



Herbert, Rowland & Grubic, Inc.  
501 Allendale Road, Suite 203  
King of Prussia, PA 19406  
484.460.7050  
www.hrg-inc.com

May 17, 2023

East Vincent Township  
262 Ridge Road  
Spring City, PA 19475  
Attention: Collin Fox, Interim Township Manager

**RE: Final Subdivision and Land Development Plan Application:  
Jones Motor Tract – Residential Portion  
Final Plan Review  
Sanitary Sewer Review**

Dear Mr. Fox:

This letter is responding to the January 13, 2023, letter from D. L. Howell Associates, Inc., which is responding to the April 12, 2022, letter from CKS pertaining to the sanitary sewer for the Jones Motor Tract – Residential Portion.

HRG has reviewed the sanitary sewer aspects of the Final Subdivision and Land Development Plans for conformance with the standards of East Vincent Township and has addressed D.L. Howell Associates responses to CKS Engineers' original comments in the previous letters. Listed below are our responses to the concerns identified in their review of the plans.

1. Acknowledged. No plan revision necessary.

**HRG: Agreements to be prepared and executed at a future date.**

2. Acknowledged. No plan revision necessary. The Applicant's sewer consultant, Ebert Engineering, is handling the planning module and amendment to the Act 537 Plan Update.

**HRG: The applicant must provide an update on status of the planning module and amendment to the Act 537 Plan Update.**

3. Acknowledged. No plan revision necessary.

**HRG: Agreements to be prepared and executed at a future date.**

4. Acknowledged. No plan revision necessary.

**HRG: Agreements to be prepared and executed at a future date.**

5. The referenced sanitary pipe runs that are greater than 15 feet deep have been revised to be ductile iron piping.

**HRG: Acknowledged.**

6. We understand the pump station design is still being finalized by Ebert Engineering. Once the design is complete, the profile will be updated with the correct size and pipe material.

**HRG will review plans once completed.**

7. This will be provided once the Ebert Pump Station design has been completed. The plans will be updated once that is provided.

**HRG will review plans once completed.**

- 
8. Sheet 64 has been updated to include the approximate location of the existing force main. The existing force main runs parallel with the proposed force main for the entirety of the pipe.

**HRG: The page numbers have changed, and the existing force main does not appear on sheet 64 but is located on sheet 66.**

9. Sheet 26 and Sheet 63 have been updated to reference the correct Construction Detail Sheet. The connection information has been added to Sheet 23 and the profile has been revised to include all the inverts of the existing manhole.

**HRG: The page numbers have changed, and the comment does not appear on Sheet 63, but was located on Sheet 65. Similarly, the comment does not appear on Sheet 26, but does appear on Sheet 25. The comments on both Sheet 65 and 25, as well as Sheet 23 reference Sheet 66 as the Construction Detail Sheet. With the page changes, the Construction Details are now located Sheet 68. These comments need to be updated to reflect the correct page numbers.**

10. The plans have been revised to show a proposed lateral extending to the recreational lot per the Conditional Use requirements. All other existing sanitary services are to be removed.

**HRG: Acknowledged**

11. Sheet 29 has been revised to call out the existing sewer pipe as 8" PVC.

**HRG: The call out does not appear on Sheet 29 due to the change in page numbers. The call out was located on Sheet 23 and Sheet 25.**

12. Acknowledged. No revision necessary.

**HRG will review plans once completed.**

13.

- a. Sheet 17 has been revised to state that the dwellings are to be removed. Ebert Engineering was contacted regarding the existing septic system and location is unknown at this time as it was installed most likely prior to health department permitting and record keeping. At their request, General Note 32 was added that states all existing septic systems shall be removed per requirements of PADEP, CCHD, and the Township

**HRG: A call out is still needed stating that the existing dwelling at 1010 West Bridge Street (Parcel No. 21-5-10) will be removed.**

- b. Sheet 17 has been revised to state that the dwelling is to be removed. The existing septic system and location is unknown at this time. General Note 32 states that all existing septic systems shall be removed per requirements of PADEP, CCHD, and the Township.

**HRG: Acknowledged.**

- c. General Note 32 on Sheet 1 has been updated accordingly. The note has been added to the Demolition Notes as requested on Sheet 18 and has been updated on Sheet 17.

**HRG: Acknowledged.**

14. Acknowledged. These will be provided prior to recording.

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**HRG will review the easements and rights-of-way when provided.**

15. Sheet 4 and 8 have been revised to include a call out for the proposed sanitary pump station easement.

**HRG: The adequacy of the proposed easement area will be reviewed along with the pump station design plans.**

16. The sanitary sewer in this area has been re-aligned to eliminate the driveway crossing.

**HRG: the sanitary sewer has been re-aligned, but the associated 20-ft-wide easement is still crossing the Unit 11 and 12 driveways and needs to be revised to align with the sanitary sewer on drawings C01.3, C01.8, C03.1, and C03.6 (and possibly others).**

17. Our office would propose that the sanitary sewer agreement reference access to the sanitary sewer for maintenance and ownership responsibilities through the private and future public rights of way in the development, and therefore act as a blanket easement along the road corridors without necessarily providing a separate easement above and beyond the rights of way already provided.

**HRG will defer to the Township on this item.**

18. Monuments and pins have been added to the easement as requested. With regard to providing documents for the existing easement, our office just references the Approved Subdivision and Land Development Plans for Phase 1A East Vincent Business Park, and also the ALTA survey provided by Nave Newall which both depict the easement from Enterprise Parkway to the Jones Motor Residential property. It is important to note that the applicant for this development is also the property owner of the lot where the existing sewer easement crosses through, therefore if a new easement needs to be documented, we expect that could be established. Also, the existing sewer stub is noted to be removed and cut back as the CKS comment suggests.

**HRG will defer to the Township on this item. The sewer stub note was not located on the Existing Conditions Plan (pg. 17), or on the Grading and Utilities plan (pg. 25).**

19. Acknowledged. A HOP permit will be obtained for the construction of the sanitary sewer within the state highway.

**HRG will review the HOP once completed.**

**Additional comment: A PENNDOT driveway permit application will be required for the Bridge Street Pump Station.**

20. The profile on Sheet 65 has been revised to show the stream crossing to be detailed to conform with the requirements found in Township's Standard Specification 02580. A note has been added stating the requirements of the proposed pipe crossing and the pipe has been revised to show ductile iron pipe.

**HRG: PENNDOT may have additional or differing requirements, which will be reviewed with the HOP application.**

21. Sheet 24 has been updated to show the proposed concrete encasement as well as a call out for length.

**HRG: The length annotation did not plot on the two locations on one of the pages identified as 24. There are currently two pages numbered 24.**

22. An additional manhole has been added in this location and the proposed sewer no longer runs under the sidewalk and curb.

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**HRG: Acknowledged.**

23. The pipe run from MH 674 and MH 673 has been revised and the slope is now greater than 0.50%.

**HRG: Acknowledged.**

24. The slopes of the pipes flowing into MH 222 have been checked and revised to be accurate. The pipe slopes are shown from center to center of the manhole.

**HRG: Acknowledged.**

25.

- a. Sheet 48 has been revised and now includes a label for MH 675 and an invert out.

**HRG: Acknowledged.**

- b. The water lateral for Lot 127 has been revised and no longer goes through the manhole.

**HRG: Acknowledged.**

- c. As requested, the landscape and lighting plans have been updated to reflect revisions and changes to the sanitary sewer.

**HRG: Acknowledged.**

- d. The profile plan views have been revised to include the profile stationing.

**HRG: Acknowledged.**

- e. The cleanout locations for the referenced Lots have been moved to be between the sidewalk and curb.

**HRG: Lots 122, 123, and 124's cleanouts still need to be moved to the grass strip between curbing and sidewalk.**

26. The profile sheets have been revised to include the road names within the title. Additionally, the Sheet List Table on Sheet 1 has been updated accordingly.

