

RECONSTRUCTION OF BLANCHARD ROAD CAMBRIDGE, MA



INDEX OF DRAWINGS

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PREPARED FOR:

CITY OF CAMBRIDGE
COMMUNITY DEVELOPMENT DEPARTMENT
DEPARTMENT OF PUBLIC WORKS

PREPARED BY:



695 ATLANTIC AVENUE
BOSTON, MA 02111
(617) 357-7700



Gerald Friedman
7-10-08

GENERAL

EXISTING	PROPOSED	
FOR EXISTING FEATURES LEGEND SEE EXISTING CONDITIONS PLAN SHEET 9		MANHOLE CATCH BASIN GATE VALVE HYDRANT UTILITY POLE WITH LIGHT SIGN WITH POST GRANITE CURB STORM DRAIN FENCE LINE PEDESTRIAN RAMP SPOT GRADE CONTOUR (INTERMEDIATE) CONTOUR (INDEX)

PROPOSED ABBREVIATIONS

FOR EXISTING FEATURES ABBREVIATIONS
SEE EXISTING CONDITIONS PLAN SHEET 9

ADJ	ADJUST
CB	CATCH BASIN
CONC	CONCRETE
CLF	CHAIN LINK FENCE
DIA	DIAMETER
DMH	DRAIN MANHOLE
EXIST	EXISTING
GRAN	GRANITE
HMA	HOT MIXED ASPHALT
I=30.00	INVERT ELEVATION
M&M	MEET AND MATCH
PROP	PROPOSED
R=50.00	RIM ELEVATION
RET	RETAIN
SMH	SEWER MANHOLE
SW	SIDEWALK
TC	TOP OF CURB
TH=60.00	TOP OF HOOD ELEVATION
TYP	TYPICAL
TP=50.00	TOP OF PIPE ELAVATION
UP	UTILITY POLE
VGC	VERTICAL GRANITE CURB

MARKINGS

SWLL	4" SINGLE WHITE LANE LINE
BWLL	4" BROKEN WHITE LANE LINE
SWEL	4" SINGLE WHITE EDGE LINE
SL	12" STOP LINE
SYEL	4" SINGLE YELLOW EDGE LINE
DYCL	4" DOUBLE YELLOW CENTER LINE
DBYL	4" DOUBLE BROKEN YELLOW LINE
SYGL	8" SOLID YELLOW GORE LINE
DSYCL	4" DASHED SINGLE YELLOW CENTER LINE

SIGNS

SNB	STREET NAME BLADE
LA	LEFT ARROW
RA	RIGHT ARROW
DA	DOUBLE ARROW

MATERIALS/HATCHING LEGEND

	PROPOSED FULL DEPTH CONSTRUCTION
	DETECTABLE WARNING STRIP
	RAISED INTERSECTION PAVERS
	RAISED INTERSECTION RAMP
	LOAM AND SEED
	RAISED PAVEMENT MARKER TWO WAY - WHITE/RED
	RAISED PAVEMENT MARKER TWO WAY - YELLOW/RED
	RAISED PAVEMENT MARKER TWO WAY - YELLOW/YELLOW
	BICYCLE LANE PAVEMENT MARKING
	SHARED LANE PAVEMENT MARKING

GENERAL NOTES

- FOR SURVEY INFORMATION, SEE EXISTING CONDITIONS PLANS SHEETS 8-11.
- THE ACCURACY AND COMPLETENESS OF UNDERGROUND UTILITIES AS SHOWN IN THE PLANS ARE NOT GUARANTEED. THE INFORMATION SHOWN IS APPROXIMATE AND HAS NOT BEEN INDEPENDENTLY VERIFIED BY EITHER THE CITY OF CAMBRIDGE OR THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.
- ELEVATIONS REFER TO CAMBRIDGE CITY BASE.
- A PROPERTY LINE SURVEY HAS NOT BEEN PERFORMED. THE LOCATION OF ALL RIGHT-OF-WAY AND PROPERTY LINES ARE CONSIDERED APPROXIMATE.
- THE CONTRACTOR SHALL NOTIFY, IN WRITING, ALL UTILITY COMPANIES AND GOVERNMENT AGENCIES PRIOR TO EXCAVATION WORK AND CALL "DIG-SAFE" AT 1-800-322-4844, AT LEAST 72 HOURS PRIOR TO COMMENCING WORK.
- ALL FEES AND PERMITS SHALL BE PAID FOR BY THE CONTRACTOR.
- THE CONTRACTOR SHALL SECURE THE WORK AREA AT THE END OF EACH WORK DAY.
- CONTRACTOR SHALL DISPOSE OF ALL DEMOLISHED MATERIAL, RUBBISH AND DEBRIS IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REQUIREMENTS HAVING JURISDICTION.
- CONTRACTOR SHALL RESTORE TO THEIR ORIGINAL CONDITION ANY AREAS ADJACENT TO AND OUTSIDE THE LIMIT OF WORK WHICH ARE DISTURBED DURING CONSTRUCTION, AT THE CONTRACTOR'S OWN EXPENSE.
- UTILITY SERVICES SHALL BE MAINTAINED AT ALL TIMES.
- CONTRACTOR SHALL SAW-CUT ALL EDGES OF PAVING WHERE PAVEMENT IS TO BE REMOVED AND WHERE A NEW PAVEMENT IS TO ABUT EXISTING PAVEMENT.
- CONTRACTOR SHALL PROVIDE EXPANSION JOINTS IN CONCRETE WALKS WHERE WALKS ABUT BUILDING WALLS AND/OR EXISTING WALKS.
- CONTRACTOR SHALL PROVIDE UNIFORM SLOPE BETWEEN SPOT GRADES AND CONTOURS.
- CONTRACTOR SHALL ADJUST ALL EXISTING PUBLIC UTILITY CASTINGS WITHIN LIMIT OF WORK TO LINE AND GRADE, UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL PROVIDE A STAKED LAYOUT ON SITE FOR ENGINEER'S REVIEW PRIOR TO COMMENCING WORK.
- LABELED DIMENSIONS SHALL SUPERCEDE SCALED DIMENSIONS FOR ALL LAYOUT WORK.
- AT ALL LOCATIONS, STATION AND OFFSETS ARE GIVEN TO "REVEAL SIDE" OF CURB OR EDGE OF PAVEMENT AS APPROPRIATE.
- ALL LINES ARE PARALLEL OR PERPENDICULAR UNLESS OTHERWISE INDICATED.
- SIGNING REQUIRED FOR CONSTRUCTION ZONES AND CONSTRUCTION TRAFFIC MANAGEMENT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). SIGNING AND OTHER TRAFFIC MANAGEMENT DEVICES SHALL BE MAINTAINED IN A CONDITION ACCEPTABLE TO THE ENGINEER THROUGHOUT CONSTRUCTION.
- THE LIMIT OF WORK SHALL BE AT THE PROPERTY AND LAYOUT LINES UNLESS OTHERWISE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER.
- "DON'T DUMP" PLACARDS SHALL BE INSTALLED AT ALL EXISTING AND PROPOSED CATCH BASINS THAT ARE ADJACENT TO SIDEWALKS RECONSTRUCTED UNDER THIS CONTRACT. PLACARDS WILL BE FURNISHED BY THE CITY AT NO COST TO THE CONTRACTOR.
- ALL EXISTING GRANITE CURB WITHIN THE PROJECT LIMITS DESIGNATED BY THE ENGINEER AS SUITABLE FOR REUSE SHALL BE REMOVED AND RESET.
- IN ALL AREAS OF NEW SIDEWALK CONSTRUCTION, THE CONTRACTOR SHALL REMOVE AND DISPOSE ALL EXISTING BITUMINOUS CONCRETE MATERIAL WITHIN THE PLAN LIMITS OF THE PROPOSED SIDEWALK OR AS OTHERWISE INTERFERES WITH THE PROPOSED WORK.
- ALL EXISTING TREES SHALL BE PRESERVED, UNLESS OTHERWISE NOTED OR DIRECTED BY THE ENGINEER SEE SPECIFICATIONS.
- ALL PRIVATE UTILITY STRUCTURES SHALL BE ADJUSTED BY OTHERS AS REQUIRED. CONTRACTOR SHALL COORDINATE WORK BY OTHERS. COORDINATION WITH OTHERS IS CONSIDERED INCIDENTAL TO THE WORK.
- ALL WORK ON FRESH POND GOLF COURSE SHALL BE COORDINATED THROUGH CAMBRIDGE WATER DEPARTMENT. SEE SPECIFICATIONS.



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			Scale	AS NOTED	CITY OF CAMBRIDGE, MASSACHUSETTS	Sheet No.
			Date	7/1/08		2
			Job No.	53275		
			Designed by	PFB	RECONSTRUCTION OF BLANCHARD ROAD	Total Sheets
0	AS-BID	7/1/08	Drawn by	JG		22
No.	DESCRIPTION	DATE	Checked by	GMF	LEGEND, ABBREVIATIONS AND GENERAL NOTES	File No.
REVISIONS				Approved by		

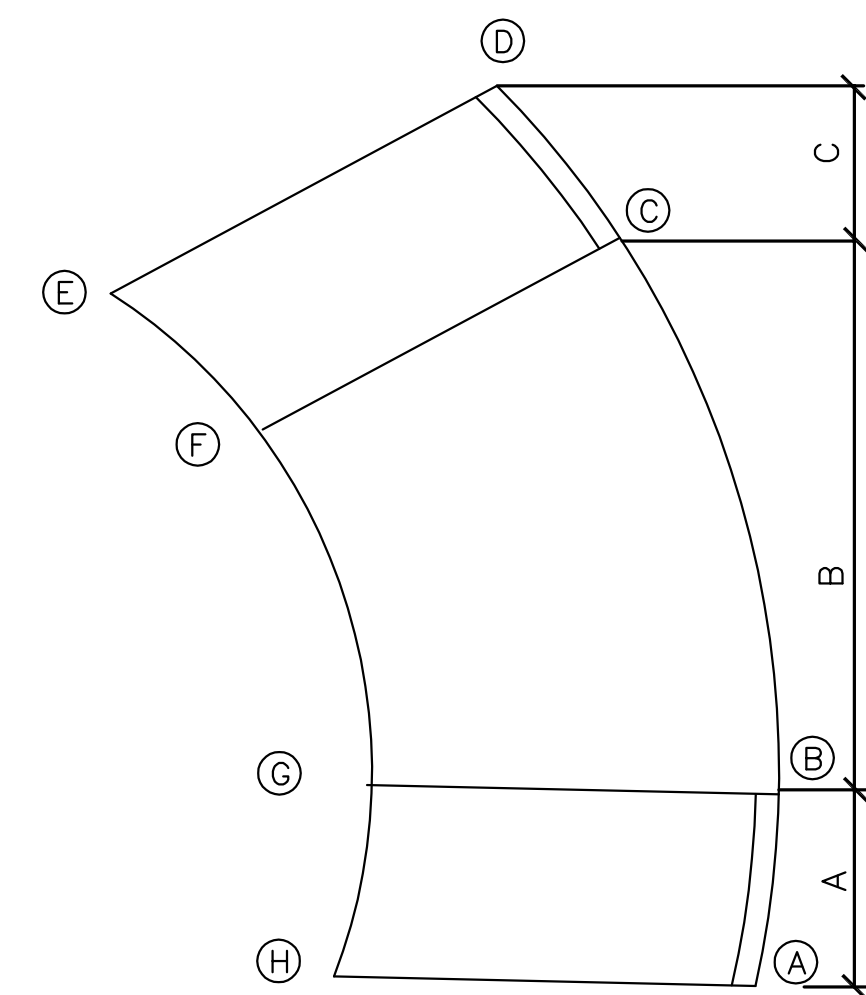


Diagram illustrating a rectangular structure labeled "TYPE 5". The structure is defined by two horizontal lines and two vertical lines. The vertical distance between the horizontal lines is labeled "B". The horizontal distance between the vertical lines is labeled "D". The corners of the rectangle are labeled with circled letters: "A" at the top-left, "B" at the bottom-left, "C" at the top-right, and "D" at the bottom-right. To the left of the rectangle, there are two curved lines representing a boundary or path.

