

ADDENDUM No. 1

ITB No. 4433

FERDON WELLS STORM SEWER REHABILITATION PROJECT

Due: Tuesday, April 26, 2016, on or before 2:00 P.M. (Local Time)

The following changes, additions, and/or deletions shall be made to the Invitation to Bid for **ITB No. 4433 Ferdon Wells Storm Sewer Rehabilitation Project**, on which proposals will be received on/or before Tuesday, April 26, 2016, by 2:00P.M.

The information contained herein shall take precedence over the original documents and all previous addenda (if any), and is appended thereto. **This Addendum includes 12 page(s) and 2 drawing(s).**

Bidder is to acknowledge receipt of this Addendum No. 1, including all attachments (if any) in its Bid by so indicating on page ITB-1 of the Invitation to Bid Form. Bids submitted without acknowledgement of receipt of this addendum will be considered nonconforming.

The following forms provided within this ITB Document must be included in submitted bids.

- **City of Ann Arbor Prevailing Wage Declaration of Compliance**
- **City of Ann Arbor Living Wage Ordinance Declaration of Compliance**
- **Vendor Conflict of Interest Disclosure Form**
- **City of Ann Arbor Non-Discrimination Ordinance Declaration of Compliance**

Bids that fail to provide these completed forms listed above upon bid opening will be rejected as non-responsive and will not be considered for award.

I. CORRECTIONS/ADDITIONS/DELETIONS

Changes to the Bid documents which are outlined below are referenced to a page or Section in which they appear conspicuously. The Bidder is to take note in its review of the documents and include these changes as they may affect work or details in other areas not specifically referenced here.

<u>Section/Page(s)</u>	<u>Change</u>
DS-1 & DS-2	These pages shall be removed and replaced by DS-1-R-1, and DS-2-R-1, which are attached below.
DS-5 & DS-6	These pages shall be removed and replaced by DS-5-R-1, and DS-6-R-1, which are attached below.
DS-9 & DS-10	These pages shall be removed and replaced by DS-9-R-1, and DS-10-R-1, which are attached below.
BF-3	This page shall be removed and replaced with BF-3-R-1, which is attached to this addendum. The following five items were added to the bid form.

<u>Item</u>	<u>Description</u>	<u>Unit</u>	<u>Estimated Quantity</u>
363	Type I Manhole Additional Depth, 6 foot dia	VF	1
385	Sewer Pipe Abandonment	LF	125
386	Sewer Structure Abandonment	Each	5
391	Pipe Undercut & Refill (6AA)	CY	100
522	Subgrade Undercutting - Type II	CY	75.0

Plans Sheets 4 & 7 These plan sheets shall be removed and replaced with the attached plans sheets #4 and 7. The significant changes to these plans sheets include the following:

On plan sheet #4, the 10 inch sand subbase, CIP is shown to consist of MDOT Granular Material Class II, Modified.

On plan sheet #7, a note about bypass pumping was added.

Respondents are directed to take note in its review of the documents of the following questions and City responses as they affect work or details in other areas not specifically referenced here.

II. QUESTIONS AND ANSWERS

The following Questions have been received by the City. Responses are being provided in accordance with the terms of the ITB.

Question #1: Will the Pre bid meeting sign in sheet be made available?

Answer: Yes. The Pre Bid Meeting Notes and sign-in sheet is attached to this Addendum.

Question #2: What is the Engineer's Estimate?

Answer: The Engineer's Estimate is \$417,656.00.

Question #3: Will the entire width of the pavement be removed and replaced?

Answer: Due to the depth of the storm sewer a majority of the pavement width shall be removed as part of the storm sewer installation. If during the installation of the storm sewer, a determination that the entire pavement width (if it is not under the influence of the storm sewer/manhole trench) shall be replaced the contractor shall be paid for the additional pavement removal in accordance with the pay item "Remove HMA Pavement".

Question #4: Are the two 36 inch inlet structures (88-52834 and 88-52835, respectively) going to be removed and replaced?

Answer: The two 36 inch inlet structures (88-52834 and 88-52835) shall remain and are not going to be replaced. The 12 inch pipes from 92-58317 shall be abandoned. The inlet structures (88-52834 and 88-52835) shall be bulk headed at the old pipe. This work is included in the cost of the pay item "Storm Sewer Bulkhead and Abandonment". The new 12 inch pipe extending from manhole R101 shall be installed and tapped at the inlet structures (88-52834 and 88-52835). This work including tapping the inlets shall be paid for "12 inch Class IV RCP Trench Detail I".

Bidders are responsible for any conclusions that they may draw from the information contained in the Addendum.

DETAILED SPECIFICATION FOR PROJECT SCHEDULE

Examination of Plans, Specifications, and Work Site: Bidders shall carefully examine the Bid Form, plans, specifications and the work site until the Bidder is satisfied as to all local conditions affecting the contract and the detailed requirements of construction. The submission of the bid shall be considered prima facie evidence that the Bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and all requirements of the contract.

The entire work under this Contract shall be completed in accordance with, and subject to, the scheduling requirements as outlined below, and all other requirements of the Contract Documents.

1. By no later than **May 23, 2016**, the Contractor shall submit a detailed schedule of work for the Engineer's review and approval. The proposed schedule must fully comply with the scheduling requirements contained in this Detailed Specification. The Contractor shall update the approved work schedule each week and present it to the Engineer at the weekly progress meeting.
2. The Contractor will receive two (2) copies of the Contract, for his/her execution, on or before **June 7, 2016**. The Contractor shall properly execute both copies of the Contract and return them, with the required Bonds and Insurance Certificate, to the City by June 17, 2016.
3. Contractor may begin construction on or before **June 20, 2016**, and only after receiving the copy of executed contract documents and the Notice to Proceed from the City. Appropriate time extensions shall be granted if the Notice to Proceed is delayed due to the circumstances controlled by the City.
4. The entire work under this Contract, including but not limited to the stabilization of all disturbed areas, permanent placement of hot mix asphalt or concrete, as needed, and the removal of any and all traffic control devices shall be completed by **August 22, 2016**, or within **sixty-three (63)** calendar days from the date of Notice to Proceed.

The Contractor may propose to adjust the limits or sequencing of construction in order to complete the work more efficiently. Changes to the recommended construction sequence must be approved in writing by the Engineer prior to construction and must assure all required coordination with other projects and time lines.

Time is of the essence in the performance of the work of this contract. The Contractor is expected to mobilize sufficient personnel and equipment, and work throughout all authorized hours in order to complete the project by the final completion date. Costs for the Contractor to organize, coordinate, and schedule all of the work of the project, will not be paid for separately, but shall be included in the bid price of the Contract Item "General Conditions."

Failure to complete all work as specified herein within the times specified herein, including time extensions granted thereto as determined by the Engineer, shall entitle the City to deduct from the payments due the Contractor, **\$350.00** in "Liquidated Damages", and not as a penalty, for delays in the completion of the work for each and every calendar day beyond the **sixty-three (63)** calendar days from the date of Notice to Proceed.

