



CITY OF ANN ARBOR PROJECT MANAGEMENT

DOWNTOWN VALVE REPLACEMENT

BID No. 4449, FILE No. 2006061

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.

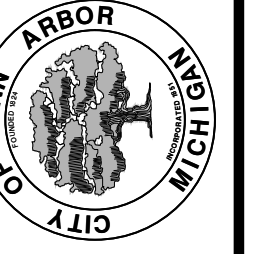
THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS, TELEPHONE, ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

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.



REV.	DATE	DESCRIPTION
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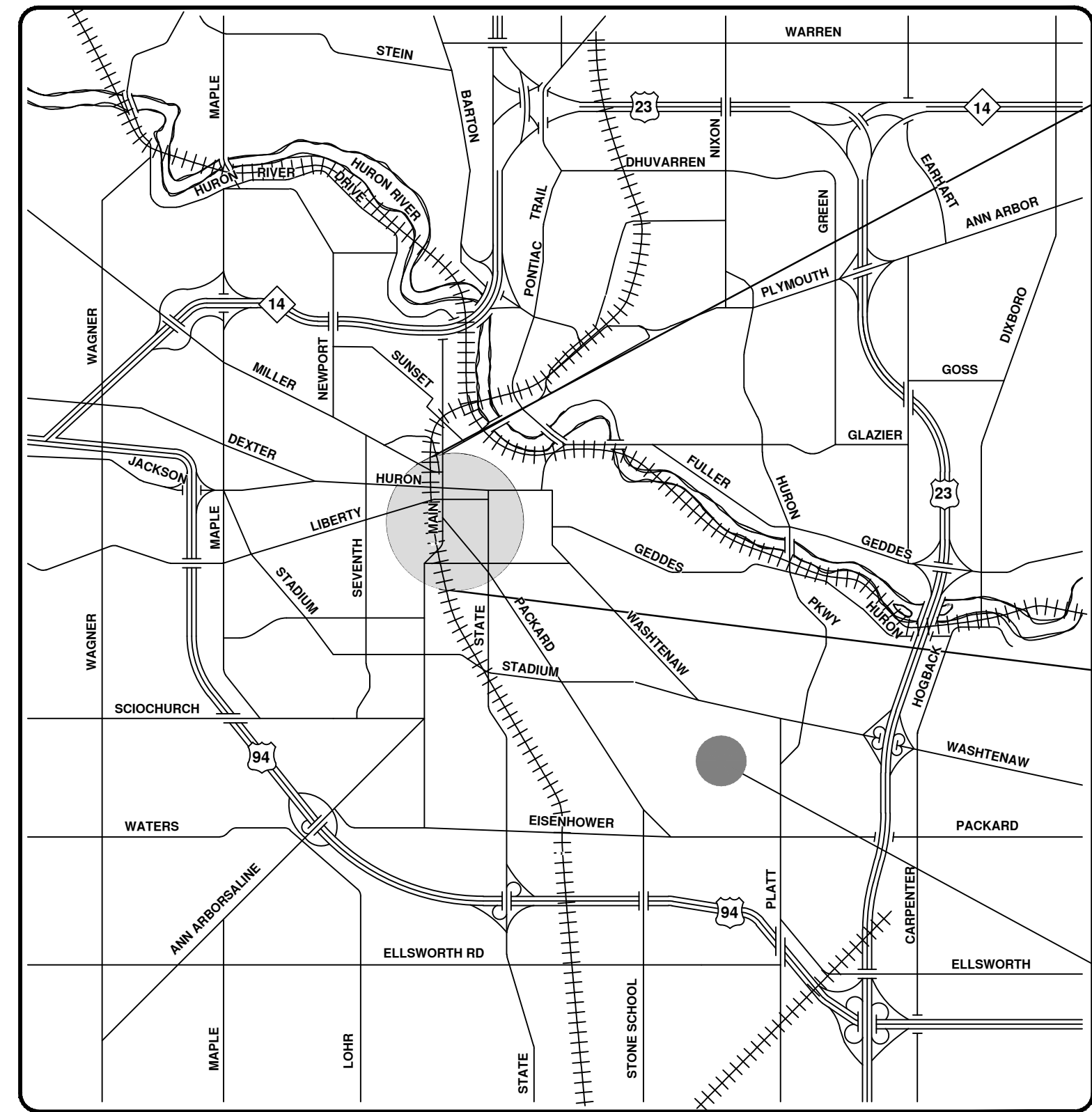
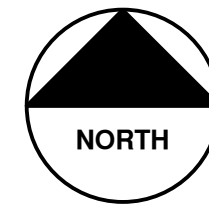
CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-8647
ANN ARBOR 734-754-4410
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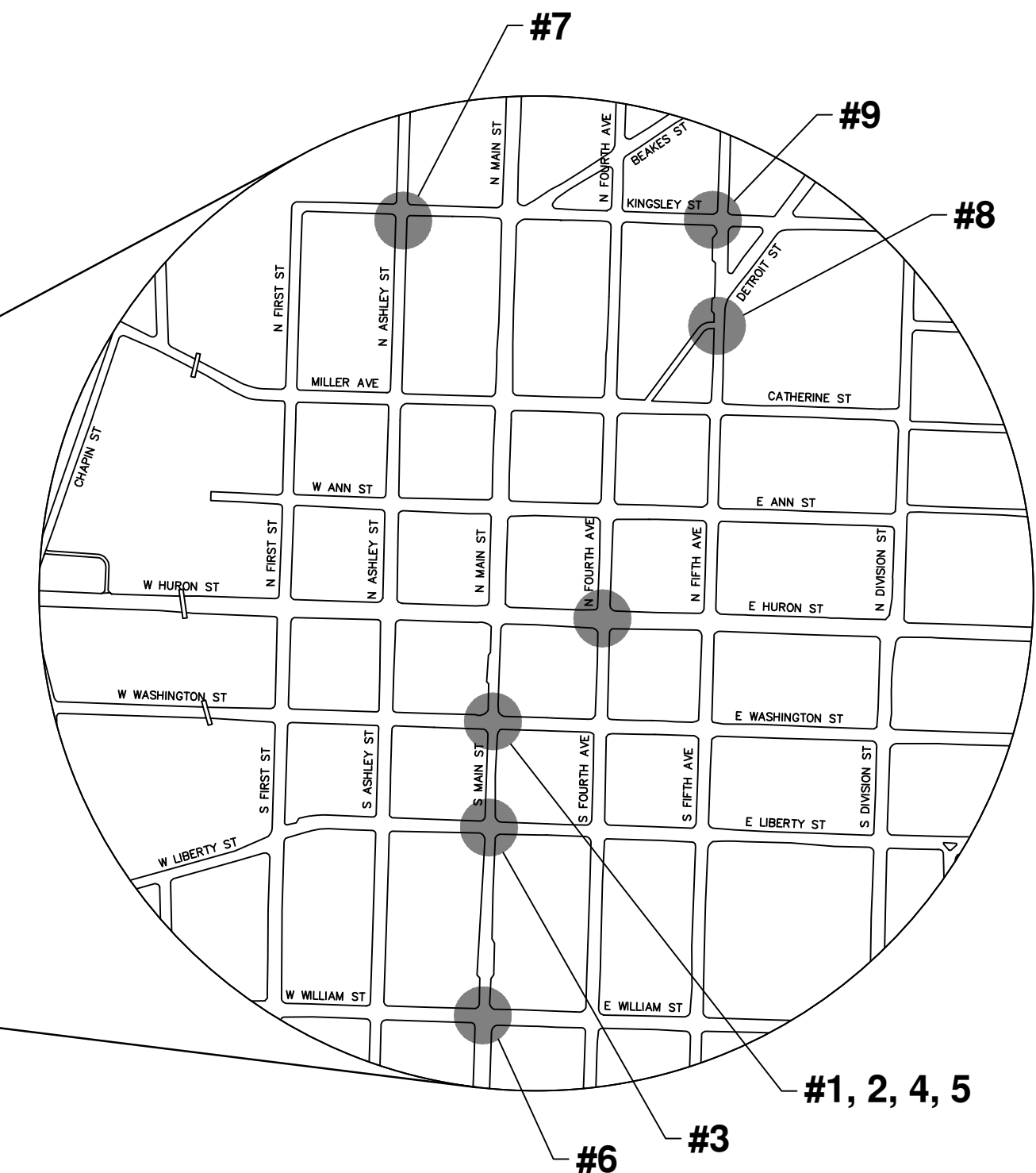
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
REPLACE WATER MAIN VALVES VARIOUS AT LOCATIONS
SCALE
DRAWING No. 2006061-1
SHEET No. 1 OF 15

© DOWNTOWN VALVE REPLACEMENT; BID No. 4449; FILE No. 2006061

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VICINITY MAP



PROJECT MANAGEMENT SERVICE UNIT

PREPARED UNDER THE SUPERVISION OF

Igor V. Kotlyar
IGOR V. KOTLYAR, P.E. - MI LICENSE No. 43287
PROJECT ENGINEER

05 / 26 / 2016
DATE

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EXISTING LEGEND

- FIRE HYDRANT
- GATE VALVE IN BOX
- GATE VALVE IN WELL
- STOP BOX
- WATER VAULT
- WELL
- CATCH BASIN (SQ)
- CATCH BASIN (RD)
- STORM MANHOLE
- NON-CURB CATCH BASIN (SQ)
- END SECTION
- SANITARY MANHOLE
- CLEAN-OUT
- POST
- PEDESTRIAN SIGNAL
- SIGN
- HAND HOLE
- ORNAMENTAL LIGHT
- FLOOD LIGHT
- UNKNOWN MANHOLE
- TELEPHONE MANHOLE
- TELEPHONE RISER
- GAS VALVE
- GAS VENT
- GAS BOX
- ELECTRICAL RISER
- TRANSFORMER
- UTILITY POLE
- LAMP POLE
- GUY ANCHOR
- GUY POLE
- MONITORING WELL
- MAILBOX
- SOIL BORING
- TRAVERSE POINT
- BENCH MARK
- IRON PIPE
- MON BOX

- WATER MAIN
- STORM SEWER
- SANITARY SEWER
- GAS MAIN
- ELECTRICAL OVER HEAD
- ELECTRICAL UNDER GROUND
- ELECTRICAL DUCT BANK
- TELEPHONE OVER HEAD
- TELEPHONE UNDER GROUND
- TELEPHONE DUCT BANK
- CABLE TV OVER HEAD
- CABLE TV UNDER GROUND
- FIBER OPTIC
- FIBER OPTIC DUCT BANK
- BOUNDARY
- BUILDING
- CENTERLINE OF DITCH
- CENTERLINE/CROWN OF ROAD
- CONTOUR MAJOR
- CONTOUR MINOR
- EDGE OF WATER
- FLOODPLAIN
- FENCE
- GRAVEL
- GUARDRAIL
- STONE WALL
- R.O.W.
- TREELINE
- WETLAND
- EDGE OF BRUSH
- HEDGE

- TREE (DECIDUOUS)
- TREE (CONIFEROUS)
- SHRUB (DECIDUOUS)
- STUMP
- TREE TO REMAIN & PROTECT (DECIDUOUS)
CRITICAL ROOT ZONE (C.R.Z.) = DIAMETER BREST HEIGHT (INCHES) X 10
- TREE TO REMAIN & PROTECT (CONIFEROUS)
CRITICAL ROOT ZONE (C.R.Z.) = DIAMETER BREST HEIGHT (INCHES) X 10

PROPOSED LEGEND

- HYDRANT (PLAN)
- WATER GATE WELL
- REDUCER
- WATER GATE VALVE
- WATER STOP BOX
- WATER VAULT
- INLET
- DOUBLE INLET
- INLET JUNCTION CHAMBER
- ROUND CATCH BASIN
- STORM MANHOLE
- DRAIN ARROW
- FLARED END SECTION
- SANITARY MANHOLE
- CLEAN-OUT
- SIGN
- PUSH BUTTON
- HAND HOLE
- WATER MAIN
- STORM SEWER
- SANITARY SEWER
- FIBER OPTIC
- ELECTRICAL
- CENTERLINE OF DITCH
- CENTERLINE OF ROAD
- FENCE
- GRAVEL
- SILT FENCE
- PROTECTIVE FENCE
- GUARDRAIL
- LOT/UNIT
- CURB
- TEMPORARY GRADING PERMIT
- CONTOUR MAJOR
- CONTOUR MINOR
- WATER EASMENT
- STORM EASEMENT
- SANITARY EASEMENT
- R.O.W.
- LIMITS OF CONSTRUCTION
- LIMIT OF GRADING
- STONE WALL

- DETECTABLE WARNING
- ASPHALT
- CONCRETE
- SIDEWALK
- TREE (DECIDUOUS)
- TREE (CONIFEROUS)
- TREE TO BE REMOVED (DECIDUOUS)
- TREE TO BE REMOVED (CONIFEROUS)
- STUMP TO BE REMOVED

Know what's below.
Call before you dig.

REV.	DATE	DESCRIPTION
00	5-26-16	OUT FOR BID
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
DOWNTOWN VALVE REPLACEMENT

SCALE: N/A
DRAWING No. **2006061-2**

SHEET No. **2 OF 15**

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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.
- 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.
- Insertion valves to be placed a minimum of ten feet away from existing valves and fittings.

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.
- SAMPLE SOIL EROSION AND SEDIMENTATION CONTROL INSTALLATION MINIMUM REQUIREMENTS:**
- INSTALL SILT FENCE, TREE PROTECTION FENCING, AND INLET FILTERS ON EXISTING DRAINAGE FEATURES PRIOR TO ANY CLEARING OR EARTH MOVING OPERATION.
 - STRIP AND STOCKPILE TOPSOIL. STABILIZE STOCKPILE AS REQUIRED.
 - INSTALL WATER MAINS, STORM AND SANITARY SEWERS, AND OTHER ENCLOSED DRAINAGE FEATURES. NEW INLET FILTERS SHALL BE INSTALLED IMMEDIATELY FOLLOWING INSTALLATION OF NEW DRAINAGE INLETS.
 - PERFORM MACHINE GRADING OPERATIONS AND CONSTRUCT PAVEMENTS (MAINLINE, SIDEWALKS, DRIVES, ETC.).
 - CONTINUALLY MAINTAIN EROSION AND SEDIMENTATION CONTROL MEASURES, AS REQUIRED TO ALLOW DRAINAGE AND SEDIMENT REMOVAL. REMOVE ANY ACCUMULATED SEDIMENT IMMEDIATELY.
 - COMPLETE ALL GRADING AND FINE GRADING.
 - TEMPORARY SEED AND INSTALL EROSION CONTROL BLANKET IN ALL DISTURBED AREAS.
 - CLEAN OUT STORM SEWER SYSTEMS.
 - REMOVE ALL TEMPORARY SOIL EROSION CONTROL MEASURES UPON FINAL INSPECTION AND APPROVAL BY THE ENGINEER.
 - REMEDY ANY NOTED DEFECTS TO THE SATISFACTION OF THE CITY OF ANN ARBOR'S SOIL EROSION AND SEDIMENTATION CONTROL OFFICIAL.

