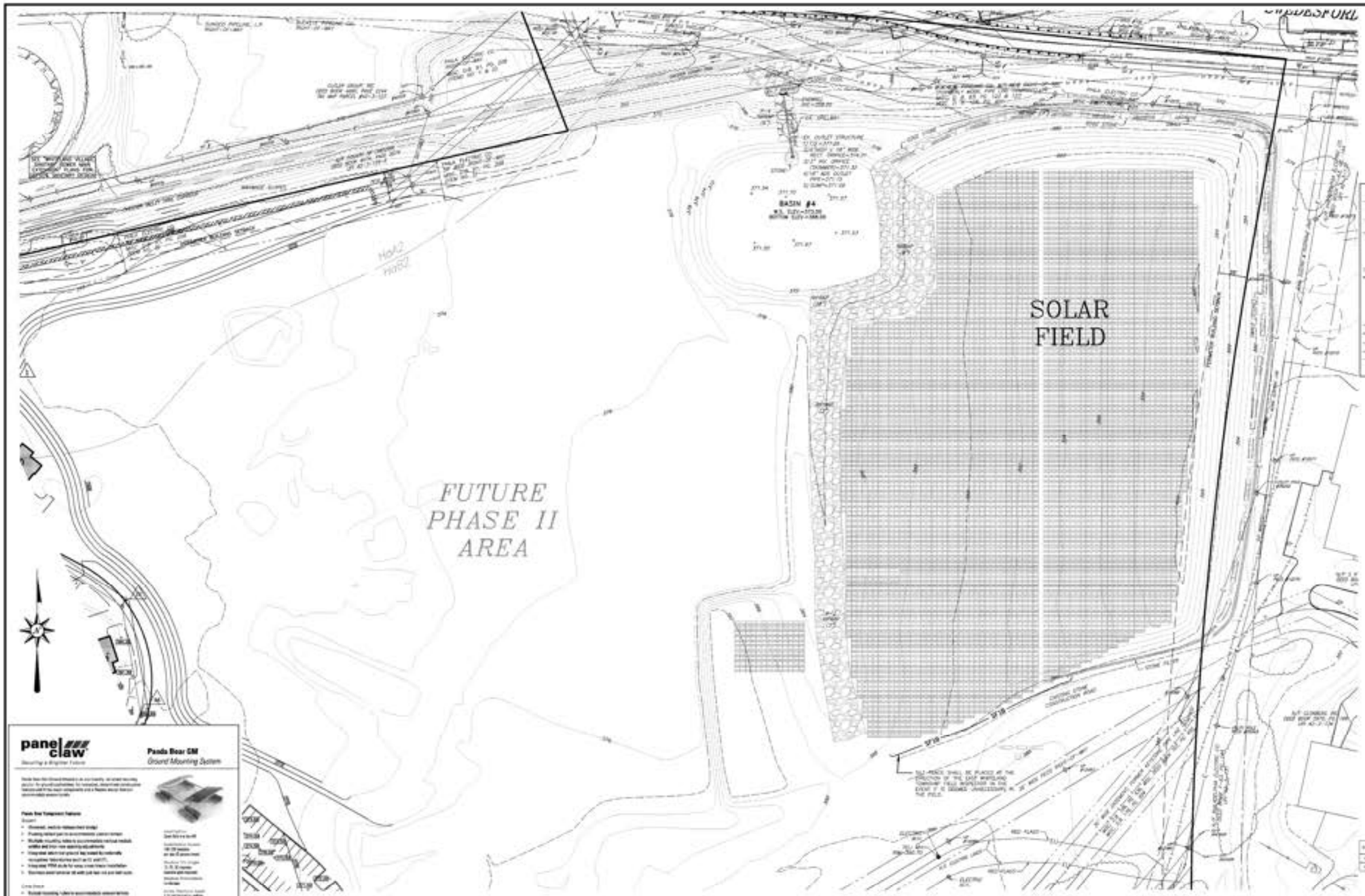


KEY MAP

SCALE: 1"=1000'

