

PRELIMINARY / FINAL LAND DEVELOPMENT PLAN FOR 2509 MILL ROAD TOWNHOMES LOCATED IN UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PA ZONING HEARING APPLICATION EXHIBIT "A"



PENNSYLVANIA ACT 38
(1991) AS AMENDED
REQUIRES NOTIFICATION OF
EXCAVATORS, DESIGNERS, OR
ANY PERSON PREPARING TO
DISTURB THE EARTH'S
SURFACE ANYWHERE IN THE
COMMONWEALTH. SERIAL NO.
20211971405 IN UPPER
ALLEN TOWNSHIP 7/27/2021

UTILITY CO. CONTACTS

COMPANY: VERIZON
PENNSYLVANIA LLC
ADDRESS: 1026 HAY ST
PITTSBURGH, PA. 15221
CONTACT: DEBORAH BARUM
deborah.d.della@verizon.com

COMPANY: MESSIAH UNIVERSITY
ADDRESS: FACILITY SERVICES
ONE UNIVERSITY AVE SUITE 3001
MECHANICSBURG, PA. 17055
CONTACT: RUSS EHRICH
REHRICH@MESSIAH.EDU

COMPANY: UPPER ALLEN
TOWNSHIP PUBLIC WORKS
ADDRESS: 100 GETTYSBURG PIKE
MECHANICSBURG, PA. 17055
CONTACT: COLIN BARGE
CBARGE@UATWP.ORG

COMPANY: UGI UTIL LANCASTER
ADDRESS: 1301 AIP DRIVE
MECHANICSBURG, PA. 17057
CONTACT: STEPHEN BATEMAN
sbateman@ugi.com

COMPANY: SUEZ WATER
PENNSYLVANIA INC.
ADDRESS: 6310 ALLENTOWN
BLVD
HARRISBURG, PA. 17112
CONTACT: NAT SHEFFER
nathaniel.sheffer@suez.com

COMPANY: PPL ELECTRIC UTILITIES
CORPORATION
ADDRESS: 434 SUSQUEHANNA
TRL
NORTHUMBERLAND, PA. 17857
CONTACT: DOUGLAS HAUPT
dlhaupt@pplweb.com

COMPANY: UPPER ALLEN
TOWNSHIP
ADDRESS: 100 GETTYSBURG PIKE
MECHANICSBURG, PA. 17055
CONTACT: KODI HOCKENBERRY
khockenberry@uatwp.org

GENERAL NOTES:

- The purpose of this plan is to create a Preliminary / Final Land Development Plan depict the improvements required for 14 rental Townhouse-style Attached Dwellings.
- All existing buildings within the site will be removed prior to development.
- The site survey is on State Plane Coordinates (NAD 83 PA SOUTH ZONE GRID). Elevations are on NAVD 88 Datum referenced from Benchmark (Iron Pin Found at southern front property corner at 529.29. The existing ground topography shown on this plan is a combination of a field survey conducted from 7/22/2021 to 11/30/2021 by R. J. Fisher & Associates, Inc.
- Proposed gravity sanitary sewer system, low pressure force main sewer and duplex grinder pump station shall be privately owned and maintained.
- Within clear sight triangles shown, no structure or growing material shall exceed a height of 3 feet above the grade of the street, and no branch of a tree, or obstruction, shall be lower than 9 feet above the grade of the street, with the exception of traffic signs, public utility poles, and similar-type structures.
- All new utilities shall be placed underground.
- All stormwater drainage facilities located outside of dedicated and accepted public street rights-of-way shall be private, and shall be maintained by the developer. The developer shall maintain the drainage facilities to the design, dimensions and elevations indicated on these drawings, and such facilities shall be permanent unless and until a revised stormwater management plan is approved by Upper Allen Township, and/or PA D.E.P.
- The proposed water system shown hereon is schematic only, and shall be superseded by the water company design when Final Plans are approved.
- A minimum of 10-foot separation, or an 18' vertical separation, shall be maintained wherever possible between water lines and sanitary sewer lines.
- Approval by the Cumberland County Conservation District of a soil erosion and sedimentation control plan must be obtained prior to any earthmoving. Implementation of the erosion control plan is the responsibility of the lot owner.
- According to FEMA maps, there is no designated floodplain on this site.
- Concrete monuments will be set where indicated. All other property corners not already marked shall be marked with iron pins. Monuments and markers shall be of the proper size and material as outlined in section 220-5.11 of the Subdivision & Land Development Ordinance of Upper Allen Township.
- All public improvements shall comply with the applicable municipality's construction specifications, for the municipality in which the work is located.
- All work shall be in accordance with PennDOT Publication 408, Specifications and Publication 72, Roadway Construction Standards, unless otherwise noted.
- Signs shall be installed per PennDOT standards and specifications.
- Manhole covers for storm manholes shall be cast with the word "Storm Sewer" for identification purpose.
- Construction of all work within the public street right-of-way and work related to storm drainage facilities requires inspection by the Township.
- Contractor shall provide a minimum 48 hours notice to the Township before starting work and schedule a pre-construction site meeting with the Upper Allen Township Engineer at least 48 hours prior to starting site construction activities.
- Nothing shall be placed, planted, set or put within the area of an easement or planting strip that would adversely affect the function of the easement or planting strip or conflict with an easement agreement. No structures shall be placed in any easement or planting strip unless otherwise noted in an agreement.
- Paper and digital Record Drawings shall be provided to Upper Allen Township.
- All sanitary sewer construction in public street rights-of-way shall be subject to backfill compaction testing at the developer's expense.
- Upon Township acceptance of any sanitary sewer mains, laterals, manholes, and other appurtenances located in public streets but not yet dedicated to the Township, developer grants to Township a temporary sanitary sewer easement thirty feet in width measured from the centerline of the sanitary sewer main for that purpose of emergency or other repairs to the sanitary sewer system, until such time they are dedicated to the Township.
- Location of underground utilities is shown approximately hereon. Contractor shall contact PA One Call prior to any excavation or construction and filed verify utility locations and follow utility company requirements for protection, relocation, or removal.
- As-built Mylar plans and electronic data files shall be provided to the Township. All drawings must be signed and sealed by a professional engineer or land surveyor attesting to the correctness of the facility information shown, in accordance with Section 220-4.2.C(3) of the Codified Ordinances of Upper Allen Township.
- The average slope of entire lot is < 15%.
- Agricultural Nuisance Disclaimer:** Lands, such as this site, that are within the Residential Districts are located within an area where land is used for commercial agricultural production. Owners, residents and other users of this property may be subjected to inconvenience, discomfort and the possibility of injury to property and health arising from normal and accepted agricultural practices and operations, including, but not limited to, noise, odors, dust, the operation of machinery of any kind, including aircraft, the storage and disposal of manure, the application of fertilizers and soil amendments. Owners, occupants and users of this property should be prepared to accept such inconveniences, discomfort and possibility of injury from normal agricultural operations and are hereby put on official notice that Section 4 of the Pennsylvania Act 133 of 1982, as amended, otherwise known as the "Right to Farm Law," [1] may bar them from obtaining legal judgment against such normal agricultural operations used in a prudent manner.
- A Wetland Investigation by Vortex Environmental, Inc. on December 20, 2021 revealed no wetlands at this site.
- A Recreation Fee in-lieu-of land dedication will be provided.
- Stormwater flow discharging at the southeast corner of site onto adjacent property, currently a farm field owned by Messiah College, will not be increased, relocated, or otherwise altered without approval of the affected owner. Stormwater flow will be collected, controlled, and discharged over a rock apron stilling discharge at same location as existing condition.

PLAN APPROVAL BLOCKS

REVIEWED THIS _____ DAY OF _____
20____ BY CUMBERLAND COUNTY PLANNING DEPARTMENT.

DIRECTOR OF PLANNING _____ DATE _____

APPROVED BY THE PLANNING COMMISSION OF UPPER ALLEN TOWNSHIP, THIS _____ DAY OF _____, 20____.

SECRETARY _____ DATE _____

CHAIRMAN _____ DATE _____

APPROVED BY THE BOARD OF COMMISSIONERS OF UPPER ALLEN TOWNSHIP, THIS _____ DAY OF _____, 20____.

THE CONDITIONS OF APPROVAL WERE SATISFIED THIS ____ DAY OF 20____.

ATTEST: _____ SECRETARY _____ DATE _____

CHAIRMAN _____ DATE _____

OWNER CERTIFICATION

I, _____, the undersigned, owner of the real estate shown and described herein, do hereby certify that we have laid off and platted and hereby lay off and plan, said real estate in accordance with the within plan. The land development shall be known and designated as 2509 Mill Rd. All streets and alleys shown and not heretofore dedicated are hereby dedicated to the public.

Building setback lines are hereby established as shown on this plan, between which lines and the property lines of the street there shall be erected or maintained no building or structure.

There are strips of ground 10-30 feet in width as shown on this plan and marked: "Easement, reserved for the use of public utilities for the installation of water and sewer mains, poles, ducts, lines and wires, subject at all times to the proper authorities and to the easement herein reserved." No buildings or other structures are to be erected or maintained upon said strips of land, but owner of lot in this land development shall take their titles subject to the rights of the utilities.

The foregoing covenants (or restrictions), as recorded at the Cumberland County Courthouse, are to run with the land and shall be binding on all parties and all persons claiming under them until January 1, 2048, at which time said covenants (or restrictions) shall be automatically extended for successive periods of 10 years and shall remain in full force and effect unless changed at the end of such period of 10 years by vote of a majority of the then owners of the building site covered by these covenants (or restrictions).

The right to enforce these provisions by injunction, together with the right to cause the removal, by due process of law, of any structure or part thereof erected or maintained in violation hereof, is hereby dedicated to the public and reserved to the owner of this land development and to their heirs and assigns.

Witness our Hands and Seals this ____ day of _____, 20____.

Commonwealth of Pennsylvania: _____

County of Cumberland: _____
On this, the ____ day of _____, 20____ before me, _____, the undersigned officer, personally came _____, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged that _____ executed the same for the purposes therein contained.

OWNER : x _____

IN WITNESS WHEREOF, I have hereunto set my hand and Official Seal.

Notary Public _____

My Commission expires: _____

Sheet List Table

Sheet Number	Sheet Title
1	COVER SHEET
2	EXISTING CONDITIONS & DEMO PLAN
3	EXISTING CONDITIONS PLAN (AERIAL)
4	LAND DEVELOPMENT PLAN - SITE LAYOUT
5	GRADING & DRAINAGE PLAN
6	LANDSCAPE PLAN
7	E & S POLLUTION CONTROL PLAN
8	SITE LIGHTING PLAN
9	SANITARY SEWER PLAN & PROFILE
10	STORM SEWER PLAN & PROFILES
11	SITE DETAILS
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13	SWM DETAILS
14	SWM DETAILS
15	UTILITY DETAILS
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17	UTILITY DETAILS
18	UTILITY DETAILS
19	E&S CONTROL DETAILS
20	E&S CONTROL DETAILS
21	E&S CONTROL DETAILS

ZONING REQUIREMENTS

Medium Density Residential	Required	Proposed
Minimum Street Frontage	20 feet (interior), 35 feet (exterior)	84.72 Feet
Maximum Building Coverage	30%	14.5%
Maximum Impervious Coverage	45%	44.7%
Lot Size	2000 s.f.	1.75 AC.
Minimum Front Yard	25 Feet	25 Feet
Minimum Side Yard	10 Feet (exterior side)	10 Feet
Minimum Rear Yard	15 Feet	15 Feet
Minimum Lot Width	20 feet (interior), 35 feet (exterior)	20 feet (interior), 35 feet (exterior)
Maximum Building Height	35 Feet	<35 Feet
Parking (2.25 space/unit)	32 Spaces	35 Spaces
Handicap Parking	1 Space	1 Space

REQUIRED AGENCY APPROVALS/ PERMITS

APPROVAL	NUMBER	APPROVAL DATE	EXPIRATION DATE
PA DEP SEWAGE PLANNING MODULE EXEMPTION			
UPPER ALLEN TOWNSHIP SEWAGE PLANNING MODULE EXEMPTION CERTIFICATION			
UPPER ALLEN ZONING HEARING BOARD - SPECIAL EXCEPTION			
UPPER ALLEN TOWNSHIP LAND DEVELOPMENT PLAN APPROVAL			
CUMBERLAND COUNTY CONSERVATION DISTRICT EROSION & SEDIMENT CONTROL PLAN ADEQUACY DETERMINATION			
CUMBERLAND COUNTY CONSERVATION DISTRICT / DEP NPDES NOTICE OF INTENT ACKNOWLEDGEMENT			

SITE DATA:

- Record owner and applicant: Mihail Malinov 2509 Mill Rd. Mechanicsburg, PA 17055 Phone: (717) 713-3892
- Deed reference: INST # 201623365
- Property is zoned Medium Density Residential (R-2) in Upper Allen Township.
- Gross acreage: 1.75 acres
- Existing number of lots: 1
- Proposed number of lots: 1
- Existing number of dwelling units: 1
- Proposed number of dwelling units: 14
- Proposed Density: 10.3 Units/ac.
- Proposed use: 14 Single-Family Attached (Townhouse) dwellings.
- Proposed total length of new public streets: 0 linear feet.
- Proposed total length of new private streets: 0 linear feet
- There are no streams, wetlands, significant rock outcrops, soil subsidences, floodplains, or contaminated soils known to exist on the Upper Allen Township portion of this site.
- Proposed water supply: public (Suez Water)
- Proposed sewage disposal: public
- Maximum proposed building height is 35 feet.
- Site is tax parcel number 42-30-2110-028.

TAX PARCEL NUMBER:

42-30-2110-028

RECORDING:

THIS PLAN RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS IN AND FOR

CUMBERLAND COUNTY THIS _____ DAY OF _____, 20____.

PLAN BOOK _____, PAGE _____.

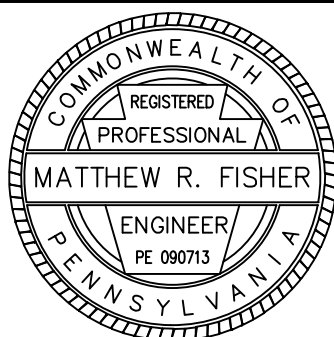
INSTRUMENT NUMBER _____.

REQUESTED WAIVERS, MODIFICATIONS, DEFERRALS

ORDINANCE SEC.	REQUIREMENT	DATE APPROVED	FULL WAIVER, MODIFICATION, OR DEFERRAL
220-5.3.A.1.	CURBS SHALL BE PROVIDED ALONG ALL EXISTING TOWNSHIP AND/OR STATE ROADS THAT ADJOIN ANY PORTION OF ANY SUBDIVISION AND/OR LAND DEVELOPMENT.		DEFERRAL OWNER SHALL INSTALL CURBING ALONG MILL ROAD FRONTAGE IF UPPER ALLEN TOWNSHIP REQUESTS IN THE FUTURE.
220-5.10.A.1.	30' WIDE STORM DRAINAGE EASEMENTS TO ALLOW LESS THAN 30 FEET IN CERTAIN LOCATIONS THAT WON'T PERMIT 30' OF WIDTH TO ALLOW 20' MIN. AS SUFFICIENT AND TO ALLOW TREES AND SHRUBS WITHIN EASEMENTS		MODIFICATION
220-5.13.B	1 SHADE TREE / 40 LF AND 1 EVERGREEN TREE/ 5 LF OF VISIBLE TRASH DUMPSTER TO ALLOW THE APPLICANT TO INSTALL FOUR EVERGREEN TREES AND ZERO SHADE TREES AROUND THE DUMPSTER ENCLOSURE AREA AND 10 EVERGREENS AND 2 SHADE TREES ELSEWHERE ON PROPERTY.		MODIFICATION

ENGINEER & SURVEYOR

R.J. FISHER & ASSOCIATES
ENGINEERING, PLANNING & SURVEYING
1546 BRIDGE STREET
NEW CUMBERLAND, PA 17070
(717) 774-7534



I, MATTHEW R. FISHER, P.E., P.L.S., HEREBY CERTIFY THAT I AM A REGISTERED LAND SURVEYOR, AND A REGISTERED ENGINEER IN COMPLIANCE WITH THE LAWS OF THE COMMONWEALTH OF PENNSYLVANIA; THAT THIS PLAN CORRECTLY REPRESENTS A SURVEY COMPLETED BY ME ON 11/30/2021; THAT ALL THE MONUMENTS SHOWN THEREON ACTUALLY EXIST; AND THAT THEIR LOCATION, SIZE, TYPE AND MATERIAL ARE ACCURATELY SHOWN. ALL ELEMENTS OF THE PLAN ARE IN CONFORMITY WITH TOWNSHIP CODE AND ANY APPLICABLE STATE REGULATIONS.

MATTHEW R. FISHER, P.L.S., P.E.

GEOLOGIST CERTIFICATION:

I, BLAIR C. KITLINSKI, P.E. OF F.T. KITLINSKI & ASSOCIATES, INC. (CONSULTING GEOTECHNICAL ENGINEERS) HEREBY CERTIFY THAT THE SITE IS NOT UNDERLAIN BY LIMESTONE BEDROCK OR OTHER CARBONATE GEOLOGIC FORMATION.

OWNER & APPLICANT

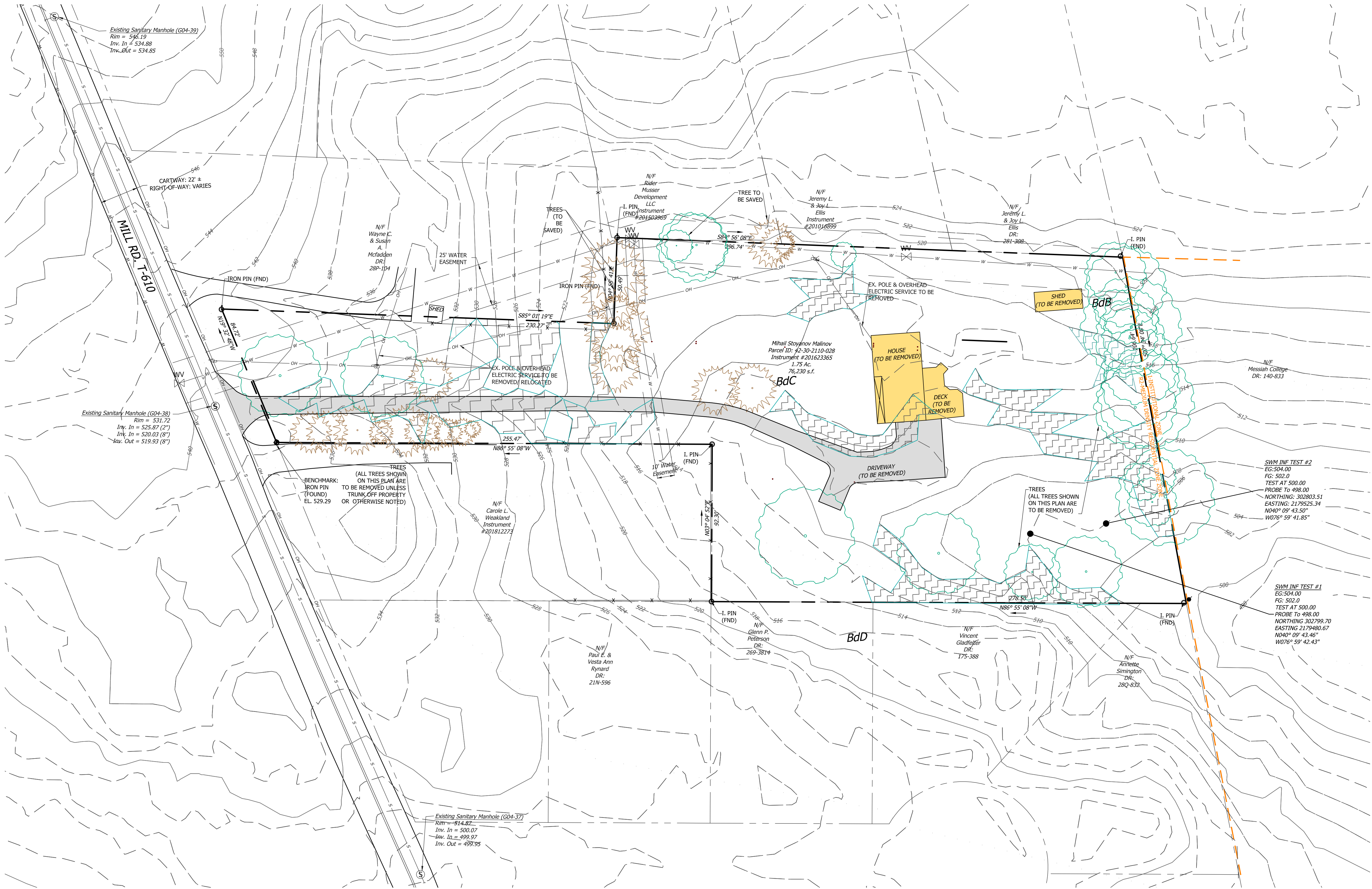
MIHAIL MALINOV
2509 MILL RD.
MECHANICSBURG, PA 17055
(717) 713-3892

BY UPPER ALLEN TOWNSHIP, I, MIHAIL MALINOV, HEREBY ACKNOWLEDGE THAT THE STORMWATER MANAGEMENT FACILITIES AND BMP'S ARE TO BE PERMANENT FIXTURES THAT CAN BE ALTERED OR REMOVED ONLY AFTER APPROVAL OF A REVISED PLAN

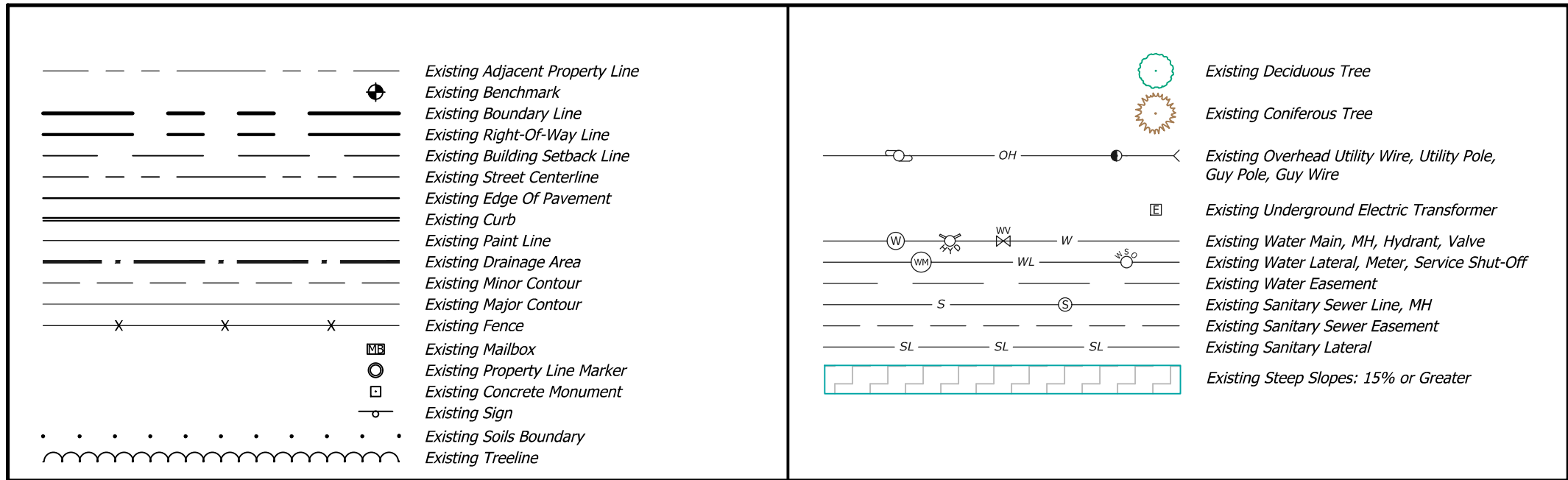


R.J. FISHER & ASSOCIATES, INC.
□ SITE PLANNING □ CIVIL ENGINEERING □ LAND SURVEYS
1546 BRIDGE STREET, NEW CUMBERLAND, PA. 17070
PHONE: (717) 774-7534 FAX: (717) 774-7190
WWW.RJFISHERENGINEERING.COM

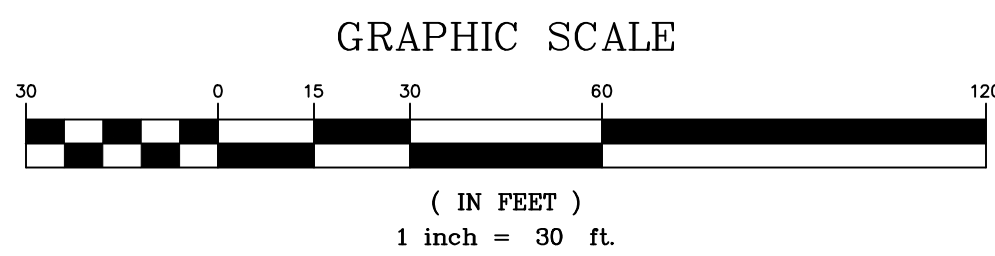
No.	REVISION	DATE	DRAWING ID
1	PER TWP PC REPORT 5/17/22	6/21/22	221013-1-COV
2	PER COCD COMMENTS	7/22/2022	
3	TWP PC REPORT #2 8/24/22	10/24/22	DATE: 04/25/2022
4	—	—	
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Existing Conditions Legend



NOTES:
1. ALL TREES WITHIN PROPERTY AND LIMIT OF DISTURBANCE TO BE REMOVED, EXCEPT AS NOTED.



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1546 BRIDGE STREET, NEW CUMBERLAND, PA. 17070
PHONE: (717) 774-7534 ■ FAX: (717) 774-7190
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EXISTING CONDITIONS & DEMO PLAN
FOR
2509 MILL ROAD TOWNHOMES
LOCATED IN
UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PA

DRAWING ID: 221013-EC
PROJECT: 221013
DATE: 04/25/2022
SHEET: 2 OF 21

NO.	REVISION	DATE
1	PER TWP PC REPORT 5/17/22	6/21/22
2	PER CCOD COMMENTS	7/22/2022
3	TWP PC REPORT #2 8/24/22	10/24/22
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5	###	###

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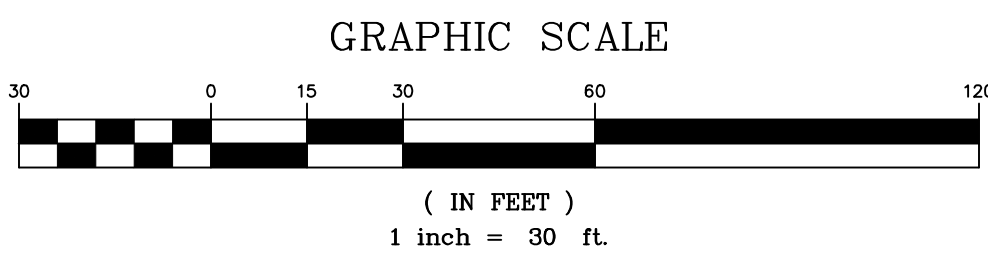
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PLOT: 221013-EC.dwg
3 ECA

Existing Conditions Legend

	<p>Existing Adjacent Property Line</p> <p>Existing Benchmark</p> <p>Existing Boundary Line</p> <p>Existing Right-Of-Way Line</p> <p>Existing Building Setback Line</p> <p>Existing Street Centerline</p> <p>Existing Edge Of Pavement</p> <p>Existing Curb</p> <p>Existing Paint Line</p> <p>Existing Drainage Area</p> <p>Existing Minor Contour</p> <p>Existing Major Contour</p> <p>Existing Fence</p> <p>Existing Mailbox</p> <p>Existing Property Line Marker</p> <p>Existing Concrete Monument</p> <p>Existing Sign</p> <p>Existing Soils Boundary</p> <p>Existing Treeline</p>
	<p>Existing Deciduous Tree</p> <p>Existing Coniferous Tree</p> <p>Existing Overhead Utility Wire, Utility Pole, Guy Pole, Guy Wire</p> <p>Existing Underground Electric Transformer</p> <p>Existing Water Main, MH, Hydrant, Valve</p> <p>Existing Water Lateral, Meter, Service Shut-Off</p> <p>Existing Water Easement</p> <p>Existing Sanitary Sewer Line, MH</p> <p>Existing Sanitary Sewer Easement</p> <p>Existing Sanitary Lateral</p>

NOTES:

1. ALL TREES WITHIN PROPERTY AND LIMIT OF DISTURBANCE TO BE REMOVED, EXCEPT AS NOTED.



EXISTING CONDITIONS PLAN (AERIAL)

FOR

2509 MILL ROAD TOWNHOMES

LOCATED IN
UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PA

DRAWING ID:
221013-EC

PROJECT: 221013

DATE: 04/25/2022

SHEET:
3 OF 21

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SITE PLANNING • CIVIL ENGINEERING • LAND SURVEYS

1546 BRIDGE STREET, NEW CUMBERLAND, PA. 17070

PHONE: (717) 774-7534 • FAX: (717) 774-7190

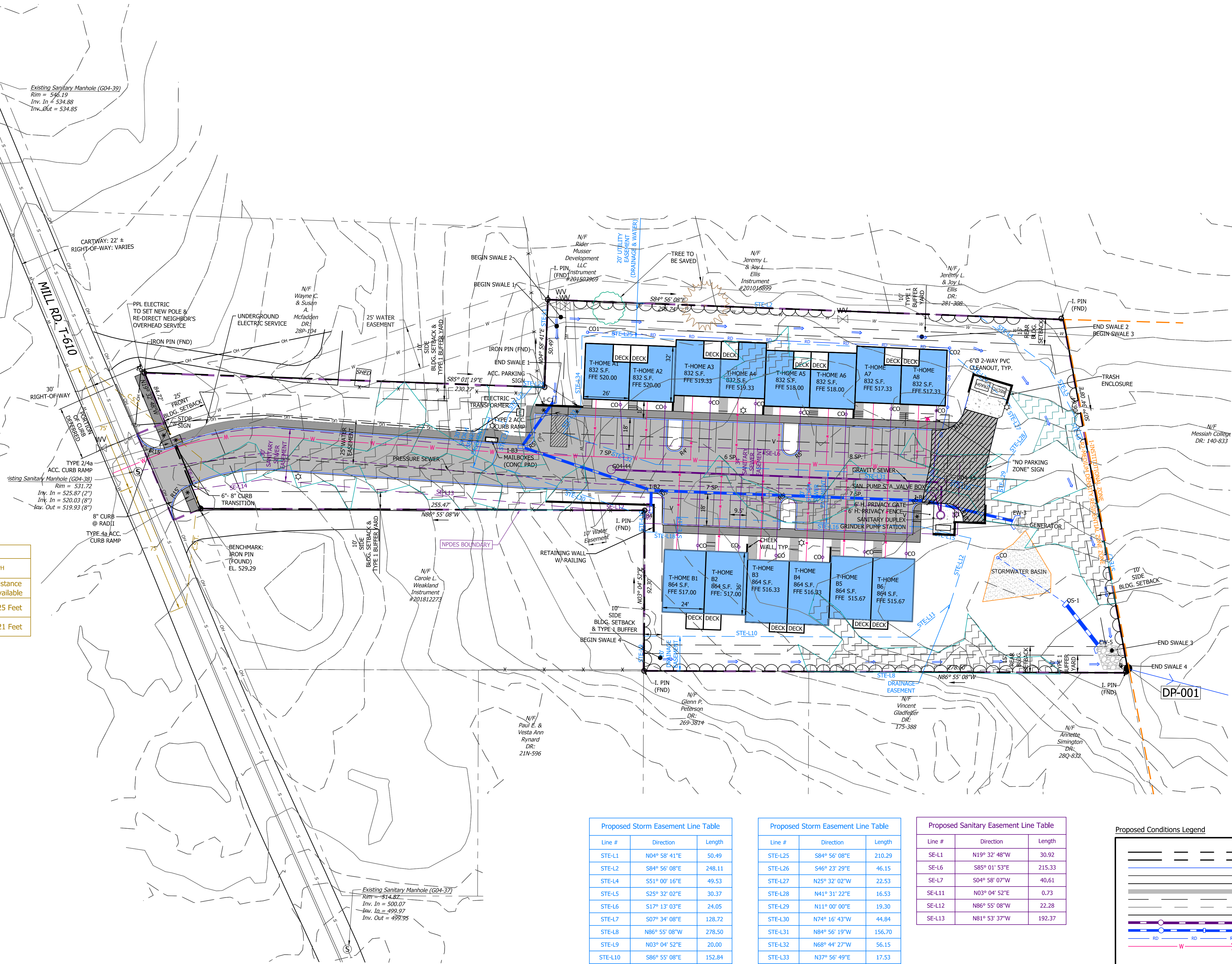
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NO.	REVISION	DATE
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4	---	---
5	###	###

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Sight Distance Table			
CL Access Drive & Mill Road Speed Limit = 25 MPH			
View From	Slope	Distance Required	Distance Available
Left	Down Hill @ 7%	97 Feet	325 Feet
Right	Up Hill @ 6%	100 Feet	421 Feet

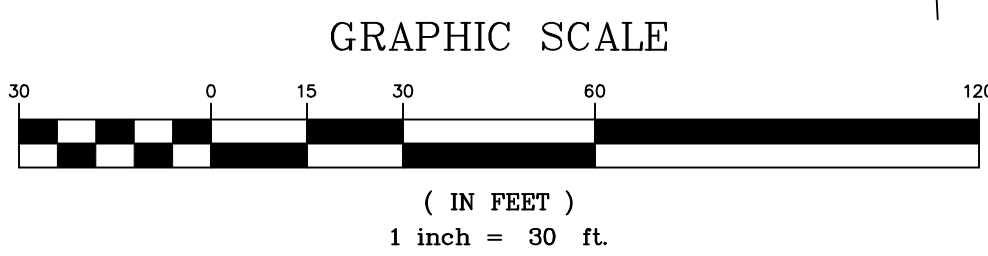
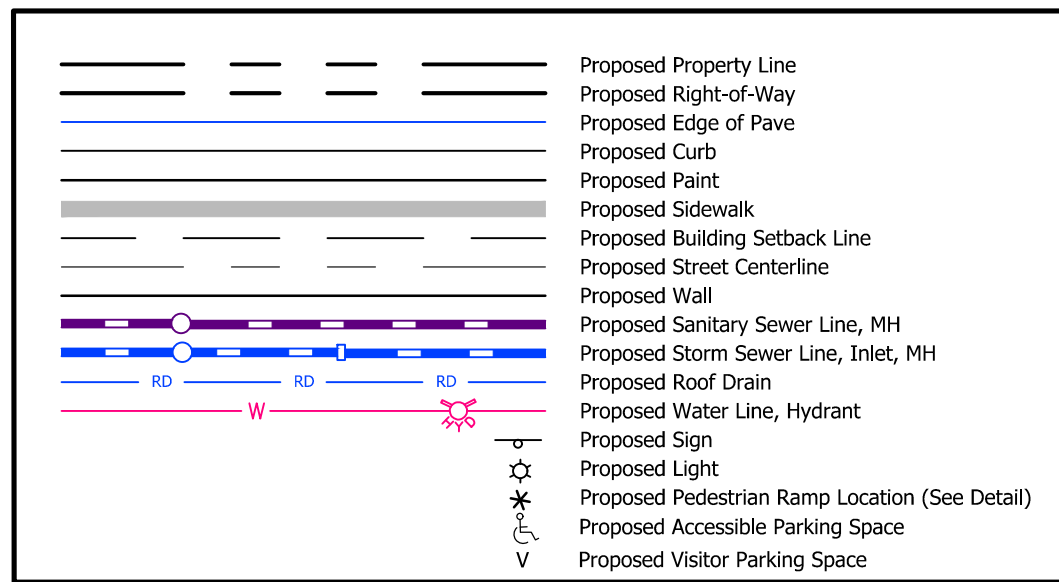


Proposed Storm Easement Line Table		
Line #	Direction	Length
STE-L1	N04° 58' 41"E	50.49
STE-L2	S84° 58' 08"E	248.11
STE-L4	S51° 00' 16"E	49.53
STE-L5	S25° 32' 02"E	30.37
STE-L6	S17° 13' 03"E	24.05
STE-L7	S07° 34' 08"E	128.72
STE-L8	N86° 55' 08"W	278.50
STE-L9	N03° 04' 52"E	20.00
STE-L10	S86° 55' 08"E	152.84
STE-L11	N53° 36' 22"E	29.78
STE-L12	N20° 18' 11"E	39.89
STE-L15	N74° 14' 10"W	29.35
STE-L16	N84° 51' 42"W	140.77
STE-L17	S04° 28' 14"W	8.84
STE-L18	N85° 31' 46"W	18.11
STE-L19	N03° 04' 47"E	12.35
STE-L20	N68° 37' 14"W	82.82
STE-L21	S21° 02' 20"W	30.00
STE-L22	N43° 01' 14"E	21.18
STE-L24	S85° 21' 41"E	7.10

Proposed Storm Easement Line Table		
Line #	Direction	Length
STE-L25	S84° 56' 08"E	210.29
STE-L26	S46° 23' 29"E	46.15
STE-L27	N25° 32' 02"W	22.53
STE-L28	N41° 31' 22"E	16.53
STE-L29	N11° 00' 00"E	19.30
STE-L30	N74° 16' 43"W	44.84
STE-L31	N84° 56' 19"W	156.70
STE-L32	N68° 44' 27"W	56.15
STE-L33	N37° 56' 49"E	17.53
STE-L34	N03° 50' 42"E	41.92

Proposed Sanitary Easement Line Table		
Line #	Direction	Length
SE-L1	N19° 32' 48"W	30.92
SE-L6	S85° 01' 53"E	215.33
SE-L7	S04° 58' 07"W	40.61
SE-L11	N03° 04' 52"E	0.73
SE-L12	N86° 55' 08"W	22.28
SE-L13	N81° 53' 37"W	192.37

Proposed Conditions Legend



LAND DEVELOPMENT PLAN - SITE LAYOUT

FOR
2509 MILL ROAD TOWNHOMES

LOCATED IN
UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PA

R. J. FISHER & ASSOCIATES, INC.

SITE PLANNING & CIVIL ENGINEERING & LAND SURVEYS

1546 BRIDGE STREET, NEW CUMBERLAND, PA. 17070
PHONE: (717) 774-7534 & FAX: (717) 774-7190

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4	—	—
5	—	—

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DRAWING ID:	221013-LD
PROJECT:	221013
DATE:	04/25/2022
SHEET:	4 OF 21

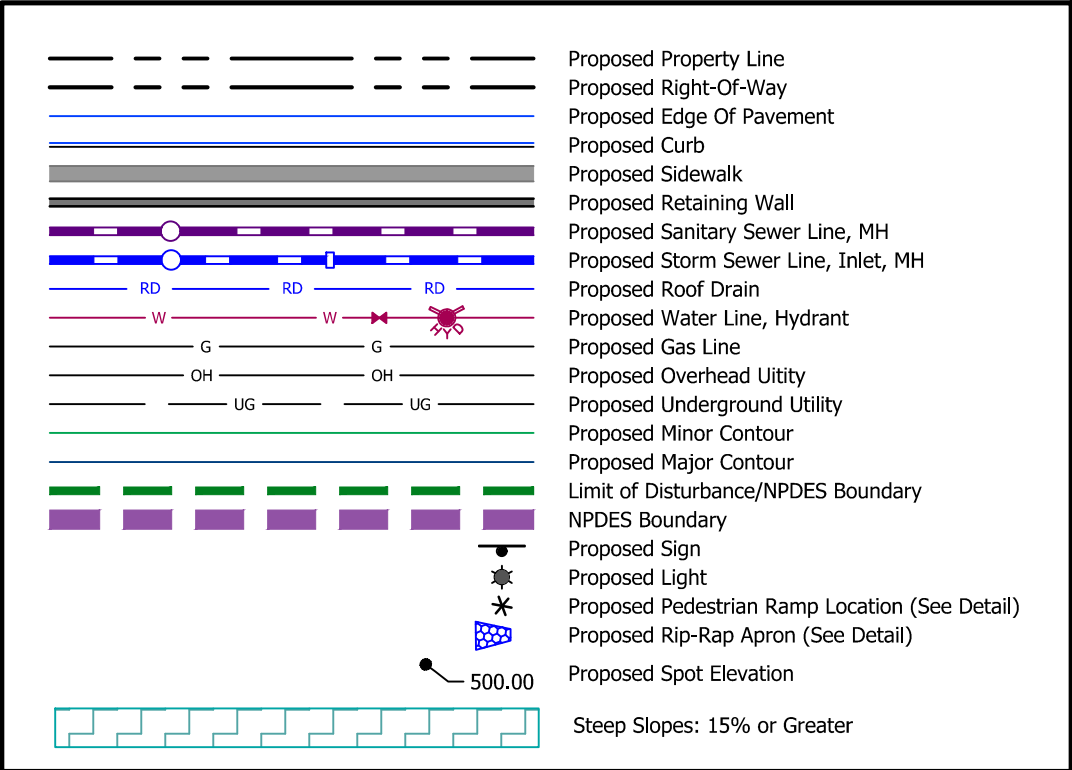
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DATE: 04/25/2022 10:45:46 AM
USER: R.J.FISHER



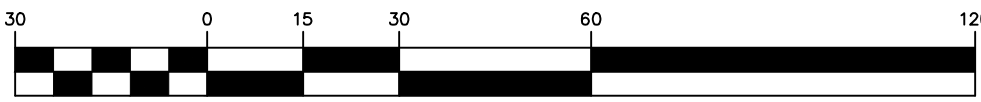
NOTES:

- Frames and covers on existing sanitary manhole nos. G04-39, G04-38 and G04-37 in Mill Road to be replaced with new frames and vented manhole covers.
- Existing manhole no. G04-38 in Mill Road to be fully lined with epoxy coating material in accordance with Township requirements.