NOTE: THIS SEQUENCE IS FOR INFORMATION ONLY. IT IS INTENDED TO SHOW THE SEQUENCE OF CONSTRUCTION WITH RESPECT TO THE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING THEIR OWN DETAILED CONSTRUCTION SEQUENCE AND SCHEDULE TO THE ENGINEER FOR REVIEW, COMMENT, AND APPROVAL.

TEMPORARY SEEDING:

- SEED IN ACCORDANCE WITH PROJECT DRAWINGS AND SPECIFICATIONS.
- ANY DISTURBED AREA NOT PAVED, SEEDED, MULCHED, SODDED OR BUILT UPON BY NOVEMBER 15TH OR JUNE 30TH IS TO BE TEMPORARILY STABILIZED PER SPECIFICATIONS.

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

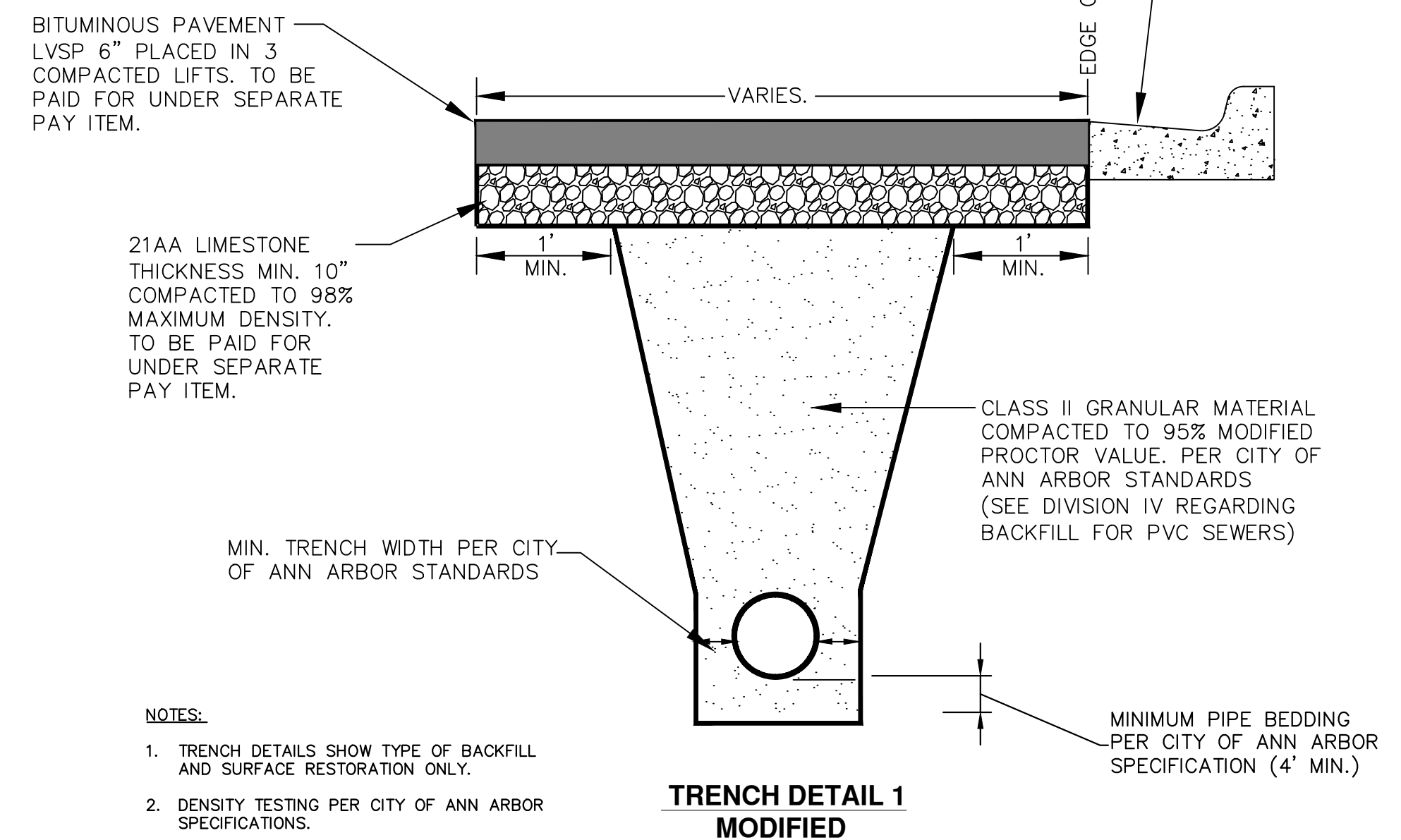
PERMIT	ISSUING AUTHORITY
LANE CLOSURE PERMIT*	CITY OF ANN ARBOR PROJECT MANAGEMENT UNIT
"NO PARKING" SIGNS PERMIT*	CITY OF ANN ARBOR PROJECT MANAGEMENT UNIT
GRADING/SOIL EROSION & SEDIMENTATION CONTROL PERMIT*	CITY OF ANN ARBOR CUSTOMER SERVICE
RIGHT-OF-WAY PERMIT*	CITY OF ANN ARBOR CUSTOMER SERVICE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

CONTACT INFORMATION

PUBLIC UTILITIES	OWNER	CONTACT
WATER	CITY OF ANN ARBOR FIELD OPERATIONS SERVICE UNIT W.R. WHEELER SERVICE CENTER 4251 STONE SCHOOL ROAD ANN ARBOR, MI 48108	DAN WOODEN (734) 794-6350
SANITARY		MARK COZART (734) 794-6350
STORM		MATT WALDSMITH (734) 794-6350
FORESTRY		STEVEN GOEBEL (734) 794-6350
SIGNS SIGNALS STREET LIGHTS		CHUCK FOJTK (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

* CITY RECORDS INDICATE CONCRETE BASE WITH ASPHALT OVERLAY AT SOME LOCATIONS. CONCRETE REMOVAL INCLUDED IN PAVEMENT REMOVAL ITEM.

AT LOCATIONS OF OVERLAID CURB, HMA WILL BE REMOVED AND REPLACED. PAID FOR USING HMA PAY ITEM.



NOTES:

- TRENCH DETAILS SHOW TYPE OF BACKFILL AND SURFACE RESTORATION ONLY.
- DENSITY TESTING PER CITY OF ANN ARBOR SPECIFICATIONS.
- ALL TRENCHING TO CONFORM TO ALL APPLICABLE M.I.O.S.H.A. STANDARDS.
- TRENCH DETAIL 1 MODIFIED FOR SHEETS 4 THROUGH 14.

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

IVK	DWF	DATE	5-26-16	DRAWN
GO	REV.	DESCRIPTION		

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
PO BOX 8640
ANN ARBOR MI 48106-8647
www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

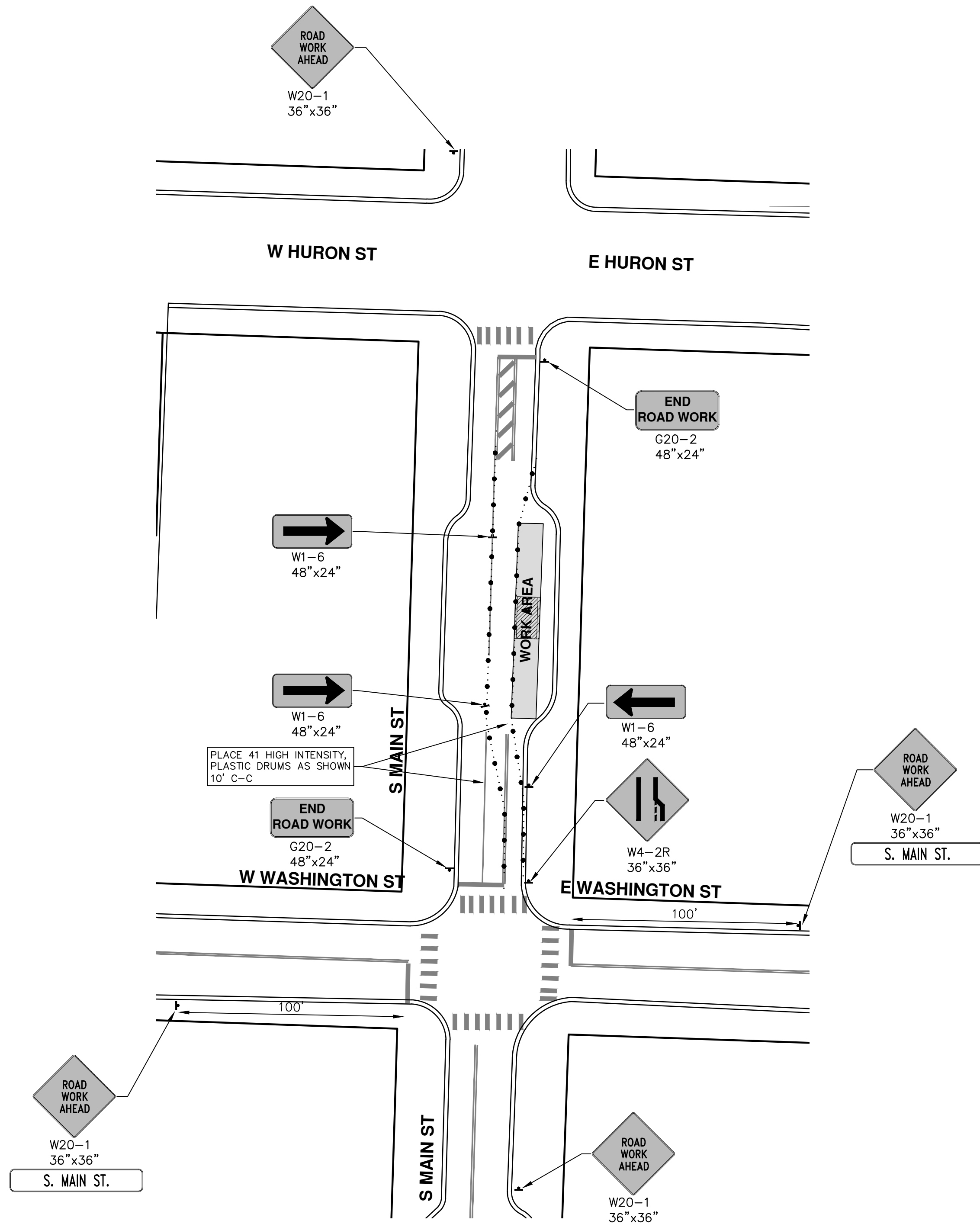
DOWNTOWN VALVE REPLACEMENT

SCALE: N/A

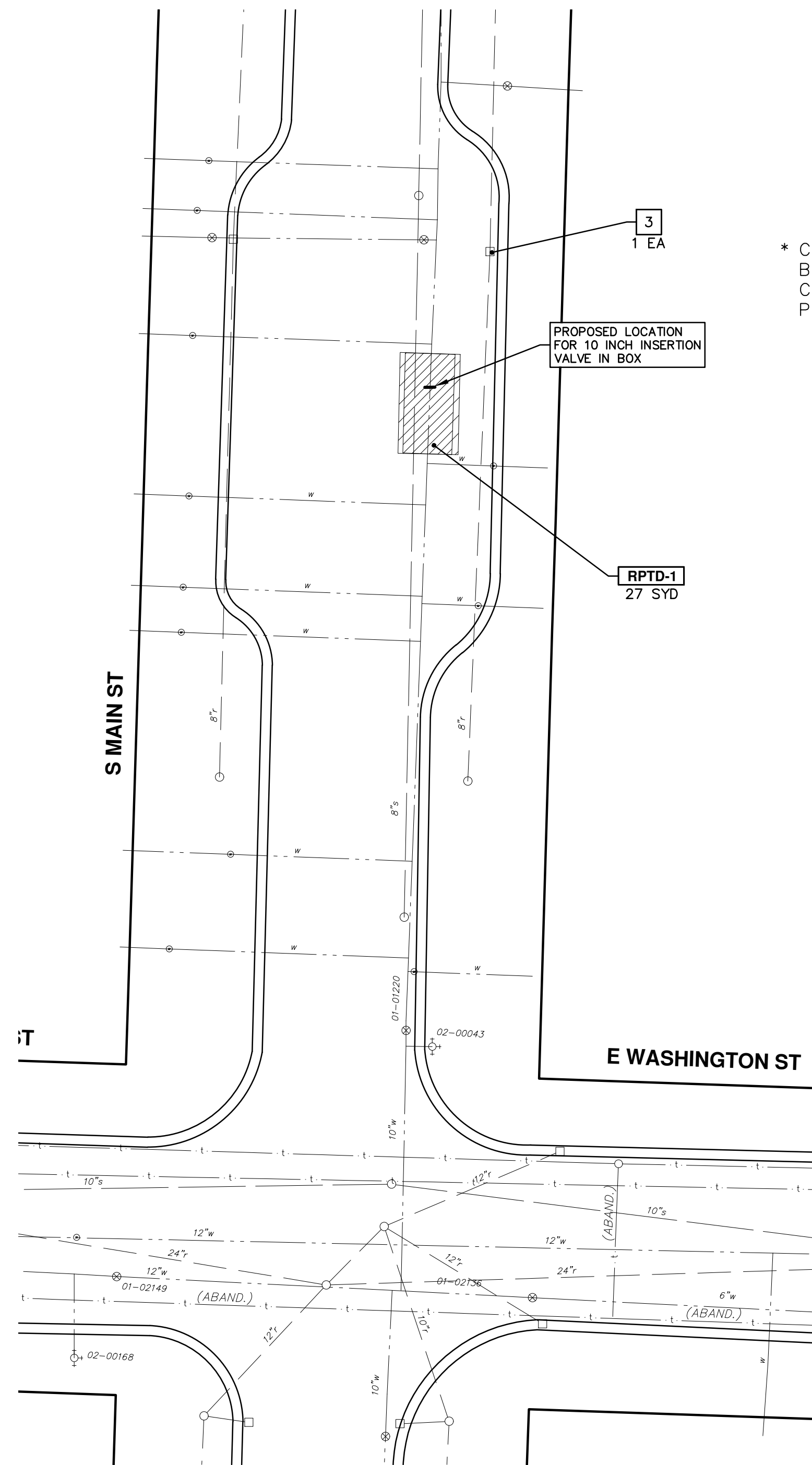
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SHEET No. 3 OF 15

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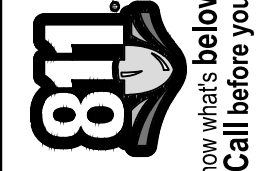


TRAFFIC CONTROL QUANTITIES FOR THIS SHEET	
ITEM DESCRIPTION	QUANTITY
TYPE B SIGNS	125 SFT
HIGH INTENSITY PLASTIC DRUMS	35 EA
TYPE III LIGHTED BARRICADE	2 EA
METER BAGS	6 EA



* CITY RECORDS INDICATE CONCRETE BASE WITH ASPHALT OVERLAY. CONCRETE REMOVAL INCLUDED IN PAVEMENT REMOVAL ITEM.

