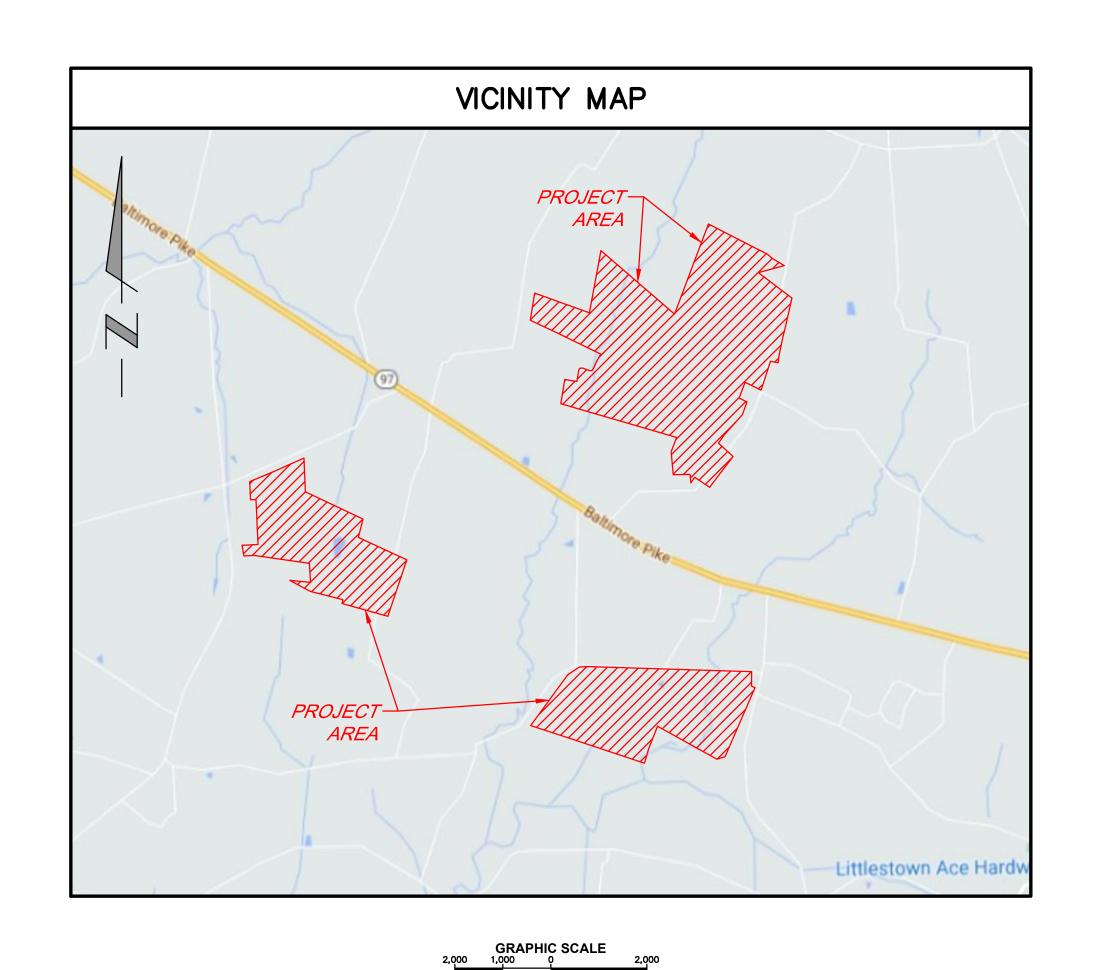
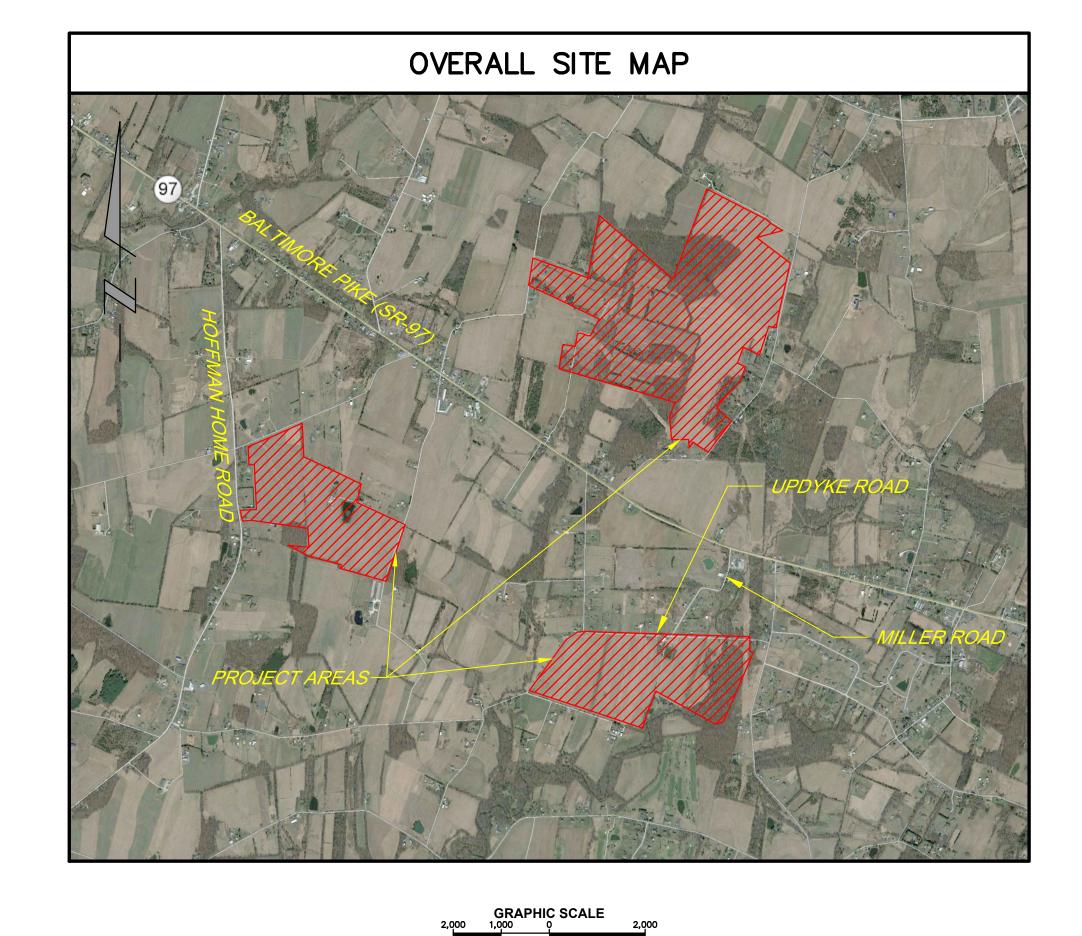
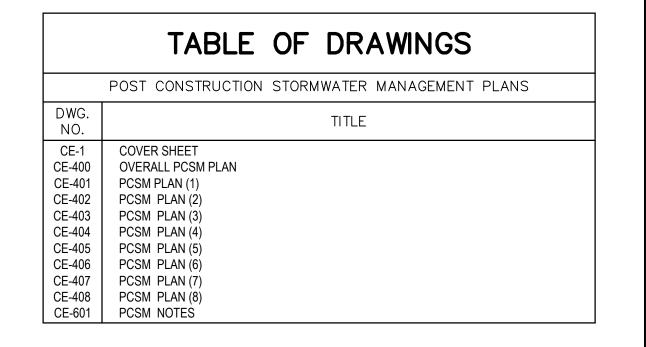
POST CONSTRUCTION STORMWATER MANAGEMENT PLAN BROOKVIEW SOLAR I, LLC. - SOLAR PROJECT

MT. JOY TOWNSHIP, ADAMS COUNTY, PENNSYLVANIA

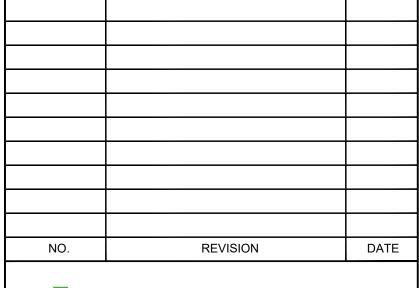
JUNE 2022













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BROOKVIEW SOLAR I, LLC.
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JUNO BEACH, FL 33408

