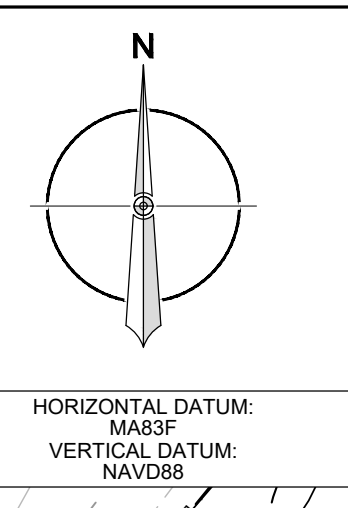


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- NOTES**
- TOTAL SURFACE AREA TO BE DREDGED FROM SOUTH DREDGE AREA IS 226,710 SF. TOTAL VOLUME TO BE DREDGED FROM SOUTH DREDGE AREA IS 30,800 CY OF DREDGE MATERIAL.
 - TURBIDITY BARRIER TO BE USED AROUND ALL ACTIVE DREDGING
 - AN ELEVATED CONCENTRATION OF ARSENIC HAS BEEN DETECTED WITHIN THE POTENTIALLY CONTAMINATED SEDIMENT DREDGING AREA SHOWN (17,500 SF). TOTAL VOLUME TO BE DREDGED FROM POTENTIALLY CONTAMINATED SEDIMENT DREDGING AREA IS 646 CY. MATERIAL DREDGED FROM WITHIN THE POTENTIALLY CONTAMINATED SEDIMENT DREDGING AREA SHALL BE SEGREGATED FROM ALL OTHER SEDIMENT AND DEWATERED IN A MANNER THAT PREVENTS CONTAMINATION FROM SPREADING.



REVISIONS		DESCRIPTION
NO.	DATE	BY

DESIGNED BY:	AP
DRAWN BY:	DPA
CHECKED BY:	AEH
PROJECT MANAGER:	AP

TOWN OF CONCORD
WARNER'S POND RESTORATION PROJECT
CONCORD, MASSACHUSETTS

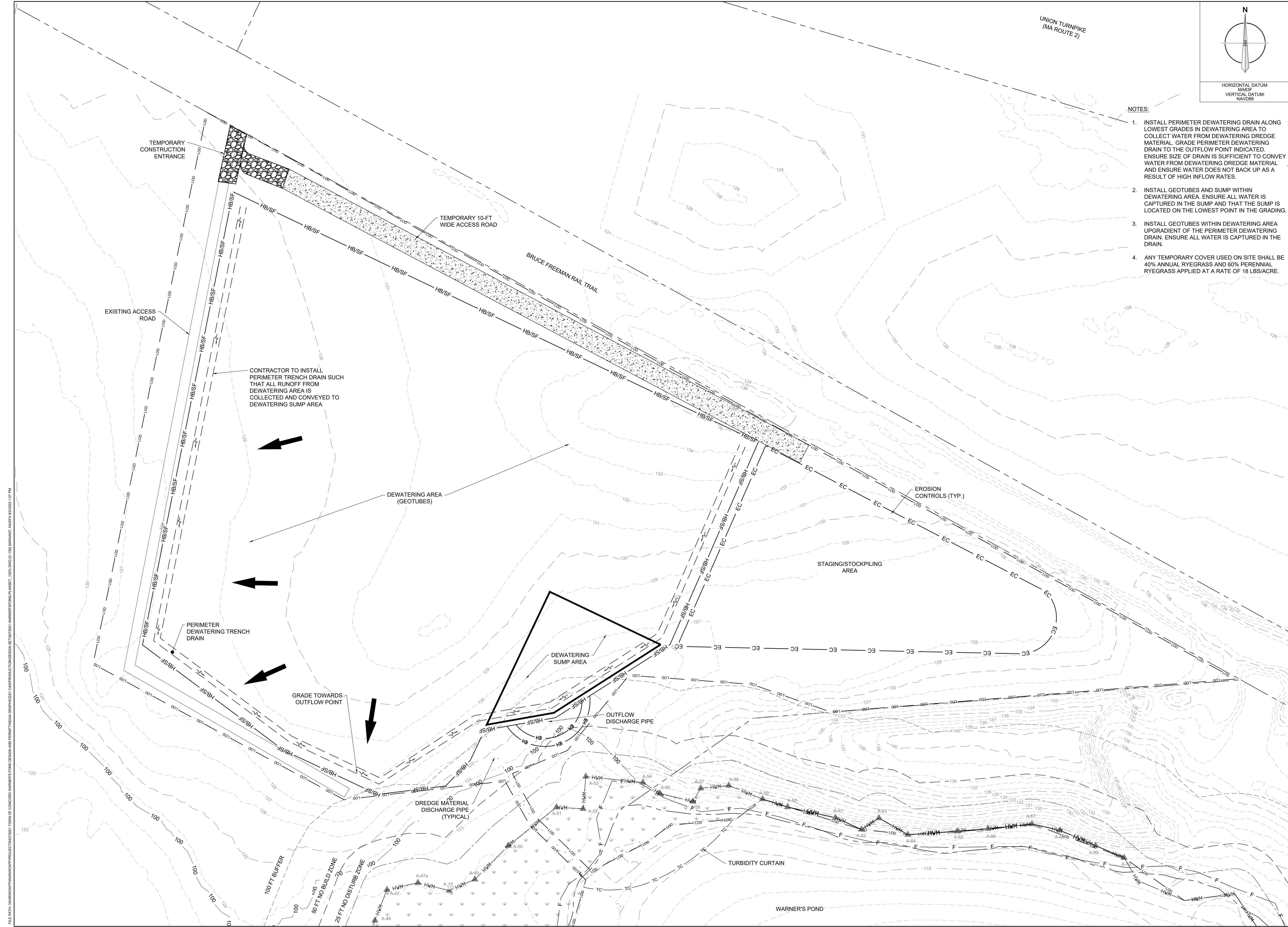
PROPOSED DREDGING PLAN - SOUTH AREA

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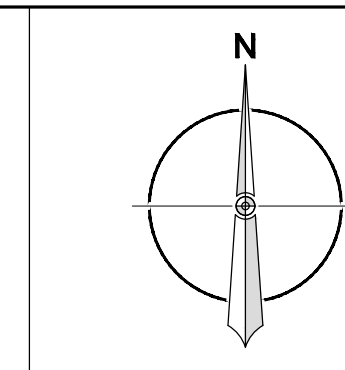
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GRAPHIC SCALE IN FEET

