (per Part 7 Special Specifications)

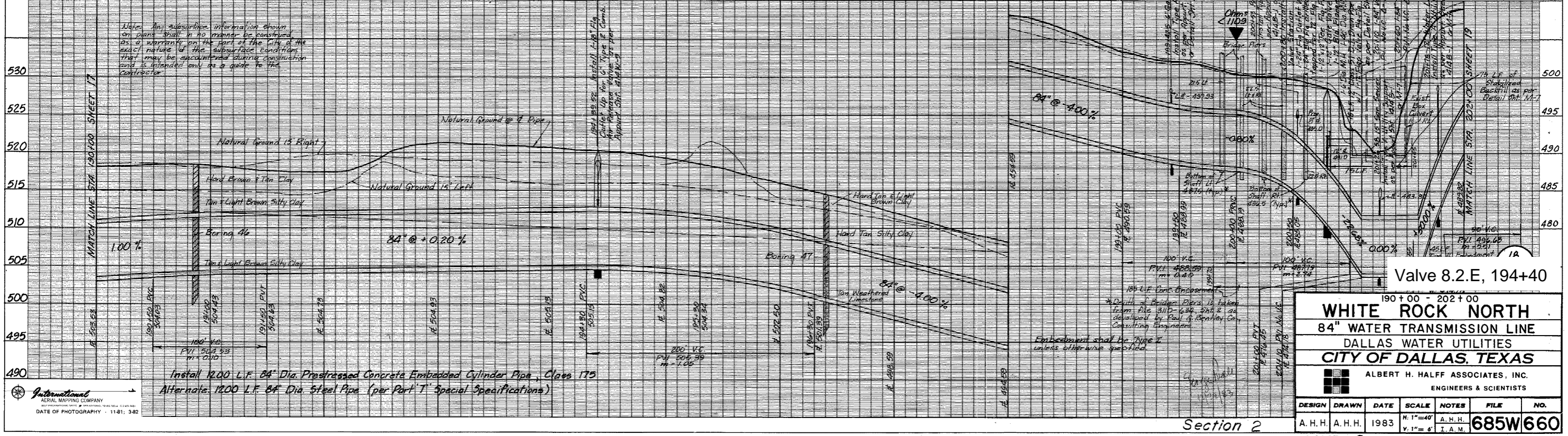
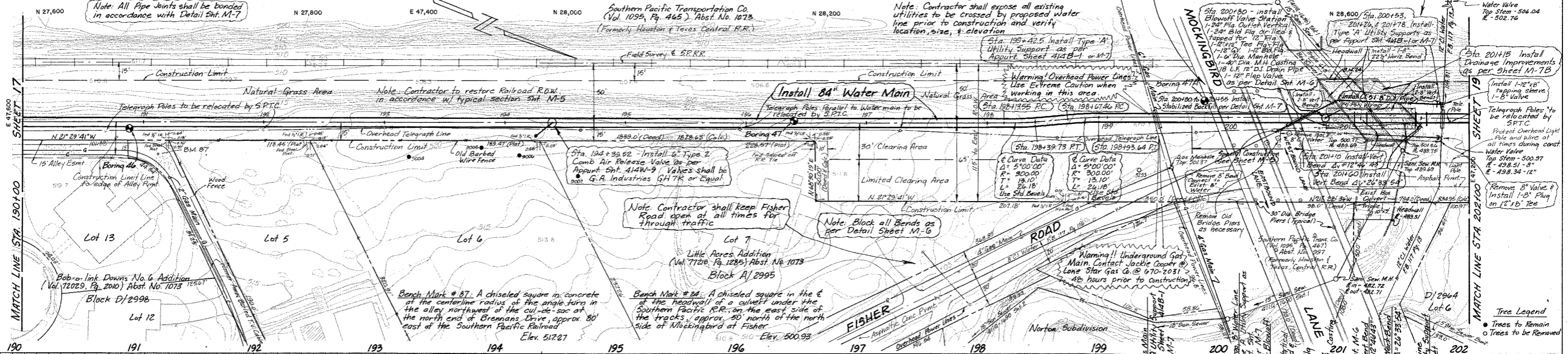
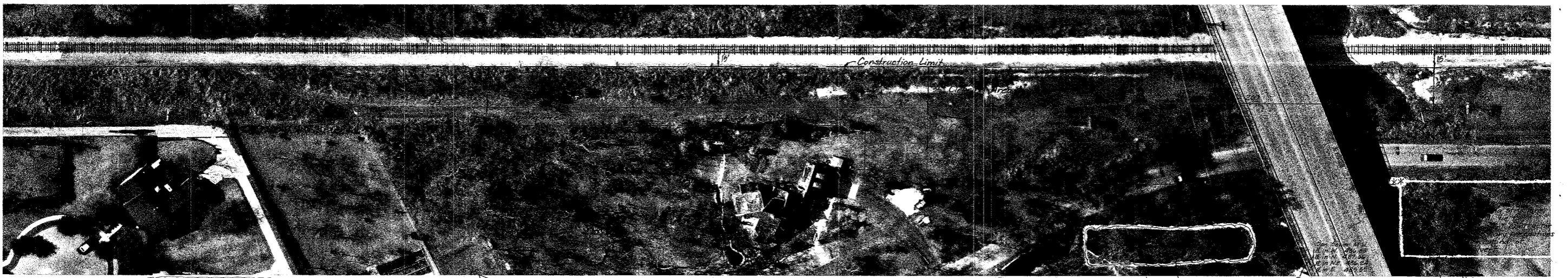
178+00 - 190+00
WHITE ROCK NORTH
 84" WATER TRANSMISSION LINE
 DALLAS WATER UTILITIES
 CITY OF DALLAS, TEXAS
 ALBERT H. HALFF ASSOCIATES, INC.
 ENGINEERS & SCIENTISTS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
A.H.H.	A.H.H.	1983	H. 1" = 40' V. 1" = 6'	A.H.H. I.A.M.	685W	660

AVO 6967 CONTRACT No. 83-503 DWR.

Changed 6" Flg outlet from Sta 184+62.83 to Sta 184+64.83 Section 2





190+00 - 202+00

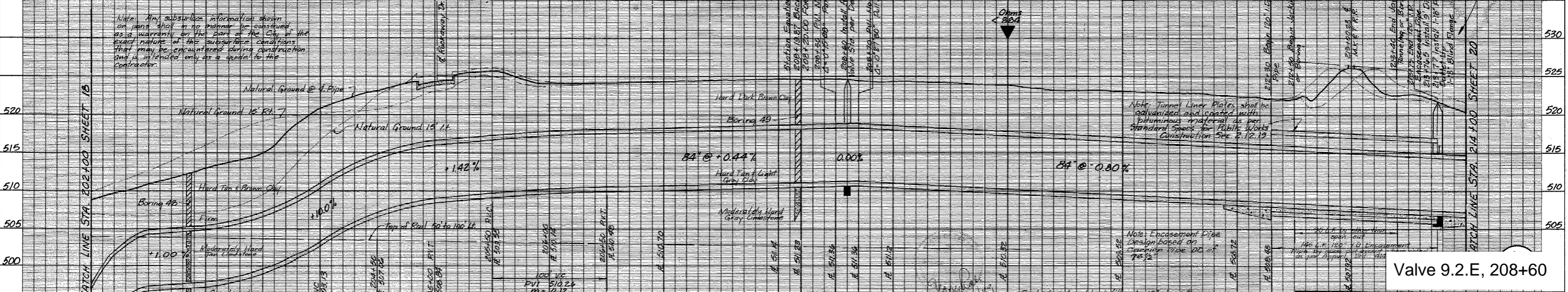
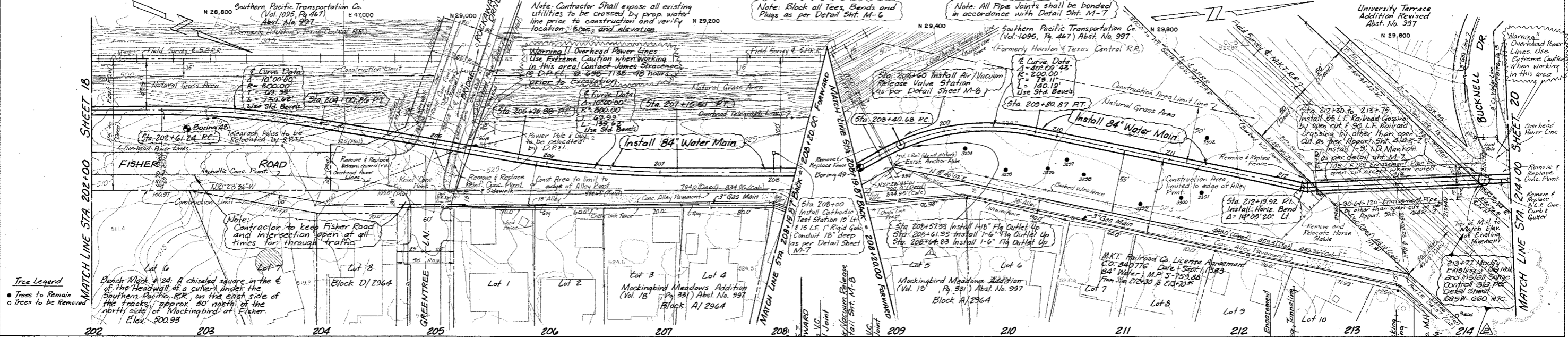
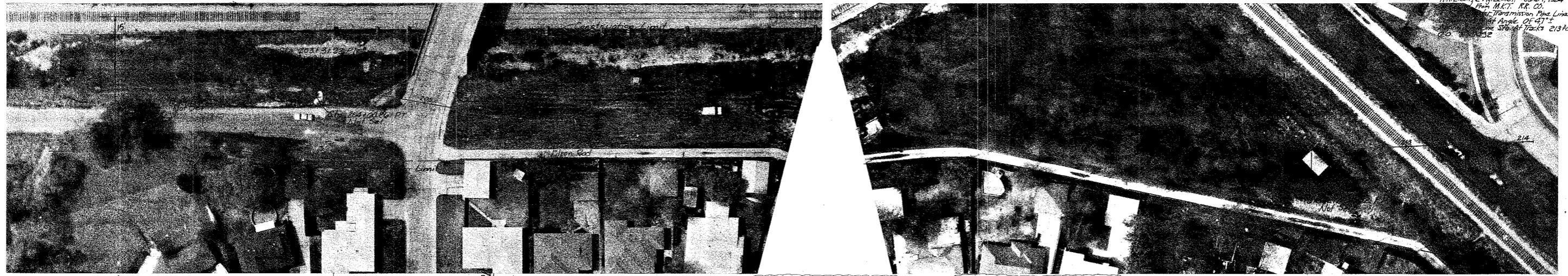
WHITE ROCK NORTH
84" WATER TRANSMISSION LINE
 DALLAS WATER UTILITIES
 CITY OF DALLAS, TEXAS

ALBERT H. HALFF ASSOCIATES, INC.
 ENGINEERS & SCIENTISTS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
A.H.H.	A.H.H.	1983	N. 1" = 40' H. 1" = 6'	A.H.H. I.A.M.	685W660	

Section 2
 AVO. 6967 CONTRACT No. 83-5D3 DWR.

International
 AERIAL MAPPING COMPANY
 DATE OF PHOTOGRAPHY - 11-81; 3-82



202 + 00 - 214 + 00
WHITE ROCK NORTH
84" WATER TRANSMISSION LINE
 DALLAS WATER UTILITIES
CITY OF DALLAS, TEXAS
 ALBERT H. HALFF ASSOCIATES, INC.
 ENGINEERS & SCIENTISTS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
A.H.H.	A.H.H.	1983	H. 1"=40' V. 1"=6'	A.H.H. E.A.M.	685W660	

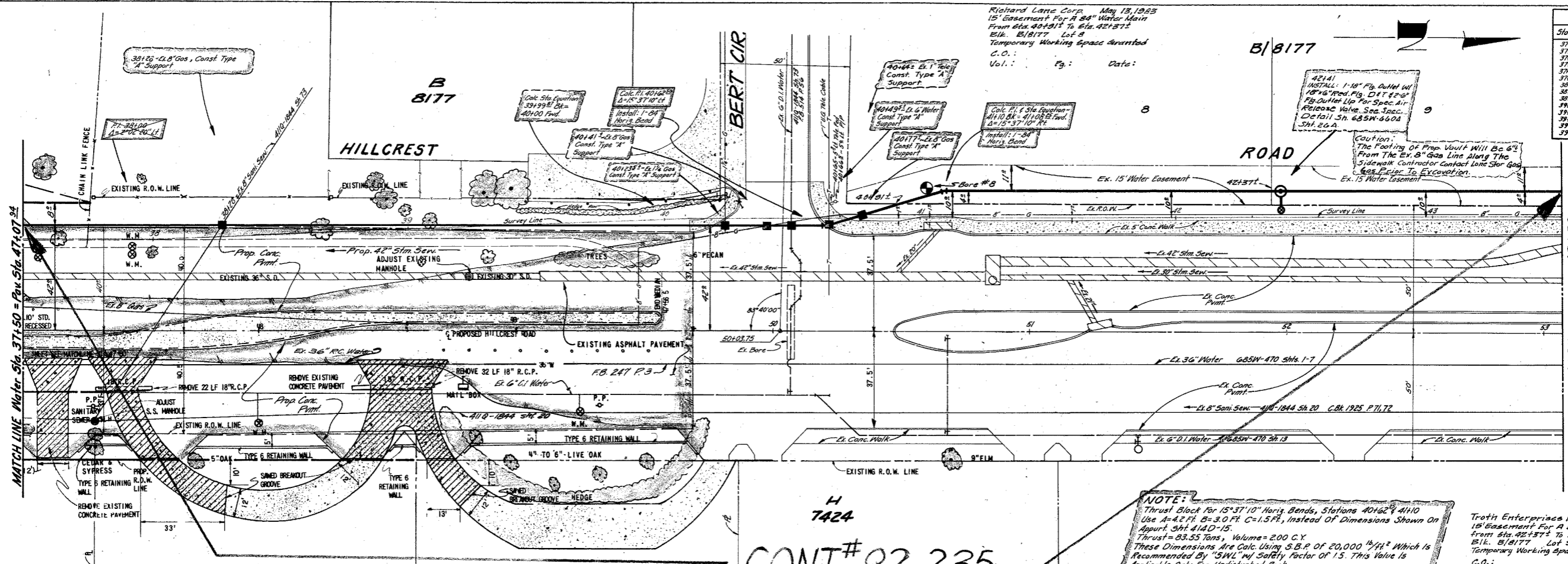
AVO. 6967 CONTRACT No. 83-503 DWR.

International
 ASIAL MAPING COMPANY
 DATE OF PHOTOGRAPHY - 11-81-3-82

Install 1200 L.F. 84" Dia. Prestressed Concrete Embedded Cylinder Pipe, Class 175
 Alternate 1200 L.F. 84" Dia. Steel Pipe (per Part 1 Special Specifications)
 Install 145 L.F. 120" I.D. Circular Tunnel Liner Plate & Gauge 2 Flg. Plate, 3 Gauge 4 Flg. Plate (1/4" or 1/8" wide)
 A Changed 6" Flg. outlet from Sta. 208+62.83 to Sta. 208+64.83
 Section 2

Richard Lane Corp. May 13, 1983
 15' Easement For A 84" Water Main
 From Sta. 40+91.5 To Sta. 42+37.5
 Blk. B/8177 Lot 8
 Temporary Working Space Granted
 C.O.: Vol.: Pg.: Date:

Station	Lt.	Rt.	Size	Describe
37+42	238	14"	Elm	
37+57	275	24"	Ash	
37+63	6	18"	Maple	
37+90	7	18"	Elm	
37+95	238	14"	Pecan	
37+99	48	6"	Ash	
38+65	51	16"	Maple	
38+85	238	14"	Maple	
38+91	48	6"	Pecan	
39+07	116	8"	Pecan	
39+08	228	28"	Pecan	
39+30	141	12"	Maple	
39+39	238	30"	Pecan	



H
7424
CONT# 82-235

NOTE:
 Thrust Block For 15'x37'10" Horiz. Bends, Stations 40+62.4-41+0
 Use A=42 FT, B=3.0 FT, C=1.5 FT, Instead Of Dimensions Shown On
 Appurt. Sht. 414D-15.
 Thrust=83.55 Tons, Volume=200 C.Y.
 These Dimensions Are Calc. Using S.B.P. Of 20,000 ¹⁶/ft² Which Is
 Recommended By "SWL" w/ Safety Factor Of 1.5. This Value Is
 Applicable Only For Undisturbed Rock.