CONSTRUCTION KEY	
KEY	DESCRIPTION
RRCG	REMOVE AND REPLACE CURB AND GUTTER, CONC, F4, SPECIAL
DWS	REMOVE AND REPLACE DETECTABLE WARNING SURFACE
SW-8	REMOVE SIDEWALK AND PLACE 8" CONC. SIDEWALK OR RAMP
RPTD-1	REMOVE PAVEMENT, EXCAVATE FOR VALVE, AND INSTALL TRENCH DETAIL I MODIFIED
RRBPV	REMOVE AND REPLACE BRICK PAVERS
RGVT	REMOVE GATE VALVE ASSEMBLY TOP SECTION AND FILL ASSEMBLY WITH 6A
3	INSTALL INLET FILTER



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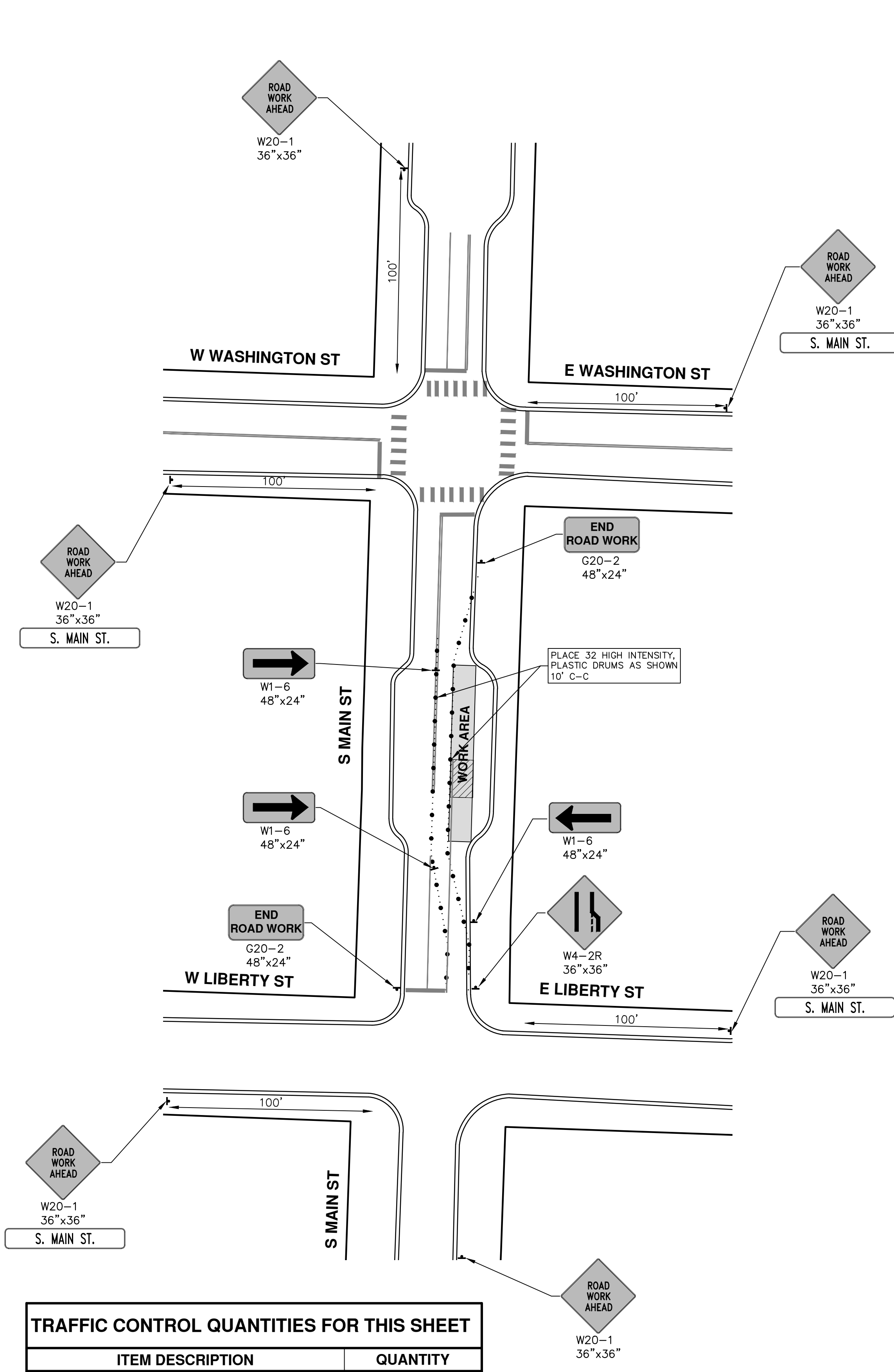


PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
DOWNTOWN VALVE REPLACEMENT
MAIN STREET - NORTH OF WASHINGTON ST. #1

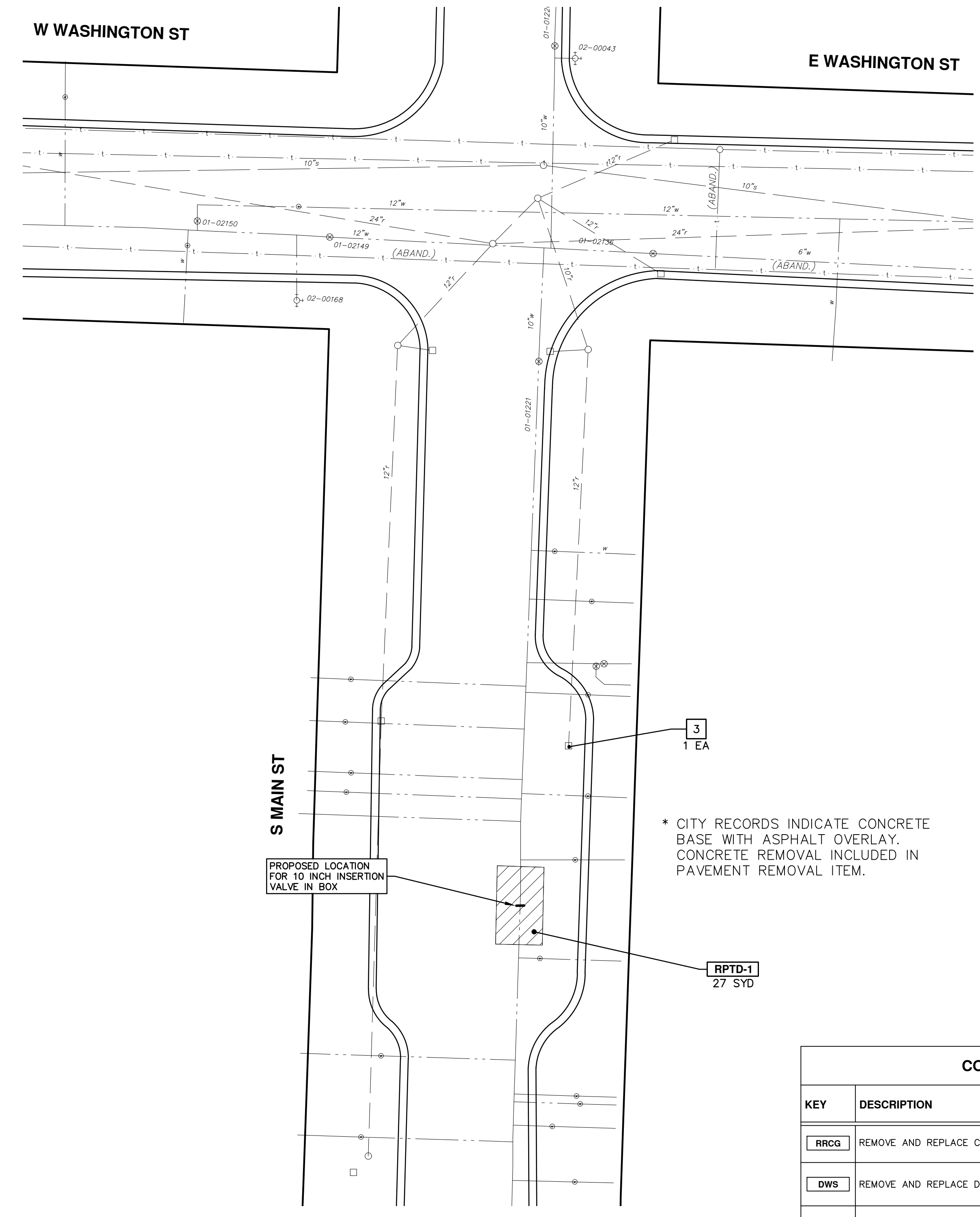
SCALE PLAN: 1" = 40'
DRAWING No.
2006061-4

REV.	DATE	DESCRIPTION
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TRAFFIC CONTROL QUANTITIES FOR THIS SHEET	
ITEM DESCRIPTION	QUANTITY
TYPE B SIGNS	160 SFT
HIGH INTENSITY PLASTIC DRUMS	35 EA
TYPE III LIGHTED BARRICADE	2 EA
METER BAGS	6 EA



CONSTRUCTION KEY	
KEY	DESCRIPTION
RRCG	REMOVE AND REPLACE CURB AND GUTTER, CONC, F4, SPECIAL
DWS	REMOVE AND REPLACE DETECTABLE WARNING SURFACE
SW-8	REMOVE SIDEWALK AND PLACE 8" CONC. SIDEWALK OR RAMP
RPTD-1	REMOVE PAVEMENT, EXCAVATE FOR VALVE, AND INSTALL TRENCH DETAIL I MODIFIED
RRBPV	REMOVE AND REPLACE BRICK PAVERS
RGVT	REMOVE GATE VALVE ASSEMBLY TOP SECTION AND FILL ASSEMBLY WITH 6A
3	INSTALL INLET FILTER

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

REV. DESCRIPTION DATE DRAWN CHECKED

00 OUT FOR BID 5-26-16 DPF IVK

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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
DOWNTOWN VALVE REPLACEMENT

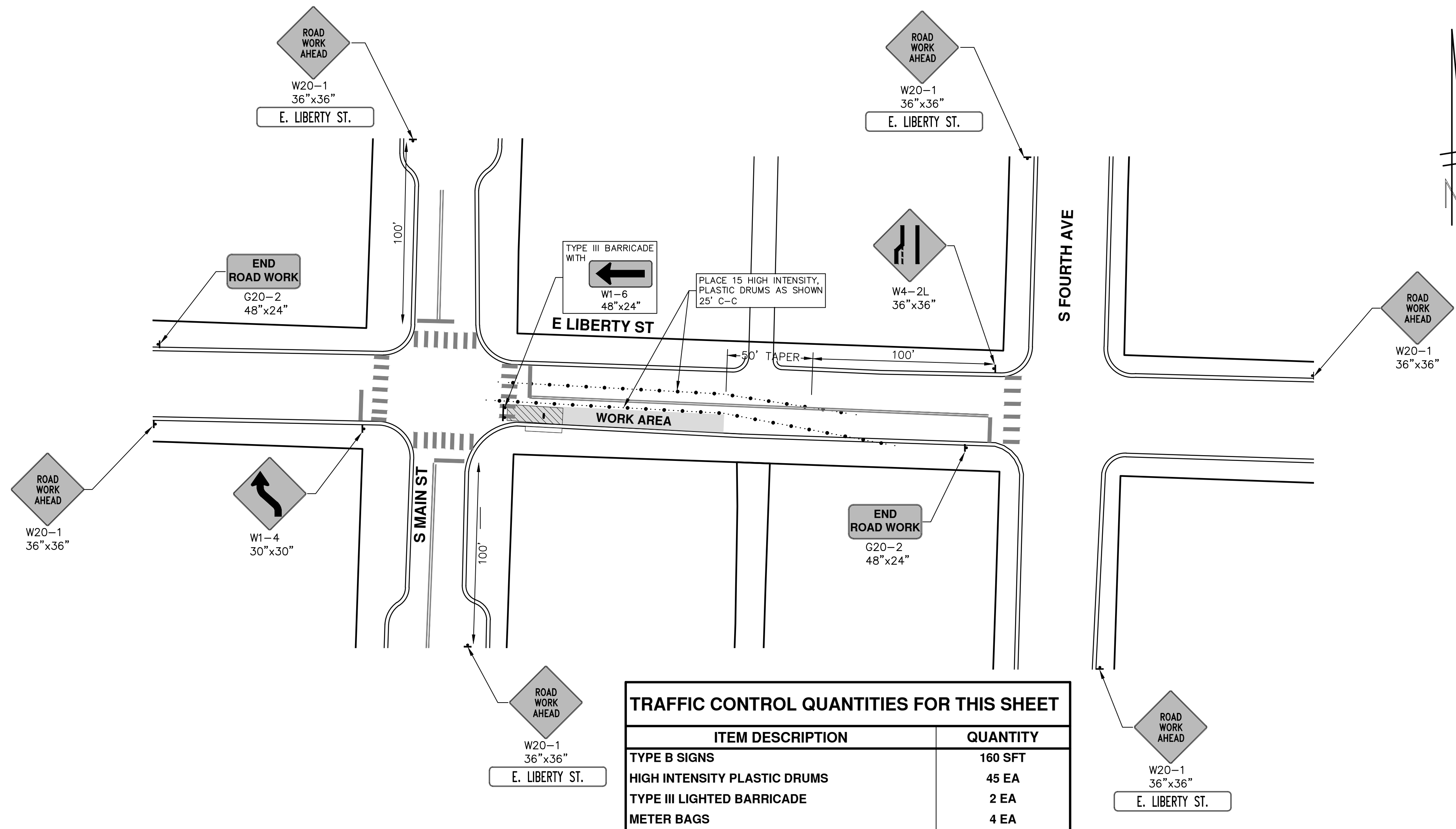
MAIN STREET - SOUTH OF WASHINGTON ST. #2

SHEET No. SCALE PLAN: 1" = 40'

