

ABINGTON TOWNSHIP

SEPTEMBER 28, 2022



PLANNING COMMISSION MEETING



TOWNSHIP OF ABINGTON

PLANNING COMMISSION MEETING

A G E N D A **September 28, 2022** **7:30 PM**

2nd Floor Board Room
1176 Old York Road
Abington, PA 19001

CALL TO ORDER

ROLL CALL *BROWN, DICELLO, ROBINSON, GAUTHIER, RUSSELL, ROSEN, COOPER, BAKER, STRACKHOUSE*

CONSIDER APPROVAL OF MINUTES

- a. Consider Approving Planning Commission Minutes of August 23, 2022.

PRESENTATION

UNFINISHED BUSINESS

NEW BUSINESS

- a. Review and approve the minor Land Development application, LD-22-04 - 521 Moredon Road (Solar Array Panel).

PUBLIC COMMENT

ADJOURNMENT

BOARD POLICY ON PUBLIC PARTICIPATION

For Information Purposes Only

The Township shall conduct business in accordance with the Commonwealth of Pennsylvania Laws governing the conduct of public meetings and only establish guidelines that shall govern public participation at meetings consistent with the law.

Each commenter shall:

- Direct their comments to the Presiding Officer;
- Speak from the podium or into a microphone designated by the presiding officer;
- State their name for the record;
- Either orally or in writing provide their address for the record;
- Have a maximum of three minutes to make their comments. Each commenter when speaking to a specific agenda item, is to keep their comments relative to that identified agenda item;
- Speak one time per agenda item;
- When commenting on non-agenda items, the commenter is to keep their comments related to matters of the Township of Abington, Montgomery County, Pennsylvania.
- State a question to the Presiding Officer after all commenters have spoken, and;
- Be seated after speaking or upon the request of the presiding officer;
- Not engage in debate, dialogue or discussion;
- Not disrupt the public meeting, and;
- Exercise restraint and sound judgement in avoiding the use of profane language, and the maligning of others.

The stated meeting of the Planning Commission of the Township of Abington was held on Tuesday, August 23, 2022, via webinar with Chairwoman Lucy Strackhouse presiding.

CALL TO ORDER: 7:36 p.m.

ROLL CALL: Present: BROWN, DiCELLO, GAUTHIER, COOPER, BAKER, STRACKHOUSE
Excused: ROSEN, ROBINSON

Also Present: County Planner NARCOWICH
Township Engineer LEE

CONSIDER APPROVAL OF MINUTES:

Ms. Gauthier made a MOTION, seconded by Mr. DiCello to approve the minutes of the Planning Commission Meeting of August 4, 2022.

MOTION was ADOPTED 6-0.

PRESENTATION: None.

UNFINISHED BUSINESS:

Review and discuss the request by Toll Mid-Atlantic, L.P. Company, Inc. (Toll Brothers) for a Zoning Text Amendment to create the AR-Age-Restricted Carriage Home Overlay District and a Zoning Map Amendment to rezone certain parcels on the northeast side of Fox Chase Road as AR – Age-Restricted Carriage Home Overlay:

Mr. Colagreco said proposed ordinance was revised to include tax parcel numbers and acreage, and the buffer specifications will be changed to medium density. Also, it was articulated in the proposed ordinance that guest parking is not permitted to be counted as open space, but all other uses are part of the open space regime.

Ms. Gauthier asked the applicant to revise proposed ordinance to add a parking requirement for the carriage homes; make correction to referenced Section 2301, which should be 2103 as the text amendment still referenced it erroneously, and H-12 use should be H-13 since H-12 was added by a prior text amendment; also, to reduce the plantings distance within the buffer area, so the plantings are closer to the tract boundary line to provide more effective screening. Also, she questioned whether the language of “parking serving said facilities” in the proposed ordinance is permitted as open space in Abington.

Ms. Erin DeRocini, representing Toll Brothers, replied we are not counting any parking spaces towards open space.

Ms. Gauthier asked that the language of “parking serving said facilities” be stricken from proposed ordinance.

Mr. Colagreco agreed to strike it from the ordinance.

Ms. Gauthier commented that the language of “guest parking otherwise serving the community shall not be permitted in the open space,” can remain in the ordinance.

Mr. Colagreco continued that any reference to a three-story structure was removed from proposed ordinance and revised to say, “age-restricted carriage homes may be one- or two-bedroom dwelling units above grade provided they do not exceed district height limitation and may have a third level serving as a basement,”

Ms. Gauthier clarified that Page 4. Section 2 of proposed ordinance needs to be amended to Section 2103 and the H-12 use needs to be changed to H-13.

Mr. Colagreco agreed. Also, age-restricted carriage homes shall be a minimum of 28 ft. wide and 50 ft. in depth, and the underling zoning will remain as CS-Community Service.

Ms. Strackhouse asked why there is a need for this amendment as opposed to working within the existing SNR District.

Mr. Colagreco replied that it could be done by amending the SNR District, which is an existing zone that only applies to one property in the Township. If we amend it with some of the modifications requested by Toll, it will create nonconformities with the product that has already been built, so we thought it best to create a separate district. If it needs to be within the SNR District, we will discuss that with Township Solicitor; however, changes will be the same as presented in the AR–Age Restricted Carriage Home Overlay District.

Mr. Baker said if what is being proposed is much more restricted then why go to the trouble of creating a new use, and although it is a great project and will be good for the Township, he would like to see a design that would fit into the SNR District.

Ms. DeRocini added that the issue with the SNR is the density, and the carriage home would be good for an age-restricted community that would benefit the Abington Township.

Mr. Narcowich clarified that the H-12 is in fact the senior apartment use, so any proposed use should be listed as H-13 and Section 2103 is the current use regulation section. Also, this could be merged into the SNR District with variations based on frontage from which the neighborhood takes access, and in the SNR, the impervious area is permitted to be higher, so he would suggest calibrating to the location based on the road from which it takes access.

Regarding the zoning text, if the applicant takes advantage of the overlay, then the provisions that would apply from the underling CS-Community Service District need to be clarified.

Regarding transportation and parking, it is important to have interconnections, and if there cannot be road interconnections, then there could be sidewalk and emergency vehicle interconnections. Parking requirements for the use for townhouses require two parking spaces not counting garages plus quarter space per unit for developments over 16 units, which would apply to this one.

Ms. Gauthier asked for a separate section to be added to the proposed ordinance for the required parking for this type of use.

Mr. Narcowich agreed that it should be included in the zoning ordinance, and has the applicant reviewed parking requirements for age-restricted communities?

Mr. Brian Thierrin, representing Toll Brothers, replied we set up the driveways for parking of two vehicles and there is overflow, which is the typical design.

Mr. Narcowich suggested there should be more overflow parking for guests.

Ms. DeRocini replied there are 47 parallel parking spaces on the street and the clubhouse has 12, which does not include spaces for each house.

Mr. Narcowich recommended coordinating with SEPTA on the location of a bus shelter.

Per the SALDO on open space says, “a parcel or parcels of land interconnected and designed for the use and enjoyment of the residents of the development and/or community not including streets, required yard areas and areas set aside for public facilities,” and suggested tying the land counted as open space to usable open space per requirements of the current zoning and SALDO. Is the applicant considering the residential buffer and green area to be part of the open space or separate from it?

Ms. DeRocini replied all the land in the rear and side is considered open space, but the internal space behind the units and amenity area is additional land to be included.

Ms. Gauthier questioned whether the naturalized stormwater basin area is permitted to be counted as open space per the zoning ordinance.

Mr. Narcowich replied that the zoning ordinance mentions plazas, parks, central green and urban gardens as usable public open space, but it does not mention naturalized stormwater basin areas.

Ms. Allison Lee said that will be determined during land development process.

Ms. Gauthier said as a resident and Planning Commission member, she would like to see the AR – Age Restricted Carriage Home Overlay District merged with the SNR District and that the SNR permit the carriage home use and rezone it to senior housing or age-restricted because there are already too many existing districts, which is something that the Board of Commissioners should look at.

Mr. Colagreco said if the 125 ft. open space buffer in which the residents have asked Toll Brothers to provide will not be permitted to be counted as open space, then this is a futile exercise. Also, he did not receive a copy of Mr. Narcowich’s review letter dated August 19th.

Ms. Strackhouse commented that the buffer should be counted as open space, and the applicant has worked diligently with the neighbors to provide a buffer to their satisfaction.

Mr. Narcowich agreed that buffers can be counted towards open space, but he would like to see central usable open space and suggested adding minimum area and/or percentage of the tract for central open space; require that accommodations and facilities enhance the usability of the land; and that all basins should be naturalized and landscaped.

The buffer can be in keeping with the spirit of protecting their privacy as well as landscaped screening to block views from existing homes while adding benches, a winding trail, and a place to walk a dog, making it look more attractive from both sides.

Also, there is a portion of land appropriate for conservation on the northern end of the tract adjacent to the land owned by the Township and questioned whether there would be a benefit of dedicating it to the Township, so it would adjoin Fox Chase Manor Park for the primary purpose of conservation having a continuous greenway along the tributary to the Pennypack.

Ms. Strackhouse asked for any other comments from members of the Planning Commission.

Mr. Baker agreed that the buffer can be used as open space that is contained within the property, but he would like it to be used as a winding trail and creatively landscaped.

Mr. DiCello commented that the reception is poor in this area and suggested looking into ways to improve it.

Ms. Gauthier said for a buffer to function properly it needs to be closer to the boundary line, so she would like to see the buffer changed to be along the boundary line and not in the middle of the site.

Mr. Cooper suggested that something more creative be done and moving trees closer to the existing development would make the open space more usable.

Mr. Brown noted that Section 2304 – Parking Requirements does not have any provisions for the proposed H-13 use, so that needs to be amended. He would like to see a merging with the SNR District, and he does not see any reason to change the dimensional requirements to make this a financially viable project. Also, the open space should be as usable as possible as this goes through the land development process, and he would like to see side-loaded parking on end-units, which is a provision of Section 2304 for townhome parking requirements.

Ms. Strackhouse asked for any public comment.

Ms. Lauria, resident, expressed concern about standing water as well as geese. Also, when construction begins all the dust and debris will affect our homes and having that buffer is a big deal to the neighbors.

Mike Tobin, resident, said the neighbors do not want the side streets open as they are too small to cut through and we do not want more traffic. We do want a buffer, and if there is a walking trail, we do not want it close to our homes, and who would own it, and will it be open to the public, and why isn't Alverthorpe Park open to the public? Also, he would like to see the trees planted now so they can block some of the dust and debris.

Liz Kerr, resident, expressed concern about not being able to review Mr. Narcowich's review letter dated August 19th, and she does not want benches beyond her house where strangers could sleep.

Ray Vandergrift, resident, commented that Alverthorpe Park is across the street for anyone who wants to go for a walk, which has certain hours, gated and locked. Also, it makes no sense to have trees closer to our homes and the neighbors do not want a walking path or benches or the side streets open. If there is going to be a walking path, put it on the 125 ft. buffer of the new development so he and his neighbors do not have to look at strangers walking behind their property.

Ms. Grossman, resident, commented that the neighbors told Toll Brothers that they do not want cut-through traffic between Ascot Road and Roseland Avenue, and Toll Brothers indicated they had adequate access to Fox Chase Road. The neighbors in Crosswicks are very upset that Ascot Road may be opened to the development because there is already enough traffic on Forrest Avenue.

Vincent Kelly, resident, agreed with Ray Vandergrift and Mike Tobin. The buffer is a big deal to the neighbors, and we do not want a public park or public trail and the more open space, the better.

Dennis Lauria, resident, asked would additional stormwater management be needed for construction of an impervious trail?

Ms. Strackhouse replied she does not know at this time whether a trail will be constructed.

Ms. Gauthier said she would like to recommend that the Board of Commissioners merge this proposed ordinance with the SNR and rezone the site; however, if that is not feasible, then she would recommend approval of proposed ordinance subject to the applicant adding parking regulations; making corrections to the section numbers, and she would prefer that proposed ordinance be revised to not place the buffer in the middle of the site, but rather closer to the boundary line.

Mr. Baker agreed that it is important to have a separation between the existing neighborhood and the new development; however, a buffer closer to the existing neighbors would provide more privacy, and he would like the planted buffer area to be reduced.

Mr. Cooper agreed that by moving the plantings and trees closer towards the existing residences would be more effective.

Ms. Gauthier made a MOTION, seconded by Mr. Baker to request that the Board of Commissioners work with the applicant (Toll Brothers) to merge their proposed ordinance within the existing SNR (Senior Neighborhood Residential) District to create one district and rezone this site appropriately in keeping with the spirit of this ordinance. If it is determined to not be feasible, then it was recommended that the Planning Commission approve the AR-Age Restricted Carriage Home Overlay District as proposed with the following changes:

1. The parking regulations shall be included in the proposed ordinance.
2. All revised section numbers and agreed upon “strike throughs” of the proposed ordinance that were discussed during the beginning of the meeting be completed.
3. The buffer shall be closer to the boundary line.

Planning Commission Meeting

August 23, 2022

MOTION was ADOPTED 6-0.

ADJOURNMENT: 8:57 p.m.

Respectfully submitted,

Liz Vile, Minutes Secretary



PLANNING COMMISSION MEETING

AGENDA ITEM

September 28, 2022

DATE

Administration

DEPARTMENT

AGENDA ITEM NUMBER

FISCAL IMPACT

Cost > \$10,000

Yes No

PUBLIC BID REQUIRED

Cost > \$20,100

Yes No

AGENDA ITEM:

521 Moredon Road

EXECUTIVE SUMMARY:

The applicant is proposing to lease a portion of land owned by the Sisters of the Holy Redeemer to install a ground mounted principal solar array and panel system, and associated equipment, conduit, concrete pads along with the solar panels; an extension of the exiting gravel access road; and stormwater runoff control measures. Access to/from the site will be by way of one (1) existing gravel access road currently used by the Sewer Authority located off of Moredon Road.

PREVIOUS BOARD ACTIONS:

8/11/22 - The applicant was granted a conditional use approval for the portion of the array and fencing that encroaches within the Zone 2 of the Riparian Corridor Conservation District by the Board of Commissioners.

RECOMMENDED BOARD ACTIONS:

Review and approve the minor Land Development application, LD-22-04 - 521 Moredon Road (Solar Array Panel).

September 9, 2022

ABINT130026

Mr. Richard Manfredi, Township Manager
Abington Township
1176 Old York Road
Abington, PA 19001

**RE: Executive Summary for LD-22-04 – 521 Moredon Road (Solar Panel Farm)
521 Moredon Road PARID: 30-00-44765-00-7 / TMID: 30018 011E**

Dear Mr. Manfredi:

We have received a copy of the Preliminary/Final Minor Land Development Plans (3rd Submission) consisting of fifteen (15) sheets dated July 16, 2022 and received on August 17, 2022; as prepared by Boles, Smyth Associates Inc., located at 2400 Chestnut Street in Philadelphia, PA for the above referenced project.

Executive Summary:

Under this Application, the Applicant is proposing to lease a portion of land (approximately 4.7 acres) owned by the Sisters of the Holy Redeemer to install a ground mounted principal solar array and panel system; and associated equipment, conduit, concrete pads along with the solar panels; an extension to the existing gravel access road; and stormwater runoff control measures. Access to/from the site will be by way of one (1) existing gravel access road currently used by the Sewer Authority located off of Moredon Road. The new solar panel array system will not be needing public water or sewer.

This project is located within the R-1 Low-Density Residential Zoning District and is fronted by Moredon Road to the southwest, Pennypack Creek to the northeast, and residential properties zoned in the R-1 Low-Density Residential Zoning District to the northwest and southeast.

Due to the unnamed tributary to Pennypack Creek, portions of the tract has been identified by the FEMA, Flood Insurance Rate Map (FIRM) Panel No. 42091C0402G, effective March 2, 2016, to be located within flood Zone X and are special flood hazard areas subject to inundation by the 0.2% annual chance flood (500-year flood), or areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile. The remaining portions of the tract, including the solar array field, are located within Zone X, which are areas determined by the FEMA FIRM to be located outside the 0.2% annual chance flood and areas of minimal flood hazard. In addition to the tract being subject to the Floodplain Conservation District, this parcel is classified by Figure 15.2 - Abington Township Riparian Corridor Analysis Map as a parcel that intersects the riparian corridor; therefore, this parcel is subject to the regulations of the Riparian Corridor Conservation District.

Based on the existing contours shown on the plan, there are areas of precautionary steep slopes (greater than 15% to 25%) and prohibitive steep slopes (greater than 25%), located throughout the site. Since these areas do span five contiguous 10-foot contour intervals, the site is determined to be located in the steep slope conservation overlay district and is subject to the regulations of the Steep Slope Conservation District.

Variations Received:

The Applicant has been granted the following variations by the Zoning Hearing Board under Application no. 21-25:

1. **§301 and §2706.A - Principal Solar Energy Systems** - to allow for the construction of a ground mounted solar panel array in the R-1 Low-Density Residential Zoning District.

This variance was granted subject to the following conditions:

1. That construction upon and use of the subject property shall be in substantial conformance with the testimony, exhibits, and other evidence presented at the Public Hearing on this matter, with the exception of minor modifications in precise placement of the proposed panel array; and
2. That if the proposed solar panel improvements are visible from residences within the abutting Tall Trees community the Applicant shall install landscaping to obstruct the visibility upon written request from that community's homeowner's association delivered to the Applicant and the Township within two years of:
 - a. The date of this approval, or
 - b. The completion of the installation of the solar panel improvements depicted on the exhibits presented at the Public Hearing, whichever is latest.

Conditional Use Approval Received:

The Applicant was granted a conditional use approval for the portion of the array and fencing that encroaches within the Zone 2 of the Riparian Corridor Conservation District by the Board of Commissioners on August 11, 2022.

Waivers Requested:

The Applicant has provided a waiver request letter dated August 26, 2022 and is requesting the following waivers as part of this land development project:

1. **§142 – Stormwater Management** – A waiver from the requirement to provide stormwater management design report and calculations for the solar panel array.
The Applicant is proposing concrete curb level spreaders for the solar panel array which will help reduce the velocities of the flows leaving the site. Stormwater management is provided for the 3,300 SF of new gravel area as required by the code.
2. **§146-11.B.(11).(b) – Existing Features Plan** – A waiver from the requirement to provide vegetation resource identification of stand-alone trees with calipers of ten (10) inches or greater, measured at a point four (4) feet above grade on the Existing Features Plan.
The Applicant is proposing to not conduct a tree survey for the entire 85-acre parcel since only two (2) trees are to be removed as part of this project.
3. **§146-11.H.(1) – Landscape Plan** – A waiver from the requirement to provide a landscape plan prepared by a registered landscape architect.
The Applicant is proposing the landscape plan to be prepared by the design engineer with the screening and replacement trees being selected by the Redeemer Health System's Director of Landscaping.

Issues:

Applicant has addressed or will comply with our review comments and therefore, we do not have outstanding issues regarding this proposed development.

Summary:

We recommend Preliminary/Final Major Subdivision and Land Development Plans approval contingent the Applicant adequately addresses all outstanding review comments.

If you have any questions or comments with this submittal, please do not hesitate to contact me.

Sincerely,

PENNONI



Khaled R. Hassan, PE
Township Engineer

cc: Terry Castorina, Executive Assistant to the Township Manager
Ashley McIlvaine, Special Assistant to the Township Manager
Lucy Strackhouse, Chairperson, Abington Township Planning Commission

\\PENNONI.COM\DATA\ACCOUNTS\ABINT\ABINT130026 - LD-22-04 - 521 MOREDON RD (SOLAR PANELS)\ADMIN\LD-22-04-PC MTG EXEC SUMMARY - 521 MOREDON RD (SOLAR ARRAY).DOCX



Boles, Smyth Associates, Inc.
2400 Chestnut Street Philadelphia, PA 19103 215-561-2644

February 8, 2022

Township of Abington
1176 Old York Road,
Abington, PA 19001

Attn: Richard J. Manfredi, Township Manager

Re: Solar Panel Array at 521 Moredon Road, Huntingdon Valley PA 19006

Dear Mr. Manfredi:

Attached please find the Land Development Application and Plans for the Proposed Principal Solar Energy System at 521 Moredon Road.

Included are the following:

- Land Development Application (Includes checklist)
- 5 sets Full Size site plans
- 5 sets site plans at 11x17
- Electronic copies to be provided by email
- Check for Land Development Application Fee

Please note that there will be no new sewage or water service connections and no change in use or occupancy therefore sewage planning is not required.

We are in the process of preparing an application for earth disturbance associated with construction activities which will be submitted to the to the MCCD for review.

Please contact me if you have any questions or need any additional information.

Sincerely,

A handwritten signature in black ink that reads "Timothy F. Boles". The signature is written in a cursive, flowing style.

Timothy F. Boles, P.E.
Attachments

APPLICATION FOR SUBDIVISION/LAND DEVELOPMENT

PROJECT TITLE: Solar Panel Array at 521 Moredon Road

APPLICANT NAME: Sisters of the Redeemer, c/o Jack Dempster VP Facilities/Constr.

TO BE COMPLETED BY THE TOWNSHIP

Submission Information:

Application Number: _____

Date Complete: _____

Received By: _____

90 Day Date: _____

File Date: _____

Ward No. _____

REQUIRED MATERIAL FOR ALL SUBDIVISION/LAND DEVELOPMENT APPLICATIONS:

1. This form **MUST** be completed and submitted.
2. A Subdivision/ Land Development Application **MUST** include all of the items listed in the application checklist in Section V to be considered complete.
3. Incomplete application will **NOT** be placed on the Planning Commission agenda. Incomplete applications will be returned to the applicant.
4. Complete applications must be received at least 45 DAYS (see schedule) prior to the Planning Commission meeting at which it will be heard.
5. Ten (10) full size paper copies, and one (1) 11x17 reduced copy of the plans, plus three (3) copies of each report or study are to be submitted in the initial submission of the complete application. A digital copy of all submitted documents must be included with the application.

***It is highly encouraged to submit applications in a digital format**

I. CONTACT INFORMATION

**Applicant
Information**

Holy Redeemer Health System, Jack Dempster

Name
521 Moredon Road, Huntingdon Valley PA 19006

Address
215-938-2022

Phone Fax
jdempster@holyredeemer.com

Email Address

**Property
Owners
Information
(if different
than applicant)**

Sisters of the Redeemer, (Sisters of the Holy Redeemer), c/o Sr. Ellen Marvel, CSR

Name
Office: 1600 Huntingdon Pike, Meadowbrook, PA 19046

Address Project Location: 521 Moredon Road, Huntingdon Valley PA 19006
215-914-4003

Phone Fax
emarvel@holyredeemer.com

Email Address

**Architect/
Planner**

N/A

Name

Address

Phone Fax

Email Address

**Engineer/
Surveyor**

Boles, Smyth Associates Inc. - Tim Boles

Name
2400 Chestnut Street Philadelphia, PA 19103

Address

**Engineer/
Surveyor
Cont'd**

215-561-2644

Phone

Fax

TFBoles@bolessmyth.com

Email Address

Attorney

Stradley Ronon Stevens & Young, LLP, Christopher E. Cummings

Name

30 Valley Stream Parkway, Malvern, PA 19355-1481

Address

610.640.5812

610.640.1965

Phone

Fax

CCummings@STRADLEY.COM

Email Address

II. PROJECT INFORMATION

Application Type:

- | | | |
|--|---|--|
| <input type="checkbox"/> Minor Subdivision | <input checked="" type="checkbox"/> Minor Land Develop. | <input type="checkbox"/> Preliminary Major SD & LD |
| <input type="checkbox"/> Preliminary Major Subdivision | <input type="checkbox"/> Prelim. Major Land Develop. | <input type="checkbox"/> Final Major SD & LD |
| <input type="checkbox"/> Final Major Subdivision | <input type="checkbox"/> Final Major Land Develop. | |

Full street address of the property: 521 Moredon Road

Tax Parcel No.: 30-00-22412-00-4 County Deed Book No.: 5132 Page No.: 1511

Description of Proposed Work: Installation of a ground mounted Principal Solar Array

Total Tract Acreage: 90.41 Project Acreage: 5.1

Zoning District: R1 Existing Number of Lots: 1 Proposed Number of Lots: 1

Existing Sewer Flows: N/A Proposed Sewer Flows: N/A

Proposed Land Use:

- | | | | |
|--|---|--|-------------------------------------|
| <input type="checkbox"/> Single Family Detached | <input type="checkbox"/> Single Family Attached | <input type="checkbox"/> Single Family Semi-Detached | |
| <input type="checkbox"/> Multi-Family | <input type="checkbox"/> Commercial | <input type="checkbox"/> Office | <input type="checkbox"/> Industrial |
| <input checked="" type="checkbox"/> Other (Describe): <u>Ground mounted Principal Solar Array connected to PECO grid at Moredon Road</u> | | | |

III. REVIEW

Please complete the following section by circling a response:

- Have you met with the Zoning Officer regarding this plan? Yes No
- Are there known variances/any zoning relief necessary for this project? Yes No
- If YES, have you submitted an application to the Zoning Hearing Board? Yes No
- Has this plan been heard by the Zoning Hearing Board? Yes No

*Please be advised that if any variances are found to be necessary during the course of the review of this plan, you will be required to go to the Zoning Hearing Board prior to proceeding to the Planning Commission. In addition, you will be requested to grant the Township a waiver to the 90-day action period or an immediate denial of this application will be made, and you will be required to resubmit the application.

It is recommended that ALL Land Development and Major Subdivision applications have a pre-submission meeting to discuss the project prior to full application submittal.

Minor Subdivision applications may request a pre-submission meeting; if one is desired.

Meetings are held the fourth Tuesday of each month beginning at 9:30 a.m. at the Township Administrative Offices.

Applicants assume responsibility of any fees associated with this meeting.

Applicant signature

Date

To schedule a pre-submission meeting, please contact the office of the Township Manager at 267-536-1003 or email tcastorina@abingtonpa.gov

IV. WAIVERS

List of Requested Waivers: Attach separate sheet if required.

Section/Requirement:

Article XXI: Use Regulations, Use A-13: Fences and Walls. 1. Unless otherwise regulated, the maximum height of fences and walls shall be six feet (6'). +

Relief Requested:

Relief requested for fence exceeding 6'. The 8' high is to be placed at the setback line. Fence Height of 8' min. height is Otherwise Regulated by Article XXVII: Alternative Energy, item 6. +

Stormwater Management

Relief requested from providing a Stormwater Management Design Report and Calculations on the basis that the array design complies with FAQ#4 of PADEP's recommended guidance for ground

mounted solar projects and that potential stormwater impacts are mitigated by the BMP's to be employed as part of the solar installation. See project narrative and the link below. Earth

Disturbance on the project will not exceed 1 Acre. https://files.dep.state.pa.us/Water/BNPNSM/StormwaterManagement/ConstructionStormwater/Solar_Panel_Farms_FAQ.pdf

V. SUBMISSION

APPLICATION CHECKLIST

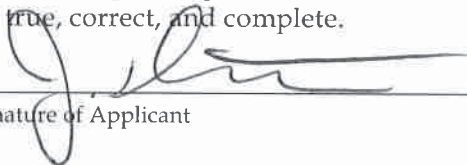
The applicant is responsible for the submission of a complete application. This checklist will aid both the applicant and staff in ensuring that all applications are complete. The following is a per item submission checklist for all Subdivision, Land Development and Conditional Use Applications for the Township of Abington.

- Application Form: completed and signed by the owner/applicant
Five (5)
- ~~10 (ten)~~ copies of the proposed plan, folded to legal file size. Plan should not be smaller than 1" = 50' and not exceed a sheet size of 24" x 36"
Five (5)
- ~~One (1)~~ reduced copy of the proposed plan, no larger than 11" x 17"
- Two (2) sets of tentative architectural plans for all applications proposing construction or land development

- One (1) copy of the Recreation Facilities Plan (if required by §146-40)
N/A
- Letter of Sanitary Sewer availability from the Township Wastewater Treatment Department Two
N/A no new sewer connections
- (2) copies of Sewage Facilities Planning Module Applications
N/A, No new EDUs
- Letter of Water availability from AQUA PA
N/A No new water services or capacity required.
- One (1) copy of any previous Zoning Hearing Board decisions related to the subject property
- One (1) Digital copy of all submitted documents
- Application Fee: Check made payable to the Township of Abington
- Escrow Fee: Check made payable to the Township of Abington. Separate check from application fee

VI. SIGNATURE

The undersigned represents that to the best of his/her knowledge and belief, all the above statements are true, correct, and complete.



Signature of Applicant

3/28/22

Date

Signature of Property Owner (if different than applicant)

Date

THE FOLLOWING IS FOR INTERNAL USE ONLY:

PAYMENT

Application Fee Amount: \$ 1500 Check No.: # 3085

Review Escrow Fee Amount: \$ _____ Check No.: # _____

DECISION INFORMATION

Approval Denial Decision Date: _____

Comments/Conditions:

**ESCROW AGREEMENT FOR PROFESSIONAL REVIEW FEES
FOR PRE-SUBMISSION MEETING**

The undersigned hereby agrees to post an escrow to cover the costs of the review of subdivision and land development applications by the Township’s Planner, Engineer(s), and Solicitor. The amount of said escrow shall be according to the attached “Schedule of Fees” and shall be posted at the time of initial submission of an application to the Township. Said fees shall be placed in an escrow account and any balance remaining shall be returned to the applicant subsequent to the receipt of final approval.

The applicant is advised that the “Schedule of Fees” represents only an estimate of the costs associated with plan review. The completeness and quality of the submission, the complexity of the project, the number of revisions and other factors may cause costs to exceed the established escrow amounts. If during the course of a subdivision/land development review an escrow amount falls to 10% of the original escrow amount or \$250, whichever is greater, the Township may require the posting of additional escrow.

NOTE: NO FINAL APPROVALS, CONSTRUCTION, BUILDING OR OCCUPANCY PERMITS SHALL BE ISSUED UNTIL ALL OUTSTANDING PROFESSIONAL REVIEW FEES HAVE BEEN SATISFIED.

