

ENGINEERS SURVEYORS **PLANNERS**

LANDSCAPE ARCHITECTS

82 Worman's Mill Ct Suite G Frederick, MD 21701 Phone: 301-695-0880

Fax: 301-293-6009

LETTER of TRANSMITTAL

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- 4	U.

Frederick SCD

92 Thomas Johnson Dr. Frederick, MD 21702

Date: 10/25/2019 Project No.: 18-31047

Attn:

David Huffer

RE:

Emmitsburg Rutters

WE ARE SENDING THE FOLLOWING ITEMS:

Attached

☐ Under separate cover via:

COPIES	DATE	DESCRIPTION
1		Improvement Plans
1		SWM Computations
1		Transmittal & Fee Check

THESE ARE TRANSMITTED AS INDICATED BELOW:

□For approval	☐ As Requested	☐ Other:	
□For your use	✓ For Review and Comm	ent	
REMARKS:			
CC:		SENT BY:_	hell H. h.
			Joseph H. Ceci, P.E.
			Vice President
Recvd By:			jceci@foxassociatesinc .com



Est. 1966

ENGINEERS SURVEYORS **PLANNERS**

LANDSCAPE ARCHITECTS

82 Worman's Mill Ct

Suite G

Frederick, MD 21701 Phone: 301-695-0880

Fax: 301-293-6009

LETTER of TRANSMITTAL

To:

Town of Emmitsburg 300 A South Seton Ave

Emmitsburg, MD 21727

Date: 10/25/2019 Project No.: 18-31047

Attn:

Zach Gulden

RE:

Emmitsburg Rutters

WE ARE SENDING THE FOLLOWING ITEMS:

✓ Attached

☐ Under separate cover via:

COPIES	DATE	DESCRIPTION
15		Improvement Plans
1		SWM Computations
1		Pump Station Computations
1		Fee Check

THESE ARE TRANSMITTED AS INDICATED BELOW:

☐For approval	☐ As Requested	☐ Other:	
□For your use	✓ For Review and Con	nment	
REMARKS:			8.
CC:		SENT BY:_	hell H. h.
			Joseph H. Ceci, P.E.
			Vice President
Recyd By:		<u></u>	jceci@foxassociatesinc .com

IMPROVEMENT PLAN

TOWN OF EMMITSBURG FREDERICK COUNTY, MARYLAND

VICINITY MAP TAX MAP 009 PARCEL 008 SCALE: 1" = 500' TAX ID. 05-158680

PAVING PROFILES **PAVING PLAN** PAVING PLAN UTILITY PLAN UTILITY PLAN **GRADING PLAN GRADING PLAN** OFFSITE UTILITY PLAN WATERLINE PROFILES WATERLINE PROFILES SEWER FORCEMAIN AND WATERLINE PROFILE SEWER FORCEMAIN AND WATERLINE PROFILE **GRAVITY SEWER PROFILES PUMP STATION PLAN PUMP STATION NOTES AND DETAILS PUMP STATION NOTES AND DETAILS PUMP STATION NOTES AND DETAILS PUMP STATION NOTES AND DETAILS** STORMWATER MANAGEMENT PROFILES STORMWATER MANAGEMENT PROFILES STORMWATER MANAGEMENT NOTES AND DETAILS STORMWATER MANAGEMENT NOTES AND DETAILS STORM DRAIN PROFILES SITE NOTES AND DETAILS SITE NOTES AND DETAILS

SITE NOTES AND DETAILS

LANDSCAPE PLAN

CONTRACTOR FOR BIDDING PURPOSES.

LANDSCAPE PLAN, NOTES AND DETAILS

DISTURBED AREA QUANTITY

THE TOTAL AREA TO BE DISTURBED SHOWN ON THESE PLANS HAS BEEN

DETERMINED TO BE APPROXIMATELY 722,581 SQ. FT. AND THE

BEEN COMPUTED TO BE APPROXIMATELY 25,534 CU. YDS. * OF

* THESE QUANTITIES ARE APPROXIMATE AND SHALL NOT BE USED BY THE

ENGINEER DESIGN CERTIFICATION

EXCAVATION AND APPROXIMATELY 52,456 CU. YDS. * OF FILL.

TOTAL AMOUNT OF EXCAVATION AND FILL AS SHOWN ON THESE PLANS HAS

SEDIMENT & EROSION CONTROL NOTES AND DETAILS

SEDIMENT & EROSION CONTROL NOTES AND DETAILS

DESCRIPTION

EXISTING CONDITIONS AND DEMO PLAN

STATE HIGHWAY RTE 140 IMPROVEMENTS

STATE HIGHWAY RTE 140 IMPROVEMENTS

SHEET INDEX

COVERSHEET

PAVING PLAN

SHEET No.

TOWN OF EMMITSBURG TOWN MANAGER FREDERICK SOIL CONSERVATION DISTRICT SOIL EROSION AND SEDIMENT CONTROL PLAN APPROVAL SCD APPROVAL FOR SEDIMENT AND EROSION CONTROL IS CONTINGENT UPON ISSUANCE OF ALL APPLICABLE REGULATORY PERMITS. (PLAN IS VALID FOR TWO YEARS FROM DATE OF APPROVAL)

APPROVED BY:

OWNERS / DEVELOPERS CERTIFICATION I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. 10/24/19

	[FREDERICK CO DEVELOPMENT RI				}	
А	PPROVED:						
	Deve	elopment Review Chief		Date	•		_
А	PPROVED:					,	
1	Stor	mwater Management		Date			
constru constru	ıction. Approval i ıction before the	e with local County requirement s valid for two (2) years after las approval expiration to be consid e made to Development Review	t date shown ab ered active. Oth	ove. The project nerwise, resubm	ct mus littal of	t be under f plans, includin	ıa
REV #	DATE	REVISION DESCRIPT *FILL IN THESE BLOCKS FOR REVISION		CONSULTA DATE AND IN		DEV. REVII DATE AND IN	
 							

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REV. #	DATE	REVISION DESCRIPTION *FILL IN THESE BLOCKS FOR REVISIONS ONLY	CONSULTA DATE AND IN	DEV. REVIE DATE AND IN	
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CDD - Dev. Review File: A/P#:

Due Date:

18-31407 PROJECT NO. D - 3480 OCTOBER 2019 DATE: ____ DRAWN BY: CHECKED BY: ______JHC

PARKING OF EQUIPMENT AND/OR CONSTRUCTION-RELATED VEHICLES IN THE PUBLIC

RESPONSIBILITY TO ENSURE THAT PROPER AND APPROPRIATE AREAS ARE SECURED FOR THESE USES FOR THE DURATION OF THE PROJECT. 25. CONTRACTOR IS RESPONSIBLE FOR ALL COSTS RELATED TO TEMPORARY AND PERMANENT TRAFFIC CONTROL (PAVEMENT MARKINGS, SIGNAGE, SIGNALIZATION. TRAFFIC BARRIERS, FLAGGERS, ETC.).

BE UTILIZED FOR THE ABOVE PURPOSES. IT IS THE CONTRACTOR'S ULTIMATE

RIGHTS-OF-WAY OR PUBLICLY-OWNED PROPERTY WITHOUT PRIOR APPROVAL OF THE TOWN OF EMMITSBURG. WHERE PRACTICAL AND TO THE DEGREE POSSIBLE, THE ENGINEER SHALL DESIGNATE ON THESE PLANS APPROPRIATE SPACE THAT CAN

- 22. THE SITE SHALL COMPLY WITH ALL APPLICABLE PROVISIONS OF THE MARYLAND ACCESSIBILITY CODE (MAC), THE AMERICAN DISABILITIES ACT 2010 (ADA), AND ANSI A117.1. IF THERE ARE CONFLICTING REQUIREMENTS, THE MOST STRINGENT
- 23. SWM CONCEPT DEVELOPMENT PLAN, AP # 17321 WAS APPROVED ON MAY 17, 2017
- TOWN AUTHORITY BEFORE ANY OF THE ABOVE MODIFICATIONS ARE ENACTED. 26. ALL CONTRACTORS MUST COMPLY WITH ALL APPLICABLE CITY, STATE AND FEDERAL LABOR AND INDUSTRY REGULATIONS TO INCLUDE CITY SAFETY & HEALTH POLICY, MOSHA, OSHA, ETC.
- 27. IN ACCORDANCE WITH CODE OF MARYLAND (COMAR) 26.04.01.33, MATERIALS USED IN PIPE. STORAGE TANK, VALVE, FIXTURE, OR OTHER MATERIALS WHICH COME IN CONTACT WITH WATER INTENDED FOR USE IN PUBLIC WATER SUPPLY MUST MEET SANITATION FOUNDATION (NSF 61-G AND NSF 61-372) STANDARDS FOR DIRECT OR INDIRECT DRINKING WATER ADDITIVES, THIS APPLIES TO ANY PRODUCT WHICH
- SEQUENCES AND PROCEDURES AS WELL AS ANY ASSOCIATED SAFETY PRECAUTIONS AND PROGRAMS, AND ALL INCIDENTAL OR TEMPORARY DEVICES REQUIRED TO CONSTRUCT THE PROJECT. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL PORTIONS OF THE WORK.

- DURING ALL TYPES OF WEATHER AND AT ALL TIMES. 2. FIRE DEPARTMENT ACCESS ROADS SHALL BE CAPABLE OF

- RADIUS OF 40 TO 45 FEET.
- 5. STREETS AND FIRE HYDRANTS/WATER MAINS ARE REQUIRED TO BE CONSTRUCTED AND IN SERVICE PRIOR TO THE START OF ANY VERTICAL BUILDING CONSTRUCTION.
- THE START OF VERTICAL CONSTRUCTION OF THE BUILDINGS (NFPA 1, SECTION 16.1.4).
- 7. ON-SITE FIRE HYDRANTS SHALL BE INSTALLED AND IN SERVICE PRIOR TO THE START OF VERTICAL CONSTRUCTION OF THE BUILDINGS (NFPA 1, 16.4.3.1.3).

PREPARED BY

FOX & ASSOCIATES, INC

981 MT. AETNA ROAD HAGERSTOWN, MD. 21740 SUITE 'G' PHONE: (301)733-8503

ENGINEERS • SURVEYORS • PLANNER 82 WORMANS MILL COUR FREDERICK, MD. 21701 or (301)416-7250 PHONE: (301)695-0880 FAX: (301)733-1853

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FAX: (301)293-6009 WWW.FOXASSOCIATESINC.COM Email: FOXFREDERICK@FOXASSOCIATESINC.COM

FIRE & RESCUE NOTES: 1. FIRE DEPARTMENT ACCESS ROADS SHALL BE ACCESSIBLE

SUPPORTING FIRE APPARATUS AT ALL TIMES AND BE A MINIMUM OF 18 FEET WIDE. 3. FIRE DEPARTMENT ACCESS SHALL BE PROVIDED AND MAINTAINED

TO ALL STRUCTURES UNDERGOING CONSTRUCTION, ALTERATION OR DEMOLITION.

4. THE ACCESS ROADWAYS SHALL PROVIDE A MINIMUM TURNING

6. FIRE LANES/STREETS PROVIDING ACCESS TO THE BUILDINGS. WHILE UNDER CONSTRUCTION SHALL BE PROVIDED PRIOR TO

PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER

HEREBY CERTIFY THIS PLAN FOR SOIL EROSION AND SEDIMENT CONTROL HAS BEEN

DESIGNED IN ACCORDANCE WITH LOCAL ORDINANCES, COMAR 26.17.01, 26.17.02 AND THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT

UNDER THE LAWS OF THE STATE OF MARYLAND.

ICENSE No.: 30709 EXP. DATE: 7/23/20

DATE

REVISION

1201 OLD NATIONAL PIKE

DEVELOPER: M&G REALTY, INC.

NEW MARKET, MARYLAND 21774

YORK, PENNSYLVANIA 17404

MARYLAND STATE PLANE COORDINATE SYSTEM NAD 83/91.

TRIAD ENGINEERING, INC. DATED APRIL, 2019.

SPECIFICATIONS FOR CONSTRUCTION MATERIALS.

PROCEEDING WITH CONSTRUCTION.

ALL APPLICABLE CODES AND REGULATIONS.

DISPOSED OF AT AN APPROVED LOCATION.

8. PLACEMENT OF ANY CONCRETE WORK SUCH AS

CABLEWATER AND SEWER LINES/ETC. ARE IN PLACE.

2295 SUSQUEHANNA TRAIL, SUITE (

2. SITE INFORMATION: THE SUBJECT SITE CONSISTS OF 13.7 AC. +/-, PLUS 2.03 AC. +/-

OF A TITLE REPORT AND MAY NOT INDICATE ALL ENCUMBRANCES ON THE

VERTICAL DATUM IS BASED ON NAVD88. HORIZONTAL DATUM IS BASED ON

5. FLOODPLAIN: THE 100 YEAR FLOODPLAIN IS SHOWN PER THE FREDERICK COUNTY. MARYLAND FLOOD INSURANCE RATE MAP COMMUNITY PANEL #24021C0060D.

6. WETLANDS: WETLANDS SHOWN HEREON WERE DELINEATED BY TIM KELLERMAN.

INVESTIGATION TO DETERMINE LOCATIONS OF ROCK, SOIL TYPES, WATER TABLE,

1. ALL CONSTRUCTION METHODS AND MATERIALS SHALL BE IN STRICT ACCORDANCE

WITH THE TOWN OF WALKERSVILLE, FREDERICK COUNTY DUSWM GENERAL CONDITIONS AND STANDARD SPECIFICATIONS FOR WATER MAINS, SANITARY

SEWERS AND RELATED STRUCTURES AND THE MSHA 2018 STANDARDS AND

INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM

PLAN OR LESS THAN 12 INCHES, CONTACT FOX & ASSOCIATES, INC. BEFORE

WALKERSVILLE DPW AT (301) 845-4500, SEVENTY-TWO (72) HOURS PRIOR TO STAR

5. ALL CONSTRUCTION STATIONING IS APPROXIMATE AND MAY BE ADJUSTED IN ORDER TO MEET FIELD CONDITIONS. CONTACT THE FREDERICK CITY DEPARTMENT OF

MATERIALS, EQUIPMENT OR SAFETY MEASURES IN THE PERFORMANCE OF ANY

WORK ON THIS PROJECT. THE CONTRACTOR ASSUMES ALL RESPONSIBILITY AND LIABILITY FOR PERFORMING THE WORK CORRECTLY AND IN CONFORMANCE WITH

CURB/GUTTER/SIDEWALKS/DRIVEWAY APRONS/ETC. SHALL BE COMMENCED ONLY

AFTER THE RELOCATIONS AND/OR INSTALLATION OF ALL UTILITIES INCLUDING GAS LINES/ELECTRICAL LINES/ STREET LIGHTING CONDUITS/CONDUITS/TELEVISION

CONTRACTOR TO OBTAIN PROPER PERMITS AND PERFORM BLASTING OPERATIONS

12. TOWN WATER MAINS TO BE 8" DIP CL. 52 UNLESS OTHERWISE NOTED AND INSTALLED WITH A MINIMUM 3.5' OF COVER AND IN ACCORDANCE WITH THE PLUMBING CODE.

DETERMINE LOCATIONS OF ROCK, DIFFERENT SOIL TYPES, WATER TABLES UTILITIES.

CONTRACTOR SHALL TEST PIT IN THE AREA OF KNOWN UTILITIES TO VERIFY SIZE.

ELEVATION. LOCATION AND TYPE PRIOR TO PERFORMING ANY WORK. ANY UTILITY, WHETHER SHOWN OR NOT, THAT IS DAMAGED BY THE CONTRACTOR SHALL BE

9. CONTRACTOR SHALL NOTIFY FREDERICK COUNTY ENVIRONMENTAL COMPLIANCE

9. JOB SITE SAFETY SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR

SECTION (301-600-3507) AT LEAST 3 DAYS PRIOR TO START OF WORK.

10. ANY BLASTING REQUIRED FOR SITE CONSTRUCTION SHALL REQUIRE THE

14. EXISTING UTILITIES ARE SHOWN FROM BEST AVAILABLE RECORDS. THE

REPAIRED IMMEDIATELY AT NO EXPENSE TO THE OWNER. SHOULD THE

CONTRACTOR DISCOVER DISCREPANCIES BETWEEN THE PLANS AND FIELD

CONTRACTOR MAKE FIELD CORRECTIONS OR ADJUSTMENTS WITHOUT THE

15. ANY NECESSARY ADJUSTMENTS TO EXISTING MANHOLES, VALVE BOXES, ETC., ARE

TO BE DONE SO BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR

REMOVING AND REPLACING ANY EXISTING FENCES, DRIVEWAYS, SIGNS, DRAINAGE

CONSTRUCTION. ALL DISTURBED AREAS SHALL BE RETURNED TO THEIR ORIGINAL

16. ALL UNDERGROUND ROOF DRAIN TO BE 6" PVC SCH. 40 AND SHALL BE INSTALLED IN

17. EXCAVATION WITHIN A STATE ROAD RIGHT-OF-WAY WILL REQUIRE A PERMIT ISSUED

REQUIREMENTS WILL BE REQUIRED AT THE COMPLETION OF THE PROJECT FOR

19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING SILT AND DEBRIS OUT OF

ROADWAYS IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL

CONTROL SECTION, OF THE MARYLAND STATE HIGHWAY ADMINISTRATION'S BOOK

MAINLINES WITHOUT PRIOR APPROVAL FROM TOWN OF WALKERSVILLE INSPECTOR.

DEVICES (MUTCD) AND AS NOTED IN SECTION 104, THE TEMPORARY TRAFFIC

THE STORM DRAINAGE SYSTEM FOR THE DURATION OF THE CONTRACT.

20. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF TRAFFIC ON EXISTING

21. CONTRACTOR SHALL NOT TAP OR OTHERWISE PENETRATE EXISTING SEWER

CONTRACTOR SHALL PROVIDE ALL SEWER PLUGGING AND PUMPING AND

CONSTRUCTION UNTIL TOWN HAS GRANTED FINAL APPROVAL TO THE PROJECT.

23. CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING DUST, DIRT, DEBRIS AND

MUD FROM ENTERING ALL ROADWAYS. IF DUST, DIRT, DEBRIS AND MUD HAPPEN TO

OVERRIDE PREVENTION MEASURES AND ENTER THE ROADWAY, THE CONTRACTOR

SHALL BE REQUIRED TO CLEAN THE ROADWAY AS SOON AS POSSIBLE, AT HIS/HER

EXPENSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ELIMINATION OF DUST IN THE AIR BY THE REQUIRED WATERING OF THE GROUND AS NEEDED. 24. THE CONTRACTOR SHALL NOT (1) STAGE WORK, (2) STORE MATERIALS OR (3) PERMIT

CONTRACTOR IS RESPONSIBLE TO AVOID SPILLAGE OF RAW SEWAGE.

CONTAINMENT EQUIPMENT NECESSARY TO AVOID SPILLAGE.

OWNER:

SPT LAND, LLC

DEVELOPER:

M&G REALTY, INC.

1201 OLD NATIONAL PIKE

NEW MARKET, MARYLAND 21774

22. ALL BENCHMARKS SHALL BE MAINTAINED FOR THE DURATION OF THE

CONDITIONS, THE OWNER IS TO BE NOTIFIED IMMEDIATELY. SHOULD THE

AUTHORIZATION OF THE OWNER, THEN THE CONTRACTOR ASSUMES THE

PIPES, MAILBOXES, SHRUBS, TREES, ETC. DAMAGED OR REMOVED DURING

RESPONSIBILITY FOR SAID CORRECTIONS OR ADJUSTMENTS.

BY THE MARYLAND STATE HIGHWAY ADMINISTRATION (SHA).

18. AS-BUILT CERTIFICATIONS IN ACCORDANCE WITH DPDR ENGINEERING

ACCORDANCE WITH THE PLUMBING CODE

ON-SITE SWM FACILITIES.

OF STANDARDS, LATEST EDITIONS.

IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.

11. SOILS INFORMATION TAKEN FROM "SOILS SURVEY OF FREDERICK COUNTY", 2014

13. FOX & ASSOCIATES, INC. HAS PERFORMED NO SUBSURFACE INVESTIGATION TO

7. ALL MATERIALS EXCAVATED WHICH IS UNSUITABLE FOR BACKFILL SHALL BE

3. CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777, TOWN OF

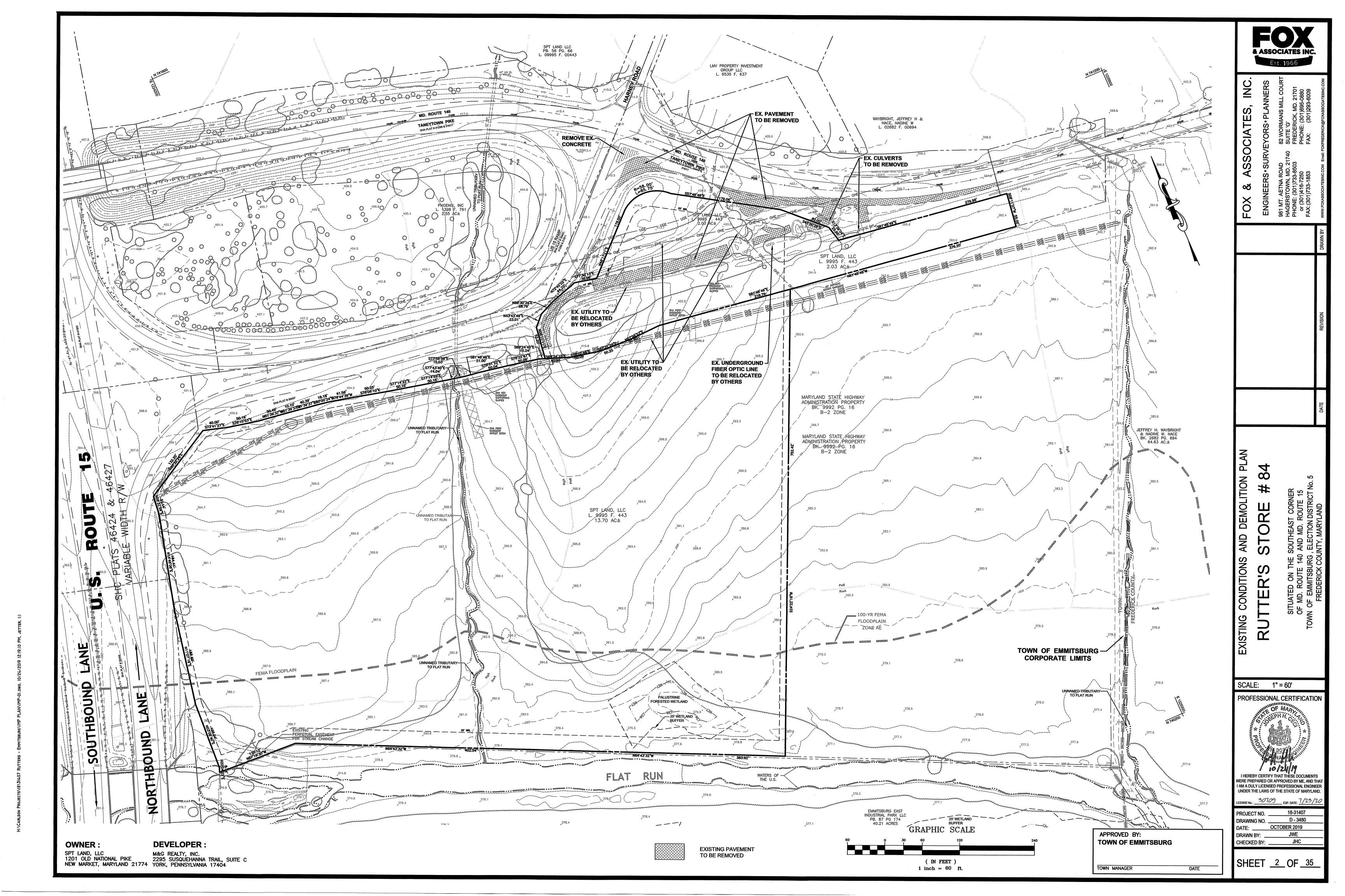
4. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS BEFORE BEGINNING

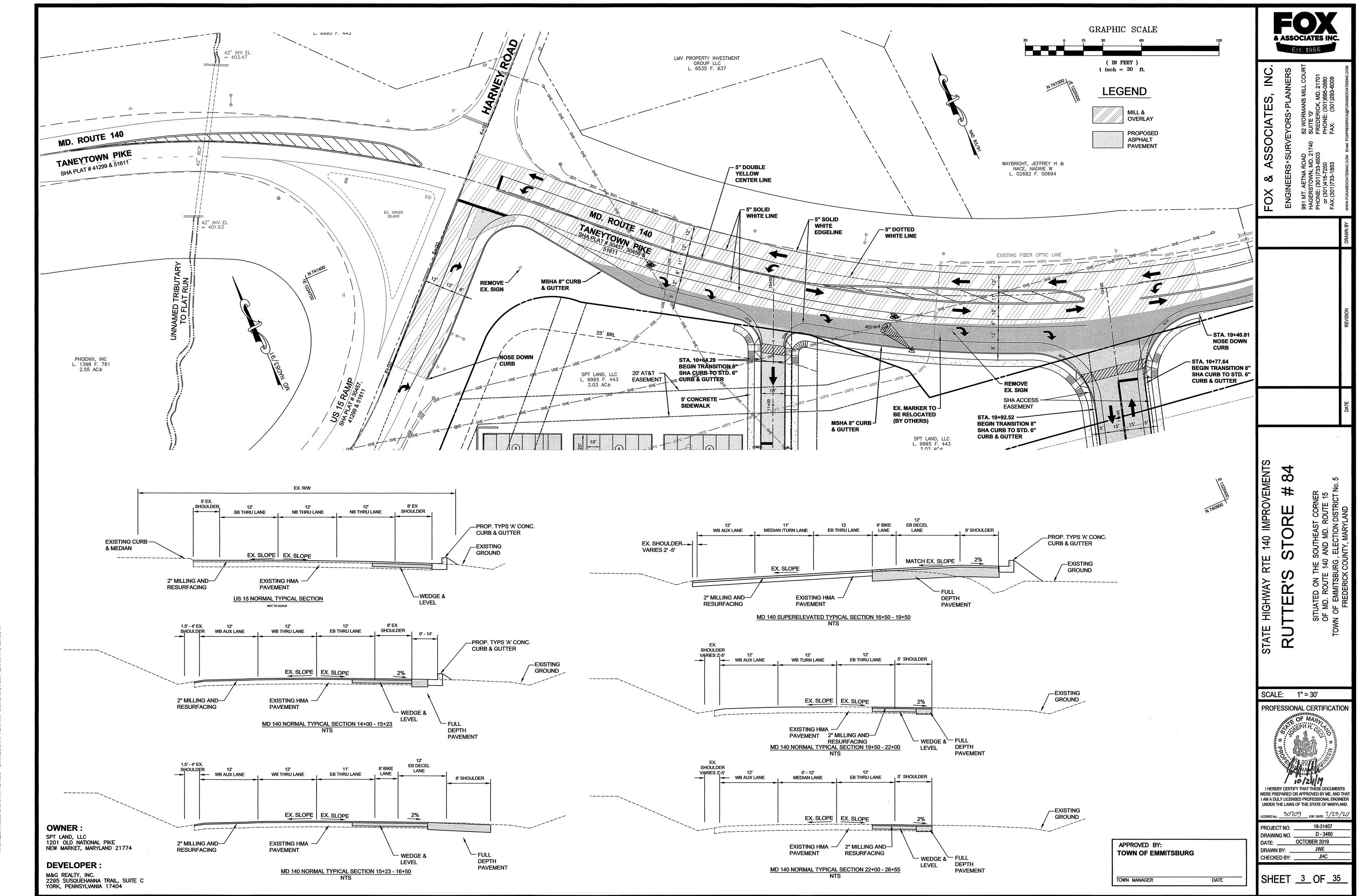
AVAILABLE RECORDS, BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION WHEN NOT SPECIFIED. IF CLEARANCE IS LESS THAN SPECIFIED ON THIS

7. SUBSURFACE: FOX & ASSOCIATES, INC. HAS PERFORMED NO SUBSURFACE

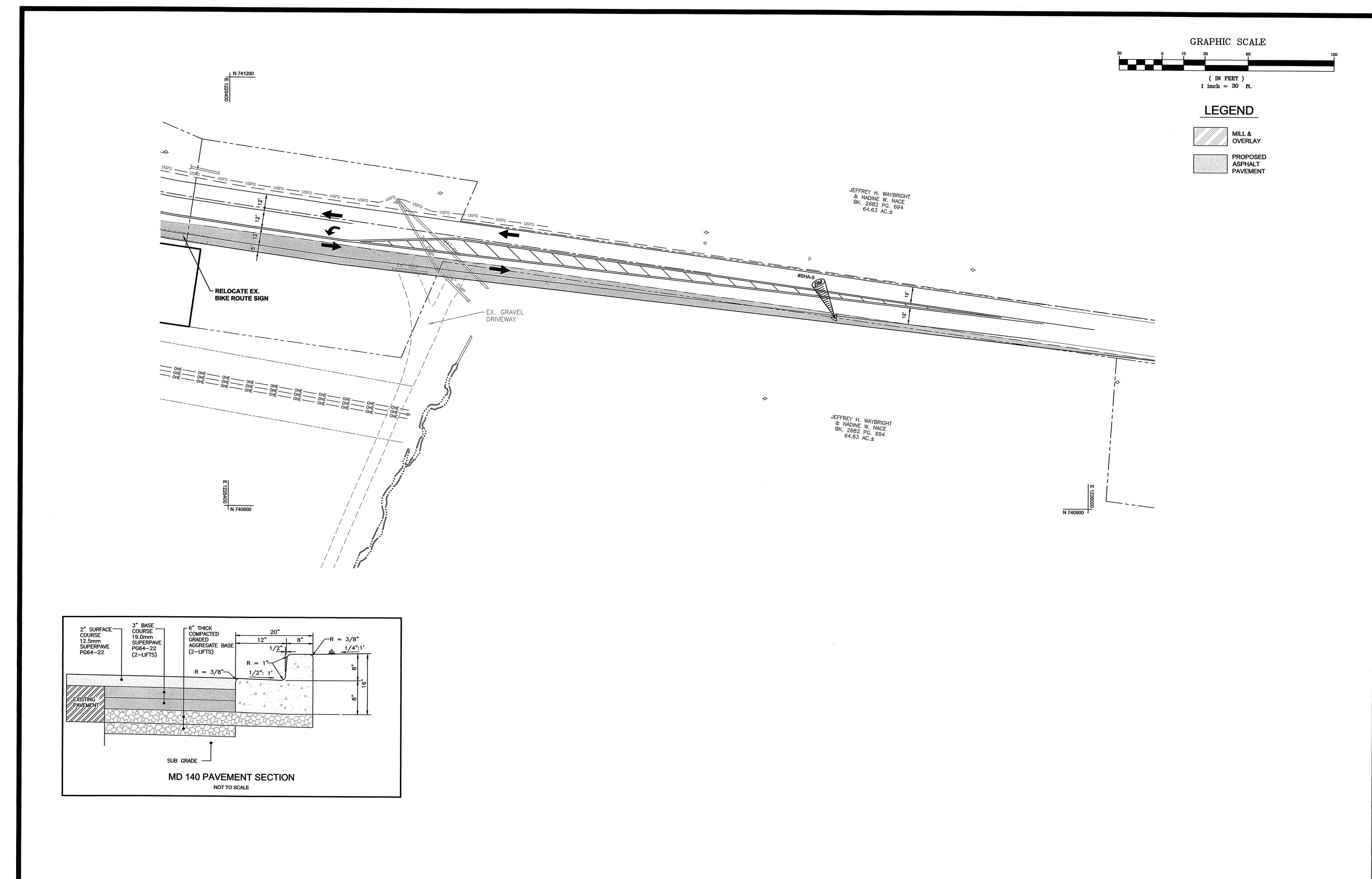
TAX MAP 9, PARCEL 8, L. 9995, F. 443, THIS PLAN WAS PREPARED WITHOUT BENEFIT

2295 SUSQUEHANNA TRAIL, SUITE C YORK, PENNSYLVANIA 17404





H:\Carlson Projects\18\31407 Rutters - Emmitsburg\1MP PLAN\1MP-01.DWG, 10/24/2019 12:19:30 PM,



DEVELOPER:

OWNER:

M&G REALTY, INC. 2295 SUSQUEHANNA TRAIL, SUITE C YORK, PENNSYLVANIA 17404

SPT LAND, LLC 1201 OLD NATIONAL PIKE NEW MARKET, MARYLAND 21774

APPROVED BY: TOWN OF EMMITSBURG

TOWN MANAGER DATE ASSOCIATES INC. Est. **1**966

ASSOCIATES

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HIGHWAY R

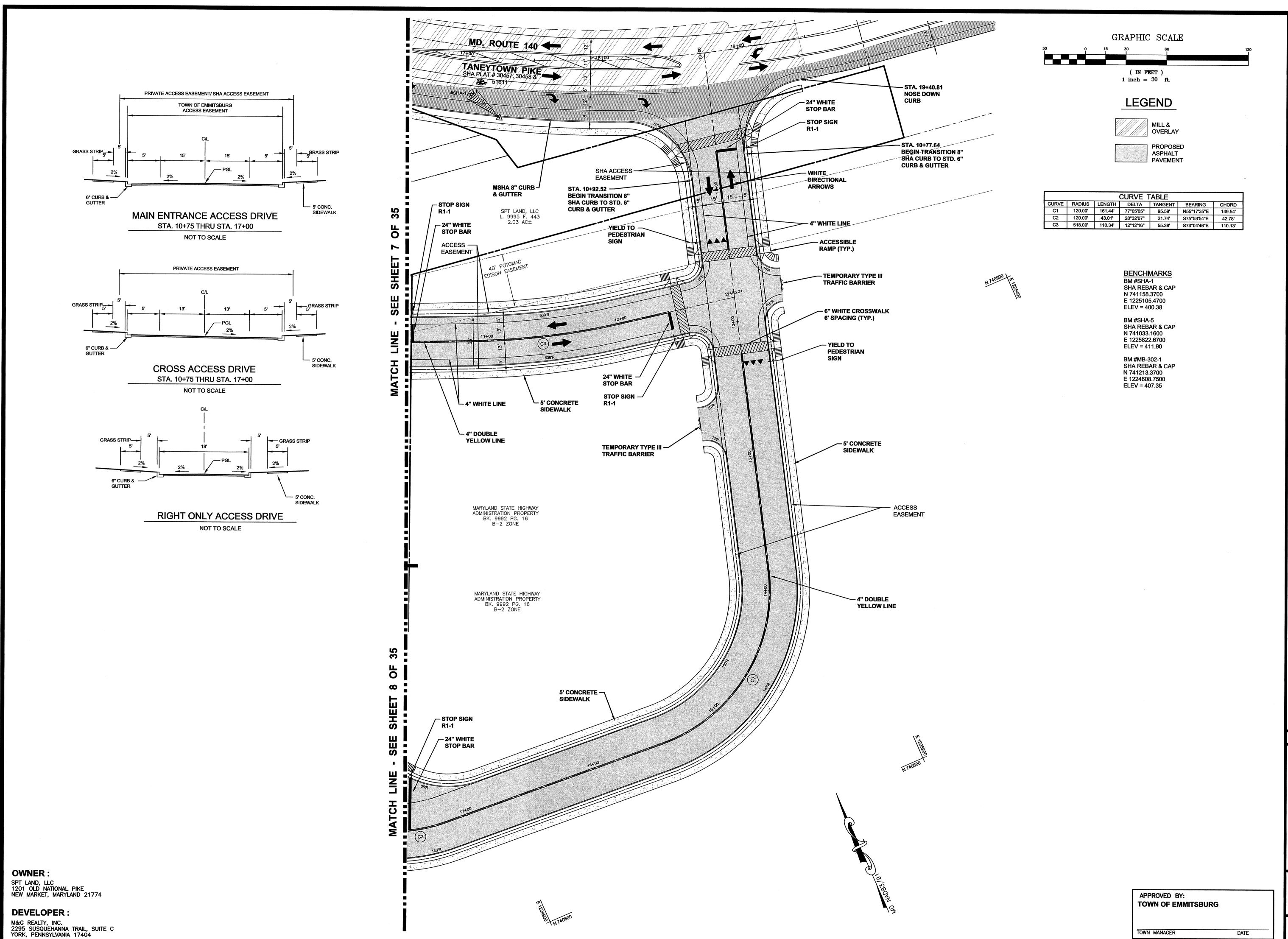
SCALE: 1" = 30'

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS
WERE PREPARED OR APPROVED BY ME, AND THAT
I AM A DULY LICENSED PROFESSIONAL ENGINEER
UNDER THE LAWS OF THE STATE OF MARYLAND.