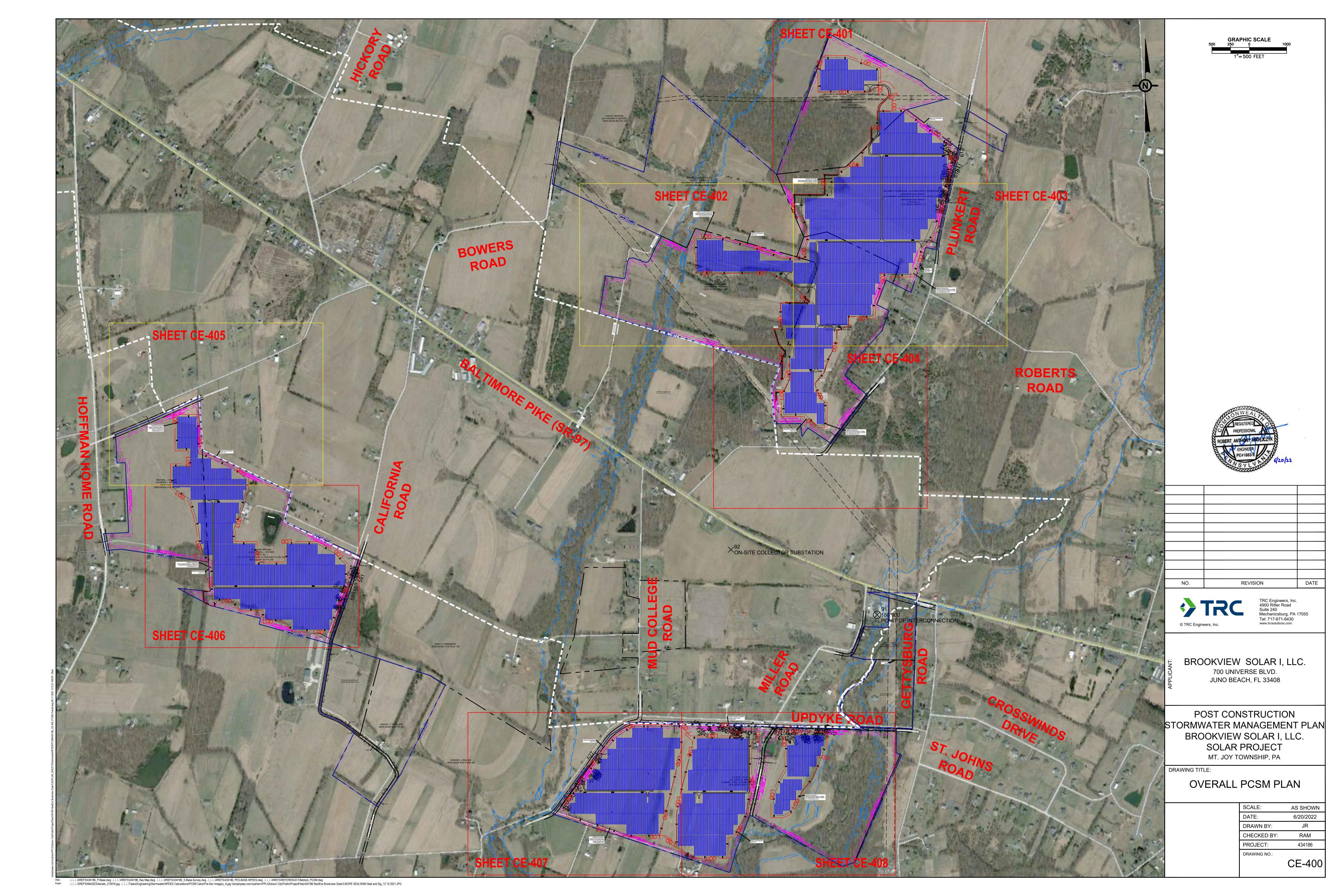
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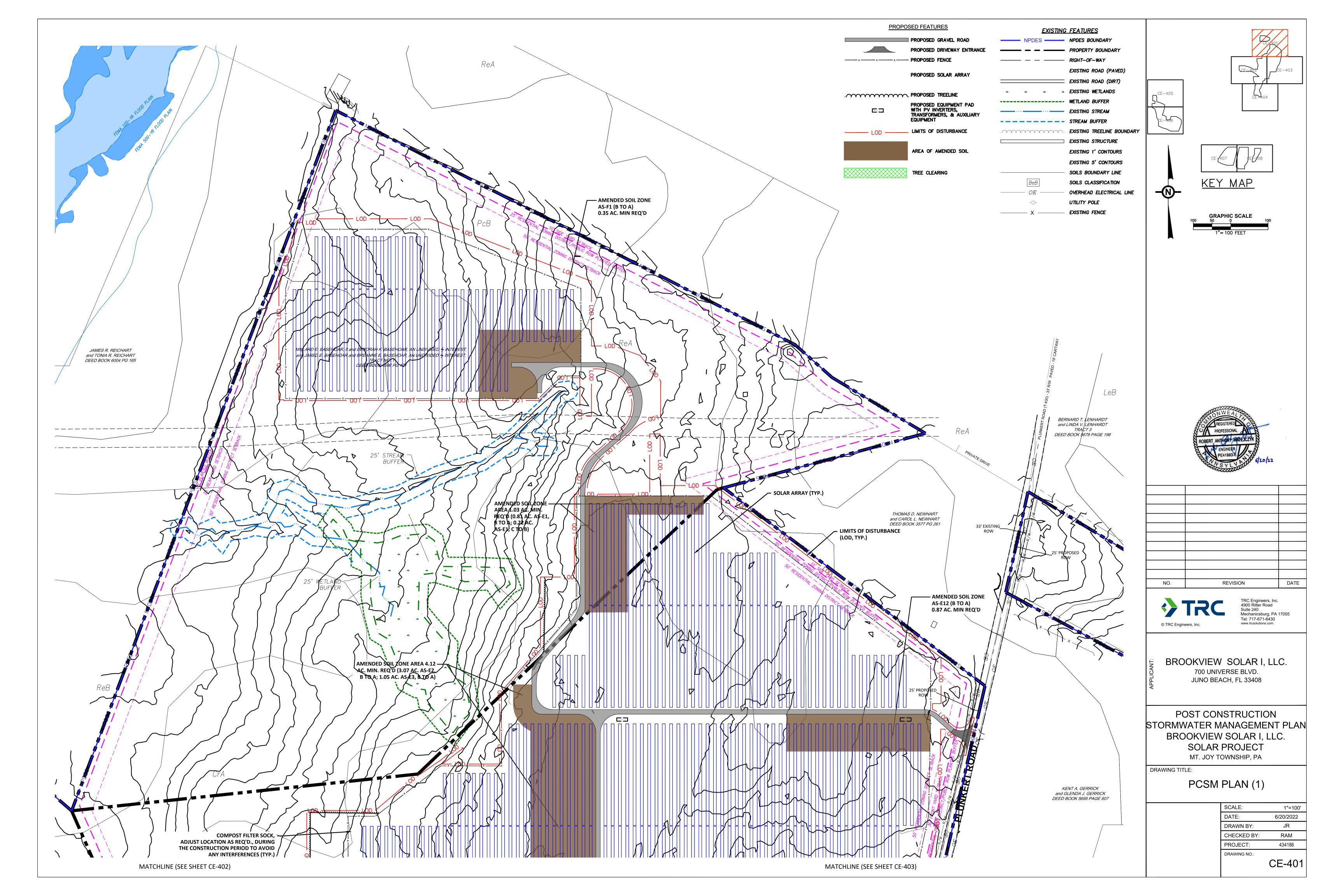
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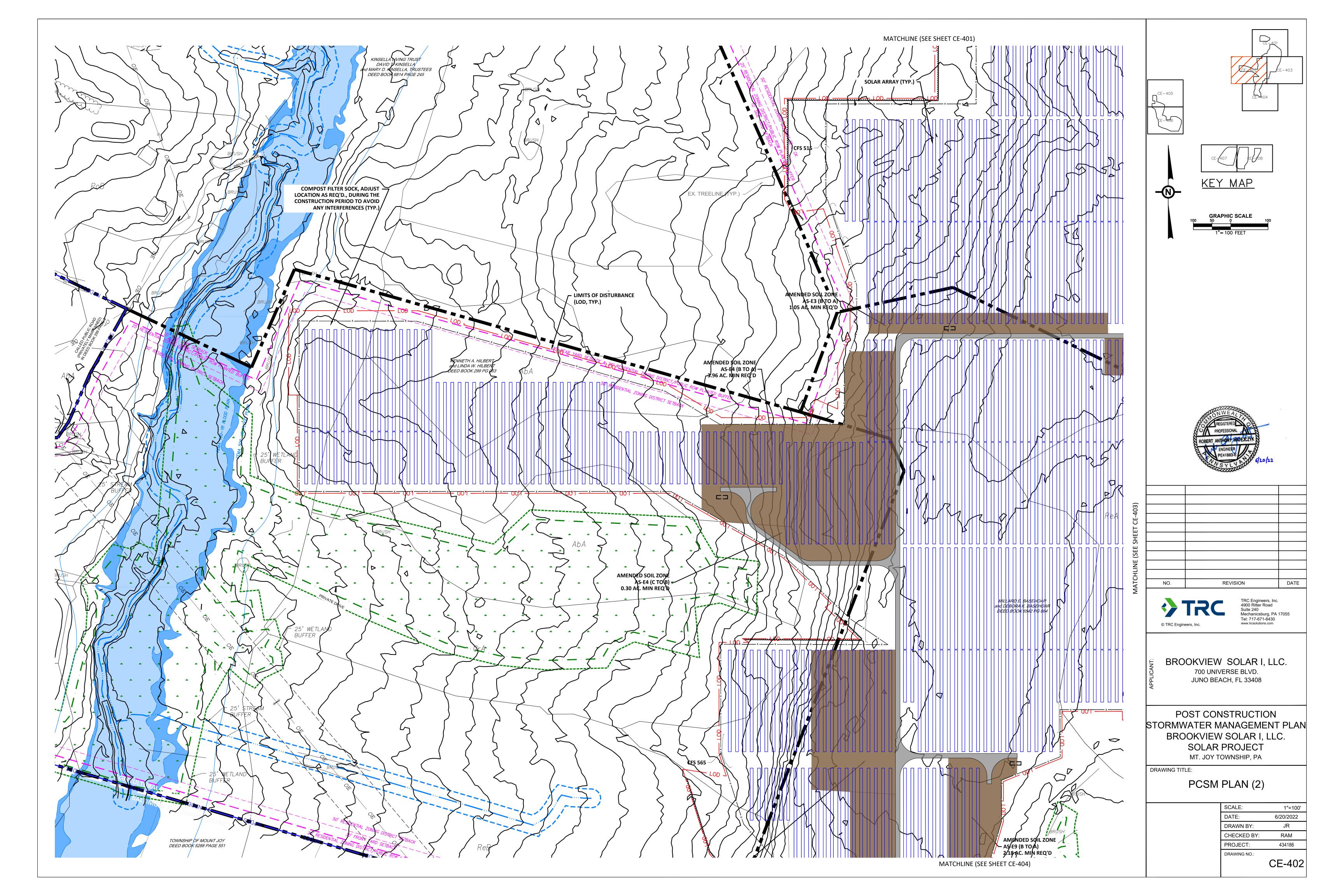
