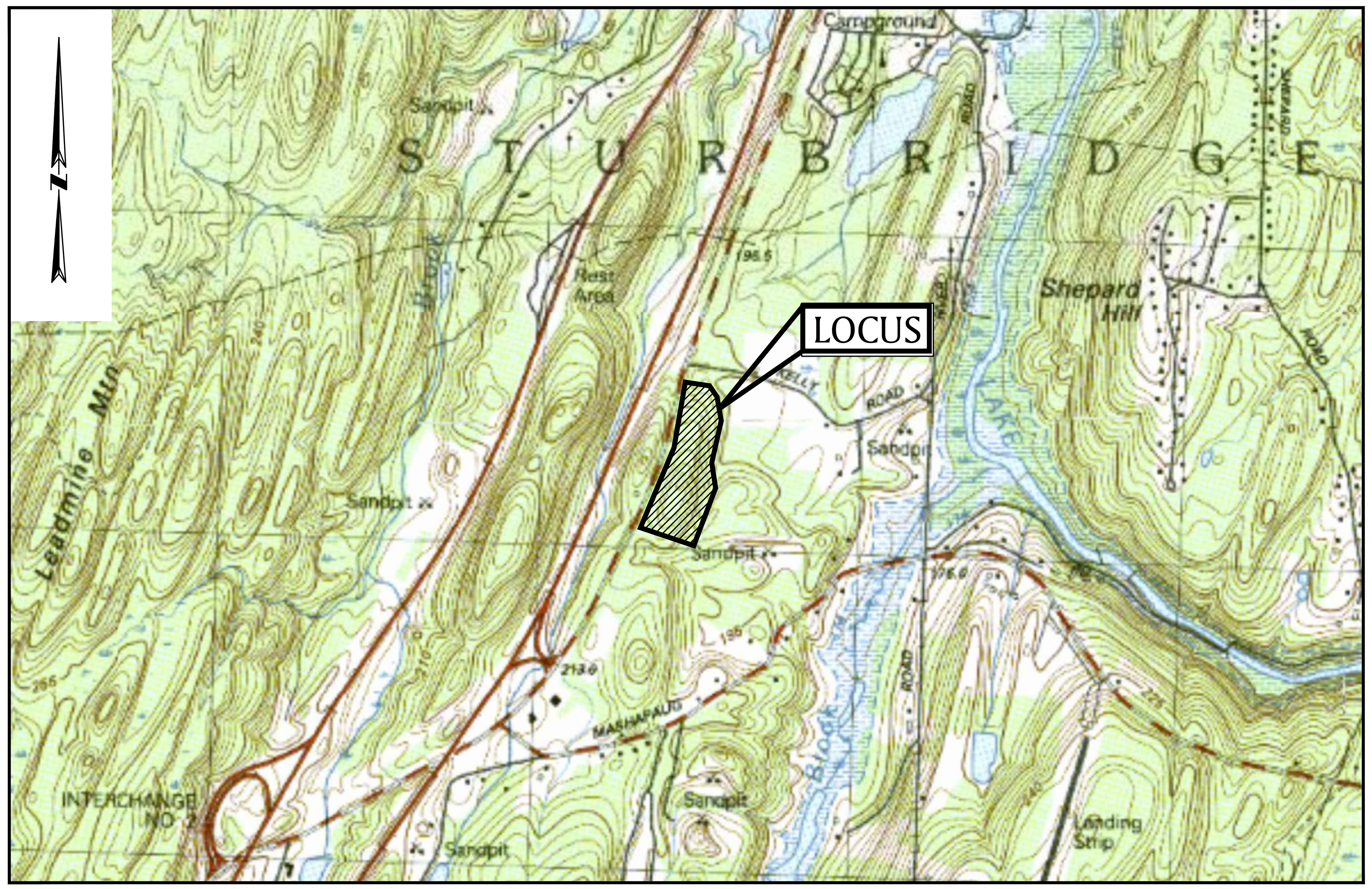
GROUND-MOUNTED PHOTOVOLTAIC SYSTEM

200 HAYNES STREET
STURBRIDGE, MASSACHUSETTS

AUGUST 1, 2023

REVISED: FEBRUARY 23, 2024

ZONING COMPLIANCE TABLE		
CRITERIA: ARTICLE XIV – INTENSITY REGULATIONS (§300–14.2, SPECIAL USE)		
	REQUIRED	PROPOSED
MINIMUM LOT AREA	1 ACRE	13.92 ACRES
MINIMUM LOT FRONTAGE	200'	1,619.5'±
MINIMUM STREET SETBACK	50'	54.2'
MINIMUM SIDE/REAR YARD SETBACK	30'	192.3'
MAX. LOT COVERAGE (%)	30%	17.0%
MAXIMUM HEIGHT	35'	N/A
CRITERIA: ARTICLE X – SOLAR ENERGY FACILITIES (§300–10.1 – §300.10.12)		
	REQUIRED	PROPOSED
MINIMUM FRONT/SIDE/REAR YARD SETBACK	100'	100.6'
MINIMUM RESIDENTIAL LANDSCAPED BUFFER	200'	200.0'
MAX. PARCEL COVERAGE	20%	16.9%



LOCUS MAP

500 0 1,000 2,000 3,000 feet

SCALE: 1" = 1,000±

COMMONWEALTH OF MASSACHUSETTS
BRIAN G. YERGATIAN
CIVIL
No. 46206
REGISTERED PROFESSIONAL ENGINEER

01/31/23

INDEX OF DRAWINGS

PREPARED FOR:

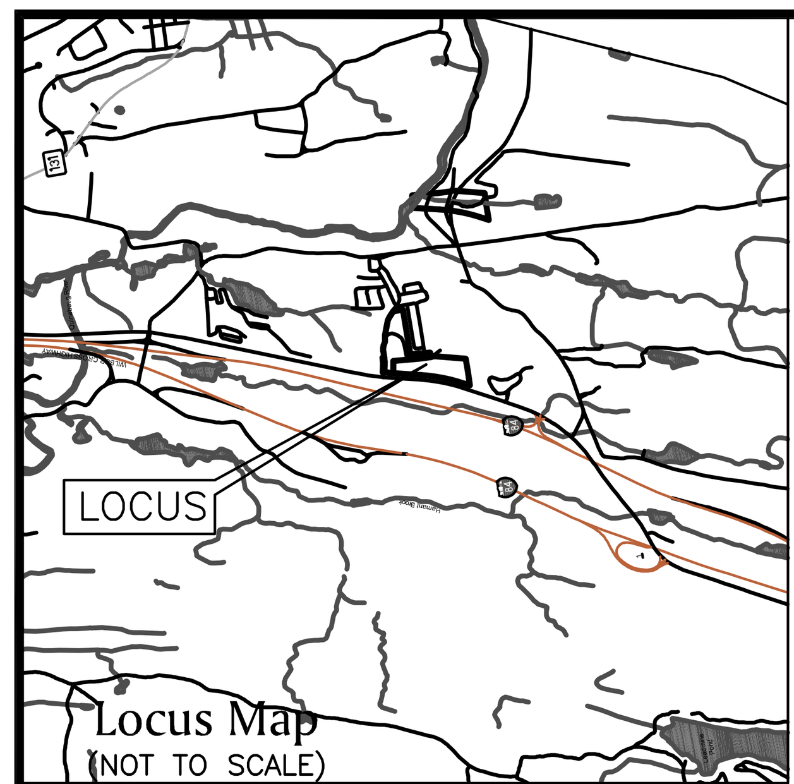
STURBRIDGE PV, LLC
2420 17TH STREET
DENVER, CO 80202

PREPARED BY:

BSC GROUP
349 Main Street - Route 28
W. Yarmouth, Massachusetts
02673
508 778 8919

ISSUED FOR PERMITTING
NOT FOR CONSTRUCTION

JOB NO: 5–0745.00



UTILITY NOTE

EXISTING UTILITIES, WHERE SHOWN HEREON, ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY LOCATING AND COORDINATING ANY ON-SITE ACTIVITY WITH DIG-SAFE AND THE APPROPRIATE UTILITY COMPANY AND MAINTAINING EXISTING UTILITY SYSTEM SERVICE. DIG-SAFE SHALL BE NOTIFIED PER RHODE ISLAND GENERAL LAWS TITLE 39 CHAPTER 39-1.2, AT 1-888-344-7233. NO GUARANTEE IS IMPLIED OR INTENDED AS TO THE ACCURACY, LOCATION OR THAT ALL UTILITIES AND/OR SUBSURFACE STRUCTURES ARE SHOWN. THE CONTRACTOR SHALL VERIFY SIZE, LOCATION AND INVERTS OR UTILITIES AND STRUCTURES AS REQUIRED PRIOR TO THE START OF CONSTRUCTION.

LEGEND

BIT	BITUMINOUS
▦	CATCH BASIN
—x—	CHAIN LINK FENCE
CONC	CONCRETE
⊙	DECIDUOUS TREE
DWP	DETECTABLE WARNING PAD
Ⓓ	DRAIN MANHOLE
•	DRILL HOLE
Ⓔ	ELECTRIC MANHOLE
	HYDRANT
	IRON ROD FENCE
● IR	IRON ROD
	LIGHT POLE
○	MANHOLE
	PEDESTRIAN SIGNAL
Ⓢ	SEWER MANHOLE
	SIGN
SWL	SINGLE WHITE LINE
Ⓣ	TELEPHONE MANHOLE
TC/BC	TOP CURB/BOTTOM CURB
TW/BW	TOP WALL/BOTTOM WALL
	TRAFFIC MASTARM
	UTILITY POLE W/LIGHT & TRANSFORMER
VGC	VERTICAL GRANITE CURB
⊗	WATER GATE
—OHW—	OVERHEAD WIRES
	ONE FOOT CONTOUR
	FIVE FOOT CONTOUR
—D—	UNDERGROUND DRAIN
—E—	UNDERGROUND ELECTRIC
—G—	UNDERGROUND GAS
—S—	UNDERGROUND SEWER
—T—	UNDERGROUND TELEPHONE
—W—	UNDERGROUND WATER

NAD 1983

OWNER:
30 SWIFT, LLC
SEE PLAN FOR ABUTTING PARCEL OWNER INFORMATION

GENERAL NOTES:

1) THE EXISTING CONDITIONS SHOWN HEREON DEPICT THE SUBJECT SITE AS IT APPEARED DURING A FIELD SURVEY CONDUCTED BY BSC GROUP, INC. BETWEEN OCTOBER 11, 2022 AND NOVEMBER 18, 2022.

