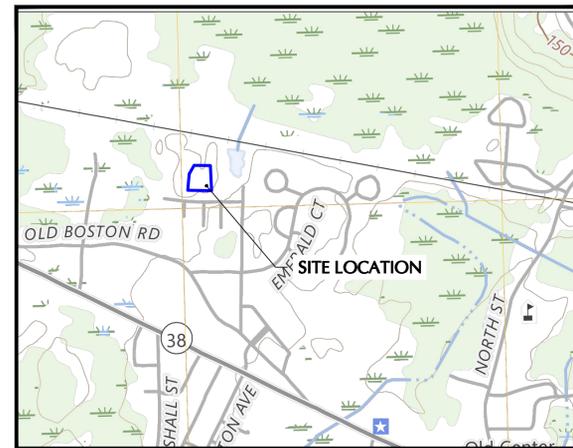


HILLMAN ENERGY CENTER BATTERY ENERGY STORAGE SYSTEM 30% DESIGN DRAWINGS

73 & 75 HILLMAN STREET
 TOWN OF TEWKSBURY, MIDDLESEX COUNTY, MASSACHUSETTS

CIVIL DRAWING INDEX			
SHEET NUMBER	DRAWING TITLE	DATE	LAST REVISED
CS001	SITE COVER SHEET	03-26-2025	11-05-2025
CS002	MASTER LEGEND AND NOTES	03-26-2025	
VL101	TOPOGRAPHIC AND BOUNDARY SURVEY	02-28-2025	
CE101	SITE PREP & EROSION CONTROL PLAN	03-26-2025	11-05-2025
CS101	SITE PLAN	03-26-2025	11-05-2025
CG101	GRADING, DRAINAGE, & UTILITY PLAN	03-26-2025	11-05-2025
CS501	SITE DETAILS I	03-26-2025	
CS502	SITE DETAILS II	03-26-2025	
CS503	SITE DETAILS III	03-26-2025	11-05-2025
CS504	SITE DETAILS IV	03-26-2025	11-05-2025
LP101	LANDSCAPING PLANTING PLAN	03-26-2025	11-05-2025
LP501	PLANTING NOTES & DETAILS	03-26-2025	
LL101	LIGHTING PLAN	03-26-2025	11-05-2025
LL501	LIGHTING NOTES & DETAILS	03-26-2025	



MAP REFERENCE: USGS 2024 WILMINGTON QUADRANGLE
 MASSACHUSETTS (7.5 MINUTE SERIES)

LOCATION MAP

SCALE: 1"=1000'