**HRG: Acknowledged**

27. The referenced details have been replaced with the provided Township details.

**HRG: Acknowledged.**

28. Sheet 65 has been updated to include the two PennDOT Pavement Restoration details.

**HRG: Acknowledged.**

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**New Comments:**

**29. HRG: The plan set is missing a sheet 27 (C03.5) and has two-page numbers labeled sheet 24 (C03.2). Any notes or callouts referencing page numbers should be adjusted accordingly.**

**30. HRG: The details should be updated to East Vincent Township's most recent Standard Specifications, attached.**

The above recommends our comments on the proposed Plan. A cover letter which addresses each of these comments by number should be included when the Applicant resubmits plans. In addition, a digital and paper copy of the plan must be submitted to HRG at that time. If you have any questions or require any additional information on this matter, please do not hesitate to contact me.

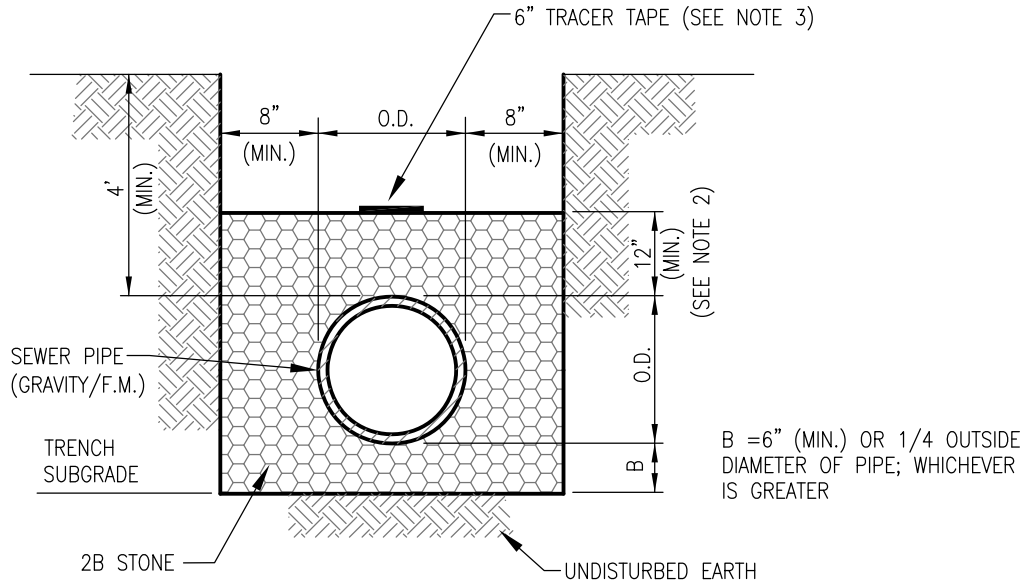
Sincerely,

**Herbert, Rowland & Grubic, Inc.**



William A. Brown II, P.E.  
Senior Project Manager

AEK/WAB  
009388.0427.003



**GRAVITY SANITARY SEWERS  
AND FORCE MAINS**

**BEDDING DETAILS**

N.T.S.

**NOTE:**

1. CONTRACTOR TO COMPLY WITH CURRENT OSHA STANDARD 29 CFR 1910/1926 FOR TRENCH DIMENSIONS, SLOPING, BENCHING, SHORING AND INSPECTIONS.
2. STONE BEDDING SHALL EXTEND 12" ABOVE PIPE UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
3. TRACER TAPE TO BE PLACED ON TOP OF STONE BEDDING ALONG ALL SANITARY SEWER FORCE MAIN AND LOW PRESSURE SEWER SYSTEM PIPING.

STANDARD DETAIL

CRUSHED STONE

BEDDING FOR PIPE

**EAST VINCENT TOWNSHIP**  
CHESTER COUNTY, PENNSYLVANIA

Date:

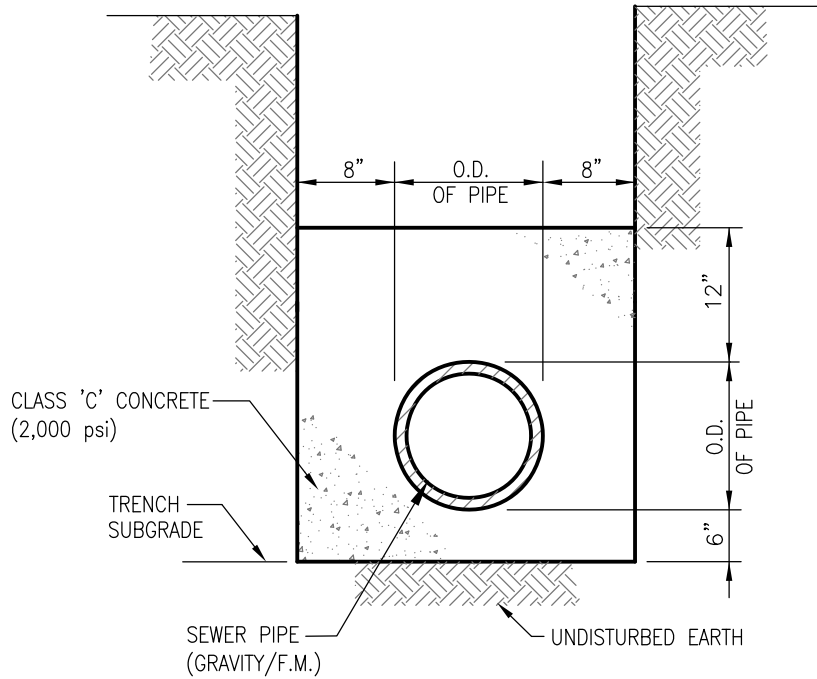
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Detail No.

SD-G-03



4259 W. Swamp Road  
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www.cksengineers.com  
215.340.0600



**NOTE:**  
CONTRACTOR TO COMPLY WITH CURRENT OSHA  
STANDARD 29 CFR 1926 FOR TRENCH DIMENSIONS,  
SLOPING, BENCHING, SHORING AND INSPECTIONS.

**TYPICAL CONCRETE  
ENCASEMENT DETAIL**  
N.T.S.

**STANDARD DETAIL**

**CONCRETE ENCASEMENT FOR PIPE**

**EAST VINCENT TOWNSHIP  
CHESTER COUNTY, PENNSYLVANIA**

Date:

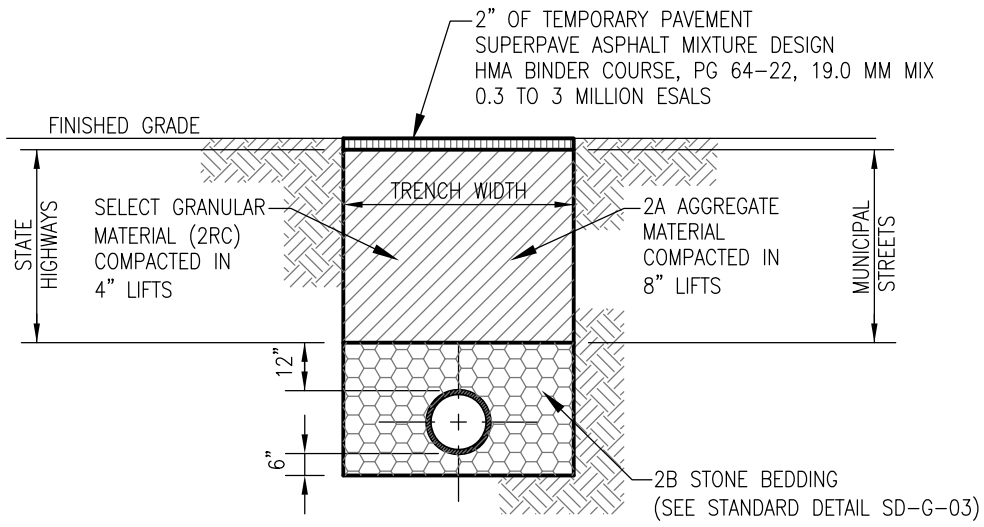
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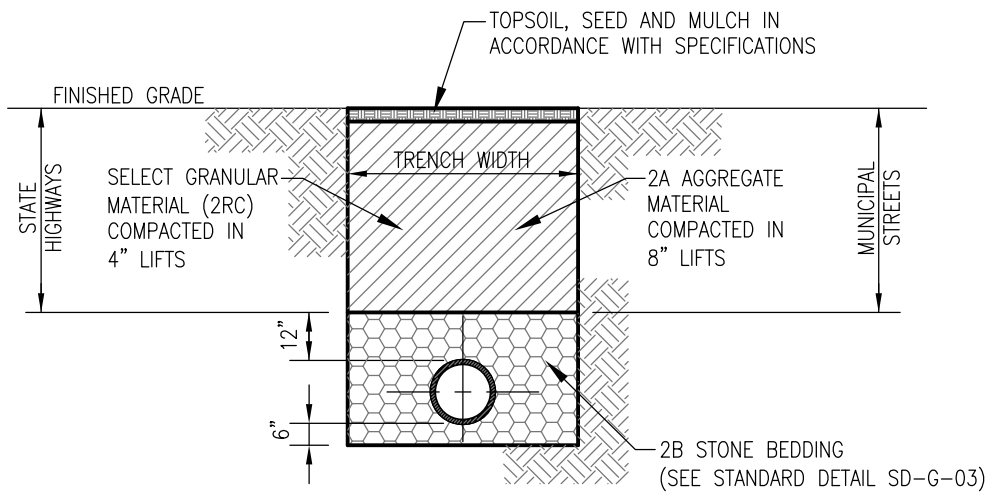
SD-G-04



