# PRELIMINARY/FINAL LAND DEVELOPMENT PLAN FOR 575 SOUTH UPPER MERION TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA LOT VR-6



USGS MAP SCALE: 1"=2000'

GRAPHIC SCALE 4000

> ( IN FEET ) 1 inch = 2000 ft.

# **PROJECT LOCATION**:

575 SOUTH GODDARD BOULEVARD PART OF TAX MAP PARCEL #58-00-17494-007

# DEVELOPER / CONTRACT PURCHASER:

TOLL PA VIII, LP 250 GIBRALTAR ROAD HORSHAM, PA 19044 (215) 938-8000

COMMON	WEA	LTH	OF	PENNS	
COUNTY	OF	MON	TGC	MERY	

OWNER/CORPORATE CERTIFICATION

I DO HEREBY CERTIFY THAT . IS THE REGISTERED OWNER OF THE LAND HEREIN SUBDIVIDED, PROPOSED TO BE DEVELOPED AND THAT IT DOES ADOPT THIS PLAN AND DESIRE THE SAME TO BE RECORDED.

(NAME)

(TITLE)

T.M.P. NO.

BY:

NOTARY PUBLIC COMMONWEALTH OF PENNSYLVANIA COUNTY OF MONTGOMERY

ON THE\_\_\_\_\_DAY OF\_\_\_\_ UNDERSIGNED NOTARY PUBLIC, PERSONALLY APPEARED\_ WHO ACKNOWLEDGED HIMSELF /HERSELF TO BE \_\_

OFFICER BEING AUTHORIZED TO DO SO, HAS EXECUTED THE FOREGOING PLAN BY SIGNING HER NAME AS SUCH OFFICER. IN WITNESS WHEREOF, I HEREUNDER SET MY HAND AND OFFICIAL SEAL.

NOTARY PUBLIC \_\_\_\_\_ MY COMMISSION EXPIRES\_\_\_\_\_



SECRETARY

TOWNSHIP ENGINEER (REVIEW BY)

# SHEET INDEX

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1	SD01.01	COVER SHEET (RECORD PLAN 1 OF 3)
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3	SD02.02	GENERAL NOTES (RECORD PLAN 3 OF 3)
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15	DR40.01	INLET DRAINAGE AREA PLAN





# Know what's **below. Call** before you dig.

## DRAWINGS TO BE RECORDED BY OTHERS

1 SUBDIVISION PLAN PREPARED BY ESE CONSULTANTS DATED 10/02/17, LAST REVISED 2/08/18 (SHEET 2 OF 2).

> SHEETS 1 THROUGH 3 OF THIS PLAN SET WILL BE CONSIDERED A COMPLETE RECORD PLAN SET FOR FILING PURPOSES IN THE MONTGOMERY COUNTY RECORDER OF DEEDS OFFICE.

SURVEYOR'S CERTIFICATION. BOUNDARY & TOPOGRAPHY 'HIS IS TO CERTIFY THAT THIS PLAN REPRESENTS A FIELD SURVEY BY ME OR UNDER MY SUPERVISION, THAT ALL PROPERTY CORNERS ARE SET AS SHOWN HEREON, THAT ALL GEOMETRIC AND GEODETIC DETAILS AS SHOWN ARE CORRECT, AND THAT ALL LOTS

PENNSYLVANIA PROFESSIONAL LAND SURVEYOR No.

OR TRACTS HAVE A BOUNDARY CLOSURE OF 1:10,000 OR BETTER.





# 

LEGE	<u>ND</u>
FF=	1st FLOOR ELEVATION
   	EXISTING DIRT/GRAVEL ROAD EXISTING STREET SIGN EXISTING UTILITY POLE EXISTING R.O.W. EXISTING CARTWAY STREAM LINE
	EXISTING CENTER LINE
	EXISTING BOUNDARY LINE SOILS LINE
⊡ ⊕up €	EXISTING CONCRETE MONUME EXISTING IRON PIN EXISTING SIGN EXISTING UTILITY POLE EXISTING INLET
+ 409.4	EXISTING SPOT ELEVATION
	EXISTING DECIDUOUS TREE
C.	EXISTING FLOWERING TREE
	EXISTING CONTOURS
100  <i>→ 100.0</i> + 100.00	PROPOSED CONTOURS EXISTING SPOT ELEVATION PROPOSED SPOT ELEVATION
	EXISTING TREE LINE
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	EXISTING VEGWOODS
	EXISTING VEGSHRUBS
	PROPOSED TREE LINE
	PROPOSED BUILDING
	EXISTING BELGIAN BLOCK CUR PROPOSED BELGIAN BLOCK CU
	PROPOSED ADA RAMP
<u>1</u>	STOP SIGN
$\frac{1}{2^{\bullet}}$	ADA PARKING SIGN
3	NO PARKING
<u>-</u>	NO OUTLET
⊠— -	ENTRANCE MONUMENT ENTRANCE STREET LIGHT
	GRASS PAVERS
	CROSSWALK
	TERRACE

## TING CONCRETE MONUMENT TING IRON PIN TING SIGN TING UTILITY POLE TING INLET TING SPOT ELEVATION TING DECIDUOUS TREE TING FLOWERING TREE TING CONTOURS POSED CONTOURS TING SPOT ELEVATION POSED SPOT ELEVATION STING TREE LINE TING VEG.-WOODS TING VEG.-SHRUBS POSED TREE LINE POSED BUILDING TING BELGIAN BLOCK CURB POSED BELGIAN BLOCK CURB POSED ADA RAMP SIGN PARKING SIGN

GRAPHIC SCALE

( IN FEET )

1 inch = 30 ft.

ENEI	RAL NOTES
	ALL ACCESSIBLE ADA PARKING SPACES MUST BE CONSTRUCTED TO MEET, AT A MINIMUM, THE MORE STRINGENT OF THE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT" (ADA) CODE (42 U.S.C. § 12101 et seq. AND 42 U.S.C. § 4151 et seq.) OR THE REQUIREMENTS OF THE JURISDICTION WHERE THE PROJECT IS TO BE CONSTRUCTED, AND ANY AND ALL AMENDMENTS TO BOTH WHICH ARE IN EFFECT WHEN THESE PLANS ARE COMPLETED.
	PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED THE COMMENTS

GE

TO ALL PLANS AND OTHER DOCUMENTS REVIEWED AND APPROVED BY THE PERMITTED AUTHORITIES AND CONFIRM THAT ALL NECESSARY OR REQUIRED PERMITS HAVE BEEN OBTAINED. CONTRACTOR MUST HAVE COPIES OF ALL PERMITS AND APPROVALS ON SITE AT ALL TIMES.

OWNER/CONTRACTOR MUST BE FAMILIAR WITH AND RESPONSIBLE FOR THE PROCUREMENT OF ANY AND ALL CERTIFICATIONS REQUIRED FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

ALL WORK MUST BE PERFORMED IN ACCORDANCE WITH THESE PLANS. SPECIFICATIONS AND CONDITIONS OF APPROVAL, AND ALL APPLICABLE REQUIREMENTS, RULES, REGULATIONS, STATUTORY REQUIREMENTS, CODES, LAWS AND STANDARDS OF ALL GOVERNMENTAL ENTITIES WITH JURISDICTION OVER THIS PROJECT.

THESE PLANS ARE BASED ON INFORMATION PROVIDED TO ESE CONSULTANTS INC. BY OWNER AND OTHERS PRIOR TO THE TIME OF PLAN PREPARATION. CONTRACTOR MUST FEILD VERIFY EXISTING CONDITIONS AND NOTIFY ESE CONSULTANTS INC., IN WRITING, IMMEDIATELY IF ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLAN, OR IF THE PROPOSED WORK CONFLICTS WITH ANY OTHER FEATURES.

ALL DIMENSIONS SHOWN ON THE PLANS MUST BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR MUST NOTIFY ENGINEER, IN WRITING, IF ANY CONFLICTS, DISCREPANCIES, OR AMBIGUITIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR WORK WHICH HAS TO BE REDONE OR REPAIRED DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS PRIOR TO CONTRACTOR GIVING ENGINEER WRITTEN NOTIFICATION OF SAME AND ENGINEER, THEREAFTER, PROVIDING CONTRACTOR WITH WRITTEN AUTHORIZATION TO PROCEED WITH SUCH ADDITIONAL WORK.

CONTRACTOR MUST REFER TO THE ARCHITECTURAL/BUILDING PLANS 'OF RECORD' FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY/EXIT 7. POINTS, ELEVATIONS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY LOCATIONS.

PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR MUST COORDINATE THE BUILDING LAYOUT BY CAREFUL REVIEW OF THE LATEST CIVIL PLANS AND THE LATEST ARCHITECTURAL PLANS (INCLUDING, BUT NOT LIMITED TO, STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SUPPRESSION PLAN, WHERE APPLICABLE). CONTRACTOR MUST IMMEDIATELY NOTIFY OWNER, ARCHITECT AND ESE CONSULTANTS INC., IN WRITING, OF ANY CONFLICTS, DISCREPANCIES OR AMBIGUITIES WHICH EXIST.

9. DEBRIS MUST NOT BE BURIED ON THE SUBJECT SITE AND ALL UNSUITABLE EXCAVATED MATERIAL AND DEBRIS (SOLID WASTE) MUST BE DISPOSED OF IN ACCORDANCE WITH THE REQUIREMENTS OF ANY AND ALL GOVERNMENTAL AUTHORITIES WHICH HAVE JURISDICTION OVER THIS PROJECT OR OVER CONTRACTOR.

THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING WHEN SHORING IS REQUIRED AND FOR INSTALLING ALL SHORING REQUIRED DURING EXCAVATION (TO BE PERFORMED IN ACCORDANCE WITH THE CURRENT OSHA STANDARDS) AND ANY ADDITIONAL PRECAUTIONS TO BE TAKEN TO ASSURE THE STABILITY OF ADJACENT, NEARBY AND CONTIGUOUS STRUCTURES AND PROPERTIES.

THE CONTRACTOR IS TO EXERCISE EXTREME CARE WHEN PERFORMING ANY WORK ACTIVITIES ADJACENT TO PAVEMENT, STRUCTURES, ETC. WHICH ARE TO REMAIN EITHER FOR AN INITIAL PHASE OF THE PROJECT OR AS PART OF THE FINAL CONDITION. CONTRACTOR IS RESPONSIBLE FOR TAKING ALL APPROPRIATE MEASURES REQUIRED TO ENSURE THE STRUCTURAL STABILITY OF SIDEWALKS AND PAVEMENT, UTILITIES, BUILDINGS, AND INFRASTRUCTURE WHICH ARE TO REMAIN, AND TO PROVIDE A SAFE WORK AREA FOR THIRD PARTIES, PEDESTRIANS AND ANYONE INVOLVED WITH THE PROJECT.

THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE DONE TO ANY NEW OR EXISTING CONSTRUCTION OR PROPERTY DURING THE COURSE OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. AND SHALL BEAR ALL COSTS ASSOCIATED WITH SAME TO INCLUDE, BUT NOT BE LIMITED TO, REDESIGN, RE-SURVEY, RE-PERMITTING AND CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR AND MUST REPLACE ALL SIGNAL INTERCONNECTION CABLE, WIRING CONDUITS, AND ANY UNDERGROUND ACCESSORY EQUIPMENT DAMAGED DURING CONSTRUCTION AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE REPAIR OF ANY SUCH NEW OR EXISTING CONSTRUCTION OR PROPERTY MUST RESTORE SUCH CONSTRUCTION OR PROPERTY TO A CONDITION EQUIVALENT TO OR BETTER THAN THE CONDITIONS PRIOR TO COMMENCEMENT OF THE CONSTRUCTION AND IN CONFORMANCE WITH APPLICABLE CODES, LAWS RULES, REGULATIONS, STATUTORY REQUIREMENTS AND STATUTES. CONTRACTOR MUST BEAR ALL COSTS ASSOCIATED WITH SAME. CONTRACTOR IS RESPONSIBLE TO DOCUMENT ALL EXISTING DAMAGE AND TO NOTIFY OWNER AND THE CONSTRUCTION MANAGER PRIOR TO THE START OF CONSTRUCTION.

THE ENGINEER IS NOT RESPONSIBLE FOR CONSTRUCTION METHODS, MEANS, TECHNIQUES OR PROCEDURES, GENERALLY OR FOR THE CONSTRUCTION 13. MEANS, METHODS, TECHNIQUES OR PROCEDURES FOR COMPLETION OF THE WORK DEPICTED BOTH ON THESE PLANS, AND FOR ANY CONFLICTS/SCOPE REVISIONS WHICH RESULT FROM SAME. CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE METHODS/MEANS FOR COMPLETION OF THE WORK PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

THE ENGINEER OF RECORD IS NOT RESPONSIBLE FOR JOB SAFETY. THE ENGINEER OF RECORD HAS NOT BEEN RETAINED TO PERFORM OR BE RESPONSIBLE FOR JOB SITE SAFETY, SAME BEING WHOLLY OUTSIDE OF ENGINEER'S SERVICES AS RELATED TO THE PROJECT. THE ENGINEER OF RECORD IS NOT RESPONSIBLE TO IDENTIFY OR REPORT ANY JOB SITE SAFETY ISSUES, AT ANY TIME

IF THE CONTRACTOR DEVIATES FROM THE PLANS AND SPECIFICATIONS, INCLUDING THE NOTES CONTAINED HEREIN, WITHOUT FIRST OBTAINING THE 15. PRIOR WRITTEN AUTHORIZATION OF THE ENGINEER FOR SUCH DEVIATIONS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PAYMENT OF ALL COST INCURRED IN CORRECTING ANY WORK DONE WHICH DEVIATES FROM THE PLANS, ALL FINES AND/OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM AND, FURTHER, SHALL DEFEND, INDEMNIFY AND HOLD HARMLESS THE ENGINEER, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, IN ACCORDANCE WITH THESE NOTES HEREIN, FOR AND FROM ALL FEES, ATTORNEY'S FEES, DAMAGES, COSTS, JUDGEMENTS, PENALTIES AND THE LIKE RELATED TO SAME.

CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AND PROTECTION OF TRAFFIC PLAN FOR ALL WORK THAT AFFECTS PUBLIC TRAVEL EITHER IN 16. THE R.O.W. OR ON SITE. THE COST FOR THIS ITEM MUST BE INCLUDED IN THE CONTRACTOR'S PRICE.

ALL SIGNING AND PAVEMENT STRIPING MUST CONFORM TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES OR LOCALLY APPROVED SUPPLEMENT. 17.

ENGINEER IS NOT RESPONSIBLE FOE ANY INJURY OR DAMAGES RESULTING FROM CONTRACTOR'S FAILURE TO BUILD OR CONSTRUCT IN STRICT 18. ACCORDANCE WITH THE APPROVED PLANS. IF CONTRACTOR AND/OR OWNER FAIL TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH APPROVED PLANS, THEY AGREE TO JOINTLY AND SEVERALLY INDEMNIFY AND HOLD ENGINEER HARMLESS FOR ALL INJURIES AND DAMAGES THAT ENGINEER SUFFERS AND COST THAT ENGINEER INCURS.

ALL DIMENSIONS MUST BE TO FACE OF CURB, EDGE OF PAVEMENT, OR EDGE OF BUILDING, UNLESS NOTED OTHERWISE. 19.

ALL CONSTRUCTION AND MATERIALS TO BE PER PENNDOT PUBLICATION 408 AND MUST COMPLY WITH AND CONFORM TO APPLICABLE FEDERAL, 20. STATE AND LOCAL REGULATIONS, LAWS, ORDINANCE, RULES AND CODES, AND ALL APPLICABLE OSHA REQUIREMENTS.

THIS PROJECT IS SUBJECT TO TERMS OF A SETTLEMENT BETWEEN OWNER AND TOWNSHIP, ANY CONFLICTS WITH OTHER RULES, ORDINANCES, ETC. SHALL BE RESOLVED IN THE FAVOR OF THE SETTLEMENT AGREEMENT.

THE CONTRACTOR IS RESPONSIBLE FOR THE REPLACEMENT OF DAMAGED STREET TREES AND ENSURING THAT THE TREE SPACING REQUIREMENTS 22. OF THE SETTLEMENT AGREEMENT ARE MET.

TRASH STORAGE TO BE INSIDE THE GARAGE UNTIL PICK UP BY A PRIVATE COLLECTION AND DISPOSAL COMPANY. 23.

ALL FREESTANDING OR BUILDING MOUNTED SIGNAGE SHALL COMPLY WITH SECTION 4.06 OF THE SETTLEMENT AGREEMENT. 24.

•

PARKING:

PROVIDED:

5.

6.

9.

10.

8.

## <u>SITE DESIGN REQUIREMENTS</u>

REQUIREMENTS TAKEN FROM:

MANUAL OF SITE DEVELOPMENT STANDARDS, DATED 3/21/06

## **REQUIREMENTS:**

PROPOSED USE: RESIDENTIAL (PERMITTED BY RIGHT)		
	REQUIRED	PROVIDED
MIN. LOT AREA:	N/A	92,573 S.F. (2.13 AC.)
TOTAL GROSS FLOOR AREA:	N/A	115,759 S.F.
FIRST FLOOR: (PARKING & GROUND FLOOR)	N/A	23,203 S.F.
SECOND FLOOR:	N/A	23,139 S.F.
THIRD FLOOR	N/A:	23,139 S.F.
FOURTH FLOOR:	N/A	23,139 S.F.
FIFTH FLOOR:	N/A	23,139 S.F.
MIN. FRONT YARD SETBACK:	N/A	O' TO LEGAL ROW
MAX. LOT COVERAGE (IMPERVIOUS):	75%	69% (63,870 S.F.)
MAX. BUILDING HEIGHT:	320 FT. ABOVE SEA LEVEL**	<320 FT. ABOVE SEA LEVEL
REQUIRED MIN. COMMON OPEN SPACE:	20% (ENTIRE 124 AC.)*	23.2% (21,503 S.F.) ON SUBJECT LOT

\* NOTE: THERE ARE NO LOT COVERAGE AND OPEN SPACE REQUIREMENTS FOR INDIVIDUAL PARCELS; THE REQUIREMENTS APPLY TO THE ENTIRE 124 ACRE PROPERTY.

