



CITY OF ANN ARBOR PROJECT MANAGEMENT

NOTES

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 53, THE CONTRACTOR SHALL CALL 811 OR 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS, PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

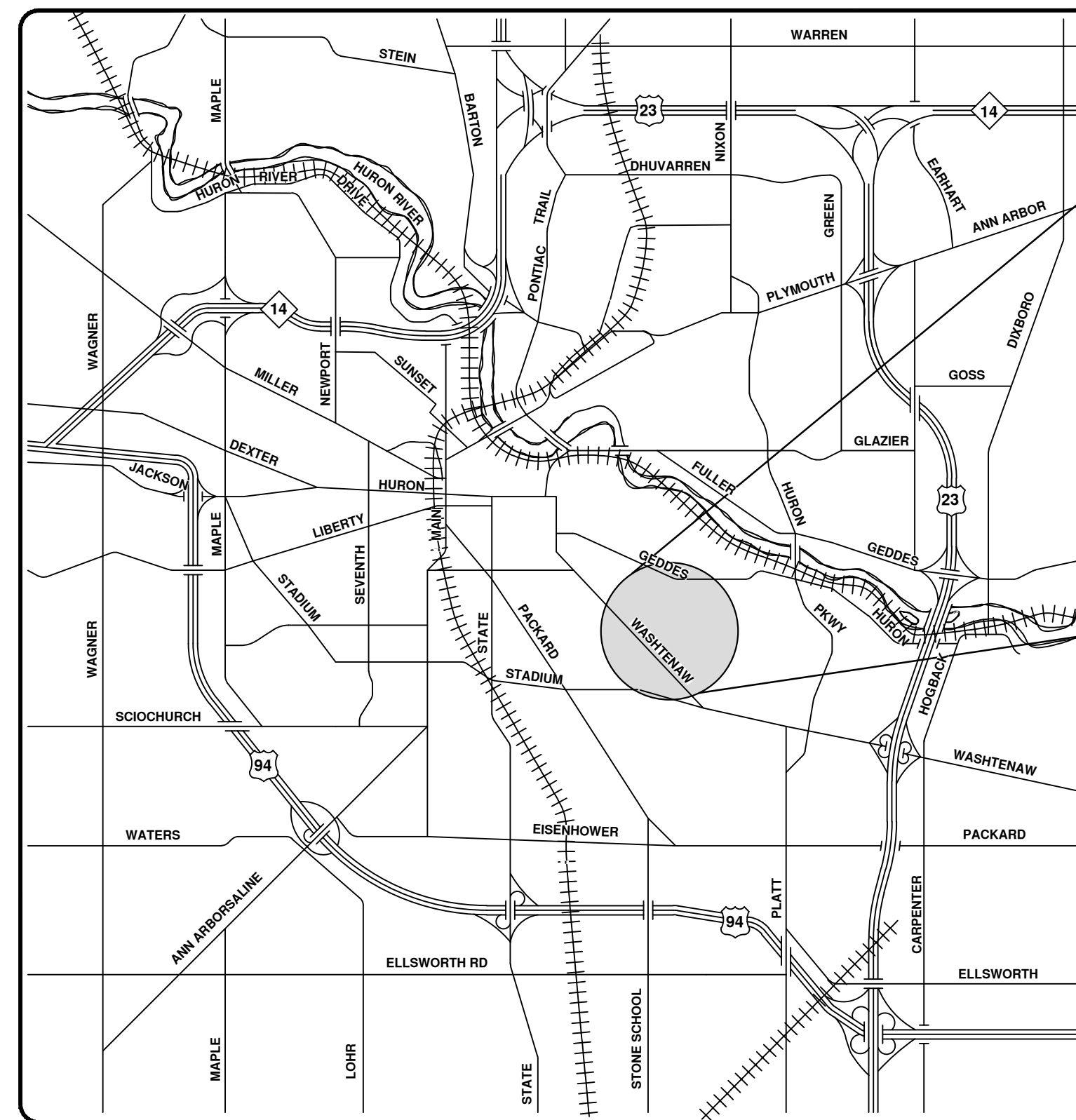
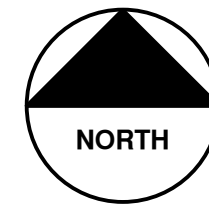
THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS, TELEPHONE, ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE 1994 EDITION OF THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS, ITS DETAILS, WHICH ARE INCLUDED BY REFERENCE, AND THIS PROJECT'S CONTRACT DOCUMENTS. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT.

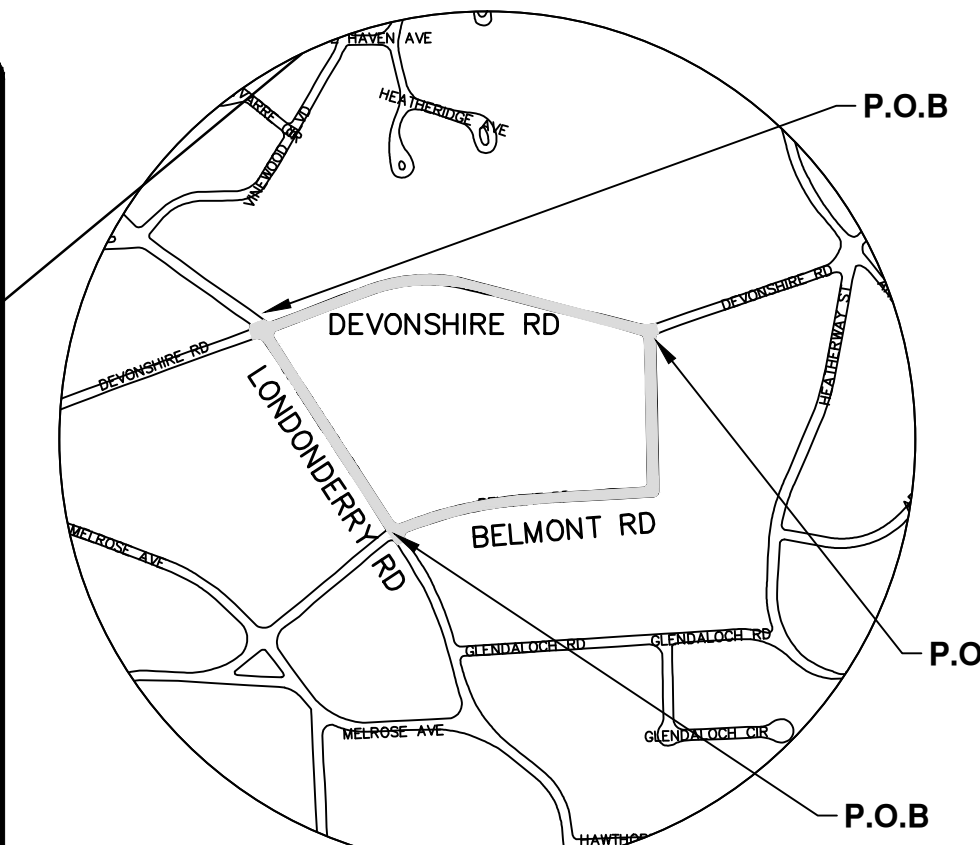
DEVONSHIRE, BELMONT, LONDONDERRY WATER MAIN REPLACEMENT PROJECT

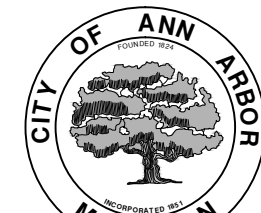
BID No. 4373, FILE No. 2014033

SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE
1	COVER SHEET
2	LEGEND, CASTING SCHEDULE, TREE PROTECTION
3	NOTES, CONTACTS, BENCHMARKS
4	TRENCH DETAILS AND INLET FILTER DETAIL
5	TRAFFIC CONTROL
6-9	REMOVALS
10	OVERALL UTILITY INDEX
11-20	WATER MAIN PLAN & PROFILE
21	SANITARY SEWER PLAN & PROFILE



VICINITY MAP




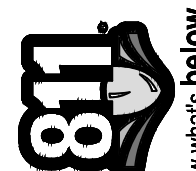


PROJECT MANAGEMENT SERVICE UNIT

Anne M. Warford

DATE: 3 / 25 / 2015





Know what's below.
Call before you dig.

REV.	DESCRIPTION	DATE	DRAWN	CHECKED
00	MOEQ SUBMITTAL	2/17/2015	WIS/ES	AW

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-6647
ANN ARBOR 734-794-4410
www.aagov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

CONTRACT FOR CONSTRUCTION WORK ON DEVONSHIRE, BELMONT, AND LONDONDERRY RD. INCLUDES REPLACEMENT OF WATERMAIN.

ENGINEER'S SEAL

SCALE

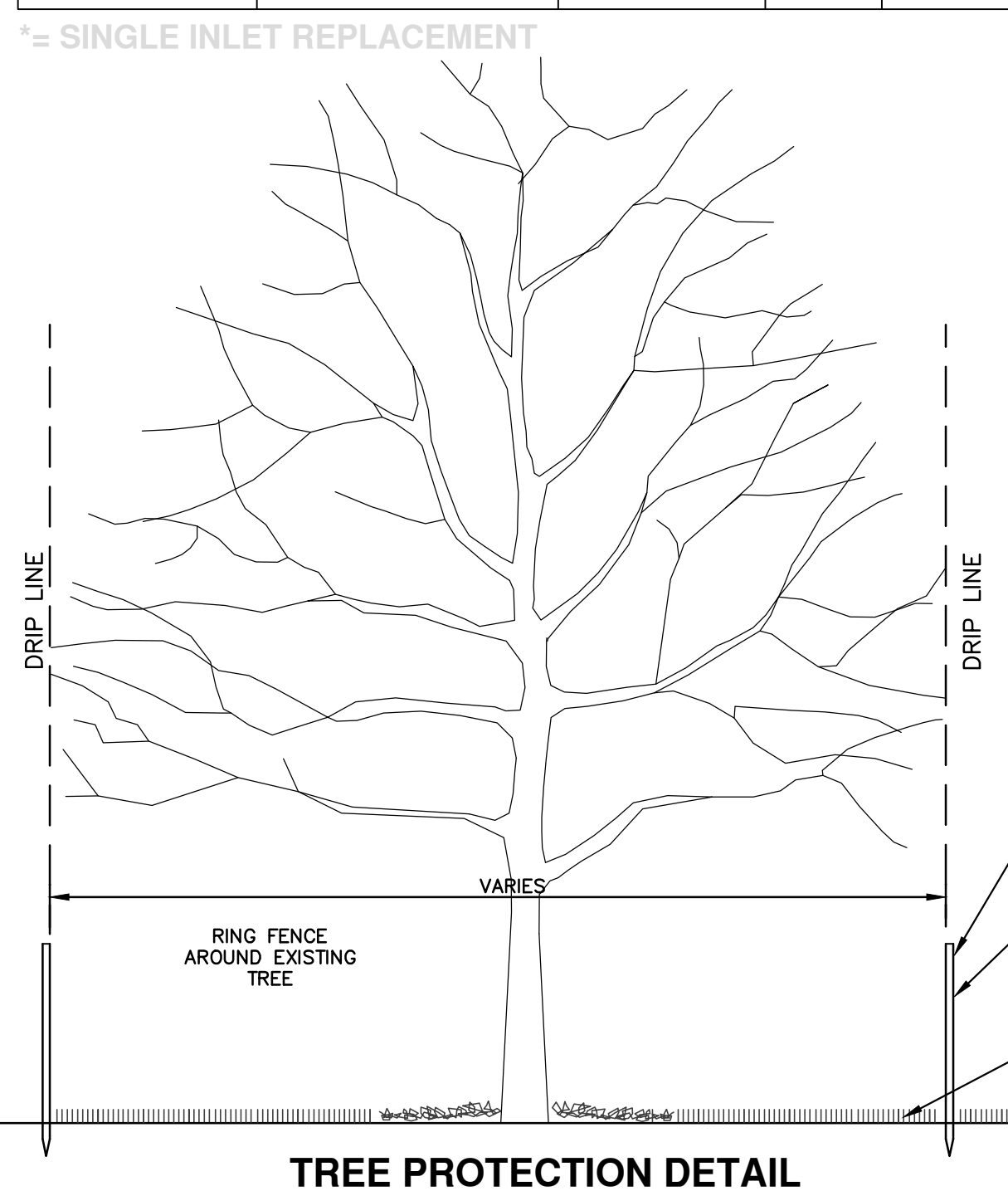
DRAWING No. 2014033-01

SHEET No. 01 OF 21

s:\project_management\Design\20140333 devonshire londonderry belmont wm\plan_production\Primary\20140333Cov.dwg - a2 standard bw.stb - Plot Date: 3/25/2015 10:40:09 AM

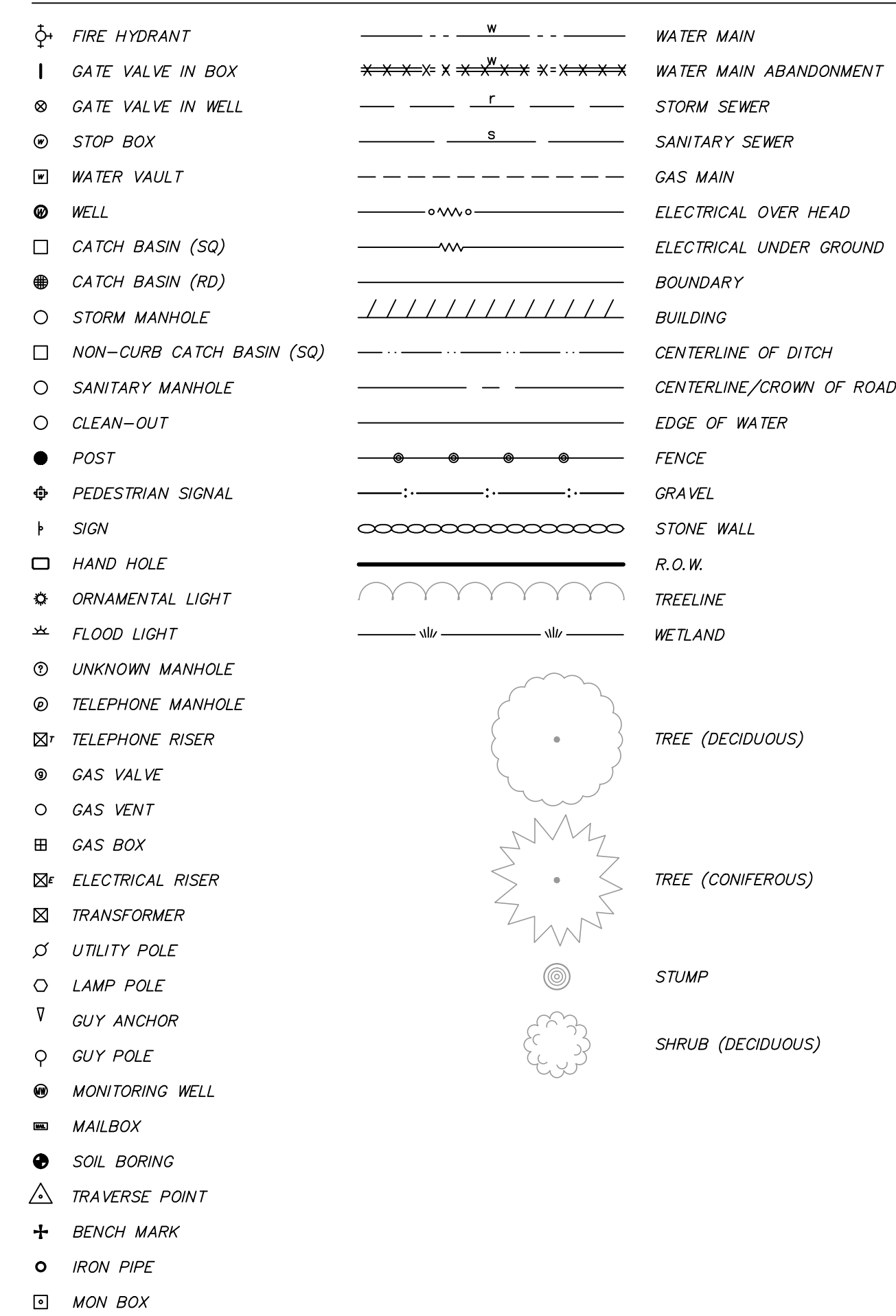
STORM SEWER STRUCTURE TABLE				
STRUCTURE	INVERT ELEVATION, SIZE & DIRECTION	TOP OF CASTING ELEVATION	DEPTH (Feet)	SIZE
* 88-60297	12" NW 830.16	834.56	6.40	24" Dia.
* 88-60298	12" N 830.97	834.97	6.00	24" Dia.
* 88-60299	12" S 829.95	834.85	6.90	24" Dia.
* 88-60300	12" E 837.12	840.52	5.40	24" Dia.
* 88-60301	12" NW 836.13	840.53	6.40	24" Dia.
* 88-60302	12" E 841.47	845.27	5.80	24" Dia.
88-60303	12" E 854.02	857.05	5.03	24" Dia.
* 88-60450	12" SE 850.60	853.40	4.80	24" Dia.
88-60451	12" E 851.50	854.20	4.70	24" Dia.
88-60452	12" E 853.51	855.81	4.30	24" Dia.
* 88-60463	12" N 880.46	883.56	5.10	24" Dia.
88-60464	12" NE 880.13	884.33	6.20	24" Dia.
* 88-60465	12" W 880.15	882.55	4.40	24" Dia.
88-60466	12" W 874.79	879.49	6.70	24" Dia.
88-60467	12" NE 875.61	879.41	5.80	24" Dia.
88-60509	12" W 850.97 12" NE 850.87	853.97	5.10	24" Dia.
88-60523	12" NE 864.70	867.70	5.00	24" Dia.
88-60613	12" NE 852.67	855.87	5.20	24" Dia.
* 88-60614	12" N 848.82	852.12	5.30	24" Dia.
* 88-60615	12" N 845.66	849.66	6.00	24" Dia.
* 88-60616	12" N 840.50	845.99	7.49	24" Dia.
* 88-60617	12" NE 836.58	840.28	5.70	24" Dia.
* 88-60618	12" S 834.88	839.88	7.00	24" Dia.
88-60619	12" S 838.76	843.06	6.30	24" Dia.
88-60620	12" E 843.90	846.00	4.10	24" Dia.
88-60621	12" E 846.95	849.15	4.20	24" Dia.
* 88-60622	12" S 847.24	852.24	7.00	24" Dia.
* 88-60623	12" SE 849.85	852.75	4.90	24" Dia.
88-60648	12" N 836.80	839.90	5.10	24" Dia.
* 88-60649	12" NE 835.11	838.21	5.10	24" Dia.
* 88-60650	12" S 833.16	838.06	6.90	24" Dia.
88-60706	12" S 840.18	844.88	6.70	24" Dia.
92-50244	36" W 827.87 12" N 829.47 12" S 829.97 36" E 827.87	835.37	9.50	48" Dia.
92-50245	12" S 833.24 12" W 835.94 12" SE 835.44 15" N 832.94	840.54	9.60	48" Dia.
92-50246	15" S 829.96 15" N 829.86 12" SE 829.96	835.21	7.35	48" Dia.
92-50247	15" S 829.38 36" W 827.68 42" E 826.38	834.38	10.00	72" Dia.
92-50248	12" S 837.92 12" W 840.42 12" N 837.82	845.42	9.60	48" Dia.
92-50249	12" W 850.42 12" SW 850.47 12" N 849.52	857.11	9.59	48" Dia.
92-50263	42" W 819.61	825.91	8.30	72" Dia.
92-58644	12" NW 876.44	885.79	11.35	48" Dia.
92-58645	12" NW 873.56 12" SW 876.36 12" S 876.26 12" E 877.16 12" SE 873.66	883.26	11.70	48" Dia.
92-58646	12" NW 870.88 12" SW 875.28 12" SE 871.08 12" E 874.68 12" NE 871.13	879.98	11.10	48" Dia.
92-58649	12" NW 859.29 12" SW 862.79	869.29	12.00	48" Dia.
92-58650	12" NW 848.30 12" SW 851.95 12" SE 848.50	856.15	9.85	48" Dia.

STORM SEWER STRUCTURE TABLE				
STRUCTURE	INVERT ELEVATION, SIZE & DIRECTION	TOP OF CASTING ELEVATION	DEPTH (Feet)	SIZE
92-58651	24" NW 845.80 12" NW 849.10 15" SW 845.60 12" SE 846.10 36" NE 845.70	853.30	9.70	48" Dia.
92-58652	36" SW 842.92 12" S 844.08 12" W 846.72 36" E 842.92	849.22	8.30	48" Dia.
92-58653	36" W 840.15 12" W 843.65 12" NW 841.45 36" E 840.15 12" S 841.65	846.15	8.00	48" Dia.
92-58654	36" W 836.43 24" S 837.03 36" E 836.43	844.43	10.00	48" Dia.
92-58655	36" W 835.66 36" E 835.66	842.71	9.05	48" Dia.
92-58656	36" W 833.15 12" SW 834.35 12" N 834.80 36" E 833.00	840.25	9.25	48" Dia.
92-58663	15" E 854.98	857.06	4.08	48" Dia.
92-58679	24" NW 847.08 24" SE 847.08	854.43	9.35	48" Dia.
92-58693	36" W 829.95 12" N 833.05 12" SW 833.05 36" E 829.95	838.35	10.40	48" Dia.
92-062993	12" NW 869.97 12" SE 870.07	878.71	10.74	48" Dia.
92-062995	12" NE 862.89 12" SW 863.39 12" SE 862.99	867.69	6.80	24" Dia.
92-062996	12" NW 865.59 12" SE 865.59	872.29	8.70	48" Dia.
Structure - (4)	15" NE 846.21 12" SW 848.81 12" W 850.11 12" NW 849.51 15" W 846.21	854.21	10.00	48" Dia.
Structure - (31)	12" NE 855.71	858.80	5.09	24" Dia.
Structure - (57)	36" W 836.00 12" N 836.00 36" E 836.00	843.61	9.61	24" Dia.
Structure - (58)	24" N 843.57	846.13	???	???" Dia.
Structure - (68)	12" SE 843.85	845.95	4.10	24" Dia.