RELEASE DATES	
DATE	ISSUED FOR
03/26/2025	30% DESIGN DRAWINGS
11/05/2025	UPDATE 30% DESIGN DRAWINGS

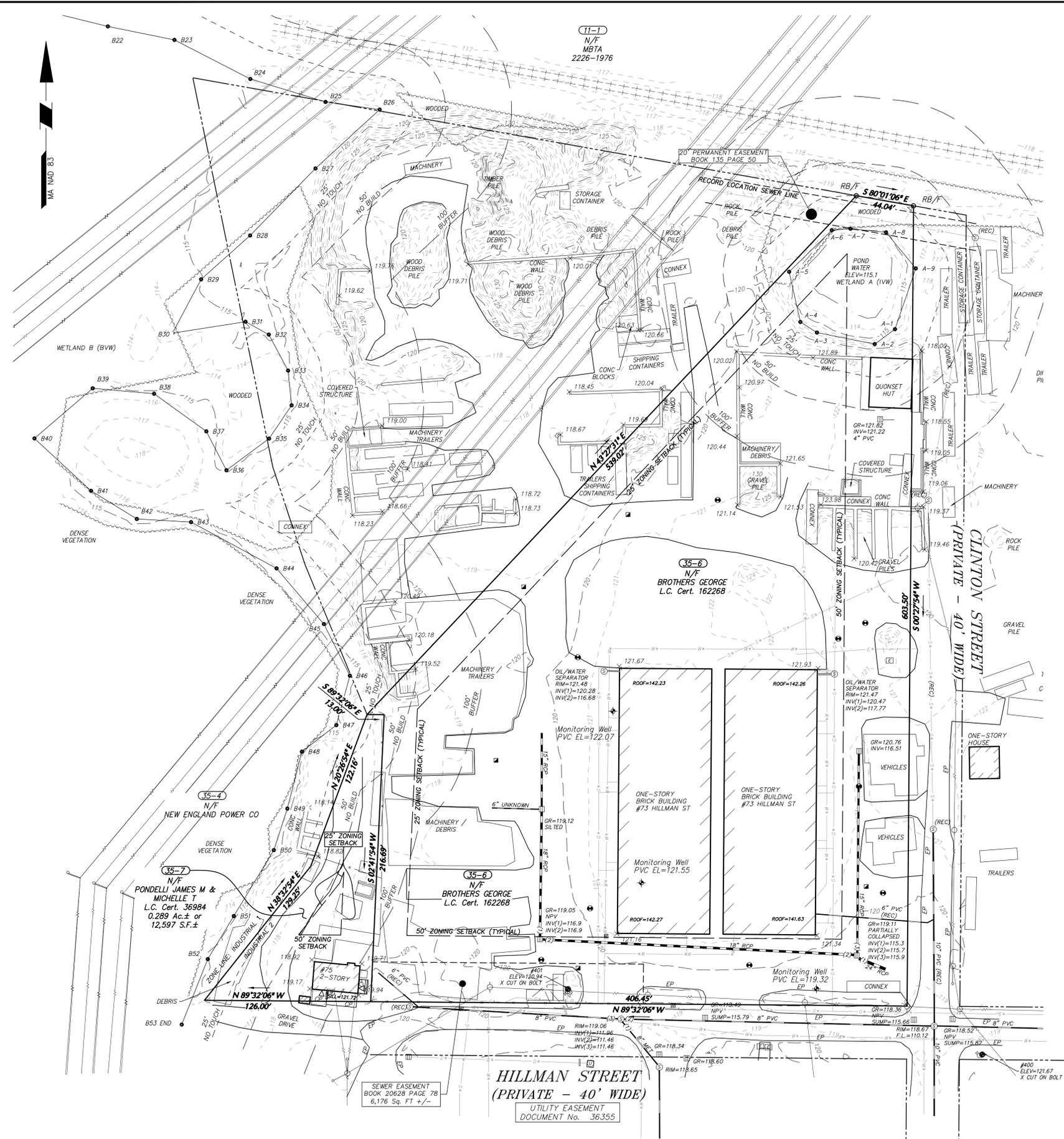
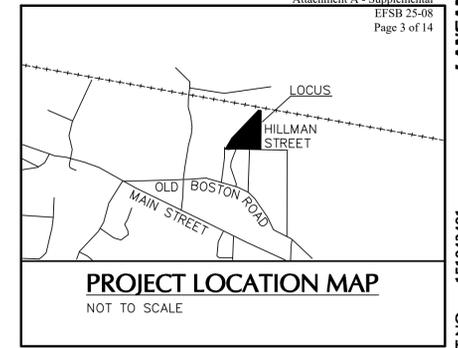
HILLMAN ENERGY CENTER, LLC
 C/O: TYLER RYNNE
 310 4TH STREET NE, 3RD FLOOR
 CHARLOTTESVILLE, VIRGINIA 22902
 PHONE: 434-217-5575
 EMAIL:
 TRYNNNE@EASTPOINTENERGY.COM

WETLANDS & NATURAL RESOURCES
EPSILON ASSOCIATES, INC.
 C/O: MARC BERGERON
 3 MILL & MAIN PLACE, SUITE 250
 MAYNARD, MA 01754
 PHONE: 978-461-6253
 EMAIL:
 MBERGERON@EPSILONASSOCIATES.COM

CIVIL ENGINEER, LAND SURVEYOR, ENVIRONMENTAL
SERVICES & LANDSCAPE ARCHITECT
LANGAN ENGINEERING & ENVIRONMENTAL SERVICES, LLC
 C/O: HILARY HOLMES
 100 CAMBRIDGE STREET SUITE 1310
 BOSTON, MA 02116
 PHONE: 617-824-9126

