

# SITE DEVELOPMENT PLANS FOR FEARING HILL ROAD SOLAR PROJECT

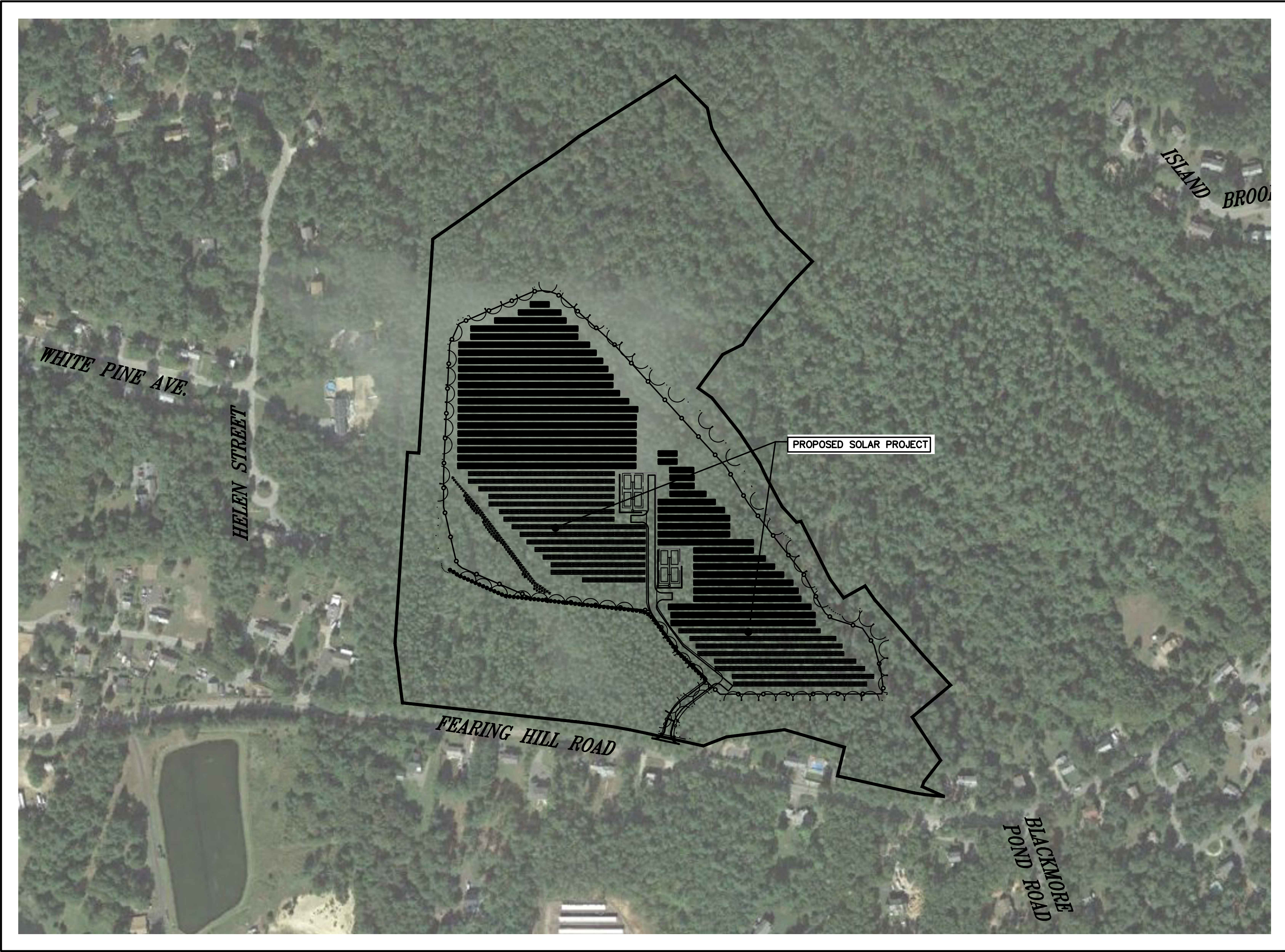
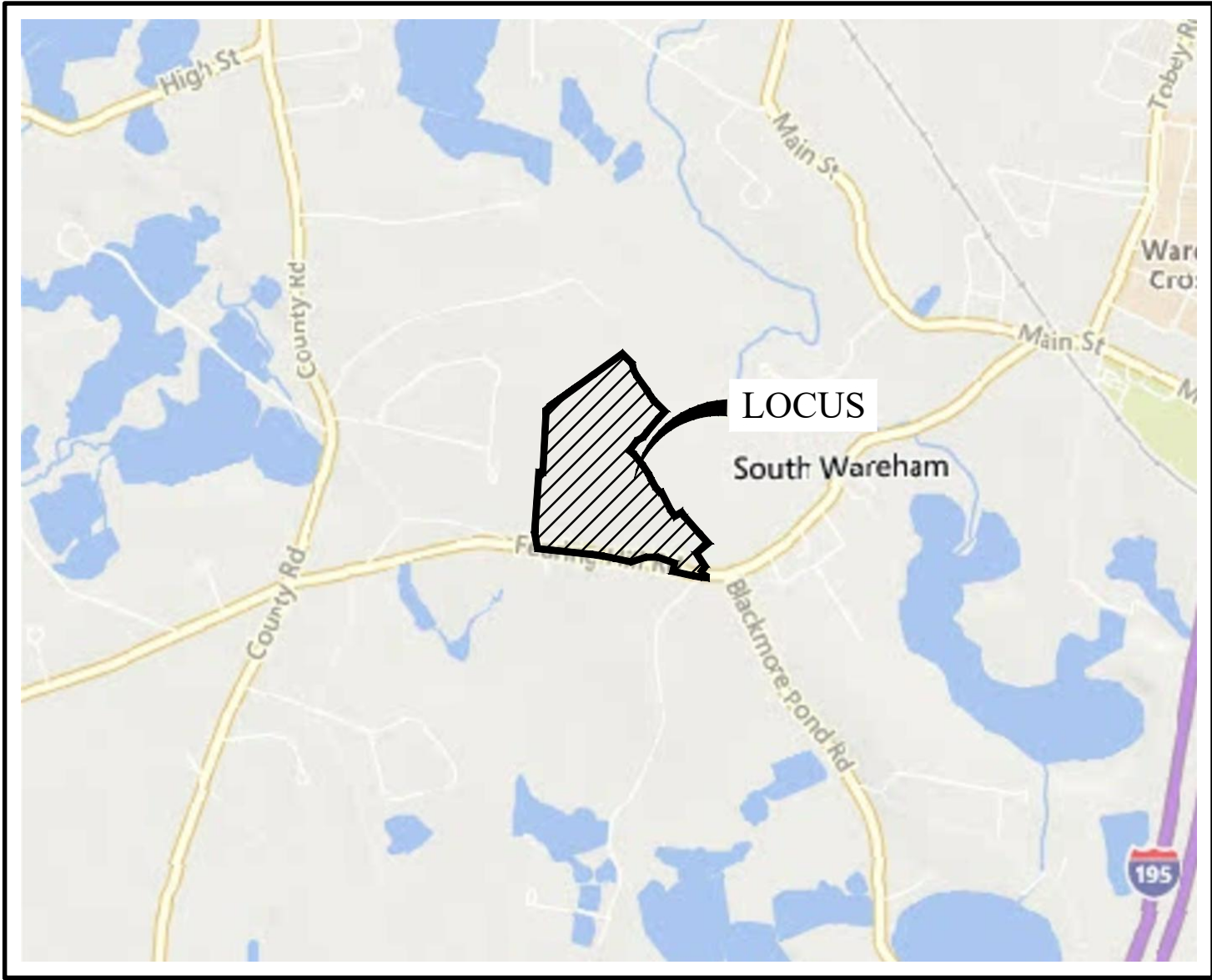
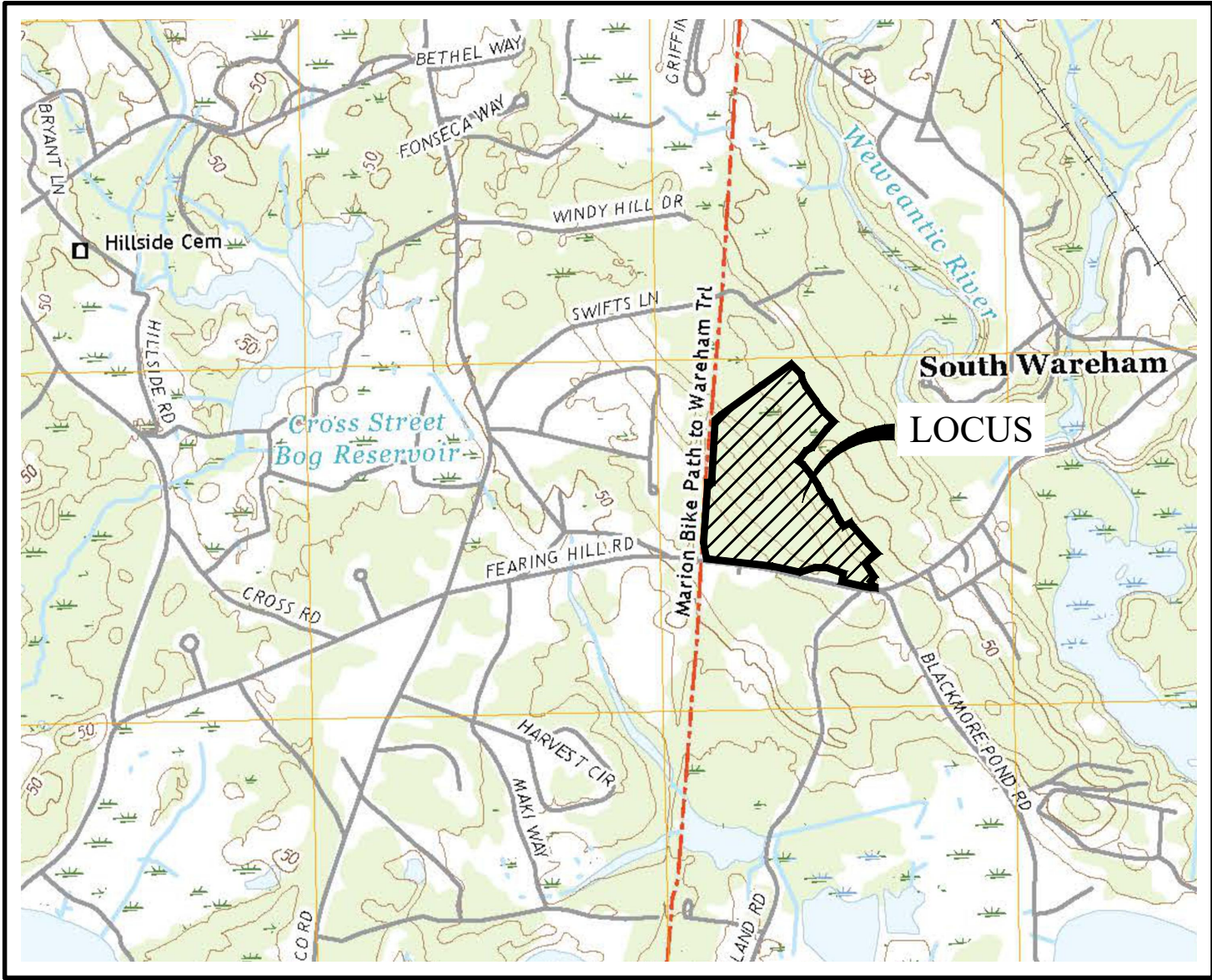
LOCATED AT  
91 AND 101 FEARING HILL ROAD  
WAREHAM, MASSACHUSETTS 02578