PROJECT NO. DRAWING NO. D - 3480 DATE: OCTOBER 2019
DRAWN BY: JWE CHECKED BY: _____ JHC

SHEET <u>4</u> OF <u>35</u>



Est. 1966

ASSOCIATE

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FOX

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SCALE: 1" = 30' PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THA I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAN

LICENSE No.: 30709 EXP. DATE: 7/23/2 18-31407 D - 3480 DRAWING NO. _ OCTOBER 2019 DRAWN BY: CHECKED BY: ____

SHEET <u>5</u> OF <u>35</u>

OWNER:

SPT LAND, LLC 1201 OLD NATIONAL PIKE NEW MARKET, MARYLAND 21774

DEVELOPER:

M&G REALTY, INC. 2295 SUSQUEHANNA TRAIL, SUITE C YORK, PENNSYLVANIA 17404

APPROVED BY: TOWN OF EMMITSBURG

TOWN MANAGER

STORE PROFILES RU

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SCALE: AS SHOWN

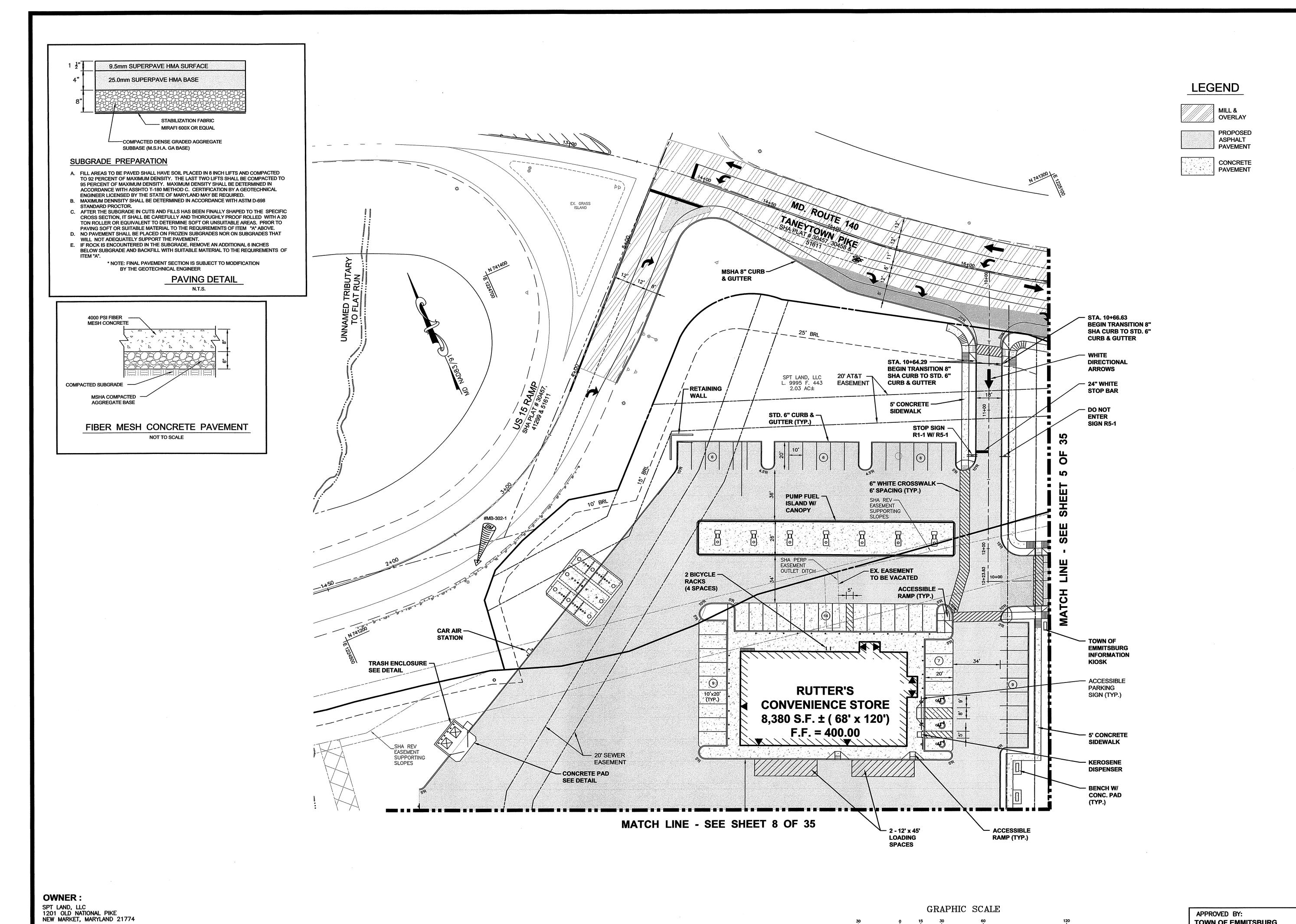
PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE DOCUMENTS

WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE No.: 30709 EXP. DATE: 7/23/2 18-31407

D - 3480 DRAWING NO. _____ DATE: OCTOBER 2019 DRAWN BY: _____ CHECKED BY: ______ JHC

SHEET <u>6</u> OF <u>35</u>



ASSOCIA⁻

TORE

RUT

SCALE: 1" = 30'

PROFESSIONAL CERTIFICATION

WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER

UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE No.: 30709 EXP. DATE: 7/23/2

D - 3480 DRAWING NO. .

SHEET _7_OF _35_

CHECKED BY: ____

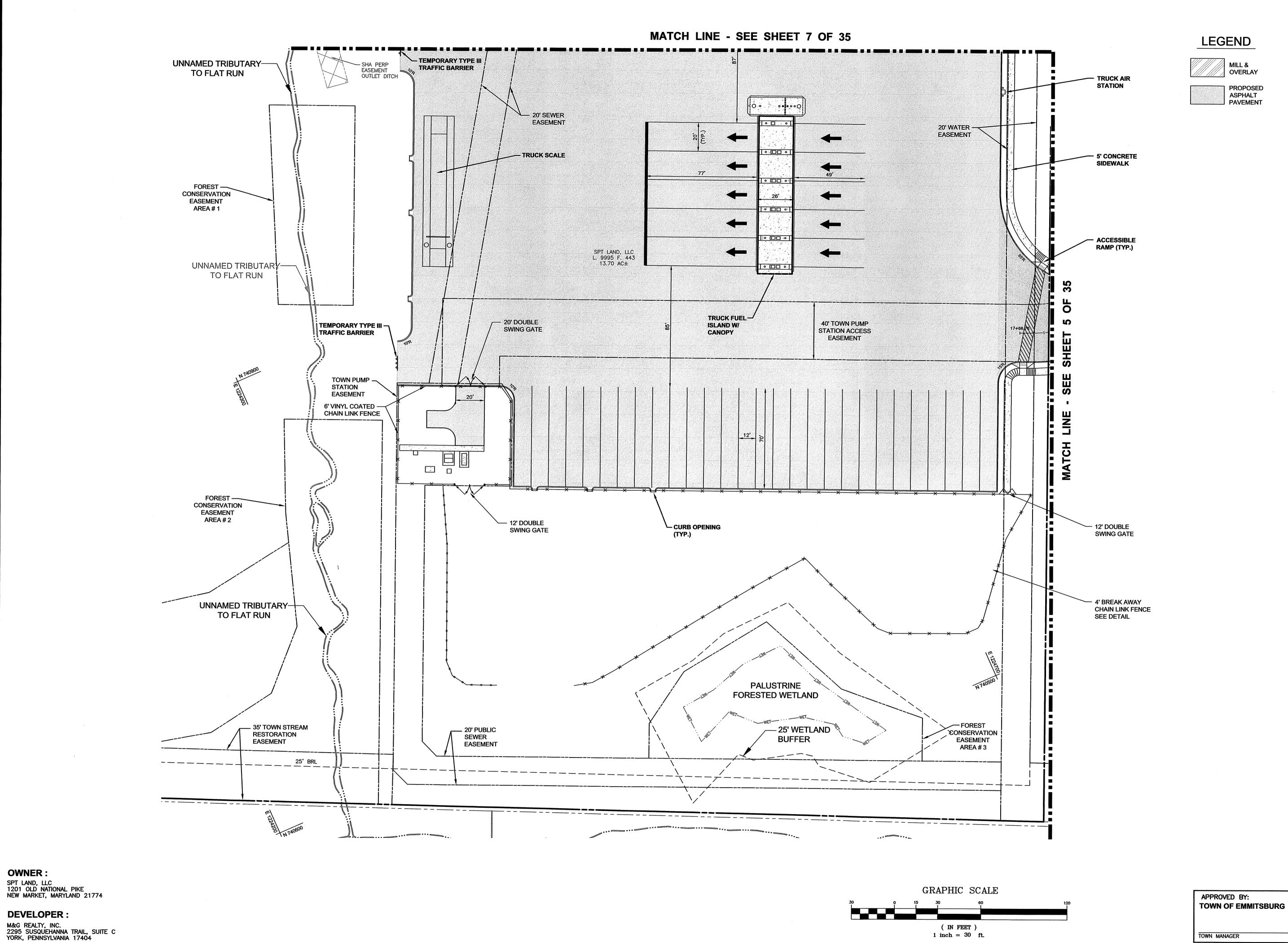
DATE

TOWN OF EMMITSBURG

DEVELOPER:

M&G REALTY, INC. 2295 SUSQUEHANNA TRAIL, SUITE C YORK, PENNSYLVANIA 17404

(IN FEET) 1 inch = 30 ft.



(IN FEET)

1 inch = 30 ft.

OWNER:

DEVELOPER:

PROPOSED

ASSOCIATES

TORE

SCALE: 1" = 30'

PROFESSIONAL CERTIFICATION

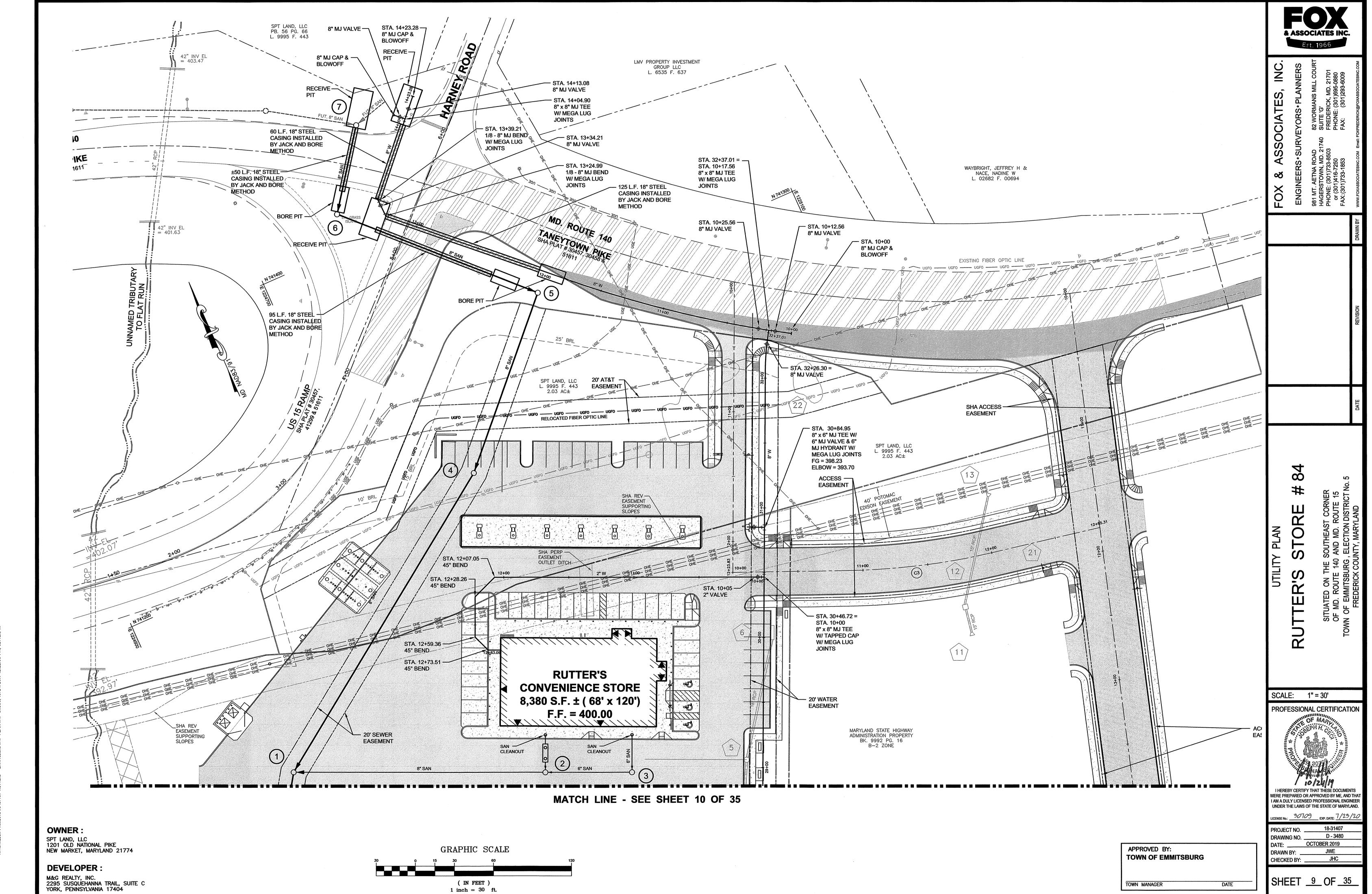
WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

PROJECT NO. __ DRAWING NO. D - 3480

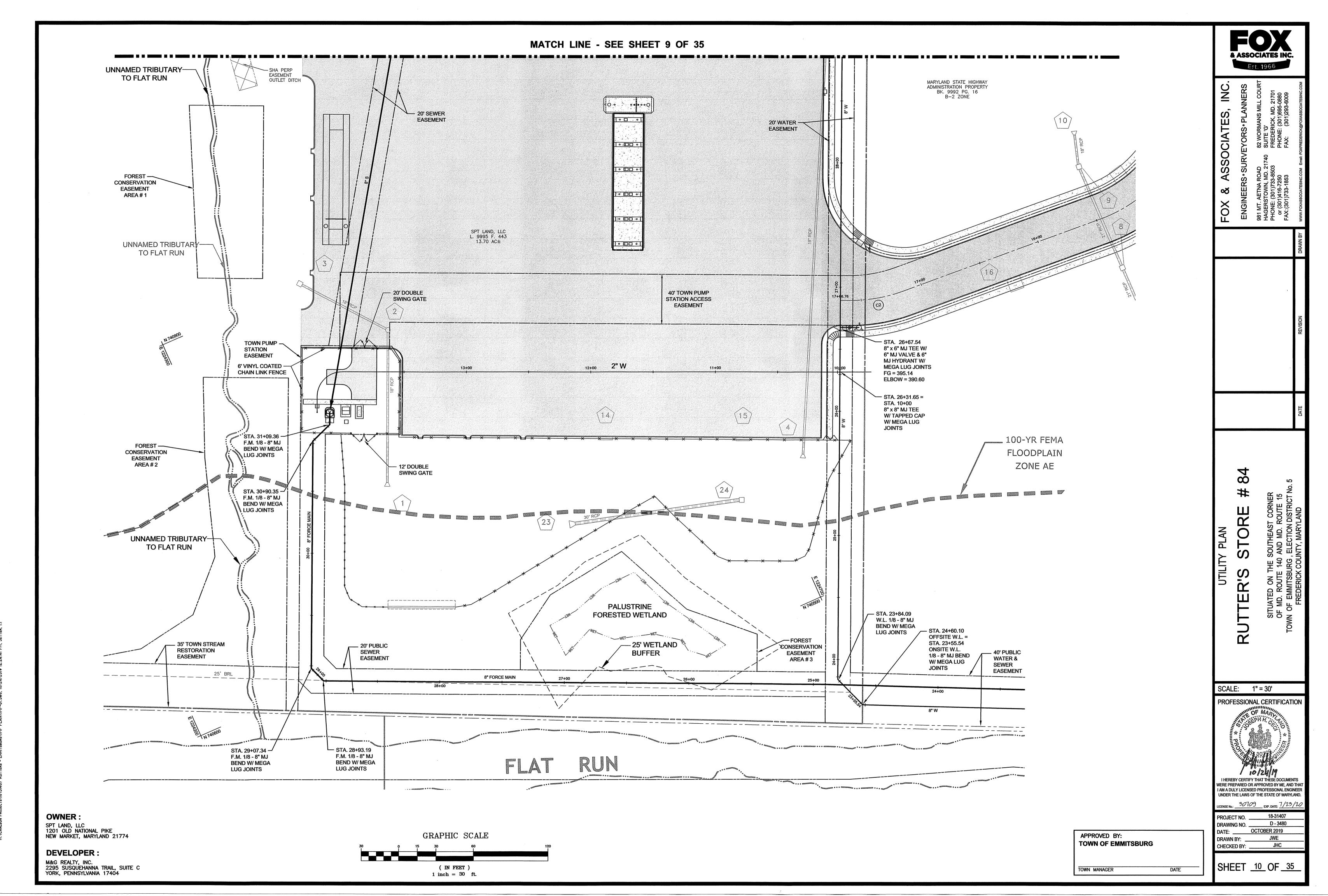
DATE: OCTOBER 2019 DRAWN BY: ______JWE CHECKED BY: JHC

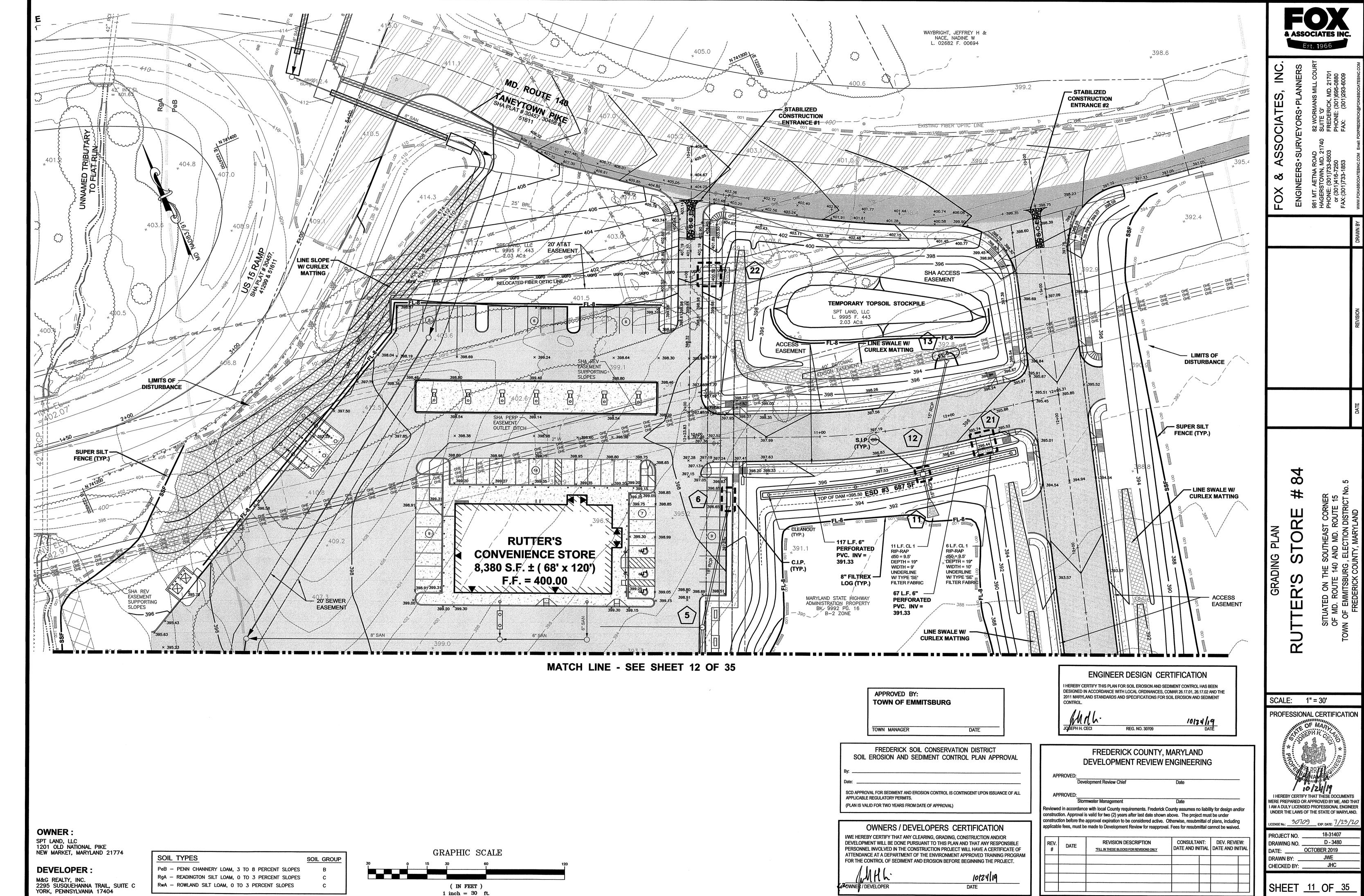
SHEET <u>8</u> OF <u>35</u>

DATE



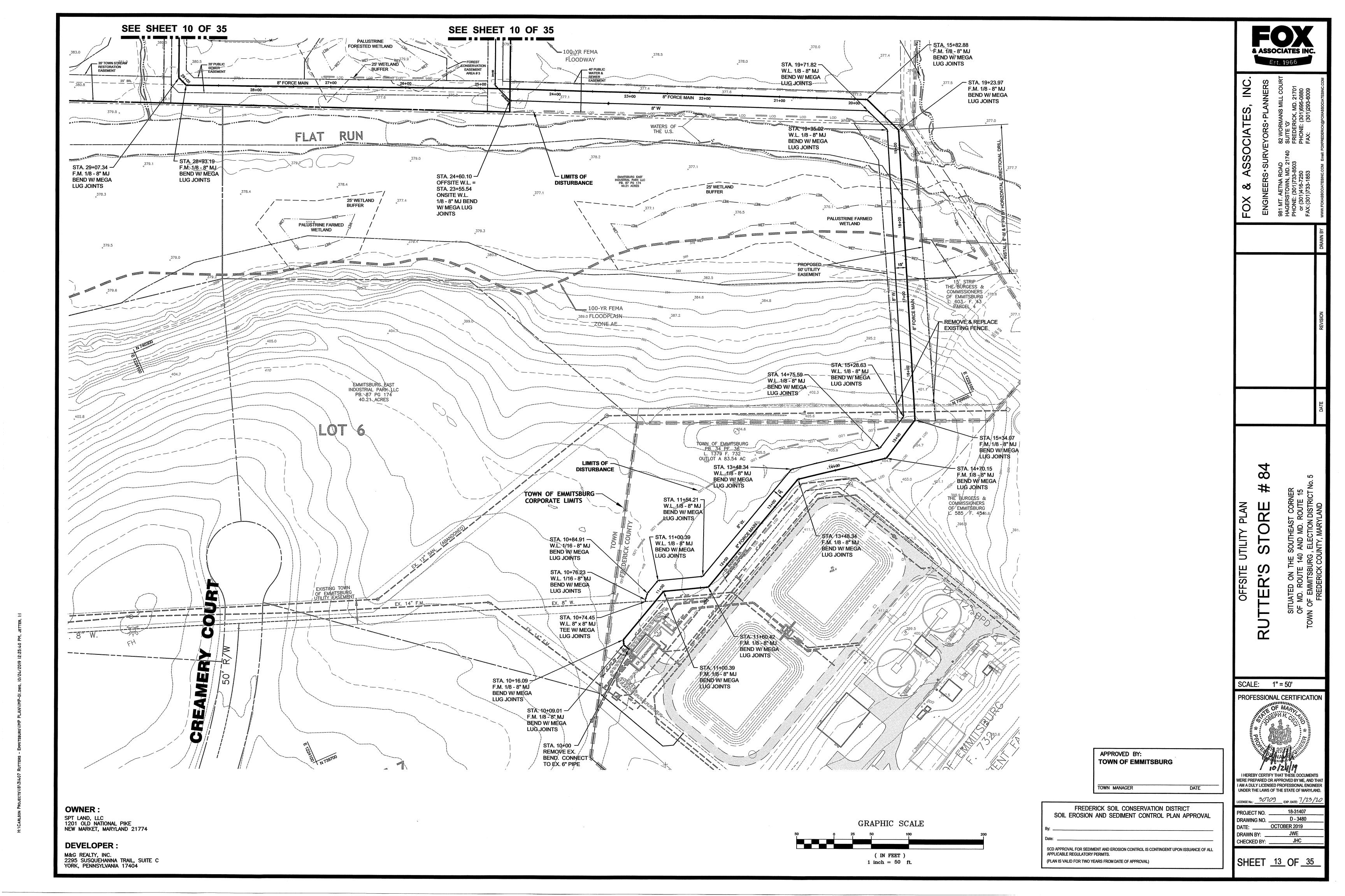
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1 inch = 30 ft.

SHEET <u>11</u> OF <u>35</u>



ASSOCIATES, ±475 L.F. PROVIDE FIELD LOK RESTRAINED JOINT GASKETS FOX & A
ENGINEERS
981 MT. AETNA R
HAGERSTOWN, N
PHONE: (301)733-185
FAX: (301)733-185 PROPOSED — GRADE STA. 32+37.01 8" x 8" MJ TEE W/ MEGA LUG JOINTS STA. 32+26.30 8" MJ VALVE STA. 26+67.54 8" x 6" MJ TEE W/ 6" MJ VALVE & 6" MJ HYDRANT W/ MEGA LUG JOINTS FG = 395.14 ELBOW = 390.60 r STA. 26+31.65 8" x 8" MJ TEE W/ MEGA LUG JOINTS STA. 30+84.95
8" x 6" MJ TEE W/
6" MJ VALVE & 6"
MJ HYDRANT W/
MEGA LUG JOINTS
FG = 398.23
ELBOW = 393.70 18" RCP INV. = 391.55 STA. 30+46.72 8" x 8" MJ TEE W/ MEGA LUG JOINTS STRUCTURAL FILL (TYP.) EXISTING GROUND STA. 23+55.54 1/8 - 8" MJ BEND W/ MEGA LUG STA. 23+84.09 1/8 - 8" MJ BEND JOINTS 375 STORE PROFILES 372 32+50 32+00 31+00 31+50 30+50 30+00 29+00 29+50 28+50 27+50 28+00 27+00 25+50 26+00 26+50 24+50 25+00 24+00 23+50 **PROFILE** SCALE: HORIZ. - 1" = 30' VERT. - 1" = 3' SCALE: AS SHOWN PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE DOCUMENTS
WERE PREPARED OR APPROVED BY ME, AND THAT
I AM A DULY LICENSED PROFESSIONAL ENGINEER
UNDER THE LAWS OF THE STATE OF MARYLAND. PROJECT NO. ____ D - 3480 OWNER: DRAWING NO. __ DATE: OCTOBER 2019 SPT LAND, LLC 1201 OLD NATIONAL PIKE NEW MARKET, MARYLAND 21774 APPROVED BY: JWE DRAWN BY: _____ TOWN OF EMMITSBURG CHECKED BY: JHC **DEVELOPER:** SHEET <u>14</u> OF <u>35</u> TOWN MANAGER M&G REALTY, INC. 2295 SUSQUEHANNA TRAIL, SUITE C YORK, PENNSYLVANIA 17404

H. C. A. D. S. C. A. D. D. B. C. T. S. L. C. A. D. M. T. SRIBG N. M. P. ANNIMP-01. DWG. 10/24/2019 12:26:48 PM.

APPROVED BY: **TOWN OF EMMITSBURG** DATE TOWN MANAGER

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE No.: 30709 EXP. DATE: 7/23/2 18-31407 PROJECT NO. D - 3480 DRAWING NO. _ DATE: OCTOBER 2019 DRAWN BY: _____JWE CHECKED BY: ______JHC

SHEET <u>15</u> OF <u>35</u>

EXISTING GROUND 402 PROPOSED BUILDING FF = 400.00 PROPOSED — GRADE 21" RCP INV. = 385.82 STA. 12+59.36 1/8 MJ BEND STA. 12+07.05 1/8 MJ BEND STA. 10+00 396 8" x 8" MJ TEE W/ 2" TAPPED CAP W/ MEGA LUG JOINTS STA. 12+73.5 2" PE W 1/8 MJ BEND STA. 12+28.26 1/8 MJ BEND 13+00 12+50 12+00 11+50 11+00 10+00 10+50 14+00 13+50 13+00 **PROFILE** SCALE: HORIZ. - 1" = 30' VERT. - 1" = 3' 8" W D.I.P. CL. 52 TR-FLEX RESTRAINED JOINT PIPE 414 STA. 14+23.28 — -\$TA. 14+13.08 8" CAP 8" MJ VALVE GRADE 411 EXISTING GROUND STA. 13+34 21 8" MJ VALVE STA. 14+04.90 — 408 8" x 8" MJ TEE W/ MEĠA LUG JOINTS STA. 13+39.21 1/8 - 8" MJ BEND ±60 L.F. 18" STEEL CASING W/ MEGA LUG INSTALLED BY JACK AND JOINTS BORE METHOD STA. 13+24.99 --/ ±125 L.F. 18" STEEL CASING -/ INSTALLED BY JACK AND BORE METHOD 1/8 - 8" MJ BEND W/ MEGA LUG JOINTS STA. 10+25.56 -8" MJ VALVE STA 10+12.56 8" MJ VALVE STA. 10+00 STA. 10+17.56 -8" CAP 8" x 8" MJ TEE W/ MEGA LUG 396 14+50 14+00 13+50 13+00 12+50 12+00 11+50 11+00 10+50 10+00

OWNER:

SPT LAND, LLC 1201 OLD NATIONAL PIKE NEW MARKET, MARYLAND 21774

405

DEVELOPER:

M&G REALTY, INC. 2295 SUSQUEHANNA TRAIL, SUITE C YORK, PENNSYLVANIA 17404

SCALE: AS SHOWN

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STORE

PROFESSIONAL CERTIFICATION

Est. 1966

PROPOSED + GRADE

STRUCTURAL -/ FILL (TYP.)

11+00

10+50

2" PE W

11+50

12+00

- EXISTING

GROUND

12+50

ENGINEERS • SURVEYORS • PLANNERS
981 MT. AETNA ROAD 82 WORMANS MILL COURT
HAGERSTOWN, MD. 21740 SUITE 'G'
PHONE: (301)733-8503 FREDERICK, MD. 21701
or (301)416-7250 PHONE: (301)293-6009
FAX: (301)733-1853 FAX: (301)293-6009

ASSOCIATES,

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FOX

STA. 10+00 393 8" x 8" MJ TEE W/ 2" TAPPED

CAP W/ MEĠA LUG JOINTS

18" RCP INV. = 389.63

10+00

OWNER:

SPT LAND, LLC 1201 OLD NATIONAL PIKE NEW MARKET, MARYLAND 21774

3. STRUCTURAL FILL SHALL BE COMPACTED TO 97% MAX. DRY DENSITY FOR TOP 1' OF MATERIAL AND 95% MAX. DRY DENSITY BELOW 1' PER AASHTO T-180 OR AS RECOMMENDED BY PROJECT GEOTECHNICAL

DEVELOPER:

M&G REALTY, INC. 2295 SUSQUEHANNA TRAIL, SUITE C YORK, PENNSYLVANIA 17404

APPROVED BY:

DATE TOWN MANAGER

TOWN OF EMMITSBURG

LICENSE No.: 30709 EXP. DATE: 7/23/20 DRAWING NO. ____ OCTOBER 2019 DRAWN BY: CHECKED BY: ______JHC

SHEET <u>16</u> OF <u>35</u>

ASSOCIATES,

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WATERLINE

AND

FORCEMAIN

TORE

TTER'S

R

SCALE: AS SHOWN

PROFESSIONAL CERTIFICATION

WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

18-31407

D - 3480

ASSOCIATE

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FOX

AND S **TER'S FORCEMAIN** R

SCALE: AS SHOWN

PROFESSIONAL CERTIFICATION

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LICENSE No.: 30709 EXP. DATE: 7/23/20 18-31407 PROJECT NO. ____

D - 3480 DRAWING NO. _ OCTOBER 2019 JWE DRAWN BY: _ JHC CHECKED BY: _____

SHEET <u>17</u> OF <u>35</u>

DEVELOPER: M&G REALTY, INC. 2295 SUSQUEHANNA TRAIL, SUITE C YORK, PENNSYLVANIA 17404

8" FM & 8" W D.I.P. CL. 52 TR-FLEX RESTRAINED JOINT PIPE INSTALLATION BY HORIZONTAL DIRECTIONAL DRILL

WATERS OF THE U.S.

35

OF

9

27+50

28+00

28+50

29+00

26+00

26+50

APPROVED BY:

TOWN MANAGER

TOWN OF EMMITSBURG

DATE

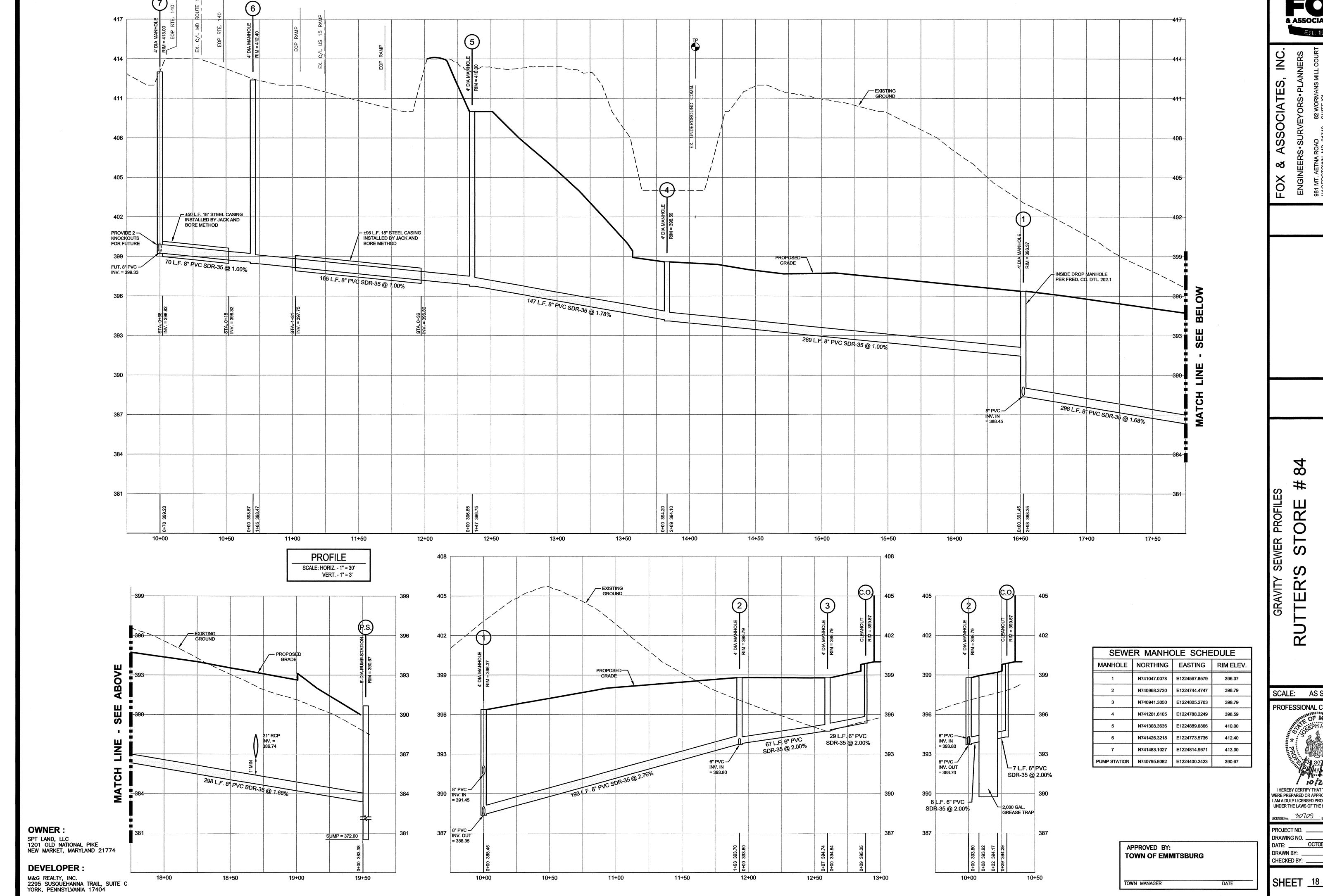
27+00

31+00

30+00

30+50

29+50



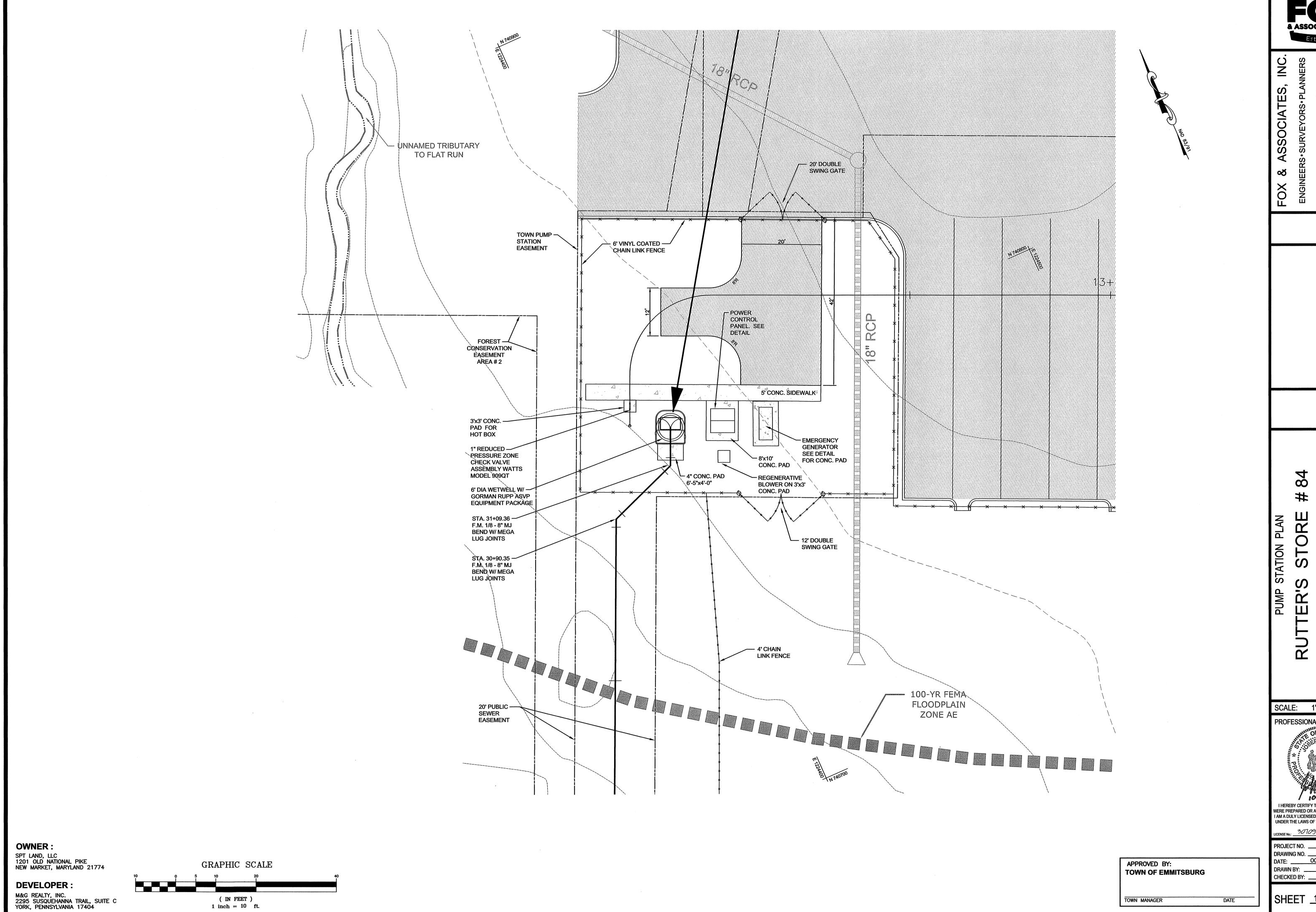
SCALE: AS SHOWN PROFESSIONAL CERTIFICATION I AM A DULY LICENSED PROFESSIONAL ENGINEER

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THA UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE No.: 30709 EXP. DATE: 7/23/2 18-31407 PROJECT NO. . D - 3480 DRAWING NO. . DATE: OCTOBER 2019 JWE

JHC

SHEET <u>18</u> OF <u>35</u>



1 inch = 10 ft.