NOT FOR CONSTRUCTION

LANGAN



NOTES

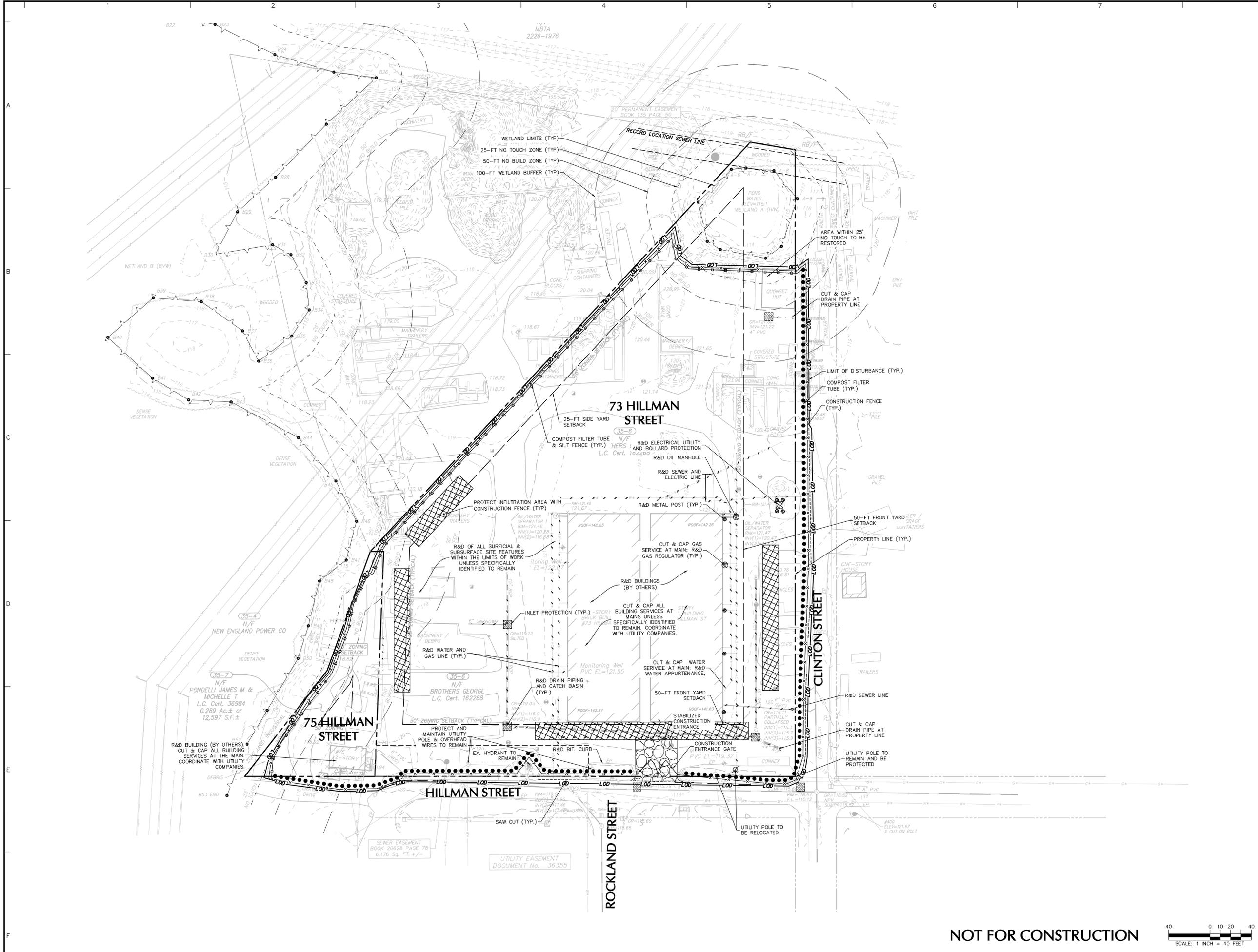
- THIS SURVEY IS BASED UPON EXISTING PHYSICAL CONDITIONS FOUND AT THE SUBJECT SITE, DEED INFORMATION AND PLANS OF RECORD.
- THE MERIDIAN OF THIS SURVEY IS REFERENCED TO MASSACHUSETTS STATE PLANE COORDINATE SYSTEM NAD 83 (EPOCH 2001). POSITION WAS DETERMINED BY GLOBAL NAVIGATION SATELLITE SYSTEMS (GNSS) AS PROVIDED BY HXGN SMARTNET CONTINUOUSLY OPERATED REFERENCE STATIONS (CORS).
- ELEVATIONS SHOWN ARE REFERENCED TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) (GEOID 12B) AS DETERMINED BY GNSS
- PLANIMETRIC AND TOPOGRAPHIC INFORMATION SHOWN HEREON HAS BEEN OBTAINED FROM GROUND SURVEYS BY LANGAN ENVIRONMENTAL AND ENGINEERING SERVICES. FIELD WORK COMPLETED DURING THE MONTH OF FEBRUARY 2025.
- AS PER THE NATIONAL FLOOD INSURANCE PROGRAM FIRM MAP ENTITLED "MIDDLESEX COUNTY, MASSACHUSETTS PANEL 276 OF 654, MAP NUMBER 250218, EFFECTIVE DATE JULY 06, 2016" THE PROJECT AREA IS IN ZONE X (UNSHADED).
- UNLESS SPECIFICALLY NOTED HEREON, STORM AND SANITARY SEWER INFORMATION (INCLUDING PIPE INVERT, PIPE MATERIAL, AND PIPE SIZE) WAS OBSERVED AND MEASURED AT FIELD LOCATED STRUCTURES (MANHOLES/CATCH BASINS, ETC.). CONDITIONS CAN VARY FROM THOSE ENCOUNTERED AT THE TIMES WHEN AND LOCATIONS WHERE DATA IS OBTAINED. DESPITE MEETING THE REQUIRED STANDARD OF CARE, THE SURVEYOR CANNOT, AND DOES NOT WARRANT THAT PIPE MATERIAL AND/OR PIPE SIZE THROUGHOUT THE PIPE RUN ARE THE SAME AS THOSE OBSERVED AT EACH STRUCTURE, OR THAT THE PIPE RUN IS STRAIGHT BETWEEN THE LOCATED STRUCTURES.
- ADDITIONAL UTILITY (WATER, GAS, ELECTRIC ETC.) DATA IS SHOWN FROM FIELD LOCATED SURFACE MARKINGS (BY OTHERS), EXISTING STRUCTURES, AND/OR FROM EXISTING DRAWINGS.
- UNLESS SPECIFICALLY NOTED HEREON, THE SURVEYOR HAS NOT EXCAVATED TO PHYSICALLY LOCATE THE UNDERGROUND UTILITIES. THE SURVEYOR MAKES NO GUARANTEES THAT THE SHOWN UNDERGROUND UTILITIES ARE EITHER IN SERVICE, ABANDONED OR SUITABLE FOR USE, NOR ARE IN THE EXACT LOCATION OR CONFIGURATION INDICATED HEREON.
- ALL BUILDINGS AND STRUCTURES WERE LOCATED AND MEASURED AT GROUND LEVEL. THE SURVEYOR MAKES NO DETERMINATIONS OR GUARANTEES AS TO THE ABSENCE, EXISTENCE OR LOCATION OF UNDERGROUND STRUCTURES, FOUNDATIONS, FOOTINGS, PROJECTIONS, WALLS, TANKS, SEPTIC SYSTEMS, ETC. NO TEST PITS, EXCAVATIONS OR GROUND PENETRATING RADAR WERE PERFORMED AS PART OF THIS SURVEY.
- PRIOR TO ANY DESIGN OR CONSTRUCTION, THE PROPER UTILITY AGENCIES MUST BE CONTACTED FOR VERIFICATION OF UTILITY TYPE AND FOR FIELD LOCATIONS.
- THIS SURVEY IS NOT VALID WITHOUT THE EMBOSSED OR INKED SEAL OF THE PROFESSIONAL.