DRAWING No. 2006061-5

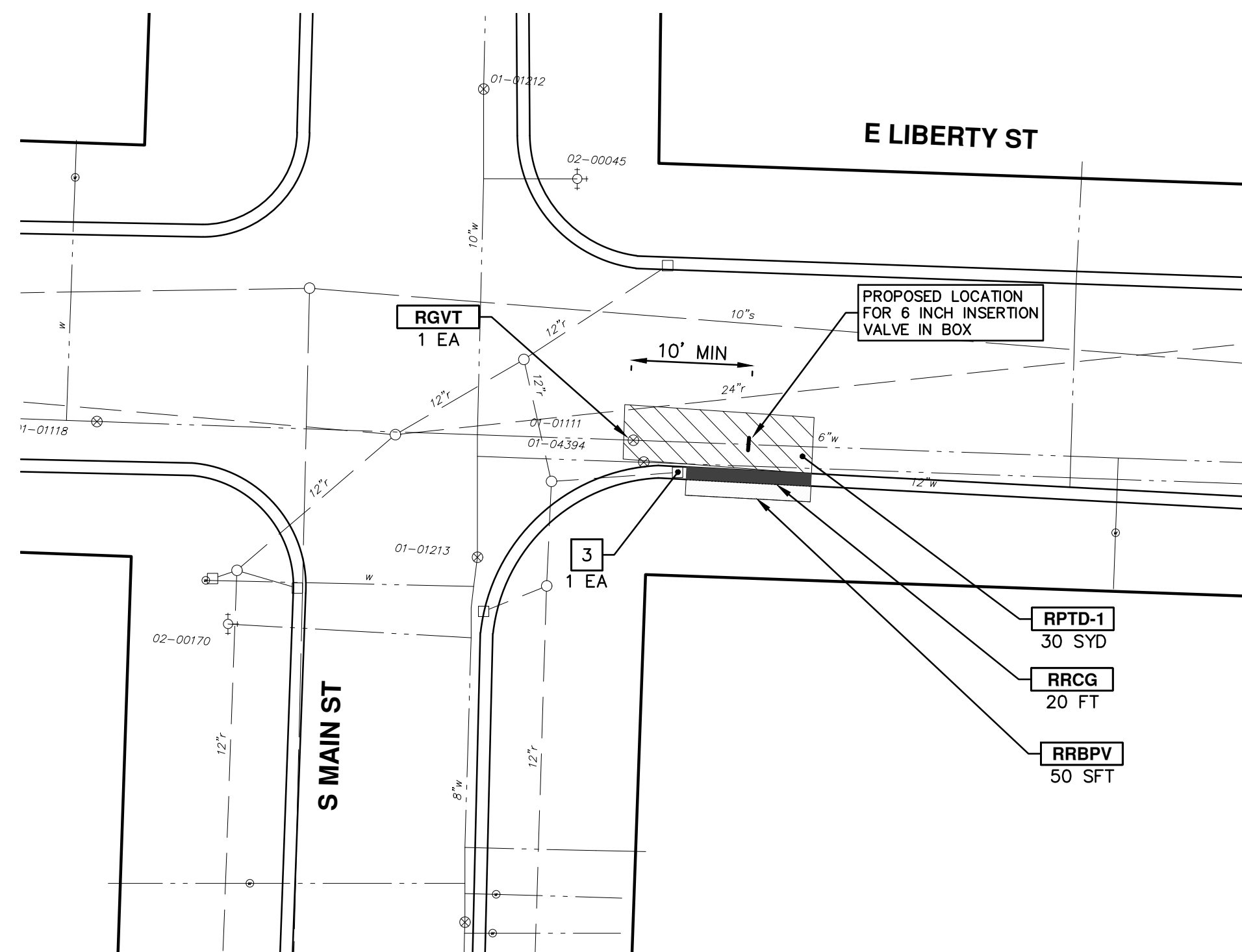
5 OF 15

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TRAFFIC CONTROL QUANTITIES FOR THIS SHEET	
ITEM DESCRIPTION	QUANTITY
TYPE B SIGNS	160 SFT
HIGH INTENSITY PLASTIC DRUMS	45 EA
TYPE III LIGHTED BARRICADE	2 EA
METER BAGS	4 EA

MISCELLANEOUS QUANTITIES THIS SHEET	
	QUANTITY
PAVT MRKG OVERLAY COLD PLASTIC WHITE BIKE SHARROW	1 EA
PAVT MRKG OVERLAY COLD PLASTIC 24 INCH WHITE	30 FT



CONSTRUCTION KEY	
KEY	DESCRIPTION
RRCG	REMOVE AND REPLACE CURB AND GUTTER, CONC, F4, SPECIAL
DWS	REMOVE AND REPLACE DETECTABLE WARNING SURFACE
SW-8	REMOVE SIDEWALK AND PLACE 8" CONC. SIDEWALK OR RAMP
RPTD-1	REMOVE PAVEMENT, EXCAVATE FOR VALVE, AND INSTALL TRENCH DETAIL I MODIFIED
RRBPV	REMOVE AND REPLACE BRICK PAVERS
RGVT	REMOVE GATE VALVE ASSEMBLY TOP SECTION AND FILL ASSEMBLY WITH 6A
3	INSTALL INLET FILTER

* CITY RECORDS INDICATE CONCRETE BASE WITH ASPHALT OVERLAY. CONCRETE REMOVAL INCLUDED IN PAVEMENT REMOVAL ITEM.

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR


DOWNTOWN VALVE REPLACEMENT

LIBERTY STREET - EAST OF MAIN ST. #3

SCALE PLAN: 1" = 40'

DRAWING No. **2006061-6**

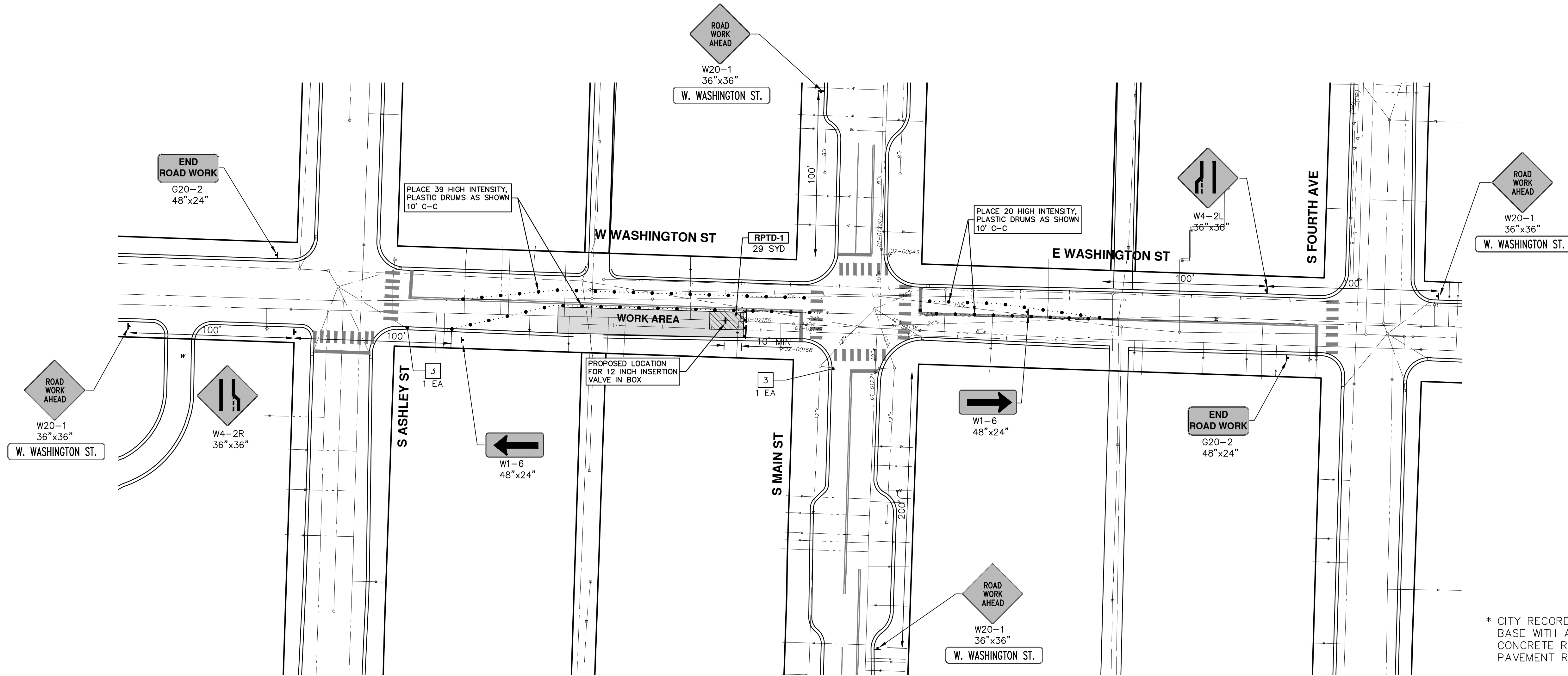
SHEET No. **6 OF 15**



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PUBLIC SERVICES
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ANN ARBOR, MI 48106-3667
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03		REV.
04		REV.
05		REV.
06		REV.
07		REV.
08		REV.
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27		REV.
28		REV.
29		REV.
30		REV.

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TRAFFIC CONTROL QUANTITIES FOR THIS SHEET	
ITEM DESCRIPTION	QUANTITY
TYPE B SIGNS	140 SFT
HIGH INTENSITY PLASTIC DRUMS	65 EA
TYPE III LIGHTED BARRICADE	2 EA
METER BAGS	7 EA

CONSTRUCTION KEY	
KEY	DESCRIPTION
RRCG	REMOVE AND REPLACE CURB AND GUTTER, CONC, F4, SPECIAL
DWS	REMOVE AND REPLACE DETECTABLE WARNING SURFACE
SW-8	REMOVE SIDEWALK AND PLACE 8" CONC. SIDEWALK OR RAMP
RPTD-1	REMOVE PAVEMENT, EXCAVATE FOR VALVE, AND INSTALL TRENCH DETAIL 1 MODIFIED
RRBPV	REMOVE AND REPLACE BRICK PAVERS
RGVT	REMOVE GATE VALVE ASSEMBLY TOP SECTION AND FILL ASSEMBLY WITH 6A
3	INSTALL INLET FILTER

* CITY RECORDS INDICATE CONCRETE BASE WITH ASPHALT OVERLAY. CONCRETE REMOVAL INCLUDED IN PAVEMENT REMOVAL ITEM.

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
 SCALE PLAN: 1" = 40'
 DRAWING No. 2006061-7

WASHINGTON STREET - WEST OF MAIN ST. #4

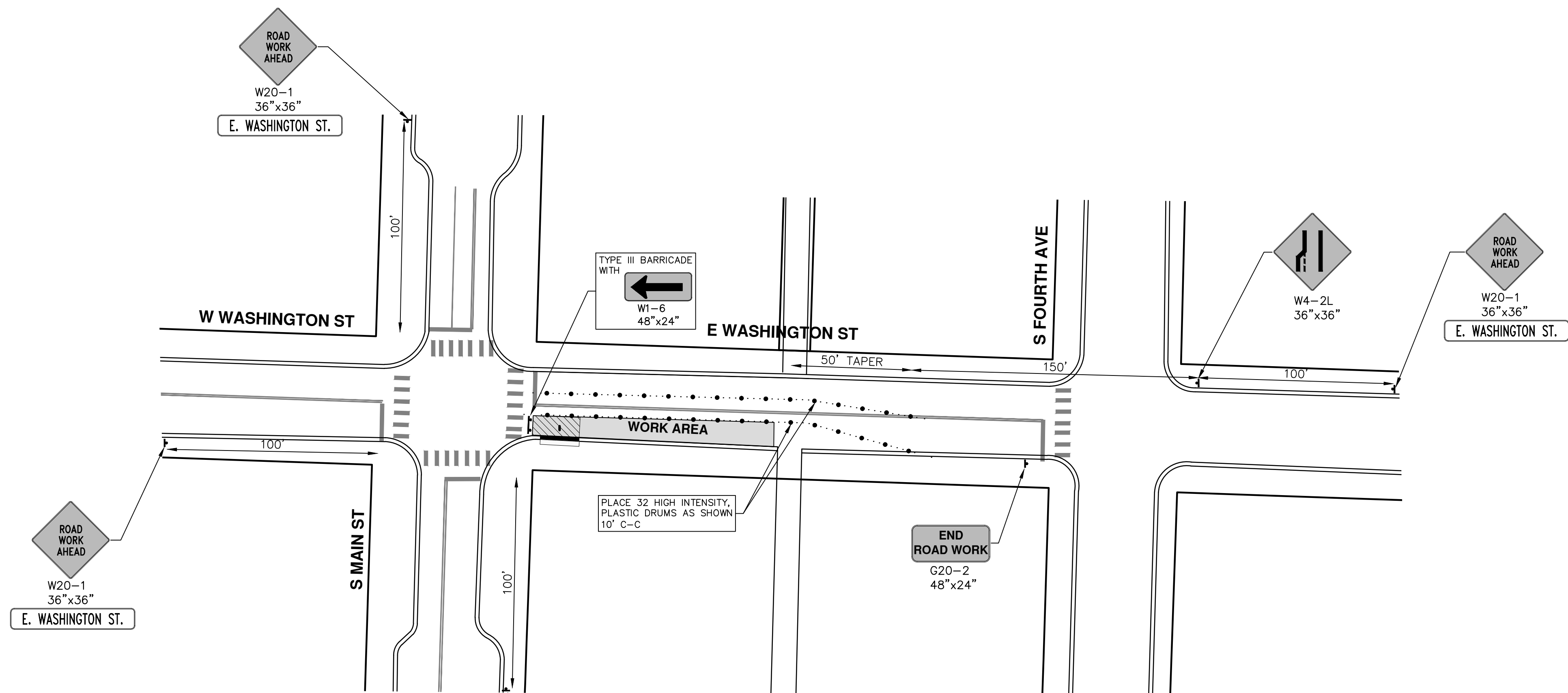
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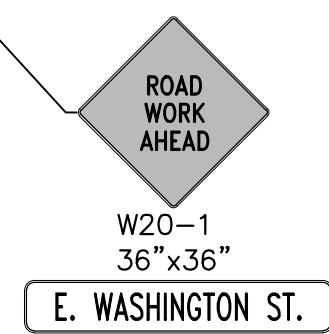
00	OUT FOR BID	5-26-16	DPF	DRAWN	CHECKED
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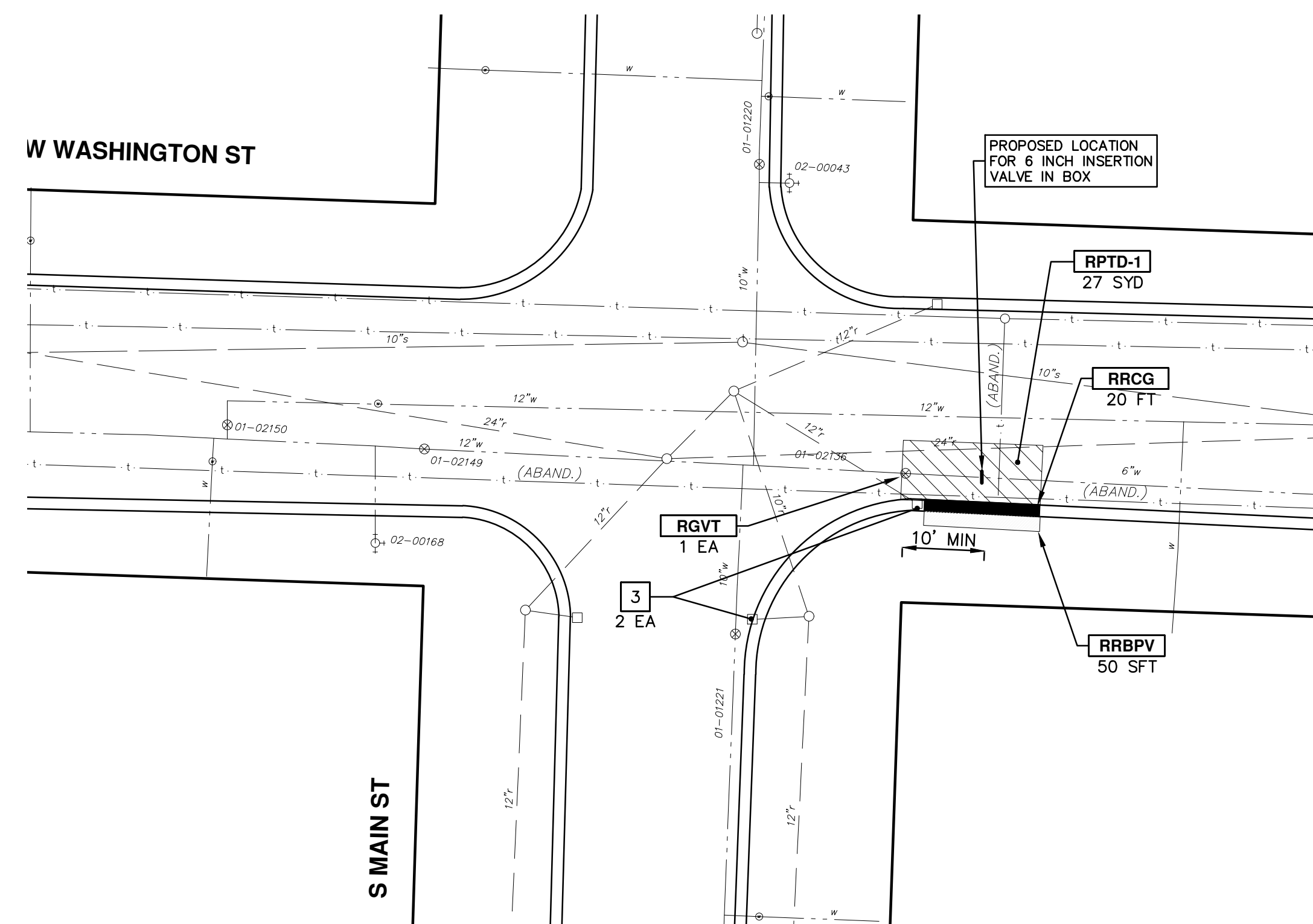