\*\* FOR EACH ADDITIONAL LINEAR FOOT OF BUILDING HEIGHT OVER 85 FEET ABOVE GRADE AN ADDITIONAL 400 SQUARE FEET OF COMMON OPEN SPACE OVER THE REQUIRED 20% SHALL BE PROVIDED. THE HEIGHTS OF BUILDINGS TO BE CONSTRUCTED IN THE TOWN CENTER DEVELOPMENT SHALL BE MEASURED BASED UPON THE MEAN ELEVATION AT THE BASE OF THE BUILDING TO THE MEAN ELEVATION OF THE ROOF OF THE BUILDING, EXCLUDING ANY PARAPET WALL AND ANY ELECTRICAL, MECHANICAL, OR ELEVATOR PENTHOUSE.

(REQUIREMENTS PER MANUAL OF SITE DEVELOPMENT STANDARDS SECTION 4.03.1.a.2)

 $20 - ONE BEDROOM: (20 \times 1.5 = 30 SPACES)$  $28 - TWO BEDROOM: (28 \times 2 = 56 SPACES)$  $12 - THREE BEDROOM: (12 \times 2.5 = 30 SPACES)$ 60 TOTAL UNITS

TOTAL REQUIRED: 116 SPACES TOTAL PROVIDED: 117 SPACES 36 SPACES SHOWN UNDER BUILDING, 81 SPACES OUTDOORS

GENERAL GRADING & UTILITY NOTES

- LOCATIONS OF ALL EXISTING AND PROPOSED SERVICE ARE APPROXIMATE AND MUST BE INDEPENDENTLY CONFIRMED WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. SANITARY SEWER AND ALL OTHER UTILITY SERVICE CONNECTION POINTS MUST BE INDEPENDENTLY CONFIRMED BY THE CONTRACTOR IN THE FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. PROPOSED INTERFACE POINTS (CROSSING) WITH EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PITS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- CONTRACTOR MUST VERTICALLY AND HORIZONTALLY LOCATE ALL EXISTING UTILITIES AND SERVICES INCLUDING, BUT NOT LIMITED TO, GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN THE LIMITS OF DISTURBANCE OR WORK SPACE, WHICHEVER IS GREATER. THE CONTRACTOR MUST USE, REFER TO, AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL DAMAGE TO ANY EXISTING UTILITIES DURING CONSTRUCTION, AT NO COST TO THE OWNER. CONTRACTOR SHALL BEAR ALL COSTS ASSOCIATED WITH DAMAGE TO ANY EXISTING UTILITIES DURING CONSTRUCTION.
- 3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL CONSTRUCTION CONTRACT DOCUMENTS INCLUDING, BUT NOT LIMITED TO, ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE PRIOR TO THE INITIATION AND COMMENCEMENT OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT AND/OR DISCREPANCY BETWEEN THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR THE RELATIVE OR APPLICABLE CODES, REGULATIONS, LAWS, RULES, STATUTES AND/OR ORDINANCES, IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD, IN WRITING, OF SAID CONFLICT AND/OR DISCREPANCY PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR'S FAILURE TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE CONTRACTOR'S FULL AND COMPLETE ACCEPTANCE OF ALL RESPONSIBILITY TO COMPLETE THE SCOPE OF WORK AS DEFINED BY THE DRAWINGS AND IN FULL COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS, LAWS, STATUTES, ORDINANCES AND CODES AND FURTHER, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST ASSOCIATED WITH SAME.
  - CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF SITE PLAN DOCUMENTS AND ARCHITECTURAL DESIGN FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS, GREASE TRAP REQUIREMENTS/DETAILS, DOOR ACCESS, AND EXTERIOR GRADING. THE ARCHITECT WILL DETERMINE THE UTILITY SERVICE SIZE. THE CONTRACTOR MUST COORDINATE INSTALLATION UTILITIES/SERVICES WITH THE INDIVIDUAL COMPANIES, TO AVOID CONFLICTS AND TO ENSURE THAT PROPER DEPTHS ARE ACHIEVED. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT INSTALLATION OF ALL IMPROVEMENTS COMPLIES WITH ALL UTILITY REQUIREMENTS WITH JURISDICTION AND/OR CONTROL OF THE SITE, AND ALL OTHER APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES AND, FURTHER, IS RESPONSIBLE FOR COORDINATING THE UTILITY TIE-INS/CONNECTIONS PRIOR TO CONNECTING TO THE EXISTING UTILITY/SERVICE. WHERE CONFLICT(S) EXISTS BETWEEN THESE PLANS AND THE ARCHITECTURAL PLANS, OR WHERE ARCHITECTURAL PLAN UTILITY CONNECTION POINTS DIFFER, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER, IN WRITING, AND PRIOR TO CONSTRUCTION, RESOLVE SAME.
  - ALL NEW UTILITIES/SERVICES, INCLUDING ELECTRIC, TELEPHONE, CABLE TV, ETC. ARE TO BE INSTALLED UNDERGROUND. ALL NEW UTILITIES/SERVICES MUST BE INSTALLED IN ACCORDANCE WITH THE UTILITY/SERVICE PROVIDER INSTALLATION SPECIFICATIONS AND STANDARDS.
  - SITE GRADING MUST BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT REFERENCED IN THIS PLAN SET. MOISTURE CONTENT AT TIME OF PLACEMENT MUST BE SUBMITTED IN A COMPACTION REPORT PREPARED BY A QUALIFIED GEOTECHNICAL ENGINEER, REGISTERED WITH THE STATE WHERE THE WORK IS PERFORMED, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS AND ALL APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES. SUBBASE MATERIAL FOR SIDEWALK, CURB, OR ASPHALT MUST BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DEEMED UNSUITABLE BY OWNER/DEVELOPER, OR OWNER/DEVELOPER'S REPRESENTATIVE, SUBBASE IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL COMPACTED AS DIRECTED BY THE OWNER. EARTHWORK ACTIVITIES INCLUDING, BUT NOT LIMITED TO EXCAVATION, BACKFILL, AND COMPACTING MUST COMPLY WITH THE OWNER REQUIREMENTS AND ALL APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES.
  - ALL FILL, COMPACTION, AND BACKFILL MATERIALS REQUIRED FOR UTILITY INSTALLATION MUST BE AS PER THE OWNER REQUIREMENTS AND MUST BE COORDINATED WITH THE APPLICABLE UTILITY COMPANY SPECIFICATIONS. FILL AND COMPACTION MUST, AT A MINIMUM, COMPLY WITH THE STATES DOT REQUIREMENTS AND SPECIFICATIONS AND CONSULTANT SHALL HAVE NO LIABILITY OR RESPONSIBILITY FOR OR AS RELATED TO FILL, COMPACTION AND BACKFILL
  - THE CONTRACTOR MUST COMPLY, TO THE FULLEST EXTENT, WITH THE LATEST OSHA STANDARDS AND REGULATIONS, AND/OR ANY OTHER AGENCY WITH JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE "MEANS AND METHODS" REQUIRED TO MEET THE INTENT AND PERFORMANCE CRITERIA OF OSHA, AS WELL AS ANY OTHER ENTITY THAT HAS JURISDICTION FOR EXCAVATION AND/OR TRENCHING PROCEDURES AND CONSULTANT SHALL HAVE NO RESPONSIBILITY FOR OR AS RELATED TO EXCAVATION AND TRENCHING PROCEDURES.
  - PAVEMENT MUST BE SAW CUT IN STRAIGHT LINES, AND EXCEPT FOR EDGE OF BUTT JOINTS, MUST EXTEND TO THE FULL DEPTH OF THE EXISTING PAVEMENT. ALL DEBRIS FROM REMOVAL OPERATIONS MUST BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS WILL NOT BE PERMITTED.
  - THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, UTILITY VALVES, AND SANITARY CLEANOUTS MUST BE ADJUSTED, AS NECESSARY, TO MATCH PROPOSED GRADES IN ACCORDANCE WITH ALL APPLICABLE STANDARDS, REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES.
  - DURING THE INSTALLATION OF SANITARY SEWER, STORM SEWER, AND ALL UTILITIES, THE CONTRACTOR MUST MAINTAIN A CONTEMPORANEOUS AND THOROUGH RECORD OF CONSTRUCTION TO IDENTIFY THE AS-INSTALLED LOCATIONS OF ALL UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR MUST CAREFULLY NOTE ANY INSTALLATIONS THAT DEVIATE FROM THE INFORMATION CONTAINED IN THE UTILITY PLAN. THIS RECORD MUST BE KEPT ON A CLEAN COPY OF THESE PLANS, WHICH CONTRACTOR MUST PROMPTLY PROVIDE TO THE OWNER AND SELLER AT THE COMPLETION OF WORK.
  - THE CONTRACTOR IS FULLY RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCING ANY CONSTRUCTION. CONTRACTOR MUST CONFIRM AND ENSURE 0.75% MINIMUM SLOPE AGAINST ALL ISLANDS, GUTTERS, AND CURBS; 1.0% ON ALL CONCRETE SURFACES; AND 1.5% MINIMUM ON ASPHALT (EXCEPT WHERE ADA REQUIREMENTS LIMIT GRADES), TO PREVENT PONDING. CONTRACTOR MUST IMMEDIATELY IDENTIFY, IN WRITING TO THE ENGINEER, ANY DISCREPANCIES THAT MAY OR COULD AFFECT THE PUBLIC SAFETY, HEALTH OR GENERAL WELFARE, OR PROJECT COST. IF CONTRACTOR PROCEEDS WITH CONSTRUCTION WITHOUT PROVIDING PROPER NOTIFICATION, THIS SHALL BE AT THE CONTRACTOR'S OWN RISK AND FURTHER, CONTRACTOR SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS THE DESIGN ENGINEER FOR ANY DAMAGES, COST, INJURIES, ATTORNEY'S FEES AND THE LIKE WHICH RESULT FROM SAME.
- 13. IN THE EVENT OF DISCREPANCIES AND/OR CONFLICTS BETWEEN PLANS OR RELATIVE TO OTHER PLANS, THE SITE PLAN WILL TAKE PRECEDENCE AND CONTROL. CONTRACTOR MUST IMMEDIATELY NOTIFY THE DESIGN ENGINEER, IN WRITING, OF ANY DISCREPANCIES AND/OR CONFLICTS.
  - CONTRACTOR IS REQUIRED TO SECURE ALL NECESSARY AND/OR REQUIRED PERMITS AND APPROVALS FOR ALL OFF-SITE MATERIAL SOURCES AND DISPOSAL FACILITIES. CONTRACTOR MUST SUPPLY A COPY OF APPROVALS TO ENGINEER AND OWNER PRIOR TO INITIATING ANY WORK.

- d.) ALL INLETS TO BE TYPE AS NOTED. e.) DEVELOPER/CONTRACTOR IS RESPONSIBLE FOR PROVIDING SHOP DRAWINGS FOR ALL STRUCTURES. SANITARY SEWER: PVC SCHEDULE 40 OR PVC SDR-26 UNLESS INDICATED, IN WRITING, OTHERWISE. b.) SEWER MAINS ARE TO BE DEDICATED TO AND MAINTAINED BY AQUA. c.) ALL SANITARY SEWER EXTENSIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH AQUA SPECIFICATIONS. BE EXTENDED TO NOT MORE THAN 400 FEET. WATER SERVICE: SHALL BE VERIFIED IN THE FIELD. d.) ALL GATE VALVES AND FIRE HYDRANTS OPEN RIGHT. AREAS WITH THE PROPER SQUARE FOOTAGE OF CONCRETE BLOCKING. FIELD-LOK GASKETS IN SINKHOLE PRONE AREAS. (AQUA PENNSYLVANIA, INC.). CONNECTIONS. o.) MAXIMUM DEFLECTION AT JOINT FOR PIPE & FITTINGS IS, 6"-5"-19" FOR 18' BY LENGTH 8"-5"-19" FOR 18' BY LENGTH 12"-5"-19" FOR 18' BY LENGTH 16"-5"-19" FOR 18' BY LENGTH DISTRIBUTION SYSTEM. RATED FOR 350 PSI WORKING PRESSURE. s.) ALL PIPE TO PIPE CONNECTIONS SHALL BE "FIELD LOK" 350 GASKETS. JURISDICTION OVER SAME.
- LIGHTS, SITE LIGHTING CONDUIT, STREET TREES AND IRRIGATION.

- STORM SEWERS: 15.

  - SCHEDULE 40 UNLESS INDICATED OTHERWISE.

17.

AT THE PROJECT SITE BY THE ASSIGNED AQUA PENNSYLVANIA INSPECTOR.

19.

- 20.

a.) UNLESS INDICATED OTHERWISE, ALL STORM SEWER PIPE MUST BE REINFORCED CONCRETE PIPE (RCP) CLASS III WITH JOINTS. WHEN HIGH-DENSITY POLYETHYLENE PIPE (HDPE) IS CALLED FOR ON THE PLANS, IT MUST CONFORM TO AASHTO M294 AND TYPE S (SMOOTH INTERIOR WITH ANGULAR CORRUGATIONS) WITH GASKET FOR WATERTIGHT JOINT. PVC PIPE FOR ROOF DRAIN CONNECTION MUST BE SDR 26 OR

b.) ALL STORM PIPES SHALL BE A MINIMUM OF 12" DIAMETER - EXCLUDES RAIN LEADERS AND YARD DRAINS. c.) WATERTIGHT GASKET JOINTS SHALL BE REQUIRED FOR ALL STORM PIPES PER ASTM D3212, ASTM D3312, AND AASHTO M294-13.

f.) THE SELLER REQUIRES SHOP DRAWINGS FOR ANY ADJUSTMENT TO EXISTING STRUCTURES FOR REVIEW AND APPROVAL.

a.) SANITARY SEWER MAIN MUST BE POLYVINYL CHLORIDE (PVC) SDR-26 EXCEPT WHERE INDICATED OTHERWISE. SANITARY LATERALS MUST BE

d.) SANITARY SEWER SHOP DRAWINGS SHALL BE PROVIDED BY THE BUYER FOR REVIEW AND APPROVAL BY THE SELLER AND AQUA. e.) SIZE AND GRADE. SANITARY SEWER SHALL HAVE A MINIMUM INSIDE DIAMETER OF EIGHT INCHES AND A MINIMUM GRADE OF 0.5%. f.) MANHOLES. MANHOLES TO BE DEDICATED SHALL BE LOCATED AT INTERVALS OF AT LEAST 250 FEET AND AT EACH CHANGE OF LINE OR GRADE. IN EXCEPTIONAL CASES, THE INTERVAL MAY BE EXTENDED TO NOT MORE THAN 300 FEET. MANHOLE FRAMES, COVERS, BUCKETS AND STEPS SHALL BE ACCORDING TO THE CURRENT TOWNSHIP REQUIREMENTS. NON-DEDICATED MANHOLES TO BE DEDICATED SHALL BE LOCATED AT INTERVALS OF AT LEAST 300 FEET AND AT EACH CHANGE OF LINE OR GRADE. IN EXCEPTIONAL CASES, THE INTERVAL MAY

a.) LOCATION OF EXISTING WATER FACILITIES SHOWN ARE APPROXIMATE. ANY UTILITIES NOT SHOWN, OR NOT LOCATED AS SHOWN, SHALL NOT BE THE CAUSE OF THE CONTRACTOR TO DENY RESPONSIBILITY FOR PROTECTION AND/OR REPAIR DURING CONSTRUCTION. EXACT LOCATION

b.) SEWERS CONVEYING SANITARY FLOW, COMBINED SANITARY, AND STORMWATER FLOW OR INDUSTRIAL FLOW MUST BE SEPARATED FROM WATER MAINS BY A DISTANCE OF AT LEAST 10 FEET HORIZONTALLY. IF SUCH LATERAL SEPARATION IS NOT POSSIBLE, THE PIPES MUST BE IN SEPARATE TRENCHES WITH THE SEWER AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN, OR SUCH OTHER SEPARATION AS APPROVED BY THE GOVERNMENT AGENCY WITH JURISDICTION OVER SAME.

c.) WHERE APPROPRIATE SEPARATION FROM A WATER MAIN IS NOT POSSIBLE, THE SEWER MUST BE ENCASED IN CONCRETE, OR CONSTRUCTED OF DUCTILE IRON PIPE USING MECHANICAL OR SLIP-ON JOINTS FOR A DISTANCE OF AT LEAST 10 FEET ON EITHER SIDE OF THE CROSSING. IN ADDITION, ONE FULL LENGTH OF SEWER PIPE SHOULD BE LOCATED SO BOTH JOINTS WILL BE AS FAR FROM THE WATER LINE AS POSSIBLE. WHERE A WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURE SUPPORT FOR THE SEWER MUST BE PROVIDED.

e.) 3/4" M.A.V./CL2 ASSEMBLIES ARE REQUIRED ON ALL WATER MAIN EXTENSIONS. THE EXACT QUANTITY AND LOCATION WILL BE DETERMINED

f.) ALL DIRECTIONAL CHANGE FITTINGS REQUIRE RETAINING GLANDS (MEGA-LUG or EQUAL) AND FIELD-LOK GASKETS IN SINKHOLE PRONE

g.) A LENGTH EQUIVALENT TO TWO COMPLETE LENGTHS OF PIPE UPSTREAM AND DOWNSTREAM OF DIRECTIONAL CHANGE FITTINGS REQUIRE

h.) ALL PERMANENT BLOW-OFFS ARE TO BE BLOCKED WITH A STEEL RAIL AND THE PROPER SQUARE FOOTAGE OF CONCRETE BLOCKING.

i.) WHEN THE WORKING PRESSURE OF THE MAIN EXCEEDS 100 P.S.I., PRESSURE REDUCING VALVES ARE REQUIRED ON ALL AFFECTING SERVICES. PRESSURE REDUCING VALVES ARE NOT SUPPLIED, OWNED, OR MAINTAINED BY AQUA PENNSYLVANIA, INC.

j.) ALL THRUST BLOCK VALUES ARE DETERMINED ACCORDING TO THE INTENDED WORKING PRESSURE OF THE PROPOSED MAIN. WHEN PRESSURES ARE IN EXCESS OF 200 P.S.I., THE ENGINEERING DEPARTMENT WILL PROVIDE SPECIFIC REQUIREMENTS.

k.) EASEMENT RIGHTS SHALL INCLUDE AN ADDITIONAL 10' WIDE TEMPORARY EASEMENT ON ALL SIDES DURING CONSTRUCTION.

