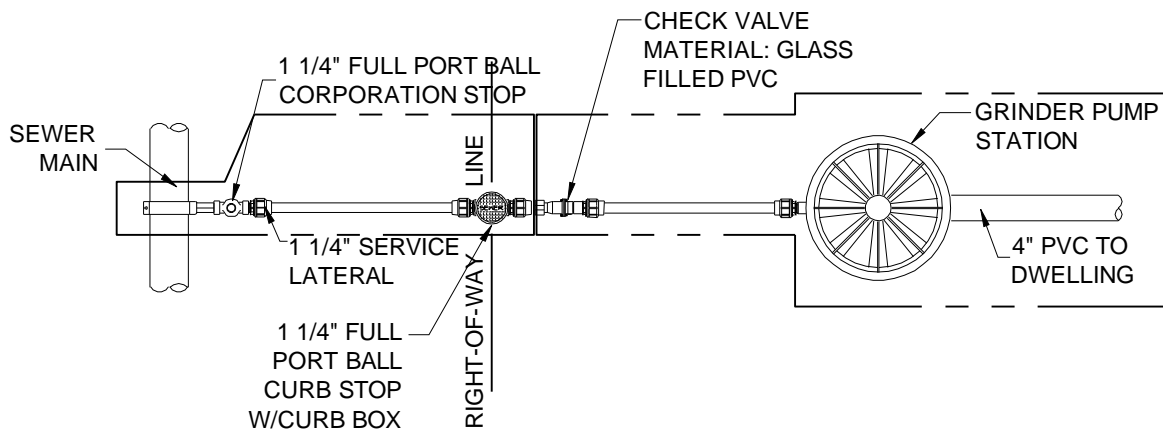


APPENDIX F
STANDARD CONSTRUCTION DETAILS

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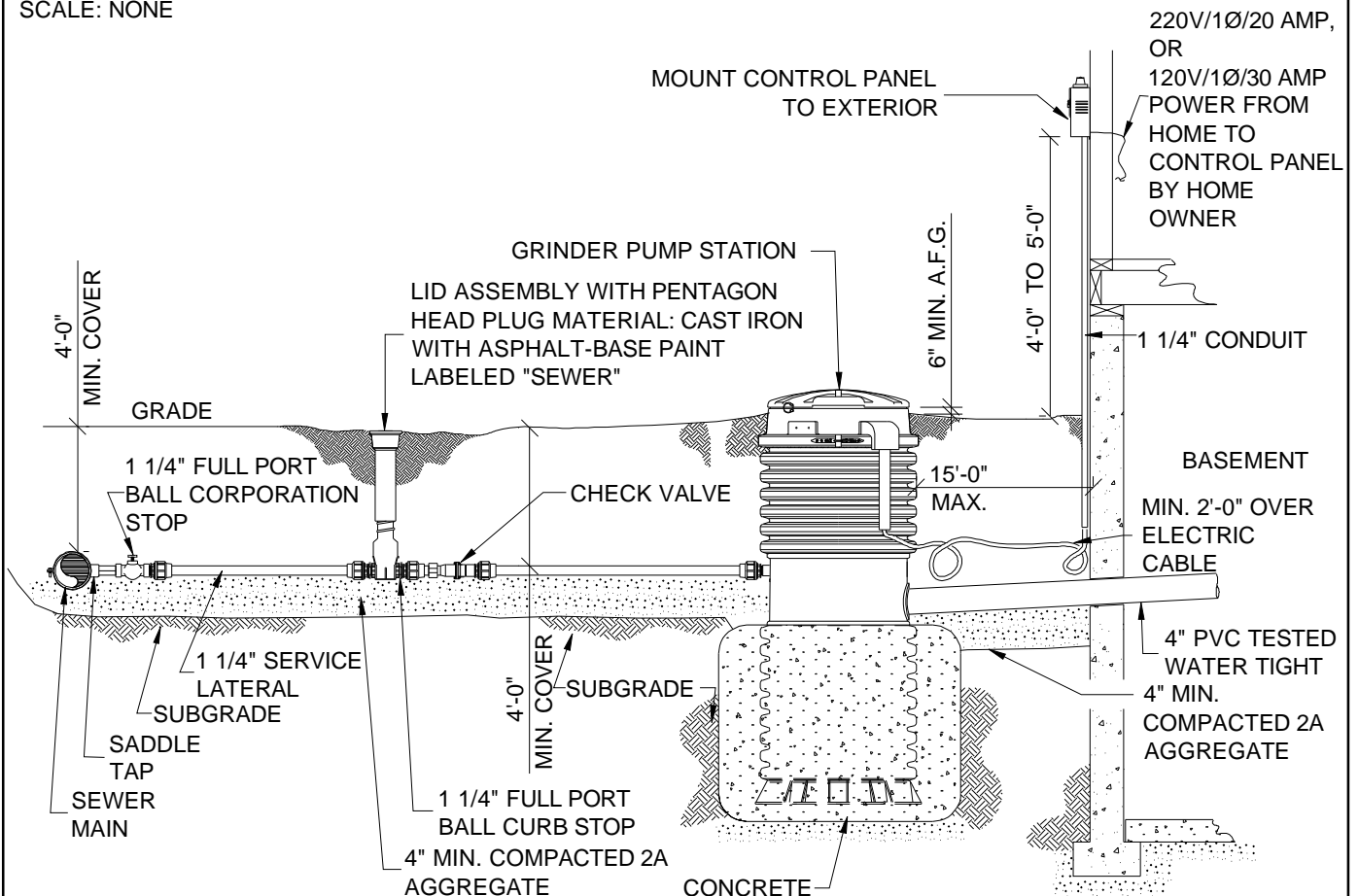
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TYPICAL GRINDER PUMP LATERAL INSTALLATION - PLAN


SCALE: NONE



TYPICAL GRINDER PUMP INSTALLATION - ELEVATION

SCALE: NONE

NOTES: 1. REFER TO DRAWING S-3 FOR LATERAL NOTES.

 ENTECH	Entech Engineering, Inc. <small>Engineering Architecture Construction</small> Corporate Office: 4 S. Fourth Street Reading, PA 19602 ph: 610.373.6667 fx: 610.373.7537			WAYMART AREA AUTHORITY TYPICAL GRINDER PUMP INSTALLATION	
	Pottsville, PA ph: 570.628.5655 Mountaintop, PA ph: 570.868.0275 Lititz, PA ph: 717.626.6666 www.entecheng.com 1.800.825.1372			DATE: 7/20/10	DRAWING NO.
	PREPARED BY: MBD CHECKED BY: BAK APPROVED BY: EJP	PROJECT NO. 4152.14	SCALE: NONE	S-2	

LATERAL NOTES:


1. ALL MATERIAL USED FOR LATERAL INSTALLATIONS SHALL BE NEW, FREE FROM DEFECTS AND CONFORM TO ALL STANDARDS SET FORTH BY WAYMART AREA AUTHORITY.
2. ALL LATERALS MUST BE INSPECTED BEFORE BACKFILLING. COMPLETED DRAWINGS SHOWING THE EXACT LOCATION AND DEPTH OF LINE SHALL BE SUBMITTED TO THE TOWNSHIP DURING FINAL INSPECTION OR THE LATERAL WILL NOT BE AUTHORIZED TO USE.
3. ALL FEES MUST BE PAID IN PROPER AMOUNT BEFORE A CONNECTION PERMIT WILL BE ISSUED.

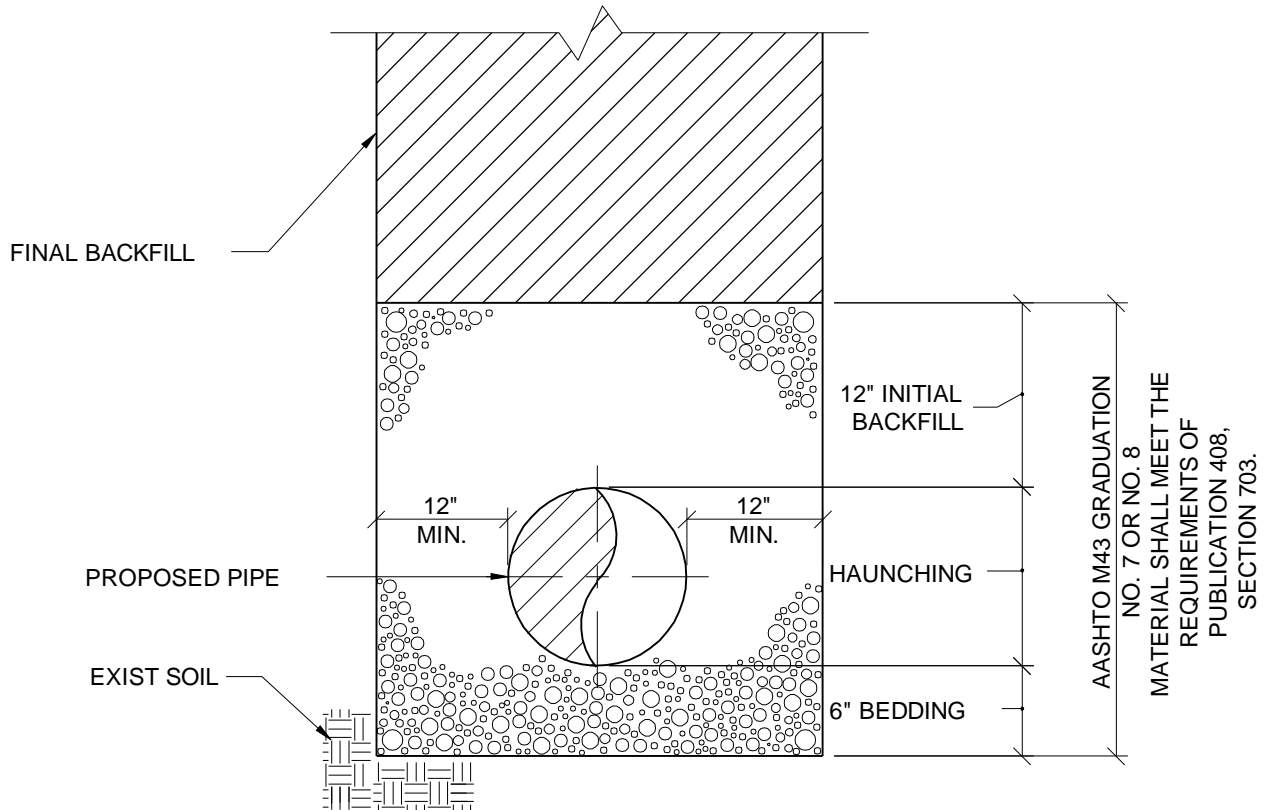
MATERIAL ALLOWED BY WAYMART AREA AUTHORITY FOR BUILDING GRAVITY SEWERS

1. PVC BELL AND SPIGOT SEWER PIPE / SDR 35.
2. 4" @ 1/4" / FT. MIN. GRADE
6" @ 1/8" / FT. MIN. GRADE

LOW PRESSURE:


1. HDPE OR PVC
2. MINIMUM DIAMETER: 1 1/4 INCH

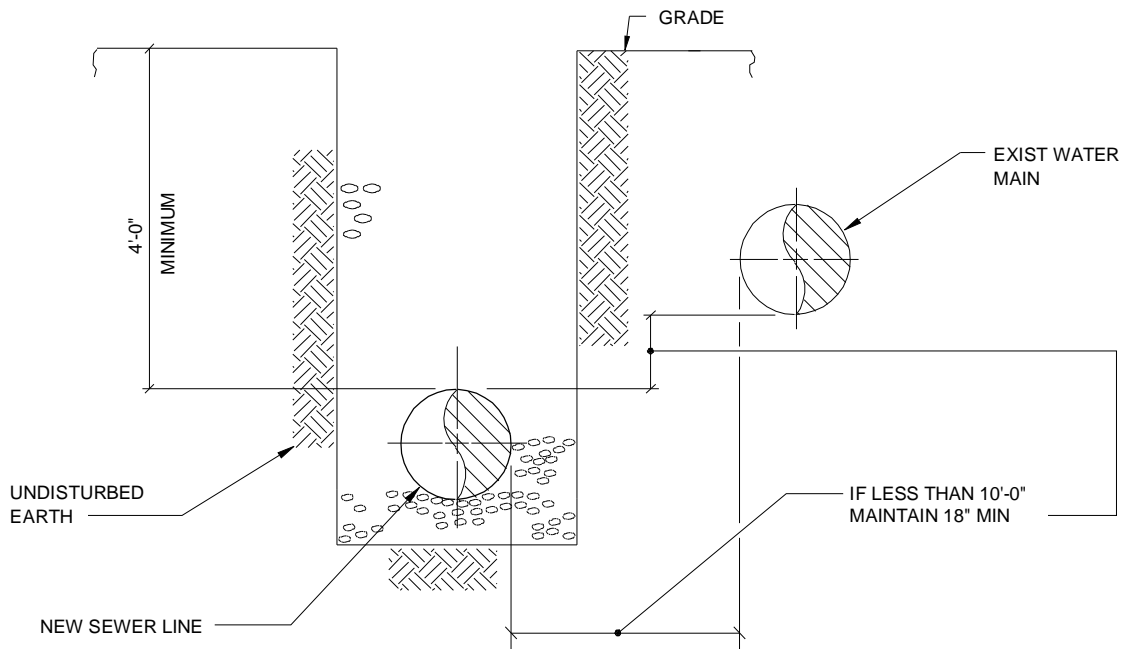
 ENTECH	Entech Engineering, Inc. <small>Engineering Architecture Construction</small> Corporate Office: 4 S. Fourth Street Reading, PA 19602 ph: 610.373.6667 fx: 610.373.7537			WAYMART AREA AUTHORITY LATERAL NOTES	
	Pottsville, PA ph: 570.628.5655 Mountaintop, PA ph: 570.868.0275 Lititz, PA ph: 717.626.6666 www.entecheng.com 1.800.825.1372			DATE: 7/20/10	DRAWING NO. S-3
	PREPARED BY DYH	CHECKED BY BAK	APPROVED BY EJP	PROJECT NO. 4152.14	SCALE: NONE



TYPICAL EXCAVATION, BACKFILL & PIPE EMBEDMENT DETAIL


SCALE: NONE

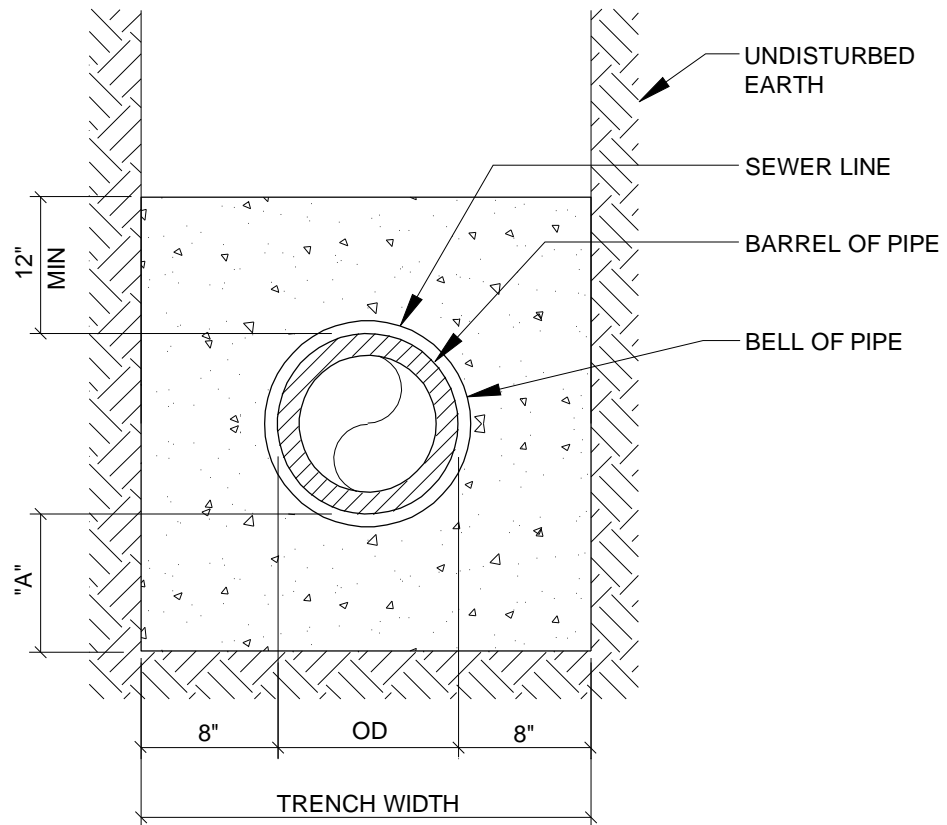
 ENTECH	Entech Engineering, Inc. <small>Engineering Architecture Construction</small> Corporate Office: 4 S. Fourth Street Reading, PA 19602 ph: 610.373.6667 fx: 610.373.7537			WAYMART AREA AUTHORITY TYPICAL EXCAVATION, BACKFILL & PIPE EMBEDMENT DETAIL	
	Pottsville, PA ph: 570.628.5655 Mountaintop, PA ph: 570.868.0275 Lititz, PA ph: 717.626.6666 www.entecheng.com 1.800.825.1372			DATE: 7/20/10	DRAWING NO. S-4
	PREPARED BY MBD	CHECKED BY BAK	APPROVED BY EJP	PROJECT NO. 4152.14	SCALE: NONE