FULL SIZE PLOT: 24" x 36"
DATE: AUGUST 2022
PROJECT NUMBER: 6373001
C-102
SHEET: 4 OF 13

100% PLANS - FOR CONSTRUCTION



UNION TURNPIKE
(MA ROUTE 2)

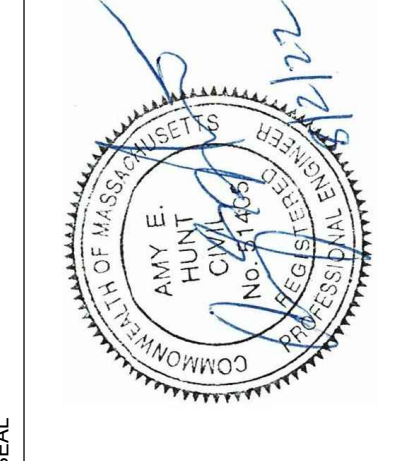


HORIZONTAL DATUM:
MABSF
VERTICAL DATUM:
NAVD88

NOTES:

1. INSTALL PERIMETER DEWATERING DRAIN ALONG LOWEST GRADES IN DEWATERING AREA TO COLLECT WATER FROM DEWATERING DREDGE MATERIAL. GRADE PERIMETER DEWATERING DRAIN TO THE OUTFLOW POINT INDICATED. ENSURE SIZE OF DRAIN IS SUFFICIENT TO CONVEY WATER FROM DEWATERING DREDGE MATERIAL AND ENSURE WATER DOES NOT BACK UP AS A RESULT OF HIGH INFLOW RATES.
2. INSTALL GEOTUBES AND SUMP WITHIN DEWATERING AREA. ENSURE ALL WATER IS CAPTURED IN THE SUMP AND THAT THE SUMP IS LOCATED ON THE LOWEST POINT IN THE GRADING.
3. INSTALL GEOTUBES WITHIN DEWATERING AREA UPGRADIENT OF THE PERIMETER DEWATERING DRAIN. ENSURE ALL WATER IS CAPTURED IN THE DRAIN.
4. ANY TEMPORARY COVER USED ON SITE SHALL BE 40% ANNUAL RYEGRASS AND 60% PERENNIAL RYEGRASS APPLIED AT A RATE OF 18 LBS/ACRE.

REVISIONS		DESCRIPTION
NO.	DATE	BY
DESIGN INFORMATION		
DESIGNED BY:	AP	
DRAWN BY:	DPA	
CHECKED BY:	AEH	
PROJECT MANAGER:	AP	



TOWN OF CONCORD
WARNER'S POND RESTORATION PROJECT
 CONCORD, MASSACHUSETTS
DEWATERING PLAN

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GRAPHIC SCALE IN FEET			
FULL SIZE PLOT: 24" x 36"			
DATE: AUGUST 2022			
PROJECT NUMBER: 6373001			
C-106			
SHEET: 8 OF 13			

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100% PLANS - FOR CONSTRUCTION

FILE PATH: \\WARNER\PROJECTS\PROJECTS\301 TOWN OF CONCORD\WARNER'S POND RESTORATION\DESIGN\301 CAD\PRODUCTION\DESIGN\SET\301 WARNER'S POND RESTORATION - 100% (DWG) (C-107) BARBANK, MA\FR\AUGUST 2022 1:07 PM

Common Name	Scientific Name	Symbol	Indicator Status	Application Rate
Canada Wild Rye	Elymus canadensis	EC	FACU+	35 lbs/acre
Red Fescue	Festuca rubra	FR	FACU	35 lbs/acre
Annual Ryegrass	Lolium multiflorum	LM		35 lbs/acre
Perennial Ryegrass	Lolium perenne	LP		35 lbs/acre
Little Bluestem	Schizachyrium scoparium	SS	FACU	35 lbs/acre
Switch Grass	Panicum virgatum	PV	FAC	35 lbs/acre
Indian Grass	Sorghastrum nutans	SN	UPL	35 lbs/acre

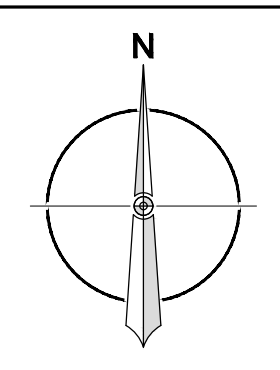
TABLE 2. NEW ENGLAND EROSION CONTROL/RESTORATION MIX

HATCH LEGEND

	EXPECTED STORAGE CAPACITY (28,500 CY)
	ADDITIONAL STORAGE CAPACITY (5,500 CY)

NOTE

- TOTAL VOLUME OF EXCESS EXCAVATED MATERIAL TO BE DISPOSED ON DISPOSAL SITE IS APPROXIMATELY 32,000 CY.
- DISPOSAL SITE STORAGE DESIGNED TO HOLD BETWEEN 28,500 CY AND 34,000 CY.
- SEED DREDGE MATERIAL DISPOSAL PILE WITH NATIVE SEED MIX OR APPROVED EQUAL. PERMANENT SEEDING SHALL BE UNDERTAKEN IN THE SPRING FROM MARCH THROUGH MAY, AND IN LATE SUMMER AND EARLY FALL FROM AUGUST TO OCTOBER 15. DURING THE PEAK SUMMER MONTHS AND IN THE FALL AFTER OCTOBER 15, WHEN SEEDING MAY BE UNDERTAKEN DURING THE SUMMER IF PLANS PROVIDE FOR ADEQUATE MULCHING AND WATERING.
- ANY SEEDING SUBSTITUTIONS MUST BE APPROVED BY THE TOWN OF CONCORD.



