

EARTH FILLING PLAN

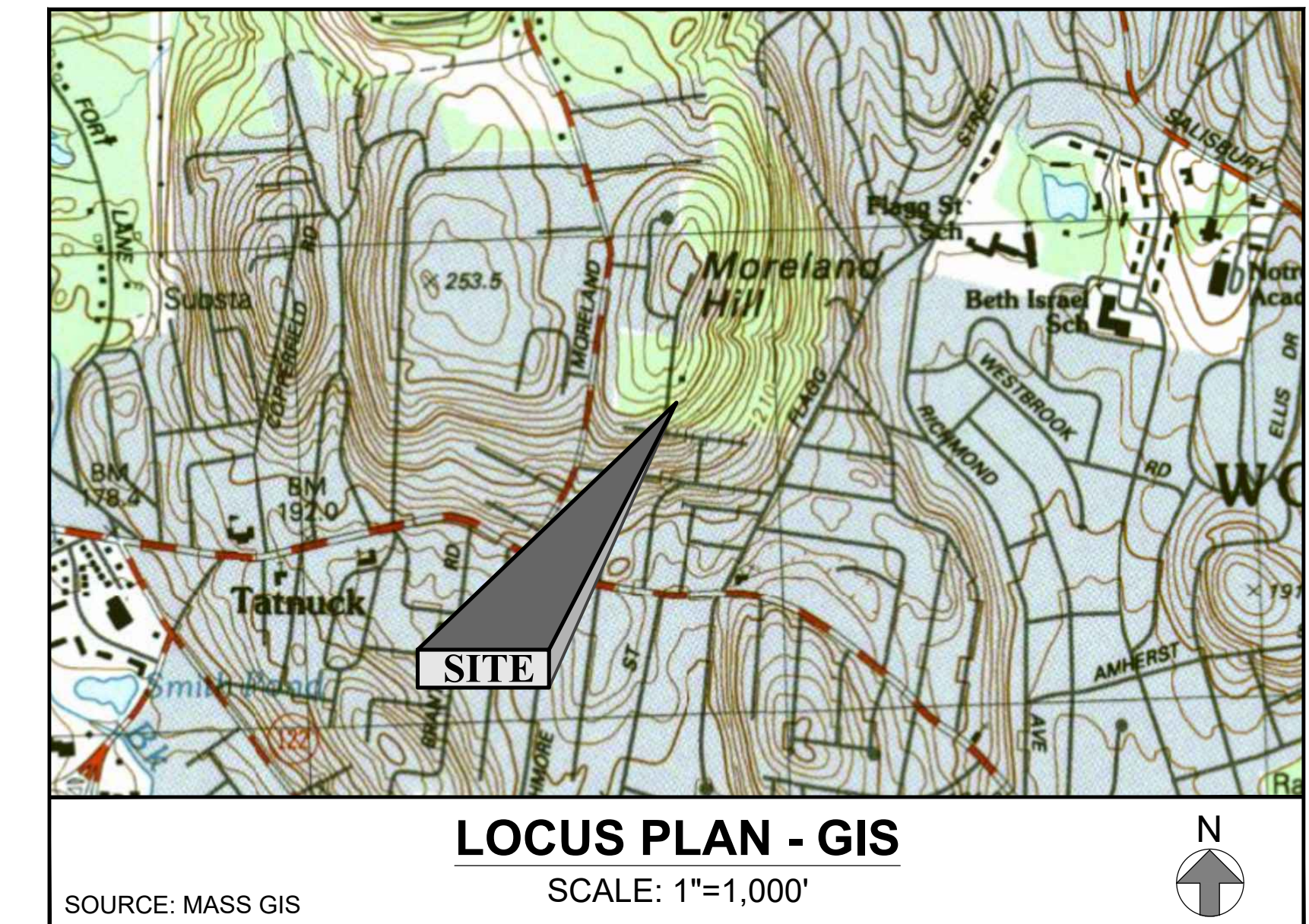
