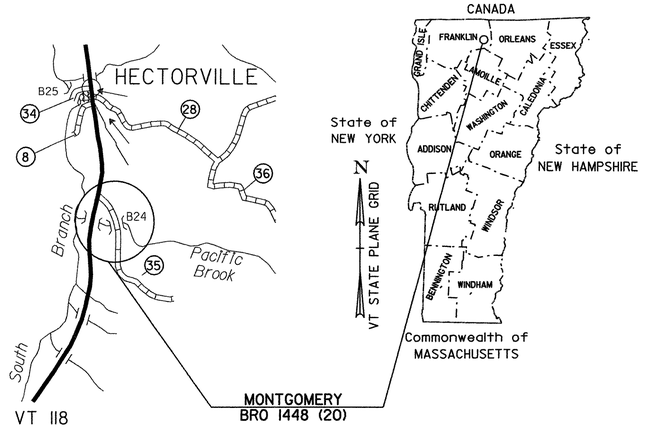
SEE SHEET 2 FOR A LIST OF SHEETS

STATE OF VERMONT
AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT
BRIDGE PROJECT

TOWN OF MONTGOMERY

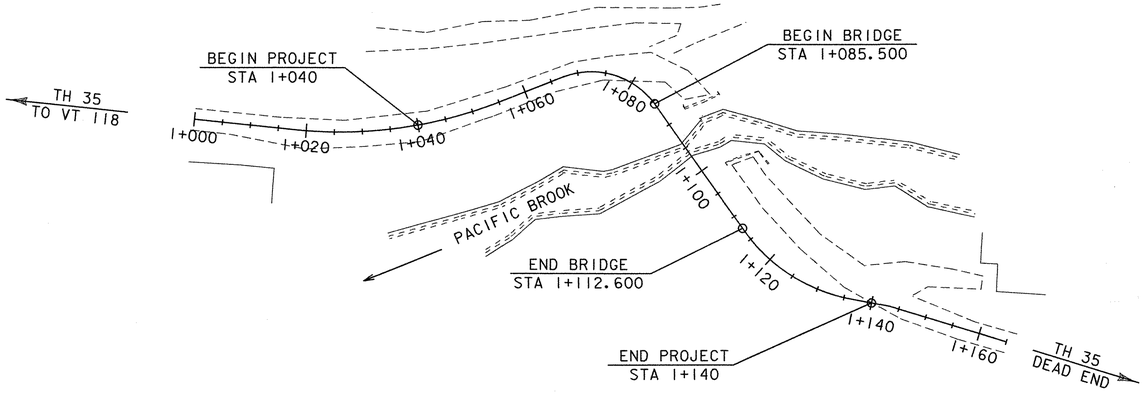
COUNTY OF FRANKLIN

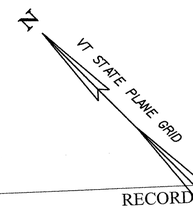
ROUTE NO : TH 35 (CLASS 3) (LOCAL ROAD) BRIDGE NO : 24

PROJECT LOCATION : BRIDGE 24 ON TH 35 APPROXIMATELY 0.2 KM SOUTHEASTERLY OF THE INTERSECTION OF TH 35 AND VT 118 AND EXTENDING ALONG TH 35 FOR 100 METERS.

PROJECT DESCRIPTION : REPLACEMENT OF BRIDGE 24 WITH NECESSARY APPROACH WORK.

LENGTH OF STRUCTURE :	27.100	METERS.
LENGTH OF ROADWAY :	72.900	METERS.
LENGTH OF PROJECT :	100.000	METERS.





RECORD PLANS

CONTRACTOR: A.L. ST. ONGE CONTRACTOR, INC., - MONTGOMERY, VT

RESIDENT ENGINEER: CARL GLEASON

CONSTRUCTION BEGAN: MAY 19, 2006

CONSTRUCTION COMPLETE: JULY 28, 2007

RECORD PLANS BY: C. GLEASON & N GARBACIK

I HEREBY CERTIFY THAT ALL THE CONSTUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.

BY Carl M Gleason RESIDENT ENGINEER

DATE 11/18/08

NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found at Central Files in the electronic archives.

CONVENTIONAL SYMBOLS

COUNTY LINE
TOWN LINE
LIMITS OF ACCESS
POINT OF ACCESS
FENCE LINE
STONE WALL
TRAVELED WAY
GUARD RAIL
RAILROAD
SURVEY LINE
CULVERT
POWER POLE
TELEPHONE POLE
TREES
CONTROL OF ACCESS
PROPERTY LINE
R.O.W. TAKING LINE
SLOPE RIGHTS
TOP OF CUT
TOE OF SLOPE

SURVEYED BY : R. Moreau
SURVEYED DATE : 1995

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD - 83 (92)

0 10 20 30
SCALE 1:500

Metric
UNLESS NOTED OTHERWISE
STATIONS ARE IN KILOMETERS
ELEVATIONS ARE IN METERS
DIMENSIONS ARE IN MILLIMETERS

THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT.

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2001, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JANUARY 4, 2001 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

sJI24t1.i
/PW/94JI24/sJI24bdr.dgn PLOTTED:19-SEP-2005

DIRECTOR OF PROGRAM DEVELOPMENT
APPROVED Richard Tetreault DATE 9/21/05

PROJECT MANAGER : ROGER WHITCOMB

PROJECT NAME : MONTGOMERY
PROJECT NUMBER : BRO 1448 (20)

SHEET 1 OF 50 SHEETS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

PRELIMINARY INFORMATION SHEET

Metric

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7. ROW Details
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10. Mainline Profile
11. Construction Signing
12. Boring Layout Sheet
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15. Boring Log #3
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LIST OF STANDARDS

A-61M	Standard Typical for Slopes in Solid Rock Excavation, Drilling and Blasting of Solid Rock Subgrade	6/13/1997
B-5M	Embankment of Earth Slope, Embankment of Rock Slope, Muck Excavation, Typical Slope Rounding	1/3/2000
D-1M	Precast Reinforced Pipe Drop Inlet With Cast Iron Grate	6/13/1997
D-2M	C.R.M. Headwalls, Underdrain; C.R.M. Headwalls and Retaining Walls; Riprap Light Type Slope Headwall; Reinforced Concrete Headwall, Underdrain and Carrier Pipe Construction Details	6/13/1997
E-100	Construction Approach Signs	1/2/2004
E-101	Construction Sign Details	5/30/2003
E-102A	Construction Sign Details	5/1/2004
E-102	Construction Sign Details	6/30/2003
E-107A	Breakaway Barricade Details	8/8/1995
E-107	Delineation, Barricades and Detours for Construction Areas	6/30/2003
E-150	Warning Sign Details	5/1/2004
E-152	Warning Sign Details	5/1/2004
E-160	Flanged Channel Steel Sign Post	5/20/1999
E-164	Square Steel Sign Post	6/13/1997
G-1dM	Steel Beam Guardrail Approach End Terminal, Steel Beam Guardrail Trailing End Terminal, Anchor for Steel Beam Guardrail, Steel Beam Median Barrier	1/3/2000
G-1M	Steel Beam Guardrail with Steel Posts, Steel Beam Guardrail with Wood Posts	1/3/2000
SB-R6-82M	Bridge Railing Heavy Duty Steel Beam (Type A, Type B, Type C and Type D), Bridge Railing Heavy Duty Steel Beam with Box Beam Hand Rail (Type E)	7/10/1997

FINAL HYDRAULIC REPORT

HYDROLOGIC DATA

Date: 3/14/02

DRAINAGE AREA : 8.6 sq. km
CHARACTER OF TERRAIN : Mountainous and forested
STREAM CHARACTERISTICS : Perennial, flashy, steep, incised, non-alluvial, and sinuous
NATURE OF STREAMBED : Mostly ledge with some boulders, cobbles and gravel.

PEAK FLOW DATA

Q 2.33 =	6.5 cms	Q 50 =	23.8 cms
Q 10 =	14.2 cms	Q 100 =	27.8 cms
Q 25 =	19.8 cms	Q 500 =	45 .0 cms

DATE OF FLOOD OF RECORD : unknown
ESTIMATED DISCHARGE: unknown
WATER SURFACE ELEV.: unknown
NATURAL STREAM VELOCITY : @ Q25 = 6.4 mps
ICE CONDITIONS : Moderate
DEBRIS: Moderate
DOES THE STREAM REACH MAXIMUM HIGHWATER ELEV. RAPIDLY? Yes
IS ORDINARY RISE RAPID? Yes
IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? No
IF YES, DESCRIBE:

WATERSHED STORAGE: 1%
HEADWATERS:
UNIFORM: X
IMMEDIATELY ABOVE SITE:

EXISTING STRUCTURE INFORMATION

STRUCTURE TYPE: Single span steel pony truss with wood deck.
YEAR BUILT: 1901
CLEAR SPAN(NORMAL TO STREAM): 10.5 m
VERTICAL CLEARANCE ABOVE STREAMBED: 2.7 m (Low beam elev. 255.9m)
WATERWAY OF FULL OPENING: 32.9 sq. m
DISPOSITION OF STRUCTURE: Remove
TYPE OF MATERIAL UNDER SUBSTRUCTURE: Ledge

WATER SURFACE ELEVATIONS AT:

Q2.33 =	254.0 m *	VELOCITY =	6.4 mps **
Q10 =	254.4 m	"	6.9 mps
Q25 =	254.5 m	"	7.3 mps
Q50 =	254.7 m	"	7.4 mps
Q100 =	254.8 m	"	7.6 mps

LONG TERM STREAMBED CHANGES: None expected due to the presence of ledge.

IS THE ROADWAY OVERTOPPED BELOW Q100: No
FREQUENCY: Above Q100
RELIEF ELEVATION: 256.7 m
DISCHARGE OVER ROAD @Q100: None

UPSTREAM STRUCTURE

TOWN: (There is no upstream structure)
HIGHWAY # :
CLEAR SPAN:
YEAR BUILT:
STRUCTURE TYPE:
DISTANCE:
STRUCTURE #:
CLEAR HEIGHT:
FULL WATERWAY:

DOWNSTREAM STRUCTURE

TOWN: Montgomery
HIGHWAY # : VT 118
CLEAR SPAN: 16.2 m
YEAR BUILT: 1961
STRUCTURE TYPE: Single span bridge with steel beams and concrete deck.
DISTANCE: 250 m
STRUCTURE #: 11
CLEAR HEIGHT: 2.4 m
FULL WATERWAY: 16.2 sq. m

LOAD FACTOR LOAD RATING (METRIC TONNES)

LOADING LEVELS (LOAD FACTOR)	TRUCK						
	M	MS	3S2	6 AXLE	3A.STR.	4A.STR.	5A.SEMI
INVENTORY A=2.17; B=1.00	57	79					
POSTED A=1.55; B=1.40	80	111	130		102	105	120
OPERATING A=1.30; B=1.67		133	155	182	122	125	

STRENGTH RF = $\frac{\phi M_N - 1.3\, M_{DL}}{A \times M_{LL+I}}$ SERVICEABILITY RF = B $\frac{.95\, F_y S_{LL+I} - M_{DL}\frac{S_{LL+I}}{S_{DL}} - M_{SDL}\frac{S_{LL+I}}{S_{SDL}}}{1.67\, M_{LL+I}}$

TRAFFIC DATA

YEAR	ADT	DHV	% D	% T	ADTT
1995	50	10	0	<1	<1
2015	60	10	0	<1	<1

20 year ESAL for flexible pavement from 1999 to 2019 : <50,000
40 year ESAL for flexible pavement from 1999 to 2039 : <50,000
Design Speed : 30 km/h

PROPOSED STRUCTURE

STRUCTURE TYPE: Single span bridge with steel girders and concrete deck.

CLEAR SPAN(NORMAL TO STREAM): 25.9 m
VERTICAL CLEARANCE ABOVE STREAMBED: 5.5 m
WATERWAY OF FULL OPENING: 75.0 sq. m

WATER SURFACE ELEVATIONS AT:

Q2.33 =	254.0 m *	VELOCITY=	6.4 mps **
Q10 =	254.4 m	"	6.9 mps
Q25 =	254.5 m	"	7.3 mps
Q50 =	254.7 m	"	7.4 mps
Q100 =	254.8 m	"	7.6 mps

IS THE ROADWAY OVERTOPPED BELOW Q100: No
FREQUENCY: Above Q100
RELIEF ELEVATION: 257.8 m
DISCHARGE OVER ROAD @Q100: None

AVERAGE LOW ELEVATION OF SUPERSTRUCTURE: 256.8 m
VERTICAL CLEARANCE: @ Q100 = 2.0 m

SCOUR: None. The bridge spans the entire channel and abutments are poured on ledge.
REQUIRED CHANNEL PROTECTION: Stone Fill, Type II is adequate as shown.

PERMIT INFORMATION

AVERAGE DAILY FLOW:	0.2 cms	DEPTH OR ELEVATION:	
ORDINARY LOW WATER:	0.1 cms		less than 0.2 m
ORDINARY HIGH WATER:	2.8 cms		0.6 m

TEMPORARY BRIDGE REQUIREMENTS

STRUCTURE TYPE: Traffic will be maintained on the existing bridge.
CLEAR SPAN (NORMAL TO STREAM):
VERTICAL CLEARANCE ABOVE STREAMBED:
WATERWAY AREA OF FULL OPENING:

ADDITIONAL INFORMATION

*Water surface elevations for both existing and proposed bridges are reported at a location about 10.0 m upstream of the existing bridge. Water surface elevations will be lower at the bridges, especially at the proposed bridge where the channel bottom is much lower.
**Velocities reported are the highest through the bridge area.

DESIGN CRITERIA

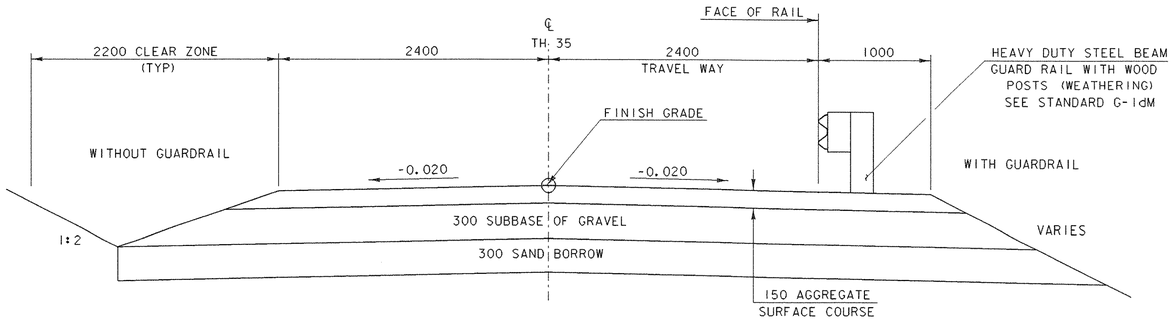
1. DESIGN LIVE LOAD AASHTO MS 22.50
2. DESIGN SPAN 26.500m
3. ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL 120 kPa
   ON LEDGE 480 kPa
4. ALLOWABLE LOAD FOR PILING N/A
   TYPE N/A
   ESTIMATED LENGTH N/A
5. STRUCTURAL STEEL AASHTO M270/M270M GRADE 345W
6. REINFORCING STEEL GRADE 420
7. ALLOWABLE STRESS FOR CONCRETE
   HIGH PERFORMANCE CLASS A f'c: 30 Mpa
   HIGH PERFORMANCE CLASS B f'c: 25 Mpa
8. SOIL UNIT WEIGHT 22 KN/m³
9. DESIGN LOAD FOR SPREAD FOOTINGS ON LEDGE 380 kPa

TRAFFIC MAINTENANCE

1. IS TRAFFIC TO BE MAINTAINED? YES
   IF YES, ON EXISTING STRUCTURE? YES
   OR ON TEMPORARY BRIDGE? N/A
2. ONE OR TWO-WAY TRAVEL? N/A
   TRAFFIC CONTROL SIGNALS REQUIRED? NO
3. ARE SIDEWALKS REQUIRED? NO

PROJECT NAME: MONTGOMERY
PROJECT NUMBER: BRO 1448(20)

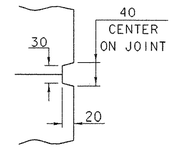
FILE NAME: /TransFANS/94j124/sj124pi.xls
PROJECT MANAGER: R. WHITCOMB
DESIGNED BY: C. CARLSON
PRELIMINARY INFORMATION SHEET
PLOT DATE: 4/20/2005
DRAWN BY: J. GILMORE
CHECKED BY: C. CARLSON



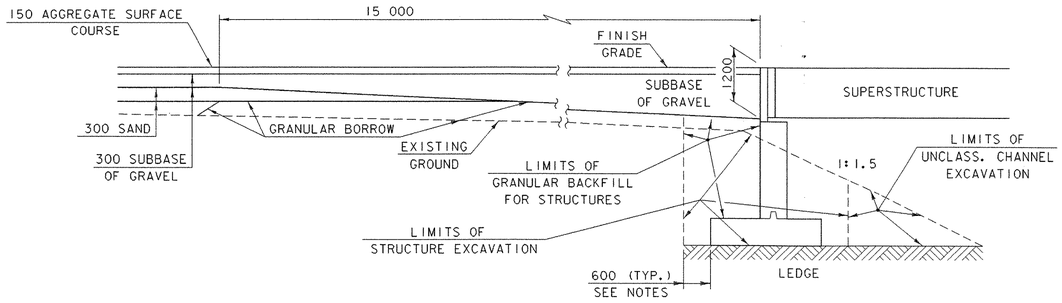
ROADWAY TYPICAL SECTION

SCALE: 1 : 25

MATERIAL ITEM	TOLERANCE
SUBBASE	± 30 mm
SAND BORROW	± 30 mm
AGGREGATE SURFACE COURSE	± 15 mm
GRANULAR BORROW	± 25 mm

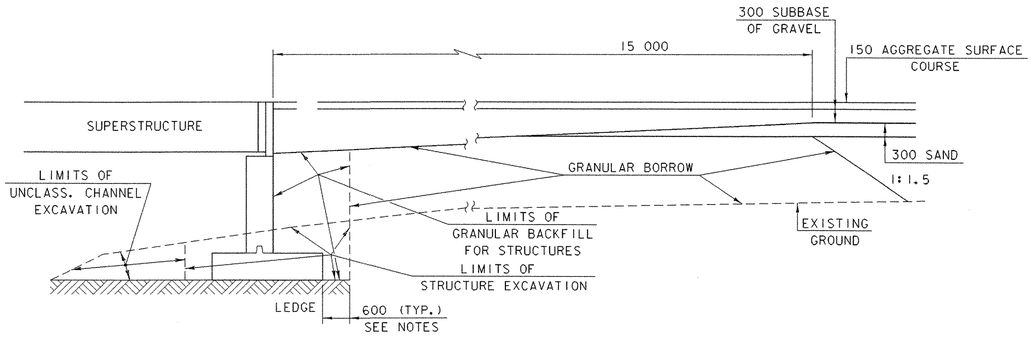


SCORE MARK DETAIL



TYPICAL ABUTMENT #1 SECTION

(NOT TO SCALE)



TYPICAL ABUTMENT #2 SECTION

(NOT TO SCALE)

NOTES

1. FOR PURPOSES OF ESTIMATING EARTHWORK QUANTITIES, THE LIMITS OF STRUCTURE EXCAVATION HAVE BEEN ASSUMED TO BE 600mm OUTSIDE THE PERIMETER OF THE FOOTING.