& ASSOCIATES INC.
Est. 1966

SCALE: 1" = 10' PROFESSIONAL CERTIFICATION

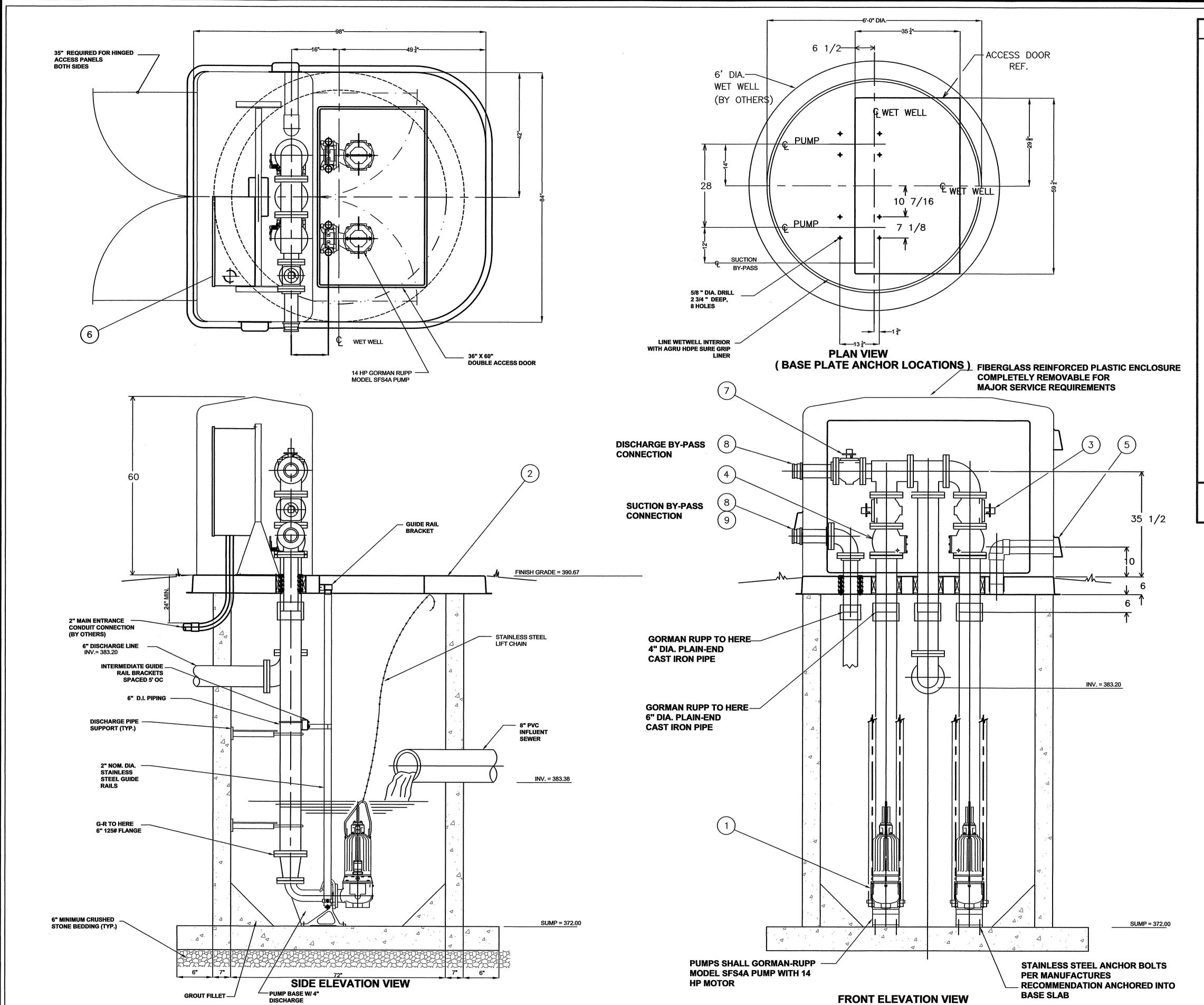
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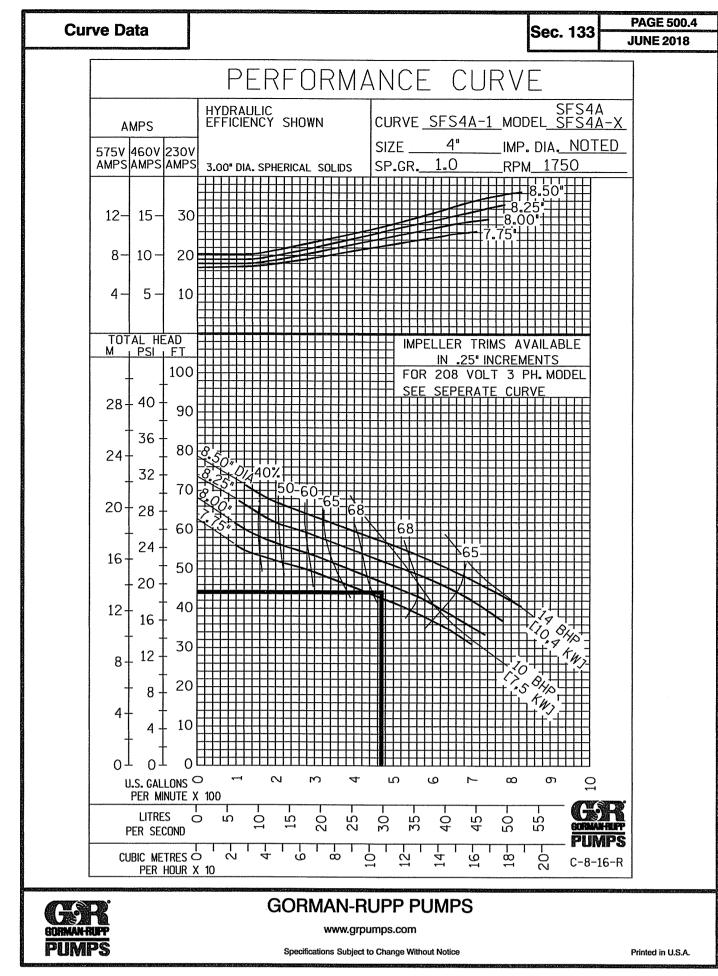
18-31407 D - 3480 DATE: OCTOBER 2019 DRAWN BY: _____

SHEET <u>19</u> OF <u>35</u>

DATE

TOWN MANAGER





© Copyright Gorman-Rupp Pumps 2018

ITEM	DESCRIPTION	MAT'L & SIZE
1	PUMP	CAST IRON
2	BASE	CAST CONCRETE
3	PLUG VALVE	CAST IRON 6"
4	CHECK VALVE	CAST IRON 6"
5	WETWELL VENT	PVC 4"
6	CONTROL PANEL	STEEL
7	PLUG VALVE	CAST IRON 4"
8	OPW ADAPTER	ALUMINUM
9	SUCTION BY-PASS ASS'Y	CAST IRON

DUPLEX SUBMERSIBLE PUMPS FOR 6' DIA. WET WELL (AS SHOWN) 6" PIPING W/ SUCTION & DISCHARGE BY-PASS CONNECTION

USED WITH MODELS: SFV3A

SFV3B SFV4A SFV4B SFV4C SFV4D SFV4E

45161406.S01.DGN

GORMAN-RUPP

THE GORMAN-RUPP CO. MANSFIELD, OHIO ST. THOMAS, ONTARIO

NAME ABOVE GROUND SUBMERSIBLE VALVE PACKAGE W/DUPLEX SUBMERSIBLE PUMPS

WL-06392

OWNER:

SPT LAND, LLC 1201 OLD NATIONAL PIKE NEW MARKET, MARYLAND 21774

DEVELOPER:

M&G REALTY, INC. 2295 SUSQUEHANNA TRAIL, SUITE C YORK, PENNSYLVANIA 17404

APPROVED BY: **TOWN OF EMMITSBURG**

TOWN MANAGER DATE

ORE **TER'S**

STATION

PUMP

R

SCALE: AS SHOWN

PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT

I AM A DULY LICENSED PROFESSIONAL ENGINEE UNDER THE LAWS OF THE STATE OF MARYLAND

ICENSE No.: 30709 EXP. DATE: 7/23/2 18-31407 PROJECT NO. D - 3480 DRAWING NO.

OCTOBER 2019 JWE DRAWN BY: JHC CHECKED BY: ____

SHEET <u>20</u> OF <u>35</u>

AIR BUBBLER INSTALLATION FOR

NOT TO SCALE

ABOVE GROUND SUBMERSIBLE VALVE PACKAGE

ELEVATION VIEW

DEVELOPER:

M&G REALTY, INC. 2295 SUSQUEHANNA TRAIL, SUITE C YORK, PENNSYLVANIA 17404

GENERAL NOTES

 ALL EXPOSED METAL SHALL BE PRIMED AND PAINTED WITH 2 COATS OF EXTERIOR ENAMEL PAINT. 2. WETWELLS SHALL BE CONSTRUCTED WITH A HIGH DENSITY POLYETHYLENE LINER OR FIBERGLASS LINER CAST

IN DURING CONSTRUCTION. THIS LINER SHALL BE AGRU SUREGRIP HDPE LINER, OR GU FIBERGLASS LINER, OR

3. BASE AND FIRST RISER UNIT TO BE CAST MONOLITHIC.

4. COORDINATE WITH PUMP MANUFACTURER FOR ALL INSTALLATION INSTRUCTIONS. 5. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO PURCHASING.

6. THE OUTSIDE SURFACE OF THE REINFORCED CONCRETE WET WELL SHALL BE COATED 7. FORCE MAIN TO HAVE 42" MINIMUM COVER.

8. ALL CONSTRUCTION AND EQUIPMENT SHALL BE IN ACCORDANCE WITH THE TOWN OF EMMITSBURG DESIGN AND CONSTRUCTION STANDARDS. 9. ALL PUMPING STATION PIPING SHALL BE FLANGED DUCTILE IRON PIPE CLASS 53 UNLESS OTHERWISE NOTED.

10. ALL WALL OPENINGS IN PUMPING STATION FOR PIPES, ETC., SHALL BE THOROUGHLY GROUTED AND MADE 11. THE CONTRACTOR SHALL PROVIDE A WATER SERVICE, CURB STOP AND 3/4" HOSE BIBB TO POINT INDICATED

12. CONTRACTOR SHALL PROVIDE A REDUCED PRESSURE BACKFLOW PREVENTER WATTS 909 OR EQUAL ON THE

WATER SERVICE LINE, MOUNTED BEFORE THE HOSE BIBB. 13. THE CONTRACTOR SHALL INSURE THAT A NAME PLATE SHALL BE FURNISHED FOR EACH PUMP INDICATING THE CAPACITY, TDH, SPEED AND EFFICIENCY.

14. BACKFILL AROUND PIPE AND STRUCTURES IN 12" LIFTS COMPACTING TO A MINIMUM OF 95% MODIFIED PROCTOR (AASHTO T-99).

15. ALL LOCATIONS WHERE PIPES ENTER OR LEAVE THE WET WELL SHALL BE MADE WATERTIGHT WITH LINK SEAL CLOSURES SELECTED FOR THE PROPER SEALING RANGE.

16. INSTALL PUMP BASE ELLS, GUIDE RAILS, AND DISCHARGE PIPING PLUMB, LEVEL, AND SQUARE.

17. INSTALL BENCH FOR PUMP BASE ELL, IF NECESSARY, PER MANUFACTURER'S APPROVED SHOP DRAWINGS.

18. ALL HARDWARE, BOLTING & FASTENERS SHALL BE 316 STAINLESS STEEL. 19. COAT ALL METALS THAT ARE NOT STAINLESS STEEL AND ARE LOCATED IN THE WETWELL WITH 10 MILS (DRY FILM THICKNESS) OF BLACK, HIGH-SOLIDS EPOXY. (TNEMEC SERIES 69 HI-BUILD EPOXYLINE II OR AN

EQUIVALENT PRODUCT. COATING SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION AND SHALL NOT BE IMMERSED UNTIL FULL CURE IS ACHIEVED.

Est. 1966

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84 世

SCALE: AS SHOWN

PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE DOCUMENT WERE PREPARED OR APPROVED BY ME, AND THA

I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLANI

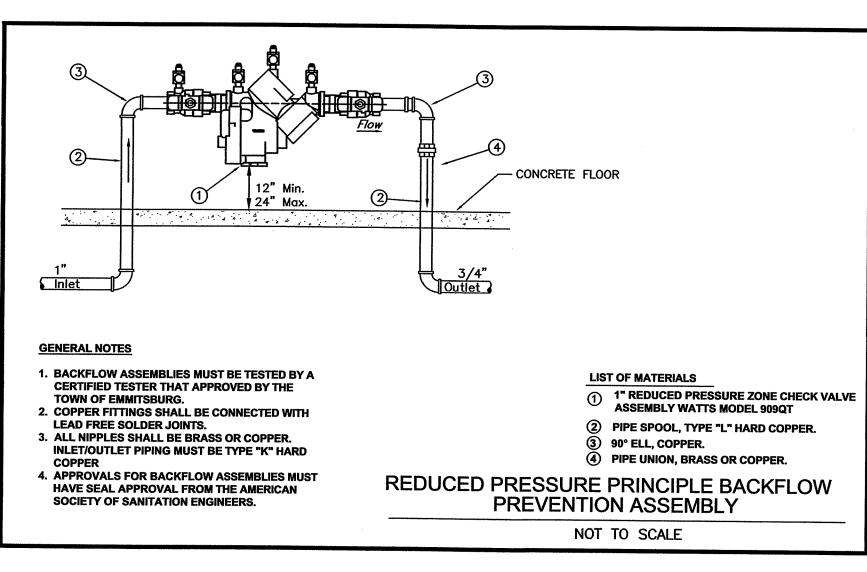
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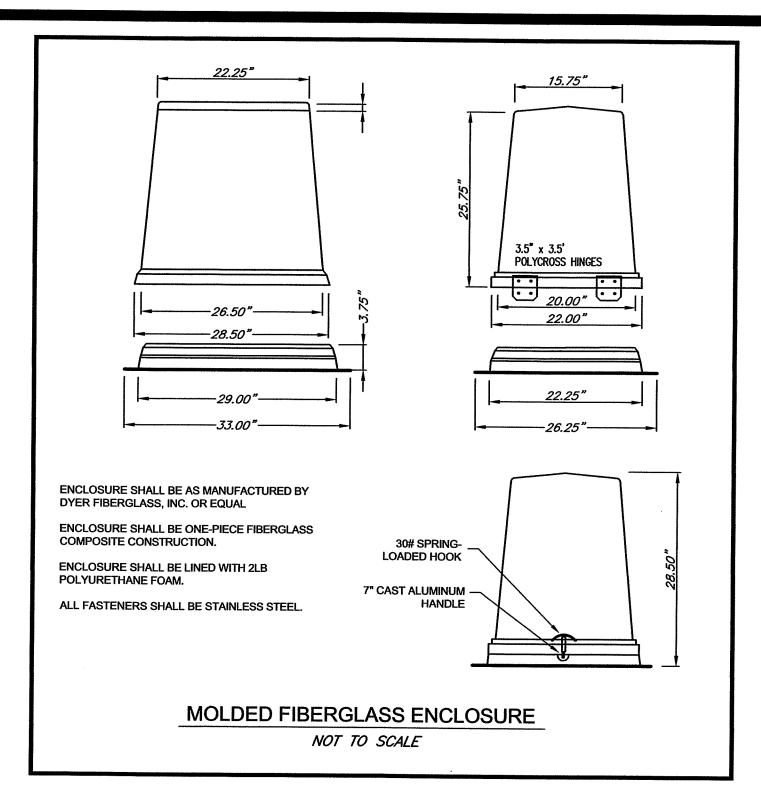
SHEET <u>21</u> OF <u>35</u>

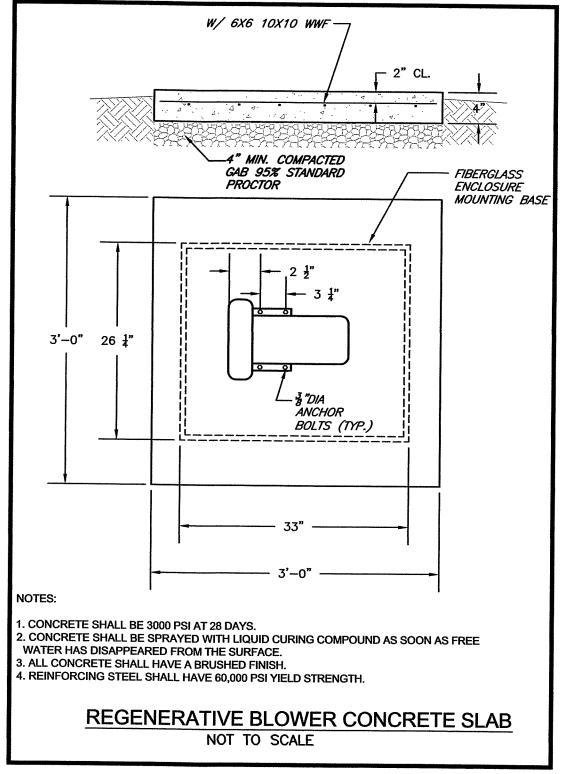
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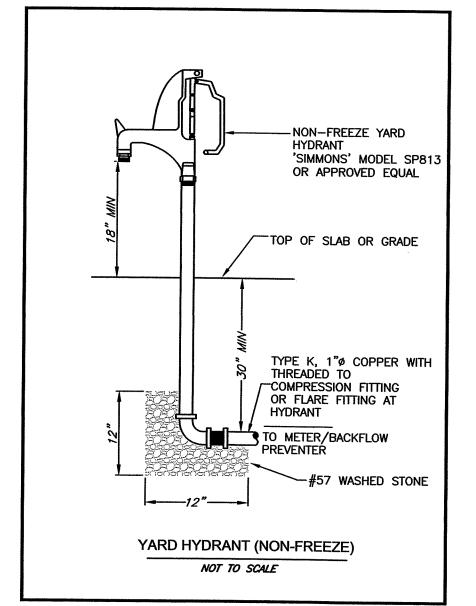
APPROVED BY: **TOWN OF EMMITSBURG**

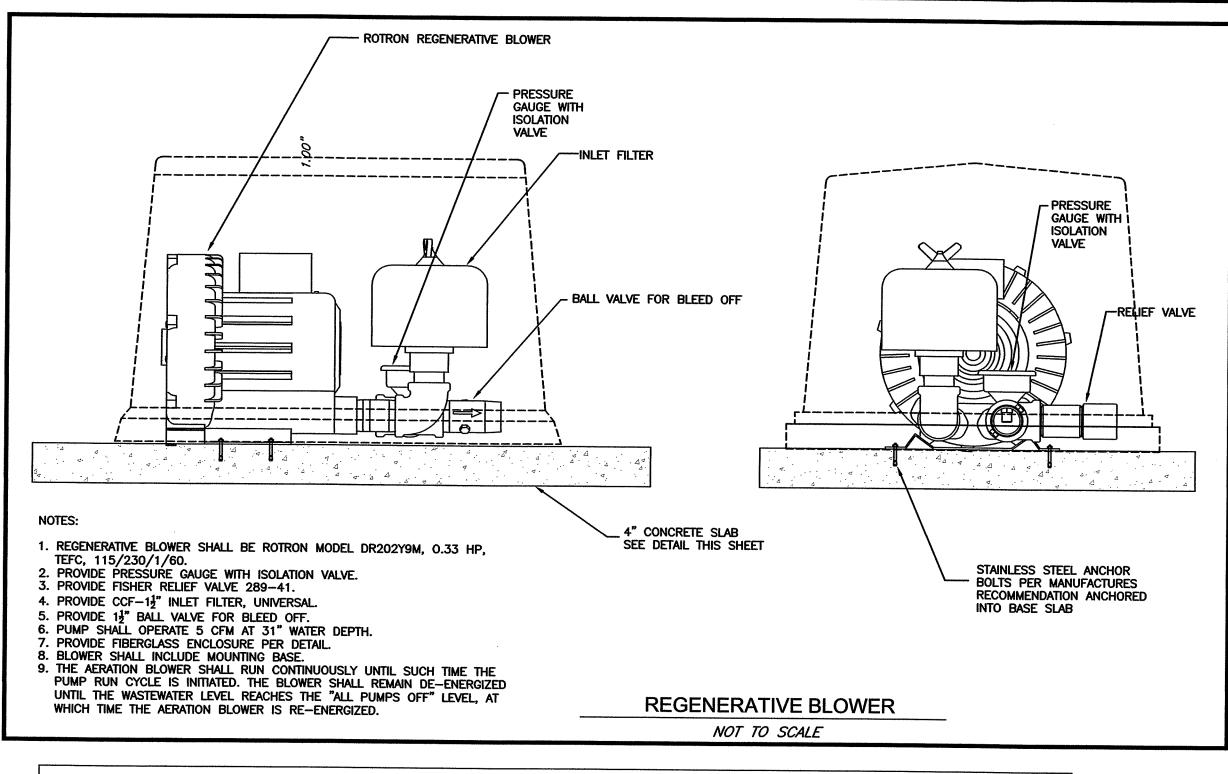
DATE TOWN MANAGER

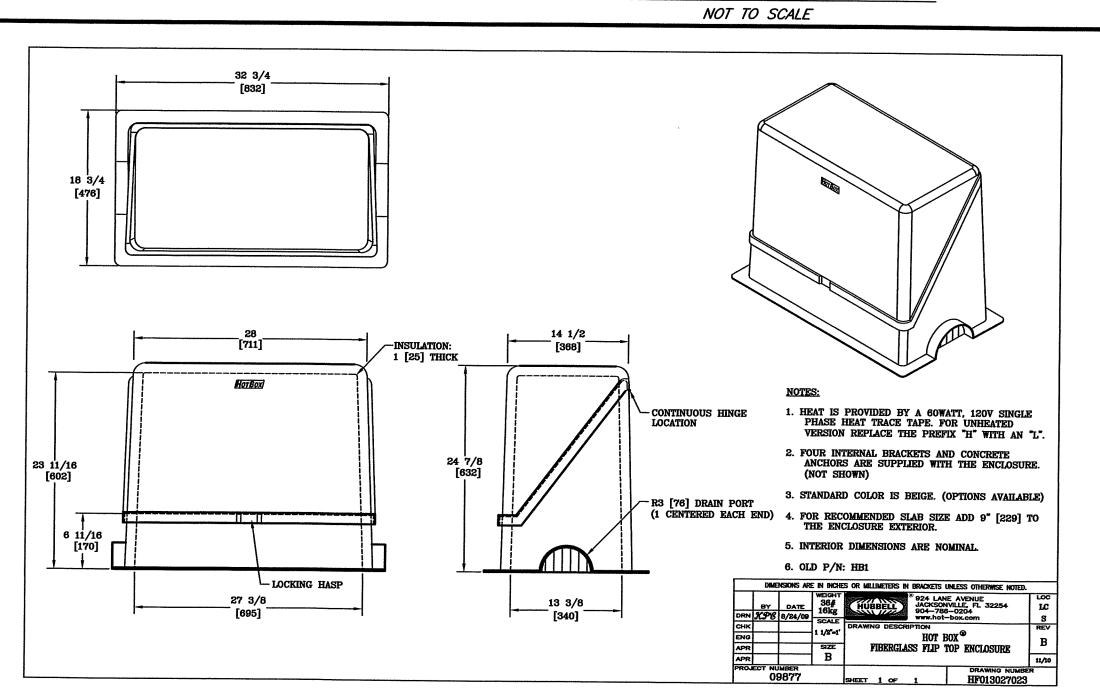


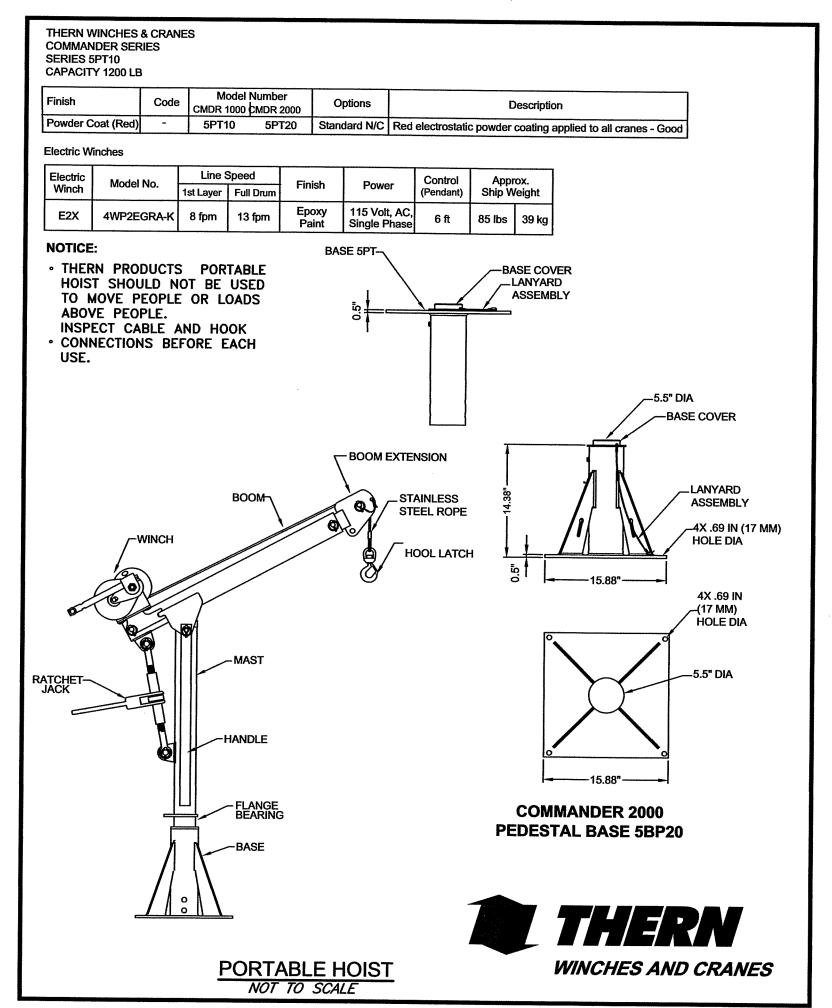














SPT LAND, LLC 1201 OLD NATIONAL PIKE NEW MARKET, MARYLAND 21774

DEVELOPER:

M&G REALTY, INC. 2295 SUSQUEHANNA TRAIL, SUITE C YORK, PENNSYLVANIA 17404

APPROVED BY: **TOWN OF EMMITSBURG** TOWN MANAGER

Est. 1966

EYORS PLANNERS

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NOTES

STATION

PUMP

SCALE: AS SHOWN

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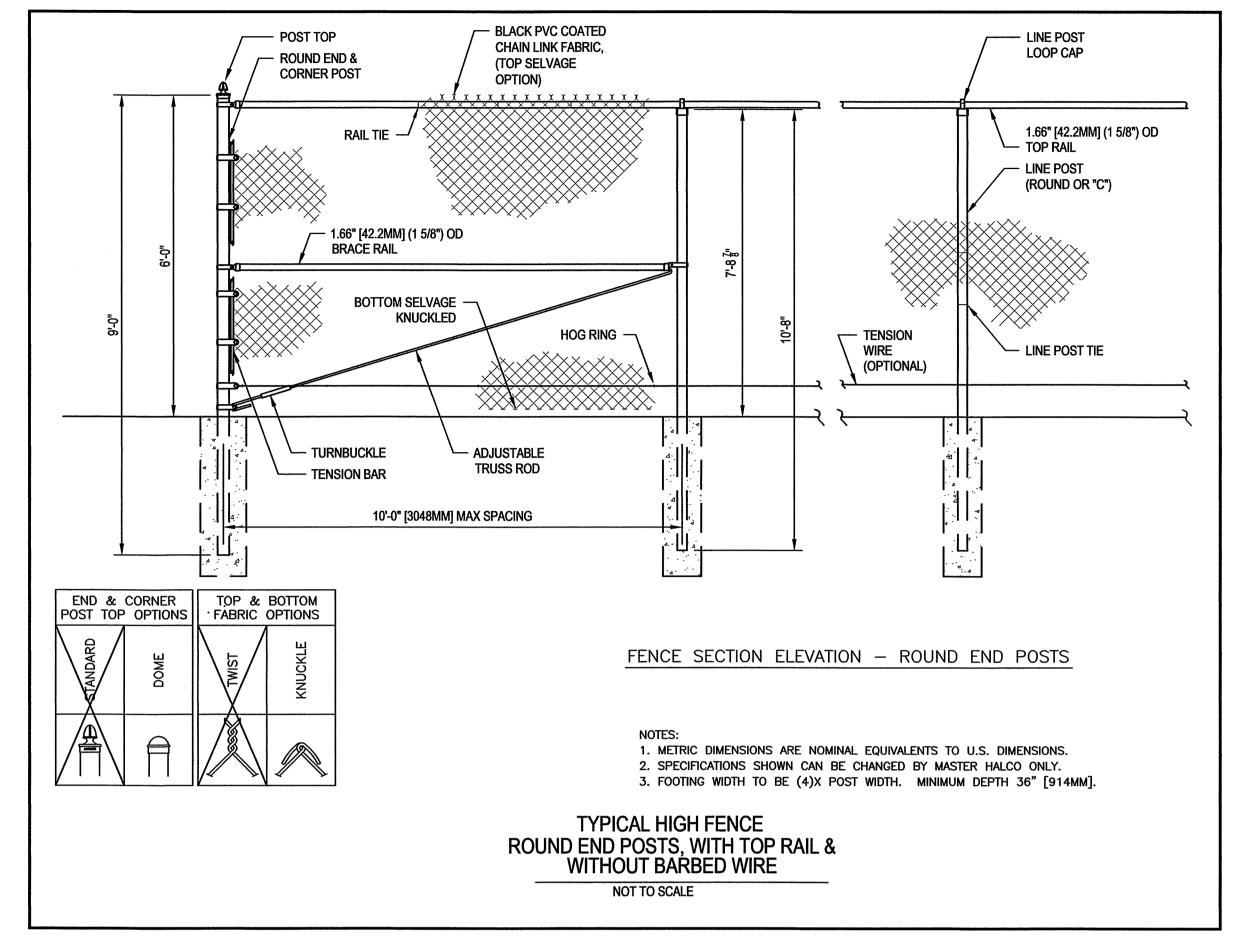
PROFESSIONAL CERTIFICATION

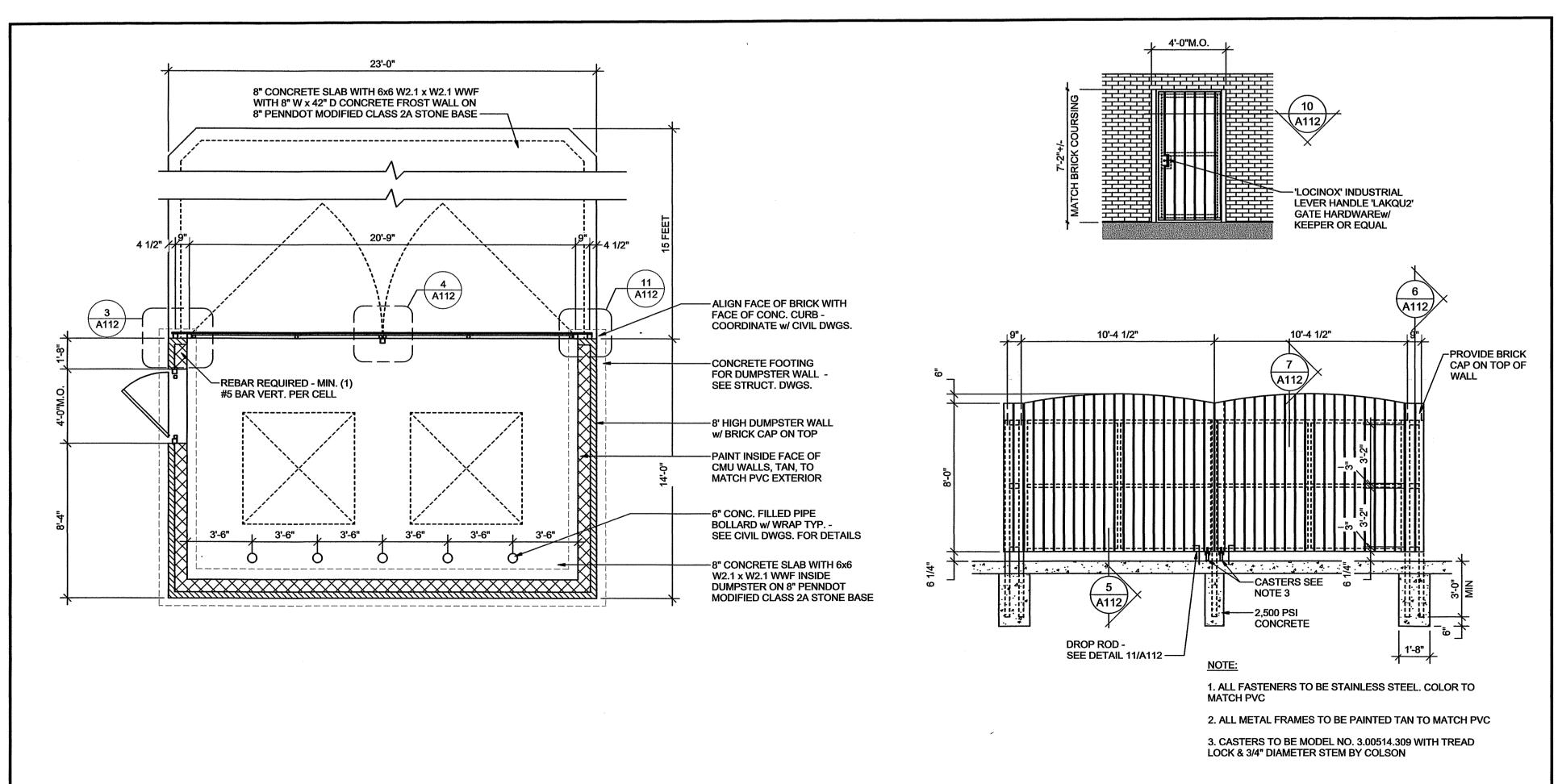
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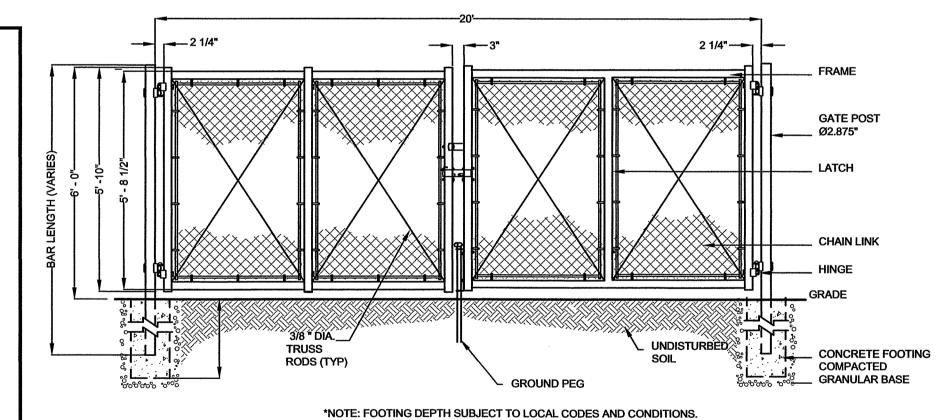
LICENSE No.: 30709 EXP. DATE: 7/23/20

18-31407 PROJECT NO. D - 3480 DRAWING NO. . DATE: OCTOBER 2019 DRAWN BY: ____ CHECKED BY: ______JHC

SHEET <u>22</u> OF <u>35</u>







NOTES:

1. THIS DRAWING IS FOR INFORMATION PURPOSES ONLY AND NOT FOR CONSTRUCTION.

2. DO NOT SCALE DRAWINGS.

3. CONTRACTORS NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info

GATE POST SCHEDULE

GATE LEAF WIDTH (NOMINAL)

6' OR LESS 2.875" OD 2.5" SQ

MORE THAN 6' TO 12' 4.0" OD

MORE THAN 12' TO 18' 6.625" OD

8.625" OD

TYPICAL DOUBLE SWING GATE

MORE THAN 18'

REFERENCE NUMBER 000-313B.

