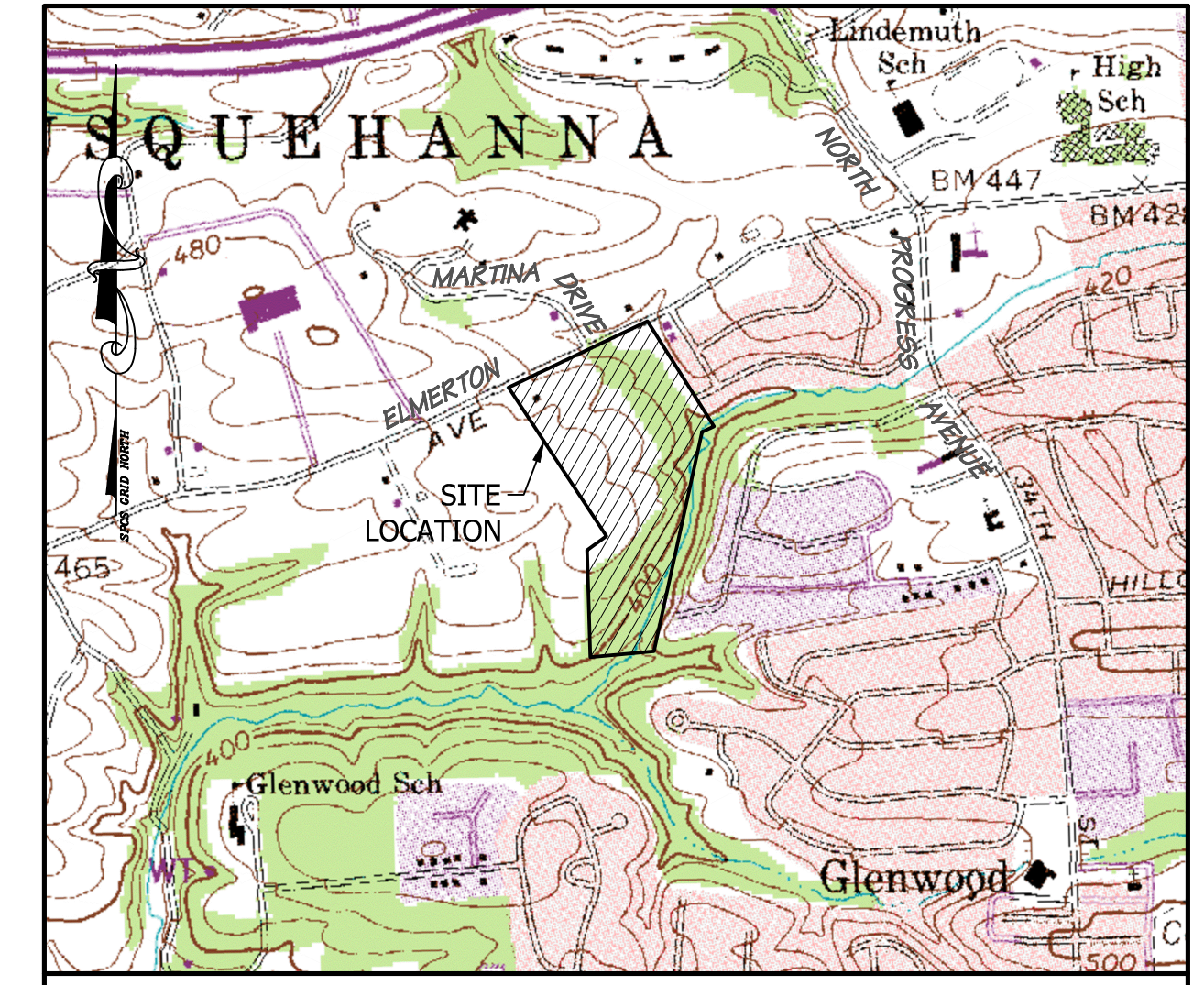


VICINITY MAP: 1" = 600'

PRELIMINARY / FINAL SUBDIVISION & LAND DEVELOPMENT PLAN FOR ENCLAVE AT ELMERTON LOCATED IN SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA



LOCATION MAP: 1" = 1000'

PLAN PURPOSE STATEMENT:

THE PURPOSE OF THIS PLAN IS TO DEVELOP AN EXISTING 25.524 ACRE VACANT TRACT WITH 20 TOWNHOMES (156 UNITS) AND ASSOCIATED INFRASTRUCTURES.

GENERAL NOTES:

- 1. A WETLAND DELINEATION WAS PERFORMED BY VORTEX ENVIRONMENTAL, INC. ON MARCH 20, 2020.
2. NO FEMA MAPPED FLOODPLAIN EXISTS ON THIS SITE, AS SHOWN BY FEMA'S NATIONAL FLOOD HAZARD LAYER FIRMETTE, AREA 42043C0340D, EFFECTIVE 8/2/2012.
3. SANITARY SEWER MAINS ARE PROPOSED TO BE DEDICATED TO SUSQUEHANNA TOWNSHIP AUTHORITY.
... 26. ANY AMENITIES SHOW WITHIN THE POCKET PARKS IS CONCEPTUAL AND THE DEVELOPER HAS THE RIGHT TO MODIFY THE AMENITIES TO MEET THE NEED/DESIRE OF THE RESIDENTS.

WETLAND CERTIFICATION

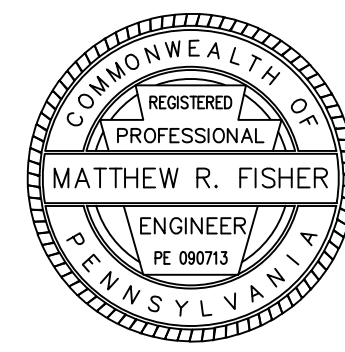
I HEREBY CERTIFY THAT I HAVE CONDUCTED A WETLANDS DELINEATION STUDY IN ACCORDANCE WITH THE REQUIREMENTS OF THIS ORDINANCE AND HAVE DETERMINED THAT REGULATORY WETLANDS EXIST ON THE SUBJECT SITE AND THIS PLAN ACCURATELY DEPICTS THE EXTENT OF ALL WETLANDS.

BRADLY J. GOCHNAUER, VORTEX DATE

SURVEYOR / ENGINEER CERTIFICATIONS:

I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THE SURVEY AND PLAN SHOWN AND DESCRIBED HEREON IS TRUE AND CORRECT TO THE ACCURACY REQUIRED BY THE SUSQUEHANNA TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.

I HEREBY CERTIFY THIS PLAN TO BE CORRECT AS SHOWN.



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

SITE DATA:

RECORD OWNER: GAIL W. RAYMOND 9292 VENERO PLACE NAPLES, FL 34113 PHONE: 410-666-7207
SITE IS TAX PARCEL NUMBERS: 62-023-096 & 62-023-023
TOTAL TRACT AREA: 25.684 ACRES
EXISTING USE: AGRICULTURAL
PROPOSED USE: SINGLE FAMILY ATTACHED DWELLINGS
EXISTING NUMBER OF LOTS: 2
PROPOSED NUMBER OF LOTS: 1
EXISTING NUMBER OF DWELLING UNITS: 0
PROPOSED NUMBER OF DWELLING UNITS: 156
EXISTING IMPERVIOUS AREA: 0.0 ACRES
PROPOSED IMPERVIOUS AREA: 7.0 ACRES
PROPOSED OPEN SPACE: 36.2% (9.162 ACRES)
EXISTING WATER SUPPLY: NONE
EXISTING SEWAGE DISPOSAL: NONE
PROPOSED WATER SUPPLY: PUBLIC
PROPOSED SEWAGE DISPOSAL: PUBLIC

PARKING DATA:

REQUIRED PARKING, DWELLINGS: 312 SPACES (2 SPACES PER DWELLING UNIT X 156 UNITS)
PROPOSED PARKING, DWELLINGS: 334 SPACES (2.1 SPACES PER UNIT)
(1 SPACE COUNTED FOR EACH GARAGE)
(1 SPACE COUNTED FOR EACH DRIVEWAY)
REQUIRED PARKING, LEASING OFFICE: 22 SPACES (1 SPACE FOR EACH 100 SQ. FT. OF GROSS FLOOR AREA) (G.F.A. = 2,156 S.F.)
PROPOSED PARKING, LEASING OFFICE: 22 SPACES
PROPOSED "MAILBOX" PARKING: 4 SPACES
TOTAL PARKING REQUIRED: 334 SPACES
TOTAL PARKING PROPOSED: 360 SPACES

PA UTILITY ONE - CALL:

Diagram showing utility lines and call boxes. Includes text: PENNSYLVANIA ACT 287 OF 1974, AS AMENDED BY ACT 50 OF 2017, REQUIRES NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE COMMONWEALTH. SERIAL NO. 20201050556 COMPLETED ON APRIL 14, 2020

WAIVERS:

THE FOLLOWING WAIVERS ARE REQUESTED OR WERE APPROVED FROM THE SUSQUEHANNA TOWNSHIP SALDO

Table with 4 columns: WAIVER SECTION, REQUIREMENT, DATE OF WAIVER REQUEST, DATE OF WAIVER APPROVAL. Rows include: 22-1107 SIDEWALK REQUIRED ALONG ELMERTON AVENUE, 22-1106.F CURBING REQUIRED, 22-501.7 PROVIDE TWO SEPARATE POINTS OF INGRESS AND EGRESS, 22-1004.D GRADING ON SLOPING LANDS 15% OR GREATER WITH FILLS GREATER THAN 12 FEET

FORMAL WAIVER REQUEST DOCUMENTATION AND JUSTIFICATION HAS BEEN SUBMITTED TO THE TOWNSHIP FOR REVIEW AND APPROVAL

DESIGN ENGINEER:

R.J. FISHER & ASSOCIATES, INC. 1546 BRIDGE STREET NEW CUMBERLAND, PA 17070 PHONE: (717) 774-7534 MRF@RJFISHERENGINEERING.COM

EQUITABLE OWNER / APPLICANT:

ELMERTON ENCLAVE, LP 5351 JAYCEE AVENUE HARRISBURG, PA 17112 PHONE: 717-657-5729 WWW.TRIPLECROWNCORP.COM

ZONING DATA:

Table with 3 columns: MINIMUM TRACT AREA, MAXIMUM DWELLING UNITS / ACRE, MAXIMUM HEIGHT, MAXIMUM BUILDING COVERAGE, MAXIMUM IMPERVIOUS COVERAGE, MINIMUM VEGETATIVE COVERAGE, MINIMUM BUILDING SEPARATION, REAR TO REAR, MINIMUM BUILDING SEPARATION, SIDE TO SIDE, MINIMUM YARD SETBACK, FRONT, MINIMUM YARD SETBACK, SIDE, MINIMUM YARD SETBACK, REAR. Includes existing and proposed values.

PER SUSQUEHANNA TOWNSHIP ZONING ORDINANCE, AS ADOPTED BY THE BOARD OF COMMISSIONERS OF THE TOWNSHIP OF SUSQUEHANNA 9/24/2003 BY ORD. 03-12 SINGLE FAMILY ATTACHED LIMITED TO A MAXIMUM OF EIGHT DWELLING UNITS PER BUILDING OR ROW OF ATTACHED SINGLE FAMILY UNITS.

DRAWING INDEX:

Table with 2 columns: SHEET NO., TITLE. Lists sheets 1 through 29 including COVER SHEET, EXISTING RESOURCES, SITE ANALYSIS & RESOURCE IMPACT PLAN, EXISTING CONDITIONS PLAN, LAND DEVELOPMENT PLAN, GRADING & PCSM PLAN, etc.

ACKNOWLEDGMENT OF PLAN, STATEMENT OF OWNERSHIP AND OFFER OF DEDICATION:

COMMONWEALTH OF PENNSYLVANIA COUNTY OF ... ON THIS THE ... DAY OF ... 20 ... BEFORE ME THE UNDERSIGNED PERSONALLY APPEARED.

OWNER MARK X. DISANTO

WHO BEING DULY SWORN ACCORDING TO LAW, DEPOSE AND SAY THAT THEY ARE THE OWNERS OF THE PROPERTY SHOWN ON THIS PLAN AND THAT THEY ACKNOWLEDGE THE SAME TO BE THEIR ACT AND DEED AND DESIRE THE SAME TO BE RECORDED AS SUCH ACCORDING TO LAW.

WITNESS MY HAND AND NOTORIAL SEAL THE DAY AND THE DATE ABOVE WRITTEN

NOTARY PUBLIC

MY COMMISSION EXPIRES

IT IS HEREBY CERTIFIED THAT THE UNDERSIGNED ARE THE OWNERS OF THE PROPERTY SHOWN ON THIS PLAT AND THAT ALL STREETS OR PARTS THEREOF, IF NOT PREVIOUSLY DEDICATED, ARE HEREBY TENDERED FOR DEDICATION TO PUBLIC USE.

ALL STORMWATER BMPs ARE FIXTURES THAT CANNOT BE ALTERED OR REMOVED WITHOUT PRIOR APPROVAL BY SUSQUEHANNA TOWNSHIP.

OWNER MARK X. DISANTO

PLAN APPROVAL BLOCKS:

DAUPHIN COUNTY PLANNING COMMISSION REVIEW

THIS PLAN REVIEWED BY THE DAUPHIN COUNTY PLANNING COMMISSION THIS ... DAY OF ... 20 ... CHAIRMAN SECRETARY

TOWNSHIP ENGINEER REVIEW

THIS PLAN REVIEWED BY THE SUSQUEHANNA TOWNSHIP ENGINEER THIS ... DAY OF ... 20 ... TOWNSHIP ENGINEER

SUSQUEHANNA TOWNSHIP PLANNING COMMISSION REVIEW

THIS PLAN RECOMMENDED FOR APPROVAL BY THE SUSQUEHANNA TOWNSHIP PLANNING COMMISSION THIS ... DAY OF ... 20 ... CHAIRMAN SECRETARY

FINAL PLAN APPROVAL

THIS PLAN APPROVED BY THE SUSQUEHANNA TOWNSHIP BOARD OF COMMISSIONERS, AND ALL CONDITIONS IMPOSED WITH RESPECT TO SUCH APPROVAL WERE COMPLETED ON THIS ... DAY OF ... 20 ... CHAIRMAN SECRETARY

RECORDING:

THIS PLAN RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS IN AND FOR DAUPHIN COUNTY THIS ... DAY OF ... 20 ...

PLAN BOOK ... PAGE ...

INSTRUMENT NUMBER

TAX PARCEL NUMBERS:

62-023-096 & 62-023-023

Table with 3 columns: NO., REVISION, DATE. Shows revision 1 on 07/16/21.

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



COVER SHEET FOR ENCLAVE AT ELMERTON LOCATED IN SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

Table with 2 columns: DRAWING ID: 220021-COV, PROJECT: 220108, DATE: 06/11/21, SHEET: 1 OF 29



RESOURCE IMPACT AND CONSERVATION REPORT

DESCRIPTION OF EXISTING RESOURCES:

THE PROJECT SITE CONTAINS NUMEROUS EXISTING RESOURCES, INCLUDING STREAM CHANNELS, WOODLANDS, WETLANDS, STEEP SLOPES, FLOODWAY AREAS AND A GREEN BELT PATH. THE MAIN STREAM CHANNEL OF ASYLUM RUN FOLLOWS ALONG THE EASTERN SIDE OF THE PROJECT SITE. THERE ARE TWO ADDITIONAL STREAM CHANNELS THAT FLOW THROUGH THE NORTH EASTERN PORTION OF THE SITE BEFORE THEY ENTER THE MAIN STREAM CHANNEL. THE MAJORITY OF THE WETLAND AREAS ARE LOCATED IN THE SPACE BETWEEN THE UNWAKED TRIBUTARIES AND THE BOUNDARY LINE AT THE NORTH EASTERN END OF THE SITE, WITH A SMALLER POCKET OF WETLANDS AT THE SOUTHERN END OF THE SITE. THE WOODED AREAS ARE LOCATED PREDOMINANTLY ALONG THE STREAM CHANNELS AND WITHIN THE WETLAND AREAS ALONG THE EASTERN AND SOUTHERN BOUNDARIES. THE 15% TO 25% AND 25%+ STEEP SLOPE AREAS ARE ALSO FOCUSED AROUND THE STREAM CHANNELS AND THE WOODLAND PATCHES, OCCURRING MOSTLY ON THE WESTERN SIDE OF THE STREAM. THERE IS NO FEMA DEFINED FLOODPLAIN ON THE SITE, BUT AN ASSUMED 50 FOOT FLOODWAY IS PROVIDED. THE EXISTING GREEN BELT PATH ENTERS THE PROPERTY OFF THE END OF ANDREA DRIVE, CROSSES THE UNWAKED TRIBUTARY AND FOLLOWS THE WESTERN SIDE OF THE STREAM UNTIL IT REACHES THE SOUTHERN END OF THE SITE.

IMPACT OF THE PROPOSED IMPROVEMENTS ON EXISTING RESOURCES:

AS LABELED ON THE PLAN BELOW, THERE ARE A NUMBER OF IMPACTS ON THE EXISTING RESOURCES. THE CONNECTION TO THE EXISTING SANITARY SEWER LINE WILL DISTURB THE WOODLAND AND STEEP SLOPE AREAS IT PASSES THROUGH AND ENROACHES WITHIN THE ASSUMED FLOODWAY LINE. THE PROPOSED TRAIL CONNECTION TO THE EXISTING GREEN BELT PATH TRAVERSSES THE STEEP SLOPES AND WOODED AREAS. IN ORDER TO MAKE THE CONNECTION, OTHER PORTIONS OF THE STEEP SLOPES AND WOODED AREAS ARE IMPACTED BY THE EARTHWORK THAT IS NECESSARY FOR THE CONSTRUCTION OF THE APARTMENT BUILDINGS AND STORMWATER FACILITIES. THERE ARE NO PROPOSED IMPACTS TO THE WETLAND AREAS AND STREAM CHANNELS.

MEASURES TAKEN TO AVOID IMPACTS TO EXISTING RESOURCES:

THERE WERE A NUMBER OF MEASURES TAKEN TO AVOID IMPACTS TO THE EXISTING RESOURCES, BOTH DURING AND AFTER CONSTRUCTION. THE PROPOSED IMPROVEMENTS SHOW IMPACTS TO THE EDGES OF THE WOODED AREAS, BUT AVOID MAJOR CLEARING OF THE MATURE VEGETATION. ADDITIONALLY, STEEP SLOPES WERE IMPACTED IN A NUMBER OF PLACES, BUT THE MAJORITY OF THE STEEP SLOPES WILL REMAIN UNTOUCHED. THE SANITARY SEWER AND TRAIL CONNECTIONS WILL ONLY DISTURB WHAT IS NECESSARY TO CONSTRUCT THE RESPECTIVE IMPROVEMENTS AS THEY GO DOWN THE HILL TOWARD THE STREAM CHANNEL. THE ENROACHMENT INTO THE FLOODWAY WILL HAVE LITTLE TO NO IMPACT, AS THERE IS NO FILL PROPOSED IN THAT AREA. A GENERAL PERMIT WILL BE OBTAINED FROM DEP IN ORDER TO CONSTRUCT THE SANITARY SEWER CONNECTION WITHIN THE FLOODWAY. THERE ARE NO PROPOSED IMPACTS TO THE WETLAND AREAS AND STREAM CHANNELS. DURING CONSTRUCTION, SEDIMENT BARRIERS AND SEDIMENT TRAPS ARE PROPOSED TO CAPTURE AND FILTER SEDIMENT LADEN RUNOFF TO PREVENT POLLUTION OF THE STREAMS AND WETLANDS. RIPRAP APRONS ARE ALSO PROPOSED TO LIMIT THE POTENTIAL FOR EROSION AT THE PIPE OUTFALLS. AFTER CONSTRUCTION, THE OPEN SPACE AREAS AND STORMWATER BMPs SHALL BE STABILIZED AND SEEDED AS SOON AS POSSIBLE TO ENCOURAGE INFILTRATION OF STORMWATER, MINIMIZE EROSION AND TO LIMIT THERMAL IMPACTS ON THE RUNOFF BEFORE IT ENTERS THE EXISTING STREAM CHANNELS.

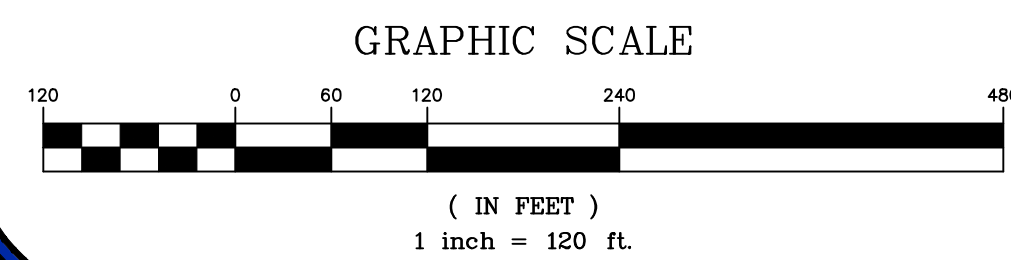
SOILS TABLE

SOIL SYMBOL	SOIL DISCRPTION	SLOPE (%)	HYDROLOGIC SOIL GROUP	DEPTH TO BEDROCK PER SOIL SURVEY	DEPTH TO SEASONAL HIGH WATER TABLE PER SOIL SURVEY
BH2	Berks Channery Silt Loam	8 to 15	B	36"	> 79"
BK2	Berks Shaly Silt Loam	3 to 8	B	34"	> 79"
Ph	Philo Silt Loam	N/A	B/D	> 79"	21"
We2	Weikert Shaly Silt Loam	25 to 40	D	17"	> 79"

GEOLOGIC INFORMATION:
THE ENTIRE SITE IS UNDERLAIN BY THE HAMBURG SEQUENCE ROCKS FORMATION. THIS FORMATION CONSISTS MAINLY OF SHALE, SILTSTONE AND GRAYWACKE.

Existing Conditions Legend

	Existing 100 Year Floodplain
	Existing Adjacent Property Line
	Existing Benchmark
	Existing Boundary Line
	Existing Right-Of-Way Line
	Existing Building Setback Line
	Existing Street Centerline
	Existing Edge Of Pavement
	Existing Curb
	Existing Paint Line
	Existing Drainage Area
	Existing Minor Contour
	Existing Major Contour
	Existing Fence
	Existing Guideline
	Existing Mailbox
	Existing Property Line Marker
	Existing Concrete Monument
	Existing Sign
	Existing Light
	Existing Soils Boundary
	Existing Stream
	Existing Sidewalk
	Existing Tree Line
	Existing Deciduous Tree
	Existing Coniferous Tree
	Existing Overhead Utility Wire, Utility Pole, Guy Pole, Guy Wire
	Existing Underground Utilities
	Existing Utility Easement
	Existing Communications Box
	Existing Underground Electric Transformer
	Existing Gas Main, Valve
	Existing Gas Easement
	Existing Gas Lateral, Service Shut-Off
	Existing Water Main, MH, Hydrant, Valve
	Existing Water Lateral, Meter, Service Shut-Off
	Existing Water Easement
	Existing Sanitary Sewer Line, MH
	Existing Sanitary Lateral
	Existing Storm Sewer Line, Inlet, MH
	Existing Storm Sewer Easement
	Existing Wetlands



PRECAUTIONARY SLOPES
(15% - 25%):
215,699 S.F., 4.952 ACRES

PROHIBITIVE SLOPES
(25% OR MORE):
208,074 S.F., 4.777 ACRES

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**EXISTING RESOURCES, SITE ANALYSIS
& RESOURCE IMPACT PLAN**
FOR
ENCLAVE AT ELMERTON
LOCATED IN
SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID:
220021-RES IMP

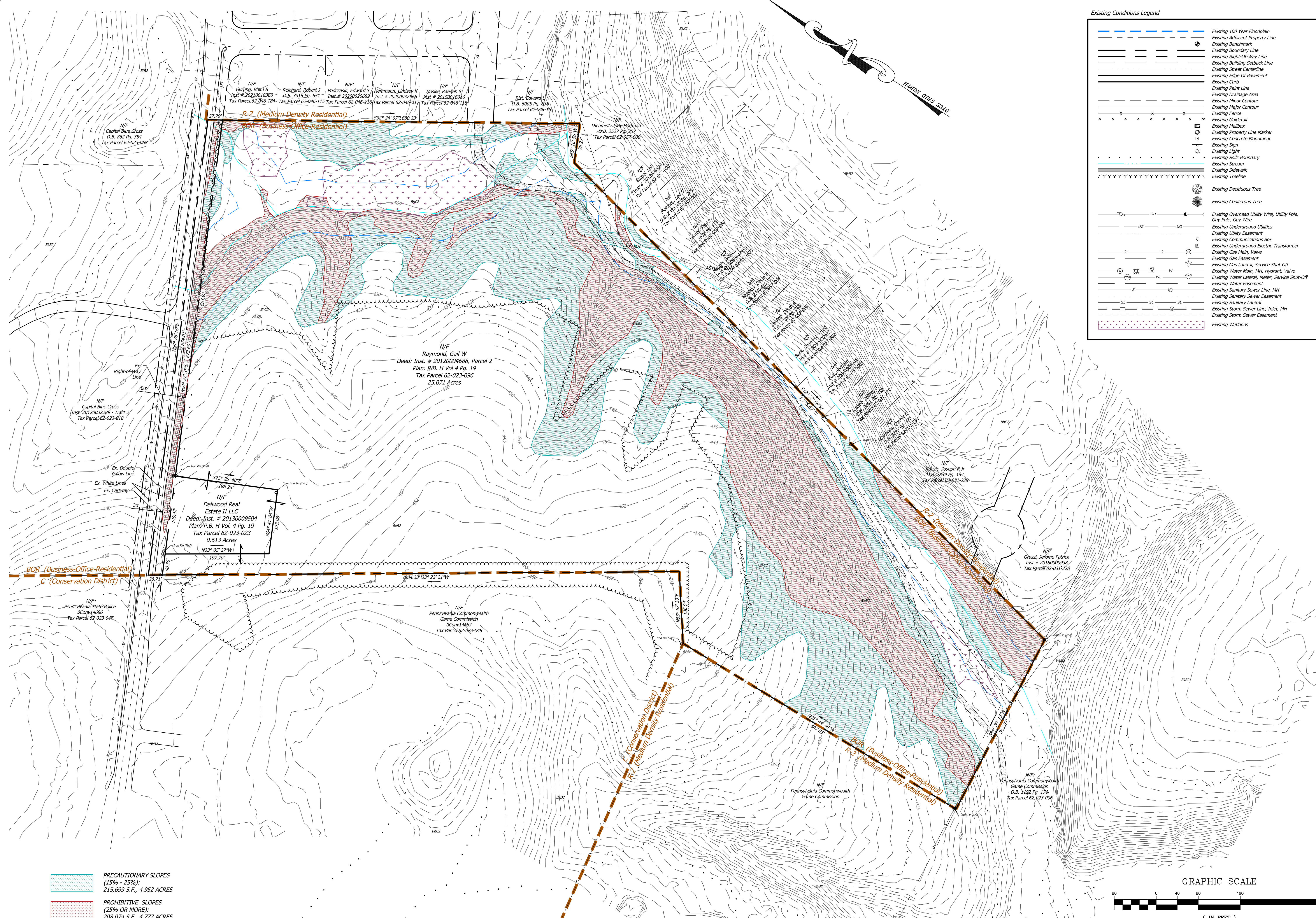
PROJECT: 220021

DATE: 06/11/21

SHEET:
2 OF 29

NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	07/16/21
2		
3		
4		
5		

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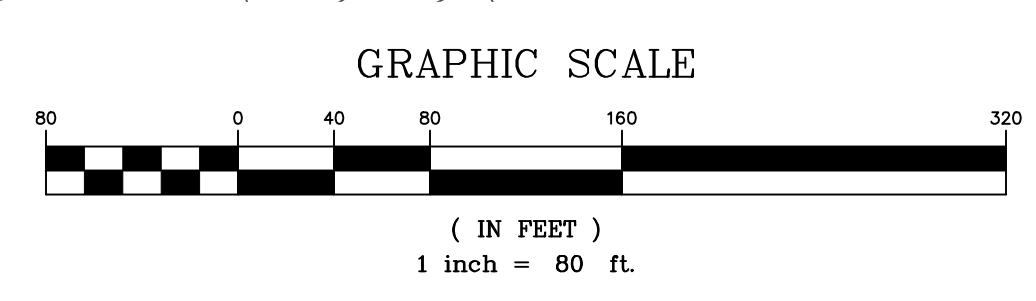


Existing Conditions Legend

	Existing 100 Year Floodplain
	Existing Adjacent Property Line
	Existing Benchmark
	Existing Boundary Line
	Existing Right-Of-Way Line
	Existing Building Setback Line
	Existing Street Centerline
	Existing Edge Of Pavement
	Existing Curb
	Existing Paint Line
	Existing Drainage Area
	Existing Minor Contour
	Existing Major Contour
	Existing Fence
	Existing Gutter/ail
	Existing Mailbox
	Existing Property Line Marker
	Existing Concrete Monument
	Existing Sign
	Existing Light
	Existing Soil Boundary
	Existing Stream
	Existing Sidewalk
	Existing Treeline
	Existing Deciduous Tree
	Existing Coniferous Tree
	Existing Overhead Utility Wire, Utility Pole, Guy Pole, Guy Wire
	Existing Underground Utilities
	Existing Utility Easement
	Existing Communications Box
	Existing Underground Electric Transformer
	Existing Gas Main, Valve
	Existing Gas Easement
	Existing Gas Lateral, Service Shut-Off
	Existing Water Main, MH, Hydrant, Valve
	Existing Water Lateral, Meter, Service Shut-Off
	Existing Water Easement
	Existing Sanitary Sewer Line, MH
	Existing Sanitary Sewer Easement
	Existing Storm Sewer Line, Inlet, MH
	Existing Storm Sewer Easement
	Existing Wetlands

PRECAUTIONARY SLOPES
(15% - 25%)
215,699 S.F., 4.952 ACRES

PROHIBITIVE SLOPES
(25% OR MORE)
208,074 S.F., 4.777 ACRES



NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	07/16/21
2		
3		
4		
5		

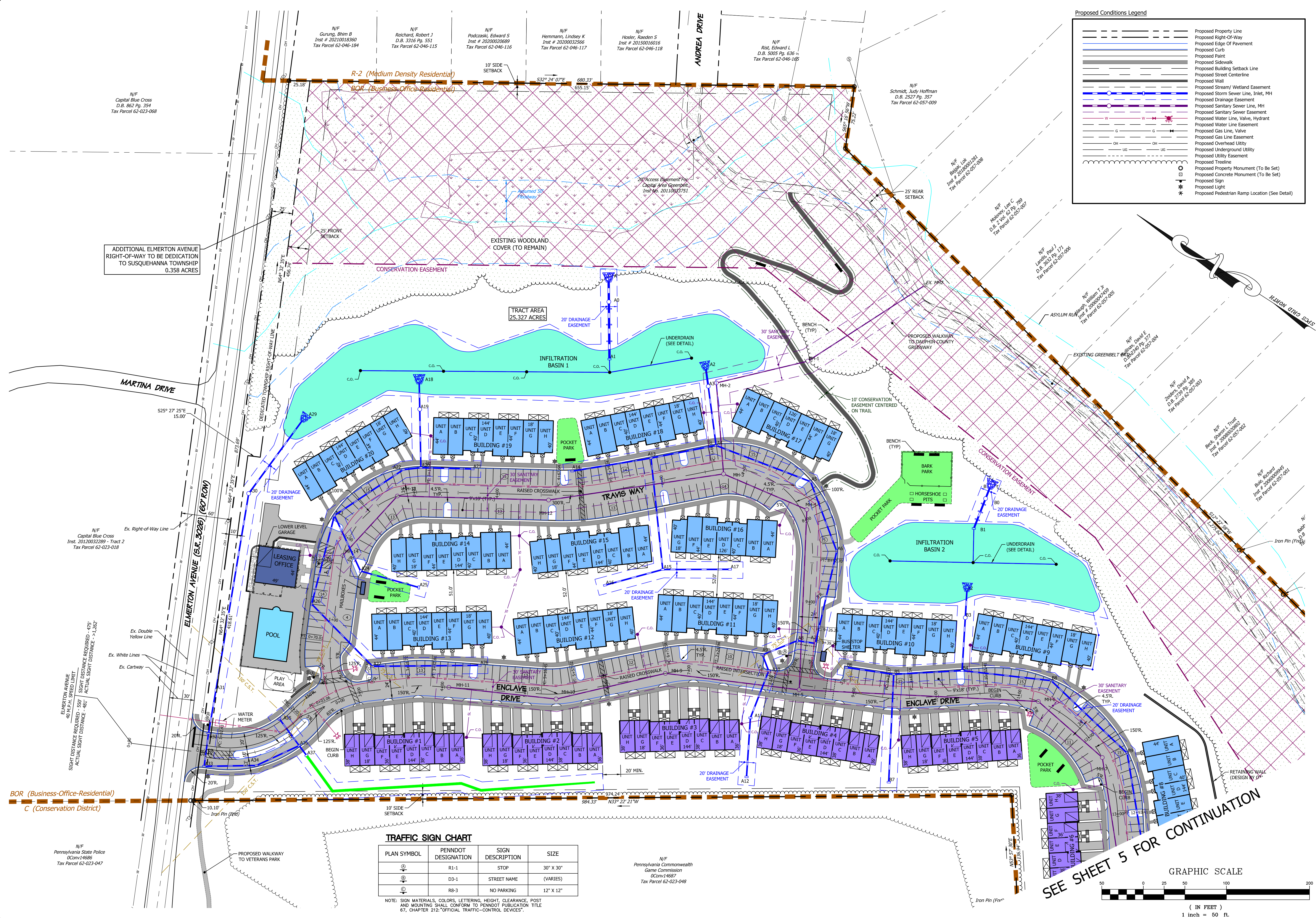
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EXISTING CONDITIONS PLAN
FOR
ENCLAVE AT ELMERTON
LOCATED IN
SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID:	220021-EXC
PROJECT:	220021
DATE:	06/11/21
SHEET:	3 OF 29

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Proposed Conditions Legend

[Symbol]	Proposed Property Line
[Symbol]	Proposed Right-Of-Way
[Symbol]	Proposed Edge of Pavement
[Symbol]	Proposed Curb
[Symbol]	Proposed Pavement
[Symbol]	Proposed Sidewalk
[Symbol]	Proposed Building Setback Line
[Symbol]	Proposed Street Centerline
[Symbol]	Proposed Wall
[Symbol]	Proposed Stream/ Wetland Easement
[Symbol]	Proposed Storm Sewer Line, Inlet, MH
[Symbol]	Proposed Drainage Easement
[Symbol]	Proposed Sanitary Sewer Line, MH
[Symbol]	Proposed Sanitary Sewer Easement
[Symbol]	Proposed Water Line, Valve, Hydrant
[Symbol]	Proposed Water Line Easement
[Symbol]	Proposed Gas Line, Valve
[Symbol]	Proposed Gas Line Easement
[Symbol]	Proposed Overhead Utility
[Symbol]	Proposed Underground Utility
[Symbol]	Proposed Utility Easement
[Symbol]	Proposed Trestle
[Symbol]	Proposed Property Monument (To Be Set)
[Symbol]	Proposed Concrete Monument (To Be Set)
[Symbol]	Proposed Sign
[Symbol]	Proposed Light
[Symbol]	Proposed Pedestrian Ramp Location (See Detail)

ADDITIONAL ELMERTON AVENUE RIGHT-OF-WAY TO BE DEDICATED TO SUSQUEHANNA TOWNSHIP 0.358 ACRES

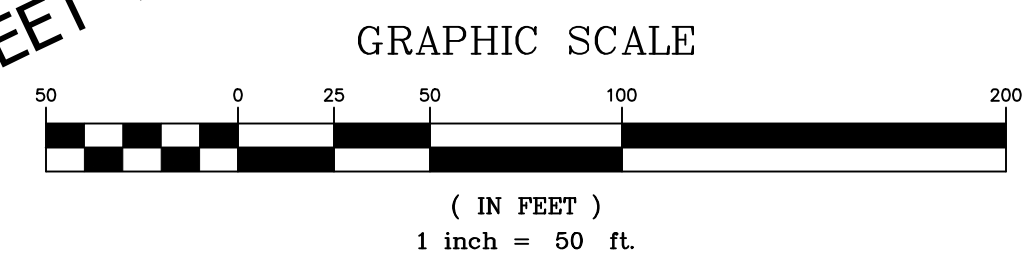
TRACT AREA 25.327 ACRES

SEE SHEET 5 FOR CONTINUATION

TRAFFIC SIGN CHART

PLAN SYMBOL	PENNDOT DESIGNATION	SIGN DESCRIPTION	SIZE
[Symbol]	R1-1	STOP	30" X 30"
[Symbol]	D3-1	STREET NAME (VARIES)	(VARIES)
[Symbol]	RB-3	NO PARKING	12" X 12"

NOTE: SIGN MATERIALS, COLORS, LETTERING, HEIGHT, CLEARANCE, POST AND MOUNTING SHALL CONFORM TO PENNDOT PUBLICATION TITLE 67, CHAPTER 212, "OFFICIAL TRAFFIC-CONTROL DEVICES".



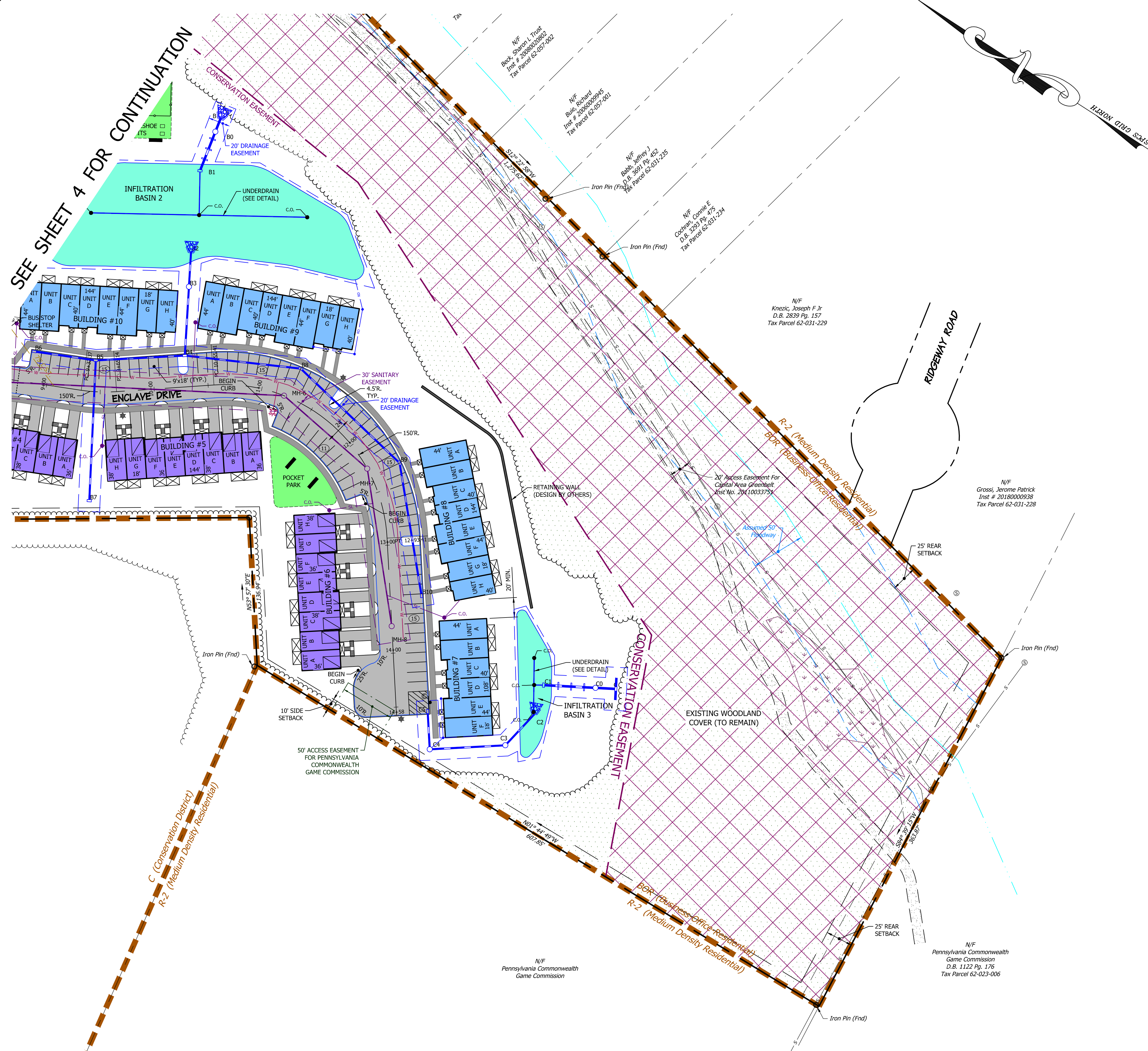
NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	07/16/21
2		
3		
4		
5		

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LAND DEVELOPMENT PLAN
 FOR
ENCLAVE AT ELMERTON
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID:	220021-LDP
PROJECT:	220021
DATE:	06/11/21
SHEET:	4 OF 29



Proposed Conditions Legend

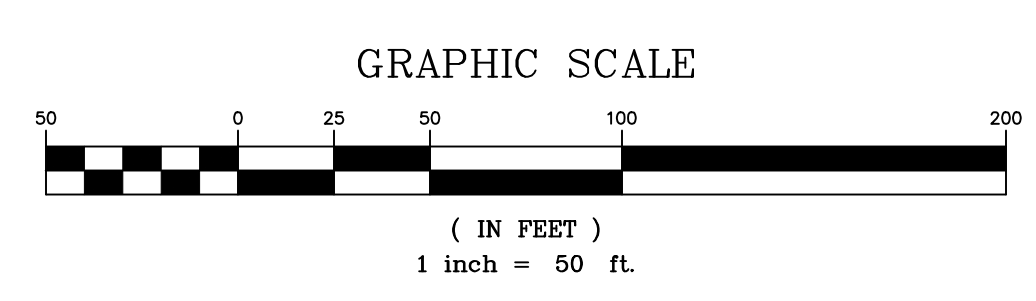
	Proposed Property Line
	Proposed Right-Of-Way
	Proposed Edge of Pavement
	Proposed Curb
	Proposed Pavement
	Proposed Sidewalk
	Proposed Building Setback Line
	Proposed Street Centerline
	Proposed Wall
	Proposed Stream/Wetland Easement
	Proposed Storm Sewer Line, Inlet, MH
	Proposed Drainage Easement
	Proposed Sanitary Sewer Line, MH
	Proposed Sanitary Sewer Easement
	Proposed Water Line, Valve, Hydrant
	Proposed Water Line Easement
	Proposed Gas Line, Valve
	Proposed Gas Line Easement
	Proposed Overhead Utility
	Proposed Underground Utility
	Proposed Utility Easement
	Proposed Trestle
	Proposed Property Monument (To Be Set)
	Proposed Concrete Monument (To Be Set)
	Proposed Sign
	Proposed Light
	Proposed Pedestrian Ramp Location (See Detail)

INTERSECTION & DRIVEWAY SIGHT DISTANCE TABLE

BUILDING NO.	UNIT	SIGHT DISTANCE (FT)	
		LEFT	RIGHT
NORTHERN INTERSECTION BETWEEN ENCLAVE DRIVE & TRAVIS WAY			
		449	196
SOUTHERN INTERSECTION BETWEEN ENCLAVE DRIVE & TRAVIS WAY			
1	A	180	349
	B	161	363
	C	153	371
	D	141	389
	E	142	397
	F	238	413
	G	224	422
	H	195	442
2	A	340	340
	B	315	315
	C	303	303
	D	279	279
	E	267	267
	F	245	245
	G	233	233
	H	211	211
3	A	367	367
	B	408	408
	C	433	433
	D	449	449
	E	436	436
	F	412	412
	G	399	399
	H	375	375
4	A	341	223
	B	330	248
	C	328	261
	D	385	285
	E	379	298
	F	362	323
	G	357	336
	H	350	359
5	A	699	184
	B	658	138
	C	637	124
	D	603	129
	E	472	138
	F	433	157
	G	413	168
	H	375	189
6	A	194	66
	B	187	80
	C	176	92
	D	158	115
	E	151	127
	F	149	150
	G	169	163
	H	177	186

TRAFFIC SIGN CHART

PLAN SYMBOL	PENNDOT DESIGNATION	SIGN DESCRIPTION	SIZE
	R1-1	STOP	30" X 30"
	D3-1	STREET NAME (VARIES)	(VARIES)
	RB-3	NO PARKING	12" X 12"



NOTE: SIGN MATERIALS, COLORS, LETTERING, HEIGHT, CLEARANCE, POST AND MOUNTING SHALL CONFORM TO PENNDOT PUBLICATION TITLE 67, CHAPTER 212: "OFFICIAL TRAFFIC-CONTROL DEVICES".

NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	07/16/21
2		
3		
4		
5		

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LAND DEVELOPMENT PLAN
 FOR
ENCLAVE AT ELMERTON
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220021-LDP
 PROJECT: 220021
 DATE: 06/11/21
 SHEET: 5 OF 29

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 DATE: 06/11/21 10:43 AM
 USER: JFISHER

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Proposed Conditions Legend

- Proposed Property Line
- Proposed Right-Of-Way
- Proposed Edge Of Pavement
- Proposed Curb
- Proposed Sidewalk
- Proposed Retaining Wall
- Proposed Sanitary Sewer Line, MH
- Proposed Storm Sewer Line, Inlet, MH
- Proposed Roof Drain
- Proposed Water Line, Hydrant
- Proposed Gas Line
- Proposed Overhead Utility
- Proposed Underground Utility
- Proposed Minor Contour
- Proposed Major Contour
- Limit of Disturbance/NPDES Boundary
- NPDES Boundary
- Proposed Sign
- Proposed Light
- Proposed Pedestrian Ramp Location (See Detail)
- Proposed Rip-Rap Apron (See Detail)
- Proposed Spot Elevation

NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	07/16/21
2		
3		
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5		

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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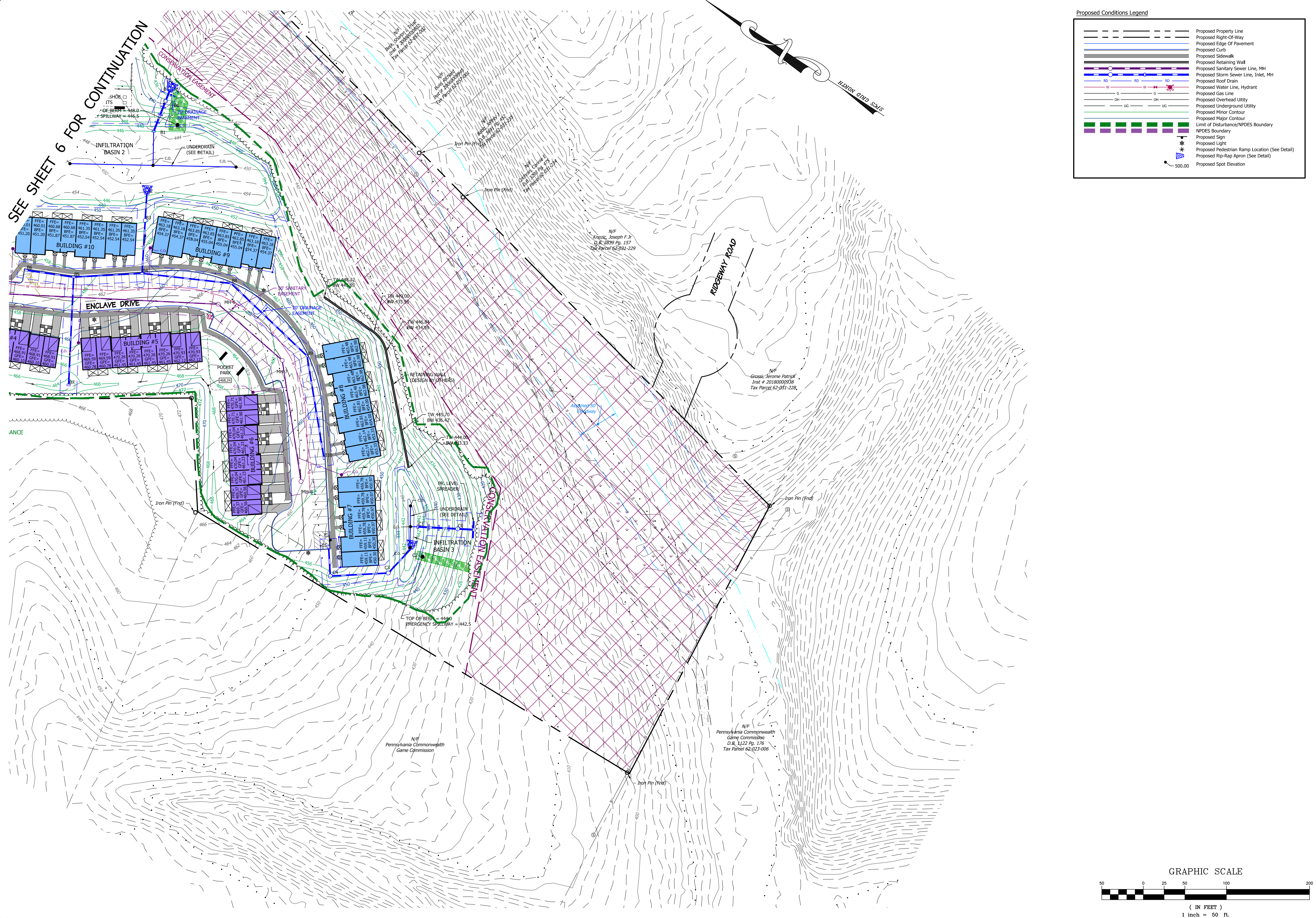
GRADING & PCSM PLAN
 FOR
ENCLAVE AT ELMERTON
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

SEE SHEET 7 FOR CONTINUATION

GRAPHIC SCALE
 (IN FEET)
 1 inch = 50 ft.

DRAWING ID:	220021-GRD
PROJECT:	220021
DATE:	06/11/21
SHEET:	6 OF 29

DATE PLOTTED: 06/11/21 10:45:00 AM
 USER: JFISHER
 6-GRD



Proposed Conditions Legend

	Proposed Property Line
	Proposed Right-Of-Way
	Proposed Edge of Pavement
	Proposed Retaining Wall
	Proposed Sanitary Sewer Line, MH
	Proposed Storm Sewer Line, Inlet, MH
	Proposed Roof Drain
	Proposed Water Line, Hydrant
	Proposed Gas Line
	Proposed Overhead Utility
	Proposed Underground Utility
	Proposed Minor Contour
	Proposed Major Contour
	Limit of Disturbance/NPDES Boundary
	NPDES Boundary
	Proposed Sign
	Proposed Light
	Proposed Pedestrian Ramp Location (See Detail)
	Proposed Rip-Rap Apron (See Detail)
	Proposed Spot Elevation

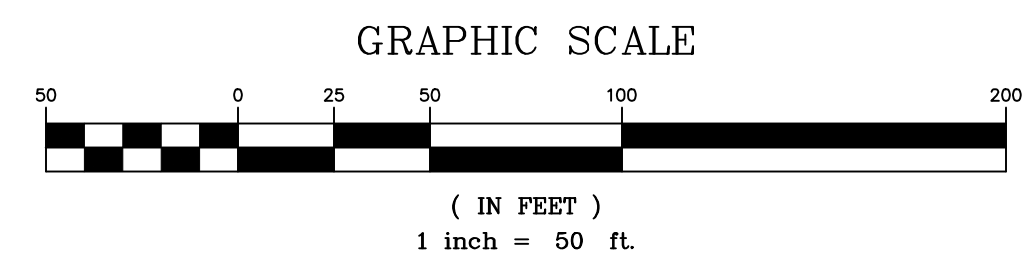
NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	07/16/21
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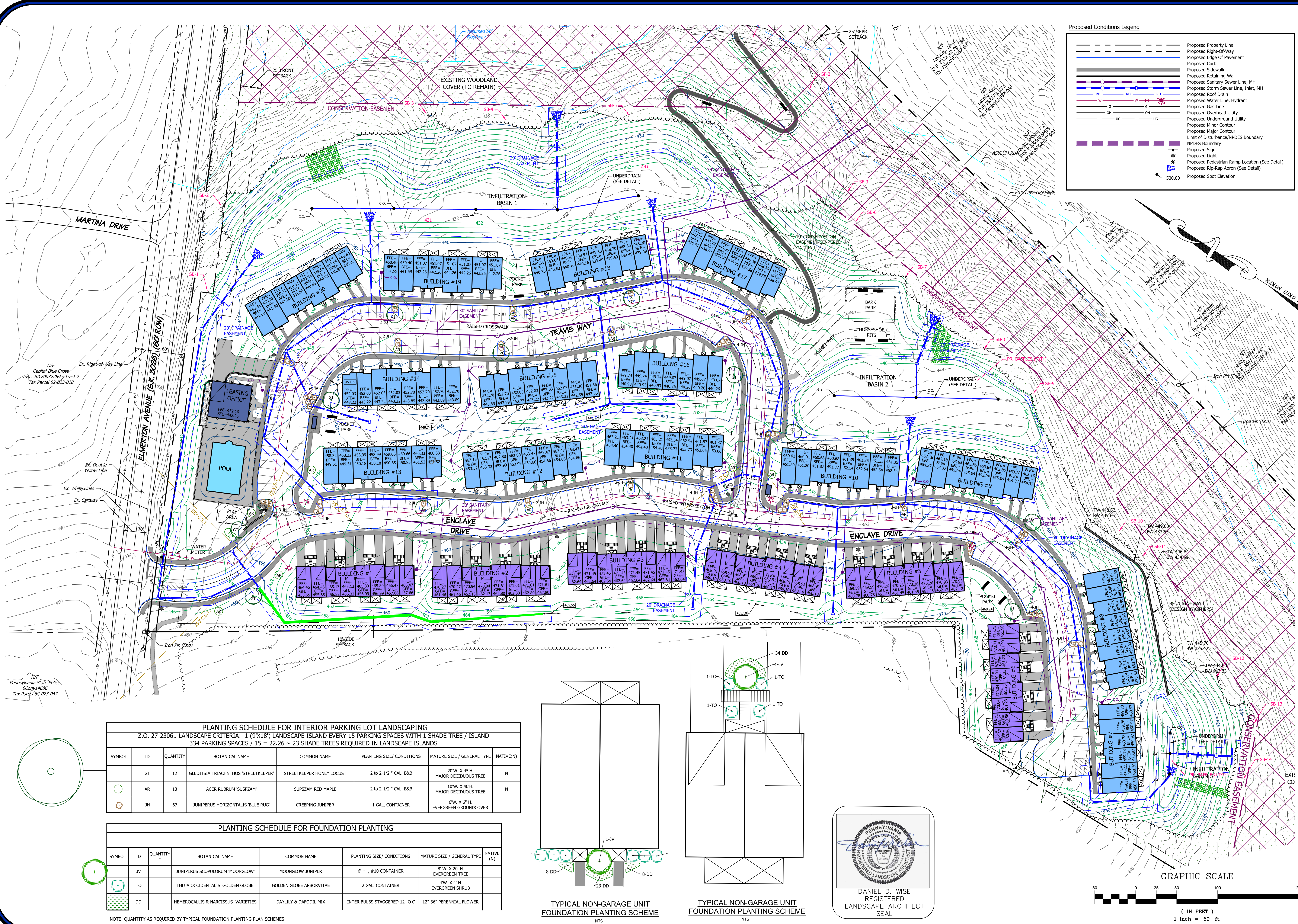


GRADING & PCSM PLAN
 FOR
ENCLAVE AT ELMERTON
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID:	220021-GRD
PROJECT:	220021
DATE:	06/11/21
SHEET:	7 OF 29



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 DATE: 06/11/21 10:43 AM
 USER: rjfisher



Proposed Conditions Legend

- Proposed Property Line
- Proposed Right-Of-Way
- Proposed Edge Of Pavement
- Proposed Curb
- Proposed Sidewalk
- Proposed Retaining Wall
- Proposed Sanitary Sewer Line, MH
- Proposed Storm Sewer Line, Inlet, MH
- Proposed Roof Drain
- Proposed Water Line, Hydrant
- Proposed Gas Line
- Proposed Overhead Utility
- Proposed Underground Utility
- Proposed Minor Contour
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- Limit of Disturbance/NPDES Boundary
- NPDES Boundary
- Proposed Sign
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- Proposed Pedestrian Ramp Location (See Detail)
- Proposed Rip-Rap Apron (See Detail)
- Proposed Spot Elevation

NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	07/16/21
2		
3		
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LANDSCAPE PLAN
 FOR
ENCLAVE AT ELMERTON
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID:	220021-LSCP
PROJECT:	220021
DATE:	06/11/21
SHEET:	8 OF 29