2) THE ABOVE MENTIONED FIELD SURVEY IS BASED ON NAD 1983 HORIZONTAL AND NAVD 1988 VERTICAL DATUM (TEMPORARY BENCH MARKS (TBM) SET) AS DERIVED FROM GPS OBSERVATIONS MADE AT THE TIME OF THE SURVEY.

***3) THE UTILITIES SHOWN ON THIS PLAN ARE TAKEN FROM LOCATIONS OF SURFACE STRUCTURES AND ALSO RECORD INFORMATION SUPPLIED BY UTILITY COMPANIES AND PB 90 PG 52-62

CHRISTOPHER W. MCNARY #47396 DATE 04/25/2023
PROFESSIONAL LAND SURVEYOR

GROUND-MOUNTED PHOTOVOLTAIC SYSTEM

200 ROUTE 15

IN

STURBRIDGE MASSACHUSETTS

(WORCESTER COUNTY)

EXISTING CONDITIONS PLAN

APRIL 26, 2023

REVISIONS:

NO.	DATE	DESC.

PREPARED FOR:
BEAR PEAK POWER, LLC
2420 17TH STREET
DENVER, CO 80202

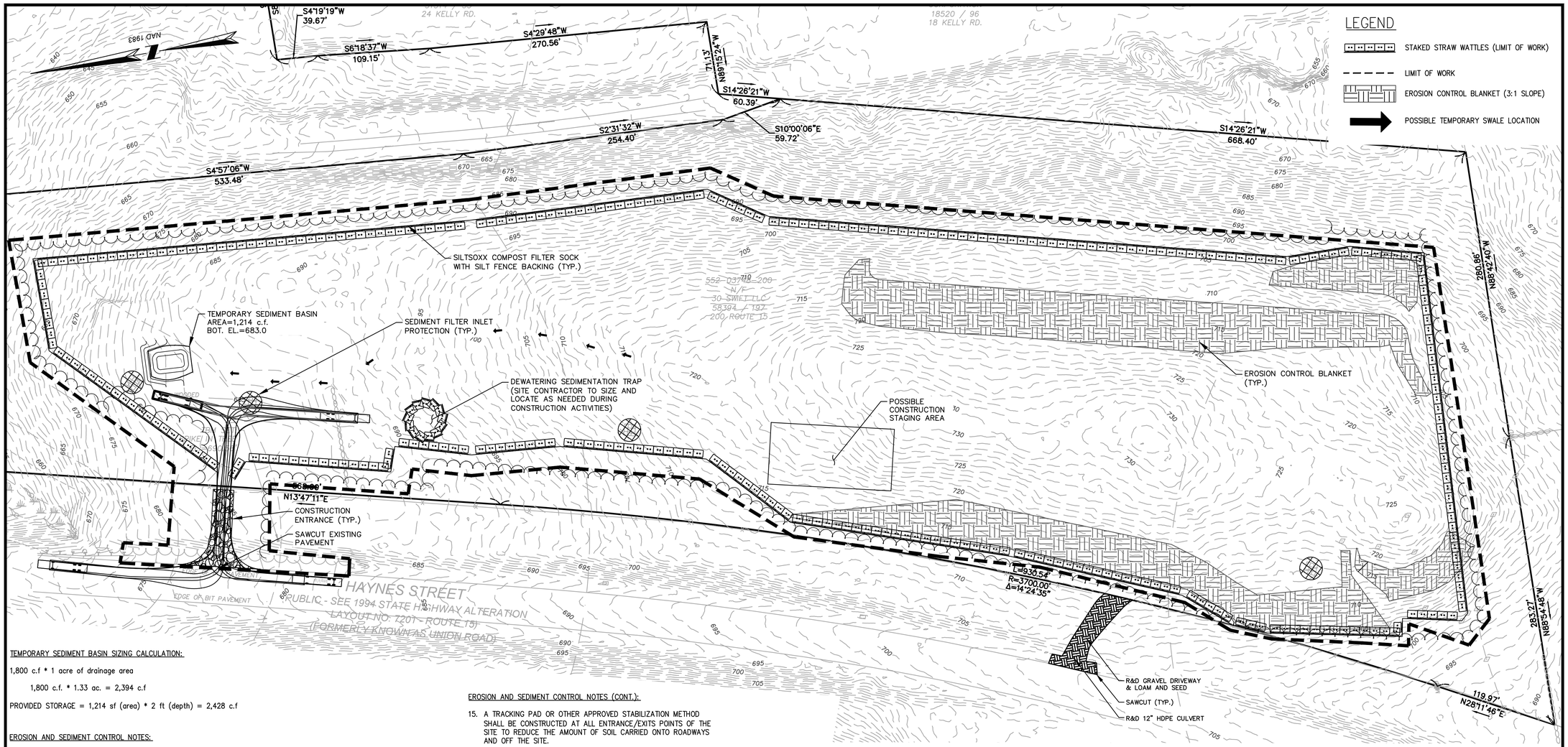
BSC GROUP
349 Main Street - Route 28
West Yarmouth, Massachusetts
02673
508 778 8919

SCALE: 1" = 60'

0 30 60 120 FEET

ISSUED FOR PERMITTING
NOT FOR CONSTRUCTION

FILE: PROJECTS-YAR\5074500\C\D\5074500-SP.dwg
DWG.: DWG
JOB. NO: 5-0745.00



TEMPORARY SEDIMENT BASIN SIZING CALCULATION:

1,800 c.f * 1 acre of drainage area

1,800 c.f. * 1.33 ac. = 2,394 c.f

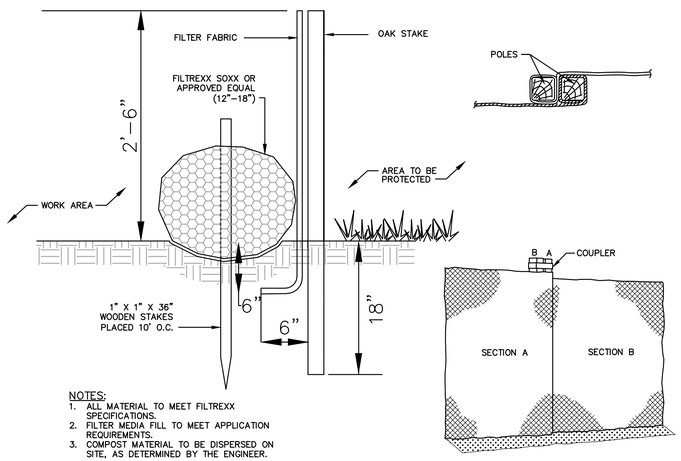
PROVIDED STORAGE = 1,214 sf (area) * 2 ft (depth) = 2,428 c.f

EROSION AND SEDIMENT CONTROL NOTES:

1. PRIOR TO ANY LAND DISTURBANCE ACTIVITIES COMMENCING ON THE SITE, THE DEVELOPER SHALL PHYSICALLY MARK LIMITS OF NO LAND DISTURBANCE ON THE SITE WITH TAPE, SIGNS, OR ORANGE CONSTRUCTION FENCE, SO THAT WORKERS CAN SEE THE AREAS TO BE PROTECTED. THE PHYSICAL MARKERS SHALL REMAIN IN PLACE UNTIL A CERTIFICATE OF COMPLETION HAS BEEN ISSUED.
2. APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO SOIL DISTURBANCE. MEASURES SHALL BE TAKEN TO CONTROL EROSION WITHIN THE PROJECT AREA. SEDIMENT IN RUNOFF WATER SHALL BE TRAPPED AND RETAINED WITHIN THE PROJECT AREA. WETLAND AREAS AND SURFACE WATERS SHALL BE PROTECTED FROM SEDIMENT.
3. MINIMIZE TOTAL AREA OF DISTURBANCE AND PROTECT NATURAL FEATURES AND SOIL.
4. THE CONTRACTOR SHALL SEQUENCE ALL ACTIVITIES TO MINIMIZE SIMULTANEOUS AREAS OF DISTURBANCE. MASS CLEARING AND GRADING OF THE ENTIRE SITE SHALL BE AVOIDED.
5. MINIMIZE SOIL EROSION AND CONTROL SEDIMENTATION DURING CONSTRUCTION.
6. DIVERT UNCONTAMINATED WATER AROUND DISTURBED AREAS.
7. INSTALL AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND GOOD ENGINEERING PRACTICES OR IN ACCORDANCE WITH THE 2017 EPA CONSTRUCTION GENERAL PERMIT.
8. PROTECT AND MANAGE ON AND OFF-SITE MATERIAL STORAGE AREAS (OVERBURDEN AND STOCKPILES OF DIRT, BORROW AREAS, OR OTHER AREAS USED SOLELY BY THE PERMITTED PROJECT ARE CONSIDERED A PART OF THE PROJECT).
9. COMPLY WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS INCLUDING WASTE DISPOSAL, SANITARY OR SEWER REGULATIONS, AND AIR QUALITY REQUIREMENTS, INCLUDING DUST CONTROL.
10. SEDIMENT SHALL BE REMOVED ONCE THE VOLUME REACHES 1/4 TO 1/2 THE HEIGHT OF THE EROSION CONTROL DEVICE. SEDIMENT SHALL BE REMOVED FROM SILT FENCE PRIOR TO REACHING THE LOAD-BEARING CAPACITY OF THE SILT FENCE WHICH MAY BE LOWER THAN 1/4 TO 1/2 THE HEIGHT.
11. SEDIMENT FROM SEDIMENT TRAPS OR SEDIMENTATION PONDS SHALL BE REMOVED WHEN DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT.
12. BMPS TO BE USED FOR INFILTRATION AFTER CONSTRUCTION SHALL NOT BE USED AS BMPS DURING CONSTRUCTION UNLESS OTHERWISE APPROVED IN WRITING BY THE ENGINEER AND THE TOWN OF STURBRIDGE. MANY INFILTRATION TECHNOLOGIES ARE NOT DESIGNED TO HANDLE THE HIGH CONCENTRATIONS OF SEDIMENTS TYPICALLY FOUND IN CONSTRUCTION RUNOFF, AND THUS MUST BE PROTECTED FROM CONSTRUCTION RELATED SEDIMENT LOADINGS.
13. SOIL STOCKPILES MUST BE STABILIZED OR COVERED AT THE END OF EACH WORKDAY. STOCKPILE SIDE SLOPES SHALL NOT BE GREATER THAN 2:1. ALL STOCKPILES SHALL BE SURROUNDED BY SEDIMENT CONTROLS.
14. FOR ACTIVE CONSTRUCTION AREAS SUCH AS BORROW OR STOCKPILE AREAS, ROADWAY IMPROVEMENTS AND AREAS WITHIN 50 FEET OF A BUILDING UNDER CONSTRUCTION, A PERIMETER SEDIMENT CONTROL SYSTEM SHALL BE INSTALLED AND MAINTAINED TO CONTAIN SOIL.