Proposed Conditions Legend



GRAPHIC SCALE



GRADING & DRAINAGE PLAN

FOR
2509 MILL ROAD TOWNHOMES

LOCATED IN
UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PA

DRAWING ID:
221013-5-GD

PROJECT: 221013

DATE: 04/25/2022

SHEET:

5 OF 21



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SITE PLANNING ■ CIVIL ENGINEERING ■ LAND SURVEYS

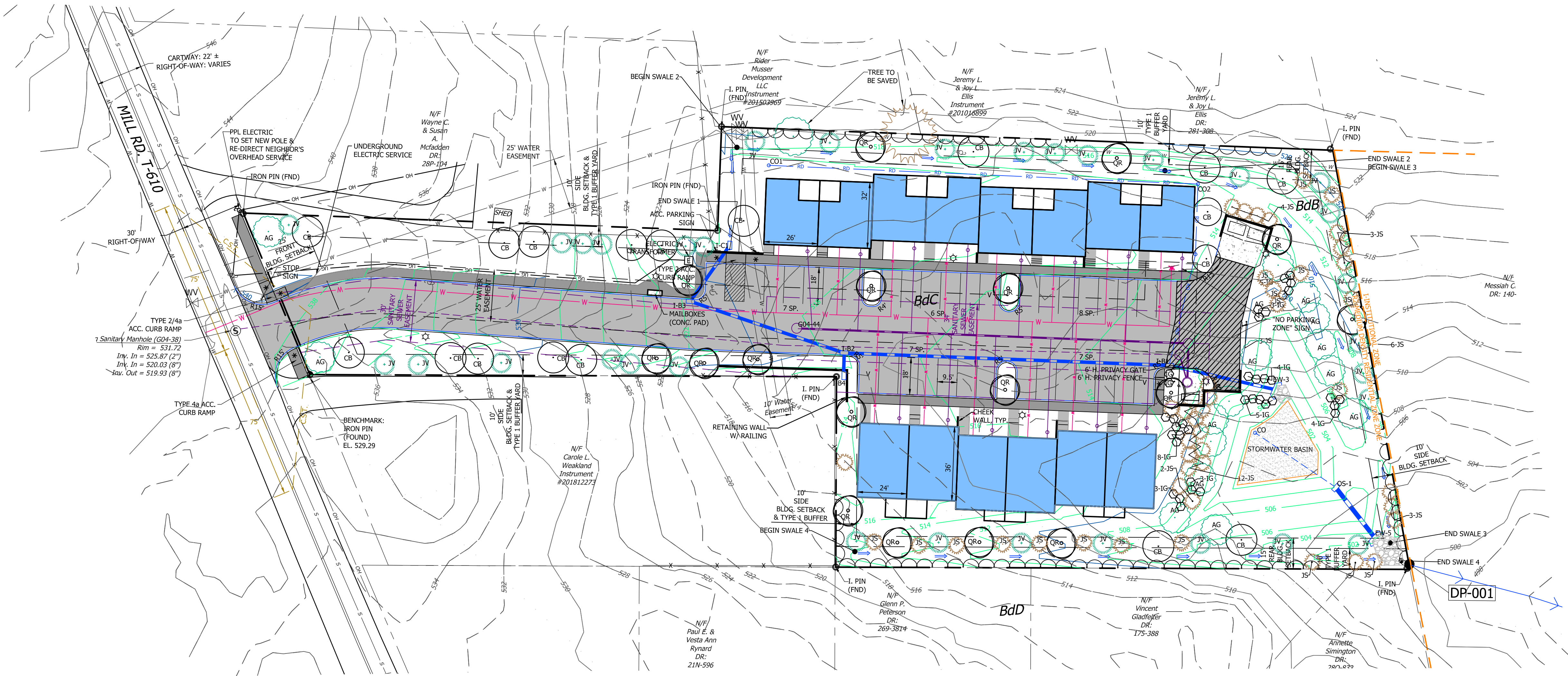
1546 BRIDGE STREET, NEW CUMBERLAND, PA. 17070

PHONE: (717) 774-7534 ■ FAX: (717) 774-7190

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NO.	REVISION	DATE
1	PER TWP PC REPORT 5/17/22	6/21/22
2	PER CCOD COMMENTS	7/22/22
3	TWP PC REPORT #2 8/24/22	10/24/22
4	—	—
5	—	—

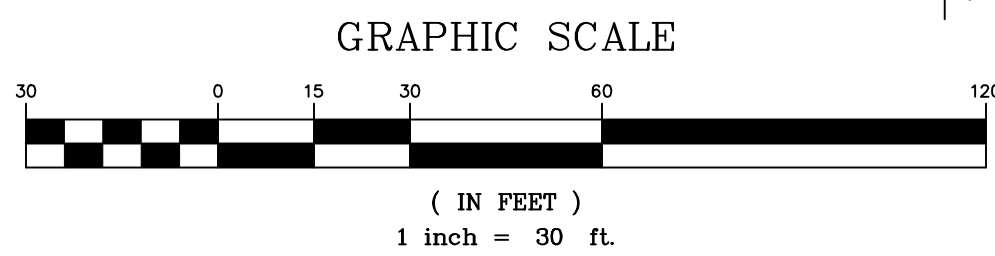
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PLANTING SCHEDULE						
245-16.5.C., 220-5.13.B1, TYPE 1 BUFFER REQUIRES 1 SHADE TREE PER 50 LF OF BUFFER AND 1 EVERGREEN TREE PER 40 LF OF BUFFER YARD; 220-5.13 DUMPSTER SCREENING: 1 SHADE TREE PER 40 LF AND 1 EVERGREEN PER 5 LF OF VISIBILITY (70/40=2 SHADE TREES REQ'D., 70/5=14 EVERGREEN TREES); 1285' OF TYPE 1 BUFFER = 26 SHADE TREES REQUIRED, 33 EVERGREENS REQ'D., 47 PROPOSED; 4 EVERGREENS @ 70' OF DUMPSTER ENCLOSURE PERIMETER PLUS 10 EVERGREENS AND 2 SHADE TREES ELSEWHERE PER WAIVER MODIFICATION PER UAT PC						
SYMBOL	ID	QUANTITY	BOTANICAL NAME	COMMON NAME	PLANTING SIZE/ CONDITIONS	MATURE SIZE / GENERAL TYPE
	CB	16	CARPINUS BETULUS 'FASTIGIATA'	UPRIGHT EUROPEAN HORNBEAM	2 to 2-1/2" CAL. B&B, 40' O.C MAX	15'W. X 30'H. MAJOR DECIDUOUS TREE
	QR	11	QUERCUS ROBAR 'FASTIGIATA'	COLUMNAR ENGLISH OAK	2 to 2-1/2" CAL. B&B	15'W. X 50'H. MAJOR DECIDUOUS TREE
	JV	33	JUNIPERUS VIRGINIANA 'BRODIE'	BRODIE EASTERN REDCEDAR	5'H. B&B, ADJUST LOCATION TO AVOID PLANTING WITHIN 10' OF HEALTHY TREE TO BE SAVED	10'W. X 35'H. EVERGREEN TREE
	JS	14	JUNIPERUS SCOPULORUM 'MOONGLOW'	MOONGLOW JUNIPER	5' H., #10 CONTAINER	8' W. X 20' H. EVERGREEN TREE
220-5.13.D.7 STREET TREES REQUIRED 2 PER 100 LF OF RIGHT-OF-WAY, 84/100 = 2 REQUIRED, 2 PROPOSED						
	AG	2	AMELANCHIER X GRANDIFLORA	AUTUMN BRILLIANCE APPLE SERVICEBERRY	2" CALIPER (CAL.), BALLED & BURLAPPED (B&B) ROOT	20' W. X 20' H. ORNAMENTAL SMALL ST. TREE
205-5.13.g.5 TYPE 3 BUFFER REQUIRED FOR STORMWATER FACILITY, 1 SHADE TREE PER 30 LF AND 1 EVERGREEN TREE PER 10 LF AND 1 SHRUB PER 10 LF OF BERM PERIMETER REQUIRED PERIMETER = 340', 340/30 = 12 SHADE TREES REQUIRED, 340/10 = 34 EVERGREEN TREES REQ'D., 34 PROPOSED; 34 SHRUBS PROPOSED						
	AG	12	AMELANCHIER X GRANDIFLORA	AUTUMN BRILLIANCE APPLE SERVICEBERRY	2" CALIPER (CAL.), BALLED & BURLAPPED (B&B) ROOT	20' W. X 20' H. ORNAMENTAL SMALL ST. TREE
	JS	34	JUNIPERUS SCOPULORUM 'MOONGLOW'	MOONGLOW JUNIPER	5' H., #10 CONTAINER	8' W. X 20' H. EVERGREEN TREE
	IG	34	ILEX GLABRA 'INKBERRY'	COMPACT INKBERRY HOLLY	18" H., #3 CONTAINER	4' W. X 4' H. EVERGREEN SHRUB
205-5.13.B.2.b 1 SHADE TREE FOR EACH LANDSCAPE ISLAND REQUIRED						
	QR	6	QUERCUS ROBAR 'FASTIGIATA'	COLUMNAR ENGLISH OAK	2 to 2-1/2" CAL. B&B	15'W. X 50'H. MAJOR DECIDUOUS TREE

GENERAL LANDSCAPE NOTES:

- ALL LANDSCAPE MATERIALS SHALL BE PLACED AND PLANTED IN ACCORDANCE WITH THIS PLAN AND ALL APPLICABLE STANDARDS AND REQUIREMENTS OF THE UPPER ALLEN TOWNSHIP ZONING AND SUBDIVISION/ LAND DEVELOPMENT ORDINANCES.
- THE OWNER WILL BE RESPONSIBLE FOR THE PROPER MAINTENANCE OF ALL PLANT MATERIALS. ALL PLANTINGS WILL BE INSTALLED, MAINTAINED AND REPLACED BY THE OWNER, IF DEAD OR DISEASED, IN LOCATIONS AS SHOWN ON THIS APPROVED LANDSCAPE PLAN.
- ALL PLANT MATERIALS SHALL BE PLANTED IN ACCORDANCE WITH GOOD NURSERY AND LANDSCAPING PRACTICES WITH ADEQUATE UNPAVED SURFACE AROUND EACH FOR WATER AND AIR AND SHALL BE PROPERLY PROTECTED BY CURBS, CURB STOPS, DISTANCE OR OTHER PROTECTIVE DEVICES TO PREVENT DAMAGE FROM VEHICLES. ANY AND ALL OTHER APPLICABLE STANDARDS ESTABLISHED BY THE TOWNSHIP SHALL ALSO APPLY. INDIVIDUAL PLANTS SHOULD BE MULCHED IN A CIRCLE OF MINIMUM DIAMETER OF 3 FT. GROUPS OF SHRUBS SHOULD BE IN A CONTINUOUS ORGANICALLY-SHAPED MULCH BED.
- ALL PLANT MATERIALS SHALL BE NURSERY GROWN IN A CLIMATE SIMILAR TO THAT OF THE LOCALITY OF THE SUBJECT TRACT.
- ALL PLANT MATERIALS SHALL HAVE A NORMAL, SYMMETRICAL GROWTH HABIT AND SHALL BE SOUND, HEALTHY AND VIGOROUS AND SHALL BE FREE FROM DISEASE, INSECTS, INSECT EGGS AND LARVAE.
- REQUIREMENTS FOR THE MEASUREMENT, BRANCHING, GRADING, QUALITY, BALLING AND BURLAPPING OF PLANT MATERIALS SHALL FOLLOW THE CODE OF STANDARDS RECOMMENDED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION IN THE AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z.60, CURRENT EDITION. PLANTS SHALL BE SO TRAINED IN DEVELOPMENT AND APPEARANCE TO BE PROPER IN FORM, COMPACTNESS AND SYMMETRY. THEY SHALL BE SOUND, HEALTHY, VIGOROUS, WELL BRANCHED, DENSELY FOLIATED WHEN IN LEAF AND FREE OF DISEASE AND INSECTS OF ANY KIND.
- LAYOUT OF PLANTS PRIOR TO PLANTING SHALL BE VERIFIED BY THE OWNER/DEVELOPER AND/OR THEIR REPRESENTATIVE.
- PRIOR TO PLANTING, TREES SHALL BE INSPECTED BY THE OWNER/DEVELOPER AND/OR THEIR REPRESENTATIVE FOR INJURY TO TRUNKS, EVIDENCE OF INSECT INFESTATION, OR IMPROPER PRUNING.
- ALL ROPES, STAVES, TAGS OR OTHER BINDINGS SHALL BE CUT OFF THE TOPS AND SIDES OF THE BALLS AND REMOVED FROM PITS. ALL ROT-PROOF, ROT-RESISTANT, PLASTIC BURLAP AND TOP HALF OF WIRE BASKET (MINIMUM) BALL COVERINGS SHALL BE REMOVED BEFORE PLANTING.
- DIAMETER OF PITS FOR TREES AND B+B SHRUBS SHALL BE AT LEAST 2 FEET GREATER THAN THE DIAMETER OF THE BALL OR SPREAD OF ROOTS. DIAMETER OF PITS FOR BARE-ROOTED TREES AND SHRUBS SHALL BE AT LEAST 1 FOOT GREATER THAN THE SPREAD OF ROOTS. NEVER CUT LEADER, PRUNE TOP OF BARE-ROOTED SHRUBS AND LATERAL BRANCHES OF TREE TO BALANCE LOSS OF ROOTS RESULTING FROM DIGGING. REFER TO DETAIL SHEET FOR PLANTING DETAILS.
- PLANT SUBSTITUTIONS MAY BE PERMITTED IF APPROVED BY THE OWNER/DEVELOPER AND LEMOYNE BOROUGH. ANY APPROVED SUBSTITUTION SHALL BE MADE IN LIKE KIND, SUITABLE FOR MICRO-CLIMATE AND SOIL CONDITIONS OF PLANTING SITE AND BE EQUIVALENT IN MATURE HEIGHT & WIDTH, GENERAL TYPE, HARDINESS.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR IDENTIFYING AND AVOIDING DISRUPTION OR DAMAGE OF ANY AND ALL UNDERGROUND UTILITY LOCATIONS, PRIOR TO DIGGING, PERFORMING A PA ONE CALL, AND PERFORMING EXPLORATORY TESTING AS MAY OTHERWISE BE REQUIRED. ANY AND ALL DAMAGE TO UNDERGROUND UTILITIES, WHETHER KNOWN OR UNKNOWN, IS AND WILL BE THE SOLE RESPONSIBILITY AND LIABILITY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL SPRAY PAINT OR OTHERWISE MARK ALL PROPOSED PLANTING BED LINES FOR OWNER APPROVAL PRIOR TO CUTTING IN PROPOSED BEDS.
- IF ANY DISCREPANCIES BETWEEN QUANTITIES IN PLANTING SCHEDULES AND THOSE SHOWN ON THE PLAN, THE PLAN SHALL GOVERN.
- ALL TREES SHALL BE GUYED OR STAKED FOR ONE YEAR FOLLOWING PLANTING. ALL GUYS OR STAKES SHOULD BE REMOVED ONE YEAR FROM INSTALLATION.
- TREE CANOPIES WILL BE MAINTAINED TO BE CLEAR OF BRANCHES AND LEAVES FROM GROUND TO 8 FT HEIGHT ABOVE CLEAR SIGHT TRIANGLE, SIDEWALKS, STREETS, PARKING AREAS AND OTHER AREAS OF PEDESTRIAN / VEHICLE CIRCULATION AREAS.
- PLANT BACKFILL MIX SHALL BE 75% TOPSOIL AND 25% PEAT (TOPSOIL & PEAT CONFORMING TO PENNDOT PUB. 408, SECTION 802 SPECIFICATIONS).

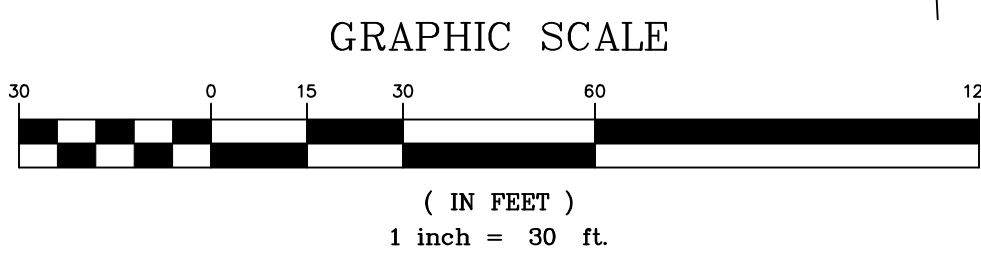


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1546 BRIDGE STREET, NEW CUMBERLAND, PA. 17070
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LANDSCAPE PLAN
FOR
2509 MILL ROAD TOWNHOMES
LOCATED IN
UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PA

DRAWING ID: 221013-6-LSP
PROJECT: 221013
DATE: 04/25/2022
SHEET: 6 OF 21



E & S POLLUTION CONTROL PLAN
FOR
2509 MILL ROAD TOWNHOMES
LOCATED IN
UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PA

NO.	REVISION	DATE
1	PER TWP PC REPORT 5/17/22	6/21/22
2	PER CCCD COMMENTS	7/12/2022
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4	—	—
5	—	—

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DRAWING ID:
221013-3-LD

PROJECT: 221013

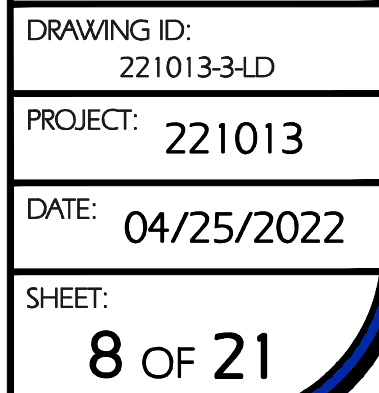
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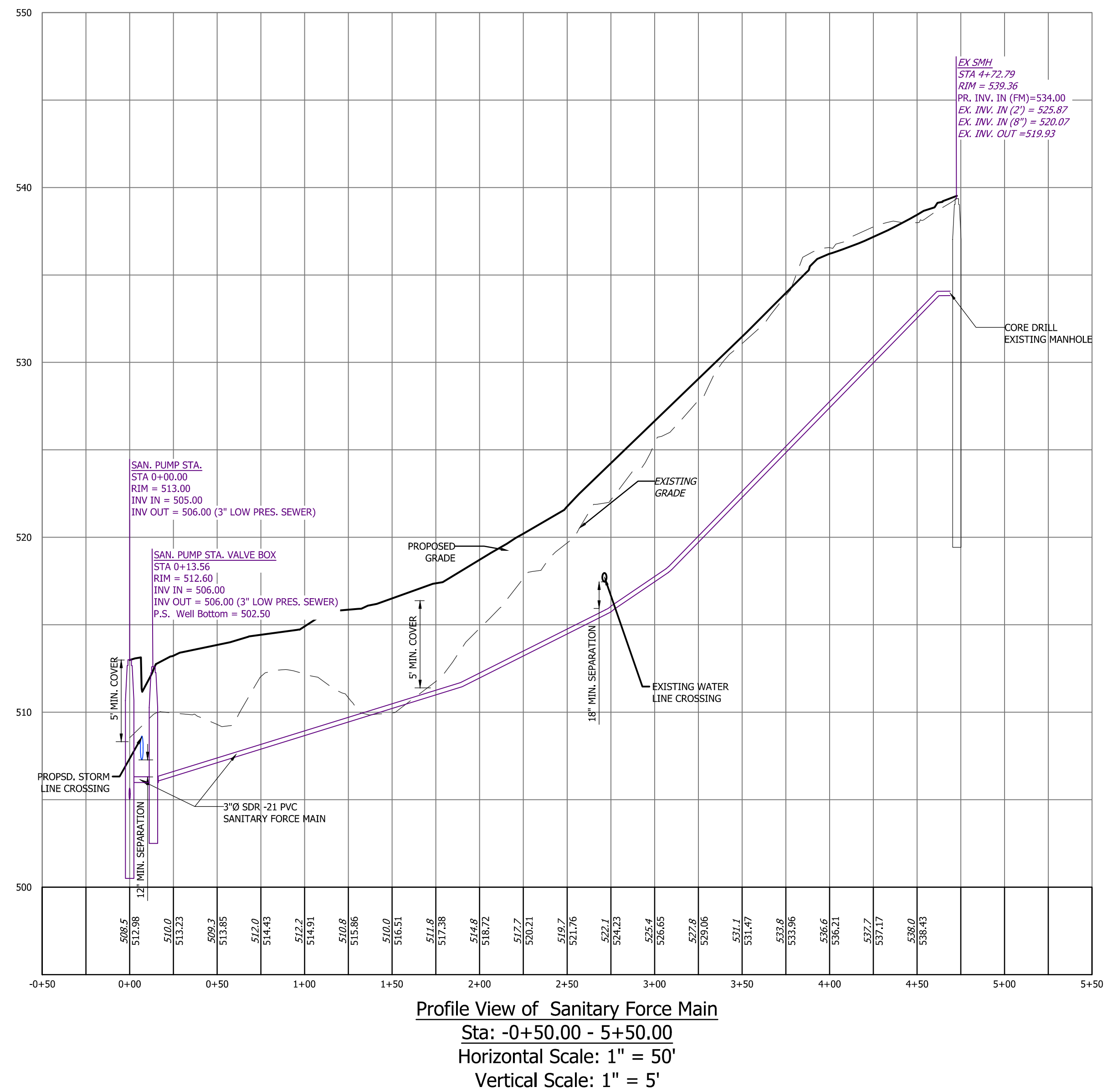
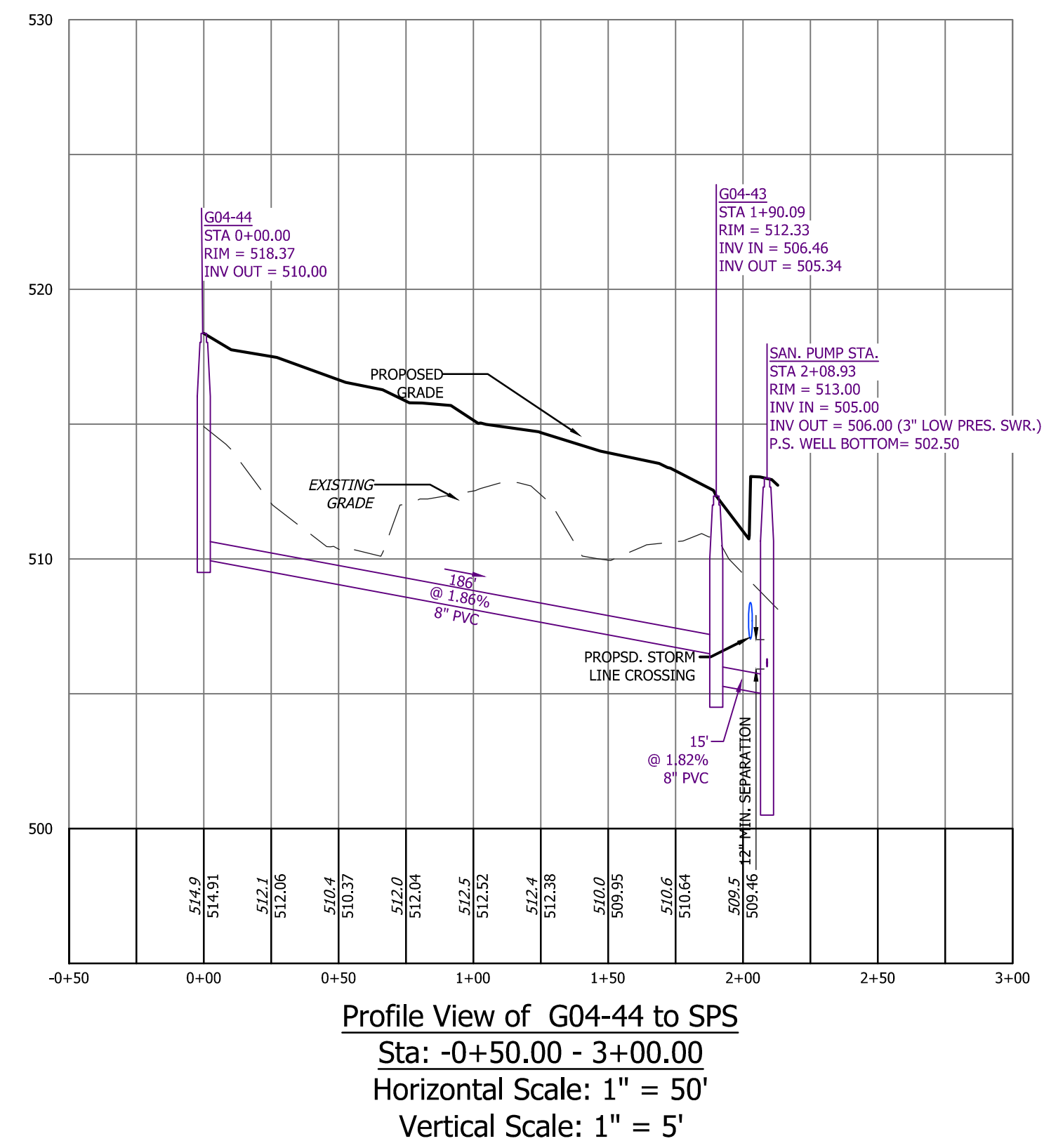
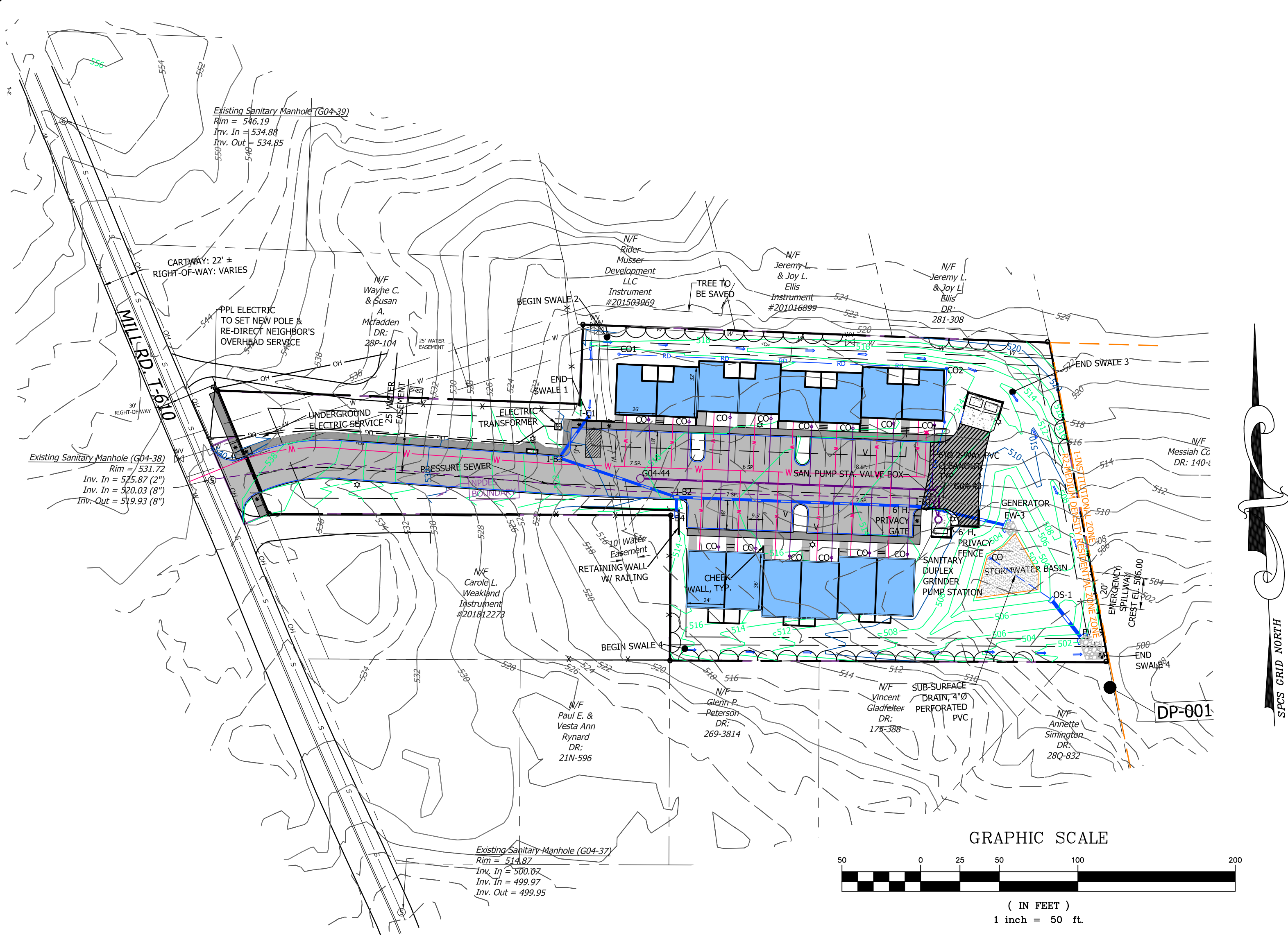
SHEET:
7 OF 21

NO.	REVISION	DATE
1	PER TWP PC REPORT 5/17/22	6/21/22
2	PER CCCD COMMENTS	7/12/2022
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- NOTES:
1. Frames and covers on existing sanitary manhole nos. G04-39, G04-38 and G04-37 in Mill Road to be replaced with new frames and vented manhole covers.
 2. Existing manhole no. G04-38 in Mill Road to be fully lined with epoxy coating material in accordance with Township requirements.