Troth Enterprises Inc. May 2, 1983
 15' Easement For A 84" Water Main
 From Sta. 42+37.5 To Sta. 44+10.5
 Blk. B/8177 Lot 9
 Temporary Working Space Granted
 C.O.: Vol.: Pg.: Date:

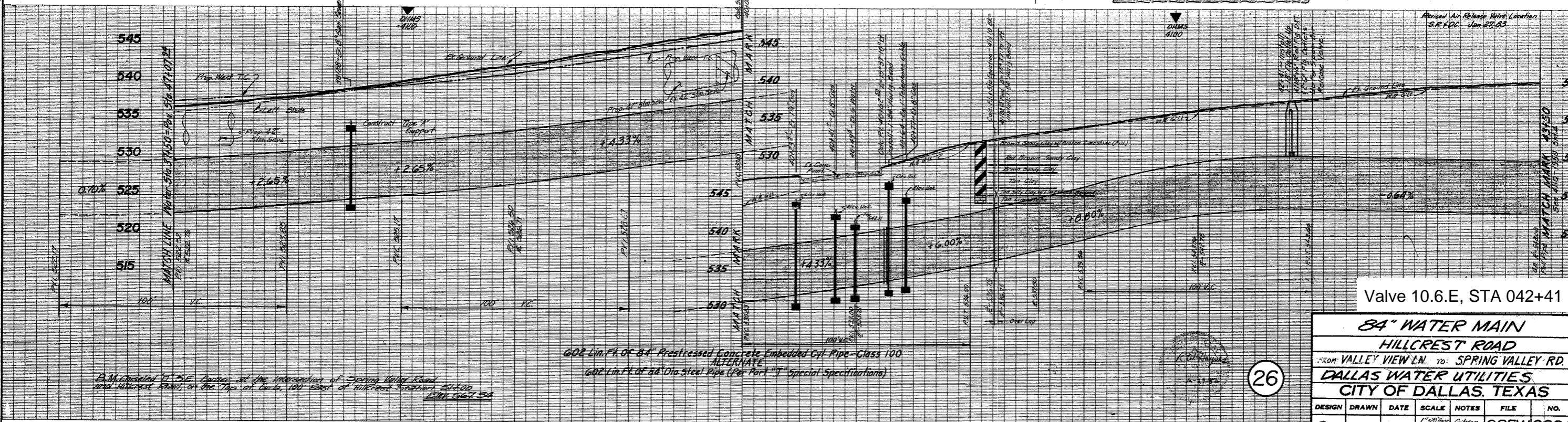
NOTE!
 All Thrust Block Excavations Should Have Clean Undisturbed
 Sides With No Backfill On The Load Carrying Sides. Thrust Block
 Excavations Should Be Filled With Concrete As Soon As Possible
 To Avoid Deterioration To The Load Bearing Sidewalls.

NOTE:
 1. Wing & Toe Ditch Walls Should Be As
 Nearly Vertical As Possible.
 2. Concrete Strength To Be 2000 PSI. Min.
 3. Concrete To Be Poured Against Undisturbed Rock.

Install 84" P.C. Or Steel
Water Pipe

Water Map
9-26 W
Sewer Key Map
F-3

NOTE!
 All Ties Are
 To The Original
 Survey

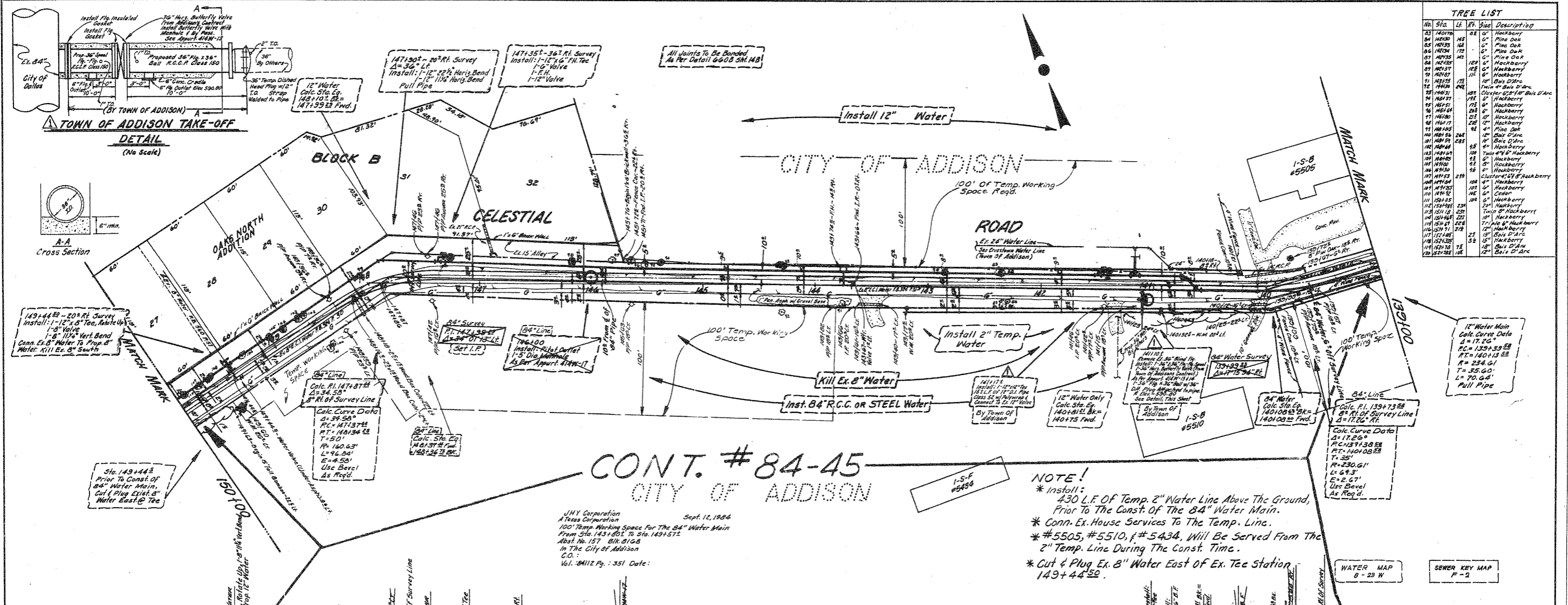


Valve 10.6.E, STA 042+41

84" WATER MAIN
HILLCREST ROAD
 FROM VALLEY VIEW LN. TO SPRING VALLEY RD.
DALLAS WATER UTILITIES
CITY OF DALLAS, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
Reas	Carroll	5/83	1"=20'	11/20/83	685W/660A	

26



TREE LIST

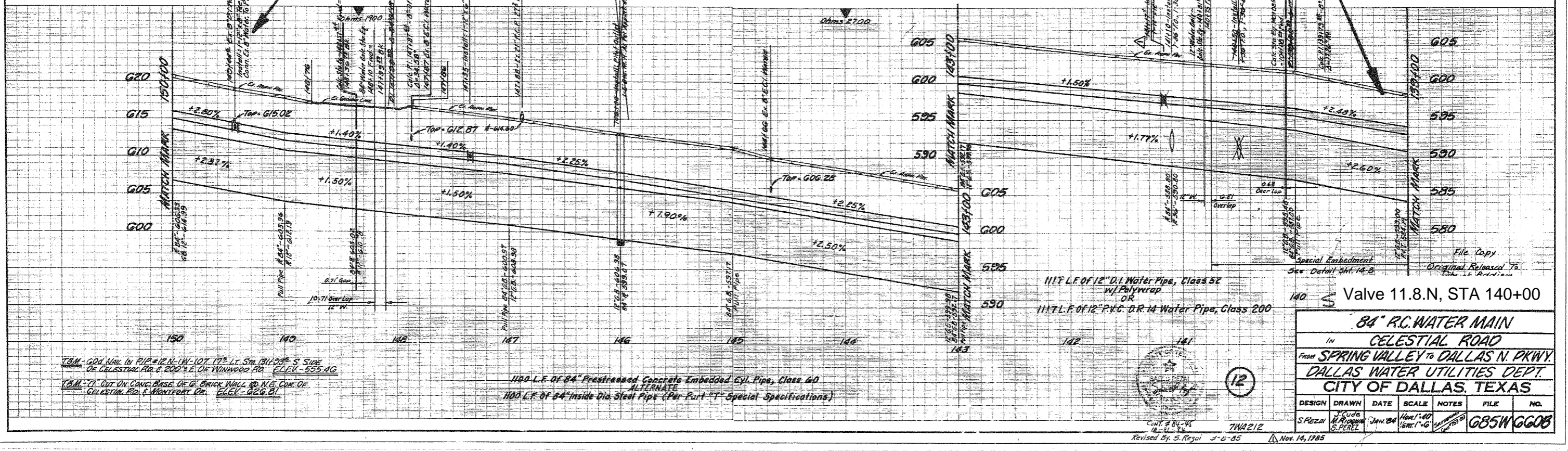
No.	Sta.	Lt.	Rt.	Description
23	147070			Hackberry
24	147070	48		Pine Oak
25	147070	148		Pine Oak
26	147070	172		Pine Oak
27	147070	192		Pine Oak
28	147070	212		Hackberry
29	147070	232		Hackberry
30	147070	252		Hackberry
31	147070	272		Hackberry
32	147070	292		Hackberry
33	147070	312		Hackberry
34	147070	332		Hackberry
35	147070	352		Hackberry
36	147070	372		Hackberry
37	147070	392		Hackberry
38	147070	412		Hackberry
39	147070	432		Hackberry
40	147070	452		Hackberry
41	147070	472		Hackberry
42	147070	492		Hackberry
43	147070	512		Hackberry
44	147070	532		Hackberry
45	147070	552		Hackberry
46	147070	572		Hackberry
47	147070	592		Hackberry
48	147070	612		Hackberry
49	147070	632		Hackberry
50	147070	652		Hackberry
51	147070	672		Hackberry
52	147070	692		Hackberry
53	147070	712		Hackberry
54	147070	732		Hackberry
55	147070	752		Hackberry
56	147070	772		Hackberry
57	147070	792		Hackberry
58	147070	812		Hackberry
59	147070	832		Hackberry
60	147070	852		Hackberry
61	147070	872		Hackberry
62	147070	892		Hackberry
63	147070	912		Hackberry
64	147070	932		Hackberry
65	147070	952		Hackberry
66	147070	972		Hackberry
67	147070	992		Hackberry
68	147070	1012		Hackberry
69	147070	1032		Hackberry
70	147070	1052		Hackberry
71	147070	1072		Hackberry
72	147070	1092		Hackberry
73	147070	1112		Hackberry
74	147070	1132		Hackberry
75	147070	1152		Hackberry
76	147070	1172		Hackberry
77	147070	1192		Hackberry
78	147070	1212		Hackberry
79	147070	1232		Hackberry
80	147070	1252		Hackberry
81	147070	1272		Hackberry
82	147070	1292		Hackberry
83	147070	1312		Hackberry
84	147070	1332		Hackberry
85	147070	1352		Hackberry
86	147070	1372		Hackberry
87	147070	1392		Hackberry
88	147070	1412		Hackberry
89	147070	1432		Hackberry
90	147070	1452		Hackberry
91	147070	1472		Hackberry
92	147070	1492		Hackberry
93	147070	1512		Hackberry
94	147070	1532		Hackberry
95	147070	1552		Hackberry
96	147070	1572		Hackberry
97	147070	1592		Hackberry
98	147070	1612		Hackberry
99	147070	1632		Hackberry
100	147070	1652		Hackberry

CONT. # 84-45
CITY OF ADDISON

- NOTE!**
- * Install 430 L.F. OF Temp. 2" Water Line Above The Ground, Prior To The Const. Of The 84" Water Main.
 - * Conn. Ex. House Services To The Temp. Line.
 - * #5505, #5510, #5434, Will Be Served From The 2" Temp. Line During The Const. Time.
 - * Cut & Plug Ex. 8" Water East Of Ex. Tee Station 149+44.50.

JHY Corporation
A Texas Corporation
100' Temp. Working Space For The 84" Water Main
From Sta. 143+80' To Sta. 149+57'
Asst. No. 157 BIK 8128
In The City of Addison
C.O.
Vol. 38112 Pg. 351 Date:

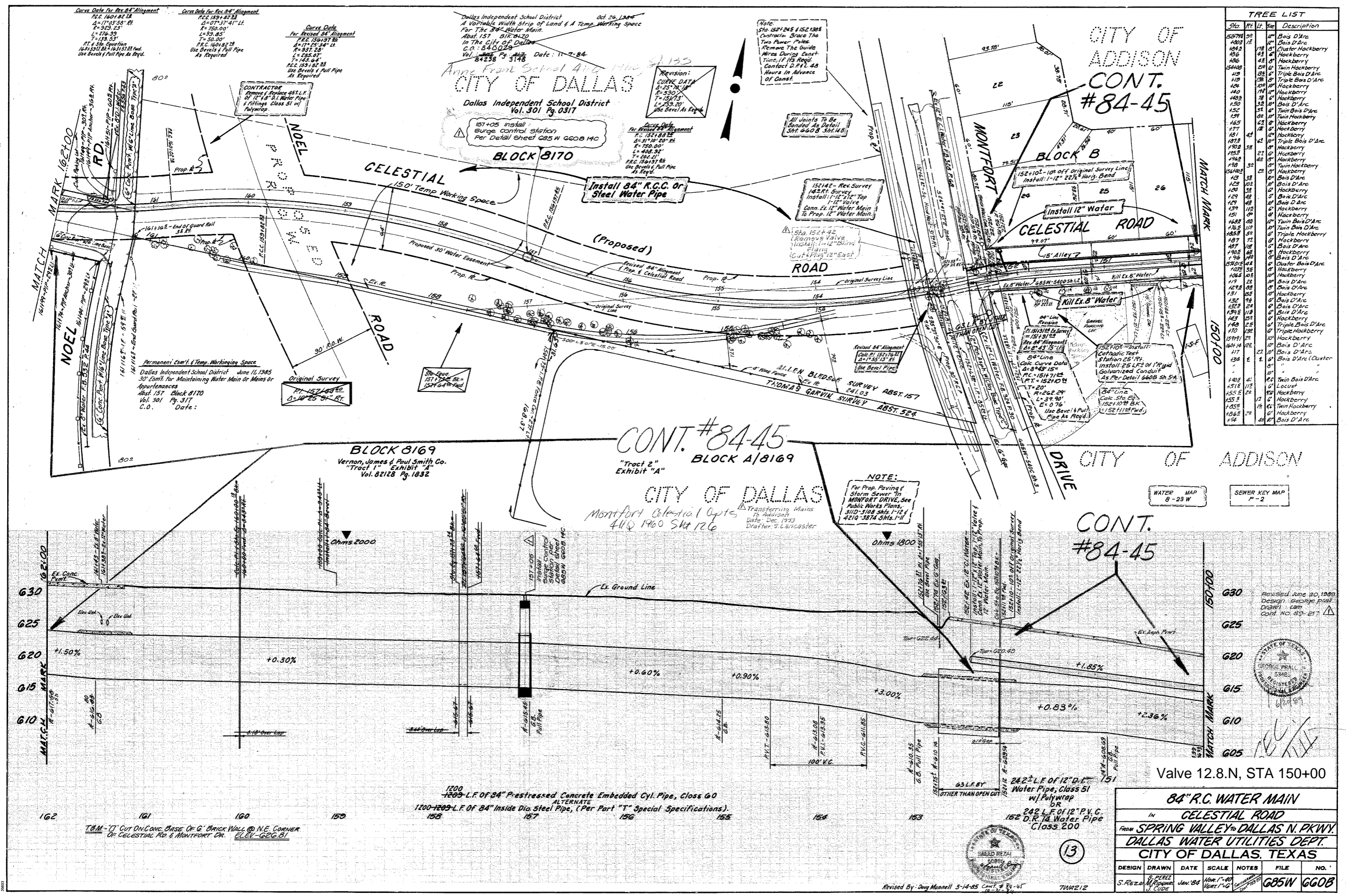
WATER MAP 8-29 W
SEWER KEY MAP F-2



Valve 11.8.N, STA 140+00

84" R.C. WATER MAIN
IN **CELESTIAL ROAD**
FROM **SPRING VALLEY** TO **DALLAS N. PKWY.**
DALLAS WATER UTILITIES DEPT.
CITY OF DALLAS, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
S. PEREZ	J. CUDG	JAN. 84	1"=10'		GB5WGG08	



Sta.	Tree No.	Type	Description
152+78	58	1 1/2"	Bois D'Arc
152+82	12	1 1/2"	Bois D'Arc
152+85	178	6"	Cluster Hackberry
152+86	63	6"	Hackberry
152+87	43	6"	Hackberry
152+89	27	6"	Twin Hackberry
152+90	112	6"	Triple Bois D'Arc
152+91	13	6"	Hackberry
152+92	14	6"	Hackberry
152+93	14	6"	Hackberry
152+94	78	6"	Bois D'Arc
152+95	32	6"	Bois D'Arc
152+96	51	6"	Twin Bois D'Arc
152+97	69	6"	Twin Hackberry
152+98	63	6"	Hackberry
152+99	12	6"	Hackberry
153+01	44	6"	Hackberry
153+02	61	6"	Triple Bois D'Arc
153+03	53	6"	Hackberry
153+04	23	6"	Hackberry
153+05	46	6"	Hackberry
153+06	33	6"	Twin Hackberry
153+07	15	6"	Bois D'Arc
153+08	102	6"	Bois D'Arc
153+09	38	6"	Hackberry
153+10	68	6"	Bois D'Arc
153+11	27	6"	Bois D'Arc
153+12	113	6"	Hackberry
153+13	6	6"	Hackberry
153+14	9	6"	Hackberry
153+15	65	6"	Twin Bois D'Arc
153+16	112	6"	Twin Bois D'Arc
153+17	52	6"	Triple Hackberry
153+18	72	6"	Hackberry
153+19	6	6"	Bois D'Arc
153+20	142	6"	Hackberry
153+21	65	6"	Hackberry
153+22	10	6"	Bois D'Arc
153+23	109	6"	Bois D'Arc
153+24	6	6"	Hackberry
153+25	10	6"	Triple Bois D'Arc
153+26	170	6"	Triple Hackberry
153+27	10	6"	Hackberry
153+28	117	2 1/2"	Bois D'Arc
153+29	11	6"	Bois D'Arc
153+30	1	6"	Bois D'Arc (Cluster)
153+31	6	6"	6"
153+32	4	6"	Twin Bois D'Arc
153+33	112	6"	Locust
153+34	29	6"	Hackberry
153+35	17	6"	Hackberry
153+36	15	6"	Twin Hackberry
153+37	7	6"	Hackberry
153+38	6	6"	Bois D'Arc

84" R.C. WATER MAIN
IN CELESTIAL ROAD
 FROM **SPRING VALLEY TO DALLAS N. PKWY.**
DALLAS WATER UTILITIES DEPT.
CITY OF DALLAS, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
S. PEREZ	J. CUDE	Jan. '84	Hor. 1" = 40'	Vert. 1" = 40'	GG5W	GG0B

Valve 12.8.N, STA 150+00

Revised June 20, 1989
 design: George Prall
 Drawn: Lam
 Cont. No. 89-217

WATER MAP 8-23 W
 SEWER KEY MAP # - 2

Curve Data For Rev. 84" Alignment
 P.C.E. 1601.82 L.B.
 A=175.35' R.
 E=923.12'
 L=274.33'
 T=134.53'
 P.T. = 1611.85 L.B.
 U.S. 1611.85 L.B. 1613.51 L.B. 1615.17 L.B. 1616.83 L.B.
 Use Bevels & Pull Pipe As Req'd.