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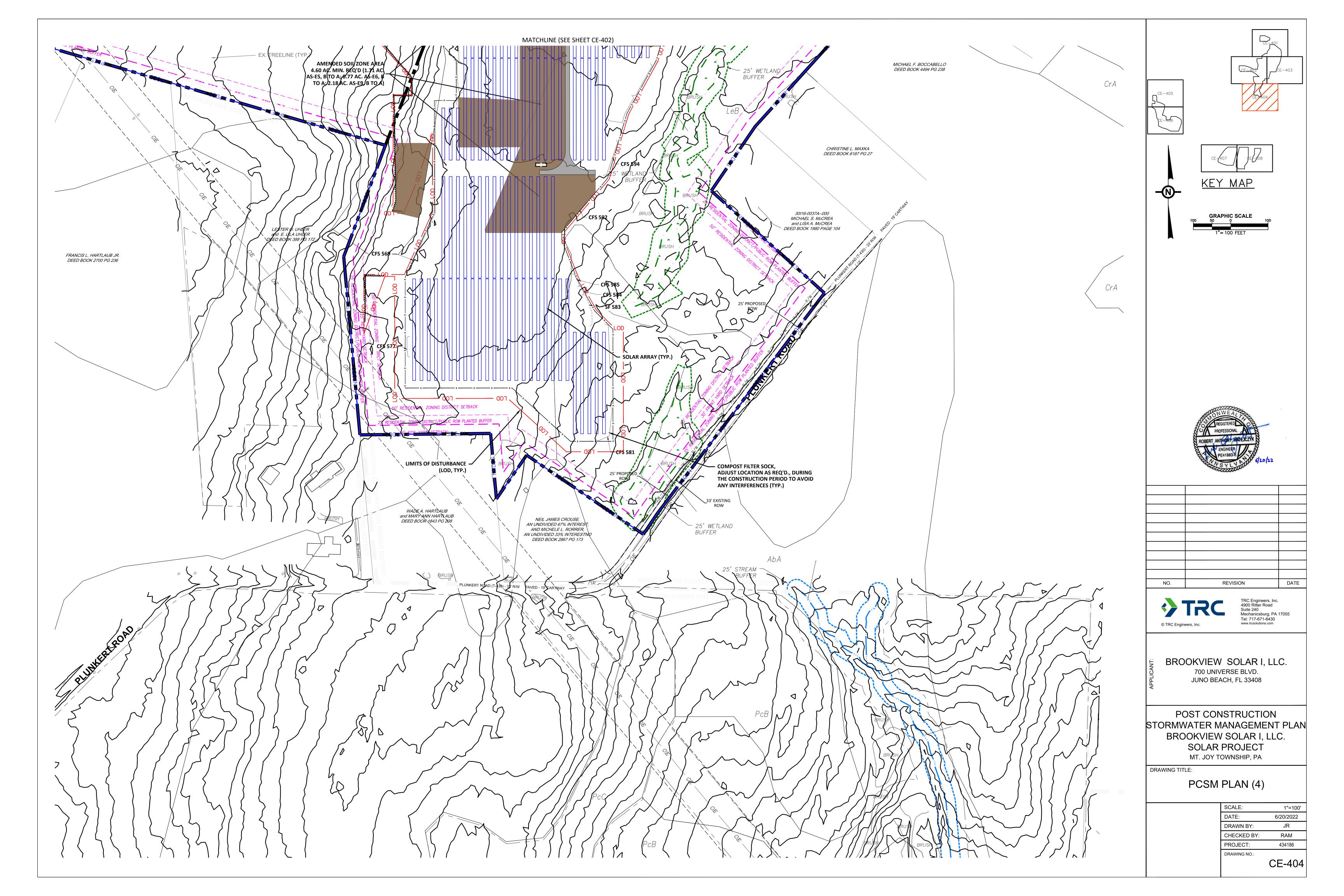
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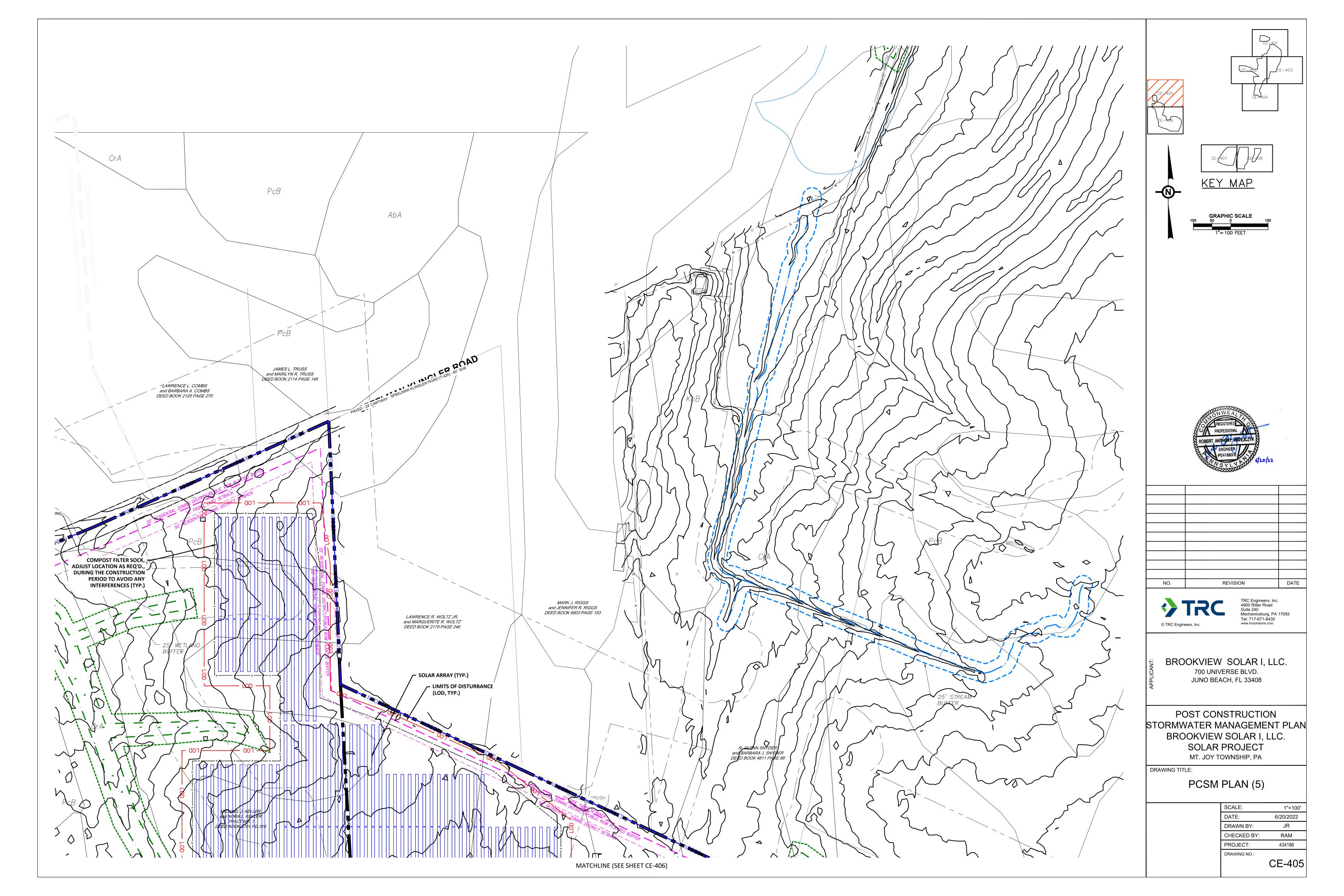