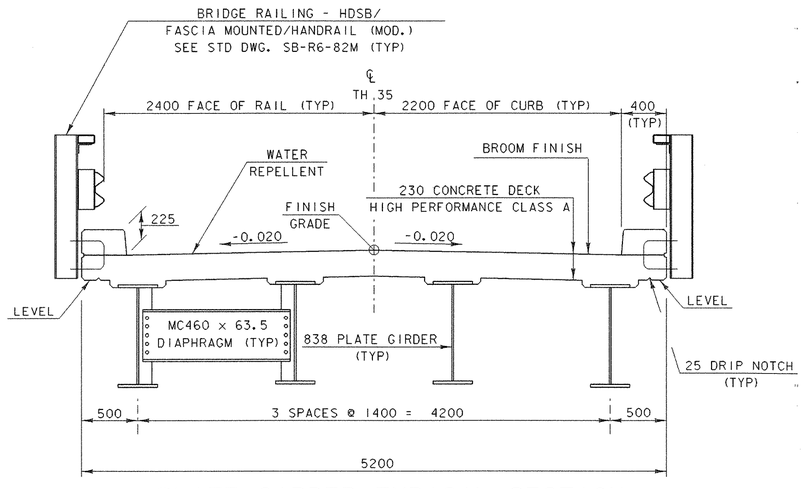
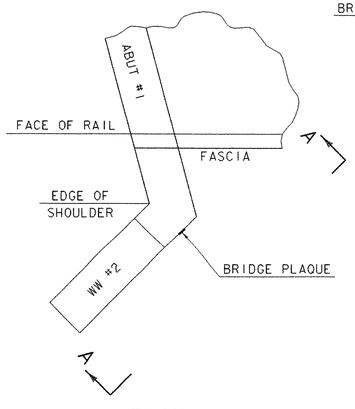
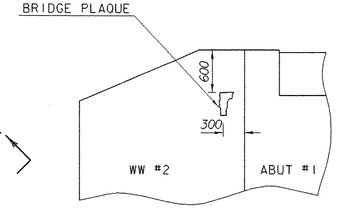


PLATE GIRDER TYPICAL SECTION

SCALE: 1 : 25



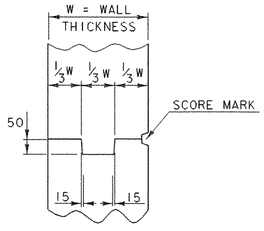
PLAN



VIEW "A-A"

LOCATE BRIDGE PLAQUE

THE BRIDGE PLAQUE WILL BE SUPPLIED BY THE AGENCY OF TRANSPORTATION AND SHALL BE INSTALLED BY THE CONTRACTOR AT ABUTMENT #1 ON THE RIGHT SIDE AS SHOWN OR AS DIRECTED BY THE ENGINEER.



TYPICAL CONCRETE CONSTRUCTION JOINT

(FOR CONSTRUCTION JOINTS LOCATED IN ABUTMENT NO. 1 & ABUTMENT NO. 2)

SHEET NAME:	**TYPICAL SECTIONS**		
PROJECT NAME:	MONTGOMERY	HIGHWAY NO.:	TH 35
PROJECT NUMBER:	BRO 1448(20)	BRIDGE NO.:	24
		OVER:	PACIFIC BROOK
FILE NAME:	/PW/94j124/sj124pl.dgn	PLOT DATE:	06-DEC-2005
PROJECT MANAGER:	R. WHITCOMB	DRAWN BY:	T. FILLBACH
DESIGNED BY:	C. CARLSON	IPARM NAME:	sj124pl.i
BRIDGE SHEET NUMBER:		SHEET	3 OF 50

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET

Metric

SUMMARY OF ESTIMATED QUANTITIES

ROADWAY	GABION RETAINING WALL	CHANNEL	SUPER-STRUCTURE	ABUTMENT #1	ABUTMENT #2	EROSION CONTROL	FULL CE ITEMS	BRIDGE QUANTITY
1								
200								
		300						300
210								
60								
50						10		
	240			140	90			230
30	120			50	70			120
260						50		
100								
			43					43
				36	35			71
			26750					26750
				2360	2305			4665
				27	29			56
			6165	30				6195
			1					1
			62	12	10			84
			59					59
1								
			1					1
			8					8
41								
41								
41								
1								
1								
1								
5								
1								
275								
	150							
30		20				10		20
						10		
						10		
		120						120
1								
1								
280								
88								
4								
							1	

TOTALS

ROUND	GRAND TOTAL	FINAL
	1	
	200	
	300	
	210	
	60	
	60	
	470	
	270	
	310	
	100	
	43	
	71	
	26750	
	4665	
	56	
	6195	
	1	
	84	
	59	
	1	
	1	
	8	
	41	
	41	
	41	
	1	
	1	
	1	
	5	
	1	
	275	
	150	
	60	
	10	
	10	
	120	
	1	
	1	
	280	
	88	
	4	
	1	

DESCRIPTIONS

UNIT	ITEMS	ITEM NUMBER
LS	CLEARING AND GRUBBING (INCL. INDV. TREES AND STUMPS)	201.10
CM	COMMON EXCAVATION	203.15
CM	UNCLASSIFIED CHANNEL EXCAVATION	203.27
CM	SAND BORROW	203.31
CM	GRANULAR BORROW	203.32
CM	TRENCH EXCAVATION OF EARTH	204.20
CM	STRUCTURE EXCAVATION	204.25
CM	GRANULAR BACKFILL FOR STRUCTURES	204.30
CM	SUBBASE OF GRAVEL	301.15
CM	AGGREGATE SURFACE COURSE	401.10
CM	CONCRETE, HIGH PERFORMANCE CLASS A	501.33
CM	CONCRETE, HIGH PERFORMANCE CLASS B	501.34
KG	STRUCTURAL STEEL(PLATE GIRDER)	506.55
KG	REINFORCING STEEL	507.15
M	DRILLING AND GROUTING DOWELS	507.16
KG	EPOXY COATED REINFORCING STEEL	507.17
LS	SHEAR CONNECTORS (656 - 22 x 180)	508.15
L	WATER REPELLENT (MOD. - SILANE)	514.10
M	BRIDGE RAILING - HDSB/FASCIA MOUNTED/HAND RAIL (MOD.)	525.43
LS	MAINTENANCE OF TRAFFIC FOR BRIDGE PROJECTS (MOD.)	527.10
EACH	PARTIAL REMOVAL OF STRUCTURE	529.20
EACH	BEARING DEVICE ASSEMBLY (FABRIC)	531.10
	BEGIN PIPE & ELBOW OPTIONS	
M	450 mm CSP 2.01 mm (68 mm X 12 mm)	601.0016
M	450 mm CAAP 2.67 mm (68 mm X 12 mm)	601.0217
M	450 mm CPEP	601.0915
EACH	450 mm CSP ELBOW 1.63 mm (68 mm X 12 mm)	601.5015
EACH	450 mm CAAP ELBOW 1.52 mm (68 mm X 12 mm)	601.5215
EACH	450 mm CPEP ELBOW	601.5814
	END PIPE & ELBOW OPTIONS	
CM	DRY RUBBLE MASONRY	602.20
EACH	PRC PIPE DROP INLET WITH CAST IRON GRATE	604.25
CM	DUST CONTROL WITH WATER	609.10
CM	GABION RETAINING WALL	612.10
CM	STONE FILL, TYPE I	613.10
CM	STONE FILL, TYPE I (MOD. - CHECK DAMS)	613.10
CM	STONE FILL, TYPE I (MOD. - CONSTRUCTION ENTRANCE)	613.10
CM	STONE FILL, TYPE II	613.11
EACH	RELOCATE MAIL BOX, SINGLE SUPPORT	617.10
EACH	YIELDING MARKER POSTS	619.17
M	SNOW FENCE (MOD. - PDF)	620.70
M	HEAVY DUTY STEEL BEAM GUARD RAIL (WEATHERING) (WOOD POSTS)	621.21
EACH	ANCHOR FOR STEEL BEAM RAIL	621.60
LS	FIELD OFFICE-ENGINEERS	631.10

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
		TEMPORARY EROSION CONTROL ITEMS (Included under Erosion Control Items)
10	CM	204.20 TRENCH EXCAVATION OF EARTH
50	CM	301.35 SUBBASE OF GRAVEL
10	CM	613.10 STONE FILL, TYPE I
10	CM	613.10 STONE FILL, TYPE I (MOD. 1 - CHECK DAMS)
10	CM	613.10 STONE FILL, TYPE I (MOD. 2 - CONST. ENTRANCE)
120	SM	649.51 GEOTEXTILE FOR SILT FENCE
5	KG	651.17 SEED - WINTER RYE
640	SM	654.10 EROSION MATTING
		NABI = NOT A BID ITEM
		EARTHWORK SUMMARY
		FILL REQUIRED
		FILL FACTOR (x 0.15) (60 X 0.15) **9 CM**
		TOTAL FILL x FACTOR **69 CM**
		COMMON EXCAVATION (200 CM x 1.00) = **200 CM**
		STRUCTURE EXCAVATION (470 CM X 0.60) = **282 CM**
		UNCLASSIFIED CHANNEL EXCAVATION (300 CM X 0.60) = **= 180 CM**
		TRENCH EXCAVATION (41 CM X 1.00) **= 41 CM**
		TOTAL MATERIAL AVAILABLE FOR FILL **703 CM**
		EXCESS MATERIAL **634 CM**

PROJECT NAME: MONTGOMERY
PROJECT NUMBER: BRO 1448(20)

FILE NAME: **/PW/94j124/sj124qnt.xls**
PROJECT MANAGER: **R. WHITCOMB**
DESIGNED BY: **C.CARLSON**
QUANTITY SHEET #1

PLOT DATE: **11/1/2005**
DRAWN BY: **T. FILLBACH**
CHECKED BY: **C.CARLSON**
SHEET **4** OF **50**

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET

Metric

SUMMARY OF ESTIMATED QUANTITIES

ROADWAY	GABION RETAINING WALL	CHANNEL	SUPER-STRUCTURE	ABUTMENT #1	ABUTMENT #2	EROSION CONTROL	FULL CE ITEMS	BRIDGE QUANTITY
							1	
							1	
1								
1								
	100	310						310
						120		
						10		
						5		
						25		
						0.25		
						0.25		
20						30		
		190						190
						1		
						50		
						1		
						640		
3								
1								
4.55								
42								
42								
1								

TOTALS

ROUND	GRAND TOTAL	FINAL
	1	
	1	
	1	
	1	
	410	
	120	
	10	
	5	
	25	
	0.25	
	0.25	
	50	
	190	
	1	
	50	
	1	
	640	
	3	
	1	
	4.55	
	42	
	42	
	1	

DESCRIPTIONS

UNIT	ITEMS	ITEM NUMBER
LS	TESTING EQUIPMENT - CONCRETE	631.16
LU	FIELD OFFICE - TELEPHONE (N.A.B.I.)	631.25
LS	MOBILIZATION/DEMOBILIZATION	635.11
LS	TRAFFIC CONTROL	641.10
SM	GEOTEXTILE UNDER STONE FILL	649.31
SM	GEOTEXTILE FOR SILT FENCE	649.51
KG	SEED	651.15
KG	SEED-WINTER RYE	651.17
KG	FERTILIZER	651.18
T	AGRICULTURAL LIMESTONE	651.20
T	HAY MULCH	651.25
CM	TOPSOIL	651.35
SM	GRUBBING MATERIAL	651.40
LS	EROSION PREVENTION & SEDIMENT CONTROL PLAN	652.10
HR	MONITORING EROSION PREVENTION & SEDIMENT CONTROL PLAN	652.20
LU	MAINTENANCE OF EROSION PREVENTION & SEDIMENT CONTROL PLAN (N.A.B.I.)	652.30
SM	EROSION MATTING	654.10
EACH	DECIDUOUS TREES (SUGAR MAPLE-ACER SACCHARUM, B&B, 80 - 100 CAL.)	656.30
EACH	TRANSPLANTING SHRUBS	656.50
SM	TRAFFIC SIGNS, TYPE A	675.20
	BEGIN SIGN POST OPTIONS	
M	FLANGED CHANNEL SIGN POST	675.301
M	SQUARE TUBE SIGN POSTS AND ANCHOR	675.341
	END SIGN POST OPTIONS	
EACH	REMOVING SIGNS	675.50

N.A.B.I. = NOT A BID ITEM

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

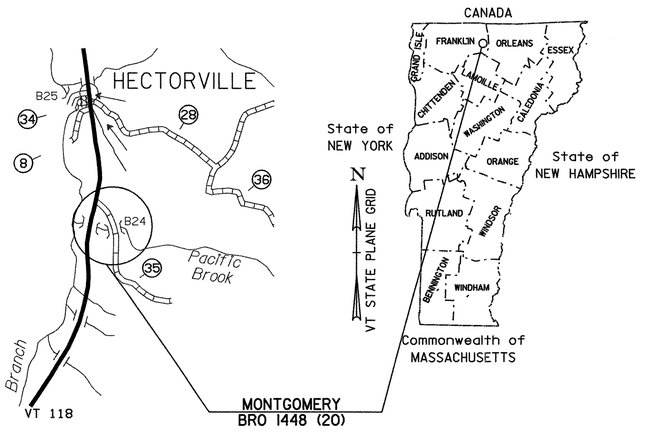
PROJECT NAME: **MONTGOMERY**
PROJECT NUMBER: **BRO 1448(20)**

FILE NAME: **/PW/94j124/sj124qnt.xls**
PROJECT MANAGER: **R. WHITCOMB**
DESIGNED BY: **C.CARLSON**
QUANTITY SHEET #2

PLOT DATE: **12/9/98**
DRAWN BY: **T. FILLBACH**
CHECKED BY: **C.CARLSON**
SHEET **5** OF **50**

R. O. W. PLANS

STATE OF VERMONT
AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT
BRIDGE PROJECT

TOWN OF MONTGOMERY

COUNTY OF FRANKLIN

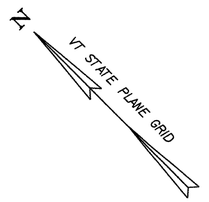
ROUTE NO : TH 35 (CLASS 3) (LOCAL ROAD) BRIDGE NO : 24

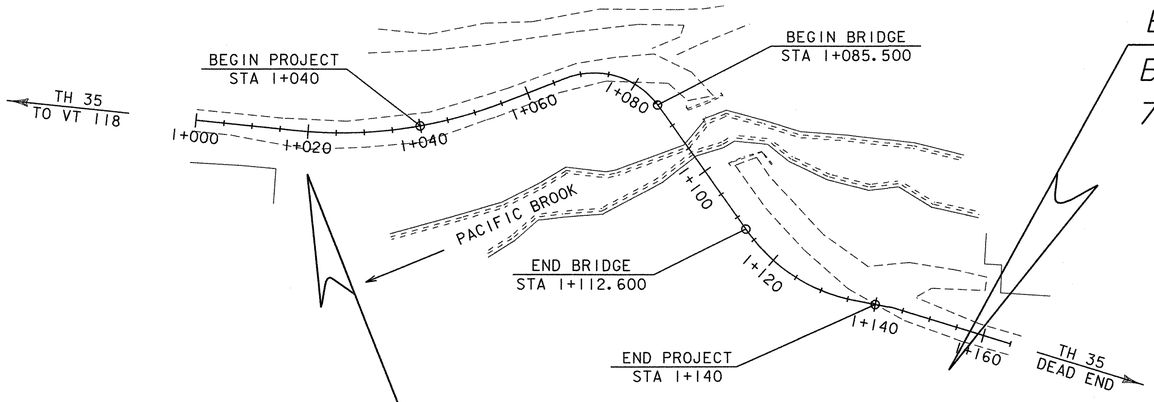
PROJECT LOCATION : BRIDGE 24 ON TH 35 APPROXIMATELY 0.2 KM SOUTHEASTERLY OF THE INTERSECTION OF TH35 AND VT 118 AND EXTENDING ALONG TH 35 FOR 100 METERS.

PROJECT DESCRIPTION : REPLACEMENT OF BRIDGE 24 WITH NECESSARY APPROACH WORK.

LENGTH OF STRUCTURE :	27.100	METERS.	
LENGTH OF ROADWAY :	72.900	METERS.	
LENGTH OF PROJECT :	100.000	METERS.	
LENGTH OF R.O.W. PROJECT :	131.5+/-	METERS.	(431 FEET+/-)

NOTE: TRAFFIC WILL BE MAINTAINED ON EXISTING BRIDGE.