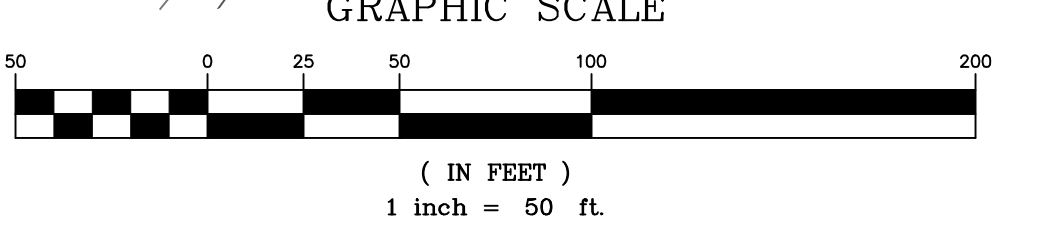
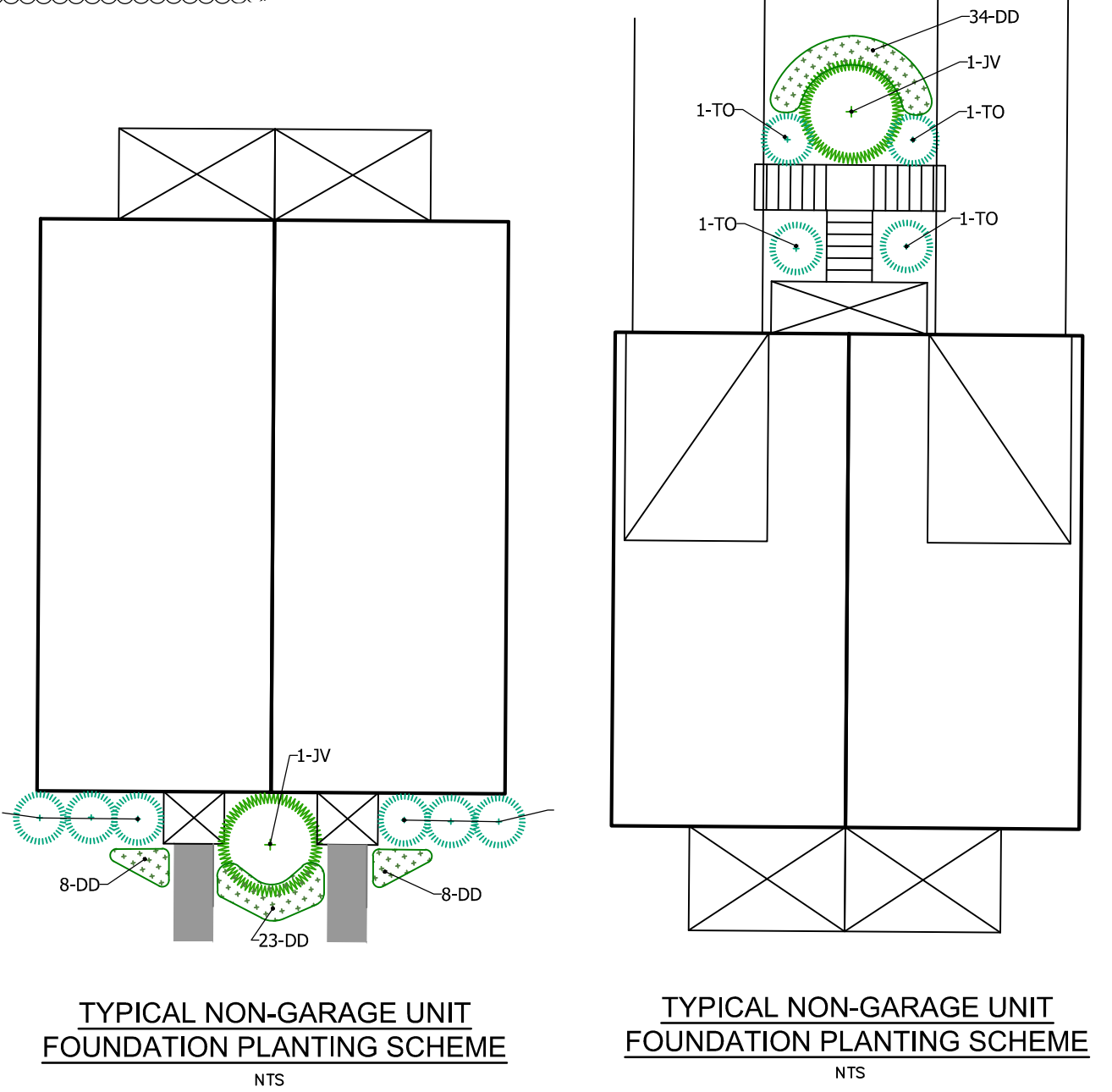
PLANTING SCHEDULE FOR INTERIOR PARKING LOT LANDSCAPING
 Z.O. 27-2306. LANDSCAPE CRITERIA: 1 (9'X18') LANDSCAPE ISLAND EVERY 15 PARKING SPACES WITH 1 SHADE TREE / ISLAND
 334 PARKING SPACES / 15 = 22.26 ~ 23 SHADE TREES REQUIRED IN LANDSCAPE ISLANDS

SYMBOL	ID	QUANTITY	BOTANICAL NAME	COMMON NAME	PLANTING SIZE / CONDITIONS	MATURE SIZE / GENERAL TYPE	NATIVE(N)
GT	12		GLEDITSIA TRIACANTHOS 'STREETKEEPER'	STREETKEEPER HONEY LOCUST	2 to 2-1/2" CAL. B&B	20' W. X 45' H. MAJOR DECIDUOUS TREE	N
AR	13		ACER RUBRUM 'SUSPZAM'	SUSPZAM RED MAPLE	2 to 2-1/2" CAL. B&B	10' W. X 40' H. MAJOR DECIDUOUS TREE	N
JH	67		JUNIPERUS HORIZONTALIS 'BLUE RUG'	CREeping JUNIPER	1 GAL. CONTAINER	6' W. X 6' H. EVERGREEN GROUND COVER	

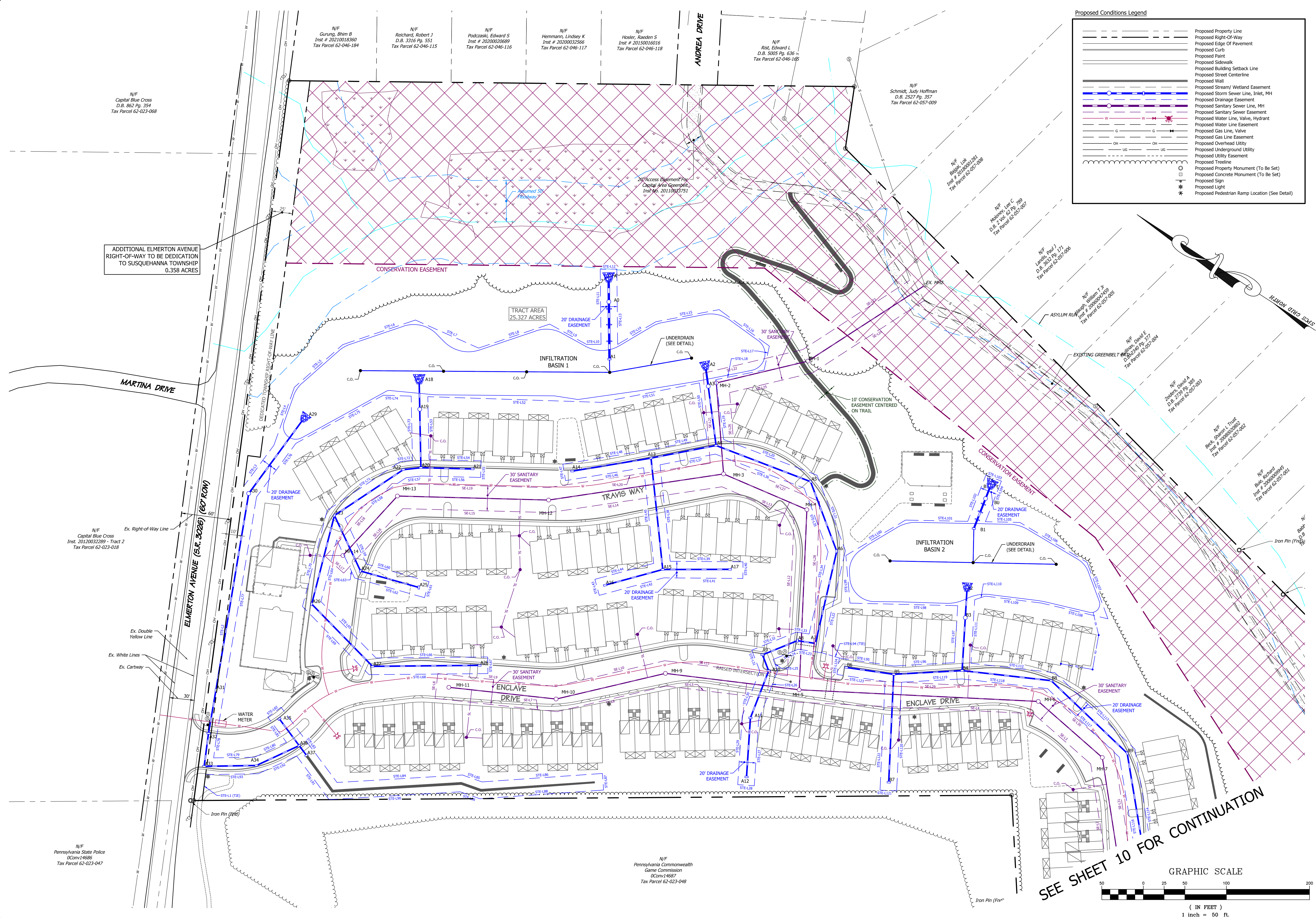
PLANTING SCHEDULE FOR FOUNDATION PLANTING

SYMBOL	ID	QUANTITY	BOTANICAL NAME	COMMON NAME	PLANTING SIZE / CONDITIONS	MATURE SIZE / GENERAL TYPE	NATIVE (N)
JV			JUNIPERUS SCOPULORUM 'MOONGLOW'	MOONGLOW JUNIPER	6" H., #10 CONTAINER	8' W. X 20" H. EVERGREEN TREE	
TO			THUJA OCCIDENTALIS 'GOLDEN GLOBE'	GOLDEN GLOBE ARBORVITAE	2 GAL. CONTAINER	4' W. X 4' H. EVERGREEN SHRUB	
DD			HEMEROCALLIS & NARCISSUS VARIETIES	DAYLILY & DAFODIL MIX	INTER BULBS STAGGERED 12" O.C.	12"-36" PERENNIAL FLOWER	

NOTE: QUANTITY AS REQUIRED BY TYPICAL FOUNDATION PLANTING PLAN SCHEMES



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 USER: DJW
 PLOT: 06/11/21 10:52:30 AM
 PLOTTER: HP DesignJet T1200



Proposed Conditions Legend

	Proposed Property Line
	Proposed Right-Of-Way
	Proposed Edge of Pavement
	Proposed Curb
	Proposed Pavement
	Proposed Sidewalk
	Proposed Building Setback Line
	Proposed Street Centerline
	Proposed Wall
	Proposed Stream/Wetland Easement
	Proposed Storm Sewer Line, Inlet, MH
	Proposed Drainage Easement
	Proposed Sanitary Sewer Line, MH
	Proposed Sanitary Sewer Easement
	Proposed Water Line, Valve, Hydrant
	Proposed Water Line Easement
	Proposed Gas Line, Valve
	Proposed Gas Line Easement
	Proposed Overhead Utility
	Proposed Underground Utility
	Proposed Utility Easement
	Proposed Trestle
	Proposed Property Monument (To Be Set)
	Proposed Concrete Monument (To Be Set)
	Proposed Sign
	Proposed Light
	Proposed Pedestrian Ramp Location (See Detail)

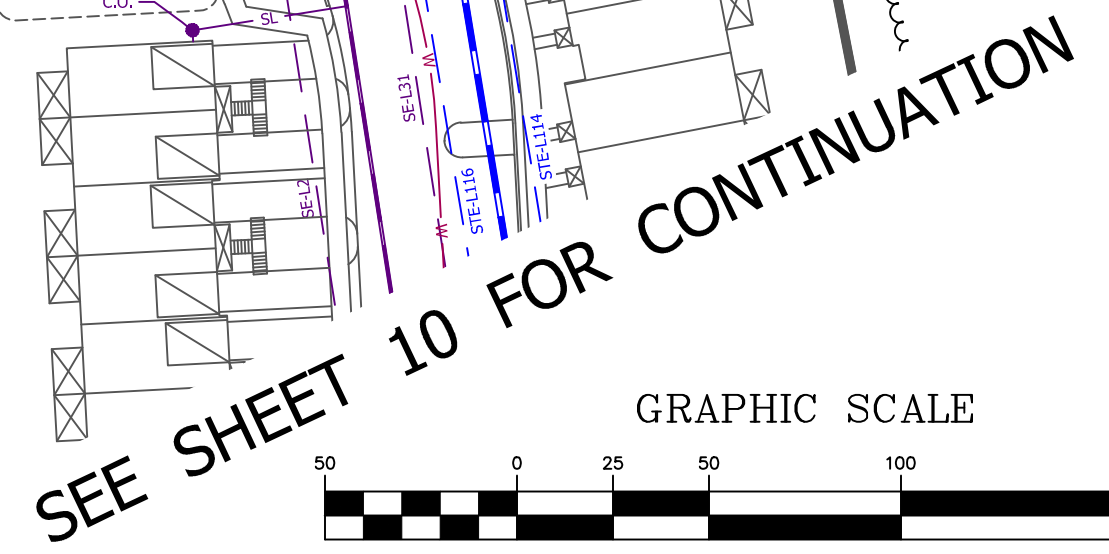
ADDITIONAL ELMERTON AVENUE
RIGHT-OF-WAY TO BE DEDICATION
TO SUSQUEHANNA TOWNSHIP
0.358 ACRES

N/F
Capital Blue Cross
Inst. 20120032289 - Tract 2
Tax Parcel 62-023-018

Ex. Right-of-Way Line
Ex. Double Yellow Line
Ex. White Lines
Ex. Carway

N/F
Pennsylvania State Police
0Conv14686
Tax Parcel 62-023-047

N/F
Pennsylvania Commonwealth
Game Commission
0Conv14687
Tax Parcel 62-023-048



SEE SHEET 10 FOR CONTINUATION

NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	07/16/21
2		
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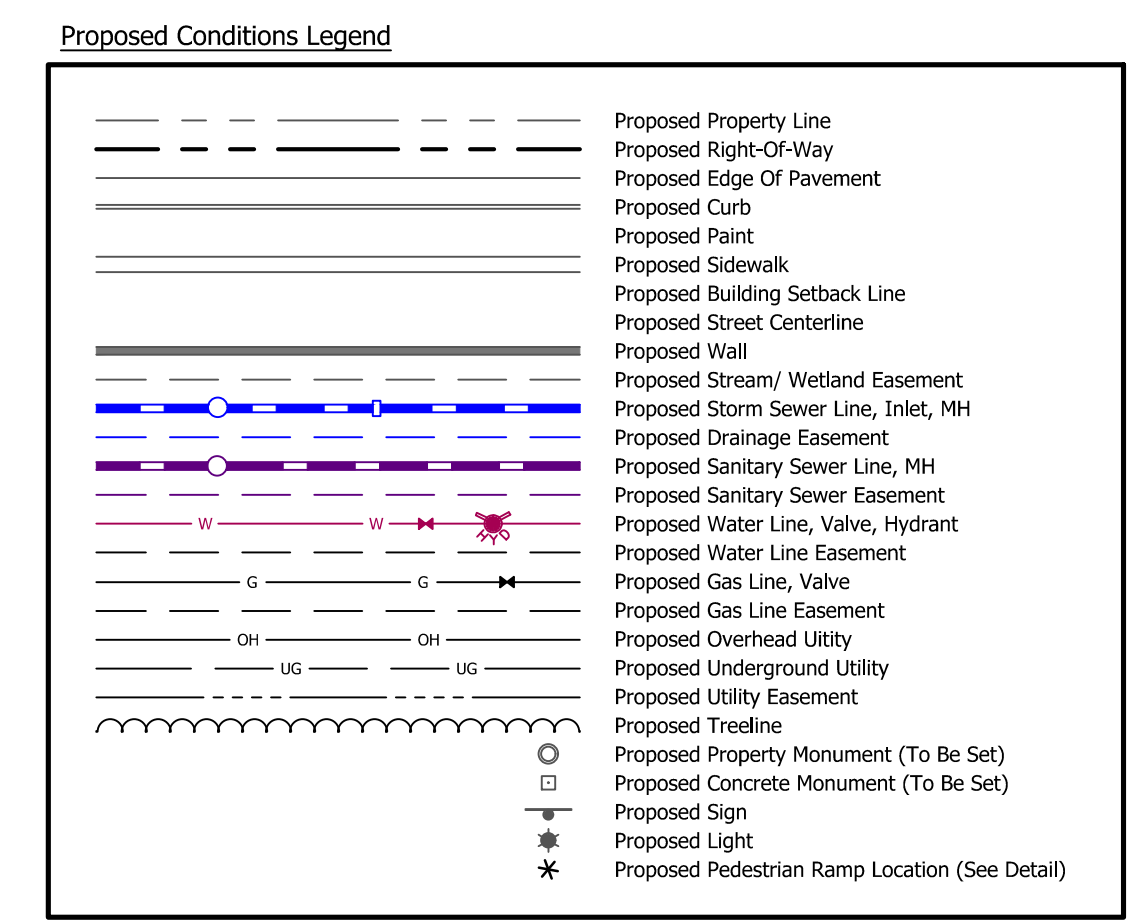
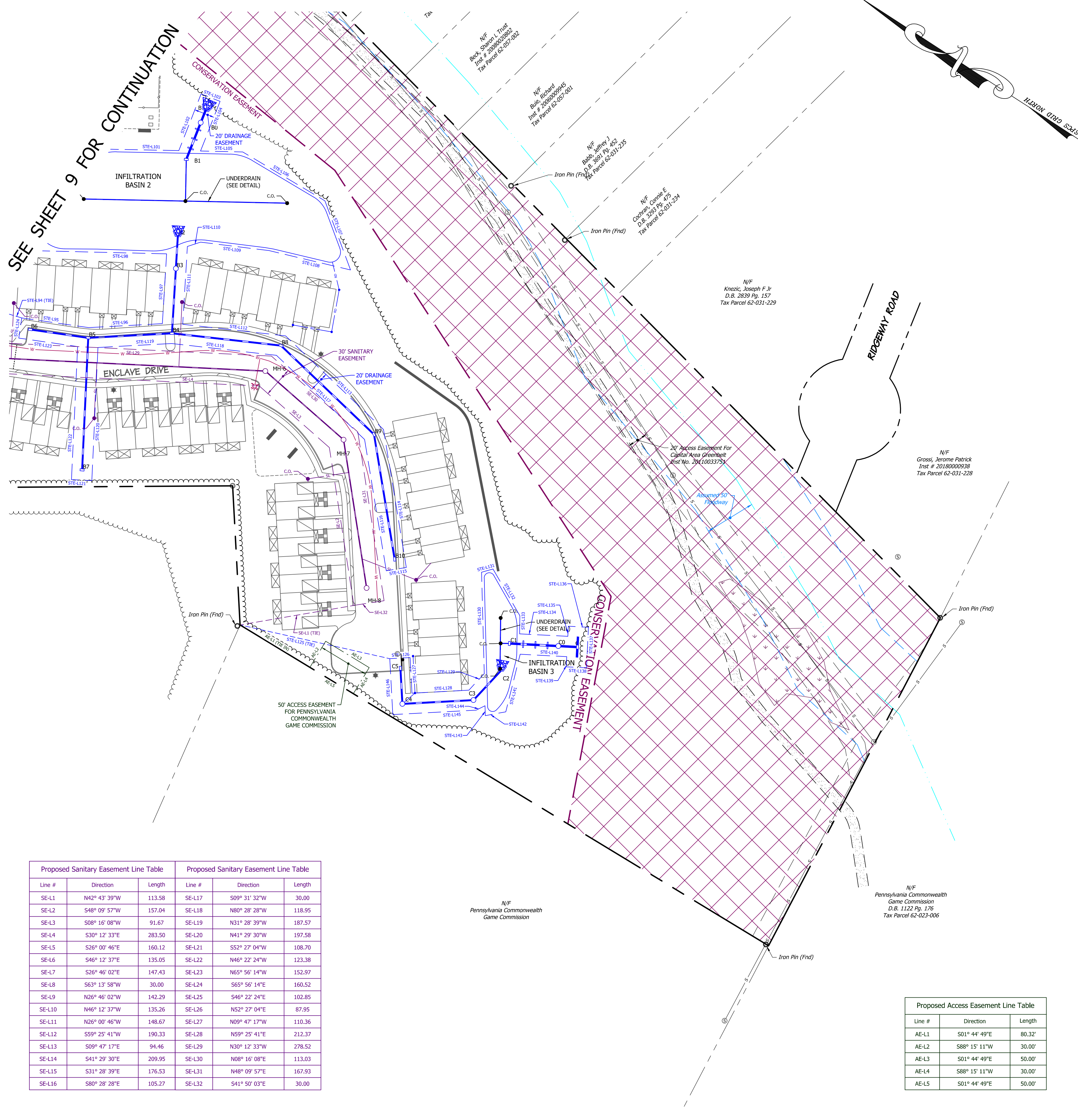
R. J. FISHER & ASSOCIATES, INC.
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EASEMENT PLAN
FOR
ENCLAVE AT ELMERTON
LOCATED IN
SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID:	220021-EASE
PROJECT:	220021
DATE:	06/11/21
SHEET:	9 OF 29

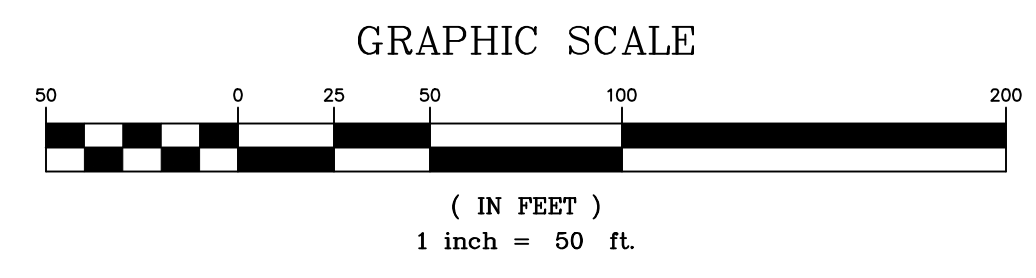
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Proposed Storm Easement Line Table			Proposed Storm Easement Line Table			Proposed Storm Easement Line Table		
Line #	Direction	Length	Line #	Direction	Length	Line #	Direction	Length
STE-L1	S64° 32' 35"W	31.37	STE-L50	N49° 28' 20"E	67.88	STE-L99	S52° 00' 44"W	57.45
STE-L2	S64° 32' 35"W	350.18	STE-L51	N44° 12' 14"W	120.75	STE-L100	N63° 41' 32"W	83.57
STE-L3	S86° 41' 14"E	61.00	STE-L52	N31° 07' 03"W	208.56	STE-L101	N31° 50' 04"W	74.83
STE-L4	N76° 33' 10"E	74.16	STE-L53	S55° 53' 01"W	75.73	STE-L102	S78° 27' 53"W	59.92
STE-L5	S74° 22' 45"E	77.39	STE-L54	S31° 38' 30"E	62.58	STE-L103	N11° 32' 07"W	20.00
STE-L6	S51° 44' 10"E	92.37	STE-L55	S58° 21' 30"W	20.00	STE-L104	N78° 27' 53"E	52.52
STE-L7	S09° 04' 31"E	83.26	STE-L56	N31° 38' 30"W	71.49	STE-L105	N31° 50' 04"W	41.49
STE-L8	S51° 37' 27"E	90.23	STE-L57	N39° 13' 40"W	18.20	STE-L106	N02° 16' 12"W	94.09
STE-L9	S04° 10' 12"E	50.75	STE-L58	N66° 39' 26"W	88.48	STE-L107	N36° 43' 01"E	72.41
STE-L10	S33° 54' 38"E	17.34	STE-L59	S31° 51' 12"W	60.63	STE-L108	S19° 39' 58"E	82.46
STE-L11	N56° 23' 10"E	90.27	STE-L60	S17° 16' 31"E	78.27	STE-L109	S25° 57' 35"E	67.66
STE-L12	S33° 36' 50"E	20.00	STE-L61	S72° 43' 29"W	20.00	STE-L110	S51° 10' 13"E	13.65
STE-L13	S56° 23' 10"W	90.66	STE-L62	N17° 16' 31"W	87.41	STE-L111	N60° 26' 31"E	76.62
STE-L14	S63° 39' 04"E	53.45	STE-L63	N31° 51' 12"E	50.58	STE-L112	N26° 34' 09"W	101.76
STE-L15	S43° 49' 02"E	77.46	STE-L64	S71° 24' 50"W	76.59	STE-L113	N10° 41' 28"E	133.20
STE-L16	S02° 56' 52"W	74.77	STE-L65	S12° 39' 51"W	94.88	STE-L114	N47° 36' 55"E	137.50
STE-L17	S69° 22' 19"W	29.46	STE-L66	S33° 31' 24"E	134.46	STE-L115	S42° 23' 05"E	20.00
STE-L18	N44° 12' 14"W	59.33	STE-L67	S56° 28' 36"W	20.00	STE-L116	S47° 36' 55"W	130.82
STE-L19	S49° 28' 20"W	72.63	STE-L68	N33° 31' 24"W	142.99	STE-L117	S10° 41' 28"W	119.78
STE-L20	S12° 02' 51"E	120.32	STE-L69	N12° 39' 51"E	114.67	STE-L118	S26° 34' 09"E	103.68
STE-L21	S36° 23' 17"W	96.91	STE-L70	N71° 24' 50"E	119.48	STE-L119	S36° 06' 06"E	72.59
STE-L22	S69° 59' 24"W	126.12	STE-L71	S66° 39' 26"E	105.80	STE-L120	N59° 38' 51"E	130.96
STE-L23	N24° 26' 13"W	28.52	STE-L72	S39° 13' 40"E	14.60	STE-L121	S30° 21' 09"E	20.00
STE-L24	N55° 05' 07"W	32.76	STE-L73	N55° 53' 01"E	77.21	STE-L122	S59° 38' 51"W	130.93
STE-L25	S35° 52' 20"W	14.76	STE-L74	N31° 07' 03"W	33.46	STE-L123	S24° 47' 01"E	58.43
STE-L26	S78° 15' 37"W	62.98	STE-L75	N61° 49' 08"W	120.28	STE-L124	S65° 12' 59"W	20.00
STE-L27	S60° 45' 39"W	79.68	STE-L76	N86° 41' 14"W	79.80	STE-L125	N20° 18' 06"W	150.89
STE-L28	N29° 14' 21"W	20.00	STE-L77	S66° 28' 15"W	298.09	STE-L126	S36° 06' 33"E	20.00
STE-L29	N60° 45' 39"E	82.76	STE-L78	S64° 28' 46"W	20.24	STE-L127	S53° 53' 27"W	35.05
STE-L30	N78° 15' 37"E	58.31	STE-L79	S33° 54' 45"E	49.17	STE-L128	S36° 02' 30"E	56.01
STE-L31	N35° 52' 20"E	26.68	STE-L80	S57° 56' 06"E	42.48	STE-L129	S80° 00' 04"E	22.11
STE-L32	S55° 05' 07"E	57.91	STE-L81	N20° 21' 57"E	37.74	STE-L130	N55° 30' 15"E	99.81
STE-L33	S24° 26' 13"E	15.48	STE-L82	S69° 38' 03"E	20.00	STE-L131	S48° 38' 01"E	11.68
STE-L34	N69° 59' 24"E	101.57	STE-L83	S20° 21' 57"W	112.83	STE-L132	S27° 10' 25"W	52.99
STE-L35	N36° 23' 17"E	81.87	STE-L84	N36° 24' 13"W	151.26	STE-L133	S57° 41' 58"W	17.75
STE-L36	N12° 02' 51"W	114.42	STE-L85	N13° 38' 22"W	24.97	STE-L134	S30° 00' 03"E	47.46
STE-L37	N43° 58' 18"W	67.76	STE-L86	S37° 00' 44"E	145.18	STE-L135	N59° 59' 57"E	10.00
STE-L38	S50° 58' 43"W	116.73	STE-L87	S52° 59' 16"W	20.00	STE-L136	N30° 00' 03"W	20.00
STE-L39	S32° 32' 42"E	87.59	STE-L88	S37° 00' 44"E	149.32	STE-L137	S59° 42' 19"W	40.00
STE-L40	S57° 27' 18"W	20.00	STE-L89	S13° 38' 22"E	25.08	STE-L138	S30° 00' 03"E	20.00
STE-L41	N32° 32' 42"W	95.15	STE-L90	S36° 24' 13"E	158.04	STE-L139	N59° 59' 57"E	10.00
STE-L42	N48° 10' 57"W	80.51	STE-L91	N20° 21' 57"E	65.47	STE-L140	N30° 00' 03"W	45.85
STE-L43	N41° 49' 03"E	20.00	STE-L92	N57° 56' 06"W	50.88	STE-L141	S71° 01' 49"W	58.37
STE-L44	S48° 10' 57"E	73.37	STE-L93	N33° 54' 45"W	63.37	STE-L142	N43° 28' 10"W	20.47
STE-L45	N50° 58' 43"E	115.71	STE-L94	S16° 10' 08"E	22.07	STE-L143	N55° 30' 15"E	9.67
STE-L46	N42° 22' 31"W	95.32	STE-L95	N24° 47' 01"W	66.51	STE-L144	N58° 59' 38"W	9.77
STE-L47	N47° 37' 29"E	20.00	STE-L96	N36° 06' 06"W	72.56	STE-L145	N36° 02' 30"W	82.05
STE-L48	S42° 22' 31"E	105.78	STE-L97	S60° 26' 31"W	68.71	STE-L146	N53° 53' 27"E	55.03
STE-L49	S43° 58' 18"E	70.23	STE-L98	S31° 37' 06"E	129.67			

Proposed Sanitary Easement Line Table			Proposed Sanitary Easement Line Table		
Line #	Direction	Length	Line #	Direction	Length
SE-L1	N42° 43' 39"W	113.58	SE-L17	S09° 31' 32"W	30.00
SE-L2	S48° 09' 57"W	157.04	SE-L18	N80° 28' 28"W	118.95
SE-L3	S08° 16' 08"W	91.67	SE-L19	N31° 28' 39"W	187.57
SE-L4	S30° 12' 33"E	283.50	SE-L20	N41° 29' 30"W	197.58
SE-L5	S26° 00' 46"E	160.12	SE-L21	S52° 27' 04"W	108.70
SE-L6	S46° 12' 37"E	135.05	SE-L22	N46° 22' 24"W	123.38
SE-L7	S26° 46' 02"E	147.43	SE-L23	N65° 56' 14"W	152.97
SE-L8	S63° 13' 58"W	30.00	SE-L24	S65° 56' 14"E	160.52
SE-L9	N26° 46' 02"W	142.29	SE-L25	S46° 22' 24"E	102.85
SE-L10	N46° 12' 37"W	135.26	SE-L26	N52° 27' 04"E	87.95
SE-L11	N26° 00' 46"W	148.67	SE-L27	N09° 47' 17"W	110.36
SE-L12	S59° 25' 41"W	190.33	SE-L28	N59° 25' 41"E	212.37
SE-L13	S09° 47' 17"E	94.46	SE-L29	N30° 12' 33"W	278.52
SE-L14	S41° 29' 30"E	209.95	SE-L30	N08° 16' 08"E	113.03
SE-L15	S31° 28' 39"E	176.53	SE-L31	N48° 09' 57"E	167.93
SE-L16	S80° 28' 28"E	105.27	SE-L32	S41° 50' 03"E	30.00

Proposed Access Easement Line Table		
Line #	Direction	Length
AE-L1	S01° 44' 49"E	80.32'
AE-L2	S88° 15' 11"W	30.00'
AE-L3	S01° 44' 49"E	50.00'
AE-L4	S88° 15' 11"W	30.00'
AE-L5	S01° 44' 49"E	50.00'



NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	07/16/21
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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
 R.JFISHERENGINEERING.COM



EASEMENT PLAN
 FOR
ENCLAVE AT ELMERTON
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220021-EASE
 PROJECT: 220021
 DATE: 06/11/21
 SHEET: 10 OF 29

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Proposed Conditions Legend

	Proposed Property Line
	Proposed Right-Of-Way
	Proposed Edge of Pavement
	Proposed Curb
	Proposed Sidewalk
	Proposed Retaining Wall
	Proposed Sanitary Sewer Line, MH
	Proposed Storm Sewer Line, Inlet, MH
	Proposed Roof Drain
	Proposed Water Line, Hydrant
	Proposed Gas Line
	Proposed Overhead Utility
	Proposed Underground Utility
	Proposed Minor Contour
	Limit of Disturbance
	Proposed Major Contour
	Drainage Area
	Proposed Inlet Protection, Waterbar, Inlet I.D.

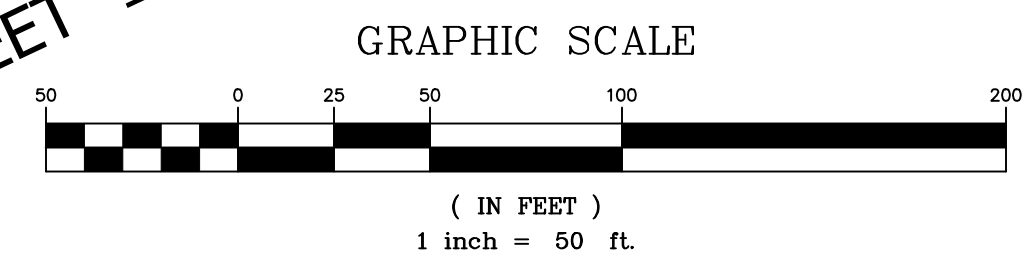
NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	07/16/21
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R. J. FISHER & ASSOCIATES, INC.
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E&S POLLUTION CONTROL PLAN
 FOR
ENCLAVE AT ELMERTON
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

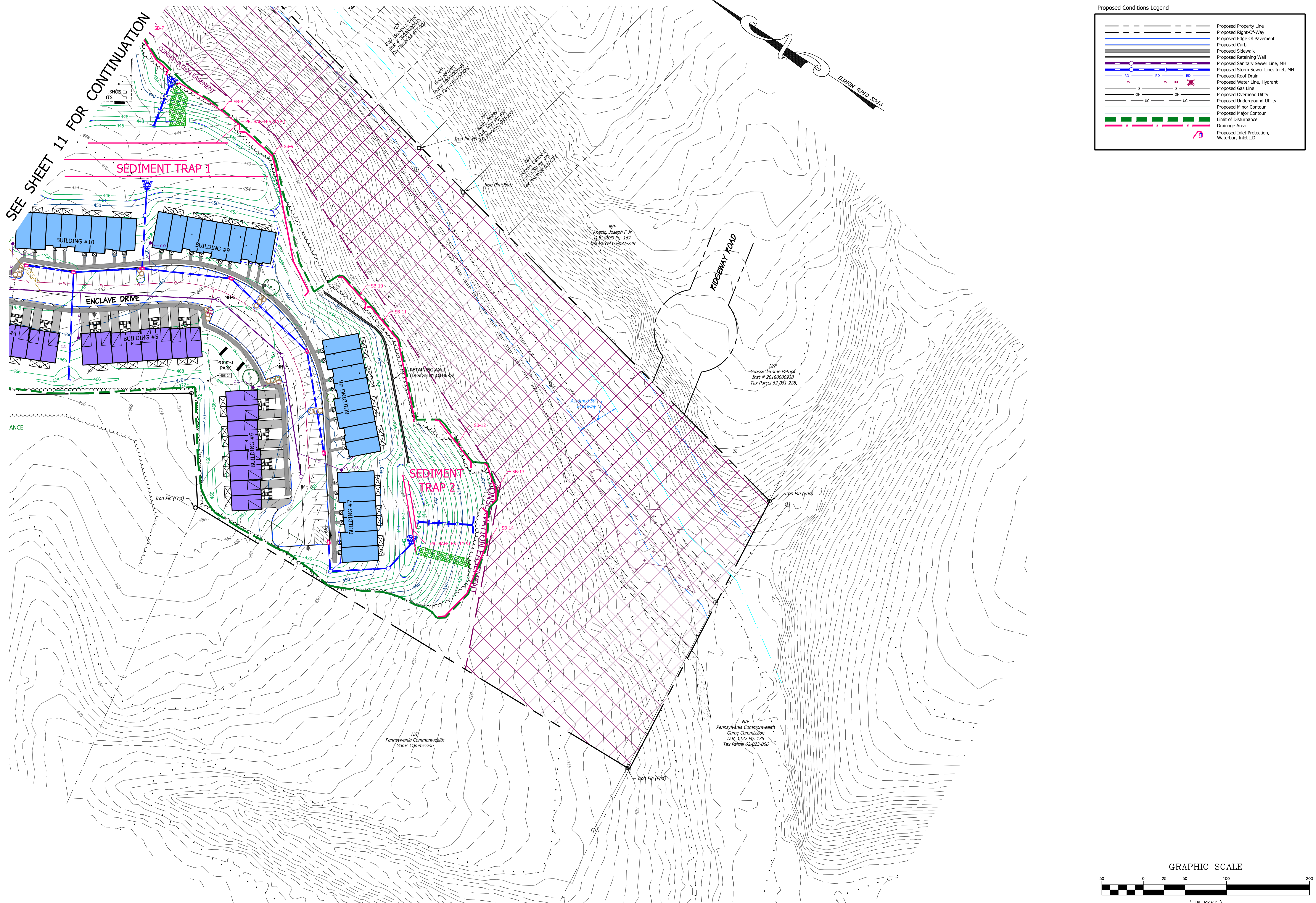
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PROJECT:	220021
DATE:	06/11/21
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SEE SHEET 12 FOR CONTINUATION

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SEE SHEET 11 FOR CONTINUATION



Proposed Conditions Legend

	Proposed Property Line
	Proposed Right-Of-Way
	Proposed Edge of Pavement
	Proposed Curb
	Proposed Sidewalk
	Proposed Retaining Wall
	Proposed Sanitary Sewer Line, MH
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	Proposed Underground Utility
	Proposed Minor Contour
	Proposed Major Contour
	Limit of Disturbance
	Drainage Area
	Proposed Inlet Protection, Waterbar, Inlet I.D.

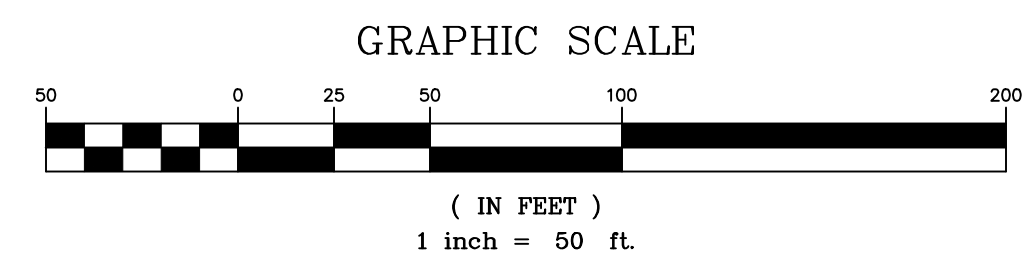
NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	07/16/21
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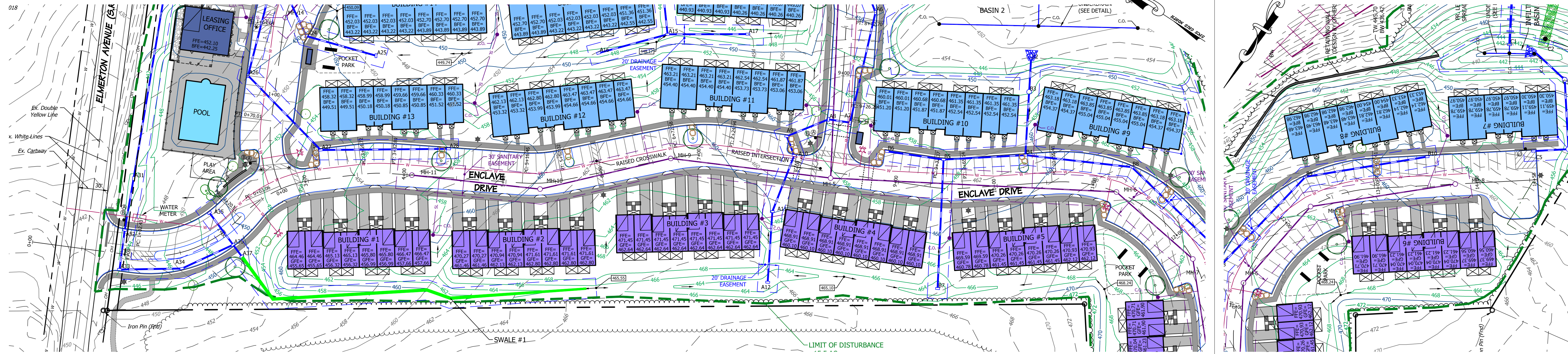
E&S POLLUTION CONTROL PLAN
 FOR
ENCLAVE AT ELMERTON
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID:	220021-EnS
PROJECT:	220021
DATE:	06/11/21
SHEET:	12 OF 29

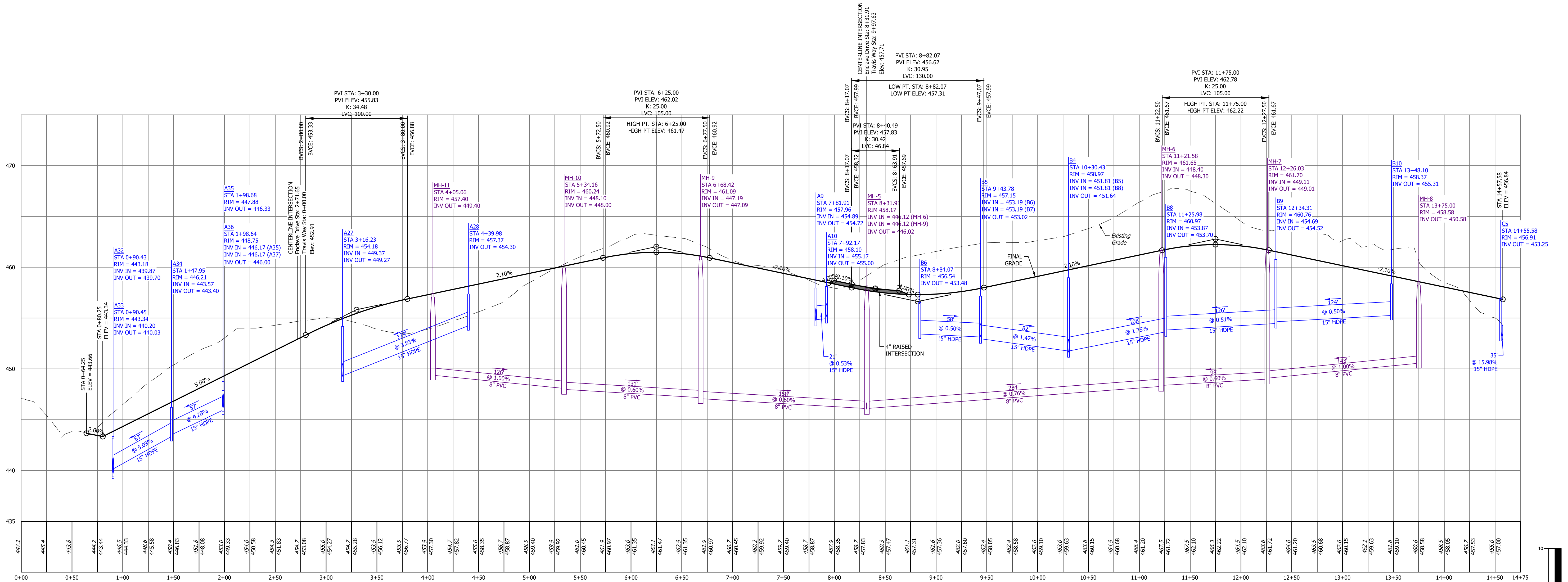


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 12-EN5

018

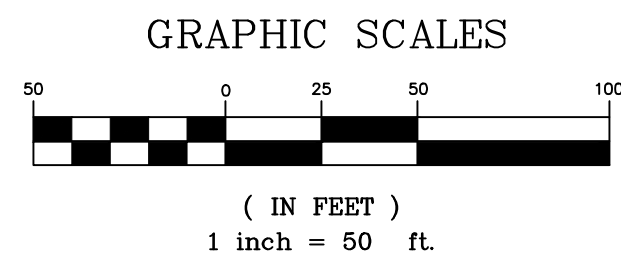


Plan View Of Enclave Drive
Scale: 1" = 50'



Profile View Of Enclave Drive Sta: 0+00.00 - 14+75.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'

NOTES:
ALL INLETS ARE TYPE 'C' UNLESS OTHERWISE NOTED.
ALL TYPE 'C' INLETS ARE SUMPED 2".



NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	07/16/21
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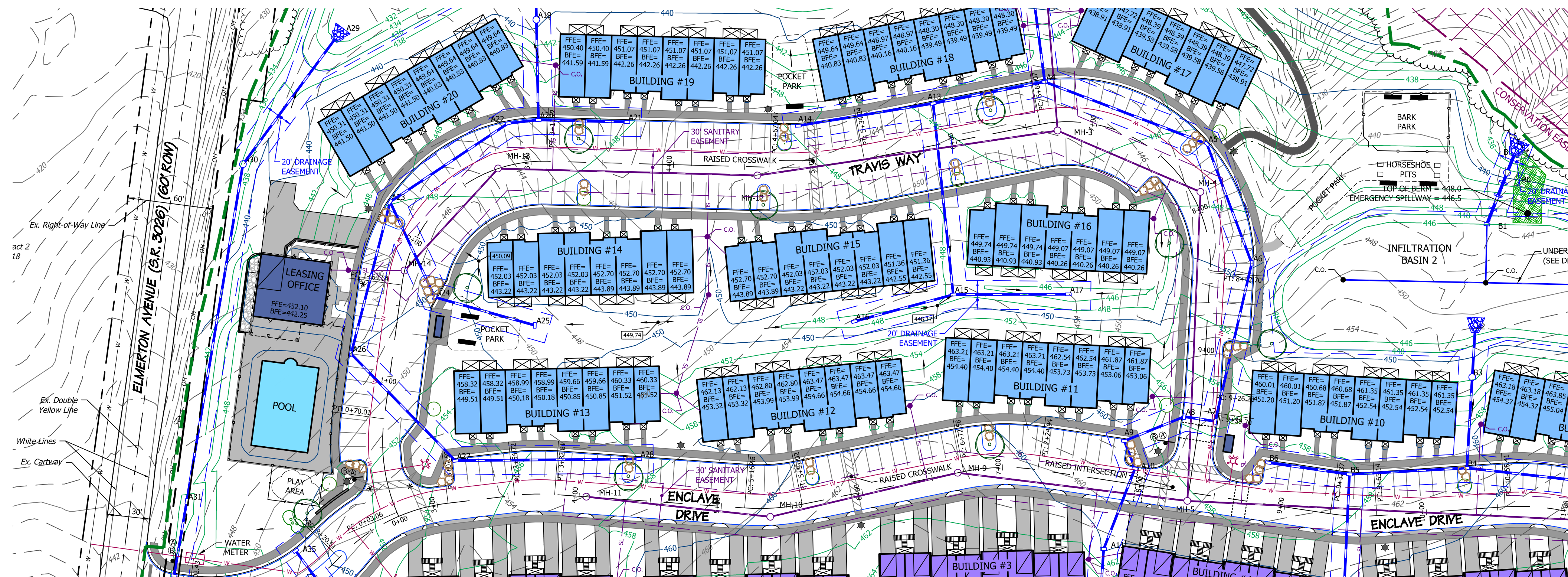
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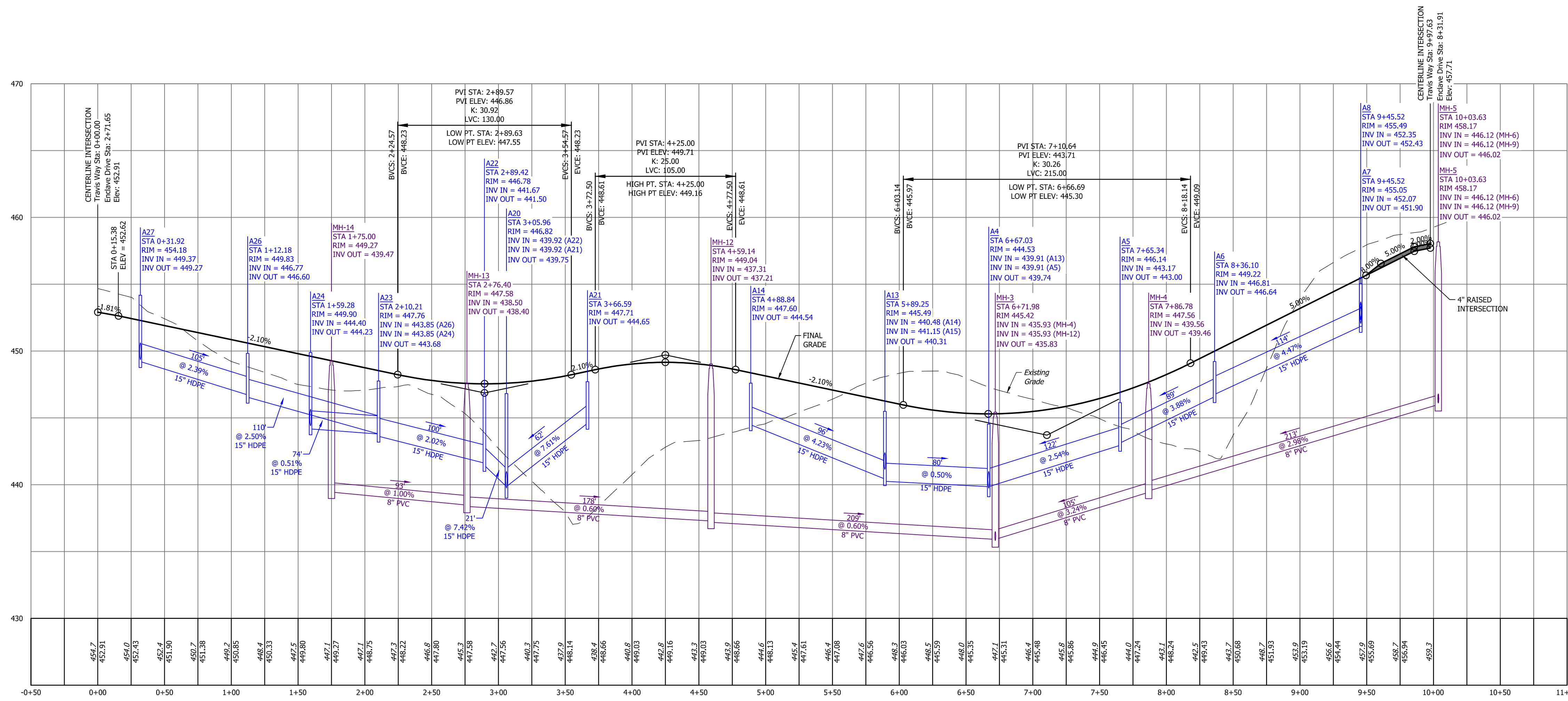
STREET PROFILES
FOR
ENCLAVE AT ELMERTON
LOCATED IN
SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID:	220021-PRO
PROJECT:	220021
DATE:	06/11/21
SHEET:	13 OF 29

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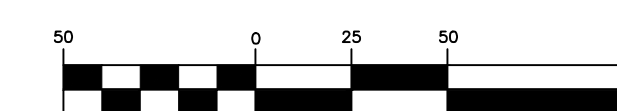
Plan View Of Travis Way
Scale: 1"=50'



Profile View Of Travis Way Sta: -0+50.00 - 11+00.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'

NOTES:
ALL INLETS ARE TYPE 'C' UNLESS OTHERWISE NOTED.
ALL TYPE 'C' INLETS ARE SUMPED 2".

GRAPHIC SCALES



(IN FEET)
1 inch = 50 ft.

(IN FEET)
1 inch = 5 ft.

NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	07/16/21
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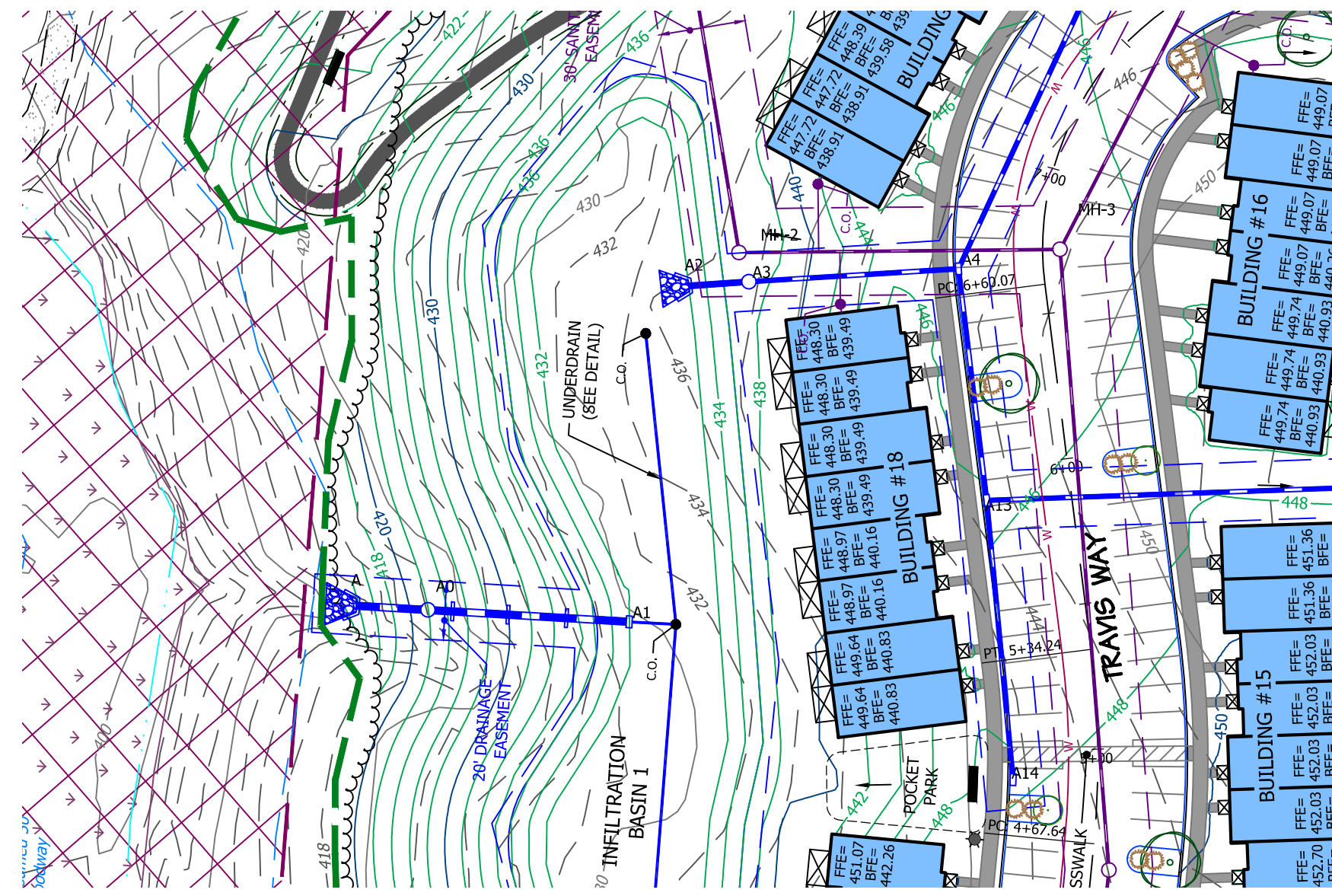
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1546 BRIDGE STREET, NEW CUMBERLAND, PA. 17070
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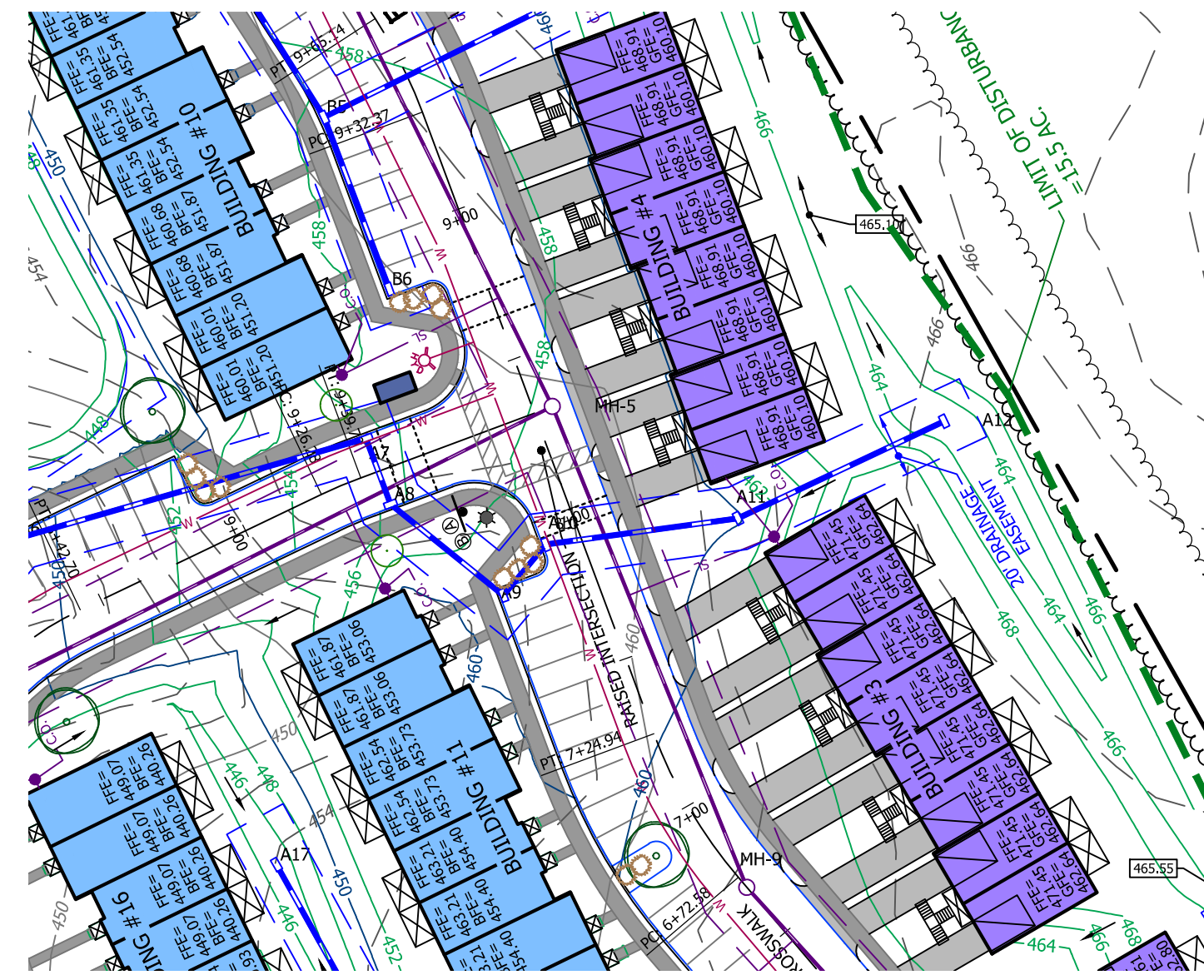
STREET PROFILES
FOR
ENCLAVE AT ELMERTON
LOCATED IN
SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID:	220021-PRO
PROJECT:	220021
DATE:	06/11/21
SHEET:	14 OF 29