I.) AN ADDITIONAL 10' WIDE EASEMENT IS GRANTED FOR EACH WATER SERVICE THAT IS, OR WILL BE CONNECTED

m.) FIELD CHANGES WILL BE MADE AT THE DISCRETION OF THE AQUA INSPECTOR OR AQUA CONSTRUCTION SUPERVISOR.

n.) "FIELD LOK" GASKETS WITH MEGA-LUG JOINT RESTRAINT SHALL BE INSTALLED ON ALL PIPE JOINTS, FITTINGS, VALVES, AND FIRE HYDRANT

p.) 20' ACCESS EASEMENT CENTERED OVER THE WATER MAIN IS PROPOSED FOR AQUA PENNSYLVANIA TO OPERATE AND MAINTAIN THE WATER

q.) ALL PIPE SHALL BE CLASS 52 DUCTILE IRON PIPE WITH DOUBLE CEMENT LINING, MEETING THE REQUIREMENTS OF AWWA C104, C150, AND

r.) ALL PIPE FITTINGS SHALL BE MECHANICAL JOINT DUCTILE IRON, AND MEET THE REQUIREMENTS OF AWWA C104, C150, AND C151. AND BE

t.) ALL END CAP CONNECTIONS SHALL BE DOUBLE MEGA-LUG WITH THE STANDARD JOINT GASKET.

ALL CONTRACTORS WORKING ON THIS PROJECT SHALL COMPLY WITH THE REQUIREMENTS OF THE UNDERGROUND UTILITY LINE PROTECTION LAW, PA. ACT 287, AS AMENDED. CONTRACTORS SHALL OBTAIN A PA ONE CALL NUMBER FOR CONSTRUCTION PURPOSES.

CONTRACTOR MUST ENSURE THAT ALL UTILITY TRENCHES LOCATED IN EXISTING PAVED ROADWAYS INCLUDING SEWER, WATER AND STORM SYSTEMS, MUST BE REPAIRED IN ACCORDANCE WITH REFERENCED MUNICIPAL, COUNTY AND/OR DOT DETAILS AND ASTM AND AASHTO SPECIFICATIONS AS APPLICABLE. CONTRACTOR MUST COORDINATE INSPECTION AND APPROVAL OF COMPLETED WITH THE AGENCY WITH

CONSULTANT IS NEITHER LIABLE NOR RESPONSIBLE FOR ANY SUBSURFACE CONDITIONS AND FURTHER, SHALL HAVE NO LIABILITY FOR ANY HAZARDOUS MATERIALS, HAZARDOUS SUBSTANCES, OR POLLUTANTS ON, ABOUT OR UNDER THE PROPERTY.

21. CONTRACTOR TO PROTECT STREET LIGHTS DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO REPAIR/REPLACE DAMAGED STREET

22. CONTRACTOR TO ENSURE THAT SLOPES FOR PROPOSED CONCRETE SIDEWALKS SHALL HAVE A MINIMUM CROSS SLOPE OF 1/4 INCH PER FOOT.

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SOILS MAP SCALE: 1"=1000' GRAPHIC SCALE

( IN FEET ) 1 inch = 1000 ft.

## NOTES:

- BOUNDARY INFORMATION TAKEN FROM PLANS PREPARED FOR TOLL PA VIII, L.P., ENTITLED "ALTA/NSPS LAND TITLE SURVEY, TOLL PA VIII, L.P. – VR-6, BLOCK S, PART OF UNIT 4, BLOCK 7, APN #58-00-17494-007", PREPARED BY CONTROL POINT ASSOCIATES, INC., DATED AUGUST 9, 2017, LAST REVISED AUGUST 21, 2017.
- 2. SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD
- 3. SURVEY WORK PERFORMED BY ESE CONSULTANTS, INC. ON NOVEMBER 10, 2017.
- BENCHMARK: DRILL HOLE ON THE HEADWALL OF THE BOX CULVERTS AT COORDINATES N282780.2027, E2623845.7346 ELEV. 158.39.

# <u>LEGEND</u>

EXISTING DIRT/GRAVEL RO	AD
EXISTING STREET SIGN	
EXISTING UTILITY POLE	
EXISTING CONTOURS	G G G
EXISTING TREE LINE	©РМВ
EXISTING BRUSH LINE	⊕ IP
EXISTING R.O.W.	₩S.
EXISTING CARTWAY	
STREAM LINE	× <sup>409.4</sup>
EXISTING CENTER LINE	$\bigcirc$
EXISTING INLET W/STORM	SEWER
	C. J.

EXISTING BOUNDARY LINE SOILS LINE EXISTING GAS EASEMENT EXISTING GAS LINE EXISTING GAS LINE EXISTING MAIL BOX EXISTING CONCRETE MONUMENT EXISTING CONCRETE MONUMENT EXISTING IRON PIN EXISTING SIGN EXISTING SIGN EXISTING UTILITY POLE EXISTING INLET EXISTING SPOT ELEVATION EXISTING DECIDUOUS TREE EXISTING FLOWERING TREE

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ne D.	Line ID	Line Length	Line Size	Line Slope	Invert Up	Invert Dn	Gnd/Rim El Up	Gnd/Rim El Dn	HGL Up	HGL Dn	Drng Area	Runoff Coeff	Gutter Spread	Q Capt	Q Byp	Vel Up	Vel Dn	
		(ft)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ac)	(C)	(ft)	(cfs)	(cfs)	(ft/s)	(ft/s)	
24	Y.D. 1 TO 210	40	12	3.47	161.70	160.30	165.20	163.80	162.05	160.52	0.05	0.78	8.16	0.28	0.00	2.85	5.44	
25	Y.D. 2 TO Y.D. 1	44	8	3.15	163.44	162.04	166.80	165.20	163.75	162.24	0.05	0.79	8.22	0.28	0.00	2.78	4.84	
26	C.O. 10 TO 202	42	8	5.78	159.03	156.59	162.20	159.76	159.27	156.73	0.04	0.90	7.84	0.25	0.00	2.35	5.12	
27	C.O. 11 TO Y.D. 2	47	8	3.38	165.23	163.64	168.40	166.80	165.44	163.77	0.03	0.90	6.82	0.19	0.00	2.16	3.89	
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DTE	S: ** Critical depth																	
																		Storm Sew

# <u>LEGEND</u>

FF=	FIRST FLOOR ELEVATION
	PROPOSED BUILDING
	EXISTING DIRT/GRAVEL ROAD EXISTING STREET SIGN EXISTING UTILITY POLE EXISTING R.O.W. EXISTING CARTWAY EXISTING CENTER LINE
E E G W	EXISTING BOUNDARY LINE SOILS LINE EXISTING ELECTRIC LINE EXISTING GAS LINE EXISTING WATER LINE
E ⊕ IP ▼S ⊕ UP Ⅲ + 409.4	EXISTING CABLE LINE EXISTING CONCRETE MONUMENT EXISTING IRON PIN EXISTING SIGN EXISTING UTILITY POLE EXISTING INLET EXISTING SPOT ELEVATION
	EXISTING DECIDUOUS TREE
	EXISTING FLOWERING TREE
	EXISTING CONTOURS
<u> </u>	PROPOSED CONTOURS EXISTING SPOT ELEVATION PROPOSED SPOT ELEVATION EXISTING TREE LINE
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	EXISTING VEGWOODS
	EXISTING VEGSHRUBS
	PROPOSED TREE LINE
	EXISTING INLET W/ STORM SEWER
MH MH	W/ STRUCTURE NUMBER
	PROPOSED STORM MANHOLE W/ STRUCTURE NUMBER
FES 10	PROPOSED FLARED END SECTION W/STRUCTURE NUMBER
• 	PROPOSED YARD INLET PROPOSED CLEANOUT EXISTING ELECTRIC LINE PROPOSED GAS LINE PROPOSED WATER LINE PROPOSED CABLE LINE PROPOSED SPLIT RAIL FENCE
	RIP-RAP APRON
<u>1</u> ●	STOP SIGN
2	ADA PARKING SIGN
3	NO PARKING
4	NO OUTLET
<u>∞</u> –	ENTRANCE MONUMENT
* 	WETLANDS

GRASS PAVERS

CROSSWALK

TERRACE

GRAPHIC SCALE

( IN FEET )

1 inch = 30 ft.

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Line No.	Line ID	Line Length	Line Size	Line Slop	e Inver e Up	rt Inv D	vert On	Gnd/Rim El Up	Gnd/Rim El Dn	HGL Up	HGL Dn	Drng Area	Runoff Coeff	Gutter Spread	Q Capt	Q Byp	Vel Up	Vel Dn		Line No.	Line ID	Line Length	Line Size	Line Slope	Invert Up	Invert Dn	Gnd/Rim El Up	Gnd/Rim El Dn	HGL Up	HGL Dn	Drng Area	Runoff Coeff	Gutter Spread	Q Capt	t By	Q Vel yp Up	Vel Dn	
		(ft)	(in)	(%)	(ft)	(f	ft)	(ft)	(ft)	(ft)	(ft)	(ac)	(C)	(ft)	(cfs)	(cfs)	(ft/s)	(ft/s)				(ft)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ac)	(C)	(ft)	(cfs)	) (ct	fs) (ft/s)	(ft/s)	
1	MH 102 TO EXIST	6	18	0.50	) 150.9	91 150	0.88	158.89	158.89	151.95	5 151.80	6 0.00	0.00				4.93	5.27		24	Y.D. 1 TO 210	40	12	3.47	161.70	160.30	165.20	163.80	162.05	160.52	0.05	0.78	8.16	0.28	8 0.	.00 2.85	5.44	
2	104 TO MH 102	9	18	0.5	7 151.1	6 151	1.11	158.83	158.89	152.34	152.3	0.25	0.80	7.06	1.15	0.32	3.55	3.44		25	Y.D. 2 TO Y.D. 1	44	8	3.15	163.44	162.04	166.80	165.20	163.75	162.24	0.05	0.79	8.22	0.28	8 0.	.00 2.78	4.84	
3	106 TO 104	67	15	0.50	) 151.7	75 151	1.41	160.20	158.83	152.74	152.6	0.08	0.86	4.86	0.61	0.06	3.26	2.81		26	C.O. 10 TO 202	42	8	5.78	159.03	156.59	162.20	159.76	159.27	156.73	0.04	0.90	7.84	0.25	5 0.	.00 2.35	5.12	
4	108 TO 106	48	15	0.50	152.1	9 151	1.95	159.85	160.20	153.06	3 152.9	0.12	0.79	10.10	0.49	0.18	3.33	2.80		27	C.O. 11 TO Y.D. 2	47	8	3.38	165.23	163.64	168.40	166.80	165.44	163.77	0.03	0.90	6.82	0.19	9 0.	.00 2.16	3.89	
5	MH 110 TO 108	67	15	0.5	152.7	3 152	2.39	160.52	159.85	153.38	3 153.23	0.00	0.00				3.92	2.92																				
6	112 TO MH 110	62	15	0.50	153.2	24 152	2.93	159.08	160.52	153.90	153.6	0.08	0.72	9.10	0.33	0.07	3.88	3.72																				
7	114 TO 112	41	12	0.5	153.7	70 153	3.49	157.90	159.08	154.29	154.2	5 0.20	0.84	12.30	1.28	0.00	2.47	1.86																				
8	116 TO 114	49	12	3.39	155.5	6 153	3.90	159.56	157.90	155.74	j 154.4	0.03	0.89	7.10	0.17	0.02	2.00	0.44																				
9	118 TO MH 102	31	12	1.02	2 154.4	12 154	4.11	158.42	158.89	154.93	3 154.5	5 0.30	0.68	7.20	2.01	0.00	3.60	4.33																				
10	C.O. 1 TO 104	48	12	3.02	2 156.7	7 155	5.33	160.90	158.83	157.17	155.5	0.04	0.90	7.84	0.25	0.00	3.11	5.64																				
11	C.O. 2 TO C.O. 1	47	12	0.5	157.2	21 156	5.97	161.10	160.90	157.57	j 157.3	3 0.04	0.90	7.84	0.25	0.00	2.78	2.77																				
12	C.O. 3 TO C.O. 2	40	8	0.50	) 157.7	75 157	7.55	161.30	161.10	158.11	157.9	0.04	0.90	7.84	0.25	0.00	2.51	2.52																				
13	C.O. 4 TO C.O. 3	52	8	1.50	158.7	3 157	7.95	161.90	161.30	158.96	5 158.10	0.04	0.90	7.84	0.25	0.00	2.35	2.68																				
14	C.O. 5 TO 112	19	12	2.4	5 156.0	155	5.58	161.30	159.08	156.47	155.8	0.04	0.90	7.84	0.25	0.00	3.25	5.44																				
15	C.O. 6 TO C.O. 5	46	8	1.4	158.7	78 158	3.13	161.95	161.30	159.02	158.3	0.04	0.90	7.84	0.25	0.00	2.35	3.10																				
16	C.O. 7 TO C.O. 5	81	12	0.5	156.6	6 156	5.24	161.00	161.30	157.00	j 156.5	0.04	0.90	7.84	0.25	0.00	2.70	2.71																				
17	C.O. 8 TO C.O. 7	46	8	0.50	) 157.2	2 156	5.99	161.00	161.00	157.55	5 157.3	0.04	0.90	7.84	0.25	0.00	2.44	2.44																				
18	C.O. 9 TO C.O. 8	42	8	1.01	157.8	34 157	7.42	161.00	161.00	158.04	157.6	0.03	0.90	6.82	0.19	0.00	2.16	2.53																				
19	202 TO EXIST	42	12	1.10	) 155.5	56 155	5.10	159.76	159.10	156.24	155.7	0.10	0.90	11.10	0.61	0.24	4.43	5.11																				
20	MH 204 TO 202	62	12	0.80	156.2	26 155	5.76	160.53	159.76	156.83	3 156.29	0.00	0.00				3.87	4.17																				
21	206 TO MH 204	26	12	0.50	156.5	59 156	5.46	160.79	160.53	157.01	156.8	0.09	0.90	10.10	0.49	0.17	2.96	2.97																				
22	208 TO 206	71	12	1.01	157.5	51 156	6.79	161.51	160.79	157.78	j 157.0	3 0.07	0.90	9.10	0.36	0.09	2.52	2.38																				
23	210 TO MH 204	44	12	0.50	156.7	75 156	6.53	163.80	160.53	157.17	156.9	5 0.05	0.79	8.10	0.24	0.04	2.94	2.95																				
Projec	t File: Runs 100 and 3	200.stm										Nun	nber of lin	es: 27			Date: 2	2/6/2018		Project	File: Runs 100 and 20	) 00.stm									Num	hber of line	es: 27			Date: 2	2/6/2018	
NOTE	S: ** Critical depth											I								NOTES	: ** Critical depth																	



SHEET NO.:

6 OF 15

## <u>LEGEND</u> FF =FIRST FLOOR ELEVATION EXISTING STRUCTURE EXISTING DIRT/GRAVEL ROAD EXISTING STREET SIGN EXISTING UTILITY POLE $- \bigcirc -$ EXISTING R.O.W. EXISTING CARTWAY EXISTING CENTER LINE EXISTING BOUNDARY LINE | | | | | | | | | | | | | | | SOILS LINE EXISTING ELECTRIC LINE EXISTING GAS LINE EXISTING WATER LINE EXISTING CABLE LINE EXISTING CONCRETE MONUMENT EXISTING IRON PIN EXISTING SIGN EXISTING UTILITY POLE EXISTING INLET + 409.4 EXISTING SPOT ELEVATION EXISTING DECIDUOUS TREE 6 EXISTING FLOWERING TREE \_\_\_\_\_ 200 \_\_\_\_\_ EXISTING CONTOURS 100 PROPOSED CONTOURS + 100.0 EXISTING SPOT ELEVATION + 100.00 PROPOSED SPOT ELEVATION EXISTING TREE LINE EXISTING VEG.-WOODS EXISTING VEG.-SHRUBS PROPOSED TREE LINE EXISTING INLET W/ STORM SEWER PROPOSED STORM SEWER W/ STRUCTURE NUMBER MH PROPOSED STORM MANHOLE W/ STRUCTURE NUMBER \_\_\_\_\_ PROPOSED YARD INLET PROPOSED CLEANOUT FES 10 PROPOSED FLARED END SECTION W/STRUCTURE E E E E EXISTING ELECTRIC LINE ----- x ------ x PROPOSED SPLIT RAIL FENCE GRAPHIC SCALE

( IN FEET )

1 inch = 30 ft.