END R. O. W. PROJECT

BRO 1448(20) STA. 1+154.49

7.54M (24.75') RT.

THE FOLLOWING RIGHT OF WAY PLAN SHEETS PERTAIN DIRECTLY TO THE ACQUISITION OF LAND AND RIGHTS NECESSARY TO CONSTRUCT THIS TRANSPORTATION PROJECT. SHEETS REGARDING SPECIFIC CONSTRUCTION DETAILS ARE NOT INCLUDED IN THIS RECORDED SET.

ALL DRIVES AS INDICATED ON PLANS ARE SUBJECT TO PERMITS PURSUANT TO TITLE 19 SECTION 1111, V.S.A.

CONVENTIONAL SYMBOLS

COUNTY LINE	COUNTY LINE
TOWN LINE	TOWN LINE
LIMITS OF ACCESS	
POINT OF ACCESS	X
FENCE LINE	
STONE WALL	
TRAVELED WAY	
GUARD RAIL	
RAILROAD	
SURVEY LINE	
CULVERT	
POWER POLE	
TELEPHONE POLE	
TREES	
CONTROL OF ACCESS	
PROPERTY LINE	
R.O.W. TAKING LINE	
SLOPE RIGHTS	SR SR SR
TOP OF CUT	
TOE OF SLOPE	

BEGIN R. O. W. PROJECT

BRO 1448(20) STA. 1+023.00

7.54M (24.75') RT.

SURVEYED BY :

SURVEYED DATE :

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD - 83 (92)

LINES SHOWN ON THIS PLAN AS EXISTING PROPERTY LINES P/L ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE TOWN OF MONTGOMERY'S ACQUISITION OF LAND AND RIGHTS FOR THIS PROJECT.

0 10 20 30

SCALE 1:500

THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROJECT DEVELOPMENT.

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2001, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JANUARY 4, 2001 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

sjl241.i

/strl/94jl24/sjl24bdr.dgn

PLOTTED: 31-JAN-2003

Metric

UNLESS NOTED OTHERWISE

STATIONS ARE IN KILOMETERS
ELEVATIONS ARE IN METERS
DIMENSIONS ARE IN MILLIMETERS

APPROVED _____ DATE 2/3/03
Director of Project Development

APPROVED _____ DATE 1/31/03
Chief of Right of Way

MONTGOMERY
BRO 1448(20)
R. O. W. SHEET 1 OF 7 SHEETS

BRIDGE RAILING - HDSB
/FASCIA MOUNTED/
HANDRAIL (MOD.)

STA. 1+084.600 RT. - STA. 1+113.380 RT.
STA. 1+083.500 LT. - STA. 1+113.380 LT.

HDSB GUARD RAIL WITH WOOD POSTS (WEATHERING)

STA. 1+047.500 RT. - STA. 1+084.600 RT.
STA. 1+113.380 RT. - STA. 1+128.640 RT.
STA. 1+082.370 LT. - STA. 1+083.500 LT.
STA. 1+113.380 LT. - STA. 1+127.700 LT.

STONE FILL, TYPE I (IN DITCHES)

STA. 1+025.000 LT. - STA. 1+080.500 LT.
STA. 1+112.500 RT. - STA. 1+145.000 RT.

CONSTRUCT DRIVE

STA. 1+078.000 LT.
STA. 1+142.000 LT.

ANCHOR FOR STEEL BEAM RAIL

STA. 1+048.500 RT.
STA. 1+082.443 LT.
STA. 1+127.500 RT.
STA. 1+125.600 LT.

PIPE OPTION (450)

STA. 1+040
CSP
CPEP
CAAP

STA. 1+113.900 - 1+147.500 LT.
CSP
CPEP
CAAP

GABION WALL

STA. 1+044.800 RT. - STA. 1+080.800 RT.

RELOCATION OF MAILBOX

STA. 1+134.400 LT.

DECIDUOUS TREES
(SEE GENERAL NOTE #19)

STA. 1+109.500 LT. +/- - STA. 1+120.000 LT. +/-

EXISTING R.O.W. IS 3 RODS (49.5')
AS CLAIMED BY
THE TOWN OF MONTGOMERY
SELECT BOARD

CURVE NO. 1 DATA
Δ= 27°07'21.0"
R= 80.000
T= 19.298
L= 37.870
E= 2.295
BANK=VARIES

CURVE NO. 2 DATA
Δ= 75°53'56"
R= 14.000
T= 10.918
L= 18.546
E= 3.754
BANK= NORMAL CROWN

CURVE NO. 3 DATA
Δ= 43°35'23.1"
R= 30.000
T= 11.997
L= 22.824
E= 2.286
BANK= NORMAL CROWN

CURVE NO. 4 DATA
Δ= 5°55'44.9"
R= 120.000
T= 6.215
L= 12.418
E= 0.161
BANK= NORMAL CROWN

VT STATE PLANE GRID

CHAUVIN, PAUL J.
& DEBORAH J.

FORMERLY
SCOTT

KADEN, BARBARA
REVOCABLE TRUST
KADEN, BARBARA, TRUSTEE

KEEN, COLIN G.
& BRIGITTE

- THE INDICATED LOCATIONS OF THE SEPTIC TANK AND LEACHFIELD ARE APPROXIMATE AND WERE ESTABLISHED AS PER AN ONSITE MEETING WITH THE PROPERTY OWNER. APPROPRIATE CARE SHOULD BE TAKEN WHILE WORKING IN THIS AREA. SEE GENERAL NOTE 16.

STA. 1+040 - 450 x 11 000 OPTION
PIPE WITH D.I. AT INLET AND
STONE FILL, TYPE I PAD AT OUTLET

STA. 1+113.900 - 1+147.500 LT - 450 x 30 000
OPTION PIPE WITH STONE HEADWALL AT INLET

LEGEND

- FILTER CURTAIN
- SILT FENCE
- STONE FILL, TYPE I
- PDF — PROJECT DEMARCATION FENCE (SNOW FENCE (MOD.-PDF))
- STONE CHECK DAM (TEMP.) (TO BE REMOVED UPON COMPLETION OF STONE DITCHES.)

SCALE 1:250

FOR RIGHT OF WAY
INFORMATION
ONLY

EXISTING BRIDGE DATA

BRIDGE WIDTH: 5151
BRIDGE LENGTH: 13.716
ROADWAY APPROACH WIDTH: 3962
THE EXISTING BRIDGE IS A PONY TRUSS WITH A WOOD PLANK DECK WITH RUNNERS. THERE IS A ROLLED BEAM STRINGER AT EACH FASCIA WITH FOUR H-PILES IN BETWEEN SUPPORTING THE DECK. THE EXISTING ABUTMENTS ARE CONCRETE WITH METAL I-BEAM BACKWALLS.

LINES SHOWN ON THIS PLAN AS EXISTING PROPERTY LINES P/L ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE TOWN OF MONTGOMERY'S ACQUISITION OF LAND AND RIGHTS FOR THIS PROJECT.

BEGIN R.O.W. PROJECT
BRO 1448(20) STA. 1+023.00
7.54M (24.75') RT.

END R.O.W. PROJECT
BRO 1448(20) STA. 1+154.49
7.54M (24.75') RT.

SHEET NAME: PLAN SHEET

PROJECT NAME: MONTGOMERY
PROJECT NUMBER: BRO 1448(20)
HIGHWAY NO.: TH 35
BRIDGE NO.: 24
OVER: PACIFIC BROOK

FILE NAME: /PW/94jl24/sjl24bdr.dgn
PROJECT MANAGER: R. WHITCOMB
DESIGNED BY: C. CARLSON
R.O.W. SHEET 7 OF 7 SHEETS
PLOT DATE: 06-DEC-2005
DRAWN BY: J. GILMORE
IPARM NAME: sjl24ial.i
SHEET 6 OF 50

Metric

BRIDGE RAILING-HEAVY DUTY
STEEL BEAM/FASCIA MOUNTED
WITH HANDRAIL (TYPE E) (MOD.)

STA. 1+084.600 RT. - STA. 1+113.380 RT.
STA. 1+083.500 LT. - STA. 1+113.380 LT.

GUARD RAIL, HEAVY DUTY STEEL BEAM, TYPE 4

STA. 1+047.500 RT. - STA. 1+084.600 RT.
STA. 1+113.380 RT. - STA. 1+128.640 RT.
STA. 1+082.370 LT. - STA. 1+083.500 LT.
STA. 1+113.380 LT. - STA. 1+127.700 LT.

STONE FILL, TYPE I (IN DITCHES)

STA. 1+025.000 LT. - STA. 1+080.500 LT.
STA. 1+112.500 RT. - STA. 1+145.000 RT.

CONSTRUCT DRIVE

STA. 1+078.000 LT.
STA. 1+142.000 LT.

ANCHOR FOR STEEL BEAM RAIL

STA. 1+048.500 RT.
STA. 1+082.443 LT.
STA. 1+127.500 RT.
STA. 1+125.600 LT.

PIPE OPTION (450)

STA. 1+040
CSP
CPEP
CAAP

STA. 1+136.5 - 1+147.5 LT.
CSP
CPEP
CAAP

GABION WALL

STA. 1+044.700 RT. - STA. 1+080.900 RT.

RELOCATION OF MAILBOX

STA. 1+134.400 LT.

DECIDUOUS TREES
(SEE GENERAL NOTE #19)

STA. 1+106.000 LT. +/- - STA. 1+108.500 LT. +/-

EXISTING R.O.W. IS 3 RODS (49.5') AS CLAIMED BY THE TOWN OF MONTGOMERY SELECT BOARD

CURVE NO. 1 DATA
Δ= 27°07'21.0"
R= 80.000
T= 19.298
L= 37.870
E= 2.295
BANK=VARIES

STA. 1+040
BEGIN PROJECT
END APPROACH

STA. 1+040 - 450 x 11 000 OPTION
PIPE WITH D.I. AT INLET AND
STONE FILL, TYPE I PAD AT OUTLET

PI
Sta 1+036.935

PC
Sta 1+017.639

POB
Sta 1+000.000

TH 35
TO VT 118

STATIONING

1+000
1+020
1+040
1+060
1+080
1+100
1+120
1+140
1+160
1+166

PROPOSED ALIGNMENT

STONE FILL TYPE I
(TYP)

PDF

WOODS ROAD

HARDWOOD/SOFTWOOD
TREES

COMB.
20/91/
2/26

PT
Sta 1+055.509

EXISTING DRAINAGE

CT. DISP.
RIP RAP

14.78m(48.5')

20.10m
(65.9')

1+072.75
7.54m(24.75') RT.

GABION
RETAINING
WALL

HCTRL

SR (T)

CONST (T)

CUL. DIT.
&DR. (P)

S. BIRCH

M. PINE
(SAVE)

S. ELM
(SAVE)

ARTESIAN
WELL

BUILDING

STA 1+020
BEGIN APPROACH

DRIVE (T)

PI
Sta 1+078.183

PC
Sta 1+067.265

CURVE NO. 2 DATA
Δ= 75°53'56"
R= 14.000
T= 10.918
L= 18.546
E= 3.754
BANK= NORMAL CROWN

STA 1+085.500
BEGIN BRIDGE
F.G. = 258.016

PT
Sta 1+085.811

STONE FILL,
TYPE I

HARDWOOD/SOFTWOOD
TYPE II TREES

NEW DECIDUOUS
TREES

POE
Sta 5+050.000

5+050
5+040
5+020
5+000
4+980
4+960
4+950

P L

PACIFIC BROOK

PT
Sta 1+135.993

PC
Sta 1+136.990

FLOWERS **
GRASS

2 STORY
HOUSE

SEPTIC
TANK

STONE FILL,
TYPE II

200 BIRCH
350 BIRCH
300 ASH
300 MAPLE
M. BIRCH

CEDAR PINE
TREES (SAVE)

CLUMP
BIRCHES

DUMP

GRAVEL
DRIVE

LEACH
FIELD

M.
BIRCH
(SAVE)

3/6 GUY WIRE

COMB
20/91/
2/26

POE
EROSION CONTROL
Sta 1+166.285
MATTING

TH 35
DEAD END

STA 1+160
END APPROACH

NUTTING ROAD

59.96m(196.7')

PT
Sta 1+149.416

11+54.49
7.54M(24.75') RT.

EROSION CONTROL
Sta 1+142.000
MATTING

CURVE NO. 4 DATA
Δ= 5°55'44.9"
R= 120.000
T= 6.215
L= 12.418
E= 0.161
BANK= NORMAL CROWN

STA 1+140
END PROJECT
BEGIN APPROACH

STONE FILL TYPE I
(TYP)

PI
Sta 1+125.166

STA. 1+136.5-1+147.5LT - 450 x 11 000
OPTION PIPE WITH STONE HEADWALLS AT
INLET AND OUTLET

PDF HARDWOOD/SOFTWOOD
65.02m(213.3')

PDF
Sta 1+113.170

STA 1+112.600
END BRIDGE
F.G. = 258.151

1+095.71
0.61m(2.00') RT.

1+094.47
7.54m(24.75') RT.

STA 1+102.000=
CHAN STA 5+000.000
Δ= 90°

CONST (T)

SR (P)

CURVE NO. 3 DATA
Δ= 43°35'23.1"
R= 30.000
T= 11.997
L= 22.824
E= 2.286
BANK= NORMAL CROWN

END R.O.W. PROJECT
BRO 1448(20) STA. 1+154.49
7.54M (24.75') RT.

CHAUVIN, PAUL J. & DEBORAH J.

KEEN, COLIN G. & BRIGITTE

KADEN, BARBARA REVOCABLE TRUST KADEN, BARBARA, TRUSTEE

BEGIN R.O.W. PROJECT
BRO 1448(20) STA. 1+023.00
7.54M (24.75') RT.

VT STATE PLANE GRID

* THE INDICATED LOCATIONS OF THE SEPTIC TANK AND LEACHFIELD ARE APPROXIMATE AND WERE ESTABLISHED AS PER AN ONSITE MEETING WITH THE PROPERTY OWNER. APPROPRIATE CARE SHOULD BE TAKEN WHILE WORKING IN THIS AREA. SEE GENERAL NOTE 16.

LEGEND

- FILTER CURTAIN
- SILT FENCE
- STONE FILL, TYPE I
- PDF — PROJECT DEMARCATION FENCE (SNOW FENCE (MOD.-PDF))
- STONE CHECK DAM (TEMP.) (TO BE REMOVED UPON COMPLETION OF STONE DITCHES.)

0 10 20
SCALE 1:250

EXISTING BRIDGE DATA

BRIDGE WIDTH: 5151
BRIDGE LENGTH: 13.716
ROADWAY APPROACH WIDTH: 3962
THE EXISTING BRIDGE IS A PONY TRUSS WITH A WOOD PLANK DECK WITH RUNNERS. THERE IS A ROLLED BEAM STRINGER AT EACH FASCIA WITH FOUR H-PILES IN BETWEEN SUPPORTING THE DECK. THE EXISTING ABUTMENTS ARE CONCRETE WITH METAL I-BEAM BACKWALLS.

LINES SHOWN ON THIS PLAN AS EXISTING PROPERTY LINES P/L ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE TOWN OF MONTGOMERY'S ACQUISITION OF LAND AND RIGHTS FOR THIS PROJECT.

SHEET NAME: PLAN SHEET

PROJECT NAME: MONTGOMERY
PROJECT NUMBER: BRO 1448(20)
HIGHWAY NO.: TH 35
BRIDGE NO.: 24
OVER: PACIFIC BROOK

FILE NAME: /PW/94JI24/sJI24bdr.dgn
PROJECT MANAGER: R. WHITCOMB
DESIGNED BY: C. MEUNIER
R.O.W. SHEET 7 OF 7 SHEETS
PLOT DATE: 17-JUN-2004
DRAWN BY: J. GILMORE
IPARM NAME: sJI24al.i
SHEET 6 OF 50

Metric

STATE OF VERMONT
AGENCY OF TRANSPORTATION
RIGHT OF WAY PLANS
DETAIL SHEET

TABLE OF PROJECT PROPERTY ACQUISITION

PARCEL NO.	GRANTOR	SHEET NO.	BEGINNING STATION	ENDING STATION	TAKING	REM.	RIGHTS	TITLE TAKEN	DATE	TOWN OR CITY RECORDED	BK.	PG.	REMARKS
1	KADEN, BARBARA REVOCABLE TRUST	7	1+072.75 RT.	1+095.71 RT.	80 SM±			WDOE	05-19-04	MONTGOMERY	68	408-	861 S.F.±
	BARBARA KADEN, TRUSTEE		1+023.0 RT.	1+052.5 RT.			CONST. (T) 75 SM±					410	807 S.F.±
													INCLUDES EROSION CONTROL
			1+036.8 RT.	1+048.0 RT.			SLOPE (T) 17 SM±						183 S.F.±
			1+040.0 RT.				CUL.,DIT. & DR. (P)						
2	CHAUVIN, PAUL J. & DEBORAH J.	7	1+078.0 LT.				DRIVE (T)						4M (12') GRAVEL
			1+084.6 LT.	1+085.8 LT.			CONST. (T) 9.44 SM±						102 S.F.±
3	DELETED												FORMERLY SCOTT
4	KEEN, COLIN G. & BRIGITTE	7	1+094.47 RT.	1+154.49 RT.	320 SM±			WDOE	05-19-04	MONTGOMERY	68	412-	3,445 S.F.±
			1+096.9 RT.	1+135.7 RT.			CONST. (T) 111 SM±					413	1,195 S.F.±
			1+127.95 RT.	1+131.68 RT.			SLOPE (P) 4.5 SM±						48 S.F.±
5	VERMONT ELECTRIC COOPERATIVE, INC.												UTILITY
6	FAIRPOINT COMMUNICATIONS SOLUTIONS CORPORATION (NORTHLAND TELEPHONE COMPANY, INC.)												UTILITY

REVISION NO.	SHEET	DESCRIPTION OF REVISION	DATE	MADE BY	APPROVED BY
1	6, 7	PARCEL NO. 2 CHAUVIN. DELETE EROSION CONTROL FROM THE PLANS. SHOW TEMPORARY CONSTRUCTION ON THE PLANS. PER C.O. 9328	01-12-04	G.J.F.	R.P.D.
2	6, 7	PARCEL NO. 3 SCOTT. DELETE EROSION CONTROL FROM THE PLANS. SHOW TEMPORARY CONSTRUCTION ON THE PLANS. PER C.O. 9329	01-12-04	G.J.F.	R.P.D.
3	6, 7	PARCEL NO. 3 SCOTT. DELETE PARCEL FROM PROJECT. PER C.O. 9346.	04-16-04	M.J.R.	R.P.D.
		ELECTRONIC FILES TO STRUCTURES	06-17-04	G.J.F.	R.P.D.

