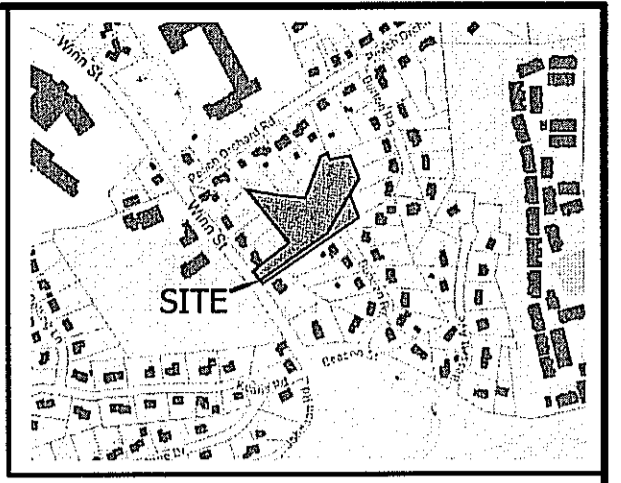
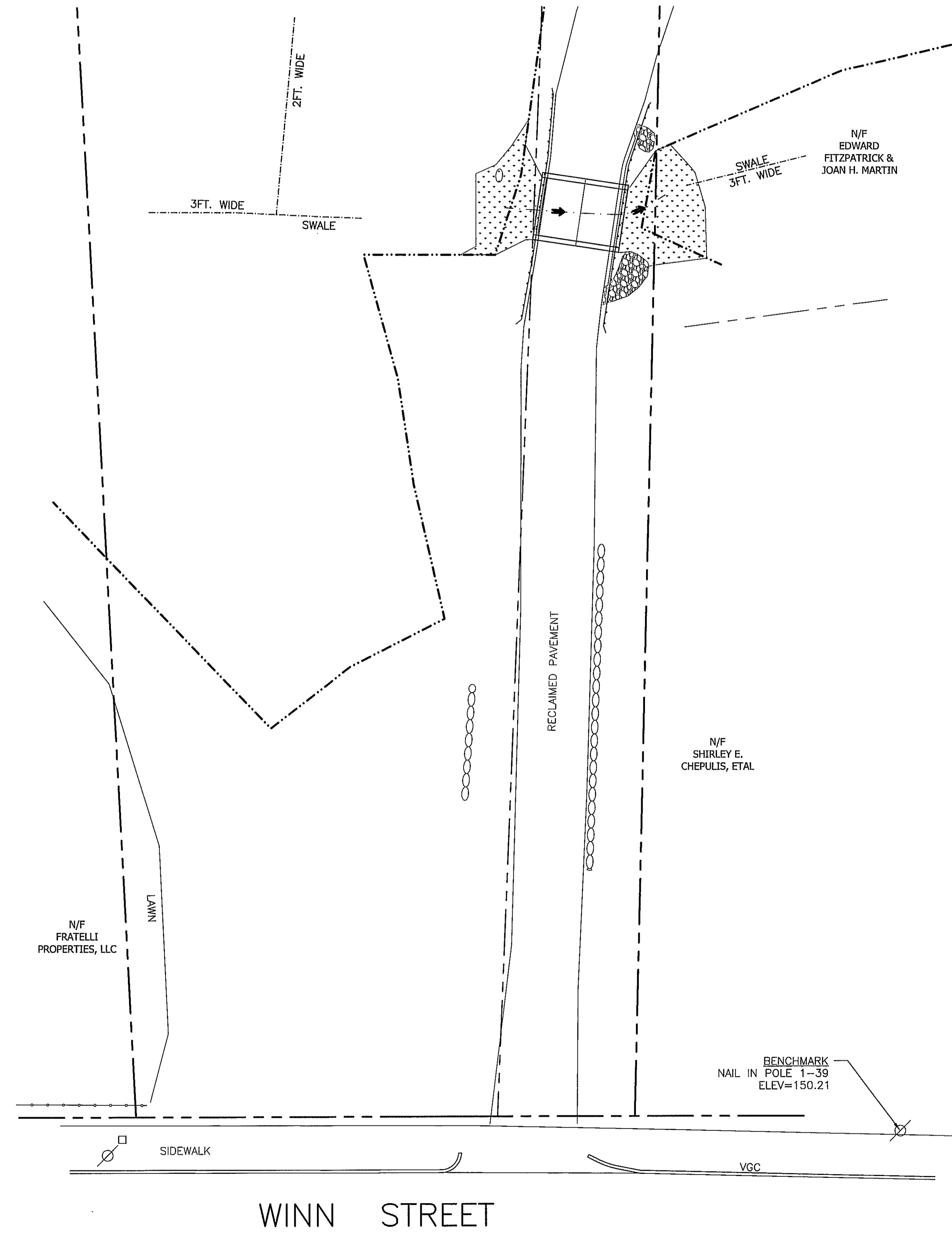


CULVERT REPLACEMENT PLAN

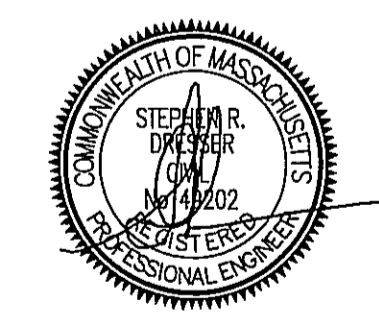
IN
BURLINGTON, MASS.



LOCUS
NTS



INDEX	
SHEET 1	COVER - SCALE: 1" = 10'
SHEET 2	EXISTING CONDITIONS - SCALE: 1" = 10'
SHEET 3	EROSION CONTROL - SCALE: 1" = 10'
SHEET 4	GRADING & X-SECTIONS - SCALE: 1" = 10'
SHEET 5	SITE PLAN - SCALE: 1" = 10'
SHEET 6	DETAILS - SCALE: AS SHOWN