HORIZONTAL DATUM: MAB3F
VERTICAL DATUM: NAVD88

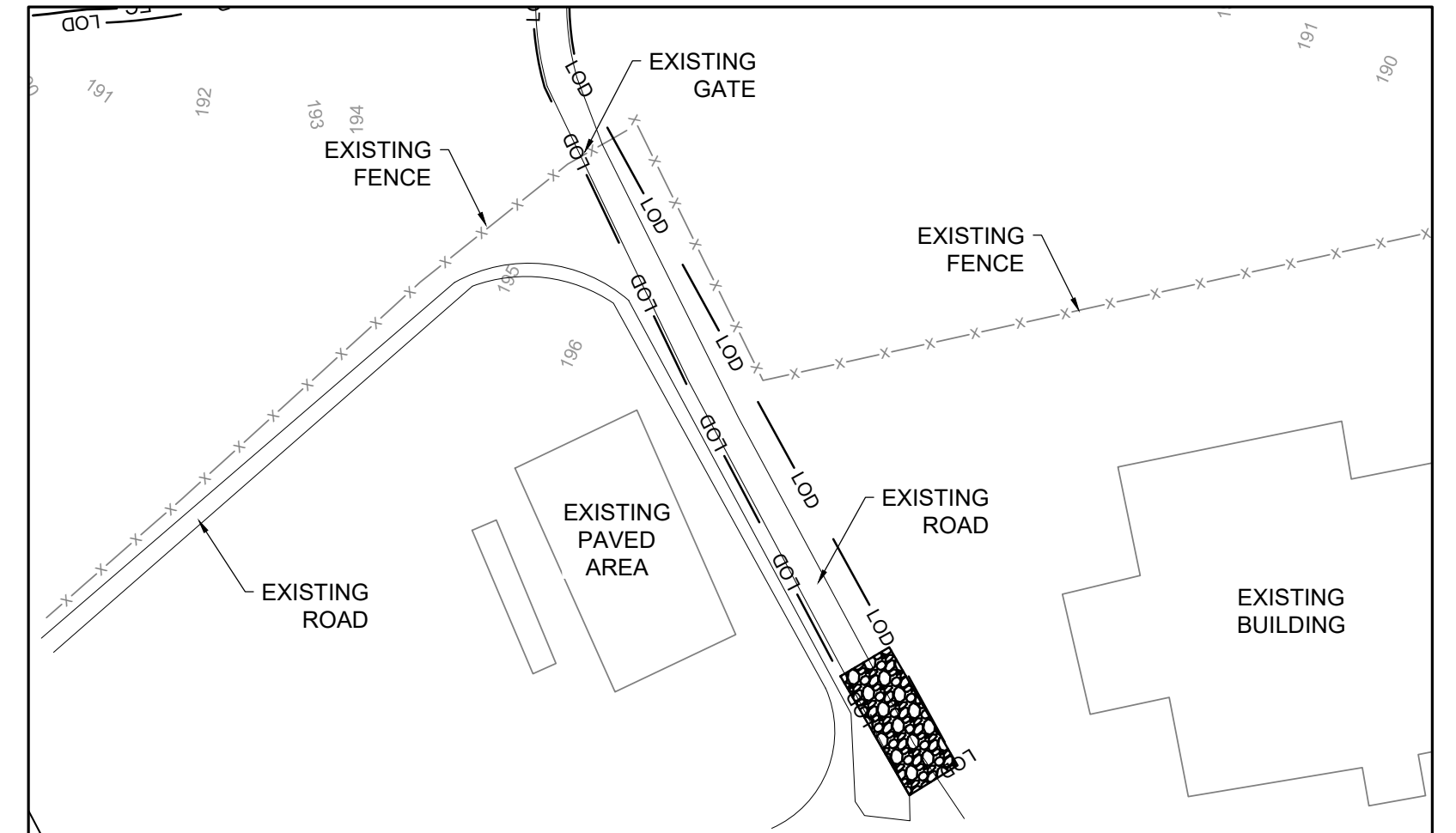


NO.	DATE	BY	DESCRIPTION

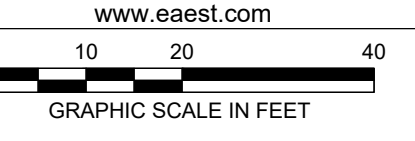
DESIGNED BY: AP
DRAWN BY: DPA
CHECKED BY: AEH
PROJECT MANAGER: AP



TOWN OF CONCORD
WARNER'S POND RESTORATION PROJECT
CONCORD, MASSACHUSETTS
DREDGE MATERIAL DISPOSAL SITE

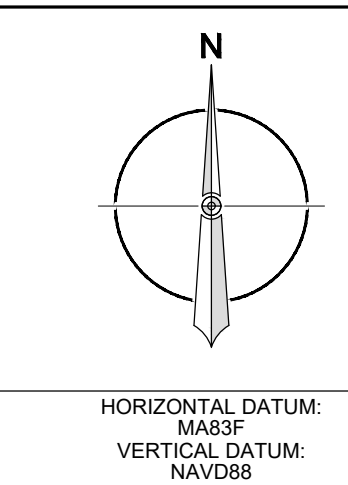
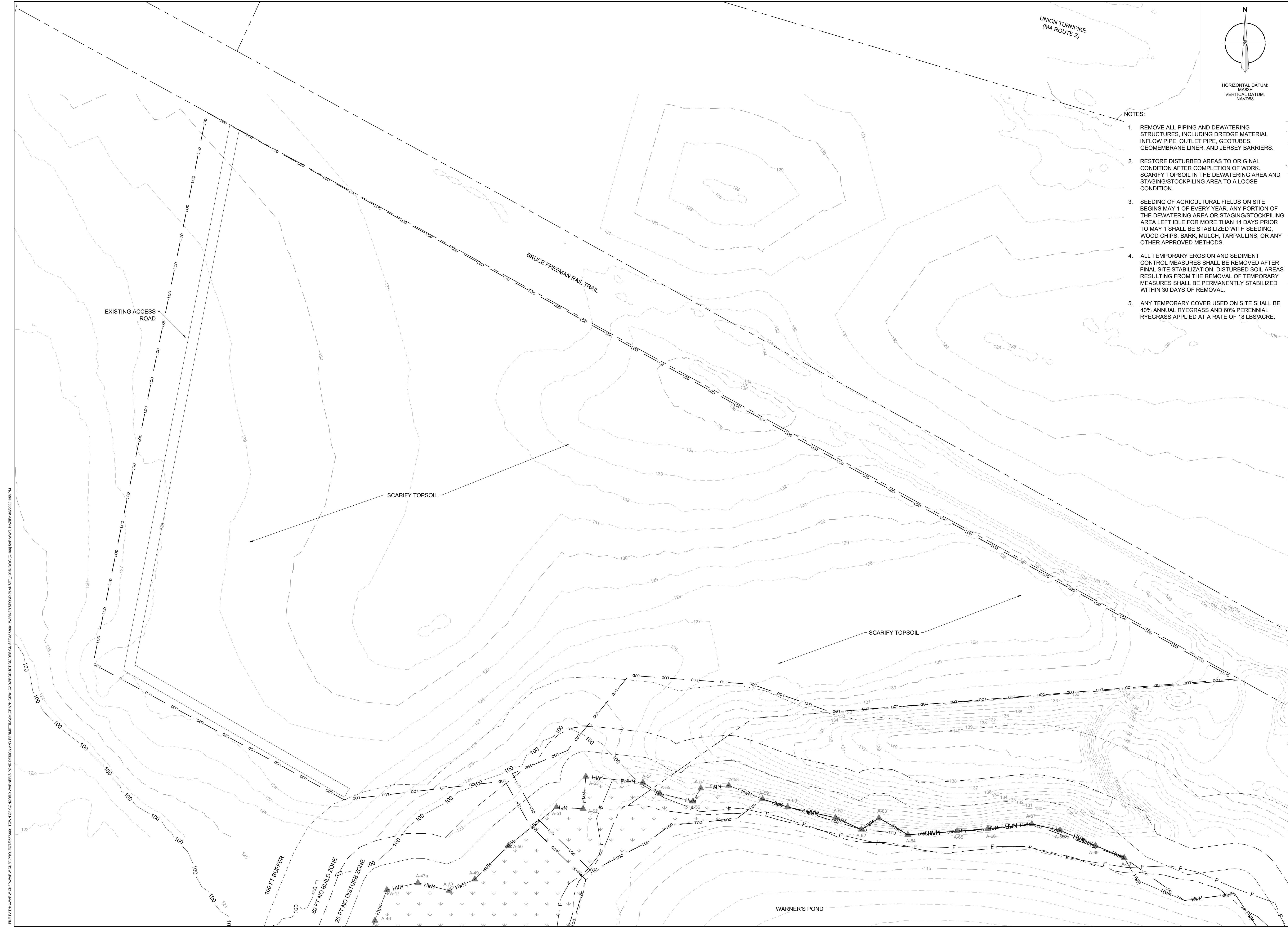


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FULL SIZE PLOT: 24" x 36"
DATE: AUGUST 2022
PROJECT NUMBER: 6373001

100% PLANS - FOR CONSTRUCTION



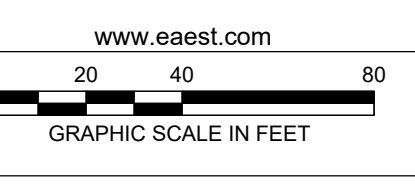
- NOTES:**
1. REMOVE ALL PIPING AND DEWATERING STRUCTURES, INCLUDING DREDGE MATERIAL INFLOW PIPE, OUTLET PIPE, GEOTUBES, GEOMEMBRANE LINER, AND JERSEY BARRIERS.
 2. RESTORE DISTURBED AREAS TO ORIGINAL CONDITION AFTER COMPLETION OF WORK. SCARIFY TOPSOIL IN THE DEWATERING AREA AND STAGING/STOCKPILING AREA TO A LOOSE CONDITION.
 3. SEEDING OF AGRICULTURAL FIELDS ON SITE BEGINS MAY 1 OF EVERY YEAR. ANY PORTION OF THE DEWATERING AREA OR STAGING/STOCKPILING AREA LEFT IDLE FOR MORE THAN 14 DAYS PRIOR TO MAY 1 SHALL BE STABILIZED WITH SEEDING, WOOD CHIPS, BARK, MULCH, TARPULINS, OR ANY OTHER APPROVED METHODS.
 4. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED AFTER FINAL SITE STABILIZATION. DISTURBED SOIL AREAS RESULTING FROM THE REMOVAL OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED WITHIN 30 DAYS OF REMOVAL.
 5. ANY TEMPORARY COVER USED ON SITE SHALL BE 40% ANNUAL RYEGRASS AND 60% PERENNIAL RYEGRASS APPLIED AT A RATE OF 18 LBS/ACRE.