Liquidated Damages will be assessed until the required work is completed in the current construction season. If, with the Engineer's approval, work is extended beyond seasonal limitations, the assessment of Liquidated Damages will be discontinued until the work is resumed in the following construction season.

MEASUREMENT AND PAYMENT

If the construction contract is not completed within the **sixty-three (63)** calendar days from the date of Notice to Proceed, and any extensions of time granted thereto, at the sole discretion of the City of Ann Arbor, this Contract may be terminated with no additional compensation due to the Contractor, and the Contractor may be forbidden to bid on future City of Ann Arbor projects for a period of at least three (3) years. If the Engineer elects to terminate the Contract, contract items paid for on a Lump Sum basis shall be paid up to a maximum percentage equal to the percentage of the contract work that has been completed.

Costs for the Contractor to organize, coordinate, and schedule all of the work of the project, will not be paid for separately, but shall be included in the bid price of the Contract Item "General Conditions, Max.\$_____." If the City elects to terminate this Construction Contract due to non-performance, contract items paid for on a Lump Sum basis will be pro-rated based on percentage equal to the percentage of the contract work completed.

**DETAILED SPECIFICATION
FOR
ITEM #201 – GENERAL CONDITIONS, MAX. \$50,000**

DESCRIPTION

This item shall include all work described and required by the Plans and Specifications for which no item of work is listed in the Bid Form, including but not limited to:

- Scheduling and organization of all work, subcontractors, suppliers, testing, inspection, surveying, and staking
- Coordination of, and cooperation with, other contractors, agencies, departments, and utilities
- Protection and maintenance of Utilities
- Placing, maintaining, and removing all soil erosion and sedimentation controls (as specified or as shown on project plans)
- Maintaining drainage
- Maintaining driveway drive openings, sidewalks, bike paths, mail deliveries, and solid waste/recycle pick-ups. This includes the placement and maintenance of gravel in driveway openings as directed by the Engineer
- Storing all materials and equipment off lawn areas
- Temporary relocation and final replacement/re-setting of mailboxes
- Site clean-up
- Coordination efforts to furnish various HMA mixtures as directed by the Engineer
- Coordination efforts to furnish and operate various-size vehicles/equipment as directed by the Engineer
- Furnishing and operating vacuum-type street cleaning equipment a minimum of once per week or more frequently as directed by the Engineer
- Furnishing and operating vacuum-type utility structure cleaning equipment
- Furnishing and operating both vibratory plate and pneumatic-type (“pogo-stick”) compactors
- Furnishing and operating a backhoe during all work activities
- Furnishing and operating a jackhammer and air compressor during all work activities
- Noise and dust control
- Mobilization(s) and demobilization(s)

- Furnishing submittals and certifications for materials and supplies
- Disposing of excavated materials and debris
- Removal of shrubs, brush, and trees less than 8” diameter as directed by Engineer
- Trimming of trees to accommodate intersection sight distance as shown on plans and directed by Engineer.
- Fencing to protect excavation over 1’ in depth during non-work hours and trees as shown on plans or as directed by the Engineer. The fencing must be a minimum of 36” high, be constructed of orange HDPE material, and reasonably secured to prevent access.
- All miscellaneous and incidental items such as overhead, insurance, and permits.
- Meeting all requirements relating to Debarment Certification, Davis Bacon Act, and Disadvantaged Business Enterprise, and providing the necessary documentation.

MEASUREMENT AND PAYMENT

This item of work will be paid for on a pro rata basis at the time of each progress payment. Measurement will be based on the ratio between work completed during the payment period and the total contract amount. When all of the work of this Contract has been completed, the measurement of this item shall be 1.0 Lump Sum, minus any deductions incurred for inadequate performance as described herein. This amount will not be increased for any reason, including extensions of time, extras, and/or additional work. The completed work as measured for this item of work will be paid for at the Contract Unit Price for the following Contract (Pay) Item:

PAY ITEM

General Conditions, Max. \$50,000

PAY UNIT

Lump Sum

The unit price for this item of work shall include all labor, material, and equipment costs to perform all the work specified in the Standard Specifications and as modified by this Detailed Specification.

**DETAILED SPECIFICATION
FOR
ITEM #203 - MINOR TRAFFIC DEVICES, MAX. \$8,000**

DESCRIPTION

The work of Temporary Traffic Devices shall consist of protecting and maintaining vehicular and pedestrian traffic as shown on the plans, in the Maintenance of Traffic specification, and as directed by the Engineer, in accordance with Sections 103.05, 103.06, and 812 of the 2012 MDOT Standard Specifications for Construction; Part 6 of the Michigan Manual of Uniform Traffic Control Devices, Latest Revised Edition (MMUTCD); and the City Standard Specifications, except as modified herein. These devices include, but not limited to, advance, regulatory, and warning signs; barricades and channeling devices at intersecting streets on which traffic is to be maintained; barricades at the ends of the project and at right-of-way lines of intersecting streets; changeable message signs; lighted arrow boards; sign/signal covers and pavement marking cover tape for construction operations.

The work of Minor Traffic Devices shall include, but not be limited to:

- The furnishing and operating of miscellaneous signs, warning devices, flag-persons, and cones;
- The operation of additional signs furnished by the City;
- Furnishing and installing meter bags;
- Coordinating with the City to have meter heads removed and reinstalled;
- Maintaining pedestrian traffic;
- Temporarily covering traffic controls;
- Temporarily covering existing signs as directed;
- Any and all other miscellaneous and/or incidental items which are necessary to properly perform the work.

The Contractor shall maintain vehicular and pedestrian traffic during the work by the use of flag-persons, channelizing devices, and signs as necessary, as directed by the Engineer, and in accordance with MMUTCD. Typical applications for maintaining pedestrian traffic in accordance with the MMUTCD are included in this detailed specification.

MATERIALS, EQUIPMENT, AND CONSTRUCTION METHODS

General

Materials and equipment shall meet the requirements specified in the above-designated sections of the MDOT Standard Specifications.

All temporary traffic/pedestrian control devices furnished by the Contractor shall remain the property of the Contractor. The City shall not be responsible for stolen or damaged signs, barricades, barricade lights or other traffic maintenance items. The Contractor shall replace missing traffic control devices immediately, at no additional cost to the City.

All existing signs, and signs erected by the City of Ann Arbor on this project shall be preserved, protected, and maintained by the Contractor. Existing City owned signs which are damaged by the Contractor during the work will be repaired by the City at the Contractor's expense.

The Contractor shall temporarily cover conflicting traffic and/or parking signs when directed by the Engineer.

When traffic control devices have been damaged by, or due to, the negligence of the Contractor, his subcontractors or material suppliers, the traffic control devices shall be replaced at the Contractor's expense.