LEGEND (NOT SHOWN TO SCALE)

●	AIR CONDITIONING UNIT	⊙	BORING HOLE
⊙	BOLLARD	⊙	TEST PIT
⊙	COLUMN	EG	EDGE OF GRAVEL
⊙	DOOR	EW	EDGE OF WALK
⊙	DOUBLE DOOR	DW	DETECTABLE WARNING
⊙	FLAG POLE	BC	BITUMINOUS CURB
⊙	MONITORING WELL	CC	CONCRETE CURB
⊙	SIGN	GC	GRANITE CURB
⊙	TREE	SG	SLOPED GRANITE CURB
⊙	WETLAND FLAG		METAL GUARD RAIL
⊙	CATCH BASIN		WOOD GUARD RAIL
⊙	CLEANOUT		STOCKADE FENCE
⊙	ELECTRIC BOX		CHAINLINK FENCE
⊙	ELECTRIC METER		IRON FENCE
⊙	FIRE HYDRANT		TREE LINE
⊙	FLARED END SECTION		OVERHEAD WIRE
⊙	COMMUNICATION BOX		WETLAND LINE
⊙	GAS METER		EASEMENT LINE
⊙	GAS VALVE		PROPERTY LINE
⊙	GUY POLE		RIGHT-OF-WAY LINE
⊙	HAND HOLE		CONTOUR LINE
⊙	MANHOLE (TYPE AS LABELED)		SANITARY FORCE MAIN
⊙	POWER POLE		DRAINAGE MARK OUT LINE
⊙	ROOF DRAIN		ELECTRIC MARK OUT LINE
⊙	STANDPIPE		COMMUNICATION MARK OUT LINE
⊙	WATER VALVE		GAS MARK OUT LINE
⊙	SPOT ELEVATION		SANITARY SEWER MARK OUT LINE
⊙	BITUMINOUS		WATER MARK OUT LINE
⊙	CONCRETE		STEAM MARK OUT LINE
⊙	CONCRETE PAD		UNKNOWN MARK OUT LINE
⊙	LANDSCAPED AREA		REFERENCE UTILITY LINE (TYPE AS NOTED) - PLOTTED FROM EXISTING MAPPING
⊙	BUILDING OVERHANG		
⊙	BOTTOM OF WALL		
⊙	EDGE OF PAVEMENT		

Date	Description	No.
REVISIONS		
IAN C. WISURI, PLS No. 47403 DATE SIGNED		
LANGAN		
Langan Engineering and Environmental Services, Inc. 100 Cambridge Street, Suite 1310 Boston, MA 02114 T: 617.824.9100 F: 617.824.9101 www.langan.com		
Project		
BESS ENERGY-EPSILON TEWKSBURY		
73 & 75 HILLMAN STREET TEWKSBURY, 01876		
MIDDLESEX COUNTY MASSACHUSETTS		
Prepared for		
EPSILON ASSOCIATES, INC.		
3 MILL & MAIN PLACE, SUITE 250 MAYNARD, MASSACHUSETTS, 01754		
Record Owner		
ASSESSORS MAP 35 LOT 6 N/F		
BROTHERS GEORGE		
L.C. Cert. 162268		
ASSESSORS MAP 35 LOT 6 N/F		
PONDELLI JAMES M & MICHELLE T		
L.C. Cert. 162268		
Drawing Title		
TOPOGRAPHIC AND BOUNDARY SURVEY		
Project No.	Drawing No.	
151043401	VL101	
Date	FEBRUARY 28, 2025	
Drawn By	JIC	
Checked By	ICW	
Sheet 1 of 2		





