



US HIGHWAY



INTERSTATE HIGHWAY



STATE ROUTES



TOWNSHIP ROADS



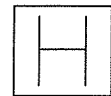
SITE DIRECTION



TOWNSHIP BUILDING



AIRPORT



HOSPITAL



STATE PARK



FORESTS



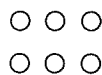
MOUNTAINS



RECYCLING CENTER



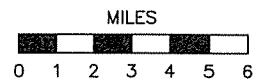
WATER WELL



SEPTIC DRAINFIELD/
SYSTEM



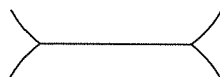
PERC TEST HOLE/
PIT



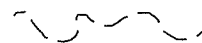
SCALE



OPEN GAS, OIL,
WATER WELL



CULVERT



STREAM



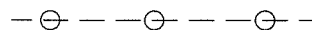
PROPERTY LINE
MONUMENT/PIN



SETBACK LINE



UTILITY LINES
ABOVE GROUND



UTILITY LINES
BURIED



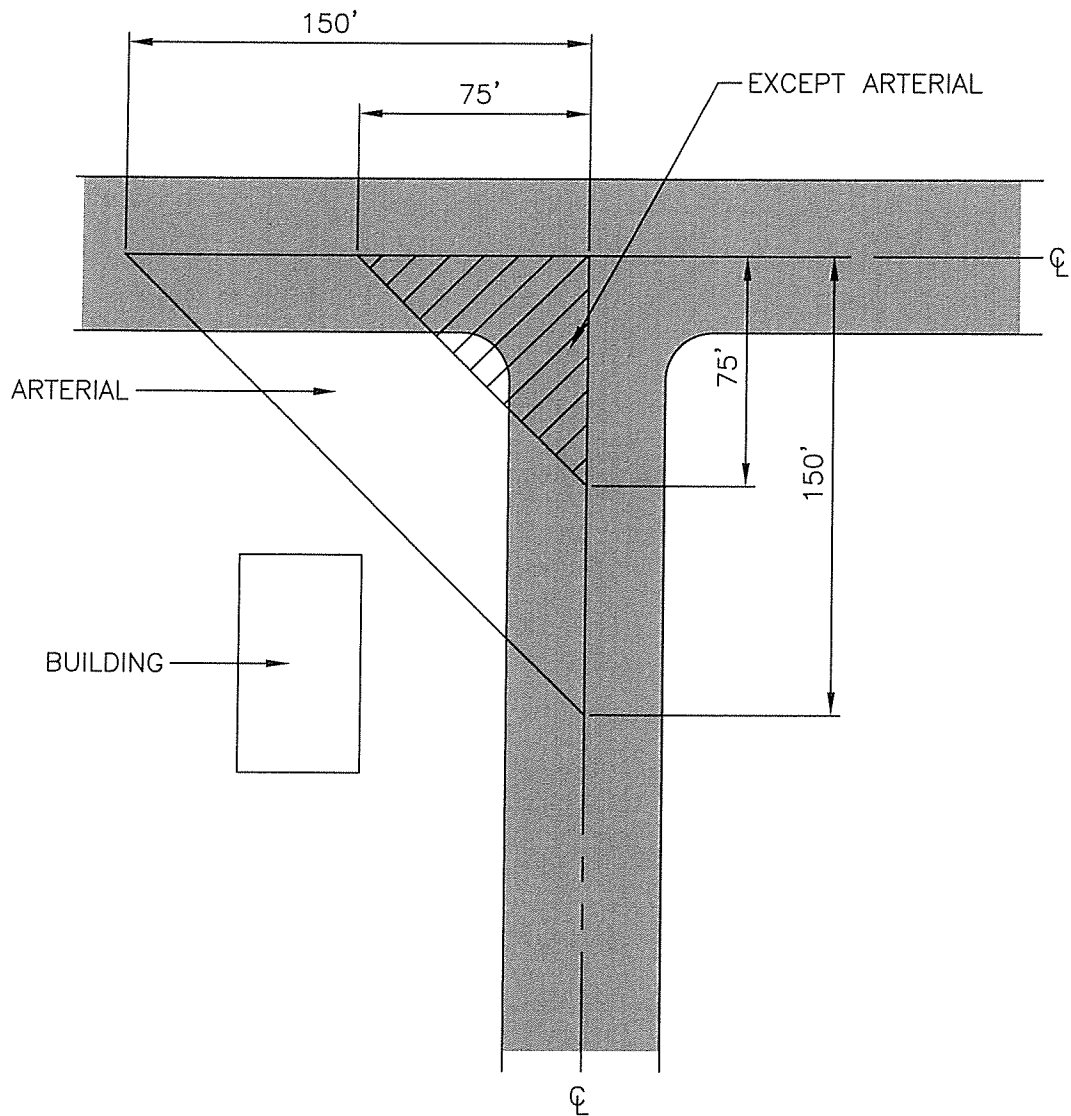
PROPERTY LINE

NEW SEWICKLEY TOWNSHIP SITE SYMBOLS STANDARD DETAIL 1



OLSEN & ASSOCIATES, LLC

PROJECT NO. 200799B

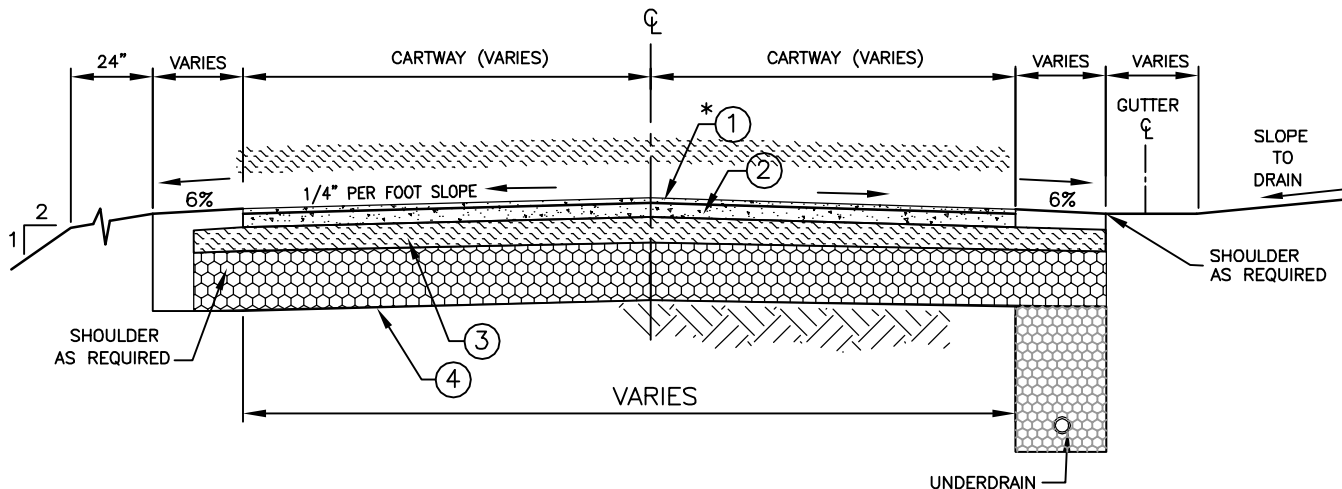


NEW SEWICKLEY TOWNSHIP
 CLEAR SIGHT TRIANGLE
 STANDARD DETAIL 2



OLSEN & ASSOCIATES, LLC

PROJECT NO. 200799B



NO.	TYPE	COURSE	
* ①	FINAL WEARING	BITUMINOUS SUPERPAVE WEARING COURSE OF FB-1 MATERIALS IN ACCORDANCE WITH PADOT FORM 408, LATEST EDITION, SECTION 409	0.5"
②	WEARING	BITUMINOUS SUPERPAVE 9.5 MM HMA WEARING COURSE, IN ACCORDANCE WITH PADOT FORM 408, LATEST EDITION, SECTION 409	1.5"
** ③	BASE	BITUMINOUS SUPERPAVE 25 MM HMA BASE COURSE IN ACCORDANCE WITH PADOT FORM 408, LATEST EDITION, SECTION 409	4.5"
** ④	SUBBASE	COARSE AGGREGATE IN ACCORDANCE WITH PADOT FORM 408, LATEST EDITION, SECTION 409	8"

* FINAL WEARING COURSE SHALL NOT BE INSTALLED UNTIL 75% OF THE LOTS ARE DEVELOPED OR WITHIN 2 YEARS OF THE DATE OF ISSUANCE OF FIRST PLAN BUILDING PERMIT. WEARING COURSE SHALL BE APPROVED EQUAL BY THE TOWNSHIP ENGINEER IF FINAL WEARING COURSE IS NOT PLACED PRIOR TO END OF THE THE FIRST PAVING SEASON.

** THE SUBBASE AND THE BASE SHALL BE AT LEAST 12" WIDER THAN THE WEARING COURSES.

GENERAL NOTES:

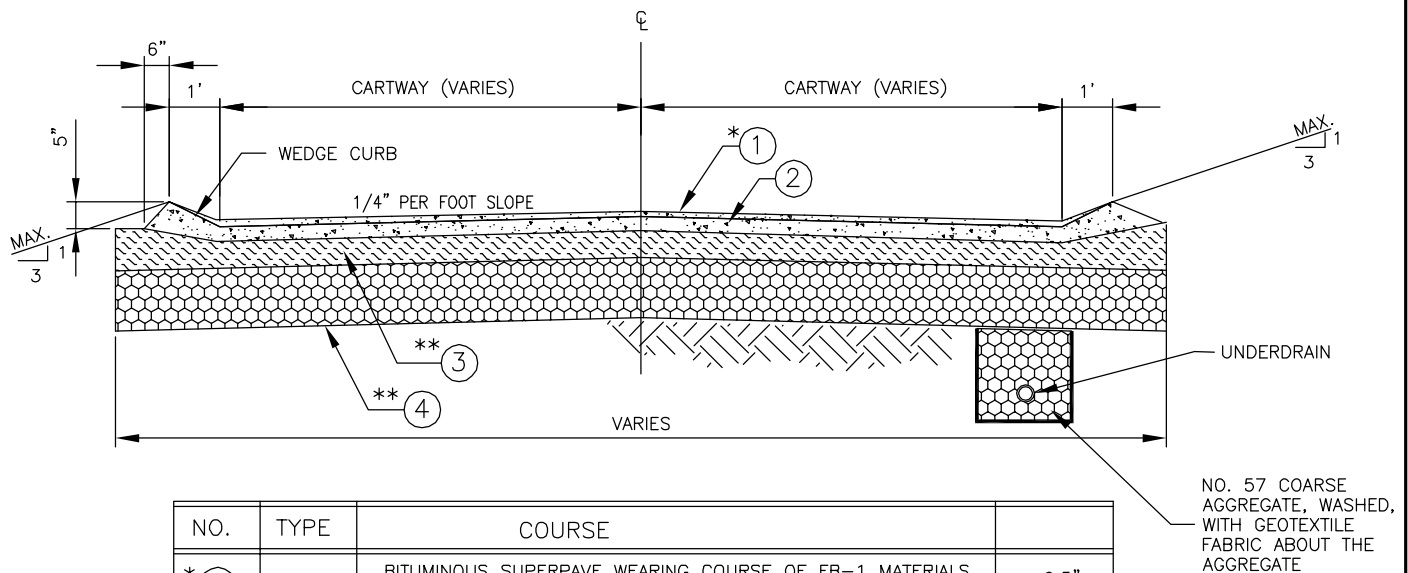
1. MATERIALS AND CONSTRUCTION IN ACCORDANCE WITH PADOT FORM 408, LATEST EDITION, SECTION 409.
2. IF NECESSARY ALL UNEVEN AREAS, SETTLED AREAS, AREAS DAMAGED BY UTILITY COMPANIES AND OTHER BROKEN OR UNEVEN AREAS SHALL BE REPAIRED TO MATCH ORIGINAL ROAD CONSTRUCTION MATERIALS/THICKNESSES.
3. PAVEMENT WIDTH IN ACCORDANCE WITH THE SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.
4. DETAIL AND TABLE DOES NOT APPLY TO PRIVATE STREETS.
5. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT THE PROPER MATERIAL IS PROVIDED BY SUPPLYING A COPY OF AN APPROVED PADOT BITUMINOUS ASPHALT MIX DESIGN A MINIMUM OF 5 WORKING DAYS PRIOR TO THE START OF THE WORK OR AT THE PRE-CONSTRUCTION MEETING. THE CONTRACTOR WILL ALSO SUPPLY THE MUNICIPALITY WITH A DAILY BITUMINOUS MATERIAL CERTIFICATION ON A TR-465 OR CS-4171 WITHIN 24 HOURS OF PLACING THE BITUMINOUS MATERIAL FOR EACH DAY'S PLACEMENT.
6. UNSUITABLE MATERIALS SHALL BE REMOVED AND REPLACED WITH COARSE AGGREGATE MATERIAL AS APPROVED BY THE TOWNSHIP ENGINEER.
7. UNDERDRAINS SHALL BE INSTALLED, AS A MINIMUM, ON THE HIGH SIDE OF THE ROAD CROSS SECTION