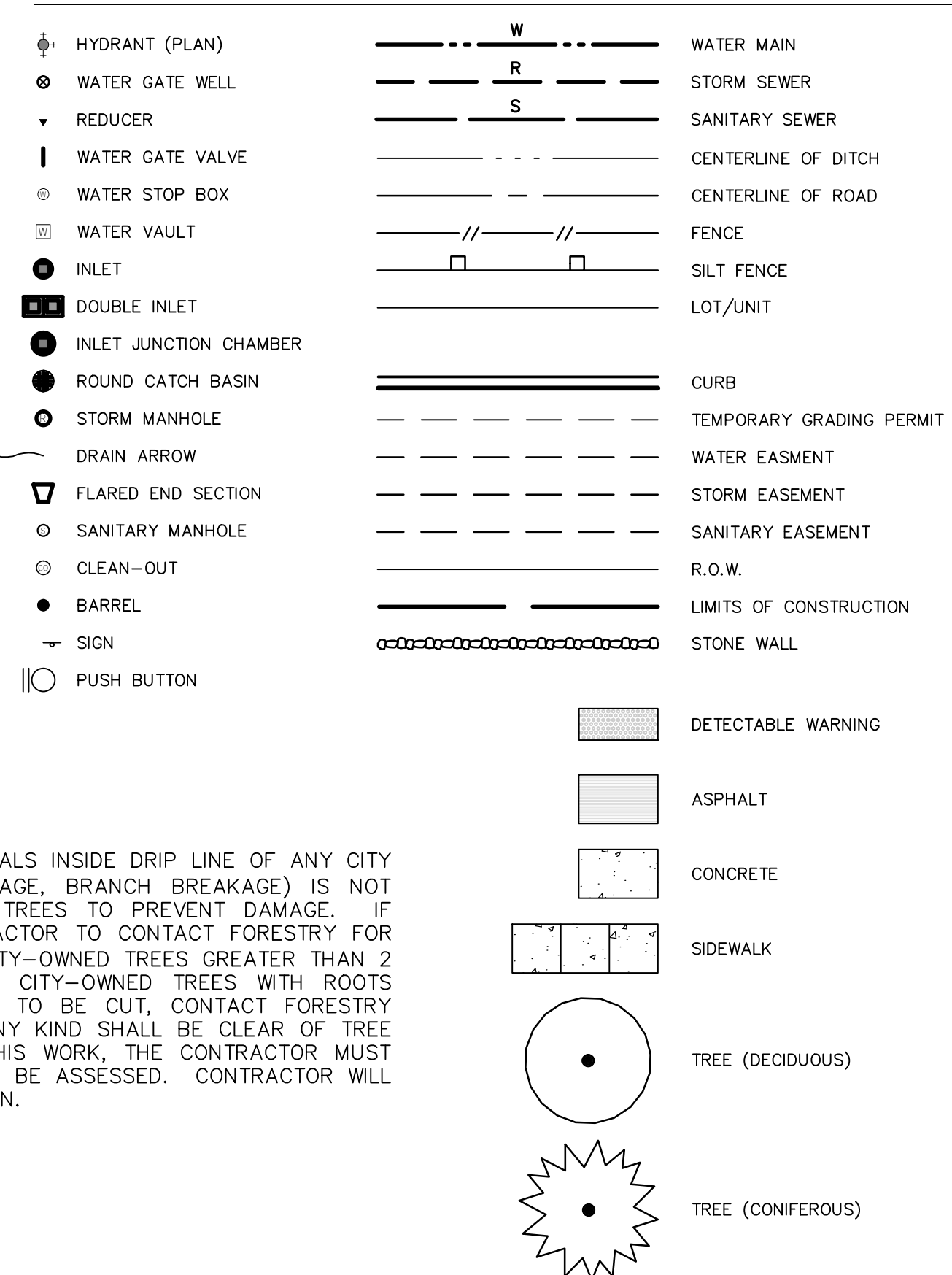


SANITARY SEWER STRUCTURE TABLE					
STRUCTURE	RIM	DEPTH	DIA.	TYPE	INVERTS
71-61909	835.77	12.10	48	4' MH	8" W 825.67 8" E 825.67
71-61910	835.32	12.05	48	4' MH	8" W 825.27 8" S 825.47 8" E 825.27 6" N 825.47
71-61911	834.54	12.00	48	4' MH	8" W 824.54 8" E 824.54
71-61912	844.64	13.80	48	4' MH	6" W 837.44 8" S 833.04 8" N 832.84 6" E 837.14
71-61913	857.66	12.81	48	4' MH	8" W 846.95 8" N 846.85 6" SE 849.85
71-62021	826.59	10.70	48	4' MH	8" W 817.89
71-69328	890.43	20.95	48	4' MH	8" NE 871.48
71-69329	886.29	17.10	48	4' MH	8" NW 871.19
71-69330	889.07	9.15	48	4' MH	8" E 881.92 8" W 881.92
71-69331	880.48	9.99	48	4' MH	8" W 872.48 6" SE 872.88 6" S 874.98 6" N 872.88
71-69332	883.18	14.65	48	4' MH	8" E 870.88 8" SW 870.53 8" SE 870.63 8" NW 870.63
71-69333	877.30	13.70	48	4' MH	8" SE 865.60 8" NW 865.60
71-69334	863.38	9.20	48	4' MH	8" SE 856.28 8" NW 856.18 8" W 856.48
71-69335	860.21	6.58	48	4' MH	8" E 855.63
71-69336	856.45	11.95	48	4' MH	8" SE 846.50
71-69365	854.36	12.30	48	4' MH	8" SE 846.81 8" NE 844.06
71-69366	853.91	13.00	48	4' MH	8" NW 843.11 8" SW 843.66 8" E 842.91
71-69367	846.58	13.10	48	4' MH	8" W 835.48 8" E 835.48
71-69368	845.23	13.20	48	4' MH	8" W 834.03 8" E 834.03
71-69369	843.22	12.40	48	4' MH	8" W 832.82 8" E 832.82
71-69370	840.59	12.40	48	4' MH	8" W 830.19 8" E 830.19
71-69371	860.51	11.40	48	4' MH	8" W 852.11 8" E 851.11
71-69384	859.23	10.60	48	4' MH	6" E 850.63 6" W 850.83 6" SW 851.73
71-073400	872.90	14.00	48	4' MH	8" E 860.90

EXISTING LEGEND



PROPOSED LEGEND



CONTRACTOR SHALL NOT STORE OR PLACE EQUIPMENT AND/OR MATERIALS INSIDE DRIP LINE OF ANY CITY TREE. MECHANICAL DAMAGE TO CITY OWNED TREES (I.E. BARK DAMAGE, BRANCH BREAKAGE) IS NOT PERMITTED. CONTRACTOR IS RESPONSIBLE FOR PROPERLY PRUNING TREES TO PREVENT DAMAGE. IF BRANCHES GREATER THAN 2" IN DIAMETER REQUIRE PRUNING, CONTRACTOR TO CONTACT FORESTRY FOR CONSULTATION AND EVALUATION AT (734) 794-6350. NO ROOTS OF CITY-OWNED TREES GREATER THAN 2 INCHES IN DIAMETER ARE TO BE CUT. IF CONTRACTOR ENCOUNTERS CITY-OWNED TREES WITH ROOTS GREATER THAN 2 INCHES IN DIAMETER THAT THEY DETERMINE NEED TO BE CUT, CONTACT FORESTRY IMMEDIATELY FOR EVALUATION. ALL TRENCHING AND BORE PITS OF ANY KIND SHALL BE CLEAR OF TREE DRIP LINES. IF ANY CITY-OWNED STREET TREES ARE DAMAGED BY THIS WORK, THE CONTRACTOR MUST CONTACT FORESTRY AS SOON AS POSSIBLE SO THAT THE DAMAGE CAN BE ASSESSED. CONTRACTOR WILL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH DAMAGE REMEDIATION.



CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
PO BOX 866
ANN ARBOR MI 48106-0867
www.a3gov.org



PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
DEVONSHIRE, LONDONDERRY, BELMONT WATER MAIN
LEGEND, CASTING SCHEDULE, TREE PROTECTION

SHEET No. 02 OF 21
DRAWING No. 2014033-02

s:\project management\Design\20140333 devonshire londonderry belmont wm\plan_production\Primary\20140333Cov.dwg i _a2 standard bw.stb - Plot Date: 3/25/2015 10:40:10 AM

CONSTRUCTION NOTES:

- Driveways and entrances to buildings, real property, and the like shall not be blocked except for short durations and only when approved by the Engineer. Vehicular and pedestrian access shall be maintained at all times. It shall be the Contractor's responsibility to coordinate all necessary driveway closures with the property owner(s) and resident(s) in the areas of construction.
- The location and depth of all existing utilities and service leads are to be field verified by the Contractor prior to construction.
- Location and depth of utilities as depicted on the plans is approximate and shown according to the best information available. It is the Contractor's responsibility to excavate ahead and adjust depth of conflict utilities accordingly. Any damage to utilities is the Contractor's responsibility to avoid and/or repair as necessary.
- The Contractor is to take special care to protect the existing water main and be responsible for maintaining consistent water service.
- During non-working hours no trench shall remain open; any open trench shall be properly secured with protective fencing. This work shall be included in the item of work "General Conditions".
- Trenches for new water services shall be excavated to MIOSHA and City of Ann Arbor Field Services requirements.
- City of Ann Arbor Field Services will install the corporation and copper service lead(s) to transfer the connection(s). If an existing water service is found to be failing or is not copper, the lead will be replaced to the curb box by Field Services.
- For the installation of corporations, or any other related activities, the Contractor shall not receive additional compensation for delays due to the scheduling of or coordination with the City of Ann Arbor Field Services.
- The Contractor shall backfill trenches in accordance with Trench Detail specified on plans. This work shall be included in the item of work "Excavate and Backfill for Water Service Tap and Lead". All concrete removals and replacements required for this work will be paid for separately.
- All ductile iron pipe and fittings shall be polyethylene wrapped per ANSI/AWWA C105/A21.5.
- Cor-blu bolts to be used at all mechanical water main joints at hydrants and Megalug fittings
- The Contractor shall construct, flush, and bacteriologically test the water main per Detailed Specification "Water Main Installation and Testing" and as approved by the Engineer. All chlorinated water shall be discharged directly into an approved sanitary sewer. The Contractor shall supply all necessary hoses, fittings and the like to accomplish this work.
- Water main fittings, other than those specifically listed as separate pay items, which are required to complete the work, such as blow-off assemblies, concrete thrust blocks, solid sleeves and mechanical plugs, shall not be paid for separately, but shall be included in the pipe pay items.

- "No Parking" signs shall be installed by the Contractor at locations as approved or directed by the Engineer. All signs shall be installed in accordance with the detailed specifications.
- Postal delivery and refuse pickup service shall be maintained at all times by the Contractor.
- All fittings, hydrants, valves and castings removed during construction are the property of the City of Ann Arbor. The Contractor within 48 hours shall deliver to City of Ann Arbor Field Operations and Maintenance Facility at the W.R. Wheeler Service Center located at 4251 Stone School Road.
- Where street curbs are undermined due to construction activities, they shall be removed and replaced as directed by the Engineer.
- The Contractor shall be responsible for the continuous maintenance of the temporary road surface and soil erosion control measures within the construction area until the full completion of the project. This work shall be included in the item of work "General Conditions".
- All curb, sidewalk, driveway approach removals shall be approved by Engineer before the work is done.
- Sawed sewer pipe connections shall be coupled with a Fernco flexible coupling and a stainless steel shear ring.
- The location of material stock piles and on-site staging areas to be approved by the Engineer.
- All structures shall receive new castings as directed by the Engineer, as specified on the standard casting schedule. The existing castings are the property of the City of Ann Arbor. The Contractor shall deliver to City of Ann Arbor Field Operations and Maintenance Facility at the W.R. Wheeler Service Center located at 4251 Stone School Road.
- Payment for drainage structure sumps, where specified, shall be included in the payment for the various drainage structure sizes and or types.
- Where sewer pipes of different sizes or materials are joined, Fernco flexible couplings with stainless steel shear rings shall be used. The Contractor's purchase price for these devices, including shipping, shall be paid as an extra. Prior to payment for this item, the Contractor shall submit receipts for the Engineer's review and approval. All other costs associated with the installation of these devices shall be included in the payment for the sewer.
- Where sewer and water main are to be removed & replaced or added, all pipe shall be installed using Trench Detail detailed in the specifications or shown on Plans. Backfill for sewer and water construction shall be MDOT Granular Material, Class II, Modified.
- Existing street name, guide, and regulatory signs, and mailboxes which conflict with the proposed construction shall be removed prior to construction, stored in a manner which will prevent damage, and re-set in locations as directed by the Engineer. This work will not be paid for separately, but shall be included in "General Conditions Modified."

SOIL EROSION & SEDIMENT CONTROL GENERAL NOTES:

NOTIFY THE CITY OF ANN ARBOR SOIL EROSION CONTROL OFFICE 48 HOURS PRIOR TO BEGINNING WORK ON THE PROJECT. PHONE: 734-794-6265.

- THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN SOIL EROSION CONTROL MEASURES AS DIRECTED BY THE ENGINEER AT ALL TIMES DURING CONSTRUCTION. ANY MODIFICATIONS OR ADDITIONS TO THE SOIL EROSION CONTROL MEASURES DUE TO CONSTRUCTION OR CHANGED CONDITIONS SHALL BE AS DIRECTED AND APPROVED BY THE ENGINEER.
- ALL SOIL EROSION AND SEDIMENTATION CONTROL WORK SHALL CONFORM TO THE PERMIT REQUIREMENTS OF THE CITY OF ANN ARBOR, CITY ORDINANCE CHAPTER 63, CITY OF ANN ARBOR STANDARDS DIVISION VII, THE LAWS OF THE STATE OF MICHIGAN, AND THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
- DAILY, OR AFTER ANY STORM EVENT, INSPECTIONS OF EROSION CONTROL MEASURES SHALL BE MADE BY THE CONTRACTOR. PERIODIC INSPECTIONS MAY BE MADE BY THE ENGINEER TO DETERMINE THE EFFECTIVENESS OF EROSION AND SEDIMENTATION CONTROL MEASURES. ANY NECESSARY CORRECTIONS SHALL BE MADE WITHOUT DELAY, AND WITHOUT ADDITIONAL COST TO THE CITY OF ANN ARBOR.
- EROSION AND SEDIMENTATION FROM WORK ON THE SITE SHALL BE CONTAINED ON THE SITE AND NOT BE ALLOWED TO COLLECT ON ANY OFF-SITE AREAS, ROADWAYS OR WATERWAYS.
- ALL MUD/DIRT TRACKED ONTO ROADWAYS FROM THE SITE DUE TO CONSTRUCTION, SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR. IF SO ORDERED, THE CONTRACTOR SHALL PROVIDE AND OPERATE A VACUUM-TYPE STREET SWEEPER, AT NO ADDITIONAL COST TO THE CITY OF ANN ARBOR, WITHIN FOUR (4) HOURS OF BEING SO ORDERED.
- RESTORATION OF ALL DISTURBED AREAS, INCLUDING PLACEMENT OF TOPSOIL, SEED, FERTILIZER AND MULCH AND/OR SOD SHALL BE PERFORMED WITHIN FIVE (5) DAYS OF THE COMPLETION OF FINAL GRADE.
- CONSTRUCTION OPERATIONS SHALL BE SCHEDULED AND PERFORMED SO THAT PREVENTATIVE SOIL EROSION CONTROL MEASURES ARE IN PLACE PRIOR TO EXCAVATION IN CRITICAL AREAS AND TEMPORARY STABILIZATION MEASURES ARE IN PLACE IMMEDIATELY FOLLOWING BACKFILLING OPERATIONS.
- SPECIAL PRECAUTIONS WILL BE TAKEN IN THE USE OF CONSTRUCTION EQUIPMENT TO PREVENT SITUATIONS THAT PROMOTE EROSION.
- PROPER DUST CONTROL SHALL BE MAINTAINED DURING CONSTRUCTION BY USE OF WATER TRUCKS AND/OR DUST PALLATIVE AS REQUIRED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND REMOVAL OF SOME MEASURES UPON AUTHORIZED COMPLETION OF THE PROJECT. FINAL COMPLETION OF PROJECT WILL NOT BE AUTHORIZED UNTIL ALL SITE WORK AND UTILITY CONSTRUCTION IS COMPLETE AND ALL SOILS ARE STABILIZED.
- THE CONTRACTOR SHALL NOT GRADE INTO ADJACENT PROPERTIES. SILT AND PROTECTIVE FENCE SHALL BE INSTALLED AND MAINTAINED TO PREVENT GRADING, EROSION AND SEDIMENTATION INTO THE ADJACENT PROPERTIES.
- TREE PROTECTION FENCING MUST REMAIN INTACT UNTIL RESTORATION OF THE SITE IS COMPLETE.

SEQUENCE OF EROSION CONTROL MEASURES:

- THE CONTRACTOR IS TO SUBMIT TO THE ENGINEER, A SEQUENCE OF CONSTRUCTION WITH RESPECT TO THE SOIL EROSION CONTROL MEASURES FOR REVIEW, COMMENT AND APPROVAL. THIS SCHEDULE IS TO INCLUDE INSPECTION AND REPAIR OF ALL TEMPORARY EROSION CONTROL MEASURES DAILY AND WITHIN 24 HOURS OF A STORM EVENT.

CONSTRUCTION SEQUENCE:

The Contractor shall review the Traffic Maintenance Plans of the Contract Documents and note that each of the two construction Stages (1 and 2) are provided to maintain access at all times to residences solely accessed off of Belmont Street. Plans indicate leaving 10 feet of existing pavement for access road during water main installation, final removal limits of pavement as directed by Engineer. The driveways are to be maintained at all times. During crossing of drives with utilities and road building, residents must be notified at least a day in advance so vehicles can be moved prior to the closure. Drives are to be temporarily put back as soon as possible, and opened for resident use at the end of each day. The Contractor may choose to adjust the limits or sequencing of construction in order to complete the work more efficiently. However, changes to the recommended stages and phases must be approved in writing by the Engineer prior to construction and must assure that access is maintained as described above.

Stage 1, Phases I and Phase II

Stage 1, Phase I shall consist of constructing sanitary sewer on west side of Belmont and the installation of a GVB on Heather Way. Stage 1 Phase II consists of constructing improvements on east side of Londonderry from intersection of Devonshire to intersection of Belmont and along Belmont to station 7+61. Maintain minimum of 10 foot wide access path on west and north side of streets.

- Installation of traffic control devices. Installation of portable, changeable message signs with messages as directed by the Engineer one week prior to construction. Installation of Soil Erosion Control Devices.
- Perform exploratory excavations at water main tie in locations and at the water main and sanitary sewer crossing in Belmont for existing utility alignment and elevations.
- Install 8" sanitary sewer and test per City Detailed Specification for Sanitary Sewer Testing.
- Install 8" GVB on Heather Way.
- Removal of pavement and concrete items leaving 10 feet of existing road for access lane or as directed by Engineer. Access lane to be open and free of obstructions at end of each day.
- Install 8 inch water main along Londonderry from the intersection of Devonshire to Belmont approximate station 7+61.
- With passing pressure test on water main schedule and make connection of new 8 inch main to existing 6 inch main at Devonshire and Londonderry. With placement of aqua swabs east and west of new tee during water main placement flush and remove 8 inch swab to the south.
- Install 2ft dia. storm sewer structures as indicated on plans, including the installation of underdrain as directed by the Engineer.
- Test water main per City Detailed Specification for Water Main Testing.
- Once bacteriological samples have passed schedule with Field Operations and transfer services to new main from the intersection of Devonshire to Belmont approximate station 7+61.
- Schedule and make connections to the remaining side street connection as detailed at Londonderry & Belmont.
- Construct road cross section for half of road. Aggregate base will be ramped at driveways and be maintained at all times. Any areas of base that become contaminated or deficient will be removed and replaced as directed by Engineer.
- Topsoil, seed and install mulch blankets at all disturbed areas in Stage 1 Phase 1.
- Locate structures in road with offset stakes.

Stage 2.

Stage 2, consist of constructing improvements on east side of Belmont from station 7+61 to Devonshire and along Devonshire from Belmont to Londonderry, maintaining minimum of 10 foot wide access path on west side of street or removal of only the pavement necessary to install proposed water main.

- Perform exploratory excations at water main tie in locations for existing utility alignment and elevations.
- Removal of pavement and concrete items leaving 10 feet of existing road for access lane or as directed by Engineer. Access lane to be open and free of obstructions at end of each day.
- Install 8 inch water main along Belmont from approximate station 7+61 to the intersection of Devonshire then along Devonshire from Belmont to Londonderry.
- With passing pressure test on water main schedule and make connection of new 8 inch main to 8 inch main at approximate station 7+61 installed in Stage 1. With placement of aqua swabs during water main placement flush and remove 8 inch swab to the north.
- Install 2ft dia. storm sewer structures as indicated on plans, including the installation of underdrain as directed by the Engineer.
- Test water main per City Detailed Specification for Water Main Testing.
- Once bacteriological samples have passed schedule with Field Operations and transfer services to new main from approximate station 7+61 to the intersection of Devonshire then along Devonshire from Belmont to Londonderry.
- Schedule and make connections to the remaining side street connection as detailed at Devonshire & Belmont, Devonshire & Londonderry.
- Construct road cross section for half of road. Aggregate base will be ramped at driveways and be maintained at all times. Any areas of base that become contaminated or deficient will be removed and replaced as directed by Engineer.
- Locate structures in road with offset stakes.
- Overall project cleanup.
- Turn soil erosion control and construction signage over to the Resurfacing Program Contractor.

PERMITS REQUIRED TO BE OBTAINED BY THE CONTRACTOR PRIOR TO THE BEGINNING OF CONSTRUCTION.

PERMIT	ISSUING AUTHORITY
LANE CLOSURE PERMIT*	CITY OF ANN ARBOR PROJECT MANAGEMENT UNIT
"NO PARKING" SIGNS PERMIT*	CITY OF ANN ARBOR PROJECT MANAGEMENT UNIT
GRADING/SOIL EROSION & SEDIMENTATION CONTROL PERMIT*	CITY OF ANN ARBOR CUSTOMER SERVICE
RIGHT-OF-WAY PERMIT*	CITY OF ANN ARBOR CUSTOMER SERVICE
* NO COST TO CONTRACTOR	

PERMITS REQUIRED TO BE OBTAINED BY THE CITY OF ANN ARBOR PRIOR TO THE BEGINNING OF CONSTRUCTION.

PERMIT	ISSUING AUTHORITY
M.D.E.Q. WATER MAIN CONSTRUCTION PERMIT	MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
M.D.E.Q. SANITARY SEWER CONSTRUCTION PERMIT	MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

CONTACT INFORMATION

PUBLIC UTILITIES	OWNER	CONTACT
WATER		DAN WOODEN (734) 794-6350
SANITARY		MARK COZART (734) 794-6350
STORM	CITY OF ANN ARBOR FIELD OPERATIONS SERVICE UNIT W.R. WHEELER SERVICE CENTER 4251 STONE SCHOOL ROAD ANN ARBOR, MI 48108	KEVIN ERNST (734) 794-6350
FORESTRY		STEVEN GOEBEL (734) 794-6350
SIGNS SIGNALS STREET LIGHTS		CHUCK FOJTIK (734) 794-6361
PRIVATE UTILITIES	OWNER	CONTACT
GAS	DTE ENERGY 3150 E. MICHIGAN AVE, YPSILANTI TOWNSHIP, MI 48198	ROBERT CZAPIEWSKI (734) 544-7818
ELECTRIC	DTE ENERGY WESTERN WAYNE SERVICE CENTER 8001 HAGGERTY ROAD BELLEVILLE, MI 48111	CLAY COMBEE (734) 397-4112
CABLE	COMCAST 27800 FRANKLIN ROAD SOUTHFIELD, MI 48034	RON SUTHERLAND (313) 999-8300
PHONE	AT&T 550 S. MAPLE ROAD ANN ARBOR, MI 48103	(734) 996-2135
FIBER OPTIC	MCI 2800 N. GLENFILLE ROAD RICHARDSON, TX 75082	DEAN BOYERS (972) 729-6016

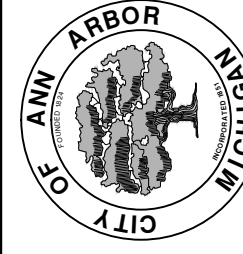
BENCHMARKS

BM #	ELEV	DESCRIPTION
2003	854.320	ANN ARBOR BRASS DISC IN CONCRETE AT THE NORTHWEST CORNER OF DEVONSHIRE RD AND AVON RD
1	880.410	E. RIM SANITARY MH IN FRONT OF HSE #2235 BELMONT
2	862.260	HYDRANT STEAMER VALVE ON S SIDE OF BELMONT #2254
3	883.970	SPIKE ON E FACE POWER POLE, NW CORNER OF BELMONT AND LONDONDERRY
4	889.080	E RIM OF MH IN FRONT OF #2228 BELMONT, CENTERLINE OF ROAD
6	842.847	RR SPIKE E SIDE OF LP ON W SIDE OF BELMONT BETWEEN HSE 1020 & 1010
7	835.015	RR SPIKE S SIDE OF LP ON N SIDE OF DEVONSHIRE @ BELMONT RD
8	838.368	RR SPIKE S SIDE OF LP ON N SIDE OF DEVONSHIRE BETWEEN HSE 2475 & 2355
9	842.725	RR SPIKE S SIDE OF LP ON N SIDE OF DEVONSHIRE BETWEEN HSE 2321 & 2317
10	849.142	RR SPIKE S SIDE OF LP ON N SIDE OF DEVONSHIRE BETWEEN HSE 2211 & 2215
11	874.839	NE ANCHOR BOLT ON LP ON W SIDE OF LONDONDERRY BETWEEN HSE 2108 & 2100
12	878.861	NE ANCHOR BOLT ON LP ON W SIDE OF LONDONDERRY BETWEEN HSE 2110 & 2114
13	835.587	RR SPIKE IN E SIDE OF LP ON W SIDE OF HEATHERWAY BETWEEN HSE 1092 & 1120



DATE	DRAWN	CHECKED
2/17/2015	WMS/ES	AW
	MOEQ SUBMITTAL	DESCRIPTION
00	REV.	