Date	Description	No.
11/05/2025	UPDATE 30% DESIGN DRAWINGS	1

REVISIONS

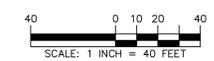
LANGAN
 Langan Engineering and
 Environmental Services, LLC.
 100 Cambridge Street, Suite 1310
 Boston, MA 02114
 T: 617.824.9100 F: 617.824.9101 www.langan.com

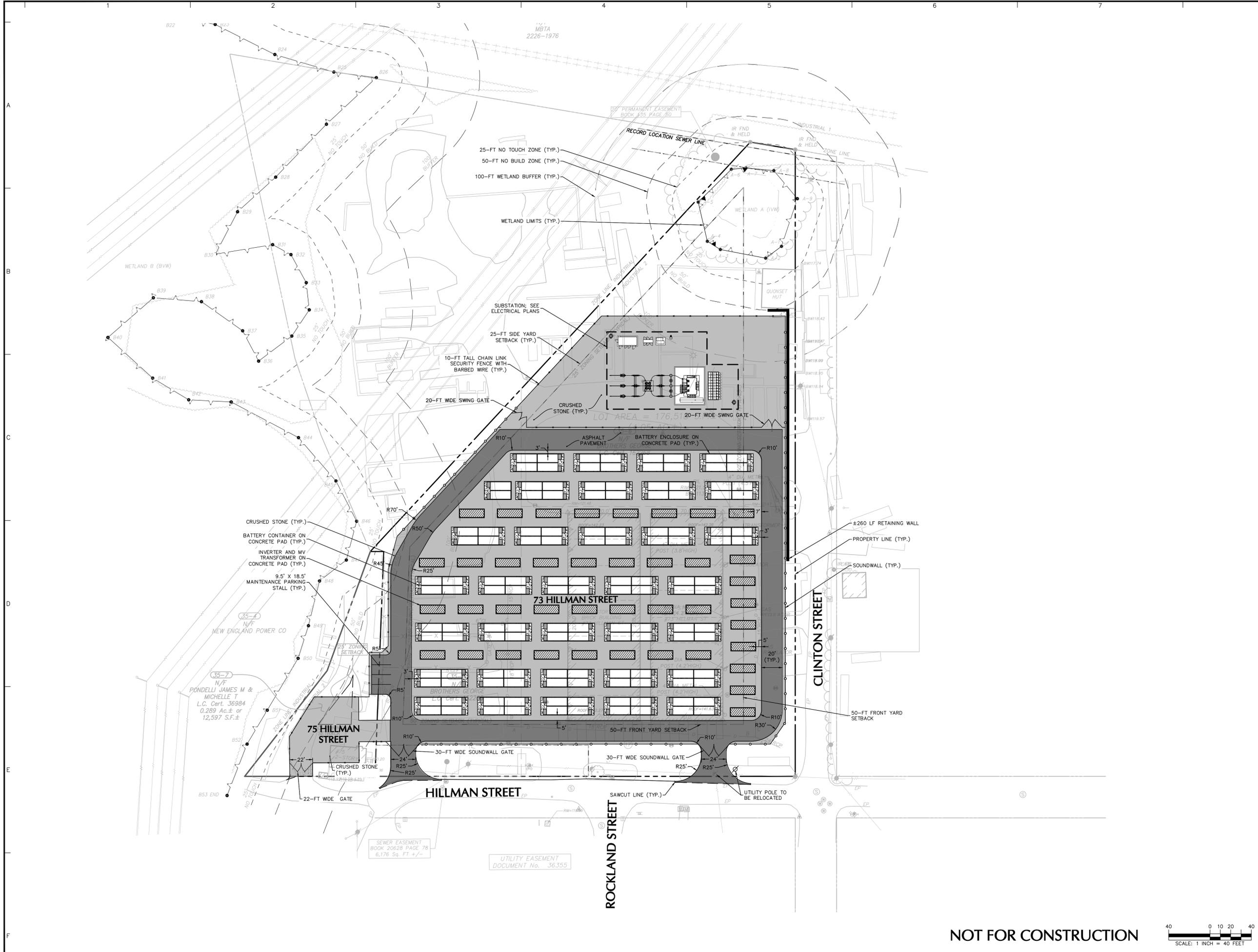
Project **HILLMAN ENERGY CENTER BATTERY ENERGY STORAGE SYSTEM**
 TEWKSBURY
 MIDDLESEX COUNTY MASSACHUSETTS