PREPARED FOR:
SUNG OK & IN HO LEE
102R WINN STREET
BURLINGTON, MA
01803

DESIGN BY: DJG

DRAFT BY: DJG

CHECK BY: SRD

SHEET 1 OF 6

CULVERT REPLACEMENT PLAN

MAP 37, LOT 29, BLOCK 0
102R WINN STREET

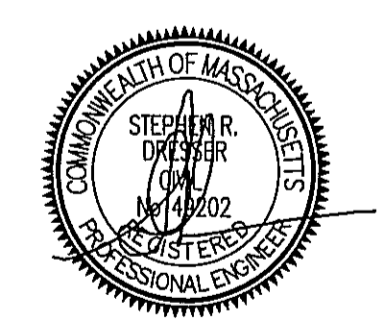
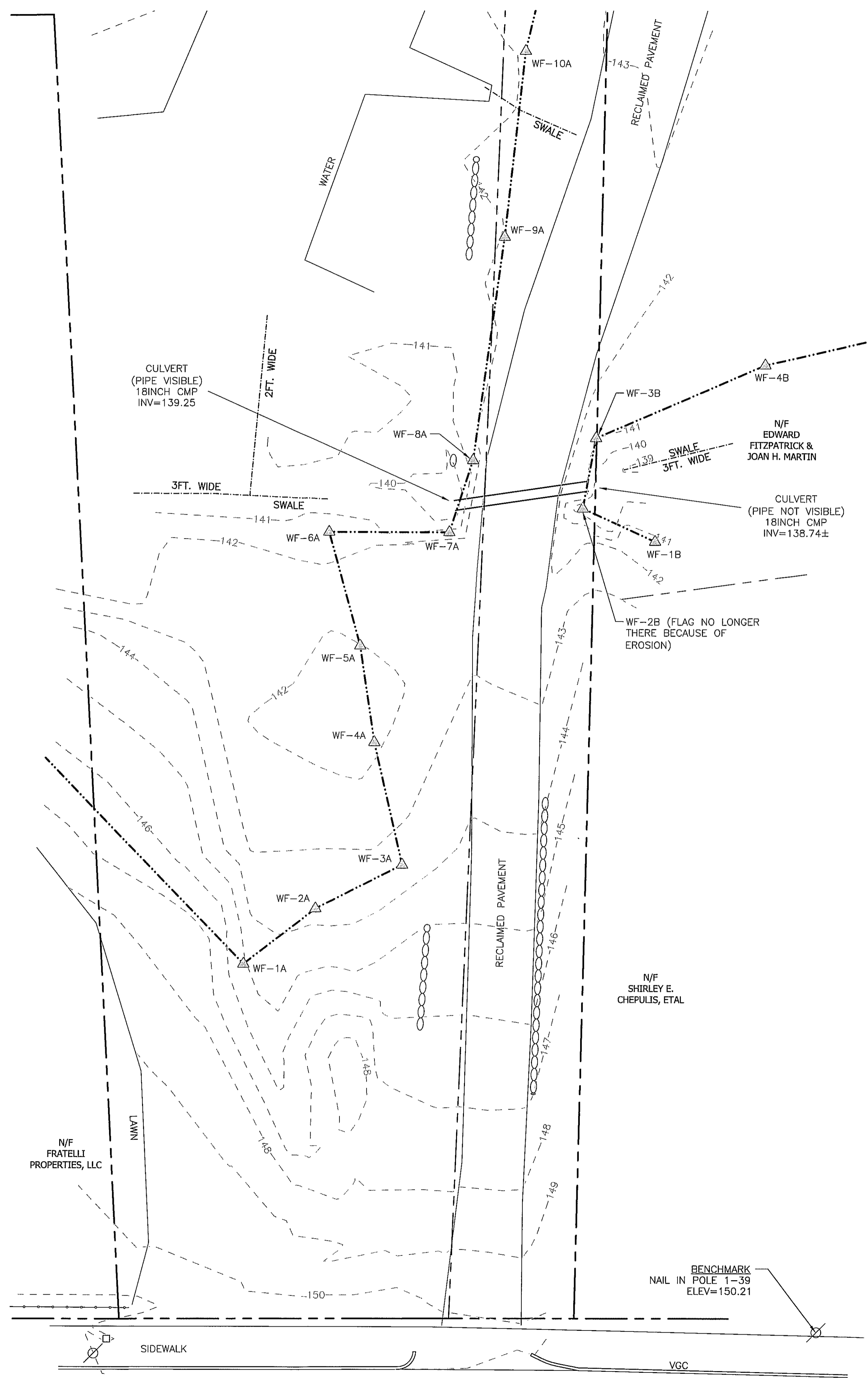
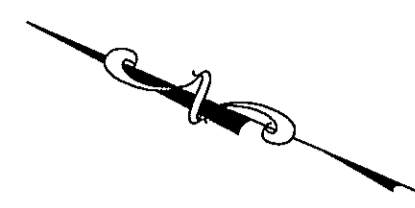
COVER

SCALE: 1"=10'

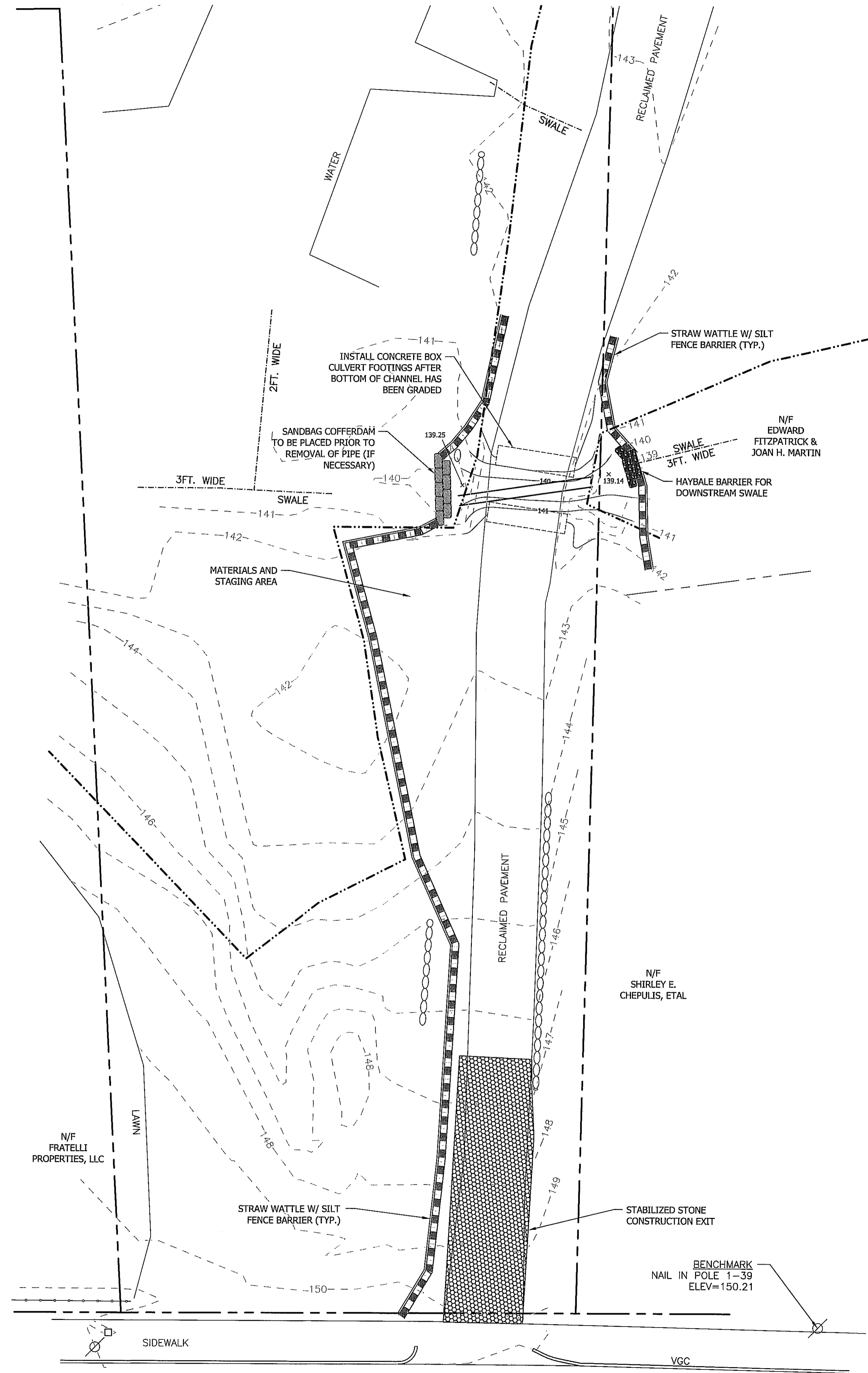
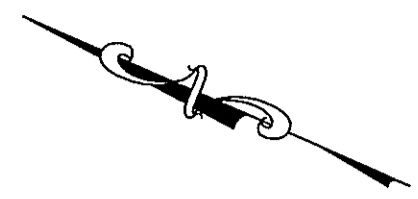
NOVEMBER 23, 2021

Dresser, Williams & Way, Inc.
572 BOSTON ROAD - UNIT 5 BILLERICA, MA
TELEPHONE NO. (978) 663-5410 E-MAIL: DWWINC11@YAHOO.COM
Professional Engineers & Land Surveyors

REVISED COMMENTS



PREPARED FOR: SUNG OK & IN HO LEE 102R WINN STREET BURLINGTON, MA 01803	CULVERT REPLACEMENT PLAN MAP 37, LOT 29, BLOCK 0 102R WINN STREET <i>EXISTING CONDITIONS</i> SCALE: 1"=10' NOVEMBER 23, 2021
DESIGN BY: DJG	Dresser, Williams & Way, Inc. 572 BOSTON ROAD - UNIT 5 BILLERICA, MA TELEPHONE NO. (978) 663-5410 E-MAIL: DWWINC11@YAHOO.COM Professional Engineers & Land Surveyors
DRAFT BY: DJG	
CHECK BY: SRD	
SHEET 2 OF 6	REVISED COMMENTS

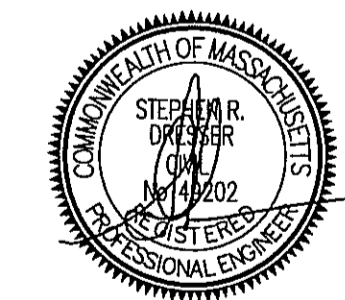


PROPOSED CONSTRUCTION SEQUENCE

1. INSTALL EROSION CONTROL WATTLES, SILT FENCING, AND/OR HAY BALES.
2. INSTALL TEMPORARY STONE EXIT.
3. CLEAR AND GRUB PROJECT AREA.
4. DEWATER AREA UPSTREAM OF CULVERT (IF NECESSARY) & INSTALL SANDBAG COFFERDAM.
5. REMOVE RECLAIMED PAVEMENT AND EXCAVATE AREA AROUND PIPE.
6. REMOVE 18" CMP.
7. GRADE BOTTOM OF CHANNEL TO FINISH SLOPE.
8. EXCAVATE AREA FOR FOOTINGS AND INSTALL THE STRUCTURES.
9. BACKFILL OVER FOOTINGS WHILE INSTALLING BOX CULVERT SECTIONS.
10. BACKFILL DRIVEWAY TO BOX CULVERT.
11. REMOVE SANDBAG COFFERDAM.
12. PLACE RECLAIMED PAVEMENT TO FINISH GRADE.
13. INSTALL GUARDRAIL.
14. GRADE, LOAM AND SEED ANY REMAINING DISTURBED AREAS.