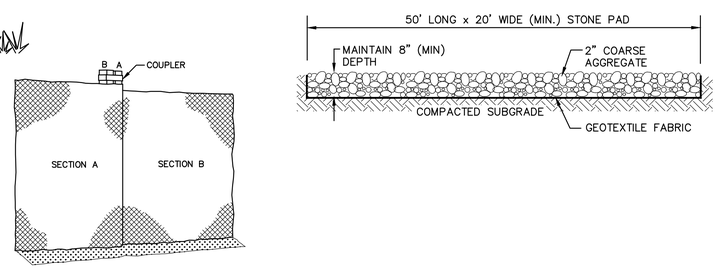
EROSION AND SEDIMENT CONTROL NOTES (CONT.):

15. A TRACKING PAD OR OTHER APPROVED STABILIZATION METHOD SHALL BE CONSTRUCTED AT ALL ENTRANCE/EXITS POINTS OF THE SITE TO REDUCE THE AMOUNT OF SOIL CARRIED ONTO ROADWAYS AND OFF THE SITE.
16. ON THE CUT SIDE OF ROADS, DITCHES SHALL BE STABILIZED IMMEDIATELY WITH ROCK RIP-RAP OR OTHER NON-ERODIBLE LINERS, OR WHERE APPROPRIATE, VEGETATIVE MEASURES SUCH AS HYDROSEEDING OR JUTE MATTING
17. PERMANENT SEEDING SHALL BE UNDERTAKEN IN THE SPRING FROM MARCH THROUGH MAY, AND IN LATE SUMMER AND EARLY FALL FROM AUGUST TO OCTOBER 15. DURING THE PEAK SUMMER MONTHS AND IN THE FALL AFTER OCTOBER 15, WHEN SEEDING IS FOUND TO BE IMPRACTICAL, APPROPRIATE TEMPORARY STABILIZATION SHALL BE APPLIED. PERMANENT SEEDING MAY BE UNDERTAKEN DURING THE SUMMER IF PLANS PROVIDE FOR ADEQUATE MULCHING AND WATERING.
18. ALL SLOPES STEEPER THAN 3:1 (H:V, 33.3%), AS WELL AS PERIMETER DIKES, SEDIMENT BASINS OR TRAPS, AND EMBANKMENTS MUST, UPON COMPLETION, BE IMMEDIATELY STABILIZED WITH SOD, SEED AND ANCHORED STRAW MULCH, OR OTHER APPROVED STABILIZATION MEASURES. AREAS OUTSIDE OF THE PERIMETER SEDIMENT CONTROL SYSTEM MUST NOT BE DISTURBED.
19. TEMPORARY SEDIMENT TRAPPING DEVICES MUST NOT BE REMOVED UNTIL PERMANENT STABILIZATION IS ESTABLISHED IN ALL CONTRIBUTORY DRAINAGE AREAS.
20. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED AFTER FINAL SITE STABILIZATION. DISTURBED SOIL AREAS RESULTING FROM THE REMOVAL OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED WITHIN 30 DAYS OF REMOVAL.
21. PROPERLY MANAGE ON-SITE CONSTRUCTION AND WASTE MATERIALS.
22. PREVENT OFF-SITE VEHICLE TRACKING OF SEDIMENTS,
23. DUST SHALL BE CONTROLLED AT THE SITE.
24. ALL PREVIOUSLY DISTURBED LAND SHALL BE STABILIZED BY APPROVED METHODS AFTER 14 DAYS IF LEFT UNDISTURBED, THIS INCLUDES STOCKPILES, CONSTRUCTION ENTRANCES, GRADED AREAS AND OTHER CONSTRUCTION ACTIVITY RELATED CLEARING,
25. IF WORK IS HALTED OVER WINTER MONTHS THE CONTRACTOR SHALL BE RESPONSIBLE FOR STABILIZING THE AREA THROUGH GROUND COVER PRACTICES.



SILTSOXX COMPOST FILTER SOCK WITH SILT FENCE BACKING

SCALE: NONE



TEMPORARY CONSTRUCTION ENTRANCE

SCALE: NONE

COMMONWEALTH OF MASSACHUSETTS
BRIAN G. YERGATIAN
CIVIL
No. 46208
REGISTERED
PROFESSIONAL ENGINEER

02/23/2024

BRIAN G. YERGATIAN PROFESSIONAL ENGINEER — DATE

GROUND-MOUNTED PHOTOVOLTAIC SYSTEM

200 HAYNES STREET

IN

STURBRIDGE
MASSACHUSETTS
(WORCESTER COUNTY)

EROSION & SEDIMENT CONTROL PLAN

AUGUST 1, 2023

REVISIONS:

NO.	DATE	DESC.
1	11/15/23	PER PEER REVIEW
2	01/16/24	PER PEER REVIEW
3	02/23/24	PER PEER REVIEW

ISSUED FOR PERMITTING
NOT FOR CONSTRUCTION

PREPARED FOR:
STURBRIDGE PV, LLC
2420 17TH STREET
DENVER, CO 80202

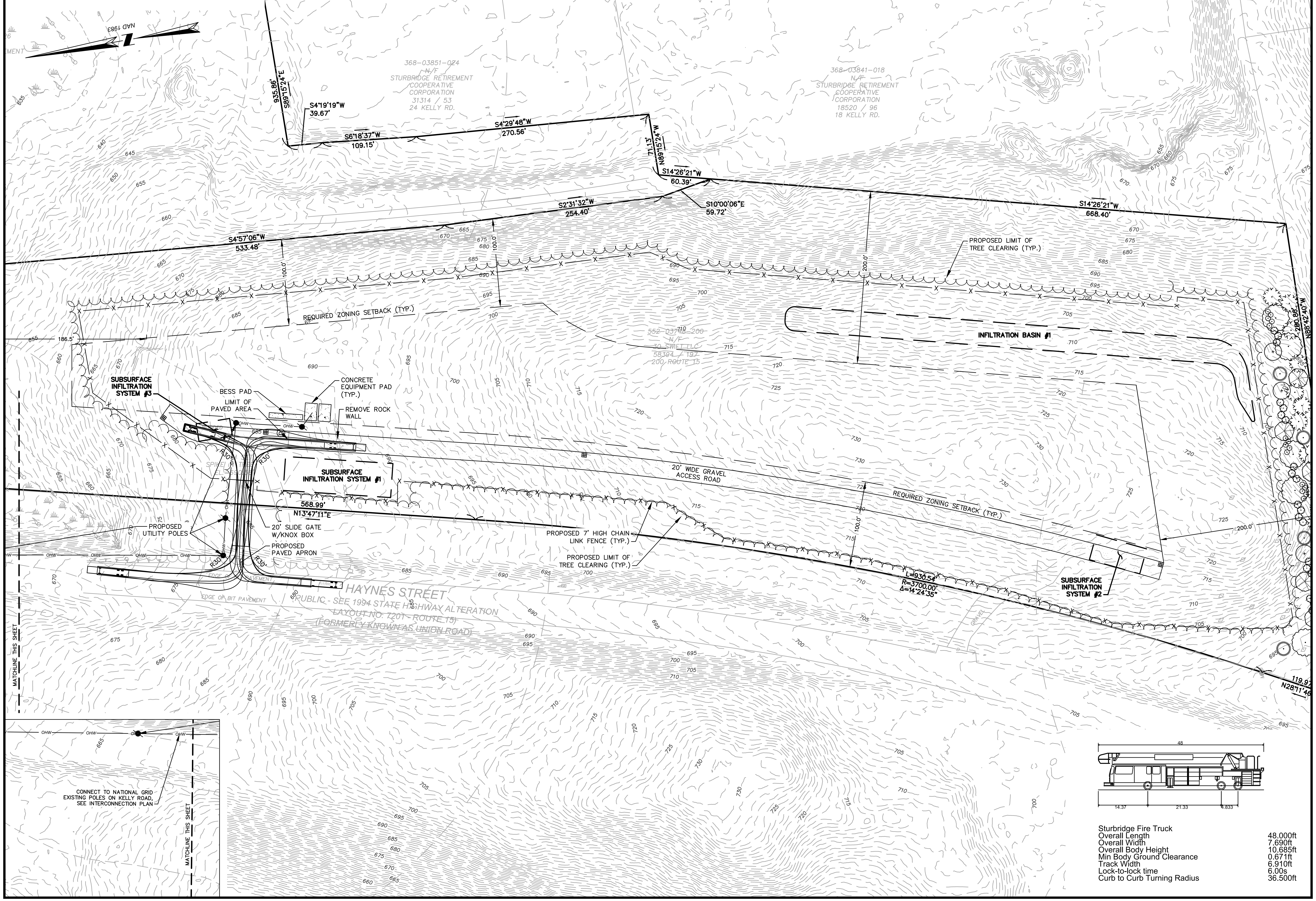
BSC GROUP
349 Main Street - Route 28
West Yarmouth, Massachusetts
02673
508 778 8919

SCALE: 1" = 50'
0 25 50 100 FEET

FILE: PROJECTS-YAR\5074500\C\D\5074500-SP.dwg
DWG.: DWG
JOB. NO: 5-0745.00
SHEET 3 OF 9

GENERAL NOTES

1. THE AREA ENCLOSED BY CHAIN LINK FENCE IS 8.48± ACRES.
2. CONSTRUCTION OF THE PROPOSED SITE IMPROVEMENTS REQUIRES THE CLEARING OF 9.30± ACRES OF WOODLANDS.
3. ALL DISTURBED AREAS WITHIN THE CHAIN LINK FENCE, IF NOT OTHERWISE SPECIFIED, WILL BE LOAMED AND SEEDED WITH A POLLINATOR SEED MIXTURE.



