

**PLANNING DEPARTMENT**  
Cumberland County

**Cumberland County  
Subdivision and Land Development  
Review Report**

Cumberland County Planning Department  
310 Allen Road, Suite 101  
Carlisle, PA 17013  
Telephone: (717) 240-5362

Municipality:	Date Received:	Date Reviewed:	Reviewed By:	Plan Number:
Middlesex Township	1/5/2026	1/22/2026	SH, EG	P26-5
Plan Title:				
Ahold Delhaize Solar Development				
Plan Status:		Plan Type:		
Preliminary/Final		Land Development Plan		
Comments and Recommendations:				

1. A warning sign concerning voltage should be placed at the base of all pad-mounted transformers and substations or fence. The plan should indicate the location of the signs. In addition, details regarding these signs should be included on sheet 10 (zoning 14.60.A.7).
2. The applicant should include a section reference on the zoning information table on sheet 5.
  - a. The maximum building height requirement is indicated as 15 feet. This may apply to an accessory solar energy system (zoning 14.59.A.7.a).
  - b. It appears that the setbacks provided are required for an accessory solar energy system (zoning 14.59.A.7.d.2).
3. The proposed coverage is noted as 1%. The plan should address the conditions and requirements established by the Pennsylvania DEP that are necessary to waive stormwater management and impervious coverage requirements for a solar facility.
4. The title of the plan should indicate the site is in Middlesex Township (SLDO 501.A.3).
5. The title of the plan should indicate the plan status (preliminary or final) and the plan type (land development) (SLDO 501.A.3).
6. The parcel boundary should be shown on the location map (SLDO 501.A.6).
7. The city should be provided on the “prepared by” statement on the cover sheet (SLDO 501.A.9.e).
8. The Cumberland County Tax PIN should be included on the cover sheet and on the adjoining properties on sheet 2 (SLDO 501.A.15.g).
9. Based on a discussion with Middlesex Township staff, the plan was reviewed at a conditional use hearing prior to adoption of the new zoning ordinance. The plan will need to comply with the former zoning ordinance (3-89) (SLDO 501.A.21 and 22).
  - a. The zoning information on sheet 5 should indicate the property is in the light industrial (LI) district (SLDO 501.A.21.a).

- b. The plan should include the conditional use hearing date and docket / hearing number (SLDO 501.A.22).
  - c. Any conditions of approval should be noted on the plan. The conditions should all be addressed (SLDO 501.A.22).
  - d. The plan notes should indicate that the former zoning ordinance (3-89) will apply to the proposed solar facility.
10. The adjacent zoning districts should be shown on the plan (SLDO 501.A.23).
11. The plan should address the presence or absence of wetlands (SLDO 501.A.25.b).
12. The Cumberland County Planning Department signature block should be changed to reference the CCPD file number (SLDO 601.K.4). There is a misspelling on the title of the signature block. It should read planning "commission."
13. The proposed access drive should be paved (SLDO 703.E.1).
14. The plan should show the required and provided sight distances and a clear sight triangle (SLDO 703.K).
15. Sidewalks and curbing should be provided along Shady Lane. The applicant and the township may want to consider a waiver of these requirements. (SLDO 707 and 708).
16. The survey monuments and markers should be identified and labeled at each property corner (SLDO 709).
17. The plan should address a dedication of recreation land or a fee in lieu of dedication (SLDO 710).
18. A stop sign should be placed at the access drive intersection with Shady Lane (SLDO 715.A.1).
19. The proposed development is in the Letort Spring Run area as designated in the Cumberland County Natural Areas Inventory. The applicant should consider planting native trees to restore the riparian area in the 150' buffer identified on the plan (SLDO 1202.F).
20. Please work with the municipal addressing authority to determine addresses as soon as possible. Providing complete and accurate addressing information to Cumberland County GIS when plans are finalized, but before construction, ensures that they can be added to the Master Street Address Guide (MSAG). An up-to-date MSAG is critical to ensuring that addresses validate in the 9-1-1 system. Other utility providers also depend on the MSAG to validate installations in new developments. If you have any questions regarding addressing or the MSAG, please contact Garrett McKinney, MSAG Coordinator, at (717)240-6418 or [ghmckinney@cumberlandcountypa.gov](mailto:ghmckinney@cumberlandcountypa.gov).
21. Cumberland County strives to create the most accurate public records possible. The following electronic AutoCAD files (.dwg) are **required** by the Planning Department prior to or at the time of recording any plan. Please note that the Planning Department **will not sign the plan for recording** until this information is emailed to [planningreviews@cumberlandcountypa.gov](mailto:planningreviews@cumberlandcountypa.gov). Links to online file downloads are acceptable. Applicants are required to provide the following information:
- a. **Parcel boundaries**
  - b. **Lot lines**
  - c. **Building footprints**

- d. Road rights-of-ways**
- e. Edge of pavement**
- f. Declaration of planned communities/condominiums documents (including amendments)**



# AHOLD DELHAIZE SOLAR DEVELOPMENT

SHADY LANE, BOROUGH OF CARLISLE, CUMBERLAND COUNTY, PENNSYLVANIA  
DECEMBER, 2025

MUNICIPAL AND COUNTY REVIEW AND APPROVAL

REVIEWED BY THE PLANNING COMMISSION OF THE TOWNSHIP OF MIDDLESEX THIS \_\_\_\_\_  
DAY OF \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
SECRETARY

\_\_\_\_\_  
CHAIRPERSON

APPROVED BY THE SUPERVISORS OF THE TOWNSHIP OF MIDDLESEX THIS \_\_\_\_\_ DAY OF \_  
\_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
SECRETARY

\_\_\_\_\_  
CHAIRPERSON

CUMBERLAND COUNTY PLANNING COMISSION'S  
REVIEW CERTIFICATE

THE CUMBERLAND COUNTY PLANNING DEPARTMENT, AS REQUIRED BY THE PENNSYLVANIA  
MUNICIPALITES PLANNING CODE, ACT 247 OF 1968, AS AMENDED, REVIEWED THIS PLAN ON THE  
\_\_\_\_\_ DAY OF \_\_\_\_\_ 20\_\_\_\_, AND COPY OF THE REVIEW IS ON FILE AT THE  
OFFICE OF THE PLANNING DEPARTMENT AS FCPC FILE NO. \_\_\_\_\_. THIS CERTIFICATE  
DOES NOT INDICATE APPROVAL OR DISAPPROVAL OF THE PLAN BY THE CUMBERLAND COUNTY  
PLANNING DEPARTMENT, AND DOES NOT REPRESENT NOR GUARANTEE THAT THIS PLAN COMPLIES WITH  
THE VARIOUS ORDINANCES, RULES, REGULATIONS OR LAWS OF THE LOCAL MUNICIPALITY, THE  
COMMONWEALTH, OR THE FEDERAL GOVERNMENT.

\_\_\_\_\_  
SIGNATURE OF DIRECTOR

CONTACT INFORMATION

**OWNER/DEVELOPER**  
SR PA AH1, LLC  
Contact: Karen Jenkins  
Address: 51 S Broad St,  
Ridgewood, NJ 07450  
Phone #: 908-219-1185  
Email: kjenkins@scalemicrogrids.com

**ENGINEER**  
MORRIS KNOWLES & ASSOCIATES, INC.  
Contact: Garrett Varner  
Address: 1740 Golden Mile Hwy., Suite 101,  
Monroeville, PA 15146  
Phone #: 724-757-0797  
Email: gvarner@morrisknowles.com

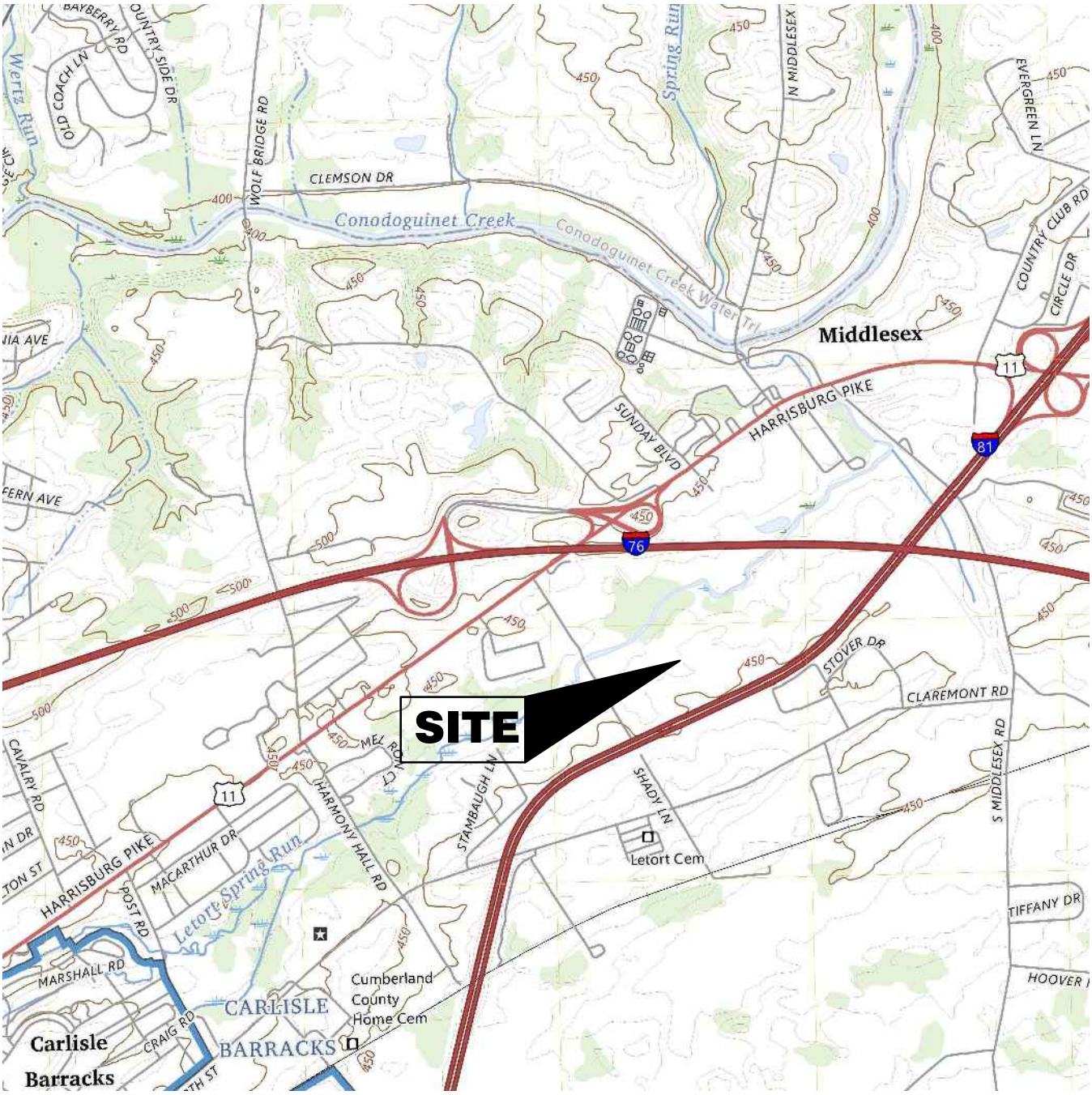
**LAND SURVEYOR**  
FREDERICK, SEIBERT & ASSOCIATES, INC.  
Contact: Justin Doty  
Address: 505 South Hanover St,  
Carlisle, PA 17013  
Phone #: 717-701-8111  
Email: jdoty@fsa-inc.com



CALL BEFORE YOU DIG  
IN PENNSYLVANIA  
1-800-242-1776  
DESIGN SN: 20253422860

Know what's below  
Call before you dig

THE GENERAL CONTRACTOR SHALL NOTIFY ALL UTILITY  
COMPANIES INVOLVED IN THE SITE NO MORE TEN DAYS  
AND NO LESS THAN THREE DAYS IN ADVANCE OF EXCAVATION  
(PA ACT 287 OF 1974 AMENDED BY ACT 50 OF 2017).  
PA STATE LAW REQUIRES 3 WORKING DAYS NOTICE



LOCATION MAP  
SCALE: 1"=2000'  
USGS QUADRANGLE MAP  
CARLISLE, PA

PREPARED FOR:

**SR PA AH1, LLC**

51 SOUTH BROAD STREET,  
RIDGEWOOD, NJ 07450

ATTN – NOAH SIEGL  
PHONE – 1-516-640-2877

PREPARED BY:



**Morris Knowles & Associates, Inc.**

*Consulting Engineers & Land Surveyors*

1740 GOLDEN MILE HWY., SUITE 101 PA 15146

TELEPHONE: (724) 468-4622 FAX: (724) 468-8940

INDEX OF SHEETS

TITLE SHEET	C000
GENERAL NOTES	C001
EXISTING CONDITIONS/DEMOLITION PLAN	C100
EXISTING GRADE HEAT MAP	C101
SITE PLAN	C200
GRADING PLAN	C300
ACCESS ROAD PROFILE	C301
UTILITY PLAN	C400
LANDSCAPE PLAN	C500
GENERAL DETAILS	C600
EROSION AND SEDIMENT CONTROL TITLE SHEET	C700
EROSION AND SEDIMENT CONTROL PLAN	C701
CUT / FILL SHEET	C702
EROSION AND SEDIMENTATION CONTROL DETAILS	C703
POST CONSTRUCTION STORMWATER MANAGEMENT PLAN	C800
SIGHT DISTANCE PLAN	C900

SUPPLEMENTAL SHEETS

ALTA SURVEY	BY OTHERS
LOT CONSOLIDATION PLAN	BY OTHERS

UTILITY COMPANIES

WATER/SANITARY

MIDDLESEX TOWNSHIP MUNICIPAL AUTHORITY  
350 N Middlex Rd,  
Carlisle, PA 17013  
Rory Morrison  
717-243-0874  
rmorrison@middlesextwp.com

ELECTRICITY

PPL ELECTRIC UTILITIES CORPORATION  
437 Blue Church Rd,  
Greensburg, PA 15601  
Doug Haupt  
570-490-5684  
dhaupt@pplweb.com

GAS

UGI Utilities, Inc.  
1301 Alp Dr  
Middletown, PA 17057  
Dylan Walborn  
(717) 304-4810  
dwalborn@ugi.com

CABLE/TELEPHONE/FIBER OPTICS

COMCAST  
1241 PA-66 BUS  
Greensburg, PA 15601  
Ashley Donaldson  
412-925-3236  
ashley\_donaldson@comcast.com



**TITLE SHEET**  
**AHOLD DELHAIZE SOLAR DEVELOPMENT**

prepared for  
**SR PA AH1, LLC**  
situated in,  
**MIDDLESEX TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA**

**MKA**  
**Morris Knowles & Associates, Inc.**  
*Consulting Engineers and Land Surveyors*  
1740 Golden Mile Hwy., Suite 101  
Monroeville, PA 15146  
Telephone: (724) 468-8940  
info@morrisknowles.com www.morrisknowles.com

SHEET NO.  
C000

DESCRIPTION: \_\_\_\_\_  
DESCRIPTION: \_\_\_\_\_  
DESCRIPTION: \_\_\_\_\_  
DESCRIPTION: \_\_\_\_\_  
DESCRIPTION: \_\_\_\_\_  
DESCRIPTION: \_\_\_\_\_

DATE: \_\_\_\_\_  
DATE: \_\_\_\_\_  
DATE: \_\_\_\_\_  
DATE: \_\_\_\_\_  
DATE: \_\_\_\_\_  
DATE: \_\_\_\_\_

REVISION BY: \_\_\_\_\_  
REVISION BY: \_\_\_\_\_  
REVISION BY: \_\_\_\_\_  
REVISION BY: \_\_\_\_\_  
REVISION BY: \_\_\_\_\_  
REVISION BY: \_\_\_\_\_