LEGEND

EXISTING INDEX CONTOUR	LIMIT OF 100 YEAR FLOOD
EXISTING INTERMEDIATE CONTOUR	EXISTING CURB
EXISTING DEPRESSION CONTOUR	PROPOSED CURB
PROPOSED CONTOUR	EXISTING SIGN
PROPOSED SPOT ELEVATION	PROPOSED SIGN
EXISTING INLET	WATER METER
PROPOSED INLET	WATER VALVE
EXISTING STORM SEWER PIPE	EXISTING D-W ENDWALL
PROPOSED STORM SEWER PIPE	PROPOSED D-W ENDWALL
EXISTING STORM MANHOLE	
PROPOSED STORM MANHOLE	
PROPOSED MONUMENT	PROPOSED FIRE HYDRANT
EXISTING SANITARY MANHOLE	PROPOSED STORM INLET NUMBER
PROPOSED SANITARY MANHOLE	
EXISTING SANITARY SEWER PIPE	PROPOSED SANITARY MH NUMBER
PROPOSED SANITARY SEWER PIPE	BIORETENTION AREA IDENTIFICATION NO.
EXISTING WATER LINE	
PROPOSED WATER LINE	BIORETENTION AREA
SOLIS LINE	
	PROPOSED SOLAR PANEL ARRAYS

CONSTRUCTION SEQUENCE

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE.

AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES INCLUDING BUT NOT LIMITED TO: THE LANDOWNER, PROJECT ENGINEER AND ALL APPROPRIATE MUNICIPAL OFFICIALS, A REPRESENTATIVE FROM THE CHESTER COUNTY CONSERVATION DISTRICT (610-825-4900) FOR AN ON SITE PRE-CONSTRUCTION MEETING.

1. INSTALL FIXED BELOW GROUND MOUNTING SYSTEM AND SOLAR PANELS PER SPECIFICATIONS.

2. CONTACT CHESTER COUNTY CONSERVATION DISTRICT TO ARRANGE FOR AN INSPECTION. CONVERT SEDIMENT BASIN "C" TO PERMANENT DETENTION BASIN #4 PER THE DETENTION BASIN CONVERSION SEQUENCE. SEDIMENT BASIN "C" SHALL NOT BE CONVERTED INTO THE PERMANENT CONDITION WITHOUT THE CONSERVATION DISTRICT APPROVAL. TEMPORARY SEDIMENT BASIN "C" SHALL BE EXCAVATED TO THE ELEVATIONS SHOWN ON THE DETAIL FOR THE PERMANENT DETENTION BASIN, ONCE THE SITE HAS BEEN STABILIZED PER THE SPECIFICATIONS BELOW.

STABILIZATION NOTE: AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE, THE OPERATOR SHALL STABILIZE ANY AREAS DISTURBED BY THE ACTIVITIES DURING NON-DEMANDING PERIODS, WHICH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS. DISTURBED AREAS WHICH ARE AT FINISHED GRADE OR WHICH WILL NOT BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.

SEDIMENT BASIN "C" TO PERMANENT BASIN #4 CONVERSION SEQUENCE

UPON SITE STABILIZATION EACH SEDIMENT BASIN SHALL BE CONVERTED TO A PERMANENT STORM WATER MANAGEMENT BASIN ACCORDING TO THE STEPS LISTED BELOW. THE CONSERVATION DISTRICT MUST BE NOTIFIED PRIOR TO BASIN CONVERSION.

1. DE-WATER THE SEDIMENT BASIN
2. REMOVE DEWA-OUT STAKES
3. REMOVE BAFFLE WALLS FROM THE SEDIMENT BASIN FLOOR
4. REMOVE SEDIMENT FROM BASIN FLOOR AND DEPOSIT IN AN AREA NOT SUBJECT TO ACCELERATED EROSION.
5. REMOVE SKIMMERS AND APPLY TEMPORARY STONE FILTER AROUND LOWER SKIMMER(S) PER DETAIL
6. EXCAVATE BASIN TO THE SPECIFICATIONS SHOWN ON THE DETENTION BASIN #4 DETAIL AND PERFORM ANY REGRADING NECESSARY TO ESTABLISH THE PERMANENT BASIN CONFIGURATION, INCLUDING BUT NOT LIMITED TO THE EMERGENCY SPILLWAY AREA. INSTALL AND SOLID TRENCH FURNISH FOR BASIN #4 INSTALL SEDIMENT CLEANOUT PER PLAN AND THE DETENTION BASIN #4 DETAIL. SEED DISTURBED AREAS WITHIN 5 DAYS OF INITIAL CONSTRUCTION.
7. INSTALL PERMANENT OUTLET STRUCTURE MODIFICATIONS PER DETAIL
8. STABILIZE ANY DISTURBED AREAS, INCLUDING BASIN SPILLWAY AND BERM WITH EROSION CONTROL MATTING
9. PERFORM ANY REQUIRED REMEDIAL REPAIRS TO THE EMERGENCY SPILLWAY
10. UPON STABILIZATION ON DISTURBED 3H:1LOPE AREAS PER STABILIZATION REQUIREMENTS IN THE CONSTRUCTION SEQUENCE