NEW SEWICKLEY TOWNSHIP ROAD SECTION WITHOUT CURBING STANDARD DETAIL 3



OLSEN & ASSOCIATES, LLC

PROJECT NO. 200799B



NO.	TYPE	COURSE	
* ①	FINAL WEARING	BITUMINOUS SUPERPAVE WEARING COURSE OF FB-1 MATERIALS IN ACCORDANCE WITH PADOT FORM 408, LATEST EDITION, SECTION 409	0.5"
②	WEARING	BITUMINOUS SUPERPAVE 9.5 MM HMA WEARING COURSE, IN ACCORDANCE WITH PADOT FORM 408, LATEST EDITION, SECTION 409	1.5"
** ③	BASE	BITUMINOUS SUPERPAVE 25 MM HMA BASE COURSE IN ACCORDANCE WITH PADOT FORM 408, LATEST EDITION, SECTION 409	4.5"
** ④	SUBBASE	COARSE AGGREGATE IN ACCORDANCE WITH PADOT FORM 408, LATEST EDITION, SECTION 409	8"

* FINAL WEARING COURSE SHALL NOT BE INSTALLED UNTIL 75% OF THE LOTS ARE DEVELOPED OR WITHIN 2 YEARS OF THE DATE OF ISSUANCE OF FIRST PLAN BUILDING PERMIT. WEARING COURSE SHALL BE APPROVED EQUAL BY THE TOWNSHIP ENGINEER IF FINAL WEARING COURSE IS NOT PLACED PRIOR TO END OF THE THE FIRST PAVING SEASON.

** THE SUBBASE AND THE BASE SHALL BE AT LEAST 12" WIDER THAN THE WEARING COURSES.

GENERAL NOTES:

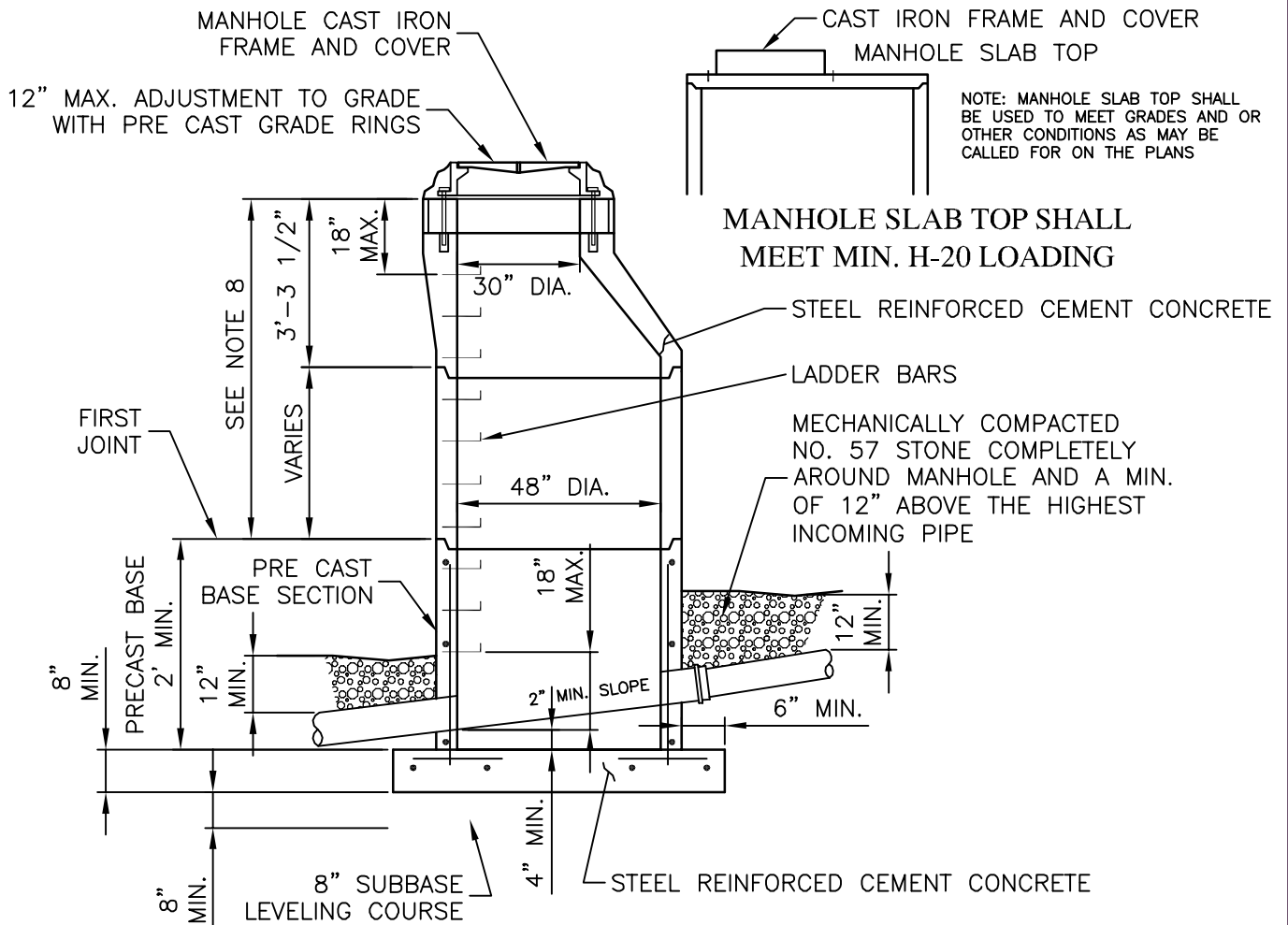
1. MATERIALS AND CONSTRUCTION IN ACCORDANCE IN ACCORDANCE WITH PADOT FORM 408, LATEST EDITION, SECTION 409.
2. IF NECESSARY ALL UNEVEN AREAS, SETTLED AREAS, AREAS DAMAGED BY UTILITY COMPANIES AND OTHER BROKEN OR UNEVEN AREAS SHALL BE REPAIRED TO MATCH ORIGINAL ROAD CONSTRUCTION MATERIALS/THICKNESSES.
3. PAVEMENT WIDTH IN ACCORDANCE WITH THE SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.
4. DETAIL AND TABLE DOES NOT APPLY TO PRIVATE STREETS.
5. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT THE PROPER MATERIAL IS PROVIDED BY SUPPLYING A COPY OF AN APPROVED PADOT BITUMINOUS ASPHALT MIX DESIGN A MINIMUM OF 5 WORKING DAYS PRIOR TO THE START OF THE WORK OR AT THE PRE-CONSTRUCTION MEETING. THE CONTRACTOR WILL ALSO SUPPLY THE MUNICIPALITY WITH A DAILY BITUMINOUS MATERIAL CERTIFICATION ON A A TR-465 OR CS-4171 WITHIN 24 HOURS OF PLACING THE BITUMINOUS MATERIAL FOR EACH DAY'S PLACEMENT.
6. UNSUITABLE MATERIALS SHALL BE REMOVED AND REPLACED WITH COARSE AGGREGATE MATERIAL AS APPROVED BY THE TOWNSHIP ENGINEER.
7. UNDERDRAINS SHALL BE INSTALLED, AS A MINIMUM, ON THE HIGH SIDE OF THE ROAD CROSS SECTION

NEW SEWICKLEY TOWNSHIP ROAD SECTION WITH CURBING STANDARD DETAIL 4

PROJECT NO. 200799B

GENERAL NOTES:

1. ALL CONCRETE SHALL BE CLASS AA CONCRETE, 4000 PSI MIN. 5% AIR ENTRAINED, MEETING PaDOT RC-39 AND PUBLICATION 408 SPECIFICATIONS.
2. MANHOLE BARREL JOINTS TO BE SEALED WITH NON-SHRINK GROUT OR WITH 1" DIA. FLEXIBLE BUTYL RUBBER JOINT SEALANT, USE 1/2" DIA. FOR FRAME AND COVER.
3. FRAME AND COVER TO BE ANCHORED WITH (2) 3/4" DIA. S.S. ANCHOR BOLTS SET 6 INCHES INTO CONCRETE.
4. LIFTING HOLES TO BE POINTED WITH NON-SHRINK GROUT, AND LEFT WATERTIGHT, NEAT AND SMOOTH.
5. MAXIMUM ADJUSTMENT TO FINISHED GRADE USING PRE CAST GRADE RINGS SHALL NOT EXCEED TWELVE INCHES (12").
6. PRE CAST SECTIONS SHALL CONFORM TO ASTM C-478 AS REVISED.
7. MANHOLE INVERT SHALL BE CONCRETE TO THE SPRING LINE OF PIPE WITH SIDES SLOPING 1" PER 1'-0" TO INSIDE FACE OF PRE CAST BASE SECTION.
8. IF THIS DIMENSION IS LESS THAN 3'-3" USE PRE CAST SLAB TOP DESIGNED TO MEET LOAD CONDITIONS.
9. FOR PIPES OF 30" I.D. OR GREATER, PROVIDE "MODIFIED" MANHOLE PER PaDOT RC-39.