TRAFFIC CONTROL QUANTITIES FOR THIS SHEET	
ITEM DESCRIPTION	QUANTITY
TYPE B SIGNS	110 SFT
HIGH INTENSITY PLASTIC DRUMS	35 EA
TYPE III LIGHTED BARRICADE	2 EA
METER BAGS	7 EA



* CITY RECORDS INDICATE CONCRETE BASE WITH ASPHALT OVERLAY. CONCRETE REMOVAL INCLUDED IN PAVEMENT REMOVAL ITEM.

CONSTRUCTION KEY	
KEY	DESCRIPTION
RRCG	REMOVE AND REPLACE CURB AND GUTTER, CONC, F4, SPECIAL
DWS	REMOVE AND REPLACE DETECTABLE WARNING SURFACE
SW-8	REMOVE SIDEWALK AND PLACE 8" CONC. SIDEWALK OR RAMP
RPTD-1	REMOVE PAVEMENT, EXCAVATE FOR VALVE, AND INSTALL TRENCH DETAIL I MODIFIED
RRBPV	REMOVE AND REPLACE BRICK PAVERS
RGVT	REMOVE GATE VALVE ASSEMBLY TOP SECTION AND FILL ASSEMBLY WITH 6A
3	INSTALL INLET FILTER



MISCELLANEOUS QUANTITIES THIS SHEET	
	QUANTITY
PAVT MRKG OVERLAY COLD PLASTIC WHITE BIKE SHARROW	1 EA

REV.	DESCRIPTION	DATE	DRAWN	CHECKED
00	OUT FOR BID	5-26-16	DPF	IVK

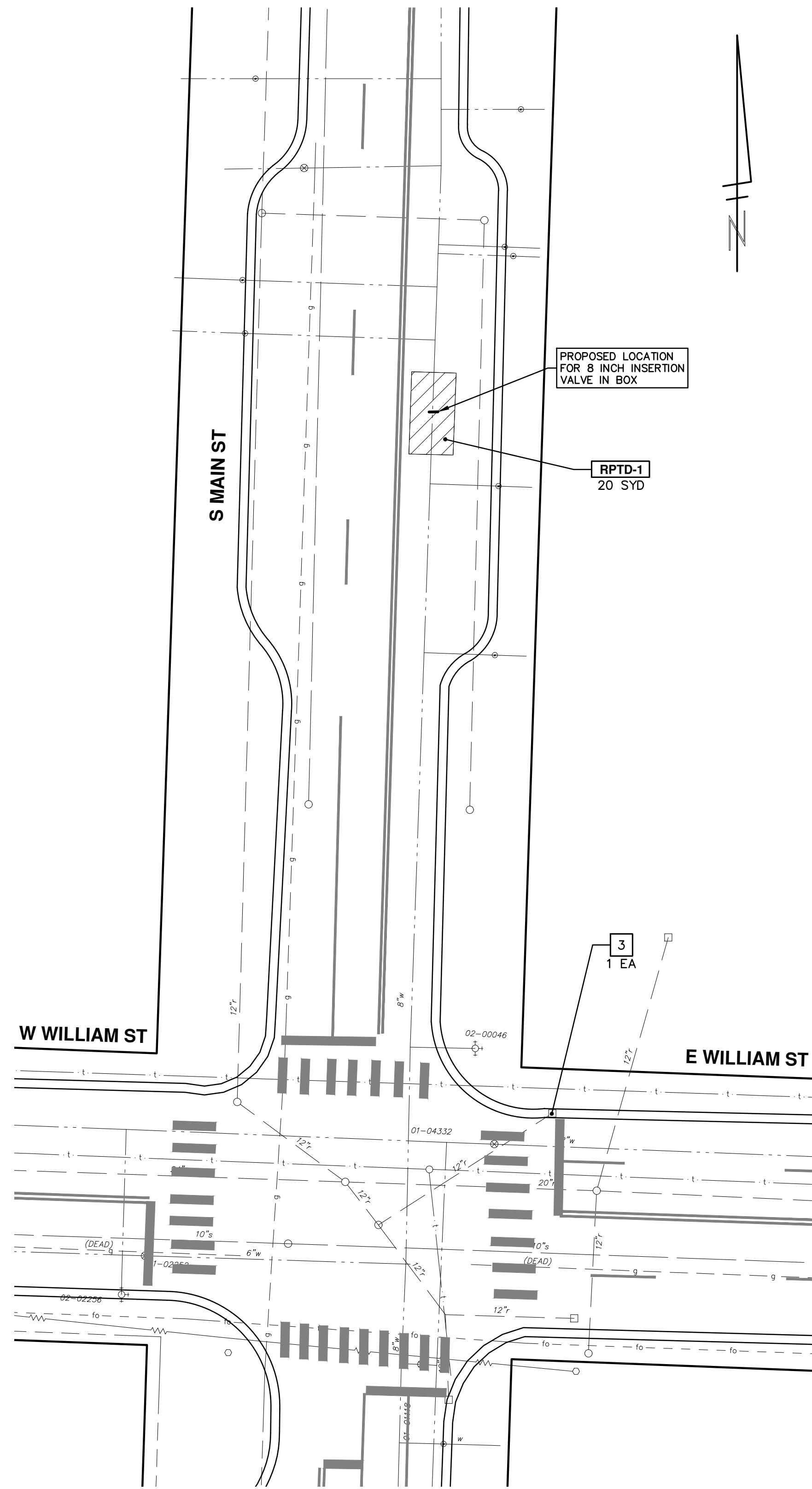
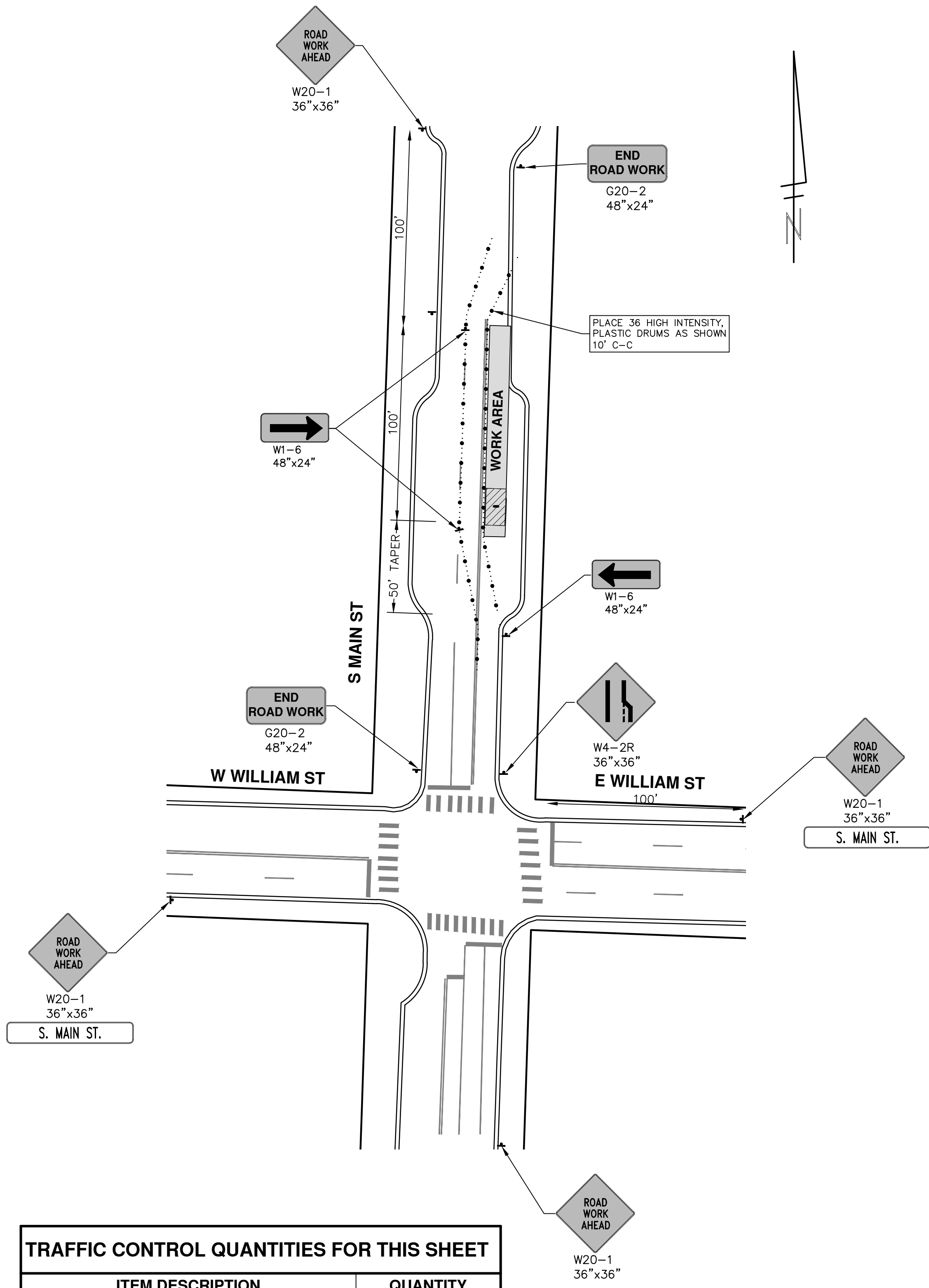
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
DOWNTOWN VALVE REPLACEMENT
WASHINGTON STREET - EAST OF MAIN ST. #5

SHEET No. **8 OF 15**

SCALE PLAN: 1" = 40'
DRAWING No. **2006061-8**

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TRAFFIC CONTROL QUANTITIES FOR THIS SHEET	
ITEM DESCRIPTION	QUANTITY
TYPE B SIGNS	125 SFT
HIGH INTENSITY PLASTIC DRUMS	45 EA
TYPE III LIGHTED BARRICADE	2 EA
METER BAGS	8 EA

CONSTRUCTION KEY	
KEY	DESCRIPTION
RRCG	REMOVE AND REPLACE CURB AND GUTTER, CONC, F4, SPECIAL
DWS	REMOVE AND REPLACE DETECTABLE WARNING SURFACE
SW-8	REMOVE SIDEWALK AND PLACE 8" CONC. SIDEWALK OR RAMP
RPTD-1	REMOVE PAVEMENT, EXCAVATE FOR VALVE, AND INSTALL TRENCH DETAIL I MODIFIED
RRBPV	REMOVE AND REPLACE BRICK PAVERS
RGVT	REMOVE GATE VALVE ASSEMBLY TOP SECTION AND FILL ASSEMBLY WITH 6A
3	INSTALL INLET FILTER

MISCELLANEOUS QUANTITIES THIS SHEET	
	QUANTITY
PAVT MRKG HOT APPLIED THERMOPLASTIC 4 INCH YELLOW	40 FT

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
 SCALE PLAN: 1" = 40'
 DRAWING No. 2006061-9