CULVERT CONSTRUCTION NOTES

1. CONSTRUCTION OF CULVERT SHALL TAKE PLACE DURING LOW FLOW SEASON TO MINIMIZE POTENTIAL OF WASHOUT.
2. A CONTROLLED BYPASS PUMP SYSTEM SHALL BE USED FOR DEWATERING PURPOSES AND FOR CONSTRUCTION DURING RAIN EVENTS. THE INLET AND OUTLET HOSES FOR THE PUMP SHALL BE CAPPED WITH A SILT SOCK FILTER OR APPROVED EQUAL. THE WATER SHALL BE PUMPED TO THE RIP-RAP AREA DOWNSTREAM OF THE CULVERT.



PREPARED FOR:
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BURLINGTON, MA
01803

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CHECK BY: SRD

SHEET 3 OF 6

CULVERT REPLACEMENT PLAN

MAP 37, LOT 29, BLOCK 0
102R WINN STREET

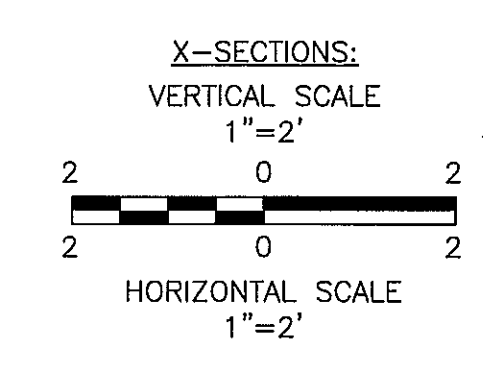
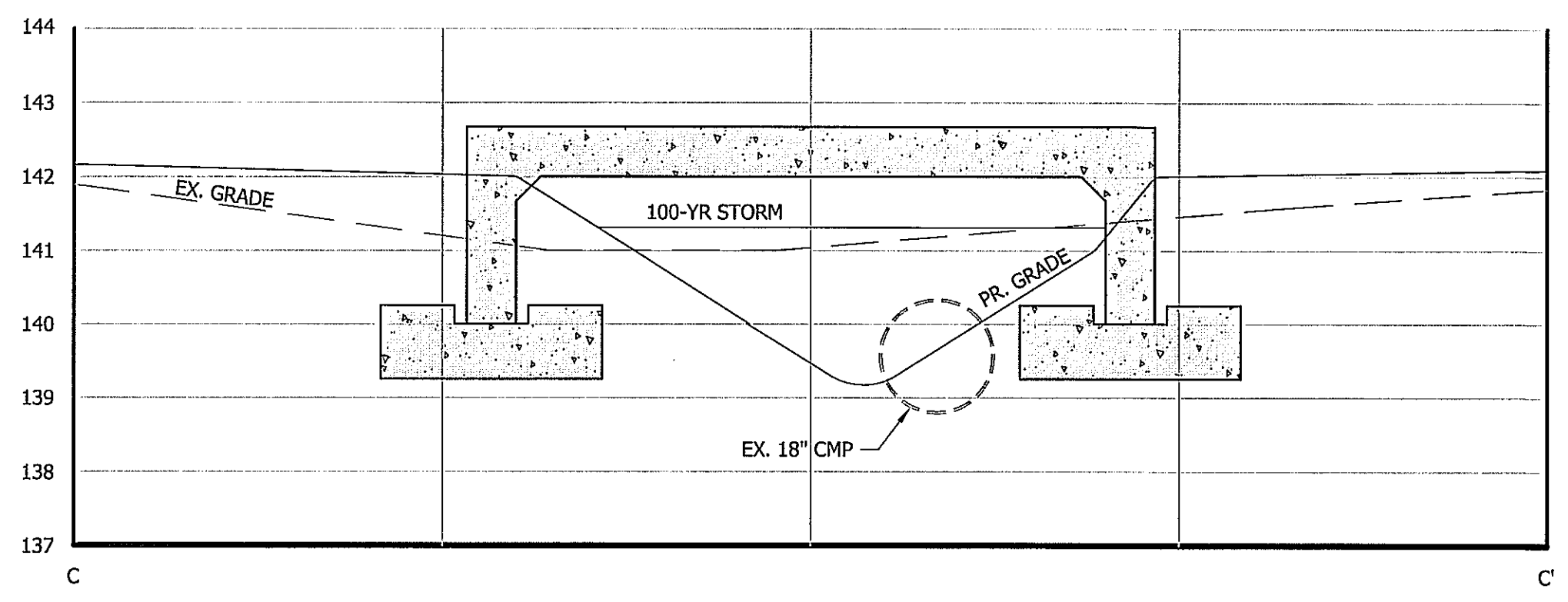
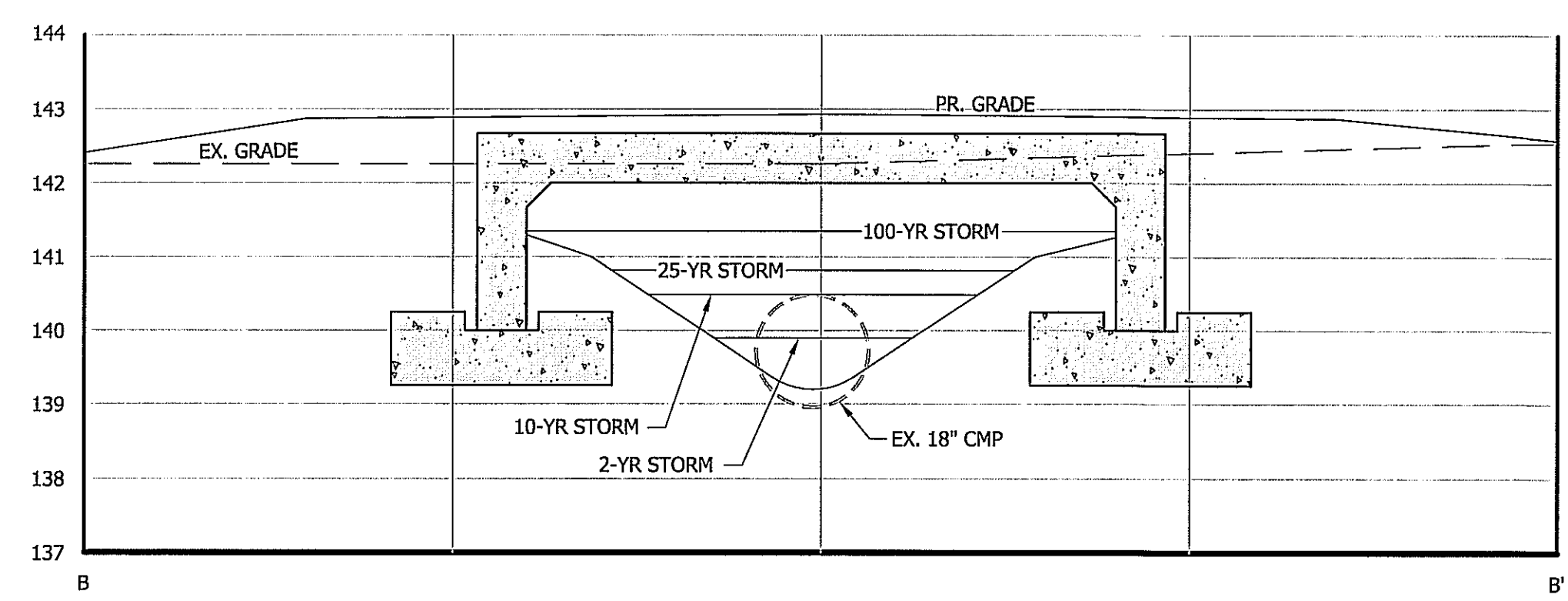
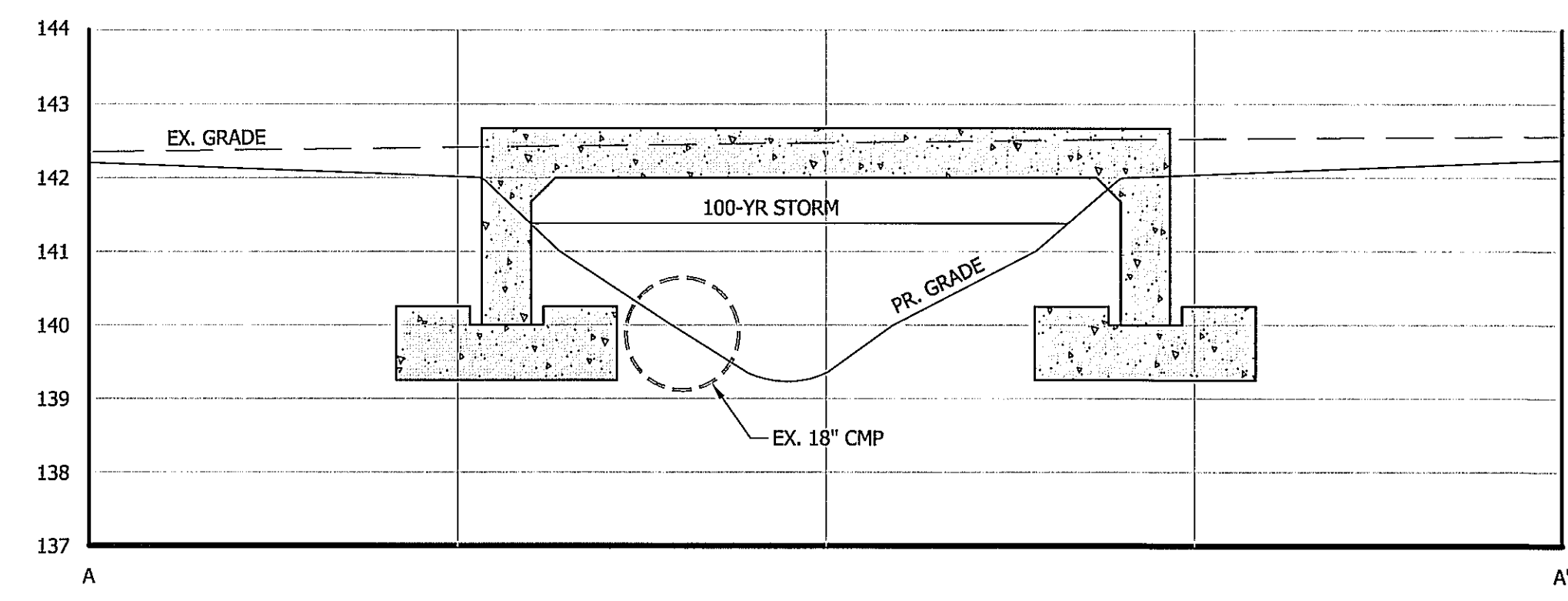
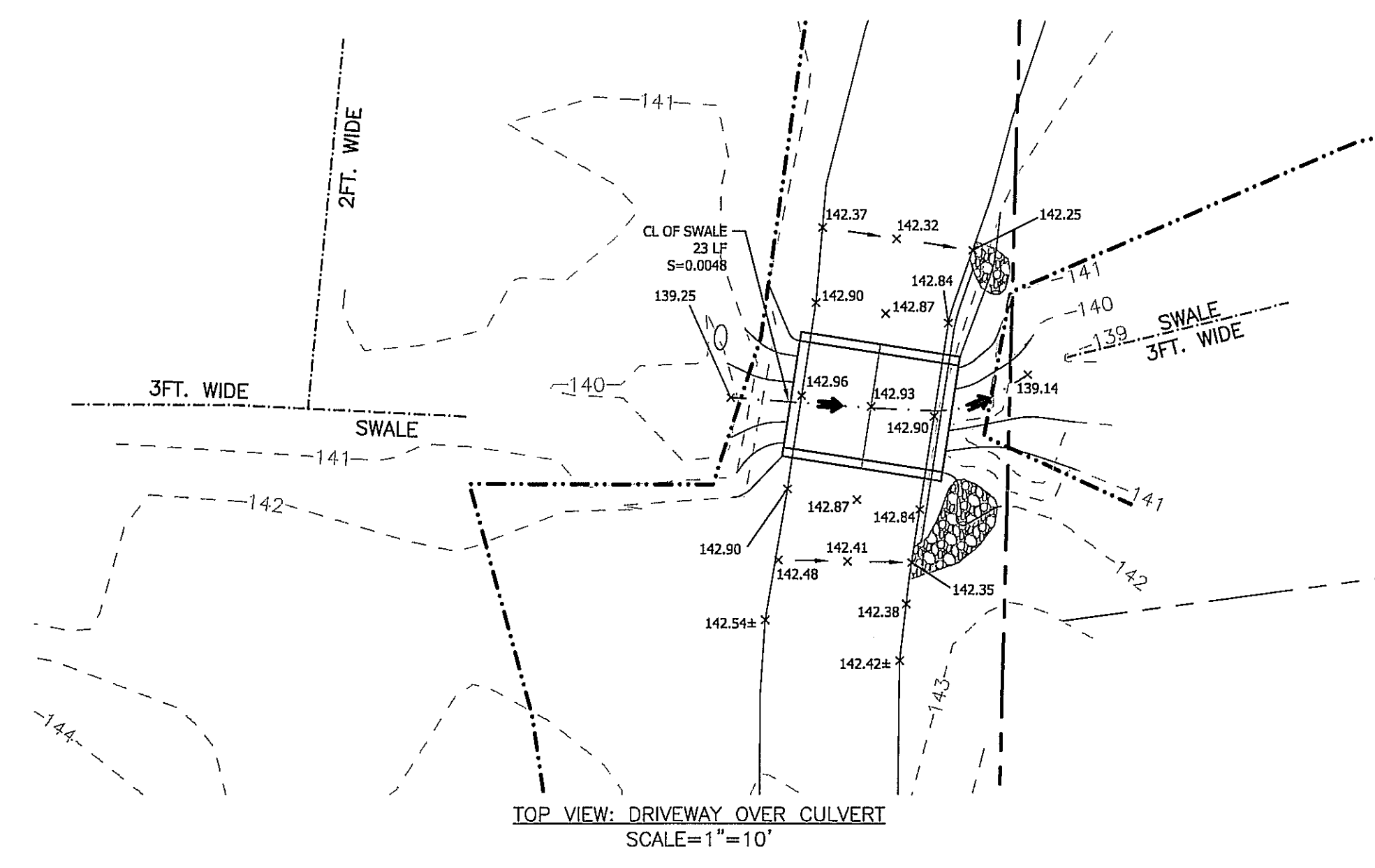
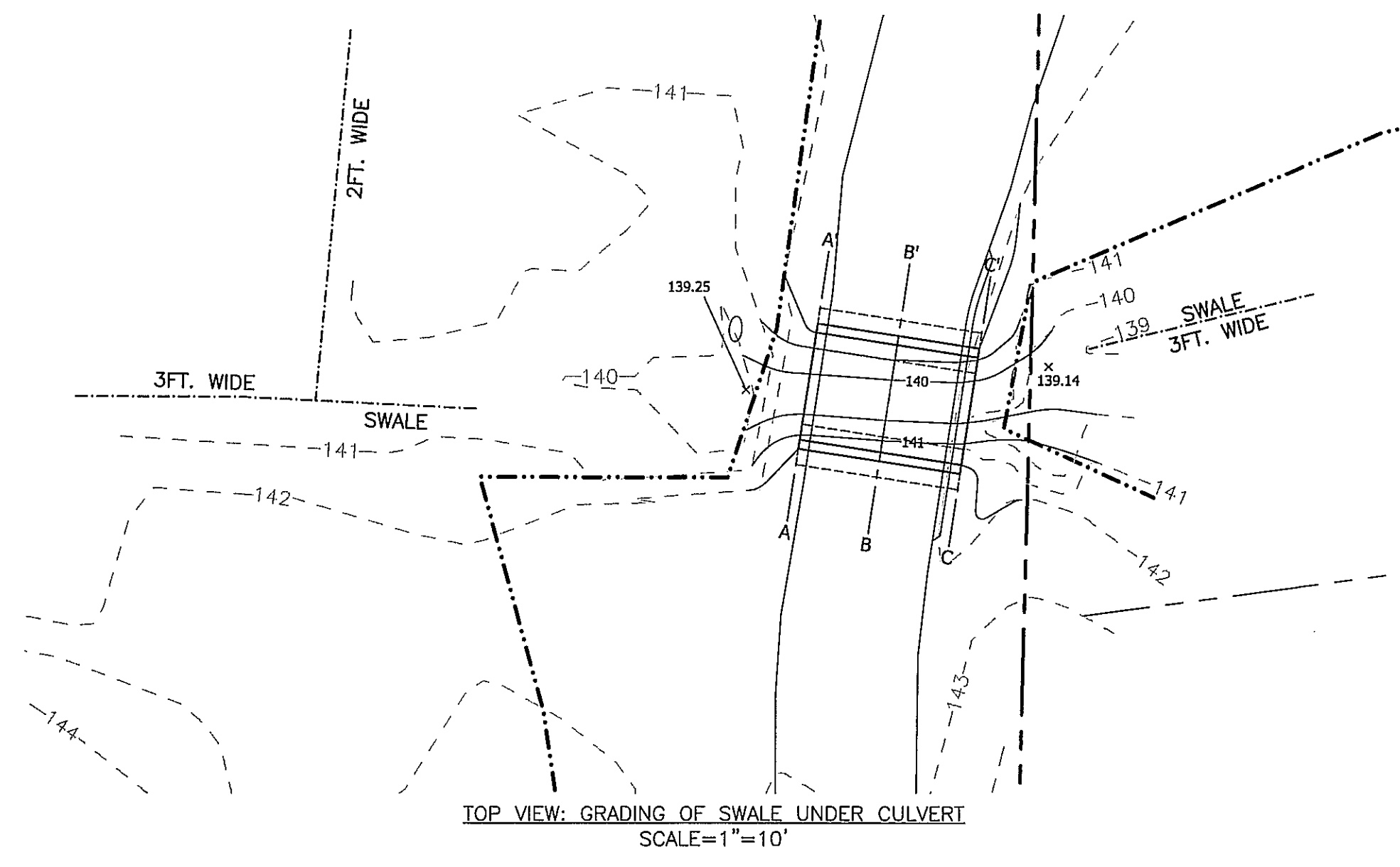
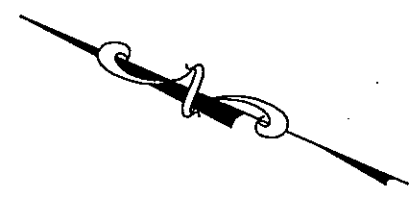
EROSION CONTROL