SOILS LIST

SYMBOL	SOIL NAME	DESCRIPTION	DEPTH TO SEASONAL HIGH WATER TABLE	DEPTH TO BEDROCK	CONDITIONS WATER TABLE	FLOOD	POND	PERC	TOPOGRAPHIC SLOPE EFFECTS FOR DIFFERENT TYPE DEVELOPMENTS	HYDROLOGIC GROUP
UnbB	UNADILLA SILT LOAM	SILT LOAM, 3 TO 8 PERCENT SLOPES, OCCASIONAL FLOODING	6" PLUS	4 TO 6'	NONE	NONE	NONE	NONE	MEDIUM SLOPING	C
UnbC	UNADILLA SILT LOAM	SILT LOAM, 8 TO 15 PERCENT SLOPES, OCCASIONAL FLOODING	6" PLUS	4 TO 6'	NONE	NONE	NONE	NONE	MEDIUM SLOPING	C

EXPOSED PIPELINE NOTE:
IF ANY PORTION OF THE PIPELINE IS EXPOSED DURING CONSTRUCTION, ONE (1) FOOT OF SAND OR SCREENINGS SHALL BE PLACED OVER THE PIPELINE DURING TRENCH BACKFILL.

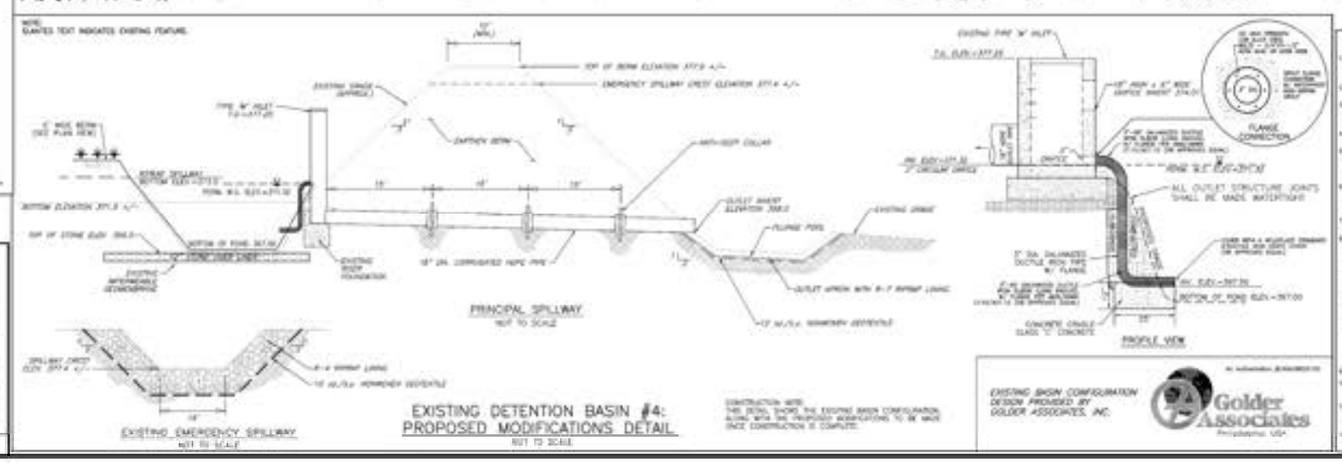
THE PROJECT AREA IS LOCATED WITHIN THE WEST BRANCH OF THE VALLEY CREEK WATERSHED (CWF-MF), AND THE VALLEY CREEK WATERSHED (EV), AS CLASSIFIED UNDER TITLE 25 CHAPTER 93.

TOTAL LIMIT OF SOLAR CONSTRUCTION AREA = 7.62 ACRES
TOTAL LIMIT OF SOLAR DISTURBANCE AREA = 0.05 ACRES (BASIN CONVERSION/EQUIPMENT)