Drawing Title
SITE PREP & EROSION CONTROL PLAN

Project No. 151043401	Drawing No. CE101
Date 03/26/2025	
Drawn By JED/MPG	
Checked By HH	

NOT FOR CONSTRUCTION





Date	Description	No.
11/05/2025	UPDATE 30% DESIGN DRAWINGS	1

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Environmental Services, LLC.
100 Cambridge Street, Suite 1310
Boston, MA 02114
T: 617.824.9100 F: 617.824.9101 www.langan.com

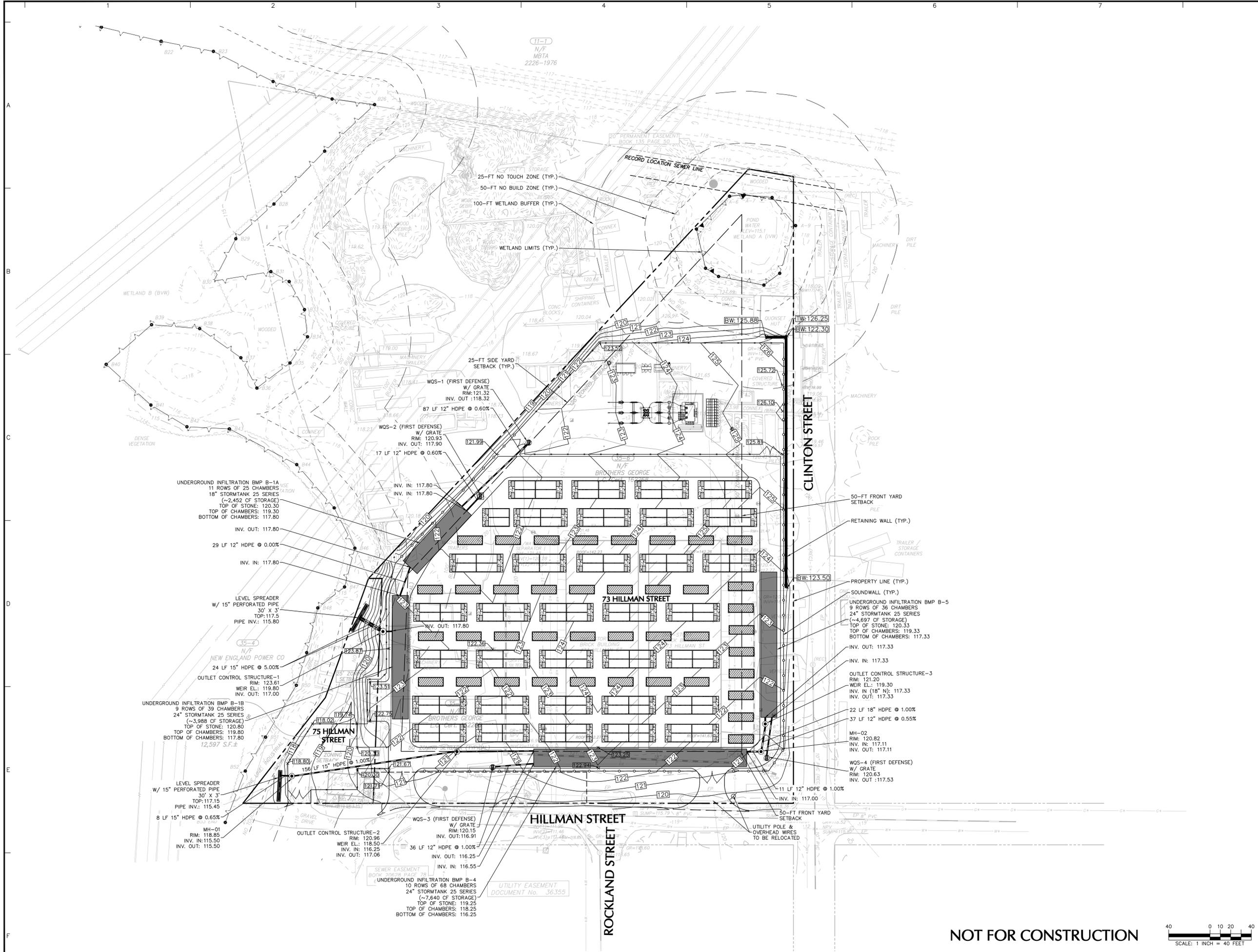
Project **HILLMAN ENERGY
CENTER BATTERY
ENERGY STORAGE
SYSTEM**
TEWKSBURY
MIDDLESEX COUNTY MASSACHUSETTS

Drawing Title
SITE PLAN

Project No. 151043401	Drawing No. CS101
Date 03/26/2025	
Drawn By TS	
Checked By HH	

