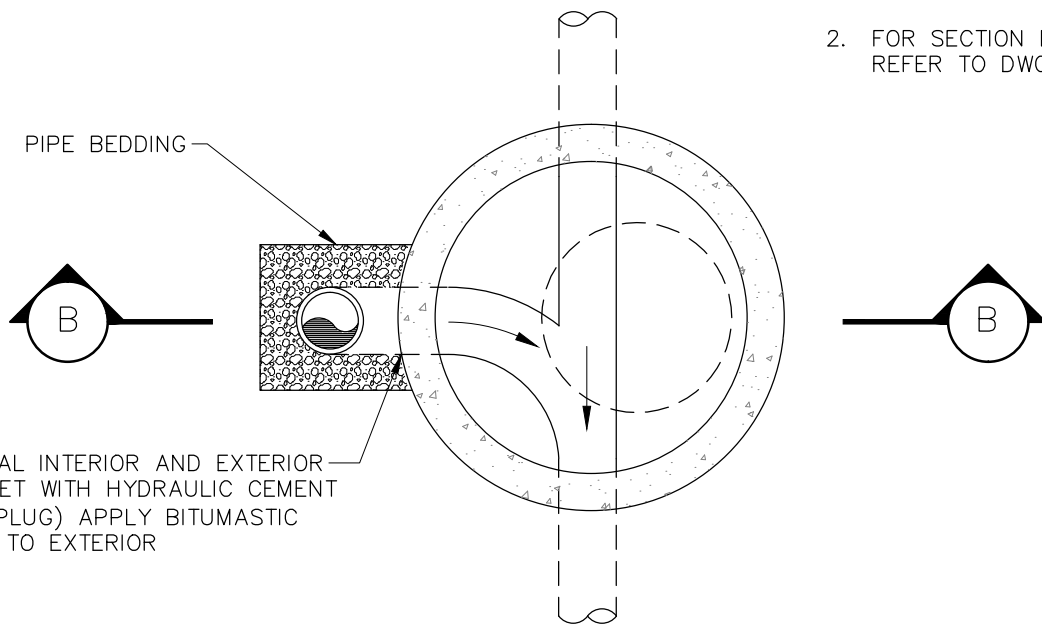


DUAL SEAL INTERIOR AND EXTERIOR
OF GASKET WITH HYDRAULIC CEMENT
(WATER PLUG) APPLY BITUMASTIC
COATING TO EXTERIOR

TYPICAL MANHOLE

NOTES:

1. FOR SECTION A-A
REFER TO DWG. NO. 2.
2. FOR SECTION B-B
REFER TO DWG. NO. 3.



PIPE BEDDING

DUAL SEAL INTERIOR AND EXTERIOR
OF GASKET WITH HYDRAULIC CEMENT
(WATER PLUG) APPLY BITUMASTIC
COATING TO EXTERIOR

DROP MANHOLE

SECTIONAL PLAN VIEW OF TYPICAL AND DROP MANHOLES

NOT TO SCALE



UNIVERSITY AREA JOINT AUTHORITY

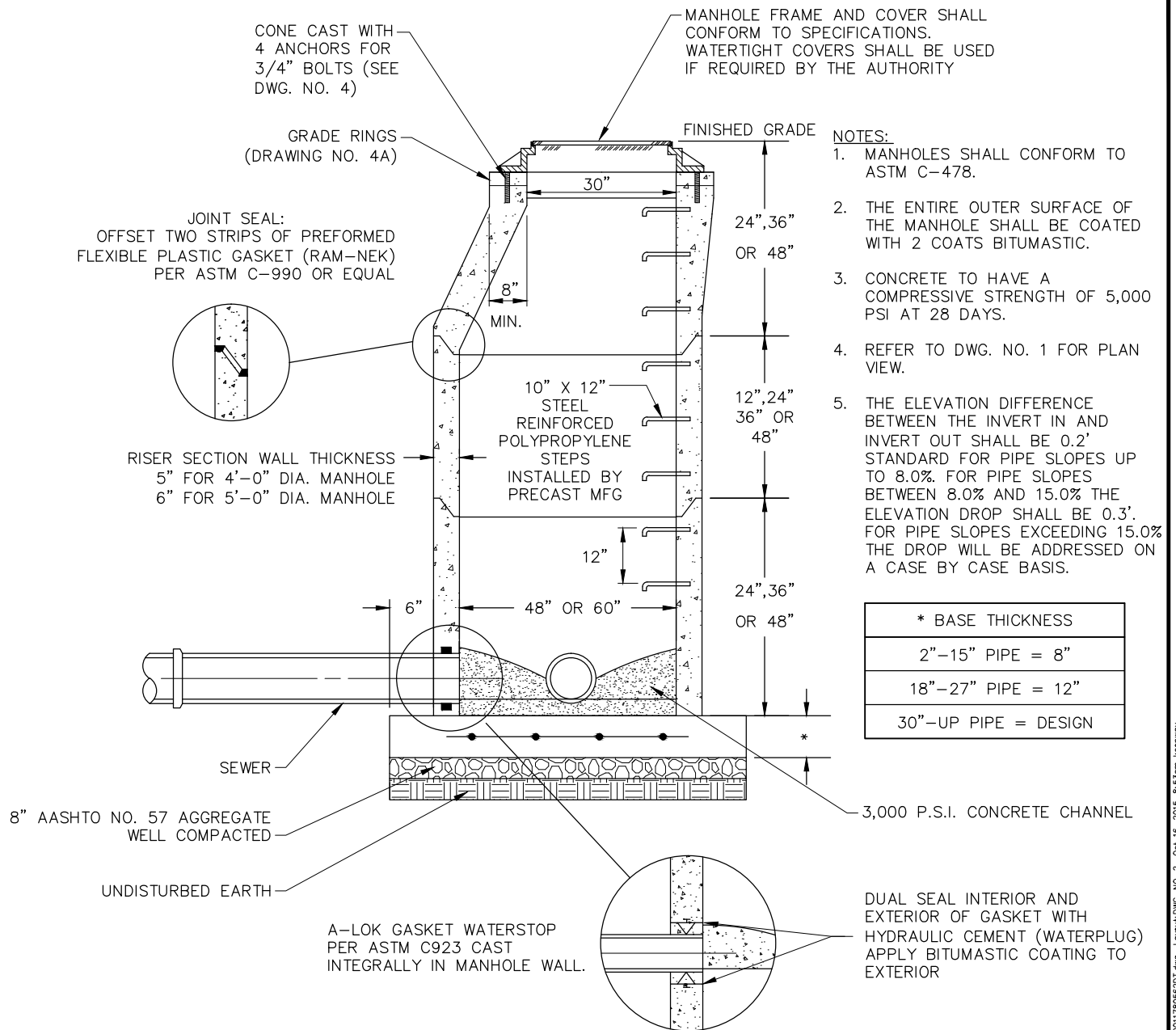
**SANITARY SEWER STANDARD DETAIL
FOR
UNIVERSITY AREA JOINT AUTHORITY**

CENTRE COUNTY

PENNSYLVANIA

PROJ. MGR. — BRB
DESIGN—
CADD— KEC
CHECKED—
SCALE— AS NOTED
DATE— JUNE 2015

DRAWING NO.
1
SHEET NO.
1 OF 22
PROJECT 001178.0562



TYPICAL MANHOLE SECTION A-A **PRECAST BASE AND WALL SECTIONS**

NOT TO SCALE



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SANITARY SEWER STANDARD DETAIL **FOR** **UNIVERSITY AREA JOINT AUTHORITY**

CENTRE COUNTY

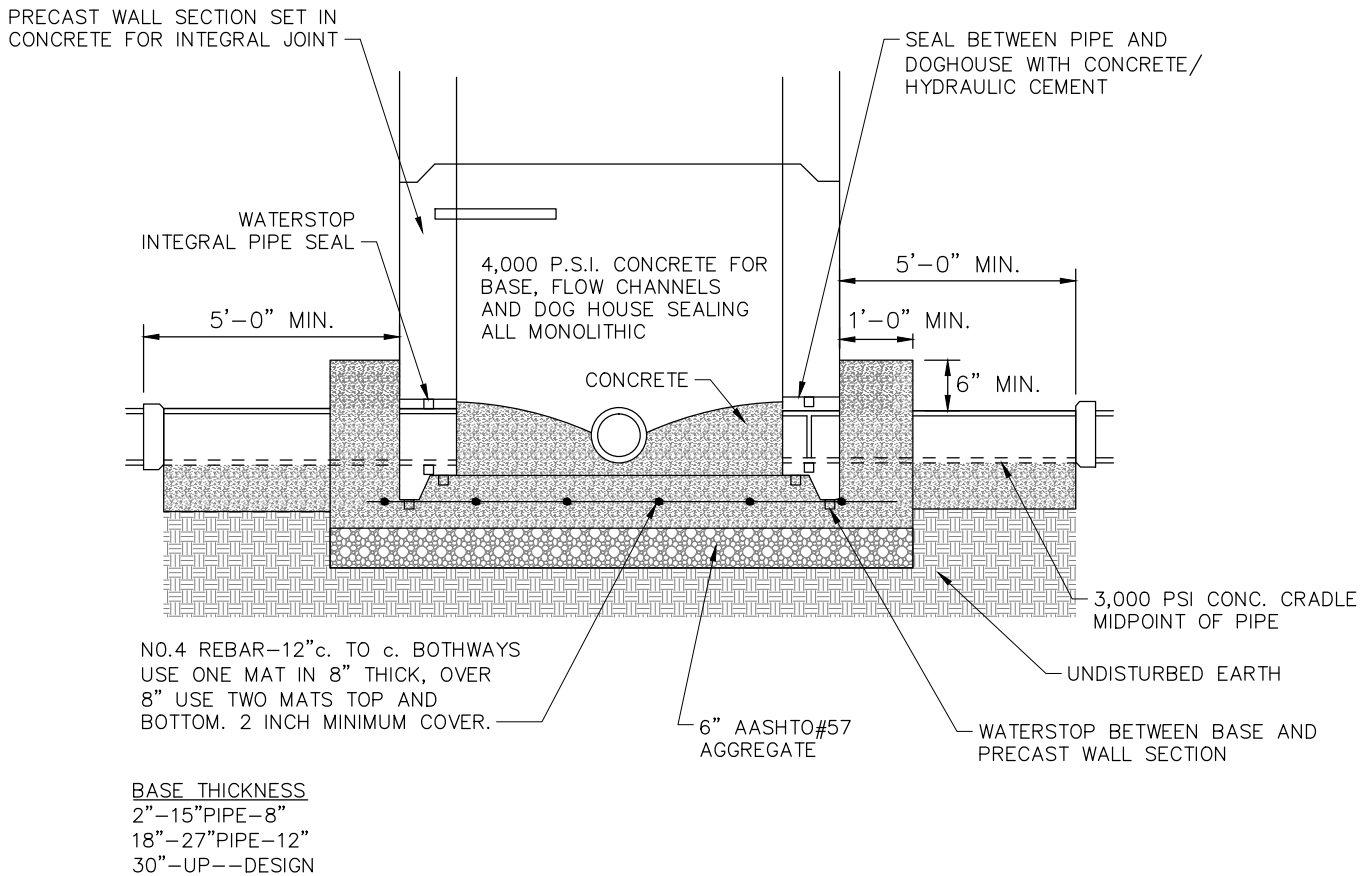
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DRAWING NO.
2
SHEET NO.
2 OF 22
PROJECT 001178.0562