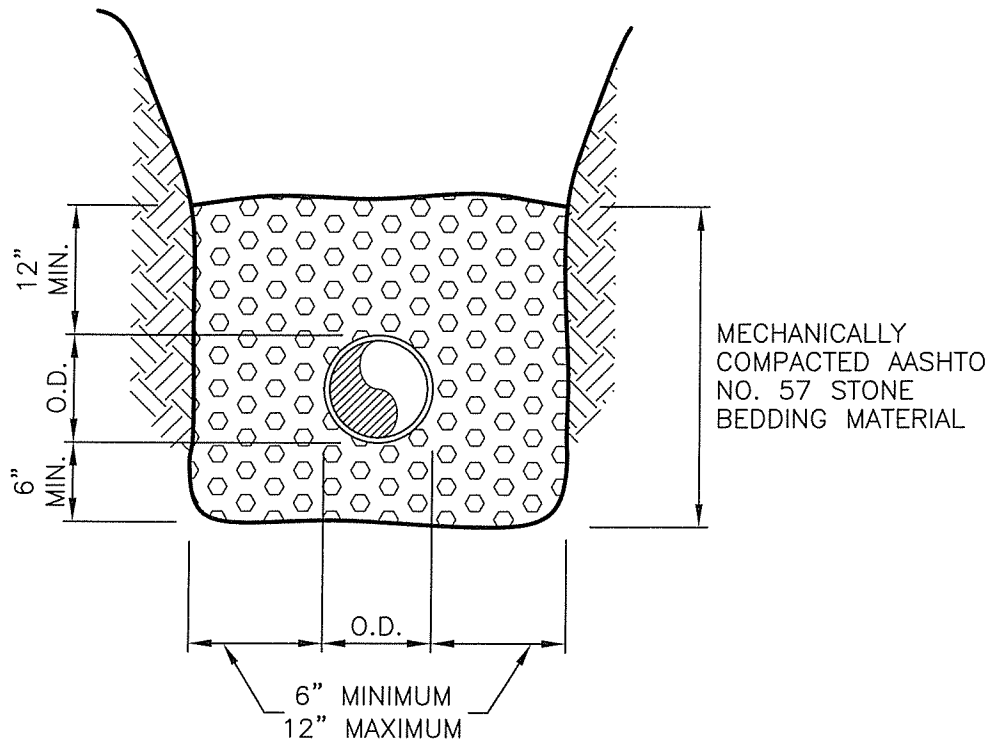
PRECAST CONCRETE MANHOLE WITH
MONOLITHICALLY POURED BASE SECTION

NEW SEWICKLEY TOWNSHIP PRECAST CONCRETE STORM MANHOLE (UP TO 18') STANDARD DETAIL 7



OLSEN & ASSOCIATES, LLC

PROJECT NO. 200799B



**TYPICAL BEDDING AND PIPE ZONE
POLYETHYLENE PIPE**

GENERAL NOTES:

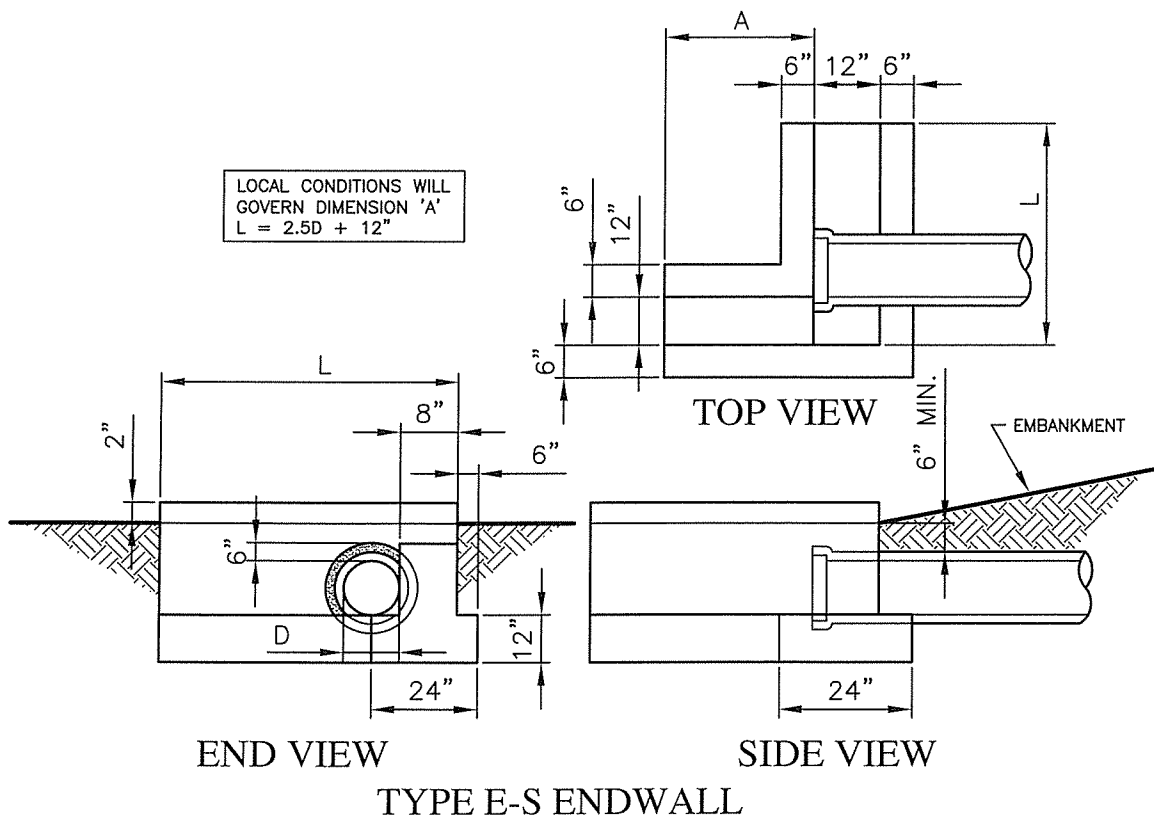
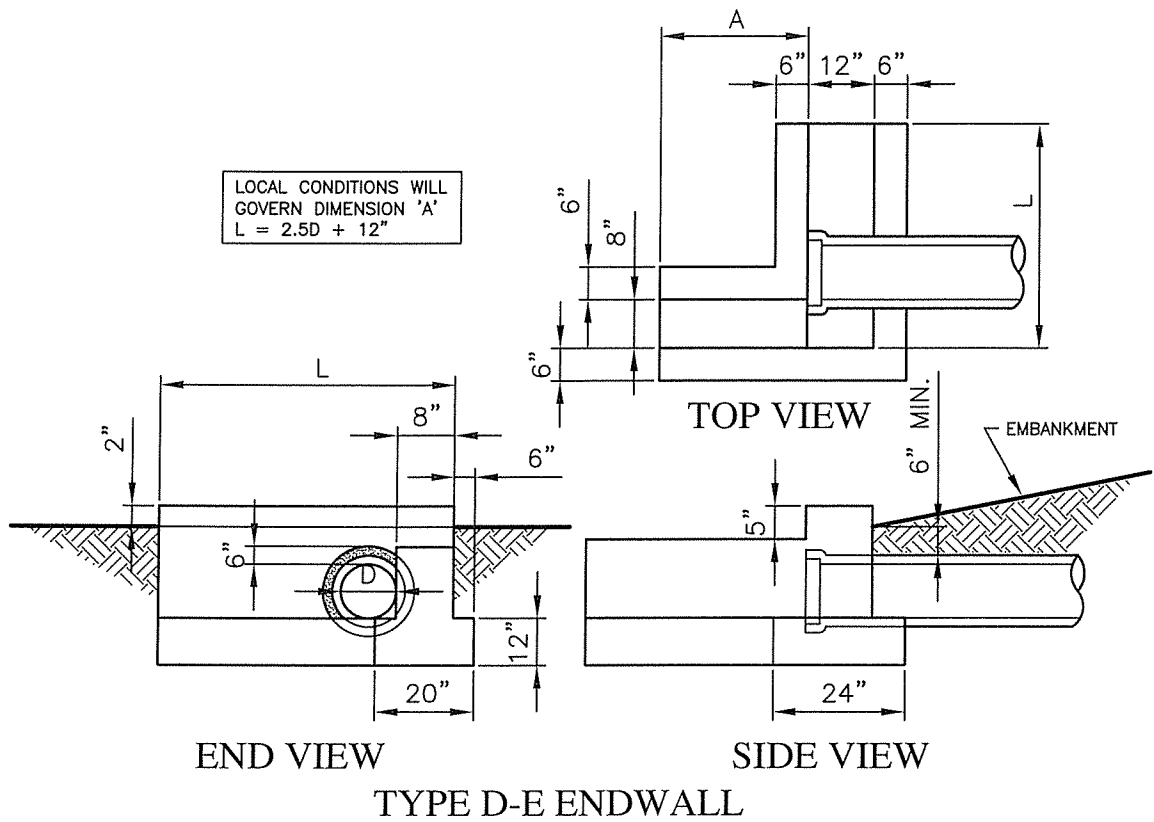
1. POLYETHYLENE PIPE SPECIFICATIONS.
2. PIPE AND FITTINGS SHALL BE MADE OF POLYETHYLENE COMPOUNDS WHICH MEET OR EXCEED THE REQUIREMENTS OF TYPE III, CATEGORY 4 OR 5, GRADE P33 OR P34, CLASS C PER ASTM D-1248 WITH THE APPLICABLE REQUIREMENTS DEFINED IN ASTM D-1248.
3. MIN. COVER IS TO BE 2 FT. WITH AASHTO NO. 57 STONE A MIN. OF 12" ABOVE THE TOP OF PIPE. IF THE PIPE IS TO BE LAID UNDER DRIVEWAYS OR PARKING AREAS WITH MINIMUM COVER, THE 2 FEET SHALL BE NO. 57 STONE. MAXIMUM COVER OVER THE PIPE IS NOT TO EXCEED 30 FEET.
4. MANNING'S 'N' FOR DESIGN SHALL BE 0.012 FOR SMOOTH INTERIOR, AND SHALL BE 0.018 FOR SIZES UP TO AND INCLUDING 15", AND 0.020 FOR SIZES FROM 18" UP TO AND INCLUDING 36" FOR CORRUGATED INTERIOR.
5. POLYETHYLENE PIPE SHALL BE IN ACCORDANCE WITH PaDOT FORM 408, SECTION 601.