Curve Data For Rev. 84" Alignment
 P.C.E. 1591.82 L.B.
 A=175.35' R.
 E=750.00'
 L=274.33'
 T=134.53'
 P.T. = 1611.85 L.B.
 U.S. 1611.85 L.B. 1613.51 L.B. 1615.17 L.B. 1616.83 L.B.
 Use Bevels & Pull Pipe As Required

CONTRACTOR
 Remove & Replace 45 L.F. of 12" x 8" D.I. Water Pipe & Fittings Class 51 w/ Polywrap

Permanent Ex. & Temp. Working Space
 Dallas Independent School District June 16, 1985
 30' Ex. for Maintaining Water Main or Mains or Apertances
 Abst. 157 Block 8170
 Vol. 301 Pg. 317
 C.O. Date:

Dallas Independent School District
 A Vorrable Width Strip of Land & A Temp. Working Space
 For The 34" Water Main.
 Abst. 157 Block 8170
 In The City of Dallas
 C.O. 840029
 Vol. 301 Pg. 317 Date: 11-7-84

ANN FRANK SCHOOL AREA
CITY OF DALLAS
 Dallas Independent School District
 Vol. 301 Pg. 0317

151+05 install Surge Control Station Per Detail Sheet G65 W GG0B 14C

Install 84" R.C.C. or Steel Water Pipe

151+42 - Rev. Survey 142 RT Survey Install 1" x 12" Valve Conn. Ex. 12" Water Main To Prop. 12" Water Main

152+10 - 10' off Original Survey Line Install 1" x 12" Valve Conn. Ex. 12" Water Main

152+42 (Remove Valve) Install 1" x 12" Valve Conn. Ex. 12" Water Main

152+90 - Rev. Survey 142 RT Survey Install 1" x 12" Valve Conn. Ex. 12" Water Main To Prop. 12" Water Main

152+105 - 10' off Original Survey Line Install 1" x 12" Valve Conn. Ex. 12" Water Main

152+105 - 10' off Original Survey Line Install 1" x 12" Valve Conn. Ex. 12" Water Main

152+105 - 10' off Original Survey Line Install 1" x 12" Valve Conn. Ex. 12" Water Main

CITY OF ADDISON CONT. #84-45

NOEL RD. ROAD
CELESTIAL ROAD
MONTFORT DRIVE
150' ALLEY

BLOCK 8170
BLOCK B
BLOCK 8169
 Vernon, James & Paul Smith Co.
 "Tract 1" Exhibit "A"
 Vol. 82128 Pg. 1832

CITY OF DALLAS
 "Tract 2" Exhibit "A"
 Montfort Colonial Cpts
 411 Q 1960 Sht 126
 Transferring Mains to Add. Date, Dec. 1953
 Drafter, S. Lancaster

NOTE:
 For Prop. Paving of Storm Sewer in MONTFORT DRIVE. See Public Works Plans, 311D-3108 Shts. 1-12 & 21Q-387A Shts. 1-11

CONT. #84-45
BLOCK A/8169

CITY OF DALLAS
 "Tract 2" Exhibit "A"
 Montfort Colonial Cpts
 411 Q 1960 Sht 126
 Transferring Mains to Add. Date, Dec. 1953
 Drafter, S. Lancaster

NOTE:
 For Prop. Paving of Storm Sewer in MONTFORT DRIVE. See Public Works Plans, 311D-3108 Shts. 1-12 & 21Q-387A Shts. 1-11

Profile View Data:
 Elevations: 630, 625, 620, 615, 610, 605
 Slopes: +1.50%, +0.30%, +0.60%, +0.90%, +3.00%, +0.83%, +2.36%, +1.85%

1200 - L.F. OF 84" Prestressed Concrete Embedded Cyl. Pipe, Class 60
ALTERNATE
1200-1209 - L.F. OF 84" Inside Dia. Steel Pipe, (Per Part "T" Special Specifications)

Valve 12.8.N, STA 150+00

84" R.C. WATER MAIN
 IN **CELESTIAL ROAD**
 FROM **SPRING VALLEY TO DALLAS N. PKWY.**
DALLAS WATER UTILITIES DEPT.
CITY OF DALLAS, TEXAS

DESIGN: S. PEREZ
 DRAWN: J. CUDE
 DATE: Jan. '84
 SCALE: Hor. 1" = 40', Vert. 1" = 40'
 FILE: GG5W GG0B

B/8170

SOME SUCH PLACE TOO APTS.

Curve Data
 For Revised 84" Alignment
 P.R.C. 1601.82 28
 Δ = 174° 53' 58" RT
 R = 549.23
 L = 276.99'
 T = 139.53'
 P.T. Sta. Station
 1631.57 12.96 (Revised Alignment =
 1631.57 13.96 Fwd. Ex. Alignment
 Use Bevels & Full Pipe As Req'd.

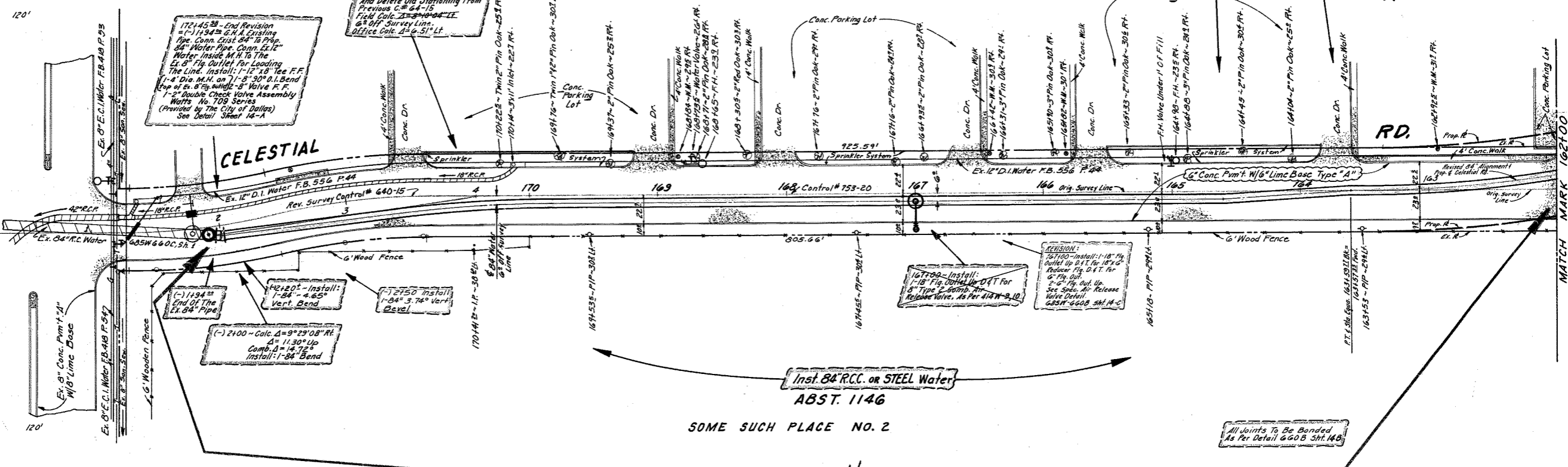
Revision
 Calc. P.I. of Sta. Equ. - 8.212
 164+60.18 BE -
 164+60.18 Fwd.
 Δ = 3.43' Lt.
 Install: 1-84" Bevel

Revision
 163150 - Calc. P.I.
 Δ = 3.43' Lt.
 Install: 1-84" Bevel

Calc. Sta. Eq.
 173+40 BK.
 173+40 Fwd.
 Uninstall 1-84"
 2-Piece
 Closure Section

172+45.29 - End Revision
 = (-) 1134.25 G.H. A. Existing
 Pipe. Chan. dist. 64" To Prop.
 84" Water Pipe. Conn. Ex. 12"
 Water Inside M.H. To The
 Ex. 8" Fig. Outlet For Loading
 The Line. Install: 1-12" Teal F.F.
 1" Dia. M.H. on 7'-8" 300 D.I. Bend
 Top of Ex. 8" Fig. Valve - 8" Valve F.F.
 1-2" Double Check Valve Assembly
 Works No. 709 Series
 (Provided The City of Dallas)
 See Detail Street 14-A

170+41.23 BK = 1-14+00 Fwd.
 Begin Revision With Sta. 170+41.23
 And Delete Old Stationing From
 Previous C# 84-15
 Field Calc. Δ = 6.51' Lt.
 6" Off Survey Line.
 Office Calc. Δ = 6.51' Lt.



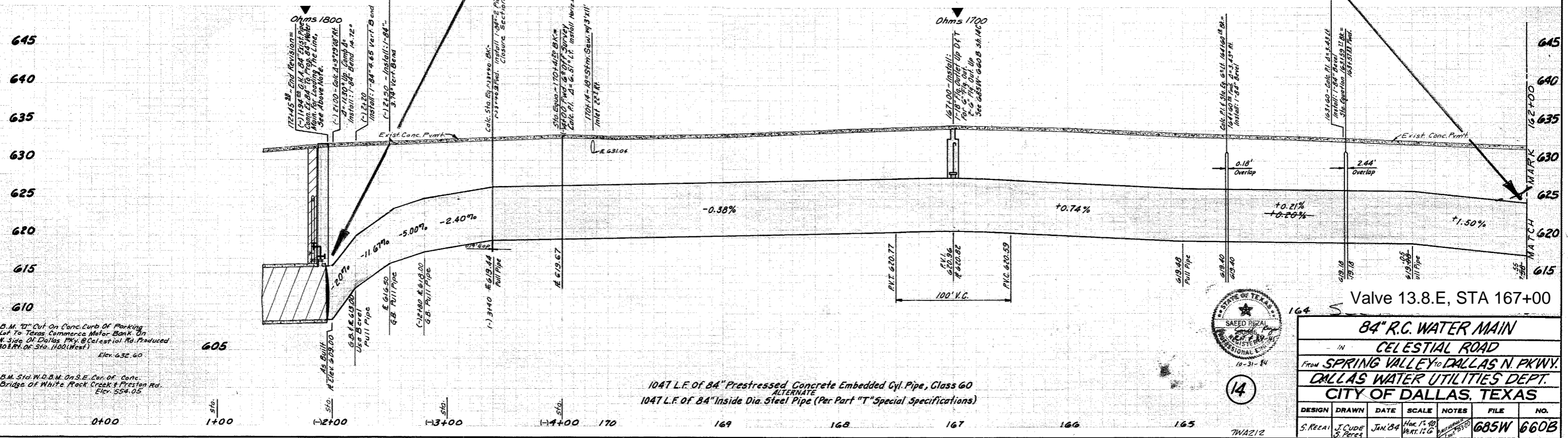
Inst. 84" R.C.C. OR STEEL Water
 ABST. 1146

SOME SUCH PLACE NO. 2

CONT. #84-45

WATER MAP
 8-22 W
 8-23 W

SEWER KEY MAP
 F-2



B.M. "D" Cut On Conc. Curb Of Parking
 Lot To Texas Commerce Motor Bank On
 W. Side Of Dallas Pky. @ Celestial Rd. Produced
 30.1.61. Of Sta. 1100 (West)
 Elev. 632.60

B.M. Sid. W.D.M. On S.E. Cor. Of Conc.
 Bridge Of White Rock Creek & Preston Rd.
 Elev. 554.05

1047 L.F. Of 84" Prestressed Concrete Embedded Cyl. Pipe, Class 60
 ALTERNATE
 1047 L.F. Of 84" Inside Dia. Steel Pipe (Per Part "T" Special Specifications)



84" R.C. WATER MAIN						
IN CELESTIAL ROAD						
FROM SPRING VALLEY TO DALLAS N. PKWY.						
DALLAS WATER UTILITIES DEPT.						
CITY OF DALLAS, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
S. RECAL	J. CUDE	JAN 84	HOR. 1:50 VERT. 1:6	REVISED	685W	660B

Revised By: Doug Munnell 5-14-85
 Revision By: S. Rejal 6-27-85

McNeff-Palmer Properties Inc. March 15, 1983
 30' Easement For A 84" Water Main
 From Sta. 20+150 to Sta. 24+200
 Abstr. No. 1140, Blk. 1 of Quorum West
 In The City of Addison.
 Contractor To Complete Construction/
 Installation Of 84" Water Main & Clean Up
 Area (From Sta. 20+150 to Sta. 24+200) by Nov. 20, 1983
 Temp. Working Space Granted.
 SEE CONDITIONS Accompanying This
 Easement.
 C.O. : 831420
 Vol. : 83217 Pg. : 1673 Date : 4-27-83

McNeff-Palmer Properties Inc. March 15, 1983
 30' Easement For A 84" Water Main
 From Sta. 24+200 to Sta. 24+250
 Abstr. No. 1140, Blk. 1 of Quorum West
 In The City of Addison.
 Contractor To Complete Construction/
 Installation Of 84" Water Main & Clean Up Area
 (From Sta. 24+200 to Sta. 24+250) by Nov. 25, 1983
 Temp. Working Space Granted.
 SEE CONDITIONS Accompanying This
 Easement.
 C.O. : 831420
 Vol. : 83217 Pg. : 1673 Date : 4-27-83

Railroad License Agreement April 29, 1983
 Obtained from St. Louis Southwestern Railway
 Co. for an 84" R.C. Water Main crossing from
 Sta. 34+550 to Sta. 38+550.
 Contractor shall contact Mr. H. R. Caldwell at (214)
 980-1590, five (5) days written notice prior to
 construction of Water Main.
 C.O. : 83-0020

Calc. Sta. 41+145 Install:
 1-84" Internal Test Fitting w/ Reaction Stop Ring
 1-18" Flg. Outlet Up w/ 18"x8" Red. Flg. w/ 18"x2" T.O.R.F.
 (For Water Transfer and Drainage)
 1-8" Flg. Outlet Up w/ 8"x2" T.O.R.F.
 1-3" I.D. Manhole as per Appurt. Sht. 41A0-5R

Calc. Sta. 41+30 Install
 1-84" Temp. Nite Cap

Calc. P.I. 34+00
 4-14"x6" 24" Lt.
 Install:
 1-84" Home Board
 (5' Gate Down)

BELTWOOD PUMP STATION
 &
 RESERVOIR

BELTLINE

ST. LOUIS ROAD

SOUTHWESTERN R.R.