File name: C:\Civil 3D Projects\001178_0562\Plan Sets\WD01178056201.dwg Layout: DWG, NO. 2 Oct 16, 2015 8:53am hconway

NOTE:
USE DOG HOUSE APPLICATION WHEN
CONNECTING INTO EXISTING SANITARY SEWER
LINE.



FIELD POURED BASE WITH PRECAST WALL SECTIONS



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CENTRE COUNTY

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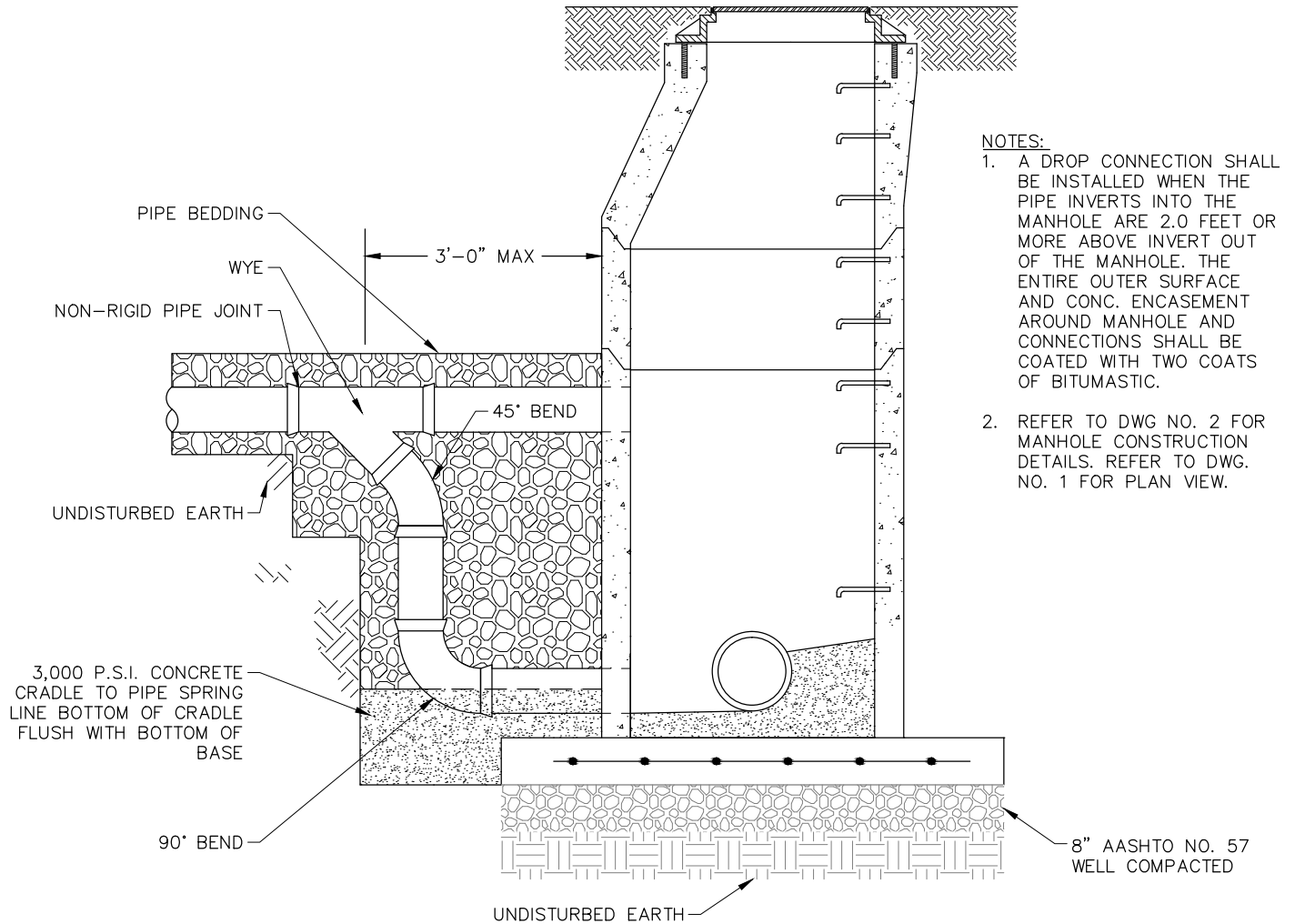
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2A

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PROJECT 001178.0562



TYPICAL DROP MANHOLE SECTION B-B PRECAST BASE AND WALL SECTIONS

NOT TO SCALE



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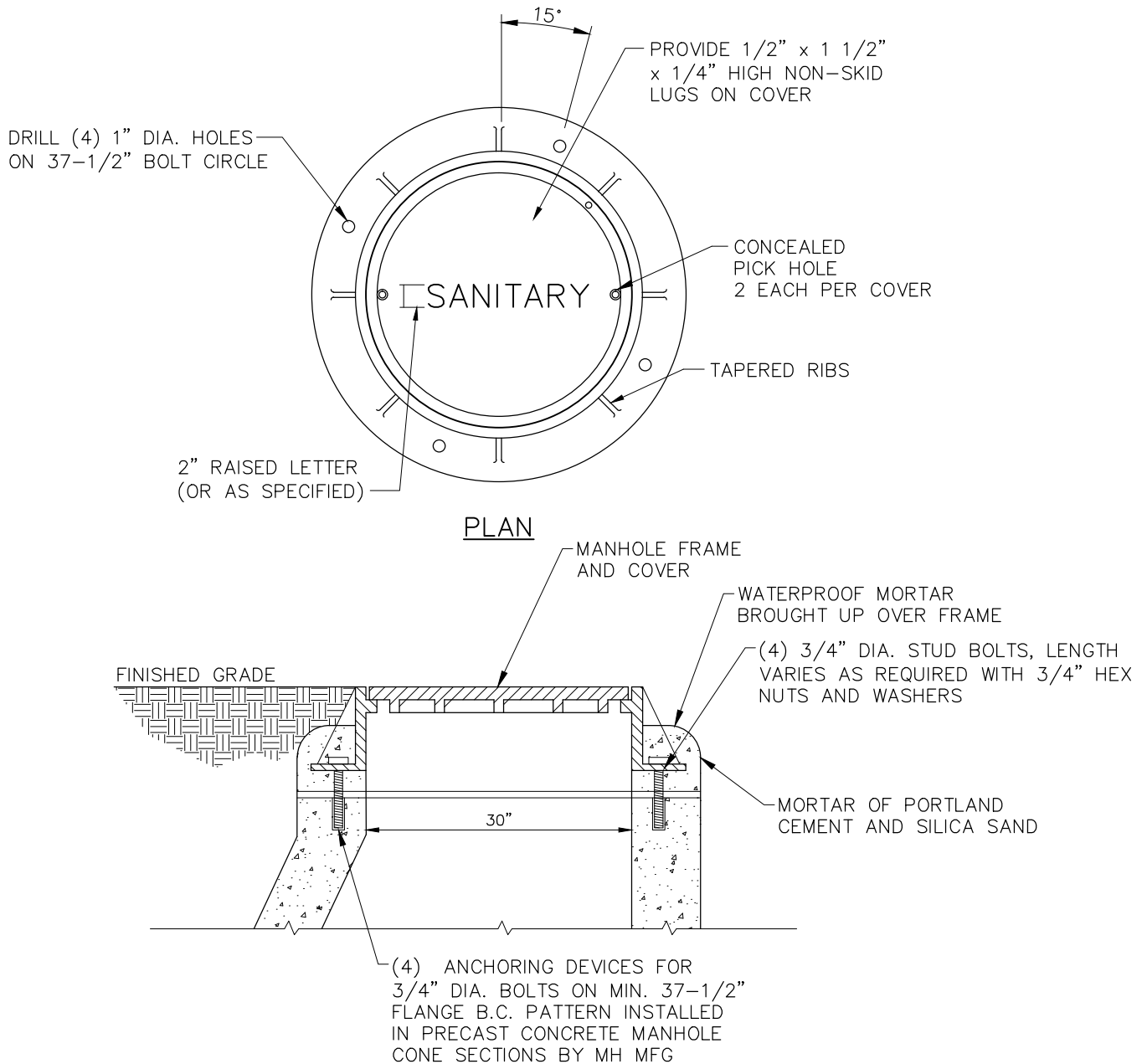
SANITARY SEWER STANDARD DETAIL FOR UNIVERSITY AREA JOINT AUTHORITY

CENTRE COUNTY

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3
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SECTION

NOTES:

1. THE WORD "SANITARY" MUST BE ON THE MANHOLE COVER.
2. PRECAST CONCRETE RINGS ARE REQUIRED ONLY WHERE MANHOLE FRAME AND COVER MUST CONFORM TO GRADE OF STREET. THE TOPS OF ALL WATERTIGHT MANHOLE FRAMES AND COVERS SHALL BE NO LESS THAN (1) FOOT ABOVE GRADE AS DIRECTED BY AUTHORITY. MAX. HEIGHT ADJUSTMENT W/RINGS IS 12".