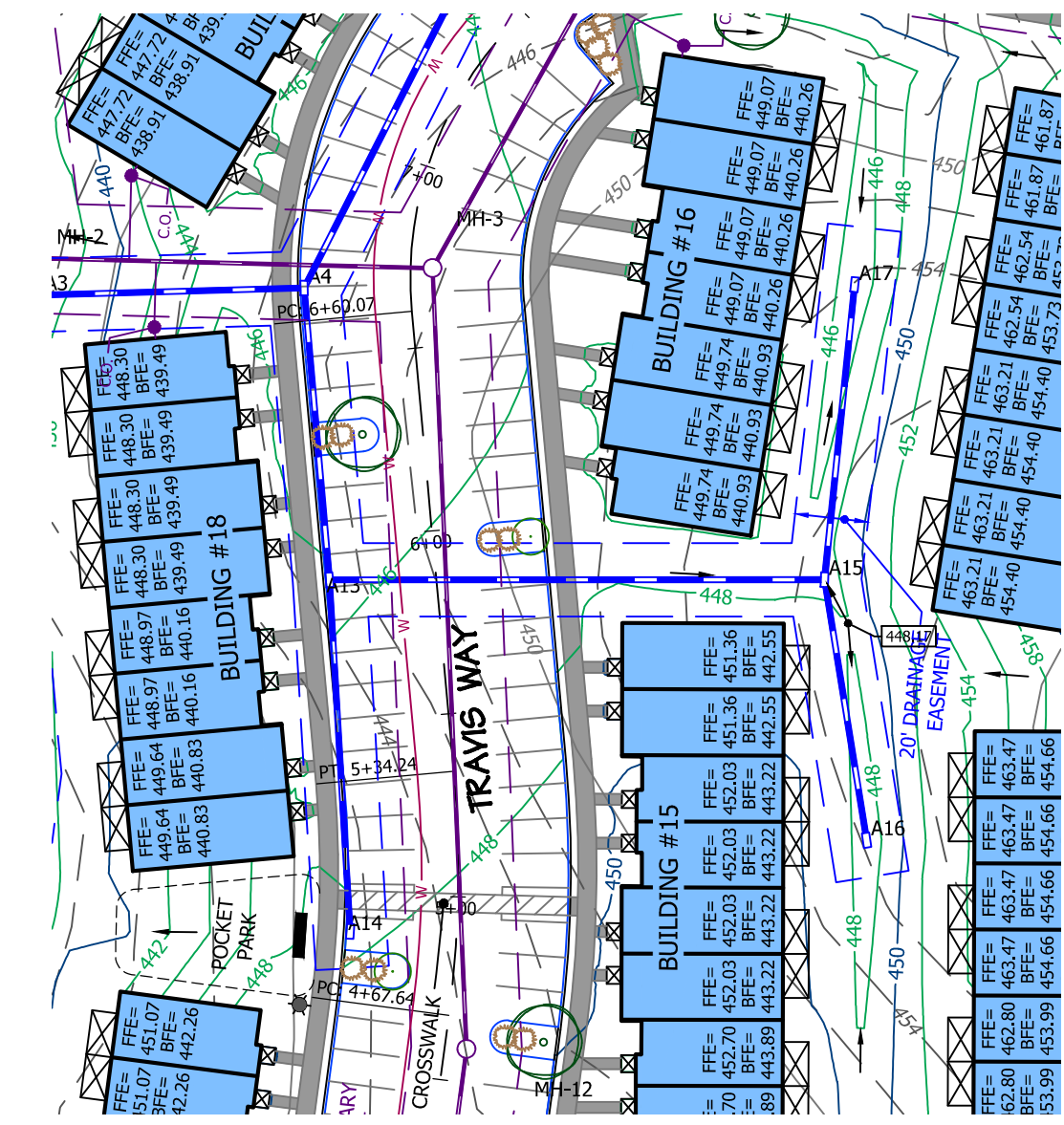
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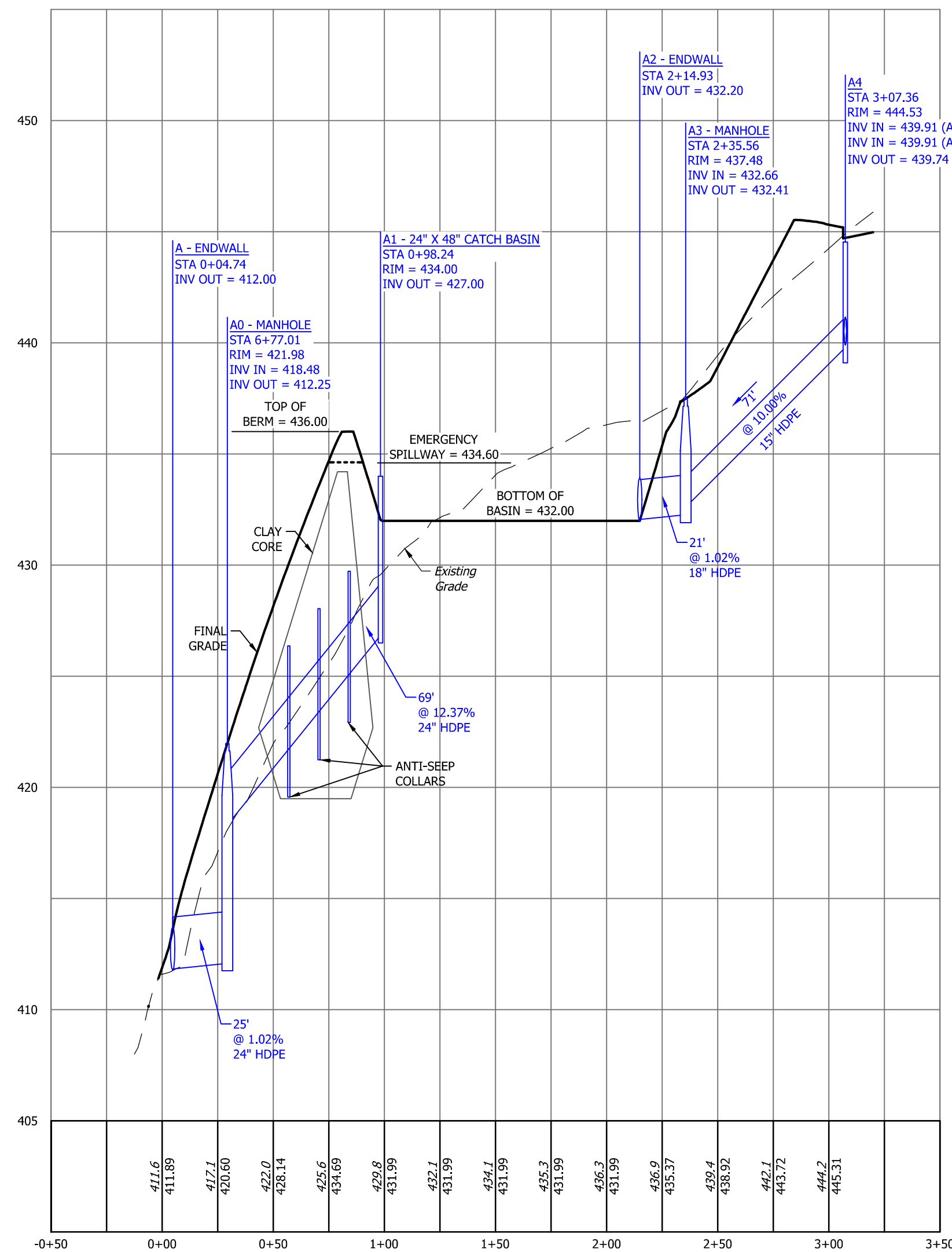
Plan View Of A To A4
Scale: 1"=50'



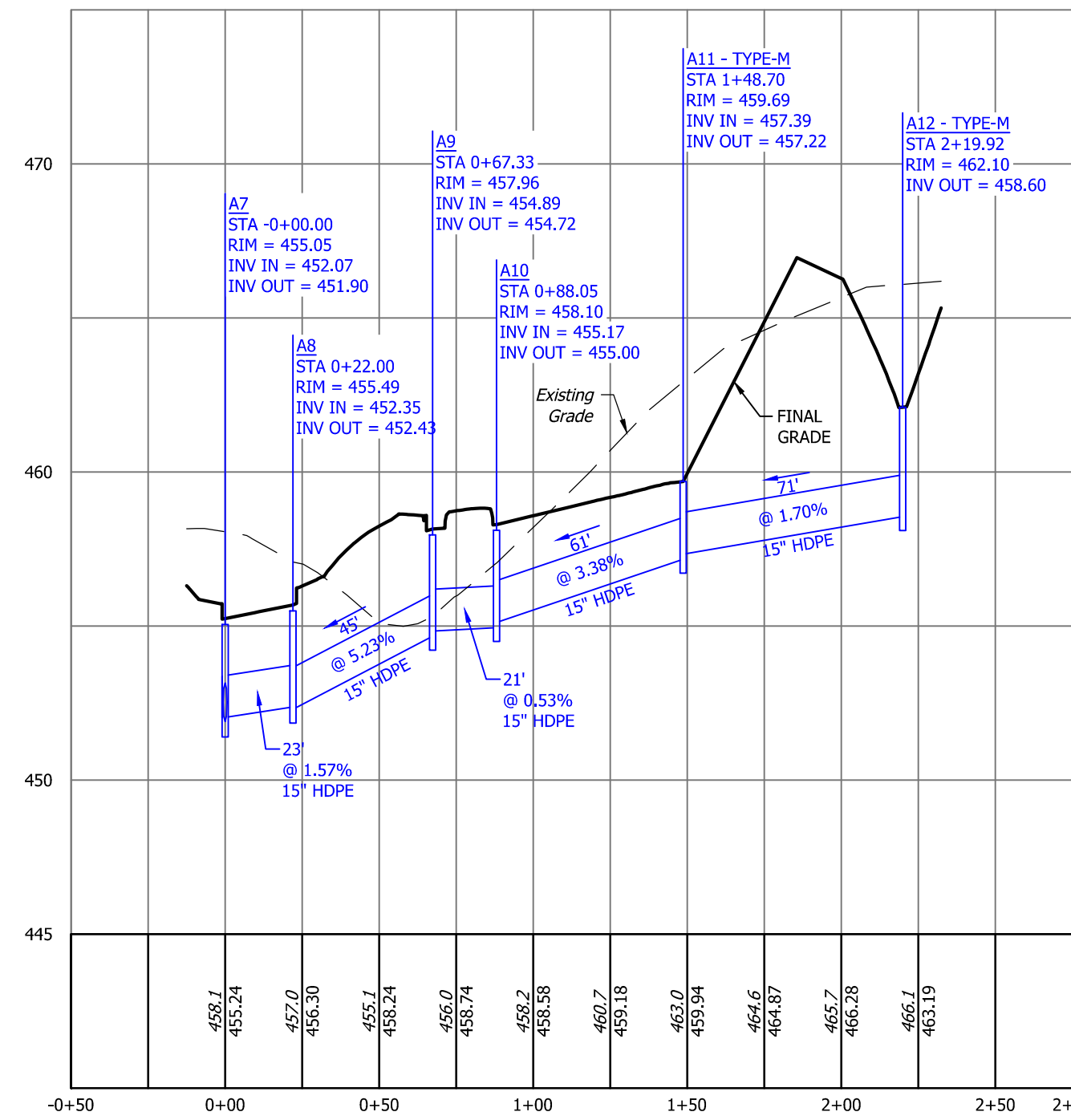
Plan View Of A7 To A12
Scale: 1"=50'



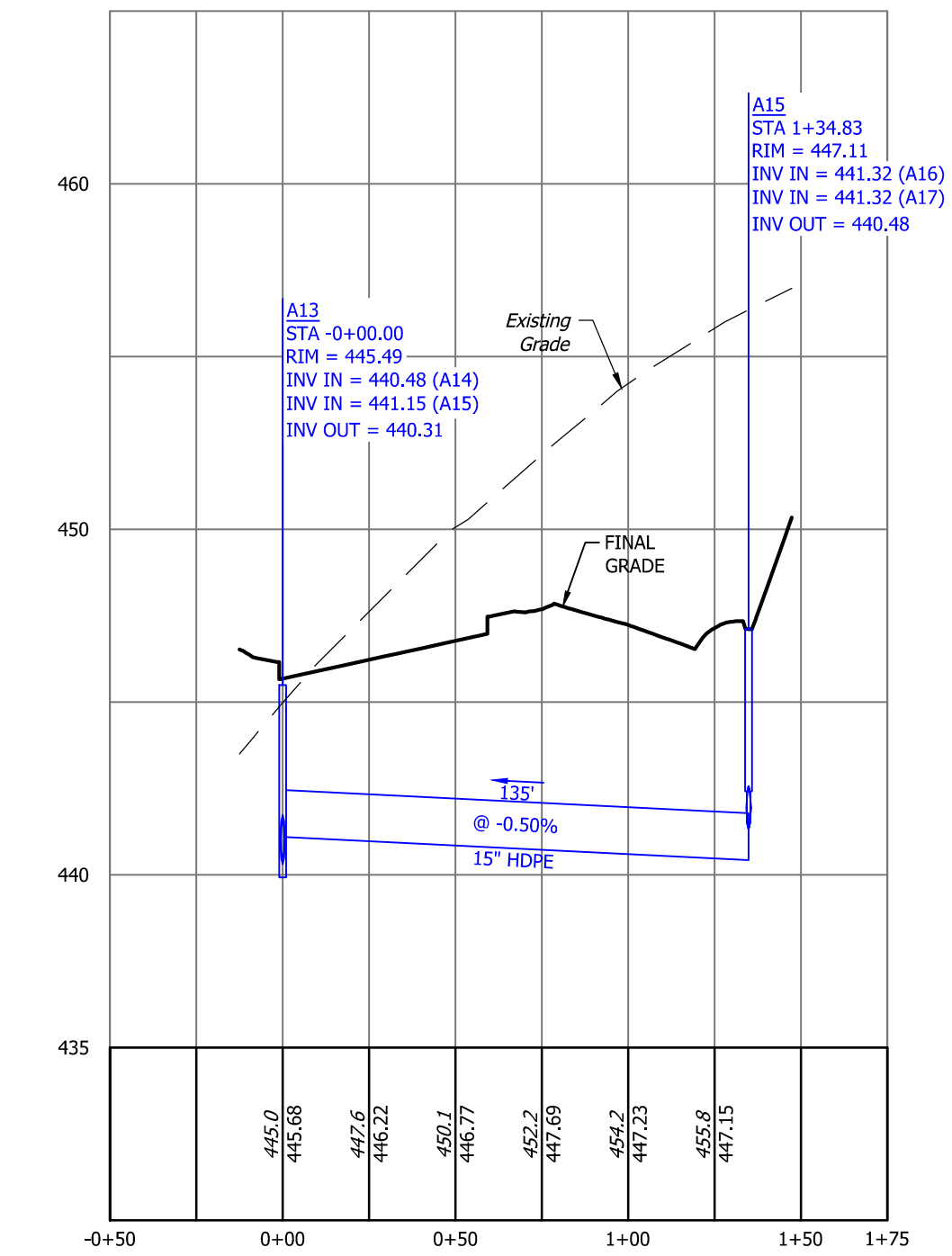
Plan View Of A13 To A15
Scale: 1"=50'



Profile View of A To A4 (Basin 1) Sta: -0+50.00 - 3+50.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'

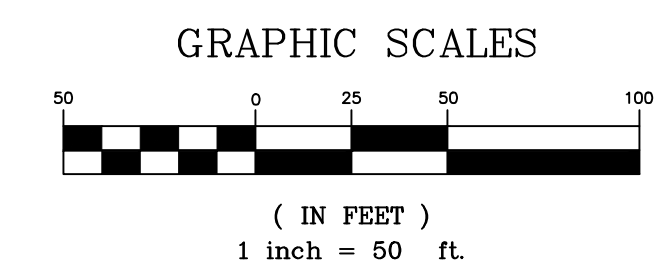


Profile View of A7 To A12 Sta: -0+50.00 - 2+75.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'



Profile View of A13 To A15 Sta: -0+50.00 - 1+75.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'

NOTES:
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ALL TYPE 'C' INLETS ARE SUMPED 2".



NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	07/16/21
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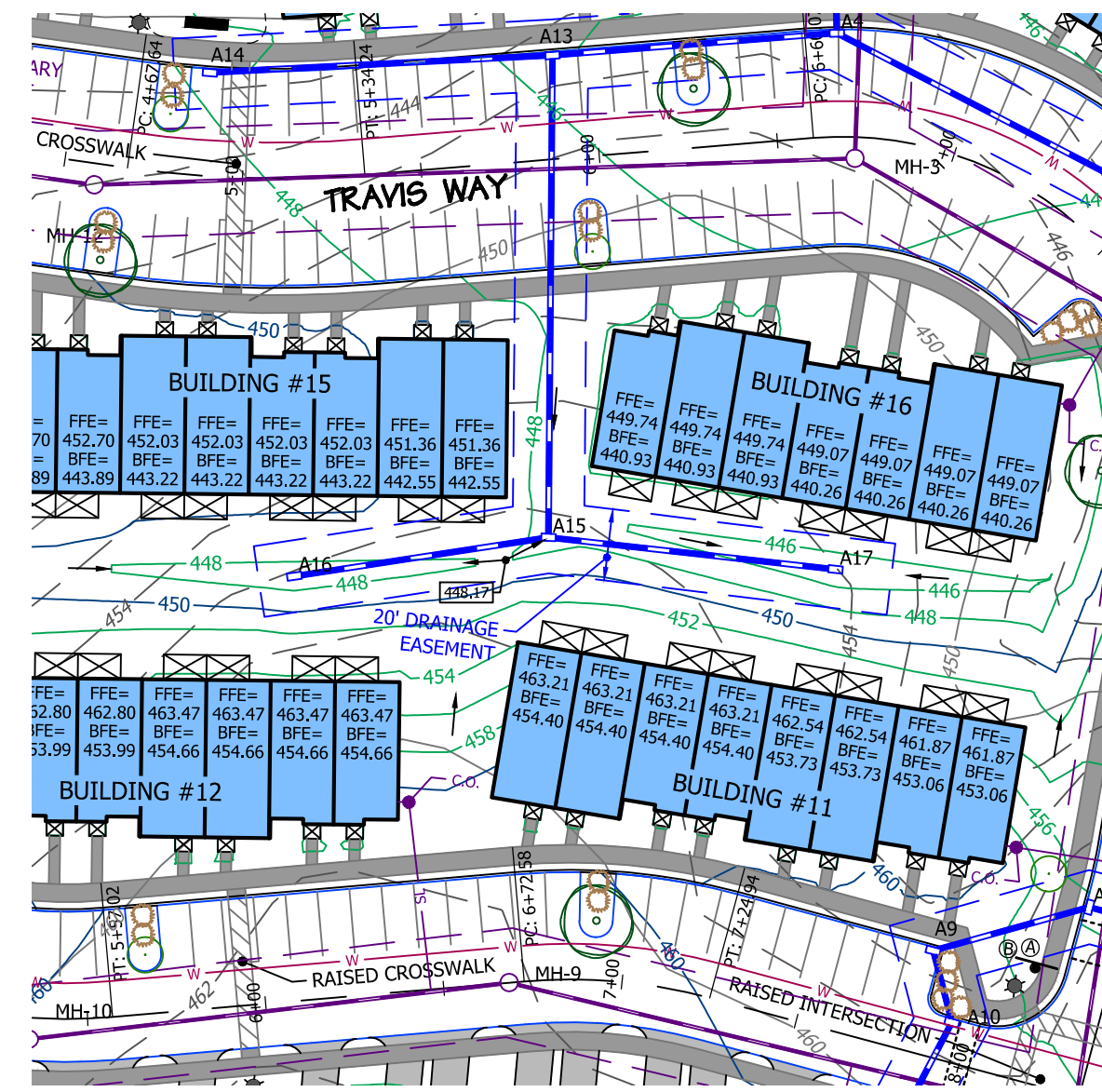
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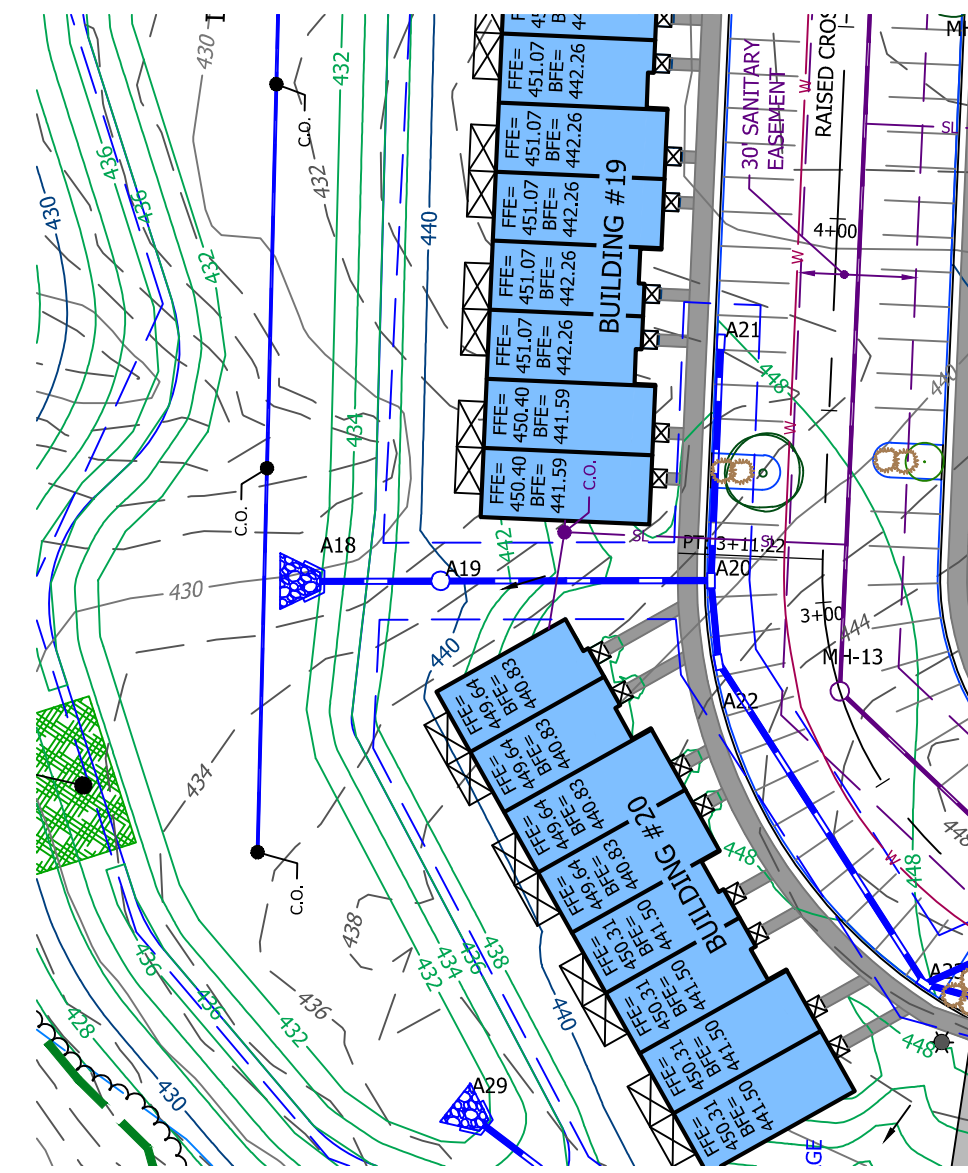
STORM SEWER PROFILES
FOR
ENCLAVE AT ELMERTON
LOCATED IN
SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID:	220021-PRO
PROJECT:	220021
DATE:	06/11/21
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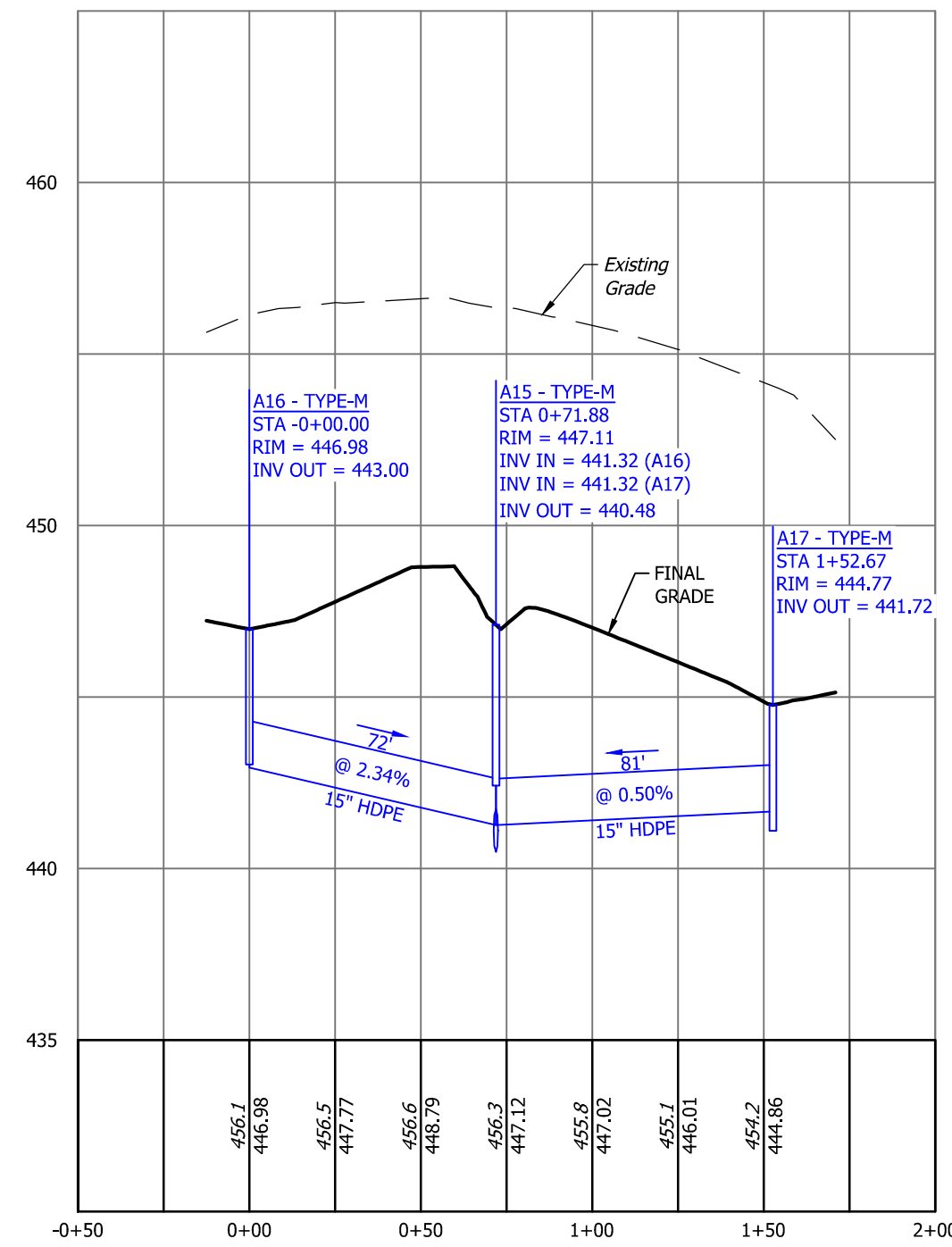
Plan View Of A16 To A17
Scale: 1"=50'



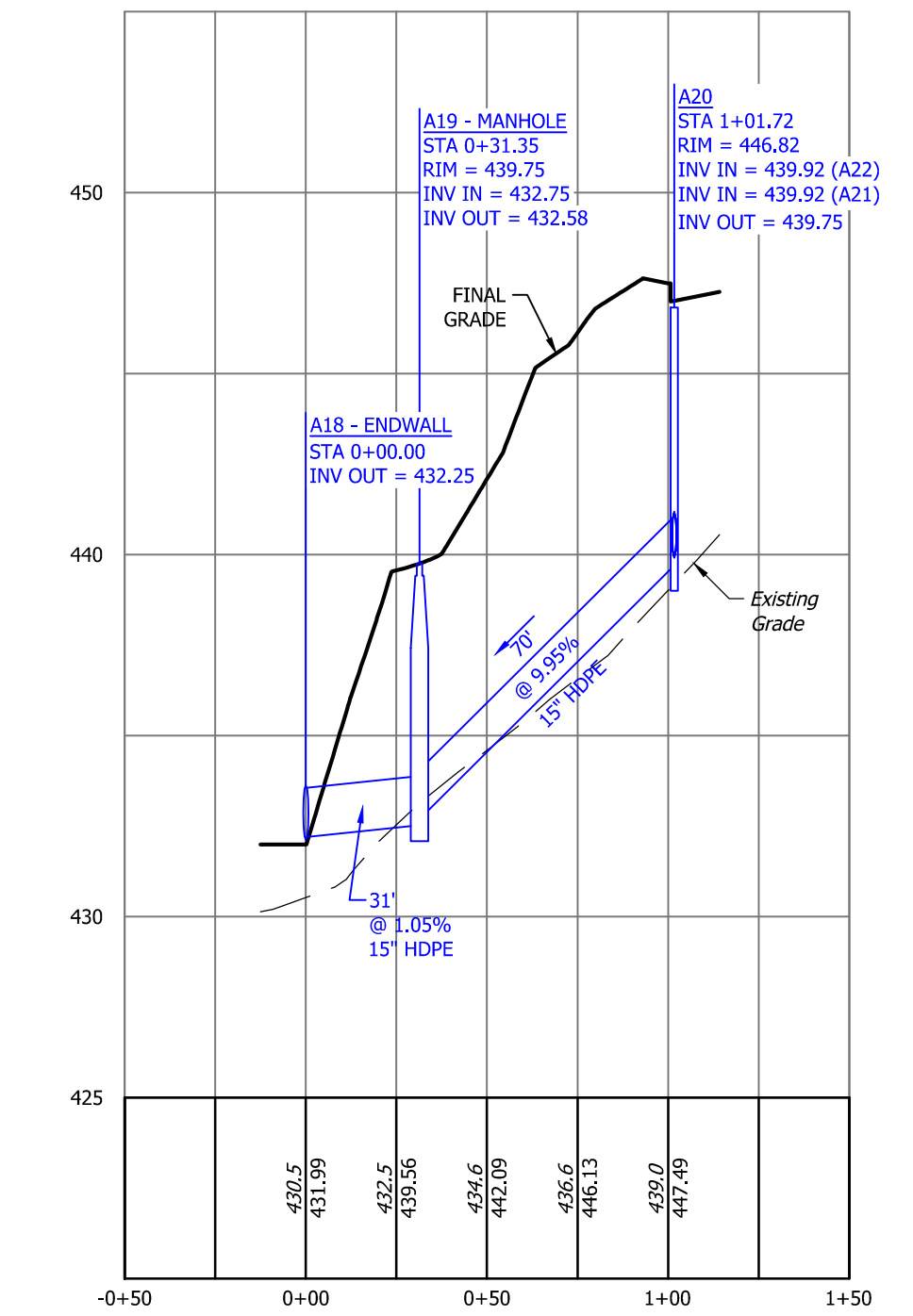
Plan View Of A18 To A20
Scale: 1"=50'



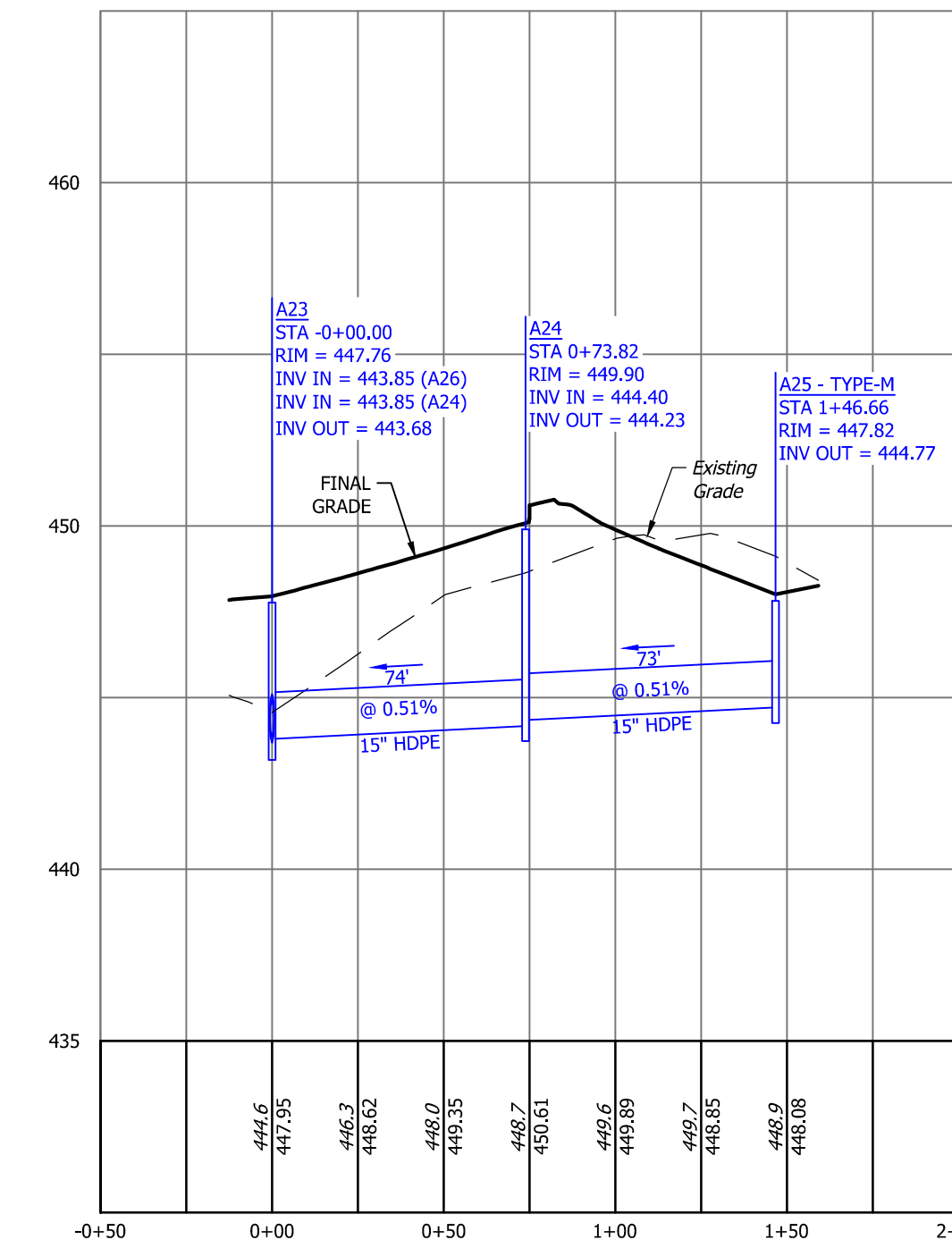
Plan View Of A23 To A25
Scale: 1"=50'



Profile View Of A16 To A17 Sta: -0+50.00 - 2+00.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'

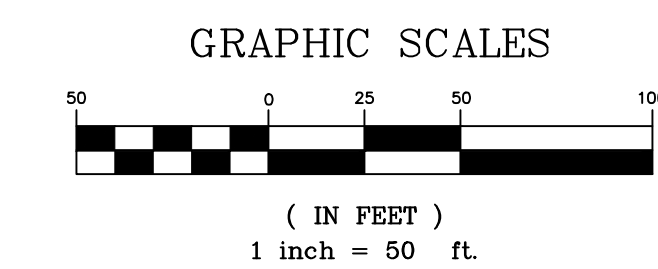


Profile View Of A18 To A20 Sta: -0+50.00 - 1+50.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'



Profile View Of A23 To A25 Sta: -0+50.00 - 2+00.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'

NOTES:
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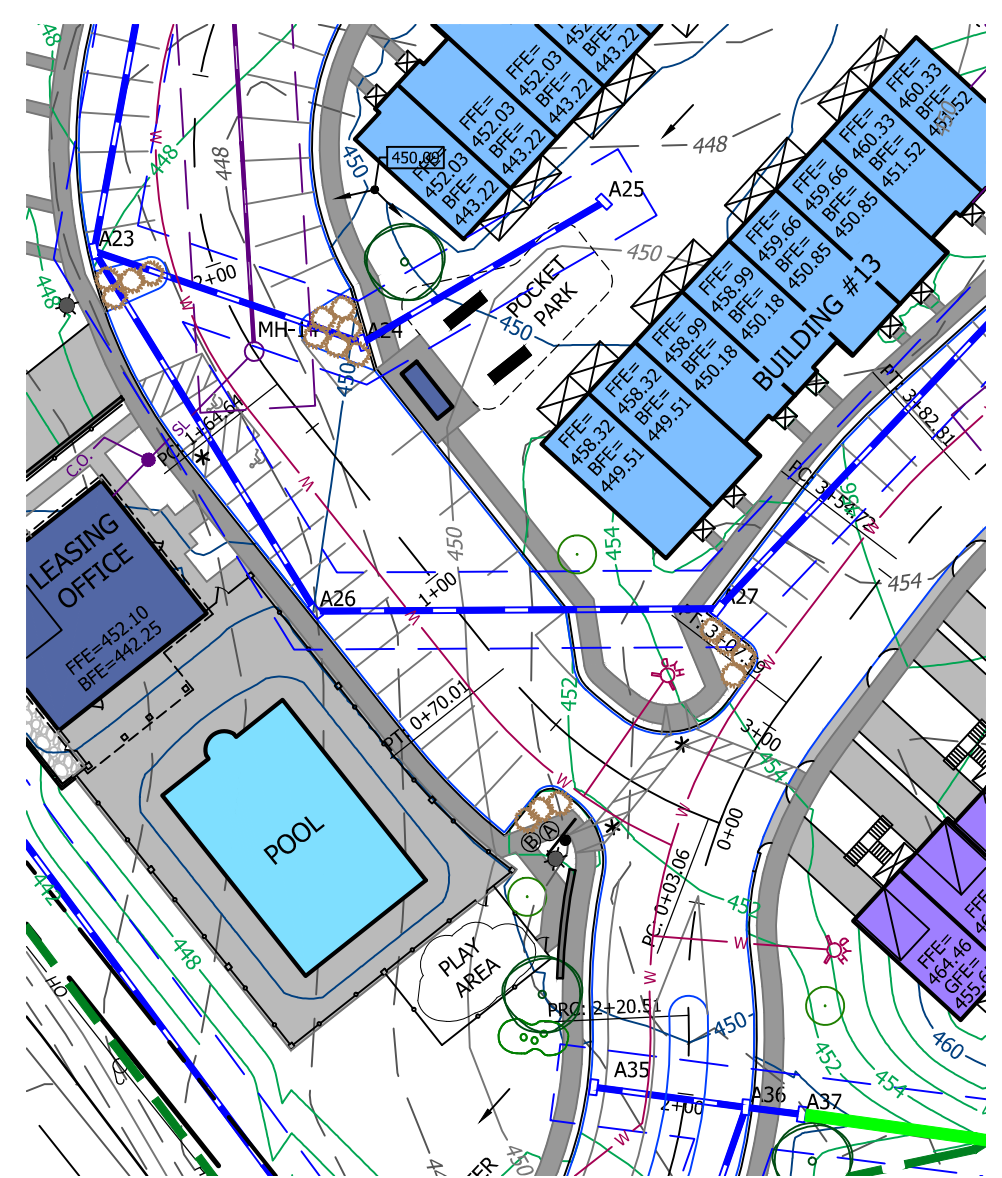
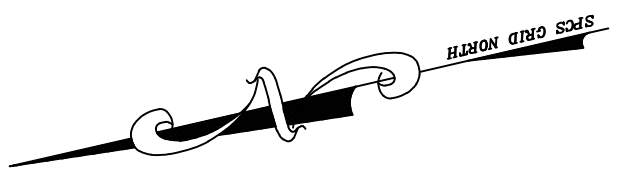
NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	07/16/21
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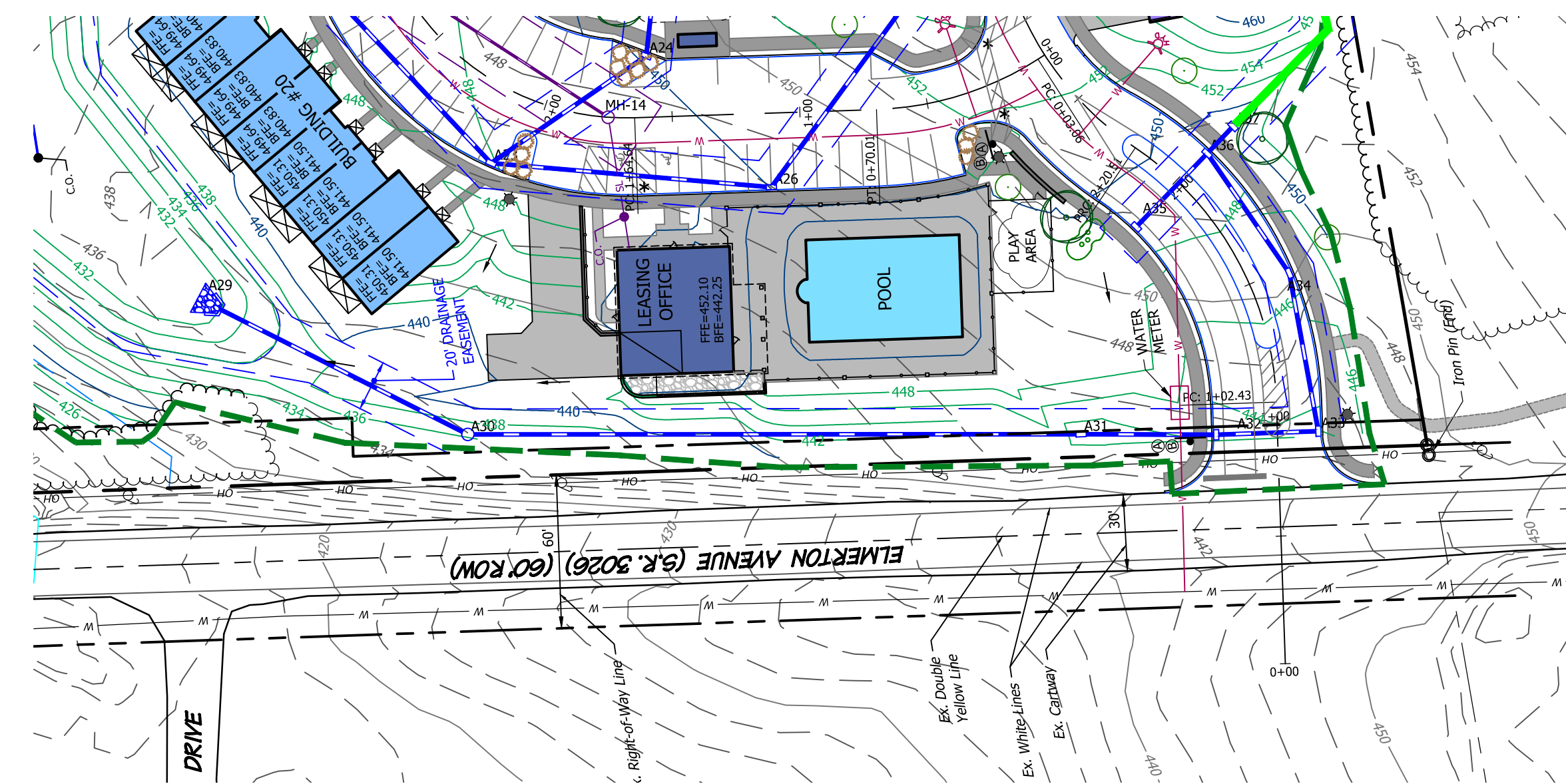
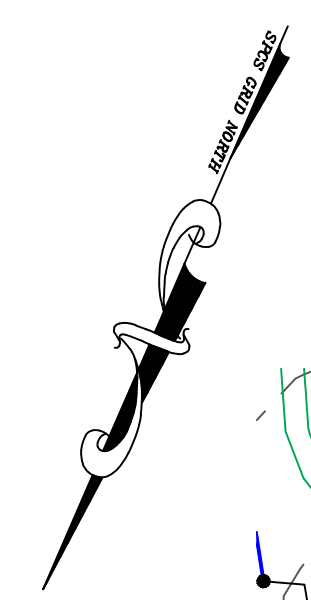


STORM SEWER PROFILES
FOR
ENCLAVE AT ELMERTON
LOCATED IN
SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

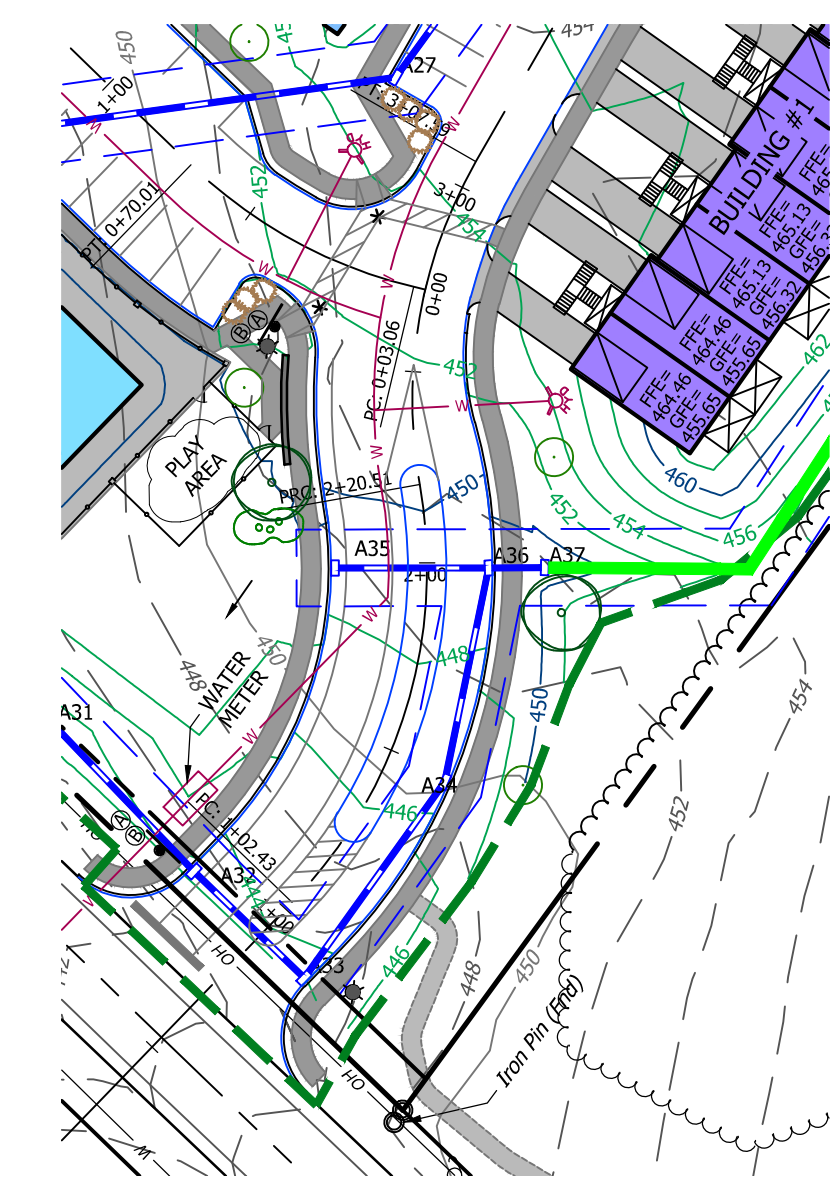
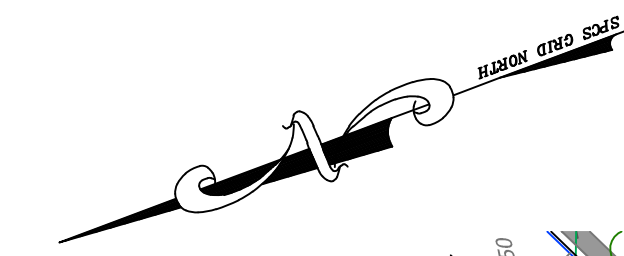
DRAWING ID: 220021-PRO
PROJECT: 220021
DATE: 06/11/21
SHEET: 16 OF 29



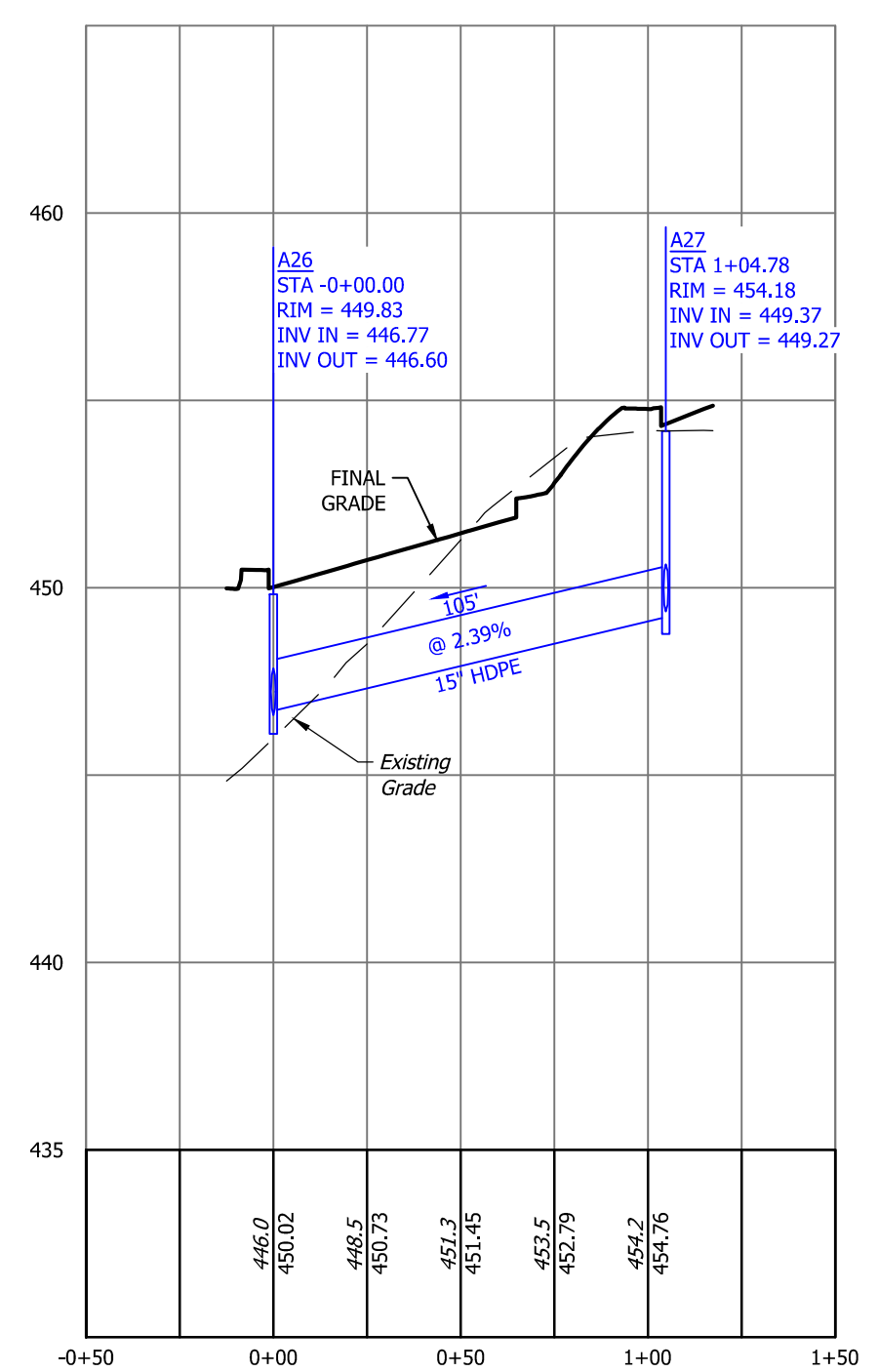
Plan View Of A26 To A27
Scale: 1"=50'



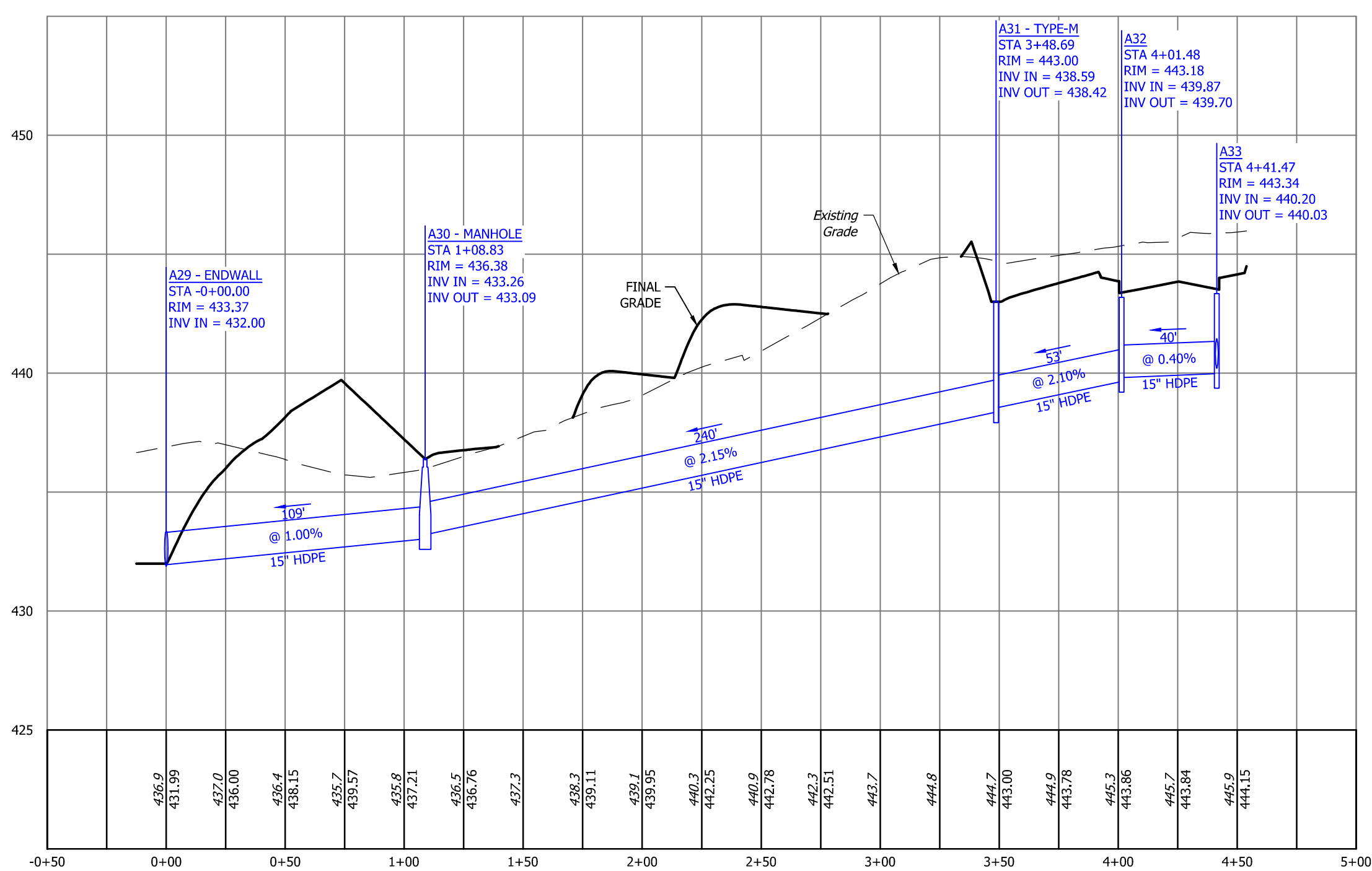
Plan View Of A29 To A33
Scale: 1"=50'



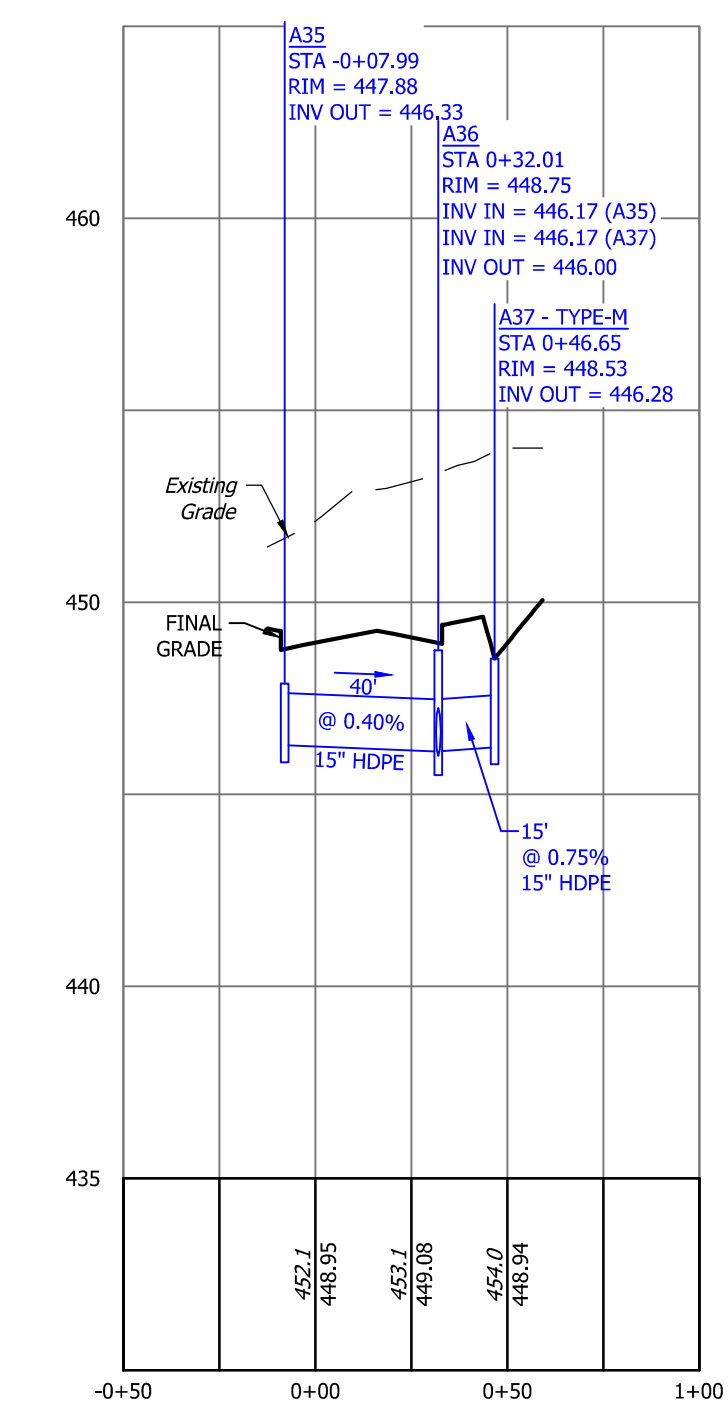
Plan View Of A35 To A37
Scale: 1"=50'



Profile View Of A26 To A27 Sta: -0+50.00 - 1+50.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'

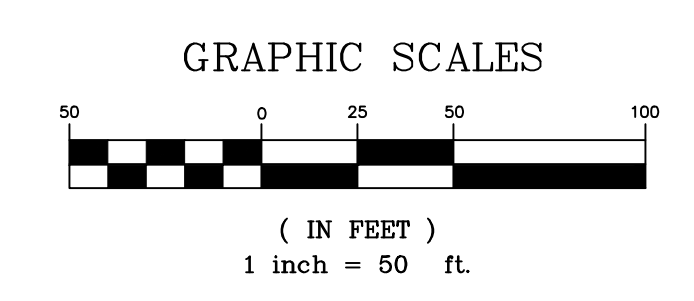


Profile View Of A29 To A33 Sta: -0+50.00 - 5+00.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'



Profile View Of A35 To A37 Sta: -0+50.00 - 1+00.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'

NOTES:
ALL INLETS ARE TYPE 'C' UNLESS OTHERWISE NOTED.
ALL TYPE 'C' INLETS ARE SUMPED 2".