ACCT.rdrown
IP_PWP:dms02054\rJJ24d.dgn
DATE PLOTTED 06-DEC-2005

DR.(P)- DRAINAGE RIGHT
DIT.(P)- DITCHING RIGHT
CH.(P)- CHANNEL RT.
DRIVE (T)- DRIVE RIGHT
CUL.(P)- CULVERT RIGHT
W - WATER SOURCES

PRESENT R.O.W.
TAKING WITHOUT ACCESS
TAKING WITHOUT ACCESS ALONG PROPERTY LINE
TAKING WITH ACCESS
(P) PERMANENT EASEMENT
(T) TEMPORARY EASEMENT

LEGEND
C&T (P) CLEARING & TRIMMING
CZ (P) CLEAR ZONE
CONST.(T) CONSTRUCTION EASEMENT
SR SR SLOPE RIGHTS
P L PROPERTY LINE
TOP OF CUT
TOE OF SLOPE
UE (P) PERMANENT UTILITY EASEMENT

APPROVED: ROGER P. DUMAS DATE: 01-31-03
CHIEF, PLANS & TITLES

R.O.W. PLANS

MONTGOMERY
BRO 1448(20)
R.O.W. SHEET 6 OF 7 SHEETS
SHEET 7 OF 50

NOT Metric

STATE OF VERMONT
AGENCY OF TRANSPORTATION
RIGHT OF WAY PLANS
DETAIL SHEET

TABLE OF PROJECT PROPERTY ACQUISITION

PARCEL NO.	GRANTOR	SHEET NO.	BEGINNING STATION	ENDING STATION	TAKING	REM.	RIGHTS	TITLE TAKEN	DATE	TOWN OR CITY RECORDED	BK.	PG.	REMARKS
1	KADEN, BARBARA REVOCABLE TRUST	7	1+072.75 RT.	1+095.71 RT.	80 SM±			WDOE	05-19-04	MONTGOMERY	68	408-	861 S.F±
	BARBARA KADEN, TRUSTEE		1+023.0 RT.	1+052.5 RT.			CONST. (T) 75 SM±					410	807 S.F.±
													INCLUDES EROSION CONTROL
			1+036.8 RT.	1+048.0 RT.			SLOPE (T) 17 SM±						183 S.F.±
			1+040.0 RT.				CUL.,DIT. & DR. (P)						
2	CHAUVIN, PAUL J. & DEBORAH J.	7	1+078.0 LT.				DRIVE (T)						4M (12') GRAVEL
			1+084.6 LT.	1+085.8 LT.			CONST. (T) 9.44 SM±						102 S.F.±
3	DELETED												FORMERLY SCOTT
4	KEEN, COLIN G. & BRIGITTE	7	1+094.47 RT.	1+154.49 RT.	320 SM±			WDOE	05-19-04	MONTGOMERY	68	412-	3,445 S.F.±
			1+096.9 RT.	1+135.7 RT.			CONST. (T) 111 SM±					413	1,195 S.F.±
			1+127.95 RT.	1+131.68 RT.			SLOPE (P) 4.5 SM±						48 S.F.±
5	VERMONT ELECTRIC COOPERATIVE, INC.												UTILITY
6	FAIRPOINT COMMUNICATIONS SOLUTIONS CORPORATION (NORTHLAND TELEPHONE COMPANY, INC.)												UTILITY

REVISION NO.	SHEET	DESCRIPTION OF REVISION	DATE	MADE BY	APPROVED BY
1	6, 7	PARCEL NO. 2 CHAUVIN. DELETE EROSION CONTROL FROM THE PLANS. SHOW TEMPORARY CONSTRUCTION ON THE PLANS. PER C.O. 9328	01-12-04	G. J. F.	R. P. D.
2	6, 7	PARCEL NO. 3 SCOTT. DELETE EROSION CONTROL FROM THE PLANS. SHOW TEMPORARY CONSTRUCTION ON THE PLANS. PER C.O. 9329	01-12-04	G. J. F.	R. P. D.
3	6, 7	PARCEL NO. 3 SCOTT. DELETE PARCEL FROM PROJECT. PER C.O. 9346.	04-16-04	M. J. R.	R. P. D.
		ELECTRONIC FILES TO STRUCTURES	06-17-04	G. J. F.	R. P. D.

ACCT.mryan
IP_PWP:dms02054\rJl24d.dgn
DATE PLOTTED 18-JUN-2004

DR.(P)- DRAINAGE RIGHT
DIT.(P)- DITCHING RIGHT
CH.(P)- CHANNEL RT.
DRIVE (T)- DRIVE RIGHT
CUL.(P)- CULVERT RIGHT
[W]- WATER SOURCES

PRESENT R.O.W.
TAKING WITHOUT ACCESS
TAKING WITHOUT ACCESS ALONG PROPERTY LINE
TAKING WITH ACCESS
(P) PERMANENT EASEMENT
(T) TEMPORARY EASEMENT

LEGEND
C&T (P) CLEARING & TRIMMING
CZ (P) CLEAR ZONE
CONST.(T) CONSTRUCTION EASEMENT
SR SLOPE RIGHTS
P PROPERTY LINE
L TOP OF CUT
TOE OF SLOPE
UE (P) PERMANENT UTILITY EASEMENT

APPROVED: ROGER P. DUMAS DATE: 01-31-03
CHIEF, PLANS & TITLES

R. O. W. PLANS

MONTGOMERY
BRO 1448(20)
R. O. W. SHEET 6 OF 7 SHEETS
SHEET 7 OF 50

GPS CONTROL POINTS

HVCTRL #1

STANDARD DISC STAMPED

NUTTING AZ

N = 259357.2390

E = 491398.8680

ELEV. = 242.100

DESCRIBED BY VERMONT AGENCY OF TRANSPORTATION 1994 (CHR) GENERAL LOCATION, MONTGOMERY, VT., IN THE SMALL SETTLEMENT OF HECTORVILLE, ABOUT 12.5 MI (20.1 KM) SOUTH OF THE U.S./CANADA BORDER, ABOUT 20.5 MI (33.0 KM) WEST OF NEWPORT, AND ABOUT 23.5 MI (37.8 KM) EAST OF ST ALBANS. OWNERSHIP, ARNOLD MERCY, RD 1 BOX 330, MONTGOMERY CENTER, VT. 05471. PHONE 802-326-4200. TO REACH FROM THE INTERSECTION OF VT ROUTES 118 AND 242 IN MONTGOMERY CENTER GO SOUTH ALONG VT ROUTE 118 FOR 3.1 MI (5.0 KM) TO THE MARK ON THE RIGHT, ABOUT 0.1 MI (0.2 KM) NORTH OF A LOG HOME. THE MARK IS 11.5 M (37.7 FT) WEST OF AND ABOUT LEVEL WITH THE CENTERLINE OF VT ROUTE 118, 2.6 M (8.5 FT) SOUTH OF UNDERGROUND TELEPHONE CABLE BOX NO. 2/29, 4.3 M (14.1 FT) SOUTHWEST OF MILE MARKER 1180/0610/0260 AND A GUY ANCHOR, AND 3.4 M (11.2 FT) SOUTH OF A FIBERGLASS WITNESS POST AND POLE NO. MT/168. IT IS SET FLUSH WITH THE GROUND IN THE TOP OF A 1 M (3.3 FT) X 0.5 M (1.6 FT) ROCK OUTCROP.

HVCTRL #2

STANDARD DISC STAMPED

NUTTING

N = 258972.7470

E = 491386.9480

ELEV. = 243.000

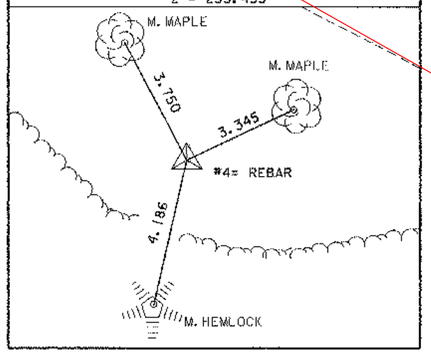
DESCRIBED BY VERMONT AGENCY OF TRANSPORTATION 1994 (CHR) GENERAL LOCATION, MONTGOMERY, VT., IN THE SMALL SETTLEMENT OF HECTORVILLE, ABOUT 13 MI (20.9 KM) SOUTH OF THE U.S./CANADA BORDER, ABOUT 20.5 MI (33.0 KM) WEST OF NEWPORT, AND ABOUT 23.5 MI (37.8 KM) EAST OF ST ALBANS. TO REACH FROM THE INTERSECTION OF VT ROUTES 118 AND 242 IN MONTGOMERY CENTER GO SOUTH ALONG VT ROUTE 118 FOR 3.3 MI (5.3 KM) TO THE MARK ON THE RIGHT, ABOUT 25 M (82.0 FT) SOUTH OF THE INTERSECTION OF NUTTING ROAD. THE MARK IS 8.7 M (28.5 FT) WEST OF AND ABOUT LEVEL WITH THE CENTERLINE OF VT ROUTE 118, 35.4 M (116.1 FT) SOUTHWEST OF POLE NO. VE COOP MT/164, 17.4 M (57.1 FT) EAST OF A 40-CM MAPLE (MOST NORTHERLY OF 2) , 34.7 M (113.8 FT) NORTH-NORTHEAST OF POLE NO. 20/91A/1/2/29-2, AND 0.3 M (1.0 FT) EAST OF A FIBERGLASS WITNESS POST. IT IS SET FLUSH WITH THE GROUND IN THE TOP OF A 30-CM DIAMETER CONCRETE MONUMENT POURED TO A DEPTH OF 1.3 M.

* DESCRIPTION PROVIDED BY VERMONT AGENCY OF TRANSPORTATION GEODETIC SURVEY UNIT

TRAVERSE TIES

HVCTRL #4

N = 258821.832
E = 491558.747
Z = 253.453



HVCTRL #40

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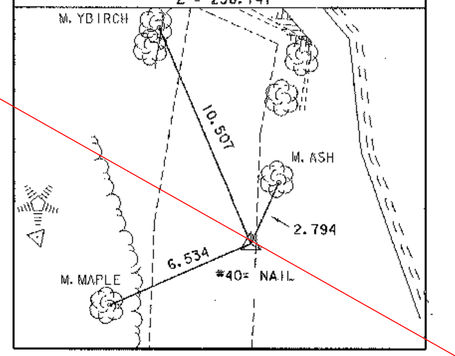


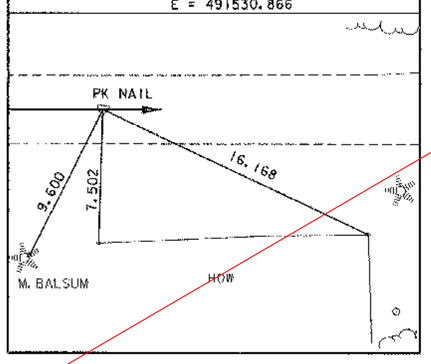
* MAIN TRAVERSE COMPLETED: FEBRUARY 21, 1995 BY R. MOREAU, A. MYERS & T. CHASE

SEE REVISED SHEET 8 & 8A

ALIGNMENT TIES

POT 1+ 000.000

N = 258859.746
E = 491530.866



PC 1+017.639

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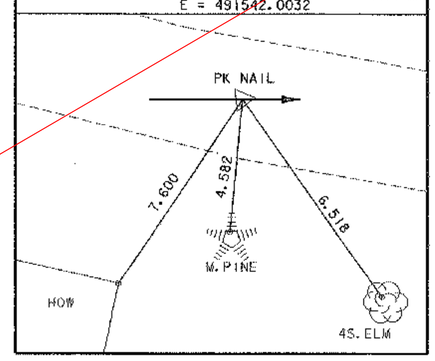
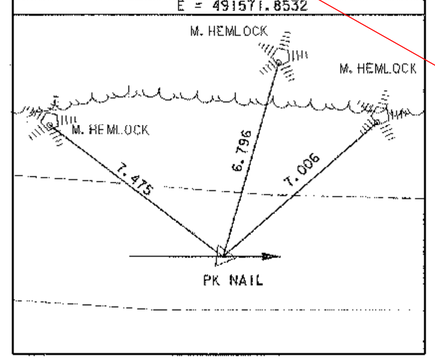
E = 491542.0032



PT 1+055.509

N = 258823.3401
E = 491571.8532



PC 1+067.265

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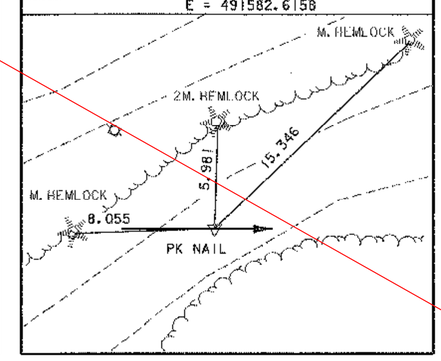
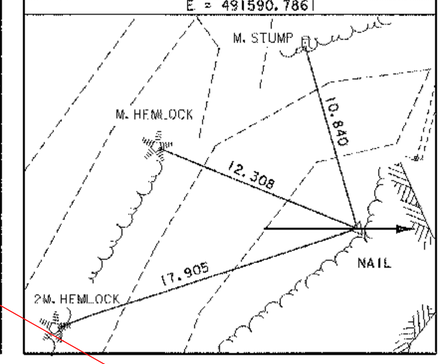
E = 491582.6158



PT 1+085.811

N = 258803.4530
E = 491590.7861



* ALIGNMENT STAKED ON JANUARY 20, 2002 BY R. GILMAN & P. WINTERS

DATUM

VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

PROJECT NAME: MONTGOMERY
PROJECT NUMBER: BRO 1448 (20)

FILE NAME: 94J124\xJ1241.dgn
PROJECT LEADER: R. R. WHITCOMB
DESIGNED BY: C. CARLSON
PLOT DATE: 10-APR-2002
DRAWN BY: J.HULETT
CHECKED BY: P.HODGE
SHEET 8 OF 50

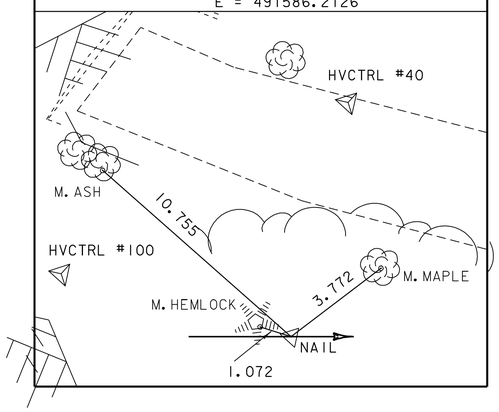
GPS CONTROL POINTS

TRAVERSE TIES

ALIGNMENT TIES

PC 1+113.170

N = 258776.4790
E = 491586.2126



PT 1+135.993

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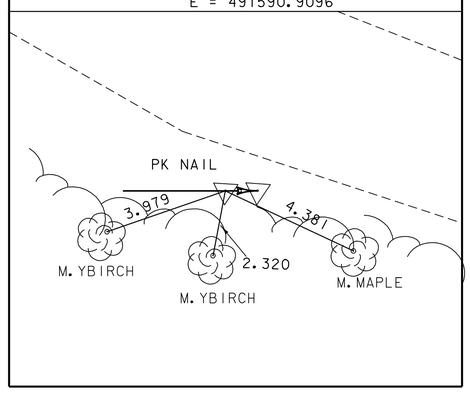
E = 491590.9096



PC 1+136.990

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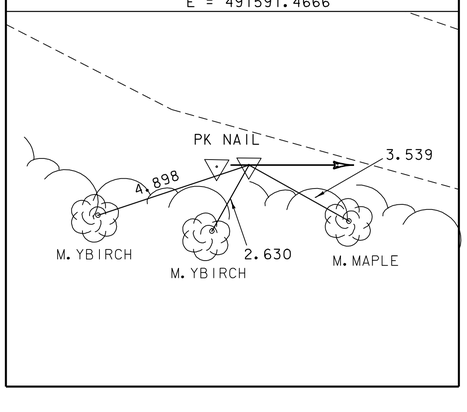

PT 1+149.416

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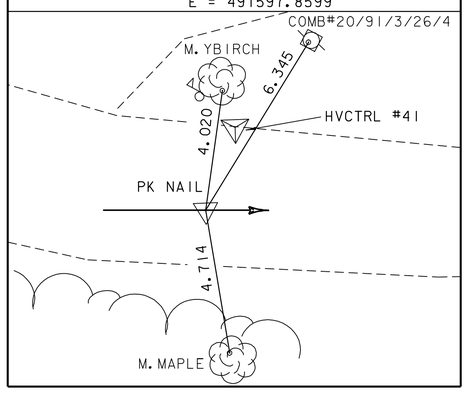