REVISIONS		DESCRIPTION	
NO.	DATE	BY	

DESIGN INFORMATION			
DESIGNED BY:	AP	DRAWN BY:	DPA
CHECKED BY:	AEH	PROJECT MANAGER:	AP



TOWN OF CONCORD
WARNER'S POND RESTORATION PROJECT
 CONCORD, MASSACHUSETTS
RESTORATION PLAN



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 FULL SIZE PLOT: 24" x 36"
 DATE: AUGUST 2022
 PROJECT NUMBER: 6373001
C-108
 SHEET: 10 OF 13

FILE PATH: \\WARWICK\PM\PROJECTS\6373001\TOWN OF CONCORD\WARNER'S POND DESIGN AND RESTORATION\GIS\CAD\PRODUCTION\DESIGN\SET\6373001\WARWICK_POND_PLANSET_1000.DWG (C:\08\BARBARA\A\6373001_100.PLT)

100% PLANS - FOR CONSTRUCTION

NOTE

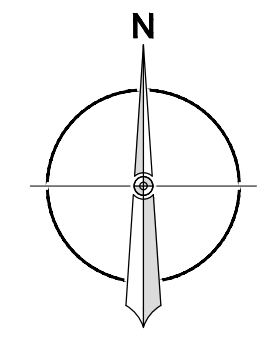
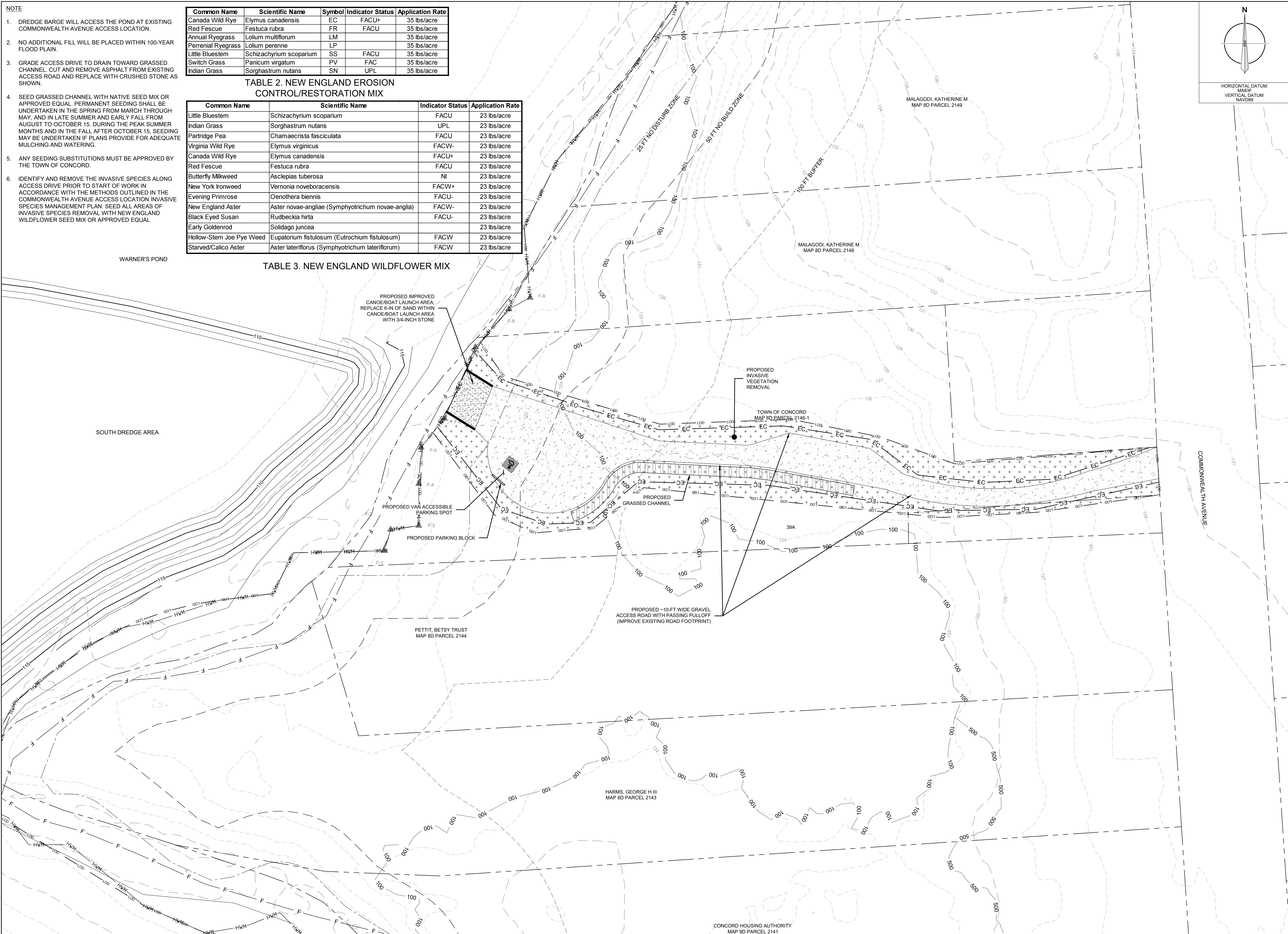
- DREDGE BARGE WILL ACCESS THE POND AT EXISTING COMMONWEALTH AVENUE ACCESS LOCATION.
- NO ADDITIONAL FILL WILL BE PLACED WITHIN 100-YEAR FLOOD PLAIN.
- GRADE ACCESS DRIVE TO DRAIN TOWARD GRASSED CHANNEL. CUT AND REMOVE ASPHALT FROM EXISTING ACCESS ROAD AND REPLACE WITH CRUSHED STONE AS SHOWN.
- SEED GRASSED CHANNEL WITH NATIVE SEED MIX OR APPROVED EQUAL. PERMANENT SEEDING SHALL BE UNDERTAKEN IN THE SPRING FROM MARCH THROUGH MAY, AND IN LATE SUMMER AND EARLY FALL FROM AUGUST TO OCTOBER 15, DURING THE PEAK SUMMER MONTHS AND IN THE FALL AFTER OCTOBER 15. SEEDING MAY BE UNDERTAKEN IF PLANS PROVIDE FOR ADEQUATE MULCHING AND WATERING.
- ANY SEEDING SUBSTITUTIONS MUST BE APPROVED BY THE TOWN OF CONCORD.
- IDENTIFY AND REMOVE THE INVASIVE SPECIES ALONG ACCESS DRIVE PRIOR TO START OF WORK IN ACCORDANCE WITH THE METHODS OUTLINED IN THE COMMONWEALTH AVENUE ACCESS LOCATION INVASIVE SPECIES MANAGEMENT PLAN. SEED ALL AREAS OF INVASIVE SPECIES REMOVAL WITH NEW ENGLAND WILDFLOWER SEED MIX OR APPROVED EQUAL