INWOOD ROAD

ROAD

CONT. No. 83-139
 CITY OF ADDISON

Install: 84" R.C. Water Pipe
 Ohms V

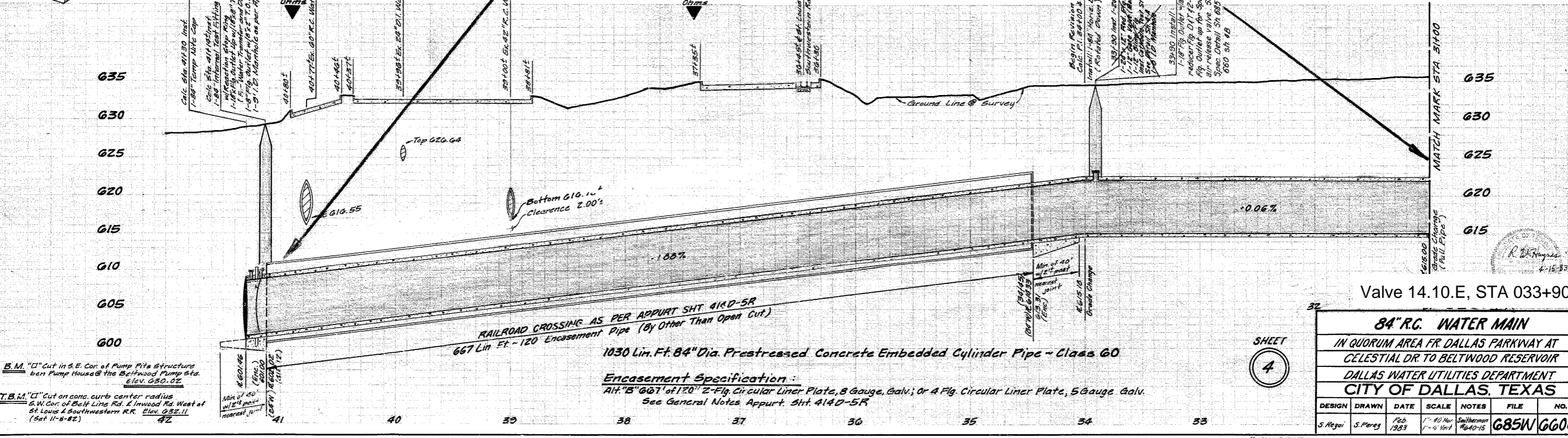
REVISION
 33+90 Install:
 1-18" Flg. Outlet w/ 18"x6"
 reducer Flg. DFT 2-6"
 Flg. Outlet up for spec. air
 release valve. See spec.
 Detail Sh. 685W 660A sh. 4B

33+90 Install:
 1-24"x18" Red. Flg.
 1-12" Gate Valve (Manual Hand Wheel Operator)
 1-12" 6" Gate Valve
 Install Gate Valve Test Station
 See Detail Sht. 4-B
 1-8" I.D. Manhole

NOTE: Bond All Joints See Detail Sht. 4-A
 NOTE:
 Thrust Block For
 Use A =
 Instead Of Dimensions Shown On Appurt. Sht. 41A0-15
 Thrust =
 These Dimensions Are For Using 6,000 P.S.I. OF 20,000 LBS/FT²
 Which Is Recommended By "Mason-Johnson Associates"
 w/ Safety Factor Of
 This Value Is Applicable Only For Undisturbed Rock.
 All Thrust Block Excavations Should Have Clean
 Undisturbed Sides With No Backfill On The Load
 Carrying Sides. Thrust Block Excavations Should
 Be Filled With Concrete As Soon As Possible To
 Avoid Deterioration To The Load Bearing Side Walls

NOTE: Brace All Power Poles As
 Required. Contractor Shall Contact
 Mr. D.E. Rich of T.P. & L. Co. At (214)
 247-0175, Two Days Prior To Any
 Excavation Of This Project.
 At Contractor Expense.

NOTE:
 1. Wing & Toe Ditch Wall Should Be As Vertical
 As Possible.
 2. Concrete Strength To Be 2000 P.S.I. Min.
 3. Concrete To Be Poured Against Undisturbed Rock.



B.M. "C" Cut in S.E. Cor. of Pump Pits Structure
 ben Pump House @ the Beltwood Pump Sta.
 Elev. 630.02
 T.B.M. "C" Cut on conc. curb center radius
 S.W. Cor. of Belt Line Rd. & Inwood Rd. West of
 St. Louis & Southwestern R.R. Elev. 632.11
 (Set 11-8-82)

RAILROAD CROSSING AS PER APPURT SHT. 41A0-5R
 667 Lin. Ft. - 120" Encasement Pipe (By Other Than Open Cut)
 1030 Lin. Ft. 84" Dia. Prestressed Concrete Embedded Cylinder Pipe - Class 60
 Encasement Specification:
 Aft. "B" 667' of 120" Z-Flg. Circular Limer Plate, 8 Gauge, Galv.; Or 4 Flg. Circular Limer Plate, 5 Gauge Galv.
 See General Notes Appurt. Sht. 41A0-5R

Valve 14.10.E, STA 033+90

84" R.C. WATER MAIN						
IN QUORUM AREA FR. DALLAS PARKWAY AT CELESTIAL DR. TO BELTWOOD RESERVOIR						
DALLAS WATER UTILITIES DEPARTMENT						
CITY OF DALLAS, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
S. Regal	S. Perez	Feb 1983	1" = 40' Hor 1" = 6' Vert	Smitherman #640-15	685W 660C	

SHEET
 4

#7WAZ12

NOTE: SEE SHEET 39 FOR GENERAL NOTES

INSTALL 54" R.C. WATER

**WHITE ROCK LAKE PARK
CITY OF DALLAS
BLK. 2999**

WATER DESIGN CURVE DATA
 $\Delta = 8^\circ 23' 41.10''$
 $R = 1400.00'$
 $T = 102.75'$
 $L = 205.12'$
 $C = 204.94'$
 Use Horiz. Deflections As Required To Make Curve.

0+51 (LINE "D") ~ INSTALL:
 1-24" x 16" x 90° Reducing Bend
 Fx F (PULL PIPE) w/ 1" Threaded Outlet
 1-16" Valve Fx MJ (East)
 1-16" Plug (East)
 1-1" Copper Blowoff For Chlorination
 And Flushing.

P.I. + 51a Eq. 31+86 (LINE "D") ~ INSTALL:
 32+79 (Survey) ~ INSTALL:
 1-24" Fig. Outlet
 1-24" Horiz. Gate Valve, Fx MJ
 1-24" x 45" Vert. Bend (North)

1+35 (LINE "D") ~ INSTALL:
 1-24" x 16" x 90° Reducing Bend
 Fx F w/ 1" Threaded Outlet
 1-16" Valve, Fx MJ
 1-16" Plug (West)
 1-1" Copper Blowoff For
 Chlorination And Flushing.

32+39 (SURVEY) ~ INSTALL:
 1-54" x 54" Tee, B.B.F.
 1-54" Butterfly Valve, F.F.
 (South) As Per Appurt. 414W-13
 1-54" Fig. x L-301
 Test Fitting w/ Internal Test
 Plug
 1-54" Night Cap Plug, Typical
 To Detail, Sheet 40.

0+21 (LINE "D") ~ INSTALL:
 1-16" Fig. Outlet
 1-24" x 44" x 45" Vert.
 Bend (South)
 1-16" Valve Fx MJ (East)
 1-16" Plug (East)

1+65 (LINE "D") ~ INSTALL:
 1-16" Fig. Outlet
 1-16" Valve, Fx M.J. (West)
 1-24" x 44" x 37" 30" Vert.
 Bend (South)
 1-16" Plug (West)

32+39 (SURVEY) ~ INSTALL:
 1-54" Butterfly Valve, F.F. As Per
 Appurt. 414W-13

32+19 & 33+95 (SURVEY) ~ INSTALL:
 2-18" Fig. Outlets Up,
 2-18" Blind Flanges Drilled
 And Tapped For 8" Type II
 Comb. Air Valves As Per
 Appurt. 414W-9

P.I. + 51a Eq. 31+95 (SURVEY) = 0+00
 (LINE "D") ~ INSTALL:
 1-24" Fig. Outlet
 1-24" Horiz. Gate Valve, Fx MJ
 1-24" x 45" Vert. Bend (North)

32+79 (SURVEY) ~ INSTALL:
 1-54" Butterfly Valve, F.F. As Per
 Appurt. 414W-13

P.I. 33+47 (SURVEY) ~ INSTALL:
 1-54" x 46" 08' 04"
 Horiz. Bend

P.I. 33+47 (SURVEY) ~ INSTALL:
 1-54" x 46" 08' 04"
 Horiz. Bend

INSTALL:
 1-20' Wide Gravel Drive w/
 Backup Space
 Location Shall Be Determined
 By Construction Engineer

NOTE:
 CONTRACTOR IS TO
 STOCKPILE AND REPLACE
 GRAVEL AND BOLLARDS
 IF DISTURBED

NOTE:
 CONTRACTOR IS TO
 STOCKPILE AND REPLACE
 GRAVEL AND BOLLARDS
 IF DISTURBED

NOTE:
 CONTRACTOR IS TO
 STOCKPILE AND REPLACE
 GRAVEL AND BOLLARDS
 IF DISTURBED

NOTE:
 CONTRACTOR IS TO
 STOCKPILE AND REPLACE
 GRAVEL AND BOLLARDS
 IF DISTURBED

NOTE:
 CONTRACTOR IS TO
 STOCKPILE AND REPLACE
 GRAVEL AND BOLLARDS
 IF DISTURBED

NOTE:
 CITY DISTRIBUTION DIVISION SHALL PROVIDE AND
 INSTALL THE 3 AND 15 MGD TEMPORARY PUMPS,
 16" WATER MAIN, CONCRETE PADS, SHELTER,
 AND ALL ACCESSORY ITEMS FROM STA. 0+51
 (LINE "D") TO STA. 1+35 (LINE "D"), AND STA.
 0+21 (LINE "D") TO STA. 1+65 (LINE "D")
 CONNECTIONS.

NOTE:
 CONTRACTOR IS TO
 STOCKPILE AND REPLACE
 GRAVEL AND BOLLARDS
 IF DISTURBED

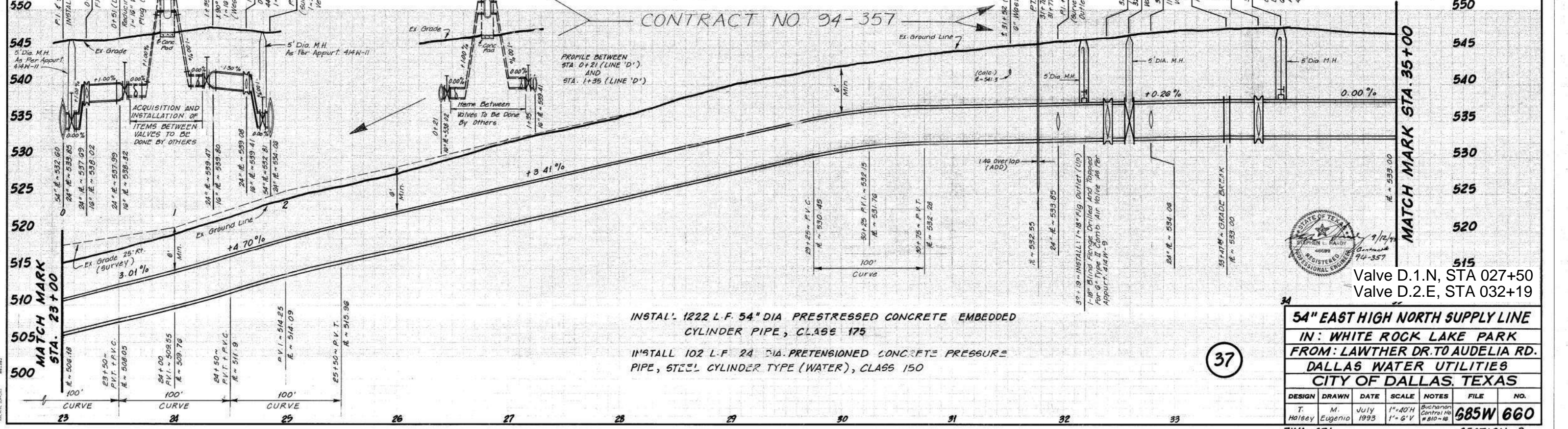
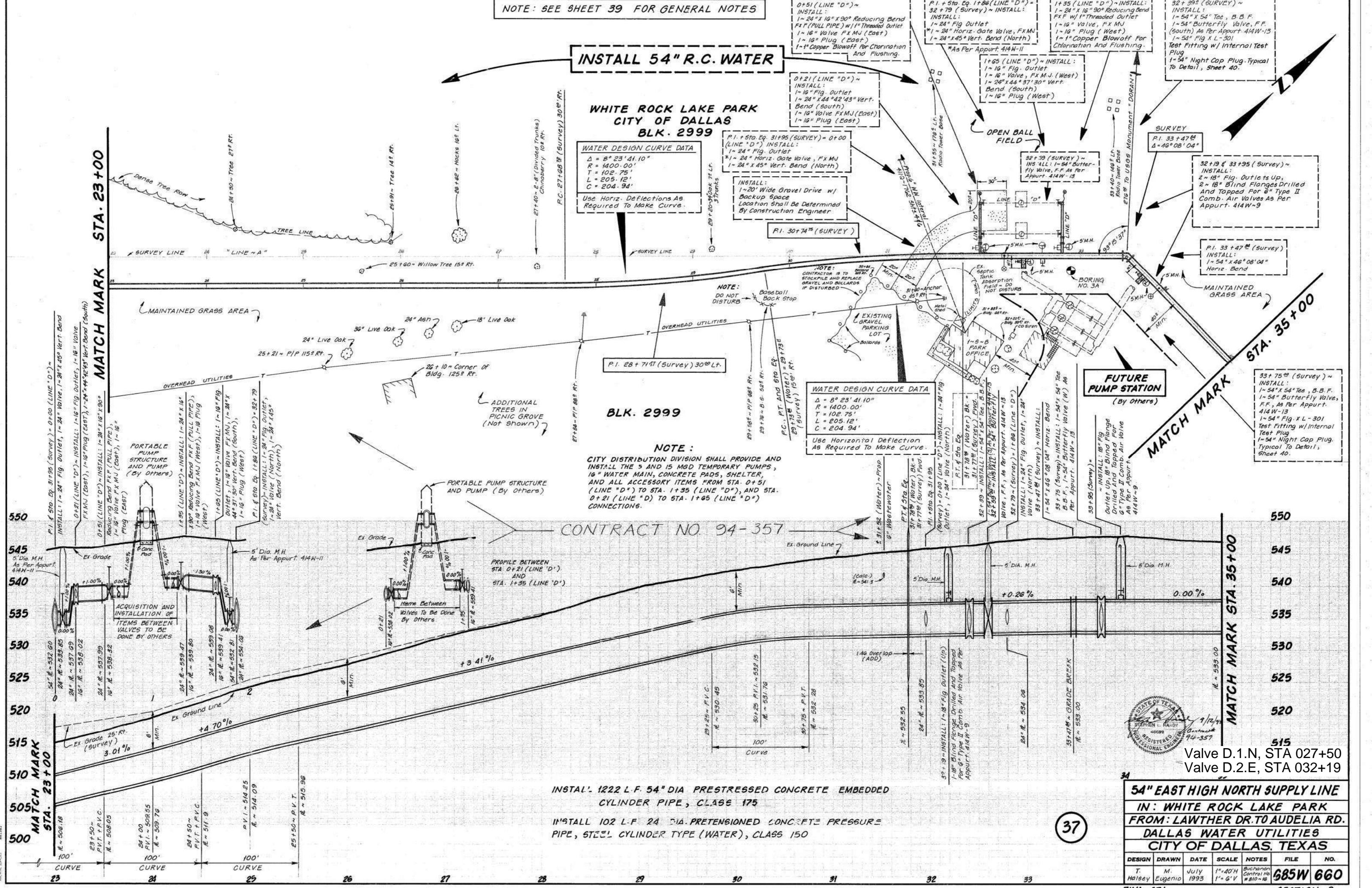
NOTE:
 CONTRACTOR IS TO
 STOCKPILE AND REPLACE
 GRAVEL AND BOLLARDS
 IF DISTURBED