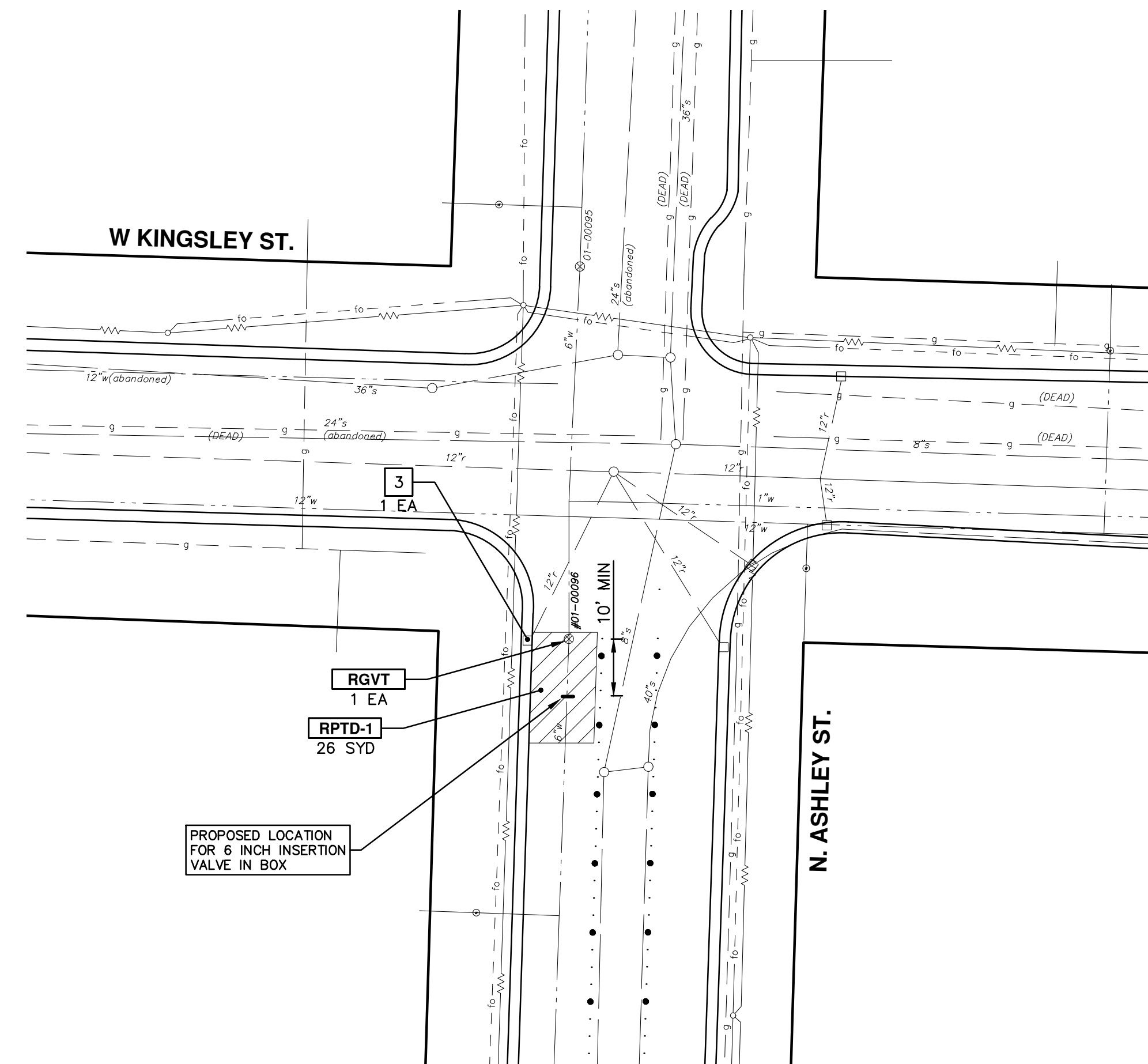
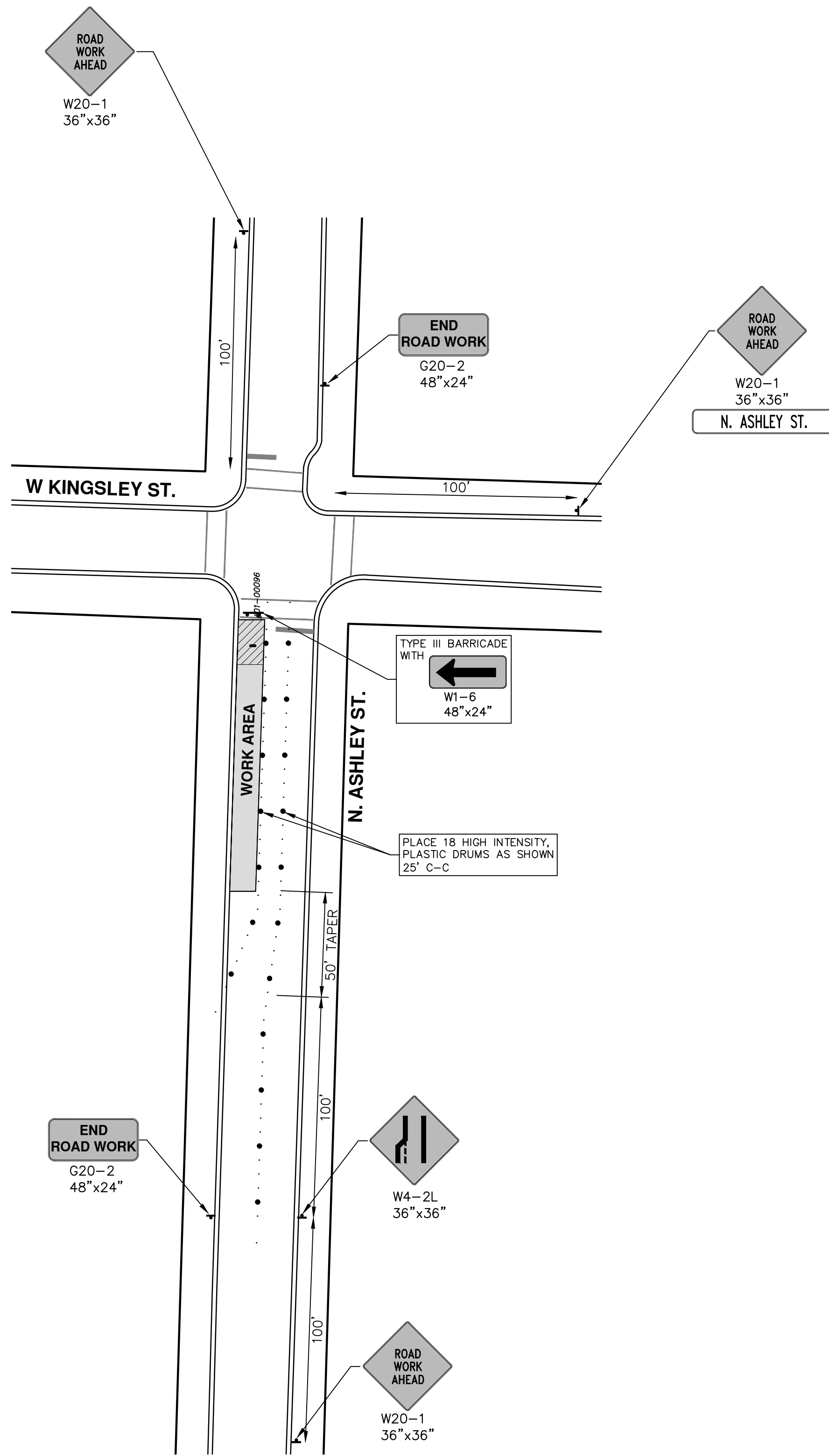
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
 DOWNTOWN VALVE REPLACEMENT
 MAIN ST. - NORTH OF WILLIAM ST. #6

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 ANN ARBOR: 734-794-4410
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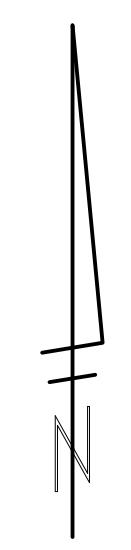
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TRAFFIC CONTROL QUANTITIES FOR THIS SHEET	
ITEM DESCRIPTION	QUANTITY
TYPE B SIGNS	100 SFT
HIGH INTENSITY PLASTIC DRUMS	25 EA
TYPE III LIGHTED BARRICADE	2 EA
METER BAGS	3 EA

MISCELLANEOUS QUANTITIES THIS SHEET	
	QUANTITY
PAVT MRKG OVERLAY COLD PLASTIC 6 INCH WHITE	15 FT

CONSTRUCTION KEY	
KEY	DESCRIPTION
RRCG	REMOVE AND REPLACE CURB AND GUTTER, CONC, F4, SPECIAL
DWS	REMOVE AND REPLACE DETECTABLE WARNING SURFACE
SW-8	REMOVE SIDEWALK AND PLACE 8" CONC. SIDEWALK OR RAMP
RPTD-1	REMOVE PAVEMENT, EXCAVATE FOR VALVE, AND INSTALL TRENCH DETAIL I MODIFIED
RRBPV	REMOVE AND REPLACE BRICK PAVERS
RGVT	REMOVE GATE VALVE ASSEMBLY TOP SECTION AND FILL ASSEMBLY WITH 6A
3	INSTALL INLET FILTER



PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
 SCALE PLAN: 1" = 40'
 DRAWING No. 2006061-10

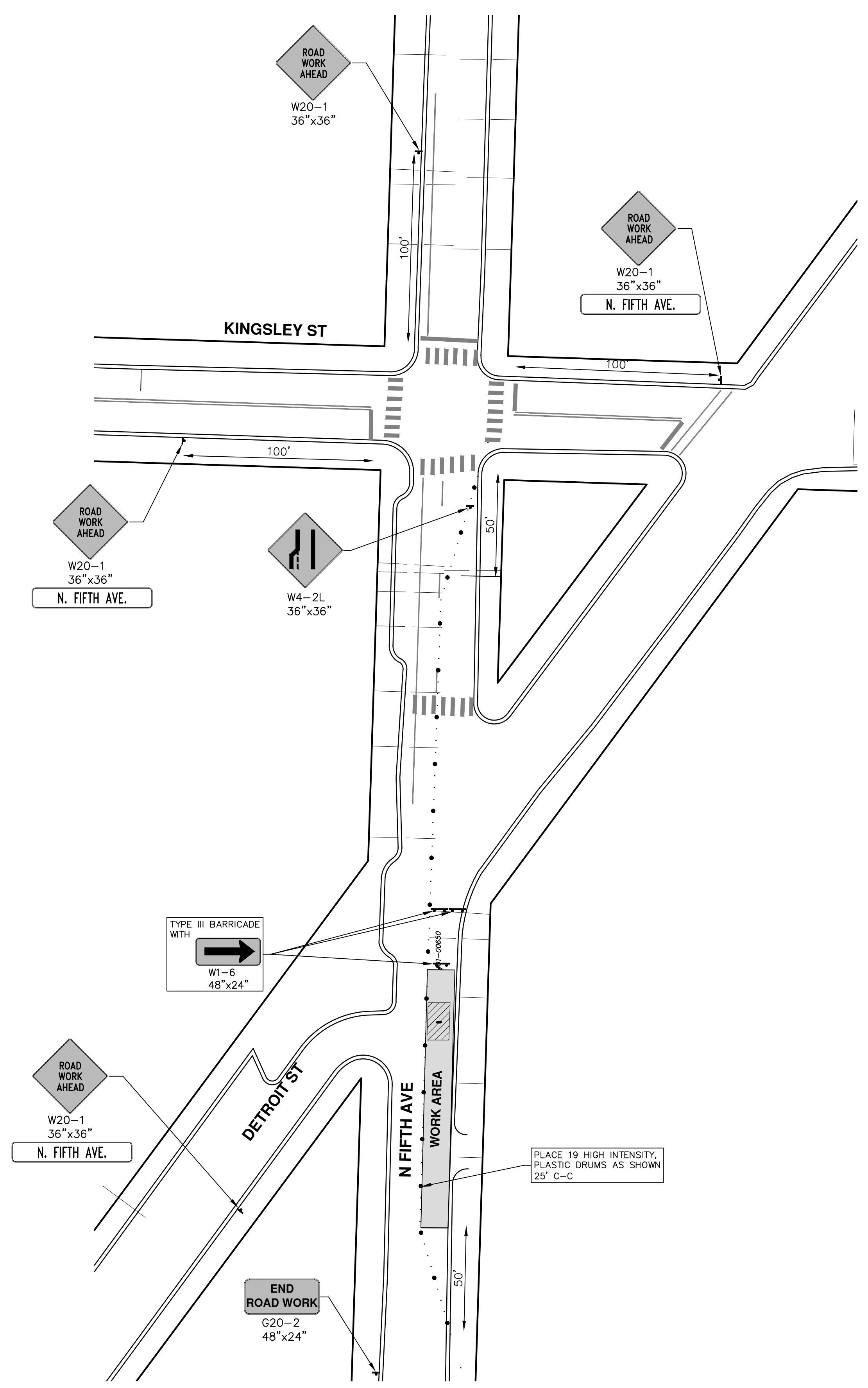
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
 DOWNTOWN VALVE REPLACEMENT
 ASHLEY ST. - SOUTH OF KINGSLEY ST. #7

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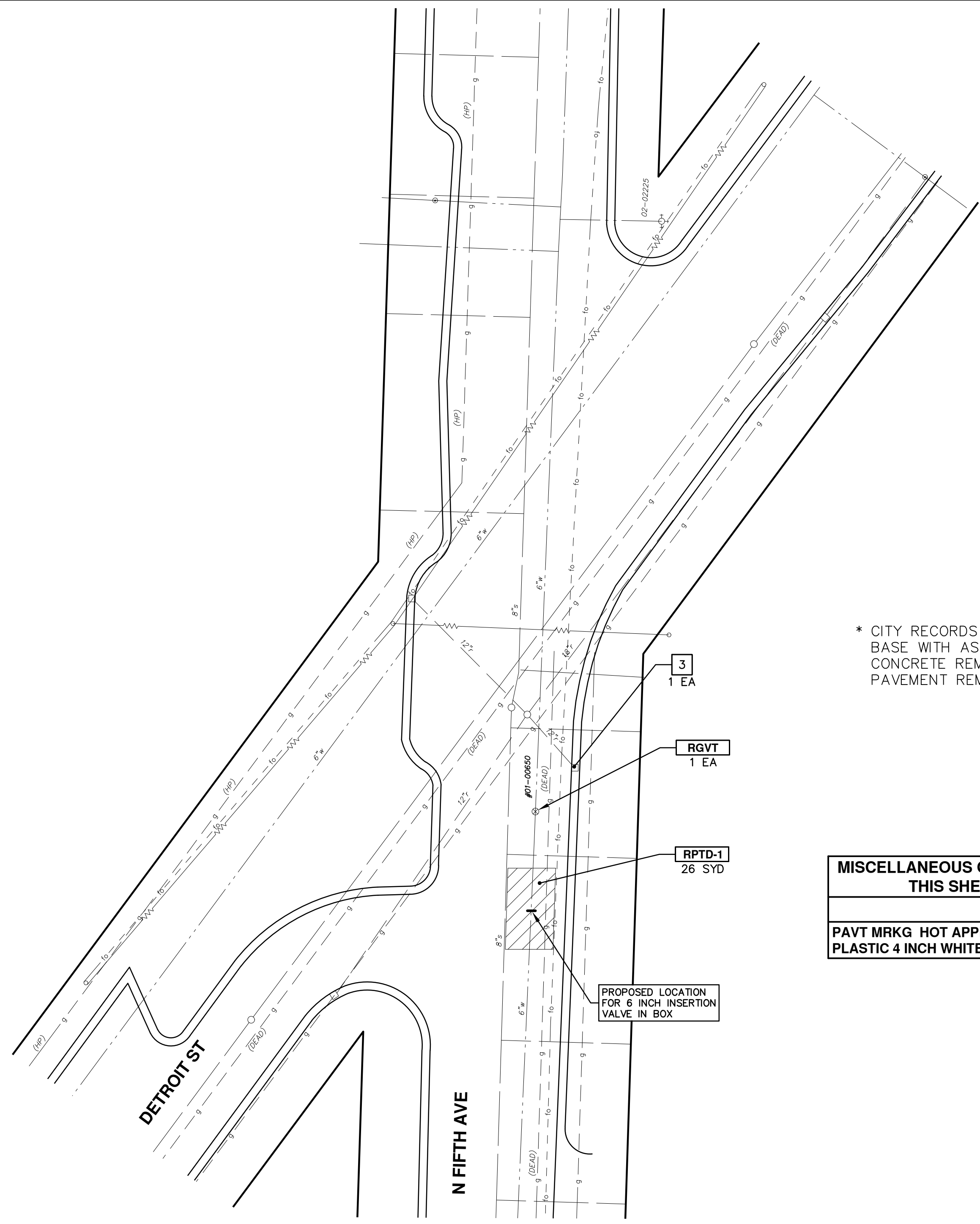
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TRAFFIC CONTROL QUANTITIES FOR THIS SHEET	
ITEM DESCRIPTION	QUANTITY
TYPE B SIGNS	105 SFT
HIGH INTENSITY PLASTIC DRUMS	25 EA
TYPE III LIGHTED BARRICADE	2 EA
METER BAGS	2 EA



* CITY RECORDS INDICATE CONCRETE BASE WITH ASPHALT OVERLAY. CONCRETE REMOVAL INCLUDED IN PAVEMENT REMOVAL ITEM.