TS\PENNSYLVANIA\4222-VILLAGE AT VALLEY FORGE\ENGDEPT\DRAWINGS\4222-S-PROF.DWG-Andrew Roth-2/8/2018 12:35





lmitations and resolutions: SHOULD GROUNDWATER BE ENCOUNTERED DURING FOUNDATION OR UTILITY EXCAVATIONS, WATER SHALL BE PUMPED FROM TRENCH INTO FILTER BAG. 2. DUE TO GRADING LIMITATIONS OF SOILS DURING WINTER MONTHS, THE CONTRACTOR SHALL NOT GRADE THESES SOILS DURING FROSTING OR ICING CONDITIONS. SHOULD BEDROCK BE ENCOUNTERED DURING FOUNDATION OR UTILITY EXCAVATION, ROCK SHALL BE REMOVED AND DISPOSED OF IN A LEGAL MANNER SOIL TEST SHOULD BE PERFORMED TO DETERMINE SOIL SUITABLE FOR TOPSOIL. IF SOIL IS DETERMINED TO BE UNSUITABLE THEN TOPSOIL SHALL BE IMPORTED AND DISTRIBUTED THROUGHOUT THE SITE AS REQUIRED. 5. THE SUBJECT SITE DRAINS TO TROUT CREEK, WHICH HAS A WWF, MF, CHAPTER 93 CLASSIFICATION. SEEDING SPECIFICATIONS SEEDING DATES: SEEDING SHALL OCCUR BETWEEN MARCH 1ST AND MAY 15TH OR BETWEEN AUGUST 15TH AND NO LATER THAN OCTOBER 15TH B. IF SEEDING CANNOT BE CONDUCTED DURING THE TIMEFRAMES NOTED ABOVE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL CONSERVATION DISTRICT AND ALL APPROPRIATE AGENCIES TO DETERMINE AN ACCEPTABLE MEANS IN WHICH TO STABILIZE THE SITE THROUGH THE NEXT GROWING 2. SEED MIXTURES: SEED MIXTURE TO BE USED ON THIS SITE SHALL CONSIST OF THE FOLLOWING UNLESS OTHERWISE NOTED ON THE PLANS. RATES ARE IN THE FORM OF POUNDS PER ACRE (LB/A) PER PURE LIVE SEED (POUNDS/ACRE PLS). CONTRACTOR WILL NEED TO ADJUST ACCORDINGLY BASED ON THE SEED GERMINATION AND PURITY RATING (SEE ITEM #3 BELOW). TEMPORARY SEED MIXTURES: DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE DISTURBED AGAIN WITHIN TWELVE (12) MONTHS MUST BE SEEDED WITH A TEMPORARY SEED MIXTURE AS FOLLOWS: ANNUAL RYE (40 POUNDS/ACRE PLS) OR SPRING OATS (96 POUNDS/ACRE PLS OR WINTER RYE (168 POUNDS/ ACRE PLS) (REFERENCE: PENN STATE "EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND", TABLE 5) PERMANENT SEEDING SHALL CONSIST OF A NURSE CROP PLUS A PERMANENT SEED MIXTURE, AS FOLLOWS: NURSE CROP (SELECT ONE) ANNUAL RYE (10 POUNDS/ACRE PLS) OR SPRING OATS (64 POUNDS/ACRE PLS) OR WINTER RYE (56 POUNDS/ACRE PLS) (REFERENCE: PA DEP EROSION AND SEDIMENT CONTROL PROGRAM MANUAL, LATEST EDITION, TABLE 11.4, SEED MIX #1) II. PERMANENT SEED MIX: TALL FESCUE (64 POUNDS/ACRE PLS) OR FINE FESCUE (35 POUNDS/ACRE PLS) OR KENTUCKY BLUEGRASS (25 POUNDS/ACRE PLS) PLUS REDTOP (3 POUND/ACRE PLS) OR PERENNIAL RYEGRASS (15 POUND/ACRE PLS) (REFERENCE: PA DEP EROSION AND SEDIMENT CONTROL PROGRAM MANUAL, LATEST EDITION, TABLE 11.4, SEED MIX #2) PURE LIVE SEED SEED USED FOR THE PURPOSE OF PERMANENT STABILIZATION SHALL BE LABELED WITH GERMINATION AND PURITY PERCENTAGES. UNLABELED SEED WILL BE REJECTED. SEED SHALL NOT BE USED MORE THAN ONE (1) YEAR BEYOND THE LABEL DATE. B. DETERMINING THE PERCENTAGE OF GERMINATION AND DIVIDE THE RESULT BY 100 (%PURE X %GERMINATION/100) DETERMINING THE ACTUAL SEED RATE: SIMPLY DIVIDE THE PERCENT PLS RATING OF THE SEED INTO THE PLS REQUIRED, AS NOTED ABOVE. THE RESULT IS THE POUNDS OF SEED REQUIRED. FOR EXAMPLE: IF THE REQUIRED RATE IS 64 POUNDS PLS, AND THE SEED IS RATED AT 35% PLS, DIVIDE 64 BY 0.35 TO GET 182.9 POUNDS, WHICH IS THE AMOUNT OF THAT SEED REQUIRED PER ACRE. APPLICATION OF SEED: SEEDING SHALL BE APPLIED AND ESTABLISHED IN ACCORDANCE WITH THE "EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL" AS PUBLISHED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATER QUALITY PROTECTION (MOST RECENT EDITION). A. SEED SHALL BE APPLIED IN A NON-COMPACT, ROUGHENED TOPSOIL SEED MAY BE APPLIED THROUGH ANY OF THE FOLLOWING MEANS AND METHODS, OR OTHER ACCEPTED INDUSTRY PRACTICES, UNLESS SPECIFICALLY NOTED OTHERWISE ON THESE PLANS: DRILL SEEDING BROADCAST SEEDING (TWO DIRECTIONS) HYDROSEEDING (TWO DIRECTION) ALL\_SEED\_SHALL\_BE\_TEMPORARILY\_OR\_PERMANENTLY\_STABILIZED\_UNTIL\_A\_70%\_PERENNIAL\_COVER\_IS\_ACHIEVED: TEMPORARY STABILIZATION WITH STRAW: STRAW MULCH SHALL BE APPLIED ON TOP OF THE FRESHLY SEEDED AREAS AT A RATE OF 3 TONS PER ACRE (4 TONS PER ACRE BETWEEN NOVEMBER 1ST AND MARCH 1ST) STRAW SHALL BE STABILIZED WITH A WOOD OR PAPER FIBER MULCH AND TACKIFIER SOLUTION IN ACCORDANCE WITH THE PRODUCT MANUFACTURER'S SPECIFICATIONS. TEMPORARY/PERMANENT STABILIZATION WITH EROSION CONTROL MATTING/BLANKETS (WHERE SPECIFIED) MATTING/BLANKETS SHALL BE INSTALLED IN AREAS AS NOTED ON THE EROSION & SEDIMENT CONTROL PLAN OR WITHIN 50 FEET OF PONDS, STREAMS OR WETLANDS. THE PRODUCT SHALL BE INSTALLED AND STAPLED ON TOP OF THE SEEDING IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS AREAS WITH MATTING/BLANKETS SHALL NOT BE TRACKED (CATWALKED) AFTER INSTALLATION. MATTING/BLANKETS SHALL BE VISUALLY INSPECTED DAILY TO ENSURE THAT THE PRODUCT IS FUNCTIONING PROPERLY, IS HELD FAST TO THE SOIL SURFACE AND IS IN GOOD CONDITION. J. ONCE SEED HAS BEEN SET, VEHICULAR TRAFFIC OR OTHER SOURCES OF COMPACTION SHALL BE AVOIDED. 4. IRRIGATION: NEW SEED APPLICATIONS SHOULD BE SUPPLIED WITH ADEQUATE WATER, A MINIMUM OF 1/4" TWICE A DAY, UNTIL VEGETATION IS WELL ESTABLISHED (A MINIMUM OF 75% COVER UusB - URBAN LAND-UDORTHENTS, SHALE AND SANDSTONE COMPLEX, 0 TO 8 PERCENT SLOPES MAP UNIT SETTING NATIONAL MAP UNIT SYMBOL: 2DTZ9 ELEVATION: 250 TO 950 FEET MEAN ANNUAL PRECIPITATION: 38 TO 48 INCHES MEAN ANNUAL AIR TEMPERATURE: 48 TO 57 DEGREES F FROST-FREE PERIOD: 161 TO 215 DAYS FARMLAND CLASSIFICATION: NOT PRIME FARMLAN MAP UNIT COMPOSITION URBAN LAND: 80 PERCENT UDORTHENTS, SHALE AND SANDSTONE, AND SIMILAR SOILS: 15 PERCENT MINOR COMPONENTS: 5 PERCENT ESTIMATES ARE BASED ON OBSERVATIONS, DESCRIPTIONS, AND TRANSECTS OF THE MAPUNIT. DESCRIPTION OF URBAN LAND SETTING LANDFORM: HILLS PARENT MATERIAL: PAVEMENT, BUILDINGS AND OTHER ARTIFICIALLY COVERED AREAS TYPICAL PROFILE C - 0 TO 6 INCHES: VARIABLE PROPERTIES AND QUALITIES SLOPE: 0 TO 8 PERCENT DEPTH TO RESTRICTIVE FEATURE: 10 TO 99 INCHES TO LITHIC BEDROCK AVAILABLE WATER STORAGE IN PROFILE: VERY LOW (ABOUT 0.0 INCHES) INTERPRETIVE GROUP LAND CAPABILITY CLASSIFICATION (IRRIGATED): NONE SPECIFIED LAND CAPABILITY CLASSIFICATION (NONIRRIGATED) 85 HYDRIC SOIL RATING: NO DESCRIPTION OF UDORTHENTS, SHALE AND SANDSTONE SETTING LANDFORM: RIDGES LANDFORM POSITION (TWO-DIMENSIONAL): BACKSLOPE, SHOULDER, SUMMIT LANDFORM POSITION (THREE-DIMENSIONAL): SIDE SLOPE, NOSE SLOPE, INTERFLUVE DOWN-SLOPE SHAPE: LINEAR, CONVEX ACROSS-SLOPE SHAPE: LINEAR, CONVEX PARENT MATERIAL: GRADED AREAS OF SANDSTONE AND SHALE TYPICAL PROFILE A - 0 TO 6 INCHES: VERY CHANNERY LOAM C - 6 TO 60 INCHES: VERY CHANNERY SILT LOAM UusD - URBAN LAND-UDORTHENTS, SHALE AND SANDSTONE COMPLEX, 8 TO 25 PERCENT SLOPES MAP UNIT SETTING NATIONAL MAP UNIT SYMBOL: 2DTZB ELEVATION: 250 TO 950 FEET MEAN ANNUAL PRECIPITATION: 38 TO 48 INCHES MEAN ANNUAL AIR TEMPERATURE: 50 TO 57 DEGREES F FROST-FREE PERIOD: 160 TO 200 DAYS FARMLAND CLASSIFICATION: NOT PRIME FARMLAND MAP UNIT COMPOSITION URBAN LAND: 80 PERCENT UDORTHENTS, SHALE AND SANDSTONE, AND SIMILAR SOILS: 15 PERCENT MINOR COMPONENTS: 5 PERCENT ESTIMATES ARE BASED ON OBSERVATIONS, DESCRIPTIONS, AND TRANSECTS OF THE MAPUNIT. DESGRIPTION OF URBAN LAND SETTING LANDFORM: HILLS LANDFORM POSITION (TWO-DIMENSIONAL): SUNNIT, SHOULDER, BACKSLOPE LANDFORM POSITION (THREE-DIMENSIONAL): INTERFLUVE, SIDE SLOPE, NOSE SLOPE DOWN-SLOPE SHAPE: LINEAR, CONVEX ACROSS-SLOPE SHAPE: CONVEX. LINEAR PARENT MATERIAL: PAVEMENT, BUILDINGS AND OTHER ARTIFICIALLY COVERED AREAS TYPICAL PROFILE C - O TO 6 INCHES: VARIABLE PROPERTIES AND QUALITIES SLOPE: 8 TO 25 PERCENT DEPTH TO RESTRICTIVE FEATURE: 10 TO 99 INCHES TO LITHIC BEDROCK AVAILABLE WATER STORAGE IN PROFILE: VERY LOW (ABOUT 0.0 INCHES) INTERPRETIVE GROUPS LAND CAPABILITY CLASSIFICATION (IRRIGATE): NONE SPECIFIED LAND CAPABILITY CLASSIFICATION (NONIRRIGATED): 85 HYDRIC SOIL RATING: NO DESCRIPTION OF UDORTHENTS, SHALE AND SANDSTONE SETTING LANDFORM: HILLS LANDFORM POSITION (TWO-DIMENSIONAL): SUMMIT, SHOULDER, BACKSLOPE LANDFORM POSITION (THREE-DIMENSIONAL): INTERFLUV, SIDE SLOPE, NOSE SLOPE DOWN-SLOPE SHAPE: LINEAR, CONVEX ACROSS-SLOPE SHAPE: CONVEX. LINEAR PARENT MATERIAL: GRADED AREAS OF SANDSTONE AND SHALE AP – 0 TO 6 INCHES: VERY CHANNERY LOAM C – 6 TO 60 INCHES: V<u>ERY CHANNERY SILTY CLAY LOAM</u>

VISUAL INSPECTION THE PERMITTEE AND CO-PERMITTEE(S) MUST ENSURE THAT VISUAL SITE INSPECTIONS ARE CONDUCTED WEEKLY, AND WITHIN 24 HOURES AFTER EACH MEASURE RAINFALL EVENT THROUGHOUT THE DURATION OF CONSTRUCTION AND UNTIL THE RECIPT AND ACKNOWLEDGEMENT OF THE NOT BY THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT. THE VISUAL SITE INSPECTIONS AND REPORTS SHALL BE COMPLETED IN A FORMAT PROVIDED BY THE DEPARTMENT, AND CONDUCTED BY QUALIFIED PERSONNEL, TRAINED AND EXPERIENCED IN EROSION AND SEDIMENT CONTROL, TO ASCERTAIN THAT E&S BMPS AND PCSM BMPS ARE PROPERLY CONSTRUCTED AND MAINTAINED TO EFFECTIVELY MINIMIZE POLLUTION TO THE WATERS OF THIS COMMONWEALTH. A WRITTEN REPORT OF EACH INSPECTION SHALL BE KEPT AND INCLUDE AT A MINIMUM:

(1) A SUMMARY OF SITE CONDITIONS, E&S BMP AND PCSM BMP, IMPLEMENTATION AND MAINTENANCE AND COMPLIANCE ACTIONS; AND (2) THE DATE, TIME, NAME AND SIGNATURE OF THE PERSON CONDUCTING THE INSPECTION.

## NONCOMPLIANCE REPORTING

WHERE E&S, PCSW OR PPC BMPS ARE FOUND TO BE INOPERATIVE OR INEFFECTIVE DURING AN INSPECTION, OR ANY OTHER TIME, THE PERMITTEE AND CO-PERMITTEE(S) SHALL, WITHIN 24 HOURS, CONTACT THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT, BY PHONE OR PERSONAL CONTACT, FOLLOWED BY THE SUBMISSION OF A WRITTEN REPORT WITHIN 5 DAYS OF THE INITIAL CONTACT. NONCOMPLIANCE REPORTS SHALL INCLUDE THE FOLLOWING INFORMATION:

(1) ANY CONDITION ON THE PROJECT SITE WHICH MAY ENDANGER PUBLIC HEALTH, SAFETY, OR THE ENVIRONMENT, OR INVOLVE INCIDENTS WHICH CAUSE OR THREATEN POLLUTION: (2) THE PERIOD OF NONCOMPLIANCE, INCLUDING EXACT DATES AND TIMES AND/OR ANTICIPATED TIME WHEN THE ACTIVITY WILL RETURN TO COMPLIANCE;

STEPS BEING TAKEN TO REDUCE, ELIMINATE, AND PREVENT RECURRENCE OF THE NONCOMPLIANCE; AND (4) THE DATE OR SCHEDULE OF DATES, AND IDENTIFYING REMEDIES FOR CORRECTING NONCOMPLIANCE CONDITIONS.

REDUCTION, LOSS, OR FAILURE OF THE BMPS UPON REDUCTION, LOSS, OR FAILURE OF THE BMPS, THE PERMITTEE AND CO-PERMITTEE SHALL TAKE IMMEDIATE ACTION TO RESTORE THE BMPS OR PROVIDE AN ALTERNATIVE METHOD OF TREATMENT. SUCH RESTORED BMPS OR ALTERNATIVE TREATMENT SHALL BE AT LEAST AS EFFECTIVE AS THE ORIGINAL BMPS.

TERMINATION OF COVERAGE NOTE: UPON PERMANENT STABILIZATION OF EARTH DISTURBANCE ACTIVITIES ASSOCIATED WITH CONSTRUCTION ACTIVITY THAT ARE AUTHORIZED BY THIS PERMIT AND WHEN BMPS IDENTIFIED IN THE PCSM PLAN HAVE BEEN PROPERLY INSTALLED, THE PERMITTEE AND/OR CO-PERMITTEE OF THE FACILITY MUST SUBMIT A NOT FORM THAT IS SIGNED IN ACCORDANCE WITH PART B, SECTION 1.C, SIGNATORY REQUIREMENTS, OF THIS PERMIT. ALL LETTERS CERTIFYING DISCHARGE TERMINATION ARE TO BE SENT TO THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT. THE NOT MUST CONTAIN THE FOLLOWING INFORMATION: FACILITY NAME, ADDRESS, AND LOCATION. OPERATOR NAME AND ADDRESS, PERMIT NUMBER, IDENTIFICATION AND PROOF OF ACKNOWLEDGMENT FROM THE PERSON(S) WHO WILL BE RESPONSIBLE FOR OPERATION AND MAINTENANCE OF THE PCSM BMPS IN ACCORDANCE WITH THE APPROVED PCSM PLAN, AND THE REASON FOR PERMIT TERMINATION. UNTIL THE PERMITTEE HAS RECEIVED WRITTEN ACKNOWLEDGMENT OF THE NOT, THE PERMITTEE WILL REMAIN RESPONSIBLE FOR OPERATING AND MAINTAINING ALL E&S BMPS AND PCSM BMPS ON THE PROJECT SITE AND WILL BE RESPONSIBLE FOR VIOLATIONS OCCURRING ON THE PROJECT SITE.

## COMPLETION CERTIFICATE AND FINAL PLANS

WITHIN 30 DAYS AFTER THE COMPLETION OF EARTH DISTURBANCE ACTIVITIES AUTHORIZED BY THIS PERMIT, INCLUDING THE PERMANENT STABILIZATION OF THE SITE AND PROPER INSTALLATION OF PCSM BMPS IN ACCORDANCE WITH THE APPROVED PCSM PLAN, OR UPON SUBMISSION OF THE NOT IF SOONER, THE PERMITTEE SHALL FILE WITH THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT A STATEMENT SIGNED BY A LICENSED PROFESSIONAL AND BY THE PERMITTEE CERTIFYING THAT WORK HAS BEEN PERFORMED IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THIS PERMIT AND THE APPROVED E&S AND PCSM PLANS.