Lighted Plastic Drums; Barricades; Temporary Signs; Portable Changeable Message Signs; Lighted Arrow Boards; Pavement Marking Cover Tape; Temporary Pavement Markings

The Contractor shall furnish and operate these items as directed by the Engineer.

Traffic control devices meeting current MDOT and MMUTCD specifications shall be used on this project.

Lighted plastic drums shall be sufficiently ballasted to minimize tipping.

Type I and III barricades shall have standard orange-and-white stripes on both sides of the barricade.

Sufficient signs shall be provided by the Contractor to ensure the safety of the workers and the general public in accordance with the current MMUTCD.

"Road Work Ahead" warning signs shall be placed, as indicated on the Plans, or as directed by the Engineer, prior to the start of work, regardless of the nature, magnitude or duration of the work.

Removable black pavement marking cover tape shall be used to cover conflicting pavement markings as directed by the Engineer.

Temporary pavement markings may be used within transition areas as directed by the Engineer and shall be removable.

MEASUREMENT AND PAYMENT

This item of work will be paid for on a pro rata basis at the time of each progress payment. Measurement will be based on the ratio between work completed during the payment period and the total contract amount. When all of the work of this Contract has been completed, the measurement of this item shall be 1.0 Lump Sum.

The completed work as measured for this item of work will be paid for at the Contract Unit Price for the following Contract (Pay) Item:

PAY ITEM

Minor Traffic Devices, Max \$8,000

PAY UNIT

Lump Sum

The unit price for this item of work shall include all labor, material, and equipment costs to perform all the work specified in the Standard Specifications and as modified by this Detailed Specification.

BID FORM

Section 1–Schedule of Prices

Project: Ferdon Wells Storm Sewer Rehabilitation Project

File #: 2014-044 Bid #: 4433

<u>Item</u>	<u>Description</u>	<u>Unit</u>	<u>Estimated Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>
362	Type I Manhole 0-10 feet Deep, 6 foot diameter	Each	1	\$ _____	\$ _____
363	Type I Manhole Additional Depth, 6 foot dia	VF	1	\$ _____	\$ _____
385	Sewer Pipe Abandonment	LF	125	\$ _____	\$ _____
386	Sewer Structure Abandonment	Each	5	\$ _____	\$ _____
391	Pipe Undercut & Refill (6AA)	CY	100	\$ _____	\$ _____
522	Subgrade Undercutting - Type II	CY	75	\$ _____	\$ _____
563	Structure Covers	Lbs	1,800	\$ _____	\$ _____
566	Adjust Structure Cover	Each	5	\$ _____	\$ _____
567	Adjust Monument or Gate Valve Boxes	Each	6	\$ _____	\$ _____
596	Hot-Applied, Thermoplastic Pavement Marking, 6 inch White	LF	159	\$ _____	\$ _____
597	Hot-Applied, Thermoplastic Pavement Marking, 24 inch White	LF	56	\$ _____	\$ _____
703	Inlet Filter	Each	6.0	\$ _____	\$ _____
800	Silt Fence	LF	450.0	\$ _____	\$ _____
822	Acer rubrum, (Red Maple), 2 inch	Each	2	\$ _____	\$ _____
824	Quercus rubra, (Red Oak), 2 inch	Each	2	\$ _____	\$ _____
TOTAL THIS PAGE				\$ _____	
TOTAL FROM PAGE BF-1:				\$ _____	
TOTAL FROM PAGE BF-2:				\$ _____	
TOTAL BASE BID:				\$ _____	

**Pre-Bid Meeting for the
Ferdon Wells Storm Sewer Rehabilitation Project**

April 13, 2016 @ 3:00 p.m. in the Basement Conference Room, City Hall

- I. Introductions
- II. Addendum Items
 - a. Addendum #1 – will include the following:
 - i. Pre-Bid minutes, including sign in sheet
 - ii. Other minor revisions
- III. General
 - a. Project Overview
 - b. Standard Specifications and Detailed Specifications
 - i. Project Schedule
 - Starting Date – approximately June 20th
 - Completion Date – approximately August 22nd (63 days after notice to proceed)
 - Hours of work: 7:00 a.m. to 8:00 p.m. Monday thru Saturday (Sundays with permission)
 - ii. Engineer’s estimate - \$417,656
 - iii. General Conditions
 - 1. Street sweeping & dust control
 - iv. Access to driveways - Contractor responsible for maintaining access to driveways during construction, and notifying residents when access will be unavailable (i.e. during utility work, paving, and concrete work)
- IV. Construction
 - a. Utility Construction
 - i. Storm sewer – Installation and Testing
 - ii. Reminder that all new storm sewers (including manholes) shall be cleaned and televised before final acceptance
 - b. Reconstruction the road and paving – the 10 inch Class II sand subbase will be paid for separately.
 - c. Sidewalk and ADA Ramps – ADA compliance MUST be achieved at all locations
 - d. Landscape Items and Restoration
 - i. Topsoil and Hydroseeding
 - ii. Trees and shrubs
- V. Other Items
 - a. The 10 inch sand subbase, CIP in the road shall consist of MDOT Granular Material Class II, Modified. This change will be reflected in Addendum #1.
 - b. If during the installation of the storm sewer, a determination that the entire pavement width (if it is not under the influence of the storm sewer/manhole trench) shall be replaced the contractor shall be paid for the additional pavement removal in accordance with the pay item “Remove HMA Pavement”.

- c. If during of the installation of the storm sewer, a determination that the entire road cross section (if it is not under the influence of the storm sewer/manhole trench) shall be replaced the contractor shall be paid for the additional removal in accordance with the pay item “Subgrade Undercutting - Type II”.
- d. The 24 inch cross lot storm sewer that extends beneath 1216 Ferdon will be abandoned and grouted in accordance with the sewer pipe abandonment pay item.
- e. The pay item “Adjust Structure Cover” includes the cost to lower (prior to milling) and adjusting (prior to top layer of asphalt) existing structures.
- f. The final structure adjustment to all **NEW** structures installed as part of this project is included in the cost of the structure and will not be paid for separately.
- g. The castings for all new structures are included in the pay items for the specific structures and shall not be paid for separately.
- h. The sanitary sewer structure #71-69058 shall be abandoned. The flow channel inside manhole shall be replaced with 8 inch schedule 35 PVC pipe. Bypass pumping of sanitary sewer flow will be required.
- i. The two 36 inch inlet structures (88-52834 and 88-52835) shall remain and are not going to be replaced. The 12 inch pipes from 92-58317 shall be abandoned. The inlet structures (88-52834 and 88-52835) shall be bulk headed at the old pipe. This work is included in the cost of the pay item “Storm Sewer Bulkhead and Abandonment”. The new 12 inch pipe extending from manhole R101 shall be installed and tapped at the inlet structures (88-52834 and 88-52835). This work including tapping the inlets shall be paid for “12 inch Class IV RCP Trench Detail I”.
- j. The HMA is a low volume superpave and shall be paid for separately.