SCALE: 1"=10'

NOVEMBER 23, 2021

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Professional Engineers & Land Surveyors

REVISED	COMMENTS

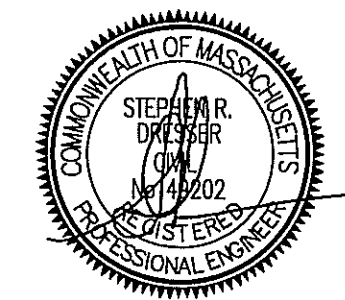


PROPOSED CONSTRUCTION SEQUENCE

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PREPARED FOR:
SUNG OK & IN HO LEE
102R WINN STREET
BURLINGTON, MA
01803

DESIGN BY: DJG

DRAFT BY: DJG

CHECK BY: SRD

SHEET 4 OF 6

CULVERT REPLACEMENT PLAN

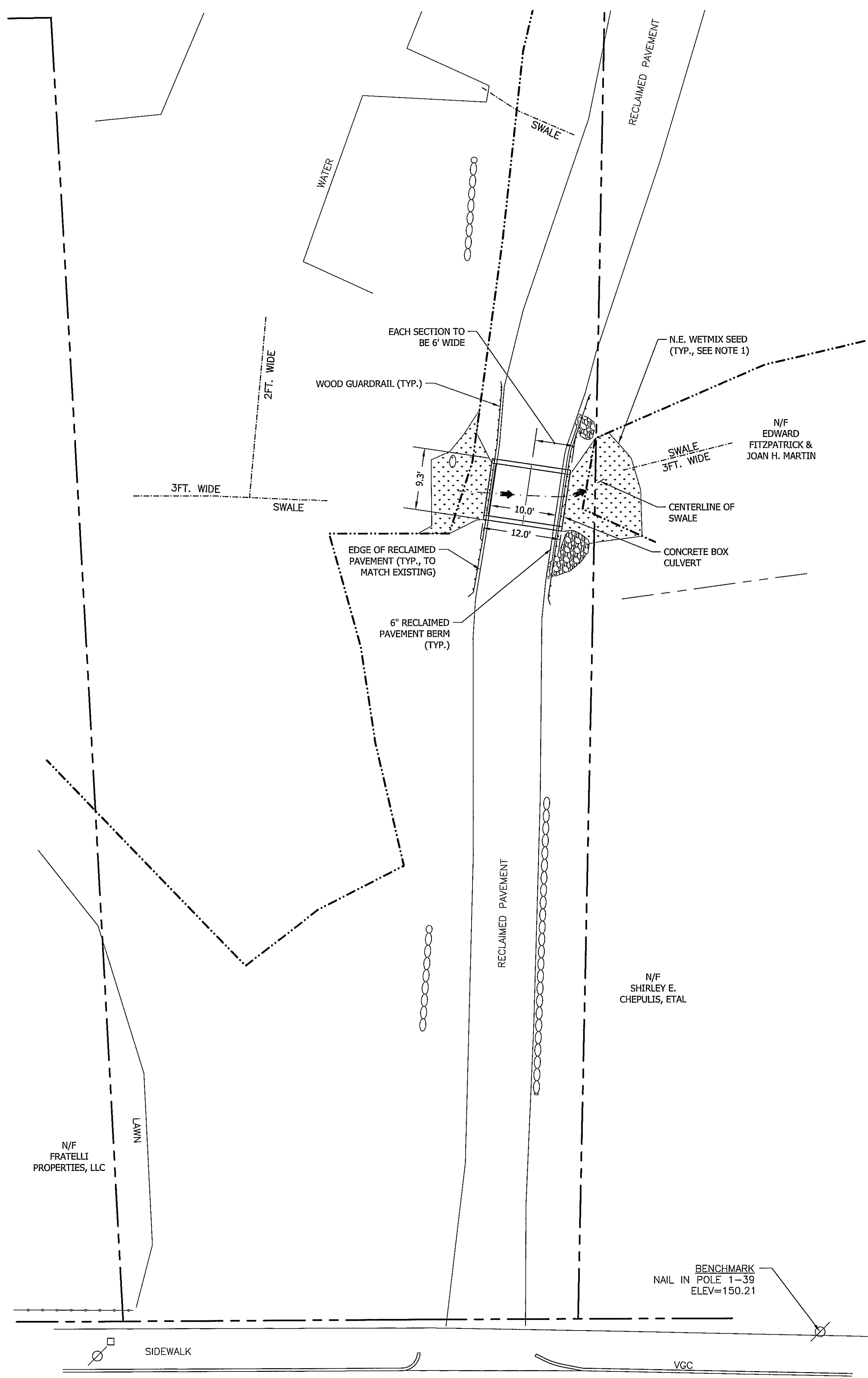
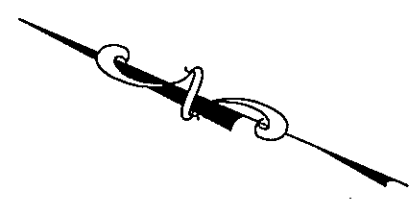
MAP 37, LOT 29, BLOCK 0
102R WINN STREET

GRADING & X-SECTIONS

SCALE: 1"=10' NOVEMBER 23, 2021

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REVISED	COMMENTS



NOTE:

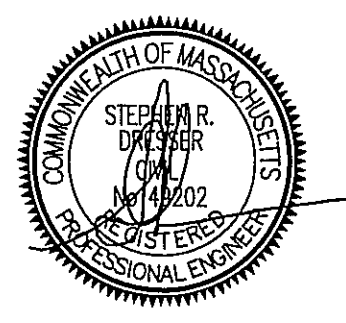
1. HERBACEOUS LAYER - NEW ENGLAND WETLAND PLANTS, INC. WETMIX (WETLAND SEED MIX). SEED MIX APPLICATION RATE IS 1 LB / 2,500 SF. AREA SHALL REQUIRE APPROXIMATELY 0.11 LBS OF SEED MIX.

