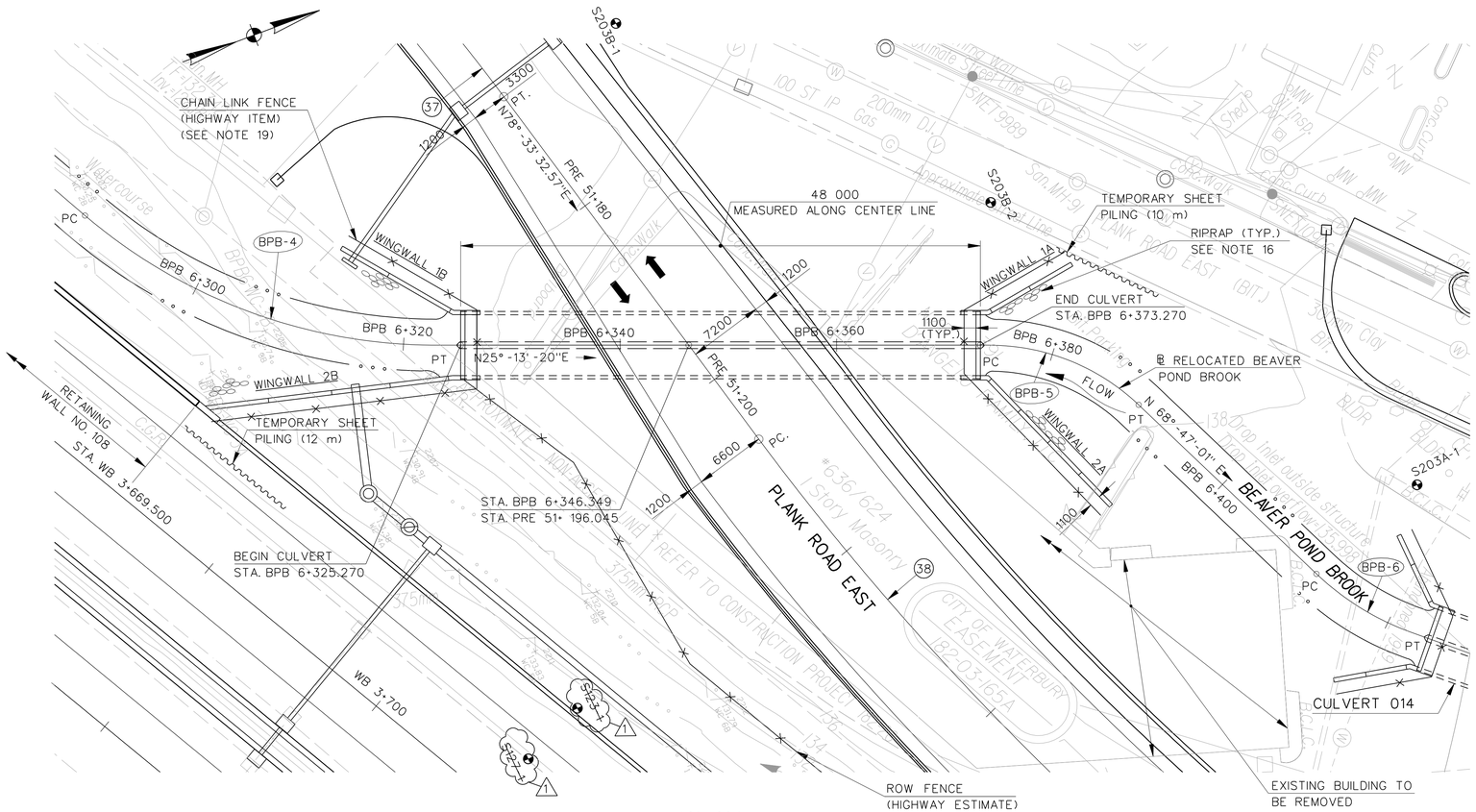


PLAN

SCALE: 1:250

GENERAL NOTES

1. SPECIFICATIONS: CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 816 (2004) WITH SUPPLEMENTS THERETO DATED (JULY 2013) AND SPECIAL PROVISIONS.
2. DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SIXTH EDITION 2012 WITH THE INTERIM SPECIFICATIONS UP TO AND INCLUDING 2013, AS SUPPLEMENTED BY THE CONNECTICUT DEPARTMENT OF TRANSPORTATION BRIDGE MANUAL (2003 EDITION) INCLUDING REVISIONS TO 2013.
3. DESIGN STRENGTHS:
   CLASS "A" CONCRETE BASED ON f'c = 21 MPa
   REINFORCEMENT (ASTM A515M GRADE 420) fY = 414 Mpa
4. LIVE LOAD: HL - 93.INCLUDING ALTERNATE MILITARY LOADING OF (2) 107.5 KN AXLES SPACED AT 1.2 m APART.
5. CLASS "A" CONCRETE: CLASS "A" CONCRETE SHALL BE USED FOR THE ENTIRE STRUCTURE AND THE PARAPETS.
6. JOINT SEAL: SEE SPECIAL PROVISIONS.
7. EXPOSED EDGES: EXPOSED EDGES OF CONCRETE SHALL BE BEVELED 25 mm x 25 mm UNLESS DIMENSIONED OTHERWISE.
8. CONCRETE COVER: ALL REINFORCEMENT SHALL HAVE 50 mm COVER UNLESS DIMENSIONED OTHERWISE.
9. REINFORCEMENT: ALL REINFORCEMENT SHALL BE ASTM A615M GRADE 420.
10. PREFORMED EXPANSION JOINT FILLER: THE COST OF FURNISHING AND INSTALLING PREFORMED EXPANSION JOINT FILLER SHALL BE INCLUDED IN THE COST OF THE ITEM "CLASS 'A' CONCRETE.