APPROVED BY:
TOWN OF EMMITSBURG

TOWN MANAGER DATE

FOX & ASSOCIATES, IN

ENGINEERS • SURVEYORS • PLANNE
981 MT. AETNA ROAD 82 WORMANS MILL CO
HAGERSTOWN, MD. 21740 SUITE 'G'
PHONE: (301)733-8603 FREDERICK, MD. 2170
or (301)416-7250 PHONE: (301)695-088
FAX: (301)733-1853 FAX: (301)293-6009

Est. 1966

UTTER'S STORE # 84

SITUATED ON THE SOUTHEAST CORNER

SCALE: AS SHOWN

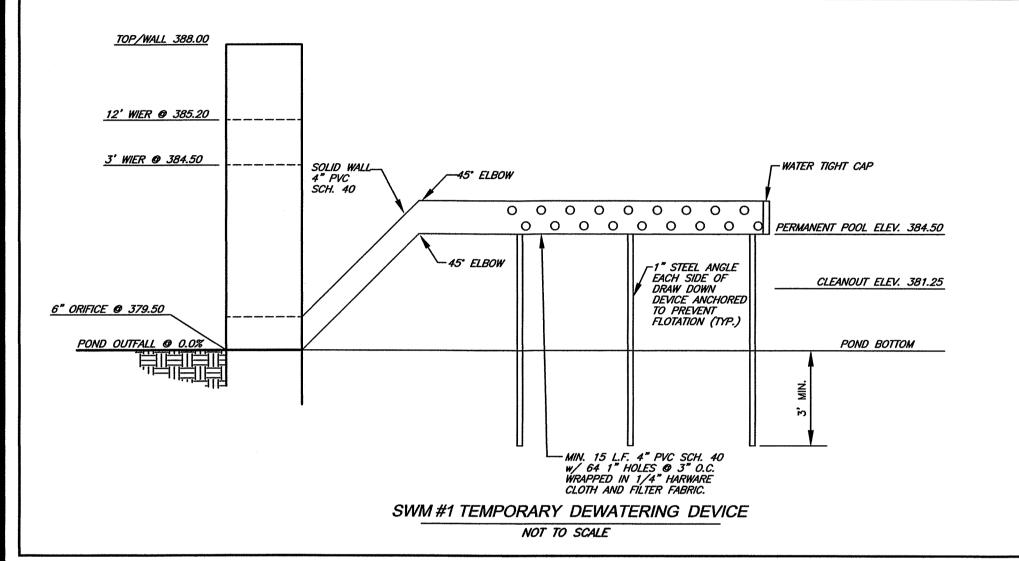
PROFESSIONAL CERTIFICATION

OF MANAGEMENT OF MANAGEMENT

I HEREBY CERTIFY THAT THESE DOCUMENTS
WERE PREPARED OR APPROVED BY ME, AND THAT
I AM A DULY LICENSED PROFESSIONAL ENGINEER
UNDER THE LAWS OF THE STATE OF MARYLAND.

PROJECT NO. 18-31407
DRAWING NO. D - 3480
DATE: OCTOBER 2019
DRAWN BY: JWE
CHECKED BY: JHC

HEET <u>23</u> OF <u>35</u>



STRUCTURAL NOTES

GENERAL NOTES

- 1 THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO STARTING CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES. 2 NOTES AND DIMENSIONS ON DRAWINGS SHALL TAKE PRECEDENCE OVER SCALES SHOWN ON
- 3 ALL WORK SHALL BE IN ACCORDANCE WITH THE MORE STRINGENT REQUIREMENTS OF THE MINIMUM STANDARDS LISTED IN THE GOVERNING CODE OR AS INDICATED HEREON, GOVERNING CODE SHALL BE IBC 2012.
- 4 COORDINATE THESE DRAWINGS WITH THE CIVIL DRAWINGS, ANY INCONSISTENCIES SHALL BE REPORTED TO THE ENGINEER FOR INSTRUCTIONS ON HOW TO PROCEED.
- 5 THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE EXISTING CONDITIONS AND PROPOSED STRUCTURE DURING CONSTRUCTION, INCLUDING ALL BRACING AND SHORING REQUIRED TO RESIST 6 ASTM SPECIFICATIONS LISTED SHALL BE THE LATEST EDITION.
- 7 DESIGN LIVE LOADS: LATERAL LOAD OF RETAINED MATERIAL BASED ON: UNIT WEIGHT OF MATERIAL = 120 PCF

FOUNDATION

- 1 A FOUNDATION / SUBSURFACE REPORT HAS BEEN ISSUED BY AND INCLUDED IN THE CONTRACT
- 2 FOUNDATIONS HAVE BEEN DESIGNED BASED ON ALL ALLOWABLE BEARING PRESSURE EQUAL TO 2,000 PSF.
- THE CONTRACTOR SHALL PROVIDE FOR ALL DE-WATERING, SHORING, BRACING, ETC. SUPPORTING THE PRESSURE INDICATED.
- 4 IF FOUNDATION MATERIAL IS UNCOVERED AND DETERMINED NOT TO BE CAPABLE OF SUPPORTING THE PRESSURE INDICATED, THE UNDERLYING MATERIAL SHALL BE OVEREXCAVATED UNTIL COMPETENT MATERIAL IS FOUND AND BACKFILLED WITH CRUSHED STONE COMPACTED TO 95% MAXIMUM DENSITY.

CONCRETE

- 1 ALL CONCRETE SHALL CONFORM WITH THE REQUIREMENTS OF THE MSHA MIX NO. 3 CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318-11). CONCRETE FOR WALLS AND FOOTINGS SHALL BE 3,000 PSI
- 2 CLEAR COVERAGE OVER OUTER REINFORCING BAR SHALL BE AS FOLLOWS: CONCRETE ALL LOCATIONS 3 INCHES
- 3 CONCRETE MIXES SHALL BE DESIGNED BY A QUALIFIED TESTING LABORATORY 4 PORTLAND CEMENT SHALL CONFORM TO ASTM C-150, TYPE A IF CONCRETE IS IN

SPACING OR NUMBER AS THE VERTICAL REINFORCING, RESPECTIVELY.

CONTACT WITH SOIL OR SUBJECT TO FREEZING AND THAWING. 5 AGGREGATE FOR CONCRETE SHALL CONFORM TO ALL THE REQUIREMENTS AND TESTS OF ASTM C-33 AND PROJECT SPECIFICATIONS.

REINFORCING STEEL

1 REINFORCING STEEL SHALL CONFORM TO ASTM DESIGNATION A-615 GRADE 60. TIES AND

- STIRRUPS MAY BE GRADE 40. 2 ALL REINFORCING SHALL BE DETAILED AND PLACED IN CONFORMANCE WITH THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI LATEST APPROVED EDITION), AND
- THE "MANUAL OF STANDARD PRACTICE FOR CONCRETE REINFORCEMENT" BY C.R.S.I. 3 ALL REINFORCING BAR BENDS SHALL BE MADE COLD. 4 DOWELS BETWEEN FOOTINGS AND WALLS OR COLUMNS SHALL BE THE SAME SIZE, GRADE, AND

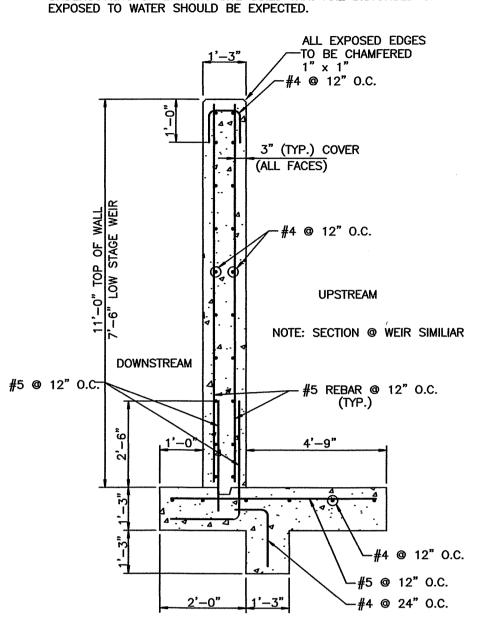
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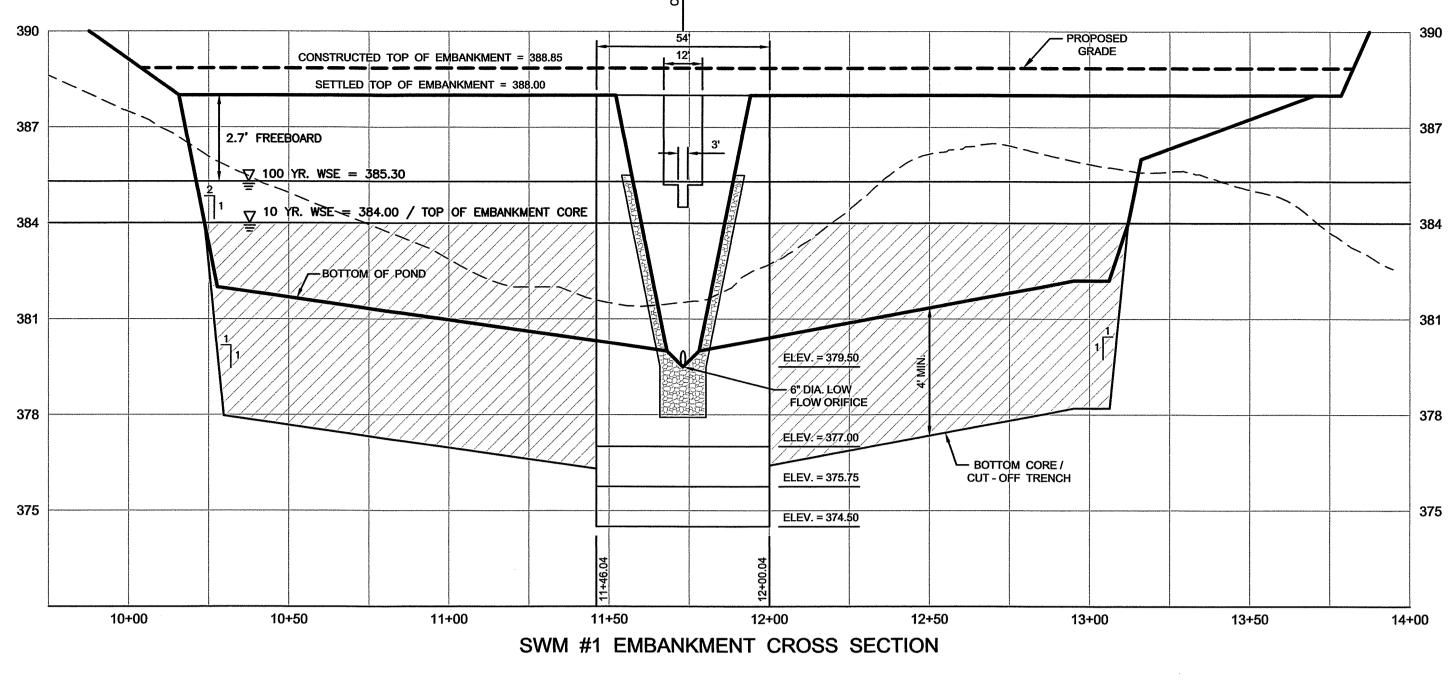
SPT LAND, LLC 1201 OLD NATIONAL PIKE NEW MARKET, MARYLAND 21774

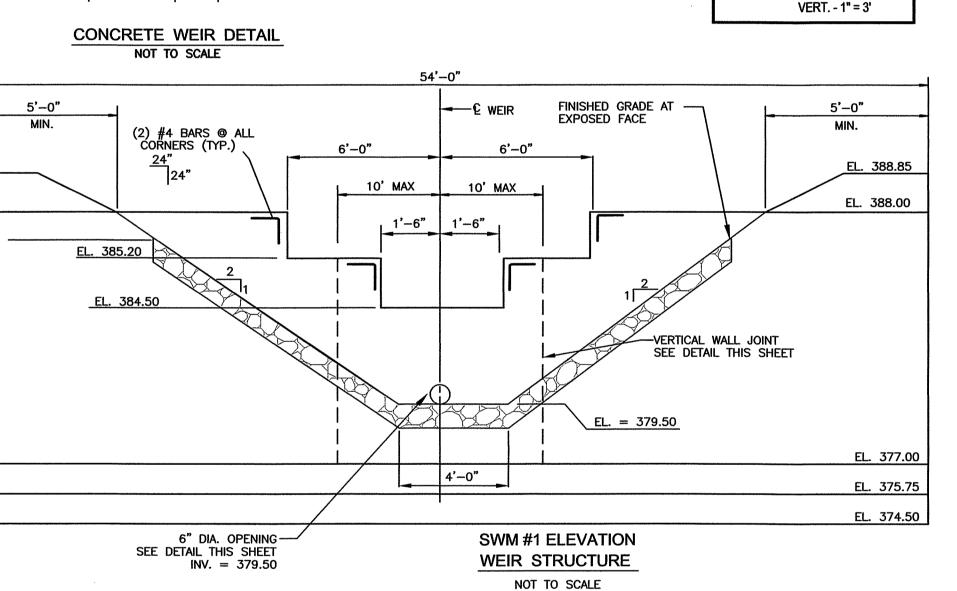
DEVELOPER:

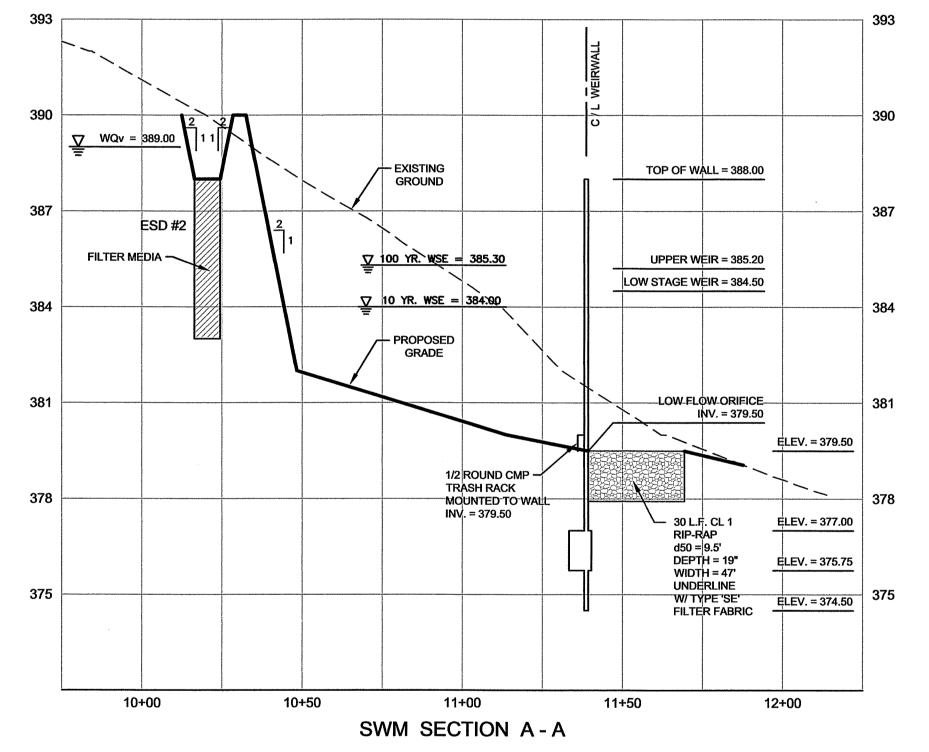
M&G REALTY, INC. 2295 SUSQUEHANNA TRAIL, SUITE C YORK, PENNSYLVANIA 17404

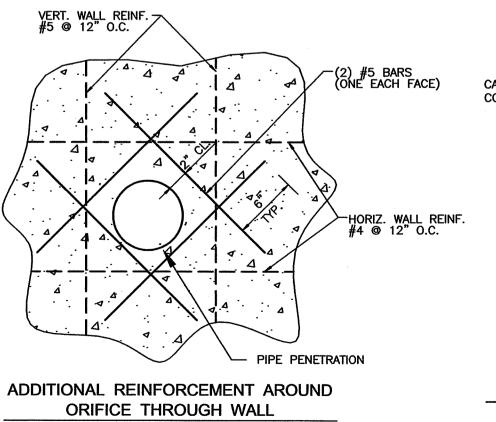
- **NOTES:** 1. CORE TRENCH MATERIALS SHALL CONFORM TO UNIFIED SOIL CLASSIFICATION GC, SC, CH OR CL PER MD-378 SPECIFICATIONS. OFF-SITE BORROW MATERIALS MAY BE NECESSARY TO CONSTRUCT
- 2. ALL EMBANKMENT MATERIALS SHALL BE INSTALLED AND APPROVED
- BY A GEOTECHNICAL ENGINEER. 3. IN THE EVENT THAT ROCK IS ENCOUNTERED, EXPOSED ROCK
- SURFACES IN THE BASIN OR EMBANKMENT AREAS MUST BE REMOVED. 4. THE EMBANKMENT FILL SUBGRADES SHOULD BE STRIPPED OF TOPSOIL AND ANY DISTURBED SOILS. THE SUBGRADES SHALL BE PROOF ROLLED UNDER THE OBSERVATION OF THE GEOTECHNICAL ENGINEER'S REPRESENTATIVE. ADDITIONAL SOFT OR UNSUITABLE SOILS SHOULD BE REMOVED AND REPLACED WITH COMPACTED FILL. ADDITIONAL UNDERCUTTING OF EXISTING SITE SOILS THAT ARE DISTURBED OR



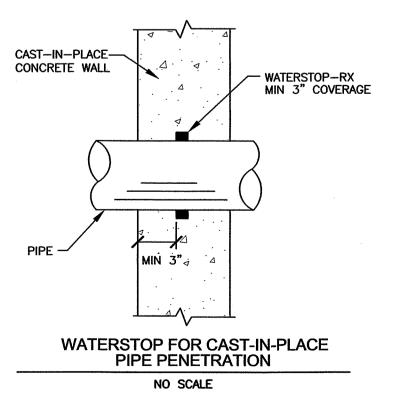


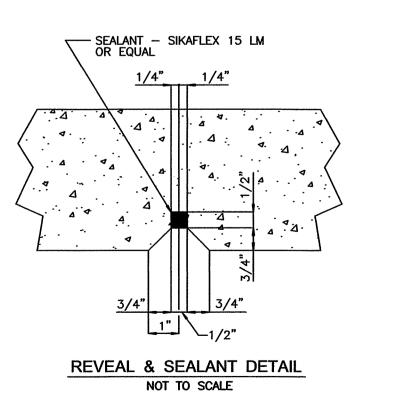






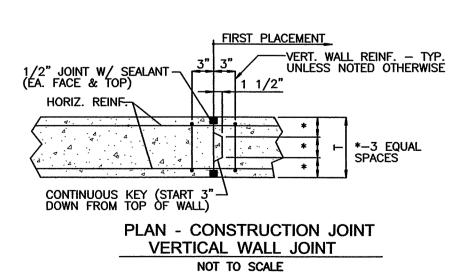
SCALE: $1 \frac{1}{2} = 1'-0"$





PROFILE

SCALE: HORIZ. - 1" = 30'



TOWN MANAGER

APPROVED BY: **TOWN OF EMMITSBURG**

fig	[FREDERICK COUNTY, DEVELOPMENT REVIEW		6	A PAO CO	30/11/5/5
	PROVED:	elopment Review Chief	Date		I HEREBY CERTIFY T	
Reviewec constructi	Stor d in accordance ion. Approval i ion before the	mwater Management e with local County requirements. Frederick is valid for two (2) years after last date showr approval expiration to be considered active.	above. The project mus Otherwise, resubmittal o	st be under f plans, including	WERE PREPARED OR A I AM A DULY LICENSED UNDER THE LAWS OF LICENSE No.: 30709	PROFESSIONAL E THE STATE OF MA
REV.	DATE	e made to Development Review for reapprov REVISION DESCRIPTION FILL IN THESE BLOCKS FOR REVISIONS ONLY	CONSULTANT:	DEV. REVIEW:	PROJECT NO DRAWING NO DATE:OC	



WERE PREPARED OR APPROVED BY ME. AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE No.: 30709 EXP. DATE: 7/23/2 18-31407 PROJECT NO. . D - 3480 DRAWING NO. _

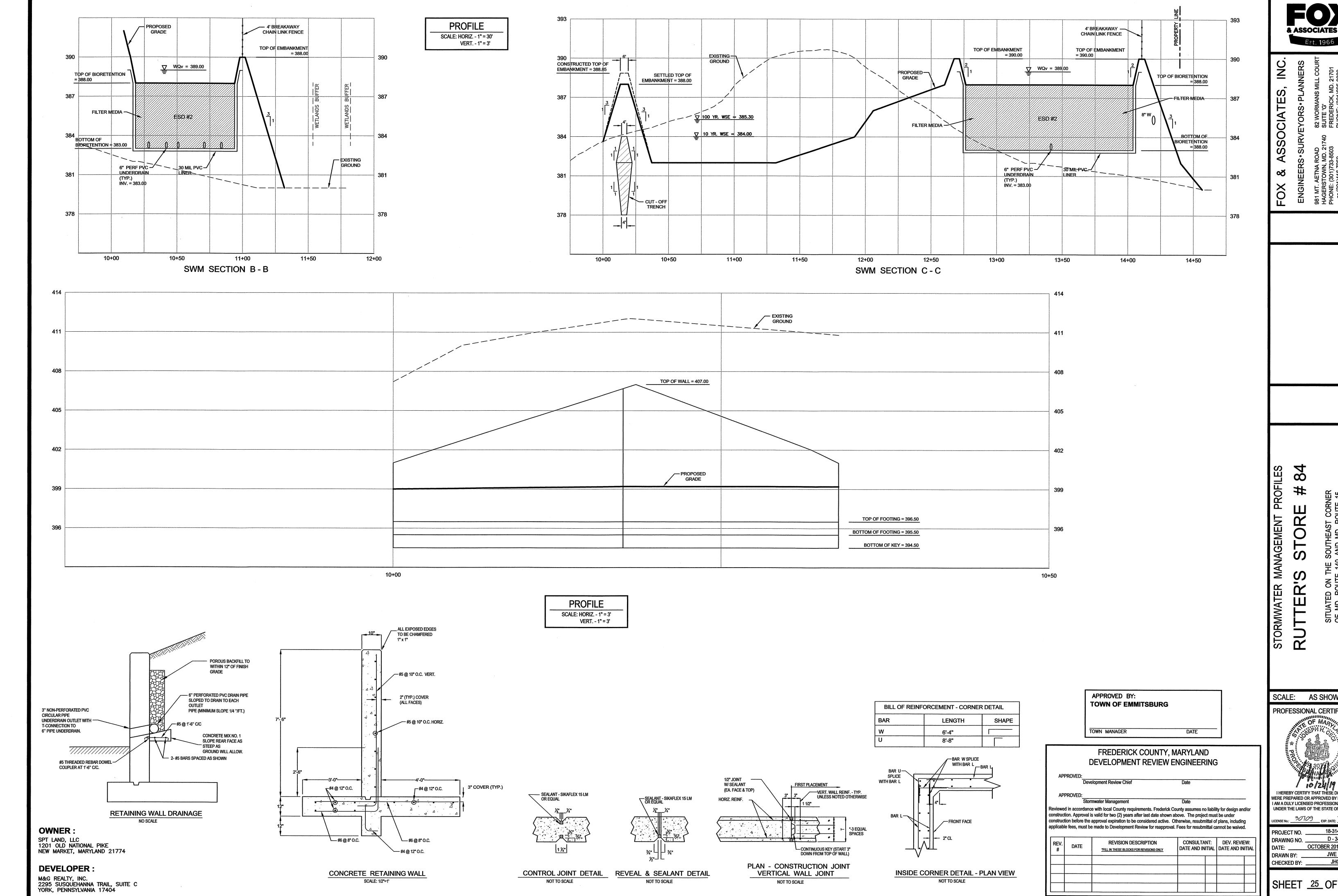
STORMWAT

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SCALE: AS SHOWN

PROFESSIONAL CERTIFICATION

SHEET <u>24</u> OF <u>35</u>



SCALE: AS SHOWN PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE No.: 30709 EXP. DATE: 7/23/2

18-31407 D - 3480 OCTOBER 2019 JWE JHC

SHEET <u>25</u> OF <u>35</u>

All cleared and grubbed material shall be disposed of outside and below the limits of the dam and reservoir as directed by the owner or his representative. When specified, a sufficient quantity of topsoil will be stockpiled in a suitable location for use on the embankment and other designated areas.

EARTH FILL

MATERIAL - The fill material shall be taken from approved designated borrow areas. It shall be free of roots, stumps, wood, rubbish, stones greater than 6", frozen or other objectionable materials. Fill material for the center of the embankment and cut off trench shall conform to Unified Soil Classification GC,SC,CH, or CL. Consideration may be given to the use of other materials in the embankment if design and construction are supervised by a geotechnical engineer.

PLACEMENT - Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in maximum 8 inch thick (before compaction) layers which are to be continuous over the entire length of the fill. The most permeable borrow material shall be placed in the downstream portions of the embankment. The principal spillway must be installed concurrently with fill placement and not excavated into the embankment.

COMPACTION - The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one tread track of the equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot, rubber tired or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction will be obtained with the equipment used. The fill material shall contain sufficient moisture so that if formed into a ball it will not crumble yet not be so wet that water can be squeezed out. Where a minimum required density is specified, it shall not be less that 95% of maximum dry density with a moisture content within +2% of the optimum. Each layer of fill shall be compacted as necessary to obtain that density, and is to be certified by the Engineer at the time of construction. All compaction is to be determined by AASHTO Method T-99.

CUT OFF TRENCH - The cutoff trench shall be excavated into impervious material along or parallel to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be governed by the equipment used for excavation, with the minimum width being four feet. The depth shall be at least four feet below existing grade or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. The backfill shall be compacted with construction equipment, rollers, or hand tampers to assure maximum density and minimum permeability.

STRUCTURE BACKFILL

Backfill adjacent to pipes or structures shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other manually directed compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally. to any part of a structure. Under no circumstances shall equipment be driven over any part of a concrete structure or pipe, unless there is a compacted fill of 24" or greater over the structure or

PIPE CONDUITS

All pipes shall be circular in cross section. CORRUGATED METAL PIPE - All of the following criteria shall apply for corrugated metal pipe:

 Materials - (Steel Pipe) - This pipe and its appurtenances shall be galvanized and fully bituminous coated and shall conform to the requirements of AASHTO Specification M-190 Type A with watertight coupling bands. Any bituminous coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound. Steel pipes with polymeric coatings shall have a minimum coating thickness of 0.01 inch (10 mil) on both sides of the pipe. The following coatings or an approved equal may be used: Nexon, Plasti-Cote, Blac-Klad, and Beth-Cu-Loy. Coated corrugated steel pipe shall meet the requirements of AASHTO M-245 and M-246.

Materials - (Aluminum Coated Steel Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-274 with watertight coupling bands or flanges. Any aluminum coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound.

Materials - (Aluminum Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-196 or M-211 with watertight coupling bands or flanges. Aluminum surfaces that are to be in contact with concrete shall be painted with one coat of zinc chromate primer. Hot dip galvanized bolts may be used for connections. The pH of the surrounding soils shall be between 4 and 9.

2. Coupling bands, anti-seep collars, end sections, etc. must be composed of the same material as the pipe. Metals must be insulated from dissimilar materials with use of rubber or plastic insulating materials at least 24 mils in thickness.

Connections - All connections with pipes must be completely watertight. The drain pipe or barrel connection to the riser shall be welded all around when the pipe and riser are metal. Anti-seep collars shall be connected to the pipe in such a manner as to be completely watertight. Dimple bands are not considered to be watertight. All connections shall use a rubber or neoprene gasket when joining pipe sections. The end of each pipe shall be re-rolled an adequated number of corrugations to accomodate the band width. The following type connections are acceptable for pipes less than 24" in diameter: flanges on both ends of the pipe, a 12" wide standard lap type band with 12" wide by 3/8" thick closed cell circular neoprene gasket; and a 12" wide hugger type band with O-ring gaskets having a minimum diameter of 1/2" greater than the corrugation depth. Pipes 24" in diameter and larger shall be connected by a 24" long annular corrugated band using rods and lugs. A 12" wide by 3/8" thick closed cell circular neoprene gasket will be installed on the end of each pipe for a total of 24". Helically corrugated pipe shall have either continuously welded seams or have lock seams with internal caulking or a neoprene bead.

Bedding - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequated support.

5. Backfilling shall conform to "STRUCTURE BACKFILL."

shown on the drawings.

6. Other details (anti-seep collars, valves, etc.) shall be as

REINFORCED CONCRETE PIPE - All of the following criteria shall apply for reinforced concrete pipe:

1. Materials - Reinforced concrete pipe shall have bell and spigot joints with rubber gaskets and shall equal or exceed ASTM Designation C-361.

2. Bedding - All reinforced concrete pipe conduits shall be laid in a concrete bedding for their entire length. This bedding shall consist of high slump concrete placed under the pipe and up the sides of the pipe at least 10% of its outside diameter with a minimum thickness of 3 inches, or as shown on the

3. Laying pipe - Bell and spigot pipe shall be placed with the bell end upstream. Joints shall be made in accordance with recommendations of the manufacturer of the material. After the joints are sealed for the entire line, the bedding shall be placed so that all spaces under the pipe are filled. Care shall be exercised to prevent any deviation from the original line and grade of the pipe. The first joint must be located within 2 feet from the riser.

4. Backfilling shall conform to "STRUCTURE BACKFILL."

5. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

POLYVINYL CHLORIDE (PVC) PIPE - All of the following criteria shall apply for polyvinyl chloride (PVC) pipe:

conforming to ASTM D-1785 or ASTM D-2241. 2. Joints and connections to anti-seep collars shall be

1. Materials - PVC pipe shall be PVC-1120 or PVC-1220

3. Bedding - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth

4. Backfilling shall conform to "STRUCTURE BACKFILL."

compacted to provide adequated support.

5. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

CONCRETE

completely watertight.

Concrete shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 608, Mix 3

ROCK RIPRAP

Rock riprap shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 905.

The riprap shall be placed to the required thickness in one operation. The rock shall be delivered and placed in a manner that will insure the riprap in place shall be reasonably homogeneous with the larger rocks uniformly distributed and firmly in contact one to another with the smaller rocks filling the voids between the larger rocks. Filter cloth shall be placed under all riprap and shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 919.12.

CARE OF WATER DURING CONSTRUCTION

All work on permanent structures shall be carried out in areas free from water. The Contractor shall construct and maintain all temporary dikes, levees, cofferdams, drainage channels, and stream diversions necessary to protect the areas to be occupied by the permanent works. The contractor shall also furnish, install, operate, and maintain all necessary pumping and other equipment required for removal of water from the various parts of the work and for maintaining the excavations, foundation, and other parts of the work free from water as required or directed by the engineer for constructing each part of the work. After having served their purpose, all temporary protective works shall be removed or leveled and graded to the extent required to prevent obstruction in any degree whatsoever of the flow of water to the spillway or outlet works and so as not to interfere in any way with the operation or maintenance of the structure. Stream diversions shall be maintained until the full flow can be passed through the permanent works. The removal of water from the required excavation and the foundation shall be accomplished in a manner and the extent that will maintain stability of the excavated slopes and bottom of required excavations and will allow satisfactory performance of all construction operations. During the placing and compacting of material in required excavations, the water level at the locations being refilled shall be maintained below the bottom of the excavation at such locations which may require draining the water to stumps from which the water shall be pumped.

All borrow areas shall be graded to provide proper drainage and left in a sightly condition. All exposed surfaced of the embankment, spillway, spoil and borrow areas, and berms shall be stabilized by seeding, liming, fertilizing and mulching in accordance with the Maryland Soil Conservation Service Standards and Specifications for Critical Area Planting (MD-342) or as shown on the accompanying drawings.

EROSION AND SEDIMENT CONTROL

Construction operations will be carried out in such a manner that erosion will be controlled and water and air pollution minimized. State and local laws concerning pollution abatement will be followed. Construction plans shall detail erosion and sediment control measures to be employed during the construction process.

PRECAST NOTES

1. MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASTM C-478 2. CONCRETE SHALL BE MIX NO. 6 (4500 PSI). 3. WALL REINFORCEMENT FOR BASE UNITS. RISER UNITS AND ECCENTRICAL CONE UNITS SHALL BE REINFORCEMENT BASE OR WELDED WIRE FABRIC WITH A MINIMUM AREA OF 0.18 IN. 2 FT. FOR THE 72" DIAMETER MANHOLES. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 AND A 82. REINFORCEMENT BARS SHALL MEET ASTM A 615.GRADE 60. 4. BASE REINFORCEMENT SHAII BE REINFORCEMENT BARS OR WELDED WIRE FABRIC WITH A MINIMUM AREA OF 0.27 IN. SQ./ FT. THE BASE MAY BE CAST MONOLITHIC WITH THE UNIT OR JOINTED PER MANUFACTURER'S

5. THE MANUFACTURER SHALL FORM MALE AND FEMALE ENDS OF JOINTS USING THIER DESIGN. THE JOINTS SHALL BE SEALED BY THE CONTRACTOR AND MADE WATERTIGHT USING (WHERE APPLICABLE) MORTER, RUBBER 0-RING GASKETS MEETING ASTM C 361 & C 443 OR FLEXIBLE PLASTIC GASKETS MEETING AASHTO M 198 TYPE B.

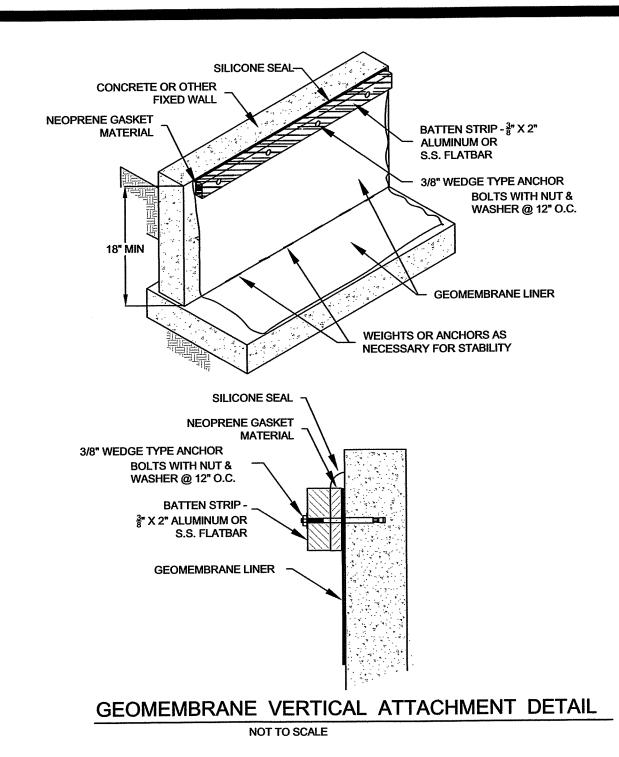
6. LADDER RUNGS SHALL BE INSTALLED IN VERTICAL ALIGNMENT AT 1'-0" MAXIMUM C/C. RUNG TYPES SHALL BE IN ACCORDANCE WITH STANDARDS MD 383.91 OR MD 383.92. 7. LIFT HOLES OR LIFT EYES SHALL BE PROVIDED IN EACH SECTION FOR

8. MIX NO. 2 CONCRETE OR BRICK CHANNEL SHALL BE PROVIDED.

POND NOTES:

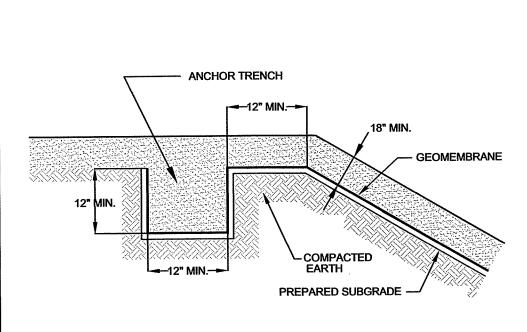
1. IN THE EVENT THAT ROCK IS ENCOUNTERED, EXPOSED ROCK SURFACES IN THE BASIN OR EMBANKMENT AREAS SHOULD BE COVERED WITH A MINIMUM OF 12 INCHES OF COMPACTED, ON SITE CLAY TO REDUCE INFILTRATION AND TO FACILITATE VEGETATIVE GROWTH.

2. THE EMBANKMENT FILL SUBGRADES SHOULD BE STRIPPED OF TOPSOIL AND ANY DISTURBED SOILS. THE SUBGRADES SHALL BE PROOF ROLLED UNDER THE OBSERVATION OF THE GEOTECHNICAL REPRESENTATIVE. ADDITIONAL SOFT OR UNSUITABLE SOILS SHOULD BE REMOVED AND REPLACED WITH COMPACTED FILL. ADDITIONAL UNDERCUTTING OF EXISTING SITE SOILS THAT ARE DISTURBED OR EXPOSED TO WATER SHOULD BE EXPECTED.