PROPOSED CONSTRUCTION SEQUENCE

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PREPARED FOR: SUNG OK & IN HO LEE 102R WINN STREET BURLINGTON, MA 01803
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DRAFT BY: DJG
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SHEET 5 OF 6

CULVERT REPLACEMENT PLAN

MAP 37, LOT 29, BLOCK 0
102R WINN STREET

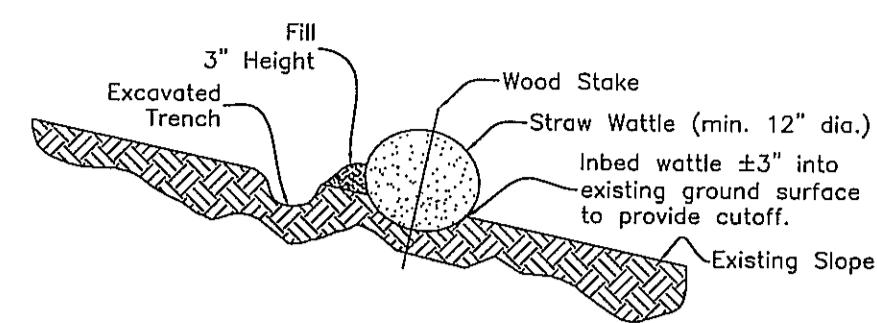
SITE PLAN

SCALE: 1"=10' NOVEMBER 23, 2021

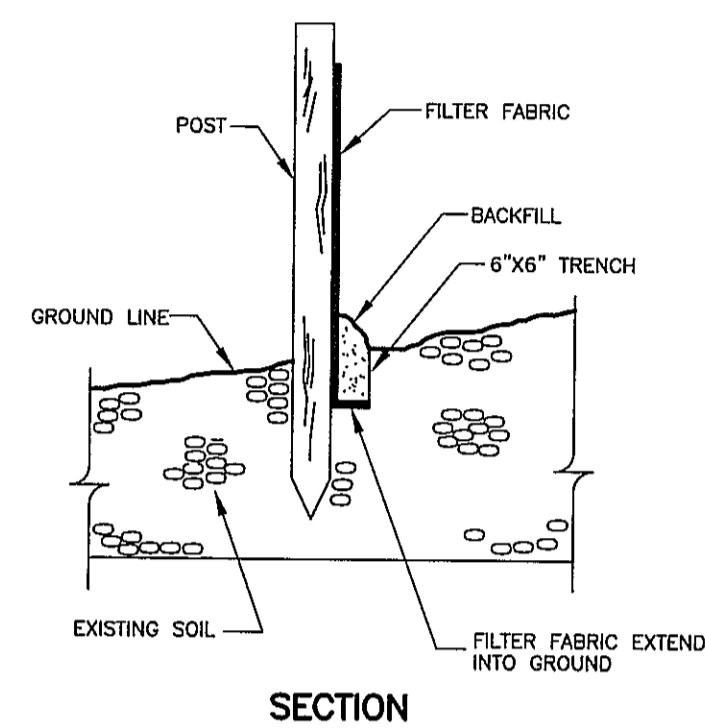
Dresser, Williams & Way, Inc.
 572 BOSTON ROAD - UNIT 5 BILLERICA, MA
 TELEPHONE No. (978) 663-5410 E-MAIL: DWWINC11@YAHOO.COM
 Professional Engineers & Land Surveyors

WINN STREET

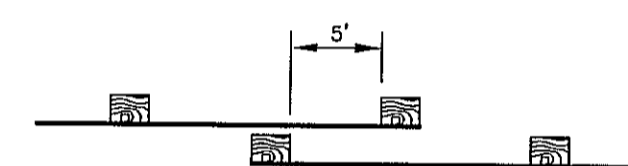
REVISED	COMMENTS
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STRAW WATTLE
(NTS)



SECTION

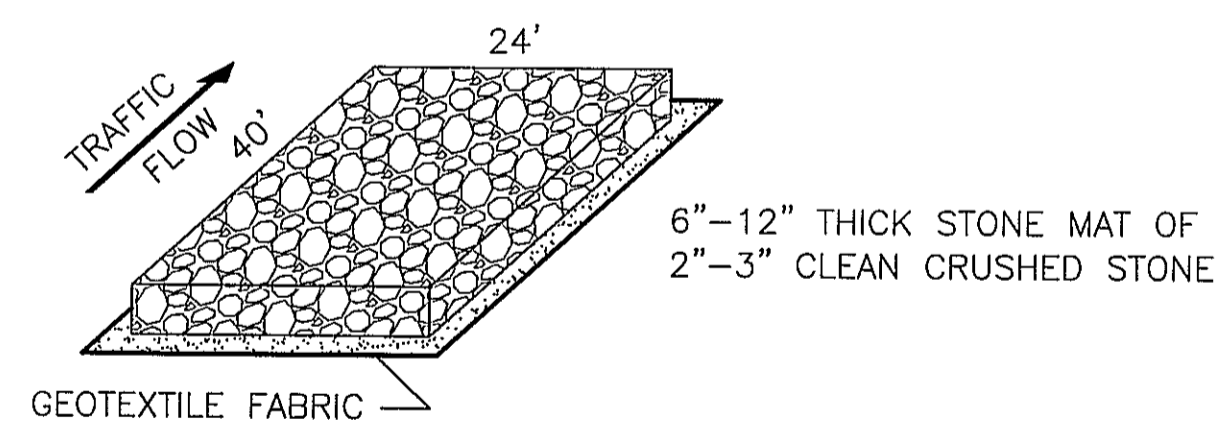


PLAN

WHEN JOINING TWO OR MORE FENCES, OVERLAP ENDS OF FENCES 5 FT.