11. CONSTRUCTION JOINTS: CONSTRUCTION JOINTS, OTHER THAN THOSE SHOWN ON THE PLANS, WILL NOT BE PERMITTED WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.
12. ELEVATIONS: ALL ELEVATIONS ARE GIVEN IN METERS (m).
13. DIMENSIONS: ALL DIMENSIONS ARE GIVEN IN MILLIMETERS (mm).
14. STATIONING: STATIONS ARE GIVEN IN METERS (m).
15. DECIMAL DIMENSIONS: WHEN DIMENSIONS ARE GIVEN TO LESS THAN THREE DECIMAL PLACES, THE OMITTED DIGITS SHALL BE ASSUMED TO BE ZEROS.
16. RIVER RELOCATIONS & GRADING PLAN: SEE BEAVER POND BROOK RELOCATION PLANS.
17. TRAFFIC: ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE SPECIAL PROVISIONS "MAINTENANCE AND PROTECTION OF TRAFFIC" AND "SECTION 1.08 - PROSECUTION AND PROGRESS".
18. SEQUENCE OF CONSTRUCTION OPERATIONS: REFER TO MAINTENANCE AND PROTECTION OF TRAFFIC STAGING PLANS AND SECTION 1.08 - PROSECUTION AND PROGRESS SPECIFICATION FOR THE SEQUENCING OF CONSTRUCTION OPERATIONS
19. FOR DETAILS AND PAYMENT SEE ROADWAY DEVELOPMENT PLANS .

CURVE NO. BPB-4	
BEAVER POND BROOK	
P.C.	STA.. BPB 6+287.711
	N 230949.649
	E 284210.842
C.C.	N 230995.225
	E 284190.280
P.T.	STA.. BPB 6+323.049
	N 230973.918
	E 284235.513
Δ	40° 29'40" Left
T (m)	18.443
L (m)	35.338
R (m)	50.000