NEW SEWER LINE PARALLEL TO EXISTING WATER MAIN DETAIL

SCALE: NONE

 ENTECH	Entech Engineering, Inc. <small>Engineering Architecture Construction</small> Corporate Office: 4 S. Fourth Street Reading, PA 19602 ph: 610.373.6667 fx: 610.373.7537			WAYMART AREA AUTHORITY NEW SEWER LINE PARALLEL TO EXISTING WATER MAIN	
	Pottsville, PA ph: 570.628.5655 Mountaintop, PA ph: 570.868.0275 Lititz, PA ph: 717.626.6666 www.entecheng.com 1.800.825.1372			DATE: 7/20/10	DRAWING NO. S-5
	PREPARED BY DYH	CHECKED BY BAK	APPROVED BY EJP	PROJECT NO. 4152.14	SCALE: NONE




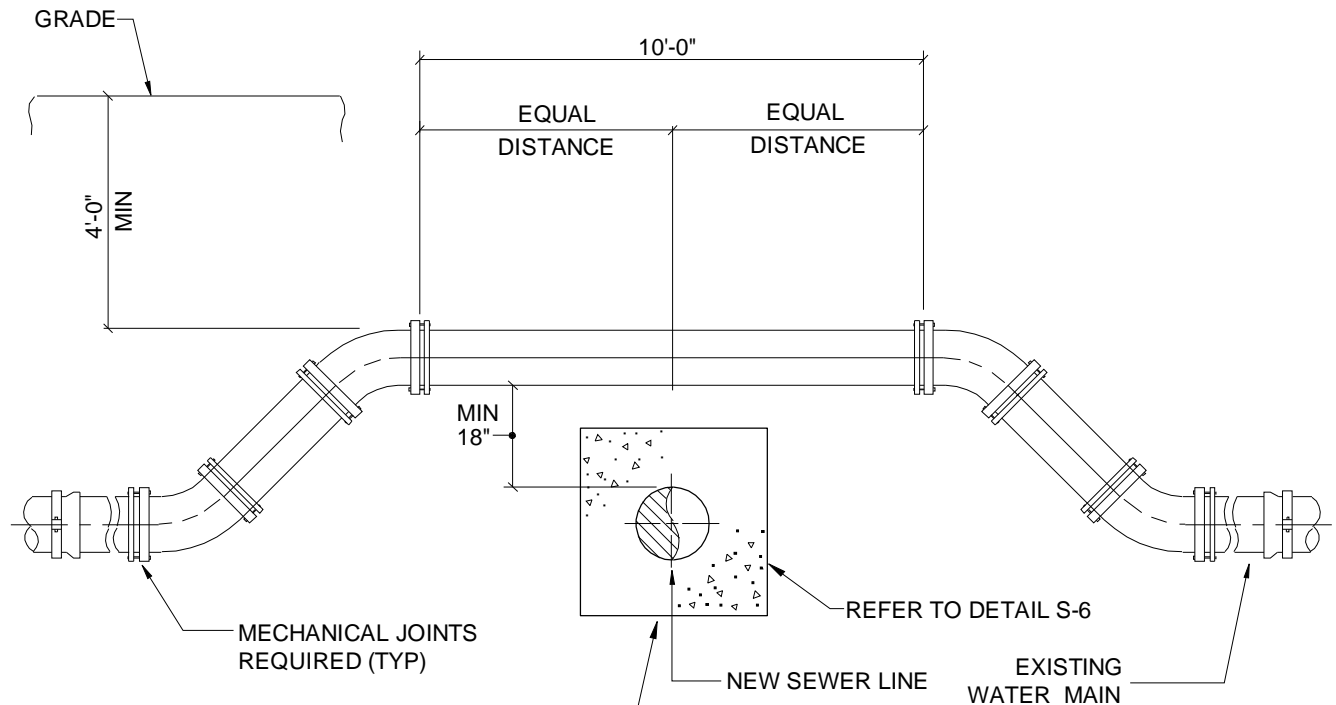
PIPE SIZE	"A"
4" - 16"	6"
18" - 48"	6"
54" - 84"	10"

NOTE: ALL CONCRETE SHALL HAVE MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT THE END OF 28 DAYS.

CONCRETE ENCASEMENT DETAIL

SCALE: NONE

 ENTECH	Entech Engineering, Inc. <small>Engineering Architecture Construction</small> Corporate Office: 4 S. Fourth Street Reading, PA 19602 ph: 610.373.6667 fx: 610.373.7537			WAYMART AREA AUTHORITY CONCRETE ENCASEMENT DETAIL	
	Pottsville, PA ph: 570.628.5655 Mountaintop, PA ph: 570.868.0275 Lititz, PA ph: 717.626.6666 www.entecheng.com 1.800.825.1372			DATE: 7/20/10	DRAWING NO. S-6
	PREPARED BY DYH	CHECKED BY BAK	APPROVED BY EJP	PROJECT NO. 4152.14	SCALE: NONE




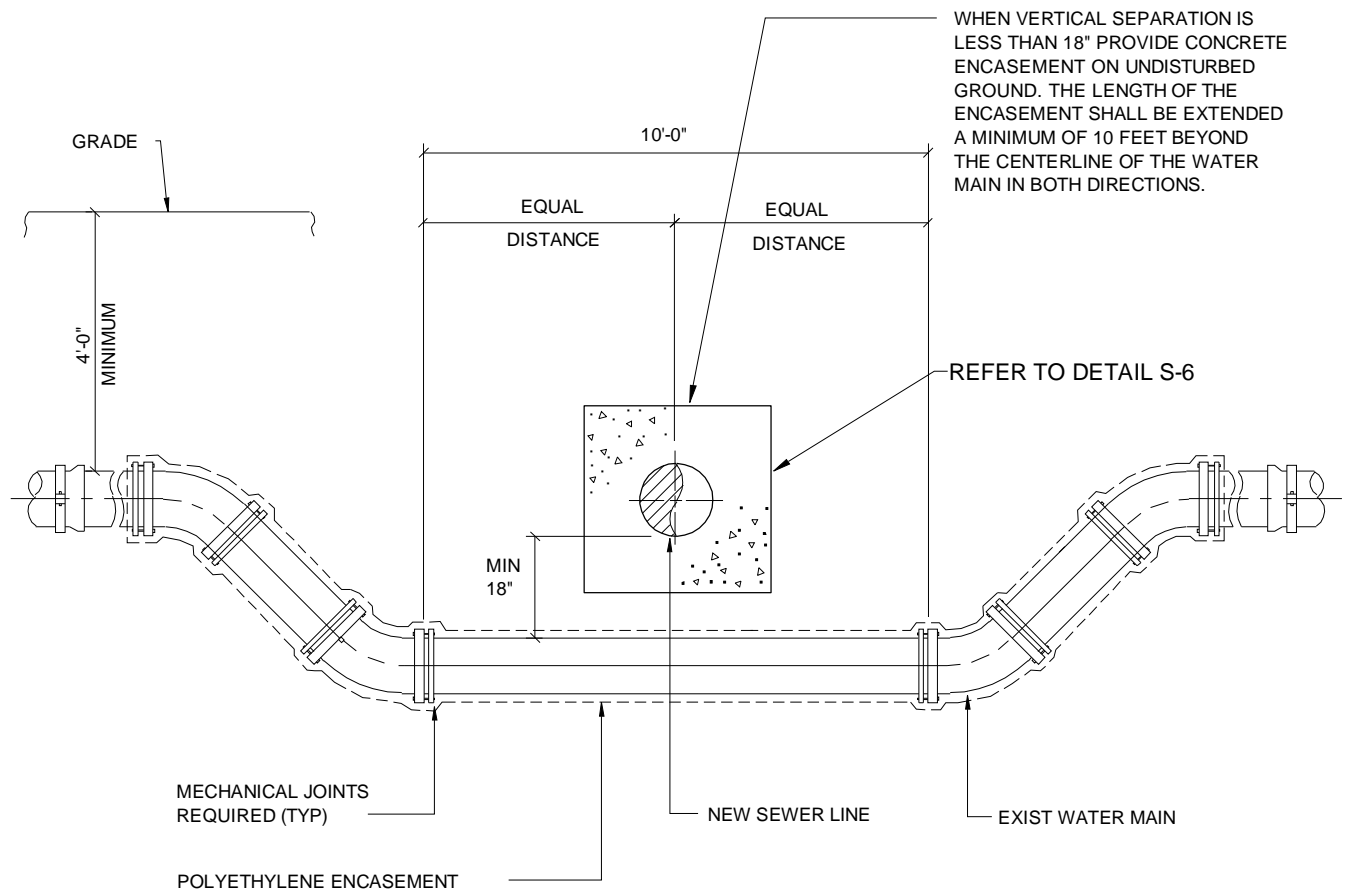
WHEN VERTICAL SEPARATION IS LESS THAN 18" PROVIDE CONCRETE ENCASEMENT ON UNDISTURBED GROUND. THE LENGTH OF THE ENCASEMENT SHALL BE EXTENDED A MINIMUM OF 10 FEET BEYOND THE CENTERLINE OF THE WATER MAIN IN BOTH DIRECTIONS.

NOTE: ALL CONCRETE SHALL HAVE MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT THE END OF 28 DAYS.

NEW SEWER LINE CROSSING UNDER EXISTING WATER MAIN DETAIL

SCALE: NONE


 ENTECH	Entech Engineering, Inc. <small>Engineering Architecture Construction</small> Corporate Office: 4 S. Fourth Street Reading, PA 19602 ph: 610.373.6667 fx: 610.373.7537			WAYMART AREA AUTHORITY SEWER CROSSING UNDER EXISTING WATER MAIN DETAIL	
	Pottsville, PA ph: 570.628.5655 Mountaintop, PA ph: 570.868.0275 Lititz, PA ph: 717.626.6666 www.entecheng.com 1.800.825.1372			DATE: 7/20/10	DRAWING NO. S-7
	PREPARED BY DYH	CHECKED BY BAK	APPROVED BY EJP	PROJECT NO. 4152.14	SCALE: NONE

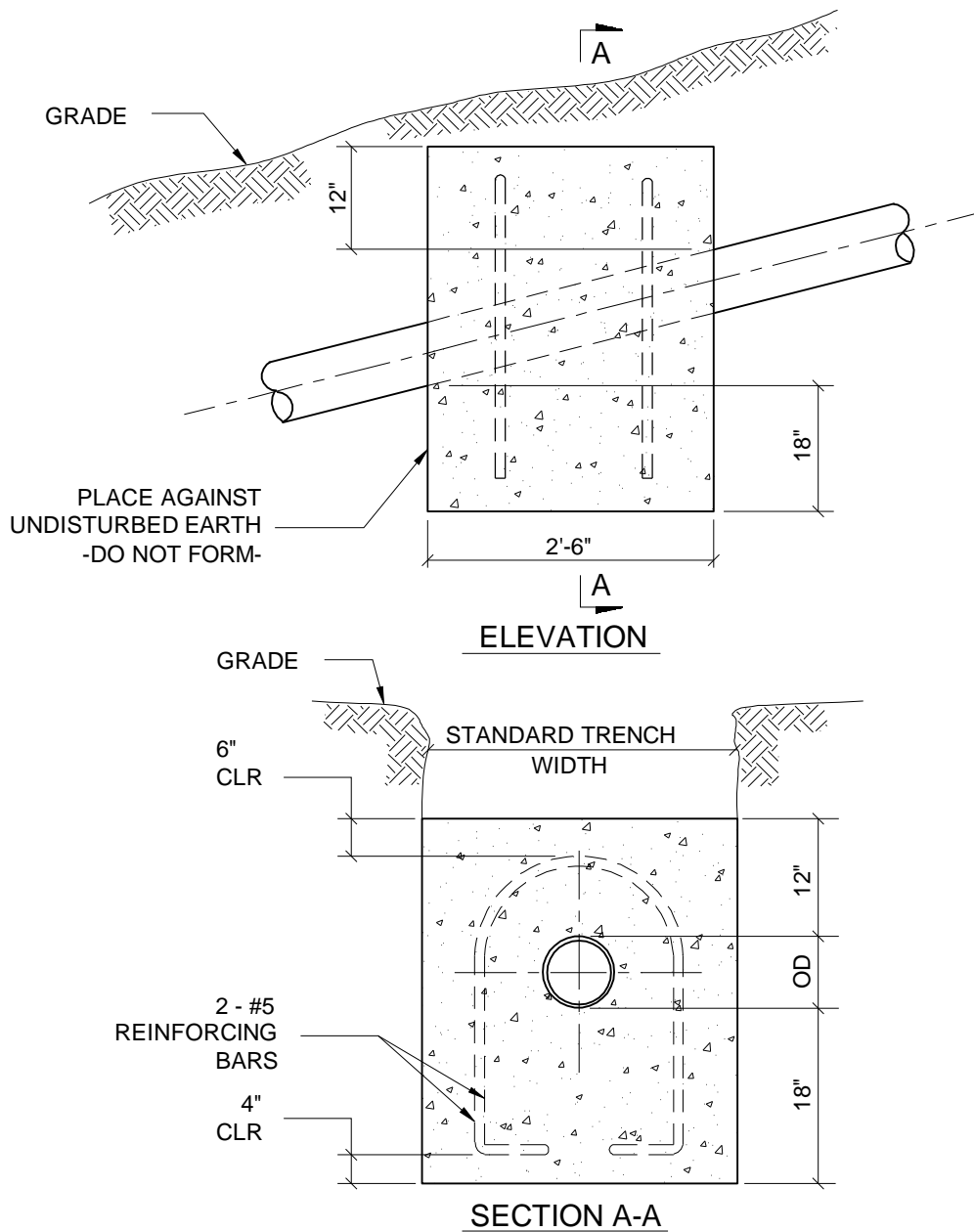


NOTE: ALL CONCRETE SHALL HAVE MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT THE END OF 28 DAYS.

NEW SEWER LINE CROSSING OVER EXISTING WATER MAIN DETAIL

SCALE: NONE

 ENTECH	Entech Engineering, Inc. <small>Engineering Architecture Construction</small> Corporate Office: 4 S. Fourth Street Reading, PA 19602 ph: 610.373.6667 fx: 610.373.7537			WAYMART AREA AUTHORITY NEW SEWER CROSSING OVER EXISTING WATER MAIN	
	Pottsville, PA ph: 570.628.5655 Mountaintop, PA ph: 570.868.0275 Lititz, PA ph: 717.626.6666 www.entecheng.com 1.800.825.1372			DATE: 7/20/10	DRAWING NO. S-8
	PREPARED BY DYH	CHECKED BY BAK	APPROVED BY EJP	PROJECT NO. 4152.14	SCALE: NONE




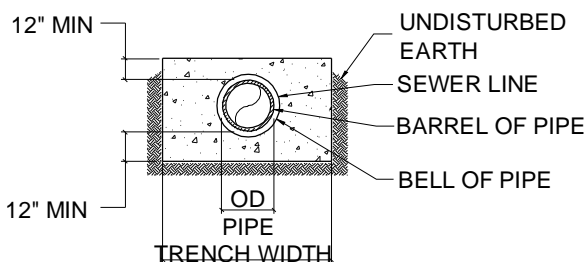
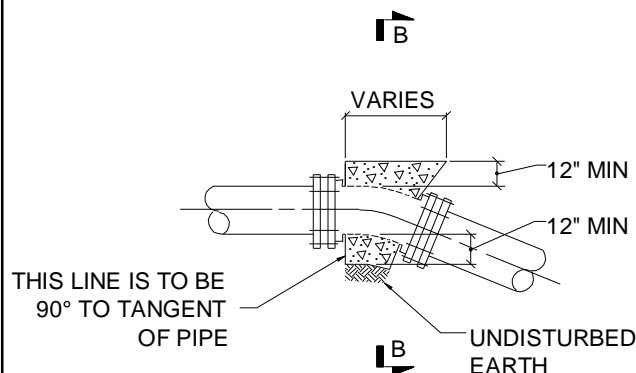
CONCRETE ANCHOR NOTES:

1. ANCHORS ARE NOT REQUIRED ON SLOPES LESS THAN 20% UNLESS NOTED ON DRAWINGS.
2. PROVIDE ANCHORS ON 36' CENTERS FOR SLOPES BETWEEN 20% TO 34%.
3. PROVIDE ANCHORS ON 24' CENTERS FOR SLOPES BETWEEN 35% TO 50%.
4. PROVIDE ANCHORS ON 16' CENTERS FOR SLOPES BETWEEN 51% TO 70%.
5. ALL CONCRETE SHALL HAVE MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT THE END OF 28 DAYS.

