

LOCATION MAP
SCALE: 1"=1000'

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF MONTGOMERY

ON THIS _____ DAY OF _____, 20____, BEFORE ME, THE SUBSCRIBER, A NOTARY PUBLIC FOR THE COMMONWEALTH OF PENNSYLVANIA, PERSONALLY APPEARED _____ WHO ACKNOWLEDGED THIS PLAN TO BE THE OFFICIAL PLAN OF STREETS AND PROPERTY SHOWN THEREON, SITUATED IN THE TOWNSHIP OF UPPER MERION, MONTGOMERY COUNTY, PENNSYLVANIA, AND DESIRE THAT THIS PLAN BE RECORDED ACCORDING TO LAW.

NOTARY PUBLIC _____

MY COMMISSION EXPIRES: _____

I/WE _____ HAVE LAID UPON MY/OUR LANDS SITUATE IN THE TOWNSHIP OF UPPER MERION, MONTGOMERY COUNTY, PENNSYLVANIA, LOTS AND STREETS ACCORDING TO THE ACCOMPANIED PLAN WHICH IS INTENDED TO BE RECORDED. WITNESS MY/OUR HAND AND SEAL THE _____ DAY OF _____, 20____.

REVIEWED BY THE UPPER MERION TOWNSHIP ENGINEER THIS _____ DAY OF _____, 20____.

APPROVED BY TOWNSHIP SUPERVISORS OF THE TOWNSHIP OF UPPER MERION THIS _____ DAY OF _____, 20____.

CHAIRPERSON _____ VICE-CHAIRPERSON _____

SURVEYOR'S CERTIFICATE, BOUNDARY & TOPOGRAPHY

THIS IS TO CERTIFY THAT THIS PLAN REPRESENTS A FIELD SURVEY BY ME OR UNDER MY SUPERVISION, THAT ALL PROPERTY OWNERS ARE SET AS SHOWN HEREON, THAT ALL GEOMETRIC AND GEODETIC DETAILS AS SHOWN ARE CORRECT, AND THAT ALL LOTS OR TRACTS HAVE A BOUNDARY CLOSURE ERROR OF 1:10,000 OR BETTER.

PLS _____ DATE _____ SEAL _____

SU # _____

RECORDER OF DEEDS

RECORDED IN THE OFFICE FOR THE RECORDING OF DEEDS IN AND FOR THE COUNTY OF MONTGOMERY, AT NORRISTOWN, PA, IN PLAN BOOK _____, PAGE NO. _____ ON _____, 20____.

MCPC No. _____

PROCESSED and REVIEWED. A report has been prepared by the Montgomery County Planning Commission in accordance with the Municipalities Planning Codes.

Certified this date _____

For The Director
MONTGOMERY COUNTY PLANNING COMMISSION

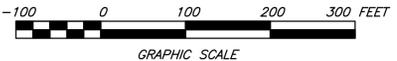
- GENERAL NOTES:**
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 - TOTAL TRACT AREA: 22.826 AC.
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ACT 287 SERIAL NUMBER:
EDWARD B. WALSH & ASSOCIATES, INC. DOES NOT GUARANTEE THE ACCURACY OF THE LOCATIONS FOR EXISTING SUBSURFACE UTILITY LINES, STRUCTURES, ETC. SHOWN ON THE PLANS, NOR DOES E. B. WALSH & ASSOC., INC. GUARANTEE THAT ALL SUBSURFACE UTILITY LINES, STRUCTURES, ETC. ARE SHOWN.

CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATIONS OF ALL SUBSURFACE UTILITY LINES, STRUCTURES, ETC. BEFORE THE START OF WORK, BY CALLING THE PENNSYLVANIA ONE CALL SYSTEM AT 1-800-242-1776.

- UTILITIES NOTIFIED**
- ABOVENET COMMUNICATIONS INC.
 - AMERIGAS PROPANE LP
 - AQUA PENNSYLVANIA INC
 - AT&T ATLANTA
 - AT&T LOCAL SERVICES
 - CAVALIER TELEPHONE
 - COMCAST CABLE
 - COMCAST CABLE COMMUNICATIONS LEVEL 3 COMMUNICATIONS LLC
 - MC/VERIZON BUSINESS
 - PECO ENERGY
 - PENNSYLVANIA'S AMERICAN WATER
 - QUEST COMMUNICATIONS
 - UPPER MERION TOWNSHIP
 - UPPER MERION TWP MUNICIPAL UTILITY AUTHORITY
 - VERIZON PENNSYLVANIA INC
 - XO COMMUNICATIONS INC
 - ZAYO BANDWIDTH FORMERLY PPL TELCOM LLC

PARCELS NO. 58-0013346-00-6 & 58-00-13345-90-7 (PER DEED)



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APPLICANT/OWNER

MANCILL MILL ROAD COMPANY
401 SOUTH SCHUYLKILL AVENUE
NORRISTOWN, PA. 19403
PHONE: 610-630-7911
FAX: 610-630-9877
ATTN: RICHARD ORLOW

3	5-19-16	REVISED PER TWP CONSULTANT REVIEW LETTERS DATED 3-31-16 & 4-25-16
2	11-16-15	REV. MODIFIED LAYOUT
1	5-14-15	REVISED PER TWP ENGR REVIEW LETTER DATED 10-3-14

LAND DEVELOPMENT PLAN
FOR
MANCILL MILL ROAD COMPANY

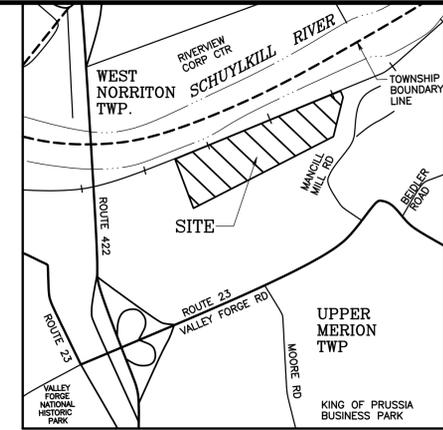
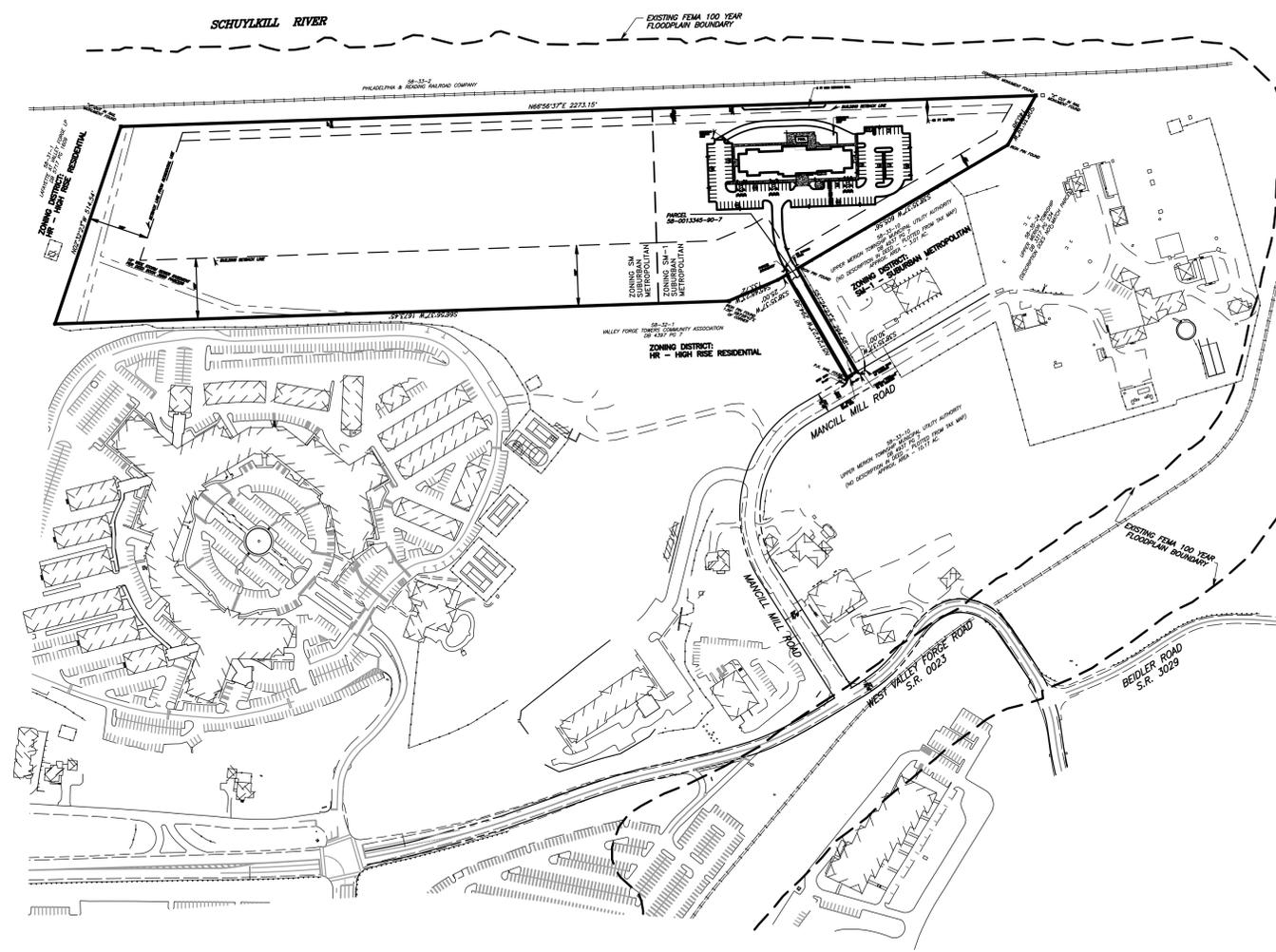
UPPER MERION TOWNSHIP MONTGOMERY COUNTY, PA.

Edward B. Walsh & Associates, Inc. **Project- 3755**
CIVIL ENGINEERS & SURVEYORS **Date- 7-9-14**

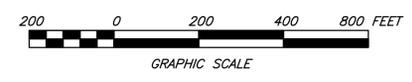
125 Downing Forge Road **Scale- 1"= 100'**
Easton, Pennsylvania 19341 **Drawn- R.F.N.**
Phone (610) 903-0060 **Checked- A.J.B.**
Fax (610) 903-0080 **Sheet- 1 OF 14**

EBWA

Plotted: 6/7/2016 File: F:\JB\3755\3755-89.pro Ver.- 000



LOCATION MAP
SCALE: 1" = 1000'



PRELIMINARY
SITE AND SURROUNDING
PROPERTY PLAN

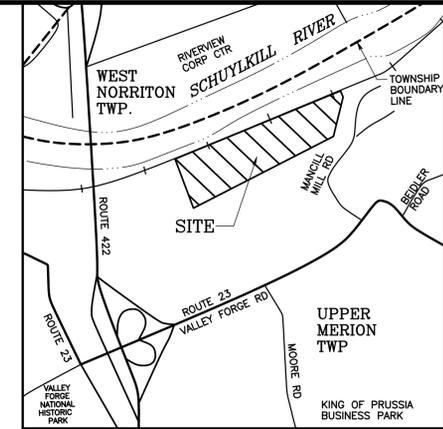
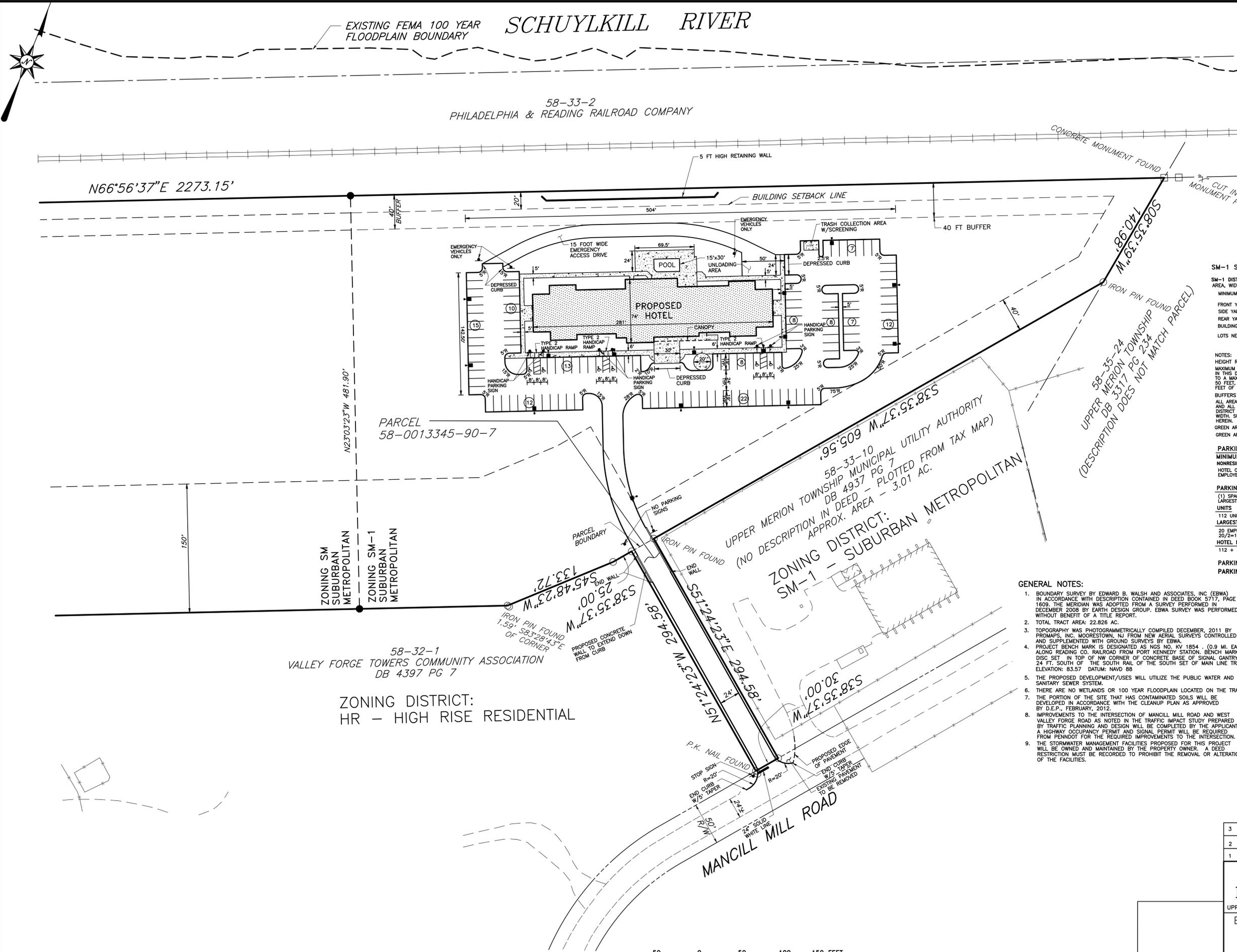
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Edward B. Walsh & Associates, Inc.
CIVIL ENGINEERS & SURVEYORS
125 Downin Forge Road
Eaton, Pennsylvania 19341
Phone (610) 903-0060
Fax (610) 903-0080



Project- 3755
Date- 7-9-14
Scale- 1" = 200'
Drawn- R.F.N.
Checked- A.J.B.
Sheet- 2 OF 14



LOCATION MAP
SCALE: 1"=1000'

ZONING REQUIREMENTS

SM-1 SUBURBAN METROPOLITAN DISTRICT

SM-1 DISTRICT AREA, WIDTH AND YARD REGULATIONS:

	REQUIRED	PROVIDED
MINIMUM LOT AREA	1 ACRE	7.229 ACRES (SM-1 PORTION OF PARCEL)
FRONT YARD	40'	150'
SIDE YARD	15' MIN/40' AGGR	40'
REAR YARD	20'	20'
BUILDING AREA	50%	5.23% (BUILDING FOOTPRINT AREA = 15,480 S.F.)
LOTS NEAR RESIDENTIAL DISTRICTS	150'	150' (TOTAL BUILDING AREA = 65,920 S.F. (4 STORY))

NOTES:
HEIGHT REGULATIONS: 50' / 50'
MAXIMUM HEIGHT OF BUILDINGS AND OTHER STRUCTURES ERECTED OR ENLARGED IN THIS DISTRICT SHALL BE 50 FEET, EXCEPT THAT SUCH HEIGHT MAY BE INCREASED TO A MAX. OF 65 FEET, PROVIDED THAT FOR EVERY FOOT OF HEIGHT IN EXCESS OF 50 FEET, THERE SHALL BE ADDED TO EACH YARD REQUIREMENT TWO CORRESPONDING FEET OF WIDTH OR DEPTH.
ALL AREAS DENOTED BY THE FRONT LOT LINE FOR THE ENTIRE LENGTH THEREOF AND ALL AREA DENOTED BY ANY LOT LINE ABUTTING AN AGRICULTURAL OR RESIDENTIAL DISTRICT SHALL BE EFFECTIVELY SCREENED BY A BUFFER OF NOT LESS THAN 40 FEET IN WIDTH. SUCH PLANTING SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF 165-217.1 HEREIN.
GREEN AREA MIN. REQUIREMENTS: REQUIRED 15%, PROVIDED 72.31%

PARKING REQUIREMENTS

MINIMUM REQUIREMENTS
NONRESIDENTIAL USES
HOTEL OR MOTEL: ONE SPACE PER ROOM PLUS ONE SPACE FOR EACH TWO EMPLOYEES ON LARGEST SHIFT.