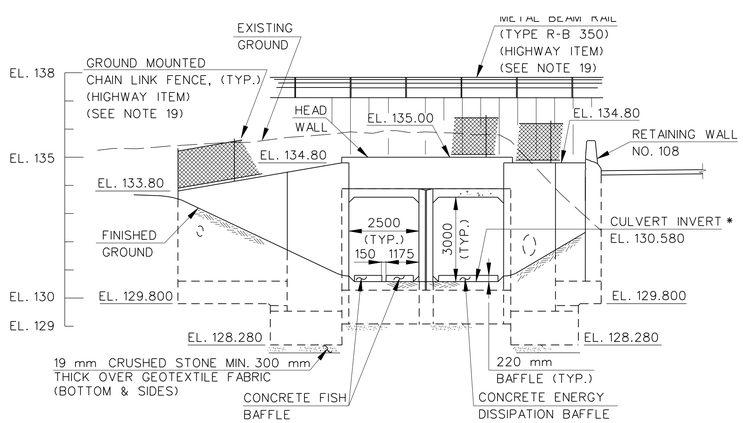
CURVE NO. BPB-5	
BEAVER POND BROOK	
P.C.	STA.. BPB 6+374.112
	N 231020.113
	E 284257.272
C.C.	N 231011.590
	E 284275.365
P.T.	STA.. BPB 6+389.318
	N 231030.235
	E 284268.127
Δ	43° 33'41" Right
T (m)	7.992
L (m)	15.206
R (m)	20.000

CURVE NO. 38	
PLANK ROAD EAST	
P.C.	STA. PRE 51+206.869
	N 230997.144
	E 284256.050
C.C.	N 231251.978
	E 284204.477
P.T.	STA. PRE 51+269.851
	N 231016.955
	E 284315.673
Δ	13° 52'45.16" Left
T (m)	31.646
L (m)	62.982
R (m)	260.000

CURVE DATA

BORING LEGEND

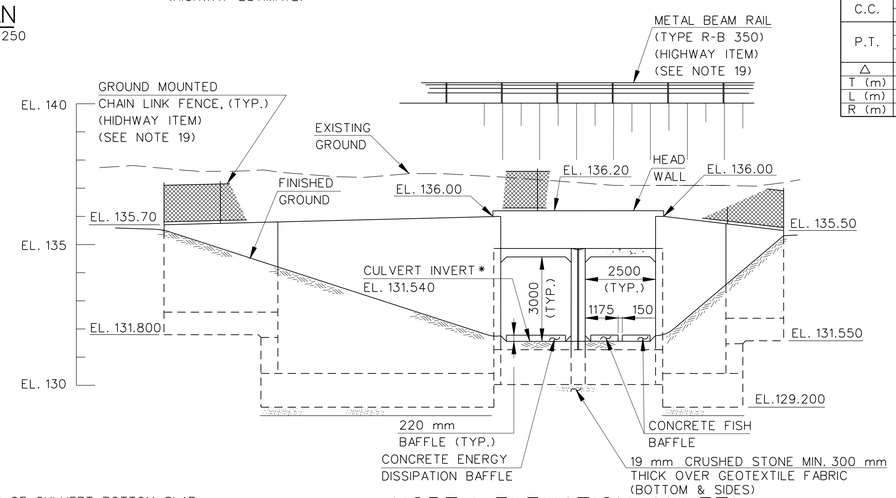
- NEW BORING (2001)



SOUTH ELEVATION (OUTLET)

SCALE: 1:100

* TOP OF CULVERT BOTTOM SLAB



NORTH ELEVATION (INLET)

SCALE: 1:100

HYDRAULIC DATA TABLE	
CULVERT NO.	**151-014**
Drainage Area (km2)	7.8
Design Frequency (year)	100
Design Discharge (cms)	29.87
Average Daily Flow Elevation (M)	133.7 (estimated)
Upstream Design Water Surface Elevation (M)	136.15
Downstream Design Water Surface Elevation (M)	134.25

Nick Ivanoff
2014.09.29
15:40:32 -04'00'