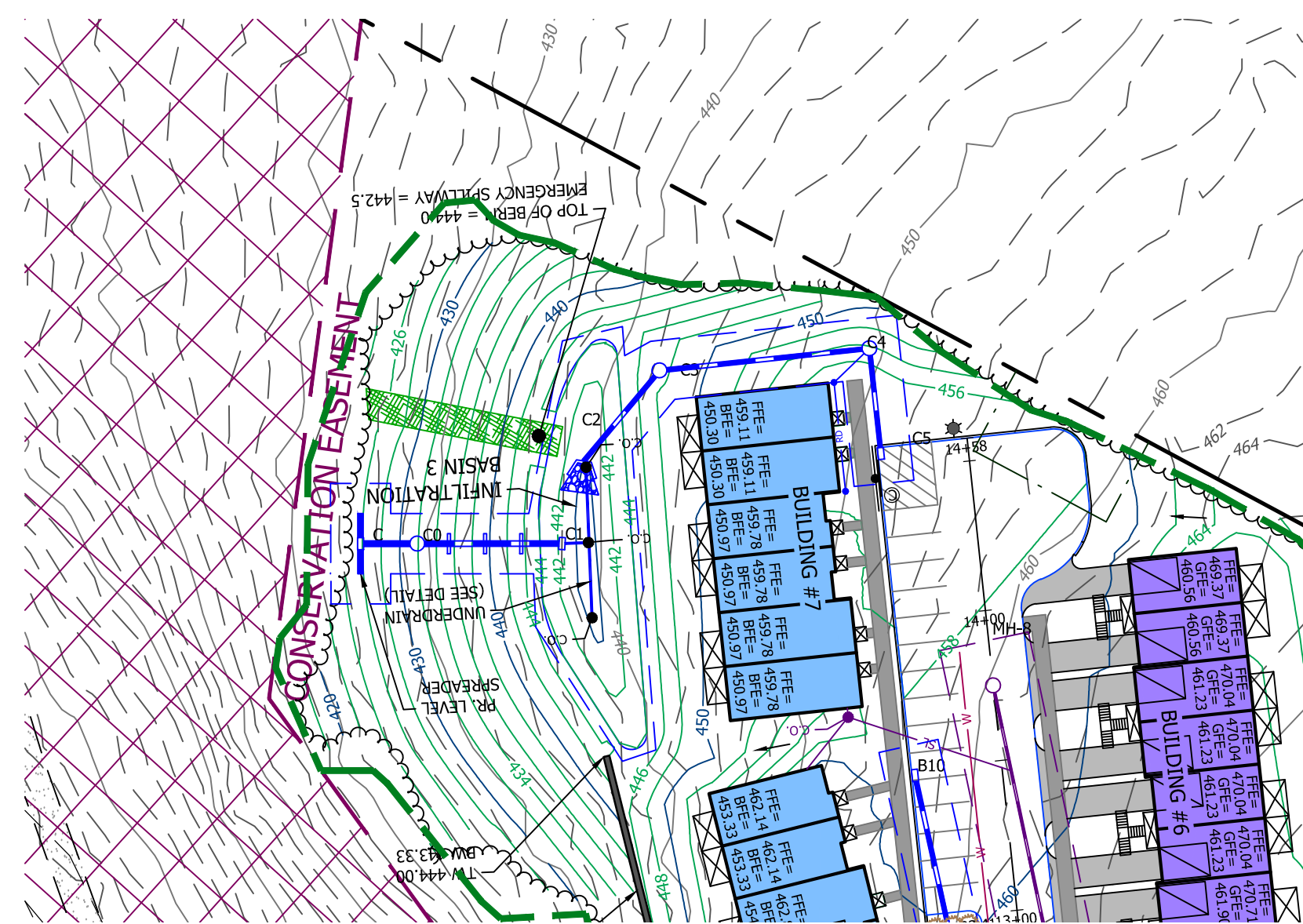
NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	07/16/21
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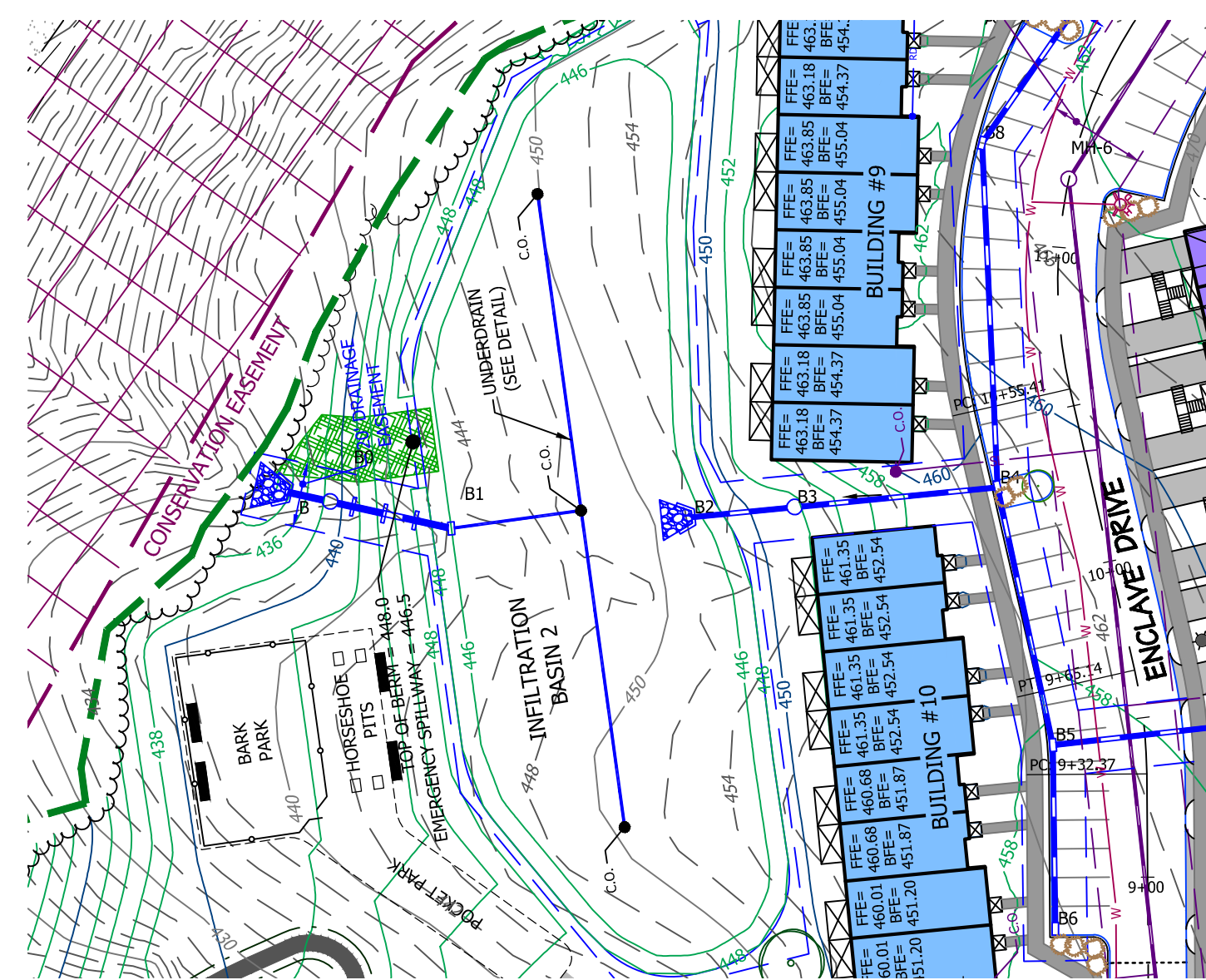


STORM SEWER PROFILES
FOR
ENCLAVE AT ELMERTON
LOCATED IN
SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

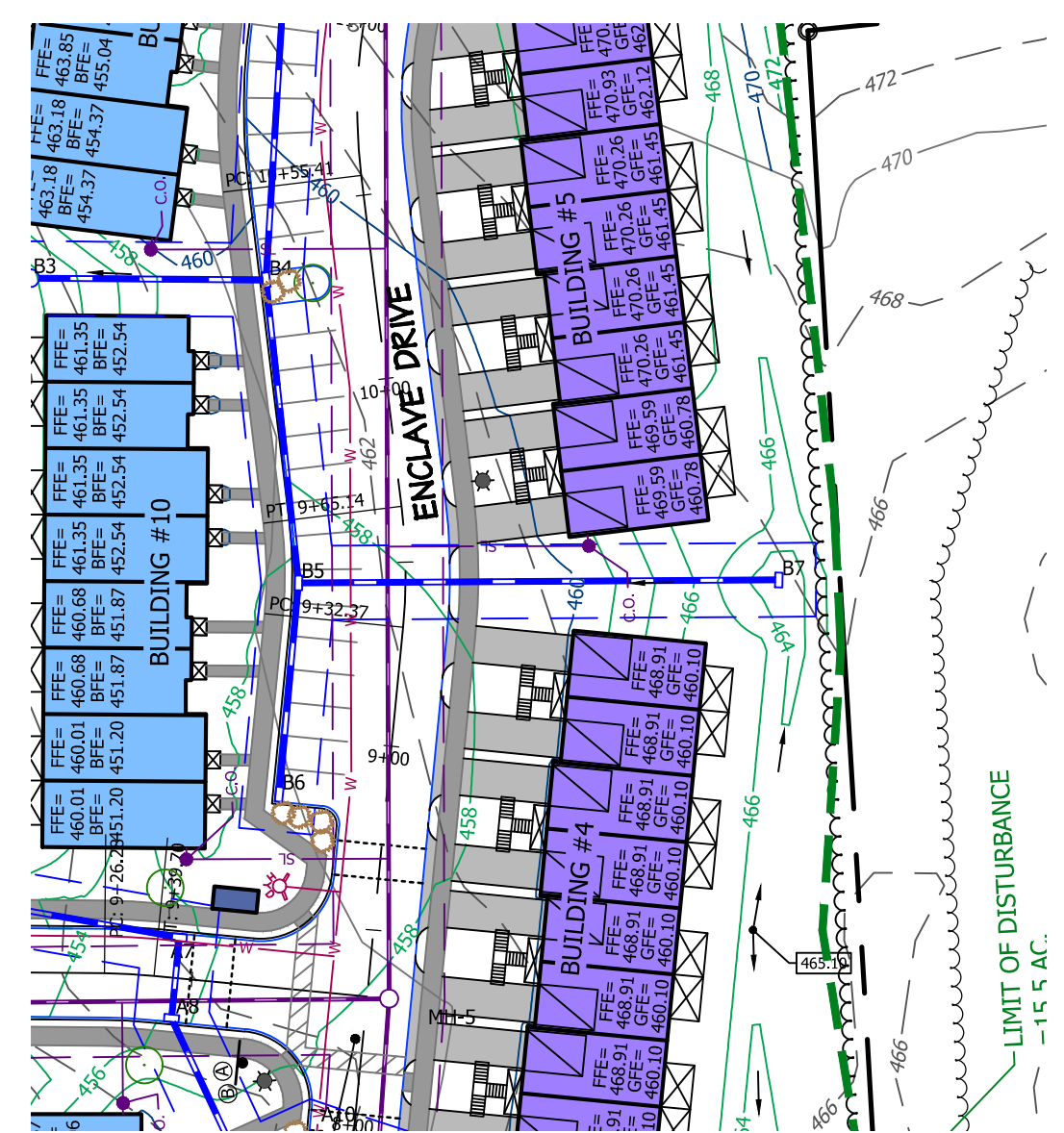
DRAWING ID:	220021-PRO
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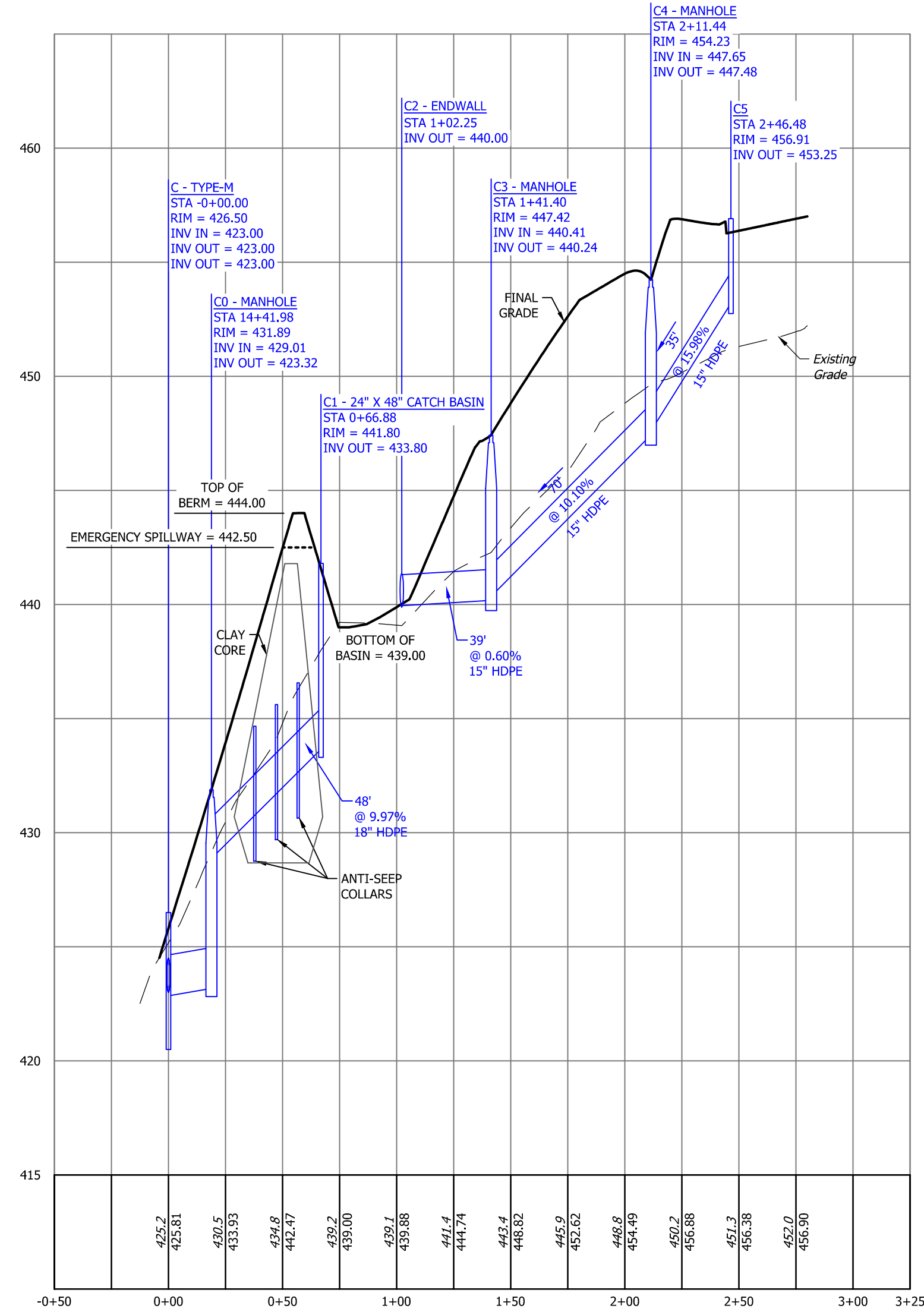
Plan View Of C To C5
Scale: 1"=50'



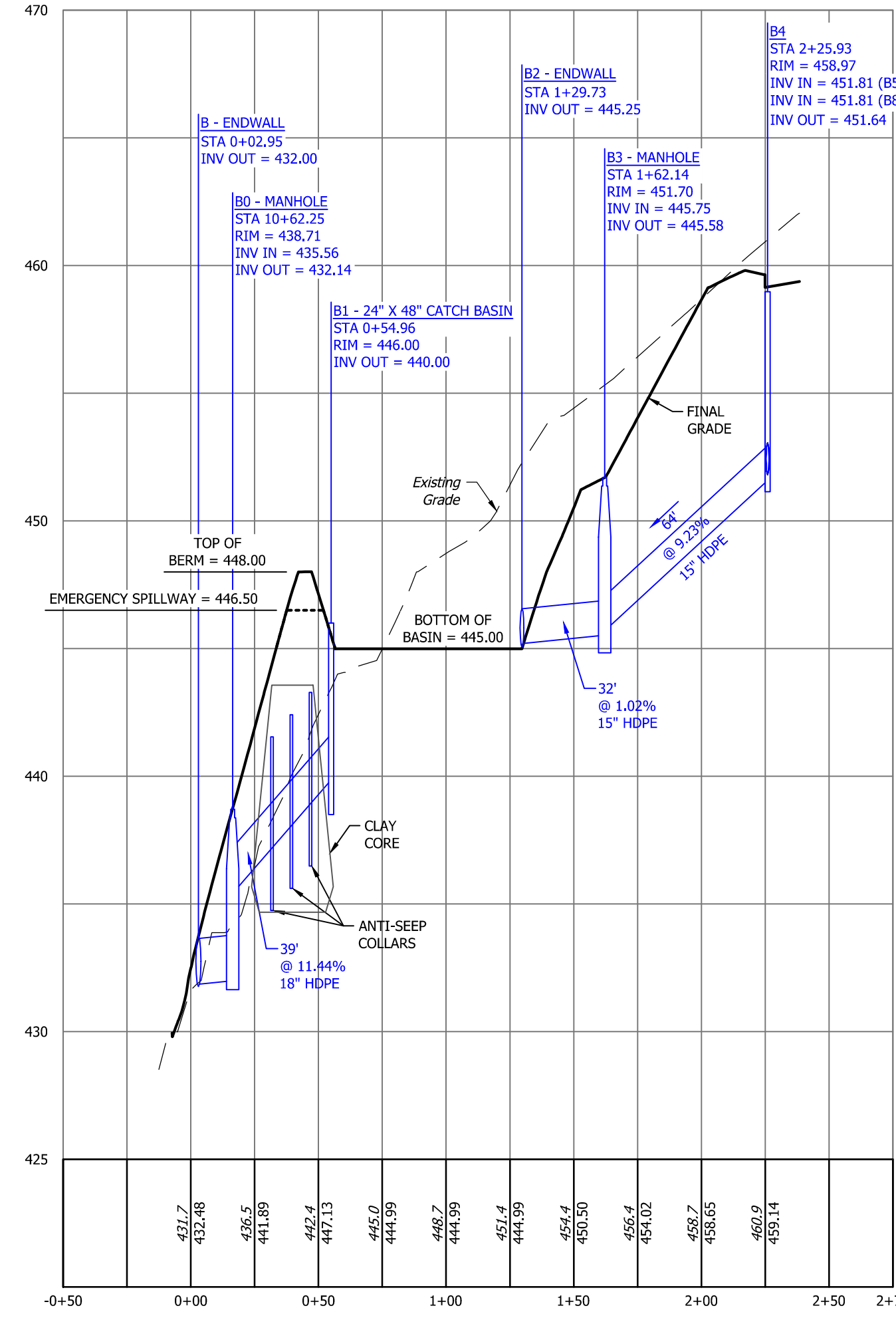
Plan View Of B To B4
Scale: 1"=50'



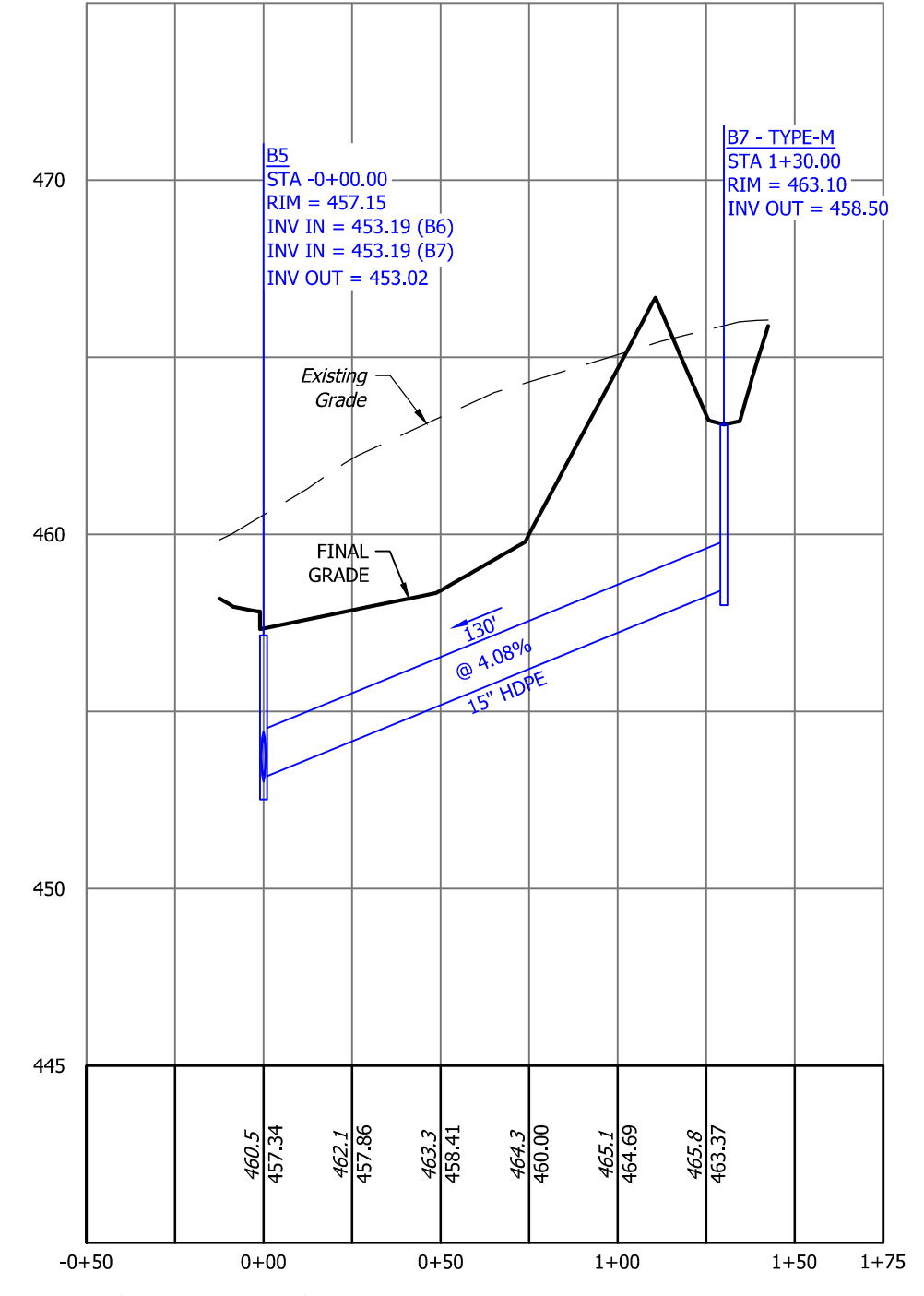
Plan View Of B5 To B7
Scale: 1"=50'



Profile View Of C To C5 (Basin 3) Sta: -0+50.00 - 3+25.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'



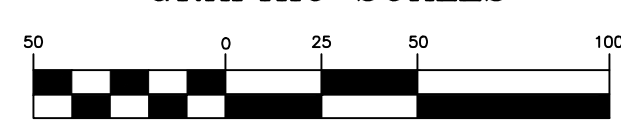
Profile View Of B To B4 (Basin 2) Sta: -0+50.00 - 2+75.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'



Profile View Of B5 To B7 Sta: -0+50.00 - 1+75.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'

NOTES:
ALL INLETS ARE TYPE 'C' UNLESS OTHERWISE NOTED.
ALL TYPE 'C' INLETS ARE SUMPED 2'.

GRAPHIC SCALES



(IN FEET)
1 inch = 50 ft.

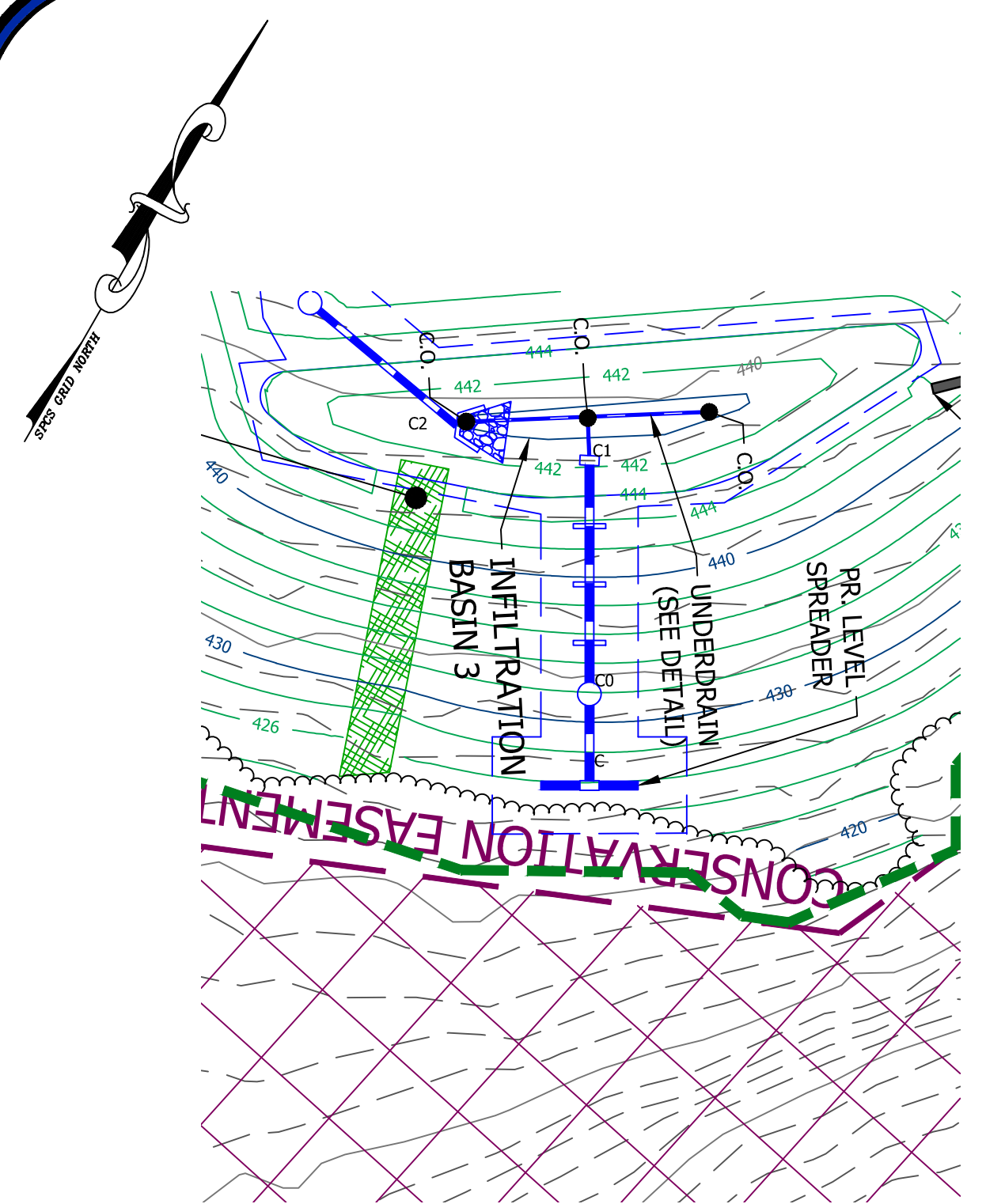
NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	07/16/21
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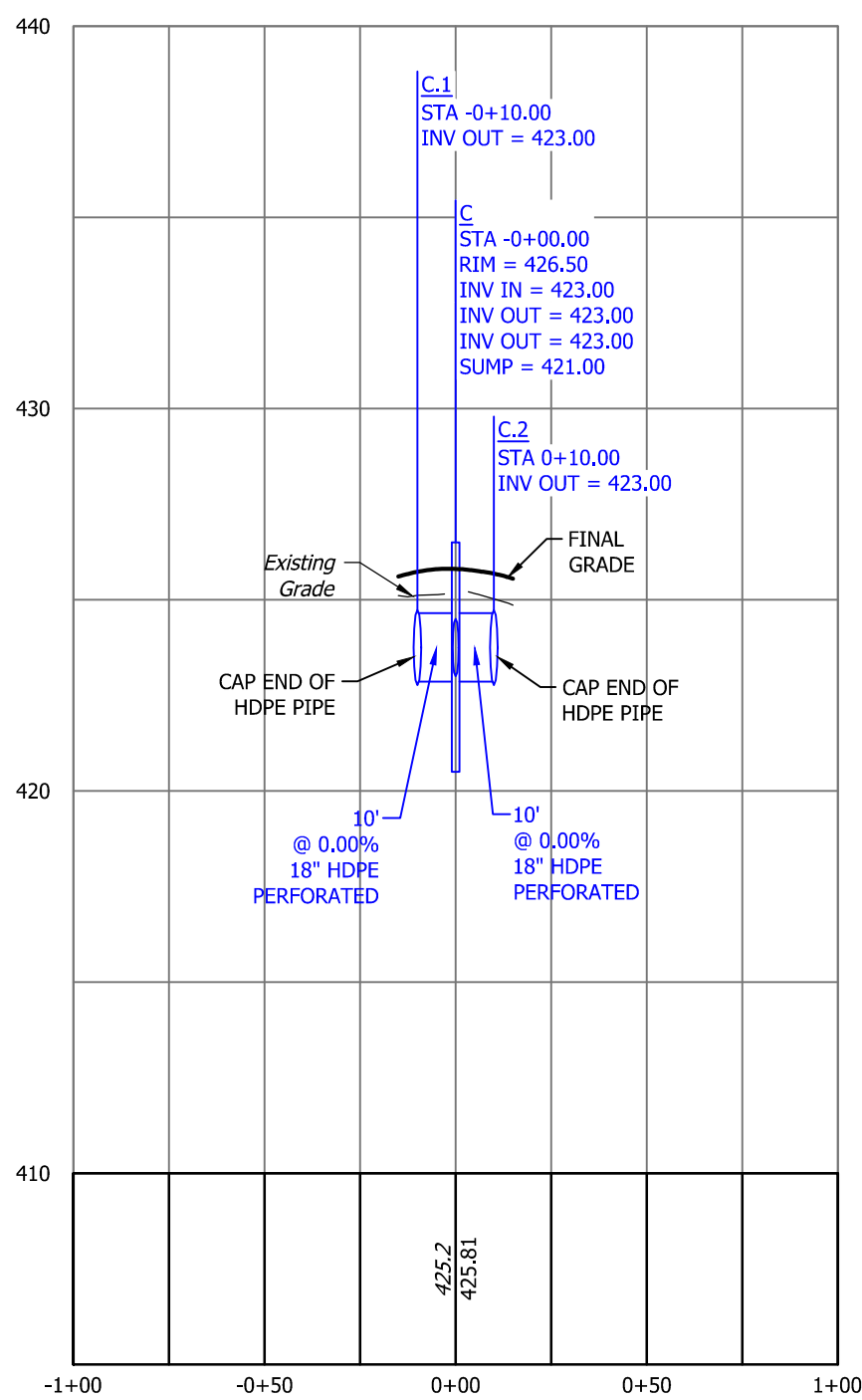


STORM SEWER PROFILES
FOR
ENCLAVE AT ELMERTON
LOCATED IN
SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

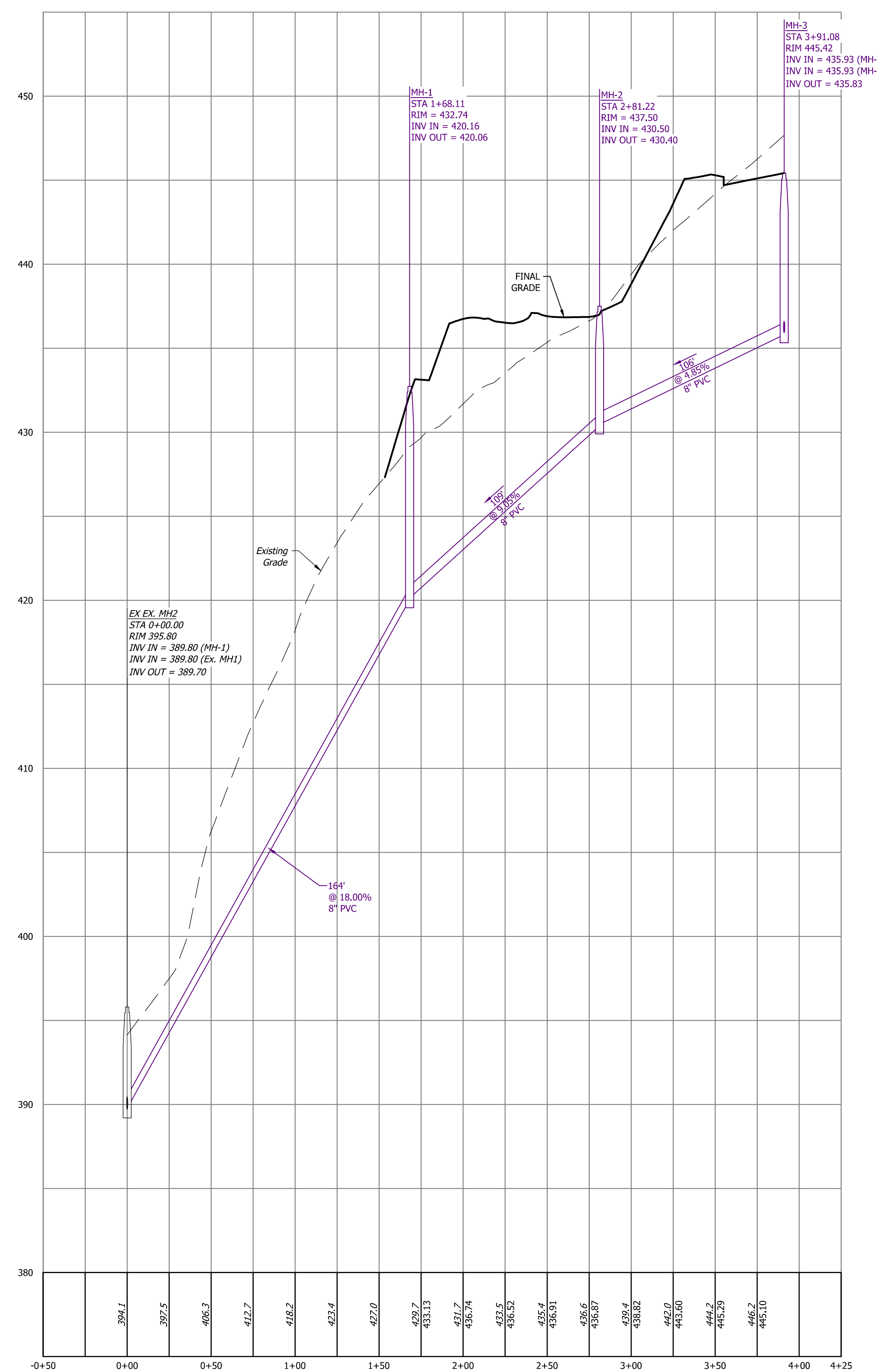
DRAWING ID:	220021-PRO
PROJECT:	220021
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SHEET:	18 OF 29



Plan View Of Outlet C (Level Spreader)
Scale: 1"=50'



Profile View Of Outfall C (Level Spreader) Sta: -1+00.00 - 1+00.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'

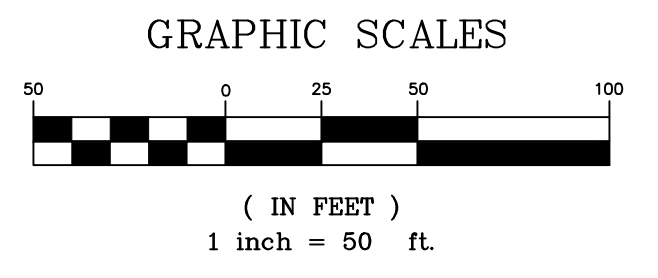


Profile View Of EX. MH2 To MH 3 Sta: -0+50.00 - 4+25.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'



Plan View Of EX. MH 2 To MH 3
Scale: 1"=50'

NOTES:
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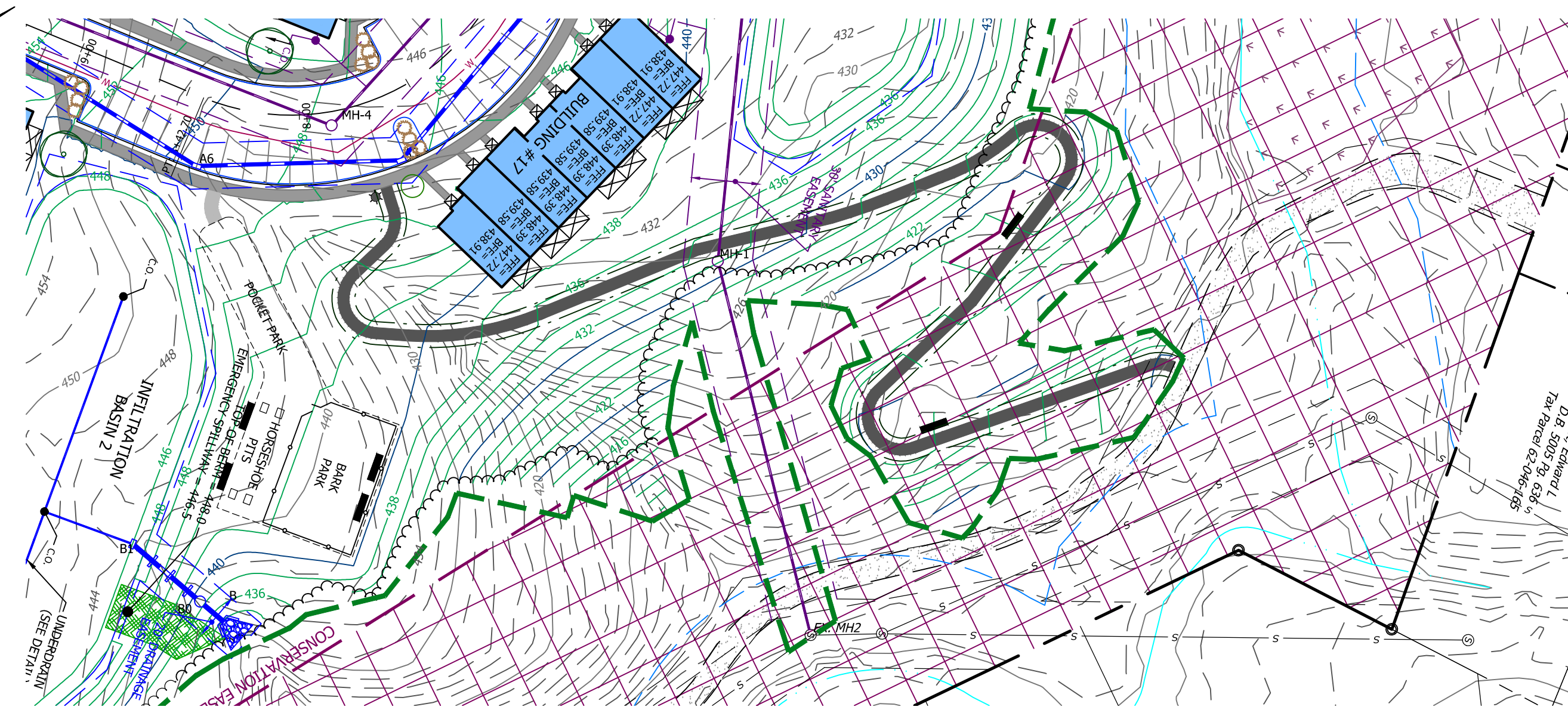
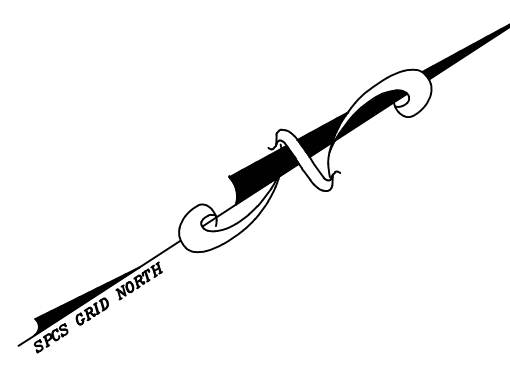
NO.	REVISION	DATE
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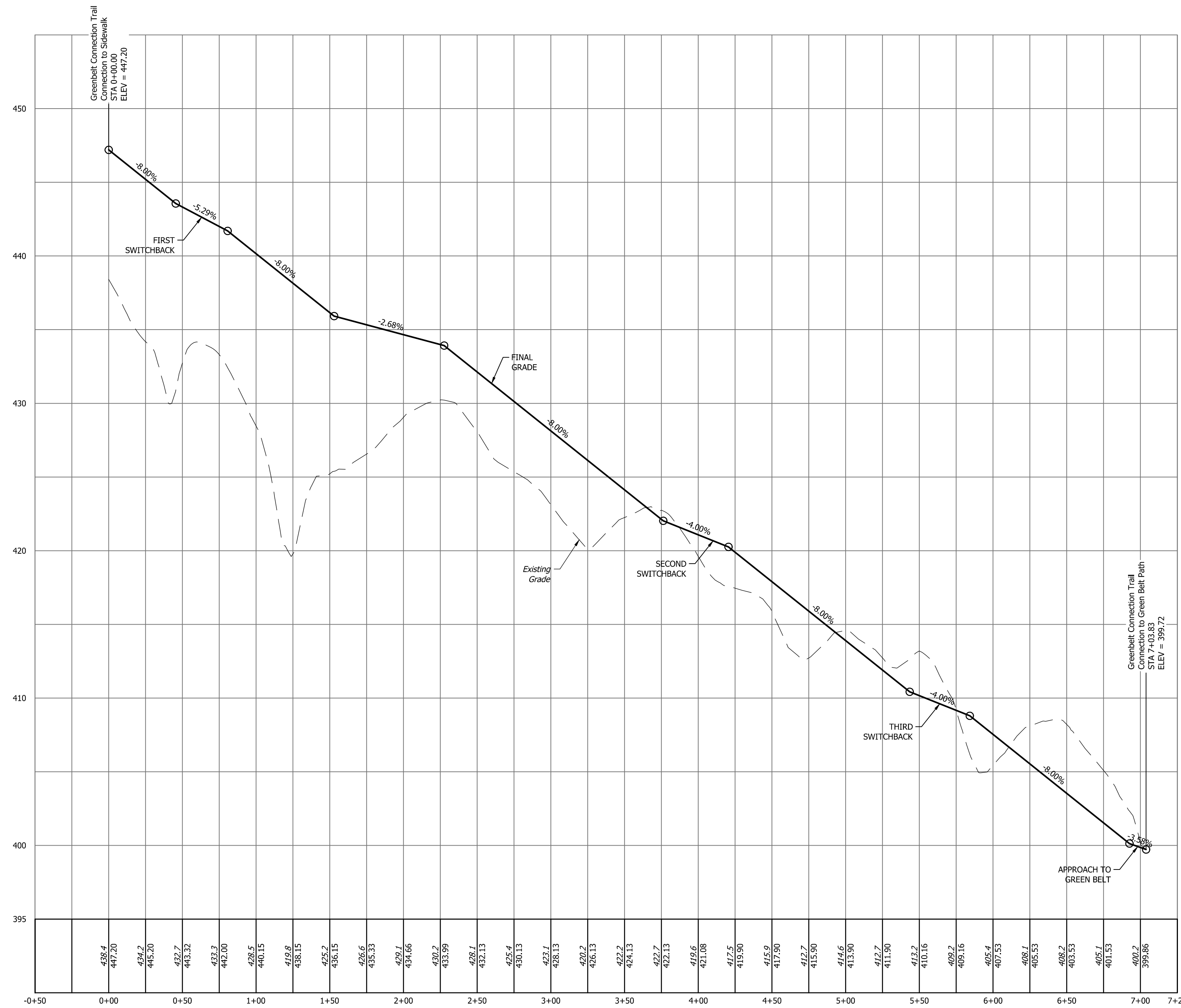


STORM & SANITARY SEWER PROFILES
FOR
ENCLAVE AT ELMERTON
LOCATED IN
SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

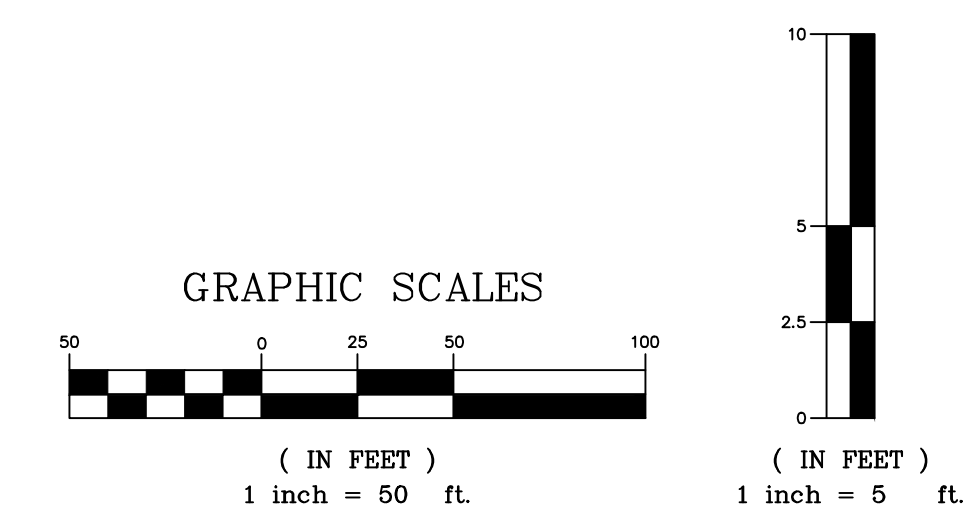
DRAWING ID:	220021-PRO
PROJECT:	220021
DATE:	06/11/21
SHEET:	19 OF 29



Plan View Of Greenbelt Connection Trail
Scale: 1"=50'



Profile View Of Greenbelt Connection Trail Sta: -0+50.00 - 7+25.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'



NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	07/16/21
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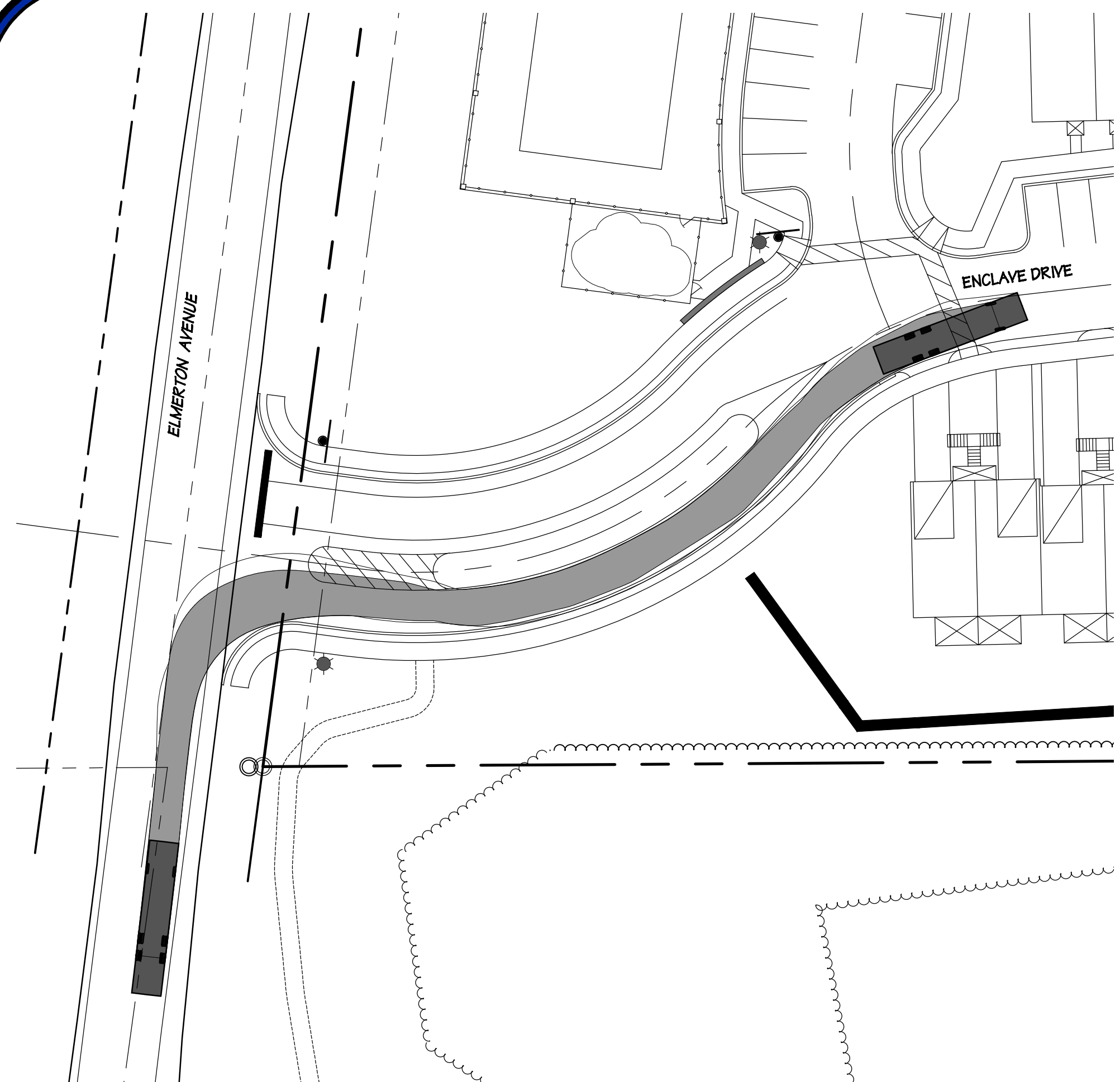


GREENBELT CONNECTION TRAIL PROFILE
FOR
ENCLAVE AT ELMERTON
LOCATED IN
SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

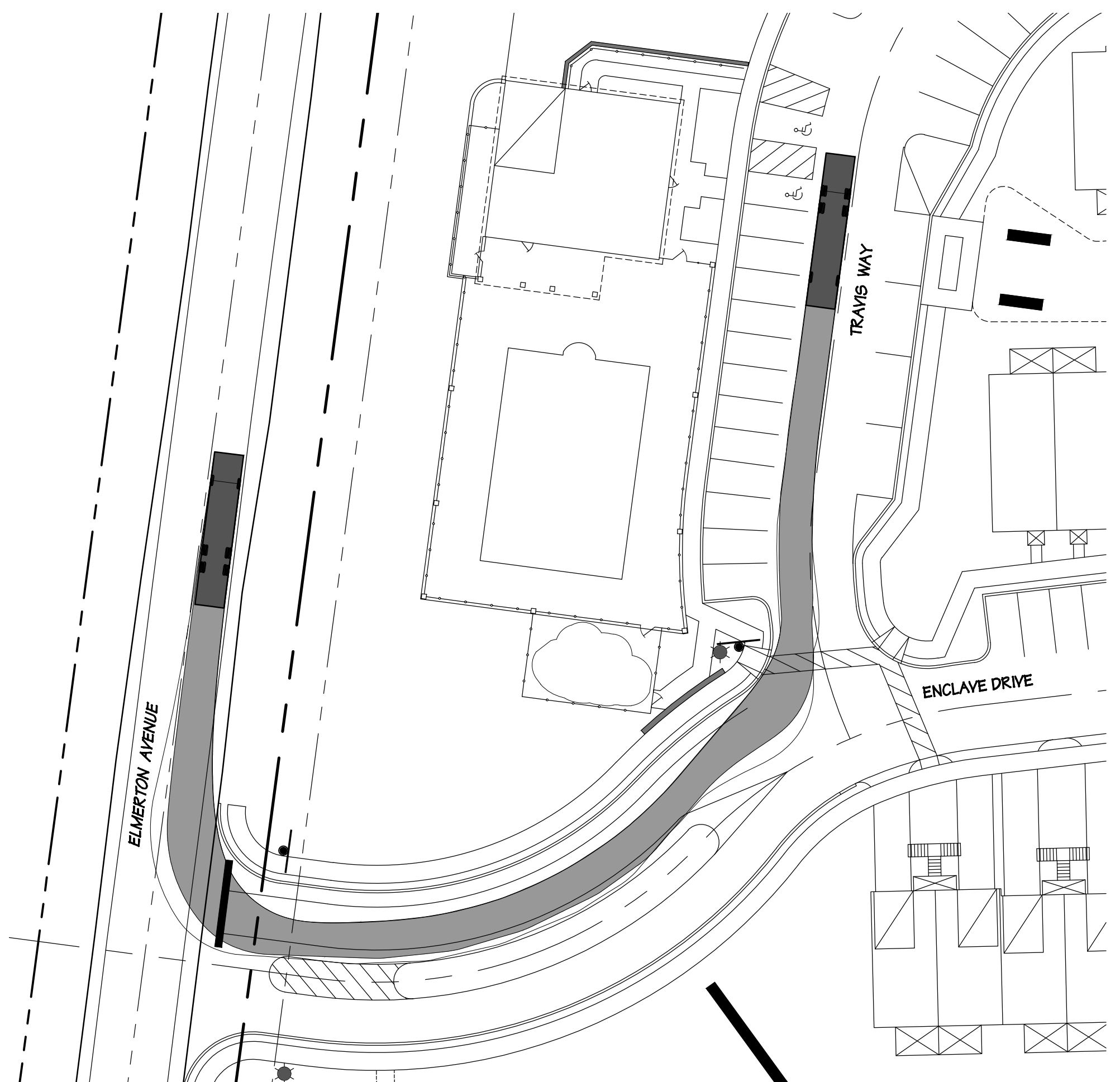
DRAWING ID:	220021-PRO
PROJECT:	220021
DATE:	06/11/21
SHEET:	20 OF 29

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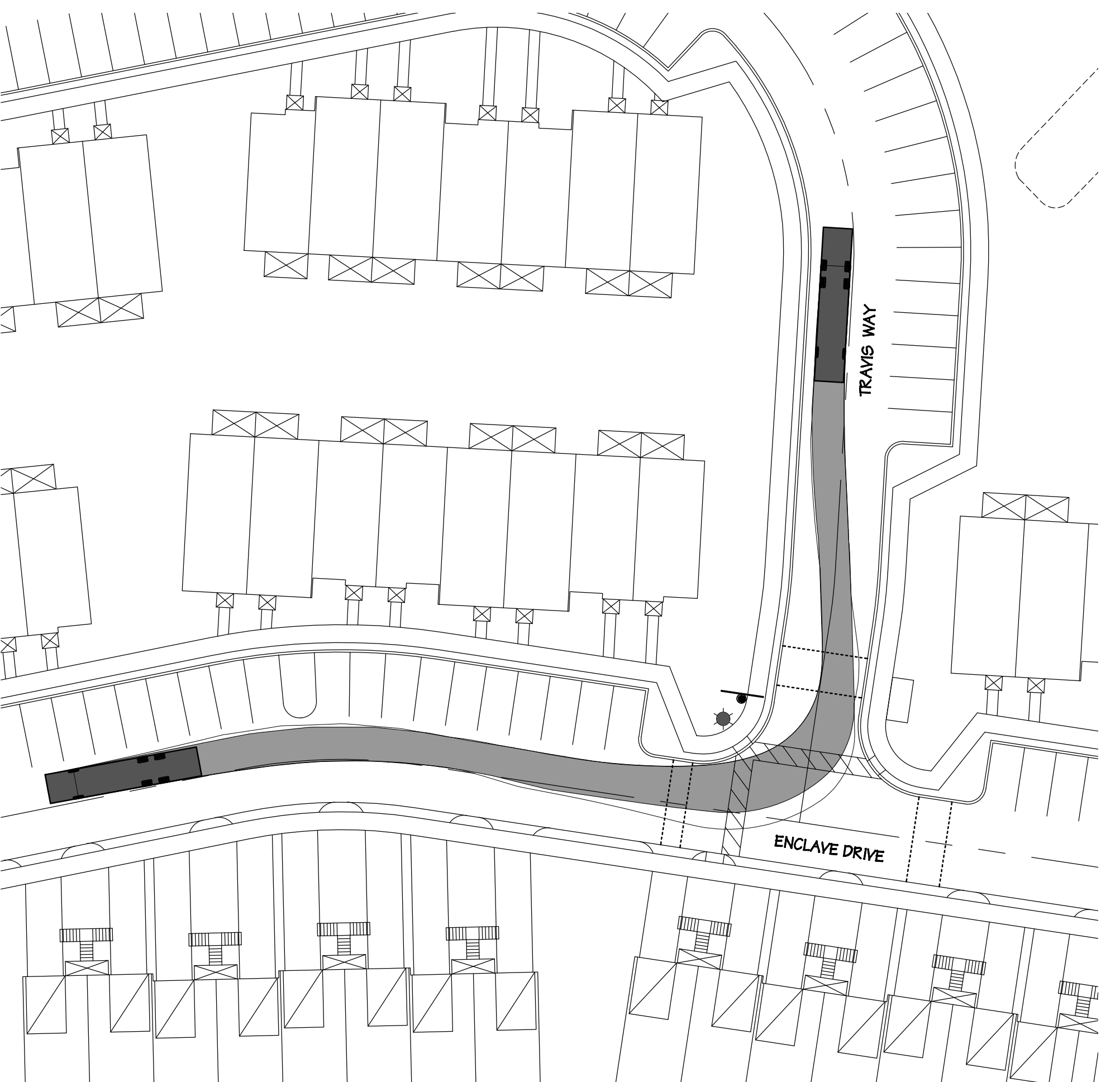
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DATE: 06/11/21 10:48 AM
USER: JFISHER