PROP. LIMIT OF GRADING

43.26

42.47

43.40

42.29

42.61

7

42.38

42.33

42.41

TC=42.58

BC=42.17

TC=43.11

BC=42.80

CONCORD AVENUE

120

TC=42.81

BC=42.21

6

42.63

42.28

TC=42.42

BC=42.31

42.66

42.72

42.69

42.52

41.87

TC=42.13

BC=41.77

TC=41.73

BC=41.20

4

TC=42.40

BC=41.86

41.80

41.70

5

41.62

41.74

TC=41.81

BC=41.52

41.75

41.29

41.78

TC=41.74

BC=41.41

40.40

TC=40.70

BC=40.45

41.75

41.29

3

40.37

TC=40.58

BC=40.20

40.73

40.65

40.71

40.70

40.85

40.64

TC=40.50

BC=39.91

TC=40.10

BC=39.55

CONCORD AVENUE

[illegible]

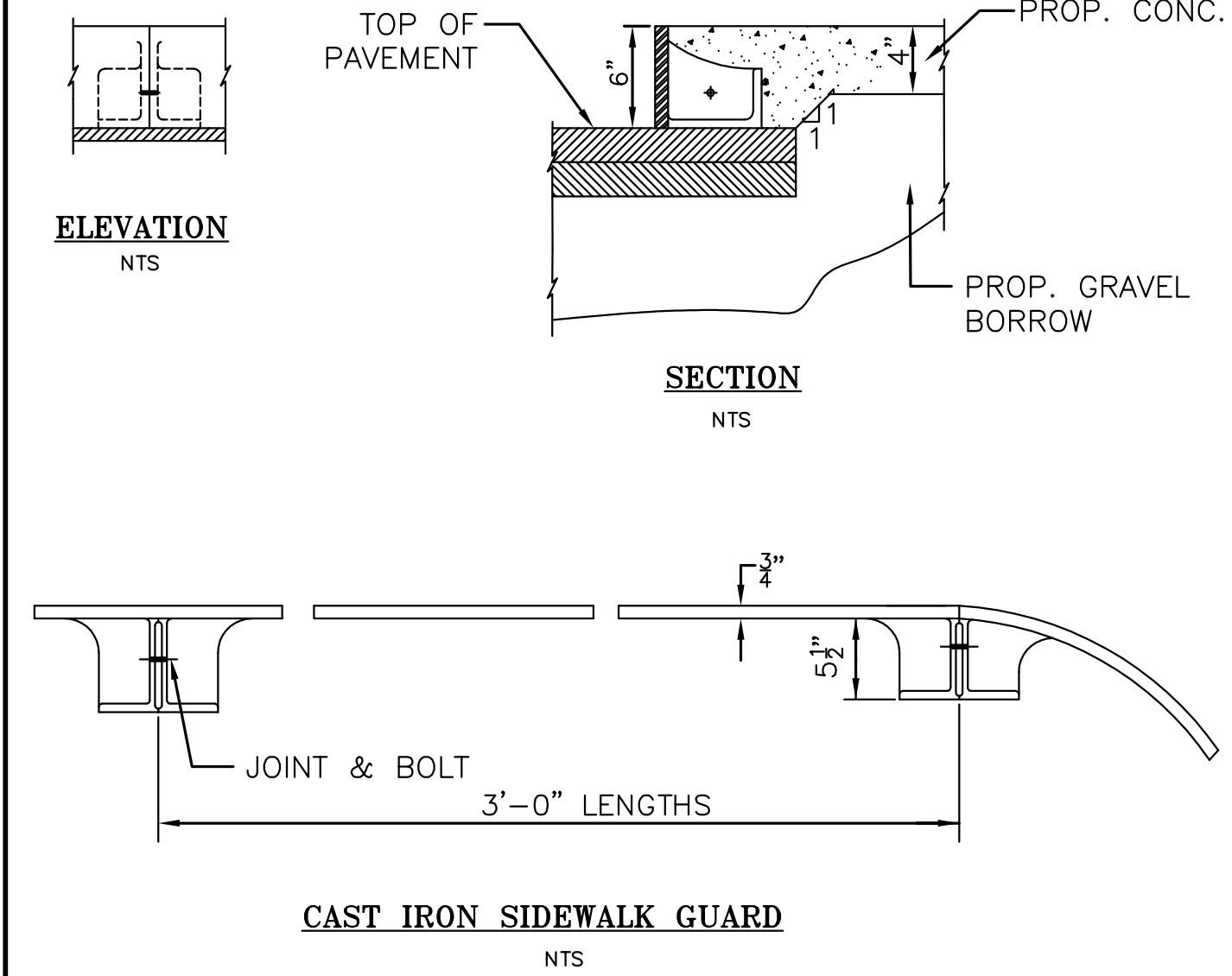
RAMP NO.	TYPE	STATION/OFFSET (MIDPOINT OF RAMP AT GUTTER LINE)	TRANS		LENGTH	RAMP W	RAMP L	LANDING L	F
			A	C	B	D	E		
				(C1-C2)		(D1-D2)			
1	TYPE 5	115+82.85, 19.98 L	N/A	N/A	5.0'	10.5'	N/A	N/A	
2	TYPE 5	116+16.20, 21.27 L	N/A	N/A	5.0'	6.8'	N/A	N/A	
3	TYPE 1	120+08.00, 84.73 R	6.5'	7.7'	5.0'	3.4'	4.0'	5.7'	
4	TYPE 1	120+15.67, 64.27 R	N/A	6.5'	5.0'	6.0'	6.0'	2.8'	
5	TYPE 1	120+30.29, 59.37 R	6.5'	9.0'	5.0'	2.0'	3.1'	6.5'	
6	TYPE 1	120+38.94, 15.00 R	6.5'	N/A	5.0'	6.5'	4.0'	4.0'	
7	TYPE 6	120+50.05, 25.86 L	6.5'	14.0'	5.0'	N/A	N/A	N/A	



HDR
HDR Engineering, Inc.

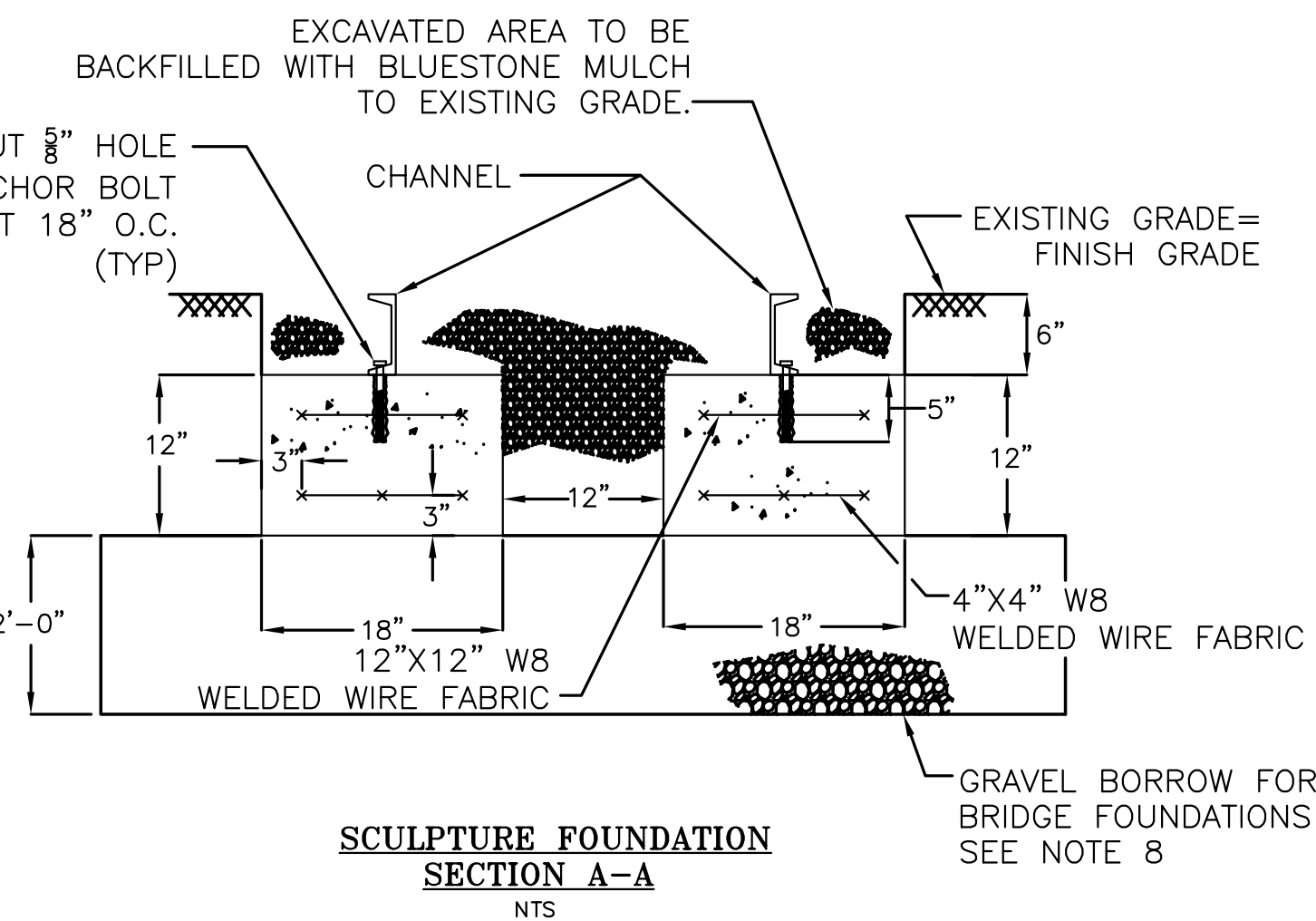
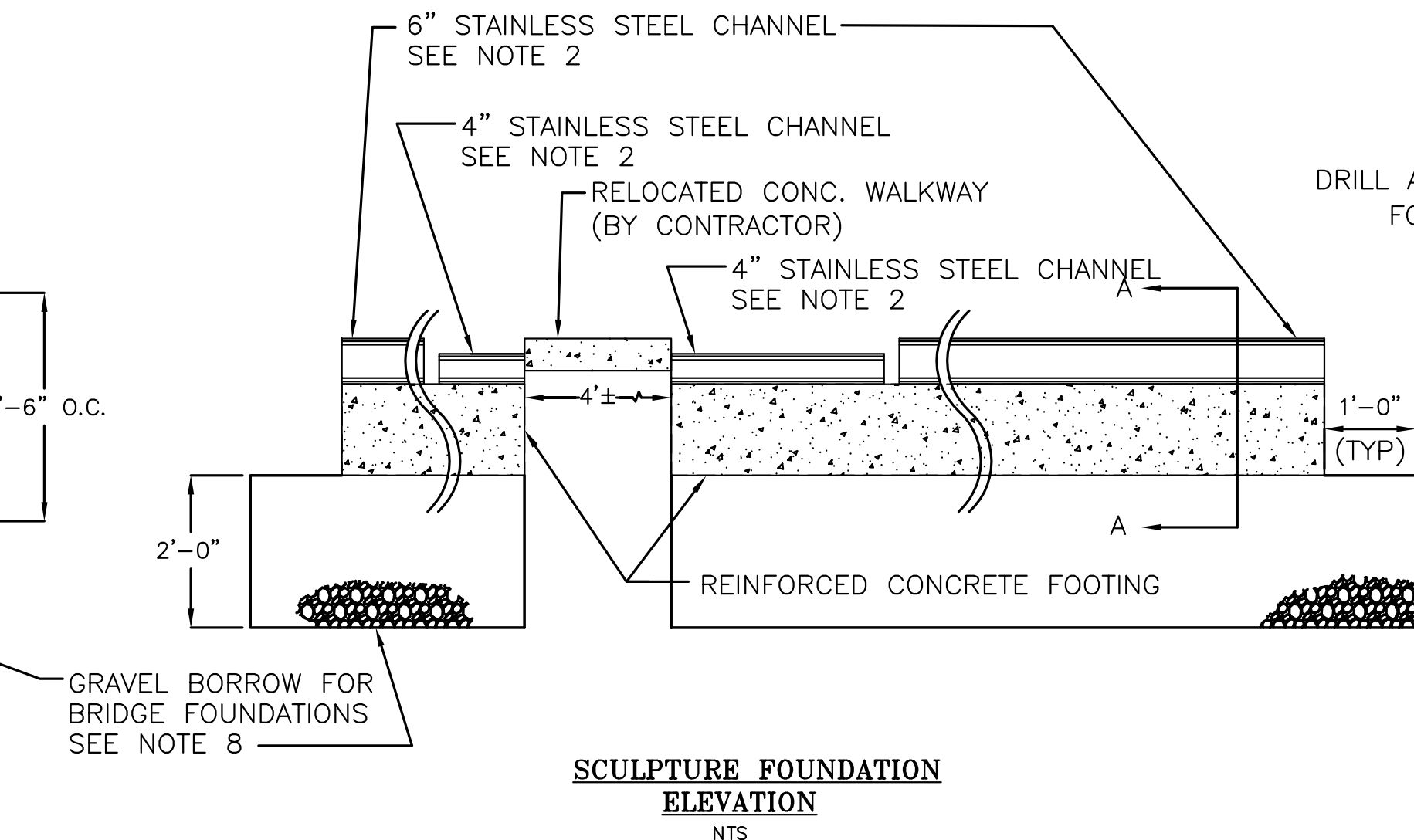
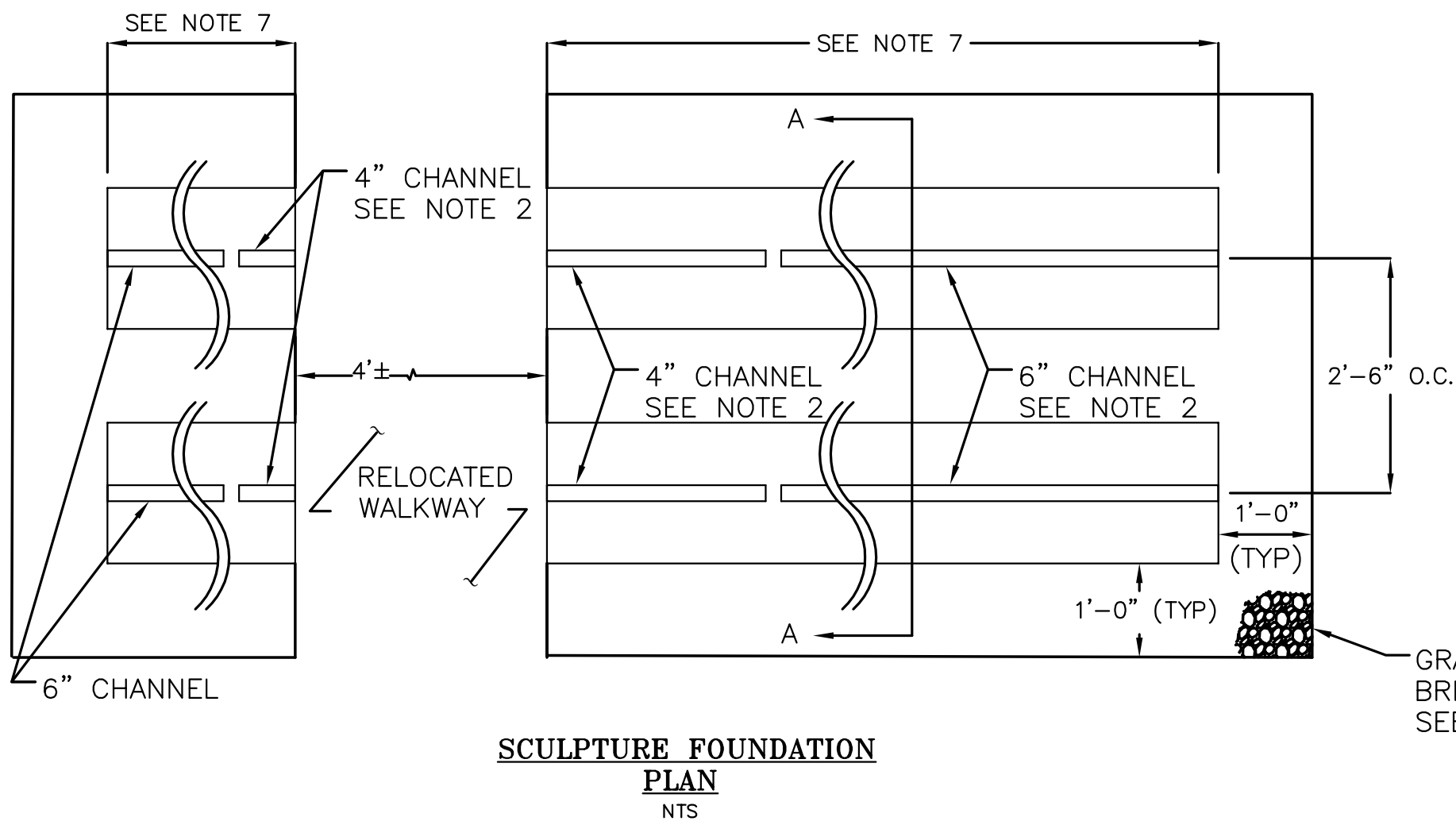
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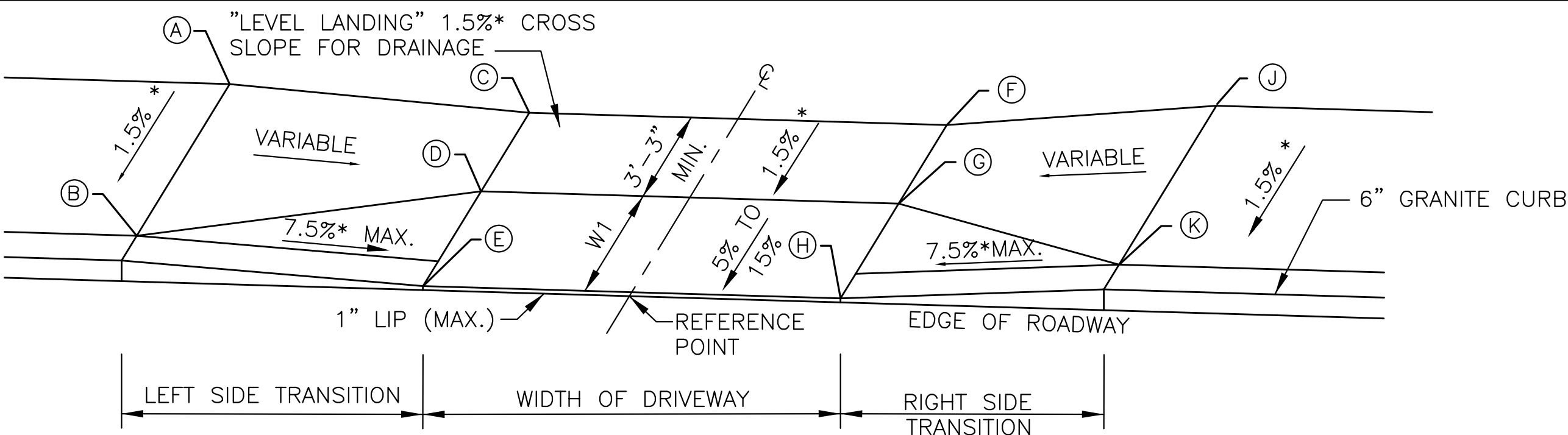
SCULPTURE FOUNDATION NOTES:

1. CONCRETE SHALL BE 4000 PSI, $\frac{3}{4}$ IN., 660 CEMENT CONCRETE AND SHALL BE IN ACCORDANCE WITH ALL REQUIREMENTS OF THE MASSACHUSETTS HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS.
2. STAINLESS STEEL CHANNELS ARE TO BE PROVIDED BY PROJECT ARTIST AND INSTALLED BY CONTRACTOR.
3. WELDED WIRE FABRIC SHALL BE ASTM A185, GRADE 60.
4. ALL BOLTS SHALL BE ASTM A325 STEEL, GALVANIZED.
5. GAP BETWEEN ANCHOR BOLT HEAD AND CHANNEL FLANGE SHALL BE SHIMMED SO CONTACT AREA IS FLUSH.
6. ANCHOR BOLT GROUT SHALL BE KELKEN KELIGROUT OR EQUAL APPROVED BY ENGINEER.
7. FOOTING LENGTH AND ALIGNMENT OF RELOCATED WALKWAY TO BE COORDINATED WITH PROJECT ARTIST AND ENGINEER.
8. GRAVEL BORROW SHALL CONFORM TO THE MASSACHUSETTS HIGHWAY DEPARTMENT STNADARD SPECIFICATIONS SECTIONS 150.56 AND M1.03.0, TYPE A.
9. EXISTING GAS MAIN (NOT SHOWN) TO BE RELOCATED BY OTHERS PRIOR TO CONSTRUCTION OF FOUNDATION



DRIVEWAY DATA

NOT TO SCALE



NOTES:

- * CONSTRUCTION TOLERANCE $\pm 0.5\%$
SEE CURB TIE/GRADING PLANS FOR DRIVEWAY LOCATIONS
- ** DRIVEWAY #7 IS DESIGNED AS A WHEELCHAIR PASSING AREA. NO CHANGES MAY BE MADE WITHOUT CONSULTING THE ENGINEER

DRIVE #	DRIVE REFERENCE POINT		LENGTH OF PRIMARY RAMP (W1) (LEFT–RIGHT)	DEPTH OF LEVEL LANDING (LEFT–RIGHT)	WIDTH OF DRIVEWAY	ROADWAY GUTTER SLOPE	TRANSITION LENGTH		ELEVATION										
	STATION	OFFSET					LEFT SIDE	RIGHT SIDE	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(J)	(K)	
①	101+43.91	14.00 R	2.00'	6.17'–6.66'	14.00	1.51	6'–6"	9'–0"	59.59	59.55	59.70	59.61	59.39	59.85	59.76	59.71	60.03	59.98	
②	102+15.99	14.00 R	2.65'–3.44'	3.25'	14.58	2.17	2'–9"	11'–0"	58.09	58.03	58.25	58.21	57.96	58.70	58.66	58.28	58.89	58.85	
③	102+45.90	14.00 R	1.31'–1.74'	3.25'	22.22	2.17	6'–6"	4'–7"	57.46	57.41	57.42	57.38	57.21	57.96	57.93	57.69	58.02	57.95	
④	103+08.30	14.93 R	1.00'–3.87	4.00'	23.29	3.40	6'–6"	14'–0"	55.48	55.43	55.42	55.40	55.10	56.24	56.21	56.14	56.91	56.87	
⑤	104+15.86	15.04 R	2.00'	3.27'–4.14'	21.34	3.66	N/A	14'–0"	51.47	51.44	51.44	51.42	51.28	52.23	52.20	52.06	53.04	53.01	
⑥	105+06.43	15.25 R	2.62'–1.96'	3.25'	16.70	1.88	6'–6"	N/A	49.37	49.34	49.45	49.41	49.08	49.67	49.62	49.40	49.87	49.80	
⑦ **	105+79.66	14.91 R	0.00'	5.00'	17.05	0.04	7'–8"	9'–0"	48.92	48.89	48.57	N/A	48.50	48.51	N/A	48.44	48.75	48.72	
⑧	106+28.83	14.34 R	1.30'	3.25'	21.84	0.71	7'–8"	6'–6"	49.14	49.08	48.99	48.96	48.78	48.87	48.82	48.63	48.92	48.89	
⑨	107+15.62	14.00 R	1.51'–1.26'	3.25'	20.56	1.20	3'–0"	6'–6"	49.83	49.77	49.75	49.70	49.52	49.28	49.23	49.15	49.64	49.62	
⑩	107+48.27	14.00 R	2.00'	3.25'	24.71	1.20	9'–0"	2'–2"	50.51	50.46	50.02	49.98	49.86	50.02	49.98	49.74	49.91	49.83	
⑪	108+77.45	14.00 R	2.26'–3.07'	4.31'–3.50'	12.99	0.68	9'–0"	6'–6"	51.70	51.67	51.45	51.40	51.17	51.43	51.39	51.08	51.39	51.36	
⑫	109+57.40	14.00 R	2.00'	6.59'–6.92'	20.56	0.78	6'–6"	7'–8"	51.49	51.45	51.30	51.23	51.07	51.34	51.30	51.20	51.75	51.70	
⑬	110+28.77	14.00 R	4.27'–4.62'	3.5'	12.92	0.78	3'–3"	7'–8"	50.88	50.78	50.99	50.97	50.64	51.09	51.06	50.80	51.15	51.03	
⑭	110+55.19	14.00 R	2.43'–2.60'	5.00'	13.02	0.78	3'–3"	3'–10"	50.58	50.55	50.47	50.45	50.33	50.82	50.79	50.52	50.83	50.73	
⑮	110+85.08	14.00 R	2.00'	4.52'–5.27'	20.45	0.99	6'–6"	3'–10"	50.34	50.31	50.15	50.09	49.99	50.33	50.30	50.20	50.52	50.49	
⑯	112+17.08	14.00 R	2.25'–3.00'	3.25'	25.18	1.65	6'–6"	9'–0"	48.27	48.20	48.20	48.15	47.82	48.75	48.70	48.25	49.00	48.92	
⑰	113+77.79	14.00 L	3.00'	4.57'–5.05'	11.20	4.56	15'–0"	6'–6"	44.95	44.85	44.10	44.04	43.77	43.78	43.71	43.26	43.59	43.48	
⑱	114+50.80	14.00 L	4.09'–3.89'	4.22'–4.33'	30.13	4.56	15'–0"	6'–6"	42.20	42.08	41.32	41.27	40.87	39.87	39.82	39.50	39.50	39.46	
⑲	117+08.86	14.00 L	2.00'	4.42'–5.18'	10.85	0.76	6'–6"	7'–8"	34.79	34.76	34.59	34.57	34.47	34.77	34.74	34.55	35.00	34.96	
⑳	117+98.00	14.13 L	3.64'–3.19'	3.25'–4.85'	52.38	2.91	6–6"	14'–0"	35.67	35.64	35.71	35.67	35.43	37.33	37.30	36.93	37.91	37.86	
㉑	118+91.86	17.17 R	2.12'–2.29'	3.25'	19.05	3.05	14'–0"	6'–6"	40.46	40.39	39.86	39.81	39.49	39.35	39.30	38.96	39.29	39.22	
㉒	119+37.44	16.34 L	2.05'–3.11'	3.25'	33.71	2.22	6'–6"	11'–0"	40.36	40.31	40.42	40.38	40.08	41.19	41.15	40.79	41.50	41.44	



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CITY OF CAMBRIDGE, MASSACHUSETTS

RECONSTRUCTION OF BLANCHARD ROAD

CONSTRUCTION DETAILS
SHEET 2 OF 4

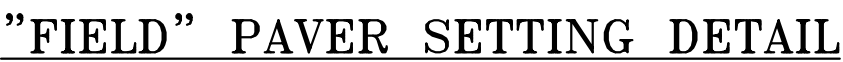
Sheet No.
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Total Sheets
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File No.