ADDENDUM NO. 3

REV.	DATE	DESCRIPTION	SHEET. NO.
1	9/26/14	DELETED BOFING LOG LOCATION	

REVISIONS

SCALE AS NOTED

DESIGNER: L. MARQUEZ
DRAFTER: G. TOWNSEND
CHECKED BY: B. YIN
DATE CHECKED: 12/2013

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

CADD ...\Str014-6622\FD\0273F203b01.brg
PLOTTED 9/29/2014

AMMANN & WHITNEY
2500 WESTCHESTER AVENUE
3RD FLOOR
HARRISON, NY

PROJECT TITLE: RECONSTRUCTION OF I-84 WATERBURY PLANK RD. EAST OVER BEAVER POND BROOK STRUCTURE NO. 151-0273-06622

TOWN: WATERBURY

DRAWING TITLE: GENERAL PLAN AND ELEVATION

PROJECT NO.: 151-273
DRAWING NO.: S1
SHEET NO.: 06.06.001.A03

Connecticut Department of Transportation
QA/QC Format Check

J. Muccino DRILLER C. White INSPECTOR Haley & Aldrich, Inc. SOILS ENGINEER	SM - 001 - M REV. 1/94 BORING REPORT STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION TOWN: New Haven, CT PROJECT NAME: Reconstruction of I-84 PROJECT NUMBER: State: 151-273/H&A: 91313-100 BORING CONTRACTOR: General Borings, Inc.	Hole No. S203B-1 Line & Station ~~PRE 51+168~~ Offset 12.3 L N. Coordinate 231001.57 E. Coordinate 284215.68 Berger, Lehman Associates, P.C. PRIME DESIGNER

Surface Elevation: 136.22
Date Started: 16 March 2001
Date Finished: 16 March 2001
Groundwater Observations
@ 3.66 m after - hours
@ m after hours

	Casing	Auger	Mud	Sampler		Core Barrel			
Utilized				X					
Type	BW	NW	HW	Pipe	Solid	Hollow		SS	
Size I.D. (mm)	60	76	100	64		108		35	X
Hammer (kg)	136	136	136	136			Bit	63.5	
Fall (m)	0.6	0.6	0.6	0.6				0.76	

	B(st)	B(dt)	NX(st)	NQ(dt)
	35	35	55	51
Type			Diamond	
of bit			Carbide	

DEPTH	Casing blows per half meter	SAMPLE DEPTH IN METERS FROM - TO	NO.	PEN. m	REC m	Type	BLOWS PER 0.15 METERS ON SAMPLER 0-0.15	0.15-0.30	0.30-0.45	0.45-0.60	STRATA CHANGE ELEV./DEPTH (m)	FIELD IDENTIFICATION OF SOIL REMARKS (INCL. COLOR, LOSS OF WASH WATER, ETC.)
												-ASPHALT and ROADSTONE-
		0.30-0.83	1	0.53	0.27	D	13	21	35	100/0.08	0.25	Very dense brown coarse to fine SAND, trace coarse to fine gravel, silt
												Augered through boulders and cobbles 0.83 to 1.82 m.
		1.82-2.43	2	0.61	0.23	D	3	3	4	4		Loose dark brown coarse to fine SAND, trace fine gravel, wood fibers, roots, black staining top 0.13 m. of sample
		2.43-3.04	3	0.61	0.23	D	4	3	6	4	133.23 / 2.99	
		3.05-3.66	4	0.61	0.40	D	4	6	9	11	3.46	Loose orange-brown coarse to fine SAND, trace silt, gravel
5		4.57-5.18	5	0.61	0.36	D	19	11	15	13		
												-FILL-
		6.10-6.55	6	0.45	0.30	D	10	13	100			Loose tan coarse to fine SAND, little fine gravel, trace coarse to medium gravel
		7.62-8.23	7	0.61	0.20	D	17	19	23	36	128.75 / 7.47	Medium dense olive fine SAND, trace roots, moist
		9.14-9.75	8	0.61	0.24	D	8	23	31	33		Medium dense tan coarse to fine SAND, trace fine gravel, cobbles
10											126.52 / 9.70	Medium dense tan fine SAND, trace silt, moist
		10.67-10.67	9	0.00	0.00	D	50/0.00				125.55 / 10.67	Very dense olive coarse SAND, some fine sand, trace fine gravel, slight petroleum odor, wet
												Dense light brown coarse SAND, little fine sand, fine gravel, wet
												Note: Running sand at 7.60 m.
15												Very dense brown coarse to fine SAND, some coarse to fine gravel,

Casing Size	From	To	Meters of Earth	Rock
HSA	0.0	10.7	10.67 m	- m
			No. of Samples	
			9D	

