

TYPICAL DETAILS

BOROUGH OF CONSHOHOCKEN MONTGOMERY COUNTY, PENNSYLVANIA

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TYPICAL DETAILS BOROUGH OF CONSHOHOCKEN MONTGOMERY COUNTY, PENNSYLVANIA

EXHIBIT "A"

ADOPTED MAY 2009 LAST REVISED FEBRUARY 2022 1. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR THE QUALITY AND CORRECTNESS OF COMPLETED WORK. THE PROPERY OWNER MAY DESIGNATE A CONTRACTOR, CONSULTANT OR OTHER AGENT TO COORDINATE INSPECTIONS WITH THE BOROUGH. THE PROPERTY OWNER IS RESPONSIBLE FOR ALL OUTSIDE CONSULTANT FEES INCURRED BY THE BOROUGH.

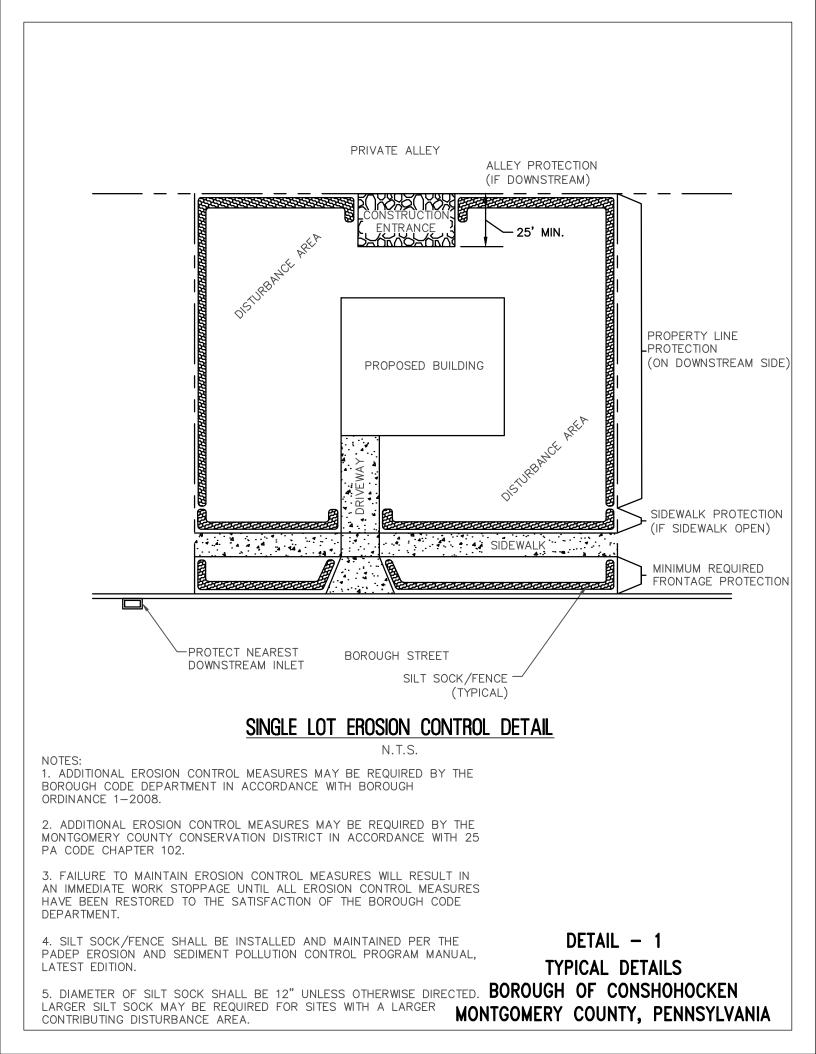
2. ANY COMPLETED WORK THAT DOES NOT COMPLY WITH APPLICABLE STANDARDS SUCH AS THE AMERICANS WITH DISABILITIES ACT (ADA), PENNDOT SPECIFICATIONS AND CONSTRUCTION STANDARDS, OR THE BOROUGH OF CONSHOHOCKEN TYPICAL DETAILS SHALL BE REMOVED AND REPLACED.

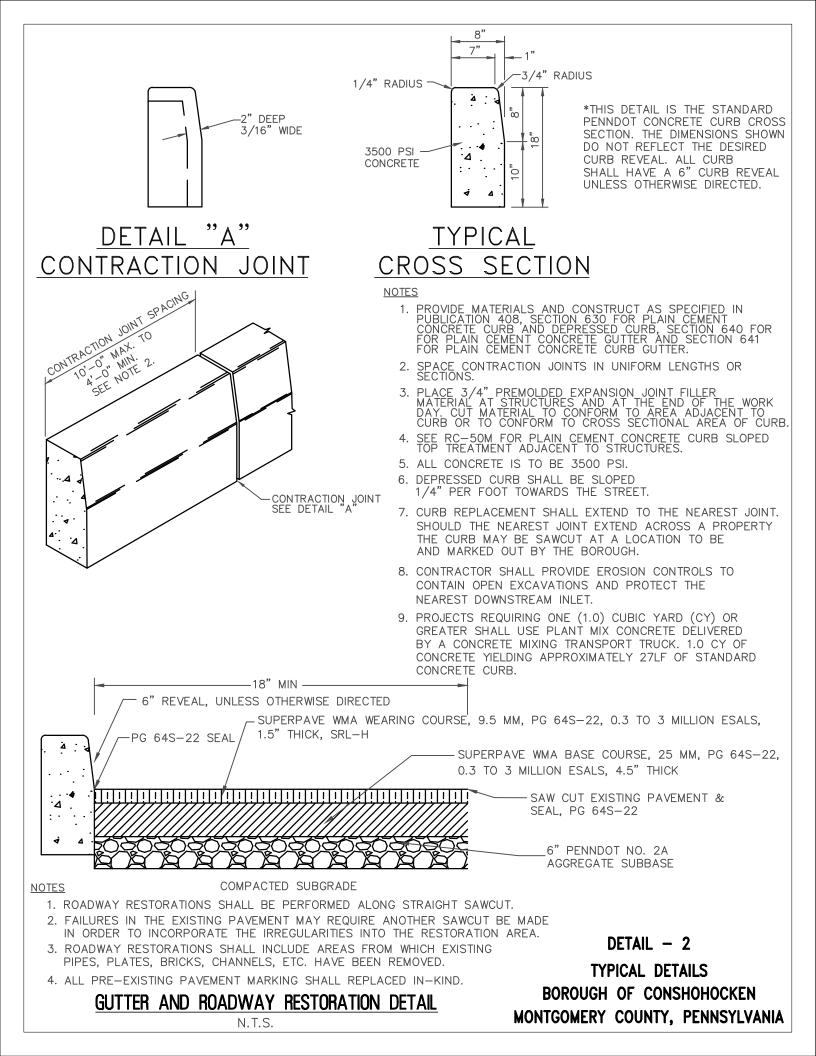
3. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR ENSURING COMPLIANCE WITH THE BOROUGH STORMWATER MANAGEMENT ORDINANCE. SPECIFICALLY, ALL WORK SITES SHALL BE PROTECTED FROM EROSION AND SEDIMENT RUNOFF IN ACCORDANCE WITH MONTGOMERY COUNTY CONSERVATION DISTRICT REQUIREMENTS. FAILURE TO INSTALL AND MAINTAIN ACCEPTABLE EROSION CONTROLS WILL RESULT IN WORK STOPPAGES AND FINES IN ACCORDANCE WITH THE BOROUGH ORDINANCE.

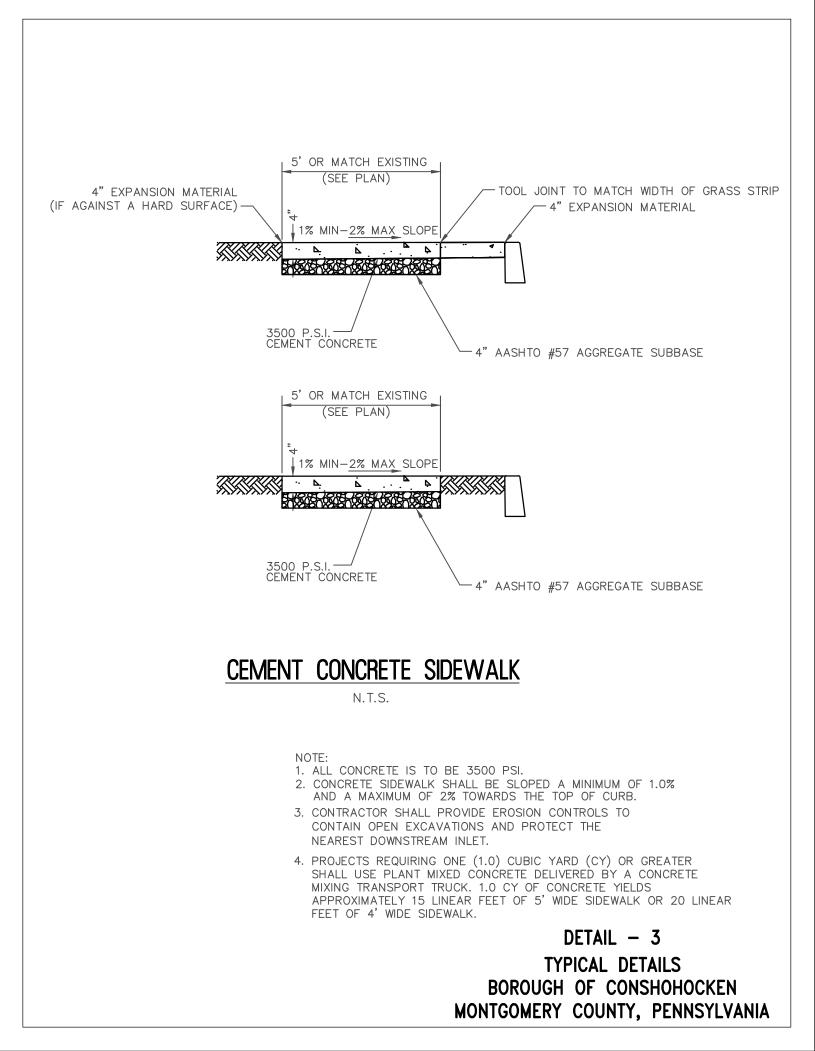
4. EROSION CONTROL INLET PROTECTION SHALL BE INSTALLED IN THE NEAREST DOWNSTREAM INLET OF ALL WORK SITES. PIPE TRENCHES SHALL BE PUMPED THROUGH A WATER FILTER BAG.