**NEW SEWICKLEY TOWNSHIP
POLYETHYLENE PIPE SPECIFICATIONS
STANDARD DETAIL 8**



OLSEN & ASSOCIATES, LLC

PROJECT NO. 200799B

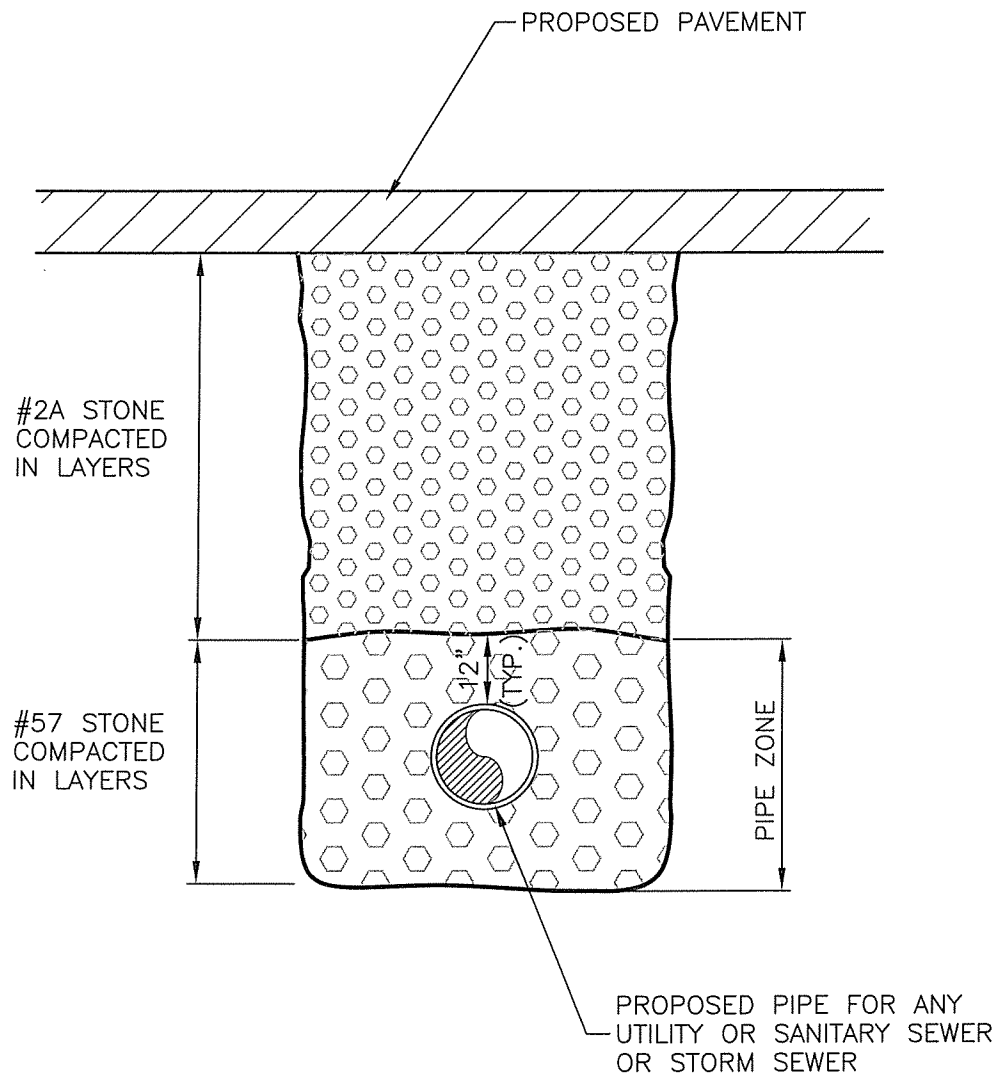


NEW SEWICKLEY TOWNSHIP HEADWALLS AND ENDWALLS STANDARD DETAIL 9



OLSEN & ASSOCIATES, LLC

PROJECT NO. 200799B

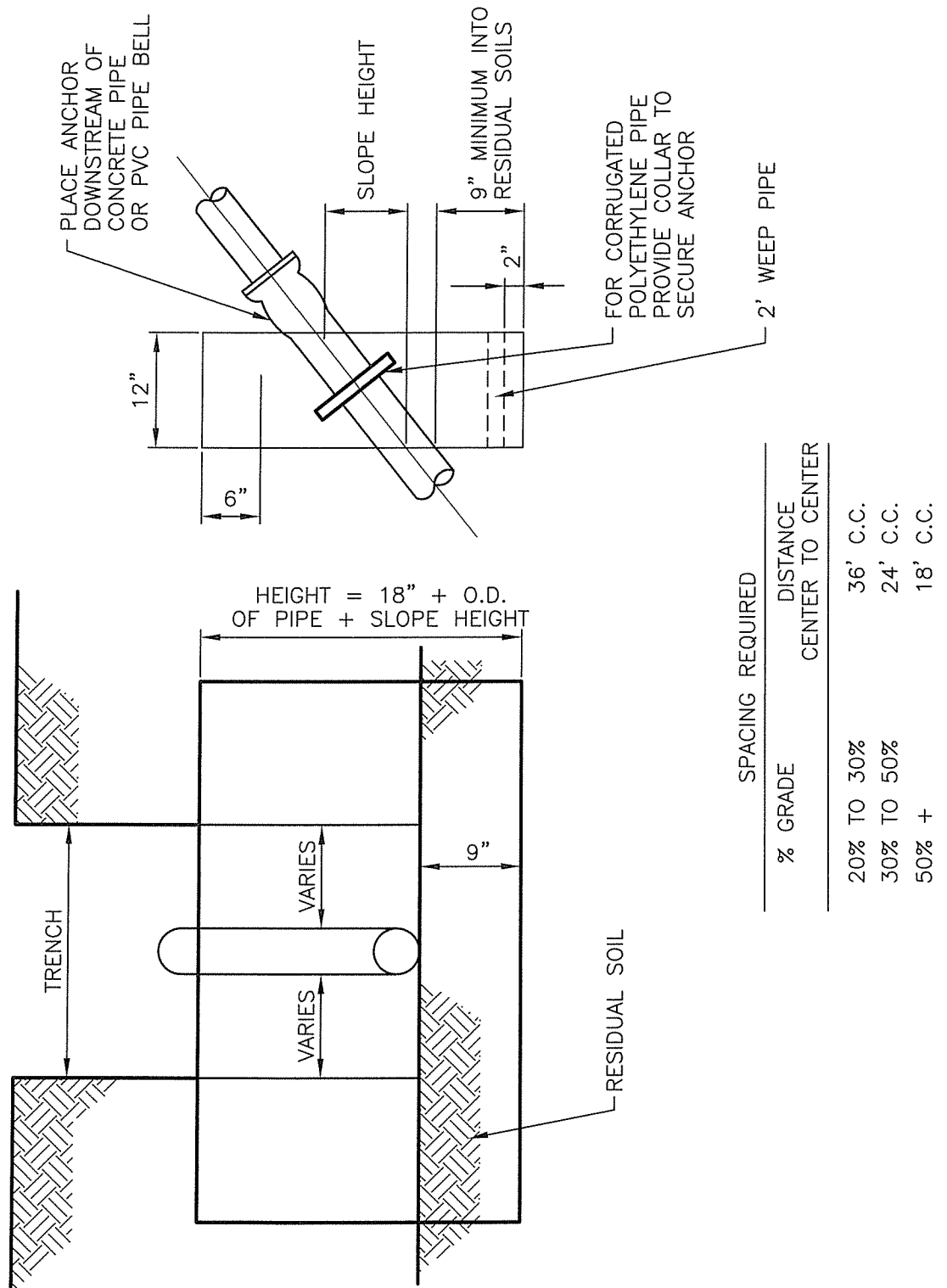


NEW SEWICKLEY TOWNSHIP
TRENCH BACKFILL
STANDARD DETAIL 10



OLSEN & ASSOCIATES, LLC

PROJECT NO. 200799B



NEW SEWICKLEY TOWNSHIP PIPE ANCHOR STANDARD DETAIL 12

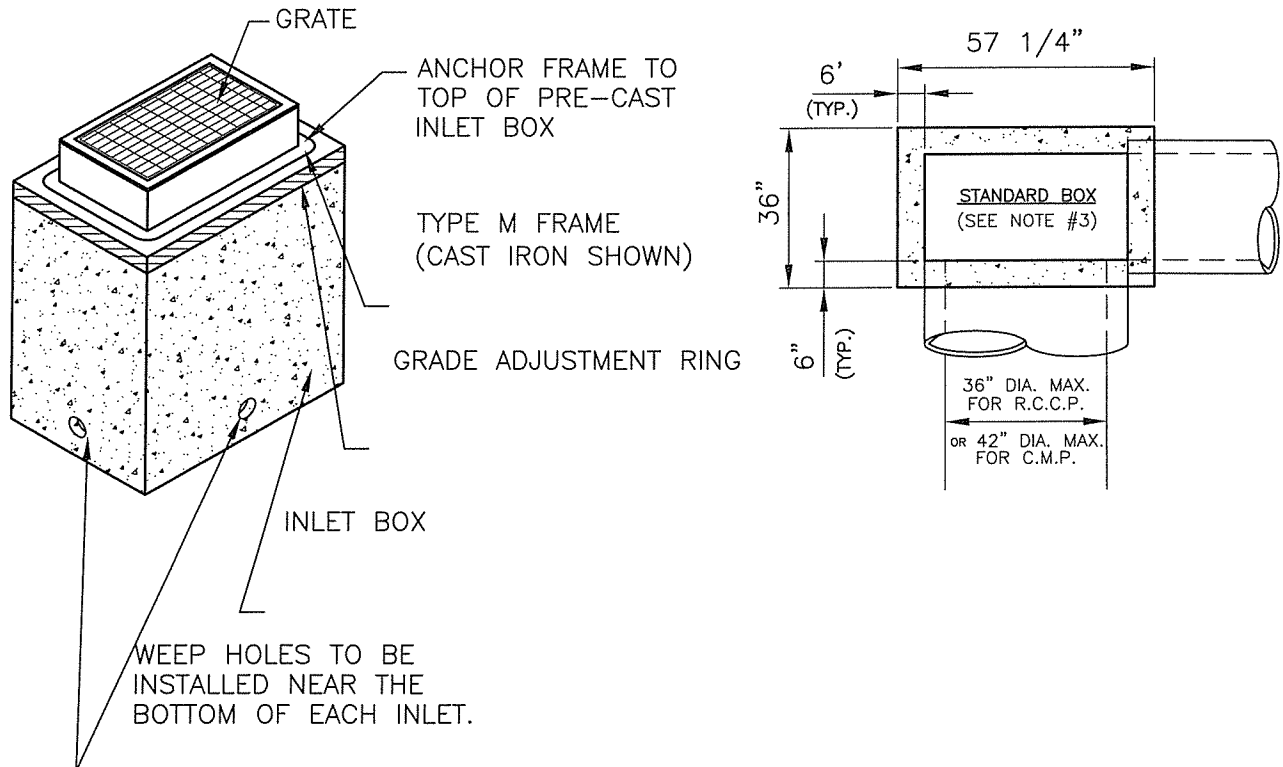


OLSEN & ASSOCIATES, LLC

PROJECT NO. 200799B

GENERAL NOTES:

1. CONSTRUCT INLET BOXES IN ACCORDANCE WITH THE REQUIREMENTS OF PUBLICATION 408, SECTION 713.2(d), FOR PRECAST CEMENT CONCRETE UNITS.
2. ONLY PRECAST INLET BOXES SUPPLIED BY A MANUFACTURER LISTED IN BULLETIN 15 SHALL BE PERMITTED.
3. PROVIDE STANDARD INLET BOXES AND COVER ADJUSTMENT SLABS WITH A 24" X 45 1/4" OPENING TO ACCOMMODATE STANDARD TOP COMPONENTS.
4. INLETS THAT EXCEED THE MAXIMUM HEIGHT SHOWN SHALL REQUIRE A SPECIAL DETAIL AND DESIGN FOR THE INLET WALLS AND BASE. CONSTRUCT INLETS THAT EXCEED 4 FEET IN HEIGHT WITH STEPS SIMILAR TO MANHOLES.
5. LOCATE PIPE OR PIPES, AS INDICATED, WITH THE INLET BOTTOM SHAPED TO CHANNEL THE FLOW TOWARD THE OUTLET PIPE.
6. PLACE SUBBASE MATERIAL MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTION 350.2, IN 4 INCH LAYERS, COMPACTED TO A 95% MODIFIED PROCTOR STANDARD DENSITY.
7. FOR PIPE DIAMETERS LARGER THAN 36" IN THIS WALL FOR A TYPE 1, USE A MODIFIED TYPE I INLET BOX.
8. FOR PIPE DIAMETERS LARGER THAN 48" R.C.C.P. OR 54" C.M.P. IN THIS WALL FOR A TYPE 2, USE A MODIFIED TYPE II INLET BOX.
9. FOR PIPE DIAMETERS LARGER THAN 48" R.C.C.P. OR 54" C.M.P. IN THE LONG DIRECTION OR LARGER THAN 36" IN THE SHORT DIRECTION, A SPECIAL DETAIL AND DESIGN IS REQUIRED.