NAD 1983
368-03851-024
N/F
STURBRIDGE RETIREMENT COOPERATIVE CORPORATION
31314 / 53
24 KELLY RD.
368-03841-018
N/F
STURBRIDGE RETIREMENT COOPERATIVE CORPORATION
18520 / 96
18 KELLY RD.
S4°19'19"W 39.67'
S6°18'37"W 109.15'
S4°29'48"W 270.56'
S89°15'24"E 935.86'
N89°15'24"W 71.13'
S14°26'21"W 60.39'
S2°31'32"W 254.40'
S10°00'06"E 59.72'
S4°57'06"W 533.48'
S14°26'21"W 668.40'
N88°42'40"W 280.86'
N13°47'11"E 568.99'
L=930.54'
R=3700.00'
Δ=14°24'35"
N28°11'46"
119.97
PROPOSED LIMIT OF TREE CLEARING (TYP.)
REQUIRED ZONING SETBACK (TYP.)
INFILTRATION BASIN #1
SUBSURFACE INFILTRATION SYSTEM #3
BESS PAD
LIMIT OF PAVED AREA
CONCRETE EQUIPMENT PAD (TYP.)
REMOVE ROCK WALL
SUBSURFACE INFILTRATION SYSTEM #1
20' WIDE GRAVEL ACCESS ROAD
PROPOSED UTILITY POLES
20' SLIDE GATE W/KNOX BOX
PROPOSED PAVED APRON
PROPOSED 7' HIGH CHAIN LINK FENCE (TYP.)
PROPOSED LIMIT OF TREE CLEARING (TYP.)
SUBSURFACE INFILTRATION SYSTEM #2
HAYNES STREET
(PUBLIC - SEE 1994 STATE HIGHWAY ALTERATION LAYOUT NO. 7201 - ROUTE 15)
(FORMERLY KNOWN AS UNION ROAD)
EDGE OF BIT PAVEMENT
MATCHLINE THIS SHEET
CONNECT TO NATIONAL GRID EXISTING POLES ON KELLY ROAD, SEE INTERCONNECTION PLAN

Sturbridge Fire Truck	
Overall Length	48.000ft
Overall Width	7.690ft
Overall Body Height	10.685ft
Min Body Ground Clearance	0.671ft
Track Width	6.910ft
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	36.500ft

BRIAN G. YERGATIAN
PROFESSIONAL ENGINEER
02/23/2024
DATE

GROUND-MOUNTED PHOTOVOLTAIC SYSTEM

200 HAYNES STREET

IN

STURBRIDGE MASSACHUSETTS
(WORCESTER COUNTY)

LAYOUT & MATERIALS PLAN

AUGUST 1, 2023

REVISIONS:

NO.	DATE	DESC.
1	11/15/23	PER PEER REVIEW
2	01/16/24	PER PEER REVIEW
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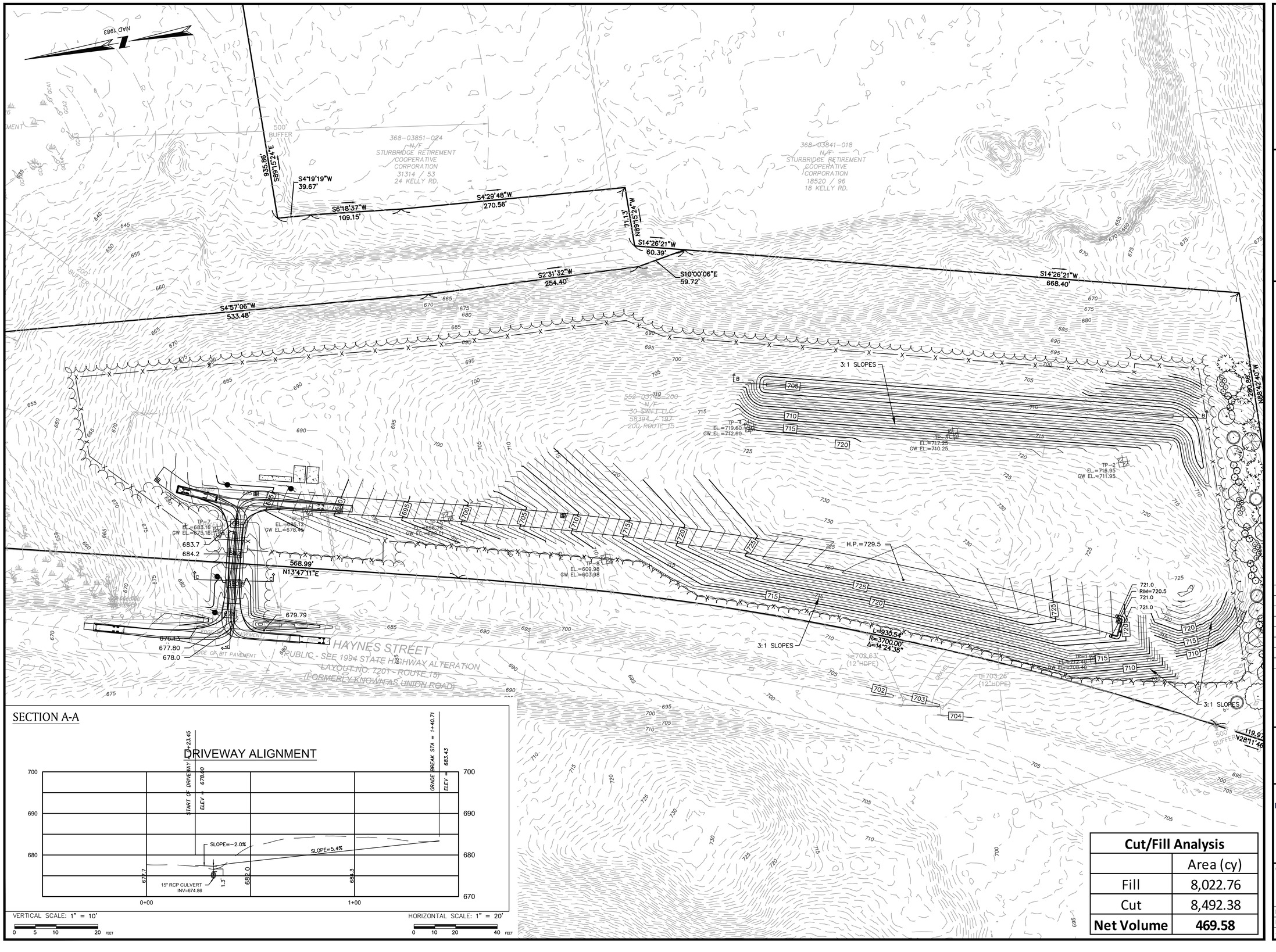

SECTION A-A

DRIVEWAY ALIGNMENT

VERTICAL SCALE: 1" = 10'
0 5 10 20 FEET

HORIZONTAL SCALE: 1" = 20'
0 10 20 40 FEET

Cut/Fill Analysis	
	Area (cy)
Fill	8,022.76
Cut	8,492.38
Net Volume	**469.58**

COMMONWEALTH OF MASSACHUSETTS
BRIAN G. YERGATIAN
CIVIL
No. 46208
REGISTERED PROFESSIONAL ENGINEER

02/23/2024

BRIAN G. YERGATIAN DATE
PROFESSIONAL ENGINEER

GROUND-MOUNTED PHOTOVOLTAIC SYSTEM

200 HAYNES STREET

IN

STURBRIDGE
MASSACHUSETTS
(WORCESTER COUNTY)

GRADING PLAN

AUGUST 1, 2023

REVISIONS:

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1	11/15/23	PER PEER REVIEW
2	01/16/24	PER PEER REVIEW
3	02/23/24	PER PEER REVIEW

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2420 17TH STREET
DENVER, CO 80202

BSC GROUP
349 Main Street - Route 28
West Yarmouth, Massachusetts
02673
508 778 8919

SCALE: 1" = 50'
0 25 50 100 FEET

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DWG.: DWG
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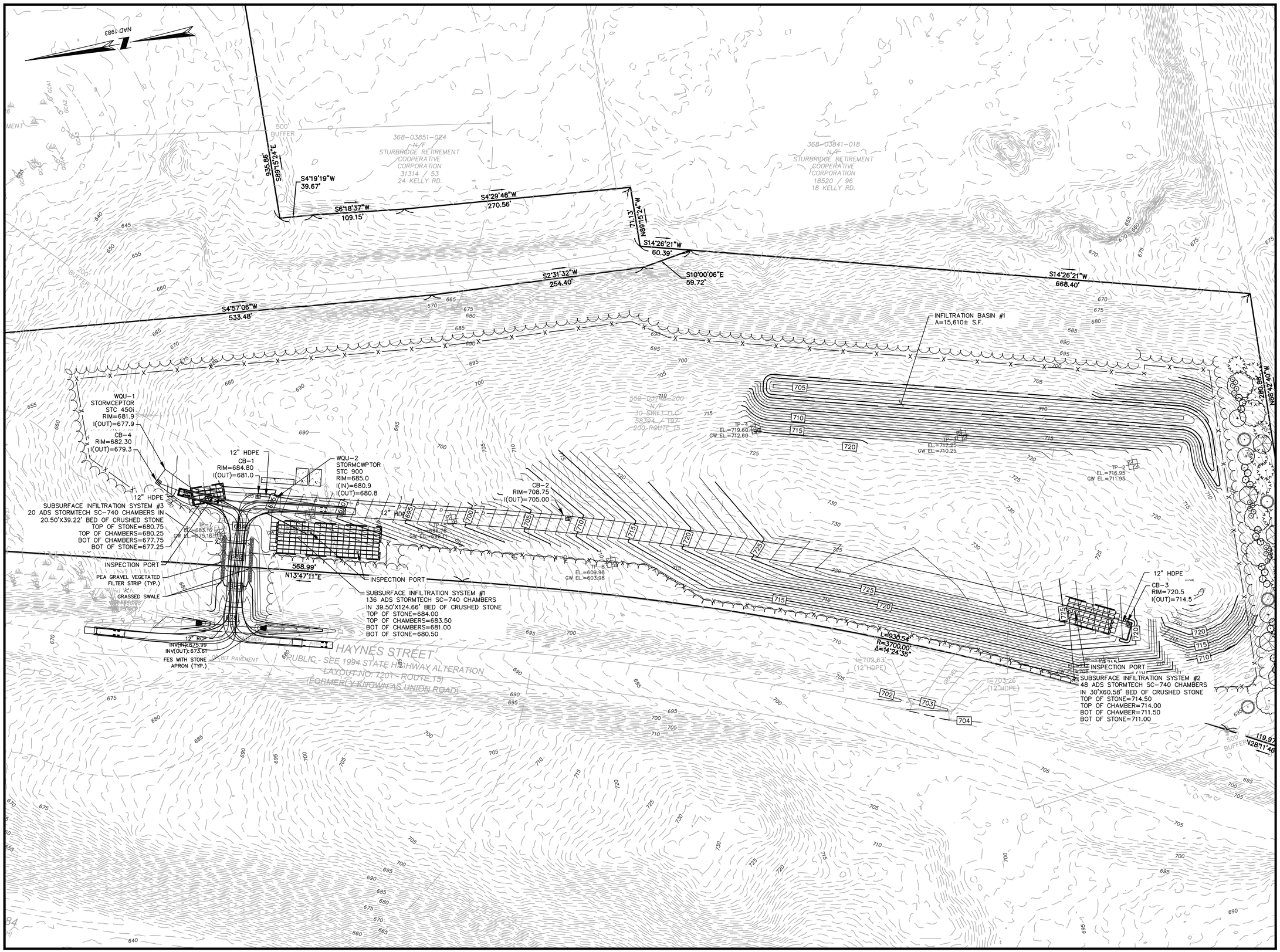
SHEET 5 OF 9



BRIAN G. YERGATIAN
CIVIL
No. 46209
REGISTERED
PROFESSIONAL ENGINEER
COMMONWEALTH OF MASSACHUSETTS

02/23/2024

BRIAN G. YERGATIAN DATE
PROFESSIONAL ENGINEER

GROUND-MOUNTED PHOTOVOLTAIC SYSTEM

200 HAYNES STREET

IN

STURBRIDGE
MASSACHUSETTS
(WORCESTER COUNTY)

DRAINAGE PLAN

AUGUST 1, 2023

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0 25 50 100 FEET

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DWG.: DWG
JOB. NO: 5-0745.00
SHEET 6 OF 9

EXAMINATION OF CONDITIONS:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR JUDGING THE FULL EXTENT OF WORK REQUIREMENTS INVOLVED. THIS RESPONSIBILITY INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING: TRANSPORTATION, PURCHASE, TEMPORARY STORAGE AND MAINTENANCE OF PLANTS; PLANT RE-HANDLING PRIOR TO FINAL INSTALLATION; REMOVAL AND OFF-SITE DISPOSAL OF EXISTING LOAM DETERMINED BY THE ENGINEER TO BE UNACCEPTABLE; PURCHASE, TRANSPORT, AND SUPPLY OF LOAM.