NTS



FULL-DEPTH PAVEMENT SECTION

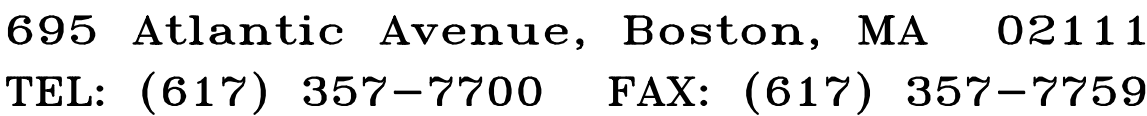
NTS

(TO BE USED AT ALL FULL-DEPTH AREAS ON PROJECT)

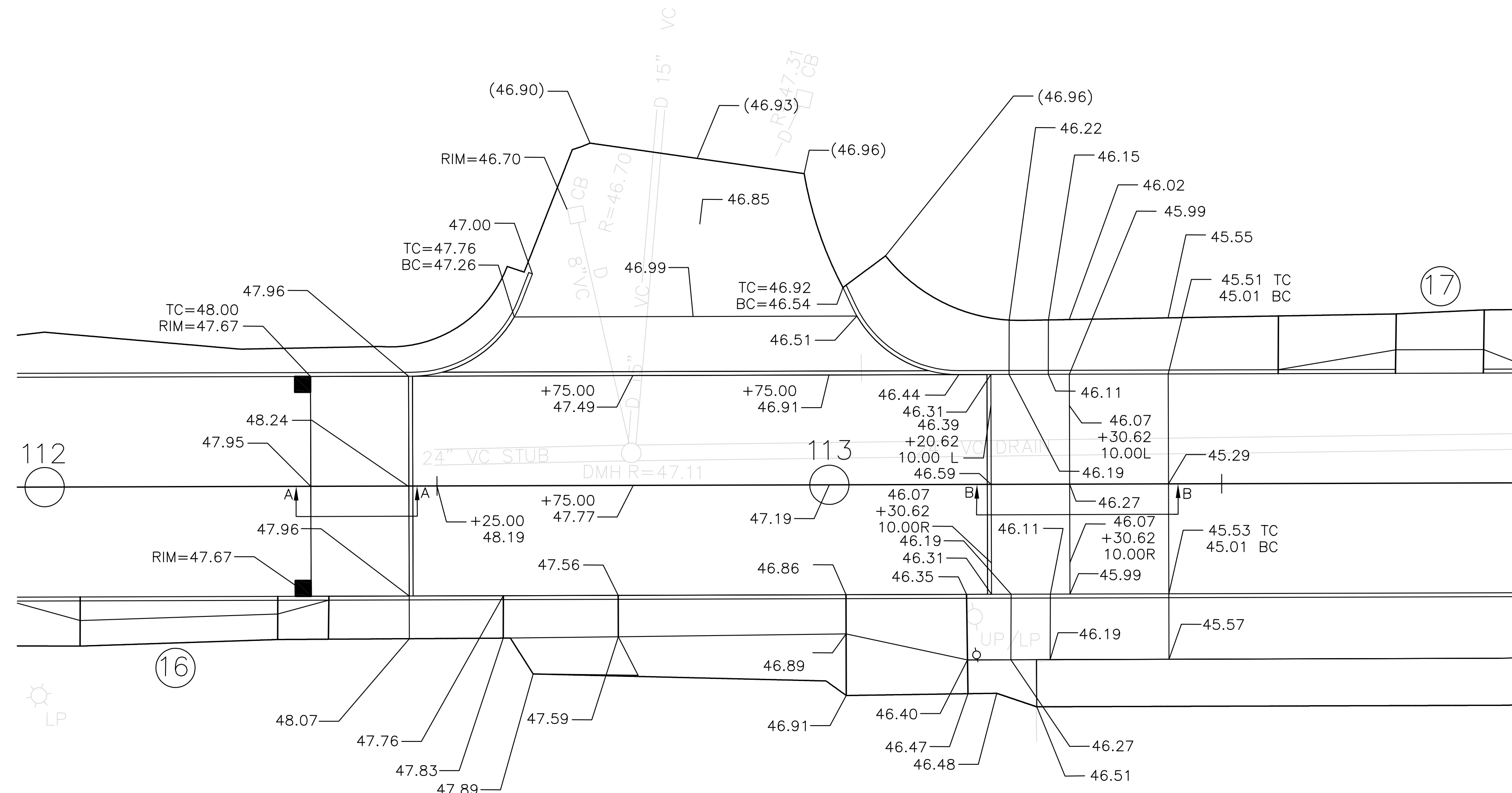
NOTES:

1. HMA BASE COURSE SHALL BE MINIMUM 2" DEPTH. EXISTING ROADWAY PAVEMENT SHALL BE PLANED AS REQUIRED IN ORDER TO PROVIDE MINIMUM 2" DEPTH FOR THE HMA BASE COURSE.
2. FOR RAISED INTERSECTION PROFILE AND ELEVATIONS SEE DETAIL GRADING SHEET 6.

RAISED INTERSECTION WITH CROSSWALK DETAILS



			Scale	AS NOTED	CITY OF CAMBRIDGE, MASSACHUSETTS	Sheet No.	5	
			Date	7/1/08		RECONSTRUCTION OF BLANCHARD ROAD	Total Sheets	22
			Job No.	53275			CONSTRUCTION DETAILS SHEET 3 OF 4	File No.
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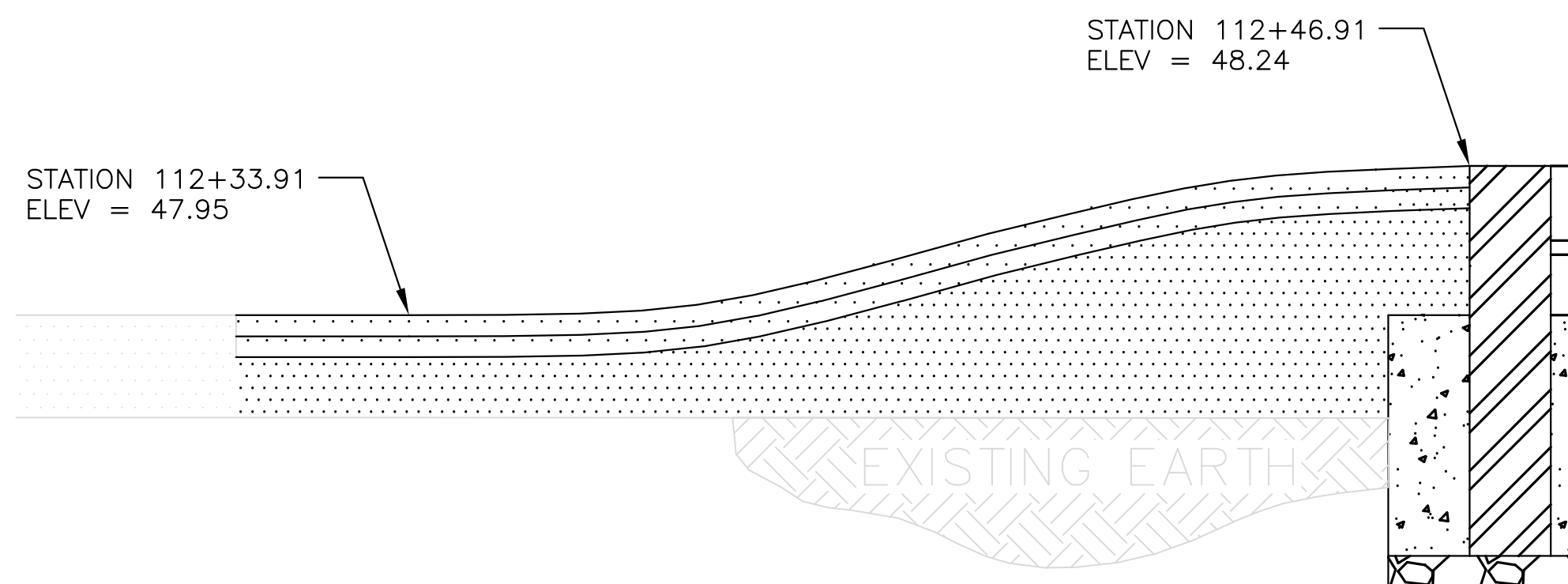


**GLENN ROAD AT BLANCHARD ROAD
RAISED INTERSECTION - DETAIL GRADING PLAN**

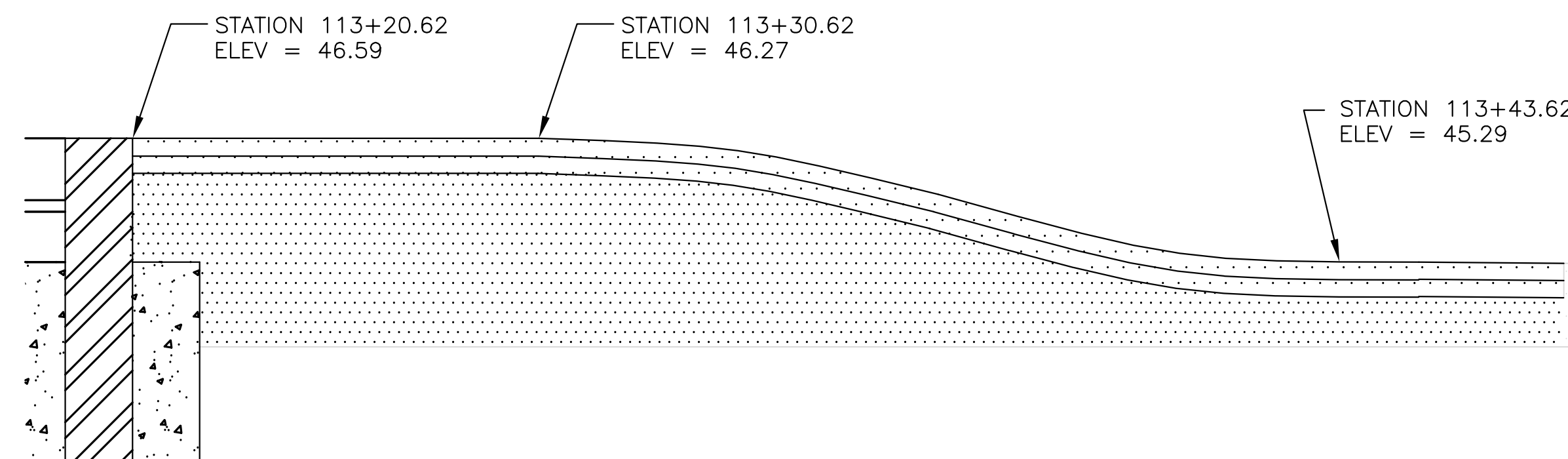
SCALE: 1"=10'

(XX.XX) = EXISTING GRADE TO BE MATCHED

SECTION A-A RAMP PROFILE	
STATION	Q. ELEVATION
112+33.91	47.95
112+34.91	47.95
112+35.91	47.97
112+36.91	49.99
112+37.91	48.01
112+38.91	48.04
112+39.91	48.08
112+40.91	48.11
112+41.91	48.14
112+42.91	48.18
112+43.91	48.20
112+44.91	48.22
112+45.91	48.23
112+46.91	48.24



**SECTION A-A
RAMP PROFILE**
N.T.S.



**SECTION B-B
RAMP & CROSSWALK PROFILE**
N.T.S.

SECTION B-B RAMP PROFILE	
STATION	Q. ELEVATION
113+30.62	46.27
113+31.62	46.25
113+32.62	46.21
113+33.62	46.14
113+34.62	46.05
113+35.62	45.95
113+36.62	45.83
113+37.62	45.72
113+38.62	45.60
113+39.62	45.50
113+40.62	45.41
113+41.62	45.35
113+42.62	45.30
113+43.62	45.29



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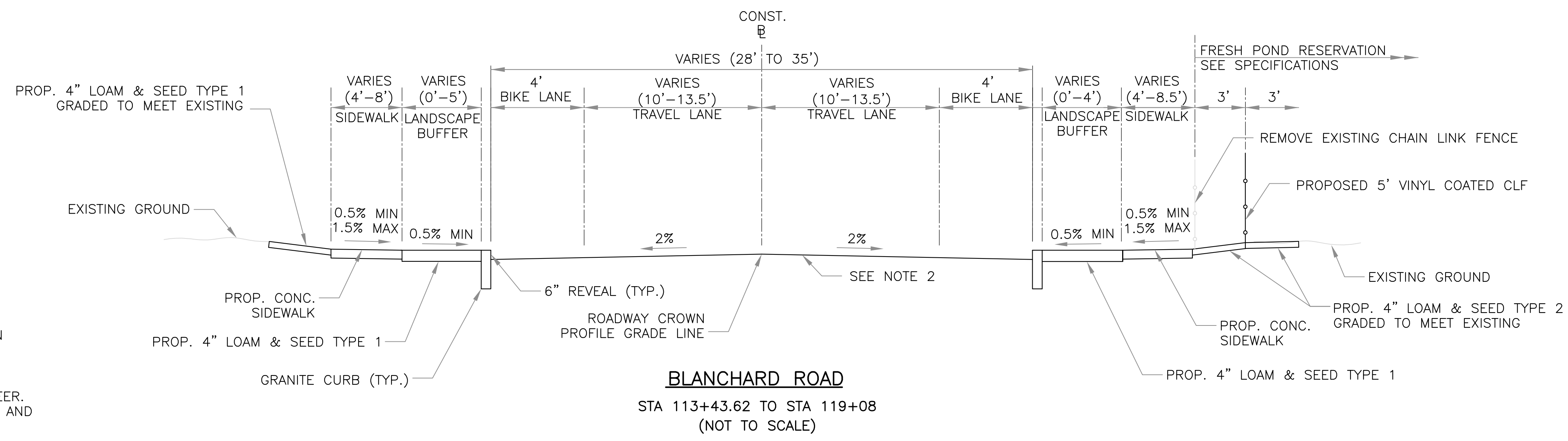
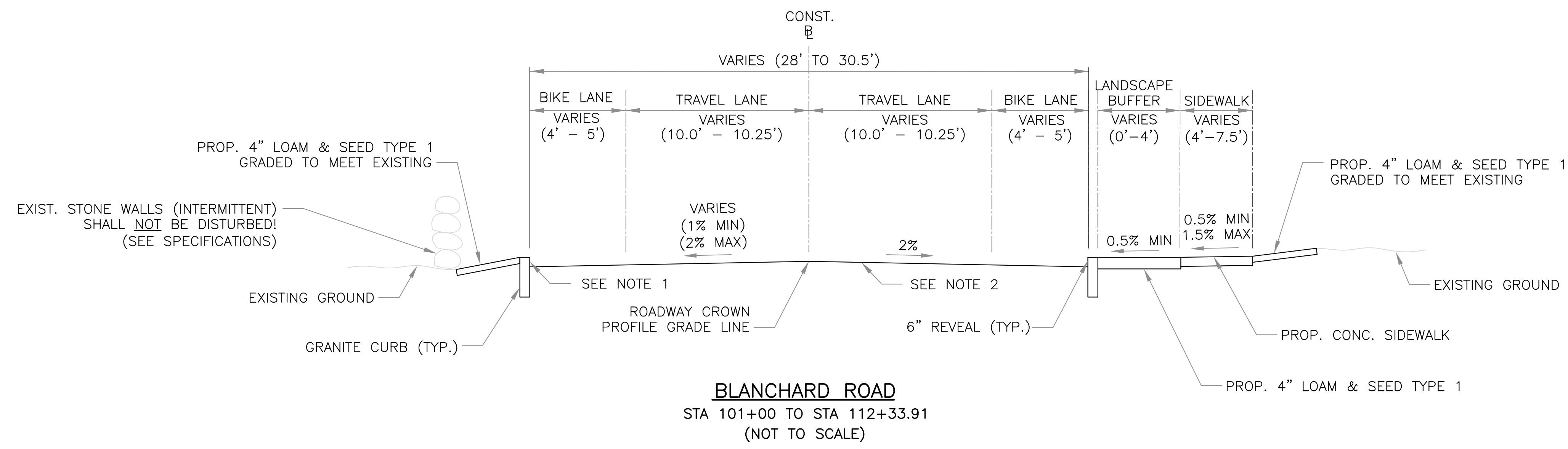
RECONSTRUCTION OF BLANCHARD ROAD

CONSTRUCTION DETAILS
SHEET 4 OF 4

Sheet No.
6

Total Sheets
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File No.