NOTE:
 CONTRACTOR IS TO
 STOCKPILE AND REPLACE
 GRAVEL AND BOLLARDS
 IF DISTURBED

NOTE:
 CONTRACTOR IS TO
 STOCKPILE AND REPLACE
 GRAVEL AND BOLLARDS
 IF DISTURBED

NOTE:
 CONTRACTOR IS TO
 STOCKPILE AND REPLACE
 GRAVEL AND BOLLARDS
 IF DISTURBED

NOTE:
 CONTRACTOR IS TO
 STOCKPILE AND REPLACE
 GRAVEL AND BOLLARDS
 IF DISTURBED



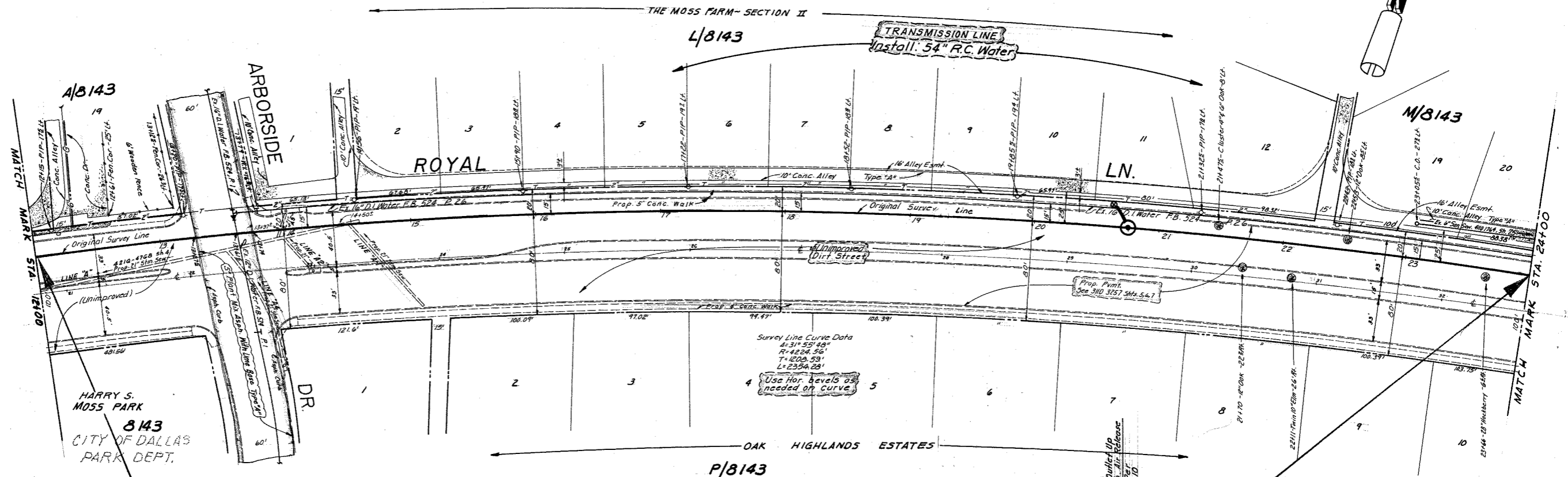
INSTALL 1222 L.F. 54" DIA PRESTRESSED CONCRETE EMBEDDED
 CYLINDER PIPE, CLASS 175
 INSTALL 102 L.F. 24" DIA. PRETENSIONED CONCRETE PRESSURE
 PIPE, STEEL CYLINDER TYPE (WATER), CLASS 150



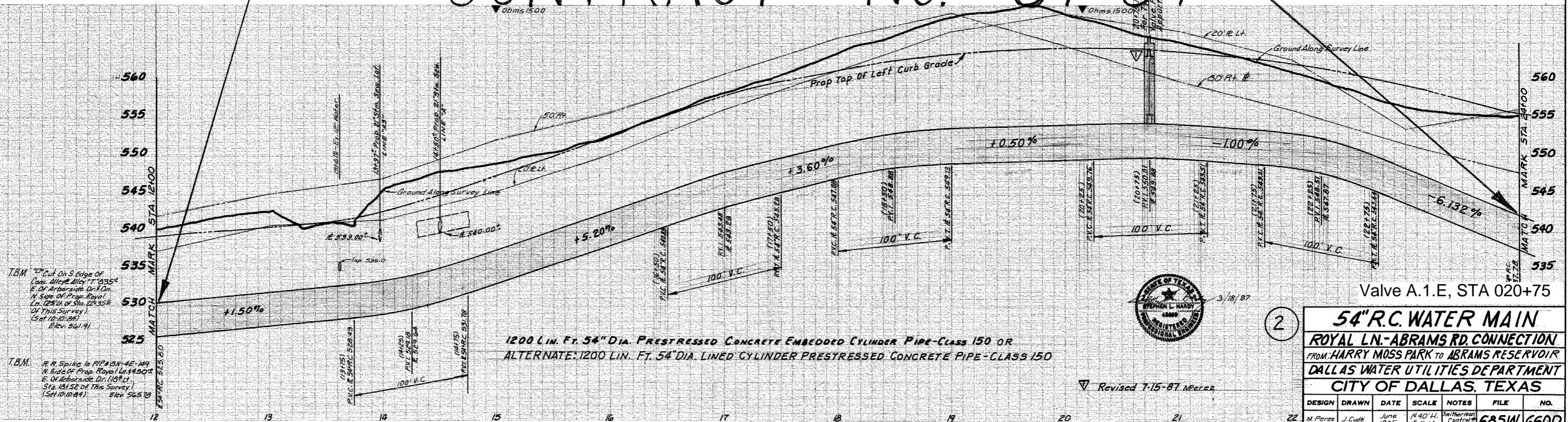
Valve D.1.N, STA 027+50
 Valve D.2.E, STA 032+19

54" EAST HIGH NORTH SUPPLY LINE						
IN: WHITE ROCK LAKE PARK						
FROM: LAWTHER DR. TO AUDELIA RD.						
DALLAS WATER UTILITIES						
CITY OF DALLAS, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
T. Halsey	E. M. Halsey	July 1993	1"=40' 1"=6' V	Buchanan Control No #810-18	685W 660	

37



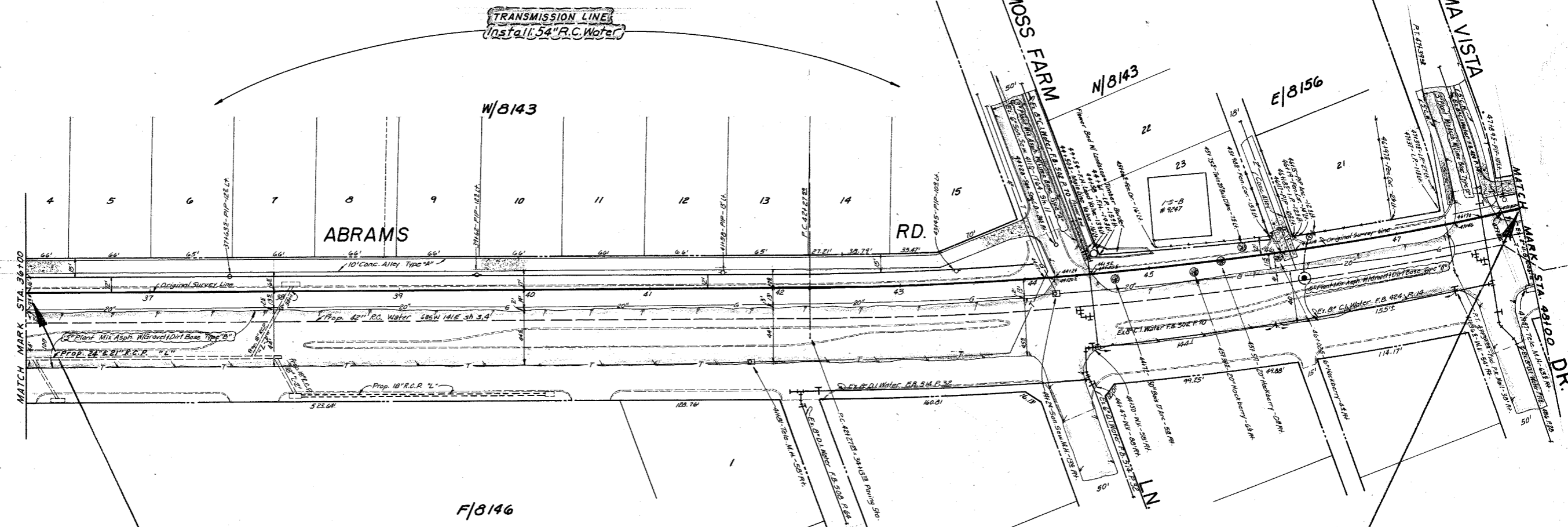
CONTRACT No. 87-07



54" R.C. WATER MAIN						
ROYAL LN.-ABRAMS RD. CONNECTION						
FROM HARRY MOSS PARK TO ABRAMS RESERVOIR						
DALLAS WATER UTILITIES DEPARTMENT						
CITY OF DALLAS, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
M. Perez	J. Cude S. Perez	June 1985	1/4" = 1'-0"	See 760-04	685W	660D

Survey Line Curve Data
 $\Delta = 10^\circ 22' 05''$
 $R = 2826.60'$
 $T = 256.45'$
 $L = 511.49'$

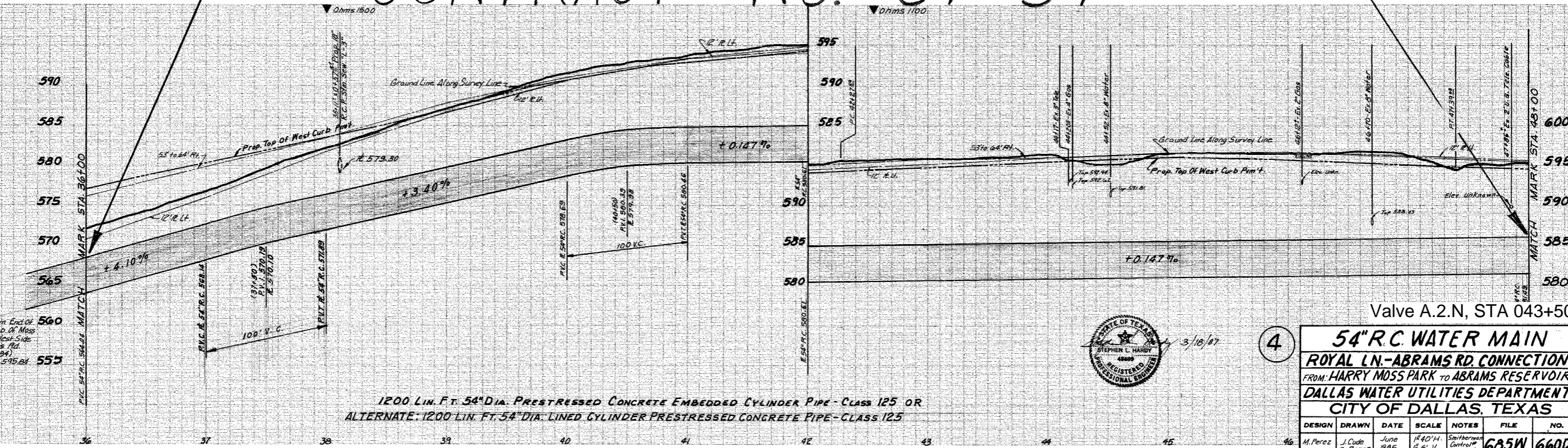
Use Not Beveled
 Needed on Curve



CONTRACT No. 87-57

Soni. Sew Key Map
 H-4

Prop. 10' R.C. Water
 17-31M



T.B.M. 10' Cut E. from End of
 North Curd. of Moss
 Farm in Moss Side
 of Abrams Rd.
 (Set 12-8-84)
 Elev. 595.84

Valve A.2.N, STA 043+50

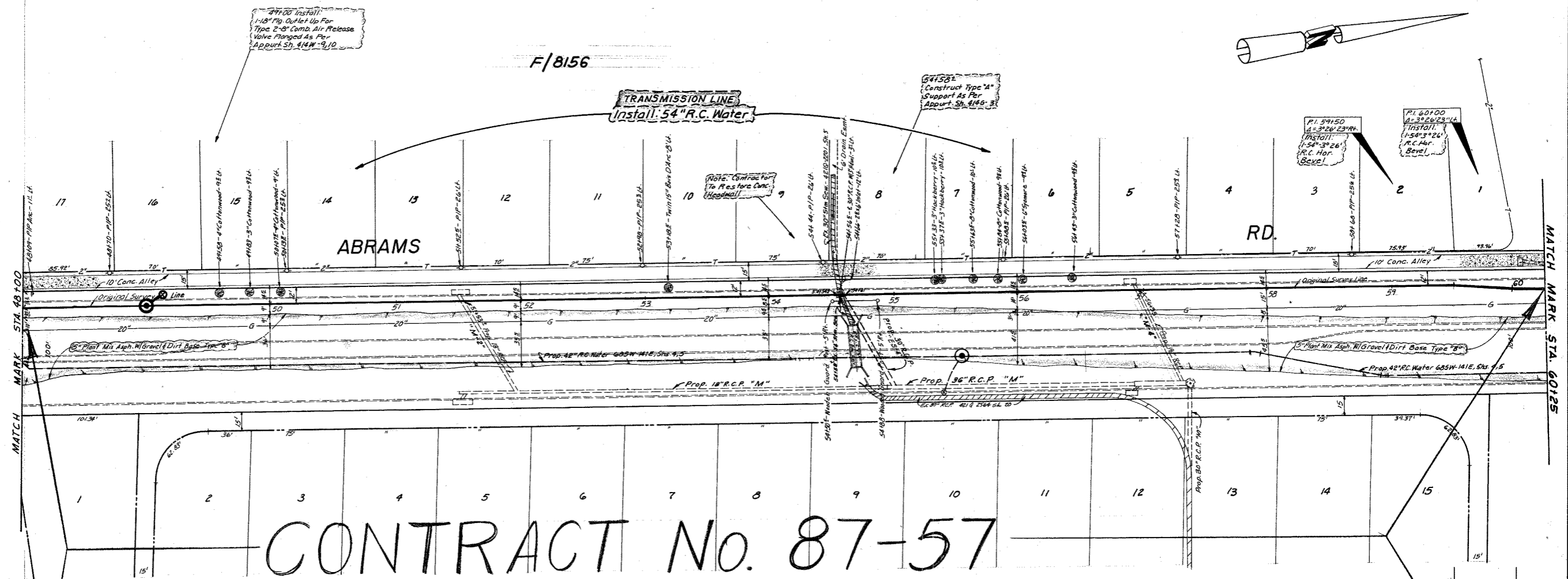


3/18/87

4

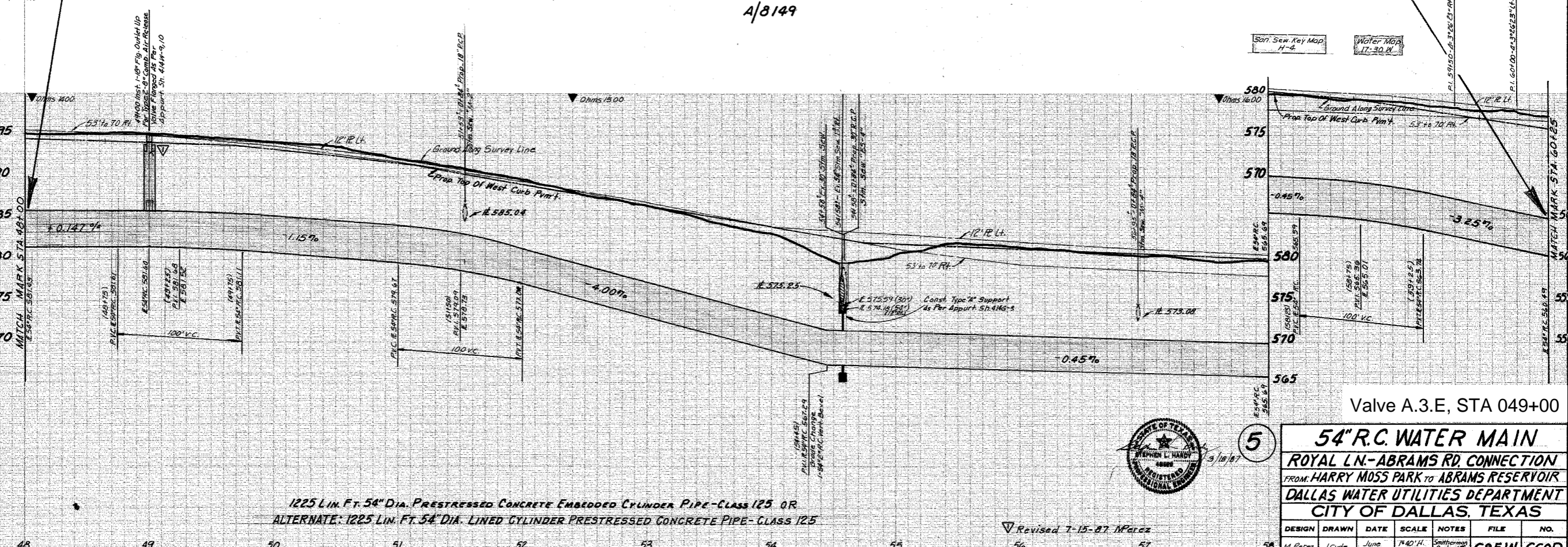
54" R.C. WATER MAIN					
ROYAL LN.-ABRAMS RD. CONNECTION					
FROM: HARRY MOSS PARK TO ABRAMS RESERVOIR					
DALLAS WATER UTILITIES DEPARTMENT					
CITY OF DALLAS, TEXAS					
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE NO.
M. Perez	J. Cude S. Perez	June 1985	1/40" H. 1/8" V.	Southwestern Control 7-0-04	685W 660D

