D. Site Location Map Figures and Civil/Erosion and Sediment Control Plans and Details

DRAWING INDEX							
DRAWING NO	DRAWING TITLE	DATE	REV	DATE	REV	DATE	REV
SRS-C-100-00	CIVIL COVER SHEET	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-100-01	CIVIL GENERAL NOTES	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-100-02	OVERALL SITE AREA INDEX	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-101-01	TYPICAL CIVIL DETAILS (SHEET 1 OF 10)	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-101-02	TYPICAL CIVIL DETAILS (SHEET 2 OF 10)	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-101-03	TYPICAL CIVIL DETAILS (SHEET 3 OF 10)	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-101-04	TYPICAL CIVIL DETAILS (SHEET 4 OF 10)	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-101-05	TYPICAL CIVIL DETAILS (SHEET 5 OF 10)	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-101-06	TYPICAL CIVIL DETAILS (SHEET 6 OF 10)	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-101-07	TYPICAL CIVIL DETAILS (SHEET 7 OF 10)	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-101-08	TYPICAL CIVIL DETAILS (SHEET 8 OF 10)	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-101-09	TYPICAL CIVIL DETAILS (SHEET 9 OF 10)	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-101-10	TYPICAL CIVIL DETAILS (SHEET 10 OF 10)	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-110-01	EXISTING CONDITIONS & CLEARING PLAN SITE 1	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-110-02	EXISTING CONDITIONS & CLEARING PLAN SITE 2	1/29/2021	A	5/22/2021	B	7/14/2021	C
SRS-C-110-03	EXISTING CONDITIONS & CLEARING PLAN SITE 3	1/29/2021	A	5/23/2021	B	7/14/2021	C
SRS-C-110-04	EXISTING CONDITIONS & CLEARING PLAN SITE 4	1/29/2021	A	5/24/2021	B	7/14/2021	C
SRS-C-110-05	EXISTING CONDITIONS & CLEARING PLAN SITE 5	1/29/2021	A	5/25/2021	B	7/14/2021	C
SRS-C-110-06	EXISTING CONDITIONS & CLEARING PLAN SITE 6	1/29/2021	A	5/26/2021	B	7/14/2021	C
SRS-C-110-07	EXISTING CONDITIONS & CLEARING PLAN SITE 7	1/29/2021	A	5/27/2021	B	7/14/2021	C
SRS-C-110-08	EXISTING CONDITIONS & CLEARING PLAN SITE 8	1/29/2021	A	5/28/2021	B	7/14/2021	C
SRS-C-110-09	EXISTING CONDITIONS & CLEARING PLAN SITE 9	1/29/2021	A	5/29/2021	B	7/14/2021	C
SRS-C-110-10	EXISTING CONDITIONS & CLEARING PLAN SITE 10	1/29/2021	A	5/30/2021	B	7/14/2021	C
SRS-C-110-11	EXISTING CONDITIONS & CLEARING PLAN SITE 11	1/29/2021	A	5/31/2021	B	7/14/2021	C
SRS-C-110-12	EXISTING CONDITIONS & CLEARING PLAN SITE 12	1/29/2021	A	6/1/2021	B	7/14/2021	C
SRS-C-110-13	EXISTING CONDITIONS & CLEARING PLAN SITE 13	1/29/2021	A	6/2/2021	B	7/14/2021	C
SRS-C-110-14	EXISTING CONDITIONS & CLEARING PLAN SITE 14	1/29/2021	A	6/3/2021	B	7/14/2021	C
SRS-C-110-15	EXISTING CONDITIONS & CLEARING PLAN SITE 15	1/29/2021	A	6/4/2021	B	7/14/2021	C
SRS-C-110-16	EXISTING CONDITIONS & CLEARING PLAN SITE 16	1/29/2021	A	6/5/2021	B	7/14/2021	C
SRS-C-111-01	GRADING AND EROSION SITE 1	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-111-02	GRADING AND EROSION SITE 2	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-111-03	GRADING AND EROSION SITE 3	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-111-04	GRADING AND EROSION SITE 4	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-111-05	GRADING AND EROSION SITE 5	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-111-06	GRADING AND EROSION SITE 6	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-111-07	GRADING AND EROSION SITE 7	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-111-08	GRADING AND EROSION SITE 8	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-111-09	GRADING AND EROSION SITE 9	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-111-10	GRADING AND EROSION SITE 10	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-111-11	GRADING AND EROSION SITE 11	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-111-12	GRADING AND EROSION SITE 12	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-111-13	GRADING AND EROSION SITE 13	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-111-14	GRADING AND EROSION SITE 14	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-111-15	GRADING AND EROSION SITE 15	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-111-16	GRADING AND EROSION SITE 16	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-111-17	SUBSTATION GRADING AND EROSION CONTROL PLAN	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-111-18	B.E.S.S. GRADING AND EROSION CONTROL PLAN	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-111-19	B.E.S.S. & SUBSTATION AR 38 & AR 39 PROFILES	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-01	ACCESS ROAD 01 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-02	ACCESS ROAD 02 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-03	ACCESS ROAD 03 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-04	ACCESS ROAD 04-05-06 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-05	ACCESS ROAD 07 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-05A	ACCESS ROAD 07 - PLAN & PROFILE (Cont'd)	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-06	ACCESS ROAD 08 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-07	ACCESS ROAD 09 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-07A	ACCESS ROAD 09 - PLAN & PROFILE (Cont'd)	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-08	ACCESS ROAD 10 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-09	ACCESS ROAD 11 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-09A	ACCESS ROAD 11 - PLAN & PROFILE (Cont'd)	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-10	ACCESS ROAD 12 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-10A	ACCESS ROAD 12 TIE-IN - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-11A	ACCESS ROAD 13 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-11	ACCESS ROAD 13 - PLAN & PROFILE (Cont'd)	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-12	ACCESS ROAD 14 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-13	ACCESS ROAD 15 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-14	ACCESS ROAD 16 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-15	ACCESS ROAD 17 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-16	ACCESS ROAD 18 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-17	ACCESS ROAD 19 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-18	ACCESS ROAD 20 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-19	ACCESS ROAD 21 & LATERAL 1 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-19A	ACCESS ROAD 21 & LATERAL 2 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-19B	ACCESS ROAD 21 LATERAL 3 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-20	ACCESS ROAD 22 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-20A	ACCESS ROAD 22A - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-21	ACCESS ROAD 23 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-22	ACCESS ROAD 24 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-22A	ACCESS ROAD 24A - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-22B	ACCESS ROAD 24A - PLAN & PROFILE (Cont'd)	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-22C	ACCESS ROAD 24A - PLAN & PROFILE (Cont'd)	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-23	ACCESS ROAD 25 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-24	ACCESS ROAD 26A - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-24A	ACCESS ROAD 26A TIE-IN - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-25	ACCESS ROAD 26B - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-26	ACCESS ROAD 27 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-27	ACCESS ROAD 28 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-27A	ACCESS ROAD 28 - PLAN & PROFILE (Cont'd)	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-28	ACCESS ROAD 29 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-29	ACCESS ROAD 30 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-30	ACCESS ROAD 31 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-30A	ACCESS ROAD 31 - PLAN & PROFILE (Cont'd)	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-30B	ACCESS ROAD 31 & 31A - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-30C	ACCESS ROAD 31A - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-31	ACCESS ROAD 32 & 33 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-32A	ACCESS ROAD 34 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-32	ACCESS ROAD 34 - PLAN & PROFILE (Cont'd)	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-33	ACCESS ROAD 35 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-34	ACCESS ROAD 36 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-34A	ACCESS ROAD 36A - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-34B	ACCESS ROAD 36 - LAT 1, LAT 2, & LAT 3 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C
SRS-C-112-35	ACCESS ROAD 37 - PLAN & PROFILE	1/29/2021	A	5/21/2021	B	7/14/2021	C

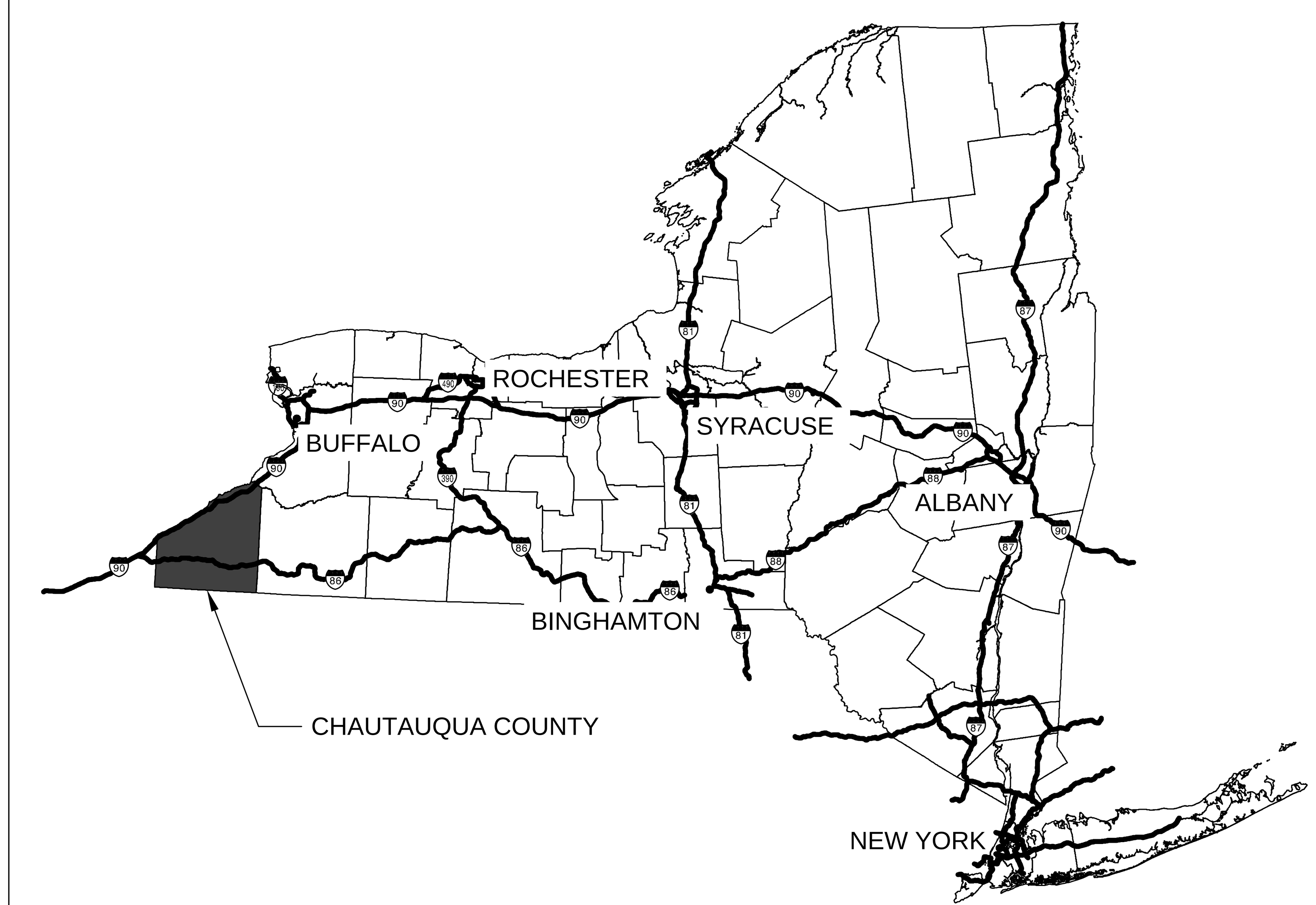
** THESE DESIGN DRAWINGS HAVE BEEN CREATED AT THE DIRECTION OF A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK **

SOUTH RIPLEY SOLAR PROJECT
CIVIL - SOLAR

PREPARED FOR: CONNECTGEN CHAUTAUQUA COUNTY, LLC
PREPARED BY: MOTT MACDONALD NY, INC.
ISSUE DATE: JULY 14, 2021
ISSUE STATUS: ISSUED FOR 94C

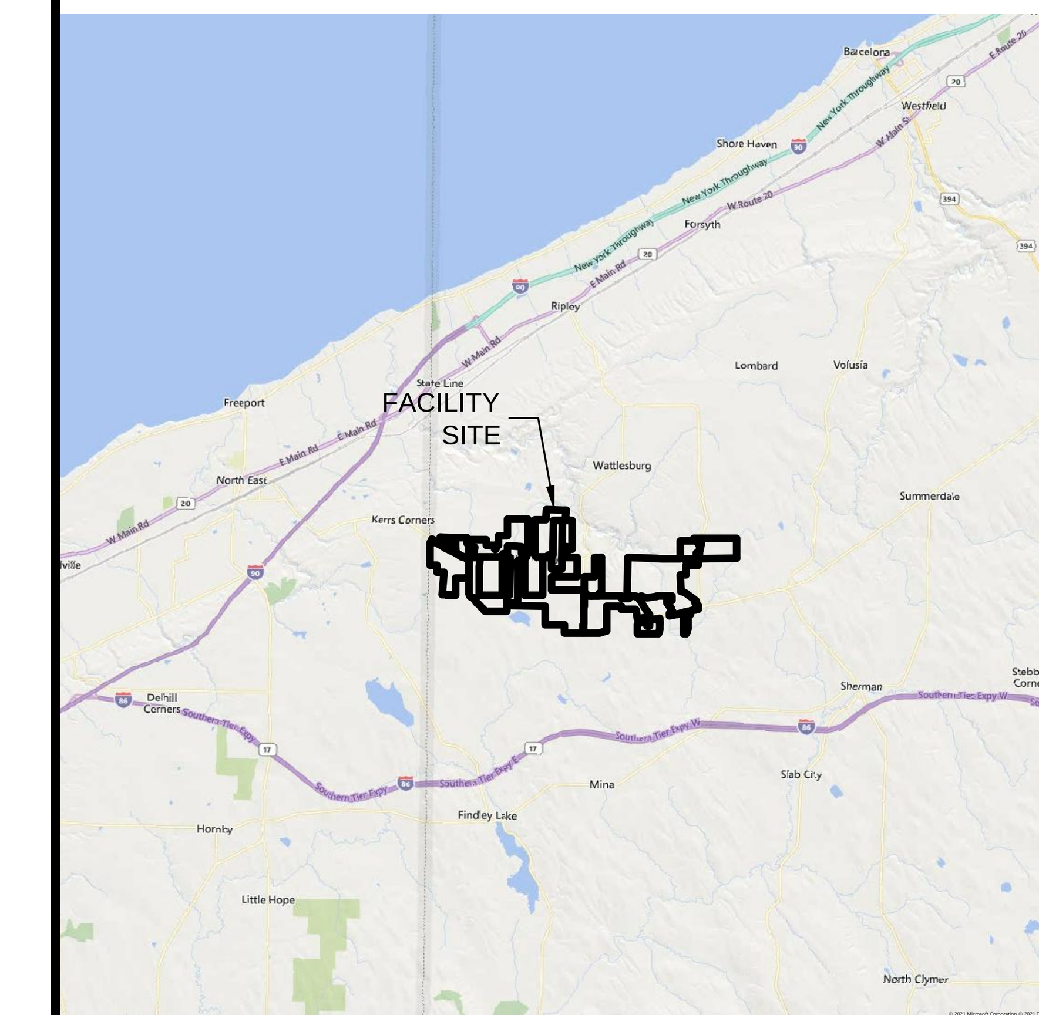
PROJECT DATA:

LOCATION:	CHAUTAUQUA COUNTY, NY
PROJECTION:	STATE PLANE NAD 83 (NY83-WF)
POWER GENERATED:	270 MWac



THE STATE OF NEW YORK

CONCEPTUAL - NOT FOR CONSTRUCTION



VICINITY MAP
SCALE: 1" = 20,000'

N

0' 10000' 20000' 40000'

Rev	Date	Drawn	Description	Ch'k'd	App'd
C	07/14/2021	JSD	ISSUED FOR 94C	KW	NJM
B	05/21/2021	RCB	ISSUED FOR REVIEW	KW	NJM
A	01/29/2021	RCB	ISSUED FOR REVIEW	KW	NJM

MOTT MACDONALD
Mott Macdonald NY Inc.
111 Wood Avenue South
Iselin, NJ 08830-4112
United States
T +1 (973) 379-3400
F +1 (973) 376-1072
W www.mottmac.com

Client
South Ripley SOLAR PROJECT

Title
SOUTH RIPLEY SOLAR
CIVIL - SOLAR COVER SHEET

PRELIMINARY NOT FOR CONSTRUCTION
REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION

Designed	MU	Eng check	KW
Drawn	RCB	Approved	NJM
Dwg check		Project Mngr	RA
Scale at ANSI D: NTS		Date: 07/14/2021	Rev: C

Drawing Number
SRS-C-100-00

C:\pwworking\hmm\external\woo72000\d0506086\SRS-C-100-00.dwg Jul 27, 2021 - 9:50AM WOO72000

PRELIMINARY CONTRACTOR NOTES:

1. ANY UNDERGROUND UTILITY LOCATIONS SHOWN ON DRAWINGS ARE APPROXIMATE. THE BALANCE OF PLANT (BOP) CONTRACTOR WILL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT EXITING UTILITIES, PAVEMENTS, AND MONUMENTS EITHER SHOWN OR NOT SHOWN ON THESE DRAWINGS,

2. THE PROPOSED FACILITY COMPONENTS DEPICTED ON THE FINAL CONSTRUCTION DRAWINGS WILL BE DELINEATED IN THE FIELD BY EITHER LATH MARKERS, SURVEYORS RIBBON, PIN FLAGS, OR SUITABLE EQUIVALENT.

3. THE BOUNDARIES OF ALL STREAMS, WETLANDS, AND WETLAND ADJACENT AREAS AS DEPICTED ON THE FINAL CONSTRUCTION DRAWINGS WILL BE MARKED IN THE FIELD BY EITHER LATH MARKERS, SURVEYORS RIBBON, PIN FLAGS, OR SUITABLE EQUIVALENT PRIOR TO CONSTRUCTION BY THE BOP CONTRACTOR.

4. THE BOUNDARIES OF ALL AREAS OF TREES TO BE CLEARED AS DEPICTED ON THE FINAL CONSTRUCTION DRAWINGS WILL BE MARKED IN THE FIELD BY EITHER LATH MARKERS, SURVEYORS RIBBON, PIN FLAGS, OR SUITABLE EQUIVALENT PRIOR TO CONSTRUCTION BY THE BOP CONTRACTOR.

5. THE BOP CONTRACTOR WILL NOTE THE CONDITION OF ANY EXISTING FENCE THAT MAY BE IMPACTED BY PROJECT CONSTRUCTION. FENCES THAT MUST BE REMOVED AND/OR CUT WILL HAVE A TEMPORARY GATE INSTALLED IF NEEDED BASED ON LANDOWNER DISCUSSION. UPON COMPLETION OF CONSTRUCTION, THE FENCE WILL BE REBUILT, AT A MINIMUM TO ITS PRECONSTRUCTION CONDITION.

6. ANY DISRUPTION TO DEC REGULATED WETLANDS WILL BE MINIMIZED. DEC'S FIELD REPRESENTATIVE WILL NOTIFY THE DPS STAFF REPRESENTATIVE AND THE APPLICANT'S REPRESENTATIVE OF ANY ACTIVITIES THAT VIOLATE OR MAY VIOLATE EITHER THE TERMS OF THE CERTIFICATE OR THE ENVIRONMENTAL CONSERVATION LAW. DPS AND DEC STAFFS' FIELD REPRESENTATIVES WILL WORK COOPERATIVELY TO DETERMINE WHETHER STOP WORK AUTHORITY WILL BE EXERCISED, OR WHETHER TO DIRECT THE APPLICANT TO TAKE ACTION TO FURTHER MINIMIZE IMPACTS TO STREAMS AND WETLANDS.

7. RESTRICTED ACTIVITIES PERTAIN TO A BUFFER ZONE OF 100 FEET ON EITHER SIDE OF THE BOUNDARIES OF WATER-RELATED RESOURCES (STREAMS, WETLANDS, SPRINGS, WELLS, DRAINAGE, ETC.) AND INCLUDE THE FOLLOWING RESTRICTIONS:

   A. NO DEPOSITION OF SLASH WITHIN IDENTIFIABLE STREAM CHANNELS OR WOOD CHIPS WITHIN 25 FEET OF WETLANDS;
   B. NO UNNECESSARY REMOVAL OF WOOD VEGETATION OR DEGRADATION OF STREAM BANKS;
   C. NO EQUIPMENT WASHING OR REFUELING EXCEPT AS SPECIFIED IN THE FINAL CONSTRUCTION DRAWINGS;
   D. AND NO STORAGE MIXING OR HANDLING OF ANY PETROLEUM OR CHEMICAL MATERIALS IN OPEN CONTAINERS.

8. "AVOID, DO NOT CROSS" INDICATES THAT AN AREA DOES NOT HAVE A DESIGNATED ACCESS ROUTE AND THAT EQUIPMENT IS RESTRICTED FROM CROSSING OR OPERATING IN THAT AREA. THIS DESIGNATION IS APPLIED TO ALL WETLANDS, STREAMS, AND ASSOCIATED BUFFERS THAT DO NOT HAVE APPROVED EQUIPMENT ACCESS, AS DEPICTED ON THE FINAL CONSTRUCTION DRAWINGS

9. CONTRACTOR TO UTILIZE SOLAR SITES AS TEMPORARY LAYDOWN AREAS DURING CONSTRUCTION.

10. PARCEL LINES, RIGHT-OF-WAYS, EXISTING UTILITIES AND EXISTING CONTOURS SHOWN WITHIN THE DRAWINGS WERE FIELD DELINEATED BY MOTT MACDONALD SURVEYING AND PROVIDED IN CAD FILE FORMAT TITLED "CONNECT GEN SOUTH RIPLEY SOLAR PRELIM RECTIFY_052021.DWG" ON MAY 21, 2021. EXISTING CONTOURS SHOWN WITHIN THE DRAWINGS WERE GENERATED USING LIDAR.

PRELIMINARY GENERAL ENVIRONMENTAL RESTRICTIONS:

1. ALL EQUIPMENT ACCESS, STORAGE OF EQUIPMENT AND MATERIALS, AND OTHER CONSTRUCTION ACTIVITIES WILL BE CONFINED TO THE ACCESS ROADS, SOLAR SITES, SUBSTATIONS, AND THE COLLECTION LINE AND TRANSMISSION LINE ROUTES AS DEPICTED ON THE FINAL CONSTRUCTION DRAWINGS.

2. EQUIPMENT WILL UTILIZE THE INTERSECTION OF ACCESS ROADS AND EXISTING ROADS FOR TURNING. WORK AREAS, SUCH AS SOLAR SITES AND SUBSTATION AREAS, WILL ALSO PROVIDE AREAS FOR EQUIPMENT TURNING AND PARKING, IN ADDITION TO DESIGNATED TURNING LOCATIONS.

3. FUGITIVE DUST RESULTING FROM CONSTRUCTION ACTIVITIES WILL BE MINIMIZED TO THE MAXIMUM EXTENT PRACTICAL BY IMPLEMENTING APPROPRIATE CONTROL MEASURES. THESE MEASURES INCLUDE THE APPLICATION OF MULCH, WATER, OR STONE ON ACCESS ROADS, EXPOSED SOILS, STOCKPILED SOILS, OR UNPAVED PUBLIC ROADS WHEN DRY AND WINDY CONDITIONS EXIST. A WATERING VEHICLE (OR A VEHICLE CONTAINING AN APPROVED CHEMICAL TREATMENT) WILL BE AVAILABLE ON AN AS-NEEDED BASIS.

4. BOP CONTRACTOR MUST MAINTAIN ALL EQUIPMENT IN GOOD OPERATING CONDITIONS AND ALL MOTORS AND ENGINES WILL BE MUFFLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND WILL COMPLY WITH STATE ENVIRONMENTAL LAW, SUBCHAPTER E, PART 450 (NOISE FROM HEAVY MOTOR VEHICLES). ANY FAULTY NOISE SUPPRESSOR WILL BE REPAIRED OR REPLACED, EQUIPMENT WILL NOT BE LEFT RUNNING UNNECESSARILY, AND EXISTING TALL GROWING VEGETATION WILL BE MAINTAINED, TO THE MAXIMUM EXTENT PRACTICABLE, TO SERVE AS A NOISE BUFFER.

5. CONSTRUCTION ACTIVITY WILL GENERALLY OCCUR BETWEEN THE HOURS OF 6:00 A.M. AND 6:00 P.M. HOWEVER, DUE TO SAFETY OR CONTINUOUS OPERATION REQUIREMENTS, CONSTRUCTION ACTIVITIES MAY OCCUR OUTSIDE OF THESE TIME FRAMES AND ADDITIONAL WORK HOURS MAY BE NECESSARY.

6. WITHIN 100 FEET OF STATE REGULATED WETLANDS AND 25 FEET OF OTHER WATER BODIES, REMOVE ONLY THE MINIMUM VEGETATION NECESSARY TO ALLOW FOR CONSTRUCTION AND OPERATION OF THE FACILITY.

7. STREAMS AND WETLANDS WILL BE PROTECTED FROM INDIRECT IMPACTS DURING CONSTRUCTION BY UTILIZING VARIOUS EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH APPROVED PROJECT STORMWATER POLLUTION PREVENTION PLAN (SWPPP). SUCH MEASURES WILL INCLUDE, BUT NOT BE LIMITED TO, SILT FENCES PLACED BETWEEN WATER RESOURCE BOUNDARIES AND CONSTRUCTION AREAS. EXPOSED SOIL WILL BE SEEDED AND/OR MULCHED, AS SOON AS PRACTICABLE, BUT IN ANY EVENT, NO LATER THAN SEVEN DAYS IN WHICH SITE DISTURBANCE OCCURS, TO ASSURE THAT EROSION AND SILTATION IS KEPT TO A MINIMUM ALONG STREAM AND WETLAND BOUNDARIES.

8. TEMPORARY EROSION CONTROL DEVICES AND STABILIZATION PRACTICES WILL BE INSTALLED SOON AS PRACTICABLE AND APPROPRIATE, IN ACCORDANCE WITH THE SWPPP. EROSION CONTROL DEVICES WILL BE INSTALLED AFTER CLEARING, BUT PRIOR TO SOIL DISTURBANCE.

9. IN THE EVENT THAT ARCHAEOLOGICAL MATERIALS, HUMAN REMAINS, OR EVIDENCE OF HUMAN BURIALS ARE ENCOUNTERED DURING CONSTRUCTION, ALL WORK IN THE VICINITY OF THE FIND WILL BE IMMEDIATELY HALTED AND THE "UNANTICIPATED DISCOVERY PLAN" WILL BE IMPLEMENTED.

10. THE BOP CONTRACTOR WILL LOCATE AND DISTRIBUTE EXCESS EXCAVATION MATERIAL IN NON-AGRICULTURE UPLAND AREAS (I.E., OUTSIDE OF WETLANDS, STREAMS, AND AGRICULTURAL FIELDS). WHERE PRACTICAL, SUCH MATERIAL WILL BE USED AS ROAD FILL OR BACKFILL AROUND STRUCTURES. EROSION CONTROL PRACTICES WILL BE INSTALLED, AND EXPOSED SOILS STABILIZED IN ACCORDANCE WITH THE SWPPP.