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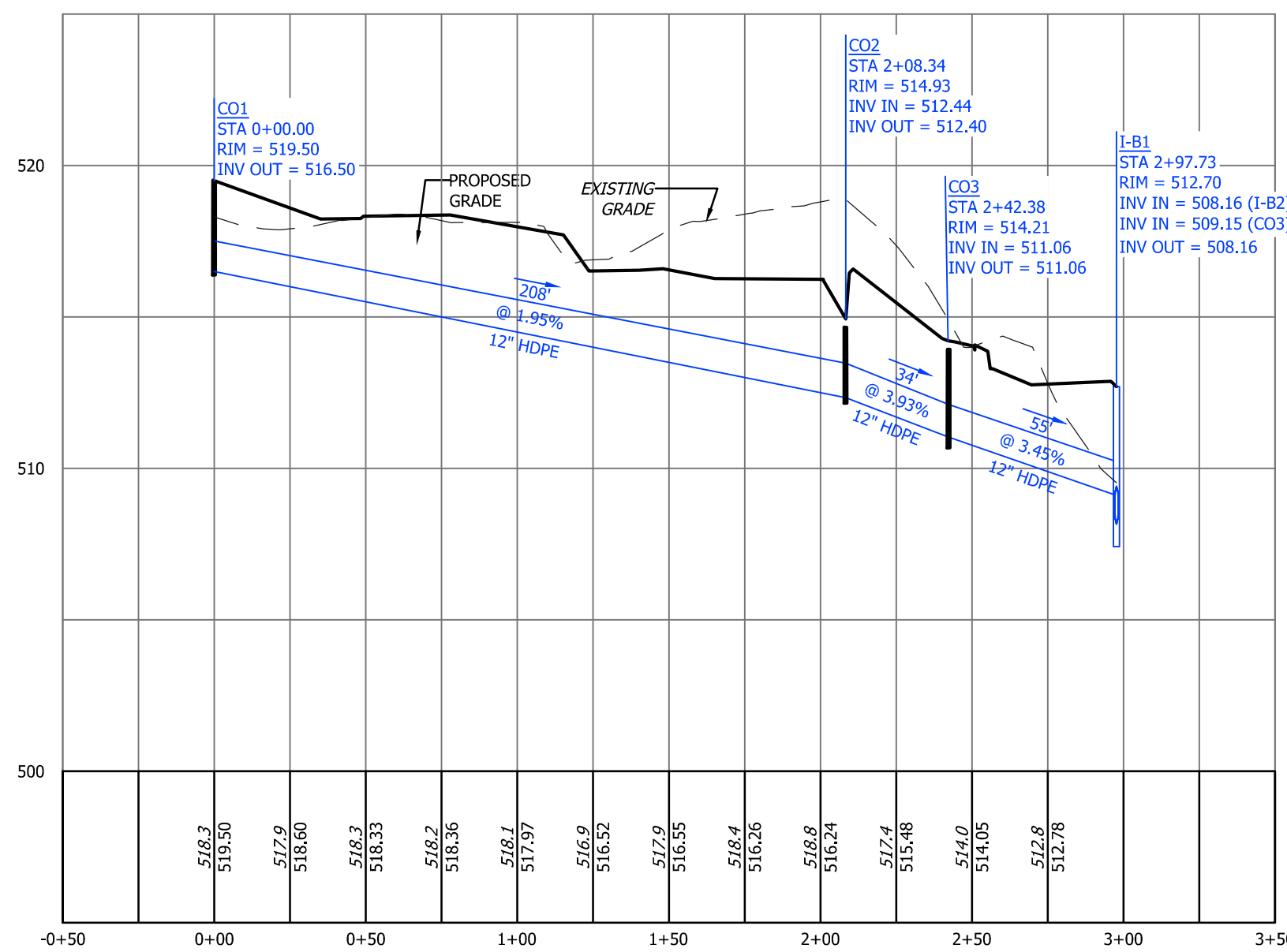
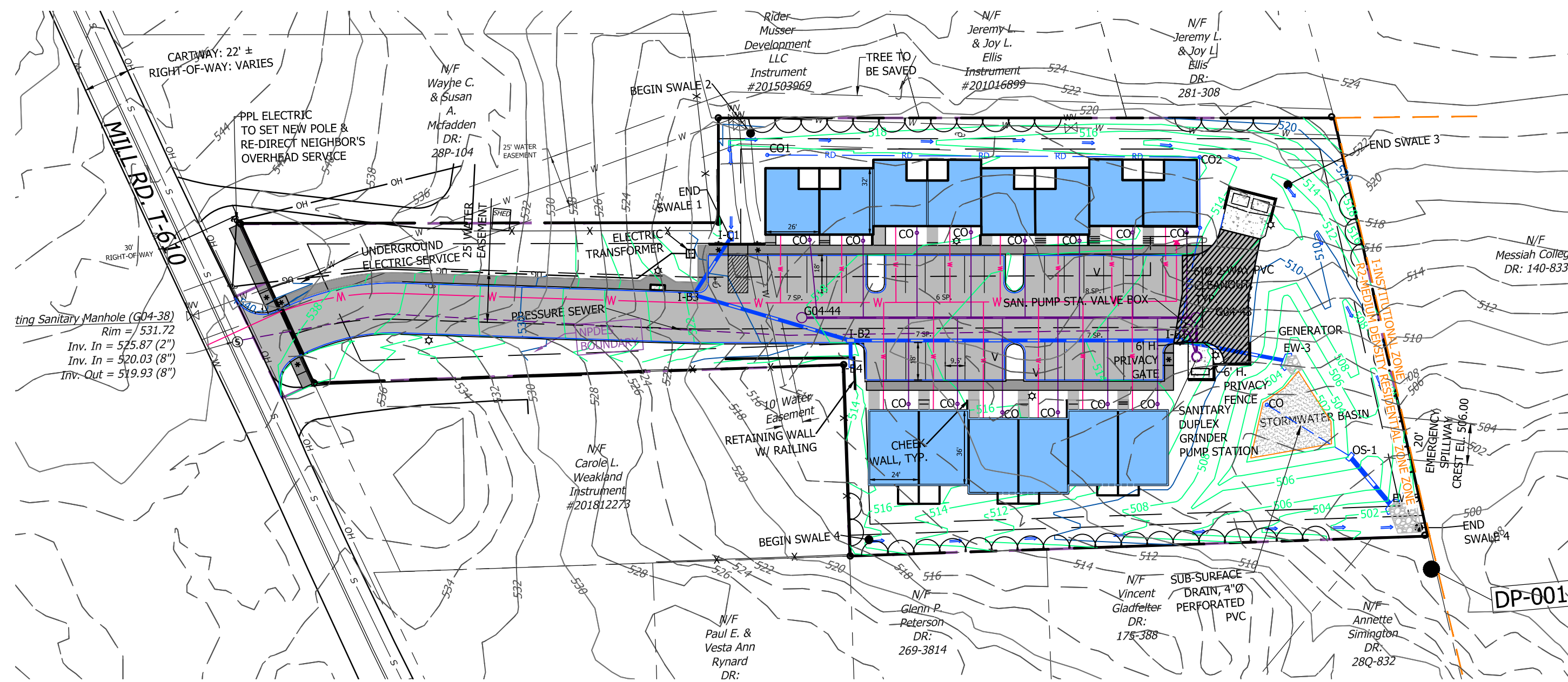
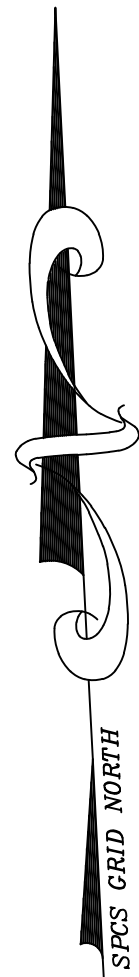
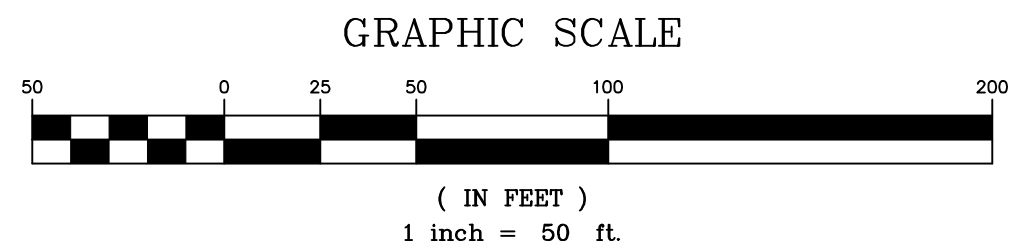


SANITARY SEWER PLAN & PROFILE
FOR
2509 MILL ROAD TOWNHOMES
LOCATED IN
UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PA

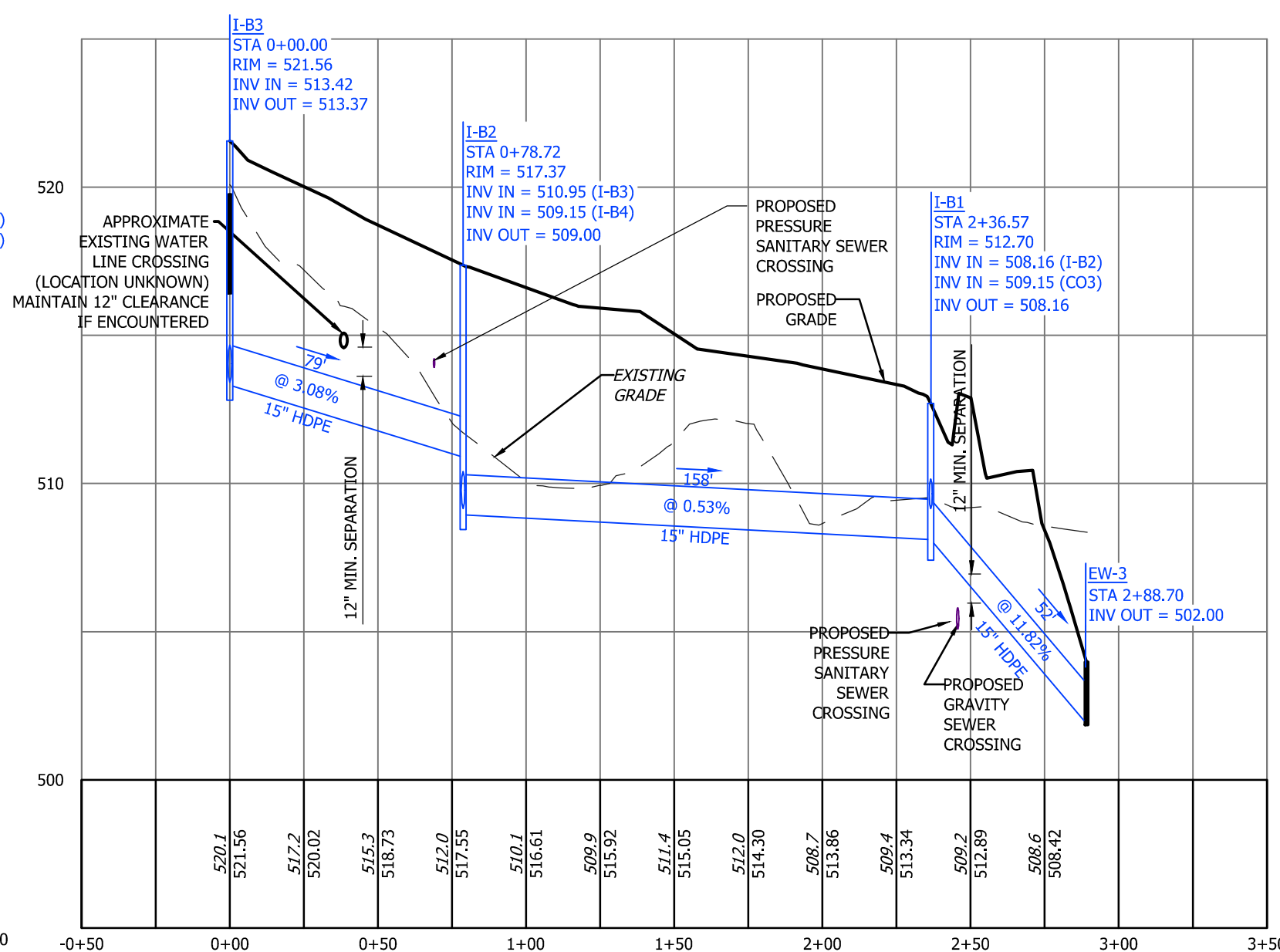
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PROJECT:	221013
DATE:	04/25/2022
SHEET:	9 OF 21

NO.	REVISION	DATE
1	PER TWP PC REPORT 5/17/22	6/21/22
2	PER CCOD COMMENTS	7/22/2022
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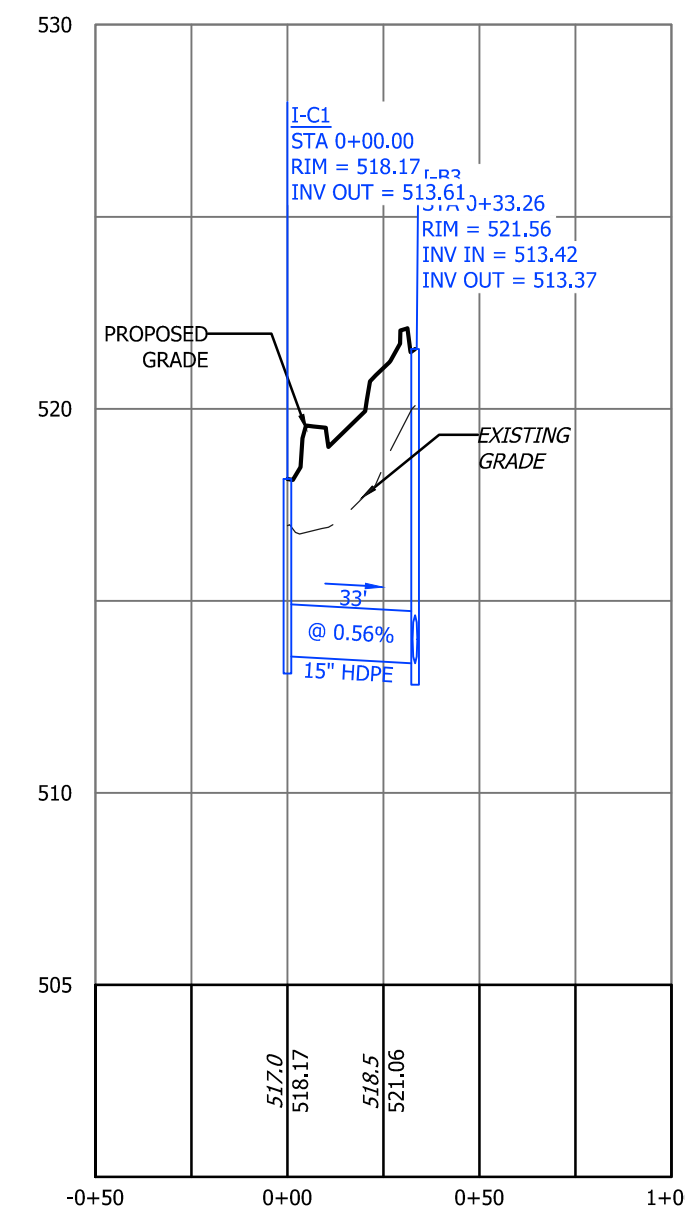
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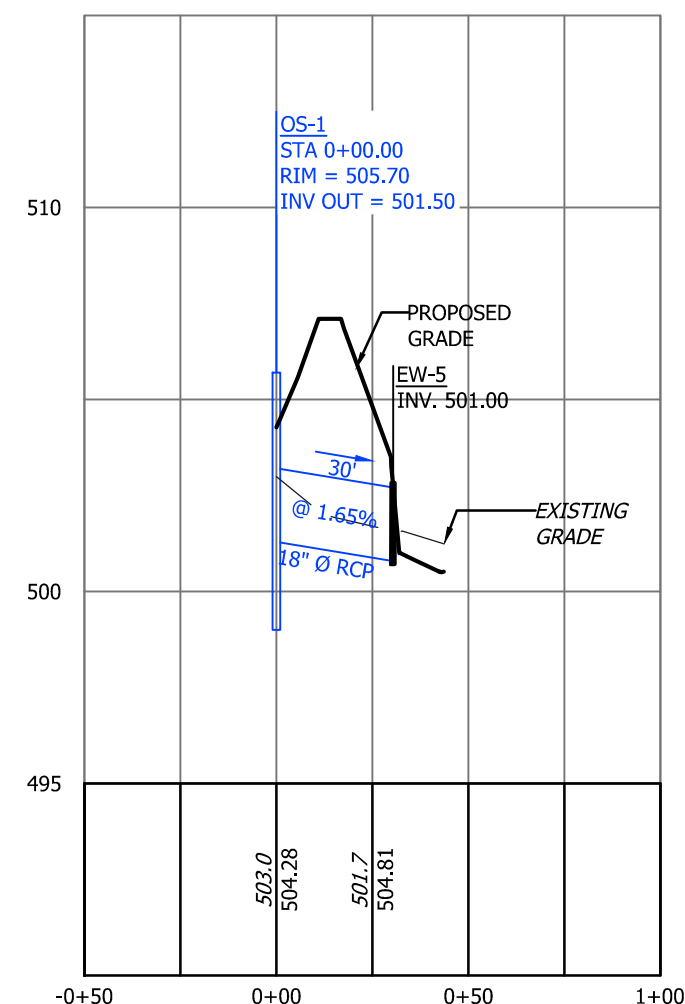
Profile View of CO1- I-B1
Sta: -0+50.00 - 3+50.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'



Profile View of I-B2 TO EW-3
Sta: -0+50.00 - 3+50.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'



Profile View of I-C1 TO I-B2
Sta: -0+50.00 - 1+00.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'



Profile View of OS-1 EW-5
Sta: -0+50.00 - 1+00.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'

STORM SEWER PLAN & PROFILES

FOR 2509 MILL ROAD TOWNHOMES

LOCATED IN
UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PA

R. J. FISHER & ASSOCIATES, INC.

SITE PLANNING ▫ CIVIL ENGINEERING ▫ LAND SURVEYS

1546 BRIDGE STREET, NEW CUMBERLAND, PA. 17070

PHONE: (717) 774-7534 ▫ FAX: (717) 774-7190

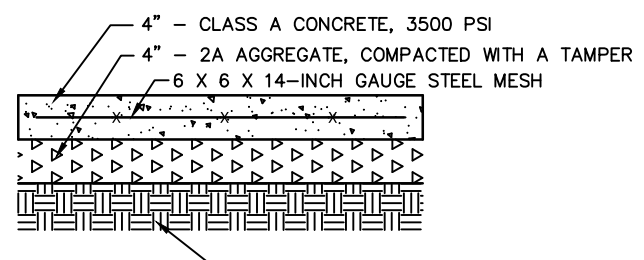
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NO.	REVISION	DATE
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2	PER CCOD COMMENTS	7/22/2022
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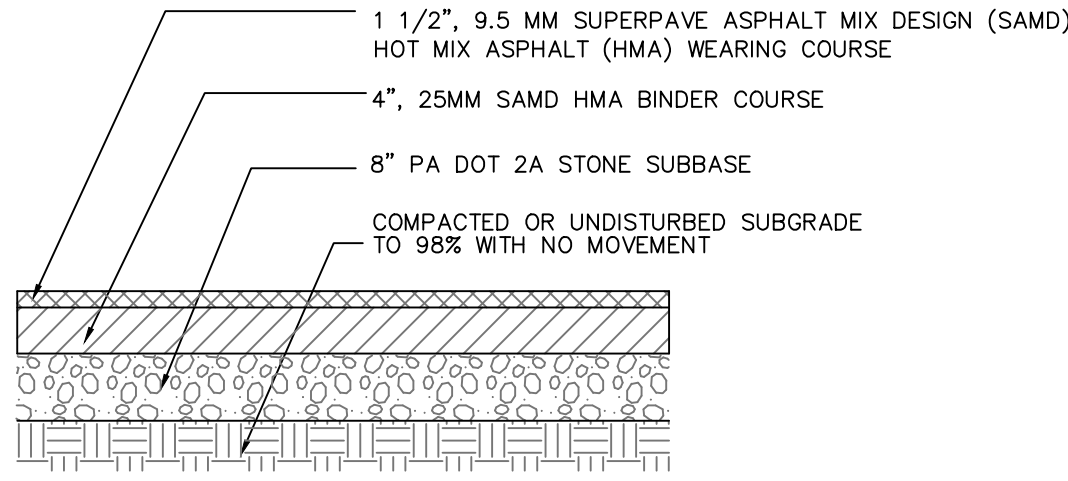
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DRAWING ID:	221013-7-STM-PR
PROJECT:	221013
DATE:	04/25/2022
SHEET:	10 OF 21

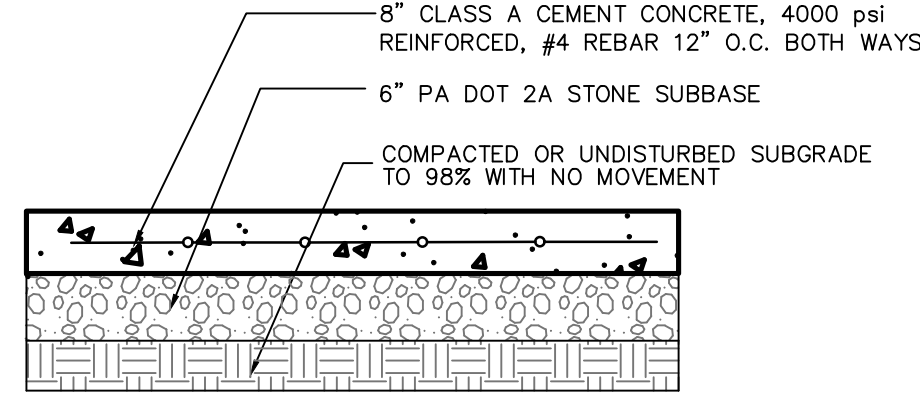


- NOTE: 1. PROVIDE TRANSVERSE ASPHALT TYPE EXPANSION JOINTS SPACED 30' MAX.
2. PROVIDE CONSTRUCTION JOINTS @ 4' INTERVALS OR AS SPECIFIED.
3. A TOOLED EDGE SHALL BE PROVIDED ON ALL EDGES INCLUDING EXPANSION JOINTS.
4. IN THE CASE WHERE SIDEWALKS ARE PROPOSED DIRECTLY AGAINST CURB OR BUILDING, EXPANSION MATERIAL SHALL BE INSTALLED CONTINUOUSLY ALONG THE COMMON EDGE.
5. PROVIDE A BROOM FINISH.
6. WHERE PROPOSED SIDEWALKS CROSS A DRIVEWAY, A CONCRETE APRON SHALL BE PROVIDED FROM THE EDGE OF THE STREET CARRYWAY TO THE FAR EDGE OF THE SIDEWALK. CONCRETE DRIVEWAY APRONS SHALL HAVE A MINIMUM DEPTH OF SIX INCHES AND CONSTRUCTED WITH REINFORCED WIRE OF FIBERGLASS SUBSTITUTE FOR STRENGTHENING PURPOSES.
7. JOINTS SHALL BE SEALED IN ACCORDANCE WITH PENNDOT SECTION 705.4.

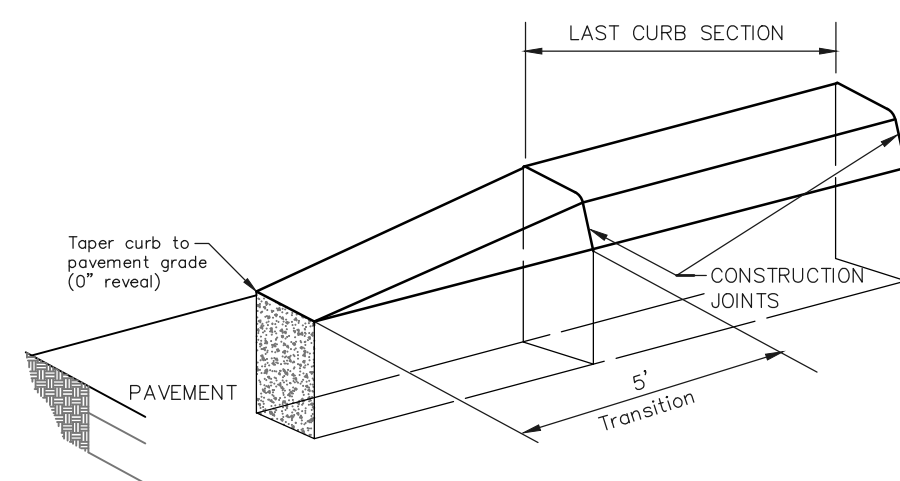
CONCRETE SIDEWALK DETAIL
N.T.S.



PAVING DETAIL
N.T.S.

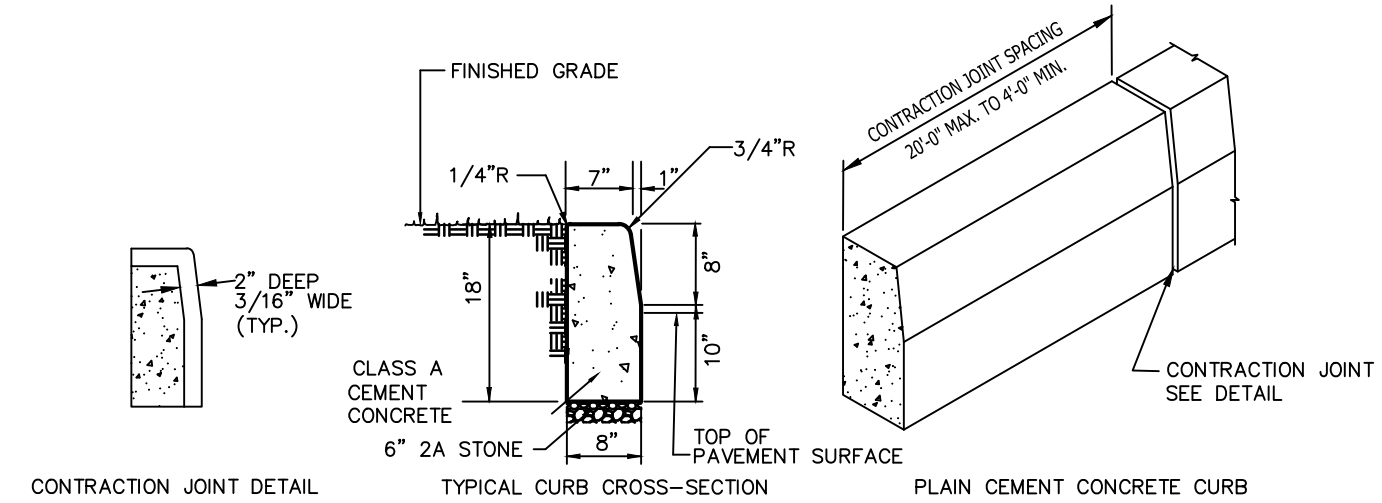


DUMPSTER & SEWAGE PUMP STATION
PAD PAVING DETAIL
N.T.S.



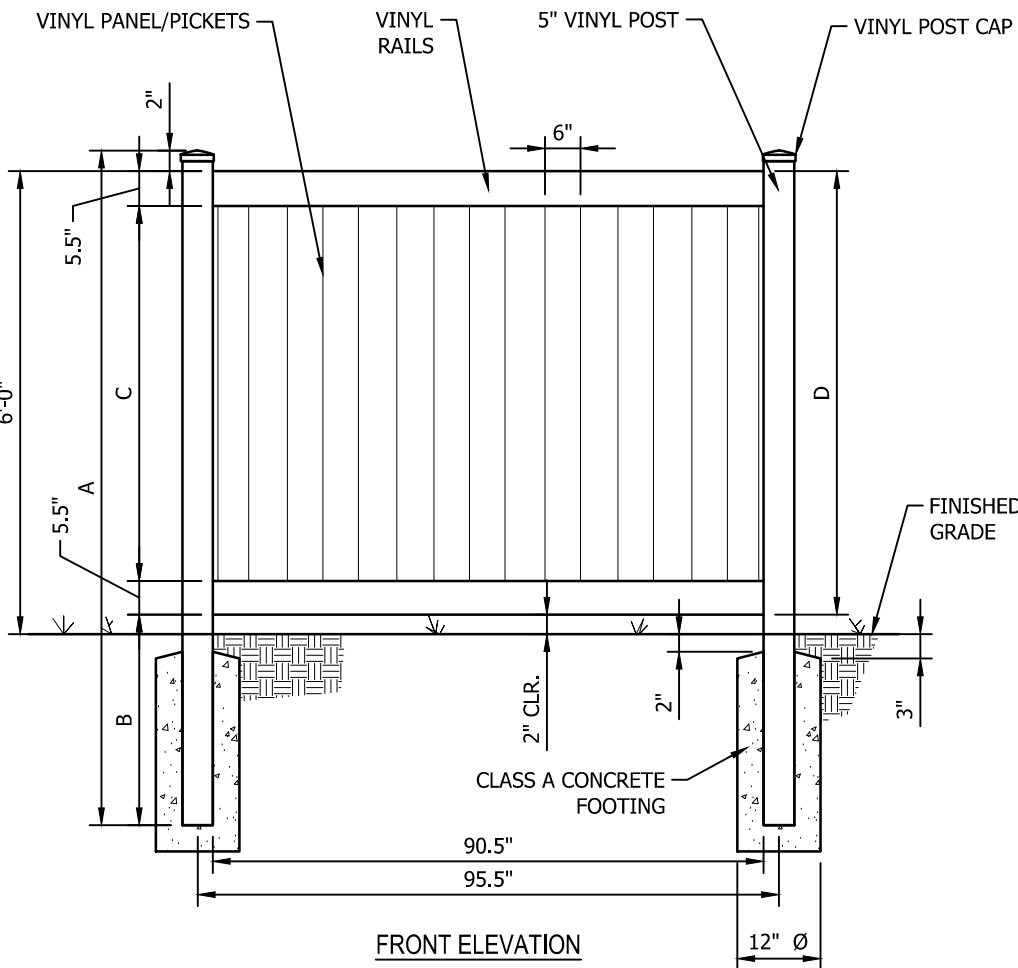
- NOTES:
1. ALL CONSTRUCTION MATERIALS AND STRUCTURES SHALL BE IN CONFORMANCE WITH PENN DOT STANDARDS FOR ROADWAY CONSTRUCTION AS AMENDED AUGUST 28, 2000.
2. ALL CURBING SHALL BE IN CONFORMANCE WITH RC-64M STANDARDS.
3. SEE PLAN FOR LIMITS OF VERTICAL CURB INSTALLATION.
4. CURB TAPERS SHALL BE PROVIDED AT CURB ENDS WITH A 5' TRANSITION AND A 0" TERMINUS REVEAL.

CURB TAPER DETAIL
N.T.S.



- NOTES:
1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUB. 408, SECTION 630 FOR PLAIN CONCRETE CURB AND DERESSED CURB, SECTION 640 FOR PLAIN CONCRETE CURB AND PLAIN CONCRETE CURB CUTTER.
2. SPACE CONTRACTION JOINTS IN UNIFORM LENGTHS OR SECTIONS.
3. PLACE 3/4-INCH PREMOULDED EXPANSION JOINT FILLER MATERIAL AT STRUCTURES AND AT THE END OF THE WORK DAY. CUT MATERIAL TO CONFORM TO AREA ADJACENT TO CURB OR TO CONFORM TO CROSS SECTIONAL AREA OF CURB.

8" VERTICAL CONCRETE CURB DETAIL
(DRIVEWAY RADII @ MILL ROAD)
N.T.S.



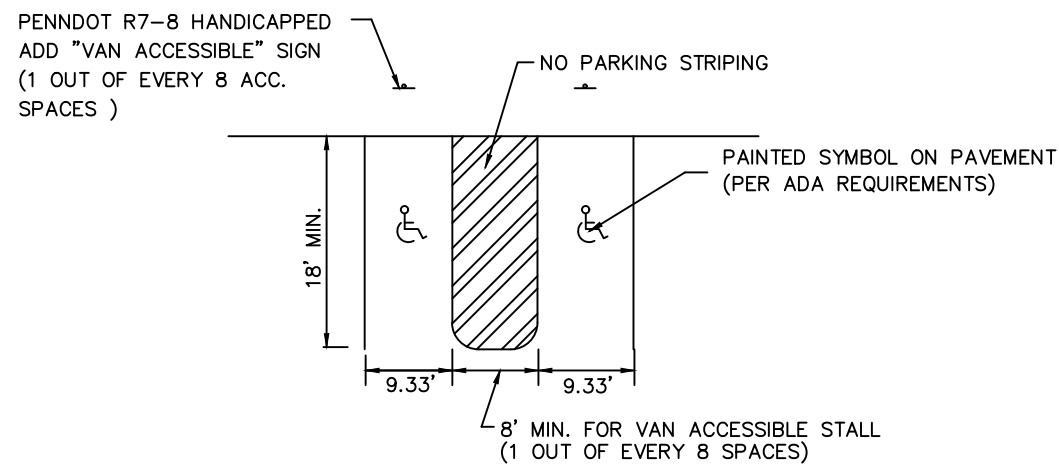
A	B	C	D
INCHES	INCHES	INCHES	INCHES
108	34	59	72

- NOTES:
1. REVISED TO FENCE IS MAXIMUM 6 ft. above grade
2. AVAILABLE IN GRAND ILLUSIONS COLOR SPECTRUM (35 COLORS) AND GRAND ILLUSIONS VINYL WOODBOND (5 AUTHENTIC WOODGRAINS), CHOSEN BY OWNER
3. INCLUDES METAL REINFORCEMENT BOTTOM RAIL
4. PROVIDE DBL.-LEAF MATCHING GATE WITH LATCH

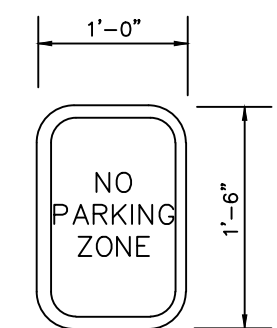
V300-6 ILLUSIONS FENCE PRODUCT
AS MANUFACTURED BY
ILLUSIONS VINYL FENCE
MEDFORD, NY 11763
WWW.ILLUSIONSFENCE.COM
TOLL FREE: 1-800-339-3362

POST CAP MODEL:
FLAT - V55FO
POST OPTIONS:
5" X 5" H.D. - .250 WALL

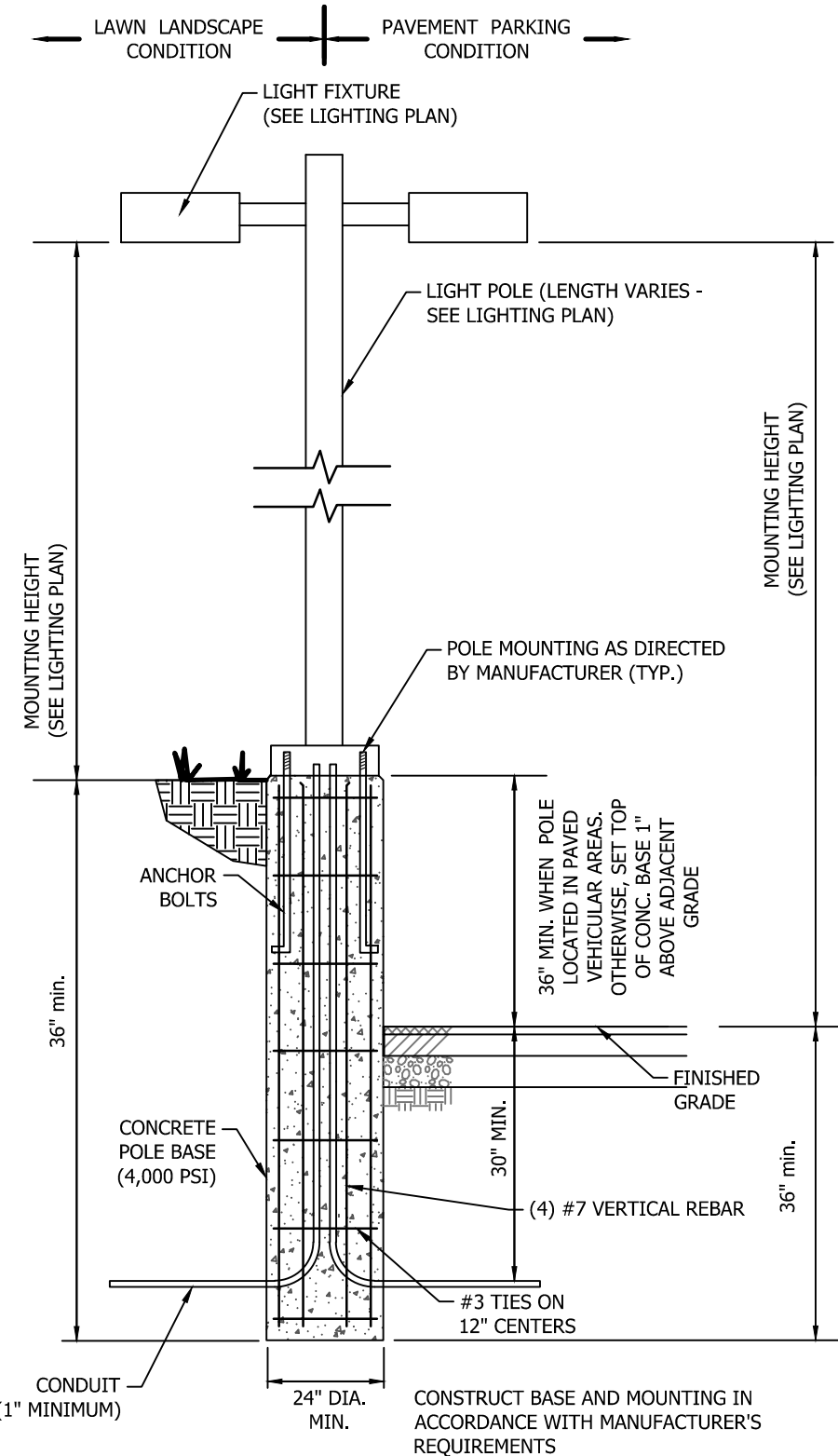
(SOLID TONGUE AND GROOVE)
6" H. VINYL PRIVACY FENCE
NOT TO SCALE



NOTE: HANDICAPPED RAMPS AND STALLS SHALL COMPLY WITH THE AMERICANS WITH DISABILITY ACT DESIGN STANDARDS
TYPICAL HANDICAP PARKING SPACE
N.T.S.

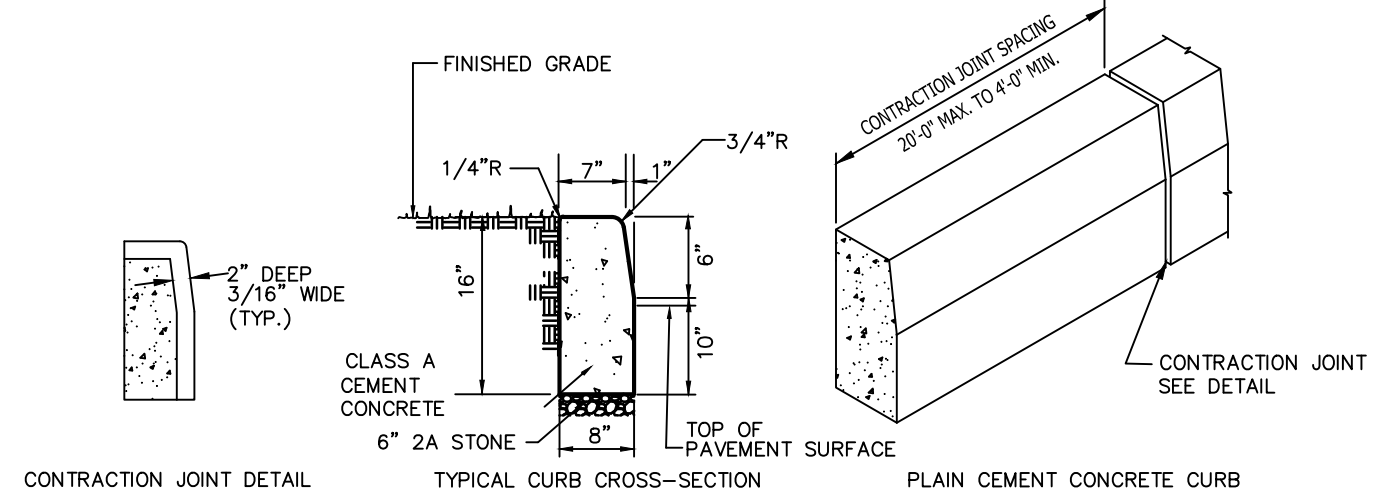


NO PARKING SIGN
N.T.S.



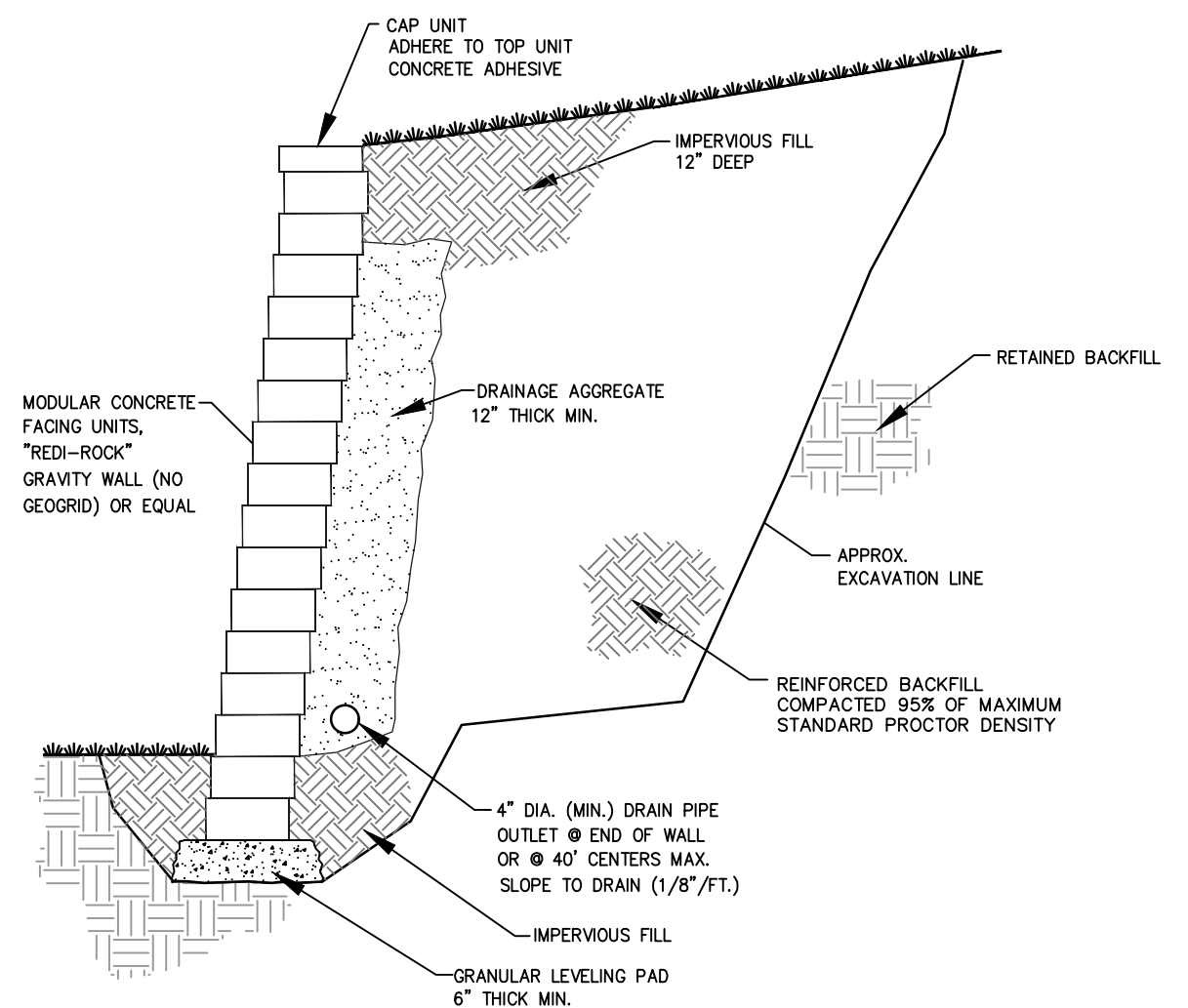
- NOTES:
1. SEE ELECTRICAL DRAWINGS FOR CONDUIT LOCATIONS.
2. NUMBER AND SIZE OF ANCHOR BOLTS PER MANUFACTURER'S REQUIREMENTS.
3. FOUNDATION INFORMATION AND DESIGN TO BE PROVIDED BY THE LIGHTING DESIGNER.
4. POLES MUST BE GROUNDED.