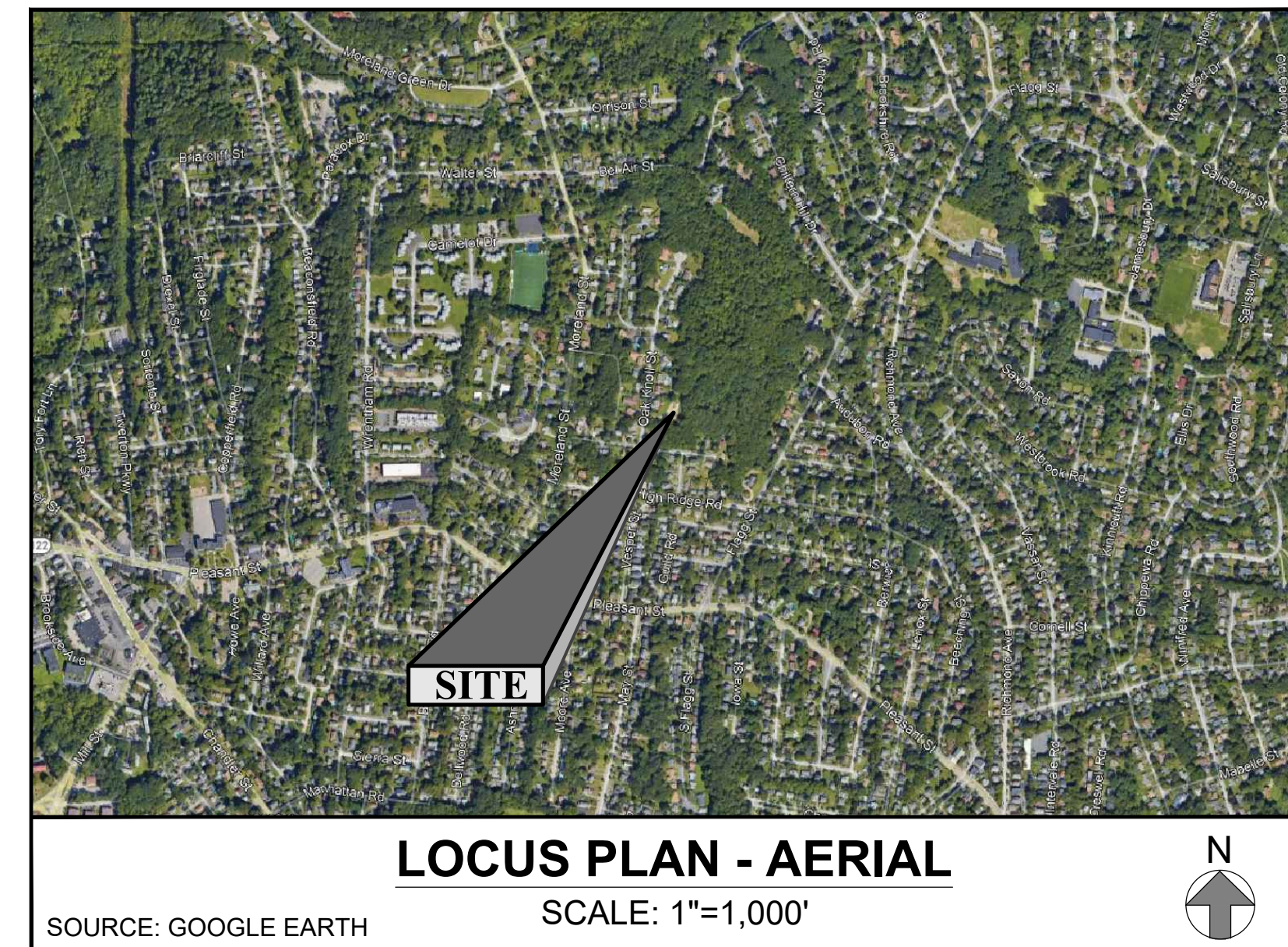
12 OAK KNOLL ROAD
WORCESTER, MA 01609

