NARRATIVE

THIS PROPOSAL INVOLVES THE IMPROVEMENT OF A WETLANDS CROSSING TO BE UTILIZED FOR FARM EQUIPMENT. THE PROPERTY CONTAINS REGULATED INLAND WETLANDS ASSOCIATED WITH PALMER POND THAT WERE FLAGGED BY DEMIAN SORRENTINO, A CERTIFIED SOIL SCIENTIST. THE PROPOSED CROSSING WILL BE INSTALLED IN THE AREA OF AN EXISTING WOODS ROAD AND INCLUDES FILLING OF 3,890± SF OF REGULATED INLAND WETLANDS WITH SPECIFIED ROCK AND SOIL FILL AND THE INSTALLATION OF A 30" HDPE CULVERT AND TWO 15" HDPE CULVERTS AND ASSOCIATED RIP RAP PREFORMED SCOUR HOLES AT THE OUTLETS. THE WETLAND CROSSING IS PROPOSED AT THIS LOCATION IN ORDER TO ACCESS THE REAR OF THE PROPERTY WITH THE MINIMUM IMPACT ON THE INLAND WETLANDS ON THE SITE IN A PREVIOUSLY DISTURBED AREA. THERE IS NO OTHER PROPOSED ACTIVITY OR FILLING WITHIN THE 100' REGULATED AREA ADJACENT TO THE WETLANDS.

EROSION CONTROL MEASURES TO BE IMPLEMENTED DURING CONSTRUCTION INCLUDE SEDIMENT FENCE DOWN GRADIENT OF EARTHWORK OPERATIONS. THESE EROSION CONTROL MEASURES WILL BE MAINTAINED THROUGHOUT THE PROJECT. EROSION CONTROL MEASURES WILL BE REMOVED ONLY AFTER ALL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED.

CONSTRUCTION SEQUENCE

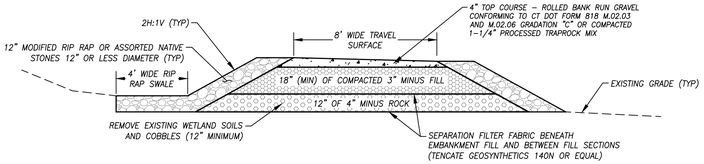
1. *SECURE ALL NECESSARY LOCAL, STATE, AND FEDERAL PERMITS. THE CULVERT INSTALLATION WORK SHALL BE ACCOMPLISHED DURING THE DRY SEASON, PREFERABLY MID–LATE SUMMER. NO EXCAVATION WITHIN FLOWING WATER SHALL BE PERMITTED BETWEEN SEPTEMBER 30 AND JUNE 1. WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE REQUIREMENTS OF ARMY CORPS OF ENGINEERS GENERAL PERMIT 18.*
2. *INSTALL SEDIMENT FENCE DOWNGRADIENT OF THE WORK AREA TO PROTECT ADJACENT WETLANDS. CLEAR ALL VEGETATION WITHIN THE PROPOSED WETLAND CROSSING AREA.*
3. *GRUB ALL VEGETATION AND STRIP ALL ORGANIC MATERIAL TO A DEPTH OF 12" FROM THE PROPOSED CULVERT INSTALLATION AREA AND STOCKPILE IT FOR FUTURE REUSE. TEMPORARILY SEED THIS STOCKPILE WITH RYEGRASS AND INSTALL SEDIMENT AROUND THE DOWNGRADIENT SIDE OF STOCKPILE.*
4. *FILL AND ROUGH GRADE DRIVEWAY AREA IN ACCORDANCE WITH DETAIL. INSTALL CULVERTS, FLARED ENDS, RIP RAP SWALE AND PREFORMED RIP RAP SCOUR HOLES AT OUTLETS.*
5. *AFTER ALL AREAS HAVE BEEN PERMANENTLY STABILIZED, REMOVE EROSION CONTROL MEASURES.*