DATE: MAY 17, 2021

REVISED: SEPTEMBER 9, 2021 PER TOWN REVIEW COMMENTS (SHEET 3 ONLY)

REVISED: JUNE 14, 2022 PER TOWN REVIEW COMMENTS AND HYDROGEOLOGICAL REPORT

REVISED: JULY 26, 2022 PER ADDITIONAL HYDROGEOLOGICAL COMMENTS AND TOWN ENGINEER REVIEW LETTER



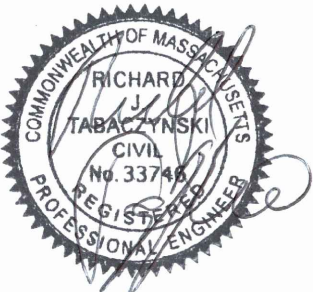
OVERALL LOCATION PLAN  
SCALE: 1" = 200'

INDEX OF PLANS		
SHEET NO.	TITLE	SCALE
1	COVER SHEET	1" = 200'
2	OVERALL EXISTING CONDITIONS PLAN	1" = 100'
3	OVERALL SITE DEVELOPMENT PLAN	1" = 120'
4	SITE DEVELOPMENT PLAN	1" = 40'
5	SITE DEVELOPMENT PLAN	1" = 40'
6	SITE DEVELOPMENT PLAN	1" = 40'
7	DETAIL PLAN	N.T.S.
8	DETAIL PLAN	N.T.S.

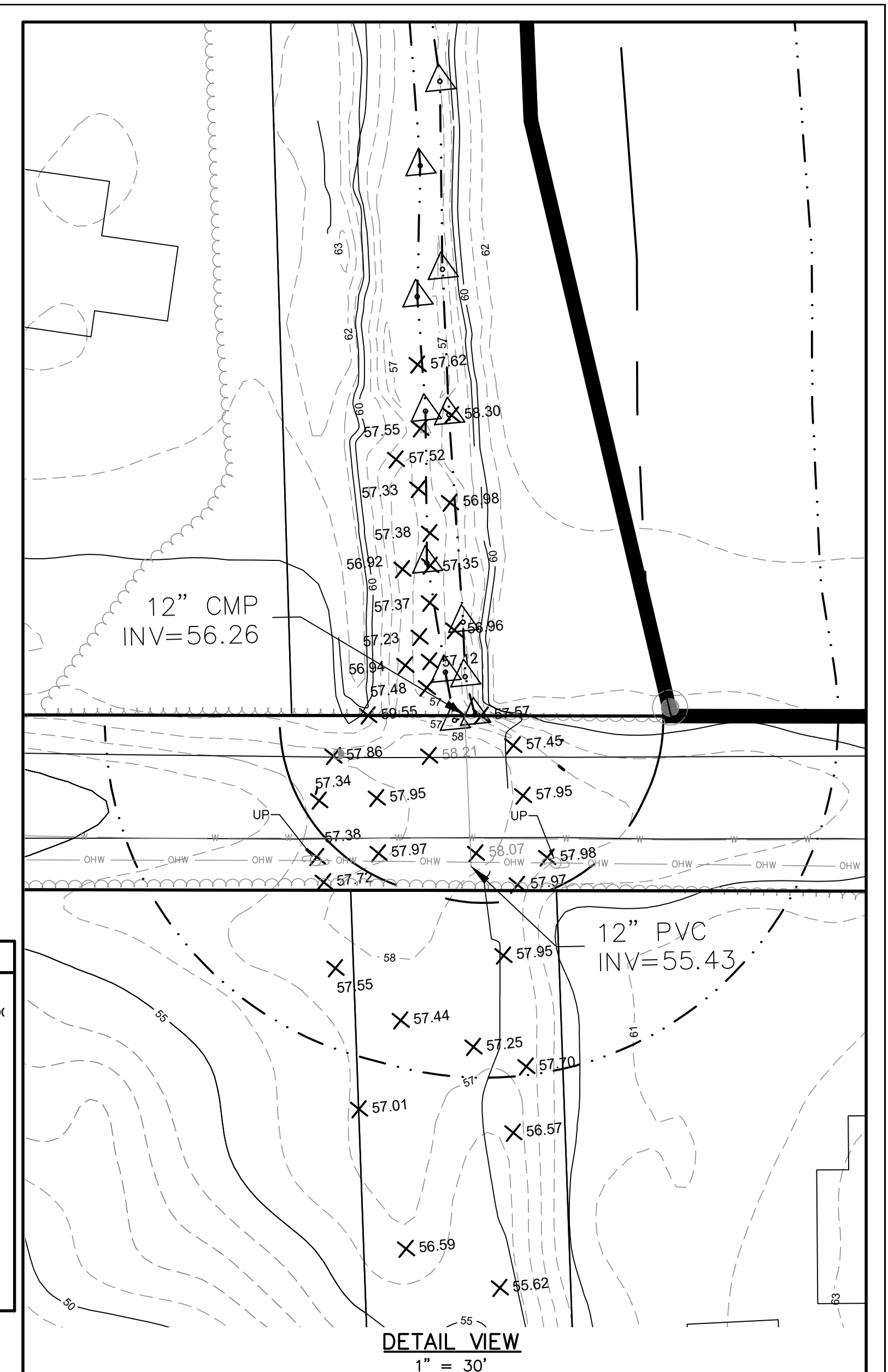
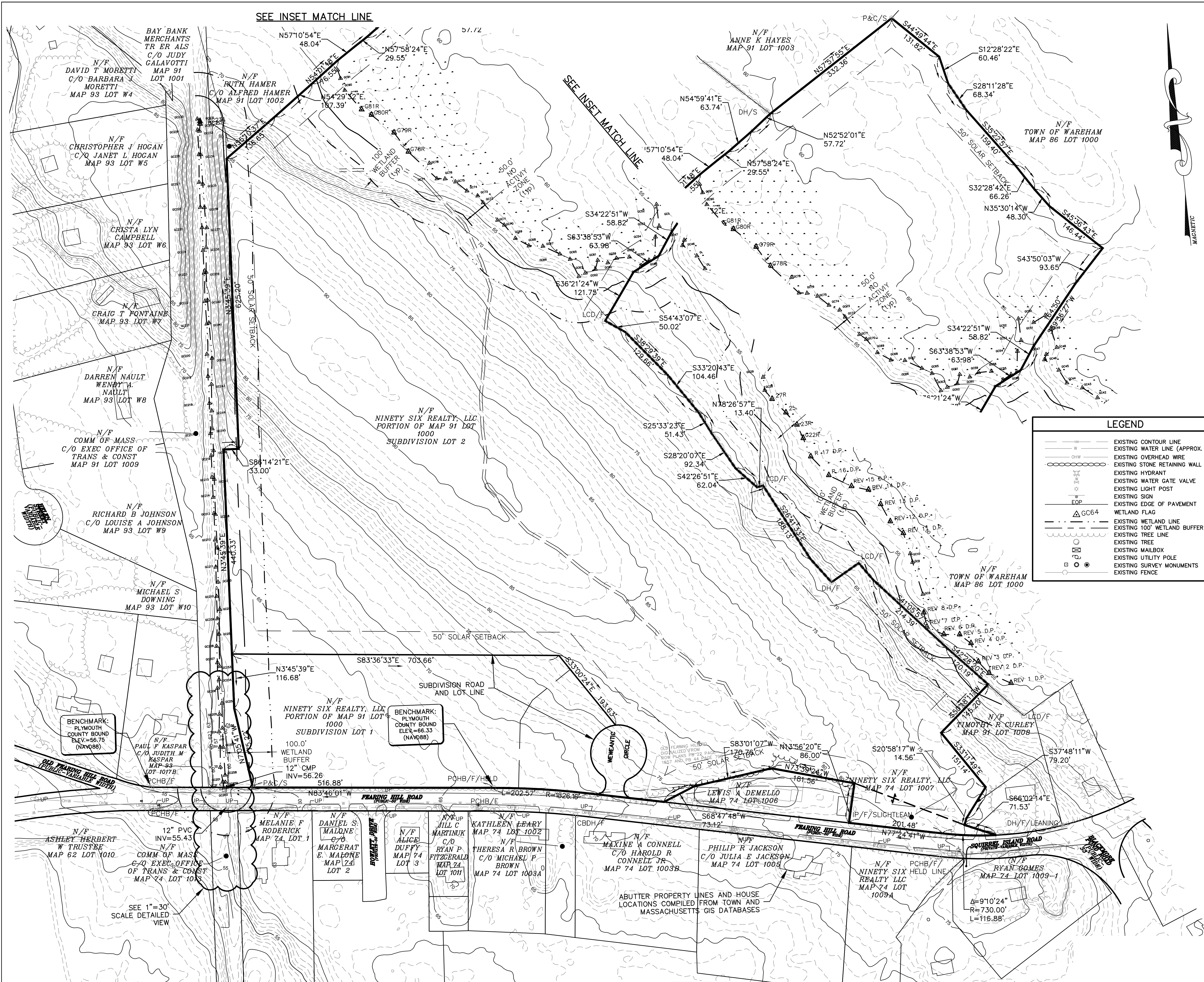
**OWNER:**  
NINETY SIX REALTY LLC  
246 SOUTH MEADOW ROAD,  
GATE 4, HANGER NW8  
PLYMOUTH, MA 02360  
BOOK 54648 PAGE 68  
BOOK 40960 PAGE 290  
508-847-5548