PARKING REQUIREMENTS: SPACE USE
(1) SPACE PER UNIT + (1) SPACE FOR EVERY (2) EMPLOYEES ON THE LARGEST SHIFT
UNITS
112 UNITS x 1 = 112 PARKING SPACES REQUIRED
LARGEST SHIFT
20 EMPLOYEES
20/2=10 PARKING SPACES REQUIRED
HOTEL PARKING REQUIRED
112 + 10 = 122 SPACES REQUIRED

PARKING REQUIRED 122 SPACES
PARKING SHOWN 122 SPACES

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PRELIMINARY SITE PLAN

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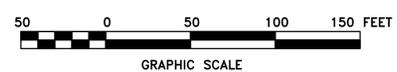
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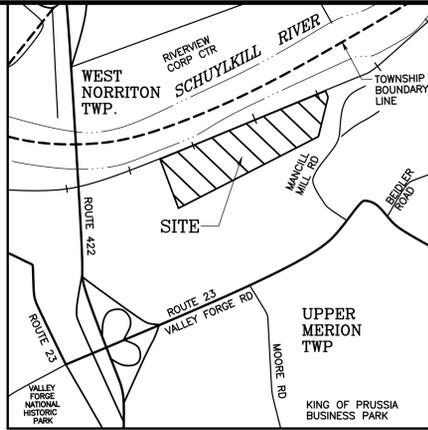
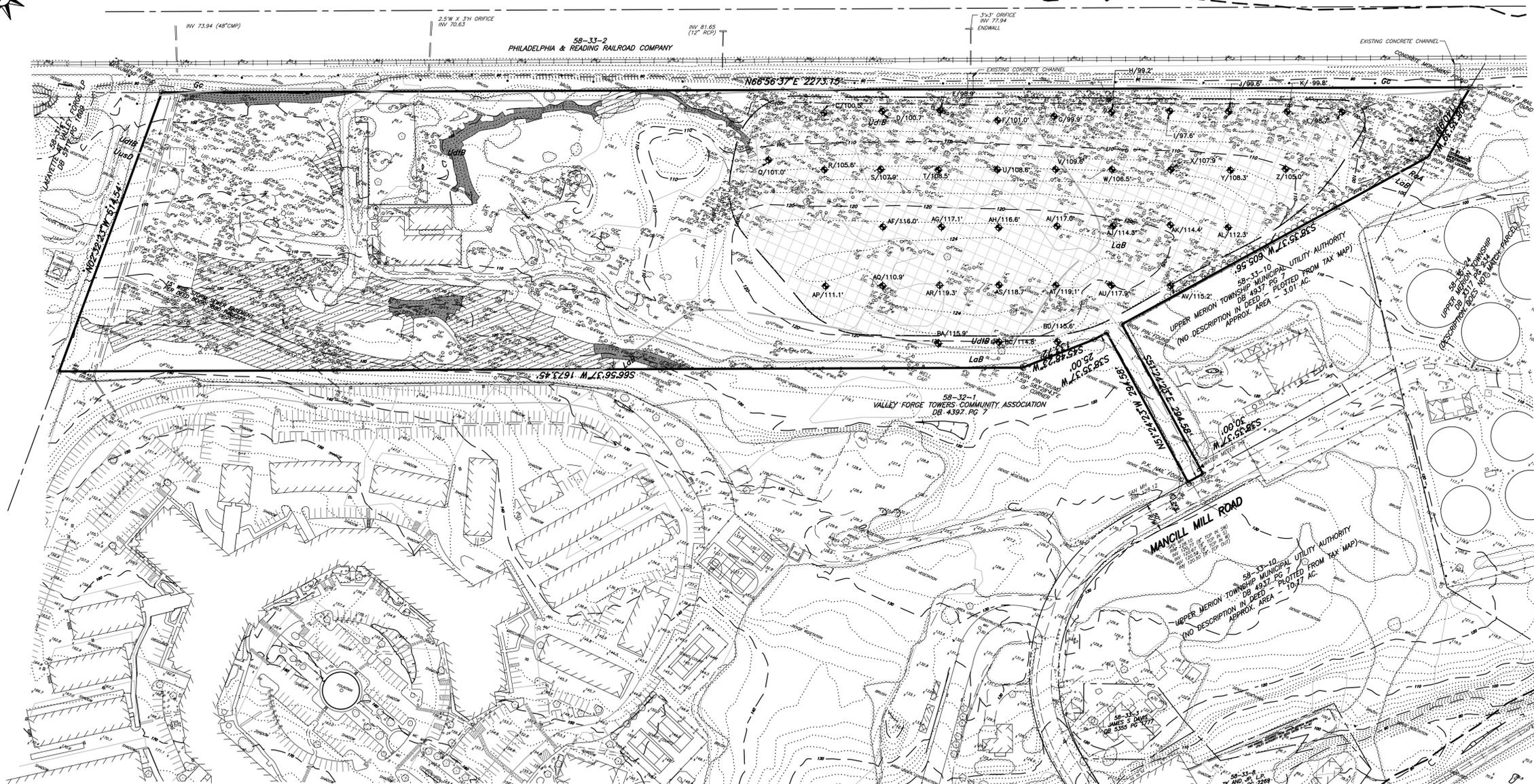
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PARCELS NO. 58-0013346-00-6 & 58-00-13345-90-7 (PER DEED)



SCHUYLKILL RIVER

EXISTING FEMA 100 YEAR FLOODPLAIN BOUNDARY



LOCATION MAP
SCALE: 1"=1000'

LEGEND

---	430	EXISTING INDEX CONTOUR
---		EXISTING INTERIOR CONTOUR
---		EXISTING INLET
---		EXISTING STORM SEWER PIPE
○		EXISTING STORM MANHOLE
○		EXISTING SANITARY MANHOLE
S		EXISTING SANITARY SEWER PIPE
---	W	EXISTING WATER LINE
---		EXISTING CURB
○		EXISTING SIGN
○		WATER METER
○		WATER VALVE
---		EXISTING ENDWALL
---		FEMA FLOODPLAIN BOUNDARY
---		EXISTING PAVING
---		EXISTING BUILDINGS
---		STEEP SLOPES 15%-25%
---		SIGNIFICANT SLOPES >25%
---		CONTAMINATED SOILS BOUNDARY
---		EXISTING EDGE OF WOODLANDS/TREES
---		CONTAMINATED SOILS
AA/100.00		TEST BORING LOCATION/ DESIGNATION WITH ELEVATION OF TOP OF CONTAMINATED SOIL

SOILS CLASSIFICATION

Gc	- GIBRALTER SILT LOAM
LgB	- LANSDALE LOAM, 3 TO 8 PERCENT SLOPES
Roa	- RARITAN SILT LOAM, 0 TO 3 PERCENT SLOPES
UdtB	- UDORTMENTS, SHALE AND SANDSTONE, 0 TO 8 PERCENT SLOPES

SITE BORING TEST RESULTS FOR SITE CONTAMINATION

BORING LABEL	ELEVATION OF TOP OF CONTAMINATED SOIL LAYER	COVER OVER CONTAMINATED SOIL
C	100.5'	1.0'
D	100.7'	1.0'
E	98.9'	1.3'
F	101.0'	0.9'
G	99.9'	1.1'
H	99.2'	1.0'
I	97.6'	2.3'
J	99.6'	1.2'
K	99.8'	0.5'
L	98.7'	0.2'
Q	101.0'	4.9'
R	105.6'	4.2'
S	107.9'	2.1'
T	108.5'	3.3'
U	108.6'	2.4'
V	109.6'	1.4'
W	106.5'	4.0'
X	107.9'	2.1'
Y	108.3'	2.6'
Z	105.0'	2.5'
AF	116.0'	1.5'
AG	117.1'	0.8'
AH	116.6'	1.4'
AI	117.0'	0.7'
AJ	114.3'	3.2'
AK	114.4'	3.5'
AL	112.3'	1.2'
AP	111.1'	6.6'
AQ	110.9'	8.3'
AR	119.3'	1.0'
AS	118.7'	2.1'
AT	119.1'	1.2'
AU	117.9'	0.5'
AV	115.2'	1.1'
BA	115.9'	0.2'
BC	114.8'	1.5'
BD	115.8'	0.2'

SENSITIVE NATURAL RESOURCES TO BE PROTECTED
THE EXISTING SITE TO BE DEVELOPED DOES NOT CONTAIN SENSITIVE FEATURES.

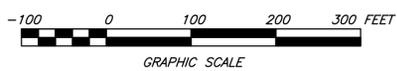
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TREE SPECIES LEGEND

BOX ELDER	= BE
BLACK LOCUST	= BL
SILVER MAPLE	= SM
MULBERRY	= MUL
SUMAC	= SU
BLACK WALNUT	= BW
WILLOW	= W
ELM	= ELM
PEAR	= PEAR
CRAB APPLE	= CA
ASH	= ASH
TULIP POPLAR	= POP
SYCAMORE	= SYC

NOTE: THE TREES SHOWN IN THE AREA TO BE DEVELOPED HAVE BEEN PREVIOUSLY REMOVED IN CONJUNCTION WITH THE SITE CONTAMINATED SOILS REMEDIATION PROJECT.



THE NOTED AREA IS CONTAMINATED WITH 35% ASBESTOS/AMOSITE STARTING AT A DEPTH AS NOTED IN THE CHART.



PARCELS NO. 58-0013346-00-6 & 58-00-13345-90-7 (PER DEED)

PRELIMINARY OVERALL EXISTING FEATURES PLAN

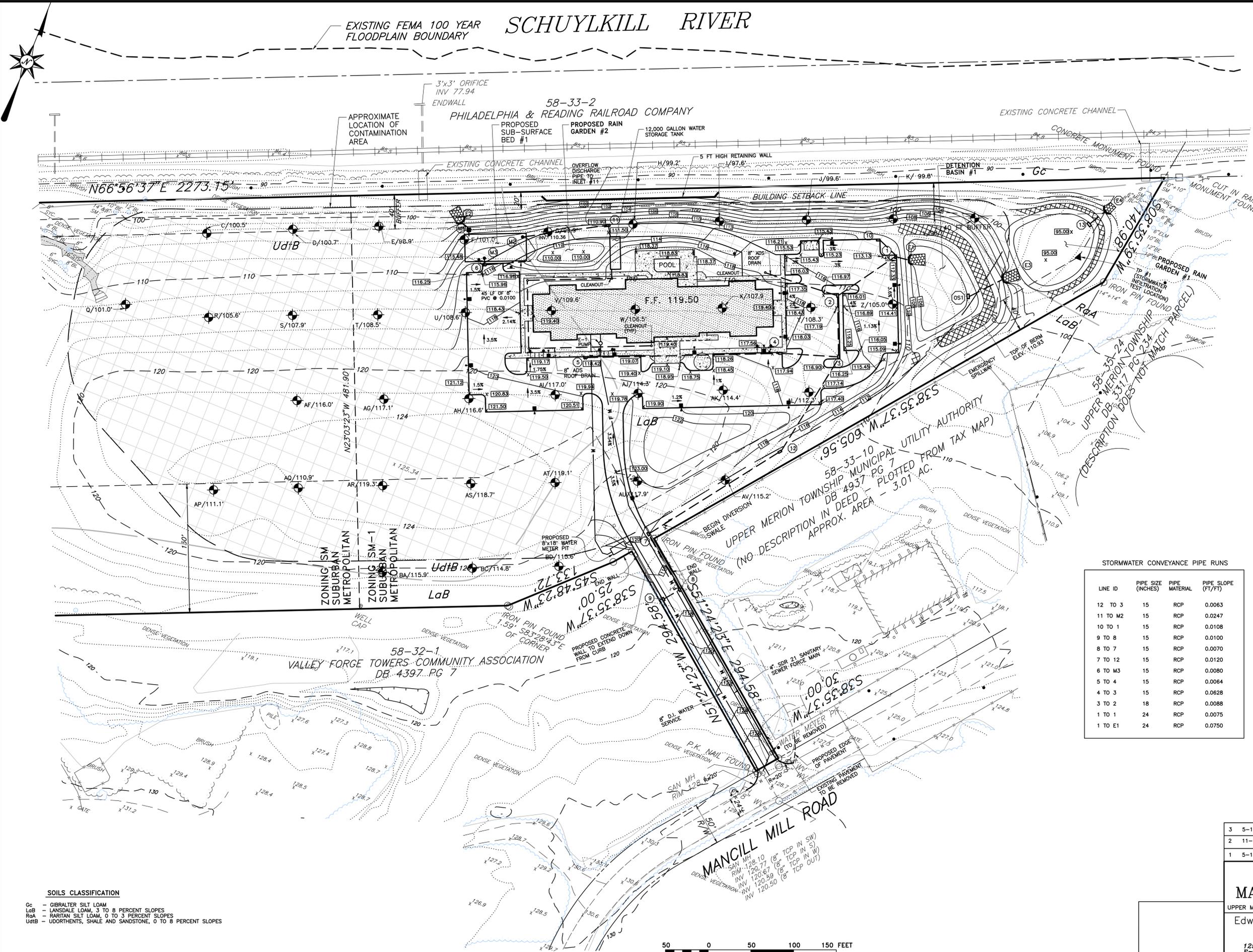
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UPPER MERION TOWNSHIP MONTGOMERY COUNTY, PA.
Edward B. Walsh & Associates, Inc.
CIVIL ENGINEERS & SURVEYORS

125 Dowlin Forge Road
Eaton, Pennsylvania 19341
Phone (610) 903-0060
Fax (610) 903-0080

Project- 3755
Date- 7-9-14
Scale- 1"= 100'
Drawn- R.F.N.
Checked- A.U.B.
Sheet- 4 OF 14
Ver.- 000

Plotted: 6/7/2016 File: F:\JB\3755\3755-B9.pro



LEGEND

- 4.30 --- EXISTING INDEX CONTOUR
- 4.30 --- EXISTING INTERIOR CONTOUR
- 4.30 --- PROPOSED CONTOUR
- EXISTING INLET
- EXISTING INLET
- PROPOSED STORMSEWER STRUCTURE DESIGNATION
- EXISTING STORM SEWER PIPE
- PROPOSED STORM SEWER PIPE
- EXISTING STORM MANHOLE
- PROPOSED STORM MANHOLE
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY SEWER PIPE
- FM --- SANITARY SEWER FORCE MAIN
- W --- EXISTING WATER LINE
- W --- PROPOSED WATER MAIN
- SOILS LINE
- EXISTING CURB
- PROPOSED CURB
- EXISTING PAVING
- LIGHT POLE & FIXTURE
- PROPOSED SPOT ELEVATION
- EXISTING SIGN
- WATER METER
- WATER VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED D-W ENDWALL
- EXISTING ENDWALL
- FEMA FLOODPLAIN BOUNDARY
- EXISTING BUILDINGS
- PROPOSED BUILDINGS
- STEEP SLOPES 15%-25%
- SIGNIFICANT SLOPES >25%
- CONTAMINATED SOILS BOUNDARY
- EXISTING EDGE OF WOODLANDS/TREES
- CONTAMINATED SOILS
- AA/100.00 --- TEST BORING LOCATION/ DESIGNATION WITH ELEVATION OF TOP OF CONTAMINATED SOIL
- TOP OF STORMWATER MANAGEMENT SYSTEM BERM

STORMWATER CONVEYANCE PIPE RUNS

LINE ID	PIPE SIZE (INCHES)	PIPE MATERIAL	PIPE SLOPE (FT/FT)
12 TO 3	15	RCP	0.0063
11 TO M2	15	RCP	0.0247
10 TO 1	15	RCP	0.0108
9 TO 8	15	RCP	0.0100
8 TO 7	15	RCP	0.0070
7 TO 12	15	RCP	0.0120
6 TO M3	15	RCP	0.0080
5 TO 4	15	RCP	0.0064
4 TO 3	15	RCP	0.0628
3 TO 2	18	RCP	0.0088
1 TO 1	24	RCP	0.0075
1 TO E1	24	RCP	0.0750

SOILS CLASSIFICATION

- Gc - GIBRALTER SILT LOAM
- LaB - LANSDALE LOAM, 3 TO 8 PERCENT SLOPES
- RaA - BARITAN SILT LOAM, 0 TO 3 PERCENT SLOPES
- UdtB - UDORTHERENTS, SHALE AND SANDSTONE, 0 TO 8 PERCENT SLOPES



PARCELS NO. 58-0013346-00-6 & 58-00-13345-90-7 (PER DEED)

PRELIMINARY GRADING & UTILITIES PLAN

3	5-19-16	REVISED PER TWP CONSULTANT REVIEW LETTERS DATED 3-31-16 & 4-25-16
2	11-16-15	REV. MODIFIED LAYOUT
1	5-14-15	REVISED PER TWP ENGR REVIEW LETTER DATED 10-3-14

LAND DEVELOPMENT PLAN FOR
MANCILL MILL ROAD COMPANY

UPPER MERION TOWNSHIP MONTGOMERY COUNTY, PA.