LIGHT STANDARD BASE DETAIL
N.T.S.



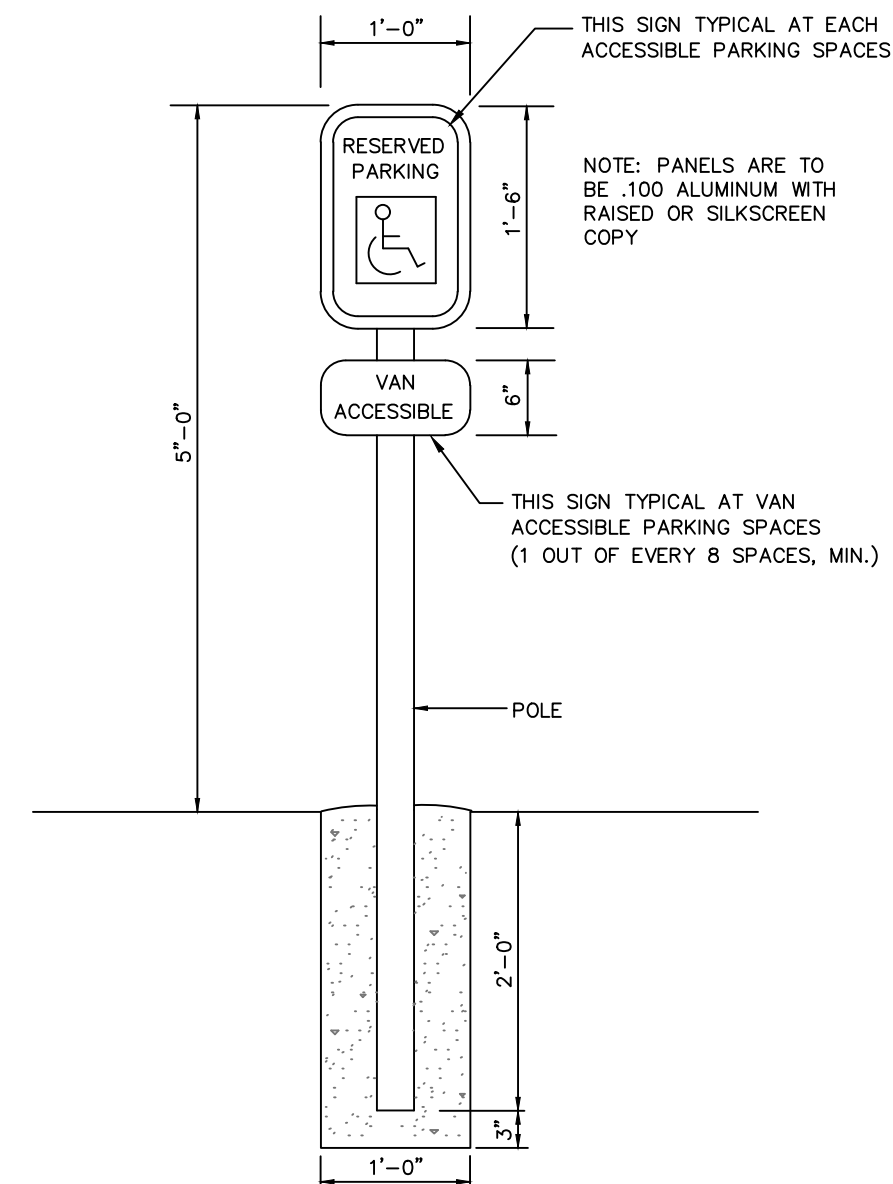
- NOTES:
1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUB. 408, SECTION 630 FOR PLAIN CONCRETE CURB AND DERESSED CURB, SECTION 640 FOR PLAIN CONCRETE CURB AND PLAIN CONCRETE CURB CUTTER.
2. SPACE CONTRACTION JOINTS IN UNIFORM LENGTHS OR SECTIONS.
3. PLACE 3/4-INCH PREMOULDED EXPANSION JOINT FILLER MATERIAL AT STRUCTURES AND AT THE END OF THE WORK DAY. CUT MATERIAL TO CONFORM TO AREA ADJACENT TO CURB OR TO CONFORM TO CROSS SECTIONAL AREA OF CURB.

6" VERTICAL CONCRETE CURB DETAIL
(ON-SITE)
N.T.S.

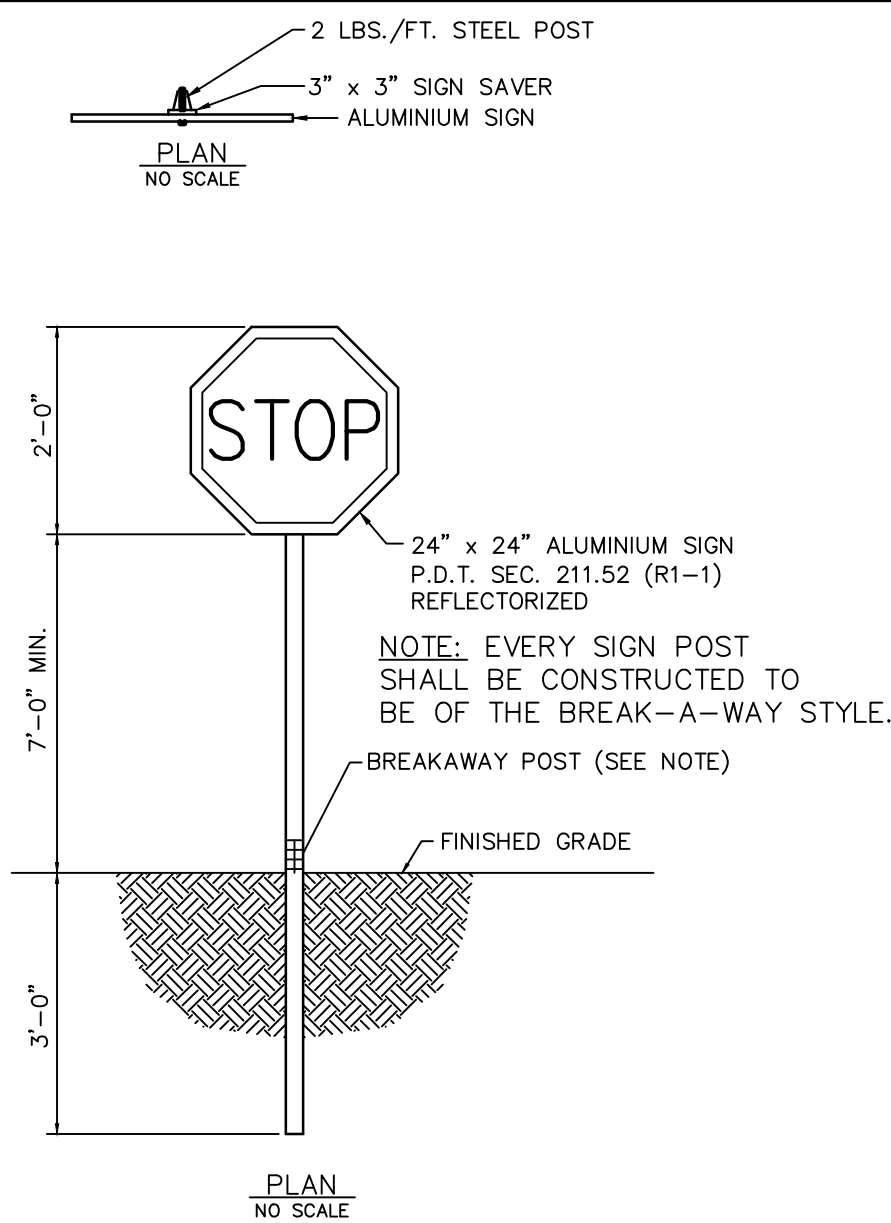


- NOTE: THIS DETAIL IS A REPRESENTATION ONLY. ACTUAL DESIGN OF THE RETAINING WALL SHALL BE AS CERTIFIED BY A PROFESSIONAL ENGINEER IN ACCORDANCE WITH MANUFACTURER'S DESIGN REQUIREMENTS AND PROVIDED TO TOWNSHIP FOR REVIEW IN CONJUNCTION WITH TOWNSHIP BUILDING PERMIT APPLICATION.

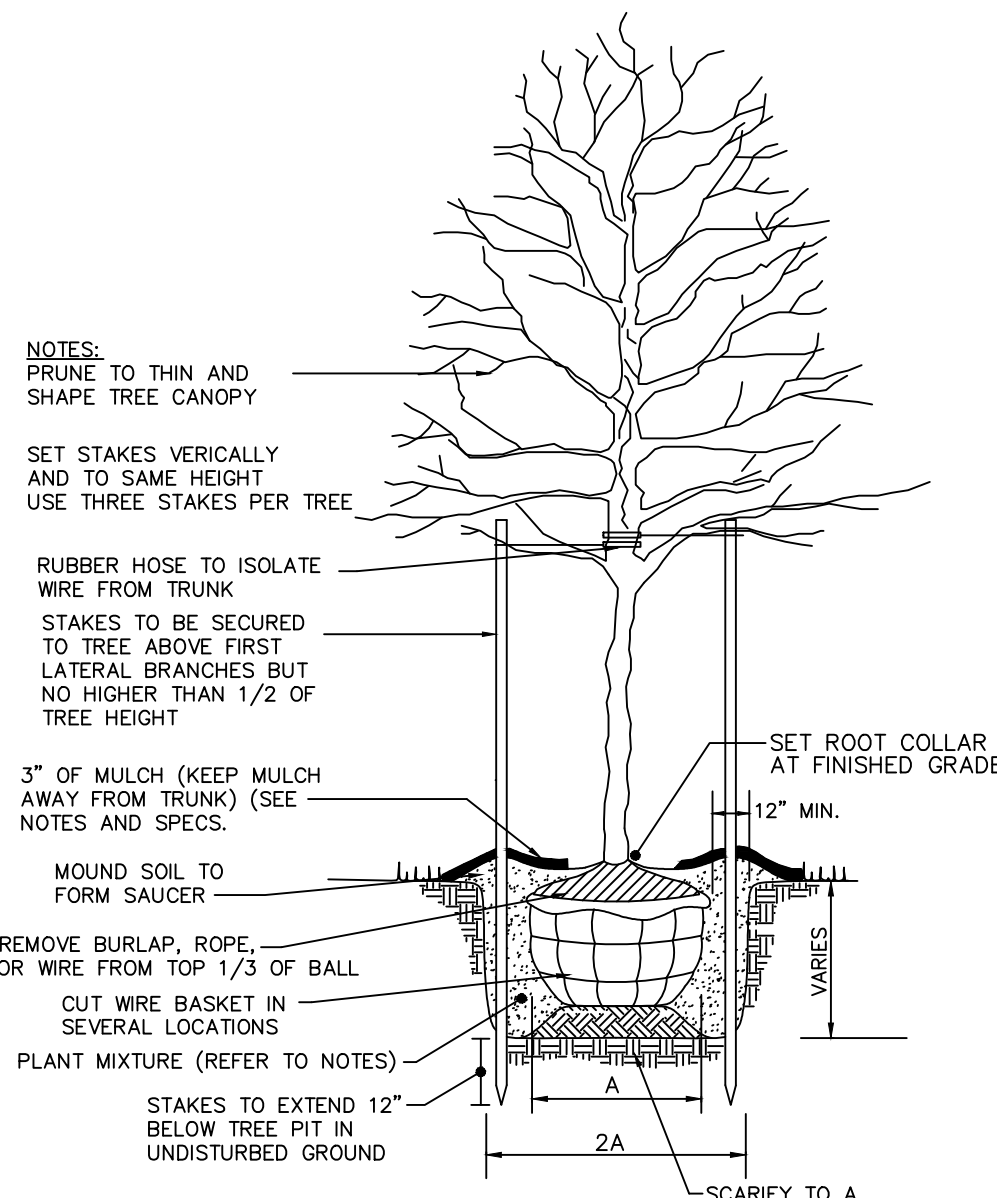
TYPICAL SECTION - RETAINING WALL
NOT TO SCALE



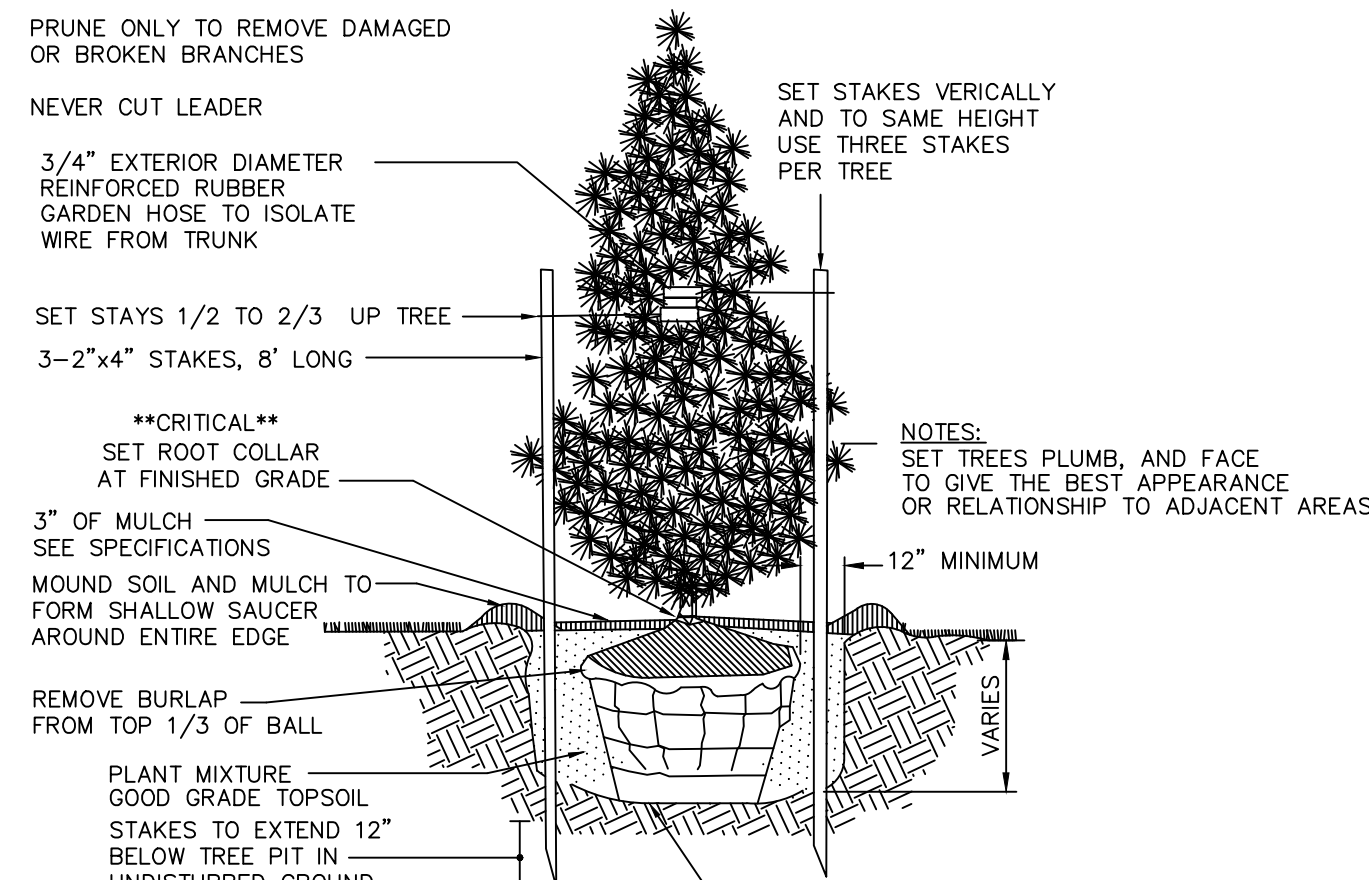
TYPICAL ACCESSIBLE PARKING SIGN DETAIL
N.T.S.



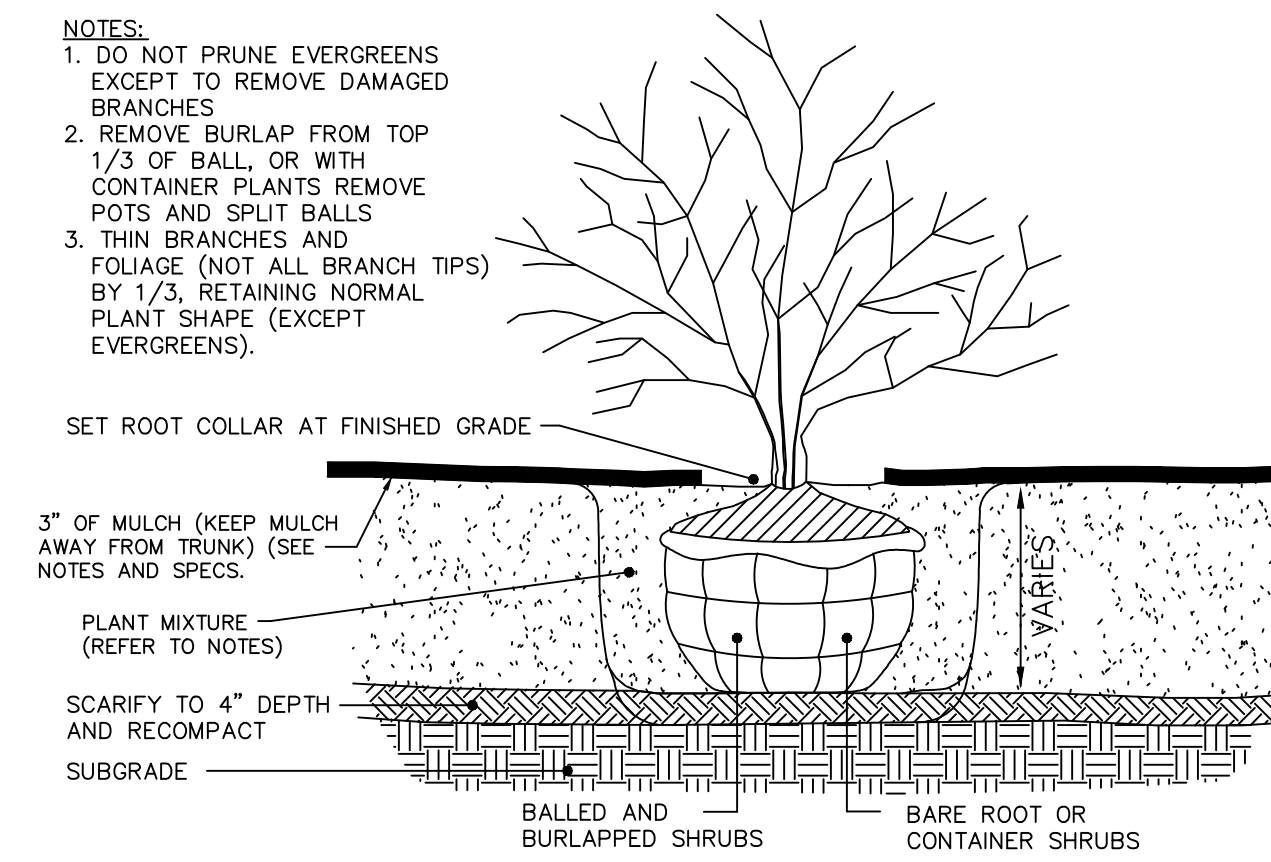
24" STOP SIGN
Pa.D.O.T. SIGN, R1-1
N.T.S.



DECIDUOUS TREE PLANTING
N.T.S.



CONIFEROUS TREE PLANTING
N.T.S.



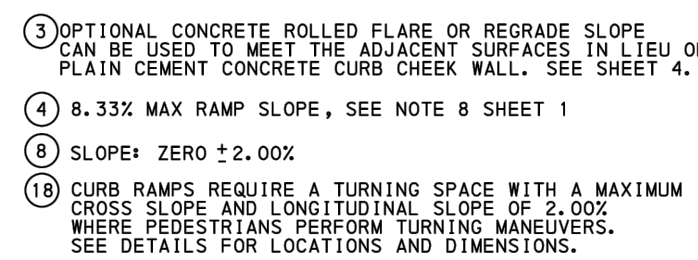
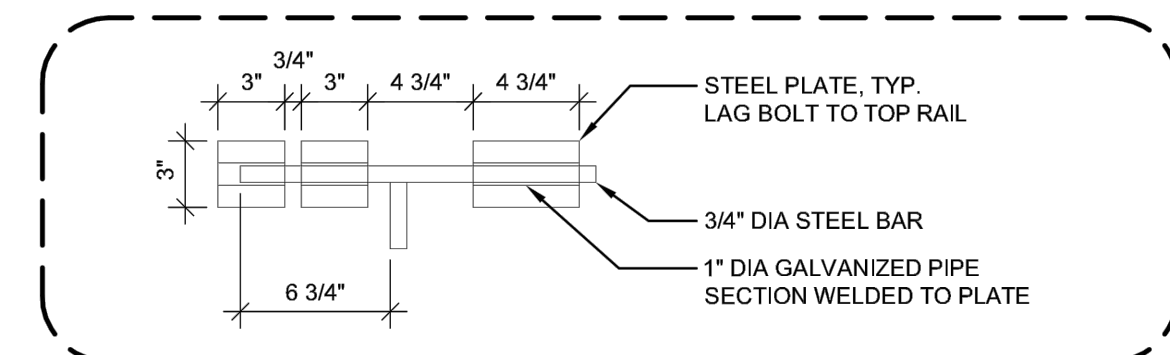
SHRUB PLANTING

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SITE DETAILS
FOR
2509 MILL ROAD TOWNHOMES
LOCATED IN
UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PA

DRAWING ID: 221013-3-LD
PROJECT: 221013
DATE: 04/25/2022
SHEET: 11 OF 21

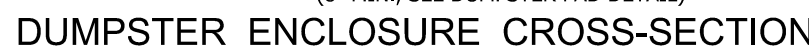


NEW CONSTRUCTION OR
ALTERATION DETAILS
TYPE 1A AND TYPE 2 CURB RAMPS

RECOMMENDED JUN. 10, 2013 <i>TR. W. Smith</i> CHIEF, HWY. DELIVERY DIVISION	RECOMMENDED JUN. 10, 2013 <i>David A. [Signature]</i> ACTING DIR. BUREAU OF PROJECT DELIVERY	SHT 3 OF 14 RC-67M
---	--	-----------------------

1. PROVIDE MATERIALS AND SPECIFICATIONS AS SPECIFIED IN PRELIMINARY GRAD, SECTIONS 350, 413, 630, 676 AND 678.
2. PROVIDE EXPANSION JOINT 3/4" THICK WHERE CURB RAMP ADJOINS ANY RIGID PavEMENT, SIDEWALK OR STRUCTURE WITH THE TOP OF JOINT FLIRER FLUSH WITH ADJACENT CONCRETE SURFACE.
3. PROVIDE CURB RAMP WITH A MINIMUM 1% SLOPE TO THE ADJACENT SIDEWALK OR ROADWAY. WITHIN THE WIDTH OF THE CROSSWALK AND WOLLY-DOWN THE PARALLEL VELOCITY TRAVEL LANE, SEE SHEET 7 FOR DETAILS.
4. SEAL JOINTS WITH AN APPROVED SEALING MATERIAL.
5. PROVIDE SLIP RESISTANT TEXTURE ON CURB RAMP BY COMBE BROOMING TRANSVERSE TO THE SLOPE OF THE SIDEWALK OR ROADWAY. TEXTURE THE FULL LENGTH OF THE CURB RAMP INCLUDING SIDEWALK FLARES.
6. MODIFY CONSTRUCTION DETAILS TO ADAPT DIMENSIONS TO NEW OR 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. PROVIDE 15'-0" ADJUST RAMP SLOPE AS NEEDED TO PROVIDE ACCESS TO THE MAXIMUM EXTENT FEASIBLE.
9. NON-WALK AREA IS AN OBSTRUCTED OR GRASS/NO-PAVEMENT AREA ADJACENT TO THE PEDESTRIAN ACCESS ROUTE TO THE CROSSWALK.
10. THE DETAILS DEPICT PEDESTRIAN PUSHBUTTON PLACES TO ILLUSTRATE THE RECOMMENDED PLACEMENT OF PUSHBUTTONS FOR ALTERNATE CROSSWALK LOCATIONS. THE DETAILS DO NOT REPRESENT THE RECOMMENDED PLACEMENTS TO THE MAXIMUM EXTENT FEASIBLE. INSTALL PEDESTRIAN PUSHBUTTON STOP BUTTONS, WHERE APPLICABLE, AND NOT RECOMMENDED.
11. SEE TO-BE-800S FOR ALTERNATE PEDESTRIAN PUSHBUTTON DETAILS NOT SHOWN.
12. ALIGN DETECTABLE WARNING SURFACE TRUNCATED DOMES ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL. DETECTABLE WARNING SURFACES SHALL BE 2" HIGH AND ALSO COVER SURFACES ADJACENT TO THE CROSSWALK.
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 WITH THE SURFACE ADJACENT TO THE RAMP. DETECTABLE WARNING SURFACES SHALL BE 2" HIGH AND SHALL BE 2' WIDE.
14. FOR NEW CONSTRUCTION, DO NOT EXCEED 2.00% CROSS SLOPE ON THE CURB RAMP OR PEDESTRIAN ACCESS ROUTE.
15. FOR NEW CONSTRUCTION AND ALTERATIONS, CONSTRUCT CURB RAMP AND FLARE SLOPES WITH THE FLATTEST POSSIBLE SLOPE. FOR EXISTING CONSTRUCTION, 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 FLIRER SLOPES THAT EXCEED 5.00% LONGITUDINAL SLOPE, THE SLOPE SHALL BE 2.00% TO EXCEED 5.00% CROSS SLOPE. SEE SHEET 8 FOR DETAILS.
17. THE CURB RAMP AND ADJOINING ROAD OR SIDEWALK SLOPE SLOPE 1% NOT TO EXCEED AN UNBALANCED DIFFERENCE OF 13.33%. THE COUNTER SLOPE OF THE OUTTER OR ROAD AT THE FOOT OF A CURB RAMP OR GRADE BREAK SHALL BE 2% TO EXCEED 5.00% CROSS SLOPE. 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. THE CURB RAMP HEIGHT SHALL BE 8" MINIMUM. THE CURB RAMP HEIGHT OF 8" IS NOT SOLELY DEPENDENT ON THE HEIGHT OF CURB. (FOR EXAMPLE, A 6" CURB DOES NOT NECESSARILY MEAN A RAMP OF 6" HEIGHT.)
20. SIDEWALK WIDTH MAY BE REDUCED TO 4'-0" WHEN, WHEN PASSING AREAS 5'-0" x 5'-0" ARE PROVIDED EVERY 20'.
21. 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 DEPRESSIONED CURB FOR CURB RAMP FLUSH TO ADJACENT ROADWAY, GRADE EDGE OF ROAD ELEVATIONS AS THE FLOOR LINE TO MINIMIZE SPILLAGE AND PREVENT POOLING. FOR EXISTING, TURNING SLOPES, CONSTRUCT DEPRESSIONED CURB AND ROADWAYS, REMOVE EXCESS JOINT SEALER AND COVER THE SEALED AREA WITH A LIGHT COAT OF DRY SAND.
23. CHECK MARKS ARE PERMITTED WHEN ADJACENT TO NON-WALK AREAS OR ELEVATION DIFFERENCES CANNOT BE ACCOMMODATED BY FLARES OR GRADING. GRADE BREAKS OR OTHER NON-WALK AREAS AT 3:1 OR FLATTER, OR ADJACENT TO SIDEWALKS OR CURB RAMP, SHALL BE FLUSH WITH ADJACENT SURFACES.
24. CONSTRUCT TOP OF PLAIN CEMENT CONCRETE DEPRESSIONED CURB TO BE FLUSH WITH ADJACENT SURFACES.
25. CURB RAMP DETAILS THAT LEAD TO A SINGLE CROSSWALK, THE RAMP (EXCLUDING FLARES) TO BE FULLY INSIDE OF MARKED CROSSWALK LINES, SEE SHEET 7 FOR DETAILS.
26. 15'-0" MAXIMUM DIGITAL DISPLAY LENGTH WILL BE USED TO VERIFY THE SLOPES OF CURB RAMP AND SIDEWALKS.
27. INSTALL DUMMY JOINTS WHERE RAMPs, TURNING SPACES, FLARES, AND SIDEWALKS ABUT.
28. FOR EXISTING CONSTRUCTION, THE DETAILS DEPICT THE RECOMMENDED TRANSITION FROM PEDESTRIAN ACCESS ROUTE TO MATCH ROADWAY PROFILE AT GRADUALLY AS POSSIBLE. FOR NEW CONSTRUCTION, DO NOT EXCEED 3.00% PER SIDE SLOPE.
29. DO NOT SCORE OR MAKE GROOVES ON SLOPED SURFACES. LINES SHOWN ON DETAILS ARE FOR ILLUSTRATION ONLY. NOTE 5.
30. DETAIL DEPICTED CURB MONOLITHICALLY WITH CURB RAMP AND SIDEWALK, OR BOTH, DO NOT PLACE DEPRESSIONED CURB MONOLITHICALLY WITH OTHER CEMENT CONCRETE SIDEWALK.

N.T.S.



NO.	REVISION	DATE
1	PER TWP PC REPORT 5/1/72	6/2/72
2	PER CCOD COMMENTS	7/22/2022
3	TWP PC REPORT #2 8/24/22	10/24/22
4	—	—
5	—	—

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Fisher & Associates, Inc.

SITE DETAILS

FC

2509 MILL ROAD TOWNHOMES

LOCATED IN
UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PA

UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PA

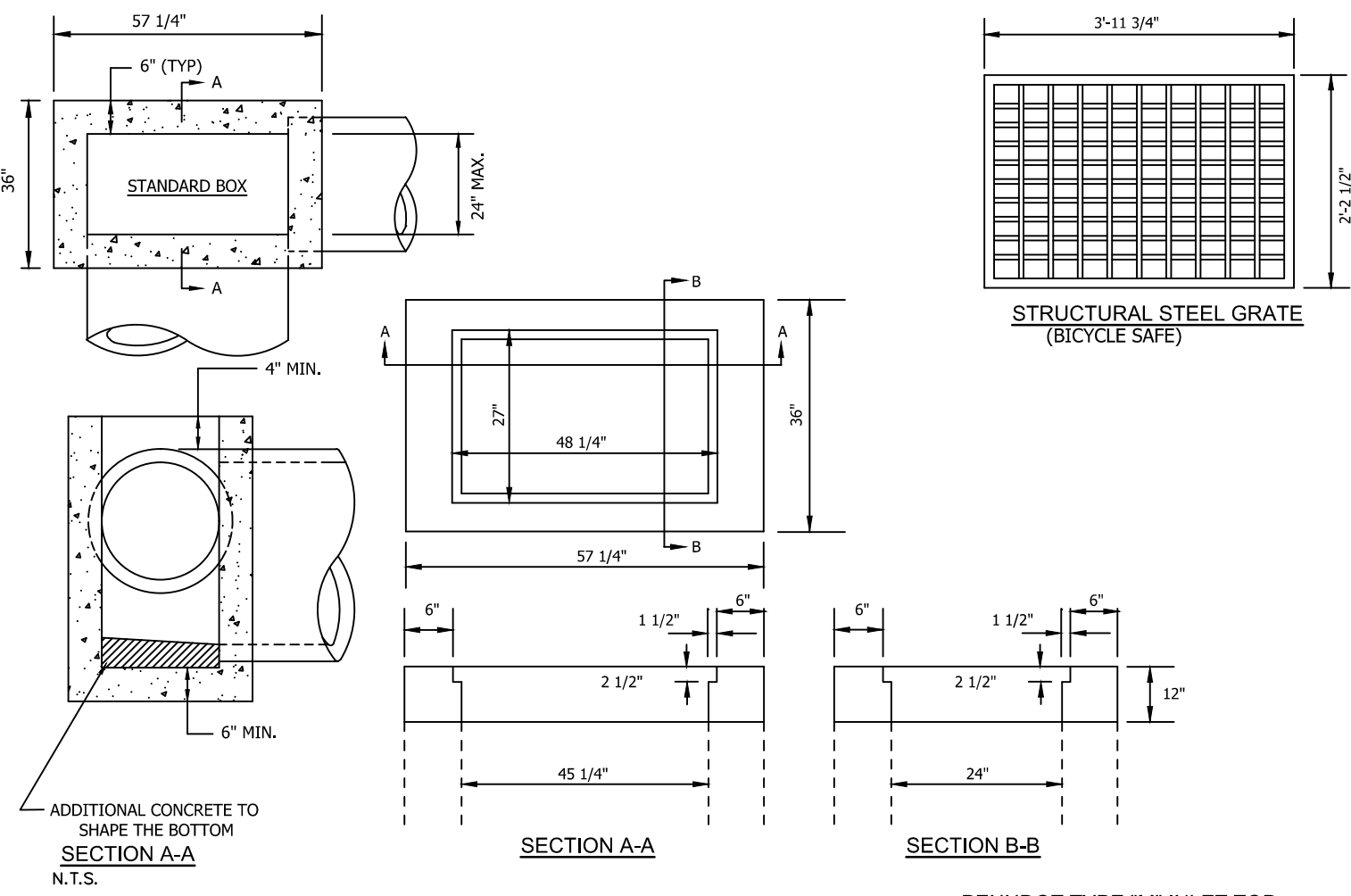
DRAWING ID:
221013-3-LD

PROJECT: 221013

DATE: 04/25/2022

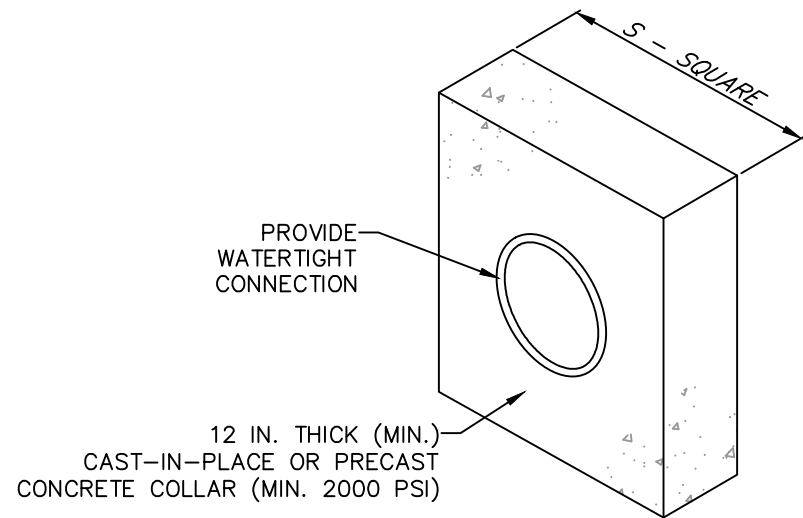
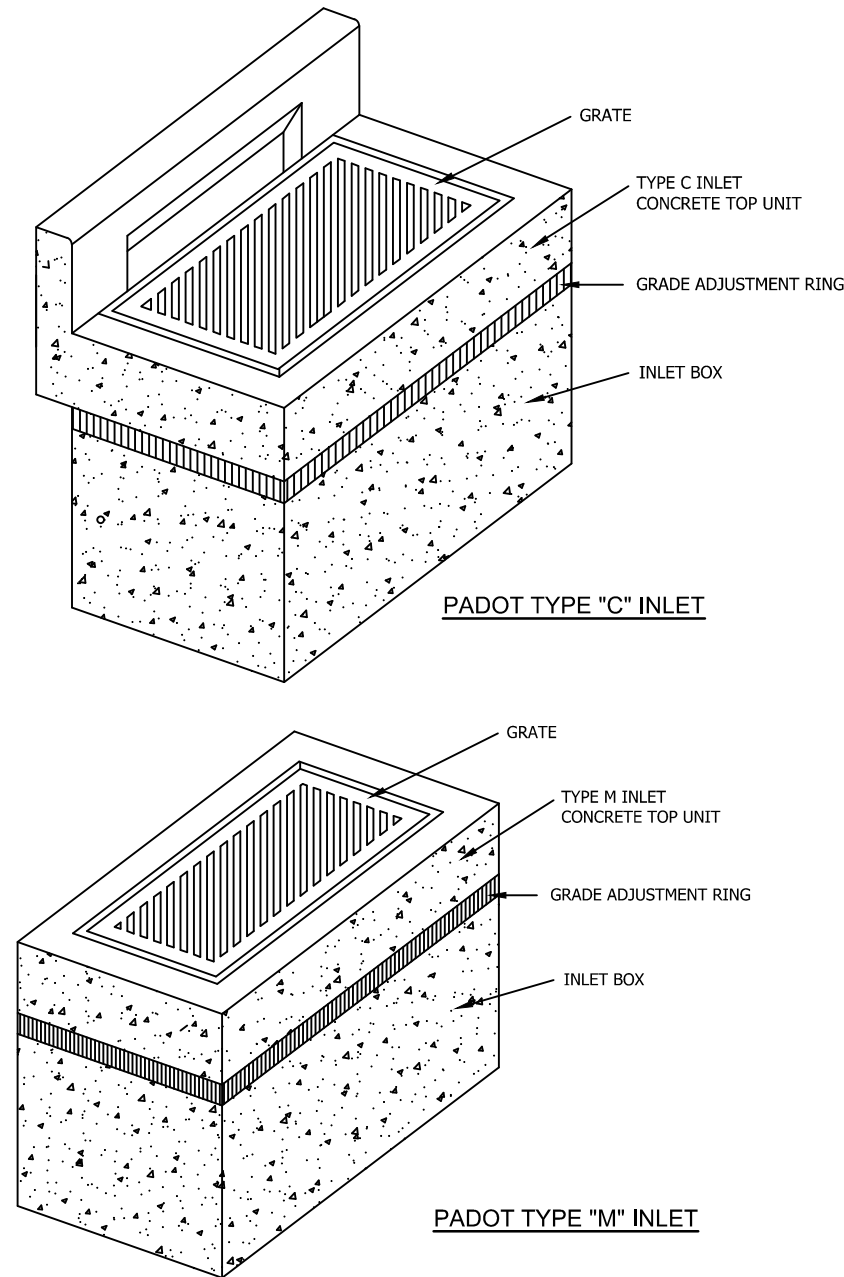
SHEET

12 OF 21



STORM INLET

NOTE: CONSTRUCTION OF STORMWATER INLETS SHALL CONFORM TO AND BE IN ACCORDANCE WITH ALL APPLICABLE RC STANDARDS, PENNDOT PUBLICATION 72M AND ALL AMENDMENTS.