**APPLICANT:**  
WAREHAM MA 3, LLC  
100 SUMMIT LAKE DRIVE, SUITE 210  
VALHALLA, NY 10595  
(978) 888-4088

**ENGINEER:**  
**Atlantic®**  
DESIGN ENGINEERS, INC.  
P.O. Box 1051, Sandwich, MA 02563  
PHONE NUMBER: (508) 888-9282







- GENERAL NOTES:**
- OWNER OF RECORD:  
NINETY SIX REALTY LLC  
246 SOUTH MEADOW ROAD,  
GATE 4, HANGER NW8  
PLYMOUTH, MA 02360  
BOOK 54648 PAGE 68  
BOOK 40960 PAGE 290
  - THE SUBJECT PROPERTIES ARE IDENTIFIED AS LOTS 1000 & 1007, ON THE TOWN OF WAREHAM ASSESSOR MAP 91 & 74, RESPECTIVELY. TOTAL LAND AREA IS APPROXIMATELY 44± ACRES.
  - BASED UPON A REVIEW OF THE TOWN OF WAREHAM ZONING MAP AND PROPERTY CARDS, THE SUBJECT PROPERTIES LIE WITHIN AN RESIDENTIAL-60 (R-60) DISTRICT.
  - THE PROPERTY LINES SHOWN HEREON, ARE BASED ON PLANS AND DEEDS OF RECORD AND A FIELD SURVEY BY ATLANTIC DESIGN ENGINEERS AND ARE BASED UPON THE NORTH AMERICAN DATUM OF 1983 (NAD83).
  - EXISTING CONDITIONS DEPICTED HEREON ARE BASED FIELD SURVEY BY ATLANTIC DESIGN ENGINEERS IN MARCH 2021 AND MAY 2022.
  - THE PROPERTY LIES WITHIN A FLOOD ZONE X (AREA OF MINIMAL FLOOD HAZARD) BASED UPON A REVIEW OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) MAP NUMBER 25023C0469J, DATED JULY 17, 2012.
  - WETLAND RESOURCE AREAS SHOWN HEREON ARE BASED UPON DELINEATION BY GODDARD CONSULTING IN MARCH 2021 AND FIELD LOCATED BY ATLANTIC DESIGN ENGINEERS IN MARCH 2021.
  - THE PROPERTY IS NOT LOCATED WITHIN A ZONE II OR AN INTERIM WELLHEAD PROTECTION AREA BASED UPON A REVIEW OF THE MASSACHUSETTS GEOGRAPHIC INFORMATION SYSTEM AND TOWN ZONING MAP.
  - THE SITE IS NOT LOCATED WITHIN AN ESTIMATED HABITAT OF RARE WILDLIFE AND/OR A PRIORITY HABITAT OF RARE SPECIES BASED UPON A REVIEW OF THE NATURAL HERITAGE AND ENDANGERED SPECIES PROGRAM MAPS OBSERVED ON THE MASSACHUSETTS GEOGRAPHIC INFORMATION SYSTEM.
  - THE PROPERTY DOES NOT LIE WITHIN AN AREA OF CRITICAL ENVIRONMENTAL CONCERN (ACEC) BASED UPON A REVIEW OF THE MASSACHUSETTS GEOGRAPHIC INFORMATION SYSTEM.

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P.O. Box 1051, Sandwich, MA 02563 (508) 888 - 9282

Designed by : \_\_\_\_\_  
Drawn by : \_\_\_\_\_  
Checked by : \_\_\_\_\_  
Survey chg. by : \_\_\_\_\_  
Approved by : \_\_\_\_\_