EROSION CONTROL NOTES

1. *ALL UTILITIES ARE APPROXIMATE. CONTRACTOR TO VERIFY ALL UTILITIES PRIOR TO CONSTRUCTION. CONTACT "CALL–BEFORE–YOU–DIG" AT 1–800–922–4455 AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION.*
2. *THE RESPONSIBLE PARTY FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION CONTROL MEASURES IS THE EXCAVATION CONTRACTOR.*
3. *THIS PROPOSAL IS EXPECTED TO BE ACCOMPLISHED IN THE FALL OF 2020. CONSTRUCTION IS ESTIMATED TO REQUIRE APPROXIMATELY 2 WEEKS.*
4. *THE "2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" BY THE CONNECTICUT COUNCIL ON SOIL AND WATER CONSERVATION IN COOPERATION WITH THE CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION, DEP BULLETIN 34, SHALL BE USED FOR INSTALLING AND MAINTAINING ALL EROSION CONTROL MEASURES. THE CONTRACTOR SHALL INSTALL ADDITIONAL MEASURES AS NECESSARY IF DIRECTED BY THE ENGINEER OR TOWN STAFF.*
5. *SEEDING FOR PERMANENT STABILIZATION SHALL BE DONE BETWEEN APRIL 15 THROUGH JUNE 15 OR BETWEEN AUGUST 15 THROUGH SEPTEMBER 15. IF SEEDING CANNOT BE DONE WITHIN THESE TIMES, APPLY TEMPORARY MULCH UNTIL NEXT SEEDING TIME. SEED MIXTURE SHALL BE AS FOLLOWS:*

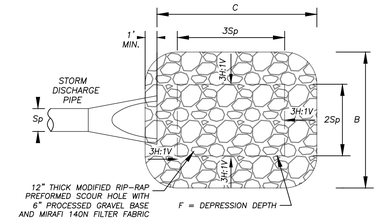
ALL 2:1 SLOPE AREAS			
CROWN VETCH	15 LBS/ACRE	OR	0.35 LBS/1,000 SF
PERENNIAL RYEGRASS	10 LBS/ACRE	OR	0.25 LBS/1,000 SF
ALL OTHER GRASSED AREAS			
CREEPING RED FESCUE	20 LBS/ACRE	OR	0.45 LBS/1,000 SF
REDTOP	2 LBS/ACRE	OR	0.05 LBS/1,000 SF
CROWN VETCH	15 LBS/ACRE	OR	0.35 LBS/1,000 S