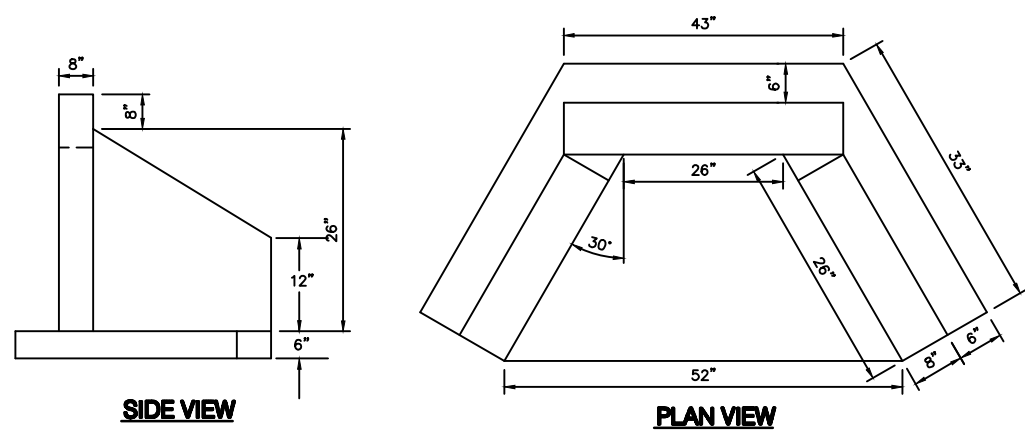
BASIN OR TRAP NO.	PIPE SIZE (IN)	S (IN)	NO. OF COLLARS	RISER TO COLLAR (FT)	COLLAR SPACING (FT)
1	18	36	2	10'	5'

NOTES:

ALL COLLARS SHALL BE INSTALLED SO AS TO BE WATERTIGHT.
COLLAR SIZE AND SPACING SHALL BE AS INDICATED WITHIN TABLE.

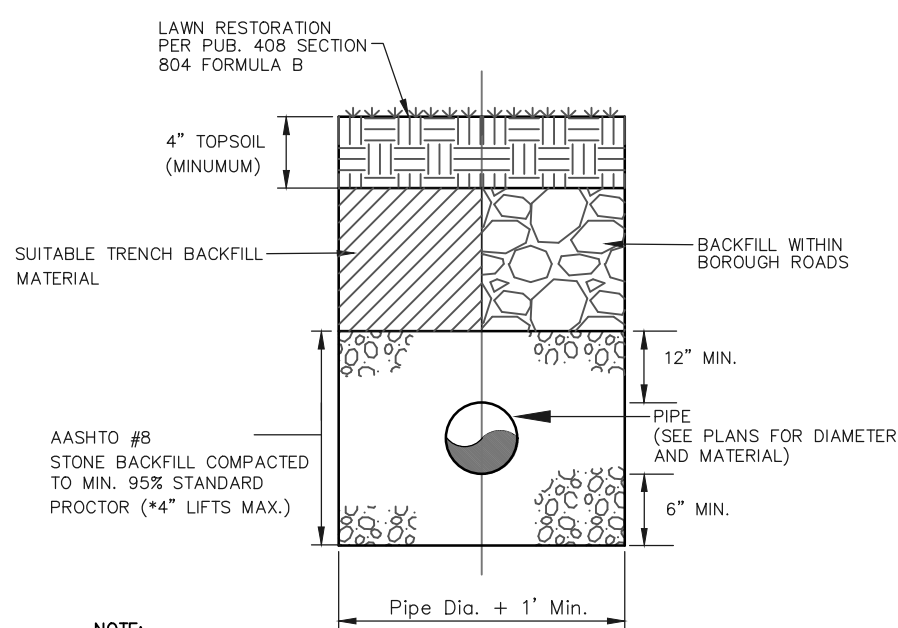
STANDARD CONSTRUCTION DETAIL #7-16 CONCRETE ANTI-SEEP COLLAR FOR PERMANENT BASINS OR TRAPS

N.T.S.



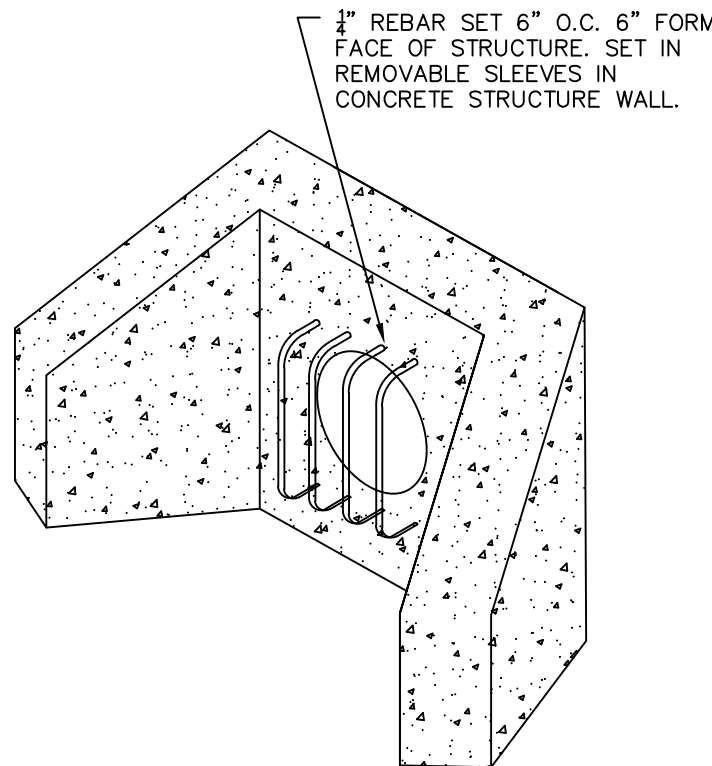
NOTE: PROVIDE PROTECTIVE BAR SCREEN IF PIPE IS 24" OR LARGER IN DIAMETER

N.T.S.

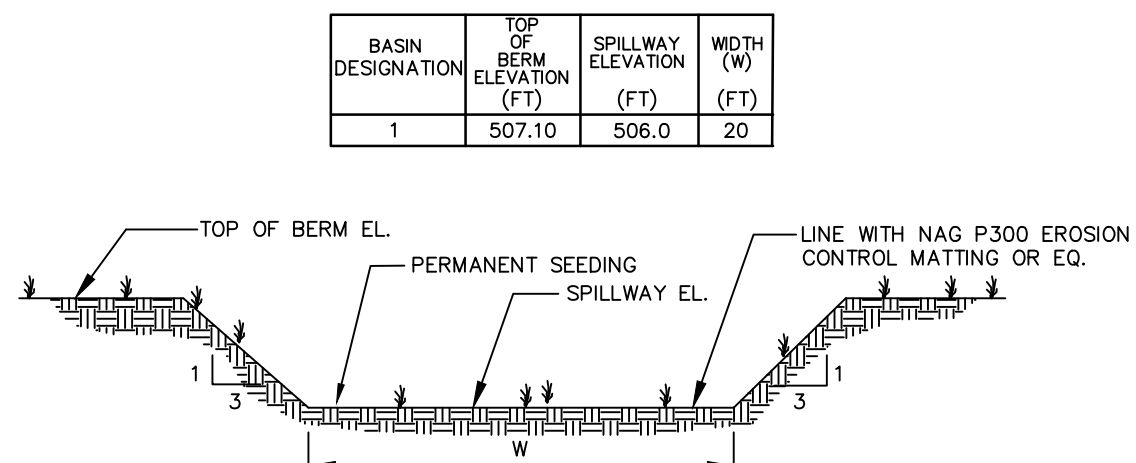


DETAIL FOR STORM SEWER TRENCHES

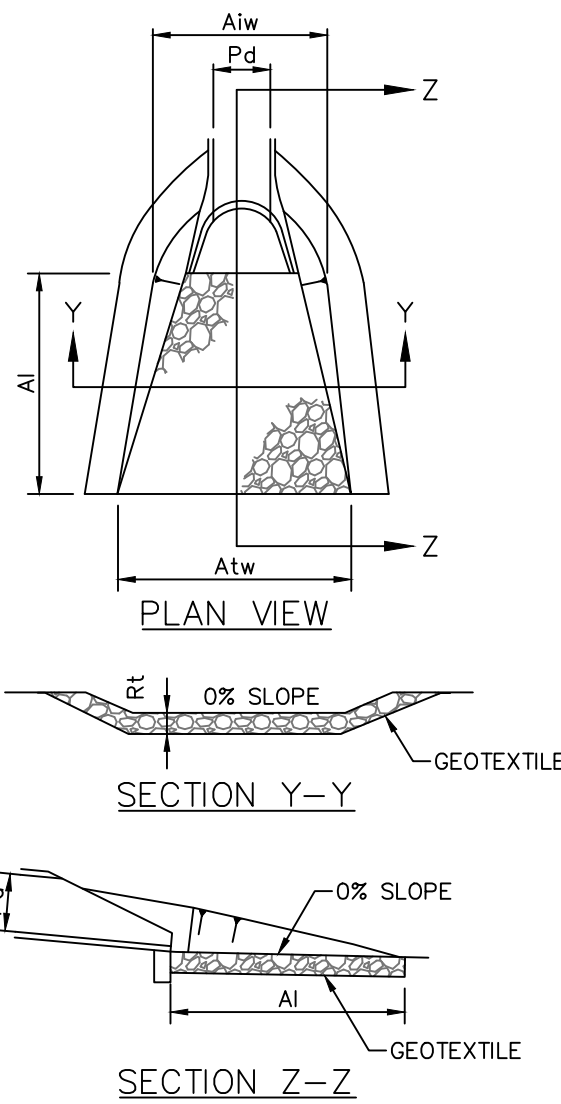
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N.T.S.



N.T.S.



OUTLET NO.	PIPE DIAMETER	RIP-RAP SIZE	RIP RAP THICKNESS	APRON LENGTH	INITIAL APRON WIDTH	TERMINAL APRON WIDTH
E-3	15"	R-3	9"	6'	3.75'	10'
E-5	18"	R-6	36"	20'	4.5'	24.5'

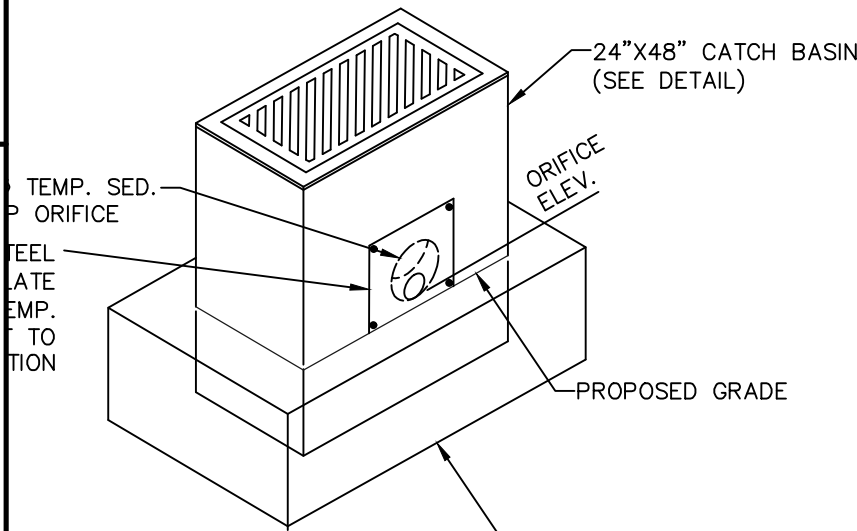
NOTES:

ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.

ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

RIPRAP APRON AT PIPE OUTLET WITH FLARED END SECTION OR ENDWALL

N.T.S.



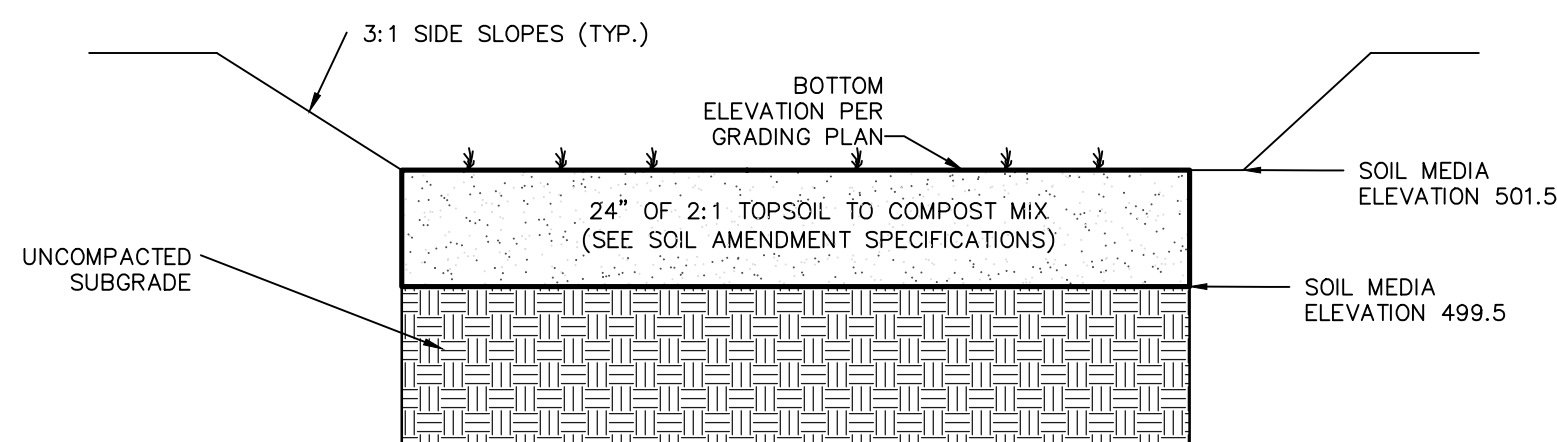
BASIN/ BMP NO.	TOP ELEV RCE (FT)	RISER		U. D. ELEV UDE (FT)	MAT'L	DIA Db (IN)	BARREL		OUTLET ELEV BOE (FT)
		SIZE (IN)	ORIFICE ELEV (FT)				INLET ELEV BIE (FT)	LENGTH BI (FT)	
1	505.7	12"	503.5	---	RCP	18	501.5	26	501.0

NOTES:

- PROTECT INFILTRATION BASIN AREA FROM COMPACTION PRIOR TO INSTALLATION.
- IF POSSIBLE, INSTALL INFILTRATION BASIN DURING LATER PHASES OF SITE CONSTRUCTION TO PREVENT SEDIMENTATION AND/OR DAMAGE FROM CONSTRUCTION ACTIVITY. AFTER INSTALLATION, PREVENT SEDIMENT-LADEN WATER FROM ENTERING INLETS AND PIPES.
- INSTALL AND MAINTAIN PROPER EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION.
- IF NECESSARY, EXCAVATE INFILTRATION BASIN BOTTOM TO AN UNCOMPACTED SUBGRADE FREE FROM ROCKS AND DEBRIS. DO NOT COMPACT SUBGRADE.
- INSTALL OUTLET CONTROL STRUCTURES. OUTLET STRUCTURES SHOULD PROVIDE MEANS TO MODIFY THE ORIFICES THROUGH THE USE OF REMOVABLE PLATES UNDER THE DIRECTION OF THE TOWNSHIP.
- SEED, INSTALL LIVE SHRUB STAKES AND STABILIZE WITH TOPSOIL. SEED WITH SPECIALTY SEEDING PER NATIVE SLOPE MIX AND RETENTION BASIN MIX HEREON. INSTALL LIVE STAKES PER SCHEDULE ON SHEET 6.
- DO NOT REMOVE INLET PROTECTION OR OTHER EROSION AND SEDIMENT CONTROL MEASURES UNTIL SITE IS FULLY STABILIZED.
- PLAT IS TO BE IN PLACE DURING CONSTRUCTION AND TO BE REMOVED FOR THE PERMANENT CONDITION

OUTLETE STRUCTURE & INFILTRATION BASIN DETAIL

NOT TO SCALE



SOIL MEDIA IN BASIN

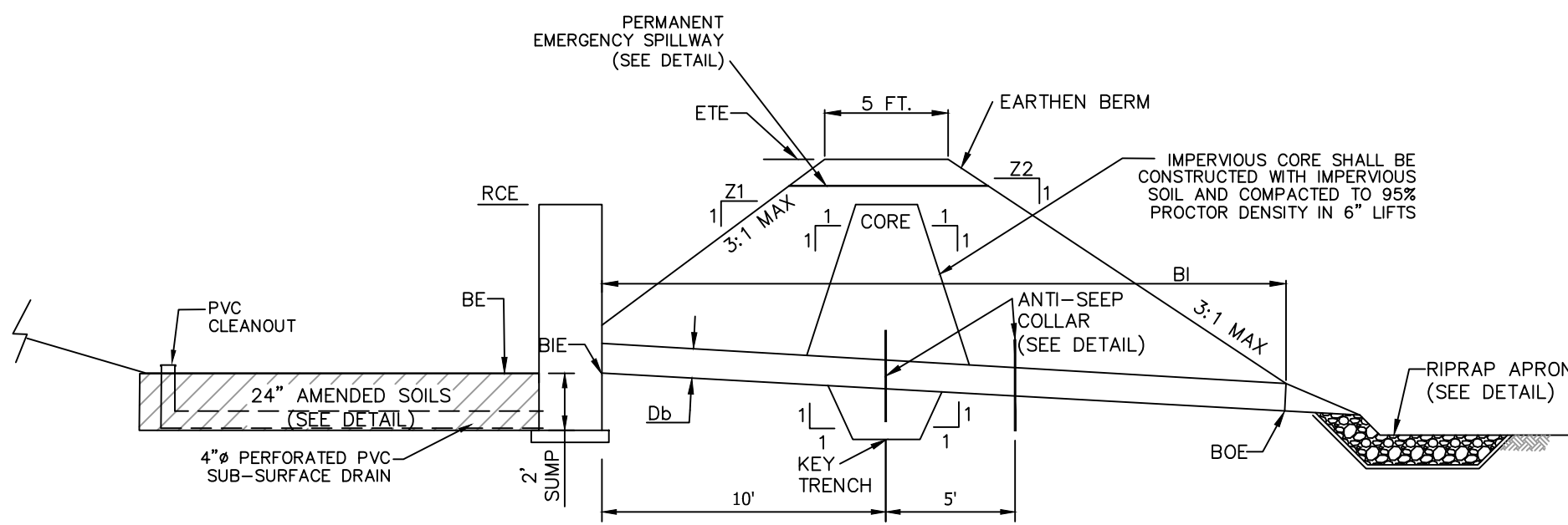
NOT TO SCALE

NOTES:

- EVACUATE FOR SOIL MEDIA TO PROPOSED INVERT DEPTH AND SCARIFY THE EXISTING SOIL SURFACES. DO NOT COMPACT IN-SITU SOILS.
- BACKFILL INFILTRATION AREA / BASIN WITH AMENDED SOIL AS SHOWN ON THE PLANS AND SPECIFICATIONS. OVERFILLING IS RECOMMENDED TO ACCOUNT FOR SETTLEMENT. LIGHT HAND TAMPING IS ACCEPTABLE IF NECESSARY.
- PRESOAK THE PLANTING SOIL PRIOR TO PLANTING VEGETATION TO AID IN SETTLEMENT.
- COMPLETE THE FINAL GRADING TO ACHIEVE PROPOSED DESIGN ELEVATIONS, LEAVING SPACE FOR UPPER LAYER OF COMPOST, MULCH OR TOPSOIL AS SPECIFIED ON PLANS.
- SEED WITH ERNMX-181 RETENTION BASIN FLOOR MIX. SEE SPECIALTY SEEDING SCHEDULE ON EROSION CONTROL DETAILS SHEET.
- MULCH AND INSTALL EROSION PROTECTION AT SURFACE FLOW ENTRANCES WHERE NECESSARY.

SOIL AMENDMENT SPECIFICATIONS:

- SOIL AMENDMENT MEDIA MAY CONSIST OF COMPOST (CHOPPED STRAW, LEAVES, GRASS CLIPPINGS AD OTHER PLANT REFUSE), COMPOSTED OR DRIED MANURES, WOOD PRODUCTS (SAWDUST, WOOD SHAVINGS, SHREDDED WOOD PULVERIZED BARK AND WOOD CHIPS), PEAT MOSS, MUSHROOM SOIL, OR SAND. WELL-BLENDED AND AGED.
- COMPOST SHOULD BE ADDED AT A RATE OF 2:1 (SOIL:COMPOST).
- ON-SITE TOPSOILS CAN BE PROPERLY STOCKPILED AND REUSED FOR SOIL PORTION OF THE 2:1 SOIL:COMPOST MIX.



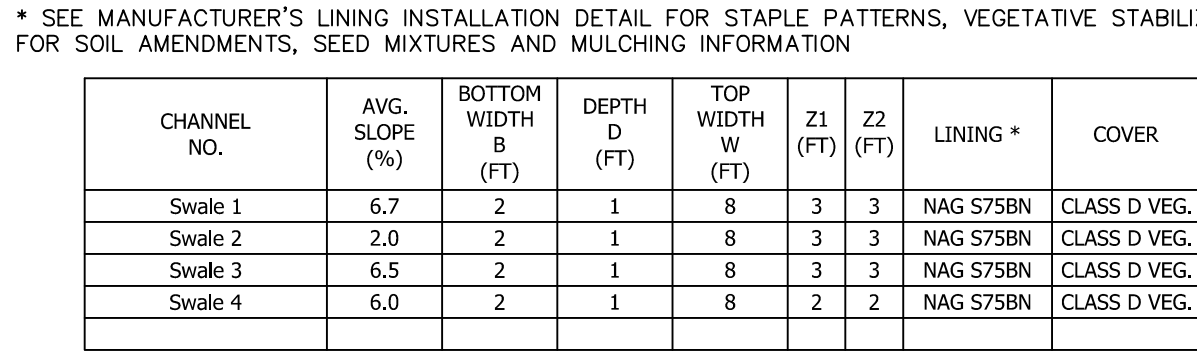
BASIN NO.	Z1 (FT)	Z2 (FT)	EMBANKMENT				BOTTOM ELEV BE (FT)
			TOP ELEV ETE (FT)	KEY TRENCH DEPTH ETw (FT)	KEY TRENCH WIDTH (FT)	KEY TRENCH DEPTH (FT)	
1	3	3	507.10	5.0	3.0	5.0	501.5

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SWM DETAILS
FOR
2509 MILL ROAD TOWNHOMES
LOCATED IN
UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PA

DRAWING ID: 221013-3-LD
PROJECT: 221013
DATE: 04/25/2022
SHEET: 13 OF 21



NOTES:

CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED. CHANNEL SHALL BE CLEANED WHENEVER TOTAL CHANNEL DEPTH IS REDUCED BY 25% AT ANY LOCATION. SEDIMENT DEPOSITS SHALL BE REMOVED WITHIN 24 HOURS OF DISCOVERY OR AS SOON AS SOIL CONDITIONS PERMIT ACCESS TO CHANNEL WITHOUT FURTHER DAMAGE. DAMAGED LINING SHALL BE REPAIRED OR REPLACED WITHIN 48 HOURS OF DISCOVERY.

NO MORE THAN ONE THIRD OF THE SHOOT (GRASS LEAF) SHALL BE REMOVED IN ANY MOWING. GRASS HEIGHT SHALL BE MAINTAINED BETWEEN 2 AND 3 INCHES UNLESS OTHERWISE SPECIFIED. EXCESS VEGETATION SHALL BE REMOVED FROM PERMANENT CHANNELS TO ENSURE SUFFICIENT CHANNEL CAPACITY.

NOT TO SCALE

OPERATION AND MAINTENANCE SCHEDULE

The storm water volume and quality control Best Management Practices (BMPs) constructed for this project will be maintained to function as designed, and shall implement the procedures described below. The owner of the lot on which facilities are located shall own and maintain the facilities as shown on the drawings.

Excess materials will be properly recycled or disposed of.

The approved facilities are to be permanent, and can only be removed or altered after approval by one or more of the following entities which may have jurisdiction: Upper Allen Township; and/or PA D.E.P. The tasks outlined herein shall be accomplished by the lot owner.

The following physical facilities shall be maintained to the original design and dimensions shown on the design plans approved by Upper Allen Township, until such time as an amended plan is approved by the Township:

- stormwater pipes;
- riprap aprons at pipe outlets;
- drain inlets, manholes and open pipe ends;
- stormwater infiltration basin
- drainage easements associated with all of the above.

For any structural facility (pipe, inlet, manhole), it must be repaired or replaced if damaged more than superficially, in a way that is a safety hazard, if structurally unsound, or if not substantially performing as it is intended per the original design. The lot owner shall keep record of any repaired or replaced facility, including costs, dates, materials removed, materials placed, and the contractor(s) information.

Swales.

- Inspect annually at a minimum and after significant rain events of greater than 1" rainfall. Remove any accumulated sediment, debris and trash, promptly. Any scoured or bare earth should be re-stabilized with sward lining, or seeding or sod that is watered until established. Repair any torn or displaced matting.

Riprap Aprons inspection and maintenance tasks--

- Inspect annually at a minimum. Remove any accumulated debris and trash, and remove promptly. Dislodged rock should be reset in place. Any scouring of earth at or below the apron should be re-stabilized with rock, or seeding (seed, mulch and matting), or sod that watered until established; rock should be placed in non-growing seasons, even if temporary.