11. THE BOP CONTRACTOR WILL NOT LEAVE FUEL FIRED GENERATORS IDLING WHEN THEY ARE NOT IN ACTIVE USE.

PRELIMINARY SPECIFIC STREAM CROSSING RESTRICTIONS:

1. CONSTRUCTION WORK IN STREAMS WILL CONFORM TO APPROPRIATE TIMING RESTRICTIONS TO PROTECT IMPORTANT FISHERIES RESOURCES, DURING SPAWNING AND PRIMARY MIGRATION PERIODS. STREAMS SUBJECT TO SUCH RESTRICTIONS WILL BE DETERMINED IN THE FIELD BY REPRESENTATIVES OF THE DEC AND THE APPLICANT, PRIOR TO CONSTRUCTION. FOR COLD WATER FISHERIES IN THE PROJECT AREA, CONSTRUCTION WORK IN STREAMS WILL BE PROHIBITED BETWEEN OCTOBER 1 AND MAY 31 TO AVOID TROUT SPAWNING PERIODS. FOR WARM WATER FISHERIES, CONSTRUCTION WORK IN STREAMS WILL BE PROHIBITED BETWEEN MARCH 1 AND JULY 15. HOWEVER, ONCE INSTALLED, SUCH CROSSINGS CAN BE USED BY CONSTRUCTION VEHICLES THROUGHOUT THE DURATION OF PROJECT CONSTRUCTION. ANY EXCEPTIONS TO THESE PROHIBITED PERIODS REQUIRE PRIOR APPROVAL BY DPS STAFF, IN CONSULTATION WITH DEC.

PRELIMINARY SPECIFIC WETLAND CROSSING RESTRICTIONS:

1. ANY REQUIRED TEMPORARY ACCESS ROUTE WILL BE REMOVED FOLLOWING CONSTRUCTION.
2. IN ALL CASES, THE PRE-DISTURBANCE FLOW REGIME MUST BE MAINTAINED.
3. DURING EXCAVATION IN WETLANDS, TEMPORARY SPOIL STOCKPILES WILL BE PLACED ON CONSTRUCTION MATTING. FOLLOWING BACKFILL, ANY EXCESS SPOIL NOT USED AS STRUCTURE BACKFILL WILL BE DISPOSED OF AT AN UPLAND SITE AS APPROVED BY THE ENVIRONMENTAL INSPECTOR (NO BULL-DOZING, BACK-BLADING, OR OTHERWISE SPREADING OF EXCESS SPOIL OVER THE WETLAND SURFACE).
4. EROSION CONTROL AND OTHER WETLAND PROTECTION MEASURES WILL BE IMPLEMENTED AS SPECIFIED IN THE SWPPP.
5. BOP CONTRACTOR WILL INSTALL AND MAINTAIN SILT FENCING AND SEDIMENT BARRIERS WHEREVER EXCAVATION OR FILLING ACTIVITIES OCCUR ADJACENT TO OR WITHIN WETLAND AREAS AS INDICATED ON THE SWPPP DRAWINGS.

PRELIMINARY AGRICULTURAL LAND-RELATED RESTRICTIONS:

1. AGRICULTURAL MITIGATION, RESTORATION, AND CLEAN UP MAY INCLUDE, BUT IS NOT LIMITED TO, THE FOLLOWING: USE OF CONSTRUCTION MATTING, TOPSOIL STRIPPING, REMOVAL OF ROCK 4 INCHES OR LARGER PLACED BY BOP CONTRACTOR, REPLACEMENT OF EXISTING TOPSOIL WITH MATERIALS WHICH WERE STRIPPED IN THE AREA AT THE START OF CONSTRUCTION, SURFACE AND SUBSURFACE SHATTERING, DEEP TILLAGE, REPAIR OF FUNCTIONING STONE DRAINAGE SYSTEMS, BROKEN TILE OR TILING SYSTEMS, AND INSTALLATION OF NEW INTERCEPT DRAINS.
2. ACCESS ROUTES WILL BE CONSTRUCTED ONLY IN LOCATIONS SHOWN ON THE FINAL CONSTRUCTION DRAWINGS.
3. ALL ACCESS ROUTES WILL BE THE MINIMUM WIDTH NECESSARY TO ACCOMMODATE CONSTRUCTION TRAFFIC.
4. TO PREVENT DAMAGE TO ADJACENT AGRICULTURAL LAND, ALL VEHICLE TRAFFIC AND PARKING WILL BE CONFINED TO THE ACCESS ROADS AND DESIGNATED WORK AREAS AT THE SOLAR AND SUBSTATION FACILITY SITES. ANY NECESSARY PULL-OFFS AND PARKING AREAS WILL BE DEVELOPED OUTSIDE OF ACTIVE AGRICULTURAL FIELDS TO THE EXTENT PRACTICAL.
5. IN REPAIRING ANY DAMAGED DRAINAGE LINES, KNITTED FILTER COVERING WILL GENERALLY NOT BE USED AROUND CORRUGATED PLASTIC TUBING (TO AVOID POTENTIAL SILT ACCUMULATION AND SEAL-OFF OF DRAINAGE LINES).
6. IMMEDIATELY FOLLOWING CONSTRUCTION ACTIVITY, THE WORK AREAS WILL BE THOROUGHLY AND SAFELY CLEARED OF NUTS, BOLTS, SPIKES, WIRE, PIECES OF STEEL, AND OTHER ASSORTED ITEMS.
7. THE FUNCTIONS SERVED BY ACTIVE FARM FENCES AND GATES AFFECTED BY THE CONSTRUCTION WILL BE TEMPORARILY SUSTAINED THROUGHOUT ALL PHASES OF CONSTRUCTION AND SUCH SEGMENTS OF AFFECTED FENCES AND GATES WILL BE REBUILT AT A MINIMUM TO IT PRE-CONSTRUCTION CONDITION OR AS AGREED TO WITH THE LANDOWNER.
8. NO PIN FLAGS WILL BE USED IN AGRICULTURAL FIELDS.
9. THE NEW YORK DEPARTMENT OF AGRICULTURE AND MARKETS (NYDAM) GUIDELINES FOR AGRICULTURE AND MITIGATION FOR SOLAR PV PROJECTS WILL BE FOLLOWED TO THE EXTENT PRACTICABLE. NYDAM WILL BE CONSULTED WITH WHEN DEVIATIONS FROM THE GUIDELINES ARE NECESSARY.

PRELIMINARY EROSION & SEDIMENT CONTROL NOTES:

1. REFER TO THE CONSTRUCTION SEQUENCE IN THE PRELIMINARY SWPPP.
2. THE BOP CONTRACTOR WILL INSTALL EROSION AND SEDIMENT CONTROL PRACTICES AS SHOWN ON THE SWPPP, AS WARRANTED BY SITE CONDITIONS, AND THROUGHOUT ALL PHASES OF CONSTRUCTION.
3. ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND OPERATED IN ACCORDANCE WITH THEIR DESIGN. ANY NECESSARY REPAIRS SHALL BE MADE IMMEDIATELY TO ASSURE THE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION THROUGHOUT THE CONSTRUCTION PROCESS.
4. CONSTRUCTION ENTRANCES WILL BE INSTALLED FOR THE ACCESS ROUTES AT EACH JUNCTION WITH A PUBLIC ROAD, UNLESS OTHERWISE INDICATED ON THE FINAL CONSTRUCTION DRAWINGS.
5. INSTALL SILT FENCE ON THE DOWNSTREAM SIDE OF ALL DISTURBED AREAS, AS NECESSARY.
6. PLACE CHECK DAMS IN ALL SWALES/DITCHES, WHERE SPECIFIED IN THE FINAL CONSTRUCTION DRAWINGS, IN ACCORDANCE WITH THE 2005 NYS STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
7. THE CONTRACTOR SHALL PLACE SOIL AND EXCESS EXCAVATED EARTH IN TEMPORARY STOCK PILE AREAS THAT DO NOT INTERFERE WITH CONSTRUCTION ACTIVITIES, AND STORMWATER RUNOFF, AND ARE NOT IN ENVIRONMENTALLY SENSITIVE AREAS. STOCK PILES SHALL BE STABILIZED PER THE DETAIL.
8. ALL DISTURBED AREAS SHALL BE STABILIZED PER THE NYS STANDARDS FOR EROSION AND SEDIMENT CONTROL, AS NECESSARY BASED ON SITE CONDITIONS.
9. AFTER CONSTRUCTION IS COMPLETE, THE CONTRACTOR SHALL ROUGH GRADE, RE-APPLY STOCKPILED TOPSOIL, FINE GRADE, SEED, AND MULCH ALL DISTURBED AREAS PLANNED FOR VEGETATIVE COVER.
10. CONSTRUCTION WORK AREAS AND ACCESS ROUTES MAY BE IMPROVED, AS NECESSARY, TO ALLOW CONSTRUCTION ACCESS. ANY IMPROVEMENTS, UNLESS DEEMED PERMANENT, MUST BE REMOVED AT THE COMPLETION OF CONSTRUCTION AND THE AREA RESTORED TO PRE-CONSTRUCTION CONDITION.
11. THE CONTRACTOR IS RESPONSIBLE FOR THE PLACEMENT, DESIGN, APPROVAL, AND OPERATION OF CONCRETE WASHOUTS. THE CONCRETE WASHOUTS SHALL BE INSTALLED A MINIMUM OF 50 FEET AWAY FROM STORM DRAINAGE, SURFACE WATER, OR OTHER SENSITIVE AREAS. CONCRETE WASTE MATERIAL SHALL NOT BE ALLOWED TO OVERFLOW OR OTHERWISE DISCHARGE FROM THE CONCRETE WASHOUT.
12. THE CONTRACTOR SHALL PROVIDE HANDWASHING AND SANITARY FACILITIES, THESE FACILITIES SHALL BE SERVICED REGULARLY AND PROPERLY IN ACCORDANCE WITH LOCAL, STATE AND/OR FEDERAL REQUIREMENTS.

ARCHAEOLOGICAL SITES NOTE:

ARCHAEOLOGICAL SITES WILL BE IDENTIFIED DURING THE PHASE 1B ARCHAEOLOGICAL SURVEY. THE SITES RECOMMENDED FOR AVOIDANCE SHOULD BE AVOIDED BY ALL POTENTIALLY EARTH-DISTURBING ACTIVITIES RELATED TO THE CONSTRUCTION OF THE FACILITY. THE MAPPED LOCATIONS OF ALL ARCHAEOLOGICAL SITES RECOMMENDED FOR AVOIDANCE THAT OCCUR WITHIN 100 FEET (31 METERS) OF PROPOSED FACILITY-RELATED IMPACTS WILL BE IDENTIFIED AS ENVIRONMENTALLY SENSITIVE AREAS OR SIMILAR ON THE FINAL CONSTRUCTION DRAWINGS, AND MARKED IN THE FIELD BY CONSTRUCTION FENCING WITH SIGNS THAT RESTRICT ACCESS. THESE MEASURES SHOULD BE ADEQUATE TO ENSURE THAT IMPACTS TO ARCHAEOLOGICAL RESOURCES ARE AVOIDED.

CONCEPTUAL - NOT FOR CONSTRUCTION

C:\pwworking\hmm\external\woo72000\d0506086\SRS-C-100-01.dwg Jul 27, 2021 - 9:58AM WOO72000

Legend

Key Plan

Rev	Date	Drawn	Description	Ch'k'd	App'd
C	07/14/2021	JSD	ISSUED FOR 94C	KW	NJM
B	05/21/2021	RCB	ISSUED FOR PERMIT	KW	NJM
A	01/29/2021	RCB	ISSUED FOR REVIEW	KW	NJM

MOTT MACDONALD
Mott Macdonald NY Inc.
111 Wood Avenue South
Iselin, NJ 08830-4112
United States
T +1 (973) 379-3400
F +1 (973) 376-1072
W www.mottmac.com

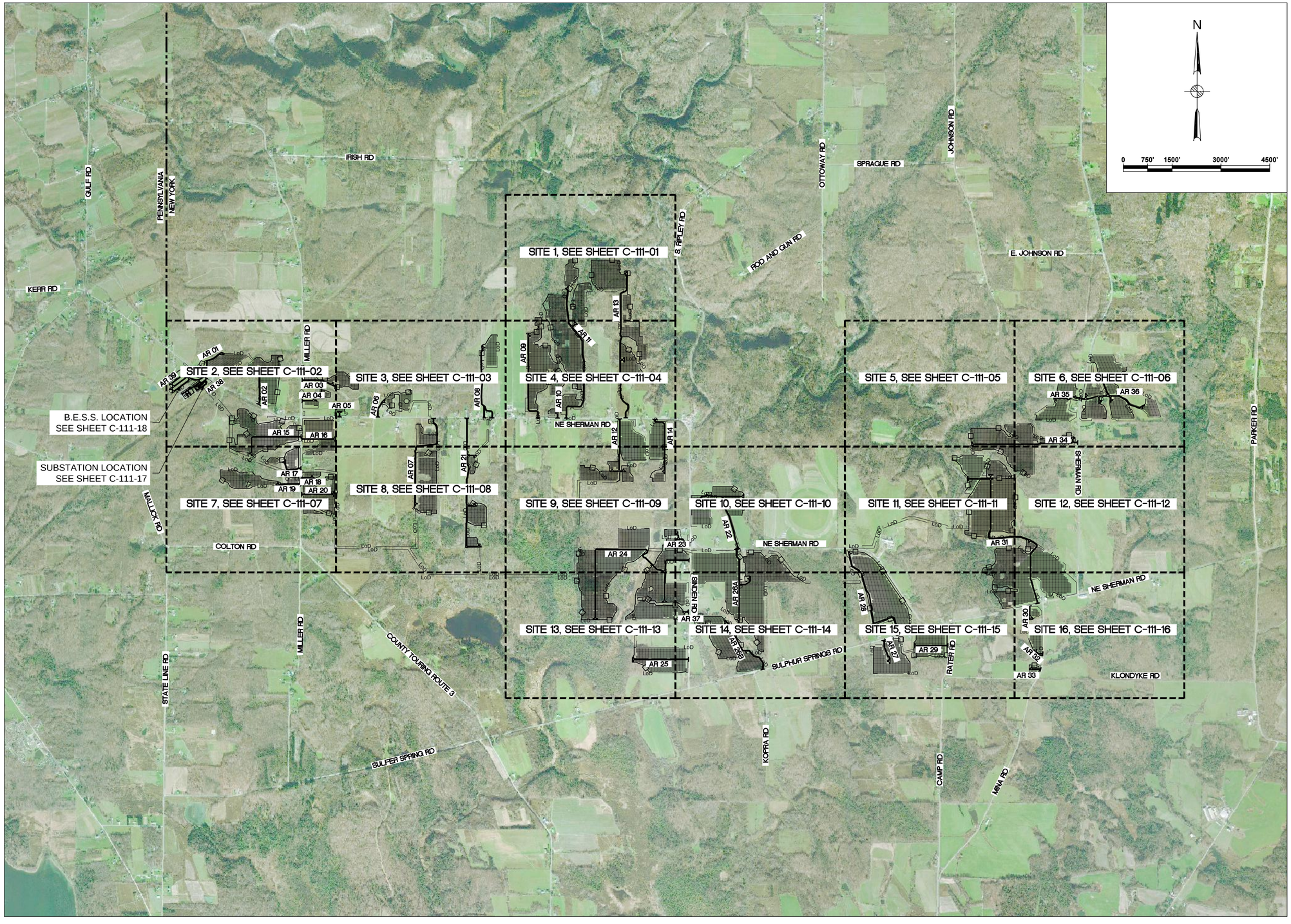
Client: South Ripley SOLAR PROJECT

Title: SOUTH RIPLEY SOLAR
CIVIL GENERAL NOTES

PRELIMINARY
NOT FOR CONSTRUCTION
REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION

Designed	MU	Eng check	KW
Drawn	RCB	Approved	NJM
Dwg check		Project Mngr	
Scale at ANSI D: NTS		Date: 07/14/2021	Rev: C

Drawing Number: SRS-C-100-01



Legend

- TAX PARCEL BOUNDARY
- PROPOSED ACCESS ROAD
- SOLAR PANEL BUILDABLE AREA
- GAS — EXISTING GAS PIPELINE
- LoD — LIMITS OF DISTURBANCE
- AR ## — PROPOSED ACCESS ROAD NUMBER
- EXISTING ROAD CENTERLINE

Key Plan

Rev	Date	Drawn	Description	Ch'k'd	App'd
C	07/14/2021	JSD	ISSUED FOR 94C	KW	NJM
B	05/21/2021	RCB	ISSUED FOR PERMIT	KW	NJM
A	01/29/2021	RCB	ISSUED FOR REVIEW	KW	NJM

MOTT MACDONALD

Mott Macdonald NY Inc.
111 Wood Avenue South
Iselin, NJ 08830-4112
United States
T +1 (973) 379-3400
F +1 (973) 376-1072
W www.mottmac.com

Client

South Ripley SOLAR PROJECT

Title

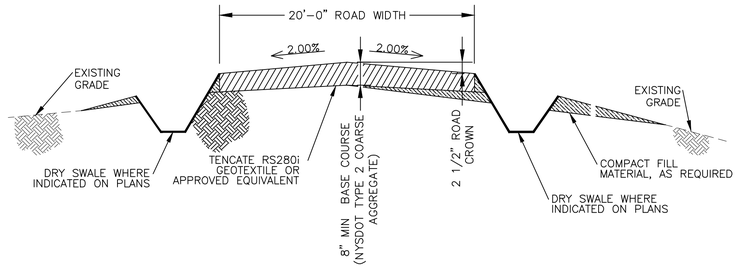
SOUTH RIPLEY SOLAR GRADING AND EROSION CONTROL SITE AREA INDEX SHEET

PRELIMINARY
NOT FOR CONSTRUCTION
REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION

Designed	MU	Eng check	KW
Drawn	RCB	Approved	NJM
Dwg check		Project Mngr	
Scale at ANSI D: 1" = 1500'		Date: 07/14/2021	Rev: C

Drawing Number
SRS-C-100-02

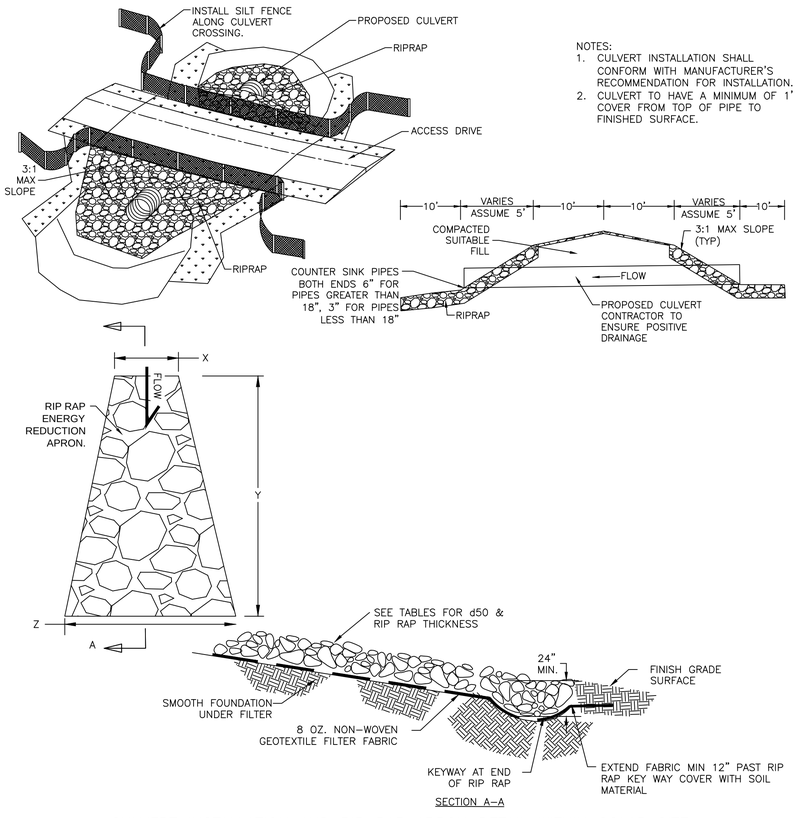
CONCEPTUAL - NOT FOR CONSTRUCTION



NOTES:

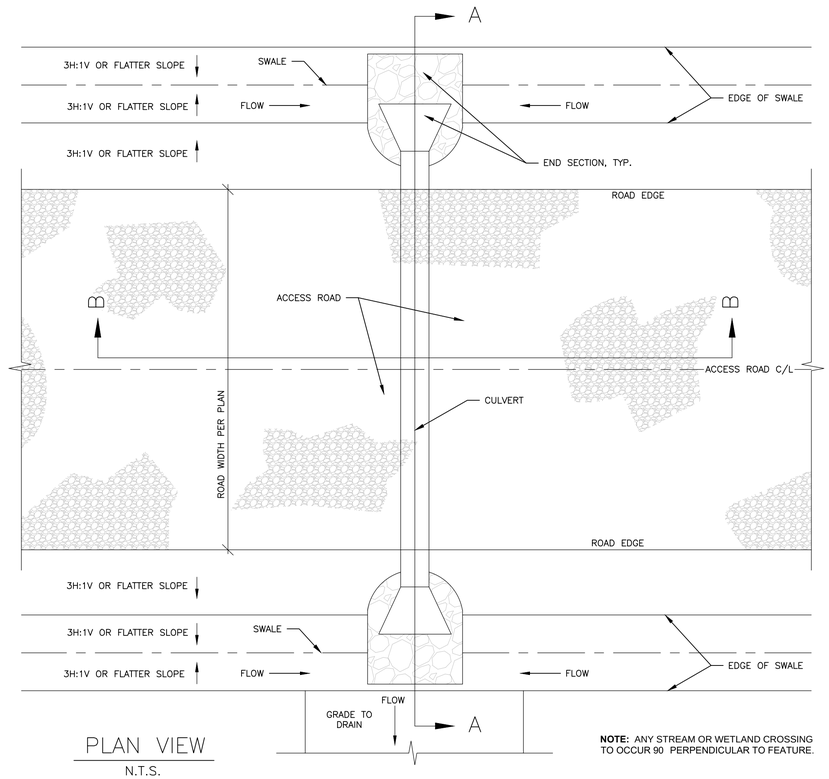
1. ROADWAY SHOULDER SHALL BE COMPACTED AND SLOPED TO MEET FLUSH WITH ADJACENT GRADE FINAL TOPSOIL ELEVATION.
2. MINIMUM ROADWAY CENTERLINE RADIUS SHALL BE 50 FT.
3. ALL PV ACCESS ROADS ARE TO BE 20' IN WIDTH. IN AREAS OF WEAK SUBGRADES (CBR LESS THAN 10), ADDITIONAL STABILIZATION MAY BE OBTAINED THROUGH CHEMICAL TREATMENT OF THE SUBGRADE INCLUDING INTRODUCTION OF LIME OR CEMENT.
4. REFER TO DETAIL 35 IN SHEET SRS-C-101-06 FOR ACCESS ROAD TYPICAL SECTION

1 TYPICAL ACCESS ROAD CROSS SECTION
N.T.S.



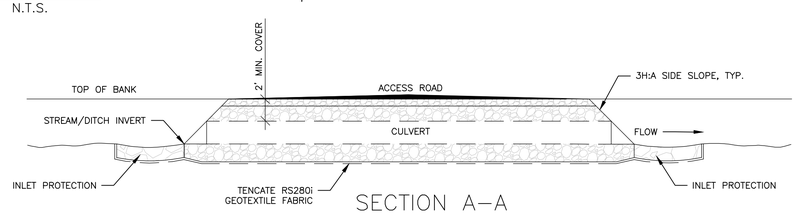
NOTES:
1. CULVERT INSTALLATION SHALL CONFORM WITH MANUFACTURER'S RECOMMENDATION FOR INSTALLATION.
2. CULVERT TO HAVE A MINIMUM OF 1' COVER FROM TOP OF PIPE TO FINISHED SURFACE.

2 CULVERT INSTALLATION AND RIP RAP APRON DETAIL WITHIN SOLAR SITE
N.T.S.

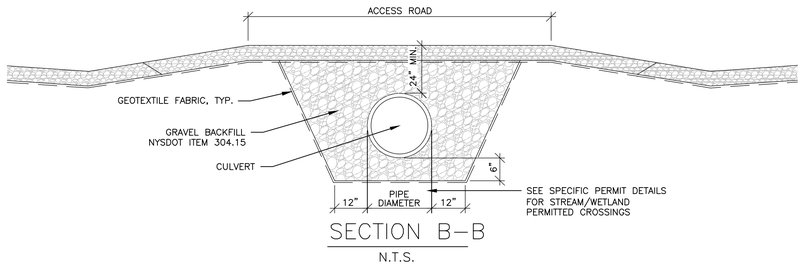


PLAN VIEW
N.T.S.

NOTE: ANY STREAM OR WETLAND CROSSING TO OCCUR 90 PERPENDICULAR TO FEATURE.



SECTION A-A
N.T.S.



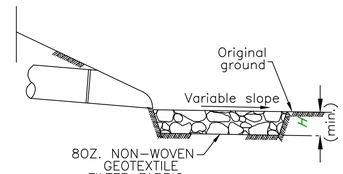
SECTION B-B
N.T.S.

CULVERT NOTES:

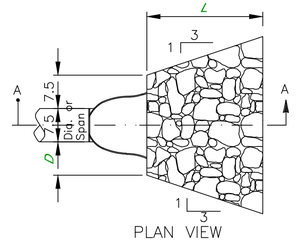
1. 1. ALL BACKFILL SHALL BE COMPACTED TO 95% STD. PROCTER.
2. 2.CULVERT SIZE: THE CROSS SECTIONAL AREA OF THE CULVERT PIPE SHALL BE THE LARGEST PIPE DIAMETER EQUAL TO THE UNDISTURBED CROSS SECTIONAL AREA OF THE BANK FULL CONDITION OF THE STREAM. IT SHOULD FIT INTO THE EXISTING CHANNEL WITHOUT EXCAVATION OF THE WATERWAY CHANNEL OR MAJOR APPROACH FILLS. IF A CHANNEL WIDTH EXCEEDS 3 FEET, ADDITIONAL PIPES MAY BE USED UNTIL THE CROSS SECTIONAL AREA OF THE PIPES APPROACHES THE EXISTING CHANNEL. THE MINIMUM CULVERT SIZE SHALL BE AN 18" DIAMETER PIPE.
3. 3. TEMPORARY INLET AND OUTLET PROTECTION SHALL BE INSTALLED AS DETAILED
4. 4.MULTIPLE PIPE INLETS: 4.A. CULVERT LENGTH: THE CULVERTS SHALL EXTEND TO THE UPSTREAM AND DOWNSTREAM TOE OF SLOPE. 4.B. MULTIPLE CULVERTS SHALL BE SET SO THEY HAVE A MINIMUM OF 12" SEPARATION FROM OUTSIDE PIPE TO OUTSIDE PIPE. 4.C. THE INVERT ELEVATIONS OF THE CULVERT SHALL BE INSTALLED AT OR BELOW THE NATURAL STREAMBED GRADE TO MINIMIZE INTERFERENCE WITH FISH MIGRATION. 4.D. THE CULVERT SHALL BE COVERED WITH A MINIMUM OF TWO FEET AGGREGATE.

3 CULVERT INSTALLATION DETAIL WITHIN STREAMS/WETLANDS AND STATE AND COUNTY ROAD ROWS
N.T.S.

OUTLET WITHOUT DITCH PROTECTIVE APRON DIMENSIONS AND ESTIMATED QUANTITIES						
	CULVERT SIZE D (INCHES)	RIPRAP CLASS	LENGTH OF APRON L (FEET)	DEPTH OF APRON H (FEET)	ESTIMATED RIPRAP QUANTITY (CY)	ESTIMATED GEOTEXTILE QUANTITY (SY)
WITH END SECTION	12	2	4	1.5	1	5
	18	2	6	1.5	2.2	9
	24	2	8	1.5	3.9	14
	30	3	12.5	2	10.9	28
	36	3	16	2	15.6	37
	42	4	21	2.5	34.1	63
	48	4	24	2.5	44.5	79



SECTION A-A



PLAN VIEW

CULVERT WITH STANDARD END SECTION

END SECTION DETAIL AND RIP RAP DETAIL WITHIN STATE AND COUNTY ROAD ROW
5
N.T.S.