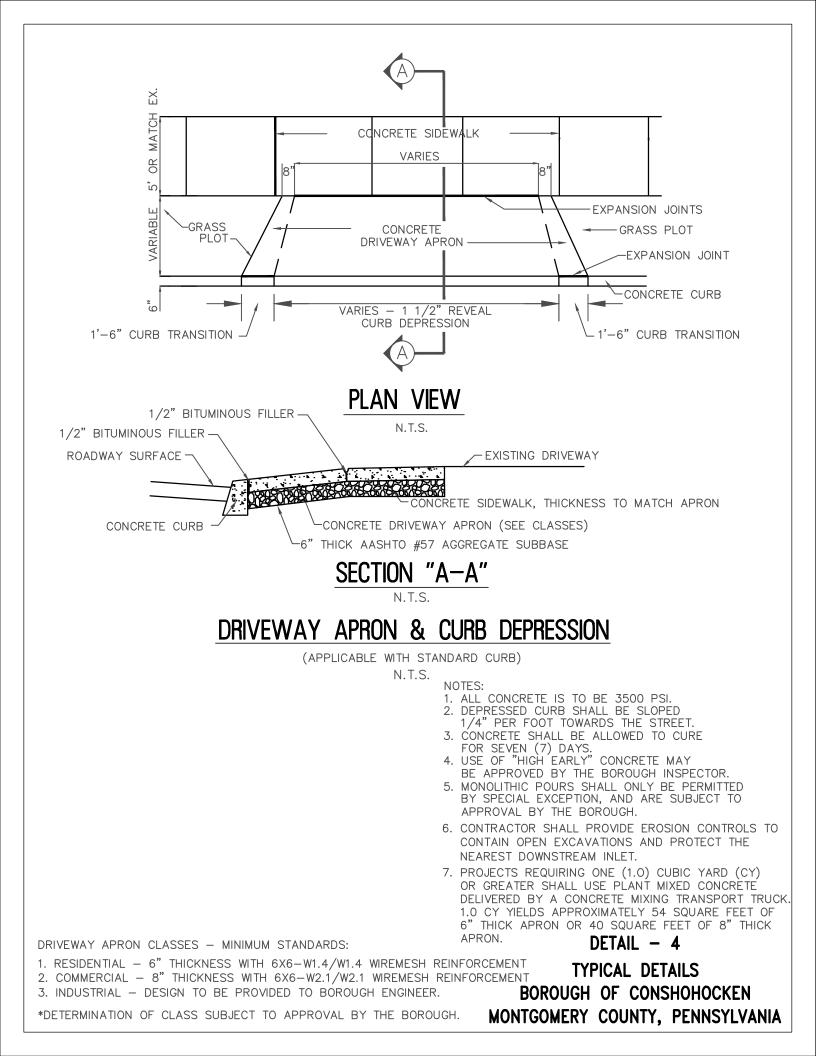
5. THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION LAYOUT. THE BOROUGH INSPECTOR WILL VERIFY THAT THE APPROPRIATE CONSTRUCTION DETAILS ARE BEING FOLLOWED AND THAT THE APPROPRIATE METHODS ARE BEING USED. THE BOROUGH INSPECTOR DOES NOT APPROVE ANY PHYSICAL PRODUCT UNTIL THE WORK IS COMPLETE. ANY PERCEIVED APPROVAL OF LAYOUT, FORMWORK, ETC., DOES NOT ABSOLVE THE CONTRACTOR FROM ENSURING THAT THE FINAL PRODUCT COMPLIES WITH ALL APPLICABLE STANDARDS.