2. IMPORTED LOAM OFTEN CARRIES ANNUAL WEED SEED SUCH AS PERSICARIA. IT IS ADVANTAGEOUS TO ALLOW SOIL TO SETTLE AND WEED SEED TO GERMINATE AND BE MOWED PRIOR TO SITE SEEDING.

3. VERIFY ALL EXISTING UTILITY LINES PRIOR TO PLANTING AND REPORT ANY CONFLICTS TO THE OWNER OR HIS REPRESENTATIVE.

PLANTING NOTES

4. ALL PLANT MATERIAL SHALL CONFORM TO THE MINIMUM GUIDELINES ESTABLISHED BY THE AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC.

5. PLANT MATERIALS SHALL BEAR SAME RELATIONSHIP TO GRADE AS THEY BORE TO GRADE IN THE NURSERY.

6. ALL TREES NOTED FOR CLEARING AND SELECTIVE PRUNING AND THINNING SHALL BE EXECUTED UNDER THE SUPERVISION of A LICENSED ARBORIST.

7. THE CONTRACTOR SHALL CLEARLY MARK LIMITS OF CLEARING AND LIMITS OF SELECTIVE PRUNING AND THINNING, FOR REVIEW BY THE A/E PRIOR TO ANY CLEARING OPERATIONS. VEGETATION THAT IS NOT USED IN HABITAT FEATURES OR REMOVED AS TIMBER PRODUCTS SHALL BE CHIPPED ON SITE AND INCORPORATED INTO TOP SOIL.

8. THE CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO PROTECT EXISTING VEGETATION THAT IS TAGGED BY THE A/E, "TO BE SAVED".

9. ALL TREES TO BE SAVED SHALL BE PROTECTED WITH MARKED BOUNDS AT A MINIMUM DISTANCE OF 6', OR AS DIRECTED BY THE LANDSCAPE ARCHITECT.

10. THE A/E RESERVES THE RIGHT TO ADJUST FINAL GRADES IN THE FIELD TO SAVE EXISTING VEGETATION.

11. LOAM AND SEED ALL DISTURBED AREAS UNLESS OTHERWISE INDICATED.

12. THE LANDSCAPE CONTRACTOR SHALL FURNISH TOPSOIL. TOPSOIL SHALL BE FERTILE, FRIABLE, NATURAL AND PRODUCTIVE TOPSOIL OF GOOD CLAY-LOAM TYPE. IT SHALL BE FREE OF WEED SEEDS. TOPSOIL SHALL BE WITHOUT ADMIXTURE OF SUBSOIL AND SHALL BE REASONABLY FREE OF STONES, LUMPS, ROOTS, STICKS AND OTHER FOREIGN MATTER. TOPSOIL SHALL NOT BE WORKED OR APPLIED IN A MUDDY OR WET CONDITION.

13. STOCKPILE ROCKS STUMPS, LOGS AND ORGANIC DEBRIS FROM SOIL SURFACE AS HABITAT AND GRADE TO AN UNEVEN SURFACE.

14. PROVIDE FERTILIZE OR OTHER SOIL AMENDMENTS AS DIRECTED BY THE LANDSCAPE ARCHITECT BASED UPON THE FINDINGS OF THE SOIL TEST REPORT. NO FERTILIZER OR OTHER NUTRIENT AMENDMENT SHALL BE APPLIED WITHOUT COMPLIANCE WITH 330 CMR 31.00–31.11 .

MAINTENANCE PERIOD: 90 DAYS

15. THE MAINTENANCE PERIOD SHALL BEGIN IMMEDIATELY AFTER EACH PLANT IS PLANTED AND SHALL CONTINUE FOR A MINIMUM OF 90 DAYS FOLLOWING THE COMPLETION OF ALL PLANTING INSTALLATIONS, OR UNTIL THE CONDITIONAL ACCEPTANCE OF ALL PLANTING WORK, WHICHEVER IS A LONGER PERIOD OF TIME.

16. AT THE END OF THE MAINTENANCE PERIOD, THE CONTRACTOR WILL REQUEST INSPECTION BY THE OWNERS REPRESENTATIVE AT LEAST 10 DAYS BEFORE THE ANTICIPATED DATE OF INSPECTION.

17. AT THE TIME OF INSPECTION, IF THE PLANT MATERIALS AND WORKMANSHIP ARE ACCEPTABLE TO THE LANDSCAPE ARCHITECTS, THEY SHALL ISSUE A WRITTEN CERTIFICATE OF CONDITIONAL ACCEPTANCE TO THE CONTRACTOR. THE DATE OF THE INSPECTION SHALL ESTABLISH THE END OF THE MAINTENANCE PERIOD AND THE COMMENCEMENT OF THE REQUIRED ONE-YEAR ESTABLISHMENT PERIOD FOR PLANTING WORK.

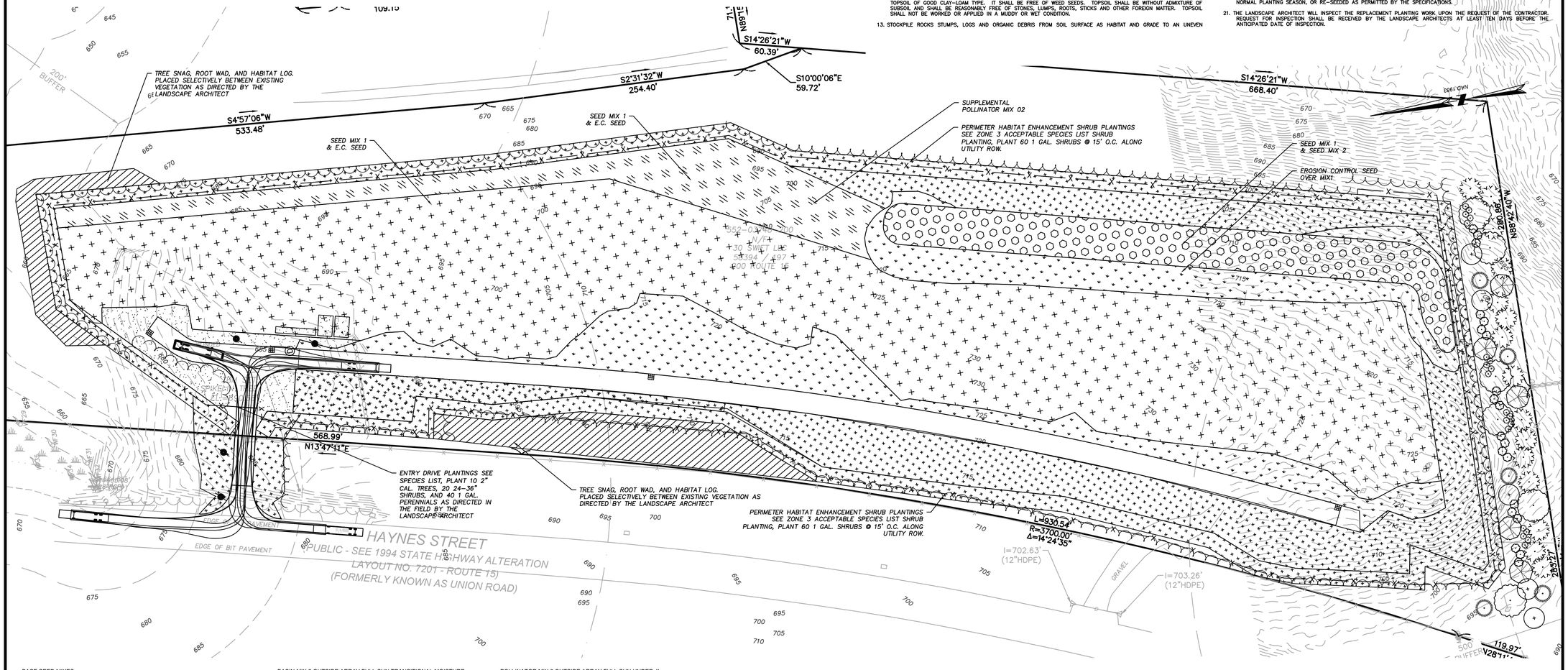
18. IF IN THE LANDSCAPE ARCHITECTS OPINION, PLANT MATERIALS AND/OR WORKMANSHIP IS DEFICIENT, ACCEPTANCE WILL NOT BE GRANTED, AND THE MAINTENANCE PERIOD FOR ALL THE PLANTS SHALL BE EXTENDED UNTIL PLANT REPLACEMENTS ARE MADE OR OTHER DEFICIENCIES ARE CORRECTED. ALL DEAD AND UNSATISFACTORY PLANTS WILL BE REMOVED PROMPTLY FROM THE PROJECT. REPLACEMENT PLANTS SHALL CONFORM IN ALL RESPECTS TO THE SPECIFICATIONS FOR THE ORIGINAL PLANTS AND SHALL BE PLANTED IN THE SAME MANNER.