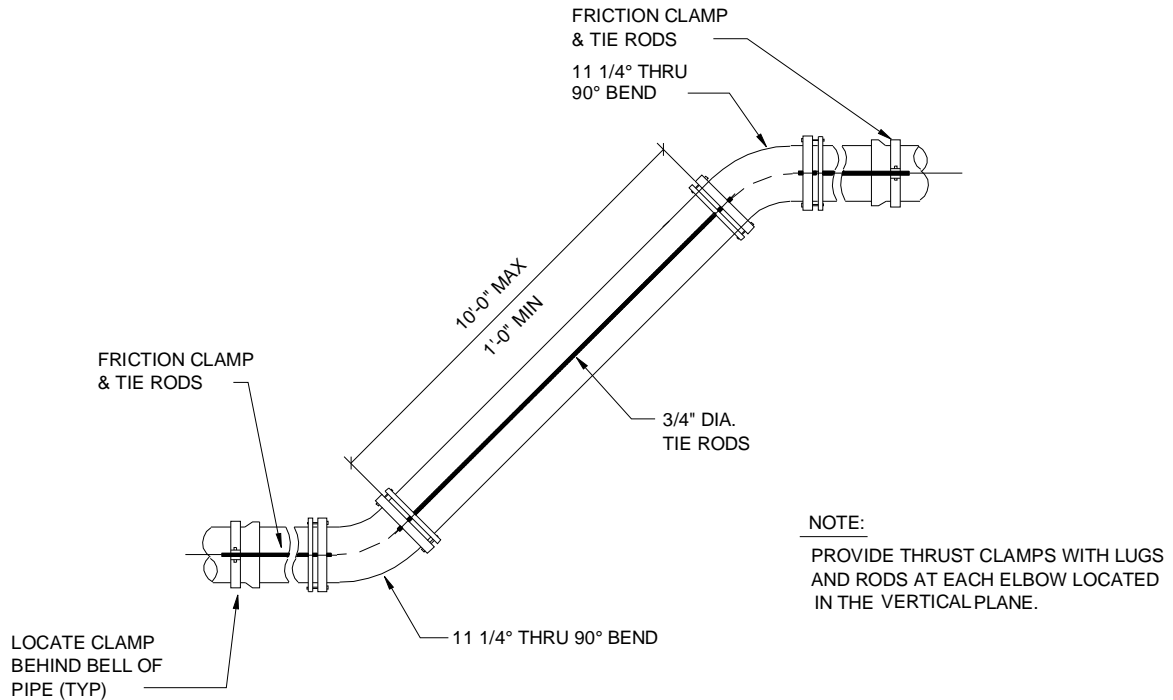
CONCRETE ANCHORS - SLOPE BREAKERS

SCALE: NONE

 ENTECH	Entech Engineering, Inc. <small>Engineering Architecture Construction</small> Corporate Office: 4 S. Fourth Street Reading, PA 19602 ph: 610.373.6667 fx: 610.373.7537			WAYMART AREA AUTHORITY CONCRETE ANCHORS - SLOPE BREAKERS	
	Pottsville, PA Mountaintop, PA Lititz, PA www.entecheng.com	ph: 570.628.5655 ph: 570.868.0275 ph: 717.626.6666 1.800.825.1372	PROJECT NO. 4152.14	DATE: 7/20/10	DRAWING NO. S-9
	PREPARED BY DYH	CHECKED BY BAK	APPROVED BY EJP	SCALE: NONE	




S-10



THRUST CLAMPING DETAIL

SCALE: NONE

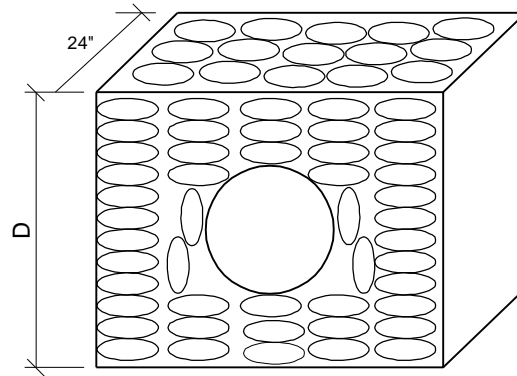
 ENTECH	Entech Engineering, Inc. <small>Engineering Architecture Construction</small> Corporate Office: 4 S. Fourth Street Reading, PA 19602 ph: 610.373.6667 fx: 610.373.7537			WAYMART AREA AUTHORITY THRUST CLAMPING DETAIL	
	Pottsville, PA ph: 570.628.5655 Mountaintop, PA ph: 570.868.0275 Lititz, PA ph: 717.626.6666 www.entecheng.com 1.800.825.1372			DATE: 7/20/10	DRAWING NO. S-11
	PREPARED BY DYH	CHECKED BY BAK	APPROVED BY EJP	PROJECT NO. 4152.14	SCALE: NONE

REQUIRED SPACING AND MATERIALS FOR TRENCH PLUGS

TRENCH SLOPE (%)	SPACING (FT)	PLUG MATERIAL
< 5	*	*
5-15	500	** EARTH FILLED SACKS
15-25	300	** EARTH FILLED SACKS
25-35	200	** EARTH FILLED SACKS
35-100	100	** EARTH FILLED SACKS
> 100	50	CEMENT FILLED BAGS (WETTED) OR MORTARED STONE

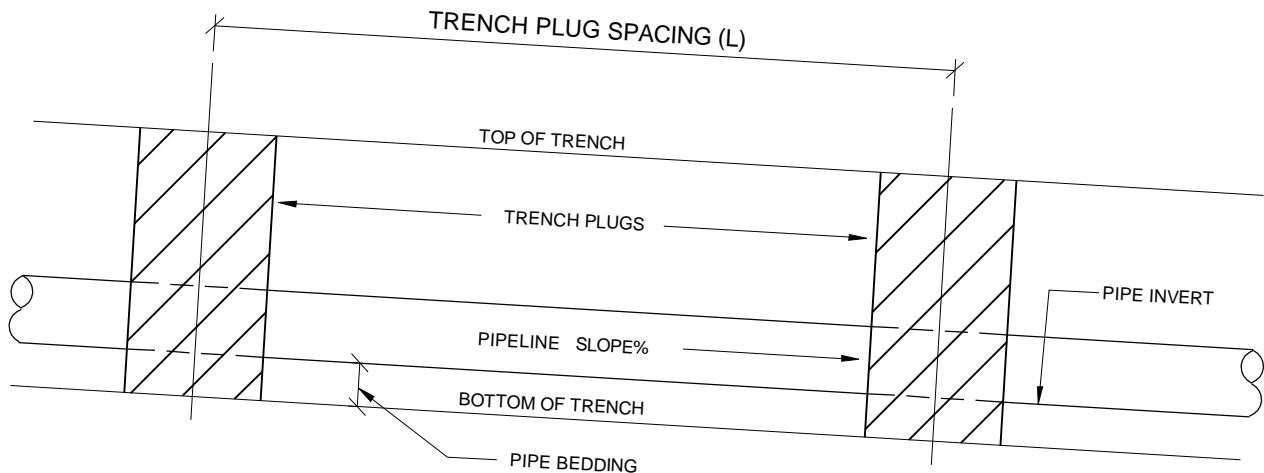
* TRENCH PLUGS ARE REQUIRED AT ALL STREAM, RIVER, OR WATER-BODY CROSSINGS REGARDLESS OF TRENCH SLOPE. OTHERWISE NOT REQUIRED.

** TOPSOIL MAY NOT BE USED TO FILL SACKS.



D = DEPTH TO BOTTOM OF TRENCH

SECTION VIEW



ELEVATION

TRENCH PLUG DETAIL

SCALE: NONE



ENTECH

Entech Engineering, Inc.

Engineering Architecture Construction

Corporate Office:

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Pottsville, PA
Mountaintop, PA
Lititz, PA
www.entecheng.com

ph: 570.628.5655
ph: 570.868.0275
ph: 717.626.6666
1.800.825.1372

WAYMART AREA AUTHORITY
TRENCH PLUG DETAIL

DATE:
7/20/10

DRAWING NO.

S-12

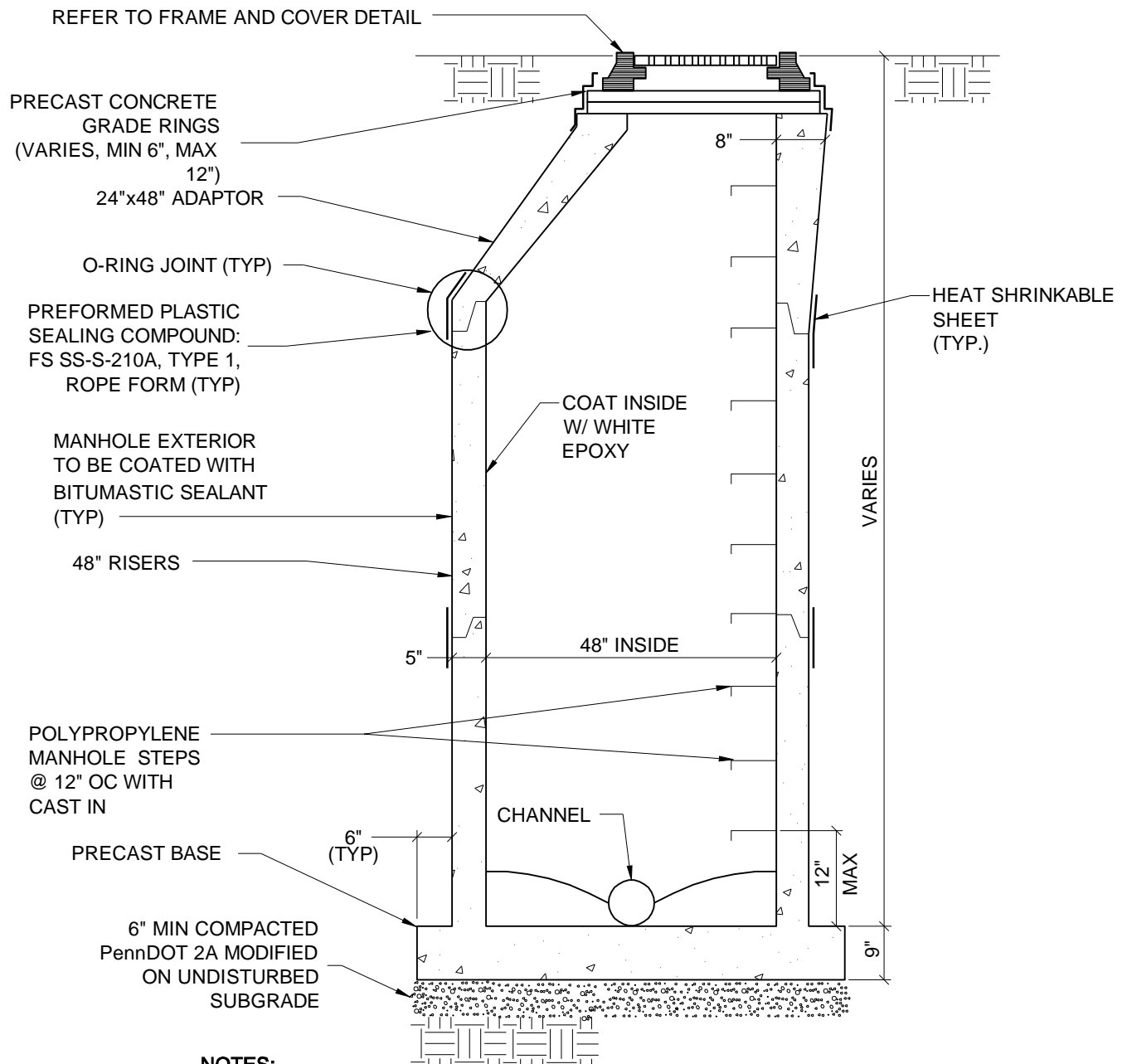
PREPARED BY
MBD

CHECKED BY
BAK

APPROVED BY
EJP

PROJECT NO.
4152.14

SCALE:
NONE




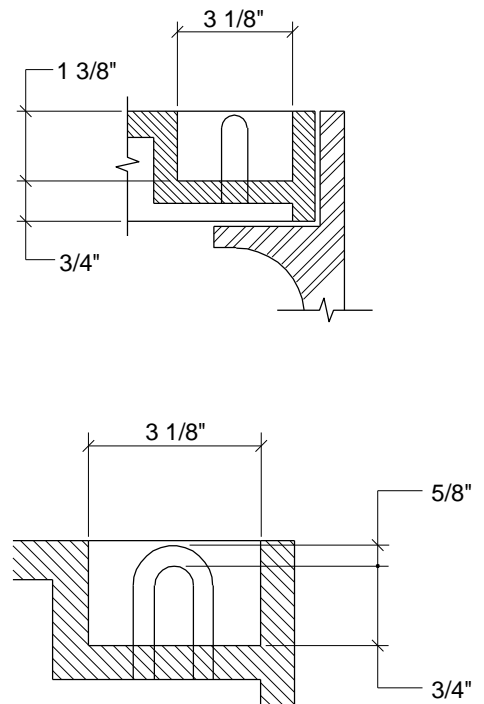
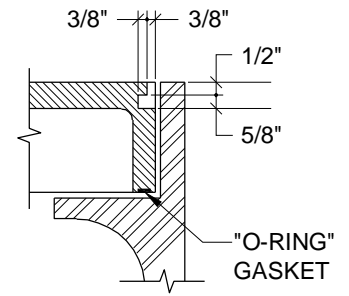
NOTES:

1. ALL PIPE TO MANHOLE CONNECTIONS SHALL BE MADE WITH A CAST-IN-PLACE GASKET. (TYP) (A-LOK OR APPROVED EQUAL)
2. MANHOLES EXCEEDING A DEPTH OF 16 FEET SHALL PROVIDE PRE-CAST LANDING PLATFORM.

TYPICAL MANHOLE DETAIL

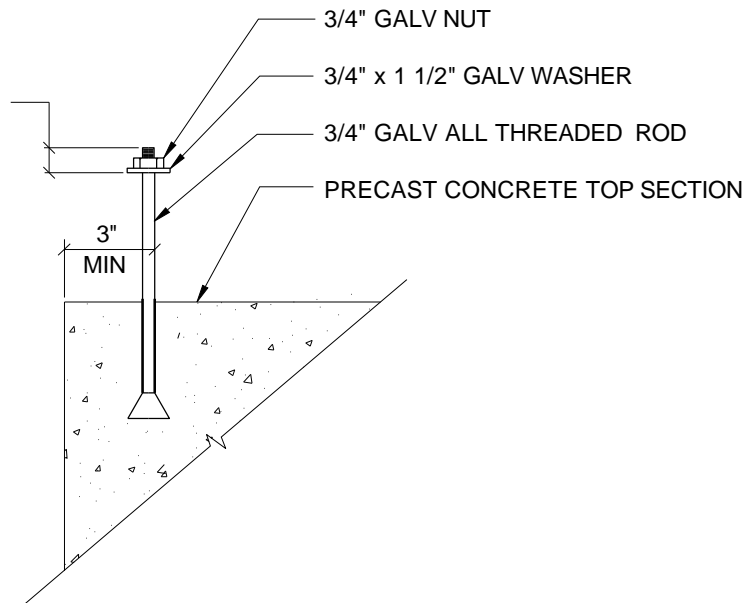
SCALE: NONE

 ENTECH	Entech Engineering, Inc. Engineering Architecture Construction Corporate Office: 4 S. Fourth Street Reading, PA 19602 ph: 610.373.6667 fx: 610.373.7537			WAYMART AREA AUTHORITY TYPICAL MANHOLE DETAIL	
	Pottsville, PA ph: 570.628.5655 Mountaintop, PA ph: 570.868.0275 Lititz, PA ph: 717.626.6666 www.entecheng.com 1.800.825.1372	PREPARED BY DYH	CHECKED BY BAK	APPROVED BY EJP	PROJECT NO. 4152.14
DATE: 7/20/10			DRAWING NO. S-13		
SCALE: NONE					



S-14


2 1/2" MIN PROJECTION
ABOVE FINAL COURSE OF
CONCRETE OR RUBBER
RISER GRADE RINGS

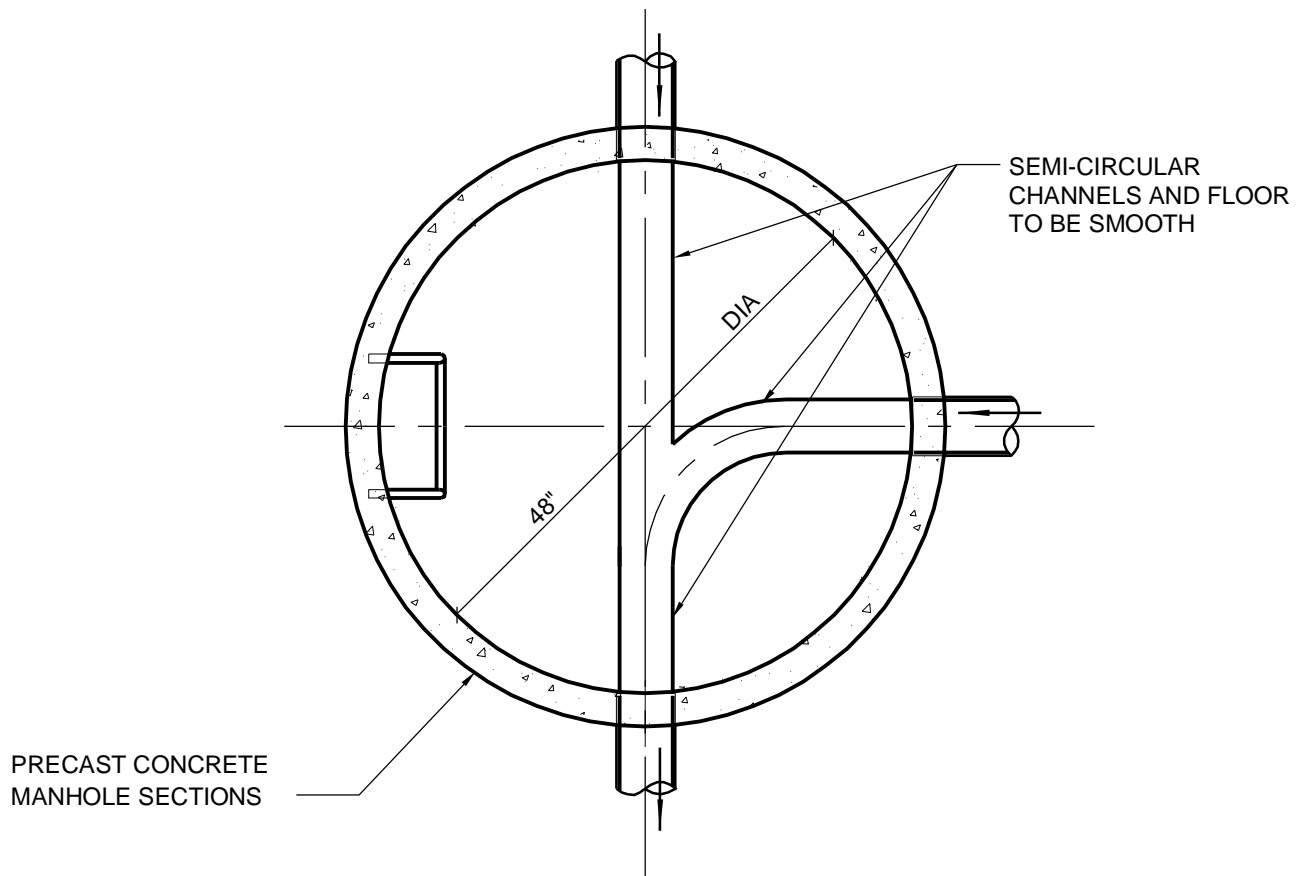


NOTE: FOUR (4) BOLTS REQUIRED PER MANHOLE.