CITY OF ANN ARBOR PUBLIC SERVICE 301 EAST HURON STREET P.O. BOX 866 ANN ARBOR, MI 48106-0867
www.aagov.org

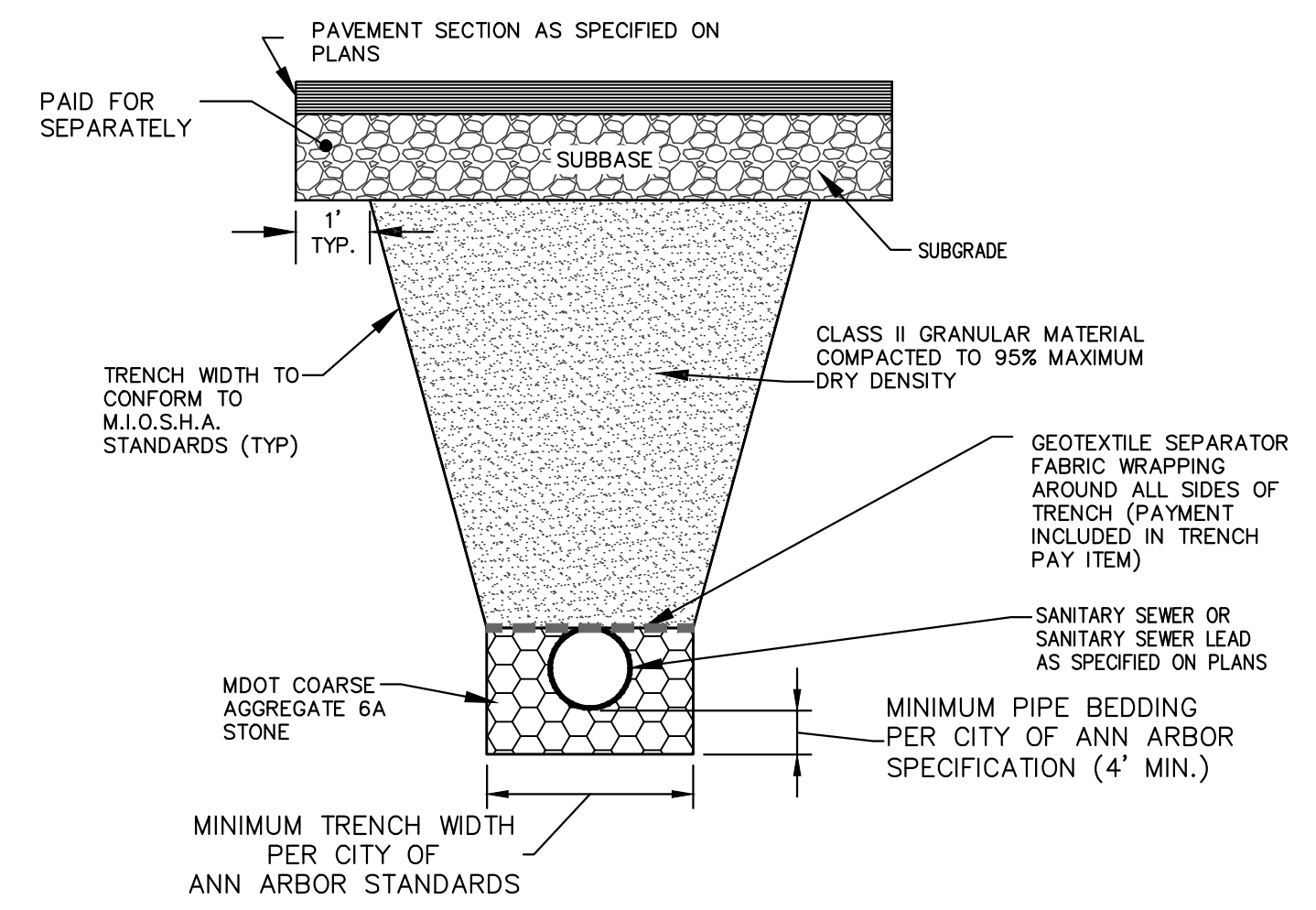


PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
DEVONSHIRE, LONDONDERRY, BELMONT WATER MAIN

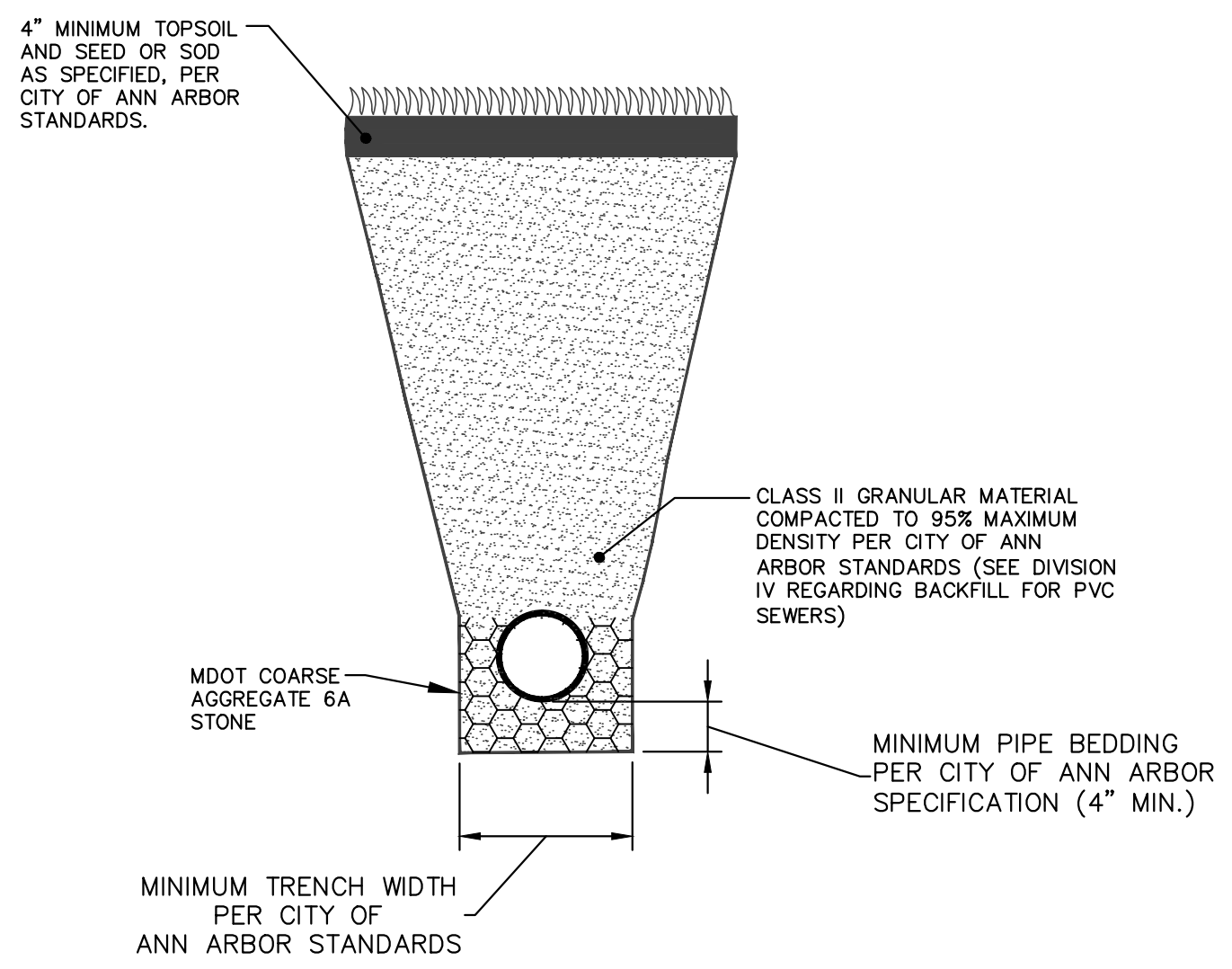
SCALE PLAN: #####
DRAWING No. 2014033-03

NOTES, CONTACTS, BENCHMARKS

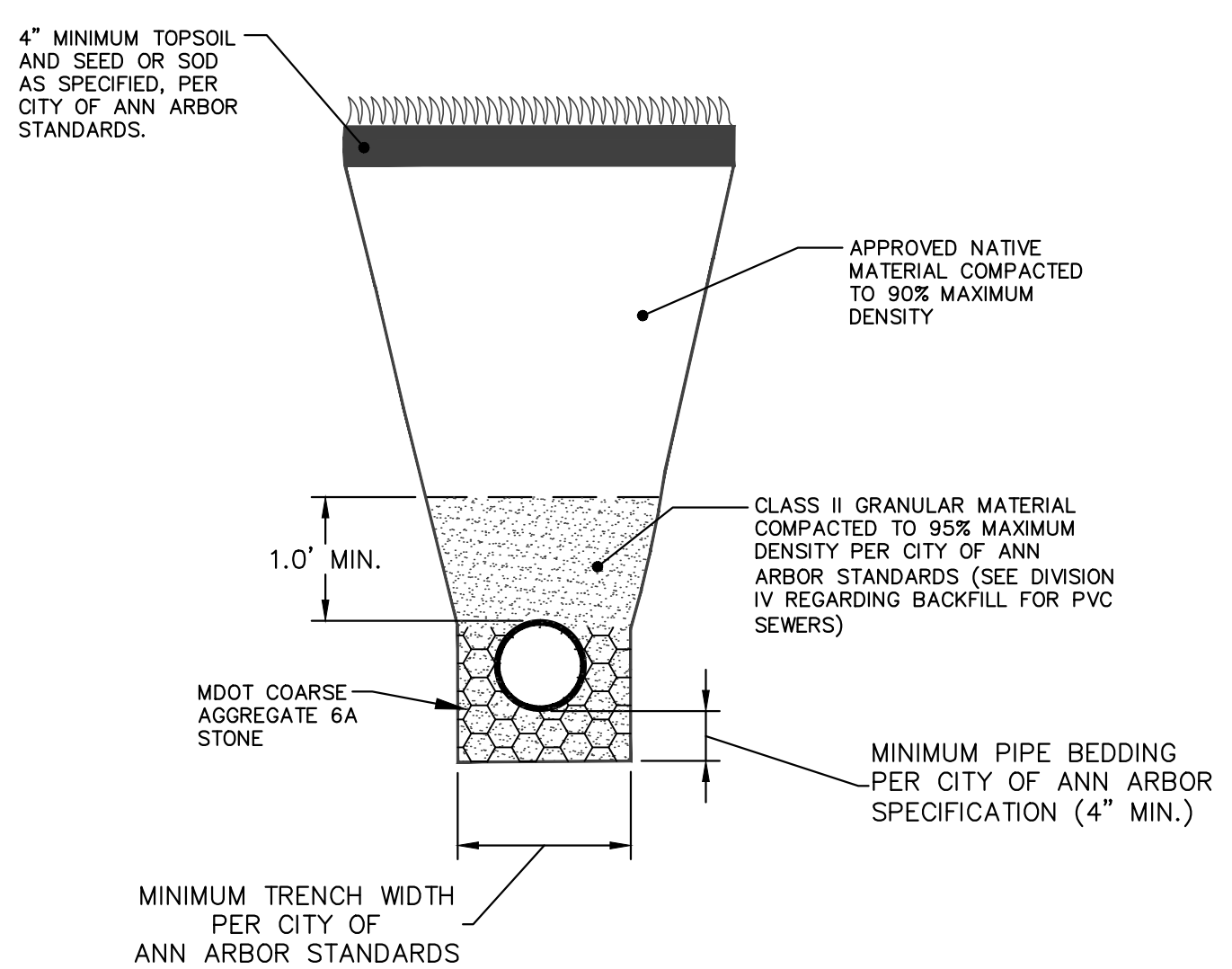
s:\project_management\Design\2014033 devonshire londonderry belmont wm\plan_production\Primary\2014033DET.dwg Dwg Created: 5-Feb-15 - _a2 standard bw.stb - Plot Date: 25-Mar-15



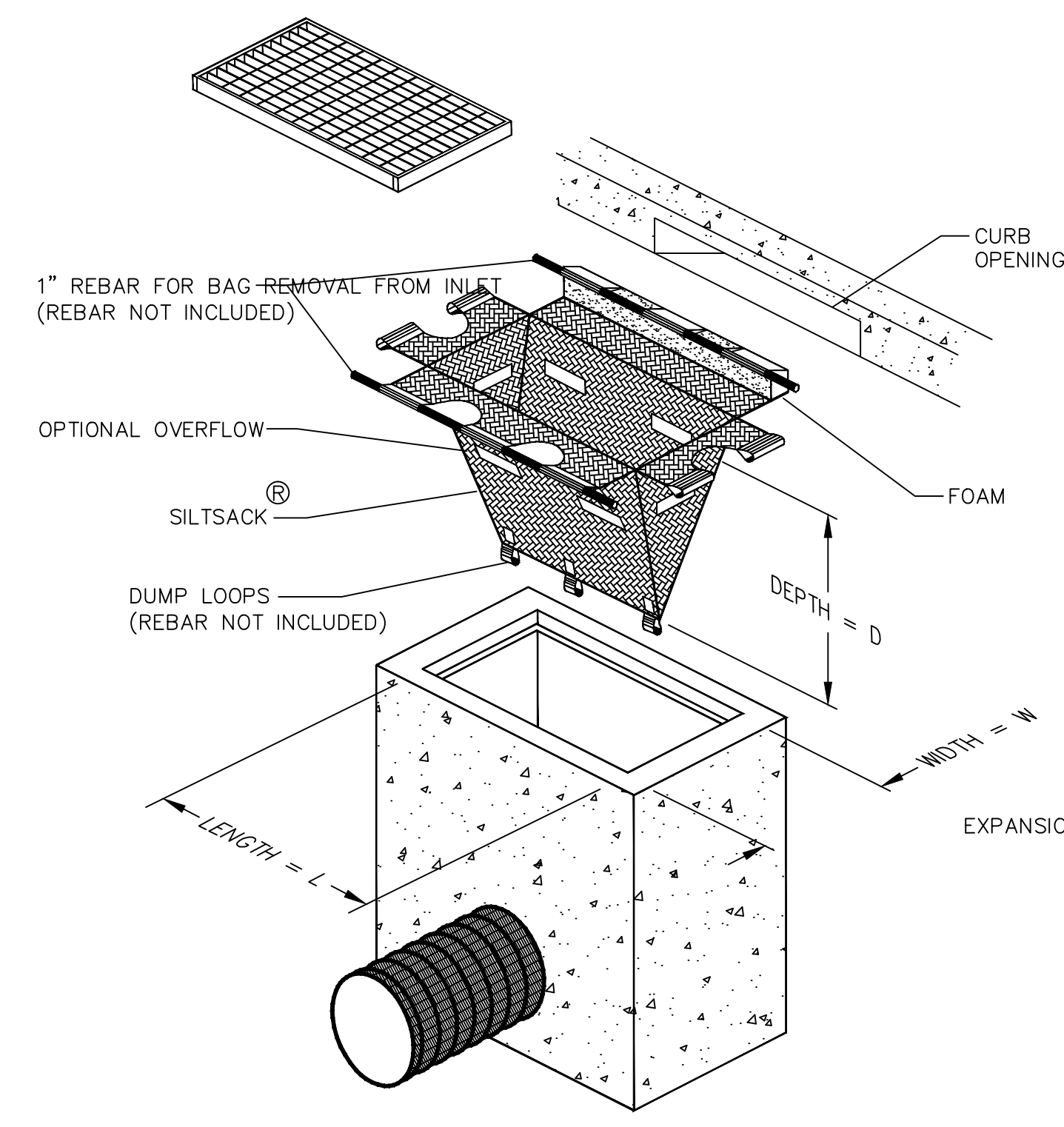
TRENCH DETAIL IA, MODIFIED



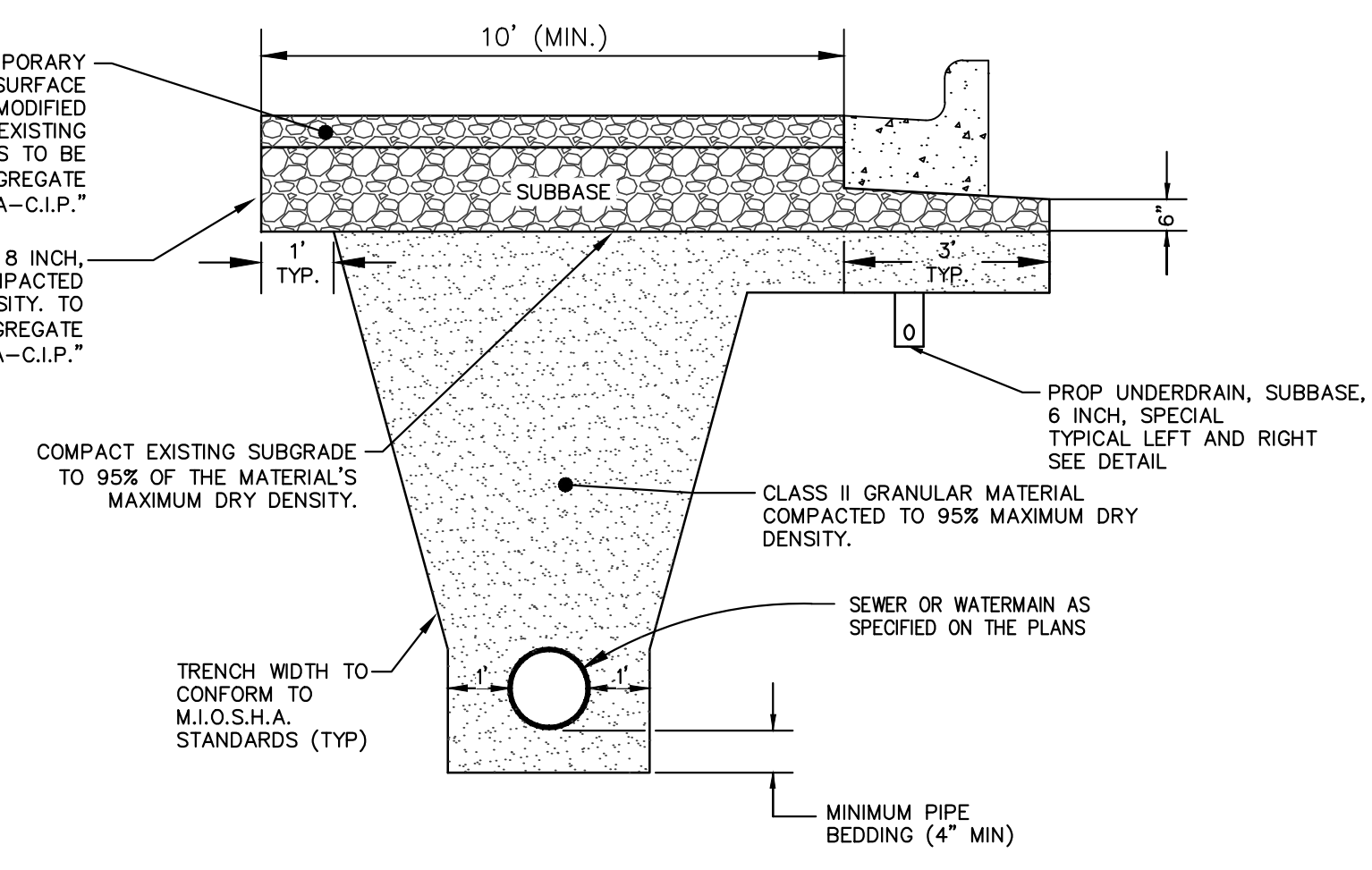
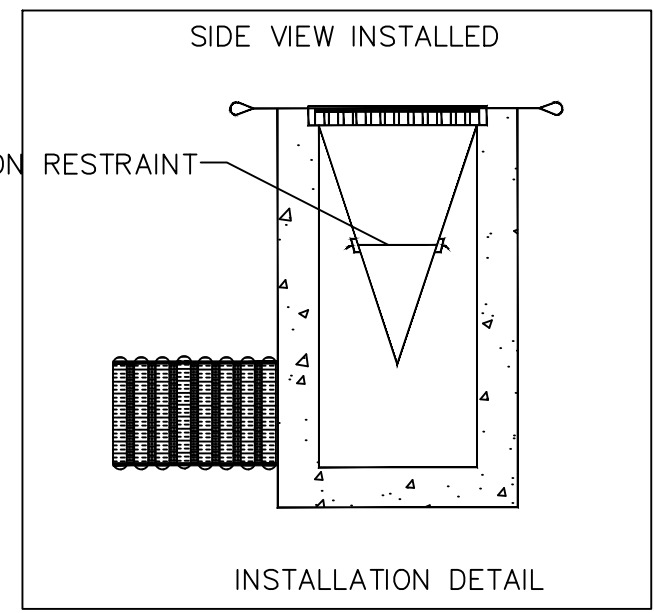
TRENCH DETAIL VI (FOR SANITARY SEWER WITHIN 10' OF ROADWAY)



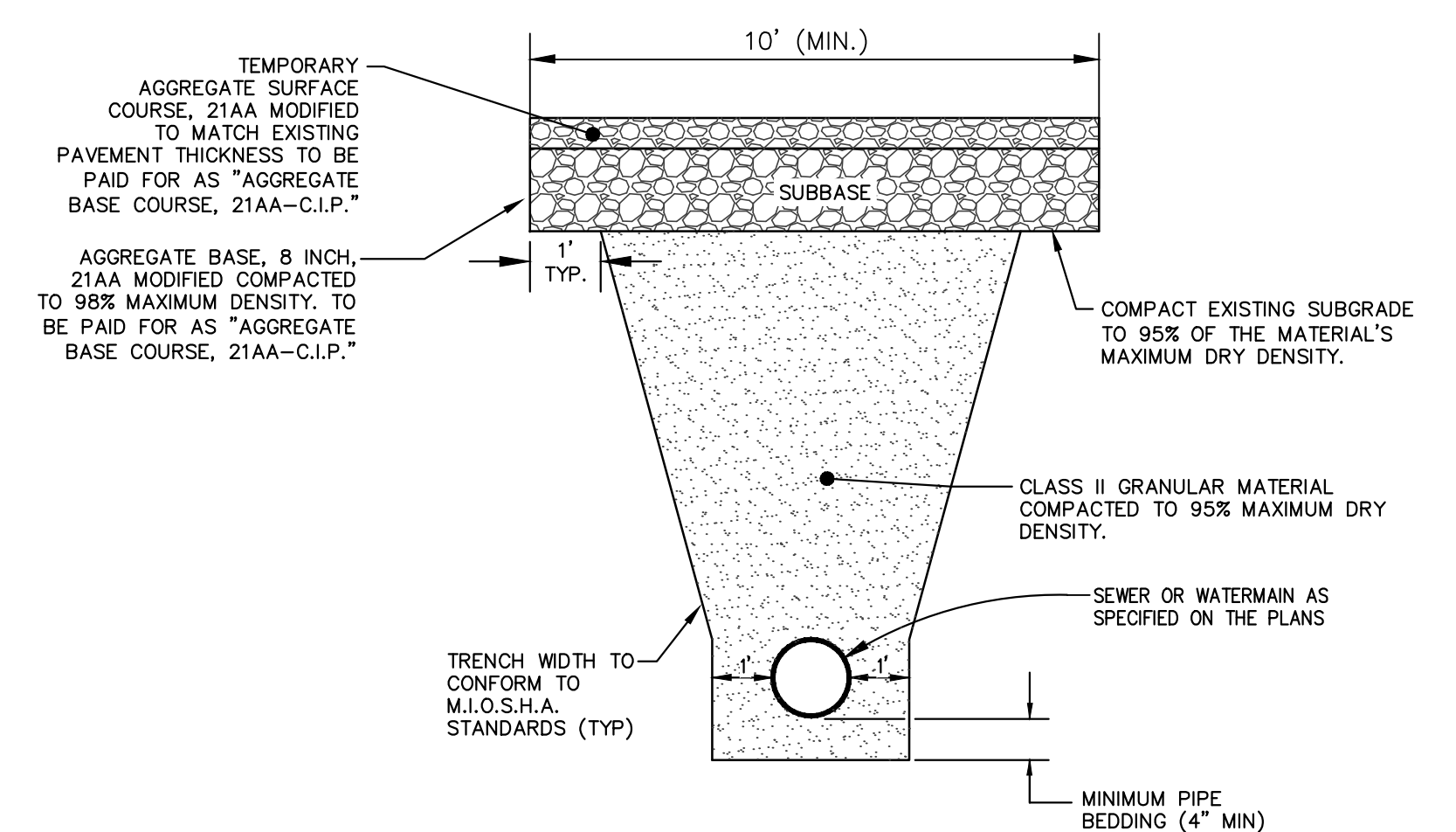
TRENCH DETAIL V



INLET FILTER (MODIFIED)
NOT TO SCALE



UTILITY TRENCH - TYPE IB MODIFIED
NOT TO SCALE



UTILITY TRENCH - TYPE IC MODIFIED
NOT TO SCALE

NOTE: DENSITY TESTING PER CITY OF ANN ARBOR SPECIFICATION
NOTE: TRENCH DETAILS SHOW TYPE OF BACKFILL AND SURFACE RESTORATION ONLY.
NOTE: ALL TRENCHING TO CONFORM TO ALL APPLICABLE M.I.O.S.H.A. STANDARDS

Know what's below. Call before you dig.