DESIGNED BY: CJM  
REVIEWED BY: GJV  
DRAWN BY: CJM  
DATE: DEC 2025  
PROJ. NO.: 2011.02

SCALE:  
N/A



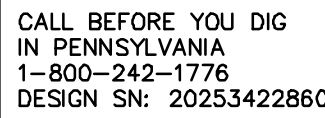
1. FOR OTHER PERTINENT INFORMATION, THE CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THE CONSTRUCTION SET. IT IS NOT THE ENGINEER'S INTENTION THAT ANY SINGLE PLAN SHEET IN THIS COLLECTION OF DOCUMENTS ACCURATELY DEPICTS ALL WORK ASSOCIATED WITH THE PROJECT.
2. BEFORE STARTING WORK, THE CONTRACTORS SHALL EXAMINE THE JOB SITE AND THE DRAWINGS AND BE THOROUGHLY FAMILIAR WITH THE ENTIRE CONSTRUCTION, THE FACILITIES, ANY DIFFICULTIES IN THE WORK TO BE COMPLETED, THE ACCURACY OF THE DRAWINGS AND DETAILS, AND QUANTITY OF LABOR AND MATERIALS REQUIRED.
3. THE CONTRACTOR SHALL NOT SCALE THESE DRAWINGS FOR CONSTRUCTION OR BIDDING PURPOSES. IN THE EVENT OF OMISSIONS OF NECESSARY DIMENSION, THE CONTRACTOR SHALL INFORM THE ARCHITECT OR ENGINEER, FIGURED AND CALCULATED DIMENSIONS TAKE PRECEDENCE OVER SCALED MEASUREMENTS. DETAILED DRAWINGS AND LARGER SCALE DRAWINGS TAKE PRECEDENCE OVER SMALLER SCALED DRAWINGS.
4. ALL PLAN DETAILS AND WALL SECTIONS ARE CONSIDERED "TYPICAL" INDUSTRY DETAILS UNLESS NOTED OTHERWISE AS SITE SPECIFIC.
5. TRAFFIC SHALL BE MAINTAINED ON ALL ADJOINING STREETS AND DRIVES AT ALL TIMES. TRAFFIC CONTROL SHALL BE MAINTAINED IN ACCORDANCE WITH PENNDOT'S REQUIREMENTS.
6. CONTRACTOR SHALL VERIFY THE LOCATION AND INVERT ELEVATION OF ALL EXISTING UTILITIES WITH PROPOSED CONNECTIONS PRIOR TO CONSTRUCTION AND GRADING OF THE SITE. THE ENGINEER SHALL BE IMMEDIATELY NOTIFIED OF ANY DESIGN CONFLICTS.
7. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR ANY CHANGES IN DESIGN PLANS UNLESS WRITTEN CONSENT IS GIVEN BY THE ENGINEER. THE CONTRACTOR AND/OR THE OWNER WILL BE HELD RESPONSIBLE FOR ANY FIELD MODIFICATIONS MADE WITHOUT THE WRITTEN CONSENT OF THE ENGINEER AND NECESSARY APPROVALS BY PERMITTING AGENCIES.
8. THE LOCATION OF EXISTING UTILITIES WERE TAKEN FROM RECORDS AND MARKING PROVIDED BY OTHERS AND OBSERVED EVIDENCE. THE LOCATIONS SHOWN MAY BE APPROXIMATE. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT LOCATIONS, SIZES AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL EXERCISE CARE TO AVOID DAMAGE TO ALL EXISTING UTILITIES.
9. ALL MATERIALS AND WORKMANSHIP INVOLVED IN THIS SITE WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION, INCLUDING SUPPLEMENTS, OF THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS PUB. FORM 408, UNLESS OTHERWISE NOTED.
10. A PENNDOT HIGHWAY OCCUPANCY PERMIT, PURSUANT TO SECTION 420 OF THE ACT OF JUNE 1, 1945 (P.L. 1242 NO. 428), KNOWN AS THE "STATE HIGHWAY LAW" IS REQUIRED FOR DRIVEWAY ACCESS TO ANY STATE ROADWAY.
11. A FINAL EROSION AND SEDIMENTATION CONTROL PLAN AND PERMIT PURSUANT TO THE RULES AND REGULATIONS OF THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (TITLE 25, PART 1, SUBPART C, ARTICLE II, CHAPTER 102 OF THE PENNSYLVANIA CODE) IS REQUIRED BEFORE ANY EARTH MOVING ACTIVITIES ON THE PROPOSED LOTS IS ALLOWED.
12. ALL PROPOSED ACCESSIBLE FACILITIES ARE TO BE CONSTRUCTED TO CURRENT ADA REQUIREMENTS AND STANDARDS.
13. ALL PROPOSED ON-SITE LIGHTING SHALL BE DIRECTED INWARD AND DOWNWARD AWAY FROM RESIDENTIAL PROPERTIES AND ALL STREET RIGHT-OF-WAYS.
14. LAND DEVELOPMENT PLAN APPROVAL DOES NOT RELIEVE THE OWNER FROM ALL APPLICABLE SIGN REGULATIONS. ALL PROPOSED ON-SITE SIGNAGE SHALL CONFORM TO THE MUNICIPAL ZONING ORDINANCES.
15. CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES, INCLUDING EARTHWORK. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNER AND ENGINEER DURING THE BIDDING PROCESS OF ANY QUANTITY DISCREPANCIES IN THE BID DOCUMENTS. ONCE THE BIDDING CONTRACT IS ISSUED, THE CONTRACTOR ACKNOWLEDGES THE CONTRACT PRICE COVERS ALL LABOR, MATERIALS AND INCIDENTALS TO SUBSTANTIALLY COMPLETE THE PROJECT ACCORDING TO THE CONSTRUCTION PLANS.
16. IT IS THE INTENTION OF THE ENGINEER THAT THE DRAWINGS AND SPECIFICATIONS PROVIDE FOR A COMPLETELY FINISHED PROJECT. ANYTHING OR MATTER SHOWN ON THE DRAWINGS OR DESCRIBED BY THE SPECIFICATIONS OR FAIRLY IMPLIED BY EITHER OR BOTH, SHALL BE CONSIDERED A PART OF THE WORK THE SAME AS IF NOTED, SHOWN AND DESCRIBED. SHOULD THE CONTRACTORS FIND ANY DISCREPANCIES OR OMISSIONS IN THE DRAWINGS OR SPECIFICATIONS, OR BE IN DOUBT AS TO THEIR MEANING, THEY SHALL NOTIFY THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK. ANY CLARIFICATIONS FROM THE ENGINEER WILL BE WRITTEN AND THE CONTRACTORS SHALL BE RESPONSIBLE AT NO COST TO THE OWNER OR ENGINEER FOR ANY WORK WHICH MUST BE REDONE BECAUSE OF THEIR FAILURE TO COMPLY WITH THE PRECEDING.
17. FURTHER EXPLANATORY DRAWINGS OR DETAILS WILL ALSO BE CONSIDERED PART OF THE PROJECT AND WORK EXECUTED WITHOUT SUCH DETAILS SHALL BE AT THE CONTRACTOR'S RISK.
18. THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND MEASUREMENTS. ANY DISCREPANCIES BETWEEN THE DRAWING AND ACTUAL EXISTING CONDITIONS SHALL BE REPORTED TO THE ENGINEER BEFORE PROCEEDING. ANY CHANGES OR CORRECTIONS WILL BE WRITTEN, AND THE CONTRACTORS SHALL BE RESPONSIBLE FOR ANY WORK COMPLETED BEFORE RECEIVING SAID CORRECTION.
19. IN THE CASE OF AN INCONSISTENCY BETWEEN DRAWINGS AND SPECIFICATIONS, OR WITHIN EITHER DOCUMENT NOT CLARIFIED BY AN ADDENDUM, THE BETTER QUALITY OR GREATER QUANTITY OF WORK SHALL BE PROVIDED IN ACCORDANCE WITH THE ENGINEER AND THE OWNER'S REPRESENTATIVES' INTERPRETATION.
20. THESE DRAWINGS SHALL NOT BE USED BY ANY PERSON, FIRM OR CORPORATION WITHOUT SPECIFIC WRITTEN PERMISSION FROM MORRIS KNOWLES & ASSOCIATES, INC. THESE PLANS ARE NOT TO BE REPRODUCED, CHANGED OR MANIPULATED IN ANY FORM OR MANNER. IF ANY PARTS ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT PERMISSION AND CONSENT OF MORRIS KNOWLES & ASSOCIATES, INC.

1. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION WORK.
2. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITY CONNECTIONS PRIOR TO CONSTRUCTION/DEMOLITION AT THIS SITE. THE CONTRACTOR SHALL ALSO COORDINATE ALL UTILITY CONNECTIONS WITH LOCAL PROVIDERS.
3. ALL EXISTING PAVEMENT, CURB AND SIDEWALK TO BE REMOVED SHALL BE SAW CUT AS SHOWN ON PLANS.
4. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL DRIVES, WALKS, EXISTING PAVEMENT AND CURBING WITHIN THE LIMITS AS SHOWN. ALL DEBRIS IS TO BE HAULED OFF-SITE TO AN APPROVED LANDFILL.
5. THE CONTRACTOR SHALL REPLACE ALL CURB SECTIONS, SIDEWALKS, AND PAVEMENT, WHICH HAS BEEN CUT AND DISTURBED WITHIN THE RIGHT-OF-WAY WITH PENNSYLVANIA DEPARTMENT OF TRANSPORTATION'S STANDARD MATERIALS.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE ROADWAYS AND ASSOCIATED STRUCTURES AND SHALL MAKE REPAIRS AS NECESSARY TO THE SATISFACTION OF MIDDESEX TOWNSHIP AND PENNDOT. THE CONTRACTOR SHALL ALSO TAKE PRECAUTIONS FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS AND WARNING DEVICES TO INFORM AND PROTECT THE PUBLIC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF TRAFFIC THROUGHOUT THE CONSTRUCTION PERIOD.

1. THE CONTRACTOR SHALL INSTALL ALL PAVEMENT MARKINGS AS SHOWN ON THE PLANS.
2. MINE OPENINGS ARE NOT ANTICIPATED. IF MINE SPOILS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL EITHER REWORK THE MATERIAL PER GEOTECHNICAL ENGINEERS RECOMMENDATIONS OR REMOVE THE MATERIAL TO A PERMITTED AREA.
3. NO SIGNIFICANT CULTURAL OR SENSITIVE ENVIRONMENTAL FEATURES EXIST WITHIN THE PROJECT BOUNDARY. NO FURTHER ENVIRONMENTAL STUDIES WILL BE NECESSARY.

1. THE OWNER IS RESPONSIBLE FOR OBTAINING A GEOTECHNICAL ENGINEERING FIRM TO TEST AND CONFIRM COMPACTION REQUIREMENTS. PLACE FILL IN LIFTS AS DESIGNATED BY THE GEOTECHNICAL ENGINEER AND COMPLY WITH THE COLLING METHOD AS SPECIFIED IN THE GEOTECHNICAL ENGINEER'S REPORT. PROVIDOR INSPECTION OF ALL FILL AS IT IS PLACED FOR PROPER DENSITY BY A GEOTECHNICAL TESTING FIRM.
2. ALL CUT AND FILL OPERATIONS SHALL FOLLOW THE "PENNSYLVANIA HANDBOOK OF BEST MANAGEMENT PRACTICES" FOR DEVELOPING AREAS.
3. THE CONTRACTOR SHALL CONTROL DUST ON THE SITE IN ACCORDANCE WITH PA DEP REQUIREMENTS.
4. THE CONTRACTOR SHALL NOT REMOVE SOIL FROM THE SITE. IF THE CONTRACTOR DISCOVERS CONTAMINATED SOIL ON THE SITE DURING CONSTRUCTION ACTIVITIES, THEN THE SOIL SHALL BE CLEANED AND DISPOSED OF AT AN APPROVED LANDFILL IN ACCORDANCE WITH PA DEP RULES, REGULATIONS AND REQUIREMENTS.
5. THE CONTRACTOR SHALL ADJUST TO GRADE ALL WATER AND GAS VALVES.
6. THIS PLAN REPRESENTS THE PROPOSED FINISH GRADE SURFACE OF THE SITE REPRESENTED BY CONTOUR WITH GRADE ELEVATIONS ONLY. FINAL GRADES MAY CHANGE DEPENDING ON GEOTECHNICAL ENGINEERS REQUIREMENTS DURING CONSTRUCTION. THE OWNER/DEVELOPER SHALL CONTACT MORRIS KNOWLES & ASSOCIATES, INC. SHOULD FINAL GRADES REQUIRE MODIFICATIONS TO THE SITE PLANS.
7. THIS PLAN DOES NOT CONSTITUTE A COMPACTION PLAN OR SLOPE STABILITY PLAN. MORRIS KNOWLES & ASSOCIATES, INC. WILL BE HELD HARMLESS FOR ONSITE GEOTECHNICAL OPERATIONS, AND METHODS AND MEANS DURING AND AFTER CONSTRUCTION.
8. GRADING OPERATIONS MUST BE CONDUCTED UNDER THE SUPERVISIONS OF THE GEOTECHNICAL ENGINEER WHO SIGN CERTIFY THAT ALL FILL HAS BEEN PROPERLY PLACED AND SUBMIT A FINAL COMPACTION REPORT FOR ALL STRUCTURAL FILLS.
9. THE GEOTECHNICAL ENGINEERING REQUIREMENTS TAKE PRECEDENCE OVER SITE DESIGN PLANS. MORRIS KNOWLES & ASSOCIATES, INC. HAS NO AUTHORITY OVER GEOTECHNICAL REQUIREMENTS AND TESTING BEFORE, DURING, AND AFTER CONSTRUCTION.

1. ALL EXISTING UTILITIES SERVING THIS PROPERTY SHALL BE PROPERLY TERMINATED AT THE RIGHT-OF-WAY LINE IN COMPLIANCE WITH TOWNSHIP AND COUNTY REGULATIONS. CONTRACTOR SHALL PROVIDE EVIDENCE OF COMPLIANCE WITH ALL STATE AND FEDERAL LAWS REGARDING THE DEMOLITION OF STRUCTURES AND ABANDONMENT OF UTILITIES.
2. ANY UTILITIES FOUND DURING EXCAVATION, NOT SHOWN ON PLAN, SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER.
3. EACH SUBCONTRACTOR SHALL OBTAIN HIS OR HER OWN PERMITS AND CONTACT THE UTILITY COMPANY FOR VERIFICATION AND LOCATION OF HOOK-UP PRIOR TO ANY WORK BEING DONE.
4. UTILITIES SHOWN WERE TAKEN IN PART FROM RECORDS OF RESPECTIVE UTILITY COMPANIES AND PART FROM A SURVEY AND DO NOT NECESSARILY REPRESENT ALL UNDERGROUND OR OVERHEAD UTILITIES ADJACENT TO OR UPON THE PREMISES SHOWN ON THE PLAN.
5. THE CONTRACTOR SHALL COORDINATE UTILITY CONNECTIONS TO THE SITE WITH THE ELECTRICAL DRAWINGS AND PROVIDE CONNECTIONS WITH EXISTING UTILITIES IN ACCORDANCE WITH THE UTILITY PROVIDER'S REQUIREMENTS.
6. ALL UTILITIES SHALL BE UNDERGROUND.
7. CONTRACTOR SHALL VERIFY THE LOCATION AND INVERTS OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
8. THE CONTRACTOR SHALL COORDINATE ALL UTILITY CONNECTIONS AND SHUT-OFFS WITH UTILITY PROVIDERS.



THE GENERAL CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES INVOLVED IN THE SITE NO MORE TEN DAYS AND NO LESS THAN THREE DAYS IN ADVANCE OF EXCAVATION (PA ACT 287 OF 1974 AMENDED BY ACT 50 OF 2017). PA STATE LAW REQUIRES 3 WORKING DAYS NOTICE



# AHOLD DELHAIZE SOLAR DEVELOPMENT

prepared for  
SR PA AH1 IIC

MIDDLESEX TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA  
*situated in*

**MORRIS ALLOWAY**  
& Associates, Inc.

*Consulting Engineers and Land Surveyors*  
(A Hammontree Company)

1740 Golden Mile Hwy., Suite 101  
Monroeville, Pa 15146

Telephone: (724) 468-4622  
Fax: (724) 468-8940

www.thotisknowies.com www.thotisknowies.com

SCALE:  
N/A

N/A

DESIGNED BY: CJM  
REVIEWED BY: GJV  
DRAWN BY: CJM  
DATE: DEC 2025  
PROJ. NO.: 2011.02

REVISION BY: \_\_\_\_\_  
REVISION BY: \_\_\_\_\_  
REVISION BY: \_\_\_\_\_  
REVISION BY: \_\_\_\_\_  
REVISION BY: \_\_\_\_\_  
REVISION BY: \_\_\_\_\_


[illegible]




1. THE SUBJECT PROPERTIES ARE NOT LOCATED WITHIN A 100 YEAR FLOOD PLAIN ACCORDING TO FEMA FLOOD MAP NUMBER 42041C0232F, LAST REVISED 9/7/2023.

Page 10



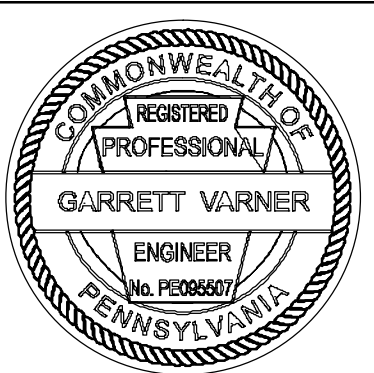
- |      |                            |   |                                |
|------|----------------------------|---|--------------------------------|
| SAN  | - SANITARY                 | — G —   | - GAS LINE                     |
| ST   | - STORM                    | — W —   | - WATER LINE                   |
| MAN  | - MANHOLE                  | — T —   | - SUBSURFACE TELEPHONE LINE    |
| TOP  | - TOP OF CASTING           | — E —   | - SUBSURFACE ELECTRIC LINE     |
| INV  | - INVERT / FLOW LINE       | — OH —  | - OVERHEAD WIRES               |
| WV   | - WATER VALVE              | — 908 —   | - EXISTING CONTOURS            |
| GV   | - GAS VALVE                |  | - EXISTING INLET               |
| GM   | - GAS METER                | — O —   | - EXISTING MANHOLE             |
| EM   | - ELECTRIC METER           | — X —   | - EXISTING SEWER               |
| S.R. | - STATE ROUTE              | — X —   | - FENCE                        |
| TEL  | - TELEPHONE                | — X —   | - 100' BUFFER FROM TOP OF BANK |
| CRP  | - REINFORCED CONCRETE PIPE |   |                                |
| CPP  | - CORRUGATED PLASTIC PIPE  |   |                                |

SCALE: 1 INCH = 60'



0 30' 60' 120'

GRAPHIC SCALE



## EXISTING CONDITIONS/DEMOLITION PLAN AHOLD DELHAIZE SOLAR DEVELOPMENT

*prepared for*  
SR PA AH1, LLC  
*situated in*  
MIDDLESEX TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

SHEET NO.  
C100

DESIGNED BY: CJM	REVISION BY: _____	DESCRIPTION: _____
REVIEWED BY: GUV	REVISION BY: _____	DESCRIPTION: _____
DRAWN BY: CJM	REVISION BY: _____	DESCRIPTION: _____
DATE: DEC 2025	REVISION BY: _____	DESCRIPTION: _____
PROJ. NO.: 2011.02	REVISION BY: _____	DESCRIPTION: _____

SCALE:  
1" = 60'

**MA** **Morris Knowles & Associates, Inc.**  
(A Hammonree Company)  
*Consulting Engineers and Land Surveyors*  
1740 Golden Mile Hwy., Suite 101  
Monroeville, Pa 15146  
Telephone: (724) 468-4622  
Fax: (724) 468-8940  
[www.morrisknowles.com](http://www.morrisknowles.com)  
[info@morrisknowles.com](mailto:info@morrisknowles.com)

DWG. PATH: P:\Clients\2011 Scale Microgrids\2011.02 - Ahold Delhaize\CAD\2011.02 - Ahold Delhaize - LD.dwg  
LAST SAVE: Dec 16, 2025 - 10:35am debartam

CALL BEFORE YOU DIG  
IN PENNSYLVANIA  
1-800-242-1776  
DESIGN SN: 20253422860



Know what's below  
Call before you dig

THE GENERAL CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES INVOLVED IN THE SITE NO MORE TEN DAYS AND NO LESS THAN THREE DAYS IN ADVANCE OF EXCAVATION (PA ACT 287 OF 1974 AMENDED BY ACT 50 OF 2017). PA STATE LAW REQUIRES 3 WORKING DAYS NOTICE