NEW SEWICKLEY TOWNSHIP TYPE M INLET STANDARD DETAIL 13

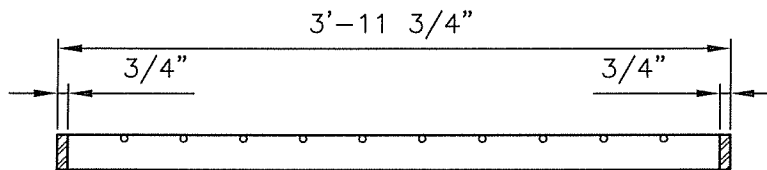


OLSEN & ASSOCIATES, LLC

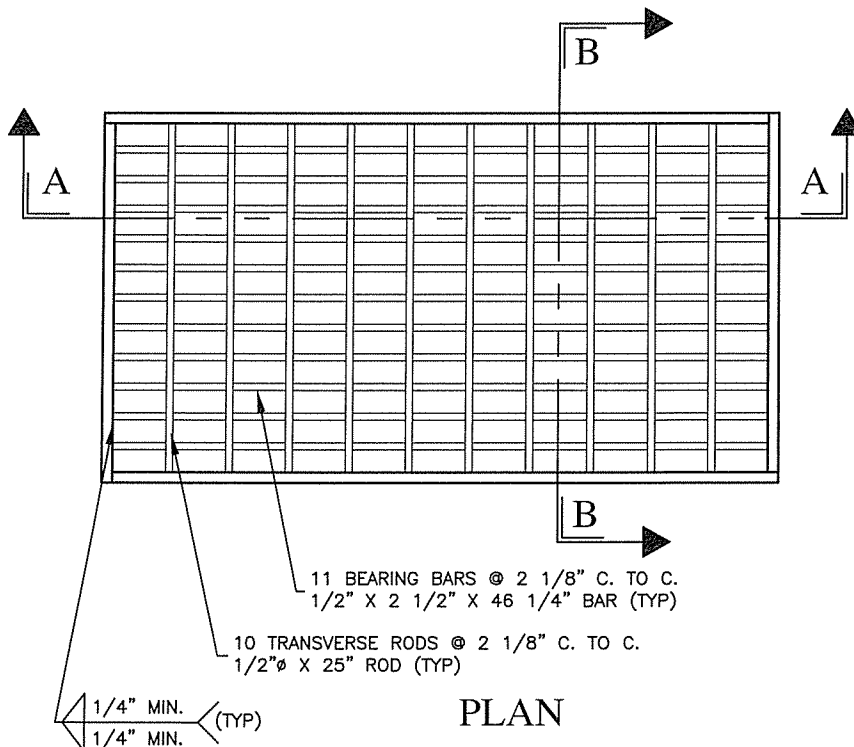
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GENERAL NOTES:

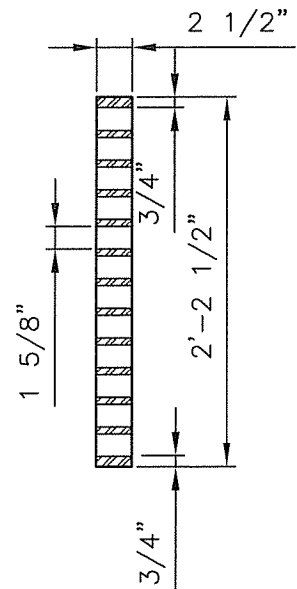
1. THIS SHEET DEPICTS THE DIMENSIONS REQUIRED FOR UNIFORMITY AND INTERCHANGEABILITY. IT DOES NOT INCLUDE DETAILS REQUIRED FOR FABRICATION OR MANUFACTURING. ONLY GRATES SUPPLIED BY A MANUFACTURER LISTED IN BULLETIN 15 SHALL BE PERMITTED. FOR A BULLETIN 15 LISTING, SUBMIT A 22" x 36" REPRODUCIBLE SHOP DRAWING TO THE BUREAU OF CONSTRUCTION AND MATERIALS, MATERIALS AND TESTING DIVISION FOR REVIEW AND APPROVAL.
2. WELD STRUCTURAL STEEL GRATES IN ACCORDANCE WITH THE REQUIREMENTS OF PUBLICATION 408 SECTION 1105.03(R). WELDING SHOPS ARE NOT REQUIRED TO BE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) CERTIFIED.
3. PROVIDE TRANSVERSE RODS, MEETING THE REQUIREMENTS OF AASHTO-M227 OR M255, GRADE 70, 75 OR 80, FLUSH WITH THE GRATE SURFACE.
4. PROVIDE BICYCLE-SAFE, STRUCTURAL STEEL OR CAST IRON VANE GRATES FOR INSTALLATION ONLY WHERE BICYCLE TRAFFIC IS ANTICIPATED SUCH AS CURBED ROADWAYS IN URBAN AREAS OR ROADWAYS SPECIFICALLY ESTABLISHED AND SIGNED AS BIKEWAYS OR HAVING BIKE LANES. ALTERNATE BICYCLE-SAFE GRATE DESIGNS SHALL REQUIRE A SHOP DRAWING SUBMISSION, AS SPECIFIED IN NOTE 1, AND SHALL CONFORM TO THE DIMENSIONAL REQUIREMENTS FOR PROPER INSTALLATION WITH THE CURRENT CONCRETE TOP UNITS.
5. FABRICATE SLOTS BY BURNING, DRILLING, SHEARING OR PUNCHING. HAVE THE BOTTOM OF ALL BURNED OR DRILLED SLOTS CONFORM TO THE SHAPE OF THE ROD.
6. INSTALL STRUCTURAL STEEL GRATES WITH THE GRATE SPACERS LOCATED FLUSH ALONG THE TOP SURFACE OF THE GRATE.



SECTION A-A



PLAN



SECTION B-B

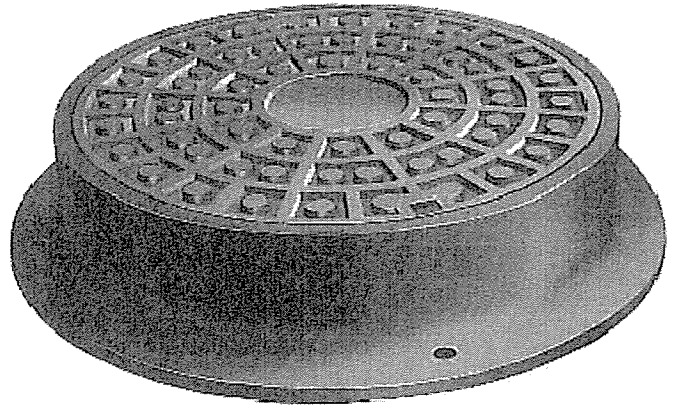
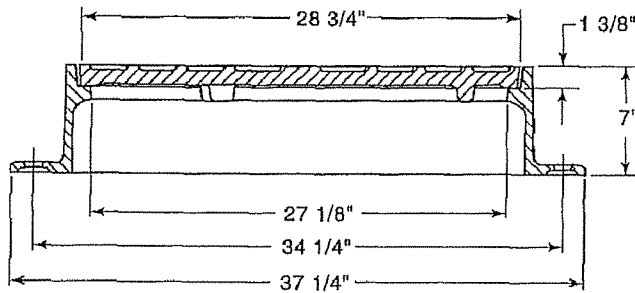
NEW SEWICKLEY TOWNSHIP STRUCTURAL STEEL GRATE BICYCLE SAFE STANDARD DETAIL 14



