DUE DILIGENCE NOTES:

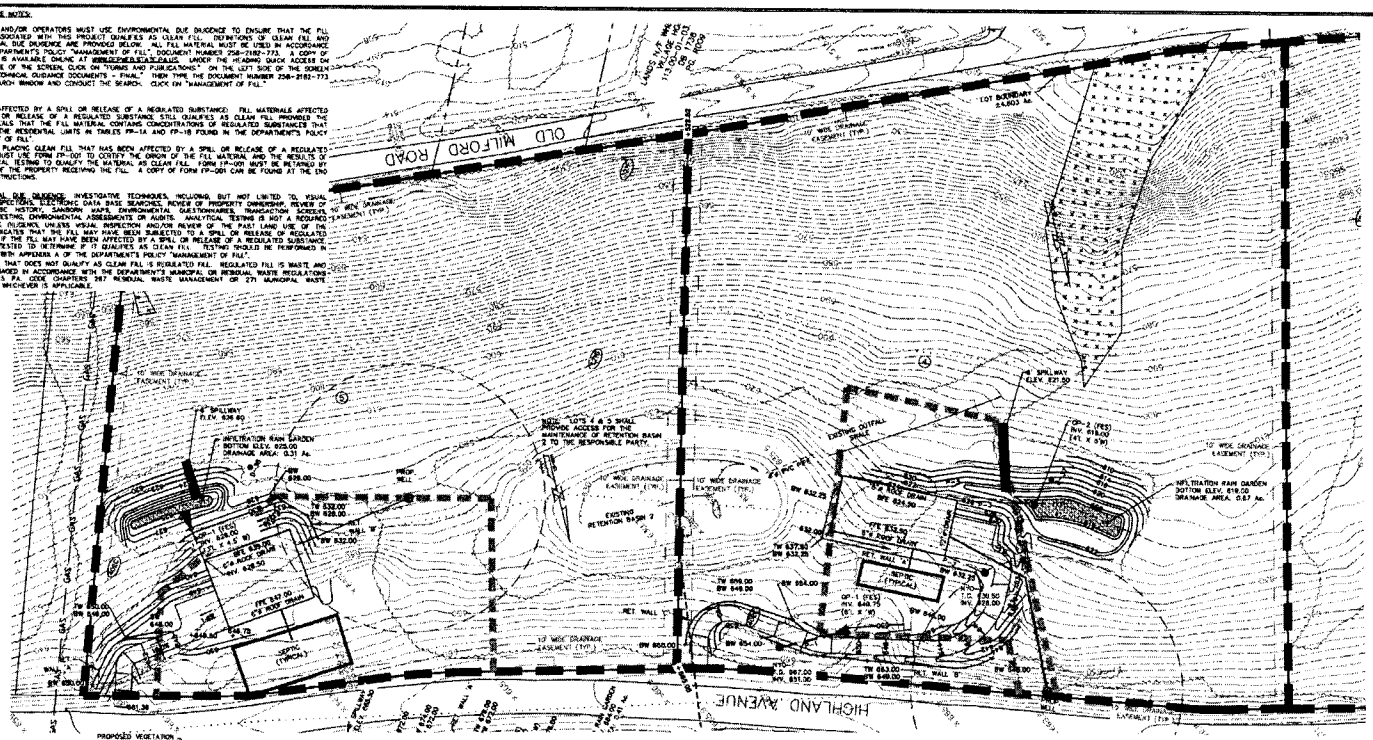
APPLICANTS AND/OR OPERATORS MUST USE ENVIRONMENTAL DUE DILIGENCE TO ENSURE THAT THE FILL MATERIAL ASSOCIATED WITH THIS PROJECT QUALIFIES AS CLEAN FILL. DEFINITIONS OF CLEAN FILL AND ENVIRONMENTAL DUE DILIGENCE ARE PROVIDED BELOW. ALL FILL MATERIAL MUST BE USED IN ACCORDANCE WITH THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL", DOCUMENT NUMBER 258-2182-773. A COPY OF THIS POLICY IS AVAILABLE ONLINE AT WWW.DEP.STATE.PA.US. UNDER THE HEADING QUICK ACCESS ON THE LEFT SIDE OF THE SCREEN, CLICK ON "FORMS AND PUBLICATIONS." ON THE LEFT SIDE OF THE SCREEN, CLICK ON "TECHNICAL GUIDANCE DOCUMENTS – FINAL." THEN TYPE THE DOCUMENT NUMBER 258-2182-773 INTO THE SEARCH WINDOW AND CONDUCT THE SEARCH. CLICK ON "MANAGEMENT OF FILL."