Storm Pipes and Inlets inspection and maintenance tasks--

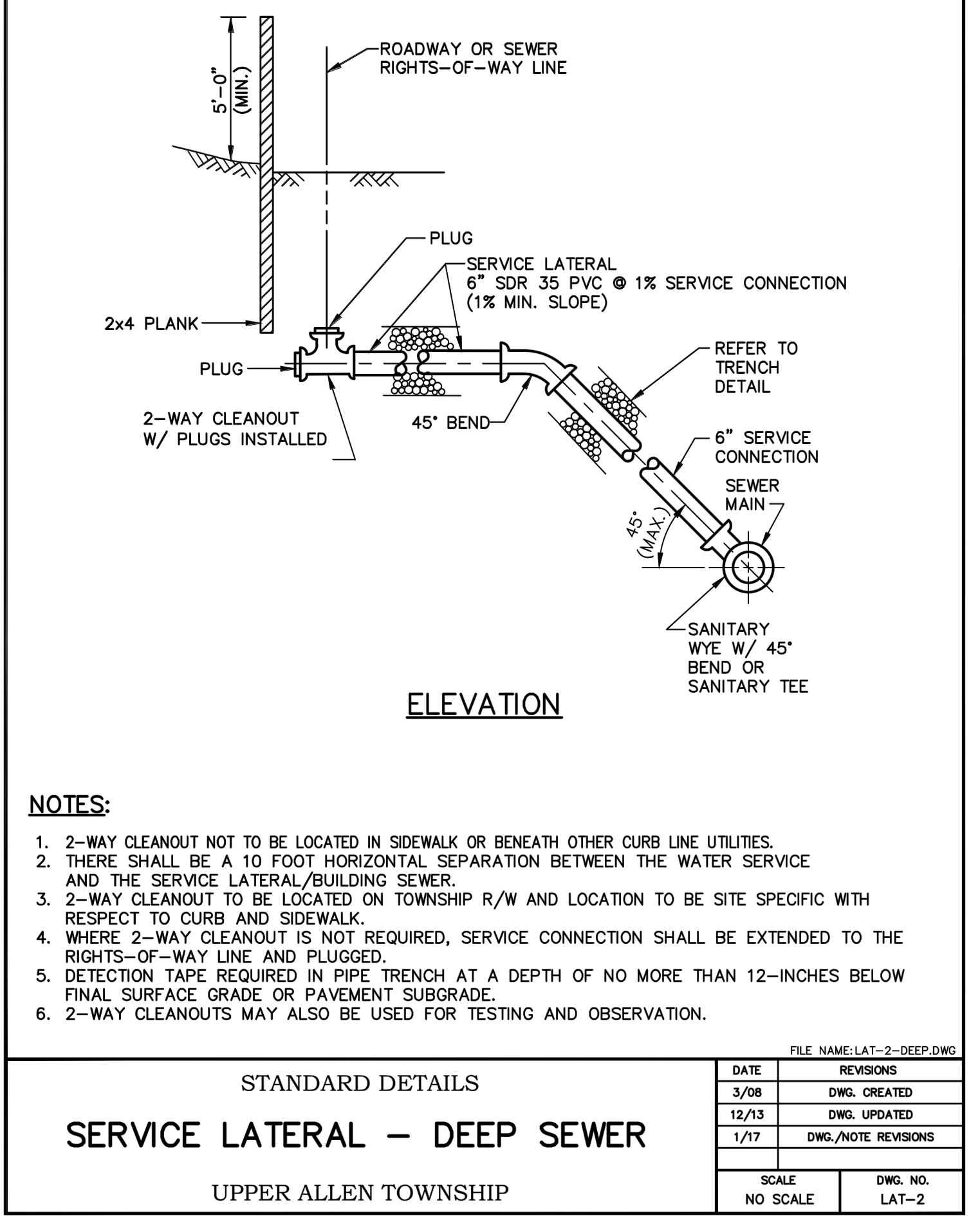
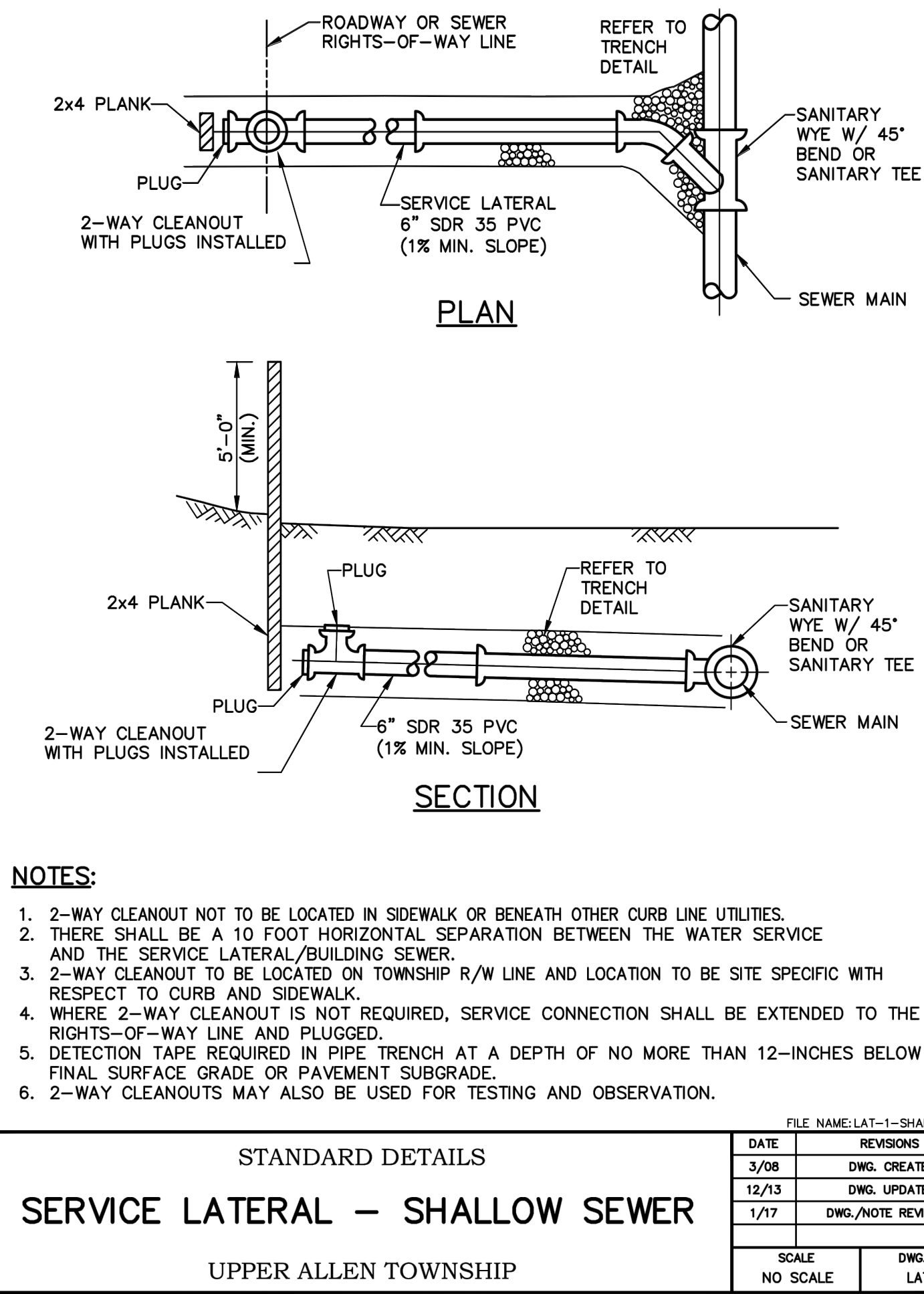
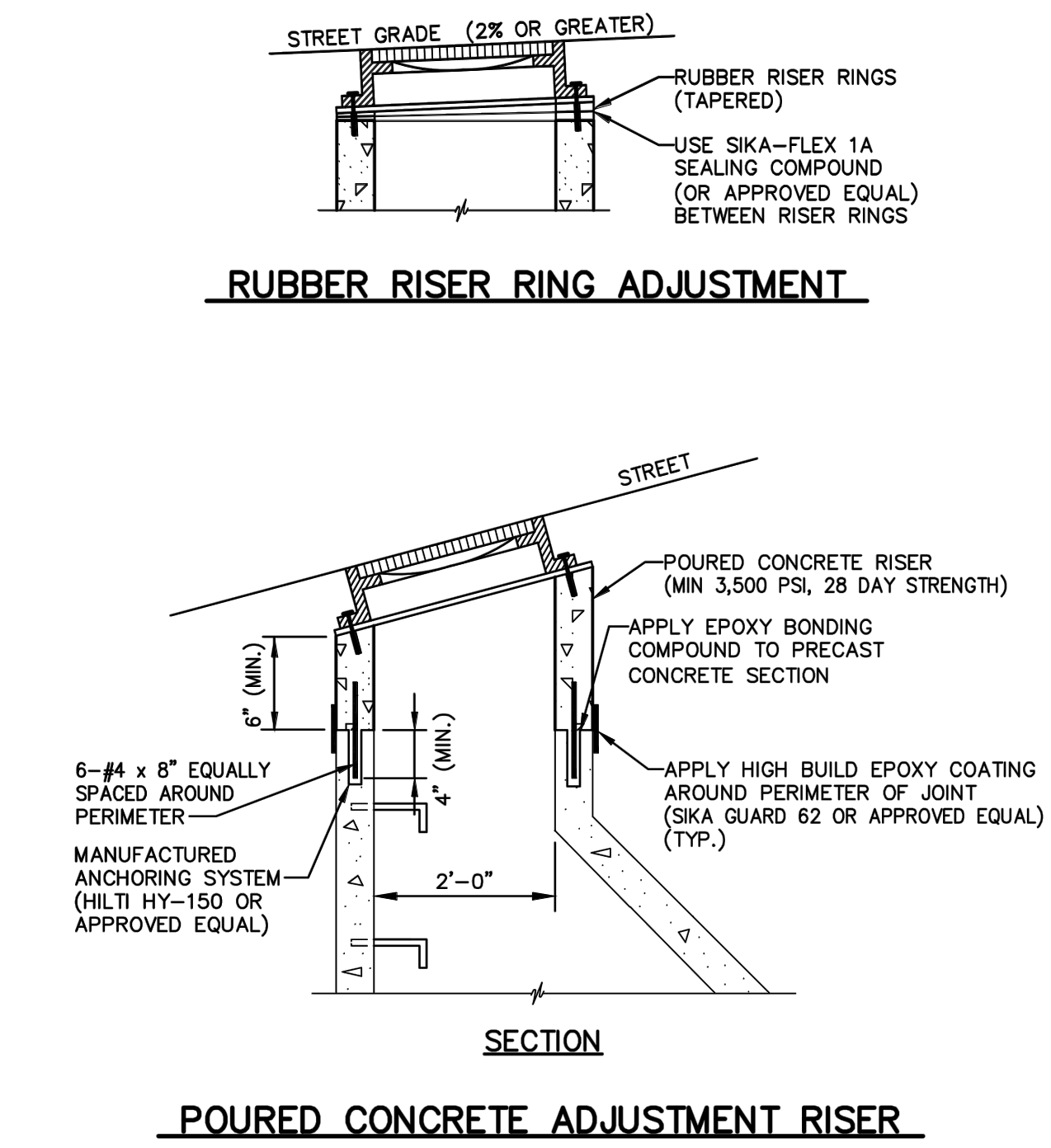
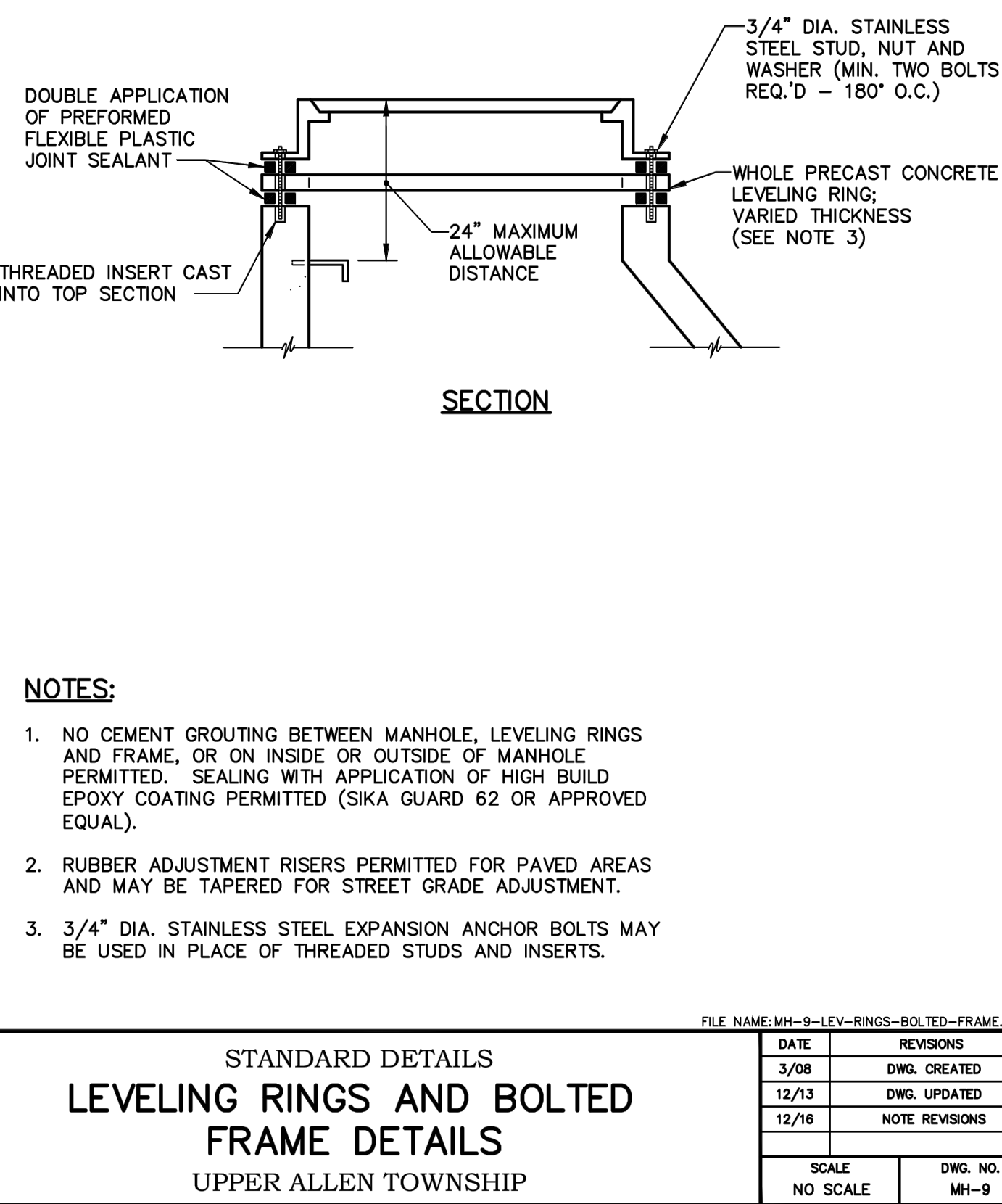
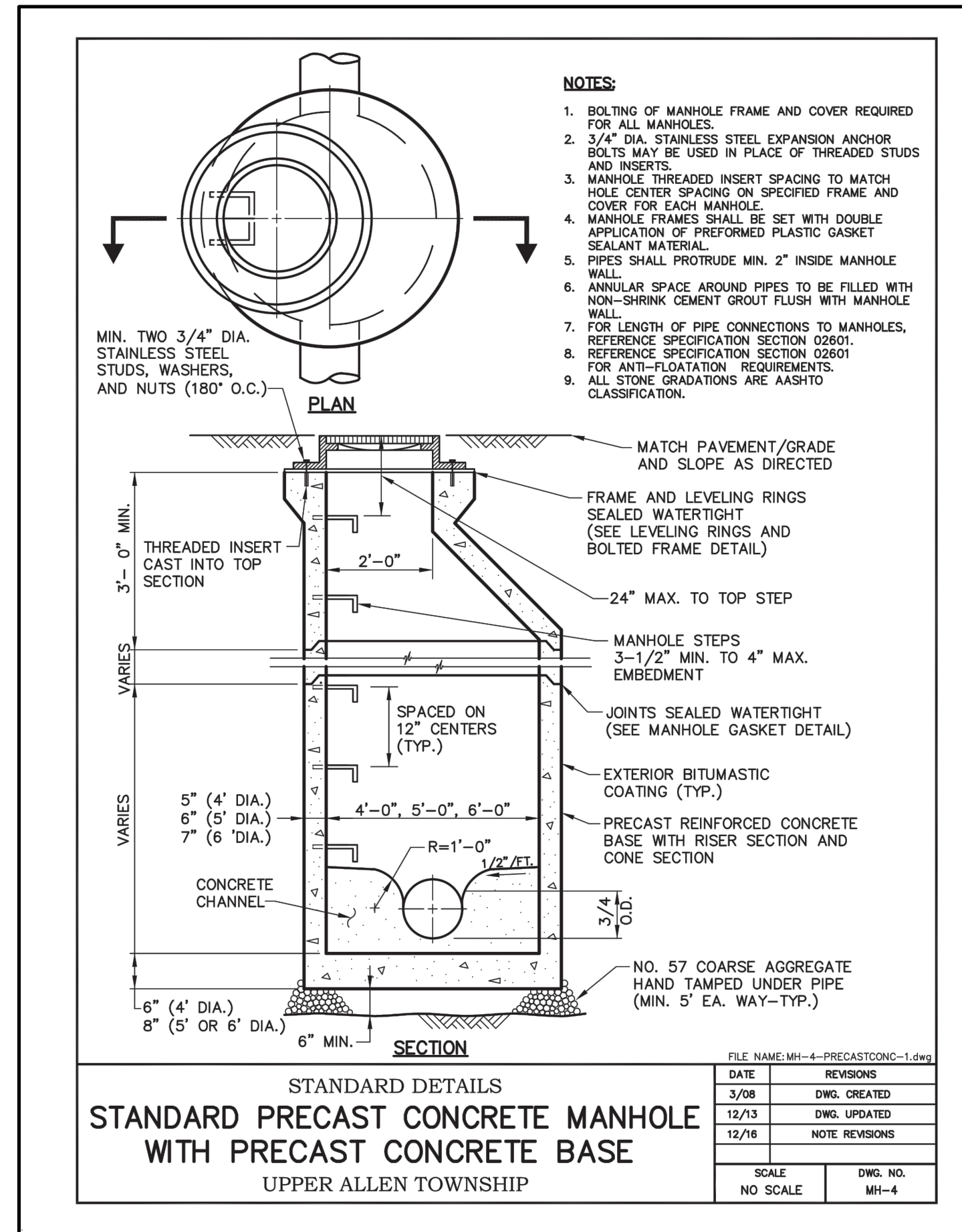
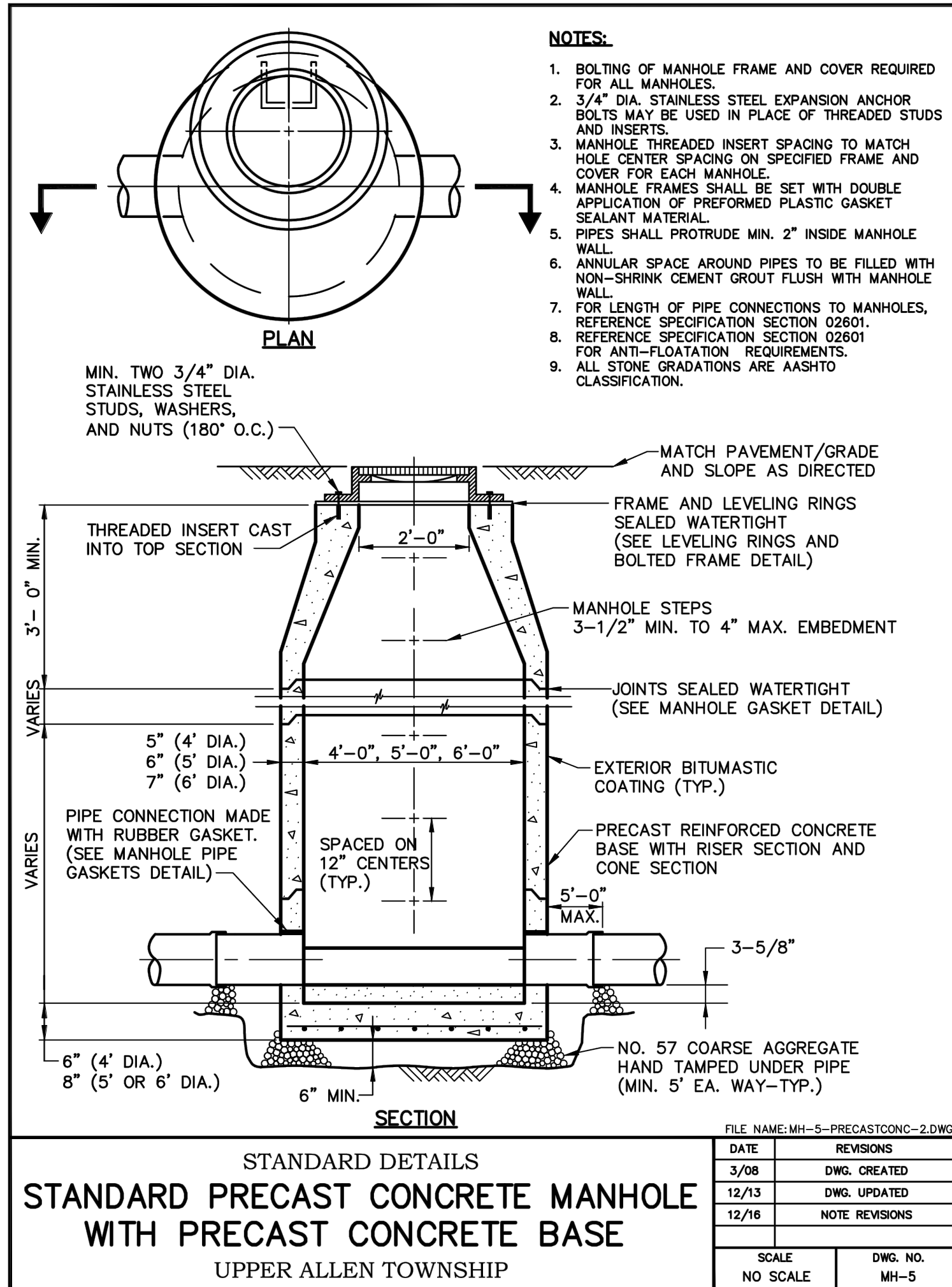
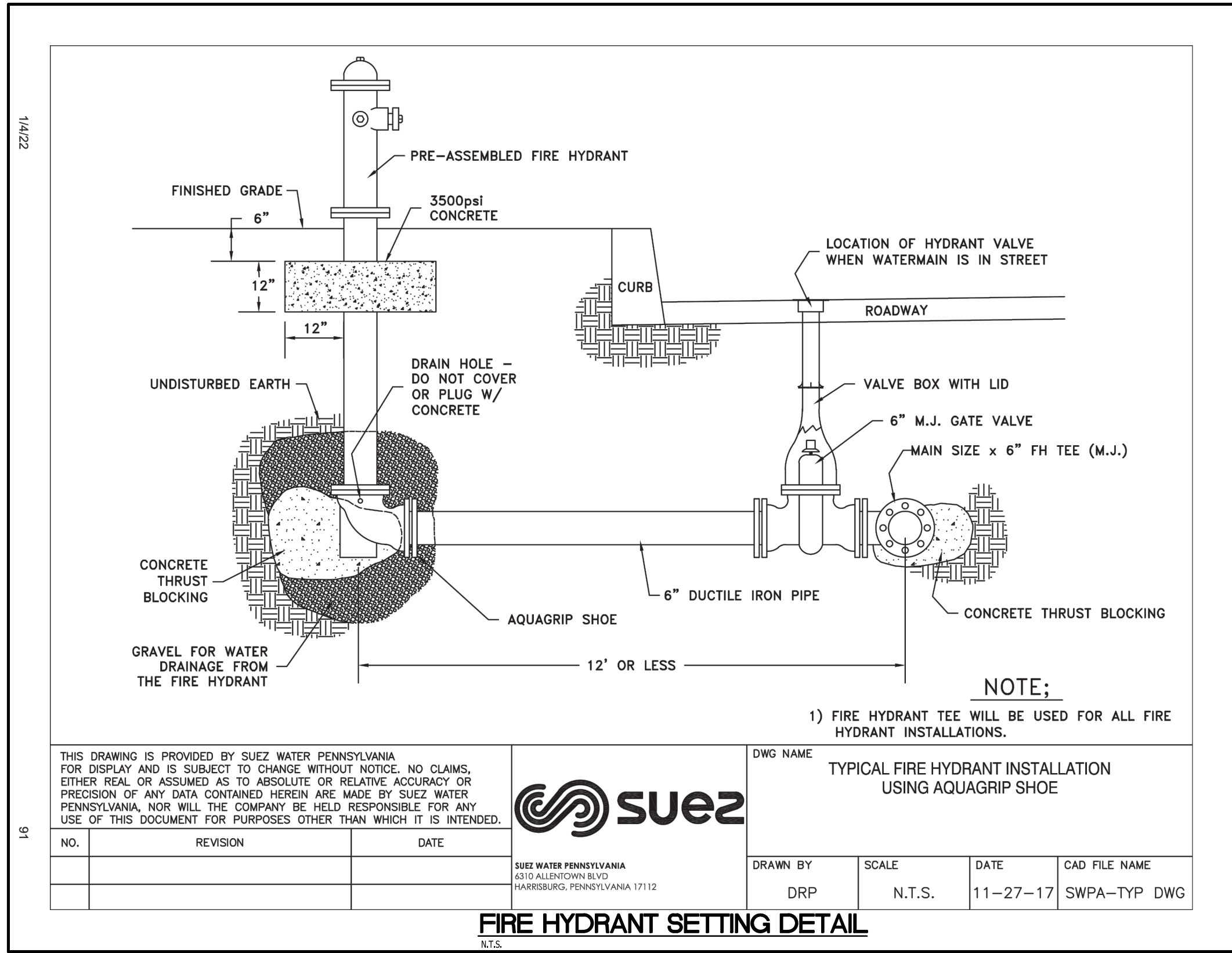
- Examine annually at a minimum. Remove man-made trash and dispose of properly.
- Examine inlet bottoms via gates, for accumulated debris. Remove accumulated gird and other debris. Check for any obvious structural deterioration.
- Examine swales for obstructions and erosion. Any scouring of earth should be re-stabilized with rock, or seeding (seed, mulch and mowing), or sod that is watered until established; rock should be placed in non-growing seasons, even if temporary.
- All inlets, storm piping, swales and drainage structures shall be kept free of any obstructions and foreign material that would cause clogging.
- All impervious surfaces shall be maintained clean of oil, fuel or other toxic spills, in accordance with State, Federal or local regulations.

Drainage Easements inspection and maintenance tasks--

- Inspect annually at a minimum.
- Notify the landowner if any obstructions or alteration of the ground surface interfere with the purpose and use of the easement, and request removal / correction of the problem.
- Examine any swales for obstructions and erosion. Any scouring of earth should be re-stabilized with rock, or seeding (seed, mulch and matting), or sod that is watered until established; rock should be placed in non-growing seasons, even if temporary.

Stormwater Infiltration Basin

- Inspect annually at a minimum.
- The bottom of the stormwater infiltration basin can be maintained as maintained meadow, or natural brush succession, per the wishes of the owner. The basin berms shall be maintained as meadow, being mowed once per year.
- Removal of sediment / debris shall take place when the basin bottom has dried, if possible. Man-made trash shall be disposed of properly in containers collected by a licensed commercial trash hauler.
- Examine for and clean out the outlet structure and trash rack, of accumulated trash, grit and the like.
- If the water level in the basin is high, or the water volume is high, so that storage volume is maintained.
- Infiltration Basin. If standing water is present for greater than 72 hours after the last rainfall pump out the basin to



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UTILITY DETAILS

FOR

2509 MILL ROAD TOWNHOMES

LOCATED IN

UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PA

DRAWING ID:

221013-3-LD

PROJECT:

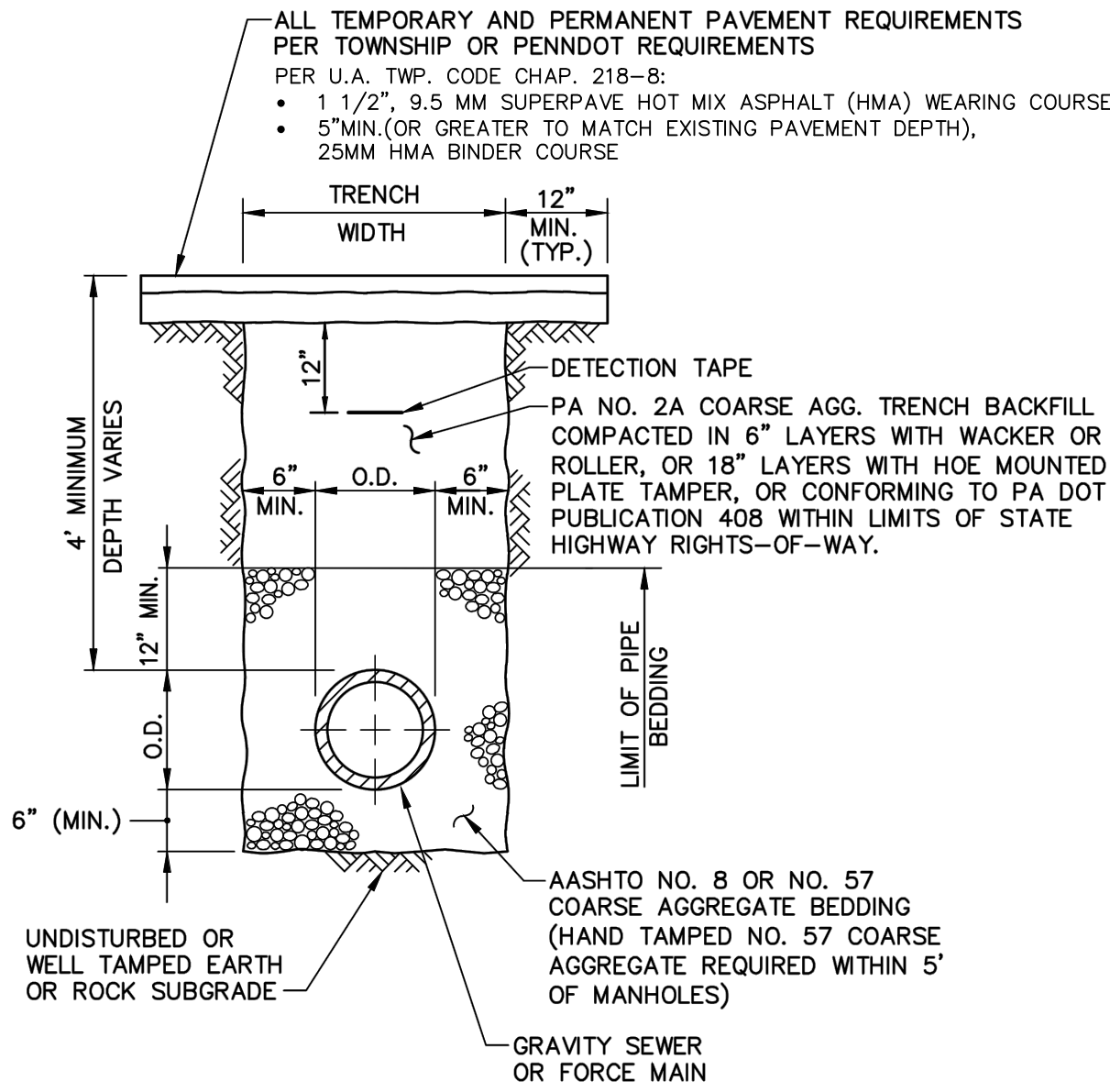
221013

DATE:

04/25/2022

SHEET:

15 OF 21

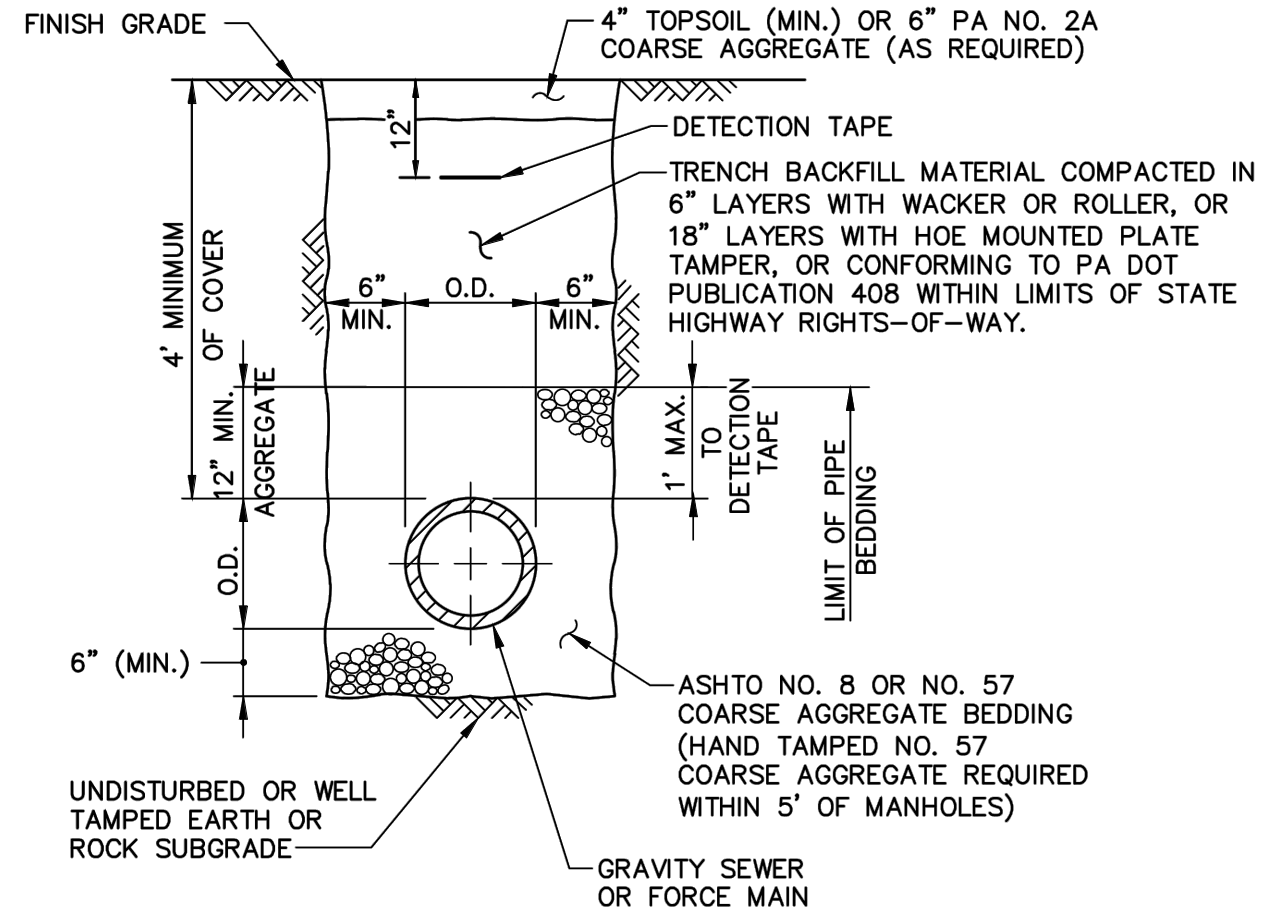


NOTE:

- BACKFILL AND COMPACTION REQUIREMENT APPLIES TO PAVED ROADWAYS AND SHOULDERS OF PROPOSED AND EXISTING STREETS (OTHER THAN STATE HIGHWAYS), PAVED DRIVEWAYS, AND SIDEWALKS.
- CONSTRUCTION REQUIREMENTS PER UPPER ALLEN TWP. CODE CHAPTER 217-8

STANDARD DETAILS TRENCH BACKFILL DETAIL IN PAVED AREAS UPPER ALLEN TOWNSHIP

DATE	REVISIONS
3/08	DWG. CREATED
12/13	DWG. UPDATED
1/17	NOTE REVISIONS
SCALE	DWG. NO.
NO SCALE	TR-1

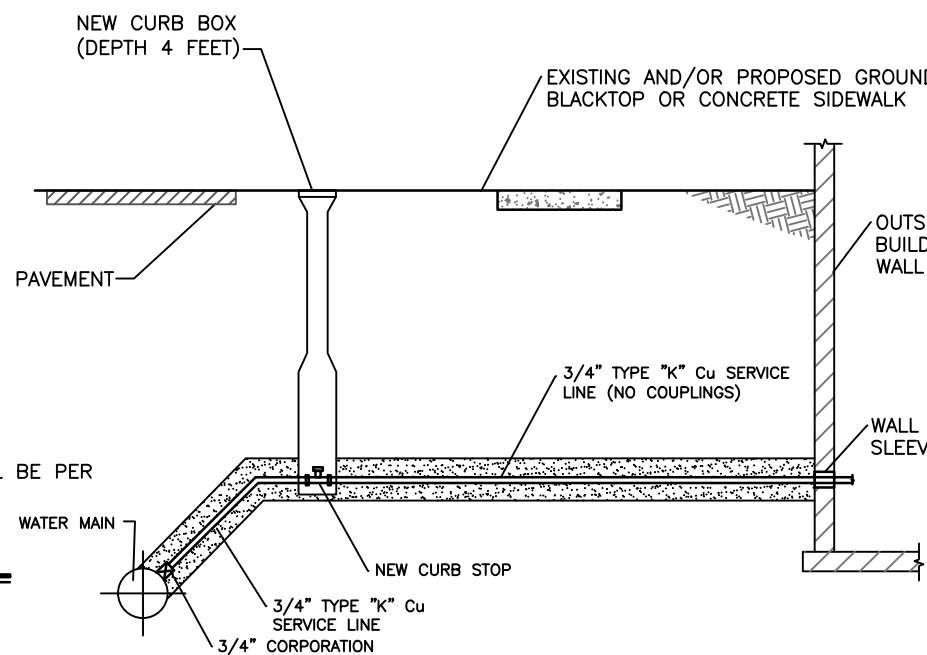


BACKFILLING REQUIREMENTS:

- UNPAVED AREAS OUTSIDE ROADWAYS - SUITABLE ON-SITE BACKFILL COMPACTED AS INDICATED ABOVE TO BOTTOM OF TOPSOIL. REPLACE TOPSOIL TO APPROXIMATE DEPTH OF EXISTING OR MIN. 4".
- UNPAVED AREAS WITHIN R/W LIMITS OF STATE HIGHWAYS - CONFORMING TO REQUIREMENTS OF PA DOT PUBLICATION 408.
- UNPAVED SHOULDERS OF PROPOSED AND EXISTING STREETS OTHER THAN STATE HIGHWAYS - AGGREGATE BACKFILL COMPACTED AS INDICATED ABOVE.
- STONE DRIVEWAYS AND PARKING AREAS - PA NO. 2A COARSE AGGREGATE BACKFILL COMPACTED AS INDICATED ABOVE.
- UNIMPROVED STREETS - AGGREGATE BACKFILL COMPACTED AS INDICATED ABOVE.

STANDARD DETAILS TRENCH BACKFILL DETAIL IN UNPAVED AREAS UPPER ALLEN TOWNSHIP

DATE	REVISIONS
3/08	DWG. CREATED
12/13	DWG. UPDATED
1/17	NOTE REVISIONS
SCALE	DWG. NO.
NO SCALE	TR-2

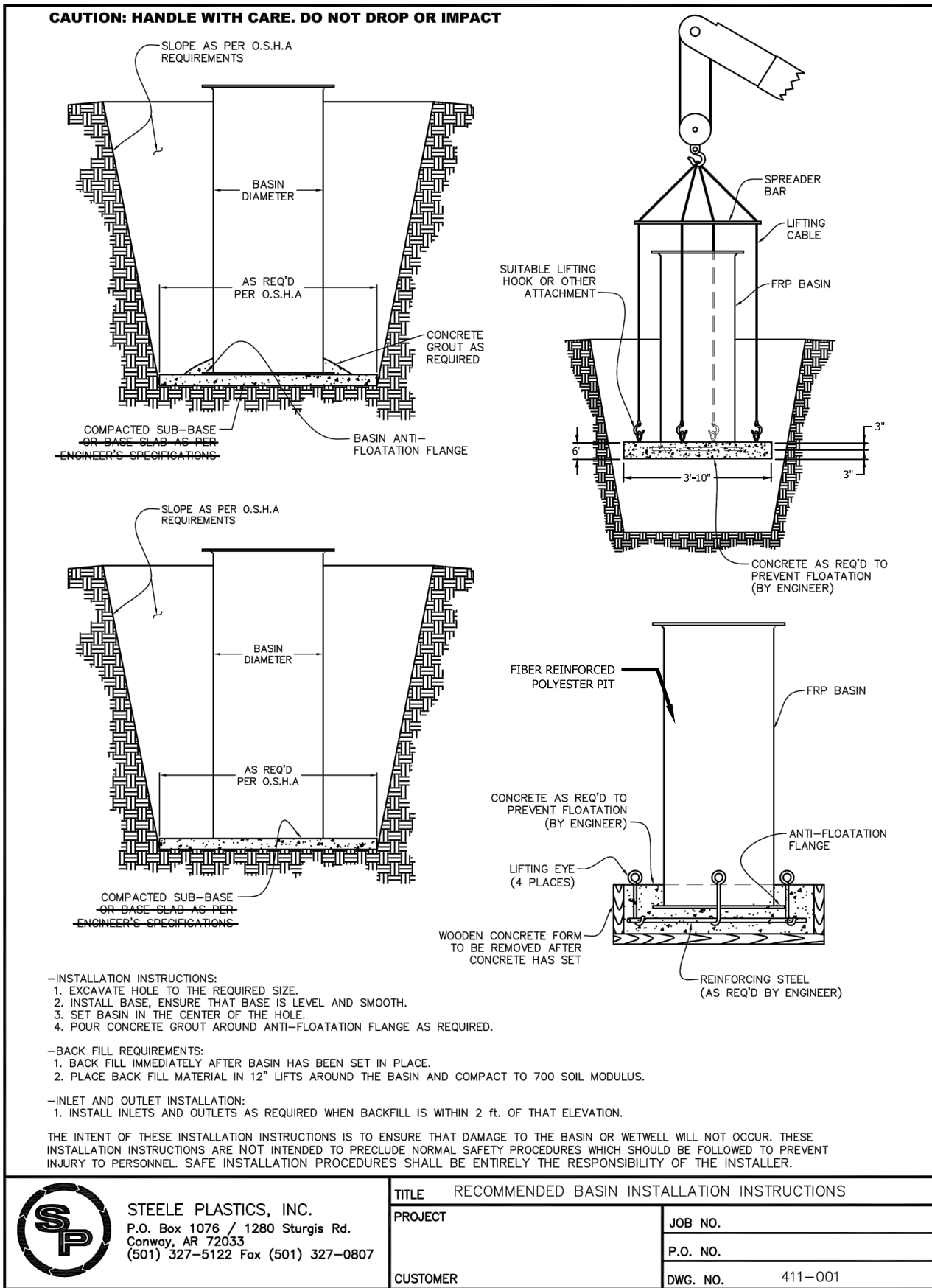


NOTES:

- DESIGN AND REQUIREMENTS SHALL BE PER THE WATER SUPPLY COMPANY.

WATER SERVICE DETAIL

N.T.S.



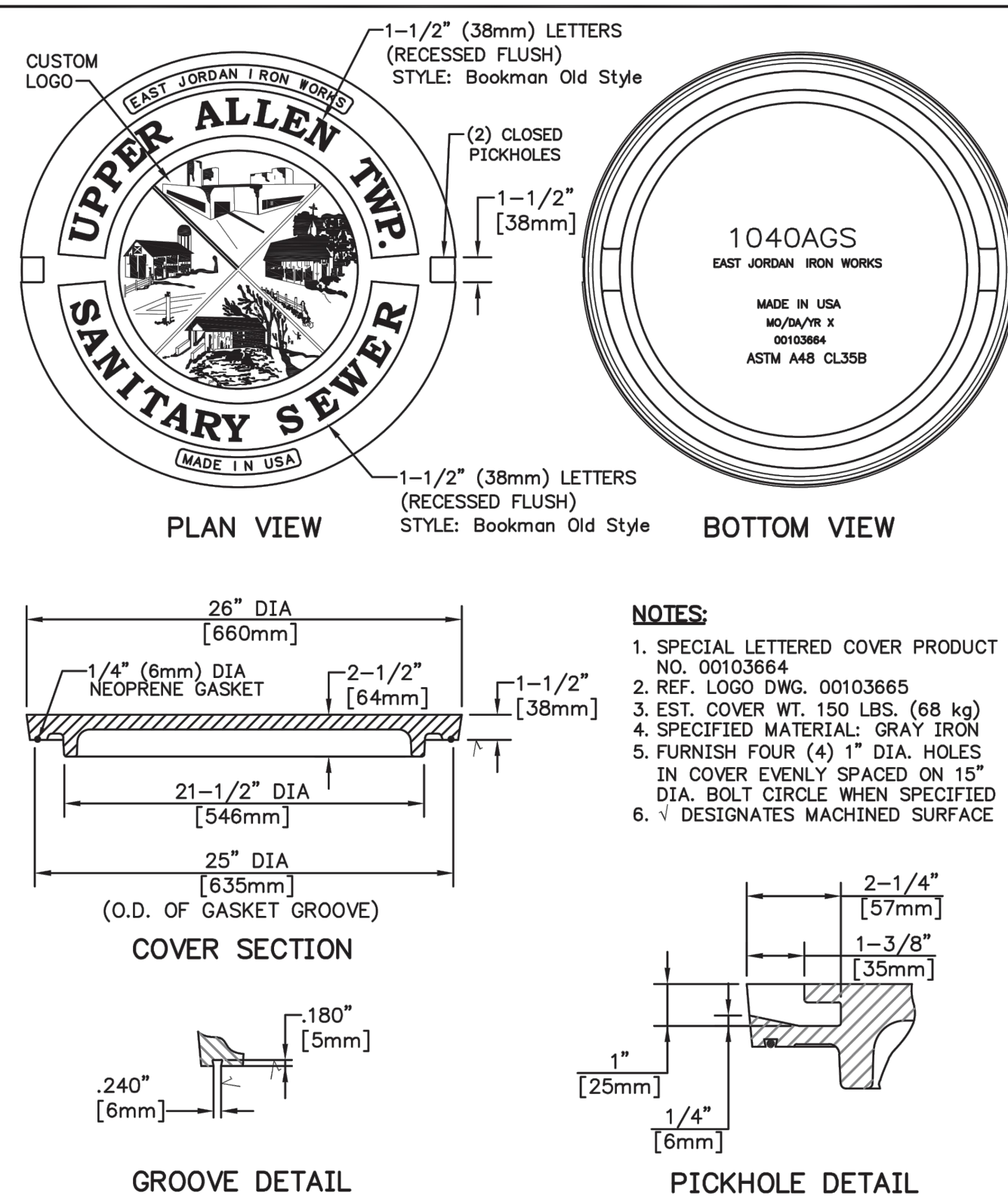
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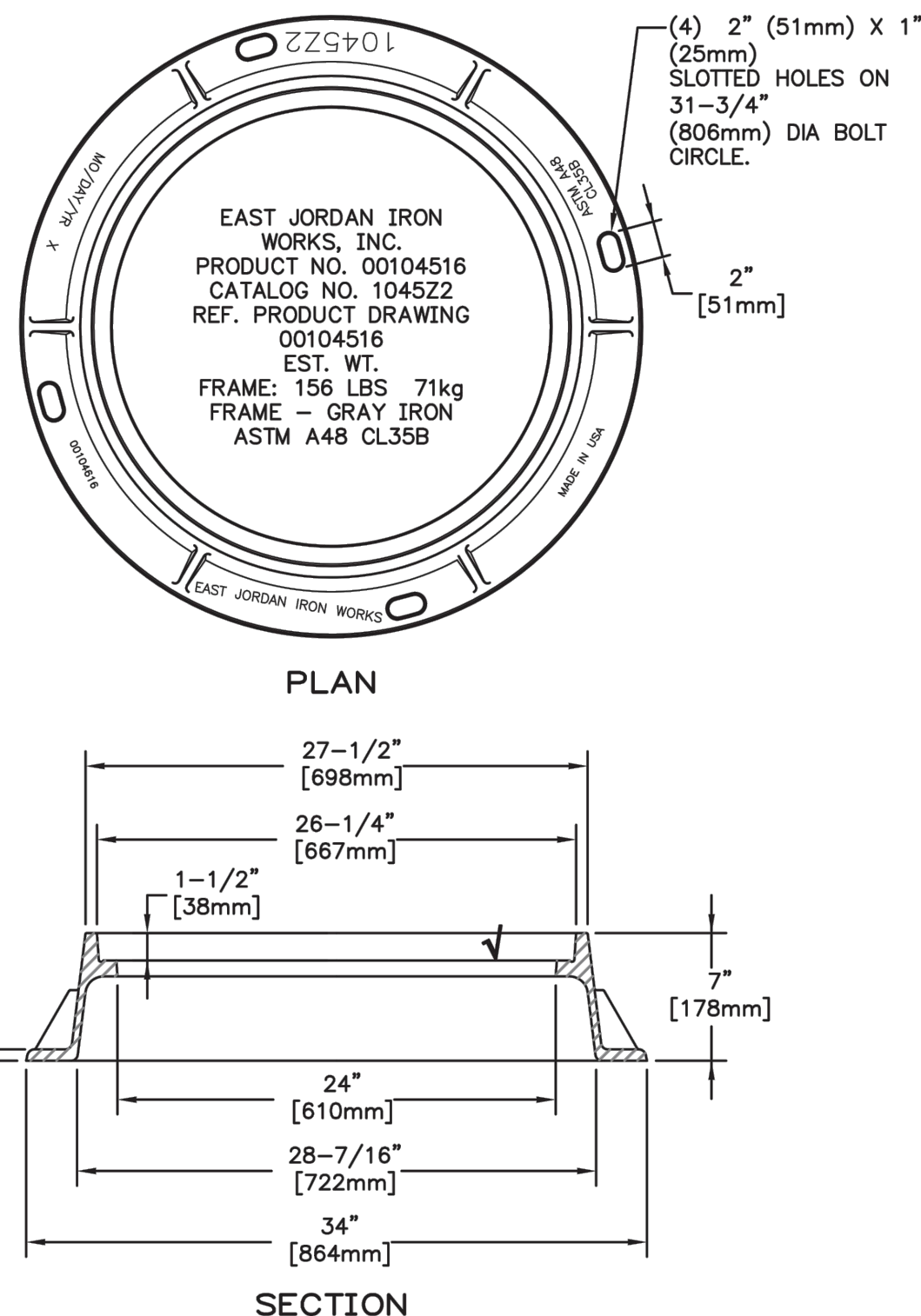
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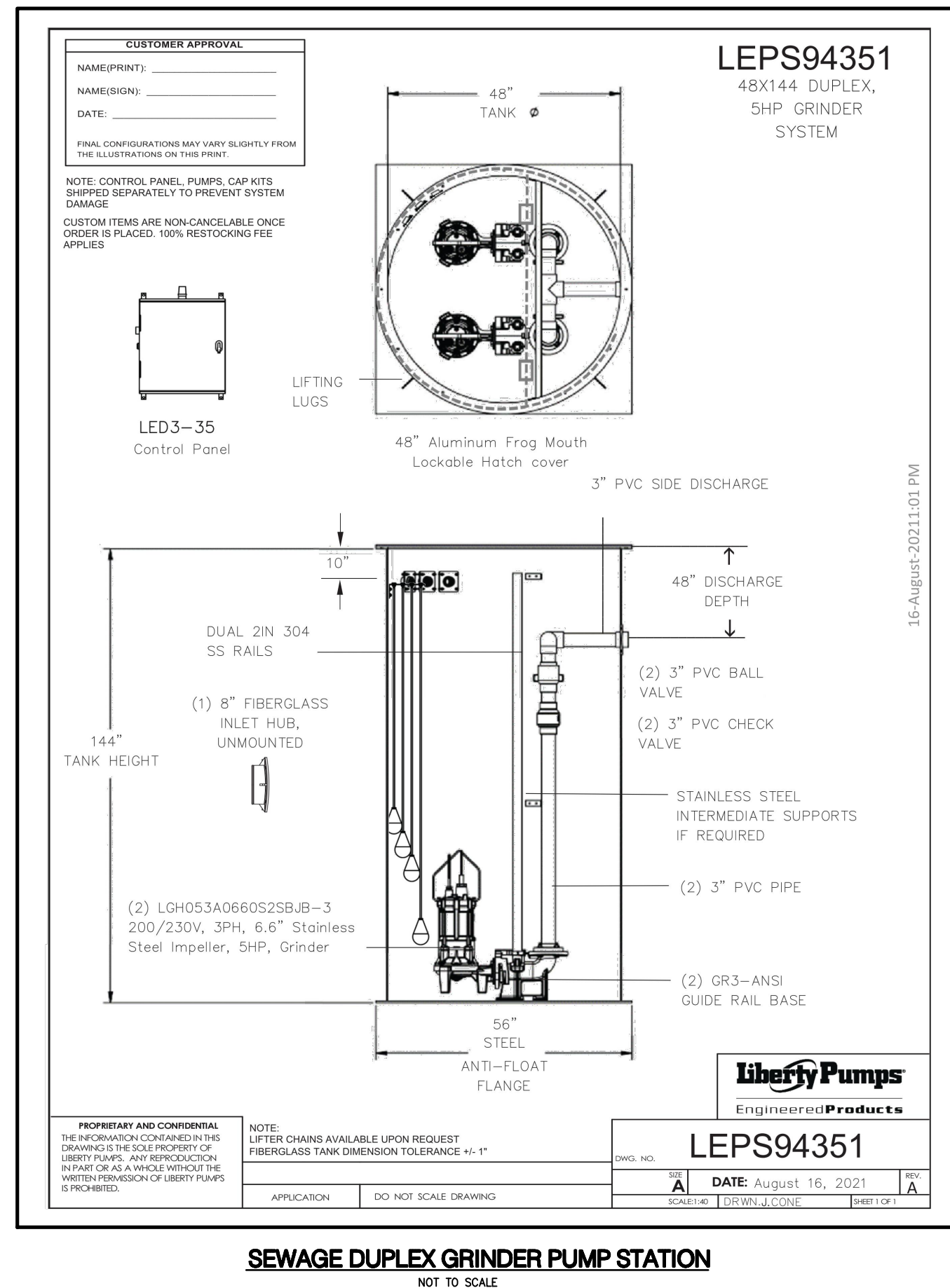
STANDARD DETAILS HEAVY DUTY MANHOLE SELF-SEALING COVER UPPER ALLEN TOWNSHIP