MANHOLE FRAME AND COVER INSTALLATION FOR PRECAST CONCRETE MANHOLES

NOT TO SCALE



UNIVERSITY AREA JOINT AUTHORITY

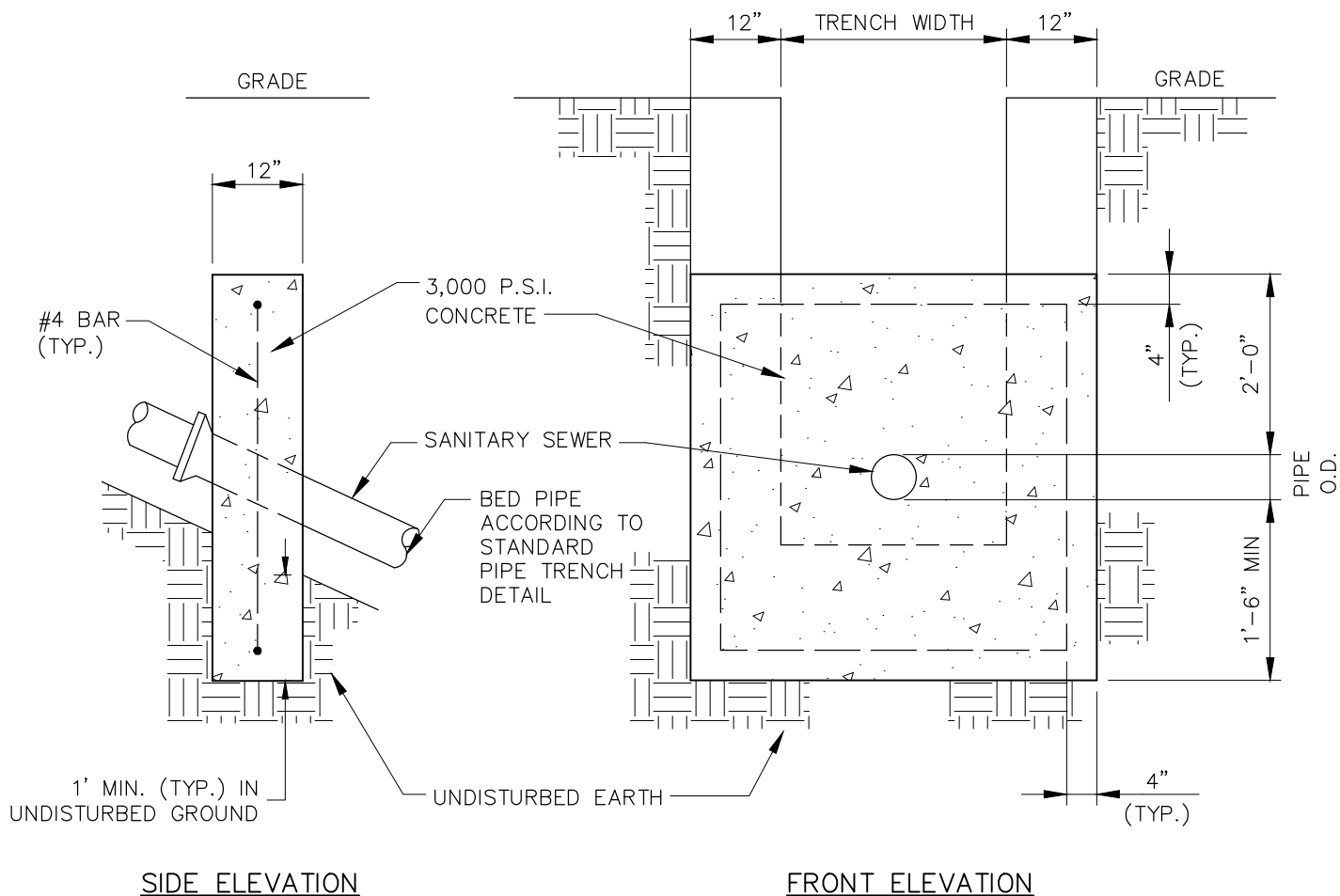
SANITARY SEWER STANDARD DETAIL FOR UNIVERSITY AREA JOINT AUTHORITY

CENTRE COUNTY

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MAXIMUM SPACING CHART	
SLOPE	SPACING
20% TO 35%	36'
35% TO 50%	24'
50% AND OVER	16'



UNIVERSITY AREA JOINT AUTHORITY

**SANITARY SEWER STANDARD DETAIL
FOR
UNIVERSITY AREA JOINT AUTHORITY**

CENTRE COUNTY

PENNSYLVANIA

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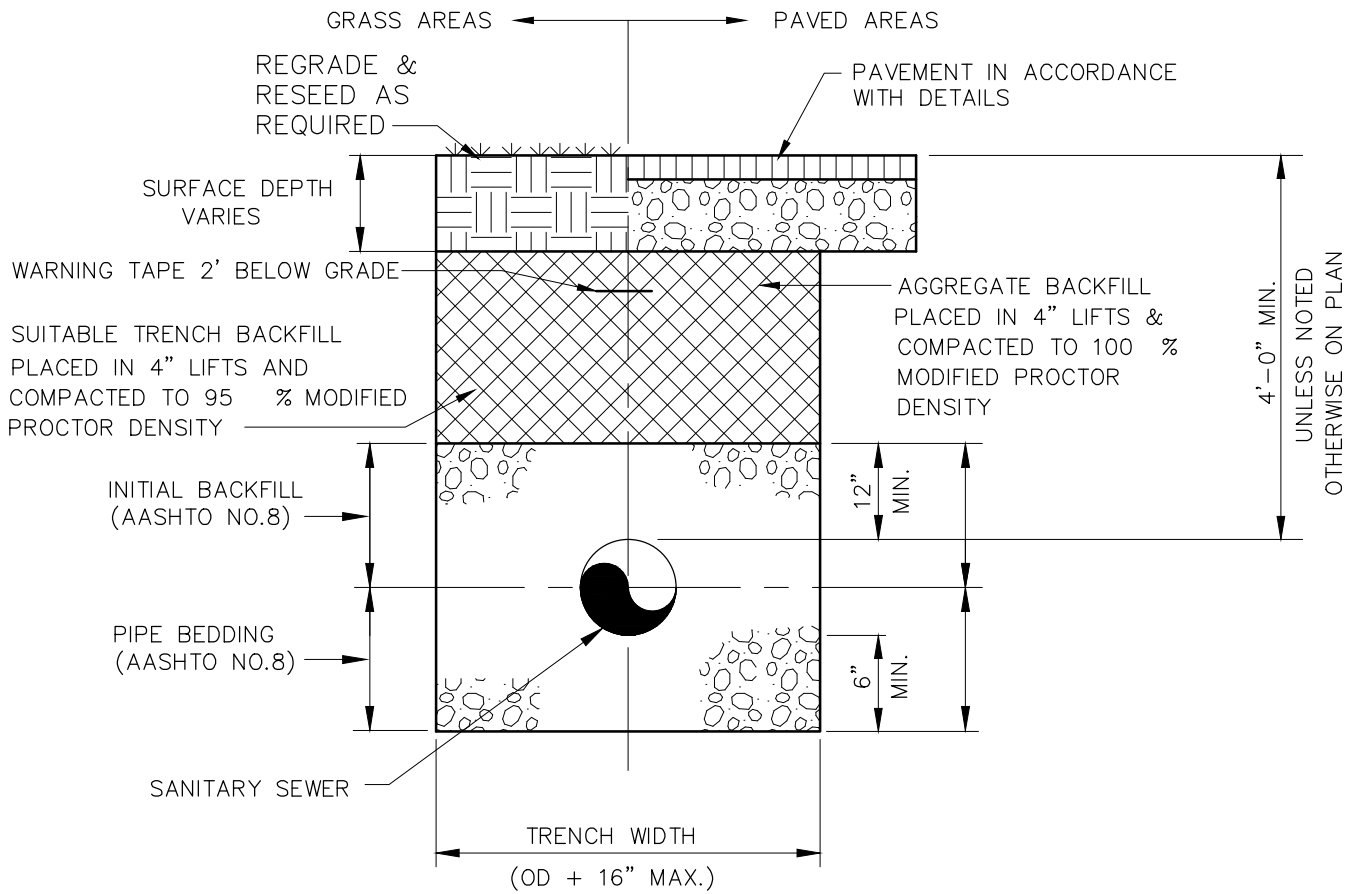
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SHEET NO.

8 OF 22

PROJECT 001178.0562

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PIPE TRENCH

NOT TO SCALE



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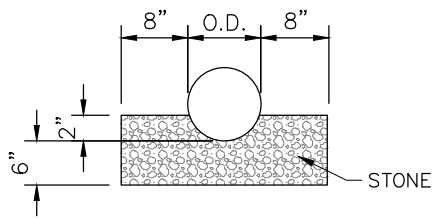
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CENTRE COUNTY

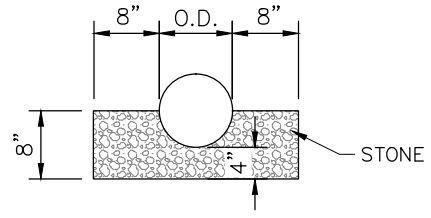
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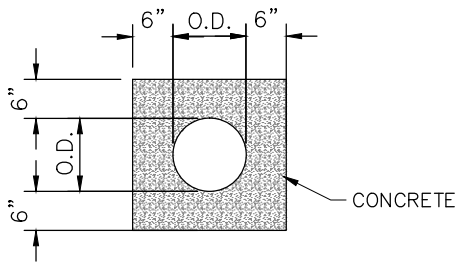
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SHEET NO.
9 OF 22
PROJECT 001178.0562



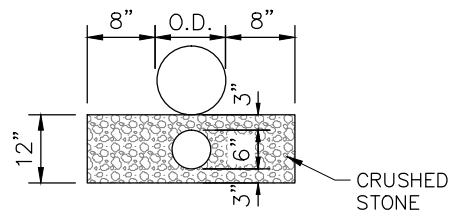
TYPE I



TYPE II



COMPLETE ENCASEMENT



UNDERDRAINS



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**SANITARY SEWER STANDARD DETAIL
FOR
UNIVERSITY AREA JOINT AUTHORITY**