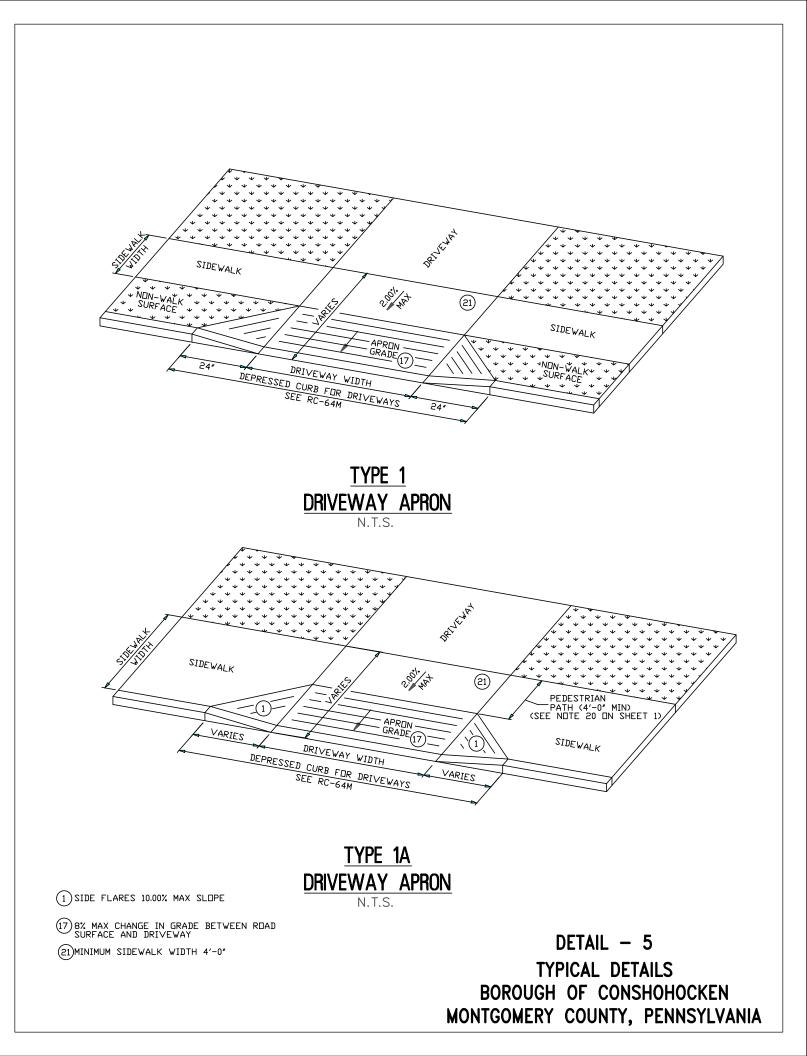
> STANDARD NOTES BOROUGH OF CONSHOHOCKEN MONTGOMERY COUNTY, PENNSYLVANIA







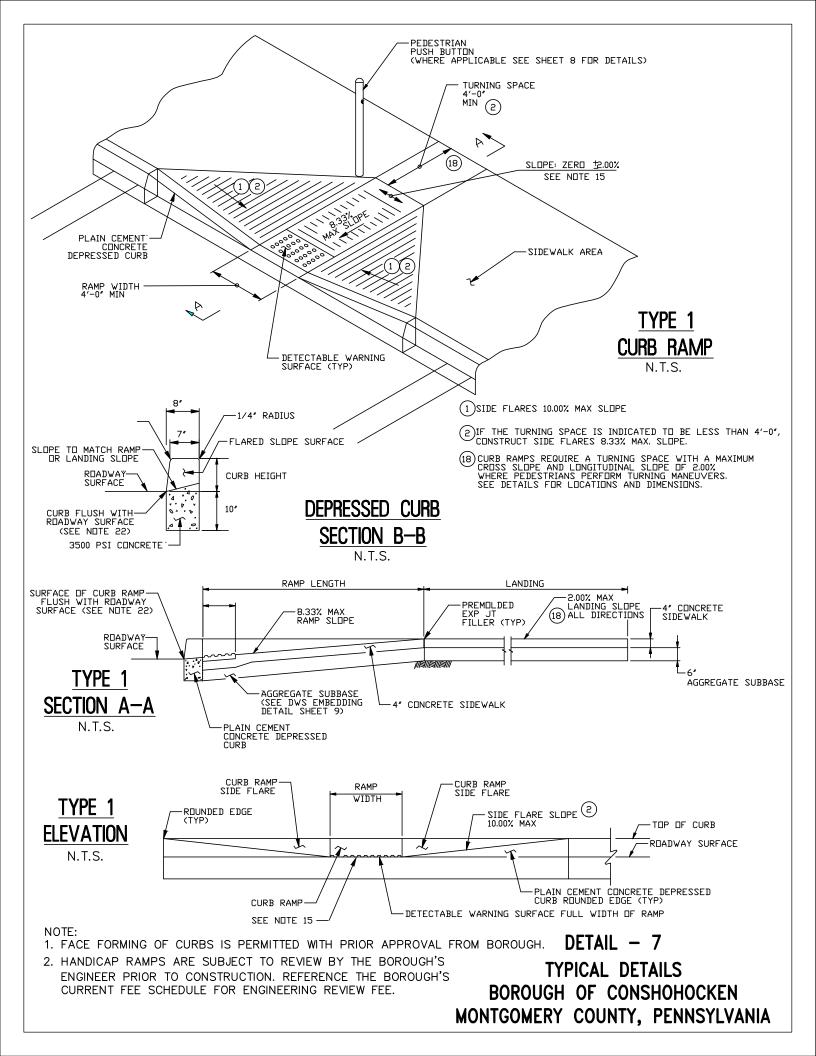


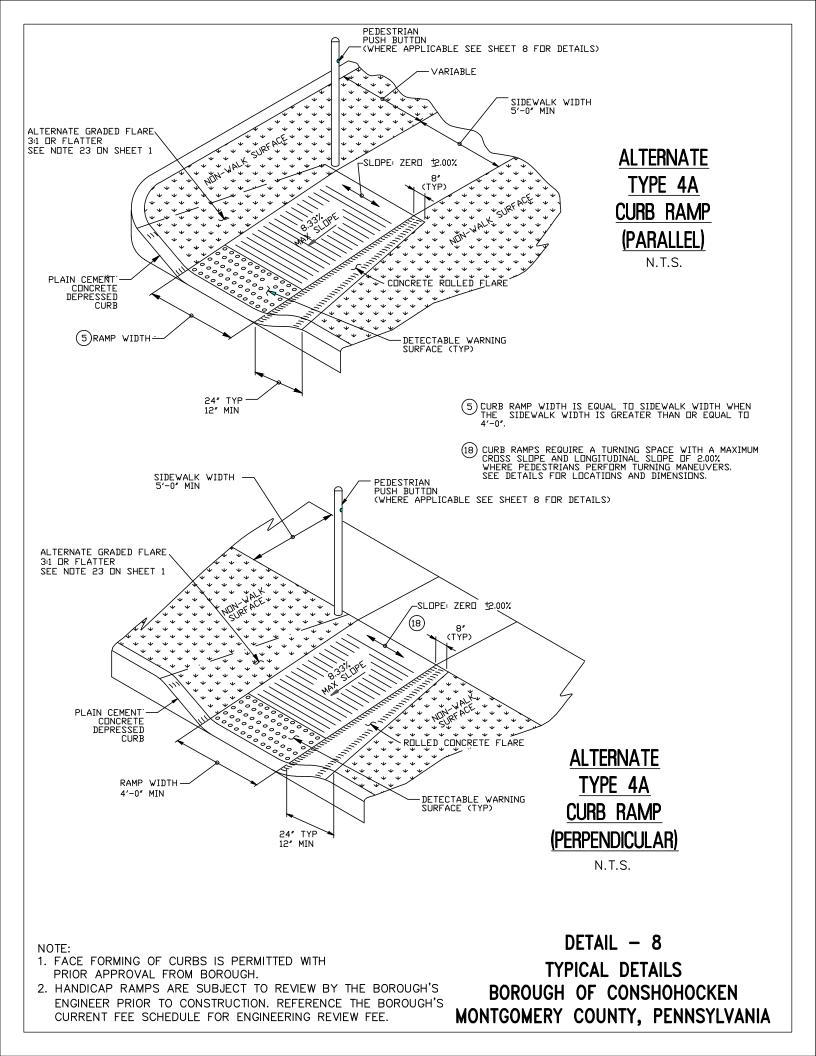


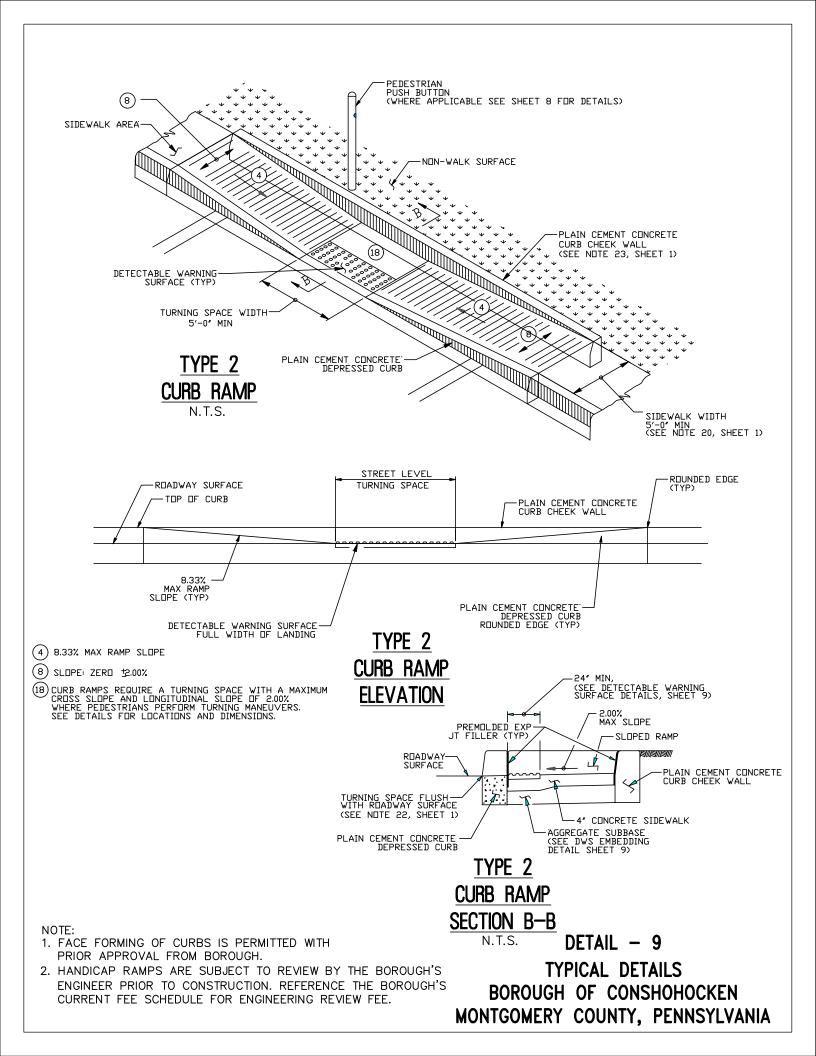
HANDICAPPED CURB RAMP NOTES

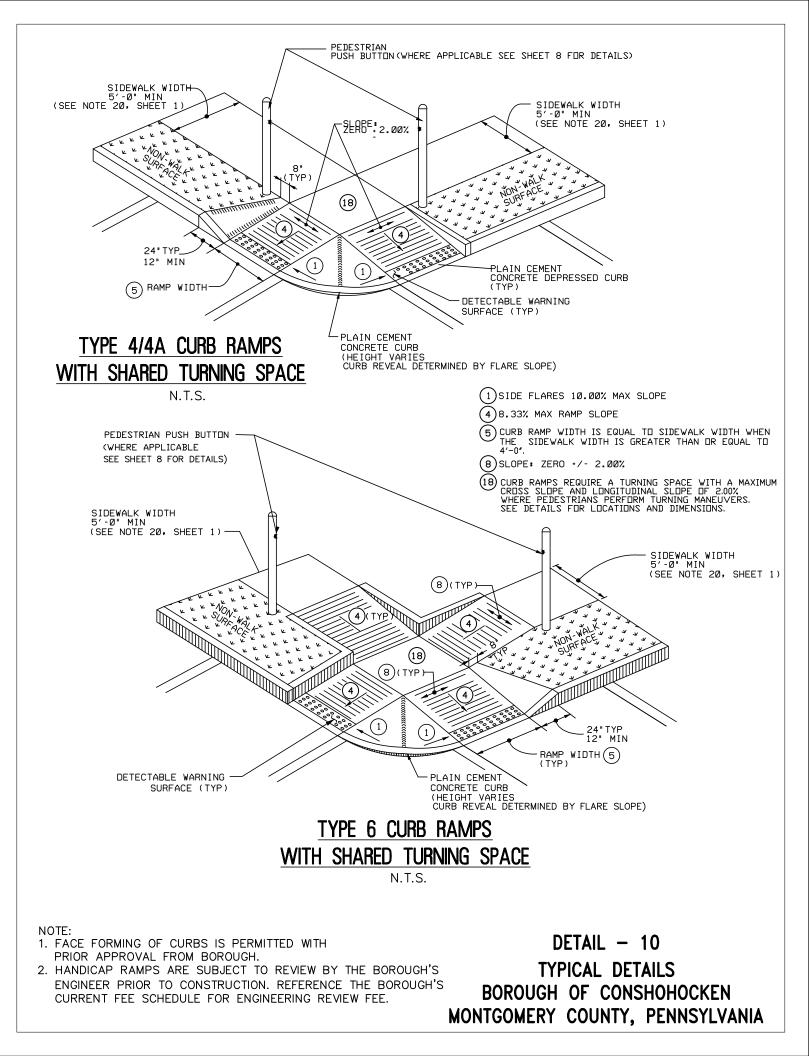
- 1. PROVIDE MATERIALS AND CONSTRUCT AS SPECIFIED IN PUBLICATION 408, SECTIONS 350, 413, 630, 676 AND 695.
- 2. PROVIDE EXPANSION JOINT MATERIAL 3/4" THICK WHERE CURB RAMP ADJOINS ANY RIGID PAVEMENT, SIDEWALK OR STRUCTURE WITH THE TOP OF JOINT FILLER FLUSH WITH ADJACENT CONCRETE SURFACE.
- 3. CONSTRUCT CURB RAMPS WITH A MINIMUM 4'-0" X 4'-0" CLEAR SPACE BEYOND THE CURB FACE, WITHIN THE WIDTH OF THE CROSSWALK AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE. SEE SHEET 7 FOR CROSSWALK DETAILS.
- 4. SEAL JOINTS WITH AN APPROVED SEALING MATERIAL.
- 5. PROVIDE SLIP RESISTANT TEXTURE ON CURB RAMP BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP. EXTEND TEXTURE THE FULL WIDTH AND LENGTH OF THE CURB RAMP INCLUDING SIDE FLARES.
- 6. MODIFY CONSTRUCTION DETAILS TO ADAPT DIMENSIONS TO EXISTING CURB HEIGHTS WHERE THE CURB IS LESS THAN THE STANDARD 8" HEIGHT.
- 7. CURB RAMP AND SIDE FLARE LENGTHS ARE VARIABLE AND BASED ON CURB HEIGHT AND THE SIDEWALK SLOPE.
- 8. TO AVOID CHASING GRADE INDEFINITELY WHEN TRAVERSING THE HEIGHT OF CURB, RAMP LENGTH NOT TO EXCEED 15'-0". ADJUST RAMP SLOPE AS NEEDED TO PROVIDE ACCESS TO THE MAXIMUM EXTENT FEASIBLE.
- 9. NON-WALK AREA IS AN OBSTRUCTED OR GRASS/NON-PAVED AREA ADJACENT TO THE PEDESTRIAN ACCESS ROUTE THAT IS NOT USED BY THE PEDESTRIAN FOR ACCESS.
- 10. THE DETAILS DEPICT PEDESTRIAN PUSHBUTTON POLES TO ILLUSTRATE THE RECOMMENDED PLACEMENT OF PEDESTRIAN PUSHBUTTONS. FOR ALTERATION PROJECTS, PROVIDE ACCESS TO EXISTING PEDESTRIAN PUSHBUTTONS TO THE MAXIMUM EXTENT FEASIBLE. INSTALL PEDESTRIAN PUSHBUTTON STUB POLES, WHERE APPLICABLE, SO AS NOT TO CREATE PEDESTRIAN OBSTRUCTIONS.
- 11. SEE TC-8803 FOR ADDITIONAL PEDESTRIAN PUSHBUTTON DETAILS NOT SHOWN.
- 12. ALIGN DETECTABLE WARNING SURFACE TRUNCATED DOMES ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF THE RAMP AND PERPENDICULAR TO CURB. SEE SHEET 9 FOR INSTALLATIONS ALONG CURVED SURFACES.
- 13. PROVIDE DETECTABLE WARNING SURFACES (DWS) 24" MINIMUM (IN THE DIRECTION OF PEDESTRIAN TRAVEL) ACROSS FULL WIDTH OF RAMP AT THE GRADE BREAK NEAR STREET EDGE. PROVIDE DWS THAT CONTRAST VISUALLY WITH ADJACENT WALKWAY SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT FOR THE FULL WIDTH OF RAMP.
- 14. FOR NEW CONSTRUCTION, DO NOT EXCEED 2.00% CROSS SLOPE ON THE CURB RAMP OR PEDESTRIAN ACCESSIBLE ROUTE.
- 15. FOR NEW CONSTRUCTION AND ALTERATIONS, CONSTRUCT CURB RAMP AND FLARE SLOPES WITH THE FLATTEST SLOPE POSSIBLE. THE SLOPES INDICATED IN THE DETAILS SHOW THE MAX SLOPE ALLOWABLE. SLOPES THAT EXCEED THOSE INDICATED IN THE DETAILS, OR CONTRACT DOCUMENTS AS APPLICABLE, WILL NOT BE ACCEPTED AND WILL BE RECONSTRUCTED.