NOTES

1. REVEAL TO BE 6 INCHES EXCEPT AS NOTED AT DRIVEWAYS AND BETWEEN STA 108+00 AND 112+00. SEE CONSTRUCTION DETAILS PLAN AND GRADING PLANS.

2. COLD PLANE AND OVERLAY EXCEPT AS SHOWN ON PLANS OR DIRECTED BY ENGINEER. DEPTH VARIES - SEE PROPOSED PROFILES AND GRADING DETAILS.



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			Scale	AS NOTED
			Date	7/1/08
			Job No.	53275
			Designed by	KPM
0	AS-BID	7/1/08	Drawn by	KPM
No.	DESCRIPTION	DATE	Checked by	GMF
REVISIONS			Approved by	

CITY OF CAMBRIDGE, MASSACHUSETTS

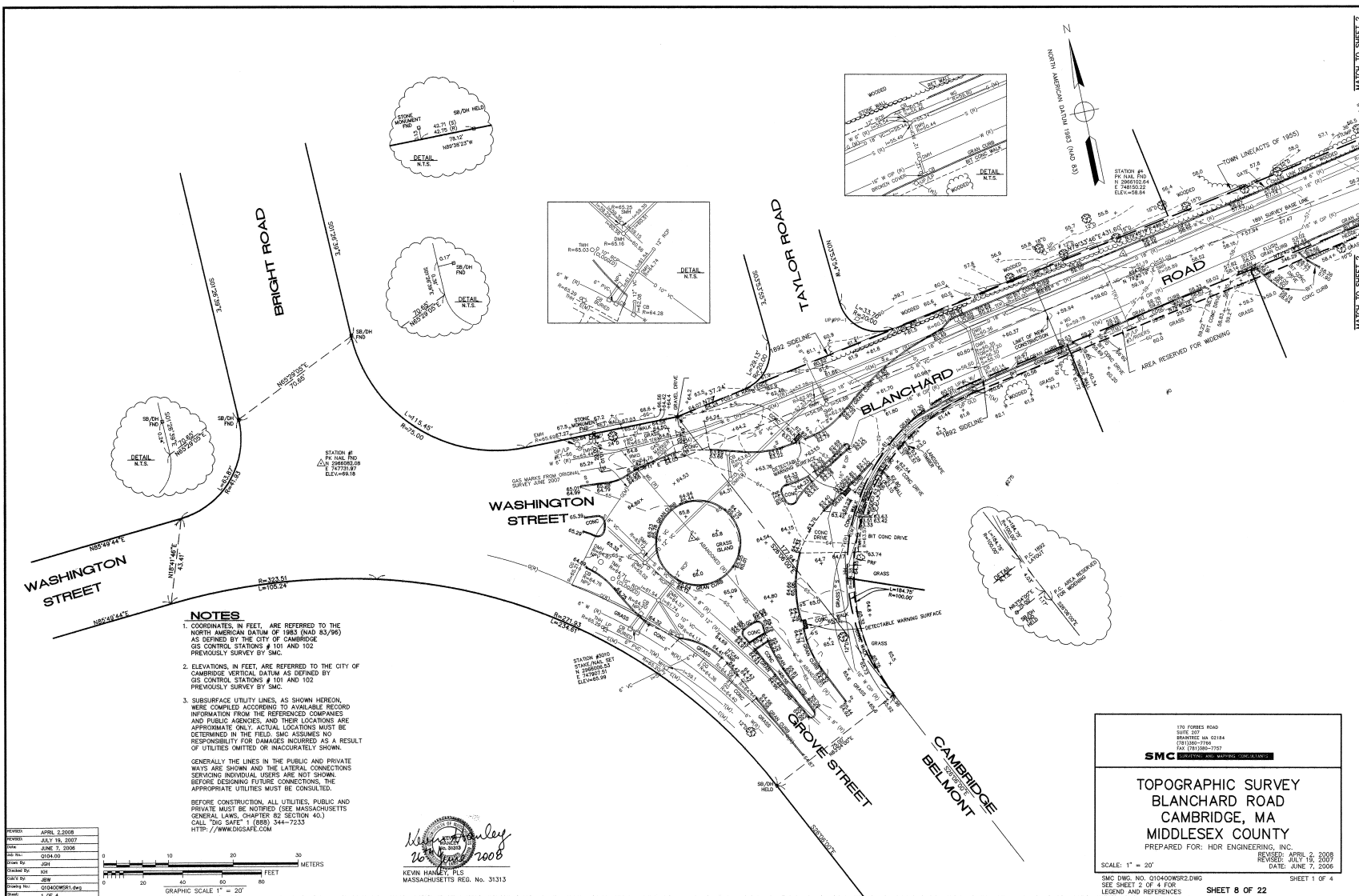
RECONSTRUCTION OF BLANCHARD ROAD

BLANCHARD ROAD
TYPICAL SECTIONS

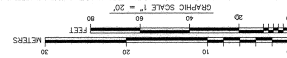
Sheet No.
7

Total Sheets
22

File No.



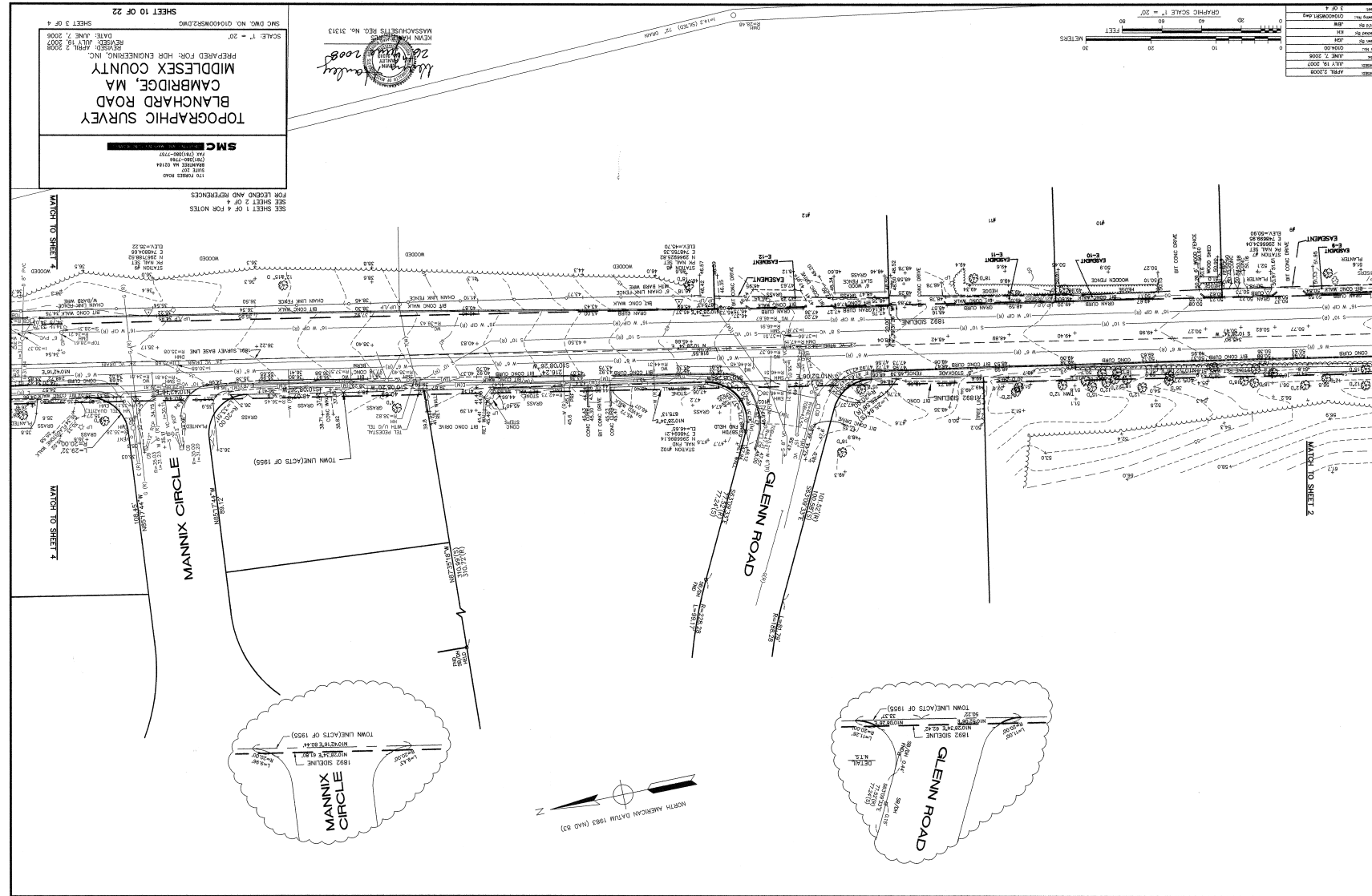
DATE	JUNE 7, 2008
TIME	10:00 AM
BY	JOHN J. HARRIS
FOR	MR. JAMES J. HARRIS
PROJECT	BLANCHARD ROAD
SHEET	10 OF 22

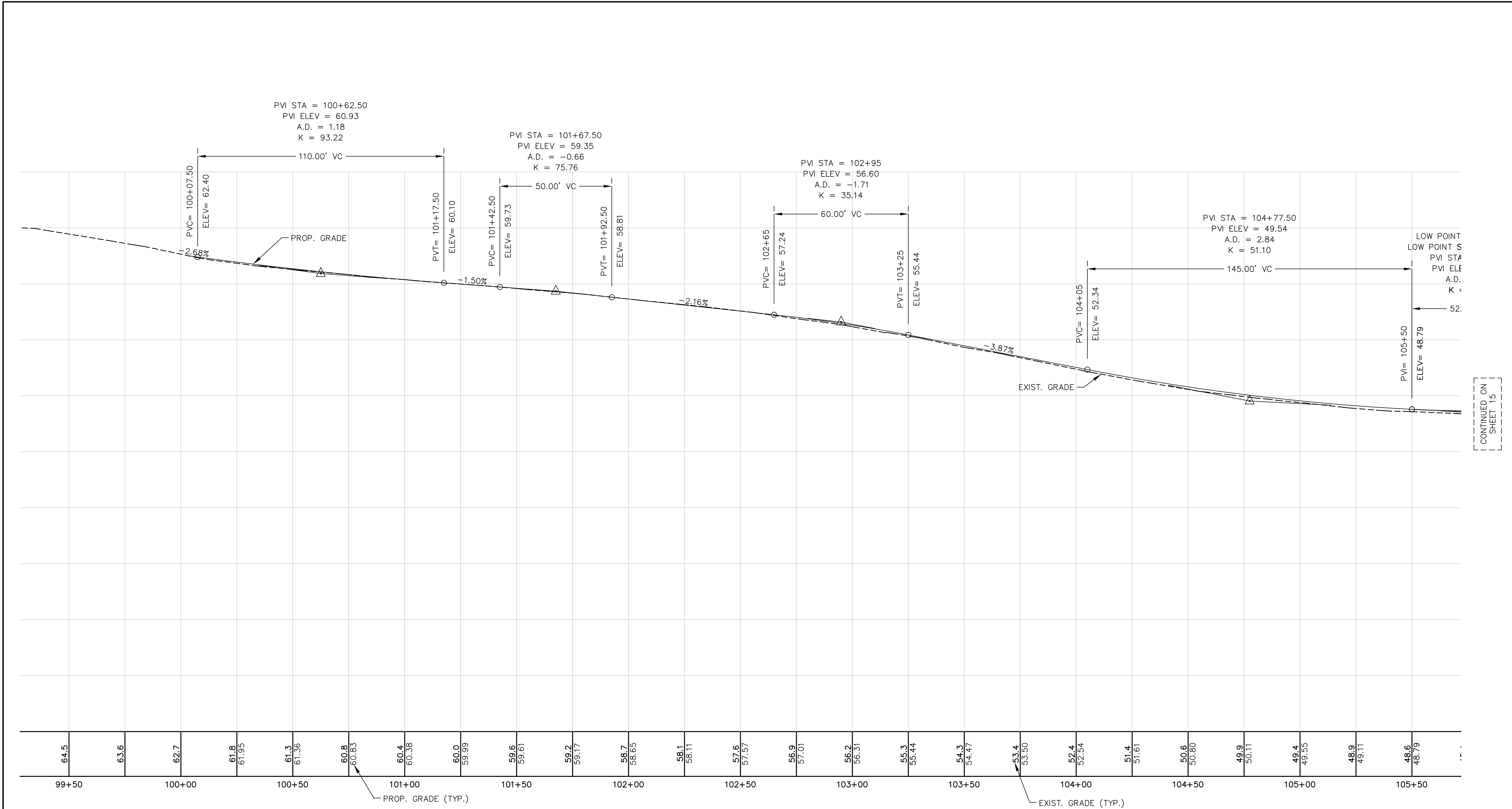


SMC CIVIL ENGINEERING, INC.
 170 BRASS ROAD
 CAMBRIDGE, MA 02142
 TEL: 617-552-1100
 FAX: 617-552-1101
 E-MAIL: JHARRIS@SMC-CIVIL.COM