Signature:  _____
Applicant

Date: 3/7/2022

Applicant Request for County Review

This request should be filled out by the applicant and submitted to the municipality where the application is being filed along with digital copies of all plan sets/information. Municipal staff will electronically file the application with the county, and a notice for the prompt payment of any fees will be emailed to the Applicant's Representative.



Date: April 8, 2022
Municipality: Abington Township

Applicant's Representative: Jack Dempster
Address: 521 Moredon Road

Proposal Name: Solar Panel Array at 521 Moredon Road

City/State/Zip: Huntingdon Valley PA 19006

Business Phone (required): 215-938-2022

Business Email (required): jdempster@holyredeemer.com

Applicant Name: Sisters of the Redeemer
Address: 1600 Huntingdon Pike
City/State/Zip: Meadowbrook, PA 19046
Phone: 215-914-4003
Email: emarvel@holyredeemer.com

Type of Review Requested:

(Check All Appropriate Boxes)

- Land Development Plan
- Subdivision Plan
- Residential Lot Line Change
- Nonresidential Lot Line Change
- Zoning Ordinance Amendment
- Zoning Map Amendment
- Subdivision Ordinance Amendment
- Curative Amendment
- Comprehensive / Other Plan
- Special Review*

* (Not included in any other category - includes parking lot or structures that are not associated with new building square footage)

Type of Plan: Type of Submission:

- Tentative (Sketch) New Proposal
- Preliminary / Final Resubmission*

* A proposal is NOT a resubmission if A) The proposed land use changes, or B) The amount of residential units or square footage proposed changes more than 40%, or C) The previous submission was over 5 years ago.

Zoning:

Existing District: R1 low density residential
Special Exception Granted Yes No
Variance Granted Yes No For 301 and 2706-A for
construction of Principal Solar Energy System

Plan Information:

Tax Parcel Number(s) 30-00-22412-00-4

Location (address or frontage) _____

Nearest Cross Street Huntingdon Pike

Total Tract Area 90.41

Total Tract Area Impacted By Development 5.1

(If the development is a building expansion, or additional building on existing development, or only impacts a portion of the tract, please provide a rough estimate of the land impacted, including associated yards, drives, and facilities.)

Land Use(s)	Number of New		Senior Housing		Open Space Acres*	Nonresidential New Square Feet
	Lots	Units	Yes	No		
Single-Family						
Townhouses/Twins						
Apartments						
Commercial						
Industrial						
Office						
Institutional						
Other						

*Only indicate Open Space if it will be on a separate lot or deed restricted with an easement shown on the plan.

Additional Information: Installation of a ground mounted Solar Panel Array

Joseph C. Kuhls
Attorney at Law

October 20, 2021

Redeemer Village
c/o Jack H. Dempster
Vice President, Facilities and Construction
667 Welsh Road
Huntingdon Valley, PA 19006

Christopher E. Cummings
Stradley, Ronon, Stevens & Young, LLP
30 Valley Stream Parkway
Malvern, PA 19355

Re: Abington Township Zoning Hearing Board Application 21-25

Messrs. Dempster and Cummings,

This firm serves as Solicitor to the Abington Township Zoning Hearing Board. This will confirm that the Board, at its Public Meeting last evening, voted to approve the above-named Application of Redeemer Village for variances from Abington Township Zoning Ordinance §301 and §2706-A to facilitate construction of a Principal Solar Energy System upon real property identified as 521 Moredon Road.

This approval is granted subject to the conditions: 1) that construction upon and use of the subject property shall be in substantial conformance with the testimony, exhibits, and other evidence presented at the Public Hearing on this matter, with the exception of minor modifications in precise placement of the proposed panel array; and 2) that if proposed solar panel improvements are visible from residences within the abutting Tall Trees community the Applicant shall install landscaping to obstruct that visibility upon written request from that community's homeowners association delivered to the Applicant and the Township within two years of: 1) the date of this Approval; or 2) completion of the installation of the solar panel improvements depicted on the exhibits presented at the Public Hearing, whichever is latest.

Any aggrieved party may file an appeal to the Court contesting this decision within thirty (30) days. Anyone taking action on this decision within that appeal period does so at their own risk. Please remember that this Zoning Approval does not relieve the Applicant of the obligation to obtain a building permit and/or other related approvals.

This correspondence constitutes the written decision of the Board to approve the uncontested Application, and no further findings, conclusions, or reasons will be issued.



Joseph C. Kuhls

**MONTGOMERY COUNTY
BOARD OF COMMISSIONERS**

VALERIE A. ARKOOSH, MD, MPH, CHAIR

KENNETH E. LAWRENCE, VICE CHAIR

JOSEPH C GALE, COMMISSIONER



**MONTGOMERY COUNTY
PLANNING COMMISSION**

MONTGOMERY COUNTY COURTHOUSE • PO Box 311
NORRISTOWN, PA 19404-0311
610-278-3722

FAX: 610-278-3941 • TDD: 610-631-1211
WWW.MONTCOPA.ORG

SCOTT FRANCE, AICP
EXECUTIVE DIRECTOR

March 16, 2022

County Land Use Letter
Ground Mounted Solar Array
Lower Moreland Township

Boles, Smyth Associates, Inc.
Attn: Timothy Boles
2400 Chestnut Street
Philadelphia, PA 19103

Dear Mr. Boles:

We have received your letter regarding your intent to submit for an NPDES Permit. The permit is related to plans to construct a ground-mounted solar array in a meadow. Our office has determined that your project is consistent with the Montgomery County Comprehensive Plan (adopted January 15, 2015) and all other county land use plans that impact this area as long as all necessary steps are taken to ensure the environmental protection of the area.

The Montgomery County Planning Commission has participated in the completion of plans for ten of its seventeen watersheds. The proposed project occurs within the Pennypack Creek Watershed which has an adopted an Act 167 (2009). According to the limited documentation submitted with the Act 14, 67, 68, and 127 notifications the Montgomery County Planning Commission cannot comment on the consistency with the Act 167 plan. That being said, we defer to the municipal engineer to ensure compliance with the plan.

Please contact me if you have any questions on the content of this letter.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jon A. Leshner', is positioned below the 'Sincerely,' text.

Jon A. Leshner, LEED Green Associate
Environmental Planning Assistant Manager
Montgomery County Planning Commission
(610)278-3750
jlesher@montcopa.org



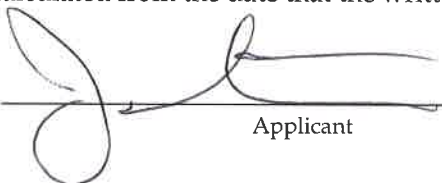
PLANNING PROCESS EXTENSION AGREEMENT

FOR

LD-22-04-521 MOREDOIT RD. (SOLAR ARRAY FARM)
PROJECT NAME

The Pennsylvania Municipality Planning Code (MPC) and the Abington Township Subdivision and Land Development Ordinance state that action must be taken by the Township within ninety (90) days after a complete application is filed with the Township. In the Township, complicated, unique, and community impactful projects have or may require additional time in order to complete a thorough review before being considered for approval. As such, an applicant may voluntarily waive the timing requirement at any time, but is encouraged to submit this waiver with the completed application.

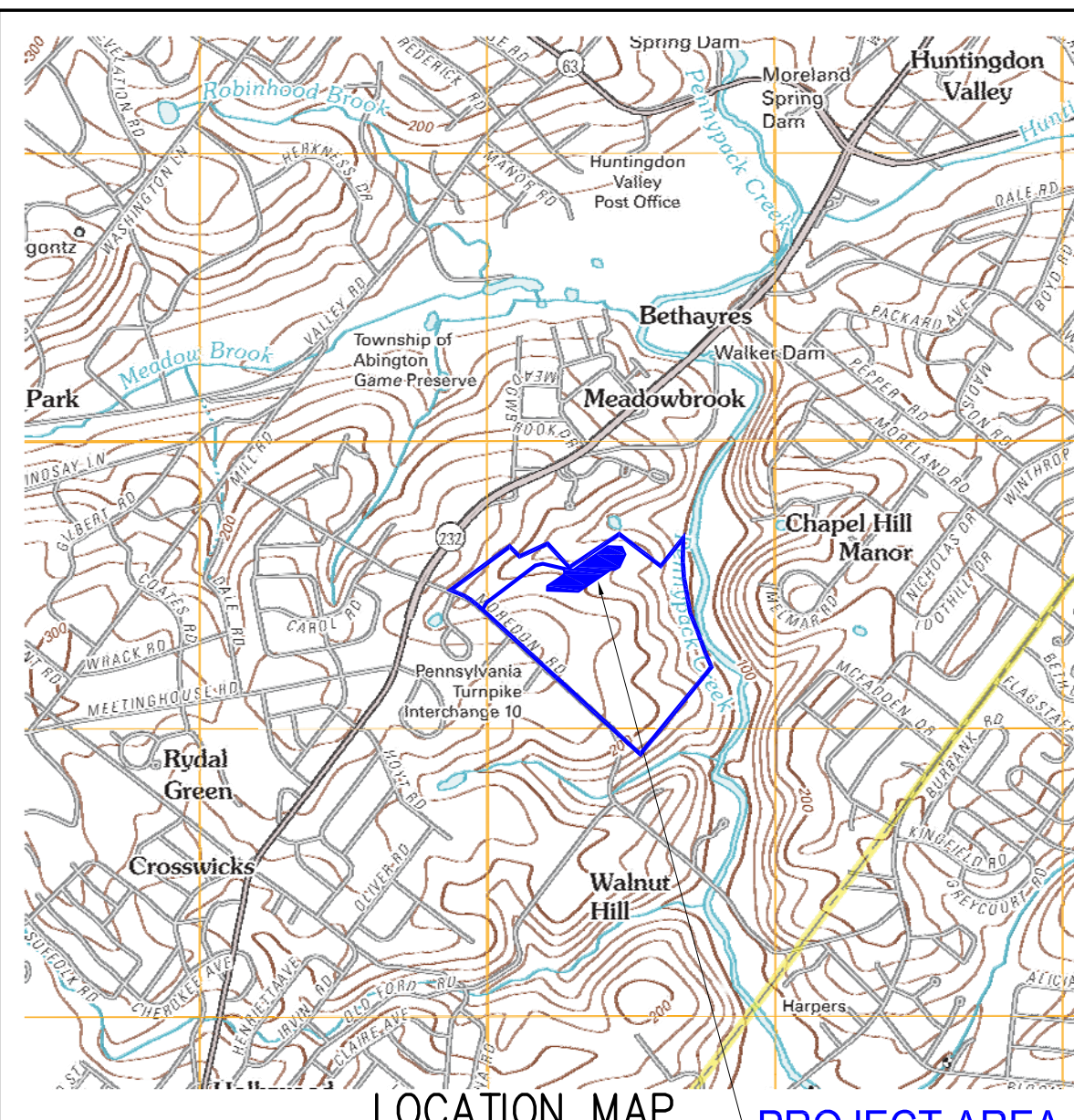
I, the applicant, hereby voluntarily waive the timing requirement as set forth in the MPC (Section 53 P.S. 10508) and the Abington Township Subdivision and Land Development Ordinance (Section 146-13). Applicant acknowledges that this waiver can be revoked at any time upon written notice to the Township Manager. The time limitations set forth in 53 P.S. 10508 and Section 146-13 of the Abington Township Code shall be calculated from the date that the written revocation is received by the Township Manager.

Signed:  _____
Applicant

Date: 6/28/22

Received: _____
Township

Date: _____



LOCATION MAP
SCALE: 1"=2000'
USGS QUAD: Frankford PA-NJ (2011)

GENERAL NOTES

- LANDOWNER: SISTERS OF THE REDEEMER
521 MOREDON ROAD, HUNTINGDON VALLEY PA 19006
- APPLICANT: REDEEMER VILLAGE, c/o REDEEMER HEALTH
521 MOREDON ROAD, HUNTINGDON VALLEY, PA 19006
- LOCATION: 521 MOREDON ROAD,
TMP 30 018 011T1, PARCEL 30-00-44766-00-6
- BOUNDARY INFORMATION TAKEN FROM A PLAN PREPARED BY:
PENNONI ASSOCIATES INC. DATED 09/20/1995.
- ELEVATIONS BASED ON NATIONAL GEODETIC VERTICAL DATUM (NGVD 1929).
SUBTRACT 4.44 FT TO CONVERT TO THE ABINGTON TOWNSHIP SEWER DATUM.
- THE SITE IS LOCATED WITHIN A ZONE X ON FEMA FLOOD MAP PANEL NO. 42091C04029
EFFECTIVE MARCH 2, 2016. ZONE X IS DESCRIBED AS, "AREAS DETERMINED TO BE
OUTSIDE THE 500 YR FLOODPLAIN".
- THIS PROPERTY HAS AREAS THAT ARE WITHIN THE 100-YR FLOODPLAIN AND ARE DESIGNATED TO BE
WITHIN THE FLOODPLAIN CONSERVATION OVERLAY DISTRICT. THIS PROJECT DOES NOT PROPOSE ANY
DEVELOPMENT OR DISTURBANCE WITHIN THE FLOODPLAIN CONSERVATION OVERLAY DISTRICT.
- IN ACCORDANCE WITH PA ACT 287 OF 1974 AS AMENDED BY PA ACT 50 OF 2017 ENTITLED
"UNDERGROUND UTILITY LINE PROTECTION LAW". THE CONTRACTOR SHALL NOTIFY ALL UTILITIES
WITHIN THE WORK AREA VIA THE PENNSYLVANIA ONE CALL SYSTEM, INC. (800-242-1776) A MINIMUM
OF 3 WORKING DAYS BEFORE THE START OF EXCAVATION.
- PROPERTY IS ZONED R-1, LOW DENSITY RESIDENTIAL.
- OVERLAY DISTRICTS - THE PROPERTY IS LOCATED IN THE FOLLOWING DISTRICTS:
- RIPARIAN CORRIDOR CONSERVATION DISTRICT (ARTICLE XV)
- STEEP SLOPE CONSERVATION DISTRICT (ARTICLE XVI)
- LAND PRESERVATION DISTRICT (ARTICLE XVII)
- PRECAUTIONARY SLOPES WITH A SLOPE FROM 15% TO 25% EXIST ON 18.6% OF THE NET AREA OF THE
PROPERTY. THE PROPOSED IMPROVEMENTS WILL PERMANENTLY DISTURB 560 SF (0.08%) OF THE
PRECAUTIONARY SLOPES. AREAS TEMPORARILY DISTURBED FOR CONDUIT INSTALLATION WILL BE
RESTORED.
- PROHIBITIVE SLOPES WITH A SLOPE OF 25% OR STEEPER EXIST ON 9.7% OF THE NET AREA OF THE PROPERTY.
THE PROPOSED IMPROVEMENTS WILL PERMANENTLY DISTURB 130 SF (0.03%) OF THE PROHIBITIVE SLOPES.
- NO WATER SUPPLY IS REQUIRED FOR THE PROPOSED IMPROVEMENTS.
- NO SANITARY WASTEWATER WILL BE GENERATED BY THE PROPOSED IMPROVEMENTS
- OUTSIDE STORAGE OF JUNK, DEBRIS, OTHER MATERIALS AND OUTDOOR VEHICLE REPAIRS ARE NOT PERMITTED ON
THE SITE. NO UNREGISTERED OR UNINSPECTED MOTOR VEHICLES SHALL BE PARKED, KEPT OR STORED ON THE
PROPERTY. NO COMMERCIAL OR RECREATIONAL VEHICLES SHALL BE PARKED OR STORED ON THE PROPERTY.
VEHICLES SHALL NOT DISPLAY ANY SIGNAGE OR ADVERTISING WITHIN THE SITE UNLESS ENCLOSED IN
STRUCTURES WHICH ARE IN COMPLIANCE WITH THE CRITERIA OF THE DISTRICT.
- ALL UTILITY & TRANSMISSION LINES SHALL BE UNDERGROUND TO THE EXTENT FEASIBLE.
- REFLECTIVE SUN GLARE, IF ANY, SHALL NOT BE DIRECTED TOWARDS ANY INHABITED BUILDING ON ADJACENT
PROPERTIES AS WELL AS ADJACENT STREETS AND RIGHTS-OF-WAYS.
- A VARIANCE HAS BEEN GRANTED FOR CONSTRUCTION OF A PRINCIPAL SOLAR ENERGY SYSTEM IN A RESIDENTIAL
DISTRICT. THE USE VARIANCE WAS GRANTED SUBJECT TO THE FOLLOWING CONDITIONS:
A. THAT CONSTRUCTION UPON AND USE OF THE SUBJECT PROPERTY SHALL BE IN SUBSTANTIAL CONFORMANCE WITH
THE TESTIMONY, EXHIBITS, AND OTHER EVIDENCE PRESENTED AT THE PUBLIC HEARING ON THIS MATTER, WITH
THE EXCEPTION OF MINOR MODIFICATIONS IN PRECISE PLACEMENT OF THE PROPOSED PANEL ARRAY; AND
B. THAT IF THE PROPOSED SOLAR PANEL IMPROVEMENTS ARE VISIBLE FROM RESIDENCES WITHIN THE ADJUTING
TALL TREES COMMUNITY THE APPLICANT SHALL INSTALL LANDSCAPING TO OBSTRUCT THE VISIBILITY UPON
WRITTEN REQUEST FROM THAT COMMUNITY'S HOMEOWNER'S ASSOCIATION DELIVERED TO THE APPLICANT AND THE
TOWNSHIP WITHIN TWO YEARS OF: A. THE DATE OF THIS APPROVAL, OR: B. THE COMPLETION OF THE
INSTALLATION OF THE SOLAR PANEL IMPROVEMENTS DEPICTED ON THE EXHIBITS PRESENTED AT THE PUBLIC
HEARING, WHICHEVER IS LATEST.
- DECOMMISSIONING:
A. IF THE APPLICANT CEASES OPERATION OF THE ENERGY PROJECT OR BEGINS, BUT DOES NOT COMPLETE,
CONSTRUCTION OF THE PROJECT, THE APPLICANT SHALL RESTORE THE SITE ACCORDING TO A PLAN APPROVED BY THE
PLANNING AUTHORITY.
B. THE LARGE SOLAR ENERGY PRODUCTION FACILITY OWNER IS REQUIRED TO NOTIFY THE TOWNSHIP IMMEDIATELY
UPON CESSATION OR ABANDONMENT OF THE OPERATION. THE OWNER SHALL BE RESPONSIBLE FOR THE REMOVAL OF
THE FACILITY WITHIN SIX (6) MONTHS FROM THE DATE THE APPLICANT CEASES USE OF THE FACILITY OR THE
FACILITY BECOMES OBSOLETE. THE OWNER SHALL THEN HAVE 12 MONTHS IN WHICH TO DISMANTLE AND REMOVE
THE LARGE SOLAR ENERGY PRODUCTION FACILITY FROM THE PROPERTY. AT THE TIME OF ISSUANCE OF THE
PERMIT FOR THE CONSTRUCTION OF THE LARGE SOLAR ENERGY PRODUCTION FACILITY, THE OWNER SHALL
PROVIDE FINANCIAL SECURITY IN FORM AND AMOUNT ACCEPTABLE TO THE TOWNSHIP TO SECURE THE EXPENSE OF
DISMANTLING AND REMOVING SAID STRUCTURES.
- CONDITIONAL USE APPROVAL FOR THE PORTION OF THE ARRAY AND FENCING THAT ENCOACH WITHIN THE ZONE 2
OF THE RIPARIAN CORRIDOR CONSERVATION DISTRICT WAS GRANTED BY THE BOARD OF COMMISSIONERS ON
AUGUST 11, 2022. SEE ENCOACHMENT AND MITIGATION AREAS INDICATED ON THIS PLAN. (ENCOACHMENT
AREA= 0.52 AC, MITIGATION AREA= 0.53 AC)

SEE CONTINUATION ON NEXT PAGE
File: Solar_SH_1-3_Ex_Site.dwg Plotted: 8/16/22 at 2:46pm by: TFBoles1

ZONING REGULATIONS - R1 LOW DENSITY RESIDENTIAL

DIMENSION	REQUIRED	EXISTING +	PROPOSED
LOT AREA	1 AC	85,66446 AC	NO CHANGE
LOT WIDTH	200 FT	3,731,544 SF	NO CHANGE
LOT DEPTH	100 FT	2,702 FT	NO CHANGE
FRONT YARD	50 FT	42 FT	42 FT
SIDE YARD	20 FT	524 FT	524 FT
REAR YARD	30 FT	1212 FT	766 FT
BUILDING, GROUND FLOOR AREA FOR PRINCIPAL USE	N/A	30,446 SF+	NO CHANGE
BUILDING AREA (ROOF AREA)	20% (MAX)	0.97 %	NO CHANGE
		36,273 SF +	
IMPERVIOUS COVER	25% (MAX)	4.45 % +	4.53 % +
		165,993 SF +	169,345 SF
GRAVEL AREAS	N/A	60,458 SF +	65,108 SF +
GREEN AREA	75% (MIN)	95.55 % +	95.46 % +
		3,565,551 SF+	3,562,199 SF+
STEEP SLOPES			
15-25%	-	714,850SF (18.6%)	714,286SF (18.6%)
25% OR STEEPER	-	373,500SF (9.7%)	373,357SF (9.7%)
TEMP. DISTURBANCE			
15-25%	-	-	13,225 SF
25% OR STEEPER	-	-	0 SF
BUILDING HEIGHT	35 FT (MAX)	VARIABLES	NO CHANGE
BUILDING LENGTH	150 FT (MAX)	285 FT	NO CHANGE
PARKING			
TOTAL PARKING SP.	104	191	NO CHANGE
ACCESSIBLE SP.	4	2	
VAN SPACES	1	4	
TOTAL ACC. SP.	5	6	

+ INDICATES AREA AFTER PENDING COMPLETION REDEEMER VALLEY FARM BARN.
* GRAVEL AREAS ARE INCLUDED IN IMPERVIOUS AREA. SOLAR PANELS EXCLUDED FROM IMPERVIOUS AREA PER ARTICLE XXVII, SECTION 2706, C.
IMPERVIOUS PAVEMENTS TO BE CONSTRUCTED BY THE PROJECT INCLUDE A CONCRETE PAD FOR ELECTRICAL EQUIPMENT AND GRAVEL STABILIZATION AT THE PAD AREA. NO NEW ROADWAY PAVEMENTS OR ROOF AREAS ARE TO BE CONSTRUCTED AS PART OF THE PROPOSED IMPROVEMENTS.

TOTAL PROPOSED DISTURBED PROJECT AREA = 14,000 SF (0.32 AC)

Zoning Districts Listed

- CS - COMMUNITY SERVICE
- R1 - LOW DENSITY RESIDENTIAL
- RC - APARTMENT OFFICE

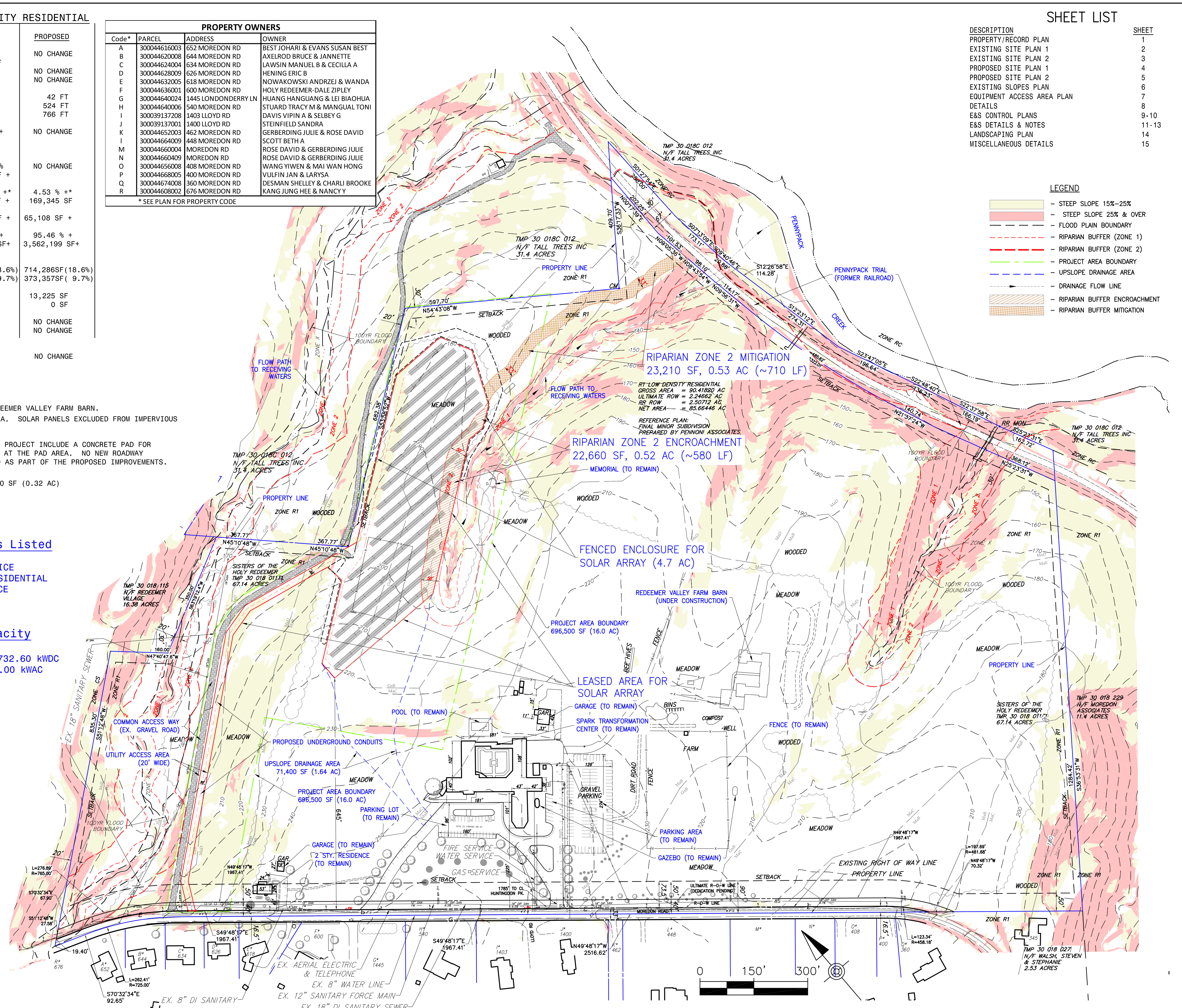
Solar Array Capacity

DC SYSTEM SIZE: 1,1732.60 KWDC
AC SYSTEM SIZE: 840.00 KWAC

PROPERTY OWNERS

Code*	PARCEL	ADDRESS	OWNER
A	300044616003	652 MOREDON RD	BEST JOHARI & EVANS SUSAN BEST
B	300044620008	644 MOREDON RD	AXELROD BRUCE & JANNETTE
C	300044624004	634 MOREDON RD	LAWSIN MANUEL B & CECILIA A
D	300044628009	626 MOREDON RD	HENING ERIC B
E	300044632005	618 MOREDON RD	NOWAKOWSKI ANDRZEJ & WANDA
F	300044636001	600 MOREDON RD	HOLY REDEEMER-DALE ZIPLEY
G	300044640024	1445 LONDONDERRY LN	HUANG HANGUANG & LEI BIAOHUA
H	300044640006	540 MOREDON RD	STUARD TRACY M & MANGUAL TONI
I	300039137208	1403 LLOYD RD	DAVIS VIPIN A & SELBEY G
J	300039137001	1400 LLOYD RD	STEINFELD SANDRA
K	300044652003	462 MOREDON RD	GERBERDING JULIE & ROSE DAVID
L	300044654009	448 MOREDON RD	SCOTT BETH A
M	300044660004	MOREDON RD	ROSE DAVID & GERBERDING JULIE
N	300044660409	MOREDON RD	ROSE DAVID & GERBERDING JULIE
O	300044665008	408 MOREDON RD	WANG YIYEN & MAI WAN HONG
P	300044668005	400 MOREDON RD	VULFIN JAN & LARYSA
Q	300044674008	360 MOREDON RD	DESMAN SHELLEY & CHARLI BROOKE
R	300044680002	676 MOREDON RD	KANG JUNG HEE & NANCY Y

* SEE PLAN FOR PROPERTY CODE



SHEET LIST

DESCRIPTION	SHEET
PROPERTY/RECORD PLAN	1
EXISTING SITE PLAN 1	2
EXISTING SITE PLAN 2	3
PROPOSED SITE PLAN 1	4
PROPOSED SITE PLAN 2	5
EXISTING SLOPES PLAN	6
EQUIPMENT ACCESS AREA PLAN	7
DETAILS	8
E&S CONTROL PLANS	9-10
E&S DETAILS & NOTES	11-13
LANDSCAPING PLAN	14
MISCELLANEOUS DETAILS	15

LEGEND

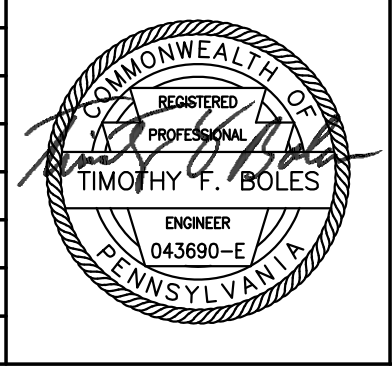
- STEEP SLOPE 15%-25%
- STEEP SLOPE 25% & OVER
- FLOOD PLAN BOUNDARY
- RIPARIAN BUFFER (ZONE 1)
- RIPARIAN BUFFER (ZONE 2)
- PROJECT AREA BOUNDARY
- UPSLOPE DRAINAGE AREA
- DRAINAGE FLOW LINE
- RIPARIAN BUFFER ENCROACHMENT
- RIPARIAN BUFFER MITIGATION

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES
3 WORKING DAYS NOTICE FOR
CONSTRUCTION PHASE AND TO WORKING
DAYS IN DESIGN STAGE - STOP CALL