MISCELLANEOUS QUANTITIES THIS SHEET	QUANTITY
PAVT MRKG HOT APPLIED THERMO PLASTIC 4 INCH WHITE	25 FT

CONSTRUCTION KEY	
KEY	DESCRIPTION
RRCG	REMOVE AND REPLACE CURB AND GUTTER, CONC, F4, SPECIAL
DWS	REMOVE AND REPLACE DETECTABLE WARNING SURFACE
SW-6	REMOVE SIDEWALK AND PLACE 8" CONC. SIDEWALK OR RAMP
RPTD-1	REMOVE PAVEMENT, EXCAVATE FOR VALVE, AND INSTALL TRENCH DETAIL 1 MODIFIED
RRBPV	REMOVE AND REPLACE BRICK PAVERS
RGVT	REMOVE GATE VALVE ASSEMBLY TOP SECTION AND FILL ASSEMBLY WITH 6A
3	INSTALL INLET FILTER

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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
DOWNTOWN VALVE REPLACEMENT

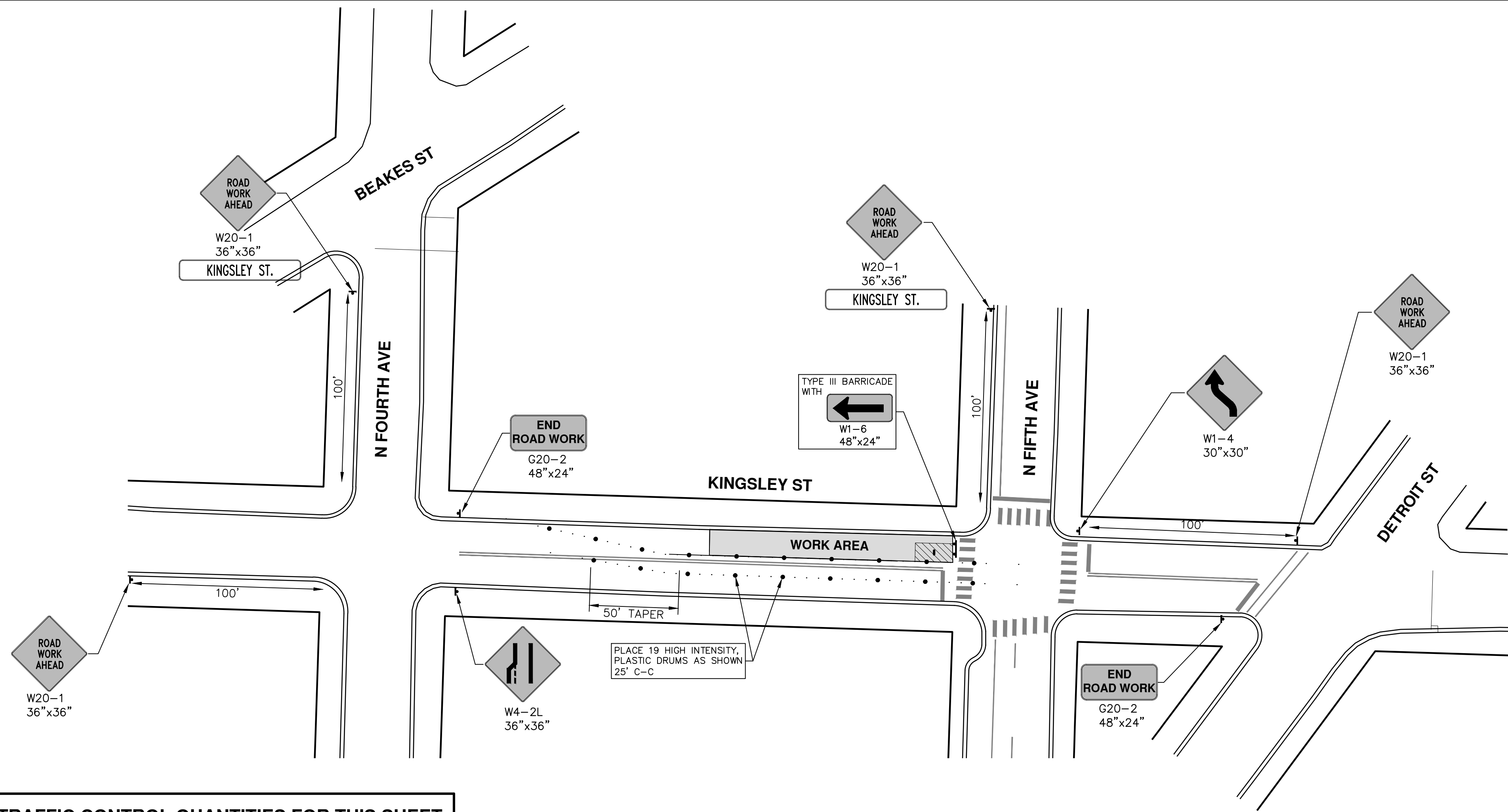
FIFTH AVENUE - NEAR COMMUNITY HIGH SCHOOL #8

SHEET No. DRAWING No. SCALE PLAN: 1" = 40'

2006061-11

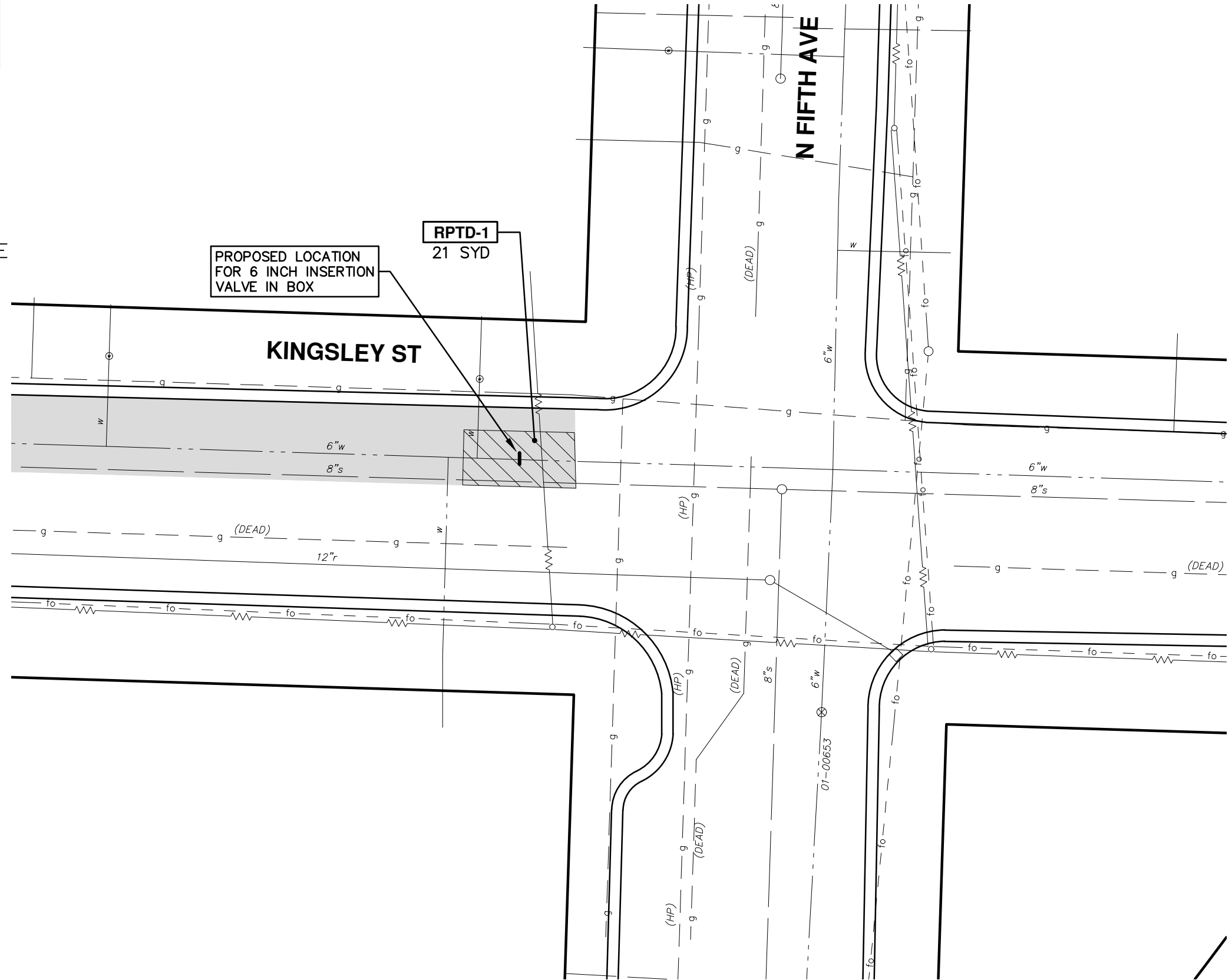
11 OF 15

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TRAFFIC CONTROL QUANTITIES FOR THIS SHEET	
ITEM DESCRIPTION	QUANTITY
TYPE B SIGNS	130 SFT
HIGH INTENSITY PLASTIC DRUMS	25 EA
TYPE III LIGHTED BARRICADE	2 EA
METER BAGS	4 EA

* CITY RECORDS INDICATE CONCRETE BASE WITH ASPHALT OVERLAY. CONCRETE REMOVAL INCLUDED IN PAVEMENT REMOVAL ITEM.



CONSTRUCTION KEY	
KEY	DESCRIPTION
RRCG	REMOVE AND REPLACE CURB AND GUTTER, CONC, F4, SPECIAL
DWS	REMOVE AND REPLACE DETECTABLE WARNING SURFACE
SW-8	REMOVE SIDEWALK AND PLACE 8" CONC. SIDEWALK OR RAMP
RPTD-1	REMOVE PAVEMENT, EXCAVATE FOR VALVE, AND INSTALL TRENCH DETAIL I MODIFIED
RRBPV	REMOVE AND REPLACE BRICK PAVERS
RGVT	REMOVE GATE VALVE ASSEMBLY TOP SECTION AND FILL ASSEMBLY WITH 6A
3	INSTALL INLET FILTER

MISCELLANEOUS QUANTITIES THIS SHEET	
	QUANTITY
NO PARKING SIGNS	5 EA

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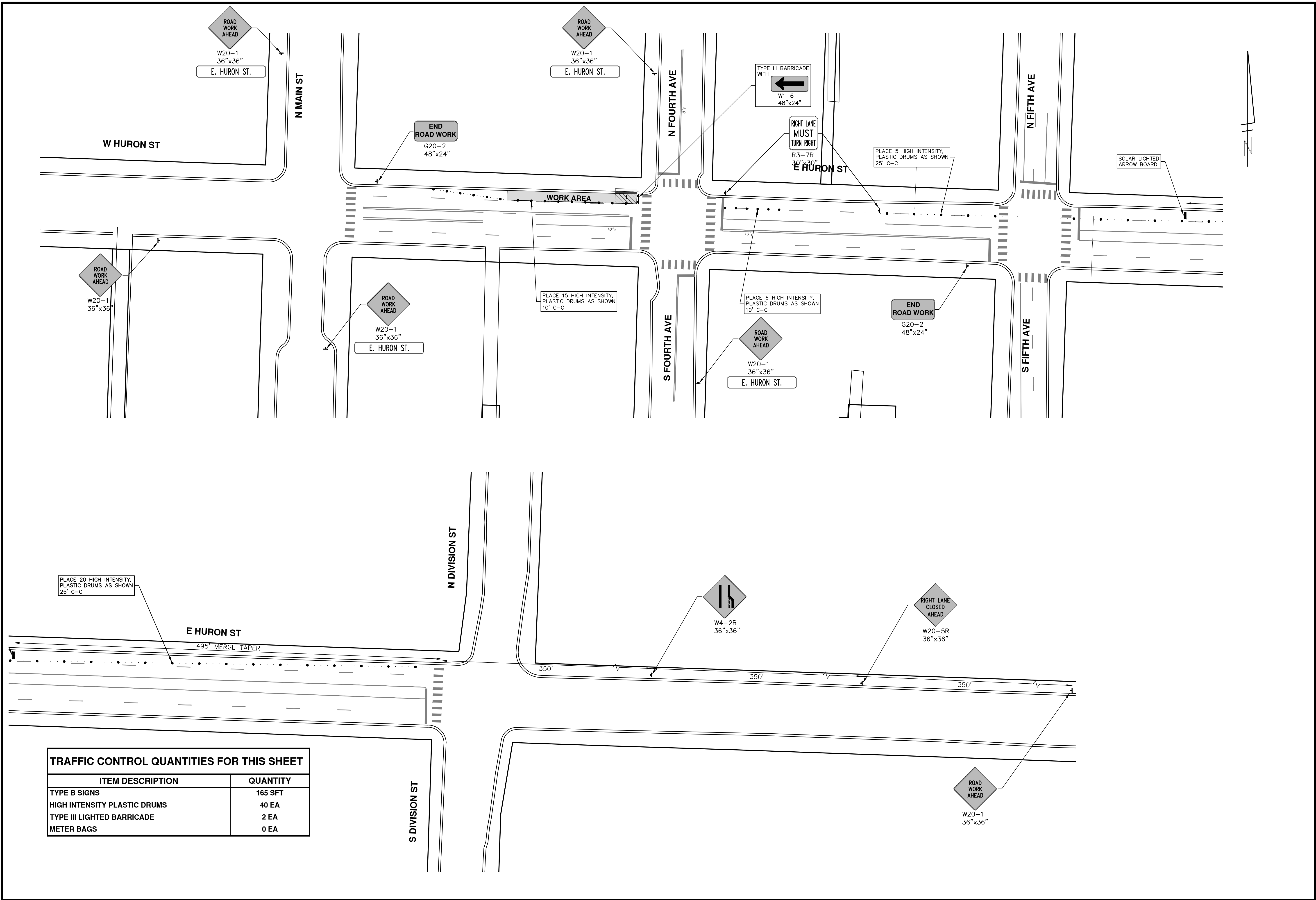
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
DOWNTOWN VALVE REPLACEMENT
KINGSLEY ST. - WEST OF FIFTH AVE. #9