Rev	Date	Drawn	Description	Ch'k'd	App'd
C	07/14/2021	JSD	ISSUED FOR 94C	KW	NJM
B	05/21/2021	RCB	ISSUED FOR REVIEW	KW	NJM
A	01/29/2021	RCB	ISSUED FOR REVIEW	KW	NJM

MOTT MACDONALD

Mott Macdonald NY Inc.
111 Wood Avenue South
Iselin, NJ 08830-4112
United States
T +1 (973) 379-3400
F +1 (973) 376-1072
W www.mottmac.com

Client

South Ripley SOLAR PROJECT

Title

SOUTH RIPLEY SOLAR
TYPICAL CIVIL DETAILS
SHEET 1 OF 10

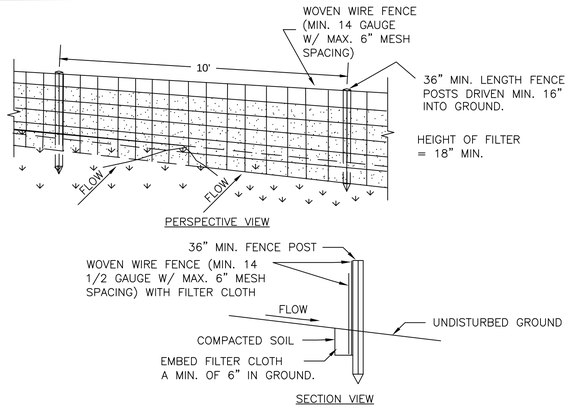
PRELIMINARY NOT FOR CONSTRUCTION
REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION

Designed	MU	Eng check	KW
Drawn	RCB	Approved	NJM
Scale at ANSI D: NTS		Date: 07/14/2021	Rev: C

Drawing Number: SRS-C-101-01

CONCEPTUAL - NOT FOR CONSTRUCTION

C:\pwworking\hmm\external\woo72000\d0506086\SRS-C-101-01.dwg Jul 27, 2021 - 10:32AM DEC56995

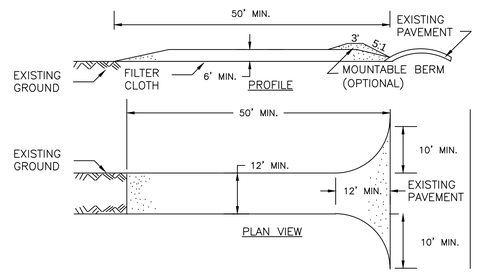


CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER–LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

ADAPTED FROM DETAILS PROVIDED BY: USDA – NRCS,
NEW YORK STATE DEPARTMENT OF TRANSPORTATION,
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION,
NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

5 SILT FENCE DETAIL
N.T.S.

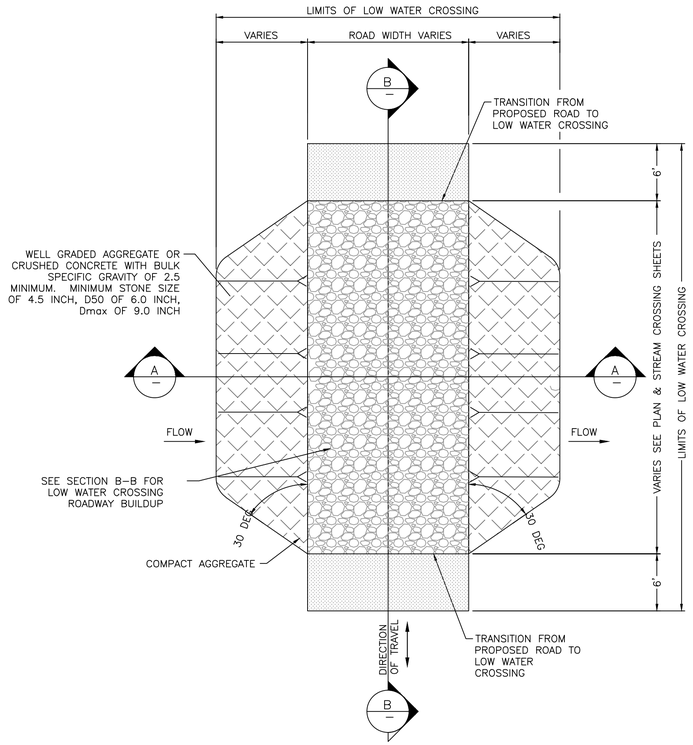


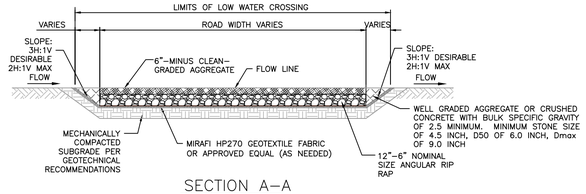
CONSTRUCTION SPECIFICATIONS

1. STONE SIZE – USE 1–4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH – NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS – NOT LESS THAN SIX (6) INCHES.
4. WIDTH – TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY–FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. GEOTEXTILE – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CON–STRUCTION ACCESS SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS–OF–WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

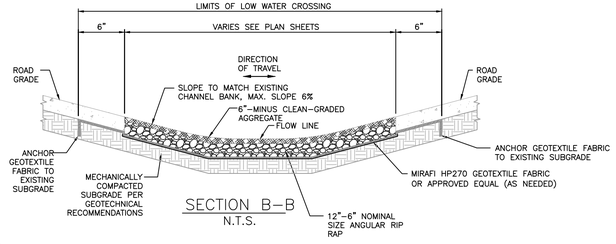
ADAPTED FROM DETAILS PROVIDED BY: USDA – NRCS,
NEW YORK STATE DEPARTMENT OF TRANSPORTATION,
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION,
NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

6 STABILIZED CONSTRUCTION ACCESS
N.T.S.





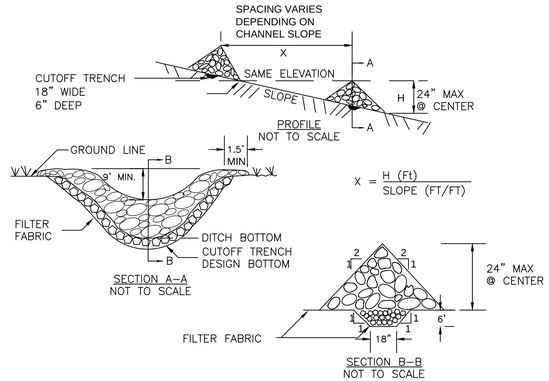
SECTION A–A
N.T.S.



SECTION B–B
N.T.S.

NOTES:
1. CHANNEL SLOPES TO BE MODIFIED TEMPORARILY DURING CONSTRUCTION TO ALLOW FOR ADEQUATE COMPONENT DELIVERY.
2. THE ACCESS ROAD SHALL CROSS THE DITCH AT A 90° ANGLE AND NOT DEFLECT FOR MORE THAN 6 INCHES OVER 50 FEET.
3. THE TOP BED OF THE ROCK CHANNEL CROSSING SHALL CONFORM TO THE EXISTING DITCH CROSS SECTIONAL SLOPES.
4. THE SLOPE OF THE LOW WATER CROSSING SHOULD MATCH THE EXISTING GRADE UNLESS OTHERWISE IDENTIFIED ON THE PLAN SHEETS.
5. CONTRACTOR MAY SUBMIT ALTERNATE LOW WATER CROSSING REVETMENT AND ROAD BED STABILIZATION TO THE ENGINEER OF RECORD FOR REVIEW AND POSSIBLE APPROVAL.

7 LOW WATER CROSSING
N.T.S.



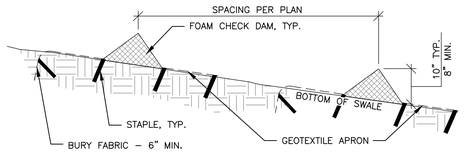
CONSTRUCTION SPECIFICATIONS

1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
2. SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.

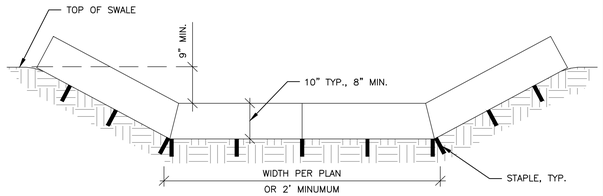
MAXIMUM DRAINAGE AREA 2 ACRES.

ADAPTED FROM DETAILS PROVIDED BY: USDA – NRCS,
NEW YORK STATE DEPARTMENT OF TRANSPORTATION,
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION,
NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

8 STONE CHECK DAM DETAIL
N.T.S.



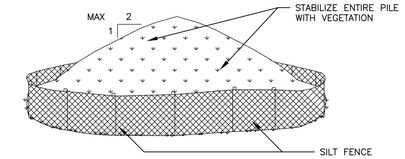
PROFILE
N.T.S.



CROSS SECTION
N.T.S.

NOTES:
1. PREFABRICATED TEMPORARY CHECK DAMS SHALL BE EITHER URETHANE FOAM (CFC FREE) COVERED WITH GEOTEXTILE FABRIC, TRIANGULAR SILT DIKE BY ACF OR EQUAL.
2. ALTERNATELY, DPE TEMPORARY CHECK DAMS, GEORIDGE BY NILEX OR EQUAL, MAY BE USED. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
3. STAPLES SHALL BE PLACES WHERE UNITS OVERLAP AND DIRECTED BY MANUFACTURER'S INSTRUCTIONS.

9 PREFABRICATED TEMPORARY CHECK DAM DETAIL
N.T.S.



INSTALLATION NOTES:
1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 3H:1V. MAXIMUM HEIGHT SHALL BE 4 FEET.
3. EACH PILE SHALL BE SURROUNDED WITH SILT FENCING, INSTALLED PER CORRESPONDING DETAIL, THEN STABILIZED WITH ANNUAL GRAINM WITHIN 3 DAYS.
4. A PERIMETER DIKE/SWALE SHALL BE LOCATED UP–SLOPE OF THE TOPSOIL STOCKPILE.

10 STABILIZED TEMPORARY TOPSOIL STOCKPILE
N.T.S.

Rev	Date	Drawn	Description	Ch'k'd	App'd
C	07/14/2021	JSD	ISSUED FOR 94C	KW	NJM
B	05/21/2021	RCB	ISSUED FOR REVIEW	KW	NJM
A	01/29/2021	RCB	ISSUED FOR REVIEW	KW	NJM

MOTT MACDONALD
Mott Macdonald NY Inc.
111 Wood Avenue South
Iselin, NJ 08830-4112
United States
T +1 (973) 379-3400
F +1 (973) 376-1072
W www.mottmac.com

Client

South Ripley SOLAR PROJECT

Title

SOUTH RIPLEY SOLAR
TYPICAL CIVIL DETAILS
SHEET 2 OF 10

PRELIMINARY
NOT FOR CONSTRUCTION
REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION

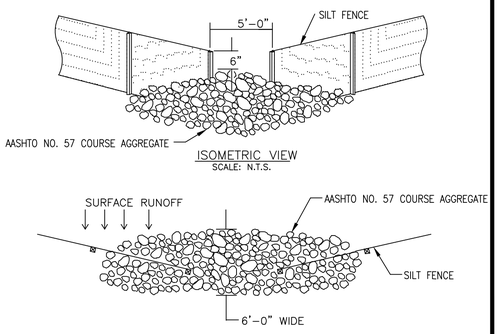
Designed	MU	Eng check	KW
Drawn	RCB	Approved	NJM

Scale at ANSI D: NTS
Date: 07/14/2021
Rev: C

Drawing Number: SRS-C-101-02

CONCEPTUAL - NOT FOR CONSTRUCTION

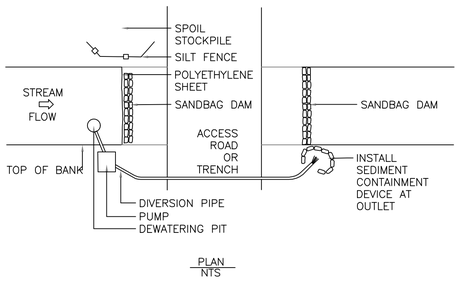
C:\pwworking\hmm\external\woo72000\d0506086\SRS-C-101-01.dwg Jul 27, 2021 - 10:32AM DEC56995



NOTES:

1. ROCK FILTER OUTLETS SHALL BE PLACED ALONG SEDIMENT BARRIERS AS SHOWN ON THE PLAN. THE ROCK FILTER OUTLET IS NOT INTENDED TO BE PLACED IN STREAMS, RIVERS, CREEKS OR DITCHES WHICH NORMALLY HAVE FLOWING WATER.
2. ONCE THE DISTURBED AREA IS STABILIZED, THE ROCK FILTER OUTLET SHALL BE REMOVED AND ANY DISTURBED AREAS CAUSED BY REMOVAL SHALL BE RETURNED TO ORIGINAL CONDITION AND REVEGETATED.
3. THE ROCK UTILIZED IN THE ROCK FILTER OUTLET SHALL BE CLEANED OR REPLACED WHEN THE ACCUMULATION OF SEDIMENT IS SUCH THAT THE ROCK FILTER OUTLET CAN NOT EFFECTIVELY FILTER DISCHARGE WATER.
4. INSTALL AASHTO NO. 1 COURSE AGGREGATE AT THE OUTLET SIDE OF THE SEDIMENT BARRIER AS SHOWN IN THE DETAIL. AFTER INSTALLING AASHTO NO. 1 COURSE AGGREGATE, INSTALL AASHTO NO. 57 COURSE AGGREGATE AT THE INLET SIDE OF THE SEDIMENT BARRIER TO CREATE AN ADEQUATE FILTER STONE FACE FOR THE OUTLET STRUCTURE.

11 ROCK FILTER OUTLET
N.T.S.

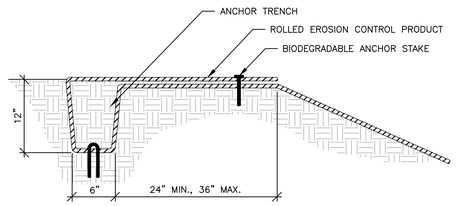


PLAN
NTS

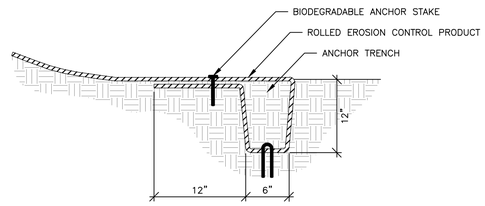
NOTES:

1. TEMPORARY SAND BAGS ARE TO BE INSTALLED PRIOR TO ANY CONSTRUCTION WITHIN THE LIMITS OF THE STREAM. IN THE EVENT THAT THE STREAM IS DRY DURING CONSTRUCTION AND NO RAIN IS FORECAST, SAND BAGS AND TEMPORARY DIVERSION ARE NOT NECESSARY.
2. EXCAVATED TRENCH MATERIAL SHALL BE STOCKPILED ADJACENT TO THE TRENCH, NO CLOSER THAN 25' FROM THE TOP OF BANK OF THE STREAM.
3. SILT FENCE SHALL BE INSTALLED BETWEEN THE STOCKPILED MATERIAL AND THE TOP OF BANK OF THE STREAM.
4. IMMEDIATELY AFTER CONSTRUCTION IS COMPLETE, PERMANENT STABILIZATION MEASURES SHALL BE APPLIED.

12 TYPICAL STREAM DIVERSION DETAIL
N.T.S.

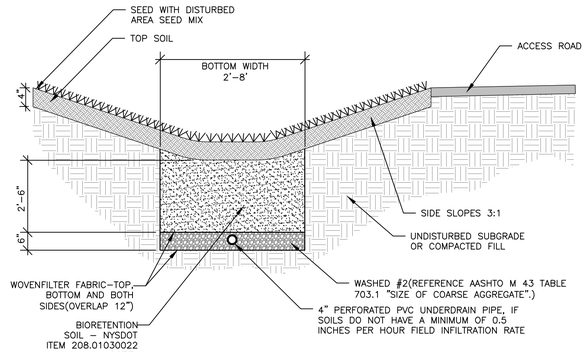


INITIAL ANCHOR TRENCH – UPHILL



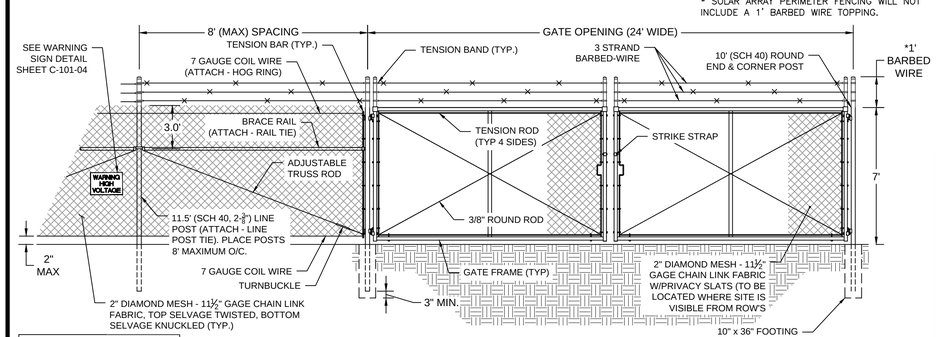
TERMINAL ANCHOR TRENCH – DOWNHILL

13 ROLLED EROSION CONTROL PRODUCT ANCHORING DETAIL
N.T.S.



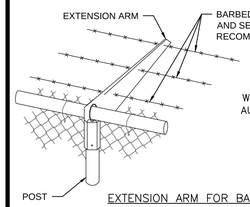
NOTE: LOCATIONS AND DIMENSION OF DRY SWALES TO BE IDENTIFIED ON CONSTRUCTION DOCUMENTS.

14 TYPICAL DRY SWALE (INTERFACE @ UG COLLECTOR)
N.T.S.

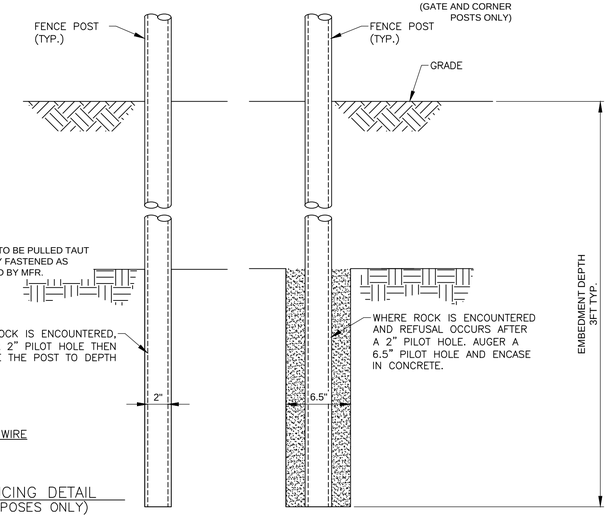


POST SCHEDULE: (SCH 40)	
TERMINAL	2- ⅞" OD
GATE	4" OD
POST SCHEDULE: (SCH 40)	
LINE	2- ¾" OD
BRACE RAIL	1- ⅝" OD

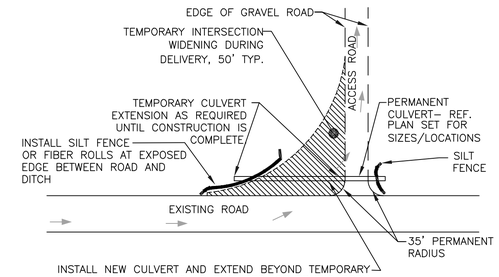
NOTE:
1. ALL POST HOLES SHALL BE AUGERED. DO NOT FORM.
2. FOR PLAN AND LOCATION FOR GATES, SEE SITE SPECIFIC DRAWING
3. CONCRETE SHALL REACH A MINIMUM COMPRESSIVE STRENGTH OF 3000 P.S.I. AT 28 DAYS
4. LINE POST SHALL BE INSTALLED EQUALLY SPACED ALONG FENCE LINE AT A MAXIMUM 8'-0" CENTER TO CENTER.
5. ALL WIRE, FENCE FABRIC POST, BRACE RAILS AND HARDWARE TO BE HOT DIPPED GALVANIZED.
6. CONTRACTOR TO SUBMIT SHOP DRAWING FOR FENCE GATE LATCH FOR ENGINEER'S APPROVAL.



EXTENSION ARM FOR BARBED WIRE
N.T.S.



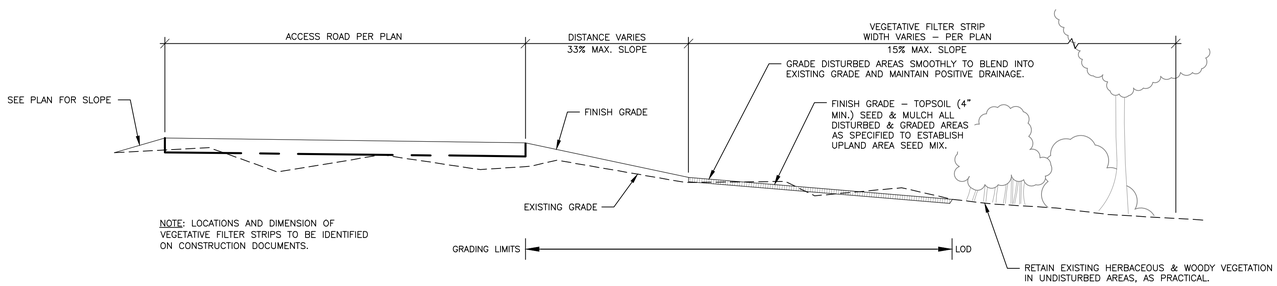
15 TYPICAL SUBSTATION FENCING DETAIL
N.T.S. (FOR INFORMATIONAL PURPOSES ONLY)



NOTES:

1. UPON DELIVERY VEHICLE COMPLETION, TEMPORARY INTERSECTION WIDENING AND TEMPORARY CULVERT TO BE REMOVED AND ALL DISTURBED AREA RESTORED TO NATIVE CONDITIONS.
2. CULVERTS AND SILT FENCE SHALL BE INSTALLED AND MAINTAINED AT INTERSECTIONS WHERE THE ACCESS ROAD IS CROSSING AN EXISTING DITCH TO ENSURE ADEQUATE DRAINAGE.
3. INTERSECTION IMPROVEMENTS AND CULVERT INSTALLATION NEEDS TO BE APPROVED BY GOVERNING BODY.

17 SOLAR DELIVERY ACCESS ROAD TYPICAL INTERSECTION
N.T.S.



NOTE: LOCATIONS AND DIMENSION OF VEGETATIVE FILTER STRIPS TO BE IDENTIFIED ON CONSTRUCTION DOCUMENTS.

16 TYPICAL VEGETATIVE FILTER STRIP
N.T.S.

Rev	Date	Drawn	Description	Ch'k'd	App'd
C	07/14/2021	JSD	ISSUED FOR 94C	KW	NJM
B	05/21/2021	RCB	ISSUED FOR REVIEW	KW	NJM
A	01/29/2021	RCB	ISSUED FOR REVIEW	KW	NJM

MOTT MACDONALD
Mott Macdonald NY Inc.
111 Wood Avenue South
Iselin, NJ 08830-4112
United States
T +1 (973) 379-3400
F +1 (973) 376-1072
W www.mottmac.com

Client: South Ripley SOLAR PROJECT

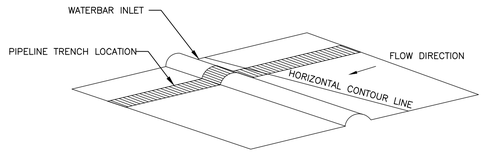
Title: SOUTH RIPLEY SOLAR
TYPICAL CIVIL DETAILS
SHEET 3 OF 10

PRELIMINARY
NOT FOR CONSTRUCTION
REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION

Designed	MU	Eng check	KW
Drawn	RCB	Approved	NJM
Scale at ANSI D: NTS		Date: 07/14/2021	Rev: C

Drawing Number: SRS-C-101-03

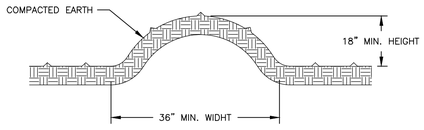
CONCEPTUAL - NOT FOR CONSTRUCTION



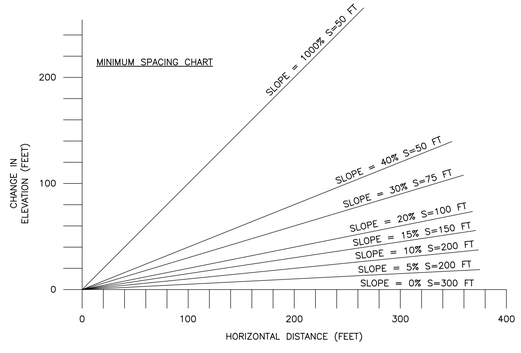
NOTES:

1. WATERBARS ARE TO BE CONSTRUCTED AT SPACING AS INDICATED IN WATERBAR SPACING DETAIL.
   - 1.A. WATER SHALL BE DIVERTED OFF THE DISTURBED RIGHT-OF-WAY AT AN OUTSLOPE OF THREE TO FIVE PERCENT BY CONSTRUCTING WATERBARS ACCORDING TO THE FOLLOWING PROCEDURE:
   - 1.B. AT THE PROPOSED WATERBAR INTERCEPTOR LOCATION ESTABLISH A HORIZONTAL CONTOUR LINE (USING A POCKET TRANSIT OR HAND HELD LEVEL) WHICH EXTENDS COMPLETELY ACROSS THE DISTURBED RIGHT-OF-WAY. THIS LINE WILL ALWAYS BE PERPENDICULAR TO THE DIRECTION OF WATER FLOW AND SHOULD BE PARALLEL TO MAP CONTOURS SHOWN ON THE PLAN DRAWINGS.
   - 1.C. DETERMINE WHICH SIDE OF THE RIGHT-OF-WAY IS BEST SUITED FOR THE WATERBAR OUTLET (EVALUATE VEGETATION DENSITY, LOCAL TOPOGRAPHY, ETC.) AND DEVIATE WATERBARS AWAY FROM THE HORIZONTAL CONTOUR LINE SLIGHTLY DOWNWARD TOWARD THE SELECTED OUTLET SIDE MAINTAINING A THREE TO FIVE PERCENT SLOPE.
   - 1.D. WHEN OUTLETING NEAR WATER BODIES, STREAMS, DITCHES AND CROP FIELDS, A STONE CHECK DAM SHALL BE PLACED ON THE OUTLET END OF THE INTERCEPT WATERBAR.
2. PERMANENT TRENCH BREAKER SANDBAGS SHALL NOT BE FILLED WITH TOPSOIL.
3. SPACING SHOWN ARE RECOMMENDED GUIDELINES, OWNER REPRESENTATIVE MAY ADJUST SPACING IN THE FIELD.
4. ONE TRENCH BREAKER IS REQUIRED AT ALL STREAM BANKS AND AT WETLAND BOUNDARIES.

WATERBAR DETAIL
N.T.S



MINIMAL HEIGHT & WIDTH DIMENSIONS FOR

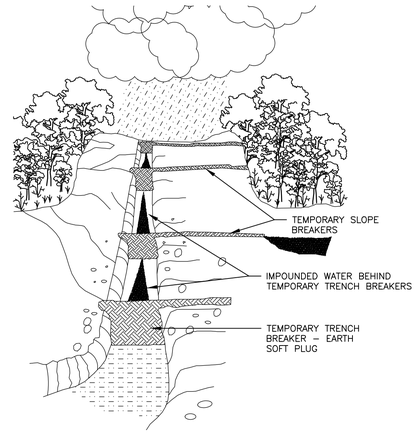


WATERBAR SPACING GUIDELINE

18 WATERBAR CONSTRUCTION DETAIL
N.T.S.

NOTES:

1. TEMPORARY TRENCH BREAKERS WILL BE INSTALLED TO PROVIDE CROSSING AS NECESSARY FOR PROPERTY OWNERS, FARMERS AND WILDLIFE OR CURTAIL THE FLOW OF WATER ALONG THE DITCH, IN AREAS OF SLOPE.
2. TEMPORARY TRENCH BREAKERS WILL BE MAINTAINED DURING THE VARIOUS STAGES OF CONSTRUCTION AND WILL BE REMOVED IMMEDIATELY PRIOR TO THE LOWERING-IN OPERATIONS.
3. ANY PONDED WATER BEHIND THE SOFT PLUG SHALL BE PUMPED OUT OF THE DITCH BEFORE THE REMOVAL OF THE SOFT PLUG.
4. TEMPORARY SLOPE BREAKERS SHOULD INSTALLED IN THE SAME LOCATION AS THE TRENCH BREAKERS TO DIVERT WATER OFF OF RIGHT-OF-WAY.