panel claw
Securing a Brighter Future

Panda Bear GM
Ground Mounting System

SOLAR PANEL DETAIL



EROSION AND SEDIMENTATION CONTROL NOTES

1. BEFORE BEFORE AND DURING THE IMPROVED EROSION AND SEDIMENT CONTROL PLAN OR PROCEEDING TO ANY PROCEDURES, ANY DEVICES TO BE CONSTRUCTED IN THE DIRECTION THE CHESTER COUNTY CONSERVATION DISTRICT.
2. ALL TEMPORARY EROSION CONTROL DEVICES SHALL BE INSPECTED AFTER EACH RAIN BY THE CONTRACTOR TO ASSURE THEY ARE FUNCTIONING AS INTENDED. REPAIRS SHALL BE MADE AS NECESSARY.
3. THE CONTRACTOR IS ADVISED TO BEGIN IMPROVEMENTS TOGETHER WITH THE PROVISIONS OF THE EROSION AND SEDIMENTATION CONTROL PLAN AND DESIGNATION OF SEDIMENT CONTROL INSPECTION PLAN. PROTECTION OF REGIONAL TRANSPORTED OFFICE OF WATER RESOURCES CHAPTER 102, EROSION CONTROL.
4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE SITE.
5. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE APPROVED PLAN AND THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AND PENNSYLVANIA CONSERVATION COMMISSION REGULATIONS AND DEVICES OF THE SITE.
6. SURFACE WATERWAYS PROVIDE CONSTANT GROUNDS OF WATER CONDITIONS THE CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION AND DESIGNATION OF SURFACE WATERWAYS. THE CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION AND DESIGNATION OF SURFACE WATERWAYS, CHANNELS, DRAINAGE DITCHES AND OTHER DEVICES TO PROTECT THE WATERWAYS FROM DAMAGE DURING CONSTRUCTION.
7. PROTECTION TO EXISTING TREES AND SHRUBS SHALL BE MADE TO ELIMINATE UNNECESSARY DAMAGE.
8. UNTIL THE SITE IS STABILIZED ALL EROSION AND SEDIMENTATION BMP'S MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE REMOVAL OF ALL EROSION AND SEDIMENTATION BMPS AFTER THE STABILIZATION HAS BEEN ACHIEVED. REMOVAL OF BMPS MUST BE PERFORMED IN A MANNER THAT MINIMIZES EARTH DISTURBANCE. THE CONTRACTOR SHALL INSPECT ALL BMPS AFTER EACH RAIN TO DETERMINE IF MAINTENANCE IS NECESSARY. THE CONTRACTOR SHALL REMOVE SEDIMENT FROM BMPS WHEN IT REACHES 1/2 OF THE HEIGHT OF THE BMP. SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED IN A MANNER THAT WILL NOT CONTAMINATE ADJACENT AREAS.
9. ALL EQUIPMENT AND TEMPORARY MAINTENANCE WORK INCLUDING FUEL AND TRUCK MAINTENANCE, MATERIAL STORAGE, REFUELING OPERATIONS, AND REMOVAL MUST BE CONDUCTED IN A MANNER THAT MINIMIZES EXCESSIVE SOIL EROSION AND SEDIMENTATION. BMPS THAT TO PROTECTION OF CONTAMINATED WATER OR CONTAMINATION OF WATER WITHOUT WILL BE REQUIRED.
10. ANY SLOPES TO BE STABILIZED BY EROSION CONTROL BLANKET 4:1 OR STEEPER.
11. THE CONTRACTOR SHALL MONITOR THE EROSION CONTROL DEVICES DAILY AND AFTER EACH RAINFALL AND NOTIFY THE DEVELOPER'S REPRESENTATIVE OF ANY DEFICIENCIES IMMEDIATELY.
12. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE APPROVED PLAN AND THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AND PENNSYLVANIA CONSERVATION COMMISSION REGULATIONS AND DEVICES OF THE SITE.
13. PROTECTION TO EXISTING TREES AND SHRUBS SHALL BE MADE TO ELIMINATE UNNECESSARY DAMAGE.

NO.	DATE	REVISION
1	12/9/2019	PER TOWNSHIP ENGINEER'S LETTER DATED 11/06/2019

SOLAR FIELD PHASE 2 PROPOSED GRADING PLAN

PLAN OF PROPERTY FOR MAKEMIE AT WHITELAND

EAST WHITELAND TOWNSHIP — CHESTER COUNTY, PA

Edward B. Walsh & Associates, Inc.
CIVIL ENGINEERS & LAND PLANNERS
Licensed Professional Engineers
117 Allendale Village Road
Bryn Mawr, Pennsylvania 19010
Phone: (610) 525-6900
Fax: (610) 525-6902

PROJECT #2019-17
DATE: 10/15/2019
SCALE: 1"=50'
DRAWN: KDH
CHECKED: JMP
SHEET: 05 OF 08

Plotted: 12/9/2019

ASSESSMENT MAP 42-3; PARCELS 128 & 130