- 16. CONSTRUCT SIDEWALKS AT A LONGITUDINAL SLOPE NOT TO EXCEED 5.00%. FOR ROADWAY PROFILE SLOPES THAT EXCEED 5.00%, CONSTRUCT PARALLEL SIDEWALKS ADJACENT TO ROADWAY AT A LONGITUDINAL SLOPE NOT TO EXCEED ROADWAY PROFILE SLOPE.
- 17. THE CHANGE IN GRADE AT THE BOTTOM OF THE CURB RAMP AND ADJOINING ROAD SURFACE IS NOT TO EXCEED AN ALGEBRAIC DIFFERENCE OF 13.33%. THE COUNTER SLOPE OF THE GUTTER OR ROAD AT THE FOOT OF A CURB RAMP, TURNING SPACE OR BLENDED TRANSITION IS NOT TO EXCEED 5.00%. SEE SHEET 8 FOR DETAILS.
- 18. THE CONSTRUCTION STANDARDS DEPICTED ARE MOST APPROPRIATE FOR NEW CONSTRUCTION. ALL CONSTRUCTION MUST MEET THE STANDARDS CONTAINED HEREIN UNLESS OTHERWISE NOTED OR DIRECTED.
- 19. ALL SLOPES ARE MEASURED WITH RESPECT TO A LEVEL PLANE, THEREFORE, THE LENGTH OF RAMP IS NOT SOLELY DEPENDANT ON THE HEIGHT OF CURB. (FOR EXAMPLE, A 6" CURB DOES NOT NECESSARILY MEAN A RAMP LENGTH OF 6'-0" FOR A 12:1 SLOPE.
- 20. SIDEWALK WIDTH MAY BE REDUCED TO 4'-0", WHEN PASSING AREAS 5'-0" X 5'-0" ARE PROVIDED EVERY 200'.
- 21. THE TRAVEL LANE IS DEFINED BY THE OUTSIDE EDGE OF THE WHITE PAVEMENT MARKING LINE. IF A WHITE PAVEMENT MARKING LINE DOES NOT EXIST, THE TRAVEL LANE IS DEFINED BY THE CONTRACT DOCUMENTS.
- 22. CONSTRUCT DEPRESSED CURB FOR CURB RAMPS FLUSH TO ADJACENT ROADWAY. GRADE EDGE OF ROAD ELEVATIONS AT THE FLOW LINE TO ENSURE POSITIVE DRAINAGE AND PREVENT PONDING. FOR LEVEL TURNING SPACES BEHIND DEPRESSED CURB, ADJUST SLOPES TO PROVIDE POSITIVE DRAINAGE. AT THE JOINT BETWEEN DEPRESSED CURB AND ROADWAYS, REMOVE EXCESS JOING SEALER AND COVER THE SEALED AREA WITH A LIGHT APPLICATION OF DRY SAND.
- 23. CHEEK WALLS ARE PERMITTED WHEN ADJACENT TO NON-WALK AREAS OR ELEVATION DIFFERENCES CANNOT BE ACCOMMODATED BY FLARES OR GRADING, GRADE GRASS AREAS OR OTHER NON-WALK AREAS AT 3:1 MAXIMUM. DO NOT INSTALL CHEEK WALLS THAT INTERSECT THE PEDESTRIAN PATH.
- 24. CONSTRUCT TOP OF PLAIN CEMENT CONCRETE DEPRESSED CURB TO BE FLUSH WITH ADJACENT SURFACES (RAMPS, SIDEWALKS, FLARES).
- 25. FOR CURB RAMPS THAT LEAD TO A SINGLE CROSSWALK, THE RAMP (EXCLUDING FLARES) TO BE FULLY INSIDE OF MARKED CROSSWALK LINES. SEE SHEET 7 FOR DETAILS.
- 26. A 4'-0" MAXIMUM DIGITAL DISPLAY LEVEL WILL BE USED TO VERIFY THE SLOPES OF CURB RAMPS AND SIDEWALKS.
- 27. INSTALL DUMMY JOINTS WHERE RAMPS, TURNING SPACES, FLARES, AND SIDEWALKS ABUT.
- 28. CONSTRUCT DEPRESSED CURB SLOPE TO MATCH ROADWAY PROFILE AND HAVE A FLUSH CONNECTION. TRANSITION CURB RAMP CROSS SLOPE TO MATCH ROADWAY PROFILE AS GRADUALLY AS POSSIBLE. DO NOT EXCEED 3.00% PER 1'-0" CROSS SLOPE RATE OF CHANGE WHEN TRANSITIONING TO ROADWAY PROFILE.
- 29. DO NOT SCORE OR MAKE GROOVES ON SLOPED SURFACES. LINES SHOWN ON DETAILS ARE FOR ILLUSTRATION ONLY. SEE NOTE 5.30. THE DEPRESSED CURB MAY BE PLACED MONOLITHICALLY WITH CURB RAMP, SIDE FLARES, OR BOTH. DO NOT PLACE DEPRESSED CURB MONOLITHICALLY WITH OTHER CEMENT CONCRETE SIDEWALK.