1200 LIN. FT. 54" DIA. PRESTRESSED CONCRETE EMBEDDED CYLINDER PIPE - CLASS 125 OR
 ALTERNATE: 1200 LIN. FT. 54" DIA. LINED CYLINDER PRESTRESSED CONCRETE PIPE - CLASS 125



CONTRACT No. 87-57

A/8149



1225 L IN. FT. 54" DIA. PRESTRESSED CONCRETE EMBEDDED CYLINDER PIPE-CLASS 125 OR
 ALTERNATE: 1225 L IN. FT. 54" DIA. LINED CYLINDER PRESTRESSED CONCRETE PIPE-CLASS 125

Revised 7-15-87 MPerz

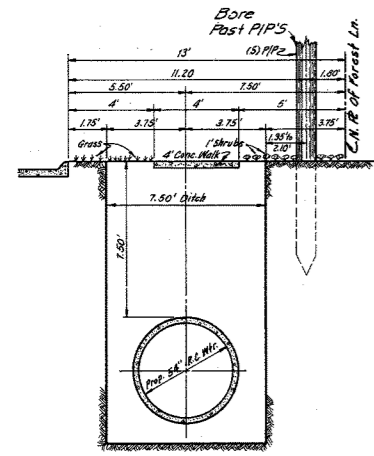


Valve A.3.E, STA 049+00

54" R.C. WATER MAIN						
ROYAL LN.-ABRAMS RD. CONNECTION						
FROM HARRY MOSS PARK TO ABRAMS RESERVOIR						
DALLAS WATER UTILITIES DEPARTMENT						
CITY OF DALLAS, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
M. Perz	J. Cude S. Perz	June 1983	1"=40' 1 1/2"=1"	Smithman Contract 76028	685W	660D

TNA336

CONT. No. 87-57



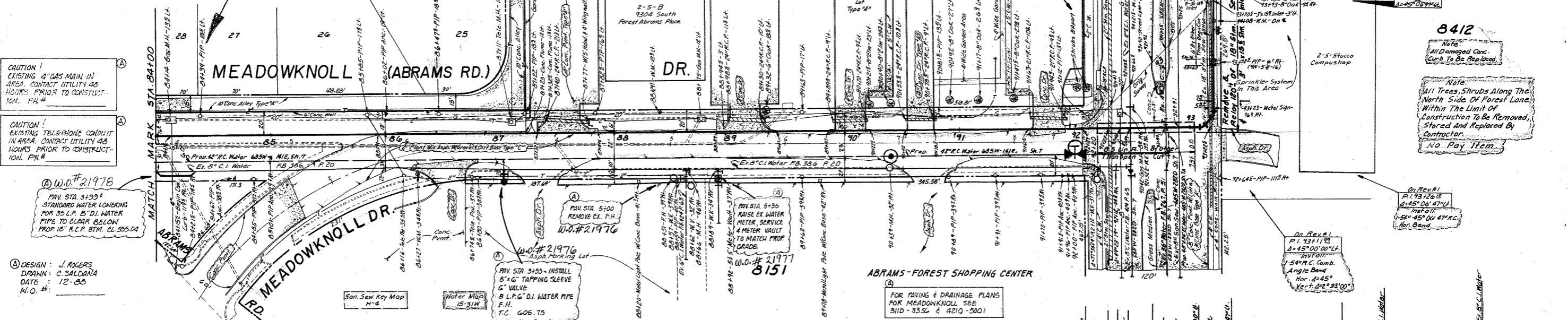
CROSS SECTION
DETAIL "A-A"

TRANSMISSION LINE
Install: 54" R.C. Water

Install: 54" R.C. Water



TYPICAL BORE AT POWER POLES



CAUTION! EXISTING 4" GAS MAIN IN AREA. CONTACT UTILITY 48 HOURS PRIOR TO CONSTRUCTION. P.H.#

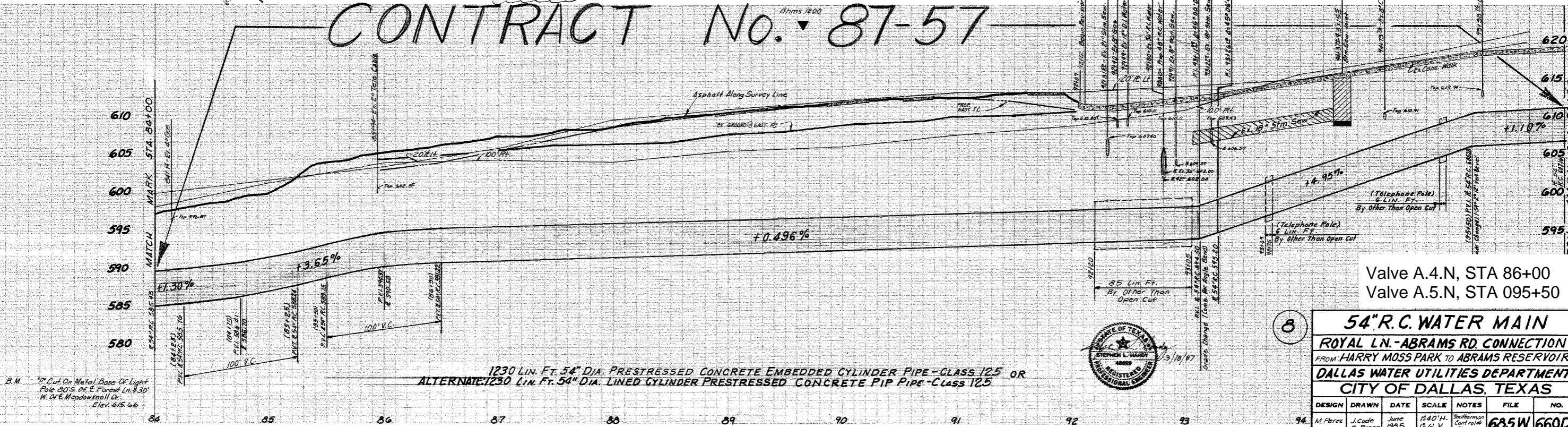
CAUTION! EXISTING TELEPHONE CONDUIT IN AREA. CONTACT UTILITY 48 HOURS PRIOR TO CONSTRUCTION. P.H.#

W.O.#21978
PAV. STA. 34.99 ±
STANDARD WATER LONING FOR 36" L.F. 8" D.I. WATER PIPE TO CLEAR BELOW PROP. 18" R.C.P. STM. CL. 555.04

DESIGN: J. ROGERS
DRAWN: C. SALDANA
DATE: 12-85
N.O. #:

8412
Note: All Damaged Conc. Curbs To Be Replaced.
Note: All Trees, Shrubs Along The North Side Of Forest Lane Within The Limit Of Construction To Be Removed, Stored And Replaced By Contractor.
No Pay Item.

CONTRACT No. 87-57



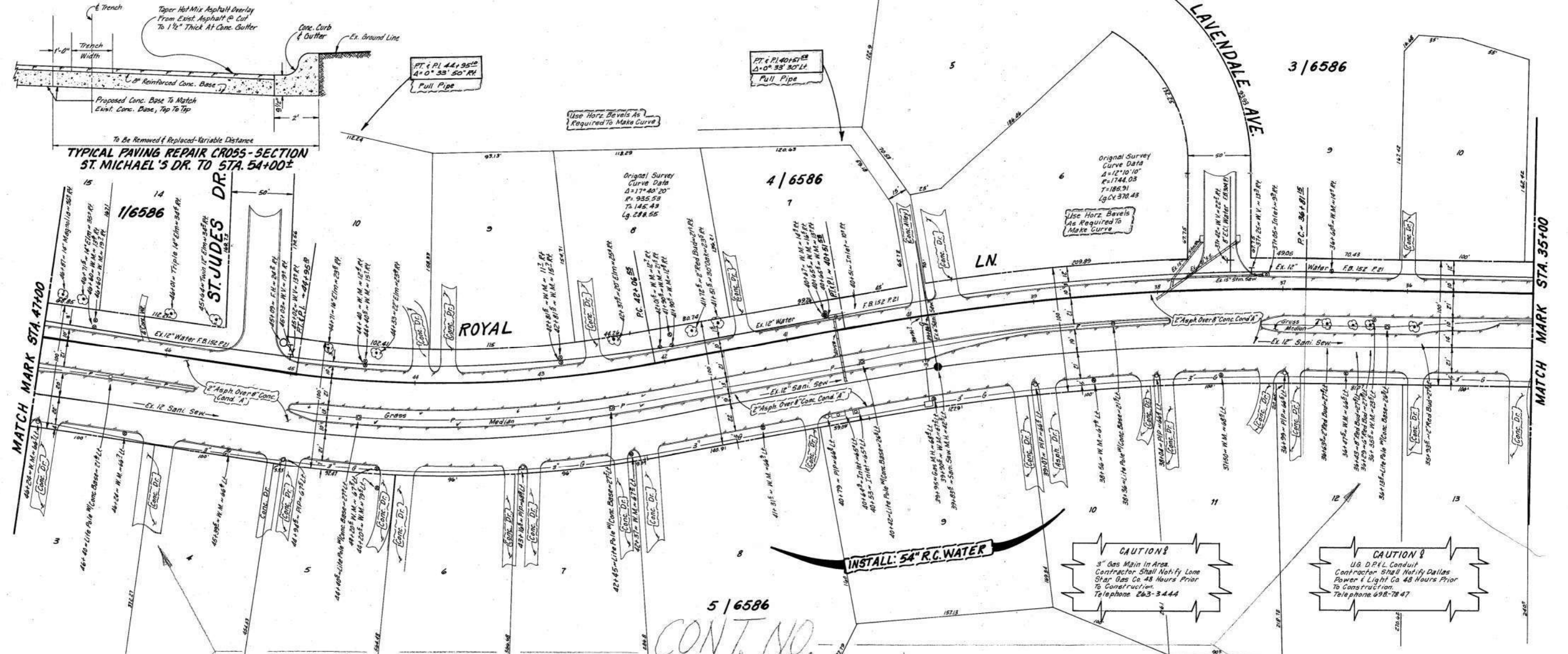
B.M. 40' Cut On Metal Base Of Light Pole 80'S. OF E Forest Ln. 830' W. OF E Meadowknoll Dr. Elev: 615.66

1230 Lin. Ft. 54" DIA. PRESTRESSED CONCRETE EMBEDDED CYLINDER PIPE - CLASS 125 OR ALTERNATE: 1230 Lin. Ft. 54" DIA. LINED CYLINDER PRESTRESSED CONCRETE PIPE - CLASS 125



Valve A.4.N, STA 86+00
Valve A.5.N, STA 095+50

54" R.C. WATER MAIN						
ROYAL LN.-ABRAMS RD CONNECTION						
FROM HARRY MOSS PARK TO ABRAMS RESERVOIR						
DALLAS WATER UTILITIES DEPARTMENT						
CITY OF DALLAS, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
M. Perez	J. Cude S. Perez	June 1985	1/40" H. 1 1/2" V.	Shullerman Contract # 700-04		685W 660D



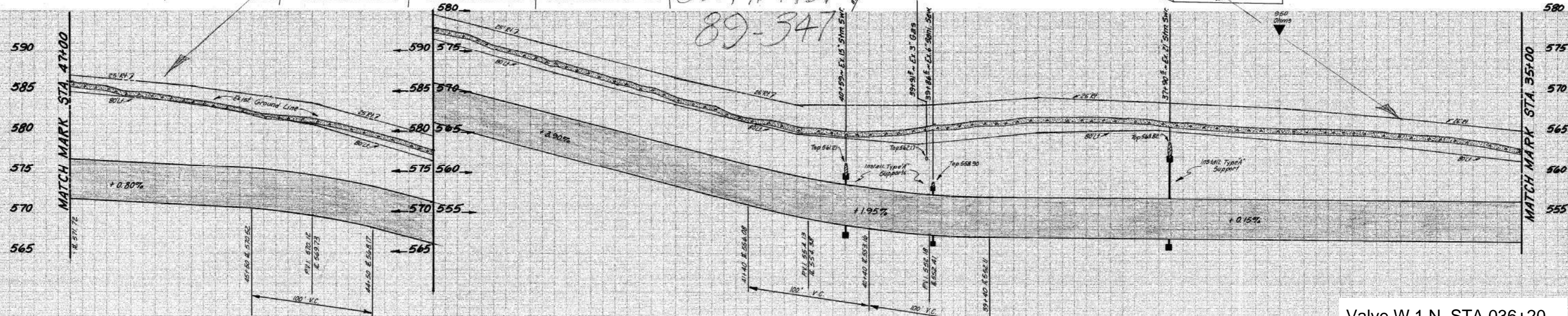
Water Maps
17-26
17-27
17-28

Sani. Sew. Key Maps
G-4, G-5 & F-5

CONT. NO.
89-347

CAUTION
3" Gas Main in Area
Contractor Shall Notify Lone
Star Gas Co. 48 Hours Prior
to Construction.
Telephone 263-3444

CAUTION
UG D.P.F.L. Conduit
Contractor Shall Notify Dallas
Power & Light Co. 48 Hours Prior
to Construction.
Telephone 698-7847



B.M. Sid. W.D.B.M. in Center of Radius
of Concrete Curb N.E. Corner of
Intersection Royal Ln. & Lavendale
Ave. Elev. 566.72

T.B.M. Cut On N.E. Corner Intersection
Royal Ln. & St. Judes Dr. in Front of
F.H. On Concrete Curb
Elev. 583.54

Install: 1200 Lin. Ft. Of 54" Prestressed Concrete Embedded Cylinder Pipe - Class 100
Alternate: 1200 Lin. Ft. Of 54" Prestressed Concrete Lined Cylinder Pipe Class 100



Valve W.1.N, STA 036+20

54" R.C. WATER

**NORTH SIDE OF ROYAL LN. FROM
CENTRAL EXPWY TO HILLCREST**

**WATER UTILITIES DEPARTMENT
CITY OF DALLAS, TEXAS**

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
J.Jones	S.Lancaster	May, 1988	1" = 40' H 1" = 6' V	Jefferson Cont # 710-02	685W	822

6
W.A.# TWA 565

CAUTION!
1/2" U.G. Tile In Area
Contractor Shall Notify
Southwestern Bell Tele. Co.
48 Hours Prior To Construction
Telephone: 995-4102

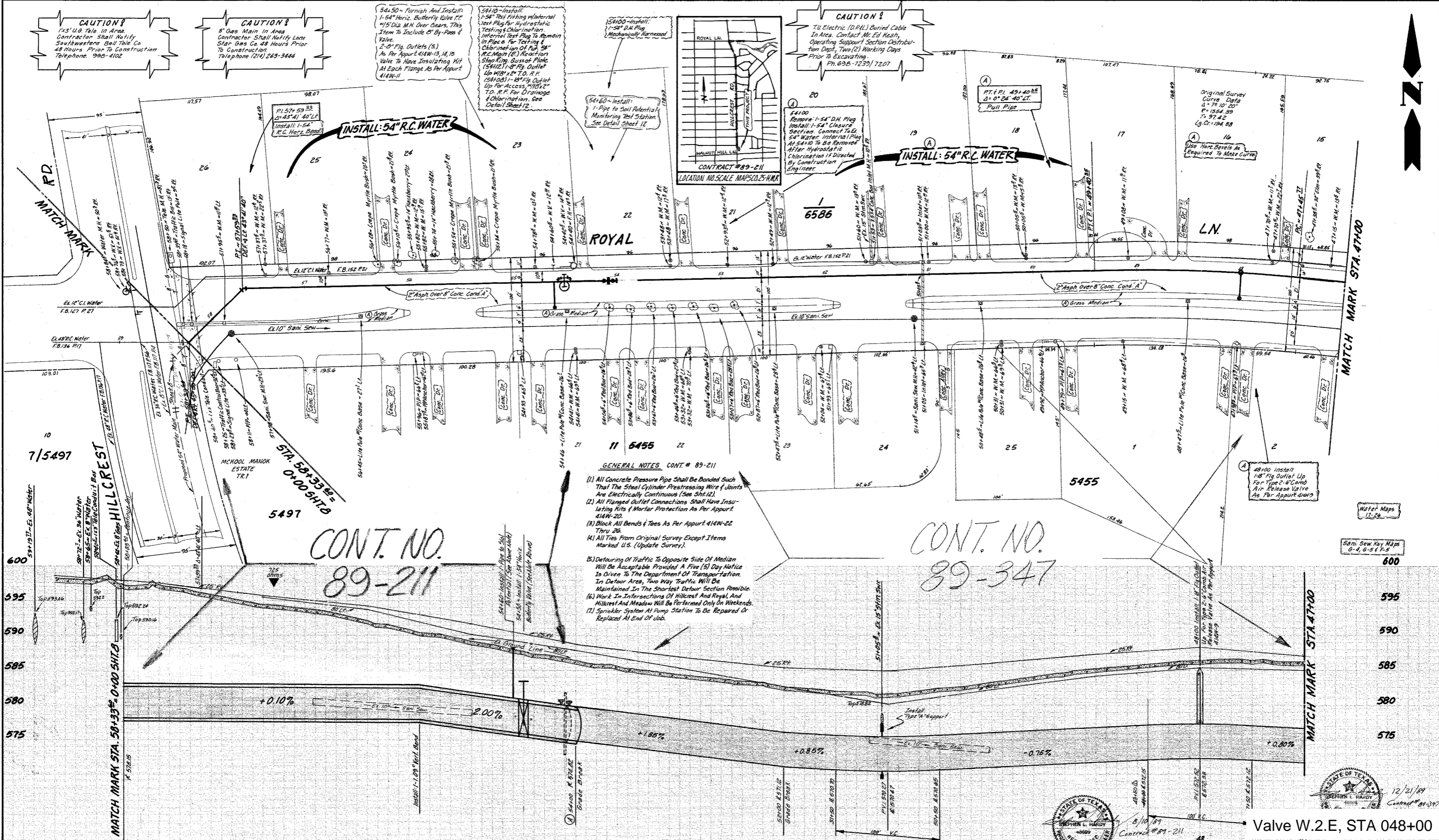
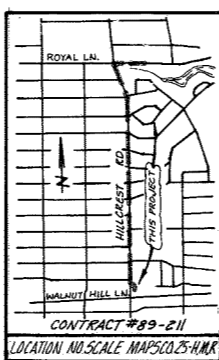
CAUTION!
8" Gas Main In Area
Contractor Shall Notify
Star Gas Co. 48 Hours Prior
To Construction
Telephone (214) 263-3444