CENTRE COUNTY

PENNSYLVANIA

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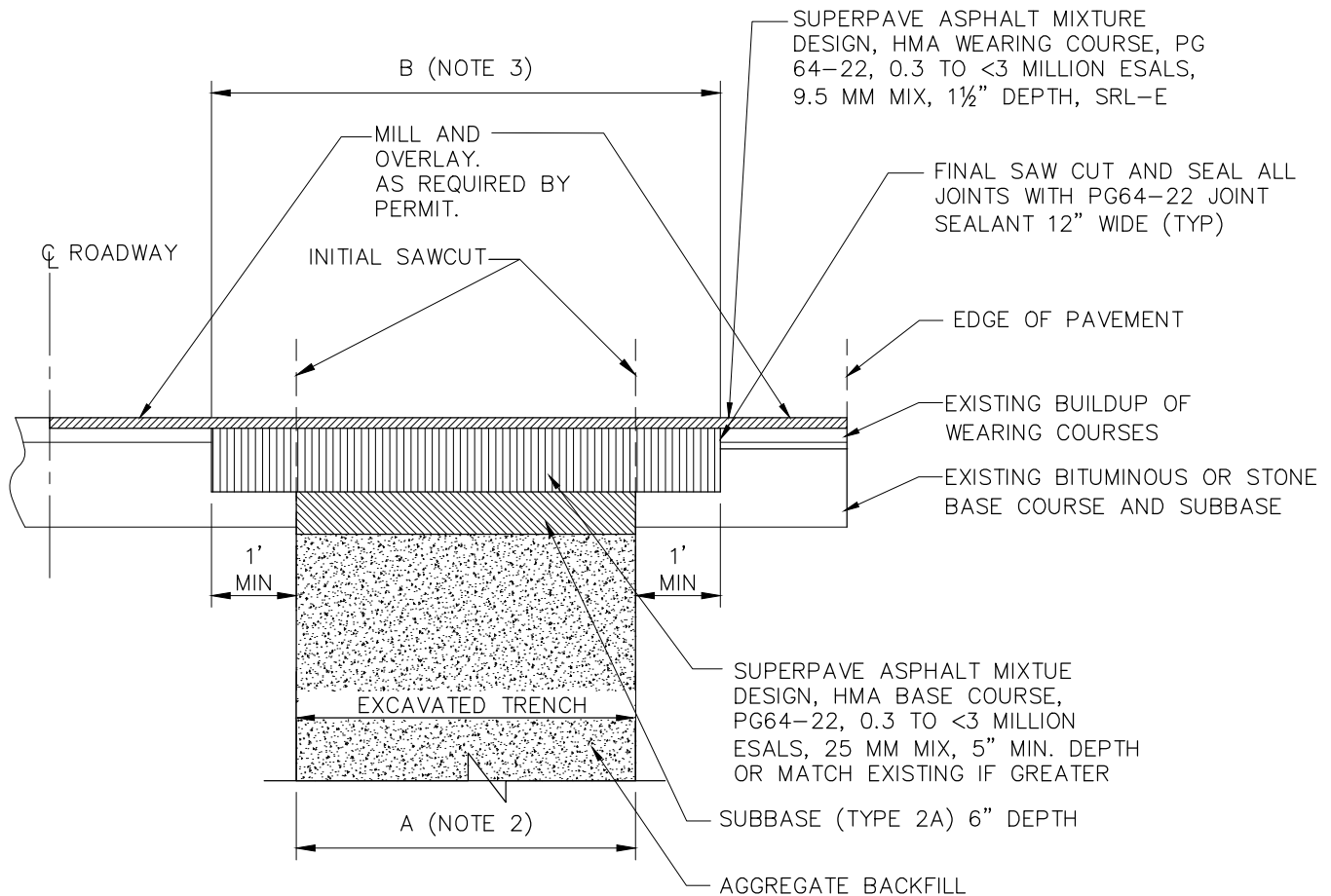
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6

SHEET NO.

10 OF 22

PROJECT 001178.0562



NOTES:

1. PADOT REQUIREMENTS SHALL GOVERN ANY ITEM OF WORK WITHIN THE R-O-W OF PADOT. REFER TO PUBLICATION 408 AND APPLICABLE HOP.
2. TRENCH WIDTHS FOR PIPES IN STATE HIGHWAY RIGHT-OF-WAYS SHALL BE PIPE DIAMETER AT BELL/FLANGE PLUS TWO FEET (A). THIS SHALL ALSO BE THE PAY WIDTH WHEN ROCK EXCAVATION IS CLASSIFIED
3. PAVEMENT RESTORATION PAY WIDTHS SHALL BE PIPE DIAMETER AT BELL/FLANGE PLUS FOUR FEET (B).
4. REFER TO PROJECT CONSTRUCTION DRAWINGS, PENNDOT PUB 408, R.C. STANDARD NO.'S RC-26 & RC-30, AND HIGHWAY OCCUPANCY PERMIT FOR DETAILS NOT SHOWN ON THIS DRAWING.
5. EXPOSED VERTICAL AND HORIZONTAL SURFACES SHALL BE PREPARED AS PER PUB. 408, SECTION 401.3(f).
6. IF THE INITIAL SAWCUT IS WITHIN 3' OF THE CURB, EDGE OF PAVEMENT, OR EXISTING PAVEMENT JOINT, THE ENTIRE AREA SHALL BE REPLACED.

STATE REPAVING REQUIREMENTS AND PAY WIDTHS FOR ROCK EXCAVATION AND REPAVEMENT RESTORATION

NOT TO SCALE



UNIVERSITY AREA JOINT AUTHORITY

SANITARY SEWER STANDARD DETAIL FOR UNIVERSITY AREA JOINT AUTHORITY

CENTRE COUNTY

PENNSYLVANIA

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DATE— JUNE 2015

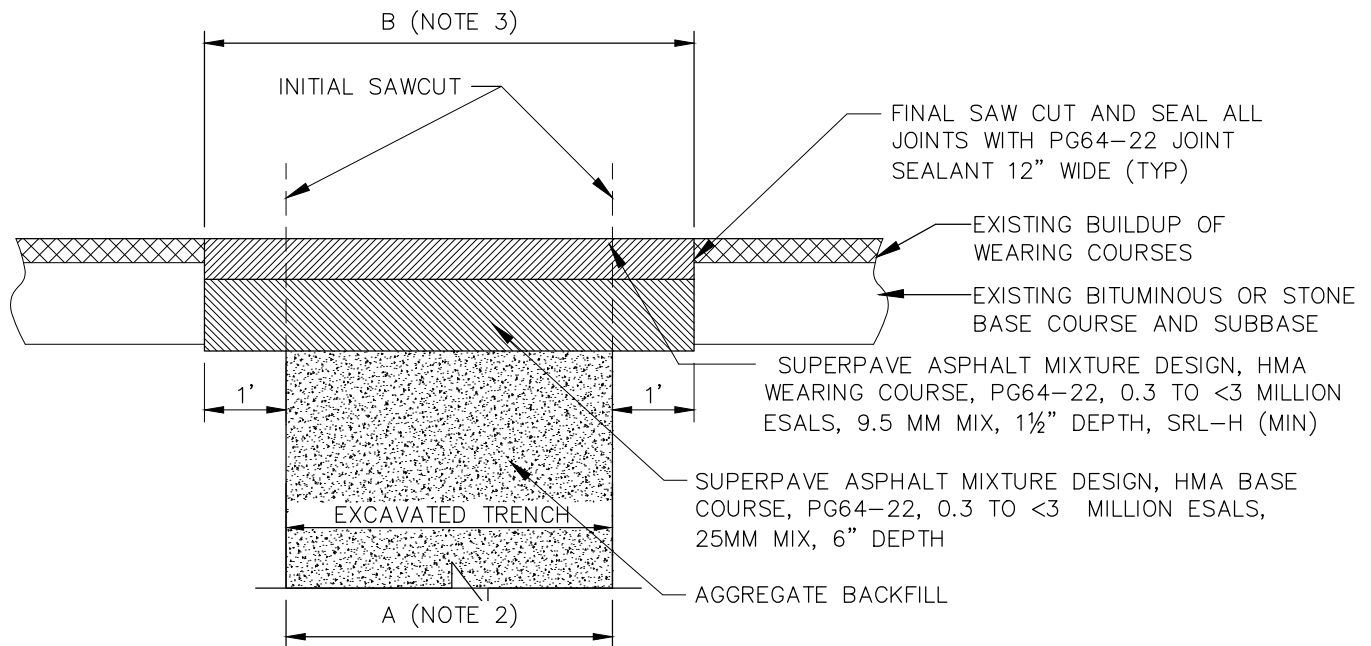
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7

SHEET NO.

11 OF 22

PROJECT 001178.0562



NOTES:

1. EXPOSED VERTICAL AND HORIZONTAL SURFACES SHALL BE PREPARED AS PER PUB. 408, SECT. 401.3(f).
2. TRENCH WIDTHS FOR PIPES IN LOCAL (TOWNSHIP, BOROUGH, PRIVATE) RIGHT OF WAYS SHALL BE PIPE DIAMETER AT THE BELL/FLANGE PLUS 1.33 FEET (A). THIS SHALL BE THE PAYMENT WIDTH WHEN ROCK EXCAVATION IS CLASSIFIED.
3. PAYMENT RESTORATION PAY WIDTHS SHALL BE PIPE DIAMETER AT THE BELL/FLANGE PLUS 3.33 FEET (B).
4. THE PAY WIDTH FOR STREET REPAVING ALSO APPLIES TO DRIVEWAY REPAVING.
5. IF THE FINAL SAWCUT IS WITHIN 3' OF THE CURB, EDGE OF PAVEMENT, OR EXISTING PAVEMENT JOINT, THE ENTIRE AREA WILL BE REPLACED.