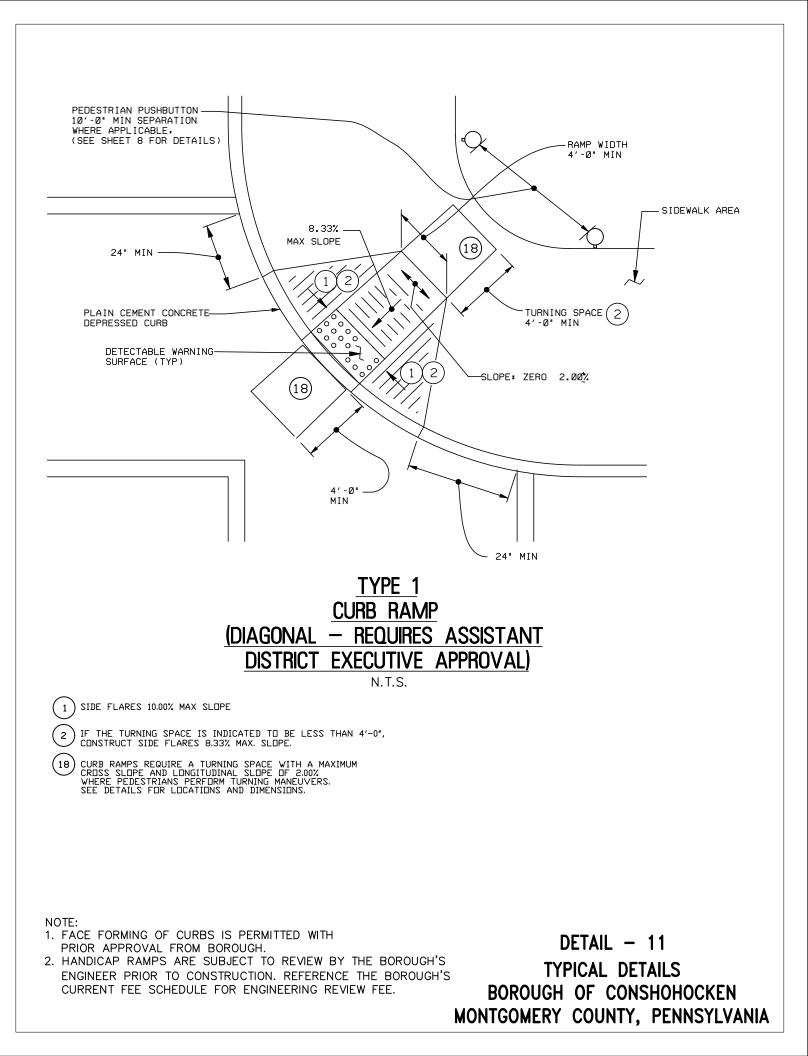
DETAIL – 6 TYPICAL DETAILS BOROUGH OF CONSHOHOCKEN MONTGOMERY COUNTY, PENNSYLVANIA