SHEET INDEX

No.	Title	Issue Date
C001	Cover Sheet	September 30, 2024
C101	Earth Fill Plan	September 30, 2024

REVISIONS/ISSUES

No.	Note	Date
1	Issued for Permitting	February 7, 2024
2	Revised per Staff Comments	April 10, 2024
3	Revised per ZBA Comments	September 30, 2024



OWNER

Marguerite Mullaney
12 Oak Knoll Road
Worcester, MA 01609

APPLICANT

Frank Deboise & Marguerite Mullaney
12 Oak Knoll Road
Worcester, MA 01609



100 GROVE STREET | WORCESTER MA 01605
T 508-856-0321 | F 508-856-0357
gravesengineering.com



GENERAL NOTES

PARCEL DATA:
 STREET ADDRESS: 12 OAK KNOLL ROAD, WORCESTER, MA 01609
 AREA: ±36,081 SQ. FT. (0.8283 AC.)
 OWNER: MULLANEY, MARGUERITE P ZONE: RS-10
 12 OAK KNOLL ROAD
 WORCESTER, MA 01609

- NOTES:**
- 1) THIS PLAN WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND IS SUBJECT TO ANY FINDINGS SUCH A REPORT MIGHT DISCLOSE.
 - 2) LOCATION OF UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND ARE BASED ON THE FIELD LOCATION OF VISIBLE STRUCTURES SUCH AS CATCH BASINS, MANHOLES, WATER GATES, ETC. IN ACCORDANCE WITH CHAPTER 82 SECTION 40 INCLUDING AMENDMENTS, ALL CONTRACTORS SHOULD NOTIFY IN WRITING ALL UTILITY COMPANIES AND GOVERNMENT AGENCIES PRIOR TO ANY EXCAVATION WORK AND CALL DIG-SAFE AT 811. THE CITY OF WORCESTER DPW SHALL ALSO BE CONTACTED FOR UTILITY MARKOUTS.
 - 3) TOPOGRAPHIC FEATURES ON THIS PLAN ARE BASED ON AN INSTRUMENT SURVEY PERFORMED BY GRAVES ENGINEERING, INC. ON DECEMBER, 27 2023. SURVEY NOTES ARE RECORDED IN SURVEY BOOK S-50, PAGE 28. PROPERTY LINE DATA WAS COMPILED FROM GIS AND SHALL BE CONSIDERED APPROXIMATE.
 - 4) THE VERTICAL DATUM FOR THIS PROJECT IS NAVD 88; SEE PLANS FOR PROJECT BENCHMARK. HORIZONTAL DATUM IS MASSACHUSETTS STATE PLANE COORDINATE SYSTEM. DATUMS ARE AS ESTABLISHED BY GPS METHODS.
 - 5) FEATURES NOT LOCATED IN THE FIELD WERE COMPILED VIA GIS (BACK OF BUILDINGS, CATCH BASINS, ETC.)
 - 6) THE SITE PROPERTY IS NOT LOCATED WITHIN ANY DESIGNATED SPECIAL FLOOD ZONES AS SHOWN ON FIRM MAP 25027C0614E, DATED JULY 4, 2011.

REFERENCES:
 DEED BOOK/PAGE: 14920/0211 (WORCESTER REGISTRY OF DEEDS)
 ASSESSORS REFERENCE: 25/001/00008

GENERAL SEQUENCE OF CONSTRUCTION

THE FOLLOWING IS INTENDED TO PROVIDE A GENERAL SEQUENCE OF CONSTRUCTION AND IS SUBJECT TO CHANGE BASED ON CONTRACTOR'S SCHEDULE AND MEANS AND METHODS OF CONSTRUCTION

- 1) INSTALL STABILIZED CONSTRUCTION ENTRANCE.
- 2) INSTALL PERIMETER AND INTERMEDIATE SEDIMENT CONTROLS.
- 3) CONDUCT ROUGH BULK GRADING (CUTS AND FILLS) AND APPLY COMPACTION FOR EVERY 1 TO 2 FEET OF FILL PLACED. COMPACTION MAY VARY BASED UPON CONTRACTOR'S MEANS AND METHODS OF CONSTRUCTION. (E.G. BUCKET TAMPING, BULLDOZER TRACKING, PLATE COMPACTOR, VIBRATORY ROLLER, ETC.)
- 4) LOAM AND SEED, INSTALL EROSION CONTROL BLANKETS.
- 5) REMOVE PERIMETER SEDIMENT CONTROLS ONLY WHEN UPGRADIENT AREAS ARE FULLY STABILIZED.

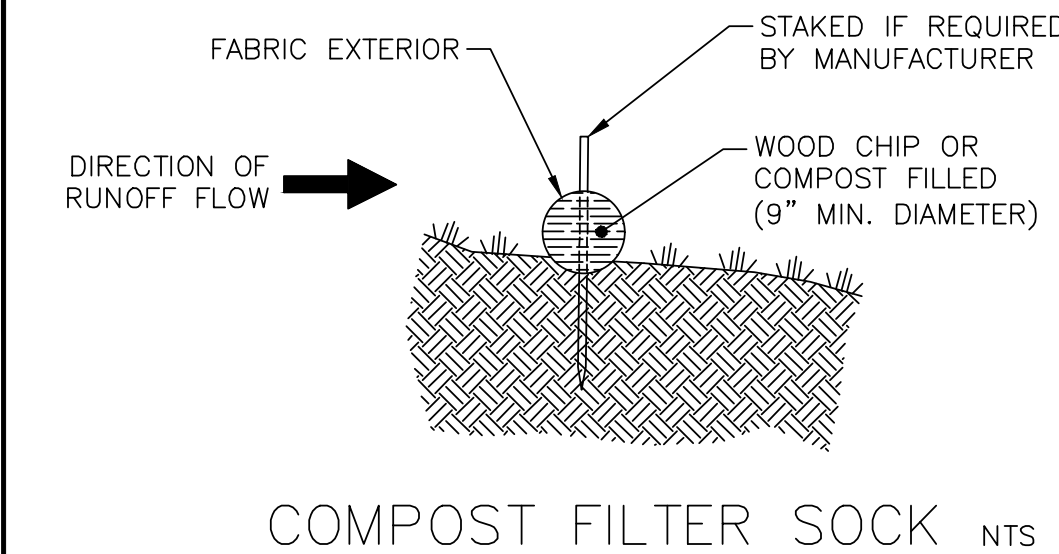
LEGEND

- CFS— COMPOST FILTER SOCKS
- SF— SILT FENCE
- LOW— LIMIT OF WORK
- ⊙ CATCH BASIN (CB)
- TREE LINE
- TREE, SIZE, DECIDUOUS (DEC.), CONIFEROUS (CON.)
- XXX.XX SPOT ELEVATION
- 100SPZ— 100 FOOT STORMWATER PROTECTION ZONE (LOCAL ORDINANCE)
- 790--- 2015 LIDAR DATA CONTOURS
- 790--- EXISTING CONTOURS (12/27/23)
- 790— PROPOSED CONTOURS

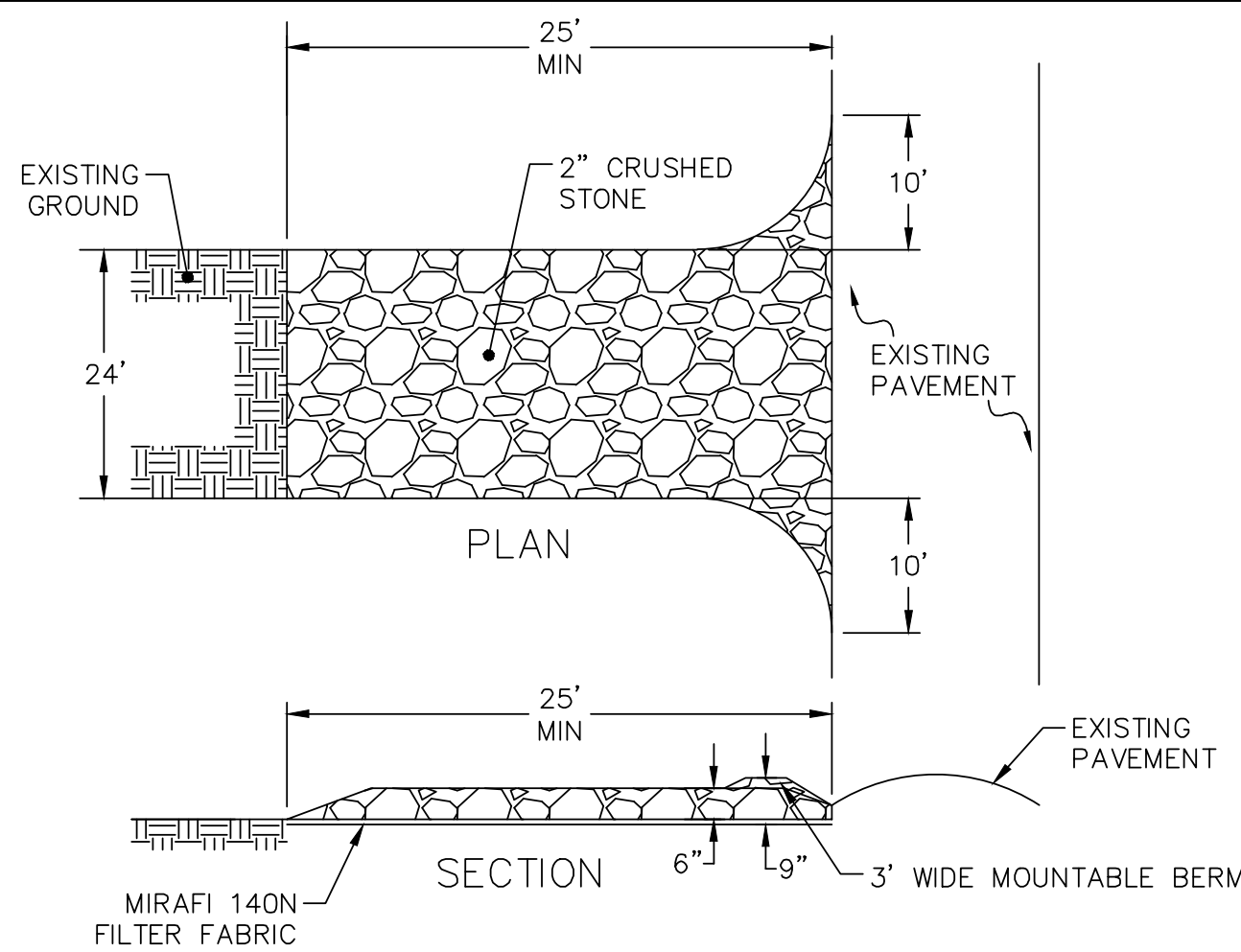
EARTH FILL CALCULATIONS

	VOLUME (CUBIC YARDS)
2015 LIDAR VS SURVEY 12/27/23 DATA*	±1,300
SURVEY 12/27/23 DATA VS PROPOSED GRADING	±112
FILL NEEDED TO COMPLETE PER THIS PLAN	±112
TOTAL FILL	±1,412

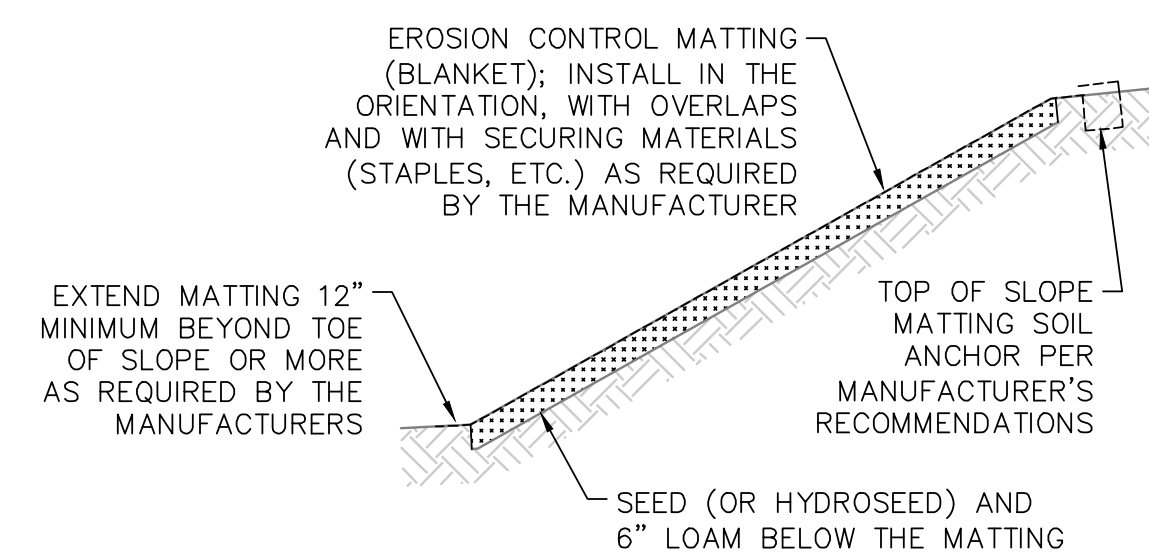
* 2015 LIDAR TOPOGRAPHY WAS USED TO GENERATE THE PRE-EXISTING SITE TOPOGRAPHY PRIOR TO EARTH FILLING OPERATIONS.



COMPOST FILTER SOCK NTS



STABILIZED CONSTRUCTION ENTRANCE NTS



EROSION CONTROL BLANKET SLOPE STABILIZATION NTS

- NOTES:**
- 1) EROSION CONTROL MATTING (BLANKETS) SHALL BE INSTALLED ON ALL FINISHED SLOPES SHOWN EQUAL TO OR EXCEEDING A 3:1 SLOPE (33.5%).
 - 2) INSTALLATION SHALL STRICTLY FOLLOW THE MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS.
 - 3) UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS FOR A PARTICULAR LOCATION AND APPLICATION, ACCEPTABLE EROSION CONTROL BLANKETS FOR GENERAL SLOPE STABILIZATION ARE: ERONET SC150 BY NORTH AMERICAN GREEN, CURLEX II BY AMERICAN EXCELSIOR COMPANY, OR LANDLOK C2 BY PROPEX (OR ENGINEER APPROVED EQUAL).

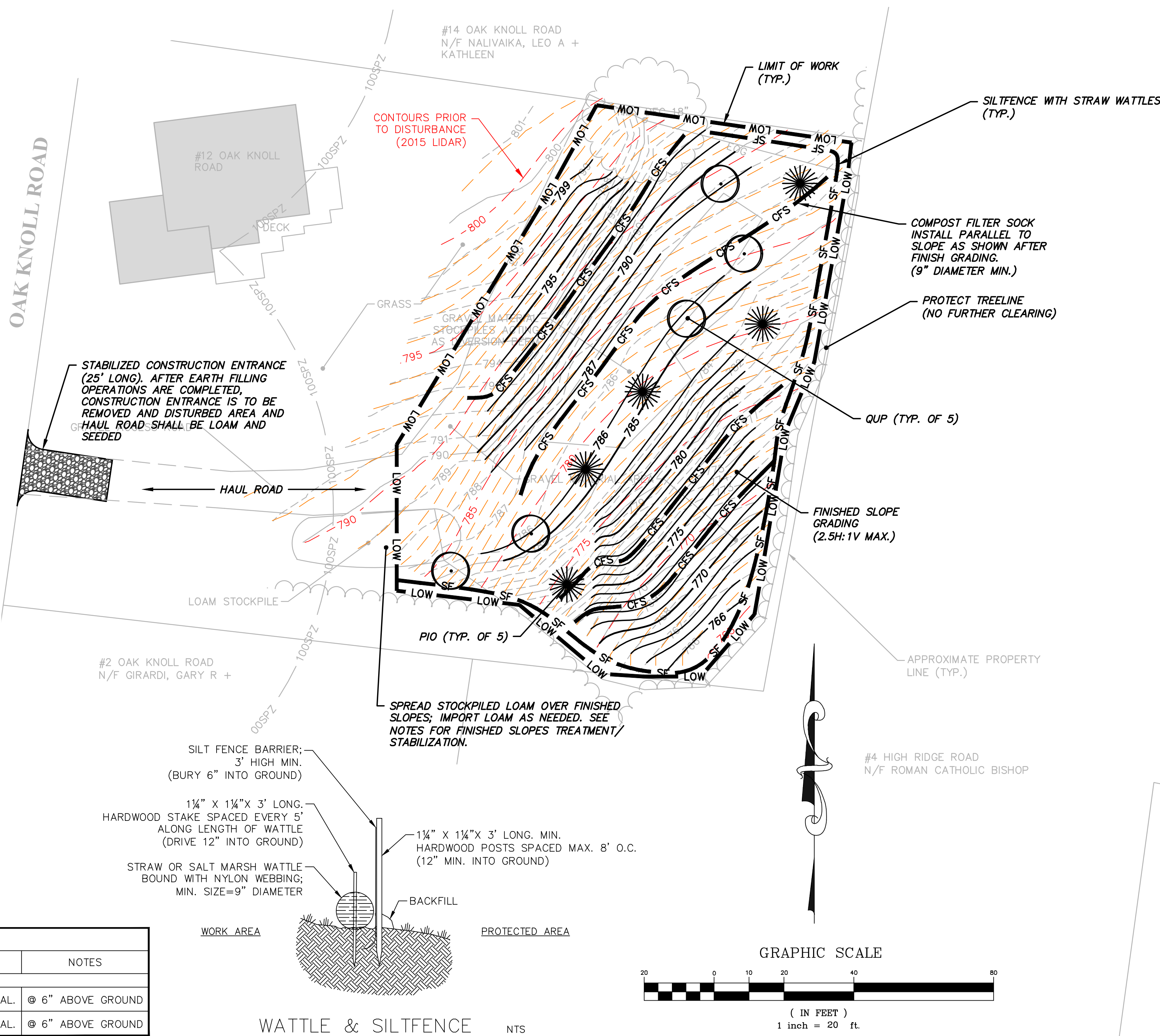
NOTE:
 1) PROVIDE A 3' TO 6' LEVEL AREA BETWEEN THE SILT SOCK AND THE TOE OF ANY SLOPE TO PROVIDE AREA FOR SEDIMENT ACCUMULATION.

SHEET NOTES

- 1) PROVIDE POSITIVE DRAINAGE IN ALL FINISH GRADED WORK AREAS.
- 2) FINISHED SLOPES EQUAL TO OR STEEPER THAN A 3H TO 1V SLOPE SHALL BE STABILIZED WITH EROSION CONTROL BLANKETS AND SEEDED WITH WILDLIFE/ CONSERVATION SEED MIX (NEW ENGLAND WETLAND PLANTS, INC. OR EQUAL); SEE DETAIL THIS SHEET. THE SLOPES SHALL NOT BE MOWED AND BE ALLOWED TO RE-Forest.
- 3) ALL OTHER DISTURBED AREAS NOT OTHERWISE SPECIFIED SHALL BE TREATED WITH AT LEAST 4 INCHES OF LOAM AND HYDROSEEDING. RE-SEED AS NECESSARY TO ESTABLISH FULL STABILIZATION.
- 4) MATERIAL STAGING AND STOCKPILE LOCATIONS (STRIPPED LOAM, FILL MATERIALS, ETC.) SHALL BE RINGED WITH SILTFENCE.
- 5) THE CONTRACTOR SHALL EMPLOY ANY AND ALL EROSION AND SEDIMENT CONTROL MEASURES TO PREVENT A RELEASE OF SEDIMENT FROM THE SITE.
- 6) SEDIMENT AND EROSION CONTROLS SHALL BE INSTALLED PRIOR TO THE START OF ANY ADDITIONAL SITE WORK.
- 7) ALL IMPORTED FILL MATERIAL MUST BE CLEAN AND UNCONTAMINATED SOIL MATERIAL ONLY. INVASIVE SPECIES SHALL BE REMOVED AS OBSERVED.
- 8) EXISTING FILL IS FROM 54 MILLBROOK STREET, WORCESTER MA 01606.
- 9) THE EARTH FILLING SHOWN ON THIS PLAN AND STABILIZATION SHALL BE COMPLETED BY FALL 2024.
- 10) THE CONTRACTOR SHALL UTILIZE EFFECTIVE WATERING PRACTICES TO ENSURE SEED GERMINATION AND SITE STABILIZATION.

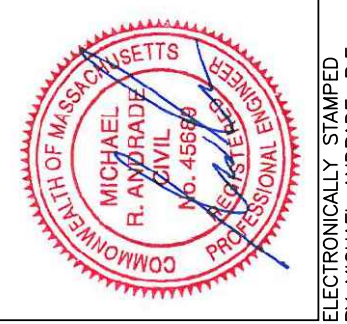
PLANTING LIST

CODE	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
SHADE TREES					
QUP	5	QUERCUS PALLUSTRIS	PIN OAK	2.5-3" CAL.	⊙ 6" ABOVE GROUND
PIO	5	PICEA OMORIKA	SERBIAN SPRUCE	2.5-3" CAL.	⊙ 6" ABOVE GROUND



NOTE:
 1) PROVIDE A 3' TO 6' LEVEL AREA BETWEEN THE WATTLE AND THE TOE OF ANY SLOPE TO PROVIDE AREA FOR SEDIMENT ACCUMULATION.

NO.	DATE	BY	DESCRIPTION
3	09/30/24	MRA	REVISED PER ZBA COMMENTS
2	04/10/24	DFS	REVISED PER STAFF COMMENTS
1	02/07/24	DFS	ISSUED FOR PERMITTING



EARTH FILL PLAN
12 OAK KNOLL ROAD
WORCESTER MA 01609
 PREPARED FOR: FRANK DEBOISE & MARGUERITE MULLANEY
 12 OAK KNOLL ROAD, WORCESTER MA 01609
 DATE: 04/10/24 SCALE: 1"=20'
 DES. BY: DFS
 DRW. BY: DFS
 CHK. BY: MRA
 PRL. NO.: 23140