01	BID	3/25/2015	MAS	MAS/ES	AW	CHECKED
00	MOEQ SUBMITTAL	2/17/2015			AW	DRAWN
	REV.	DATE	DESCRIPTION			

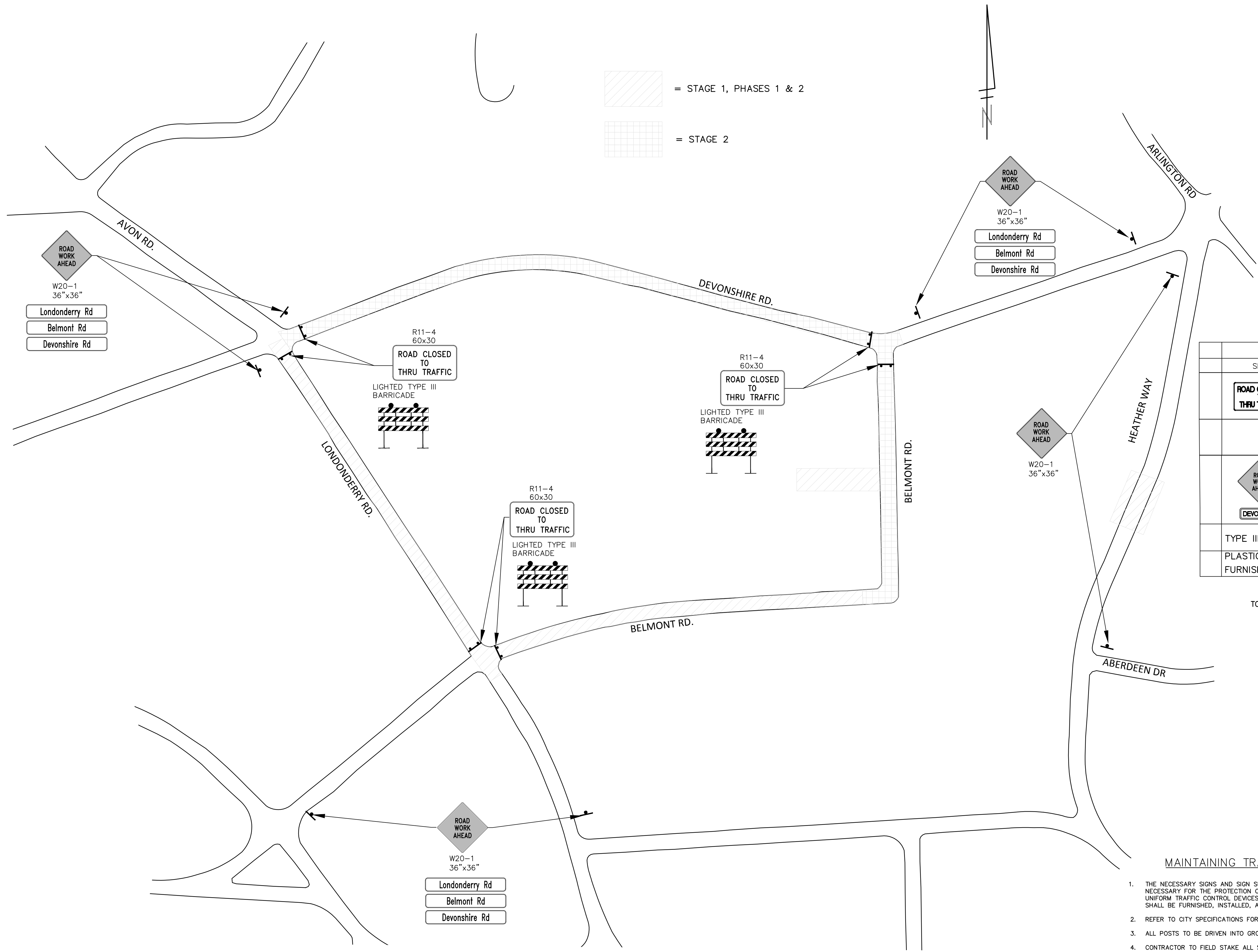
CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR MI 48106-8647
www.aagov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
DEVONSHIRE, LONDONDERRY, BELMONT WATER MAIN
TRENCH DETAIL INLET FILTER DETAIL

SCALE: NTS
DRAWING No. 2014033-04

SHEET No. 04 OF 21

s:\project_management\Design\2014033 devonshire londonderry belmont wm\plan_production\Primary\2014033DTR.dwg Dwg Created: 9-Jan-15 - _a2_standard bw.stb - Plot Date: 25-Mar-15



TRAFFIC CONTROL SIGN			
SIGN	NUMBER	QUANTITY	TOTAL AREA (SFT)
	R11-3 60x30	3	43
	W20-1 36 X 36	8	72
	D3-1	18	54
TYPE III BARRICADE		6	
PLASTIC DRUM LIGHTED FURNISHED/OPERATE		185	

TOTAL TYPE B SIGNS FOR PROJECT= 169 SFT

MAINTAINING TRAFFIC AND TRAFFIC CONTROL

1. THE NECESSARY SIGNS AND SIGN SUPPORT STANDARDS, BARRICADES, AND TRAFFIC CONTROL DEVICES NECESSARY FOR THE PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AS APPROVED BY THE CITY OF ANN ARBOR. ALL SUCH DEVICES SHALL BE FURNISHED, INSTALLED, AND MAINTAINED BY THE CONTRACTOR.
2. REFER TO CITY SPECIFICATIONS FOR DETAILS ON MATERIALS, EQUIPMENT, AND CONSTRUCTION METHODS.
3. ALL POSTS TO BE DRIVEN INTO GROUND.
4. CONTRACTOR TO FIELD STAKE ALL SIGNS AND CONTACT CITY FOR REVIEW AND APPROVAL OF SIGN PLACEMENT PRIOR TO INSTALLATION.

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

REV.	DATE	DESCRIPTION
00	2/17/2015	MDECO SUBMITTAL
AW		CHECKED
MAS/ES		DRAWN

CITY OF ANN ARBOR
PUBLIC SERVICE
301 EAST HURON STREET
ANN ARBOR, MI 48106-0667
www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
DEVONSHIRE, LONDONDERRY, BELMONT WATER MAIN

TRAFFIC CONTROL

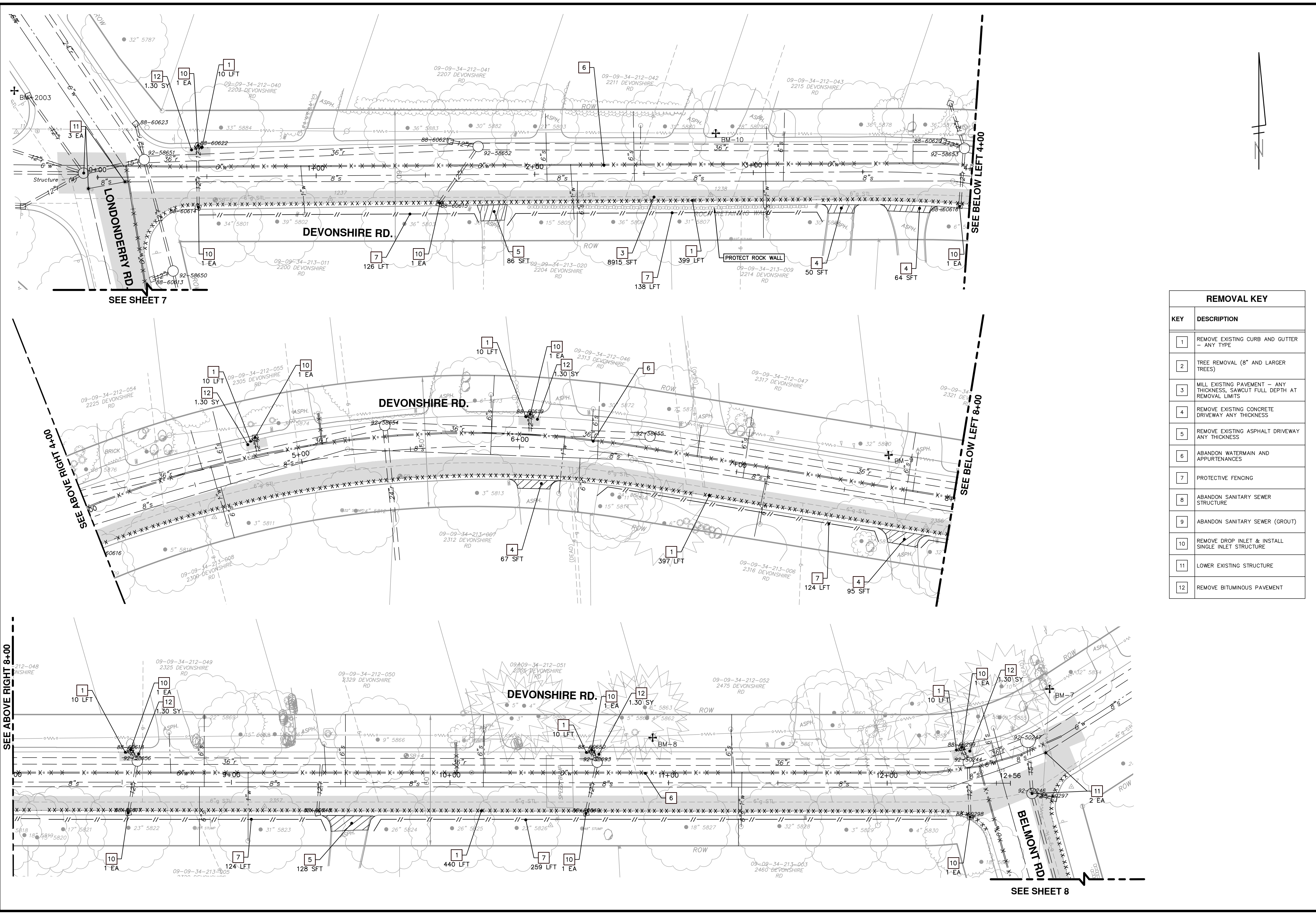
SCALE PLAN: 1" = 100'

DRAWING No. **2014033-05**

SHEET No.

05 OF 21

s:\project_management\Design\2014033 devonshire londonderry belmont wm\plan_production\Primary\2014033Rem1.dwg Dwg Created: 14-Jun-15 15:02 standard bw.stb -- Plot Date: 25-Mar-15



REMOVAL KEY	
KEY	DESCRIPTION
1	REMOVE EXISTING CURB AND GUTTER - ANY TYPE
2	TREE REMOVAL (8" AND LARGER TREES)
3	MILL EXISTING PAVEMENT - ANY THICKNESS, SAWCUT FULL DEPTH AT REMOVAL LIMITS
4	REMOVE EXISTING CONCRETE DRIVEWAY ANY THICKNESS
5	REMOVE EXISTING ASPHALT DRIVEWAY ANY THICKNESS
6	ABANDON WATERMAIN AND APPURTENANCES
7	PROTECTIVE FENCING
8	ABANDON SANITARY SEWER STRUCTURE
9	ABANDON SANITARY SEWER (GROUT)
10	REMOVE DROP INLET & INSTALL SINGLE INLET STRUCTURE
11	LOWER EXISTING STRUCTURE
12	REMOVE BITUMINOUS PAVEMENT

PROJECT MANAGEMENT - CITY OF ANN ARBOR
DEVONSHIRE, LONDONDERRY, BELMONT WATER MAIN REMOVALS

SCALE PLAN: 1" = 20'

DRAWING No. 2014033-06

SHEET No. 06 OF 21

REMOVALS

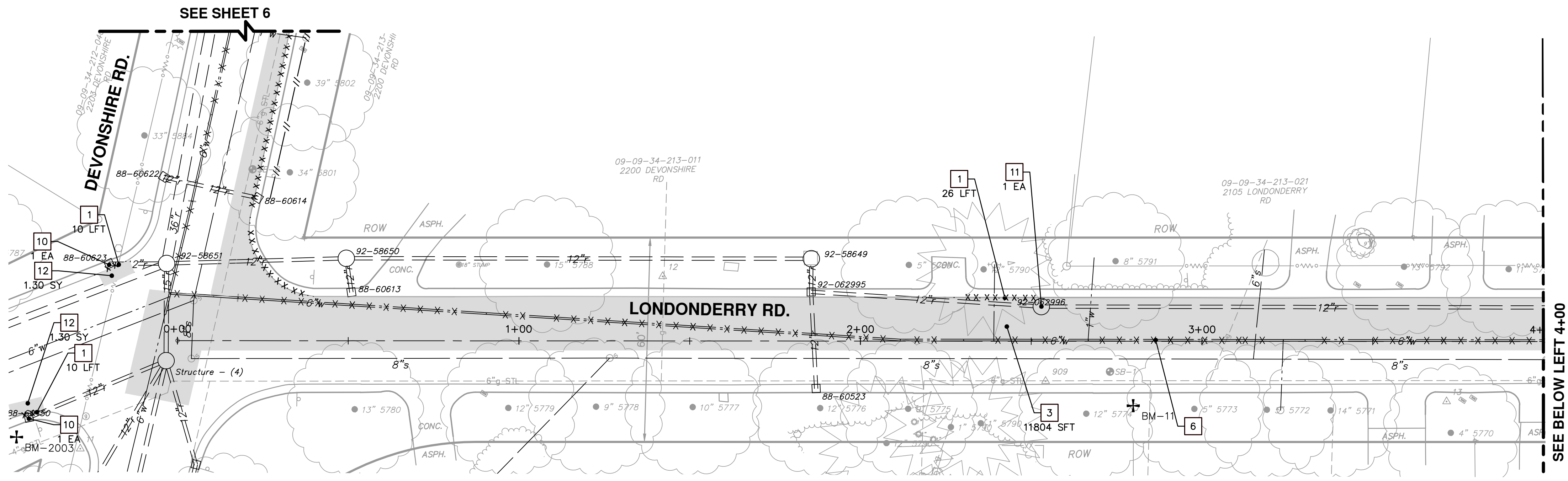
DEVONSHIRE REMOVAL

00	MOEQ SUBMITTAL	DESCRIPTION	REV.
01	2/17/2015	DATE	
	WAS/ES	DRAWN	CHECKED
	AW		

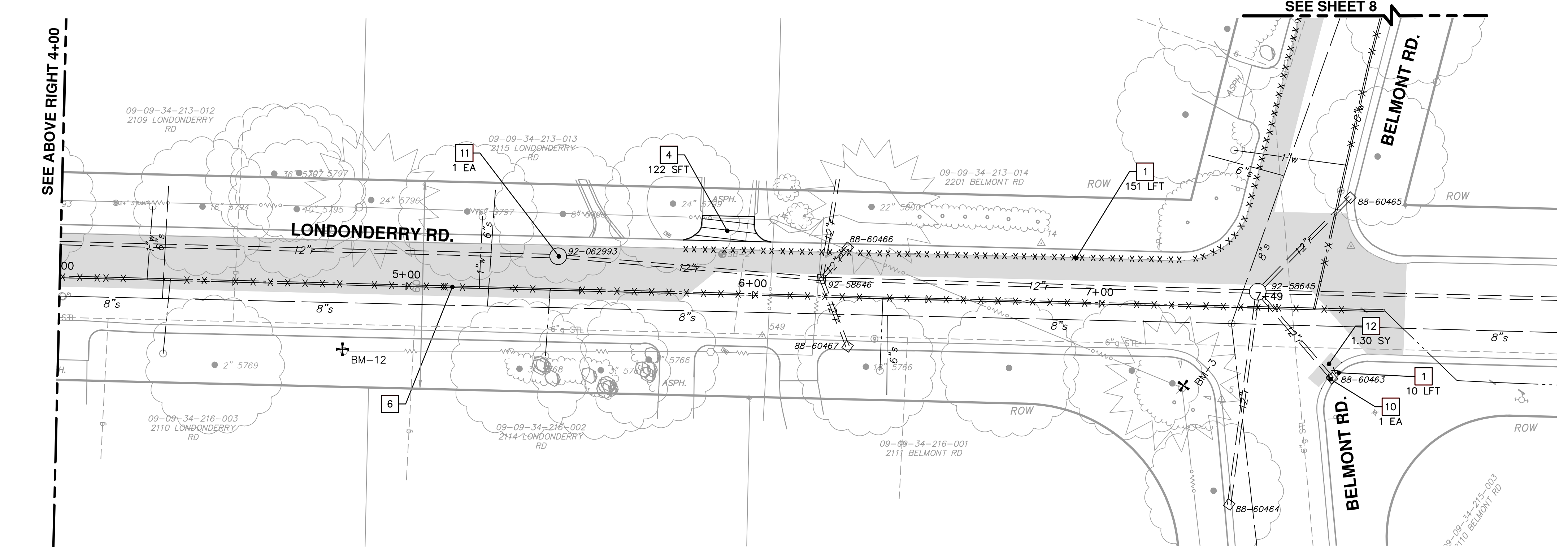
811
Know what's below. Call before you dig.

CITY OF ANN ARBOR
 PUBLIC SERVICE
 301 EAST HURON STREET
 ANN ARBOR MI 48106-0667
 www.aagov.org

s:\project_management\Design\20140333 devonshire londonderry belmont wm\plan_production\Primary\20140333Rem2.dwg Dwg Created: 14-Jan-15 --_02 standard bw.stb -- Plot Date: 25-Mar-15



SEE BELOW LEFT 4+00



SEE ABOVE RIGHT 4+00

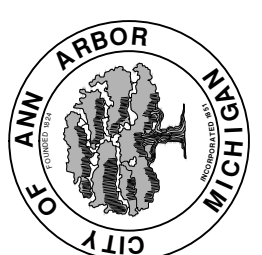
SEE SHEET 8

REMOVAL KEY	
KEY	DESCRIPTION
1	REMOVE EXISTING CURB AND GUTTER - ANY TYPE
2	TREE REMOVAL (8" AND LARGER TREES)
3	MILL EXISTING PAVEMENT - ANY THICKNESS, SAWCUT FULL DEPTH AT REMOVAL LIMITS
4	REMOVE EXISTING CONCRETE DRIVEWAY ANY THICKNESS
5	REMOVE EXISTING ASPHALT DRIVEWAY ANY THICKNESS
6	ABANDON WATERMAIN AND APPURTENANCES
7	PROTECTIVE FENCING
8	ABANDON SANITARY SEWER STRUCTURE
9	ABANDON SANITARY SEWER (GROUT)
10	REMOVE DROP INLET & INSTALL SINGLE INLET STRUCTURE
11	LOWER EXISTING STRUCTURE
12	REMOVE BITUMINOUS PAVEMENT

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
 PROFILE: 1" = 20'
DEVONSHIRE, LONDONDERRY, BELMONT WATER MAIN REMOVALS

SHEET No. **07 OF 21**

REMOVALS
 LONDONDERRY RD REMOVALS



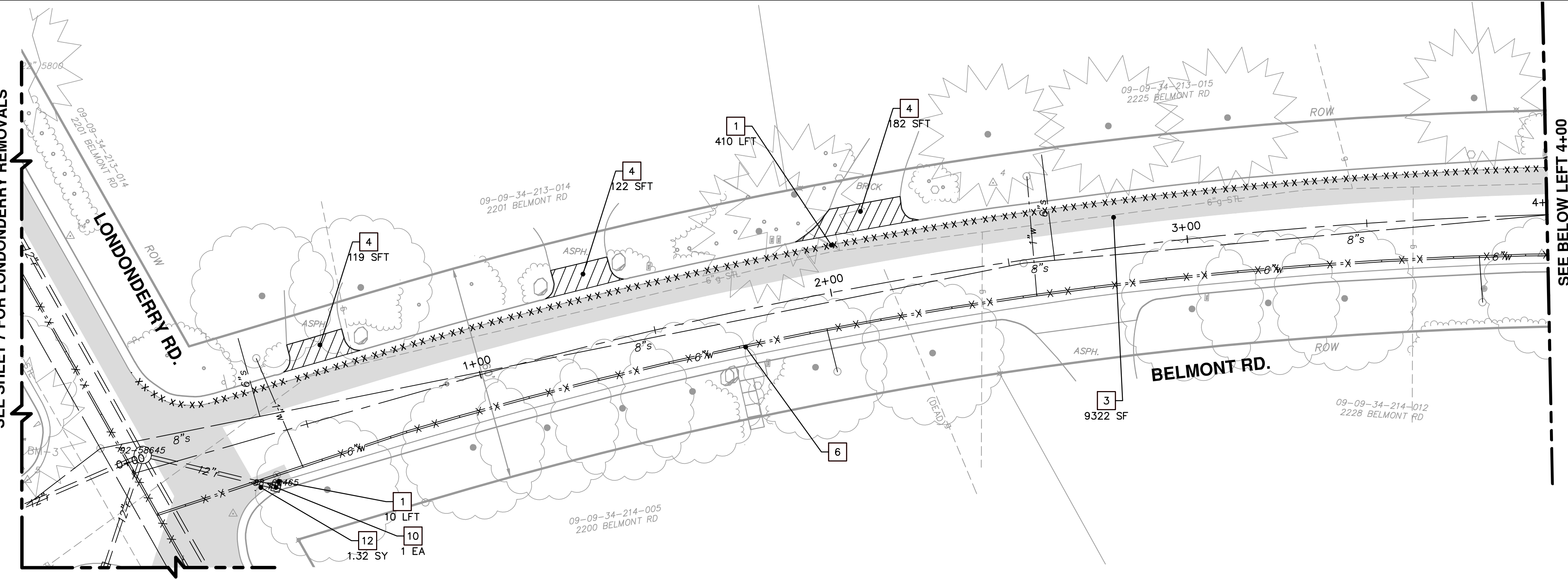
CITY OF ANN ARBOR
 PUBLIC SERVICE
 301 EAST HURON STREET
 ANN ARBOR, MI 48106-8647
 WWW.A2GOV.ORG

REV.	DESCRIPTION	DATE	DRAWN	CHECKED
00	MOEQU SUBMITTAL	2/17/2015	WAS/ES	AW

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

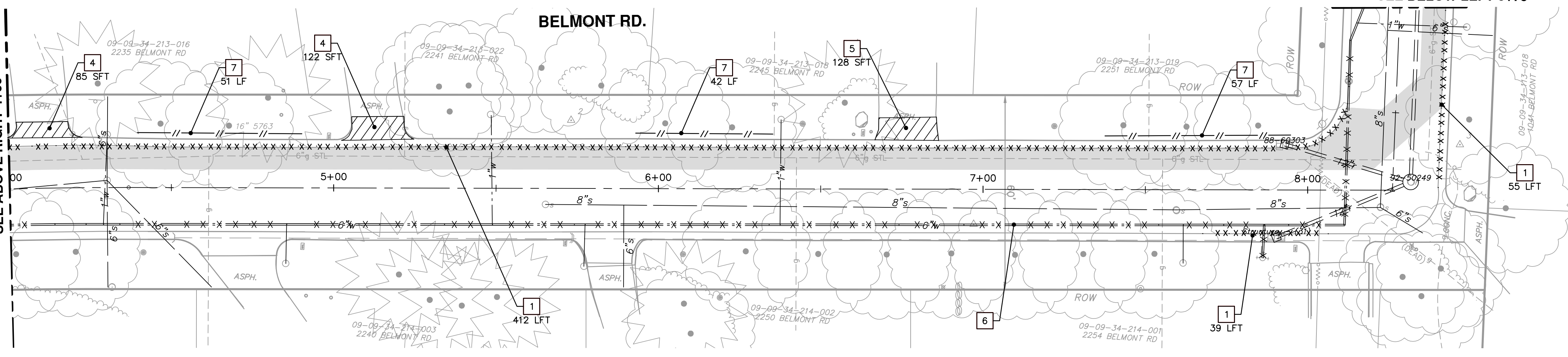
s:\project_management\Design\2014033 devonshire londonderry belmont wm\plan_production\Primary\2014033Rem3.dwg Created: 14-Jan-15 10:02 standard bw.stb - Plot Date: 25-Mar-15

SEE SHEET 7 FOR LONDONDERRY REMOVALS



SEE BELOW LEFT 4+00

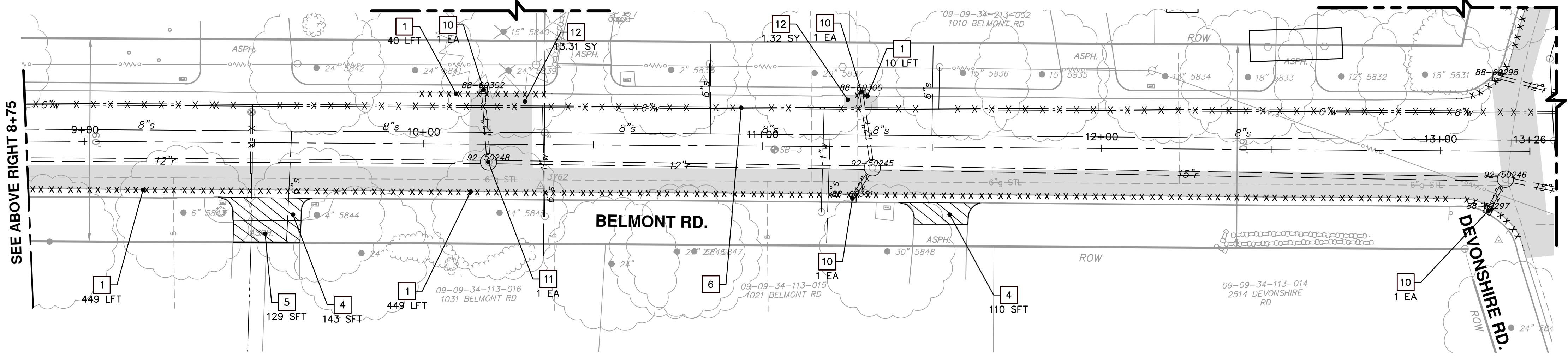
SEE ABOVE RIGHT 4+00



SEE BELOW LEFT 8+75

SEE SHEET 9 FOR SANITARY SEWER REMOVALS

SEE SHEET 6 FOR DEVONSHIRE REMOVALS



REMOVAL KEY	
KEY	DESCRIPTION
1	REMOVE EXISTING CURB AND GUTTER - ANY TYPE
2	TREE REMOVAL (8" AND LARGER TREES)
3	MILL EXISTING PAVEMENT - ANY THICKNESS, SAWCUT FULL DEPTH AT REMOVAL LIMITS
4	REMOVE EXISTING CONCRETE DRIVEWAY ANY THICKNESS
5	REMOVE EXISTING ASPHALT DRIVEWAY ANY THICKNESS
6	ABANDON WATERMAIN AND APPURTENANCES
7	PROTECTIVE FENCING
8	ABANDON SANITARY SEWER STRUCTURE
9	ABANDON SANITARY SEWER (GROUT)
10	REMOVE DROP INLET & INSTALL SINGLE INLET STRUCTURE
11	LOWER EXISTING STRUCTURE
12	REMOVE BITUMINOUS PAVEMENT

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

AW
DRAWN
DATE
2/17/2015
REV.
00

CITY OF ANN ARBOR
PUBLIC SERVICE
301 EAST HURON STREET
ANN ARBOR MI 48106-0667
www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
DEVONSHIRE, LONDONDERRY, BELMONT WATER MAIN REMOVALS