MANHOLE FRAME - ANCHOR BOLT DETAIL

SCALE: NONE

 ENTECH	Entech Engineering, Inc. <small>Engineering Architecture Construction</small> Corporate Office: 4 S. Fourth Street Reading, PA 19602 ph: 610.373.6667 fx: 610.373.7537		WAYMART AREA AUTHORITY MANHOLE FRAME - ANCHOR BOLT	
	Pottsville, PA ph: 570.628.5655 Mountaintop, PA ph: 570.868.0275 Lititz, PA ph: 717.626.6666 www.entecheng.com 1.800.825.1372		DATE: 7/20/10	DRAWING NO. S-16
	PREPARED BY DYH	CHECKED BY BAK	APPROVED BY EJP	PROJECT NO. 4152.14



NOTE:

1. ALL FLOW CHANNELS SHALL BE PRE-CAST BY MANUFACTURER UNLESS AUTHORIZED BY ENGINEER/AUTHORITY.

MANHOLE BASE **TYPICAL CHANNEL CONFIGURATION**

SCALE: NONE



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Engineering Architecture Construction

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Mountaintop, PA
Lititz, PA
www.entecheng.com

ph: 570.628.5655
ph: 570.868.0275
ph: 717.626.6666
1.800.825.1372

WAYMART AREA AUTHORITY **MANHOLE BASE TYPICAL CHANNEL CONFIGURATION**

DATE:

7/20/10

DRAWING NO.

S-17

PREPARED BY

DYH

CHECKED BY

BAK

APPROVED BY

EJP

PROJECT NO.

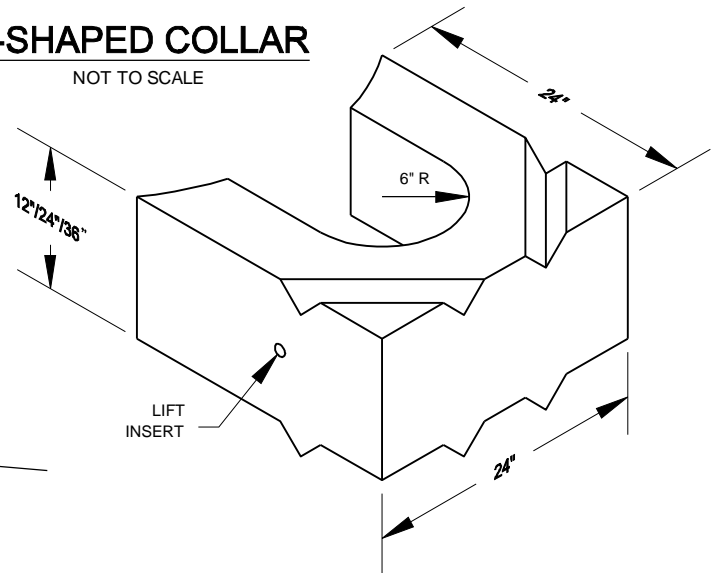
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SCALE:

NONE

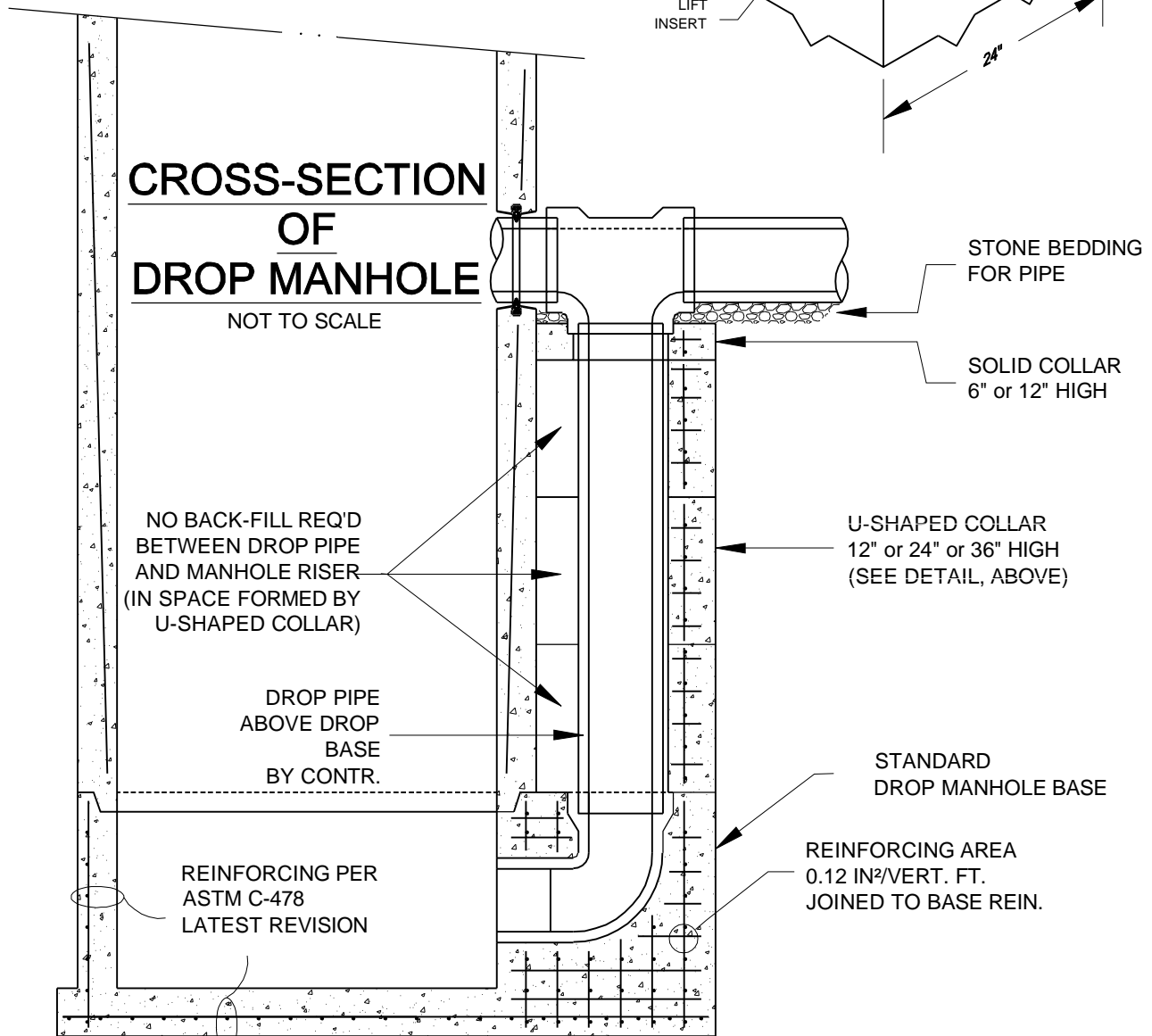
U-SHAPED COLLAR

NOT TO SCALE



CROSS-SECTION OF DROP MANHOLE

NOT TO SCALE



TYPICAL OUTSIDE DROP MANHOLE DETAIL

SCALE: NONE



ENTECH

Entech Engineering, Inc.

Engineering Architecture Construction

Corporate Office:

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ph: 570.868.0275
ph: 717.626.6666
1.800.825.1372

WAYMART AREA AUTHORITY
TYPICAL OUTSIDE DROP MANHOLE DETAIL

DATE:

7/20/10

DRAWING NO.

S-18

PREPARED BY

MBD

CHECKED BY

BAK

APPROVED BY

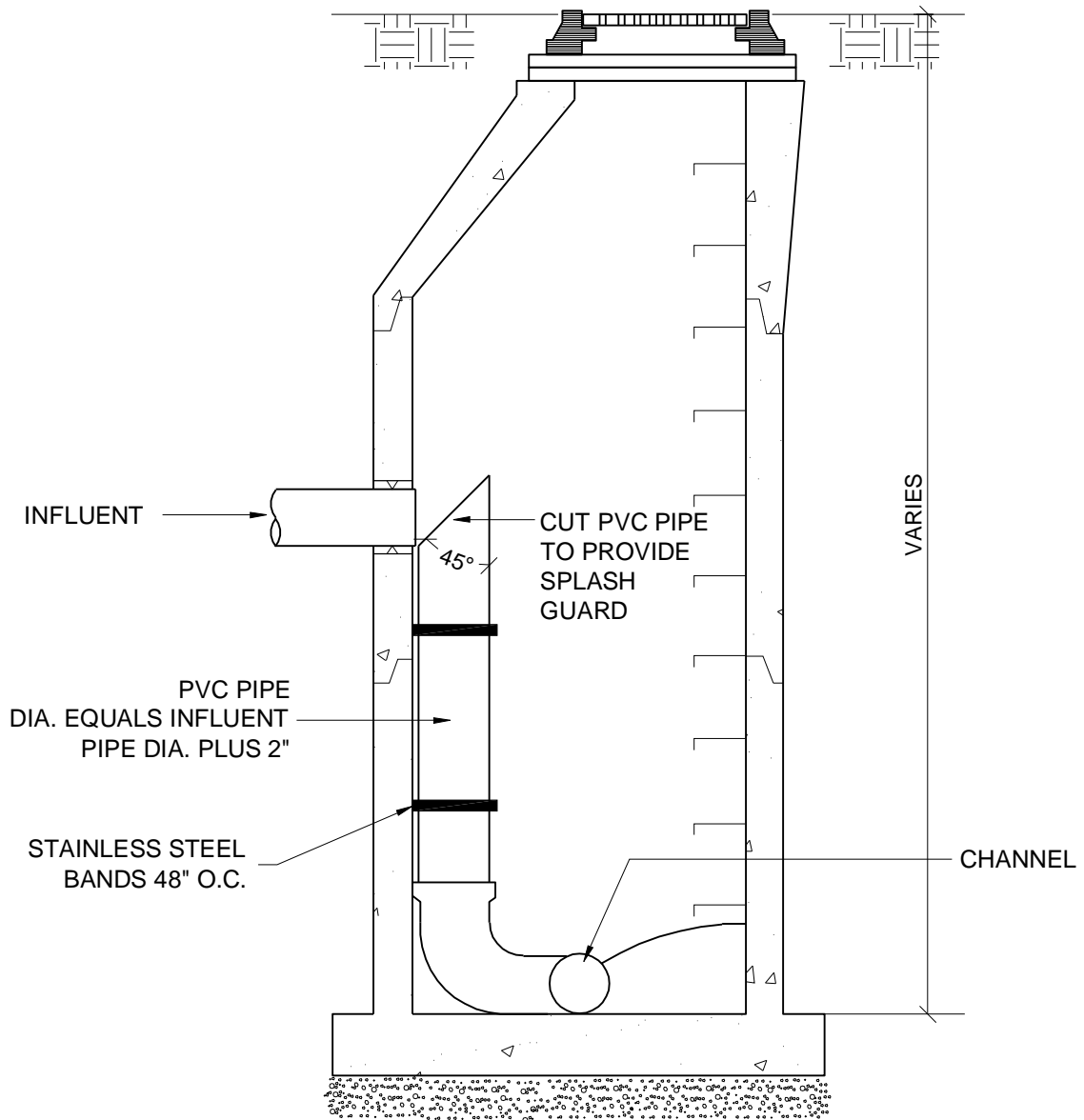
EJP

PROJECT NO.

4152.14


SCALE:

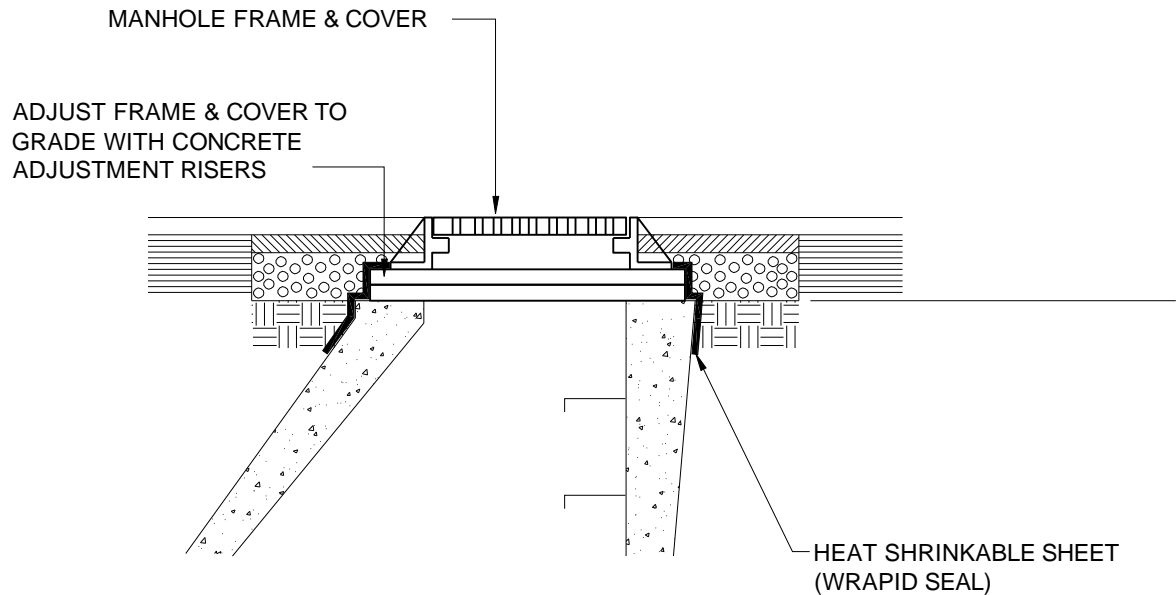
NONE



TYPICAL INSIDE DROP MANHOLE DETAIL


SCALE: NONE

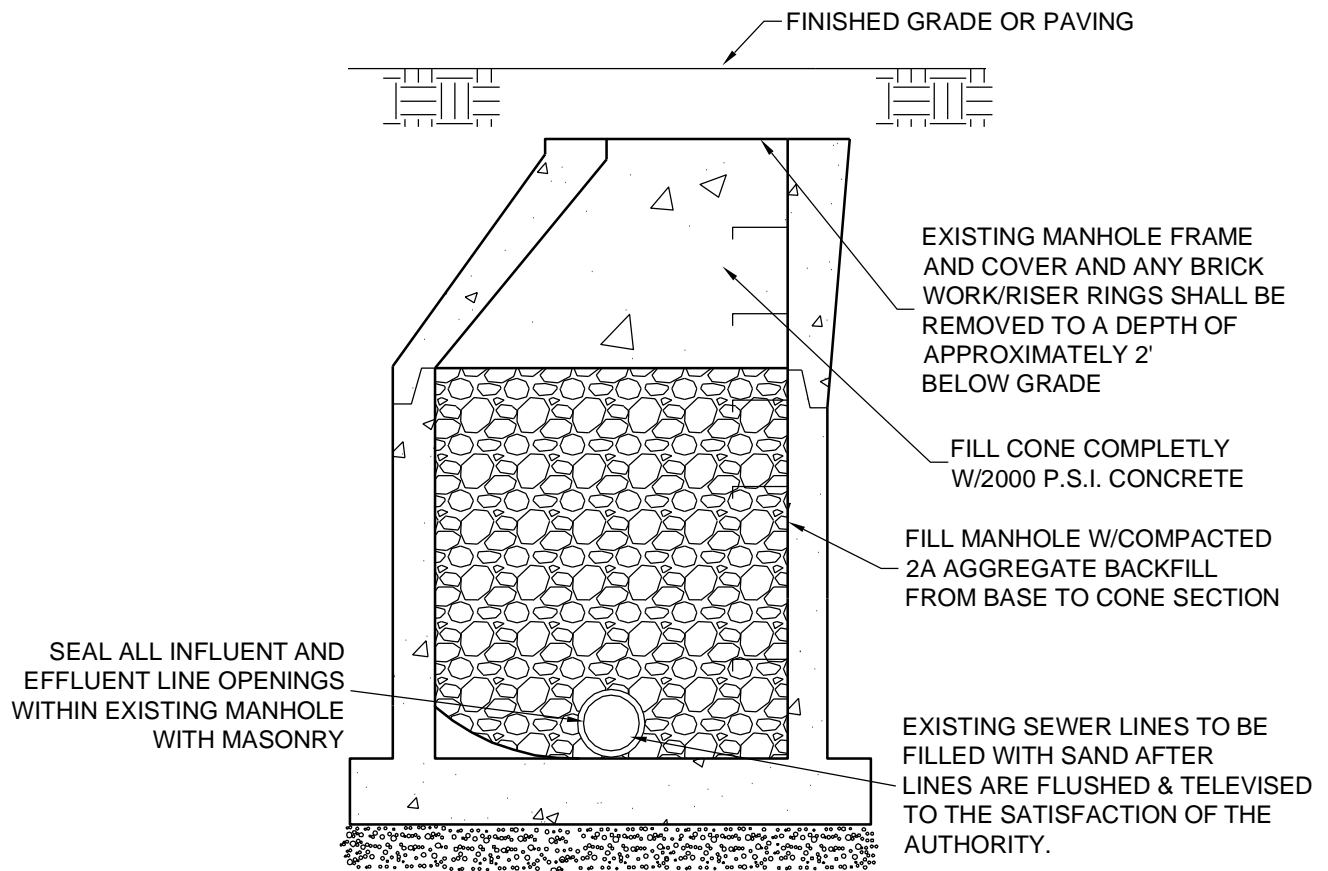
 ENTECH	Entech Engineering, Inc. Engineering Architecture Construction Corporate Office: 4 S. Fourth Street Reading, PA 19602 ph: 610.373.6667 fx: 610.373.7537			WAYMART AREA AUTHORITY TYPICAL INSIDE DROP MANHOLE DETAIL	
	Pottsville, PA ph: 570.628.5655 Mountaintop, PA ph: 570.868.0275 Lititz, PA ph: 717.626.6666 www.entecheng.com 1.800.825.1372	PREPARED BY MBD	CHECKED BY BAK	APPROVED BY EJP	PROJECT NO. 4152.14
DATE: 7/20/10			DRAWING NO. S-19		
SCALE: NONE					