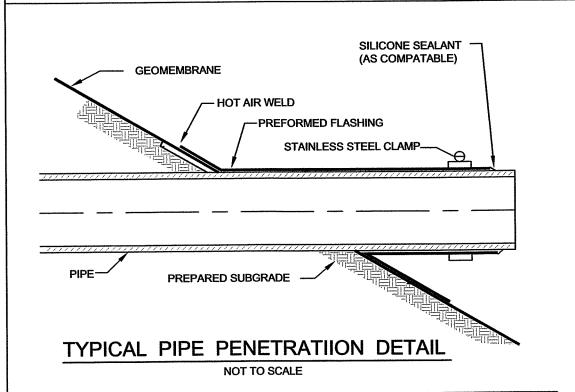


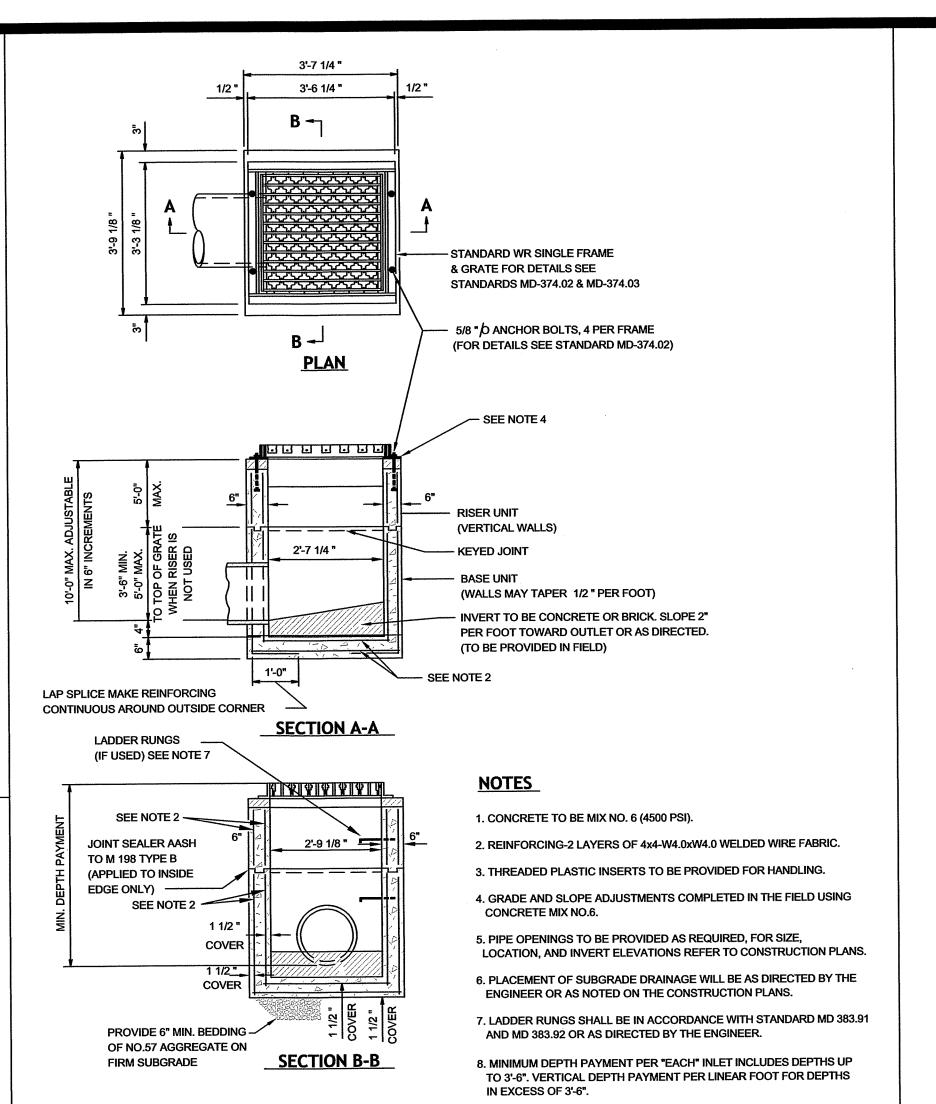
GEOMEMBRANE INSTALLATION REQUIREMENTS

- THE GEOMEMBRANE SHALL BE COVERED AS SOON AS POSSIBLE. THE COVERING OPERATION SHALL NOT DAMAGE THE GEOMEMBRANE. THE COVER SOIL MATERIAL SHALL BE FREE OF FOREIGN AND ORGANIC MATERIAL, SHARP OBJECTS, OR DEBRIS OF ANY KIND, WHICH COULD POTENTIALLY DAMAGE THE GEOMEMBRANE. NO CONSTRUCTION EQUIPMENT OR MACHINERY SHALL OPERATE DIRECTLY ON THE GEOMEMBRANE. THE USE OF LIGHTWEIGHT MACHINERY (I.E., GENERATOR, ETC.) WITH LOW GROUND PRESSURE IS ALLOWED.
- THE ANCHOR TRENCH SHALL BE BACKFILLED BY THE EARTHWORK CONTRACTOR. TRENCH BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. CARE SHALL BE TAKEN WHEN BACKFILLING THE TRENCHES TO PREVENT ANY DAMAGE TO THE GEOMEMBRANE, IF DAMAGE OCCURS, IT SHALL BE REPAIRED PRIOR TO BACKFILLING.
- THE SURFACE SHALL BE FREE OF ALL ROCKS, STICKS, STONES, ROOTS, SHARP OBJECTS OR DEBRIS OF ANY KIND. THE SURFACE SHOULD PROVIDE A FIRM UNYIELDING FOUNDATION FOR THE MEMBRANE WITH NO SUDDEN, SHARP OR ABRUPT CHANGE OR BREAK IN GRADIENT. NO STANDING WATER OR EXCESS MOISTURE SHALL BE PRESENT. THE SURFACE MUST BE CONSTRUCTED TO ALLOW THE NECESSARY COMPACTION. 90% PROCTOR WITH A SURFACE TOLERANCE OF ±1 IN. FOR PLASTIC MATERIALS, 80% PROCTOR AND ±2 IN. FOR RUBBER MATERIALS.
- BACKFILL MATERIAL OVER IMPERVIOUS LINER SHALL BE PROCESSED OR NATURAL NON-COHESIVE SOILS, SUCH AS A GRAVELLY SAND, SCREENED SAND, AND PEA GRAVEL AND WELL GRADED COHESIVE SOILS, SUCH AS CLAYEY-SILT OR SILTY-CLAY. MAXIMUM STONE SIZE OF ANY OF THE GRAVEL INCLUSIONS SHOULD NOT BE GREATER THAN 1".

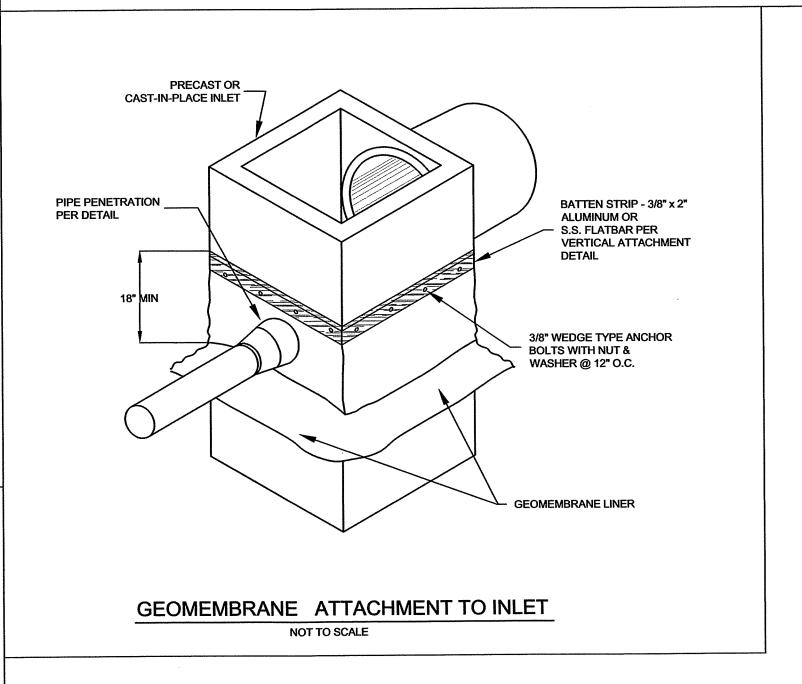


TYPICAL ANCHOR TRENCH DETAIL NOT TO SCALE





MODIFIED SINGLE WR INLET NOT TO SCALE



OWNER: SPT LAND, LLC

1201 OLD NATIONAL PIKE NEW MARKET, MARYLAND 21774

DEVELOPER:

M&G REALTY, INC. 2295 SUSQUEHANNA TRAIL, SUITE C YORK, PENNSYLVANIA 17404

APPROVED BY: **TOWN OF EMMITSBURG**

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		FREDERICK COUNTY, N	MARYLAND	
		EVELOPMENT REVIEW E		
API	PROVED:			
	Deve	lopment Review Chief	Date	
. AP	PROVED:			
	Storr	nwater Management	Date	
construc	tion. Approval is tion before the	e with local County requirements. Frederick C s valid for two (2) years after last date shown approval expiration to be considered active. C e made to Development Review for reapprova	above. The project mus Otherwise, resubmittal of	t be under f plans, including
REV.	DATE	REVISION DESCRIPTION *FILL IN THESE BLOCKS FOR REVISIONS ONLY	CONSULTANT: DATE AND INITIAL	DEV. REVIEW: DATE AND INITIAL

CDD - Dev. Review

File:

A/P#:

Due Date:

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SCALE: AS SHOWN PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND

LICENSE No.: 30709 EXP. DATE: 7/23/2

18-31407 PROJECT NO. D - 3480 DRAWING NO. OCTOBER 2019 JWE DRAWN BY:

CHECKED BY: __

SHEET <u>26</u> OF <u>35</u>

JHC

	20000
10	TES:
١.	PIPE SHALL BE 6" DIAMETER, PERFORATED RIGID PLASTIC PIPE (ASTMF 758, TYPE PS 28, OR AASHTO-M-278).
2.	PERFORATIONS SHALL BE %" DIAMETER LOCATED 6" ON CENTER WITH A MINIMUM OF FOUR HOLES PER ROW.
3.	PIPE SHALL BE WRAPPED WITH A '4" (NO. 4 OR 4X4) GALVANIZED HARDWARE CLOTH.

LOW MAINTENANCE	SEED MIXTURE
CANADIAN BLUEGRASS	10 LBS./ACRE
KENTUCKY BLUE GRASS	10 LBS./ACRE
PENNLAWN RED FESCUE	20 LBS./ACRE
REDTOP GRASS SEED	10 LBS./ACRE

5 LBS./ACRE

BIRDSFOOT TREFOIL

MATERIAL	SPECIFICATION	SIZE	NOTES
PLANTINGS	SEE APPENDIX A, TABLE A.4	N/A	PLANTINGS ARE SITE SPECIFIC
PLANTING SOIL [2'-4' DEEP]	LOAMY SAND (60-65%) & COMPOST (35-40%) OR SANDY LOAM (30%) COARSE SAND (30%) COMPOST (40%)	N/A	USDA SOIL TYPES LOAMY SAND OR SANDY LOAM; CLAY CONTENT <5%
ORGANIC CONTENT	MIN. 10% BY DRY WEIGHT (ASTM D2974)		
MULCH	SHREDDED HARDWOOD		AGED 6 MONTHS, MINIMUM, NO PINE OR WOOD CHIPS
PEA GRAVEL DIAPHRAGM	PEA GRAVEL: (ASTM D-448)	NO. 8 OR NO. 9 (1/8" TO 3/8")	
CURTAIN DRAIN	ORNAMENTAL STONE: WASHED COBBLES	STONE: 2" TO 5"	
GEOTEXTILE		N/A	PE TYPE I NONWOVEN
GRAVEL (UNDERDRAINS AND INFILTRATION BERMS)	AASHTO M-43	NO. 57 OR NO. 6 AGGREGATE	
UNDERDRAIN PIPING	F758, TYPE PS 28 OR AASHTO M-278	4" TO 6" RIGID SCHEDULE 40 PVC OR SDR-35	SLOTTED OR PERFORATED PIPE; 3" PERF. @6" ON CENTER, 4 HOLES PER ROW; MINIMUM 3 OF GRAVEL OVER PIPES; NOT NECESSARY UNDERNEATH PIPES. PERFORATED PIPE SHALL BE WRAPPED WITH 1" GALVANIZED HARDWARE CLOTH.
POURED IN PLACE CONCRETE (IF REQUIRED)	MSHA MIX NO. 3 fc=3500 PSI @ 28 DAYS, NORMAL WEIGHT, AIR-ENTRAINED, REINFORCING TO MEET ASTM-615-60	N/A	ON-SITE TESTING OF POURED-IN-PLACE CONCRETE REQUIRED: 28 DAY STRENGTH AND SLUMP TEST; ALL CONCRETE DESIGN (CAST-IN-PLACE OR PRECAST) NOT USING PREVIOUSLY APPROVED STATE OR LOCAL STANDARDS REQUIRES DESIGN DRAWINGS SEALED AND APPROVED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF MARYLAND - DESIGN TO INCLUDE MEETING ACI CODE 350.R/89; VERTICAL LOADING [H-10 OR H-20]; ALLOWABLE HORIZONTAL LOAD (BASED ON SOIL PRESSURES); AND ANALYSIS OF POTENTIAL CRACKING
SAND	AASHTO-M-6 OR ASTM-C-33	0.02" TO 0.04"	SAND SUBSTITUTIONS SUCH AS DIABASE AND GRAYSTONE (AASHTO) #10 ARE NOT ACCEPTABLE. NO CALCIUM CARBONATED OR DOLOMITIC SAND SUBSTITUTIONS ARE ACCEPTABLE. NO "ROCK DUST" CAN BE USED FOR SAND.

PLANTING NON-GRASS GROUND COVER

- THE GROUND COVER PLANTING HOLES SHALL BE DUG THROUGH THE MULCH WITH ONE OF THE FOLLOWING: HAND TROWEL, SHOVEL, BULB PLANTER, OR HOE (THIS DOES NOT APPLY TO GRASSES OR LEGUMES). BEFORE PLANTING BIODEGRADABLE POTS SHALL BE SPLIT, AND
- NON-BIODEGRADABLE POTS SHALL BE REMOVED. ROOT SYSTEMS OF ALL POTTED PLANTS SHALL BE SPLIT OR CRUMBLED. THE GROUND COVER SHALL BE PLANTED SO THAT THE ROOTS ARE SURROUNDED BY THE SOIL BELOW THE MULCH. POTTED PLANTS SHALL BE SET SO THAT THE TOP OF THE POT IS EVEN WITH THE EXISTING
- THE MULCHED AND PLANTED GROUND COVER BED WITH A
- PRE-EMERGENT HERBICIDE. THE ENTIRE GROUND COVER BED SHALL BE THOROUGHLY WATERED.
- PLANTING GRASS GROUND COVER
- GRASSES AND LEGUME SEED SHALL BE TILLED INTO THE SOIL TO A DEPTH OF AT LEAST 2 INCHES BY EITHER HARROWING OR DISCING. FERTILIZER SHALL BE APPLIED AT THE SAME RATE AND UTILIZING THE SAME PROCESS FOR NON-GRASS GROUND COVER. GRASS AND LEGUME PLUGS SHALL BE PLANTED FOLLOWING THE NON-GRASS GROUND COVER

GRADE. THE ROOTS OF BARE ROOT PLANTS SHALL BE COVERED TO THE

FERTILIZER

ALL GROUND COVERS SHALL BE FERTILIZED WITH A 10-6-4 ANALYSIS FERTILIZER AS A WET APPLICATION AT THE RATE OF 3 LBS. PER 100 SQUARE FEET OF THE BIORETENTION AREA PRIOR TO PLANTING NON-GRASS GROUND COVER OR AS PART OF THE GRASS SEED GROUND

OWNER: SPT LAND, LLC

PLANTING TECHNIQUES.

1201 OLD NATIONAL PIKE NEW MARKET, MARYLAND 21774

DEVELOPER

2295 SUSQUEHANNA TRAIL, SUITE C YORK, PENNSYLVANIA 17404

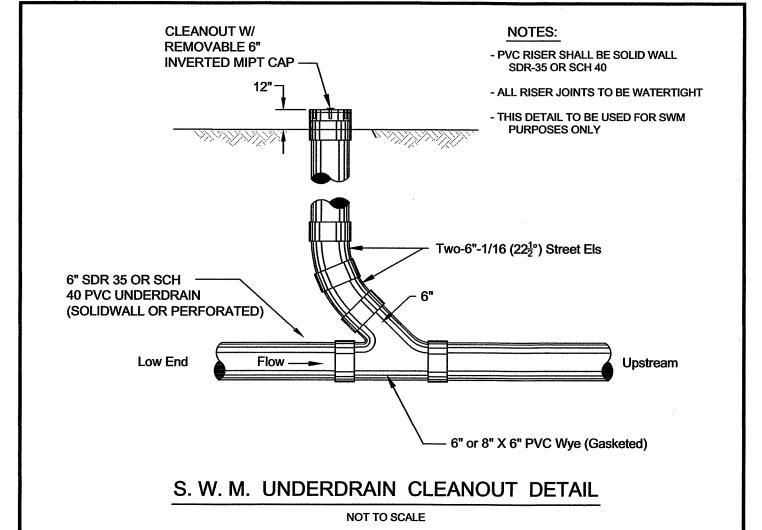


ROUTINE MAINTENANCE:

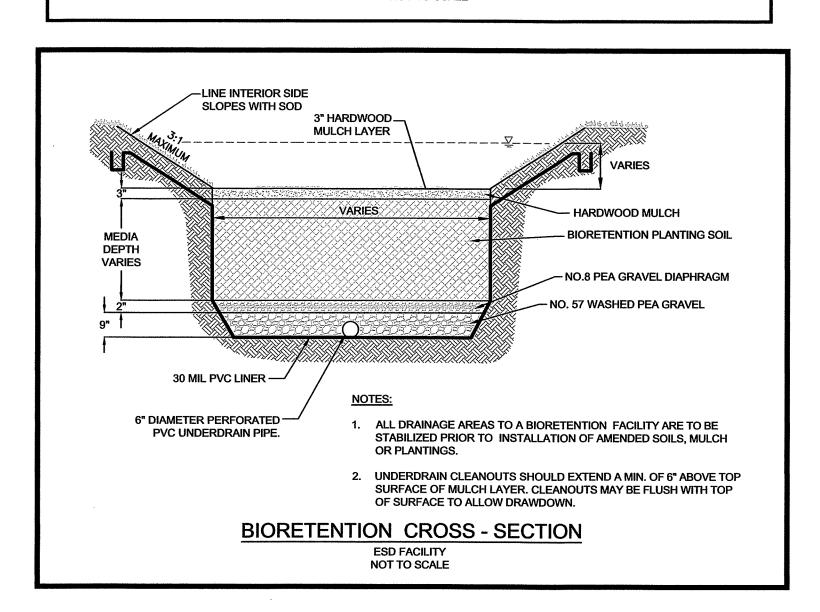
- 1 THE FACILITY SHALL BE INSPECTED BIANNUALLY AND AFTER MAJOR STORMS. INSPECTIONS SHOULD BE PERFORMED DURING WET WEATHER TO DETERMINE IF AND INSIDE SLOPE SHALL BE MOWED A MINIMUM OF TWICE A YEAR, ONCE IN LATE POND IS FUNCTIONING PROPERLY.
- 2 THE EMBANKMENT OF THE POND CONSISTING OF THE OUTSIDE SLOPE, THE TOP, JUNE AND ONCE IN SEPTEMBER. OTHER SIDE SLOPES, POND BOTTOM, AND MAINTENANCE ACCESS ARE TO BE MOWED AS NEEDED.
- 3 DEBRIS, TRASH AND LITTER SHALL BE REMOVED DURING REGULAR MOWING OPERATIONS OR AS DEEMED NECESSARY.
- 4 NO WOODY VEGETATION ALLOWED WITHIN 50 FOOT RADIUS OF THE POND PRINCIPLE SPILLWAY (INFLOW OR OUTFLOW AREAS) OR ANYWHERE ON THE MANMADE EMBANKMENT.
- 5 BURROWING ANIMALS ARE TO BE REMOVED FROM THE MANMADE EMBANKMENT AREA AND THE BURROWS BACKFILLED.
- 6 VISIBLE SIGNS OF EROSION ALONG THE INFLOW CHANNELS, WITHIN THE POND, AND AT THE OUTFALL SHALL BE REPAIRED IMMEDIATELY.
- 7. REPLACE MULCH ANNUALLY.
- 8. IF PONDING OCCURS THE TOP 3" OF PLANTING SOIL SHALL BE REPLACED.

NON-ROUTINE MAINTENANCE:

- 1 STRUCTURAL COMPONENTS OF THE POND SUCH AS THE EMBANKMENT, RISER, BARREL, WEIR, ETC. SHALL BE REPAIRED IMMEDIATELY UPON DETECTION OF A
- 2 PERIODIC CLEANING, RECOATING, WELDING, ETC. OF THE POND TRASH RACK, RISER, BARREL, LOW FLOW DEWATERING DEVICE, ETC. IMMEDIATELY UPON DETECTION OF A PROBLEM.



CLEANOUT W/ **REMOVABLE 6"** - PVC RISER SHALL BE SOLID WALL SDR-35 OR SCH 40 - INVERTED MIPT CAP - ALL RISER JOINTS TO BE WATERTIGHT - THIS DETAIL TO BE USED FOR SWM PURPOSES ONLY Two-6"-1/16 ($22\frac{1}{2}$ °) Street Els -6" Cemented Cap 6" SDR 35 OR SCH -**40 PVC UNDERDRAIN** (SOLIDWALL OR PERFORATED) **─**Flow 6" X 6" PVC Wye (Gasketed) S. W. M. TERMINAL END UNDERDRAIN CLEANOUT DETAIL NOT TO SCALE



F	PROPOSED BIORETENTION PLANTING SOIL DEPTH & PONDING DEPTH						
ESD No.	AREA (S.F.)	TYPE	* MEDIA DEPTH	** PONDING DEPTH			
1	3,010 S.F.	BIORETENTION	3.83'	0.67'			
2	9,627 S.F.	BIORETENTION	3.83'	1'			
3	687 S.F.	BIORETENTION	2'	0.67'			
4	1,612 S.F.	BIORETENTION	2'	0.67'			
5	2,086 S.F.	BIORETENTION	2.83'	0.67'			

B.3.B SPECIFICATIONS FOR BIORETENTION

1. MATERIAL SPECIFICATIONS

THE ALLOWABLE MATERIALS TO BE USED IN BIORETENTION AREA ARE DETAILED IN TABLE B.4.1

2. PLANTING SOIL

THE SOIL SHALL BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS OR OTHER SIMILAR OBJECTS LARGER THAN TWO INCHES. NO OTHER MATERIALS OR SUBSTANCES SHALL BE MIXED OR DUMPED WITHIN THE MICRO-BIORETENTION PRACTICE THAT MAY BE HARMFUL TO PLANT GROWTH, OR PROVE A HINDRANCE TO THE PLANTING OR MAINTENANCE OPERATIONS. THE PLANTING SOIL SHALL BE FREE OF BERMUDA GRASS, QUACKGRASS, JOHNSON GRASS, OR OTHER NOXIOUS WEEDS AS SPECIFIED UNDER COMAR 15.08.01.05.

THE PLANTING SOIL SHALL BE TESTED AND SHALL MEET THE FOLLOWING CRITERIA:

- SOIL COMPONENT LOAMY SAND OR SANDY LOAM (USDA SOIL TEXTURAL CLASSIFICATION)
- ORGANIC CONTENT MINIMUM 10% BY DRY WEIGHT (ASTM D 2974). IN GENERAL, THIS CAN BE MET WITH A MIXTURE OF LOAMY SAND (60%-65%) AND COMPOST (35% TO 40%) OR SANDY LOAM (30%), COARSE SAND (30%), AND COMPOST (40%).
- CLAY CONTENT MEDIA SHALL HAVE A CLAY CONTENT OF LESS THAN 5%.
- pH RANGE SHOULD BE BETWEEN 5.5 7.0. AMENDMENTS (E.G., LIME, IRON SULFATE PLUS SULFUR) MAY BE MIXED INTO THE SOIL TO INCREASE OR DECREASE pH.

THERE SHALL BE AT LEAST ONE SOIL TEST PER PROJECT. EACH TEST SHALL CONSIST OF BOTH THE STANDARD SOIL TEST FOR PH. AND ADDITIONAL TESTS OF ORGANIC MATTER, AND SOLUBLE SALTS. A TEXTURAL ANALYSIS IS REQUIRED FROM THE SITE STOCKPILED TOPSOIL. IF TOPSOIL IS IMPORTED, THEN A TEXTURE ANALYSIS SHALL BE PERFORMED FOR EACH LOCATION WHERE THE TOPSOIL WAS EXCAVATED.

SINCE DIFFERENT LABS CALIBRATE THEIR TESTING EQUIPMENT DIFFERENTLY, ALL TESTING RESULTS SHALL COME FROM THE SAME TESTING FACILITY.

SHOULD THE PH FALL OUT OF THE ACCEPTABLE RANGE, IT MAY BE MODIFIED (HIGHER) WITH LIME OR (LOWER) WITH

IRON SULFATE PLUS SULFUR.

IT IS VERY IMPORTANT TO MINIMIZE COMPACTION OF BOTH THE BASE OF THE BIORETENTION AREA AND THE REQUIRED BACKFILL. WHEN POSSIBLE, USE EXCAVATION HOES TO REMOVE ORIGINAL SOIL. IF BIORETENTION AREAS ARE EXCAVATED USING A LOADER. THE CONTRACTOR SHOULD USE WIDE TRACK OR MARSH TRACK EQUIPMENT, OR LIGHT EQUIPMENT WITH TURF TYPE TIRES. USE OF EQUIPMENT WITH NARROW TRACKS OR NARROW TIRES, RUBBER TIRES WITH LARGE LUGS, OR HIGH PRESSURE TIRES WILL CAUSE EXCESSIVE COMPACTION RESULTING IN REDUCED INFILTRATION RATES AND IS NOT ACCEPTABLE. COMPACTION WILL SIGNIFICANTLY CONTRIBUTE TO DESIGN FAILURE.

COMPACTION CAN BE ALLEVIATED AT THE BASE OF THE BIORETENTION FACILITY BY USING A PRIMARY TILLING OPERATION SUCH AS A CHISEL PLOW, RIPPER, OR SUBSOILER. THESE TILLING OPERATIONS ARE TO REFRACTURE THE SOIL PROFILE THROUGH THE 12 INCH COMPACTION ZONE. SUBSTITUTE METHODS MUST BE APPROVED BY THE ENGINEER. ROTOTILLERS TYPICALLY DO NOT TILL DEEP ENOUGH TO REDUCE THE EFFECTS OF COMPACTION FROM **HEAVY EQUIPMENT.**

ROTOTILL 2 TO 3 INCHES OF SAND INTO THE BASE OF THE BIORETENTION FACILITY BEFORE BACKFILLING THE OPTIONAL SAND LAYER. PUMP ANY PONDED WATER BEFORE PREPARING (ROTOTILLING) BASE. WHEN BACKFILLING THE TOPSOIL OVER THE SAND LAYER, FIRST PLACE 3 TO 4 INCHES OF TOPSOIL OVER THE SAND, THEN ROTOTILL THE SAND/TOPSOIL TO CREATE A GRADATION ZONE. BACKFILL THE REMAINDER OF THE TOPSOIL TO FINAL GRADE.

WHEN BACKFILLING THE BIORETENTION FACILITY, PLACE SOIL IN LIFTS 12" TO 18". DO NOT USE HEAVY EQUIPMENT WITHIN THE BIORETENTION BASIN. HEAVY EQUIPMENT CAN BE USED AROUND THE PERIMETER OF THE BASIN TO SUPPLY SOILS AND SAND. GRADE BIORETENTION MATERIALS WITH LIGHT EQUIPMENT SUCH AS A COMPACT LOADER OR A DOZER/LOADER WITH MARSH TRACKS.

4. PLANT MATERIAL

3. COMPACTION

PLANT MATERIAL FOR BIORETENTION AREAS CAN BE FOUND ON THE SITE SPECIFIC LANDSCAPE PLAN.

5. PLANT INSTALLATION

MULCH SHOULD BE PLACED TO A UNIFORM THICKNESS OF 2" TO 3". SHREDDED OR CHIPPED HARDWOOD MULCH IS THE ONLY ACCEPTED MULCH. PINE MULCH AND WOOD CHIPS ARE NOT ACCEPTABLE. SHREDDED MULCH MUST BE WELL AGED (6 TO 12 MONTHS) FOR ACCEPTANCE.

ROOT STOCK OF THE PLANT MATERIAL SHALL BE KEPT MOIST DURING TRANSPORT AND ON-SITE STORAGE. THE PLANT ROOT BALL SHOULD BE PLANTED SO 1/8TH OF THE BALL IS ABOVE FINAL GRADE SURFACE. THE DIAMETER OF THE PLANTING PIT SHALL BE AT LEAST SIX INCHES LARGER THAN THE DIAMETER OF THE PLANTING BALL. SET AND MAINTAIN THE PLANT STRAIGHT DURING THE ENTIRE PLANTING PROCESS. THOROUGHLY WATER GROUND BED COVER

TREES SHALL BE BRACED USING 2" BY 2" STAKES ONLY AS NECESSARY AND FOR THE FIRST GROWING SEASON ONLY. STAKES ARE TO BE EQUALLY SPACED ON THE OUTSIDE OF THE TREE BALL.

GRASSES AND LEGUME SEED SHOULD BE DRILLED INTO THE SOIL TO A DEPTH OF AT LEAST ONE INCH. GRASS AND LEGUME PLUGS SHALL BE PLANTED FOLLOWING THE NON-GRASS GROUND COVER PLANTING SPECIFICATIONS.

THE TOPSOIL SPECIFICATIONS PROVIDE ENOUGH ORGANIC MATERIAL TO ADEQUATELY SUPPLY NUTRIENTS FROM NATURAL CYCLING. THE PRIMARY FUNCTION OF THE BIORETENTION STRUCTURE IS TO IMPROVE WATER QUALITY.

ADDING FERTILIZERS DEFEATS, OR AT A MINIMUM, IMPEDES THIS GOAL. ONLY ADD FERTILIZER IF WOOD CHIPS OR MULCH ARE USED TO AMEND THE SOIL. ROTOTILL UREA FERTILIZER AT A RATE OF 2 POUNDS PER 1000 SQUARE FEET.

6. UNDERDRAINS

UNDERDRAINS ARE TO BE PLACED ON A 3'-0" WIDE SECTION OF FILTER CLOTH. PIPE IS PLACED NEXT, FOLLOWED BY THE GRAVEL BEDDING. THE ENDS OF UNDERDRAIN PIPES NOT TERMINATING IN AN OBSERVATION WELL SHALL BE

THE MAIN COLLECTOR PIPE FOR UNDERDRAIN SYSTEMS SHALL BE CONSTRUCTED PER PLAN.

OBSERVATION WELLS AND/OR CLEAN-OUT PIPES MUST BE PROVIDED (ONE MINIMUM PER EVERY 1000 SQUARE FEET OF SURFACE AREA).

7. MISCELLANEOUS

APPROVED BY:

TOWN MANAGER

TOWN OF EMMITSBURG

THE BIORETENTION FACILITY MAY NOT BE CONSTRUCTED UNTIL ALL CONTRIBUTING DRAINAGE AREA HAS BEEN

FREDERICK COUNTY, MARYLAND DEVELOPMENT REVIEW ENGINEERING APPROVED: leviewed in accordance with local County requirements. Frederick County assumes no liability for design and/or construction. Approval is valid for two (2) years after last date shown above. The project must be under construction before the approval expiration to be considered active. Otherwise, resubmittal of plans, including applicable fees, must be made to Development Review for reapproval. Fees for resubmittal cannot be waived. CONSULTANT: DEV. REVIEW: REVISION DESCRIPTION DATE DATE AND INITIAL DATE AND INITIAL *FILL IN THESE BLOCKS FOR REVISIONS ONLY

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SCALE: AS SHOWN

PROFESSIONAL CERTIFICATION WERE PREPARED OR APPROVED BY ME, AND THAT

I AM A DULY LICENSED PROFESSIONAL ENGINEE UNDER THE LAWS OF THE STATE OF MARYLAN LICENSE No.: 30109 EXP. DATE: 7/23/1

18-31407 PROJECT NO. D - 3480 DRAWING NO. DATE: ____ OCTOBER 2019 DRAWN BY: CHECKED BY: _____

SHEET <u>27</u> OF <u>35</u>

JHC

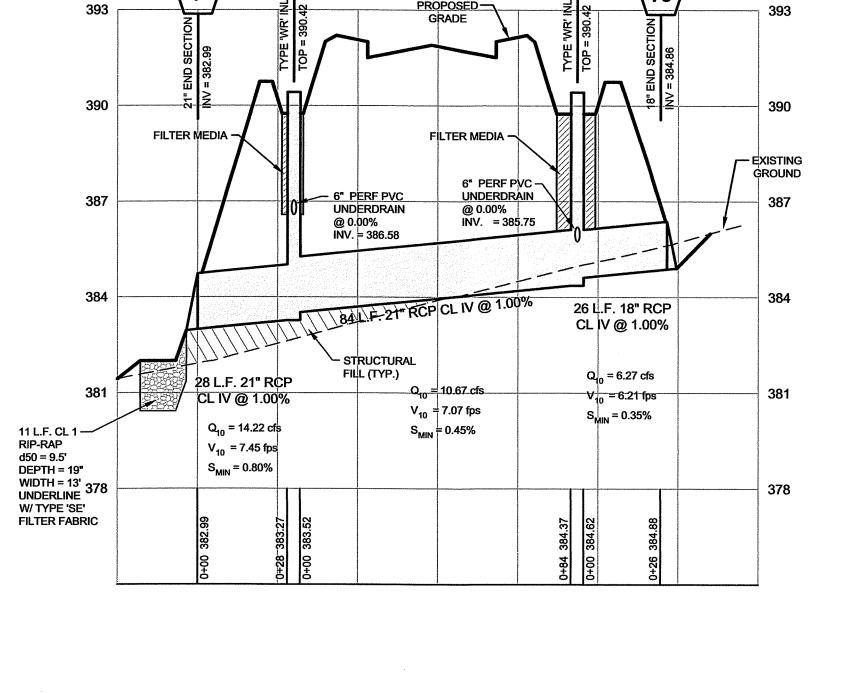
OWNER:

SPT LAND, LLC 1201 OLD NATIONAL PIKE

DEVELOPER:

NEW MARKET, MARYLAND 21774

M&G REALTY, INC. 2295 SUSQUEHANNA TRAIL, SUITE C YORK, PENNSYLVANIA 17404



EXISTING — GROUND

PROPOSED-

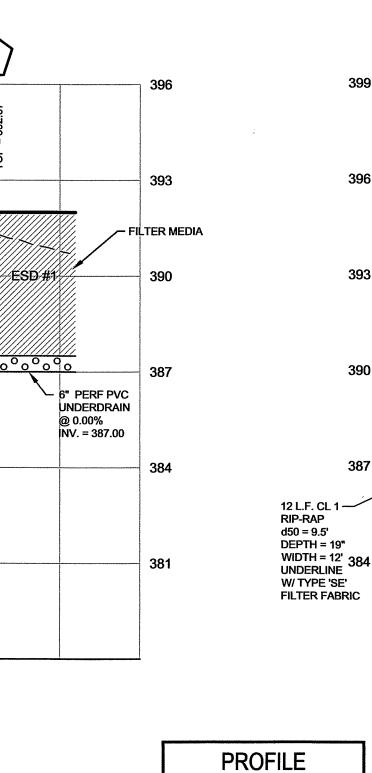
d50 = 9.5'

DEPTH = 19" WIDTH = 5'

UNDERLINE W/ TYPE 'SE' FILTER FABRIC 121 L.F. 18 RCP CL IV @ 1.00%

 $Q_{10} = 9.80 \text{ cfs}$

 $S_{MIN} = 0.87\%$



ESD #1

76 L.F. 18" RCP CL IV @ 1.00%

Q₁₀ = 9.80 cfs

V₁₀ = 6.75 fps

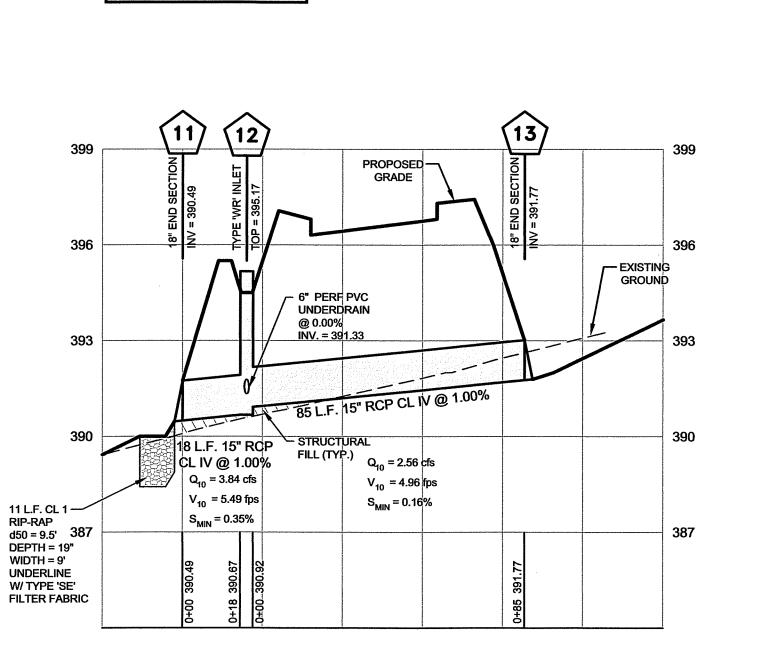
S_{MIN} = 0.87%

393

390

387

SCALE: HORIZ. - 1" = 30" VERT. - 1" = 3'



PROPOSED-GRADE

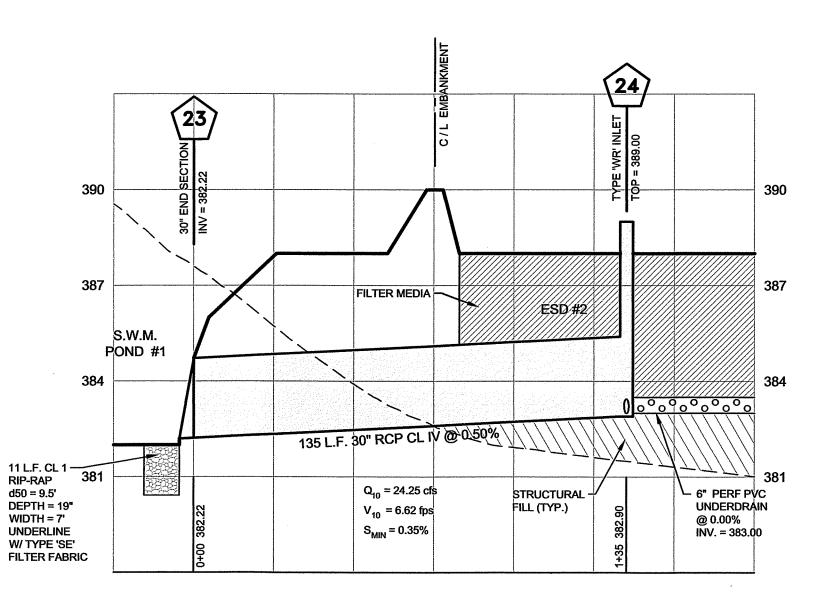
STRUCTURAL

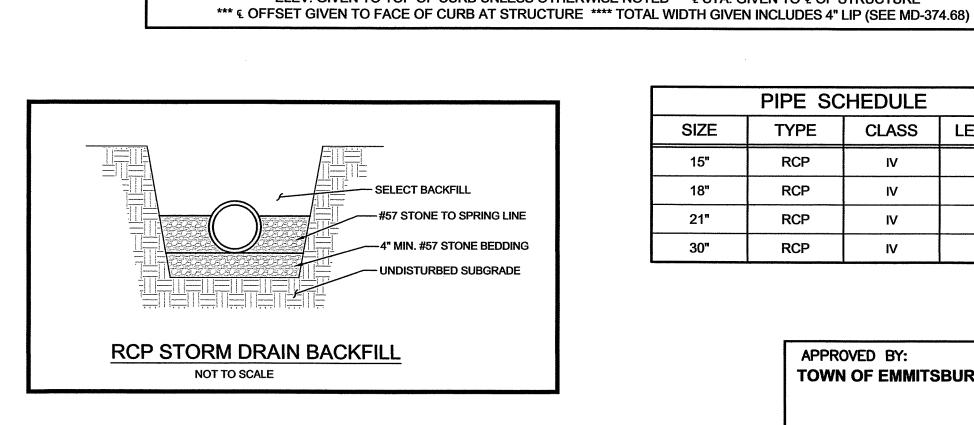
FILL (TYP.)