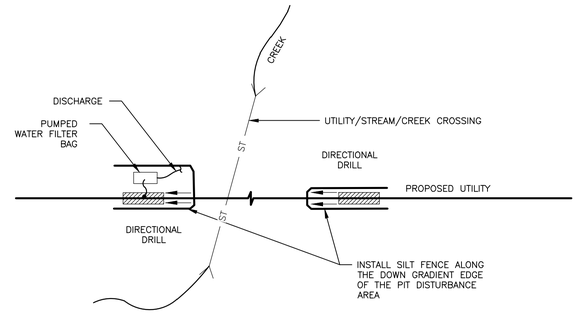


19 TEMPORARY TRENCH BREAKERS - SOFT PLUGS DETAIL
N.T.S.

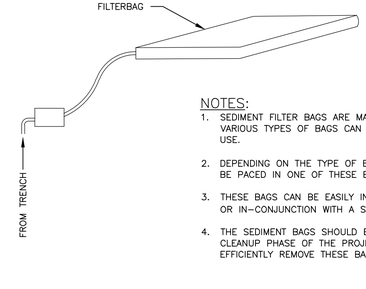
NOTES:

1. EROSION CONTROL MAT TO BE MANUFACTURED USING WEED FREE STRAW FROM AGRICULTURAL CROPS. STRAW SHALL BE MIN, 1/4 INCH THICK ON PHOTODEGRADABLE POLYPROPLINE MESH AND ATTACHED WITH HIGH STRENGTH THREAD. MANUFACTURE TO BE NORTH AMERICAN GREEN, COMTECH ERO MAT OR APPROVED EQUAL.
2. EROSION CONTROL MAT IS TO BE SECURED TO THE SLOPED AREA WITH U SHAPED STAPLES. SIZE AND LOCATION SHALL BE PER THE MANUFACTURE'S SPECIFICATIONS.
3. TOPSOIL SHALL BE FINE GRADED AND ROLLED OR TAMPED TO PREVENT SETTLING. BEFORE SEEDING, TOPSOIL SHALL BE TRIMMED AND RAKED. OBJECTIONABLE MATERIALS SHALL BE REMOVED AND A FINELY PULVERIZED SEED BED SHALL BE FORMED.
4. HYDROSEED MIX SHALL BE A COMBINATION OF PERENNIAL RYEGRASS, FESCUE AND KENTUCKY BLUEGRASS. TACTIEFIER AND FERTILIZER SHALL BE ADDED TO THE HYDROSEED MIX.
5. THE RESTORED AREA SHALL BE WATERED AND MAINTAINED BY THE CONTRACTOR FOR TWO MOWINGS. ANY AREAS WHICH FAIL TO SHOW A UNIFORM CATCH SHALL BE RESEEDED BY THE CONTRACTOR.

20 EROSION CONTROL MAT DETAIL
N.T.S.



TYPICAL EROSION CONTROL MEASURES INSTALLED AT DIRECTIONAL-DRILL PIT
N.T.S.



NOTES:

1. SEDIMENT FILTER BAGS ARE MADE OUT OF GEOTEXTILE MATERIAL AND VARIOUS TYPES OF BAGS CAN BE CHOSEN TO SUIT THE INTENDED USE.
2. DEPENDING ON THE TYPE OF BAG CHOSEN, A6" DIAMETER HOSE CAN BE PACED IN ONE OF THESE BAGS.
3. THESE BAGS CAN BE EASILY INSTALLED AND MAY BE USED SINGLY OR IN-CONJUNCTION WITH A STRAW/HAY BALE RETENTION POND.
4. THE SEDIMENT BAGS SHOULD BE REMOVED DURING RESTORATION AND CLEANUP PHASE OF THE PROJECT WHEN EQUIPMENT IS AVAILABLE TO EFFICIENTLY REMOVE THESE BAGS.

21 FILTERBAG DETAIL
N.T.S.

Rev	Date	Drawn	Description	Ch'k'd	App'd
C	07/14/2021	JSD	ISSUED FOR 94C	KW	NJM
B	05/21/2021	RCB	ISSUED FOR REVIEW	KW	NJM
A	01/29/2021	RCB	ISSUED FOR REVIEW	KW	NJM

MOTT MACDONALD
Mott Macdonald NY Inc.
111 Wood Avenue South
Iselin, NJ 08830-4112
United States
T +1 (973) 379-3400
F +1 (973) 376-1072
W www.mottmac.com

Client: South Ripley SOLAR PROJECT

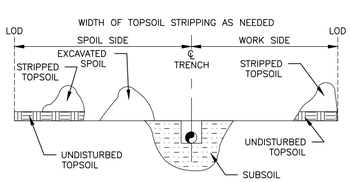
Title: SOUTH RIPLEY SOLAR
TYPICAL CIVIL DETAILS
SHEET 4 OF 10

PRELIMINARY
NOT FOR CONSTRUCTION
REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION

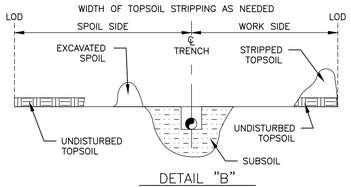
Designed	MU	Eng check	KW
Drawn	RCB	Approved	NJM

Scale at ANSI D: NTS
Date: 07/14/2021
Rev: C
Drawing Number: SRS-C-101-04

CONCEPTUAL - NOT FOR CONSTRUCTION



DETAIL "A"
SCALE: NONE

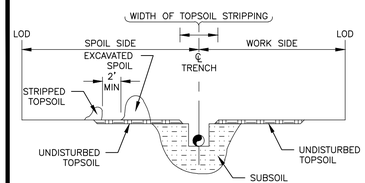


DETAIL "B"
SCALE: NONE

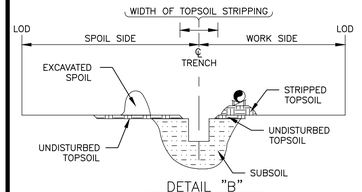
NOTES:

1. REMOVE TOPSOIL FROM THE TRENCH, SPOIL STORAGE AND WORK AREAS. STORE TOPSOIL ONE OR BOTH SIDES OF THE LIMIT OF DISTURBANCE (LOD) ADJACENT TO THE STRIPPED AREAS.
2. EXCAVATE TOPSOIL AND STORE ON SPOIL SIDE ADJACENT TO THE TRENCH. ALLOW FOR AT LEAST A TWO FOOT SEPARATION BETWEEN THE TOP SOIL PILE AND TRENCH SPOIL PILE.
3. IN DETAIL "B" AN ALTERNATE METHOD SHOWS THE TOPSOIL PILED TO THE FAR EDGE OF THE WORKING SIDE. THIS METHOD ENSURES THAT THERE IS NO TOPSOIL AND SUBSOIL MIXING.
4. THE LOD WIDTHS MAY VARY DEPENDING ON THE THICKNESS OF THE TOPSOIL LAYER BEING STRIPPED.
5. THIS TYPE OF STRIPPING IS USED IN AGRICULTURAL FIELDS AND IN IMPROVED PASTURE AREAS.
6. WHEN THIS TYPE OF STRIPPING IS USED IN AGRICULTURAL FIELDS, FOLLOW THE AGRICULTURAL MITIGATION MEASURES WITH RESPECT TO DRAINAGE MITIGATION BACKFILL, ROCK PICKING, DECOMPACTION AND TRENCH CROWING AS OUTLINED IN THE AGRICULTURAL MITIGATION SECTION OF THIS DOCUMENT.
7. THIS STRIPPING TYPE CAN BE USED IN WETLAND AREAS THAT ARE UNDERLAIN BY BEDROCK AT A DEPTH OF 6 TO 15 INCHES. THE TOPSOIL AND SUBSOIL WILL ALL BE PILED, IN SEPARATE PILES, ON THE SPOIL SIDE OF THE LOD. THIS METHOD WOULD PRESERVE TOPSOIL DURING TRENCHING AND BLASTING ACTIVITIES.

22 FULL WIDTH TOPSOIL STRIPPING DETAIL
N.T.S.



DETAIL "A"
SCALE: NONE



DETAIL "B"
SCALE: NONE

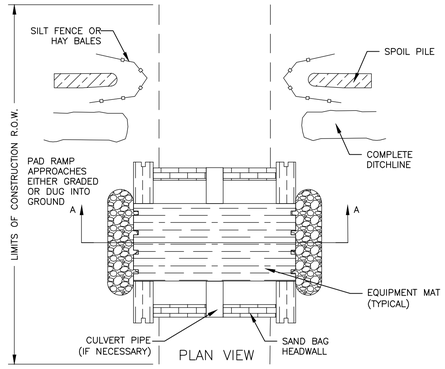
DETAIL "A" NOTES:

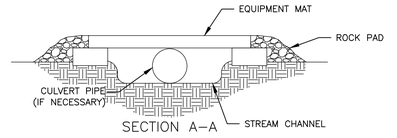
1. REMOVE TOPSOIL FROM THE TRENCH AREA AND PLACE IT NEAR THE FAR EDGE OF SPOIL SIDE ON UNDISTURBED TOPSOIL.
2. DIG TRENCH AND PLACE DITCH SPOIL BETWEEN THE STRIPPED TOPSOIL PILE AND THE TRENCH.
3. KEEP AT LEAST TWO FOOT DISTANCE BETWEEN THE SPOIL AND STORED TOPSOIL PILE TO AVOID MIXING.
4. THIS TYPE OF STRIPPING IS USED IN WETLANDS TO SEGREGATE TOPSOIL FROM SUBSOIL TO PRESERVE THE ROOT MASS IN THE TOPSOIL LAYER.

DETAIL "B" NOTES:

1. REMOVE TOPSOIL FROM THE TRENCH AREA AND PLACE IT NEXT TO THE TRENCH LINE ON THE WORKING SIDE OF THE RIGHT-OF-WAY.
2. DIG TRENCH AND PLACE DITCH SPOIL ON SPOIL SIDE OF RIGHT-OF-WAY NEXT TO TRENCH.
3. THIS METHOD IS USED IN WETLAND WHERE THERE ARE RESTRICTED RIGHT-OF-WAY WIDTHS. WHEN PILING THE TOPSOIL NEXT TO THE DITCH, IT EFFECTIVELY REDUCES LOD WIDTH AND GIVES YOU A PLACE TO FABRICATE PIPE. THIS METHOD IS A FIELD CALL DEPENDS ON SOIL STABILITY.

23 DITCH LINE STRIPPING DETAIL
N.T.S.

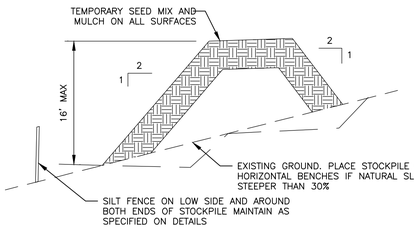




NOTES:

1. CULVERT PIPE OR OTHER SUPPORT MEASURES UTILIZED IF ADDITIONAL SUPPORT REQUIRED.
2. ADDITIONAL MATS CAN BE PUT SIDE BY SIDE IF EXTRA WIDTH IS REQUIRED.
3. EQUIPMENT MAT TYPICALLY CONSTRUCTED OF HARDWOOD: MUST ACCOMMODATE THE LARGEST EQUIPMENT USED.
4. ROCK ROADS OR CRUSHED STONE SHALL BE USED AT ENTRANCE TO THE EQUIPMENT PADS (IF NECESSARY).
5. GEOTEXTILE FABRIC MUST BE PLACE BELOW AND EXTENDING ONTO THE BANK AND SUITABLE SIDE RAILS BUILT INTO THE BRIDGES TO PREVENT SEDIMENT FROM ENTERING THE STREAM.
6. BRIDGES OR CULVERTS MAY NOT BE DRAGGED THROUGH THE STREAM AND MUST BE SUITABLY ANCHORED TO PREVENT DOWNSTREAM TRANSPORT DURING FLOOD.
7. FILL MAY NOT BE PLACE WITHIN THE STREAM CHANNEL BELOW BANKFULL ELEVATION AND PLACEMENT OF ABUTMENTS OR FILL IS AUTHORIZED ONLY ABOVE AND OUTSIDE BANKFULL BOUNDARIES.

28 TEMPORARY EQUIPMENT CROSSING – WOOD MAT BRIDGES
N.T.S.

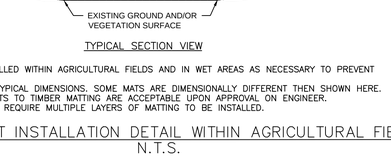


SOIL STOCKPILE MAINTENANCE

1. STOCKPILE TOPSOIL OR EXCAVATED SOIL MATERIAL AT LOCATIONS SHOWN FOR EACH PHASE OF CONSTRUCTION.
2. HEIGHT AND SIDE SLOPES SHALL NOT EXCEED MAXIMUM VALUES SHOWN ON DETAIL.
3. INSTALL SILT FENCE PRIOR TO STOCKPILING OF MATERIAL REPLACE ANY SILT FENCE REMOVED FOR VEHICULAR ACCESS AFTER EACH WORK DAY.
4. APPLY A TEMPORARY SEED MIX AND MULCH WHEN PILE WILL REMAIN FOR 14 DAYS OR MORE.

TEMPORARY STOCKPILE
SCALE: NONE

29 TEMPORARY EXCAVATED SOIL STOCKPILE
N.T.S.

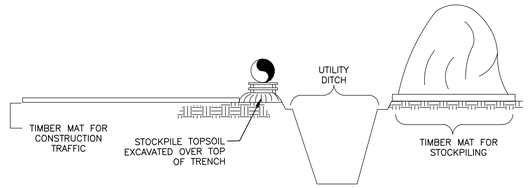


NOTES:

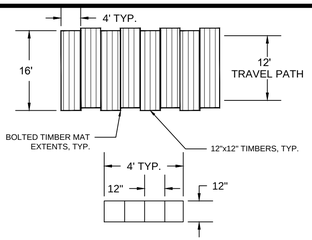
1. THIS METHOD CAN BE USED TO REDUCE THE LOD WIDTH REQUIREMENTS FOR STOCKPILING EXCAVATED SOILS AND THEREBY REDUCE THE AMOUNT OF CLEARING AND GRADING FOR CONSTRUCTION.
2. THIS METHOD MAY BE USED IN THE FOLLOWING AREAS:
   a.) BRUSH LANDS
   b.) FOREST LANDS
   c.) NATIVE PASTURE
   d.) WETLANDS WHERE SEVERELY SATURATED SOILS OR STANDING WATER HINDER EFFECTIVE SEGREGATION.

24 NO TOPSOIL STRIPPING DETAIL
N.T.S.

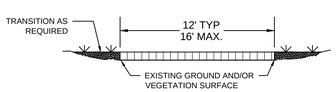
NOTES:
1. FILL MATERIAL SHALL BE PLACED ON TOP OF THE TIMBER MAT NOT OVERLAPPING THE EDGES OF THE TIMBER MAT. THERE SHOULD BE 1 TO 2 FEET OF EXPOSED TIMBER MAT ON EITHER SIDE OF THE STOCKPILE.



25 WETLAND ACCESS ROAD CONSTRUCTION TIMBER MAT DETAIL
N.T.S.



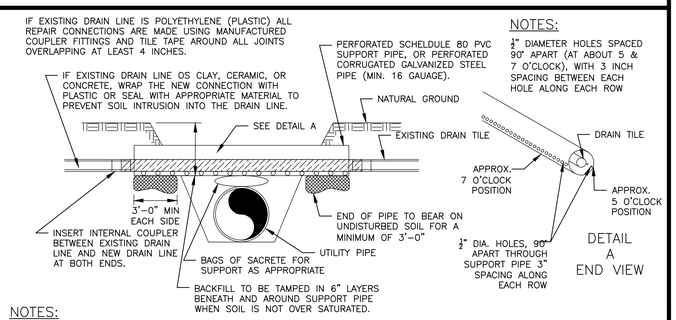
TYPICAL MAT SECTION (BOLTED TOGETHER)



TYPICAL SECTION VIEW

NOTES:
1. MATTING TO BE INSTALLED WITHIN AGRICULTURAL FIELDS AND IN WET AREAS AS NECESSARY TO PREVENT RUTTING.
2. THIS DETAIL SHOWS TYPICAL DIMENSIONS. SOME MATS ARE DIMENSIONALLY DIFFERENT THEN SHOWN HERE. APPROVED EQUIVALENTS TO TIMBER MATTING ARE ACCEPTABLE UPON APPROVAL ON ENGINEER.
3. SITE CONDITIONS MAY REQUIRE MULTIPLE LAYERS OF MATTING TO BE INSTALLED.

26 TIMBER MAT INSTALLATION DETAIL WITHIN AGRICULTURAL FIELD
N.T.S.



NOTES:
½" DIAMETER HOLES SPACED 90° APART (AT ABOUT 5 & 7 O'CLOCK), WITH 3 INCH SPACING BETWEEN EACH HOLE ALONG EACH ROW

NOTES:

1. REPLACEMENT DRAIN LINE TO BE AASHTO M252 DRAIN TUBING: PERFORATED POLYETHYLENE (PLASTIC). PERFORATED, CORRUGATED SINGLE WALL, WHERE SLEEVED THROUGH THE PIPE; AND DOUBLE WALLED, CORRUGATED EXTERIOR/SMOOTH INTERIOR, AASHTO M252 WHERE EXPOSED AND RESTING ON A SUPPORT BEAM.
2. IF LENGTH OF REPAIR EXCEEDS 20 FR, DUE TO AN OBLIQUE CROSSING, THE COMPANY NEEDS TO RECONFIGURE THE DRAIN LINE CROSSING TO A RIGHT ANGLE TO SHORTHEM THE REPAIR LENGTH.
3. IF SOLID STEEL OR SCHEDULE 80 PVC PIPE IS USED, TWO ROWS OF ½" DIAMETER HOLES MUST BE DRILLED IN THE SUPPORT PIPE WITH A 3" SPACING (SEE DETAIL A). THE ROWS SHOULD BE LOCATED 90° APART AND POSITIONED AT ABOUT 5 O'CLOCK AND 7 O'CLOCK RESPECTIVELY.
4. SCHEDULE 80 PVC PIPE OR ITS EQUIVALENT SHOULD BE USED FOR THE CROSS TRENCH SUPPORT PIPE. THE MAXIMUM LENGTH OF THE PVC PIPE IS USUALLY 20FT. THE SCHEDULE 80 PVC PIPE DIAMETER SHOULD NE LARGE ENOUGH SO THE INSTALLED DRAIN LINE CAN EASILY GO THROUGH THE INSIDE OF THE PVC PIPE.
5. IN ALL SITUATIONS, THE GRAVITY FLOE OF DRAIN LINES MUST BE MAINTAINED FOR THE INSTALLED REPAIR.

DRAIN LINE REPAIR CROSS TRENCH FOR UNDERGROUND COLLECTOR
27 N.T.S.

Rev	Date	Drawn	Description	Ch'k'd	App'd
C	07/14/2021	JSD	ISSUED FOR 94C	KW	NJM
B	05/21/2021	RCB	ISSUED FOR REVIEW	KW	NJM
A	01/29/2021	RCB	ISSUED FOR REVIEW	KW	NJM

MOTT MACDONALD
Mott Macdonald NY Inc.
111 Wood Avenue South
Iselin, NJ 08830-4112
United States
T +1 (973) 379-3400
F +1 (973) 376-1072
W www.mottmac.com

Client: South Ripley SOLAR PROJECT

Title: SOUTH RIPLEY SOLAR
TYPICAL CIVIL DETAILS
SHEET 5 OF 10

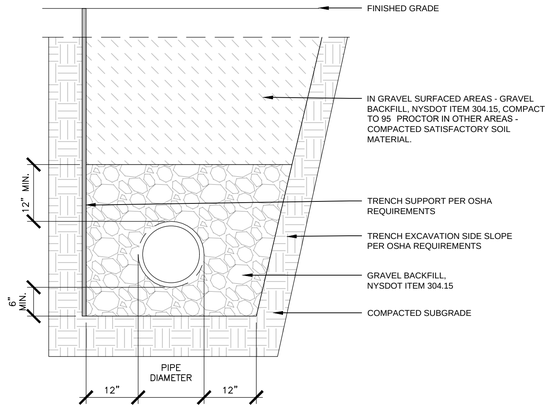
PRELIMINARY
NOT FOR CONSTRUCTION
REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION

Designed	MU	Eng check	KW
Drawn	RCB	Approved	NJM
Scale at ANSI D: NTS		Date: 07/14/2021	Rev: C

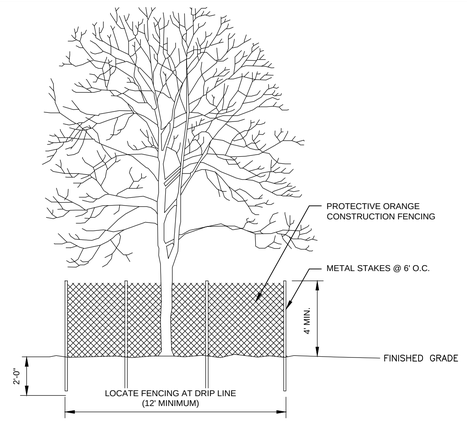
Drawing Number: SRS-C-101-05

CONCEPTUAL - NOT FOR CONSTRUCTION

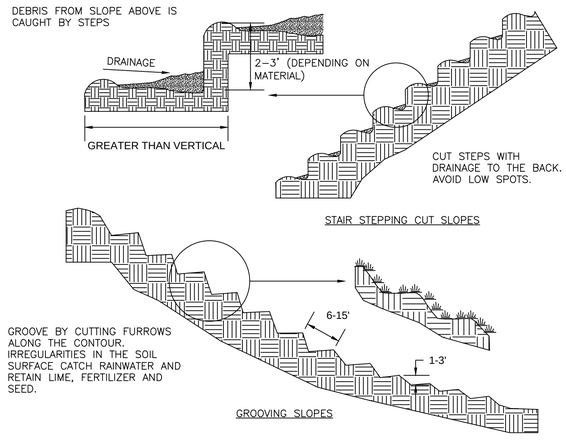
C:\pwworking\hmm\external\woo72000\d0506086\SRS-C-101-01.dwg Jul 27, 2021 - 10:32AM DEC56995



30 TYPICAL PIPE TRENCH DETAIL (APPLICABLE ONLY FOR O&M YARD)
N.T.S.

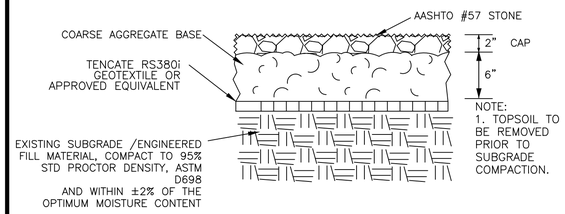


31 VEGETATIVE PROTECTION
N.T.S.

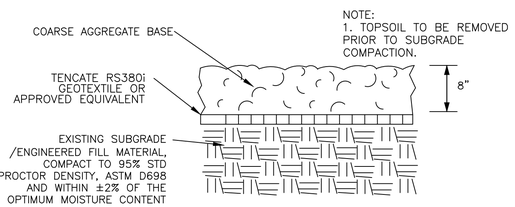


ADAPTED FROM DETAILS PROVIDED BY: USDA – NRCS,
NEW YORK STATE DEPARTMENT OF TRANSPORTATION,
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION,
NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

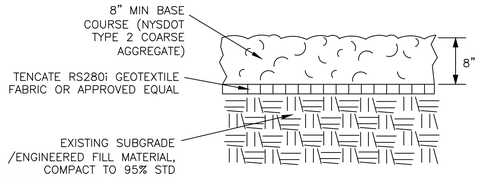
32 SURFACE ROUGHENING DETAIL
N.T.S.



33 O&M FACILITY GRAVEL PAD BUILDUP DETAIL
N.T.S.

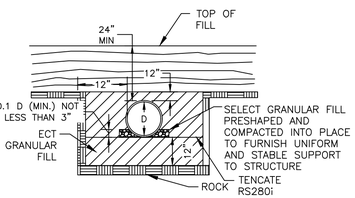


34 TEMPORARY LAYDOWN AREA GRAVEL PAD BUILDUP DETAIL
N.T.S.



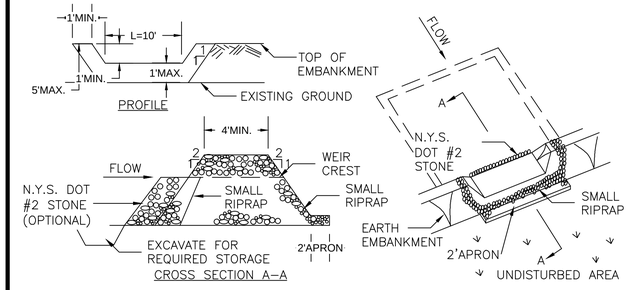
NOTES:
1. GEOTEXTILE REINFORCEMENT SHALL BE INSTALLED OVER GRADED, COMPACTED SUBGRADE. GEOTEXTILE REINFORCEMENT SHALL BE TENCATE RS280i GEOTEXTILE FABRIC FOR SEPARATION/STABILIZATION, OR APPROVED EQUIVALENT.

35 ACCESS DRIVE/ROADWAY BUILDUP DETAIL
N.T.S.



36 CULVERT INSTALLATION IN SHALLOW BEDROCK
N.T.S.

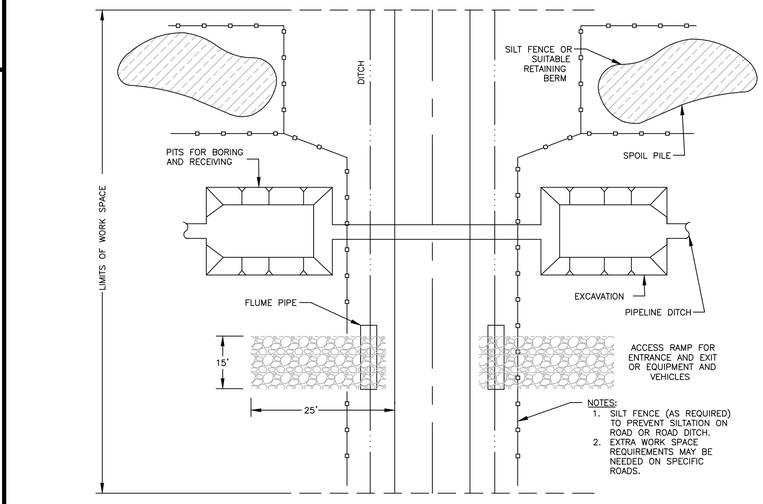
NOTES:
1. WHERE MATERIAL IS FOUND TO BE ROCK AND WHEN THE ENGINEER CANNOT MAKE ADJUSTMENT IN THE LOCATION OF THE PIPE, UNDERCUT EXISTING FOUNDATION MATERIAL WITHIN THE LIMITS ESTABLISHED IN THE PLANS. BACKFILL THE UNDERCUT WITH FOUNDATION CONDITIONING MATERIAL.
2. ENCAPSULATE THE FOUNDATION CONDITIONING MATERIAL WITH FOUNDATION CONDITIONING GEOTEXTILE BEFORE PLACING BEDDING MATERIAL.
3. OVERLAP ALL TRANSVERSE AND LONGITUDINAL JOINTS IN THE GEOTEXTILE AT LEAST 18 INCHES.
4. COMPACTION REQUIREMENTS SHALL CONFORM TO 203–3.06,"SELECT GRANULAR FILL.