PA SYSTEM, INC.
SERIAL NUMBERS: 20202661433
CALL 1-800-242-1776
CALL TYPE: DESIGN

No	Date	Description	REVISIONS



SUBMISSION TYPE:
- FINAL PLAN SUBMISSION
- MINOR PLAN SUBMISSION

ENGINEER:
Boles, Smyth Associates Inc.
Consulting Civil Engineers
2400 Chestnut Street - Philadelphia PA, 19103
215-561-2644 (P) - 215-561-0501 (F)

OWNER/DEVELOPER:
Sisters of the Redeemer
1600 Huntingdon Pike
Meadowbrook, PA 19046

PROJECT:
**SOLAR PANEL ARRAY
For Redeemer Village
(Ground Mounted)**

PROJECT ADDRESS:
**521 Moredon Road
Huntingdon Valley, PA 19006**

SHEET:
**Property Plan
Record Plan**

Project No.: 78.09
Date: 07-16-2022
Drawn by: TFB

Scale: As Noted
Checked: TFB

Dwg No.
1

GENERAL NOTES (CONTINUED):

21. THE LOCATION OF THE EXISTING UNDERGROUND UTILITIES SHOWN ON THESE PLANS HAVE BEEN TAKEN FROM EXISTING UTILITY RECORDS AVAILABLE AT THE TIME THESE PLANS WERE PREPARED AND FROM SURFACE OBSERVATION OF THE SITE. COMPLETENESS OR ACCURACY OF LOCATION AND DEPTH OF UNDERGROUND UTILITIES AND STRUCTURES IS NOT GUARANTEED. THE CONTRACTOR SHALL VERIFY LOCATIONS AND DEPTHS OF ALL UNDERGROUND UTILITIES AND STRUCTURES BEFORE THE START OF WORK.
22. ALL DIMENSIONS ARE US STANDARD MEASURE UNLESS OTHERWISE NOTED.
23. SITE CLEARING: PERFORM ALL SOLAR ARRAY INSTALLATION ACTIVITIES IN A MANNER THAT MINIMIZES EARTH DISTURBANCE AND SOIL COMPACTION. STRIPPED TOPSOIL IN ACCESS AREA IS TO BE INCORPORATED AS FILL ON THE DOWNSLOPE SIDE OF THE GRAVEL AND CONCRETE PAD AREA OR IN OTHER DESIGNATED AREAS AS INDICATED ON THE PLANS. SEE SEQUENCE OF CONSTRUCTION OUTLINED IN THE EROSION CONTROL PLANS.
24. AFTER STRIPPING TOPSOIL PROOF ROLL SUBGRADE AT GRAVEL ACCESS AREA AND CONCRETE PAD AREA PRIOR TO PLACEMENT OF STONE MATERIALS TO ASSURE PROPER COMPACTION.
25. FURNISH AGGREGATES, CONCRETE MATERIALS ONLY FROM PENNDOT APPROVED SUPPLIERS. FURNISH PENNDOT APPROVED GRADATION REPORTS AND MIX DESIGNS FOR REVIEW AND APPROVAL PRIOR TO TRANSPORTING ANY MATERIAL TO THE SITE.
26. PROVIDE TEMPORARY TRAFFIC CONTROLS IN ACCORDANCE WITH PENNDOT PUBLICATION NO. 213, TEMPORARY TRAFFIC CONTROL GUIDELINES.
27. ALL SITE WORK IS TO CONFORM TO INDUSTRY STANDARDS FOR MATERIALS AND WORKMANSHIP. DEFECTIVE WORK IS TO BE REMOVED AND REPLACED AT NO COST TO THE OWNER. PENNDOT PUBLICATION 408 AND PUBLICATION 72 (STANDARDS FOR ROADWAY CONSTRUCTION, CURRENT EDITION) ARE TO BE CONSIDERED THE BASIS FOR INDUSTRY STANDARDS. THE FOLLOWING SECTIONS ARE INCLUDED BY REFERENCE:

- 212 GEOTEXTILES
- 350 SUBBASE
- 701 CEMENT
- 703 AGGREGATE
- 704 CEMENT CONCRETE

- 709 REINFORCEMENT STEEL
- 711 CONCRETE CURING MATERIAL AND ADMIXTURES
- 735 GEOTEXTILES
- 804 SEEDING AND SOIL SUPPLEMENTS
- 805 MULCHING
- 855 PUMPED WATER FILTER BAG
- 867 COMPOST FILTER SOCK

COMPANY:		UTILITY CONTACT LIST:		COMPANY:	
CROWN CASTLE	ADDRESS: 1500 CORPORATE DR CANONSBURG, PA. 15317	AQUA PENNSYLVANIA INC	ADDRESS: 762 W LANCASTER AVE BRYN MAWR, PA. 19010	VERIZON BUSINESS FORMERLY MCI	ADDRESS: 400 INTERNATIONAL PARKWAY RICHARDSON, TX. 75081
CONTACT: TYLER STEIN	EMAIL: tyler.stein@crowncastle.com	CONTACT: STEVE PIZZI	EMAIL: sbpizzi@aquamerica.com	CONTACT: DEAN BOYERS	EMAIL: investigations@verizon.com
COMCAST	ADDRESS: 4400 WAYNE AVENUE PHILADELPHIA, PA. 19140	PECO ENERGY C/O USIC	ADDRESS: 450 S HENDERSON RD SUITE B KING OF PRUSSIA, PA. 19406	VERIZON PENNSYLVANIA LLC	ADDRESS: 1050 VIRGINIA DR FORT WASHINGTON, PA. 19034
CONTACT: ROBERT HARVEY	EMAIL: bob_harvey@cable.comcast.com	CONTACT: NIKKIA SIMPKINS	EMAIL: NIKKIASIMPKINSUSICLLC.COM	CONTACT: DARLINE LEPPERD JOHNSON	
COMCAST	ADDRESS: 4400 WAYNE AVENUE PHILADELPHIA, PA. 19140	CENTURY LINK	ADDRESS: 1025 ELDORADO BLVD BROOMFIELD, CO. 80021	ABINGTON TOWNSHIP OF	ADDRESS: 1176 OLD YORK ROAD ABINGTON, PA. 19001
CONTACT: ROBERT HARVEY	EMAIL: bob_harvey@cable.comcast.com	CONTACT: CENTURY LINK OPERATOR	EMAIL: RELOCATIONS@LUMEN.COM	CONTACT: TIM CLARK	EMAIL: TCLARK@ABINGTON.ORG

SOILS INFORMATION						
MAP SYMBOL -->	MaB	MaC	MaD	MaE	GsB	Ha
Mapunit Name	Manor loam, 3-8%	Manor loam, 8-15%	Manor loam, 15-25%	Manor loam, 25-35%	Glenville silt loam, 3-8%	Hatboro silt loam
Component Name	Manor	Manor	Manor	Manor	Glenville	Hatboro
Drainage Class	Well drained	Well drained	Well drained	Well drained	Moderately Well drained	Poorly drained
Depth to restrictive layer (bedrock)	72 to 99 inches	59 to 128 inches	59 to 128 inches	60-100 in to paralitich BR	29-31 in. to fragipan	60 to 99 in. to lithic BR
Depth to water table	More than 80 in.	More than 80 in.	More than 80 in.	More than 80 in.	18 to 22 inches	0 to 6 inches
Bearing Value (from Geotechnical report)	3,000 PSF	3,000 PSF	3,000 PSF	3,000 PSF	-	-

SOIL LIMITATIONS															
SOIL NAME	CUTBANKS CAVE	CORROSIVE TO CONCRETE/STEEL	DROUGHTY	EASILY ERODIBLE	FLOODING	DEPTH TO SATURATED ZONE/SEASONAL HIGH HYDRIC/HYDRIC INCLUSIONS	LOW STRENGTH/ LANDSLIDE PRONE	SLOW PERCOLATION	PIPING	POOR SOURCE OF TOPSOIL	FROST ACTION	SHRINK - SWELL	POTENTIAL SINKHOLE	PONDING	WETNESS
Glenville	X	C/S				X	X	X	X	X	X				X
Manor	X	C		X		X	X	X	X	X	X				
Hatboro	X	C/S			X	X	X	X	X	X	X				X

LEGEND

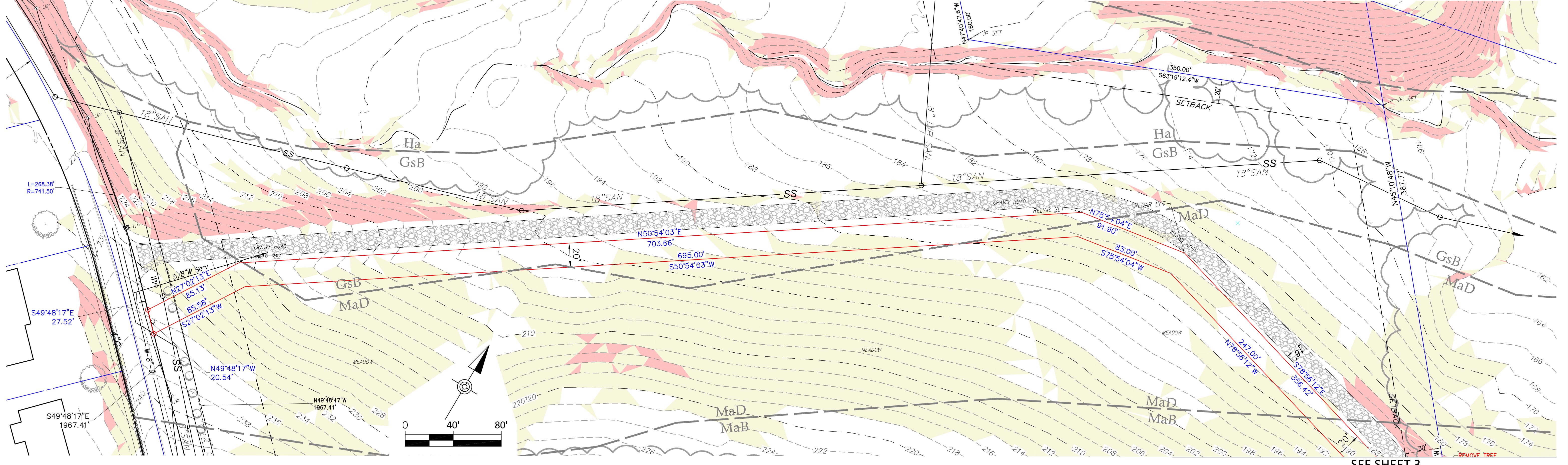
--- SOIL TYPE BOUNDARY

MaB SOIL TYPE

--- STEEP SLOPE 15%-25%

--- STEEP SLOPE 25% & OVER

--- UPSLOPE DRAINAGE AREA



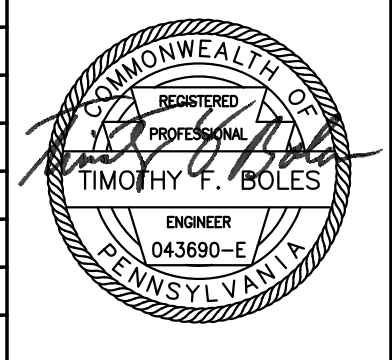
File: Solar_Sht_1-3_Ext_Site.dwg Plotted: 8/16/22 at 2:50pm By: TFBoles1

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE - STOP CALL

PA SYSTEM, INC. SERIAL NUMBERS: 20202661433 CALL TYPE: DESIGN CALL 1-800-242-1776

No	Date	Description	REVISIONS



SUBMISSION TYPE:
- FINAL PLAN SUBMISSION
- MINOR PLAN SUBMISSION

ENGINEER:
Boles, Smyth Associates Inc.
Consulting Civil Engineers
2400 Chestnut Street - Philadelphia PA, 19103
215-561-2644 (P) - 215-561-0501 (F)

OWNER/DEVELOPER:
Sisters of the Redeemer
1600 Huntingdon Pike
Meadowbrook, PA 19046

PROJECT:
SOLAR PANEL ARRAY For Redeemer Village (Ground Mounted)

PROJECT ADDRESS:
**521 Moredon Road
Huntingdon Valley, PA 19006**

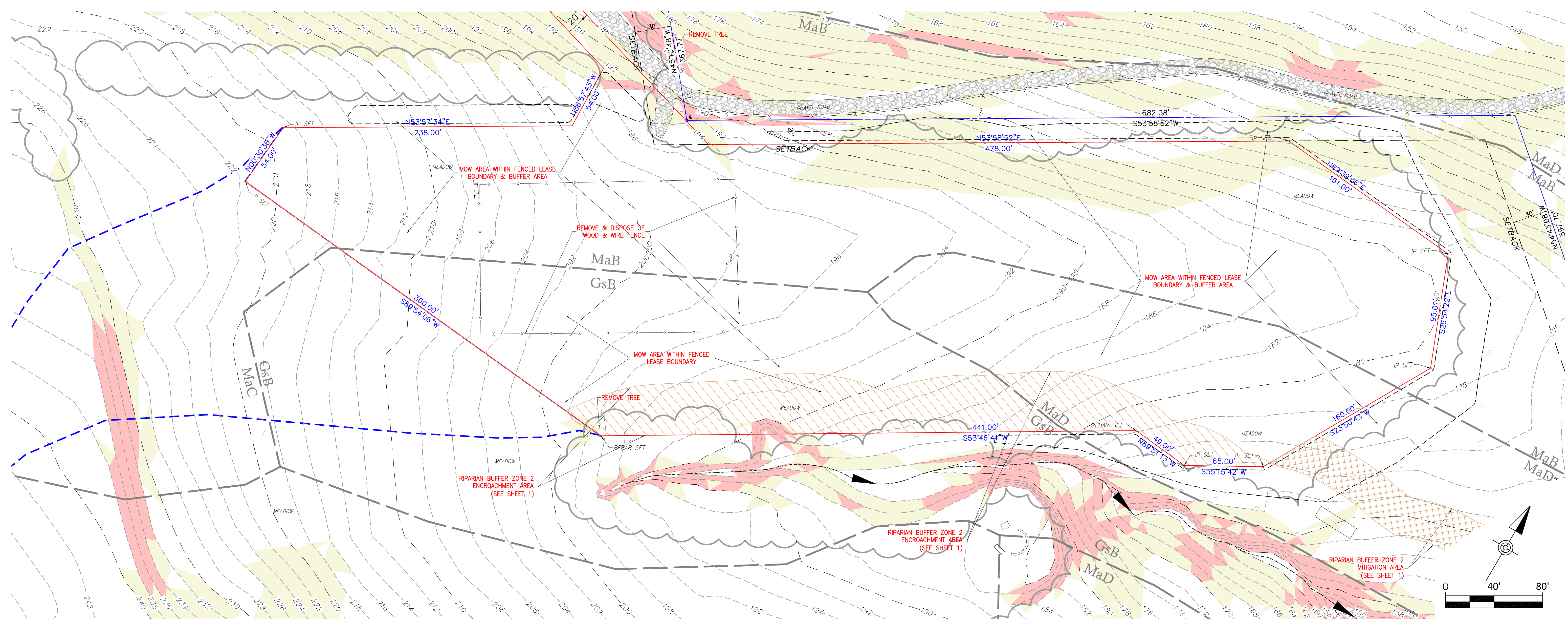
SHEET:
Existing Site Plan 1

Project No.: 78.09
Date: 07-16-2022
Drawn by: TFB
Scale: As Noted
Checked: TFB

Dwg No.
2

- LEGEND**
- SOIL TYPE BOUNDARY
 - MaB SOIL TYPE
 - STEEP SLOPE 15%-25%
 - STEEP SLOPE 25% & OVER
 - - - UPSLOPE DRAINAGE AREA
 - - - DRAINAGE FLOW LINE
 - ▨ RIPARIAN BUFFER ENCROACHMENT
 - ▨ RIPARIAN BUFFER MITIGATION

NOTES:
 1. REMOVE ONLY LIVE TREES THAT ARE INDICATED TO BE REMOVED.
 REMOVE DEAD TREES AND BRANCHES AS NECESSARY AND AS DIRECTED.

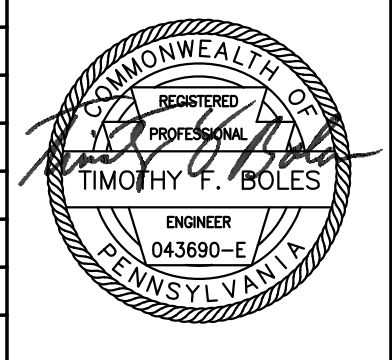


File: Solar_Sht_1-3_Ext_Site.dwg Plotted: 8/16/22 at 1:28pm By: TFBoles1

CALL BEFORE YOU DIG!
 PENNSYLVANIA LAW REQUIRES
 3 WORKING DAYS NOTICE FOR
 CONSTRUCTION PHASE AND 10 WORKING
 DAYS IN DESIGN STAGE - STOP CALL

PA
 SYSTEM, INC.
 SERIAL NUMBERS: 20202661433
 CALL TYPE: DESIGN
 CALL 1-800-242-1776

No	Date	Description	REVISIONS



SUBMISSION TYPE:
 - FINAL PLAN SUBMISSION
 - MINOR PLAN SUBMISSION

ENGINEER:

Boles, Smyth Associates Inc.
 Consulting Civil Engineers
 2400 Chestnut Street - Philadelphia PA, 19103
 215-561-2644 (P) - 215-561-0501 (F)

OWNER/DEVELOPER:
Sisters of the Redeemer
 1600 Huntingdon Pike
 Meadowbrook, PA 19046

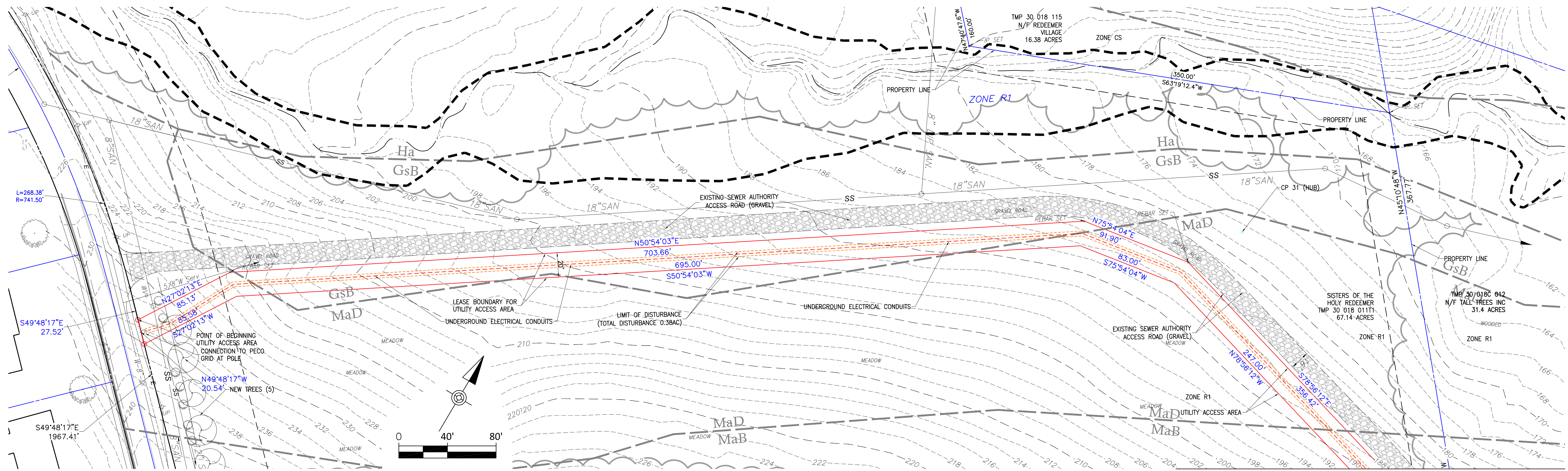
PROJECT:
**SOLAR PANEL ARRAY
 For Redeemer Village
 (Ground Mounted)**

PROJECT ADDRESS:
**521 Moredon Road
 Huntingdon Valley, PA 19006**

SHEET:
Existing Site Plan 2

Project No.: 78.09
 Date: 07-16-2022
 Drawn by: TFB
 Scale: As Noted
 Checked: TFB

Dwg No.
3

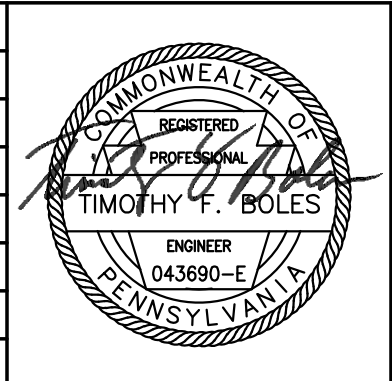


File: Solor_Sht_4-5_Pr_Site.dwg Plotted: 8/16/22 at 1:17pm By: TFBoles1

CALL BEFORE YOU DIG!
 PENNSYLVANIA LAW REQUIRES
 3 WORKING DAYS NOTICE FOR
 CONSTRUCTION PHASE AND 10 WORKING
 DAYS IN DESIGN STAGE - STOP CALL

PA SYSTEM, INC.
 SERIAL NUMBERS: 20202661433
 CALL TYPE: DESIGN
 CALL 1-800-242-1776

No	Date	Description	REVISIONS



SUBMISSION TYPE:
 - FINAL PLAN SUBMISSION
 - MINOR PLAN SUBMISSION

ENGINEER:

Boles, Smyth Associates Inc.
 Consulting Civil Engineers
 2400 Chestnut Street - Philadelphia PA, 19103
 215-561-2644 (P) - 215-561-0501 (F)

OWNER/DEVELOPER:
Sisters of the Redeemer
 1600 Huntingdon Pike
 Meadowbrook, PA 19046

PROJECT:
**SOLAR PANEL ARRAY
 For Redeemer Village
 (Ground Mounted)**

PROJECT ADDRESS:
**521 Moredon Road
 Huntingdon Valley, PA 19006**

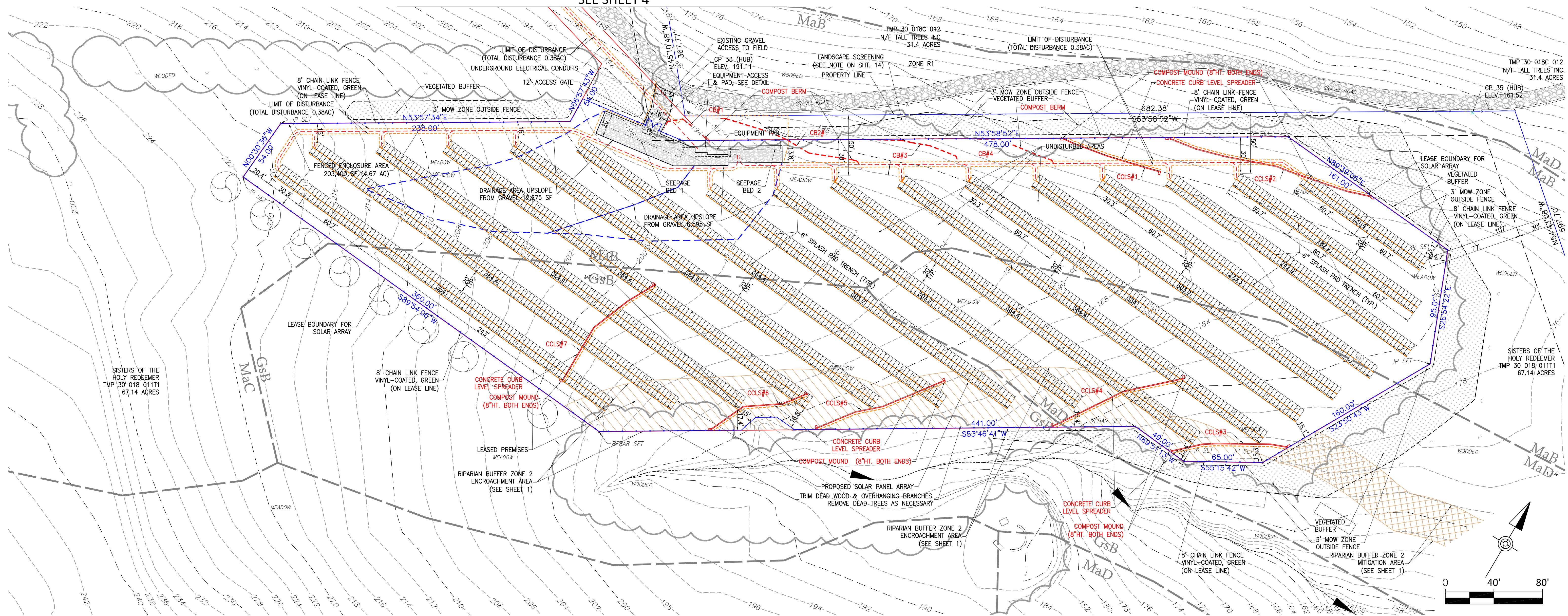
SHEET:
Proposed Site Plan 1

Project No.: 78.09
 Date: 07-16-2022 Scale: As Noted
 Drawn by: TFB Checked: TFB

Dwg No.
4

SEE SHEET 5

SEE SHEET 4

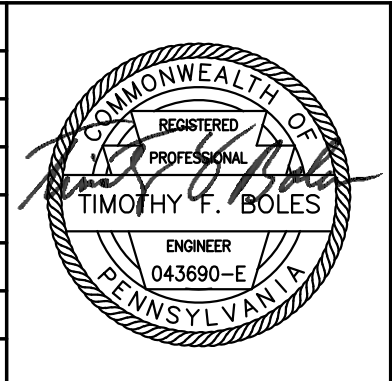


File: Solar_Sht_4-5_Pr_Site.dwg Plotted: 8/16/22 at 1:20pm By: TFBoles1

CALL BEFORE YOU DIG!
 PENNSYLVANIA LAW REQUIRES
 3 WORKING DAYS NOTICE FOR
 CONSTRUCTION PHASE AND 10 WORKING
 DAYS IN DESIGN STAGE - STOP CALL

PA SYSTEM, INC.
 SERIAL NUMBERS: 20202661433
 CALL TYPE: DESIGN
 CALL 1-800-242-1776

No	Date	Description	REVISIONS



SUBMISSION TYPE:
 - FINAL PLAN SUBMISSION
 - MINOR PLAN SUBMISSION

ENGINEER:

Boles, Smyth Associates Inc.
 Consulting Civil Engineers
 2400 Chestnut Street - Philadelphia PA, 19103
 215-561-2644 (P) - 215-561-0501 (F)

OWNER/DEVELOPER:
Sisters of the Redeemer
 1600 Huntingdon Pike
 Meadowbrook, PA 19046

PROJECT:
**SOLAR PANEL ARRAY
 For Redeemer Village
 (Ground Mounted)**

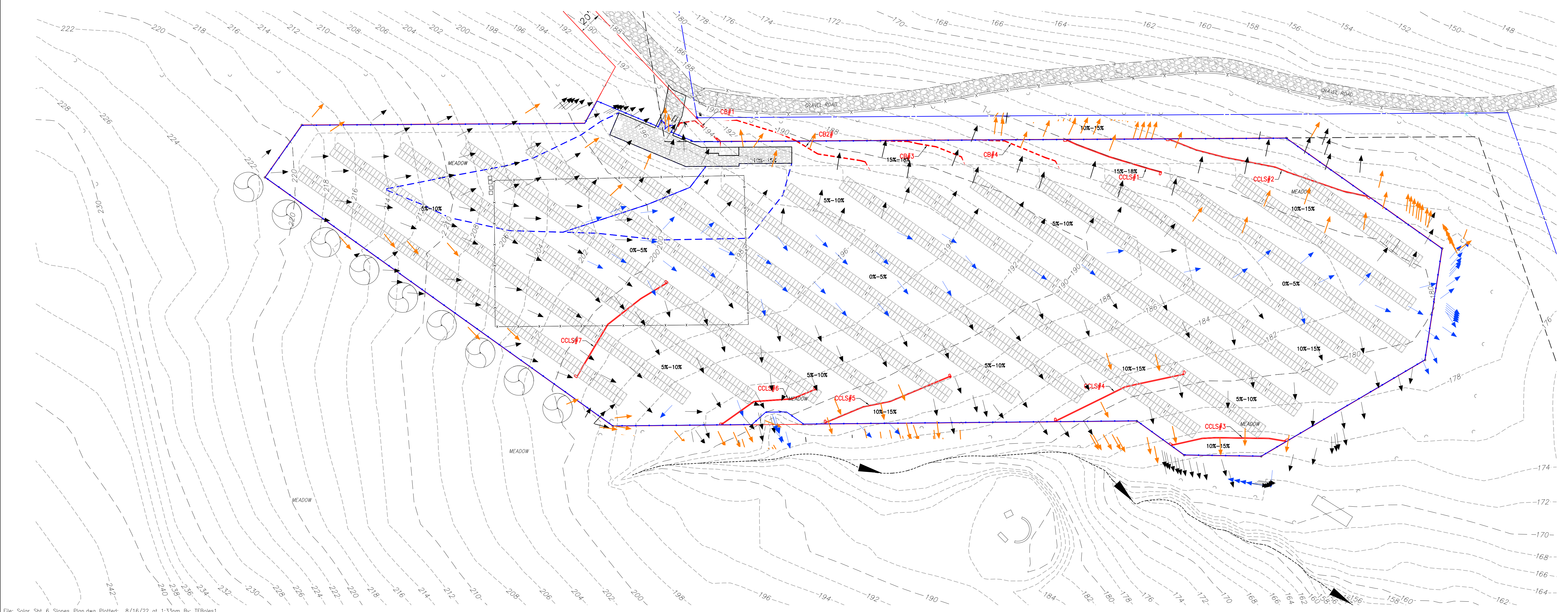
PROJECT ADDRESS:
**521 Moredon Road
 Huntingdon Valley, PA 19006**

SHEET:
Proposed Site Plan 2

Project No.: 78.09
 Date: 07-16-2022
 Drawn by: TFB
 Scale: As Noted
 Checked: TFB