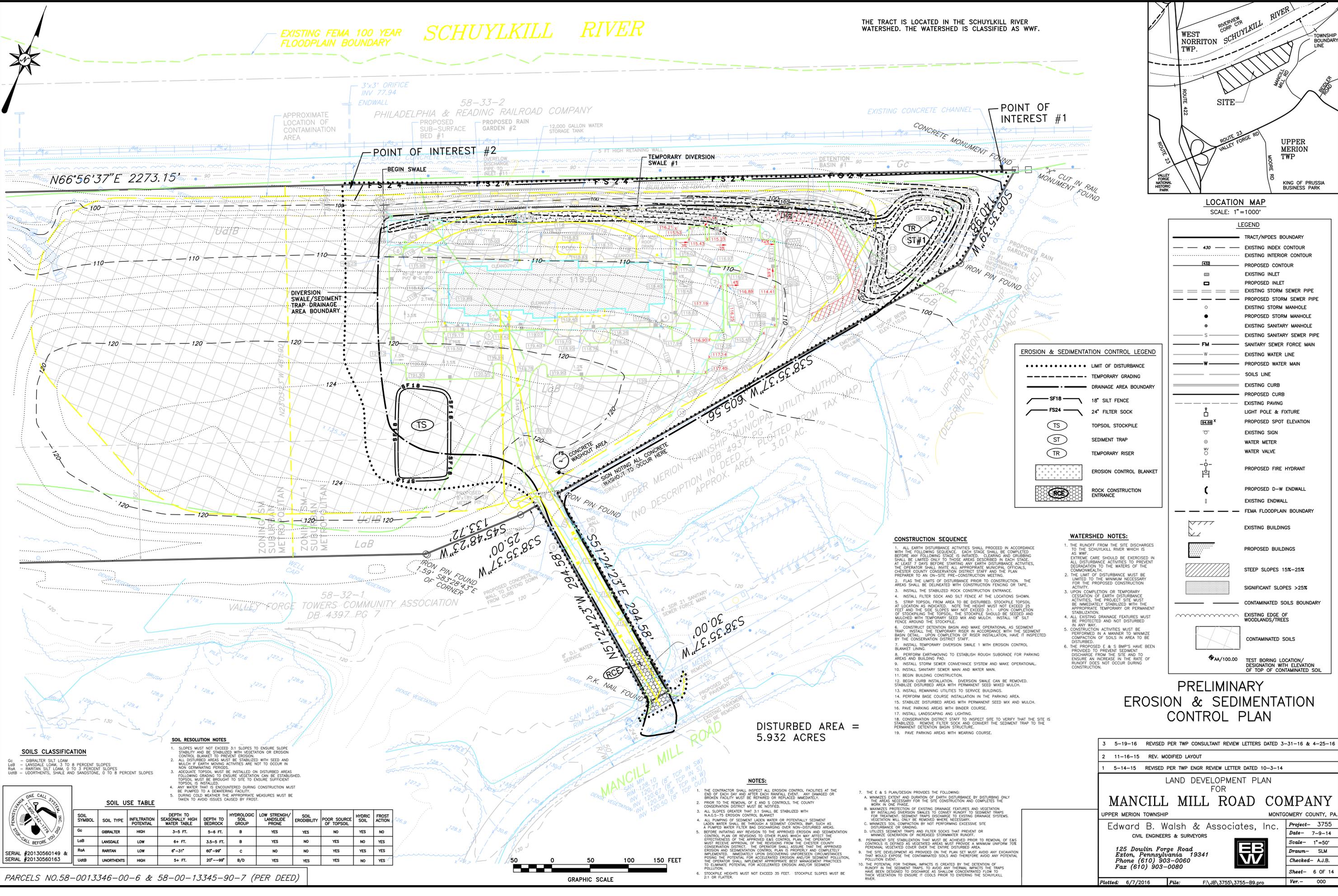
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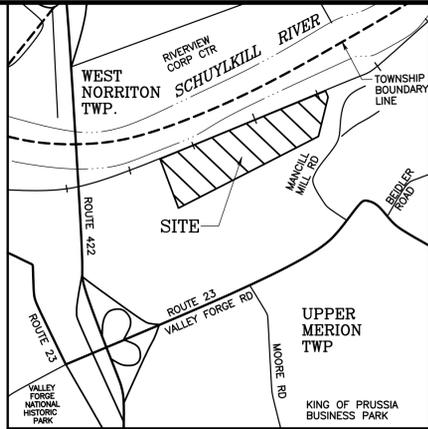




EXISTING FEMA 100 YEAR FLOODPLAIN BOUNDARY

SCHUYLKILL RIVER

THE TRACT IS LOCATED IN THE SCHUYLKILL RIVER WATERSHED. THE WATERSHED IS CLASSIFIED AS WWF.



LOCATION MAP
SCALE: 1"=1000'

LEGEND

- TRACT/NPDES BOUNDARY
- EXISTING INDEX CONTOUR
- EXISTING INTERIOR CONTOUR
- PROPOSED CONTOUR
- EXISTING INLET
- PROPOSED INLET
- EXISTING STORM SEWER PIPE
- PROPOSED STORM SEWER PIPE
- EXISTING STORM MANHOLE
- PROPOSED STORM MANHOLE
- EXISTING SANITARY MANHOLE
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- FM SANITARY SEWER MAIN
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- CONTAMINATED SOILS
- TEST BORING LOCATION/ DESIGNATION WITH ELEVATION OF TOP OF CONTAMINATED SOIL

EROSION & SEDIMENTATION CONTROL LEGEND

- LIMIT OF DISTURBANCE
- TEMPORARY GRADING
- DRAINAGE AREA BOUNDARY
- 18" SILT FENCE
- 24" FILTER SOCK
- TOPSOIL STOCKPILE
- SEDIMENT TRAP
- TEMPORARY RISER
- EROSION CONTROL BLANKET
- ROCK CONSTRUCTION ENTRANCE

- CONSTRUCTION SEQUENCE**
1. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE. AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL INVITE ALL APPROPRIATE MUNICIPAL OFFICIALS, CHESTER COUNTY CONSERVATION DISTRICT STAFF AND THE PLAN PREPARER TO AN ON-SITE PRE-CONSTRUCTION MEETING.
 2. FLAG THE LIMITS OF DISTURBANCE PRIOR TO CONSTRUCTION. THE AREAS SHALL BE DELINEATED WITH CONSTRUCTION FENCING OR TAPE.
 3. INSTALL THE STABILIZED ROCK CONSTRUCTION ENTRANCE.
 4. INSTALL FILTER SOCK AND SILT FENCE AT THE LOCATIONS SHOWN.
 5. STRIP TOPSOIL FROM AREA TO BE DISTURBED. STOCKPILE TOPSOIL AT LOCATION AS INDICATED. NOTE THE HEIGHT MUST NOT EXCEED 3 FEET AND THE SIDE SLOPES MAY NOT EXCEED 3:1. UPON COMPLETION OF STOCKPILING THE TOPSOIL, THE STOCKPILE SHOULD BE SEEDED AND MULCHED WITH TEMPORARY SEED MIX AND MULCH. INSTALL 18" SILT FENCE AROUND THE STOCKPILE.
 6. CONSTRUCT DETENTION BASIN AND MAKE OPERATIONAL AS SEDIMENT TRAP. INSTALL THE TEMPORARY RISER IN ACCORDANCE WITH THE SEDIMENT BASIN DETAIL. UPON COMPLETION OF RISER INSTALLATION, HAVE IT INSPECTED BY THE CONSERVATION DISTRICT STAFF.
 7. INSTALL TEMPORARY DIVERSION SWALE 1 WITH EROSION CONTROL BLANKET LINING.
 8. PERFORM EARTHMOVING TO ESTABLISH ROUGH SUBGRADE FOR PARKING AREAS AND BUILDING PAD.
 9. INSTALL STORM SEWER CONVEYANCE SYSTEM AND MAKE OPERATIONAL.
 10. INSTALL SANITARY SEWER MAIN AND WATER MAIN.
 11. BEGIN BUILDING CONSTRUCTION.
 12. BEGIN CURB INSTALLATION. DIVERSION SWALE CAN BE REMOVED. STABILIZE DISTURBED AREA WITH PERMANENT SEED MIXED MULCH.
 13. INSTALL REMAINING UTILITIES TO SERVICE BUILDINGS.
 14. PERFORM BASE COURSE INSTALLATION IN THE PARKING AREA.
 15. STABILIZE DISTURBED AREAS WITH PERMANENT SEED MIX AND MULCH.
 16. PAVE PARKING AREAS WITH FINISHED COURSE.
 17. INSTALL LANDSCAPING AND LIGHTING.
 18. CONSERVATION DISTRICT STAFF TO INSPECT SITE TO VERIFY THAT THE SITE IS STABILIZED. REMOVE FILTER SOCK AND CONVERT THE SEDIMENT TRAP TO THE PERMANENT DETENTION BASIN STRUCTURE.
 19. PAVE PARKING AREAS WITH WEARING COURSE.

- WATERSHED NOTES:**
1. THE RUNOFF FROM THE SITE DISCHARGES TO THE SCHUYLKILL RIVER WHICH IS AS WWF. EXTREME CARE SHOULD BE EXERCISED IN ALL DISTURBANCE ACTIVITIES TO PREVENT DEGRADATION TO THE WATERS OF THE COMMONWEALTH.
 2. THE LIMIT OF DISTURBANCE MUST BE LIMITED TO THE MINIMUM NECESSARY FOR THE PROPOSED CONSTRUCTION ACTIVITY.
 3. UPON COMPLETION OR TEMPORARY CESSATION OF EARTH DISTURBANCE ACTIVITIES, THE PROJECT SITE MUST BE IMMEDIATELY STABILIZED WITH THE APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION.
 4. ALL EXISTING DRAINAGE FEATURES MUST BE PROTECTED AND NOT DISTURBED IN ANY WAY.
 5. CONSTRUCTION ACTIVITIES MUST BE PERFORMED IN A MANNER TO MINIMIZE COMPACTION OF SOILS IN AREA TO BE DISTURBED.
 6. THE PROPOSED E & S BMP'S HAVE BEEN PROVIDED TO PREVENT SEDIMENT DISCHARGE FROM THE SITE AND TO ENSURE AN INCREASE IN THE RATE OF RUNOFF DOES NOT OCCUR DURING CONSTRUCTION.

DISTURBED AREA = 5.932 ACRES

- NOTES:**
1. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL FACILITIES AT THE END OF EACH DAY AND AFTER EACH RAINFALL EVENT. ANY DAMAGED OR BROKEN FACILITY MUST BE REPAIRED OR REPLACED IMMEDIATELY.
 2. PRIOR TO THE REMOVAL OF E AND S CONTROLS, THE COUNTY CONSERVATION DISTRICT MUST BE NOTIFIED.
 3. ALL SLOPES GREATER THAN 3:1 SHALL BE STABILIZED WITH 100% EROSION CONTROL BLANKET.
 4. ALL PUMPING OF SEDIMENT LADEN WATER OR POTENTIALLY SEPTIC LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG DISCHARGING OVER NON-DISTURBED AREAS.
 5. BEFORE INITIATING ANY REVISION TO THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED EAS CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE CHESTER COUNTY CONSERVATION DISTRICT. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES THAT COULD POTENTIALLY AFFECT THE EROSION AND/OR SEDIMENTATION CONTROL POTENTIAL, FOR ACCELERATED EROSION AND/OR SEDIMENTATION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENTATION.
 6. STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
 7. THE E & S PLAN/DESIGN PROVIDES THE FOLLOWING:
 - A. MINIMIZE EXTENT AND DURATION OF EARTH DISTURBANCE BY DISTURBING ONLY THE AREA NECESSARY FOR THE SITE CONSTRUCTION AND COMPLETES THE WORK IN ONE PHASE.
 - B. MAXIMIZE PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION BY INSTALLING DIVERSION SWALES TO CONVEY RUNOFF TO SEDIMENT TRAPS FOR TREATMENT OF THE RUNOFF AND COMPLETE THE DRAINAGE SYSTEMS. VEGETATION WILL ONLY BE REMOVED WHERE NECESSARY.
 - C. MINIMIZE SOIL COMPACTION BY NOT PERFORMING EXCESSIVE SITE DISTURBANCE OR GRADING.
 - D. UTILIZE SEDIMENT TRAPS AND FILTER SOCKS THAT PREVENT OR MINIMIZE THE GENERATION OF INCREASED STORMWATER RUNOFF.
 - E. PERMANENT SITE STABILIZATION THAT MUST BE ACHIEVED PRIOR TO REMOVAL OF E&S CONTROLS IS DEFINED AS PROVIDING A MINIMUM UNIFORM 10% PERENNIAL VEGETATED COVER OVER THE ENTIRE DISTURBED AREA.
 8. THE SITE DEVELOPMENT AS PROVIDED ON THE PLAN SET MUST AVOID ANY EXCAVATION THAT WOULD EXPOSE THE CONTAMINATED SOILS AND THEREFORE AVOID ANY POTENTIAL POLLUTION EVEN.
 9. THE POTENTIAL FOR THERMAL IMPACTS IS CREATED BY THE DETENTION OF RUNOFF IN THE SEDIMENT TRAPS. TO AVOID ANY THERMAL IMPACTS THE TRAPS HAVE BEEN DESIGNED TO DISCHARGE AS SHALLOW CONCENTRATED FLOW TO THICK VEGETATION TO ENSURE IT COOLS PRIOR TO ENTERING THE SCHUYLKILL RIVER.

SOILS CLASSIFICATION

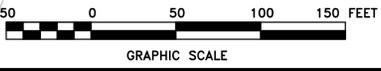
Gc = GIBRALTER SILT LOAM, 3 TO 8 PERCENT SLOPES
 LaB = LANSDALE LOAM, 3 TO 8 PERCENT SLOPES
 RoA = RARITAN SILT LOAM, 0 TO 3 PERCENT SLOPES
 UoB = UDORNTHERNS, SHALE AND SANDSTONE, 0 TO 8 PERCENT SLOPES

- SOIL RESOLUTION NOTES**
1. SLOPES MUST NOT EXCEED 3:1 SLOPES TO ENSURE SLOPE STABILITY AND BE STABILIZED WITH VEGETATION OR EROSION CONTROL BLANKET TO PREVENT EROSION.
 2. ALL DISTURBED AREAS MUST BE STABILIZED WITH SEED AND MULCH & EARTH MOVING ACTIVITIES ARE NOT TO OCCUR IN NON GERMINATING PERIODS.
 3. ADEQUATE TOPSOIL MUST BE INSTALLED ON DISTURBED AREAS FOLLOWING GRADING TO ENSURE VEGETATION CAN BE ESTABLISHED. TOPSOIL MUST BE BROUGHT TO SITE TO ENSURE SUFFICIENT TOPSOIL IS INSTALLED.
 4. ANY WATER THAT IS ENCOUNTERED DURING CONSTRUCTION MUST BE PUMPED TO A DEWATERING FACILITY.
 5. DURING COLD WEATHER THE APPROPRIATE MEASURES MUST BE TAKEN TO AVOID ISSUES CAUSED BY FROST.