SCALE  
SCALE 1" = 100'  
0 25 50 100 200

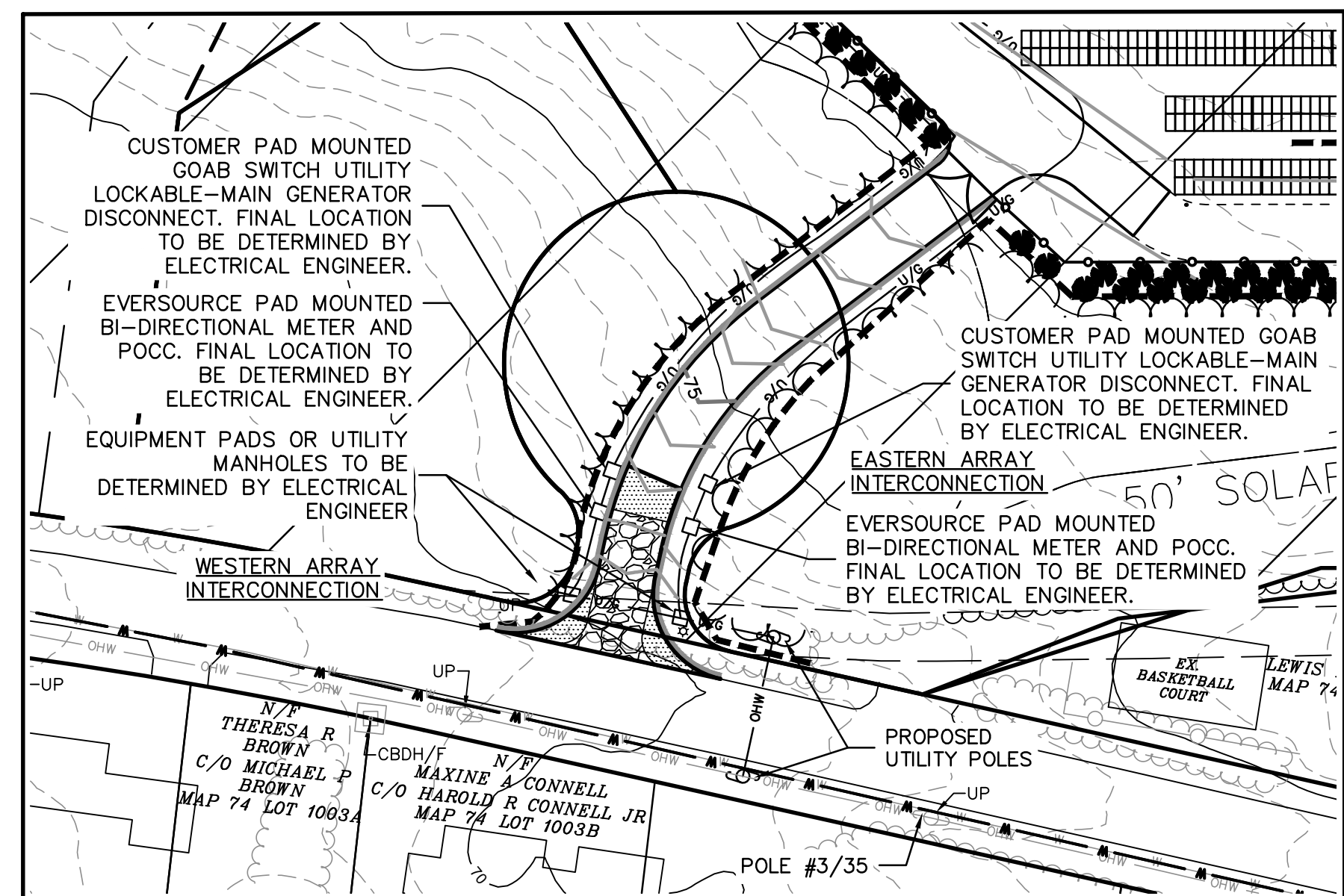
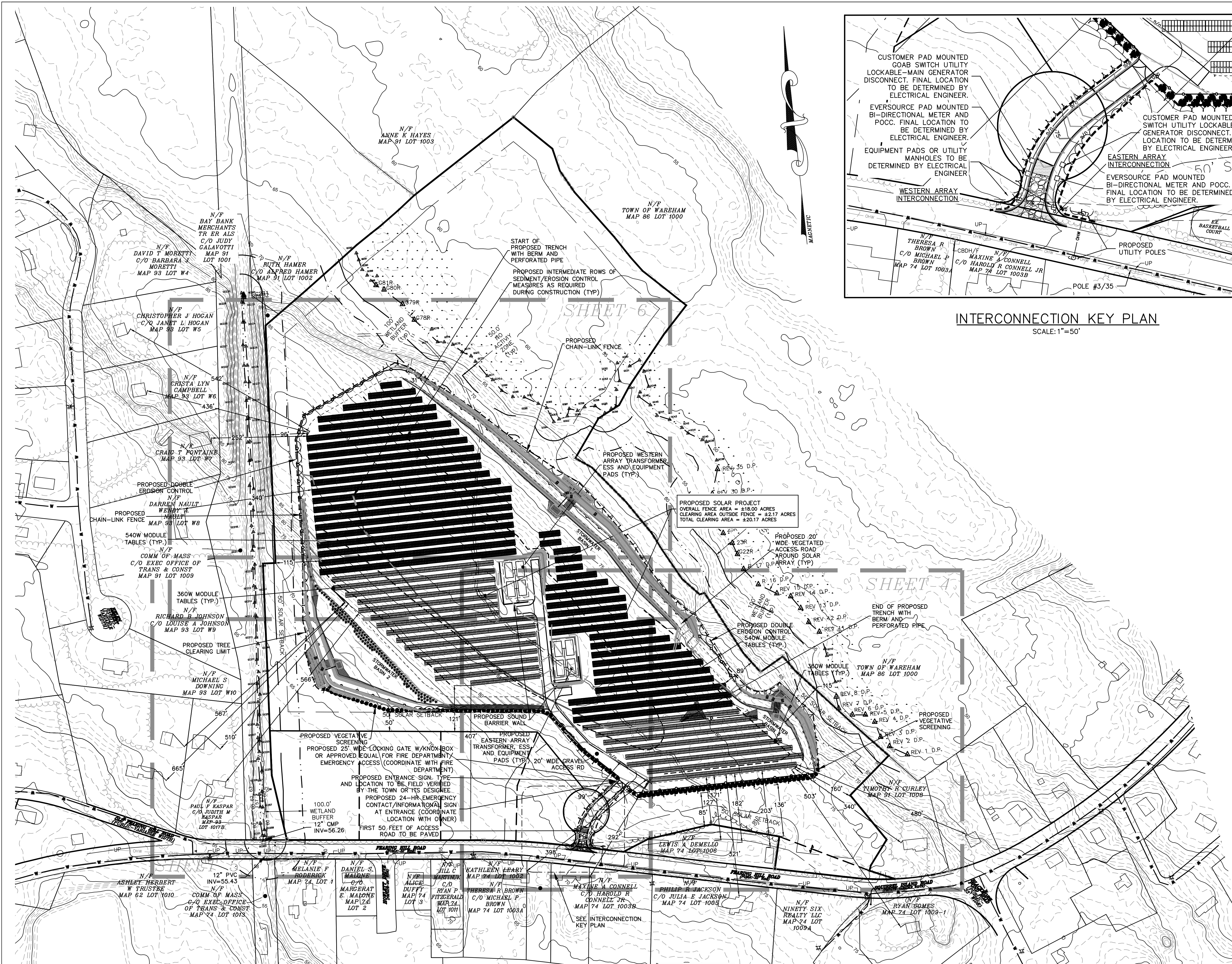
NO.	BY	DATE	REVISION
3	NJC	7/26/22	PER ADDITIONAL HYDROGEO COMMENTS & TOWN ENGINEER LETTER
2	NJC	6/14/22	PER TOWN COMMENTS AND HYDROGEO REPORT
1	NJC	9/9/21	PER TOWN COMMENTS (SHEET 3 ONLY)

APPLICANT:  
**WAREHAM MA 3, LLC**  
100 SUMMIT LAKE DRIVE, SUITE 210  
VALHALLA, NY 10595

EXISTING CONDITIONS PLAN  
FOR  
**FEARING HILL ROAD SOLAR PROJECT**  
WAREHAM MA 02576  
MAY 17, 2021

Sheet	of
2	8
JOB NUMBER	
3055.02	





LEGEND	
	EXISTING CONTOUR LINE
	EXISTING WATER LINE (APPROX. LOCA)
	EXISTING OVERHEAD WIRE
	EXISTING STONE RETAINING WALL
	EXISTING HYDRANT
	EXISTING WATER GATE VALVE
	EXISTING LIGHT POST
	EXISTING SIGN
	EXISTING EDGE OF PAVEMENT
	WETLAND FLAG
	EXISTING WETLAND LINE
	EXISTING 100' WETLAND BUFFER
	EXISTING TREE LINE
	EXISTING TREE
	EXISTING MAILBOX
	EXISTING UTILITY POLE
	EXISTING SURVEY MONUMENTS
	EXISTING FENCE
	PROPOSED FENCE LINE
	PROPOSED MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	PROPOSED OVERHEAD WIRE
	PROPOSED UNDERGROUND ELECTRIC
	PROPOSED LIMIT OF TREE CLEARING
	PROPOSED LIMIT OF EROSION CONTROL
	PROPOSED UTILITY POLE
	PROPOSED CHECK DAM
	PROPOSED CATCH BASIN
	PROPOSED DRAIN LINE
	PROPOSED DRAIN MANHOLE