Dwg No.
5

- SLOPE ARROW LEGEND**
- 0% - 5%
 - 5% - 10%
 - 10% - 15%
 - 15% - 18%

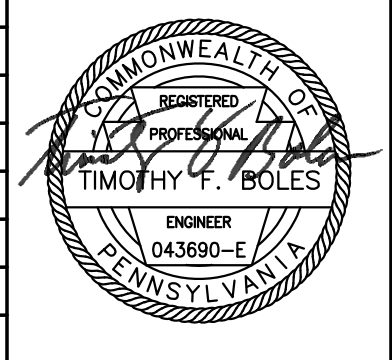


File: Solar_Sht_6_Slopes_Plan.dwg Plotted: 8/16/22 at 1:33pm By: TFBoles1

CALL BEFORE YOU DIG!
 PENNSYLVANIA LAW REQUIRES
 3 WORKING DAYS NOTICE FOR
 CONSTRUCTION PHASE AND 10 WORKING
 DAYS IN DESIGN STAGE - STOP CALL

PA
 SYSTEM, INC.
 SERIAL NUMBERS: 20202661433
 CALL TYPE: DESIGN
 CALL 1-800-242-1776

No	Date	Description	REVISIONS



SUBMISSION TYPE:
 - FINAL PLAN SUBMISSION
 - MINOR PLAN SUBMISSION

ENGINEER:

Boles, Smyth Associates Inc.
 Consulting Civil Engineers
 2400 Chestnut Street - Philadelphia PA, 19103
 215-561-2644 (P) - 215-561-0501 (F)

OWNER/DEVELOPER:
Sisters of the Redeemer
 1600 Huntingdon Pike
 Meadowbrook, PA 19046

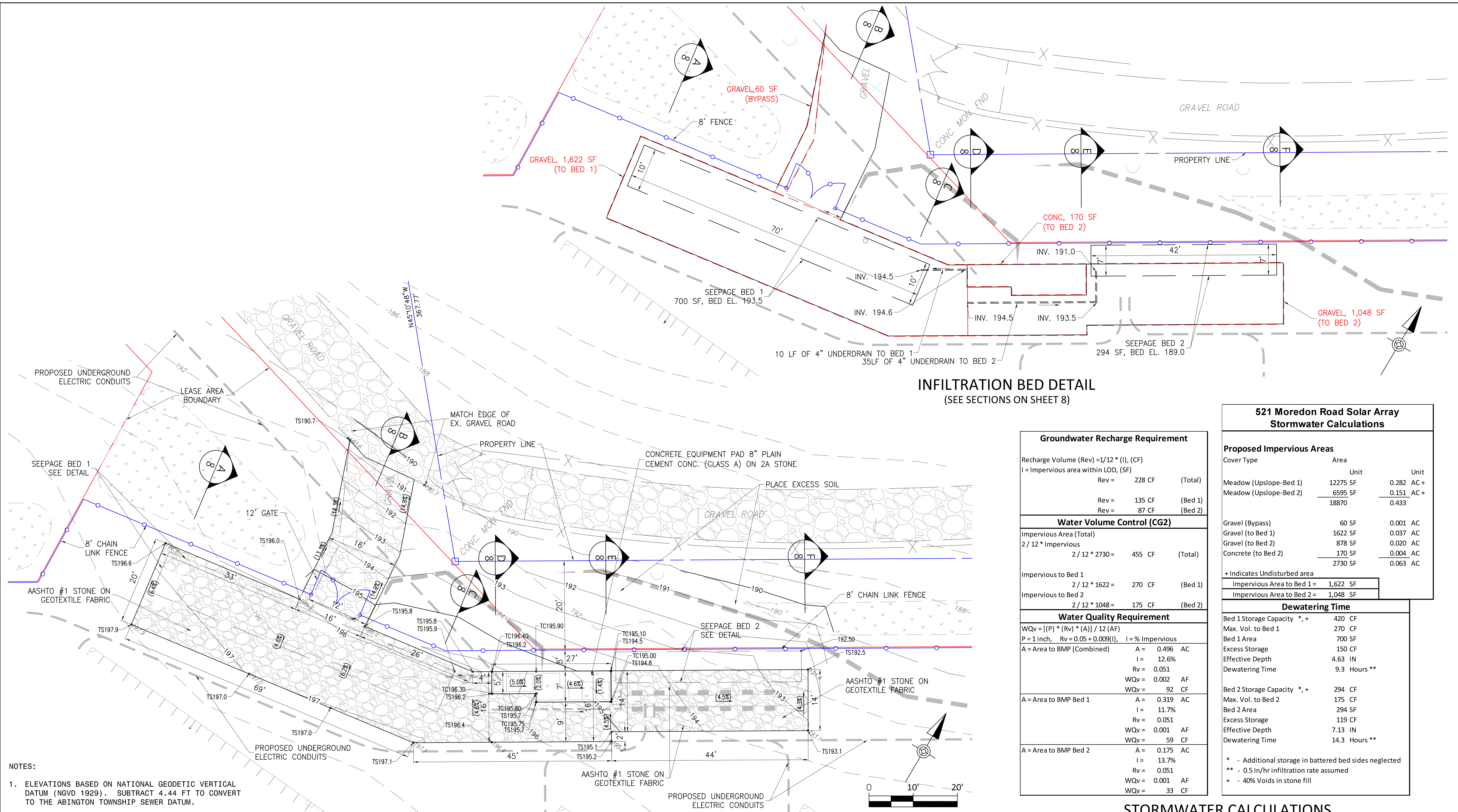
PROJECT:
**SOLAR PANEL ARRAY
 For Redeemer Village
 (Ground Mounted)**

PROJECT ADDRESS:
**521 Moredon Road
 Huntingdon Valley, PA 19006**

SHEET:
Existing Slopes Plan

Project No.: 78.09
 Date: 07-16-2022
 Drawn by: TFB
 Scale: As Noted
 Checked: TFB

Dwg No.
6



INFILTRATION BED DETAIL
(SEE SECTIONS ON SHEET 8)

GRADING DETAIL

Groundwater Recharge Requirement		
Recharge Volume (Rev) = 1/12 * (I), (CF)		
I = Impervious area within LOD, (SF)		
Rev =	228 CF	(Total)
Rev =	135 CF	(Bed 1)
Rev =	87 CF	(Bed 2)
Water Volume Control (CG2)		
Impervious Area (Total)		
2 / 12 * Impervious	2 / 12 * 2730 =	455 CF (Total)
Impervious to Bed 1		
2 / 12 * 1622 =	270 CF	(Bed 1)
Impervious to Bed 2		
2 / 12 * 1048 =	175 CF	(Bed 2)
Water Quality Requirement		
WQv = [(P) * (Rv) * (A)] / 12 (AF)		
P = 1 inch, Rv = 0.05 + 0.009(I), I = % Impervious		
A = Area to BMP (Combined)	A = 0.496 AC	
	I = 12.6%	
	Rv = 0.051	
	WQv = 0.002 AF	
	WQv = 92 CF	
A = Area to BMP Bed 1	A = 0.319 AC	
	I = 11.7%	
	Rv = 0.051	
	WQv = 0.001 AF	
	WQv = 59 CF	
A = Area to BMP Bed 2	A = 0.175 AC	
	I = 13.7%	
	Rv = 0.051	
	WQv = 0.001 AF	
	WQv = 33 CF	

521 Moredon Road Solar Array Stormwater Calculations		
Proposed Impervious Areas		
Cover Type	Area	Unit
Meadow (Upslope-Bed 1)	12275 SF	0.282 AC +
Meadow (Upslope-Bed 2)	6595 SF	0.151 AC +
	18870	0.433
Gravel (Bypass)	60 SF	0.001 AC
Gravel (to Bed 1)	1622 SF	0.037 AC
Gravel (to Bed 2)	878 SF	0.020 AC
Concrete (to Bed 2)	170 SF	0.004 AC
	2730 SF	0.063 AC
+ Indicates Undisturbed area		
Impervious Area to Bed 1 =	1,622 SF	
Impervious Area to Bed 2 =	1,048 SF	
Dewatering Time		
Bed 1 Storage Capacity *, +	420 CF	
Max. Vol. to Bed 1	270 CF	
Bed 1 Area	700 SF	
Excess Storage	150 CF	
Effective Depth	4.63 IN	
Dewatering Time	9.3 Hours **	
Bed 2 Storage Capacity *, +	294 CF	
Max. Vol. to Bed 2	175 CF	
Bed 2 Area	294 SF	
Excess Storage	119 CF	
Effective Depth	7.13 IN	
Dewatering Time	14.3 Hours **	
* - Additional storage in battered bed sides neglected		
** - 0.5 in/hr infiltration rate assumed		
+ - 40% Voids in stone fill		

STORMWATER CALCULATIONS

NOTES:
1. ELEVATIONS BASED ON NATIONAL GEODETIC VERTICAL DATUM (NGVD 1929). SUBTRACT 4.44 FT TO CONVERT TO THE ABINGTON TOWNSHIP SEWER DATUM.

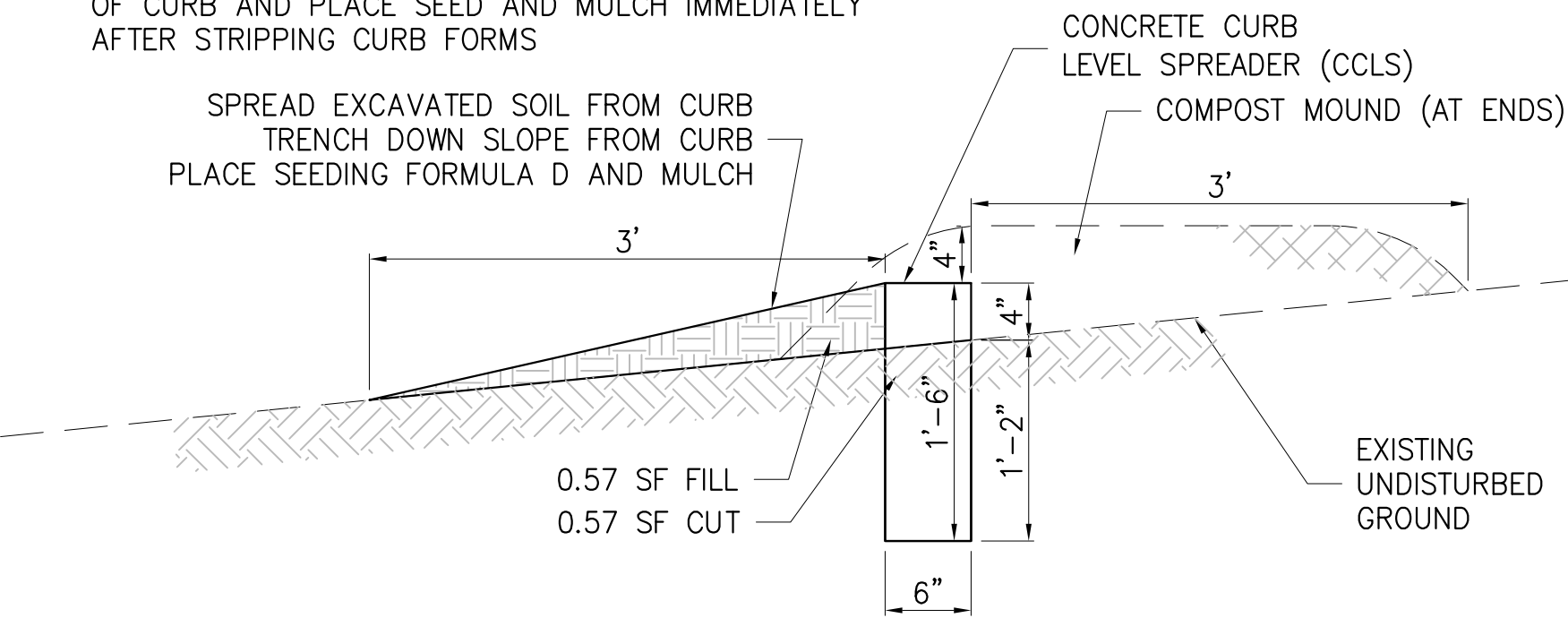
File: Solar_Sht_7_Access_Prof.dwg Plotted: 8/16/22 at 1:36pm By: TFBales1

<p>CALL BEFORE YOU DIG!</p> <p>PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE - STOP CALL</p> <p>PA SYSTEM, INC. SERIAL NUMBERS: 20202661433 CALL TYPE: DESIGN CALL 1-800-242-1776</p>		<p>SUBMISSION TYPE: - FINAL PLAN SUBMISSION - MINOR PLAN SUBMISSION</p>	<p>ENGINEER: Boles, Smyth Associates Inc. Consulting Civil Engineers 2400 Chestnut Street - Philadelphia PA, 19103 215-561-2644 (P) - 215-561-0501 (F)</p>	<p>OWNER/DEVELOPER: Sisters of the Redeemer 1600 Huntingdon Pike Meadowbrook, PA 19046</p>	<p>PROJECT: SOLAR PANEL ARRAY For Redeemer Village (Ground Mounted)</p>	<p>SHEET: Equipment Access Area Plan</p>						
		<table border="1"> <thead> <tr> <th>No</th> <th>Date</th> <th>Description</th> <th>REVISIONS</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	No	Date	Description	REVISIONS					<p>PROJECT ADDRESS: 521 Moredon Road Huntingdon Valley, PA 19006</p>	<p>Project No.: 78.09 Date: 07-16-2022 Drawn by: TFB</p>
No	Date	Description	REVISIONS									

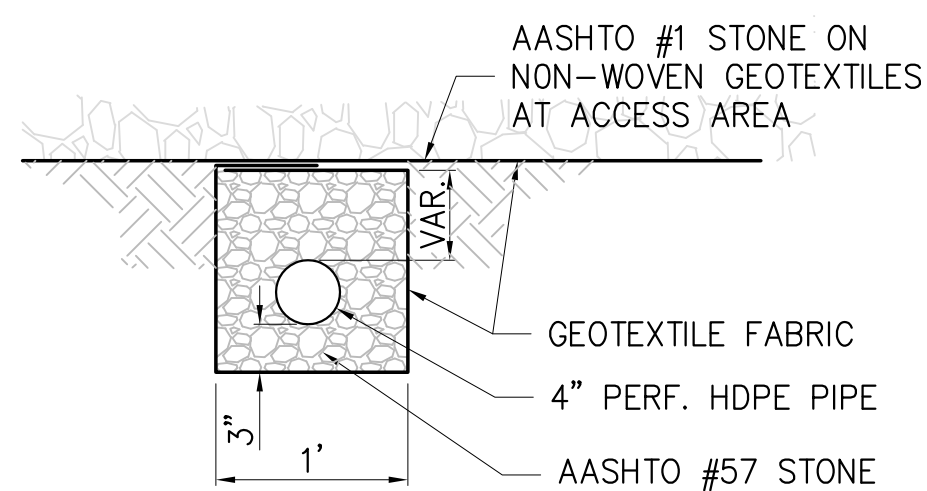
CONCRETE LEVEL SPREADER NOTES:

1. STAKE OUT CURB LEVEL SPREADER ALIGNMENT TO FOLLOW UNIFORM CONTOUR ELEVATION. COORDINATE PANEL INSTALLATION CURB LEVEL SPREADER INSTALLATION.
2. SET TOP OF CURB HEIGHT AT 4 INCHES ABOVE GRADE ON UPSLOPE SIDE OF CURB.
3. TOP OF CURB TO BE DEAD LEVEL FOR FULL LENGTH EVEN AT LOCATIONS WHERE IRREGULARITIES IN THE GROUND MAY OCCUR.
4. PLACE 8" HIGH COMPOST MOUND AT ENDS OF CURB TO PREVENT RUNOFF FROM FLOWING AROUND ENDS.
5. REGRADE WASTE SOIL WITHIN 3' OF DOWNSLOPE SIDE OF CURB AND PLACE SEED AND MULCH IMMEDIATELY AFTER STRIPPING CURB FORMS

CONC. CURB LEVEL SPREADERS			
NO.	GROUND EL.	CURB EL.	LEN. (LF)
CCLS#1	180	180.33	85
CCLS#2	176	176.33	175
CCLS#3	175.5	175.83	100
CCLS#4	181	181.33	115
CCLS#5	188	188.33	110
CCLS#6	191	191.33	90
CCLS#7	199	199.33	110

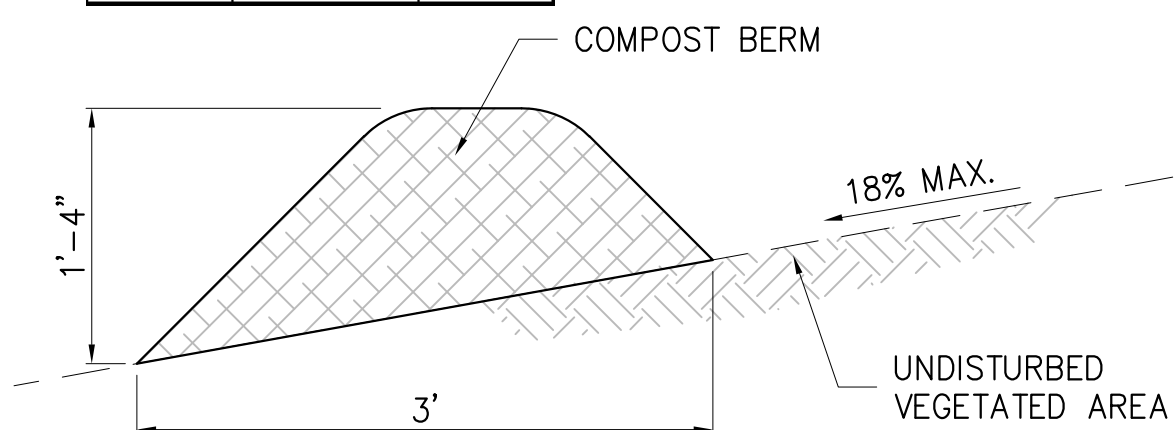


CONCRETE CURB LEVEL SPREADER

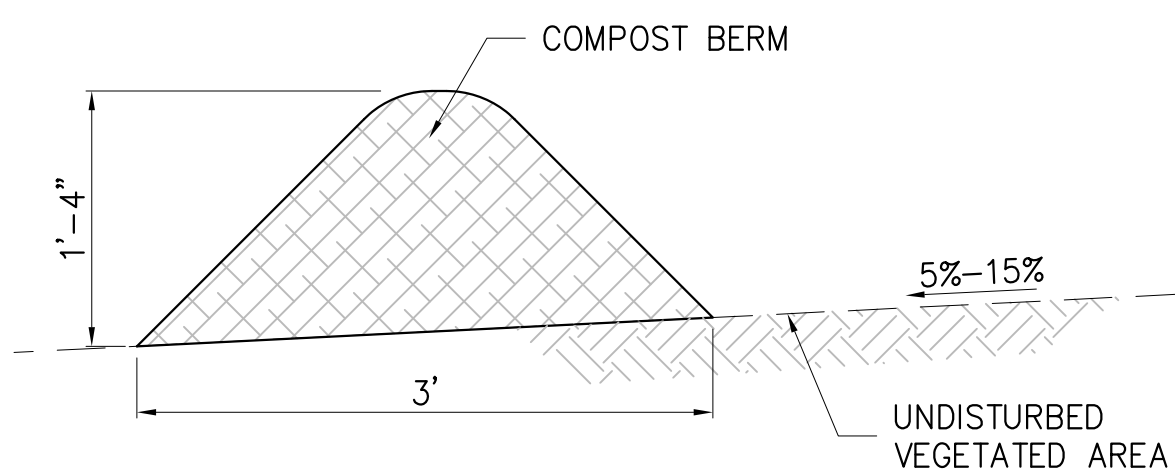


UNDERDRAIN DETAIL

COMPOST BERMS		
NO.	GROUND EL.	LEN. (LF)
CB#1	194	85
CB#2	191	175
CB#3	187	80
CB#4	183	75



MAXIMUM SLOPE CONDITION



TYPICAL SLOPE CONDITION

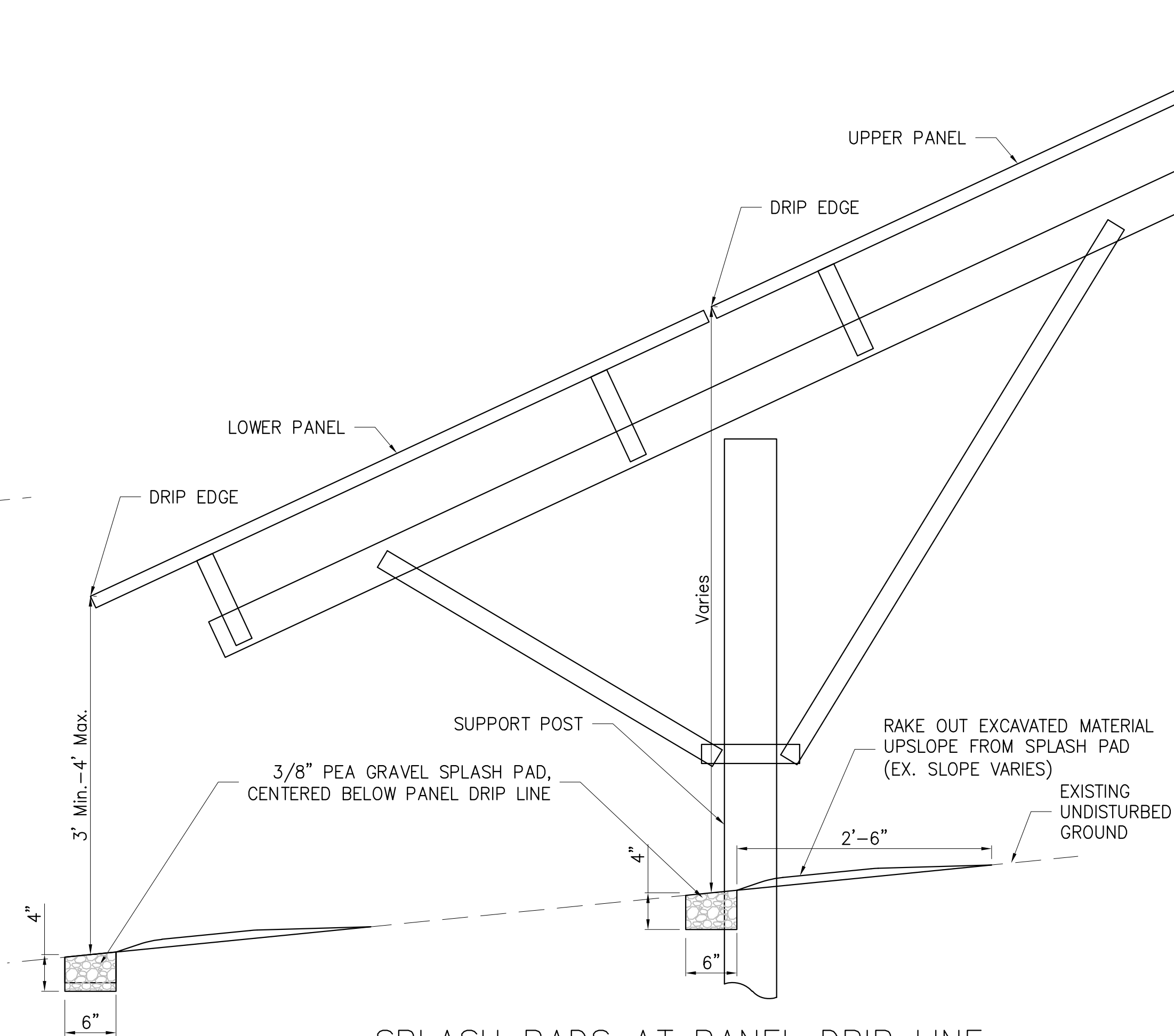
COMPOST BERM DETAIL

COMPOST BERM NOTES:

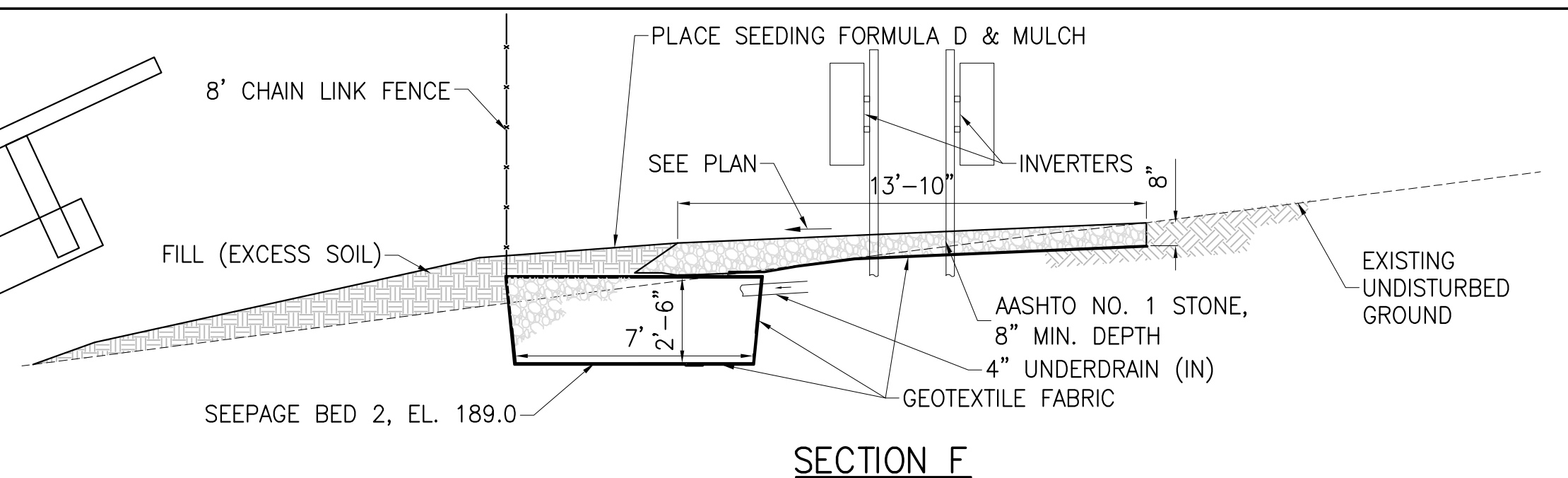
1. PLACE COMPOST BERMS WHERE INDICATED ON PLANS TO DISSIPATE POTENTIAL CONCENTRATED FLOWS PROMOTE INFILTRATION OF STORMWATER RUNOFF FROM THE SITE.
2. COMPOST BERMS TO BE INSTALLED PARALLEL TO CONTOUR GRADE THEN TURNED AND EXTENDED ONE FOOT UPSLOPE AT ENDS TO CONTAIN RUNOFF.
3. COMPOST BERMS TO BE 1 FOOT 4 INCHES HIGH AND 3 FEET WIDE.
4. MOW VEGETATION TO 6" HEIGHT PRIOR TO PLACING COMPOST BERMS.

SEQUENCE OF CONSTRUCTION FOR COMPOST BERM PLACEMENT:

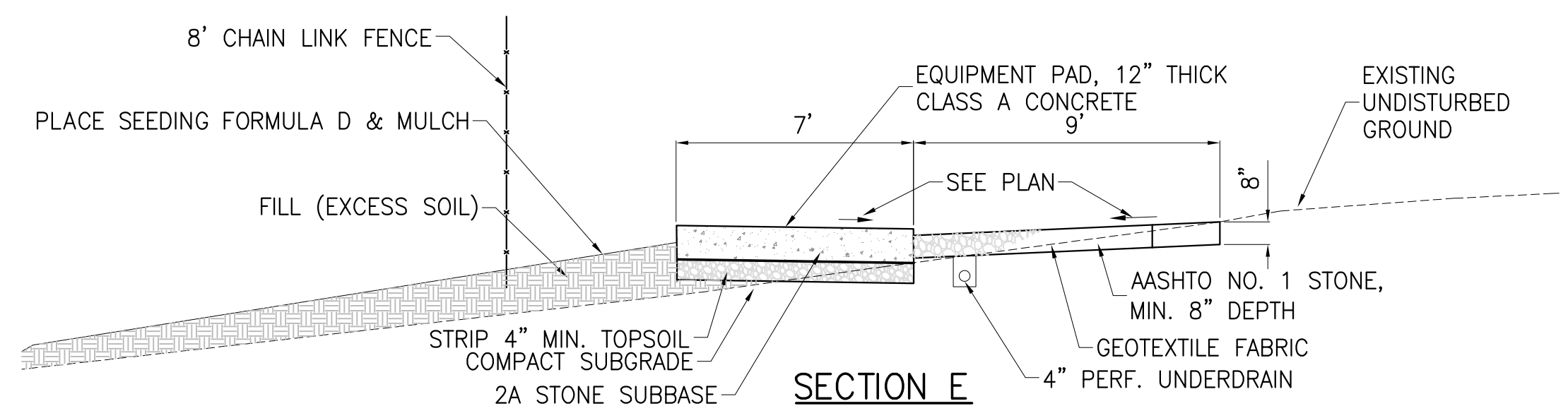
1. STAKE OUT BERM LOCATION AND PLACE ROW OF STAKES AND/OR PAINT MARKINGS ALONG THE CONTOUR ELEVATION OF THE COMPOST BERMS.
2. MOW VEGETATION WITHIN TO APPROXIMATELY 6 INCHES IN HEIGHT PRIOR TO PLACING COMPOST.
3. STAKE OUT UPSLOPE TERMINATIONS AT ENDS TO AT LEAST ONE FOOT ABOVE THE LEVEL PORTION.
4. REVIEW THE BERM STAKE OUT WITH THE OWNER'S REPRESENTATIVE PRIOR TO PLACEMENT OF COMPOST BERMS.
5. UPON ACCEPTANCE, COMPLETE PLACEMENT OF COMPOST BERMS.