ESTABLISHMENT PERIOD: ONE YEAR

19. THE PURPOSE OF THE ESTABLISHMENT PERIOD IS TO NURTURE PLANTS AND SEEDING THROUGH AT LEAST ONE FULL GROWING SEASON AND ONE FULL WINTER. ALL PLANTS SHALL BE INSPECTED BY THE ENGINEER ONE YEAR AFTER CONDITIONAL ACCEPTANCE AND SHALL BE ALIVE AND IN SATISFACTORY GROWTH AT THE END OF THAT TIME. THE CONTRACTOR IS RESPONSIBLE FOR ARRANGING INSPECTION EARLY ENOUGH IN THE SEASON TO ALLOW ADEQUATE TIME TO PROCURE AND INSTALL REPLACEMENT MATERIAL.

20. AT THE END OF THE ESTABLISHMENT PERIOD, EACH PLANT/ SEED TYPE SHALL SHOW HEALTHY GROWTH ON AT LEAST 75 PERCENT OF ITS TERMINAL STEMS, AS DETERMINED BY THE ENGINEER. DETERMINATION OF HEALTHY GROWTH SHALL INCLUDE, BUT IS NOT NECESSARILY LIMITED TO, VIABLE LEAVES (IN SEASON) AND TERMINAL BUDS. PLANTS FOUND TO BE UNACCEPTABLE SHALL BE REMOVED PROMPTLY FROM THE SITE AND REPLACED IMMEDIATELY OR DURING THE NEXT NORMAL PLANTING SEASON, OR RE-SEEDED AS PERMITTED BY THE SPECIFICATIONS.

21. THE LANDSCAPE ARCHITECT WILL INSPECT THE REPLACEMENT PLANTING WORK UPON THE REQUEST OF THE CONTRACTOR. REQUEST FOR INSPECTION SHALL BE RECEIVED BY THE LANDSCAPE ARCHITECTS AT LEAST TEN DAYS BEFORE THE ANTICIPATED DATE OF INSPECTION.



BASE SEED MIXES
POLLINATOR MIXES ARE BEST SPREAD BY BROADCASTING USING A CYCLONE FERTILIZER SPREADER PRIOR TO HYDROSEEDING OR HYDROMULCHING. BROADCASTING NATIVE WARM-SEASON GRASS AND FORB SEED ARE IRREGULAR AND REQUIRE THE USE OF A CARRIER TO ENSURE THE MIXTURE FLOWS CORRECTLY THROUGH THE SPREADER AND THE SEED IS DISTRIBUTED EVENLY ACROSS THE FIELD.

COVER CROP HYDROSEEDED OVER BASE SEED DURING ESTABLISHMENT
ALL SEEDED AREAS TO BEGIN WITH A COVER CROP SELECTED RELATIVE TO SEASON SEED AT 20 LBS/ACRE WITH A COVER CROP. FOR A COVER CROP USE JAPANESE MILLET (10 LBS/ACRE; 1 MAY TO 31 AUG), BARNYARD GRASS (10 LBS/ACRE; 1 MAY TO 31 AUG), OR GRAIN RYE (30 LBS/ACRE; 1 SEPT TO 30 APR).

LOW UPLAND POLLINATOR MIX 1 UNDER ARRAY UNDER 3' PART SHADE
1 LB/ 1000 FT.
ERNMX-612 OR EQUIVALENT
94.9% FESTUCA OVINA, (SHEEP FESCUE)
2.5% ASCLEPIAS TUBEROSA (BUTTERFLY MILKWEED)
2.0% CHAMAECRISTA FASCICULATA, PA ECOTYPE (PARTRIDGE PEA)
0.3% OENOTHERA FRUTICOSA VAR. FRUTICOSA (SUNDROPS)
0.3% SISYRINCHIUM ANGUSTIFOLIUM (NARROWLEAF BLUE EYED GRASS)

EROSION CONTROL SEED (OVER MIX 1 FOR STEEP SLOPES) UNDER 3'
2 LB/ 1000 FT.
70% LOLIUM PERENNE, TETRAPLOID (PERENNIAL RYEGRASS,TETRAPLOID)
30% AVENA SATIVA, (OATS)

POLLINATOR FRIENDLY TURF
4 LB/ 1000 FT.
ERNMX-186
LOW GRASS MIX WITH RED AND WHITE CLOVER

BASIN MIX 2 OUTSIDE ARRAY FULL SUN TRANSITIONAL MOISTURE
1 LB/ 1000 SF.
ERNMX 610
37.0% SCHIZACHYRIUM SCOPARIUM.(LITTLE BLUESTEM.)
36.3% BOUTELOUA CURTIPENDULA, BUTTE (SIDEOATS GRAMA, BUTTE)
4.0% CHAMAECRISTA FASCICULATA, (PARTRIDGE PEA)
4.0% COREOPSIS LANCEOLATA (LANCELEAF COREOPSIS)
4.0% ECHINACEA PURPUREA (PURPLE CONEFLOWER)
3.3% RUDBECKIA HIRTA (BLACKEYED SUSAN)
2.3% HELIOPSIS HELIANTHOIDES, (OXEYE SUNFLOWER)
1.6% PENSTEMON DIGITALIS (TALL WHITE BEARDTONGUE)
1.5% ASCLEPIAS TUBEROSA (BUTTERFLY MILKWEED)
0.8% LIATRIS SPICATA (MARSH BLAZING STAR)
0.7% SENNA HEBECARPA, (WILD SENNA,)
0.6% ZIZIA AUREA (GOLDEN ALEXANDERS)
0.5% ASCLEPIAS INCARNATA, (SWAMP MILKWEED)
0.5% GEUM CANADENSE, (WHITE AVENS,)
0.5% MONARDA FISTULOSA, (WILD BERGAMOT)
0.5% PYCNANTHEMUM TENUIFOLIUM (NARROWLEAF MOUNTAINMINT)
0.4% ASTER LAEVIS, NY ECOTYPE (SMOOTH BLUE ASTER, NY ECOTYPE)
0.4% ASTER NOVAE-ANGLIAE, (NEW ENGLAND ASTER,)
0.3% BAPTISIA AUSTRALIS, SOUTHERN (BLUE FALSE INDIGO, SOUTHERN)
0.3% SISYRINCHIUM ANGUSTIFOLIUM (NARROWLEAF BLUE EYED GRASS)
0.2% OENOTHERA FRUTICOSA VAR. FRUTICOSA(SUNDROPS)
0.2% SOLIDAGO NEMORALIS, (GRAY GOLDENROD)
0.1% ASTER PRENANTHOIDES, (ZIGZAG ASTER)

POLLINATOR MIX 2 OUTSIDE ARRAY FULL SUN UNDER 4'
1 LB/ 1000 FT.
ERNMX-146 OR EQUIVALENT
26.4% LOLIUM PERENNE, TETRAPLOID (PERENNIAL RYEGRASS, TETRAPLOID)
21.0% DACTYLIS GLOMERATA, POTOMAC (ORCHARDGRASS, POTOMAC)
18.9% POA PRATENSIS, 'GINGER' (KENTUCKY BLUEGRASS, 'GINGER' (PASTURE TYPE)
12.0% BROMUS BIEBERSTEINII, 'FLEET' (MEADOW BROME, 'FLEET')
5.7% TRIFOLIUM HYBRIDUM (ALSIKE CLOVER)
5.0% FESTUCA ELATIOR X LOLIUM PERENNE, DUO (FESTULOLIUM, 'DUO')
4.8% TRIFOLIUM PRATENSE, MEDIUM, (RED CLOVER, MEDIUM)
2.0% LOTUS CORNICULATUS, 'LEO' (BIRD'S FOOT TREFOIL, 'LEO')
1.4% CHAMAECRISTA FASCICULATA, (PARTRIDGE PEA,)
1.0% LINUM PERENNE (PERENNIAL BLUE FLAX)
0.9% COREOPSIS LANCEOLATA (LANCELEAF COREOPSIS)
0.5% CHRYSANTHEMUM LEUCANTHEMUM (OXEYE DAISY)
0.4% SOLIDAGO NEMORALIS, (GRAY GOLDENROD)

SHADE PERIMETER POLLINATOR MIX
1 LB/ 1000 FT.
ERNMX-132-1
29.0% PANICUM CLANDESTINUM, TIOGA (DEERTONGUE, TIOGA)
20.0% LOLIUM MULTIFLORUM (ANNUAL RYEGRASS)
15.0% ELYMUS VIRGINICUS, MADISON-NY ECOTYPE (VIRGINIA WILDRYE,
15.0% PANICUM VIRGATUM, 'SHELTER' (SWITCHGRASS, 'SHELTER')
10.0% FESTUCA RUBRA (CREEPING RED FESCUE)
5.0% AGROSTIS PERENNANS, ALBANY PINE (AUTUMN BENTGRASS)
3.0% CAREX VULPINOIDEA, (FOX SEDGE)
3.0% CHAMAECRISTA FASCICULATA, (PARTRIDGE PEA)

TREE PLANTING LEGEND

SYMBOL	SPECIES	QUANTITY	HEIGHT
	BLACK SPRUCE TREE (PICEA MARIANA)	6	4-6'
	GREY BIRCH TREE (BETULA POPULIFOLIA)	5	4-6'
	WITCH HAZEL TREE (HAMAMELIS VIRGINIANA)	5	4-6'
	BOTTLEBRUSH BUCKEYE (AESCULUS PARVIFLORA)	5	4-6'
	WHITE PINE (PINUS STROBUS)	15	4-6'
	MOUNTAIN LAUREL (KALMIA LATIFOLIA)	20	2'
	GREAT LAUREL (RHODODENDRON MAXIMUM)	20	3'

LEGEND:
- POLLINATOR MIX1
- EROSION CONTROL SEED OVER MIX1
- POLLINATOR MIX2
- NESTING FEATURE FOCUS AREA
- POLLINATOR FRIENDLY TURF SERVICE AREA
- SHADE PERIMETER POLLINATOR MIX
- LOW BASIN POLLINATOR MIX

NOTE: PERIMETER HABITAT TREE AND SHRUB PLANTINGS TYPICAL PER POLLINATOR PROTECTION SPECIFICATIONS SEE SCHEMATIC PLANT LISTS AND SEED SPECIFICATIONS..

