

EcoTec, Inc.
ENVIRONMENTAL CONSULTING SERVICES
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Worcester, MA 01605-2629
508-752-9666 – Fax: 508-752-9494

Date: May 2, 2024

To: Sturbridge Conservation Commission

RE: 36 Champeaux Road (DEP File No. CE 300-1194)

Subject: DEP Comments Response Letter

Dear Commissioners,

EcoTec is providing the following information in response to the *NOTIFICATION OF WETLAND PROTECTION ACT FILE NUMBER* letter issued on April 23, 2024 for the single-family home project at 36 Champeaux Road. EcoTec's responses to the comments are provided in bold below:

*Comment: The Commission should review the crossing to determine if the Applicant has proposed all alternatives if the land was recently subdivided and decide if the proposed design is the only alternative due to a self-created hardship.

Response: The development of the parcel located at 36 Champeaux Road is independent of the subdivided parcel at 42 Champeaux Road. One single-family home, with associated garage, driveway and barn is proposed on the entire parcel. The narrowest portion of the wetland and stream have been chosen for the Mass Stream Crossing Standards compliant crossing and a wetland crossing would have been required to develop the site regardless of the subdivision of the property. A site plan has been attached which shows that the entire site, including 36 and 42 Champeaux Road, is bisected by a stream and the delineated A/B series wetland system, thus requiring a crossing to access the suitable building site, regardless of the subdivision of the parcel.

The following alternatives analysis has been provided in the Notice of Intent application that demonstrates that the only suitable location for the house, driveway, garage and barn project is the proposed location in the southeastern portion of the site. The site contains expansive wetland in the northern portion of the site and Long Pond and land owned by the United States Army Corps of Engineers to the east. This limits the possible developable portions of the property. The following alternatives were assessed prior to the development of the proposed site plans as follows:

Alternative 1: No Wetland Fill:

This alternative was evaluated and would require the proposed home, driveway, septic system and associated site work to be located in the northwestern portion of the site. Topography in this portion of the site slopes steeply from west to east, with only a small

areas located outside the 100-foot Buffer Zone and the entire area within the 200-foot Buffer Zone under the Bylaw. Given the small size and steep topography of this portion of the site this location has been dismissed.

Alternative 2: Access via Existing Cart Path of Army Corps land:

Alternative 2 was assessed to determine if the existing cart path that runs alongside Long Pond could be utilized and upgraded to provide a driveway access to the site. This is located on land owned by the Corps of Engineers and is not an allowable use. Furthermore, portions of the access path are located within the Flowage Easement and would be flooded during significant storms, which would prevent emergency access to the proposed home. For these reasons, this alternative is not feasible and has been dismissed.

Alternative 3: Preferred Alternative:

This alternative consists of the proposed project design. This utilizes and upland break within the C series wetland to avoid Bordering Vegetated Wetland (BVW) fill along the roadside, and connects with an existing logging path and crosses a stream and BVW at a narrow point to allow access to the significant upland area in the southern portion of the site. This proposal utilizes a culvert to maintain flows within the C-series wetland, proposes a Massachusetts Stream Crossing Standard culvert to upgrade the existing cart path crossing, and proposed the development area in the southeastern portion of the site in a nearly level portion of the site, which minimizes the extent of grading and excavating required to construct the proposed house. Alternatives 1 & 2 are not allowable or contain significant constraints making the project impracticable, which would not allow the project to be constructed, while complying with the setback requirements. Therefore, this alternative has been chosen.

*Comment: The Commission may want to include conditions for the replication area should it fail to meet the standards that may include the Commission requiring additional measures that ensure the function and value of the replication area prior to issuance of a Certificate of Compliance. The Commission may want to include a condition that the replication area must achieve 75% survival of all planted strata to be considered in compliance and require regular monitoring reports.

Response: The applicant would not be opposed to such a condition.

*Comment: The Commission may want to consider the impact to mature trees when considering BVW replication beyond 1:1 requirements.

Response: The applicant would accept either 1:1 or 2:1 replication, as required by the Commission.

*Comment: A detail on the plan refers to the crossing as a stream crossing. What is bankfull width? How was bankfull width determined? How does this proposed crossing meet Stream Crossing Standards? Are there impacts to Bank?

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Response: EcoTec field measured the bankfull width at the crossing and determined that the average width at the easterly end was approximately 3.5 feet and the width at the southerly end was approximately 4.3 feet wide. The proposed 6 foot wide culvert has been designed to fully span the channel by at least 1.2 times its width; and meets the openness ratio under the Mass Stream Crossing Standards. No impacts to the Bank are proposed or anticipated.