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**PAVED STREET OR DRIVEWAY – TEMPORARY RESTORATION**  
N.T.S.



**UNPAVED STREET OR SHOULDER  
TEMPORARY AND PERMANENT RESTORATION**  
N.T.S.

**STANDARD DETAIL**

TEMPORARY PAVEMENT AND UNPAVED STREET RESTORATION

TRENCH BACKFILL

**EAST VINCENT TOWNSHIP**  
CHESTER COUNTY, PENNSYLVANIA

Date:

5/23/22

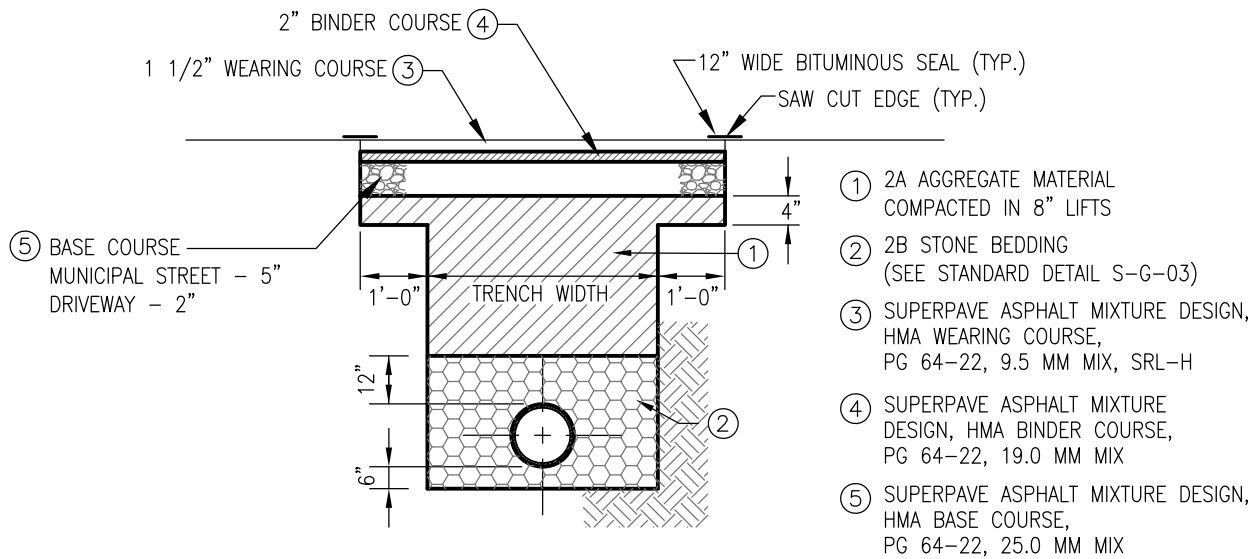
Detail No.

SD-G-05



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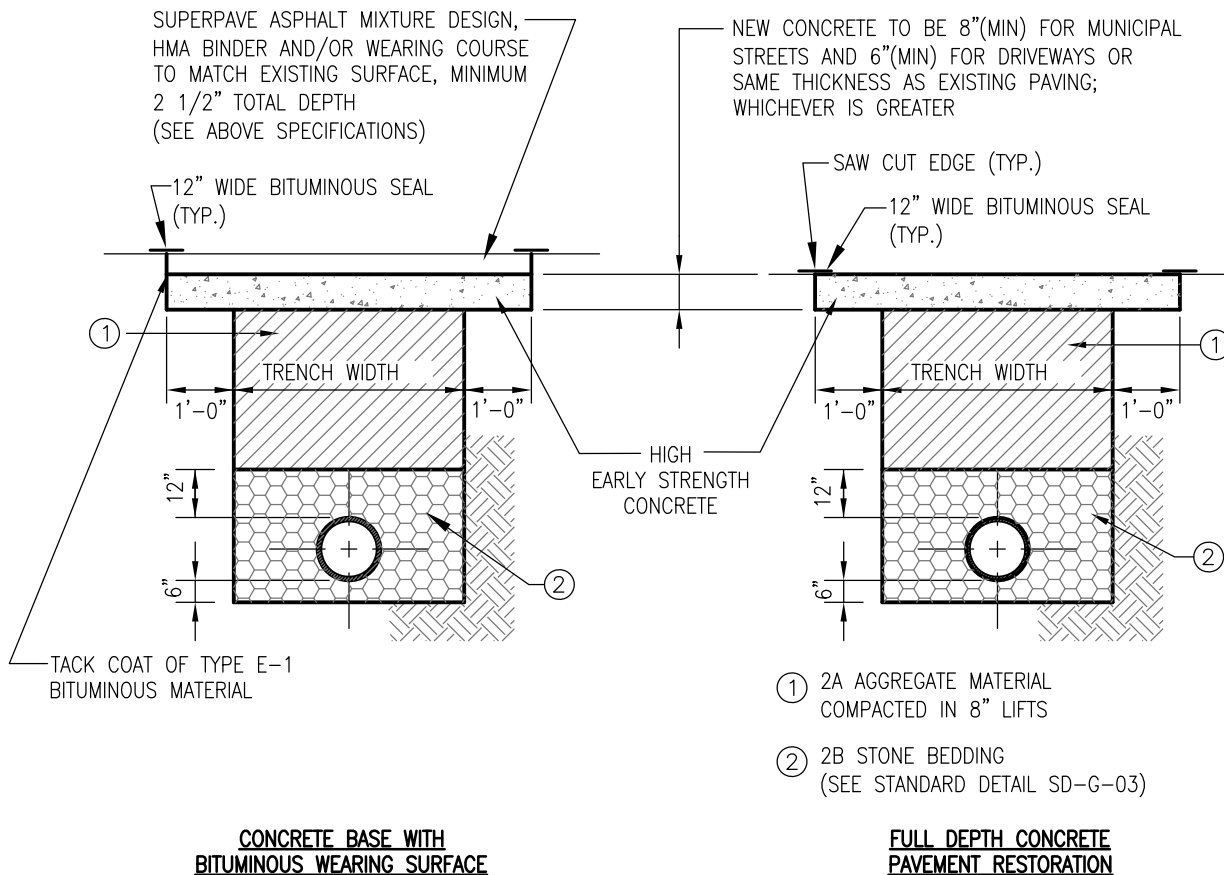




## BITUMINOUS PAVING – PERMANENT RESTORATION

N.T.S.

NOTE: ESAL VALUE FOR SUPERPAVE ASPHALT MIXTURE DESIGNS SHALL BE BASED UPON ROAD CLASSIFICATION (SEE SPECIFICATIONS)



## CONCRETE PAVING – PERMANENT RESTORATION

N.T.S.