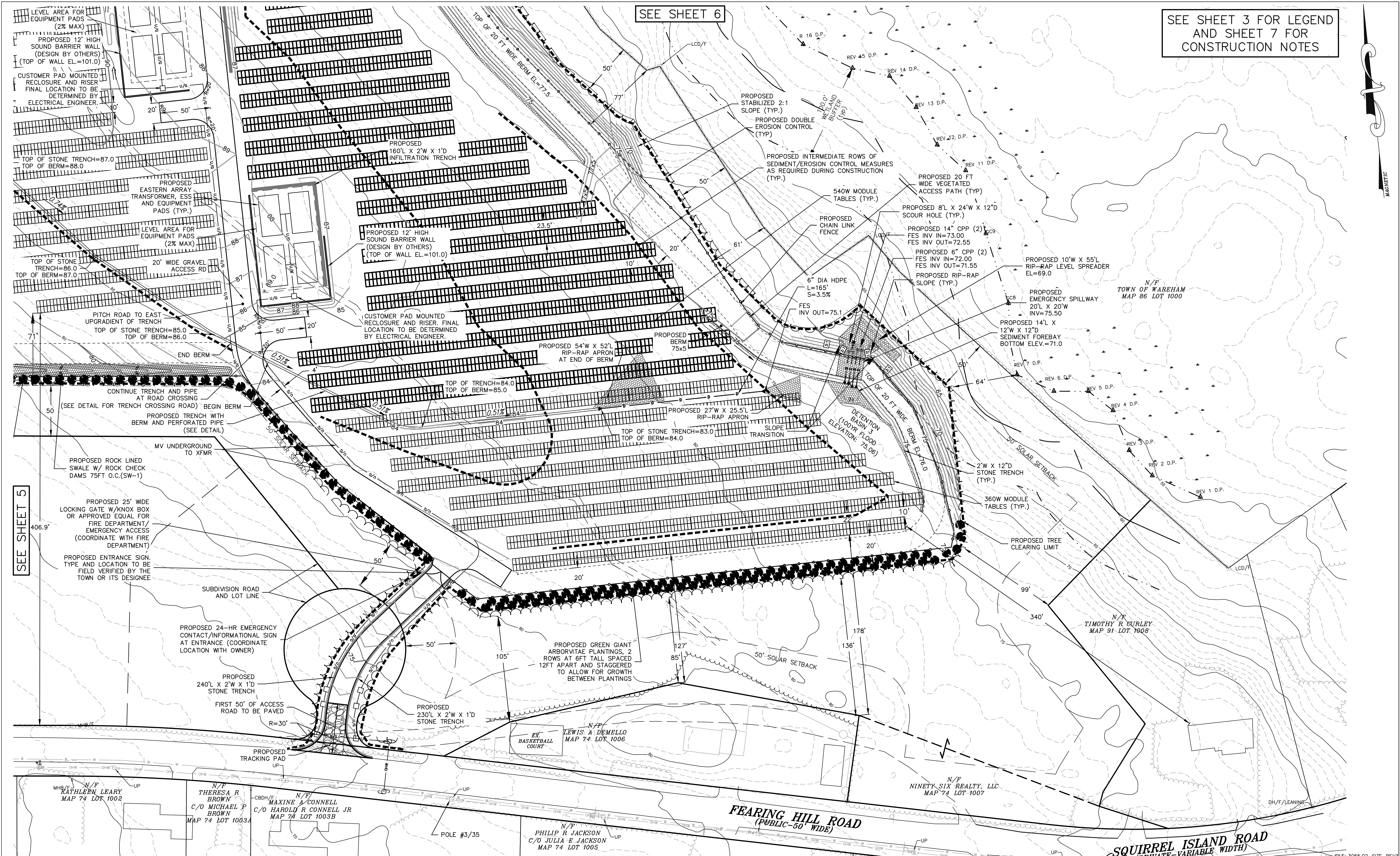
ZONING REQUIREMENTS		
TOWN OF WAREHAM ZONING BYLAWS, OCTOBER, 2019		
RESIDENTIAL 60 (R60)		
	REQUIRED <sup>(2)</sup>	PROPOSED <sup>(2)</sup>
MINIMUM LOT SIZE	60,000 SF	1,707,526 SF
MINIMUM LOT FRONTAGE	180 FEET	211 FEET
MINIMUM YARDS:		
FRONT YARD	20 FEET <sup>(1)</sup>	99 FEET <sup>(4)</sup>
SIDE YARD	10 FEET <sup>(1)</sup>	96 FEET <sup>(4)</sup>
REAR YARD	10 FEET <sup>(1)</sup>	89 FEET <sup>(4)</sup>
DISTANCE OF ANY STRUCTURE FROM A RESIDENTIAL DISTRICT	50 FEET	171 FEET <sup>(4)</sup>
MAXIMUM BUILDING HEIGHT	35 FEET	<35 FEET
MAXIMUM % OF LOT COVERED BY BUILDINGS	NR	NR
MAXIMUM % OF LOT COVERED BY IMPERVIOUS AREA	NR	NR

SOLAR ENERGY GENERATION FACILITIES SECTION 59D		
	REQUIRED	PROPOSED
MINIMUM YARDS		
FRONT:	50 FEET	50 FEET <sup>(3)</sup>
SIDE:	50 FEET	50 FEET <sup>(3)</sup>
REAR:	50 FEET	50 FEET <sup>(3)</sup>
MINIMUM LOT SIZE:	3 ACRES	±39.2 ACRES

- (1) MINIMUM YARD DEPTHS SHALL BE IN ACCORDANCE WITH ARTICLE 6 OF THE TOWN OF WAREHAM ZONING BY-LAW; PROVIDED, HOWEVER, THAT WHERE THE LOT ABUTS OR IS ACROSS THE STREET FROM A RESIDENTIAL DISTRICT OR RESIDENTIAL DEVELOPMENT, THE YARD SETBACK FOR ALL STRUCTURES, INCLUDING FENCING AND VEGETATED BUFFER, SHALL NOT BE LESS THAN 50 FEET.
- (2) DENSITY AND DIMENSIONAL REGULATIONS ARE BASED OFF NONRESIDENTIAL USE WITHIN THE RESIDENTIAL 60 DISTRICT.
- (3) MEASURED TO THE LIMIT OF CLEARING
- (4) MEASURED TO PANELS

SEE SHEET 7 FOR  
CONSTRUCTION NOTES



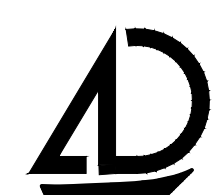
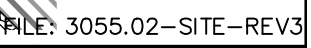








SEE SHEET 4



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P.O. Box 1051, Sandwich, MA 02563 (508) 888 - 9282

Designed by :
Drawn by :
Checked by :
Survey chk. by :
Approved by :

SCALE

SCALE 1" = 40'



DATE \_\_\_\_\_

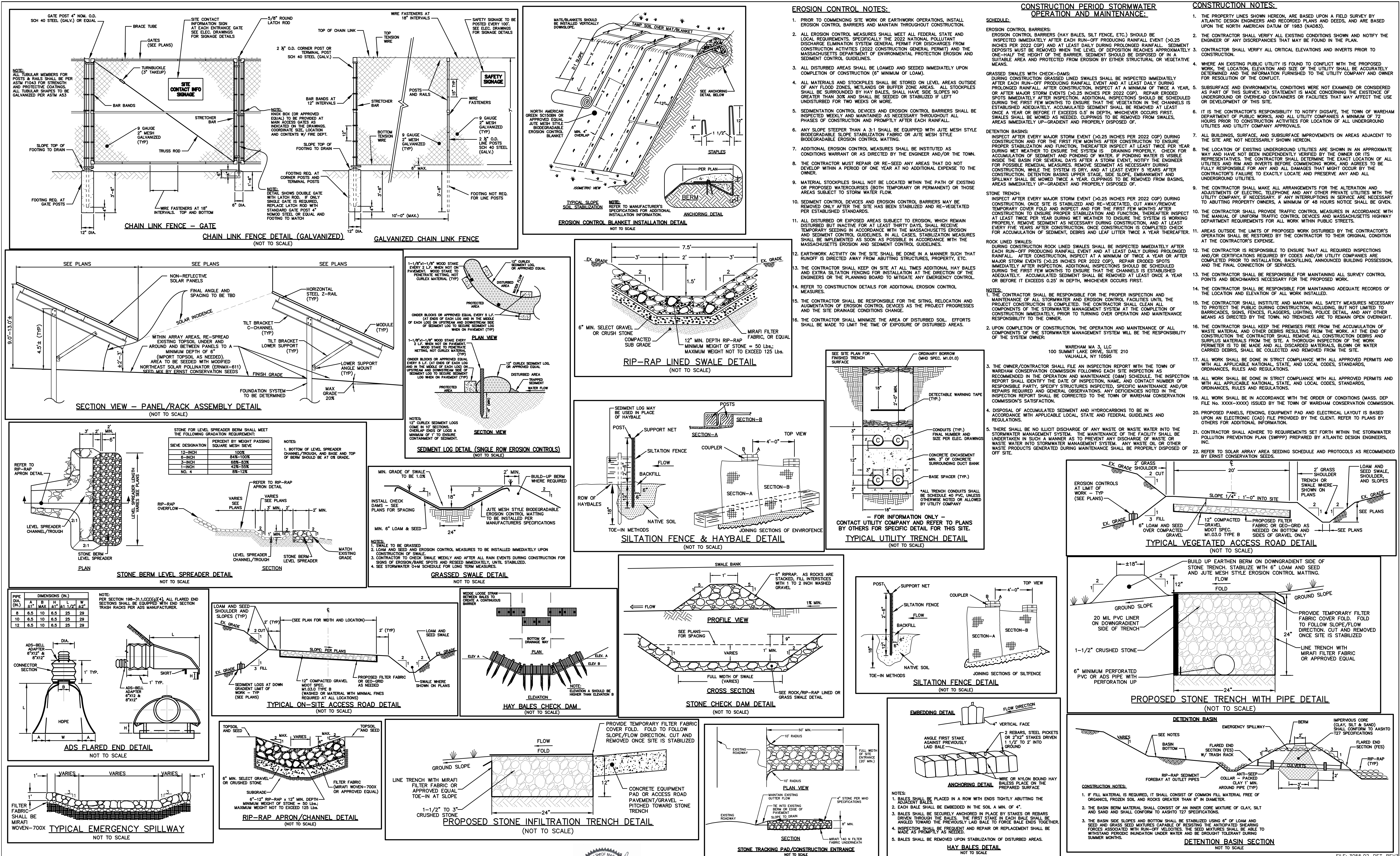
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NO.	BY	DATE	REVISION