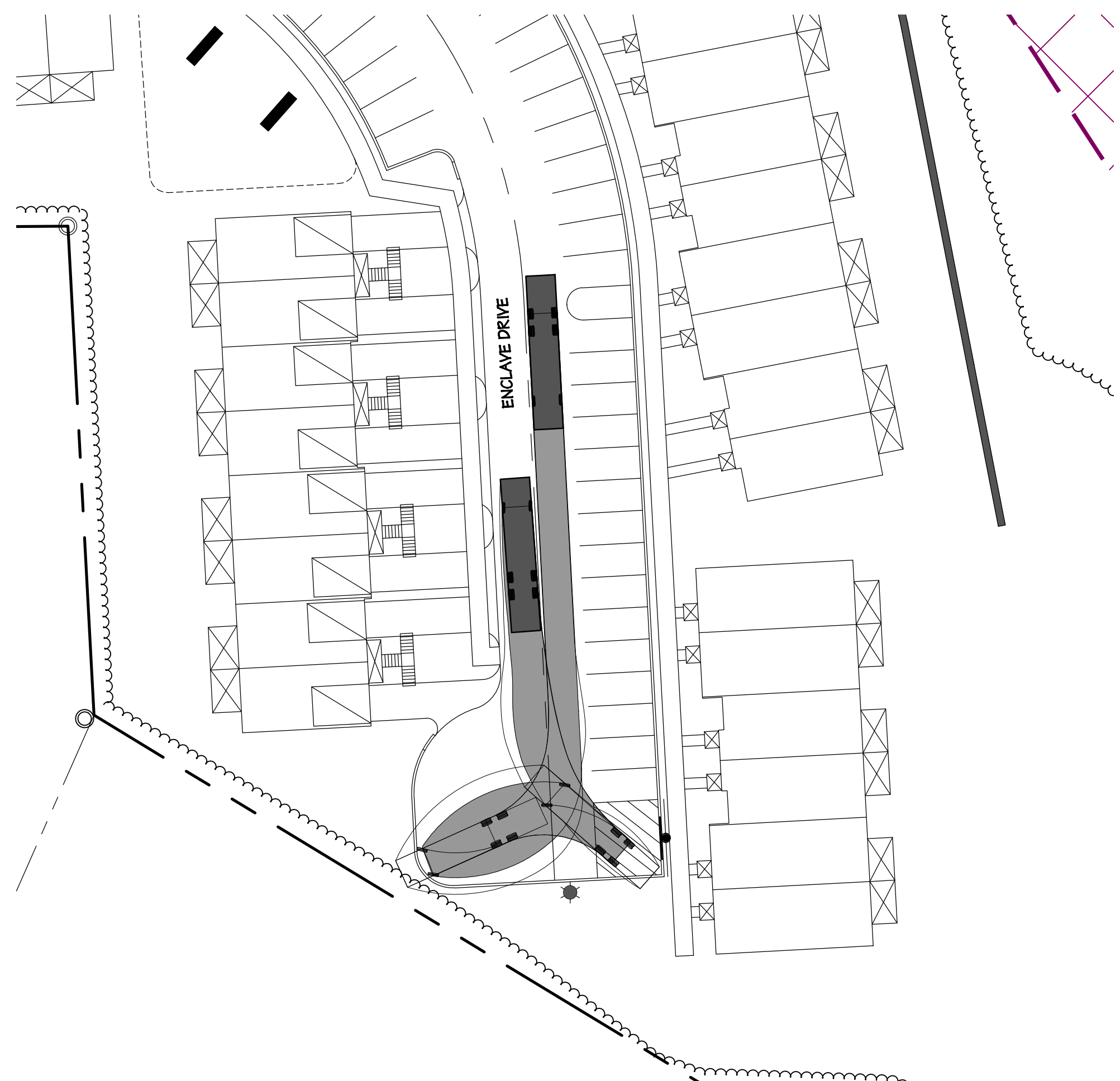
FIRE TRUCK
TRAVELING NORTHEAST ON ELMERTON AVENUE
TURNING RIGHT ONTO ENCLAVE DRIVE



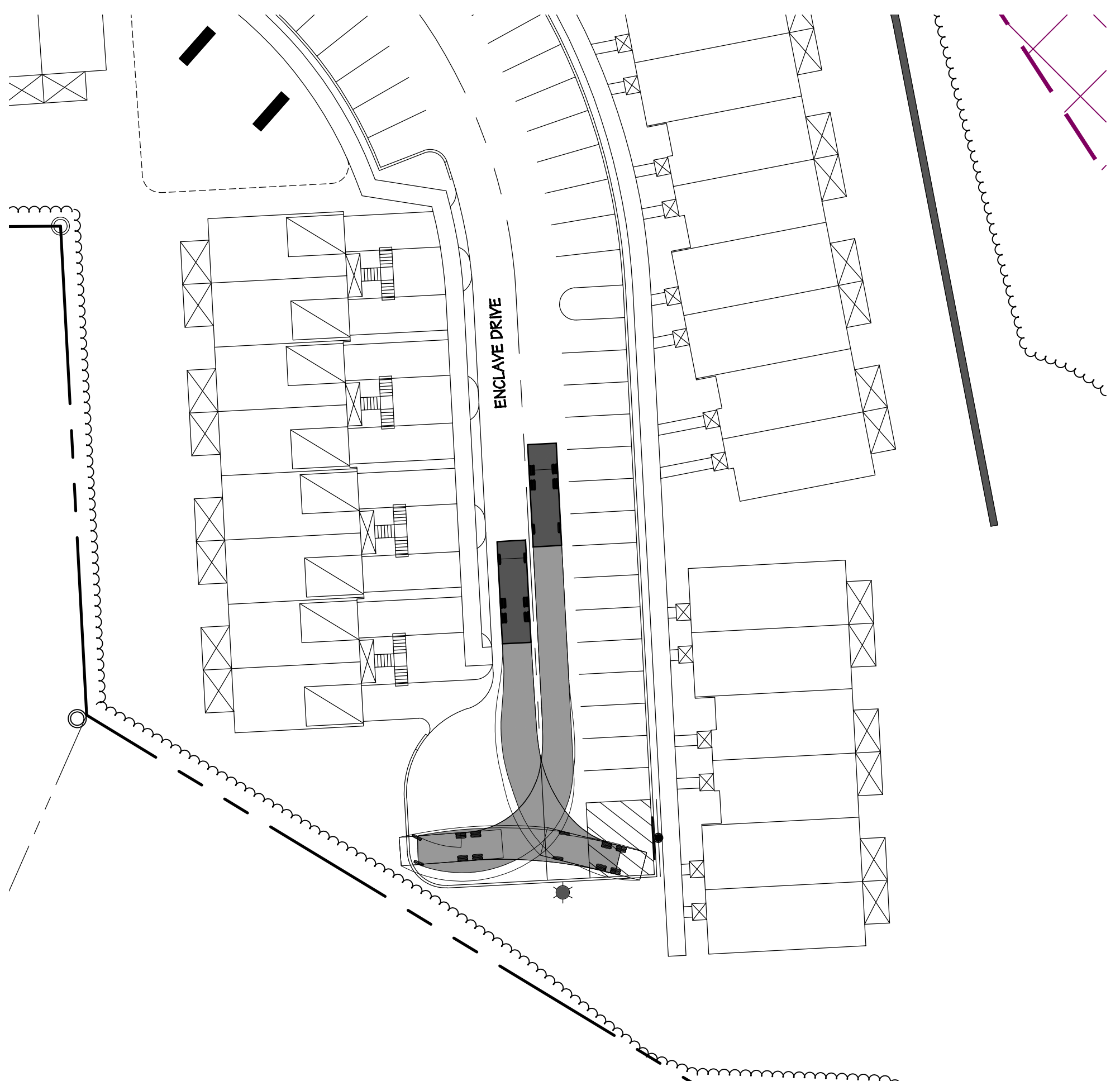
FIRE TRUCK
TRAVELING SOUTHWEST ON TRAVIS WAY TURNING RIGHT ONTO ENCLAVE DRIVE AND
TRAVELING NORTHWEST ON ENCLAVE DRIVE AND TURNING RIGHT ON ELMERTON AVENUE



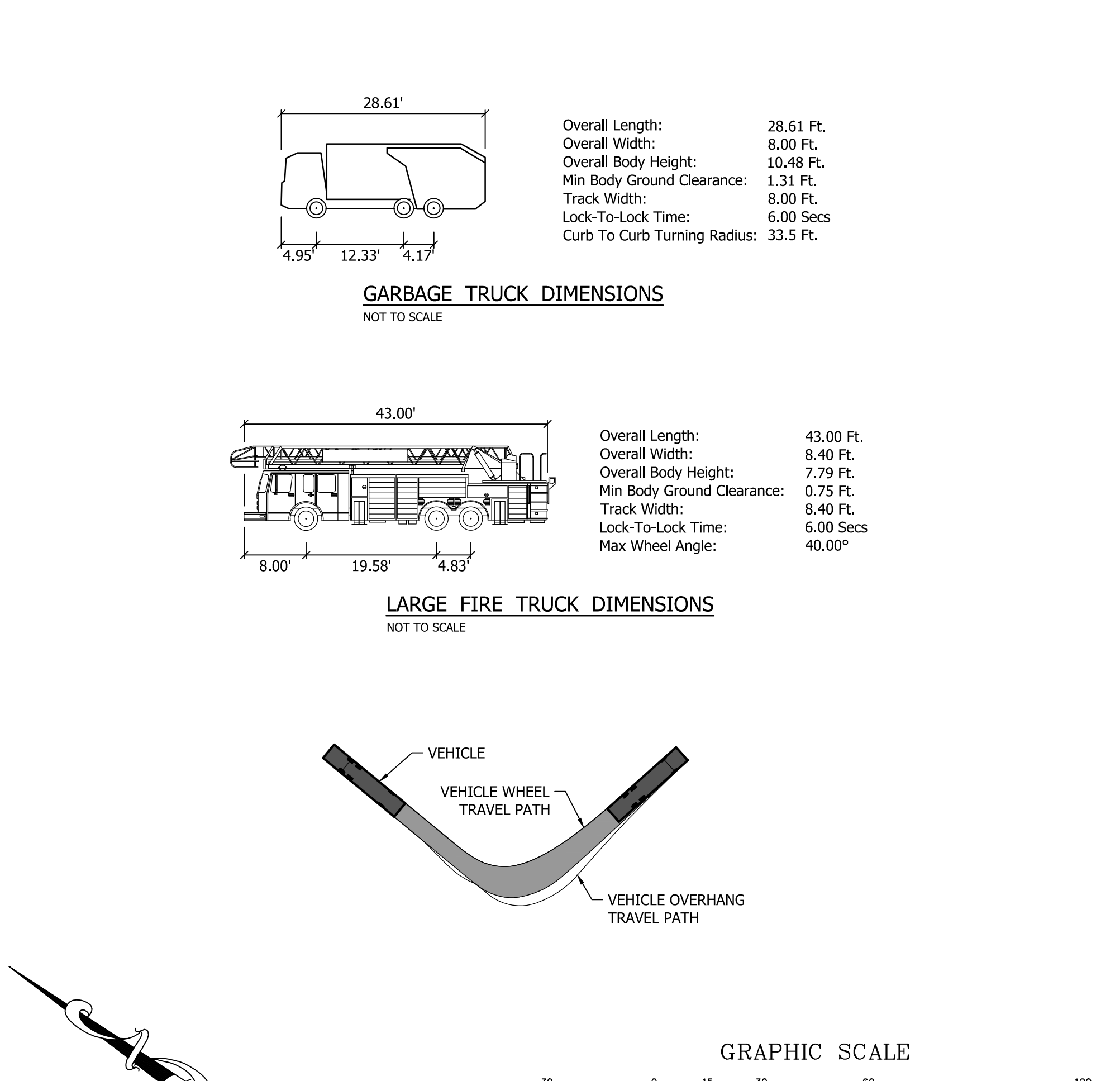
FIRE TRUCK
TRAVELING SOUTHWEST ON TRAVIS LANE
TURNING RIGHT ONTO ENCLAVE DRIVE



FIRE TRUCK
TRAVELING SOUTHWEST ON ENCLAVE DRIVE
TURNING AROUND ON ENCLAVE DRIVE



GARBAGE TRUCK
TRAVELING SOUTHWEST ON ENCLAVE DRIVE
TURNING AROUND ON ENCLAVE DRIVE



NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	07/16/21
2		
3		
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5		

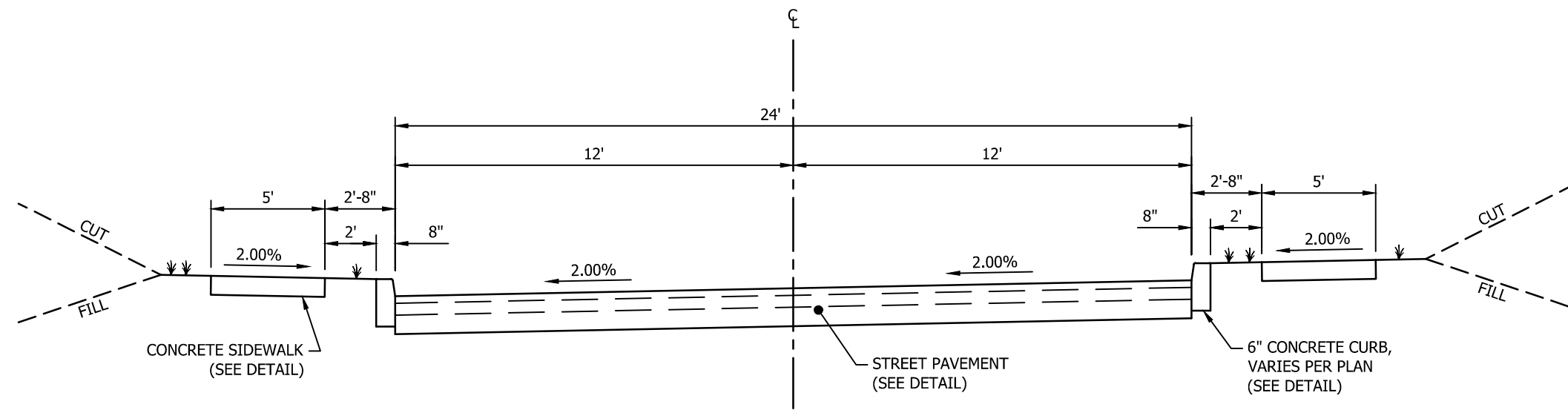
R. J. FISHER & ASSOCIATES, INC.
SITE PLANNING ◻ CIVIL ENGINEERING ◻ LAND SURVEYS
1546 BRIDGE STREET, NEW CUMBERLAND, PA. 17070
PHONE: (717) 774-7534 ◻ FAX: (717) 774-7190
RJFISHERENGINEERING.COM



TRUCK TURNING PLAN
FOR
ENCLAVE AT ELMERTON
LOCATED IN
SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220021-TRUCK
PROJECT: 220021
DATE: 06/11/21
SHEET: 21 OF 29

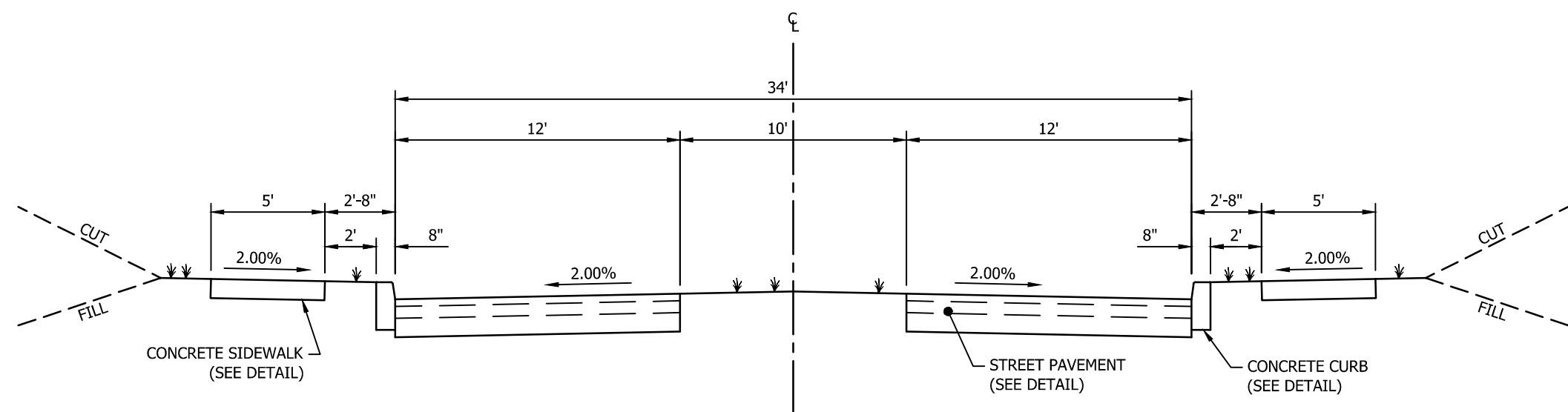
1. ALL DIMENSIONS SHOWN ON THIS DRAWING ARE TO BE CONSIDERED AS APPROXIMATE UNLESS OTHERWISE SPECIFIED.
2. THE USER OF THIS DRAWING SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND REGULATIONS FROM THE APPROPRIATE AGENCIES.
3. THIS DRAWING IS THE PROPERTY OF R. J. FISHER & ASSOCIATES, INC. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN PERMISSION OF R. J. FISHER & ASSOCIATES, INC.



- NOTES:**
1. ALL CONSTRUCTION METHODS AND MATERIALS SHALL BE IN CONFORMANCE WITH SUSQUEHANNA TOWNSHIP STANDARDS.
 2. THE SLOPE OF BANKS ALONG STREETS MEASURED PERPENDICULAR TO THE STREET CENTERLINE SHALL BE NO STEEPER THAN 2 TO 1 FOR CUTS AND 3 TO 1 FOR FILLS. ALL SLOPES SHALL BE SUITABLY PLANTED WITH PERENNIAL GRASSES OR OTHER VEGETATION TO PREVENT EROSION.

PROPOSED STREET CROSS SECTION (PRIVATE)

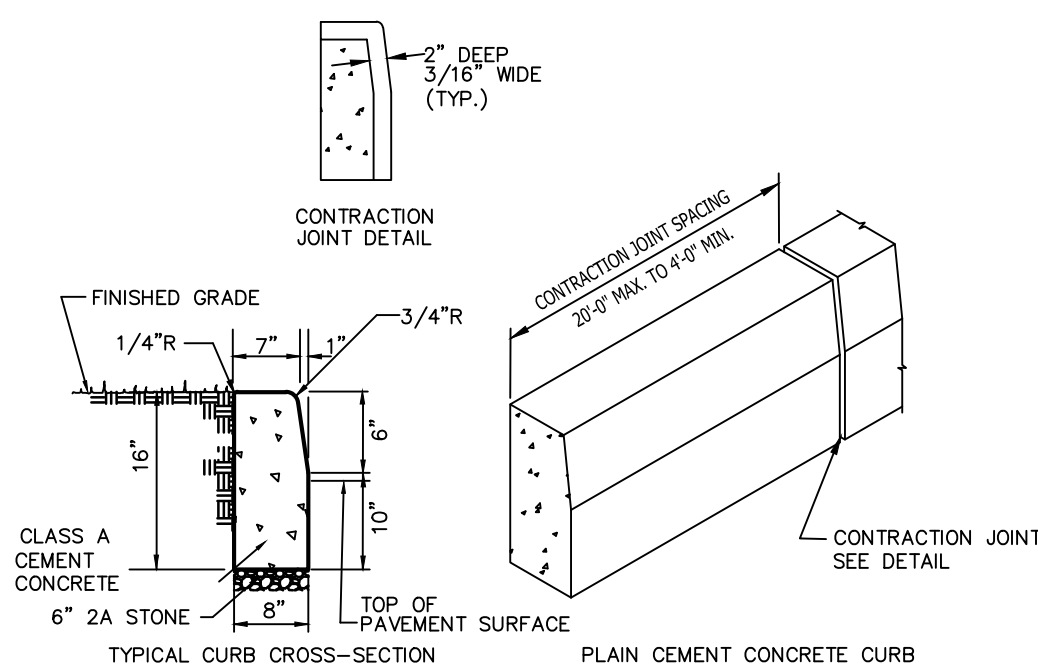
NOT TO SCALE



- NOTES:**
1. ALL CONSTRUCTION METHODS AND MATERIALS SHALL BE IN CONFORMANCE WITH SUSQUEHANNA TOWNSHIP STANDARDS.
 2. THE SLOPE OF BANKS ALONG STREETS MEASURED PERPENDICULAR TO THE STREET CENTERLINE SHALL BE NO STEEPER THAN 2 TO 1 FOR CUTS AND 3 TO 1 FOR FILLS. ALL SLOPES SHALL BE SUITABLY PLANTED WITH PERENNIAL GRASSES OR OTHER VEGETATION TO PREVENT EROSION.

PROPOSED BOULEVARD CROSS SECTION (PRIVATE)

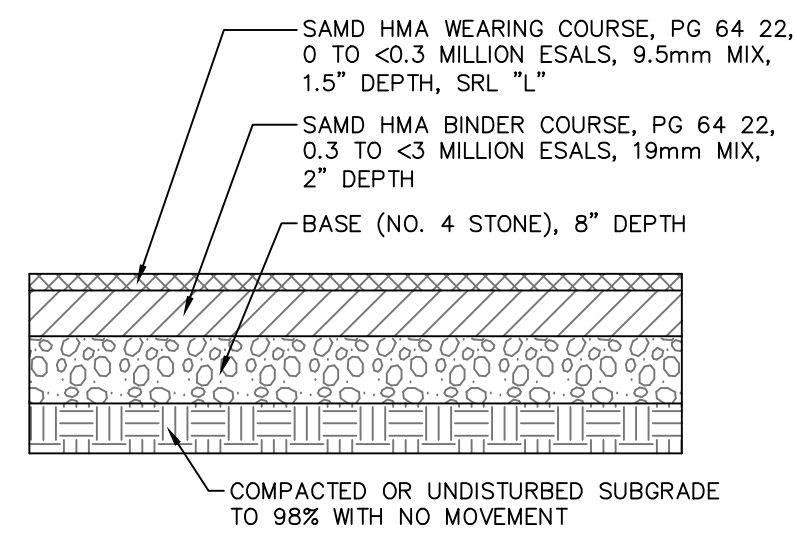
NOT TO SCALE



- 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 GUTTER.
 2. SPACE CONTRACTION JOINTS IN UNIFORM LENGTHS OR SECTIONS.
 3. PLACE 3/4-INCH PREMOISTENED 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.

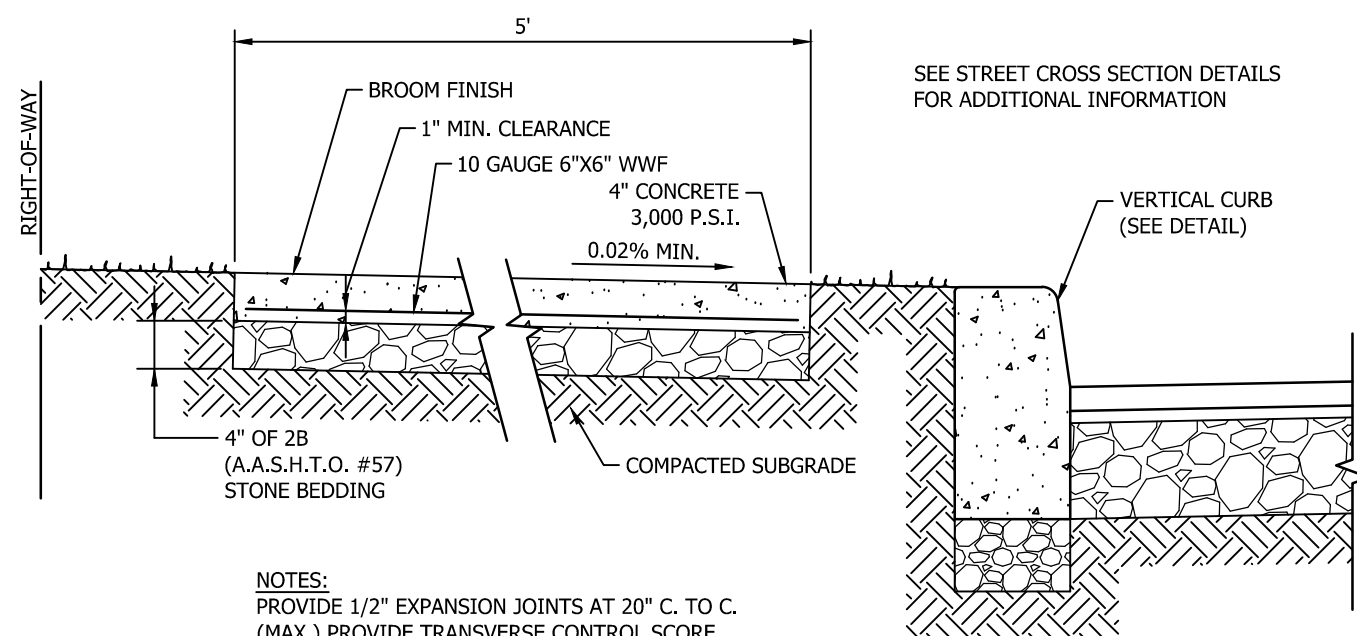
6" VERTICAL CONCRETE CURB DETAIL

NOT TO SCALE



PRIVATE STREET / PARKING PAVING DETAIL

NOT TO SCALE

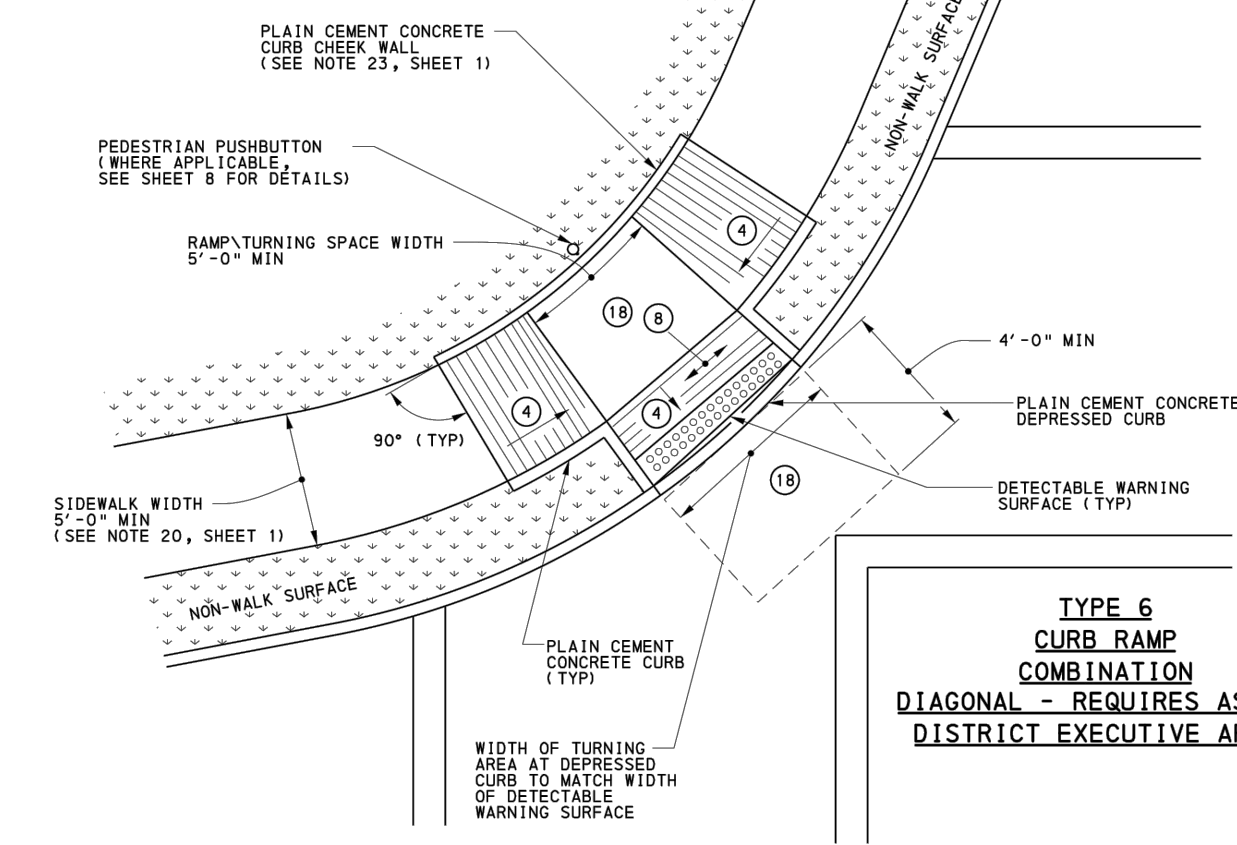


- NOTES:**
1. PROVIDE 1/2" EXPANSION JOINTS AT 20' C. TO C. (MAX.) PROVIDE TRANSVERSE CONTROL SCORE JOINTS AT 5' C. TO C. (MIN.)

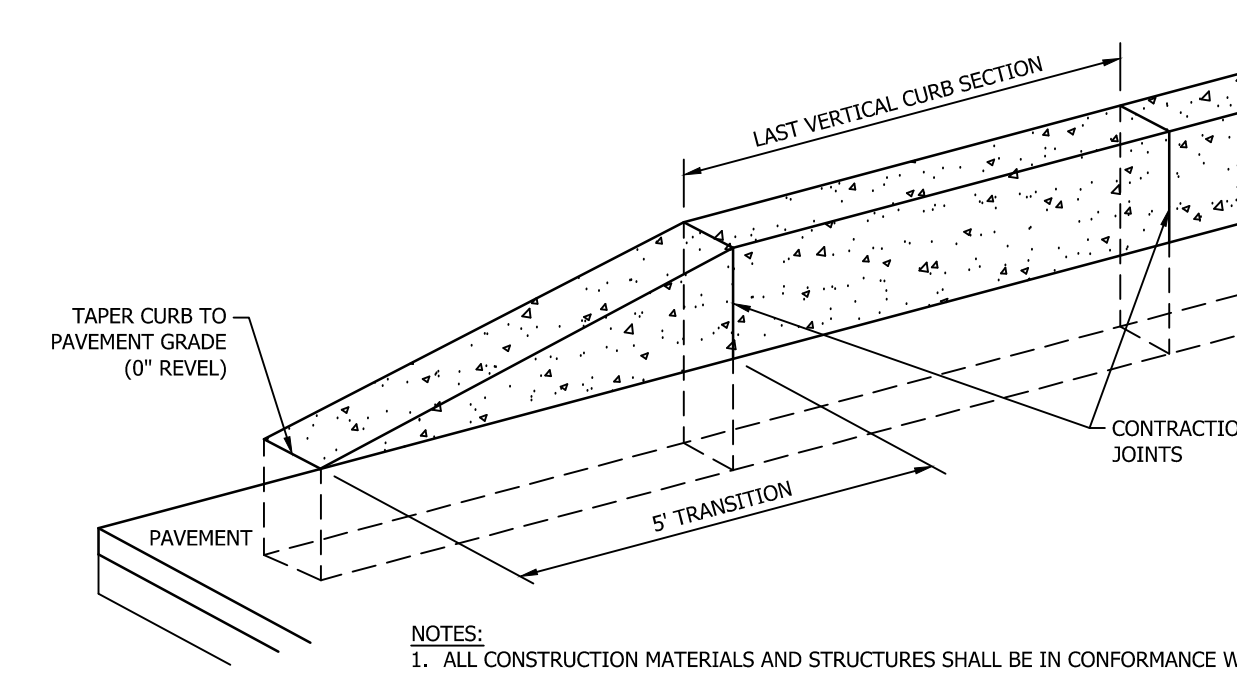
TYPICAL CONCRETE WALK DETAIL

NOT TO SCALE

- NOTES:**
1. SIDE FLARES 10.00% MAX SLOPE.
 2. 8.33% MAX RAMP SLOPE, SEE NOTE 8 SHEET 1.
 3. CURB RAMP WIDTH IS EQUAL TO SIDEWALK WIDTH WHEN THE SIDEWALK WIDTH IS GREATER THAN OR EQUAL TO 4'-0".
 4. SLOPE ZERO + 2.00%.
 5. CURB RAMP REQUIRE A TURNING SPACE WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SEE DETAILS FOR LOCATIONS AND DIMENSIONS.



TYPE 6 CURB RAMP COMBINATION DIAGONAL - REQUIRES ASSISTANT DISTRICT EXECUTIVE APPROVAL



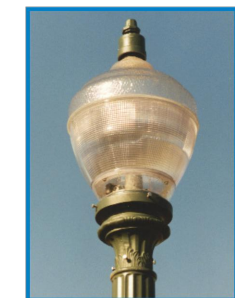
- NOTES:**
1. ALL CONSTRUCTION MATERIALS AND STRUCTURES SHALL BE IN CONFORMANCE WITH PENNDOT STANDARDS FOR ROADWAY CONSTRUCTION AS AMENDED.
 2. ALL CURBING SHALL BE IN CONFORMANCE WITH RC-64M STANDARDS.
 3. CURB TAPER SHALL BE PROVIDED AT CURB ENDS WITH A 5' TRANSITION AND 0" TERMINUS REVEL.

END TRANSITION FOR STANDARD VERTICAL CURBING

NOT TO SCALE

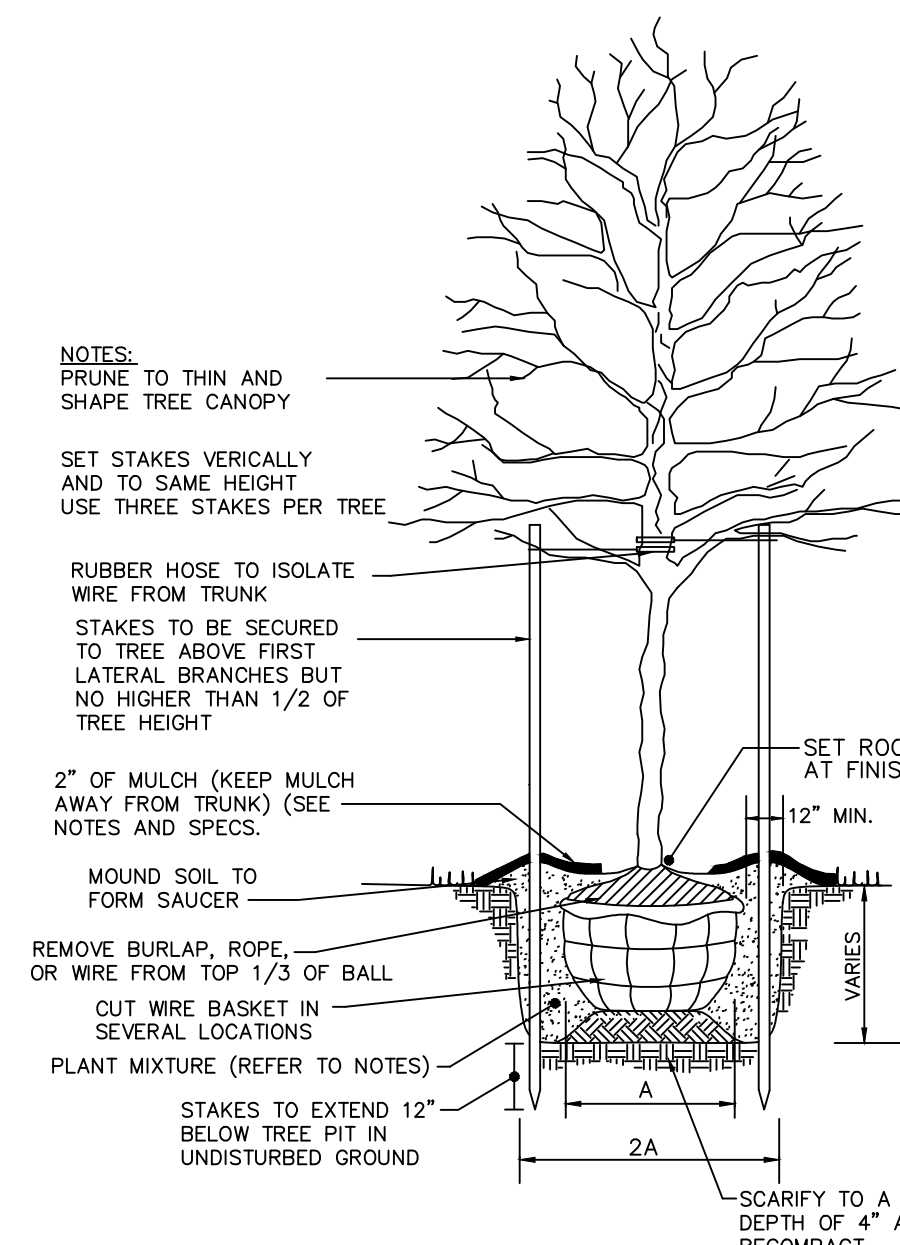
OUTDOOR LIGHTING

Acorn



- LUMINAIRE:** Acorn, black or green
- FIXTURE SIZE:** 2,600 lumen (36 watt) or 3,800 lumen (53 watt)
- FIXTURE TYPE:** Light-Emitting Diode (LED)
- POLE:** 11 or 13 foot black or green fiberglass, boulevard style, mounted on concrete foundation
- ALTERNATE POLE:** 14 foot round black steel or spun aluminum
- ELECTRIC SUPPLY:** Underground
- RATE:** Low-mount underground, Rate Schedule SLE
Light-Emitting Diode (LED)

Want to know more about the PPL Electric Utilities Outdoor Lighting Program?
Call your PPL Electric Utilities representative or PPL Electric Utilities Customer Service Business Accounts 1-888-220-9991, option 4 on IVR during business hours 8 a.m. to 5 p.m.



DECIDUOUS TREE PLANTING

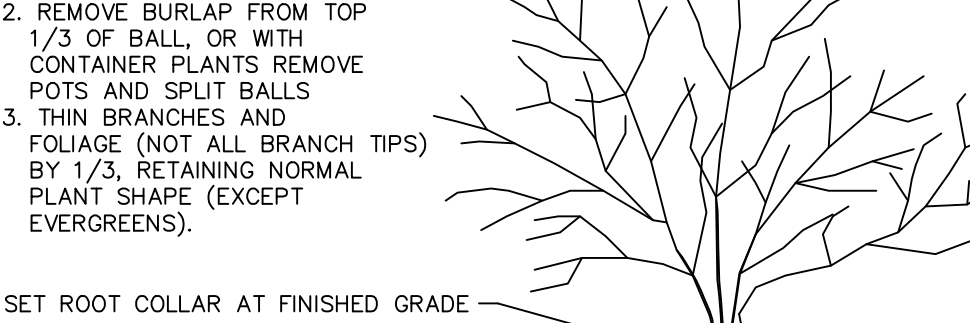
NTS

LANDSCAPE PLANT NOTES

- PLANTING BED MULCH SPECIFICATION**
1. ALL PROPOSED PLANTING BEDS, AS SHOWN, SHALL BE MULCHED WITH A 3 INCH MINIMUM DEPTH OF PREMIUM MULCH OF LIKE KIND, QUALITY, TEXTURE AND COLOR TO THE EXISTING MULCH WHICH CURRENTLY EXISTS IN CLOSE PROXIMITY TO THE PROPOSED IMPROVEMENTS.
 2. ALL PROPOSED MULCH SHALL BE INSTALLED IN STRICT CONFORMANCE WITH THE SUPPLIER'S SUGGESTED RECOMMENDATIONS AND SPECIFICATIONS.

- PLANT BACKFILL MIXTURE**
1. TO CONSIST OF REMOVED TOPSOIL AND SUBGRADE FROM THE DUG HOLE ONLY, THOROUGHLY MIXED WITH ALL ROOTS AND STONES REMOVED PRIOR TO REPLACEMENT IN THE HOLE.

- NOTES:**
1. DO NOT PRUNE EVERGREENS EXCEPT TO REMOVE DAMAGED BRANCHES
 2. REMOVE BURLAP FROM TOP 1/3 OF BALL, OR WITH CONTAINER PLANTS REMOVE POTS AND SPLIT BALLS
 3. THIN BRANCHES AND FOLIAGE (NOT ALL BRANCH TIPS) BY 1/3, RETAINING NORMAL PLANT SHAPE (EXCEPT EVERGREENS).



SHRUB PLANTING

GENERAL LANDSCAPE NOTES:

1. ALL DISTURBED SOIL AREAS NOT INDICATED TO BE COVERED WITH BUILDINGS, PAVING OR PLANTING BEDS SHALL BE PERMANENTLY SEEDED AND MAINTAINED WITH TURFGRASS.
2. IF THERE IS A PLANTING CONFLICT WITH ADJACENT IMPROVEMENTS (BUILDINGS, PAVEMENTS, LIGHTS, ETC.) UTILITIES, BEDROCK, EXISTING TREE ROOTS, POOR DRAINAGE AREA, OR OTHER OBSTACLE TO PLANTING, THE CONTRACTOR SHALL ADJUST THE TREE SPACING AND/OR ARRANGEMENT TO COMPLETE THE PLANTING IN ACCORDANCE WITH THE LANDSCAPE DESIGN INTENT.
3. ALL PLANTING AREAS, INCLUDING TURFGRASS AREAS, SHALL RECEIVE A MINIMUM OF 4" TOPSOIL BEFORE PLANTING.
4. NO TREES SHALL BE PLANTED WITHIN 10 FEET OF ANY SANITARY SEWER MAIN.
5. ALL LANDSCAPE MATERIALS SHALL BE PLANTED IN ACCORDANCE WITH THIS PLAN AND ALL APPLICABLE STANDARDS AND REQUIREMENTS OF THE SUSQUEHANNA TOWNSHIP ZONING AND SUBDIVISION/ LAND DEVELOPMENT ORDINANCES.
6. ALL PLANT MATERIALS SHALL BE PLANTED IN ACCORDANCE WITH GOOD NURSERY AND LANDSCAPING PRACTICES WITH ADEQUATE UNPAVED SURFACE AROUND EACH PLANT AND AIR AND WATER PROTECTION 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.
7. ALL PLANT MATERIALS SHALL BE NURSERY GROWN IN A CLIMATE SIMILAR TO THAT OF THE LOCALITY OF THE SUBJECT TRACT.
8. 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.
9. REQUIREMENTS FOR THE MEASUREMENT, BRANCHING, GRADING, QUALITY, BALLING AND BURLAPPING OF PLANT MATERIALS SHALL FOLLOW THE CODES 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.
10. LAYOUT OF PLANTS PRIOR TO PLANTING SHALL BE VERIFIED BY THE OWNER/DEVELOPER AND/OR THEIR REPRESENTATIVE.
11. 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.
12. ALL ROOTS, STAVES, TAGS OR OTHER BRINDINGS 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.
13. 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.
14. PLANT SUBSTITUTIONS MAY BE PERMITTED IF APPROVED BY THE OWNER/DEVELOPER AND SUSQUEHANNA TOWNSHIP. 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.
15. 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.
16. IF ANY DISCREPANCIES BETWEEN QUANTITIES IN PLANTING SCHEDULES AND THOSE SHOWN ON THE PLAN, THE PLAN SHALL GOVERN.
17. PLANT BACKFILL MIX SHALL BE 75% TOPSOIL AND 25% PEAT (TOPSOIL & PEAT CONFORMING TO PENNDOT PUB. 408, SECTION 802 SPECIFICATIONS).

SHORT TERM LANDSCAPE MAINTENANCE PLAN:

(FOR 18 MONTHS FOLLOWING INSTALLATION or MAINTENANCE BOND ISSUANCE WHICHEVER IS LONGER)

1. The landscape contractor and/or lot owner shall be responsible for watering plant material and lawn areas before, during and after installation for the duration of the warranty period.
2. Lawn areas shall be watered once weekly during dry periods of the first growing season to establish a healthy turfgrass. Watering should occur during the early part of the day and shall provide to an even saturation depth of one inch per week by rain event or irrigation.
3. Newly planted trees and shrubs shall be watered regularly during the dry periods to completely dampen the root ball during the first growing season.
4. Disease, insect and weed control and prevention should be performed in accordance with manufacturers recommendations for newly planted landscapes during the first season.
5. Newly installed plantings shall be selectively pruned if necessary to provide a neat, uniform appearance. Any dead or broken branches shall be removed. All noticeably diseased or damaged plant material shall be removed and replaced prior to final acceptance.
6. All guying and staking shall be maintained regularly to assure plant stabilization and straight, uniform growth for at least the first 18 months following the date of planting.
7. All plant material shall be true to species and variety and shall conform to measurements and minimum standards as set forth in the plant schedule.
8. All plant materials and lawn areas are to be warranted by the contractor for a period of 18 months from date when Maintenance Bond is issued/ effective. Any plants found dead, dying, or diseased during said period should be replaced in-kind during that period.
9. Tree branches overhanging vehicular and pedestrian routes (drives, walks, etc.) shall be maintained at a height 8 ft. min. from adjacent grade.

LONG TERM MAINTENANCE PLAN FOR LANDSCAPING:

1. Maintenance of trees, shrubs and turfgrass shall be the responsibility of the homeowners association.
2. The lot owner shall be responsible for regular mowing, clean-up, and grooming of all lawn and planted areas.
3. Any specific plant material shown on this approved landscape plan which does not survive or is damaged shall be replaced in kind by the lot owner within a six month period, in perpetuity.
4. Trash and tree debris shall be removed and disposed of properly.
5. Patrol natural areas and remove man-made debris and dispose of properly.

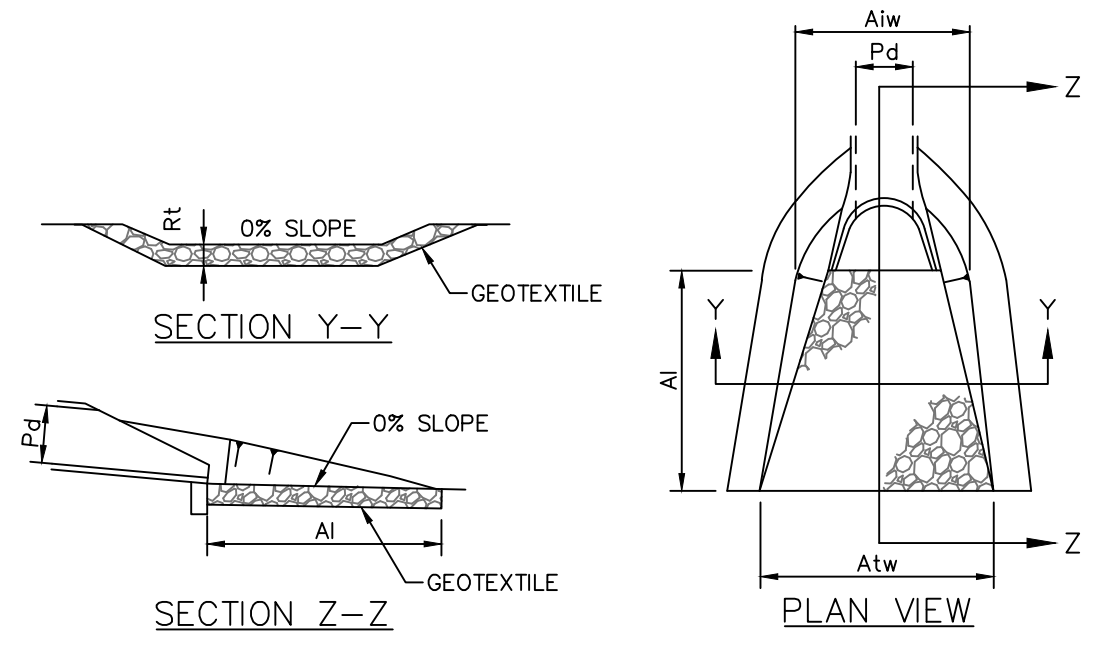
NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	07/16/21
2		
3		
4		
5		

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SITE CONSTRUCTION DETAILS
 FOR
ENCLAVE AT ELMERTON
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220021-DTL
 PROJECT: 220021
 DATE: 06/11/21
 SHEET: 22 OF 29

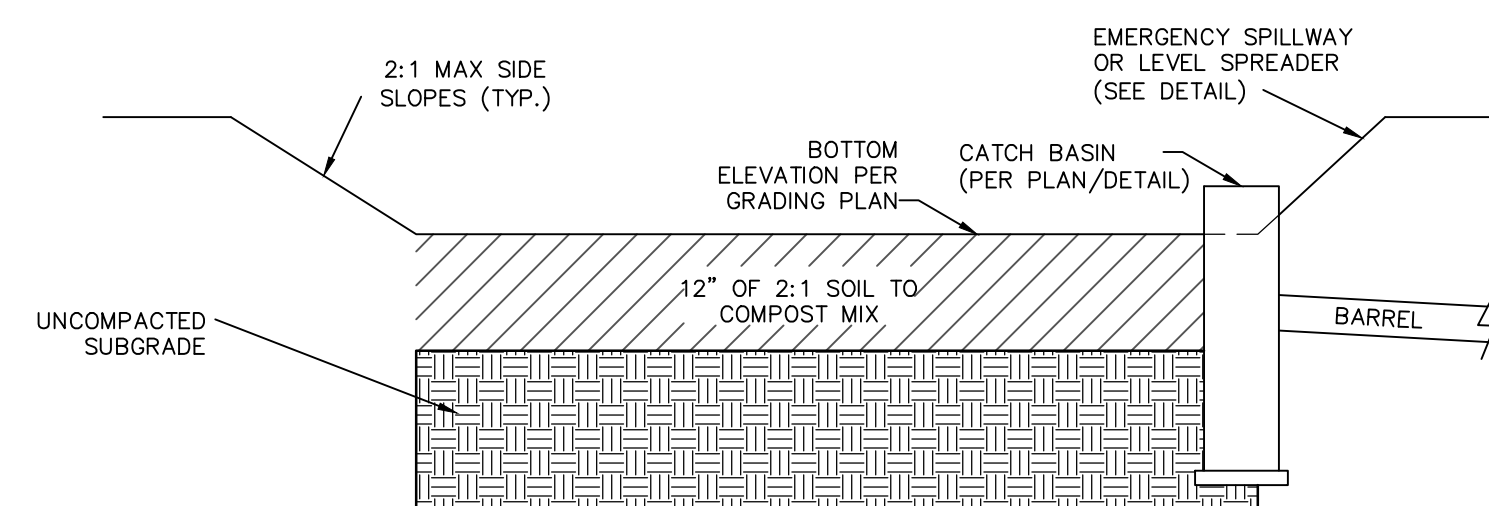


OUTLET NO.	PIPE DIA Pd (IN)	RIPRAP		INITIAL WIDTH Aiw (FT)	TERMINAL WIDTH Atw (FT)
		SIZE R	THICK. Rt (IN)		
A	24	R-4	18	11	6.0
B	18	R-4	18	10.5	4.5
C	18	R-4	18	10.5	4.5
A18	18	R-4	18	10.5	4.5
B2	18	R-4	18	10.5	4.5
A29	15	R-3	12	9	3.75
B3	15	R-3	12	9	3.75
C2	15	R-3	12	9	3.75

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

NOT TO SCALE



NOTES:

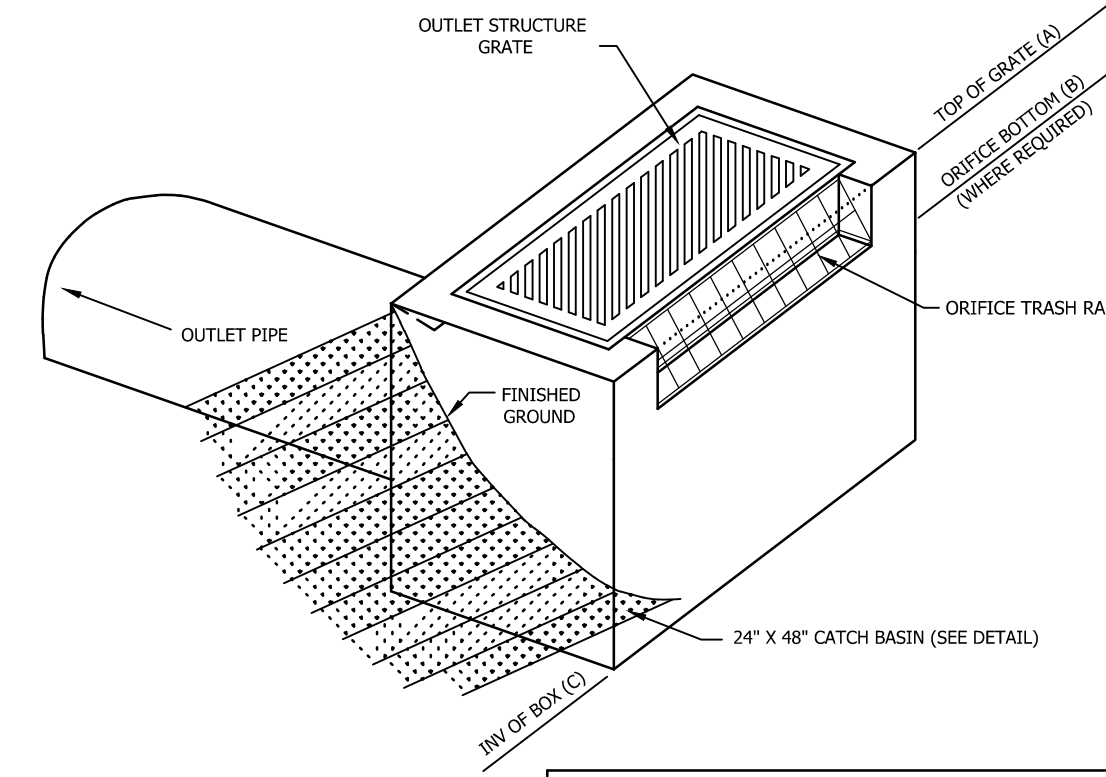
- EVACUATE INFILTRATION AREA / BASIN TO PROPOSED INVERT DEPTH AND SCARIFY THE EXISTING SOIL SURFACES. DO NOT COMPACT IN-SITU SOILS.
- INSTALL BASIN UNDERDRAIN AS SHOWN ON PLAN.
- BACKFILL INFILTRATION AREA / BASIN WITH AMENDED SOIL AS SHOWN ON THE PLANS AND SPECIFICATIONS. OVERFILLING IS RECOMMENDED 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.
- PLANT VEGETATION ACCORDING TO PLANTING PLAN.
- 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.
- 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.

INFILTRATION BASIN DETAIL

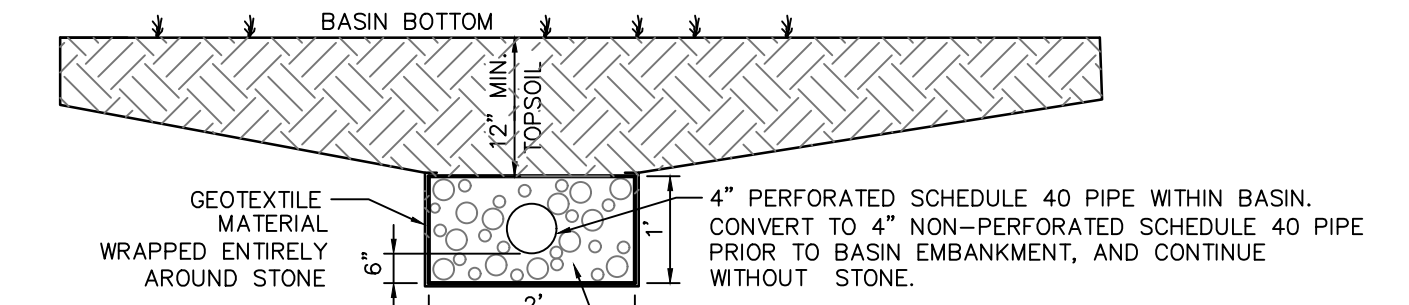
NOT TO SCALE



BASIN OUTLET STRUCTURE			
INFILTRATION BASIN #	A (FT)	B (FT)	C (FT)
1	434.00	433.17 (30\"/>	

INFILTRATION BASIN OUTLET STRUCTURE

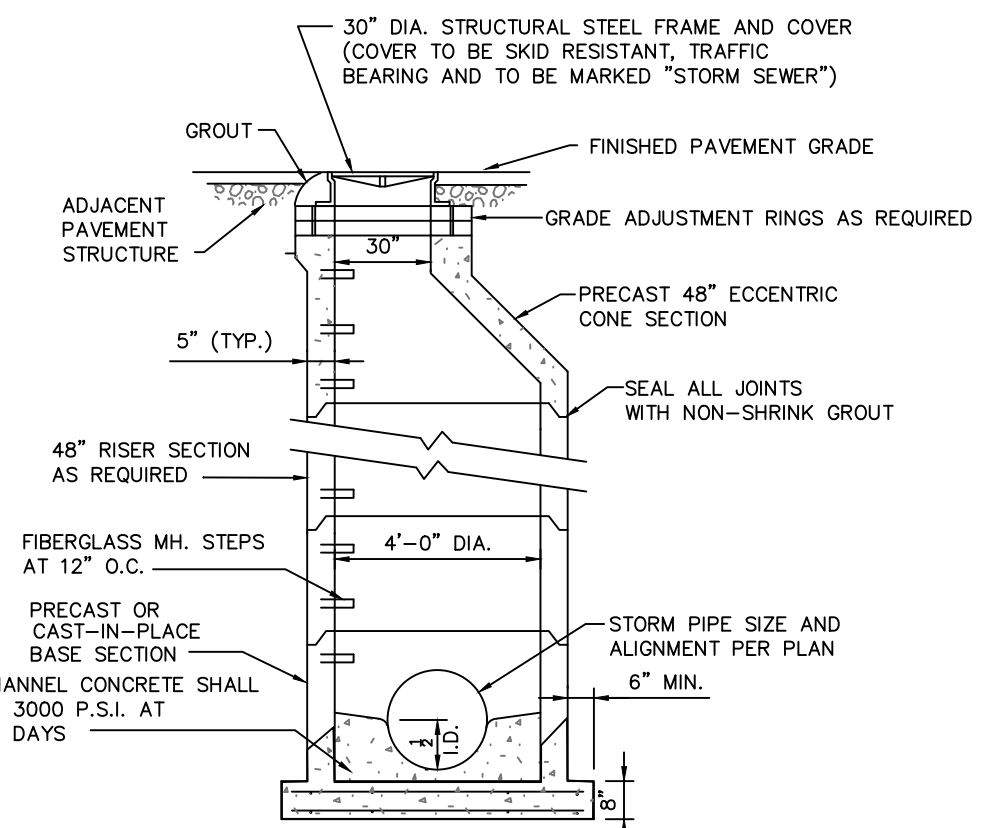
N.T.S.



- NOTES:
 1. TERMINATE UNDERDRAIN IN BASIN OUTLET BOX; SEE OUTLET STRUCTURE DETAIL.
 2. SEE GRADING PLANS FOR UNDERDRAIN LOCATIONS.

INFILTRATION/INFILTRATION BASIN UNDERDRAIN DETAIL

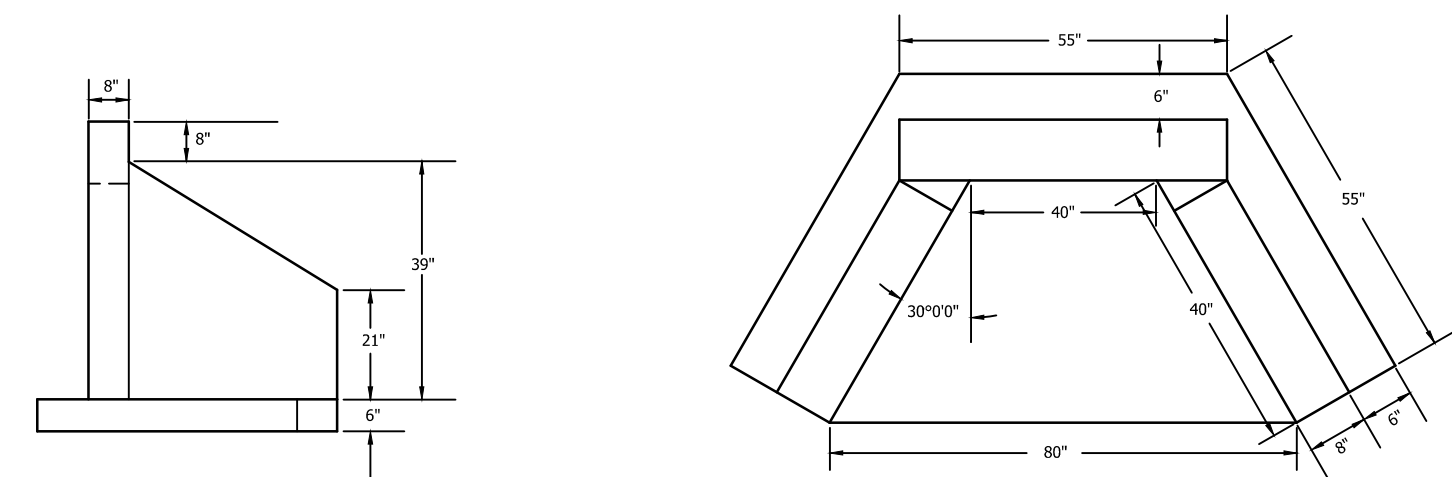
N.T.S.