Contact Information:

Anne Warrow

Project Manager

Phone: (734) 794-6410 ext. 43639

Fax: (734) 994-1744

E-mail: awarrow@a2gov.org

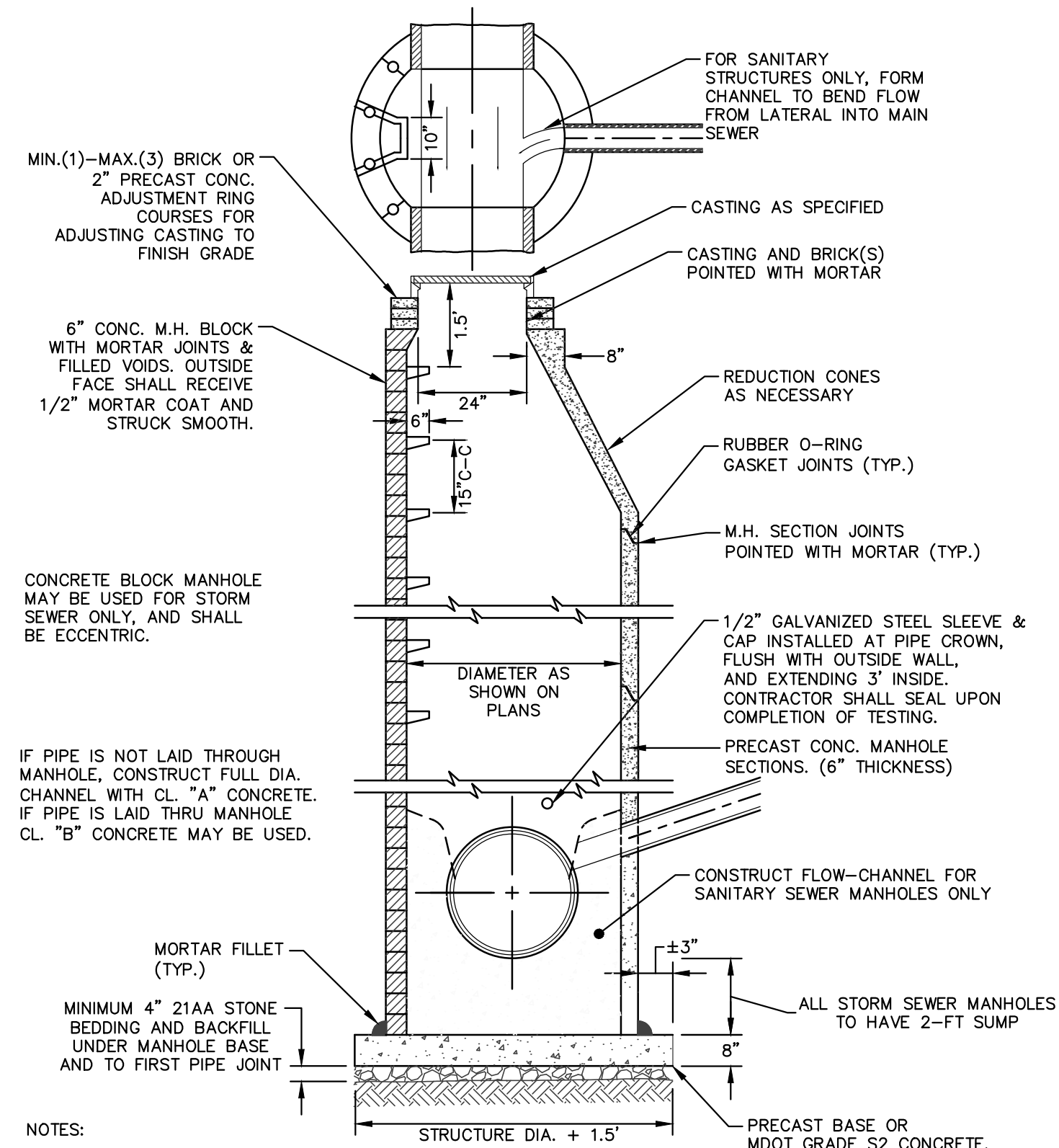
PRE-BID MEETING SIGN-IN SHEET

PROJECT: Ferdon, Wells Storm Sewer Rehabilitation Project, Bid #4433 FILE #: 2015-018 DATE: April 13, 2016

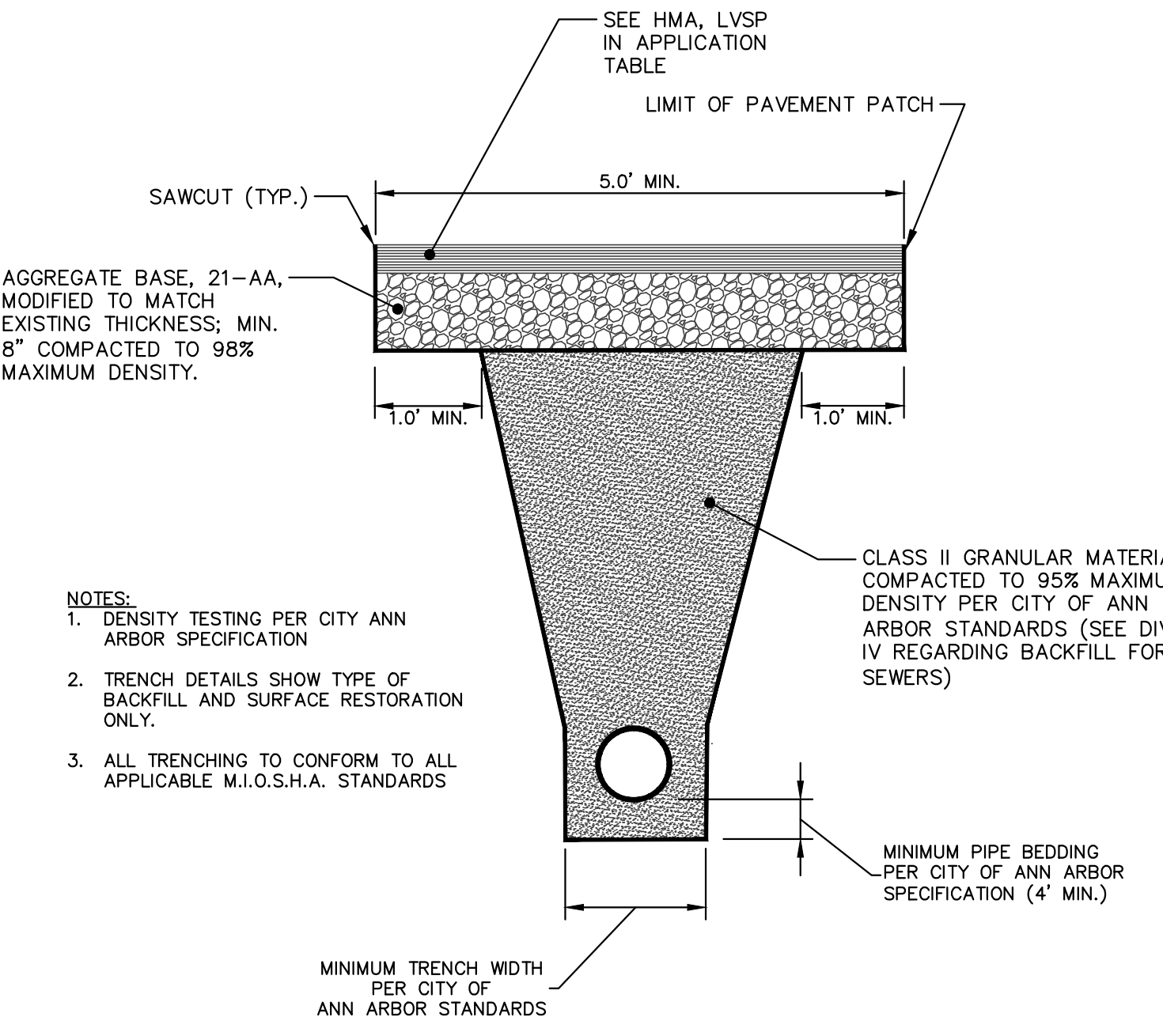
PLEASE PRINT (All information needs to be filled in to receive meeting minutes)