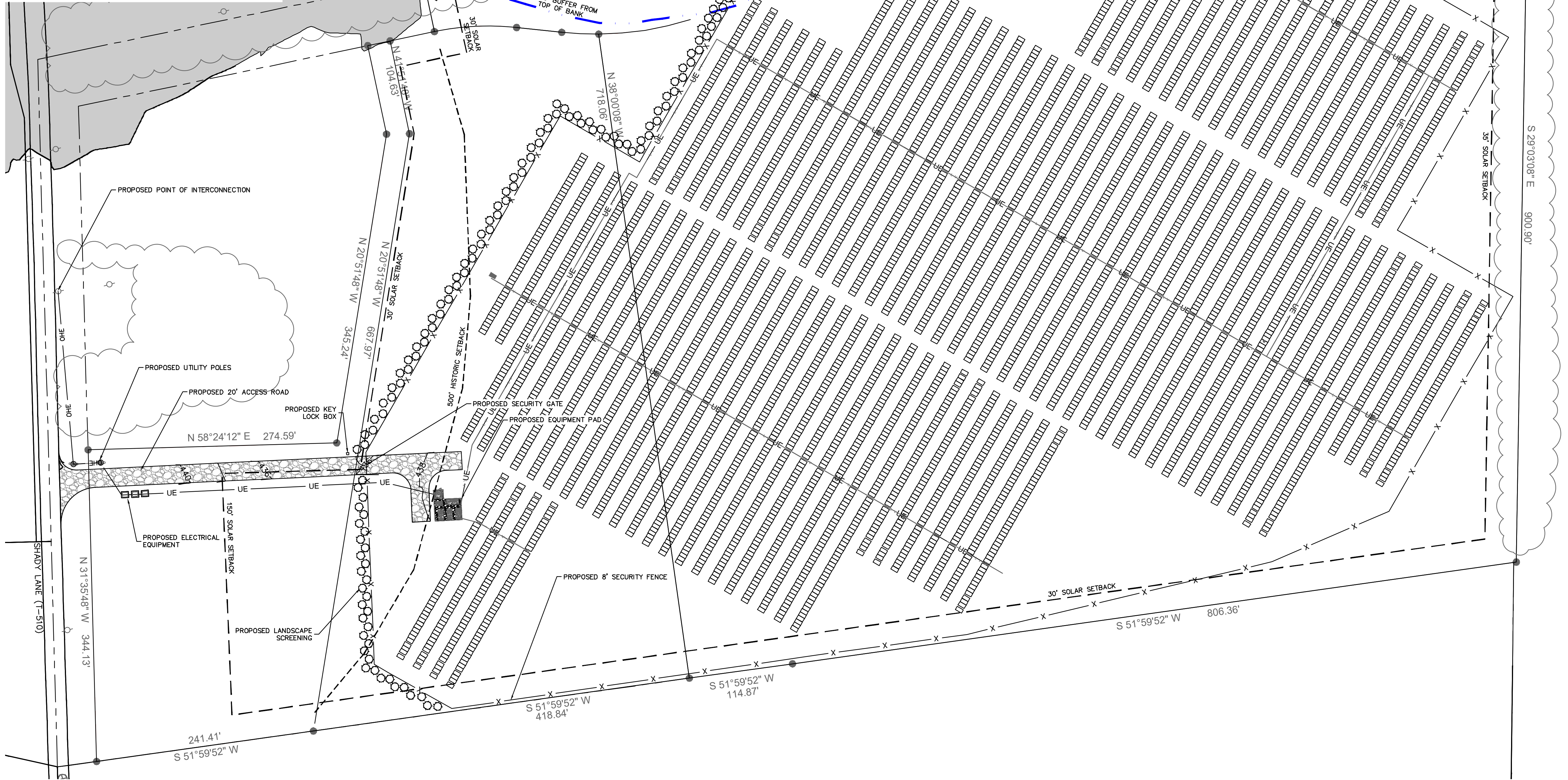






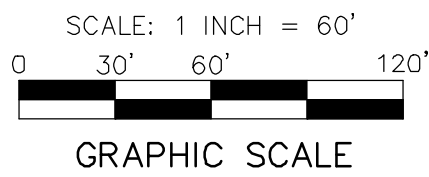
ZONING INFORMATION

LOCATION: SHADY LANE, CARLISLE, MIDDLESEX TOWNSHIP, PA 17013		
ZONE: (C-2) - LIGHT INDUSTRIAL-COMMERCIAL		
USE: PRINCIPAL SOLAR ENERGY SYSTEM (PSES)		
ITEM	REQUIREMENTS	PROPOSED
MINIMUM LOT AREA	20 ACRES	23.50 ACRES
MINIMUM LOT WIDTH	100 FEET	830 FEET
MINIMUM FRONT SETBACK	150 FEET	150 FEET
MINIMUM SIDE SETBACK	30 FEET	30 FEET
MINIMUM REAR SETBACK	35 FEET	35 FEET
MAXIMUM BUILDING HEIGHT	15 FEET	<15 FEET
MAXIMUM COVERAGE	50 PERCENT	1 PERCENT



LEGEND

- |                                |                                    |
|--------------------------------|------------------------------------|
| SAN - SANITARY                 | G - GAS LINE                       |
| ST - STORM                     | W - WATER LINE                     |
| MH - MANHOLE                   | T - SUBSURFACE TELEPHONE LINE      |
| TOP - TOP OF CASTING           | E - SUBSURFACE ELECTRIC LINE       |
| INV - INVERT / FLOW LINE       | OH - OVERHEAD WIRES                |
| WV - WATER VALVE               | - - - - - EXISTING CONTOURS        |
| GV - GAS VALVE                 | ▨ - EXISTING INLET                 |
| GM - GAS METER                 | ○ - EXISTING MANHOLE               |
| EM - ELECTRIC METER            | - - - - - EXISTING SEWER           |
| S.R. - STATE ROUTE             | == == == FENCE                     |
| TELE - TELEPHONE               | -X-X- 150' BUFFER FROM TOP OF BANK |
| RCP - REINFORCED CONCRETE PIPE |                                    |
| CPP - CORRUGATED PLASTIC PIPE  |                                    |



CALL BEFORE YOU DIG  
IN PENNSYLVANIA  
1-800-242-1776  
DESIGN SN: 20253422860



Know what's below  
Call before you dig

THE GENERAL CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES INVOLVED IN THE SITE NO MORE TEN DAYS AND NO LESS THAN THREE DAYS IN ADVANCE OF EXCAVATION (PA ACT 287 OF 1974 AMENDED BY ACT 50 OF 2017). PA STATE LAW REQUIRES 3 WORKING DAYS NOTICE

SITE PLAN

**AHOLD DELHAIZE SOLAR DEVELOPMENT**

prepared for  
SR PA AH1, LLC  
situated in,  
MIDDLESEX TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

ENGINEER  
GARRETT VARNIER  
No. PE000600  
PENNSYLVANIA

SHEET NO.  
C200

**MKA Morris Knowles**

& Associates, Inc.  
Engineers and Surveyors  
1740 Monroeville, Pa. 15146  
Telephone: (724) 468-8943  
info@morrisknowles.com www.morrisknowles.com

SCALE:

1" = 60'

DESIGNED BY: CJM

REVIEWED BY: GJV

DRAWN BY: CJM

DATE: DEC 2025

PROJ. NO.: 2011.02

REVISION BY:

REVISION BY:

REVISION BY:

REVISION BY:

REVISION BY:

DESCRIPTION:

DESCRIPTION:

DESCRIPTION:

DESCRIPTION:

DESCRIPTION:

DATE:

DATE:

DATE:

DATE:

DATE:

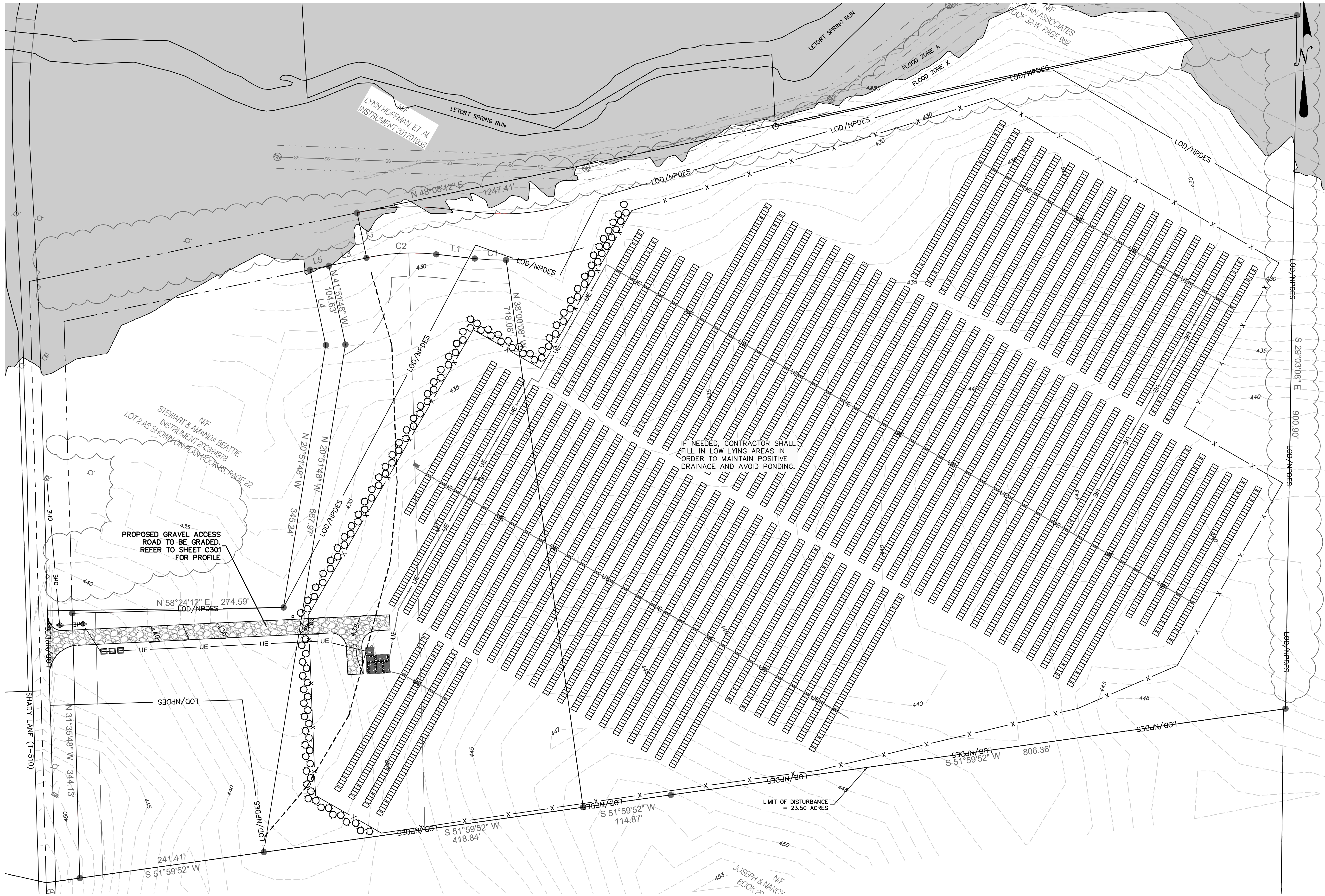


CALL BEFORE YOU DIG  
IN PENNSYLVANIA  
1-800-242-1776  
DESIGN SN: 20253422860



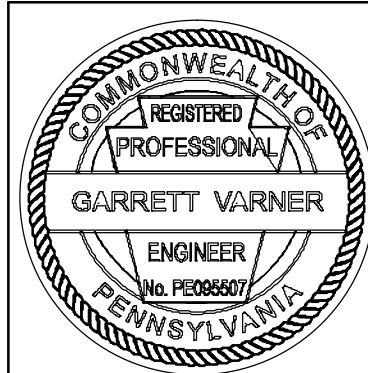
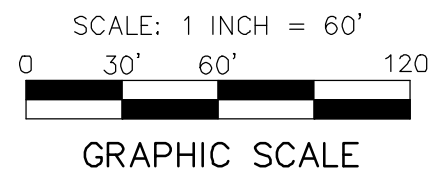
Know what's below  
Call before you dig

THE GENERAL CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES INVOLVED IN THE SITE NO MORE TEN DAYS AND NO LESS THAN THREE DAYS IN ADVANCE OF EXCAVATION (PA ACT 287 OF 1974 AMENDED BY ACT 50 OF 2017). PA STATE LAW REQUIRES 3 WORKING DAYS NOTICE



LEGEND

- |                                |                               |
|--------------------------------|-------------------------------|
| SAN - SANITARY                 | C - GAS LINE                  |
| ST - STORM                     | W - WATER LINE                |
| MH - MANHOLE                   | T - SUBSURFACE TELEPHONE LINE |
| TOP - TOP OF CASTING           | E - SUBSURFACE ELECTRIC LINE  |
| INV - INVERT / FLOW LINE       | OH - OVERHEAD WIRES           |
| WV - WATER VALVE               | --- --- EXISTING CONTOURS     |
| GV - GAS VALVE                 | --- --- EXISTING INLET        |
| GM - GAS METER                 | --- --- EXISTING MANHOLE      |
| EM - ELECTRIC METER            | --- --- EXISTING SEWER        |
| S.R. - STATE ROUTE             | --- --- FENCE                 |
| TELE - TELEPHONE               |                               |
| ROP - REINFORCED CONCRETE PIPE |                               |
| CPP - CORRUGATED PLASTIC PIPE  |                               |



GRADING/DRAINAGE PLAN

AHOLD DELHAIZE SOLAR DEVELOPMENT

prepared for  
SR PA AH1, LLC  
situated in  
MIDDLESEX TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

**MA** Morris Knowles

& Associates, Inc.  
(a subsidiary of Morris Knowles & Associates, Inc.)  
1740 Morrisville, PA 15115  
Telephone: (717) 448-8942  
info@morrisknowles.com www.morrisknowles.com

SCALE:  
1" = 60'

DESIGNED BY: DEB  
REVIEWED BY: GJV  
DRAWN BY: DEB  
DATE: DEC 2025  
PROJ. NO.: 2011.02

REVISION BY:	DATE:	DESCRIPTION:

SHEET NO.  
C300

DWG. PATH: P:\Glen\2011 Scale Micro\Glen\2011.02 - Ahold Delhaize\CAD\2011.02 - Ahold Delhaize - 10.37m  
LAST SAVE: Dec 16, 2025 - 10:37m



CALL BEFORE YOU DIG  
IN PENNSYLVANIA  
1-800-242-1776  
DESIGN SN: 20253422860



Know what's below  
Call before you dig

THE GENERAL CONTRACTOR SHALL NOTIFY ALL UTILITY  
COMPANIES INVOLVED IN THE SITE NO MORE TEN DAYS  
AND NO LESS THAN THREE DAYS IN ADVANCE OF EXCAVATION  
(PA ACT 287 OF 1974 AMENDED BY ACT 50 OF 2017).  
PA STATE LAW REQUIRES 3 WORKING DAYS NOTICE

SAN - SANITARY  
ST - STORM  
MH - MANHOLE  
TOP - TOP OF CASTING  
INV - INVERT / FLOW LINE  
WV - WATER VALVE  
GV - GAS VALVE  
GM - GAS METER  
EM - ELECTRIC METER  
S.R. - STATE ROUTE  
TELE - TELEPHONE  
RCP - REINFORCED CONCRETE PIPE  
CPP - CORRUGATED PLASTIC PIPE