- NOTE: 1. CONSTRUCT MANHOLE IN ACCORDANCE WITH PENN DOT PUBLICATION 72, RC-39 FOR PRECAST CONCRETE MANHOLES.
 2. ALL MATERIALS AND CONSTRUCTION SHALL MEET THE REQUIREMENTS OF PENN DOT PUBLICATION 408.

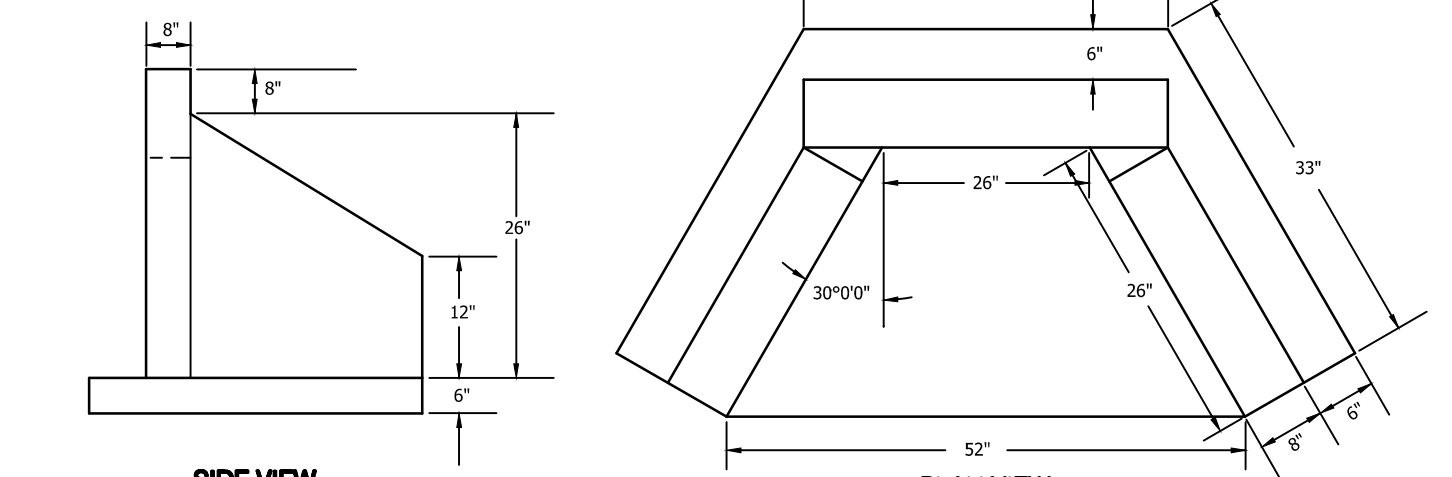
TYPICAL STORM SEWER MANHOLE

N.T.S.



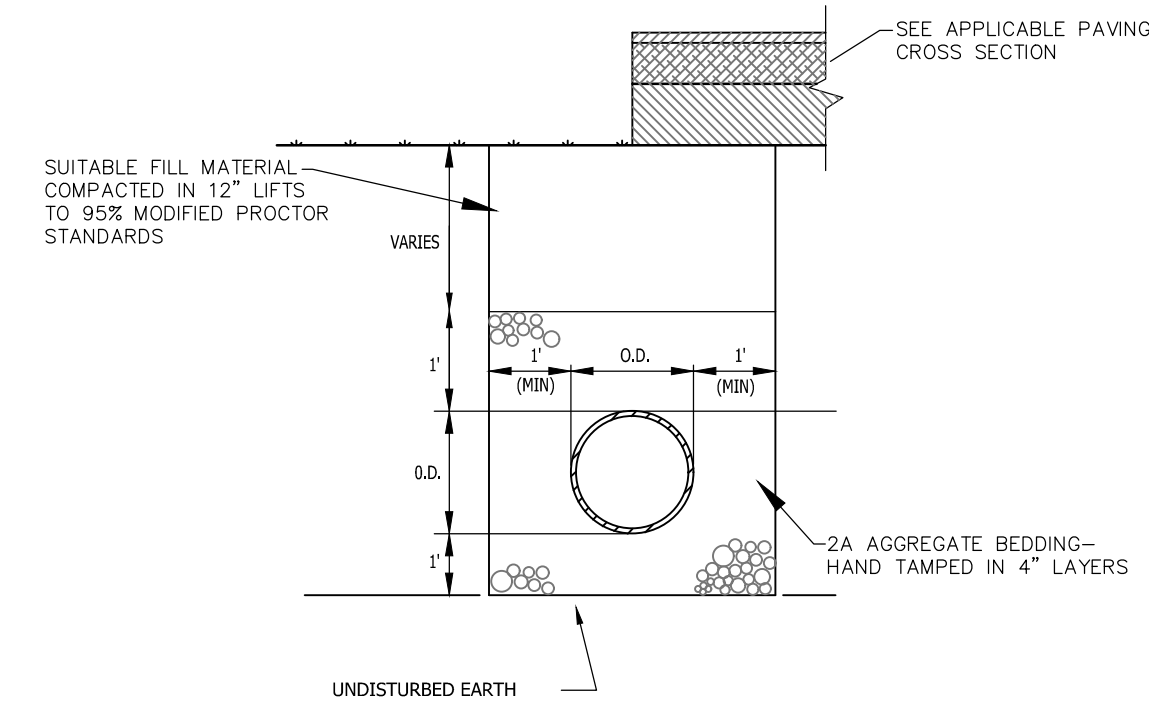
TYPE D-W ENDWALL (MAX. PIPE SIZE 36\"/>

N.T.S.



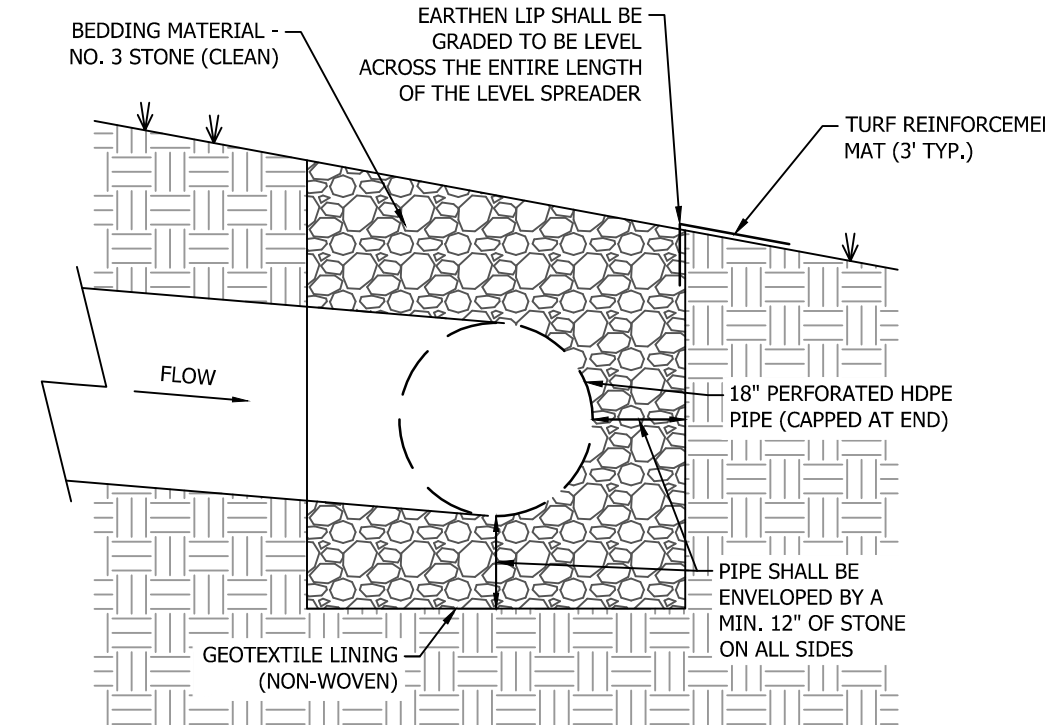
TYPE D-W ENDWALL (MAX. PIPE SIZE 21\"/>

N.T.S.



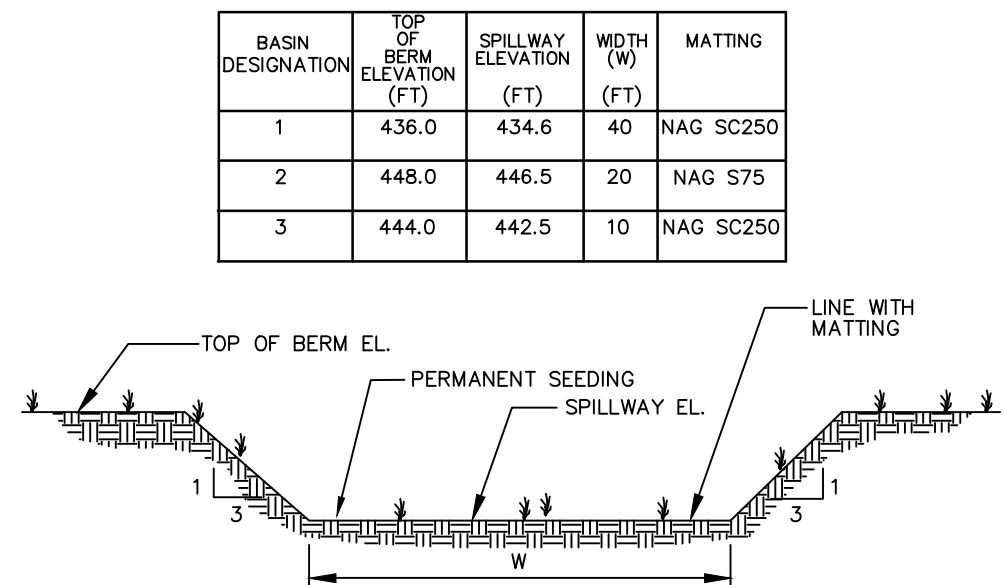
STORM SEWER TRENCH IN STREET

N.T.S.



LEVEL SPREADER DETAIL

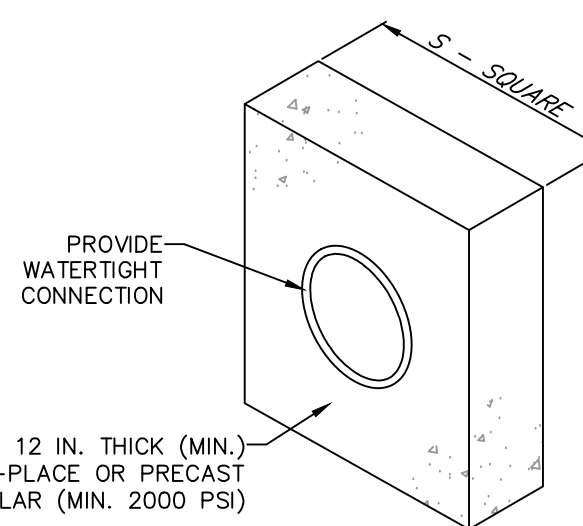
N.T.S.



PERMANENT EMERGENCY SPILLWAY DETAIL

N.T.S.

BASIN DESIGNATION	TOP OF BERM ELEVATION (FT)	SPILLWAY ELEVATION (FT)	WIDTH (W) (FT)	MATTING
1	436.0	434.6	40	NAG SC250
2	448.0	446.5	20	NAG S75
3	444.0	442.5	10	NAG SC250



12 IN. THICK (MIN.) CAST-IN-PLACE OR PRECAST CONCRETE COLLAR (MIN. 2000 PSI)

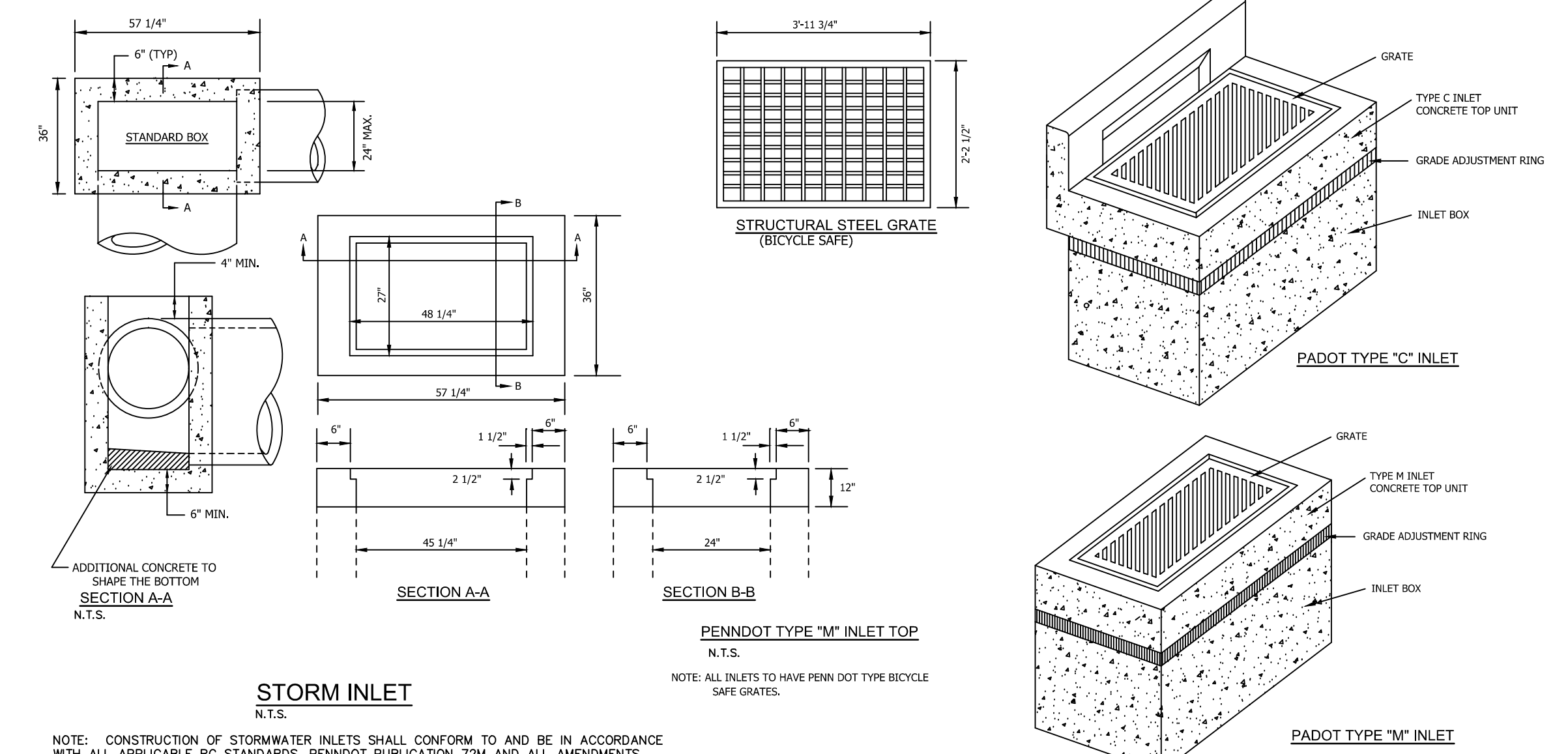
NOTES:

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

BASIN OR TRAP NO.	PIPE SIZE (IN)	S (IN)	NO. OF COLLARS	RISER TO FIRST COLLAR (FT)	COLLAR SPACING (FT)
1	24	82	3	20	20
2	18	71	3	10	10
3	18	80	3	12	12

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

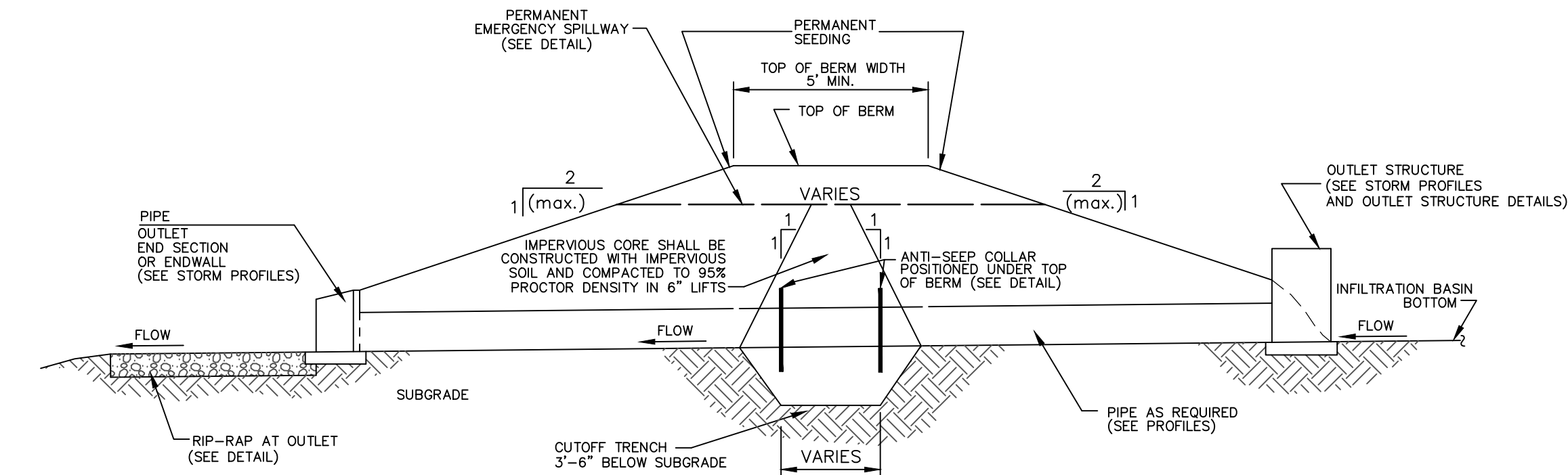
N.T.S.



STORM INLET

N.T.S.

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



TYPICAL DETENTION BASIN BERM

N.T.S.

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PCSM DETAILS FOR
ENCLAVE AT ELMERTON
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220021-DTL
 PROJECT: 220021
 DATE: 06/11/21
 SHEET: 23 OF 29

NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	07/16/21
2		
3		
4		
5		

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GENERAL PCSM NOTES

SITE PRESERVATION ANALYSIS:

There is a stream tributary and wetlands located on the south side of the site. The impervious areas were minimized to the best of our ability by designing an efficient street and lot layout that doesn't propose unnecessary pavement, long driveways or oversized homes. It was not possible to protect all of the existing drainage features and vegetation, due to the necessary grading on the site. The entire site must be cleared in order to maintain an earthwork balance that doesn't require the import or export of fill. The soil will experience some compaction in all of the areas where grading will occur, however compaction will be kept to a minimum in the areas of the Infiltration Basins.

PCSM BMP INSTALLATION SEQUENCE:

- The Infiltration Basins shall be converted from their respective sediment basins or traps, when the time comes, to the PCSM condition as approved by the Conservation District.

INDIVIDUAL BMP INSTALLATION SEQUENCES:

Infiltration Basins:

- Complete upstream site grading and construction.
- Prepare site for excavation and/or embankment construction.
- Excavate bottom of basin to desired elevation (if necessary).
- Install surrounding embankments and inlet and outlet control structures. Retrofit those used in temporary conditions as applicable.
- Grade subsoil in bottom of basin. Compact surrounding embankment areas and around inlet and outlet structures.
- Apply and grade planting soil.
- Apply geo-textiles and other erosion-control measures where applicable.
- Seed the basins.
- Install and anti-grazing measures, if necessary.
- Follow required maintenance and monitoring guidelines.

Infiltration Basins:

- Install temporary sediment control BMPs as shown on the plans.
- Complete site grading.
- Stabilize grading within the limit of disturbance except within the Basin area.
- Excavate Basin to proposed invert depth and scarify the existing soil surfaces. Do not compact in-situ soils.
- Presoak the planting soil prior to planting vegetation to aid in settlement.
- Complete final grading to proposed design elevations, leaving space for upper layer of compost, mulch or topsoil as specified on plans.
- Plant vegetation according to planting plan.

CRITICAL STAGES OF BMP INSTALLATION:

- Infiltration Basin 1, 2 and 3 Clay Core and Key Trench
- Infiltration Basin 1, 2 and 3 Anti-seep Collars
- Infiltration Basin 1, 2 and 3 Underdrains

Any stormwater BMP that is damaged in a way that keeps it from functioning as designed must be repaired or replaced as soon as possible.

RECYCLING OR DISPOSAL OF MATERIALS:

Disposal of removed material is dependant on the nature of the drainage area and the intent and function of the BMP. BMPs that primarily catch sediment and detritus from areas such as lawns may reuse the waste on the site. Pollutants such as man made trash and other non-reusable materials must be removed and deposited in an approved recycling facility or landfill.

STORMWATER BMP OPERATION AND MAINTENANCE PLAN

The stormwater Best Management Practices (BMPs) as shown on this plan shall be maintained to function as designed as per the procedures described below. Facilities located outside the public right-of-ways shall be owned and maintained by the Homeowners Association of the development.

The facilities are to remain permanent and can only be removed or altered after approval by one or more of the following entities which may have jurisdiction: Susquehanna Township; Dauphin County Conservation District; and/or PA DEP.

The following facilities located outside the public right-of-ways shall be maintained to the original design and dimensions shown on the design plans, approved by Susquehanna Township, until such a time as an amended plan is approved by the Township.

- Infiltration Basins, Emergency Spillways & Outlet Structures
- Stormwater Inlets, Manholes, Pipes & Swales
- Riprap Aprons

For any structure 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 responsible owners shall keep a record of any repaired or replaced facility, including costs, dates, materials removed, materials placed, and the contractor(s) information.

Inspection and maintenance tasks for Infiltration Basins & outlet structures:

- While vegetation is being established, pruning and weeding may be required. Weeds should be removed thereafter by hand.
- Detritus may also need to be removed approximately twice a year.
- Perennial plantings may be cut down at the end of the growing season.
- Mulch should be re-spread when erosion is evident and be replenished annually.
- Any erosion, fills or gullies should be repaired immediately.
- Any invasive species growing in the infiltration basin shall be removed upon detection.
- Remove accumulated sediment or debris from the infiltration basin as required. Restore original cross section and infiltration rate.

Property dispose of removed materials:

- Inspect after storm events exceed 1 inch within 48 hours.
- Inspection for standing water or ponding water which exceeds 72 hours after the most recent storm event which exceeds 1".
- Any erosion shall 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.
- Vegetation along the surface of the infiltration basin should be maintained in good condition, and any bare spots revegetated as soon as possible. Mow only as appropriate for vegetative cover species.
- Any dislodged rock shall be reset in place.

Inspection and maintenance tasks for stormwater inlets, manholes, & pipes:

- Examine annually at a minimum. Remove man-made trash and dispose of properly.
- Examine inlet bottoms via grates, for accumulated debris. Remove accumulated grit and debris. Check for any obvious structural deterioration.
- Any erosion shall 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.
- All inlets, storm piping, and drainage structures shall be kept free of any obstructions and foreign material that would cause disruption of water flow in a manner not designed for the facility, such as sediment, vegetation, wood, sand, debris, or vegetative growth in excess of 12 inches if not part of the landscape design. Removal of sediment/debris shall take place when the area has dried, if possible. Man-made trash shall be disposed of properly in containers collected by a licensed commercial trash hauler.
- All impervious surfaces shall be maintained clean of oil, fuel or other toxic spills, in accordance with State, Federal or local regulations.

Inspections and maintenance tasks for riprap aprons:

- 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 is watered until established; rock should be placed in non-growing seasons, even if temporary.

TEMPORARY SEEDING SCHEDULE

The contractor shall immediately temporarily stabilize any rough graded area, topsoil stockpile or unused excavated fill material that will be left idle for less than 1 year. The grass will provide interim protection against the impact of precipitation, running water and wind. Permanently seed any area that will be idle for more than 1 year.

Temporary seeding schedule is as follows:

- Species: annual rye grass
- % Live Seed: 98%
- Application rate: 10 lbs./1,000 sq. yds.
- Fertilizer type: general purpose granular, 5-5-5
- Fertilizer application rate: 11 lbs./1,000 sq. yds.
- Liming rate: per soil test; minimum of 1 ton per acre.
- Seeding dates: any time
- Strawble mulch rate: 3 tons per acre
- Mulch anchoring: Asphalt, either emulsified or cut-back, containing no solvents or other diluting agents toxic to plant and animal life, uniformly applied at the rate of 31 gallons per 1,000 square yards. Synthetic binders (chemical binders) may be used per manufacturer's recommendation provided they are non-toxic to plant and animal species.

When seeding is not possible due to the time of year or other limitations, disturbed area shall be mulched with strawboles at the rate above. An erosion control blanket must be installed on all disturbed slopes steeper than 3:1, and all areas with concentrated flows. Matting can be North American Green S75, Jute, or approved equal.

Maintenance procedure:

- Maintain a minimum 70% soil surface coverage with grass and/or mulch.
- If a washout, slope failure or similar disturbance occurs, correct drainage problem if necessary, then reapply soil to the proper grade, reapply soil amendments, seed and mulch.

PERMANENT LAWN SEEDING SCHEDULE--

- Species: 30% Kentucky bluegrass
- 40% Pennlawn Creeping Red Fescue
- 20% Norlie Perennial ryegrass
- 10% annual ryegrass

- % Pure live seed: 98%
- Application rate: 6 lbs./1,000 sq. ft.
- Fertilizer type: general purpose granular, 10-20-20
- Fertilizer application rate: 11 lbs./1,000 sq. yds.
- Liming rate: per soil test; minimum of 6 tons per acre
- Seeding dates: between 4/1 and 10/15
- Strawble mulching rate: 3 tons per acre.

Erosion control matting must be placed on slopes exceeding 3:1. Matting can be North American Green S75, Jute, or approved equal.

Maintenance procedure:

- Maintain a minimum 70% uniform soil surface coverage with grass, meadow vegetation and/or mulch.
- If a washout, slope failure or similar disturbance occurs, correct drainage problem if necessary, then reapply soil to the proper grade, reapply soil amendments, seed and mulch.

STEEP SLOPE SEEDING SCHEDULE--

The following seed mix can be planted on steep slopes of greater than 3:1 that will not be mowed several times per year, and on Infiltration Basin berms.

- Species: 100% Tall fescue, varieties such as K-31, Altra, or other recently released variety.
- % Pure live seed: 98
- Application rate: 6 lbs./1,000 sq. ft.
- Fertilizer type: general purpose granular, 10-20-20
- Fertilizer application rate: 11 lbs./1,000 sq. yds.
- Liming rate: per soil test; minimum of 4 tons per acre
- Seeding dates: between 4/1 and 10/15
- Strawble mulching rate: 3 tons per acre.

Erosion control matting must be placed on slopes exceeding 3:1. Matting can be North American Green S75, Jute, or approved equal.

Maintenance procedure:

- Maintain a minimum 70% uniform soil surface coverage with grass, meadow vegetation and/or mulch.
- If a washout, slope failure or similar disturbance occurs, correct drainage problem if necessary, then reapply soil to the proper grade, reapply soil amendments, seed and mulch.

The following seed mix shall be planted within Infiltration Basins and retention areas, as indicated on the plans. Seeding shall not take place until after the watershed tributary to the site is permanently stabilized and no erosion is expected to occur, and the basin has been converted to its permanent stormwater configuration.

RAIN GARDEN GRASS MIX

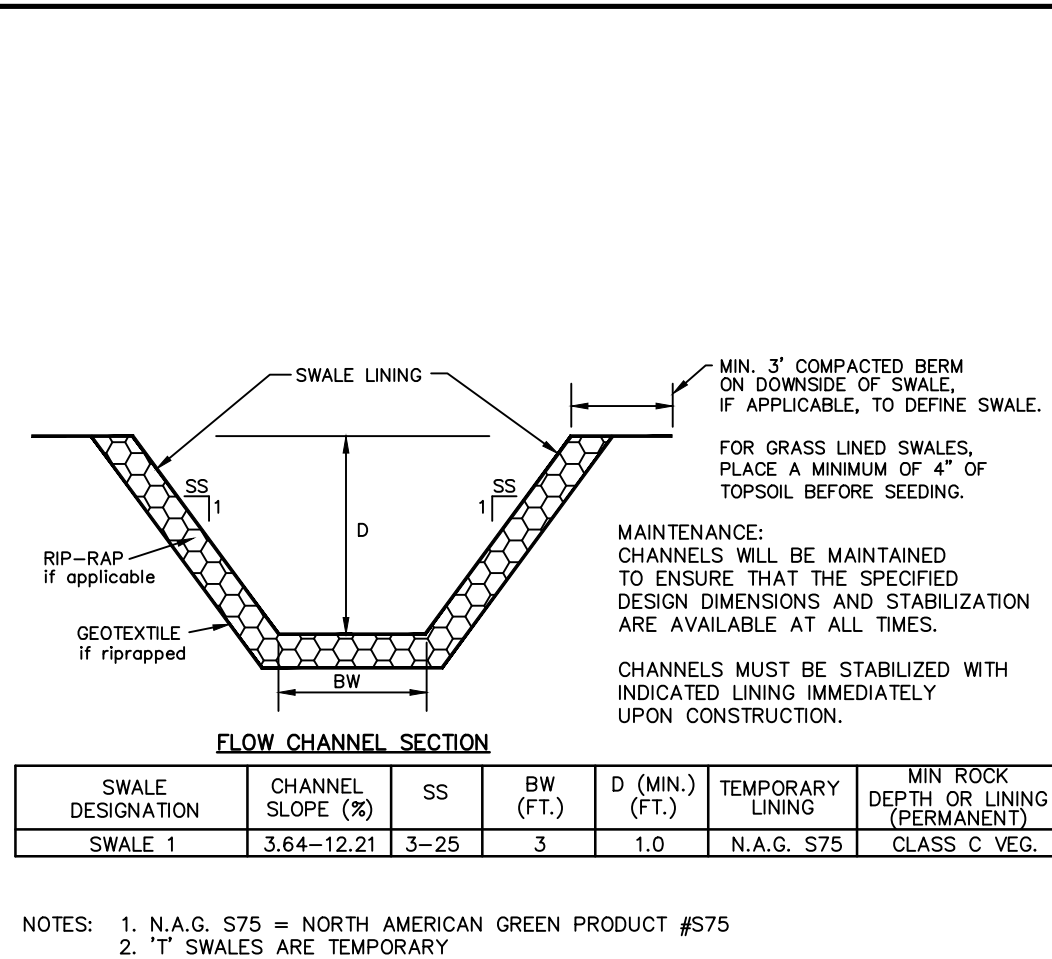
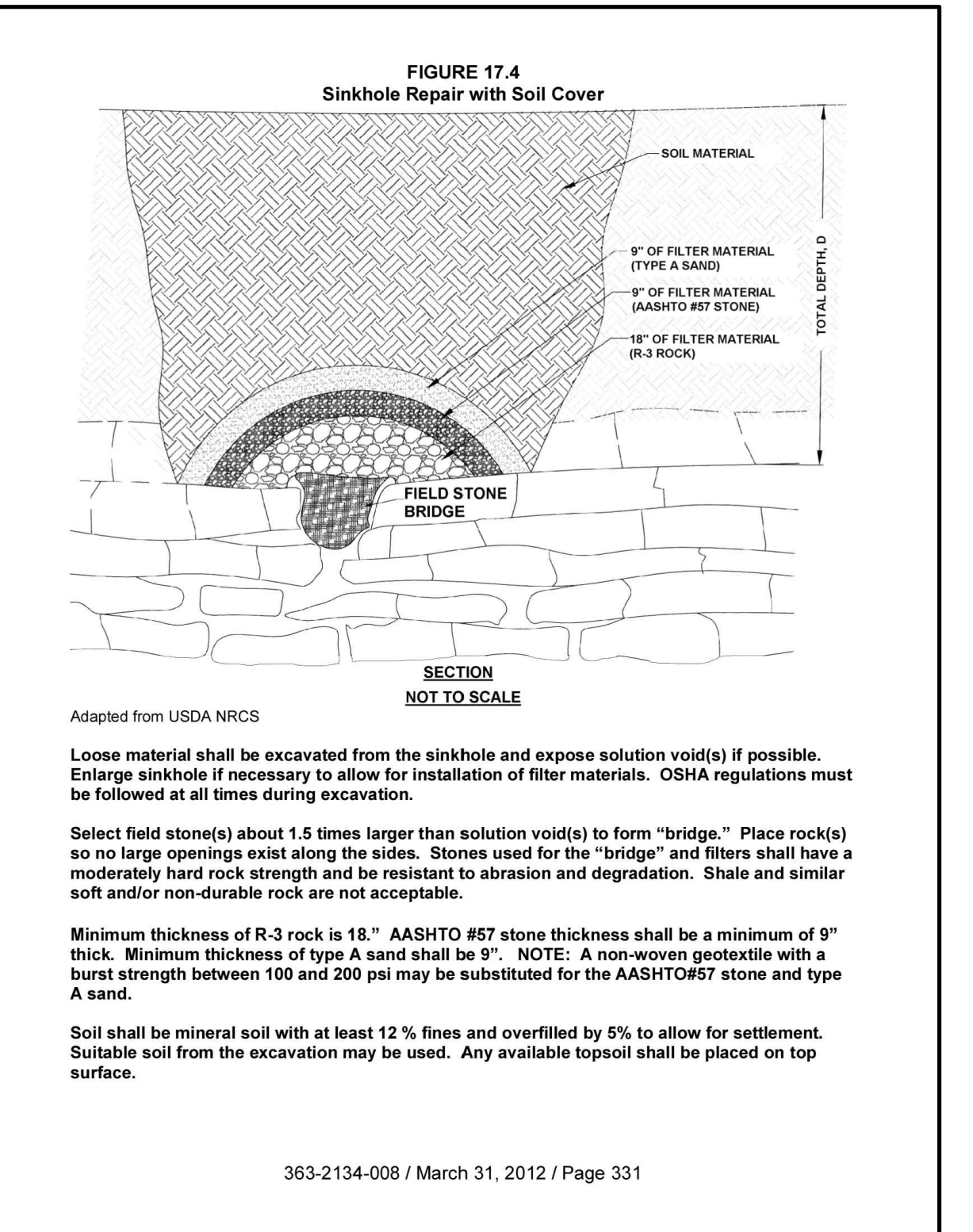
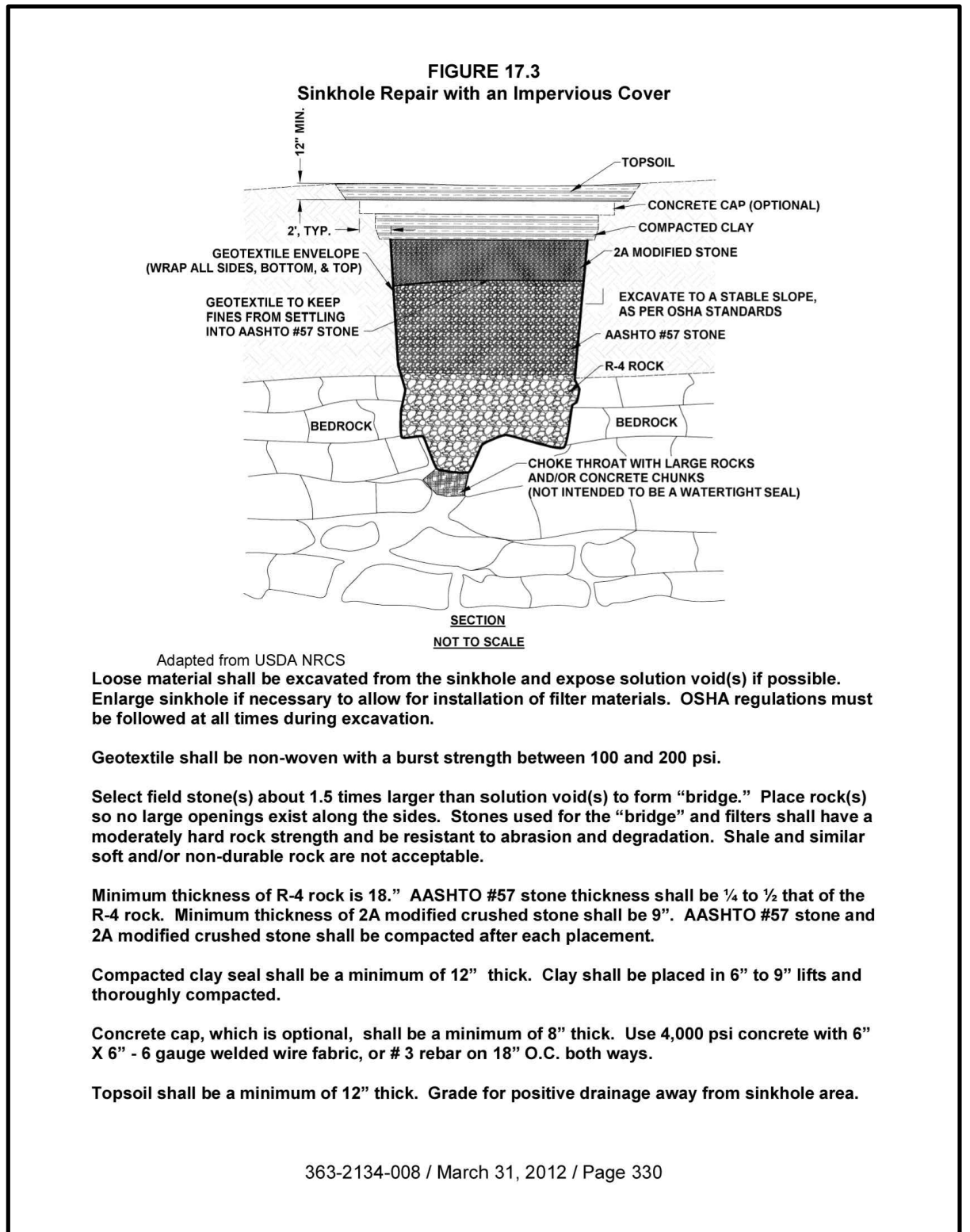
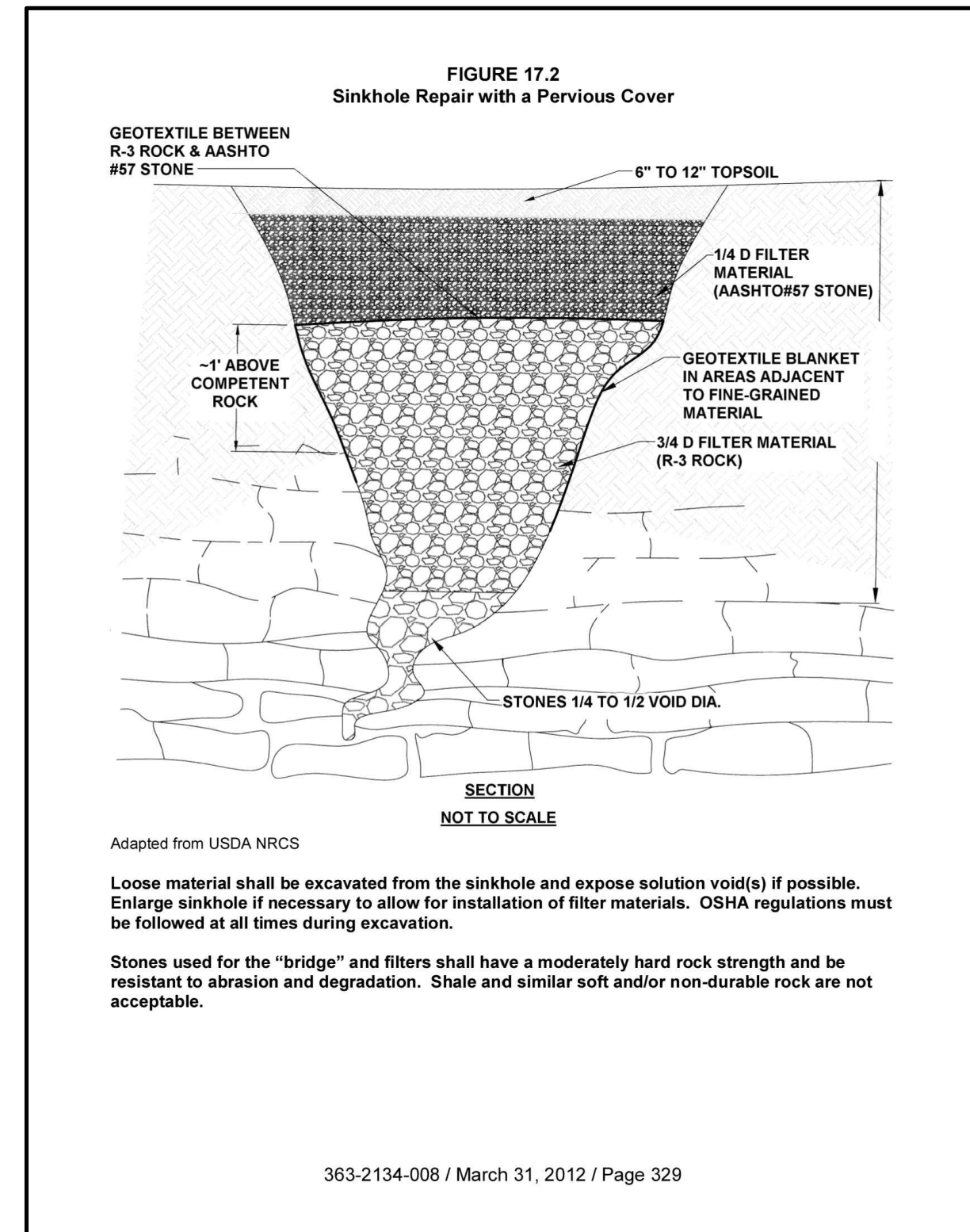
% of # of seeds	Scientific Name	Common Name
45%	Schizachyrium scoparium	Little Bluestem 'Camper'
20%	Elymus virginicus	Virginian Wildrye, PA Ecotype
11%	Panicum clandestinum	Doerflinger, Tioga
10%	Panicum sphaerocarpon	Roundseed Panicgrass
8%	Panicum rigidulum	Redtop Panicgrass
5%	Carex vulpinoidea	Fox Sedge
1.0%	Juncus effusus	Soft Rush
0.5%	Carex scoparia	Blunt Broom Sedge

Seeding rate: 15 pounds per acre with cover crop of grain rye at 30lb.

The above mix can be obtained from ERNST Seeds; an equal of similar mix can be substituted from another company depending on availability and price.

Maintenance procedure:

- If a washout, slope failure or similar disturbance occurs, correct drainage problem if necessary, then reapply soil to the proper grade, seed and mulch.



GENERAL SINKHOLE REPAIR POLICIES:

- THE AREA OF THE SINKHOLE SHOULD BE EXCAVATED UNTIL THE "THROAT" OF THE SINKHOLE IS DISCOVERED.
- ALL LOOSE SOIL OR MATERIAL SHOULD BE REMOVED.
- THE THROAT OF THE SINKHOLE SHOULD BE EVALUATED FOR STABILITY AND/OR THE PRESENCE OF ADDITIONAL FRACTURES.
- THE SINKHOLE SHOULD THEN BE BACKFILLED USING A GEOTEXTILE FILTER FABRIC FIRST, NO6 GEOTEXTILE CLASS 1 TYPE B, THEN USE R-5 STONE UP TO ABOUT 36" FROM FINISHED GRADE.
- FOLD THE GEOTEXTILE FILTER FABRIC OVER ITSELF TO CREATE A "BAG."
- ADD ABOUT 24" OF 2A MODIFIED STONE TO AROUND A FOOT BELOW FINAL GRADE DEPENDING ON WHERE THE SINKHOLE IS AND WHAT MATERIAL IS NEEDED TO FINISH BACKFILLING.

SINKHOLE AND SINKHOLE AREA TREATMENT

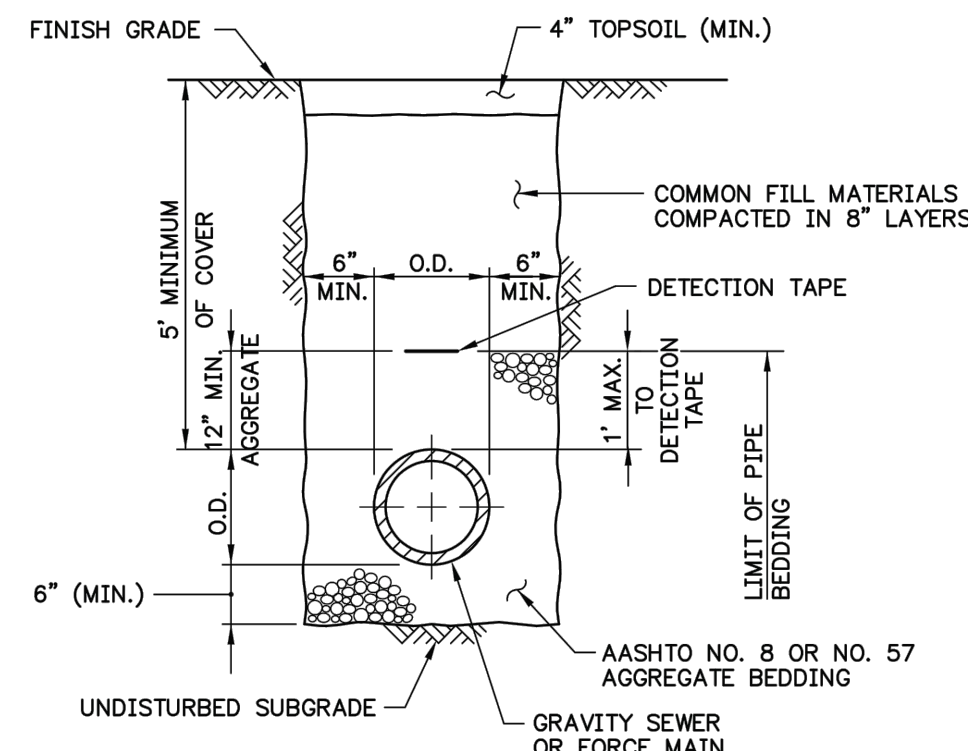
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PCSM DETAILS
 FOR
ENCLAVE AT ELMERTON
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

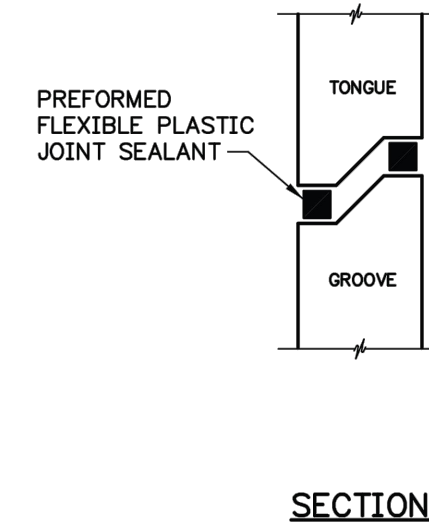
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 PROJECT: 220021
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 SHEET: 24 OF 29



TRENCH DETAIL IN UNPAVED AREAS

DATE	REVISIONS

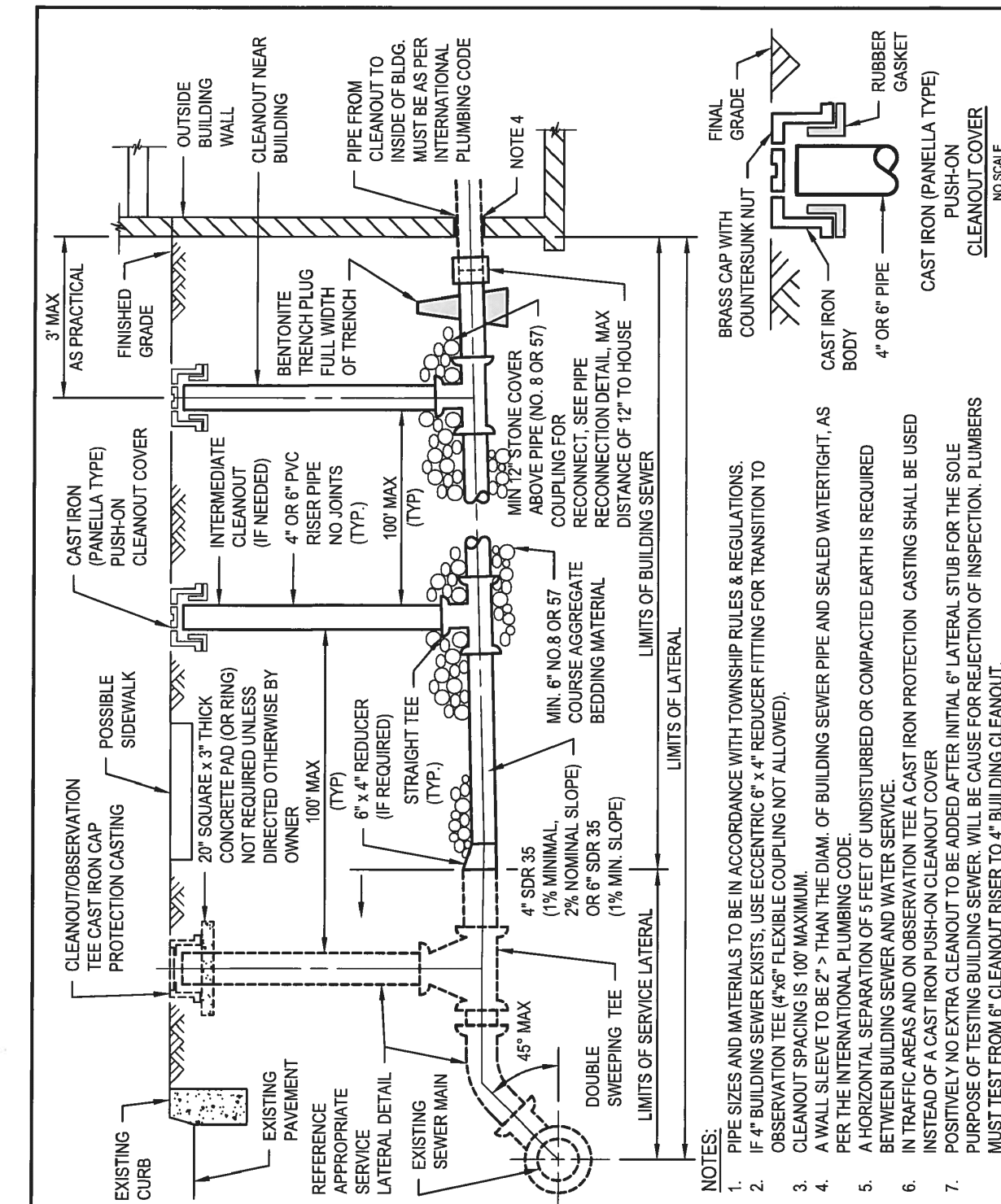
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MANHOLE GASKET

DATE	REVISIONS

SCALE	FILE
NO SCALE	MHGASKET

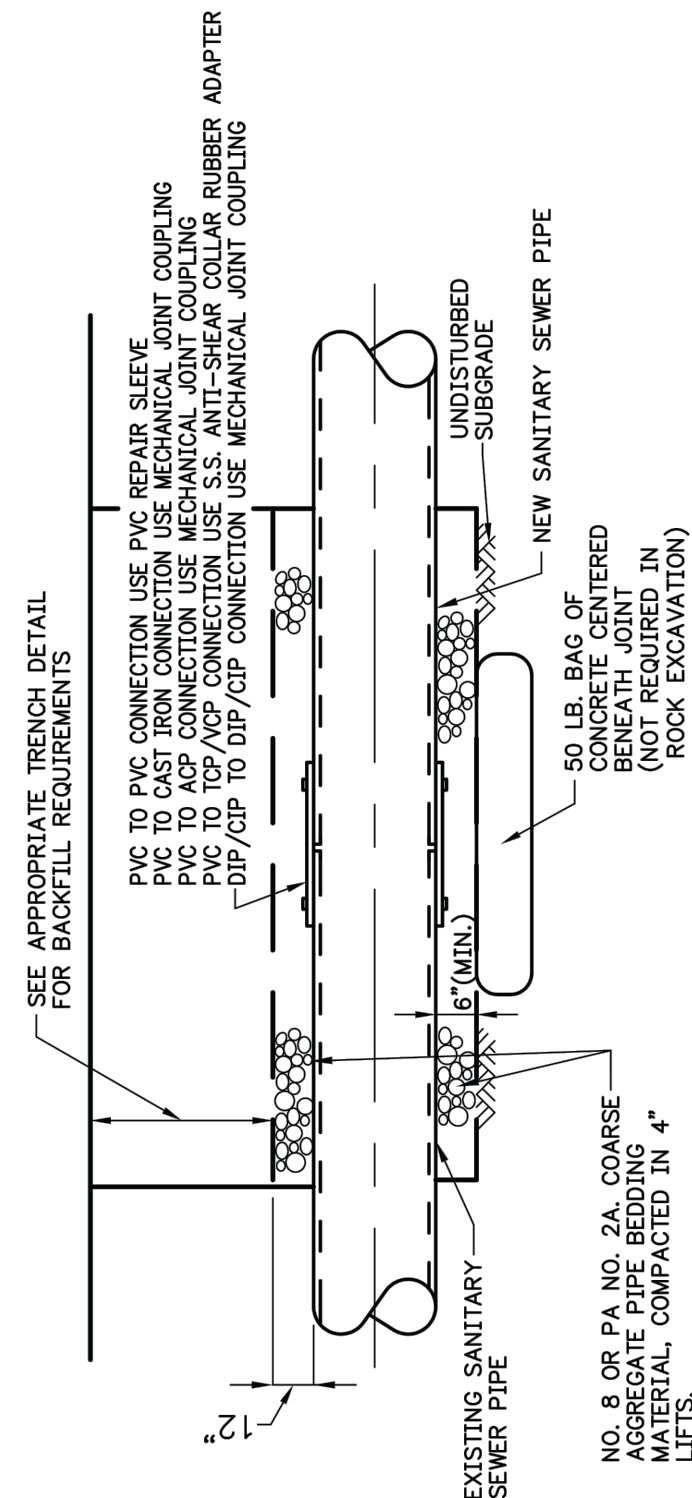


BUILDING SEWER AND/OR SERVICE LATERAL INSTALLATION/REPLACEMENT

DATE	REVISIONS
OCT 2018	UPDATED SHEETWORK DETAILS

SCALE	FILE
NO SCALE	LAT-4

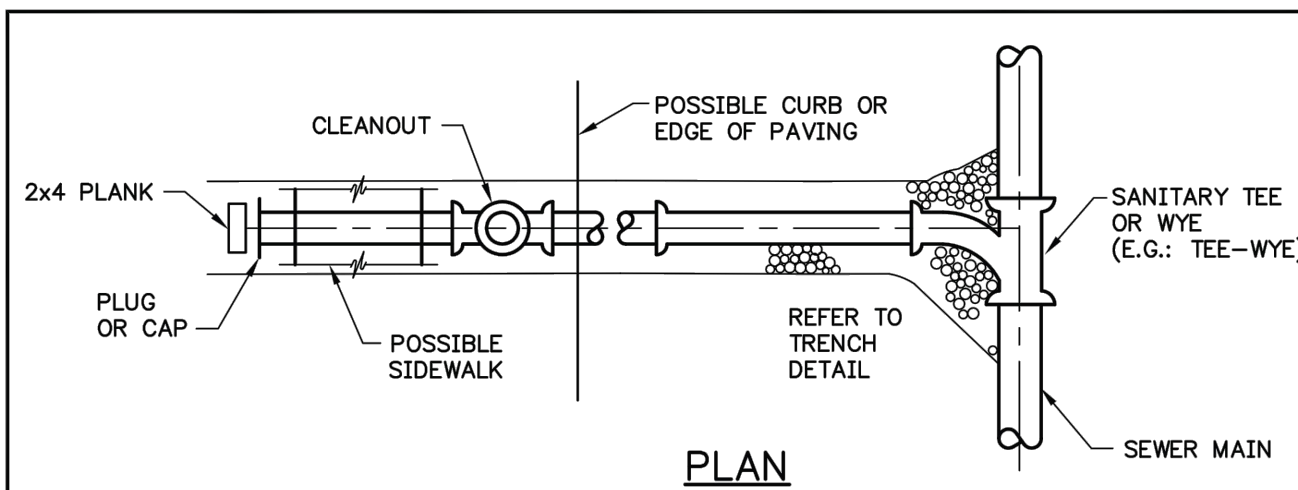
- NOTES:
- PIPE SIZES AND MATERIALS TO BE IN ACCORDANCE WITH TOWNSHIP RULES & REGULATIONS.
 - IF BUILDING SEWER EXISTS, USE ECCENTRIC 6" x 4" REDUCER FITTING FOR TRANSITION TO SERVICE LATERAL. CLEANOUT SPACING IS 100' MAXIMUM.
 - A WALL SLEEVE TO BE 2" THICKER THAN THE DIAM. OF BUILDING SEWER PIPE AND SEALED WATER TIGHT, AS SHOWN.
 - IF SERVICE LATERAL IS TO BE INSTALLED UNDER PAVEMENT, THE MINIMUM COVER SHALL BE 12" TO HOUSE.
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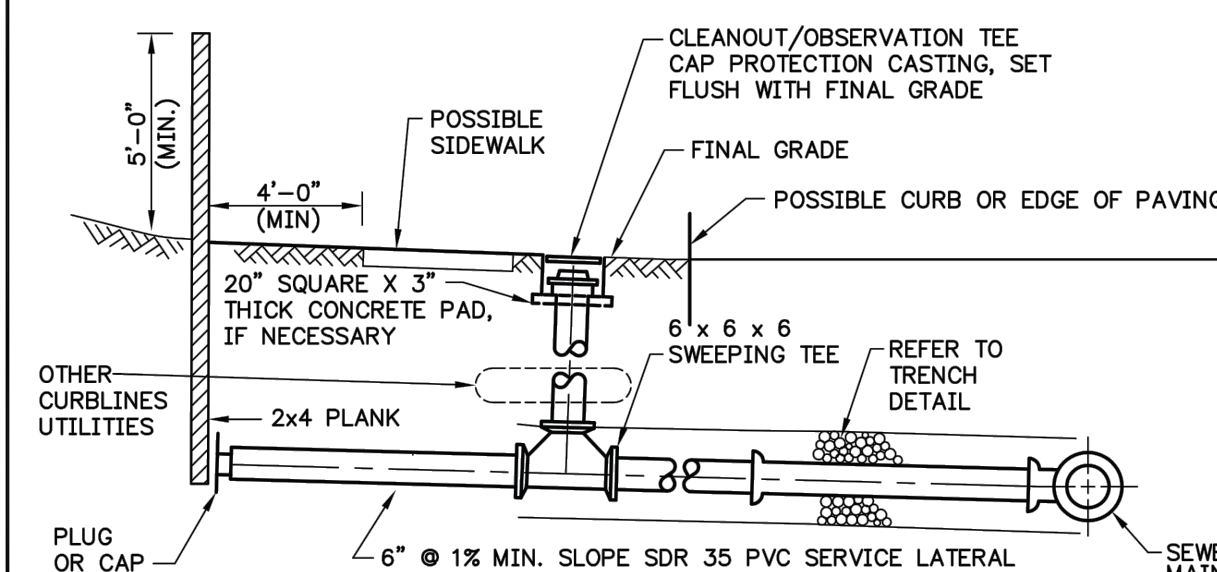
PIPE RECONNECTION DETAIL

DATE	REVISIONS

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PLAN



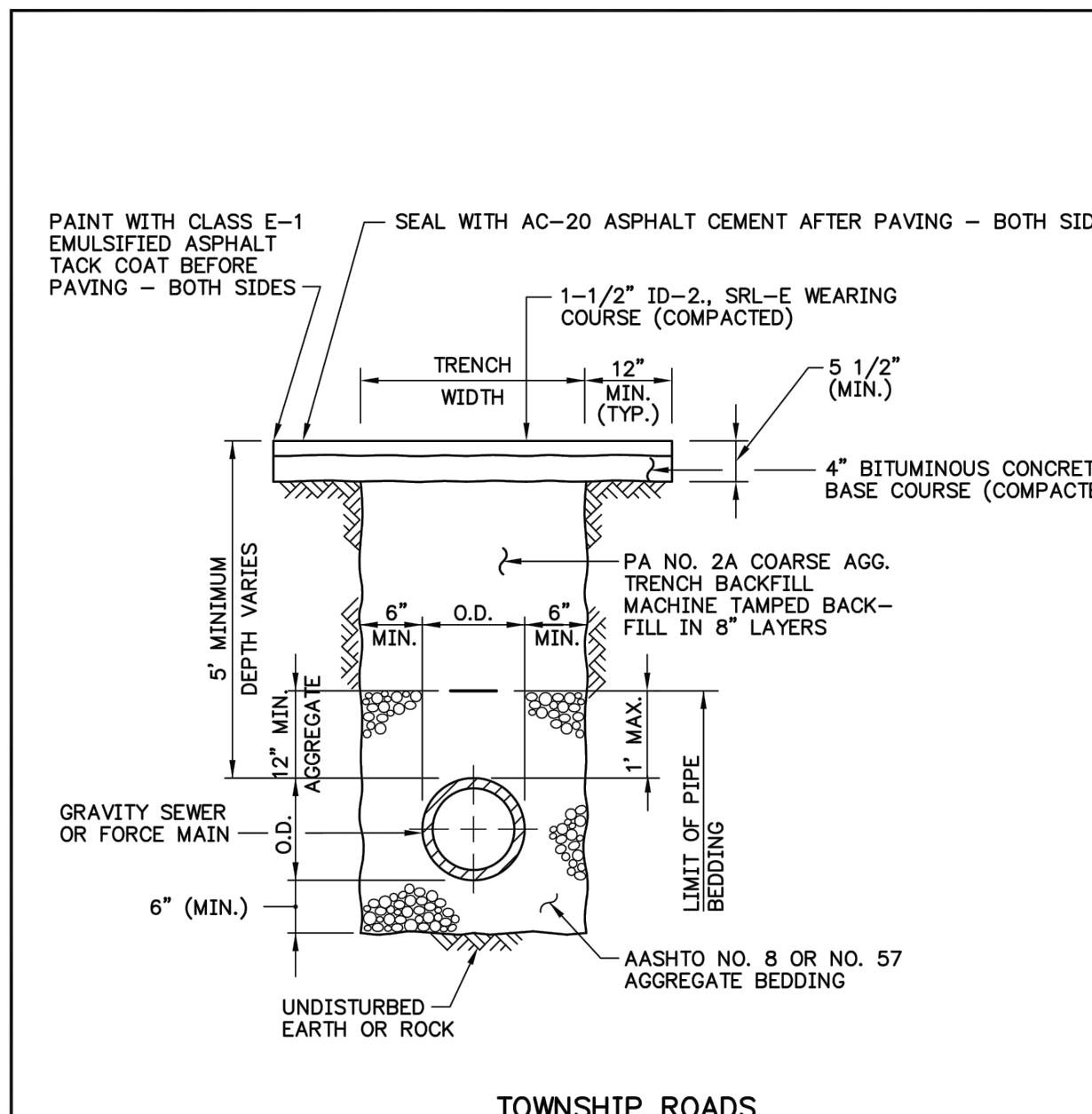
SECTION

- NOTES:
- CURB CLEANOUT NOT TO BE LOCATED IN SIDEWALK OR BENEATH OTHER CURBLINE UTILITIES.