TOPOGRAPHIC SURVEY
BLANCHARD ROAD
CAMBRIDGE, MA
MIDDLESEX COUNTY
 PREPARED FOR: HOB ENGINEERING, INC.
 DATE: JUNE 7, 2008
 SCALE: 1" = 20'

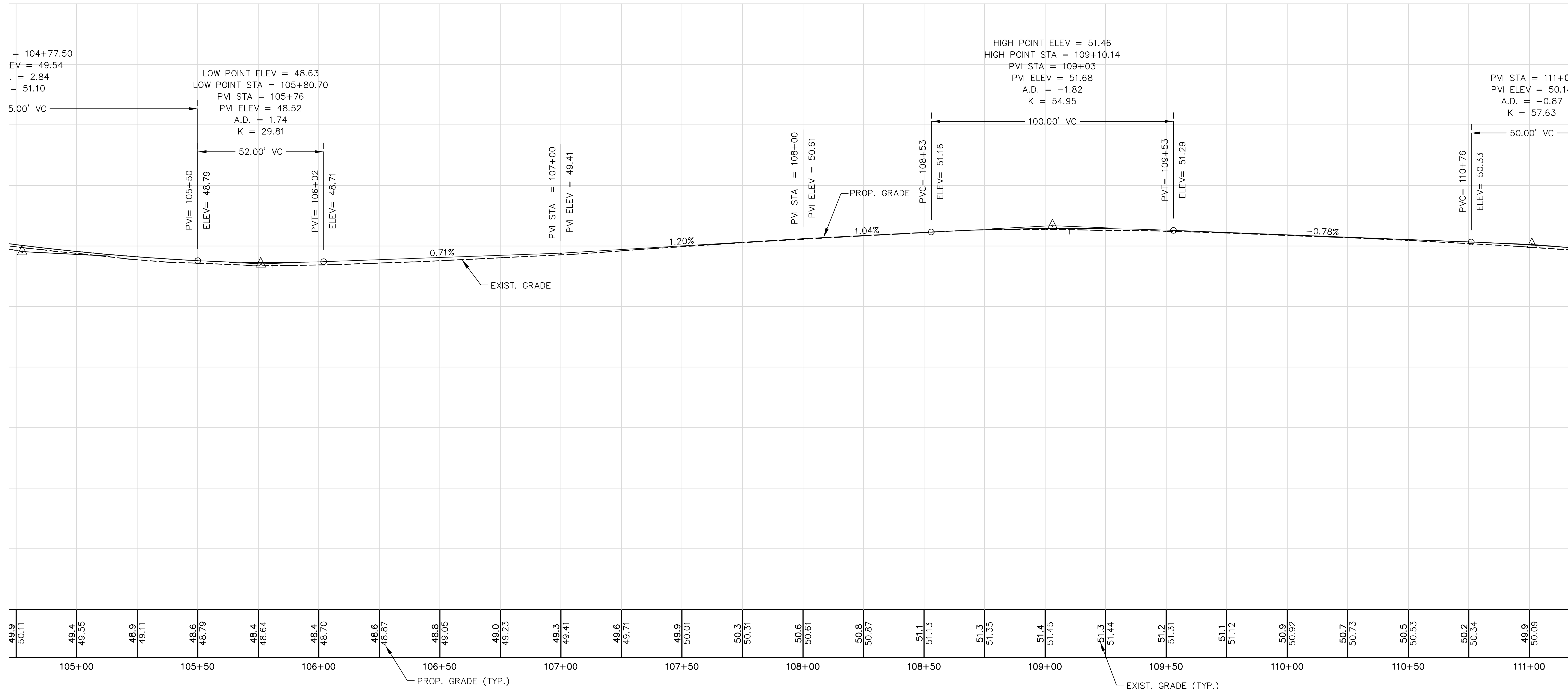
SEE SHEET 1 OF 4 FOR NOTES
 FOR LEGEND AND REFERENCES
 SEE SHEET 2 OF 4





CONTINUED ON
SHEET 15

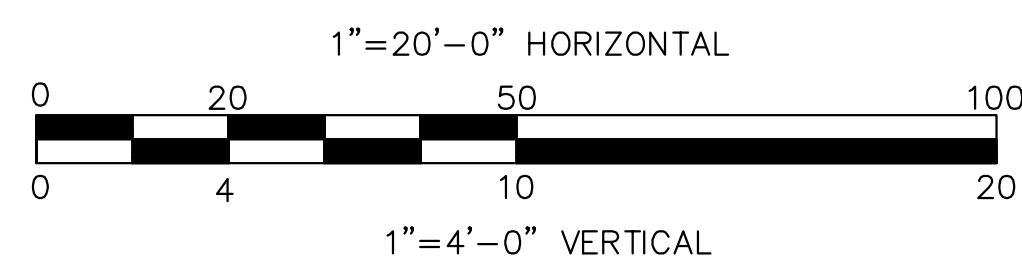
CONTINUED ON
SHEET 14



CONTINUED ON
SHEET 16



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		Scale	AS NOTED
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RECONSTRUCTION OF BLANCHARD ROAD

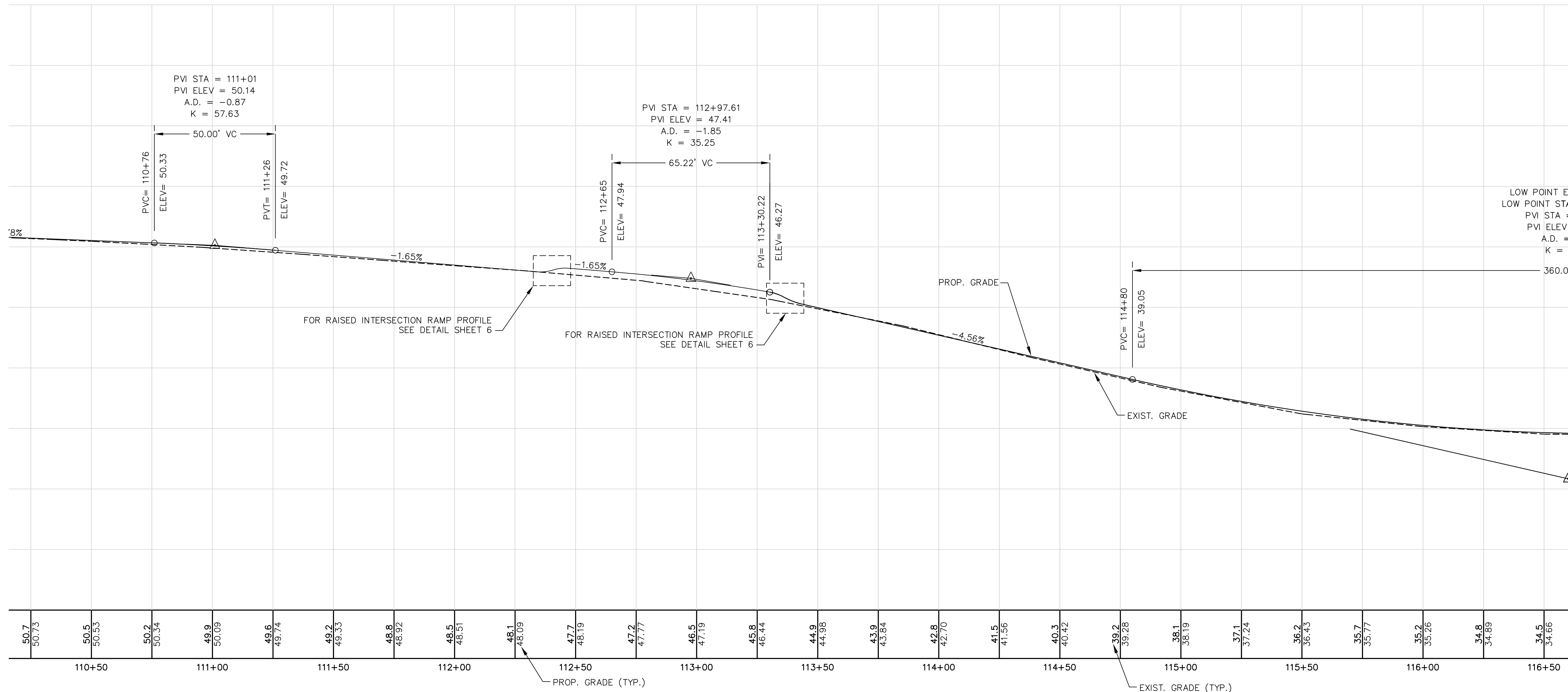
BLANCHARD ROAD
ROADWAY PROFILE - SHEET 2 OF 4

Sheet No.
15

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File No.

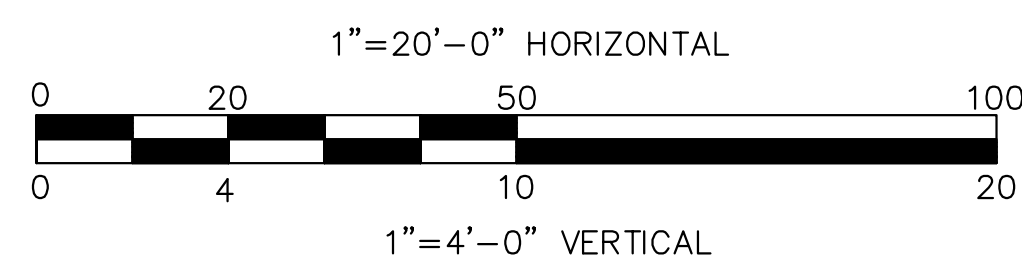
CONTINUED ON
SHEET 15



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SHEET 17



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RECONSTRUCTION OF BLANCHARD ROAD

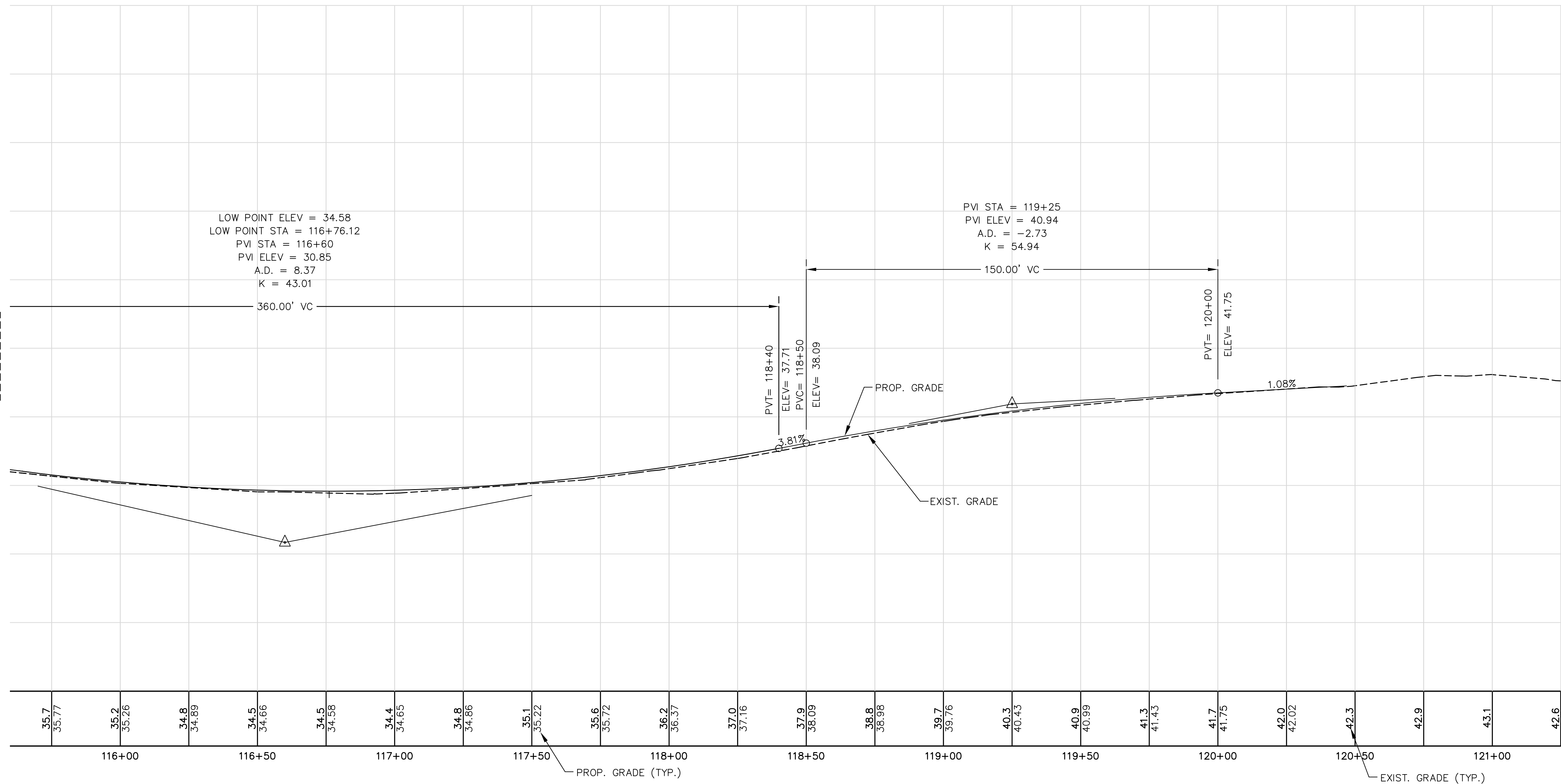
BLANCHARD ROAD
ROADWAY PROFILE - SHEET 3 OF 4