LOCAL REPAVING REQUIREMENTS AND PAY WIDTHS FOR ROCK EXCAVATION AND REPAVEMENT RESTORATION

NOT TO SCALE



UNIVERSITY AREA JOINT AUTHORITY

SANITARY SEWER STANDARD DETAIL FOR UNIVERSITY AREA JOINT AUTHORITY

CENTRE COUNTY

PENNSYLVANIA

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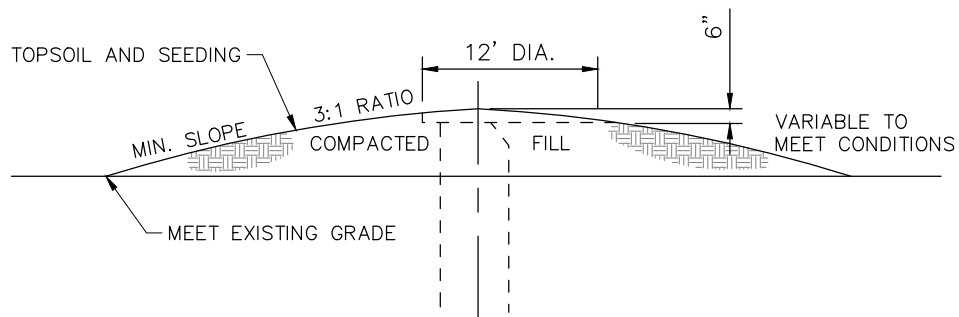
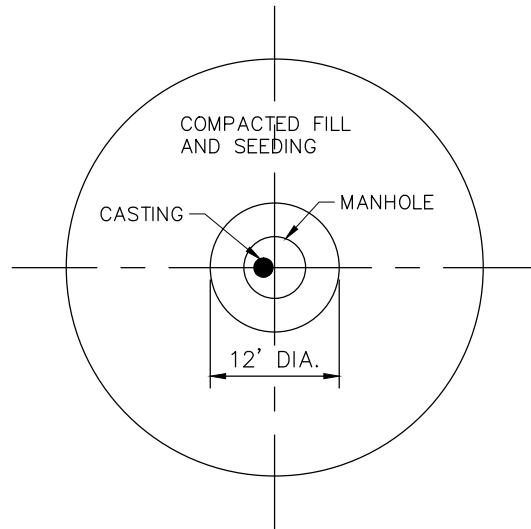
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8

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12 OF 22

PROJECT 001178.0562



TYPICAL MANHOLE ISLAND



UNIVERSITY AREA JOINT AUTHORITY

**SANITARY SEWER STANDARD DETAIL
FOR
UNIVERSITY AREA JOINT AUTHORITY**

CENTRE COUNTY

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PROJ. MGR. — BRB
DESIGN—
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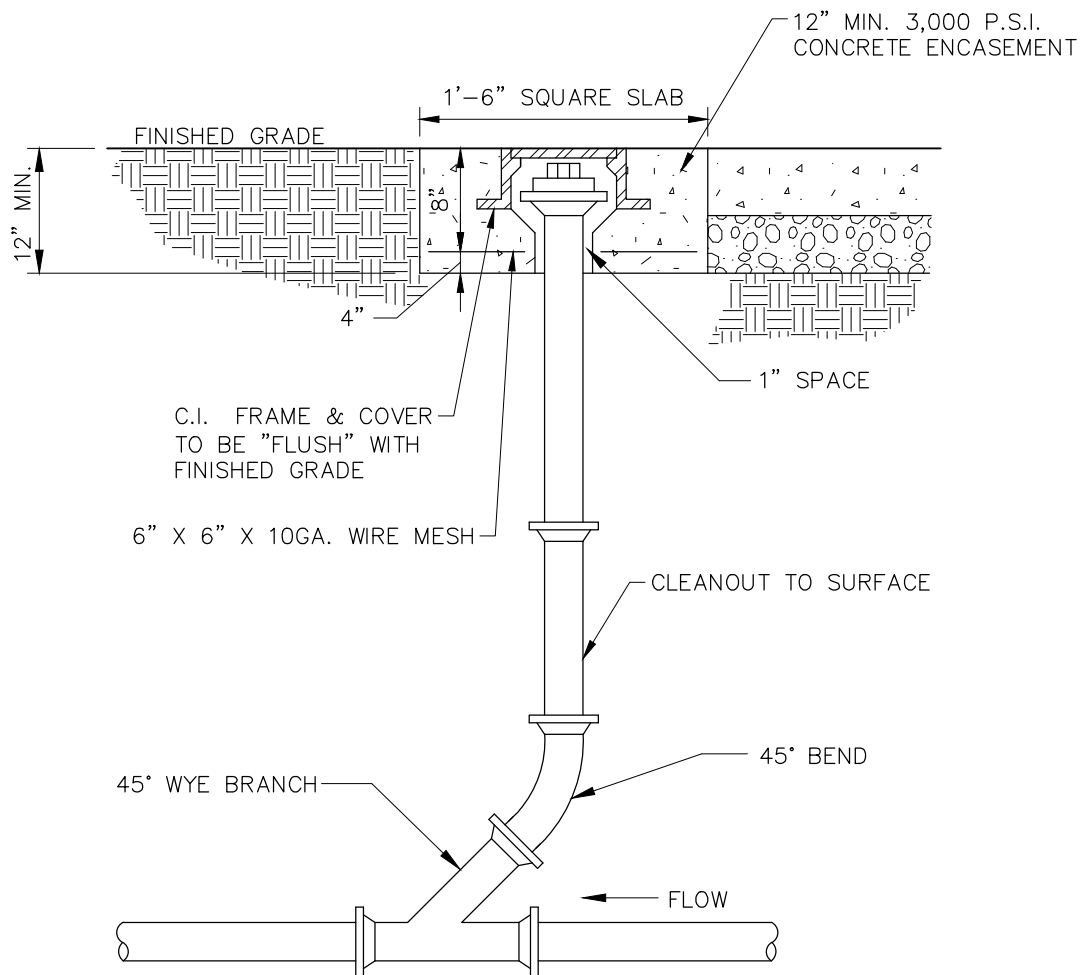
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9

SHEET NO.

13 OF 22

PROJECT 001178.0562



NOTES:

1. DETAILS FOR CLEANOUTS IN PRIVATE, RESIDENTIAL LAWN OR NON-TRAFFIC AREAS ARE THE SAME EXCEPT THE CONCRETE ENCASEMENT MAY BE OMITTED.

CLEANOUT CONSTRUCTION DETAIL FOR PRIVATE COLLECTION SYSTEM

NOT TO SCALE



UNIVERSITY AREA JOINT AUTHORITY

SANITARY SEWER STANDARD DETAIL FOR UNIVERSITY AREA JOINT AUTHORITY

CENTRE COUNTY

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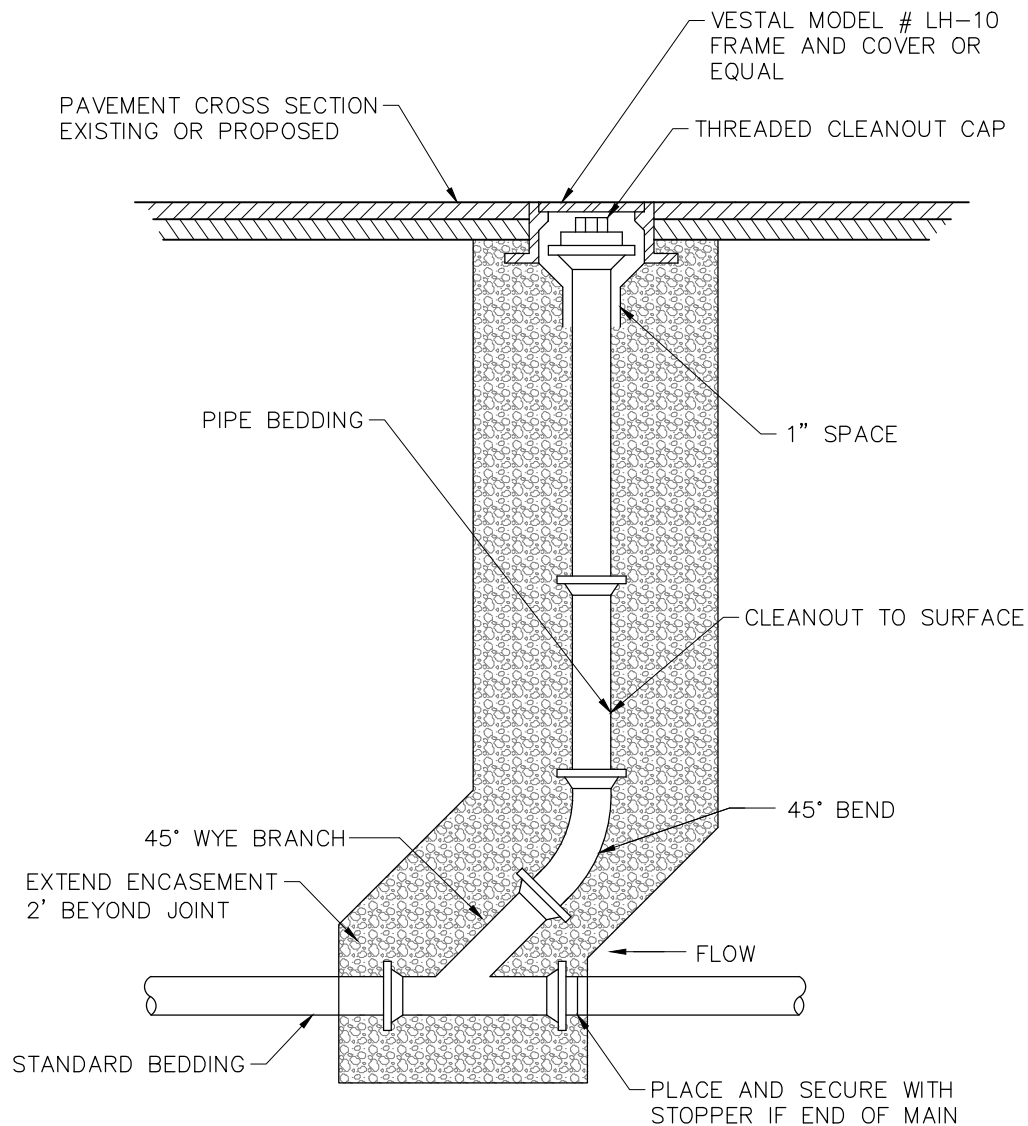
DRAWING NO.