54-50 - Furnish And Install:
1-54" Horiz. Butterfly Valve P.P.
1/5" Dia. M.H. Over Gears. This
Item To Include 8" By-Pass &
Valve.
2-8" Fig. Outlets (S)
As Per Appur. 414W-13, 14, 15
Valve To Be Insulating Nut
At Each Flange As Per Appur.
414W-11

54-10 - Install:
1-54" Test Fitting w/ Internal
Test Plug For Hydrostatic
Testing & Chlorination
Internal Test Plug To Remain
In Place For Testing &
Chlorination Of Full 54"
R.C. Main (S) Reaction
Shop Line Gasket Plate
(54-12) 1-8" Fig. Outlet
Up W/ 2" T.O. R.F.
(54-10B) 1-18" Fig. Outlet
Up For Access, "1103" T.O.
R.F. For Drainage
& Chlorination. See
Detail Sheet 12.

54-60 - Install:
1- Pipe To Soil Potential
Monitoring Station.
See Detail Sheet 12.

CAUTION!
TU Electric (D.P.H.) Buried Cable
In Area. Contact Mr. Ed Neath,
Operating Support Section Distribu-
tion Dept., Two (2) Working Days
Prior To Excavating.
Ph. 696-7239/7207



- GENERAL NOTES CONT. # 89-211**
- (1) All Concrete Pressure Pipe Shall Be Bonded Such That The Steel Cylinder Prestressing Wire & Joints Are Electrically Continuous (See Sht. 12).
 - (2) All Flanged Outlet Connections Shall Have Insulating Airt of Mortar Protection As Per Appur. 414W-20.
 - (3) Block All Bends & Tees As Per Appur. 414W-22 Thru 26.
 - (4) All Ties From Original Survey Except Items Marked U.S. (Update Survey).
 - (5) Detouring Of Traffic To Opposite Side Of Median Will Be Acceptable Provided A Five (5) Day Notice Is Given To The Department Of Transportation. In Detour Area, Two Way Traffic Will Be Maintained In The Shortest Detour Section Possible.
 - (6) Work In Intersections Of Hillcrest And Royal, And Hillcrest And Meadow Will Be Performed Only On Weekends.
 - (7) Sprinkler System At Pump Station To Be Repaired Or Replaced At End Of Job.

CONT. NO.
89-211

CONT. NO.
89-347



Valve W.2.E, STA 048+00

54" R.C. WATER						
NORTH SIDE OF ROYAL LN. FROM						
CENTRAL EXPWY TO HILLCREST						
WATER UTILITIES DEPARTMENT						
CITY OF DALLAS, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
Jones	S. Lancaster	May, 88	1" = 20' H. 1" = 6' V.	Let Forson Cont. # 172-02	685W	822

7

B.M. Std. W.D.B.M. On Concrete
Curb Center Of Radius
Southeast Corner Inter-
Section Hillcrest Rd &
Royal Ln. Elev. 592.11

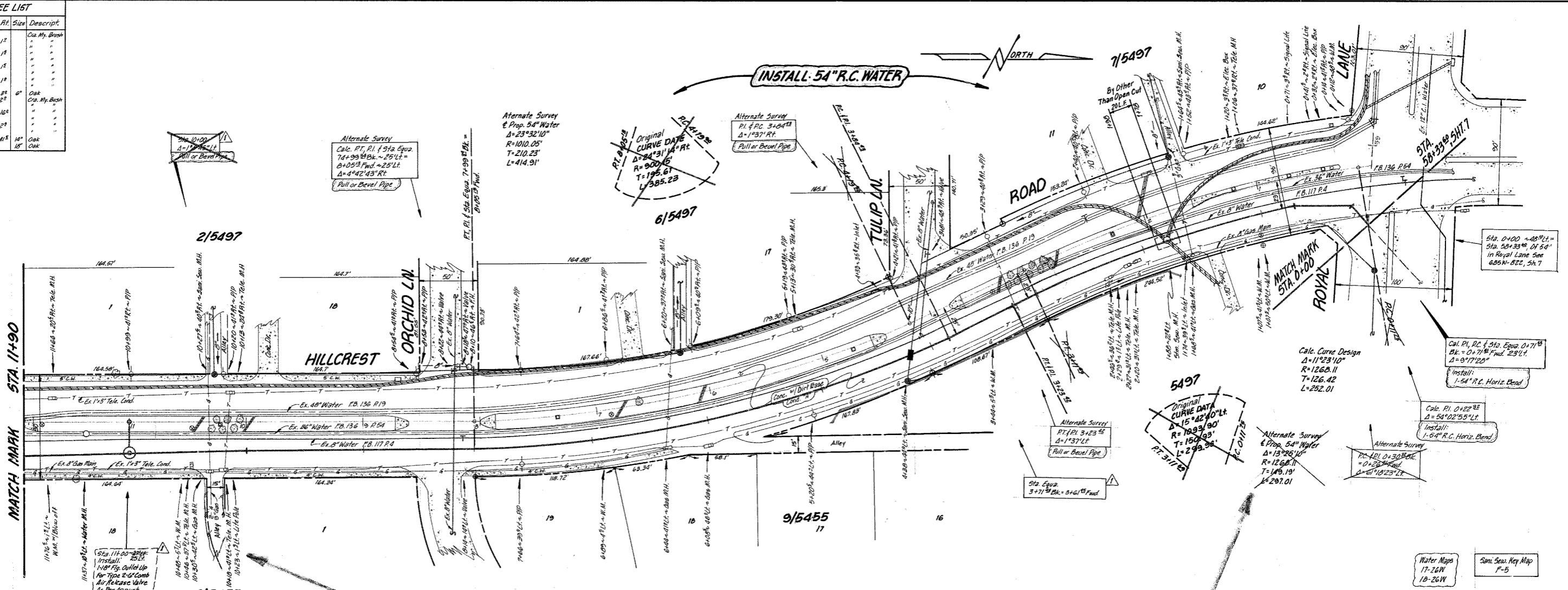
Install: 434 Lin. Ft. 54" Prestressed Concrete Embedded Cylinder Pipe ~ Class 100
Alternate: 434 Lin. Ft. 54" Prestressed Concrete Lined Cylinder Pipe ~ Class 100

Design: W.T. Cotton
Drawn: S. Lancaster
Date: Aug. 1989
W.A. 7WA-565

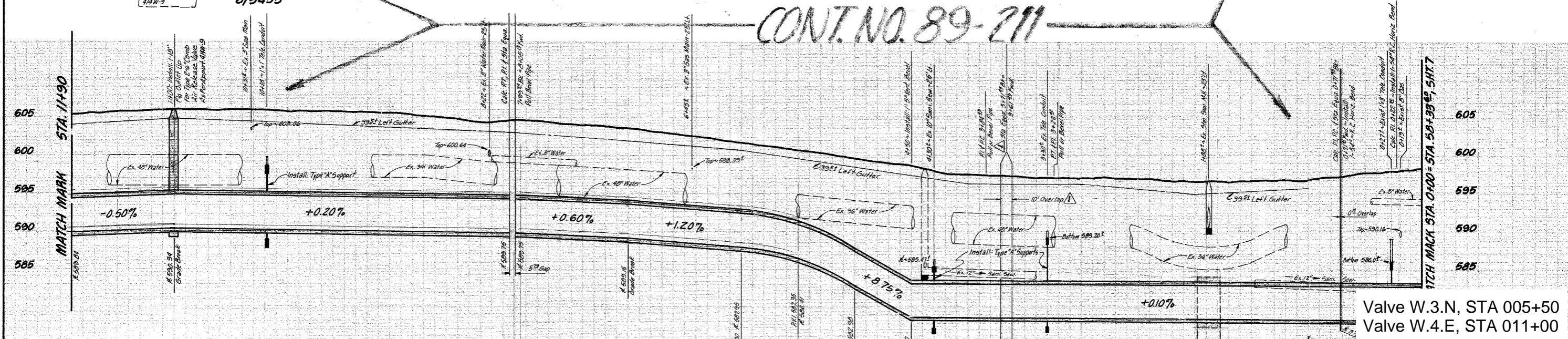
Install: 700 Lin. Ft. Of 54" Prestressed Concrete Embedded Cylinder Pipe ~ Class 100
Alternate: 700 Lin. Ft. Of 54" Prestressed Concrete Lined Cylinder Pipe ~ Class 100

Revised 4-30-80

Station	Lt	Rt	Size	Describe
2+09	08			Co. My. Bush
2+19	17			"
2+28	08			"
2+40	15			"
2+45	08			"
2+50	18			"
2+55	08			"
2+70	08			"
2+80	23		6"	Oak
2+85	23		6"	Co. My. Bush
10+05	08			"
10+18	08			"
10+27	08			"
10+38	08			"
10+30	08			"
11+12	08			"
11+45	08			"



CONT. NO. 89-211



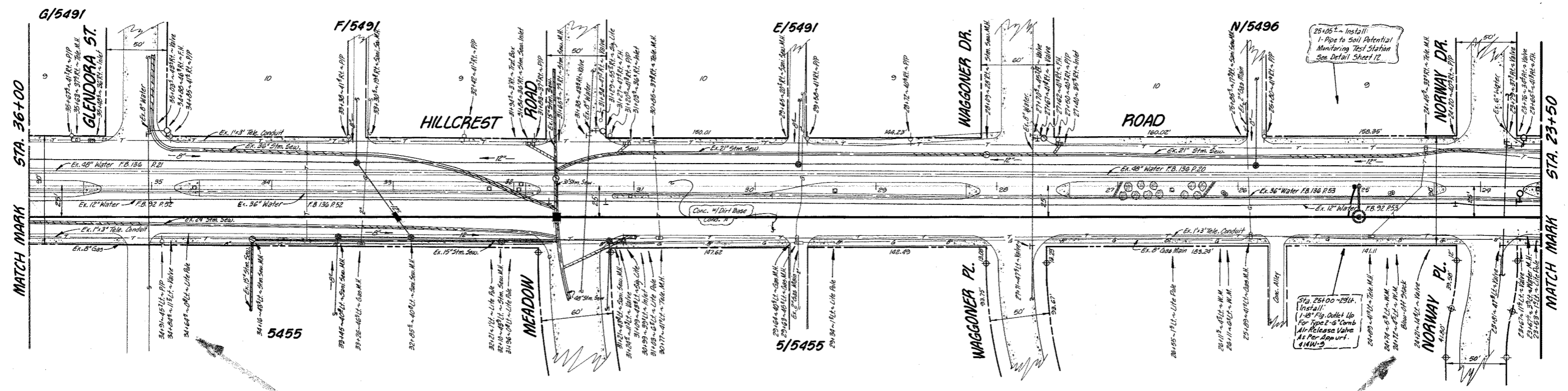
$\Delta 1204$
 INSTALL 134 LIN. FT. OF 54" PRESTRESSED CONCRETE EMBEDDED CYLINDER PIPE-CLASS 100
 ALTERNATE 134 LIN. FT. OF 54" PRESTRESSED CONCRETE LINED CYLINDER PIPE-CLASS 100
 $\Delta 1204$



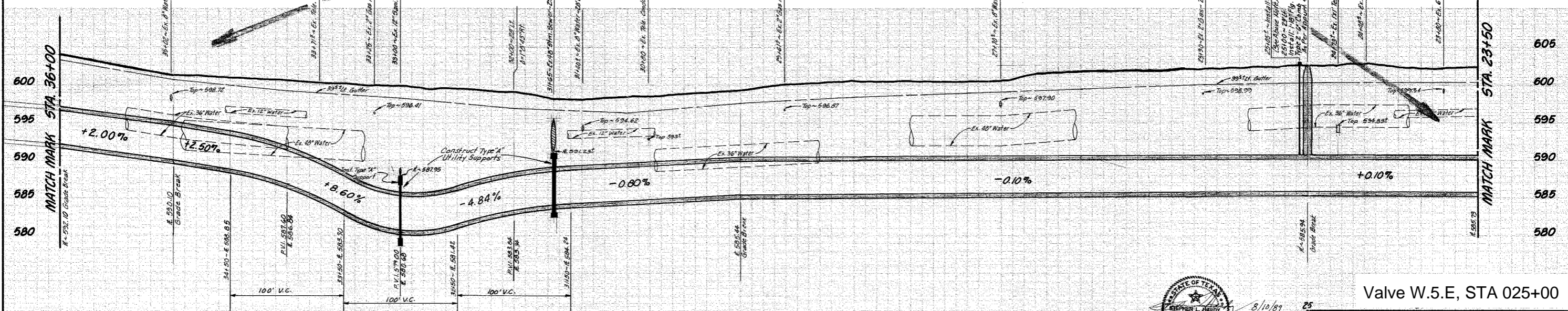
54" R.C. WATER						
EAST SIDE OF HILLCREST ROAD FROM ROYAL LN. TO WALCREST PUMPSTATION						
DALLAS WATER UTILITIES DEPARTMENT						
CITY OF DALLAS, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
W.T. Coffin	D. Greene J. Code	Feb. '09	Horiz. 1"=40' Vert. 1"=8'	8/10/89 Contract 89-211	685W	822

Station	Lt.	Rt.	Size	Describe
26+30	08	12	2"	Cape Myrtle
26+34	08	11	2"	Cape Myrtle
26+38	08	11	2"	Cape Myrtle
26+42	08	11	2"	Cape Myrtle
26+46	08	11	2"	Cape Myrtle
26+50	08	11	2"	Cape Myrtle
26+54	08	11	2"	Cape Myrtle
26+58	08	11	2"	Cape Myrtle
26+62	08	11	2"	Cape Myrtle
26+66	08	11	2"	Cape Myrtle
26+70	08	11	2"	Cape Myrtle
26+74	08	11	2"	Cape Myrtle
26+78	08	11	2"	Cape Myrtle
26+82	08	11	2"	Cape Myrtle
26+86	08	11	2"	Cape Myrtle

INSTALL 54" R.C. WATER



CONT. NO. 89-211



INSTALL 1250 LIN. FT. OF 54" PRESTRESSED CONCRETE EMBEDDED CYLINDER PIPE - CLASS 100
 ALTERNATE 1250 LIN. FT. OF 54" PRESTRESSED CONCRETE LINED CYLINDER PIPE - CLASS 100