NOTES: Truck mounted Mobile Drill B-53 with wire winch to drive safety hammer. Borehole backfilled upon completion

SAMPLE TYPE CODING: D=Driven C=Core A=Auger UP=Undisturbed Piston V=Vane Test
PROPORTIONS USED: Trace=1-10% Little=10-20%, Some=20-35%, And=35-50%

Hole No. S203B-1
Sheet 1 of 2

J. Muccino DRILLER C. White INSPECTOR Haley & Aldrich, Inc. SOILS ENGINEER	SM - 001 - M REV. 1/94 BORING REPORT STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION TOWN: New Haven, CT PROJECT NAME: Reconstruction of I-84 PROJECT NUMBER: State: 151-273/H&A: 91313-100 BORING CONTRACTOR: General Borings, Inc.	Hole No. S203B-1 Line & Station ~~PRE 51+168~~ Offset 12.3 L N. Coordinate 231001.57 E. Coordinate 284215.68 Berger, Lehman Associates, P.C. PRIME DESIGNER

Surface Elevation: 136.22
Date Started: 16 March 2001
Date Finished: 16 March 2001
Groundwater Observations
@ 3.66 m after - hours
@ m after hours

	Casing	Auger	Mud	Sampler		Core Barrel			
Utilized				X					
Type	BW	NW	HW	Pipe	Solid	Hollow		SS	
Size I.D. (mm)	60	76	100	64		108		35	X
Hammer (kg)	136	136	136	136			Bit	63.5	
Fall (m)	0.6	0.6	0.6	0.6				0.76	

	B(st)	B(dt)	NX(st)	NQ(dt)
	35	35	55	51
Type			Diamond	
of bit			Carbide	

DEPTH	Casing blows per half meter	SAMPLE DEPTH IN METERS FROM - TO	NO.	PEN. m	REC m	Type	BLOWS PER 0.15 METERS ON SAMPLER 0-0.15	0.15-0.30	0.30-0.45	0.45-0.60	STRATA CHANGE ELEV./DEPTH (m)	FIELD IDENTIFICATION OF SOIL REMARKS (INCL. COLOR, LOSS OF WASH WATER, ETC.)
												trace silt, wet
												Note: Running sand at 9.14 m.
												Very dense brown coarse to fine SAND, little coarse to fine gravel, trace silt, wet
												No recovery
												-GLACIOFLUVIAL DEPOSITS-
20												Bottom of Exploration at 10.67 m.
25												
30												

Casing Size	From	To	Meters of Earth	Rock
HSA	0.0	10.7	10.67 m	- m
			No. of Samples	
			9D	

NOTES: Truck mounted Mobile Drill B-53 with wire winch to drive safety hammer. Borehole backfilled upon completion

SAMPLE TYPE CODING: D=Driven C=Core A=Auger UP=Undisturbed Piston V=Vane Test
PROPORTIONS USED: Trace=1-10% Little=10-20%, Some=20-35%, And=35-50%

Hole No. S203B-1
Sheet 2 of 2

J. Muccino DRILLER C. White INSPECTOR Haley & Aldrich, Inc. SOILS ENGINEER	SM - 001 - M REV. 1/94 BORING REPORT STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION TOWN: New Haven, CT PROJECT NAME: Reconstruction of I-84 PROJECT NUMBER: State: 151-273/H&A: 91313-100 BORING CONTRACTOR: General Borings, Inc.	Hole No. S203B-2 Line & Station ~~PRE 51+202~~ Offset 30.4 L N. Coordinate 231025.84 E. Coordinate 284245.39 Berger, Lehman Associates, P.C. PRIME DESIGNER

Surface Elevation: 136.81
Date Started: 15 March 2001
Date Finished: 15 March 2001
Groundwater Observations
@ 2.70 m after 0 hours
@ m after hours

	Casing	Auger	Mud	Sampler		Core Barrel			
Utilized				X					
Type	BW	NW	HW	Pipe	Solid	Hollow		SS	
Size I.D. (mm)	60	76	100	64		108		35	X
Hammer (kg)	136	136	136	136			Bit	63.5	
Fall (m)	0.6	0.6	0.6	0.6				0.76	