SHEET No. **12 OF 15**

SCALE PLAN: 1" = 40'
DRAWING No. **2006061-12**

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TRAFFIC CONTROL QUANTITIES FOR THIS SHEET	
ITEM DESCRIPTION	QUANTITY
TYPE B SIGNS	165 SFT
HIGH INTENSITY PLASTIC DRUMS	40 EA
TYPE III LIGHTED BARRICADE	2 EA
METER BAGS	0 EA

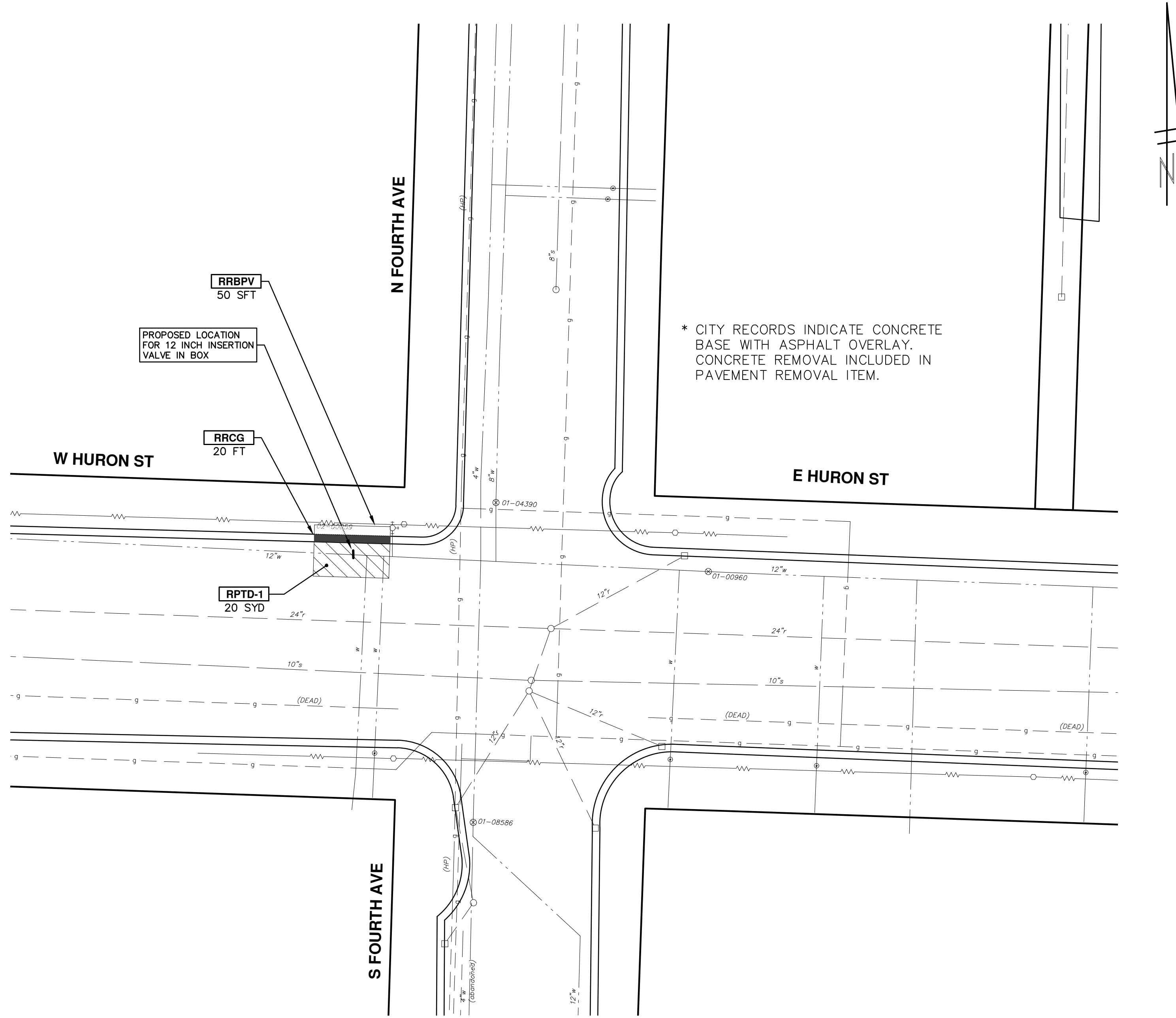
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
DOWNTOWN VALVE REPLACEMENT
 HURON STREET - WEST OF FOURTH AVE, #10 TRAFFIC CONTROL

SCALE PLAN: 1" = 40'
 DRAWING No. 2006061-13

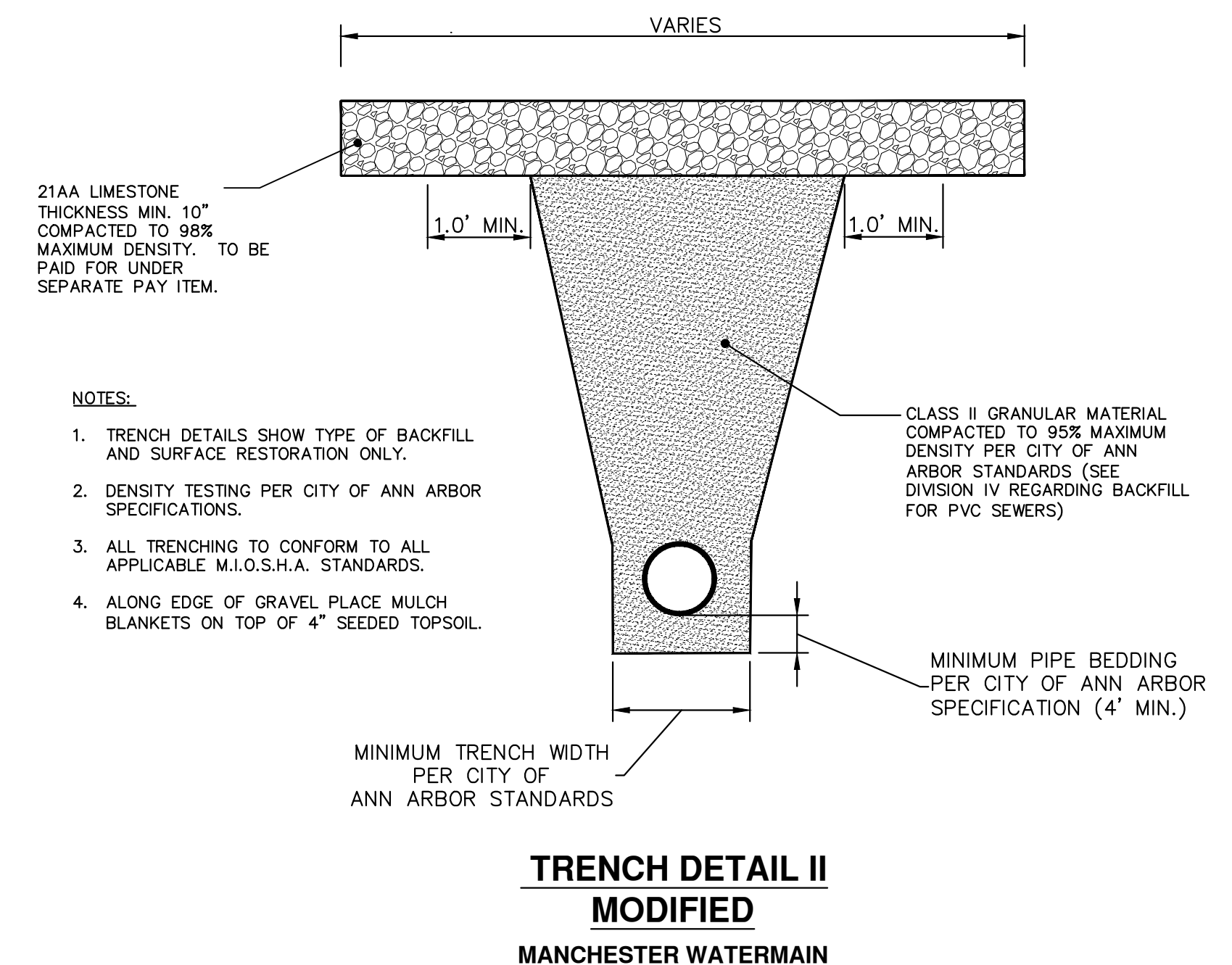
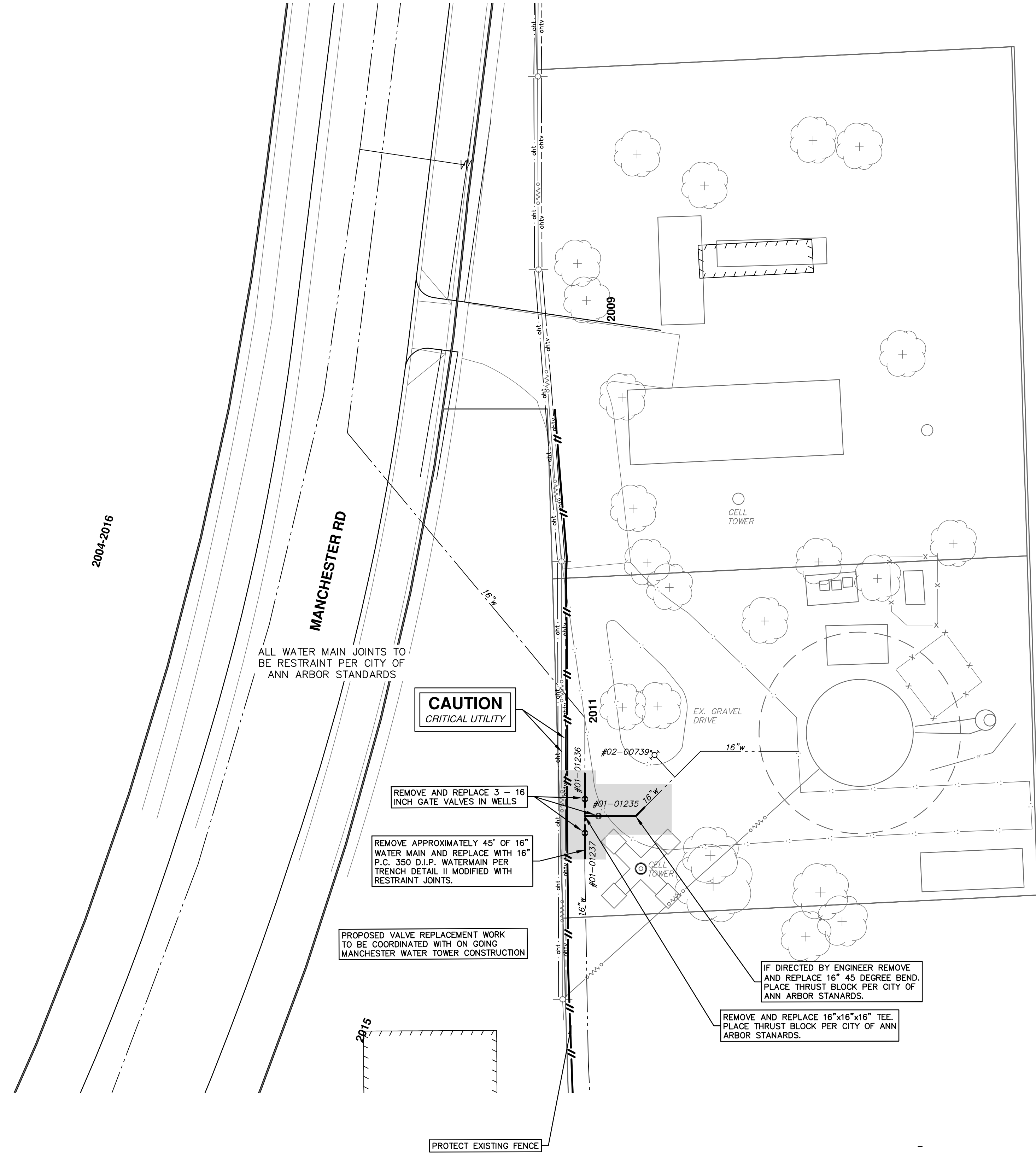
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CONSTRUCTION KEY	
KEY	DESCRIPTION
RRCG	REMOVE AND REPLACE CURB AND GUTTER, CONC, F4, SPECIAL
DWS	REMOVE AND REPLACE DETECTABLE WARNING SURFACE
SW-8	REMOVE SIDEWALK AND PLACE 8" CONC. SIDEWALK OR RAMP
RPTD-1	REMOVE PAVEMENT, EXCAVATE FOR VALVE, AND INSTALL TRENCH DETAIL I MODIFIED
RRBPV	REMOVE AND REPLACE BRICK PAVERS
RGVT	REMOVE GATE VALVE ASSEMBLY TOP SECTION AND FILL ASSEMBLY WITH 6A
3	INSTALL INLET FILTER



- NOTES:
1. TRENCH DETAILS SHOW TYPE OF BACKFILL AND SURFACE RESTORATION ONLY.
 2. DENSITY TESTING PER CITY OF ANN ARBOR SPECIFICATIONS.
 3. ALL TRENCHING TO CONFORM TO ALL APPLICABLE M.I.O.S.H.A. STANDARDS.
 4. ALONG EDGE OF GRAVEL PLACE MULCH BLANKETS ON TOP OF 4" SEEDED TOPSOIL.

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

SCALE PLAN: 1/20

DRAWING No. **2006061-15**

SHEET No. **15 OF 15**

MANCHESTER ROAD

DOWNTOWN VALVE REPLACEMENT

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