GENERAL CONSERVATION NOTES AND SPECIFICATIONS

## I. GENERAL INFORMATION

THIS EROSION AND SEDIMENT CONTROL PLAN SHALL BE AVAILABLE AT THE SITE. NO SEDIMENT OR SEDIMENT LADEN WATER MUST BE ALLOWED TO LEAVE THE SITE WITHOUT FIRST BEING PROPERLY FILTERED.

ANY SEDIMENT THAT IS TRACKED ONTO THE ROAD MUST BE CLEANED OFF BEFORE THE END OF THE DAY. DISTURBED AREAS ON WHICH EARTHMOVING ACTIVITIES HAVE CEASED AND WHICH WILL REMAIN EXPOSED SHALL BE STABILIZED IMMEDIATELY, EITHER TEMPORARILY OR PERMANENTLY, INCLUDING THE RESTORATION OF DRIVEWAYS, STOCKPILES, OFF-SITE UNDERGROUND UTILITY LINES AND GRADED PERIMETER AREAS. DURING NON-GERMINATION PERIODS, MULCH MUST BE APPLIED AT RECOMMENDED RATES. CRUSHED STONE ON PAVEMENT SUBGRADES IS CONSIDERED ADEQUATE PROTECTION.

AREAS THAT FAIL TO GERMINATE MUST BE RE-SEEDED OR MULCHED. WHERE DISTURBED AREAS ARE DIFFICULT TO STABILIZE, NETTING SHOULD BE USED TO HOLD SEED AND MULCH IN PLACE; THIS IS ESPECIALLY IMPORTAN AROUND WATERCOURSES, IN SWALES AND AREAS OF CONCENTRATED FLOWS, STEEP SLOPES.

UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN JT, REPAIR, REPLACEMENT, RE-GRADING, RE-SEEDING, RE-MULCHING, AND RE-NETTING, MUST BE PERFORMED IMMEDIATELY. IF AT ANY TIME PRIOR TO SITE STABILIZATION ANY E&SP PROBLEMS OCCUR WHICH REQUIRE ADDITIONAL CONTROLS, IMMEDIATE ACTION MUST BE TAKEN TO CORRECT THE PROBLEMS

THE CONTRACTOR MUST DEVELOP AND COORDINATE WITH OWNER AND HAVE APPROVED BY THE COUNTY CONSERVATION DISTRICT. A SEPARATE EROSION AND SEDIMENT POLLUTION CONTROL PLAN FOR EACH SPOIL, BORROW OR OTHER WORK AREA NOT DETAILED ON THE PERMITTED PLANS, WHETHER LOCATED WITHIN OR OUTSIDE OF THE LIMITS OF CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE COUNTY CONSERVATION DISTRICT OF DISPOSAL METHOD AND LOCATION OF MATERIALS (IF ANY) TO BE REMOVED FROM SITE.

STANDARD FOR DISPOSAL OF MATERIALS ALL MATERIALS TO BE RECYCLED OR DISPOSED OF MUST DO SO IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL REGULATIONS. STOCKPILES TO BE HAULED OFF SITE MUST HAVE AN APPROVED EROSION AND SEDIMENT CONTROL PLAN AT THE DESTINATION LOCATION THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN SOIL STABILIZATION THROUGHOUT CONSTRUCTION. ADDITIONAL MEASURES REQUIRED TO ENSURE ON-SITE AND OFF-SITE STABILIZATION IN AND ADJACENT TO CONSTRUCTION ACTIVITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE AT THE COST TO THE OWNER. IMMEDIATE NOTIFICATION SHALL BE QUENT TO THE OWNER AND ENGINEER SHOULD ADDITION STABILIZATION MEASURES BE NECESSARY; IN ADDITION TO THE OWNER, AND ADJACENT DESCRIPTION OF THE OWNER AND ENGINEER SHOULD ADDITION STABILIZATION MEASURES BE NECESSARY; IN ACCORDANCE WITH THE NPDES AND/OR SWPPP REQUIREMENTS FOR THE PROJECT.

## STANDARD FOR LAND GRADING

(SEE I. D.)

DEFINITION: RESHAPING THE GROUND SURFACE BY GRADING TO PLAN GRADES, WHICH ARE DETERMINED BY TOPOGRAPHIC SURVEY AND LAYOUT. PROVISIONS SHALL BE BE MADE TO SAFELY CONDUCT SURFACE WATER TO STORM DRAINS OR SUITABLE WATER COURSES AND TO PREVENT SURFACE RUNOFF FROM DAMAGING CUT FACES AND FULL SLOPES. ADJOINING PROPERTY SHALL BE PROTECTED FROM EXCAVATION AND FILING OPERATIONS.

INSTALLATION REQUIREMENTS TIMBER, LOGS, BRUSH, RUBBISH, ROCKS, STUMPS AND VEGETABLE MATTER WHICH WILL INTERFERE WITH THE GRADING OPERATION OR AFFECT THE PLANNED STABILITY OR FILL AREAS SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH STANDARD FOR DISPOSAL OF MATERIALS. FILL MATERIAL IS TO BE FREE OF BRUSH, RUBBISH, TIMBER, LOGS, VEGETATIVE MATTER AND STUMPS IN AMOUNTS THAT WILL BE DETRIMENTAL TO ONSTRUCTING STABLE FILLS ALL FILLS SHALL BE COMPACTED SUFFICIENTLY FOR THEIR INTENDED PURPOSE AND AS REQUIRED TO REDUCE SLIPPING, EROSION OR EXCESS

SATURATION. ALL DISTURBED AREAS SHALL BE LEFT WITH A NEAT AND FINISHED APPEARANCE AND SHALL BE PROTECTED FROM EROSION.

## III. STANDARD FOR UTILITY TRENCH EXCAVATION

A. LIMIT ADVANCE CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILL THAT CAN BE COMPLETED THE SAME DAY. DAILY BACKFILLING OF THE TRENCH MAY BE DELAYED FOR A MAX. OF SIX DAYS FOR CERTAIN CASES REQUIRING TESTING OF THE INSTALLED PIPE. WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING TO A FACILITY FOR REMOVAL OF SEDIMENT (SEDIMENT FILTER

BAG, SEE DETAIL) BEFORE PIPE PLACEMENT AND/OR BACKFILLING BEGINS. ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND APPROPRIATE TEMPORARY EROSION AND SEDIMENT POLLUTION CONTROL MEASURES/FACILITIES WILL BE INSTALLED. SEEDING AND MULCHING OF ALL DISTURBED AREAS WILL BE DONE IMMEDIATEL WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PLUG CONSTRUCTION AND BACKFILLING WILL BE SELF CONTAINED AND SEPARATE FROM CLEARING AND GRUBBING AND SITE RESTORATION AND STABILIZATION OPERATIONS. F. ALL SOIL EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.

## IV. STANDARD FOR TEMPORARY STABILIZATION

STANDARD FOR TEMPORARY STABILIZATION WITH FIBERMULCH MULCHING IS MOST APPLICABLE TO THOSE AREAS SUBJECT TO PERIODIC DISTURBANCE AND REWORKING. IN ADDITION, STABILIZATION WITH FIBER MULCH

SHALL BE USED DURING NON-GERMINATION PERIODS PERFORM ALL CULTURE OPERATIONS AT RIGHT ANGLES TO THE SLOPE. GRADE AS NEED AND FEASIBLE. SEE STANDARD FOR LAND GRADING.

PROTECTIVE MATERIALS TO BE USED: UNROTTED SMALL-GRAIN UN-CHOPPED STRAW OR HAY AT 3.0 TONS PER ACRE (4 TONS PER ACRE BETWEEN NOVEMBER 1 AND MARCH 1) SPREAD

UNIFORMLY AND ANCHORED WITH LIQUID MULCH BINDER. BINDER PRODUCTS SHALL BE INSTALLED IN ACCORDANCE WITH THE PRODUCT MANUFACTURER'S SPECIFICATIONS. HYDROMULCH. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL. LIQUID MULCH BINDER: APPLY IMMEDIATELY AFTER PLACEMENT OF HAY OR STRAW MULCH TO MINIMIZE LOSS BY WIND OR WATER. PRODUCTS TO BE INSTALLED IN ACCORDANCE

WITH MANUFACTURER SPECIFICATIONS.

STANDARD FOR TEMPORARY STABILIZATION WITH SEED DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN TWELVE (12) MONTHS MUST BE SEEDED AND MULCHED IMMEDIATELY WITH A TEMPORARY COVER. ALL AREAS TO BE PERMANENTLY SEEDED SHALL ALSO RECEIVE TEMPORARY SEEDING CONCURRENTLY.

## SEEDBED PREPARATION FOR TEMPORARY SEEDING PERFORM ALL CULTURAL OPERATIONS AT RIGHT ANGLES TO SLOPE.

APPLY AGRICULTURAL LIME AT A RATE OF 1 TON PER ACRE APPLY 10-10-10 FERTILIZER AT A RATE OF 500 POUNDS PER ACRE. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF FOUR (4) INCHES.

SEEDING: SEE SEEDING SPECIFICATIONS

APPLYING TOPSOIL

4.

V. STANDARD FOR PERMANENT STABILIZATION SPECIFICATION FOR SEEDING & SOIL TREATMENT FOR PERMANENT VEGETATIVE COVER

SITE PREPARATION GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING. AND MAINTENANCE SUBSOIL SHOULD BE TESTED FOR LIME REQUIREMENT AND LIMESTONE, IF NEEDED, SHOULD BE APPLIED TO BRING SOIL PH TO BETWEEN 5.5 AND 7 AND INCORPORATED INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES. IMMEDIATELY PRIOR TO TOPSOIL DISTRIBUTION, THE SURFACE SHOULD BE SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3-5 INCHES TO PROVIDE A GOOD BOND WITH THE TOPSOIL.

TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL STRUCTURE. ALL DISTURBED TOPSOIL ON-SITE IS TO BE REDISTRIBUTED ON-SITE IN AREAS NOT COVERED BY IMPERVIOUS SURFACES. NO REMOVAL OF TOPSOIL IS ALLOWED UNLESS APPROVED BY THE TOWNSHIP. UNIFORM APPLICATION TO A DEPTH OF 4-8 INCHES (UNSETTLED) IS RECOMMENDED. SOILS WITH A PH OF 4.0 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM DEPTH OF 12 INCHES OF SOIL HAVING A PH OF 5.0 OR MORE SEEDBED PREPARATION

## A SOIL TEST SHALL BE CONDUCTED TO ACCURATELY DETERMINE NECESSARY SOIL AMENDMENTS. PERFORM ALL CULTURAL OPERATIONS AT RIGHT ANGLES TO SLOPE.

SOIL MODIFICATIONS: APPLY 10-10-40 RATED FERTILIZER AT A RATE OF 1000 POUNDS PER ACRE OR 25 POUNDS PER 1000 SQUARE FEET, OR AS DIRECTED BY SOIL TEST

APPLY AGRICULTURE LIME AT A RATE OF 6 TONS PER ACRE OR 240 POUNDS PER 1000 SQUARE FEET, OR AS DIRECTED BY SOIL TEST. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM FINE SEEDBED IS PREPARED REMOVE FROM THE SURFACE ALL STONES 1 INCH (1") OR LARGER IN ANY DIMENSION, REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLODS, LUMPS OR OTHER UNSUITABLE MATERIALS. INSPECT SEEDBEDS JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RE-TILLED AND FIRMED AS ABOVE. SEEDING: SEE <u>SEEDING SPECIFICATIONS</u> STANDARD FOR PERMANENT STABILIZATION WITH SOD

METHODS AND MATERIALS CULTIVATED SOD IS PREFERRED OVER NATIVE OR PASTURE SOD. SPECIFY "CERTIFIED SOD" OR OTHER HIGH QUALITY CULTIVATED SOD. SOD SHOULD BE FREE OF WEEDS AND UNDESIRABLE COARSE WEEDY GRASSES. SOD SHOULD BE OF UNIFORM THICKNESS, APPROXIMATELY 5/8 INCH, PLUS OR MINUS 1/4 INCH, AT TIME OF CUTTING. (EXCLUDES TOP GROWTH). SOD SHOULD BE VIGOROUS AND DENSE AND BE ABLE TO RETAIN ITS OWN SHAPE AND WEIGHT WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP FROM THE UPPER 0% OF THE STRIP. BROKEN PADS OR TORN AND UNEVEN ENDS WILL NOT BE ACCEPTABLE

A SOD OF KENTUCKY 31 TALL FESCUE WITH BLUEGRASS, OR A FESCUE BLEND IS PREFERRED. ONLY MOIST, FRESH UNHEATED SOD SHOULD BE USED. SOD SHOULD BE HARVESTED, DELIVERED AND INSTALLED WITHIN A PERIOD OF 36 HOURS SITE PREPARATION: SEE SPECIFICATION FOR SEEDING & SOIL TREATMENT FOR PERMANENT VEGETATIVE COVER (ITEM V.A. ABOVE) SOD PLACEMENT

SOD STRIPS SHOULD BE LAID ON THE CONTOUR, NEVER UP AND DOWN THE SLOPE, STARTING AT THE BOTTOM OF THE SLOPE AND WORKING UP. ON STEEP SLOPES, THE USE OF LADDERS WILL FACILITATE THE WORK AND PREVENT DAMAGE TO THE SOD. DURING PERIODS OF HIGH TEMPERATURE, LIGHTLY IRRIGATE THE SOIL IMMEDIATELY PRIOR TO LAYING THE SOD. PLACE SOD STRIPS WITH SNUG EVEN JOINTS THAT ARE STAGGERED. OPEN SPACES INVITE EROSION.

ROLL OR TAMP SOD IMMEDIATELY FOLLOWING PLACEMENT TO INSURE SOLID CONTACT OF ROOT MAT AND SOIL SURFACE. DO NOT OVERLAP SOD. ALL JOINTS SHOULD BE BUTTED TIGHTLY IN ORDER TO PREVENT VOIDS, WHICH WOULD CAUSE DRYING OF THE ROOTS. ON SLOPES GREATER THAN 3 TO 1, SECURE SOD TO SURFACE SOIL WITH WOOD PEGS, WIRE STAPLES OR A BIODEGRADABLE FASTENER. SURFACE WATER CANNOT ALWAYS BE DIVERTED FROM FLOWING OVER THE FACE OF THE SLOPE, BUT A CAPPING STRIP OF HEAVY JUTE OR PLASTIC NETTING, PROPERLY SECURED, ALONG THE CROWN OF THE SLOPE AND EDGES WILL PROVIDE EXTRA PROTECTION AGAINST LIFTING AND JNDERCUTTING OF SOD. THE SAME TECHNIQUE CAN BE USED TO ANCHOR SOD IN WATER-CARRYING CHANNELS AND OTHER CRITICAL AREAS. WIRE STAPLES MUST BE USED TO ANCHOR NETTING IN CHANNEL WORK.

IMMEDIATELY FOLLOWING INSTALLATION, SOD SHOULD BE WATERED UNTIL MOISTURE PENETRATES THE SOIL LAYER BENEATH SOD TO A DEPTH OF 4 INCHES. MAINTAIN OPTIMUM MOISTURE FOR AT LEAST TWO WEEKS. FOLLOW-UP INSPECTION: AFTER THE FIRST GROWING SEASON, THE SOD SHOULD BE INSPECTED TO DETERMINE IF ADDITIONAL FERTILIZATION OR LIMING IS SEQUENCE OF CONSTRUCTION

AT LEAST 3 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INCORPORATED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES. AT LEAST SEVEN (7) DAYS BEFORE COMMENCEMENT OF ANY EARTH DISTURBING ACTIVITIES, THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES,

THE LAND OWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE EROSION AND SEDIMENTATION CONTROL PLAN PREPARER, AND A REPRESENTATIVE OF THE MONTGOMERY COUNTY CONSERVATION DISTRICT TO AN ON-SITE PRE-CONSTRUCTION MEETING.

4. ALL STRUCTURES ASSOCIATED WITH CONSTRUCTION OF SEDIMENT AND EROSION CONTROL MEASURES MUST BE AVAILABLE ON-SITE PRIOR TO ANY EARTH MOVING/DISTURBANCE

5. INSTALL CONSTRUCTION ENTRANCE OFF OF S. GODDARD BOULEVARD.

6. INSTALL SILT FENCE ON DOWNHILL SIDE OF EARTH MOVING ACTIVITIES AS INDICATED ON THE PLANS. PERIMETER SILT FENCE ALSO TO BE INSTALLED AT THIS TIME. 7. CLEAR AND GRUB WITHIN LIMIT OF DISTURBANCE AS INDICATED ON THE PLANS.

10. CONTINUE CONSTRUCTION OF UTILITIES AND INSTALL SITE LIGHTING FOUNDATIONS AND LIGHT STANDARDS

11. INSTALL PROPOSED CURBING

13. REMOVE ALL CONSTRUCTION DEBRIS AND EXCESS CUT MATERIAL FROM THE SITE IN A LAWFUL MANNER.

14. INLET PROTECTION AND SILT FENCE SHALL REMAIN IN PLACE UNTIL ALL DISTURBED AREAS ARE ADEQUATELY STABILIZED.

STABILIZED IMMEDIATELY

17. INSTALL SITE DRAINAGE AND STRIPING. 18. DEMOBILIZE.

2.) AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, THE PCSM PLAN PREPARER, THE LICENSE PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE

3.) AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES. 4.) ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE

6.) CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPS SPECIFIED BY THE BNP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.

7.) AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN. 8.) IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL

BEING ACTIVATED

11.) THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING. 12.) ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS.

14.) UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPS SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIRS, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.

15.) A LOG SHOWING DATES THAT E&S BMPS WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTIO

16.) SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE

MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELLED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER. 17.) ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.

18.) AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES - 6 TO 12 INCHES ON COMPACTED SOILS - PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL

19.) ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT

20.) ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS. 21.) FILL MATERIAL SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.

22.) FROZEN MATERIAL OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.

24.) SEEPS OR SPRING ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD

25.) ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDED AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.

26.) IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.

27.) PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.

28.) E&S BMPS SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.

29.) UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPS.

30.) AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPS MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMPS. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPS SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATIVE OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS AREA TO BE DONE ONLY DURING THE GERMINATING SEASON.