SOIL USE TABLE

SOIL SYMBOL	SOIL TYPE	INFILTRATION POTENTIAL	DEPTH TO SEASONALLY HIGH WATER TABLE	DEPTH TO BEDROCK	HYDROLOGIC SOIL GROUP	LOW STRENGTH/LANDSLIDE PRONE	SOIL ERODIBILITY	POOR SOURCE OF TOPSOIL	HYDRIC SOIL	FROST ACTION
Gc	GIBRALTER	HIGH	3-5 FT.	5-6 FT.	B	YES	YES	NO	YES	NO
LaB	LANSDALE	LOW	6+ FT.	3.5-5 FT.	B	YES	NO	YES	NO	YES
RoA	RARITAN	LOW	6'-31"	60'-99"	C	NO	NO	YES	YES	YES
UoB	UDORNTHERNS	HIGH	5+ FT.	20'-99"	B/D	YES	YES	YES	NO	YES

PARCELS NO. 58-0013346-00-6 & 58-00-13345-90-7 (PER DEED)



PRELIMINARY EROSION & SEDIMENTATION CONTROL PLAN

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2	11-16-15	REV. MODIFIED LAYOUT
1	5-14-15	REVISED PER TWP ENGR REVIEW LETTER DATED 10-3-14

LAND DEVELOPMENT PLAN FOR

MANCILL MILL ROAD COMPANY

UPPER MERION TOWNSHIP MONTGOMERY COUNTY, PA

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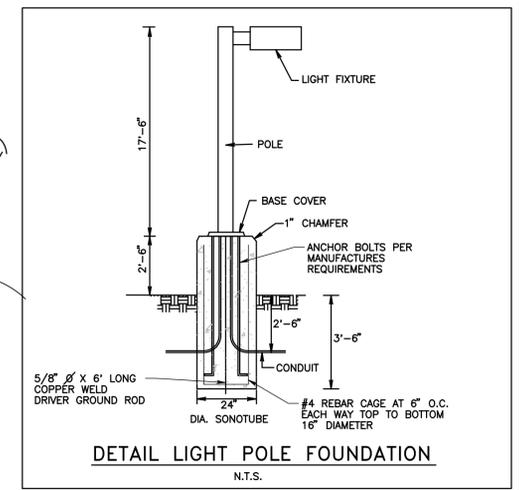
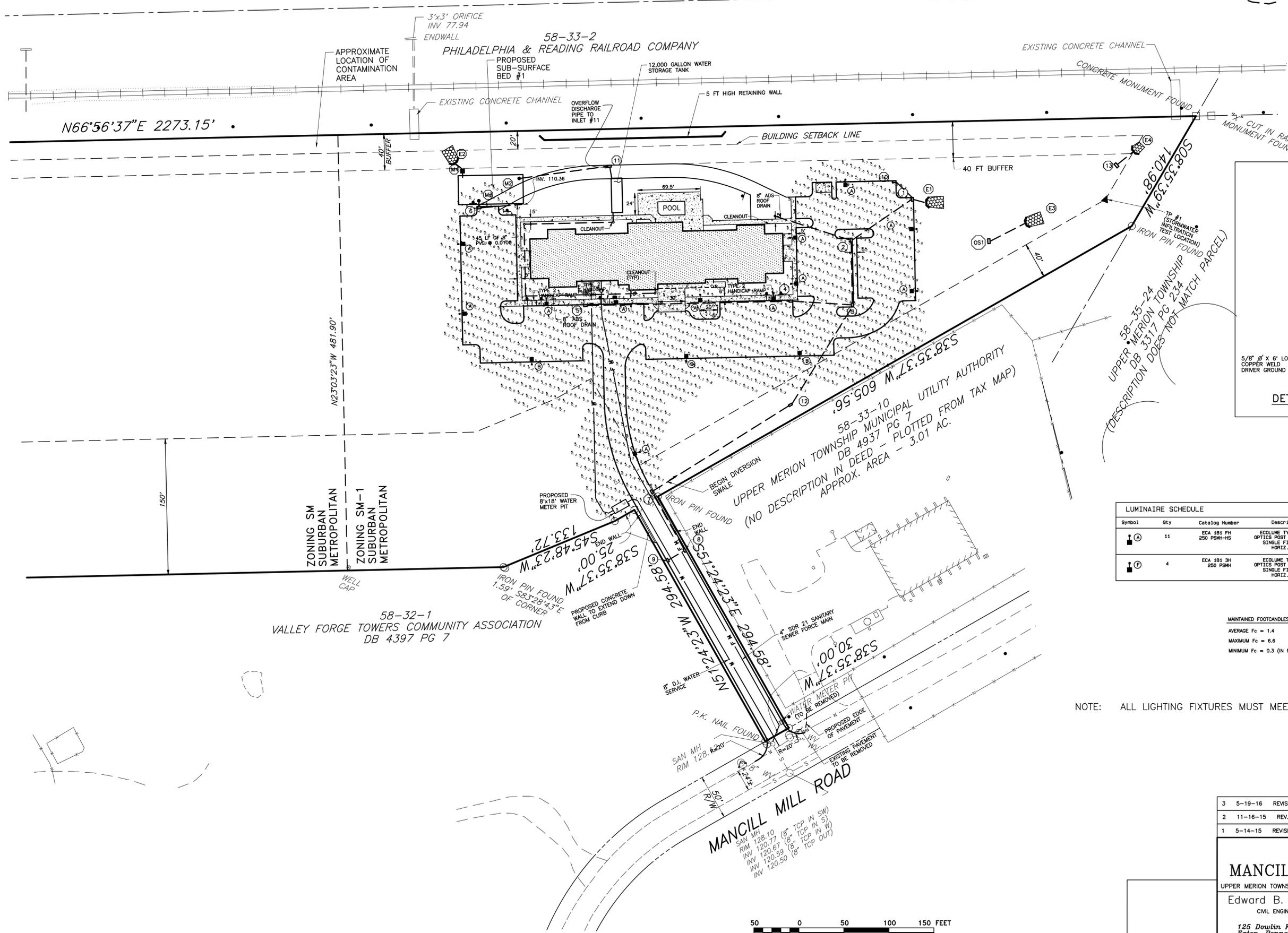
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SCHUYLKILL RIVER

EXISTING FEMA 100 YEAR FLOODPLAIN BOUNDARY



Symbol	Qty	Catalog Number	Description	Lamp	Mounting Height	File	Lumens	LLF
ⓐ	11	ECA 181 FH 250 PSMH-S	ECOLINE TYPE FH OPTICS POST MOUNT SINGLE FIXTURE HORIZ. POS.	250 WATT METAL HALIDE LAMP	20'	ECPH25M.IES	23000	0.72
ⓑ	4	ECA 181 SH 250 PSMH	ECOLINE TYPE 3 OPTICS POST MOUNT SINGLE FIXTURE HORIZ. POS.	250 WATT METAL HALIDE LAMP	20'	ECA181SH250P.IES	23000	0.72

Maintained Footcandles	Initial Footcandles
AVERAGE Fc = 1.4	AVERAGE Fc = 1.94
MAXIMUM Fc = 6.6	MAXIMUM Fc = 9.16
MINIMUM Fc = 0.3 (IN PARKING LOT)	MINIMUM Fc = 0.42

NOTE: ALL LIGHTING FIXTURES MUST MEET IESNA FULL CUTOFF REQUIREMENTS.

PRELIMINARY LIGHTING PLAN

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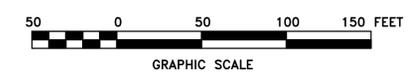
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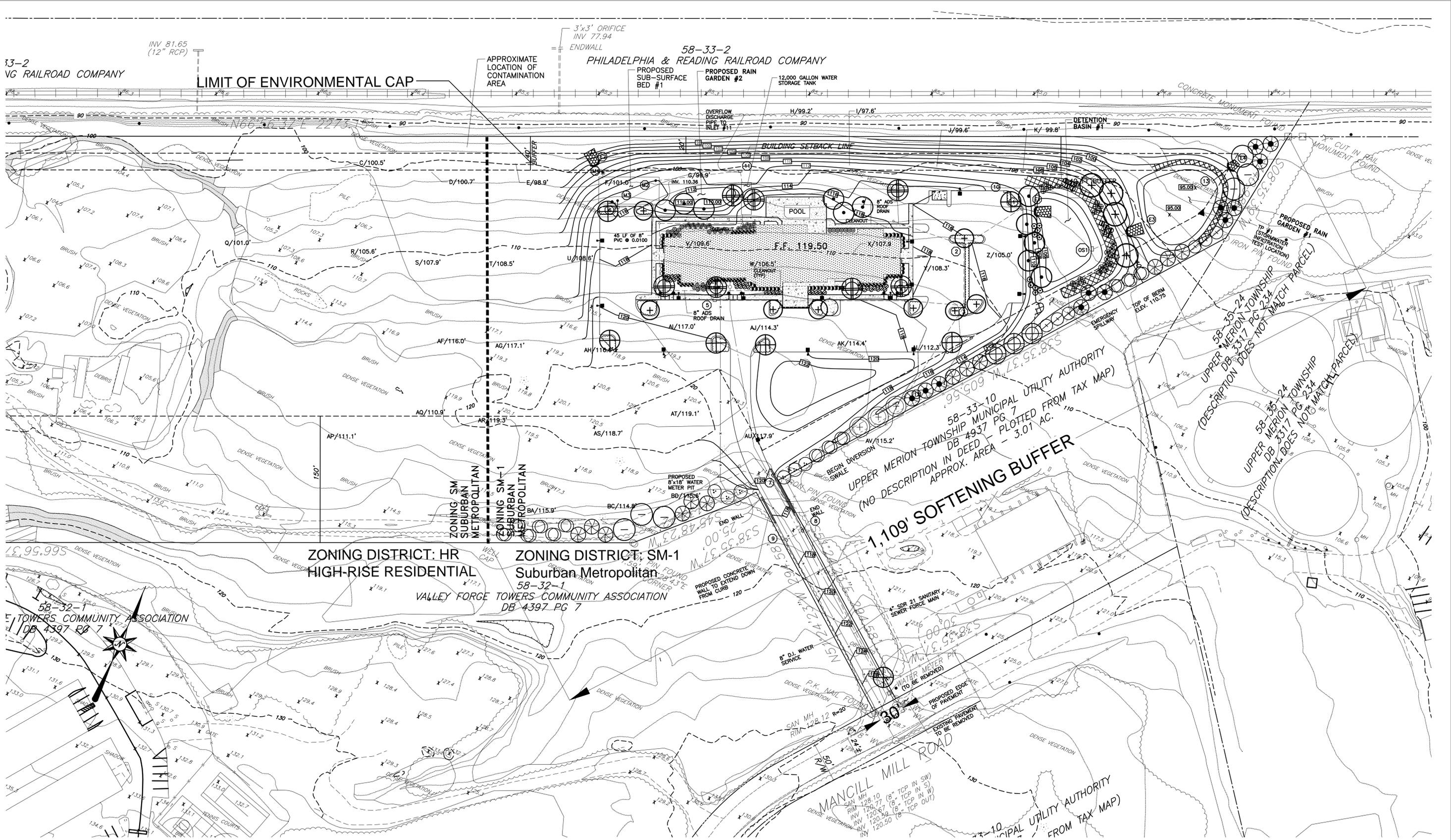
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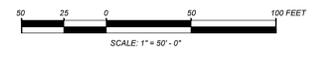


PARCELS NO.58-0013346-00-6 & 58-00-13345-90-7 (PER DEED)



OVERALL LANDSCAPE PLAN

NOTES:
 1. THIS PLAN TO BE USED FOR LANDSCAPE PURPOSES ONLY.
 2. SEE SHEET LP-2 FOR BUILDING LANDSCAPE ENLARGEMENT PLAN, NOTES, DETAILS, AND PLANT SCHEDULE.



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850 MANCILL MILL ROAD
 UPPER MERION TOWNSHIP
 MONTGOMERY COUNTY
 PENNSYLVANIA
 TOWNSHIP
 LANDSCAPE PLAN

DATE	REV	BY	DESCRIPTION
07-09-14	EMR	JJS	1" = 50'-0"
			07-09-14
			07-09-14

LP-1
 9 OF 14

REV #3 5-19-16
 REV #2 11-16-15
 REV #1 7-21-15

UPPER MERION TOWNSHIP : LANDSCAPE COMPLIANCE CHART

Chapter 145. Subdivision of Land

§145.24.1. Landscaping Requirements

§145-24.1.D. Parking Lot Landscaping:
One (1) tree for every ten parking stalls.

Each planting island shall contain one shade tree, plus shrubs, plus low growing groundcovers to cover the entire area.

121 Parking spaces / 10 = 12.1 Trees + Shrubs & Groundcovers

§145-24.1.E. Street Trees:
One (1) tree per 40 linear feet of frontage -30 L.F. of road frontage along Mancil Mill Road

§145-24.1.F. Stormwater Basins:
Two (2) trees and ten (10) shrubs per 100 linear feet of basin perimeter

Basin #1 - 450 L.F. = 9 Trees & 45 Shrubs

§145-24.1.G. Buffers and Screens.
A buffer of not less than 15' shall be established along all property lines and shall consist of pervious planting bed consisting of tall canopy trees, small understory trees and shrubs with grass or groundcover.

South and East Property Line(s): 1,109 Linear Feet
- SM-1: Suburban Metropolitan
Softening Buffer Required

§145-24.1.H. Building Plantings.
One (1) canopy tree or two (2) understory trees shall be planted for every 50 linear feet of the proposed building perimeter. Five (5) deciduous or evergreen shrubs shall be planted for every 20 linear feet of the proposed building perimeter.

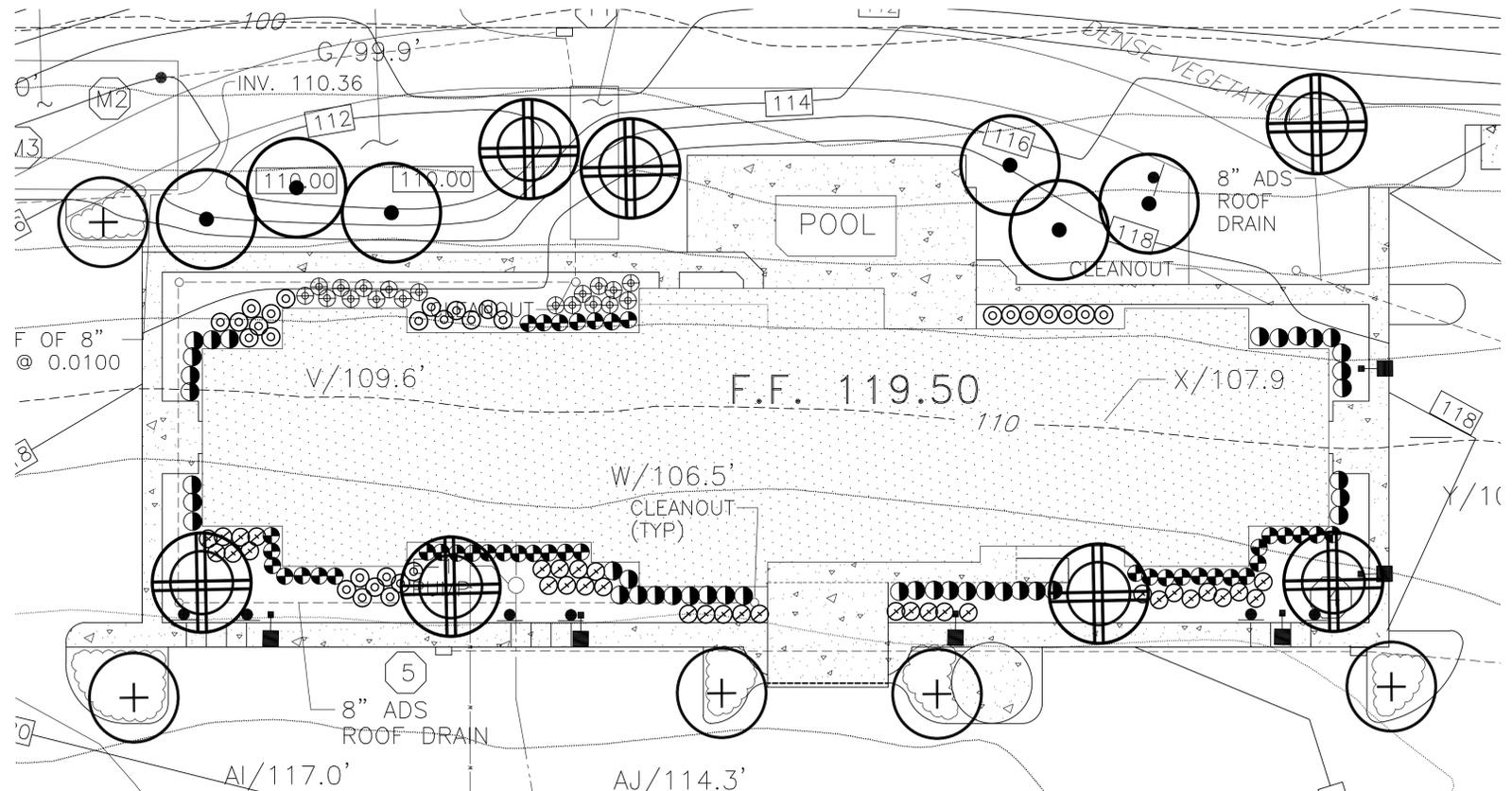
Hotel - 650' linear feet of combined building perimeter