339/L/F. 18" RCP CL/IV @ 0.50%

Q₁₀ = 5.39 cfs

V₁₀ = 4.65 fps S_{MIN} = 0.26%





TYPE

1 18" RCP END SECTION

18" RCP END SECTION

2 48" DIA. MANHOLE

5 48" DIA. MANHOLE

7 21" RCP END SECTION

10 | 18" RCP END SECTION

11 15" RCP END SECTION

13 | 15" RCP END SECTION

6 10' COS INLET

8 TYPE 'WR' INLET

9 TYPE 'WR' INLET

12 TYPE 'WR' INLET

14 10' CURB OPENING WIDTH = 3'

15 10' CURB OPENING WIDTH = 3'

16 10' CURB OPENING
**** WIDTH = 10'

17 10' CURB OPENING
**** WIDTH = 10'

18 10' CURB OPENING

19 | **** WIDTH = 10'

20 10' CURB OPENING

21 10' CURB OPENING
**** WIDTH = 10'

22 10' CURB OPENING
**** WIDTH = 11'

24 TYPE 'WR' INLET

10' CURB OPENING

23 30" RCP END SECTION

3 TYPE 'WR' INLET

	PIPE SC	HEDULE	
SIZE	TYPE	CLASS	LENGTH
15"	RCP	IV	103
18"	RCP	IV	655
21"	RCP	IV	112
30"	RCP	IV	135

APPROVED BY: **TOWN OF EMMITSBURG**

TOWN MANAGER DATE

 ∞ # ORE

DRAIN

STORM

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Y

6	8
10' COG INLET TOP = 397.15	INC.
396	FOX & ASSOCIATES, INC.
393	& ASS
93 L.F. 18" RCP CL IV @ 0.52% Q ₁₀ = 4.91 cfs	FOX
V ₁₀ = 4.56 fps S _{MIN} = 0.22%	
384	

REMARKS

MSHA STD. MD-368.01

MSHA STD. MD-384.01

MSHA STD. MD-374.06

MSHA STD. MD-368.01

MSHA STD. MD-374.61

MSHA STD. MD-368.01

MSHA STD. MD-374.06

MSHA STD. MD-374.06

MSHA STD. MD-368.01

MSHA STD. MD-368.01

MSHA STD. MD-374.06

MSHA STD. MD-368.01

MSHA STD. MD-374.68

MSHA STD. MD-374.69

MSHA STD. MD-368.01

MSHA STD. MD-374.06

399.10 (RIM) MSHA STD. MD-384.01

(5)

STRUCTURE SCHEDULE

© STATION ** | © OFFSET *** | * ELEVATION

E1224419.6711

E1224470.1297

E1224420.5581

E1224733.9599

E1224889.6534

E1224943.7488

E1224948.2869

E1225029.0857

E1225029.3361

E1225030.5152

E1225037.6577

E1225087.5354

E1225091.0977

E1225141.5454

E1224600.2177

E1224700.4203

E1224690.4000

E1224544.0325

E1224673.9139

* ELEV. GIVEN TO TOP OF CURB UNLESS OTHERWISE NOTED ** © STA. GIVEN TO © OF STRUCTURE

E1224590.1974

N740725.5144

N740837.6880

N740900.4785

N740610.8606

N740914.2176

U N740991.4490

L N741001.4693

N740613.9734

N740643.9723

N740732.4285

N740757.3905

N740933.8304

N740953.5106

N741024.1506

L N740690.7346

U 16+34.33

L 16+23.33

U 15+17.83

L 15+08.40

U 15+19.72

L 15+06.52

U 13+95.65

L 14+05.08

U 13+93.74

L 14+06.95

U 12+15.78

L 12+26.78

U 10+92.52 L 11+03.52

N740634.1586

N740597.0760

U N740640.8154

L N740645.3535

384.64 (INV)

392.70 (RIM)

392.67 (GRATE)

397.15 (TOP)

382.95 (INV)

390.42 (GRATE)

390.42 (GRATE)

384.90 (INV)

390.46 (INV)

395.17 (GRATE)

391.80 (INV)

393.19 (TOP)

393.29 (TOP)

393.08 (TOP

400.94 (TOP

382.22 (INV)

389.00 (GRATE)

S

SCALE: AS SHOWN PROFESSIONAL CERTIFICATION

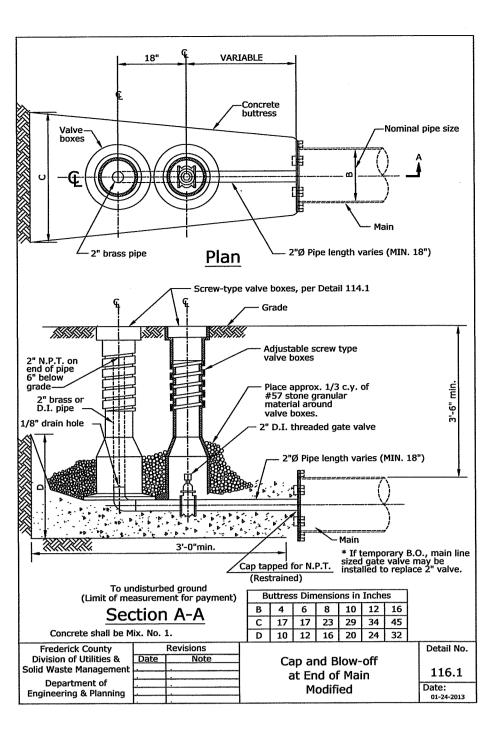
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THA I AM A DULY LICENSED PROFESSIONAL ENGINEE UNDER THE LAWS OF THE STATE OF MARYLAND. ICENSE No.: 30709 EXP. DATE: 7/23/2 18-31407 PROJECT NO. D - 3480 DRAWING NO. . OCTOBER 2019 JWE

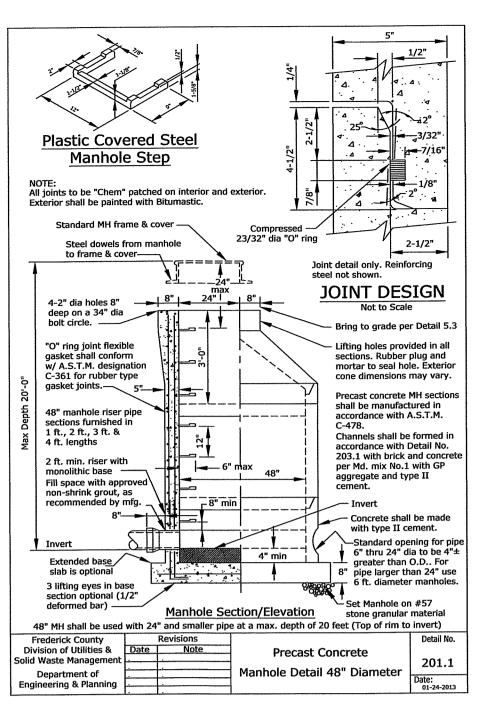
SHEET <u>28</u> OF <u>35</u>

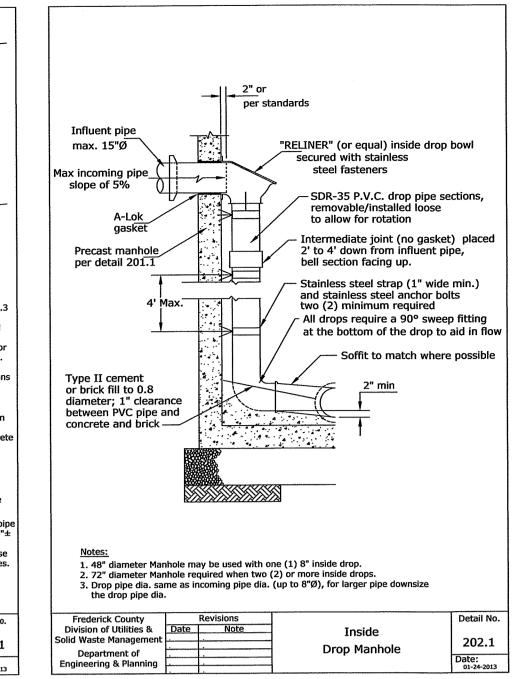
JHC

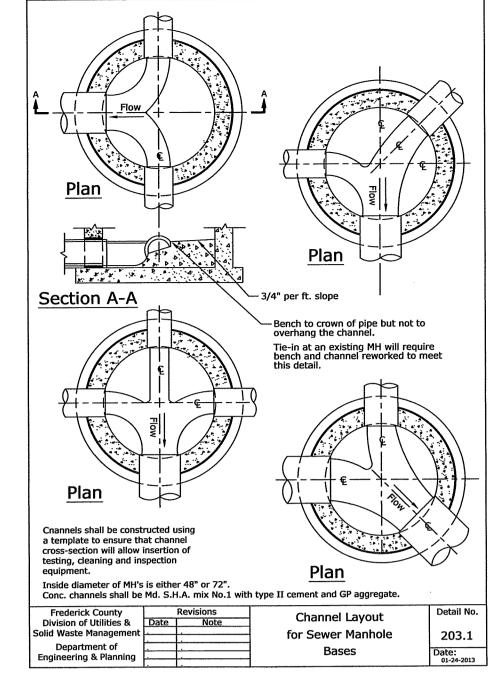
DRAWN BY:

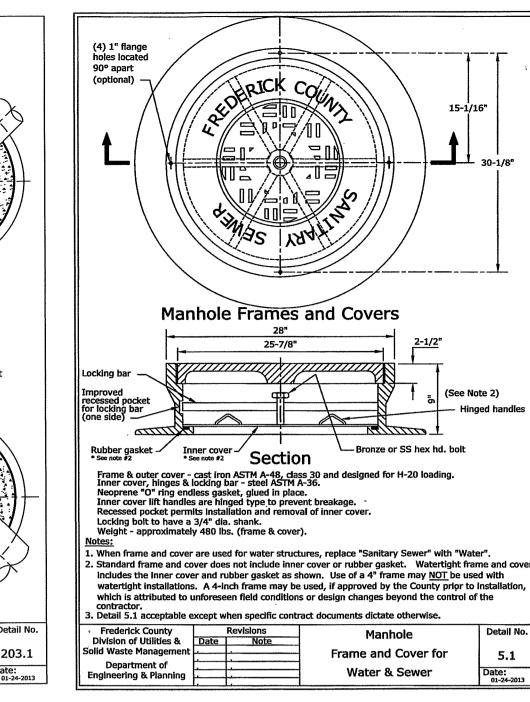
CHECKED BY: _____





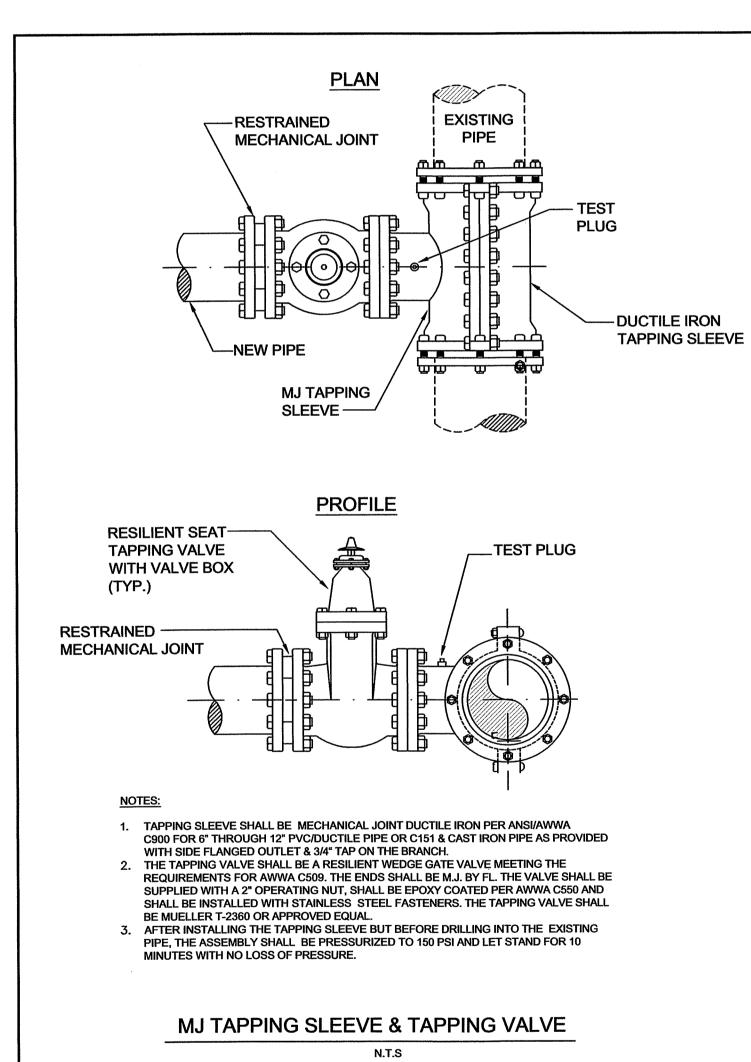


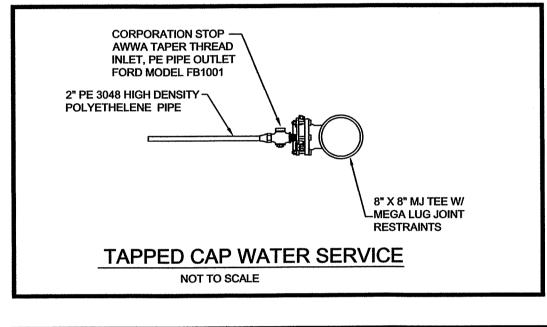


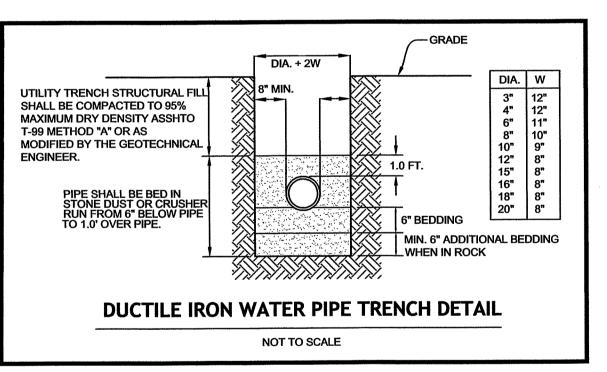


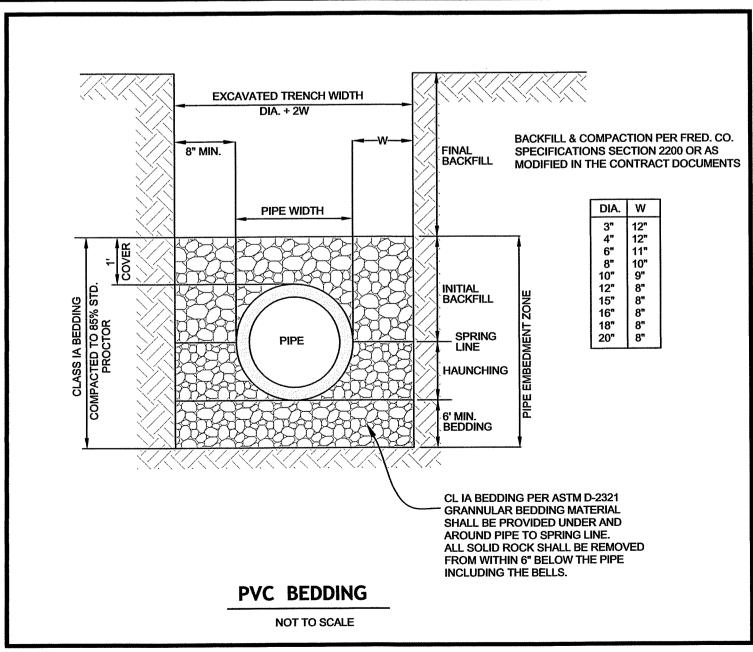
MINIMUM CASING

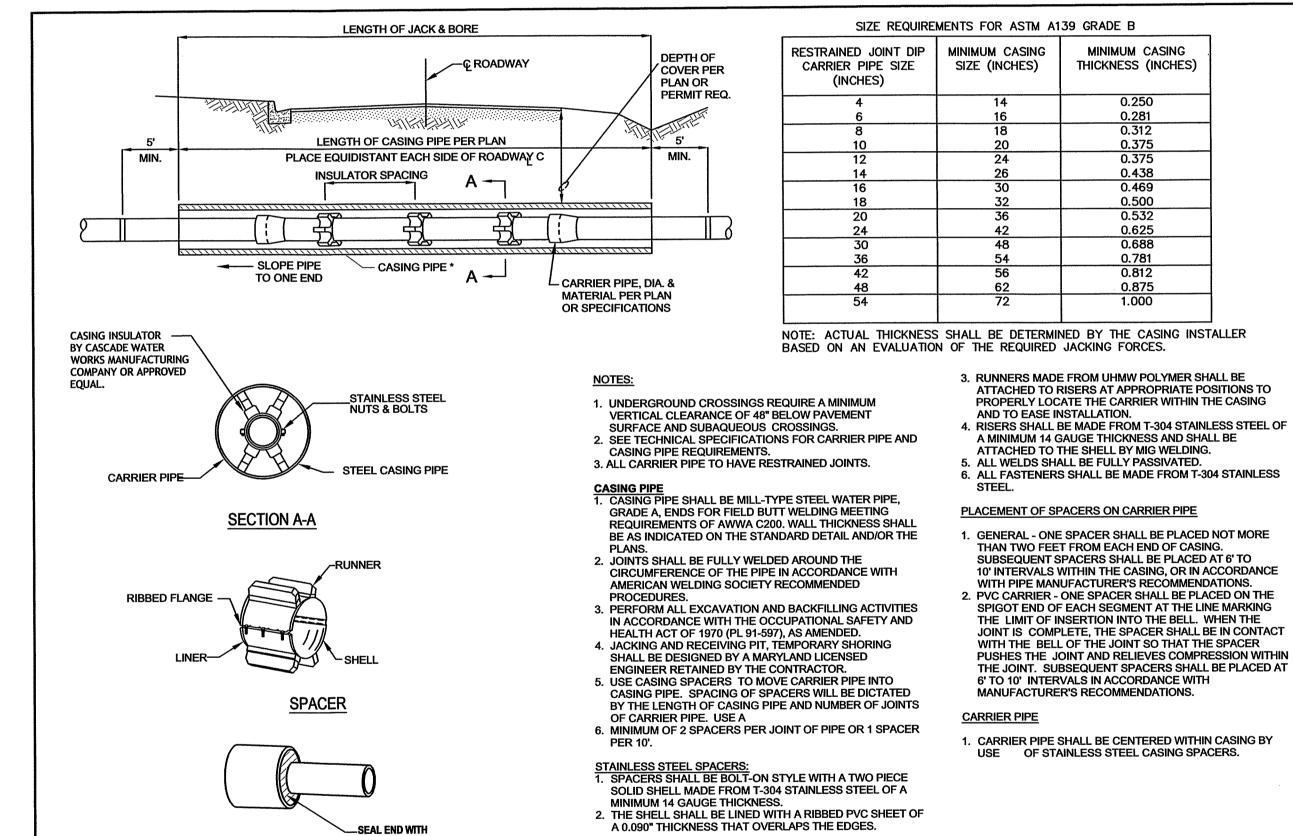
THICKNESS (INCHES)











JACK & BORE CASING PIPE

NOT TO SCALE

BRICK AND MORTAR

OR RUBBER SEAL

CASING END SEAL



Est. 1966

OCIATE

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LICENSE No.: 30709 EXP. DATE: 7/23/1 18-31407 PROJECT NO. D - 3480 DRAWING NO. OCTOBER 2019 DATE: ____

SHEET <u>29</u> OF <u>35</u>

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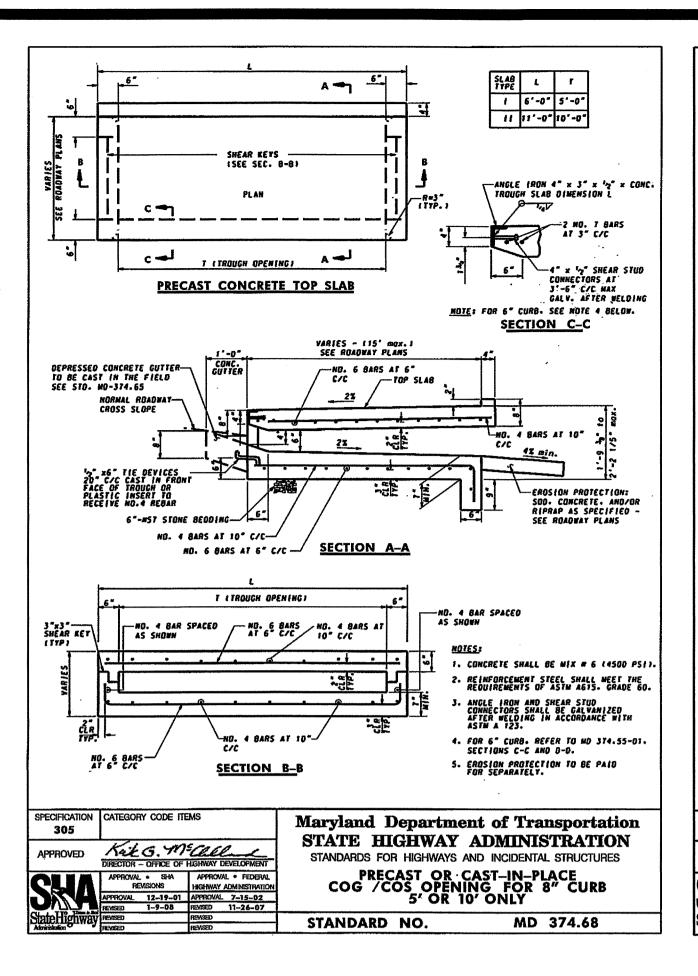
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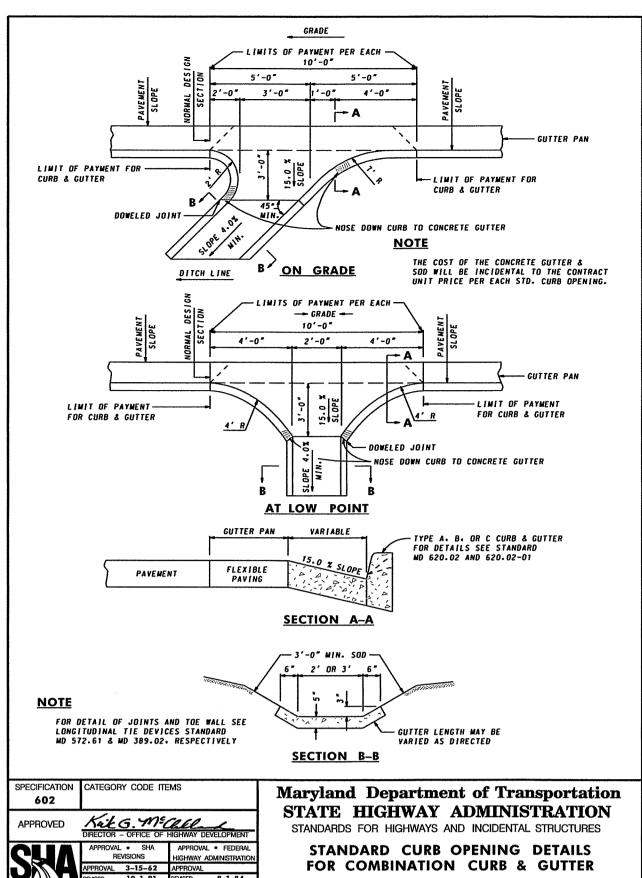
OWNER: SPT LAND, LLC 1201 OLD NATIONAL PIKE NEW MARKET, MARYLAND 21774

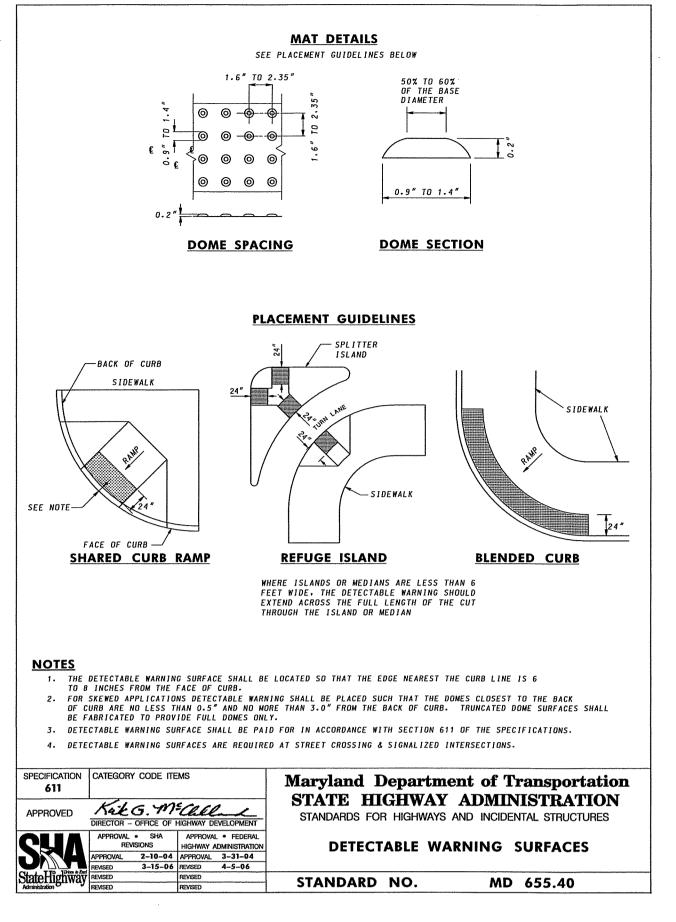
DEVELOPER:

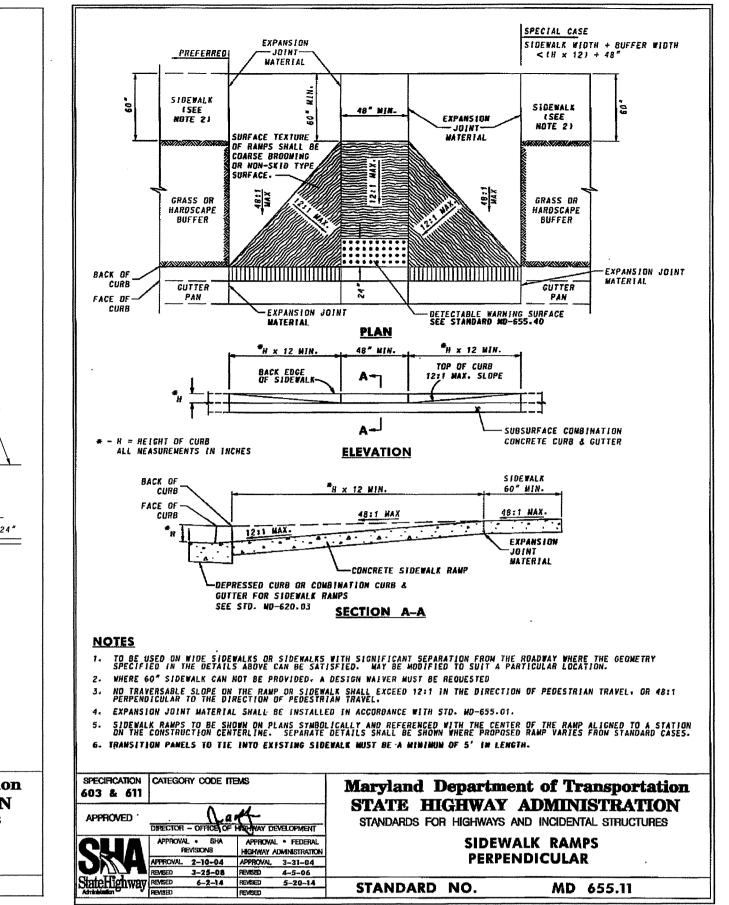
M&G REALTY, INC. 2295 SUSQUEHANNA TRAIL, SUITE C YORK, PENNSYLVANIA 17404

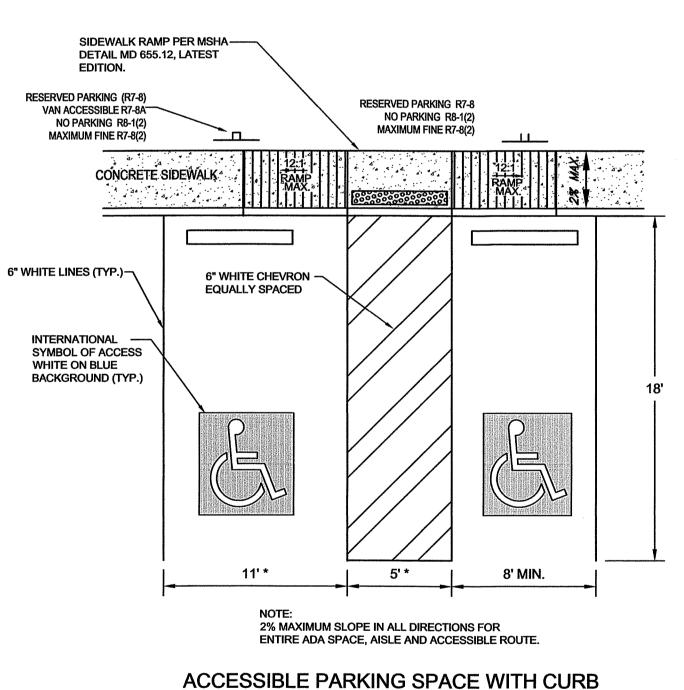
APPROVED BY: **TOWN OF EMMITSBURG** DATE TOWN MANAGER

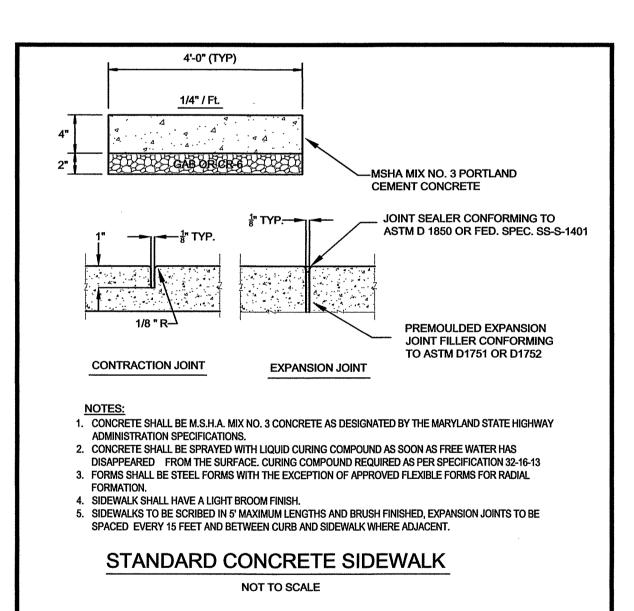




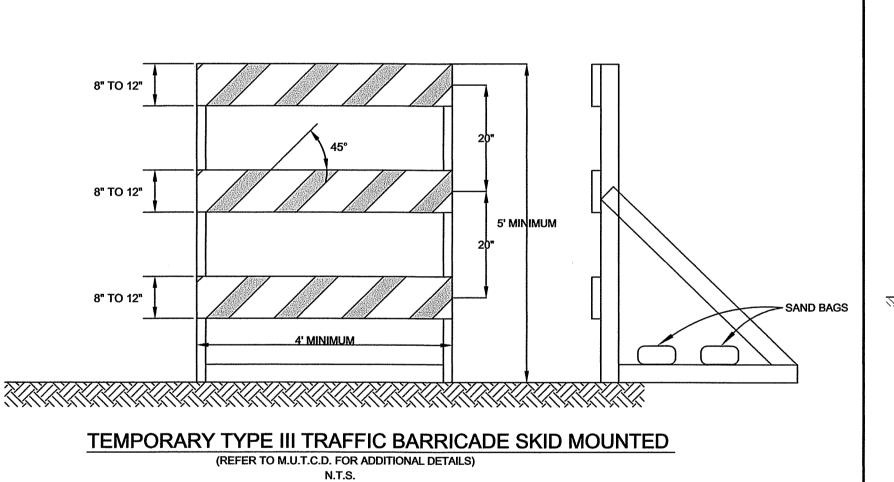


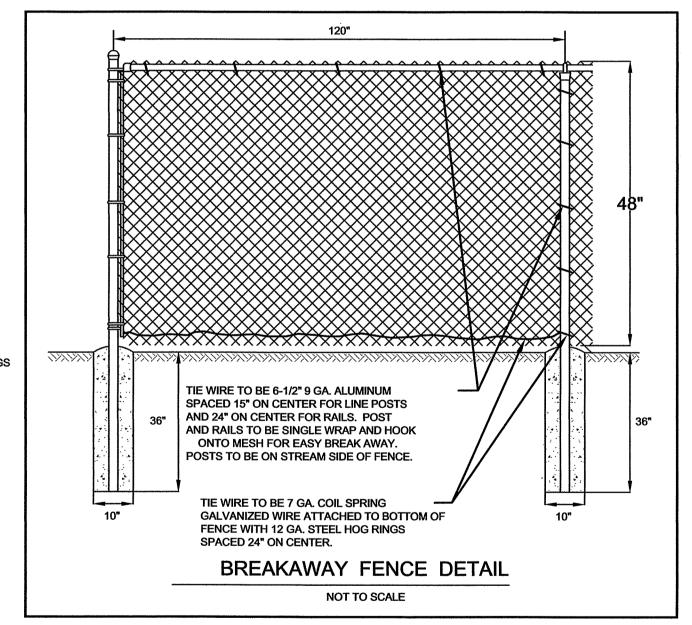


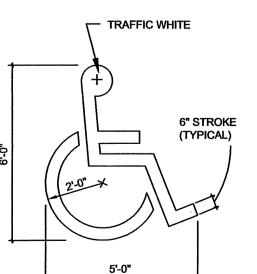


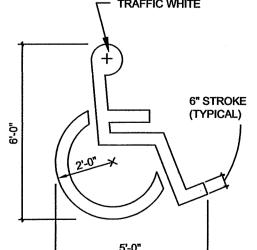


STANDARD NO. MD 640.02









DEVELOPER: M&G REALTY, INC. 2295 SUSQUEHANNA TRAIL, SUITE C YORK, PENNSYLVANIA 17404

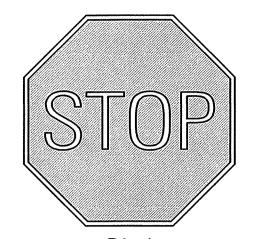
OWNER: SPT LAND, LLC 1201 OLD NATIONAL PIKE NEW MARKET, MARYLAND 21774

APPROVED BY: **TOWN OF EMMITSBURG** TOWN MANAGER DATE

SCALE: AS SHOWN PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME. AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. CENSE No.: 30709 EXP. DATE: 7/23/20 18-31407 PROJECT NO. D - 3480 DRAWING NO. _ OCTOBER 2019 DRAWN BY: _____ JHC

SHEET <u>30</u> OF <u>35</u>

CHECKED BY: ____

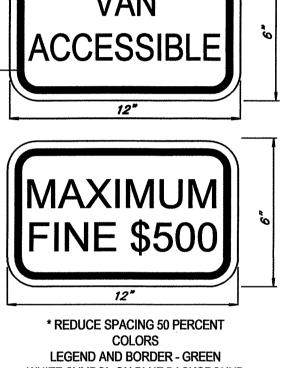


30"X30"



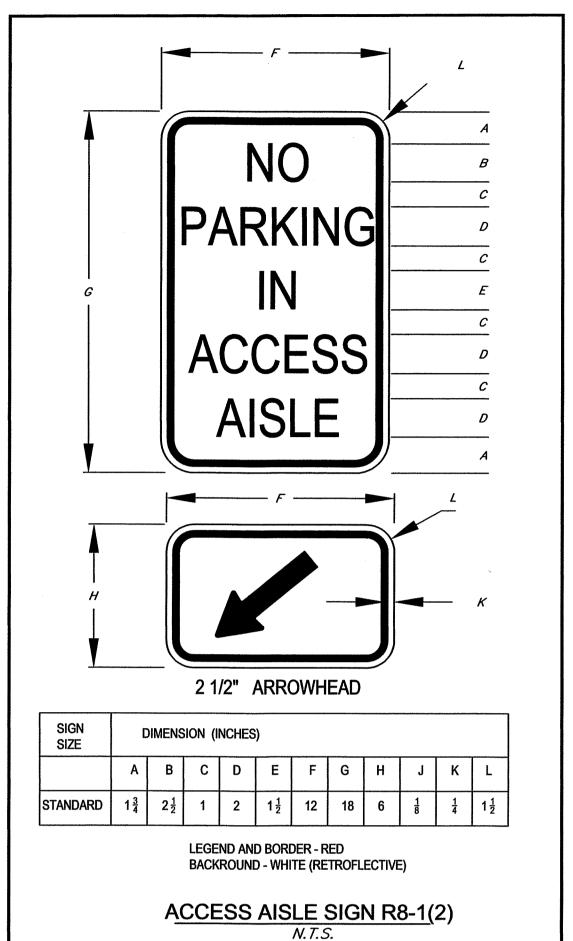
30"X30"

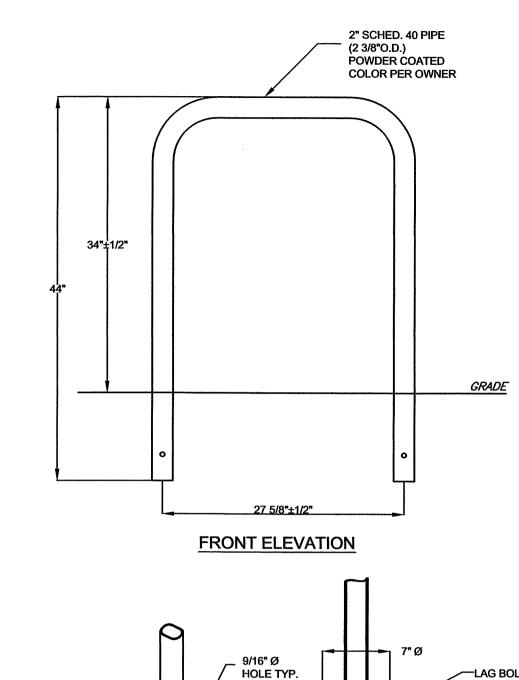




WHITE SYMBOL ON BLUE BACKGROUND BACKROUND - WHITE ARROW MAY BE REMOVED IF NECESSARY Reference: State of Maryland Standard Highway Signs Booklet MdMUTCD SECTION - 2B.39, 2B.40, 2B.41, 7B.14

RESERVED PARKING R7-8 VAN ACCESSIBLE R7-8A MAXIMUM FINE R7-8(2) N.T.S.