OPTIONAL NOTES

1. CONCRETE WASH WATER SHALL BE HANDLED IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS. IN NO CASE SHALL IT BE ALLOWED TO ENTER ANY SURFACE WATERS OR GROUNDWATER SYSTEMS 2. ALL CHANNELS SHALL BE KEPT FREE OF OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO FILL, ROCKS, LEAVES, WOODY DEBRIS, ACCUMULATED SEDIMENT, EXCESS VEGETATION, AND CONSTRUCTION MATERIAL/WASTES

4. CHANNELS HAVING RIPRAP, RENO MATTRESS, OR GABION LININGS MUST BE SUFFICIENTLY OVER-EXCAVATED SO THAT THE DESIGN DIMENSIONS WILL BE PROVIDED AFTER

PLACEMENT OF THE PROTECTIVE LINING. 5. SEDIMENT BASINS AND/OR TRAPS SHALL BE KEPT FREE OF ALL CONSTRUCTION WASTE, WASH WATER, AND OTHER DEBRIS HAVING POTENTIAL TO CLOG THE BASIN/TRAP OUTLET STRUCTURES AND/OR POLLUTE THE SURFACE WATERS.

6. SEDIMENT BASINS SHALL BE PROTECTED FROM UNAUTHORIZED ACTS BY THIRD PARTIES.

7. ANY DAMAGE THAT OCCURS IN WHOLE OR IN PARTS AS A RESULT OF BASIN OR TRAP DISCHARGE SHALL BE IMMEDIATELY REPAIRED BY THE PERMITTEE IN A PERMANENT MANNER SATISFACTORY TO THE MUNICIPALITY, LOCAL CONSERVATION DISTRICT, AND THE OWNER OF THE DAMAGED PROPERTY. 8. UPON REQUEST, THE APPLICANT OR HIS CONTRACTOR SHALL PROVIDE AN AS-BUILT (RECORD DRAWING) FOR ANY SEDIMENT BASIN OR TRAP TO THE MUNICIPAL INSPECTOR, LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT. 9. EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES 3H: 1V OR STEEPER WITHIN 50 FEET OF A SURFACE WATER AND ON ALL OTHER DISTURBED AREAS SPECIFIED ON THE PLAN MAPS AND/OR DETAIL SHEETS

THIS SEQUENCE OF CONSTRUCTION REFERS TO THE "ON-SITE" LIMIT OF DISTURBANCE. FOR EROSION AND SEDIMENT POLLUTION CONTROLS RELATING TO "OFF-SITE" CONSTRUCTION FOR S. GODDARD BOULEVARD THE CONTRACTOR MUST REFER TO THE PLANS PREPARED BY GILMORE ASSOCIATES, INC.

8. PERFORM DEMOLITION ACTIVITIES IN ACCORDANCE WITH EXISTING PLAN (IF NEEDED).

9. START CONSTRUCTION OF RETAINING WALLS AND BUILDINGS PLACE FILL MATERIAL FOR BASIN ACCESS; WITH GRASS PAVERS ANYTIME FOLLOWING.

12. INSTALL STONE BASE COURSE, BINDER COURSE, AND WEARING COURSE FOR THE PARKING LOT TO PARKING GARAGE.

15. FINAL GRADE LANDSCAPE AREAS, PLANT TREES AND SHRUBS, AND SPREAD TOPSOIL AS SHOWN ON THE LANDSCAPE PLAN.

16. UPON SITE STABILIZATION (UNIFORM COVERAGE OR DENSITY OF 70% ACROSS ALL DISTURBED AREAS) AND NOTIFICATION OF THE MCCD, REMOVE EROSION AND SEDIMENT CONTROL MEASURES INCLUDING SILT FENCE AND INLET PROTECTION. ANY AREA DISTURBED DURING THE REMOVAL OF EROSION AND SEDIMENT CONTROL MEASURES SHALL BE

## MONTGOMERY COUNTY SOIL CONSERVATION DISTRICT STANDARD E&S NOTES

1.) ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.

APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION. 5.) AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBING, AND STRIPPING OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.

IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND/OR THE REGIONAL OFFICE OF THE DEPARTMENT. 9.) ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE

MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE. 10.) ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO

13.) VEHICLES AND EQUIPMENT TRAFFIC SHALL BE COORDINATED WITH REALAN VALLEY FORGE GREENS ASSOCIATES.

BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.

23.) FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACE.

31.) UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION 32.) FAILURE TO CORRECTLY INSTALL E&S BMPS, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE

CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPS MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO \$10,000 PER DAY IN CIVIL PENALTIES, UP TO \$10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO \$25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.

UNDERGROUND UTILITIES CUTTING THROUGH ANY ACTIVE CHANNEL SHALL BE IMMEDIATELY BACKFILLED AND THE CHANNEL RESTORED TO ITS ORIGINAL CROSS-SECTION AND PROTECTIVE LINING. ANY BASE FLOW WITHIN THE CHANNEL SHALL BE CONVEYED PAST THE WORK AREA IN THE MANNER DESCRIBED IN THIS PLAN UNTIL SUCH RESTORATION

10. FILL MATERIAL FOR EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN MAXIMUM NINE (9) INCH LAYERED LIFTS AT 95% DENSITY.

SOIL EROSION AND SEDIMENT         SOIL EROSION AND SEDIMENT         POLLUTION CONTROL NOTES         POLLUTION CONTROL NOTES         DALE:         SCATE:         SCATE:         SCATE:         SCATE:         SCATE:         SCATE:         DALUTION CONTROL NOTES         DESCRIPTION         Imper Merion Township, MONTGOMERY COUNTY, PANS         Date:									
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FABRIC SHALL HAVE THE MINIMUM PROPERTIES AS SHOWN IN TABLE 4.3 OF THE PA DEP EROSION

FABRIC WIDTH SHALL BE 30 IN. MINIMUM. STAKES SHALL BE HARDWOOD OR EQUIVALENT STEEL (U

STAKE-

<u>NOTES:</u>

CONTROL MANUAL.



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

(FT)

(FT)

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

EXTEND RIPRAP ON BACK SIDE OF APRON TO AT LEAST 1/2 DEPTH OF PIPE ON BOTH SIDES TO PREVENT

STANDARD CONSTRUCTION DETAIL #9-2 RIPRAP APRON AT PIPE OUTLET NO FLARED ENDWALL NOT TO SCALE

| (IN) | (FT) |

N/A N/A N/A N/A N/A N/A N/A

(IN)

STANDARD CONSTRUCTION DETAIL #3-1 ROCK CONSTRUCTION ENTRANCE NOT TO SCALE

MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND

PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED

TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE

FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND

RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT

ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR

ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY

50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE

TO ENTERING ROCK CONSTRUCTION ENTRANCE.

OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.



SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN

BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT

HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN. COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR

PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE

\*\* CHAIN LINK TO POST FASTENERS SPACED AT 14 IN. MAX. USE NO. 9 GA. ALUMINUM WIRE OR NO. 9

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

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

SILT FENCE SHALL BE PLACED AT LEVEL EXISTING GRADE. BOTH ENDS OF THE FENCE SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH HALF THE ABOVE GROUND HEIGHT OF

THE FENCE. SILT FENCE SHALL BE INSPECTED ROUTINELY AND AFTER RUNOFF EVENTS TO DETERMINE IF MAINTENANCE IS REQUIRED.

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

## STANDARD CONSTRUCTION DETAIL #4-10 SUPER SILT FENCE NOT TO SCALE

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	SUIL ERUSIUN AND SEDIMENI								UPPER MERION IOWNSHIP, MONIGOMERY COUNIY, PENNSYLVANIA J	REV
DAT DES JOE REF NO.	E: 1/1 SIGN J B N 4 :	5/ N: MM 0.: 222	18 2 E		FI 422	CALI AS RAW LE 22-	E: NC ER NAI S-E	DTE T ME: DET-	D -EN: 1	





# outlined in that section.

The untreated base bentonite shall be of a quality sufficient to produce the following coefficient of permeability when tested at the following application rate.

beach sand containing 30-35% voids and compacting the layer at optimum moisture at 90% of maximum density as determined by the Proctor Test, ASTM

water for 20 minutes. Test with Fann viscosimeter Model #35A.