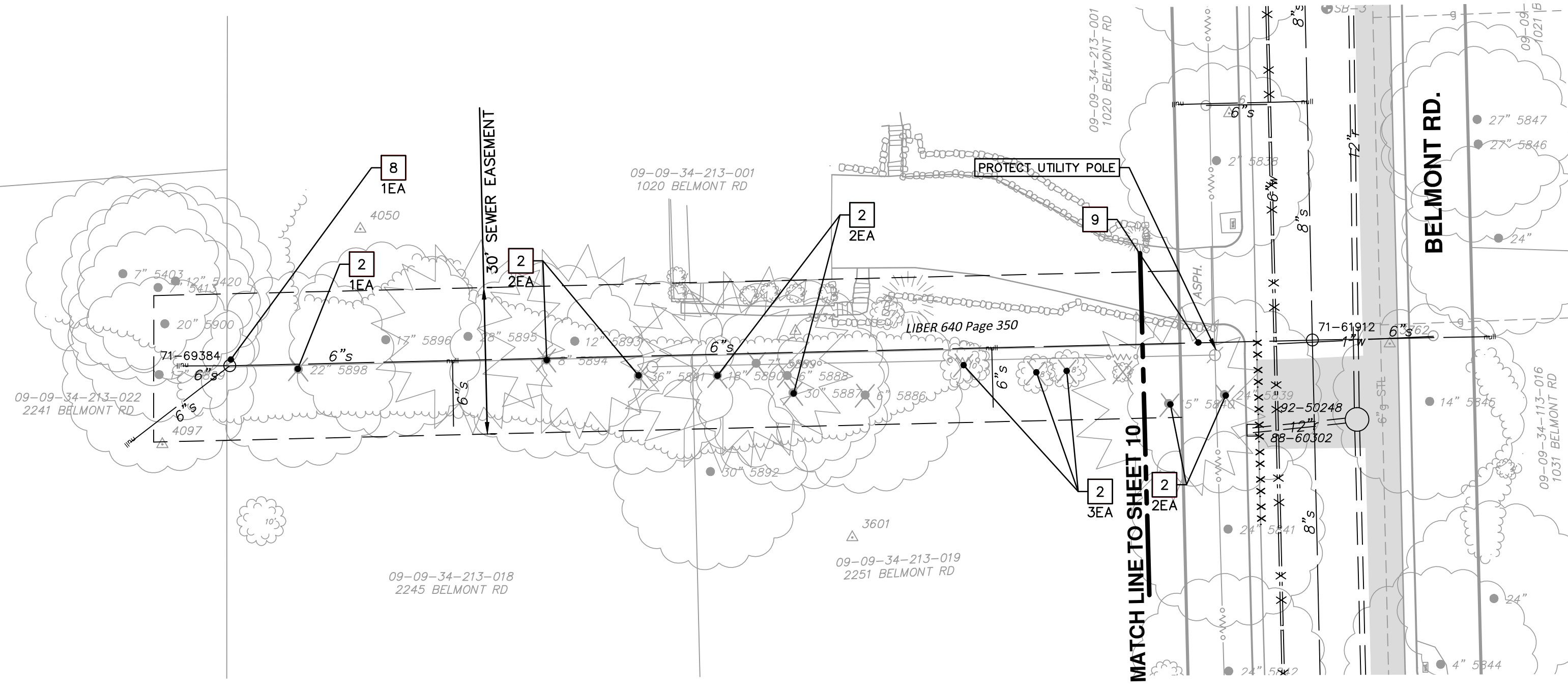
BELMONT RD REMOVALS

SCALE PLAN: 1" = 20'

DRAWING No. 2014033-08

SHEET No. 08 OF 21

08 OF 21

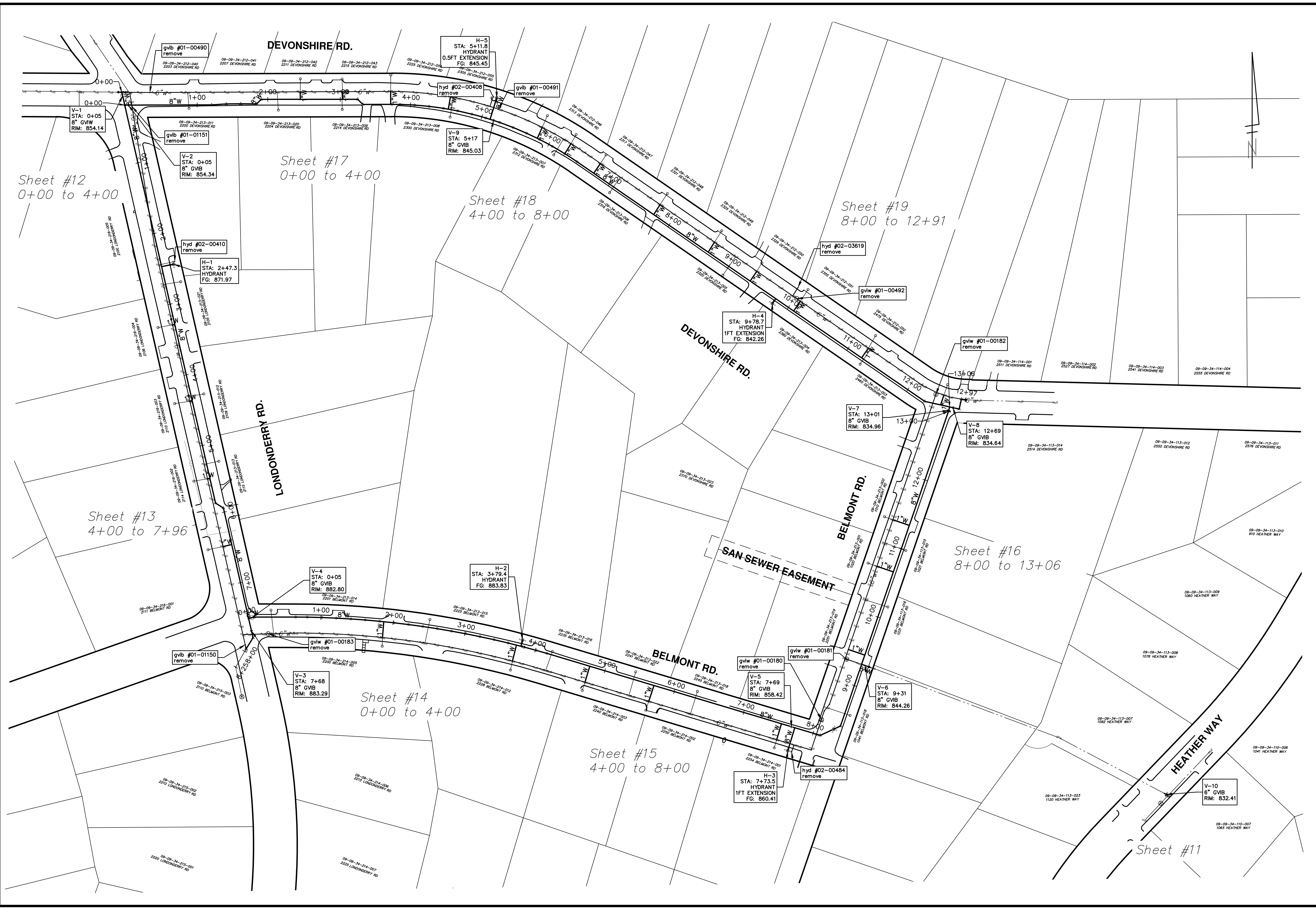


REMOVAL KEY	
KEY	DESCRIPTION
1	REMOVE EXISTING CURB AND GUTTER - ANY TYPE
2	TREE REMOVAL (8" AND LARGER TREES)
3	MILL EXISTING PAVEMENT - ANY THICKNESS, SAWCUT FULL DEPTH AT REMOVAL LIMITS
4	REMOVE EXISTING CONCRETE DRIVEWAY ANY THICKNESS
5	REMOVE EXISTING ASPHALT DRIVEWAY ANY THICKNESS
6	ABANDON WATERMAIN AND APPURTENANCES
7	PROTECTIVE FENCING
8	ABANDON SANITARY SEWER STRUCTURE
9	ABANDON SANITARY SEWER (GROUT)
10	REMOVE DROP INLET & INSTALL SINGLE INLET STRUCTURE
11	LOWER EXISTING STRUCTURE
12	REMOVE BITUMINOUS PAVEMENT



REV.	DESCRIPTION
00	MDEQ SUBMITTAL
	DATE
	DRAWN
	CHECKED

s:\project_management\Design\2014033\devonshire_londonderry_belmont_wm\plan_production\Primary\20140330\VERALL UTIL SHEET.dwg Dwg Created: 9-Jan-15 - _a2 standard bw.stb - Plot Date: 25-Mar-15



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

REV.	DATE	DESCRIPTION
00	2/17/2015	MDECO SUBMITTAL
AW		CHECKED
MA/ES		DRAWN

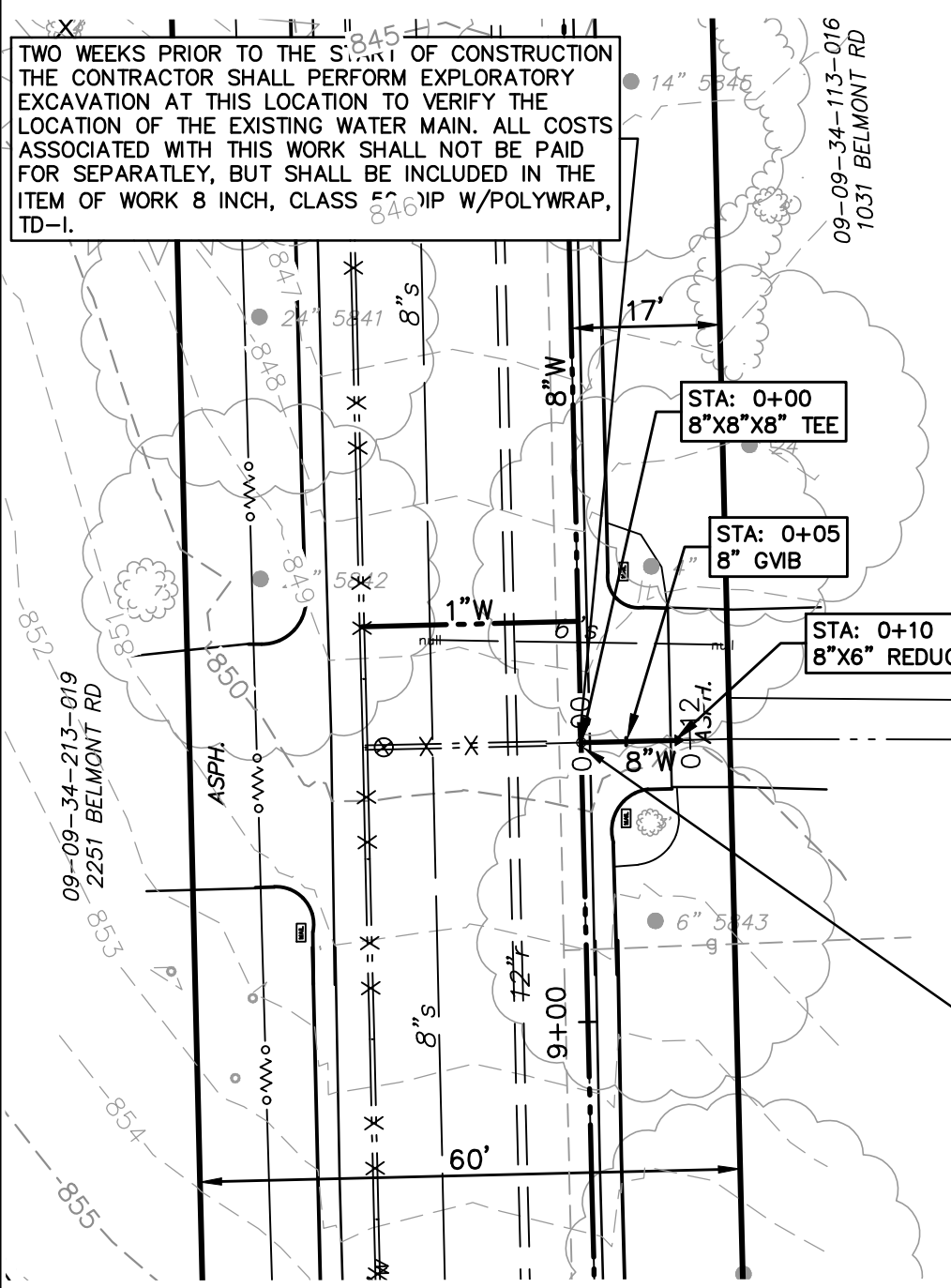
CITY OF ANN ARBOR
PUBLIC SERVICE
301 EAST HURON STREET
ANN ARBOR, MI 48106-0667
www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
DEVONSHIRE, LONDONDERRY, BELMONT WATER MAIN
WATER MAIN PLAN AND PROFILE
OVERALL UTILITY SHEET

SHEET No. **10 OF 21**

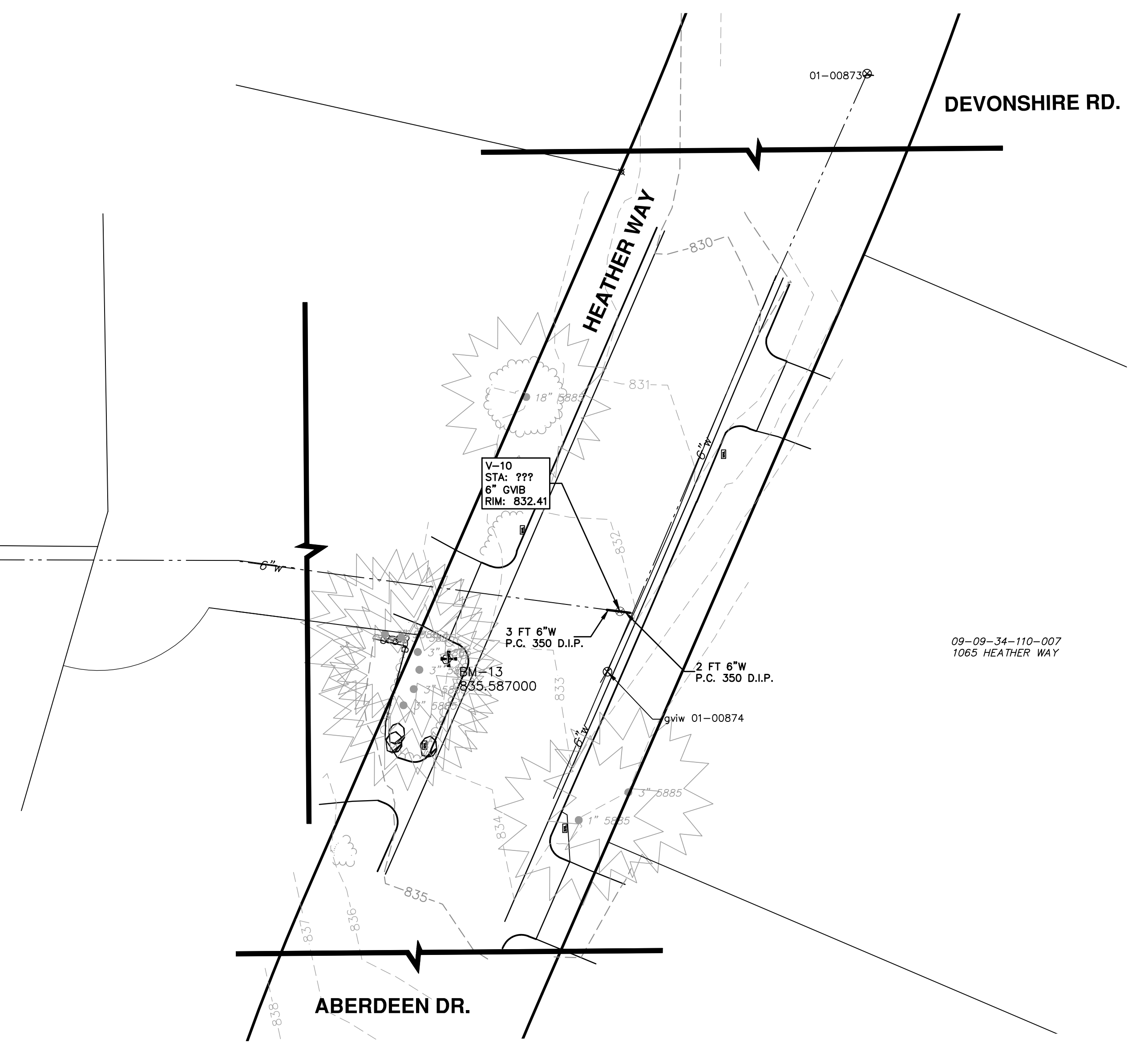
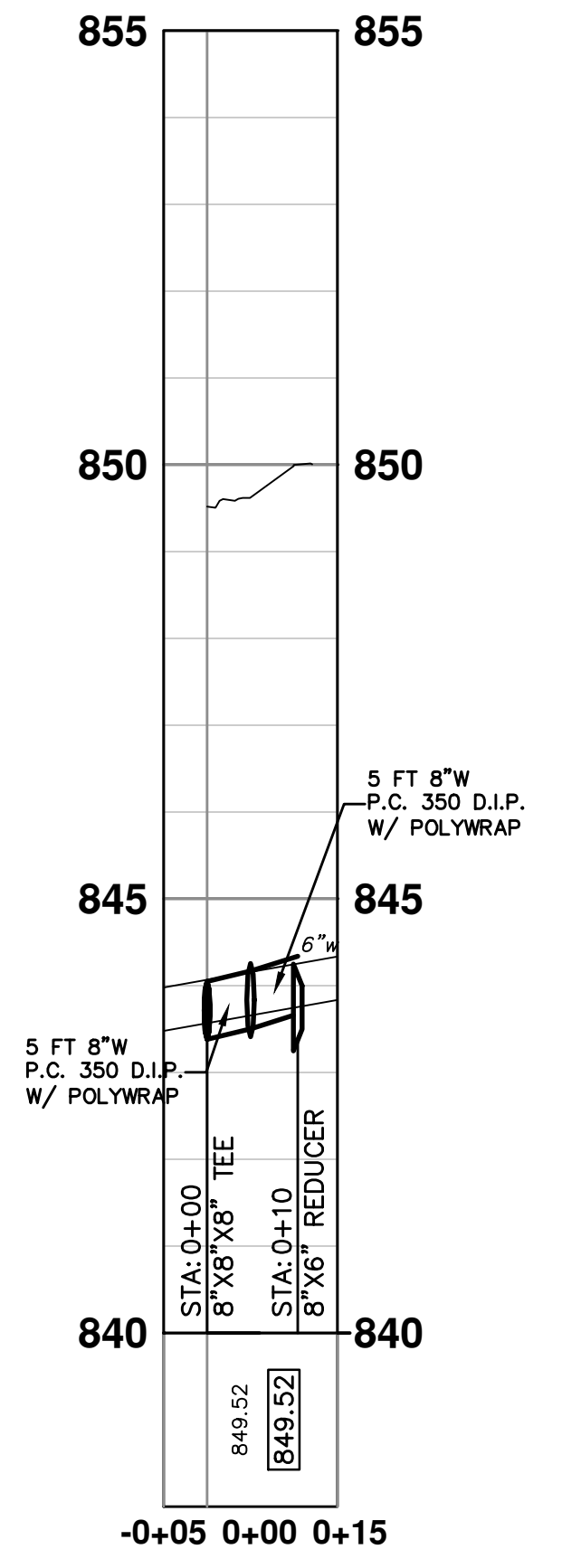
SCALE PLAN: 1" = 80'
DRAWING No. **2014033-10**

s:\project_management\Design\2014033 devonshire londonderry belmont_wm\plan_production\Primary\2014033Water.dwg Dwg Created: 17-Dec-14 --_a2 standard bw.stb -- Plot Date: 25-Mar-15



HEATHER WAY VALVE INSTALLATION TO BE PERFORMED PRIOR TO THE START OF CONSTRUCTION ON BELMONT RD. CONTRACTOR SHALL CUT-N-CAP EXISTING WATERMAIN TO FACILITATE PROPOSED WATERMAIN INSTALLATION. ALL COSTS ASSOCIATED WITH THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE ITEM OF WORK 8 INCH, CLASS 50 DIP W/POLYWRAP, TD-1.

CROSSLLOT WM



PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
 WATER MAIN PLAN AND PROFILE
 DEVONSHIRE, LONDONDERRY, BELMONT WATER MAIN
 HEATHER WAY WM & CROSS LOT

SCALE PLAN: 1" = 20'
 PROFILE: 1" = 4'

DRAWING No. 2014033-11

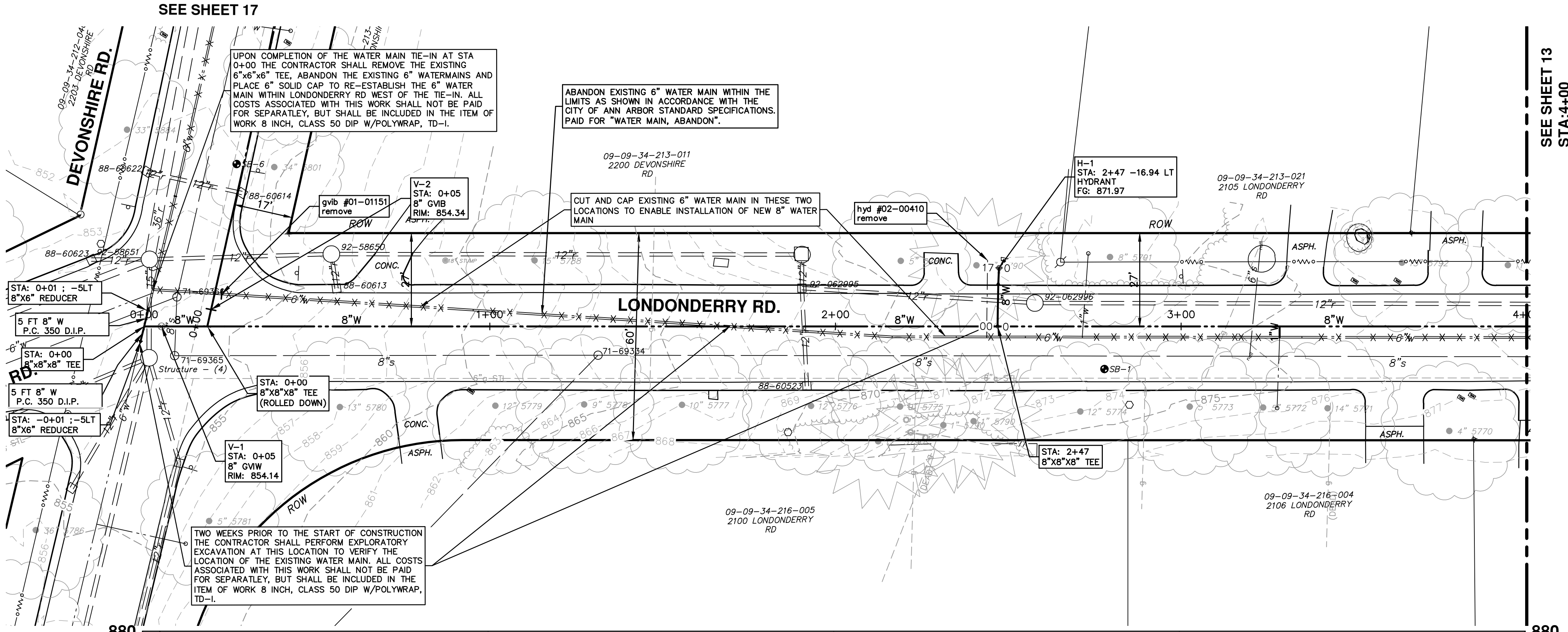
SHEET No. 11 OF 21

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

REV.	DESCRIPTION	DATE	DRAWN	CHECKED
00	MOEQ SUBMITTAL	2/17/2015	WAS/ES	AW

CITY OF ANN ARBOR
 PUBLIC SERVICE
 301 EAST HURON STREET
 ANN ARBOR, MI 48106-8647
 ANN ARBOR 734-794-4410
 www.a2gov.org

s:\project_management\Design\2014033 devonshire londonderry belmont wm\plan_production\Primary\2014033Water.dwg Dwg Created: 17-Dec-14 - _a2 standard bw.stb - Plot Date: 25-Mar-15