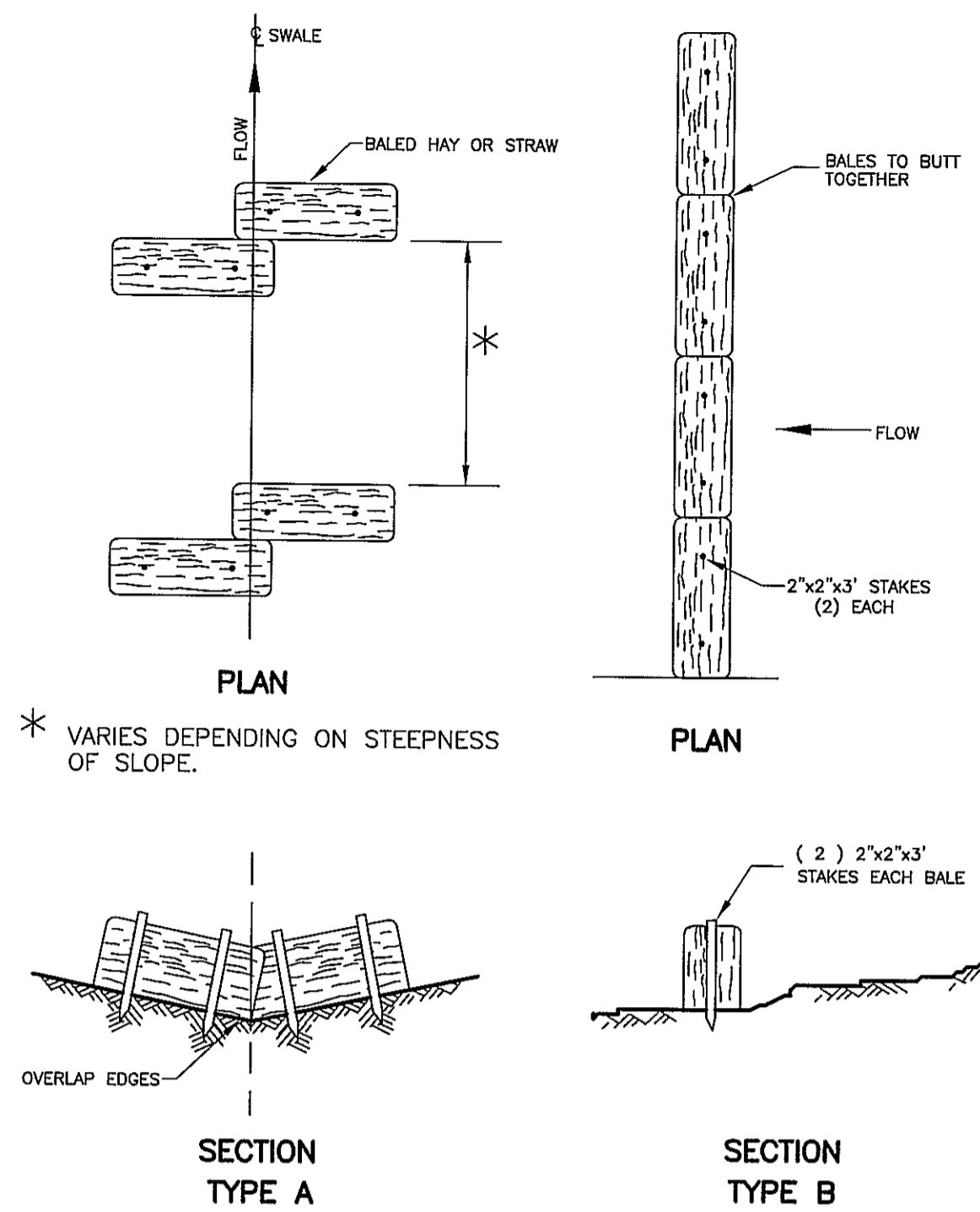
SILT FENCE STAKING DETAIL

(NTS)



TEMPORARY STONE EXIT

(NTS)



TEMPORARY EROSION CONTROL

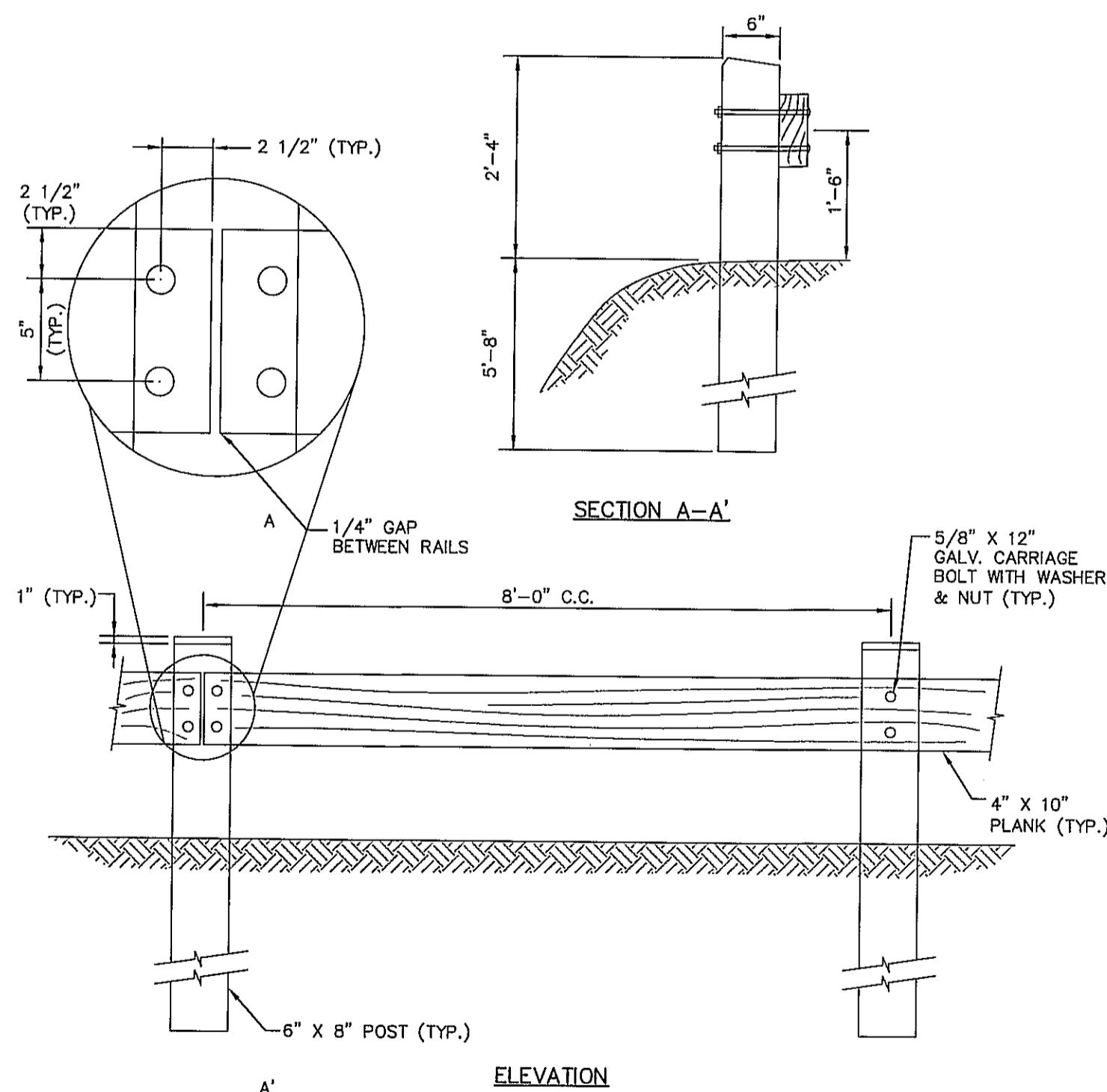
(NTS)

* VARIES DEPENDING ON STEEPNESS OF SLOPE.