DATE	REVISIONS
3/08	DWG. CREATED
12/14	DWG. UPDATED
SCALE	DWG. NO.
NO SCALE	MH-1



STANDARD DETAILS HEAVY DUTY MANHOLE FRAME (H-25) UPPER ALLEN TOWNSHIP

DATE	REVISIONS
3/08	DWG. CREATED
SCALE	DWG. NO.
NO SCALE	MH-2



SEWAGE DUPLEX GRINDER PUMP STATION

NOT TO SCALE



3 Phase					
Fiberglass Enclosure			Stainless Steel Enclosure		
Voltage	Overload	Breaker	Duplex I.S.	Duplex	Simplex I.S.
45-18	20	LEDK3-20	LED3-20	LEDK3-20	LESS3-20
8-32	35	LEDK3-35	LED3-35	LEDK3-35	LESS3-35
30-40	40	LEDK3-40	LED3-40	LEDK3-40	LESS3-40
37-50	50	LEDK3-50	LED3-50	LEDK3-50	LESS3-50
48-65	65	LEDK3-65	LED3-65	LEDK3-65	LESS3-65

UTILITY DETAILS

FOR

2509 MILL ROAD TOWNHOMES

LOCATED IN UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PA

DRAWING ID:

221013-3-LD

PROJECT:

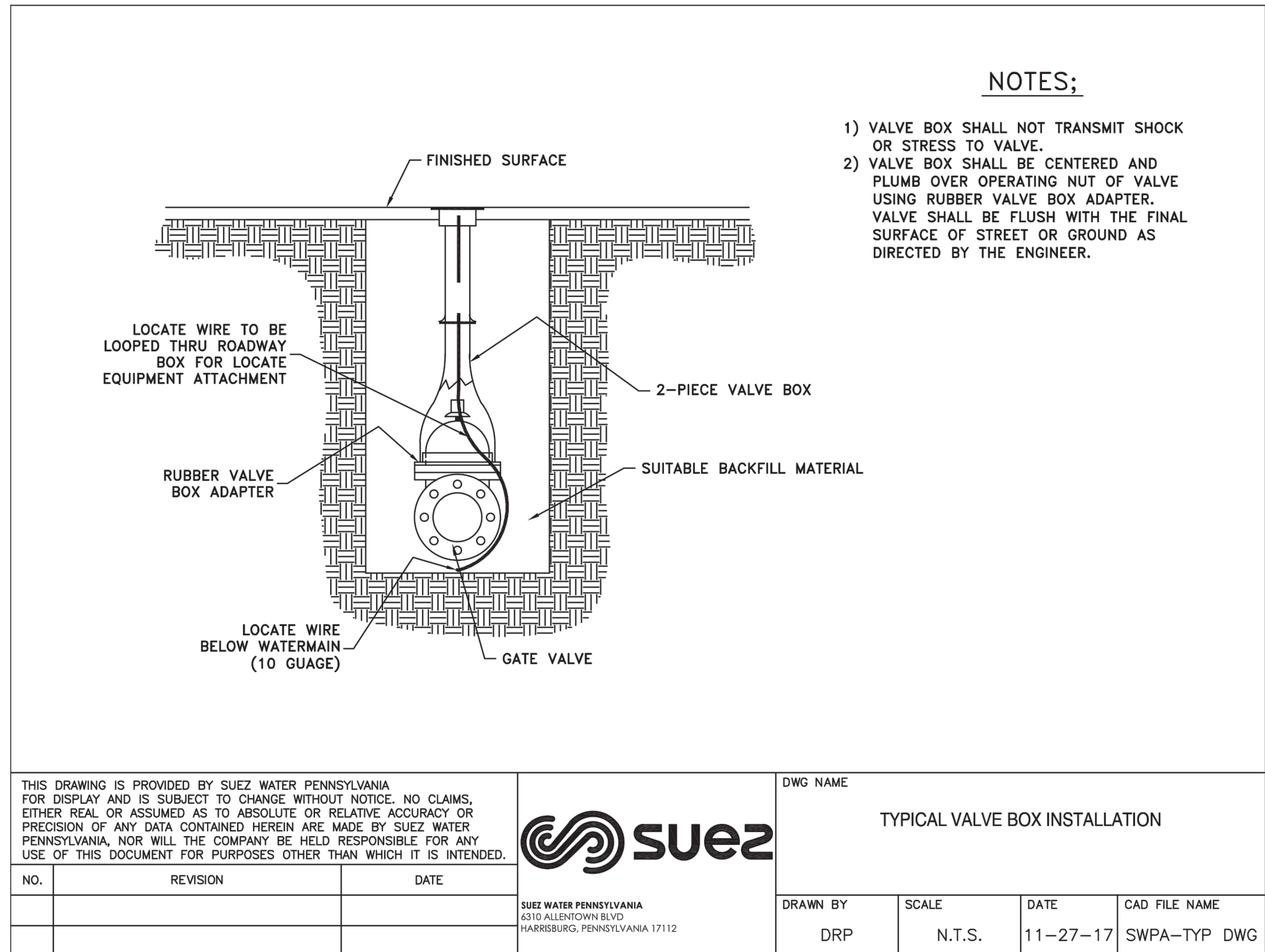
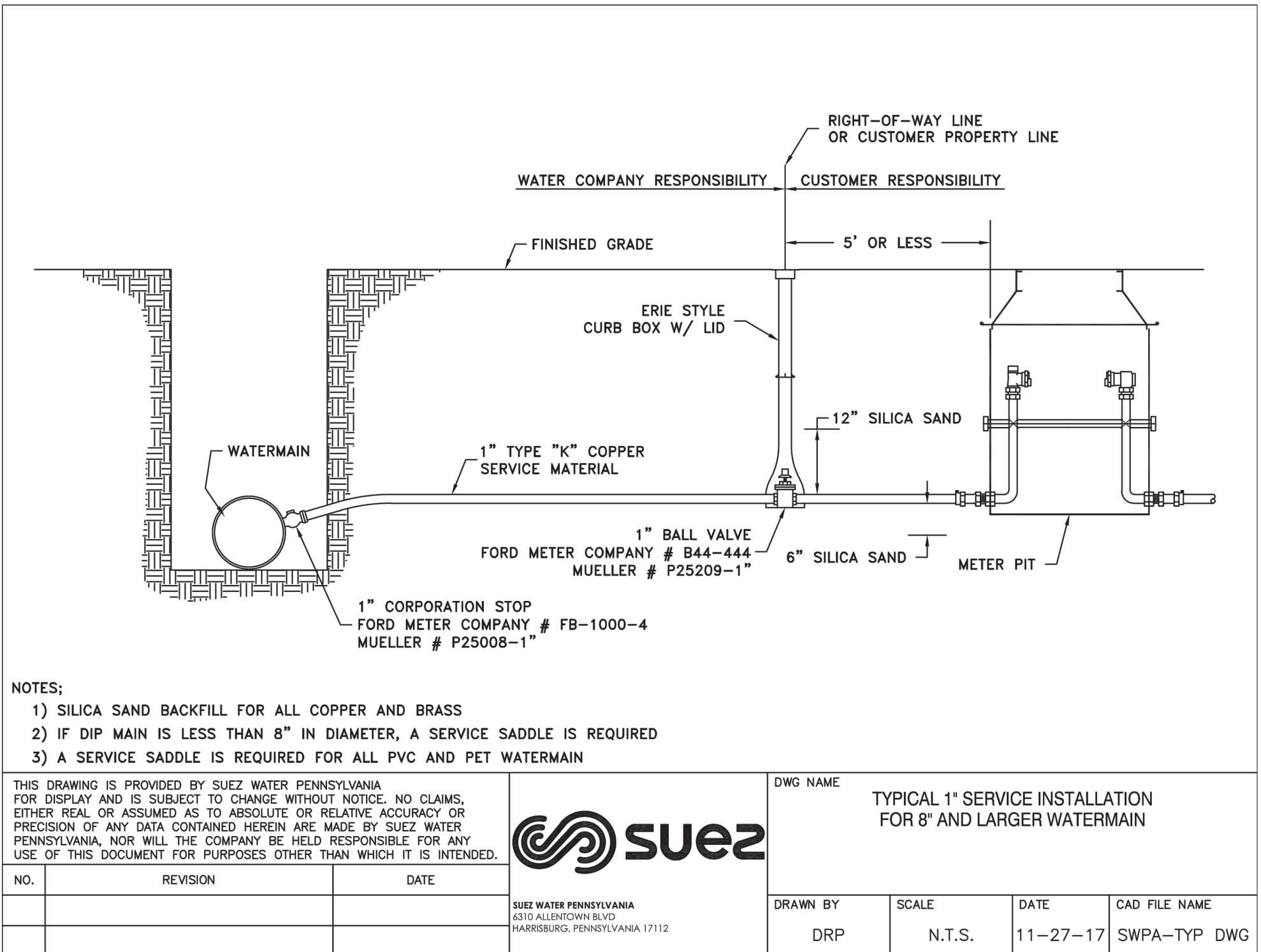
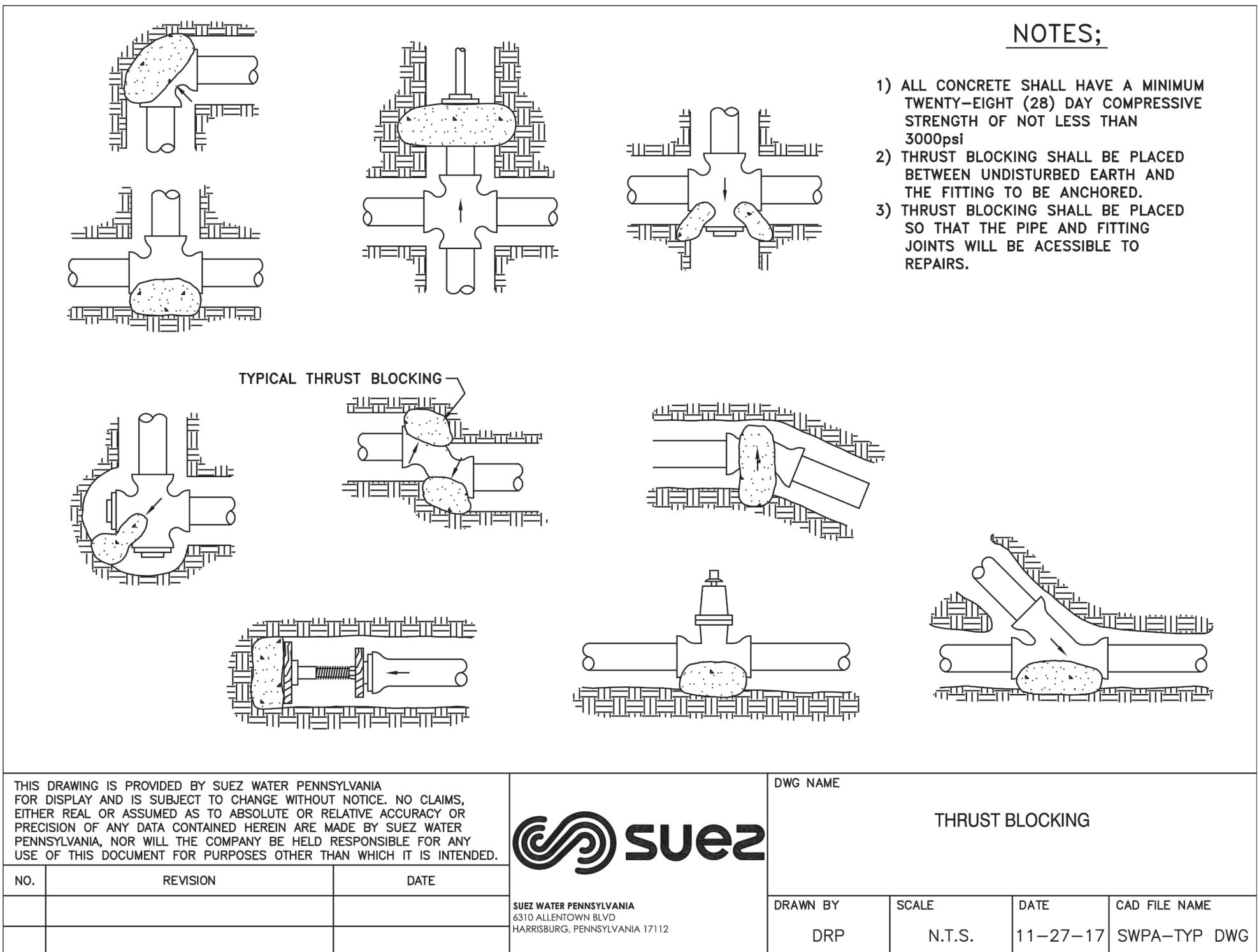
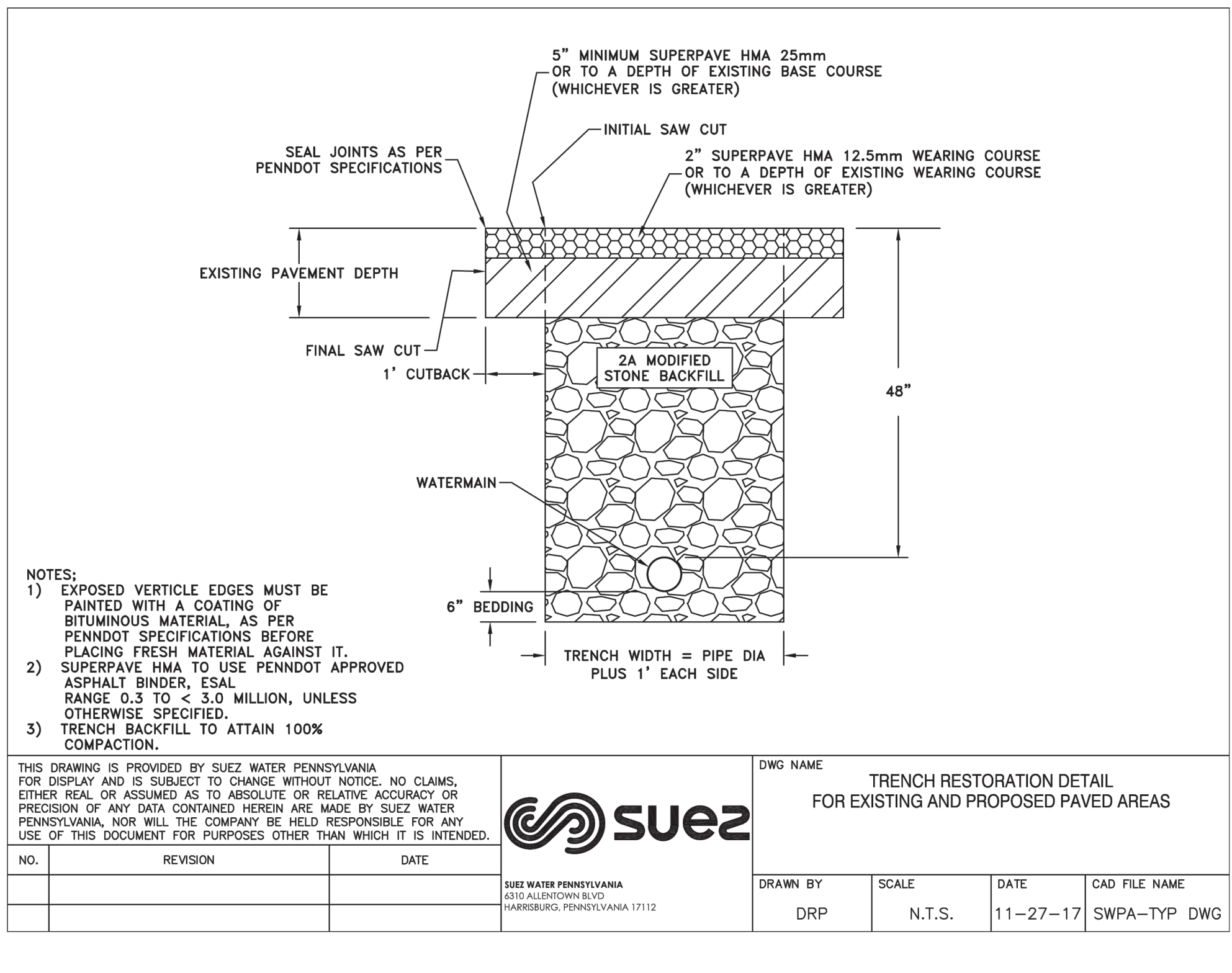
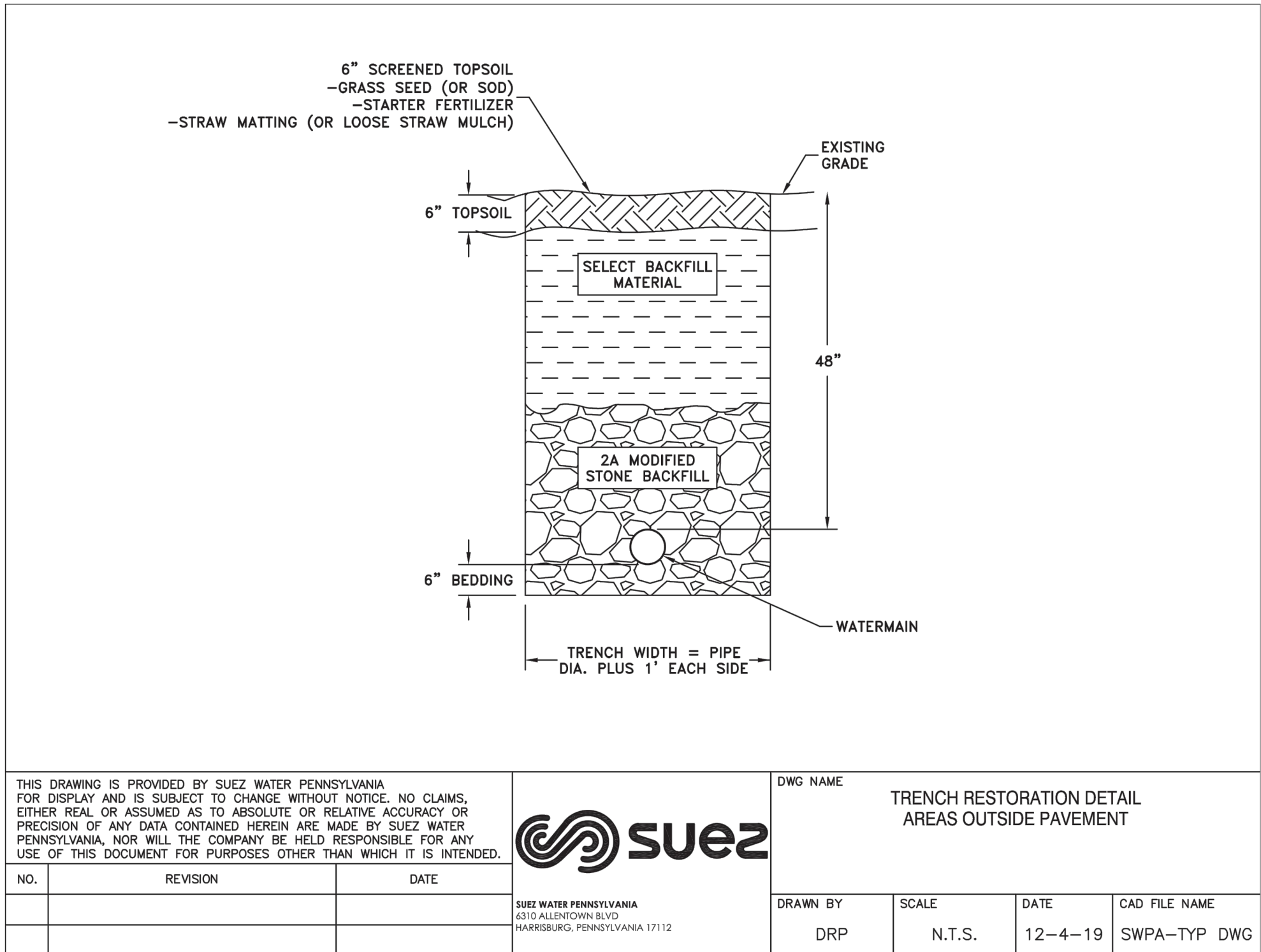
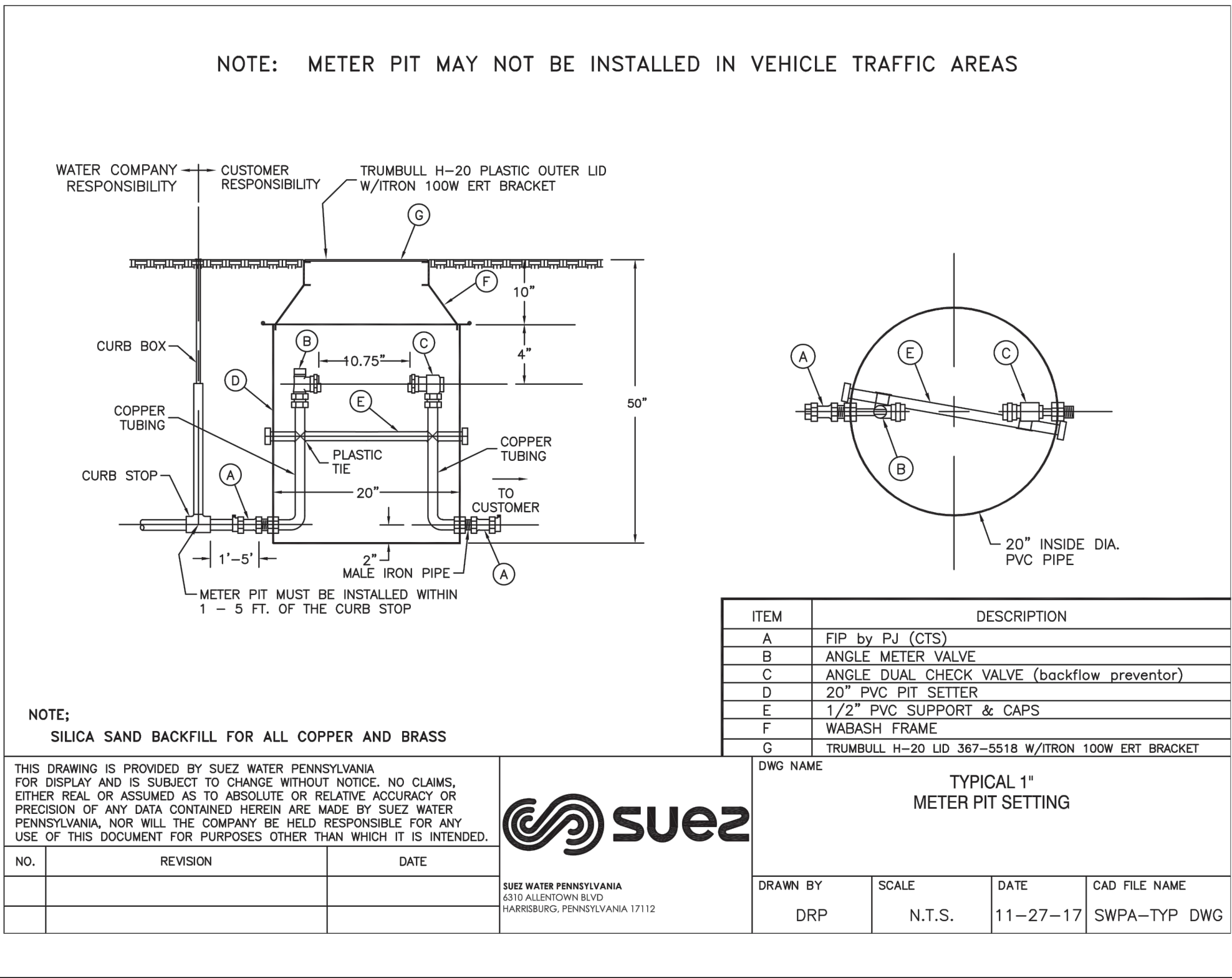
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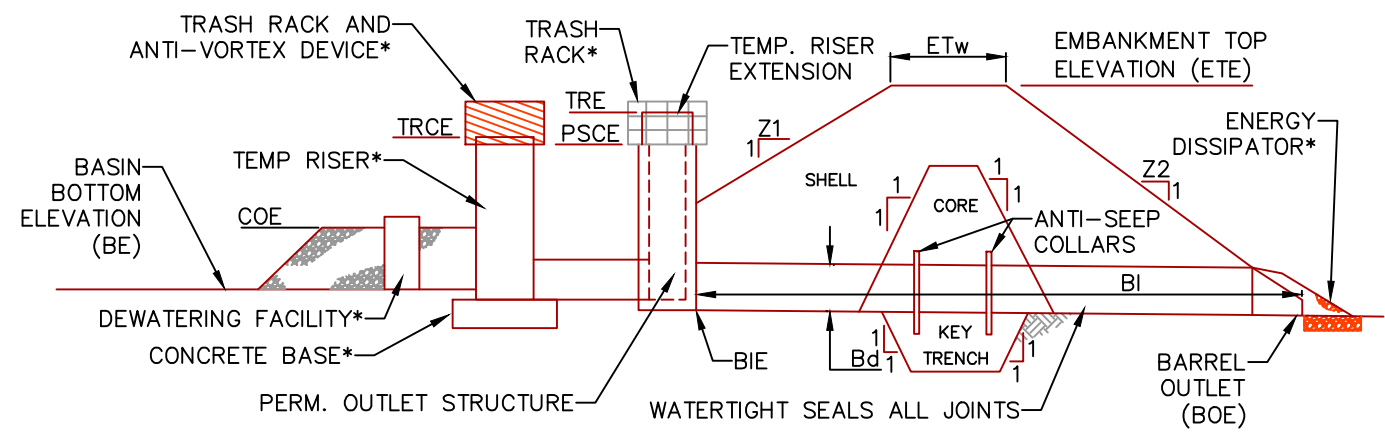
DATE:

04/25/2022

SHEET:

16 OF 21





EMBANKMENT SECTION ALONG PRINCIPAL SPILLWAY

TRAP NO.	Z1 (FT)	Z2 (FT)	TEMPORARY RISER				BARREL			
			DIA TRd (IN)	CREST ELEV TRCE (FT)	MAT'L	TEMP RISER ELEV TRE (FT)	DIA Bd (IN)	INLET ELEV BIE (FT)	MAT'L	LENGTH BI (FT)
1	3	3	30	505.70	CMP	506.20	18	501.5	RCP	26

EMBANKMENT				CLEANOUT		BOTTOM ELEV BE (FT)
TOP ELEV ETE (FT)	TOP WIDTH Etw (FT)	KEY TRENCH DEPTH (FT)	KEY TRENCH WIDTH (FT)	ELEV COE (FT)	WIDTH (FT)	
507.10	5	2	4	502.20		499.5

NOTES:

SEDIMENT BASINS, INCLUDING ALL APPURTENANT WORKS, SHALL BE CONSTRUCTED TO THE DETAIL AND DIMENSIONS SHOWN ON THE E&S PLAN DRAWINGS.

AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO A DEPTH OF TWO FEET PRIOR TO ANY PLACEMENT AND COMPACTION OF EARTHEN FILL. FILL MATERIAL FOR THE EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN LAYERED LIFTS OF NOT MORE THAN 6 TO 9 IN. THE MAXIMUM ROCK SIZE SHALL BE NO GREATER THAN 2/3 THE LIFT THICKNESS. UPON COMPLETION, THE EMBANKMENT SHALL BE SEEDED AND MULCHED OR OTHERWISE STABILIZED ACCORDING TO THE SPECIFICATIONS OF THE E&S PLAN DRAWINGS. TREES SHALL NOT BE PLANTED ON THE EMBANKMENT.

ALL SEDIMENT BASINS SHALL BE INSPECTED ON AT LEAST A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT.

ACCESS FOR SEDIMENT REMOVAL AND OTHER REQUIRED MAINTENANCE ACTIVITIES SHALL BE PROVIDED.

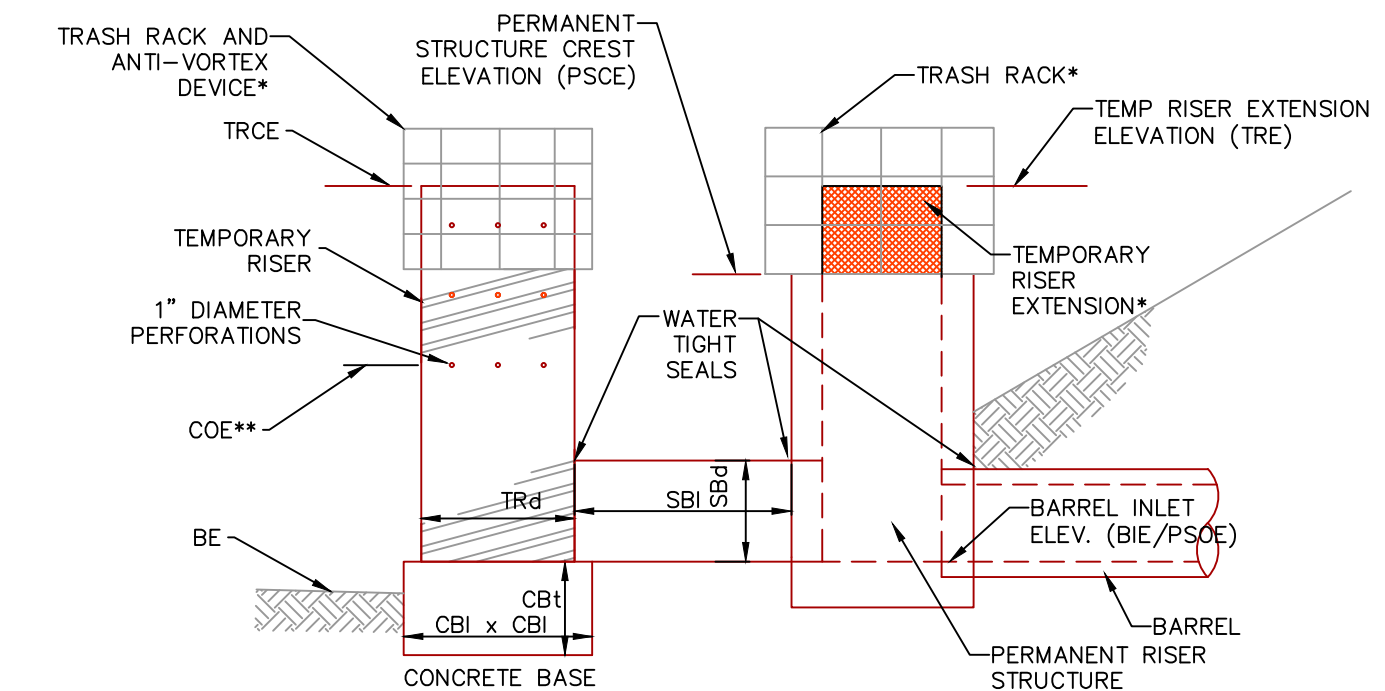
A CLEAN OUT STAKE SHALL BE PLACED NEAR THE CENTER OF EACH BASIN. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED THE CLEAN OUT ELEVATION ON THE STAKE AND THE BASIN RESTORED TO ITS ORIGINAL DIMENSIONS. DISPOSE OF MATERIALS REMOVED FROM THE BASIN IN THE MANNER DESCRIBED IN THE E&S PLAN.

BASIN EMBANKMENTS, SPILLWAYS, AND OUTLETS SHALL BE CHECKED FOR EROSION, PIPING AND SETTLEMENT. NECESSARY REPAIRS SHALL BE MADE IMMEDIATELY. DISPLACED RIPRAP WITHIN THE OUTLET ENERGY DISSIPATER SHALL BE REPLACED IMMEDIATELY. ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISTURBED AREAS INSIDE THE BASIN STABILIZED BEFORE CONVERSION TO A STORMWATER MANAGEMENT FACILITY. THE DEVICE SHOWN IN STANDARD CONSTRUCTION DETAIL #7-16 MAY BE USED TO DEWATER SATURATED SEDIMENT PRIOR TO ITS REMOVAL. ROCK FILTERS SHALL BE ADDED AS NECESSARY.

CONSTRUCTION DETAIL #7-8

SEDIMENT TRAP- DETENTION POND EMBANKMENT AND SPILLWAY DETAILS

NOT TO SCALE



** LOWEST ROW OF HOLES AT SEDIMENT CLEAN-OUT ELEVATION

TRAP NO.	DIA TRd (IN)	CREST ELEV TRCE (FT)	MAT'L	PERFORATIONS			CONCRETE BASE	
				NO. ROWS**	NO. HOLES PER ROW	VERT. SPACING OF ROWS (FT)	LENGTH AND WIDTH CBI (IN)	THICKNESS CBI (IN)
1	30	505.70	CMP	502.20	4	1	60	12

TRAP NO.	DIA SBD (IN)	INVERT ELEV SBE (FT)	MAT'L	LENGTH (FT)	PERMANENT STRUCTURE		BARREL INLET ELEV BIE (FT)
					CREST ELEV PSCE (FT)	CREST ELEV TRE (FT)	
1	18	501.50	CMP	6	505.70	506.20	501.50

NOTES:

A MINIMUM OF 2-#8 REBAR SHALL BE PLACED AT RIGHT ANGLES AND PROJECTING THROUGH SIDES OF RISER TO ANCHOR IT TO CONCRETE BASE. REBAR SHALL PROJECT A MINIMUM OF 1/4 RISER DIAMETER BEYOND OUTSIDE OF RISER.

CONCRETE BASE SHALL BE POURED IN SUCH A MANNER SO AS TO INSURE THAT CONCRETE FILLS BOTTOM OF RISER TO INVERT OF THE OUTLET PIPE TO PREVENT RISER FROM BREAKING AWAY FROM THE BASE. MINIMUM BASE WIDTH EQUALS 2 TIMES RISER DIAMETER.