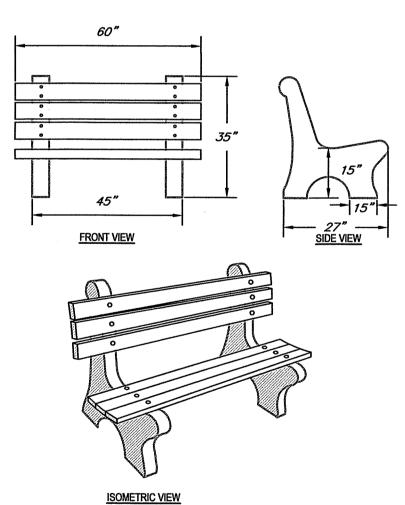




ISOMETRIC SECTION SURFACE FLANGE MOUNT (SF) -CONCRETE

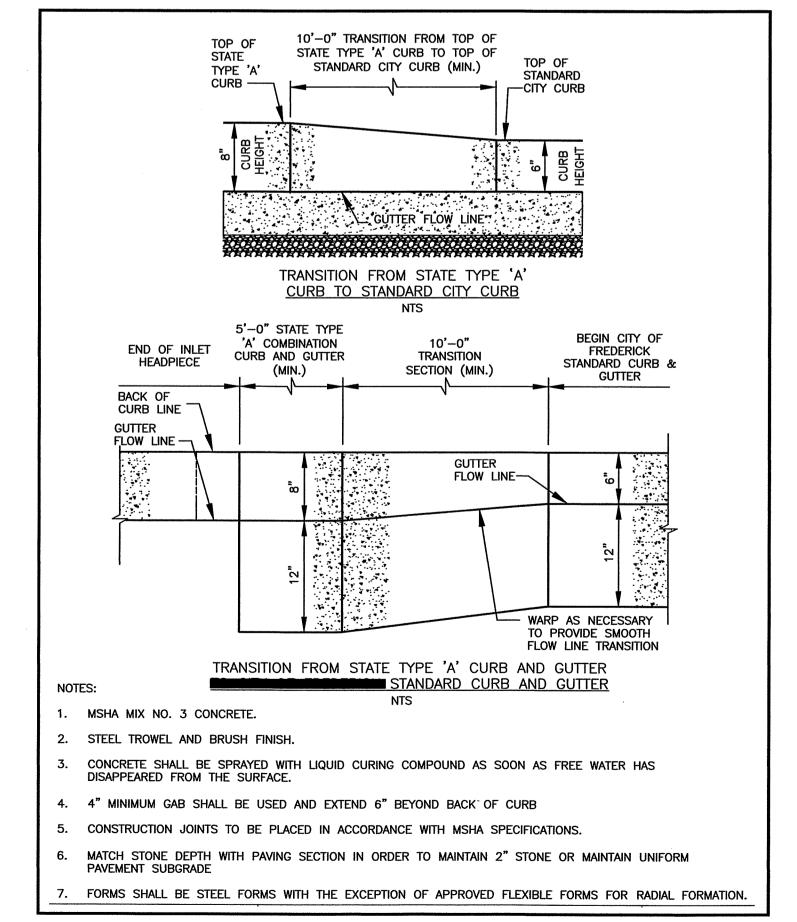
1. INSTALL BIKE RACKS ACCORDING TO MANUFACTURER'S SPECIFICATIONS. 2. OWNER TO SELECT COLOR (FINISH). 3. SEE SITE PLAN FOR LOCATION.

SURFACE MOUNT 2 BICYCLE RACK



TYPICAL CONCRETE PARK BENCH WITH WOOD SLATS

N.T.S.



SPT LAND, LLC 1201 OLD NATIONAL PIKE NEW MARKET, MARYLAND 21774

M&G REALTY, INC. 2295 SUSQUEHANNA TRAIL, SUITE C YORK, PENNSYLVANIA 17404

APPROVED BY: **TOWN OF EMMITSBURG** TOWN MANAGER DATE

PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEE UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE No.: 30709 EXP. DATE: 7/23/2

SCALE: AS SHOWN

18-31407 PROJECT NO.

D - 3480 DRAWING NO. _ DATE: ____ OCTOBER 2019 DRAWN BY: _____ CHECKED BY: ______JHC

SHEET <u>31</u> OF <u>35</u>

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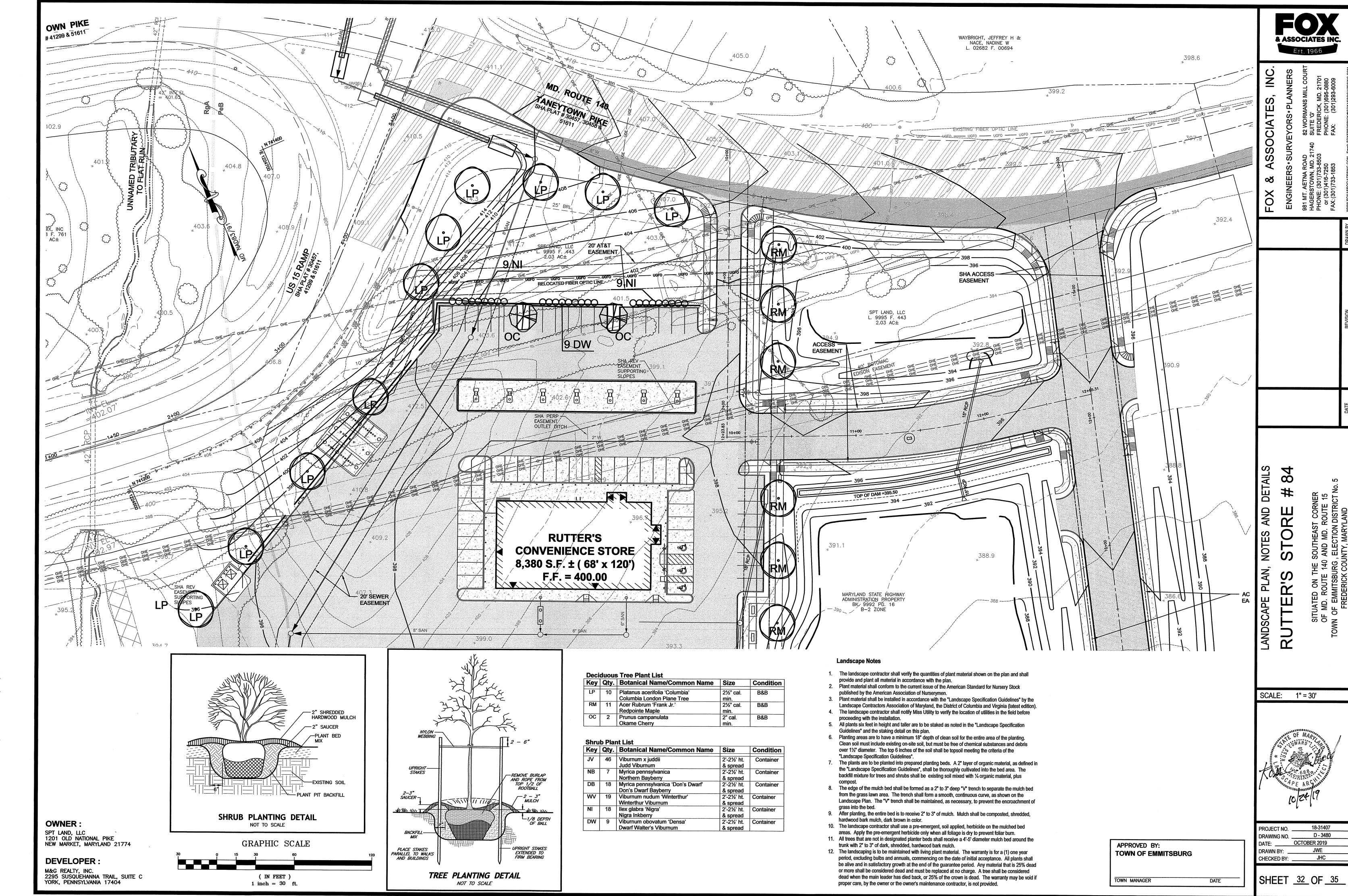
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AND

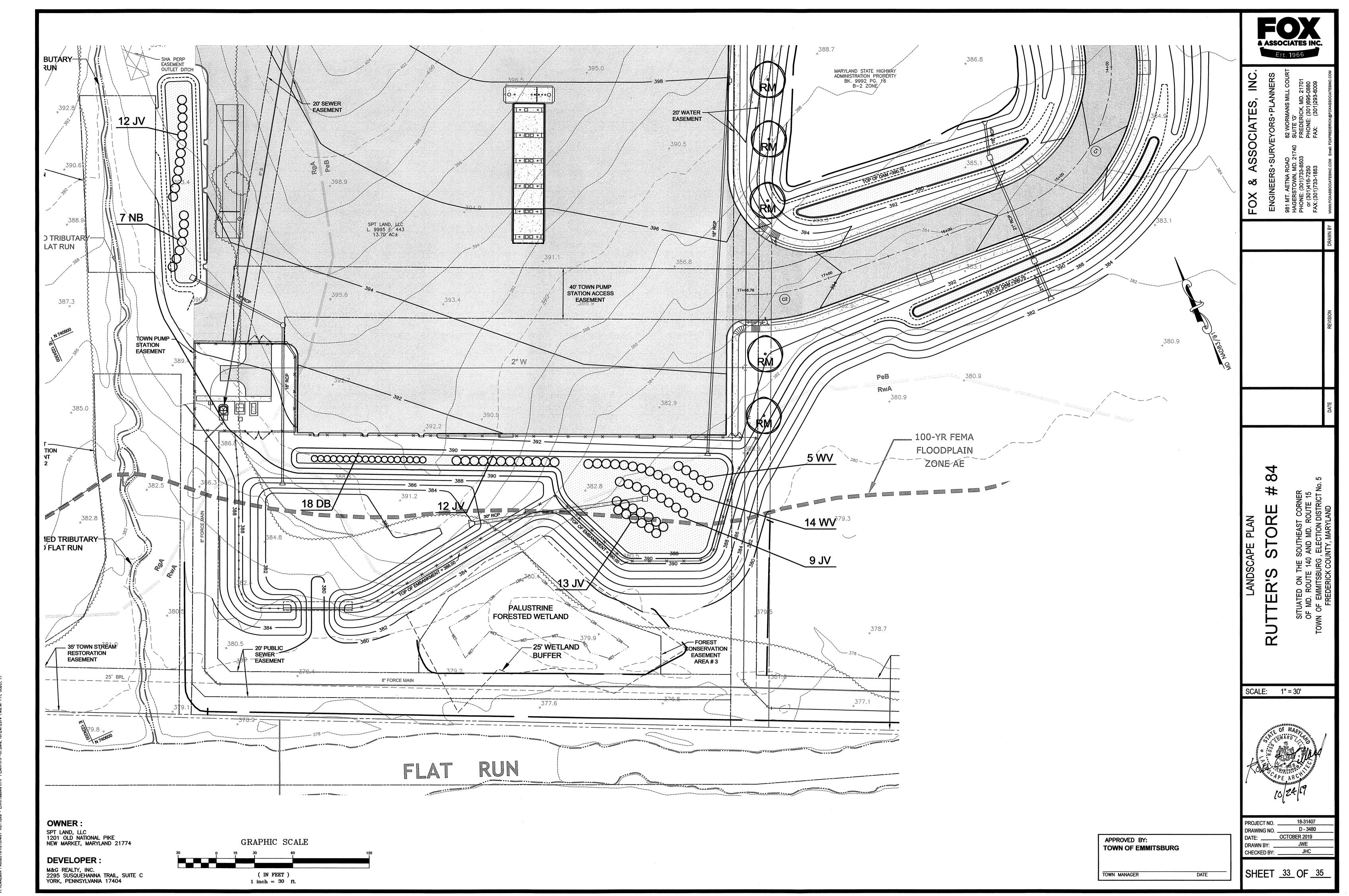
OCIATE

OWNER:

DEVELOPER:



H:\Carlson Projects\18\31407 Rutters - Emmitsburg\1MP PLAN\1MP-01,pwg, 10/24/2019 1:49:07 PM. Jeegl. 1:1



Me 17.07.1 Oloc/2017 Aug IN BANTAB DI ANNIMO AND MARCHINE IN 17.07.1 DISC.

2. ALL GRADING AND STABILIZATION SHALL COMPLY WITH THE "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, SECTION B - GRADING AND STABILIZATION" AND THE PROVISIONS OF THE APPROVED PLAN.

3. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES (BMP'S) ARE TO BE CONSTRUCTED AND/OR INSTALLED PRIOR TO OR AT THE INITIATION OF GRADING IN ACCORDANCE WITH "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", AND THE APPROVED PLAN.

. A GRADING UNIT IS THE MAXIMUM CONTIGUOUS AREA ALLOWED TO BE GRADED AT A GIVEN TIME AND IS LIMITED TO 20 ACRES. WORK MAY PROCEED TO A SUBSEQUENT GRADING UNIT WHEN AT LEAST 50 PERCENT OF THE DISTURBED AREA IN THE PRECEDING GRADING UNIT HAS BEEN STABILIZED AND APPROVED BY THE ENFORCEMENT AUTHORITY AND/OR THE LOCAL SOIL CONSERVATION DISTRICT (APPROVAL AUTHORITY) UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE APPROVAL AUTHORITY, NO MORE THAN 30 ACRES CUMULATIVELY MAY BE DISTURBED AT A GIVEN TIME.

5. FOR INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, TEMPORARY OR PERMANENT STABILIZATION MUST BE COMPLETED WITHIN:

A. THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND

B. SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT

STOCKPILES MUST BE STABILIZED IN ACCORDANCE WITH THE 7 DAY STABILIZATION REQUIREMENT, AS WELL AS, STANDARD B-4-1 INCREMENTAL STABILIZATION AND STANDARD B-4-4 TEMPORARY STABILIZATION (AS APPLICABLE).

. ALL CONSTRUCTED CHANNELS AND SWALES SHALL HAVE SPECIFIED TREATMENT INSTALLED TO THE DESIGN FLOW DEPTH COMPLETED DOWNSTREAM TO UPSTREAM AS CONSTRUCTION PROGRESSES. AN INSTALLATION DETAIL SHALL BE SHOWN ON THE PLANS.

8. ALL STORM DRAIN AND SANITARY SEWER LINES NOT IN PAVED AREAS ARE TO BE SEEDED AND MULCHED WITHIN

3 DAYS OF INITIAL BACKFILL UNLESS OTHERWISE SPECIFIED ON PLANS. 9. ELECTRIC POWER, TELEPHONE, AND GAS LINES ARE TO BE COMPACTED, SEEDED, AND MULCHED WITHIN 3 DAYS

AFTER INITIAL BACKFILL UNLESS OTHERWISE SPECIFIED ON PLANS.

10. NO SLOPE SHALL BE GREATER THAN 2:1. 11. DURING CONSTRUCTION, ALL SEDIMENT CONTROL STRUCTURES WILL BE INSPECTED AFTER EACH RAINFALL AND REPAIRED IF NECESSARY. SEDIMENT TO BE REMOVED TO A SUITABLE DISPOSAL AREA AND STABILIZED WITH PERMANENT VEGETATIVE COVER.

12. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL SEDIMENT AND EROSION CONTROL MEASURES UNTIL DISTURBED AREAS ARE STABILIZED.

13. AFTER FINE GRADING, ALL DISTURBED AREAS ARE TO BE PERMANENTLY SEEDED AND MULCHED IN ACCORDANCE WITH PERMANENT SEEDING SUMMARY.

14. ALL SPOIL AND/OR BORROW MUST COME FROM AND GO TO A SITE WITH AN APPROVED EROSION AND SEDIMENT CONTROL PLAN.

15. CONTRACTOR TO ONLY OPEN UP LENGTH OF TRENCH THAT CAN BE CONSTRUCTED AND BACKFILLED IN ONE

WORKING DAY IN PAVED AREAS. 16. IN AREAS WHERE THE CONSTRUCTION TAKES PLACE OUTSIDE OF THE EXISTING ROADBED, CONTRACTOR TO INSTALL SILT FENCE ALONG THE DOWNHILL SIDE OF THE TRENCH BEFORE BEGINNING CONSTRUCTION AND PLACE EXCAVATED MATERIAL FROM THE TRENCH ON THE UPHILL SIDE.

17. IF DEWATERING OF THE TRENCH IS REQUIRED, CONTRACTOR TO PUMP WATER TO A FILTER BAG TO DEWATER. 18. CONTRACTOR TO SWEEP STREETS OF ANY DEBRIS OR SEDIMENTS CAUSED BY CONSTRUCTION OPERATIONS

AND DISPOSE OF AT AN APPROVED LOCATION. 19. CONTRACTOR TO STABILIZE ALL DISTURBED AREAS WITH SEED & MULCH OR APPROPRIATE STREET REPAIR.

FOR SITES 1.0 ACRE OR MORE, THE FOLLOWING ARE REQUIRED:

A. MARYLAND DEPARTMENT OF THE ENVIRONMENT, GENERAL PERMIT FOR STORMWATER ASSOCIATED WITH A CONSTRUCTION ACTIVITY, NPDES PERMIT NUMBER MDR10, STATE DISCHARGE PERMIT NUMBER 09GP, OR AN

B. THE MARYLAND DEPARTMENT OF THE ENVIRONMENT (GENERAL/INDIVIDUAL PERMIT-NOTICE OF INTENT-NOI) APPLICATION AND PERMIT SHALL BE POSTED AND/OR AVAILABLE ON-SITE AT ALL TIMES.

C. DURING CONSTRUCTION, ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES (BMP'S) SHALL BE INSPECTED AND RECORDED ON THE "STANDARD INSPECTION FORM", "GENERAL PERMIT FOR STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY" PER THE MARYLAND DEPARTMENT OF THE ENVIRONMENT (GENERAL/INDIVIDUAL PERMIT-NOTICE OF INTENT-NOI).

D. FOLLOWING CONSTRUCTION AND RELEASE OF THE SIGHT FOR SOIL EROSION AND SEDIMENT CONTROL BY THE SEDIMENT CONTROL INSPECTOR I.E., ALL PORTIONS OF A SITE HAVE BEEN PERMANENTLY STABILIZED, AND ALL STORMWATER DISCHARGES FROM CONSTRUCTION SITES THAT ARE AUTHORIZED BY THE PERMIT ARE ELIMINATED, THE AUTHORIZED PERMITTEE SHALL SUBMIT THE MARYLAND DEPARTMENT OF THE ENVIRONMENT, GENERAL/INDIVIDUAL PERMIT-NOTICE OF TERMINATION (NOT)

SEDIMENT CONTROL / STORM REQUIRED INSPE		
TYPE OF INSPECTION	DEVELOPER ENGINEER APPROVAL/DATE	EEA INSPECTION/ DATE
1) PRECONSTRUCTION MEETINGS		
2) COMPLETION OF SEDIMENT CONTROL MEASURES (IF USING BASIN SEE # 6 BELOW)		
3) PRIOR TO MODIFICATION OR REMOVAL OF SED. CNTRL.		1100000
4) INFILTRATION SYSTEMS A. SITE READINESS PER SEQUENCE OF CONSTRUCTION B. INFILTRATION AREA PROTECTED FROM SEDIMENTATION C. DIMENSIONS D. FILTERING MATERIAL (TYPE/DEPTH) E. FILL MATERIAL F. SIZE, PLACEMENT, TYPE OF PIPING (IF APPLICABLE) G. OBSERVATION WELL H. COVER / STABILIZATION		
5) OPEN CHANNEL FLOW ATTENUATION A. SITE READINESS PER SEQUENCE OF CONSTRUCTION B. CROSS SECTION CONFORMANCE C. MATERIAL (TYPE/SIZE) D. STABILIZATION		
6) RETENTION / DETENTION STRUCTURES (BASIN/PONDS) A. SUBGRADE PREPARATION 1. CORE TRENCH 2. SUITABLE FILL 3. COMPACTION B. EMBANKMENT CONSTRUCTION 1. SUITABLE MATERIAL 2. SLOPE GRADE C. BARREL AND RISER ASSEMBLY 1. CORRECT MATERIAL ONSITE 2. SIZING 3. ANTI-SEEP COLLARS 4. INSTALLATION / BACKFILL D. CONCRETE INLET STRUCTURES 1. FOOTER EXCAVATION AND SIZE 2. REINFORCING MATERIAL (TYPE, SIZE, PLACEMENT) 3. WEIR POUR		
3. WEIR POUR 4. FORM STRIP AND FINISHING E. IMPOUNDING AREA 1. LOW FLOW CHANNELS 2. DEWATERING DEVICE 3. EMERGENCY SPILLWAY F. OUTFALL AREA (LEVEL SPREADER, RIPRAP CHANNEL, ETC.) G. VEGETATION STABILIZATION H. MISCELLANEOUS		

*****NOTICE****

INSTALLATION OF ANY ITEM ON THIS CHECKLIST. THE AGENCY RECOMMENDS THAT A PROFESSIONAL ENGINEER BE PRESENT FOR EACH

THIS LIST IS FOR SEQUENCE OF CONSTRUCTION ONLY. THE AGENCY ASSUMES NO RESPONSIBILITY OR LIABILITY FOR IMPROPER

OWNER:

SPT LAND, LLC 1201 OLD NATIONAL PIKE NEW MARKET, MARYLAND 21774

FREDERICK COUNTY CODES.

EACH OF THE REQUIRED INSPECTIONS

DEVELOPER: M&G REALTY, INC. 2295 SUSQUEHANNA TRAIL, SUITE C YORK, PENNSYLVANIA 17404

TEMPORARY SEEDING NOTES

PLANTING SHORT TERM VEGITATION TO STABILIZE CLEARED OR GRADED AREAS SUBJECT TO EROSION FOR A PERIOD OF 7 DAYS OR MORE.

TEMPORARY SEEDING SHALL CONFORM TO ALL REQUIREMENTS OF "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" PUBLISHED JOINTLY BY WATER MANAGEMENT ADMINISTRATION, SOIL CONSERVATION SERVICE AND STATE SOIL CONSERVATION COMMITTEE.

3. SEDIMENT EROSION CONTROL:

ALL PERIMETER CONTROLS MUST BE STABILIZED IN 3 DAYS; ALL INTERIOR CONTROLS MUST BE STABILIZED IN 7 DAYS.

SPECIFICATIONS

A. PRIOR TO SEEDING, INSTALL ALL REQUIRED SEDIMENT EROSION CONTROL MEASURES.

B. FINAL GRADING NOT REQUIRED FOR TEMPORARY SEEDING.

A. FERTILIZER SHALL BE APPLIED AT A RATE OF 600 LBS/ACRE USING 10-10-10 OR EQUIVALENT.

B. ACID SOILS SHALL BE LIMED. 3. SEED PREPARATION

A. SOIL SHALL BE LOOSENED TO A DEPTH OF 3-INCHES BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS PRIOR TO SEEDING.

4. SEEDING A. SELECT A MIXTURE FROM TABLE B.1 IN THE STANDARD SPECIFICATIONS.

B. APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER OR HYDROSEEDER. 5. MULCHING

A. MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING. MULCH MATERIALS AND APPLICATIONS SHALL CONFORM TO THE STANDARD SPECIFICATIONS.

NOTE: ALL AREAS TO BE ROUGH GRADED AND/OR GRADED ONLY ARE TO BE STABILZED BY TEMPORARY SEEDING AND MULCHING WITHIN 7 DAYS AFTER GRADING IS COMPLETE, IF PERMANENT SEEDING CANNOT BE PERFORMED AT THAT TIME. THESE AREAS SHALL BE STABILIZED WITH PERMANENT SEEDING AND MULCHING AT THE BEGINNING OF THE NEXT GROWING SEASON.

TEMPORARY SEEDING SUMMARY

	SEED I	MIXTURE (HARDINES: FROM TABLE B.1	FERTILIZER				
No.	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS	RATE (10-10-10)	LIME RATE	
1	★ BARLEY	96 (2.2 LBS/ 1000 S.F.)	3/15 - 5/31 8/1 - 9/30	1"	436 LBS./AC. (10 LBS/1000 S.F.)	2 TONS/AC. (90 LBS/1000 S.F.)	

* OR LIKE SPECIES WITH APPROVAL FROM FREDERICK & CATOCTIN S.C.D.

PERMANENT SEEDING & SOD NOTES

1. SCOPE: PLANTING PERMANENT, LONG-LIVED VEGATATIVE COVER ON GRADED OR CLEARED AREAS.

2. STANDARDS: PERMANENT SEEDING SHALL CONFORM TO ALL REQUIREMENTS OF "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" PUBLISHED JOINTLY BY WATER MANAGEMENT ADMINISTRATION, SOIL CONSERVATION SERVICE AND STATE SOIL CONSERVATION COMMITTEE.

SPECIFICATIONS

SITE PREPARATION

A. PRIOR TO SEEDING, INSTALL ALL REQUIRED SEDIMENT EROSION CONTROL MEASURES.

B. FINAL GRADING REQUIRED FOR PERMANENT SEEDING.

2. SOIL AMENDMENTS

A. FERTILIZER SHALL BE APPLIED AT A RATE OF 600 LBS/ACRE USING 10-10-10 OR EQUIVALENT.

3. SEEDBED PREPARATION

A. SOIL SHALL BE LOOSENED TO A DEPTH OF 3-INCHES BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS

PRIOR TO SEEDING.

4. SEEDING A. SELECT A MIXTURE FROM TABLE B.2 & B.3 IN THE STANDARD SPECIFICATIONS.

 B. APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER OR HYDROSEEDER (SLURRY INCLUDES SEED AND FERTILIZER ON A FIRM, MOIST SEEDBED). MAXIMUM SEEDING DEPTH SHOULD BE 1/4 INCH ON CLAYEY SOILS AND 1/2 INCH ON SANDY SOILS, WHEN USING OTHER THAN HYDROSEEDER METHOD OF APPLICATION. NOTE: IF HYDROSEEDING IS USED AND SEED AND FERTILIZER IS MIXED, THEY WILL BE MIXED ON SITE AND THE SEEDING SHALL BE IMMEDIATE WITHOUT INTERUPTION.

PERMANENT STABILIZATION WITH SOD

1. ALL SPECIFICATIONS, SITE PREPARATION, INSTALLATION AND MAINTENANCE OF SOD FOR PERMANENT, LONG-LIVED VEGATATIVE COVER SHALL CONFORM TO SECTION B OF THE "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" PUBLISHED JOINTLY BY WATER MANAGEMENT ADMINISTRATION, SOIL CONSERVATION SERVICE AND STATE SOIL CONSERVATION COMMITTEE.

NOTE: ALL AREAS TO BE ROUGH GRADED AND/OR GRADED ONLY ARE TO BE STABILIZED BY PERMANENT SEEDING AND MULCHING WITHIN 7 DAYS AFTER GRADING IS COMPLETE (SEE TEMPORARY SEEDING NOTES)

PERMANENT SEEDING SUMMARY

	SEED MIXTURE (HARDINESS ZONE 6B) FROM TABLE B.3					ERTILIZER RAT (10-20-20)	Œ	LIME
No.	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS	N	P205	K20	RATE
9	TALL FESCUE KENTUCKY BLUEGRASS PERENNIAL RYEGRASS	60 40 20	3/1 - 5/15 8/1 - 10/15	1/4" - 1/2"	45 LB/AC (1.0 LB/ 1000 S.F.)	90 LB/AC (2 LB/ 1000 S.F.)	90 LB/AC (2 LB/ 1000 S.F.)	2 TONS/AC (90 LB/ 1000 S.F.)

SEQUENCE OF CONSTRUCTION

OBTAIN ALL REQUIRED PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. CONTACT FREDERICK COUNTY ENVIRONMENTAL COMPLIANCE SECTION TO SET UP A PRE-CONSTRUCTION MEETING WITH THE SEDIMENT AND EROSION CONTROL INSPECTOR AT (301-600-3507, 48 HOURS PRIOR TO BEGINNING CONSTRUCTION. ADDITIONAL SEDIMENT CONTROL MEASURES MAY BE REQUIRED AS A RESULT OF THE

PRF-CONSTRUCTION MEETING. INSTALL STABILIZED CONSTRUCTION ENTRANCES #1 & #2

CLEAR AND GRUB ONLY THAT AREA REQUIRED TO INSTALL SEDIMENT CONTROL DEVICES INCLUDING SILT FENCE AND SUPER SILT FENCE.

CONTACT SEDIMENT CONTROL INSPECTOR BEFORE PROCEEDING.

5. CLEAR AND GRUB REMAINDER OF THE SITE. BEGIN GRADING OPERATION. STRIP AND STOCKPILE/REMOVE TOPSOIL AS NECESSARY. ALL SOIL THAT IS NOT NEEDED FOR FILL MATERIAL MUST BE REMOVED FROM THE SITE

DAILY AND DELIVERED TO AN APPROVED SITE.

EXCAVATE AND CONSTRUCT FILLS. CONSTRUCT STORMWATER MANAGEMENT FACILITY / TEMPORARY SEDIMENT BASIN. 10. PROVIDE TEMPORARY STABILIZATION AS REQUIRED.

11. EXCAVATE AND CONSTRUCT FILLS. INCLUDING ACCESS DRIVES AND MD RT. 140

12. CONSTRUCT THE SWM BIORETENTION FACILITIES. DO NOT INSTALL FILTER MATERIAL UNTIL ALL UPSTREAM AREAS ARE STABILIZED.

13. CONSTRUCT UNDERGROUND ON-SITE UTILITIES INCLUDING STORM DRAIN WATER AND

14. INSTALL OFF-SITE WATER AND SEWER INCLUDING HORIZONTAL DIRECTIONAL DRILL UNDER FLAT RUN AND WETLAND AREAS. NO DISTURBANCE OF THE WETLANDS OR STREAM ARE ALLOWED.

15. PROVIDE TEMPORARY STABILIZATION AS REQUIRED. 16. INSTALL OFF-SITE WATER AND SEWER ALONG MD RT. 140.

17. PROVIDE TEMPORARY STABILIZATION AS REQUIRED.

18. BEGIN BUILDING CONSTRUCTION. 19. WITH BUILDING CONSTRUCTION COMPLETE FINE GRADE THE PARKING LOT, INSTALL

CURB & GUTTER, SIDEWALK AND COMMENCE PAVING OPERATIONS. 20. STABILIZE ALL DISTURBED AREAS.

21. ONCE ALL UPSTREAM AREAS DRAINING TO THE SWM FACILITIES ARE PERMANENTLY STABILIZED AND UPON APPROVAL FROM THE SEDIMENT CONTROL INSPECTOR, RESHAPE THE SWM FACILITIES TO THEIR ORIGINAL DESIGN SPECIFICATIONS AND INSTALL THE UNDERDRAIN, PERMEABLE SOIL AND STONE WITHIN THE BIORETENTION

22. INSTALL LANDSCAPING.

23. STABILIZE ALL REMAINING DISTURBED AREAS. 24. WHEN SITE IS STABILIZED, CONTACT THE SEDIMENT CONTROL INSPECTOR FOR PERMISSION TO REMOVE THE SEDIMENT CONTROL DEVICES. FLUSH STORM DRAIN

SYSTEM OF ACCUMULATED SEDIMENT. 25. REMOVE SEDIMENT CONTROL DEVICES, STABILIZE AREAS DISTURBED BY THEIR

FOR UTILITY WORK ONLY OR OFF-SITE UTILITY WORK

DISTURBANCE OUTSIDE OF LIMIT OF DISTURBED AREA CAN NOT EXCEED 5,000 SQUARE

2. PLACE ALL EXCAVATED MATERIAL ON HIGH SIDE OF TRENCH.

3. ONLY DO AS MUCH WORK AS CAN BE DONE IN ONE DAY SO BACKFILLING, FINAL GRADING,

SEEDING AND MULCHING CAN OCCUR.

4. ANY SEDIMENT CONTROL MEASURES DISTURBED BY CONSTRUCTION WILL BE REPAIRED THE SAME DAY.

SECONDARY UTILITY NOTES

1. ALL DISTURBANCES FROM SECONDARY UTILITIES SUCH AS PHONE, CABLE, ELECTRIC CABLE, CABLE TV. ETC. WILL BE SUBCONTRACTORS RESPONSIBILITY TO BRING WORK AREA BACK TO GRADE LEVEL THAT WAS EXISTING AND SEED AND MULCH ANY DISTURBANCE FROM INSTALLATION OF LINES OR CONDUIT.

2. SUBCONTRACTORS WILL BE RESPONSIBLE FOR RE-INSTALLING OR REPAIRING ANY SILT FENCE OR SEDIMENT CONTROLS THAT WERE EXISTING TO MAINTAIN PROPER SEDIMENT CONTROL THAT MIGHT HAVE BEEN DAMAGED.

STOCKPILE NOTES

NEXT REDISTURBANCE.

NO STOCKPILING ALLOWED ON ASPHALT.