NAME	REPRESENTING	MAILING ADDRESS	TELEPHONE	EMAIL
Anne Warrow	City of Ann Arbor - Project Management	Address: <u>301 E. Huron Street P.O. Box 8647</u> City, State: <u>Ann Arbor, MI</u> Zip: <u>48107-8647</u>	Direct: (734) 794-6410 Mobile: (734) 323-6155 Fax: (734) 994-1744	awarrow@a2gov.org
Jim Cherven	Evergreen Civil, LLC	Address: <u>143 City Center #303</u> City, State: <u>Northville MI 481</u> Zip: <u>48167</u>	Office: (248) 374-1911 Mobile: 810-560-3111 Fax No. (248) 344-4905	jim@egreenllc.net
Jim Hamilton	Efficiency Production	Address: <u>685 Hull Road</u> City: <u>State Mason MI</u> Zip: <u>48854</u>	Office: () Mobile: (517) <u>230-9636</u> Fax No. ()	hilton@efficiencyproduction.com
Chuck Kipke	E.T. Mackenzie	Address: <u>6400 Jackson Road</u> <u>Ann Arbor , MI</u> Zip: <u>48103</u>	Office: () 761-5050 Mobile: () Fax No. () 761-5323	ckipke@mackenzieco.com
Mike Haeussler	D.N. Higgins	Address: <u>3900 Travis Point Road Suite A</u> City, State: <u>Ann Arbor, MI 48107</u>	Office: () 996-9500 Mobile: () Fax No. ()	mikeh@dnhiggins.com
Jane Allen	City of Ann Arbor - Project Management	Address: <u>301 E. Huron</u> City, State <u>Ann Arbor , MI 48107</u> Zip: _____	Office: (734) 794-6410 ex. 43678 Mobile: () Fax No. ()	jallen2@a2gov.org
		Address: _____ City, State: _____	Office: () Mobile: () _____ Fax No. () _____	
		Address: _____ City, State: _____	Office: () Mobile: () _____ Fax No. () _____	

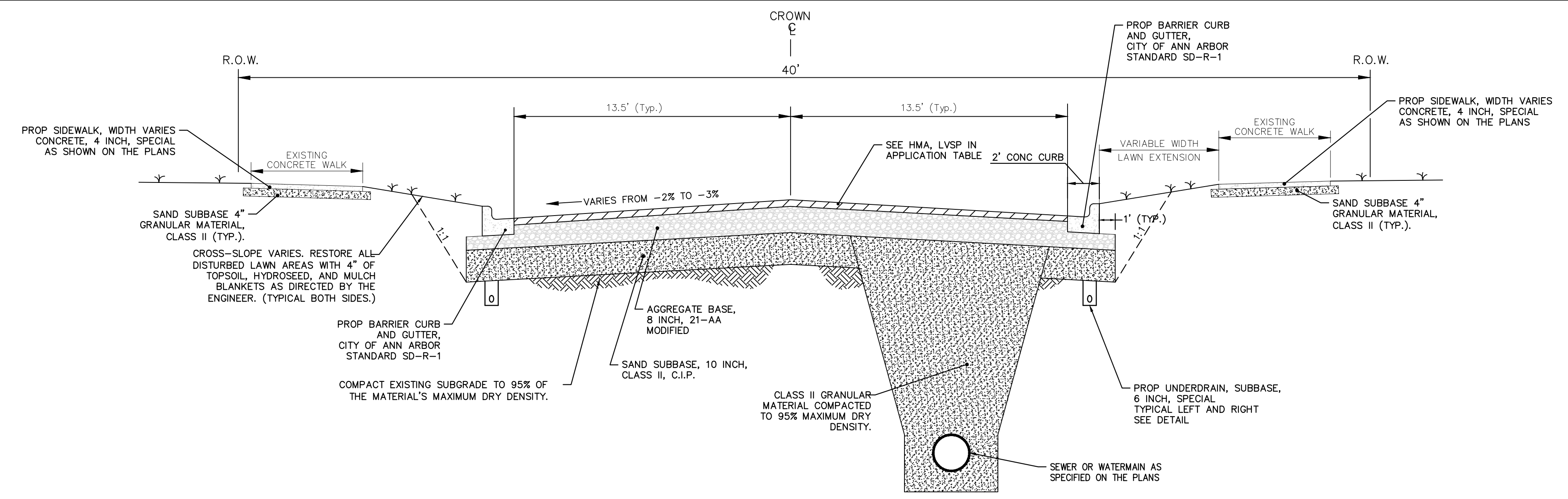
S:\Project Management\Design\2014044 Ferdon-Wells\Plan Production\Primary\2014044DET.dwg Dwg Created: 15-Apr-15 -- 02 standard bw.stb Plot Date: 19-Apr-16



- NOTES:
1. ALL SANITARY MANHOLES SHALL BE PRECAST CONCRETE.
 2. ALL MANHOLES MUST HAVE ECCENTRIC CONES - BOTH STORM AND SANITARY
 3. ALL SANITARY SEWER OPENINGS SHALL BE PRECAST WITH RUBBER BOOT CONNECTIONS.
 4. 2' SUMP REQUIRED ON ALL DRAINAGE STRUCTURES.