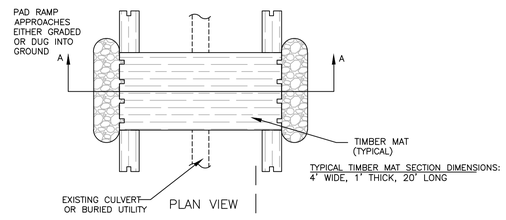
OPTION: A ONE FOOT LAYER OF N.Y.S. DOT #2 STONE MAY BE PLACED ON THE UPSTREAM SIDE OF THE RIPRAP INPLACE OF THE EMBEDDED FILTER CLOTH.

CONSTRUCTION SPECIFICATIONS
1. AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.
2. THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS AND OTHER WOODY VEGETATION AS WELL AS OVER–SIZED STONES, ROCKS, ORGANIC MATERIAL OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
3. ALL CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER.
4. THE STONE USED IN THE OUTLET SHALL BE SMALL RIPRAP 4"–8" ALONG WITH A 1' THICKNESS OF 2" AGGREGATE PLACED ON THE UP–GRADE SIDE ON THE SMALL RIPRAP OR EMBEDDED FILTER CLOTH IN THE RIPRAP.
5. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. IT SHALL BE PLACED ON SITE AND STABILIZED.
6. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
7. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND SEDIMENT ARE CONTROLLED.
8. THE STRUCTURE SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED. MAXIMUM DRAINAGE AREA 5 ACRES.

39 STONE OUTLET SEDIMENT TRAP ST–II CONSTRUCTION DETAILS
N.T.S.



37 TYPICAL BORED CROSSING AT PUBLIC ROAD
N.T.S.



NOTES:
1. ADDITIONAL TIMBER MATS CAN BE PUT SIDE BY SIDE IF EXTRA WIDTH IS REQUIRED.
2. TIMBER MATS TYPICALLY CONSTRUCTED OF HARDWOOD: MUST ACCOMMODATE THE LARGEST EQUIPMENT USED.
3. ROCK PADS OR CRUSHED STONE SHALL BE USED AT ENTRANCE TO THE TIMBER MATS (IF NECESSARY).

38 TYPICAL AIR BRIDGE WITH TIMBER MATS DETAIL
N.T.S.

Rev	Date	Drawn	Description	Ch'k'd	App'd
C	07/14/2021	JSD	ISSUED FOR 94C	KW	NJM
B	05/21/2021	RCB	ISSUED FOR REVIEW	KW	NJM
A	01/29/2021	RCB	ISSUED FOR REVIEW	KW	NJM

MOTT MACDONALD
Mott Macdonald NY Inc.
111 Wood Avenue South
Iselin, NJ 08830-4112
United States
T +1 (973) 379-3400
F +1 (973) 376-1072
W www.mottmac.com

Client: South Ripley Solar Project

Title: SOUTH RIPLEY SOLAR
TYPICAL CIVIL DETAILS
SHEET 6 OF 10

PRELIMINARY
NOT FOR CONSTRUCTION
REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION

Designed	MU	Eng check	KW
Drawn	RCB	Approved	NJM
Scale at ANSI D: NTS		Date: 07/14/2021	Rev: C

Drawing Number: SRS-C-101-06

CONCEPTUAL - NOT FOR CONSTRUCTION

STANDARD AND SPECIFICATIONS FOR PERMANENT CONSTRUCTION AREA PLANTING

Definition & Scope

Establishing **permanent** grasses with other forbs and/or shrubs to provide a minimum 80% perennial vegetative cover on areas disturbed by construction and critical areas to reduce erosion and sediment transport. Critical areas may include but are not limited to steep excavated cut or fill slopes as well as eroding or denuded natural slopes and areas subject to erosion.

Conditions Where Practice Applies

This practice applies to all disturbed areas void of, or having insufficient, cover to prevent erosion and sediment transport. See additional standards for special situations such as sand dunes and sand and gravel pits.

Criteria

All water control measures will be installed as needed prior to final grading and seedbed preparation. Any severely compacted sections will require chiseling or disking to provide an adequate rooting zone, to a minimum depth of 12", see Soil Restoration Standard. The seedbed must be prepared to allow good soil to seed contact, with the soil not too soft and not too compact. Adequate soil moisture must be present to accomplish this. If surface is powder dry or sticky wet, postpone operations until moisture changes to a favorable condition. If seeding is accomplished within 24 hours of final grading, additional scarification is generally not needed, especially on ditch or stream banks. Remove all stones and other debris from the surface that are greater than 4 inches, or that will interfere with future mowing or maintenance.

Soil amendments should be incorporated into the upper 2 inches of soil when feasible. **The soil should be tested to determine the amounts of amendments needed.** Apply ground agricultural limestone to attain a pH of 6.0 in the upper 2 inches of soil. If soil must be fertilized before results of a soil test can be obtained to determine fertilizer needs, apply commercial fertilizer at 600 lbs. per acre of 5-5 -10 or equivalent. If manure is used, apply a quantity to meet the nutrients of the above fertilizer. This requires an appropriate manure analysis prior to applying to the site. Do not use manure on sites to be planted with birdsfoot trefoil or in the path of concentrated water flow.

Seed mixtures may vary depending on location within the state and time of seeding. Generally, warm season grasses should only be seeded during early spring, April to May. These grasses are primarily used for vegetating excessively drained sands and gravels. See Standard and Specification for Sand and Gravel Mine Reclamation. Other grasses may be seeded any time of the year when the soil is not frozen and is workable. When legumes such as birdsfoot trefoil are included, spring seeding is preferred. See Table 4.4, "Permanent Construction Area Planting Mixture Recommendations" for additional seed mixtures.

General Seed Mix:	Variety	lbs./ acre	lbs/1000 sq. ft.
Red Clover[1] OR	Acclaim, Rally, Red Head II, Renegade	8[2]	0.20
Common white clover[3]	Common	8	0.20
PLUS			
Creeping Red Fescue	Common	20	0.45
PLUS			
Smooth Bromegrass OR	Common	2	0.05
Ryegrass (perennial)	Pennfine/Linn	5	0.10

[1] add inoculant immediately prior to seeding
[2] Mix 4 lbs each of Empire and Pardee OR 4 lbs of Birdsfoot and 4 lbs white clover per acre. All seeding rates are given for Pure Live Seed (PLS)

Pure Live Seed, or (PLS) refers to the amount of live seed in a lot of bulk seed. Information on the seed bag label includes the type of seed, supplier, test date, source of seed, purity, and germination. Purity is the percentage of pure seed. Germination is the percentage of pure seed that will produce normal plants when planted under favorable conditions.

To compute Pure Live Seed multiply the "germination percent" times the "purity" and divide that by 100 to get Pure Live Seed.

$$\text{Pure Live Seed (PLS)} = \frac{\%\,\text{Germination} \times \%\,\text{Purity}}{100}$$

For example, the PLS for a lot of Kentucky Blue grass with 75% purity and 96% germination would be calculated as follows:

$$\frac{(96) \times (75)}{100} = 72\%\ \text{Pure Live Seed}$$

For 10lbs of PLS from this lot =

$$\frac{10}{0.72} = 13.9\ \text{lbs}$$

Therefore, 13.9 lbs of seed is the actual weight needed to meet 10lbs PSL from this specific seed lot.

Time of Seeding: The optimum timing for the general seed mixture is early spring. Permanent seedings may be made any time of year if properly mulched and adequate moisture is provided. Late June through early August is not a good time to seed, but may facilitate covering the land without additional disturbance if construction is completed. Portions of the seeding may fail due to drought and heat. These areas may need reseeding in late summer/fall or the following spring.

Method of seeding: Broadcasting, drilling, cultipack type seeding, or hydroseeding are acceptable methods. Proper soil to seed contact is key to successful seedings.

Mulching: Mulching is essential to obtain a uniform stand of seeded plants. Optimum benefits of mulching new seedings are obtained with the use of small grain straw applied at a rate of 2 tons per acre, and anchored with a netting or tackifier. See the Standard and Specifications for Mulching for choices and requirements.

Irrigation: Watering may be essential to establish a new seeding when a drought condition occurs shortly after a new seeding emerges. Irrigation is a specialized practice and care must be taken not to exceed the application rate for the soil or subsoil. When disconnecting irrigation pipe, be sure pipes are drained in a safe manor, not creating an erosion concern.

80% Perennial Vegetative Cover

50% Perennial Vegetative Cover

Table 4.4
Permanent Construction Area Planting Mixture Recommendations

Seed Mixture	Variety	Rate in lbs./acre (PLS)	Rate in lbs./ 1, 000 ft^2
Mix #1			
Creeping red fescue	Ensylva, Pennlawn, Boreal	10	.25
Perennial ryegrass	Pennfine, Linn	10	.25
*This mix is used extensively for shaded areas.			
Mix #2			
Switchgrass	Shelter, Pathfinder, Trailblazer, or Blackwell	20	.50
*This rate is in pure live seed, this would be an excellent choice along the upland edge of a wetland to filter runoff and pro vide wildlife benefits. In areas where erosion may be a problem, a companion seeding of sand lovegrass should be added to provide quick cover at a rate of 2 lbs. per acre (0.05 lbs. per 1000 sq. ft.).			
Mix #3			
Switchgrass	Shelter, Pathfinder, Trailblazer, or Blackwell	4	.10
Big bluestem	Niagara	4	.10
Little bluestem	Aldous or Camper	2	.05
Indiangrass	Rumsey	4	.10
Coastal panicgrass	Atlantic	2	.05
Sideoats grama	El Reno or Trailway	2	.05
Wildflower mix		.50	.01
*This mix has been successful on sand and gravel plantings. It is very difficult to seed without a warm season grass seeder such as a Truax seed drill. Broadcasting this seed is very difficult due to the fluffy nature of some of the seed, such as bluestems and indiangrass.			
Mix #4			
Switchgrass	Shelter, Pathfinder, Trailblazer, or Blackwell	10	.25
Coastal panicgrass	Atlantic	10	.25
*This mix is salt tolerant, a good choice along the upland edge of tidal areas and roadsides.			
Mix #5			
Saltmeadow cordgrass (Spartina patens)—This grass is used for tidal shoreline protection and tidal marsh restoration. It is planted by vegetative stem divisions. 'Cape' American beachgrass can be planted for sand dune stabilization above the saltmeadow cordgrass zone.			
Mix #6			
Creeping red fescue	Ensylva, Pennlawn, Boreal	20	.45
Chewings Fescue	Common	20	.45
Perennial ryegrass	Pennfine, Linn	5	.10
Red Clover	Common	10	.45
*General purpose erosion control mix. Not to be used for a turf planting or play grounds.			

STANDARD AND SPECIFICATIONS FOR VEGETATING WATERWAYS

Definition & Scope

Waterways are a **permanently** constructed conveyance channel, shaped or graded. They are vegetated for the safe transport of excess surface water from construction sites and urban areas without damage from erosion.

Conditions Where Practice Applies

This standard applies to vegetating waterways and similar water carrying structures.

Supplemental measures may be required with this practice. These may include: subsurface drainage to permit the growth of suitable vegetation and to eliminate wet spots; a section stabilized with asphalt, stone, or other suitable means; or additional storm drains to handle snowmelt or storm runoff.

Retardance factors for determining waterway dimensions are shown in Table 3.1 on page 3.10 and "Maximum Permissible Velocities for Selected Grass and Legume Mixtures" (See Table 4.10 on page 4.79).

Design Criteria

Waterways or outlets shall be protected against erosion by vegetative means as soon after construction as practical. Vegetation must be well established before diversions or other channels are outletted into them. Consideration should be given to the use of turf reinforcement mats, excelsior matting, other rolled erosion control products, or sodding of channels to provide erosion protection as soon after construction as possible. It is strongly recommended that the center line of the waterway be protected with one of the above materials to avoid center gullies and to protect seedlings from erosion before establishment.

1. Liming, fertilizing, and seedbed preparation.

   A. Lime to pH 6.5.

   B. **The soil should be tested to determine the amounts of amendments needed.** If the soil must be fertilized before results of a soil test can be obtained to determine fertilizer needs, apply commercial fertilizer at 1.0 lbs/1,000 sq. ft. of N, P_2O_5, and K_2O.

   C. Lime and fertilizer shall be mixed thoroughly into the seedbed during preparation.

   D. Channels, except for paved section, shall have at least 4 inches of topsoil.

   E. Remove stones and other obstructions that will hinder maintenance.

2. Timing of Seeding.

   A. Early spring and late August are best.

   B. Temporary cover to protect from erosion is recommended during periods when seedings may fail.

3. Seed Mixtures:

Mixtures	Rate per Acre (lbs)	Rate per 1,000 sq. ft. (lbs)
A. White clover or ladino clover[1]	8	0.20
Smooth bromegrass	20	0.45
Creeping red fescue[2]	2	0.05
Total	30	0.70
OR		
B. Smooth bromegass[3]	25	0.60
Creeping red fescue	20	0.50
Perennial ryegrass	10	0.20
Total	55	1.30

[1] Inoculate with appropriate inoculum immediately prior to seeding. Ladino or birdsfoot trefoil may be substituted for common white clover and seeded at the same rate.
[2] Perennial ryegrass may be substituted for the creeping red fescue but increase seeding rate to 5 lbs/acre (0.1 lb/1,000 sq. ft).
[3] Use this mixture in areas which are mowed frequently. Common white clover may be added if desired and seeded at 8 lbs/acre (0.2 lb/1,000 sq. ft.)

4. Seeding

Select the appropriate seed mixture and apply uniformly over the area. Rolling or cultipacking across the waterway is desirable.

Waterway centers or crucial areas may be sodded. Refer to the standard and specification for Stabilization with Sod. Be sure sod is securely anchored using staples or stakes.

5. Mulching

All seeded areas will be mulched. Channels more than 300 feet long, and/or where the slope is 5 percent or more, must have the mulch securely anchored. Refer to the standard and specifications for Mulching for details.

6. Maintenance

Fertilize, lime, and mow as needed to maintain dense protective vegetative cover.

Waterways shall not be used for roadways.

If rills develop in the centerline of a waterway, prompt attention is required to avoid the formation of gullies. Either stone and/or compacted soil fill with excelsior or filter fabric as necessary may be used during the establishment phase. See Figure 4.25, Rill Maintenance Measures. Spacing between rill maintenance barriers shall not exceed 100 feet.

Table 4.10
Maximum Permissible Velocities for Selected Seed Mixtures

Cover	Slope Range [2] (%)	Permissible Velocity [1]	
		Erosion-resistant Soils (ft. per sec.) K=0.10 - 0.35 [3]	Easily Eroded Soils (ft. per sec.) K=0.36 - 0.80
Smooth Bromegrass Hard Fescue	0-5 5-10 Over 10	7 6 5	5 4 3
Grass Mixtures	[2] 0-5 5-10	5 4	4 3
White/Red Clover Alfalfa Red Fescue	[4] 0-5	3.5	2.5

[1] Use velocities exceeding 5 feet per second only where good covers and proper maintenance can be obtained.
[2] Do not use on slopes steeper than 10 percent except for vegetated side slopes in combination with a stone, concrete, or highly resistant vegetative center section.
[3] K is the soil erodibility factor used in the Revised Universal Soil Loss Equation. Visit Appendix A or consult the appropriate USDA-NRCS technical guide for K values for New York State soils.
[4] Do not use on slopes steeper than 5 percent except for vegetated side slopes in combination with a stone, concrete, or highly resistant vegetative center section.
[5] Annuals - use on mild slopes or as temporary protection until permanent covers are established.
[6] Use on slopes steeper than 5 percent is not recommended.

STANDARD AND SPECIFICATIONS FOR SOIL RESTORATION

Definition & Scope

The decompaction of areas of a development site or construction project where soils have been disturbed to recover the original properties and porosity of the soil; thus providing a sustainable growth medium for vegetation, reduction of runoff and filtering of pollutants from stormwater runoff.

Conditions Where Practice Applies

Soil restoration is to be applied to areas whose heavy construction traffic is done and final stabilization is to begin. This is generally applied in the cleanup, site restoration, and landscaping phase of construction followed by the permanent establishment of an appropriate ground cover to maintain the soil structure. Soil restoration measures should be applied over and adjacent to any runoff reduction practices to achieve design performance.

Design Criteria

1. Soil restoration areas will be designated on the plan views of areas to be disturbed.
2. Soil restoration will be completed in accordance with Table 4.6 on page 4.53.

Specification for Full Soil Restoration

During periods of relatively low to moderate subsoil moisture, the disturbed subsoils are returned to rough grade and the following Soil Restoration steps applied:

1. Apply 3 inches of compost over subsoil. The compost shall be well decomposed (matured at least 3 months), weed-free, organic matter. It shall be aerobically composted, possess no objectionable odors, and contain less than 1%, by dry weight, of man-made foreign matter. The physical parameters of the compost shall meet the standards listed in Table 5.2 - Compost Standards Table, except for "Particle Size" 100% will pass the 1/2" sieve. **Note: All biosolids compost produced in New York State (or approved for importation) must meet NYS DEC's 6 NYCRR Part 360 (Solid Waste Management Facilities) requirements. The Part 360 requirements are equal to or more stringent than 40 CFR Part 503 which ensure safe standards for pathogen reduction and heavy metals content.**

2. Till compost into subsoil to a depth of at least 12 inches using a cat-mounted ripper, tractor mounted disc, or tiller, to mix and circulate air and compost into the subsoil.
3. Rock-pick until uplifted stone/rock materials of four inches and larger size are cleaned off the site.
4. Apply topsoil to a depth of 6 inches.
5. Vegetate as required by the seeding plan. Use appropriate ground cover with deep roots to maintain the soil structure.
6. Topsoil may be manufactured as a mixture or a mineral component and organic material such as compost.

Rev	Date	Drawn	Description	Ch'k'd	App'd
C	07/14/2021	JSD	ISSUED FOR 94C	KW	NJM
B	05/21/2021	RCB	ISSUED FOR REVIEW	KW	NJM
A	01/29/2021	RCB	ISSUED FOR REVIEW	KW	NJM

MOTT MACDONALD
Mott Macdonald NY Inc.
111 Wood Avenue South
Iselin, NJ 08830-4112
United States
T +1 (973) 379-3400
F +1 (973) 376-1072
W www.mottmac.com

Client

South Ripley SOLAR PROJECT

Title

SOUTH RIPLEY SOLAR
TYPICAL CIVIL DETAILS
SHEET 7 OF 10

PRELIMINARY
NOT FOR CONSTRUCTION
REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION

Designed	MU	Eng check	KW
Drawn	RCB	Approved	NJM
Scale at ANSI D: NTS		Date: 07/14/2021	Rev: C

Drawing Number
SRS-C-101-07

CONCEPTUAL - NOT FOR CONSTRUCTION

STANDARD AND SPECIFICATIONS FOR TEMPORARY CONSTRUCTION AREA SEEDING

Definition & Scope

Providing temporary erosion control protection to disturbed areas and/or localized critical areas for an interim period by covering all bare ground that exists as a result of construction activities or a natural event. Critical areas may include but are not limited to steep excavated cut or fill slopes and any disturbed, denuded natural slopes subject to erosion.

Conditions Where Practice Applies

Temporary seedings may be necessary on construction sites to protect an area, or section, where final grading is complete, when preparing for winter work shutdown, or to provide cover when permanent seedings are likely to fail due to mid-summer heat and drought. The intent is to provide temporary protective cover during temporary shutdown of construction and/or while waiting for optimal planting time.

Criteria

Water management practices must be installed as appropriate for site conditions. The area must be rough graded and slopes physically stable. Large debris and rocks are usually removed. Seedbed must be seeded within 24 hours of disturbance or scarification of the soil surface will be necessary prior to seeding.

Fertilizer or lime are not typically used for temporary seedings.

IF: Spring or summer or early fall, then seed the area with ryegrass (annual or perennial) at 30 lbs. per acre (Approximately 0.7 lb./1000 sq. ft. or use 1 lb./1000 sq. ft.).

IF: Late fall or early winter, then seed Certified 'Aroostook' winter rye (cereal rye) at 100 lbs. per acre (2.5 lbs./1000 sq. ft.).

Any seeding method may be used that will provide uniform application of seed to the area and result in relatively good soil to seed contact.

Mulch the area with hay or straw at 2 tons/acre (approx. 90 lbs./1000 sq. ft. or 2 bales). Quality of hay or straw mulch allowable will be determined based on long term use and visual concerns. Mulch anchoring will be required where wind or areas of concentrated water are of concern. Wood fiber hydromulch or other sprayable products approved for erosion control (nylon web or mesh) may be used if applied according to manufacturers' specification. Caution is advised when using nylon or other synthetic products. They may be difficult to remove prior to final seeding and can be a hazard to young wildlife species.

STANDARD AND SPECIFICATIONS FOR TOPSOILING

Definition & Scope

Spreading a specified quality and quantity of topsoil materials on graded or constructed subsoil areas to provide acceptable plant cover growing conditions, thereby reducing erosion; to reduce irrigation water needs; and to reduce the need for nitrogen fertilizer application.

Conditions Where Practice Applies

Topsoil is applied to subsoils that are droughty (low available moisture for plants), stony, slowly permeable, salty or extremely acid. It is also used to backfill around shrub and tree transplants. This standard does not apply to wetland soils.

Design Criteria

1. Preserve existing topsoil in place where possible, thereby reducing the need for added topsoil.
2. Conserve by stockpiling topsoil and friable fine textured subsoils that must be stripped from the excavated site and applied after final grading where vegetation will be established. Topsoil stockpiles must be stabilized. Stockpile surfaces can be stabilized by vegetation, geotextile or plastic covers. This can be aided by orientating the stockpile lengthwise into prevailing winds.
3. Refer to USDA Natural Resource Conservation Service soil surveys or soil interpretation record sheets for further soil texture information for selecting appropriate design topsoil depths.

Site Preparation

1. As needed, install erosion and sediment control practices such as diversions, channels, sediment traps, and stabilizing measures, or maintain if already installed.
2. Complete rough grading and final grade, allowing for depth of topsoil to be added.
3. Scarify all compact, slowly permeable, medium and fine textured subsoil areas. Scarify at approximately right angles to the slope direction in soil areas that are steeper than 5 percent. Areas that have been overly compacted shall be decompacted in accordance with the Soil Restoration Standard.
4. Remove refuse, woody plant parts, stones over 3 inches in diameter, and other litter.

Topsoil Materials

1. Topsoil shall have at least 6 percent by weight of fine textured stable organic material, and no greater than 20 percent. Muck soil shall not be considered topsoil.
2. Topsoil shall have not less than 20 percent fine textured material (passing the NO. 200 sieve) and not more than 15 percent clay.
3. Topsoil treated with soil sterilants or herbicides shall be so identified to the purchaser.
4. Topsoil shall be relatively free of stones over 1 1/2 inches in diameter, trash, noxious weeds such as nut sedge and quackgrass, and will have less than 10 percent gravel.
5. Topsoil containing soluble salts greater than 500 parts per million shall not be used.
6. Topsoil may be manufactured as a mixture of a mineral component and organic material such as compost.

Application and Grading

1. Topsoil shall be distributed to a uniform depth over the area. It shall not be placed when it is partly frozen, muddy, or on frozen slopes or over ice, snow, or standing water puddles.
2. Topsoil placed and graded on slopes steeper than 5 percent shall be promptly fertilized, seeded, mulched, and stabilized by "tracking" with suitable equipment.
3. Apply topsoil in the amounts shown in Table 4.7 below:

Table 4.7 - Topsoil Application Depth

Site Conditions	Intended Use	Minimum Topsoil Depth
1. Deep sand or loamy sand	Mowed lawn	6 in.
	Tall legumes, unmowed	2 in.
	Tall grass, unmowed	1 in.
2. Deep sandy loam	Mowed lawn	5 in.
	Tall legumes, unmowed	2 in.
	Tall grass, unmowed	none
3. Six inches or more: silt loam, clay loam, loam, or silt	Mowed lawn	4 in.
	Tall legumes, unmowed	1 in.
	Tall grass, unmowed	1 in.

Decompaction

At the end of the project an inspector should be able to push a 3/8" metal bar 12 inches into the soil just with body weight. This should not be performed within the drip line of any existing trees or over utility installations that are within 24 inches of the surface.

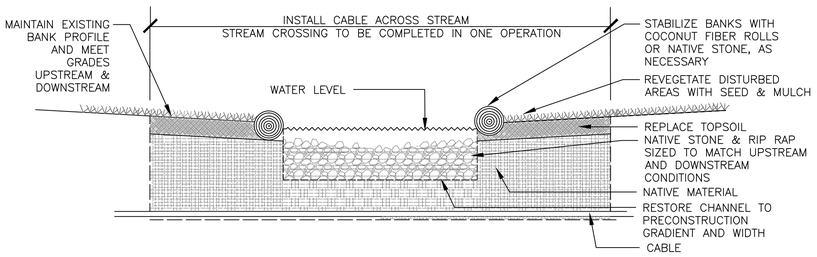
Maintenance

Keep the site free of vehicular and foot traffic or other weight loads. Consider pedestrian footpaths.

Table 4.6
AG & Markets Soil Restoration Requirements

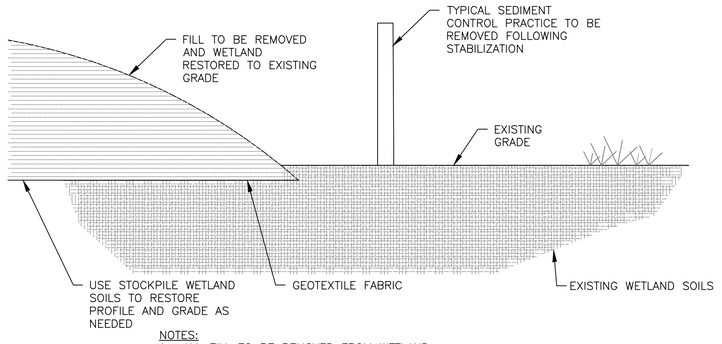
Type of Soil Disturbance	Soil Restoration Requirement		Comments/Examples
No soil disturbance	Restoration not permitted		Preservation of Natural Features
Minimal soil disturbance	Restoration not required		Clearing and grubbing
Areas where topsoil is stripped only - no change in grade	HSG A&B	HSG C&D	Protect area from any ongoing construction activities.
	Apply 6 inches of topsoil	Aerate* and apply 6 inches of topsoil	
Areas of cut or fill	HSG A&B	HSG C&D	
	Aerate* and apply 6 inches of topsoil	Apply full Soil Restoration**	
Heavy traffic areas on site (especially in a zone 5-25 feet around buildings but not within a 5 foot perimeter around foundation walls)	Apply full Soil Restoration (decompaction and compost enhancement)		
Areas where Runoff Reduction and/or Infiltration practices are applied	Restoration not required, but may be applied to enhance the reduction specified for appropriate practices.		Keep construction equipment from crossing these areas. To protect newly installed practice from any ongoing construction activities construct a single phase operation fence area
Redevelopment projects	Soil Restoration is required on redevelopment projects in areas where existing impervious area will be converted to pervious area.		

* Aeration includes the use of machines such as tractor-drawn implements with coulters making a narrow slit in the soil, a roller with many spikes making indentations in the soil, or prongs which function like a mini-subsoiler.
** Per "Deep Ripping and De-compaction, DEC 2008".