PREPARED FOR  
WAREHAM MA 3, LLC  
100 SUMMIT LAKE DRIVE, SUITE 210  
VALHALLA, NY 10595

SITE DEVELOPMENT PLAN  
FOR  
FEARING HILL ROAD SOLAR PROJECT  
WAREHAM, MASSACHUSETTS 02576  
MAY 17, 2021

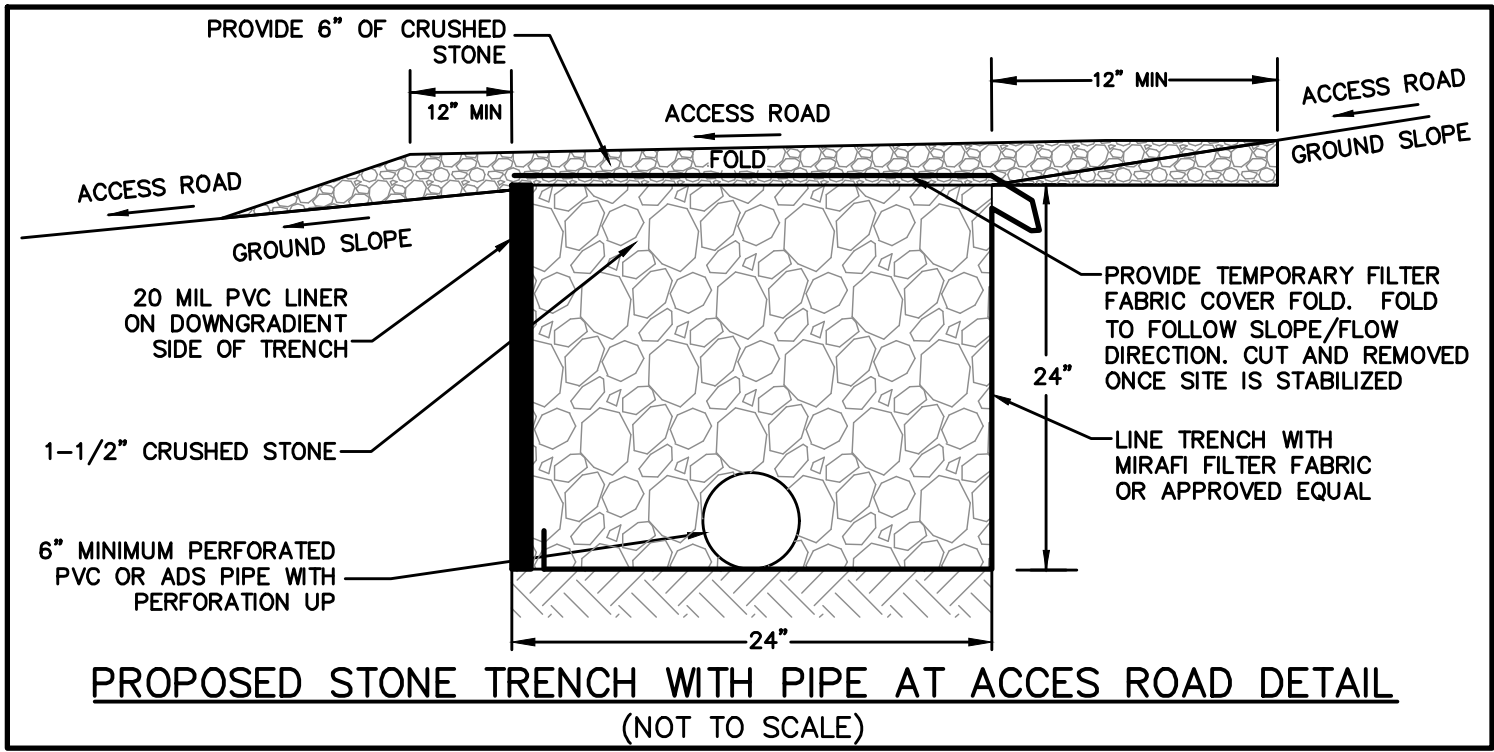
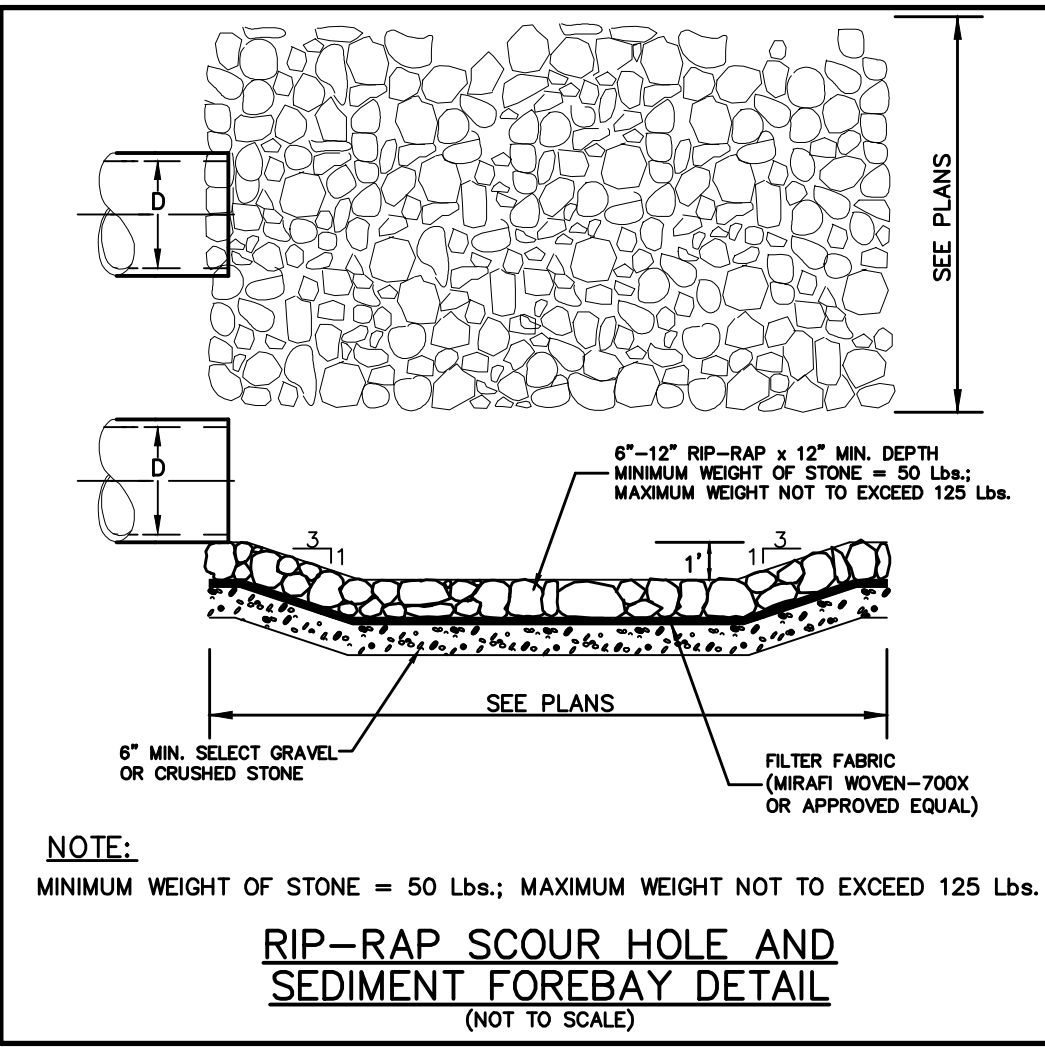
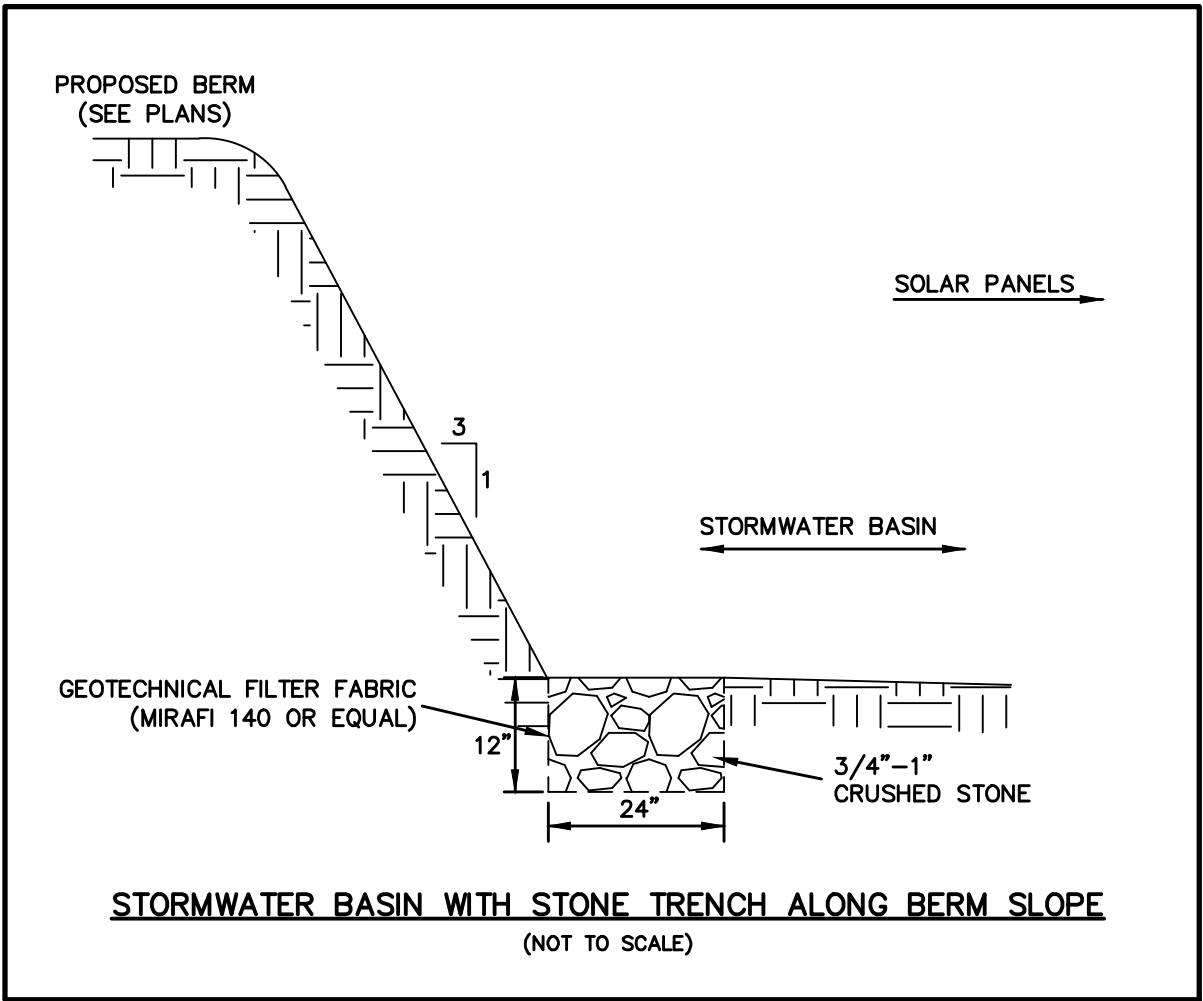
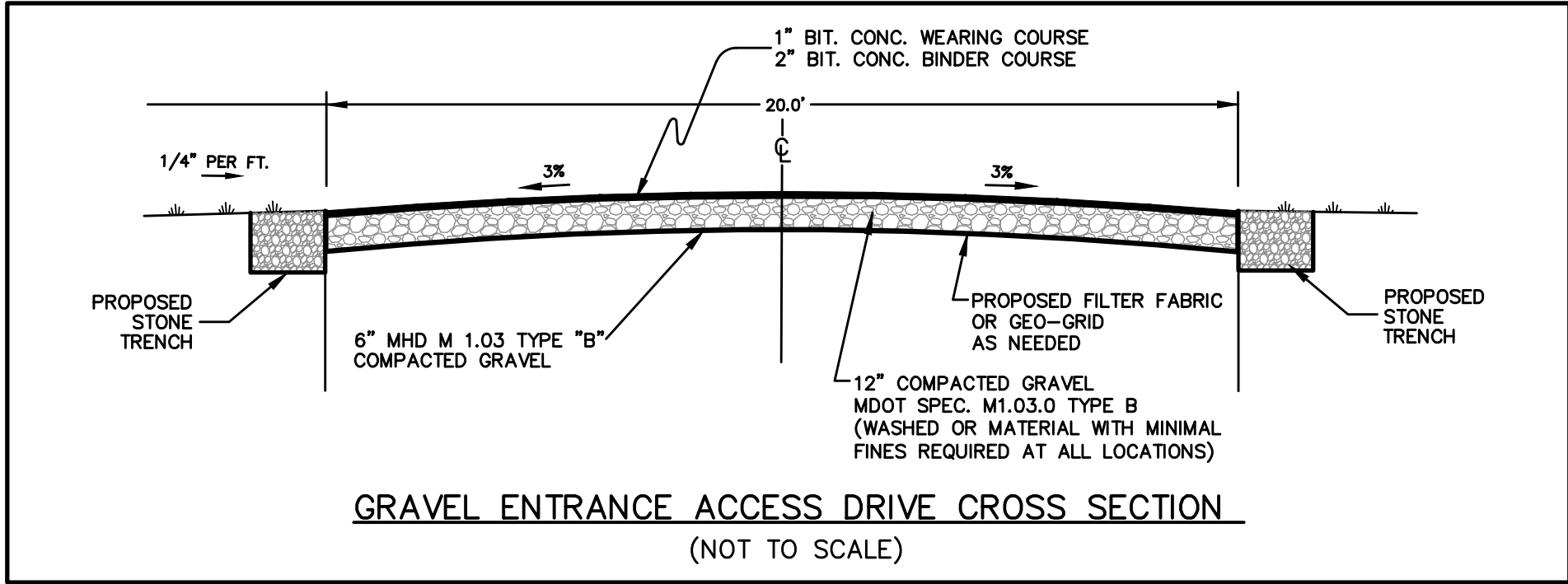
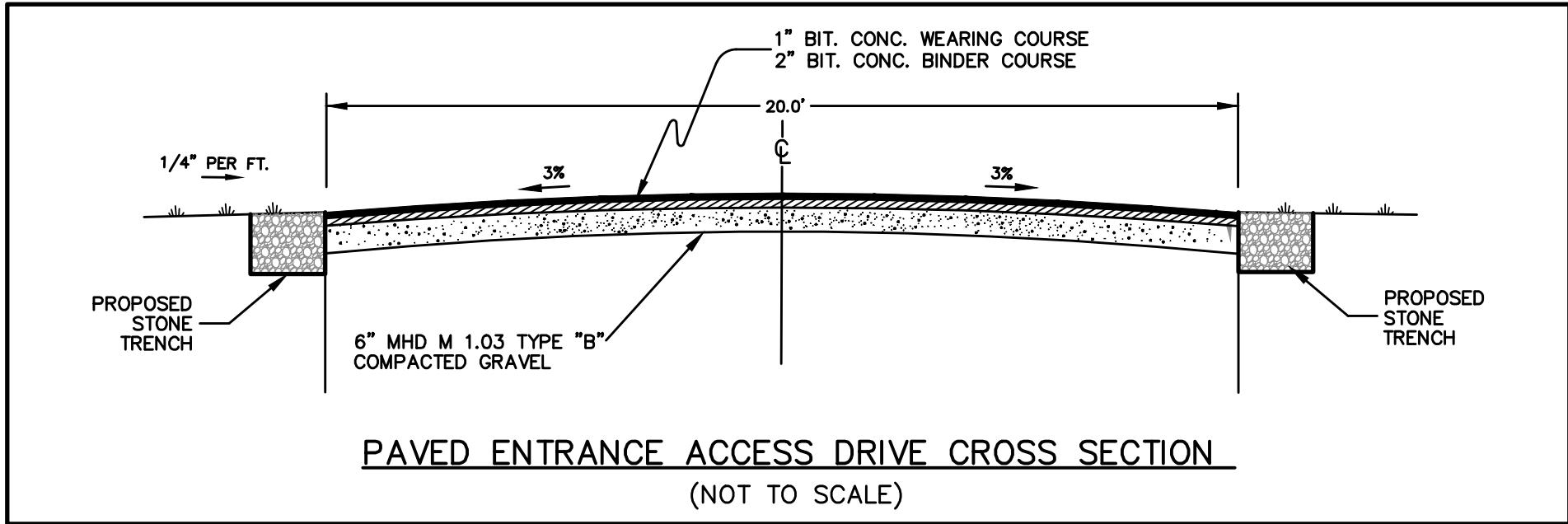
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6	8
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- ### EROSION CONTROL NOTES:
- Prior to commencing site work or earthwork operations, install erosion control barriers and maintain throughout construction.
  - All erosion control measures shall meet all federal state and local requirements. Specifically the 2022 National Pollutant Discharge Elimination System General Permit for discharges from construction activities (2022 Construction General Permit) and the Massachusetts Department of Environmental Protection Erosion and Sediment Control Guidelines.
  - All disturbed areas shall be seeded and stabilized immediately upon completion of construction (6" minimum of loam).
  - All materials and stockpiles shall be stored on level areas outside of any flood zones, wetlands or buffer zone areas. All stockpiles shall be surrounded by hay bales, shall have side slopes no greater than 3:1 and shall be seeded or stabilized if left undisturbed for two weeks or more.
  - Sedimentation control devices and erosion control barriers shall be inspected weekly and maintained as necessary throughout all phases of construction and promptly after each rainfall.
  - Any slope steeper than a 3:1 shall be equipped with jute mesh style biodegradable slope stabilization fabric or jute mesh style biodegradable erosion control matting.
  - Additional erosion control measures shall be instituted as conditions warrant or as directed by the engineer and/or the town.
  - The contractor must repair or re-seed any areas that do not develop within a period of one year at no additional expense to the owner.
  - Material stockpiles shall not be located within the path of existing or proposed watercourses (both temporary or permanent) or those areas subject to storm water flow.
  - Sediment control devices and erosion control barriers may be removed only after the site has been stabilized and re-vegetated per established standards.
  - All disturbed or exposed areas subject to erosion, which remain disturbed but inactive for at least thirty days, shall receive temporary seeding in accordance with the Massachusetts Erosion and Sediment Control Guidelines. In all cases, stabilization measures shall be implemented as soon as possible in accordance with the Massachusetts Erosion and Sediment Control Guidelines.
  - Earthwork activity on the site shall be done in a manner such that runoff is directed away from existing structures, property, etc.