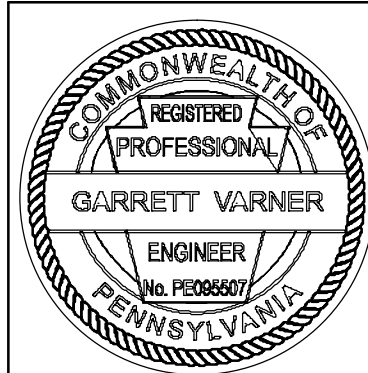
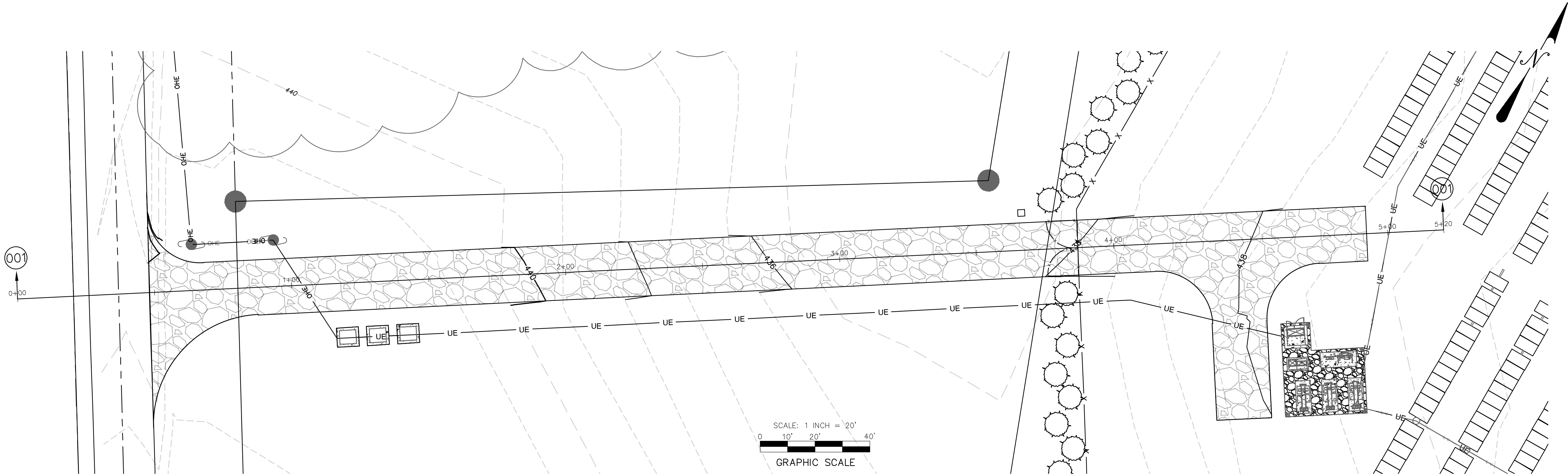
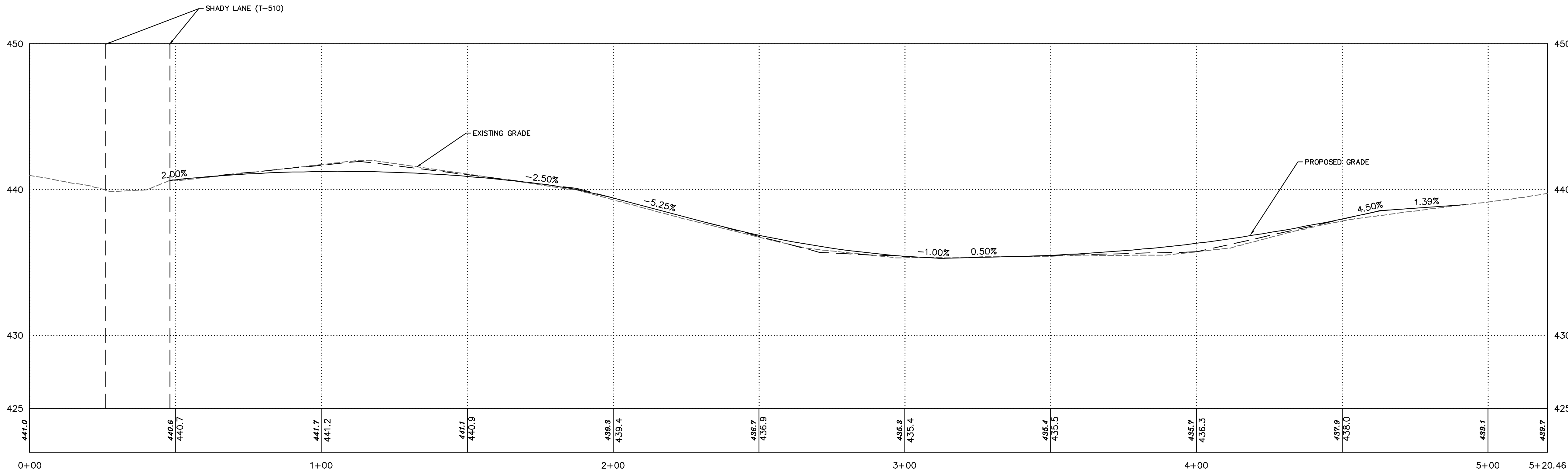
C - GAS LINE  
W - WATER LINE  
T - SUBSURFACE TELEPHONE LINE  
E - SUBSURFACE ELECTRIC LINE  
OH - OVERHEAD WIRES  
--- 908 --- EXISTING CONTOURS  
--- EXISTING INLET  
--- EXISTING MANHOLE  
--- EXISTING SEWER  
---X--- FENCE

LEGEND

Proposed Access Road PROFILE - STA. 0+00 TO STA. 5+20

HORIZ SCALE: 1"=20'

VERT SCALE: 1"=4'



ACCESS ROAD PROFILE

AHOLD DELHAIZE SOLAR DEVELOPMENT

prepared for  
SR PA AH1, LLC  
situated in,  
MIDDLESEX TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

**MKA** Morris Knowles

& Associates, Inc.  
Engineers and Surveyors  
1740 Monroeville, Pa 15146  
Telephone: (724) 489-8942  
info@morrisknowles.com www.morrisknowles.com

DESIGNED BY: DEB

REVIEWED BY: GJV

DRAWN BY: DEB

DATE: DEC 2025

PROJ. NO.: 2011.02

SCALE:

1" = 20'

DESCRIPTION:

DESCRIPTION:

DESCRIPTION:

DESCRIPTION:

DESCRIPTION:

DATE:

DATE:

DATE:

DATE:

DATE:

REVISION BY:

REVISION BY:

REVISION BY:

REVISION BY:

REVISION BY:

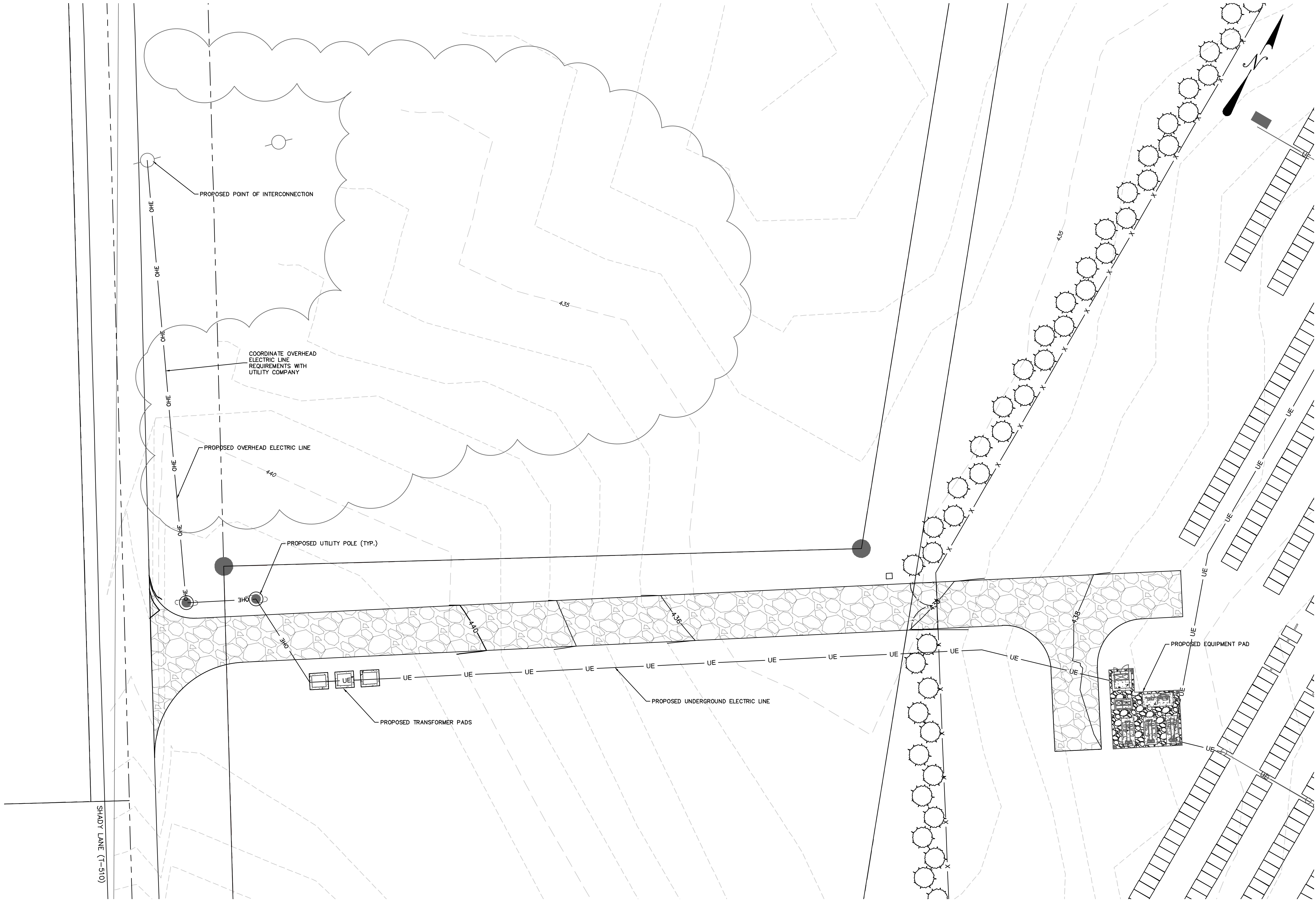


CALL BEFORE YOU DIG  
IN PENNSYLVANIA  
1-800-242-1776  
DESIGN SN: 20253422860



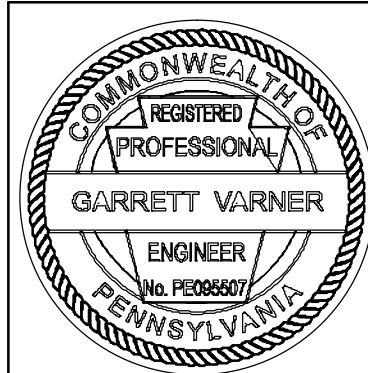
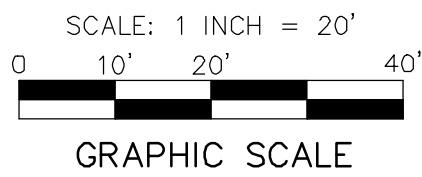
Know what's below  
Call before you dig

THE GENERAL CONTRACTOR SHALL NOTIFY ALL UTILITY  
COMPANIES INVOLVED IN THE SITE NO MORE TEN DAYS  
AND NO LESS THAN THREE DAYS IN ADVANCE OF EXCAVATION  
(PA ACT 287 OF 1974 AMENDED BY ACT 50 OF 2017).  
PA STATE LAW REQUIRES 3 WORKING DAYS NOTICE



LEGEND

- |      |   |                          |           |   |                           |
|------|---|--------------------------|-----------|---|---------------------------|
| SAN  | - | SANITARY                 | G         | - | GAS LINE                  |
| ST   | - | STORM                    | W         | - | WATER LINE                |
| MH   | - | MANHOLE                  | T         | - | SUBSURFACE TELEPHONE LINE |
| TOP  | - | TOP OF CASTING           | E         | - | SUBSURFACE ELECTRIC LINE  |
| INV  | - | INVERT / FLOW LINE       | OH        | - | OVERHEAD WIRES            |
| WV   | - | WATER VALVE              | -- 908 -- | - | EXISTING CONTOURS         |
| GV   | - | GAS VALVE                | ▨         | - | EXISTING INLET            |
| GM   | - | GAS METER                | ○         | - | EXISTING MANHOLE          |
| EM   | - | ELECTRIC METER           | =====     | - | EXISTING SEWER            |
| S.R. | - | STATE ROUTE              | -X-X-     | - | FENCE                     |
| TELE | - | TELEPHONE                |           |   |                           |
| RCP  | - | REINFORCED CONCRETE PIPE |           |   |                           |
| CPP  | - | CORRUGATED PLASTIC PIPE  |           |   |                           |



UTILITY PLAN

**AHOLD DELHAIZE SOLAR DEVELOPMENT**

prepared for  
SR PA AH1, LLC

situated in,  
MIDDLESEX TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

**MKA** Morris Knowles

& Associates, Inc.  
(a subsidiary of Morris Knowles & Associates, Inc.)

1740 Monroeville, Pa 15146  
Telephone: (724) 489-8942  
info@morrisknowles.com www.morrisknowles.com

SCALE:  
1" = 20'

DESIGNED BY: CJM  
REVIEWED BY: GJV  
DRAWN BY: CJM  
DATE: DEC 2025  
PROJ. NO.: 2011.02

REVISION BY:	DATE:	DESCRIPTION:

SHEET NO.  
C400

DWG: PA1H: P. Glavin/2011.02 - AHOLD DELHAIZE/CAO/2011.02 - AHOLD DELHAIZE - LD.dwg  
LAST SAVE: Dec 16, 2025 - 10:37am









SCALE:  
N/A



**GENERAL DETAILS**  
**AHOLD DELHAIZE SOLAR DEVELOPMENT**  
*prepared for*  
SR PA AH1, LLC  
*situated in*  
MIDDLESEX TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

SHEET NO.  
C600

DWG. PATH: P:\Clients\2011 Scale Microgrids\2011.02 - Ahold Delhoize\CAO\2011.02 - Ahold Delhoize - LD.dwg  
LAST SAVE: Dec 16, 2025 - 10:37am debartram



# AHOLD DELHAIZE SOLAR DEVELOPMENT

EROSION AND SEDIMENTATION CONTROL PLAN  
SHADY LANE, MIDDLESEX TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA  
DECEMBER, 2025

## CONSTRUCTION SEQUENCE:

THE ENTIRE SITE CANNOT BE CLEARED AND GRUBBED AT ONE TIME. ONLY AREAS FOR WHICH THE SPECIFIED EROSION AND SEDIMENTATION CONTROL HAS BEEN INSTALLED CAN BE CLEARED AND GRUBBED OR DISTURBED.

STAGE 1: INSTALL ROCK CONSTRUCTION ENTRANCE AT SHADY LANE  
A. CLEAR MINIMUM AREA NECESSARY FOR ENTRANCE INSTALLATION.  
B. EXCAVATE FOR, AND FORM ENTRANCE.  
C. IMMEDIATELY STABILIZE ENTRANCE WITH ROCK.

STAGE 2: INSTALL COMPOST FILTER SOCK  
A. INSTALL COMPOST FILTER SOCK PER PLAN ON C701.

STAGE 3: CLEAR SITE  
A. CLEAR SITE, CUT TRUNKS INTO TIMBER OR FIREWOOD AND CHIP BRANCHES ETC. LIMIT ADVANCED CLEARING AND GRUBBING AS MUCH AS POSSIBLE TO REDUCE THE AMOUNT OF AREA DISTURBED AT ANY ONE TIME. RECYCLING OF MATERIALS SHALL BE DONE WHERE POSSIBLE.  
B. THE ENTIRE SITE CANNOT BE CLEARED AND GRUBBED AT ONE TIME. ONLY AREAS FOR WHICH THE SPECIFIED EROSION AND SEDIMENTATION CONTROL HAS BEEN INSTALLED CAN BE CLEARED AND GRUBBED OR DISTURBED.

STAGE 4: INSTALL SOIL STOCKPILES #1  
A. INSTALL 18" COMPOST FILTER SOCK #1 DOWNSLOPE OF SOIL STOCKPILES.

STAGE 5: EXCAVATION  
A. UPON COMPLETION OF THE SEDIMENT TRAP, TEMPORARY DIVERSION BERMS, ROCK CONSTRUCTION ENTRANCE AND INSTALLATION OF ALL PERIMETER CONTROLS, THE CONTRACTOR SHALL BEGIN EARTHMOVING ACTIVITIES STARTING AT THE WESTERN SIDE OF THE SITE AND MOVE EAST TOWARD THE SEDIMENT TRAP.  
B. EXCAVATE SITE TO DESIGN GRADE. APPLY TEMPORARY STABILIZATION TO EMBANKMENTS AND FINISH GRADE AREAS IN CUT OR FILL.  
C. PLACE EROSION CONTROL BLANKET AS NOTED ON PLANS AFTER MATERIAL IS PLACED AND PROPERLY COMPACTED.  
D. ALL WATER PUMPED FROM WORK AREAS SHALL BE TREATED FOR SEDIMENT REMOVAL PRIOR TO DISCHARGING TO A SURFACE WATER. CONTRACTOR SHALL UTILIZE PUMPED WATER FILTER BAGS PER THE DETAIL ON PLAN SHEET C703.  
E. AS SOON AS DISTURBED AREA REACHES FINAL GRADE, AREAS MUST BE STABILIZED.  
F. NO MORE THAN 15,000 SQUARE FEET OF DISTURBED AREA SHALL REACH FINAL GRADE BEFORE INITIATING SEED AND MULCHING OPERATIONS.  
G. FILL SLOPES SHALL BE STABILIZED IN 15 FOOT VERTICAL INCREMENTS.

STAGE 6: INSTALL PROPOSED UTILITIES/SOLAR PANELS  
A. INSTALL UTILITIES FROM LOWEST TO HIGHEST ELEVATION AND ADHERE TO UTILITY TRENCH GUIDELINES.  
B. INSTALL PROPOSED SOLAR PANELS FROM LOWEST TO HIGHEST ELEVATION.

STAGE 7: INSTALL LANDSCAPING  
A. INSTALL LANDSCAPING PLANTS AND PROVISIONS.

STAGE 8: SEED AND MULCH  
A. SEED/MULCH ALL DISTURBED AREAS WITH SPECIFIED SEEDING MIXTURE. ALL E & S CONTROL FACILITIES SHALL BE MAINTAINED AND KEPT FUNCTIONAL UNTIL SITE STABILIZATION IS COMPLETE.

STAGE 9: SITE STABILIZATION  
A. WHEN SITE IS STABILIZED WITH UNIFORM 90% PERENNIAL VEGETATIVE COVER OVER PROJECT AREA, REMOVE EROSION AND SEDIMENTATION CONTROLS.  
B. DEWATER SEDIMENT TRAP #1 USING THE PUMP WATERING FILTERING DEVICE.  
C. REMOVE ACCUMULATED SEDIMENT FROM THE SEDIMENT STORAGE ZONE AND SPREAD IN THE AREA PROTECTED BY SILT FENCE, SEED DISTURBED AREA PER PERMANENT SEEDING SPECIFICATIONS.  
D. INSTALL 12" COMPOST FILTER SOCK DOWNSLOPE OF THE SEDIMENT TRAPS, RE-GRADE AREA TO ORIGINAL CONTOURS, SEED AND MULCH DISTURBED AREAS USING THE PERMANENT SEEDING MIXTURE.  
E. WHEN SEDIMENT TRAP AREA IS STABILIZED WITH UNIFORM 90% PERENNIAL VEGETATIVE COVER OVER PROJECT AREA, REMOVE EROSION AND SEDIMENTATION CONTROLS.

## UTILITY TRENCH EXCAVATING GUIDELINES

- 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.
- 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.
- LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY.
- TRENCH PLUGS WILL BE SPACED IN ACCORDANCE WITH STANDARD CONSTRUCTION DETAIL #13-4.
- WATER WHICH ACCUMULATES IN AN OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING ACCORDING TO LOCAL CONSERVATION DISTRICT REGULATIONS PRIOR TO PIPE PLACEMENT OR BACKFILLING.
- 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 IMMEDIATELY.

UTILITY TRENCH EXCAVATING GUIDELINES WILL REMAIN IN EFFECT WITH THE FOLLOWING EXCEPTIONS:  
1. DAILY BACKFILLING OF THE TRENCH MAY BE DELAYED FOR SIX DAYS.  
2. IF DAILY BACKFILLING IS DELAYED, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS.