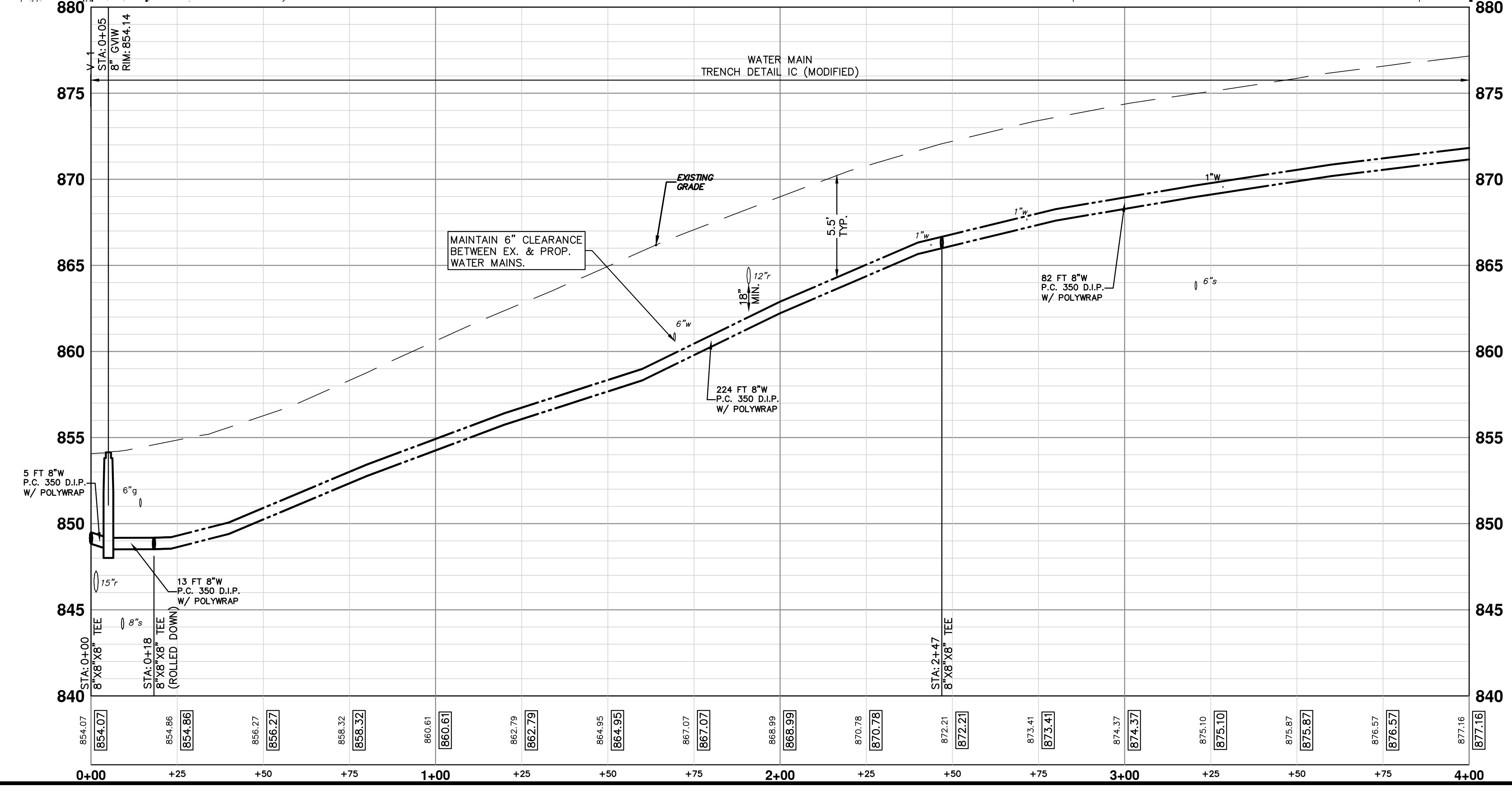
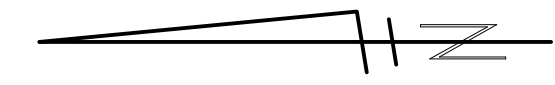


PROPOSED WATER MAIN STRUCTURE TABLE

STRUCTURE	TYPE	STATION	RIM	DEPTH
V-1	8" GVIW	0+05	854.14	5.64
H-1	HYDRANT	2+47	871.97	5.80

EXISTING WATER MAIN STRUCTURE TABLE

STRUCTURE	TYPE	STATION	RIM	DEPTH
gvib #01-01151	remove	0+22	854.20	7.99
hyd #02-00410	remove	2+44	871.78	7.58



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

CITY OF ANN ARBOR PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-1667
www.a2gov.org

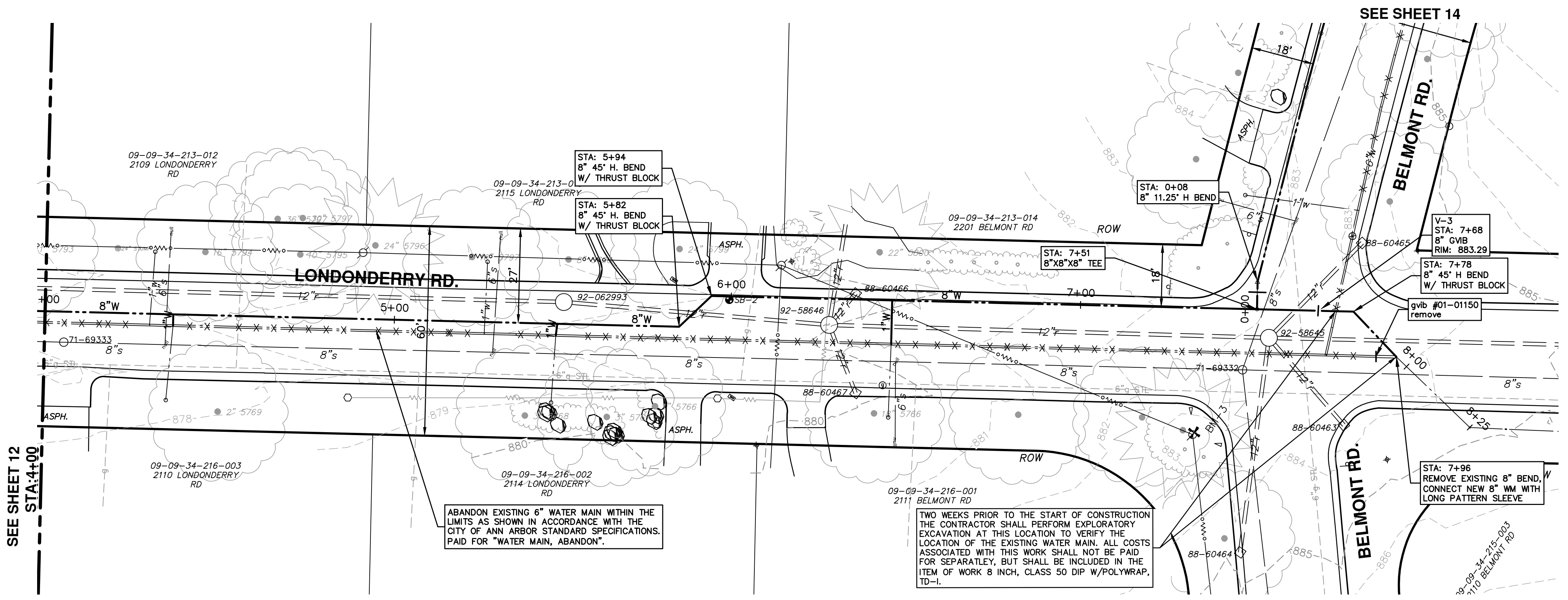
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PROFILE: 1" = 4'
DEVONSHIRE, LONDONDERRY, BELMONT WATER MAIN
WATER MAIN PLAN AND PROFILE
LONDONDERRY RD W/M STA. 0+00 TO 4+00

SCALE PLAN: 1" = 20'
DRAWING NO. **2014033-12**
SHEET NO. **12 OF 21**

REV.	DESCRIPTION	DATE	DRAWN	CHECKED
00	MDCO SUBMITTAL	2/17/2015	MA/ES	AW

s:\project_management\Design\20140333 devonshire londonderry belmont wm\plan production\Primary\20140333Water.dwg Dwg Created: 17-Dec-14 - _c2 standard bw.stb - Plot Date: 25-Mar-15

SEE SHEET 12
STA: 4+00

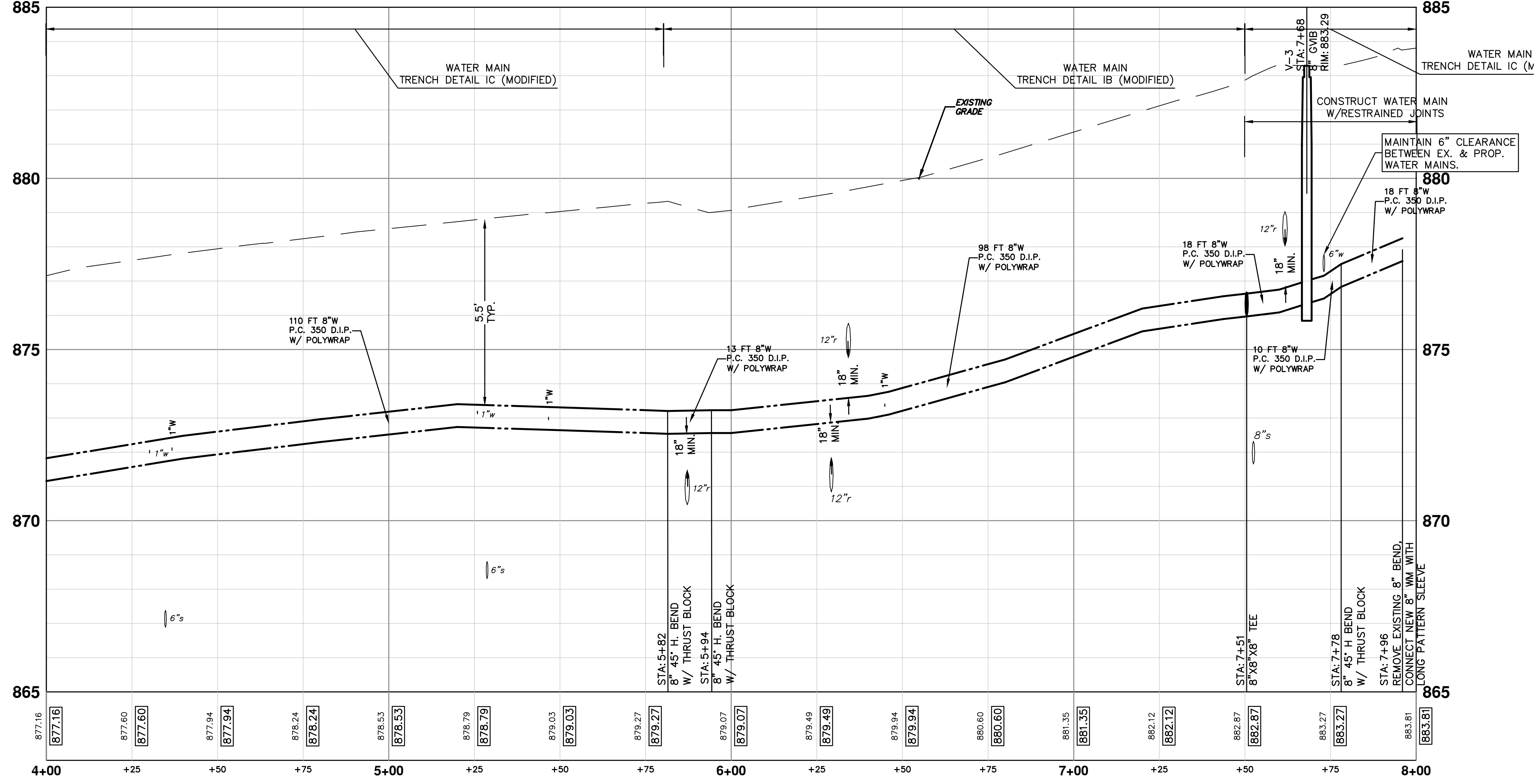


PROPOSED WATER MAIN STRUCTURE TABLE

STRUCTURE	TYPE	STATION	RIM	DEPTH
V-3	8" GVIB	7+68	883.29	6.95

EXISTING WATER MAIN STRUCTURE TABLE

STRUCTURE	TYPE	STATION	RIM	DEPTH
gvib #01-01150	remove	7+92	883.59	8.25



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

DATE: 2/17/2015
DRAWN: AW
CHECKED: []

CITY OF ANN ARBOR
PUBLIC SERVICE
301 EAST HURON STREET
ANN ARBOR, MI 48106-0667
www.a3gov.org

DESCRIPTION: LONDONDERRY RD WM STA. 4+00 TO 7+96

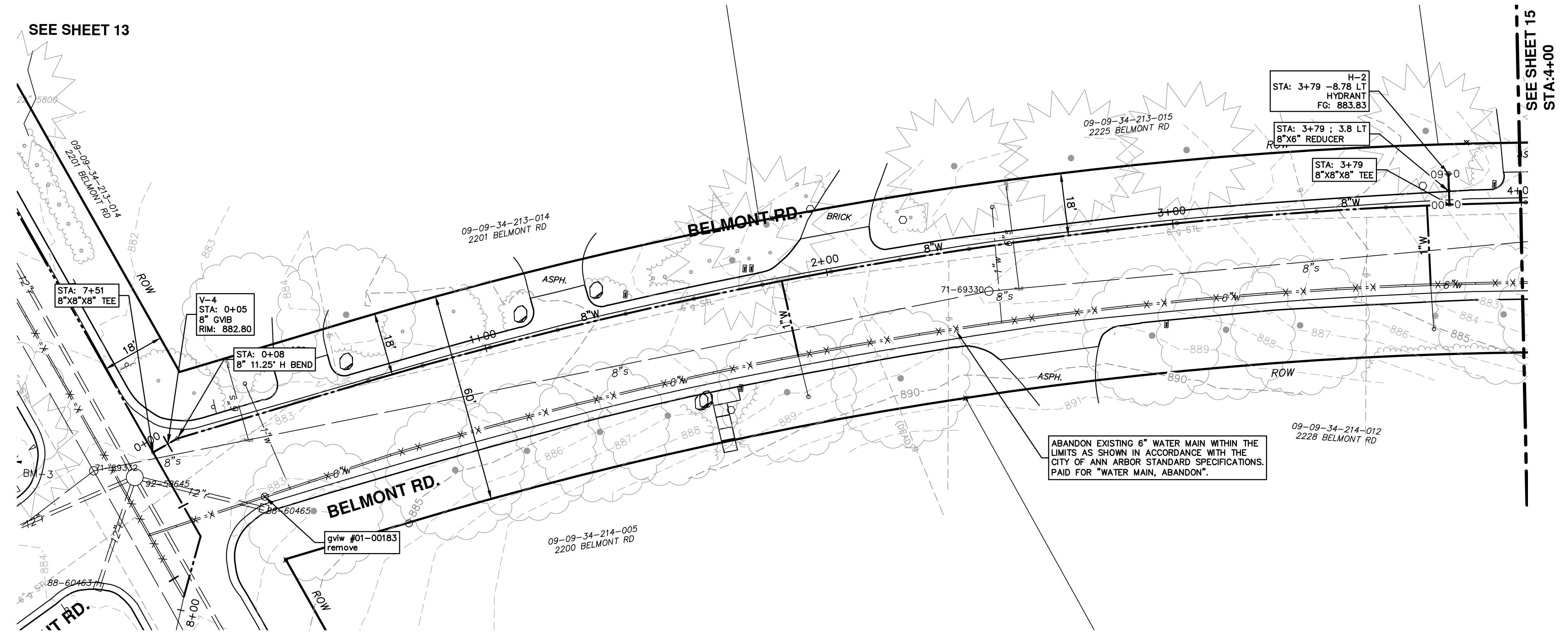
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
SCALE PLAN: 1" = 20'
PROFILE: 1" = 2'

DEVONSHIRE, LONDONDERRY, BELMONT WATER MAIN
WATER MAIN PLAN AND PROFILE

SHEET No. 13 OF 21

DRAWING No. 2014033-13

s:\project_management\Design\20140333 devonshire londonderry belmont wm\plan production\Primary\20140333Water.dwg Dwg Created: 17-Dec-14 - _c2 standard bw.stb - Plot Date: 25-Mar-15

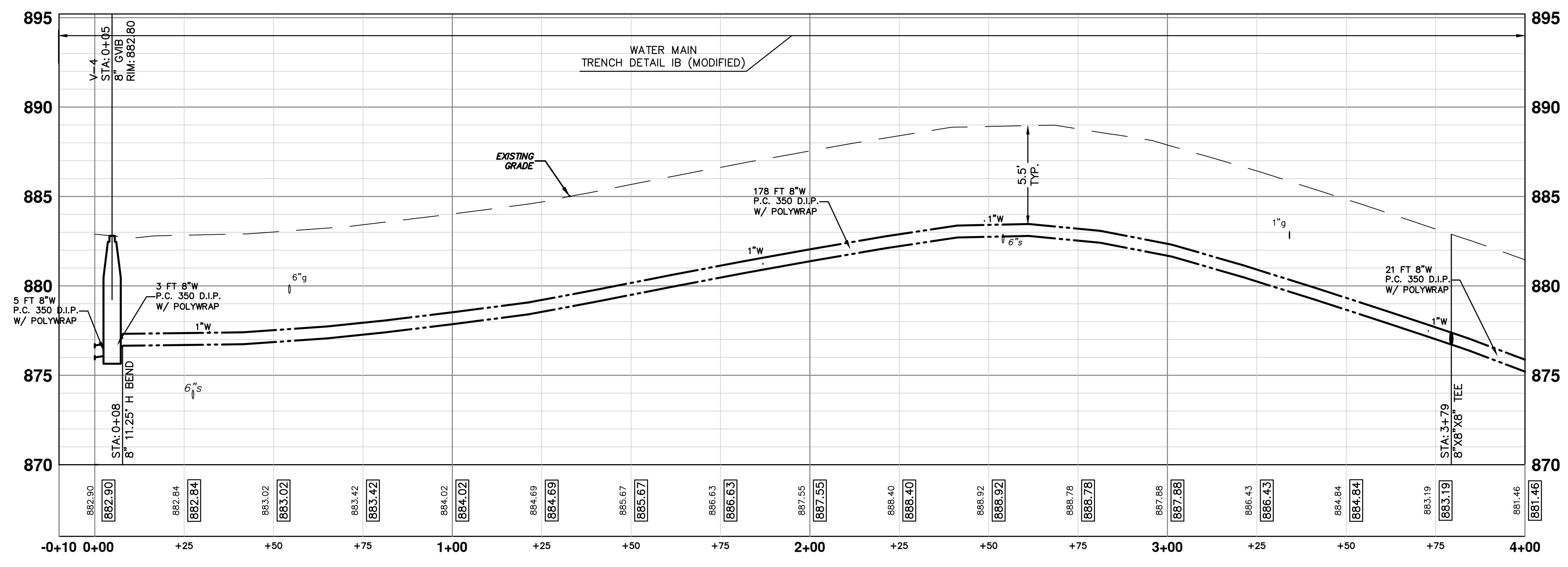


PROPOSED WATER MAIN STRUCTURE TABLE

STRUCTURE	TYPE	STATION	RIM	DEPTH
V-4	8" GVB	0+05	882.80	6.65
H-2	HYDRANT	3+79	883.83	6.04
1234		3+84	882.56	6.18

EXISTING WATER MAIN STRUCTURE TABLE

STRUCTURE	TYPE	STATION	RIM	DEPTH
gviw #01-00183	remove	0+27	882.94	7.97



Know what's below.
Call Before you dig.

AW	CHECKED
MA/ES	DRAWN
DATE	2/17/2015
REV.	00

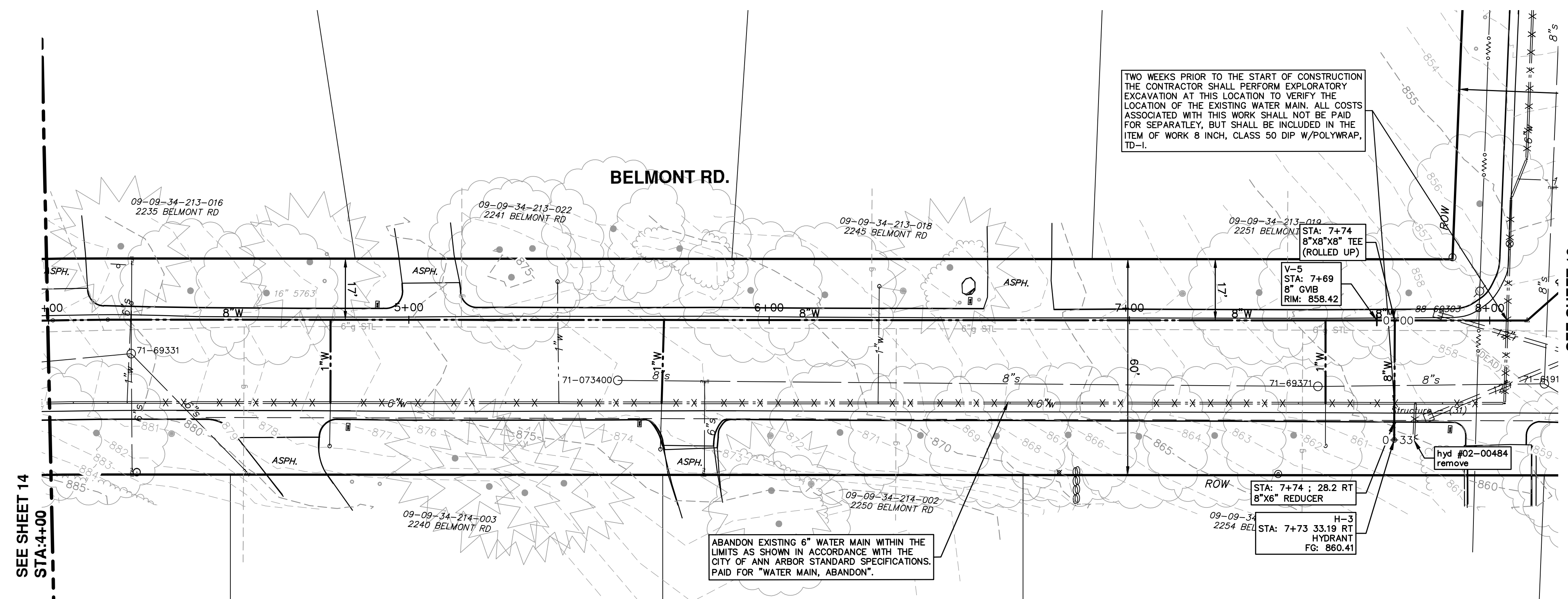
CITY OF ANN ARBOR
PUBLIC SERVICES
 301 EAST HURON STREET
 ANN ARBOR, MI 48106-6647
 www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
DEVONSHIRE, LONDONDERRY, BELMONT WATER MAIN
 WATER MAIN PLAN AND PROFILE
 BELMONT RD WM STA. 0+00 TO 4+00

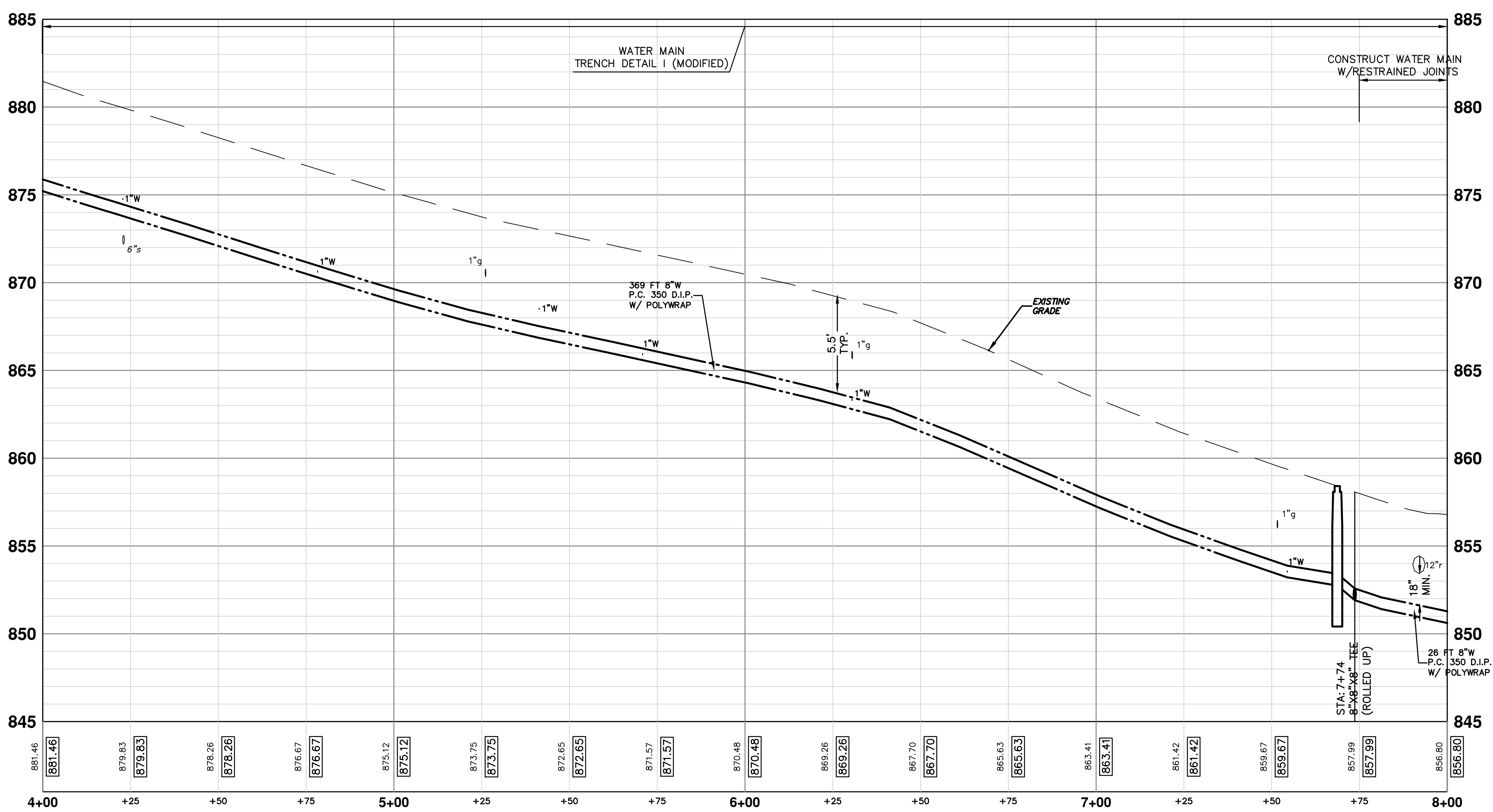
SHEET No. 14 OF 21

SCALE PLAN: 1" = 20'
 PROFILE: 1" = 4'
 DRAWING No. 2014033-14

s:\project_management\Design\2014033 devonshire londonderry belmont_wm\plan_production\Primary\2014033Water.dwg Dwg Created: 17-Dec-14 --_c2 standard bw.stb -- Plot Date: 25-Mar-15



SEE SHEET 16



PROPOSED WATER MAIN STRUCTURE TABLE				
STRUCTURE	TYPE	STATION	RIM	DEPTH
H-3	HYDRANT	7+73	860.41	5.11

EXISTING WATER MAIN STRUCTURE TABLE				
STRUCTURE	TYPE	STATION	RIM	DEPTH
hyd #02-00484	remove	7+79	860.10	6.92

Know what's below. Call Before you dig.