CLEAN FILL: AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE: FILL MATERIALS AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE STILL QUALIFIES AS CLEAN FILL, PROVIDED THE TESTING REVEALS THAT THE FILL MATERIAL CONTAINS CONCENTRATIONS OF REGULATED SUBSTANCES THAT ARE BELOW THE RESIDENTIAL LIMITS IN TABLES FP-1A AND FP-1B FOUND IN THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL."

ANY PERSON PLACING CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM FP-001 TO CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING THE FILL. A COPY OF FORM FP-001 CAN BE FOUND AT THE END OF THESE INSTRUCTIONS.

ENVIRONMENTAL DUE DILIGENCE: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE, UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL."

FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE DEPARTMENT'S MUNICIPAL OR RESIDUAL WASTE REGULATIONS BASED ON 25 PA. CODE CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE.



NPDES PERMIT PLAN (LOTS 4 & 5)
SCALE: 1"=40'

LEGEND

- EXISTING PROPERTY BOUNDARY
- EXISTING RIGHT-OF-WAY
- 932 EXISTING 2' CONTOURS
- 950 EXISTING 10' CONTOURS
- SOIL BOUNDARY
- EXISTING STORM PIPE
- GVH UTILITY LINES AND POLE
- SURVEY MARKERS FOUND
- EXISTING PAVE
- EXISTING BUILDING
- EXISTING GUARD RAIL
- EXISTING FENCE
- EXISTING FLOODWAY LINE
- SOILS TYPE
- EXISTING STRIPING
- EXISTING STONE
- EX. SAN MANHOLE
- EX. SIGN
- EX. INLET
- EXISTING LIGHT POLE
- EXISTING ELECTRIC BOX
- EXISTING SIGN
- EXISTING CULVERT
- 932 PROPOSED 2' CONTOURS
- 950 PROPOSED 10' CONTOURS
- BUILDING ENVELOPE BOUNDARY
- PROPOSED PAVE
- SUB-DRAINAGE SHED LINES
- PROPOSED TREELINE
- PROPOSED STORM PIPE
- PROPOSED SEPTIC LINE
- PROPOSED BUILDING
- EL. 1000.00 PROPOSED SPOT ELEVATION
- PROPOSED RIPRAP
- PROPOSED EROSION CONTROL MATTING
- PROPOSED INTOLIFT® GRAIN BASIN
- PROPOSED M-INLET
- PROPOSED CONCRETE ENDWALL
- PROPOSED FLARED END SECTION
- DIRT TEST LOCATION
- PROPOSED WELL LOCATION
- EXISTING TREELINE
- CONSTRUCTED SOIL MIX
- LOTS NOT SWMED
- WATERS OF THE COMMONWEALTH

SCALE: 1" = 40'

NOTES:

4.1 RESIDENTIAL LOT SWPPL

OWNERSHIP RESPONSIBILITIES: OWNERSHIP AND MAINTENANCE RESPONSIBILITIES FOR ALL STORMWATER FACILITIES CONSTRUCTED FOR THIS PROJECT WILL REMAIN WITH MILFORD HIGHLANDS PA, LLC UNTIL SUCH TIME AS AN INDIVIDUAL LOT IS TRANSFERRED TO A NEW OWNER, AT WHICH TIME THE OWNERSHIP AND MAINTENANCE RESPONSIBILITIES WILL BE TRANSFERRED TO THE NEW OWNER ACCORDING TO THE NPDES CO-PERMITTEE AGREEMENT FILED AT THAT TIME.