MANHOLE FRAME AND COVER ADJUSTMENT DETAIL


SCALE: NONE

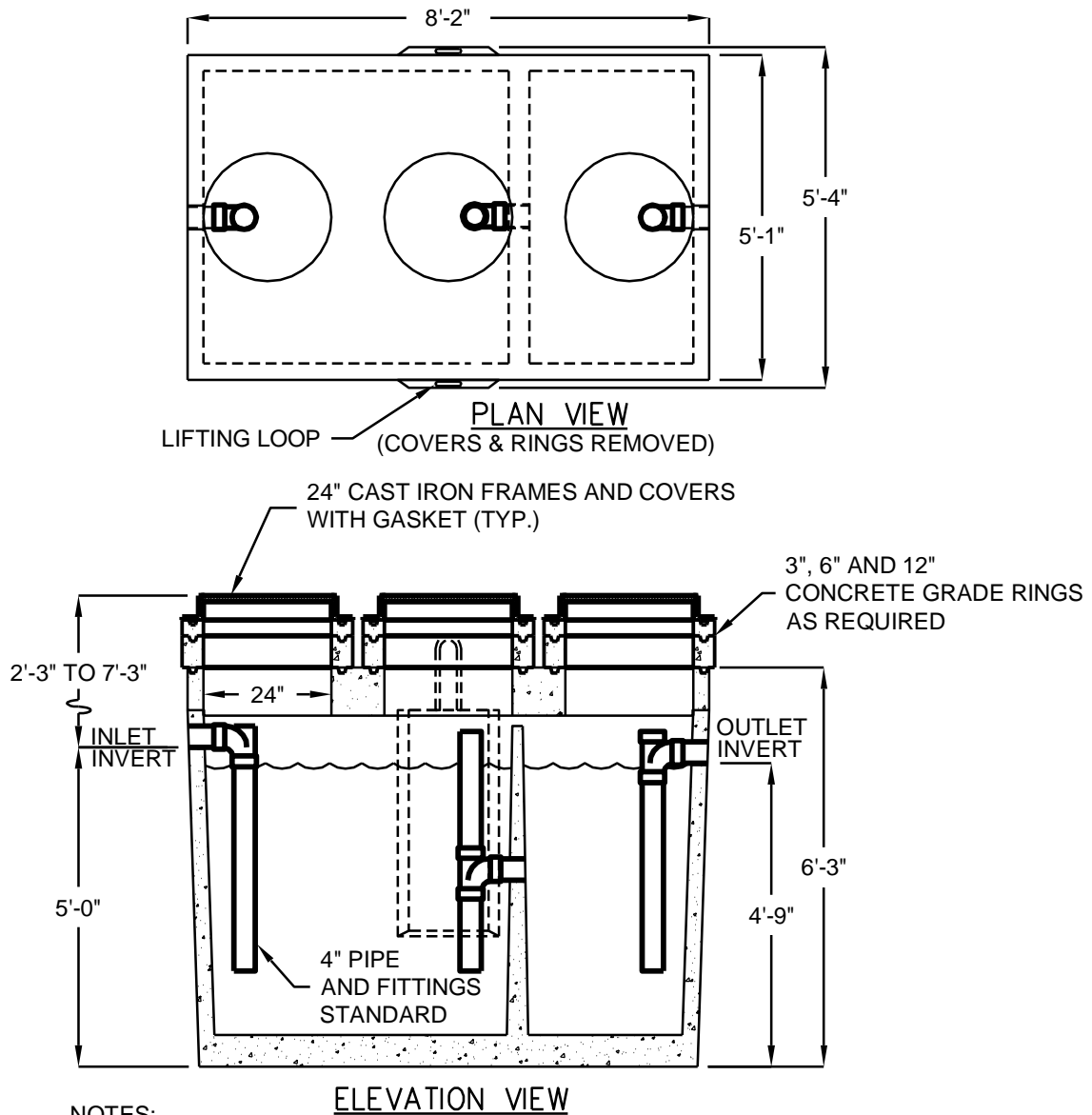
 ENTECH	Entech Engineering, Inc. <small>Engineering Architecture Construction</small> Corporate Office: 4 S. Fourth Street Reading, PA 19602 ph: 610.373.6667 fx: 610.373.7537			WAYMART AREA AUTHORITY MANHOLE FRAME AND COVER ADJUSTMENT DETAIL	
	Pottsville, PA ph: 570.628.5655 Mountaintop, PA ph: 570.868.0275 Lititz, PA ph: 717.626.6666 www.entecheng.com 1.800.825.1372			DATE: 7/20/10	DRAWING NO. S-20
	PREPARED BY DYH	CHECKED BY BAK	APPROVED BY EJP	PROJECT NO. 4152.14	SCALE: NONE



MANHOLE ABANDONMENT DETAIL

SCALE: NONE

 ENTECH	Entech Engineering, Inc. Engineering Architecture Construction Corporate Office: 4 S. Fourth Street Reading, PA 19602 ph: 610.373.6667 fx: 610.373.7537		WAYMART AREA AUTHORITY MANHOLE ABANDONMENT DETAIL	
	Pottsville, PA ph: 570.628.5655 Mountaintop, PA ph: 570.868.0275 Lititz, PA ph: 717.626.6666 www.entecheng.com 1.800.825.1372		DATE: 7/20/10	DRAWING NO. S-21
	PREPARED BY MBD	CHECKED BY BAK	APPROVED BY EJP	PROJECT NO. 4152.14




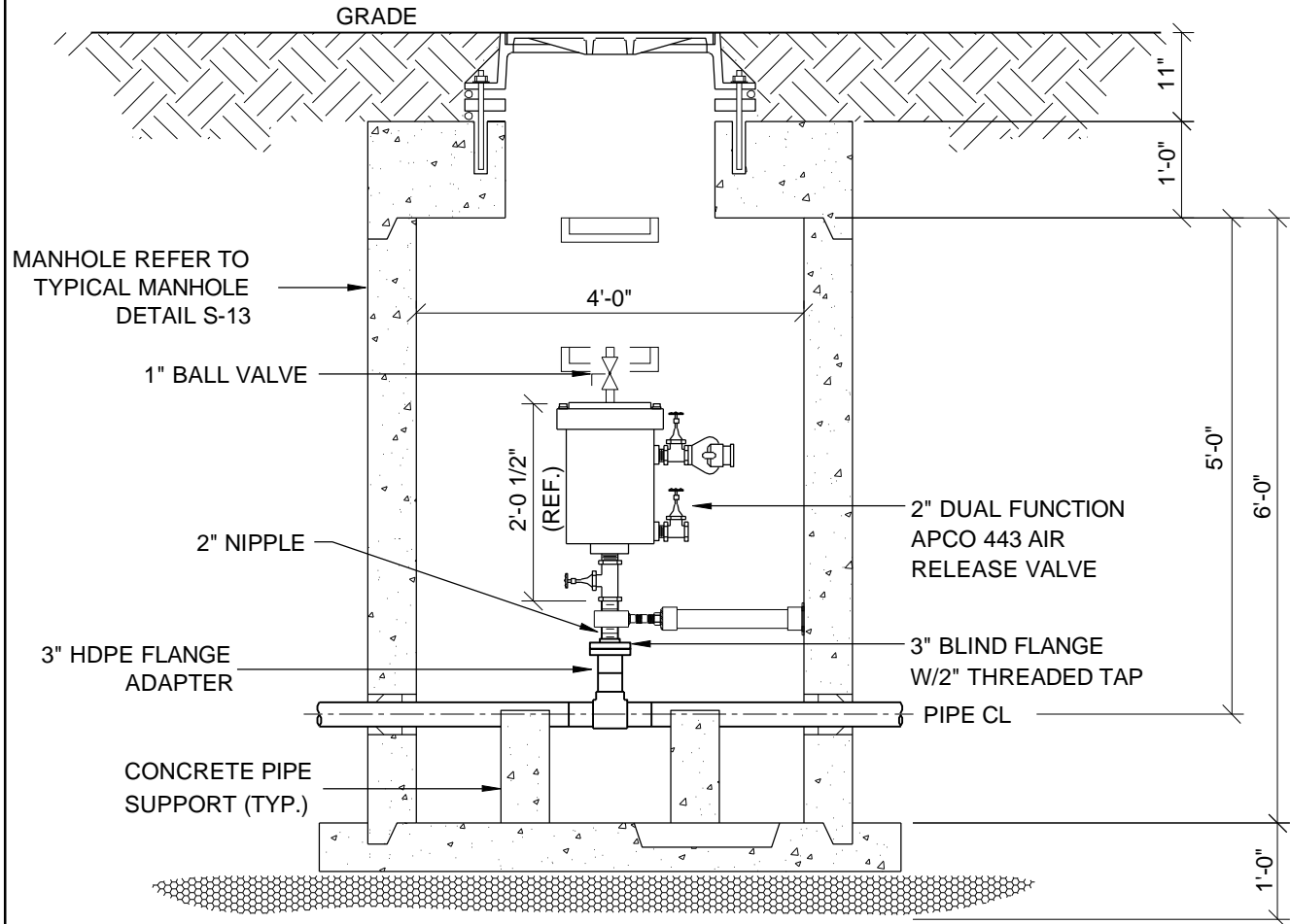
NOTES:

1. DETAIL DEPICTS A 1,000 GALLON OPERATING CAPACITY GREASE INTERCEPTOR. THE ACTUAL TYPE AND CAPACITY MUST BE DETERMINED BY OWNER AND APPROVED BY AUTHORITY.
2. DESIGN LOAD: H-20 TRAFFIC WITH DRY SOIL CONDITIONS (WATER LEVEL BELOW TANK) AND 1'-6" EARTH COVER.
3. SUIABLE SUB-BASE BEDDED WITH GRANULAR MATERIAL SHALL BE PREPARED TO HANDLE ANTICIPATED LOADS.
4. FOR KITCHEN USE ONLY NOT TO BE USED WITH SEWAGE SYSTEM.
5. INTERCEPTOR TO CONTAIN WATER TIGHT JOINTS.

1000 GALLON GREASE INTERCEPTOR


SCALE: NONE

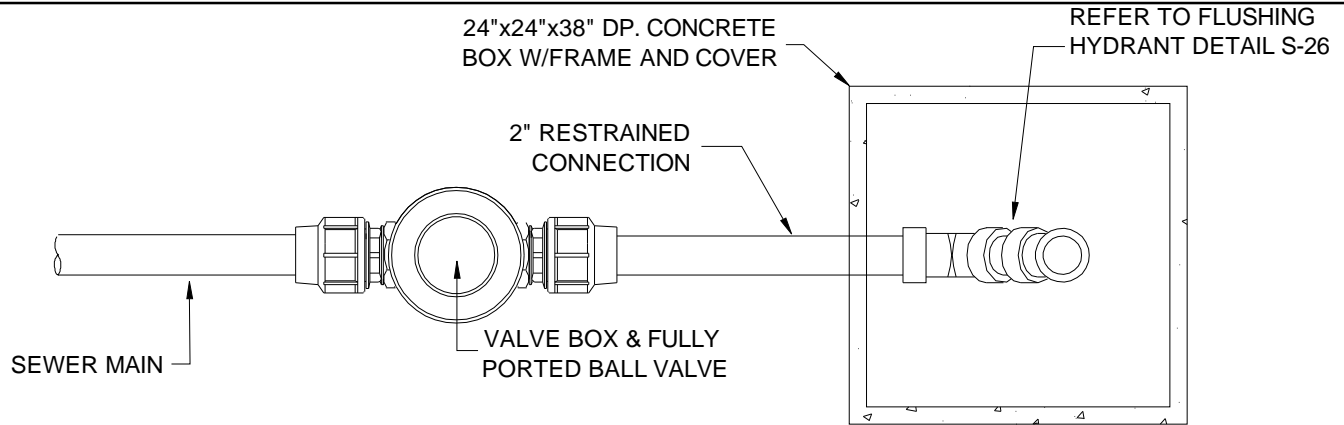
 ENTECH PREPARED BY MBD	Entech Engineering, Inc. Engineering Architecture Construction Corporate Office: 4 S. Fourth Street Reading, PA 19602 ph: 610.373.6667 fx: 610.373.7537		WAYMART AREA AUTHORITY 1000 GALLON GREASE INTERCEPTOR	
	Pottsville, PA ph: 570.628.5655 Mountaintop, PA ph: 570.868.0275 Lititz, PA ph: 717.626.6666 www.entecheng.com 1.800.825.1372		DATE: 7/20/10	DRAWING NO. S-22
	CHECKED BY BAK	APPROVED BY EJP	PROJECT NO. 4152.14	SCALE: NONE



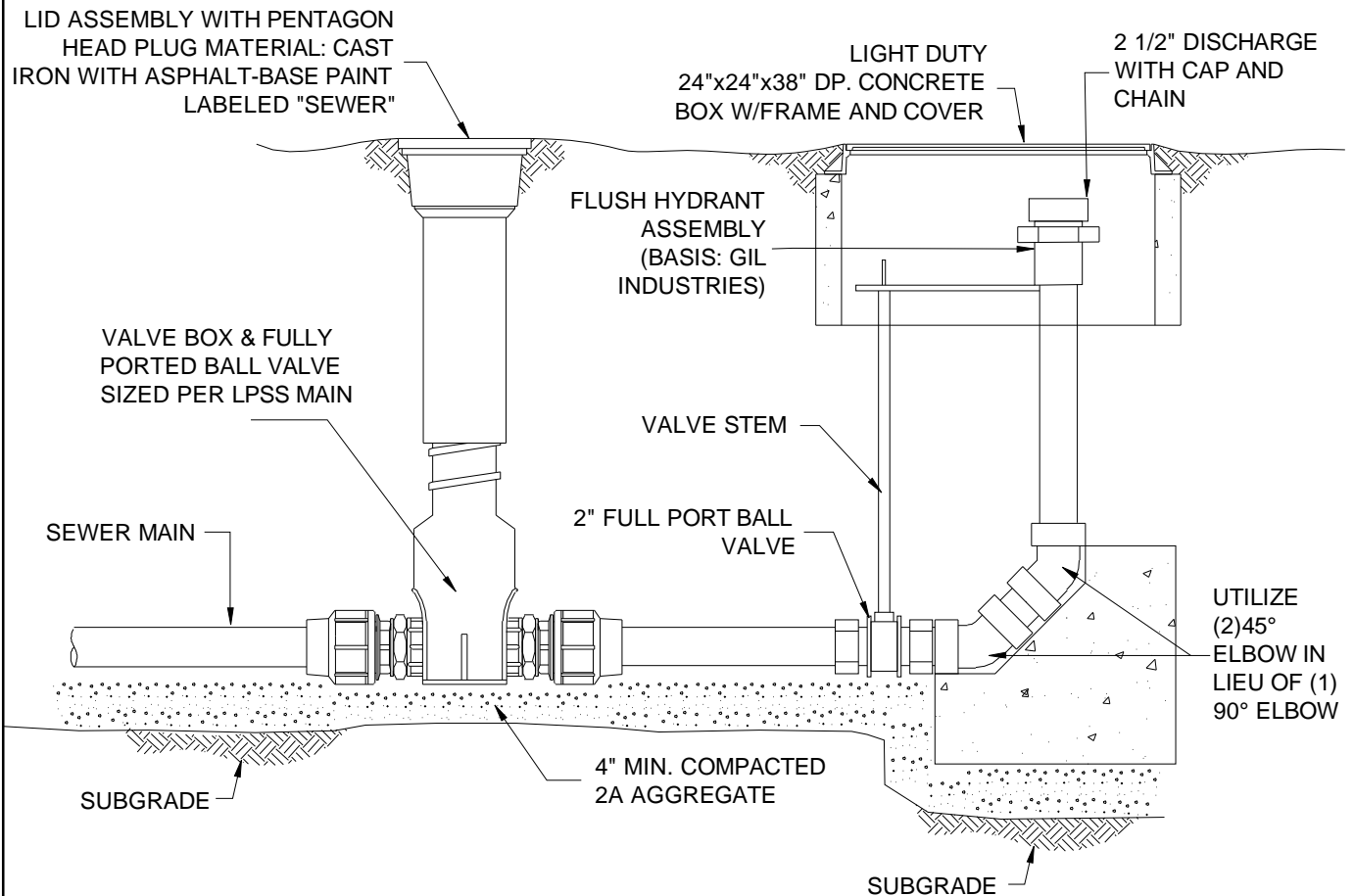
AIR RELEASE VALVE MANHOLE

SCALE: NONE

 ENTECH	Entech Engineering, Inc. <small>Engineering Architecture Construction</small> Corporate Office: 4 S. Fourth Street Reading, PA 19602 ph: 610.373.6667 fx: 610.373.7537			WAYMART AREA AUTHORITY AIR RELEASE VALVE MANHOLE	
	Pottsville, PA ph: 570.628.5655 Mountaintop, PA ph: 570.868.0275 Lititz, PA ph: 717.626.6666 www.entecheng.com 1.800.825.1372			DATE: 7/20/10	DRAWING NO. S-23
	PREPARED BY MBD	CHECKED BY BAK	APPROVED BY EJP	PROJECT NO. 4152.14	SCALE: NONE