Common Name	Scientific Name	Symbol	Indicator Status	Application Rate
Canada Wild Rye	Elymus canadensis	EC	FACU+	35 lbs/acre
Red Fescue	Festuca rubra	FR	FACU	35 lbs/acre
Annual Ryegrass	Lolium multiflorum	LM		35 lbs/acre
Perennial Ryegrass	Lolium perenne	LP		35 lbs/acre
Little Bluestem	Schizachyrium scoparium	SS	FACU	35 lbs/acre
Switch Grass	Panicum virgatum	PV	FAC	35 lbs/acre
Indian Grass	Sorghastrum nutans	SN	UPL	35 lbs/acre

TABLE 2. NEW ENGLAND EROSION CONTROL/RESTORATION MIX

Common Name	Scientific Name	Indicator Status	Application Rate
Little Bluestem	Schizachyrium scoparium	FACU	23 lbs/acre
Indian Grass	Sorghastrum nutans	UPL	23 lbs/acre
Partridge Pea	Chamaecrista fasciculata	FACU	23 lbs/acre
Virginia Wild Rye	Elymus virginicus	FACW-	23 lbs/acre
Canada Wild Rye	Elymus canadensis	FACU+	23 lbs/acre
Red Fescue	Festuca rubra	FACU	23 lbs/acre
Butterfly Milkweed	Asclepias tuberosa	NI	23 lbs/acre
New York Ironweed	Vernonia noveboracensis	FACW+	23 lbs/acre
Evening Primrose	Oenothera biennis	FACU-	23 lbs/acre
New England Aster	Aster novae-angliae (Symphyotrichum novae-angliae)	FACW-	23 lbs/acre
Black Eyed Susan	Rudbeckia hirta	FACU-	23 lbs/acre
Early Goldenrod	Solidago juncea		23 lbs/acre
Hollow-Stem Joe Pye Weed	Eupatorium fistulosum (Eutrochium fistulosum)	FACW	23 lbs/acre
Starved/Calico Aster	Aster lateriflorus (Symphyotrichum lateriflorum)	FACW	23 lbs/acre

TABLE 3. NEW ENGLAND WILDFLOWER MIX



HORIZONTAL DATUM: MAB83
VERTICAL DATUM: NAVD83

DESIGN INFORMATION		REVISIONS		DESCRIPTION	
DESIGNED BY:	AP	NO.	DATE	BY	
DRAWN BY:	DPA				
CHECKED BY:	AEH				
PROJECT MANAGER:	AP				