DATE: 2/17/2015
DRAWN: mas/es
CHECKED: AW

REV.	DESCRIPTION
00	MOEQ SUBMITTAL

CITY OF ANN ARBOR
 PUBLIC SERVICES
 301 EAST HURON STREET
 ANN ARBOR, MI 48106-6647
 www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
 DEVONSHIRE, LONDONDERRY, BELMONT WATER MAIN
 WATER MAIN PLAN AND PROFILE
 BELMONT RD WM STA. 4+00 TO 8+00

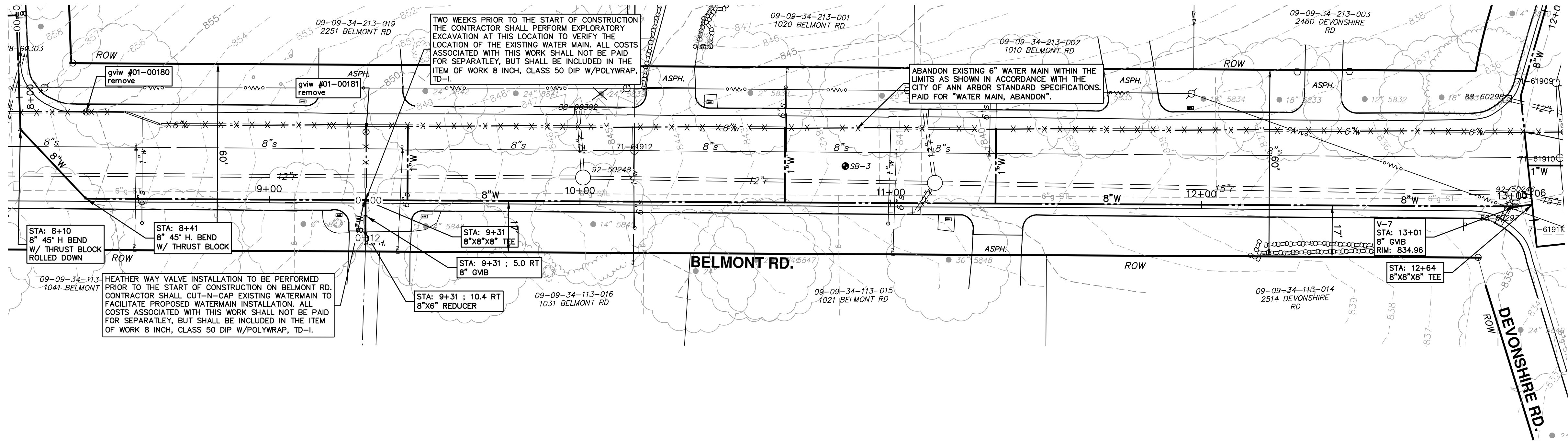
SCALE PLAN: 1" = 4'
 PROFILE: 1" = 4'

DRAWING NO.: 2014033-15

SHEET NO.: 15 OF 21

SEE SHEET 15

SEE SHEET 19

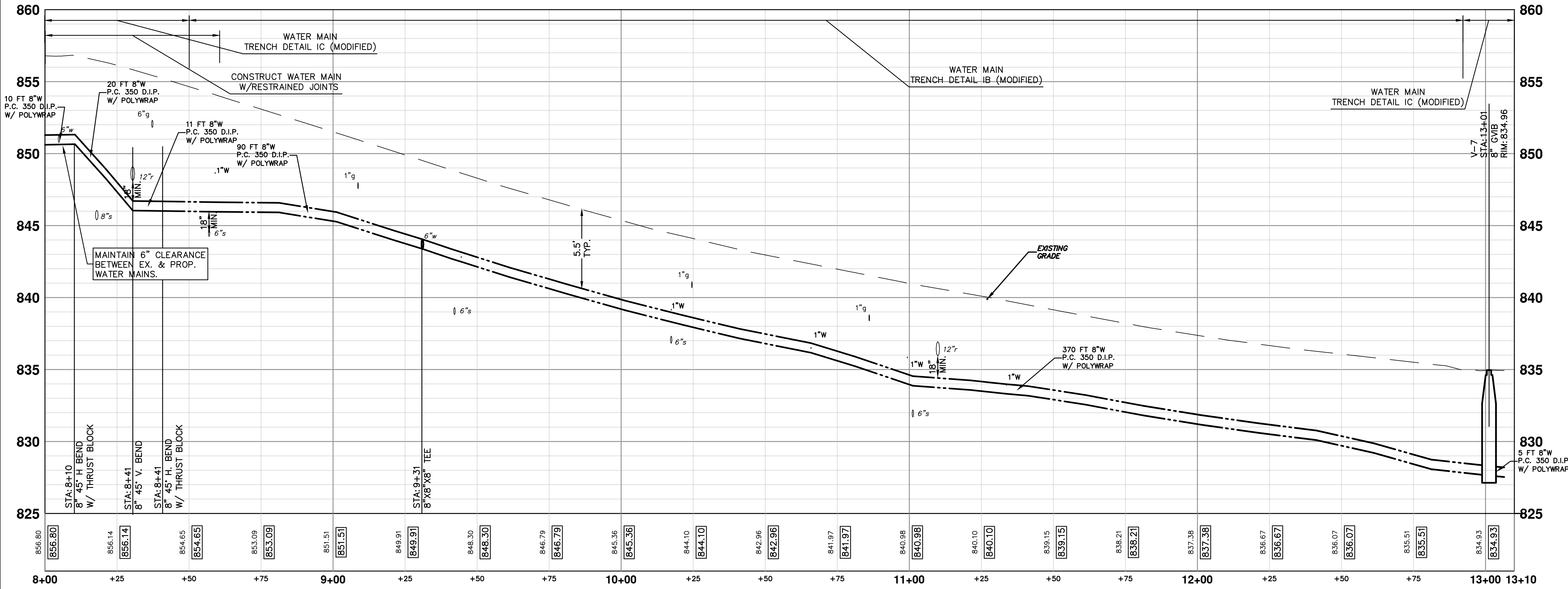



PROPOSED WATER MAIN STRUCTURE TABLE

STRUCTURE	TYPE	STATION	RIM	DEPTH
V-7	8" GVB	13+01	834.96	7.32

EXISTING WATER MAIN STRUCTURE TABLE


STRUCTURE	TYPE	STATION	RIM	DEPTH
gviw #01-00180	remove	8+21	855.22	7.98
gviw #01-00181	remove	9+31	849.64	8.14





Know what's below.
Call before you dig.

REV.	DESCRIPTION	DATE	DRAWN	CHECKED
00	MDCQ SUBMITTAL	2/17/2015	MA5/ES	AW



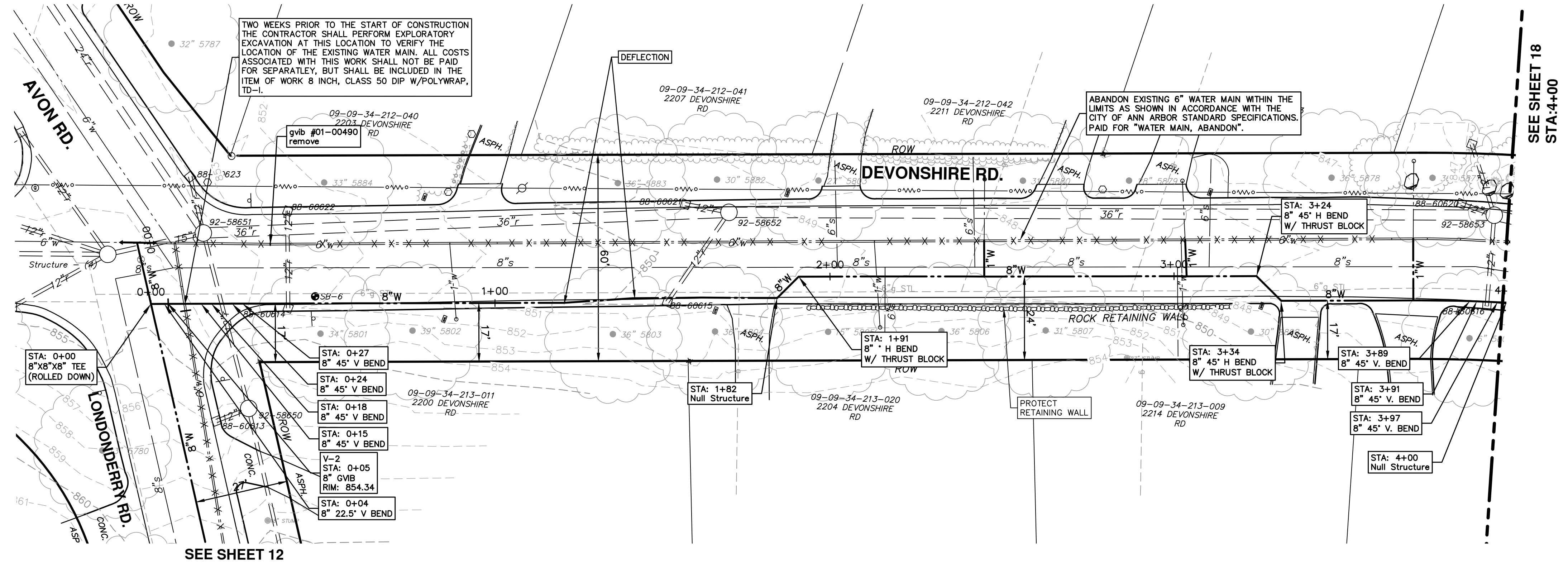
CITY OF ANN ARBOR
PUBLIC SERVICE
301 EAST HURON STREET
ANN ARBOR, MI 48106-1667
www.aagov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PROFILE: 1" = 4'
DEVONSHIRE, LONDONDERRY, BELMONT WATER MAIN
WATER MAIN PLAN AND PROFILE
BELMONT RD WM STA. 8+00 TO 13+06

SCALE PLAN: 1" = 20'
DRAWING No. **2014033-16**
SHEET No. **16 OF 21**

s:\project_management\Design\2014033 devonshire londonderry belmont wm\plan_production\Primary\2014033Water.dwg Dwg Created: 17-Dec-14 - _a2 standard bw.stb - Plot Date: 25-Mar-15

s:\project_management\Design\20140333 devonshire londonderry belmont wm\plan production\Primary\20140333Water.dwg Dwg Created: 17-Dec-14 --_a2 standard bw.stb -- Plot Date: 25-Mar-15

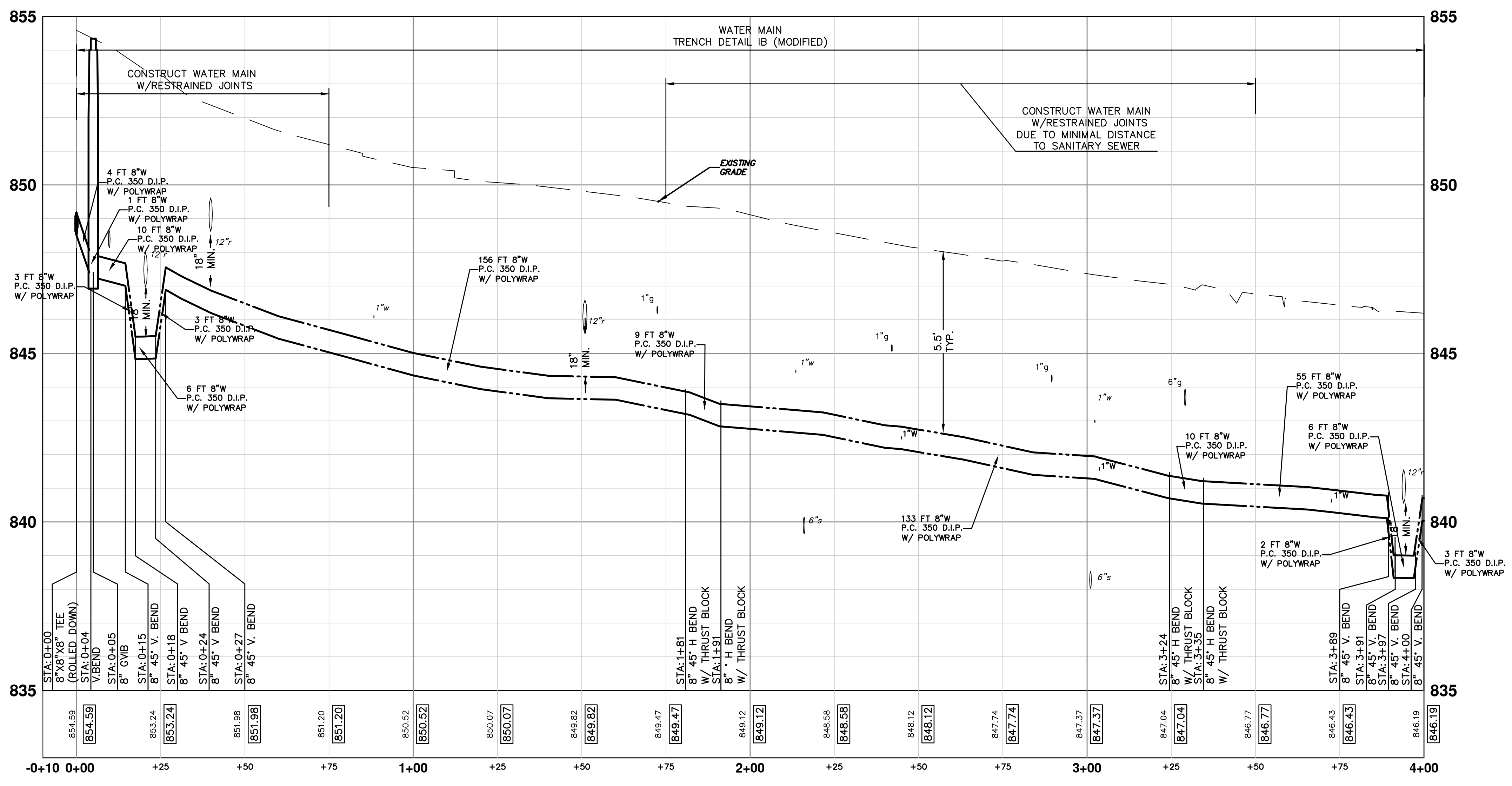


PROPOSED WATER MAIN STRUCTURE TABLE

STRUCTURE	TYPE	STATION	RIM	DEPTH
V-2	8" GVB	0+05	854.34	7.08

EXISTING WATER MAIN STRUCTURE TABLE

STRUCTURE	TYPE	STATION	RIM	DEPTH
gvib #01-00490	remove	0+35	847.32	???



SEE SHEET 18
STA: 4+00

SEE SHEET 12

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

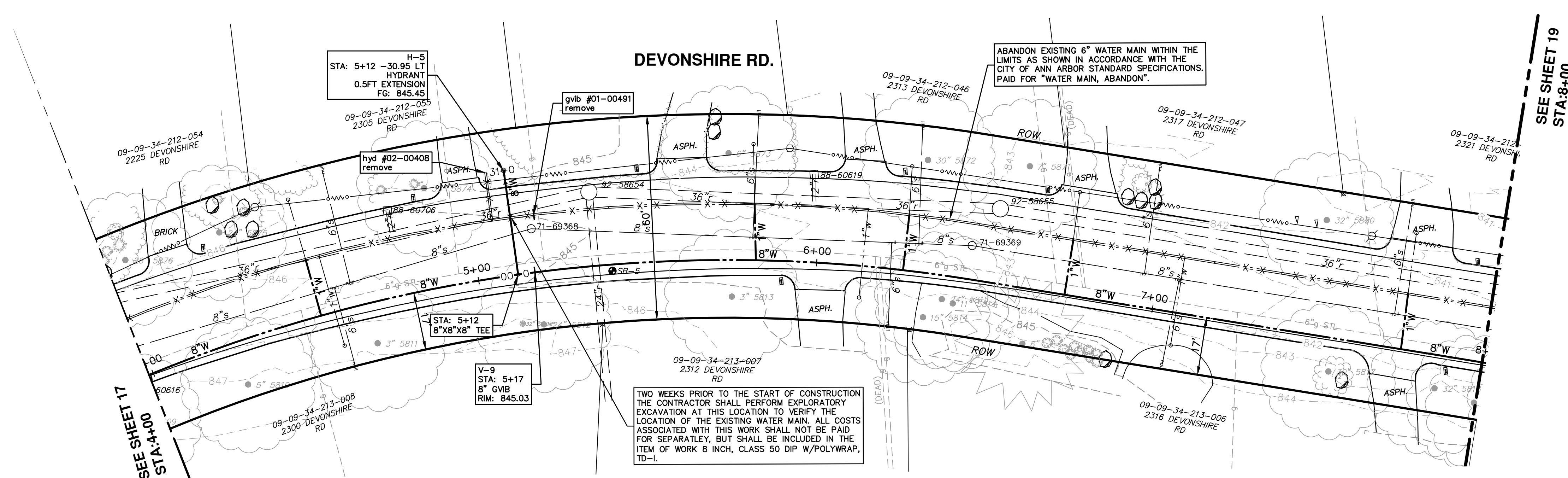
CITY OF ANN ARBOR PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-3667
www.a3gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
DEVONSHIRE, LONDONDERRY, BELMONT WATER MAIN
WATER MAIN PLAN AND PROFILE
DEVONSHIRE RD WM STA. 0+00 TO 4+00

SCALE PLAN: 1" = 20'
PROFILE: 1" = 2'
DRAWING No. 2014033-17
SHEET No. 17 OF 21

REV.	DATE	DESCRIPTION
00	2/17/2015	MDCO SUBMITTAL
AW		CHECKED
MA/S/ES		DRAWN

s:\project_management\Design\20140333 devonshire londonderry belmont wm\plan_production\Primary\20140333Water.dwg Dwg Created: 17-Dec-14 --_o2 standard bw.stb -- Plot Date: 25-Mar-15

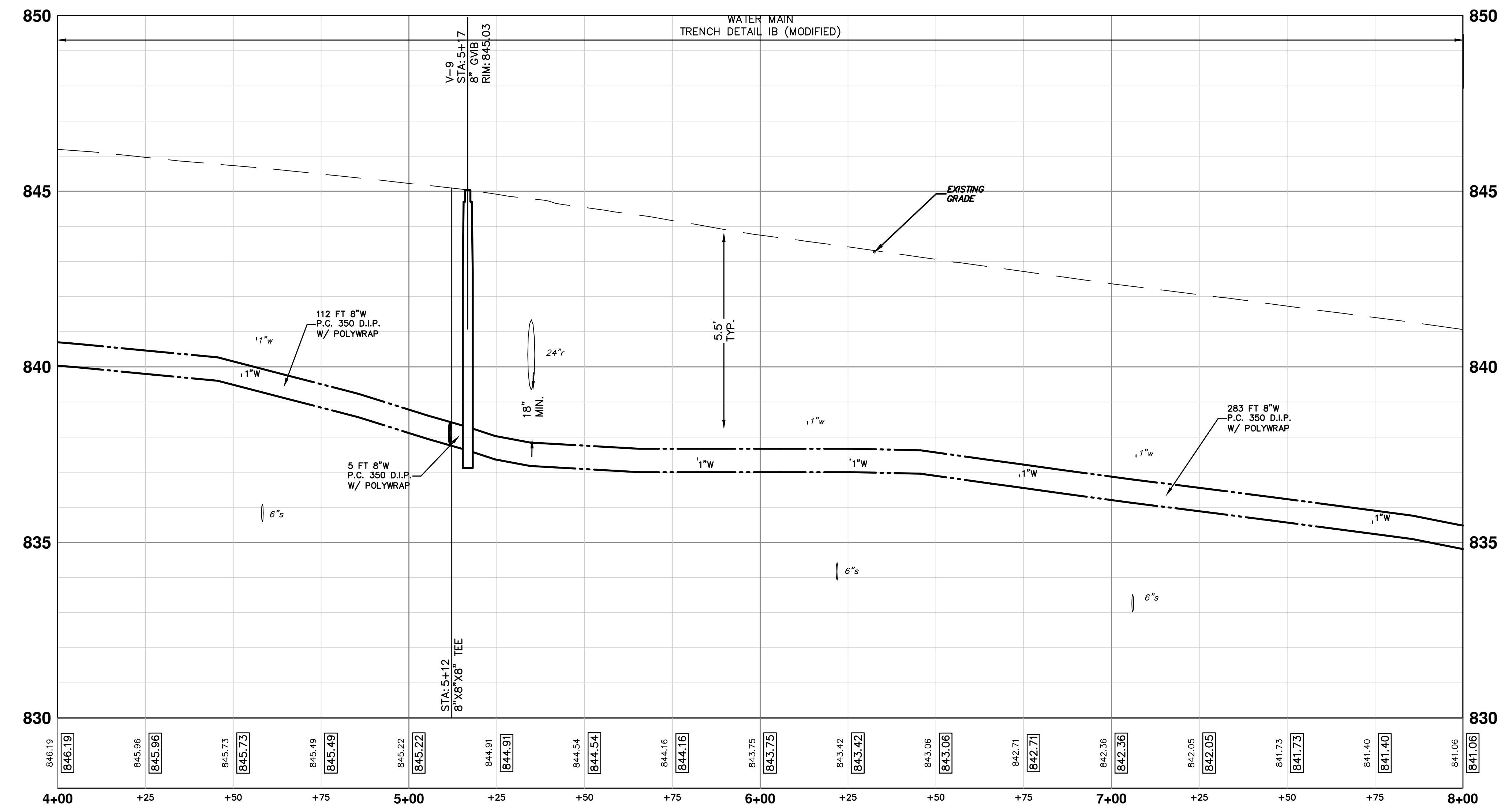



PROPOSED WATER MAIN STRUCTURE TABLE

STRUCTURE	TYPE	STATION	RIM	DEPTH
H-5	HYDRANT 0.5FT EXTENSION	5+12	845.45	6.35
V-9	8" GVIB	5+17	845.03	7.42

EXISTING WATER MAIN STRUCTURE TABLE


STRUCTURE	TYPE	STATION	RIM	DEPTH
hyd #02-00408	remove	5+07	845.54	8.04
gvib #01-00491	remove	5+18	845.25	2.54





Know what's below.
Call Before you dig.