OVERLAP EDGES

SECTION TYPE A

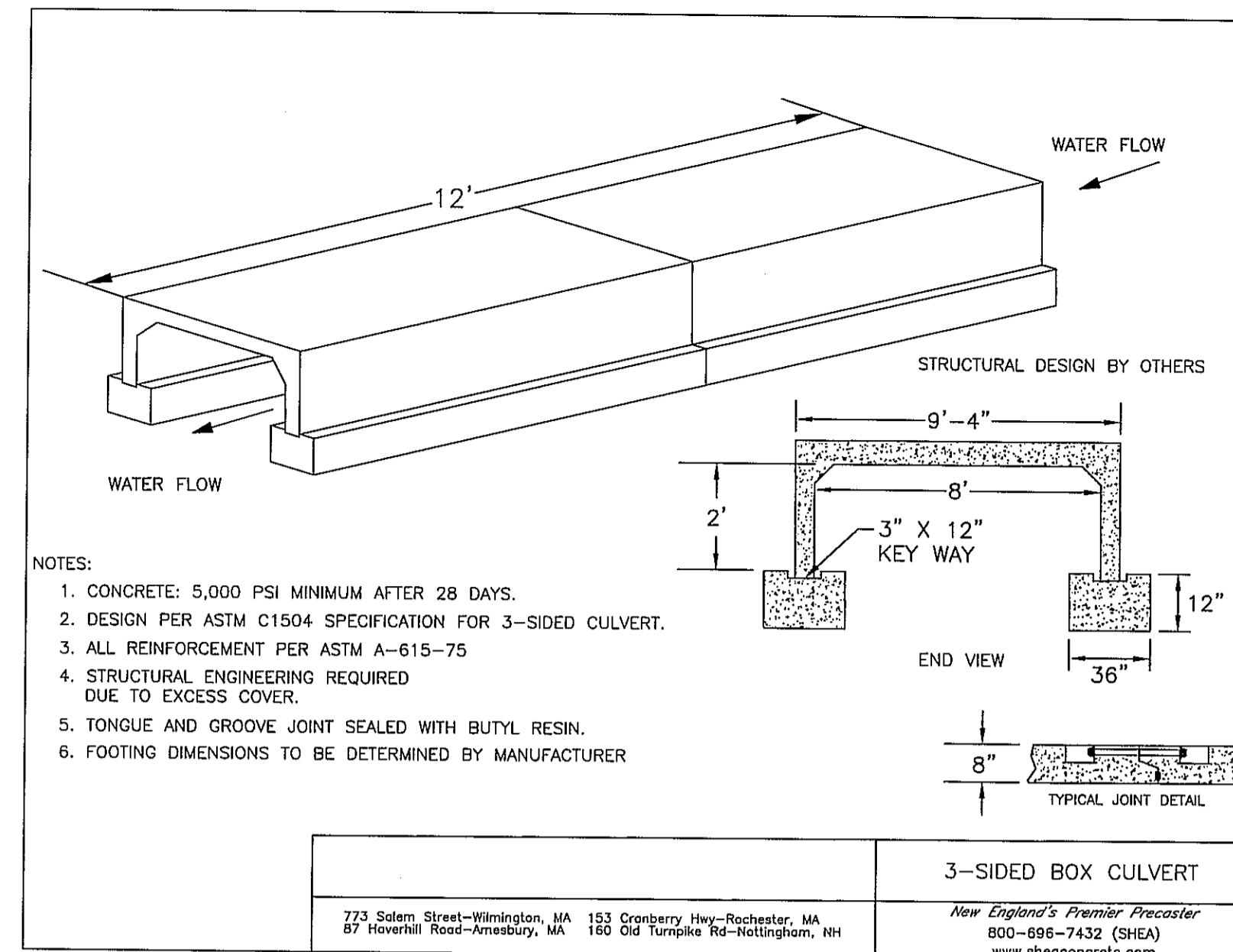
SECTION TYPE B



WOOD BEAM GUARD RAIL

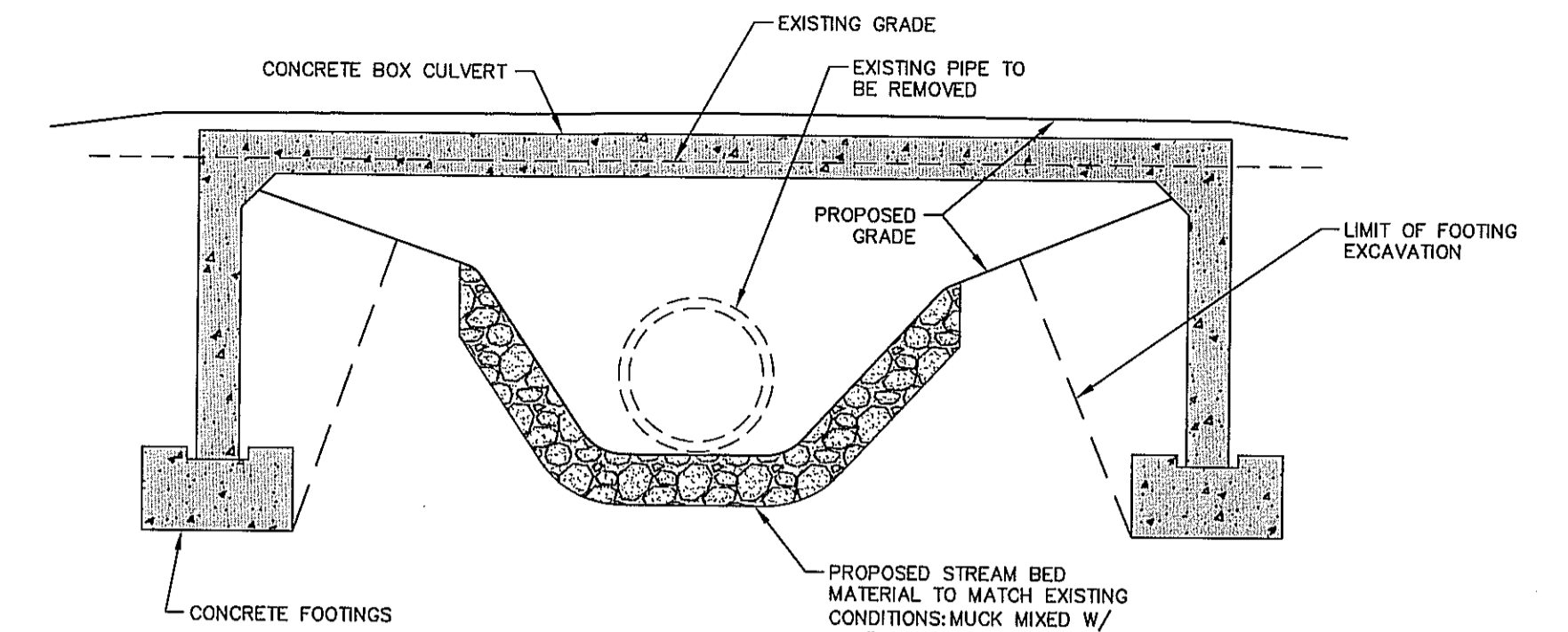
(NTS)

NOTES:
1. ALL WOOD SHALL BE PRESSURE TREATED.
2. ALL HARDWARE SHALL BE GALVANIZED.



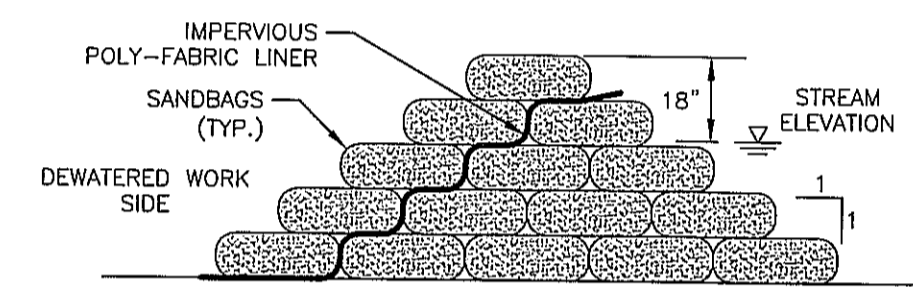
- NOTES:
1. CONCRETE: 5,000 PSI MINIMUM AFTER 28 DAYS.
 2. DESIGN PER ASTM C1504 SPECIFICATION FOR 3-SIDED CULVERT.
 3. ALL REINFORCEMENT PER ASTM A-615-75
 4. STRUCTURAL ENGINEERING REQUIRED DUE TO EXCESS COVER.
 5. TONGUE AND GROOVE JOINT SEALED WITH BUTYL RESIN.
 6. FOOTING DIMENSIONS TO BE DETERMINED BY MANUFACTURER

775 Salem Street-Wilmington, MA 01897 87 Riverhill Road-Amherst, MA 01001	153 Cranberry Hwy-Rochester, MA 01867 160 Old Turnpike Rd-Fitchingham, MA 01434	New England's Premier Precaster 800-696-7432 (SHEA) www.sheaconcrete.com
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TYPICAL SECTION DETAIL

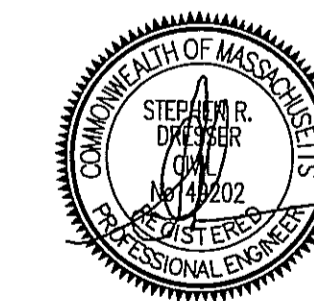
(N.T.S.)



- NOTES:
1. SANDBAGS CAN BE FILTER BAGS FILLED WITH SAND.
 2. REMOVE LARGE ROCKS AND BRANCHES FROM THE AREA WHERE SANDBAGS WILL BE PLACED.
 3. POLY-FABRIC LINER SHALL BE PLACED WITH THE CENTER OF THE LINER LOCATED OVER THE CENTER OF THE SANDBAG COFFERDAM. SANDBAGS SHALL BE INSTALLED TO NECESSARY HEIGHT. THE WIDTH OF THE COFFERDAM SHOULD BE SUITABLE TO SUPPORT THE HEIGHT OF THE COFFERDAM, EACH ROW SHOULD BE OFFSET SO THE JOINTS ARE STAGGERED. SANDBAGS SHOULD BE PACKED TIGHTLY TOGETHER.
 4. INSPECT THE SANDBAGS DAILY FOR WATER LEAKS AND SIGNS OF INSTABILITY. IMPLEMENT REPAIR PROCEDURES IMMEDIATELY.

SANDBAG COFFERDAM

(NTS)



PREPARED FOR: SUNG OK & IN HO LEE 102R WINN STREET BURLINGTON, MA 01803	CULVERT REPLACEMENT PLAN MAP 37, LOT 29, BLOCK 0 102R WINN STREET
DESIGN BY: DJG	
DRAFT BY: DJG	<p style="text-align: center;"><i>DETAILS</i></p> <p>SCALE: 1"=10'</p>
CHECK BY: SRD	
SHEET 6 OF 6	<p style="text-align: center;">Dresser, Williams & Way, Inc. 572 BOSTON ROAD - UNIT 5 BILLERICA, MA TELEPHONE NO. (978) 663-5410 E-MAIL: DWWINC11@YAHOO.COM Professional Engineers & Land Surveyors</p>

REVISED	COMMENTS
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