	B(st)	B(dt)	NX(st)	NQ(dt)
	35	35	55	51
Type			Diamond	
of bit			Carbide	

DEPTH	Casing blows per half meter	SAMPLE DEPTH IN METERS FROM - TO	NO.	PEN. m	REC m	Type	BLOWS PER 0.15 METERS ON SAMPLER 0-0.15	0.15-0.30	0.30-0.45	0.45-0.60	STRATA CHANGE ELEV./DEPTH (m)	FIELD IDENTIFICATION OF SOIL REMARKS (INCL. COLOR, LOSS OF WASH WATER, ETC.)
												-ASPHALT and ROADSTONE-
		0.30-0.93	1	0.63	0.10	D	8	13	16	33	0.25	Medium dense brown fine SAND, little coarse sand, trace fine gravel, silt, asphalt
		0.91-1.52	2	0.61	0.25	D	35	28	24	8		Very dense brown coarse to fine SAND, some coarse gravel, trace fine gravel, petroleum odor
		1.52-2.13	3	0.61	0.30	D	15	8	5	5		Medium dense brown fine SAND, little coarse to fine gravel, trace silt, strong petroleum odor
		2.13-2.74	4	0.61	0.41	D	5	5	6	5		Medium dense brown fine SAND, little silt, trace coarse sand, roots, strong petroleum odor
		3.05-3.66	5	0.61	0.41	D	17	24	36	51	133.45 / 3.36	Very dense red fine SAND, some silt, petroleum odor in top of sample
5		4.57-5.18	6	0.61	0.30	D	18	23	15	15		-FILL-
		6.10-6.71	7	0.61	0.20	D	21	24	18	20		Very dense brown coarse to fine SAND, some medium to fine gravel, wet
		7.62-7.77	8	0.15	0.08	D	100					Dense brown fine SAND, trace coarse sand, .05 m of lens of coarse to fine gravel, strong petroleum odor, wet
		9.14-9.29	9	0.15	0.10	D	100				127.36 / 9.45	Dense brown fine SAND, little medium to fine gravel, trace silt, strong petroleum odor
10												Very dense coarse GRAVEL
												Very dense brown coarse to fine GRAVEL, little fine sand, trace silt, strong petroleum odor
												-GLACIOFLUVIAL DEPOSITS-
15												Bottom of Exploration at 9.45 m.

Casing Size	From	To	Meters of Earth	Rock
HSA	0.0	9.4	9.45 m	- m
			No. of Samples	
			9D	

NOTES: Truck mounted Mobile Drill B-53 with wire winch to drive safety hammer. Borehole backfilled with cement/grout mixture upon completion.

SAMPLE TYPE CODING: D=Driven C=Core A=Auger UP=Undisturbed Piston V=Vane Test
PROPORTIONS USED: Trace=1-10% Little=10-20%, Some=20-35%, And=35-50%

Hole No. S203B-2
Sheet 1 of 1

NOTE:
FOR BORING LOCATIONS SEE DWG. NO. S1.

ADDENDUM NO. 3

REV.	DATE	DESCRIPTION	SHEET. NO.
1	8/12/14	MODIFIED HOLE NO. IDENTIFICATION	S4

REVISIONS

DESIGNER: L. MARQUEZ
DRAFTER: G. TOWNSEND
CHECKED BY: B. YIN
DATE CHECKED: 12/2013

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

CADD ...\addendum no. 2\0273F203B04.BRG
PLOTTED 9/10/2014

AMMANN & WHITNEY
2500 WESTCHESTER AVENUE
3RD FLOOR
HARRISON, NY

PROJECT TITLE: RECONSTRUCTION OF I-84 WATERBURY PLANK RD. EAST OVER BEAVER POND BROOK STRUCTURE NO. 151-0273-06622

TOWN: WATERBURY

DRAWING TITLE: BORING LOGS

PROJECT NO.: 151-273
DRAWING NO.: S4
SHEET NO.: 06.06.004.A03