650' / 50' = 13 Canopy Trees
650' / 20' x 5 = 162.5 Shrubs

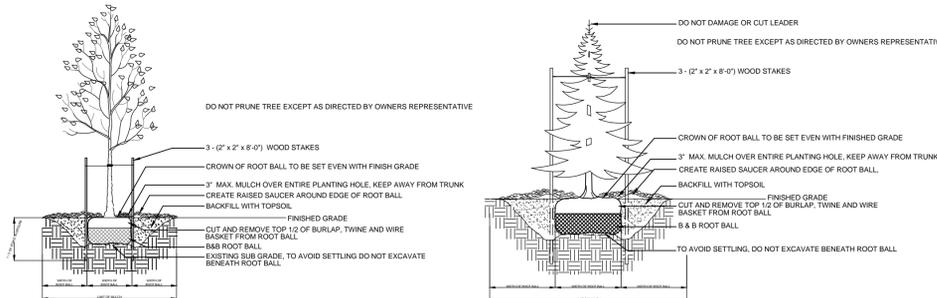
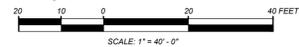
Required	Proposed
12 Shade Trees + Shrubs & Groundcover	14 Shade Trees 200 Groundcovers
1 Street Tree	1 Street Tree
9 Trees 45 Shrubs	9 Trees 45 Shrubs
12 Canopy Trees 24 Understory Trees 24 Evergreen Trees	12 Canopy Trees 24 Understory Trees 24 Evergreen Trees
13 Canopy Trees 163 Shrubs	13 Canopy Trees 163 Shrubs

General Notes:

- All plants shall be of specimen quality.
- All plants shall conform with the most current version of the "American Standard for Nursery Stock" of the American Nursery and Landscape Association.
- All plant material shall be guaranteed for a period of one (1) year.
- Location of all underground utilities shall be verified and marked in the field, prior to any digging operations.
- All trees shall be provided with a 3" deep saucer, consisting of shredded Oak bark mulch. All shrub beds shall be provided with a 3" deep layer of shredded Oak bark mulch.
- All plants shall be thoroughly watered by the Contractor at least three (3) times (in the absence of natural rainfall), prior to acceptance of planting by the Owner.
- All trees and shrubs shall be inspected and approved by the Landscape Architect, prior to planting. All plant material shall be laid out in the field by the Landscape Architect prior to installation.

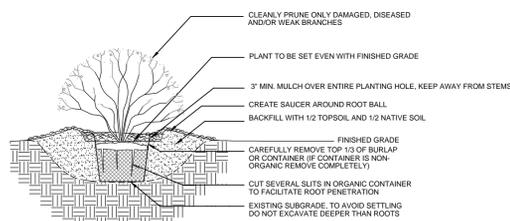


LANDSCAPE ENLARGEMENT PLAN



TYPICAL DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE

TYPICAL EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE



TYPICAL SHRUB PLANTING DETAIL
NOT TO SCALE

TOWNSHIP PLANT SCHEDULE

Quantity	Symbol	Scientific Name	Common Name	Planting Size
Parking Lot Landscaping				
8	⊕	<i>Nyssa sylvatica</i>	Blackgum	2-2 1/2" cal., 12-14ht., 6-7"sp., B&B
6	⊕	<i>Zelkova serrata</i>	Japanese Zelkova	2-2 1/2" cal., 12-14ht., 6-7"sp., B&B
200	⊕	<i>Juniperus conferta</i> 'Blue Pacific'	Blue Pacific Shore Juniper	#2 Container
Buffer Landscaping				
3	⊕	<i>Acer saccharinum</i>	Sugar Maple	2-2 1/2" cal., 12-14ht., 6-7"sp., B&B
6	⊕	<i>Liriodendron tulipifera</i>	Tulip Poplar	2-2 1/2" cal., 12-14ht., 6-7"sp., B&B
3	⊕	<i>Quercus phellos</i>	Willow Oak	2-2 1/2" cal., 12-14ht., 6-7"sp., B&B
12	⊕	<i>Picea omorika</i>	Serbian Spruce	8' ht. min., 4-5' sp., B&B
12	⊕	<i>Picea abies</i>	Norway Spruce	8' ht. min., 4-5' sp., B&B
12	⊕	<i>Cercis canadensis</i>	Redbud	8-10' ht., 4-5' sp., B&B
6	⊕	<i>Amelanchier canadensis</i>	Multi-stem Serviceberry	8-10' ht., 4-5' sp., B&B
6	⊕	<i>Cornus florida</i>	Flowering Dogwood	8-10' ht., 4-5' sp., B&B
Street Frontage Landscaping				
1	⊕	<i>Zelkova serrata</i>	Japanese Zelkova	2-2 1/2" cal., 12-14ht., 6-7"sp., B&B
Building Foundation Landscaping				
6	⊕	<i>Acer rubrum</i>	Red Maple	2-2 1/2" cal., 12-14ht., 6-7"sp., B&B
7	⊕	<i>Gleditsia triacanthos</i> var. <i>inermis</i> 'Halka'	Halka Thornless Honeylocust	2-2 1/2" cal., 12-14ht., 6-7"sp., B&B
30	⊕	<i>Itea virginica</i> 'Merlot'	Virginia Sweetspire	24" ht. min., 15-18" sp., Cont.
34	⊕	<i>Hydrangea macrophylla</i> 'Endless Summer'	Endless Summer Hydrangea	24" ht. min., 15-18" sp., Cont.
40	⊕	<i>Ilex glabra</i> 'Compacta'	Compact Inkberry	24" ht. min., 15-18" sp., Cont.
40	⊕	<i>Ilex crenata</i> 'Helleri'	Japanese Holly	24" ht. min., 15-18" sp., Cont.
19	⊕	<i>Cornus sericea</i> 'Baileyi'	Bailey's Red Twig Dogwood	24" ht. min., 15-18" sp., Cont.
Stormwater Basin Landscaping				
5	⊕	<i>Acer rubrum</i>	Red Maple	2-2 1/2" cal., 12-14ht., 6-7"sp., B&B
4	⊕	<i>Nyssa sylvatica</i>	Blackgum	2-2 1/2" cal., 12-14ht., 6-7"sp., B&B
10	⊕	<i>Clethra acuminata</i>	Summersweet	24" ht. min., 15-18" sp., Cont.
10	⊕	<i>Cornus sericea</i> 'Baileyi'	Bailey's Red Twig Dogwood	24" ht. min., 15-18" sp., Cont.
10	⊕	<i>Ilex glabra</i>	Inkberry	24" ht. min., 15-18" sp., Cont.
15	⊕	<i>Ilex verticillata</i> 'Red Sprite'	Red Sprite Winterberry	24" ht. min., 15-18" sp., Cont.
Other Landscaping				
72,000 SQ FT	⊕	Seeded Grass Area		

NOTE: ALL DISTURBED AREAS ARE TO BE FINE GRADED, RAKED AND SEEDED. CONTRACTOR IS TO VERIFY SEEDING QUANTITY PRIOR TO BID.

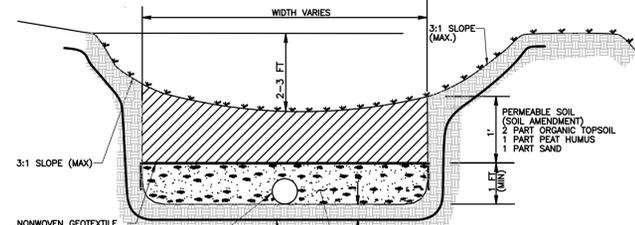
NOTES:
1. THIS PLAN TO BE USED FOR LANDSCAPE PURPOSES ONLY.
2. SEE SHEET LP-1 FOR OVERALL LANDSCAPE PLAN.



850 MANCILL MILL ROAD
UPPER MERION TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA
TOWNSHIP
LANDSCAPE PLAN

DATE	1 st 20'-0"
EMR	
DATE	07-09-14
PROJECT	LP-2
	9A OF 14

REV #3 5-19-16
REV #2 11-16-15
REV #1 7-21-15

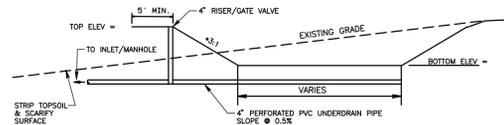


RAIN GARDEN
NOT TO SCALE

RAIN GARDEN SPECIFICATIONS

RAIN GARDEN	TOP OF SYSTEM ELEVATION	BOTTOM OF PONDING AREA/STORAGE AREA (ELEVATION)	OVERFLOW SPILLWAY ELEVATION
1	95.00	98.00	---
2	110.00	112.00	---

- NOTE:**
- AT CURB OPENINGS THE BOTTOM OF RAIN GARDEN ELEVATION VERSUS FINISH PAVEMENT ELEVATION VARIES. REFER TO SHEET 3 FOR ELEVATIONS.
 - THE OWNER/PROJECT ENGINEER MUST BE CONTACTED IF DURING INSTALLATION OF THE RAIN GARDEN ANY UNFAVORABLE CONDITIONS ARE ENCOUNTERED (I.E. GROUNDWATER AND/OR BEDROCK) TO DETERMINE THE APPROPRIATE RESOLUTION.
 - A GATE VALVE MUST BE INSTALLED AT DISCHARGE END OF UNDERDRAIN PIPE.
 - INSTALL CAP OVER UPHILL END OF UNDERDRAIN IN RAIN GARDEN.

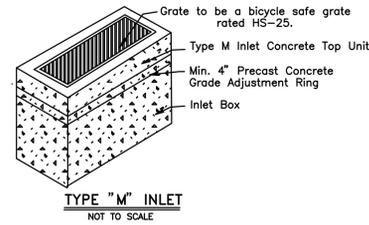


RAIN GARDEN CROSS SECTION
NOT TO SCALE

- CONSTRUCTION NOTES:**
- EXCAVATE & GRADE THE INFILTRATION AREA USING LIGHT TRACK EQUIPMENT. NOTE: IF GROUNDWATER IS ENCOUNTERED THE OWNER/ENGINEER SHOULD BE CONTACTED FOR A SOLUTION.
 - INSTALL IMPERMEABLE LINER IN BOTTOM AND SIDES OF RAIN GARDEN.
 - INSTALL UNDERDRAIN AND GRAVEL BACKFILL. EXTREME CARE MUST BE TAKEN TO ENSURE LINER IS NOT DAMAGED.
 - PLACE TOPSOIL.
 - AFTER FINAL GRADING AND PLACEMENT OF TOPSOIL, THE BOTTOM SHOULD BE DEEPLY TILLED BY MEANS OF ROTARY TILLERS OR DISC HARROWS.
 - USE TEMPORARY SEEDING SPECIFICATION FOR THE AREAS WITHIN THE INFILTRATION AREA AND PERMANENT SEEDING FOR ALL OTHER AREAS.
 - DURING CONSTRUCTION REMOVE ALL SILT THAT ENTERS THE INFILTRATION AREA AND REPLACE WITH GRANULAR MATERIAL AND SEED PER "TEMPORARY SEEDING SPECIFICATIONS".
 - AFTER STABILIZATION OF THE AREAS DRAINING TO THE INFILTRATION AREA, REMOVE THE BOTTOM OF THE INFILTRATION AREA AND LIGHTLY TILL AND SEED PER "RAIN GARDEN SEEDING SPECIFICATIONS".

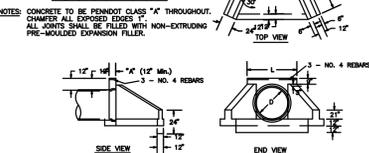
RAIN GARDEN CROSS SECTION
NOT TO SCALE

THIS IS A CRITICAL BMP THAT MUST BE INSPECTED DURING CONSTRUCTION BY THE PROJECT ENGINEER.

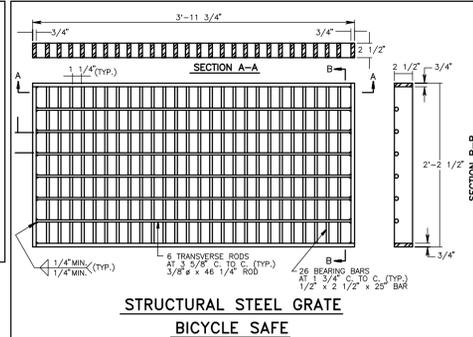


TYPE "M" INLET
NOT TO SCALE

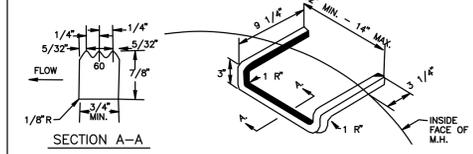
D	L	W	A
15"	3.5'	3.0'	12"
18"	4.0'	3.0'	12"
21"	4.5'	3.0'	12"
24"	5.0'	3.0'	12"
30"	5.5'	4.0'	12"
34"	5.8'	4.6'	12"
42"	6.5'	5.6'	12"
48"	7.0'	6.5'	12"
54"	7.5'	8.0'	12"
60"	8.1'	9.0'	15"
72"	9.2'	11.5'	15"



TYPE D-W ENDWALL
NOT TO SCALE

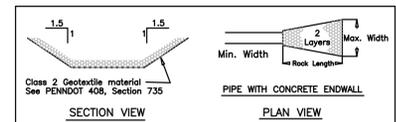


STRUCTURAL STEEL GRATE BICYCLE SAFE



MANHOLE STEP NOTES:

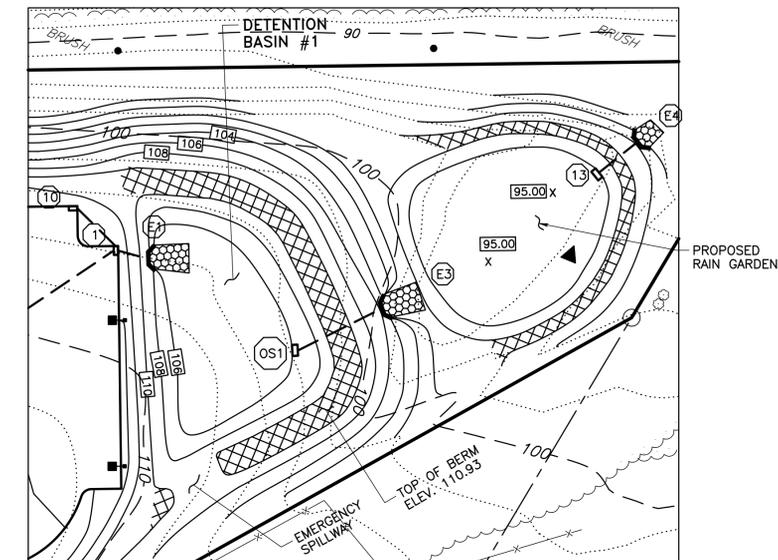
- STEPS TO BE FABRICATED OF ALUMINUM ALLOY 6061-T6. PORTIONS OF STEPS TO BE EMBEDDED IN WALLS OF MANHOLES OR CHAMBERS TO BE DIPPED IN HEAVY BODIED BITUMINOUS PAINT, OR ELSE PROVIDED WITH PLASTIC INSERT.
- STEEL REINFORCED POLYPROPYLENE STEPS ARE AN OPTIONAL STYLE.