2. ALL STOCKPILES LEFT AT THE END OF EACH WEEK NEED TO BE STABILIZED UNTIL THE

APPROVED BY: **TOWN OF EMMITSBURG** TOWN MANAGER

	FREDERICK SOIL CONSERVATION DISTRICT
S	OIL EROSION AND SEDIMENT CONTROL PLAN APPROVAL
By:	
Date:	
	PPROVAL FOR SEDIMENT AND EROSION CONTROL IS CONTINGENT UPON ISSUANCE OF AL

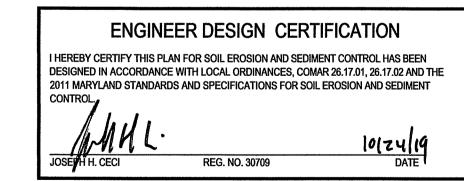
OWNERS / DEVELOPERS CERTIFICATION

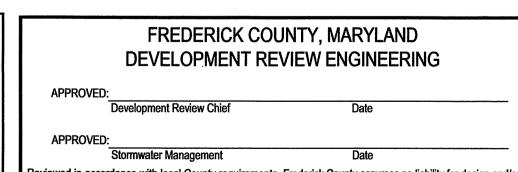
I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

10124119

MH	k	
DE ELOPER		

(PLAN IS VALID FOR TWO YEARS FROM DATE OF APPROVAL)





C	onstruc onstruc	tion. Approval is tion before the	e with local County requirements. Frederick C s valid for two (2) years after last date shown a approval expiration to be considered active. C e made to Development Review for reapproval	above. The projec Otherwise, resubmi	t mus ittal of	t be under plans, including	g	
	REV. #	DATE	REVISION DESCRIPTION *FILL IN THESE BLOCKS FOR REVISIONS ONLY	CONSULTAN DATE AND INI		DEV. REVIE DATE AND IN	1	

CENSE No.: 30709 EXP. DATE: 7/23/2 DRAWING NO. . DRAWN BY:

18-31407 D - 3480 OCTOBER 2019 JWE JHC CHECKED BY: ____

AS SHOWN

PROFESSIONAL CERTIFICATION

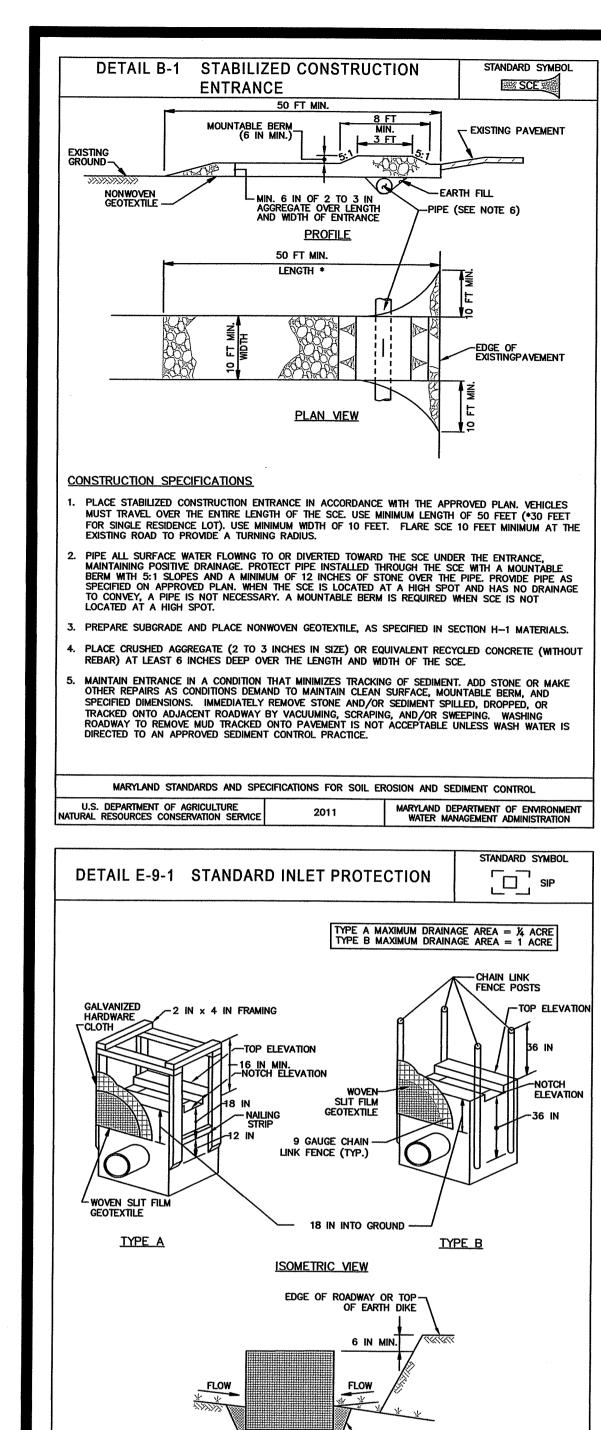
WERE PREPARED OR APPROVED BY ME, AND THAT

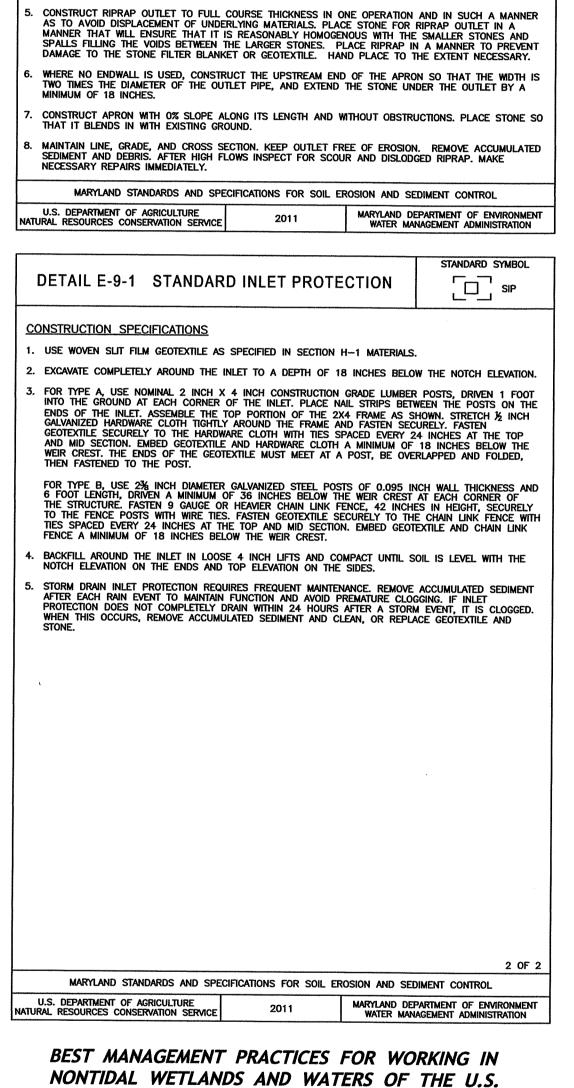
I AM A DULY LICENSED PROFESSIONAL ENGINEER

UNDER THE LAWS OF THE STATE OF MARYLAND

Y

Y





DETAIL D-4-1-A ROCK OUTLET PROTECTION

DEPTH DICTATED

OF APRON

SECTION AT END NONWOVEN

SLOPE TO DRAIN

USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, AND PROTECT FROM PUNCTURING, CUTTING, OR TEARING. REPAIR ANY DAMAGE OTHER THAN AN OCCASIONAL SMALL HOLE BY PLACING ANOTHER PIECE OF GEOTEXTILE OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE GEOTEXTILE. PROVIDE A MINIMUM OF ONE FOOT OVERLAP FOR ALL REPAIRS AND FOR JOINING TWO PIECES OF GEOTEXTILE TOGETHER

PREPARE THE SUBGRADE FOR GEOTEXTILE OR STONE FILTER (% TO 1½ INCH STONE FOR 6 INCH MINIMUM DEPTH) AND RIPRAP TO THE REQUIRED LINES AND GRADES. COMPACT ANY FILL REQUIRED IN THE SUBGRADE TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED MATERIAL.

EXTEND GEOTEXTILE AT LEAST 6 INCHES BEYOND EDGES OF RIPRAP AND EMBED AT LEAST 4 INCHES

FLOW

HEIGHT OF H

RIPRAP AND STONE MUST CONFORM TO THE SPECIFIED CLASS.

PLAN VIEW

0%___

GEOTEXTILE OR

PROFILE CONSTRUCTION SPECIFICATIONS

I NONWOVEN

-----A

ROP1

CHANNEL SECTIO

SECTION A-A

CHANNEL CROSS SECTION WILL TRANSITION FROM A-A TO B-B

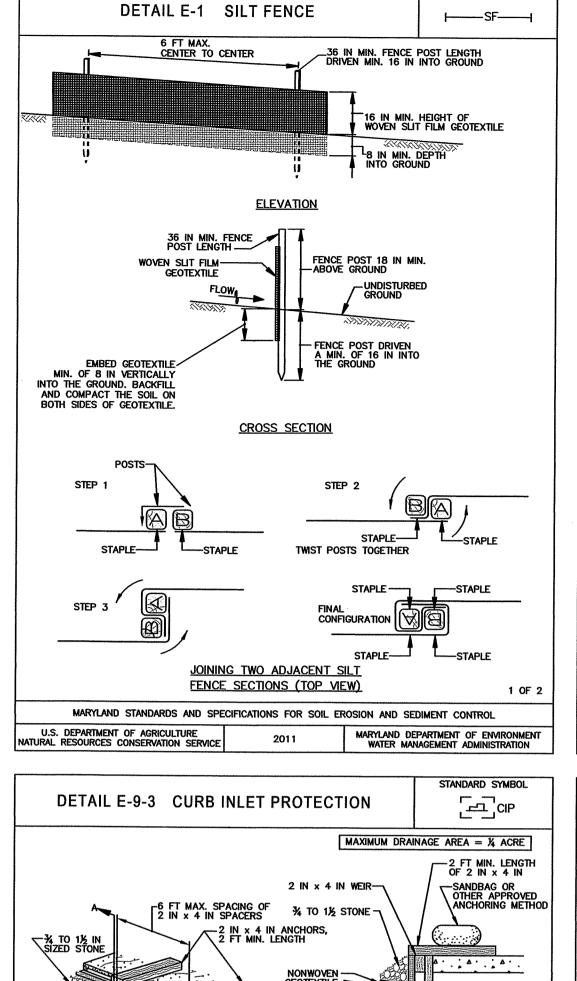
SECTION B-B

CLASS THICKNESS (T)

NONWOVEN — GEOTEXTILE

EMBED GEOTEXTILE | d/2 |

GEOTEXTILE OF



──2 IN × 4 IN SPACER

4. ATTACH A CONTINUOUS PIECE OF 1/4 INCH GALVANIZED HARDWARE CLOTH, WITH A MINIMUM WIDTH OF 30 INCHES AND A MINIMUM LENGTH OF 4 FEET LONGER THAN THE THROAT OPENING, TO THE 2x4

PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL TO 2x4 ANCHORS (MINIMUM 2 FEET LENGTH). EXTEND THE ANCHORS ACROSS THE INLET TOP AND HOLD IN PLACE BY SANDBAGS OR OTHER APPROVED ANCHORING METHOD.

9. AT NON-SUMP LOCATIONS, INSTALL A TEMPORARY SANDBAG OR ASPHALT BERM TO PREVENT INLET

10. STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS

CLOGGED. WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

7. INSTALL END SPACERS A MINIMUM OF 1 FOOT BEYOND THE ENDS OF THE THROAT OPENING.

SECTION A-A

∠2 IN x 4 IN WEIR

2. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.

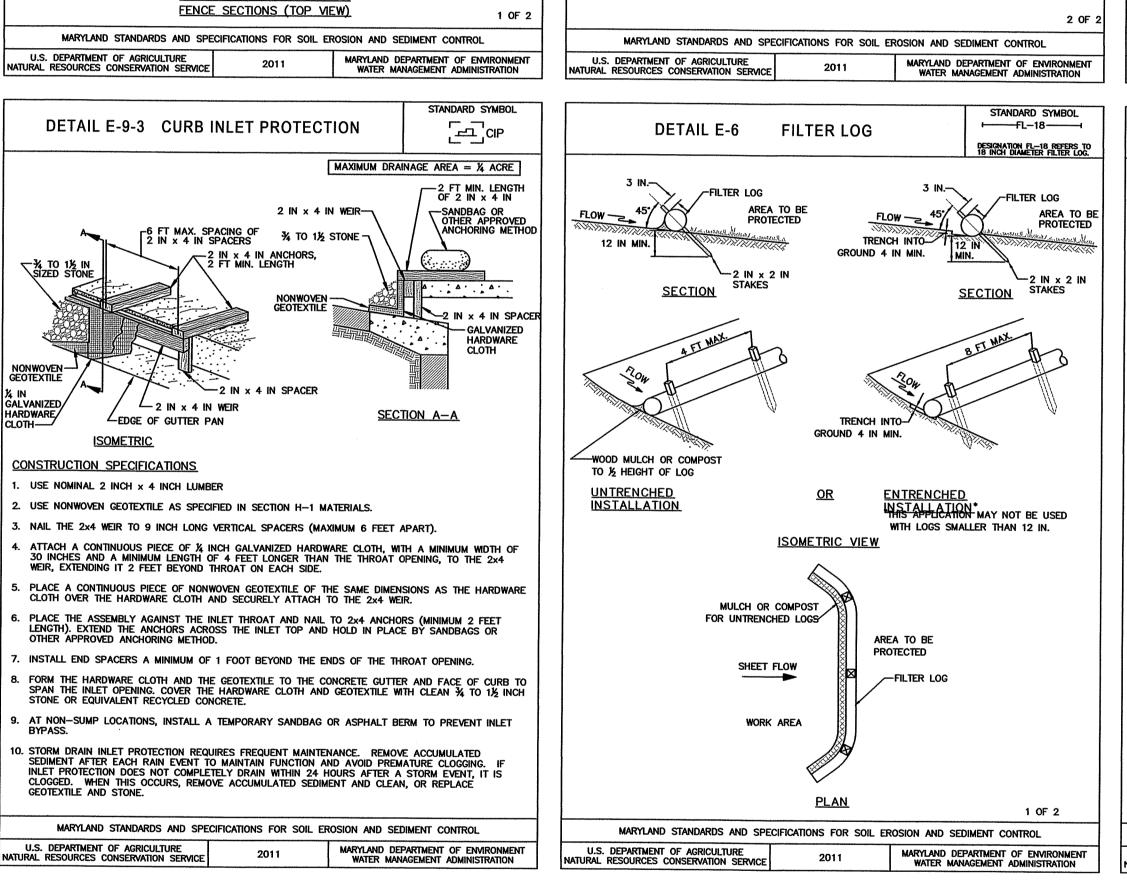
WEIR, EXTENDING IT 2 FEET BEYOND THROAT ON EACH SIDE.

3. NAIL THE 2x4 WEIR TO 9 INCH LONG VERTICAL SPACERS (MAXIMUM 6 FEET APART).

∠EDGE OF GUTTER PAN

CONSTRUCTION SPECIFICATIONS

. USE NOMINAL 2 INCH x 4 INCH LUMBER

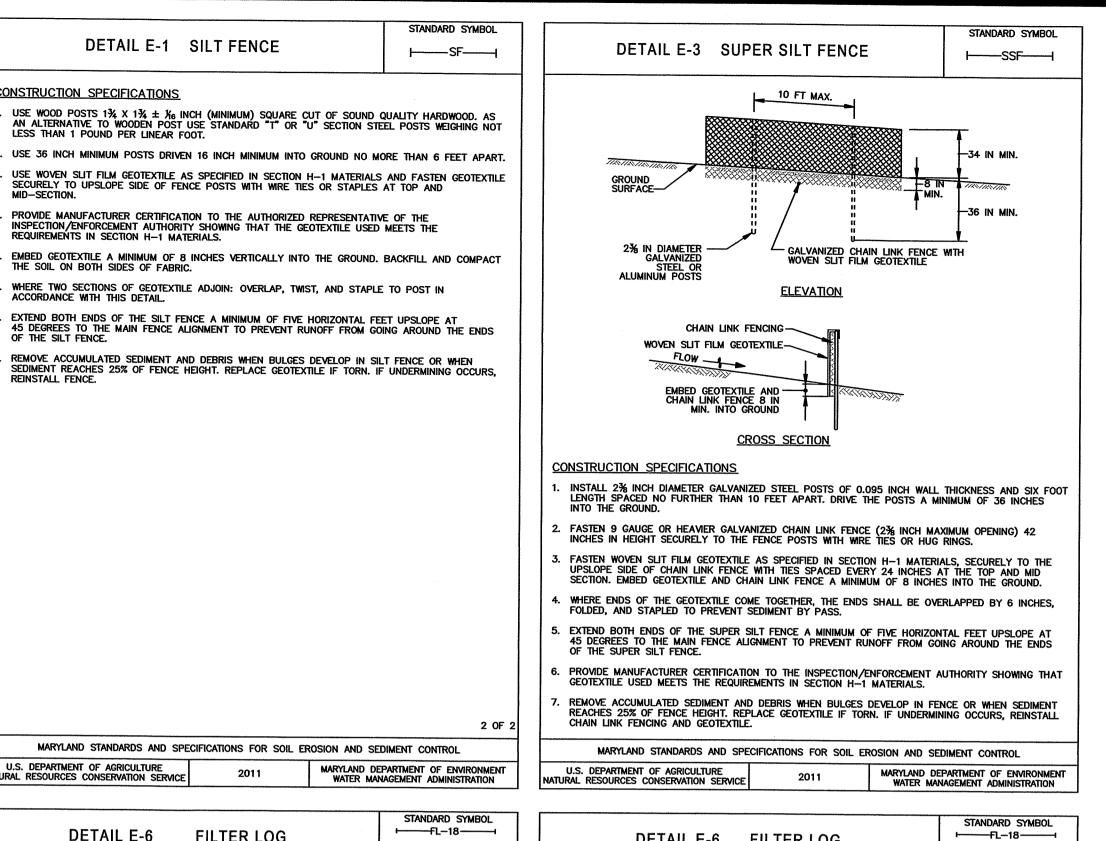


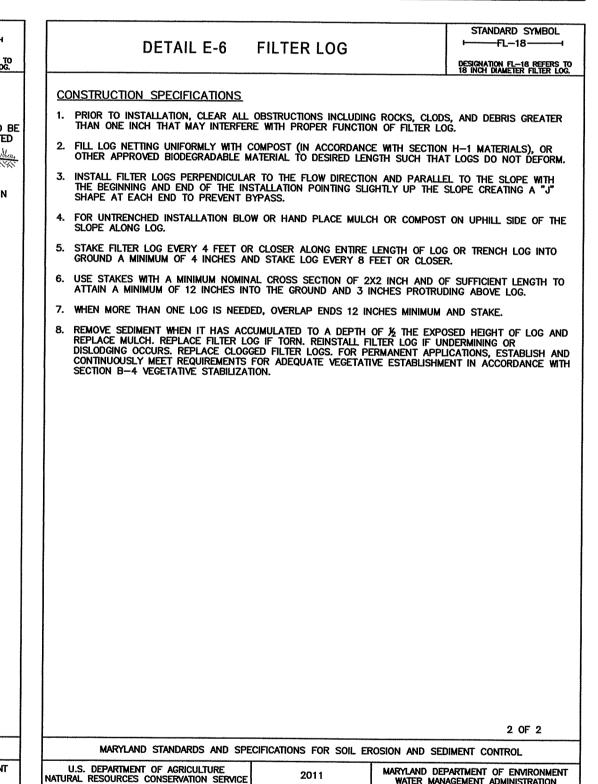
DETAIL E-1 SILT FENCE

PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H $^-$ 1 MATERIALS.

WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, TWIST, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL.

CONSTRUCTION SPECIFICATIONS







1 OF 2

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

1. Install silt fence, immediately following clearing and grubbing, along the proposed limits of disturbance so that the disturbed easement within the 100-year floodplain is surrounded by an adequate perimeter

SECTION FOR TYPE A AND E

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

- 2. Operation of equipment, and all other disturbances, must be limited to the easement that has been set apart
- 3. Use previously excavated material as backfill, unless it contains waste metal products, unsightly debris, toxic material or any other deleterious substance. Use clean borrow material when excavated material is not suitable for use as backfill.
- 4. Remove excess fill or construction material or debris to an upland disposal area.
- 5. Make post construction grades and elevations within the easement the same as the original grades and
- 6. Following completion of construction in the floodplain, that portion of the easement that was temporarily disturbed shall be stabilized with seed and mulch within 7 days. Mulch shall be anchored by approved

OWNER:

1201 OLD NATIONAL PIKE NEW MARKET, MARYLAND 21774

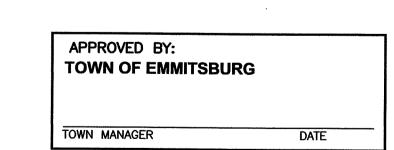
POST DRIVEN -

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE

DEVELOPER

M&G REALTY, INC. 2295 SUSQUEHANNA TRAIL, SUITE C YORK, PENNSYLVANIA 17404

- CONDUCT THE ACTIVITY SO AS NOT TO RESTRICT OR IMPEDE THE MOVEMENT OF WILDLIFE INDIGENOUS TO THE WETLAND OR ADJACENT WATERWAY.
- 2. REMOVE EXCESS FILL OR CONSTRUCTION MATERIAL OR DEBRIS TO AN UPLAND DISPOSAL AREA.
- 3. PLACE MATERIALS IN A LOCATION AND MANNER WHICH DOES NOT ADVERSELY IMPACT SURFACE OR SUBSURFACE WATER FLOW INTO OR OUT OF THE NONTIDAL WETLAND OR WATERS OF THE U.S.
- 4. IF BACKFILL IS OBTAINED FROM SOURCES OTHER THAN THE ORIGINAL EXCAVATED MATERIAL UTILIZE CLEAN FILL, FREE FROM WASTE METAL METAL PRODUCTS, UNSIGHTLY DEBRIS, TOXIC MATERIAL, OR ANY OTHER DELETERIOUS SUBSTANCE.
- PLACE HEAVY EQUIPMENT ON MATS OR SUITABLY DESIGN THE EQUIPMENT TO PREVENT DAMAGE TO THE NONTIDAL WETLANDS OR WATERS OF THE U.S.
- 6. RECTIFY ANY NONTIDAL WETLANDS OR WATERS OF THE U.S. TEMPORARILY IMPACTED BY ANY
- AFTER INSTALLATION HAS BEEN COMPLETED, MAKE POST—CONSTRUCTION GRADES AND ELEVATIONS OF NONTIDAL WETLANDS THE SAME AS THE ORIGINAL GRADES AND ELEVATIONS IN THE TEMPORARILY
- 8. ALL STABILIZATION IN THE WETLAND AND BUFFER SHALL BE OF THE FOLLOWING RECOMMENDED SPECIES: ANNUAL RYEGRASS (LOLIUM MULTIFLORUM), MILLET (SERTARIA ITALICA), BARLEY (HOTDEUM SPP.), OATS (UNIOLA SPP.), AND/OR RYE (SECALE CEREALE).
 THESE SPECIES WILL ALLOW FOR THE STABILIZATION OF THE SITE AS WELL AS ALLOW VOLUNTARY REVEGETATION OF NATURAL WETLAND SPECIES. OTHER NON-PERSISTENT VEGETATION MAY BE ACCEPTABLE, BUT MUST BE APPROVED BY THE DIVISION. KENTUCKY 31 FESCUE AND BIRDSFOOT TREFOIL SHALL NOT BE UTILIZED IN THE WETLAND OR WETLAND BUFFER AREAS. THE AREA SHOULD BE SEEDED AND MULCHED TO REDUCE EROSION AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.
- 9. ADHERE TO TIME OF YEAR RESTRICTIONS AS BY THE DEPARTMENT UNDER COMAR 26.08.02.
- 10. AT LEAST ON CULVERT IN EVERY STREAM CROSSING SHALL BE DEPRESSED AT LEAST ONE FOOT BELOW EXISTING STREAM BOTTOM UNDER THE LOW FLOW CONDITIONS. A LOW FLOW CHANNEL SHALL BE PROVIDED THROUGH ANY RIP-RAP STRUCTURES. THE CULVERT SHALL BE CONSTRUCTED AND ANY RIP RAP PLACED SO AS NOT TO OBSTRUCT THE MOVEMENT OF AQUATIC SPECIES.
- 11. REPAIR AND MAINTAIN ANY SERVICEABLE STRUCTURE OR FILL SO THERE IS NO PERMANENT LOSS OF NONTIDAL WETLAND.



	FREDERICK SOIL CONSERVATION DISTRICT
	SOIL EROSION AND SEDIMENT CONTROL PLAN APPROVAL
Ву:	
Date	
	D APPROVAL FOR SEDIMENT AND EROSION CONTROL IS CONTINGENT UPON ISSUANCE OF ALL PLICABLE REGULATORY PERMITS.
(PL	AN IS VALID FOR TWO YEARS FROM DATE OF APPROVAL)

OWNERS / DEVELOPERS CERTIFICATION I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

16.11		
MAH h.		10124/19
IOSEPH H. CECI	REG. NO. 30709	DATE

ENGINEER DESIGN CERTIFICATION

	FREDERICK COUNTY, MARYLAND DEVELOPMENT REVIEW ENGINEERING			
APPRO	VED:			
	Development Review Chief	Date		
APPRO	VED:			
	Stormwater Management	Date		
construction. construction	Reviewed in accordance with local County requirements. Frederick County assumes no liability for design and construction. Approval is valid for two (2) years after last date shown above. The project must be under construction before the approval expiration to be considered active. Otherwise, resubmittal of plans, including applicable fees, must be made to Development Project for reapproval.			

۷.	DATE	REVISION DESCRIPTION *FILL IN THESE BLOCKS FOR REVISIONS ONLY	CONSULTANT: DATE AND INITIAL	DEV. REVIEW: DATE AND INITIAL
	:			

30709 EXP. DATE: 7/23/1 18-31407 D - 3480

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& ASSOCIATES INC

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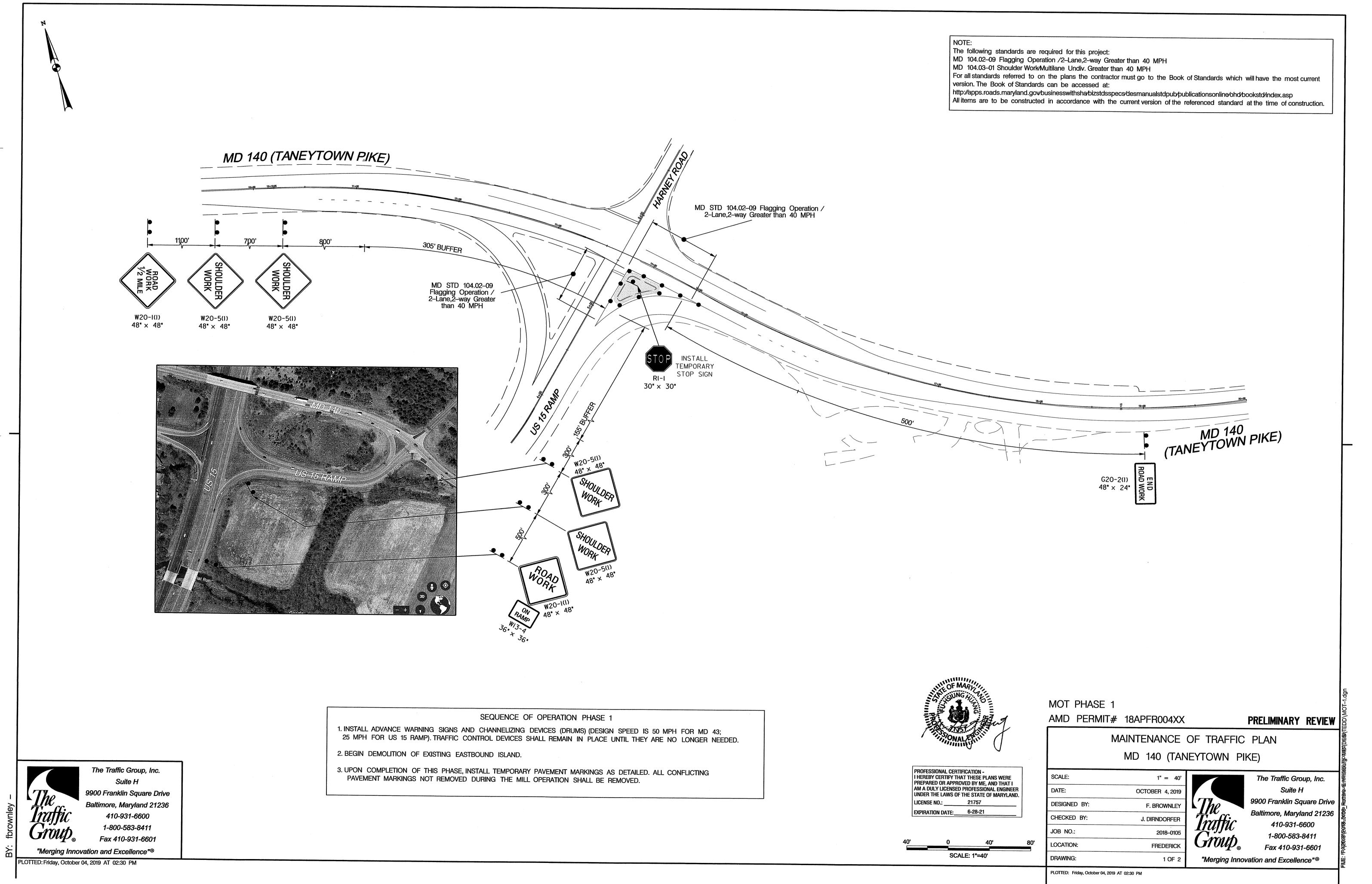
SCALE: AS SHOWN PROFESSIONAL CERTIFICATIO

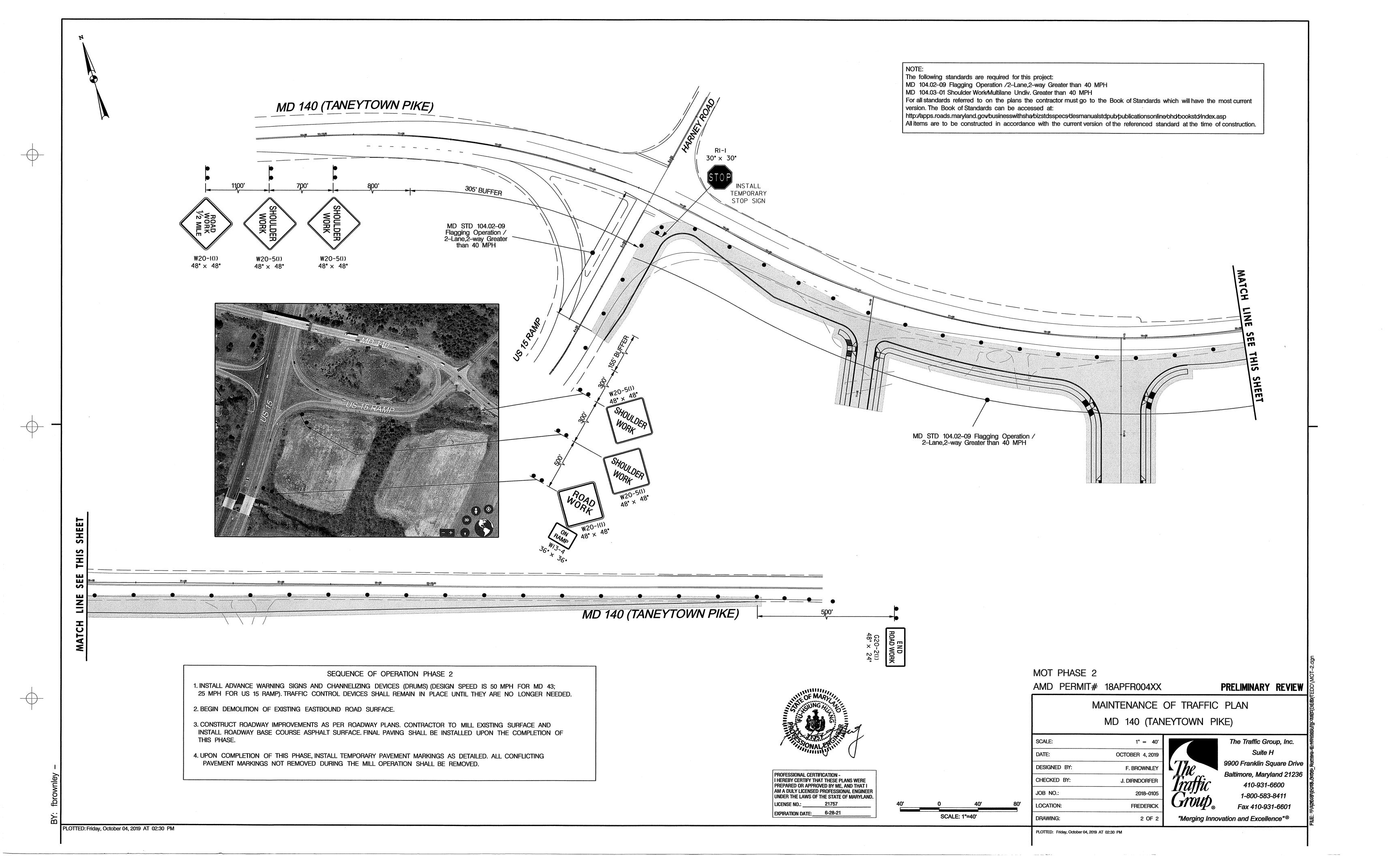
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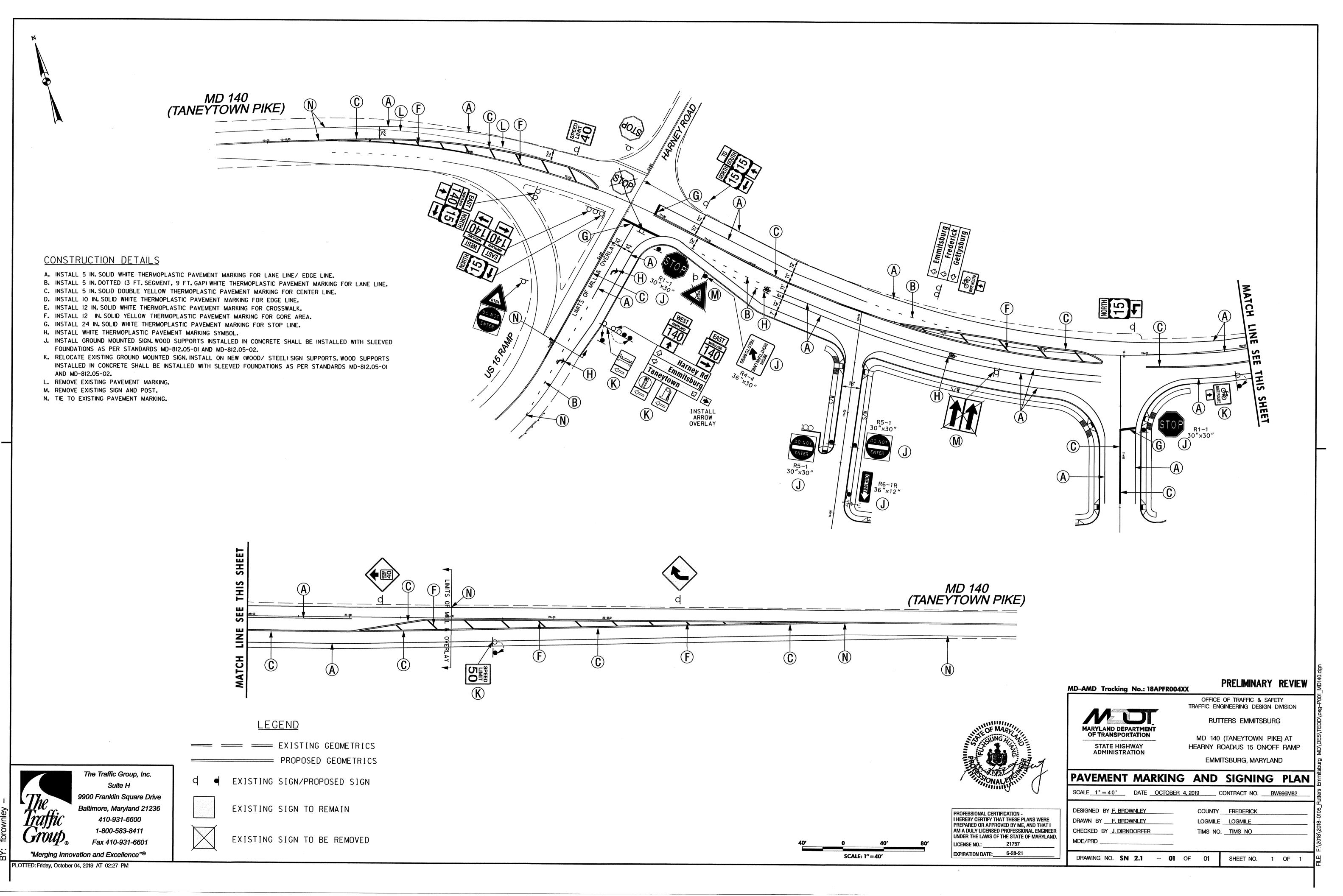
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THA I AM A DULY LICENSED PROFESSIONAL ENGINEE UNDER THE LAWS OF THE STATE OF MARYLANI PROJECT NO. DRAWING NO. OCTOBER 2019 DRAWN BY: JWE

SHEET <u>35</u> OF <u>35</u>

CHECKED BY: _____







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