SERVICE LATERAL - NORMAL DEPTH

DATE	REVISIONS

SCALE	FILE
NO SCALE	SHALLOWSEWERLR



TOWNSHIP ROADS

- NOTE:
- WHEN IN PAVED AREAS SUCH AS DRIVEWAYS OR PARKING LOTS, PAVING RESTORATION SHALL BE IN ACCORDANCE WITH CONTRACT DOCUMENTS.

TRENCH DETAIL IN PAVED AREAS

DATE	REVISIONS

SCALE	FILE
NO SCALE	TRENCH-PAVED

SANITARY SEWER DETAILS
FOR
ENCLAVE AT ELMERTON
LOCATED IN
SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

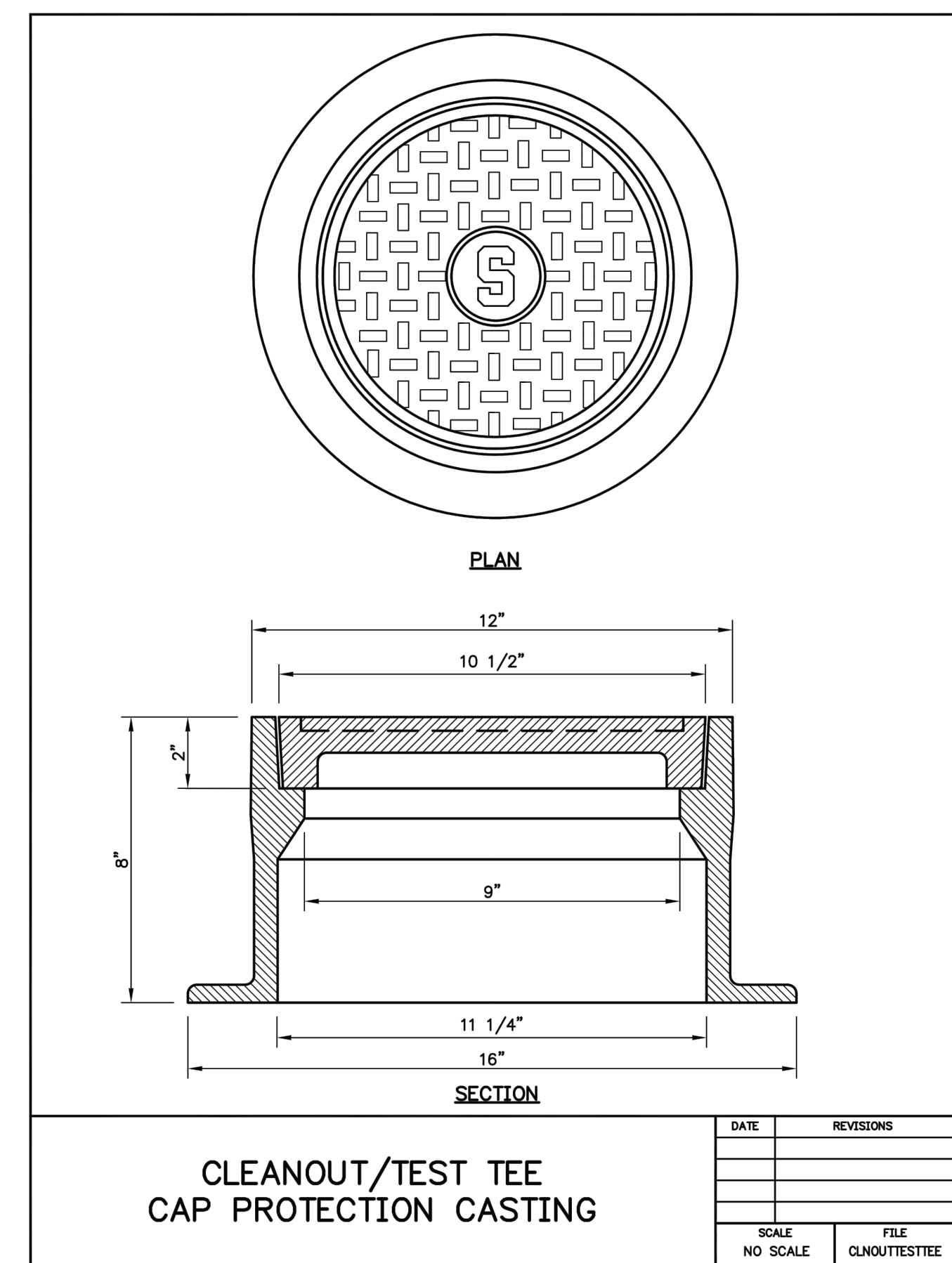
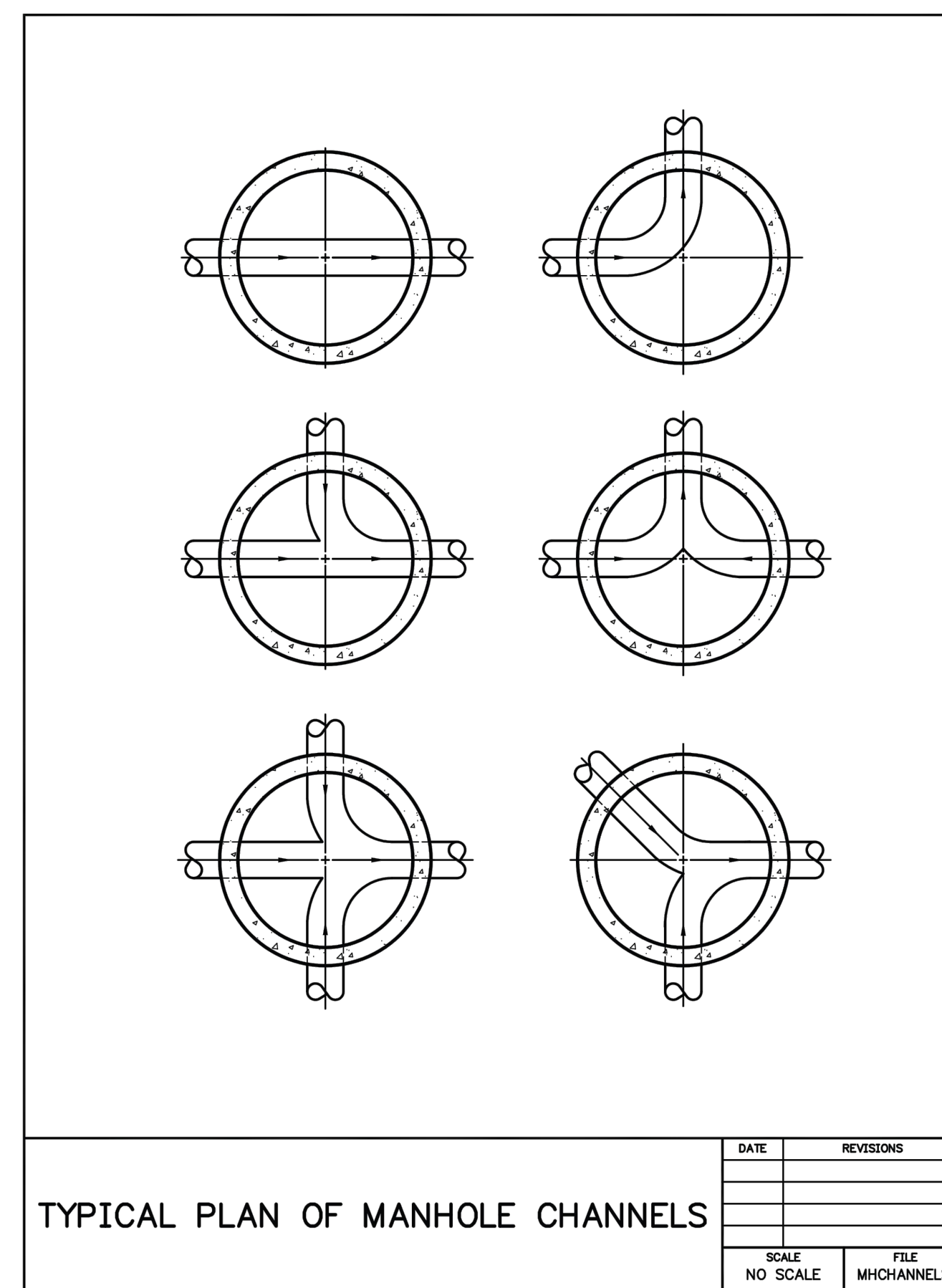
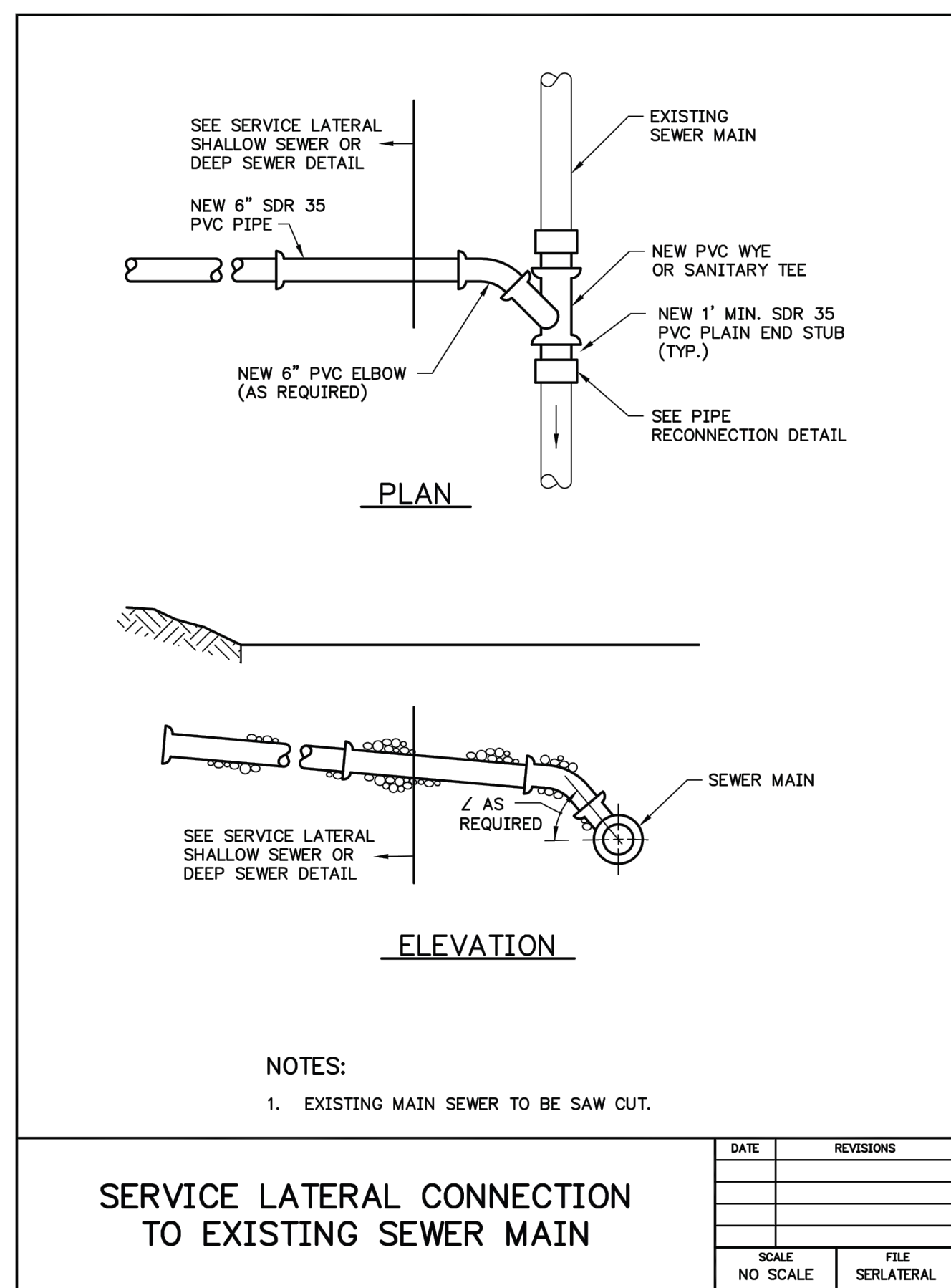
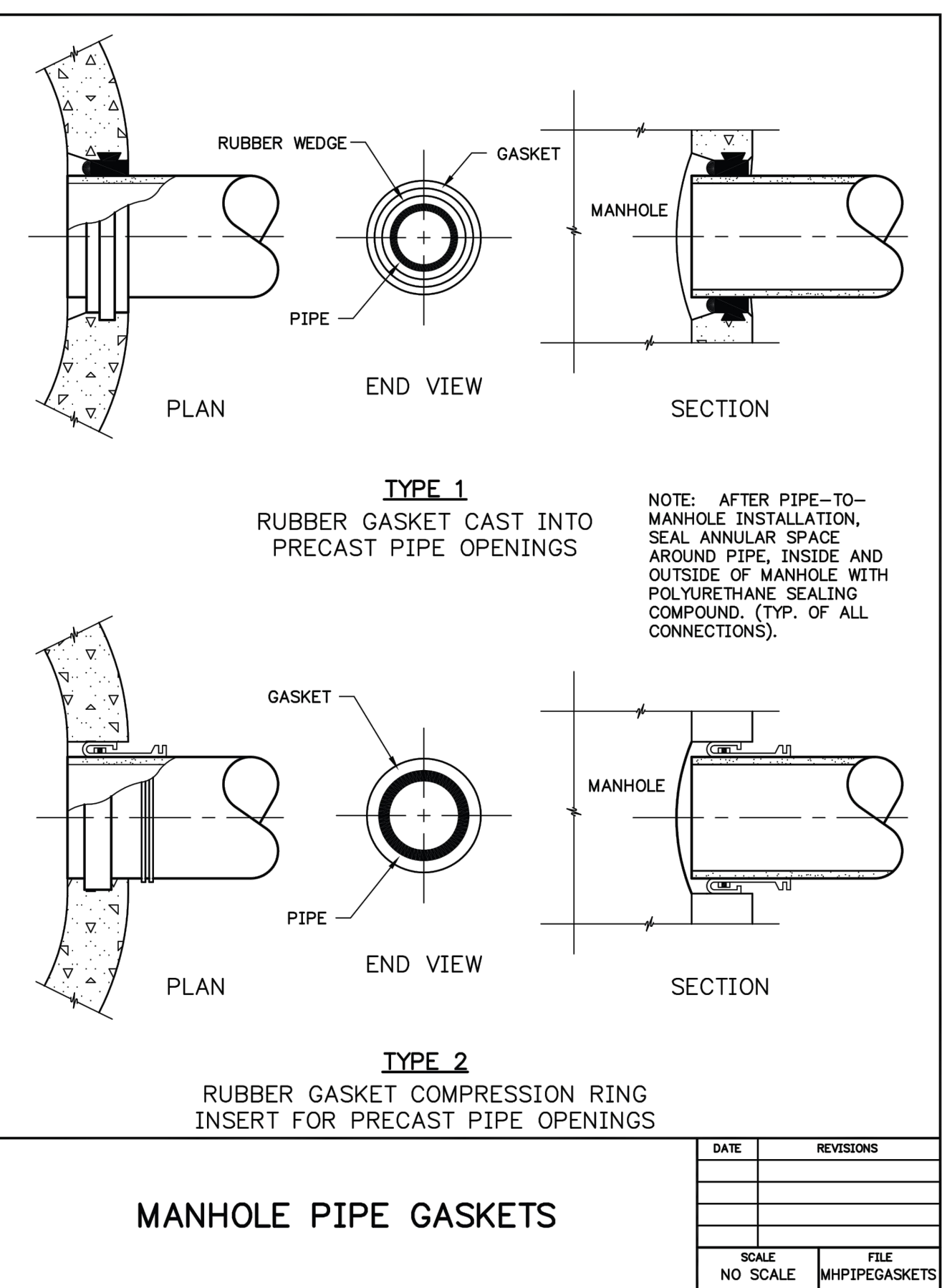
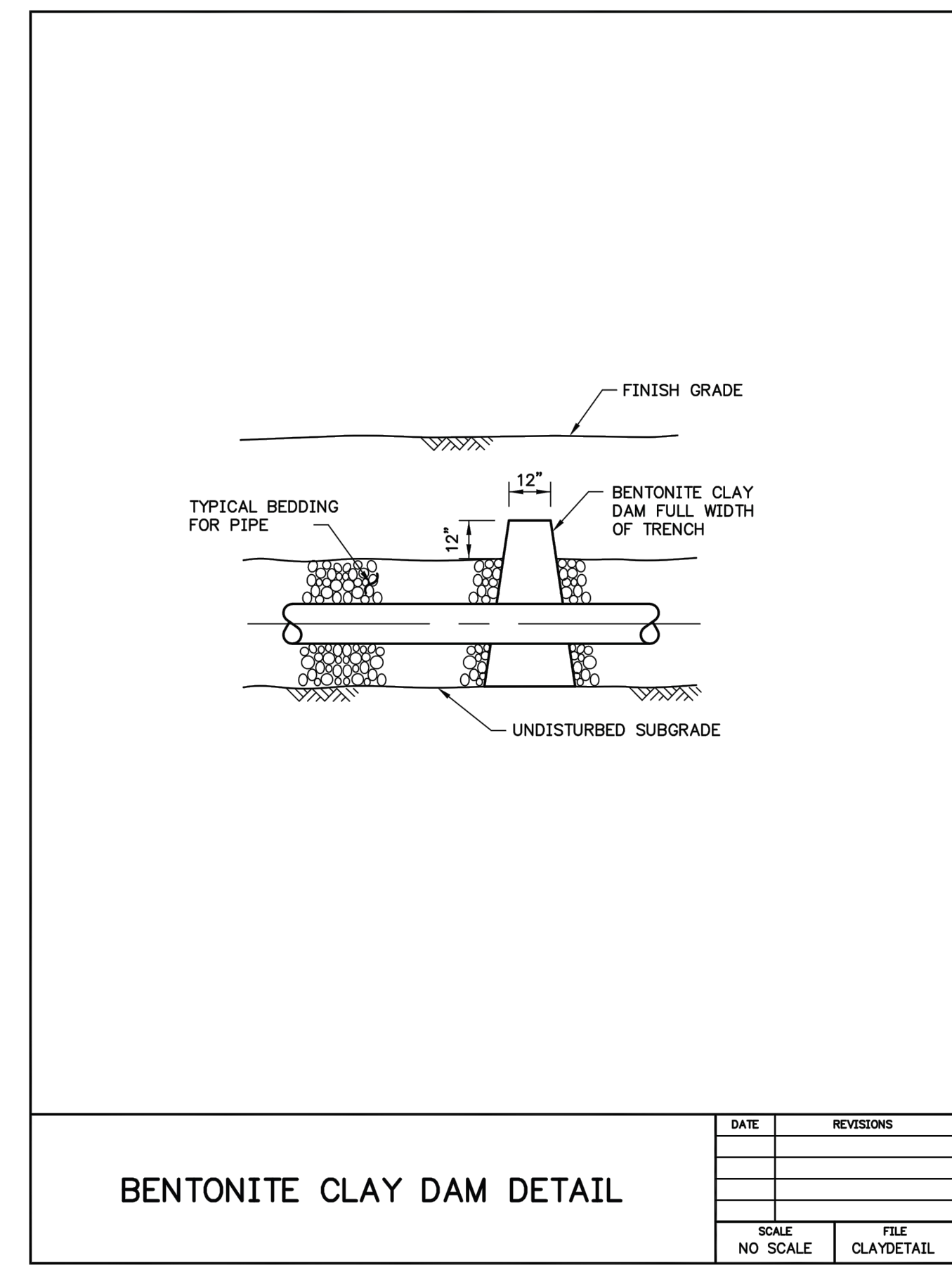
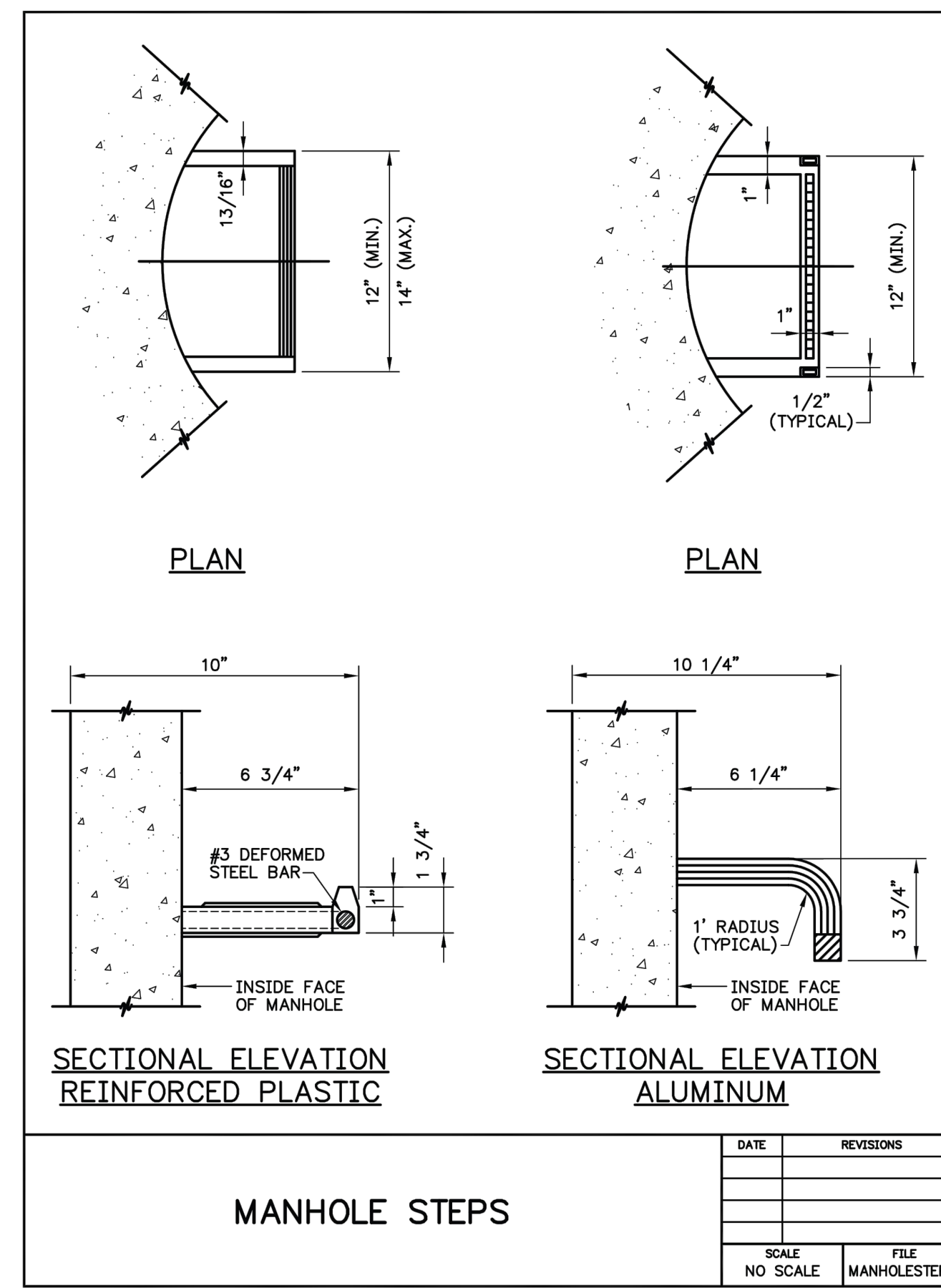
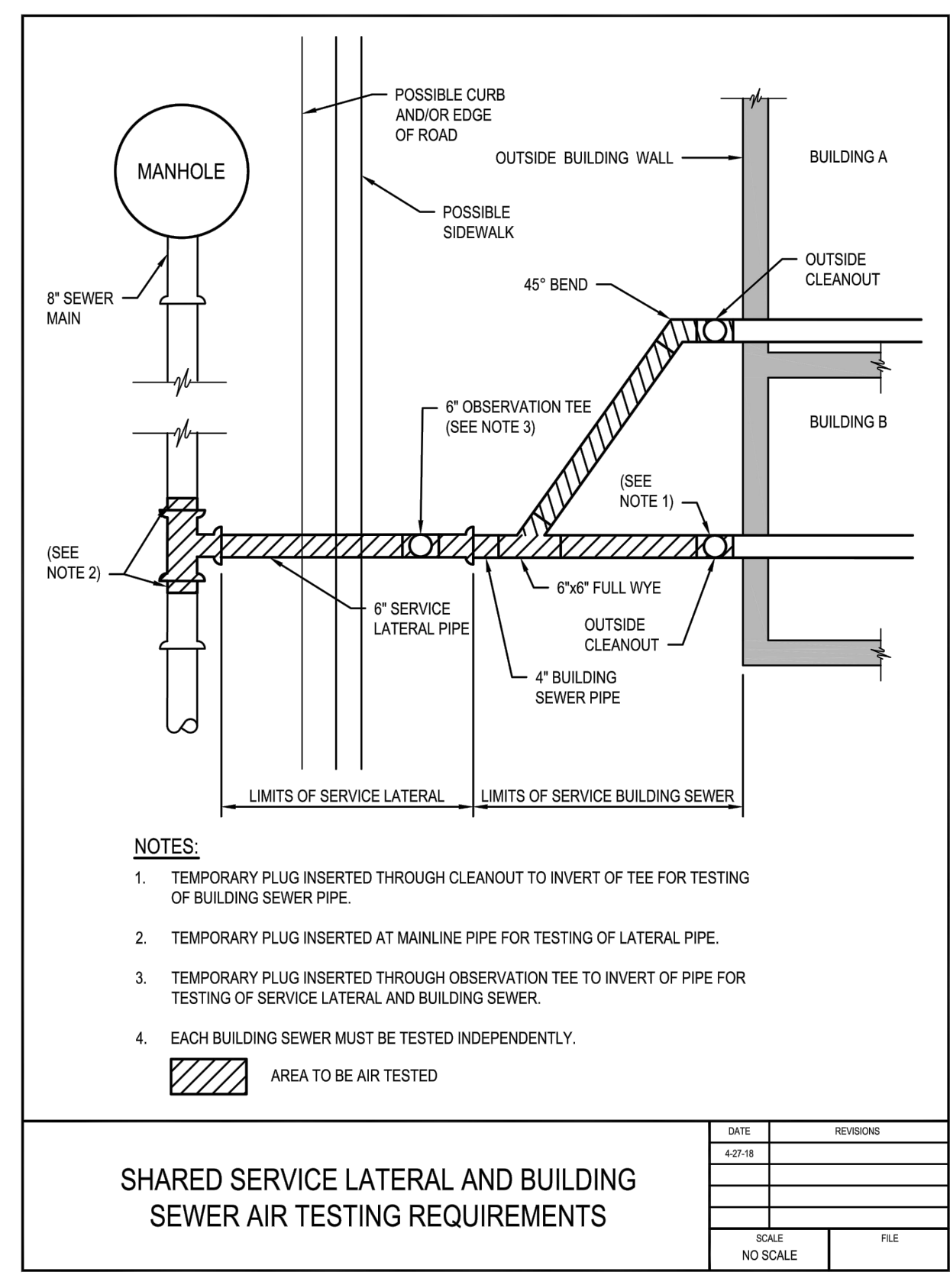
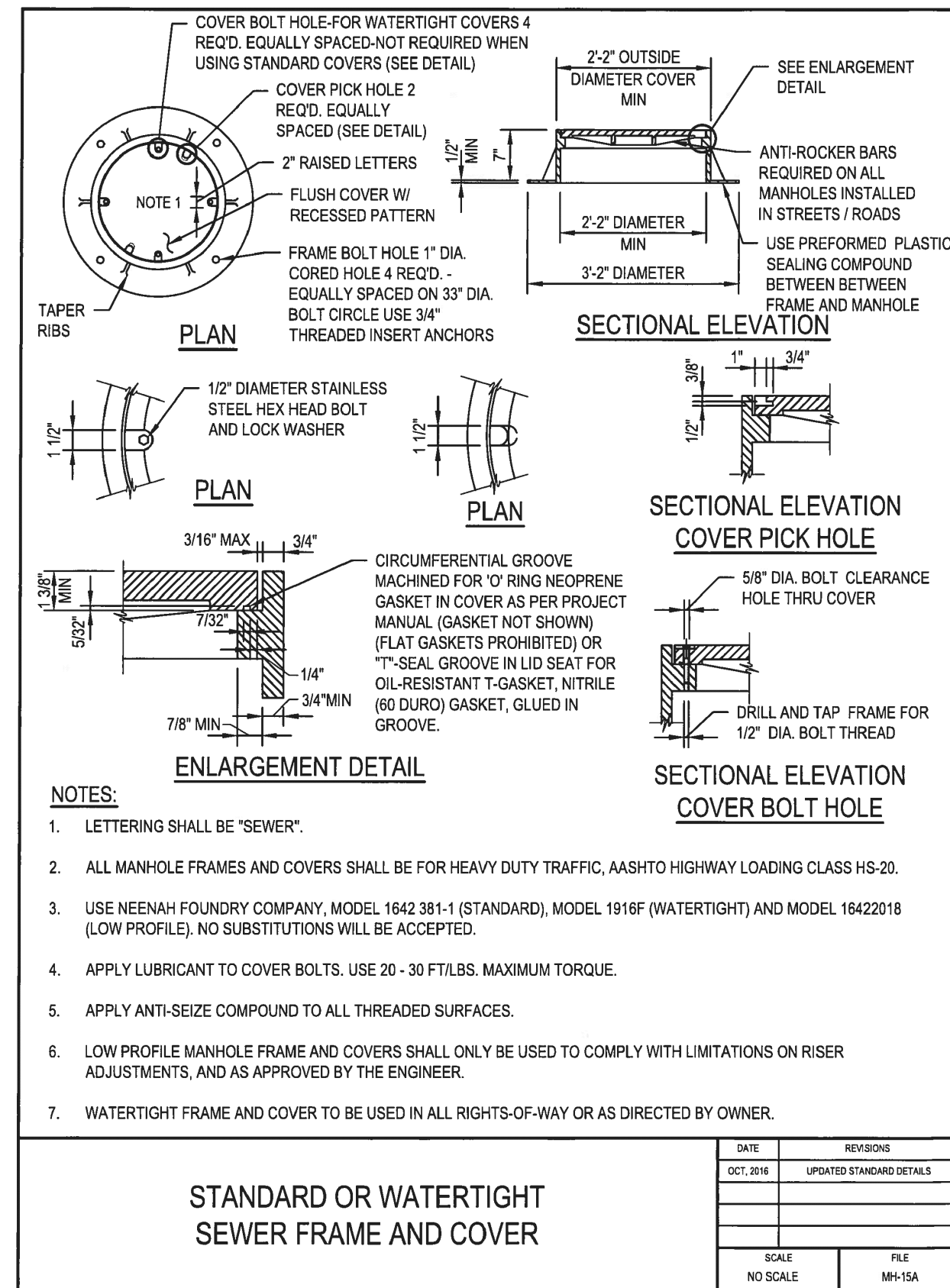
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PROJECT: 220021
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NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	07/16/21
2		
3		
4		
5		

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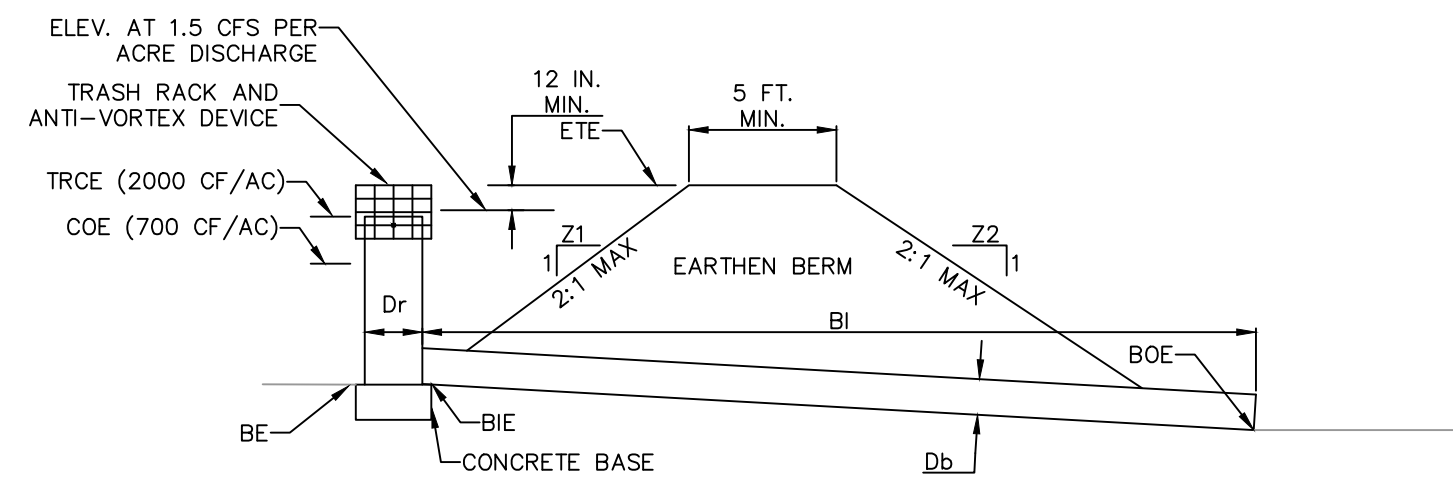
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SANITARY SEWER DETAILS
 FOR
ENCLAVE AT ELMERTON
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220021-DTL
 PROJECT: 220021
 DATE: 06/11/21
 SHEET: 26 OF 29

NO.	REVISION	COMMENTS	DATE
1	TOWNSHIP COMMENTS		07/16/21
2			
3			
4			
5			

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TRAP NO.	OUTLET STRUC.	Z1 (FT)	Z2 (FT)	RISER			BARREL			EMBANKMENT		CLEAN OUT ELEV COE (FT)	BOTTOM ELEV BE (FT)			
				DIA TR (IN)	CREST ELEV (FT)	BOT PERF ELEV (FT)	DIA DB (IN)	INLET ELEV BIE (FT)	LENGTH BI (FT)	OUTLET ELEV BOE (FT)	TOP ELEV ETE (FT)			TOP WIDTH Etw (FT)		
1	B	3	3	Conc.	2x4	442.2	440.0	HDPE	18	439.0	39	432.31	449.0	5.0	440.0	439.0
2	C	3	3	Conc.	2x4	446.0	N/A	HDPE	18	433.8	48	429.01	444.0	5.0	446.0	445.0

NOTES:

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.

ALL SEDIMENT TRAPS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT.

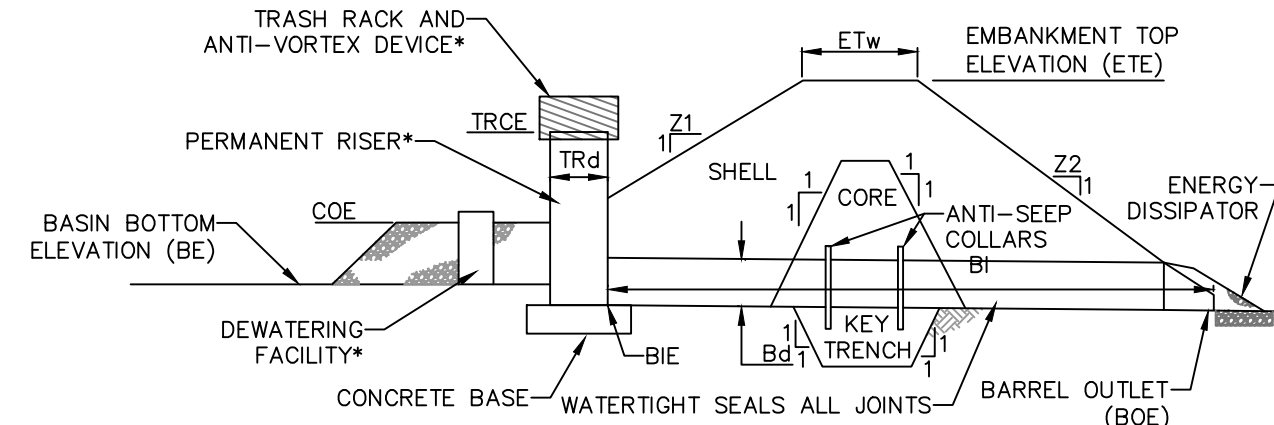
ACCESS FOR SEDIMENT REMOVAL AND OTHER REQUIRED MAINTENANCE ACTIVITIES SHALL BE PROVIDED.

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

CHECK EMBANKMENTS, SPILLWAYS, AND OUTLETS FOR EROSION, PIPING AND SETTLEMENT. CLOGGED OR DAMAGED SPILLWAYS AND/OR EMBANKMENTS SHALL BE IMMEDIATELY RESTORED TO THE DESIGN SPECIFICATIONS. DISPLACED RIPRAP WITHIN THE OUTLET PROTECTION SHALL BE REPLACED IMMEDIATELY.

ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISTURBED AREAS INSIDE THE TRAP SHALL BE STABILIZED BEFORE CONVERSION TO A STORMWATER MANAGEMENT FACILITY. TO ASSIST IN REMOVING SEDIMENT, WHICH MAY BE SATURATED, A DEVICE SUCH AS IS SHOWN IN STANDARD CONSTRUCTION DETAIL #7-18 MAY BE USED TO DEWATER THE SEDIMENT PRIOR TO ITS REMOVAL.

STANDARD CONSTRUCTION DETAIL #8-2
BARREL/RISER SEDIMENT TRAP
 NOT TO SCALE



TRAP NO.	OUTLET STRUC.	Z1 (FT)	Z2 (FT)	RISER			BARREL			EMBANKMENT		CLEAN OUT ELEV COE (FT)	BOTTOM ELEV BE (FT)			
				DIA DR (IN)	CREST ELEV RCE (FT)	BOT PERF ELEV (FT)	DIA DB (IN)	INLET ELEV BIE (FT)	LENGTH BI (FT)	OUTLET ELEV BOE (FT)	TOP ELEV ETE (FT)			TOP WIDTH Etw (FT)		
1	A	3	3	CMP	18	435.0	432.0	HDPE	18	427.0	68.9	418.48	436.0	5.0	432.0	431.0

NOTES:

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

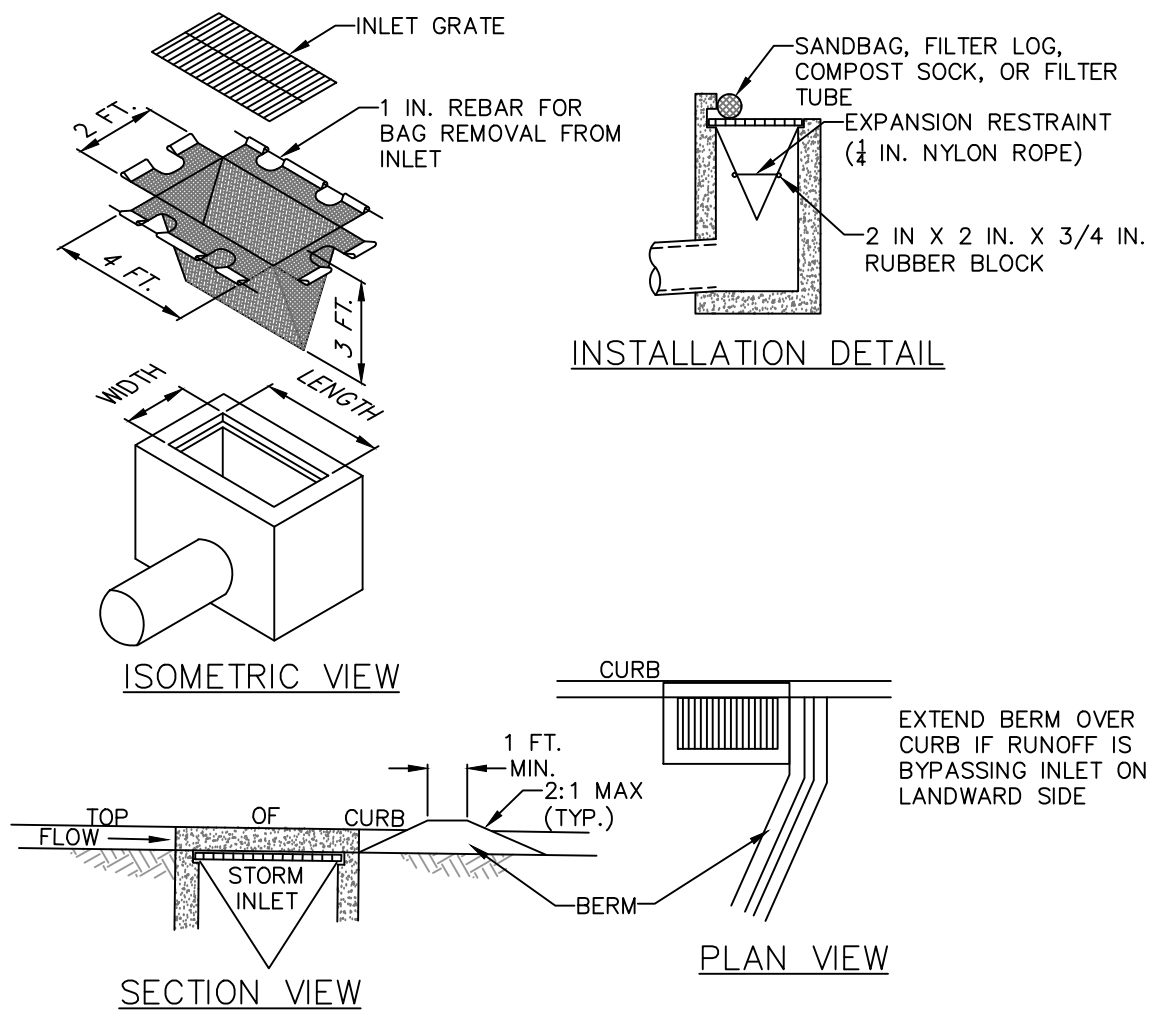
AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO A DEPTH OF TWO FEET PRIOR TO ANY PLACEMENT AND COMPACTION OF EARTHEN FILL. FILL MATERIAL FOR THE EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. 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.

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

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 RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS. DISPOSE OF MATERIALS REMOVED FROM THE BASIN IN THE MANNER DESCRIBED IN THE E&S PLAN.

INSPECT ALL SEDIMENT BASINS ON AT LEAST A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. CHECK BASIN EMBANKMENTS, SPILLWAYS, AND OUTLETS FOR EROSION, PIPING AND SETTLEMENT. NECESSARY REPAIRS SHALL BE MADE IMMEDIATELY. DISPLACED RIPRAP WITHIN THE OUTLET ENERGY DISSIPATOR SHALL BE REPLACED IMMEDIATELY. ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISTURBED AREAS SHALL BE STABILIZED INSIDE THE BASIN 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.

STANDARD CONSTRUCTION DETAIL #7-6
SEDIMENT BASIN EMBANKMENT AND SPILLWAY DETAILS
 NOT TO SCALE



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.

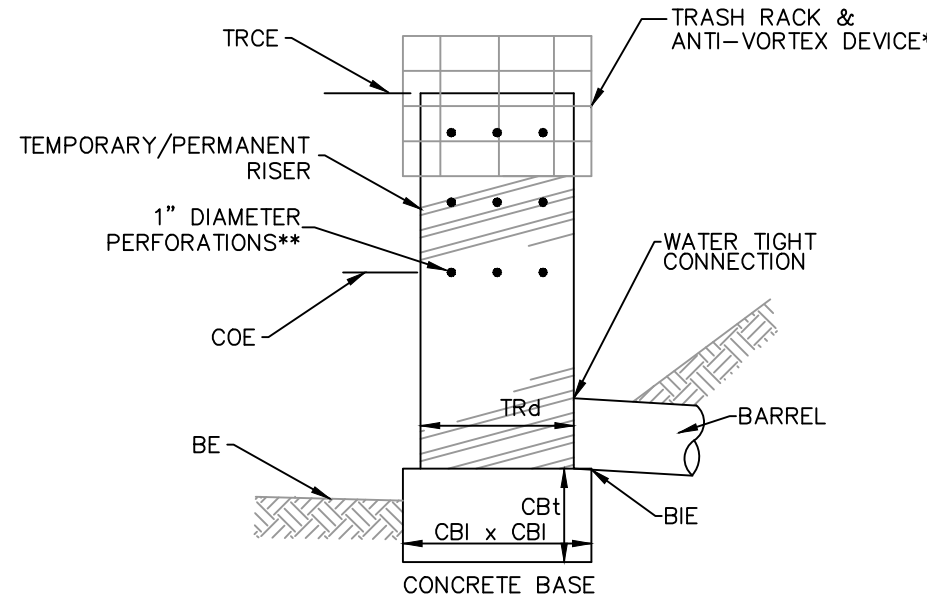
ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT.

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 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.

STANDARD CONSTRUCTION DETAIL #4-15
FILTER BAG INLET PROTECTION - TYPE C INLET
 N.T.S.



* SEE STANDARD CONSTRUCTION DETAIL #7-5, TRASH RACK AND ANTI-VORTEX DEVICE
 ** LOWEST ROW OF HOLES AT SEDIMENT CLEAN-OUT ELEVATION

BASIN NO.	OUTLET STRUC.	TEMPORARY RISER			PERFORATIONS			CONCRETE BASE		BARREL	
		DIA TR (IN)	CREST ELEV (FT)	MAT'L	LOWEST ROW OF HOLES ELEV (FT)	NO. ROWS**	NO. HOLES PER ROW	VERT. SPACING OF ROWS (FT)	LENGTH AND WIDTH CBI (IN)		THICKNESS CBI (IN)
1	A	18	435.0	CMP	432.0	1	10	N/A	60x60	12	427.0

NOTES:

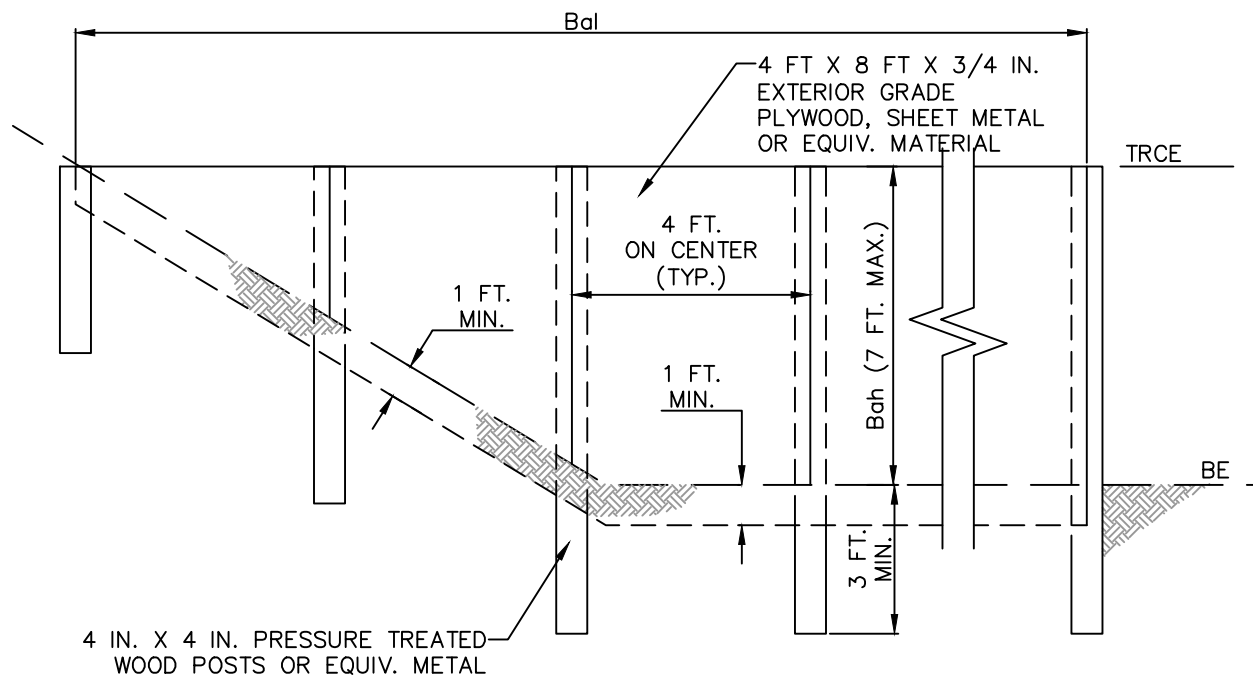
A MINIMUM OF 2-#8 REBAR SHALL BE PLACED AT RIGHT ANGLES AND PROJECTING THROUGH SIDES OF RISER TO ANCHOR IT TO CONCRETE BASE. REBAR SHALL PROJECT A MINIMUM OF 1/4 RISER DIAMETER BEYOND OUTSIDE OF RISER.

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.

STANDARD CONSTRUCTION DETAIL #7-7
SEDIMENT BASIN TEMPORARY RISER WITH PERFORATIONS
 NOT TO SCALE



BASIN OR TRAP NO.	BAFFLE		RISER	BOTTOM
	LENGTH Baf (FT)	HEIGHT Baf (FT)		
TRAP 1	594	1.0	446.0	445.0
TRAP 2	153	3.2	442.2	439.0

NOTES:

SEE APPROPRIATE BASIN DETAIL FOR PROPER LOCATION AND ORIENTATION.

AN ACCEPTABLE ALTERNATIVE IS TO INSTALL A SUPER SILT FENCE AT THE BAFFLE LOCATION

IN POOLS WITH DEPTHS EXCEEDING 7', THE TOP OF THE PLYWOOD BAFFLE DOES NOT NEED TO EXTEND TO THE TEMPORARY RISER CREST. SUPER SILT FENCE BAFFLES NEED NOT EXTEND TO TRCE ELEVATION.

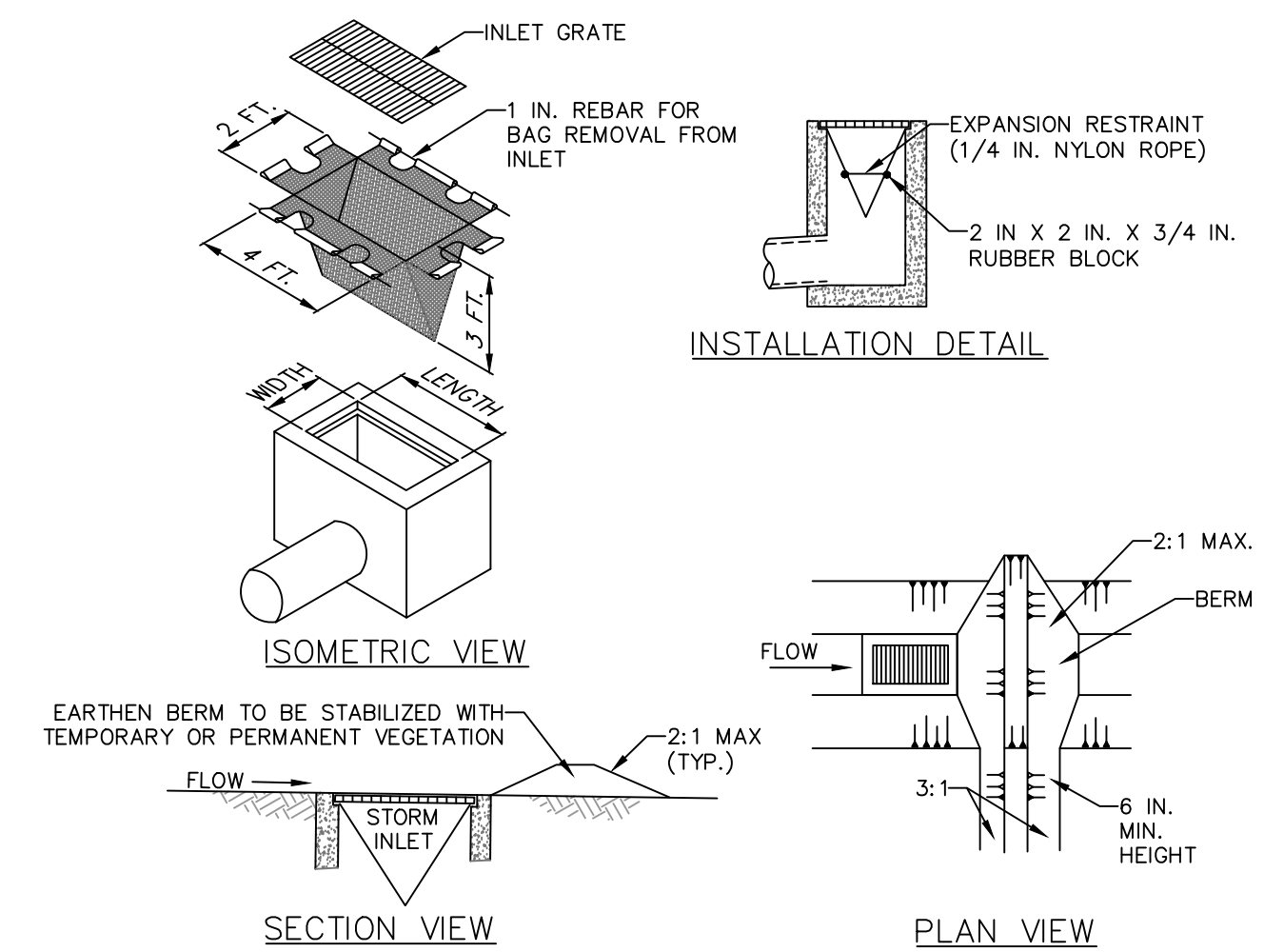
BAFFLES SHALL BE TIED INTO ONE SIDE OF THE BASIN UNLESS OTHERWISE SHOWN ON THE PLAN DRAWINGS.

SUBSTITUTION OF MATERIALS NOT SPECIFIED IN THIS DETAIL SHALL BE APPROVED BY THE DEPARTMENT OR THE LOCAL CONSERVATION DISTRICT BEFORE INSTALLATION.

DAMAGED OR WARPED BAFFLES SHALL BE REPLACED WITHIN 7 DAYS OF INSPECTION.

BAFFLES REQUIRING SUPPORT POSTS SHALL NOT BE INSTALLED IN BASINS REQUIRING IMPERVIOUS LINERS.

STANDARD CONSTRUCTION DETAIL #7-14
BAFFLE
 NOT TO SCALE



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 IN ROADWAY SHALL BE MAINTAINED 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 REMAIN PERMANENTLY.

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 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.

STANDARD CONSTRUCTION DETAIL #4-16
FILTER BAG INLET PROTECTION - TYPE M INLET
 N.T.S.

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E&S POLLUTION CONTROL
DETAILS
ENCLAVE AT ELMERTON
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220021-DTL
 PROJECT: 220021
 DATE: 06/11/21
 SHEET: 27 OF 29

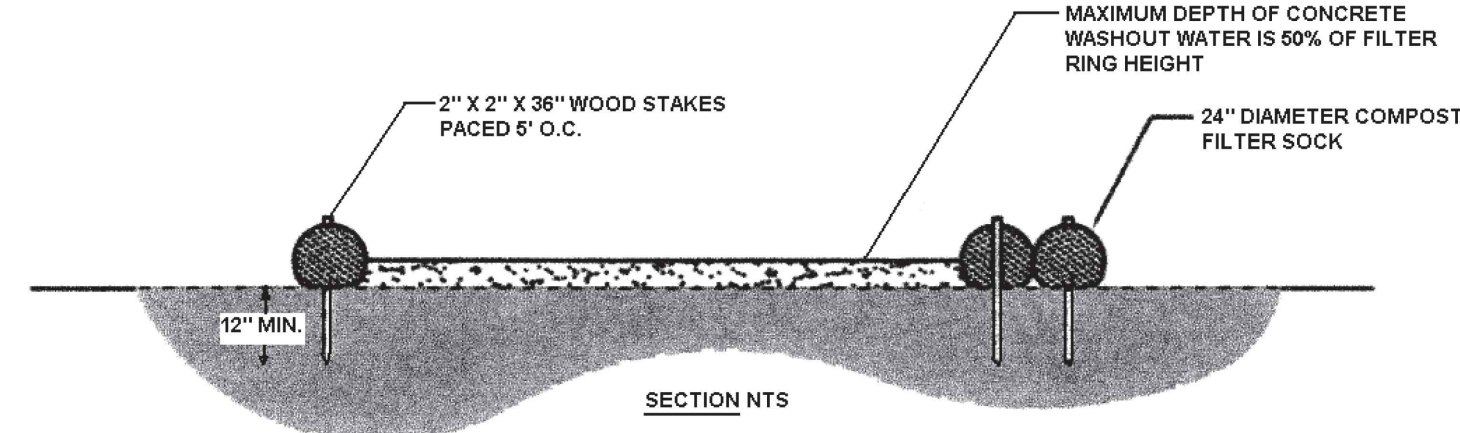
NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	07/16/21
2		
3		
4		
5		

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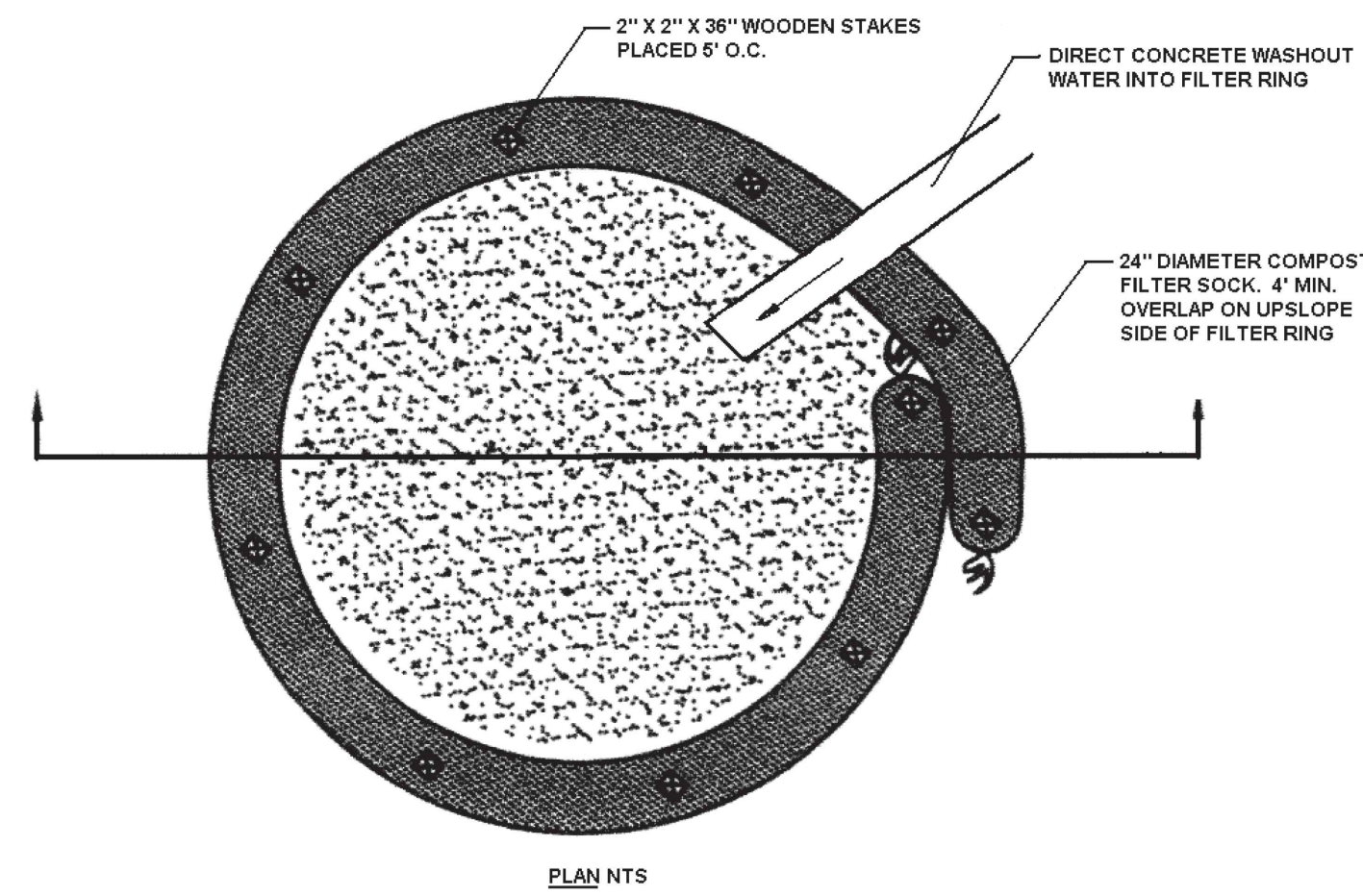


Filtrex

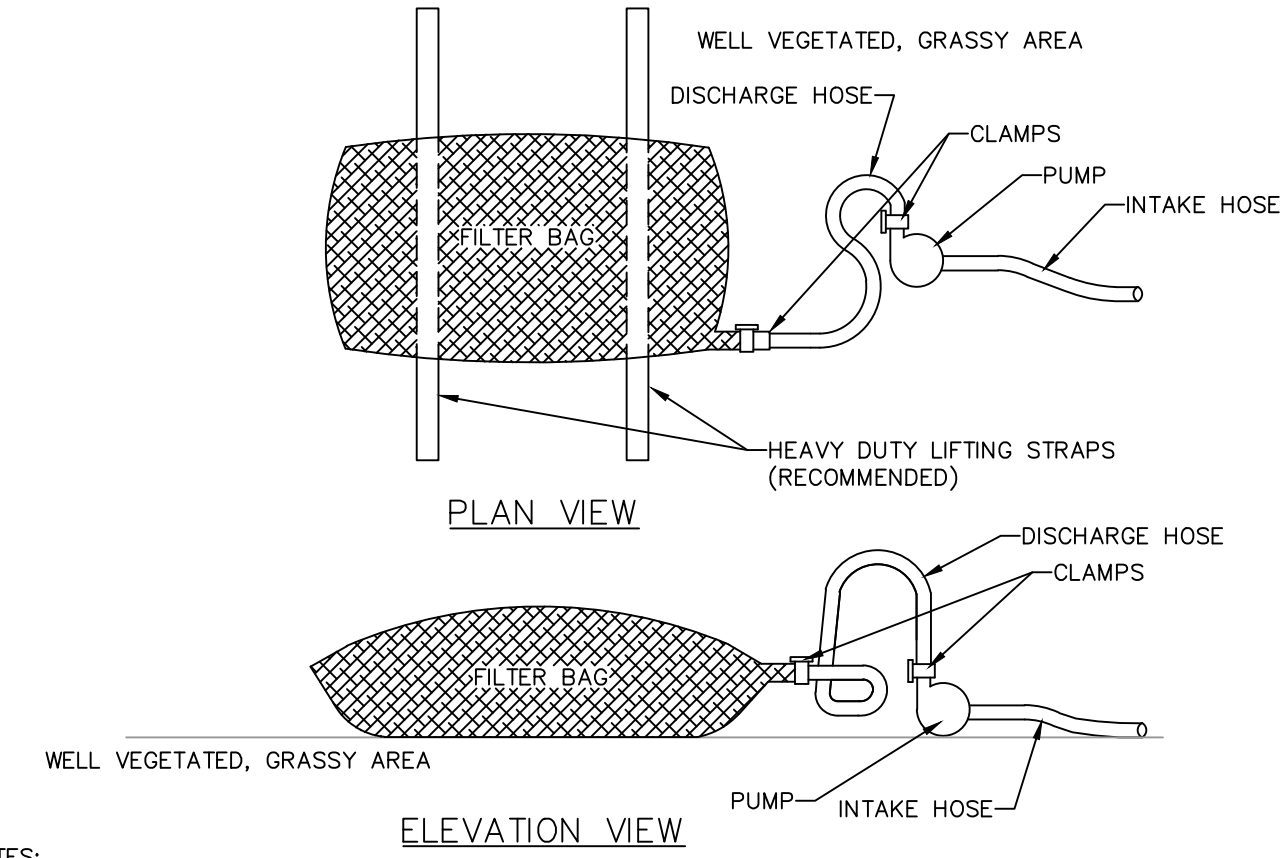
FIGURE 3.18
Typical Compost Sock Washout Installation



NOTES:
1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE
2. 18\"/>



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



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.

NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.

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.

STANDARD CONSTRUCTION DETAIL #3-16
PUMPED WATER FILTER BAG
N.T.S.

NOTES:

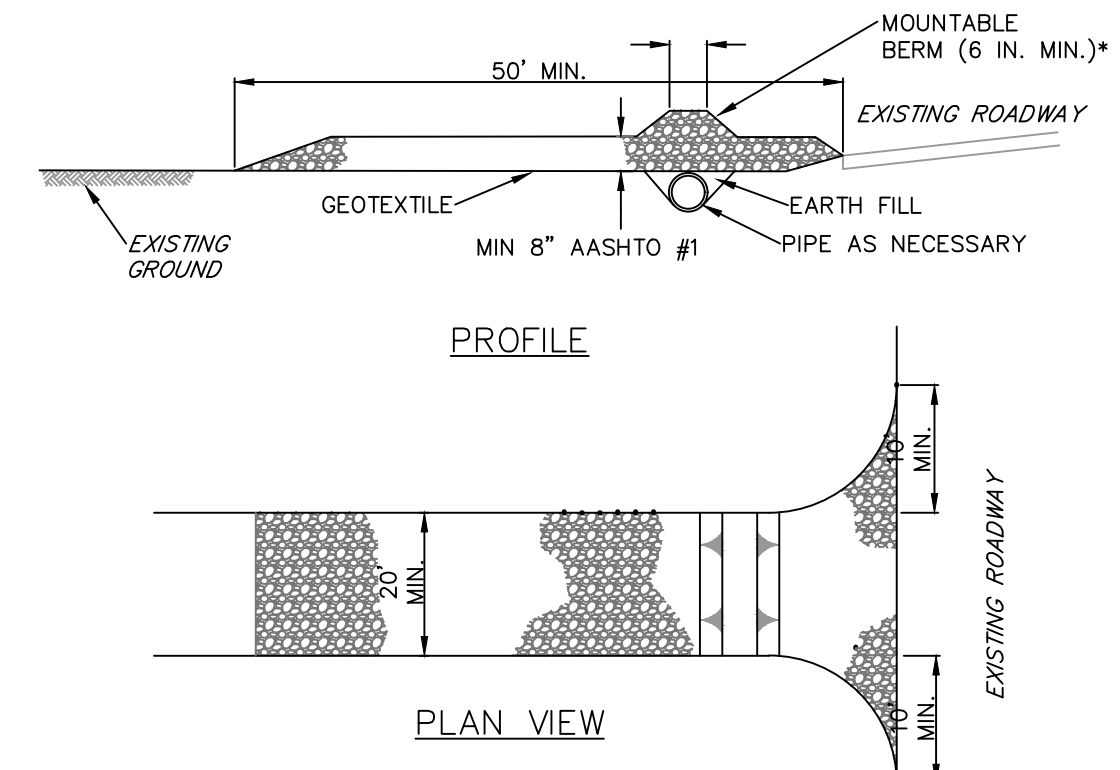
REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

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

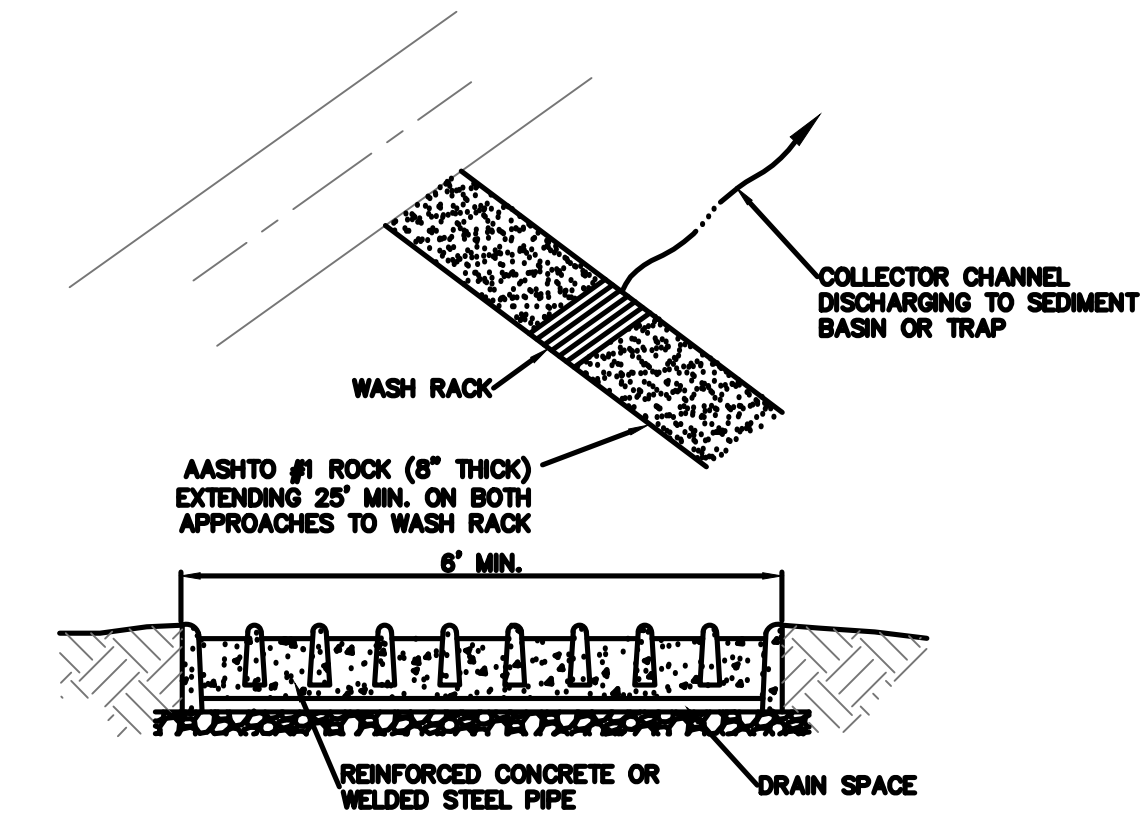
MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL 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



* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE



NOTES:

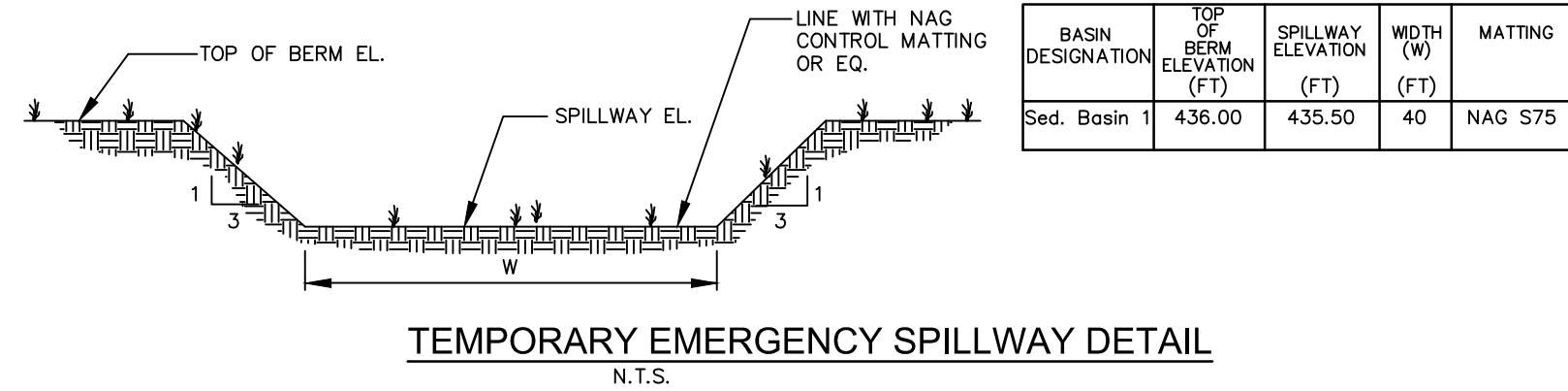
WASH RACK SHALL BE 20 FEET (MIN.) WIDE OR TOTAL WIDTH OF ACCESS.

WASH RACK SHALL BE DESIGNED AND CONSTRUCTED TO ACCOMMODATE ANTICIPATED CONSTRUCTION VEHICULAR TRAFFIC.

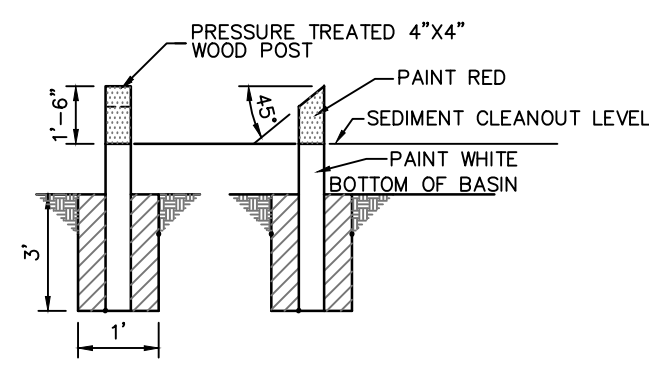
A WATER SUPPLY SHALL BE MADE AVAILABLE TO WASH THE WHEELS OF ALL VEHICLES EXITING THE SITE.

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. DRAIN SPACE UNDER WASH RACK SHALL BE KEPT OPEN AT ALL TIMES. DAMAGE TO THE WASH RACK SHALL BE REPAIRED PRIOR TO FURTHER USE OF THE RACK. ALL SEDIMENT DEPOSITED ON ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

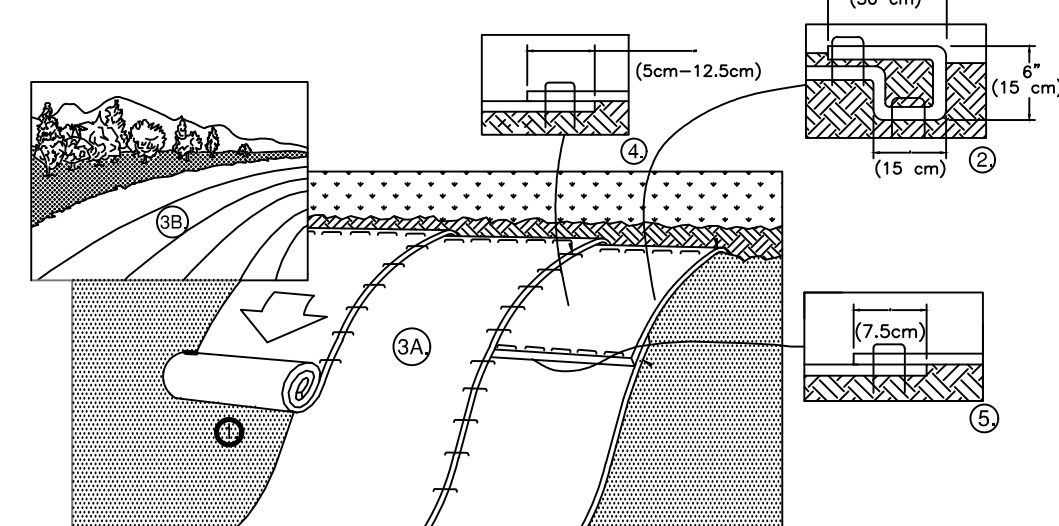
STANDARD CONSTRUCTION DETAIL #3-2
ROCK CONSTRUCTION ACCESS WITH WASH RACK
NOT TO SCALE



TEMPORARY EMERGENCY SPILLWAY DETAIL
N.T.S.

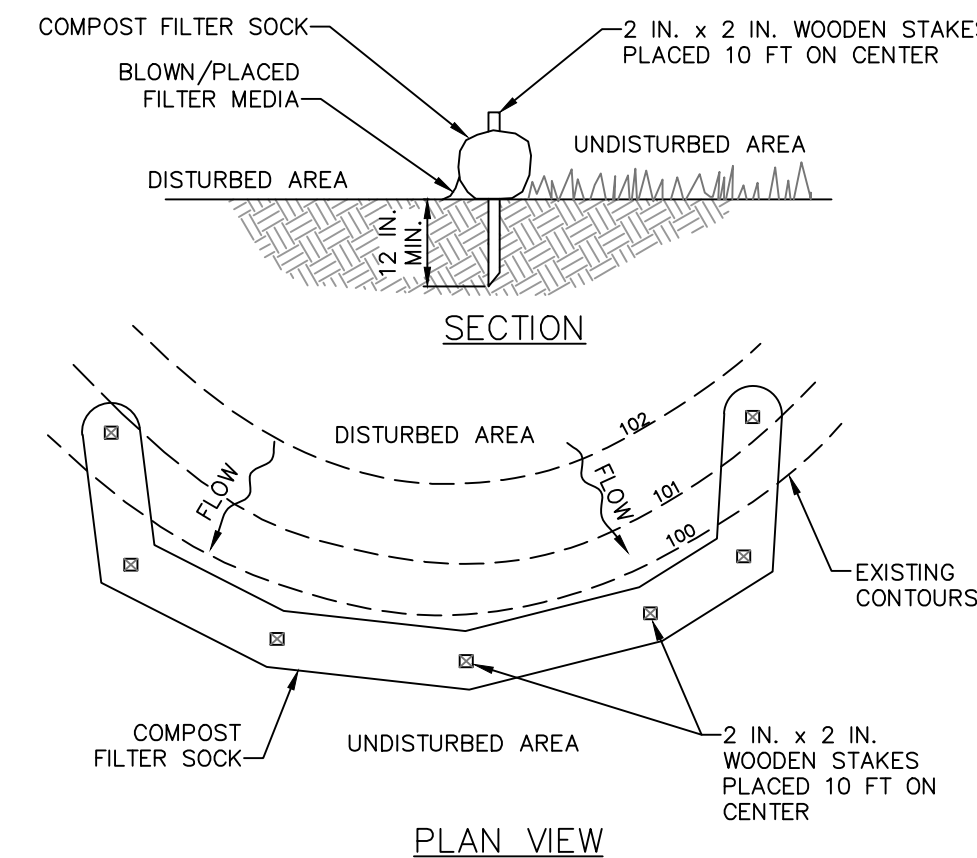


SEDIMENT CLEANOUT STAKE DETAIL
N.T.S.



NOTE: EROSION CONTROL MATTING SHALL BE NORTH AMERICAN GREEN S75, OR APPROVED EQUAL.
1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDING BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FELD REMAINING 12" (30cm) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SLIP AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5cm-12.5cm) OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5cm) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30cm) APART BETWEEN BLANKET WIDTH.
NOTE:
IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15cm) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

EROSION CONTROL MATTING ON SLOPE
N.T.S.



COMPOST FILTER SOCK
NOT TO SCALE

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	24	Shown on E&S Control Plan	5	806
2	12	Shown on E&S Control Plan	30	40
3	24	Shown on E&S Control Plan	27	89
4	18	Shown on E&S Control Plan	29	59
5	24	Shown on E&S Control Plan	29	75
6	18	Shown on E&S Control Plan	20	164
7	32	Shown on E&S Control Plan	9	346
8	32	Shown on E&S Control Plan	9	376
9	24	Shown on E&S Control Plan	13	243
10	24	Shown on E&S Control Plan	17	233
11	24	Shown on E&S Control Plan	17	257
12	32	Shown on E&S Control Plan	15	315
13	32	Shown on E&S Control Plan	14	369
14	32	Shown on E&S Control Plan	14	370

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E&S POLLUTION CONTROL
ENCLAVE AT ELMERTON
LOCATED IN
SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID:
220021-DTL
PROJECT: 220021
DATE: 06/11/21
SHEET:
28 OF 29

DATE: 07/16/21
REVISION: 1
TOWNSHIP COMMENTS: ---
NO. 1
NO. 2
NO. 3
NO. 4
NO. 5

DATE: 07/16/21
REVISION: 1
TOWNSHIP COMMENTS: ---
NO. 1
NO. 2
NO. 3
NO. 4
NO. 5

DATE: 07/16/21
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NO. 1
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DATE: 07/16/21
REVISION: 1
TOWNSHIP COMMENTS: ---
NO. 1
NO. 2
NO. 3
NO. 4
NO. 5

EROSION CONTROL PLAN

GENERAL NOTES

- The site contractor and their designees shall familiarize themselves with this Erosion Control Plan. The site contractor shall be responsible for implementation of this Erosion Control Plan. The site contractor shall not disturb more area than is necessary for the task to be done, so that potential for erosion is minimized.
- The site contractor shall ensure that earth disturbance activities are planned and implemented to the extent practicable in accordance with the following:
 - Minimize the extent and duration of the earth disturbance.
 - Maximize protection of existing drainage features and vegetation.
 - Minimize soil compaction.
 - Utilize other measures or controls that prevent or minimize the generation of increased stormwater runoff.
- Erosion and sedimentation controls must be constructed, stabilized, and functional before site disturbance within the tributary areas to the controls.
- A copy of the approved Erosion and Sediment Control Plan / Drawings (stamped, signed and dated by the reviewing agency) must be available at the project site at all times.
- Clearing, grubbing, and topsoil stripping shall be limited to those areas described in each stage of the construction sequence. General site clearing grubbing and topsoil stripping may not commence in any stage or phase of the project until the E & S BMPs specified by the Construction Sequence for that stage or phase have been installed and are functioning as described in this document.
- At no time shall construction vehicles be allowed to enter areas outside the limit of disturbance boundaries shown on the plan maps. These areas must be clearly marked and fenced off before clearing and grubbing operation begin.
- Topsoil stockpile heights shall not exceed 35 feet. Stockpile side slopes must be 2:1 or flatter. Solids, trash and other pollutants shall be disposed in accordance with federal and state regulations in order to prevent any pollutant in such materials from adversely affecting the environment. All building materials and wastes must be removed from the site and recycled or disposed in accordance with the Department of Environmental Protection's Solid Waste Management regulations at 25 Pa. Code 260.1, et seq., 271.1, and 287.1 et seq. No building materials or wastes or unused building materials shall be burned, buried, dumped, or discharged at the site.
- All off-site waste and borrow areas must have an E & S Plan approved by the Conservation District or DEP, and fully implemented prior to being activated.
- The contractor will be responsible for the removal of any excess material and make sure the site(s) receiving the excess has an approved and fully implemented erosion and sediment control plan that meets the conditions of Chapter 102 and/or other State or Federal regulations.
- The contractor is responsible for ensuring that any material brought onto the site is Clean Fill. Form FP-2001 must be retained by the property owner for any fill material affected by a spill or release of a regulated substance but qualifying as Clean Fill due to analytical testing.
- Areas which are to be topsoiled shall be scarified to a minimum depth of 4 inches prior to placement of topsoil. Areas to be vegetated shall have a minimum 4 inches of topsoil in place prior to seeding and mulching. Fill outcrops shall have a minimum of 2 inches of topsoil.
- All graded areas shall be permanently stabilized immediately upon reaching finished grade. Cut slopes in competent bedrock and rock fills shall be stabilized or vegetated.
- Cut and fill slopes shall be capable of resisting failure due to slumping, sliding, or other movements.
- All E & S BMPs must remain functional as such until all areas tributary to them are permanently stabilized or until they are replaced by another BMP approved by the Conservation District or PA DEP.
- After final site stabilization has been achieved, temporary E & S BMPs must be removed or converted to permanent post construction stormwater management BMPs. Areas disturbed during removal or conversion of BMPs must be stabilized immediately, in order to ensure rapid revegetation of disturbed areas, such removal / conversions should be done only during the germinating season.
- Failure to correctly install E & S BMPs, failure to prevent sediment-laden runoff from leaving the construction site, or failure to take immediate corrective action to resolve failure of E & S BMPs may result in administrative, civil, and/or criminal penalties being instituted by the Pennsylvania Department of Environmental Protection as defined in Section 602 of the Pennsylvania Clean Streams Law. The Clean Streams Law provides for up to \$10,000 per day in civil penalties, up to \$10,000 in summary criminal penalties, and up to \$25,000 in misdemeanor criminal penalties for each violation.
- Only limited disturbance will be permitted to initially access and acquire borrow to construct control facilities, before general site alteration begins.
- If fuel or other dangerous chemicals are stored on site, then a Preparedness, Prevention and Contingency (PPC) Plan must be developed and kept on site.
- Underground utilities cutting through any active channel shall be immediately backfilled and the channel restored to its original cross-section and protective lining. Any base flow within the channel shall be conveyed past the work in the manner described in this plan until such restoration is complete.
- All channels must be kept free of obstructions such as fill ground, fallen leaves & woody debris, accumulated sediment, and construction materials/wastes. Channels should be kept mowed and/or free of all weedy, brushy or woody growth. Any underground utilities running across/through the channel(s) shall be immediately backfilled and the channel(s) repaired and stabilized per the channel cross-section detail.
- Vegetated channels shall be constructed free of rocks, tree roots, stumps or other projections that will impede normal channel flow and/or prevent good lining to soil contact. The channel shall be initially over-excavated to allow for the placement of topsoil.
- Sediment basins/traps shall be kept free of all trash, concrete wash water and other debris that pose the potential for clogging the basin/trap outlet structures and/or pose the potential for pollution to waters of the Commonwealth.
- All building materials and wastes shall be removed from the site and recycled or disposed of in accordance with the Department's Solid Waste Management Regulations at 25 Pa. Code 260.1, et seq., 271.1, and 287.1 et seq. No building materials or wastes or unused building materials shall be burned, buried, dumped, or discharged at the site.
- Fill Materials:
 - The NPDES Permit covers the "moving, depositing, stockpiling, or storing of soil rock or earth materials." If from an off site location, the contractor shall have the fill imported from an off site location, the responsibility for performing environmental due diligence and the determination of clean fill will in most cases reside with the Operator. If the site will have excess fill that will need to be exported to an off site location, the responsibility of clean fill determination and the environmental due diligence rests on the applicant. If all cut and fill materials will be used on the site, a clean fill determination is not required by the operator unless there is a belief that a spill or release of a regulated substance occurred on site. The contractor is responsible for ensuring that any material brought onto the site is Clean Fill. Form FP-2001 must be retained by the property owner for any fill material affected by a spill or release of a regulated substance but qualifying as Clean Fill due to analytical testing.
 - Applicants and/or operators must use environmental due diligence to ensure that the fill material associated with this project qualifies as Clean Fill. Definitions of Clean Fill and Environmental Due Diligence are provided below. All fill material must be used in accordance with the Department's policy "Management of Fill," document number 258-2182-773. A copy of this policy is available online at www.depweb.state.pa.us. Under the heading Quick Access on the left side of the screen, click on "Forms and Publications." On the left side of the screen click on "Technical Guidance Documents-Final." Then type the document number 258-2182-773 into the search window and conduct the search. Click on "Management of Fill."
 - Clean Fill is defined as: Uncontaminated, non-water soluble, non-decomposable, inert, solid material. The term includes soil, rock, stone, dredged material, and brick or concrete from construction and demolition activities that is separate from other waste and is recognizable as such. The term does not include materials placed in or on the waters of the Commonwealth unless otherwise authorized. (The term "used asphalt" does not include milled asphalt or asphalt that has been processed for re-use).
 - Clean Fill affected by a spill or release of a regulated substance: Fill materials affected by a spill or release of a regulated substance still qualifies as clean fill provided the testing reveals that the fill material contains concentrations of regulated substances that are below the residential limits in Tables FP-1a and FP-1b found in the Department's policy "Management of Fill."
 - Environmental due diligence: Investigative techniques, including, but not limited to, visual property inspections, electronic data base searches, review of property ownership, review of property use history, Sanborn maps, environmental questionnaires, transaction screens, analytical testing, environmental assessments or audits. Analytical testing is not a required part of due diligence unless visual inspection and/or review of the past land use of the property indicates that the fill may have been subjected to a spill or release of regulated substance. If the fill may have been affected by a spill or release of a regulated substance, it must be tested to determine if it qualifies as clean fill. Testing should be performed in accordance with Appendix A of the Department's policy "Management of Fill."
 - Fill material that does not qualify as clean fill is regulated fill. Regulated fill is waste and must be managed in accordance with the Department's municipal or residual waste regulations based on 25 Pa. Code Chapters 287 Residual Waste Management or 271 Municipal Waste Management, whichever is applicable.

SOIL LIMITATIONS & RESOLUTIONS

The soils on this site tend to be easily erodible, and may be susceptible to piping. A solution to this limitation is to grade the site at acceptable slopes (2:1 cut, 3:1 fill), and to stabilize the slopes as soon as they've been graded. The soils on this site are also corrosive to concrete, which the use of plastic pipes will help to alleviate. As are most soils in PA, the soils on this site can lead to cut banks that may cave. Proper stabilization will be utilized when digging pipe trenches and foundations. The soils on this site also have issues with slow percolation. Test pits and infiltration tests were performed in the area of the basins and underground infiltration beds to ensure that these limitations were analyzed for this site. These tests also allowed us to analyze the amount of topsoil present, which may be a limitation on the site.

SITE PRESERVATION ANALYSIS

There is a stream channel located on the north side of this site. In order to preserve, maintain and protect it, grading will be minimized at the location of the stream and silt socks will be placed along the stream's border to ensure that sediment laden runoff does not pollute the stream. Soil compaction will be kept to a minimum around the stream. Due to the nature of the development, which includes homes and surrounding streets, it was not possible to minimize the impervious areas on the site. There are no significant drainage features and vegetation to protect on this site. Most of the site area will have to be cleared and graded in order to construct the proposed improvements. The soil will experience some compaction in all of the areas where grading will occur, however compaction will be kept to a minimum in the areas of the proposed basins. The increase in the stormwater runoff volume in the 2-year storm will be infiltrated.

STABILIZATION SPECIFICATIONS

- Upon temporary cessation of an earth disturbance activity or any stage or phase of an activity where a cessation of earth disturbance activities will exceed 4 days, the site shall be immediately seeded, mulched, or otherwise protected from accelerated erosion and sedimentation pending future earth disturbance activities.
- Permanent stabilization is defined as a minimum uniform 70% perennial vegetative cover or other permanent non-vegetative cover with a density sufficient to resist accelerated surface erosion and subsurface characteristics sufficient to resist sliding and other movements.
- Topsoil required for the establishment of vegetation shall be stockpiled at the location(s) shown on the plan drawings in the amount necessary to complete the finish grading of all exposed areas that are to be stabilized by vegetation. Each stockpile shall be protected in the manner shown on the plan drawings. Topsoil stockpile heights shall not exceed 35 feet. Stockpile side slopes must be 2:1 or flatter.
- Areas which are to be topsoiled shall be scarified to a minimum depth of 3 to 5 inches (6 to 12 inches on compacted soils) prior to placement of topsoil. Areas to be vegetated shall have a minimum 4 inches of topsoil in place prior to seeding and mulching. Fill outcrops shall have a minimum of 2 inches of topsoil.
- Topsoil should not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet, or in a condition that may otherwise be detrimental to proper grading and seedbed preparation. Compacted soils should be scarified 6 to 12 inches along contour whenever possible prior to seeding.
- An erosion control blanket will be installed on all disturbed slopes 3:1 or steeper, all areas of concentrated flows, and disturbed areas within 50' of a surface water.

TEMPORARY SEEDING SCHEDULE

The contractor shall immediately temporarily stabilize any rough graded area, topsoil stockpile or unused excavated fill material that will be left idle for less than 1 year. The grass will provide interim protection against the impact of precipitation, running water and wind. Permanently seed any area that will be idle for more than 1 year.

Temporary seeding schedule is as follows:

Species: annual rye grass
% Live Seed: 98%

Application rate: 10 lbs./1,000 sq. yds.
Fertilizer type: general purpose granular, 10-20-20
Fertilizer application rate: 11 lbs./1,000 sq. yds.
Powdered Liming rate per soil test; minimum of 4 tons per acre.
Strawbale mulch rate: 1,200 lbs./1,000 sq. yds.
Seeding dates: no seeding between 11/1 and 3/15
Mulch anchoring: Asphalt, either emulsified or cut-back, containing no solvents or other diluting agents toxic to plant or animal life, uniformly applied at the rate of 31 gallons per 1,000 square yards. Synthetic binders (chemical binders) may be used per manufacturer's recommendation provided they are non-toxic to plant and animal species.

When seeding is not possible due to the time of year or other limitations, disturbed area shall be mulched with strawbale at the rate above. An erosion control blanket must be installed on all disturbed slopes steeper than 3:1, and all areas with concentrated flows. Matting can be North American Green 'S75' or approved equal.

PERMANENT SEEDING SCHEDULE--

All disturbed soil not to be covered with impervious surfaces, riprap or landscaping mulch shall be permanently seeded to provide protection against the impact of precipitation, running water and wind. Permanent seeding schedule for the general project area is as follows:

Species: 30% Kentucky bluegrass
40% PennLawn Creeping Red Fescue
20% Norlea Perennial ryegrass
10% annual ryegrass

% Pure live seed: 98%

Application rate: 6 lbs./1,000 sq. ft.
Fertilizer type: general purpose granular, 10-20-20
Fertilizer application rate: 11 lbs./1,000 sq. yds.
Powdered Liming rate per soil test; minimum of 6 tons per acre
Seeding dates: between 4/1 and 10/15
Strawbale mulching rate: 3 tons per acre
Mulch anchoring: Asphalt, either emulsified or cut-back, containing no solvents or other diluting agents toxic to plant or animal life, uniformly applied at the rate of 31 gallons per 1,000 square yards. Synthetic binders (chemical binders) may be used per manufacturer's recommendation provided they are non-toxic to plant and animal species.

An erosion control blanket must be installed on all disturbed slopes steeper than 3:1, and all areas with concentrated flows. Matting can be North American Green 'S75' or approved equivalent.

A minimum of 6" of topsoil shall be placed prior to seeding.

MAINTENANCE PLAN

- Until the site is stabilized, all erosion and sediment control BMPs must be maintained properly. Responsibility for implementing and maintaining erosion and sedimentation control measures shall be designated to a minimum of one individual who will be present at the project site each working day. Maintenance must include inspections of all erosion and sediment control BMPs after each runoff event and on a weekly basis, to ensure that they are in place, stable, and functioning properly. All preventative and remedial maintenance work, including clean out, repair, replacement, re-grading, re-seeding, re-mulching, and re-netting must be performed immediately, to restore the control measure to the original design. If erosion and sediment control BMPs fail to perform as expected, replacement BMPs, or modifications of those installed, will be required.
- A log showing dates that E & S BMPs were inspected as well as any deficiencies found and the date they were corrected shall be maintained on the site and be made available to regulatory agency officials at the time of inspection.
- Any sediment removed from BMPs during construction shall be returned to upland areas within the project area, and incorporated into the site grading, or in the manner described on the plan drawings.
- See the construction details and seeding specifications for maintenance procedures for the various control measures.
- Mud must be removed from vehicle tires before they exit the site. Sediment tracked onto any public roadway or sidewalk shall be returned to the construction site by the end of each work day and disposed in the manner described in this plan. In no case shall the sediment be washed, shoveled, or swept into any roadside ditch, storm sewer or surface water.

STAGING OF EARTH MOVING ACTIVITIES

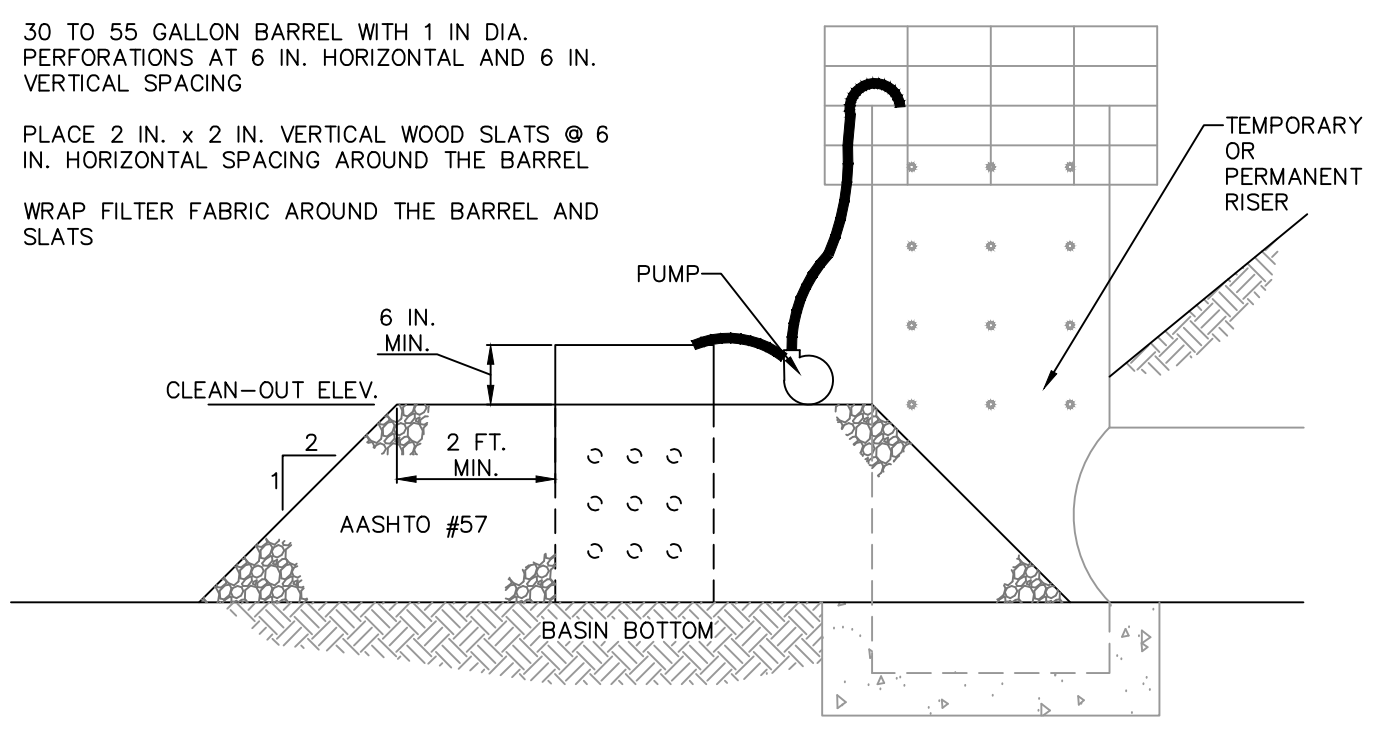
- At least 3 days before starting any earth disturbance activities, all contractors involved in those activities shall notify the Pennsylvania One Call system incorporated at 1-800-242-1776 for the location of existing underground utilities.
- All earth disturbance activities shall proceed in accordance with the following specific sequencing. Each stage shall be completed and immediately stabilized before any following stage is initiated. Clearing, grubbing, and topsoil stripping shall be limited only to those areas described in each stage. Any deviation from the following sequence must be approved in writing from the County Conservation District.
- Immediately upon discovering unforeseen circumstances posing the potential for accelerated erosion and/or sediment pollution, the operator shall implement appropriate best management practices to eliminate the potential for accelerated erosion and/or sediment pollution.
- At least 7 days before starting any earth disturbance activities, the owner and/or operator shall invite all contractors involved in those activities, the landowner, all appropriate municipal officials, and a representative of the County Conservation District to an on-site pre-construction meeting.
- Immediately after earth disturbance activities cease, the operator shall stabilize the disturbed areas. During non-germinating periods, mulch must be applied at the specified rates. Disturbed areas which are not at finished grade and which will be re-disturbed within 1 year must be stabilized in accordance with the temporary seeding vegetative stabilization specifications. Disturbed areas which are not at final grade or which will not be re-disturbed within 1 year must be stabilized in accordance with the permanent seeding vegetative stabilization specifications.
- All pumping of sediment laden water shall be through a sediment control BMP, such as a pumped water filter bag or equivalent sediment removal facility, over undisturbed vegetated areas.
- The permanent stormwater retention areas shown on the drawings shall be delineated by the land surveyor prior to beginning of earthmoving activities, and this area shall be fenced off during construction so that it is not disturbed until it is time for permanent final grading and seeding, at which time it can be shaped per the grading plan. No vehicles should be driven over the retention area except as necessary for final shaping and seeding.

SPECIFIC STAGING OF EARTHMOVING ACTIVITIES FOR MASS GRADING AND INSTALLATION OF COMMON IMPROVEMENTS

- No earth disturbance should be started until the E&S BMP's treating the disturbed area are installed and functioning.
- Clearly field mark the limits of disturbance. Install the rock construction entrances. The rock construction entrances shall be continually maintained to the specified dimensions. A stockpile of AASHTO #1 coarse aggregate shall be on the site for this purpose. At the end of each workday, any sediment deposited on paved roadways shall be removed and returned to the construction site. Field mark the topsoil stockpile locations. Topsoil stockpiles shall be stabilized utilizing the temporary seeding schedule and shall have sediment barriers located downstream to capture any sediment laden runoff. Stockpiles shall not exceed 35' in height and side slopes must be 2:1 or flatter. Field mark the locations of the Waters of the Commonwealth located within the NPDES boundary including wetland boundaries and streams.
- Install all Sediment Barriers at the locations shown on the E&S Plan. Disturbance shall be restricted to that which is only necessary to access and install the designated sediment barriers.
- Strip the topsoil in the area of Sediment Basin and Traps. Clear and grub as necessary. Construct Sediment Basin 1, including clay core, outlet structure and pipe, anti-seep collars, and riprap. Minimize compaction within the sediment basin during construction. Install cleanout marker. Stabilize the sediment basin immediately once the facility is constructed. Monitor the sediment basin through the duration of the construction activity to ensure trapped sediment does not exceed the cleanout marker elevation. A licensed professional must be present during the installation of the clay core and anti-seep collar.
- Strip topsoil in the areas of Sediment Traps 1 and 2. Clear and grub as necessary. Construct Sediment Traps 1 and 2, including clay core, outlet structures and pipes, anti-seep collars, and riprap. Minimize compaction within the trap areas during construction. Install cleanout marker. Stabilize the Sediment Trap immediately once the facility is constructed. Monitor traps through the duration of the construction activity to ensure trapped sediment does not exceed the cleanout marker elevation. A licensed professional must be present during the installation of the clay core and anti-seep collar.
- Strip the topsoil within the remaining area that will be graded. Clear and grub as necessary.
- Complete the mass grading of Phases 7 & 8. Minimize soil compaction within the undisturbed areas. Stabilize soil immediately and install temporary seeding as soon as possible.

CONVERSION TO PCSM

- Temporary control measures can only be removed when the watershed draining to the measure is permanently stabilized and removal is authorized by the County Conservation District. Permanently stabilized is defined as a minimum uniform 70% perennial vegetative cover or other permanent non-vegetative cover with a density capable to resist accelerated surface erosion, and subsurface characteristics sufficient to resist sliding and other movements. The location of the control measure must be immediately permanently stabilized upon its removal. All areas to be permanently seeded shall have a minimum depth of 6" of topsoil before seeding.
- Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas, the owner and/or operators shall contact the County Conservation District for an inspection prior to the removal of the E&S BMP's.
- Upon approval from the County Conservation District, all silt barriers shall be properly removed.
- Any areas disturbed during the removal of the temporary BMPs shall be immediately repaired and permanently stabilized.
- If the Sediment Basin BMP has not been converted as part of the previous phase of the project, Dauphin County Conservation District shall be notified in order to determine if an inspection of the BMP is necessary before conversion. Dewater the Sediment Basin and remove accumulated sediment, regrade to subgrade elevation and fill basin perimeter to final grades. Remove trash rack and anti-vortex device and replace with permanent top unit structure. All temporary orifices in the permanent outlet structure shall be capped. A temporary erosion control blanket shall be installed with the permanent seed and mulch over the entire interior of the basin. Permanently stabilize all areas disturbed during removal of E&S Controls. As this is a critical stage, a licensed professional must be present to oversee.
- Upon completion of all earth disturbance activities, removal of all temporary BMPs, the owner/operators shall contact the County Conservation District for a final inspection.

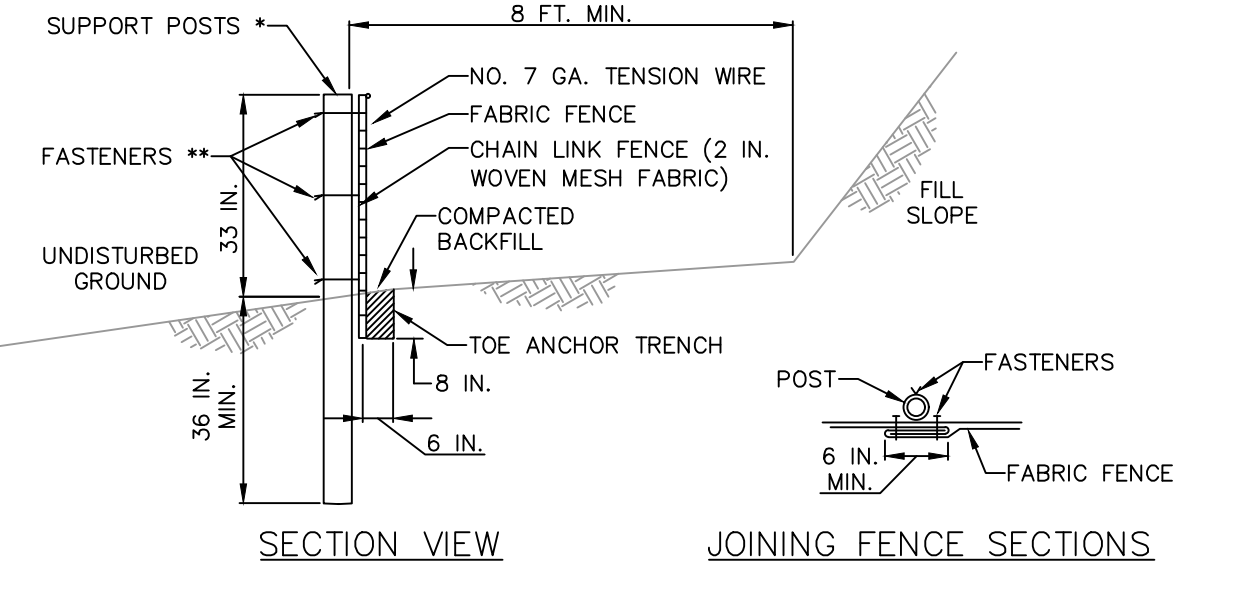


NOTES:

- 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



- * POSTS SPACED AT 10 FT. MAX. USE 2-1/2 IN. DIA HEAVY DUTY GALVANIZED OR ALUMINUM POSTS.
- ** CHAIN LINK TO POST FASTENERS SPACED AT 14 IN. MAX. USE NO. 9 GA. ALUMINUM WIRE OR NO. 9 GALVANIZED STEEL WIRE. FABRIC TO SHAIN FASTENERS SPACED AT 24 IN. MAX. ON CENTER.

NOTES:

FABRIC SHALL HAVE THE MINIMUM PROPERTIES AS SHOWN IN TABLE 4.3 OF THE PA DEP EROSION CONTROL MANUAL.

FABRIC WIDTH SHALL BE 42 IN. MINIMUM.

POSTS SHALL BE INSTALLED USING A POSTHOLE DRILL.

CHAIN LINK SHALL BE GALVANIZED NO. 11.5 GA. STEEL WIRE WITH 2-1/4 IN. OPENING, NO. 11 GA. ALUMINUM COATED STEEL WIRE IN ACCORDANCE WITH ASTM-A-491, OR GALVANIZED NO. 9 GA. STEEL WIRE TOP AND BOTTOM WITH GALVANIZED NO. 11 GA. STEEL INTERMEDIATE WIRES. NO. 7 GAGE TENSION WIRE TO BE INSTALLED HORIZONTALLY THROUGH HOLES AT TOP AND BOTTOM OF CHAIN-LINK FENCE OR ATTACHED WITH HOG RINGS AT 5 FT MAX. CENTERS.

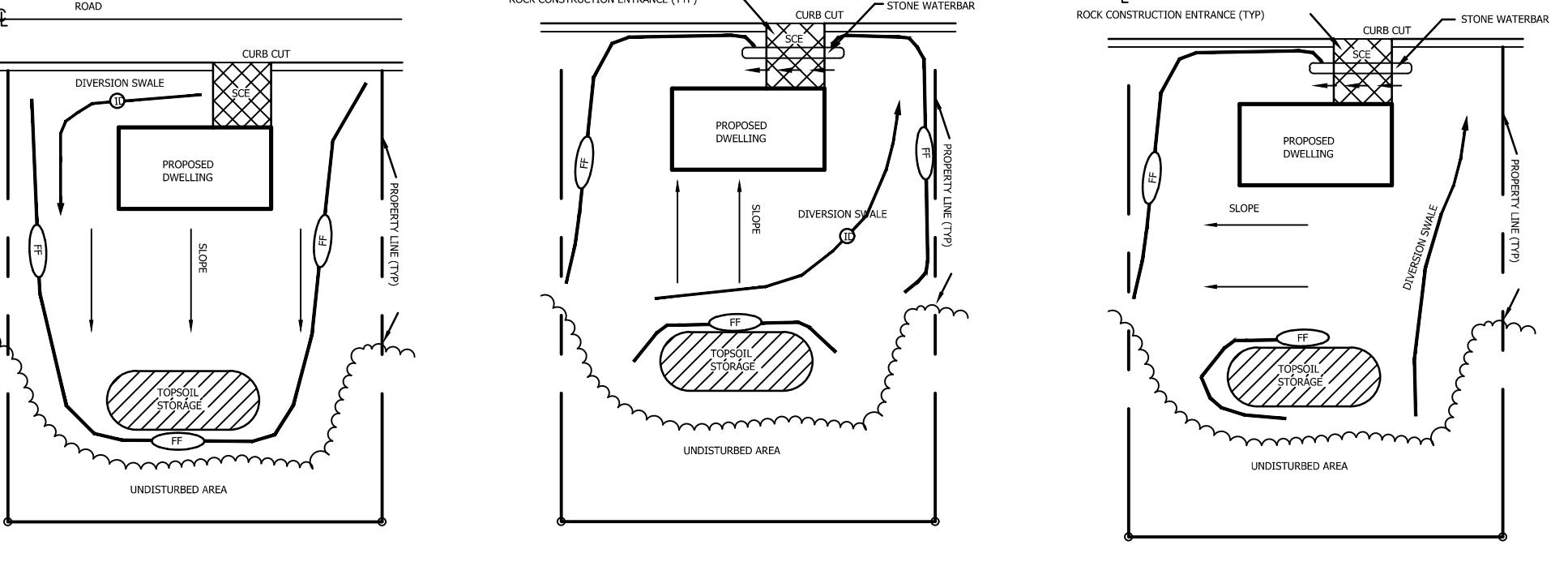
SILT FENCE SHALL BE PLACED AT LEVEL EXISTING GRADE. BOTH ENDS OF THE FENCE SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT.

SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH HALF THE ABOVE GROUND HEIGHT OF THE FENCE.

FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN TRIBUTARY AREA IS PERMANENTLY STABILIZED.

SUPER SILT FENCE

N.T.S.



EACH HOUSE CONSTRUCTION SHALL BE TREATED AS A SELF-CONTAINED EROSION CONTROL PROJECT SO THAT ONLY CLEAN WATER LEAVES THE LOT BOUNDARY. SEE THE GENERAL NOTES AND MAINTENANCE NOTES ON THE GRADING PLAN. TYPICAL STAGING OF EARTHMOVING ACTIVITIES FOR INDIVIDUAL HOME CONSTRUCTION IS AS FOLLOWS:

- INSTALL TEMPORARY CONTROL MEASURES BEFORE ANY EXCAVATION. INSTALL THE MINIMUM 20 FOOT LONG ROCK CONSTRUCTION ENTRANCE OFF THE STREET AT THE PERMANENT DRIVEWAY LOCATION. IF SLOPE IS TOWARDS THE STREET, GENTLY HUMP THE STONE ENTRANCE TO DIVERT WATER TO ONE SIDE AND INTO A SILT FENCE. INSTALL SILT FENCE ON THE DOWNHILL PERIMETER OF THE LOT SO ALL DIRTY WATER PASSES THROUGH IT. SEE THE ADJACENT CHART FOR SIZING OF SILT FENCE. INSTALL DIVERSION SWALE TO CARRY RUNOFF AROUND THE EXCAVATION AREA AND TO THE SILT FENCE. TEMPORARY SEED THE SWALE UPON CONSTRUCTION.
- STRIP TOPSOIL AND STOCKPILE; TEMPORARY SEED THE PILE.
- CONSTRUCT THE HOUSE AND UTILITY CONNECTIONS. BACKFILL AND FINAL GRADE LOT, ELIMINATE THE DIVERSION SWALE, FINAL GRADE AND STABILIZE ALL PERMANENT SWALES ACCORDING TO GRADING PLAN. PLACE AND SHAPE STONE FOR DRIVEWAY AS SOON AS POSSIBLE. AS SOON AS CONSTRUCTION AND GRADING IS COMPLETE, REPLACE TOPSOIL AND PERMANENTLY SEED OR LANDSCAPE ON ALL REMAINING DISTURBED SOIL.
- WHEN THE LOT IS AT LEAST 70% UNIFORMLY STABILIZED, REMOVE SILT FENCE AND PERMANENTLY SEED ITS LOCATION.

SLOPE - %	MAXIMUM SLOPE LENGTHS FOR FILTER FABRIC (FT) LENGTH ABOVE FENCES			
	18" fence	30" fence	Super	all fence
2 (OR LESS)	150	500	1,000	
5	100	250	500	
10	50	150	300	
15	35	100	250	
20	25	70	200	
25	20	55	150	
30	15	45	100	
35	15	40	80	
40	15	35	75	
45	10	30	63	
50	10	25	50	

TYPICAL INDIVIDUAL ON-LOT E&S CONTROL PLAN

N.T.S. NOTE: THIS CONTROL MUST BE USED IF RUNOFF FROM THE LOT WILL NOT BE TREATED BY SEDIMENT BASIN OR TRAP

NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	07/16/21
2		
3		
4		
5		

R. J. FISHER & ASSOCIATES, INC.
SITE PLANNING & CIVIL ENGINEERING & LAND SURVEYS
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E&S POLLUTION CONTROL ENCLAVE AT ELMERTON
LOCATED IN SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220021-DTL
PROJECT: 220021
DATE: 06/11/21
SHEET: 29 OF 29