OPERATION & MAINTENANCE (O&M): THE OPERATION AND MAINTENANCE OF THE PCSM PLAN, WHICH IS AN INTEGRAL PART OF THE LAND DEVELOPMENT PLANS, IS THE RESPONSIBILITY OF MILFORD HIGHLANDS PA, LLC UNTIL SUCH TIME AS AN INDIVIDUAL LOT IS TRANSFERRED TO A NEW OWNER, AT WHICH TIME THE OWNERSHIP AND MAINTENANCE RESPONSIBILITIES WILL BE TRANSFERRED TO THE NEW OWNER ACCORDING TO THE NPDES CO-PERMITTEE AGREEMENT FILED AT THAT TIME.

AN INDIVIDUAL FAMILIAR WITH PCSM BMPS SHOULD CONDUCT ALL INSPECTIONS. ALL BMPS SHOULD BE INSPECTED AFTER RAIN EVENTS AND INFILTRATION BMPS SHOULD BE OBSERVED TO ENSURE THEY DRAIN (IF WITHIN 72 HOURS).

ADDITIONAL BMP SPECIFIC INSPECTION INFORMATION IS AS FOLLOWS:

- INLETS AND PIPES (WHERE APPLICABLE) SHOULD BE INSPECTED MONTHLY FOR SEDIMENT, DEBRIS AND BLOCKAGES. MAINTENANCE, INCLUDING REMOVAL OF ACCUMULATED DEBRIS AND SEDIMENT AND REPAIR AND REPLACEMENT OF ANY BROKEN OR STRUCTURALLY COMPROMISED PIPES, SHOULD OCCUR AS NEEDED BUT TIMEFRAME'S NOTED IN CLEANING SHOULD NOT EXCEED 6 MONTHS.
- INFILTRATION RAIN GARDENS SHOULD BE INSPECTED MONTHLY. VEGETATION & PLANTINGS SHOULD BE MAINTAINED IN GOOD CONDITION WITH ORGANIC MULCH AROUND PLANTINGS. ANY BARE SPOTS SHALL BE IMMEDIATELY RE-VEGETATED. ACCUMULATED DEBRIS SHOULD BE REMOVED. DURING THE GROWING SEASON GRASS IN THE AREAS SHOULD BE KEPT TRIMMED TO AN AVERAGE HEIGHT OF SIX (6) INCHES.
- SWALES (WHERE APPLICABLE) SHOULD BE INSPECTED MONTHLY AND AFTER MAJOR RAIN EVENTS. ACCUMULATED DEBRIS SHOULD BE REMOVED AND VEGETATION AND/OR CHANNEL LINING SHOULD BE MAINTAINED AND SOURCES REPAIRED. DURING THE GROWING SEASON GRASS IN THE SWALE SHOULD BE KEPT TRIMMED TO AN AVERAGE HEIGHT OF SIX (6) INCHES.
- RIPRAP APRONS SHOULD BE INSPECTED MONTHLY AND DEBRIS SHOULD BE REMOVED. INSPECT FOR FLOW CHANNELIZATION AND RESTORE LEVEL SPREADERS IF DEPRESSIONS ARE OBSERVED.

THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ. AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE.

NOTE:

1. THE DTE GRADING, LANDSCAPED INFILTRATION RAIN GARDENS, DWELLING UNITS AND DRIVEWAYS ARE CONCEPTUAL GUIDELINES FOR THE MAXIMUM CONSTRUCTION AREA. NO FURTHER PERMITTING DOCUMENTS SHALL BE REQUIRED IF ACTUAL CONSTRUCTION FALLS WITHIN THE CONCEPTUAL GUIDELINE AREAS.

2. STORMWATER FACILITIES (BIO-INFILTRATION RAIN GARDENS) CANNOT BE FILLED/ED, RELOCATED OR MODIFIED IN ANY WAY WITHOUT FIRST RECEIVING WRITTEN PERMISSION FROM THE TOWNSHIP.

3. THE TOWNSHIP AND COUNTY HAVE THE RIGHT TO ACCESS AND INSPECT ALL STORMWATER FACILITIES AT ANY TIME TO ENSURE THEY MEET COMPLIANCE WITH THE APPROVED PLANS.

NOTE:

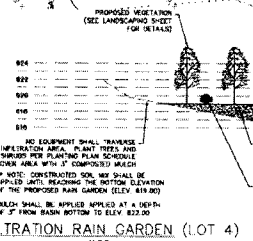
THE HOMEBUILDER/LANDOWNER SHALL NOT BE PERMITTED TO CONSTRUCT MORE IMPERVIOUS AREA THAN THE NPDES AREA TOTAL WITHOUT A DETAILED DESIGN TO ADJUST THE TREATMENT ELEMENTS ACCORDINGLY. A COPY OF EACH LOT SHEET AND TABLE SHALL ACCOMPANY ANY BUILDING PLAN PERMIT APPLICATION.