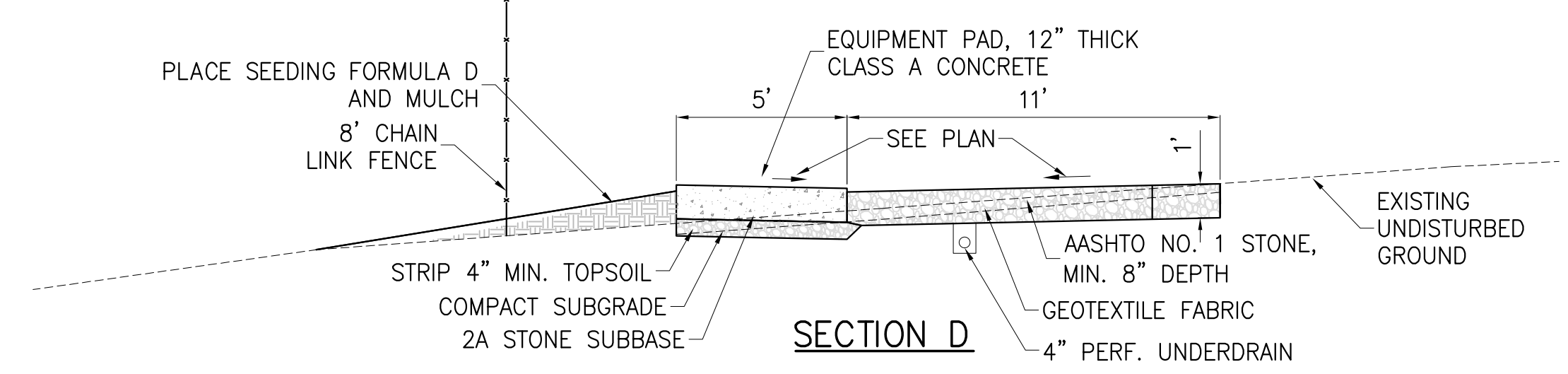
SPLASH PADS AT PANEL DRIP LINE



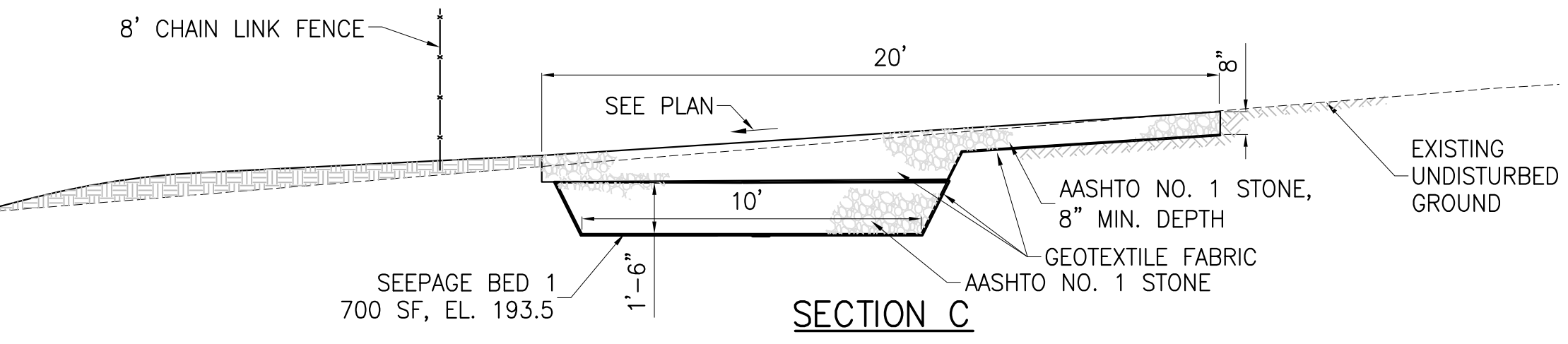
SECTION F



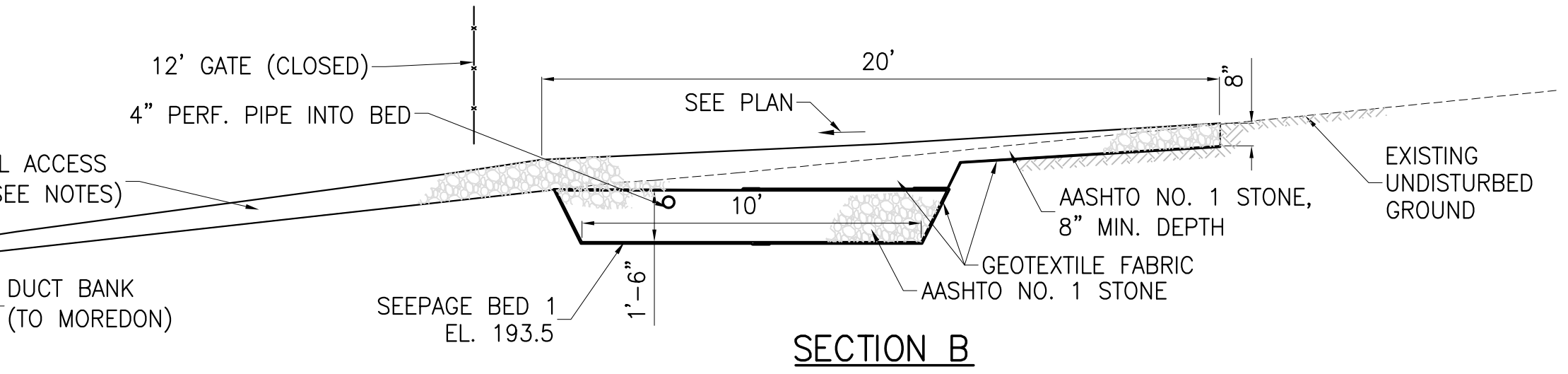
SECTION E



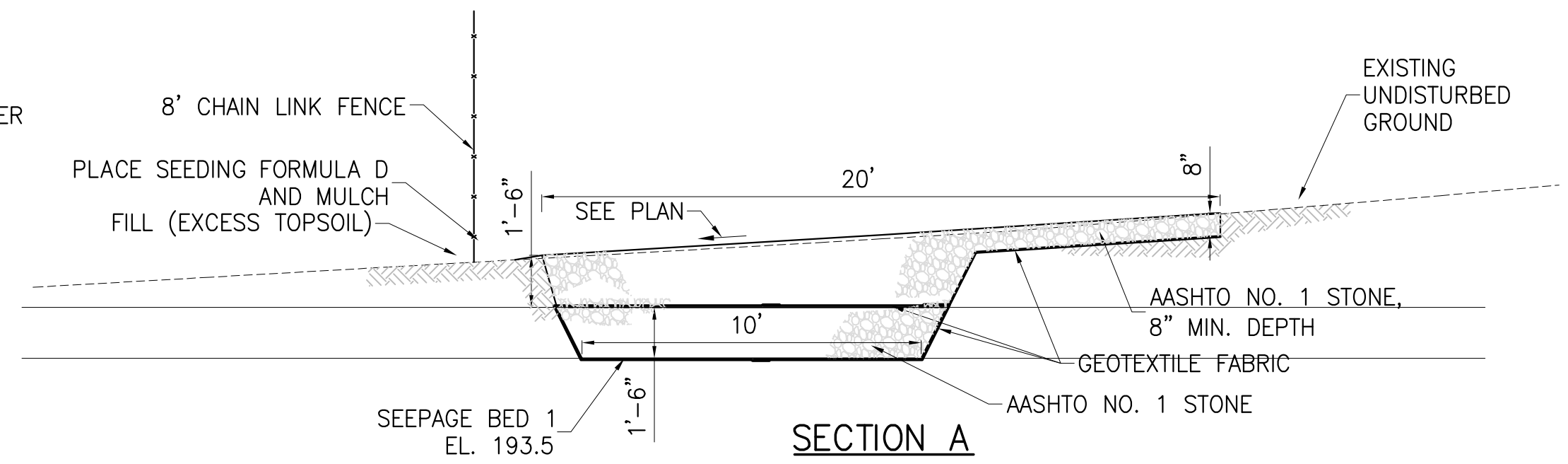
SECTION D



SECTION C



SECTION B



SECTION A

NOTES:

1. WHERE EXISTING ACCESS AREA CURRENTLY HAS GRAVEL STABILIZATION PLACE ADDITIONAL STONE OVER EXISTING STABILIZATION.
2. WHERE WIDENING OF EXISTING ACCESS IS REQUIRED INTO VEGETATED AREAS, STRIP 4" TOPSOIL, PLACE GEOTEXTILE FABRIC AND 8" MIN STONE.

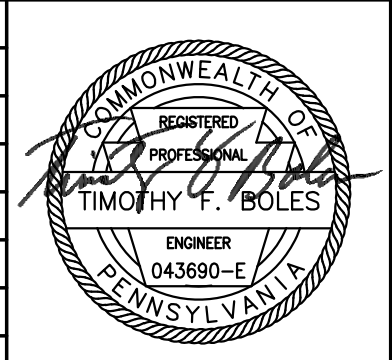
File: Solar_Sht_8_Details.dwg Plotted: 8/16/22 at 1:38pm By: TFBoles1

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE - STOP CALL

PA SYSTEM, INC. SERIAL NUMBERS: 20202661433 CALL TYPE: DESIGN CALL 1-800-242-1776

No	Date	Description	REVISIONS



SUBMISSION TYPE:
- FINAL PLAN SUBMISSION
- MINOR PLAN SUBMISSION

ENGINEER:
Boles, Smyth Associates Inc.
Consulting Civil Engineers
2400 Chestnut Street - Philadelphia PA, 19103
215-561-2644 (P) - 215-561-0501 (F)

OWNER/DEVELOPER:
Sisters of the Redeemer
1600 Huntingdon Pike
Meadowbrook, PA 19046

PROJECT:
SOLAR PANEL ARRAY For Redeemer Village (Ground Mounted)

PROJECT ADDRESS:
521 Moredon Road
Huntingdon Valley, PA 19006

SHEET:
Details

Project No.: 78.09
Date: 07-16-2022
Drawn by: TFB
Scale: As Noted
Checked: TFB

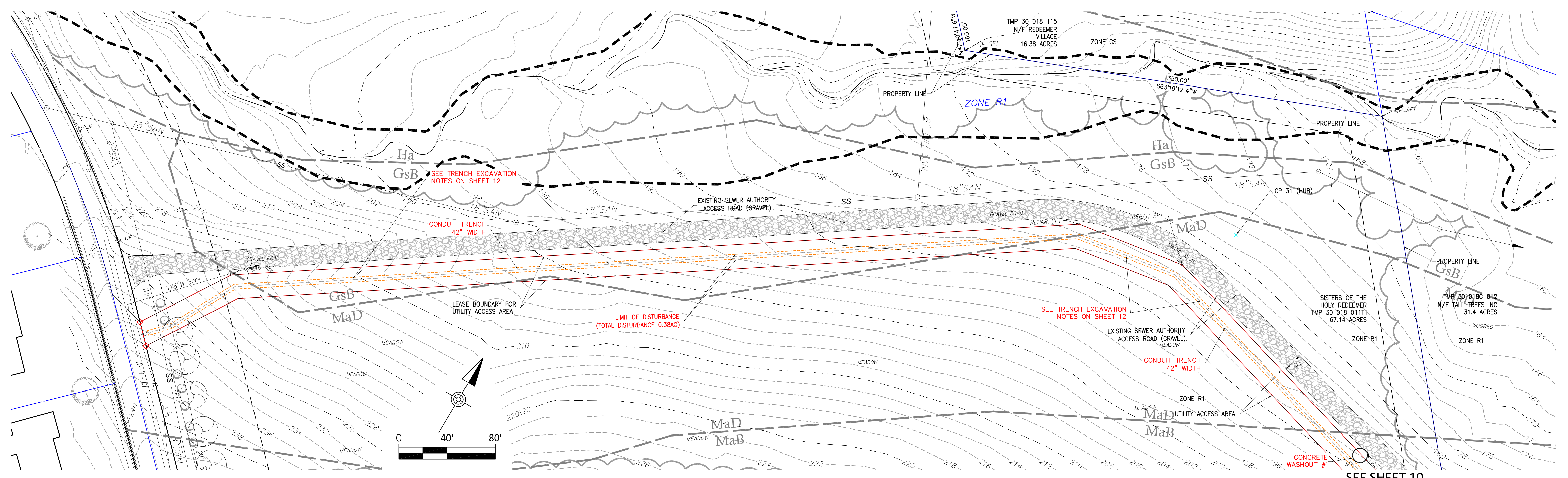
Dwg No. **8**

NOTES:

1. PROVIDE CONCRETE WASHOUT IF CONCRETE TRUCKS ARE TO BE WASHED OUT ON THE SITE.
2. SEE TRENCH EXCAVATION NOTES ON SHEET 12.
3. PROVIDE ADDITIONAL COMPOST FILTER SOCK DOWNSLOPE OF ANY UNFORESEEN EARTH DISTURBANCE.

LEGEND

- SOIL TYPE BOUNDARY
- MaB SOIL TYPE
- CFS --- COMPOST FILTER SOCK
- LIMIT OF DISTURBANCE
- CONCRETE WASHOUT

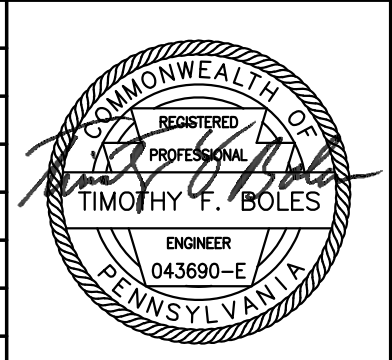


File: Solar_Sht_9-10_E&S_Plan.dwg Plotted: 8/16/22 at 1:43pm By: TFBoles1

CALL BEFORE YOU DIG!
 PENNSYLVANIA LAW REQUIRES
 3 WORKING DAYS NOTICE FOR
 CONSTRUCTION PHASE AND 10 WORKING
 DAYS IN DESIGN STAGE - STOP CALL

PA
 SYSTEM, INC.
 SERIAL NUMBERS: 20202661433
 CALL TYPE: DESIGN
 CALL 1-800-242-1776

No	Date	Description	REVISIONS



SUBMISSION TYPE:
 - FINAL PLAN SUBMISSION
 - MINOR PLAN SUBMISSION

E & S PLANS PREPARED BY:
TIMOTHY BOLES, P.E.
 BOLES, SMYTH ASSOCIATES INC.
 2400 CHESTNUT STREET
 PHILADELPHIA PA, 19103
 215 561 2644

ENGINEER:

Boles, Smyth Associates Inc.
 Consulting Civil Engineers
 2400 Chestnut Street - Philadelphia PA, 19103
 215-561-2644 (P) - 215-561-0501 (F)

OWNER/DEVELOPER:
Sisters of the Redeemer
 1600 Huntingdon Pike
 Meadowbrook, PA 19046

PROJECT:
**SOLAR PANEL ARRAY
 For Redeemer Village
 (Ground Mounted)**

PROJECT ADDRESS:
**521 Moredon Road
 Huntingdon Valley, PA 19006**

SHEET:
Erosion Control Plan

Project No.: 78.09
 Date: 07-16-2022
 Drawn by: TFB
 Scale: As Noted
 Checked: TFB

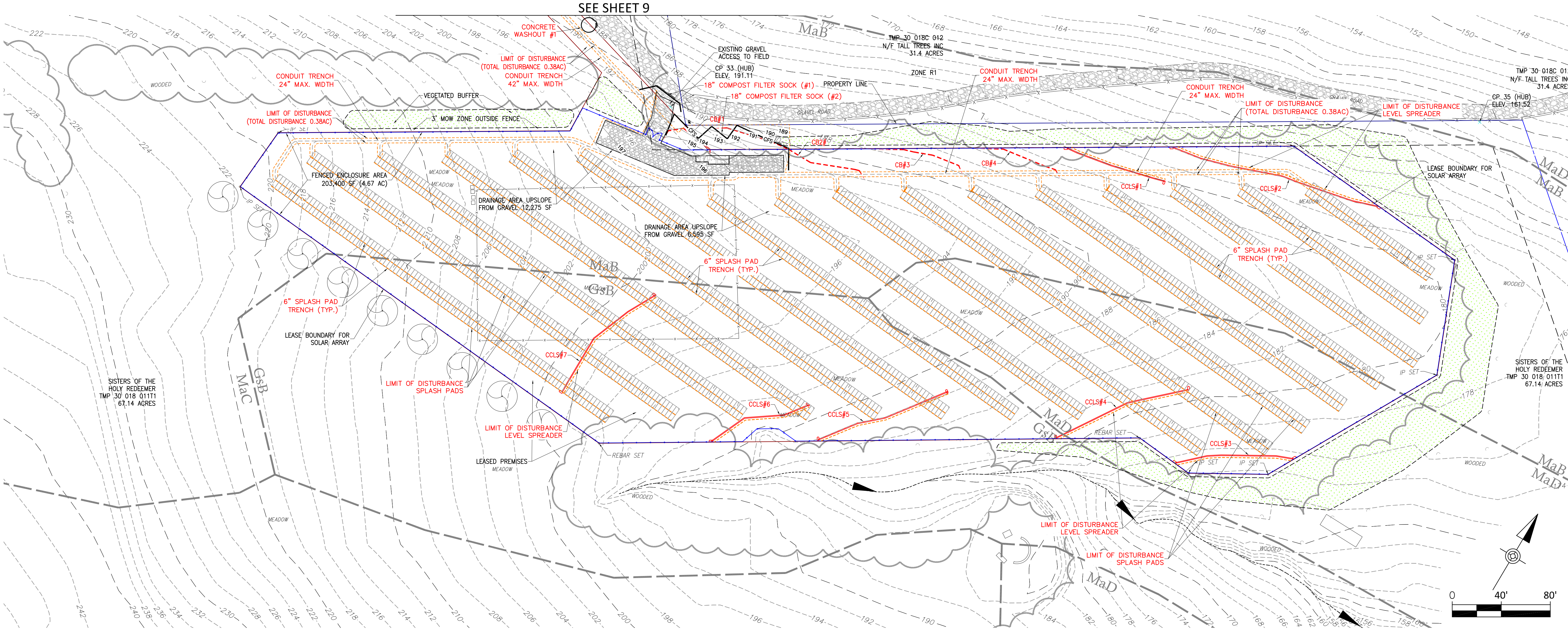
Dwg No.
9

SUMMARY OF EARTH DISTURBANCE	
CONDUIT TRENCH (24")	2,250 SF
CONDUIT TRENCH (42")	4,380 SF
GRAVEL ACCESS AREA	4,600 SF
SPLASH PADS	4,950 SF
CURB LEVEL SPREADERS	400 SF
FENCE POSTS	130 SF
	16,710 SF
SPREAD EXCESS SOIL 14,750 SF	

- NOTES:**
1. PLACE COMPOST FILTER SOCK WHERE INDICATED.
 2. SEE TRENCH EXCAVATION NOTES ON SHEET 12.
 3. SPREAD EXCAVATED SOIL FROM CONCRETE CURB LEVEL SPREADER AND GRAVEL SPLASH PADS AS INDICATED ON THE DETAILS AND NOTES. SEED AND MULCH THE ARRAS IMMEDIATELY AFTER SPREADING SOIL.
 4. PROVIDE ADDITIONAL COMPOST FILTER SOCK DOWNSLOPE OF ANY UNFORESEEN EARTH DISTURBANCE.

LEGEND

- SOIL TYPE BOUNDARY
- MaB SOIL TYPE
- CFS- COMPOST FILTER SOCK
- - - - - LIMIT OF DISTURBANCE
- CONCRETE WASHOUT



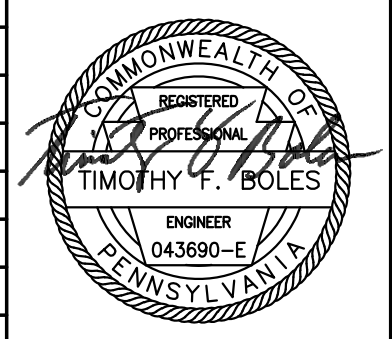
File: Solar_Sht_9-10_E&S_Plan.dwg Plotted: 8/16/22 at 1:44pm By: TFBoles1

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE - STOP CALL

PA SYSTEM, INC. SERIAL NUMBERS: 20202661433 CALL TYPE: DESIGN CALL 1-800-242-1776

No	Date	Description	REVISIONS



ENGINEER:
Boles, Smyth Associates Inc.
 Consulting Civil Engineers
 2400 Chestnut Street - Philadelphia PA, 19103
 215-561-2644 (P) - 215-561-0501 (F)

OWNER/DEVELOPER:
Sisters of the Redeemer
 1600 Huntingdon Pike
 Meadowbrook, PA 19046

PROJECT:
SOLAR PANEL ARRAY For Redeemer Village (Ground Mounted)

PROJECT ADDRESS:
**521 Moredon Road
 Huntingdon Valley, PA 19006**

SHEET:
Erosion Control Plan

Project No.: 78.09
 Date: 07-16-2022
 Drawn by: TFB
 Scale: As Noted
 Checked: TFB

Dwg No. **10**

ENGINEER:
Boles, Smyth Associates Inc.
 Consulting Civil Engineers
 2400 Chestnut Street - Philadelphia PA, 19103
 215-561-2644 (P) - 215-561-0501 (F)

OWNER/DEVELOPER:
Sisters of the Redeemer
 1600 Huntingdon Pike
 Meadowbrook, PA 19046

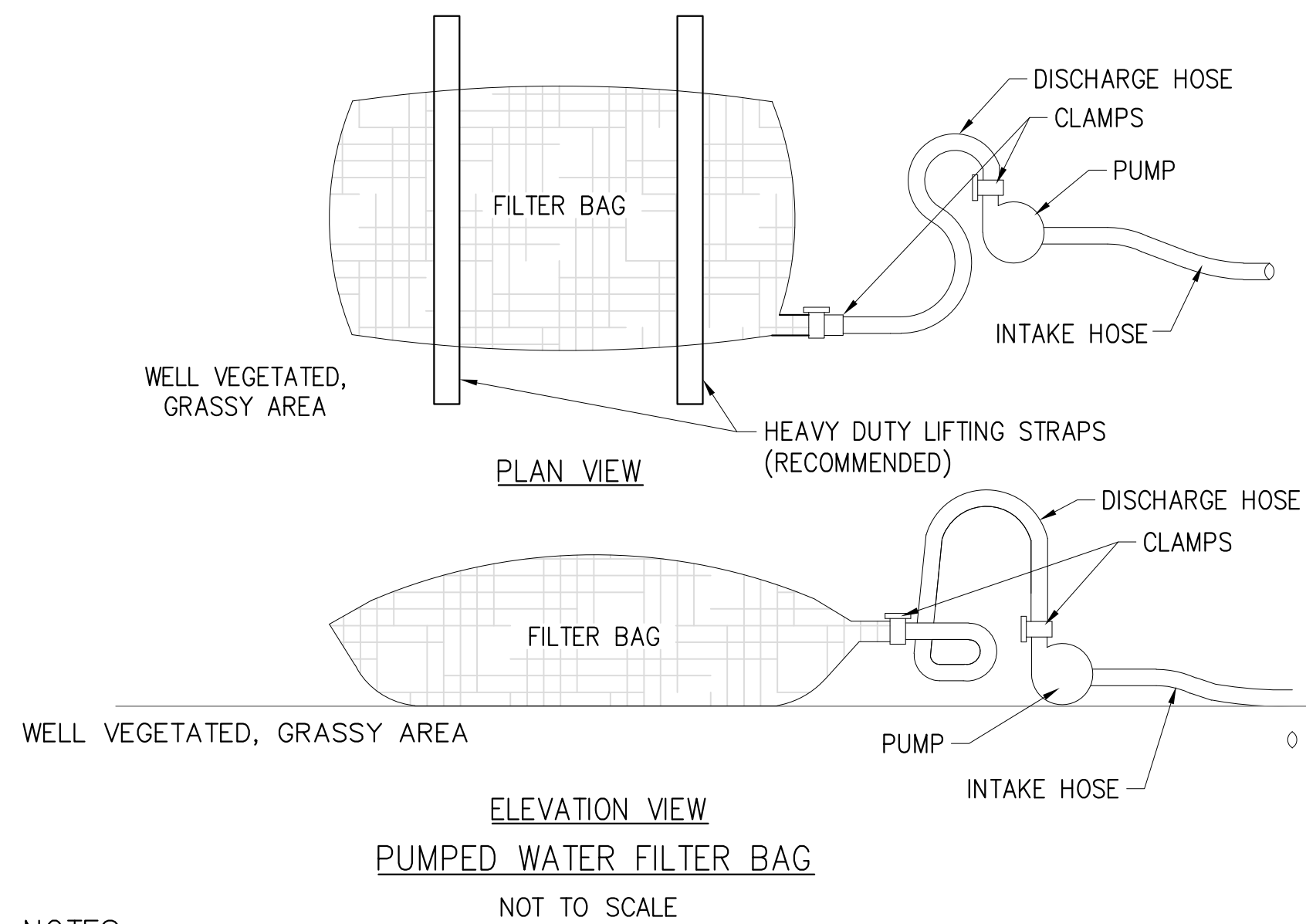
PROJECT:
SOLAR PANEL ARRAY For Redeemer Village (Ground Mounted)

PROJECT ADDRESS:
**521 Moredon Road
 Huntingdon Valley, PA 19006**

SHEET:
Erosion Control Plan

Project No.: 78.09
 Date: 07-16-2022
 Drawn by: TFB
 Scale: As Noted
 Checked: TFB

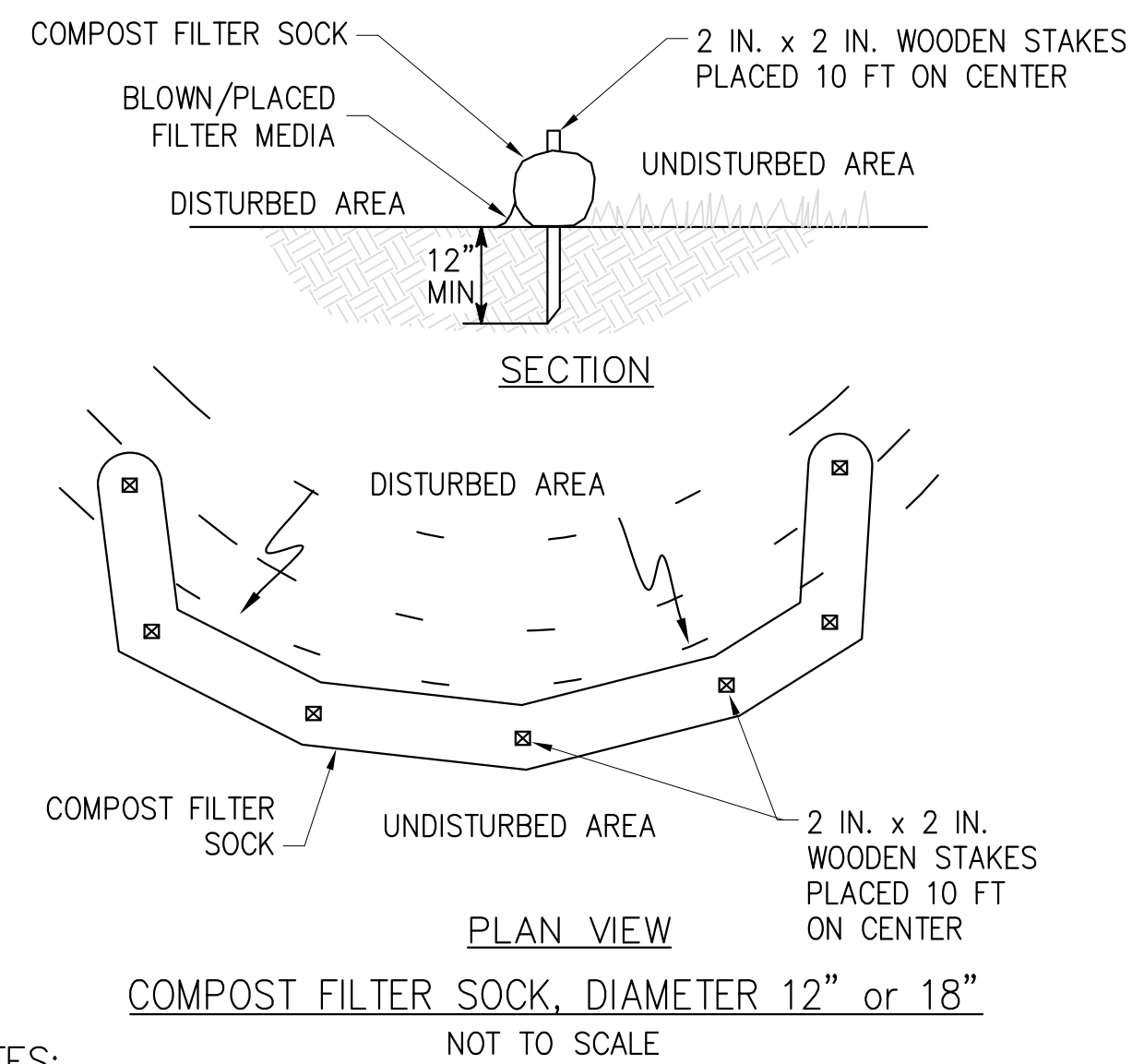
Dwg No. **10**



NOTES:

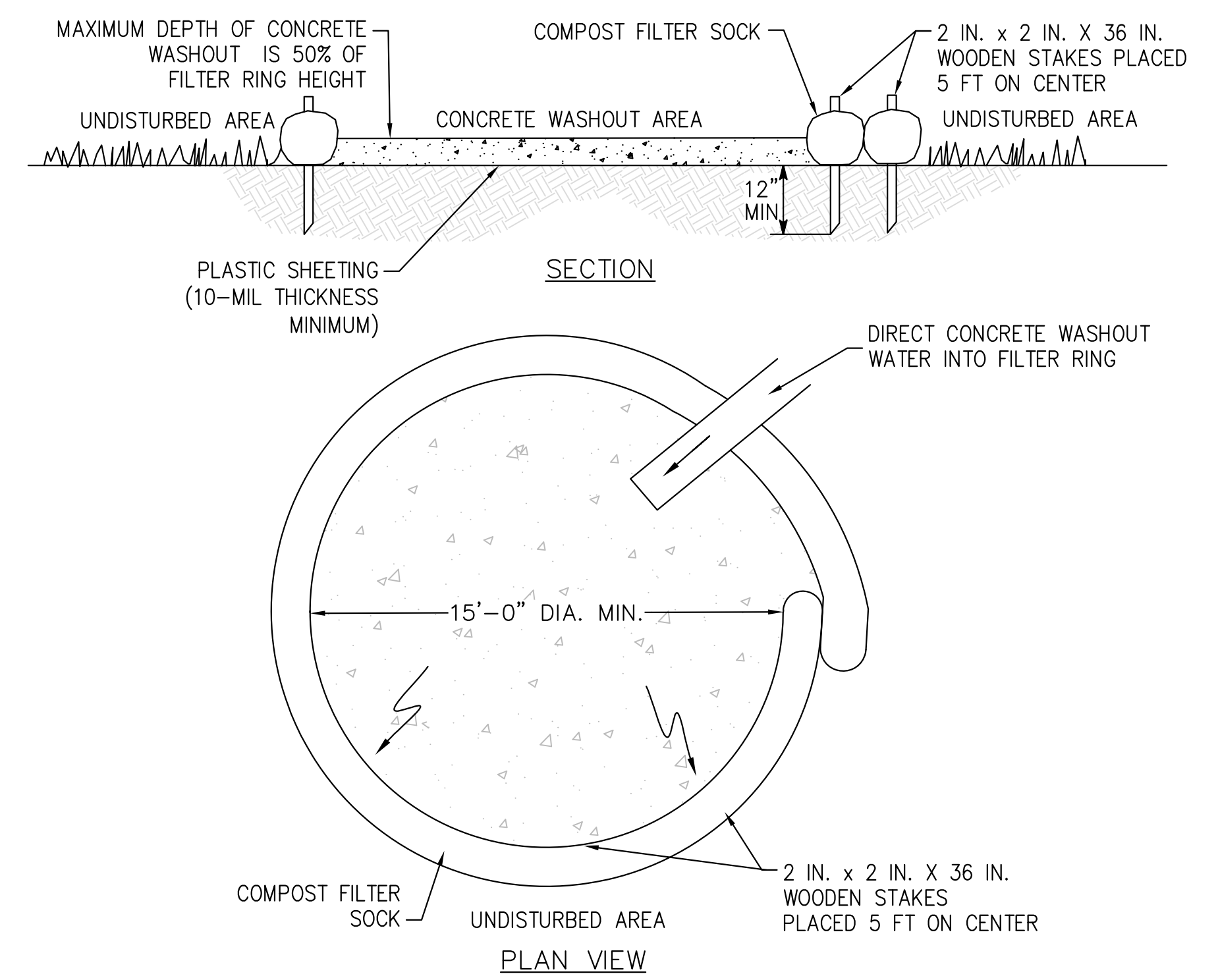
1. LOCATE BAGS IN LEVEL AREAS (LESS THAN 5% GRADE). FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.
2. LOCATE BAGS IN A WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY.
3. LOCATE BAG IN AN AREA ACCESSIBLE BY MACHINERY FOR MAINTENANCE AND DISPOSAL PURPOSES.
4. 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.
5. 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.
6. 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.
7. 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.
8. FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.
9. 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 OF 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 STRENGTH	ASTM D-4884	60 LB/IN
GRAB TENSILE	ASTM D-4632	205 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



NOTES:

1. SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.
2. COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.
3. TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.
4. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
5. COMPOST FILTER 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.
6. BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
7. 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.