6. *MULCH SHALL BE A GOOD QUALITY STRAW AND SHALL BE APPLIED AT A RATE OF 2–3 BALES/1,000 SF.*



WETLAND CROSSING EMBANKMENT DETAIL

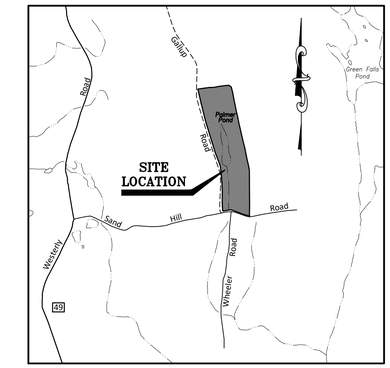
NOT TO SCALE



PIPE Sp	C	B	F	RIPRAP GRADATION
15"	7.5 FT	6.25 FT	0.625 FT	MODIFIED RIPRAP
30"	15 FT	12.5 FT	1.25 FT	MODIFIED RIPRAP

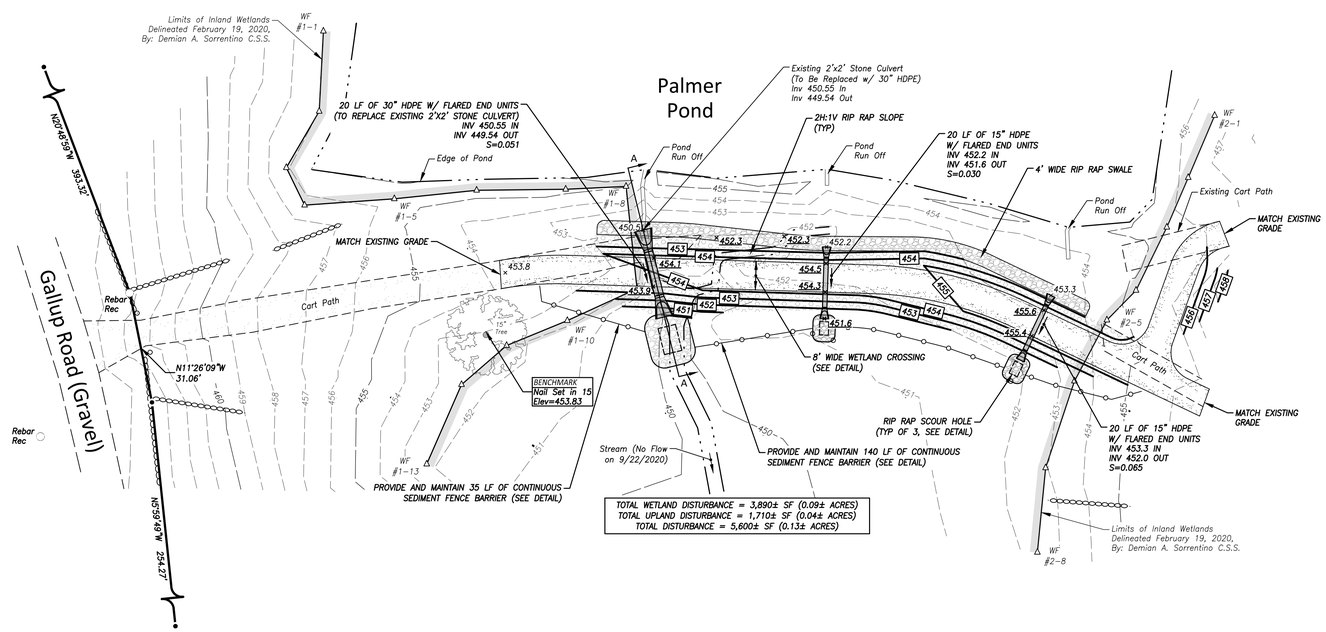
TYPE 1 RIP RAP SCOUR HOLE DETAIL

NOT TO SCALE



LOCATION MAP

SCALE: 1"=2000'



SURVEY NOTES

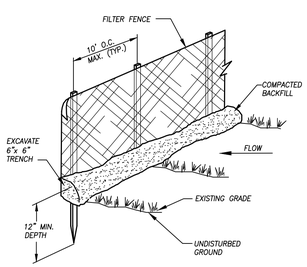
1. *THIS SURVEY HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20–300B–1 THROUGH 20–300B–20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED FOR USE BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996. IT IS AN IMPROVEMENT LOCATION AND TOPOGRAPHIC SURVEY BASED ON DEPENDANT SURVEY AND CONFORMS TO HORIZONTAL CLASS A–2 AND TOPOGRAPHIC CLASS T–2 ACCURACY STANDARDS. IT IS INTENDED TO BE USED FOR MUNICIPAL PERMITTING.*
2. *PROPERTY LINES AND NORTH ORIENTATION DEPICTED HEREON ARE BASED UPON REFERENCE MAP 1.*
3. *VERTICAL DATUM DEPICTED HEREON IS APPROXIMATE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88) BASED UPON GLOBAL POSITIONING SYSTEM OBSERVATIONS USING GEOIDE12B ON FEBRUARY 26, 2020.*
4. *THE LOCATIONS OF UNDERGROUND UTILITIES AS SHOWN HEREON ARE BASED ON THE LOCATION OF ABOVE GROUND STRUCTURES AND RECORD DRAWINGS PROVIDED BY OTHERS. NO EXCAVATIONS WERE MADE DURING THE PROGRESS OF THIS SURVEY TO LOCATE BURIED UTILITIES/STRUCTURES. ALL SUBTERRANEAN FEATURES AND IMPROVEMENTS MAY NOT BE DEPICTED OR NOTED HEREON. THE LOCATIONS OF UNDERGROUND UTILITIES/STRUCTURES MAY VARY FROM LOCATIONS SHOWN HEREON. ADDITIONAL BURIED UTILITIES/STRUCTURES MAY BE ENCOUNTERED. CONTACT "CALL BEFORE YOU DIG" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION OPERATIONS.*
5. *THE FIELD SURVEY WAS COMPLETED ON FEBRUARY 26, 2020. LAND RECORD AND RELATED RESEARCH WAS COMPLETED ON FEBRUARY 12, 2020.*
6. *RECORD TITLE TO THE SUBJECT PROPERTY MAY BE REFERENCED TO A WARRANTY DEED FROM DAVID K. PALMER, ANGELA ADAMS & DENNIS GOOSLIN TO PALMER FARM, LLC, RECORDED JANUARY 22, 2020 IN THE TOWN OF VOLUNTOWN LAND RECORDS VOLUME 115, PAGE 521.*

REFERENCE MAPS

1. *MONUMENTED PROPERTY SURVEY PLAN, PREPARED FOR STATE OF CONNECTICUT DEPARTMENT OF AGRICULTURE FARMLAND PRESERVATION PROGRAM, SAND HILL ROAD, WHEELER ROAD AND GALLUP ROAD, VOLUNTOWN CONNECTICUT, MAP PROPERTY OF RUTH E. PALMER TOTAL ACRES OWNED 155.11±, TOTAL RESTRICTED FARMLAND ACRES 149±, DATED OCTOBER 27, 2007, LAST REVISED JANUARY 17, 2005, SHEETS 1–3 OF 3, PREPARED BY: CME ASSOCIATES, INC.*