NOTES:
1. THE RESTORED STREAM CHANNEL SHALL BE EQUAL IN WIDTH, DEPTH, GRADIENT , LENGTH AND CHARACTER AS THE PRE-EXISTING STREAM CHANNEL AND TIE IN SMOOTHLY TO PROFILE OF THE STREAM CHANNEL UPSTREAM AND DOWNSTREAM OF THE PROJECT AREA. THE PLANTFORM OF AND STREAM NOT BE CHANGED.
2. ANY IN-STREAM WORK OR RESTORATION SHALL NOT RESULT IN AN IMPEDIMENT TO PASSAGE OF AQUATIC ORGANISM.
3. ANY IN-STREAM WORK (EXCLUDING DEWATERING PRACTICES ASSOCIATED WITH DRY TRENCH CROSSINGS) AND RESTORATION SHALL BE CONSTRUCTED IN A MANNER WHICH MAINTAINS LOW FLOW CONDITIONS AND PRESERVES WATER DEPTHS AND VELOCITIES SIMILAR TO UNDISTURBED UPSTREAM AND DOWNSTREAM REACHES NECESSARY TO SUSTAIN THE MOVEMENT OF NATIVE AQUATIC ORGANISMS. ANY IN-STREAM HABITAT STRUCTURES SHALL NOT CREATE A DROP HEIGHT GREATER THAN SIX INCHES.
4. ALL DISTURBED STREAM BANKS BELOW THE NORMAL HIGH-WATER ELEVATION MUST BE GRADED NO STEEPER THAN ONE VERTICAL TO TWO HORIZONTAL SLOPE (1:2), OR TO THE ORIGINAL GRADE AS APPROPRIATE , AND ADEQUATELY STABILIZED.
5. ALL OTHER AREAS OF SOIL DISTURBANCE ABOVE THE ORDINARY HIGH-WATER ELEVATION, OR ELSEWHERE, SHALL BE STABILIZED WITH NATURAL FIBER MATTING, SEEDED WITH AND APPROPRIATE PERENNIAL NATIVE CONSERVATION SEED MIX, AND MULCHED WITH STRAW WITHIN TWO (2) DAYS OF FINAL GRADING. MULCH SHALL BE MAINTAINED UNTIL SUITABLE VEGETATION COVER IS ESTABLISHED.
6. DESTROYED BANK VEGETATION SHALL BE REPLACED WITH APPROPRIATE NATIVE SHRUBS, LIVE STAKES, AND/OR TREE PLANTINGS AS SITE CONDITIONS, AS APPROPRIATE.

39 STREAM RESTORATION DETAIL
N.T.S.



NOTES:
1. ALL FILL TO BE REMOVED FROM WETLAND
2. ALL FILL MATERIAL TO BE DISCHARGED TO A LEGAL UPLAND LOCATION.
3. STABILIZE AREA IN ACCORDANCE WITH SWPPP.
4. LIMIT WORK TO TEMPORARY DISTURBED AREAS AS SHOWN ON PERMIT DRAWING.
5. CONTOURS SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITIONS WITHIN 48 HOURS OF FINAL BACKFILLING OF THE TRENCH WITHIN WETLANDS AND STATE-REGULATED ADJACENT AREAS.
6. IMMEDIATELY UPON COMPLETION OF GRADING, WETLAND AND ADJACENT AREAS SHALL BE SEEDED AND/OR REPLANTED WITH NATIVE SHRUBS AND HERBACEOUS PLANTS AT PRE-CONSTRUCTION DENSITIES. SEEDING WITH AND APPROPRIATE NATIVE WETLAND SPECIES MIX (E.G. ERNST WETLAND MIX, OBL-FACW PERENNIAL WETLAND MIX, (OBL WETLAND MIX, SPECIALIZED WETLAND MIX FOR SHADED OBL-FACW), OR EQUIVALENT) SHALL BE COMPLETED TO HELP STABILIZE THE SOILS.
7. WETLAND RESTORATION AREAS SHALL BE MONITORED FOR A MINIMUM OF 5 YEARS OR UNTIL AN 80% COVER OF PLANTS WITH THE APPROPRIATE WETLAND INDICATOR STATUS HAS BEEN REESTABLISHED OVER ALL PORTIONS OF THE RESTORED AREA. AT THE END OF THE FIRST YEAR OF MONITORING, THE CERTIFICATE HOLDER SHALL REPLACE LOST WETLAND AND/OR WETLAND ADJACENT AREA PLANTINGS IF THE SURVIVAL RATE OF THE INITIAL PLANTINGS IS LESS THAN 80%; AND
8. IF AT THE END OF THE SECOND YEAR OF MONITORING, THE CRITERIA FOR RESTORATION PLANTINGS (80% COVER, 80% SURVIVAL OF PLANTINGS) ARE NOT MET, THEN THE CERTIFICATE HOLDER MUST ESCALATE THE REASONS FOR THESE RESULTS AND SUBMIT AN APPROVABLE WETLAND PLANTING REMEDIAL PLAN (WPRP) FOR DEC AND DPS APPROVAL. THE WPRP MUST INCLUDE THE FOLLOWING:
   A) ANALYSIS OF POOR SURVIVAL;
   B) CORRECTIVE ACTIONS TO ENSURE A SUCCESSFUL RESTORATION; AND
   C) SCHEDULE FOR CONDUCTING THE REMEDIAL WORK. ONCE APPROVED, THE WPRP WILL BE IMPLEMENTED ACCORDING TO THE APPROVED SCHEDULE.

40 WETLAND RESTORATION DETAIL
N.T.S.

CONCEPTUAL - NOT FOR CONSTRUCTION

C:\pwworking\hmm\external\woo72000\d0506086\SRS-C-101-01.dwg Jul 27, 2021 - 10:34AM DEC56995

Rev	Date	Drawn	Description	Ch'k'd	App'd
C	07/14/2021	JSD	ISSUED FOR 94C	KW	NJM
B	05/21/2021	RCB	ISSUED FOR REVIEW	KW	NJM
A	01/29/2021	RCB	ISSUED FOR REVIEW	KW	NJM

MOTT MACDONALD
Mott Macdonald NY Inc.
111 Wood Avenue South
Iselin, NJ 08830-4112
United States
T +1 (973) 379-3400
F +1 (973) 376-1072
W www.mottmac.com

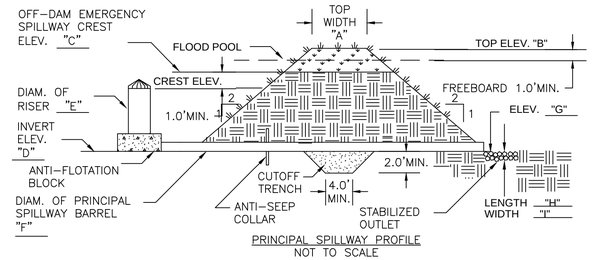
Client: South Ripley SOLAR PROJECT

Title: SOUTH RIPLEY SOLAR
TYPICAL CIVIL DETAILS
SHEET 8 OF 10

PRELIMINARY NOT FOR CONSTRUCTION
REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION

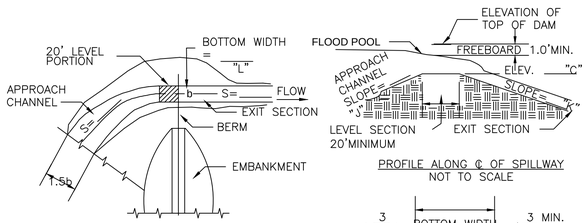
Designed	MU	Eng check	KW
Drawn	RCB	Approved	NJM
Scale at ANSI D: NTS		Date: 07/14/2021	Rev: C

Drawing Number: SRS-C-101-08



PRINCIPAL SPILLWAY PROFILE
NOT TO SCALE

MAXIMUM DRAINAGE AREA = 50 ACRES



EMERGENCY SPILLWAY PLAN VIEW
NOT TO SCALE

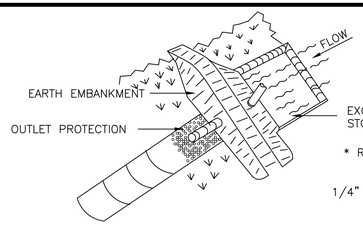
PROFILE ALONG ℄ OF SPILLWAY
NOT TO SCALE

CROSS SECTION AT CONTROL SECTION
NOT TO SCALE

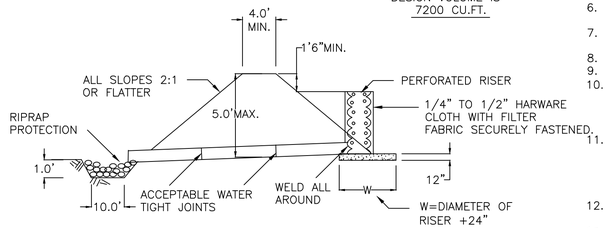
45 SEDIMENT BASIN DETAILS
N.T.S.

CONSTRUCTION SPECIFICATIONS

1. AREAS UNDER THE EMBANKMENT SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS, OR OTHER OBJECTIONABLE MATERIAL. IN ORDER TO FACILITATE CLEANOUT AND RESTORATION, THE POOL AREA (MEASURED AT THE TOP OF THE PIPE SPILLWAY) WILL BE CLEARED OF ALL BRUSH, TREES, AND OTHER OBJECTIONABLE MATERIALS.
2. A CUTOFF TRENCH SHALL BE EXCAVATED ALONG THE CENTERLINE OF EARTH FILL EMBANKMENTS. THE MINIMUM DEPTH SHALL BE TWO FEET. THE CUTOFF TRENCH SHALL EXTEND UP BOTH ABUTMENTS TO THE RISER CREST ELEVATION. THE MINIMUM BOTTOM WIDTH SHALL BE FOUR FEET, BUT WIDE ENOUGH TO PERMIT OPERATION OF EXCAVATION AND COMPACTION EQUIPMENT. THE SIDE SLOPES SHALL BE NO STEEPER THAN 1:1. COMPACTION REQUIREMENTS SHALL BE THE SAME AS THOSE FOR EMBANKMENT. THE TRENCH SHALL BE DE-WATERED DURING THE BACK-FILLING/COMPACTION OPERATIONS.
3. THE FILL MATERIAL SHALL BE TAKEN FROM APPROVED AREAS SHOWN ON THE PLANS. IT SHALL BE CLEAN MINERAL SOIL FREE OF ROOTS, WOODED VEGETATION, OVERSIZED STONES, ROCKS, OR OTHER OBJECTIONABLE MATERIAL. RELATIVELY PERVIOUS MATERIAL SUCH AS SNAG OR GRAVEL (UNIFIED SOIL CLASSES GW, GP, SW & SP) SHALL NOT BE PLACED IN THE EMBANKMENT. AREAS ON WHICH FILL IS TO BE PLACED SHALL BE SCARIFIED PRIOR TO PLACEMENT OF FILL. THE FILL MATERIAL SHALL CONTAIN SUFFICIENT MOISTURE SO THAT IT CAN BE FORMED BY HAND INTO A BALL WITHOUT CRUMBLING. IF WATER CAN BE SQUEEZED OUT OF A BALL, IT IS TOO WET FOR PROPER COMPACTION. FILL MATERIAL SHALL BE PLACED IN SIX TO EIGHT INCH THICK CONTINUOUS LAYERS OVER THE ENTIRE LENGTH OF THE FILL. COMPACTION SHALL BE OBTAINED BY ROUTING AND HAULING THE CONSTRUCTION EQUIPMENT OVER THE FILL SO THAT THE ENTIRE SURFACE OF EACH LAYER OF THE FILL IS TRAVERSED BY AT LEAST ONE WHEEL OR TREAD TRACK OF THE EQUIPMENT OR BY THE USE OF A COMPACTOR. THE EMBANKMENT SHALL BE CONSTRUCTED TO AN ELEVATION 10 PERCENT HIGHER THAN THE DESIGN HEIGHT TO ALLOW FOR SETTLEMENT.
4. THE RISER SHALL BE SECURELY ATTACHED TO THE BARREL OR BARREL STUB BY WELDING THE FULL CIRCUMFERENCE MAKING A WATERTIGHT STRUCTURAL CONNECTION. THE BARREL STUB MUST BE ATTACHED TO THE RISER AT THE SAME PERCENT (ANGLE) OF GRADE AS THE OUTLET CONDUIT. THE CONNECTION BETWEEN THE RISER AND THE RISER BASE SHALL BE WATERTIGHT. ALL CONNECTIONS BETWEEN BARREL SECTIONS MUST BE ACHIEVED BY APPROVED WATERTIGHT BANK ASSEMBLIES. THE BARREL AND RISER SHALL BE PLACED ON A FIRM, SMOOTH FOUNDATION OF IMPERVIOUS SOIL. PERVIOUS MATERIALS SUCH AS SAND, GRAVEL, OR CRUSHED STONE SHALL NOT BE USED AS BACKFILL AROUND THE PIPE OR ANTI-SEEP COLLARS. THE FILL MATERIAL AROUND THE PIPE SPILLWAY SHALL BE PLACED IN FOUR-INCH LAYERS AND COMPACTED UNDER AND AROUND THE PIPE TO AT LEAST THE SAME DENSITY AS THE ADJACENT EMBANKMENT.
5. A MINIMUM DEPTH OF TWO FEET OF HAND COMPACTED BACKFILL SHALL BE PLACED OVER THE PIPE SPILLWAY BEFORE CROSSING IT WITH CONSTRUCTION EQUIPMENT. STEEL BASE PLATES ON RISERS SHALL HAVE AT LEAST 2 ½ FEET OF COMPACTED EARTH, STONE, OR GRAVEL PLACED OVER IT TO PREVENT FLOTATION.
6. THE EMERGENCY SPILLWAY SHALL BE INSTALLED IN UNDISTURBED GROUND. THE ACHIEVEMENT OF PLANNED ELEVATIONS, GRADES, DESIGN WIDTH, ENTRANCE AND EXIT CHANNEL SLOPES ARE CRITICAL TO THE SUCCESSFUL OPERATION OF THE EMERGENCY SPILLWAY AND MUST BE CONSTRUCTED WITHIN A TOLERANCE OF +/- 0.2 FEET.
7. STABILIZE THE EMBANKMENT AND EMERGENCY SPILLWAY IN ACCORDANCE WITH THE APPROPRIATE VEGETATIVE STANDARD AND SPECIFICATION IMMEDIATELY FOLLOWING CONSTRUCTION. IN NO CASE SHALL THE EMBANKMENT REMAIN UNSTABILIZED FOR MORE THAN THREE (3) DAYS.
8. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION WILL BE MINIMIZED. STATE AND LOCAL LAWS SHALL BE COMPLIED WITH CONCERNING POLLUTION ABATEMENT.
9. STATE AND LOCAL REQUIREMENTS SHALL BE MET CONCERNING FENCING AND SIGNS, WARNING THE PUBLIC OF HAZARDS OF SOFT SEDIMENT AND FLOODWATER.
10. REPAIR ALL DAMAGES CAUSED BY SOIL EROSION AND CONSTRUCTION EQUIPMENT AT OR BEFORE THE END OF EACH WORKING DAY.
11. SEDIMENT SHALL BE REMOVED FROM THE BASIN WHEN IT REACHES THE SPECIFIED DEPTH FOR CLEANOUT NOTED ON THE PLANS WHICH WILL NOT EXCEED 50% OF THE CAPACITY OF THE SEDIMENT STORAGE ZONE. THIS SEDIMENT SHALL BE PLACED IN SUCH A MANNER THAT IT WILL NOT ERODE FROM THE SITE. THE SEDIMENT SHALL NOT BE DEPOSITED DOWNSTREAM FROM THE EMBANKMENT, ADJACENT TO A STREAM OR FLOODPLAIN.
12. WHEN TEMPORARY STRUCTURES HAVE SERVED THEIR INTENDED PURPOSE AND THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED, THE EMBANKMENT AND RESULTING SEDIMENT DEPOSITS ARE TO BE LEVELED OR OTHERWISE DISPOSED OF IN ACCORDANCE WITH THE APPROVED SEDIMENT CONTROL PLAN. THE PROPOSED USE OF A SEDIMENT BASIN SITE WILL OFTEN DICTATE FINAL DISPOSITION OF THE BASIN AND ANY SEDIMENT CONTAINED THEREIN. IF THE SITE IS SCHEDULED FOR FUTURE CONSTRUCTION, THEN THE BASIN MATERIAL AND TRAPPED SEDIMENTS MUST BE REMOVED, SAFELY DISPOSED OF, AND BACKFILLED WITH A STRUCTURAL FILL. WHEN THE BASIN AREA IS TO REMAIN OPEN SPACE, THE POND MAY BE PUMPED DRY, GRADED, AND BACKFILLED.



DESIGN VOLUME IS 7200 CU.FT.



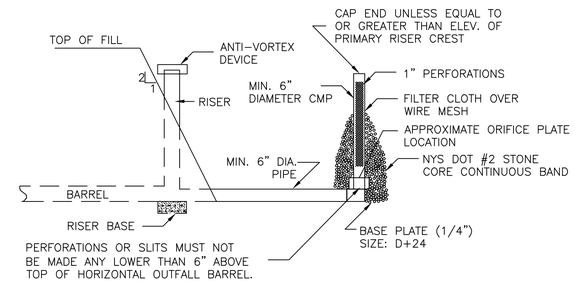
EMBANKMENT SECTION THRU RISER

SIZES OF PIPE NEEDED (PIPE OUTLET SEDIMENT TRAP 1):
BARREL DIAMETER: 18"
RISER DIAMETER: 21"

CONSTRUCTION SPECIFICATIONS

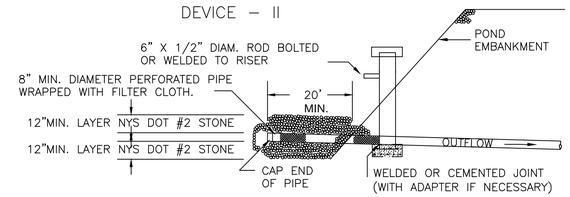
1. AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.
2. THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS OR OTHER WOODY VEGETATION AS WELL AS OVER-SIZED STONES, ROCKS, ORGANIC MATERIAL, OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
3. VOLUME OF SEDIMENT STORAGE SHALL BE 3600 CUBIC FEET PER ACRE OF CONTRIBUTORY DRAINAGE.
4. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND STABILIZED.
5. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
6. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND SEDIMENT ARE CONTROLLED.
7. THE STRUCTURE SHALL BE REMOVED AND AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
8. ALL FILL SLOPES SHALL BE 2:1 OR FLATTER; CUT SLOPES 1:1 OR FLATTER.
9. ALL PIPE CONNECTIONS SHALL BE WATERTIGHT.
10. THE TOP 2/3 OF THE RISER SHALL BE PERFORATED WITH ONE (1) INCH DIAMETER HOLES OR SLITS SPACED SIX (6) INCHES VERTICALLY AND HORIZONTALLY AND PLACED IN THE CONCAVE PORTION OF PIPE. NO HOLES WILL BE ALLOWED WITHIN SIX (6) INCHES OF THE HORIZONTAL BARREL.
11. THE RISER SHALL BE WRAPPED WITH 1/4 TO 1/2 INCH HARDWARE CLOTH WIRE THEN WRAPPED WITH FILTER CLOTH (HAVING AN EQUIVALENT SIEVE SIZE OF 40-80). THE FILTER CLOTH SHALL EXTEND SIX (6) INCHES ABOVE THE HIGHEST HOLE AND SIX (6) INCHES BELOW THE LOWEST HOLE. WHERE ENDS OF THE FILTER CLOTH COME TOGETHER, THEY SHALL BE OVER-LAPPED, FOLDED AND STAPLED TO PREVENT BYPASS.
12. STRAPS OR CONNECTING BANDS SHALL BE USED TO HOLD THE FILTER CLOTH AND WIRE FABRIC IN PLACE. THEY SHALL BE PLACED AT THE TOP AND BOTTOM OF THE CLOTH.
13. FILL MATERIAL AROUND THE PIPE SPILLWAY SHALL BE HAND COMPACTED IN FOUR (4) INCH LAYERS. A MINIMUM OF TWO (2) FEET OF HAND COMPACTED BACKFILL SHALL BE PLACED OVER THE PIPE SPILLWAY BEFORE CROSSING IT WITH CONSTRUCTION EQUIPMENT.
14. THE RISER SHALL BE ANCHORED WITH EITHER A CONCRETE BASE OR STEEL PLATE BASE TO PREVENT FLOTATION. FOR CONCRETE BASE THE DEPTH SHALL BE TWELVE (12) INCHES WITH THE RISER EMBEDDED NINE (9) INCHES. A 1/4 INCH MINIMUM THICKNESS STEEL PLATE SHALL BE ATTACHED TO THE RISER BY A CONTINUOUS WELD AROUND THE BOTTOM TO FORM A WATERTIGHT CONNECTION AND THEN PLACE TWO (2) FEET OF STONE, GRAVEL, OR TAMPED EARTH ON THE PLATE.

OPTIONAL SEDIMENT BASIN DEWATERING DEVICE – I WITH 6" MIN. PERFORATED RISER



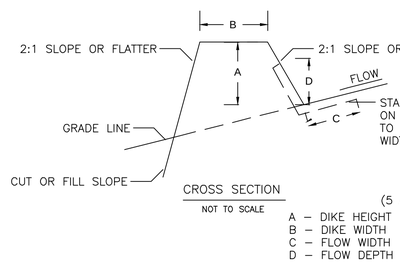
PERFORATIONS – 6" SPACING HORIZONTAL & VERTICAL LOCATED IN CONCAVE.

OPTIONAL SEDIMENT BASIN DEWATERING DEVICE – II



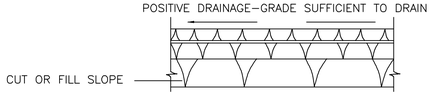
45 SEDIMENT BASIN RISER PIPE DEWATERING
N.T.S.

41 PIPE OUTLET SEDIMENT TRAP ST-I
N.T.S.



CROSS SECTION
NOT TO SCALE

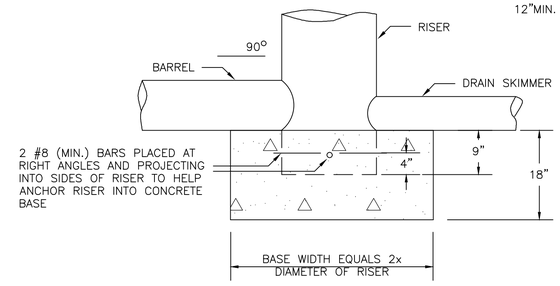
	DIKE A (5 AC. OR LESS)	DIKE B (5-10AC.)
A – DIKE HEIGHT	18"	36"
B – DIKE WIDTH	24"	36"
C – FLOW WIDTH	48"	72"
D – FLOW DEPTH	8"	15"



CONSTRUCTION SPECIFICATIONS

1. ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
2. ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
3. TOP WIDTH MAY BE WIDER AND SIDE SLOPES BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
4. FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
5. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. RUNOFF SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR SEDIMENT BASIN WHERE EITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT ADEQUATELY STABILIZED.
6. FILL STABILIZATION SHALL BE: (A) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH IF NOT IN SEEDING SEASON, (B) FLOW CHANNEL STABILIZATION PER THE STANDARD CHART BASED ON CHANNEL GRADE.

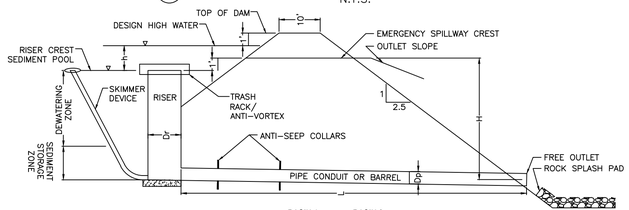
42 TYPICAL TEMPORARY EARTH DIKE
N.T.S.



CONSTRUCTION SPECIFICATIONS

1. THE CONCRETE BASE SHALL BE POURED IN SUCH A MANNER TO INSURE THAT THE CONCRETE FILLS THE BOTTOM OF THE RISER TO THE INVERT OF THE OUTLET PIPE TO PREVENT THE RISER FROM BREAKING AWAY FROM THE BASE.
2. WITH ALUMINUM OR ALUMINIZED PIPE, THE EMBEDDED SECTION MUST BE PAINTED WITH CHROMATE OR EQUIVALENT.
3. RISER BASE MAY BE SIZED AS COMPUTED USING FLOATATION WITH A FACTOR OF SAFETY OF 1.2.

43 RISER BASE DETAIL SEDIMENT BASIN
N.T.S.



BASIN 1	BASIN 2
H = 4.5 FT	H = 3.5 FT
h = 0.5 FT	h = 0.5 FT
L = 70 FT	L = 50 FT
Dp = 12 IN	Dp = 12 IN
Dr = 24 IN	Dr = 24 IN

SEDIMENT BASIN PIPE SPILLWAY DESIGN
44 N.T.S.

CONCEPTUAL - NOT FOR CONSTRUCTION

C:\pwworking\hmm\external\woo72000\d0506086\SRS-C-101-01.dwg Jul 27, 2021 - 10:34AM DEC56995

Rev	Date	Drawn	Description	Ch'k'd	App'd
C	07/14/2021	JSD	ISSUED FOR 94C	KW	NJM
B	05/21/2021	RCB	ISSUED FOR REVIEW	KW	NJM
A	01/29/2021	RCB	ISSUED FOR REVIEW	KW	NJM

MOTT MACDONALD
Mott Macdonald NY Inc.
111 Wood Avenue South
Iselin, NJ 08830-4112
United States
T +1 (973) 379-3400
F +1 (973) 376-1072
W www.mottmac.com

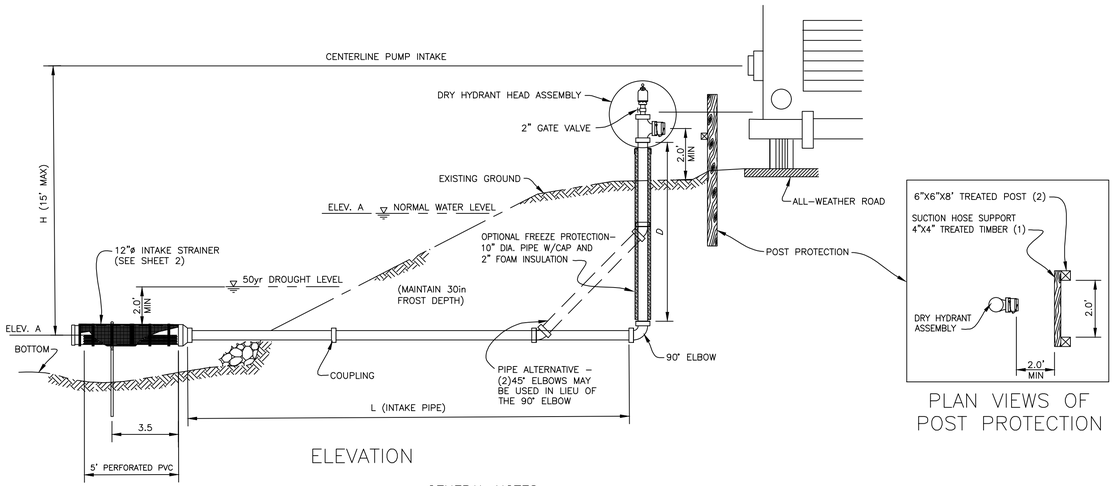
Client: South Ripley Solar Project

Title: SOUTH RIPLEY SOLAR
TYPICAL CIVIL DETAILS
SHEET 9 OF 10

PRELIMINARY
NOT FOR CONSTRUCTION
REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION

Designed	MU	Eng check	KW
Drawn	RCB	Approved	NJM
Scale at ANSI D: NTS		Date: 07/14/2021	Rev: C

Drawing Number: SRS-C-101-09



ELEVATION

PLAN VIEWS OF POST PROTECTION

DIMENSIONS:

D = _____ (ft)

H = _____ (ft)

L = _____ (ft)

ELEV. A = _____

ELEV. B = _____

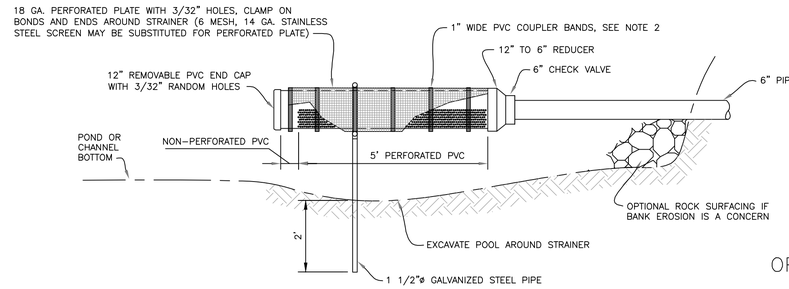
DRY HYDRANT HEAD ASSEMBLY INCLUDES TEE WITH AIR VENT, 2 INCH GATE VALVE, 6 INCH DRY HYDRANT HEAD, STRAINER, SNAP RING, SNAP-ON CAP WITH STAINLESS STEEL WIRE ROPE AND SUCTION HOSE ADAPTER, AND SHALL CONFORM TO ASTM 2466 SCHEDULE 40

THIS INSTALLATION DESIGNED FOR _____ gpm

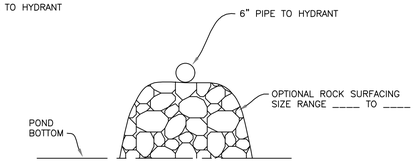
GENERAL NOTES

1. THIS DRAWING REQUIRES SUPPORTING TECHNICAL DOCUMENTATION PRIOR TO USE AND MUST BE ADAPTED TO THE SPECIFIC SITE.
2. CONTRACTOR IS RESPONSIBLE FOR LOCATING, DISCONNECTION, RECONNECTING SERVICES TO ANY UTILITIES ENCOUNTERED AND WILL OBTAIN ALL REQUIRED PERMITS PRIOR TO INSTALLATION. SERVICES WILL BE RESTORED ASAP.
3. PUMP SITE SHALL BE AT AN ELEVATION THAT WILL ENSURE THE SUCTION INLET OF PUMP ON TRUCK IS ABOVE THE DRY HYDRANT HEAD ASSEMBLY.
4. ALL DISTURBED AREA SHALL BE VEGETATED IN ACCORDANCE WITH NRCS STANDARDS AND SPECIFICATIONS FOR CRITICAL AREA TREATMENT.
5. ALL PVC PIPING OR FITTINGS EXPOSED TO SUNLIGHT SHALL BE PRIMED AND PAINTED WITH REFLECTIVE MATERIAL.
6. A 6 INCH NHT (AMERICAN NATIONAL FIRE HOSE THREAD) DRY HYDRANT HEAD WILL BE UTILIZED TO MAKE CONNECTION TO THE FIRE TRUCK HOSE. THE SLEEVE WILL BE MADE OF BRASS OR ALUMINUM AND IT WILL BE PERMANENTLY ATTACHED TO THE PVC PIPE WITH STAINLESS STEEL BOLTS AND EPOXY ADHESIVE.
7. ALL HYDRANTS SHALL CONTAIN A REMOVABLE HEAD STRAINER AND STAINLESS STEEL SNAP RING THAT CAN BE REMOVED WITHOUT SPECIAL TOOLS. THE STRAINER SHALL BE CONICAL IN SHAPE TO MAXIMIZE STRAINER AREA. ALL HYDRANTS USE A RUBBER "O" RING BETWEEN THE THREADED SLEEVE AND THE PVC PIPE.
8. DRY HYDRANT CAPS SHALL BE SNAP ON/SNAP OFF DESIGN AND REMOVABLE WITHOUT SPECIAL TOOLS. IT SHALL BE PERMANENTLY ATTACHED TO HEAD WITH A CHAIN OR CABLE. THE CAP SHALL BE EITHER PLASTIC OR BRASS.