POT 1+166.488

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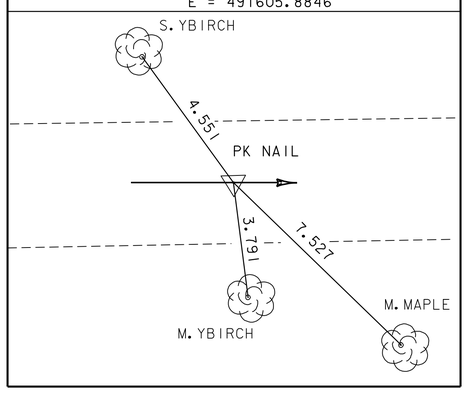


* ALIGMENT STAKED ON JANUARY 20, 2002 BY R.GILMAN & P.WINTERS

DATUM

VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (92)

PROJECT NAME:	MONTGOMERY
PROJECT NUMBER:	BRO 1448 (20)
FILE NAME: 94J124\xJ124t1.dgn	PLOT DATE: 08-JAN-2009 12:0
PROJECT LEADER:	DRAWN BY: J.HULETT
DESIGNED BY:	CHECKED BY: P.HODGE
	SHEET OF

VAOT Metric

GPS CONTROL POINTS

HVCTRL #1

STANDARD DISC STAMPED

NUTTING AZ

N = 259357.2390

E = 491398.8680

ELEV. = 242.100

DESCRIBED BY VERMONT AGENCY OF TRANSPORTATION 1994 (CHR) GENERAL LOCATION, MONTGOMERY, VT., IN THE SMALL SETTLEMENT OF HECTORVILLE, ABOUT 12.5 MI (20.1 KM) SOUTH OF THE U.S./CANADA BORDER, ABOUT 20.5 MI (33.0 KM) WEST OF NEWPORT, AND ABOUT 23.5 MI (37.8 KM) EAST OF ST ALBANS. OWNERSHIP, ARNOLD MERCY, RD 1 BOX 330, MONTGOMERY CENTER, VT. 05471. PHONE 802-326-4200. TO REACH FROM THE INTERSECTION OF VT ROUTES 118 AND 242 IN MONTGOMERY CENTER GO SOUTH ALONG VT ROUTE 118 FOR 3.1 MI (5.0 KM) TO THE MARK ON THE RIGHT, ABOUT 0.1 MI (0.2 KM) NORTH OF A LOG HOME. THE MARK IS 11.5 M (37.7 FT) WEST OF AND ABOUT LEVEL WITH THE CENTERLINE OF VT ROUTE 118, 2.6 M (8.5 FT) SOUTH OF UNDERGROUND TELEPHONE CABLE BOX NO. 2/29, 4.3 M (14.1 FT) SOUTHWEST OF MILE MARKER 1180/0610/0260 AND A GUY ANCHOR, AND 3.4 M (11.2 FT) SOUTH OF A FIBERGLASS WITNESS POST AND POLE NO. MT/168. IT IS SET FLUSH WITH THE GROUND IN THE TOP OF A 1 M (3.3 FT) X 0.5 M (1.6 FT) ROCK OUTCROP.

HVCTRL #2

STANDARD DISC STAMPED

NUTTING

N = 258972.7470

E = 491386.9480

ELEV. = 243.000

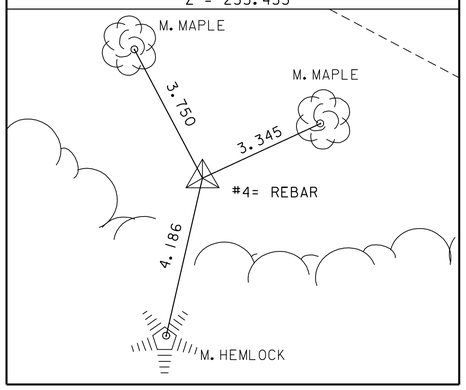
DESCRIBED BY VERMONT AGENCY OF TRANSPORTATION 1994 (CHR) GENERAL LOCATION, MONTGOMERY, VT., IN THE SMALL SETTLEMENT OF HECTORVILLE, ABOUT 13 MI (20.9 KM) SOUTH OF THE U.S./CANADA BORDER, ABOUT 20.5 MI (33.0 KM) WEST OF NEWPORT, AND ABOUT 23.5 MI (37.8 KM) EAST OF ST ALBANS. TO REACH FROM THE INTERSECTION OF VT ROUTES 118 AND 242 IN MONTGOMERY CENTER GO SOUTH ALONG VT ROUTE 118 FOR 3.3 MI (5.3 KM) TO THE MARK ON THE RIGHT, ABOUT 25 M (82.0 FT) SOUTH OF THE INTERSECTION OF NUTTING ROAD. THE MARK IS 8.7 M (28.5 FT) WEST OF AND ABOUT LEVEL WITH THE CENTERLINE OF VT ROUTE 118, 35.4 M (116.1 FT) SOUTHWEST OF POLE NO. VE COOP MT/164, 17.4 M (57.1 FT) EAST OF A 40-CM MAPLE (MOST NORTHERLY OF 2) , 34.7 M (113.8 FT) NORTH-NORTHEAST OF POLE NO. 20/91A/1/2/29-2, AND 0.3 M (1.0 FT) EAST OF A FIBERGLASS WITNESS POST. IT IS SET FLUSH WITH THE GROUND IN THE TOP OF A 30-CM DIAMETER CONCRETE MONUMENT POURED TO A DEPTH OF 1.3 M.

* DESCRIPTION PROVIDED BY VERMONT AGENCY OF TRANSPORTATION GEODETIC SURVEY UNIT

TRAVERSE TIES

HVCTRL #4

N = 258821.832
E = 491558.747
Z = 253.453



HVCTRL #40

N = 258776.257
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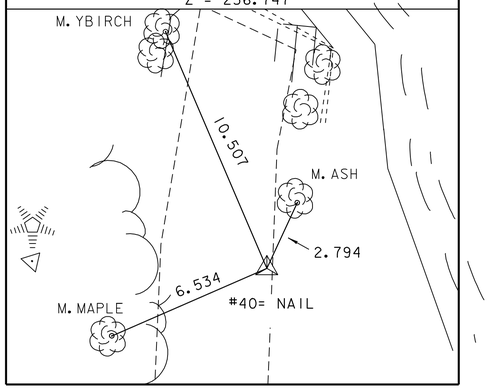
Z = 256.747

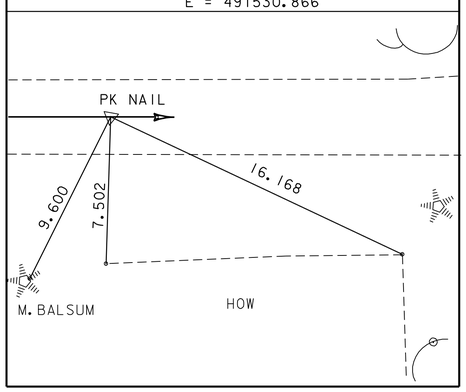


* MAIN TRAVERSE COMPLETED: FEBRUARY 21, 1995 BY R. MOREAU, A. MYERS & T. CHASE

ALIGNMENT TIES

POT 1+ 000.000

N = 258859.746
E = 491530.866



PC 1+017.639

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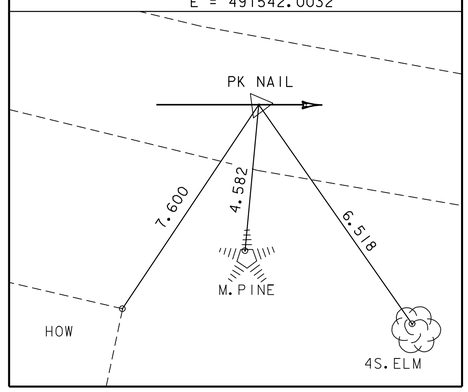
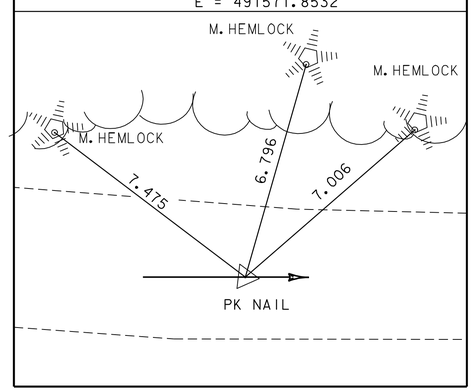
E = 491542.0032



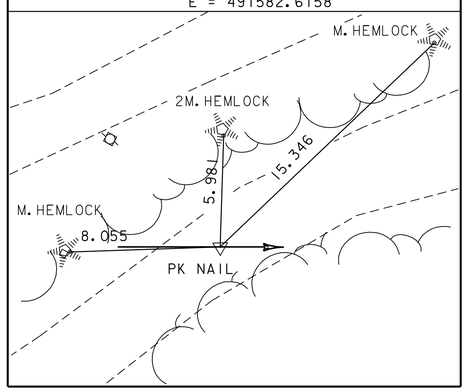
PT 1+055.509

N = 258823.3401
E = 491571.8532



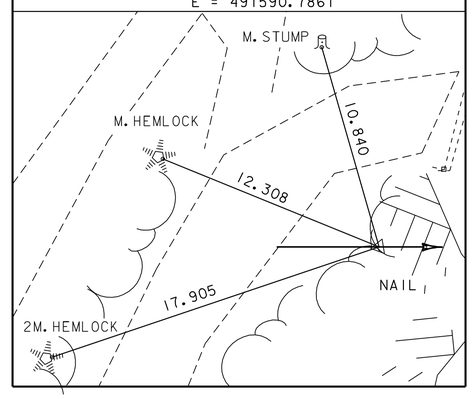
PC 1+067.265

N = 258818.6102
E = 491582.6158



PT 1+085.811

N = 258803.4530
E = 491590.7861



* ALIGMENT STAKED ON JANUARY 20, 2002 BY R. GILMAN & P. WINTERS

DATUM

VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

PROJECT NAME: MONTGOMERY
PROJECT NUMBER: BRO 1448 (20)

FILE NAME: 94J124\xJ124t1.dgn
PROJECT LEADER:
DESIGNED BY:

PLOT DATE: 08-JAN-2009 12:0
DRAWN BY: J.HULETT
CHECKED BY: P.HODGE
SHEET OF

VAST Metric

BRIDGE RAILING - HDSB /FASCIA MOUNTED/ HANDRAIL (MOD.)

STA. 1+084.600 RT. - STA. 1+113.380 RT.
STA. 1+083.500 LT. - STA. 1+113.380 LT.

HDSB GUARD RAIL WITH WOOD POSTS (WEATHERING)

STA. 1+047.500 RT. - STA. 1+084.600 RT.
STA. 1+113.380 RT. - STA. 1+128.640 RT.
STA. 1+082.370 LT. - STA. 1+083.500 LT.
STA. 1+113.380 LT. - STA. 1+127.700 LT.

STONE FILL, TYPE I (IN DITCHES)

STA. 1+025.000 LT. - STA. 1+080.500 LT.
STA. 1+112.500 RT. - STA. 1+145.000 RT.

CONSTRUCT DRIVE

STA. 1+078.000 LT.
STA. 1+142.000 LT.

ANCHOR FOR STEEL BEAM RAIL

STA. 1+048.500 RT.
STA. 1+082.443 LT.
STA. 1+127.500 RT.
STA. 1+125.600 LT.

PIPE OPTION (450)

STA. 1+040
CSP
CPEP
CAAP

STA. 1+113.900 - 1+147.500 LT.
CSP
CPEP
CAAP

GABION WALL

STA. 1+044.800 RT. - STA. 1+080.800 RT.

RELOCATION OF MAILBOX

STA. 1+134.400 LT.

DECIDUOUS TREES (SEE GENERAL NOTE #19)

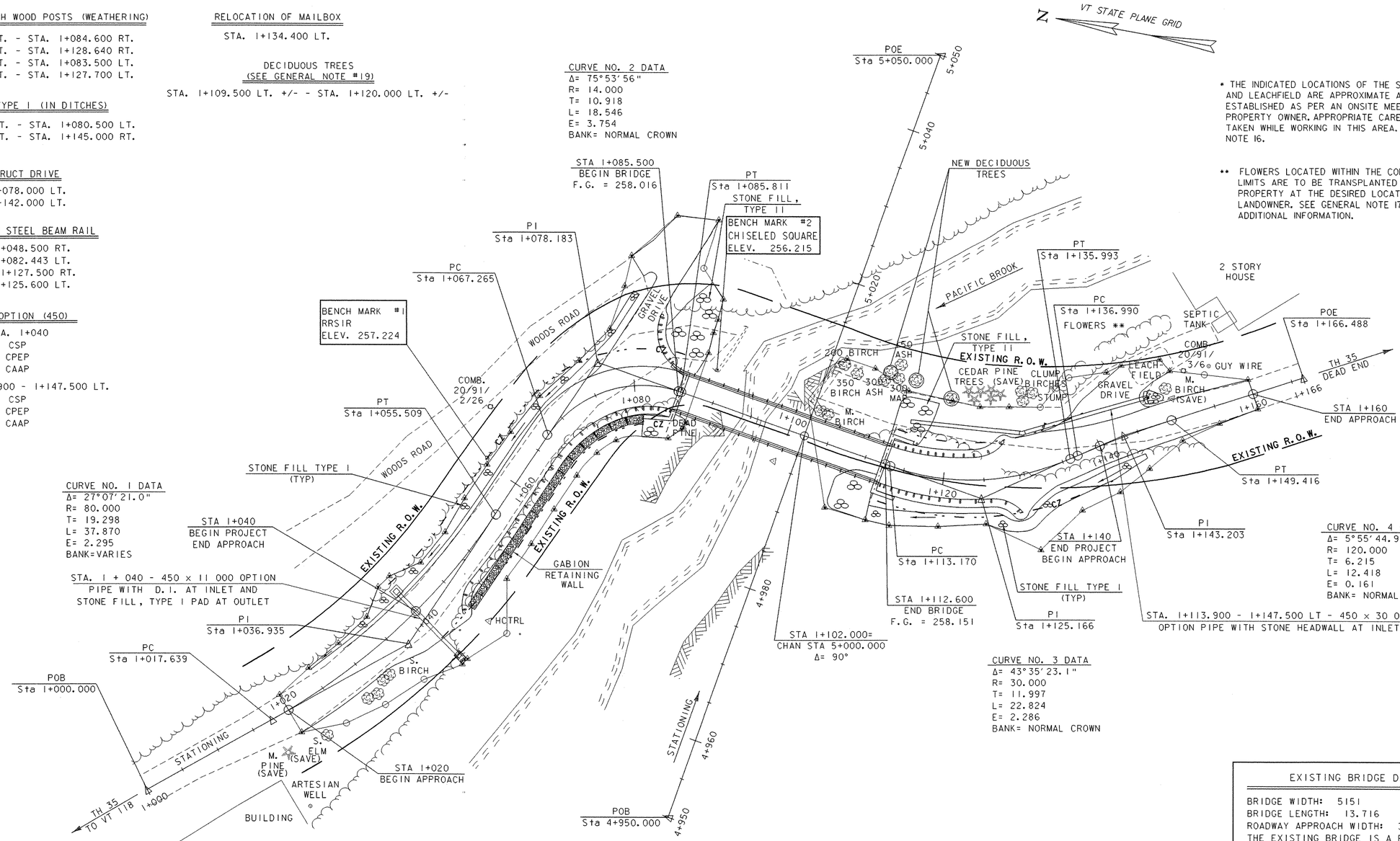
STA. 1+109.500 LT. +/- - STA. 1+120.000 LT. +/-

CURVE NO. 1 DATA
Δ= 27°07'21.0"
R= 80.000
T= 19.298
L= 37.870
E= 2.295
BANK=VARIES

CURVE NO. 2 DATA
Δ= 75°53'56"
R= 14.000
T= 10.918
L= 18.546
E= 3.754
BANK= NORMAL CROWN

CURVE NO. 3 DATA
Δ= 43°35'23.1"
R= 30.000
T= 11.997
L= 22.824
E= 2.286
BANK= NORMAL CROWN

CURVE NO. 4 DATA
Δ= 5°55'44.9"
R= 120.000
T= 6.215
L= 12.418
E= 0.161
BANK= NORMAL CROWN



* THE INDICATED LOCATIONS OF THE SEPTIC TANK AND LEACHFIELD ARE APPROXIMATE AND WERE ESTABLISHED AS PER AN ONSITE MEETING WITH THE PROPERTY OWNER. APPROPRIATE CARE SHOULD BE TAKEN WHILE WORKING IN THIS AREA. SEE GENERAL NOTE 16.

** FLOWERS LOCATED WITHIN THE CONSTRUCTION LIMITS ARE TO BE TRANSPLANTED ON THE PROPERTY AT THE DESIRED LOCATION OF THE LANDOWNER. SEE GENERAL NOTE 17 FOR ADDITIONAL INFORMATION.

EXISTING BRIDGE DATA

BRIDGE WIDTH: 5151
BRIDGE LENGTH: 13.716
ROADWAY APPROACH WIDTH: 3962
THE EXISTING BRIDGE IS A PONY TRUSS WITH A WOOD PLANK DECK WITH RUNNERS. THERE IS A ROLLED BEAM STRINGER AT EACH FASCIA WITH FOUR H-PILES IN BETWEEN SUPPORTING THE DECK. THE EXISTING ABUTMENTS ARE CONCRETE WITH METAL I-BEAM BACKWALLS.