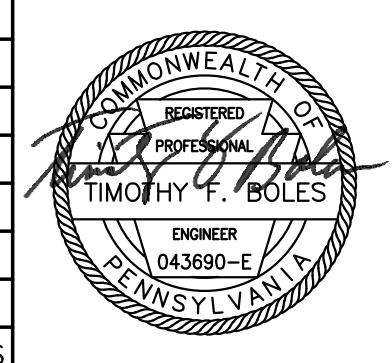


NOTES:

1. INSTALL ON GRADE LESS THAN 2%.
2. 18" DIAMETER FILTER SOCKS MAY BE STACKED ONTO DOUBLE 24" DIAMETER SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT.
3. THE PIT SHALL BE LINED WITH PLASTIC SHEETING OF AT LEAST 10-MIL THICKNESS (WITH NO HOLES OR TEARS) TO PREVENT LEACHING LIQUIDS INTO THE GROUND, INCIDENTAL TO THIS ITEM.
4. ALL CONCRETE WASHOUT FACILITIES SHOULD BE INSPECTED DAILY. DAMAGED OR LEAKING WASHOUTS SHOULD BE DEACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY.
5. ACCUMULATED MATERIALS SHOULD BE REMOVED WHEN THEY REACH 50% CAPACITY.
6. PLASTIC LINERS SHOULD BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY, INCIDENTAL TO THIS ITEM.

File: Solar_Sht_11-13_E&S_Details_Notes.dwg Plotted: 8/16/22 at 2:05pm By: TFBoles1

No	Date	Description	REVISIONS



SUBMISSION TYPE:
- FINAL PLAN SUBMISSION
- MINOR PLAN SUBMISSION

ENGINEER:

Boles, Smyth Associates Inc.
Consulting Civil Engineers
2400 Chestnut Street - Philadelphia PA, 19103
215-561-2644 (P) - 215-561-0501 (F)

OWNER/DEVELOPER:
Sisters of the Redeemer
1600 Huntingdon Pike
Meadowbrook, PA 19046

PROJECT:
**SOLAR PANEL ARRAY
For Redeemer Village
(Ground Mounted)**

PROJECT ADDRESS:
**521 Moredon Road
Huntingdon Valley, PA 19006**

SHEET:
Details

Project No.: 78.09
Date: 07-16-2022
Drawn by: TFB

Scale: As Noted
Checked: TFB

Dwg No.
11

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STANDARD EROSION AND SEDIMENT POLLUTION 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, 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 THE 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 BMP'S 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 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 FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING.
- ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS.
- UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMP'S SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMP'S AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMP'S FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMP'S, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
- A LOG SHOWING DATES THAT E&S BMP'S 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.
- SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEEPED INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
- ALL SEDIMENT REMOVED FROM BMP'S 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 OF 3 INCHES OF TOPSOIL.
- ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION,

SLIPPAGE SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDING, 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 8 INCHES OF THICKNESS.
- FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
- FROZEN 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 SPECIFICATION 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 THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
- 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 BMP'S 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 /CONVERSION OF THE E&S BMP'S.
- AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMP'S MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMP'S. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMP'S 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 BMP'S, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMP'S MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO \$10,000 PER DAY IN CIVIL PENALTIES, UP TO \$10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO \$25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.
- 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, WOODY DEBRIS, ACCUMULATED SEDIMENT, EXCESS VEGETATION, AND CONSTRUCTION MATERIAL/WASHES.
- UNDERGROUND UTILITIES CUTTING THROUGH ANY ACTIVE CHANNEL SHALL BE IMMEDIATELY BACKFILLED AND THE CHANNEL RESTORED TO ITS ORIGINAL CROSS-SECTION AND PROTECTIVE LINING. ANY BASE FLOW WITHIN THE CHANNEL SHALL BE CONVEYED PAST THE WORK AREA IN THE MANNER DESCRIBED IN THIS PLAN UNTIL SUCH RESTORATION IS COMPLETE.
- CHANNELS HAVING RIPRAP, RENO MATTRESS, OR GABION LININGS MUST BE SUFFICIENTLY OVER-EXCAVATED SO THAT THE DESIGN DIMENSIONS WILL BE PROVIDED AFTER PLACEMENT OF THE PROTECTIVE LINING.
- 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. THE EMBANKMENT SHALL BE COMPACTED IN MAXIMUM 8" LAYERED LIFTS AT 97% DENSITY.

SOIL EROSION AND SEDIMENT POLLUTION CONTROL PLAN

THE CONTRACTOR IS REQUIRED TO FULLY COMPLY WITH ALL OF THE RULES AND STANDARDS OF THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, INCLUDING THE CONSTRUCTION AND MAINTENANCE OF EROSION AND SEDIMENT POLLUTION CONTROLS AS SPECIFIED IN THE EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL DATED DECEMBER 2012 AND PREPARED BY THE BUREAU OF WATER QUALITY PROTECTION, DEPARTMENT OF ENVIRONMENTAL PROTECTION, COMMONWEALTH OF PENNSYLVANIA.

ALL SEEDING, MIXTURES, LIMING AND FERTILIZATION, SELECTION, TIME OF SEEDING, SEEDING METHODS MULCHING, AND TURFING SHALL FULLY COMPLY WITH PENN STATE UNIVERSITY'S "THE AGRONOMY GUIDE" AS A STANDARD AND SHALL BE IN ACCORDANCE WITH THE PROPER SPECIFICATIONS. ALL DISTURBED AREAS WILL BE STABILIZED USING INTERIM MEASURES SUCH AS MULCHING OR TEMPORARY SEEDING TO CONTROL DUST AND EROSION. SEE VEGETATIVE SURFACE STABILIZATION.

EROSION CONTROL MEASURES

TEMPORARY:
TEMPORARY CONTROL MEASURES INCLUDE COMPOST FILTER SOCKS, INLET FILTERS, TEMPORARY COFFERDAM, COMPOST FILTER SOCK CONCRETE WASH, AND MAINTENANCE OF EROSION AND SEDIMENT CONTROLS. COMPOST FILTER SOCK SHALL BE USED TO INTERCEPT SHEET RUNOFF. INLET FILTERS ARE A LAYER OF FILTER FABRIC PLACED OVER INLETS TO FILTER OUT SEDIMENT FROM THE RUNOFF FLOWING INTO THE INLETS. MAINTENANCE IS THE REGULAR AND ROUTINE INSPECTION CLEANING OF THE SEDIMENT AND EROSION CONTROLS, AND THE REPAIR OF THOSE CONTROLS TO PREVENT POLLUTION OF THE WATERS OF THE COMMONWEALTH OF PENNSYLVANIA.

PERMANENT:
ALL AREAS OF EARTH DISTURBED BY CONSTRUCTION SHALL BE SEEDED AND MULCHED IMMEDIATELY AFTER COMPLETION OF CONSTRUCTION. IN THE EVENT THAT SEEDING CANNOT TAKE PLACE IMMEDIATELY DUE TO WEATHER CONDITIONS, MULCH OR HEAVY EROSION CONTROL MATS WILL BE SPREAD OVER THE DISTURBED AREAS UNTIL SEEDING MAY BE PROPERLY COMPLETED.

MAINTENANCE PROGRAM FOR SEDIMENT AND EROSION CONTROLS

THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL EROSION CONTROL FACILITIES DURING CONSTRUCTION. ALL DAMAGED FACILITIES SHALL BE REPAIRED WITHIN 24 HOURS. WHEN SILT HAS ACCUMULATED TO THE SPECIFIED OR INDICATED DEPTH AGAINST OR AROUND ANY CONTROL FACILITY THE SILT WILL BE REMOVED IMMEDIATELY BY THE CONTRACTOR AND RETURNED TO THE SITE.

THE CONTRACTOR WILL NOT REMOVE ANY CONTROL FACILITY UNTIL ALL TRIBUTARY AREAS ARE STABILIZED AND UNTIL A FINAL INSPECTION IS PERFORMED. MATERIALS USED FOR EROSION CONTROL WILL BE DISPOSED OF OFF-SITE WHEN REMOVED. SUCH MATERIALS ARE CONSIDERED PROPERTY OF THE CONTRACTOR.

DEWATERING OF EXCAVATION:
WHERE PUMPING IS REQUIRED TO DEWATER EXCAVATED AREAS, WATER MUST BE PUMPED TO A FILTER BAG OR OTHER APPROVED FACILITY.

COMPOST FILTER SOCKS:
STORMWATER FROM DISTURBED AREAS MUST BE FILTERED THROUGH COMPOST FILTER SOCKS UNTIL THE TRIBUTARY AREAS ARE STABILIZED. SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH STORM EVENT. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE HEIGHT OF THE SOCK. DAMAGED SOCKS SHALL BE REPAIRED OR REPLACED.

INLET FILTERS:
STORMWATER INLETS MUST BE PROTECTED WITH STONE FILTERS OR FILTER FABRIC UNTIL THE TRIBUTARY AREAS ARE STABILIZED. SEDIMENT MUST BE REMOVED FROM INLET PROTECTION AFTER EACH STORM EVENT.


COMPLIANCE WITH STATE AND LOCAL REQUIREMENTS

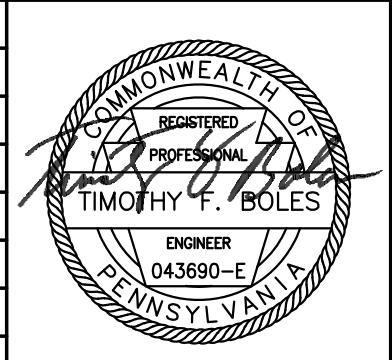
THE EROSION & SEDIMENT POLLUTION CONTROL REPORT, APPLICATION DOCUMENTS, NARRATIVE(S), CONTRACT PLANS AND SPECIFICATIONS ARE ALL INCLUDED HEREWITH BY REFERENCE AS AN INTEGRAL PART OF THIS CONTRACT. ANY QUESTIONS, COMMENTS, APPROVAL CONDITIONS OR PERMIT REQUIREMENTS CONTAINED WITHIN A REGULATORY REVIEW LETTER (OR THE ENGINEER'S RESPONSE TO A REGULATORY REVIEW LETTER) FOR THIS PROJECT ARE HEREBY INCLUDED AS AN INTEGRAL PART OF THIS CONTRACT, AND THE CONTRACTOR SHALL FULLY COMPLY WITH ANY APPROVAL CONDITIONS OR PERMIT REQUIREMENTS AS IF THEY WERE INCLUDED HEREWITH IN THEIR FULL TEXT. COPIES OF ALL STATE AND LOCAL REGULATORY AGENCY REVIEWS, COMMENTS, APPROVAL CONDITIONS OR PERMIT REQUIREMENTS MAY BE OBTAINED THROUGH THE ENGINEER OR COUNTY CONSERVATION DISTRICT OFFICE.

TRENCH EXCAVATION NOTES

- LIMIT ADVANCED 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.
- ALL SOIL EXCAVATED FROM THE TRENCH SHALL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.
- LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY.
- WATER WHICH ACCUMULATES IN THE OPEN TRENCH SHALL BE COMPLETELY REMOVED BY PUMPING BEFORE PIPE PLACEMENT AND/OR BACKFILLING BEGINS. WATER REMOVED FROM THE TRENCH SHALL BE PUMPED THROUGH A FILTRATION DEVICE.
- ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA SHALL BE GRADED TO E&S STAGE CONTOURS OR FINAL CONTOURS AND IMMEDIATELY STABILIZED.
- TOPSOIL EXCAVATED FROM EXISTING SURFACE LAYER SHOULD BE STOCKPILED SEPARATELY AND RETURNED AS FINAL SURFACE LAYER FOLLOWING TRENCH BACKFILLING.

File: Solar_Sht_11-13_E&S_Details_Notes.dwg Plotted: 8/16/22 at 2:05pm By: TFBoles1

CALL BEFORE YOU DIG!			
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE - STOP CALL			
			
SERIAL NUMBERS: 20202661413 CALL 1-800-242-1776 CALL TYPE: DESIGN			
No	Date	Description	REVISIONS



SUBMISSION TYPE:
- FINAL PLAN SUBMISSION
- MINOR PLAN SUBMISSION

ENGINEER:

Boles, Smyth Associates Inc.
Consulting Civil Engineers
2400 Chestnut Street - Philadelphia PA, 19103
215-561-2644 (P) - 215-561-0501 (F)

OWNER/DEVELOPER:
Sisters of the Redeemer
1600 Huntingdon Pike
Meadowbrook, PA 19046

PROJECT:
**SOLAR PANEL ARRAY
For Redeemer Village
(Ground Mounted)**

PROJECT ADDRESS:
**521 Moredon Road
Huntingdon Valley, PA 19006**

SHEET:
**Erosion Control
Details & Notes**

Project No.: 78.09
Date: 07-16-2022
Drawn by: TFB

Scale: As Noted
Checked: TFB

Dwg No.
12

PREPAREDNESS, PREVENTION AND CONTINGENCY PLAN (PPC)

1. A PPC PLAN IS REQUIRED IF CHEMICALS, SOLVENTS, HAZARDOUS WASTES, OR ANY MATERIAL WITH THE POTENTIAL FOR CAUSING ACCIDENTAL POLLUTION OF AIR, LAND, OR WATER, ARE STORED OR UTILIZED ON THE SITE.
2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PREPARE A "PREPAREDNESS, PREVENTION AND CONTINGENCY (PPC) PLAN" FOR THE PROPOSED CONSTRUCTION ACTIVITIES TO CONTROL THE POTENTIAL DISCHARGE OF POLLUTANTS CARRIED IN STORM WATER.
3. BOTH THE E&S AND THE PPC PLAN ARE TO BE MAINTAINED ONSITE FOR THE DURATION OF THE PERMIT.
4. FOLLOW THIS FORMAT AND INCLUDE THESE ELEMENTS FOR THE PPC PLAN:

A. GENERAL DESCRIPTION FOR THE CONSTRUCTION ACTIVITY
 - INCLUDE DRAWINGS SHOWING GENERAL LAYOUT OF SITE, PROPERTY BOUNDARIES, MATERIALS STORAGE AREAS, LOADING AND UNLOADING OPERATION SITES, TRUCK WASHING AREAS, IN ADDITION TO THE FEATURES OF THE E&S PLANS.

B. EMERGENCY RESPONSE PROGRAM
 - DESCRIBE THE ORGANIZATION STRUCTURE, CHAIN OF COMMAND, EMERGENCY COORDINATORS AND CONTACTS. INCLUDE DESCRIPTIONS OF EACH INDIVIDUAL'S DUTIES AND RESPONSIBILITIES WITHIN THE CHAIN OF COMMAND FOR IMPLEMENTATION OF THE PPC PLAN.
 - IDENTIFY ON THE ORGANIZATIONAL CHART A LIST OF EMERGENCY COORDINATORS THAT MUST BE CONTACTED IN THE EVENT OF AN EMERGENCY OR SPILL.
 - DESCRIBE THE DUTIES AND RESPONSIBILITIES OF THE EMERGENCY COORDINATOR SPECIFIC TO THE SITE OR ACTIVITY IN THE EVENT OF AN IMMINENT OR ACTUAL EMERGENCY.
 - INCLUDE ON THE ORGANIZATIONAL CHART OR ON AN ATTACHMENT, A LIST OF AGENCIES AND PHONE NUMBERS THAT MUST BE CONTACTED IN THE EVENT OF AN EMERGENCY OR SPILL.
 SUCH A LIST INCLUDES AS APPLICABLE:
 PA DEP
 PA EMERGENCY MANAGEMENT AGENCY
 COUNTY HEALTH DEPARTMENT AND CONSERVATION DISTRICT
 PA FISH & BOAT COMMISSION
 THE NATIONAL RESPONSE CENTER (U.S. EPA AND U.S. COAST GUARD),
 TOWNSHIP, LOCAL POLICE AND FIRE DEPARTMENTS
 LOCAL SEWAGE TREATMENT PLANT
 DOWNSTREAM PUBLIC WATER SUPPLIES
 INDUSTRIAL WATER USERS
 RECREATION AREAS

- INTERNAL AND EXTERNAL COMMUNICATIONS AND ALARM SYSTEMS.

C. EMPLOYEE TRAINING PROGRAM
 - LIST OF EMERGENCY EQUIPMENT. INCLUDE THE LOCATION, PHYSICAL DESCRIPTION, INTENDED USE AND CAPABILITIES OF EACH ITEM.
 - MAINTENANCE PROCEDURES AND DECONTAMINATION PROCEDURES OF EMERGENCY EQUIPMENT.
 - EVACUATION PLAN FOR INSTALLATION PERSONNEL (IF DEEMED NECESSARY).
 - ARRANGEMENTS WITH EMERGENCY RESPONSE CONTRACTORS. PROVIDE LIST WITH PHONE NUMBERS AND THE SERVICES EACH CONTRACTOR WILL PROVIDE.
 - INFORM LOCAL EMERGENCY RESPONSE AGENCIES AND HOSPITALS CONCERNING THE TYPE OF POTENTIAL EMERGENCIES THAT MAY OCCUR AND THE NEED FOR SERVICES.
 - FAMILIARIZE LOCAL POLICE, FIRE DEPARTMENT, EMERGENCY RESPONSE TEAMS AND THE COUNTY EMERGENCY MANAGEMENT COORDINATOR WITH THE LAYOUT OF THE CONSTRUCTION SITE, THE PROPERTIES AND DANGERS ASSOCIATED WITH THE HAZARDOUS MATERIALS (IF ANY) HANDLED. PLACES WHERE PERSONNEL WOULD BE NORMALLY WORKING, ENTRANCES TO ACCESS ROADS INSIDE THE FACILITY, AND ANY POSSIBLE EVACUATION ROUTES.

D. MATERIALS AND WASTE INVENTORY
 - INFORM LOCAL EMERGENCY RESPONSE AGENCIES AND HOSPITALS CONCERNING THE TYPE OF POTENTIAL EMERGENCIES THAT MAY OCCUR AND THE NEED FOR SERVICES.
 - FOR EACH HAZARDOUS CHEMICAL STORED AT THE CONSTRUCTION SITE, THE LOCATION MATERIAL SAFETY DATA SHEET OR SIMILAR INFORMATION IS TO BE CLEARLY CITED IN THE PPC PLAN.

E. SPILL AND LEAK PREVENTION AND RESPONSE
 - DESCRIBE THE SOURCE AND AREAS FOR POTENTIAL LEAKS AND SPILLS, THE PROBABLE DIRECTION OF FLOW OF SPILLED MATERIALS AND THE POLLUTION INCIDENT MEASURE SPECIFIC TO THE SOURCE OR AREA.
 - PROVIDE SEPARATE DRAWINGS OR PLOT PLANS TO SUPPLEMENT THE ABOVE.

F. INSPECTION PROGRAM
 - DESCRIBE THE INSPECTION PROGRAM AND MONITORING PROCEDURES TO ASSESS THE INTEGRITY OF EQUIPMENT, STORAGE AREAS AND SIMILAR AREAS.

G. HOUSEKEEPING PROGRAM
 - IDENTIFY THE AREAS AND THE ASSOCIATED TYPE OF HOUSEKEEPING PRACTICES TO MINIMIZE THE POSSIBILITY OF ACCIDENTAL SPILLS AND SAFETY HAZARDS TO PERSONNEL.

H. SECURITY MEASURES
 - DESCRIBE SECURITY PROCEDURES AND SYSTEMS AT THE SITE TO PREVENT ACCIDENTAL OR INTENTIONAL ENTRY THAT COULD RESULT IN A VIOLATION OF DEPARTMENTAL REGULATIONS, AND/OR INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

I. EXTERNAL FACTORS
 - DESCRIBE THE POSSIBLE EFFECTS OF EXTERNAL FACTORS SUCH AS POWER OUTAGES, STRIKES, FLOODS, SNOWSTORMS, ETC. AND ANY ACTION TO BE TAKEN TO ALLEVIATE ANY RESULTING EFFECTS TO PUBLIC HEALTH SAFETY OR THE ENVIRONMENT.

ENVIRONMENTAL DUE DILIGENCE

IF THE SITE WILL NEED TO IMPORT OR EXPORT MATERIAL FROM THE SITE, THE RESPONSIBILITY FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE AND DETERMINATION OF CLEAN FILL WILL REST WITH THE GENERAL CONTRACTOR.

CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE).

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: THE APPLICANT MUST PERFORM ENVIRONMENTAL DUE DILIGENCE TO DETERMINE IF THE FILL MATERIALS ASSOCIATED WITH THE PROJECT QUALIFY AS CLEAN FILL. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: 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. THESE REGULATIONS ARE AVAILABLE ON-LINE AT WWW.PACODE.COM

MONITORING, INSPECTION, AND REPORTING REQUIREMENTS

VISUAL INSPECTIONS
 THE PERMITTEE AND COPERMITTEE(S) MUST ENSURE THAT VISUAL SITE INSPECTIONS ARE CONDUCTED WEEKLY, AND WITHIN 24 HOURS AFTER EACH MEASURABLE RAINFALL EVENT THROUGHOUT THE DURATION OF CONSTRUCTION AND UNTIL THE RECEIPT AND ACKNOWLEDGEMENT OF THE NOT BY THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT. THE VISUAL SITE INSPECTIONS AND REPORTS SHALL BE COMPLETED IN A FORMAT PROVIDED BY THE DEPARTMENT, AND CONDUCTED BY QUALIFIED PERSONNEL, TRAINED AND EXPERIENCED IN EROSION AND SEDIMENT CONTROL, TO ASCERTAIN THAT E&S BMPs ARE PROPERLY CONSTRUCTED AND MAINTAINED TO EFFECTIVELY MINIMIZE POLLUTION TO THE WATERS OF THIS COMMONWEALTH. A WRITTEN REPORT OF EACH INSPECTION SHALL BE KEPT AND INCLUDE AT A MINIMUM:
 (1) A SUMMARY OF SITE CONDITIONS, E&S BMP IMPLEMENTATION AND MAINTENANCE AND COMPLIANCE ACTIONS; AND
 (2) THE DATE, TIME, NAME AND SIGNATURE OF THE PERSON CONDUCTING THE INSPECTION.

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

- (1) ANY CONDITION ON THE PROJECT SITE WHICH MAY ENDANGER PUBLIC HEALTH, SAFETY, OR THE ENVIRONMENT, OR INVOLVE INCIDENTS WHICH CAUSE OR THREATEN POLLUTION;
- (2) THE PERIOD OF NONCOMPLIANCE, INCLUDING EXACT DATES AND TIMES AND/OR ANTICIPATED TIME WHEN THE ACTIVITY WILL RETURN TO COMPLIANCE;
- (3) STEPS BEING TAKEN TO REDUCE, ELIMINATE, AND PREVENT RECURRENCE OF THE NONCOMPLIANCE; AND
- (4) THE DATE OR SCHEDULE OF DATES, AND IDENTIFYING REMEDIES FOR CORRECTING NONCOMPLIANCE CONDITIONS.

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

TEMPORARY STABILIZATION AND PERMANENT STABILIZATION

ALL DISTURBED AREAS ARE TO BE STABILIZED AS SOON AS POSSIBLE AFTER THE WORK IN THE AREA IS COMPLETED. USE THE FOLLOWING SEEDING AND SOIL SUPPLEMENT FORMULAS UNLESS OTHERWISE INDICATED OR DIRECTED.

- TEMPORARY SEEDING - FORMULA E
- PERMANENT LAWN AREAS 3:1 OR FLATTER - FORMULA D
- VEGETATED BUFFER AREA - FORMULA N

SEEDING REQUIREMENTS					
FORMULA AND SPECIES	% By Weight	Minimum %		Max % Weed Seed	Seeding Rate lb/1000 yd2
		Purity	Germination		
FORMULA D CONSERVATION MIX					50.0 Total
Tall Fescue (<i>Festuca arundinacea</i> var. <i>Kentucky 31</i>)	60	96	85	0.10	30
Creeping Red Fescue or Chewings Fescue (<i>Festuca rubra</i> or <i>ssp commutata</i>) (Improved and Certified)	30	97	85	0.10	15
Annual Ryegrass (<i>Lolium multiflorum</i>)	10	95	90	0.10	5
FORMULA E					10.0 Total
Annual Ryegrass (<i>Lolium multiflorum</i>)	100	95	90	0.10	10
Formula N Conservation Mix					30.0 Total
Hard Fescue mixture (<i>Festuca longifolia</i>)*	30	97	85	0.10	9.0
Creeping Red Fescue (<i>Festuca rubra</i>)**	30	97	85	0.10	9.0
Little Bluestem (<i>Andropogon scoparius</i>)	4	80	70	0.20	1.2
Canada Wild Rye (<i>Elymus canadensis</i>)	6	85	70	0.20	1.8
Virginia Wild Rye (<i>Elymus virginicus</i>)	3	85	70	0.20	1.2
Indiangrass (<i>Sorghastrum nutans</i>)	10	85	70	0.20	0.9
Annual Ryegrass (<i>Lolium multiflorum</i>)	5	95	90	0.10	3.0
Black Eye Susan (<i>Rudbeckia hirta</i>)	3	80	60	0.20	1.5
New England Aster (<i>Symphotrichum novae-anglie</i>)	5	80	50	0.20	0.9
Ox-eye Sunflower (<i>Heliopsis helianthoides</i>)	12	80	60	0.20	1.5

* A combination of improved certified varieties with no one variety exceeding 50% of the total Hard Fescue component
 ** Improved and Certified

APPLY SOIL SUPPLEMENTS AND FERTILIZER AS FOLLOWS:

- Pulverized Agricultural Limestone 800 lb/1000 yd2
- 10-20-20 Analysis Commercial Fertilizer 140 lb/1000 yd2
- 38-0-0 Ureaform Fertilizer 50 lb/1000 yd2 OR
- 32-0-0 to 38-0-0 Sulfur Coated Urea Fertilizer 59 lb/1000 yd2 to 50 lb/1000 yd2 OR
- 31-0-0 IBDU Fertilizer 61 lb/1000 yd2

HAY MULCH MUST BE APPLIED AT 3.0 TONS PER ACRE.

HAY MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.

UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMP'S MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL BMP'S AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGARDING, RESEEDING, REMULCHING, AND RENETTING, MUST BE DONE IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMP'S FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMP'S, OR MODIFICATIONS TO THOSE INSTALLED WILL BE REQUIRED.