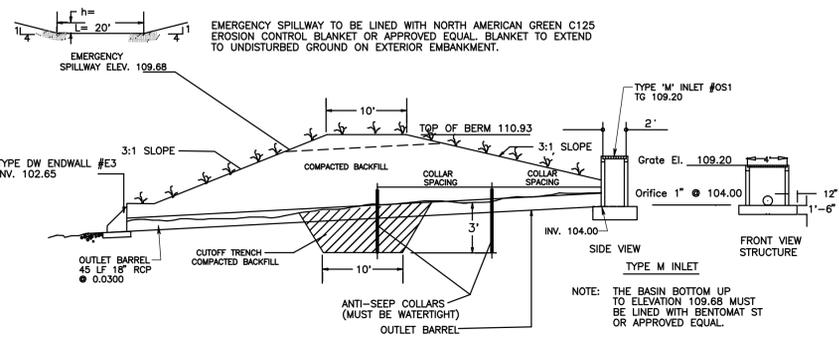
DETAIL ROCK ENERGY DISSIPATOR

ROCK ENERGY DISSIPATOR TABULATION

ENDWALL NO.	LENGTH	MIN. WIDTH	MAX. WIDTH	AVE. SIZE ROCK	GRADATION (N.S.A. NO.)	PLACEMENT THICKNESS
E-1	9.5'	6.0'	9.8'	3"	R-3	9"
E-2	8'	3.75'	11.75'	3"	R-3	9"
E-3	7'	4.5'	7.3'	3"	R-3	9"
E-4	9'	4.5'	13.5'	6"	R-4	18"

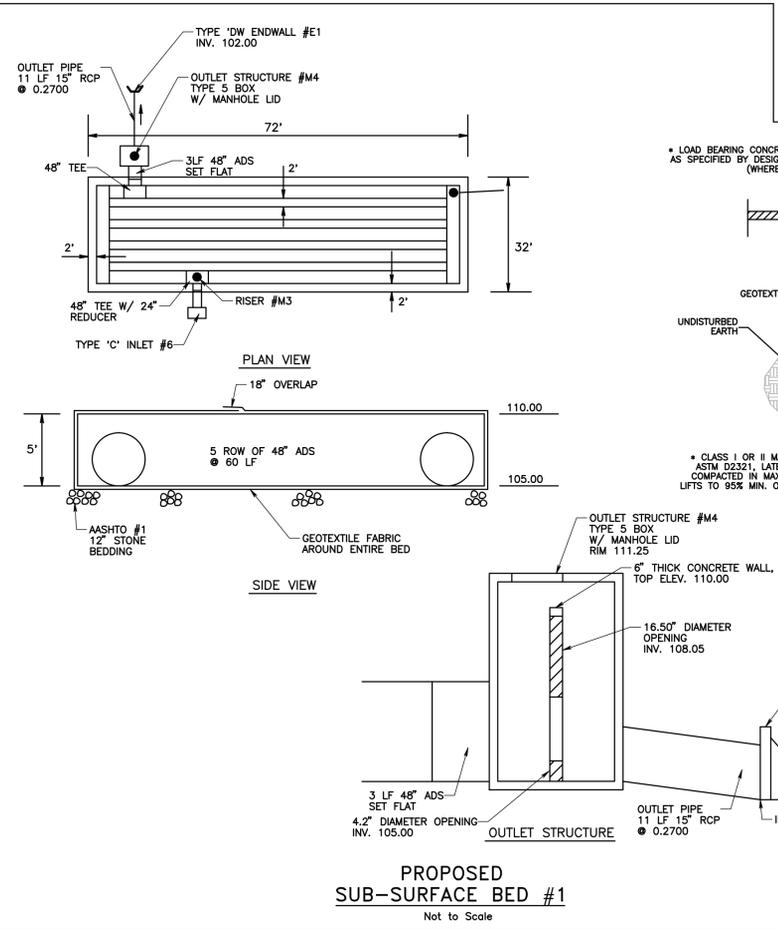


DETECTION BASIN #1

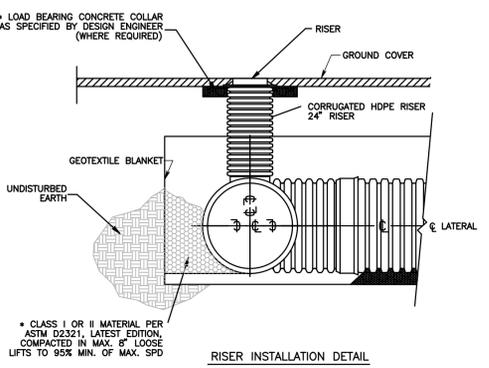


BASIN #1 EMBANKMENT CROSS SECTION
Not to Scale

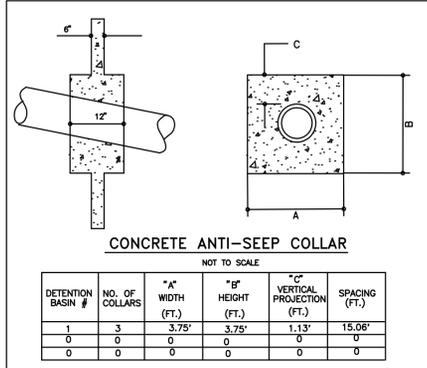
PROPOSED DETENTION BASIN #1 DETAIL
Not to Scale



PROPOSED SUB-SURFACE BED #1
Not to Scale



RISER INSTALLATION DETAIL



CONCRETE ANTI-SEEP COLLAR
NOT TO SCALE

DETECTION BASIN #	NO. OF COLLARS	"A" WIDTH (FT.)	"B" HEIGHT (FT.)	"C" VERTICAL PROJECTION (FT.)	SPACING (FT.)
1	3	3.75'	3.75'	1.13'	15.06'
2	0	0	0	0	0
3	0	0	0	0	0

PRELIMINARY DETAIL SHEET POST CONSTRUCTION STORMWATER MANAGEMENT

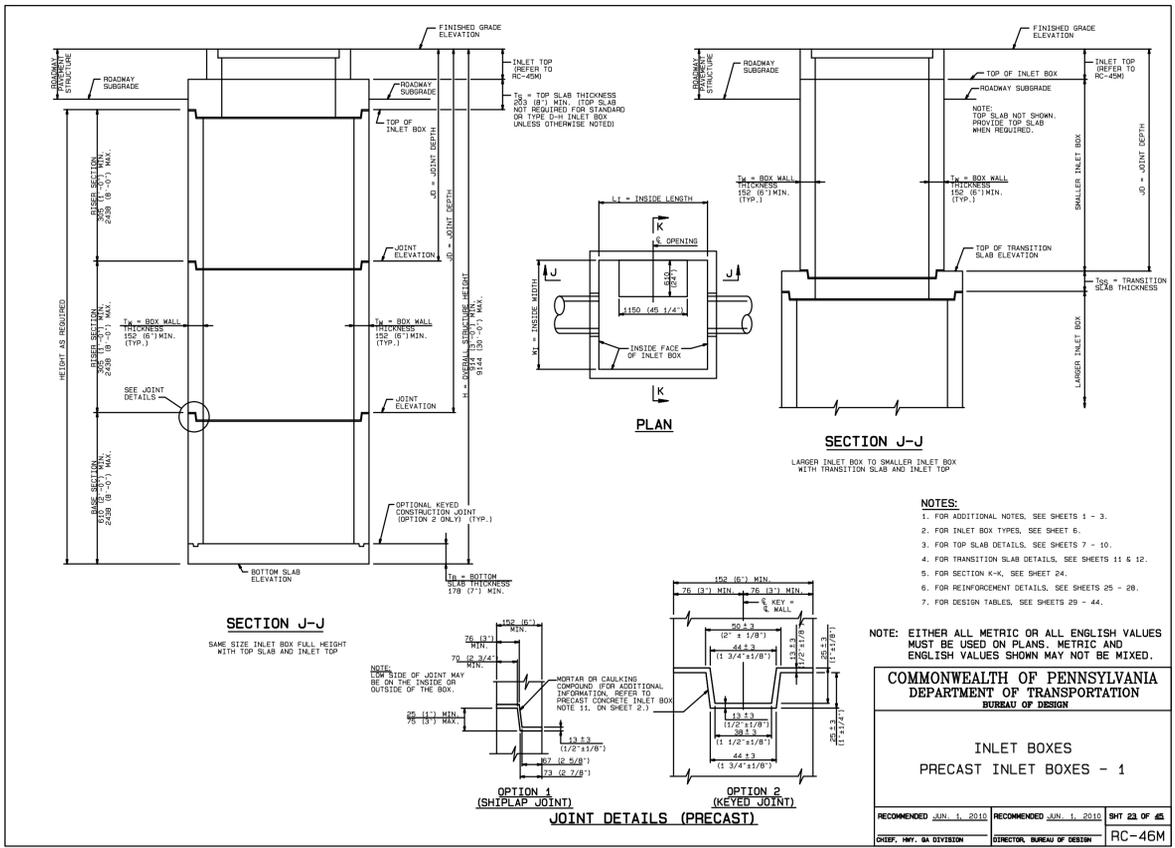
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2	11-16-15	REV. MODIFIED LAYOUT
1	5-14-15	REVISED PER TWP ENGR REVIEW LETTER DATED 10-3-14

LAND DEVELOPMENT PLAN FOR
MANCILL MILL ROAD COMPANY
UPPER MERION TOWNSHIP MONTGOMERY COUNTY, PA.
Edward B. Walsh & Associates, Inc.
CIVIL ENGINEERS & SURVEYORS

Project- 3755
Date- 7-9-14
Scale- N/A
Drawn- SLM
Checked- A.J.B.
Sheet- 10 OF 14
Ver.- 000

125 Down Forge Road
Easton, Pennsylvania 19341
Phone (610) 303-0060
Fax (610) 903-0080

Plotted: 6/7/2016 File: F:\JB\3755\3755-B9.pro



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF DESIGN

INLET BOXES
PRECAST INLET BOXES - 1

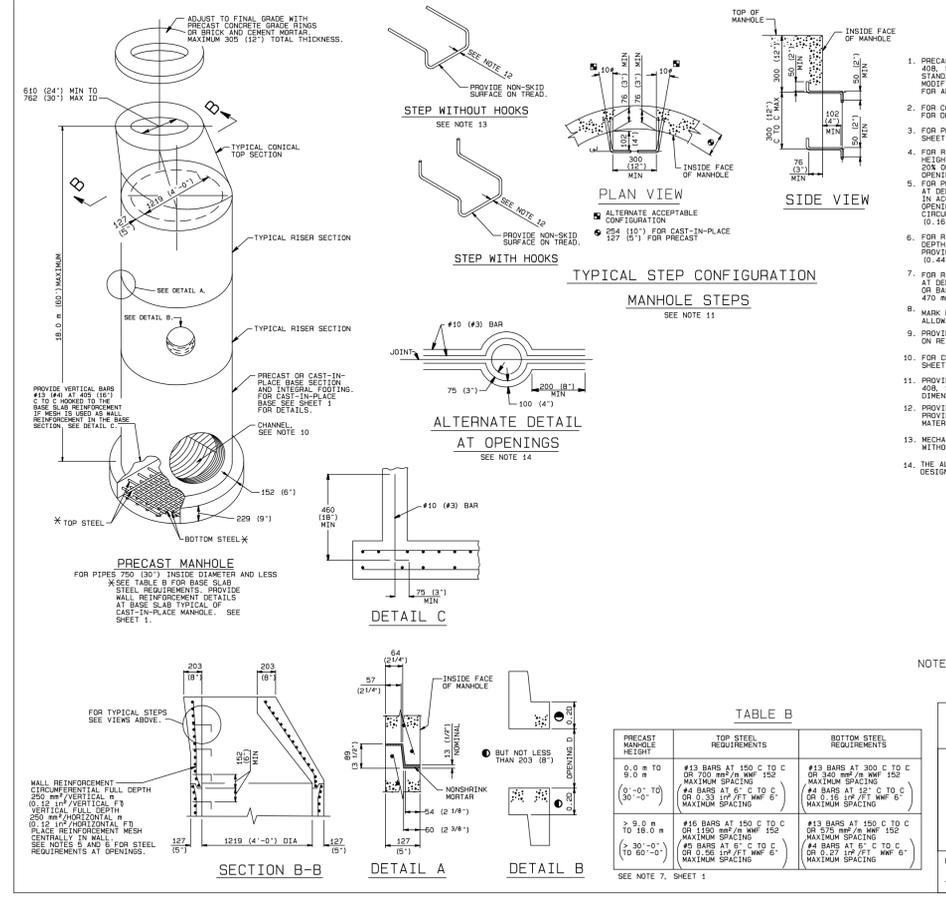
RECOMMENDED JUN. 1, 2010
RECOMMENDED JUN. 1, 2010
SHT 23 OF 43

CHIEF, HWY. SA DIVISION DIRECTOR, BUREAU OF DESIGN RC-45M

STORMWATER RUNOFF FLOW RATE SUMMARY

PRE PO#1	2 YEAR	5 YEAR	10 YEAR	25 YEAR	50 YEAR	100 YEAR
0.536	1.743	3.025	5.230	7.257	9.858	
POST BASIN 1	6.406	10.21	13.48	18.52	22.77	27.89
ROUTED BASIN #1	0.046	0.054	0.059	0.618	1.968	8.767
BYPASS PO#1	0.117	0.296	0.463	0.742	0.993	1.308
TOTAL POST	0.154	0.338	0.510	0.795	2.091	9.657

PRE PO#2	2 YEAR	5 YEAR	10 YEAR	25 YEAR	50 YEAR	100 YEAR
1.534	3.005	4.326	6.506	8.422	10.80	
POST BED 1	2.955	4.482	5.730	7.617	9.191	11.07
ROUTED BED #1	0.507	0.647	0.750	3.357	6.251	8.558
BYPASS PO#2	0.264	0.528	0.766	1.152	1.499	1.930
TOTAL POST	0.758	1.159	1.459	4.508	7.750	10.49

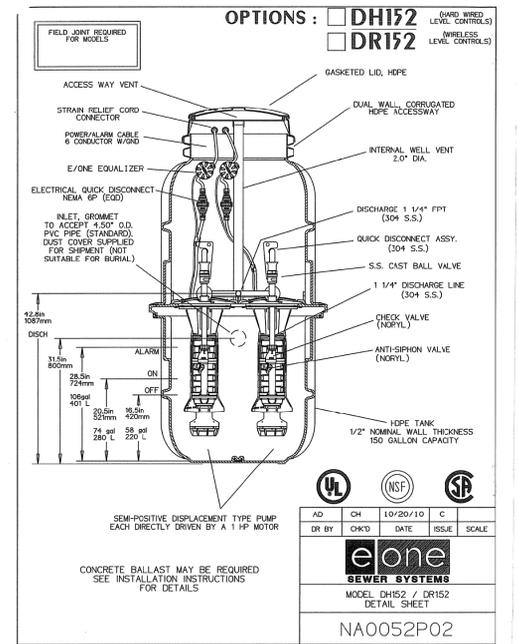


COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF DESIGN

STANDARD MANHOLES
PRECAST MANHOLES & MANHOLE STEPS

RECOMMENDED JUN. 1, 2010
RECOMMENDED JUN. 1, 2010
SHT 3 OF 5

CHIEF, HWY. SA DIVISION DIRECTOR, BUREAU OF DESIGN RC-39M



E/ONE DUPLEX GRINDER PUMP DETAIL

PRELIMINARY
DETAIL SHEET

3	5-19-16	REVISED PER TWP CONSULTANT REVIEW LETTERS DATED 3-31-16 & 4-25-16
2	11-16-15	REV. MODIFIED LAYOUT
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LAND DEVELOPMENT PLAN
FOR
MANCILL MILL ROAD COMPANY
UPPER MERION TOWNSHIP MONTGOMERY COUNTY, PA.