NOT FOR CONSTRUCTION





Date	Description	No.
11/05/2025	UPDATE 30% DESIGN DRAWINGS	1

REVISIONS

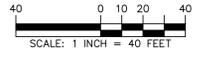
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 Langan Engineering and
 Environmental Services, LLC.
 100 Cambridge Street, Suite 1310
 Boston, MA 02114
 T: 617.824.9100 F: 617.824.9101 www.langan.com

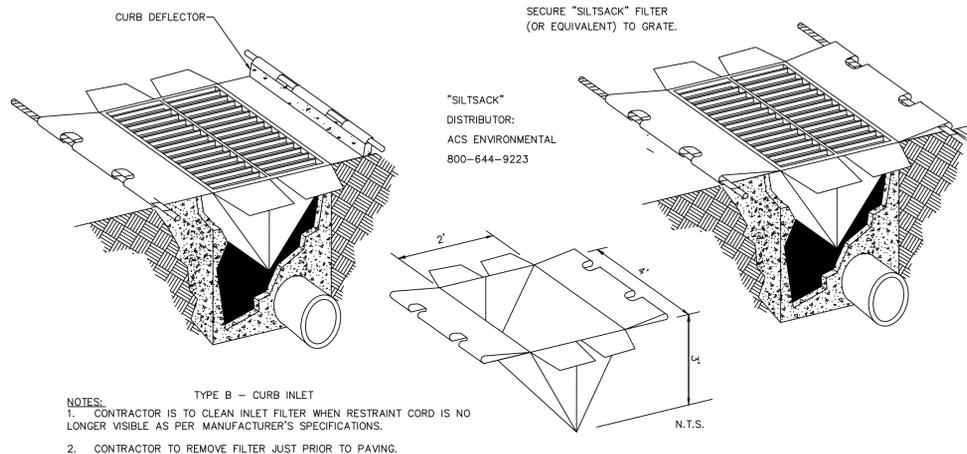
Project **HILLMAN ENERGY
 CENTER BATTERY
 ENERGY STORAGE
 SYSTEM**
 TEWKSBURY
 MIDDLESEX COUNTY MASSACHUSETTS

Drawing Title
**GRADING,
 DRAINAGE &
 UTILITY PLAN**

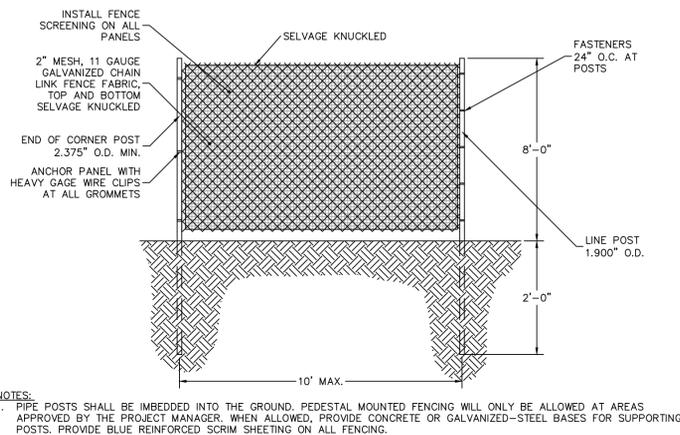
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Drawn By	TS		
Checked By	HH		

NOT FOR CONSTRUCTION

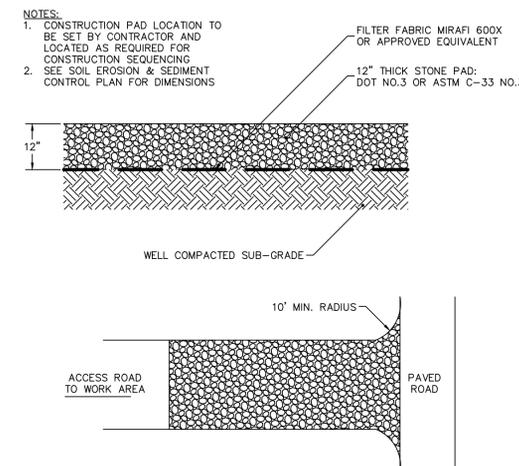




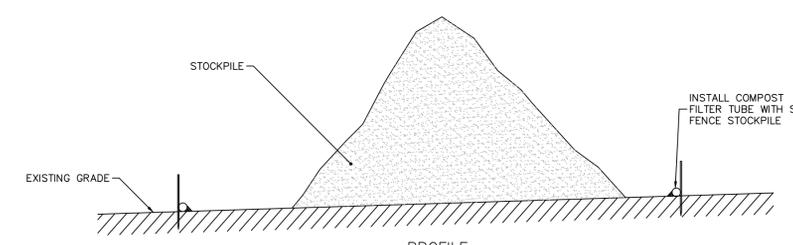
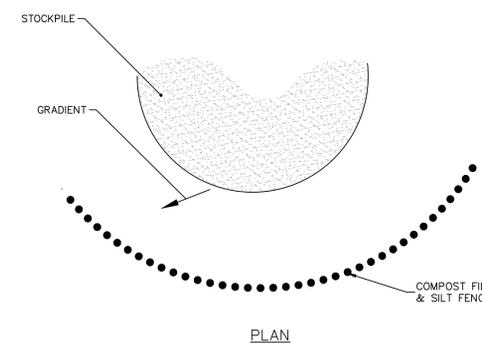
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N.T.S.