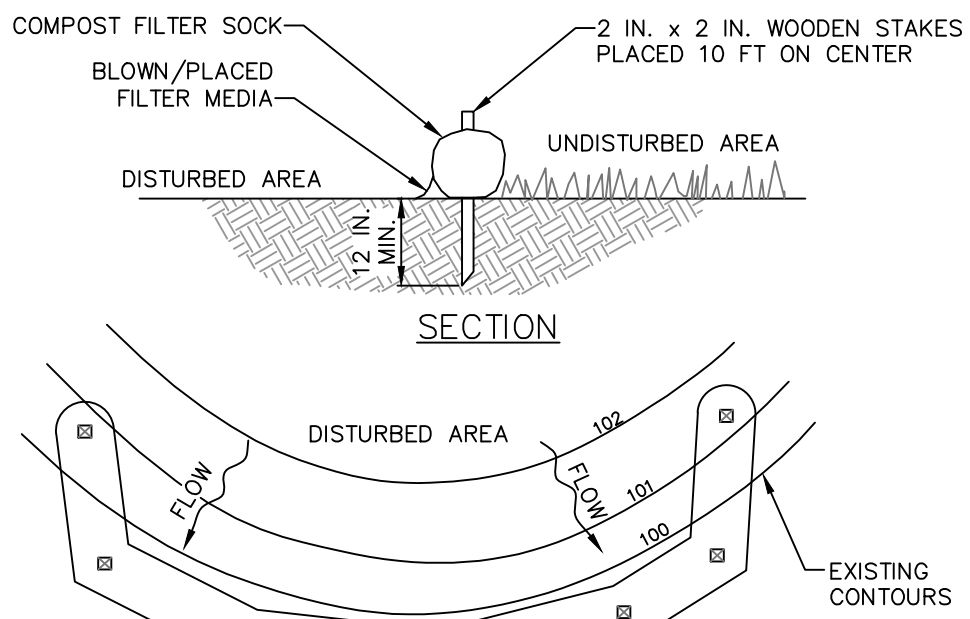
EMBEDDED SECTION OF ALUMINUM OR ALUMINIZED PIPE SHALL BE PAINTED WITH ZINC CHROMATE OR EQUIVALENT.

CLOGGED OR DAMAGED SPILLWAYS SHALL BE REPAIRED IMMEDIATELY. TRASH AND OTHER DEBRIS SHALL BE REMOVED FROM THE BASIN AND RISER.

CONSTRUCTION DETAIL #7-9

SEDIMENT TRAP - DETENTION POND RISER STRUCTURES

NOT TO SCALE



PLAN VIEW

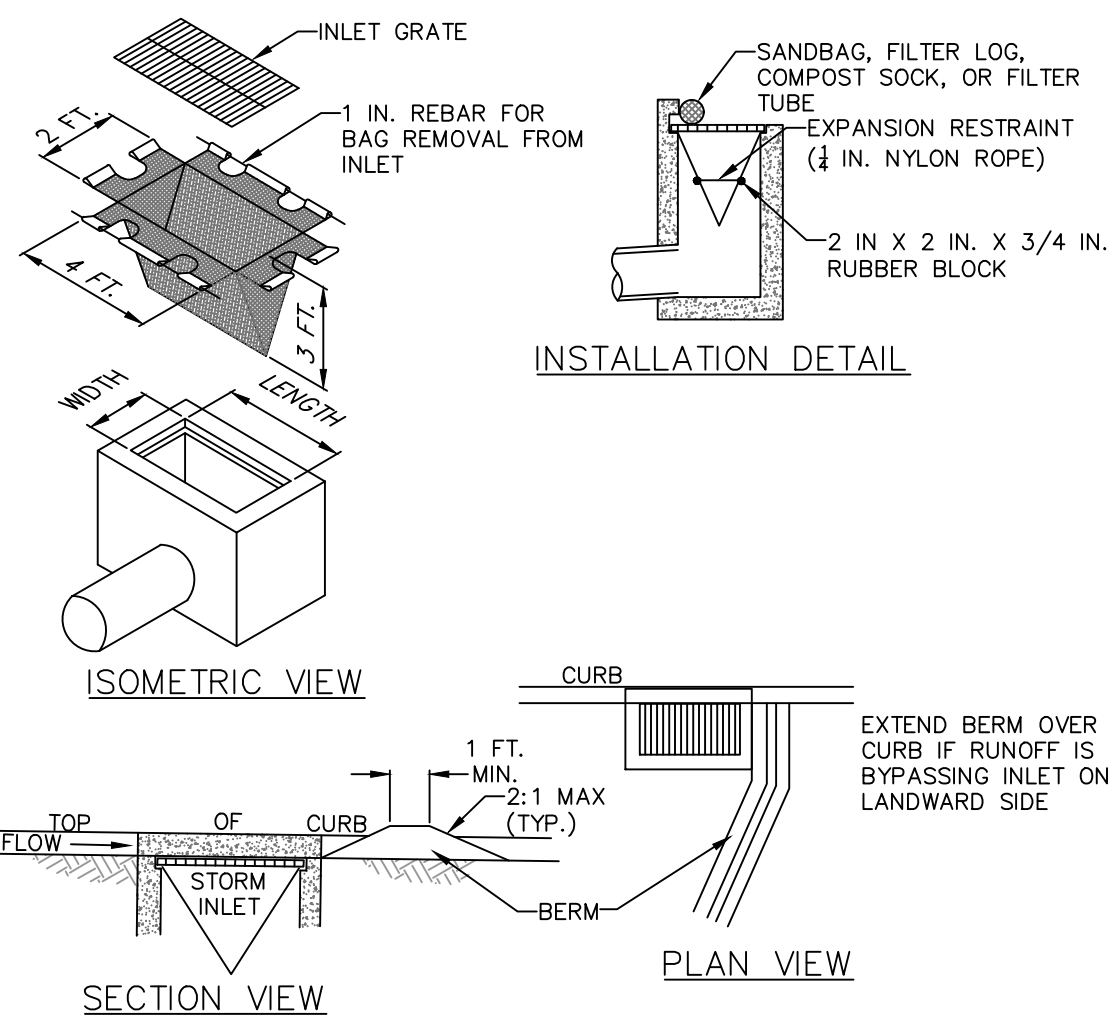
COMPOST FILTER SOCK

NOT TO SCALE

COMPOST SOCK FABRIC MINIMUM SPECIFICATIONS					
Material Type	3 mil HDPE	5 mil HDPE	5 mil HDPE	Multi-Filament Polypropylene (MFPP)	Heavy Duty Multi-Filament Polypropylene (HDMFPP)
Material Characteristics	Photo-degradable	Photo-degradable	Bio-degradable	Photo-degradable	Photo-degradable
Sock Diameters	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
Mesh Opening	3/8"	3/8"	3/8"	3/8"	1/8"
Tensile Strength		26 psi	26 psi	44 psi	202 psi
Ultraviolet Stability % Original Strength (ASTM G-155)	23% at 1000 hr.	23% at 1000 hr.		100% at 1000 hr.	100% at 1000 hr.
Minimum Functional Longevity	6 months	9 months	6 months	1 year	2 years

TWO-PLY SYSTEMS	
Inner Containment Netting	HDPE biaxial net
	Continuously wound
	Fusion-welded junctures
Outer Filtration Mesh	3/4" X 3/4" Max. aperture size
	Composite Polypropylene Fabric (Woven layer and non-woven fleece mechanically fused via needle punch)
	3/16" Max. aperture size

Filtertex & JMD



SECTION VIEW

NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT. AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

FILTER BAG INLET PROTECTION - TYPE C INLET

N.T.S.

NOTES:

SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.

COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.

TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.

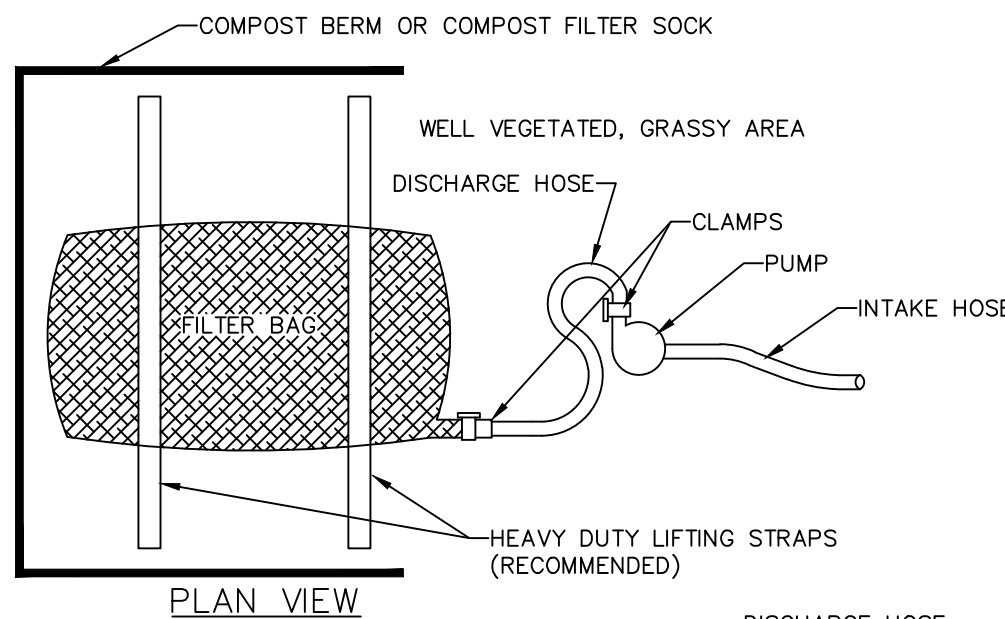
COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.

BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

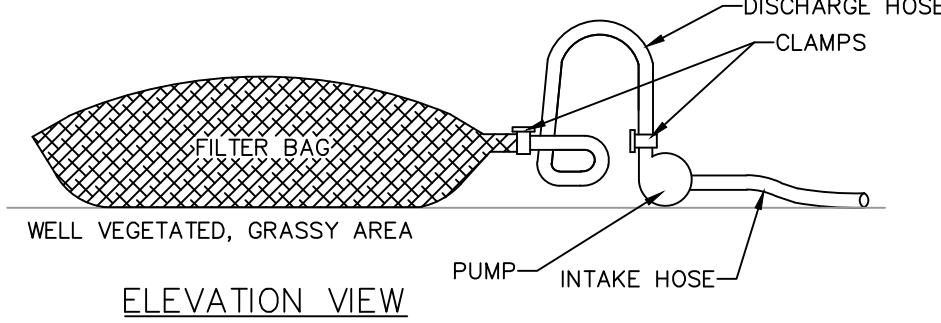
UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

COMPOST FILTER SOCK TABLE				
SOCK NO.	DIA. (IN)	LOCATION	SLOPE PERCENT	SLOPE LENGTH ABOVE BARRIER (FT)
1	32	SEE PLAN	7	593
2	32	SEE PLAN	7	593
3	12	SEE PLAN	N/A, diversion to I-B4	
4	12	SEE PLAN	N/A, surrounds Stockpile	

COMPOST STANDARDS	
Organic Matter Content	25%-100% (dry weight basis)
Organic Portion	Fibrous and elongated
pH	5.5-8.5
Moisture Content	30%-60%
Particle Size	30%-50% pass through 3/8" sieve
Soluble Salt Concentration	5.0 dS/m (mmhos/cm) Maximum



PLAN VIEW



ELEVATION VIEW

NOTES:

LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. WIDE WIDTH STRENGTH	ASTM D-4884	60 LB/IN
GRAB TENSILE	ASTM D-4632	205 LB
PUNCTURE	ASTM D-4833	110 LB
MULLEN BURST	ASTM D-3786	350 PSI
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	80 SIEVE

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.

BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5% FOR SLOPES EXCEEDING 5%. CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.

COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS DUE TO THE FACT THAT THIS BMP NEEDS TO BE ABANDONED DUE TO IMPAIRED WATER SOURCE.

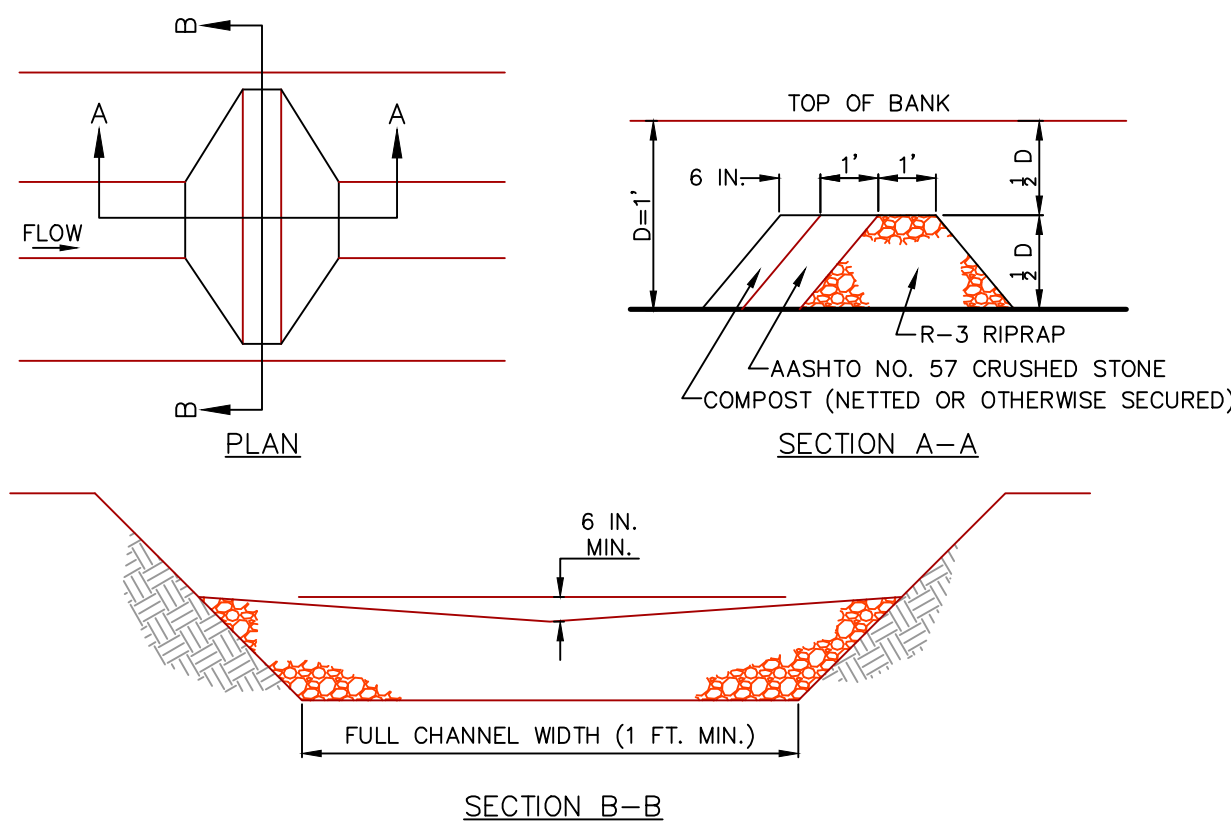
THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.

FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

PUMPED WATER FILTER BAG

N.T.S.



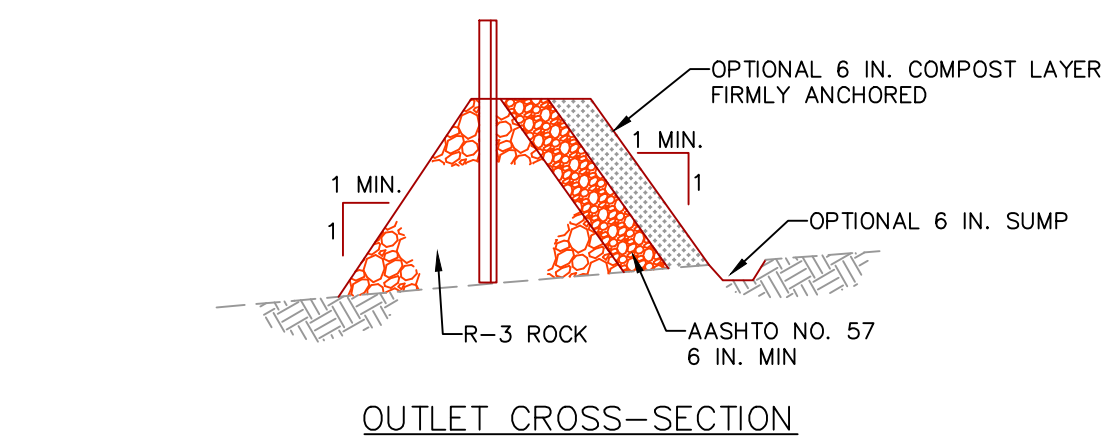
NOTES:

SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH 1/2 THE HEIGHT OF THE FILTERS.

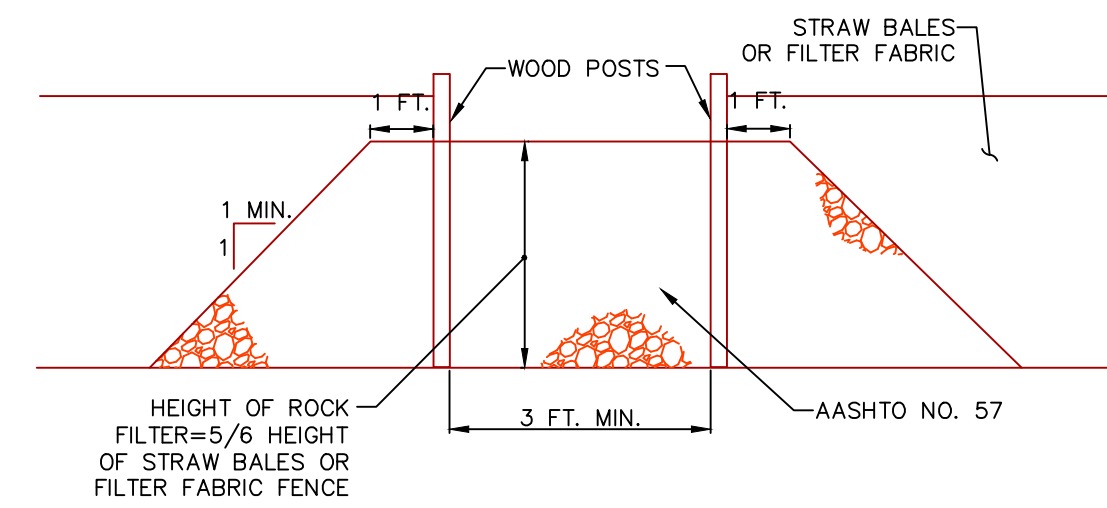
IMMEDIATELY UPON STABILIZATION OF EACH CHANNEL, REMOVE ACCUMULATED SEDIMENT, REMOVE ROCK FILTER, AND STABILIZE DISTURBED AREAS.

ROCK FILTER

NOT TO SCALE



OUTLET CROSS-SECTION



UP-SLOPE FACE

NOTES:

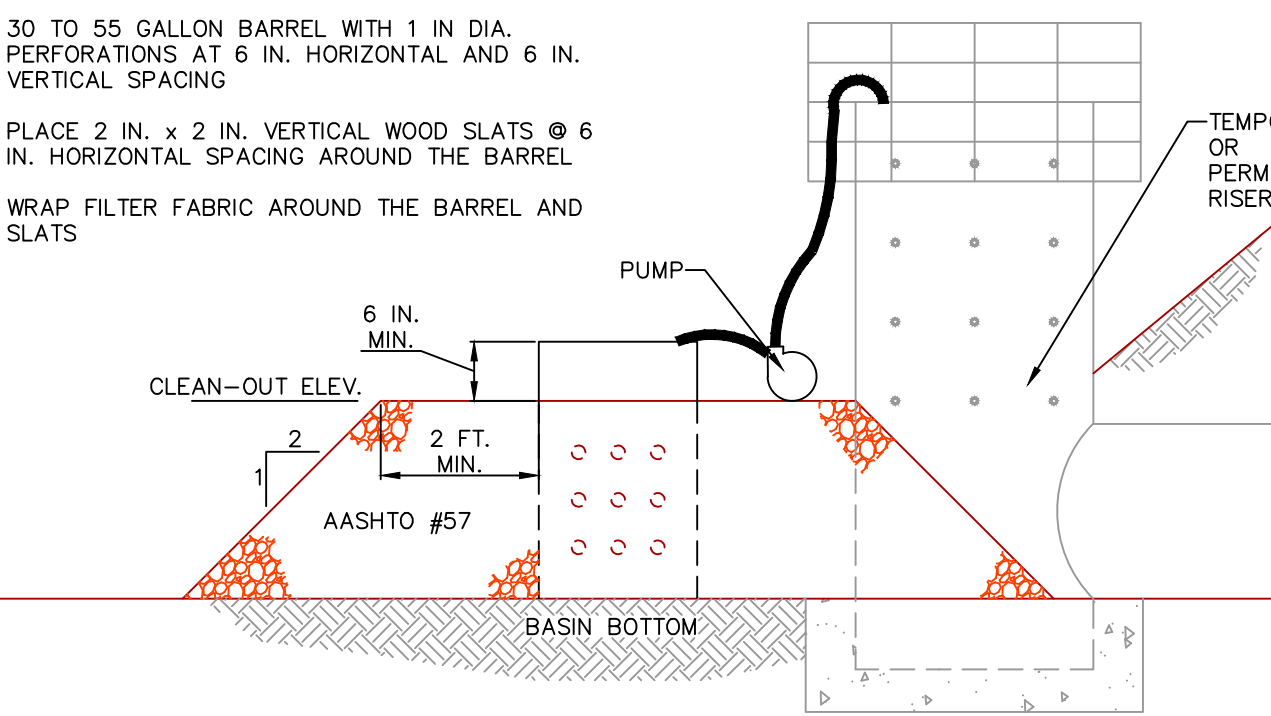
A ROCK FILTER OUTLET SHALL BE INSTALLED WHERE FAILURE OF A SILT FENCE OR STRAW BALE BARRIER HAS OCCURRED DUE TO CONCENTRATED FLOW. ANCHORED COMPOST LAYER SHALL BE USED ON UPSLOPE FACE IN HQ AND EV WATERSHEDS.

SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.

STANDARD CONSTRUCTION DETAIL #4-6

ROCK FILTER OUTLET

NOT TO SCALE



NOTES:

DEWATERING FACILITY SHALL BE INSTALLED IMMEDIATELY UPON COMPLETION OF BASIN/TRAP.

PRIOR TO INITIATING OPERATION OF DEWATERING FACILITY, ALL ACCUMULATED SEDIMENT SHALL BE CLEANED FROM THE INSIDE OF THE BARREL.

DEWATERING FACILITY SHALL BE CONTINUOUSLY MONITORED DURING OPERATION. IF FOR ANY REASON THE DEWATERING FACILITY CEASES TO FUNCTION PROPERLY, IT SHALL BE IMMEDIATELY SHUT DOWN AND NOT RESTARTED UNTIL THE PROBLEM HAS BEEN CORRECTED.

STANDARD CONSTRUCTION DETAIL #7-18

SEDIMENT BASIN OR SEDIMENT TRAP

SEDIMENT STORAGE DEWATERING FACILITY

NOT TO SCALE

R. J. FISHER & ASSOCIATES, INC.

SITE PLANNING & CIVIL ENGINEERING & LAND SURVEYS

1546 BRIDGE STREET, NEW CUMBERLAND, PA. 17070

PHONE: (717) 774-7534 & FAX: (717) 774-7190

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E&S CONTROL DETAILS

FOR

2509 MILL ROAD TOWNHOMES

LOCATED IN UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PA

DRAWING ID:

221013-3-LD

PROJECT:

221013

DATE:

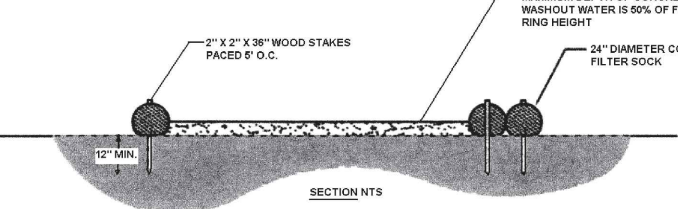
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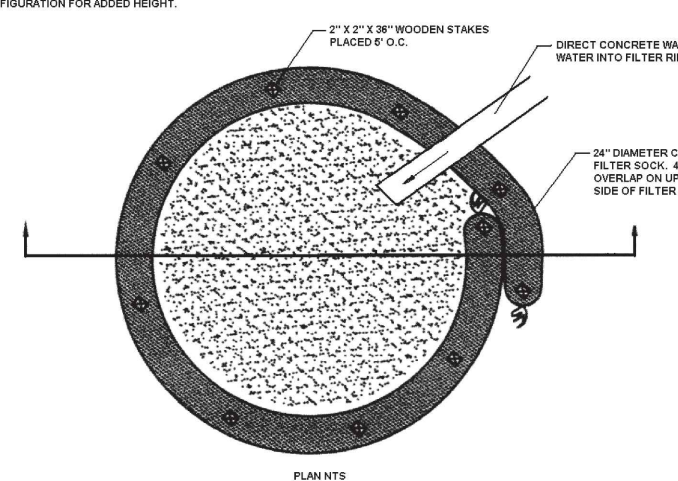
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FIGURE 3.18
Typical Compost Sock Washout Installation

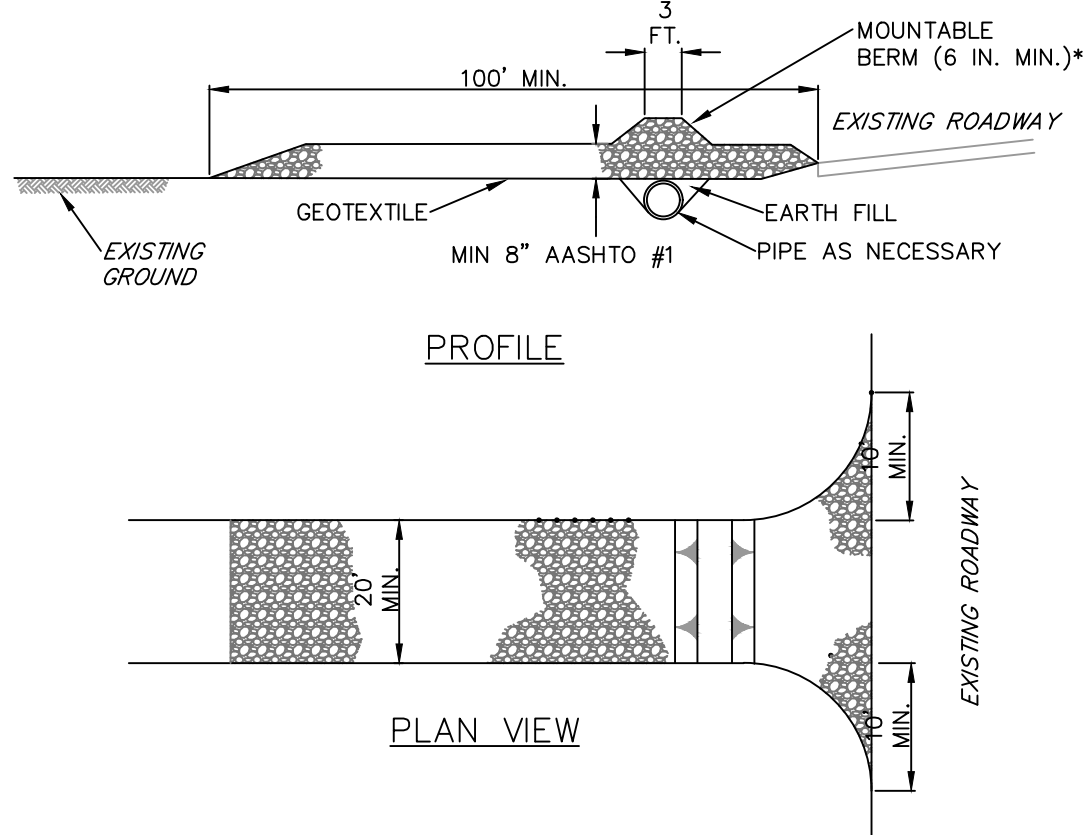


NOTES:
1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE.
2. 18" COMPOST FILTER SOCK MAY BE EXCHANGED WITH
DOUBLE 24" COMPOST SOCKS IN PARALLEL
CONFIGURATION FOR THE SAME HEIGHT.



A suitable impervious geomembrane shall be placed at the location of the washout prior to installing the socks.
Adapted from Filtrxxx

363-2134-008 / March 31, 2012 / Page 58



* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

NOTES:

REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

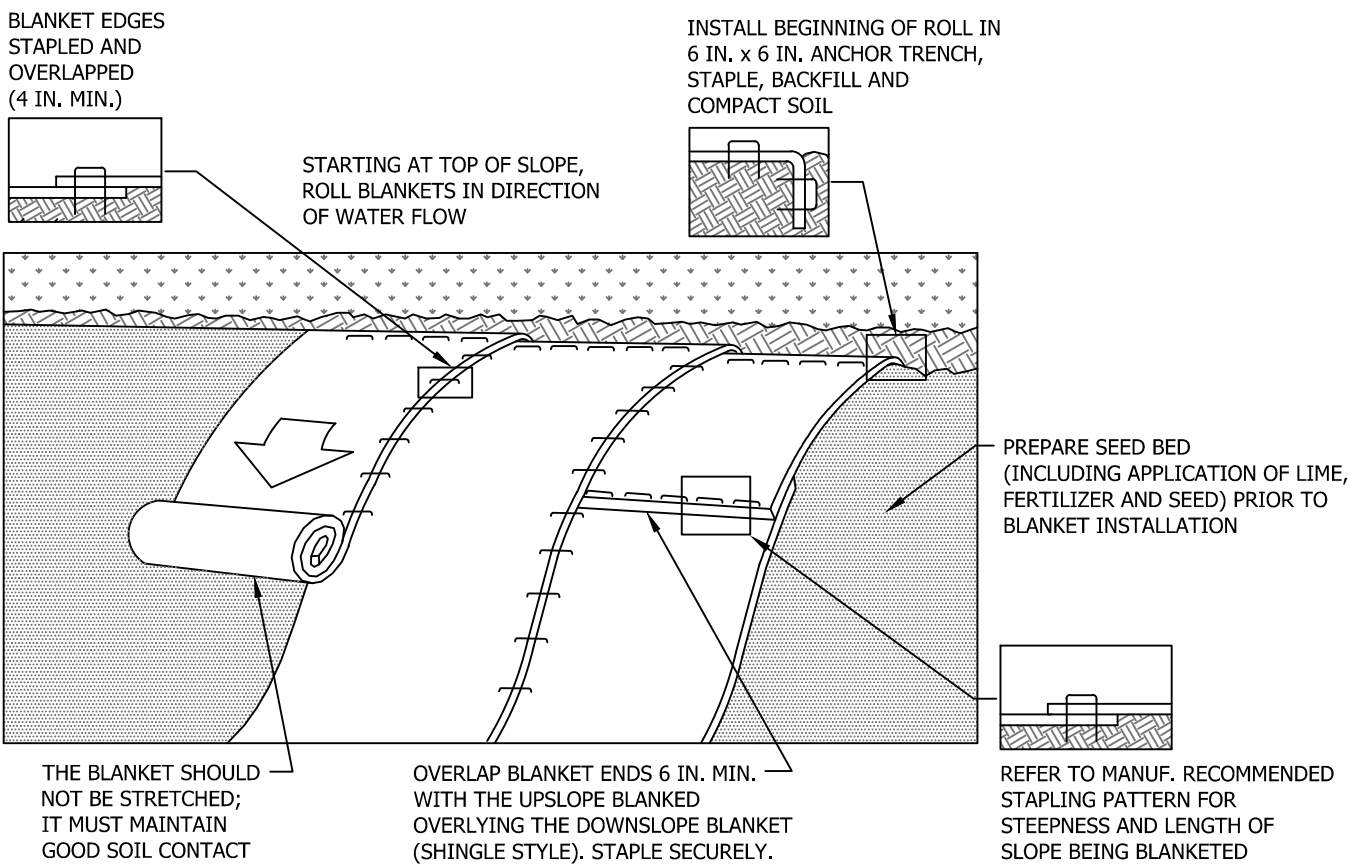
RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK, WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

ROCK CONSTRUCTION ENTRANCE

NOT TO SCALE



NOTES:

SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.

PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.

SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.

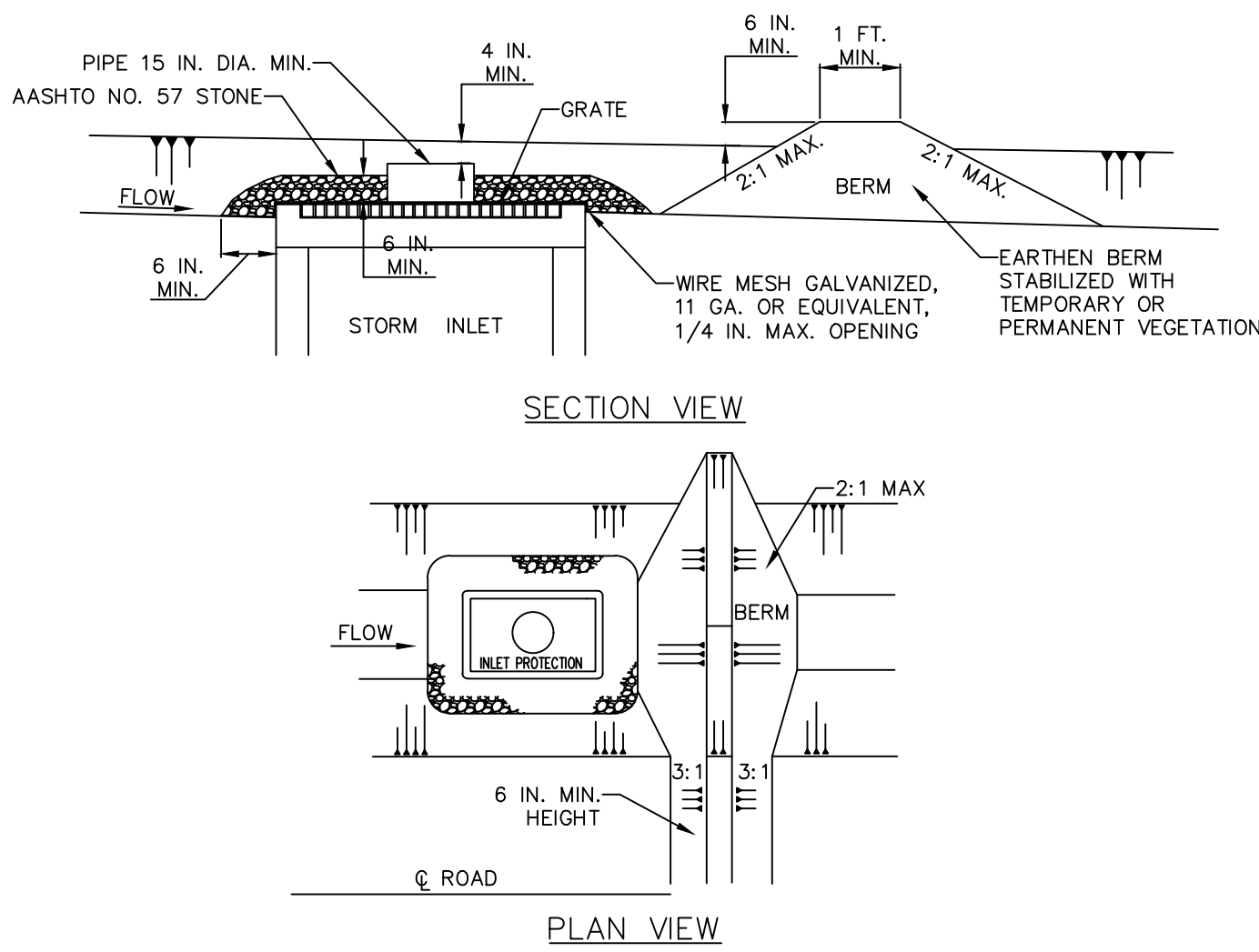
BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.

THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.

STANDARD CONSTRUCTION DETAIL #11-1
EROSION CONTROL BLANKET INSTALLATION

NOT TO SCALE



NOTES:

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS NOT LOCATED AT A LOW POINT.

ROLLED EARTHEN BERM IN ROADWAY SHALL BE PROVIDED AND MAINTAINED IMMEDIATELY DOWN GRADIENT OF THE PROTECTED INLET UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR TO REMAIN PERMANENTLY.

STONE INLET PROTECTION AND BERM FOR A TYPE M INLET CAN BE USED IN ONE ACRE MAXIMUM DRAINAGE AREA WITH 15 IN. OVERFLOW PIPE AND 4 IN. HEAD. A PERFORATED PLATE WELDED TO A METAL RISER MAY NOT BE SUBSTITUTED FOR THE WIRE MESH. A SLOTTED PLATE WELDED TO THE RISER MAY BE USED IN CONJUNCTION WITH THE WIRE MESH IF CALCULATIONS ARE PROVIDED TO SHOW SUFFICIENT CAPACITY OF THE INLET TO ACCEPT THE PEAK RUNOFF FOR A 2-YEAR STORM EVENT FROM THE TRIBUTARY DRAINAGE AREA. TOP OF PIPE SHALL BE AT LEAST 6 INCHES BELOW ADJACENT ROADWAY IF PONDED WATER WOULD POSE A SAFETY HAZARD TO TRAFFIC. EARTHEN BERM SHALL BE ROLLED.

SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE HEIGHT OF THE STONE. DAMAGED OR CLOGGED INSTALLATIONS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

FOR SYSTEMS DISCHARGING TO HQ OR EV SURFACE WATER, A 6 IN. THICK COMPOST LAYER SHALL BE SECURELY ANCHORED ON OUTSIDE AND OVER TOP OF STONE. COMPOST SHALL MEET THE STANDARDS IN TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

STANDARD CONSTRUCTION DETAIL #4-20
STONE INLET PROTECTION AND BERM - TYPE M INLET

NOT TO SCALE

E&S CONTROL DETAILS
FOR
2509 MILL ROAD TOWNHOMES
LOCATED IN
UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PA

DRAWING ID:
221013-3-LD
PROJECT: 221013
DATE: 04/25/2022
SHEET:
20 OF 21

R. J. FISHER & ASSOCIATES, INC.
SITE PLANNING & CIVIL ENGINEERING & LAND SURVEYS
1546 BRIDGE STREET, NEW CUMBERLAND, PA. 17070
PHONE: (717) 774-7534 & FAX: (717) 774-7190
RJFISHERENGINEERING.COM



NO.	REVISION	DATE
1	PER TWP PC REPORT #1/17/22	6/21/22
2	PER CCOD COMMENTS	7/22/2022
3	TWP PC REPORT #2/8/24/22	10/24/22
4	—	—
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