FOR UTILITIES THAT REQUIRE TESTING BEFORE THE TRENCH IS BACKFILLED, ALL OF THE ABOVE ITEMS REQUIRE APPROPRIATE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES OR FACILITIES TO BE INSTALLED AND THE AREAS SEEDED AND MULCHED IMMEDIATELY.

## EROSION AND SEDIMENTATION CONTROL PLAN NOTES:

- 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.
- 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 LICENSED 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 PRECONSTRUCTION MEETING.
- 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.
- ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION.
- AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.
- 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 BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.
- 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.
- TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAP(S) IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER.
- IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL 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.
- ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF 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 UNUSUED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE GUIDELINES.
- 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 BEING ACTIVATED.
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL, FORM FILL, OR MATERIAL 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.
- PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS.
- VEHICLES AND EQUIPMENT MAY ENTER DIRECTLY ONTO SHADY LANE.
- 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, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RETENING MUST BE PERFORMED IMMEDIATELY IF THE E&S BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPs, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
- 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 INSPECTION. INSPECTIONS SHALL BE LOGGED ON THE MOST CURRENT DEP FORM 3800-FM-BCW0271D AND KEPT ON SITE AT ALL TIMES.
- SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED OF IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEEP TO INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
- ALL SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.
- 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 2 INCHES OF TOPSOIL.
- ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLUFFAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
- ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
- FILL MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
- FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
- SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATIONS FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
- ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDING 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.
- IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF A 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.
- 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.
- 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.
- 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 OR CONVERSION OF THE BMPs SHALL BE STABILIZED IMMEDIATELY, IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.
- 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.
- 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 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.
- 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.
- ALL CHANNELS SHALL BE KEPT FREE OF OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO FILL, ROCKS, LEAVES, WOODS, DEBRIS, ACCUMULATED SEDIMENT, EXCESS VEGETATION, AND CONSTRUCTION MATERIAL/WASTES.
- UNDERGROUND UTILITIES CUTTING THROUGH ANY ACTIVE CHANNEL SHALL BE IMMEDIATELY BACKFILLED AND THE CHANNEL RESTORED TO ITS ORIGINAL CROSS-SECTION AND PROTECTIVE LININGS. ANY BASE FLOW WITHIN THE CHANNEL SHALL BE CONVEYED PAST THE WORK AREA IN THE MANNER DESCRIBED IN THIS PLAN UNTIL SUCH RESTORATION IS COMPLETE.
- CHANNELS HAVING RIPRAP, RENO MATRESS, OR GABION LININGS MUST BE SUFFICIENTLY REINFORCED WITH RIPRAP TO THE DESIGN DIMENSIONS WILL BE PROVIDED AFTER PLACEMENT OF THE PROTECTIVE LINING.
- 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.
- SEDIMENT BASINS SHALL BE PROTECTED FROM UNAUTHORIZED ACTS BY THIRD PARTIES.
- ANY DAMAGE THAT OCCURS IN WHOLE OR IN PART 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.
- 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.
- 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.
- FILL MATERIAL FOR EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS.
- NO WETLANDS EXIST WITHIN THE PROJECT BOUNDARY.
- MINE OPENINGS ARE NOT ANTICIPATED. IF MINE SPOILS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL EITHER REWORK THE MATERIAL PER GEOTECHNICAL ENGINEERS RECOMMENDATIONS OR REMOVE THE MATERIAL TO A PERMITTED AREA.
- NO SIGNIFICANT CULTURAL OR SENSITIVE ENVIRONMENTAL FEATURES EXIST WITHIN THE PROJECT BOUNDARY. NO FURTHER ENVIRONMENTAL STUDIES WILL BE NECESSARY.
- NO WATER RESOURCES EXIST WITHIN THE PROJECT BOUNDARY.

## SITE STABILIZATION INSTALLATION AND MAINTENANCE (TEMPORARY AND PERMANENT)

- TILL SOIL TO DEPTH OF 2". REMOVE ALL OBJECTS 2" OR LARGER.
- BLEND COMMERCIAL FERTILIZER INTO THE SOIL TO A DEPTH OF 2". FERTILIZER MAY BE BLENDED DURING TILLING.
- SOIL REQUIRED SEED MIXTURE UNIFORMLY ON THE PREPARED AREA BY HYDRAULIC SEEDING EQUIPMENT, HAND SEEDING, OR ANY OTHER APPROPRIATE METHOD.
- AFTER SEEDING ROLL TOPSOILED AREAS THAT ARE TO BE MOWED. USE A ROLLER WEIGHING NOT MORE THAN 65 LBS./FT. WIDTH.
- FOR PERMANENT SITE STABILIZATION APPLY SLOW RELEASE NITROGEN FERTILIZER TO THE SURFACE OF SEEDED AREAS.
- PLACE MULCH IMMEDIATELY AFTER SEEDING OR WITHIN 48 HOURS AFTER SEEDING IS COMPLETED. PLACE HAY & STRAW UNIFORMLY, IN A CONTINUOUS BLANKET AT THE MINIMUM RATE SPECIFIED ABOVE. AN ACCEPTABLE MECHANICAL BLOWER MAY BE USED TO APPLY MULCH. MACHINES WHICH CUT MULCH INTO SHORT PIECES WILL NOT BE PERMITTED.
- MAINTENANCE - SATISFACTORILY MAINTAIN GRASS AREAS WITHIN GRADING LIMITS, UNTIL THE ENTIRE PROJECT HAS BEEN COMPLETED. MOW, AS INDICATED AND WHEN DIRECTED. CONTROL PROHIBITED AND NOXIOUS WEED GROWTH BY HERBICIDE SPRAYING OR CUTTING. AFTER THE SEEDING AND SOIL SUPPLEMENT WORK ON A SLOPE HAS BEEN SATISFACTORILY COMPLETED, IF A SLOPE FAILURE OCCURS, ONE WHICH REQUIRES REDRESSING, EXCAVATION, OR ESTABLISHMENT OF A NEW SLOPE, REAPPLY SOIL SUPPLEMENTS, THEN RESEED, AS SPECIFIED FOR THE ORIGINAL TREATMENT.
- A SITE WILL BE CONSIDERED TO BE PERMANENTLY STABILIZED WHEN ALL PERMANENT CONTROL MEASURES AND FACILITIES HAVE BEEN COMPLETED AND ARE OPERATIONAL, TEMPORARY CONTROL MEASURES AND FACILITIES REMOVED, AND UNIFORM 70% PERENNIAL VEGETATION COVER IS ESTABLISHED TO THE POINT WHERE THE SURFACE SOIL IS CAPABLE OF RESISTING EROSION DURING RUNOFF EVENTS. THE STANDARD FOR THIS VEGETATIVE COVER WILL BE A UNIFORM COVERAGE OR DENSITY OF 70% ACROSS THE DISTURBED AREA.
- THE CONTRACTOR SHALL MAINTAIN THE SITE PER THE PROVISIONS OF THIS PLAN UNTIL PERMANENT STABILIZATION IS ESTABLISHED.

## MEADOW STABILIZATION (LANDSCAPE RESTORATION)

SPECIES : ERNMX-181 SEED MIXTURE  
% PURE LIVE SEED: 91%  
FERTILIZER: NOT RECOMMENDED FOR THIS MIXTURE  
LIMING: NOT RECOMMENDED FOR THIS MIXTURE  
APPLICATION RATE: 60 LBS PER ACRE  
MULCH TYPE: HAY & STRAW  
ANCHORING METHOD: SPRAY  
SEEDING DATES: SPRING - MARCH TO MAY 30,  
FALL - SEPTEMBER 1 TO OCTOBER 15

## EROSION AND SEDIMENT CONTROL FACILITIES MAINTENANCE SCHEDULE

- ALL EROSION AND SEDIMENT CONTROLS SHALL BE MAINTAINED UNTIL A UNIFORM 90% PERENNIAL VEGETATIVE COVER IS ESTABLISHED.

### ROCK CONSTRUCTION ENTRANCE

- THE ROCK CONSTRUCTION ENTRANCES ARE TO BE INSPECTED AT THE END OF EACH WORKING DAY AND REPAIRED IMMEDIATELY.
- THE THICKNESS OF THE ROCK CONSTRUCTION ENTRANCE SHALL BE CONSTANTLY MAINTAINED AT 8"
- A ROCK STOCKPILE IS TO BE READILY AVAILABLE ON THE SITE AT ALL TIMES FOR IMMEDIATE REPAIR.

### COMPOST FILTER SOCK

- THE COMPOST FILTER SOCK CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EACH STORM (RUNOFF) EVENT AND REPAIRED IMMEDIATELY.
- ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN DEPOSITS REACH 1/2 THE ABOVE GROUND HEIGHT OF THE SOCK.
- SILT DEPOSITS SHALL BE TAKEN TO THE TOPSOIL STOCKPILE AREA. THE SILT SHALL THEN BE SPREAD OVER STOCKPILE, SEEDED AND MULCHED.
- ALL UNDERCUTTING OR EROSION OF THE COMPOST FILTER SOCK TOE ANCHOR SHALL BE REPAIRED IMMEDIATELY.
- ALL SEDIMENT REMOVED FROM THE FILTER BAGS SHALL BE TAKEN TO THE TOPSOIL STOCKPILE, SPREAD, SEEDED AND MULCHED.

### VEGETATION

- THE CONTRACTOR SHALL INSPECT VEGETATED AREAS WEEKLY AND AFTER EACH STORM (RUNOFF) EVENT.
- THE CONTRACTOR SHALL INSPECT THE SITE FOR RILLS OR GULLIES ON CUT OR FILL SLOPES. THE CONTRACTOR SHALL FILL RILLS AND GULLIES, REGRADE DISTURBED AREAS TO PROVIDE A UNIFORM SLOPE, THEN RESEED/MULCH AND REPAIR/REPLACE ALL ORIGINAL EROSION CONTROL FACILITIES.
- THE REPAIRS SHALL BE MADE WITHIN 2 DAYS OF DISCOVERING PROBLEM. PUMPED WATER FILTERING DEVICE

### PUMPED WATER FILTERING DEVICE

- THE CONTRACTOR SHALL INSPECT FILTER BAGS DAILY AND AFTER EACH STORM (RUNOFF) EVENT TO ENSURE THEY ARE WORKING PROPERLY.
- IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.
- ALL SEDIMENT REMOVED FROM THE FILTER BAGS SHALL BE TAKEN TO THE TOPSOIL STOCKPILE, SPREAD, SEEDED AND MULCHED.

### CONCRETE WASHOUT

- ALL CONCRETE WASHOUT FACILITIES SHOULD BE INSPECTED DAILY. DAMAGED OR LEAKING WASHOUTS SHOULD BE DEACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY.
- ACCUMULATED MATERIALS SHOULD BE REMOVED WHEN THEY REACH 75% CAPACITY.
- PLASTIC LINERS SHOULD BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY.
- BEFORE HEAVY RAINS, THE LIQUID LEVEL SHOULD BE LOWERED OR THE WASHOUT COVERED TO AVOID AN OVERFLOW DURING THE RAIN STORM.

## TEMPORARY STABILIZATION

SPECIES: ANNUAL RYEGRASS  
% PURE LIVE SEED: 98%  
APPLICATION RATE: 50 LBS/ACRE  
FERTILIZER TYPE: COMMERCIAL FERTILIZER 10-20-20  
FERTILIZER APPL. RATE: 678 LBS/ACRE  
LIMING RATE: 2 TONS/ACRE  
MULCH TYPE: HAY & STRAW  
MULCHING RATE: 3 TONS/ACRE

## PERMANENT-STEEP SLOPE

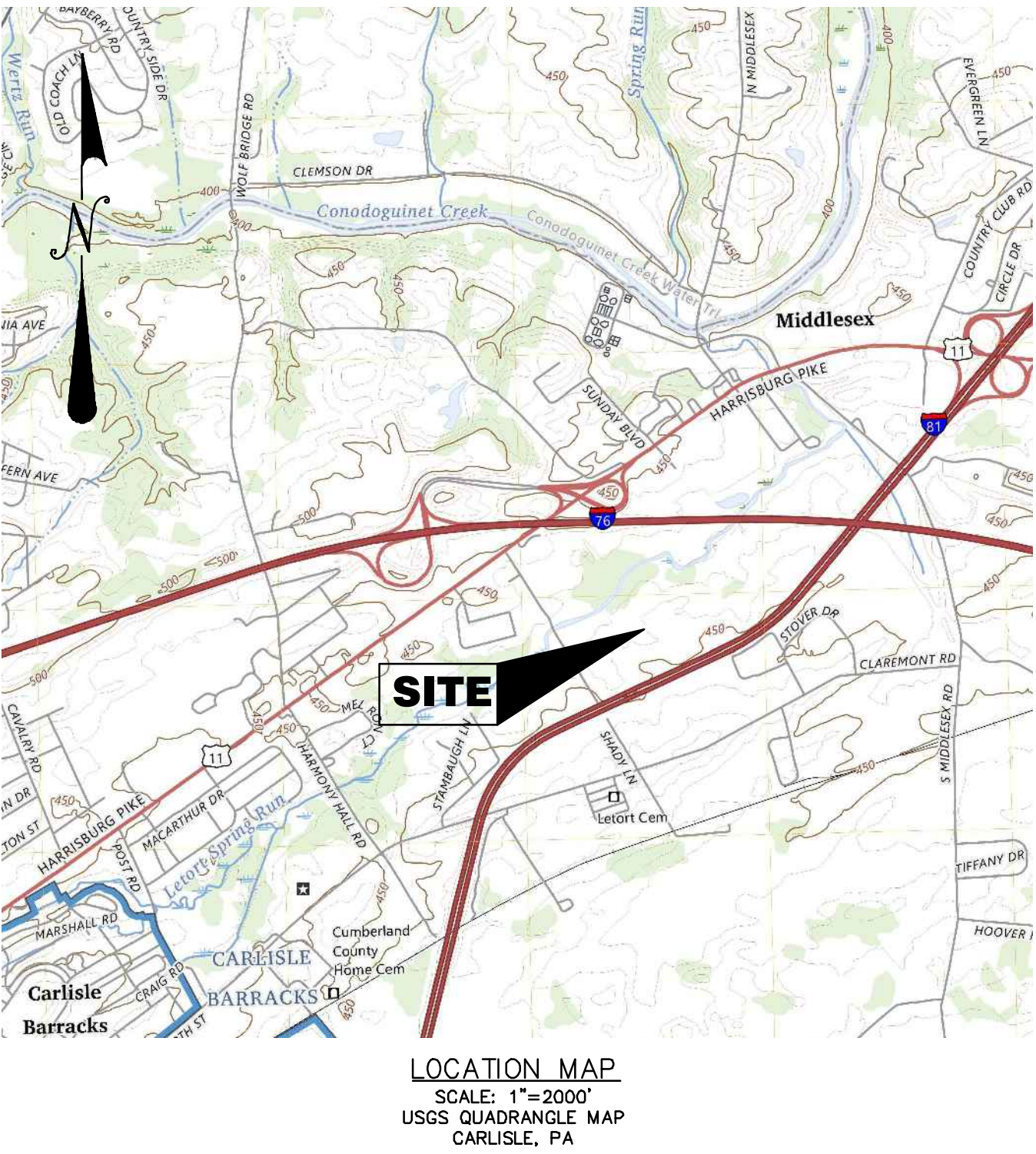
SPECIES: NATIVE STEEP SLOPE MIX WITH GRAIN OATS OR RYE DEPENDING ON TIME OF YEAR (ERNMX-181-1/ERNMX-181-2)  
% PURE LIVE SEED: 99%  
APPLICATION RATE: 75 LBS/ACRES  
FERTILIZER TYPE: COMMERCIAL FERTILIZER 5-10-10  
FERTILIZER APPL. RATE: (PER TESTING) 30 LBS/ACRE  
LIMING RATE: 1 TONS/ACRE MULCH TYPE: HAY & STRAW  
MULCHING RATE: 3 TONS/ACRE  
ANCHORING MATERIAL: NONASPHALTIC MATERIAL  
ANCHORING METHOD: SPRAY  
RATE OF ANCHORING MATERIAL APPL.: 1000 GAL/SQ.YD.  
SEEDING DATES: ERNMX-181-1 SPRING - SEPTEMBER 1ST  
ERNMX-181-2 AUGUST 1ST - FEBRUARY 15TH

## PERMANENT STABILIZATION

SPECIES :

- POA PRATENSIS (KENTUCKY BLUEGRASS) 90% PURE LIVE SEED, APPLICATION RATE 50LBS/AC
- FESTUCA RUBRA VAR. "PENNAWNN" (PENNAWNN RED FESCUE) 98% PURE LIVE SEED, APPLICATION RATE 30LBS/AC
- LOLIUM PERENNE (PERENNIAL RYEGRASS) 98% PURE LIVE SEED, APPLICATION RATE 20LBS/AC

FERTILIZER: COMMERCIAL FERTILIZER, 10-20-20, 1,000 LBS./ACRE  
LIMING: 4,000 LBS./ACRE  
MULCH: WHEAT OR OAT STRAW WELL CURED TO LESS THAN 20% MOISTURE BY WEIGHT, 5,800 POUNDS PER ACRE  
SEEDING DATES: SPRING - MARCH TO MAY 30,  
FALL - SEPTEMBER 1 TO OCTOBER 15



### LOCATION MAP

SCALE: 1"=2000'  
USGS QUADRANGLE MAP  
CARLISLE, PA

## SHEET NO. TITLE

C700	EROSION AND SEDIMENTATION CONTROL TITLE
C701	EROSION & SEDIMENTATION CONTROL PLAN
C702	CUT/FILL SHEET
C703	EROSION & SEDIMENTATION CONTROL DETAILS

## DEVELOPER:

AHOLD DELHAIZE SR PA AH1, LLC  
SHADY LANE  
CARLISLE, PA 17013  
PHONE NO.: 908-219-1185  
REP.: KAREN JENKINS

## CHAPTER 93 RECEIVING WATER COURSE:

- THE RECEIVING WATER COURSE IS LETORT SPRING RUN WHICH IS DESIGNATED AS A FISHING AND HIGH QUALITY COLD WATER FISHERY, BY THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, CHAPTER 93 .