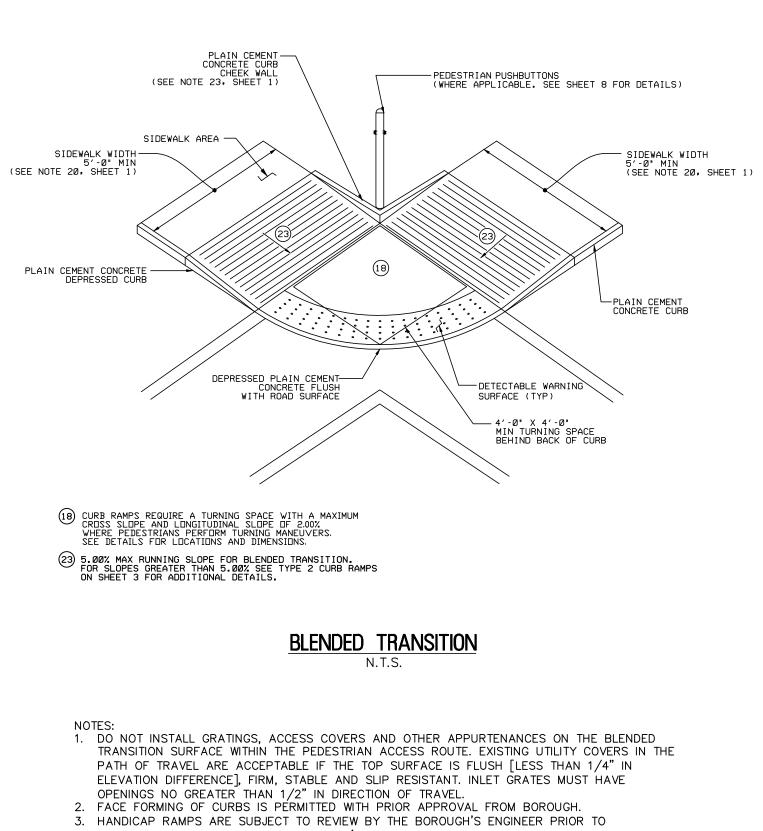








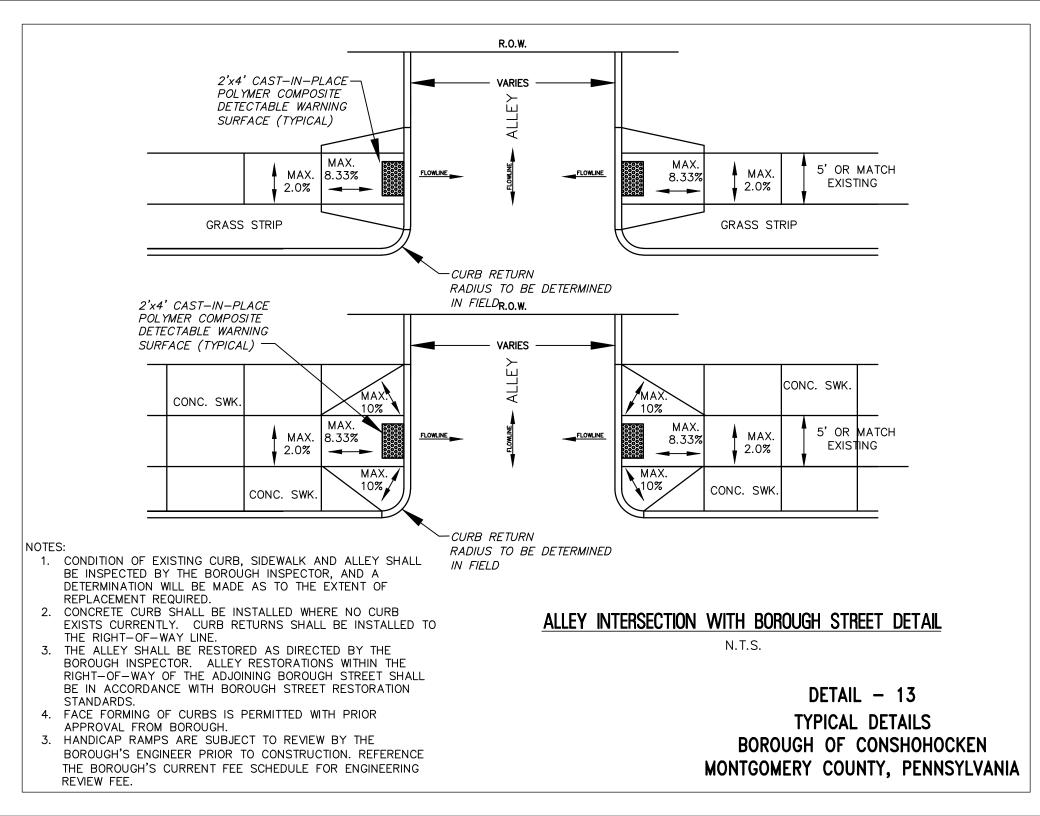


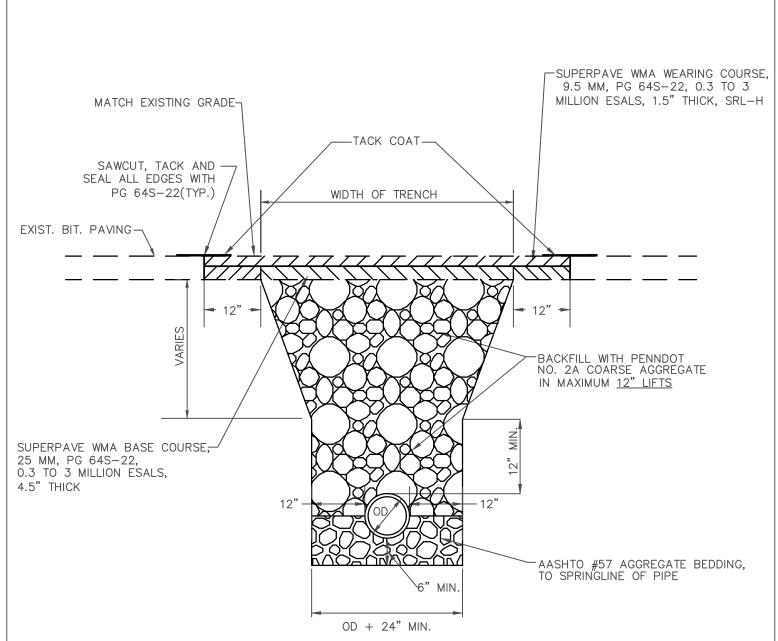


CONSTRUCTION. REFERENCE THE BOROUGH'S CURRENT FEE SCHEDULE FOR ENGINEERING REVIEW FEE.

DETAIL – 12

TYPICAL DETAILS BOROUGH OF CONSHOHOCKEN MONTGOMERY COUNTY, PENNSYLVANIA





PARALLEL ROADWAY TRENCH AND PAVEMENT RESTORATION DETAIL (BITUMINOUS CONCRETE)

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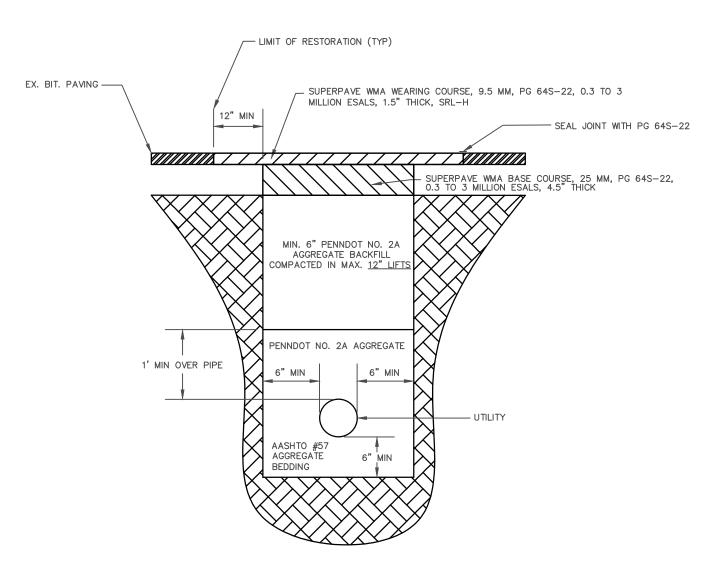
NOTE:

- 1. THE CONTRACTOR SHALL MAKE EVERY EFFORT TO MINIMIZE WIDTH OF TRENCH.
- 2. FOR UTILITY LATERAL TRENCH RESTORATION SEE DETAIL-13
- 3. RESTORATIONS ON STATE HIGHWAYS REQUIRE PENNDOT APPROVAL.
- 4. TRENCHES SHALL BE PUMPED THROUGH A FILTER BAG WHEN DEWATERING.
- 5. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR TRENCH SAFEY.

SPECIAL NOTES:

- 1. DETAIL 14 IS FOR RESURFACING REQUIREMENTS FOR MAIN TRENCHES.
- 2. SEE DETAIL 15 FOR THE LATERAL AND SERVICE TRENCH DETAIL.
- 3. COMPACTION TESTING WILL BE REQUIRED FOR LARGE UTILITY PROJECTS AT THE DISCRETION OF THE BOROUGH AND BOROUGH ENGINEER. COMPACTION TESTS SHALL CONFORM TO NOT LESS THAN THE FOLLOWING PERCENTAGE OF THE MAXIMUM DRY DENSITY:
 - 1. STRUCTURES & BUILDING AREAS 95%
 - 2. LAWNS & UNPAVED AREAS 90%
 - 3. PAVEMENT, DRIVEWAYS & WALKWAY AREAS 95%

DETAIL - 14 TYPICAL DETAILS BOROUGH OF CONSHOHOCKEN MONTGOMERY COUNTY, PENNSYLVANIA



UTILITY LATERAL TRENCH RESTORATION (PERPENDICULAR TO ROADWAY)

N.T.S.

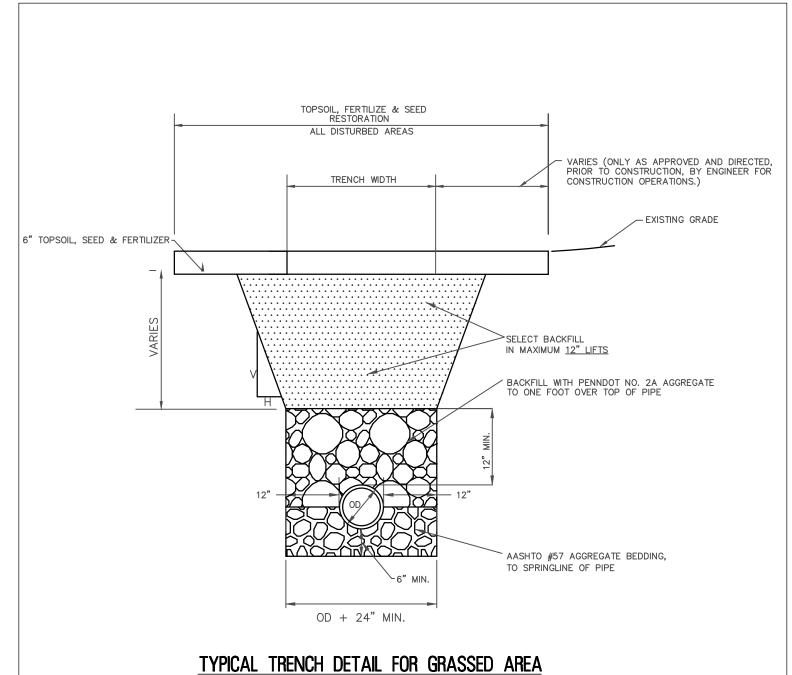
SPECIAL NOTES:

NOTE:

- 1. THE CONTRACTOR SHALL MAKE EVERY EFFORT TO MINIMIZE WIDTH OF TRENCH.
- 2. FOR UTILITY MAIN TRENCH RESTORATION SEE DETAIL-12
- 3. RESTORATIONS ON STATE HIGHWAYS REQUIRE PENNDOT APPROVAL.
- 4. TRENCHES SHALL BE PUMPED THROUGH A FILTER BAG WHEN DEWATERING.
- 5. THE CONTRACTOR IS SOLEY RESPONSIBLE FOR TRENCH SAFETY.
- 6. ALL LATERAL TRENCHES SHALL BE REPAIRED USING AN INFRARED SEAMLESS REPAIR METHOD.

- 1. UTILITY PATCHES WITHIN FIVE (5) FEET OF OTHER UTILITY PATCHES SHALL BE JOINED IN ORDER TO LIMIT THE NUMBER OF JOINTS IN THE PAVEMENT. THE PAVEMENT INTERFACE WITH THE CURB IS CONSIDERED A JOINT. PATCHES WITHIN FIVE (5) OF THE CURB SHALL BE EXTENDED TO THE CURB.
- 2. COMPACTION TESTING WILL BE REQUIRED FOR LARGE UTILITY PROJECTS AT THE DISCRETION OF THE BOROUGH AND BOROUGH ENGINEER. COMPACTION TESTS SHALL CONFORM TO NOT LESS THAN THE FOLLOWING PERCENTAGE OF THE MAXIMUM DRY DENSITY:
 - 1. STRUCTURES & BUILDING AREAS 95%
 - 2. LAWNS & UNPAVED AREAS 90%
 - 3. PAVEMENT, DRIVEWAYS & WALKWAY AREAS 95%

DETAIL - 15 TYPICAL DETAILS BOROUGH OF CONSHOHOCKEN MONTGOMERY COUNTY, PENNSYLVANIA



N.T.S.