**STANDARD DETAIL**

**EAST VINCENT TOWNSHIP  
CHESTER COUNTY, PENNSYLVANIA**

PERMANENT MUNICIPAL STREET OR DRIVEWAY RESTORATION

Date:

5/23/22

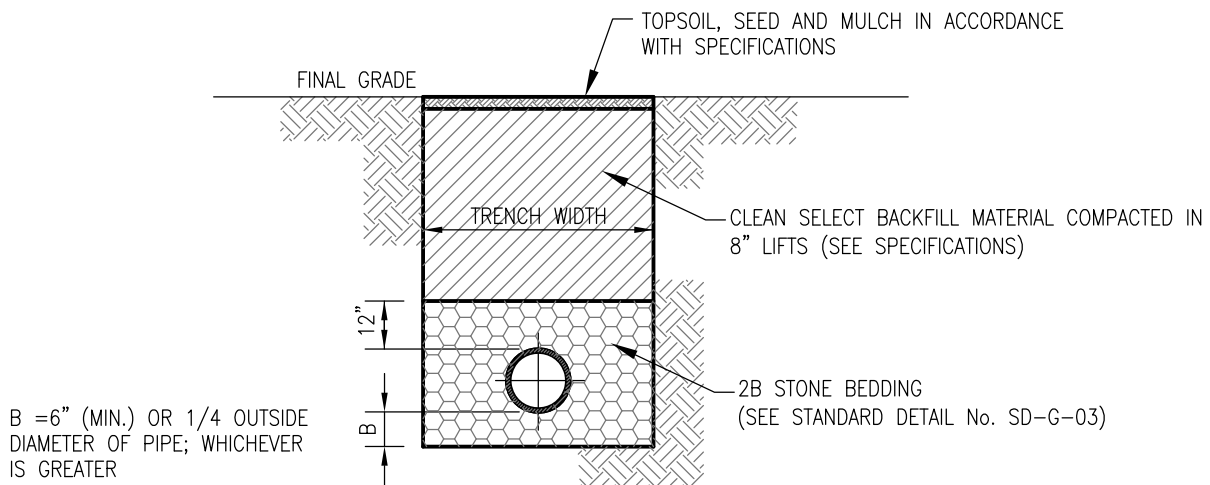
Detail No.

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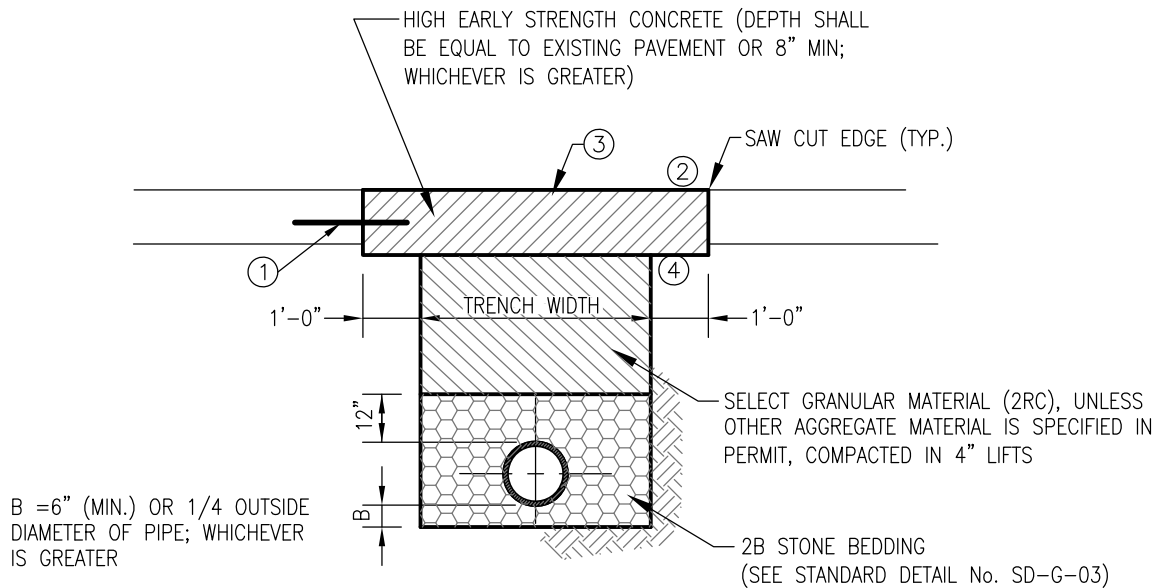
TRENCH BACKFILL AND PAVING



## UNIMPROVED AREA BACKFILLING AND RESTORATION DETAIL

N.T.S.

<b>STANDARD DETAIL</b>	<b>EAST VINCENT TOWNSHIP</b> CHESTER COUNTY, PENNSYLVANIA		
<b>UNIMPROVED AREA RESTORATION</b>	Date:	Detail No.	
<b>TRENCH BACKFILL AND SEEDING</b>	5/23/22	SD-G-07	

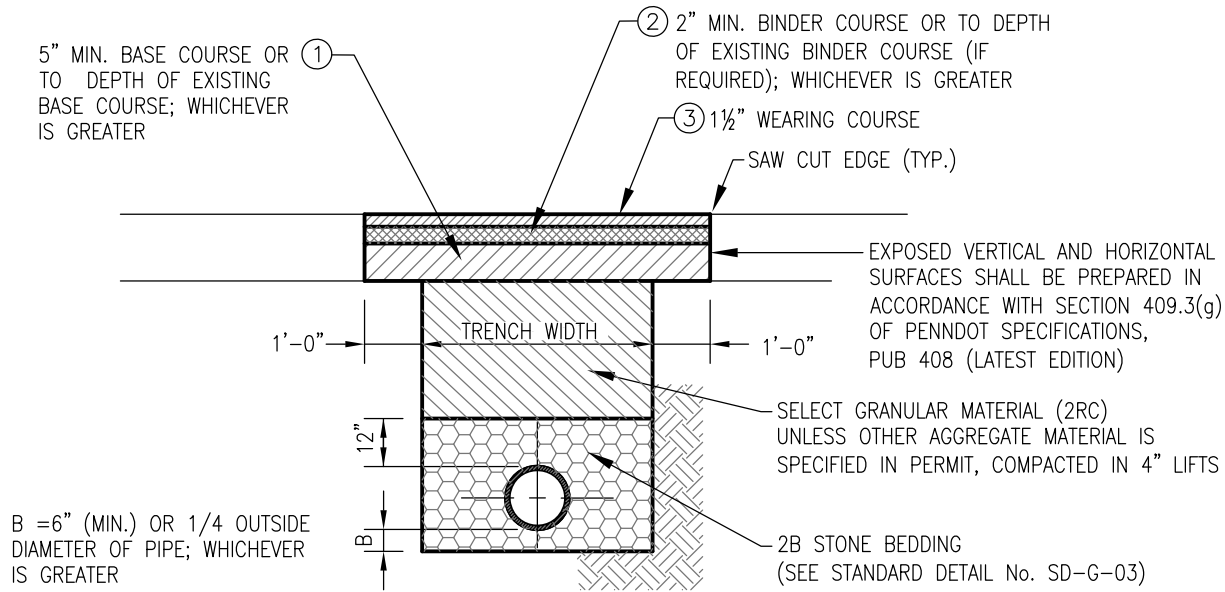


- ① ON REINFORCED CONCRETE PAVEMENT, PLACE REINFORCING STEEL, TIE BOLTS, AND LOAD TRANSFER DEVICES IN ACCORDANCE WITH RC-26M OF PENNDOT STANDARDS FOR ROADWAY CONSTRUCTION (LATEST EDITION)
- ② SURFACE TEXTURE SHALL BE IN ACCORDANCE WITH SECTION 501.3(k) OF PENNDOT SPECIFICATIONS, PUB. 408 (LATEST EDITION)
- ③ LIMITS OF CONCRETE REPLACEMENT SHALL BE IN ACCORDANCE WITH SECTION 459.8(i) OF PENNSYLVANIA CODE, TITLE 67, CHAPTER 459, OCCUPANCY OF HIGHWAYS BY UTILITIES.
- ④ CUT BACK IS NOT REQUIRED BEYOND A TRANSVERSE OR LONGITUDINAL JOINT OR CURB.

## PENNDOT ROADS OR DRIVEWAYS – RIGID PAVEMENT RESTORATION

N.T.S.