We hope that this information is helpful. Please feel free to contact me if you have any questions concerning this matter.

Cordially,
ECOTEC, INC.

A handwritten signature in cursive script that reads "Scott Jordan".

Scott Jordan, CPESC
Senior Environmental Scientist

CC: Kevin Lamy, applicant
Chris McClure, McClure Engineering

11/NOI/SturbridgeChampeauxRd36 ResponseLett

EcoTec, Inc.

LEGEND:

BIT.	BITUMINOUS
BND	BOUND
E	EAST
EOP	EDGE OF PAVEMENT
---	850- EXISTING CONTOUR
IP	IRON PIPE
N	NORTH
N / F	NOW OR FORMERLY
S	SOUTH
S.F.	SQUARE FEET
□	STONE WALL
TYP.	TYPICAL
---	TREE LINE
UP	UTILITY POLE
W	WEST
W /	WITH
A/#	WETLAND FLAG WITH NUMBER (TYP.)
EX	EXISTING
PROP.	PROPOSED

RECORD OWNER:
 KEVIN R. LAMY
 33 PAIGE HILL ROAD
 BRIMFIELD, MA 01010

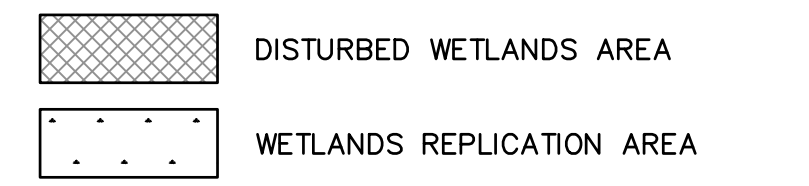
TAX MAP REFERENCES:
 PARCEL ID: 206-1922-36

DEED REFERENCES:
 (WORCESTER COUNTY REGISTRY OF DEEDS)
 LOCUS DEEDS:
 DEED BOOK 66304 PAGE 185

PLAN REFERENCES:
 (WORCESTER COUNTY REGISTRY OF DEEDS)
 PLAN BOOK 959 PLAN 113
 PLAN BOOK 940 PLAN 28
 PLAN BOOK 653 PLAN 15

WETLAND REPLICATION CALCULATIONS
 PURSUANT TO THE TOWN OF PAXTON WETLANDS REGULATIONS,
 SECTION 4.1(4) "REPLICATION AREA IS PROVIDED IN A RATIO OF 2:1
 FOR THE BVW DESTROYED".

TOTAL DISTURBED AREA = 538± S.F.
 REQUIRED: 538 S.F. X 2 = 1,076 S.F.
 PROVIDED: REPLICATION AREA #1 = 1,100± S.F.
 TOTAL = 1,100± S.F. (2.04:1)