## ENGINEER'S ROLE NOTES:

- THE ENGINEER ASSUMES NO RESPONSIBILITY FOR ANY CHANGES IN DESIGN PLANS UNLESS WRITTEN CONSENT IS GIVEN BY THE OWNER. CONTRACTOR AND/OR OWNER WILL BE HELD RESPONSIBLE FOR ANY FIELD MODIFICATIONS MADE WITHOUT WRITTEN CONSENT OF THE ENGINEER. ALL UTILITIES SHOWN ON PLANS ARE IN APPROXIMATE LOCATIONS BASED ON PA ONE-CALL FLAGGING, OR AVAILABLE UTILITY MAPS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE EXACT LOCATIONS AND DEPTH OF ALL UTILITIES PRIOR TO ANY CONSTRUCTION.
- ENGINEER WILL NOT SUPERVISE, DIRECT, CONTROL, OR HAVE AUTHORITY OVER OR BE RESPONSIBLE FOR CONTRACTOR'S MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES OF CONSTRUCTION, OR THE SAFETY PRECAUTIONS AND PROGRAMS INCIDENT THERETO, OR FOR ANY FAILURE OF CONTRACTOR TO COMPLY WITH LAWS AND REGULATIONS APPLICABLE TO THE PERFORMANCE OF THE WORK. ENGINEER WILL NOT BE RESPONSIBLE FOR CONTRACTOR'S FAILURE TO PERFORM THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- ENGINEER WILL NOT BE RESPONSIBLE FOR THE ACTS OR OMISSIONS OF CONTRACTOR OR OF ANY SUBCONTRACTOR, ANY SUPPLIER, OR OF ANY OTHER INDIVIDUAL OR ENTITY PERFORMING ANY OF THE WORK.



EROSION AND SEDIMENTATION CONTROL TITLE SHEET  
AHOLD DELHAIZE SOLAR DEVELOPMENT  
prepared for  
SR PA AH1, LLC  
situated in  
MIDDLESEX TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

SHEET NO.  
C700

Morris Knowles & Associates, Inc.  
(a subsidiary of Morris Knowles & Associates, Inc.)  
1740 Monroeville, PA 15146  
Telephone: (724) 463-8942  
www.morrisknowles.com



Barrier Number	Diameter (in)	Location	Slope Percent	Slope Length Above Barrier (ft)
CFS 1	12	See Sheet C701	2.9	342
CFS 2	12	See Sheet C701	3.3	302
CFS 3	12	See Sheet C701	5.0	60
CFS 4	18	See Sheet C701	3.8	344
CFS 5	24	See Sheet C701	2.3	732
CFS 6	24	See Sheet C701	2.6	568
CFS 7	18	See Sheet C701	2.9	516
CFS 8	32	See Sheet C701	1.5	1109
CFS 9	18	See Sheet C701	2.1	577
CFS 10	18	See Sheet C701	2.2	500
CFS 11	18	See Sheet C701	2.9	483
CFS 12	24	See Sheet C701	3.7	403
CFS 13	12	See Sheet C701	1.4	291
CFS 14	24	See Sheet C701	3.9	355

LEGEND:

- MM MEADOW SEEDING & MULCHING  
CFS COMPOST FILTER SOCK  
RCE ROCK CONSTRUCTION ENTRANCE  
ED ENERGY DISSIPATER  
CO CONCRETE WASHOUT  
FEMA FLOODPLAIN ZONE A

CALL BEFORE YOU DIG  
IN PENNSYLVANIA  
1-800-242-1776  
DESIGN SN: 20253422860



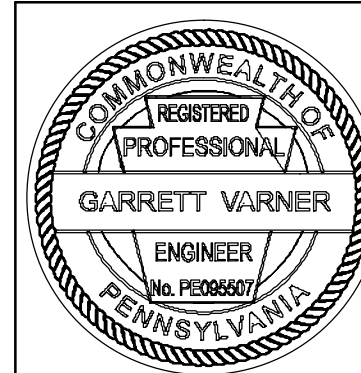
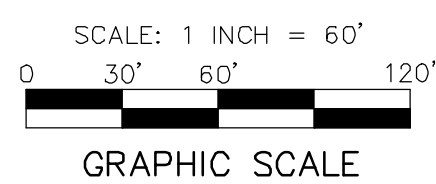
Know what's below  
Call before you dig

THE GENERAL CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES INVOLVED IN THE SITE NO MORE TEN DAYS AND NO LESS THAN THREE DAYS IN ADVANCE OF EXCAVATION (PA ACT 287 OF 1974 AMENDED BY ACT 50 OF 2017). PA STATE LAW REQUIRES 3 WORKING DAYS NOTICE

SOIL MAP UNIT LEGEND	
MAP UNIT SYMBOL	MAP UNIT NAME
HAB	HAGERSTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES
WA	WARNERS SILT LOAM

- SAN - SANITARY  
ST - STORM  
MH - MANHOLE  
TOP - TOP OF CASTING  
INV - INVERT / FLOW LINE  
WV - WATER VALVE  
GV - GAS VALVE  
GM - GAS METER  
EM - ELECTRIC METER  
S.R. - STATE ROUTE  
TLE - TELEPHONE  
RCP - REINFORCED CONCRETE PIPE  
CPP - CORRUGATED PLASTIC PIPE

- G - GAS LINE  
W - WATER LINE  
T - SUBSURFACE TELEPHONE LINE  
E - SUBSURFACE ELECTRIC LINE  
OH - OVERHEAD WIRES  
--- 908 --- EXISTING CONTOURS  
O EXISTING INLET  
O EXISTING MANHOLE  
-X-X- EXISTING SEWER  
-X-X- FENCE  
-X-X- 150' BUFFER FROM TOP OF BANK  
CFS COMPOST FILTER SOCK



EROSION AND SEDIMENTATION CONTROL PLAN  
AHOLD DELHAIZE SOLAR DEVELOPMENT

prepared for  
SR PA AH1, LLC  
situated in

MIDDLESEX TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

**MA** Morris Knowles  
& Associates, Inc.  
Environmental Engineering and Surveying  
1740 Morrisville, Pa 15116  
Telephone: (717) 448-8942  
info@morrisknowles.com www.morrisknowles.com

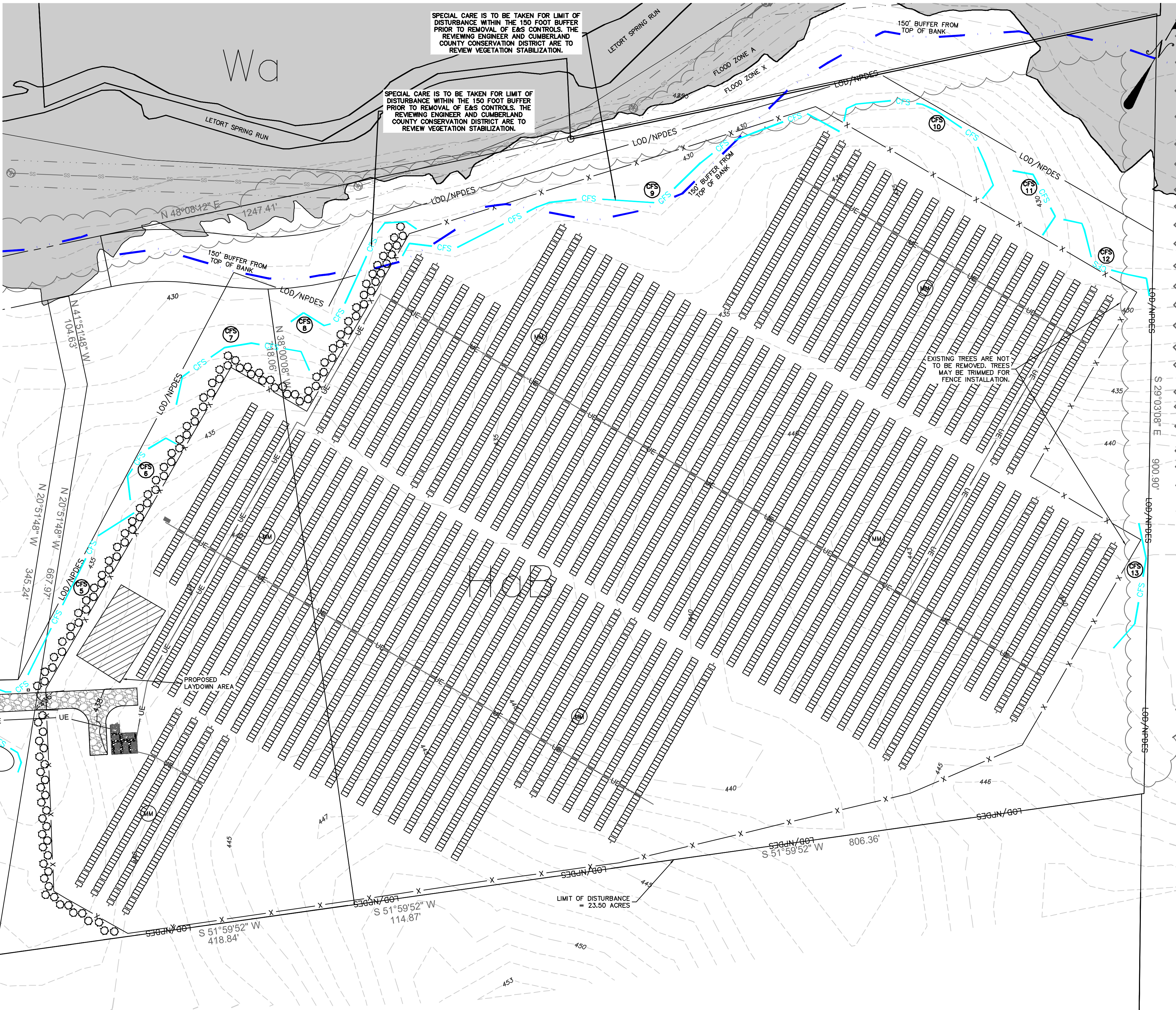
SCALE:  
1" = 60'

DESIGNED BY: CJM  
REVIEWED BY: GJV  
DRAWN BY: CJM  
DATE: DEC 2025  
PROJ. NO.: 2011.02

REVISION BY: \_\_\_\_\_  
REVISION BY: \_\_\_\_\_  
REVISION BY: \_\_\_\_\_  
REVISION BY: \_\_\_\_\_  
REVISION BY: \_\_\_\_\_  
REVISION BY: \_\_\_\_\_

DATE: \_\_\_\_\_  
DATE: \_\_\_\_\_  
DATE: \_\_\_\_\_  
DATE: \_\_\_\_\_  
DATE: \_\_\_\_\_  
DATE: \_\_\_\_\_

DESCRIPTION: \_\_\_\_\_  
DESCRIPTION: \_\_\_\_\_  
DESCRIPTION: \_\_\_\_\_  
DESCRIPTION: \_\_\_\_\_  
DESCRIPTION: \_\_\_\_\_  
DESCRIPTION: \_\_\_\_\_



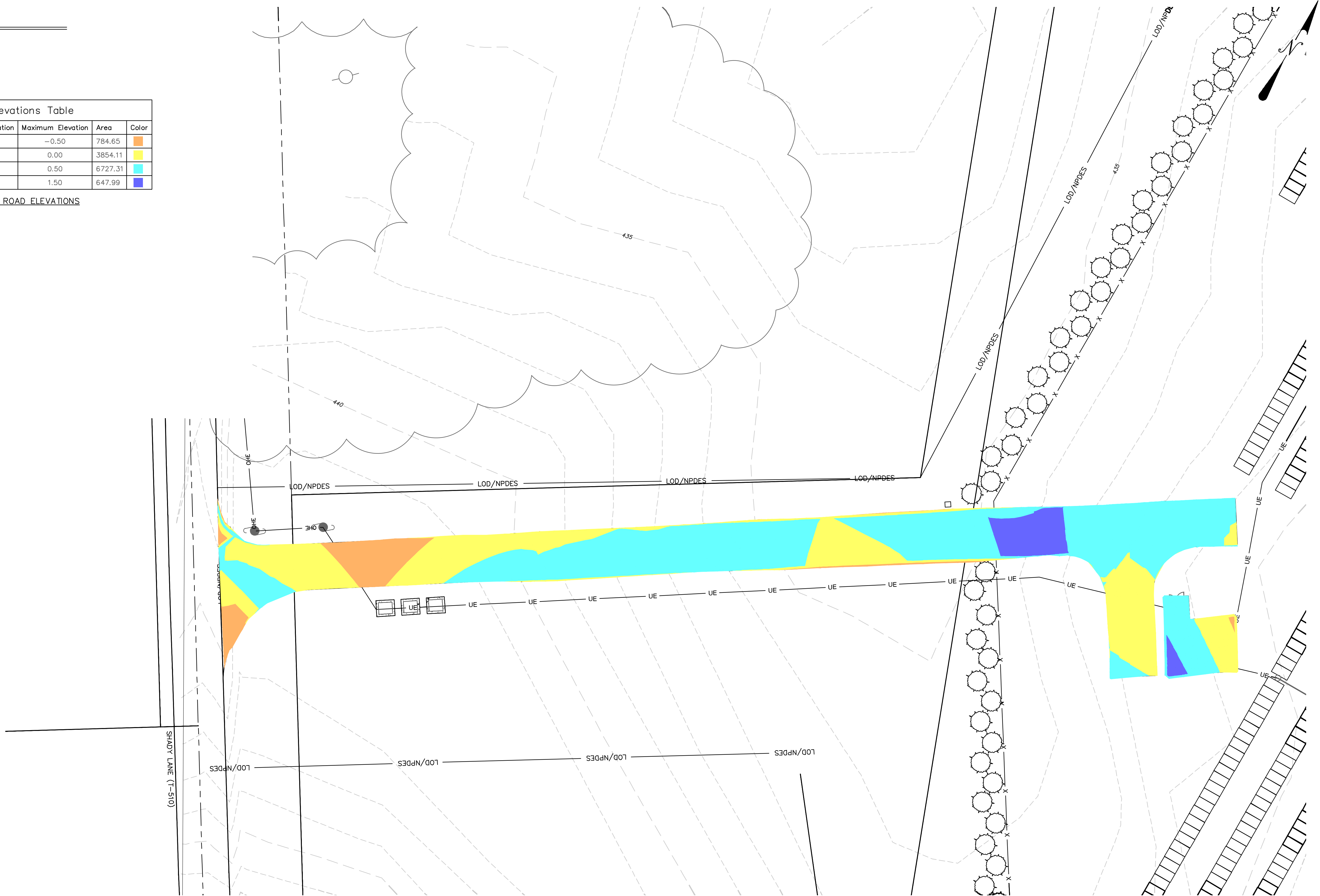


EARTHWORK

CUT = 42 CY  
FILL = 56 CY  
NET (FILL) = 14 CY

Elevations Table				
Number	Minimum Elevation	Maximum Elevation	Area	Color
1	-1.50	-0.50	784.65	Orange
2	-0.50	0.00	3854.11	Yellow
3	0.00	0.50	6727.31	Cyan
4	0.50	1.50	647.99	Blue

ACCESS ROAD ELEVATIONS



LEGEND

- SAN - SANITARY

ST - STORM

MH - MANHOLE

TOP - TOP OF CASTING

INV - INVERT / FLOW LINE

WV - WATER VALVE

GV - GAS VALVE

GM - GAS METER

EM - ELECTRIC METER

S.R. - STATE ROUTE

TELE - TELEPHONE

RCP - REINFORCED CONCRETE PIPE

CPP - CORRUGATED PLASTIC PIPE
- G-

-W-

-T-

-E-

-OH-

--908--

=====

-X-X-

-G-

-W-

-T-

-E-

-OH-

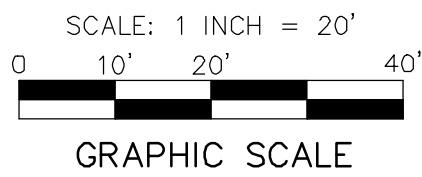
--908--

EXISTING INLET

EXISTING MANHOLE

EXISTING SEWER

FENCE



CALL BEFORE YOU DIG  
IN PENNSYLVANIA  
1-800-242-1776  
DESIGN SN: 20253422860

Know what's below  
Call before you dig

THE GENERAL CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES INVOLVED IN THE SITE NO MORE TEN DAYS AND NO LESS THAN THREE DAYS IN ADVANCE OF EXCAVATION (PA ACT 287 OF 1974, AMENDED BY ACT 50 OF 2017). PA STATE LAW REQUIRES 3 WORKING DAYS NOTICE



CUT/FILL SHEET

AHOLD DELHAIZE SOLAR DEVELOPMENT

prepared for  
SR PA AH1, LLC  
situated in,  
MIDDLESEX TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

**MKA** Morris Knowles & Associates, Inc.  
(a subsidiary of Morris Knowles & Associates, Inc.)  
1740 Morrisville, PA 15146  
Telephone: (717) 418-8942  
info@morrisknowles.com www.morrisknowles.com

SCALE:  
1" = 20'

DESIGNED BY: CJM  
REVIEWED BY: GJV  
DRAWN BY: CJM  
DATE: DEC 2025  
PROJ. NO.: 2011.02

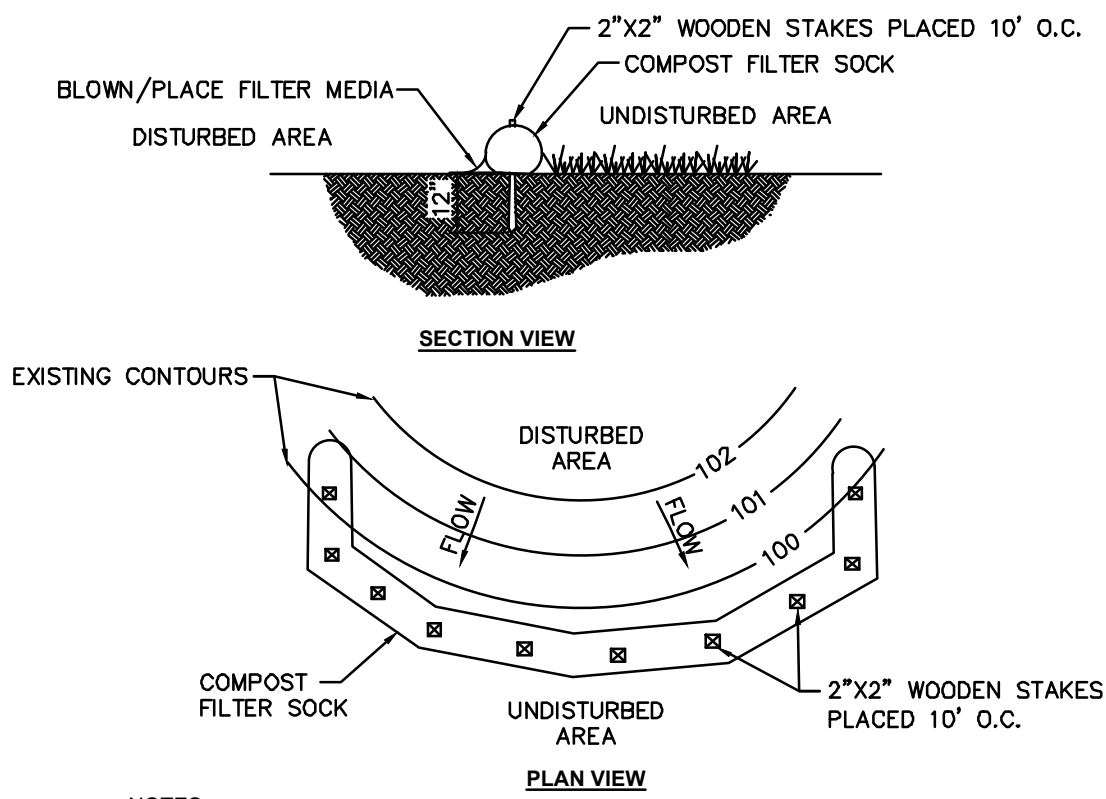
REVISION BY:	DATE:	DESCRIPTION:

REVISION BY:	DATE:	DESCRIPTION:

SHEET NO.  
C702

DWG: PA1H: P. Gilera/2011 Scale: Micro/10/2011.02 - AHold Delhaize/CAO/2011.02 - AHold Delhaize - LD.dwg  
LAST SAVE: Dec 16, 2025 - 10:37am





NOTES:

Sock fabric shall meet standards of Table 4.1. Compost shall meet the standards of Table 4.2.