<b>STANDARD DETAIL</b>	<b>EAST VINCENT TOWNSHIP</b> CHESTER COUNTY, PENNSYLVANIA		
PENNDOT ROADS OR DRIVEWAYS	Date:	Detail No.	<b>CKS</b> ENGINEERS
RIGID PAVEMENT RESTORATION	5/23/22	SD-G-08	

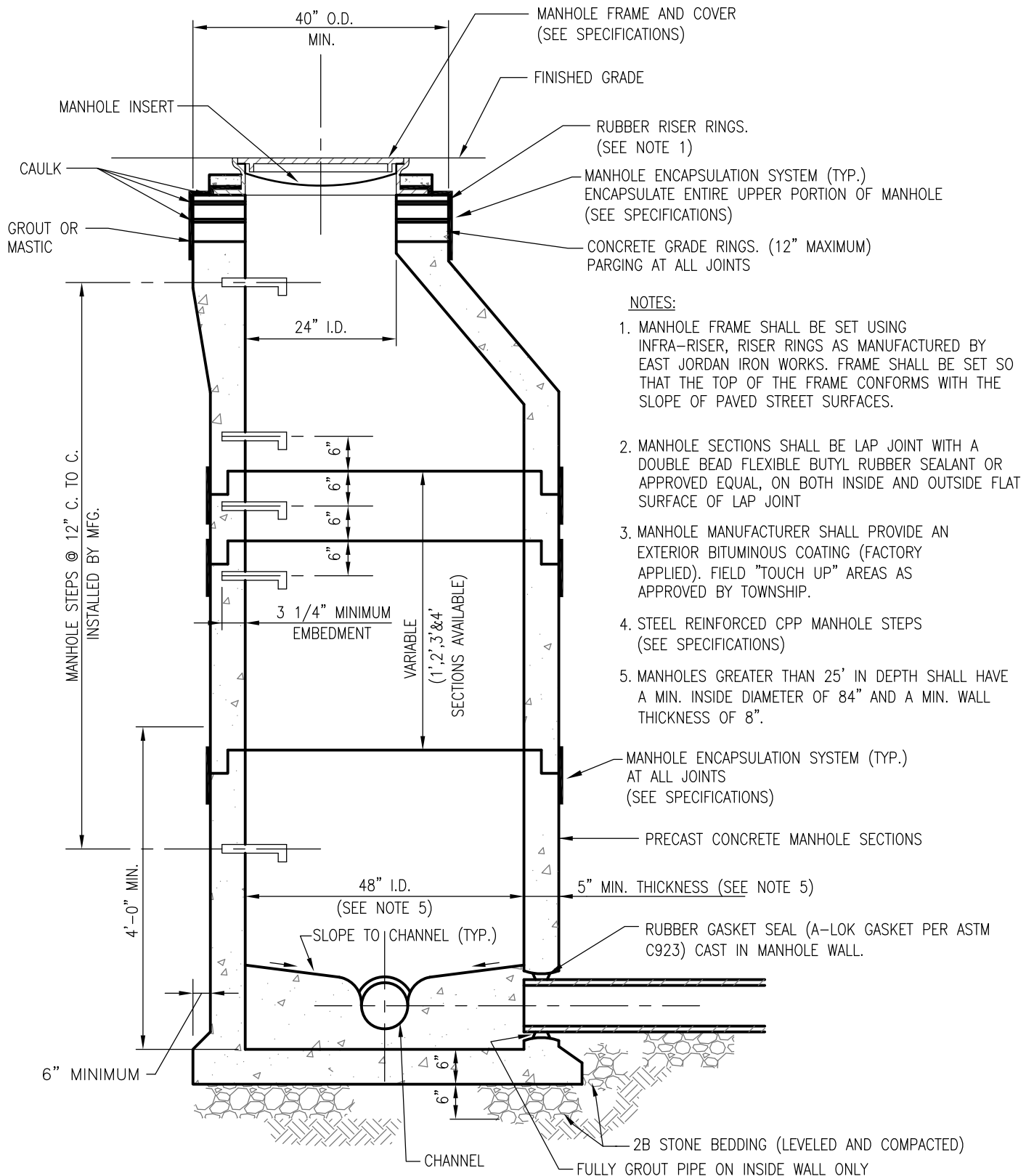


- ① SUPERPAVE ASPHALT MIXTURE DESIGN, HMA BASE COURSE, PG 64-22, 25.0 MM MIX
- ② SUPERPAVE ASPHALT MIXTURE DESIGN, HMA BINDER COURSE, PG 64-22, 19.0 MM MIX
- ③ SUPERPAVE ASPHALT MIXTURE DESIGN, HMA WEARING COURSE, PG 64-22, 9.5 MM MIX

NOTE: ESAL VALUE FOR SUPERPAVE ASPHALT MIXTURE DESIGNS SHALL BE BASED UPON ROAD CLASSIFICATION (SEE SPECIFICATIONS)

**PENNDOT ROADS OR DRIVEWAYS – FLEXIBLE PAVEMENT RESTORATION**  
N.T.S.

<b>STANDARD DETAIL</b>	<b>EAST VINCENT TOWNSHIP</b>		
	CHESTER COUNTY, PENNSYLVANIA		
PENNDOT ROADS OR DRIVEWAYS	Date:	Detail No.	 4259 W. Swamp Road Suite 410 Doylestown, PA 18902 www.cksenineers.com 215.340.0600
FLEXIBLE PAVEMENT RESTORATION	5/23/22	SD-G-09	



**NOTES:**

1. MANHOLE FRAME SHALL BE SET USING INFRA-RISER, RISER RINGS AS MANUFACTURED BY EAST JORDAN IRON WORKS. FRAME SHALL BE SET SO THAT THE TOP OF THE FRAME CONFORMS WITH THE SLOPE OF PAVED STREET SURFACES.
2. MANHOLE SECTIONS SHALL BE LAP JOINT WITH A DOUBLE BEAD FLEXIBLE BUTYL RUBBER SEALANT OR APPROVED EQUAL, ON BOTH INSIDE AND OUTSIDE FLAT SURFACE OF LAP JOINT
3. MANHOLE MANUFACTURER SHALL PROVIDE AN EXTERIOR BITUMINOUS COATING (FACTORY APPLIED). FIELD "TOUCH UP" AREAS AS APPROVED BY TOWNSHIP.
4. STEEL REINFORCED CPP MANHOLE STEPS (SEE SPECIFICATIONS)
5. MANHOLES GREATER THAN 25' IN DEPTH SHALL HAVE A MIN. INSIDE DIAMETER OF 84" AND A MIN. WALL THICKNESS OF 8".

**STANDARD MANHOLE SECTION DETAIL**

N.T.S.

**STANDARD DETAIL**

**STANDARD MANHOLE SECTION**

**EAST VINCENT TOWNSHIP  
CHESTER COUNTY, PENNSYLVANIA**

Date:

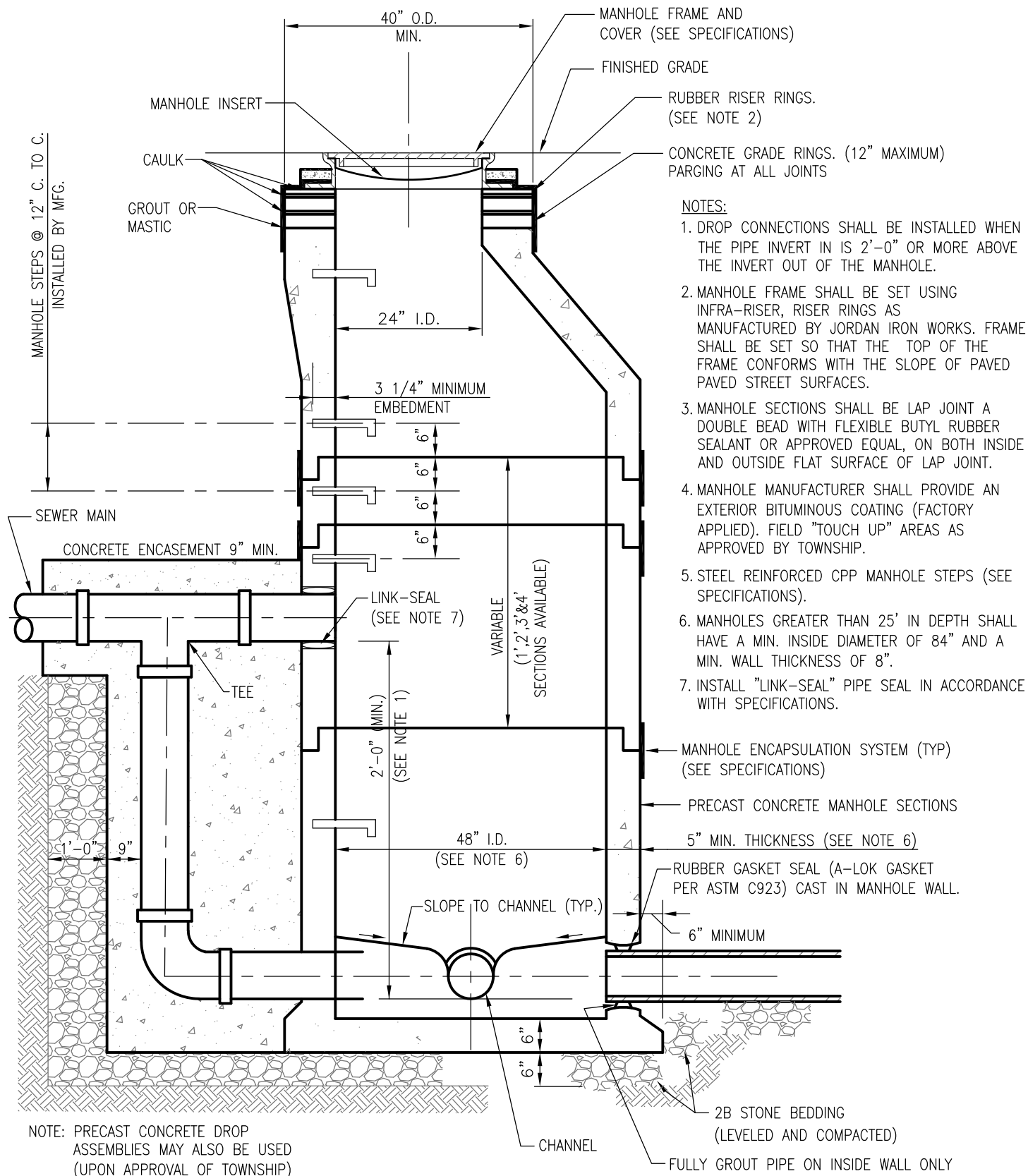
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Detail No.

SD-S-02



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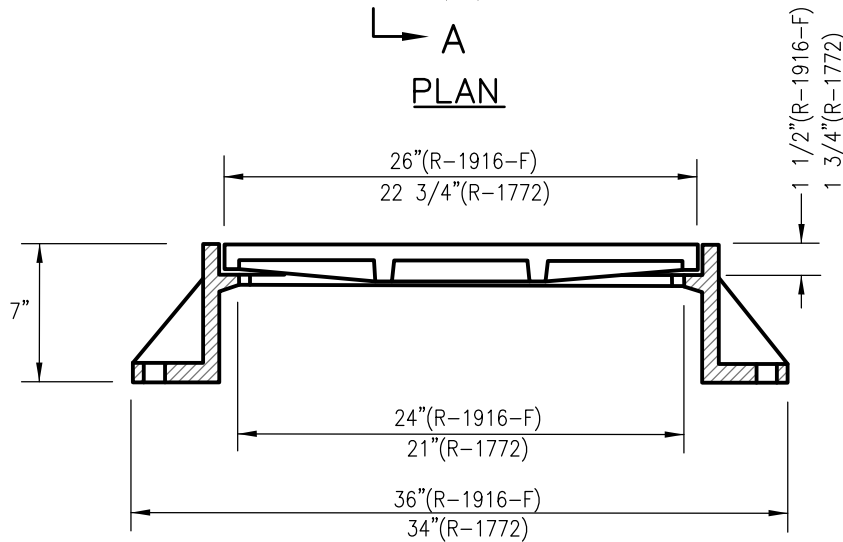
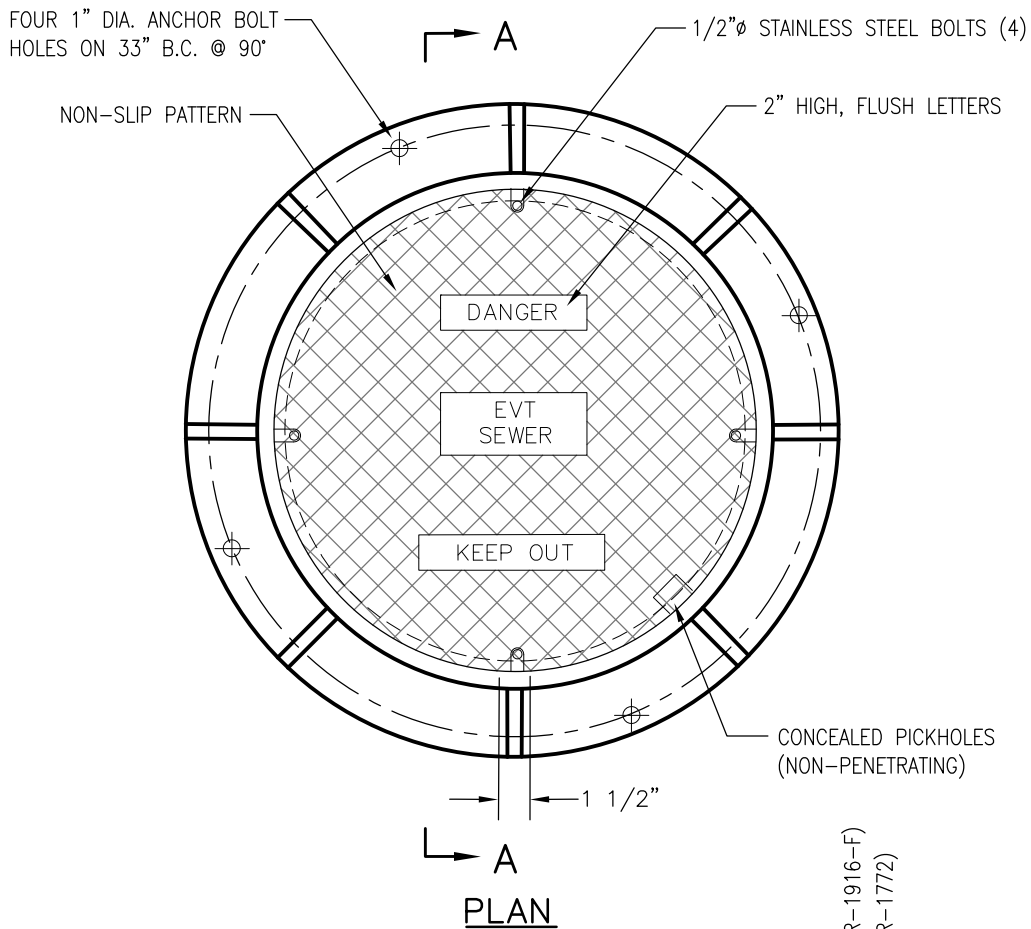


- NOTES:**
1. DROP CONNECTIONS SHALL BE INSTALLED WHEN THE PIPE INVERT IN IS 2'-0" OR MORE ABOVE THE INVERT OUT OF THE MANHOLE.
  2. MANHOLE FRAME SHALL BE SET USING INFRA-RISER, RISER RINGS AS MANUFACTURED BY JORDAN IRON WORKS. FRAME SHALL BE SET SO THAT THE TOP OF THE FRAME CONFORMS WITH THE SLOPE OF PAVED STREET SURFACES.
  3. MANHOLE SECTIONS SHALL BE LAP JOINT A DOUBLE BEAD WITH FLEXIBLE BUTYL RUBBER SEALANT OR APPROVED EQUAL, ON BOTH INSIDE AND OUTSIDE FLAT SURFACE OF LAP JOINT.
  4. MANHOLE MANUFACTURER SHALL PROVIDE AN EXTERIOR BITUMINOUS COATING (FACTORY APPLIED). FIELD "TOUCH UP" AREAS AS APPROVED BY TOWNSHIP.
  5. STEEL REINFORCED CPP MANHOLE STEPS (SEE SPECIFICATIONS).
  6. MANHOLES GREATER THAN 25' IN DEPTH SHALL HAVE A MIN. INSIDE DIAMETER OF 84" AND A MIN. WALL THICKNESS OF 8".
  7. INSTALL "LINK-SEAL" PIPE SEAL IN ACCORDANCE WITH SPECIFICATIONS.