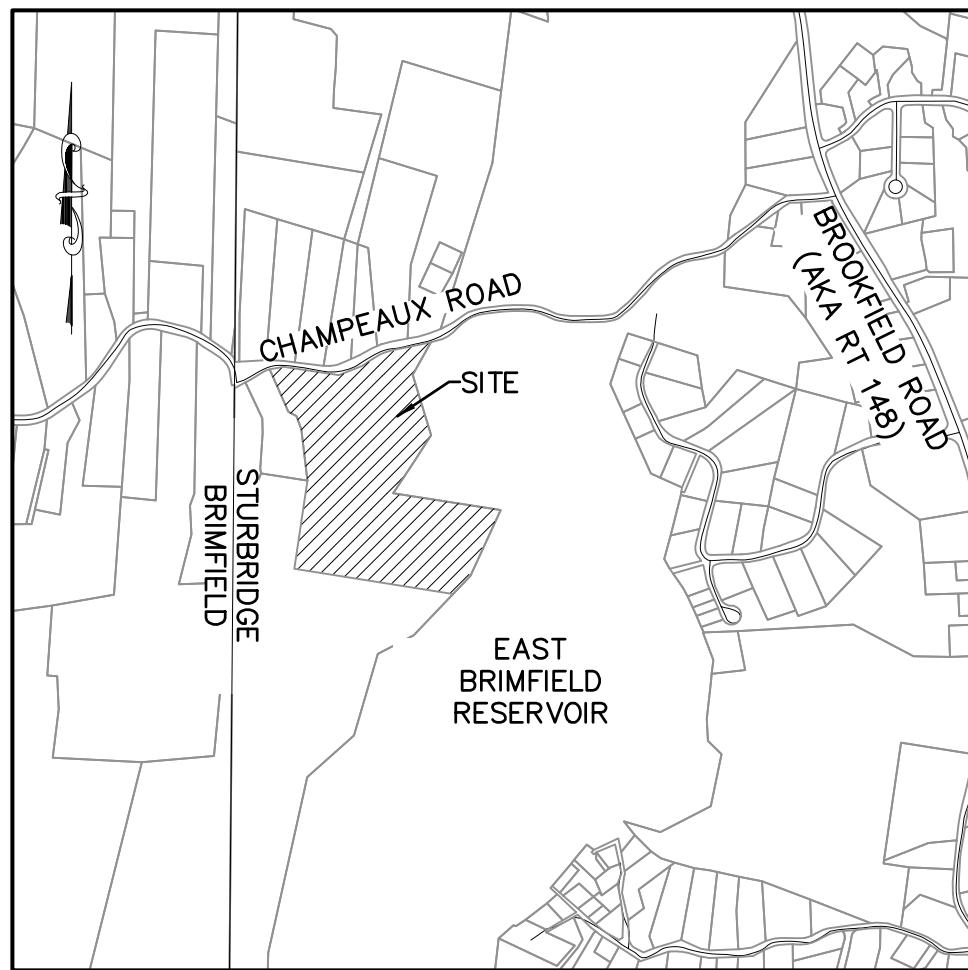
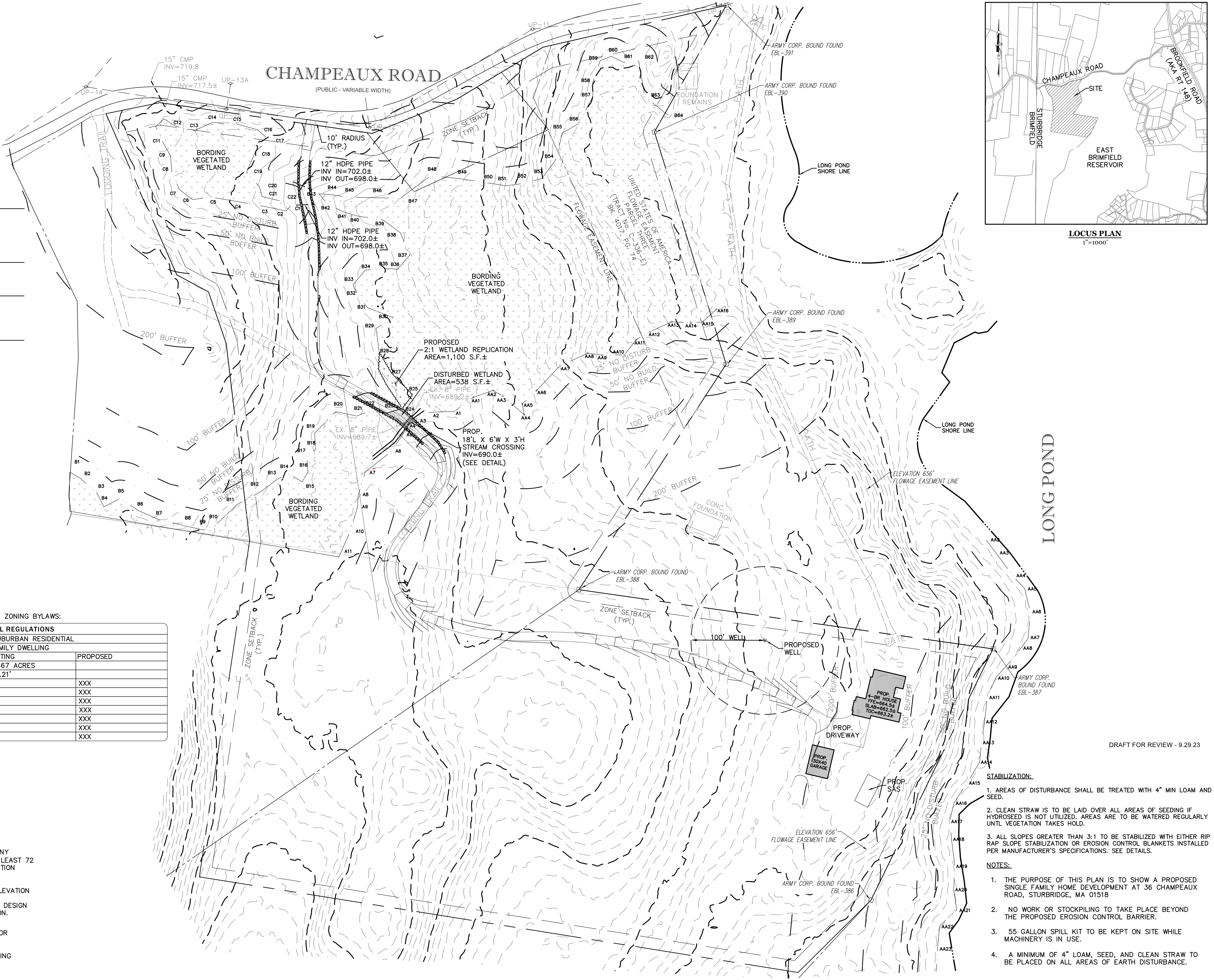