PLAN VIEW

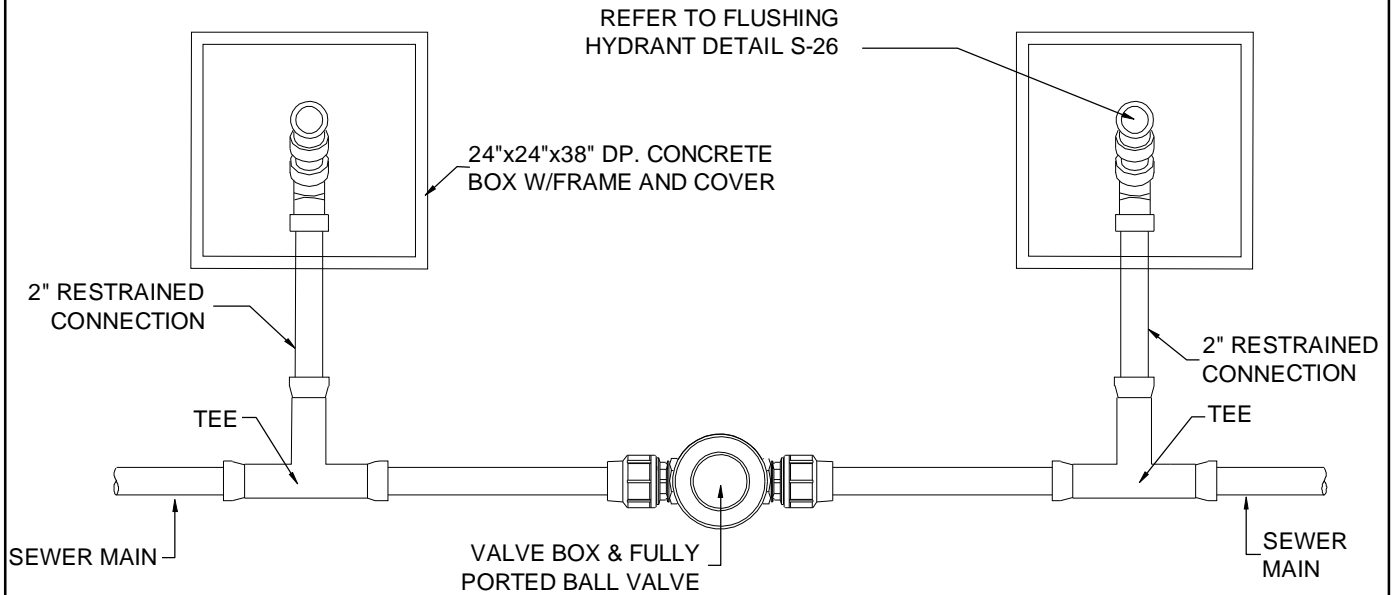


ELEVATION VIEW

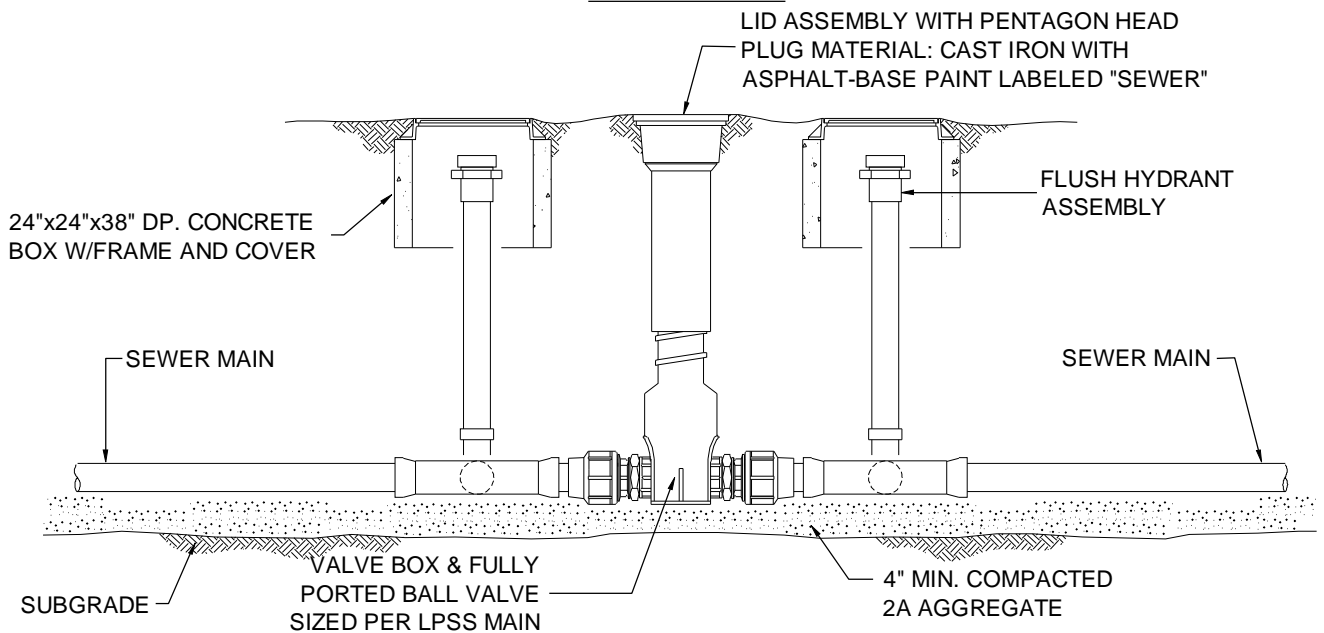
TERMINAL CLEANOUT ASSEMBLY

SCALE: NONE

 ENTECH	Entech Engineering, Inc. <small>Engineering Architecture Construction</small> Corporate Office: 4 S. Fourth Street Reading, PA 19602 ph: 610.373.6667 fx: 610.373.7537			WAYMART AREA AUTHORITY TERMINAL CLEANOUT ASSEMBLY	
	Pottsville, PA Mountaintop, PA Lititz, PA www.entecheng.com	ph: 570.628.5655 ph: 570.868.0275 ph: 717.626.6666 1.800.825.1372		DATE: 7/20/10	DRAWING NO. S-24
	PREPARED BY MBD	CHECKED BY BAK	APPROVED BY EJP	PROJECT NO. 4152.14	SCALE: NONE




PLAN VIEW

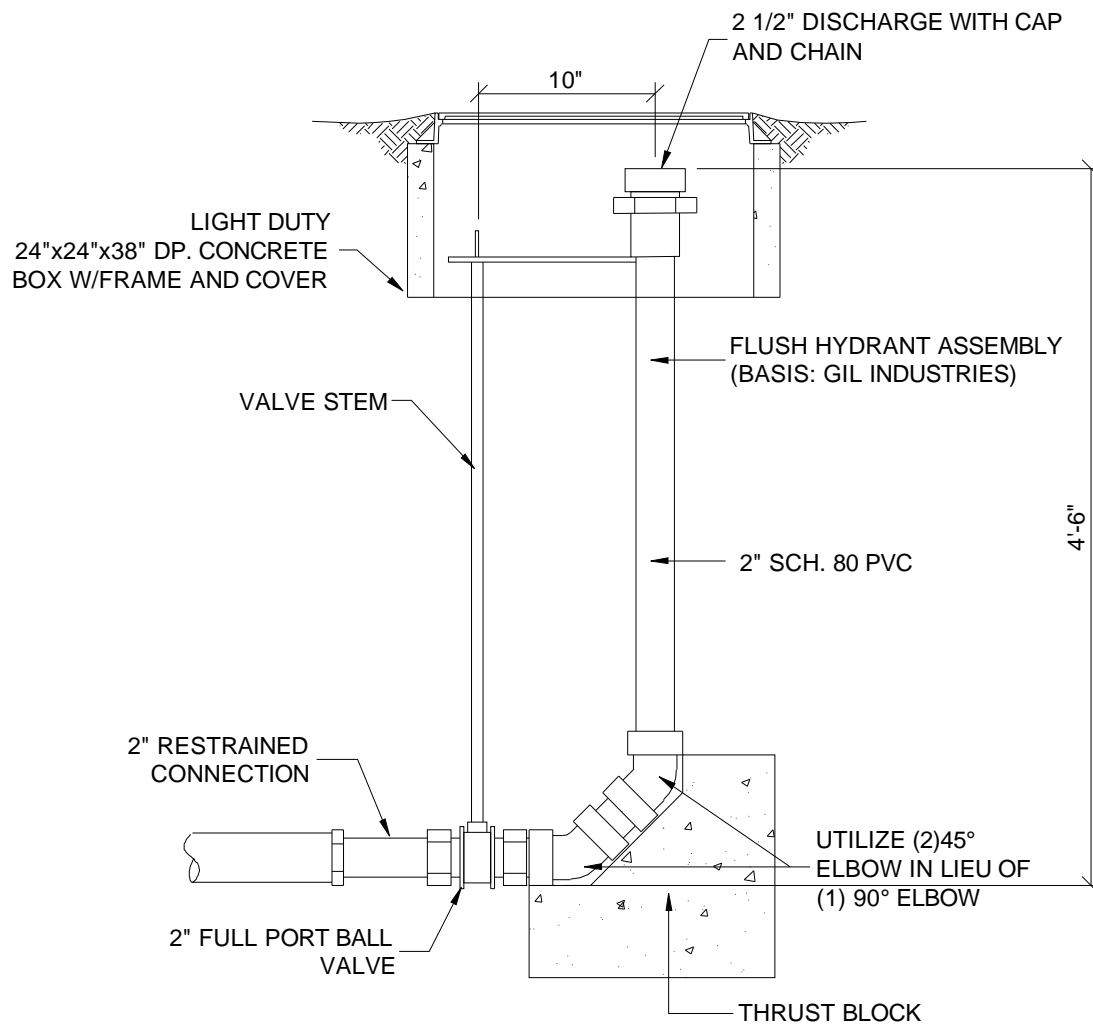


ELEVATION VIEW

INTERMEDIATE CLEANOUT ASSEMBLY


SCALE: NONE

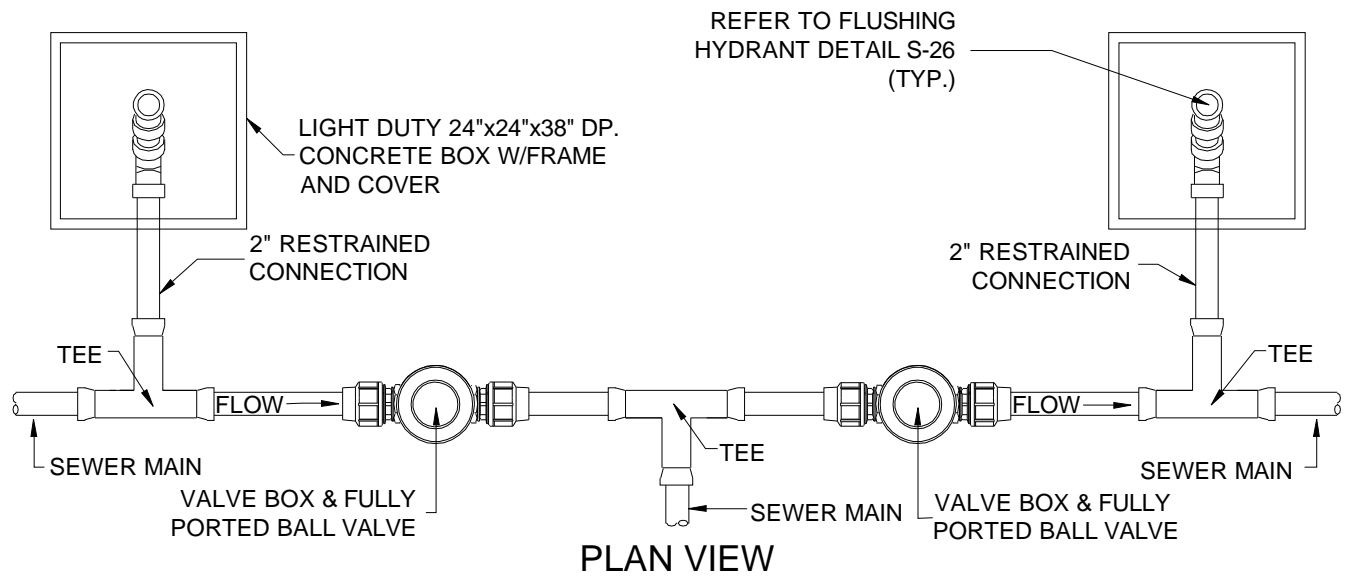
 ENTECH	Entech Engineering, Inc. <small>Engineering Architecture Construction</small> Corporate Office: 4 S. Fourth Street Reading, PA 19602 ph: 610.373.6667 fx: 610.373.7537			WAYMART AREA AUTHORITY INTERMEDIATE CLEANOUT ASSEMBLY	
	Pottsville, PA ph: 570.628.5655 Mountaintop, PA ph: 570.868.0275 Lititz, PA ph: 717.626.6666 www.entecheng.com 1.800.825.1372			DATE: 7/20/10	DRAWING NO. S-25
	PREPARED BY MBD	CHECKED BY BAK	APPROVED BY EJP	PROJECT NO. 4152.14	SCALE: NONE



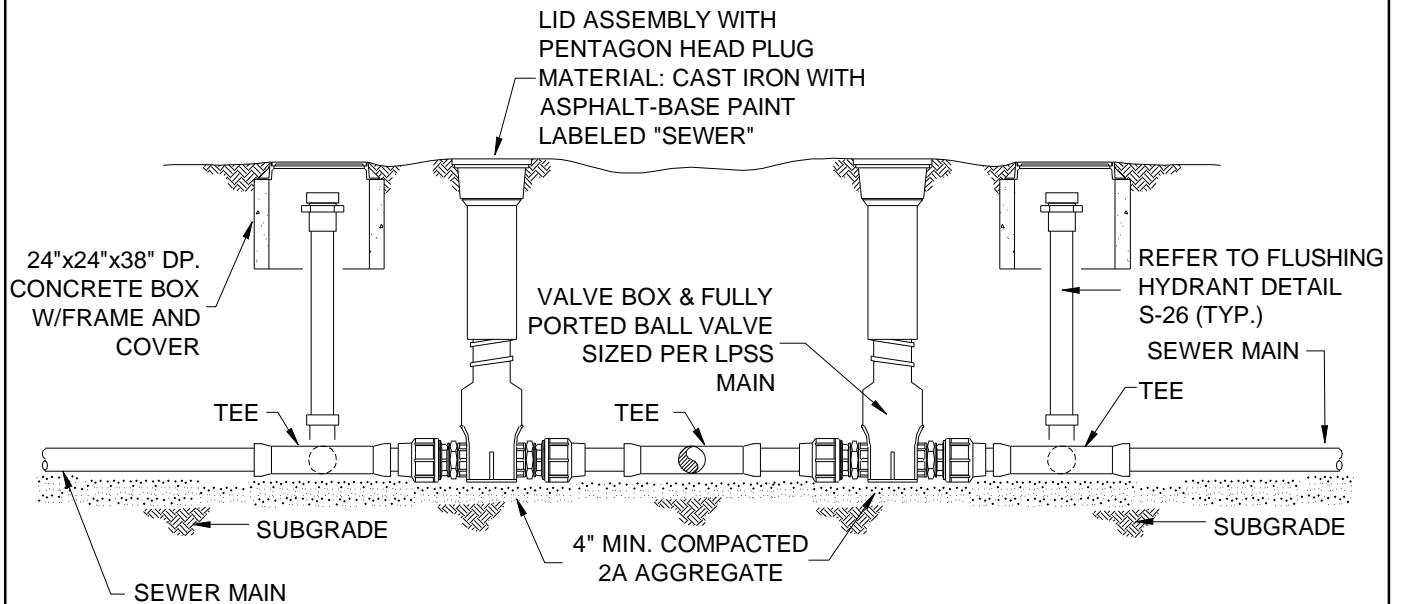
FLUSHING HYDRANT DETAIL

SCALE: NONE

 ENTECH	Entech Engineering, Inc. <small>Engineering Architecture Construction</small> Corporate Office: 4 S. Fourth Street Reading, PA 19602 ph: 610.373.6667 fx: 610.373.7537			WAYMART AREA AUTHORITY FLUSHING HYDRANT DETAIL	
	Pottsville, PA ph: 570.628.5655 Mountaintop, PA ph: 570.868.0275 Lititz, PA ph: 717.626.6666 www.entecheng.com 1.800.825.1372			DATE: 7/20/10	DRAWING NO. S-26
	PREPARED BY MBD	CHECKED BY BAK	APPROVED BY EJP	PROJECT NO. 4152.14	SCALE: NONE