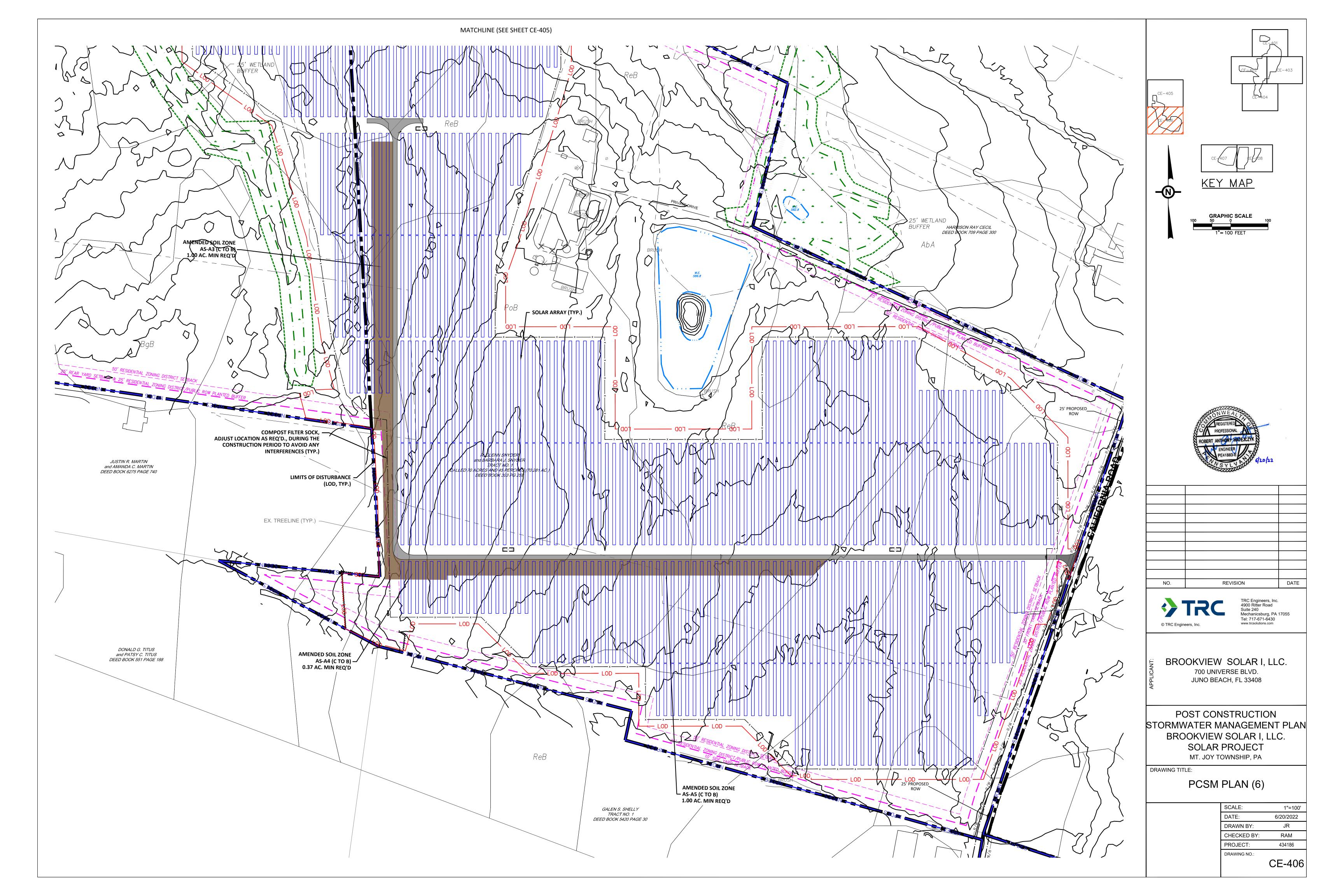


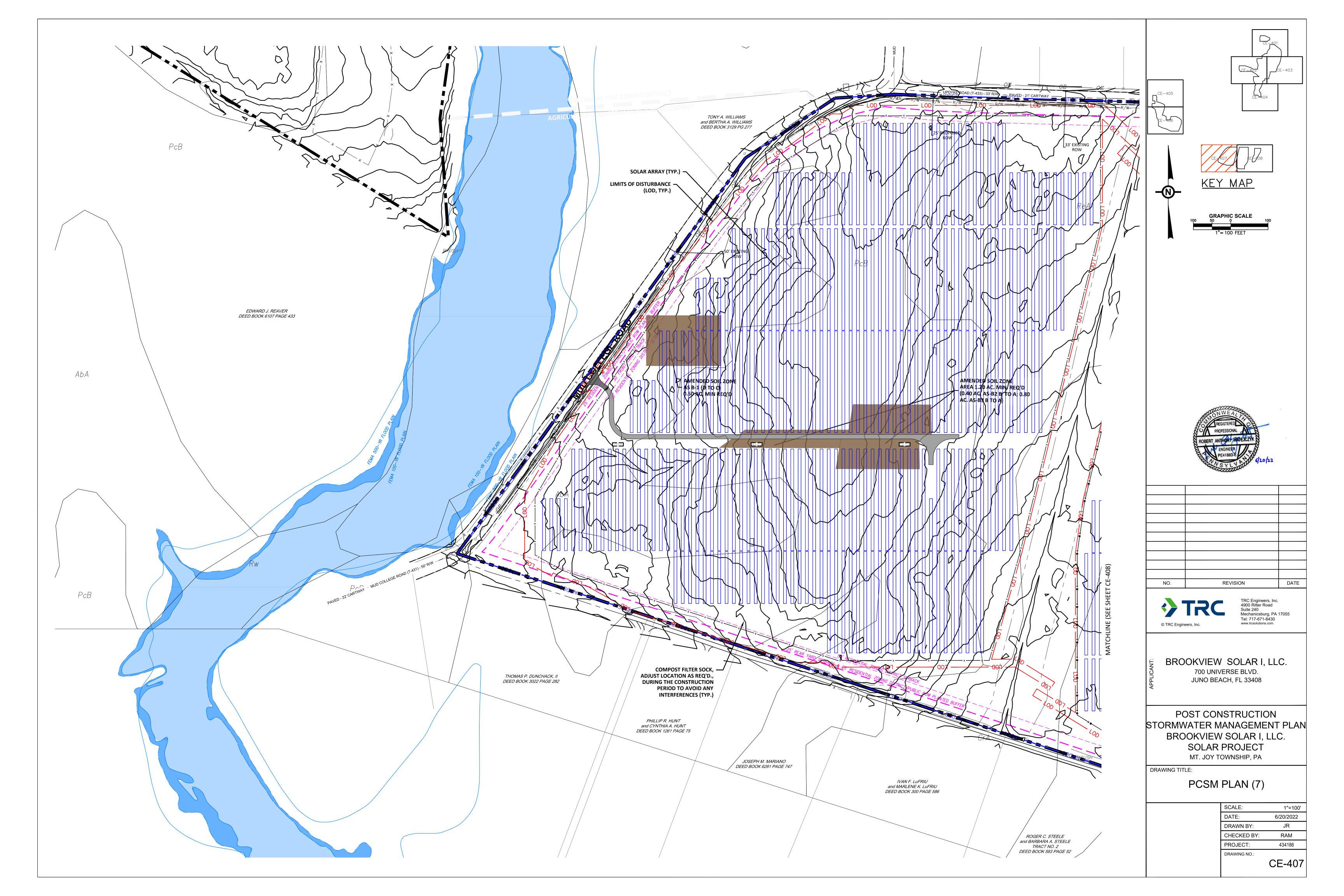


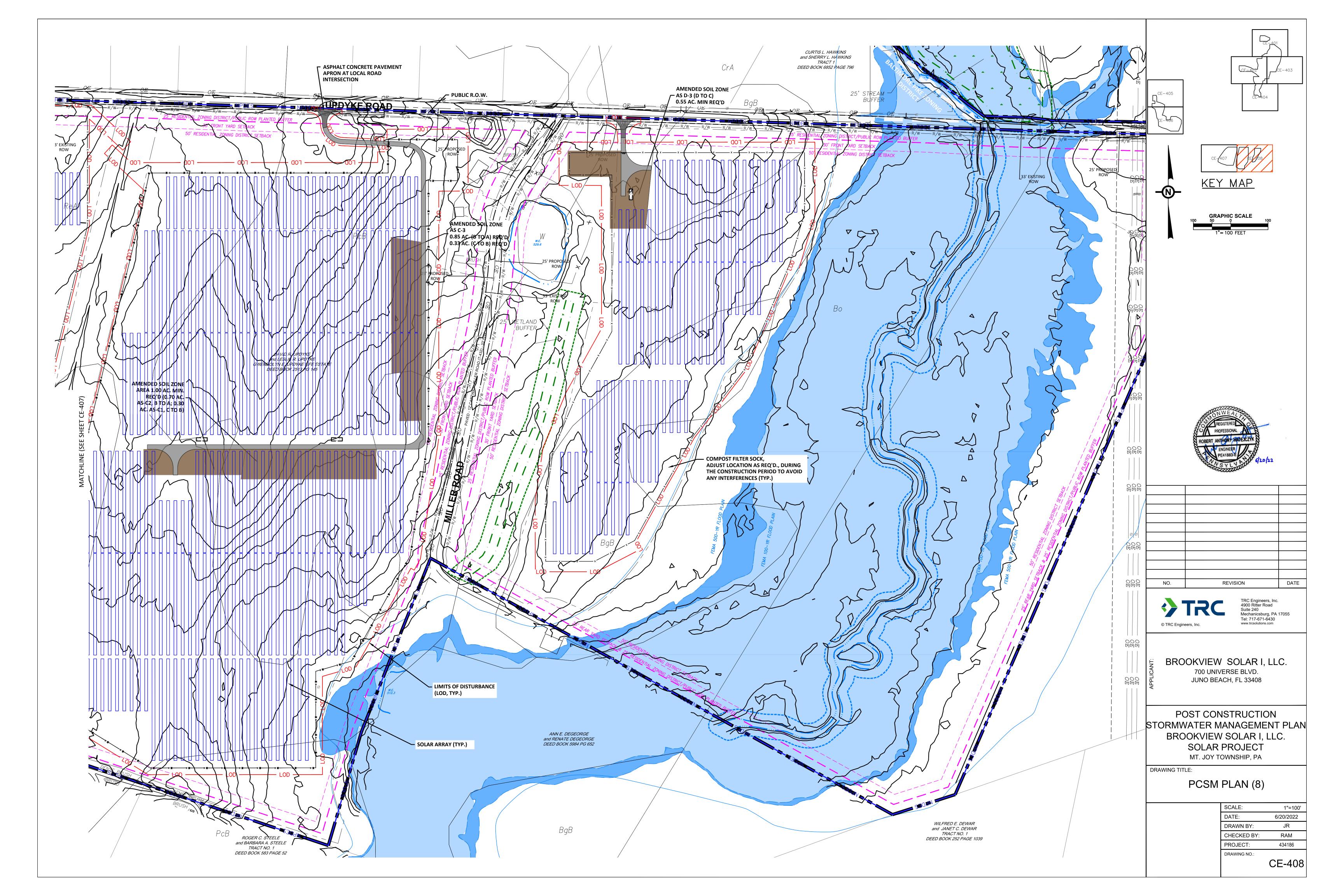












CONSTRUCTION SEQUENCE:

1. ALL CONSTRUCTION SHOULD BE COMPLETED AND STABILIZED BEFORE BEGINNING SOIL AMENDMENT/RESTORATION.

THE SOILS RESTORATION PROCESS MAY NEED TO BE REPEATED OVER TIME, DUE TO COMPACTION BY USE AND/OR SETTLING.

MAINTENANCE ISSUES:

1. SCOPE

SPECIFICATIONS:

- A. THIS SPECIFICATION COVERS THE USE OF COMPOST FOR SOIL AMENDMENT AND THE MECHANICAL RESTORATION OF COMPACTED, ERODED AND NON-VEGETATED SOILS. SOIL AMENDMENT AND RESTORATION IS NECESSARY WHERE EXISTING SOIL HAS BEEN DEEMED UNHEALTHY IN ORDER TO RESTORE SOIL STRUCTURE AND FUNCTION, INCREASE INFILTRATION POTENTIAL AND SUPPORT HEALTHY VEGETATIVE COMMUNITIES.
- B. SOIL AMENDMENT PREVENTS AND CONTROLS EROSOIN BY ENHANCING THE SOIL SURFACE TO PREVENT THE INITIAL DETACHMENT AND TRANSPORT OF SOIL PARTICLES.

2. COMPOST MATERIALS

- A. COMPOST PRODUCTS SPECIFIED FOR USE IN THIS APPLICATION ARE DESCRIBED IN TABLE 1. THE PRODUCT'S PARAMETERS
- WILL VARY BASED ON WHETHER VEGETATION WILL BE ESTABLISHED ON THE TREATED SLOPE. B. ONLY COMPOST PRODUCTS THAT MEET ALL APPLICABLE STATE AND FEDERAL REGULATIONS PERTAINING TO ITS PRODUCTION
- AND DISTRIBUTION MAY BE USED IN THIS APPLICATION. APPROVED COMPOST PRODUCTS MUST MEET RELATED STATE AND FEDERAL CHEMICAL CONTAMINANT (E.G., HEAVY METALS, PESTICIDES, ETC.) AND PATHOGEN LIMIT STANDARDS PERTAINING TO THE FEEDSTOCKS (SOURCE MATERIALS) IN WHICH IT IS DERIVED.
- C. VERY COARSE COMPOST SHOULD BE AVOIDED FOR SOIL AMENDMENT AS IT WILL MAKE PLANTING AND CROP ESTABLISHMENT
- D. NOTE 1 SPECIFYING THE USE OF COMPOST PRODUCTS THAT ARE CERTIFIED BY THE U.S. COMPOSTING COUNCIL'S SEAL OF TESTING (STA) PROGRAM (WWW.COMPOSTINGCOUNCIL.ORG) WILL ALLOW FOR THE ACQUISITION OF PRODUCTS THAT ARE ANALYED ON A ROUTINE BASIS. USING THE SPECIFIED TEST METHODS. STA PARTICIPANTS ARE ALSO REQUIRED TO PROVIDE A STANDARD PRODUCT LABEL TO ALL CUSTOMERS, ALLOWING EASY COMPARISON TO OTHER PRODUCTS.

3. SUB-SOILING TO RELIEVE COMPACTION

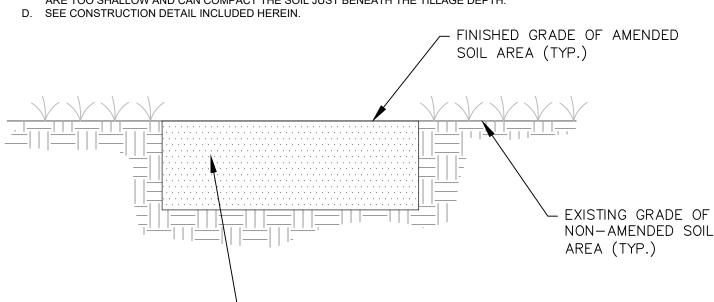
- A. BEFORE THE TIME THE COMPOST IS PLACES AND PREFERABLY WHEN EXCAVATION IS COMPLETED. THE SUBSOIL SHALL BE IN A LOOSE, FRIABLE CONDITION TO A DEPTH OF 8 INCHES BELOW FINAL TOPSOIL GRADE AND THERE SHALL BE NO EROSION RILLS OR WASHOUTS IN THE SUBSOIL SURFACE EXCEEDING 3 INCHES IN DEPTH.
- B. TO ACHIEVE THIS CONDITION, SUB-SOILING, RIPPING OR SCARIFICATION OF THE SUBSOIL WILL BE REQUIRED AS DIRECTED BY THE OWNER'S REPRESENTATIVE, WHEREVER THE SUBSOIL HAS BEEN COMPACTED BY EQUIPMENT OPERATION OR HAS BECOME DRIED OUT AND CRUSTED. AND WHERE NECESSARY TO OBLITERATE EROSION RILLS. SUB-SOILING SHALL BE REQUIRED TO REDUCE SOIL COMPACTION IN ALL AREAS WHERE PLANT ESTABLISHMENT IS PLANNED. SUB-SOILING SHALL BE PERFORMED BY THE PRIME OR EXCAVATING CONTRACTOR AND SHALL OCCUR BEFORE COMPOST PLACEMENT.
- C. SUBSOILED AREAS SHALL BE LOOSENED TO LESS THAN 1400 KPA (200 PSI) TO A DEPTH OF 8 INCHES BELOW FINAL TOPSOIL GRADE. WHEN DIRECTED BY THE OWNER'S REPRESENTATIVE, THE CONTRACTOR SHALL VERIFY THAT THE SUB-SOILING WORK CONFORMS TO THE SPECIFIED DEPTH
- D. SUB-SOILING SHALL FORM A TWO-DIRECTIONAL GRID. CHANNELS SHALL BE CREATED BY A COMMERCIALLY AVAILABLE, MULTI-SHANKED, PARALLELOGRAM IMPLEMENT (SOLID-SHANK RIPPER). THE EQUIPMENT SHALL BE CAPABLE OF EXERTING A PENETRATION FORCE NECESSARY FOR THE SITE. NO DISC CULTIVATORS CHISEL PLOWS, OR SPRING-LOADED EQUIPMENT WILL BE ALLOWED. THE GRID CHANNELS SHALL BE SPACED A MINIMUM OF 12 INCHES TO A MAXIMUM OF 36 INCHES APART. DEPENDING ON EQUIPMENT, SITE CONDITIONS AND THE SOIL MANAGEMENT PLAN. THE CHANNEL DEPTH SHALL BE A MINIMUM OF 8 INCHES OR AS SPECIFIED IN THE SOIL MANAGEMENT PLAN. IF SOILS ARE SATURATED, THE CONTRACTOR SHALL DELAY OPERATIONS UNTIL THE SOIL WILL NOT HOLD A BALL WHEN SQUEEZED. ONLY ONE PASS SHALL BE PERFORMED ON ERODIBLE SLOPES GREATER THAN 1 VERTICAL TO 3 HORIZONTAL. WHEN ONLY ONE PASS IS USED, WORK SHOULD BE AT RIGHT ANGLES TO THE DIRECTION OF SURFACE DRAINAGE, WHENEVER PRACTICAL
- E. EXCEPTIONS TO SUB-SOILING INCLUDE AREAS WITHIN THE DRIP LINE OF ANY EXISTING TREES, OVER UTILITY INSTALLATIONS WITHIN 30 INCHES OF THE SURFACE, WHERE TRENCHING/DRAINAGE LINES ARE INSTALLED, WHERE COMPACTION IS BY DESIGN (ABUTMENTS FOOTINGS OR IN SLOPES) AND ON INACCESSIBLE SLOPES AS APPROVED BY THE OWNER'S REPRESENTATIVE IN CASES WHERE EXCEPTIONS OCCUR, THE CONTRACTOR SHALL OBSERVE A MINIMUM SETBACK OF 20 FEET OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE. ARCHEOLOGICAL CLEARANCES MAY BE REQUIRED IN SOME INSTANCES.