LUMEC				LED	Urban l	uminaire	omus L
Urban			Project; Location:		<b>Dimensior</b> EPA: 1.35 ft² n Weight: 42 lb	<b>15</b> nax. s (19.1kg) max.	
Domus			Cat.No: Type: Lamps:	Qty	ں ب	27 1/2" (698 mm)	1
DMS50	The Domus 50 is	one of the most versatile d by Philips Lumec. This	Notes		(416 mm) Լ		488 mm)
	classic shape wa pioneering Philip	s one of the first in a line o s Lumec designs. Domus	of offers		16 3/8"		16. 
	a subtly refined of dimension and p	lesign that balances shap roportion.	e,		t.	DMS50 - F opti Flat lens	cs
Ordering guide: Luminaire	E SCHEDULE FOR F	Example DMS50-90W80LED	50 LUMINAIRES	MB-RCD-PH8-BKTX			
Series LED module DMS50	type Globe material Opt	ical system V	oltage Driver options				
DMS50 4000K 3000K Domus 35W32LED4K 35W32LED31 55W32LED4K 55W32LED31 55W49LED4K 55W32LED31	T ACDR Acrylic Glob globe LE2.	be     12       A <sup>6</sup> Type II (ASYM) with globe     24       A <sup>6</sup> Type III (ASYM) with globe     24       A <sup>6</sup> Type III (ASYM) with globe     24	20         120V         AST <sup>1</sup> Pre-set, p           08         208V         CLO <sup>1</sup> Pre-set, n           40         240V         Patilia         Pre-set, n	progressive start-up nanage lumen tion			
70W64LED4K 70W64LED3 72W32LED4K 72W32LED3 80W48LED4K 80W48LED3 90W80LED4K 90W80LED3	Sag LE2:	Iens S Type II (ASYM) Sag glassiens S Type II (ASYM) Sag glassiens	77         277V         DAL         The set, C           47         347V         DALI cont         DALI cont           80         480V         OTL <sup>a</sup> Pre-set to           the lamp         DMG         0-10V	original end of life of			BC 170-35-
108W48LED4K 108W48LED3 110W64LED4K 110W64LED3 135W80LED4K 135W80LED3 145W64LED4K 145W64LED3	K LE4 K LE5 K Flat	S Type IV (ASYM) Sag glass lens S' Type V (SYMM) Sag glass lens lens	CDMGP <sup>3</sup> Dim use CDMGE25 <sup>3</sup> 8 hr CDMGE50 <sup>3</sup> 8 hr	nming level set by r rs. 25% reduction rs. 50% reduction			× 170.74
180W80LED4K 180W80LED	K LE2 LE3 LE4 LE5	F Type II (ASYM) Flat glass lens F Type III (ASYM) Flat glass lens F Type IV (ASYM) Flat glass lens F' Type V (SYMM) Flat glass lens	CDMGE75 <sup>3</sup> 8 hr CDMGM25 <sup>3</sup> 6 hr CDMGM50 <sup>3</sup> 6 hr CDMGM75 <sup>3</sup> 6 hr	rs. 75% reduction rs. 25% reduction rs. 50% reduction rs. 75% reduction			
			CDMGS25 <sup>3</sup> 4 hr CDMGS50 <sup>3</sup> 4 hr CDMGS75 <sup>3</sup> 4 hr	rs 25% reduction rs 50% reduction rs 75% reduction		/	
Ordering guide (continued) Adaptors Luminaire option	ns Poles & Brackets	Finish	Footnotes	UC antian			
MA1 11/4" NPT threaded BO Bridg	e and Overpass Consult	BE2TX Textured midnight blue	Not available with 1     SMA or SMB adapte     for this option.     S. Not available 347-4	HS option. ors is required 180 volt.			
MA2 11/2" NPT threaded HS Hous hole adaptor PH7 Phot SMA? Decorative retro bott	e side shield belectric cell, m type the complete	BEBTX Textured ocean blue BEBTX Textured royal blue BG2TX Textured Sandstone BKTX Textured black	<ol> <li>Luminaire option R required with this o</li> <li>Use of photoelectri conviced to ensure</li> </ol>	C. RCD or RCD7 is options c cell or shorting cap is preper literation			r _
aluminum, accepts tubes from 15/8" to 2 3/8" PH3 <sup>24</sup> Phot exter exter	ing cap poles and electric cell, brackets. ded life	GN4TX Textured blue green GN6TX Textured blue green GN8TX Textured forest green CN8TX Textured Dk forest green	<ol> <li>Globe Material ACE optical system.</li> <li>Only 3 pin receptac</li> </ol>	DR is required with this			7 / ,
side-mounted cast- aluminum, accepts SP2 Surge	otacle 5 pins otacle 5 pins otacle 7 pins protector	GR Gray sandtex GY3TX Textured medium grey NP Natural aluminum	SMA adaptor.				
to 2 3/8"		RD2TX Textured burgundy RD4TX Textured scarlet TG Hammertone gold WHTX Textured white			///		
DMS50-Domus-LED 10/16 page1of 8			1				
						9	
		NAIRE				F.F	.= 162.01
		NAIRE SCALE				F.F	.= 162.01 ⁺₀.1
GENERAL LIGHT 1. ALL PROPOSED LIGHTS	NOT TO NOT TO NG NOTES	NAIRE SCALE				F.F	.= 162.01 *o.* *o.2
GENERAL LIGHT 1. ALL PROPOSED LIGHTS 2. THIS PLAN IS TO BE UTIL ENGINEERING PLANS FO	LUMIN NOT TO NG NOTES SHALL BE FULL CUT OFF T IZED FOR LIGHTING PURF R CIRCUITRY DESIGN AND	VAIRE SCALE TYPE. POSES ONLY. REFER TO ELE D SPECIFICATIONS.	ECTRICAL			F.F	t.= 162.01 <sup>+</sup> 0.2 <sup>+</sup> 0.2 <sup>+</sup> 0.2 <sup>+</sup> 0.2 <sup>+</sup> 0.3
<ol> <li>GENERAL LIGHT</li> <li>1. ALL PROPOSED LIGHTS</li> <li>2. THIS PLAN IS TO BE UTIL ENGINEERING PLANS FO</li> <li>3. PRIOR TO CONSTRUCTION ENGINEER FOR REVIEW A HORIZONTAL PHOTOM</li> </ol>	LUMIN NOT TC NG NOTES SHALL BE FULL CUT OFF T IZED FOR LIGHTING PURF R CIRCUITRY DESIGN ANI ON, THE CONTRACTOR SH AND APPROVAL. SUBSTIT ETRIC STUDY DEMONSTR	NAIRE SCALE TYPE. POSES ONLY. REFER TO ELE D SPECIFICATIONS. ALL PROVIDE SUBMITTALS UTION REQUESTS MUST BE NATING THAT THE FIXTURE(S	ECTRICAL TO THE PROJECT E ACCOMPANIED BY S) IN QUESTION			F.F	*.= 162.01 *0. *0.2 *0.2 *0.3 *0.4 *0.4 *0.4
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<ul> <li>GENERAL LIGHT</li> <li>1. ALL PROPOSED LIGHTS</li> <li>2. THIS PLAN IS TO BE UTIL ENGINEERING PLANS FC</li> <li>3. PRIOR TO CONSTRUCTION ENGINEER FOR REVIEW A HORIZONTAL PHOTOM WILL MEET THE DESIGN PHOTOMETRIC STUDY W</li> <li>4. THIS LIGHTING PLAN DE USING DATA PROVIDED ILLUMINATION LEVELS A</li> </ul>	LUMIN NOT TC NOT TC SHALL BE FULL CUT OFF T IZED FOR LIGHTING PURF R CIRCUITRY DESIGN ANI ON, THE CONTRACTOR SH AND APPROVAL. SUBSTIT ETRIC STUDY DEMONSTR INTENT OF THIS PLAN. SU ILL BE REJECTED. PICTS PROPOSED SUSTAI BY THE NOTED MANUFACT ND PERFORMANCE OF LU	NAIRE SCALE TYPE. POSES ONLY. REFER TO ELE D SPECIFICATIONS. ALL PROVIDE SUBMITTALS UTION REQUESTS MUST BE ATING THAT THE FIXTURE(S BSTITUTION REQUESTS WITT NED ILLUMINATION LEVELS TURER(S). ACTUAL SUSTAIN MINARIES MAY VARY DUE T	ECTRICAL TO THE PROJECT E ACCOMPANIED BY S) IN QUESTION THOUT A CALCULATED NED SITE TO VARIATIONS IN		*0.1 <sup>†</sup> 0.2 +0.2 <sup>+</sup> 0.3 <sup>-</sup> <sup>*</sup> 0.3	F.F <sup>+</sup> 0.1 <sup>+</sup> 0.2 <sup>+</sup> 0.2 <sup>+</sup> 0.2 <sup>+</sup> 0.3 <sup>+</sup> 0.3 <sup>+</sup> 0.3 0.5	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$
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<ul> <li>GENERAL LIGHT</li> <li>1. ALL PROPOSED LIGHTS</li> <li>2. THIS PLAN IS TO BE UTIL ENGINEERING PLANS FO</li> <li>3. PRIOR TO CONSTRUCTION ENGINEER FOR REVIEW A HORIZONTAL PHOTOM WILL MEET THE DESIGN PHOTOMETRIC STUDY V</li> <li>4. THIS LIGHTING PLAN DE USING DATA PROVIDED ILLUMINATION LEVELS A WEATHER, ELECTRICAL AND LUMINARIES AND O</li> <li>5. THE LIGHTING VALUES A ON A HORIZONTAL GEOD OTHERWISE NOTED. THI</li> <li>6. THE LUMINARIES, LAMPS ENSURE THAT THEY FUN TO, FREQUENT VISUAL I MANUFACTURER RECOM THE LUMINARIES FUNCT</li> <li>7. THIS LIGHTING PLAN IS I POWER SYSTEM, CONDIN RESPONSIBILITY OF THE THE CONSTRUCTION CO BY STATE AND LOCAL RI FIXTURES AND APPURTE ELECTRICAL CODES AND</li> <li>8. CONTRACTOR MUST BR CONSTRUCTION, ANY LIN STRUCTURES.</li> <li>9. THE LIGHTING CONTRACT REQUIREMENTS INDICAT NOTES, GRADING AND U ORDINANCES, REGULAT</li> <li>10. UPON OWNER'S ACCEPT RESPONSIBLE FOR ALL OVER AND ALL OF LICK</li> </ul>	LUMIN NOT TO NOT TO NOT TO NOT TO NOT TO NOT NOT SHALL BE FULL CUT OFF TO IZED FOR LIGHTING PURF R CIRCUITRY DESIGN AND ON, THE CONTRACTOR SH AND APPROVAL. SUBSTIT ETRIC STUDY DEMONSTR INTENT OF THIS PLAN. SU ILL BE REJECTED. PICTS PROPOSED SUSTAI BY THE NOTED MANUFACT NO PERFORMANCE OF LU VOLTAGE, TOLERANCE IN THER RELATED VARIABLE ND CALCULATION POINTS METRIC PLANE AT ELEVAT E VALUES DEPICTED ON T CAND LENSES MUST BE R ICTION PROPERLY. THIS V OSPECTIONS, CLEANING OF IMENDATIONS. FAILURE TO INMPROPERLY. NTENDED TO SHOW THE IN ITS, WIRING, VOLTAGE AN ARCHITECT, MEP AND/OF NTRACT DOCUMENTS. THE CULATIONS. CONTRACTO ON IMPROPERLY. NTENDED TO SHOW THE IN ITS, WIRING, VOLTAGE AN ARCHITECT, MEP AND/OF NTRACT DOCUMENTS. THE CULATIONS. CONTRACTO ON ALL OTHER APPLICABLE NG TO THE DESIGNER'S A GHT LOCATIONS THAT CO	NAIRE SCALE SCALE PSES ONLY. REFER TO ELE DSES ONLY. REFER TO ELE DSPECIFICATIONS. ALL PROVIDE SUBMITTALS UTION REQUESTS MUST BE ATING THAT THE FIXTURE(S BSTITUTION REQUESTS WIT NED ILLUMINATION LEVELS TURER(S). ACTUAL SUSTAIN MINARIES MAY VARY DUE T LAMPS, THE SERVICE LIFE FIELD CONDITIONS. DEPICTED ON THIS PLAN A ION ZERO (GROUND LEVEL) HIS PLAN ARE IN FOOTCAND EGULARLY INSPECTED/MAIL VORK SHOULD INCLUDE, BL OF LENSES, AND RELAMPING O FOLLOW THE ABOVE STE LOCATIONS AND TYPE OF LUND NO THER ELECTRICAL COM R LIGHTING CONTRACTOR, A ESE ITEMS MUST BE INSTAI DR IS RESPONSIBLE FOR INS E WITH ALL APPLICABLE BUI RULES, REGULATIONS, LAV ATTENTION, PRIOR TO THE C NFLICT WITH DRAINAGE, UT H ALL APPLICABLE CONTRACTOR INFLICT WITH DRAINAGE, UT H ALL APPLICABLE CONTRACTOR CONTRACTOR, AND INSPECTION AND ALL GOVERNMENTA D PROJECT, THE OWNER SIN S, REPAIR AND INSPECTION	ECTRICAL TO THE PROJECT E ACCOMPANIED BY S) IN QUESTION THOUT A CALCULATED NED SITE TO VARIATIONS IN OF EQUIPMENT ARE ALL ANALYZED ) UNLESS DLES. NTAINED TO JT NOT BE LIMITED G ACCORDING TO EPS COULD CAUSE UMINARIES, ONLY. MPONENTS ARE THE AS INDICATED IN LLED AS REQUIRED STALLING LIGHTING ILDING AND VS AND STATUTES. COMMENCEMENT OF TILITIES, OR OTHER CTOR TO, GENERAL AL RULES, LAWS, HALL BE OF THE LIGHTING		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	F.F. $t_{0.1}$ $t_{0.2}$ $t_{0.2}$ $t_{0.3}$ $t_{0.3}$ $t_{0.3}$ $t_{0.5}$ $t_{0.5}$ $t_{0.5}$ $t_{0.7}$ $t_{0.7}$ $t_{0.6}$ $t_{1.0}$ $t_{1.0}$ $t_{1.4}$ $t_{1.4}$ $t_{1.2}$ $t_{1.0}$ $t_{1.3}$ $t_{1.2}$ $t_{1.8}$ $t_{1.3}$ $t_{1.2}$ $t_{1.8}$ $t_{1.3}$ $t_{1.2}$ $t_{1.8}$ $t_{1.3}$ $t_{1.2}$ $t_{1.8}$ $t_{1.3}$ $t_{1.2}$ $t_{1.8}$ $t_{1.3}$ $t_{1.1}$ $t_{1.5}$ $t_{1.9}$ $t_{2.4}$ $t_{1.8}$ $t_{1.7}$ $t_{2.4}$ $t_{1.7}$ $t_{0.2}$ $t_{0.2}$ $t_{0.3}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
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<ul> <li>GENERAL LIGHT</li> <li>ALL PROPOSED LIGHTS</li> <li>THIS PLAN IS TO BE UTH ENGINEERING PLANS FOR</li> <li>PRIOR TO CONSTRUCTION ENGINEER FOR REVIEW A HORIZONTAL PHOTOMY WILL MEET THE DESIGN PHOTOMETRIC STUDY</li> <li>THIS LIGHTING PLAN DE USING DATA PROVIDED ILLUMINATION LEVELS A WEATHER, ELECTRICAL AND LUMINARIES AND OF</li> <li>THE LIGHTING VALUES A ON A HORIZONTAL GEOD OTHERWISE NOTED. THIS INSURE THAT THEY FUN TO, FREQUENT VISUAL I MANUFACTURER RECOM THE LUMINARIES FUNCT</li> <li>THIS LIGHTING PLAN IS I POWER SYSTEM, CONDON RESPONSIBILITY OF THE THE CONSTRUCTION CO BY STATE AND LOCAL RE FIXTURES AND APPURTS ELECTRICAL CODES AND</li> <li>CONTRACTOR MUST BR CONSTRUCTION, ANY LIV STRUCTURES.</li> <li>THE LIGHTING CONTRACT REQUIREMENTS INDICATION NOTES, GRADING AND U ORDINANCES, REGULAT</li> <li>UPON OWNER'S ACCEPT RESPONSIBLE FOR ALL SYSTEM AND ALL OF ITS LIGHTING LEVELS ARE P</li> </ul>	LUMIN NOT TO NOT TO NOT NOT NOT NOT NOT NOT NOT NOT SHALL BE FULL CUT OFF TO IZED FOR LIGHTING PURF R CIRCUITRY DESIGN AND ON, THE CONTRACTOR SH AND APPROVAL. SUBSTIT ETRIC STUDY DEMONSTR INTENT OF THIS PLAN. SU ILL BE REJECTED. PICTS PROPOSED SUSTAN SY THE NOTED MANUFAC: ND CALCULATION POINTS INTER RELATED VARIABLE ND CALCULATION POINTS INTER RELATED VARIABLE ND CALCULATION POINTS INTER RELATED VARIABLE ND CALCULATION POINTS INTER RELATED VARIABLE ND CALCULATION POINTS INTENDED TO SHOW THE IN SPECTIONS, CLEANING ON IMENDATIONS. FAILURE TO NITRACT DOCUMENTS. THE SULATIONS. CONTRACTO ALL OTHER APPLICABLE NG TO THE DESIGNER'S A SHT LOCATIONS THAT CO TOR SHALL COMPLY WITH ED IN THE SITE PLAN, INC TIONS AND THE LIKE. ANCE OF THE COMPLETE AND THE SITE PLAN, INC TIONS AND THE LIKE. ANCE OF THE COMPLETE AND THE SITE PLAN, INC TIONS AND THE LIKE. ANCE OF THE COMPLETE AND THE SITE PLAN, INC TIONS AND THE LIKE. ANCE OF THE COMPLETE AND THE SITE PLAN, INC TIONS AND THE LIKE.	VAIRE SCALE TYPE. POSES ONLY. REFER TO ELE D SPECIFICATIONS. ALL PROVIDE SUBMITTALS UTION REQUESTS MUST BE D STITUTION REQUESTS WI NED ILLUMINATION LEVELS TURER(S). ACTUAL SUSTAIN MINARIES MAY VARY DUE T LAMPS, THE SERVICE LIFE FIELD CONDITIONS. DEPICTED ON THIS PLAN A ION ZERO (GROUND LEVEL) HIS PLAN ARE IN FOOTCAND EGULARLY INSPECTED/MAIL VORK SHOULD INCLUDE, BL OF LENSES, AND RELAMPING O FOLLOW THE ABOVE STE OCATIONS AND TYPE OF LIN ND OTHER ELECTRICAL COM ALIGHTING CONTRACTOR, A IESE ITEMS MUST BE INSTAIN OF IS RESPONSIBLE FOR INS E WITH ALL APPLICABLE BUI RULES, REGULATIONS, LAV ATTENTION, PRIOR TO THE OF NFLICT WITH DRAINAGE, UT H ALL APPLICABLE CONTRACTOR ALIGHTING BUT NOT LIMITED TO TY, AND ALL GOVERNMENTA D PROJECT, THE OWNER SH S, REPAIR AND INSPECTION TED SYSTEMS, TO ENSURE IG AT ALL TIMES.	ECTRICAL TO THE PROJECT ACCOMPANIED BY S) IN QUESTION THOUT A CALCULATED NED SITE O VARIATIONS IN OF EQUIPMENT ARE ALL ANALYZED ) UNLESS DLES. NTAINED TO JT NOT BE LIMITED G ACCORDING TO PS COULD CAUSE UMINARIES, ONLY. MPONENTS ARE THE AS INDICATED IN LLED AS REQUIRED STALLING LIGHTING ILDING AND VS AND STATUTES. COMMENCEMENT OF FILITIES, OR OTHER CTOR TO, GENERAL AL RULES, LAWS, HALL BE OF THE LIGHTING ADEQUATE	inaire Sched	0.1 <sup>1</sup> 0.2 0.1 <sup>1</sup> 0.2 0.2 <sup>1</sup> 0.3 <sup>1</sup> 0.3 10.4 <sup>1</sup> 0.5 <sup>1</sup> 0.5 12 <sup>1</sup> 0.7 <sup>1</sup> 0.8 <sup>1</sup> 0.8 13 <sup>1</sup> 1 <sup>1</sup> 14 <sup>1</sup> 13 14 <sup>1</sup> 2 <sup>1</sup> 0.9 14 <sup>1</sup> 2 <sup>1</sup> 0.9 14 <sup>1</sup> 2 <sup>1</sup> 0.9 10.8 <sup>1</sup> 12 <sup>1</sup> 1.3 10.4 <sup>1</sup> 0.8 <sup>1</sup> 12 10.8 <sup>1</sup> 1.2 <sup>1</sup> 1.3 10.4 <sup>1</sup> 0.8 <sup>1</sup> 1.2 10.8 <sup>1</sup> 0.7 <sup>1</sup> 1.4 10.2 <sup>1</sup> 0.2 <sup>1</sup> 0.5 10.1 <sup>1</sup> 0.1 10.2 <sup>1</sup> 0.2 <sup>1</sup> 0.5 10.1 <sup>1</sup> 0.1 10.0 <sup>1</sup> 0.1 <sup>1</sup> 0.1	F.F. $t_{0.1}$ $t_{0.2}$ $t_{0.2}$ $t_{0.2}$ $t_{0.3}$ $t_{0.3}$ $t_{0.3}$ $t_{0.5}$ $t_{0.5}$ $t_{0.5}$ $t_{0.7}$ $t_{0.7}$ $t_{0.6}$ $t_{1.0}$ $t_{1.0}$ $t_{0.9}$ $t_{1.4}$ $t_{1.4}$ $t_{1.2}$ $t_{1.0}$ $t_{1.3}$ $t_{1.2}$ $t_{1.0}$ $t_{1.0}$ $t_{1.4}$ $t_{1.7}$ $t_{0.2}$ $t_{0.2}$ $t_{0.3}$ $t_{0.1}$ $t_{0.1}$ $t_{0.1}$ $t_{0.0}$ $t_{0.0}$ $t_{0.0}$ $t_{0.0}$ $t_{0.0}$ $t_{0.0}$ $t_{0.0}$	$\begin{array}{c} = & 162.01 \\ & & ^{+}0. \\ & & ^{+}0.2 \\ & ^{+}0.2 \\ & ^{+}0.3 \\ & ^{+}0.2 \\ & ^{+}0.3 \\ & ^{+}0.2 \\ & ^{+}0.3 \\ & ^{+}0.4 \\ & ^{+}0.7 \\ & ^{+}0.7 \\ & ^{+}0.7 \\ & ^{+}0.7 \\ & ^{+}0.7 \\ & ^{+}0.7 \\ & ^{+}0.6 \\ & ^{+}0.6 \\ & ^{+}0.7 \\ & ^{+}0.7 \\ & ^{+}0.7 \\ & ^{+}0.7 \\ & ^{+}0.6 \\ & ^{+}0.6 \\ & ^{+}0.7 \\ & ^{+}1.0 \\ & ^{+}1.0 \\ & ^{+}1.2 \\ & ^{+}1.0 \\ & ^{+}1.2 \\ & ^{+}1.0 \\ & ^{+}1.1 \\ & ^{+}0.9 \\ & ^{+}0.4 \\ & ^{+}0.3 \\ & ^{+}0.4 \\ & ^{+}0.3 \\ & ^{+}0.1 \\ & ^{+}0$
<ul> <li>GENERAL LIGHT</li> <li>ALL PROPOSED LIGHTS</li> <li>THIS PLAN IS TO BE UTIL ENGINEERING PLANS FC</li> <li>PRIOR TO CONSTRUCTIVE A HORIZONTAL PHOTOW WILL MEET THE DESIGN PHOTOMETRIC STUDY</li> <li>THIS LIGHTING PLAN DE USING DATA PROVIDED LILUMINATION LEVELS A WEATHER, ELECTRICAL AND LUMINARIES AND OC</li> <li>THE LIGHTING VALUES A ON A HORIZONTAL GEOD OTHERWISE NOTED. THI</li> <li>THE LUMINARIES, LAMPH ENSURE THAT THEY FUT TO, FREQUENT VISUAL I MANUFACTURER RECOM THE LUMINARIES FUNCT</li> <li>THIS LIGHTING PLAN IS I POWER SYSTEM, CONDIN RESPONSIBILITY OF THE THE CONSTRUCTION CO BY STATE AND LOCAL R FIXTURES AND APPURTH ELECTRICAL CODES AND</li> <li>CONTRACTOR MUST BR CONSTRUCTION, ANY LIV STRUCTURES.</li> <li>THE LIGHTING CONTRAC NOTES, GRADING AND U ORDINANCES, REGULAT</li> <li>UPON OWNER'S ACCEPT RESPONSIBLE FOR ALL SYSTEM AND ALL OF ITS LIGHTING LEVELS ARE P</li> </ul>	LUMIN NOT TO NOT TO NOT NOT NOT NOT NOT NOT NOT NOT SHALL BE FULL CUT OFF TO IZED FOR LIGHTING PURF R CIRCUITRY DESIGN AND ON, THE CONTRACTOR SH AND APPROVAL. SUBSTIT ETRIC STUDY DEMONSTR INTENT OF THIS PLAN. SU ILL BE REJECTED. PICTS PROPOSED SUSTAN SY THE NOTED MANUFAC ND CALCULATION POINTS INTER RELATED VARIABLE ND CALCULATION POINTS INTER RELATED VARIABLE ND CALCULATION POINTS INTER RELATED VARIABLE ND CALCULATION POINTS INTENDED TO SHOW THE IN SPECTIONS, CLEANING ON IMPROPERLY. THIS V SPECTIONS, CLEANING ON IMPROPERLY. THIS V SPECTIONS, CLEANING ON INPROPERLY. THIS V SPECTIONS, CLEANING ON INPROPERLY. THIS V SAND LENSES MUST BE R CONTRACTO SHOW THE IN ITS, WIRING, VOLTAGE AN ARCHITECT, MEP AND/OF NTRACT DOCUMENTS. THIS SONT ON THE DESIGNER'S A CONTRACTO ALL OTHER APPLICABLE NG TO THE DESIGNER'S A SHT LOCATIONS THAT CO TOR SHALL COMPLY WITH ED IN THE SITE PLAN, INC TIDITY NOTES, SITE SAFET ONS AND THE LIKE. ANCE OF THE COMPLETE ANINTENANCE, SERVICING COMPONENTS AND RELAR RESENT AND FUNCTIONIN	VAIRE O SCALE TYPE. POSES ONLY. REFER TO ELE D SPECIFICATIONS. ALL PROVIDE SUBMITTALS UTION REQUESTS MUST BE ATING THAT THE FIXTURE(S BSTITUTION REQUESTS WIT NED ILLUMINATION LEVELS TURER(S). ACTUAL SUSTAIN MINARIES MAY VARY DUE T LAMPS, THE SERVICE LIFE FIELD CONDITIONS. BEPICTED ON THIS PLAN A ION ZERO (GROUND LEVEL) HIS PLAN ARE IN FOOTCAND EGULARLY INSPECTED/MAIL VORK SHOULD INCLUDE, BL DF LENSES, AND RELAMPING O FOLLOW THE ABOVE STE COCATIONS AND TYPE OF LL ND OTHER ELECTRICAL COM R LIGHTING CONTRACTOR, A IESE ITEMS MUST BE INSTAND TO FILCT WITH DRAINAGE, UT ALL APPLICABLE CONTRACT NFLICT WITH DRAINAGE, UT ALL APPLICABLE CONTRACT D PROJECT, THE OWNER SI C, REPAIR AND INSPECTION TY, AND ALL GOVERNMENTA D PROJECT, THE OWNER SI C, REPAIR AND INSPECTION TO FOLSON, TO ENSURE IG AT ALL TIMES.	ECTRICAL TO THE PROJECT ACCOMPANIED BY S) IN QUESTION THOUT A CALCULATED NED SITE O VARIATIONS IN OF EQUIPMENT ARE ALL ANALYZED ) UNLESS DLES. NTAINED TO JT NOT BE LIMITED G ACCORDING TO PS COULD CAUSE UMINARIES, ONLY. MPONENTS ARE THE AS INDICATED IN LLED AS REQUIRED STALLING LIGHTING ILDING AND VS AND STATUTES. COMMENCEMENT OF TILITIES, OR OTHER CTOR TO, GENERAL AL RULES, LAWS, HALL BE OF THE LIGHTING ADEQUATE	inaire Sched	0.1       0.2         0.1       0.2         0.2       0.3       0.3         0.4       0.5       0.5         0.7       0.8       0.8         0.1       1.1       1.4         0.3       1.1       1.4         0.4       0.5       0.5         1.1       1.4       1.3         0.4       0.5       0.5         1.1       1.4       1.3         0.4       0.5       0.5         0.4       0.8       1.2         0.8       1.1       1.4         0.2       0.4       1.1         0.2       0.4       1.1         0.2       0.4       1.1         0.2       0.4       1.1         0.2       0.4       1.1         0.2       0.4       1.1         0.2       0.4       1.1         0.0       1.0       1.1         0.0       1.0       1.1         0.0       1.0       1.1         0.0       1.0       1.1         0.0       1.0       1.1         0.0       1.0       1.1         0	F.F. +0.1 +0.2 +0.2 +0.2 +0.3 +0.3 +0.3 +0.5 +0.5 +0.5 +0.7 +0.7 +0.6 +1.9 +1.0 +0.9 +1.4 +1.4 +1.2 +10 +1.3 +1.2 +10 +1.3 +1.2 +10 +1.3 +1.2 +10 +1.3 +1.2 +1.0 +1.4 +1.2 +1.0 +1.4 +1.2 +1.0 +1.3 +1.2 +1.0 +1.4 +1.2 +1.0 +1.4 +1.2 +1.0 +1.5 +1.8 +1.5 +1.9 +2.4 +1.8 +1.7 +2.4 +1.1 +0.2 +0.2 +0.3 +0.1 +0.1 +0.1 +0.1 +0.1 +0.1 +0.1 +0.1 +0.1 +0.1 +0.1 +0.1 +0.2 +0.2 +0.3 +0.1 +0.1 +0.1 +0.2 +0.2 +0.3 +0.1 +0.1 +0.1 +0.2 +0.2 +0.3 +0.1 +0.1 +0.1 +0.1 +0.1 +0.1 +0.1 +0.1 +0.1 +0.2 +0.2 +0.3 +0.1 +0.1 +0.1 +0.2 +0.2 +0.3 +0.1	$\begin{array}{c} = & 162.01 \\ & & ^{+}0.2 \\ & & ^{+}0.2 \\ & ^{+}0.2 \\ & ^{+}0.3 \\ & ^{+}0.2 \\ & ^{+}0.3 \\ & ^{+}0.2 \\ & ^{+}0.3 \\ & ^{+}0.4 \\ & ^{+}0.5 \\ & ^{+}0.6 \\ & ^{+}0.7 \\ & ^{+}1.1 \\ & ^{+}0.9 \\ & ^{+}0.8 \\ & ^{+}$
<ul> <li>GENERAL LIGHT</li> <li>ALL PROPOSED LIGHTS</li> <li>THIS PLAN IS TO BE UTHE ENGINEER FOR REVIEW A HORIZONTAL PHOTOM WILL MEET THE DESIGN PHOTOMETRIC STUDY V</li> <li>THIS LIGHTING PLAN DE USING DATA PROVIDED ILLUMINATION LEVELS A WEATHER, ELECTRICAL AND LUMINARIES AND O</li> <li>THE LIGHTING VALUES A ON A HORIZONTAL GEOD OTHERWISE NOTED. THI</li> <li>THE LUMINARIES, LAMPA ENSURE THAT THEY FUN TO, FREQUENT VISUAL I MANUFACTURER RECOM THE LUMINARIES FUNCT</li> <li>THIS LIGHTING PLAN IS I POWER SYSTEM, CONDOR RESPONSIBILITY OF THE THE CONSTRUCTION, ANY LIN STRUCTURES.</li> <li>THE LIGHTING CONTRAC NOTES, GRADING AND U ORDINANCES, REGULAT</li> <li>UPON OWNER'S ACCEPT RESPONSIBLE FOR ALL SYSTEM AND ALL OF ITS LIGHTING LEVELS ARE P</li> </ul>	LUMIN NOT TO NOT TO NOT TO NALL BE FULL CUT OFF TO IZED FOR LIGHTING PURF R CIRCUITRY DESIGN AND N, THE CONTRACTOR SH AND APPROVAL. SUBSTIT ETRIC STUDY DEMONSTR INTENT OF THIS PLAN. SU ILL BE REJECTED. CITS PROPOSED SUSTAI SYNTEN OF THIS PLAN. SU ILL BE REJECTED. ND CALCULATION POINTS ETRIC PLANE AT ELEVAT VALUES DEPICTED ON TO SAND LENSES MUST BE R CITION PROPERLY. THIS V SPECTIONS, CLEANING OF ION IMPROPERLY. NTENDED TO SHOW THE I SUSPECTIONS. CONTRACTO INTENDED TO SHOW THE I SUSPECTIONS. CONTRACTO SAND LENSES IN ACCORDANCE ALL OTHER APPLICABLE NG TO THE DESIGNER'S A SCHITECT, MEP AND/OF NTRACT DOCUMENTS. THE SULATIONS. CONTRACTO ALL OTHER APPLICABLE NG TO THE DESIGNER'S A SCHITECT, MEP AND/OF NTRACT DOCUMENTS. THE SULATIONS. CONTRACTO ALL OTHER APPLICABLE NG TO THE DESIGNER'S A SCHITECT STAND FUNCTIONING ALL OTHER APPLICABLE NG TO THE DESIGNER'S A SCHITECT AND FUNCTIONING TOR SHALL COMPLY WITH ED IN THE SITE PLAN, INC TILITY NOTES, SITE SAFET ONS AND THE LIKE. ANCE OF THE COMPLETE AND AND FUNCTIONING ALL OTHER APPLICABLE AND CONTRACT, SERVICING COMPONENTS AND RELA RESENT AND FUNCTIONING	VAIRE SCALE PYPE. POSES ONLY. REFER TO ELE D SPECIFICATIONS. ALL PROVIDE SUBMITTALS I UTION REQUESTS MUST BE DATING THAT THE FIXTURE(S BSTITUTION REQUESTS WITH NED ILLUMINATION LEVELS TURER(S). ACTUAL SUSTAIN MINARIES MAY VARY DUE T LAMPS, THE SERVICE LIFE FIELD CONDITIONS. B DEPICTED ON THIS PLAN A ION ZERO (GROUND LEVEL) HIS PLAN ARE IN FOOTCAME EGULARLY INSPECTED/MAIL VORK SHOULD INCLUDE, BUD OF LENSES, AND RELAMPING O FOLLOW THE ABOVE STE LOCATIONS AND TYPE OF LUN NOTHER ELECTRICAL COM R LIGHTING CONTRACTOR, A IESE ITEMS MUST BE INSTAINA OR IS RESPONSIBLE FOR INS E WITH ALL APPLICABLE BUIN RULES, REGULATIONS, LAW ATTENTION, PRIOR TO THE ON NELICT WITH DRAINAGE, UT H ALL APPLICABLE CONTRACTOR LUDING BUT NOT LIMITED T TY, AND ALL GOVERNMENTA D PROJECT, THE OWNER SP S, REPAIR AND INSPECTION TED SYSTEMS, TO ENSURE IG AT ALL TIMES.	ECTRICAL TO THE PROJECT ACCOMPANIED BY S) IN QUESTION THOUT A CALCULATED NED SITE O VARIATIONS IN OF EQUIPMENT ARE ALL ANALYZED ) UNLESS DLES. NTAINED TO JT NOT BE LIMITED G ACCORDING TO PS COULD CAUSE UMINARIES, ONLY. MPONENTS ARE THE AS INDICATED IN LLED AS REQUIRED STALLING LIGHTING ILDING AND VS AND STATUTES. COMMENCEMENT OF TILITIES, OR OTHER CTOR TO, GENERAL AL RULES, LAWS, HALL BE OF THE LIGHTING ADEQUATE	inaire Sched	1       1	F.F. +0.1 +0.2 +0.2 +0.2 +0.3 +0.3 +0.3 +0.5 +0.5 +0.5 +0.7 +0.7 +0.6 +1.0 +1.0 +0.9 +1.4 +1.4 +1.2 +10 +1.4 +1.2 +10 +1.3 +1.2 +1.0 +1.3 +1.2 +1.0 +1.3 +1.3 +1.5 +1.9 +2.4 +1.8 +1.7 +2.4 +1.7 +0.7 +0.0 +0.0 +1.1 +0.1 +0.1 +0.2 +0.2 +0.3 +0.1	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$
<ul> <li>GENERAL LIGHT</li> <li>ALL PROPOSED LIGHTS</li> <li>THIS PLAN IS TO BE UTIL ENGINEERING PLANS FC</li> <li>PRIOR TO CONSTRUCTION ENGINEER FOR REVIEW A HORIZONTAL PHOTOW WILL MEET THE DESIGN PHOTOMETRIC STUDY</li> <li>THIS LIGHTING PLAN DE USING DATA PROVIDED ILLUMINATION LEVELS A WEATHER, ELECTRICAL AND LUMINARIES AND CO</li> <li>THE LIGHTING VALUES A ON A HORIZONTAL GEO OTHERWISE NOTED. THI</li> <li>THE LUMINARIES, LAMPI ENSURE THAT THEY FUT TO, FREQUENT VISUAL I MANUFACTURER RECON THE LUMINARIES FUNCT</li> <li>THIS LIGHTING PLAN IS POWER SYSTEM, CONDOR RESPONSIBILITY OF THE ELECTRICAL CODES AND</li> <li>CONTRACTOR MUST BR CONSTRUCTION, ANY LIV STRUCTURES.</li> <li>THE LIGHTING CONTRAC REQUIREMENTS INDICATION NOTES, GRADING AND U ORDINANCES, REGULAT</li> <li>UPON OWNER'S ACCEPT RESPONSIBLE FOR ALL SYSTEM AND ALL OF ITS LIGHTING LEVELS ARE P</li> </ul>	LUMIN NOT TO NOT TO ADD DESIGNATION SHALL BE FULL CUT OFF T IZED FOR LIGHTING PURF R CIRCUITRY DESIGN AND AND APPROVAL. SUBSTIT ETRIC STUDY DEMONSTR INTENT OF THIS PLAN. SU IL BE REJECTED. DICTS PROPOSED SUSTAN SYTHE NOTED MANUFAC ND CALCULATION POINTS THER RELATED VARIABLE ND CALCULATION POINTS TON PROPERLY. THIS Y SPECTIONS, CLEANING O INTENDED TO SHOW THE IN ITS, WIRING, VOLTAGE AN INTENDED TO SHOW THE IN INTENDED TO SHOULD ADDON INTENDES IN ACCORDANCE ACCOMPONENTS AND RELA RESENT AND FUNCTIONING INTENDENT AND FUNCTIONING INTENTENANCE, SERVICING COMPONENTS AND RELA RESENT AND FUNCTIONING INTENDED IN THE SITE PLAN, INC INTENDED IN THE SITE PLAN,	VAIRE SCALE TYPE. POSES ONLY. REFER TO ELE O SPECIFICATIONS. ALL PROVIDE SUBMITTALS I UTION REQUESTS MUST BE ATING THAT THE FIXTURE(S BSTITUTION REQUESTS WITH NED ILLUMINATION LEVELS INTER(S). ACTUAL SUSTAIN MINARIES MAY VARY DUE T ILAMPS, THE SERVICE LIFE FIELD CONDITIONS. BEPICTED ON THIS PLAN A ION ZERO (GROUND LEVEL) HIS PLAN ARE IN FOOTCAND EQULARLY INSPECTED/MAIL VORK SHOULD INCLUDE, BUD OF LENSES, AND RELAMPING O FOLLOW THE ABOVE STE LOCATIONS AND TYPE OF LL ND OTHER ELECTRICAL CON LIGHTING CONTRACTOR, A IESE ITEMS MUST BE INSTAID OF IS RESPONSIBLE FOR INS WITH ALL APPLICABLE BUI RULES, REGULATIONS, LAV ATTENTION, PRIOR TO THE ON NELICT WITH DRAINAGE, UT ALL APPLICABLE CONTRACTOR LUDING BUT NOT LIMITED T TY, AND ALL GOVERNMENTA D PROJECT, THE OWNER SP S, REPAIR AND INSPECTION ITED SYSTEMS, TO ENSURE IO AT ALL TIMES.	ECTRICAL TO THE PROJECT ACCOMPANIED BY S) IN QUESTION THOUT A CALCULATED NED SITE O VARIATIONS IN OF EQUIPMENT ARE ALL ANALYZED ) UNLESS DLES. NTAINED TO JT NOT BE LIMITED G ACCORDING TO ES COULD CAUSE UMINARIES, ONLY. MPONENTS ARE THE AS INDICATED IN LLED AS REQUIRED STALLING LIGHTING ILDING AND VS AND STATUTES. COMMENCEMENT OF FILITIES, OR OTHER CTOR TO, GENERAL AL RULES, LAWS, HALL BE OF THE LIGHTING ADEQUATE	inaire Sched	1       1	F.F. +0.1 +0.2 +0.2 +0.2 +0.3 +0.5 +0.5 +0.7 +0.5 +0.5 +0.7 +0.7 +0.6 +1.0 +1.0 +0.9 +1.4 +1.4 +1.2 +10 +1.4 +1.2 +10 +1.3 +1.3 +1.1 +1.4 +1.2 +10 +1.3 +1.3 +1.5 +1.9 +2.4 +1.8 +1.7 +2.4 +1.7 +0.2 +0.2 +0.3 +0.1 +0.1 +0.1 +0.2 +0.2 +0.3 +0.1 +0.1 +0.1 +0.2 +0.2 +0.3 +0.1 +0.1 +0.1 +0.0 +0.0 LED LED LED	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$