OLSEN & ASSOCIATES, LLC

PROJECT NO. 200799B

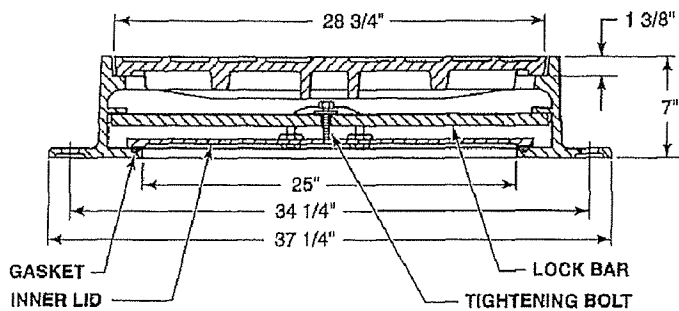
STORM MANHOLE COVER



Illustrating R-1753-A

NEENAH FOUNDRY COMPANY

WATER-TIGHT STORM MANHOLE COVER



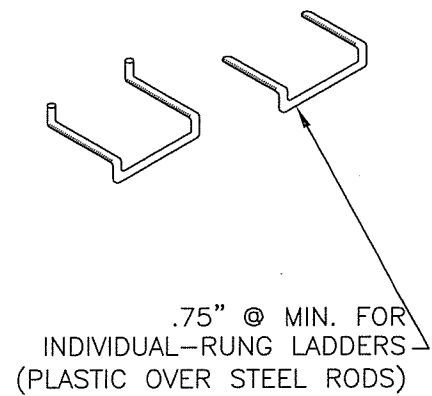
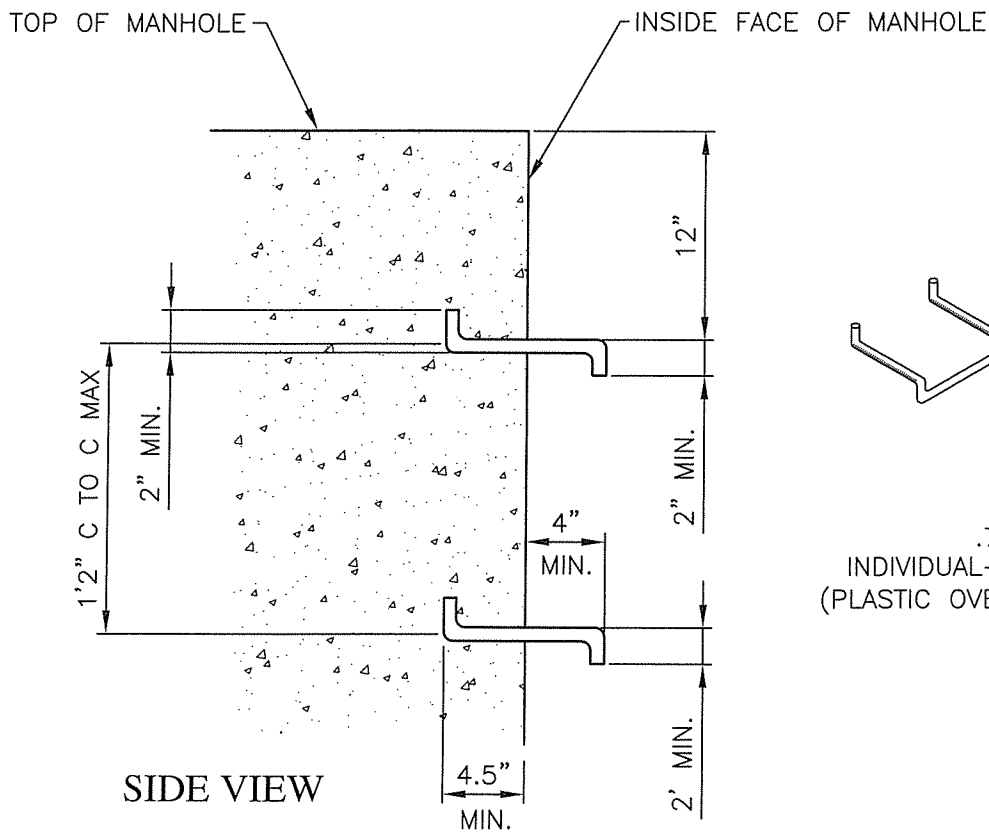
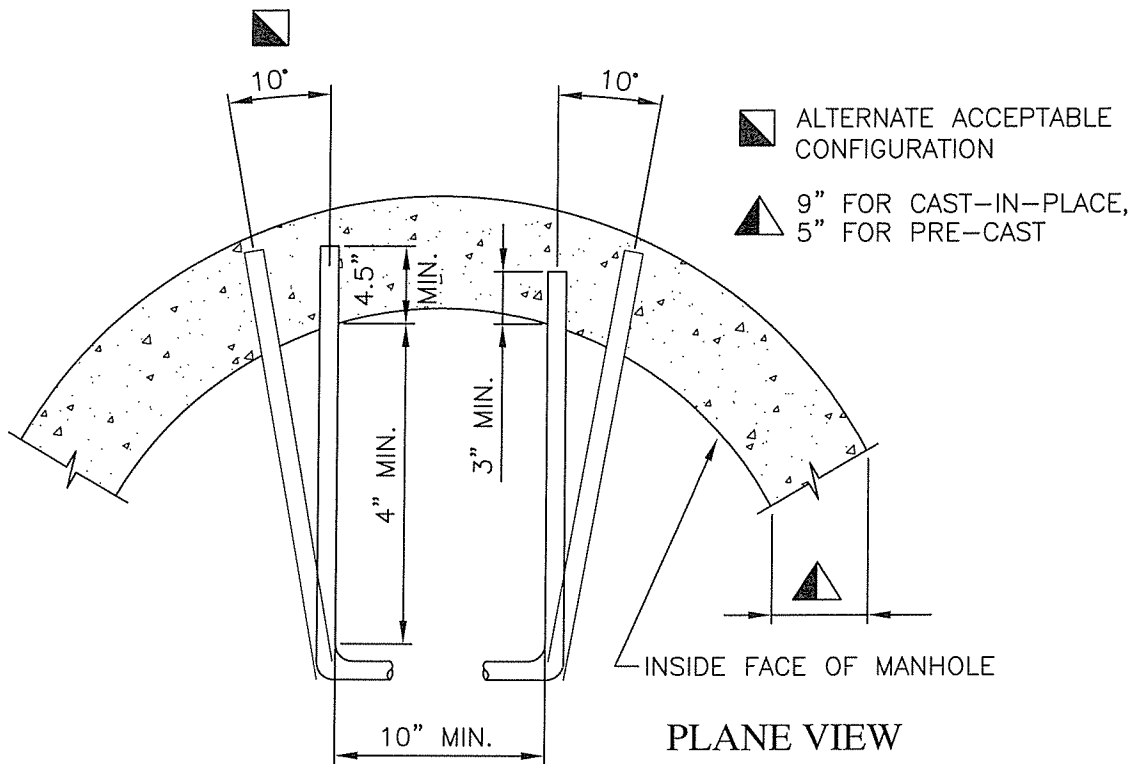
NEENAH FOUNDRY COMPANY

NEW SEWICKLEY TOWNSHIP STORM MANHOLE COVERS STANDARD DETAIL 15

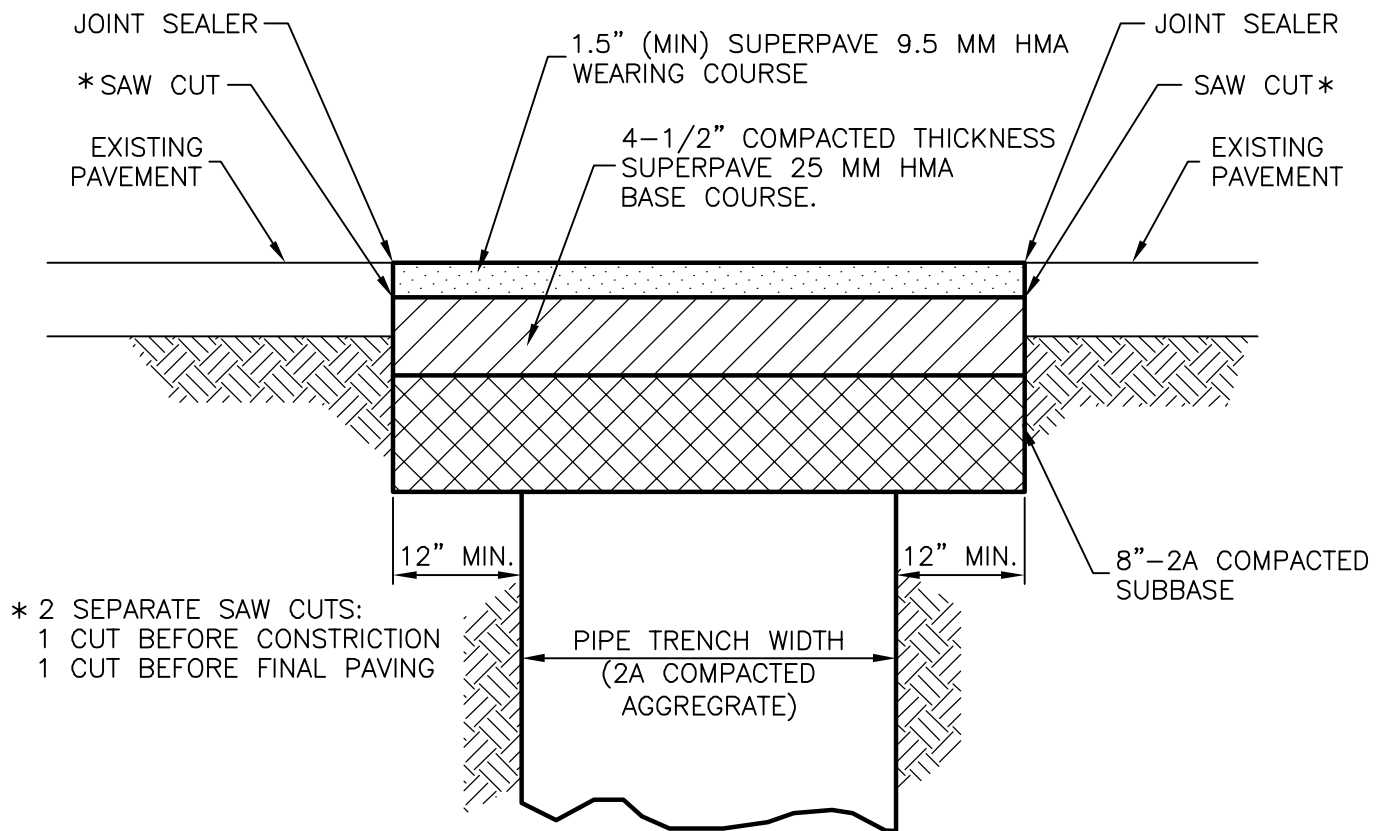


OLSEN & ASSOCIATES, LLC

PROJECT NO. 200799B



NEW SEWICKLEY TOWNSHIP MANHOLE LADDER BARS STANDARD DETAIL 16



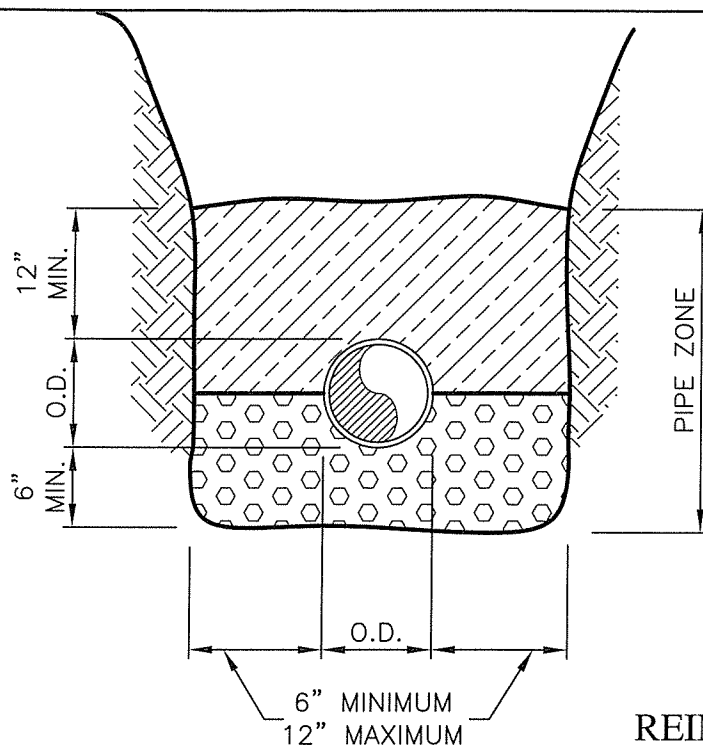
GENERAL NOTES:

1. DURING COLD WEATHER MONTHS PROVIDE AND MAINTAIN A TEMPORARY BITUMINOUS COLD PATCH SURFACE UNTIL WEATHER PERMITS HOT ASPHALT PAVING.
2. THE TOWNSHIP MUST BE NOTIFIED 48 HOURS IN ADVANCE OF ROAD OPENING AND SURFACING.
3. SUBBASE COURSE SHALL BE AS THICK AS EXISTING OR 8"-2A COMPACTED SUBBASE, (AFTER COMPACTION) WHICH EVER IS GREATER.
4. SUPERPAVE BASE COURSE SHALL BE AS THICK AS EXISTING OR 4-1/2" MINIMUM, (AFTER COMPACTION) WHICH EVER IS GREATER.
5. SUPERPAVE WEARING COURSE SHALL BE AS THICK AS EXISTING OR 1.5" MINIMUM, (AFTER COMPACTION) WHICH EVER IS GREATER.