SPECIAL NOTE:

COMPACTION TESTING WILL BE REQUIRED FOR LARGE UTILITY PROJECTS AT THE DISCRETION OF THE BOROUGH AND BOROUGH ENGINEER. COMPACTION TESTS SHALL CONFORM TO NOT LESS THAN THE FOLLOWING PERCENTAGE OF THE MAXIMUM DRY DENSITY:

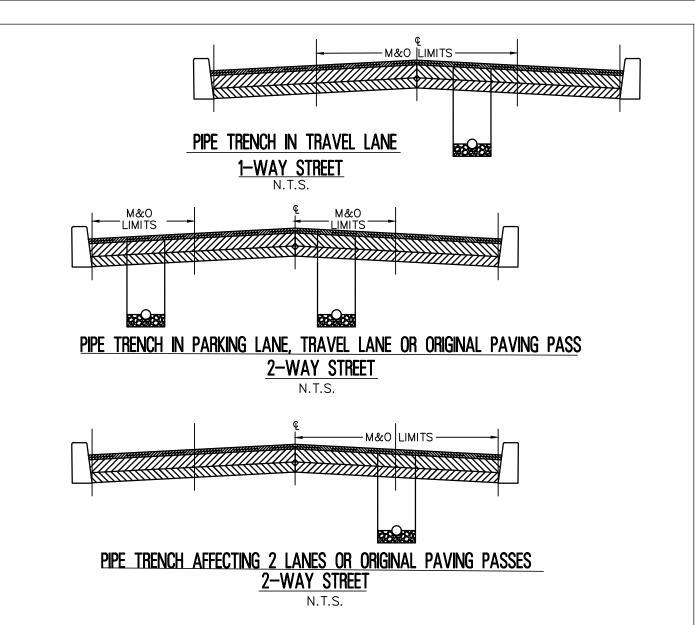
NOTE:

- 1. THE CONTRACTOR SHALL MAKE EVERY EFFORT TO MINIMIZE WIDTH OF TRENCH.
- 1. STRUCTURES & BUILDING AREAS 95%
 - 2. LAWNS & UNPAVED AREAS 90%
 - 3. PAVEMENT, DRIVEWAYS & WALKWAY AREAS 95%

2. TRENCHES SHALL BE PUMPED THROUGH A FILTER BAG WHEN DEWATERING.

3. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR TRENCH SAFETY.

> DETAIL - 16 TYPICAL DETAILS BOROUGH OF CONSHOHOCKEN MONTGOMERY COUNTY, PENNSYLVANIA



NOTES:

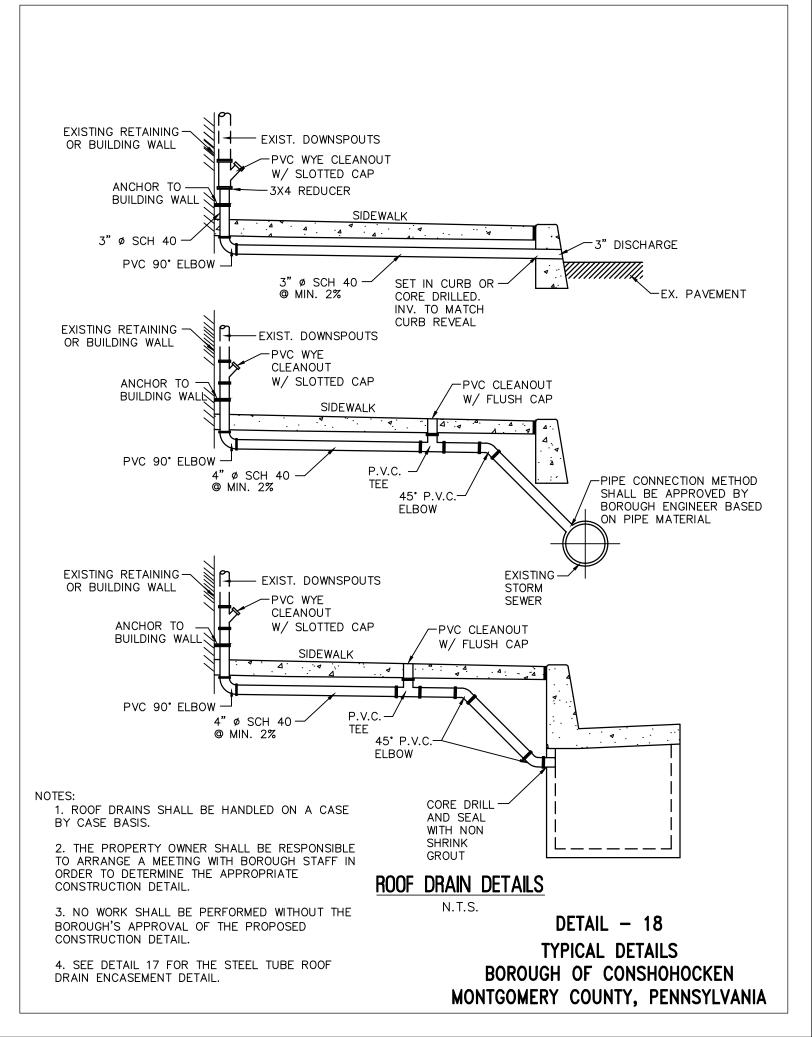
- 1. AT THE DISCRETION OF THE BOROUGH, LARGE UTILITY PROJECTS CAN OPT TO PERFORM A CURB TO CURB MILL AND OVERLAY OF THE PROJECT SITE IN LIEU OF THE HIGHWAY PERMIT FEES REQUIRED BY THE BOROUGH'S CURRENT FEE SCHEDULE.
- 2. UTILITY MAIN REPAIRS OR REPLACEMENTS WILL REQUIRE COMPLETE MILL AND OVERLAY OF THE PARKING LANE, TRAVEL LANE OR ORIGINAL PAVING PASS IN WHICH THE REPAIR FALLS. MAIN REPAIRS OR REPLACEMENTS WHICH REQUIRE TRENCHING ACROSS TWO (2) TRAVEL LANES, A TRAVEL LANE AND A PARKING LANE, OR ACROSS TWO ORIGINAL PAVING PASSES WILL REQUIRE COMPLETE MILL AND OVERLAY OF THE TRAVEL LANE(S) AND/OR PARKING LANE(S) AFFECTED.
- 3. MILL AND OVERLAY SHALL INCLUDE MILLING THE EXISTING BITUMINOUS CONCRETE PAVEMENT TO 1.5" DEPTH, PERFORMING ANY NECESSARY BASE REPAIRS, AND INSTALLING A NEW 1.5" THIS SURFACE COURSE LAYER OF PAVEMENT (WMA SURFACE COURSE, PG64S-22, 9.5MM).
- 4. AFTER MILLING, THE EXPOSED SURFACE SHALL BE TEST ROLLED WITH A FULLY LOADED DUMP TRUCK TO IDENTIFY AREAS REQUIRING BASE REPAIRS. THE TEST ROLL SHALL BE WITNESSED BY THE BOROUGH.
- 5. THE EXACT LIMITS OF PAVING SHALL BE DETERMINED IN THE FIELD. THE BOROUGH RESERVES THE RIGHT TO ADJUST THE PAVING LIMITS IN ORDER TO MATCH THE SEAMS FROM THE ORIGINAL PAVING OPERATION OR OTHERWISE TO PRESERVE TO THE INTEGRITY OF THE ROAD TO THE GREATEST EXTENT PRACTICAL.
- PAVING LIMITS SHALL BE EXPANDED TO INCLUDE ALL DISTURBANCE FROM LATERAL OF SERVICE INSTALLATIONS.
 THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF ALL PAVEMENT MARKINGS REMOVED BY THE UTILITY CONSTRUCTION, INCLUDING DECORATIVE CROSSWALKS.
- 8. REFERENCE THE BOROUGH'S CURRENT FEE SCHEDULE FOR THE COST OF HIGHWAY PERMITS.