Compost filter sock shall be placed at existing level grade. Both ends of the sock shall be extended at least 8 feet up slope at 45 degrees to the main sock alignment (Figure 4.1). Maximum slope length above any sock shall not exceed that shown on Figure 4.2. Stakes may be installed immediately downslope of the sock if so specified by the manufacturer.

Traffic shall not be permitted to cross filter socks.

Accumulated sediment shall be removed when it reaches half the aboveground height of the sock and disposed in the manner described elsewhere in the plan.

Socks shall be inspected weekly and after each runoff event. Damaged socks shall be repaired according to manufacturer's specifications or replaced within 24 hours of inspection.

Biodegradable filter socks shall be replaced after 6 months; photodegradable socks after 1 year. Polypropylene socks shall be replaced according to manufacturer's recommendations.

Upon stabilization of the area tributary to the sock, stakes shall be removed. The sock may be left in place and vegetated or removed. In the latter case, the mesh shall be cut open and the mulch spread as a soil supplement.

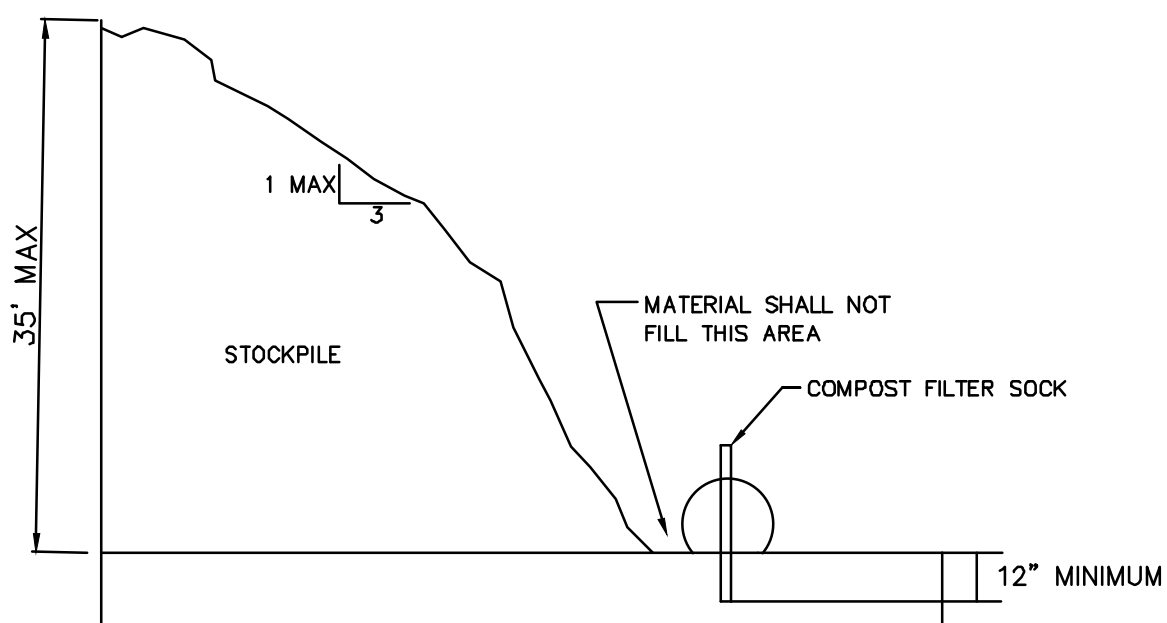
STANDARD CONSTRUCTION DETAIL #4-1  
COMPOST FILTER SOCK  
N.T.S.

TABLE 4.1  
COMPOST SOCK FABRIC MINIMUM SPECIFICATIONS

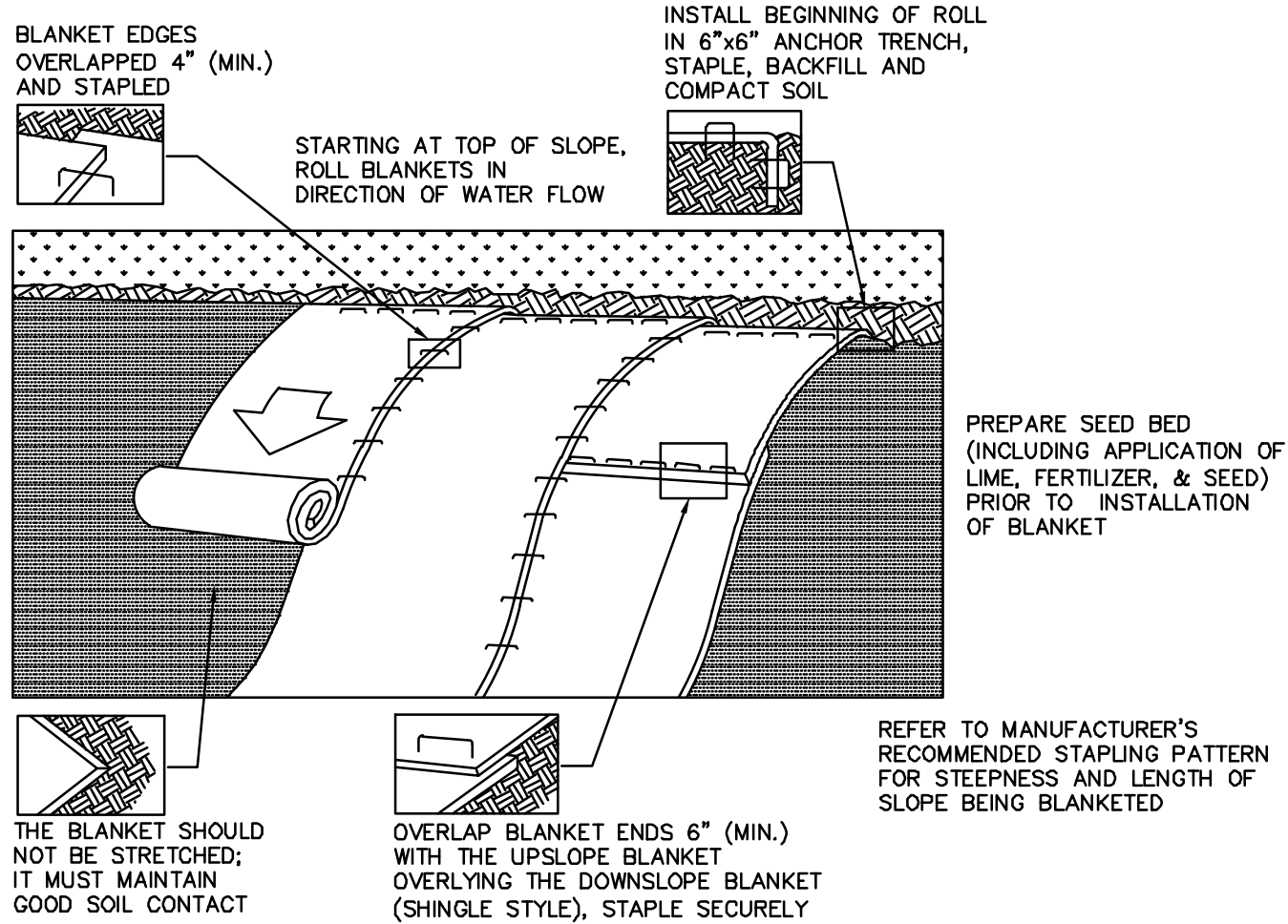
MATERIAL TYPE	3 MIL HDPE	5 MIL HDPE	5 MIL HDPE	MULTI-FILAMENT POLYPROPYLENE (MFPP)	HEAVY DUTY MULTI-FILAMENT POLYPROPYLENE (HDMFPP)
MATERIAL CHARACTERISTICS	PHOTO- DEGRADABLE	PHOTO- DEGRADABLE	BIO- DEGRADABLE	PHOTO- DEGRADABLE	PHOTO- DEGRADABLE
SOCK DIAMETERS	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
MESH OPENING	3"	3"	3"	3"	3"
TENSILE STRENGTH		26 PSI	26 PSI	44 PSI	202 PSI
ULTRAVIOLET STABILITY % ORIGINAL STRENGTH (ASTM G-155)	23% AT 1000 HR	23% AT 1000 HR		100% AT 1000 HR	100% AT 1000 HR
MINIMAL FUNCTIONAL LONGEVITY	6 MONTHS	9 MONTHS	6 MONTHS	1 YEAR	2 YEARS
TWO-PLY SYSTEMS					
INNER CONTAINMENT NETTING	HDPE BIAxIAL NET				
	CONTINUOUSLY WOUND				
	FUSION-WELDED JUNCTIONS				
	3" X 3" MAX. APERTURE SIZE				
OUTER FILTRATION MESH	COMPOSITE POLYPROPYLENE FABRIC (WOVEN LAYER AND NON-WOVEN FLEECE MECHANICALLY FUSED VIA NEEDLE PUNCH)				
	3" MAX. APERTURE SIZE				
SOCK FABRICS COMPOSED OF BURLAP MAY BE USED ON PROJECTS LASTING 6 MONTHS OR LESS.					
FILTREXX & JMD					

TABLE 4.2  
COMPOST STANDARDS

ORGANIC MATTER CONTENT	25% - 100% (DRY WEIGHT BASIS)
ORGANIC PORTION	FIBROUS AND ELONGATED
pH	5.5 - 8.5
MOISTURE CONTENT	30% - 60%
PARTICLE SIZE	30% - 50% PASS THROUGH 3/8" SIEVE
SOLUBLE SALT CONCENTRATION	5.0 dS/m (MMHOS/CM) MAXIMUM



SOIL STOCKPILE DETAIL  
N.T.S.



NOTES:

Seed and soil amendments shall be applied according to the rates in the plan drawings prior to installing the blanket.

Provide anchor trench at toe of slope in similar fashion as at top of slope.

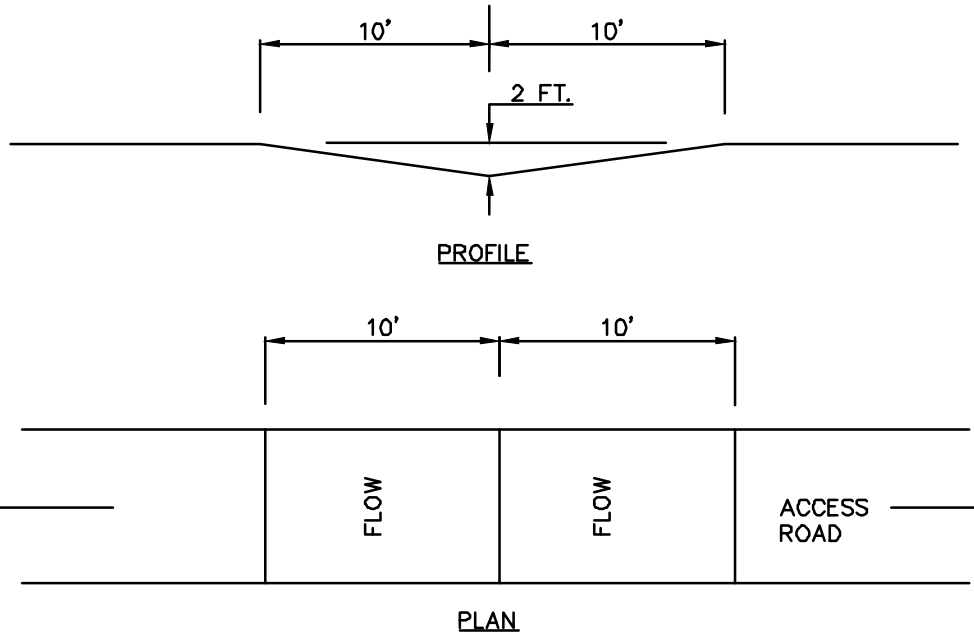
Slope surface shall be free of rocks, clods, sticks, and grass.

Blanket shall have good continuous contact with underlying soil throughout entire length. Lay blanket loosely and stake or staple to maintain direct contact with soil. Do not stretch blanket.

The blanket shall be stapled in accordance with the manufacturer's recommendations.

Blanketed areas shall be inspected weekly and after each runoff event until perennial vegetation is established to a minimum uniform 70% coverage throughout the blanketed area. Damaged or displaced blankets shall be restored or replaced within 4 calendar days.

STANDARD CONSTRUCTION DETAIL #11-1  
EROSION CONTROL BLANKET INSTALLATION  
N.T.S.



NOTES:

BROAD-BASED DIPS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN AND AT THE LOCATIONS SHOWN ON THE PLAN DRAWINGS.

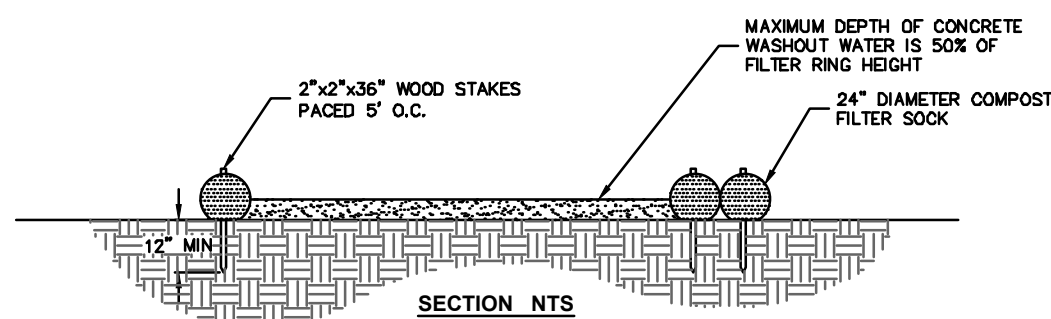
DIPS SHALL BE ORIENTED SO AS TO DISCHARGE TO THE LOW SIDE OF THE ROADWAY.

DIPS SHALL BE INSPECTED DAILY. DAMAGED OR NON-FUNCTIONING DIPS SHALL BE REPAIRED BY THE END OF THE WORKDAY.

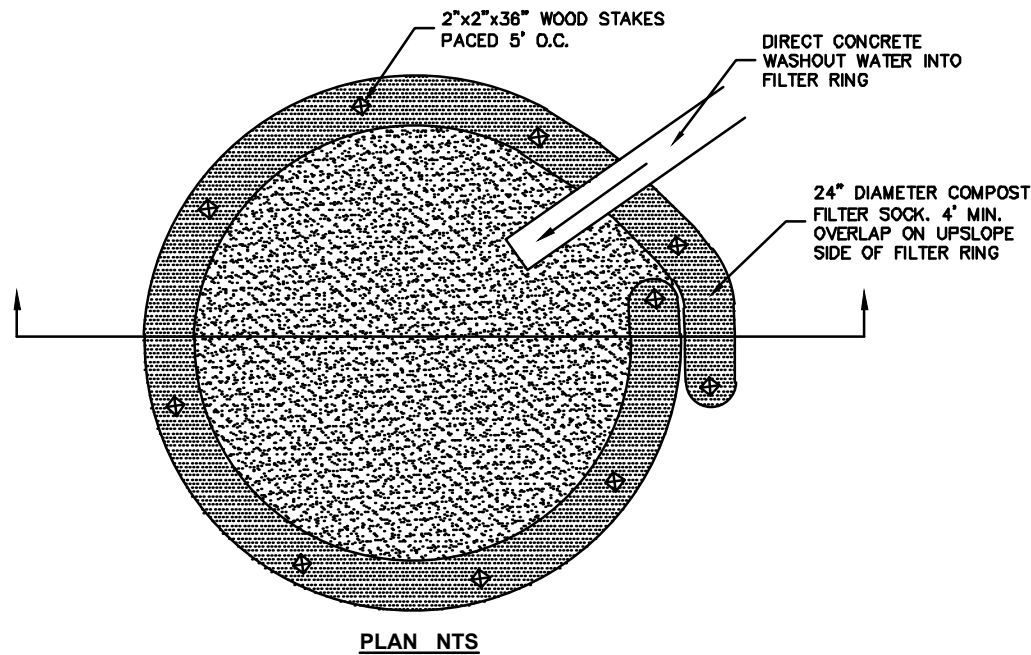
MAXIMUM SPACING OF BROAD-BASED DIPS SHALL BE AS SHOWN IN TABLE 3.2 OF THE PA DEP EROSION CONTROL MANUAL.