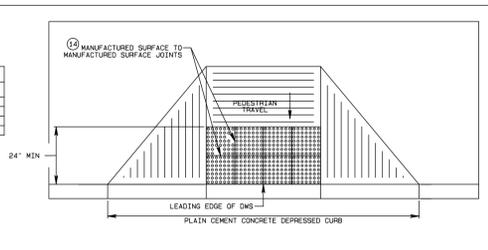
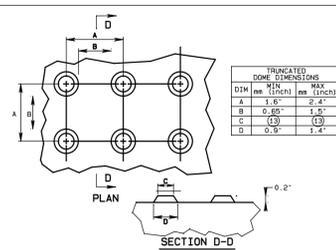
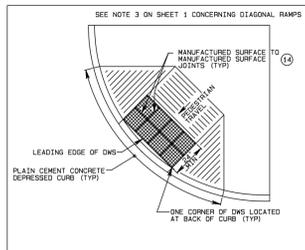
Edward B. Walsh & Associates, Inc.
CIVIL ENGINEERS & SURVEYORS

Project- 3755
Date- 7-9-14
Scale- N/A
Drawn- SLM
Checked- A.J.B.
Sheet- 11 OF 14

125 Down Forge Road
Eaton, Pennsylvania 17941
Phone (610) 303-0060
Fax (610) 903-0080

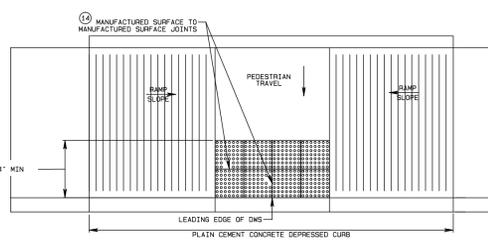
EBW

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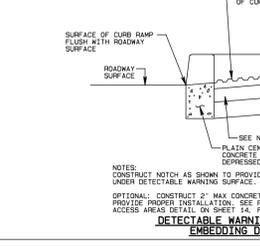


DETECTABLE WARNING SURFACE (DWS) TRUNCATED DOME DETAILS

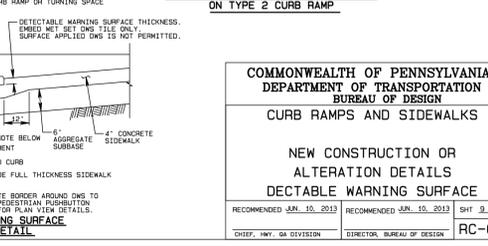
DETECTABLE WARNING SURFACE (DWS) ON TYPE 1 CURB RAMP



DETECTABLE WARNING SURFACE (DWS) ON TYPE 2 CURB RAMP



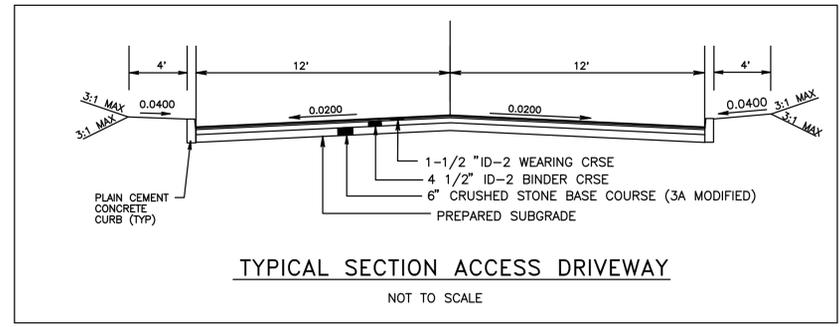
DETECTABLE WARNING SURFACE EMBEDDING DETAIL



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION BUREAU OF DESIGN CURB RAMP AND SIDEWALKS

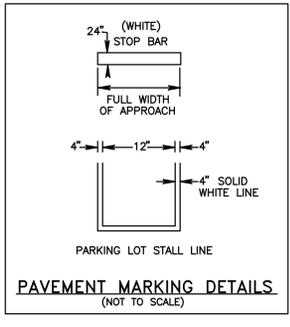
NEW CONSTRUCTION OR ALTERATION DETAILS DETECTABLE WARNING SURFACE

RC-67M



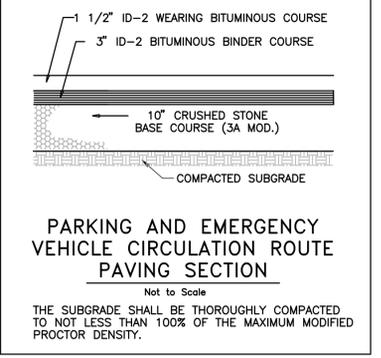
TYPICAL SECTION ACCESS DRIVEWAY

NOT TO SCALE



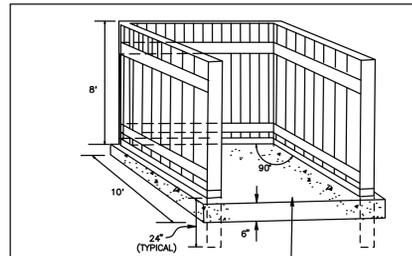
PAVEMENT MARKING DETAILS

(NOT TO SCALE)



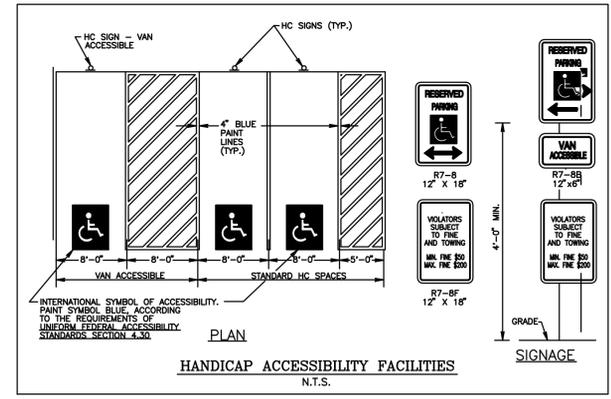
PARKING AND EMERGENCY VEHICLE CIRCULATION ROUTE PAVING SECTION

THE SUBGRADE SHALL BE THOROUGHLY COMPACTED TO NOT LESS THAN 100% OF THE MAXIMUM MODIFIED PROCTOR DENSITY.



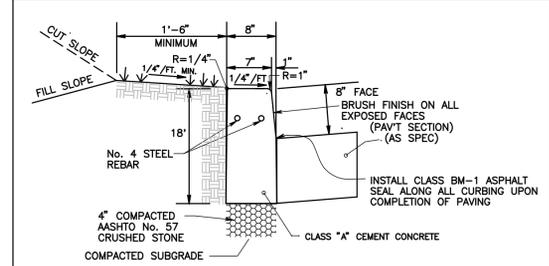
TRASH ENCLOSURE SCREEN DETAIL

N.T.S.



HANDICAP ACCESSIBILITY FACILITIES

N.T.S.

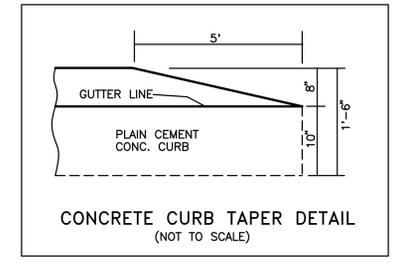


STANDARD STRAIGHT CONCRETE CURB DETAIL

NOT TO SCALE

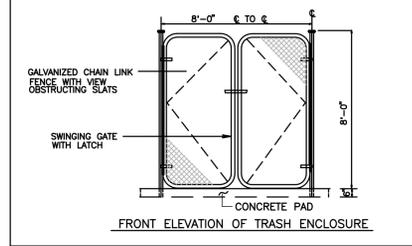
NOTE: STEEL REBAR TO BE INSTALLED AT STORM INLET CONNECTIONS, SHARP RADI AND DEPRESSED CURB LOCATIONS. CURB TO HAVE AN EXPANSION JOINT EVERY 10 FEET AND A JOINT FILLER EVERY 50 FEET.

CONCRETE SPECIFICATIONS: SHALL BE CONSTRUCTED OF MONOLITHIC CONCRETE. SAID CONCRETE SHALL HAVE A LOW SLUMP WITH A MAXIMUM SLUMP OF FOUR INCHES. A COMPRESSIVE STRENGTH OF 3,000 POUNDS PER SQUARE INCH (PSI) MINIMUM IN 28 DAYS. A LOW WATER-CEMENT RATIO OF 0.45 OR LESS, ENTRAINED AIR OF 5% TO 8% TOTAL AIR CONTENT AND A MINIMUM CEMENTITIOUS MATERIALS CONTENT OF 564 POUNDS PER CUBIC YARD (lb/cu yd) OF CONCRETE. CERTIFICATION FOR THE CONCRETE MIX SHALL BE FURNISHED IF REQUIRED BY THE ENGINEER.

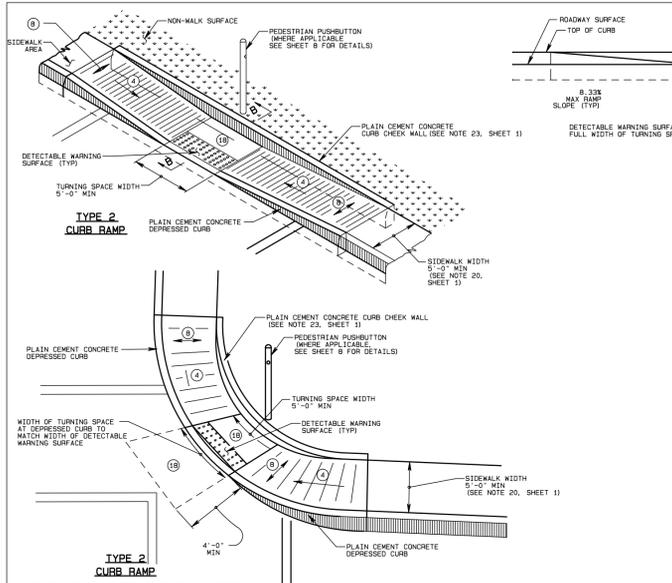


CONCRETE CURB TAPER DETAIL

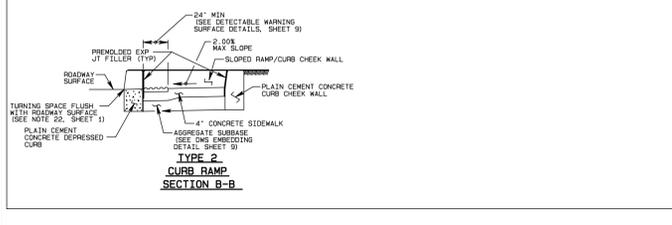
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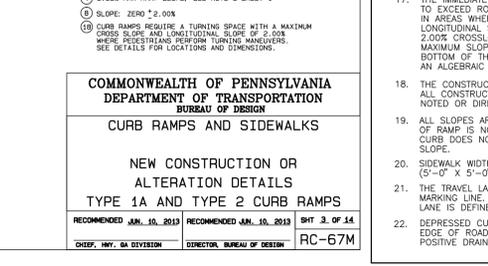
FRONT ELEVATION OF TRASH ENCLOSURE



TYPE 2 CURB RAMP ELEVATION



TYPE 2 CURB RAMP SECTION B-B

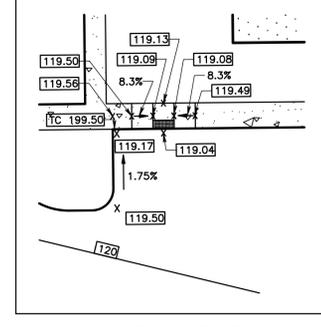


COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION BUREAU OF DESIGN CURB RAMP AND SIDEWALKS

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

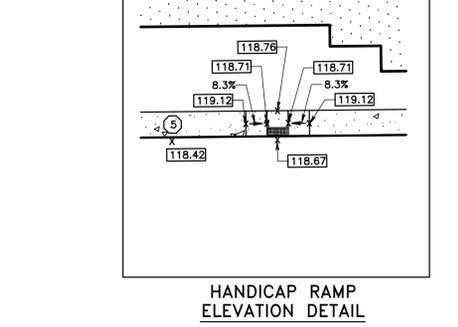
RC-67M

- NOTES**
1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTIONS 350, 409, 630, 676 AND 694.
 2. PROVIDE EXPANSION JOINT MATERIAL 13 (1/2") THICK WHERE CURB RAMP ADJONS ANY RIGID PAVEMENT, SIDEWALK OR STRUCTURE WITH THE TOP OF JOINT FULLER FLUSH WITH ADJACENT CONCRETE SURFACE.
 3. CONSTRUCT DIAGONAL CURB RAMPS WITH A 1220 (4'-0") CLEARSPACE OUTSIDE OF TRAVEL LANES AT THE BOTTOM OF THE RAMP. IF DIAGONAL CURB RAMPS ARE PROVIDED AT MARKED CROSSINGS, THE 1220 (4'-0") CLEAR SPACE IS LOCATED WITHIN THE MARKINGS AND OUTSIDE OF THE TRAVEL LANES. SEE SHEET 7 FOR CROSSWALK DETAILS.
 4. SEAL JOINTS WITH AN APPROVED SEALING MATERIAL.
 5. PROVIDE SLIP RESISTANT TEXTURE ON CURB RAMP BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP. EXTEND TEXTURE THE FULL WIDTH AND LENGTH OF THE CURB RAMP INCLUDING FLARED SIDE RAMPS.
 6. MODIFY CONSTRUCTION DETAILS TO ADAPT DIMENSIONS TO EXISTING CURB HEIGHTS WHERE THE CURB IS LESS THAN THE STANDARD 200 (8") HEIGHT.
 7. CURB RAMP AND SIDE FLARE LENGTHS ARE VARIABLE AND BASED ON CURB HEIGHT AND THE SIDEWALK SLOPE.
 8. IT MAY BE NECESSARY TO LIMIT THE RUN OF A PARALLEL OR PERPENDICULAR CURB RAMP IN ORDER TO AVOID CHASING GRADE INDEFINITELY WHEN TRAVERSING THE HEIGHT OF CURB. RAMP LENGTH NOT TO EXCEED 4500 (15'-0"). ADJUST RAMP SLOPE AS NEEDED TO PROVIDE ACCESS TO THE MAXIMUM EXTENT POSSIBLE.
 9. MEASURE AND PAY FOR DEPRESSED CURB IN ACCORDANCE WITH SECTION 630.4.
 10. THE DETAILS DEPICT PEDESTRIAN PUSH BUTTON POLES TO ILLUSTRATE THE PREFERRED PLACEMENT OF PEDESTRIAN PUSH BUTTONS. PEDESTRIAN PUSH BUTTONS ARE TO BE INSTALLED WHERE APPLICABLE.
 11. CONSTRUCT BUILT-UP CURB RAMP OF BITUMINOUS MATERIAL AS INDICATED, INCLUDING SURFACE PREPARATION AND TACK COAT, AS REQUIRED.
 12. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED. USE CUSTOMARY UNITS IN () PARENTHESIS.
 13. ALIGN DETECTABLE WARNING DOMES ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF THE RAMP AND PERPENDICULAR TO CURB.
 14. PROVIDE DETECTABLE WARNING SURFACES (DWS) 610 (24") MINIMUM (IN THE DIRECTION OF PEDESTRIAN TRAVEL) ACROSS FULL WIDTH OF RAMP AT THE GRADE BREAK NEAR STREET EDGE. PROVIDE DWS THAT CONTRAST VISUALLY WITH ADJACENT WALKWAY SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT FOR THE FULL WIDTH OF RAMP.
 15. FOR NEW CONSTRUCTION, DO NOT EXCEED 2.00% CROSS SLOPE ON THE CURB RAMP OR ACCESSIBLE ROUTE.
 16. FOR NEW CONSTRUCTION AND ALTERATIONS, CONSTRUCT CURB RAMP AND FLARE SLOPES WITH THE FLATTEST SLOPE POSSIBLE. THE SLOPES INDICATED IN THE DETAILS SHOW THE MAX SLOPE ALLOWABLE. SLOPES THAT EXCEED THOSE INDICATED IN THE DETAILS, OR CONTRACT DOCUMENTS AS APPLICABLE, WILL NOT BE ACCEPTED AND WILL BE RECONSTRUCTED.
 17. THE IMMEDIATE ADJOINING SURFACE AT THE BOTTOM AND TOP OF CURB RAMPS IS NOT TO EXCEED ROADWAY PROFILE SLOPE WHEN LOCATED ADJACENT TO THE ROADWAY. IN AREAS WHERE THE ADJOINING SURFACE IS NOT ADJACENT TO THE ROADWAY, THE LONGITUDINAL SLOPE IS NOT TO EXCEED 5.00% FOR ALL LOCATIONS DO NOT EXCEED 2.00% CROSS SLOPE. FOR LOCATIONS THAT REQUIRE A TURNING MANUEVER, THE MAXIMUM SLOPE IS 2.00% IN ALL DIRECTIONS. THE CHANGE IN GRADE AT THE BOTTOM OF THE CURB RAMP AND ADJOINING ROAD SURFACE IS NOT TO EXCEED AN ALGEBRAIC DIFFERENCE OF 11.00%. SEE SHEET 8 FOR DETAILS.
 18. THE CONSTRUCTION STANDARDS DEPICTED ARE MOST APPROPRIATE FOR NEW CONSTRUCTION. ALL CONSTRUCTION MUST MEET THE STANDARDS CONTAINED HEREIN UNLESS OTHERWISE NOTED OR DIRECTED.
 19. ALL SLOPES ARE MEASURED WITH RESPECT TO A LEVEL PLANE. THEREFORE, THE LENGTH OF RAMP IS NOT SOLELY DEPENDANT ON THE HEIGHT OF CURB. (FOR EXAMPLE, A 150 (6") CURB DOES NOT NECESSARILY MEAN A RAMP LENGTH OF 1800 (6'-0") FOR A 12:1 (1:12) SLOPE.
 20. SIDEWALK WIDTH MAY BE REDUCED TO 1220 (4'-0"), WHEN PASSING AREAS 1525 X 1525 (5'-0" X 5'-0") ARE PROVIDED EVERY 61 METERS (200').
 21. THE TRAVEL LANE IS DEFINED BY THE OUTSIDE EDGE OF THE WHITE PAVEMENT MARKING LINE. IF A WHITE PAVEMENT MARKING LINE DOES NOT EXIST, THE TRAVEL LANE IS DEFINED BY THE CONTRACT DOCUMENTS.
 22. DEPRESSED CURB FOR CURB RAMPS MUST BE FLUSH TO ADJACENT ROADWAY. EDGE OF ROAD ELEVATIONS AT THE FLOW LINE SHALL BE GRADED TO ENSURE POSITIVE DRAINAGE AND PREVENT PONDING.