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16

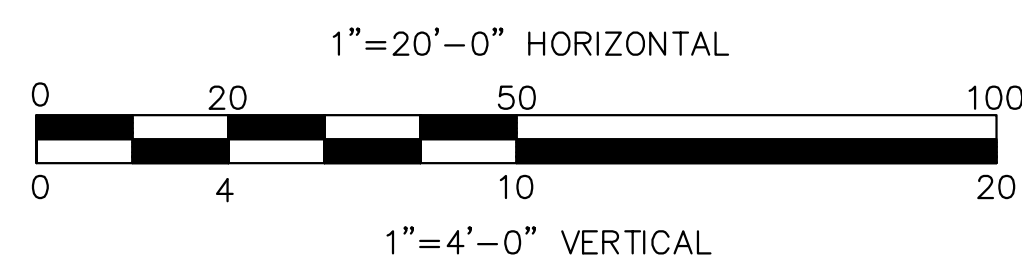
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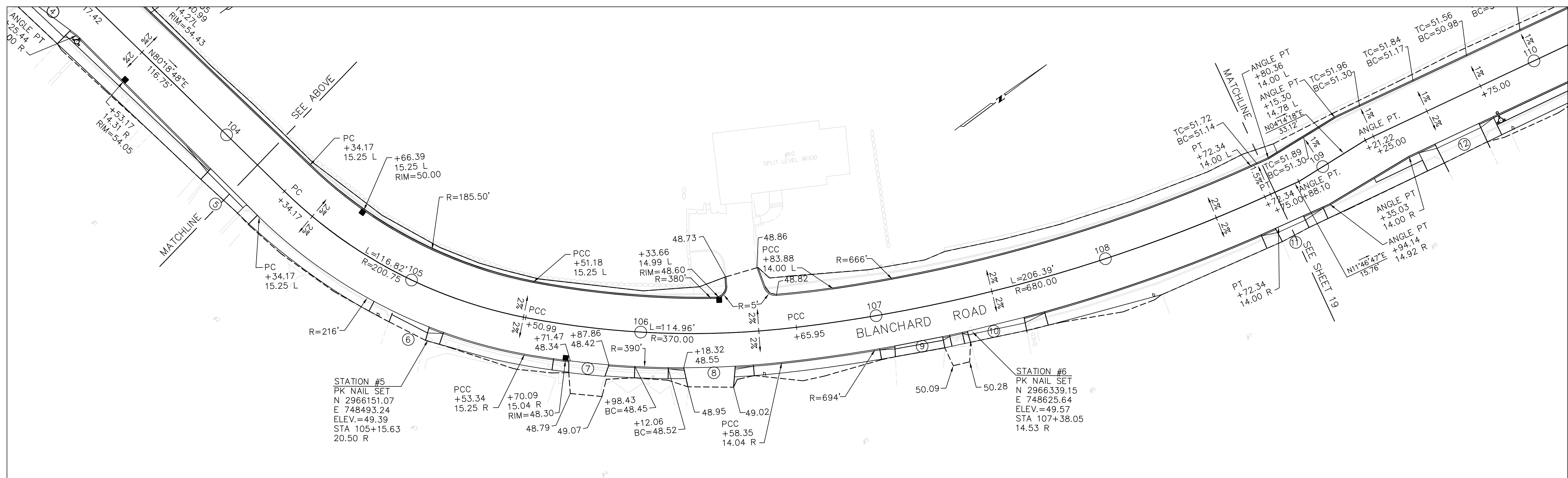
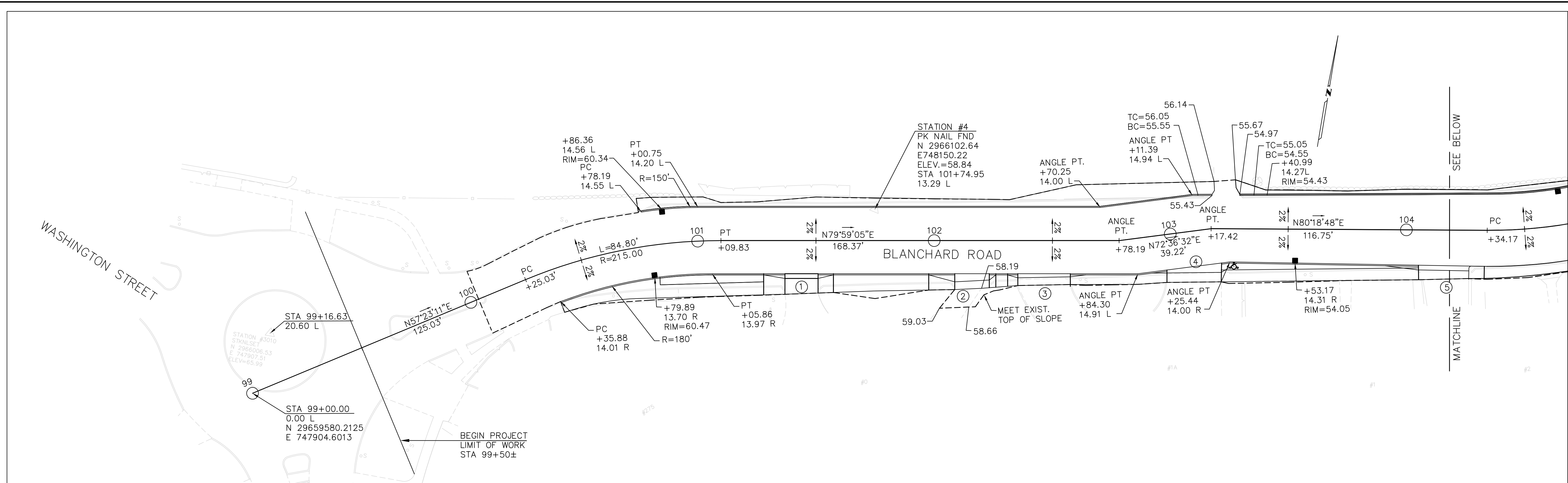
RECONSTRUCTION OF BLANCHARD ROAD

BLANCHARD ROAD
ROADWAY PROFILE - SHEET 4 OF 4

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17

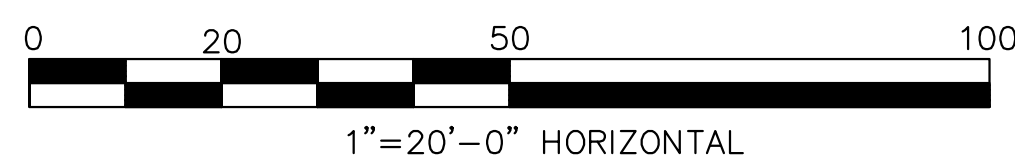
Total Sheets
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File No.



HDR Engineering, Inc.

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		Approved by	
		DATE	7/1/08
		AS-BID	
No.	DESCRIPTION		
		REVISIONS	

CITY OF CAMBRIDGE, MASSACHUSETTS

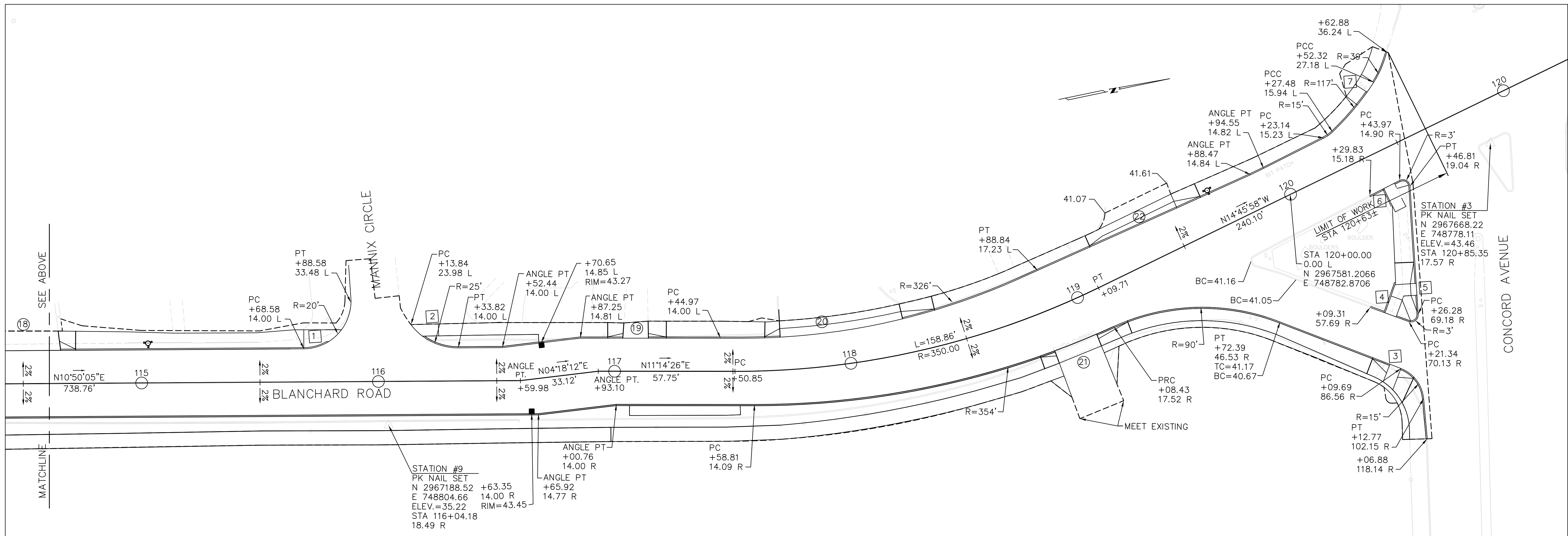
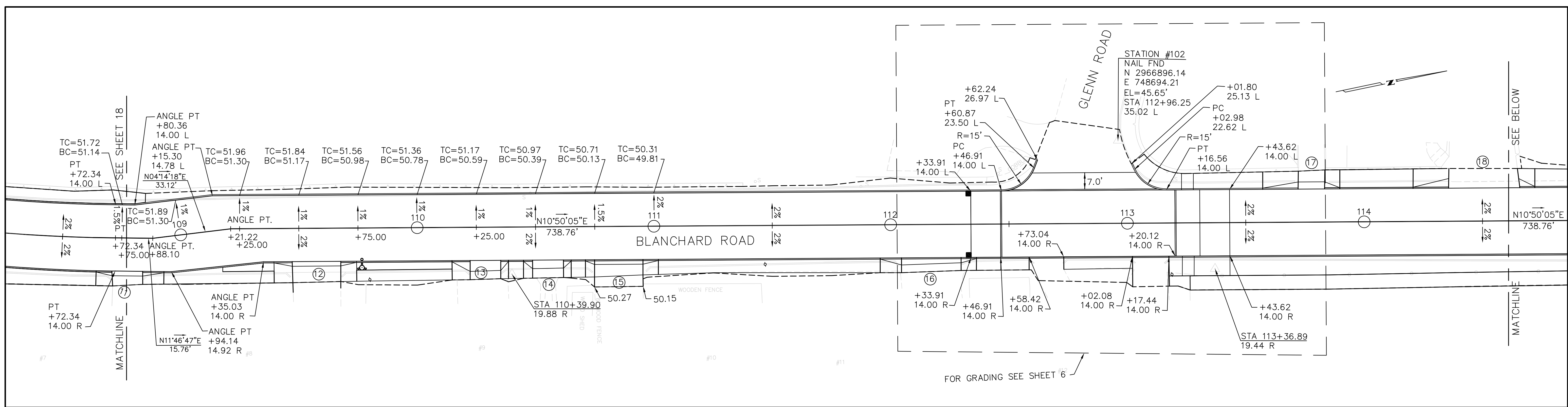
RECONSTRUCTION OF BLANCHARD ROAD

BLANCHARD ROAD
ALIGNMENT, CURB TIE AND GRADING PLAN - SHEET 1 OF 2

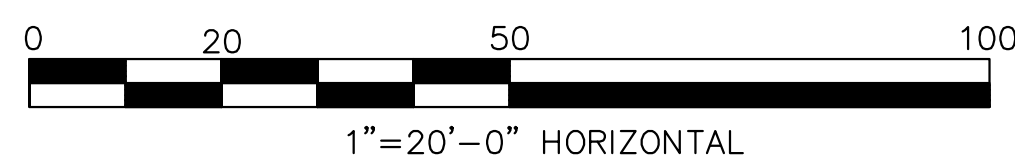
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22