STANDARD CONSTRUCTION DETAIL #3-6  
BROAD BASED DIP - LOW GRADIENT (< 5 %) ROADWAYS  
NOT TO SCALE

FIGURE 3.18  
TYPICAL COMPOST SOCK WASHOUT INSTALLATION



NOTES:  
1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE  
2. 18\"/>



A SUITABLE IMPERIOUS GEOMEMBRANE SHALL BE PLACED AT THE LOCATION OF THE WASHOUT PRIOR TO INSTALLING THE SOCKS.  
ADAPTED FROM FILTREXX

COMPOST FILTER SOCK CONCRETE WASHOUT  
N.T.S.

- 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.  
B. 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.  
C. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY.  
D. TRENCH PLUGS WILL BE SPACED IN ACCORDANCE WITH THE TABLE BELOW:

TRENCH SLOPE %	LENGTH (FEET)	PLUG MATERIAL
0 - 5	----	NONE
5 - 15	500	EARTH FILLED SACKS
15 - 25	300	EARTH FILLED SACKS
25 - 35	200	EARTH FILLED SACKS
35 - 100	100	EARTH FILLED SACKS
OVER 100	50	CEMENT FILLED BAGS (WETTED)

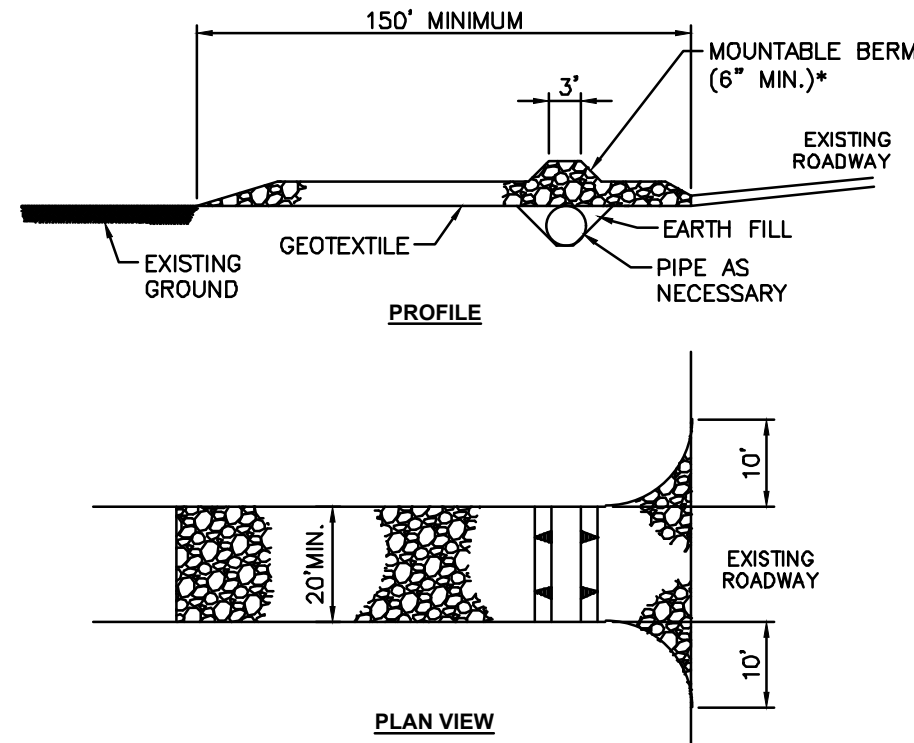
- E. WATER WHICH ACCUMULATES IN AN OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING ACCORDING TO LOCAL CONSERVATION DISTRICT REGULATIONS PRIOR TO PIPE PLACEMENT OR BACKFILLING.

- F. 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 AT THE END OF EACH WEEK.

- WILL REMAIN IN EFFECT WITH THE FOLLOWING EXCEPTIONS:  
1. DAILY BACKFILLING OF THE TRENCH MAY BE DELAYED FOR SIX DAYS.  
2. IF DAILY BACKFILLING IS DELAYED, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS

FOR UTILITIES THAT REQUIRE TESTING BEFORE THE TRENCH IS BACKFILLED, ALL OF THE ABOVE ITEMS APPROPRIATE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES/FACILITIES WILL BE INSTALLED AND THE AREAS SEEDED AND MULCHED WITHIN THE NEXT TWO DAYS.

UTILITY TRENCH EXCAVATING GUIDELINES



NOTES:

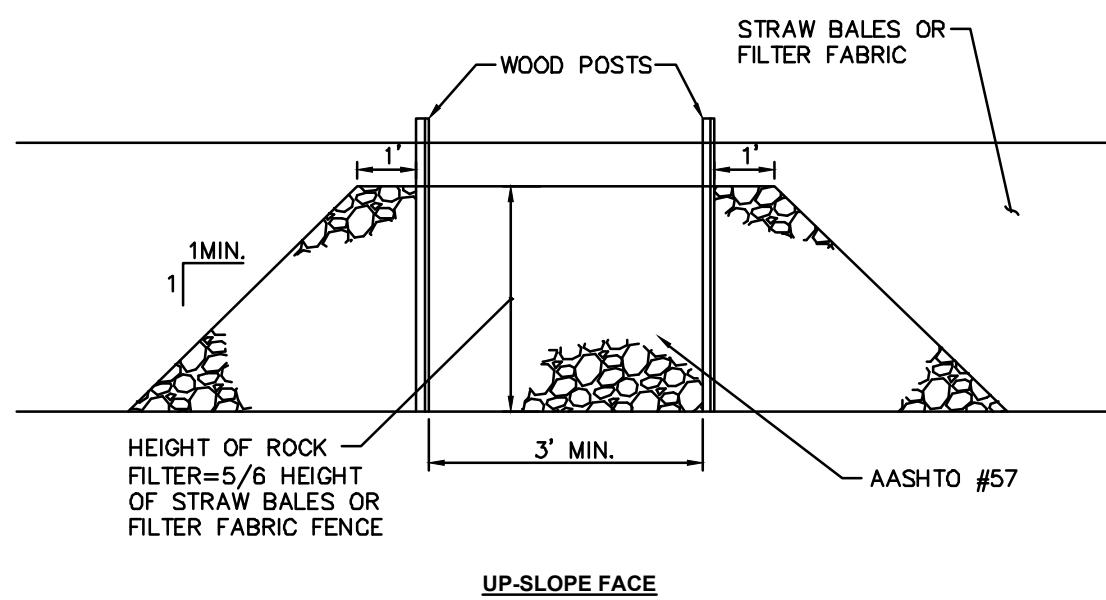
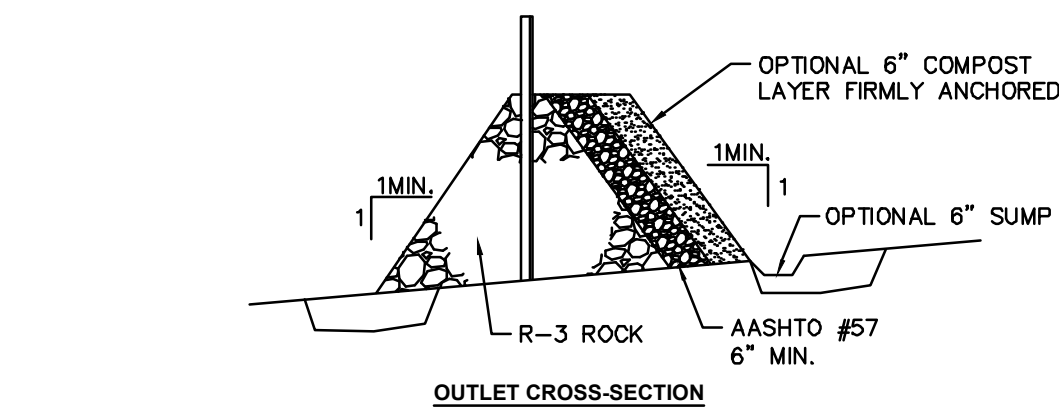
Remove topsoil prior to installation of rock construction entrance. Extend rock over full width of entrance.

Runoff shall be diverted from roadway to a suitable sediment removal bmp prior to entering rock construction entrance.

Mountable berm shall be installed wherever optional culvert pipe is used and proper pipe cover as specified 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. At the end of each construction day, all sediment deposited on paved roadways shall be removed and returned to the construction site immediately. If excessive amounts of sediment are being deposited on roadway, extent length of rock construction entrance by 50 foot increments until condition is alleviated or install wash rack. Washing the roadway or sweeping the deposits into roadway ditches, sewers, culverts, or other drainage courses is not acceptable.

STANDARD CONSTRUCTION DETAIL #3-1  
ROCK CONSTRUCTION ENTRANCE  
N.T.S.

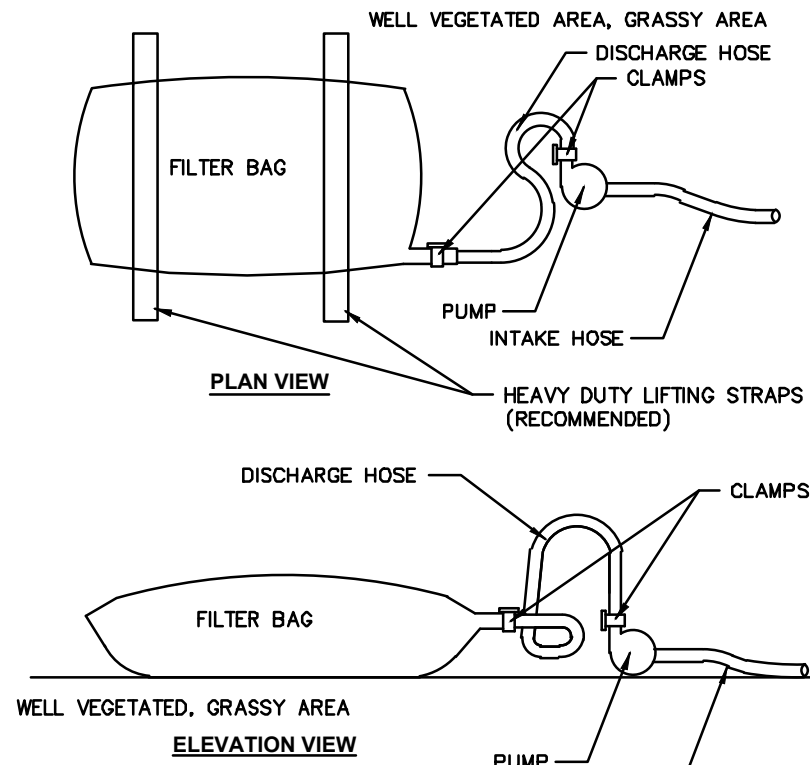


NOTES:

A rock filter outlet shall be installed where failure of a silt fence or straw bale barrier has occurred due to concentrated flow. Anchored compost layer shall be used on upslope face in HQ and EV watersheds.

Sediment shall be removed when accumulations reach 1/3 the height of the outlet.

STANDARD CONSTRUCTION DETAIL #4-6  
ROCK FILTER OUTLET  
N.T.S.



NOTES:

Low volume filter bags shall be made from non-woven geotextile material sewn with high strength double stitched "J" type seams. They shall be capable trapping particles larger than 150 microns. High volume filter bags shall be made from woven geotextiles that meet the following standards:

Property	Test Method	Minimum Standard
Avg. wide width strenght	ASTM D-4884	60 lb/in
Grab tensile	ASTM D-4632	250 lb
Puncture	ASTM D-4833	110 lb
Mullen burst	ASTM D-3786	350 psi
UV resistance	ASTM D-4355	70%
AOS % retained	ASTM D-4751	80 sieve

A suitable means of accessing the bag with machinery required for disposal purposes shall be provided. Filter bags shall be replaced when they become 1/2 full of sediment. Spare bags shall be kept available for replacement of those that have failed or are filled. Bags shall be placed on straps to facilitate removal unless bags come with lifting straps already attached.

Bags shall be located in well-vegetated (grassy) area, and discharge onto stable, erosion resistant areas. Where this is not possible, a geotextile underlayment and flow path shall be provided. Bags may be placed on filter stone to increase discharge capacity. Bags shall not be placed on slopes greater than 5%. For slopes exceeding 5%, clean rock or other non-erodible and non-polluting material may be placed under the bag to reduce slope steepness.

No downslope sediment barrier is required for most installations. Compost berm or compost filter sock shall be installed below bags located in HQ or EV watersheds, within 50 feet of any receiving surface water or where grassy area is not available.

The pump discharge hose shall be inserted into the bags in the manner specified by the manufacturer and securely clamped. A piece of PVC pipe is recommended for this purpose.

The pumping rate shall be no greater than 750 gpm or 1/2 the maximum specified by the manufacturer, whichever is less. Pump intakes shall be floating and screened.

Filter bags shall be inspected daily. If any problem is detected, pumping shall cease immediately and not resume until the problem is corrected.

STANDARD CONSTRUCTION DETAIL #3-16  
PUMPED WATER FILTER BAG  
N.T.S.

DESCRIPTION:  
DESCRIPTION:  
DESCRIPTION:  
DESCRIPTION:  
DESCRIPTION:

DATE:  
DATE:  
DATE:  
DATE:  
DATE:

REVISION BY:  
REVISION BY:  
REVISION BY:  
REVISION BY:  
REVISION BY:

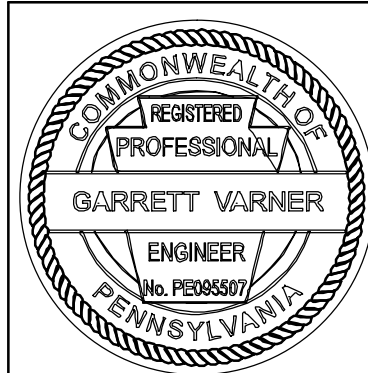
DESIGNED BY: CJM  
REVIEWED BY: GJV  
DRAWN BY: CJM  
DATE: DEC 2025  
PROJ. NO.: 2011.02

SCALE:  
N/A

**MKA** Morris Knowles & Associates, Inc.  
Environmental and Civil Engineers  
1740 Morrisville Rd., Suite 101  
Morrisville, PA 17054  
Telephone: (717) 468-8942  
Fax: (717) 468-8943  
info@morrisknowles.com  
www.morrisknowles.com

EROSION AND SEDIMENTATION CONTROL DETAILS  
AHOLD DELHAIZE SOLAR DEVELOPMENT  
prepared for  
SR PA AH1, LLC  
situated in  
MIDDLESEX TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

SHEET NO.  
C703





OWG. PATH: P:\Clients\2011 Scale Microgrids\2011.02 - Ahold Delhaize\CAD\2011.02 - Ahold Delhaize - LD.dwg  
LAST SAVE: Dec 16, 2025 - 10:37am debartram



CALL BEFORE YOU DIG  
IN PENNSYLVANIA  
1-800-242-1776  
DESIGN SN: 20253422860



Know what's below  
Call before you dig

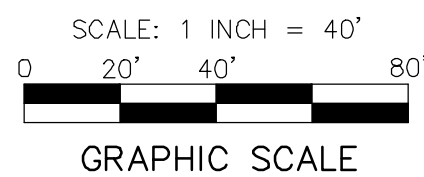
THE GENERAL CONTRACTOR SHALL NOTIFY ALL UTILITY  
COMPANIES INVOLVED IN THE SITE NO MORE TEN DAYS  
AND NO LESS THAN THREE DAYS IN ADVANCE OF EXCAVATION  
(PA ACT 287 OF 1974 AMENDED BY ACT 50 OF 2017).  
PA STATE LAW REQUIRES 3 WORKING DAYS NOTICE

SAN - SANITARY  
ST - STORM  
MH - MANHOLE  
TOP - TOP OF CASTING  
INV - INVERT / FLOW LINE  
WV - WATER VALVE  
GV - GAS VALVE  
GM - GAS METER  
EM - ELECTRIC METER  
S.R. - STATE ROUTE  
TELE - TELEPHONE  
RCP - REINFORCED CONCRETE PIPE  
CPP - CORRUGATED PLASTIC PIPE

LEGEND

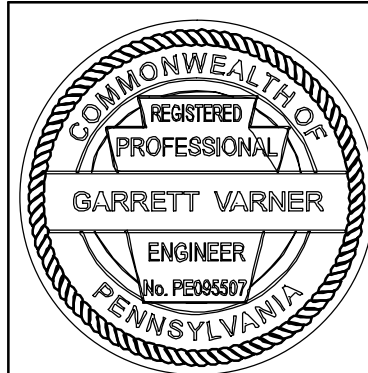
G - GAS LINE  
W - WATER LINE  
T - SUBSURFACE TELEPHONE LINE  
E - SUBSURFACE ELECTRIC LINE  
OH - OVERHEAD WIRES  
--908-- - EXISTING CONTOURS  
[Symbol] - EXISTING INLET  
[Symbol] - EXISTING MANHOLE  
===== - EXISTING SEWER  
-X-X- - FENCE

SIGHT DISTANCE PLAN  
SHADY LANE (T-510)



DRIVEWAY SIGHT DISTANCE SCHEDULE

	REQUIRED SIGHT DISTANCE	AVAILABLE SIGHT DISTANCE
A1	14.3'	205'
A2	15.3'	356'
B	14.3'	174'
C	15.3'	369'



SIGHT DISTANCE PLAN

AHOLD DELHAIZE SOLAR DEVELOPMENT

prepared for  
SR PA AH1, LLC

situated in,  
MIDDLESEX TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

**MA** Morris Knowles  
& Associates, Inc.  
(a subsidiary of Morris Knowles & Associates, Inc.)  
Engineers and Surveyors  
1740 Morrisville Rd., Suite 101  
Morrisville, PA 17054  
Telephone: (717) 449-8943  
info@morrisknowles.com www.morrisknowles.com

SCALE:  
1" = 40'

DESIGNED BY: DEB  
REVIEWED BY: GJV  
DRAWN BY: DEB  
DATE: DEC 2025  
PROJ. NO.: 2011.02

REVISION BY:	DATE:	DESCRIPTION:
REVISION BY:	DATE:	DESCRIPTION:
REVISION BY:	DATE:	DESCRIPTION:
REVISION BY:	DATE:	DESCRIPTION:
REVISION BY:	DATE:	DESCRIPTION:

