

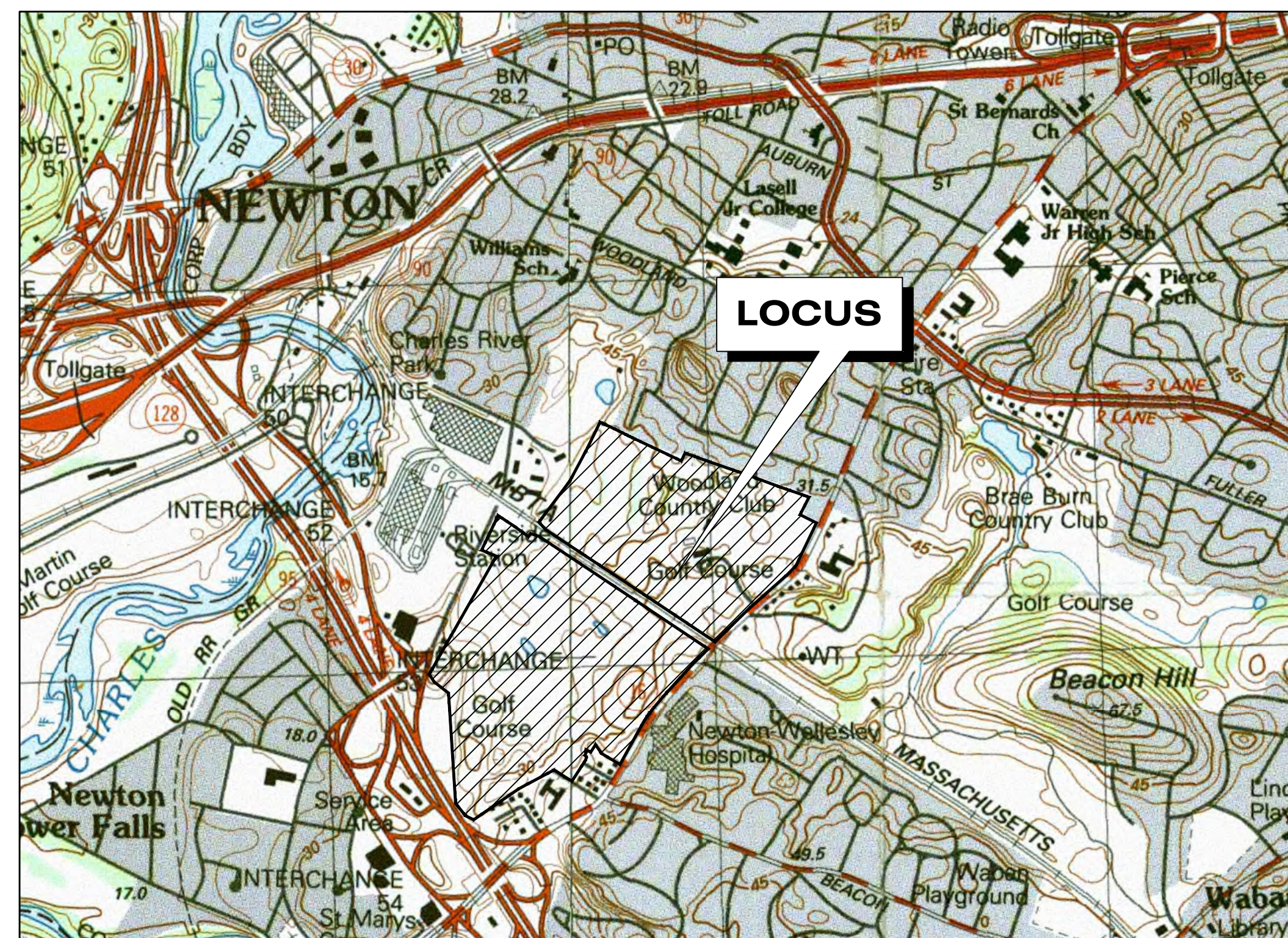
HOLE 9 POND IMPROVEMENTS WOODLAND GOLF CLUB IN AUBURNDALE, MASSACHUSETTS (Middlesex County)

OWNER/APPLICANT

Woodland Golf Club
1897 Washington Street
Auburndale, Massachusetts 02466

CIVIL ENGINEER/SURVEYOR/ LANDSCAPE ARCHITECT AND WETLAND SCIENTIST

Beals and Thomas, Inc.
144 Turnpike Road
Southborough, Massachusetts 01772



Locus Map
Scale: 1" = 1000'



SHEET INDEX

	Cover Sheet
TP	Topographic Plan
C2.1	Site Preparation and Sedimentation Control Plan
C3.1	Site Plan
C4.1	Phase 2 Landscape Plan

Issued For Permitting - MAY 5, 2022

Revised For Permitting - JUNE 3, 2022

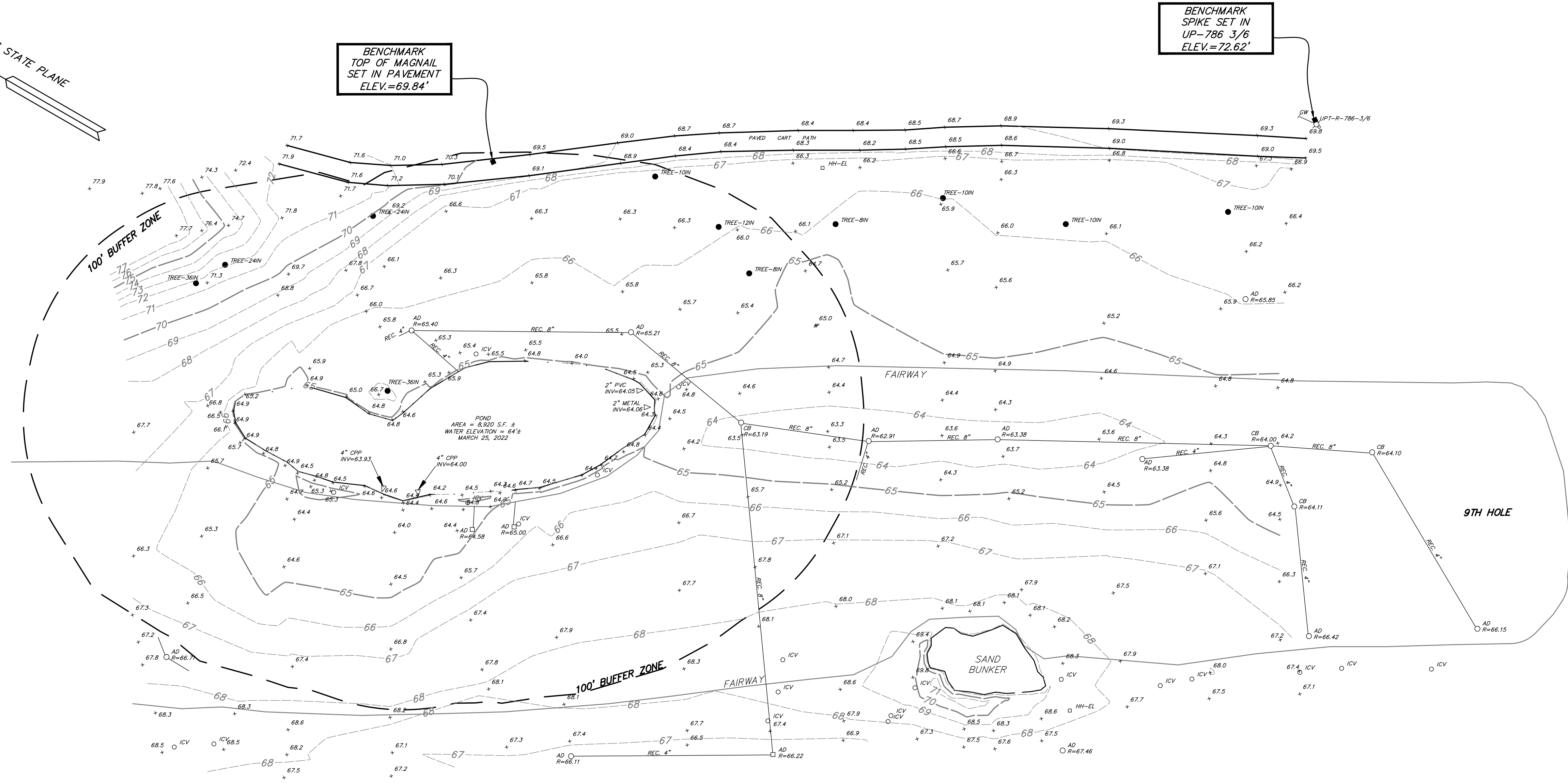
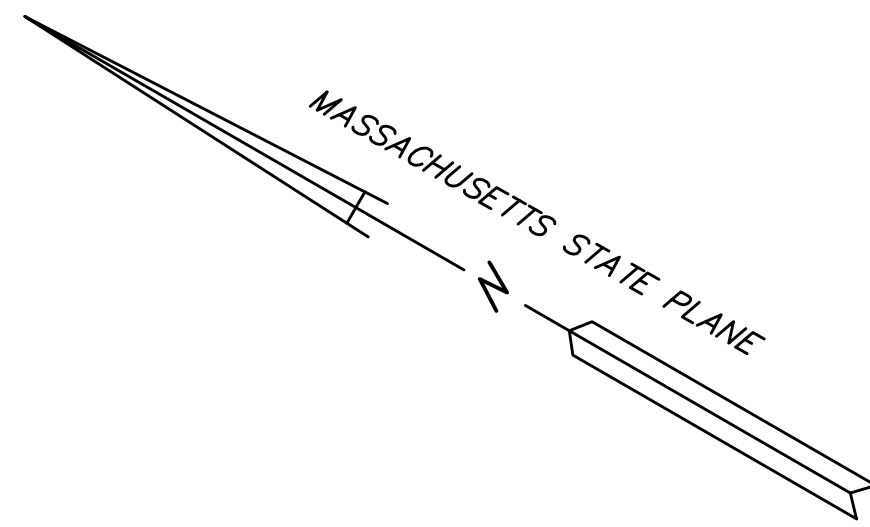


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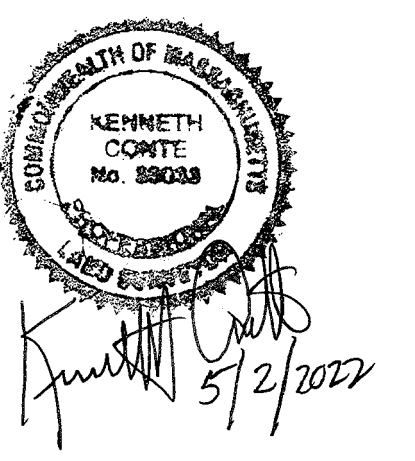
Job No.: 3304.01
Plan No.: 330401P004B-001
Sheet 1 of 5

PREPARED FOR:
WOODLAND GOLF CLUB
 1897 WASHINGTON STREET
 NEWTON, MA 02466

RECORD OWNER:
WOODLAND GOLF CLUB OF AUBURNDALE
 Book 7337 Page 390



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0	05/02/2022	INITIAL ISSUE
	ISSUE DATE	DESCRIPTION
	JMC	SJC
	FLD	CALC
	SDR	DWN
	KCC	CHK'D



LEGEND

BM ■	BENCHMARK
○ CB □ CB	CATCH BASIN
INV. I=100.00	INVERT ELEVATION
AD □	AREA DRAIN
R=100.00	RIM ELEVATION
UP □	UTILITY POLE
○ CW	GUY WIRE
○ ICV	IRRIGATION CONTROL VALVE
● TREE	TREE
--- 124 ---	MINOR CONTOUR
--- 130 ---	MAJOR CONTOUR
x125.4	SPOT ELEVATION

NOTES

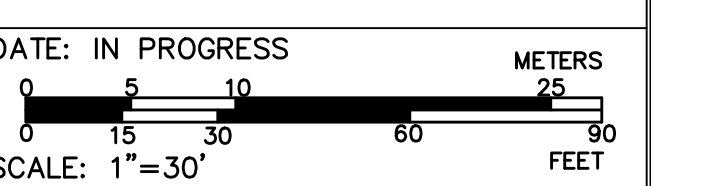
- 1) UNDERGROUND UTILITIES ARE NOT SHOWN.
- 2) SUBSURFACE DRAIN PIPES SHOWN WERE TAKEN FROM AN "IRRIGATION & DRAINAGE AS-BUILT" PLAN, DATED MAY 2007 BY GPS NEW ENGLAND, COHASSET, MA.
- 3) THIS PLAN WAS PREPARED FROM AN ACTUAL TOPOGRAPHIC SURVEY MADE ON THE GROUND USING A TRIMBLE S7 ROBOTIC TOTAL STATION ON MARCH 25, 2022.
- 4) WETLAND RESOURCE AREAS REVIEWED BY BEALS AND THOMAS, INC. ON MARCH 14, 2022.
- 5) ALL ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
- 6) NAD83 HORIZONTAL COORDINATE SYSTEM ESTABLISHED BY GPS METHODS.
- 7) THIS PLAN IS NOT INTENDED FOR PROPERTY LINE DETERMINATION - BOUNDARY LINES ARE NOT SHOWN AS A BOUNDARY SURVEY WAS NOT COMPLETED.

TOPOGRAPHIC PLAN

WOODLAND GOLF CLUB
AUBURNDALE, MA
 (MIDDLESEX COUNTY)

PREPARED BY:
BEALS + THOMAS

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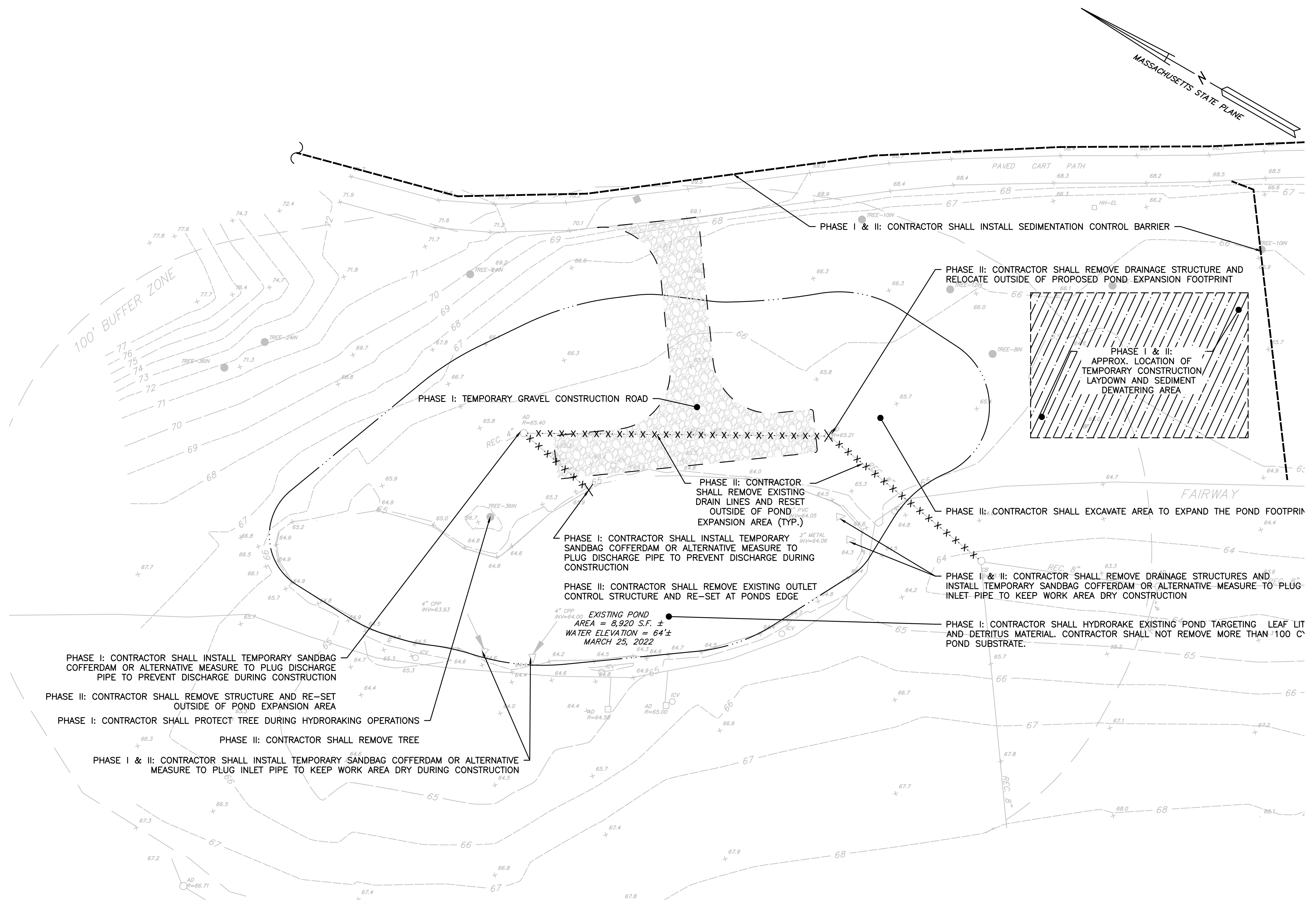


B+T JOB NO. 3304.00
 B+T PLAN NO. 330400P005A-001
 SHEET No. 1 OF 1

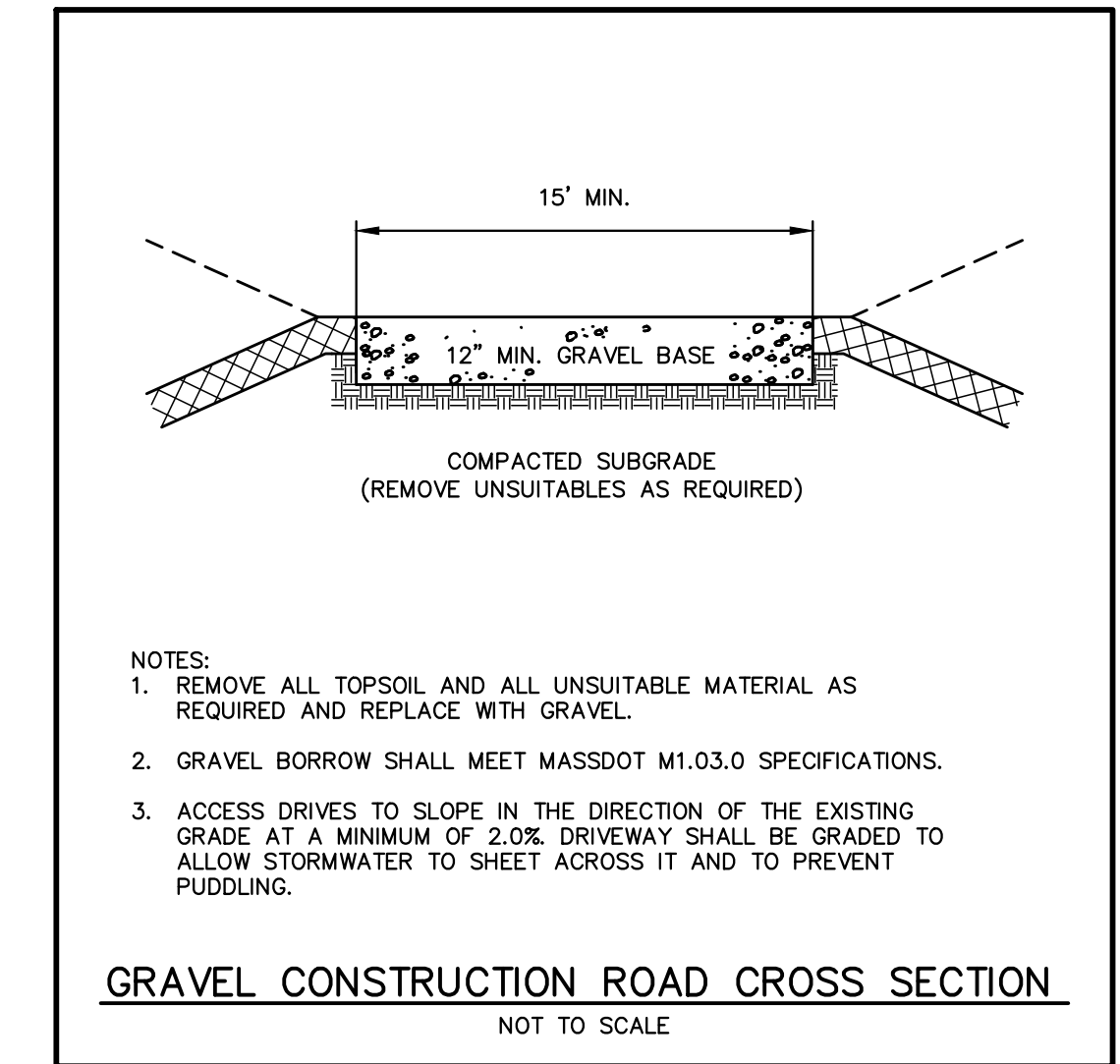
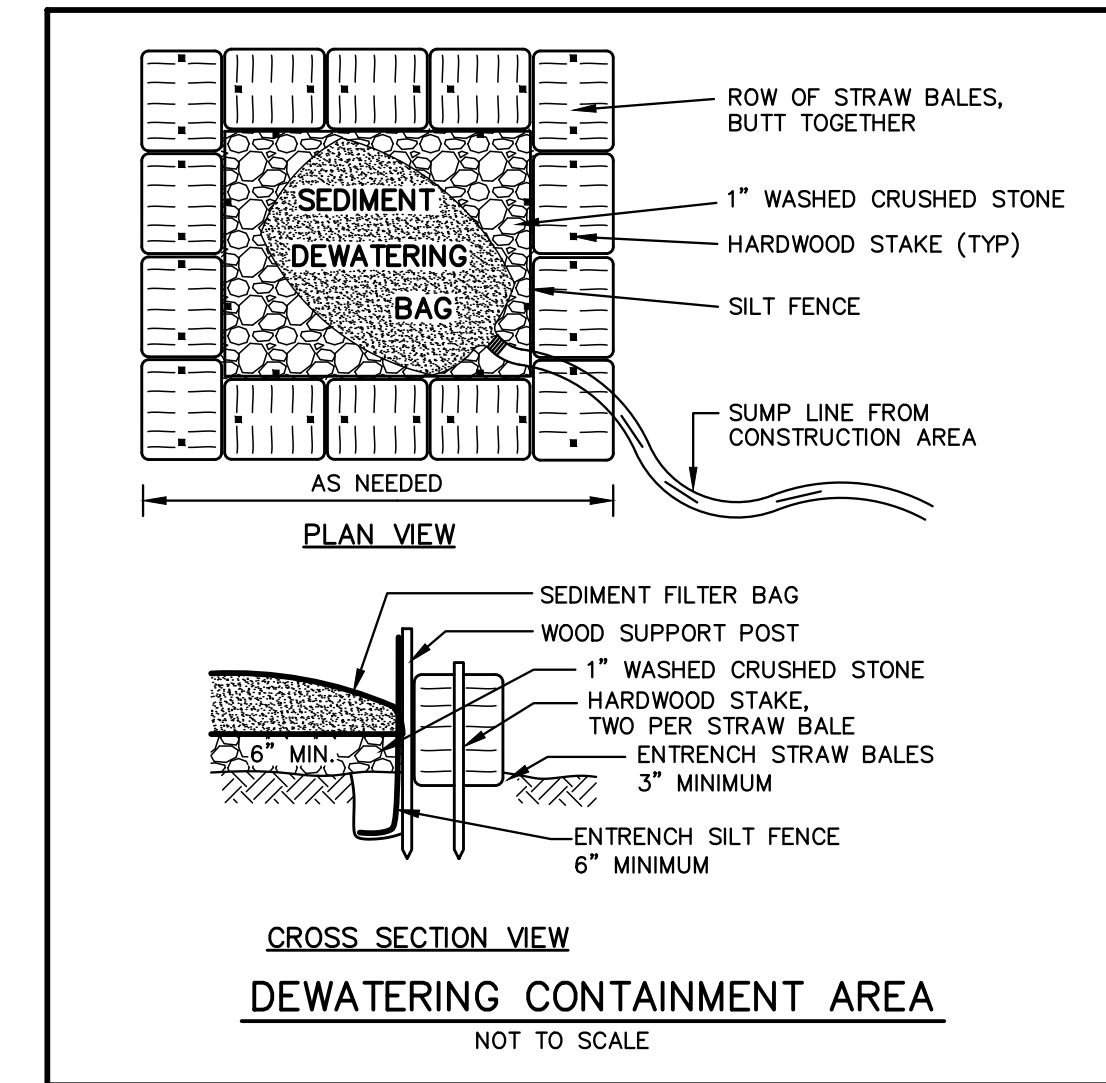
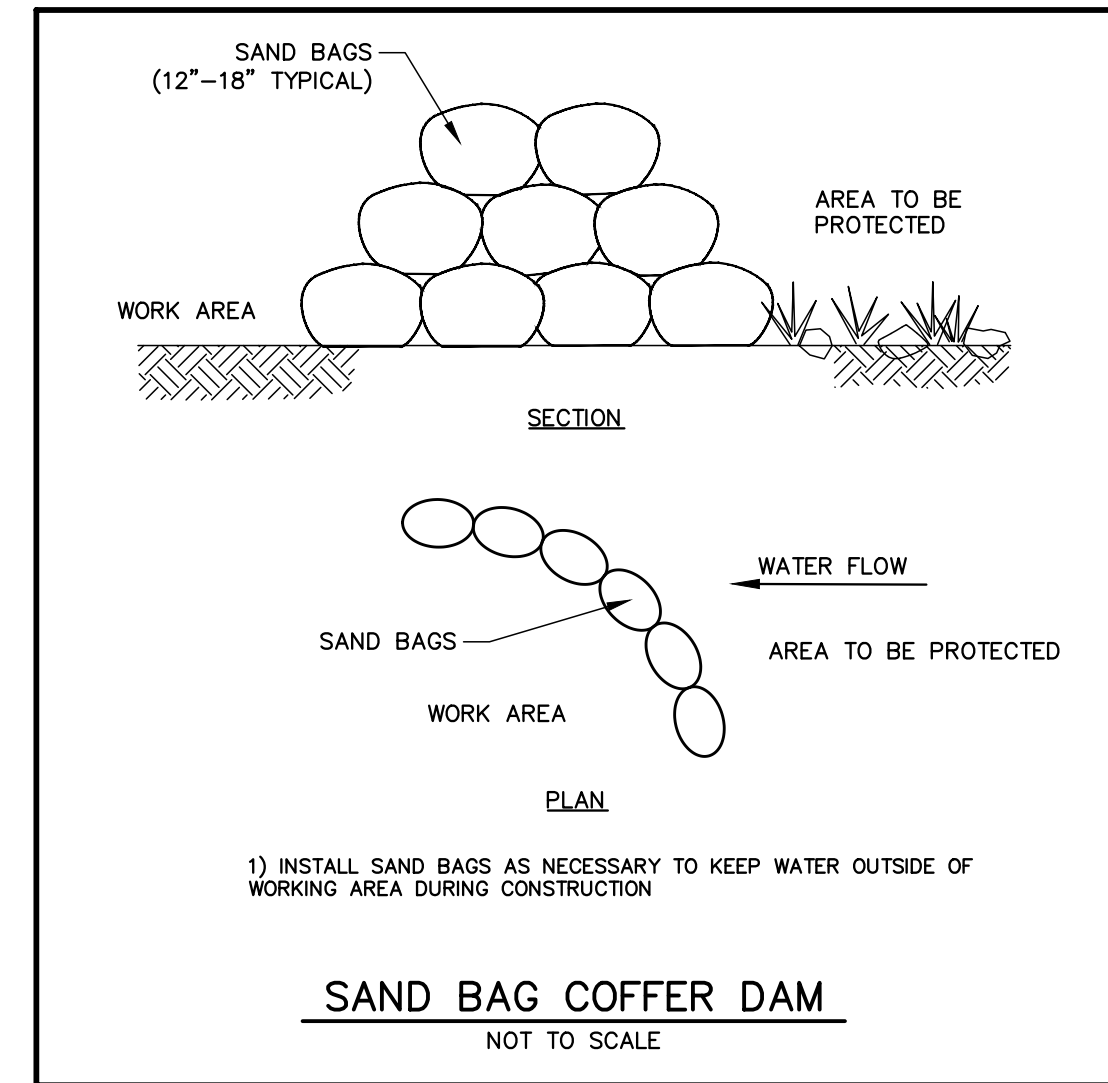
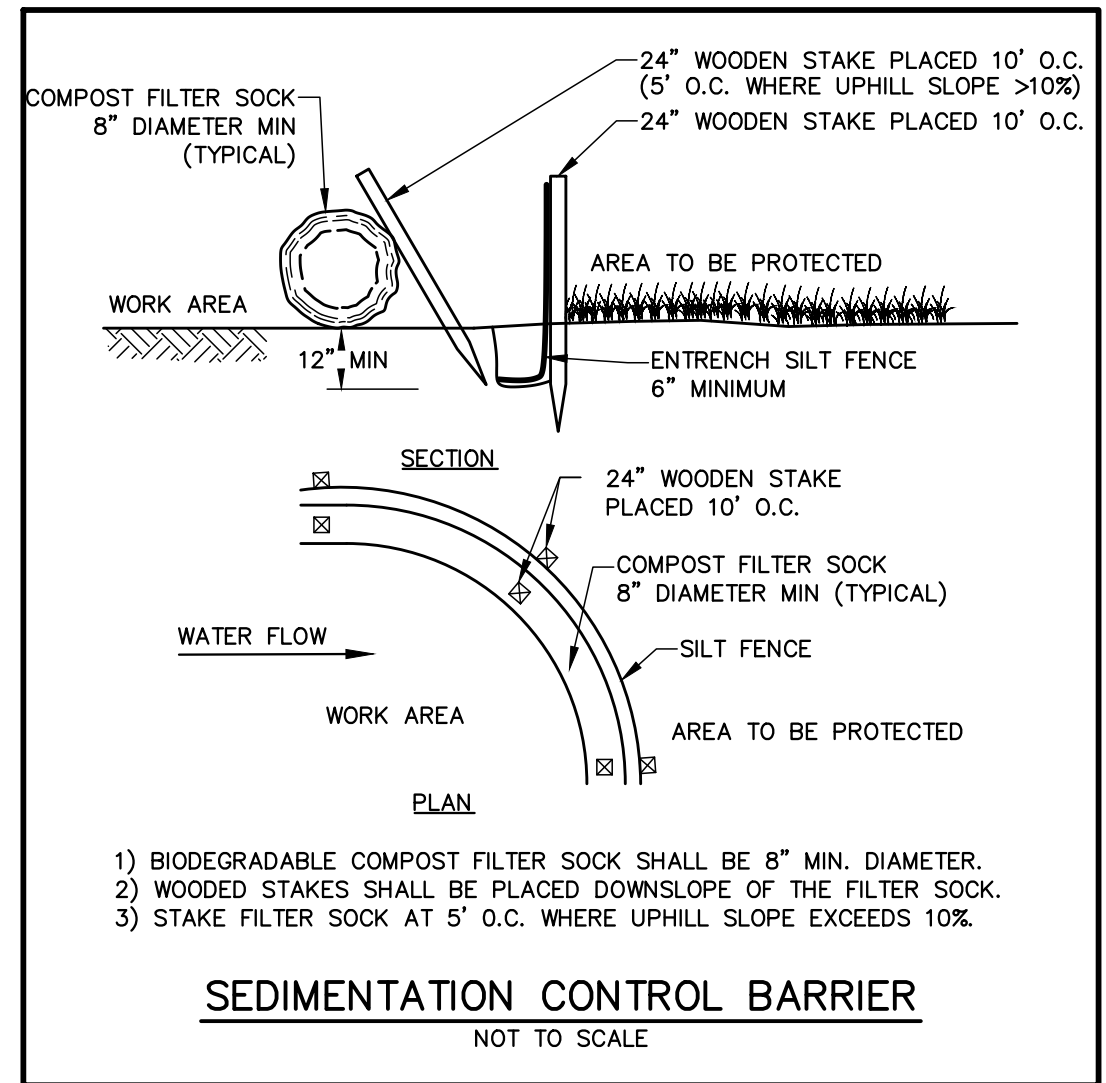
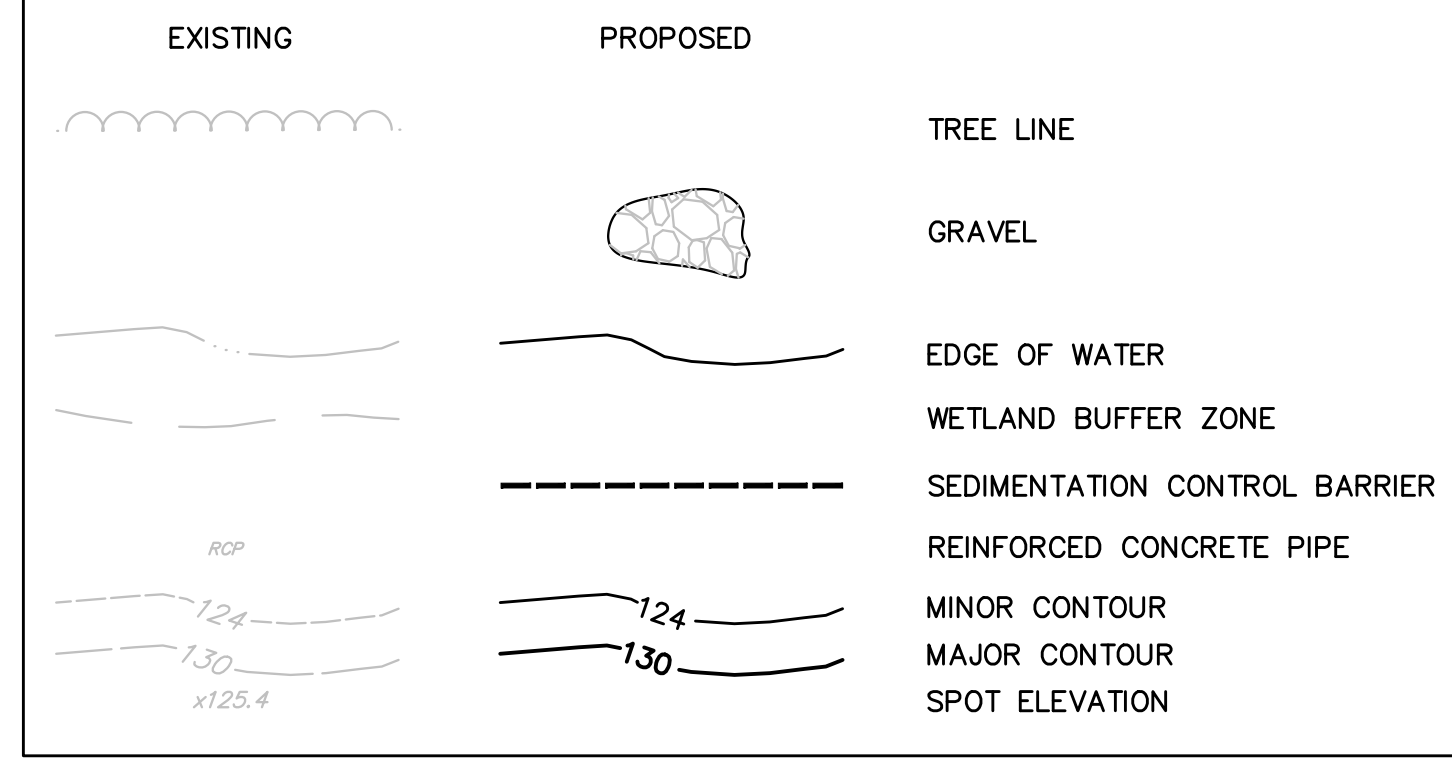
TP

CONSTRUCTION SEQUENCING PLAN
FOR POND IMPROVEMENTS

- CONTRACTOR SHALL INSTALL SEDIMENTATION CONTROL BARRIERS AND SAND BAG COFFERDAMS AS INDICATED ON THE PLAN TO RESTRICT THE FLOW OF SEDIMENT LADEN CONSTRUCTION RUNOFF OUTSIDE OF THE LIMIT OF WORK.
- CONTRACTOR SHALL INSTALL TEMPORARY GRAVEL CONSTRUCTION ROAD.
- FLEXIBLE DRAINPIPE SHALL BE LAID ALONG THE EDGES OF THE POND BANKS, AND SHALL EXTEND TO THE DEWATERING BAGS IN THE AREAS INDICATED ON THE SITE PREPARATION AND SEDIMENTATION CONTROL PLANS. THE PIPING SHALL BE CONNECTED WITH WATERTIGHT FITTINGS.
- GROUNDWATER DEWATERING WELL PIPES COMPRISED OF PERFORATED CMP SHALL BE EXCAVATED INTO POND BOTTOM TO A SUFFICIENT DEPTH BELOW THE WORK AREA AND SURROUNDED WITH CLEAN STONE. DEWATERING PUMPS SHALL BE SET WITHIN THE PERFORATED PIPES. DEWATERING PUMPS SHALL BE RUN CONTINUOUSLY OR AS NECESSARY THROUGHOUT THE CONSTRUCTION OPERATION TO MAINTAIN GROUNDWATER LEVELS BELOW THE EXCAVATION AREA. GROUNDWATER DEWATERING PIPES SHALL DISCHARGE INTO SEDIMENT DEWATERING BAGS WITHIN UPLAND AREAS SURROUNDED BY SEDIMENTATION CONTROL BARRIERS. SEDIMENTATION CONTROL BARRIERS AND SEDIMENT DEWATERING BAGS SHALL BE MONITORED DAILY THROUGHOUT THE CONSTRUCTION PROCESS AND ACCUMULATED SEDIMENT SHALL BE REMOVED AS NECESSARY TO ENSURE PROPER FUNCTIONING OF THESE BMP FACILITIES.
- PHASE I: HYDRORAISING OF THE EXISTING POND SHALL TARGET AND REMOVE ACCUMULATED LEAF LITTER AND OTHER ORGANIC DETRITUS MATERIAL. ALL HYDRORAISING SHALL BE CONDUCTED WITH THE POND DRAWN DOWN AND REASONABLY "DRY". ALL MATERIAL REMOVED SHALL BE TRANSPORTED DIRECTLY INTO DUMP TRUCKS AND SHALL BE BROUGHT TO A DESIGNATED STABILIZED DEWATERING AREA, IF NEEDED, AND ONCE THE MATERIAL HAS SUFFICIENTLY DRIED AND BEEN CHARACTERIZED, IT SHALL BE LOADED INTO WATERTIGHT DUMP TRUCKS AND TRANSPORTED TO A DESIGNATED ON-SITE DISPOSAL AREA. THE CONTRACTOR SHALL TAKE EXTREME CARE TO ENSURE THAT REMOVED MATERIAL IS NOT DISCHARGED BACK INTO THE POND.
- PHASE II: POND EXCAVATION SHALL BE PERFORMED IN ACCORDANCE WITH THE GENERAL PROCEDURES OUTLINED FOR PROPOSED HYDRORAISING. EXCAVATION FOR THE POND SHAPING AND EXPANSION SHALL BE DONE IN ACCORDANCE WITH THE GRADING DEPICTED ON THE SITE PLAN. ONCE THE POND EXPANSION AREA HAS BEEN EXCAVATED TO FINAL DEPTH, THE CONTRACTOR SHALL INSTALL SUITABLE MATERIAL ON THE BOTTOM OF THE POND GENERALLY MATCHING THE TYPE AND CONSISTENCY OF MATERIAL OBSERVED AT THE BASE OF THE EXISTING POND.
- UPON COMPLETION OF CONSTRUCTION, THE GROUNDWATER DEWATERING PUMPS SHALL BE REMOVED FROM THE POND. THE PERFORATED WELL PIPES ARE TO BE CAPPED AND REMAIN IN PLACE FOR POSSIBLE FUTURE REUSE DURING ANY FUTURE SUBSEQUENT POND IMPROVEMENTS. THE POND SHALL BE ALLOWED TO REFILL WITH BOTH GROUNDWATER AND FLOW FROM TRIBUTARY WATERWAYS/PIPING. ONCE THE POND HAS BEEN SUBSTANTIALLY FILLED, THE OUTLETS SHALL BE TEMPORARILY BLOCKED UNTIL ALL SEDIMENT HAS SETTLED FROM THE POND WATER. ONCE THE SEDIMENT HAS SETTLED, THE OUTLETS CAN BE RESTORED TO NORMAL OPERATION.
- CONTRACTOR SHALL REMOVE TEMPORARY GRAVEL CONSTRUCTION ROAD AND ALL DISTURBED AREAS SHALL BE RELOAMED AND SEEDED/SODDED TO ACHIEVE COMPLETE VEGETATION STABILIZATION. ONCE VEGETATED STABILIZATION IS ACHIEVED, THE SEDIMENTATION CONTROL BARRIERS SHALL BE REMOVED.



LEGEND AND ABBREVIATIONS



PREPARED FOR:
WOODLAND GOLF CLUB
1897 WASHINGTON STREET
AUBURNDALE, MA 02466

RECORD OWNER:
WOODLAND GOLF CLUB OF AUBURNDALE
BOOK 7337 PAGE 390

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ISSUE DATE	DESCRIPTION
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PROJECT:
HOLE 9 POND IMPROVEMENTS
WOODLAND GOLF CLUB
AUBURNDALE, MASSACHUSETTS (MIDDLESEX COUNTY)

SCALE: 1" = 20' DATE: MAY 5, 2022

SITE PREPARATION + SEDIMENTATION CONTROL PLAN

B+T JOB NO.3304.01

B+T PLAN NO. 330401P004B-002

C2.1

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WOODLAND GOLF CLUB

1897 WASHINGTON STREET
AUBURNDALE, MA 02466

RECORD OWNER:

WOODLAND GOLF CLUB OF AUBURNDALE

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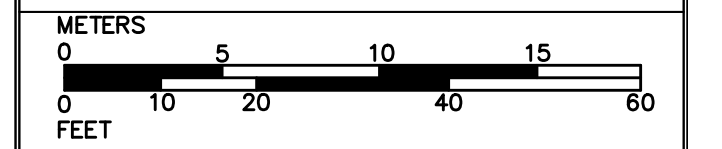
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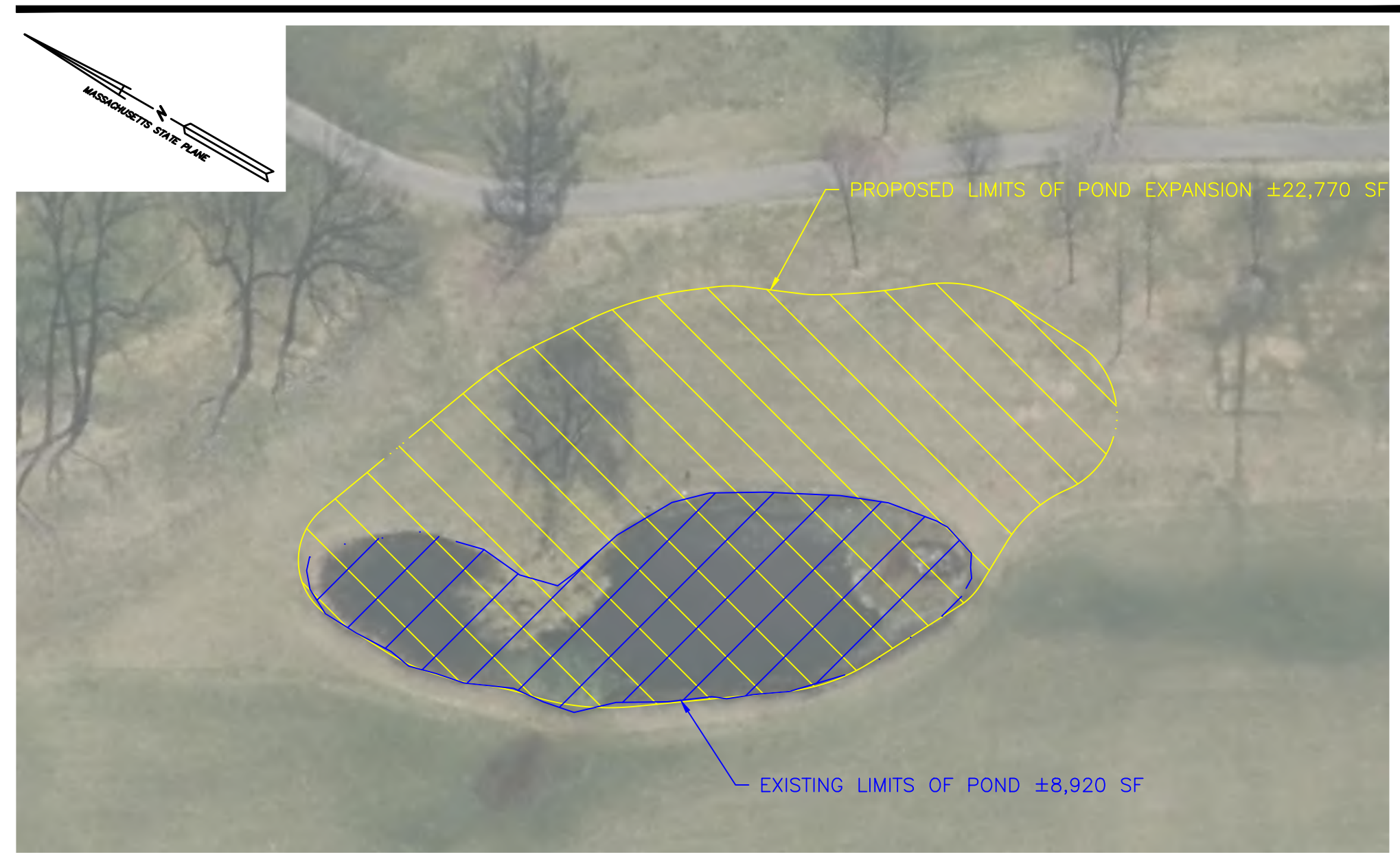
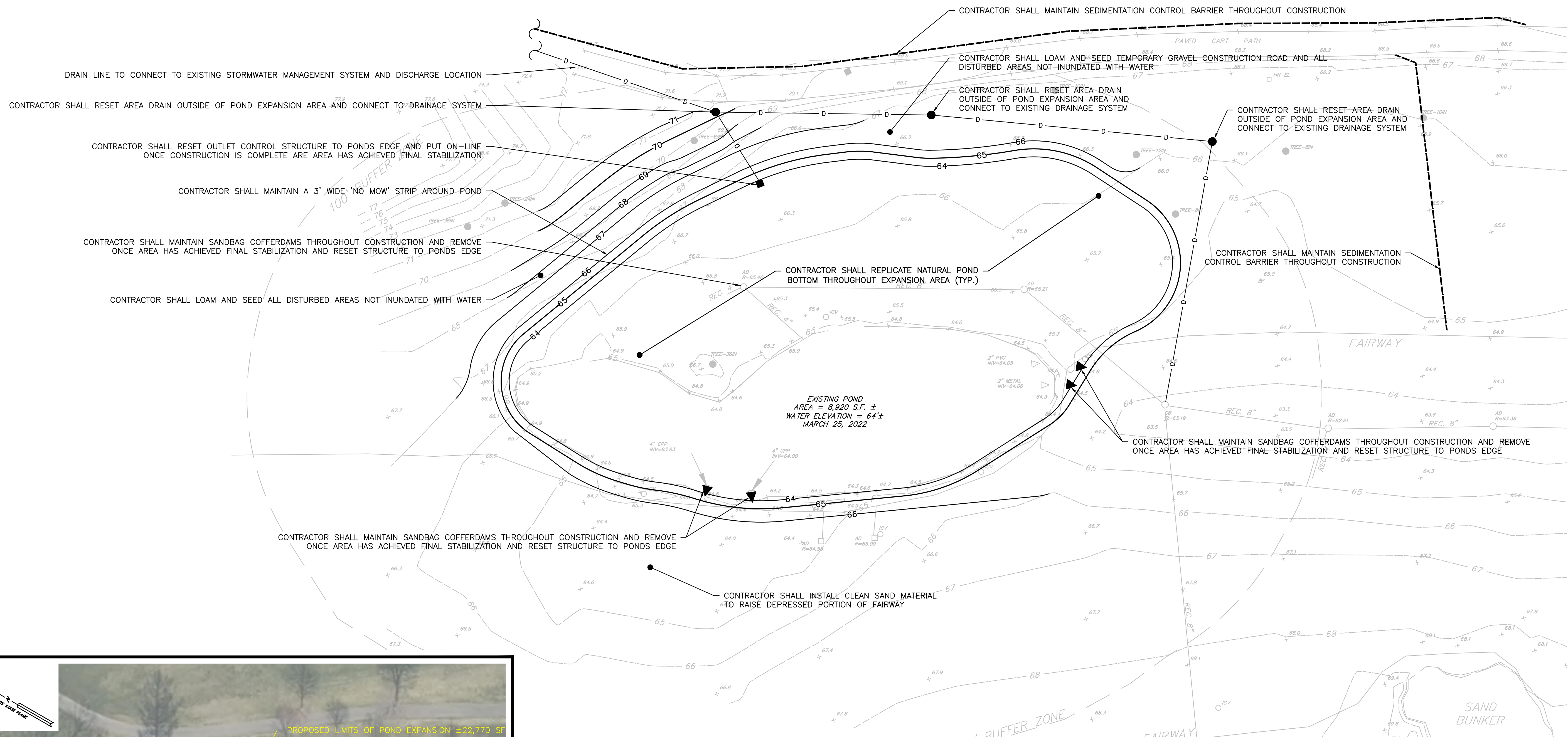


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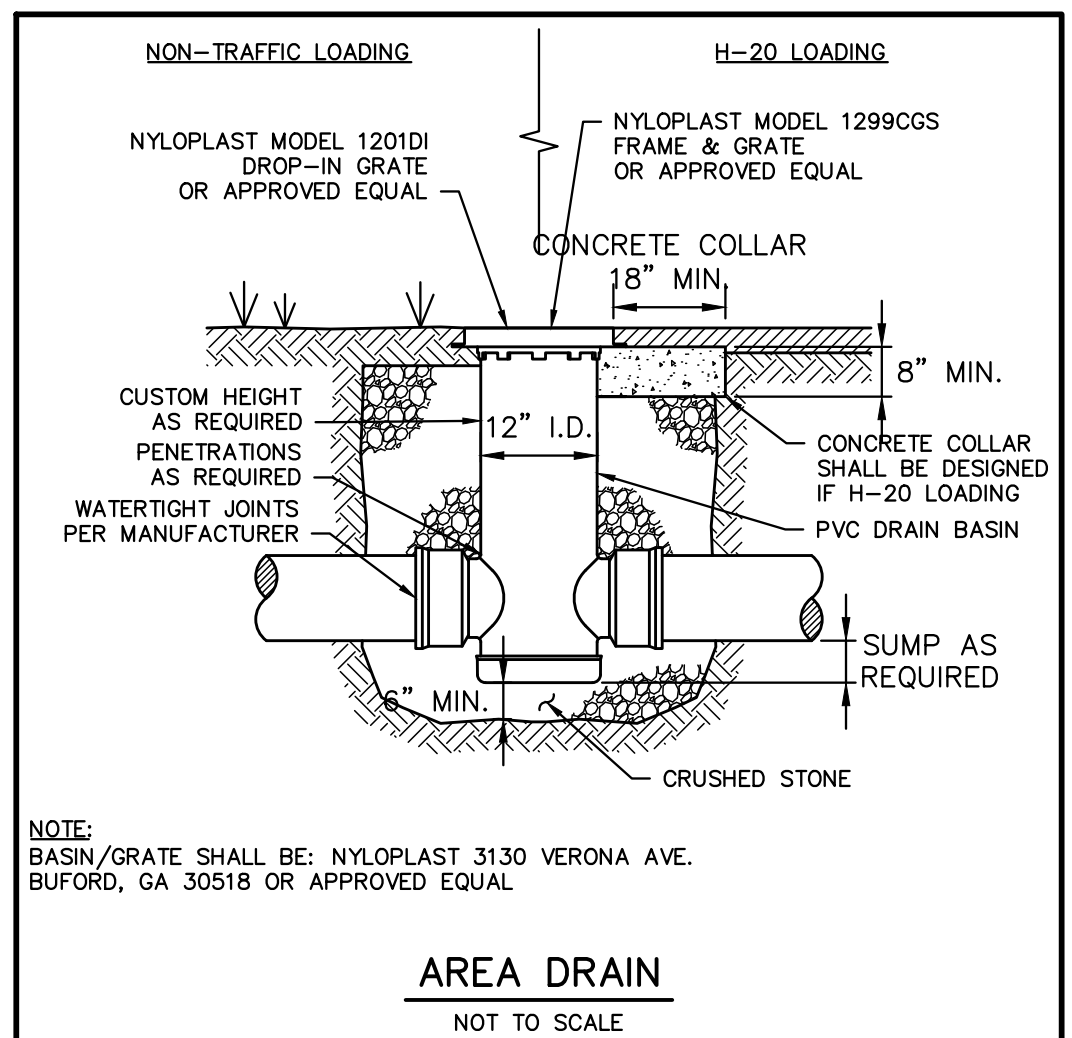
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B+T PLAN NO. 330401P004B-003

C31



POND EXPANSION OVERVIEW



FOR NOTES, REFERENCES AND LEGEND SEE SHEET C2.1.
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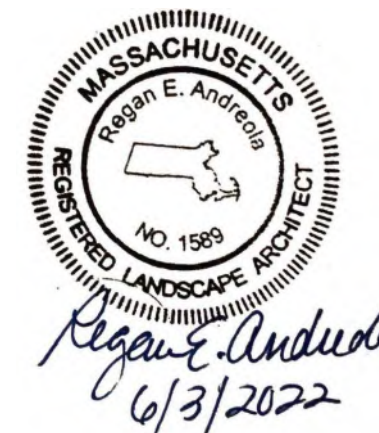
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RECORD OWNER:

WOODLAND GOLF CLUB OF AUBURNDALE

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PROJECT:
HOLE 9 POND IMPROVEMENTS
WOODLAND GOLF CLUB
AUBURNDALE, MASSACHUSETTS
(MIDDLESEX COUNTY)

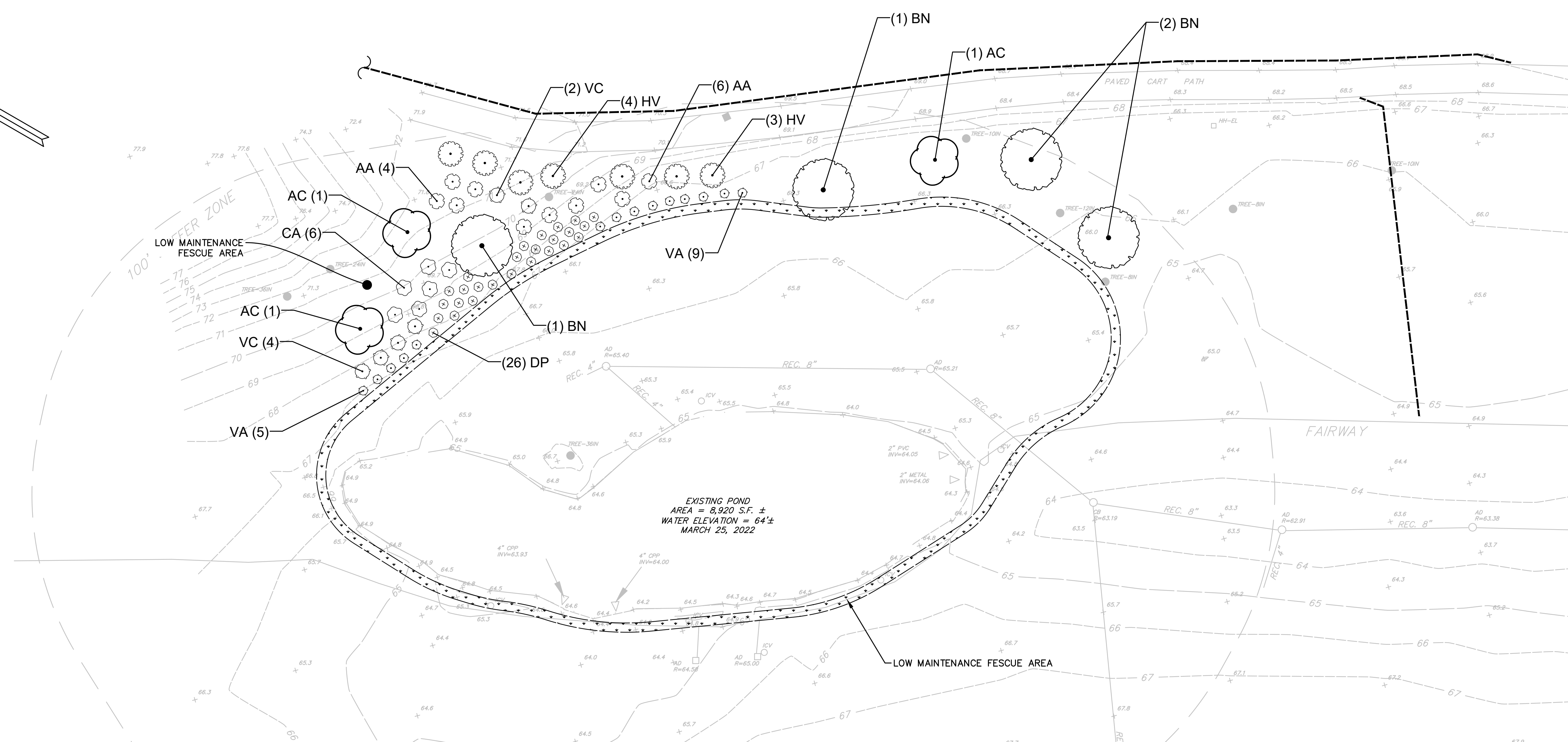
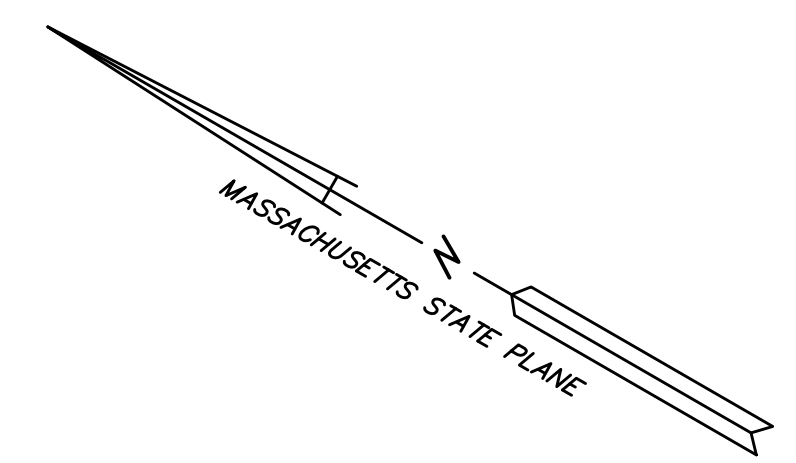
SCALE: 1" = 20' DATE: MAY 5, 2022
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PHASE 2 LANDSCAPE PLAN

B+T JOB NO.3304.01

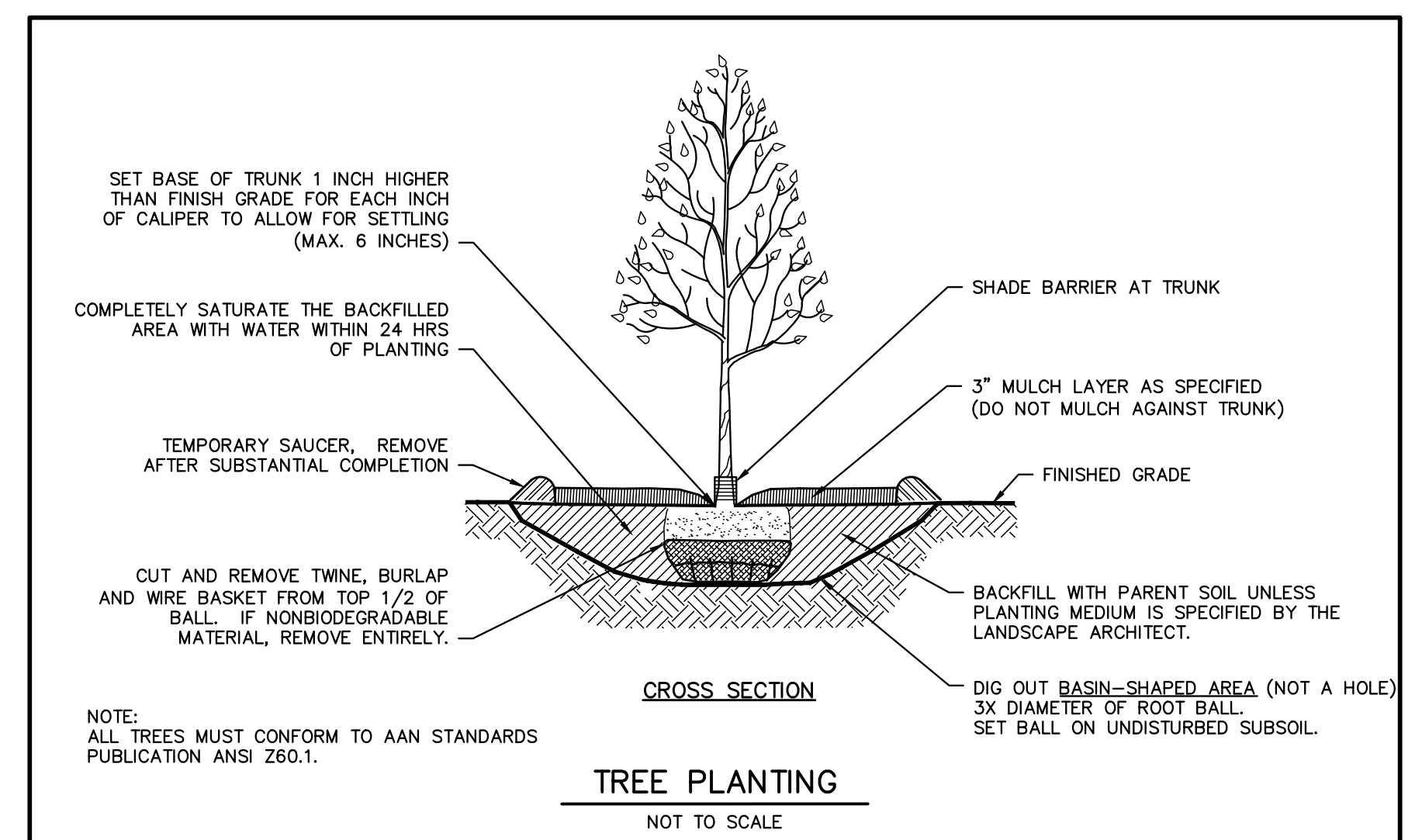
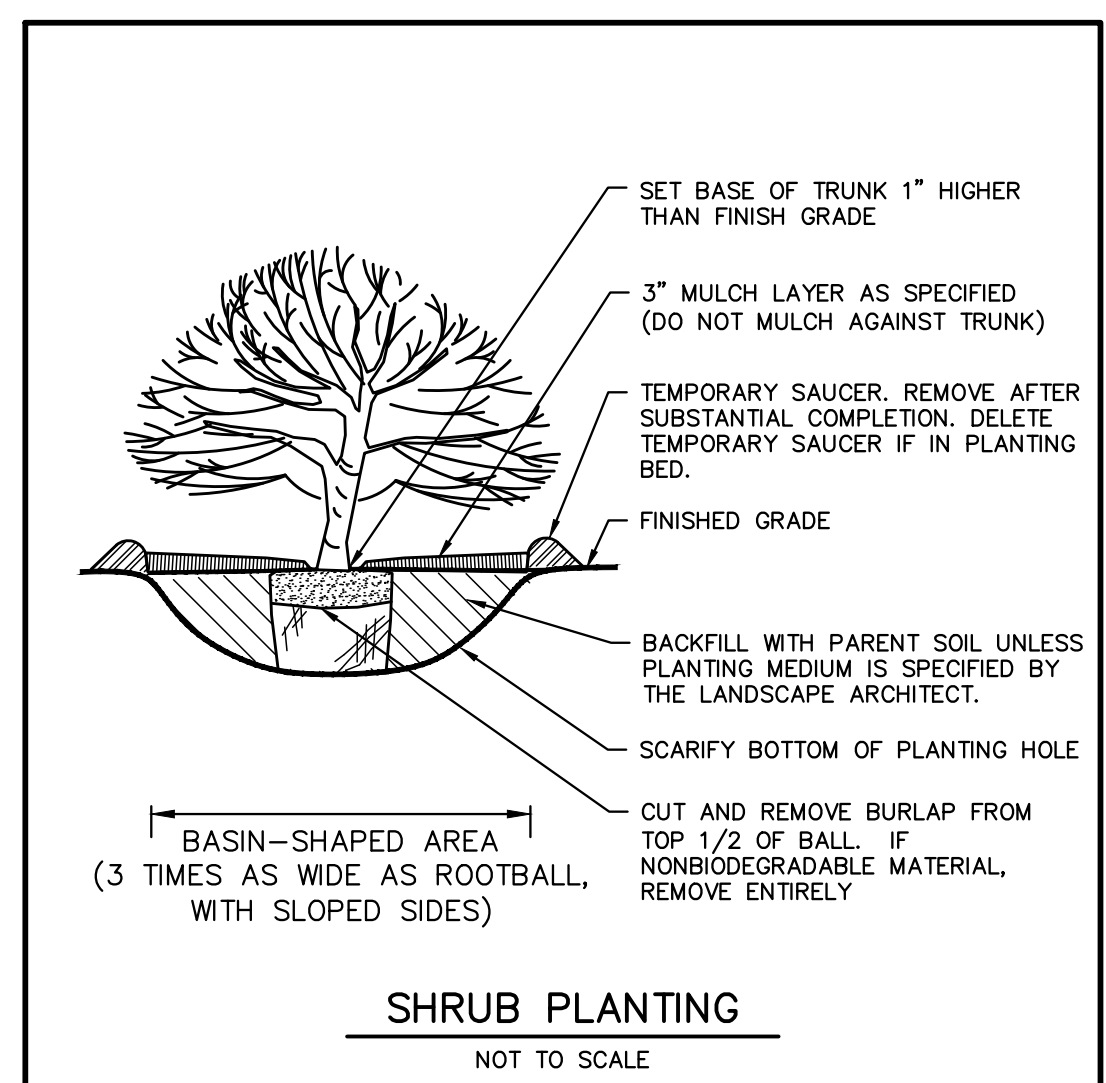
B+T PLAN NO.
330401P004B-004

C4.1



PHASE 2 PLANT SCHEDULE

TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE
AC	3	Amelanchier canadensis	Canadian Serviceberry	6-7' ht.
BN	4	Betula nigra	River Birch	2-2 1/2" cal.
SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE
AA	10	Aronia arbutifolia	Red Chokeberry	#2 CONT.
CA	6	Cornus amomum	Silky Dogwood	#2 CONT.
HV	7	Hamamelis virginiana	Common Witch Hazel	#3 CONT.
VA	14	Vaccinium angustifolium	Lowbush Blueberry	1 gal.
VC	6	Vaccinium corymbosum	Highbush Blueberry	#3 CONT.
FERNS	QTY	BOTANICAL NAME	COMMON NAME	SIZE
DP	26	Dennstaedtia punctilobula	Hay-scented Fern	1 gal.



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