SEDIMENT REMOVED FROM BMP'S SHALL BE DISPOSED OF IN UPSLOPE AREAS PROTECTED WITH EROSION CONTROLS AND OUTSIDE OF STEEP SLOPES, WETLANDS OR DRAINAGE SWALES AND ARE TO BE IMMEDIATELY STABILIZED WHEN MATERIAL PLACEMENT IS COMPLETE

THE PROJECTS RECEIVING WATERCOURSE IS PENNYPACK CREEK

DUST CONTROL

THE CONTRACTOR SHALL EMPLOY CONSTRUCTION METHODS AND MEANS THAT WILL KEEP AIRBORNE DUST TO THE MINIMUM. HE SHALL PROVIDE FOR THE SPRAYING OF WATER ON THE PROJECT AREA, AND ON ROADS, STREETS, AND OTHER AREAS IMMEDIATELY ADJACENT TO THE PROJECT LIMITS, WHEREVER TRAFFIC, OR BUILDINGS THAT ARE OCCUPIED OR IN USE, ARE AFFECTED BY SUCH DUST CAUSED BY HIS HAULING OR OTHER OPERATIONS. THE MATERIALS AND METHODS USED FOR WATER SPRAYING SHALL BE SUBJECT TO APPROVAL PRIOR TO USE. THE CONTRACTOR SHALL PROVIDE FOR PROMPT REMOVAL FROM EXISTING PAVING ALL DIRT AND OTHER MATERIALS THAT HAVE BEEN SPILLED, WASHED UPON, TRACKED UPON, OR OTHERWISE DEPOSITED THEREON BY HIS HAULING AND OTHER OPERATIONS WHENEVER THE ACCUMULATION IS SUFFICIENT TO CAUSE THE FORMATION OF DUST, MUD, INTERFERE WITH DRAINAGE, DAMAGE PAVEMENTS OR CREATE A TRAFFIC HAZARD. THE CONTRACTOR SHALL USE A VACUUM TYPE STREET SWEEPER TO REMOVE SUCH MATERIALS FROM PAVED SURFACES.

WASTE EXCAVATION & MATERIALS

ALL EXCAVATED SOIL OR TOPSOIL MATERIAL IS TO REMAIN ONSITE. TOPSOIL IS TO BE PLACED AS INDICATED ON THE PLANS. REGULATED WASTE MATERIALS, DEBRIS OR TRASH FOUND IN THE WORK AREA IS TO BE TRANSPORTED OFFSITE TO A RECYCLING FACILITY WITH APPROPRIATE PERMITS TO RECEIVE THE WASTE MATERIALS.

REMOVE ALL WASTE MATERIALS FROM THE SITE AND RECYCLE OR DISPOSE OF IN ACCORDANCE WITH SOLID WASTE MANAGEMENT REGULATION 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET. SEQ. DO NOT BURN, BURY, DUMP, OR DISCHARGE WASTE MATERIALS AT THE SITE. THESE MATERIALS INCLUDE BUT ARE NOT LIMITED TO EXCESS BUILDING MATERIALS, WASH WATER, ETC.

SEQUENCE OF CONSTRUCTION – GENERAL

- STAKE OUT THE PROJECT AREA PRIOR TO THE START OF WORK INCLUDING:
- LEASE AREA BOUNDARY & FENCE LINE
 - PROPOSED UNDERGROUND CONDUIT LOCATIONS
 - LIMITS OF STONE STABILIZATION AND CONCRETE EQUIPMENT PAD
 - SOLAR PANEL ROWS
 - VEGETATED BUFFER AREA
 - EROSION CONTROL FACILITIES TO BE INSTALLED

PLACE COMPOST FILTER SOCK, CONSTRUCTION FENCING AND OTHER EROSION AND SEDIMENT CONTROLS AS INDICATED.

CRITICAL STAGE: NOTIFY THE COUNTY CONSERVATION DISTRICT AND THE DESIGN ENGINEER AFTER STAKE OUT AND PRIOR TO INSTALLATION OF EROSION CONTROL FACILITIES TO ALLOW FOR INSPECTIONS PRIOR TO INSTALLATION.

STRIP AND STOCKPILE TOPSOIL AT ACCESS AREA AND PLACE GEOTEXTILE MATERIAL AND ROCK STABILIZATION AT EQUIPMENT AREA TO PROVIDE A STABILIZED STAGING AREA FOR THE ARRAY INSTALLATION.

NOTES:

IT IS INTENDED THAT INSTALLATION OF THE SOLAR ARRAY WILL BE EXECUTED IN A MANNER THAT MINIMIZES EARTH DISTURBANCE AND COMPACTION OF EXISTING SOILS WITHIN THE PROJECT AREA. EMPLOY MEANS AND METHODS CONSISTENT WITH THIS INTENT.
 DRIVEN PILE SUPPORTS ARE TO BE USED TO SUPPORT THE PANELS. WHERE UNDERGROUND OBSTRUCTIONS PREVENT THE USE OF DRIVEN PILES USE ALTERNATE FOUNDATION THAT MINIMIZES EXCAVATION, EARTH DISTURBANCE, WASTE MATERIAL AND COMPACTION OF THE SURROUNDING SOILS. NO ROCK CONSTRUCTION ENTRANCE WILL BE USED DUE TO THE LIMITED EARTH MOVING AND DISTURBANCE. THERE WILL BE NO IMPORTED OR EXPORTED EARTH AT THE SITE ASSOCIATED WITH THE ARRAY INSTALLATION. STORE ALL MATERIALS ON THE STABILIZED ACCESS AREA OR THE EXISTING GRAVEL ACCESS ROAD.

CONDUIT INSTALLATION:

INSTALL UTILITY SERVICE LINES IN A MANNER THAT MINIMIZES DISTURBANCE OF SURROUNDING AREAS AND MINIMIZES THE DURATION THAT THERE WILL BE OPEN TRENCHES ON THE SITE.

MARK OUT TRENCH IN ADVANCE OF EXCAVATION.

EXCAVATE ONLY AS MUCH TRENCH AS CAN BE COMPLETED, BACKFILLED AND STABILIZED EACH DAY.

EXCAVATE TRENCH, PLACING EXCAVATED SOIL ON THE UPSLOPE SIDE OF THE TRENCH. BACKFILL COMPLETED TRENCH AND STABILIZE TRENCH AREAS IMMEDIATELY AFTER BACKFILLING WITH TEMPORARY OR PERMANENT SEED AND HAY MULCH. SEE TRENCH EXCAVATION NOTES ON SHEET 12.

CONCRETE AND CONCRETE WASHOUT:

INSTALL CONCRETE WASHOUT IN ADVANCE OF ANY CONCRETE POURS ON THE SITE THAT WILL REQUIRE TRUCK WASHOUT. WASHOUT MAY BE OMITTED IF NO TRUCKS WILL BE WASHED OUT ON THE SITE. CONCRETE WILL BE USED ON THE SITE FOR 1) CONCRETE EQUIPMENT PAD; 2) DUCT BANK ENCASEMENT AT CROSSING OF GRAVEL ROAD; 3) FENCE CORNER POSTS, GATE POSTS AND PULL POSTS; AND 4) CONCRETE CURB LEVEL SPREADERS.

SPLASH PAD INSTALLATION:

CUT 6" WIDE BY 4" DEEP TRENCH DRIP LINE OF EACH PANEL. SPREAD THE EXCAVATED SOIL UPSLOPE OF TRENCH.

FILL TRENCH WITH PEA GRAVEL UP TO GRADE (DO NOT MOUND). PLACE A PLUG OF SOIL (6" IN TRENCH EVERY 20' TO PREVENT THE LATERAL FLOW OF WATER WITHIN THE TRENCH AND TO PROMOTE INFILTRATION.

ARRAY INSTALLATION:

STAKE OUT POST LOCATIONS AND DRIVE POSTS USING TRACKED EQUIPMENT TO MINIMIZE SOIL COMPACTION AND DISTURBANCE.

DO NOT OPERATE EQUIPMENT IN A MANNER OR IN WEATHER CONDITIONS THAT WILL RESULT IN TIRE/TRACK RUTS OR EXCESSIVE DISTURBANCE OF THE SOIL OR ROOT MAT. PROTECT THE GROUND FROM EQUIPMENT AND/OR MATERIALS WITH MATS WHERE NECESSARY.

CONCRETE CURB LEVEL SPREADER

STAKE AND/OR MARK OUT CONCRETE CURB LEVEL SPREADERS AND COMPOST BERMS PRIOR TO INSTALLATION OF ARRAY PANELS. SEE SHEET 8.

CONSTRUCT CONCRETE CURB LEVEL SPREADERS IN A MANNER THAT WILL NOT CAUSE EXCESSIVE EARTH DISTURBANCE. SPREAD EARTH MATERIAL EXCAVATED FOR CURBS DOWNSLOPE AND STABILIZE IMMEDIATELY WITH SEED AND MULCH. PROTECT CURB FROM VEHICLE LOADS BY PLACING PLANKING ON EITHER SIDE SO THAT WHEEL LOADS WILL NOT CAUSE CURB SETTLEMENT AT CROSSINGS.

SOIL AERATION:

AFTER INSTALLING POST SUPPORTS AND PRIOR TO INSTALLING BRACKETS AND PANELS, AERATE THE SOILS BENEATH THE PANELS WITH A CORE AERATION ROLLER. MAKE AT LEAST 2 PASSES IN ALL AREAS. CORE AERATE VEGETATED BUFFER AREA PRIOR TO FENCE INSTALLATION AND OVERSEEDING.

AFTER PANEL INSTALLATION AND WHEN ALL OTHER ARRAY CONSTRUCTION TRAFFIC HAS CEASED, AERATE ALL OTHER OPEN AREAS WITH 2 PASSES USING A CORE AERATOR.

COMPOST BERM INSTALLATION:

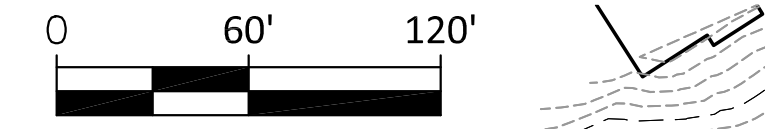
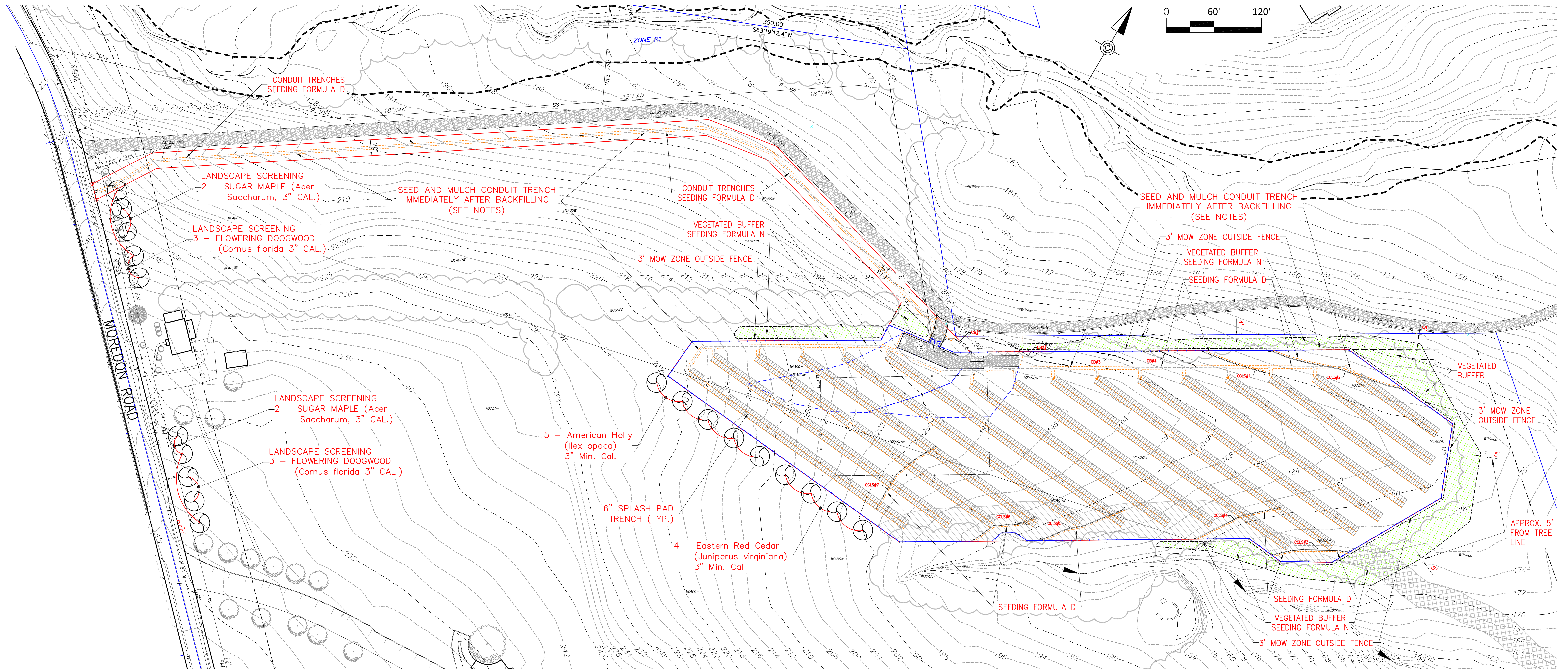
PLACE COMPOST BERMS PARALLEL TO CONTOUR GRADE WHERE INDICATED. SEE SHEET 8.

File: Solar_Sht_11-13_E&S_Details_Notes.dwg Plotted: 8/16/22 at 2:05pm By: TFBoles1

<p>CALL BEFORE YOU DIG!</p> <p>PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE – STOP CALL</p>  <p>SERIAL NUMBERS: 20202661433 CALL TYPE: DESIGN CALL 1-800-242-1776</p>				<p>DESIGN PLANS PREPARED BY:</p> <p>FIVE PLAN SUBMISSION TIMOTHY F. BOLES, E. BOLES, SMYTH ASSOCIATES INC. 2400 CHESTNUT STREET PHILADELPHIA PA, 19103 215 561 2644</p>	<p>ENGINEER:</p>  <p>Boles, Smyth Associates Inc. Consulting Civil Engineers 2400 Chestnut Street - Philadelphia PA, 19103 215-561-2644 (P) - 215-561-0501 (F)</p>	<p>OWNER/DEVELOPER:</p> <p>Sisters of the Redeemer 1600 Huntingdon Pike Meadowbrook, PA 19046</p>	<p>PROJECT:</p> <p>SOLAR PANEL ARRAY For Redeemer Village (Ground Mounted)</p>	<p>SHEET:</p> <p>Erosion Control Details& Notes</p>																																							
	<table border="1"> <thead> <tr> <th>No</th> <th>Date</th> <th>Description</th> <th>REVISIONS</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	No	Date	Description	REVISIONS																																									<p>PROJECT ADDRESS:</p> <p>521 Moredon Road Huntingdon Valley, PA 19006</p>	<p>Project No.: 78.09 Date: 07-16-2022 Drawn by: TFB</p>
No	Date	Description	REVISIONS																																												

NOTES:

1. AFTER COMPLETION AND UPON REQUEST OF THE RESIDENTS OF THE TALL TREES COMMUNITY, PROVIDE LANDSCAPE BUFFER IN THE FORM OF EVERGREEN VEGETATION ALONG THE NORTH SIDE OF THE FENCE TO SCREEN SOLAR PANELS FROM VIEW.
2. AFTER INSTALLATION OF PANEL SUPPORTS AND PRIOR TO THE INSTALLATION OF PANELS, CORE AERATE ALL UNDISTURBED AREAS TO MITIGATE SOIL COMPACTION RESULTING FROM EQUIPMENT OPERATIONS. LEVEL ANY TIRE RUTS AND OVERSEED ANY DISTURBED AREAS WITH SEEDING FORMULA N.
3. ESTABLISH LIMITS OF VEGETATED BUFFER AREA UP TO 5 FEET FROM TREES ALONG SITE BOUNDARY AND 3 FEET FROM FENCE LINE.
4. CORE AERATE VEGETATED BUFFER AREA AND OVERSEED WITH SEEDING FORMULA N. COORDINATE AERATION AND SEEDING WITH FENCE INSTALLATION.
5. SEED AND MULCH ALL DISTURBED AREAS IMMEDIATELY AFTER BACKFILLING TRENCHES OR SPREADING FILL AT CONCRETE CURB LEVEL SPREADERS.

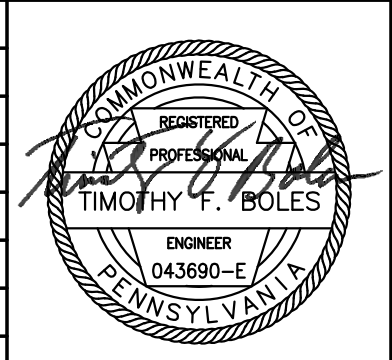


File: Solar_Sht_14_Landscape.dwg Plotted: 8/16/22 at 3:25pm By: TFBoles1

CALL BEFORE YOU DIG!
 PENNSYLVANIA LAW REQUIRES
 3 WORKING DAYS NOTICE FOR
 CONSTRUCTION PHASE AND 10 WORKING
 DAYS IN DESIGN STAGE - STOP CALL

PA
 SYSTEM, INC.
 SERIAL NUMBERS: 20202661433
 CALL TYPE: DESIGN
 CALL 1-800-242-1776

No	Date	Description	REVISIONS



SUBMISSION TYPE:
 - FINAL PLAN SUBMISSION
 - MINOR PLAN SUBMISSION

ENGINEER:

Boles, Smyth Associates Inc.
 Consulting Civil Engineers
 2400 Chestnut Street - Philadelphia PA, 19103
 215-561-2644 (P) - 215-561-0501 (F)

OWNER/DEVELOPER:
Sisters of the Redeemer
 1600 Huntingdon Pike
 Meadowbrook, PA 19046

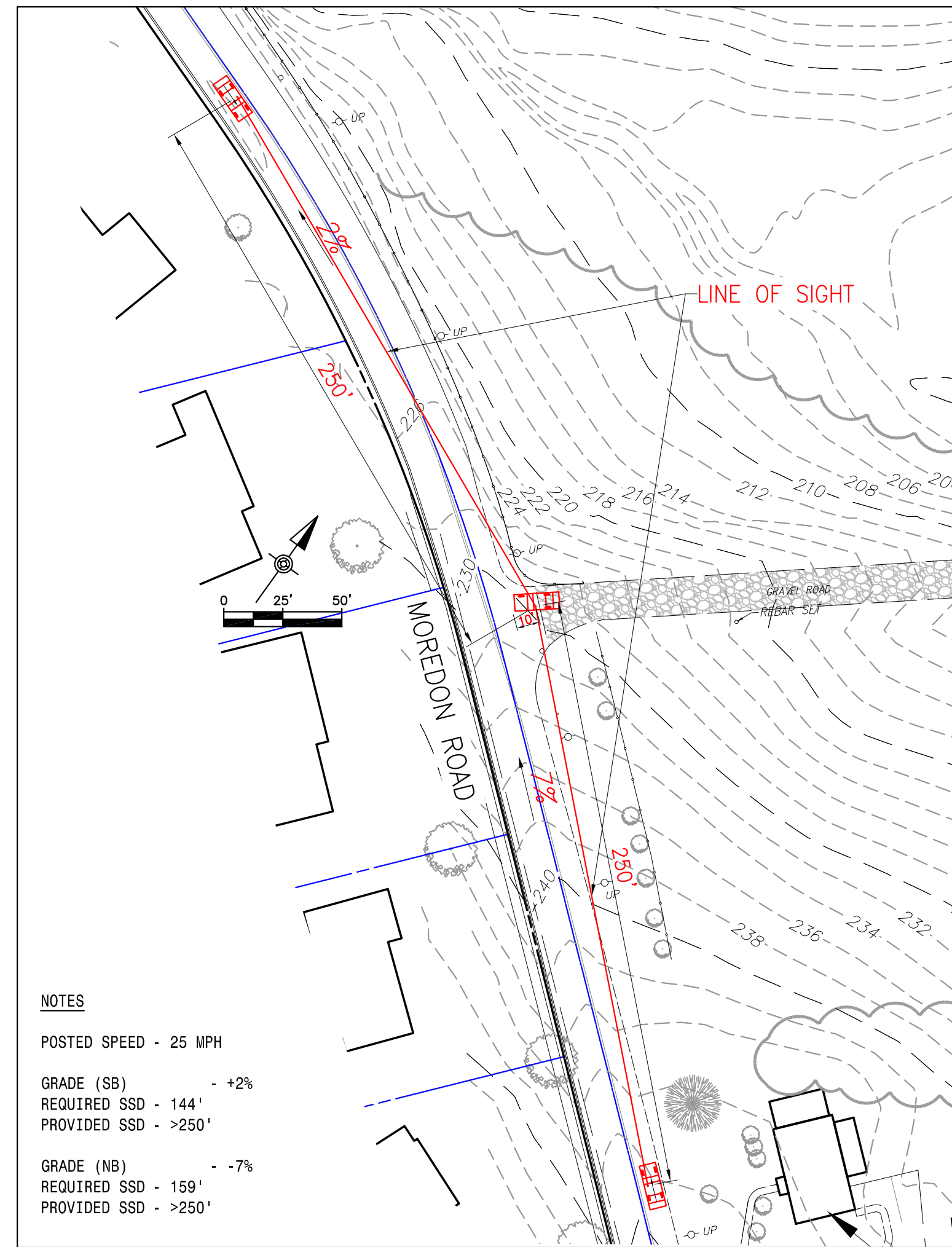
PROJECT:
**SOLAR PANEL ARRAY
 For Redeemer Village
 (Ground Mounted)**

PROJECT ADDRESS:
**521 Moredon Road
 Huntingdon Valley, PA 19006**

SHEET:
Landscaping Plan

Project No.: 78.09
 Date: 07-16-2022
 Drawn by: TFB
 Scale: As Noted
 Checked: TFB

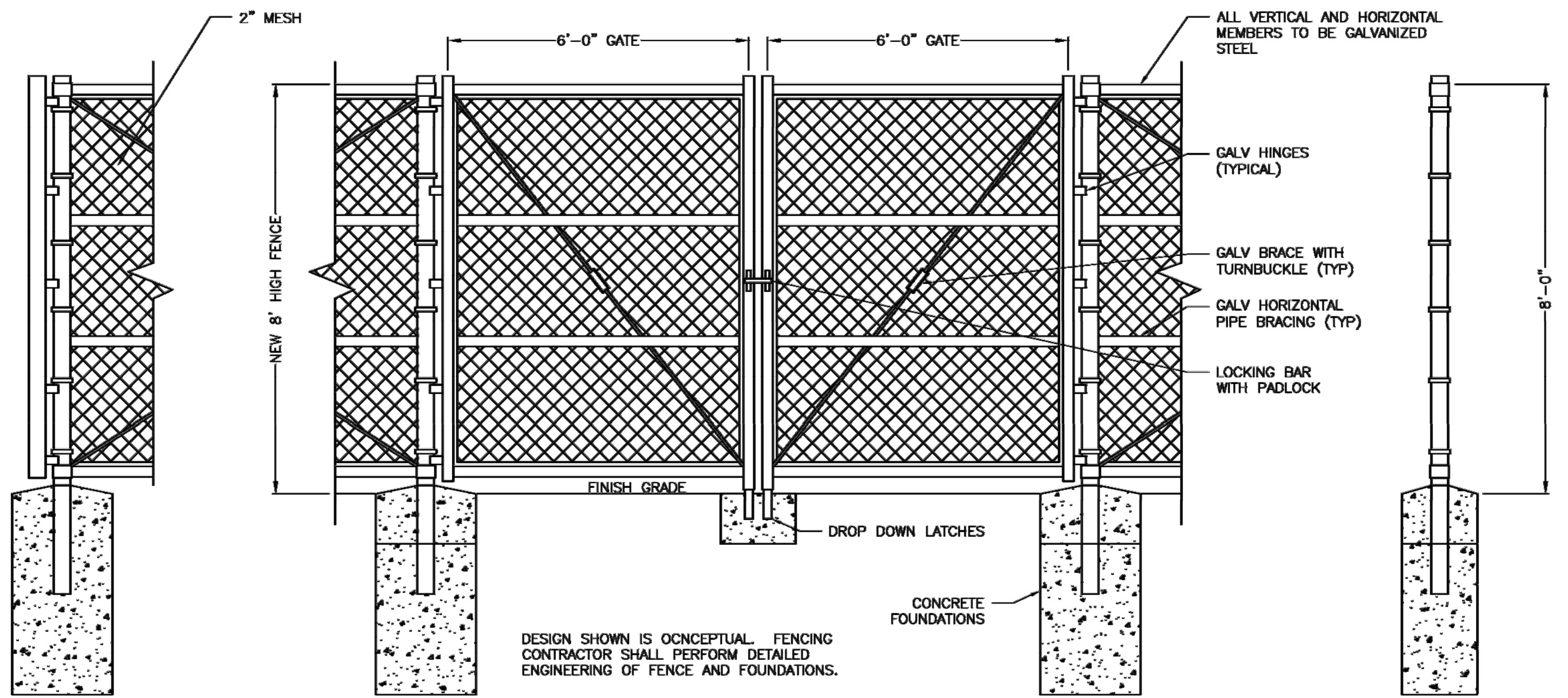
Dwg No.
14



NOTES

POSTED SPEED - 25 MPH
 GRADE (SB) - +2%
 REQUIRED SSD - 144'
 PROVIDED SSD - >250'
 GRADE (NB) - -7%
 REQUIRED SSD - 159'
 PROVIDED SSD - >250'

SIGHT DISTANCE DIAGRAM



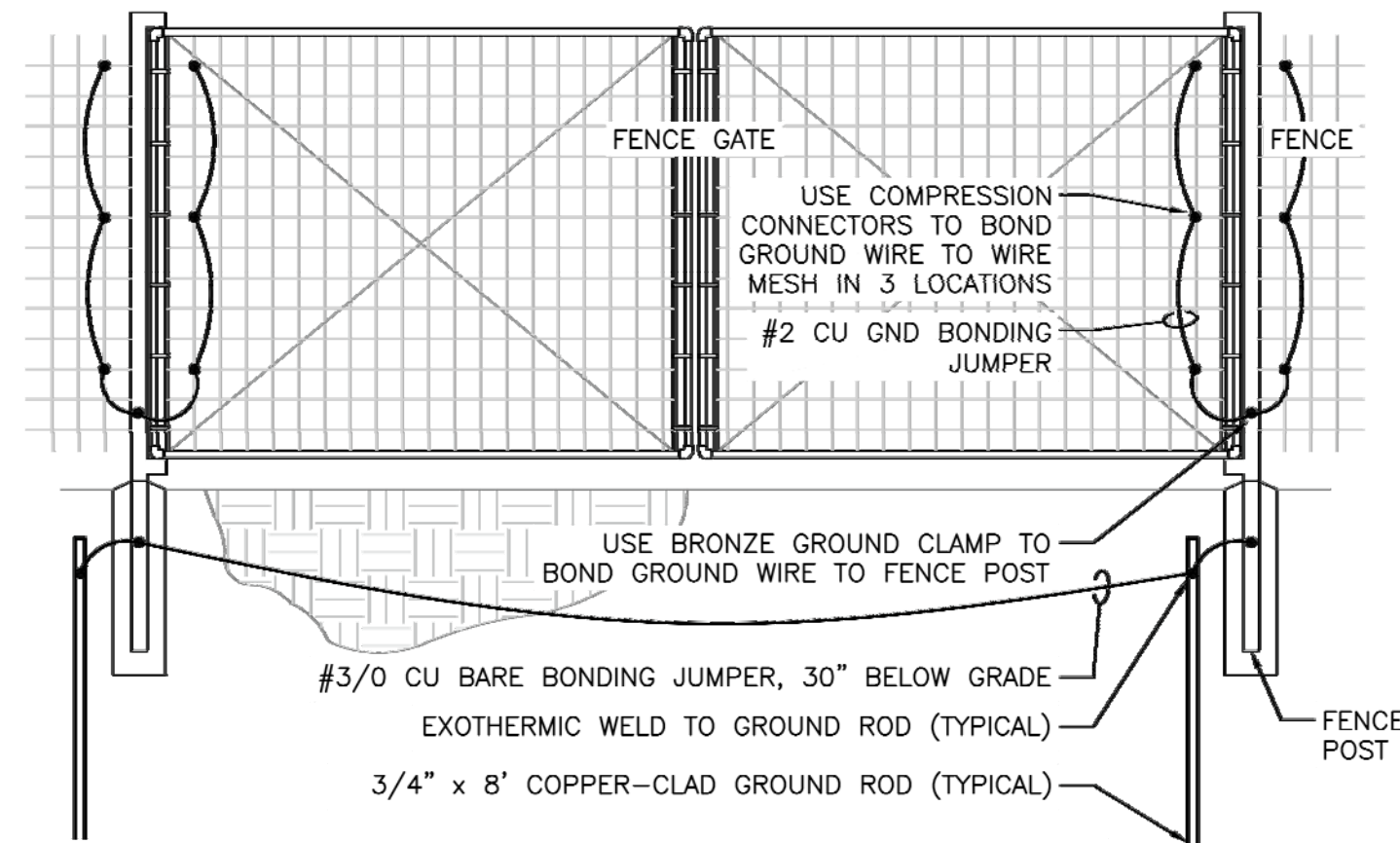
1 FENCE DETAIL
 S200 SCALE: NONE

NOTE:
 FENCING MESH TO BE GREEN VINYL COATED CHAIN-LINK.