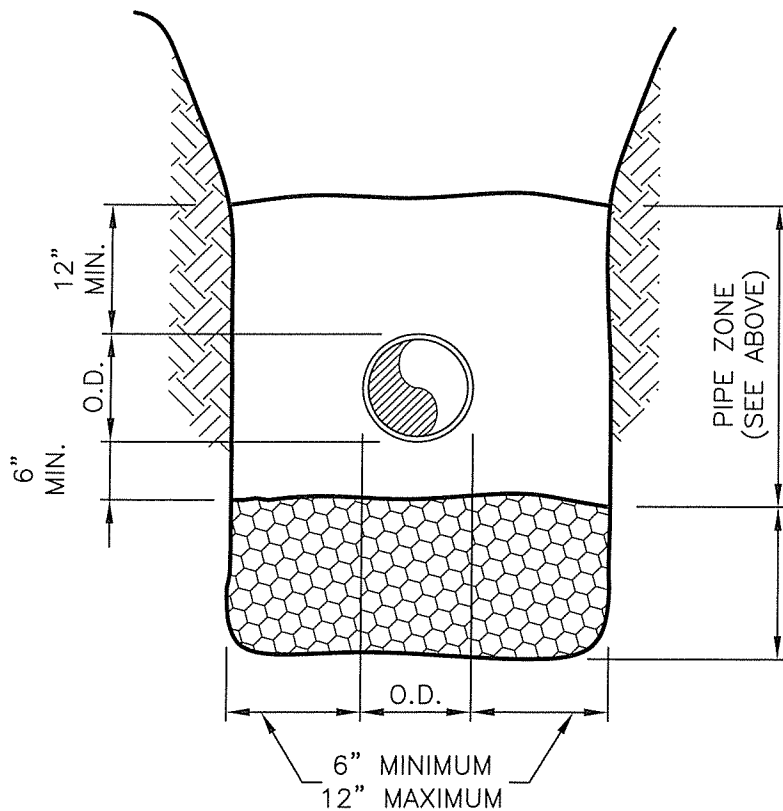
NEW SEWICKLEY TOWNSHIP ASPHALT PAVEMENT REPLACEMENT STANDARD DETAIL 17



OLSEN & ASSOCIATES, LLC
PROJECT NO. 200799B



**TYPICAL BEDDING
AND PIPE ZONE
REINFORCED CONCRETE PIPE**



GENERAL NOTE:
SPECIAL BEDDING MAY BE
REQUIRED BY THE TOWNSHIP
ENGINEER IF FIELD CONDITIONS OR
LOADS WARRANT THE ADDITIONAL
BEDDING

O.D. + 24" SPECIAL BEDDING
AASHTO NO. 1 OR AS APPROVED
BY TWP. ENGINEER

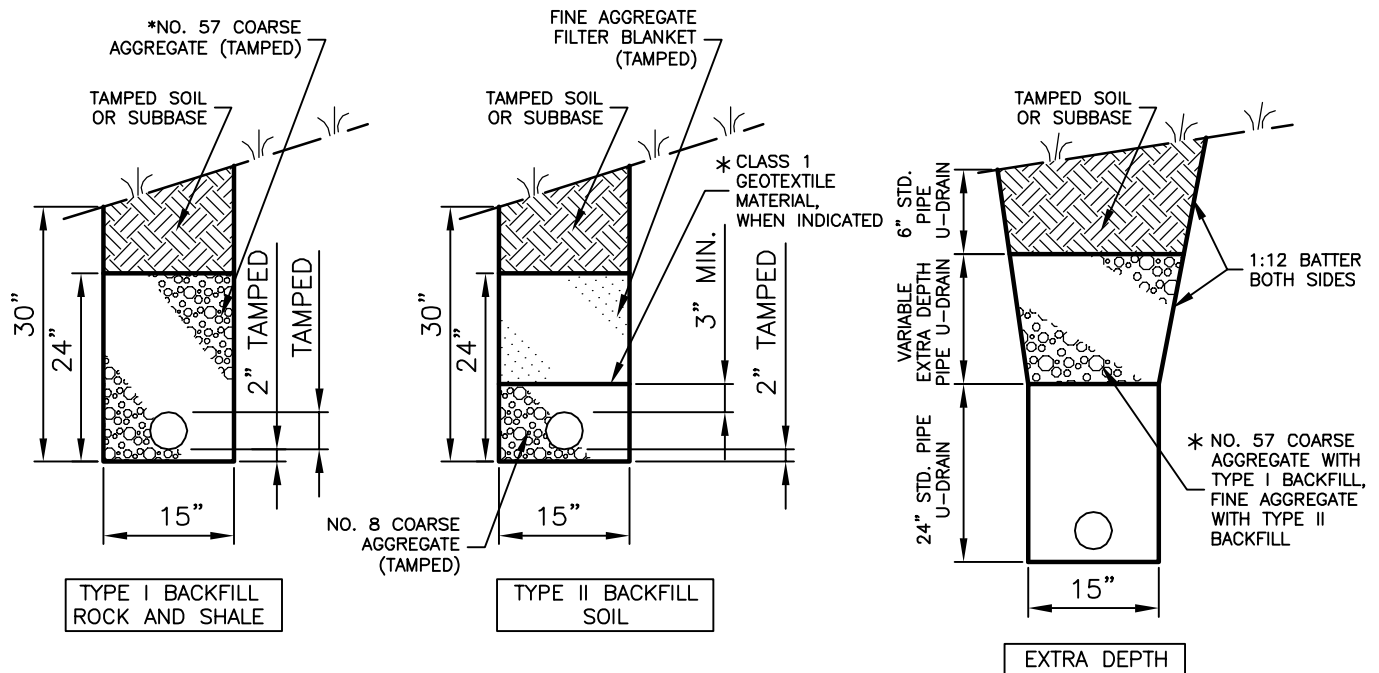
SPECIAL BEDDING

**NEW SEWICKLEY TOWNSHIP
TYPICAL BEDDING FOR RCP, SPECIAL BEDDING
STANDARD DETAIL 18**



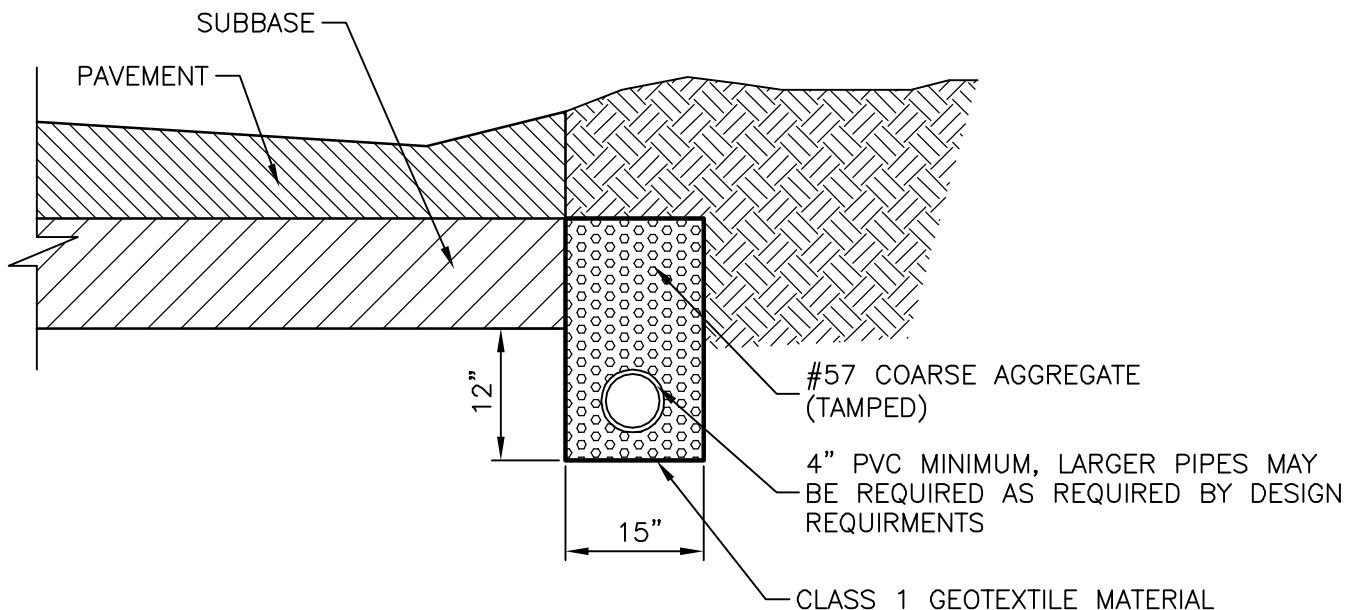
OLSEN & ASSOCIATES, LLC

PROJECT NO. 200799B



GENERAL NOTES:

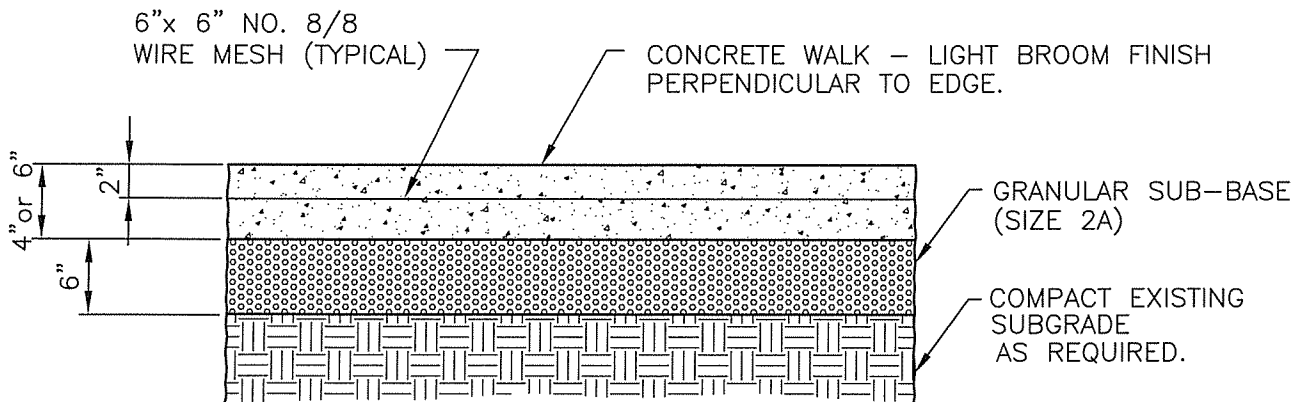
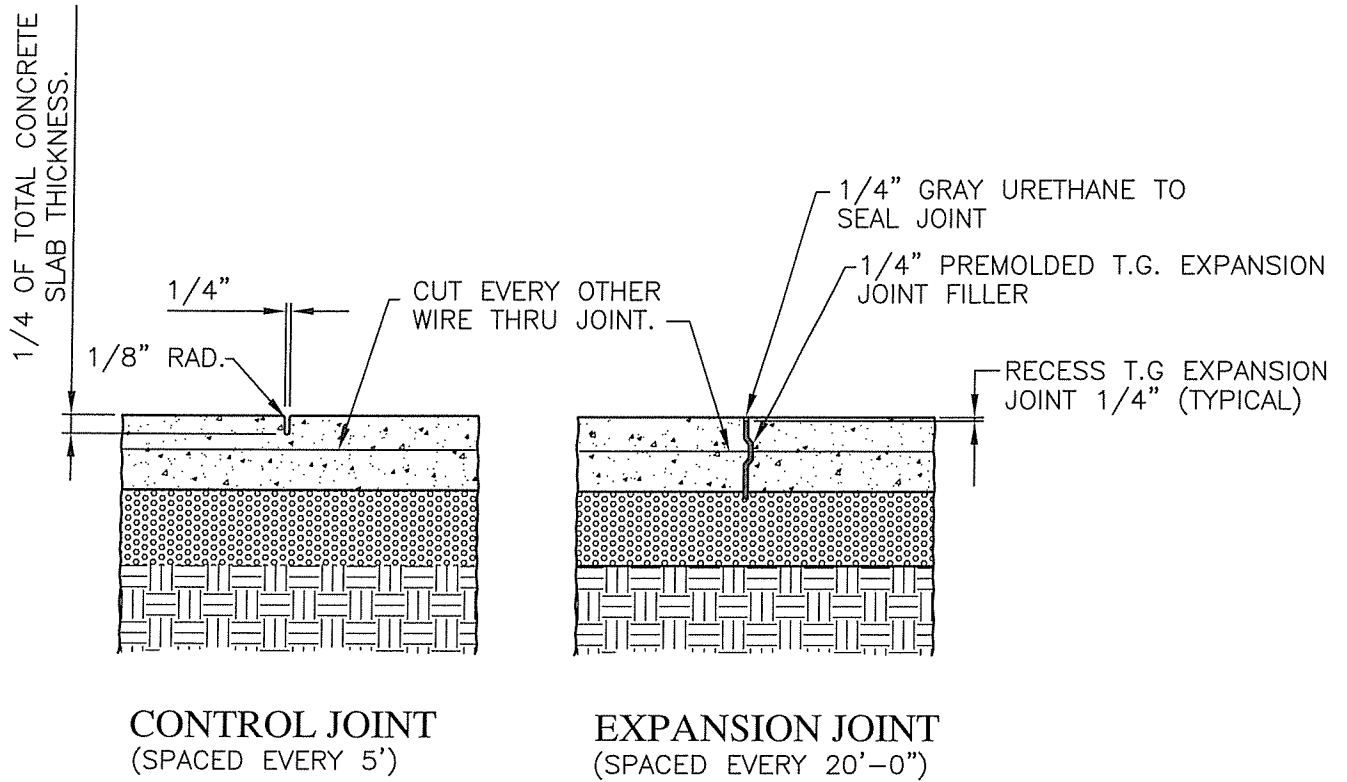
*WHEN GEOTEXTILE MATERIAL IS USED FOR TYPE II BACKFILL, REPLACE FINE AGGREGATE FILTER BLANKET WITH EQUIVALENT DEPTH OF NO. 57 COARSE AGGREGATE. WRAP ALL PIPE ZONE AGREGATE WITH CLASS 1 GEOTEXTILE MATERIAL.



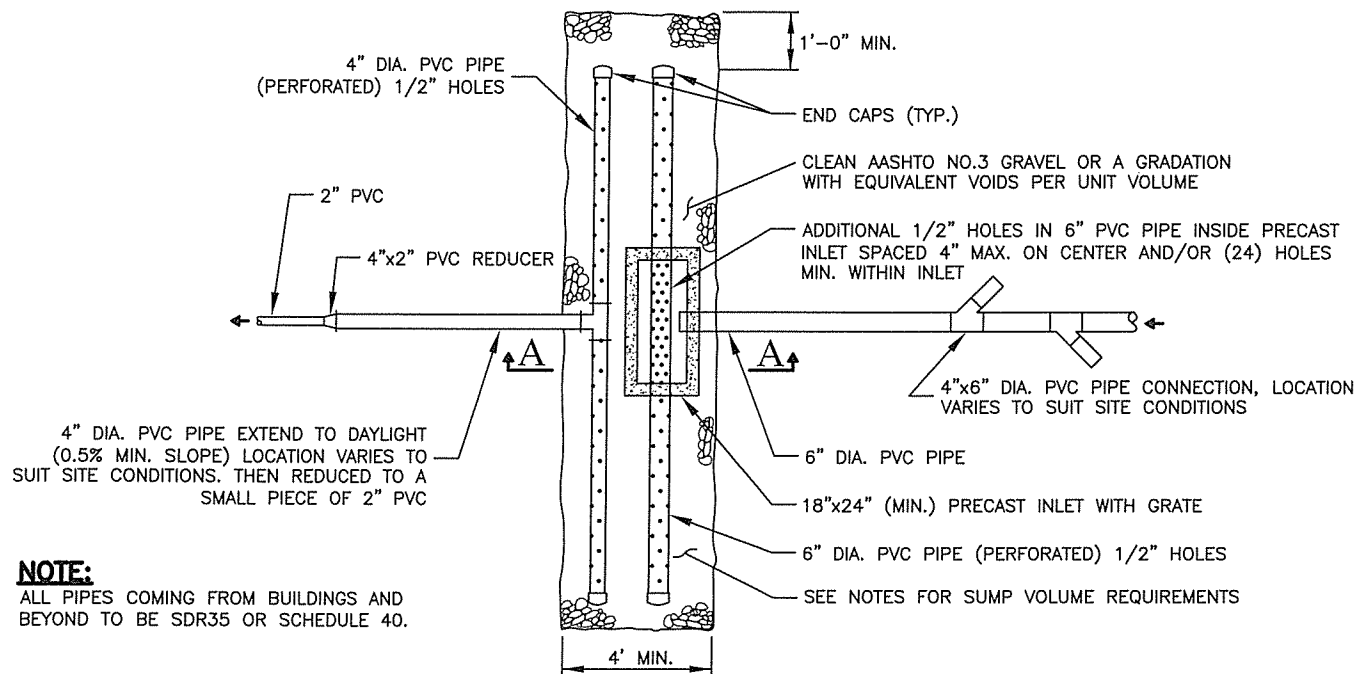
NEW SEWICKLEY TOWNSHIP PIPE UNDERDRAIN, PAVEMENT BASE DRAIN STANDARD DETAIL 19



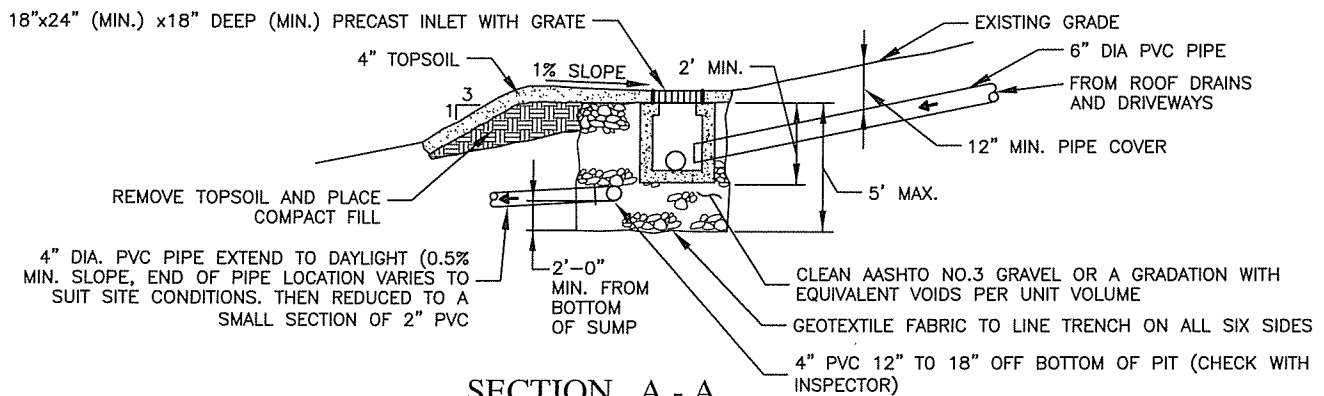
OLSEN & ASSOCIATES, LLC
PROJECT NO. 200799B



NEW SEWICKLEY TOWNSHIP CONCRETE SIDEWALK STANDARD DETAIL 20



PLAN



GENERAL NOTES:

1. AS A CONDITION OF RECEIVING A BUILDING PERMIT OR LAND SUBDIVISION APPROVAL, LOT OWNERS SHALL BE REQUIRED TO CONSTRUCT AN "ON-LOT STORMWATER DETENTION SUMP" CONFORMING TO DETAILS AND NOTES ON THIS DRAWING.
2. ALL DRY SUMPS DESIGNED FOR ACCEPTING SURFACE WATER FROM ROOF AND DRIVEWAY AREAS SHALL BE DESIGNED ACCORDING TO THE FOLLOWING CRITERIA.
3. EACH SUMP SHALL BE DESIGNED TO STORE A MINIMUM WATER VOLUME EQUIVALENT TO 2" OF PRECIPITATION COVERING THE NEW IMPERVIOUS TRIBUTARY AREA. FOR EXAMPLE, A SUMP FOR A 1200-SQUARE FOOT ROOF AREA WOULD BE DESIGNED TO STORE A WATER VOLUME OF 200-CUBIC FEET. THE TOTAL STORAGE VOLUME, ASSUMING THE SUMP IS 60% ROCK AND 40% VOIDS, WOULD BE 500-CUBIC FEET.
4. DRY SUMPS SHOULD BE ELONGATED IN A MINIMUM 3:1 LENGTH TO WIDTH RATIO AND BE ORIENTED WITH THE LONG DIMENSION PARALLEL TO THE CONTOUR.
5. DRY SUMPS MUST BE CONSTRUCTED IN UNDISTURBED GROUND ONLY. DRY SUMPS SHALL BE 20-FEET OR MORE FROM ANY PROPERTY LINE OR RIGHT-OF-WAY LINE.
6. DRY SUMPS SHALL BE LOCATED BELOW OR DOWN SLOPE SO AS TO NOT INTERFERE OR CAUSE SATURATION OF ANY EXISTING OR PROPOSED ON-LOT SANITARY DISPOSAL ABSORPTION, OR BUILDING FOUNDATION.
7. INLET GRATES SHALL BE PROVIDED TO SUPPORT 50 PSF IN LAWN AREAS AND HS20 LOADS IN PAVED AREAS.

* WHERE WATERCOURSE IS NOT AVAILABLE OR WHERE AN EXPOSED DISCHARGE PIPE IS INAPPROPRIATE, EXTEND THE 2" PIPE TO A DOWNGRADE 2'X2'X2' GRAVEL-FILLED SUMP PIT.

NEW SEWICKLEY TOWNSHIP
ON-LOT STORMWATER DETENTION SUMP DETAIL
V & ASSOCIATES, LLC STANDARD DETAIL 21



OLSEN & ASSOCIATES, LLC

STANDARD DETAIL 21