**STANDARD DROP MANHOLE SECTION DETAIL**

N.T.S.

<p><b>STANDARD DETAIL</b></p> <p><b>DROP MANHOLE SECTION</b></p>	<p><b>EAST VINCENT TOWNSHIP</b></p> <p><b>CHESTER COUNTY, PENNSYLVANIA</b></p>	
	<p>Date:</p> <p>5/23/22</p>	<p>Detail No.</p> <p>SD-S-03</p>



STANDARD MANHOLE FRAME AND COVER SHALL BE NEENAH R-1772.

WATERTIGHT MANHOLE FRAME AND COVER SHALL BE NEENAH R-1916-F.

MANHOLE CASTING - GRAY IRON PER ASTM A-48, 450 LBS $\pm$

N.T.S.

STANDARD DETAIL

STANDARD/WATERTIGHT MANHOLE

FRAME AND COVER INSTALLATION

EAST VINCENT TOWNSHIP  
CHESTER COUNTY, PENNSYLVANIA

Date:

5/23/22

Detail No.

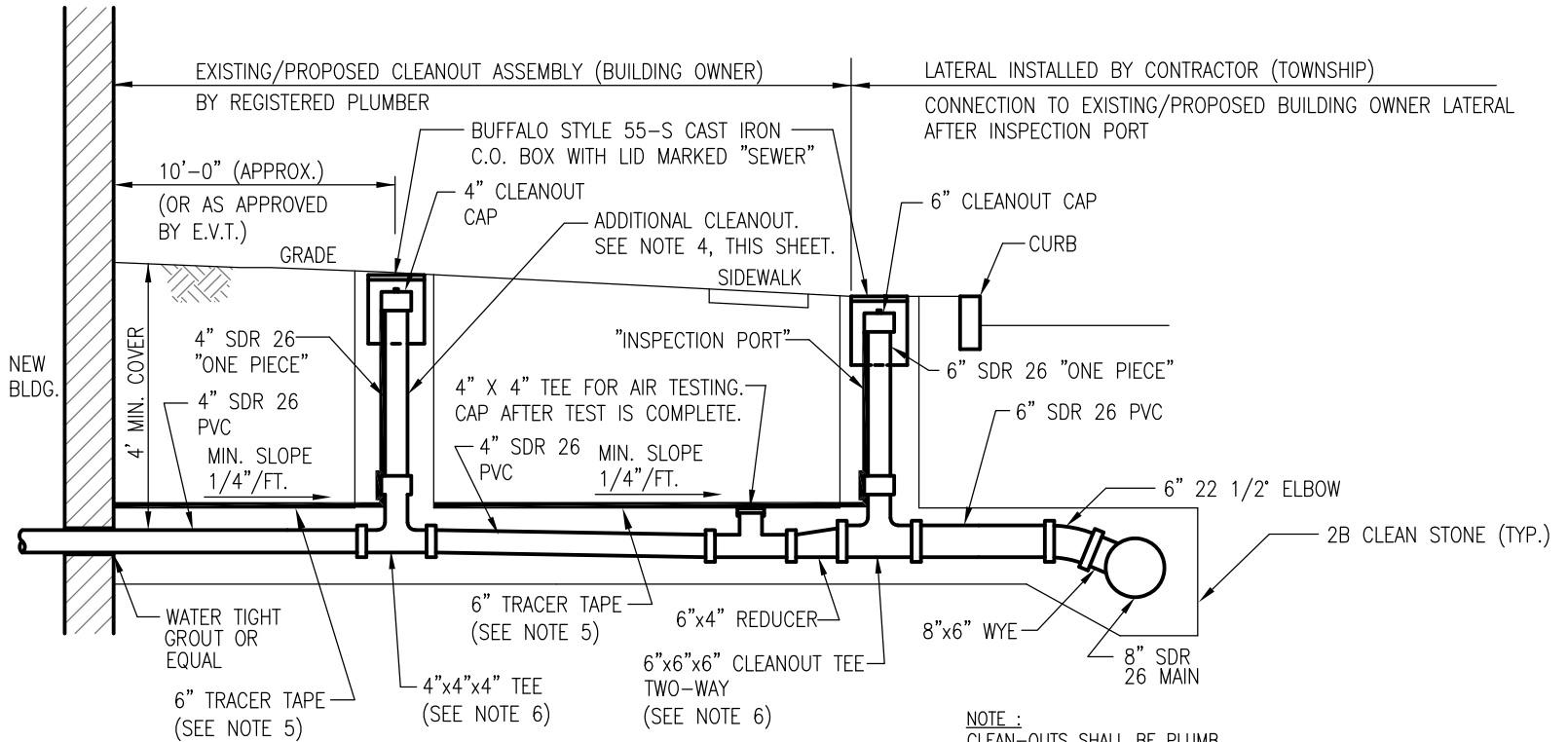
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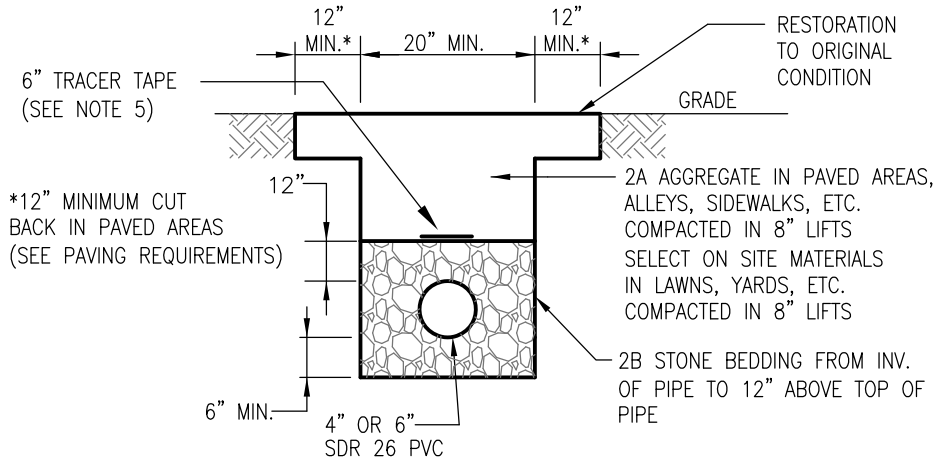
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TYPICAL LATERAL CONNECTION - NEW BUILDING

STANDARD DETAIL



ELEVATION



SECTION

TRENCH DETAIL

N.T.S.

NOTES:

- CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND DIMENSIONS PRIOR TO ORDERING AND/OR FABRICATION OF ANY MATERIALS.
- INSTALLATION SHALL CONFORM TO E.V.T. SPECIFICATIONS.
- PIPE MATERIAL FROM AND INCLUDING THE CLEANOUT SHALL BE SDR 26 SEWER W/PUSH-ON JOINTS.
- ADDITIONAL CLEANOUTS TO BE PROVIDED :
  - EVERY 100' OF LATERAL PIPE.
  - AT BENDS GREATER THAN 45° (ON UPSTREAM SIDE OF BEND).
  - WHERE BENDS ARE LESS THAN 40' APART (ON UPSTREAM SIDE OF BEND).
- TRACER TAPE TO BE PLACED ON TOP OF STONE BEDDING IN BUILDING OWNER'S SIDE OF LATERAL TRENCH. TRACER TAPE TO BE ATTACHED TO CLEAN OUTS/INSPECTION PORTS IN ACCORDANCE WITH SPECIFICATIONS.
- ALL CLEAN OUTS/INSPECTION PORTS SHALL REST ON 2B CLEAN STONE BEDDING AS SHOWN. CLEANOUTS SHALL BE THE 2-WAY TYPE ALLOWING INSPECTION/CLEANING IN EITHER DIRECTION.