TOWN OF CONCORD
WARNER'S POND RESTORATION PROJECT
CONCORD, MASSACHUSETTS
COMMONWEALTH AVE ACCESS IMPROVEMENTS

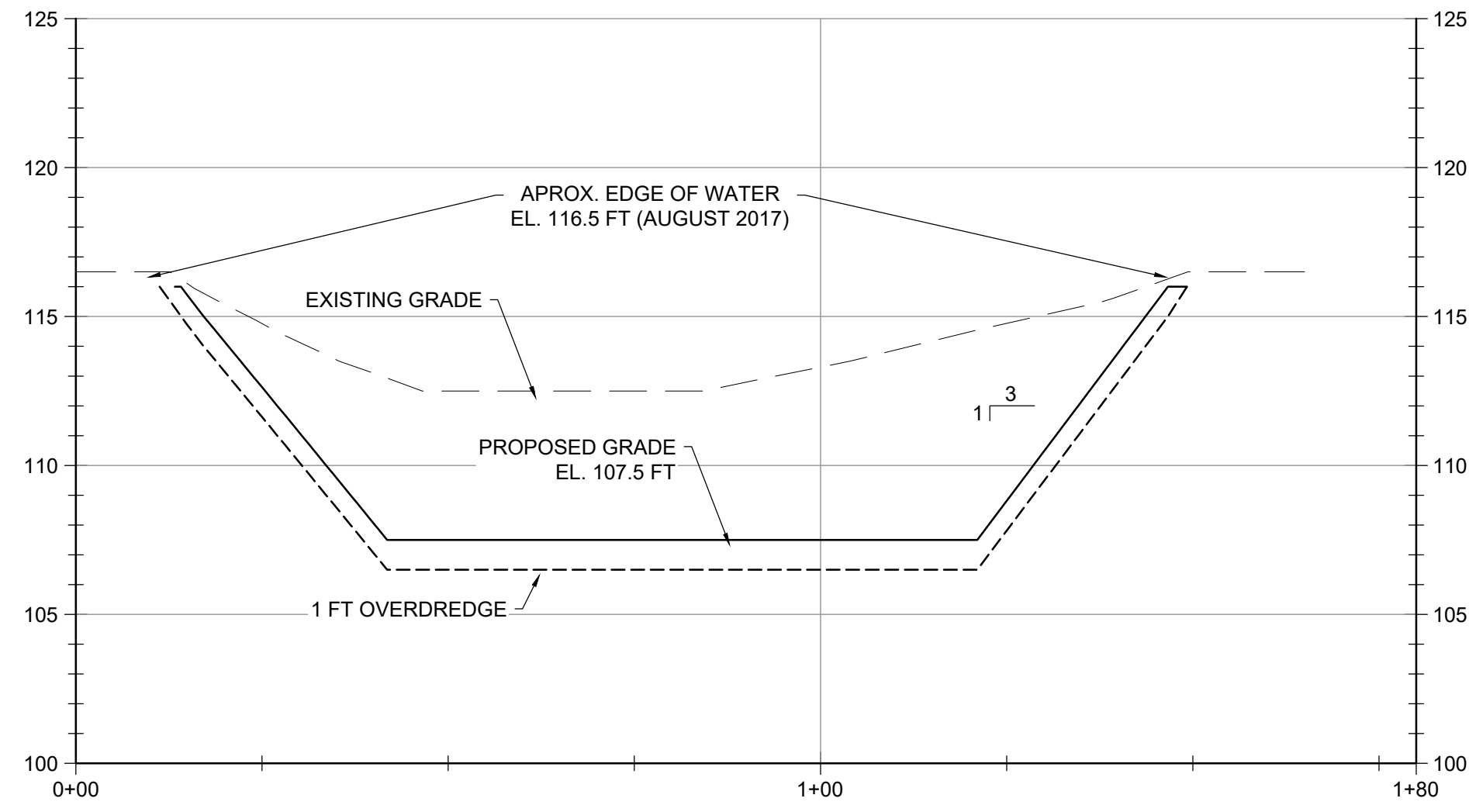


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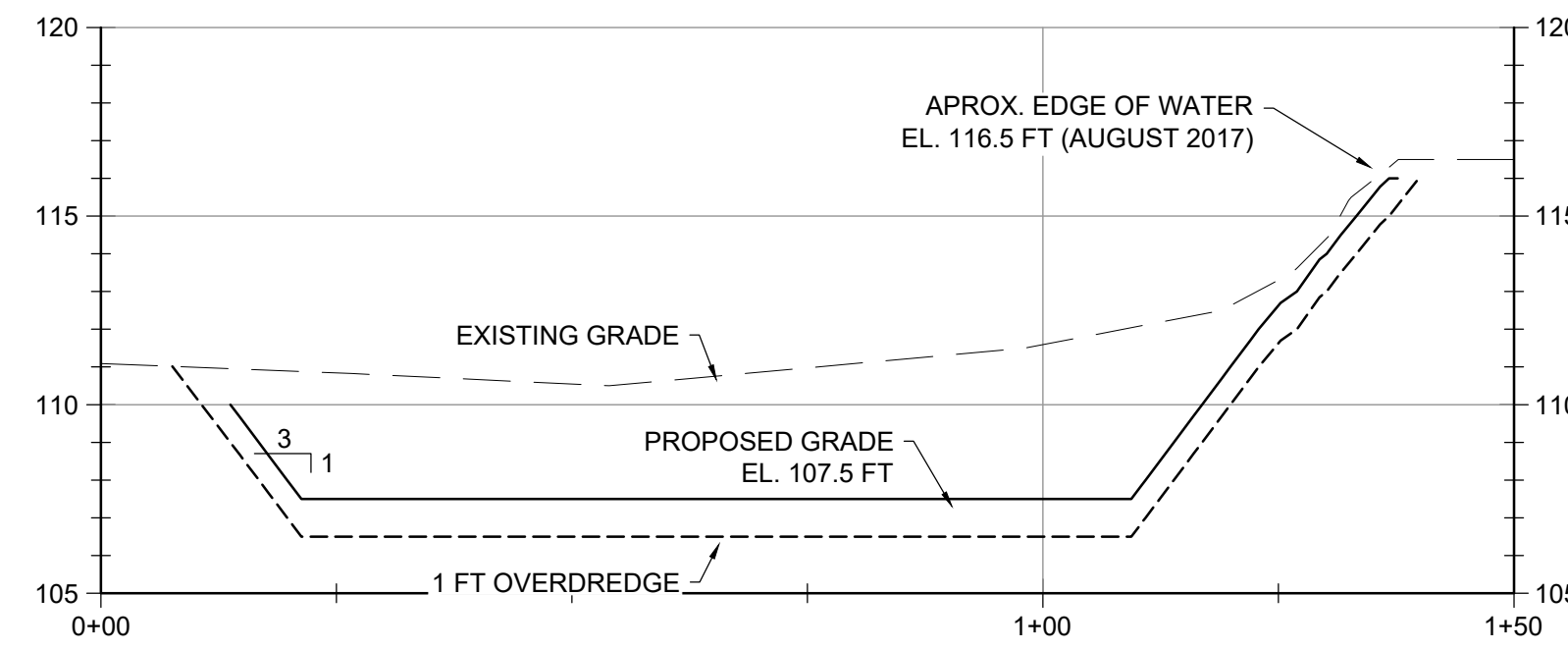
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DATE: AUGUST 2022
PROJECT NUMBER: 6373001