			Inlet	Drainag	e Area 'C	)' Value			overland
Inlet No.	Imp. (ac.)	'C'	Add'l Imp (ac.)	'C'	Lawn (ac.)	'C'	Total Area (ac.)	O∨erall 'C'	tra∨el time to inlet (min.)
Existing .	lunction	Box (Ru	n 100)						
Existing			-		2				1.000
MH102		10 <del>4000</del> 1				1.000			
104	0.20	0.90	0.00	0.90	0.04	0.35	0.25	0.80	5.00
106	0.08	0.90	0.00	0.90	0.01	0.35	0.08	0.86	5.00
108	0.09	0.90	0.00	0.90	0.02	0.35	0.12	0.79	5.00
MH110		(1999)			17 <b></b> 2	( <b>1997</b> )	<u></u>		
112	0.05	0.90	0.00	0.90	0.03	0.35	0.08	0.72	5.00
114	0.18	0.90	0.00	0.90	0.02	0.35	0.20	0.84	5.00
116	0.03	0.90	0.00	0.90	0.00	0.35	0.03	0.89	5.00
118	0.18	0.90	0.00	0.90	0.12	0.35	0.30	0.68	5.00
CO 1	0.00	0.90	0.04	0.90	0.00	0.35	0.04	0.90	5.00
CO 2	0.00	0.90	0.04	0.90	0.00	0.35	0.04	0.90	5.00
CO 3	0.00	0.90	0.04	0.90	0.00	0.35	0.04	0.90	5.00
CO 4	0.00	0.90	0.04	0.90	0.00	0.35	0.04	0.90	5.00
CO 5	0.00	0.90	0.04	0.90	0.00	0.35	0.04	0.90	5.00
CO 6	0.00	0.90	0.04	0.90	0.00	0.35	0.04	0.90	5.00
CO 7	0.00	0.90	0.04	0.90	0.00	0.35	0.04	0.90	5.00
CO 8	0.00	0.90	0.04	0.90	0.00	0.35	0.04	0.90	5.00
CO 9	0.00	0.90	0.03	0.90	0.00	0.35	0.03	0.90	5.00

			Inlet	Drainag	e Area 'C	" Value			overland
Inlet No.	Imp. (ac.)	'C'	Add'l Imp (ac.)	'C'	Lawn (ac.)	'C'	Total Area (ac.)	Overall 'C'	tra∨el time to inlet (min.)
Existing J	Junction	Box (Ru	n 200)						
Existing								( <del></del>	1. And the second se
202	0.10	0.90	0.00	0.90	0.00	0.35	0.10	0.89	5.00
MH204	A	contraction		1.1916.0	Autorit.	and and a second	•	New John	1.1910.0
206	0.09	0.90	0.00	0.90	0.00	0.35	0.09	0.90	5.00
208	0.07	0.90	0.00	0.90	0.00	0.35	0.07	0.90	5.00
210	0.00	0.90	0.04	0.90	0.01	0.35	0.05	0.79	5.00
YD 1	0.00	0.90	0.04	0.90	0.01	0.35	0.05	0.78	5.00
YD 2	0.00	0.90	0.04	0.90	0.01	0.35	0.05	0.79	5.00
CO 10	0.00	0.90	0.04	0.90	0.00	0.35	0.04	0.90	5.00
CO 11	0.00	0.90	0.03	0.90	0.00	0.35	0.03	0.90	5.00

		Bypass Drainage Area 'C' Value												
Bypass No.	Imp. (ac.)	'C'	Add'l Imp (ac.)	'C'	Lawn (ac.)	'C'	Total Area (ac.)	Overall 'C'	Local Intensity (in <i>l</i> hr)					
Bypass Are	eas (Offs	ite)												
Bypass 1	0.00	0.90	0.00	0.90	0.02	0.35	0.02	0.35	8.00					
Bypass 2	0.05	0.90	0.00	0.90	0.16	0.35	0.21	0.49	8.00					



		C	RAPH	IC SCALE	
30	0   	15 	30 	60	