46 TYPICAL DRY HYDRANT DETAIL
N.T.S.



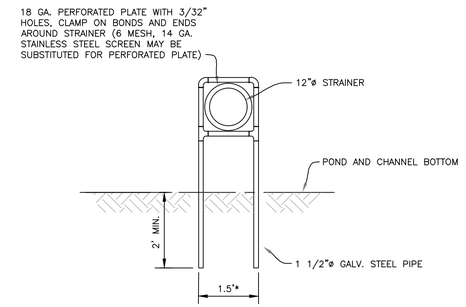
INTAKE STRAINER DETAIL



OPTIONAL BANK EROSION PROTECTION

GENERAL NOTES

1. INTAKE STRAINER SHALL BE 12" DIAMETER AND 60" LONG. STRAINER WILL HAVE 1920 –3/8" HOLES ON BOTTOM OF PIPE TO MEET 0.4 FT/SEC VELOCITY ON FISH-BEARING STREAMS
2. PLACE END CAP WITH 3/32"ø HOLES ON STRAINER . USE 1" WIDE COUPLING SECTION BANDS SPACED AT 1 FT. INTERVALS TO HOLD SCREEN OFF STRAINER ASSEMBLY.
3. WRAP STRAINER WITH 18 GA. PERFORATED PLATE WITH 3/32"ø HOLES AND CLAMP TO OUTSIDE OF STRAINER, CLAMP ON EACH BAND AND ENDS. A 6 MESH, 14 GA. STAINLESS STEEL SCREEN MAY BE SUBSTITUTED FOR THE PERFORATED PLATE.
4. USE 12" TO 6" REDUCER AND 6" CHECK VALVE IN SUPPLY LINE TO HYDRANT.
5. ALL PVC PIPING OR FITTINGS EXPOSED TO SUNLIGHT SHALL BE PRIMED AND PAINTED WITH REFLECTIVE MATERIAL.



INTAKE STRAINER SUPPORT

* PUSH INTO BOTTOM WITH HOE. ADJUST WIDTH AND HEIGHT TO FIT STRAINER AND SCREEN ASSEMBLY

Rev	Date	Drawn	Description	Ch'k'd	App'd
C	07/14/2021	JSD	ISSUED FOR 94C	KW	NJM
B	05/21/2021	RCB	ISSUED FOR REVIEW	KW	NJM
A	01/29/2021	RCB	ISSUED FOR REVIEW	KW	NJM

MOTT MACDONALD

Mott Macdonald NY Inc.
111 Wood Avenue South
Iselin, NJ 08830-4112
United States
T +1 (973) 379-3400
F +1 (973) 376-1072
W www.mottmac.com

Client

South Ripley SOLAR PROJECT

Title

SOUTH RIPLEY SOLAR
TYPICAL CIVIL DETAILS
SHEET 10 OF 10

PRELIMINARY
NOT FOR CONSTRUCTION
REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION

Designed	MU	Eng check	KW
Drawn	RCB	Approved	NJM
Scale at ANSI D: NTS		Date: 07/14/2021	Rev: C

Drawing Number: SRS-C-101-10

CONCEPTUAL - NOT FOR CONSTRUCTION

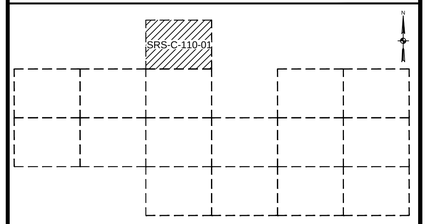
CONCEPTUAL - NOT FOR CONSTRUCTION

G:\Projectwise_Support\ConnectGen_South_Ripley\SRS-C-110-01.dwg Jul 29, 2021 - 4:21PM WOO72000

Legend

- PROPERTY LINES
- PROPERTY LINE SETBACKS
- 1300 — EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING TREELINE
- GAS — EXISTING GAS LINE & EASEMENT
- GAS WELLS
- WETLANDS - FEDERAL
- WETLANDS - NYSDEC JURISDICTIONAL
- STREAMS - FEDERAL
- STREAMS - NYSDEC JURISDICTIONAL
- FEDERAL WETLANDS/STREAMS - SETBACK
- WETLANDS/STREAMS - SETBACK
- OCCUPIED RESIDENCES
- OCCUPIED RESIDENCE SETBACK
- TREE CLEARING ONLY
- TREE CLEARING & CLEARING/GRUBBING
- LoD — LIMITS OF DISTURBANCE
- DRAWING NUMBER / DRAWING NUMBER — DRAWING SHEET MATCH LINE

Key Plan



Rev	Date	Drawn	Description	Ch'k'd	App'd
C	07/14/2021	JSD	ISSUED FOR 94C	KW	NJM
B	05/21/2021	RCB	ISSUED FOR REVIEW	KW	NJM
A	01/29/2021	RCB	ISSUED FOR REVIEW	KW	NJM

MOTT MACDONALD

Mott Macdonald NY Inc.
111 Wood Avenue South
Iselin, NJ 08830-4112
United States
T +1 (973) 379-3400
F +1 (973) 376-1072
W www.mottmac.com

Client

South Ripley SOLAR PROJECT

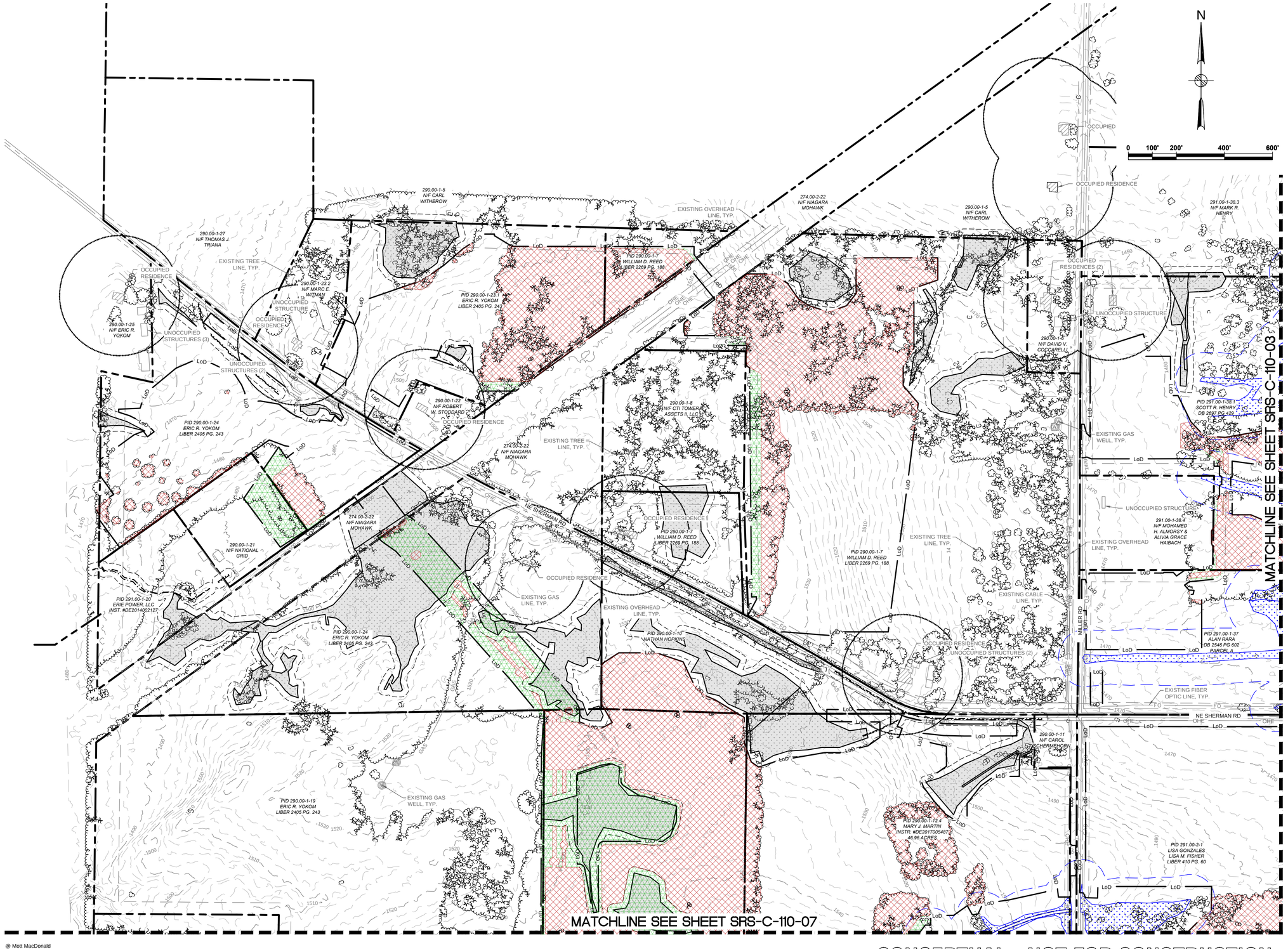
Title

SOUTH RIPLEY SOLAR EXISTING CONDITIONS & CLEARING PLAN SITE 1

PRELIMINARY NOT FOR CONSTRUCTION
REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION

Designed	MU	Eng check	KW
Drawn	RCB	Approved	NJM
Dwg check		Project Mngr	
Scale at ANSI D	1" = 200'	Date	07/14/2021
		Rev	C

Drawing Number
SRS-C-110-01

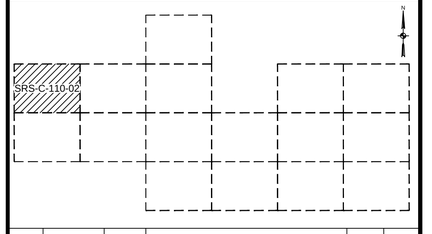


CONCEPTUAL - NOT FOR CONSTRUCTION

Legend

- PROPERTY LINES
- PROPERTY LINE SETBACKS
- 1300 — EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING TREELINE
- GAS — EXISTING GAS LINE & EASEMENT
- GAS WELLS
- WETLANDS - FEDERAL
- WETLANDS - NYSDEC JURISDICTIONAL
- STREAMS - FEDERAL
- STREAMS - NYSDEC JURISDICTIONAL
- FEDERAL WETLANDS/STREAMS - SETBACK
- WETLANDS/STREAMS - SETBACK
- OCCUPIED RESIDENCES
- OCCUPIED RESIDENCE SETBACK
- TREE CLEARING ONLY
- TREE CLEARING & CLEARING/GRUBBING
- LoD — LIMITS OF DISTURBANCE
- DRAWING NUMBER / DRAWING NUMBER — DRAWING SHEET MATCH LINE

Key Plan



Rev	Date	Drawn	Description	Ch'k'd	App'd
C	07/14/2021	RCB	ISSUED FOR 94C	KW	NJM
B	05/21/2021	RCB	ISSUED FOR REVIEW	KW	NJM
A	01/29/2021	RCB	ISSUED FOR REVIEW	KW	NJM

MOTT MACDONALD

Mott Macdonald NY Inc.
111 Wood Avenue South
Iselin, NJ 08830-4112
United States
T +1 (973) 379-3400
F +1 (973) 376-1072
W www.mottmac.com

Client

South Ripley SOLAR PROJECT

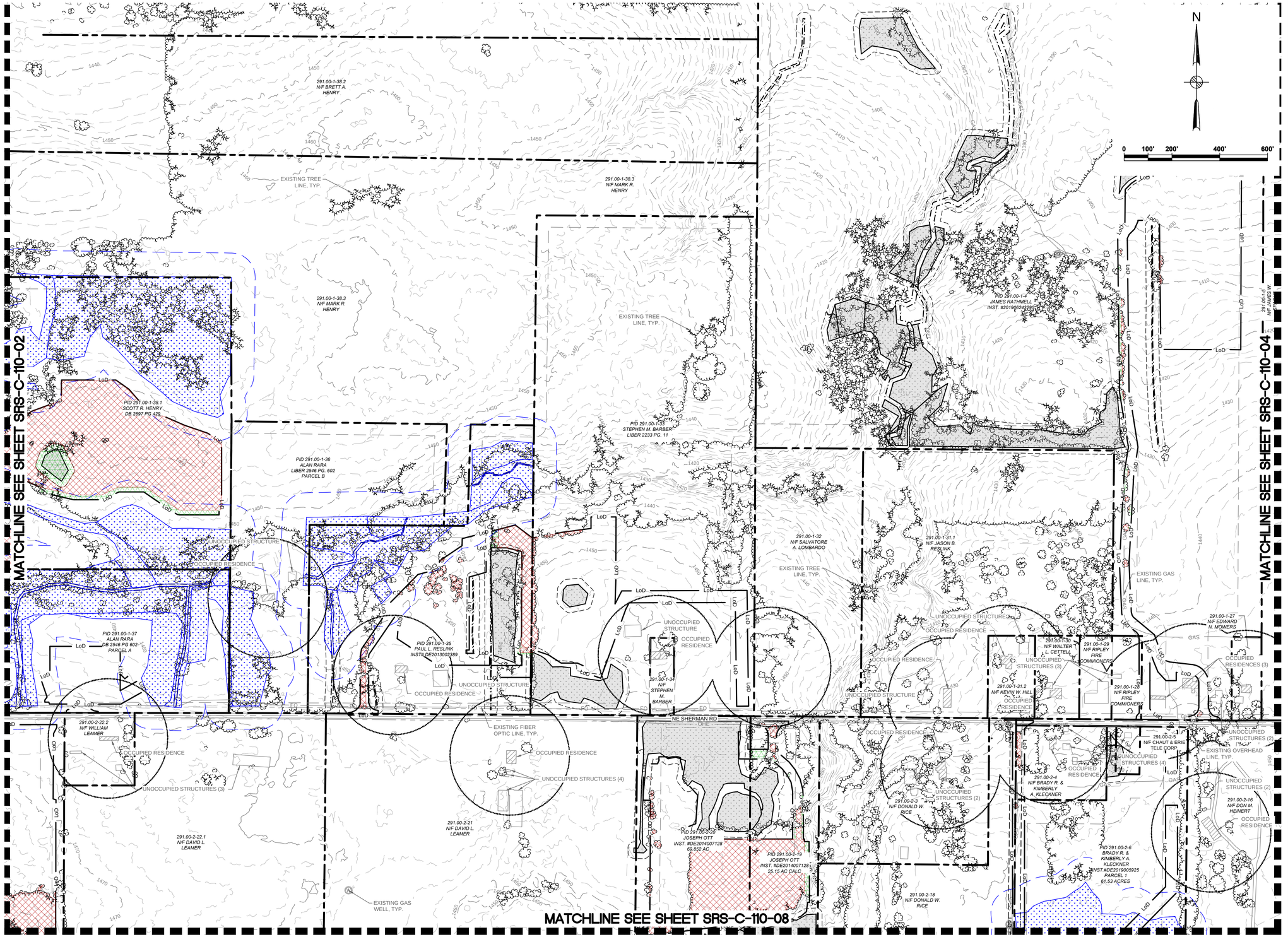
Title

SOUTH RIPLEY SOLAR EXISTING CONDITIONS & CLEARING PLAN SITE 2

PRELIMINARY NOT FOR CONSTRUCTION
REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION

Designed	MU	Eng check	KW
Drawn	RCB	Approved	NJM
Dwg check		Project Mngr	
Scale at ANSI D: 1" = 200'		Date: 07/14/2021	Rev: C

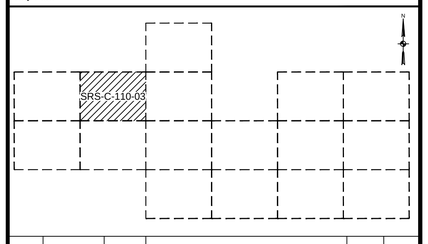
Drawing Number: SRS-C-110-02



Legend

- PROPERTY LINES
- PROPERTY LINE SETBACKS
- EXISTING MAJOR CONTOUR (1300)
- EXISTING MINOR CONTOUR
- EXISTING TREELINE
- EXISTING GAS LINE & EASEMENT (GAS)
- GAS WELLS (W)
- WETLANDS - FEDERAL
- WETLANDS - NYSDEC JURISDICTIONAL
- STREAMS - FEDERAL
- STREAMS - NYSDEC JURISDICTIONAL
- FEDERAL WETLANDS/STREAMS - SETBACK
- WETLANDS/STREAMS - SETBACK
- OCCUPIED RESIDENCES
- OCCUPIED RESIDENCE SETBACK
- TREE CLEARING ONLY
- TREE CLEARING & CLEARING/GRUBBING
- LIMITS OF DISTURBANCE (LoD)
- DRAWING NUMBER / DRAWING NUMBER — DRAWING SHEET MATCH LINE

Key Plan



Rev	Date	Drawn	Description	Ch'k'd	App'd
C	07/14/2021	RCB	ISSUED FOR 94C	KW	NJM
B	05/21/2021	RCB	ISSUED FOR REVIEW	KW	NJM
A	01/29/2021	RCB	ISSUED FOR REVIEW	KW	NJM

MOTT MACDONALD

Mott Macdonald NY Inc.
111 Wood Avenue South
Iselin, NJ 08830-4112
United States
T +1 (973) 379-3400
F +1 (973) 376-1072
W www.mottmac.com

Client

South Ripley SOLAR PROJECT

Title

SOUTH RIPLEY SOLAR EXISTING CONDITIONS & CLEARING PLAN SITE 3

Designed	MU	Eng check	KW		
Drawn	RCB	Approved	NJM		
Dwg check		Project Mngr			
Scale at ANSI D: 1" = 200'		Date: 07/14/2021		Rev: C	

PRELIMINARY NOT FOR CONSTRUCTION
REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION

Drawing Number: SRS-C-110-03

CONCEPTUAL - NOT FOR CONSTRUCTION

G:\Projectwise_Support\ConnectGen_South_Ripley\SRS-C-110-03.dwg Jul 29, 2021 - 4:05PM WOO72000

MATCHLINE SEE SHEET SRS-C-110-01

MATCHLINE SEE SHEET SRS-C-110-03

MATCHLINE SEE SHEET SRS-C-110-09

N

0 100' 200' 400' 600'

291.00-1-5
N/F JAMES W. SPACHT

PID 291.00-1-6
COCHRAN & ZANDI LAND, LLC
INST.#DE2013001001
PARCEL 1

PID 291.00-1-7
COCHRAN & ZANDI LAND, LLC
INST.#DE2013001001
PARCEL 2

PID 291.00-1-7
COCHRAN & ZANDI LAND, LLC
INST.#DE2013001001
PARCEL 3
7.254 ACRES

PID 291.00-1-7
COCHRAN & ZANDI LAND, LLC
INST.#DE2013001001
PARCEL 4

291.00-1-10
CLIFFORD YOKOM

291.00-1-20
N/F S. RIPLEY CEMETERY ASSOC

291.00-1-16.1
N/F JUSTIN SAFFORD

291.00-1-19.1
N/F JOHN V. HABAS, JR.

291.00-1-24
N/F BROOKE L. SMITH

291.00-1-26
N/F JAMES W. SPACHT

291.00-1-25
N/F BROOKE L. SMITH

291.00-2-16
N/F DON M. HEINERT

291.00-2-15
N/F DIANA J. JOINT

291.00-2-14
N/F VANDEWARK & DUNLAP

PID 291.00-2-13
MARJORIE THORP, LIFE TENANT &
DAVID THORP OWNING 50% & BARBARA SPACHT OWNING 50% AS REMAINDERMEN
LIBER 2512 PG. 156

291.00-2-8
N/F TRAVIS W. STAUFFER

PID 291.00-2-9
JEFFREY S. YOKOM
LIBER 2368 PG 587

292.00-1-23
N/F JOHN W. BISBEE

NE SHERMAN RD

EXISTING TREE LINE, TYP.

EXISTING GAS LINE, TYP.

EXISTING GAS WELL, TYP.

EXISTING OVERHEAD LINE, TYP.

OCCUPIED RESIDENCE

OCCUPIED RESIDENCES (3)

UNOCCUPIED STRUCTURES (2)

UNOCCUPIED STRUCTURES (4)

UNOCCUPIED STRUCTURE

LoD

OHE

Legend

- PROPERTY LINES
- PROPERTY LINE SETBACKS
- 1300 EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING TREELINE
- GAS EXISTING GAS LINE & EASEMENT
- GAS WELLS
- WETLANDS - FEDERAL
- WETLANDS - NYSDEC JURISDICTIONAL
- STREAMS - FEDERAL
- STREAMS - NYSDEC JURISDICTIONAL
- FEDERAL WETLANDS/STREAMS - SETBACK
- WETLANDS/STREAMS - SETBACK
- OCCUPIED RESIDENCES
- OCCUPIED RESIDENCE SETBACK
- TREE CLEARING ONLY
- TREE CLEARING & CLEARING/GRUBBING
- LoD LIMITS OF DISTURBANCE
- DRAWING NUMBER / DRAWING NUMBER DRAWING SHEET MATCH LINE

Key Plan

SRS-C-110-04

Rev	Date	Drawn	Description	Ch'k'd	App'd
C	07/14/2021	RCB	ISSUED FOR 94C	KW	NJM
B	05/21/2021	RCB	ISSUED FOR REVIEW	KW	NJM
A	01/29/2021	RCB	ISSUED FOR REVIEW	KW	NJM

MOTT MACDONALD

Mott Macdonald NY Inc.
111 Wood Avenue South
Iselin, NJ 08830-4112
United States
T +1 (973) 379-3400
F +1 (973) 376-1072
W www.mottmac.com

Client

South Ripley SOLAR PROJECT

Title

SOUTH RIPLEY SOLAR
EXISTING CONDITIONS
& CLEARING PLAN
SITE 4

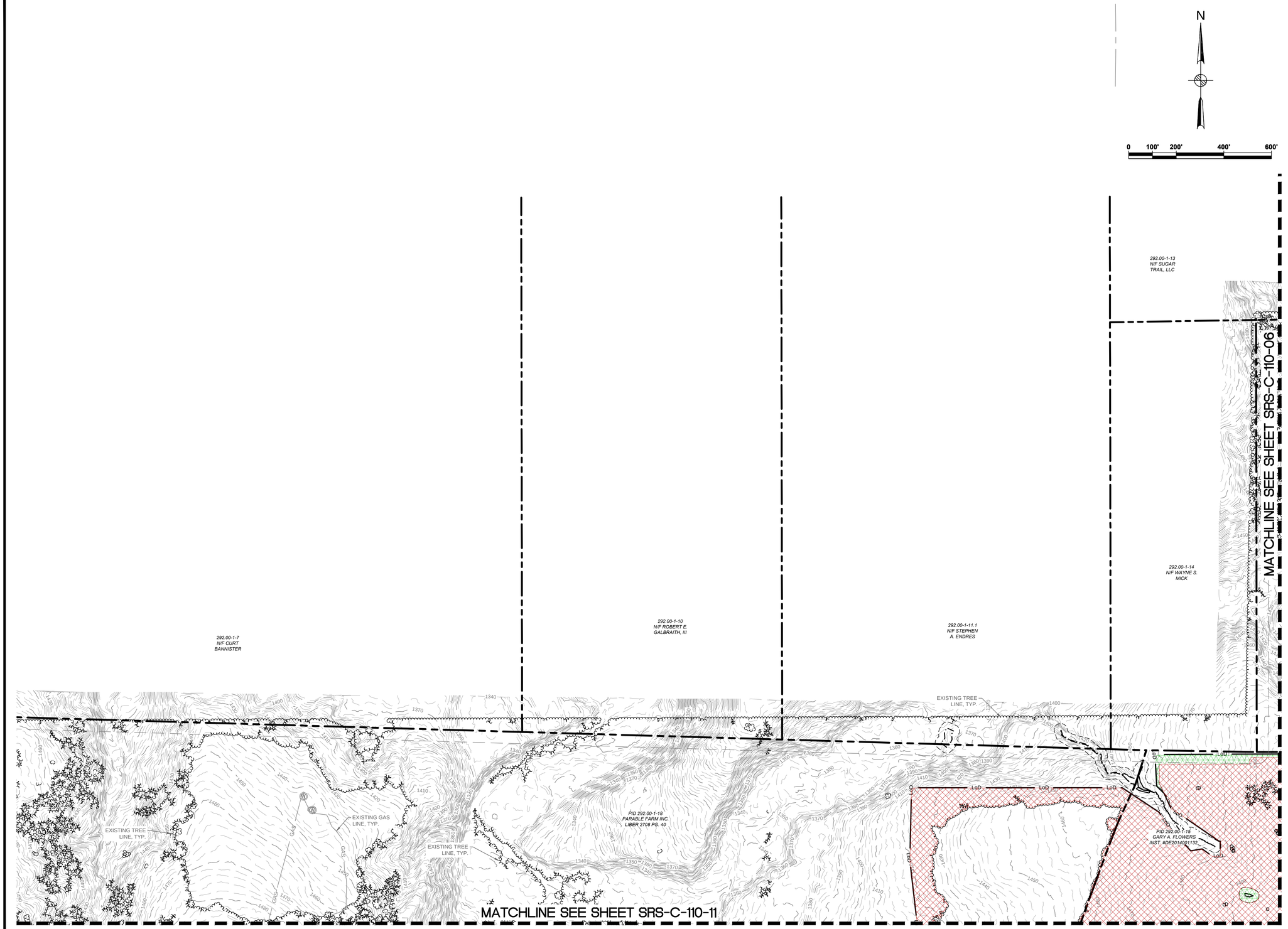
PRELIMINARY
NOT FOR CONSTRUCTION
REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION

Designed	MU	Eng check	KW
Drawn	RCB	Approved	NJM
Dwg check		Project Mngr	
Scale at ANSI D: 1" = 200'		Date: 07/14/2021	Rev: C

Drawing Number
SRS-C-110-04

CONCEPTUAL - NOT FOR CONSTRUCTION

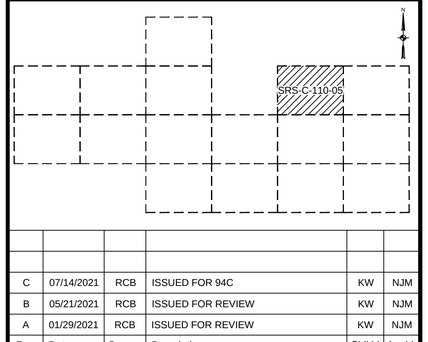
G:\Projectwise_Support\ConnectGen_South_Ripley\SRS-C-110-04.dwg Jul 29, 2021 - 4:07PM MOR72937



Legend

- PROPERTY LINES
- PROPERTY LINE SETBACKS
- 1300 — EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING TREELINE
- GAS — EXISTING GAS LINE & EASEMENT
- GAS WELLS
- WETLANDS - FEDERAL
- WETLANDS - NYSDEC JURISDICTIONAL
- STREAMS - FEDERAL
- STREAMS - NYSDEC JURISDICTIONAL
- FEDERAL WETLANDS/STREAMS - SETBACK
- WETLANDS/STREAMS - SETBACK
- OCCUPIED RESIDENCES
- OCCUPIED RESIDENCE SETBACK
- TREE CLEARING ONLY
- TREE CLEARING & CLEARING/GRUBBING
- LoD — LIMITS OF DISTURBANCE
- DRAWING NUMBER / DRAWING NUMBER — DRAWING SHEET MATCH LINE

Key Plan



Rev	Date	Drawn	Description	Ch'k'd	App'd
C	07/14/2021	RCB	ISSUED FOR 94C	KW	NJM
B	05/21/2021	RCB	ISSUED FOR REVIEW	KW	NJM
A	01/29/2021	RCB	ISSUED FOR REVIEW	KW	NJM

MOTT MACDONALD

Mott Macdonald NY Inc.
111 Wood Avenue South
Iselin, NJ 08830-4112
United States
T +1 (973) 379-3400
F +1 (973) 376-1072
W www.mottmac.com

Client

South Ripley SOLAR PROJECT

Title

SOUTH RIPLEY SOLAR EXISTING CONDITIONS & CLEARING PLAN SITE 5

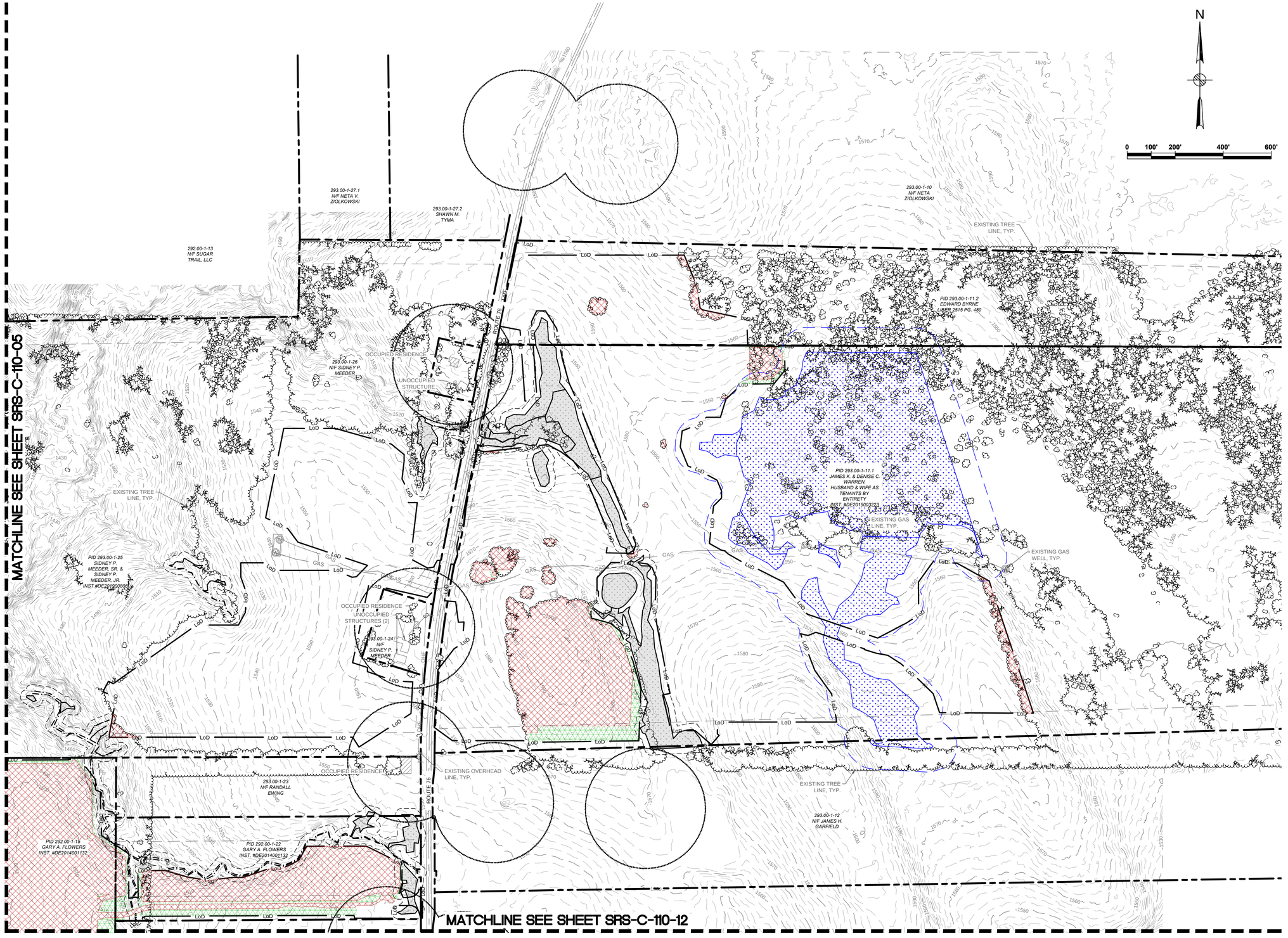
PRELIMINARY NOT FOR CONSTRUCTION
REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION

Designed	MU	Eng check	KW
Drawn	RCB	Approved	NJM
Dwg check		Project Mngr	
Scale at ANSI D: 1" = 200'		Date: 07/14/2021	Rev: C

Drawing Number: SRS-C-110-05

CONCEPTUAL - NOT FOR CONSTRUCTION

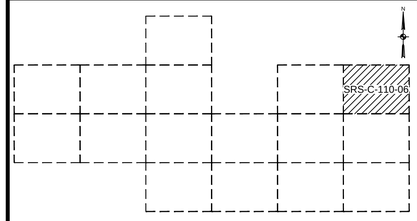
G:\Projectwise_Support\ConnectGen_South_Ripley\SRS-C-110-05.dwg Jul 29, 2021 - 4:55PM WOO72000



Legend

- PROPERTY LINES
- PROPERTY LINE SETBACKS
- 1300 EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING TREELINE
- GAS EXISTING GAS LINE & EASEMENT
- GAS WELLS
- WETLANDS - FEDERAL
- WETLANDS - NYSDEC JURISDICTIONAL
- STREAMS - FEDERAL
- STREAMS - NYSDEC JURISDICTIONAL
- FEDERAL WETLANDS/STREAMS - SETBACK
- WETLANDS/STREAMS - SETBACK
- OCCUPIED RESIDENCES
- OCCUPIED RESIDENCE SETBACK
- TREE CLEARING ONLY
- TREE CLEARING & CLEARING/GRUBBING
- LoD LIMITS OF DISTURBANCE
- DRAWING NUMBER / DRAWING NUMBER DRAWING SHEET MATCH LINE

Key Plan



Rev	Date	Drawn	Description	Ch'k'd	App'd
C	07/14/2021	RCB	ISSUED FOR 94C	KW	NJM
B	05/21/2021	RCB	ISSUED FOR REVIEW	KW	NJM
A	01/29/2021	RCB	ISSUED FOR REVIEW	KW	NJM

MOTT MACDONALD

Mott Macdonald NY Inc.
111 Wood Avenue South
Iselin, NJ 08830-4112
United States
T +1 (973) 379-3400
F +1 (973) 376-1072
W www.mottmac.com

Client

South Ripley SOLAR PROJECT

Title

SOUTH RIPLEY SOLAR EXISTING CONDITIONS & CLEARING PLAN SITE 6

PRELIMINARY
NOT FOR CONSTRUCTION
REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION

Designed	MU	Eng check	KW
Drawn	RCB	Approved	NJM
Dwg check		Project Mngr	
Scale at ANSI D: 1" = 200'		Date: 07/14/2021	Rev: C

Drawing Number
SRS-C-110-06

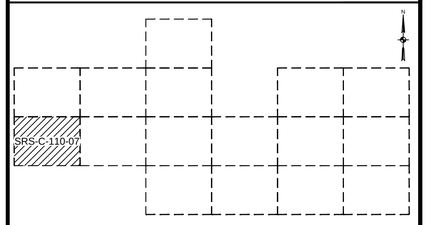
CONCEPTUAL - NOT FOR CONSTRUCTION

G:\Projectwise_Support\ConnectGen_South_Ripley\SRS-C-110-06.dwg Jul 29, 2021 - 4:51PM MOR72937

Legend

- PROPERTY LINES
- PROPERTY LINE SETBACKS
- 1300 — EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING TREELINE
- GAS — EXISTING GAS LINE & EASEMENT
- GAS WELLS
- WETLANDS - FEDERAL
- WETLANDS - NYSDEC JURISDICTIONAL
- STREAMS - FEDERAL
- STREAMS - NYSDEC JURISDICTIONAL
- FEDERAL WETLANDS/STREAMS - SETBACK
- WETLANDS/STREAMS - SETBACK
- OCCUPIED RESIDENCES
- OCCUPIED RESIDENCE SETBACK
- TREE CLEARING ONLY
- TREE CLEARING & CLEARING/GRUBBING
- LoD — LIMITS OF DISTURBANCE
- DRAWING NUMBER / DRAWING NUMBER — DRAWING SHEET MATCH LINE

Key Plan



Rev	Date	Drawn	Description	Ch'k'd	App'd
C	07/14/2021	RCB	ISSUED FOR 94C	KW	NJM
B	05/21/2021	RCB	ISSUED FOR REVIEW	KW	NJM
A	01/29/2021	RCB	ISSUED FOR REVIEW	KW	NJM

MOTT MACDONALD

Mott Macdonald NY Inc.
111 Wood Avenue South
Iselin, NJ 08830-4112
United States
T +1 (973) 379-3400
F +1 (973) 376-1072
W www.mottmac.com

Client

South Ripley SOLAR PROJECT

Title

SOUTH RIPLEY SOLAR EXISTING CONDITIONS & CLEARING PLAN SITE 7

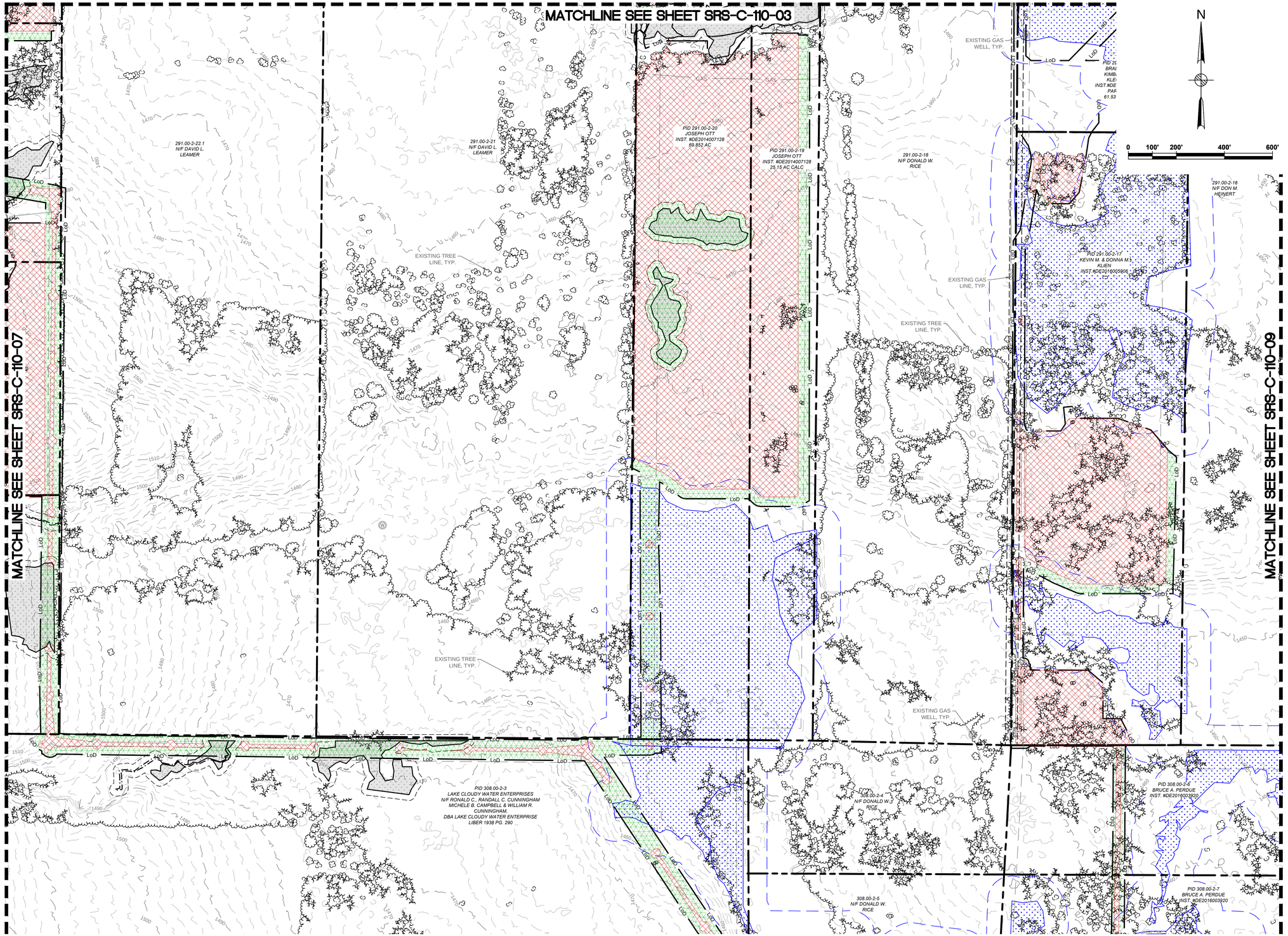
PRELIMINARY
NOT FOR CONSTRUCTION
REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION

Designed	MU	Eng check	KW
Drawn	RCB	Approved	NJM
Dwg check		Project Mngr	
Scale at ANSI D: 1" = 200'		Date: 07/14/2021	Rev: C

Drawing Number
SRS-C-110-07

CONCEPTUAL - NOT FOR CONSTRUCTION

G:\Projectwise_Support\ConnectGen_South_Ripley\SRS-C-110-07.dwg Jul 29, 2021 - 4:42PM MOR72937



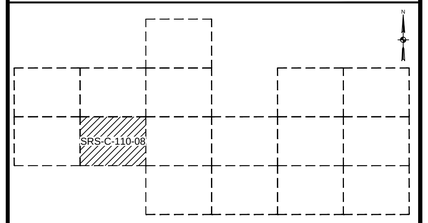
CONCEPTUAL - NOT FOR CONSTRUCTION

G:\Projectwise_Support\ConnectGen_South_Ripley\SRS-C-110-08.dwg Jul 29, 2021 - 5:09PM MOR72937

Legend

- PROPERTY LINES
- PROPERTY LINE SETBACKS
- 1300 — EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING TREELINE
- GAS — EXISTING GAS LINE & EASEMENT
- GAS WELLS
- WETLANDS - FEDERAL
- WETLANDS - NYSDEC JURISDICTIONAL
- STREAMS - FEDERAL
- STREAMS - NYSDEC JURISDICTIONAL
- FEDERAL WETLANDS/STREAMS - SETBACK
- WETLANDS/STREAMS - SETBACK
- OCCUPIED RESIDENCES
- OCCUPIED RESIDENCE SETBACK
- TREE CLEARING ONLY
- TREE CLEARING & CLEARING/GRUBBING
- LoD — LIMITS OF DISTURBANCE
- DRAWING NUMBER / DRAWING NUMBER — DRAWING SHEET MATCH LINE

Key Plan



Rev	Date	Drawn	Description	Ch'k'd	App'd
C	07/14/2021	RCB	ISSUED FOR 94C	KW	NJM
B	05/21/2021	RCB	ISSUED FOR REVIEW	KW	NJM
A	01/29/2021	RCB	ISSUED FOR REVIEW	KW	NJM

MOTT MACDONALD
Mott Macdonald NY Inc.
111 Wood Avenue South
Iselin, NJ 08830-4112
United States
T +1 (973) 379-3400
F +1 (973) 376-1072
W www.mottmac.com

Client: South Ripley SOLAR PROJECT

Title: SOUTH RIPLEY SOLAR
EXISTING CONDITIONS
& CLEARING PLAN
SITE 8

PRELIMINARY
NOT FOR
CONSTRUCTION
REPLACE WITH
ENGINEERS STAMP
AT CONSTRUCTION
AND/OR
FABRICATION

Designed	MU	Eng check	KW
Drawn	RCB	Approved	NJM
Dwg check		Project Mngr	
Scale at ANSI D: 1" = 200'		Date: 07/14/2021	Rev: C

Drawing Number: SRS-C-110-08

MATCHLINE SEE SHEET SRS-C-110-04

MATCHLINE SEE SHEET SRS-C-110-08

MATCHLINE SEE SHEET SRS-C-110-10

MATCHLINE SEE SHEET SRS-C-110-13

291.00-2-16
N/F DON M. HEINERT

291.00-2-15
N/F DIANA J. JOINT

291.00-2-14
N/F VANDEWARK & DUNLAP

PID 291.00-2-13
MARJORIE THORP, LIFE TENANT &
DAVID THORP OWNING 50% & BARBARA SPACHT OWNING 50% AS REMAINDERMEN
LIBER 2512 PG. 156

291.00-2-8
N/F TRAVIS W. STAUFFER

PID 291.00-2-9
JEFFREY S. YOKOM
LIBER 2368 PG 587

291.00-2-10
N/F EUGENE GASIEWICZ

PID 291.00-2-12
LYLE A. COX, SR.
LIBER 2339 PG 481

PID 308.00-2-6
BRUCE A. PERDUE
INST. #DE2015003920

PID 308.00-2-7
BRUCE A. PERDUE
INST. #DE2016003920

PID 308.00-2-10
JAMES BORIA
INST #DE2014005706

EXISTING TREE LINE, TYP.

EXISTING GAS WELL, TYP.

GAS

LoD

N

0 100' 200' 400' 600'

Legend

- PROPERTY LINES
- PROPERTY LINE SETBACKS
- 1300 EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING TREELINE
- GAS EXISTING GAS LINE & EASEMENT
- GAS WELLS
- WETLANDS - FEDERAL
- WETLANDS - NYSDEC JURISDICTIONAL
- STREAMS - FEDERAL
- STREAMS - NYSDEC JURISDICTIONAL
- FEDERAL WETLANDS/STREAMS - SETBACK
- WETLANDS/STREAMS - SETBACK
- OCCUPIED RESIDENCES
- OCCUPIED RESIDENCE SETBACK
- TREE CLEARING ONLY
- TREE CLEARING & CLEARING/GRUBBING
- LoD LIMITS OF DISTURBANCE
- DRAWING NUMBER / DRAWING NUMBER DRAWING SHEET MATCH LINE

Key Plan

SRS-C-110-09

Rev	Date	Drawn	Description	Ch'k'd	App'd
C	07/14/2021	RCB	ISSUED FOR 94C	KW	NJM
B	05/21/2021	RCB	ISSUED FOR REVIEW	KW	NJM
A	01/29/2021	RCB	ISSUED FOR REVIEW	KW	NJM

MOTT MACDONALD

Mott Macdonald NY Inc.
111 Wood Avenue South
Iselin, NJ 08830-4112
United States
T +1 (973) 379-3400
F +1 (973) 376-1072
W www.mottmac.com

Client

South Ripley SOLAR PROJECT

Title

SOUTH RIPLEY SOLAR
EXISTING CONDITIONS
& CLEARING PLAN
SITE 9

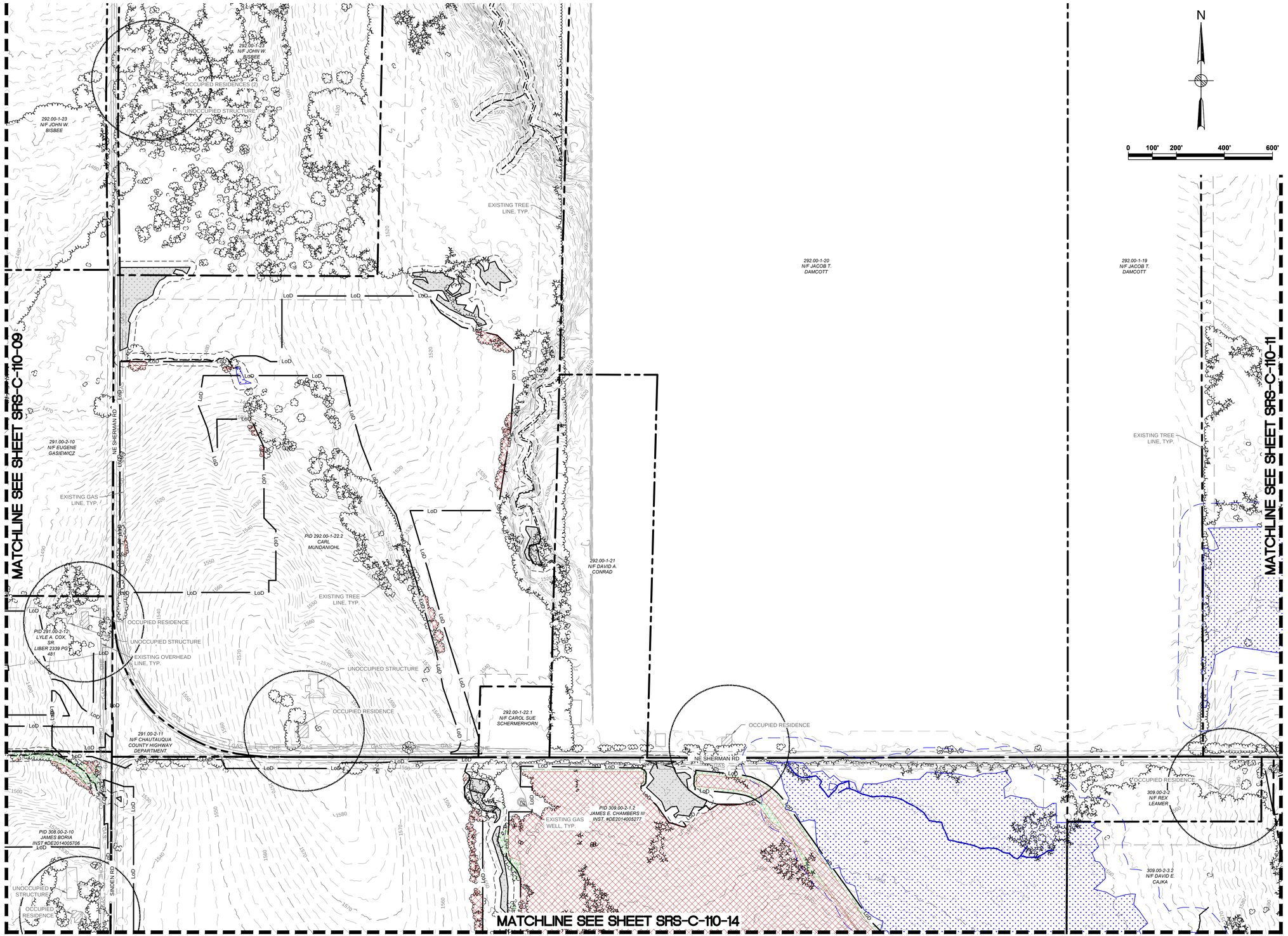
PRELIMINARY
NOT FOR CONSTRUCTION
REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION

Designed	MU	Eng check	KW
Drawn	RCB	Approved	NJM
Dwg check		Project Mngr	
Scale at ANSI D: 1" = 200'		Date: 07/14/2021	Rev: C

Drawing Number
SRS-C-110-09

CONCEPTUAL - NOT FOR CONSTRUCTION

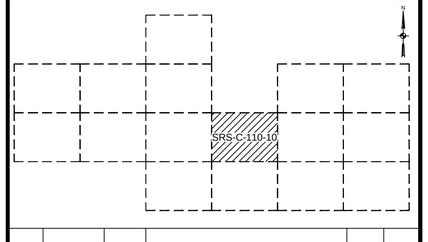
G:\Projectwise_Support\ConnectGen_South_Ripley\SRS-C-110-09.dwg Jul 29, 2021 - 5:10PM MOR72937



Legend

- PROPERTY LINES
- PROPERTY LINE SETBACKS
- EXISTING MAJOR CONTOUR (1300)
- EXISTING MINOR CONTOUR
- EXISTING TREELINE
- EXISTING GAS LINE & EASEMENT (GAS)
- GAS WELLS
- WETLANDS - FEDERAL
- WETLANDS - NYSDEC JURISDICTIONAL
- STREAMS - FEDERAL
- STREAMS - NYSDEC JURISDICTIONAL
- FEDERAL WETLANDS/STREAMS - SETBACK
- WETLANDS/STREAMS - SETBACK
- OCCUPIED RESIDENCES
- OCCUPIED RESIDENCE SETBACK
- TREE CLEARING ONLY
- TREE CLEARING & CLEARING/GRUBBING
- LIMITS OF DISTURBANCE (LoD)
- DRAWING SHEET MATCH LINE (DRAWING NUMBER / DRAWING NUMBER)

Key Plan



Rev	Date	Drawn	Description	Ch'k'd	App'd
C	07/14/2021	RCB	ISSUED FOR 94C	KW	NJM
B	05/21/2021	RCB	ISSUED FOR REVIEW	KW	NJM
A	01/29/2021	RCB	ISSUED FOR REVIEW	KW	NJM

MOTT MACDONALD

Mott Macdonald NY Inc.
111 Wood Avenue South
Iselin, NJ 08830-4112
United States
T +1 (973) 379-3400
F +1 (973) 376-1072
W www.mottmac.com

Client: South Ripley Solar Project

Title: SOUTH RIPLEY SOLAR
EXISTING CONDITIONS
& CLEARING PLAN
SITE 10

PRELIMINARY
NOT FOR
CONSTRUCTION
REPLACE WITH
ENGINEERS STAMP
AT CONSTRUCTION
AND/OR
FABRICATION

Designed	MU	Eng check	KW
Drawn	RCB	Approved	NJM
Dwg check		Project Mngr	
Scale at ANSI D: 1" = 200'		Date: 07/14/2021	Rev: C

Drawing Number: SRS-C-110-10

CONCEPTUAL - NOT FOR CONSTRUCTION

G:\Projectwise_Support\ConnectGen_South_Ripley\SRS-C-110-10.dwg Jul 29, 2021 - 5:20PM MOR72937