PLAN VIEW

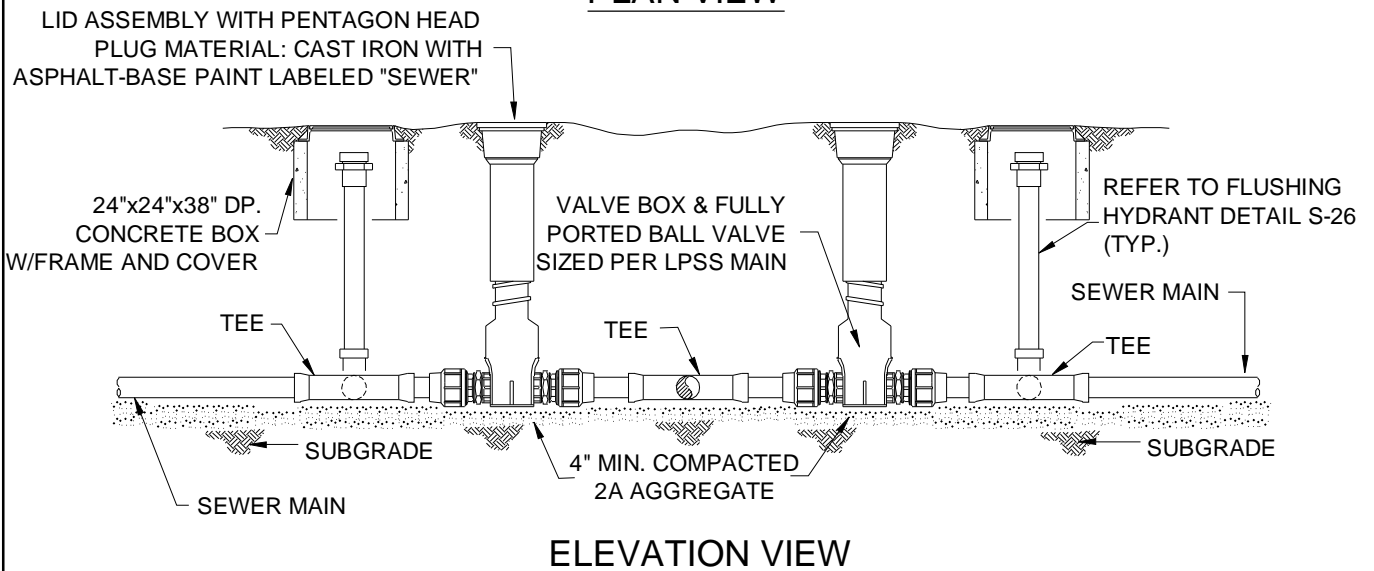
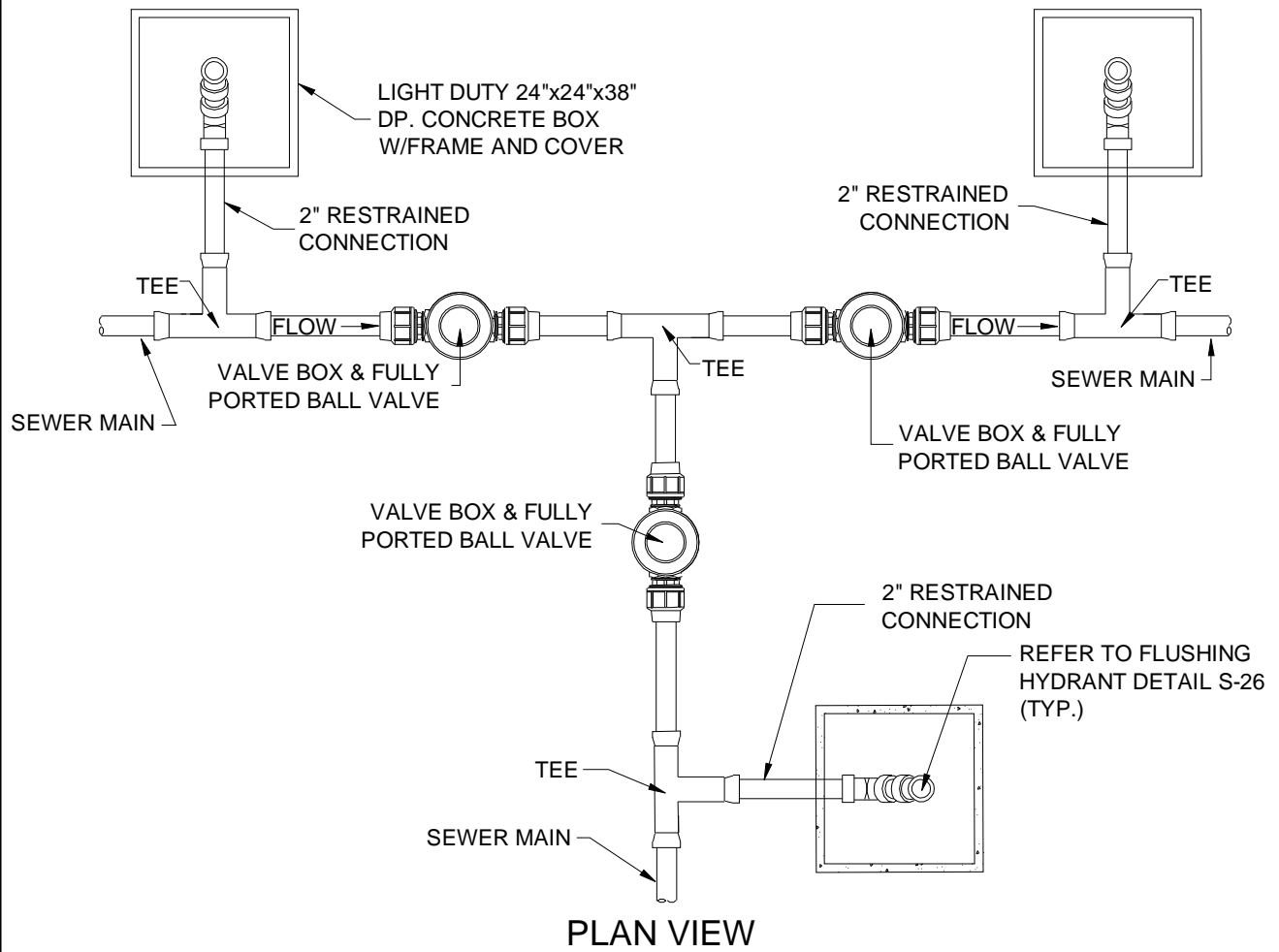


ELEVATION VIEW

2 WAY BRANCH CLEANOUT ASSEMBLY


SCALE: NONE

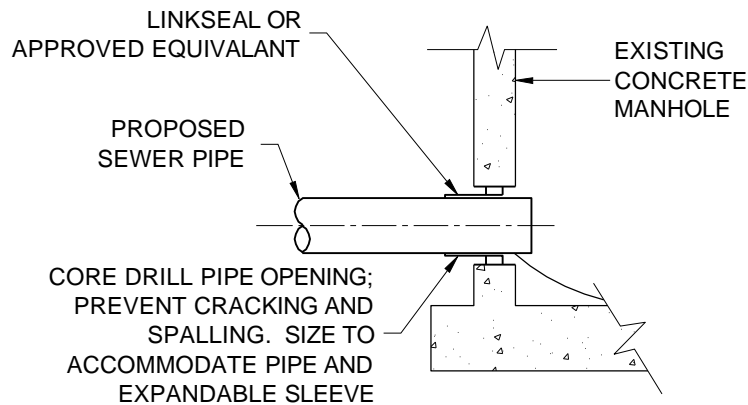
 ENTECH	Entech Engineering, Inc. <small>Engineering Architecture Construction</small> Corporate Office: 4 S. Fourth Street Reading, PA 19602 ph: 610.373.6667 fx: 610.373.7537			WAYMART AREA AUTHORITY 2 WAY BRANCH CLEANOUT ASSEMBLY	
	Pottsville, PA ph: 570.628.5655 Mountaintop, PA ph: 570.868.0275 Lititz, PA ph: 717.626.6666 www.entecheng.com 1.800.825.1372			DATE: 7/20/10	DRAWING NO. S-27
	PREPARED BY MBD	CHECKED BY BAK	APPROVED BY EJP	PROJECT NO. 4152.14	SCALE: NONE



3 WAY BRANCH CLEANOUT ASSEMBLY

SCALE: NONE

 ENTECH	Entech Engineering, Inc. <small>Engineering Architecture Construction</small> Corporate Office: 4 S. Fourth Street Reading, PA 19602 ph: 610.373.6667 fx: 610.373.7537			WAYMART AREA AUTHORITY 3 WAY BRANCH CLEANOUT ASSEMBLY	
	Pottsville, PA Mountaintop, PA Lititz, PA www.entecheng.com	ph: 570.628.5655 ph: 570.868.0275 ph: 717.626.6666 1.800.825.1372	PREPARED BY MBD	CHECKED BY BAK	APPROVED BY EJP
PROJECT NO. 4152.14			DATE: 7/20/10		DRAWING NO. S-28
SCALE: NONE					




NOTES:

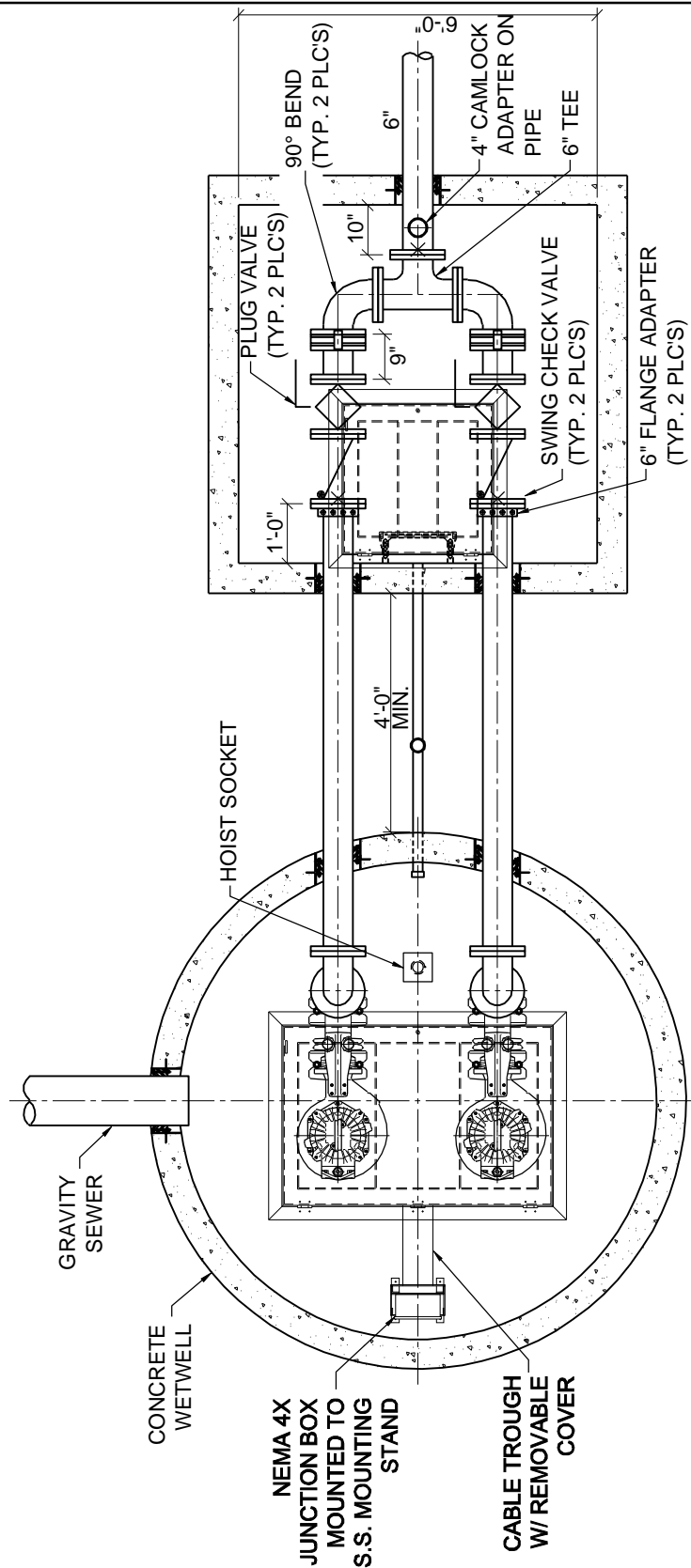
1. PROPOSED SEWER PIPE INVERT ELEVATION SHALL NOT BE BELOW EXISTING SEWER INVERT ELEVATION.
2. PROPOSED SEWER PIPE SHALL BE LOCATED A MINIMUM OF 8" ABOVE OR BELOW EXISTING MANHOLE JOINT.
3. AFTER CONNECTION OF PIPE TO MANHOLE, REMOVE CONCRETE CHANNEL AS REQUIRED AND RECONSTRUCT CHANNEL.
4. KEEP GROUNDWATER, SURFACE WATER AND DEBRIS FROM ENTERING EXISTING FACILITIES.
5. MAINTAIN EXISTING FLOW DURING CONSTRUCTION.
6. DROPS OVER 2 FT WILL REQUIRE AN INSIDE DROP CONNECTION.

TYPICAL TIE-IN TO EXISTING MANHOLE DETAIL

SCALE: NONE

 ENTECH	Entech Engineering, Inc. <small>Engineering Architecture Construction</small> Corporate Office: 4 S. Fourth Street Reading, PA 19602 ph: 610.373.6667 fx: 610.373.7537			WAYMART AREA AUTHORITY TYPICAL TIE-IN TO EXISTING MANHOLE DETAIL	
	Pottsville, PA ph: 570.628.5655 Mountaintop, PA ph: 570.868.0275 Lititz, PA ph: 717.626.6666 www.entecheng.com 1.800.825.1372			DATE: 7/20/10	DRAWING NO. S-29
	PREPARED BY MBD	CHECKED BY BAK	APPROVED BY EJP	PROJECT NO. 4152.14	SCALE: NONE

**FOR GENERAL ARRANGEMENT ONLY DETAIL
PLANS TO BE SUBMITTED FOR REVIEW.**



PLAN VIEW - PUMP STATION

SCALE: NONE



ENTECH

Entech Engineering, Inc.

Engineering Architecture Construction
Corporate Office:

4 S. Fourth Street Reading, PA 19602
ph: 610.373.6667 fx: 610.373.7537

Pottsville, PA
Mountaintop, PA
Lititz, PA
www.entecheng.com

ph: 570.628.5655
ph: 570.868.0275
ph: 717.626.6666
1.800.825.1372

WAYMART AREA AUTHORITY PLAN VIEW - PUMP STATION

DATE:
7/20/10

SCALE:
NONE

DRAWING NO.

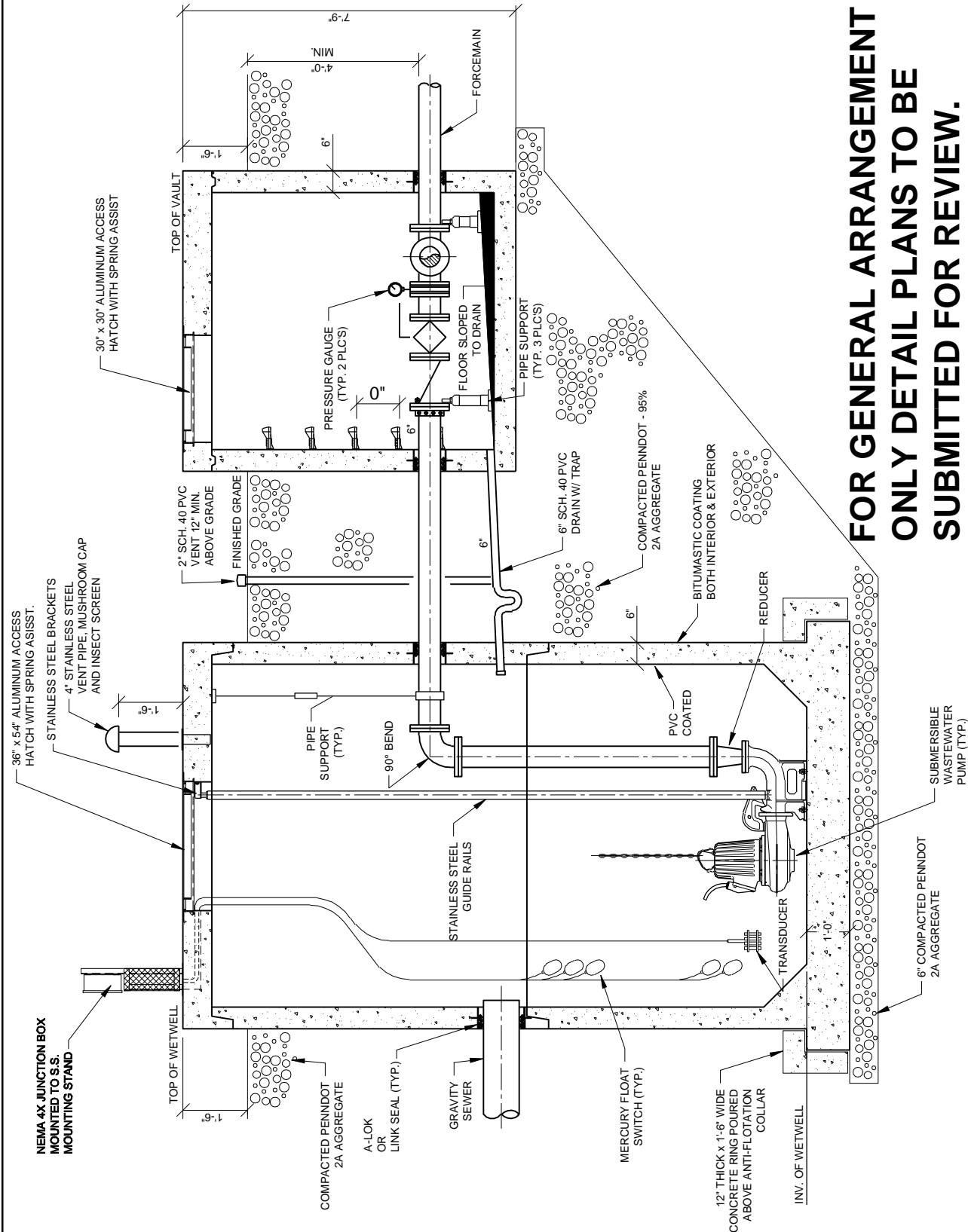
S-30

PREPARED BY
MBD

CHECKED BY
BAK

APPROVED BY
EJP

PROJECT NO.
4152.14



**FOR GENERAL ARRANGEMENT
ONLY DETAIL PLANS TO BE
SUBMITTED FOR REVIEW.**

SECTION VIEW - PUMP STATION

SCALE: NONE



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Engineering Architecture Construction