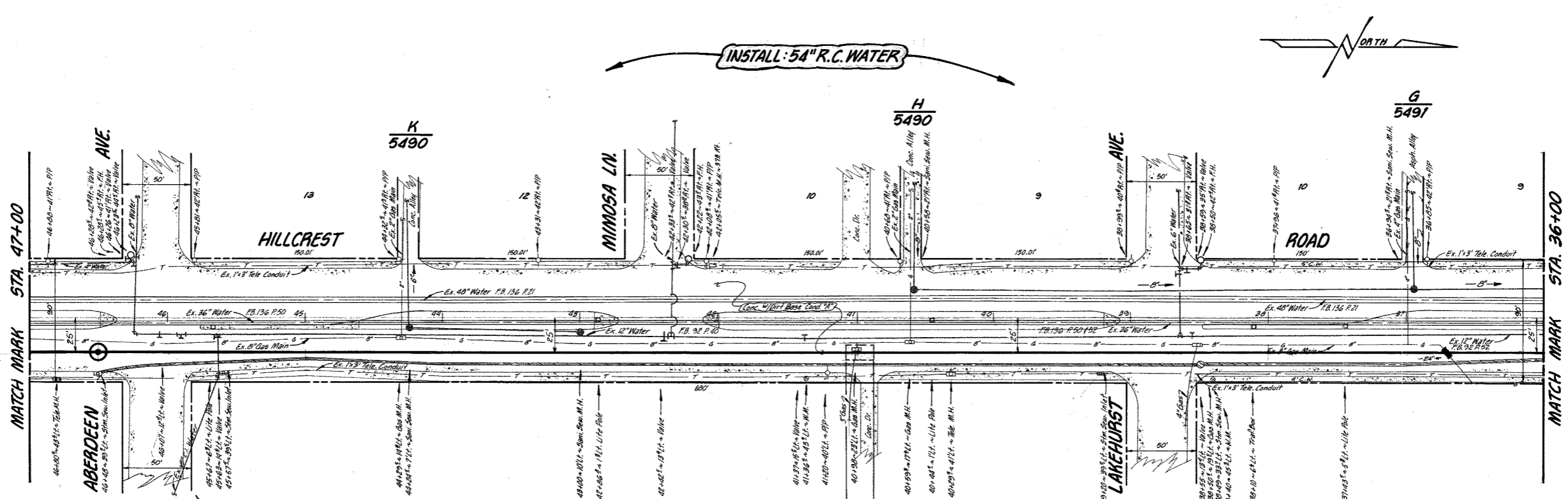


8/10/89
 Contract # 89-211

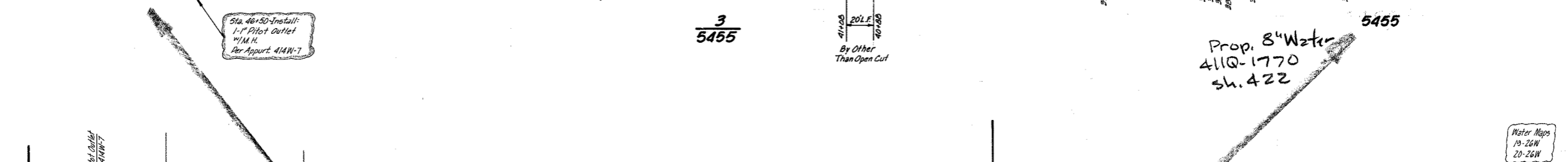
Valve W.5.E, STA 025+00

54" R.C. WATER
 EAST SIDE OF HILLCREST ROAD FROM
 ROYAL LN. TO WALCREST PUMPSTATION
 DALLAS WATER UTILITIES DEPARTMENT
 CITY OF DALLAS, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
W.T. Cotton	D. Greene J. Cuda	Feb. '89	Hor. 1" = 40' Vert. 1" = 6'	10	685W	822



INSTALL: 54" R.C. WATER



CONT. NO. 89-211

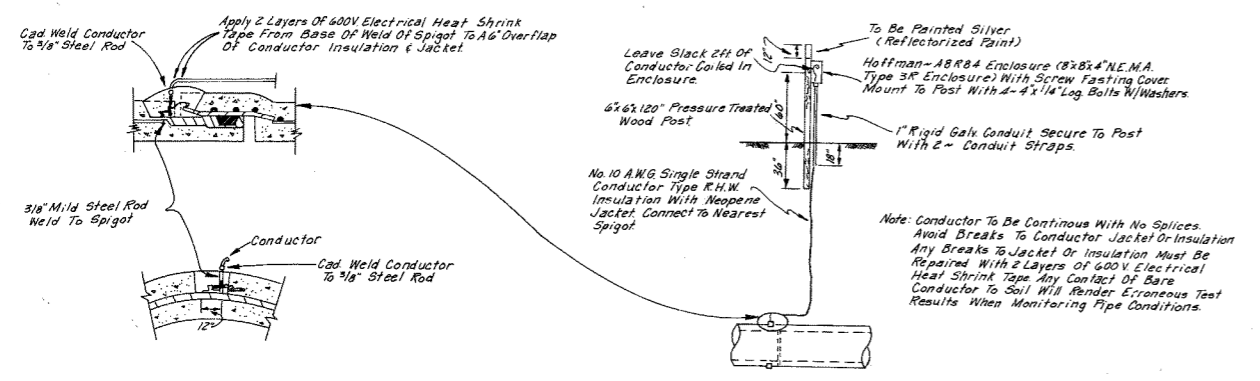
Water Maps 19-26W 20-26W
San. Sew. Key Map P-5



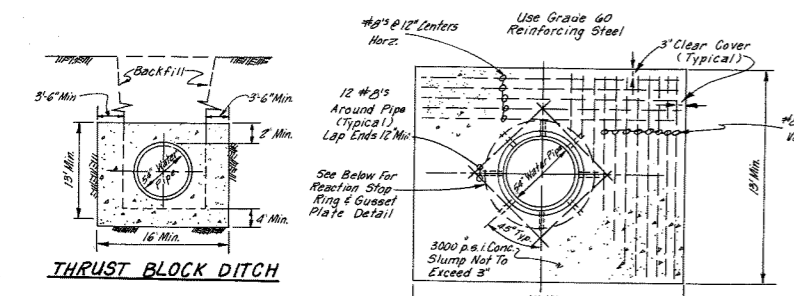
Valve W.6.N, STA 040+00

INSTALL: 1100 LIN. FT. OF 54" PRESTRESSED CONCRETE EMBEDDED CYLINDER PIPE ~ CLASS 100
ALTERNATE: 1100 LIN. FT. OF 54" PRESTRESSED CONCRETE LINED CYLINDER PIPE ~ CLASS 100

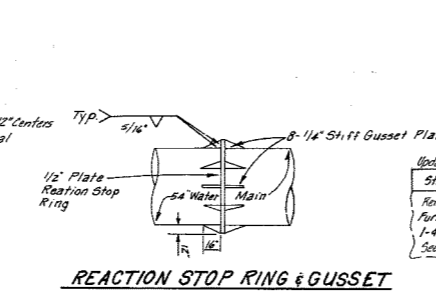
54" R.C. WATER						
EAST SIDE OF HILLCREST ROAD FROM ROYAL LN. TO WALCREST PUMPSTATION						
DALLAS WATER UTILITIES DEPARTMENT						
CITY OF DALLAS, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
W.T. Coffey	D. Greene	Feb. '89	Hor. 1"=40' Vert. 1"=6'		685W	822



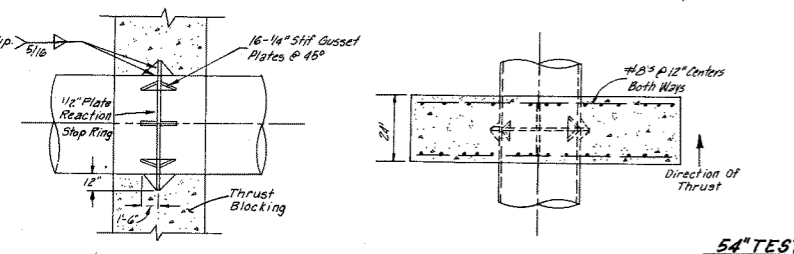
PIPE-TO-SOIL POTENTIAL MONITORING STATION



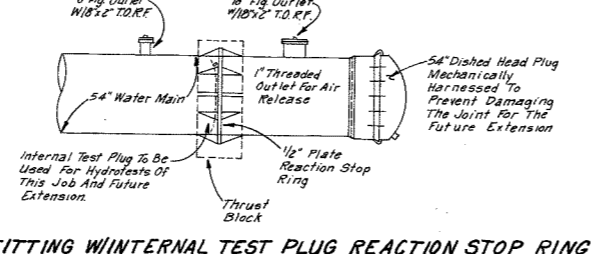
THRUST BLOCK DITCH



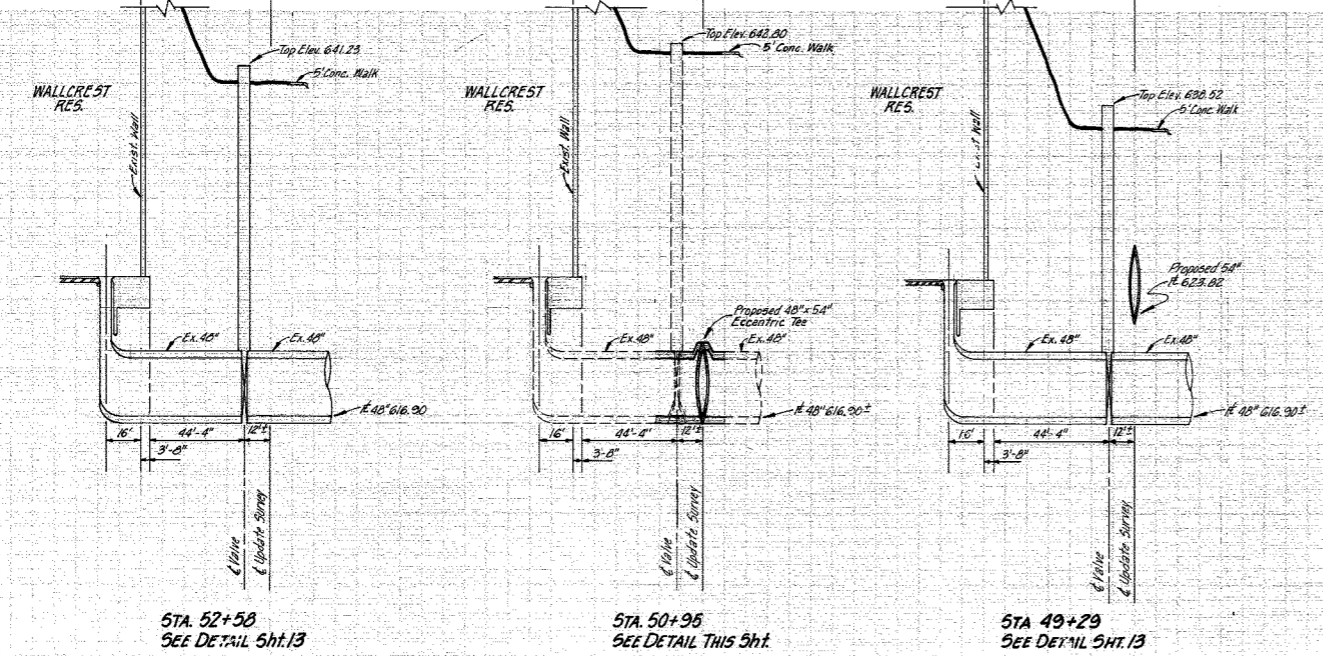
REACTION STOP RING & GUSSET



REACTION STOP RING & GUSSET PLATE THRUST BLOCK DETAIL



54" TEST FITTING WITH INTERNAL TEST PLUG REACTION STOP RING & DISHED HEAD PLUG MECHANICALLY HARNESSSED STATION 54+00 (Sheet 7)

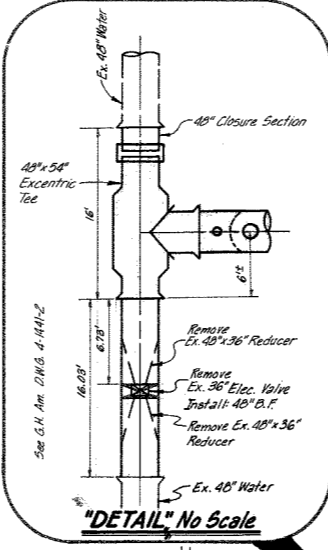


STA 52+58
SEE DETAIL SHT.13

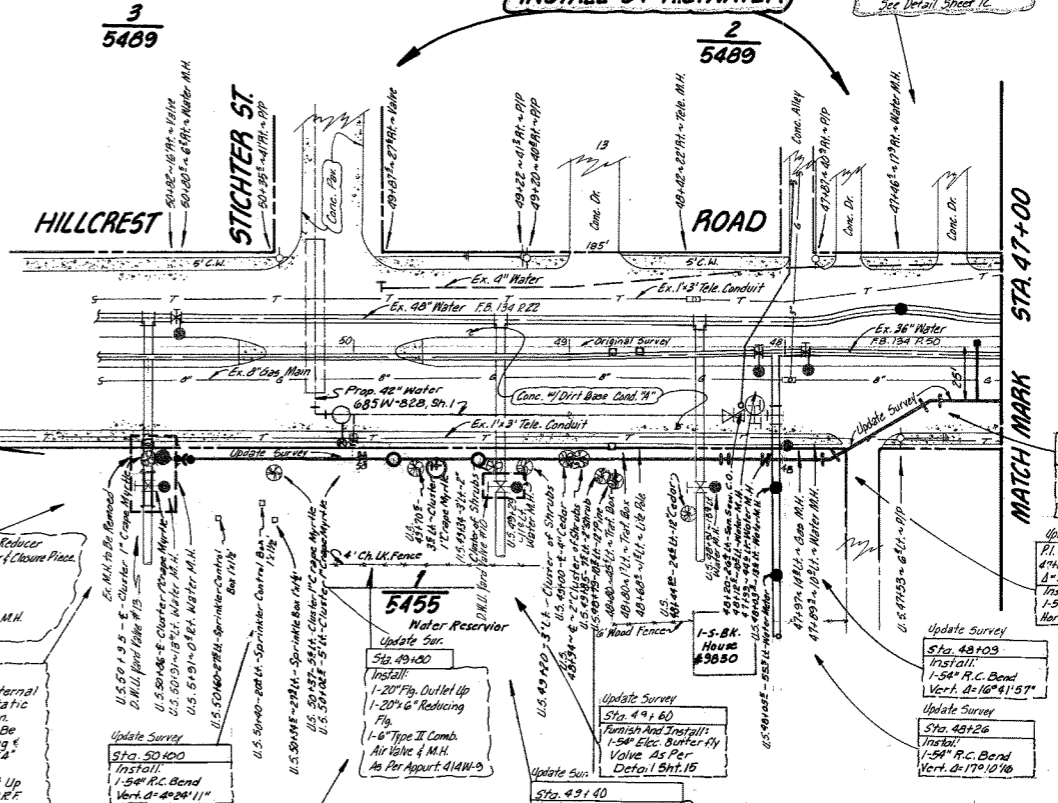
STA 50+96
SEE DETAIL THIS SHT.

STA 49+29
SEE DETAIL SHT.13

INSTALL: 403 LIN.FT. OF 54" PRESTRESSED CONCRETE EMBEDDED CYLINDER PIPE ~ CLASS 100
ALTERNATE: 403 LIN.FT. OF 54" PRESTRESSED CONCRETE LINED CYLINDER PIPE ~ CLASS 100

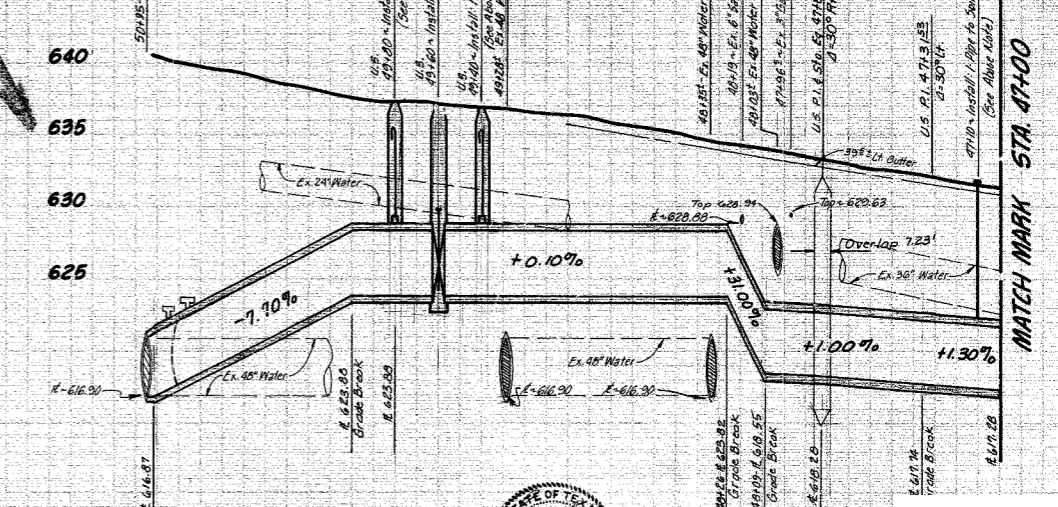


"DETAIL" No Scale



← **CONT.**

NO. 89-211



Valve W.7.E, STA 49+40

54" R.C. WATER
EAST SIDE OF HILLCREST ROAD FROM
ROYAL LN. TO WALLCREST PUMPSTATION
DALLAS WATER UTILITIES DEPARTMENT
CITY OF DALLAS, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
W.T. Coffey	O. Greene J. Cude	Feb '80	Hori. 1" = 40' Vert. 1" = 6'	As per Detail	685W	822



8/10/89
 Contract # 89-211

(12)