LOT 4

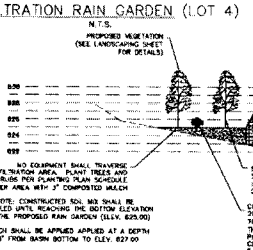
ITEM	NPDES DIMENSIONS (FEET)	NPDES AREA (S.F.)	PROPOSED DIMENSIONS (FEET)	PROPOSED AREA (S.F.)
HOUSE FOOTPRINT	42' X 88'	3,612		
DRIVEWAY	12' X 350'	4,890		
DECK, PORCH, PATIO				
OTHER IMPERVIOUS (POOLS, SIDEWALK, ETC.)				
	TOTAL	8,291		

LOT 5

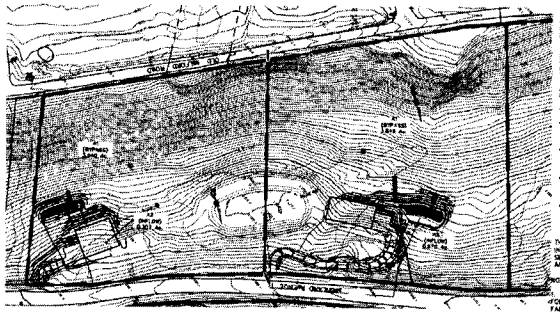
ITEM	NPDES DIMENSIONS (FEET)	NPDES AREA (S.F.)	PROPOSED DIMENSIONS (FEET)	PROPOSED AREA (S.F.)
HOUSE FOOTPRINT	54' X 87'	3,618		
DRIVEWAY	12' X 169'	2,033		
DECK, PORCH, PATIO				
OTHER IMPERVIOUS (POOLS, SIDEWALK, ETC.)				
	TOTAL	5,651		



INFILTRATION RAIN GARDEN (LOT 4)
N.T.S.

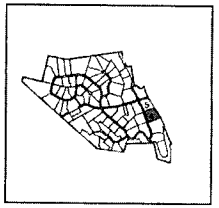


INFILTRATION RAIN GARDEN (LOT 5)
N.T.S.



DRAINAGE AREA MAP
SCALE: 1"=100'

NOTE:
OWNERS OF LOTS 4 & 5 MUST ALLOW/PROVIDE FOR THE RESPONSIBLE PARTY TO ACCESS EXISTING STORMWATER DETENTION STRUCTURES FOR MAINTENANCE AND INSPECTION PURPOSES.



KEY MAP
SCALE: 1"=2000'

SHEETS 23 & 24 FOR LANDSCAPING NOTES AND DETAILS

45 PLAN DRAWING SHEETS 23-26 REQUIRED TO ACCOMPANY PLAN NO SHEET 6 & NARRATIVE PAGES 1-30 & APPENDIX A

SHEETS 23 & 24 FOR POST CONSTRUCTION STORMWATER NOTES AND DETAILS

REVISIONS SUMMARY
1. REVISED PER TOWNSHIP & MUNICIPAL ENGINEER LETTER
2. REVISED PER PCSM REVIEW LETTER (05.11.2015)
3. REVISED FOR NPDES RENEWAL (03-14-2016)
4. REVISED PER PADEP REVIEW LETTER (10.06.2016)

POST CONSTRUCTION STORMWATER MANAGEMENT PLAN (LOTS 4 & 5)

MILFORD HIGHLANDS

OLD MILFORD ROAD

MILFORD TOWNSHIP / DELAWARE COUNTY / PENNSYLVANIA

FINAL NPDES PLAN

SCALE: 1"=40'
DATE: 09-19-2016
DRWG #: 8-PCSM
DES: KJM/TPG
DRN: KJM/TPG
CHK: KJM/TPG
CLIENT: MILFORD HIGHLANDS
DRAWING #: 1-MH
SHEET # 6

Kiley Associates, LLC
Civil Engineers & Surveyors