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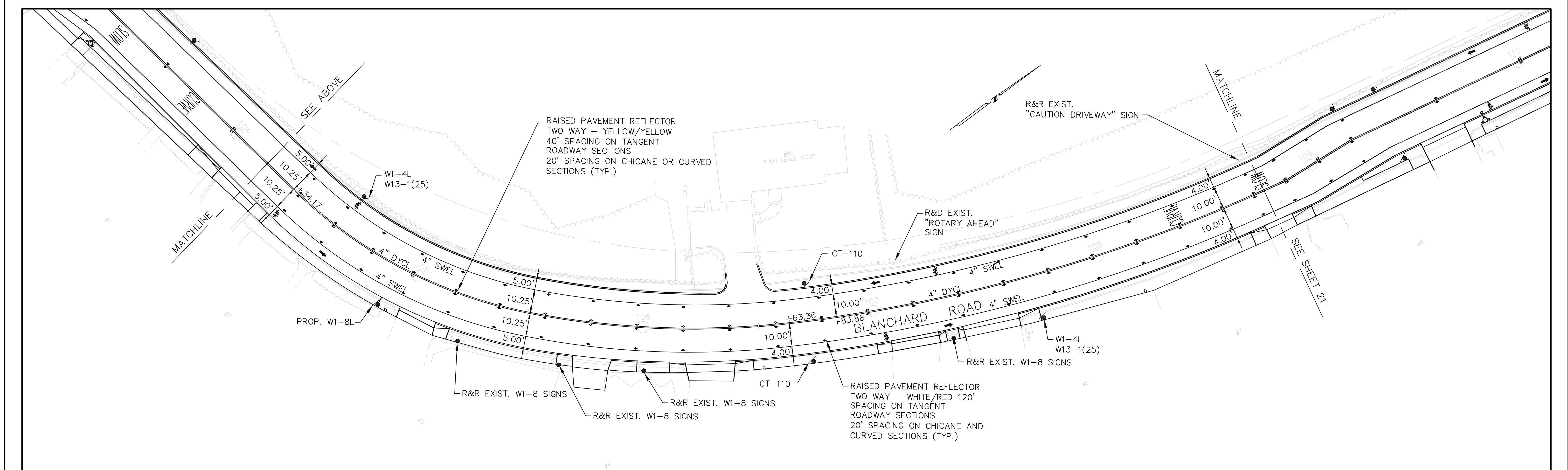
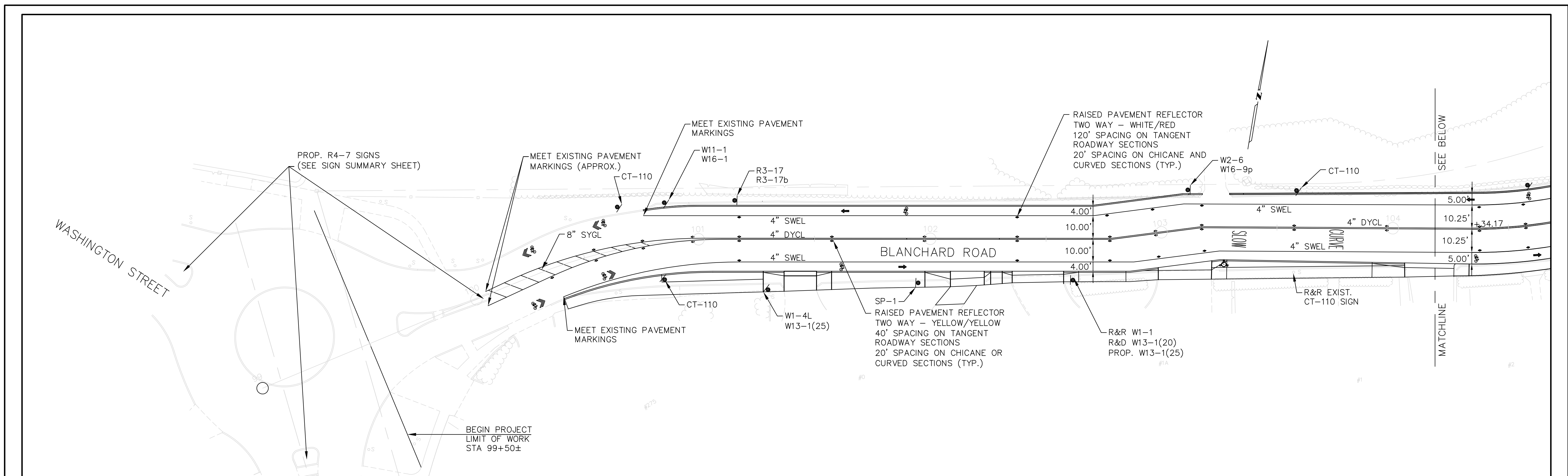
RECONSTRUCTION OF BLANCHARD ROAD

BLANCHARD ROAD
ALIGNMENT, CURB TIE AND GRADING PLAN - SHEET 2 OF 2

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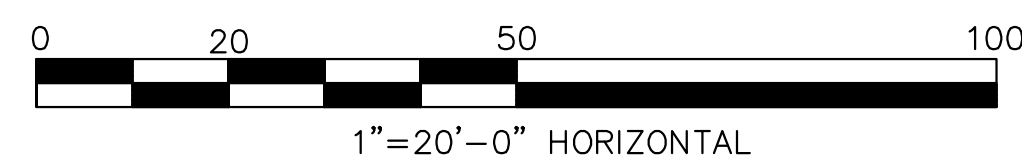
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HDR Engineering, Inc.

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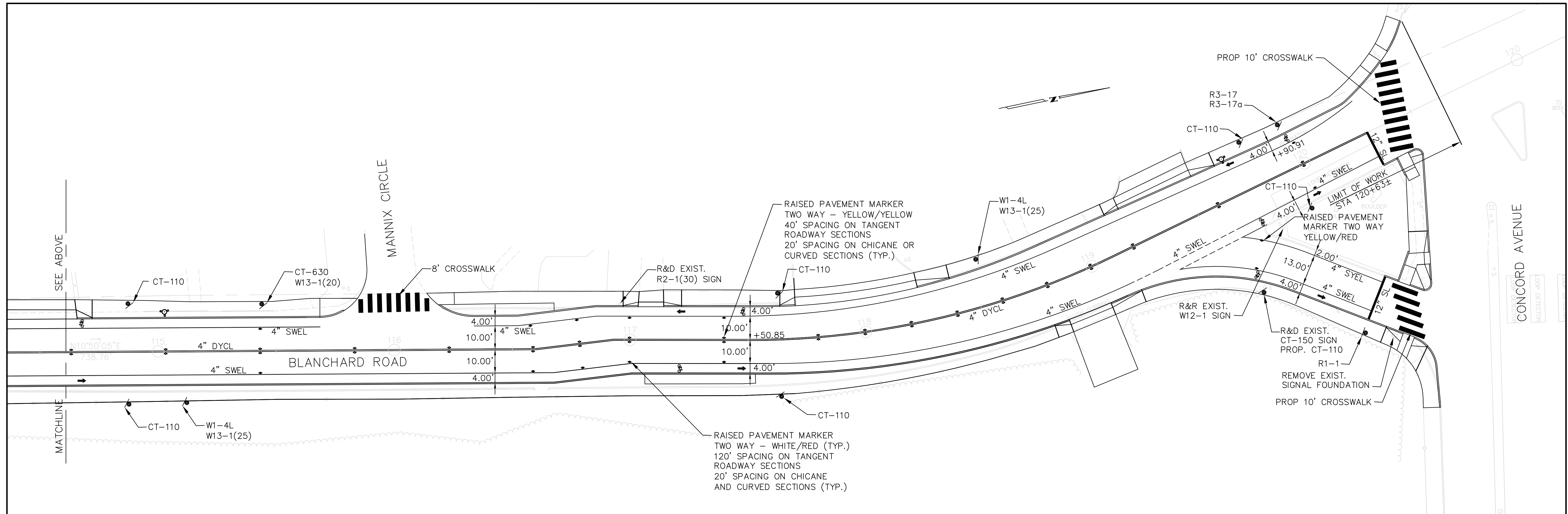
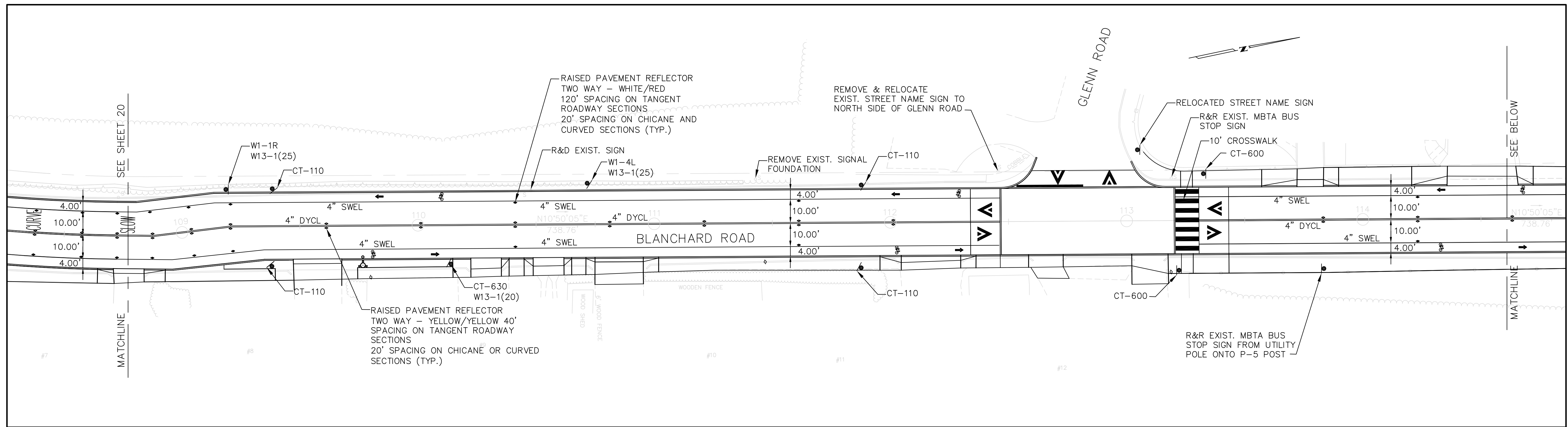
RECONSTRUCTION OF BLANCHARD ROAD

BLANCHARD ROAD
PAVEMENT MARKING AND SIGNING PLAN - SHEET 1 OF 2

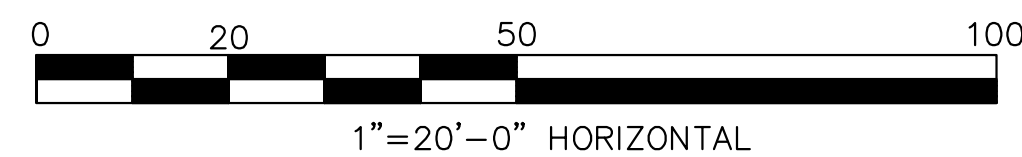
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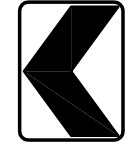











RECONSTRUCTION OF BLANCHARD ROAD

BLANCHARD ROAD
PAVEMENT MARKING AND SIGNING PLAN - SHEET 2 OF 2

Sheet No.
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File No.

SIGN ID NO.	SIZE OF SIGN		TEXT	TEXT DIMENSIONS			NUMBER OF SIGNS REQUIRED	COLOR			POST SIZE AND NO. REQUIRED	UNIT AREA (S.F.)	TOTAL AREA (S.F.)
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING (INCHES)	ARROW RTE. MKR. (INCHES)		BACK- GROUND	LEGEND	BORDER			
R1-1	30"	30"		SEE MUTCD STANDARDS			1	SEE MUTCD STANDARDS			P5 POST 1	6.25	6.25
R3-17	30"	24"					2				P5 POST 2	5.00	10.00
R3-17a	30"	12"					1				MOUNT WITH R3-17(1)	2.50	2.50
R3-17b	30"	12"					1				MOUNT WITH R3-17(1)	2.50	2.50
R4-7	24"	30"					3				P5 POST 3 (SEE NOTE 2)	5.00	15.00
W1-1R	30"	30"					1				P5 POST 1	6.25	6.25
W1-4L	30"	30"					6				P5 POST 6	6.25	37.50
W1-8L	18"	24"					1				P5 POST 5 (SEE NOTE 3)	3.00	3.00
W2-6	30"	30"					1				P5 POST 1	6.25	6.25
W11-1	24"	24"					1				P5 POST 1	4.00	4.00
W13-1 (20)	24"	18"					2				MOUNT WITH CT-630 (2)	3.00	6.00
W13-1 (25)	24"	18"					8				MOUNT WITH W1-1R(1) W1-1 (1) W1-4L(6)	3.00	24.00
W16-1	18"	24"					1				MOUNT WITH W11-1	3.00	3.00
W16-9p	24"	12"					1				MOUNT WITH W2-6(1)	2.00	2.00
SP-1	30"	30"					1				P5 POST 1	6.25	6.25
CT-110	18"	12"		SEE CITY OF CAMBRIDGE SPECIFICATIONS			16	SEE CITY OF CAMBRIDGE SPECIFICATIONS			P5 POST 16	1.50	24.00
CT-600	30"	30"					2				P5 POST 2	6.25	12.50
	15"	21"					2					2.19	4.38
CT-630	30"	30"					2				P5 POST 2	6.25	12.50
									RELOCATED MBTA BUS STOP SIGN		P5 POST 1	-	-
									TOTALS		P5 POST 42	-	187.88

NOTES

- MUTCD STANDS FOR MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION).
- LOCATION OF THREE R4-7 SIGNS TO BE DIRECTED BY THE ENGINEER AT EXISTING GROVE STREET MEDIANS.
- ADDITIONAL P5 POSTS REQUIRED FOR RESETING OF EXISTING W1-8 SIGNS.



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Sheet No.
22

RECONSTRUCTION OF BLANCHARD ROAD

Total Sheets
22

BLANCHARD ROAD
TRAFFIC SIGN SUMMARY

File No.