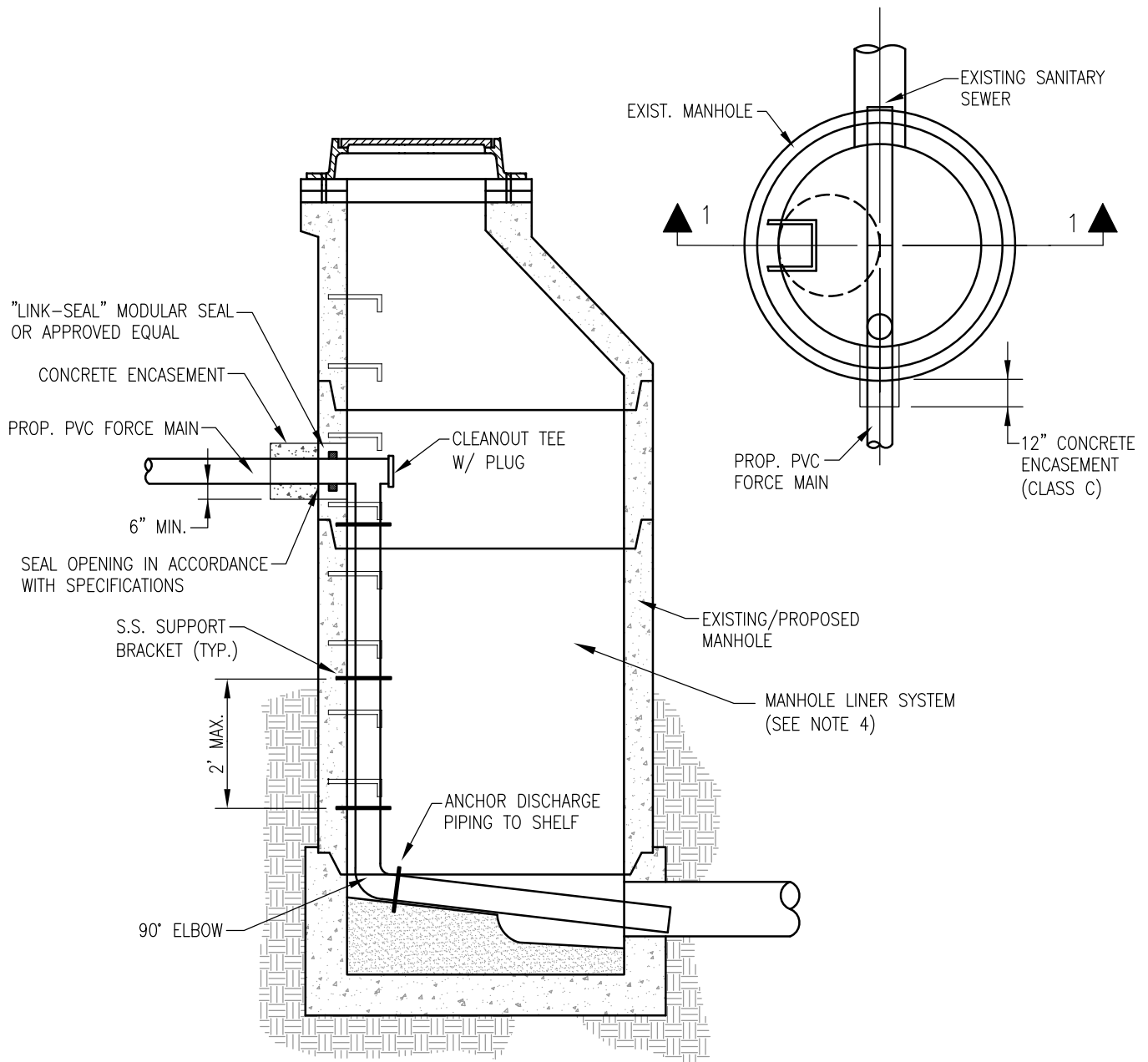
Date:

5/23/22

Detail No.

SD-S-06





**FORCE MAIN OR LOW PRESSURE SEWER  
CONNECTION TO MANHOLE**

N.T.S.

**NOTES:**

1. SECURE FORCE MAIN INFLUENT PIPE TO MANHOLE WALL W/S.S. BRACKETS AND ANCHORS.
2. THE FORCE MAIN INFLUENT PIPE SHALL DROP TO THE TOP OF THE SHELF WITH AN ELBOW TO DIRECT THE FLOW INTO THE DISCHARGE SEWER PIPE.
3. RELOCATE MANHOLE STEPS IF REQUIRED TO AVOID FORCE MAIN CONNECTION.
4. MANHOLE LINER SYSTEM TO BE APPLIED TO THE EXISTING/PROPOSED MANHOLE TO WHICH THE FORCE MAIN CONNECTS AND ALSO TO THE NEXT THREE (3) DOWNSTREAM EXISTING/PROPOSED MANHOLES IN ACCORDANCE WITH SPECIFICATIONS.

**STANDARD DETAIL**

**FORCE MAIN OR LOW PRESSURE SEWER**

**CONNECTION TO MANHOLE**

**EAST VINCENT TOWNSHIP  
CHESTER COUNTY, PENNSYLVANIA**

Date:

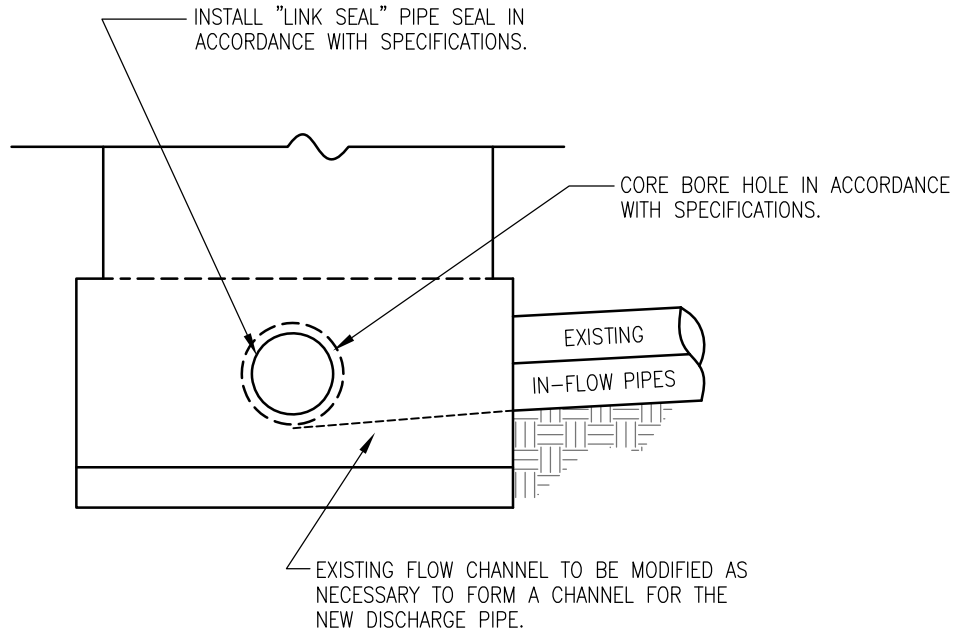
5/23/22

Detail No.

SD-S-15



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Suite 410  
Doylestown, PA 18902  
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215.340.0600



NOTE:  
 UPON COMPLETION OF THE PROPOSED SEWER PIPE CONNECTION,  
 THE EXISTING MANHOLE SHALL BE TESTED IN ACCORDANCE WITH  
 THE CONSTRUCTION SPECIFICATIONS PERTAINING TO THE TESTING  
 OF MANHOLES.

GRAVITY CONNECTION TO  
 EXISTING SANITARY MANHOLE

N.T.S.

STANDARD DETAIL

GRAVITY CONNECTION TO EXISTING SANITARY MANHOLE

**EAST VINCENT TOWNSHIP**  
 CHESTER COUNTY, PENNSYLVANIA

Date:

5/23/22

Detail No.

SD-S-16



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