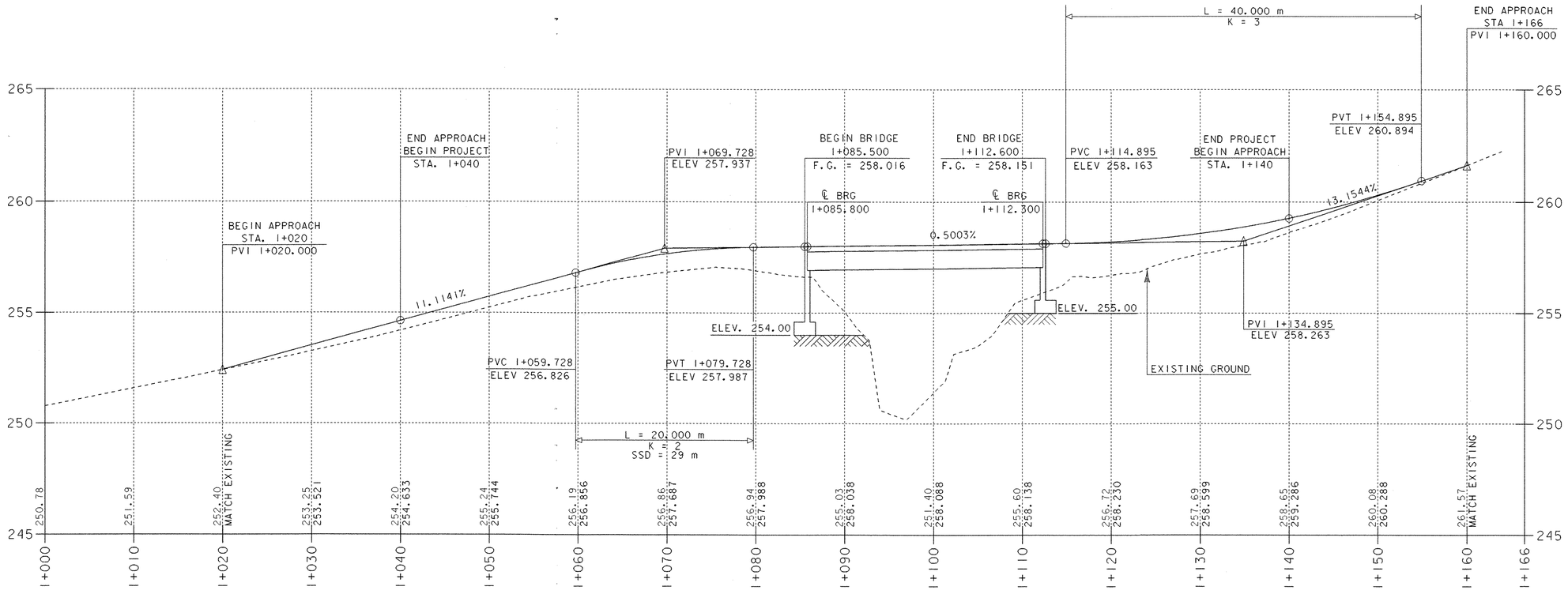
0 10 20
SCALE 1:250

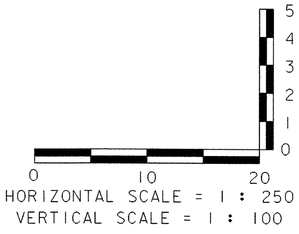
SHEET NAME: PLAN SHEET

PROJECT NAME: MONTGOMERY
PROJECT NUMBER: BRO 1448(20)
HIGHWAY NO.: TH 35
BRIDGE NO.: 24
OVER: PACIFIC BROOK

FILE NAME: /PW/94J124/sj124bdr.dgn
PROJECT MANAGER: R. WHITCOMB
DESIGNED BY: C. CARLSON
BRIDGE SHEET NUMBER:
PLOT DATE: 06-DEC-2005
DRAWN BY: J. GILMORE
IPARM NAME: sj124al.i
SHEET 9 OF 50

Profile





HORIZONTAL SCALE = 1 : 250
VERTICAL SCALE = 1 : 100

THE GRADES SHOWN TO THE NEAREST HUNDREDTH ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST THOUSANDTH ARE THE PROPOSED GRADES FOR THE NEW ALIGNMENT.

SHEET NAME:	MAINLINE PROFILE		
PROJECT NAME:	MONTGOMERY	HIGHWAY NO.:	TH 35
PROJECT NUMBER:	BRO 1448(20)	BRIDGE NO.:	24
		OVER:	PACIFIC BROOK
FILE NAME: /PW/94J124/sJ124xsl.dgn		PLOT DATE:	06-DEC-2005
PROJECT MANAGER:	R. WHITCOMB	DRAWN BY:	J. GILMORE
DESIGNED BY:	C. CARLSON	IPARM NAME:	sJ124pro.I
BRIDGE SHEET NUMBER:		SHEET	10 OF 50

VAOT Metric

LEGEND

⊗ REFLECTORIZED PLASTIC DRUMS (SEE STD. E-106)

TYPE III BARRICADES (SEE STD. E-107A)

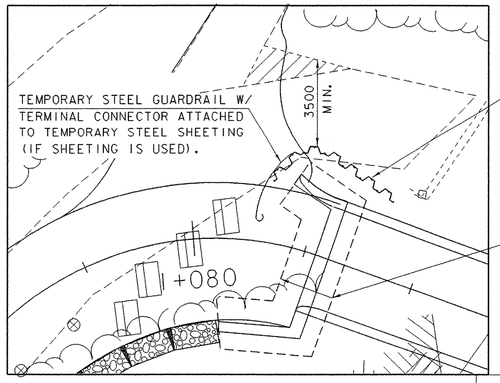
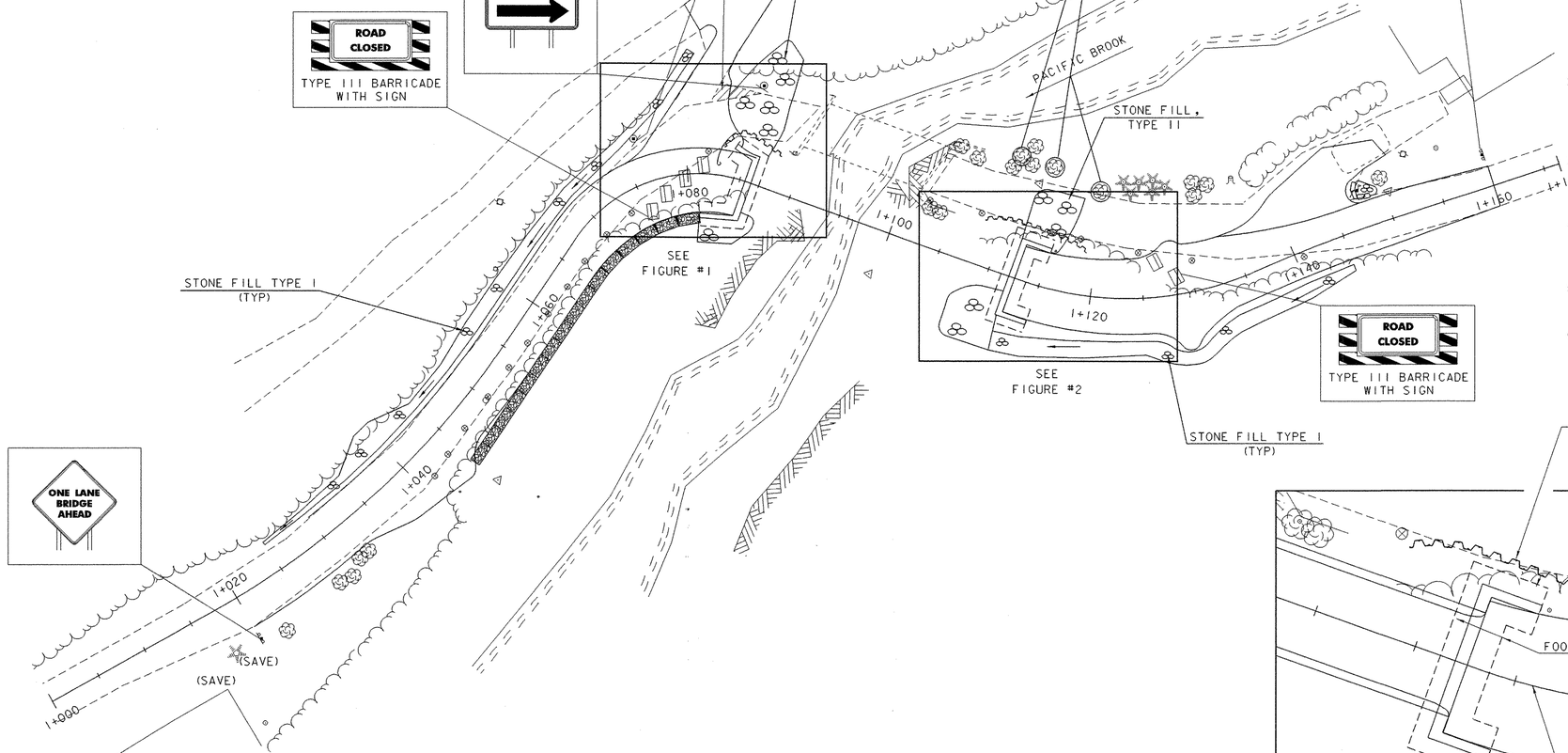
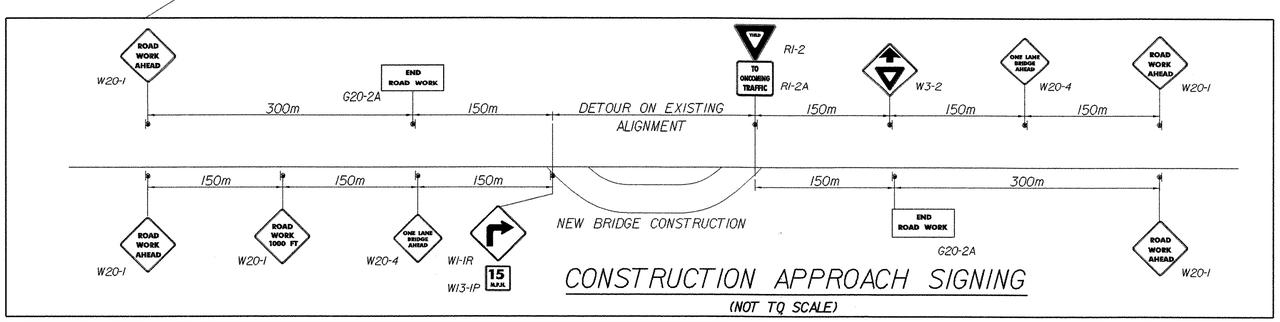


FIGURE #1

IF STEEL SHEETING IS USED, TOPS OF TEMPORARY STEEL SHEETING SHALL BE DRIVEN NO LOWER THAN 1100 ABOVE GROUND LEVEL. SEE NOTE #8 ON GENERAL NOTES SHEET.





CONSTRUCTION APPROACH SIGNING

(NOT TO SCALE)

TRAFFIC CONTROL SEQUENCE

PHASE 1

1. MAINTAIN TRAFFIC ON THE EXISTING ROADWAY WHILE CONSTRUCTING THE NEW BRIDGE AND APPROACHES. BARRICADES AND BARRELS WILL BE NECESSARY TO MAINTAIN TRAFFIC DURING THIS PHASE. THE CONTRACTOR IS TO MAINTAIN 3.5m MINIMUM LANE WIDTH OF TRAVEL.

PHASE 2

MAINTAIN TRAFFIC ON THE NEW ALIGNMENT. REMOVE THE EXISTING STRUCTURE AND BRIDGE ABUTMENTS, REGRADE AS PER PLANS.

TRAFFIC CONTROL NOTES

1. DUE TO THE CLOSE PROXIMITY BETWEEN THE EDGE OF THE EXISTING BRIDGE, ROADWAY, AND NEW ABUTMENTS, TEMPORARY STEEL SHEETING HAS BEEN INDICATED ON THE PLANS. HOWEVER, DUE TO THE SHALLOW DEPTH TO LEDGE, ALTERNATIVE METHODS OF SAFELY SEPARATING TRAFFIC FROM THE WORK AREAS MAY BE PROPOSED BY THE CONTRACTOR. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE ITEM 641.40 "TRAFFIC CONTROL".
2. STANDARD CONSTRUCTION BARRELS, TYPE III BARRICADES SHALL BE INSTALLED TO GUIDE TRAFFIC AROUND THE WORK ZONE. THIS WORK WILL BE PAID FOR UNDER THE ITEM 641.10, "TRAFFIC CONTROL."
3. ALL SIGN STANDS AND POST INSTALLATION SHALL BE NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM REPORT 350 (NCHRP) COMPLIANT.
4. AS A MINIMUM, ROLL-UP SIGN MATERIAL SHALL HAVE ASTM D 4956-01 TYPE VI FLOURESCENT ORANGE RETROREFLECTIVE SHEETING.
5. ALL OTHER SIGNS SHALL HAVE ASTM D 4956-01 TYPE VIII RETROREFLECTIVE SHEETING.
6. IF STEEL SHEETING IS USED THEN THE STEEL GUARDRAIL SHALL BE ATTACHED TO THE SHEETING AND FLARED TOWARDS THE EDGE OF THE ROAD. THIS WORK SHALL BE PAID FOR UNDER THE ITEM 527.10, "MAINTENANCE OF TRAFFIC FOR BRIDGE PROJECTS (MOD.)".

IF STEEL SHEETING IS USED, TOPS OF TEMPORARY STEEL SHEETING SHALL BE DRIVEN NO LOWER THAN 1100 ABOVE GROUND LEVEL

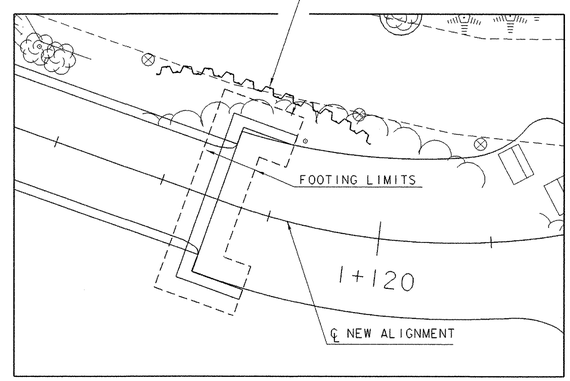


FIGURE #2

0 10 20

SCALE 1:250

SHEET NAME:	CONSTRUCTION SIGNING		
PROJECT NAME:	MONTGOMERY	HIGHWAY NO.:	TH 35
PROJECT NUMBER:	BRO 1448(20)	BRIDGE NO.:	24
		OVER:	PACIFIC BROOK
FILE NAME:	/PW/94J124/sj124tcs.dgn	PLOT DATE:	06-DEC-2005
PROJECT MANAGER:	R. WHITCOMB	DRAWN BY:	J. GILMORE
DESIGNED BY:	C. CARLSON	IPARM NAME:	sj124tcs.i
BRIDGE SHEET NUMBER:		SHEET	11 OF 50

SOIL CLASSIFICATION

AASHTO

A1	Gravel and Sand
A3	Fine Sand
A2	Silty or Clayey Gravel and Sand
A4	Silty Soil - Low Compressibility
A5	Silty Soil - Highly Compressible
A6	Clayey Soil - Low Compressibility
A7	Clayey Soil - Highly Compressible

ROCK QUALITY DESIGNATION

R.Q.D. (%)	ROCK DESCRIPTION
<25	Very Poor
25 to 50	Poor
51 to 75	Fair
76 to 90	Good
>90	Excellent

SHEAR STRENGTH

UNDRAINED SHEAR STRENGTH IN kPa	CONSISTENCY
<12	Very Soft
12-24	Soft
24-48	Med. Stiff
48-96	Stiff
96-192	Very Stiff
>192	Hard

CORRELATION GUIDE OF "N" TO DENSITY/CONSISTENCY

DENSITY (GRANULAR SOILS) N	DESCRIPTIVE TERM	CONSISTENCY (COHESIVE SOILS) N	DESCRIPTIVE TERM
<5	Very Loose	<2	Very Soft
5-10	Loose	2-4	Soft
11-24	Med. Dense	5-8	Med. Stiff
25-50	Dense	9-15	Stiff
>50	Very Dense	16-30	Very Stiff
		31-60	Hard
		>60	Very Hard

COMMONLY USED SYMBOLS

▼	Water Elevation
	Standard Penetration Boring
⊕	Auger Boring
⊙	Rod Sounding
S	Sample
N	Standard Penetration Test Blow Count Per 300 mm For: 50.8 mm O.D. Sampler 35.0 mm I.D. Sampler Hammer Weight Of 63.5 kg. Hammer Fall Of 762 mm
VS	Field Vane Shear Test
US	Undisturbed Soil Sample
B	Blast
DC	Diamond Core
MD	Mud Drill
WA	Wash Ahead
HSA	Hollow Stem Auger
AX	Core Size 30.1mm
BX	Core Size 42.0 mm
NX	Core Size 54.7 mm
M	Double Tube Core Barrel Used
LL	Liquid Limit
PL	Plastic Limit
PI	Plasticity Index
NP	Non Plastic
w	Moisture Content (Dry Wgt. Basis)
D	Dry
M	Moist
MTW	Moist To Wet
W	Wet
Sat	Saturated
Bo	Boulder
Gr	Gravel
Sa	Sand
Si	Silt
Cl	Clay
HP	Hardpan
Le	Ledge
NLTD	No Ledge To Depth
CNPF	Can Not Penetrate Further
TLOB	To Ledge Or Boulder
NR	No Recovery
Rec.	Recovery
%Rec.	Percent Recovery
ROD	Rock Quality Designation
CBR	California Bearing Ratio
<	Less Than
>	Greater Than
R	Refusal (N > 100)

COLOR

blk	Black	pnk	Pink
bl	Blue	pu	Purple
brn	Brown	rd	Red
dk	Dark	tn	Tan
gry	Gray	wh	White
gn	Green	yel	Yellow
lt	Light	mltc	Multicolored
or	Orange		

DEFINITIONS (AASHTO)

BEDROCK (LEDGE) - Rock in its native location of indefinite thickness.

BOULDER - A rock fragment with an average dimension > 304.8 mm.

COBBLE - Rock fragments with an average dimension between 76.2 and 304.8 mm.

GRAVEL - Rounded particles of rock < 76.2 mm and > 2 mm (#10 sieve).

SAND - Particles of rock < 2 mm (#10 sieve) and > 75 μm (#200 sieve).