CASEYLEE BASTIEN RLA
LANDSCAPE ARCHITECT
2/23/2024 DATE

GROUND-MOUNTED PHOTOVOLTAIC SYSTEM

200 HAYNES STREET

IN

STURBRIDGE
MASSACHUSETTS
(WORCESTER COUNTY)

PLANTING PLAN

AUGUST 1, 2023

REVISIONS:

NO.	DATE	DESC.
1	11/15/23	PER PEER REVIEW
2	01/16/24	PER PEER REVIEW
3	02/23/24	PER PEER REVIEW

ISSUED FOR PERMITTING
NOT FOR CONSTRUCTION

PREPARED FOR:
STURBRIDGE PV, LLC
2420 17TH STREET
DENVER, CO 80202

BSC GROUP
349 Main Street - Route 28
West Yarmouth, Massachusetts
02673
508 778 8919

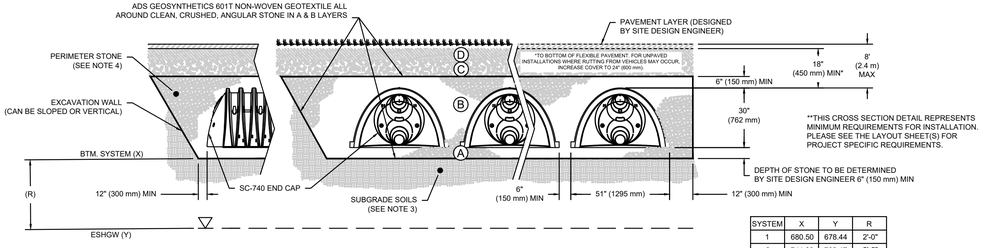
SCALE: 1" = 50'
0 25 50 100 FEET

FILE: PROJECTS–YAR\5074500\C\D\5074500–SP.dwg
DWG.: DWG
JOB. NO: 5–0745.00
SHEET 7 OF 9

ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

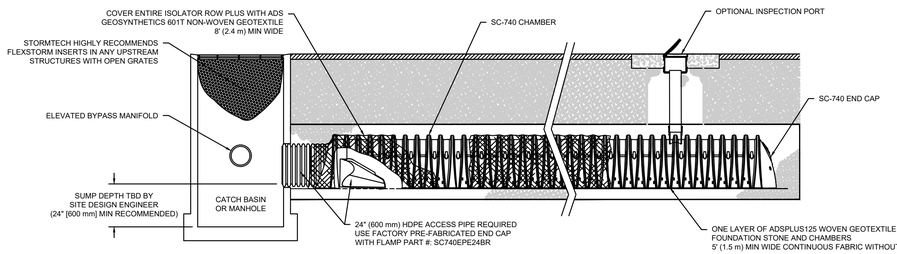
PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



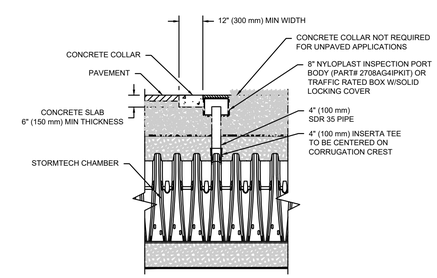
SYSTEM	X	Y	R
1	680.50	678.44	2'-0"
2	711.00	708.47	2'-6"
3	677.25	675.17	2'-1"

NOTES:
1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 LBS/FT/%. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

1 SC-740 CROSS SECTION DETAIL

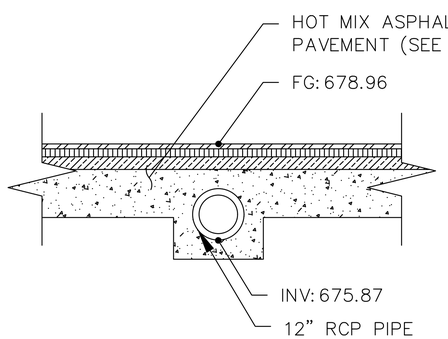


3 SC-740 ISOLATOR ROW PLUS DETAIL



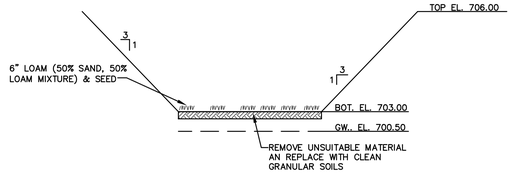
NOTE:
INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION CREST.

4 4" PVC INSPECTION PORT DETAIL (SC SERIES CHAMBER)



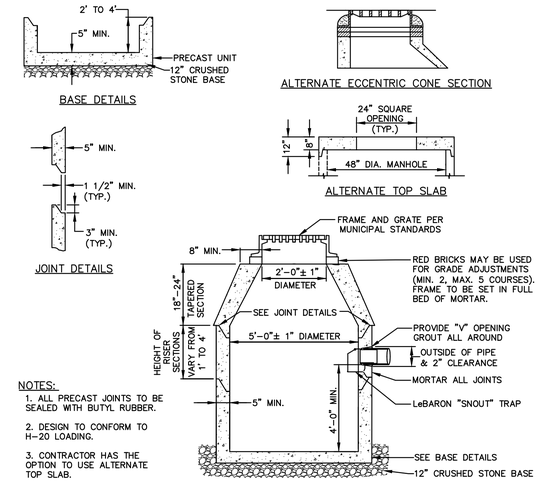
CULVERT
SCALE: NONE

INFILTRATION BASIN #1



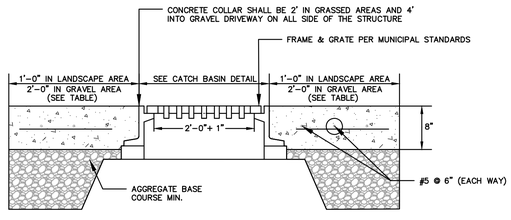
NOTES:
1. LIGHT EARTH MOVING EQUIPMENT IS TO BE USED DURING CONSTRUCTION TO REDUCE COMPACTION OF BASIN BOTTOM.
2. BASIN FLOOR IS TO BE DEEPLY TILLED AFTER FINAL GRADING.
3. PROPER EROSION SEDIMENT CONTROLS SHOULD BE UTILIZED DURING CONSTRUCTION TO PREVENT SEDIMENT AND/OR DEBRIS FROM ENTERING THE BASIN.
4. 75% OF RIP-RAP STONE SHALL BE 70 - 100 lbs.

INFILTRATION BASIN CROSS-SECTION
SCALE: NONE



NOTES:
1. ALL PRECAST JOINTS TO BE SEALED WITH BUTYL RUBBER.
2. DESIGN TO CONFORM TO H-20 LOADING.
3. CONTRACTOR HAS THE OPTION TO USE ALTERNATE TOP SLAB.

PRECAST CONCRETE CATCH BASIN
SCALE: NONE

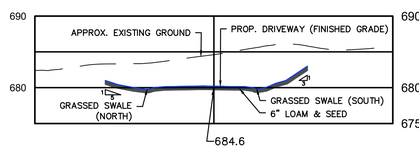


NOTE:
CONCRETE COLLARS TO BE PLACED AT ALL PROPOSED CATCH BASIN INLETS AND ANY OTHER STRUCTURES PLACED IN GRAVEL AREA.

STRC.	NORTH	SOUTH	EAST	WEST
CB-1	2'-0"	2'-0"	1'-0"	2'-0"
CB-2	2'-0"	2'-0"	1'-0"	2'-0"
CB-3	2'-0"	1'-0"	1'-0"	2'-0"
CB-4	1'-0"	2'-0"	2'-0"	1'-0"

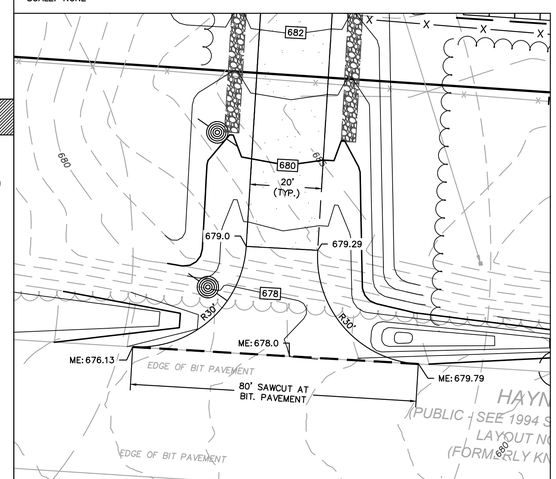
CONCRETE COLLAR
SCALE: NONE

GRASSED SWALES

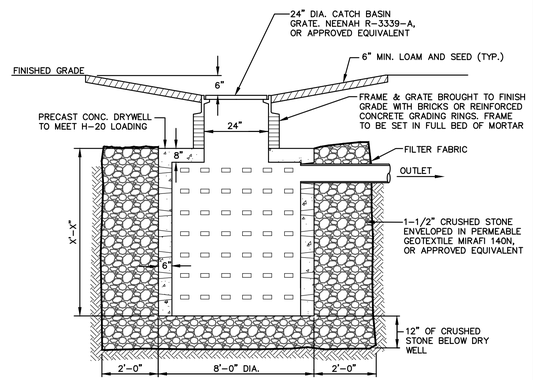


NOTES:
1. UPHILL GRADED SLOPES IN EXCESS OF 3:1 (HOR:VERT.) TO BE STABILIZED WITH JUTE MATTING OR OTHER PROTECTIVE FABRIC IN ADDITION TO LOAM AND SEED TO PREVENT EROSION OF NEWLY PLACED OR EXCAVATED MATERIAL. MAX SLOPE OF 2:1
2. SWALE CHANNEL AND SIDE SLOPES TO BE STABLIZED WITH JUTE MATTING IN ADDITION TO LOAM AND SEED TO PREVENT EROSION.
3. GRASS MIX SHOULD CONSIST OF SPECIES THAT PRODUCE FINE, UNIFORM AND DENSE COVER THAT CAN WITHSTAND PREVAILING MOISTURE CONDITIONS. (CONSIDER WETLAND ADAPTED SPECIES FOR SWALES IN AREAS OF POORLY DRAINED SOILS) SPECIES TO BE SELECTED BY WETLAND SPECIALIST.