  - The contractor shall keep on site at all times additional hay bales and extra siltation fencing for installation at the direction of the engineers or the planning board to mitigate any emergency control measures.
  - The contractor shall be responsible for the siting, relocation and augmentation of erosion control devices as the project progresses and the site drainage conditions change.
  - The contractor shall minimize the area of disturbed soil. Efforts shall be made to limit the time of exposure of disturbed areas.
- ### CONSTRUCTION PERIOD STORMWATER OPERATION AND MAINTENANCE:
- #### SCHEDULE:
- EROSION CONTROL BARRIERS:  
EROSION CONTROL BARRIERS (HAY BALES, SILT FENCE, ETC.) SHOULD BE INSPECTED IMMEDIATELY AFTER EACH RUN-OFF PRODUCING RAINFALL EVENT (>0.25 INCHES PER 2022 CDP) AND AT LEAST DAILY DURING PROLONGED RAINFALL. SEDIMENT DEPOSITS MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY HALF THE HEIGHT OF THE BARRIER. SEDIMENT SHOULD BE DISPOSED OF IN A SUITABLE AREA AND PROTECTED FROM EROSION BY EITHER STRUCTURAL OR VEGETATIVE MEANS.
- GRASSED SWALES WITH CHECK-DAMS:  
DURING CONSTRUCTION GRASSED LINED SWALES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RUN-OFF PRODUCING RAINFALL EVENT AND AT LEAST DAILY DURING PROLONGED RAINFALL. AFTER CONSTRUCTION, INSPECT AT A MINIMUM OF TWICE A YEAR, OR AFTER MAJOR STORM EVENTS (>0.25 INCHES PER 2022 CDP). REPAIR ERODED SPOTS IMMEDIATELY AFTER INSPECTION. ADDITIONAL INSPECTIONS SHOULD BE SCHEDULED DURING THE FIRST FEW MONTHS TO ENSURE THAT THE VEGETATION IN THE CHANNELS IS ESTABLISHED ADEQUATELY. ACCUMULATED SEDIMENT SHALL BE REMOVED AT LEAST ONCE A YEAR OR BEFORE IT EXCEEDS 0.5' IN DEPTH, WHICHEVER OCCURS FIRST. SWALES SHALL BE MOWED AS NEEDED. CLIPPINGS TO BE REMOVED FROM SWALES, AREAS IMMEDIATELY UP-GRADIENT AND PROPERLY DISPOSED OF.
- DETENTION BASINS:  
INSPECT AFTER EVERY MAJOR STORM EVENT (>0.25 INCHES PER 2022 CDP) DURING CONSTRUCTION AND FOR THE FIRST FEW MONTHS AFTER CONSTRUCTION TO ENSURE PROPER STABILIZATION AND FUNCTION. THEREAFTER INSPECT AT LEAST TWICE PER YEAR DURING WEATHER TO ENSURE THE SYSTEM IS DRAINING PROPERLY. CHECK FOR ACCUMULATION OF SEDIMENT AND PONDING OF WATER. IF PONDING WATER IS VISIBLE INSIDE THE BASIN FOR SEVERAL DAYS AFTER A STORM EVENT, THE CONTRACTOR SHALL TAKE IMMEDIATE ACTION TO REMOVE SEDIMENT AS NECESSARY DURING CONSTRUCTION. WHILE THE SYSTEM IS DRY, AND AT LEAST EVERY 5 YEARS AFTER CONSTRUCTION, THE CONTRACTOR SHALL CONDUCT A VISUAL INSPECTION OF THE BASIN AND SPILLWAY SHALL BE MOWED TWICE A YEAR. CLIPPINGS TO BE REMOVED FROM BASINS, AREAS IMMEDIATELY UP-GRADIENT AND PROPERLY DISPOSED OF.
- STONE TRENCH:  
INSPECT AFTER EVERY MAJOR STORM EVENT (>0.25 INCHES PER 2022 CDP) DURING CONSTRUCTION. ONCE SITE IS STABILIZED AND RE-VEGETATED, CUT AWAY/REMOVE TEMPORARY COVER FOLD AND INSPECT FOR THE FIRST FEW MONTHS AFTER CONSTRUCTION TO ENSURE PROPER STABILIZATION AND FUNCTION. THEREAFTER INSPECT AT LEAST TWICE PER YEAR DURING WEATHER TO ENSURE THE SYSTEM IS WORKING PROPERLY. REMOVE SEDIMENT AS NECESSARY DURING CONSTRUCTION, AND AT LEAST EVERY FIVE YEARS AFTER CONSTRUCTION, ONCE CONSTRUCTION IS COMPLETED, CHECK FOR ACCUMULATION OF SEDIMENT, DEBRIS AND LEAF LITTER TWICE A YEAR THEREAFTER.