SILT - Soil < 75 μm (#200 sieve), non or slightly plastic and exhibits no strength when air-dried.

CLAY - Fine grained soil, exhibits plasticity when moist and considerable strength when air-dried.

VARVED - Alternate layers of silt and clay.

HARDPAN - Extremely dense soil, cemented layer, not softened when wet.

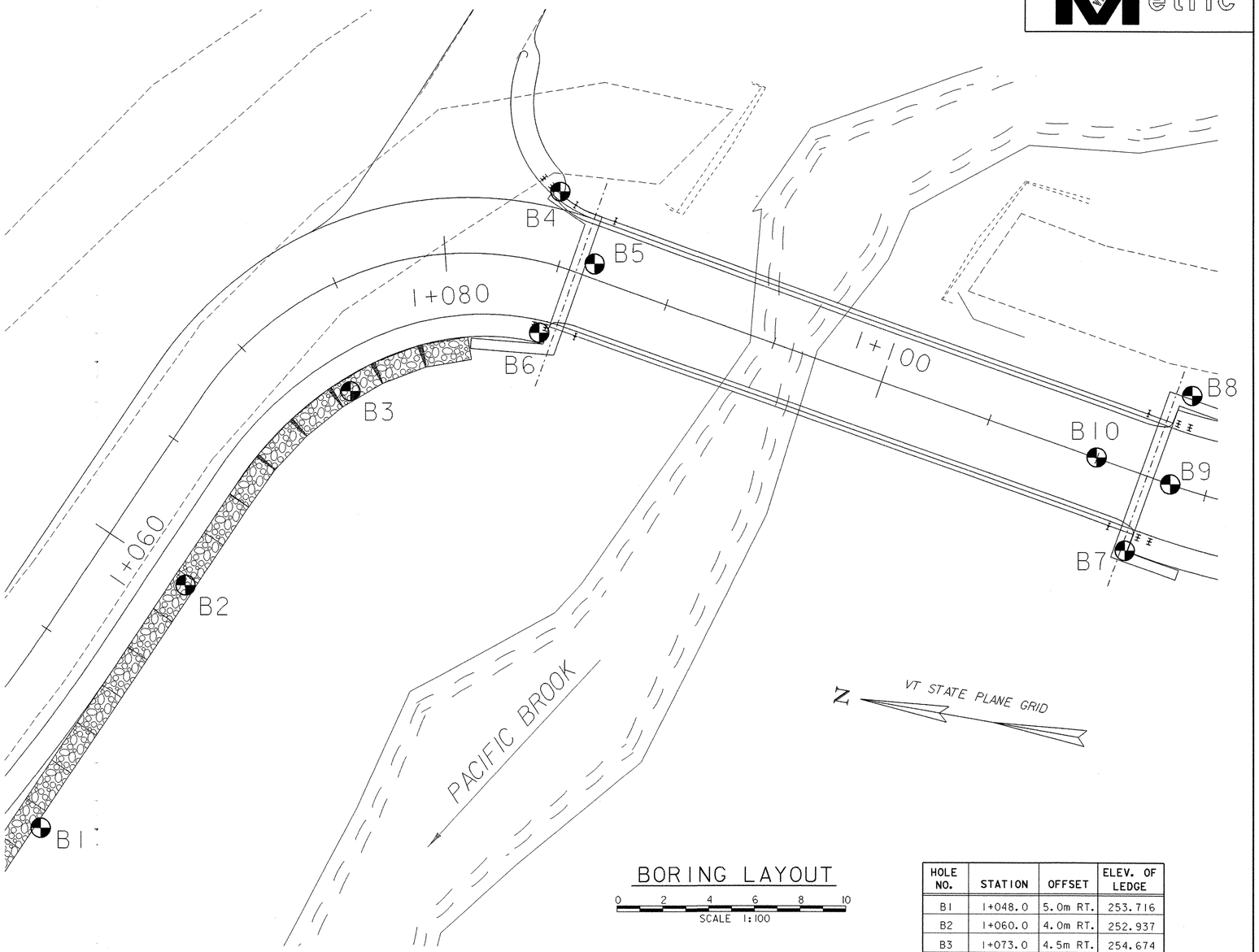
MUCK - Soft organic soil (containing > 10% organic material.

MOISTURE CONTENT - Weight of water divided by dry weight of soil.

FLOWING SAND - Granular soil so saturated (loose) that it flows into drill casing during extraction of wash rod.

STRIKE - Angle from magnetic north to line of intersection of bed with a horizontal plane.

DIP - Inclination of bed with a horizontal plane.



BORING LAYOUT

0 2 4 6 8 10

SCALE 1:100

HOLE NO.	STATION	OFFSET	ELEV. OF LEDGE
B1	1+048.0	5.0m RT.	253.716
B2	1+060.0	4.0m RT.	252.937
B3	1+073.0	4.5m RT.	254.674
B4	1+084.6	3.0m LT.	255.918
B5	1+086.5	0.6m LT.	255.863
B6	1+085.0	3.0m RT.	255.488
B7	1+112.5	3.4m RT.	255.046
B8	1+113.0	4.0m LT.	255.445
B9	1+113.4	0.0m RT.	255.481
B10	1+110.0	0.0m RT.	254.730

GENERAL NOTES

1. The subsurface explorations shown herein were made between 9/30/02 and 10/22/02 by the Agency.
2. Soil and rock classifications, properties and descriptions are based on engineering interpretation from available subsurface information by the Agency and may not necessarily reflect actual variations in subsurface conditions that may be encountered between individual boring or sample locations.
3. Observed water levels and/or conditions indicated are as recorded at the time of exploration and may vary according to the prevailing rainfall, methods of exploration and other factors.
4. Engineering judgement was exercised in preparing the subsurface information presented herein. Analysis and interpretation of subsurface data was performed and interpreted for Agency design and estimating purposes. Presentation of the information in the Contract is intended to provide the Contractor access to the same data available to the Agency. The subsurface information is presented in good faith and is not intended as a substitute for personal investigation, independent interpretation, independent analysis or judgement by the Contractor.
5. Pictorial structure details shown on the boring plan layout or soils profile are for illustrative purposes only and may not accurately portray final contract details.
6. Terminology used on boring logs to describe the hardness, degree of weathering, and spacing of fractures, joints and other discontinuities in the bedrock is defined in the AASHTO Manual on Subsurface Investigations, 1988.

SHEET NAME: **BORING LAYOUT SHEET**

PROJECT NAME: MONTGOMERY
PROJECT NUMBER: BRO 1448(20)
HIGHWAY NO.: TH 35
BRIDGE NO.: 24
OVER: PACIFIC BROOK

FILE NAME: /PW/94J124/sj124bor.dgn
PROJECT MANAGER: R. WHITCOMB
DESIGNED BY: C. CARLSON
BRIDGE SHEET NUMBER:
PLOT DATE: 06-DEC-2005
DRAWN BY: STRI
IPARM NAME: sj124br1.1
SHEET 12 OF 50

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH DIVISION
SUBSURFACE INFORMATION

HOLE NO.: B-01
SHEET I OF I
DATE STARTED: 10/2/02
DATE COMPLETED: 10/3/02

PROJECT NAME: MONTGOMERY
SITE NAME: BR 24
STATION: 1+048.00
GROUND EL.: 254.916

PROJECT NUMBER: BRO 1448 (20)
SITE NO.: TH 35
OFFSET: 5.00
G.W. DEPTH: NO WATER FOUND

BORING CREW
CREW CHIEF: TALLMAN
DRILLER: TALLMAN
LOGGER: RUSSELL
ADDITIONAL CREW:

BORING RIG: LAG TRACK RIG
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

ELEV. 254.500

DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER 0.3 m	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
		A-1-b, SaGr, brn, Moist, Rec. = 0.15m	R	24.4	44	39.9	16.1		
			RUN	REC%	ROD%	Dip°			
		Run#1: NXMDC, 1.2m-2.2m, Rec. = 0.70m, See Geologist's Report.	1	70	0	40			
		Run#2: NXMDC, 2.2m-3.7m, Rec. = 1.50m, See Geologist's Report.	2	100	17	40-50			
		Run#3: NXMDC, 3.7m-4.3m, Rec. = 0.60m, See Geologist's Report.	3	100	83	40-50			
		Top of bedrock @ 1.20 m							
		Hole stopped @ 4.30m							

DRILLER'S NOTES:

1. A few very small rock breaks on Run#1 & Run#2.

GEOLOGISTS REPORT:

Run#1: Gray quartz-sericite schist, Very closely spaced jointing along foliation planes, Jointing is rust stained, Moderately hard, Slightly to moderately weathered, Poor ROD, Poorly competent.

Run#2: Gray quartz-sericite schist, Closely to moderately closely spaced jointing along foliation planes, Moderately hard, Slightly weathered, Poor ROD, Moderately competent.

Run#3: Gray quartz-sericite schist, Closely to moderately closely spaced jointing along foliation planes, Moderately hard, Slightly weathered, Competent.

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH DIVISION
SUBSURFACE INFORMATION

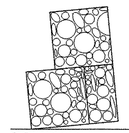
HOLE NO.: B-02
SHEET I OF I
DATE STARTED: 9/30/02
DATE COMPLETED: 10/2/02

PROJECT NAME: MONTGOMERY
SITE NAME: BR 24
STATION: 1+060.00
GROUND EL.: 255.367

PROJECT NUMBER: BRO 1448 (20)
SITE NO.: TH 35
OFFSET: 4.00
G.W. DEPTH: NO WATER FOUND

BORING CREW
CREW CHIEF: TALLMAN
DRILLER: TALLMAN
LOGGER: RUSSELL
ADDITIONAL CREW:

BORING RIG: LAG TRACK RIG
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL



ELEV. 253.900

DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER 0.3 m	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
		A-1-b, GrSa with Trace of Organics (3.8%), brn, Moist, Rec. = 0.45m,	6	22.4	35.3	47.3	17.4		
		NXMDC, 1.7m-2.2m, Boulder							
		Top of bedrock @ 2.43 m							
			RUN	REC%	ROD%	Dip°			
		Run#1: NXMDC, 2.43m-3.95m, Rec. = 1.05m, See Geologist's Report.	1	69	33	55			
		Run#2: NXMDC, 3.95m-5.47m, Rec. = 1.52m, See Geologist's Report.	2	100	90	55			
		Hole stopped @ 5.47m							

DRILLER'S NOTES:

1. At 3.65m-3.80m we had brownish color water.

GEOLOGISTS REPORT:

Run#1: Gray quartz-sericite-albite-chlorite schist with thin graphitic partings, Moderately hard, Severely weathered from 2.78m to 3.03m, Poorly competent.

Run#2: Silver gray quartz-sericite-albite-chlorite schist with thin graphitic partings, Hard, Unweathered, Competent.

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH DIVISION
SUBSURFACE INFORMATION

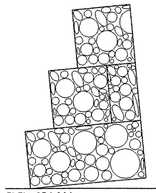
HOLE NO.: B-03
SHEET I OF I
DATE STARTED: 10/9/02
DATE COMPLETED: 10/10/02

PROJECT NAME: MONTGOMERY
SITE NAME: BR 24
STATION: 1+073.00
GROUND EL.: 255.974

PROJECT NUMBER: BRO 1448 (20)
SITE NO.: TH 35
OFFSET: 4.50
G.W. DEPTH: NO WATER FOUND

BORING CREW
CREW CHIEF: TALLMAN
DRILLER: TALLMAN
LOGGER: RUSSELL
ADDITIONAL CREW:

BORING RIG: LAG TRACK RIG
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL



ELEV. 254.900

DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER 0.3 m	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
			Some Broken Rock was within sample.						
		A-1-a, SaGr, gry-brn, Moist, Rec. = 0.20m,	37	20.8	56.9	29.9	13.2		
		Top of bedrock @ 1.30 m							
			RUN	REC%	ROD%	Dip°			
		Run#1: NXMDC, 1.30m-2.82m, Rec. = 0.55m, See Geologist's Report.	1	36	7	60			
		Run#2: NXMDC, 2.82m-3.90m, Rec. = 1.02m, See Geologist's Report.	2	94	46	60			
		Hole stopped @ 3.90m							

GEOLOGISTS REPORT:

Run#1: Gray quartz-sericite-albite-chlorite schist, Soft to moderately hard, Severely weathered, Poorly competent.

Run#2: Gray quartz-sericite-albite-chlorite schist, Mineralized near-vertical joint surface from 3.52m to 3.84m, Moderately hard, Unweathered, Fairly competent.

SHEET NAME: BORING LOG #1

PROJECT NAME: MONTGOMERY
PROJECT NUMBER: BRO 1448(20)

HIGHWAY NO.: TH 35
BRIDGE NO.: 24
OVER: PACIFIC BROOK

FILE NAME: /PW/94j124/sj124bor.dgn
PROJECT MANAGER: R. WHITCOMB
DESIGNED BY: C. CARLSON
BRIDGE SHEET NUMBER:

PLOT DATE: 06-DEC-2005
DRAWN BY: J. TOUCHETTE
IPARM NAME: sj124br2.i
SHEET 13 OF 50

NOT Metric

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH DIVISION
SUBSURFACE INFORMATION

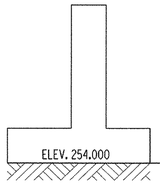
HOLE NO.: B-04
SHEET 1 OF 1
DATE STARTED: 10/3/02
DATE COMPLETED: 10/3/02

PROJECT NAME: MONTGOMERY
SITE NAME: BR 24
STATION: 1+084.60
GROUND EL.: 256.818

PROJECT NUMBER: BRO 1448 (20)
SITE NO.: TH 35
OFFSET: -3.00
G.W. DEPTH: NO WATER FOUND

BORING CREW
CREW CHIEF: TALLMAN
DRILLER: TALLMAN
LOGGER: RUSSELL
ADDITIONAL CREW:

BORING RIG: LAG TRACK RIG
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL



DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER 0.3 m	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
		Top of bedrock @ 0.90 m							
		Run#1: NXMDC, 0.90m-2.42m, Rec. = 1.17m, See Geologist's Report.	RUN 1	REC% 77	RQD% 24	Dip° 60			
		Run#2: NXMDC, 2.42m-3.94m, Rec. = 1.52m, See Geologist's Report.	2	100	41	60			
		Run#3: NXMDC, 3.94m-4.39m, Rec. = 0.40m, See Geologist's Report.	3	89	89	60			
5		Hole stopped @ 4.39m							
10									

DRILLER'S NOTES:

1. Rock break at 1.37m-1.47m.

GEOLOGISTS REPORT:

Run#1: Gray quartz-sericite-chlorite schist, Close to moderately close spaced jointing along foliation planes, Jointing is rust stained, Moderately hard, Most of Run is slightly to moderately weathered, Moderately severe weathering from 1.62m to 1.90m, Poorly Competent.

Run#2: Gray quartz-sericite-chlorite schist, Close to moderately close spaced jointing along foliation planes, Jointing is rust stained, Moderately hard, Most of Run is slightly to moderately weathered, Moderately severe weathering from 2.72m to 3.13m, Poorly Competent.

Run#3: Gray quartz-sericite-chlorite schist, Close to moderately close spaced jointing along foliation planes, Unweathered, Competent.

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH DIVISION
SUBSURFACE INFORMATION

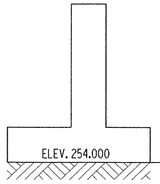
HOLE NO.: B-05
SHEET 1 OF 1
DATE STARTED: 10/7/02
DATE COMPLETED: 10/8/02

PROJECT NAME: MONTGOMERY
SITE NAME: BR 24
STATION: 1+086.50
GROUND EL.: 256.763

PROJECT NUMBER: BRO 1448 (20)
SITE NO.: TH 35
OFFSET: -0.60
G.W. DEPTH: NO WATER FOUND

BORING CREW
CREW CHIEF: TALLMAN
DRILLER: TALLMAN
LOGGER: RUSSELL
ADDITIONAL CREW:

BORING RIG: LAG TRACK RIG
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL



DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER 0.3 m	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
		Top of bedrock @ 0.90 m							
		Run#1: NXMDC, 0.90m-2.40m, Rec. = 0.62m, See Geologist's Report.	RUN 1	REC% 41	RQD% 0	Dip° ?			
		Run#2: NXMDC, 2.40m-3.90m, Rec. = 1.17m, See Geologist's Report.	2	78	10	60			
		Run#3: NXMDC, 3.90m-5.42m, Rec. = 1.52m, See Geologist's Report.	3	100	66	60			
5		Hole stopped @ 5.42m							
10									

DRILLER'S NOTES:

1. Various small Rock Breaks at 2.28m-2.40m.

GEOLOGISTS REPORT:

Run#1: Gray quartz-sericite-chlorite schist, Soft, Severely weathered, Poorly compentent.

Run#2: Gray quartz-sericite-chlorite-albite schist, Moderately hard, Upper and lower portions of Run are unweathered to moderately weathered, Severely weathered from 2.80m to 3.20m, Poorly competent.

Run#3: Gray quartz-sericite-chlorite-albite schist, Moderately hard, Unweathered, Competent

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH DIVISION
SUBSURFACE INFORMATION

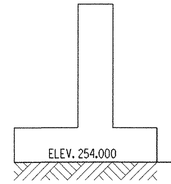
HOLE NO.: B-06
SHEET 1 OF 1
DATE STARTED: 10/8/02
DATE COMPLETED: 10/9/02

PROJECT NAME: MONTGOMERY
SITE NAME: BR 24
STATION: 1+085.00
GROUND EL.: 256.388

PROJECT NUMBER: BRO 1448 (20)
SITE NO.: TH 35
OFFSET: 3.00
G.W. DEPTH: NO WATER FOUND

BORING CREW
CREW CHIEF: TALLMAN
DRILLER: TALLMAN
LOGGER: RUSSELL
ADDITIONAL CREW:

BORING RIG: LAG TRACK RIG
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL



DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER 0.3 m	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
		Top of bedrock @ 0.90 m							
		Run#1: NXMDC, 0.90m-2.42m, Rec. = 0.70m, See Geologist's Report.	RUN 1	REC% 46	RQD% 7	Dip° 55			
		Run#2: NXMDC, 2.42m-3.97m, Rec. = 1.52m, See Geologist's Report.	2	100	66	60			
		Run#3: NXMDC, 3.97m-5.49m, Rec. = 0.74m, See Geologist's Report.	3	49	37	60			
5		Hole stopped @ 5.49m							
10									

GEOLOGISTS REPORT:

Run#1: Gray quartz-sericite-chlorite-albite schist, Moderately hard, Moderately severely weathered, Moderately competent, Poor RQD.