GRASSED SWALE (SECTION C-C)
SCALE: VERTICAL: 1"=10' HORIZONTAL: 1"=20'



DRIVEWAY APRON
SCALE: NONE



DRY WELL WITH GRATE
SCALE: NONE

06/08

02/23/2024
BRIAN G. YERGATIAN DATE
PROFESSIONAL ENGINEER

GROUND-MOUNTED PHOTOVOLTAIC SYSTEM

200 HAYNES STREET
IN
STURBRIDGE
MASSACHUSETTS
(WORCESTER COUNTY)

DETAIL SHEET

AUGUST 1, 2023

REVISIONS:

NO.	DATE	DESC.
1	11/15/23	PER PEER REVIEW
2	01/16/24	PER PEER REVIEW
3	02/23/24	PER PEER REVIEW

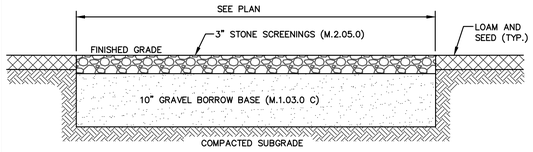
ISSUED FOR PERMITTING
NOT FOR CONSTRUCTION

PREPARED FOR:
STURBRIDGE PV, LLC
2420 17TH STREET
DENVER, CO 80202

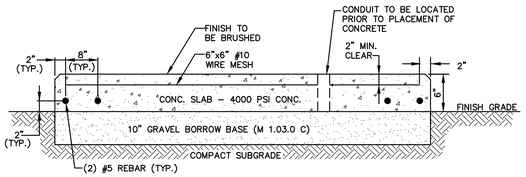
BSC GROUP
349 Main Street - Route 28
West Yarmouth, Massachusetts
02673
508 778 8919

SCALE: NOT TO SCALE

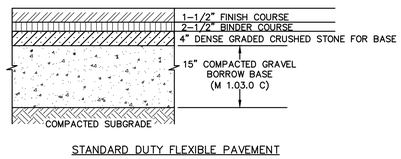
FILE: PROJECTS-YAR\5074500\C\D\5074500-SP.dwg
DWG.: DWG
JOB. NO: 5-0745.00
SHEET 8 OF 9



GRAVEL DRIVEWAY
SCALE: NONE



TRANSFORMER PAD
SCALE: NONE

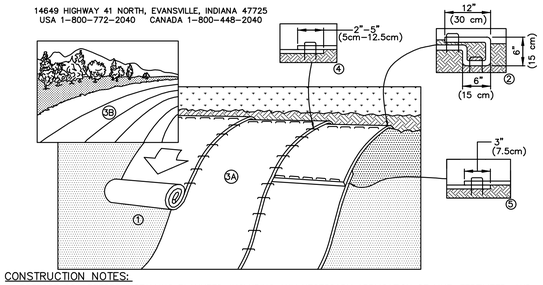


STANDARD DUTY FLEXIBLE PAVEMENT

NOTE:
PAVEMENT SECTIONS ARE SUBJECT TO CHANGE AND MAY BE BASED ON THE RESULTS OF GEOTECHNICAL INVESTIGATIONS

HOT MIX ASPHALT PAVEMENT SECTIONS
SCALE: NONE

14649 HIGHWAY 41 NORTH, EVANSVILLE, INDIANA 47725
USA 1-800-772-2040 CANADA 1-800-448-2040



CONSTRUCTION NOTES:

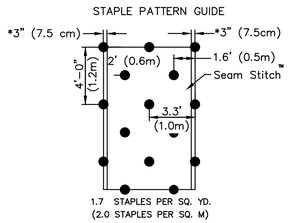
1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. HYDROSEED SIDE SLOPES BEFORE INSTALLATION OF BLANKETS.

2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.

3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM , STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATRN.

4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5cm-12.5cm) OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.

5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5cm) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30cm) APART ACROSS ENTIRE BLANKET WIDTH.



BLANKETS WITH THE OPTIONAL NORTH AMERICAN GREEN DOT SYSTEM PLACE STAPLES/STAKES THROUGH EACH OF THE GREEN COLORED DOTS.

NOTES:
*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15CM) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

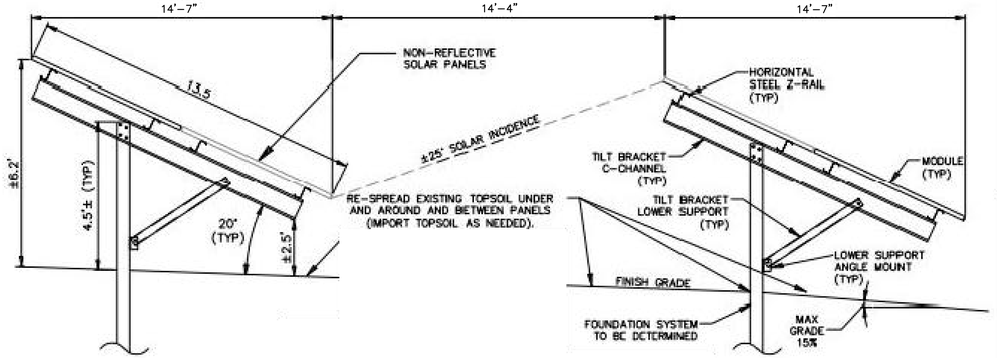
CRITICAL POINTS
A. OVERLAPS AND SEAMS
B. PROJECTED WATER LINE
C. CHANNEL BOTTOM/SIDE SLOPE VERTICES

* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

** IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENTHS IN EXCESS OF 6" (15 CM) MAY BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS.

*LOCATION OF SEAM STITCH WILL VARY DEPENDING ON NORTH AMERICAN GREEN PRODUCT TYPE: -APPROX. 5" SEAM OVERLAP FOR BIONET EROSION CONTROL BLANKETS

SLOPE STABILIZATION INSTALLATION
SCALE: NONE
\DETAILS\LD\EROSION CONTROL\SLOPE STABILIZATION INSTALLATION.DWG 06/08

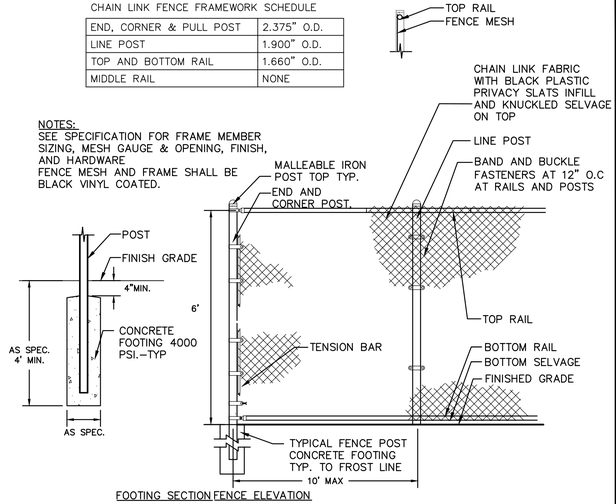


SECTION VIEW - TYPICAL PANEL/RACK ASSEMBLY
SCALE: NONE

CHAIN LINK FENCE FRAMEWORK SCHEDULE

END, CORNER & PULL POST	2.375" O.D.
LINE POST	1.900" O.D.
TOP AND BOTTOM RAIL	1.660" O.D.
MIDDLE RAIL	NONE

NOTES:
SEE SPECIFICATION FOR FRAME MEMBER SIZING, MESH GAUGE & OPENING, FINISH, AND HARDWARE.
FENCE MESH AND FRAME SHALL BE BLACK VINYL COATED.



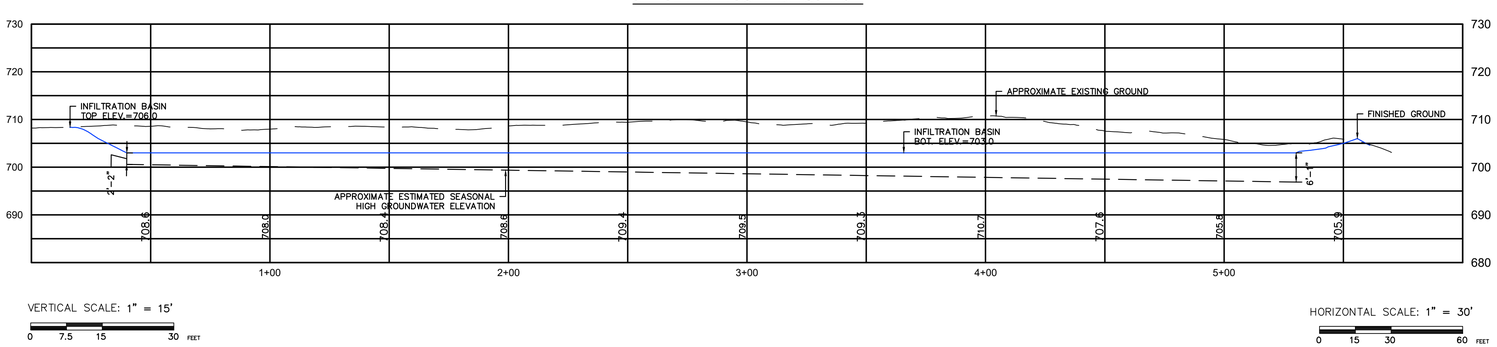
CHAIN LINK FENCE
SCALE: NONE

CHAIN LINK GATE FRAMEWORK SCHEDULE

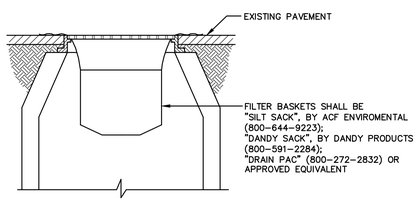
GATE LEAF SINGLE WIDTH	6' OR LESS	>6' - <12'
GATE POST	2.875" O.D.	4" O.D.
GATE FRAME (4 SIDES)	2" SQ	2" SQ
INTERIOR UPRIGHT	NONE	1 1/2" SQ

CHAIN LINK FENCE GATE
SCALE: NONE

INFILTRATION BASIN 01



INFILTRATION BASIN (SECTION B-B)
SCALE: NONE



NOTE:
FILTER BASKETS TO BE PLACED IN ALL CATCH BASINS IN THE VICINITY OF NEW CONSTRUCTION. CATCH BASINS ARE TO BE PROTECTED AS SHOWN, WITH MINIMUM WEEKLY MAINTENANCE, OR AS REQUIRED AND REPLACED IF NECESSARY.

SEDIMENT FILTER INLET PROTECTION
SCALE: NONE

COMMONWEALTH OF MASSACHUSETTS
BRIAN G. YERGATIAN
CIVIL
NO. 46206
REGISTERED PROFESSIONAL ENGINEER

02/23/2024
BRIAN G. YERGATIAN DATE
PROFESSIONAL ENGINEER

GROUND-MOUNTED PHOTOVOLTAIC SYSTEM

200 HAYNES STREET

IN

STURBRIDGE
MASSACHUSETTS
(WORCESTER COUNTY)

DETAIL SHEET II

AUGUST 1, 2023

REVISIONS:

NO.	DATE	DESC.
1	11/15/23	PER PEER REVIEW
2	01/16/24	PER PEER REVIEW
3	02/23/24	PER PEER REVIEW

ISSUED FOR PERMITTING
NOT FOR CONSTRUCTION

PREPARED FOR:
STURBRIDGE PV, LLC
2420 17TH STREET
DENVER, CO 80202

BSC GROUP
349 Main Street - Route 28
West Yarmouth, Massachusetts
02673
508 778 8919

SCALE: NOT TO SCALE

FILE: PROJECTS-YAR\5074500\C\D\5074500-SP.dwg
DWG.: DWG
JOB. NO: 5-0745.00
SHEET 9 OF 9