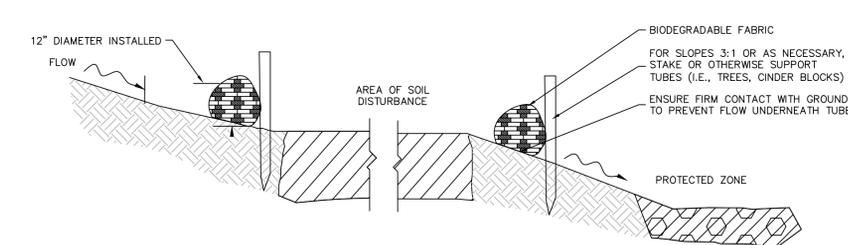
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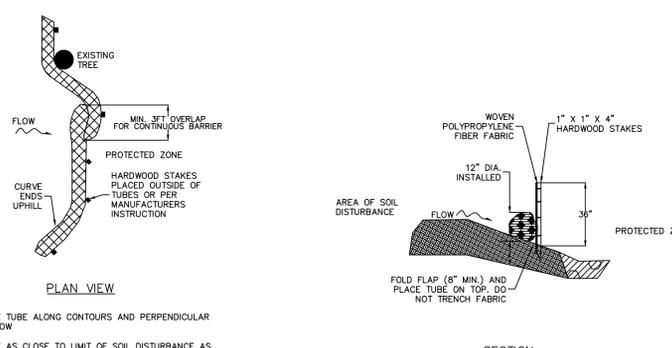
3 CONSTRUCTION ENTRANCE
N.T.S.



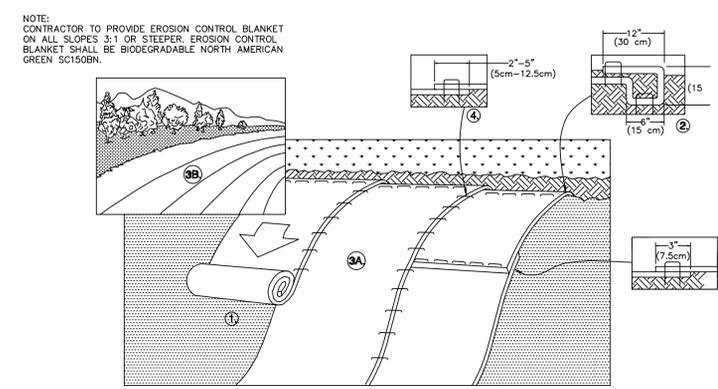
4 TEMPORARY STOCKPILE
N.T.S.



5 COMPOST FILTER TUBE
N.T.S.



6 COMPOST FILTER TUBE & SILT FENCE
N.T.S.



7 EROSION CONTROL BLANKETS (SLOPE STABILIZATION SLOPES 3H:1V AND STEEPER)
N.T.S.

- PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP'S), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
NOTE: WHEN USING CELL-0-SEED DO NOT SEED PREPARED AREA. CELL-0-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
- BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP'S IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30CM) OF RECP'S EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP'S WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF RECP'S BACK OVER SEED AND COMPACTED SOIL. SECURE RECP'S OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE RECP'S.
- ROLL THE RECP'S (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. RECP'S WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP'S MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- THE EDGES OF PARALLEL RECP'S MUST BE STAPLED WITH APPROXIMATELY 2" - 5" (5 CM - 12.5 CM) OVERLAP DEPENDING ON RECP'S TYPE.
- CONSECUTIVE RECP'S SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE RECP'S WIDTH.
NOTE:
*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE RECP'S.

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Date	Description	No.
REVISIONS		

LANGAN
Langan Engineering and
Environmental Services, LLC.
100 Cambridge Street, Suite 1310
Boston, MA 02114
T: 617.824.9100 F: 617.824.9101 www.langan.com

Project **HILLMAN ENERGY CENTER BATTERY ENERGY STORAGE SYSTEM**
TEWKSBURY
MIDDLESEX COUNTY MASSACHUSETTS

Drawing Title
SITE DETAILS I

Project No. 151043401	Drawing No. CS501
Date 03/26/2025	
Drawn By JED/MPG	
Checked By HH	