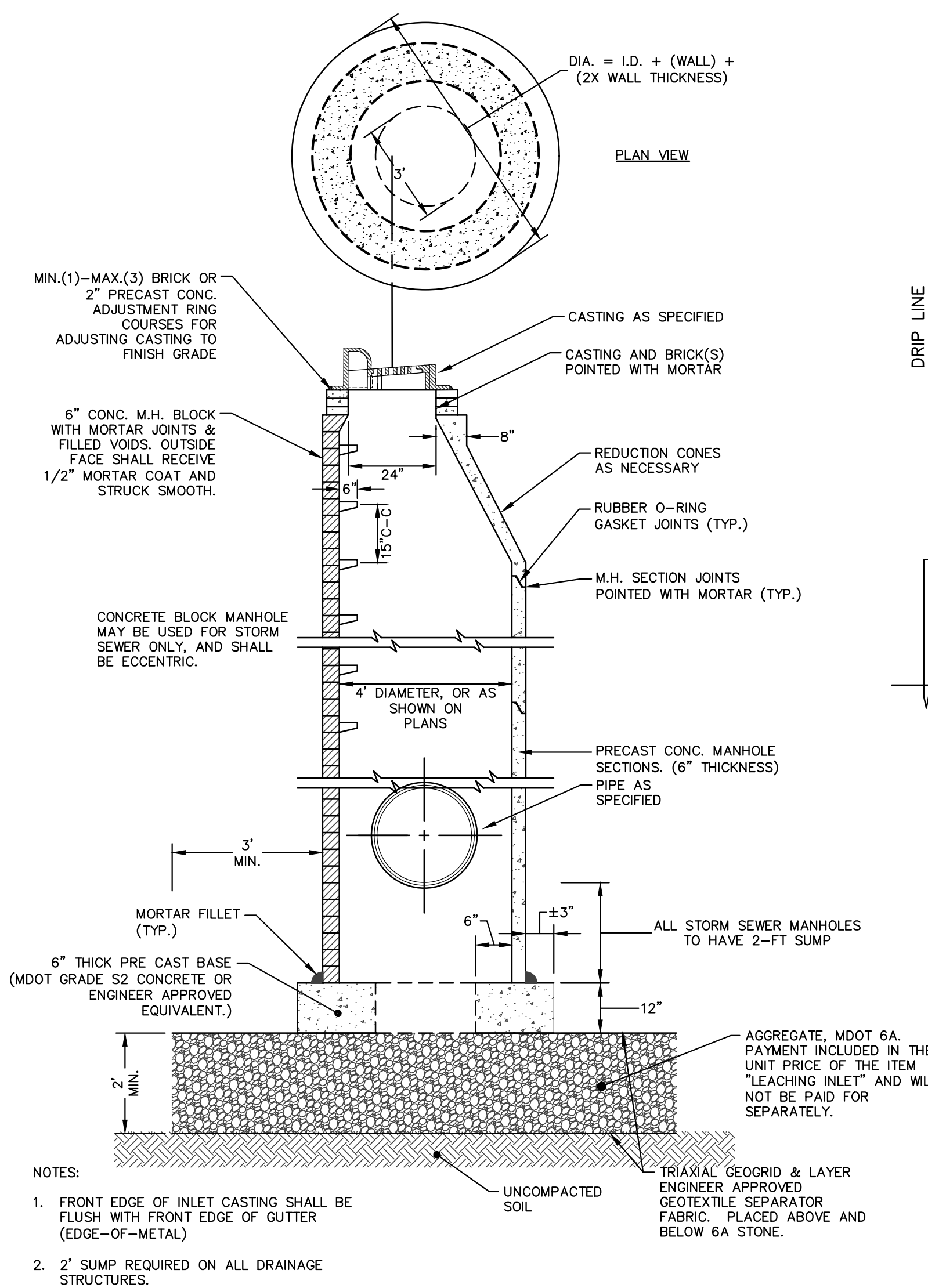
- NOTES:
1. DENSITY TESTING PER CITY ANN ARBOR SPECIFICATION
 2. TRENCH DETAILS SHOW TYPE OF BACKFILL AND SURFACE RESTORATION ONLY.
 3. ALL TRENCHING TO CONFORM TO ALL APPLICABLE M.I.O.S.H.A. STANDARDS



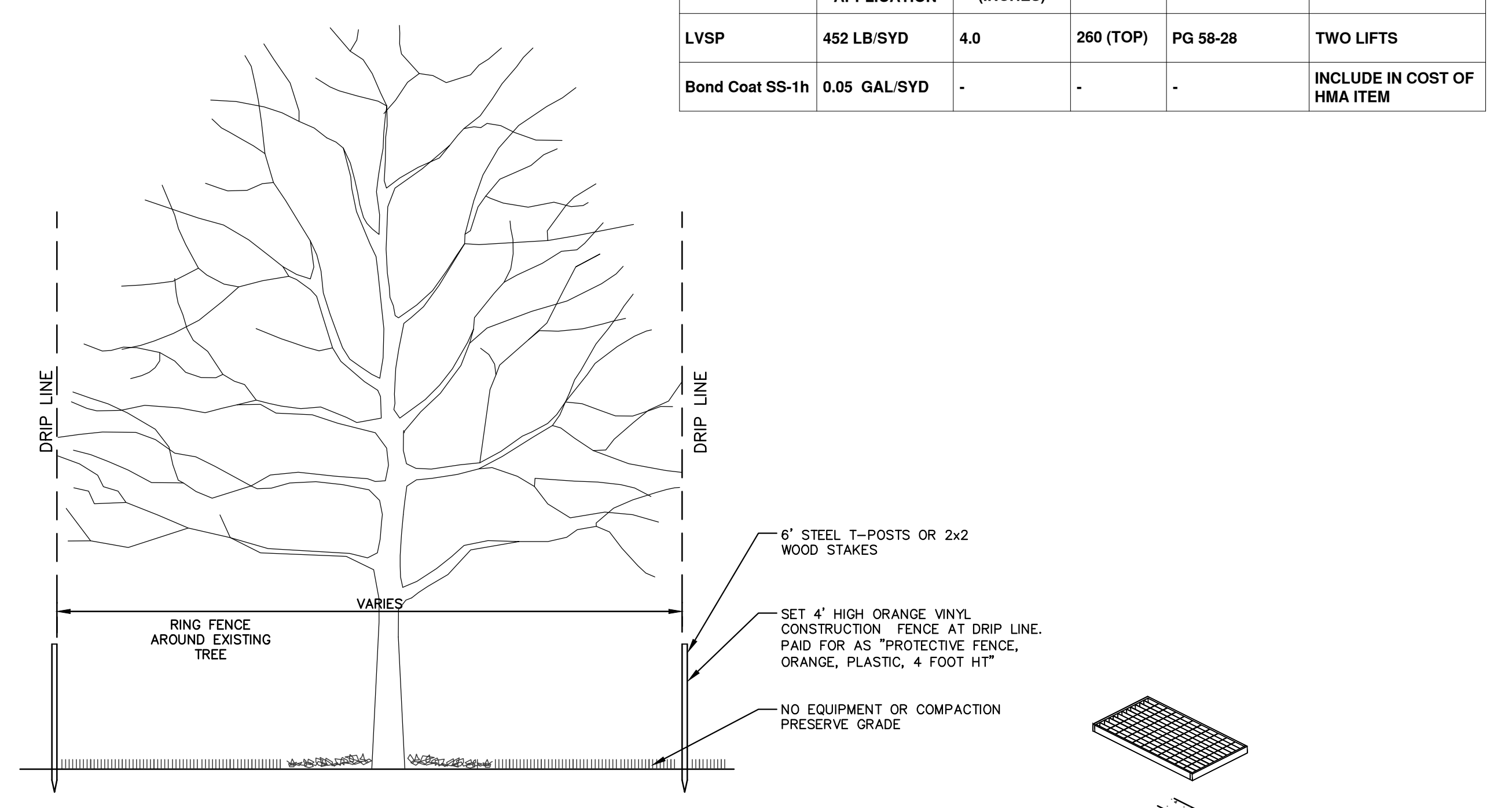
PROPOSED TYPICAL CROSS SECTION

FERDON ROAD & WELLS STREET - HMA APPLICATION ESTIMATE

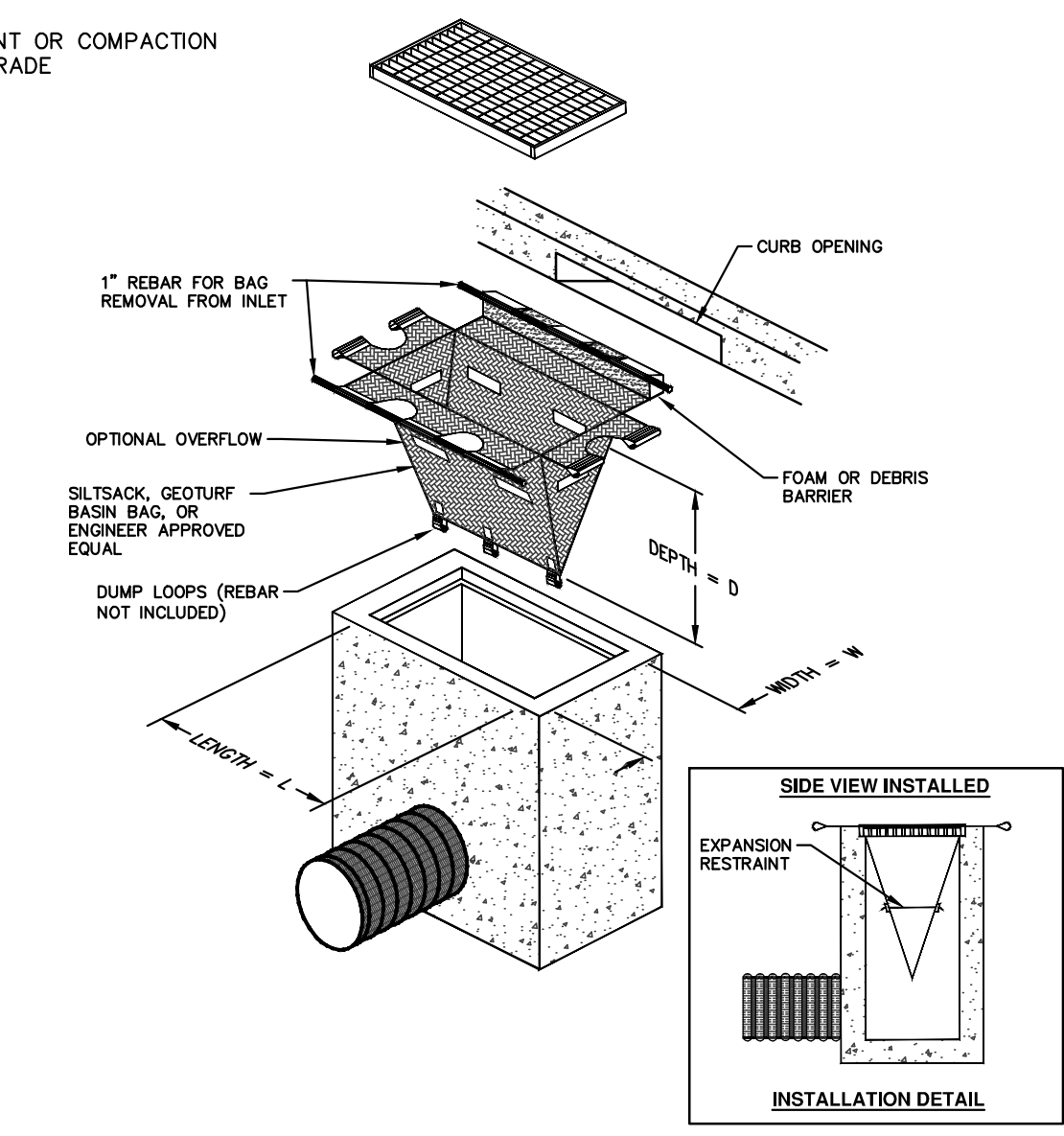
HMA MIX	RATE OF APPLICATION	THICKNESS (INCHES)	AWI (MIN.)	BINDER	LOCATION/NOTES
LVSP	452 LB/SYD	4.0	260 (TOP)	PG 58-28	TWO LIFTS
Bond Coat SS-1h	0.05 GAL/SYD	-	-	-	INCLUDE IN COST OF HMA ITEM



- NOTES:
1. FRONT EDGE OF INLET CASTING SHALL BE FLUSH WITH FRONT EDGE OF GUTTER (EDGE-OF-METAL)
 2. 2' SUMP REQUIRED ON ALL DRAINAGE STRUCTURES.



TREE PROTECTION DETAIL



INLET PROTECTION DETAIL

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

CITY OF ANN ARBOR PUBLIC SERVICES 301 EAST HURON STREET P.O. BOX 8647 ANN ARBOR MI 48107-8647 www.a2gov.org

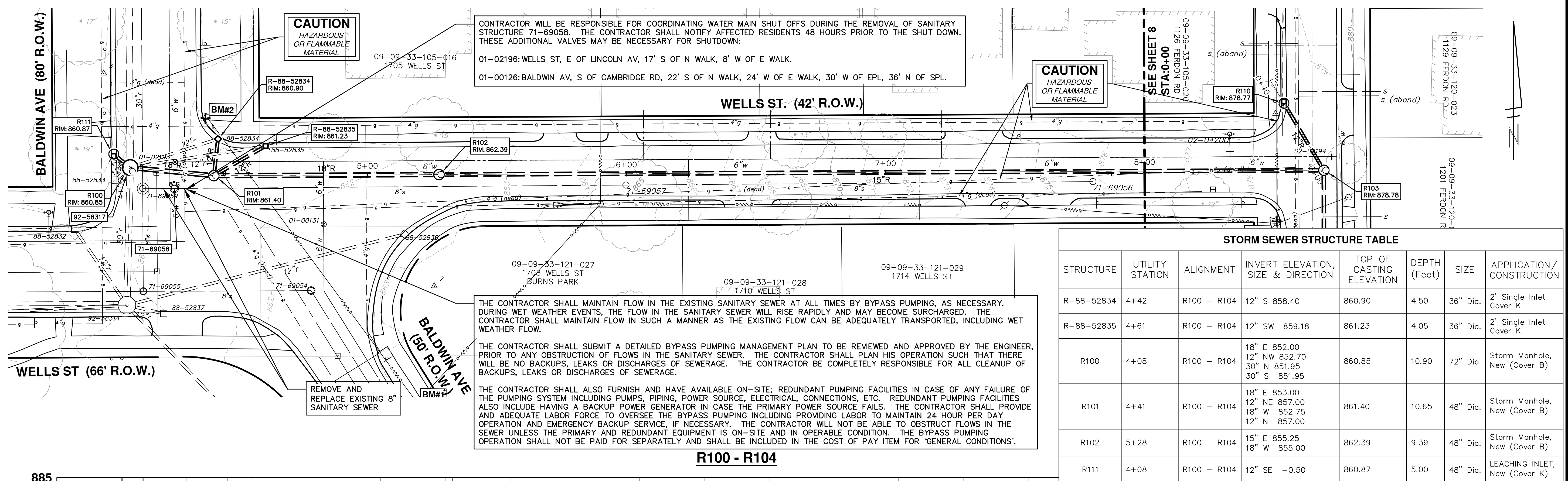
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
FERDON WELLS STORM SEWER REHABILITATION PROJECT

DETAILS

SCALE: N/A
DRAWING NO.: 2014044-4
SHEET NO.: 4 OF 10

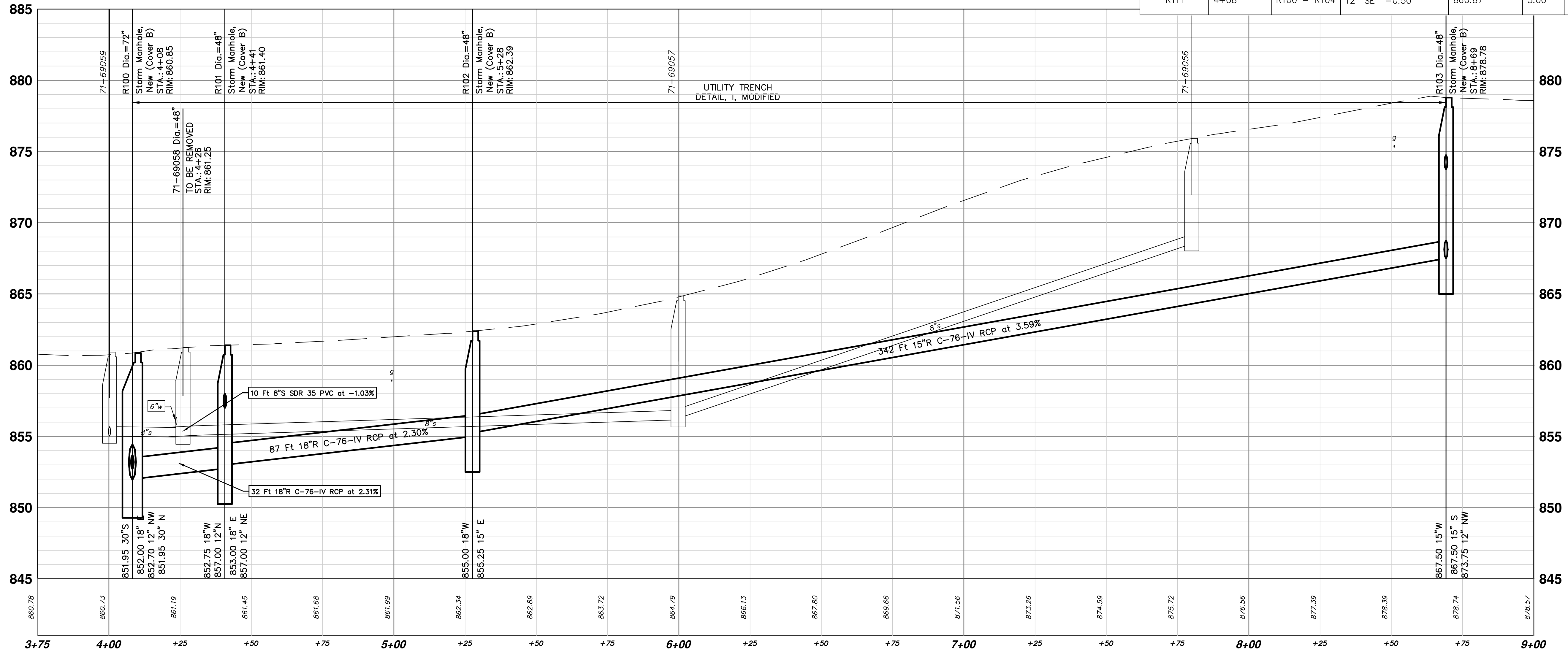
01	ADDENDUM 1	4/19/2016	JKA	AMW	CHECKED
00	OUT FOR BID	4/01/2016	CEC/DFP	AMW	DRAWN
					DATE
					DESCRIPTION
					REV.

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STRUCTURE	UTILITY STATION	ALIGNMENT	INVERT ELEVATION, SIZE & DIRECTION	TOP OF CASTING ELEVATION	DEPTH (Feet)	SIZE	APPLICATION/CONSTRUCTION
R-88-52834	4+42	R100 - R104	12" S 858.40	860.90	4.50	36" Dia.	2' Single Inlet Cover K
R-88-52835	4+61	R100 - R104	12" SW 859.18	861.23	4.05	36" Dia.	2' Single Inlet Cover K
R100	4+08	R100 - R104	18" E 852.00 12" NW 852.70 30" N 851.95 30" S 851.95	860.85	10.90	72" Dia.	Storm Manhole, New (Cover B)
R101	4+41	R100 - R104	18" E 853.00 12" NE 857.00 18" W 852.75 12" N 857.00	861.40	10.65	48" Dia.	Storm Manhole, New (Cover B)
R102	5+28	R100 - R104	15" E 855.25 18" W 855.00	862.39	9.39	48" Dia.	Storm Manhole, New (Cover B)
R111	4+08	R100 - R104	12" SE -0.50	860.87	5.00	48" Dia.	LEACHING INLET, New (Cover K)

R100 - R104



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

DATE	DRAWN	CHECKED	DESCRIPTION
4/19/2016	JKA	AMW	ADDENDUM 1
4/01/2016	CEC/DFP	AMW	OUT FOR BID
			REV.

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
FERDON WELLS STORM SEWER REHABILITATION PROJECT
STORM SEWER PLAN & PROFILE
R100 - R103

SCALE PLAN: 1" = 20'
PROFILE: 1" = 2'

DRAWING NO. 2014044-7

SHEET No. 7 OF 10