Corporate Office:

4 S. Fourth Street Reading, PA 19602
ph: 610.373.6667 fx: 610.373.7537

Pottsville, PA
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BAK

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EJP

PROJECT NO.
4152.14

WAYMART AREA AUTHORITY SECTION - PUMP STATION

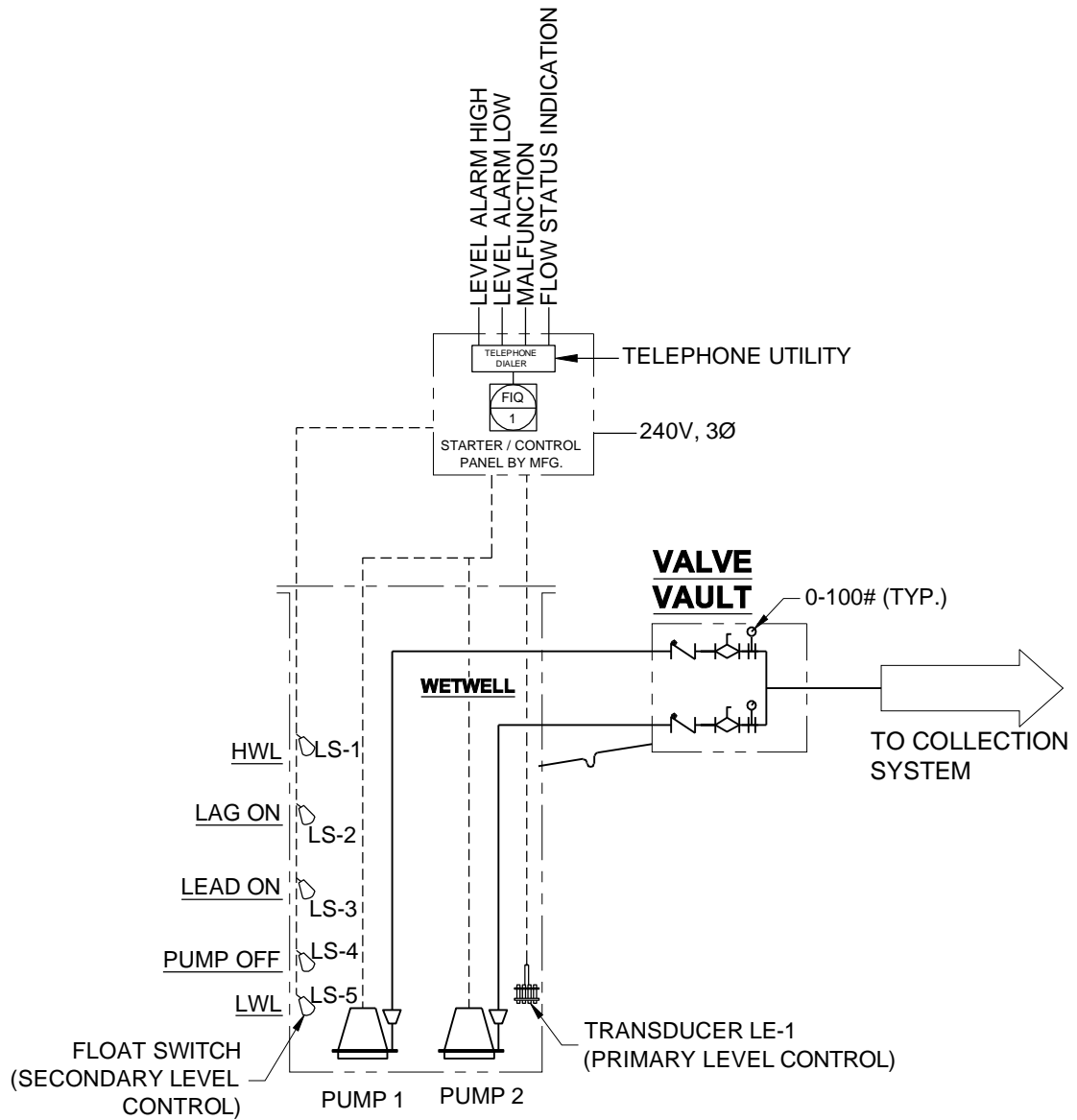
DATE:
7/20/10

SCALE:
NONE

DRAWING NO.


S-31

**FOR GENERAL ARRANGEMENT
ONLY DETAIL PLANS TO BE
SUBMITTED FOR REVIEW.**

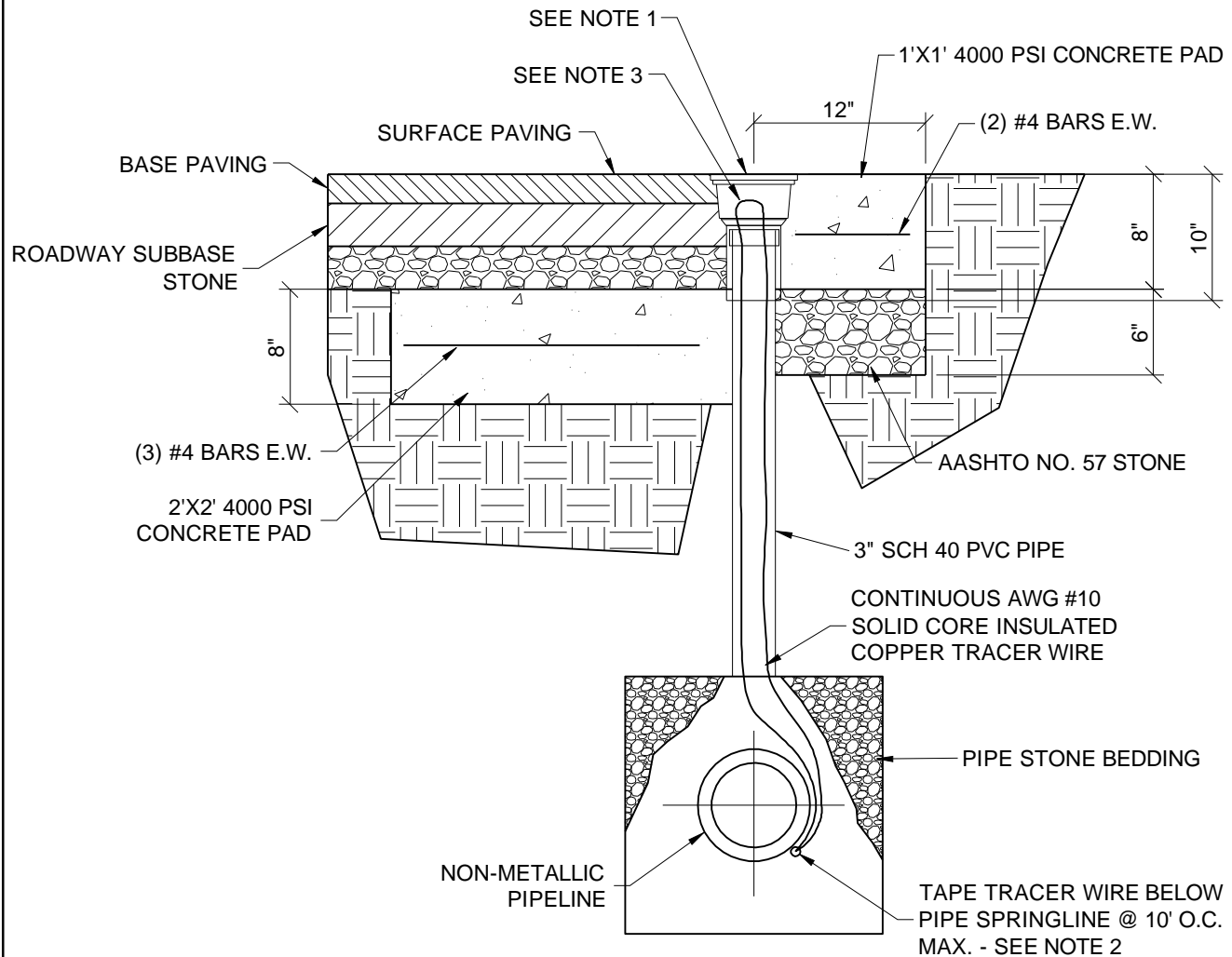


PUMP STATION **PROCESS & INSTRUMENTATION DIAGRAM**

SCALE: NONE

 ENTECH	Entech Engineering, Inc. <small>Engineering Architecture Construction</small> Corporate Office: 4 S. Fourth Street Reading, PA 19602 ph: 610.373.6667 fx: 610.373.7537			WAYMART AREA AUTHORITY PUMP STATION PROCESS & INSTRUMENTATION DIAGRAM	
	Pottsville, PA ph: 570.628.5655 Mountaintop, PA ph: 570.868.0275 Lititz, PA ph: 717.626.6666 www.entecheng.com 1.800.825.1372			DATE: 7/20/10	DRAWING NO.
	PREPARED BY MBD	CHECKED BY BAK	APPROVED BY EJP	PROJECT NO. 4152.14	SCALE: NONE

S-32




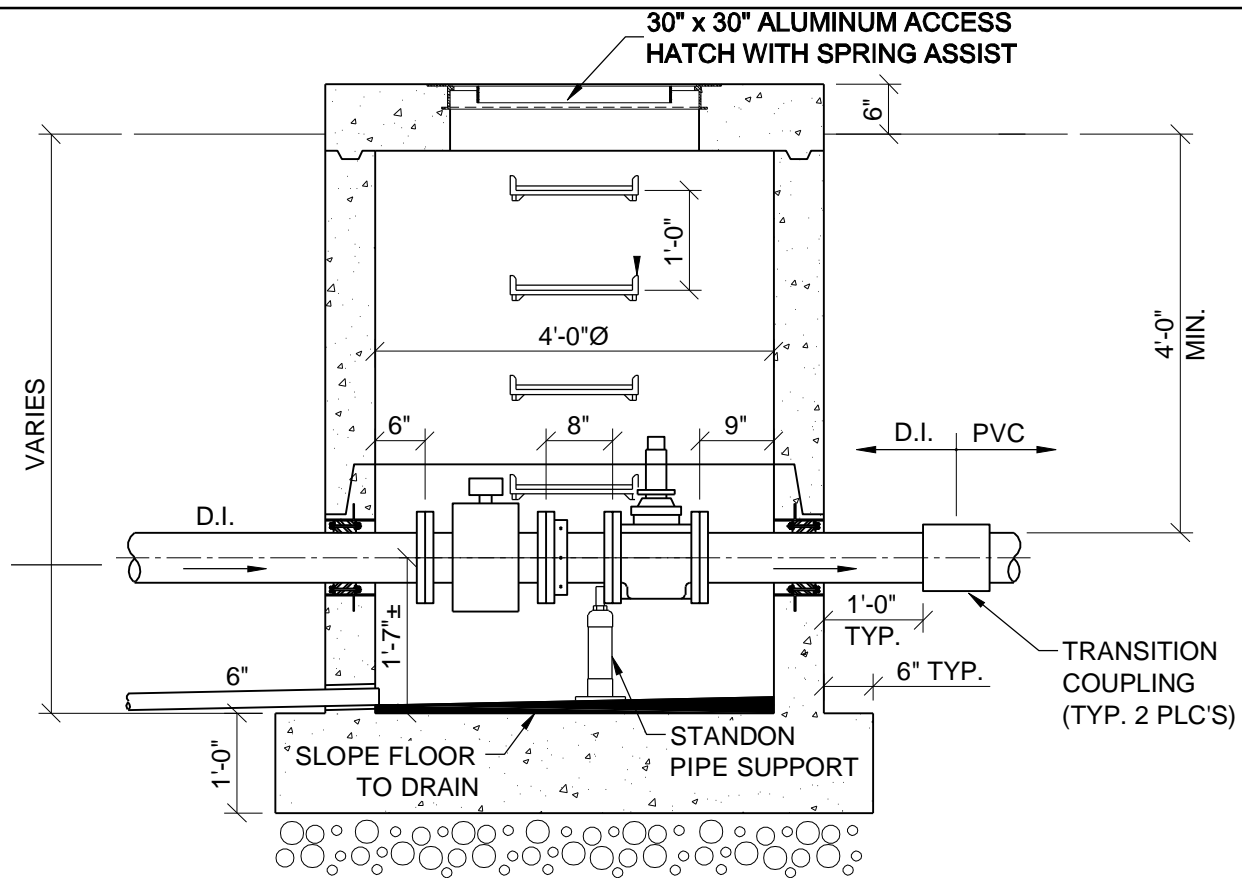
NOTES:

1. C.I. BOX SHALL BE TYLER 10" C.I. VALVE BOX TOP SECTION SLIP MODEL 10T-A WITH 5 1/4" DROP LID MODEL 14549 MARKED "SEWER"
2. DO NOT SPICE TRACER WIRE UNDERGROUND.
3. PROVIDE 3 FEET OF LOOPED WIRE WITHIN TEST STATION BOX.
4. SPACE TEST STATIONS 500 FEET MAX. AND AT ALL CHANGES IN FORCE MAIN DIRECTIONS
5. PROVIDE METALLIC CAUTION TAPE CENTERED ON FORCE MAIN 12" BELOW FINISHED GRADE.

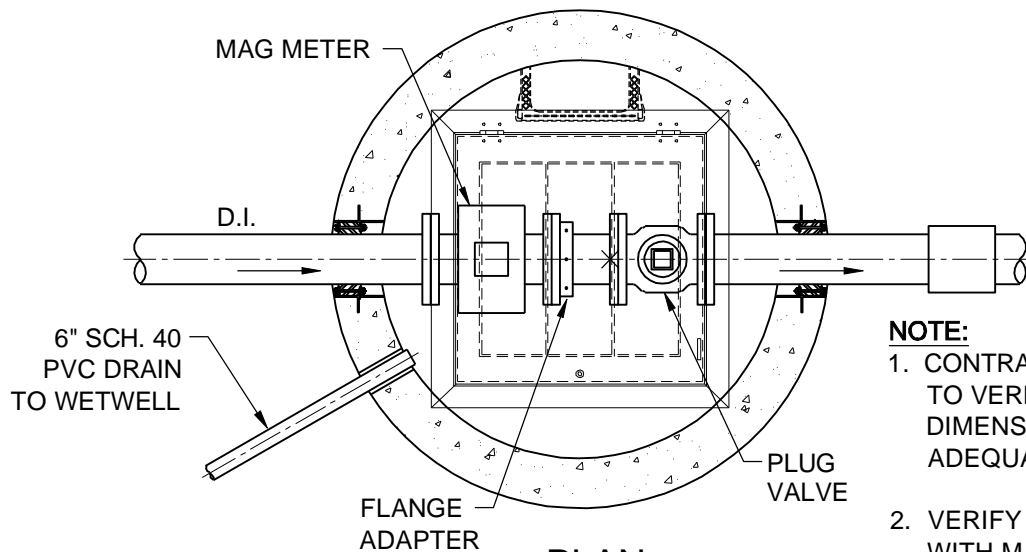
FORCE MAIN TRACER WIRE TEST STATION

SCALE: NONE

 ENTECH	Entech Engineering, Inc. Engineering Architecture Construction Corporate Office: 4 S. Fourth Street Reading, PA 19602 ph: 610.373.6667 fx: 610.373.7537			WAYMART AREA AUTHORITY FORCE MAIN TRACER WIRE TEST STATION	
	Pottsville, PA ph: 570.628.5655 Mountaintop, PA ph: 570.868.0275 Lititz, PA ph: 717.626.6666 www.entecheng.com 1.800.825.1372			DATE: 7/20/10	DRAWING NO. S-33
	PREPARED BY MBD	CHECKED BY BAK	APPROVED BY EJP	PROJECT NO. 4152.14	SCALE: NONE



SECTION



NOTE:

1. CONTRACTOR IS RESPONSIBLE TO VERIFY EXISTING DIMENSIONS AND PROVIDE FOR ADEQUATE WORKING SPACE.
2. VERIFY METER CONFIGURATION WITH MANUFACTURER.

PLAN

FORCE MAIN METERING MANHOLE DETAIL

SCALE: NONE



ENTECH

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MBD

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BAK

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EJP

PROJECT NO.
4152.14

Entech Engineering, Inc.

Engineering Architecture Construction

Corporate Office:

4 S. Fourth Street Reading, PA 19602
ph: 610.373.6667 fx: 610.373.7537

Pottsville, PA
Mountaintop, PA
Lititz, PA
www.entecheng.com

ph: 570.628.5655
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1.800.825.1372

WAYMART AREA AUTHORITY
FORCEMAIN METERING MANHOLE DETAIL

DATE:
7/20/10

SCALE:
NONE

DRAWING NO.

S-34