LOCATION: ALL ACCESS POINTS TO THE SITE AND EVERY 100' AROUND THE PERIMETER (ON FENCES AS NECESSARY)
 NEC: 110.27(C)

SIGN DETAIL



- NOTES:** PER NEC 250.194, WHERE METAL FENCES ARE LOCATED WITHIN 16' OF EXPOSED CONDUCTORS OR EQUIPMENT:
- (1) BONDING JUMPERS SHALL BE INSTALLED AT EACH FENCE CORNER AND AT MAXIMUM 50 M (160 FT) INTERVALS ALONG THE FENCE.
 - (2) WHERE BARE OVERHEAD CONDUCTORS CROSS THE FENCE, BONDING JUMPERS SHALL BE INSTALLED ON EACH SIDE OF THE CROSSING.
 - (3) GATES SHALL BE BONDED TO THE GATE SUPPORT POST, AND EACH GATE SUPPORT POST SHALL BE BONDED TO THE GROUNDING ELECTRODE SYSTEM.
 - (4) ANY GATE OR OTHER OPENING IN THE FENCE SHALL BE BONDED ACROSS THE OPENING BY A BURIED BONDING JUMPER.
 - (5) THE GROUNDING GRID OR GROUNDING ELECTRODE SYSTEMS SHALL BE EXTENDED TO COVER THE SWING OF ALL GATES.
 - (6) THE BARBED WIRE STRANDS ABOVE THE FENCE SHALL BE BONDED TO THE GROUNDING ELECTRODE SYSTEM.

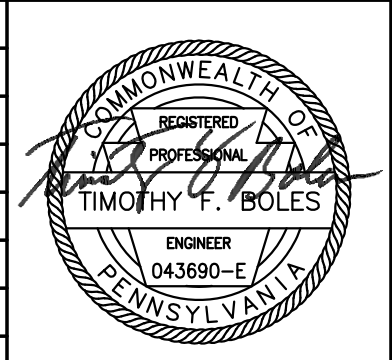
9 FENCE GROUNDING DETAIL
 E401 SCALE: NONE

File: Solar_Sht_1-3_Ext_Site.dwg Plotted: 8/16/22 at 2:11pm By: TFBoles1

CALL BEFORE YOU DIG!
 PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE - STOP CALL

PA SYSTEM, INC.
 SERIAL NUMBERS: 20202661433
 CALL TYPE: DESIGN
 CALL 1-800-242-1776

No	Date	Description	REVISIONS



SUBMISSION TYPE:
 - FINAL PLAN SUBMISSION
 - MINOR PLAN SUBMISSION

ENGINEER:

Boles, Smyth Associates Inc.
 Consulting Civil Engineers
 2400 Chestnut Street - Philadelphia PA, 19103
 215-561-2644 (P) - 215-561-0501 (F)

OWNER/DEVELOPER:
Sisters of the Redeemer
 1600 Huntingdon Pike
 Meadowbrook, PA 19046

PROJECT:
SOLAR PANEL ARRAY For Redeemer Village (Ground Mounted)

PROJECT ADDRESS:
**521 Moredon Road
 Huntingdon Valley, PA 19006**

SHEET:
Miscellaneous Details

Project No.: 78.09
 Date: 07-16-2022
 Drawn by: TFB
 Scale: As Noted
 Checked: TFB

Dwg No.
15



MEMO

To: Lucy Strackhouse, Chair – Abington Township Planning Commission
From: Abington Township Shade Tree Commission
RE: LD-22-04 - 521 Moredon Rd (Solar Panel Array)
Plan Set Date: April 8, 2022

STC Review Date: May 23, 2022, revised plan review date 6/14/2022

Site Summary

Owner: Sisters of the Redeemer, 1600 Huntingdon Pike, Meadowbrook, PA 19046
Zone – R1 – Low Density Residential
Use – Solar Panel Array
Watershed – Pennypack Creek
Summary – Installation of ground-mounted solar panel array for Redeemer Village

Dear Chairperson Strackhouse,

The members of the Abington Township Shade Tree Commission (STC) have reviewed the Landscaping Plan (page 14), as well as the revised Landscaping Plan for the above referenced Land Development Plan and offer the following recommendations:

- Regarding Note 1: If the residents of the Tall Trees Community request a landscaping buffer, the STC recommends that native evergreen trees be planted. Examples include *Juniperus virginiana*, *Juniperus communis* and *Ilex opaca*.
- Regarding the screening trees along Moredon Road:
 - In the original submission, ten red maples (*Acer rubrum*) were proposed as screening trees.
 - In the revision, four sugar maples (*Acer saccharum*) and six flowering dogwoods (*Cornus florida*) are proposed.
 - The STC believes that red maples would be a better selection for the site. If sugar maples are used, they should be the new heat-resistant variety.
 - The STC is concerned about the use of flowering dogwoods. We think they would likely not survive due to the location and the strong potential for heat stress due to their orientation on the property. We recommend additional maples instead of flowering dogwoods.

Additionally, the STC offers the following comment:

- Is there an opportunity to plant additional native canopy trees at the site in addition to the buffer zone along Moredon Road and the potential landscaping buffer for the Tall Trees Community?

Respectfully submitted,

A handwritten signature in black ink, appearing to read "P. Gallagher". The signature is written in a cursive, flowing style.

Patricia Gallagher, Ph.D., P.E.

Chair, Abington Township STC

**MONTGOMERY COUNTY
BOARD OF COMMISSIONERS**

VALERIE A. ARKOOSH, MD, MPH, CHAIR
KENNETH E. LAWRENCE, JR., VICE CHAIR
JOSEPH C. GALE, COMMISSIONER



**MONTGOMERY COUNTY
PLANNING COMMISSION**

MONTGOMERY COUNTY COURTHOUSE • PO BOX 311
NORRISTOWN, PA 19404-0311
610-278-3722 • FAX: 610-278-3941
WWW.MONTCOPA.ORG

SCOTT FRANCE, AICP
EXECUTIVE DIRECTOR

May 27, 2022

Mr. Richard J. Manfredi, Manager
Abington Township
1176 Old York Road
Abington, Pennsylvania 19001-3713

Re: MCPC #22-0113-001
Plan Name: Solar Panel Array at 521 Moredon Road
(On 1 lot of 90.41 acres)
Situat: 521 Moredon Road
Cross Street: Huntingdon Pike
Abington Township

Dear Mr. Manfredi:

We have reviewed the above-referenced land development in accordance with Section 502 of Act 247, "The Pennsylvania Municipalities Planning Code," as you requested on April 20, 2022. We forward this letter as a report of our review.

BACKGROUND

Sisters of the Redeemer, the applicant, has submitted a land development plan for a proposed ground-mounted solar panel array on a tract of 90.41 acres; the area of disturbance would consist of 5.10 acres. The applicant obtained a use variance from the Zoning Hearing Board for the proposed solar panel array as a principal use; zoning currently permits solar panels as accessory uses. The array would be accessed by an existing common gravel access road (also used by the sewer authority), and would involve the construction of an improved equipment access area consisting of stone covered by geotextile material. The site is located in the R1 Low Density Residential Zoning District. Public sewer and water will not serve the area of development; the plan is dated April 8, 2022.

COMPREHENSIVE PLAN COMPLIANCE

MONTCO 2040: A New Vision: the Comprehensive Plan for Montgomery County (2015). The proposed solar panel array (a principal use) is located in the Suburban Residential future land use category of the county comprehensive plan. Although solar panel arrays are not specifically listed as a use in this future land use category, p.36 of *MONTCO 2040* notes that MCPC advocates for adapting to changing energy needs. We have



determined that this proposal is consistent with the intent of the plan, provided adequate setbacks, screening, and other landscaping are used to minimize the view of the array from surrounding land uses and roadways, and provided stormwater management is undertaken in a comprehensive manner, including best management practices, where possible.

Abington Master Bicycle Plan (2016): As noted in our review letter (dated March 19, 2022) for the Barn for Redeemer Valley Farm, the plan designates the property as the location for a potential bicycle access route to the Pennypack Trail (see p.52). The plan's consistency with the Abington Master Bicycle Plan depends upon whether the second alternative to access the Pennypack Trail in the eastern quadrant of the township is pursued. See "Review Comments," below, for additional information.

Comprehensive Plan Update for Abington Township (2007): The proposal is located in the "Low Density Residential" future land use category of the Comprehensive Plan Update for Abington Township, and is consistent with that plan.

RECOMMENDATION

The Montgomery County Planning Commission (MCPC) generally supports the applicant's proposal, however, in the course of our review we have identified the following issues that the applicant and township may wish to consider prior to final plan approval. Our comments are as follows:

REVIEW COMMENTS

LOCATION

- A. We feel that the proposed location is an appropriate one, set back and/or buffered from surrounding development.

DIMENSIONAL CRITERIA

- A. Panel Height. How high off the ground will the solar panels be? At a predevelopment meeting, we heard that they would be about ten feet, but on the plans it appears that they will range from 3' 4" to approximately seven feet in height.

INFRASTRUCTURE

- A. Electric Infrastructure. We recommend that the township communicate with PECO about whether the necessary infrastructure exists for this project.

LANDSCAPING AND NATURAL ENVIRONMENT

1 <https://www.abingtonpa.gov/home/showpublisheddocument?id=2246>

- A. Naturalized Vegetation. We suggest that the applicant consider using the space not occupied by gravel (20 feet between rows of panels) for naturalized meadow plantings, since grass has such little ecological value.
- B. Street Trees. Street trees are required every 40 linear feet along Moredon Road. It appears as if the applicant has met this requirement, grouping the trees in the area to the east of the driveway [§2402].
- C. Buffer. The proposed use is most similar to those in category “IV” in Figure 24.5: Buffer Required by Land Use Type. A very high buffer is required for residential uses on the same side of the street for this use category, and a high buffer is required for residential uses on the opposite side of the street. Existing topographic conditions, such as embankments or berms, may be substituted for part or all of the required property line buffers at the discretion of the Township Engineer [§2403.B].

The applicant proposes to plant deciduous trees along the road as screening of the proposed solar panel array (the applicant has noted that the change in elevation will also help screen the proposed array). None of the specified screens in the zoning ordinance consist only of deciduous trees. There may be a need for year-round vegetation, including low-level plantings, depending on how visible the proposed solar panel array from nearby residences is (such as from the home pictured in the image located on the corner of Londonderry Lane and Moredon Road).



TRANSPORTATION

- A. Abington Master Bicycle Plan. The plan designates the property as the location for a potential bicycle access route to the Pennypack Trail (see p.52)¹. We recommend the applicant consult with the township to determine if this is the access route that the township would like to see implemented.

Route #18 – Moredon Trail (Moredon Road to Pennypack Trail)

¹ <https://www.abingtonpa.gov/home/showpublisheddocument?id=2246>

This route, through a property owned by Sisters of the Holy Redeemer is recommended as a second alternative to access the Pennypack Trail in the eastern quadrant of the Township. This very large property contains an existing gravel road and a significant amount of open space that could accommodate a public trail without much disturbance to the property's existing activity. Further discussion with the Sisters of the Holy Redeemer as well as an easement or agreement is needed to implement this segment.

OTHER PLAN INFORMATION

The following information shall be shown [§146-11]:

- A. Easements. Subsection B. requires information describing the location, size, ownership and purpose of all rights-of-way and easements located within the property boundaries (such as any relating to the common access road).

CONCLUSION

We wish to reiterate that MCPC generally supports the applicant's proposal but we believe that our suggested revisions will better achieve the township's planning objectives for renewable energy uses.

Please note that the review comments and recommendations contained in this report are advisory to the municipality and final disposition for the approval of any proposal will be made by the municipality.

Should the governing body approve a final plat of this proposal, the applicant must present the plan to our office for seal and signature prior to recording with the Recorder of Deeds office. A paper copy bearing the municipal seal and signature of approval must be supplied for our files. Please print the assigned MCPC number (#22-0113-001) on any plans submitted for final recording.

Sincerely,



Mike Narcowich, AICP, Community Planning Assistant Manager
mnarcowi@montcopa.org – 610-278-5238

c:

Lucy Strackhouse, Chair, Township Planning Commission
Sisters of the Redeemer, Applicant
Jack Dempster, Vice President for Facilities and Construction, Holy Redeemer Health System,
Applicant's Representative
Khaled R. Hassan, P.E., Pennoni, Township Engineer
Michael P. Clarke, Esq., Rudolph Clarke, LLC, Township Solicitor

1 <https://www.abingtonpa.gov/home/showpublisheddocument?id=2246>

Attachment A: Aerial Image of Site

Attachment B: Reduced Copy of Applicant's Proposed Site Plan

¹ <https://www.abingtonpa.gov/home/showpublisheddocument?id=2246>

ATTACHMENT A



Solar Panel Array at
521 Moredon Road
MCPC#220113001

Montgomery
County
Planning
Commission
Montgomery County Courthouse - Planning Commission
900 Box 311, Norristown, PA 19381-0311
(610) 278-1723 (t) 610-278-3441
www.montcopa.org/placomm
Aerial photography provided by Nearmap.

0 200 400 800 Feet



1 <https://www.abingtonpa.gov/home/showpublisheddocument?id=2246>



MONTGOMERY COUNTY CONSERVATION DISTRICT

143 Level Road • Collegeville, PA 19426-3313 • 610-489-4506 • Fax: 610-489-9795
www.montgomeryconservation.org

June 2, 2022

Jack Dempster, VP Facilities and Construction
Sisters of the Redeemer
521 Moredon Road
Huntingdon Valley, PA 19006

RE: Review for Adequacy
Solar Panel Array at 521 Moredon Road
521 Moredon Road Huntingdon Valley, PA 19006
Abington Township, Montgomery County, PA

Project Acres: 16.0
Disturbed Acres: 0.72

Dear Mr. Dempster:

The Montgomery County Conservation District has reviewed the Erosion & Sediment Control Plan for the above-referenced project. The plan is considered adequate as submitted on April 18, 2022 to meet State requirements on erosion and sediment control.

The Conservation District reviews this plan **solely** to determine whether it is adequate to satisfy the requirements of (25 Pa. Code §§ 102.1 et seq.), the erosion control regulations of the Pennsylvania Department of Environmental Protection, and The Clean Streams Law (35 Pa. Code §§ 691.1 et seq.).

By a determination that the plan is adequate to meet those requirements, neither the Conservation District nor Montgomery County assumes any responsibility for the implementation of the plan, or the proper construction and operation of the facilities contained in the plan.

It is the responsibility of the owner/developer to correct or modify any practices, which prove inadequate to control erosion and sedimentation during and after construction. A copy of this plan including the narrative must be available at all times at the site of the earth disturbance in accordance with erosion and sediment control regulations.

This plan as determined to be adequate by the Montgomery County Conservation District is valid for three years from the date of this letter. Should any party require revisions or alterations which affect the Erosion & Sediment Control Best Management Practices of this Plan as of this date, this letter is nullified. Resubmission of revisions will be charged a fee based on the review fee schedule in effect at the time of the re-submission. The District reserves the right to assess a full review fee if preliminary examination indicates substantial alterations to the plan have occurred. If earth disturbance does not occur within the three-year limit of this review, a resubmission to the District will be viewed as an original application and the full review fee will be charged based on the fee schedule in effect at the time of application.

Sincerely,
Jeffrey McKenna
Jeffrey McKenna
Resource Conservationist

cc: Timothy F. Boles, Boles Smyth Associates, Inc.
Abington Township
Montgomery County Planning Commission
File

ES01



3100 Horizon Drive
Suite 200
King of Prussia, PA 19406
T: 610-277-2402
F: 610-277-7449

www.pennoni.com

August 31, 2022

ABINT130026

Mr. Richard Manfredi, Township Manager
Abington Township
1176 Old York Road
Abington, PA 19001

**RE: LD-22-04 – 521 Moredon Road (Solar Panel Farm)
521 Moredon Road PARID: 30-00-44765-00-7 / TMID: 30018 011E
Preliminary/Final Minor Land Development Plans Review (3rd Submission)**

Dear Mr. Manfredi:

We have received a copy of the Preliminary/Final Minor Land Development Plans consisting of fifteen (15) sheets dated July 16, 2022 and received on August 17, 2022; as prepared by Boles, Smyth Associates Inc., located at 2400 Chestnut Street in Philadelphia, PA for the above referenced project.

Under this Application, the Applicant is proposing to lease a portion of land (approximately 4.7 acres) owned by the Sisters of the Holy Redeemer to install a ground mounted principal solar array and panel system; and associated equipment, conduit, concrete pads along with the solar panels; an extension to the existing gravel access road; and stormwater runoff control measures.

This project is located within the R-1 Low-Density Residential Zoning District and is fronted by Moredon Road to the southwest, Pennypack Creek to the northeast, and residential properties zoned in the R-1 Low-Density Residential Zoning District to the northwest and southeast.

This parcel consists of the Sisters of the Holy Redeemer Church, as well as a previously approved land development application (#LD-21-04), that is currently under construction for a 6,470 SF barn. Access to/from the site will be by way of one (1) existing gravel access road currently used by the Sewer Authority located off of Moredon Road. The new solar panel array system will not be needing public water or sewer.

In accordance with the FEMA, Flood Insurance Rate Map (FIRM) Panel No. 42091C0402G, effective March 2, 2016, the northern area and the area along the northwestern tract boundary has an unnamed tributary to Pennypack Creek; as well as, the drainage channel along the eastern portion of the tract, have been identified by the FEMA FIRM to be located within flood Zone X and are special flood hazard areas subject to inundation by the 0.2% annual chance flood (500-year flood), or areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile. The remaining portions of the tract are located within Zone X, which are areas determined by the FEMA FIRM to be located outside the 0.2% annual chance flood and areas of minimal flood hazard. Therefore, based on the FEMA determination, the area of the tract with the proposed site improvements is not located within the Floodplain Conservation Overlay District and is not subject to the floodplain regulations of the Floodplain Conservation Overlay District.

In addition to the Floodplain Conservation District, this parcel is classified by Figure 15.2 - Abington Township Riparian Corridor Analysis Map as a parcel that intersects the riparian corridor; therefore, this parcel is located within the Riparian Corridor Conservation District and is subject to the regulations of the Riparian Corridor Conservation District.

Based on the existing contours shown on the plan, there are areas of precautionary steep slopes (greater than 15% to 25%) and prohibitive steep slopes (greater than 25%), located throughout the site. Since these areas do span five contiguous 10-foot contour intervals, the site is determined to be located in the steep slope conservation overlay district and is subject to the regulations of the Steep Slope Conservation District.

VARIANCES RECEIVED

Under this land development application, the Applicant has been granted the following variances by the Zoning Hearing Board under Application no. 21-25:

1. **§301 and §2706.A - Principal Solar Energy Systems** - to allow for the construction of a ground mounted solar panel array in the R-1 Low-Density Residential Zoning District.

This variance was granted subject to the following conditions:

1. That construction upon and use of the subject property shall be in substantial conformance with the testimony, exhibits, and other evidence presented at the Public Hearing on this matter, with the exception of minor modifications in precise placement of the proposed panel array; and
2. That if the proposed solar panel improvements are visible from residences within the abutting Tall Trees community the Applicant shall install landscaping to obstruct the visibility upon written request from that community's homeowner's association delivered to the Applicant and the Township within two years of:
 - a. The date of this approval, or
 - b. The completion of the installation of the solar panel improvements depicted on the exhibits presented at the Public Hearing, whichever is latest.

CONDITIONAL USE APPROVAL RECEIVED

The Applicant was granted a conditional use approval for the portion of the array and fencing that encroaches within the Zone 2 of the Riparian Corridor Conservation District by the Board of Commissioners on August 11, 2022.

The Applicant shall provide our office with a copy of the conditional use approval.

WAIVERS REQUESTED

The Applicant has provided a waiver request letter dated August 26, 2022 and is requesting the following waivers as part of this land development project:

1. **§142 – Stormwater Management** – A waiver from the requirement to provide stormwater management design report and calculations for the solar panel array.
The Applicant is proposing concrete curb level spreaders for the solar panel array which will help reduce the velocities of the flows leaving the site. Stormwater management is provided for the 3,300 SF of new gravel area as required by the code.

We support this waiver request given that the array design complies with FAQ #4 of the PADEP's recommended guidance for ground mounted solar projects and mitigates potential stormwater impacts by employing BMPs as part of the array installation and given that stormwater

management is provided for the new gravel driveway area located at the site entrance to the solar array field.

2. **§146-11.B.(11).(b) – Existing Features Plan** – A waiver from the requirement to provide vegetation resource identification of stand-alone trees with calipers of ten (10) inches or greater, measured at a point four (4) feet above grade on the Existing Features Plan.
The Applicant is proposing to not conduct a tree survey for the entire 85-acre parcel since only two (2) trees are to be removed as part of this project.

We support this waiver request due to the limited size and scope of the project since only two (2) trees will be removed as part of this project and since the Applicant has complied with the tree replacement requirements under Section 2401.A.2.d.(1).(a).

3. **§146-11.H.(1) – Landscape Plan** – A waiver from the requirement to provide a landscape plan prepared by a registered landscape architect.
The Applicant is proposing the landscape plan to be prepared by the design engineer with the screening and replacement trees being selected by the Redeemer Health System’s Director of Landscaping.

We support this waiver request due to the limited size and scope of the project, and contingent the Applicant provides a landscaping requirements and compliance table on the plans since additional plantings have been provided under the current submission.

The following documents have been reviewed:

Title	Sheet	Dated	Revised
Property/Record Plan	1 of 15	07/16/22	-----
Existing Site Plan 1	2 of 15	07/16/22	-----
Existing Site Plan 2	3 of 15	07/16/22	-----
Proposed Site Plan 1	4 of 15	07/16/22	-----
Proposed Site Plan 2	5 of 15	07/16/22	-----
Existing Slopes Plan	6 of 15	07/16/22	-----
Equipment Access Area Plan	7 of 15	07/16/22	-----
Details	8 of 15	07/16/22	-----
E&S Control Plan	9-10 of 15	07/16/22	-----
E&S Details & Notes	11-13 of 15	07/16/22	-----
Landscape Plan	14 of 15	07/16/22	-----
Miscellaneous Details	15 of 15	07/16/22	-----

We have performed a review of the above referenced plans for compliance with the Zoning Ordinance (Chapter 162); Subdivision and Land Development Ordinance (Chapter 146); Stormwater Management Ordinance (Chapter 142) and our previous review letter dated May 11, 2022. We offer the following comments for your consideration:

ZONING COMMENTS

6. ***Per §1508.B. – Riparian Management – Mitigation Measures*** - Uses permitted in §1503. Permitted Uses involving corridor crossings or other encroachment within the Riparian Corridor Conservation District shall be mitigated by increasing the width of the corridor as replacement for the area lost due to the encroachment or disturbance, so that the total corridor area (land area within Zone One

and Zone Two) for each applicable side of the stream or watercourse is equal to that required by §1502.A.2. Width. Corridor area is the product of the corridor width required by §1502.A.2. Width and the total length for each applicable side of the stream or watercourse for which a Riparian Corridor Conservation District is being established. Perimeter shall be used in place of length for determining wetland buffer area. The increased width shall be spread throughout the corridor to the maximum extent possible. For streams and watercourses, the increased width shall be applied along the length of the stream in blocks of 1,000 feet or more, or the full length of the corridor on the affected property, whichever is less.

Applicant is encroaching onto Zone 2 of the riparian corridor and would be required to provide mitigation measures in accordance with the Zone 2 Conditional Use provisions. A statement on the plans should be provided identifying the mitigation measures and mitigation calculations to ensure these measures have been adequately addressed.

The Applicant shall provide a note on the plans to state the proposed mitigation measures.

The Applicant shall provide a note on the plans describing the mitigation measures for the stream or watercourse as indicated in §1508.B.

15. ***Per §2706.F – Liability Insurance*** – *There shall be maintained a current general liability policy covering bodily injury and property damage with limits of at least \$1 million per occurrence and \$1 million in the aggregate.*

The Applicant has stated that the owner will obtain the required insurance coverage(s).

The Applicant shall add a note on the Record Plan (Sheet 1) stating the above requirement.

GENERAL COMMENTS

35. *Since the Applicant is proposing 4-inch-high concrete curb spreaders with 8-inch-high compost mounds at each end, at various locations within the solar panel array site, the Applicant may wish to consider providing a continuous stormwater runoff management along the southerly or northern perimeter of the solar panel array site for ease of mowing and future maintenance.*

The Applicant is still proposing multiple sections of concrete curb spreaders at various locations throughout the site. For better stormwater management, it is recommended that the Applicant provide a continuous section of the concrete curb spreader along the southern portion of the site which will also help with future maintenance and mowing.

We have received the following documents/permits/reviews:

- Application for Subdivision/Land Development (March 28, 2022)
- MCPC Request for Review Letter (April 8, 2022)
- Fire Marshal Review (May 11, 2022, and August 29, 2022 via email)
- MCPC Review (May 27, 2022)
- MCCD Review (June 2, 2022)
- Legal Description & Exhibit (Revised March 25, 2022)
- STC Review (June 15, 2022)
- EAC Review (No Comments June 22, 2022)
- Waivers Request Letter (August 26, 2022)

We have not received the following documents/permits/reviews:

- Financial Escrow
- BMP O&M Agreement

- Land Development Agreement

SUMMARY

We recommend Preliminary/Final Minor Land Development Plans approval contingent the Applicant addresses the above referenced comments.

If you have any questions or comments with this submittal, please do not hesitate to contact me.

Sincerely,

PENNONI



Khaled R. Hassan, PE
Township Engineer

cc: Terry Castorina, Executive Assistant to the Township Manager
Ashley McIlvaine, Assistant Township Manager

September 9, 2022

ABINT 130026

Mr. Richard J. Manfredi, Township Manager
Abington Township
1176 Old York Road
Abington, PA 19001

**RE: LD-22-04 – 521 Moredon Road (Solar Panels)
Meets and Bounds Description Review**

Dear Mr. Manfredi:

We have completed a review of the following description, received on June 6, 2022 for the above referenced project, prepared by Charles E. Shoemaker, Inc, located at 1007 Edge Hill Road Abington, PA. We offer the following comments for your consideration:

Description(s)

- Description of “Solar Array Lease and Access Area” dated March 25, 2022

Based on our review, the above referenced description and exhibit have no inaccuracies and the bearings and distances indicated close within an acceptable error of closure; therefore, **we recommend that the attached description be accepted for recording & execution purposes.**

If you have any questions or comments, please do not hesitate to contact me.

Sincerely,

PENNONI



Khaled R. Hassan, PE
Township Engineer

cc: Terry Castorina, Executive Assistant to the Township Manager
Ashley McIlvaine, Assistant Township Manager

PREMISES C - METES AND BOUNDS DESCRIPTION OF SOLAR ARRAY LEASE AND ACCESS AREA

DESCRIPTION OF A PARCEL OF LAND LOCATED IN THE TOWNSHIP OF ABINGTON, COUNTY OF MONTGOMERY, COMMONWEALTH OF PENNSYLVANIA IN ACCORDANCE WITH A PLAN ENTITLED OFF-SITE LEASE AREA PLAN AT 521 MOREDON ROAD (SHEET 2 OF 3) PREPARED BY TEI CONSULTING ENGINEERS, INC. DATED MARCH 25, 2022.

SAID PARCEL BEING MORE FULLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE NORTHEASTERLY SIDE OF MOREDON ROAD (WIDTH VARIES); SAID POINT BEING LABELED ON THE PLAN AS "POB PREMISES C" AND BEING THE FOLLOWING COURSES AND DISTANCES FROM THE INTERSECTION OF THE NORTHERLY SIDE OF 521 MOREDON ROAD AND THE NORTHEASTERLY SIDE OF MOREDON ROAD (WIDTH VARIES);

THENCE S 70° 32' 34 W. A DISTANCE OF 84.44 FEET TO A POINT OF CURVATURE

THENCE ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 741.50 FEET, AN ARC LENGTH OF 268.38 FEET AND A DELTA ANGLE OF 20° 44' 17", TO A POINT OF TANGENCY.

THENCE S. 49° 48' 17" E. A DISTANCE OF 27.52 FEET TO THE POINT OF BEGINNING;

THENCE, LEAVING THE NORTHEASTERLY SIDE OF MOREDON ROAD (WIDTH VARIES), ALONG THE FOLLOWING COURSES AND DISTANCES DEFINING THE SOLAR ARRAY AND UTILITY ACCESS LEASE AREA

N. 27° 02' 13" E. A DISTANCE OF 85.13 FEET ;

THENCE N. 50° 54' 03" E. A DISTANCE OF 703.66 FEET ;

THENCE N. 75° 54' 04" E. A DISTANCE OF 91.90 FEET ;

THENCE S. 78° 56' 12" E. A DISTANCE OF 356.42 FEET ;

THENCE N. 53° 58' 52" E. A DISTANCE OF 478.00 FEET ;

THENCE N. 89° 39' 06" E. A DISTANCE OF 161.00 FEET ;

THENCE S. 26° 54' 22" E. A DISTANCE OF 95.00 FEET ;

THENCE S. 23° 50' 43" W. A DISTANCE OF 160.00 FEET ;

THENCE S. 55° 15' 42" W. A DISTANCE OF 65.00 FEET ;

THENCE N. 89° 51' 13" W. A DISTANCE OF 49.00 FEET ;

THENCE S. 53° 46' 41" W. A DISTANCE OF 441.00 FEET ;

THENCE S. 89° 54' 06" W. A DISTANCE OF 360.00 FEET ;

THENCE N. 00° 30' 36" W. A DISTANCE OF 54.00 FEET ;

THENCE N. 53° 57' 34" E. A DISTANCE OF 238.00 FEET ;

THENCE N. 06° 57' 43" W. A DISTANCE OF 54.00 FEET ;

THENCE N. 78° 56' 12" W. A DISTANCE OF 247.00 FEET ;

THENCE S. 75° 54' 04" W. A DISTANCE OF 83.00 FEET ;

THENCE S. 50° 54' 03" W. A DISTANCE OF 695.00 FEET ;

THENCE S. 27° 02' 13" W. A DISTANCE OF 85.58 FEET TO A POINT ON THE NORTHEASTERLY SIDE OF MOREDON ROAD (WIDTH VARIES);

THENCE ALONG THE NORTHEASTERLY SIDE OF MOREDON ROAD N. 49° 48' 17" W. A DISTANCE OF 20.54 FEET TO THE POINT OF BEGINNING.

CONTAINING IN AREA 229,802.89 SQUARE FEET (5.27555 ACRES)

Revised: 3-25-22