

ADDENDUM NO. 3



DATE: May 9, 2019

Hurst-Rosche, Inc.
3675 W. Outer Road, Suite 101
Arnold, Missouri 63010

TO: PROSPECTIVE BIDDERS

SUBJECT: ADDENDUM NO. 3 TO THE BIDDING DOCUMENTS FOR

Water Treatment Flood Protection Wall
Public Water Supply District No. 2, Jefferson County, Missouri
HR No. 290-0367

This addendum forms a part of the bidding and contract documents and modifies the bidding documents dated April 2019. Acknowledge receipt of this addendum in space provided on Bid Form. FAILURE TO DO SO MAY SUBJECT BIDDER TO DISQUALIFICATION.

.....
UPON RECEIPT OF THIS ADDENDUM, PLEASE SIGN BELOW AND EMAIL FRONT PAGE TO zyork@hurst-rosche.com WITHIN 24 HOURS OF RECEIPT.

Company Name/Authorized Signature

Date

.....
Bid Opening Date is: 3:00 PM, Tuesday, May 14, 2019

Bidders are hereby informed that the construction documents and/or drawings are modified as follows:

CONTRACT DOCUMENTS:

1. Modify Section 03 10 00 - Concrete Forming and Accessories, Part 1, Paragraph 1.6, page 03 10 00 - 2 to read as follows:
 - A. Design formwork under direct supervision of Professional Engineer experienced in design of this Work and Licensed in State of Missouri.
2. Modify Section 03 30 00 - Cast-In-Place Concrete, Part 2, Paragraph 2.4.A.1.a, page 03 30 00 - 5 to read as follows:
 - a. Cement: 6-1/2-sack minimum per cubic yard. (600 pounds minimum per cubic yard)

DRAWINGS:

1. Add the attached MSD Precast Concrete Manhole Detail, Sheet 21 (Rev) to Plan Sheet C-502 - Miscellaneous Details, in its entirety.
2. Add the attached MSD Precast Concrete Manhole On Existing Pipe With Continuous Flow Detail, Sheet 22 to Plan Sheet C-502 - Miscellaneous Details, in its entirety.

CLARIFICATIONS:

Question: Is American Steel a requirement for this project?

Answer: Yes, American Steel is a requirement for this project. Contractor will need to provide necessary certifications for the American Steel requirement.

Question: Is this project sales tax exempt?

Answer: Yes, this project is sales tax exempt for the District.

Question: Section 01 20 00 - What is the required retainage for pay application for this project?

Answer: The require retainage for the pay application will be 10% of total work completed.

Question: Section 00 41 43, 1.5.A, Bid Item No. 2, Page 2 - Are there any specifications for the 10' x 10' premanufactured utility shed?

Answer: The 10' x 10' premanufactured utility shed shall be The Utility Shed as manufactured by Cook Portable Warehouses or an approved equal. The utility shed shall have an upgrade to a heavy duty floor with a minimum weight limit of 125 pounds per square foot. The utility shed shall have one 68" double door with a minimum 66" opening on the front (endwall) of the utility shed. The utility shed shall have an asphalt shingle roof. All finish colors shall be chosen by the District. A local dealer is located at 4525 Gravois Road, House Springs, MO 63051, contact Brad Bruce, office phone 636-671-1333, cell phone 314-348-0026, lot number 133101, and website <https://cookstuff.com>.

Question: Section 00 41 43, 1.5.A, Bid Item No. 22, Page 5 - Are there any requirements for jobsite storage and office trailer? Is the job trailer for Owner use or contractor use?

Answer: There are no specific requirements for the jobsite storage and office trailer. This will be based on the requirements of the contractor during the course of construction. The District cannot provide any material storage within their existing buildings, so if the contractor requires weatherproof storage for any materials for this project, this will need to be provided by the contractor as part of the jobsite storage and/or office trailer. The jobsite storage and office trailers would be for the contractor's use based on the requirements of the contractor during the course of construction.

Question: Section 00 41 43, 1.5.A, Bid Item No. 23, Page 5 - What are the requirements for temporary trash pumps? How many? What capacity? Are the trash pumps required to be on standby for the project? Are they for contractor use? Owner use? Both?

Answer: There are no specific requirements for the temporary trash pumps. This will be based on the requirements of the contractor during the course of construction. These trash pumps are for the contractor's use during construction, including, but not limited to, dewatering operations, pump out excavated areas, stormwater control, etc.

Question: Section 00 41 43, 1.5.A, Bid Item No. 10, Page 3 - It was indicated at the prebid that the lagoon has a rock bottom. Are we to place the clay liner on top of this layer? How thick is this liner? Please confirm that the replacement of the liner is only confined to the areas disturbed by our construction.

Answer: In areas where there is a rock bottom, the clay liner will not be placed on top of this layer. In all other areas along the slope of the lagoon, a 2 foot thick clay liner shall be placed to make the lagoon watertight. With this being said, the 2 foot thick clay liner will be confined to only the areas disturbed during the construction of this project.

Question: Section 00 41 43, 1.11, Page 7 and 8 - Minority and Women Business information is to be entered on this sheet. Are there specific goals for each of these enterprises? Will this information be used in determination of the successful bidder?

Answer: Pursuant to Section 00 41 43, 1.11, Page 8, "Bids shall be considered by the Owner to be responsive only if the bidder includes the above information and assurance in the bids. Contractors are to make and show a **good faith effort** to include not less than 15% of the total funds expended with 10% Minority Business Enterprises and 5% Women Business Enterprises. Failure to include this information could be cause to reject the bid."

Question: Section 00 41 43, 1.11, Page 7 and 8 - What directory of certified MBE/WBE companies is acceptable for this project (i.e., MRCC, STL Airport Authority, etc.)?

Answer: There are no specific directory requirements for the certified MBE/WBE companies for this project. So long as the companies are certified MBE/WBE to conduct business in the State of Missouri, this will be acceptable for this project.

Question: Section 00 41 43, 1.11, Page 7 and 8 - Can materials be used for MBE and WBE requirements for this project?

Answer: Yes, materials can be used for the MBE and WBE requirements for this project.

Question: Section 00 73 13, 1.12.F, Page 5 - On the Builder's Risk Insurance Policy, is flood and earthquake coverage required?

Answer: A Builder's Risk Insurance policy is required for this project pursuant to Section 00 73 13, 1.12.F, and this policy shall include flood coverage since this project is within the FEMA flood zone.

Question: Section 03 10 00, 1.6.A, Page 2 - Is a PE licensed in the state of Missouri acceptable for formwork design?

Answer: Yes, design formwork under direct supervision of Professional Engineer experienced in design of this Work and licensed in State of Missouri.

Question: Section 03 30 00, 2.4.A.1.a, Page 5 - This paragraph states 100 lbs./sack of cement. Industry standard is 94 lbs./sack of cement. Could you please clarify?

Answer: Most cement is delivered to the ready-mix producer in bulk, so they can measure any amount of cement required for a concrete mix. With this being said and pursuant to Section 03 30 00, Class A Concrete shall have a minimum of 600 pounds of cement per cubic yard, w/c ratio of 0.40 maximum (including water in aggregates), strength of 4,500 psi in 28 days and 3,050 psi in 7 days, slump of 3 to 5 inches and air entrainment of 4% to 6%.

Question: Sections 32 91 19 and 32 92 19 - Landscape grading and seeding are specified but I couldn't find the areas on the plans where this is required. Please clarify where this work occurs.

Answer: Any and all existing grassed areas disturbed during construction will require landscape grading, seeding and strawing near the completion of the project pursuant to Sections 32 91 19 and 32 92 19.

Question: Plan Sheet C-101 - The note in the middle on the right hand side of the page states the existing temporary flood wall is to remain in place until completion of the new wall. Is the temporary wall to be demolished as part of this contract? If so, please furnish details of the construction of this wall.

Answer: The temporary flood wall shall be demolished by PWSD No. 2 and is not part of this contractor. Contractor shall coordinate with PWSD No. 2, as portions of the temporary flood wall may be demolished by PWSD No. 2 during the course of the project construction.

Question: Plan Sheet C-101 - Please indicate the depth and size of the two new manholes required to relocate the existing lime sludge line.

Answer: According to the District, the existing lime sludge line is approximately 6 to 7 feet deep. So the two new manholes would be approximately 6 to 7 feet deep. Final manhole depth will need to be field verified once the existing lime sludge line is exposed. The proposed manholes shall have 48" inside diameter and shall be constructed pursuant to MSD standards for precast concrete manholes (please see attached MSD detail sheet). The base of the manhole shall be constructed

pursuant to MSD standards for precast manhole on existing pipe with continuous flow (please see attached MSD detail sheet).

Question: Plan Sheets C-101 and C-502 - What is the depth of the area inlets and what is the size of the lines from the inlet to the pump stations?

Answer: Pursuant to MSD requirements, the depth of the area inlets shall be a minimum of 45" from the top of stone to the flowline plus a minimum of 6" for the precast concrete base section. Pursuant to Plan Sheet C-101, General Note 6, proposed piping between proposed stormwater area inlets and proposed stormwater pump stations shall be 12" diameter HP storm pipe.

Question: Plan Sheet C-101 - Will the potential relocation of the 12" PVC water main and other potential conflicts with existing utilities be paid as Change Orders? If relocations are not paid in Change Orders, do we need to include a potential relocation price in our bid?

Answer: Any necessary relocation encountered during the course of this project, which are not noted on the plan sheets, will be negotiated with the project contractor and paid as a change order due to unforeseen conditions. Based on this, you do not need to include any potential relocation price in your bid.

Question: Plan Sheet C-101 - What regulations or special disposal requirements are there for the lime sludge lagoon? Can the material and water be disposed onsite?

Answer: Pursuant to the District's request, the contractors shall use the District's existing lime sludge removal company for this item. This company already knows the regulations and special disposal requirements for this site, since they have completed the lime sludge removal for the District in the past. Contractors shall contact and coordinate with Metro-Ag, Inc., 550 N. 2nd Street, Breese, IL 62230, contact Brian Kramer, office phone 618-526-2341, office fax 618-526-2351, email metroag@metroag.com and website www.metroag.com.

Question: Plan Sheet C-101 - What is the size and depth of the lime sludge lagoon? Is there an estimated quantity on the amount of material to be removed?

Answer: Pursuant to the District's request, the contractors shall use the District's existing lime sludge removal company for this item. This company already knows the size and depth of the lime sludge lagoon and the estimated quantity of material to be removed, since they have completed the lime sludge removal for the District in the past. Contractors shall contact and coordinate with Metro-Ag, Inc., 550 N. 2nd Street, Breese, IL 62230, contact Brian Kramer, office phone 618-526-2341, office fax 618-526-2351, email metroag@metroag.com and website www.metroag.com.

Question: Plan Sheet C-101 - Is the entire lagoon to be cleaned out or just the area disturbed during construction? What is the thickness of the clay liner?

Answer: Pursuant to the District's request, the contractors shall use the District's existing lime sludge removal company for this item. Both of the existing lime sludge

lagoons (the entire lagoons) shall be cleaned out, which this company has completed for the District in the past. Contractors shall contact and coordinate with Metro-Ag, Inc., 550 N. 2nd Street, Breese, IL 62230, contact Brian Kramer, office phone 618-526-2341, office fax 618-526-2351, email metroag@metroag.com and website www.metroag.com.

Question: Plan Sheet C-101 - What type of equipment is currently in the utility shed and gets moved to the new shed? Any special requirements on the chemical handling?

Answer: The contractors shall move the existing chemical feed pump and appurtenances for the new chemical feed, and the District will move the actual chemicals. With this being said, there will not be any special requirements on the chemical handling since the District will be moving them.

Question: Plan Sheet C-101 - Does the building to be demolished contain asbestos or any other hazardous materials?

Answer: According to the District, the building that is being demolished does not contain asbestos or any other hazardous materials that will require special disposal requirements.

Question: Plan Sheet C-101 - Is the hydro excavation just to be used for underground utilities that cross and may be in conflict with proposed flood protection wall?

Answer: No, the hydro excavation shall also be used to located underground utilities for the proposed stormwater structures, stormwater piping (from area inlets to stormwater pumps stations then over the flood protection wall) and proposed electrical extensions to the stormwater pump stations and the riverhouse (river intake structure). Basically, the hydro excavation shall be utilized for all underground installations proposed for this project.

Question: Plan Sheet C-101 - Is there water available onsite for the hydro excavation and can spoils from the hydro excavation be disposed of onsite?

Answer: Yes, there is water onsite for the hydro excavation from an existing fire hydrant, and yes, the spoils from the hydro excavation can be disposed of onsite in the sludge drying bed. Contractors to coordinate these items with the District.

Question: Plan Sheet S-501 - Where can we find specifications for the stormwater pump stations?

Answer: The specification for the stormwater pump stations and the pumps will be issued as part of another addendum. With this being said, below are some specifications for the pumps located in the stormwater pump stations.

Stormwater pump station on the north side between the two existing clarifiers:

- Two non-clog submersible pumps
- Duty point for each pump = 1,225 gpm @ 28 ft TDH
- Each pump motor = 15 hp, 460V, 3 phase

- All 8" piping and appurtenances in wet well through valve vault and over the top of the flood protection wall.

Stormwater pump station on the west side by existing garage building:

- Two non-clog submersible pumps
- Duty point for each pump = 550 gpm @ 26 ft TDH
- Each pump motor = 7.5 hp, 460V, 3 phase
- All 6" piping and appurtenances in wet well through valve vault and over the top of the flood protection wall.

Stormwater pump station on the south side by existing clearwell:

- Two non-clog submersible pumps
- Duty point for each pump = 550 gpm @ 26 ft TDH
- Each pump motor = 7.5 hp, 460V, 3 phase
- All 6" piping and appurtenances in wet well through valve vault and over the top of the flood protection wall.

Question: Plant Sheet C-501 - Please indicate the elevations for each of the stormwater pump stations for top of station, bottom of station, flowline invert elevation for influent pipe and size of influent pipe. The same elevations are required for the valve vault.

Answer: If we assume that the existing finish grade is 447.50, below are the elevations for the stormwater pump stations. The top of the stormwater pump stations shall be a minimum of 3 inches above grade, so the top elevation would be 447.75. The stormwater pump stations shall be 10 feet deep below the bottom of the top concrete slab. If we assume that the top concrete slab shall be 12 inches thick, the bottom elevation of the stormwater pump stations would be 436.75. The flowline invert elevation for the influent pipe shall be based on the flowline elevation of the stormwater area inlets and providing a minimum 2% slope in the influent pipe from the stormwater area inlets to the stormwater pump stations. This flowline invert elevation will vary for the three different stormwater pump stations. Pursuant to Plan Sheet C-101, General Note 6, proposed piping between proposed stormwater area inlets and proposed stormwater pump stations shall be 12" diameter HP storm pipe. For the valve vaults, the top elevation would be the same as the stormwater pump stations, so the top elevation would be 447.75. The valve vaults shall be 4 feet deep below the bottom of the top concrete slab. If we assume that the top concrete slab shall be 8 inches thick, the bottom elevation of the valve vaults would be 443.08. Please note, the elevations provided above will require some adjustments based on the actual field existing finish grade and final location of the proposed stormwater pump stations.

Question: Plan Sheet S-104 - There is no specification for Heavy Stone Revetment. Please clarify what materials are required. Also, please give a thickness for this material. Is any bedding or filter fabric required under this revetment?

Answer: Pursuant to Plan Sheet C-001, Site Grading Note 26 - Stone for heavy stone revetment blanket shall be sound, durable and free from cracks and other structural defects that would cause the revetment to deteriorate. The stone shall

not contain any soapstone, shale or other material easily disintegrated. The stone blanket shall be at least 24 inches in thickness perpendicular to the slope of the earthen levee. Stone should be blocky in shape rather than elongated, more nearly cubical in shape, "nested" together to provide more resistant to movement. The stone shall be predominantly angular in shape. Stones shall be at least 12 inches in size and all stones shall weigh no less than 50 pounds, and at least 60 percent shall weigh no less than 100 pounds. Heavy stone revetment shall be underlain with a Mirafi 140N filter fabric and placed on a prepared subgrade. All ends of filter fabric to be anchored in accordance with manufacturer's recommendations. Heavy stone revetment blanket shall be in accordance with MODOT specification section 611.50.

Question: Plan Sheet C-502 - Is the fill under the stormwater gutter compacted in situ material?

Answer: The fill under the stormwater gutter can be compacted in situ material to a certain depth, but the actual stormwater concrete gutter shall be placed on a 6 inch thick compacted aggregate subbase pursuant to the stormwater concrete gutter detail on Plan Sheet C-502. The compacted aggregate subbase is shown in the detail, just not specifically called out.

Question: Plan Sheets C-501 and C-502 - What is the length of the rock blanket called out for the discharge locations?

Answer: The length of the rock blanket for the discharge locations shall be a minimum of 10 feet.

Question: Plan Sheet E-101 - What type of fill material shall be used for the electric line extension to the riverhouse (river intake structure)?

Answer: The fill for the proposed electric line extension to the riverhouse (river intake structure) shall be full height granular backfill.

Question: Plan Sheet E-101 - Can the contractor utilize horizontal directional drilling for the electric line extension to the riverhouse (river intake structure)?

Answer: Yes, the contractors may utilize horizontal directional drilling for the proposed electric line extension to the riverhouse (river intake structure) as an option. Please note that the existing electric line to the riverhouse (river intake structure) will still need to be located so that it does not get damage and stays in service at all times until the electrical service is switched over.

Question: Plan Sheet E-101 - Does the handhole for the electric line extension to the riverhouse (river intake structure) need to be traffic rated?

Answer: Yes, the handhole structures and tops will need to be traffic rated due to equipment and large trucks that use the access road. The handhole structures and tops shall be rate for a minimum H-25/HS-25 design load.

Question: Plan Sheet C-101 - Can the existing elevated electrical rack be utilized for some of the electrical extensions required for the project?

Answer: Yes, the contractors may utilize the existing elevated electrical rack for some of the proposed electrical extensions required for the project as an option.

Question: Plan Sheet C-101 - What is the proposed plan for the electrical extensions that cross and are required to be installed under the existing temporary flood wall?

Answer: For this situation, the contractors shall remove the temporary flood wall blocks as needed, but the blocks will need to be put back in place and fitted as close together as possible to the original conditions prior to removal. Said temporary flood wall blocks can only be removed for a short period of time and cannot be left unstacked for an extended period of time, especially during possible flood times. Contractors to coordinate this work with the District.

Question: Plan Sheet E-101, Note 12 - What is the brand / manufacturer for the existing gear in the existing panel room so we can determine pricing for the type of mounting and hardware?

Answer: The manufacturer for the existing gear is Eaton. Contractor shall field verify the series of panel.

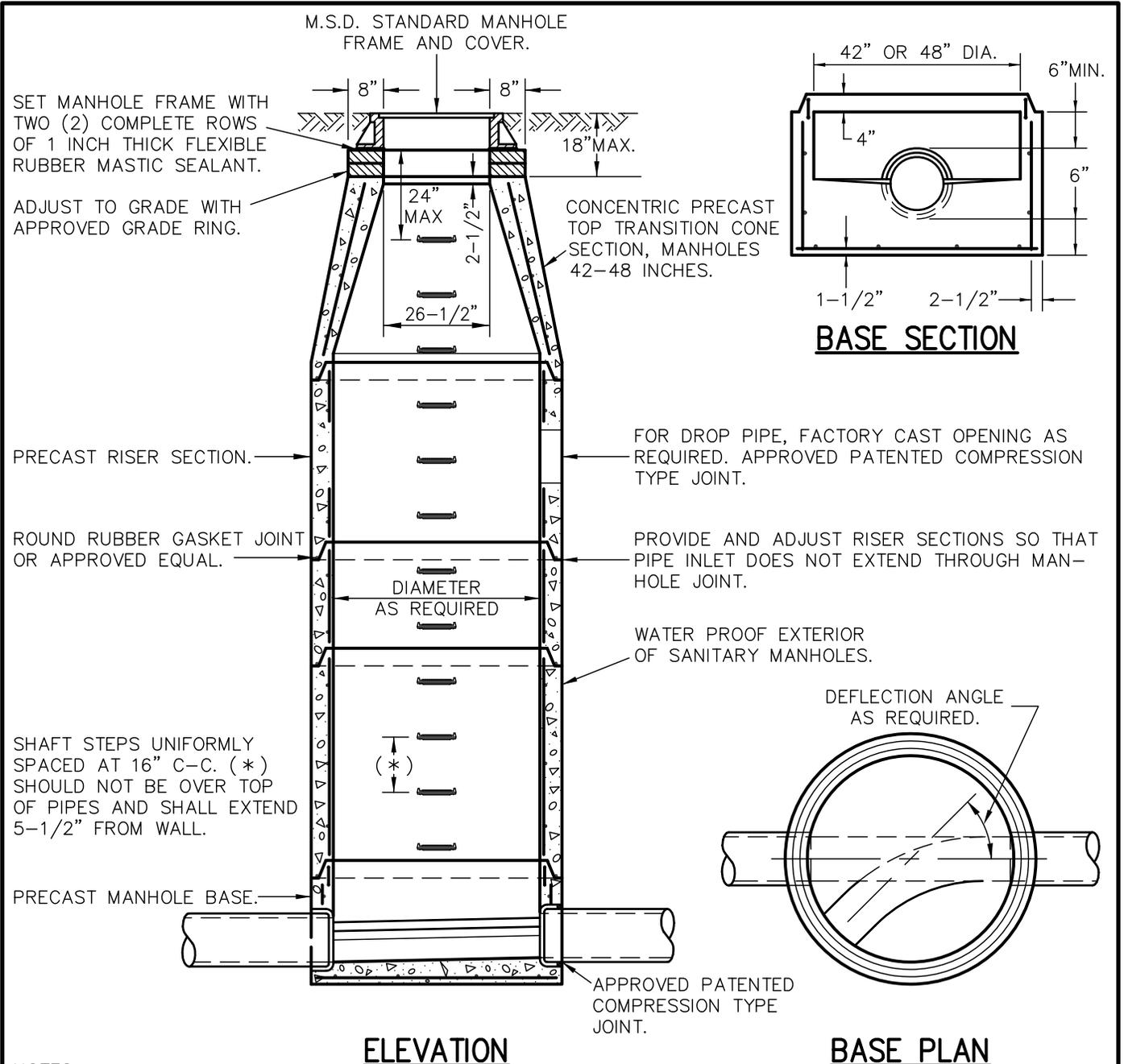
Question: Plan Sheet E-101, Note 12 - The note calls for Main Lug Only and a main breaker, we cannot provide both and it should be one or the other. Which way should we proceed?

Answer: Contractor shall provide a panel with a 100A buss and a 3p/60A main breaker.

Question: Plan Sheet E-101, Note 12 - Please provide information or specifications on the 4' LED strip lights for the proposed small utility shed.

Answer: Contractor shall provide a Metalux #4VT2-LD5-6-DR-UNV-L840-CD1-WL-U or approved equal.

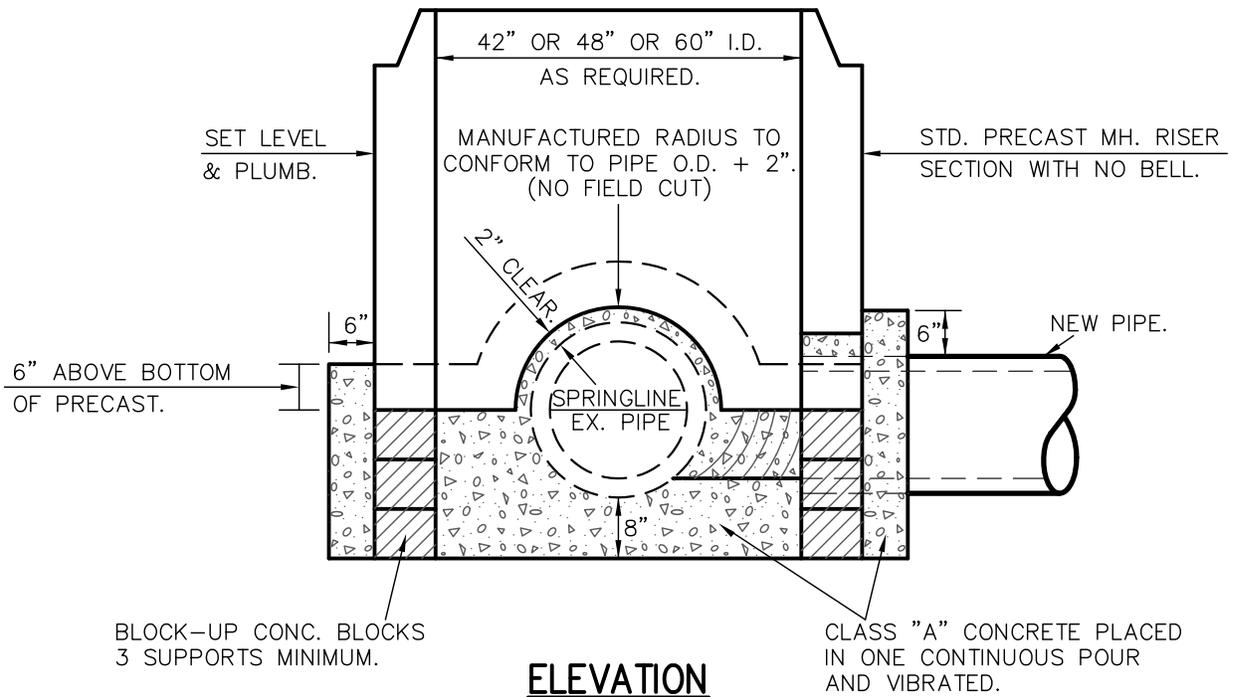
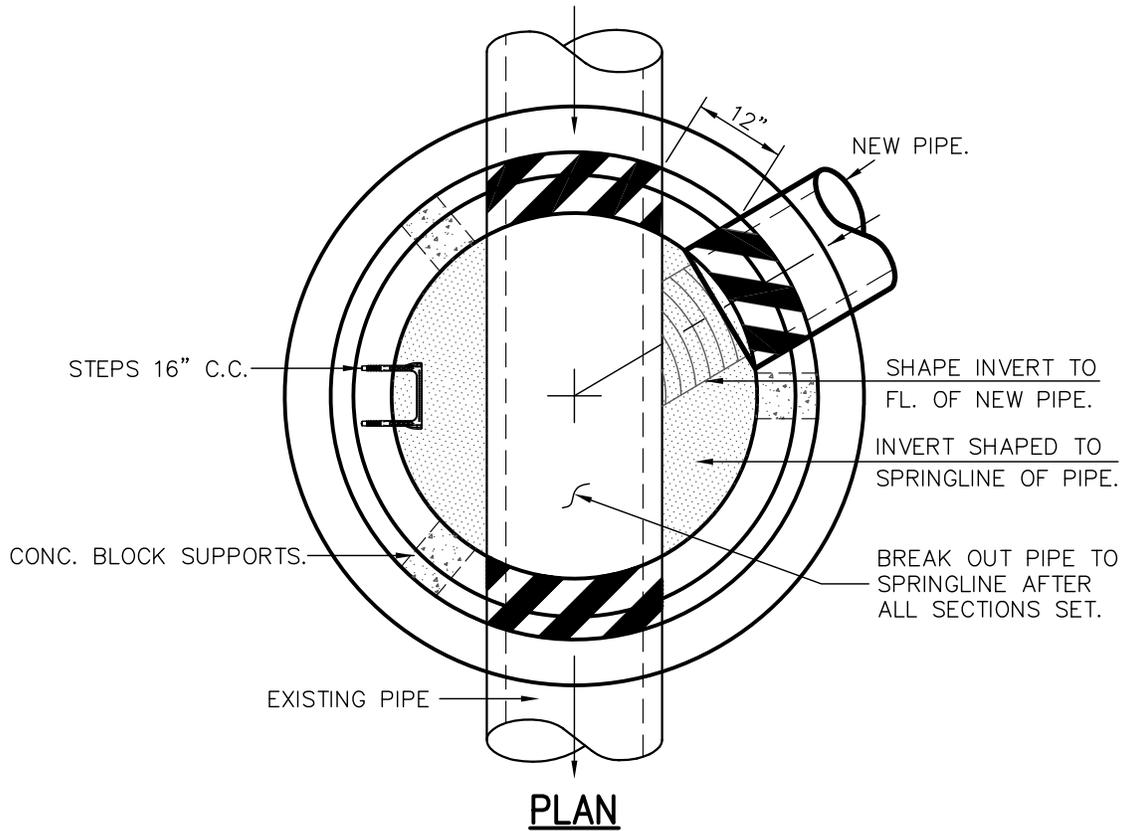
END ADDENDUM NO. 3