10

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PROJECT 001178.0562



NOTES:

1. REFER TO DWG. NO. 4 FOR COVER INSTALLATION DETAIL.

CLEANOUT CONSTRUCTION DETAIL FOR PAVED AREAS



UNIVERSITY AREA JOINT AUTHORITY

SANITARY SEWER STANDARD DETAIL FOR UNIVERSITY AREA JOINT AUTHORITY

CENTRE COUNTY

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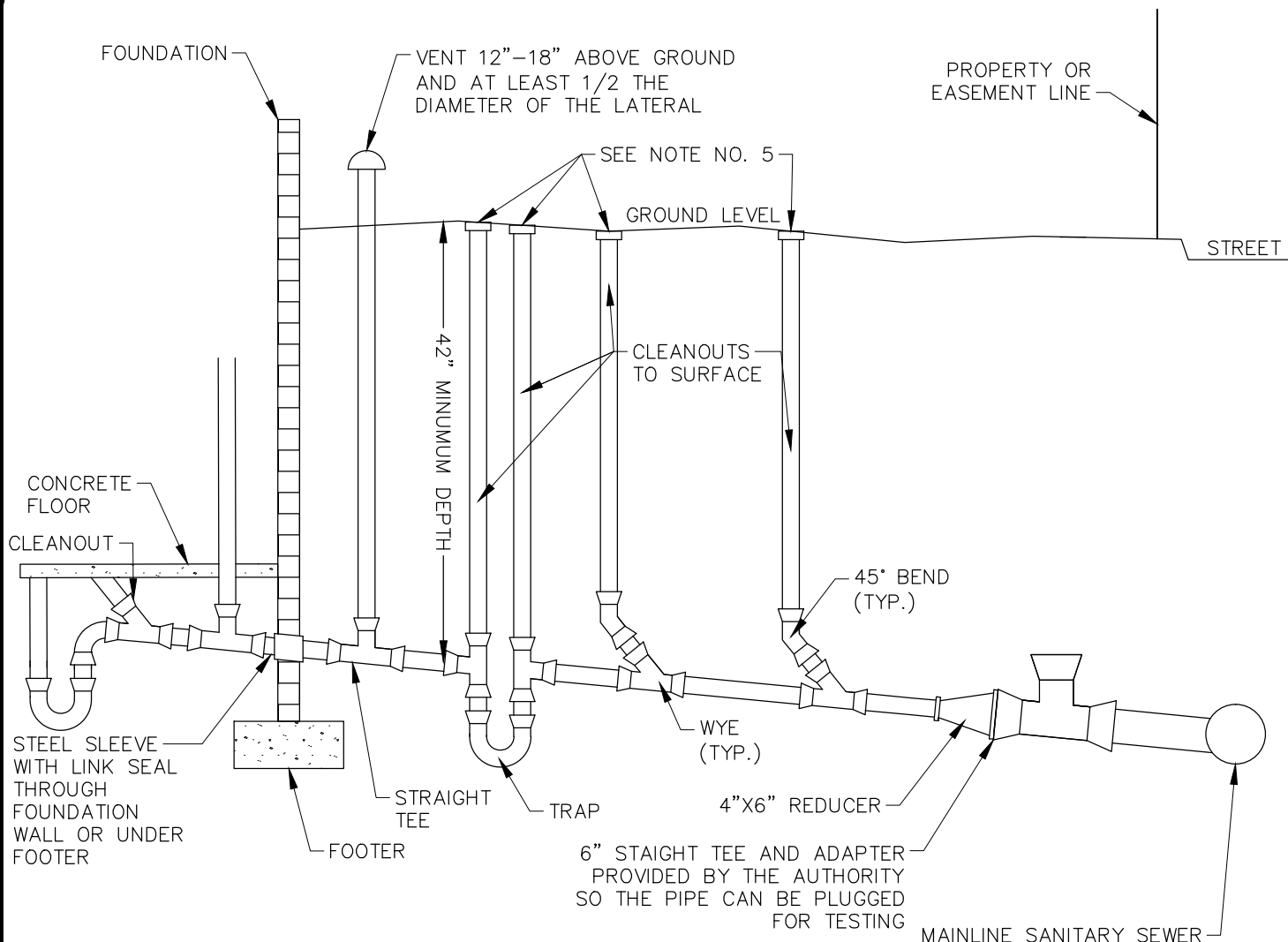
DRAWING NO.

10A

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15 OF 22

PROJECT 001178.0562



LATERAL SPECIFICATIONS:

1. 4" DIAMETER IS THE MINIMUM SIZE. LARGER SIZES WILL BE SPECIFIED BY THE AUTHORITY WHEN THE AMOUNT OF FLOW WARRANTS IT.
2. SLOPE SHALL BE 1/4" PER FOOT UNLESS APPROVED OTHERWISE BY THE AUTHORITY.
3. CLEANOUTS MUST BE INSTALLED EVERY 50' ON 4" PIPE AND EVERY 100' ON 6" PIPE.
4. LATERALS SHALL BE LAID IN AGGREGATE CUSHION AND BEDDING, REFER TO STANDARD PIPE TRENCH DETAIL
5. CLEANOUT TERMINAL(S) SHALL HAVE TREATMENT AT RESPECTIVE LOCATION. REFER TO DWG. NO.'S 10 & 10A.
6. ALL PIPING MATERIALS INCLUDING TRAPS FOR GRAVITY APPLICATIONS SHALL BE SCHEDULE 40 PVC. ANSI/ASTM D2665.
7. ALL SCHEDULE 40 PVC PIPE USED FOR PRESSURE APPLICATIONS MAY BE STAMPED ASTM D2665 BUT MUST ALSO INCLUDE A SECOND NUMBER, EITHER ASTM D1785 OR ASTM F480, WHICH ARE PRESSURE DESIGNATIONS.

INSPECTION:

1. WORK MUST BE INSPECTED AND TESTED BEFORE BACKFILLING.
2. THERE IS NO CHARGE FOR ONE-TIME INSPECTION UNLESS THE LATERAL IS LONGER THAN 150' AND/OR IF THE PIPE IS MORE THAN 4" IN DIAMETER.
3. INSPECTIONS REQUIRING MORE THAN ONE VISIT TO THE SITE WILL BE BILLED AT THE RATE IN EFFECT AT THE TIME OF INSPECTION.

TYPICAL SANITARY SEWER LATERAL

NOT TO SCALE



UNIVERSITY AREA JOINT AUTHORITY

SANITARY SEWER STANDARD DETAIL FOR UNIVERSITY AREA JOINT AUTHORITY

CENTRE COUNTY

PENNSYLVANIA

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DATE— JUNE 2015

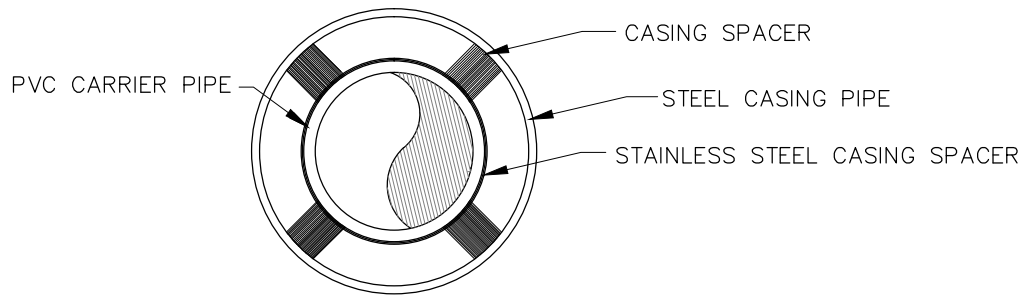
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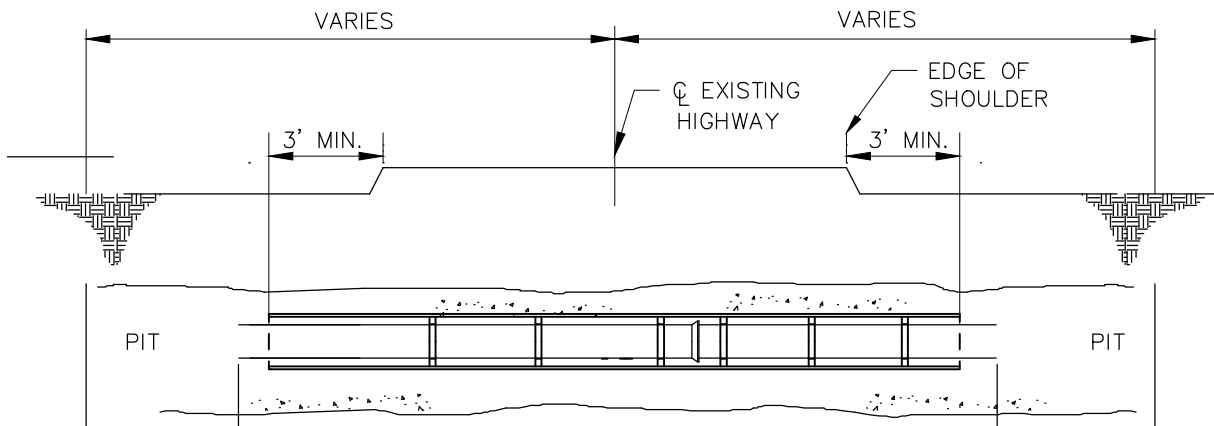
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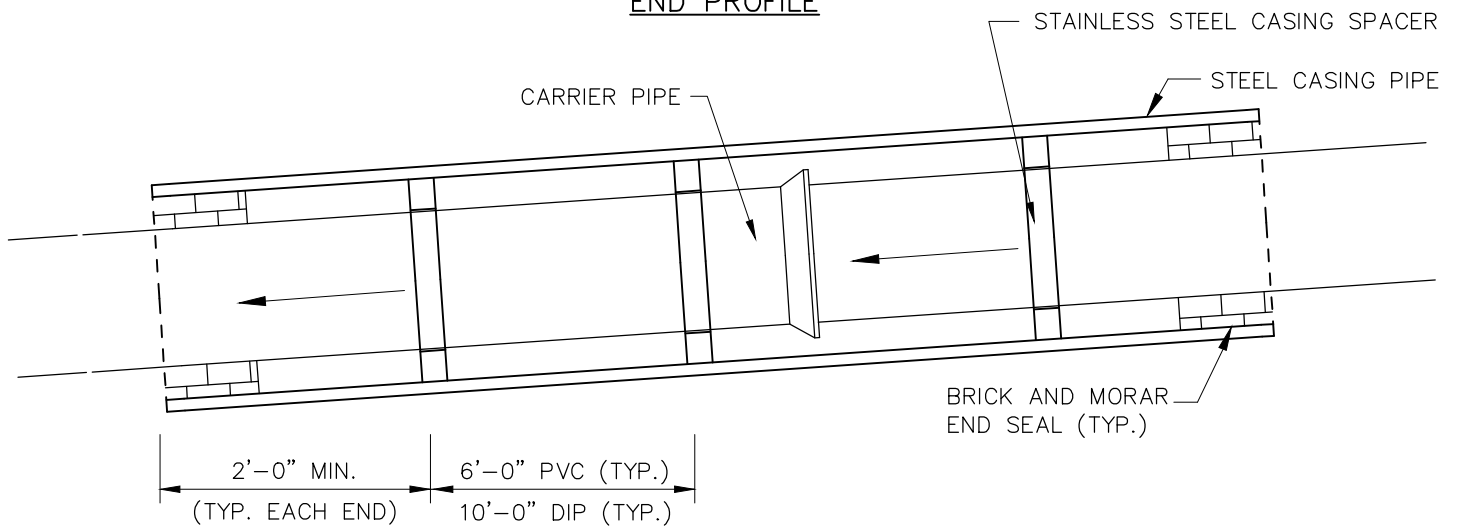
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MAIN LINE SECTION



END PROFILE



SECTION

NOTES:

1. SEE HIGHWAY CROSSINGS FOR SPECIFIC LENGTHS AND LOCATIONS.

BORE CROSSING DETAIL

NOT TO SCALE



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**SANITARY SEWER STANDARD DETAIL
FOR
UNIVERSITY AREA JOINT AUTHORITY**

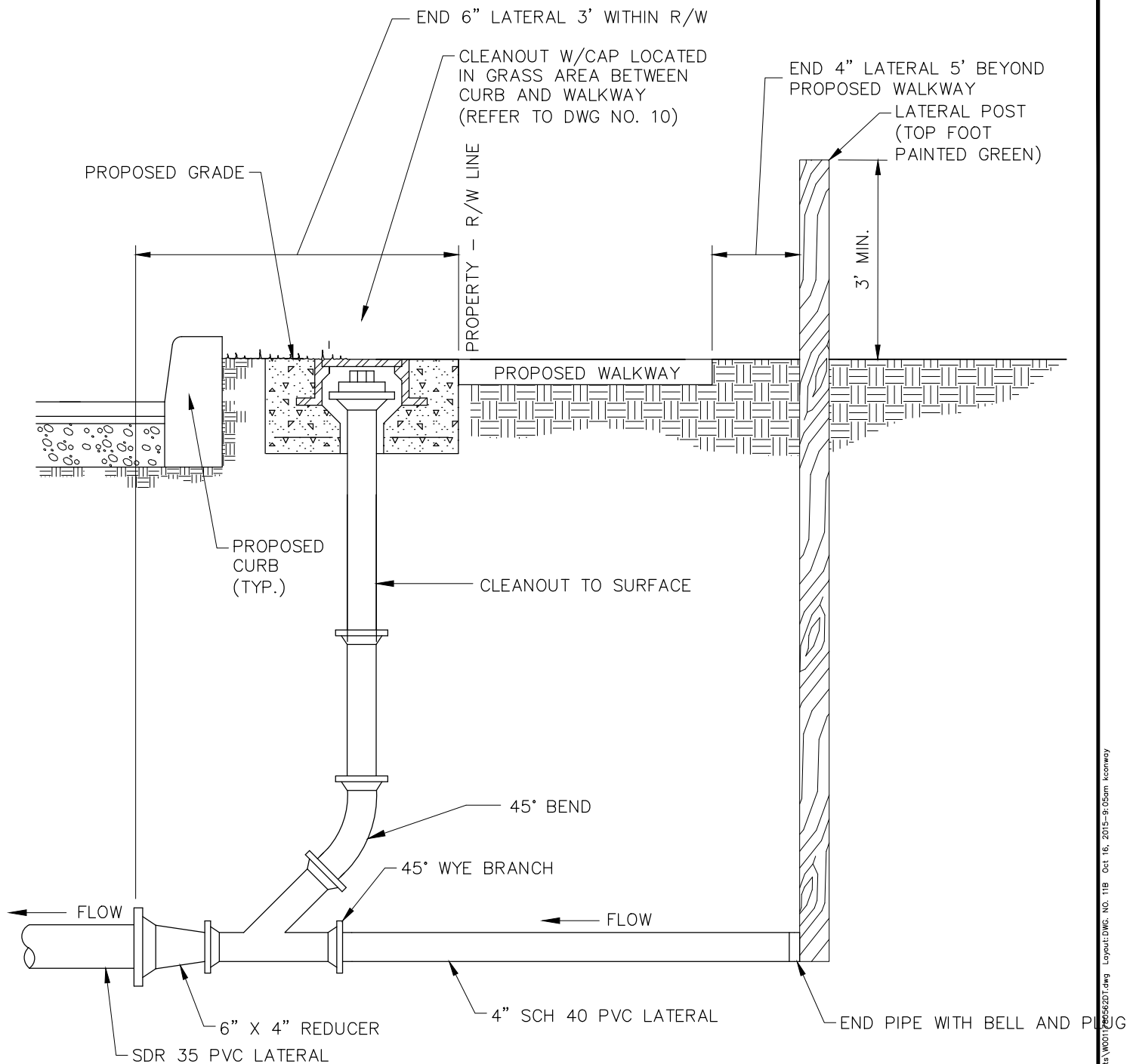
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DRAWING NO.
11A
SHEET NO.
17 OF 22
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SANITARY SEWER LATERAL DETAIL (FOR SIDEWALK ON PROPERTY OUT OF R-O-W)

NOT TO SCALE



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SANITARY SEWER STANDARD DETAIL FOR UNIVERSITY AREA JOINT AUTHORITY

CENTRE COUNTY

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SCALE - AS NOTED
DATE - JUNE 2015

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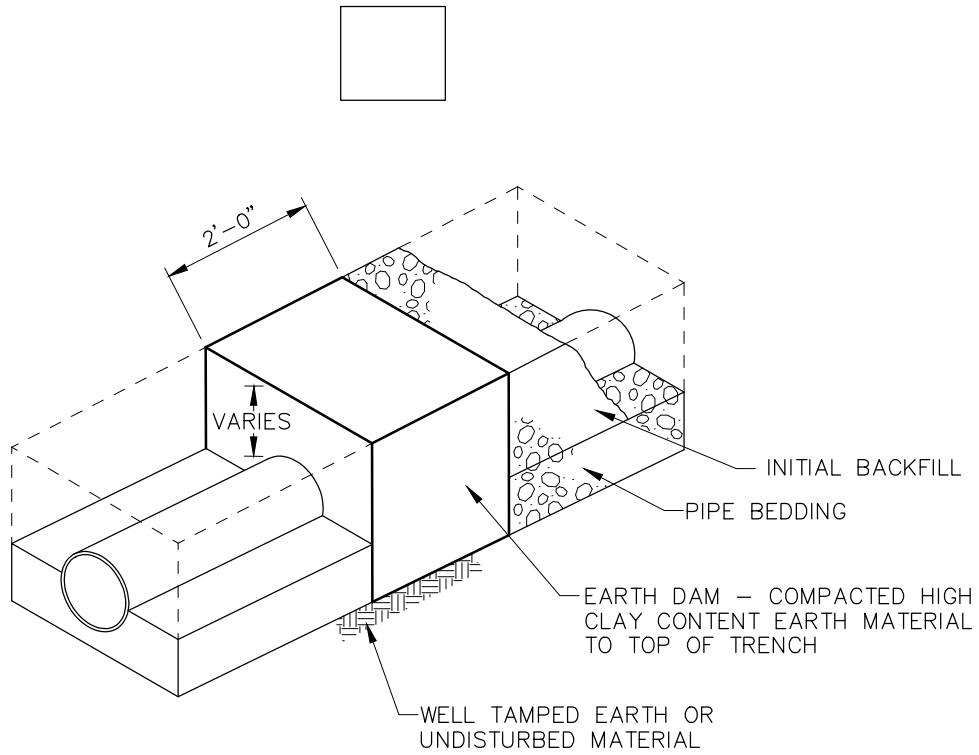
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PROJECT 001178.0532

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CLAY DIKE DETAIL NOT TO SCALE

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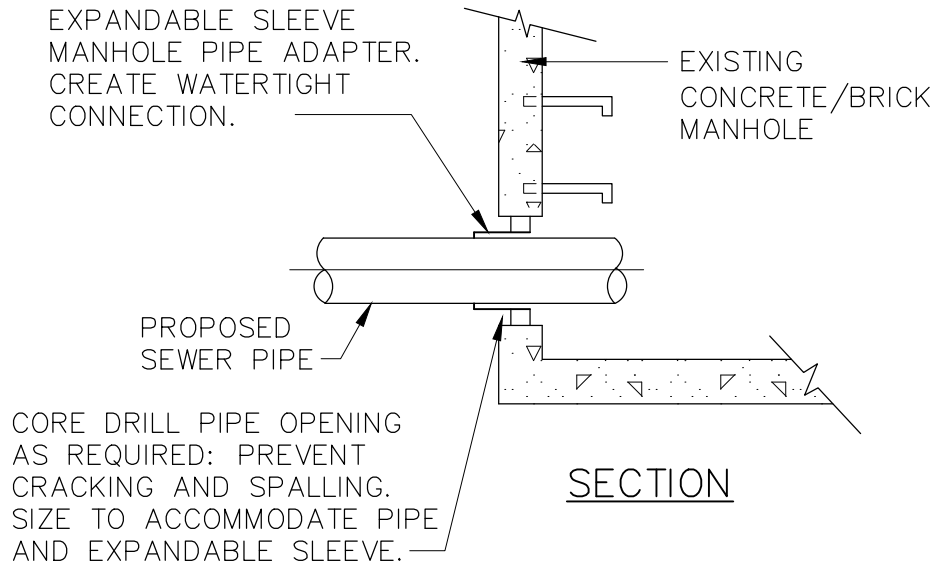
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NOTES:

1. KEEP GROUNDWATER, SURFACE WATER AND DEBRIS FROM ENTERING EXISTING FACILITIES.
2. MAINTAIN EXISTING FLOW DURING CONSTRUCTION.
3. BREAKOUT EXISTING CONCRETE/BRICK BENCH AS REQUIRED AND FORM NEW CHANNEL WITH NON-SHRINK GROUT TO ALLOW FOR PROPER FLOW. SEE TYPICAL MANHOLE CHANNEL DETAIL.
4. PREFABRICATED MANHOLE ADAPTER WITH SMOOTH EXTERNAL OR CORRUGATED PIPE ADAPTER SHALL BE UTILIZED WITH POLYPROPYLENE PIPE.

CONNECTION TO EXISTING MANHOLE DETAIL

NOT TO SCALE



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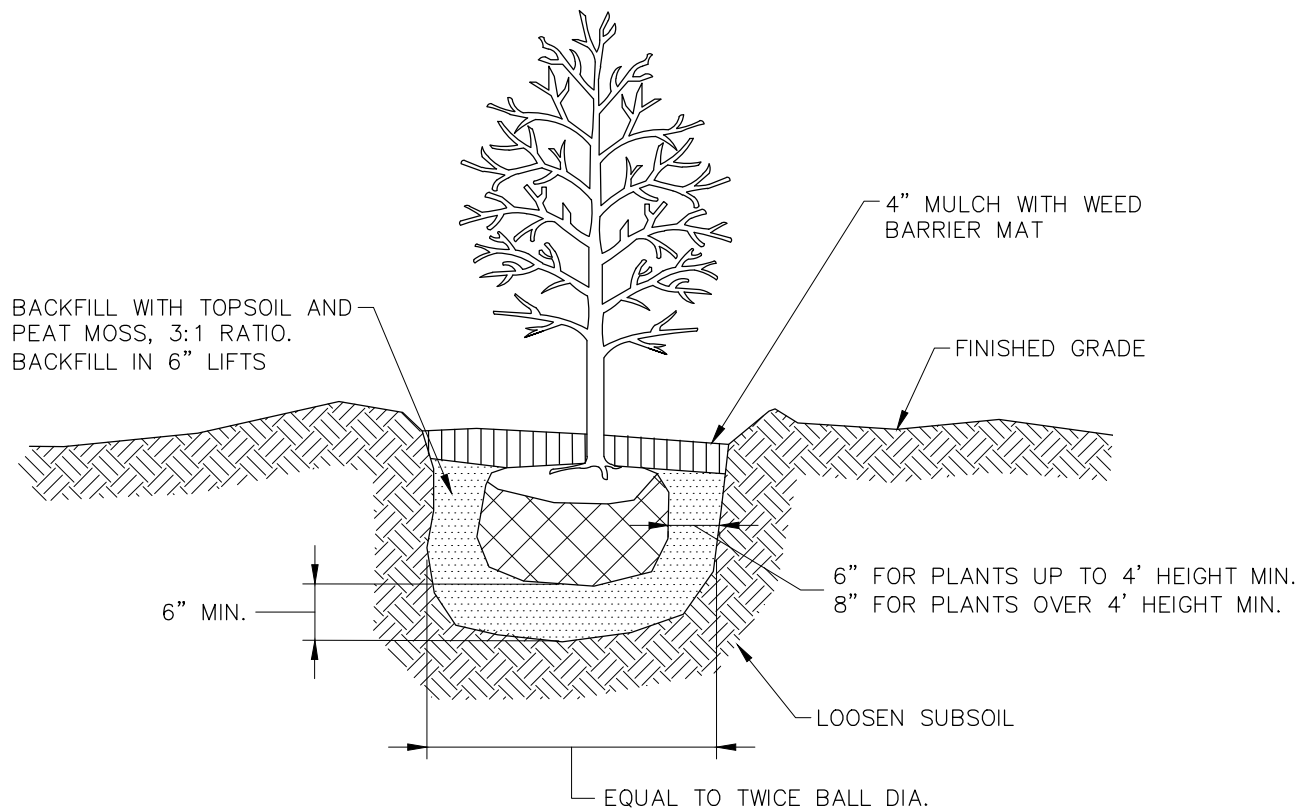
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SHRUB PLANTING DETAIL

NOT TO SCALE



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SANITARY SEWER STANDARD DETAIL FOR UNIVERSITY AREA JOINT AUTHORITY

CENTRE COUNTY

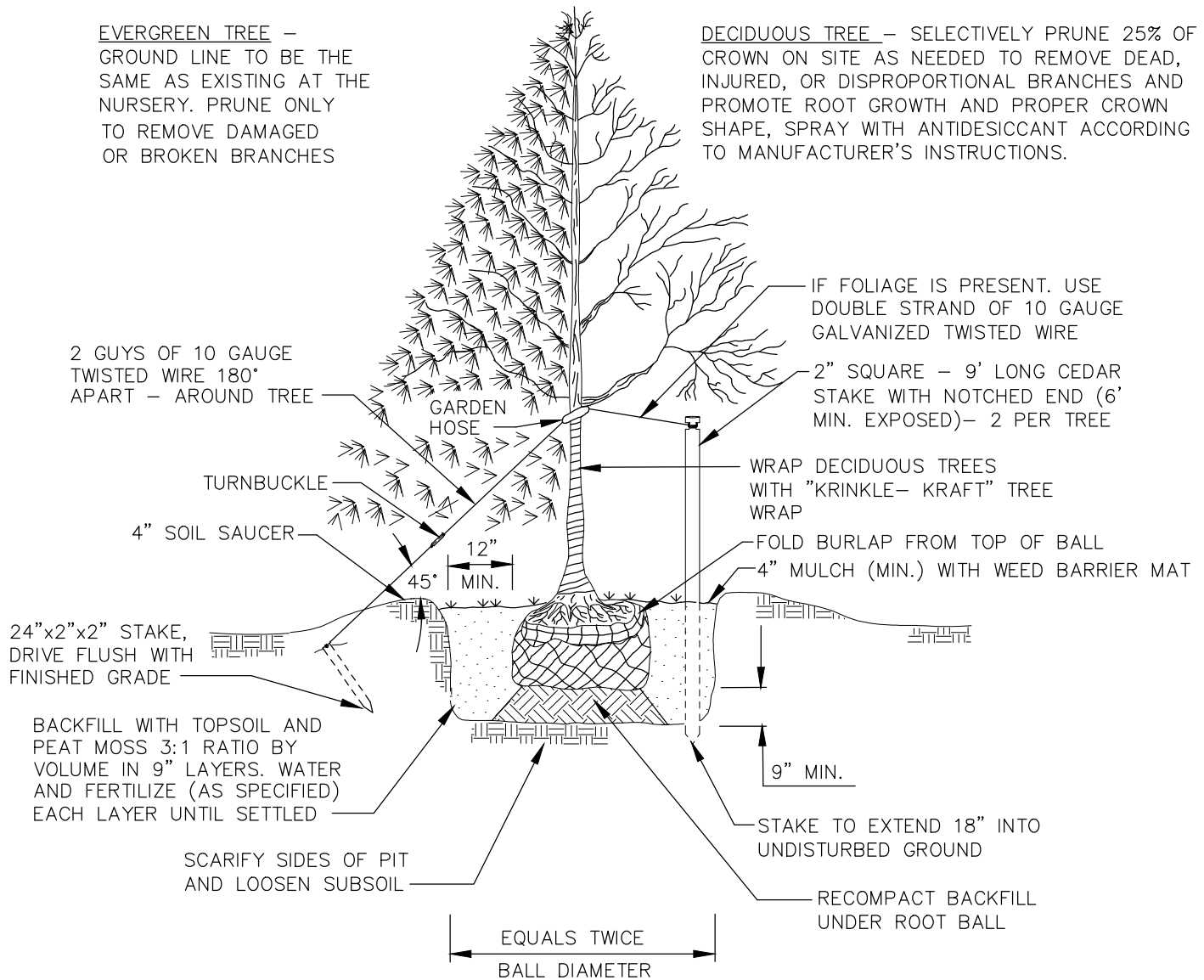
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14
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EVERGREEN TREE –
GROUND LINE TO BE THE
SAME AS EXISTING AT THE
NURSERY. PRUNE ONLY
TO REMOVE DAMAGED
OR BROKEN BRANCHES

DECIDUOUS TREE – SELECTIVELY PRUNE 25% OF
CROWN ON SITE AS NEEDED TO REMOVE DEAD,
INJURED, OR DISPROPORTIONAL BRANCHES AND
PROMOTE ROOT GROWTH AND PROPER CROWN
SHAPE, SPRAY WITH ANTIDESICCANT ACCORDING
TO MANUFACTURER'S INSTRUCTIONS.



NOTES:

1. STAKE ALL EVERGREEN TREES UNDER 12'.
2. GUY TREES 12' AND OVER AS SPECIFIED FOR DECIDUOUS TREES.
3. TREE SHALL BEAR SAME RELATION TO FINISHED GRADE AS IT BORE TO PREVIOUS GRADE.
4. NEVER CUT LEADERS.
5. IN PAVED AREAS – STONE SAUCER IN A SQUARE.
6. IN GRASS AREAS – MUCH SAUCER IN A CIRCLE.
7. AFTER PLANTING – THE SAUCER SHOULD BE FLOODED WITH WATER TWICE IN THE FIRST 4 HOURS.

TREE PLANTING AND GUYING DETAIL

NOT TO SCALE



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CENTRE COUNTY

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15
SHEET NO.
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