00	MEQ SUBMITTAL	DATE	2/17/2015	AW	CHECKED				
00	REV.	DESCRIPTION							



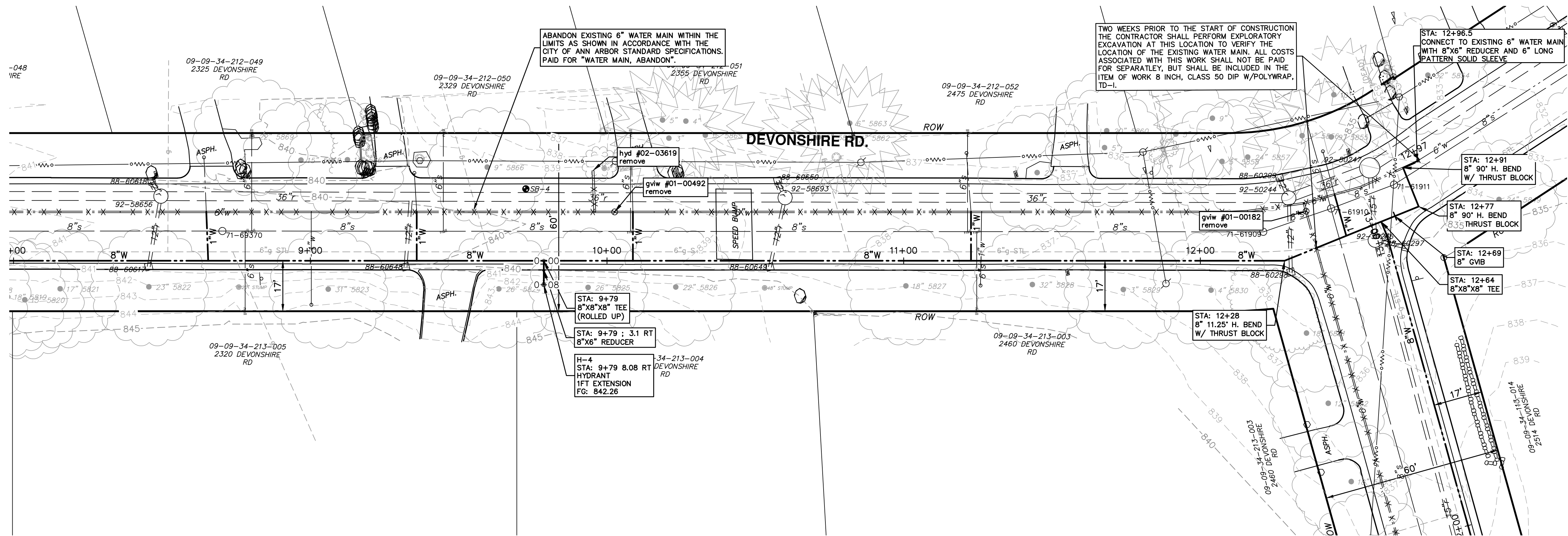
CITY OF ANN ARBOR
PUBLIC SERVICE
301 EAST HURON STREET
ANN ARBOR, MI 48106-1667
ANN ARBOR 734-764-4110
www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
DEVONSHIRE, LONDONDERRY, BELMONT WATER MAIN
 WATER MAIN PLAN AND PROFILE
 DEVONSHIRE RD WM STA. 4+00 TO 8+00

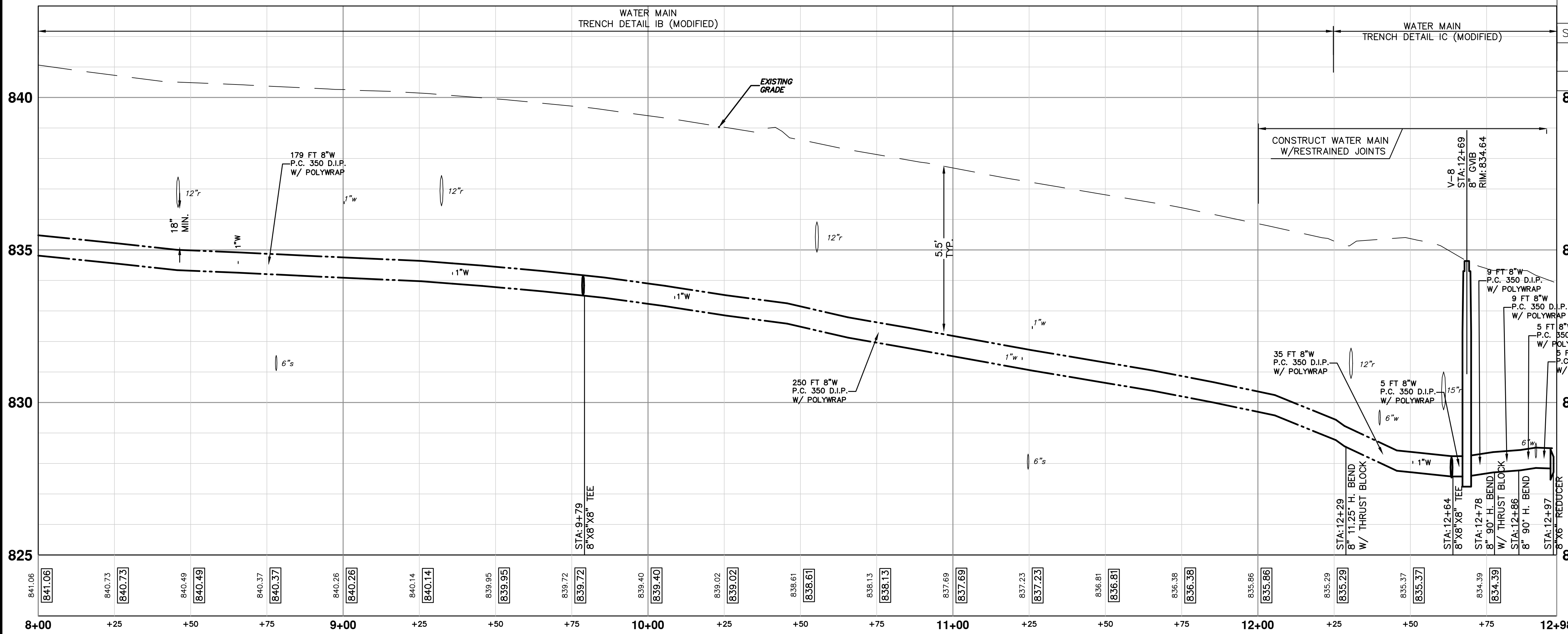
SCALE PLAN: 1" = 20'
 PROFILE: 1" = 2'
 DRAWING No. 2014033-18
 SHEET No. 18 OF 21

s:\project_management\Design\2014033 devonshire londonderry belmont wm\plan_production\Primary\2014033Water.dwg Dwg Created: 17-Dec-14 - _c2 standard bw.stb - Plot Date: 25-Mar-15

SEE SHEET 18
STA: 8+00



SEE SHEET 16



PROPOSED WATER MAIN STRUCTURE TABLE

STRUCTURE	TYPE	STATION	RIM	DEPTH
H-4	HYDRANT 1FT EXTENSION	9+79	842.26	7.08
V-8	8" GVB	12+69	834.64	7.07

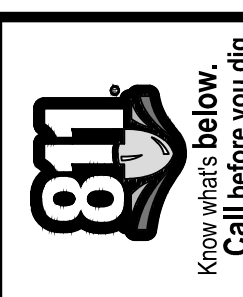
EXISTING WATER MAIN STRUCTURE TABLE

STRUCTURE	TYPE	STATION	RIM	DEPTH
hyd #02-03619	remove	9+95	839.73	2.72
gviw #01-00492	remove	10+03	839.42	7.99
gviw #01-00182	remove	12+41	835.47	8.14

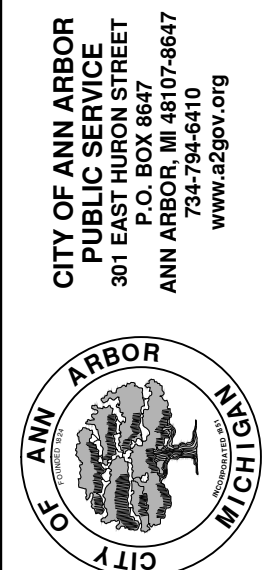
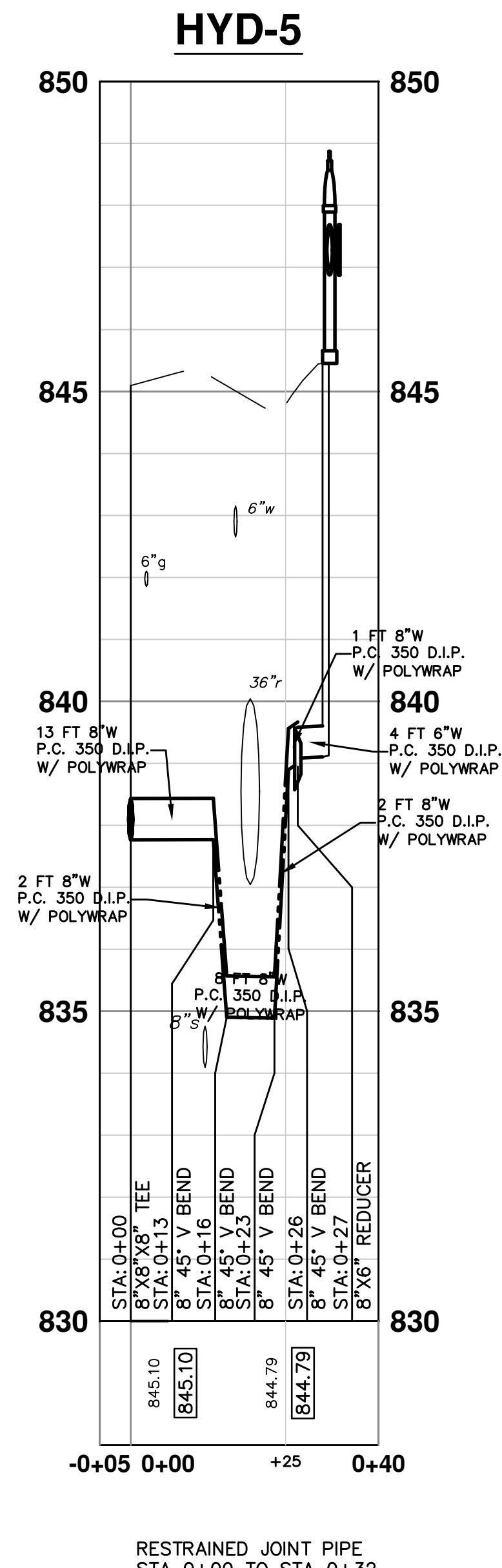
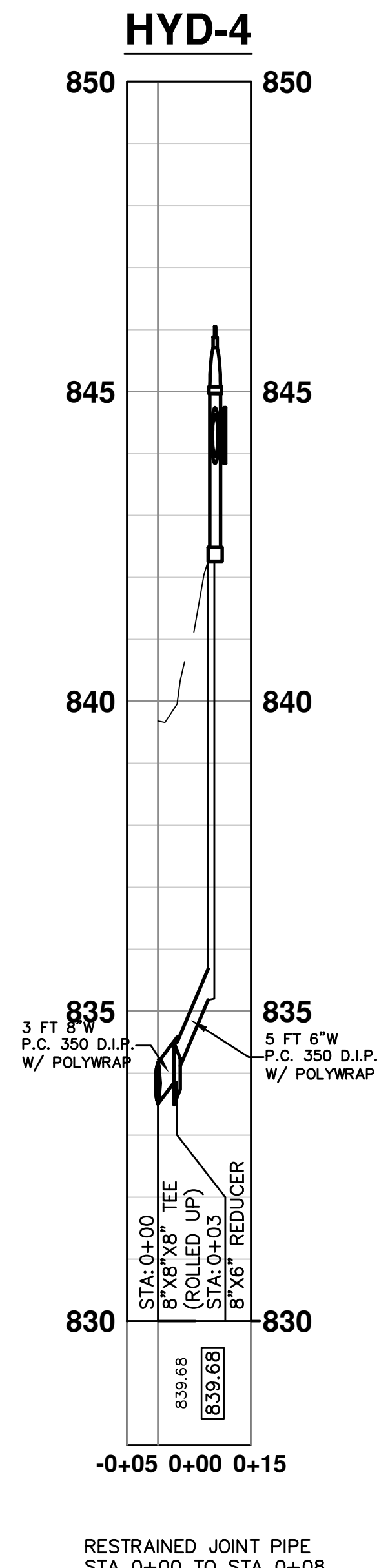
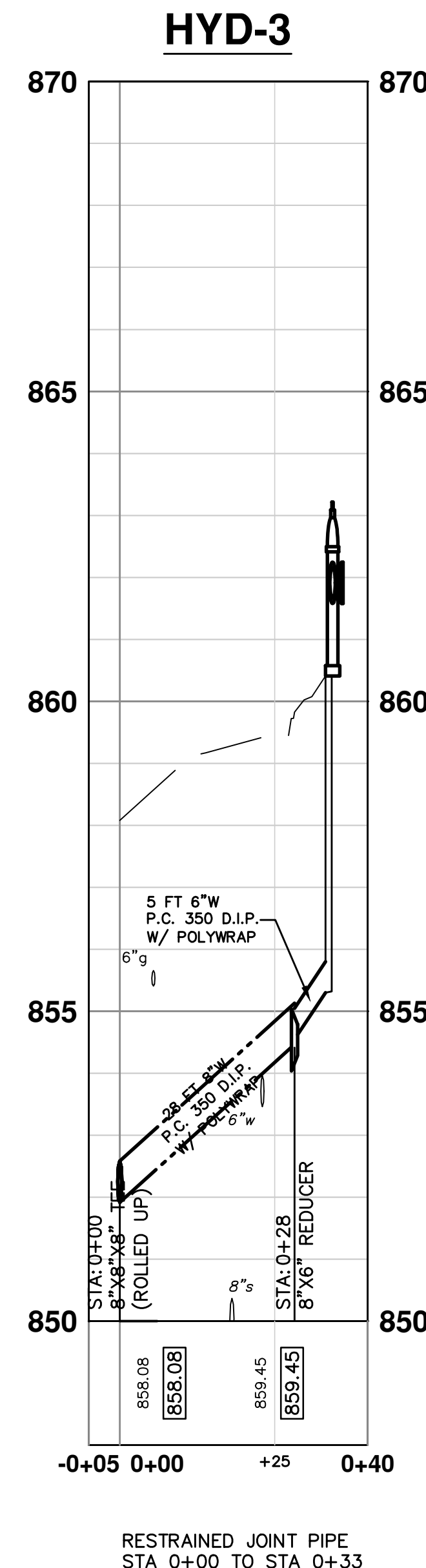
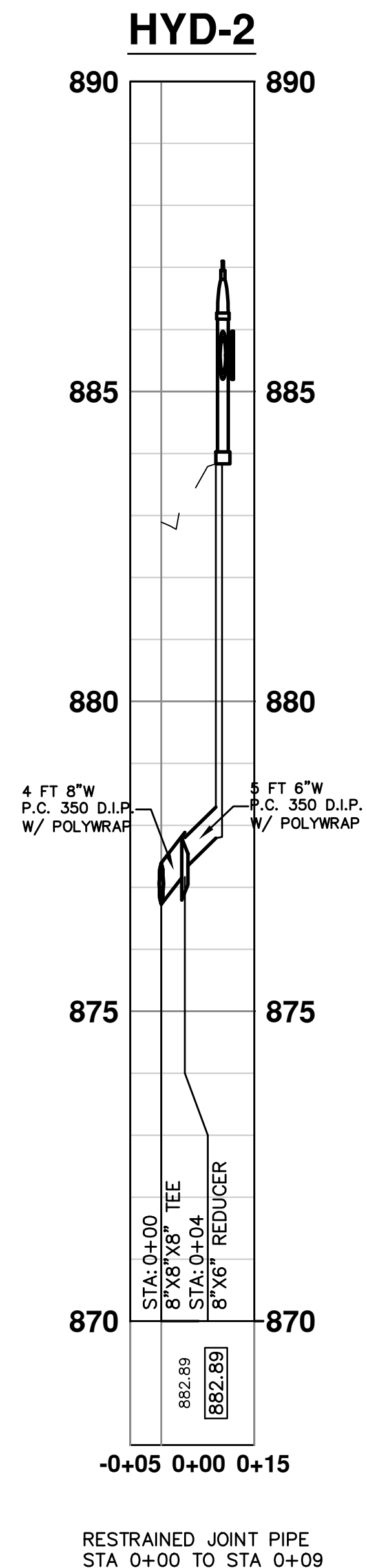
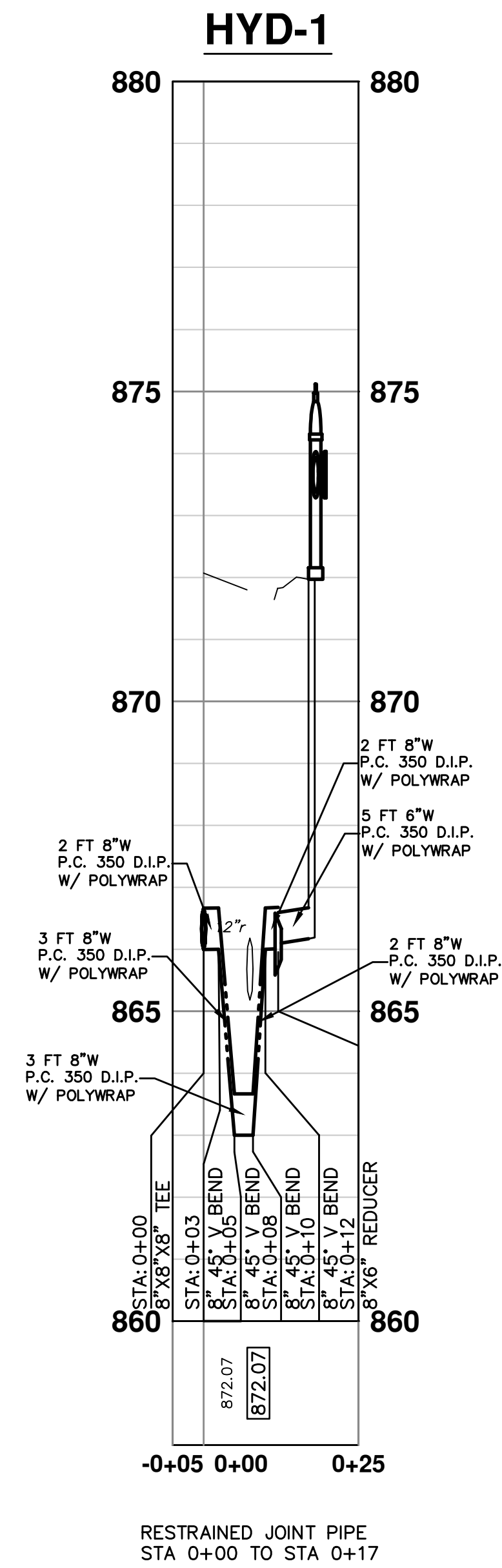
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
DEVONSHIRE, LONDONDERRY, BELMONT WATER MAIN
WATER MAIN PLAN AND PROFILE
DEVONSHIRE RD WM STA. 8+00 TO 12+98

SCALE PLAN: 1" = 20'
PROFILE: 1" = 2'
DRAWING No. 2014033-19

CITY OF ANN ARBOR
PUBLIC SERVICE
301 EAST HURON STREET
ANN ARBOR, MI 48106-6647
www.a2gov.org



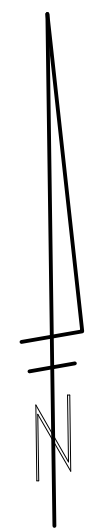
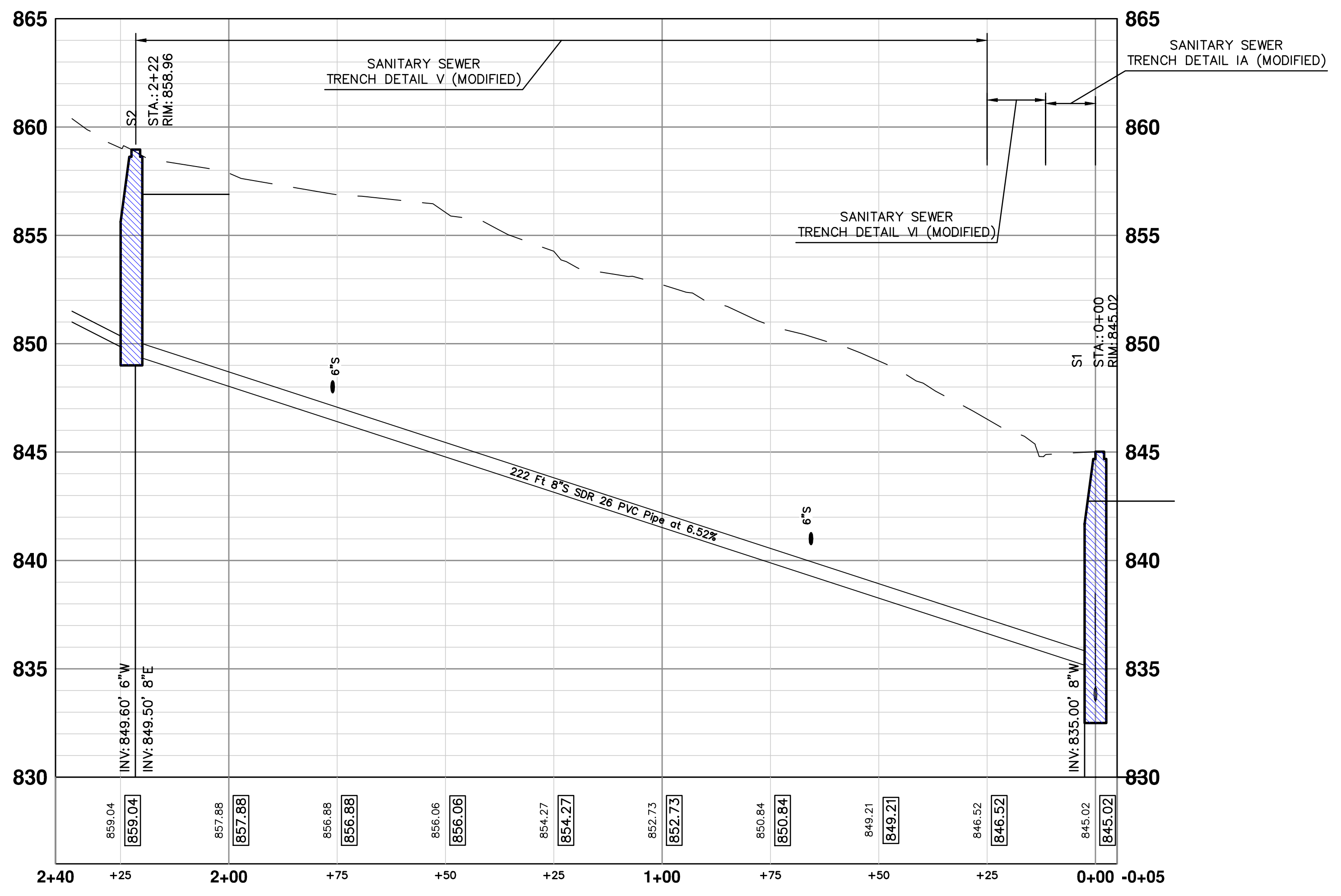
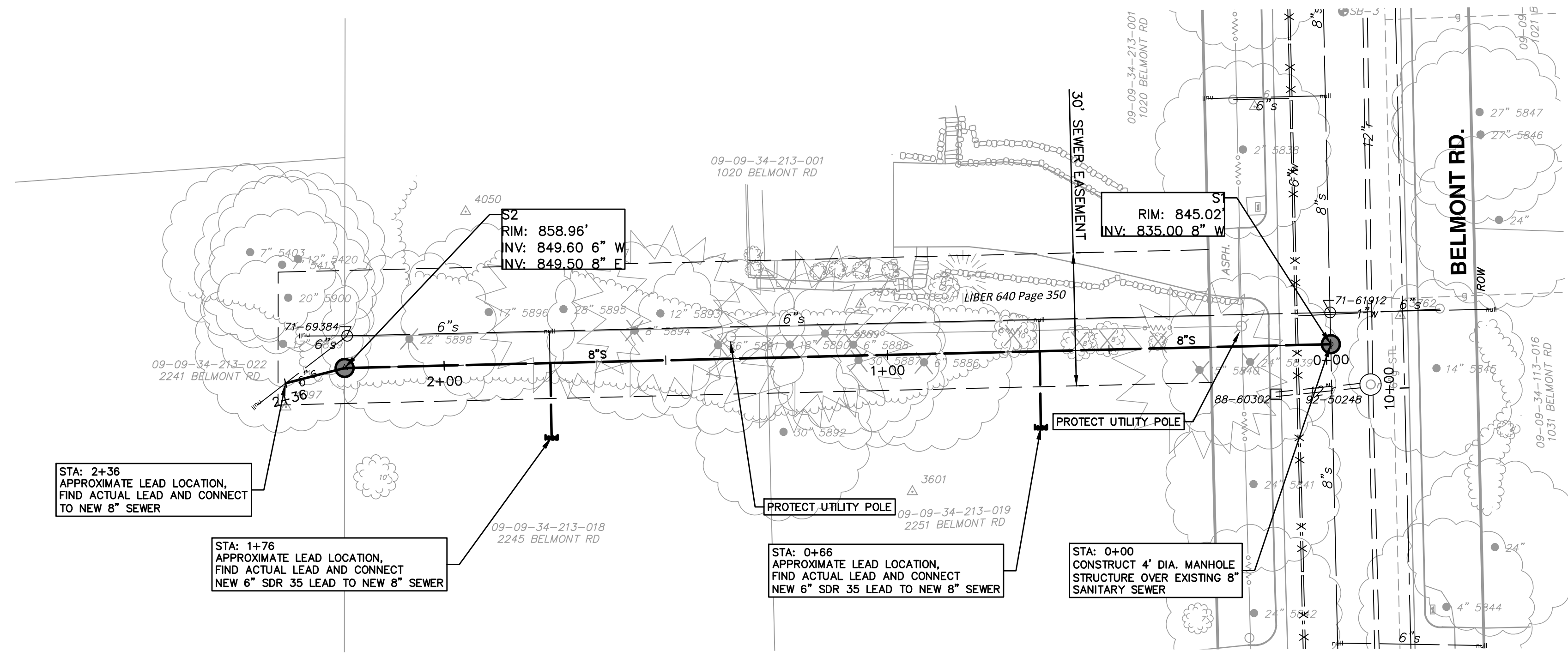
REV.	DESCRIPTION	DATE	DRAWN	CHECKED
00	MOEQ SUBMITTAL	2/17/2015	MA5/ES	AW



PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
WATER MAIN PLAN AND PROFILE
 PROFILE: 1" = 4'
DEVONSHIRE, LONDONDERRY, BELMONT WATER MAIN
 AUX STATIONS

REV.	DATE	DESCRIPTION
00	2/17/2015	MDEQ SUBMITTAL
		DRAWN
		CHECKED





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

City of Ann Arbor Public Services
301 East Huron Street
Ann Arbor, MI 48106-2667
www.a2gov.org

REV.	DESCRIPTION	DATE	DRAWN	CHECKED
00	MOEQ SUBMITTAL	2/17/2015	MA5/ES	AW

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
SCALE PLAN: 1" = 4'
PROFILE: 1" = 4'

DEVONSHIRE, LONDONDERRY, BELMONT WATER MAIN
SANITARY PLAN AND PROFILE
SANITARY SEWER

DRAWING No. 2014033-21
SHEET No. 21 OF 21