LEGEND & ABBREVIATIONS

±	MORE OR LESS	REC	RECOVERED
TYP	TYPICAL	x 456.1	EXISTING SPOT ELEVATION
HDPE	HIGH DENSITY POLY ETHYLENE	x 456.2	PROPOSED SPOT ELEVATION
SF	SQUARE FEET	456	EXISTING CONTOUR
LF	LINEAR FEET	456	PROPOSED CONTOUR
INV	INVERT		STONE WALL
S	SLOPE		ANGLE POINT
W/	WITH		REBAR
WF #1	WETLAND FLAG		WETLAND FLAG



SEDIMENT FENCE DETAIL

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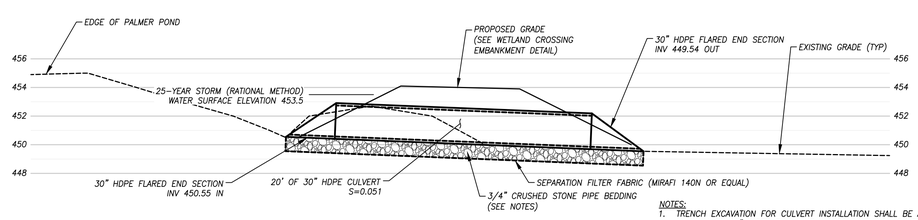

SECTION A-A AT 30" HDPE CULVERT

SCALE: 1" = 5'

NOTES:
1. *TRENCH EXCAVATION FOR CULVERT INSTALLATION SHALL BE A MINIMUM OF 12" WIDER THAN THE WIDEST DIMENSION OF THE CULVERT ON EACH SIDE (24" TOTAL).*
2. *SEPARATION FILTER FABRIC AND CRUSHED STONE LEVELING COURSE SHALL EXTEND FOR THE ENTIRE EXCAVATED WIDTH OF THE TRENCH.*
3. *CRUSHED STONE BEDDING FOR CIRCULAR CULVERTS SHALL EXTEND UP 1/4 OF THE PIPE DIAMETER.*
4. *BACKFILL SHALL BE PLACED IN MAXIMUM LOOSE LIFTS OF 12" AND COMPACTED TO 95% MAXIMUM DENSITY.*

GRAPHIC SCALE

40 20 10 0 20

(IN FEET)
1 inch = 20 ft.

CONSERVATION NOTE

THIS PROPERTY HAS WETLAND, WATERCOURSE, SWAMP, MARSH OR BOG CHARACTERISTICS WHICH HAVE BEEN DEFINED BY THIS DOCUMENT BEFORE THE INLAND WETLAND COMMISSION OF THE TOWN OF VOLUNTOWN, CONNECTICUT. PURCHASE OF THIS PROPERTY CONVEYS THE RESPONSIBILITY OF ABIDING BY ALL FEDERAL, STATE AND MUNICIPAL REGULATIONS FOR THE PRESERVATION AND PROTECTION OF THESE "REGULATED AREAS." SEE THE "WETLANDS REGULATIONS OF THE TOWN OF VOLUNTOWN" FOR PERMITTED USES OF THESE AREAS. ANY SUBSEQUENT CHANGES TO THESE PLANS WILL REQUIRE THE APPROVAL OF THE INLAND WETLAND COMMISSION OF THE TOWN OF VOLUNTOWN.

I HAVE CONDUCTED AN ON–SITE SOIL INVESTIGATION OF THE PARCEL OF LAND DEPICTED HEREON. THE INTERMITTENT WATERCOURSES AND INLAND WETLAND BOUNDARIES AS PORTRAYED ARE AN ACCURATE REPRESENTATION OF THE DELINEATION PERFORMED IN THE FIELD.

DEMIAN A. SORRENTINO, C.S.S. DATE

DAVID C. MCKAY, P.E. 29102 LICENSE NO. DATE

"TO MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON."

JOHN U. FAULISE JR. L.S. 70016 LICENSE NO. DATE

Know what's below. Call before you dig.

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P:\CIVIL 3D PROJECTS\2020\20-2797 GOODWIN\DWG\DESIGN\20-2797-GRADING PLAN.DWG

CIVIL ENGINEERING · LAND SURVEYING · LAND USE PLANNING · GIS SCIENCE
BOUNDARIES
Boundaries LLC
179 Pachaug River Drive, Gimmvill, CT 06351
T 860.376.2006 | www.boundariesllc.net

Improvement Location & Topographic Survey "Palmer Pond Wetlands Crossing Improvements"

Prepared for

Palmer Farm, LLC

179 Gallup Road - Voluntown, Connecticut

SCALE: 1" = 20'

DATE: September 2020

JOB I.D. NO. 20-2797

Revisions

SHEET NO. 1 / 1