FROM TOWN OF STURBRIDGE ZONING BYLAWS:

DISTRICT USE	DISTRICT DIMENSIONAL REGULATIONS (SR) SUBURBAN RESIDENTIAL SING FAMILY DWELLING		
	REQUIRED	EXISTING	PROPOSED
MIN. LOT SIZE	3/4 ACRE	19.667 ACRES	
MIN. FRONTAGE	125'	878.21'	
MIN. FRONT YARD DEPTH	30'	XXX	XXX
MIN. SIDE YARD DEPTH	15'	XXX	XXX
MIN. REAR YARD DEPTH	15'	XXX	XXX
MAX. BUILDING HEIGHT	35'	XXX	XXX
MAX. LOT COVERAGE	15%	XXX	XXX
MAX. IMPERVIOUS SURF.	N/A	XXX	XXX
MIN. HABITABLE AREA	750 SF	XXX	XXX

WETLAND DISTURBANCE SUMMARY		TOTAL SITE DISTURBANCE SUMMARY	
FILL	538 S.F.	SEEDING AREA	0.40 AC±
REPLICATION	1076 S.F.	DISTURBED AREA	0.70 AC±

- DIG-SAFE NOTE (1-888-344-7233):**
- CONTRACTOR SHALL NOTIFY "DIG-SAFE" PRIOR TO ANY EXCAVATION @ 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO THE START OF ANY ON-SITE CONSTRUCTION ACTIVITIES.
 - ALL EXISTING SUBSURFACE UTILITIES (LOCATION & ELEVATION) TO BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION. CONTRACTOR IS TO VERIFY EXISTING INVERTS AND NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
 - CONTRACTOR SHALL NOT LEAVE ANY BOTTOM HOLE OR TRENCHING OPEN OVERNIGHT.
 - CONTACT STURBRIDGE DPW/ BUILDING DEPT. REGARDING TRENCH PERMIT PRIOR TO CONSTRUCTION.



HOR. SCALE IN FEET: 1"=60'

REV.	DATE	DESCRIPTION	MADE (APVD)
1	9/27/23	PER CLIENT COMMENTS	IP CPM

McGLURE ENGINEERING, INC
 119 Worcester Road
 Charlton, MA 01507
 Tel: (508) 248-2005
 Fax: (508) 248-4887
 Email: peng@mccleurengineers.com

PROPOSED SINGLE FAMILY HOME
 36 CHAMPEAUX ROAD
 STURBRIDGE, MA 01518
 PREPARED FOR
 KEVIN LAMY
 33 PAIGE ROAD
 BRIMFIELD, MA 01507

- STABILIZATION:**
- AREAS OF DISTURBANCE SHALL BE TREATED WITH 4" MIN LOAM AND SEED.
 - CLEAN STRAW IS TO BE LAID OVER ALL AREAS OF SEEDING IF HYDROSEED IS NOT UTILIZED. AREAS ARE TO BE WATERED REGULARLY UNTIL VEGETATION TAKES HOLD.
 - ALL SLOPES GREATER THAN 3:1 TO BE STABILIZED WITH EITHER RIP RAP SLOPE STABILIZATION OR EROSION CONTROL BLANKETS INSTALLED PER MANUFACTURER'S SPECIFICATIONS. SEE DETAILS.
- NOTES:**
- THE PURPOSE OF THIS PLAN IS TO SHOW A PROPOSED SINGLE FAMILY HOME DEVELOPMENT AT 36 CHAMPEAUX ROAD, STURBRIDGE, MA 01518
 - NO WORK OR STOCKPILING TO TAKE PLACE BEYOND THE PROPOSED EROSION CONTROL BARRIER.
 - 55 GALLON SPILL KIT TO BE KEPT ON SITE WHILE MACHINERY IS IN USE.
 - A MINIMUM OF 4" LOAM, SEED, AND CLEAN STRAW TO BE PLACED ON ALL AREAS OF EARTH DISTURBANCE.

DRAWN BY:	IP
DATE:	8/31/2023
CHK BY:	PE
SCALE:	1"=60'
PROJ. NO.	287-2865-0

OVERALL SITE PLAN
C-2