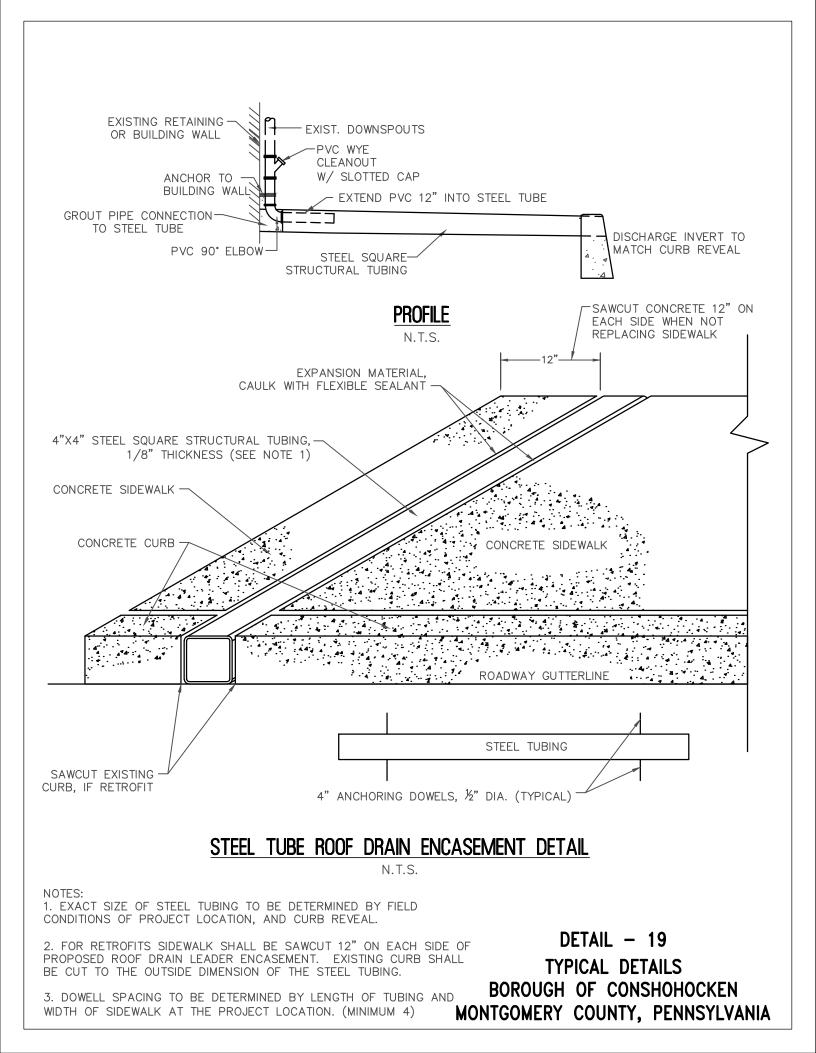
STREET DEGRADATION RESURFACING DETAILS

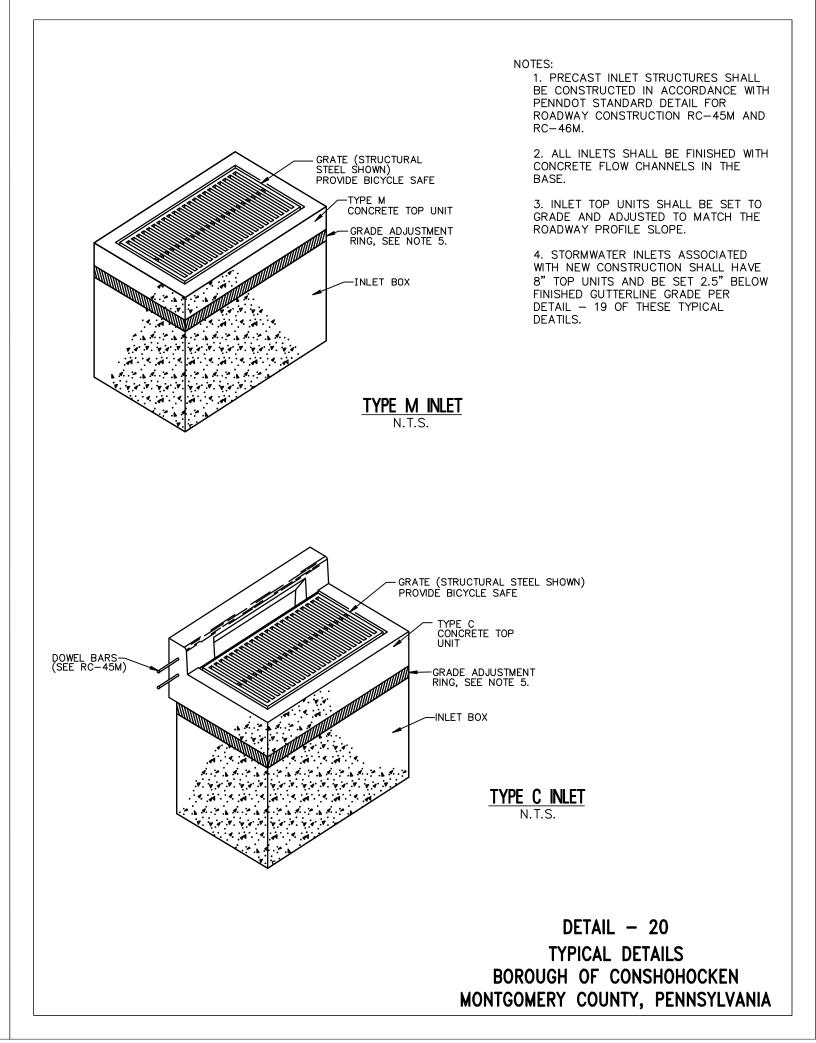
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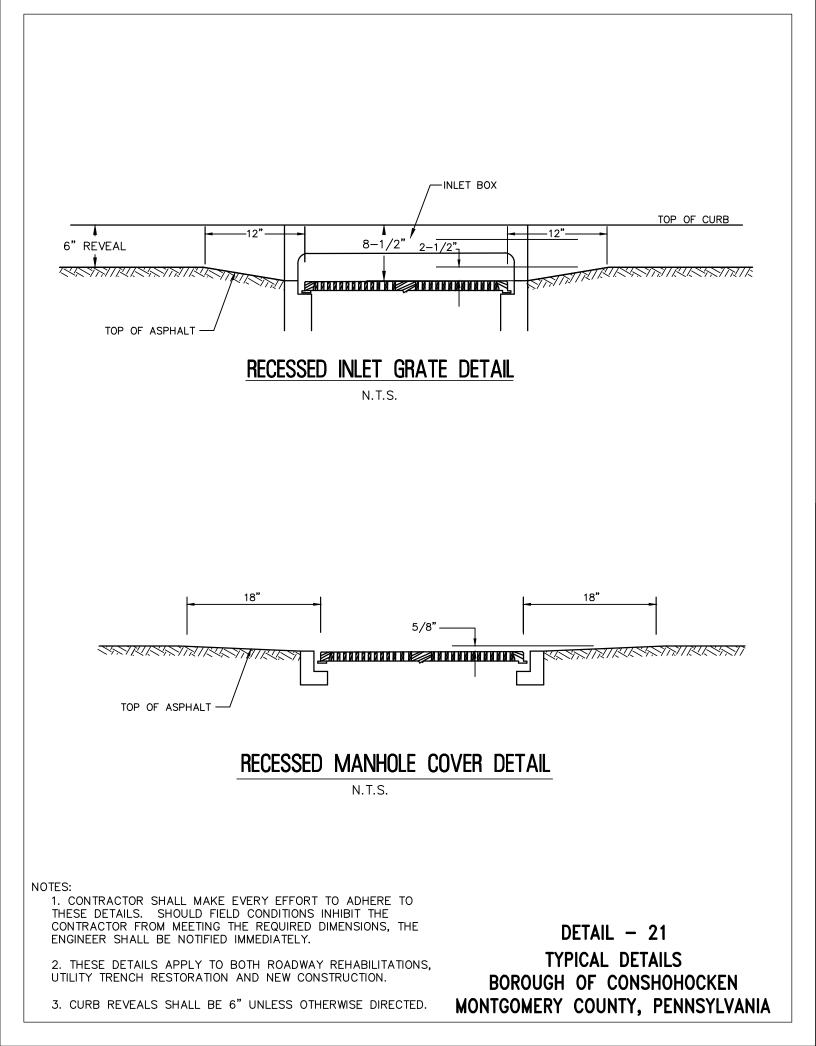
DETAIL – 17

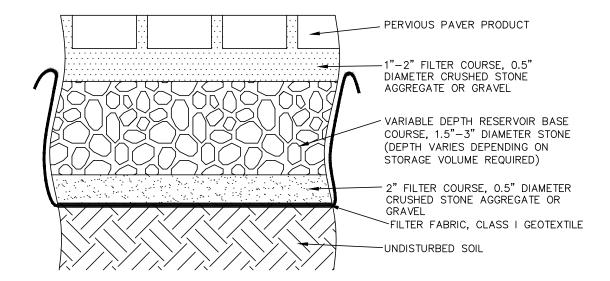
TYPICAL DETAILS BOROUGH OF CONSHOHOCKEN MONTGOMERY COUNTY, PENNSYLVANIA











PERMEABLE PAVER SURFACE DETAIL

N.T.S.

NOTES:

1. THE DETAIL PROVIDED IS ILLUSTRATIVE ONLY. THE PROPERTY OWNER SHALL PROVIDE DETAILS FOR THE DESIRED PRODUCT FOR REVIEW BY THE BOROUGH ENGINEER.

2. FILTER COURSE AND RESERVOIR AGGREGATE SHALL BE CLEAN/WASHED STONE.

3. GEOTEXTILE FILTER FABRIC SHALL BE MIRAFI #14N, OR APPROVED EQUAL.

DETAIL - 22 TYPICAL DETAILS BOROUGH OF CONSHOHOCKEN MONTGOMERY COUNTY, PENNSYLVANIA

NOTES:

- 1. INTERSECTION DRAINAGE SWALE DETAIL IS MEANT TO REPLACE DAYLIGHTED STORM SEWER PIPES THAT CONVEY STORMWATER THROUGH INTERSECTIONS AT VARIOUS LOCATIONS THROUGHOUT THE BOROUGH.
- 2. THE DETAIL PROVIDED IS ILLUSTRATIVE ONLY. THE ACTUAL DIMENSIONS AND LENGTH OF THE DRAINAGE SWALE SHALL BE DETERMINED BASED ON THE LOCATION/INTERSECTION.
- 3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE A DETAILED INTERSECTION GRADING DESIGN FOR THE BOROUGH ENGINEER'S REVIEW AND APPROVAL.