- ROCK LINED SWALES:  
DURING CONSTRUCTION ROCK LINED SWALES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RUN-OFF PRODUCING RAINFALL EVENT AND AT LEAST DAILY DURING PROLONGED RAINFALL. AFTER CONSTRUCTION, INSPECT AT A MINIMUM OF TWICE A YEAR AFTER MAJOR STORM EVENTS (>0.25 INCHES PER 2022 CDP). REPAIR ERODED SPOTS IMMEDIATELY AFTER INSPECTION. ADDITIONAL INSPECTIONS SHOULD BE SCHEDULED DURING THE FIRST FEW MONTHS TO ENSURE THAT THE CHANNELS IS ESTABLISHED ADEQUATELY. ACCUMULATED SEDIMENT SHALL BE REMOVED AT LEAST ONCE A YEAR OR BEFORE IT EXCEEDS 0.25' IN DEPTH, WHICHEVER OCCURS FIRST.
- #### NOTES:
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSPECTION AND MAINTENANCE OF ALL STORMWATER AND EROSION CONTROL FACILITIES UNTIL THE PROJECT CONSTRUCTION IS COMPLETED. THE CONTRACTOR SHALL CHOOSE THE COMPONENTS OF THE STORMWATER MANAGEMENT SYSTEM AT THE COMPLETION OF CONSTRUCTION IMMEDIATELY PRIOR TO TURNING OVER OPERATION AND MAINTENANCE RESPONSIBILITY TO THE OWNER.
  - UPON COMPLETION OF CONSTRUCTION, THE OPERATION AND MAINTENANCE OF ALL COMPONENTS OF THE STORMWATER MANAGEMENT SYSTEM WILL BE THE RESPONSIBILITY OF THE SYSTEM OWNER.
  - THE OWNER/CONTRACTOR SHALL FILE AN INSPECTION REPORT WITH THE TOWN OF WAREHAM CONSERVATION COMMISSION FOLLOWING EACH SITE INSPECTION AS RECOMMENDED IN THE OPERATION AND MAINTENANCE (O&M) SCHEDULE. THE INSPECTION REPORT SHALL IDENTIFY THE DATE OF INSPECTION, NAME, AND CONTACT NUMBER OF RESPONSIBLE PARTY, SPECIFY STRUCTURES INSPECTED, SPECIFIC MAINTENANCE AND/OR REPAIRS REQUIRED AND GENERAL OBSERVATIONS. ANY DEFICIENCIES NOTED IN THE INSPECTOR'S REPORT SHALL BE CORRECTED TO THE TOWN OF WAREHAM CONSERVATION COMMISSION'S SATISFACTION.
  - DISPOSAL OF ACCUMULATED SEDIMENT AND HYDROCARBONS TO BE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL GUIDELINES AND REGULATIONS.
  - THERE SHALL BE NO ILLICIT DISCHARGE OF ANY WASTE OR WASTE WATER INTO THE STORMWATER MANAGEMENT SYSTEM. THE MAINTENANCE OF THE FACILITY SHALL BE UNDERTAKEN IN SUCH A MANNER AS TO PREVENT ANY DISCHARGE OF WASTE OR WASTE WATER INTO STORMWATER MANAGEMENT SYSTEM. ANY WASTE OIL OR OTHER WASTE PRODUCTS GENERATED DURING MAINTENANCE SHALL BE PROPERLY DISPOSED OF OFF SITE.





NOTES:

1. ANY PLANTINGS THAT DO NOT SURVIVE ONE GROWING SEASON SHALL BE REPLACED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER OR TOWN.
  2. GROUND LINE TO BE AS EXISTED AT NURSERY
  3. GUYS OF 10 GAUGE WIRE 120\"/>
- 4\"/>
- 2\"/>
- BACKFILL W/3:1 TOPSOIL; PETE MOSS WATER EACH LAYER UNTIL SETTLED
- LOOSEN SUBSOIL
- 6\"/>
- 12\"/>
- TWICE BALL DIA.
- \* TURN BACK BURLAP FROM TOP OF BALL
- EVERGREEN TREE PLANTING DETAIL**
- NOT TO SCALE