C-109
SHEET: 11 OF 13

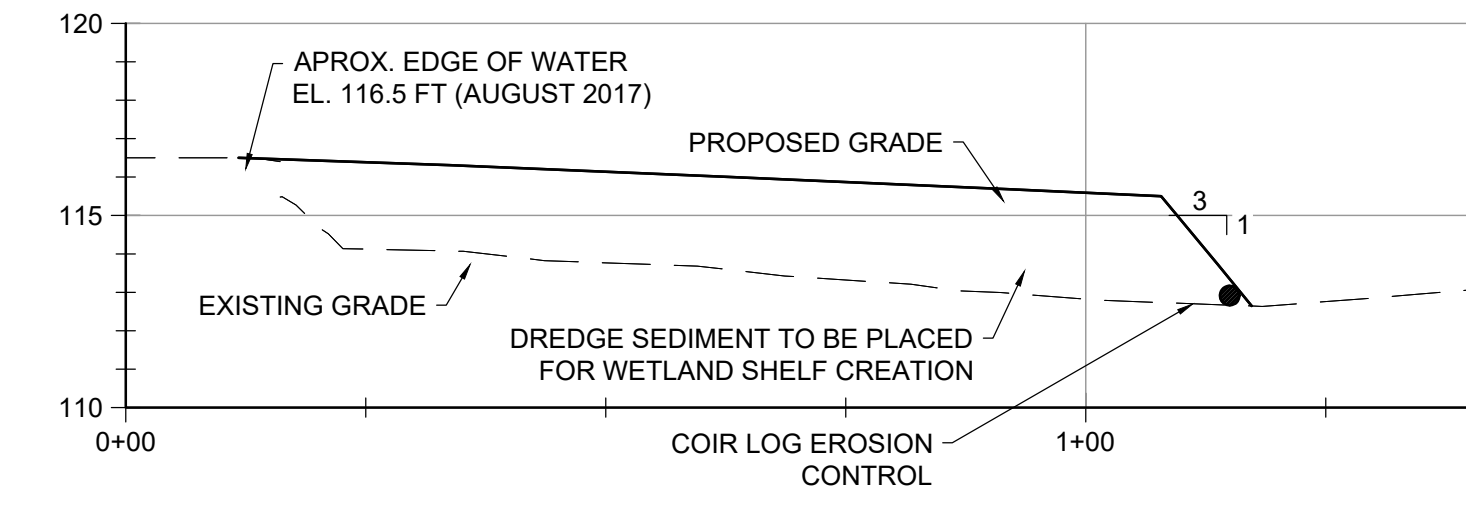
100% PLANS - FOR CONSTRUCTION



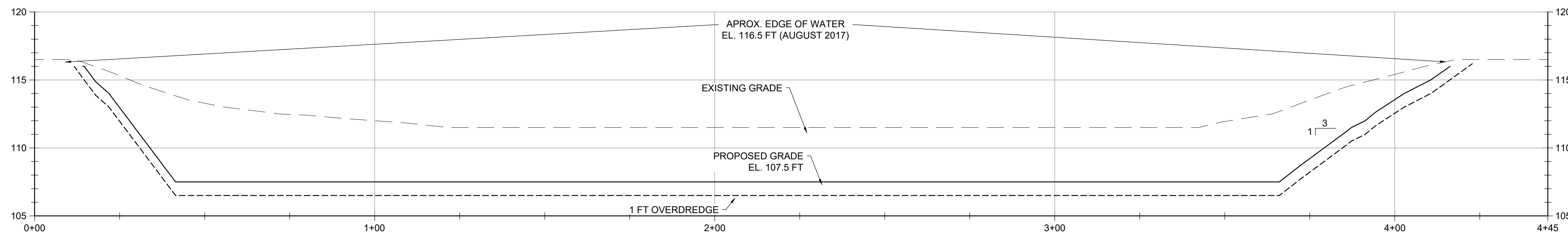
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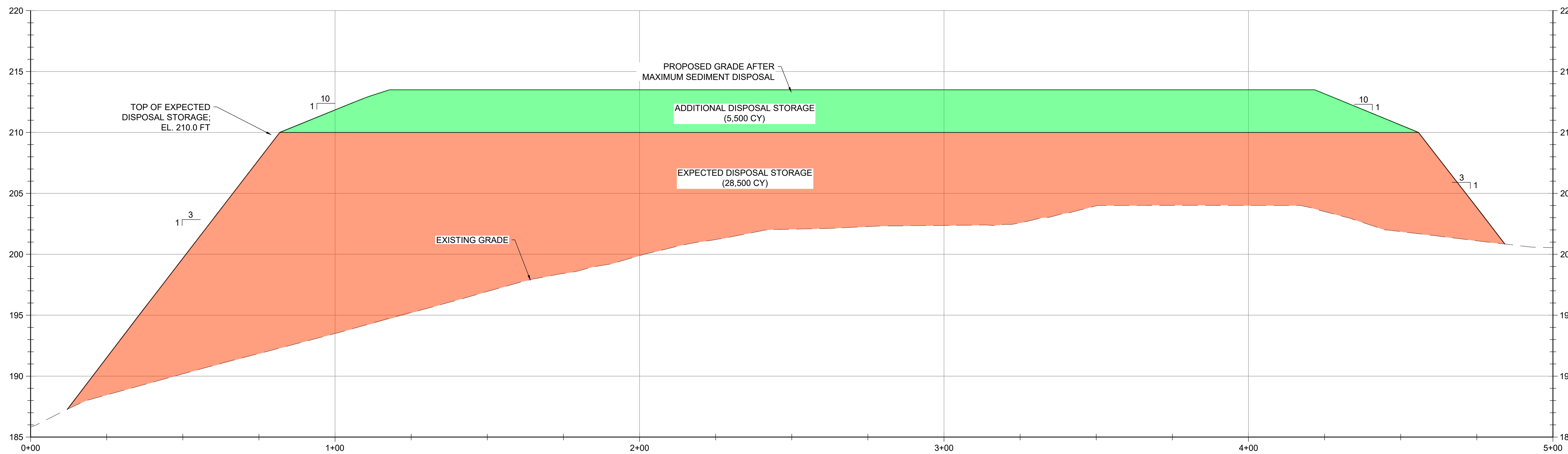
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SECTION D-D'
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SECTION B-B'
H: 1" = 20'
V: 1" = 5'



SECTION E-E'
H: 1" = 20'
V: 1" = 5'

DESIGN INFORMATION	DESIGNED BY:	AP
	DRAWN BY:	DPA
REVISIONS	CHECKED BY:	AEH
	PROJECT MANAGER:	AP
NO.	DATE	DESCRIPTION



TOWN OF CONCORD
WARNER'S POND RESTORATION PROJECT
CONCORD, MASSACHUSETTS
CROSS SECTIONS

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SCALE AS SHOWN
FULL SIZE PLOT: 24" x 36"
DATE: AUGUST 2022
PROJECT NUMBER: 6373001

C-301
SHEET: 12 OF 13

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