4. COMPOST SOIL AMENDMENT QUALITY

A. THE FINAL, RESULTING COMPOST SOIL AMENDMENT MUST MEET ALL OF THE MANDATORY CRITERIA IN TABLE 4.

5. COMPOST SOIL AMENDMENT INSTALLATION

- A. SPREAD 2-3 INCHES OF APPROVED COMPOST ON EXISTING SOIL. TILL ADDED SOIL INTO EXISTING SOIL WITH A ROTARY TILLER THAT IS SET TO A DEPTH OF 8 INCHES. ADD AN ADDITIONAL 4 INCHES OF APPROVED COMPOST TO BRING THE AREA UP TO
- B. AFTER PERMANENT PLANTING/SEEDING, 2-3 INCHES OF COMPOST BLANKET WILL BE APPLIED TO ALL AREAS NOT PROTECTED BY GRASS OR OTHER PLANTS
- C. SUB-SOILING SHOULD NOT BE PERFORMED WITH COMMON TILLAGE TOOLS SUCH AS A DISK OR CHISEL PLOW BECAUSE THEY ARE TOO SHALLOW AND CAN COMPACT THE SOIL JUST BENEATH THE TILLAGE DEPTH.



- AMENDED SOIL AREAS (LOCATIONS WHERE DEPICTED ON THE PLANS) SHALL BE TREATED FOR MINOR COMPACTION USING RIPPING/ SUBSOILING/TILLING/ SCARIFICATION TECHNIQUES, TO A DEPTH OF 8". THEN TREAT THE NEWLY DE-COMPACTED SOILS BY SPREADING 2"-3" OF APPROVED COMPOST & TILLING WITH A ROTARY TILLER THAT IS SET TO A DEPTH OF 6". THEN ADD AN ADDITIONAL 4" OF APPROVED COMPOST, AS REQ'D. TO RAISE THE AREA UP TO THE SURROUNDING ADJACENT GRADES, TO PROVIDE A SMOOTH/FLUSH SURFACE. THEN SEED, MULCH, & FERTILIZE TO COMPLETE THE PROCESS (TYP.).

SOIL AMENDMENT & RESTORATION

(BASED ON BMP 6.7.3)

Soil Texture	ldeal Bulk densities	Bulk densities that may afffect root growth	Bulk densities that restrict root growth
	g/cm3	g/cm3	g/cm3
Sands, loamy sands	<1.60	1.69	1.8
Sandy loams, loams	<1.40	1.63	1.8
Sandy clay loams,			
loams, clay loams	<1.40	1.6	1.75
Slilt, silt loams	<1.30	1.6	1.75
Silt loams, silty clay			
loams	<1.10	1.55	1.65
Sandy clays, silty			
clays, some clay			
loams (35-45% clay)	<1.10	1.49	1.58
Clays (>45% clay)	<1.10	1.39	1.47

Source: Protecting Urban Soil Quality, USDA-NRCS

6. OPERATION AND MAINTENANCE PROCEDURES

LANDSCAPE RESTORATION (BMP 6.7.2) AND SOIL AMENDMENTS (BMP 6.7.3):

- INSPECT FOR DAMAGE DURING ESTABLISHMENT OF VEGETATION AND CORRECT, AS NECESSARY. (WITHIN 24 HOURS AFTER RAIN EVENTS >1", DURING YEAR 1) A VISUAL INSPECTION SHALL OCCUR TO IDENTIFY ANY AREAS PRONE TO RILL OR GULLY EROSION OR SEDIMENT DEPOSIT
- INSPECT AREAS FOR DAMAGE FROM VEHICULAR TRAFFIC, ACCUMULATION OF DEBRIS, CHANNELIZATION, AND LOW DENSITY OF VEGETATION. (QUARTERLY BASIS DURING YEARS 2 AND 3, BI-ANNUALLY THEREAFTER).
- ANY AREAS SUBJECT TO EROSION OR SEDIMENT DEPOSIT SHALL BE REPAIRED IMMEDIATELY. THE AREAS SHALL BE RE-GRADED OR SCARIFIED TO THE ORIGINAL GRADE AND STABILIZED WITH SEEDING, MULCHING, AND EROSION CONTROL MATTING. TOPSOIL AND SOIL SUPPLEMENTS MAY BE NECESSARY TO ENSURE THAT GOOD VEGETATIVE GROWTH IS POSSIBLE.
- IF VEGETATIVE COVER FAILS TO ESTABLISH, AN ALTERNATE SPECIES/MIX SHOULD BE SELECTED. VEGETATIVE COVER SHOULD BE SUSTAINED AT 90% MINIMUM COVERAGE.
- VEGETATED AREAS SHALL BE INSPECTED FOR UNWANTED/INVASIVE SPECIES ON A SEMI-ANNUAL BASIS; ANY

OVERGROW THE PANELS. LITTER, DEBRIS, EXCESSIVE GRASS CLIPPINGS, ETC. SHALL BE REMOVED.

UNWANTED/INVASIVE SPECIES SHALL BE REMOVED, AND THE AREA SHALL BE RE-SEEDED WITH MEADOW PLANTING MIX. • THE VEGETATION WILL BE MOWED AS NEEDED TO A HEIGHT OF NOT LESS THAN 4" AS TO NOT ALLOW THE VEGETATION TO

7. CRITICAL STAGES OF PCSM PLAN IMPLEMENTATION:

A PROFESSIONAL ENGINEER OR QUALIFIED DESIGNEE, SHALL BE ON-SITE TO INSPECT THE INSTALLATION OF THE FIRST AMENDED SOIL AREA, INCLUDING THE SOIL RIPPING/SUBSOILING, TILLING, SCARIFICATION, AND COMPOST PLACEMENT TO ENSURE THAT THE CONTRACTOR IS UTILIZING THE CORRECT METHODS AS SPECIFIED IN THE APPROVED PCSM PLANS.

GENERAL CONSTRUCTION SEQUENCE NOTES

- 1. LIMIT FINAL GRADING AND COMPACTION DURING FREEZING TEMPERATURES. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STEP WILL BE COMPLETED IN COMPLIANCE WITH CHAPTER 102 REGULATIONS BEFORE ANY FOLLOWING STEP IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED TO ONLY THOSE AREAS DESCRIBED IN EACH STEP. IF DOWNSTREAM BMP'S ARE INSTALLED IN ADJACENT DRAINAGE AREAS, THEN EARTH DISTURBANCE MAY BEGIN SIMULTANEOUSLY IN THE UPSLOPE AREAS.
- 2. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL COUNTY CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION.
- 3. INSTALL ALL EROSION AND SEDIMENTATION CONTROL DEVICES AS REQUIRED PER THE NARRATIVE, PLAN, AND FIELD CONDITIONS. THESE MEASURES SHALL BE MAINTAINED DURING CONSTRUCTION AND UNTIL THE PERMANENT GROUND COVER IS ESTABLISHED IN THE DISTURBED AREAS. TO MAXIMIZE THE EFFECTIVENESS OF THIS PLAN, THE CONTRACTOR SHALL REVIEW WITH PERSONNEL FROM THE ADAMS COUNTY CONSERVATION DISTRICT AT THE ON-SITE PRECONSTRUCTION MEETING, TO DETERMINE HOW TO BEST IMPLEMENT THE PLAN.
- 4. UPON COMPLETION OR TEMPORARY CESSATION OF THE EARTH DISTURBANCE ACTIVITY THAT WILL EXCEED (4) DAYS, OR ANY STAGE THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED WITH THE APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION (HYDROSEED IS NOT CONSIDERED STABILIZATION UNTIL IT GERMINATES.) HAY OR STRAW MUST BE APPLIED AT THE
- 5. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STEP OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY PHASE OF THE PROJECT UNTIL THE E&S BMPS SPECIFIED BY THE CONSTRUCTION SEQUENCE FOR THAT PHASE HAS BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS DOCUMENT. THE ADAMS COUNTY CONSERVATION DISTRICT SHALL BE NOTIFIED UPON THE INSTALLATION OF PERIMETER CONTROLS.
- 6. STABILIZE ALL GRADED SLOPES WHICH ARE 1V:3H, OR GREATER WITH EROSION CONTROL BLANKETS.

EARTHMOVING ACTIVITY NOTES:

- 1. AT LEAST (7) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, PCSM PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN, AND A REPRESENTATIVE OF THE ADAMS COUNTY CONSERVATION DISTRICT TO AN ON-SITE
- 2. AT LEAST (3) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INCORPORATED AT (800) 242-1776 FOR THE LOCATION OF EXISTING
- 3. ALL LIMITS OF DISTURBANCE AND WATERS OF THE COMMONWEALTH BOUNDARIES ARE TO BE MARKED IN THE FIELD PRIOR TO ANY EARTH DISTURBANCE.
- 4. INSTALL STABILIZED CONSTRUCTION ENTRANCES AT THE INTERFACE OF THE PROPOSED ACCESS DRIVES WITH EXISTING ROADS OR ON-SITE ACCESS DRIVES AS SHOWN ON THE PLAN AND IN ACCORDANCE WITH THE DETAIL PROVIDED ON THE PLAN.
- 5. ESTABLISH A COVER CROP BY THE INSTALLATION OF TEMPORARY SEEDING ON ALL IDLE UN-STABILIZED AGRICULTURAL FIELDS.
- 6. BEGIN THE INSTALLATION OF GRAVEL ACCESS DRIVES TO EACH WORK AREA AS SHOWN ON THE PLANS A. ONLY INSTALL AS MUCH ROADWAY AS CAN BE STABILIZED (GRAVEL BASE) ON A DAILY BASIS.
- B. STABILIZE DISTURBANCES ASSOCIATED WITH ROAD CONSTRUCTION AS PER PLAN BY THE END OF EACH WORKDAY
- 7. INSTALL ALL ORANGE CONSTRUCTION FENCES AND ANY NECESSARY COMPOST FILTER SOCK ALONG DESIGNATED WETLAND AREAS.
- 8. BEGIN THE INSTALLATION OF PERIMETER COMPOST FILTER SOCKS AND SILTRON FENCING AT THE LOCATIONS SHOWN ON THE PLANS AND ACCORDING TO THE CHARTS ON THE DETAIL SHEETS.
- 9. BEGIN THE INSTALLATION OF TEMPORARY LAYDOWN AREAS AS SHOWN ON THE PLANS.
- 10. STOCKPILE TOPSOIL AND EXCESS SOIL IN THE IMMEDIATE AREA OF THESE BMPS. PLACE COMPOST FILTER SOCK DOWNSLOPE OF THE TEMPORARY TOPSOIL STOCKPILE. SEED THE STOCKPILE WITH A TEMPORARY SEEDING MIXTURE. ALL STOCKPILES SHALL BE A MAXIMUM OF 35'H WITH SIDE SLOPES OF 1V:2H, OR FLATTER.
- 11. BEGIN THE INSTALLATION OF THE SITE PERIMETER SECURITY FENCING AS SHOWN ON THE PLANS.
- 12. BEGIN SITE CLEARING AND GRUBBING OF THE SITE WITHIN AREAS UPSLOPE OF THE CURRENTLY INSTALLED COMPOST FILTER SOCK AND SILTRON FENCE. IN EACH ARRAY SECTION
- 13. BEGIN GRADING/EXCAVATION OF THE SITE WITHIN AREAS UPSLOPE OF THE CURRENTLY INSTALLED COMPOST FILTER SOCK AND SILTRON FENCE.
- 14. INSTALL CONCRETE WASHOUT AREAS ADJACENT TO EACH PROPOSED EQUIPMENT PAD.
- 15. PERFORM GRADING OPERATIONS NECESSARY TO CONSTRUCT THE CONCRETE EQUIPMENT PADS. INSTALL EACH EQUIPMENT PAD AND IMMEDIATELY STABILIZE THE AREA WITH TEMPORARY EROSION CONTROL MATTING (IF NEEDED), SEED AND MULCH AS INDICATED ON THE PLAN.
- 16. COMPLETE ELECTRICAL WORK PER THE SITE ELECTRICAL PLANS (NOT INCLUDED HEREIN). TRENCHING SHALL BE MINIMIZED TO THE GREATEST EXTENT POSSIBLE. APPROPRIATE EROSION CONTROL SHALL BE UTILIZED ON THE DOWNSLOPE SIDE OF ALL TRENCHING. TRENCHING SHALL BE LIMITED TO THE LENGTH THAT CAN BE COMPLETED DURING A TYPICAL WORKDAY. ALL TRENCHING SHALL BE CLOSED AND TEMPORARILY STABILIZED AT THE END OF THE WORKDAY.
- 17. IMMEDIATELY STABILIZE ANY AREAS ASSOCIATED WITH THE ABOVE REFERENCED CONSTRUCTION THAT ARE AT FINAL GRADE USING THE FINAL STABILIZATION SEEDING MIX AND MULCHING, TEMPORARY SEEDING MIX AND MULCHING, OR EROSION CONTROL BLANKETS
- 18. BEGIN THE INSTALLATION OF THE SOLAR PANEL POSTS, RACKING SYSTEM, PANEL UNITS, AND ELECTRICAL COMPONENTS.
- 19. REMOVE THE TEMPORARY GRAVEL LAYDOWN AREAS AND TEMPORARY CONSTRUCTION ENTRANCES. UPON REMOVAL OF GRAVEL IN LAYDOWN AREA, THE SURFACE SHOULD BE SCARIFIED TO DE-COMPACT AND PROMOTE INFILTRATION WITHIN THIS AREA PRIOR TO RE-SEEDING. ONCE SCARIFIED CONTRACTOR SHALL SPREAD TOPSOIL, SEED AND MULCH IN ACCORDANCE WITH THE SEEDING AND RESTORATION TABLES PROVIDED ON THE PLAN. TOPSOIL SHALL BE PLACED TO A MINIMUM DEPTH OF 4". THIS SHOULD BE INITIATED NO LATER THAN (7) DAYS AFTER REACHING FINAL GRADE.
- 20. FINAL RESTORATION, GRADING, AND CLEANUP OF DISTURBED AREA AND FINAL STABILIZATION IN ACCORDANCE WITH THE
- III. ESTABLISH A UNIFORM, PERENNIAL 90% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION
- IIJ. STABILIZE GRADING WITHIN THE LIMITS OF DISTURBANCE.
- IIK. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. ADDITIONAL MULCH AND SEED WILL BE REQUIRED UNTIL THE PROJECT AREA IS STABILIZED BY PERENNIAL VEGETATIVE COVER.
- III. MAINTAIN EROSION AND SEDIMENTATION CONTROL DEVICES UNTIL THE SITE IS DECLARED SATISFACTORILY STABILIZED BY THE ENGINEER OR DESIGNEE AND THE ADAMS COUNTY CONSERVATION DISTRICT. IIM. REMOVE ALL TEMPORARY BMPS AND IMMEDIATELY REPAIR AREAS DISTURBED DURING REMOVAL. DISPOSE OF CONSTRUCTION

WASTES AT AN APPROVED WASTE MATERIAL DISPOSAL FACILITY IN ACCORDANCE WITH STATE AND LOCAL LAWS. ROUGHEN OR LOOSEN

21. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATORS SHALL CONTACT THE ADAMS COUNTY CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO THE REMOVAL/CONVERSION OF THE E&S BMP'S.

THE SOIL SURFACE UNDER THE REMOVED TEMPORARY BMPS PRIOR TO APPLICATION OF SEED AND MULCH.

- 22. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES, REMOVAL OF ALL TEMPORARY BMPS, INSTALLATION OF ALL PERMANENT PCSM BMPS, AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OPERATORS SHALL CONTACT THE ADAMS COUNTY CONSERVATION DISTRICT FOR A FINAL INSPECTION.
- 23. A NOTICE OF TERMINATION MUST BE COMPLETED AFTER ALL CONSTRUCTION STABILIZATION AND INSPECTIONS ARE COMPLETED.

FOR ALL GRASS AREAS "WITHIN" THE SOLAR PANEL ARRAY AREAS, USE ONE OF THE FOLLOWING PERMANENT SEED MIXES:

A. ERNST NATIVE/ NATURALIZED SOLAR FARM MIX (ENRNMZ-186-1)

	ERNST NATIVE/NATURALIZED SOALR FARM SEED MIX - ERNMZ-186-1		
	BOTANICAL NAME	COMMON NAME	
34.00%	Festuca rubra	Creeping Red Fescue	
33.00%	Festuca ovina, Variety Not Stated	Sheep Fescue, Variety Not Stated	
15.00%	Festuca ovina var. duriuscula, Gladiator	Hard Fescue, Gladiator	
5.00%	Festuca ovina var. glauca, Azure	Blue Fescue, Azure	
5.00%	Poa pratensis, 'Selway'	Kentucky Bluegrass, 'Selway'	
5.00%	Poa pratensis, Appalachian	Kentucky Bluegrass, Appalachian	
3.00%	Agrostis perennans, Albany Pine Bush-NY Ecotype	Autumn Bentgrass, Albany Pine Bush-NY Ecotype	

B. ERNST SOLAR FARM MIX (ENRNMZ-186)

	-		
	ERNST SOALR FARM SEED MIX - ERNMZ-186		
	BOTANICAL NAME	COMMON NAME	
45.50%	Festuca rubra Creeping Red Fescue		
15.00%	Festuca ovina var. duriuscula, 'Jetty'	Hard Fecue, 'Jetty'	
15.00%	Festuca ovina var. duriuscula, Gladiator	Hard Fescue, Gladiator	
10.00%	Festuca rubra ssp. commutata	Chewings Fescue	
5.00%	Poa pratensis, 'Selway'	Kentucky Bluegrass, 'Selway'	
5.00%	Poa pratensis, Appalachian	Kentucky Bluegrass, Appalachian	
4.50%	Trifolium repens, Dutch	White Clover, Dutch	

2. FOR ALL GRASS AREAS "OUTSIDE" THE SOLAR PANEL ARRAY AREAS, ALONG FENCE LINES & OTHER MISC. OPEN AREAS, USE THE FOLLOWING PERMANENT SEED MIX:

A. ERNST NORTHEAST SOLAR POLLINATOR BUFFERMIX (ENRNMZ-610)

	NORTHEAST SOLAR POLLINATOR BUFFER MIX - ERNMZ-610		
	BOTANICAL NAME	COMMON NAME	
37.00%	Schizachyrium scoparium, 'Camper'	Little Bluestem, 'Camper'	
36.30%	Bouteloua curtipendula, Butte	Sideoats Grama, Butte	
4.00%	Chamaecrista fasciculata, PA Ecotype	Partridge Pea, PA Ecotype	
4.00%	Coreopsis lanceolata	Lanceleaf Coreopsis	
4.00%	Echinacea purpurea	Purple Coneflower	
3.30%	Rudbeckia hirta	Blackeyed Susan	
2.30%	Heliopsis helianthoides, PA Ecotype	Oxeye Sunflower, PA Ecotype	
1.60%	Penstemon digitalis	Tall White Beardtongue	
1.50%	Asclepias tuberosa	Butterfly Milkweed	
0.80%	Liatus spicata	Marsh Blazing Star	
0.70%	Senna hebecarpa, VA & WV Ecotype	Wild Senna, VA & WV Ecotype	
0.60%	Zizia aurea	Golden Alexanders	
0.50%	Asclepias incarnata, PA Ecotype	Swamp Milkweed, PA Ecotype	
0.50%	Geum canadense, PA Ecotype	White Avens, PA Ecotype	
0.50%	Monarda fistulosa, Fort Indiantown Gap-PA Ecotype	Wild Bergamot, Fort Indiantown Gap-PA Ecotype	
0.50%	Pycnanthemum tenuifolium	Narrowleaf Mountainmint	
0.40%	Aster laevis, NY Ecotype	Smooth Blue Aster, NY Ecotype	
0.40%	Aster novae-angliae, PA Ecotype	New England Aster, PA Ecotype	
0.30%	Baptisia australis, Southern WV Ecotype	Blue False Indigo, Southern WV Ecotype	
0.30%	Tradescantia ohiensis, PA Ecotype	Ohio Spiderwort, PA Ecotype	
0.20%	Oenothera fruticosa var. fruticosa	Sundrops	
0.20%	Solidago nemoralis, PA Ecotype	Gray Goldenrod, PA Ecotype	
0.10%	Aster prenanthoides, PA Ecotype	Zigzag Aster, PA Ecotype	

MULCHING SHALL BE PROVIDED AS REQUIRED IN AREAS DIFFICULT TO VEGETATE, AND DURING OFF-SEASON

- OPERATIONS. MULCHING METHODS AND MATERIALS SHALL CONFORM TO THE FOLLOWING:
- a. APPLY SEED MIX WITH SOIL GUARD BONDED FIBER MATRIX (OR EQUIVALENT) PER MANUFACTURERS
- b. INSTALL EROSION CONTROL BLANKET PER FHWA TYPE 2D SPECIFICATIONS (I.E. NORTH AMERICAN
- GREEN SC150 OR EQUAL) AFTER BROADCASTING SEED MIX ON ALL SLOPES. 2. SLOPES FLATTER THAN 3:1 ("FLAT" AREAS AROUND WT PADS OR ADJACENT TO ROADS) - APPLY 3 TONS
- PER ACRE OF WEED-FREE STRAW MULCH OVER SEED MIX.
- 3. STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.

C. PERMANENT VEGETATION

PERMANENT VEGETATION SHALL BE APPLIED TO ALL DISTURBED AREAS ON-SITE WHERE WORK HAS CEASED AND WILL NOT BE RE-DISTURBED AT A LATER DATE. PERMANENT SEEDING SHOULD NOT OCCUR AFTER OCTOBER 15TH BUT SHOULD BE STABILIZED ACCORDING TO THE TEMPORARY STABILIZATION TECHNIQUES DESCRIBED IN SECTION II.D AND II.E OF THIS SHEET. PROVISIONS SHOULD BE MADE TO PERMANENTLY STABILIZE THE AREA IN THE SPRINGTIME GROWING SEASON.

SCARIFY THE EXISTING SOIL IF NEEDED, GENERALLY PARALLEL WITH SLOPE CONTOURS TO A DEPTH OF 3-5" OR SUCH THAT WITH THE ADDITION OF TOPSOIL THE TOTAL DEPTH OF UNCOMPACTED SOIL IS 7"-9". SPREAD STOCKPILED TOPSOIL EVENLY ACROSS DISTURBED AREA TO ORIGINAL DEPTH. LEAVE SOIL LOOSE AND UNCOMPACTED. REMOVE LARGE ROCKS AND DEBRIS.

Table 4. Absorbed Mass of Nutrients and Metals in Unvegetated Plot Runoff From 30-Minute, High-Intenstiy (100-mm/hr.) Rainstorm

	Compost Treatments			Convention	al treatments
	Biosolids	Yardwaste	Bioindustrial	Compated	Topsoil
			Compost	Subsoil	
Element		Geometric Mean (mg)			
Chromium	0.01 ^b	<0.01 ^a	<0.01 ^b	0.92 ^c	0.76 ^c
Copper	0.02 ^b	<0.01 ^a	0.01 ^b	1.03 ^c	0.66 ^c
Nickel	<0.01 ^b	<0.01 ^a	<0.01 ^b	0.96 ^c	0.67 ^c
Lead	0.01 ^b	<0.01 ^a	<0.01 ^b	1.82 ^c	0.95 ^c
Zinc	0.10^{b}	<0.01 ^a	0.03 ^b	6.55 ^c	3.99 ^c
Nitrogen	0.47 ^b	<0.01 ^a	0.09 ^{a,b}	266.65 ^c	211.87 ^c
Phosphorus	0.45 ^b	<0.01 ^a	0.09 ^{a,b}	36.47 ^c	29.07 ^c
Potassium	0.17 ^b	<0.01 ^a	0.09 ^{a,b}	103.94 ^c	71.57 ^c

Means within the same row with differrent letter designations are significantly different (p<0.05)

ADDITIONAL SEED MIXTURE INFORMATION

PERTAINING TO ERNST NATIVE/NATURALIZED SOLAR FARM SEED MIX (ERNMX-186-1) AND ERNST SOLAR FARM MIX (ERNMX-186

MAINTENANCE RESPONSIBILITIES SHALL BE IMPLEMENTED OVER THE LIFETIME OF THE PROJECT FROM THE ONSET OF CONSTRUCTION THROUGH DECOMMISSIONING. MAINTENANCE SERVICES AND PRACTICES WILL VARY IN NEED, TYPE, AND INTENSITY DURING THE LIFECYCLE OF THE PROJECT. MOWING REGIMENS WILL VARY AS WELL DEPENDING ON THE TIME OF YEAR AND RAINFALL INTENSITY, THOUGH MOWING WILL OCCUR AS INFREQUENTLY AS VEGETATION GROWTH WILL ALLOW.

THE LONG-TERM GROUND COVER WAS SELECTED TO ELIMINATE THE NEED FOR FREQUENT MOWING. THE PRIMARY OBJECTIVE OF MOWING IS TO KEEP THE VEGETATION BELOW THREE (3) FEET IN HEIGHT TO AVOID PANEL SHADING. IT IS RECOMMENDED THAT A MINIMUM OF ONE (1) TO TWO (2) MOWINGS OCCUR FACH YEAR TO MAINTAIN A HEALTHY VIABLE GROUNDCOVER STAND THROUGHOUT THE PROJECT. MOWING WILL BE NEEDED TO CONTROL ANNUAL WEEDS THAT ARE TYPICAL AFTER A GROUND DISTURBANCE. THE PURPOSE OF THE MOWING IS TO PREVENT ANNUAL WEEDS AND ANY LONG-LASTING PERENNIAL WEEDS FROM SEEDING OUT AND COMPETING WITH THE DESIRED/PLANTED GROUND COVER. THESE MOWINGS TYPICALLY OCCUR AT LEAST TWICE THE FIRST YEAR AND LESS FREQUENTLY AFTER THAT. WITH THE TIMING AND FREQUENCY OF MOWING ADJUSTED IN RESPONSE TO VEGETATION GROWTH, WEATHER PATTERNS, AND OTHER INFLUENCES. OCCASIONALLY. A THIRD MOWING MAY BE NEEDED DURING WETTER AND HOTTER GROWING SEASON CONDITIONS. GENERALLY, ANNUAL MOWING SHOULD BE SCHEDULED TO OCCUR PRIOR TO THE END OF JULY TO AVOID WEEDY SPECIES FROM BEING ABLE TO PRODUCE SEED; HOWEVER, ALL MOWING SHOULD BE COMPLETED BY THE END OF AUGUST.

PERTAINING TO ERNST NORTHEAST SOLAR POLLINATOR BUFFER MIX (ERNMX-610) THE POLLINATOR-SPECIFIC SEED MIX TO BE USED IS DESIGNED TO PROVIDE ADDITIONA ECOLOGICAL BENEFIT AND ENHANCE VISUAL AESTHETICS OF THE PROJECT. THIS SEED MIX IS INTENDED TO BE SOWN IN SELECT AREAS AWAY FROM PANEL ARRAYS THEREFORE. THE SPECIES SELECTED CAN BE ALLOWED TO GROW TALLER THAN THE GROUND COVER MAINTAINED WITHIN THE SOLAR ARRAY.

APPLICATION RATES PER ERNST ARE AS FOLLOWS:

1) ERNST NATIVE/NATURALIZED SOLAR FARM SEED MIX (ERNMX-186-1) = 4LBS. PER 1,000 2) ERNST SOLAR FARM MIX (ERNMX-186) = 4LBS. PER 1,000 SQFT

3) ERNST NORTHEAST SOLAR POLLINATOR BUFFER MIX (ERNMX-610) = 15LBS. PER ACRE BROADCAST OR 10LBS. PER ACRE DRILLED WITH 30LBS. PER ACRE OF COVER CROP

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POST CONSTRUCTION STORMWATER MANAGEMENT PLAN BROOKVIEW SOLAR I, LLC. **SOLAR PROJECT**

DRAWING TITLE:

PCSM NOTES

MT. JOY TOWNSHIP, PA

SCALE:	AS NOTED
DATE:	6/20/2022
DRAWN BY:	JR
CHECKED BY:	RAM
PROJECT:	434186
DRAWING NO.:	

CE-601

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