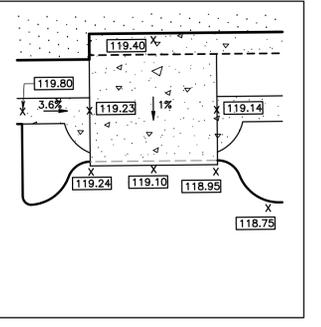
HANDICAP RAMP ELEVATION DETAIL

SCALE: 1"=20"



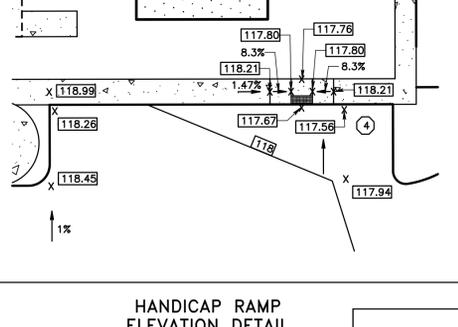
HANDICAP RAMP ELEVATION DETAIL

SCALE: 1"=20"



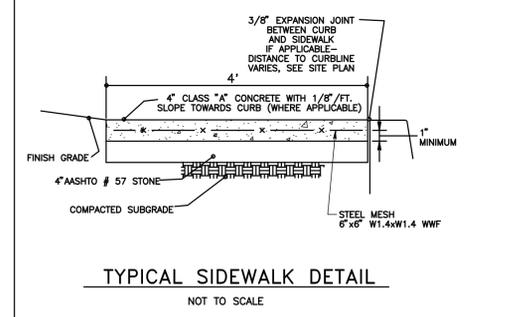
BUILDING ENTRANCE SIDEWALK ELEVATION DETAIL

SCALE: 1"=20"



HANDICAP RAMP ELEVATION DETAIL

SCALE: 1"=20"



TYPICAL SIDEWALK DETAIL

NOT TO SCALE

NOTE: 1/2" EXPANSION JOINTS MUST BE PROVIDED AT 20' C. TO C. (MAX) AND THAT TRANSVERSE CONTROL JOINTS MUST BE PROVIDED AT 5' C. TO C. (MAX). THE SUBGRADE SHALL BE THOROUGHLY COMPACTED TO NOT LESS THAN 100% OF THE MAXIMUM MODIFIED PROCTOR DENSITY.

CONCRETE SPECIFICATIONS: SHALL BE CONSTRUCTED OF MONOLITHIC CONCRETE. SAID CONCRETE SHALL HAVE A LOW SLUMP WITH A MAXIMUM SLUMP OF FOUR INCHES. A COMPRESSIVE STRENGTH OF 4,000 POUNDS PER SQUARE INCH (PSI) IN 28 DAYS. A LOW WATER-CEMENT RATIO OF 0.45 OR LESS, ENTRAINED AIR OF 5% TO 8% TOTAL AIR CONTENT AND A MINIMUM CEMENTITIOUS MATERIALS CONTENT OF 564 POUNDS PER CUBIC YARD (lb/cu yd) OF CONCRETE. CERTIFICATION FOR THE CONCRETE MIX SHALL BE FURNISHED IF REQUIRED BY THE ENGINEER.

PRELIMINARY DETAIL SHEET

3	5-19-16	REVISED PER TWP CONSULTANT REVIEW LETTERS DATED 3-31-16 & 4-25-16
2	11-16-15	REV. MODIFIED LAYOUT
1	5-14-15	REVISED PER TWP ENGR REVIEW LETTER DATED 10-3-14

LAND DEVELOPMENT PLAN FOR MANCILL MILL ROAD COMPANY

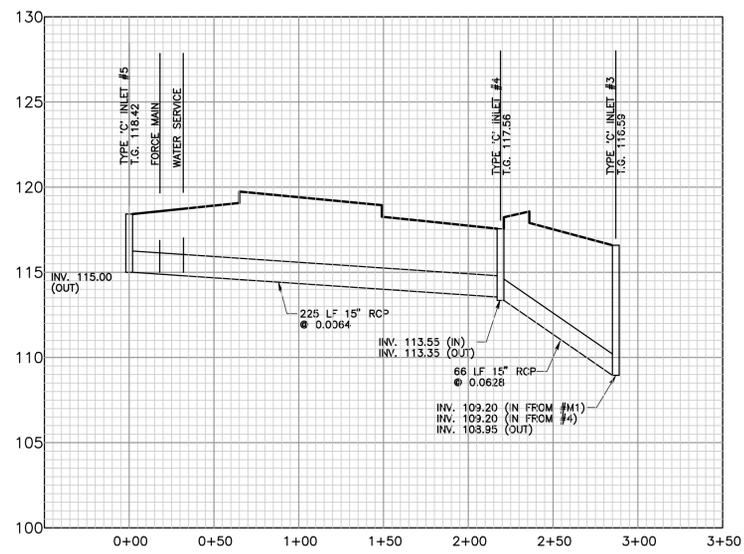
UPPER MERION TOWNSHIP MONTGOMERY COUNTY, PA.

Edward B. Walsh & Associates, Inc. CIVIL ENGINEERS & SURVEYORS

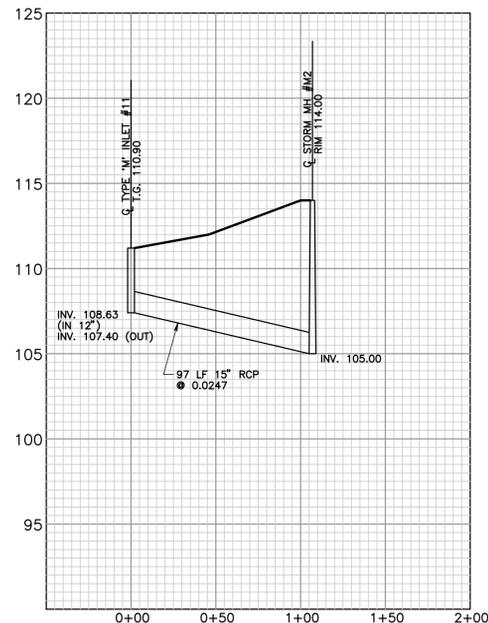
Project- 3755
Date- 7-9-14
Scale- N/A
Drawn- SLM
Checked- A.J.B.
Sheet- 12 OF 14

125 DOWNS FORGE ROAD
EASTON, PENNSYLVANIA 19341
Phone (610) 903-0060
Fax (610) 903-0080

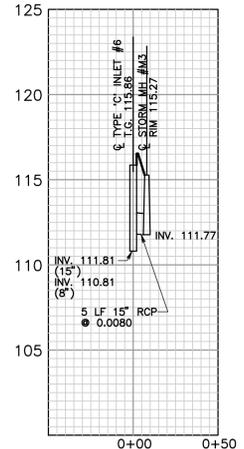
Plotted: 6/8/2016 File: F:\JB\3755\3755-89.pro Ver.- 000



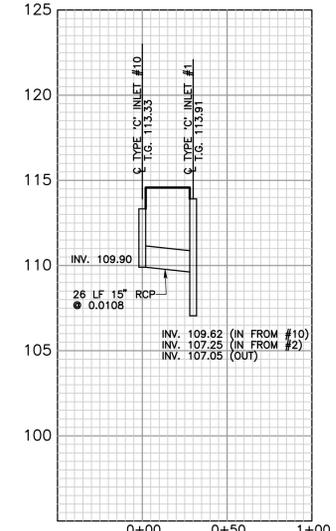
INLET #5 TO INLET #3
SCALE: H. 1"=50'
V. 1"=5'



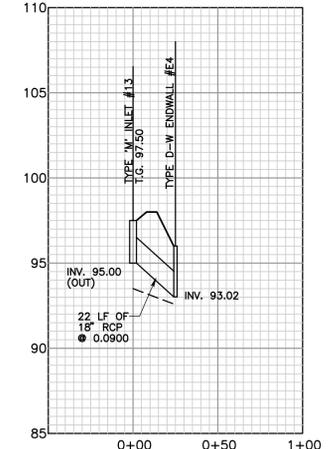
INLET #11 TO MH #M2
SCALE: H. 1"=50'
V. 1"=5'



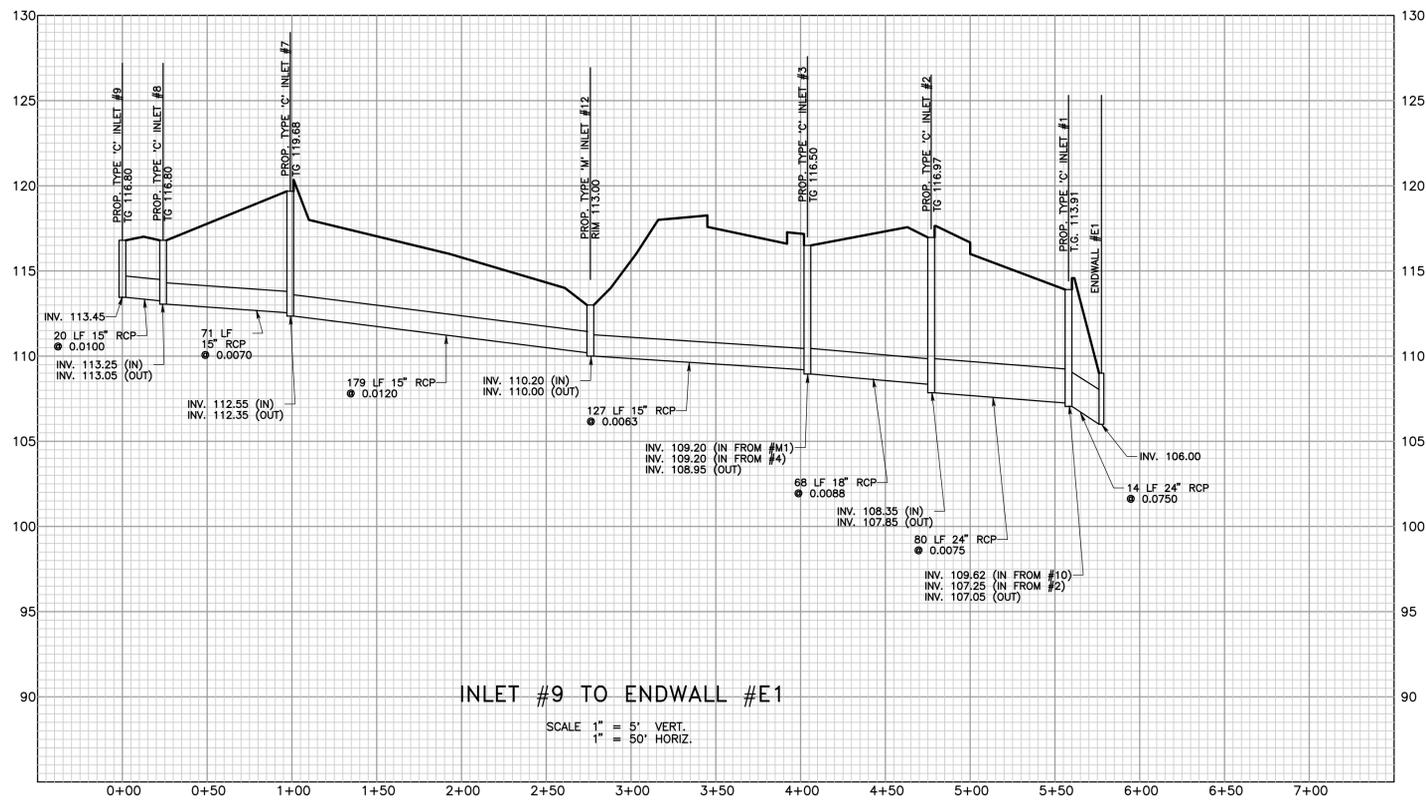
INLET #6 TO MH #M3
SCALE: H. 1"=50'
V. 1"=5'



INLET #10 TO INLET #1
SCALE: H. 1"=50'
V. 1"=5'



INLET #13 TO ENDWALL #E4
SCALE: H. 1"=50'
V. 1"=5'



INLET #9 TO ENDWALL #E1
SCALE 1" = 5' VERT.
1" = 50' HORIZ.

PRELIMINARY PROFILE SHEET

3	5-19-16	REVISED PER TWP CONSULTANT REVIEW LETTERS DATED 3-31-16 & 4-25-16
2	11-16-15	REV. MODIFIED LAYOUT
1	5-14-15	REVISED PER TWP ENGR REVIEW LETTER DATED 10-3-14
LAND DEVELOPMENT PLAN FOR MANCILL MILL ROAD COMPANY UPPER MERION TOWNSHIP MONTGOMERY COUNTY, PA.		
Edward B. Walsh & Associates, Inc. CIVIL ENGINEERS & SURVEYORS		Project- 3755 Date- 7-9-14 Scale- N/A Drawn- SLM Checked- A.J.B. Sheet- 14 OF 14 Ver.- 000
Plotted: 6/7/2016	File: F:\JB\3755\3755-B9.pro	

EXISTING FEMA 100 YEAR FLOODPLAIN BOUNDARY

SCHUYLKILL RIVER

58-33-2
PHILADELPHIA & READING RAILROAD COMPANY

N66°56'37"E 2273.15'

40' BUFFER

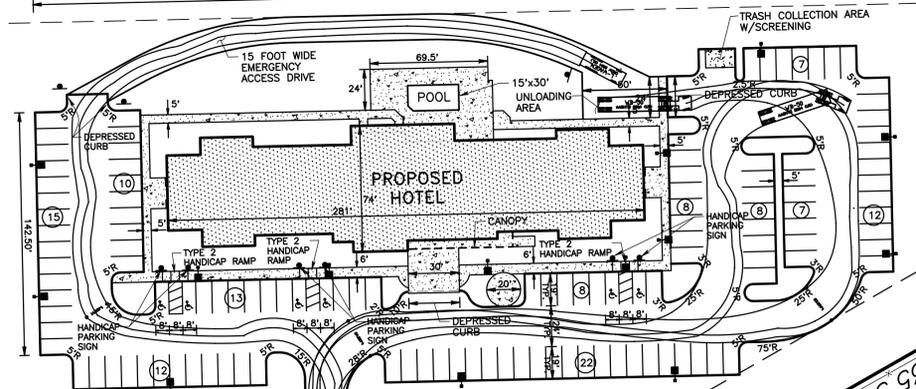
5 FT HIGH RETAINING WALL

BUILDING SETBACK LINE

40 FT BUFFER

CONCRETE MONUMENT FOUND

1/4" CUT IN RAIL MONUMENT FOUND



58-35-24
UPPER MERION TOWNSHIP
DB 3317 PG 234
(DESCRIPTION DOES NOT MATCH PARCEL)

58-33-10
UPPER MERION TOWNSHIP MUNICIPAL UTILITY AUTHORITY
DB 4937 PG 7
(NO DESCRIPTION IN DEED - PLOTTED FROM TAX MAP)
APPROX. AREA - 3.01 AC.

ZONING DISTRICT:
SM-1
SUBURBAN METROPOLITAN

ZONING SM
SUBURBAN
METROPOLITAN

58-32-1
VALLEY FORGE TOWERS COMMUNITY ASSOCIATION
DB 4397 PG 7

ZONING DISTRICT:
HR - HIGH RISE RESIDENTIAL

133.72'
S45°48'23"W
S38°35'37"W
25.00'
IRON PIN FOUND
1.59' S83°28'43"E
OF CORNER
PROPOSED CONCRETE
WALL TO EXTEND DOWN
FROM CURB

294.58'
N51°24'23"W
294.58'
IRON PIN FOUND
END WALL

S38°35'37"W
30.00'

P.K. NAIL FOUND

PROPOSED EDGE
OF PAVEMENT
END CURB
W/5' TAPER
EXISTING PAVEMENT
TO BE REMOVED

MANCILL MILL ROAD

PRELIMINARY TRUCK TURNING

3	5-19-16	REVISED PER TWP CONSULTANT REVIEW LETTERS DATED 3-31-16 & 4-25-16
2	11-16-15	REV. MODIFIED LAYOUT
1	5-14-15	REVISED PER TWP ENGR REVIEW LETTER DATED 10-3-14

LAND DEVELOPMENT PLAN
FOR
MANCILL MILL ROAD COMPANY
UPPER MERION TOWNSHIP MONTGOMERY COUNTY, PA.

Edward B. Walsh & Associates, Inc.
CIVIL ENGINEERS & SURVEYORS

125 DOWNTOWN FORGE ROAD
EASTON, PENNSYLVANIA 19341
PHONE (610) 903-0060
FAX (610) 903-0080

Project- 3755
Date- 7-9-14
Scale- N/A
Drawn- SLM
Checked- A.J.B.
Sheet- 1 OF 1
Plotted: 6/7/2016 File: F:\JB\3755\3755-B9.pro Ver.- 000