NOTES:

- 1) THE MINIMUM INSIDE DIAMETER FOR THE BASE AND RISER SECTIONS SHALL BE 42 INCHES FOR 8 INCH DIAMETER SANITARY SEWERS AND ALL STORM SEWERS. THE MINIMUM INSIDE DIAMETER FOR SANITARY SEWERS LARGER THAN 8 INCH DIAMETER IS 48 INCHES. MANHOLE SHALL MEET ASTM C-478 REQUIREMENTS.
- 2) FLOWLINE ELEVATION OF INCOMING PIPES SHALL BE 1 INCH HIGHER THAN THAT OF OUTGOING PIPE.
- 3) PIPE SIZES LARGER THAN 24 INCH DIAMETER MAY REQUIRE MANHOLE DIAMETERS OF 60 INCH, 72 INCH OR 96 INCH AS DETERMINED BY OUTSIDE DIAMETERS AND ORIENTATIONS OF CONNECTING PIPES.
- 4) ECCENTRIC CONES SHALL BE USED ON DIAMETERS 60 INCH AND LARGER. STEPS SHALL EXTEND DOWN VERTICAL WALL OF CONE.
- 5) PRIOR TO FABRICATION, SHOP DRAWINGS SHALL BE SUBMITTED TO THE DISTRICT FOR APPROVAL OF MANHOLES ON PIPE DIAMETERS LARGER THAN 24 INCH AND ALSO FOR THOSE STRUCTURES WITH A DROP PIPE CONNECTION.

PRECAST CONCRETE MANHOLE	METROPOLITAN ST. LOUIS SEWER DISTRICT <i>Standard Details of Sewer Construction</i>		
	Dr. WSH/SAM Ch. J.C.K.	2009	SHEET 21 (REV)



NOTE:

WATER STOP REQUIRED FOR P.V.C.. SANITARY & COMBINED SEWERS TO BE VACUUM TESTED.

**PRECAST MANHOLE ON EXIST.
PIPE W/CONTINUOUS FLOW ONLY**

METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction

Dr. S.A.M.
Ch. P.W.S.

2009

SHEET 22