Run#2: Gray quartz-sericite-chlorite-albite schist, Moderately hard, Some pitting, Top 0.2m of Run severely weathered, Remainder of Run unweathered to slightly weathered, Competent.

Run#3: Gray quartz-sericite-chlorite-albite schist, Moderately hard, Unweathered, Poor to fair recovery, Poor RQD.

SHEET NAME: **BORING LOG #2**

PROJECT NAME: MONTGOMERY
PROJECT NUMBER: BRO 1448(20)

HIGHWAY NO.: TH 35
BRIDGE NO.: 24
OVER: PACIFIC BROOK

FILE NAME: /PW/94jl24/sjl24bor.dgn
PROJECT MANAGER: R. WHITCOMB
DESIGNED BY: C. CARLSON
BRIDGE SHEET NUMBER:

PLOT DATE: 06-DEC-2005
DRAWN BY: J. TOUCHETTE
IPARM NAME: sjl24br3.i
SHEET 14 OF 50

VAOT Metric

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH DIVISION
SUBSURFACE INFORMATION

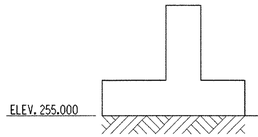
HOLE NO.: B-07
SHEET 1 OF 1
DATE STARTED: 10/16/02
DATE COMPLETED: 10/16/02

PROJECT NAME: MONTGOMERY
SITE NAME: BR 24
STATION: 1+12.50
GROUND EL.: 255.946

PROJECT NUMBER: BRO 1448 (20)
SITE NO.: TH 35
OFFSET: 3.40
G.W. DEPTH: NO WATER FOUND

BORING CREW
CREW CHIEF: TALLMAN
DRILLER: TALLMAN
LOGGER: RUSSELL
ADDITIONAL CREW:

BORING RIG: LAG TRACK RIG
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL



DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER 0.3 m	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
				Top of bedrock @ 0.90 m					
		Run#1: NXMDC, 0.90m-2.42m, Rec. = 0.65m, See Geologist's Report.	RUN	REC%	RQD%	Dip°			
			1	43	17	40-60			
		Run#2: NXMDC, 2.42m-3.94m, Rec. = 1.52m, See Geologist's Report.	2	100	90	60			
		Hole stopped @ 3.94m							
5		DRILLER'S NOTES: 1. Rock Breaks at 1.65m-1.70m.							
10									

GEOLOGISTS REPORT:

Run#1: Gray quartz-sericite-albite-chlorite schist, Drilling break from 1.65m to 1.70m, Moderately hard, Slightly weathered, Fair to poorly competent.

Run#2: Silver gray quartz-sericite-albite-chlorite schist with graphitic partings, Moderately hard, Unweathered, Competent.

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH DIVISION
SUBSURFACE INFORMATION

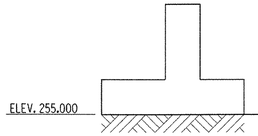
HOLE NO.: B-08
SHEET 1 OF 1
DATE STARTED: 10/15/02
DATE COMPLETED: 10/15/02

PROJECT NAME: MONTGOMERY
SITE NAME: BR 24
STATION: 1+13.00
GROUND EL.: 256.345

PROJECT NUMBER: BRO 1448 (20)
SITE NO.: TH 35
OFFSET: 4.00
G.W. DEPTH: NO WATER FOUND

BORING CREW
CREW CHIEF: TALLMAN
DRILLER: TALLMAN
LOGGER: RUSSELL
ADDITIONAL CREW:

BORING RIG: LAG TRACK RIG
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL



DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER 0.3 m	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
				Top of bedrock @ 0.90 m					
		Run#1: NXMDC, 0.90m-2.42m, Rec. = 1.50m, See Geologist's Report.	RUN	REC%	RQD%	Dip°			
			1	99	99	30			
		Run#2: NXMDC, 2.42m-3.94m, Rec. = 1.52m, See Geologist's Report.	2	100	100	30			
		Hole stopped @ 3.94m							
5									
10									

GEOLOGISTS REPORT:

Run#1: Silver gray quartz-sericite-albite-chlorite schist, Hard, Unweathered, Competent.

Run#2: Silver gray quartz-sericite-albite-chlorite schist, Hard, Unweathered, Competent.

SHEET NAME: **BORING LOG #3**

PROJECT NAME: MONTGOMERY
PROJECT NUMBER: BRO 1448(20)

HIGHWAY NO.: TH 35
BRIDGE NO.: 24
OVER: PACIFIC BROOK

FILE NAME: /PW/94J124/sJ124bor.dgn
PROJECT MANAGER: R. WHITCOMB
DESIGNED BY: C. CARLSON
BRIDGE SHEET NUMBER:

PLOT DATE: 06-DEC-2005
DRAWN BY: J. TOUCHETTE
IPARM NAME: sJ124br4.i
SHEET 15 OF 50

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH DIVISION
SUBSURFACE INFORMATION

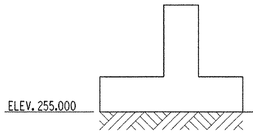
HOLE NO.: B-09
SHEET 1 OF 1
DATE STARTED: 10/17/02
DATE COMPLETED: 10/17/02

PROJECT NAME: MONTGOMERY
SITE NAME: BR 24
STATION: 1+113.40
GROUND EL.: 256.181

PROJECT NUMBER: BRO 1448 (20)
SITE NO.: TH 35
OFFSET: 0.00
G.W. DEPTH: NO WATER FOUND

BORING CREW
CREW CHIEF: RUSSELL
DRILLER: RUSSELL
LOGGER: GARROW
ADDITIONAL CREW:

BORING RIG: LAG TRACK RIG
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL



DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER 0.3 m	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
				Top of bedrock @ 0.70 m					
		Run#1: NXMDC, 0.70m-2.22m, Rec. = 1.28m, See Geologist's Report.	RUN 1	REC% 84	RQD% 66	Dip° 60			
		Run#2: NXMDC, 2.22m-3.74m, Rec. = 1.45m, See Geologist's Report.	2	95	86	60			
		Hole stopped @ 3.74m							
5									
10									

GEOLOGISTS REPORT:

Run#1: Silver gray quartz-sericite-albite-chlorite schist, Hard, Top 0.3m severely weathered, Unweathered below 1.00m, Competent below 1.00m.

Run#2: Silver gray quartz-sericite-albite-chlorite schist, Hard, Unweathered, Competent.

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH DIVISION
SUBSURFACE INFORMATION

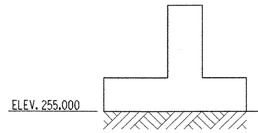
HOLE NO.: B-10
SHEET 1 OF 1
DATE STARTED: 10/21/02
DATE COMPLETED: 10/22/02

PROJECT NAME: MONTGOMERY
SITE NAME: BR 24
STATION: 1+110.00
GROUND EL.: 255.330

PROJECT NUMBER: BRO 1448 (20)
SITE NO.: TH 35
OFFSET: 0.00
G.W. DEPTH: NO WATER FOUND

BORING CREW
CREW CHIEF: TALLMAN
DRILLER: TALLMAN
LOGGER: RUSSELL
ADDITIONAL CREW:

BORING RIG: LAG TRACK RIG
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL



DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER 0.3 m	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
				Top of bedrock @ 0.60 m					
		Run#1: NXMDC, 0.60m-2.12m, Rec. = 1.52m, See Geologist's Report.	RUN 1	REC% 100	RQD% 100	Dip° 60			
		Run#2: NXMDC, 2.12m-3.64m, Rec. = 1.52m, See Geologist's Report.	2	100	100	60			
		Hole stopped @ 3.64m							
5									
10									

GEOLOGISTS REPORT:

Run#1: Silver gray quartz-sericite-albite-chlorite schist, Hard, Unweathered, Competent.

Run#2: Silver gray quartz-sericite-albite-chlorite schist, Hard, Unweathered, Competent.

SHEET NAME: **BORING LOG #4**

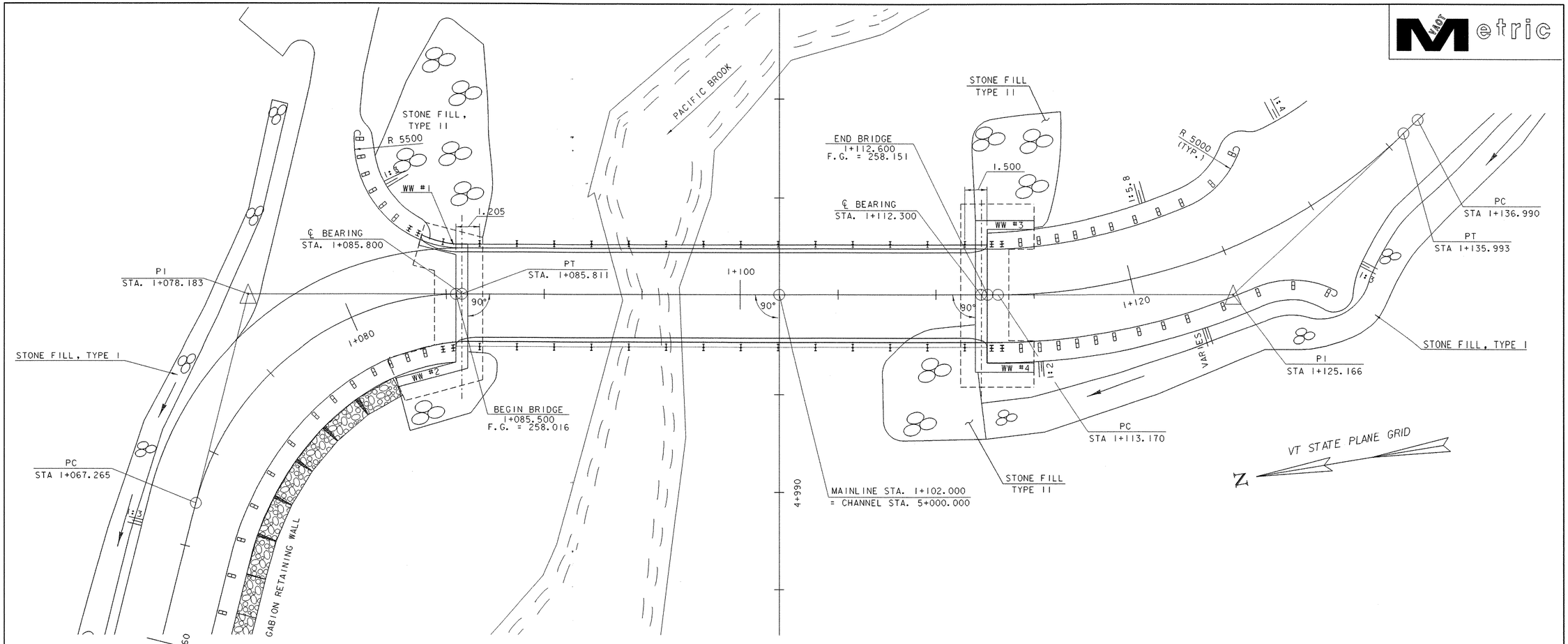
PROJECT NAME: MONTGOMERY
PROJECT NUMBER: BRO 1448(20)

HIGHWAY NO.: TH 35
BRIDGE NO.: 24
OVER: PACIFIC BROOK

FILE NAME: /PW/94J124/sJI24bor.dgn
PROJECT MANAGER: R. WHITCOMB
DESIGNED BY: C. CARLSON
BRIDGE SHEET NUMBER:

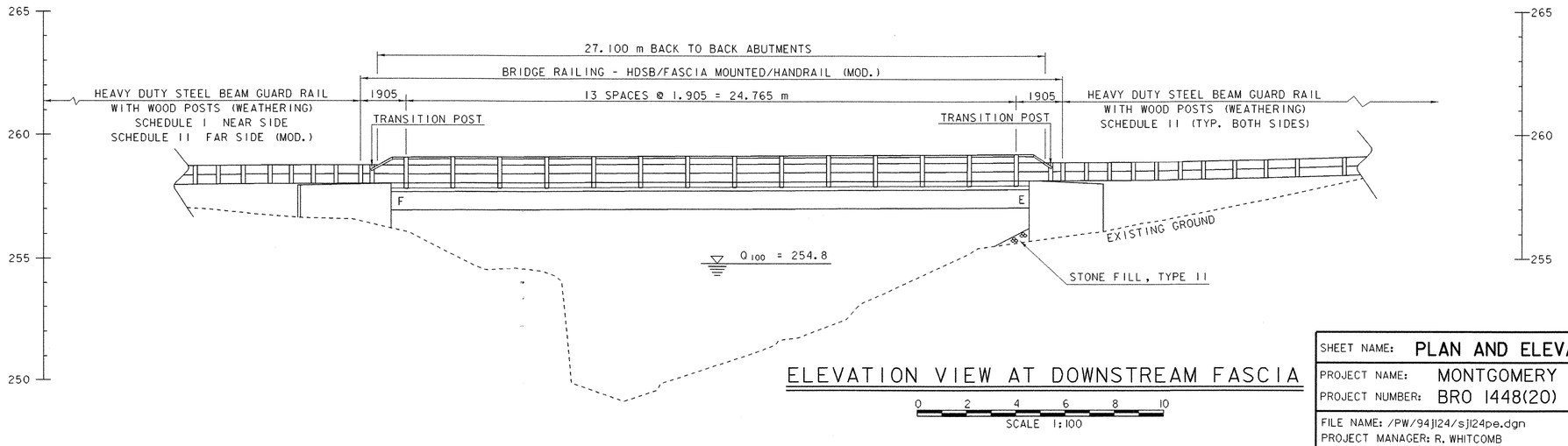
PLOT DATE: 06-DEC-2005
DRAWN BY: J. TOUCHETTE
IPARM NAME: sJI24br5.1
SHEET 16 OF 50

Metric



PLAN VIEW

0 2 4 6 8 10
SCALE 1:100



ELEVATION VIEW AT DOWNSTREAM FASCIA

0 2 4 6 8 10
SCALE 1:100

SHEET NAME: **PLAN AND ELEVATION**

PROJECT NAME: MONTGOMERY
PROJECT NUMBER: BRO 1448(20)
HIGHWAY NO.: TH 35
BRIDGE NO.: 24
OVER: PACIFIC BROOK

FILE NAME: /PW/94jl24/sjl24pe.dgn
PROJECT MANAGER: R. WHITCOMB
DESIGNED BY: C. CARLSON
BRIDGE SHEET NUMBER:
PLOT DATE: 06-DEC-2005
DRAWN BY: T. HUSK
IPARM NAME: sjl24pe.i
SHEET 17 OF 50

STATE OF VERMONT
AGENCY OF TRANSPORTATION

EROSION CONTROL NARRATIVE

Metric

DESCRIPTION OF PROJECT

This project involves the reconstruction of a bridge over the Pacific Brook. The project is on Nutting Road, an unpaved, Class III town highway, in the Town of Montgomery. A new single lane, single span, steel grider bridge will be constructed downstream of the existing bridge while traffic is maintained on the existing bridge during construction. Following completion of the new bridge, the existing bridge and abutments will be removed. In addition, a portion of the southern approach will also be removed to accomodate the larger waterway opening of the new bridge. Total roadway approach work, including both approaches, is approximately 133 meters. The limits of construction do not approach any buildings or other structures but do encroach upon a leach field area. No 'Threatened & Endangered Species,' Wetlands, or Historic Resources have been identified in the project area. The existing bridge structure has been cleared for removal as it has been photo-documented for Historical purposes. The site is located, based upon NAD 83/92 at 258776.257 N, 491595.522 E.

In addition to the bridge replacement, a retaining wall constructed of gabion baskets will be constructed along the western approach to the bridge. The wall will be 34 meters long and serve to reduce the limits of impact as the roadway is raised in the approach to the new bridge.

It is anticipated that this project will last one construction season.

Total disturbed area (excluding waste, borrow and staging areas):
0.25 ha (0.62 ac.)

SITE INVENTORY & ANALYSIS

OFF SITE DRAINAGE CHARACTERISTICS:
The property surrounding the project site consists of well established vegetation, moderate to steeply sloping, mixed softwood and hardwood forest with well defined drainageways. Due to the nature of the surrounding terrain, runoff water entering the project site will be primarily limited to that which is conveyed along roadway ditches, and that which follows Nutting Road along the 14% grade at the end of the project limits. The current roadway ditches are not well defined and are not lined with stone.

DRAINAGE, WATERWAYS, BODIES OF WATER:
Pacific Brook is located in the project area. There are no other waterbodies or wetlands within the project area. The Pacfic Brook is classified as flashy and steep with mountainous, forested surroundings and containing a streambed of mostly ledge with some boulders, cobbles and gravel. The contributing drainage area at the bridge crossing is 8.6 sq. km.

TOPOGRAPHY, EXISTING ROADS, BUILDINGS, UTILITIES:
The topography of the project site is mountainous and wooded with Nutting road following parallel to Pacific Brook which is contained by steep river banks along each side. Development along Nutting road consists of a mix of permanent and seasonal residences, two of which exist near the project limits. Overhead utility service follows along Nutting Road with the need for relocation of the utility poles unlikely.

VEGETATION:
A mix of hardwood and softwood trees of all sizes exist along Nutting Road. The two residences near the bridge site have small areas of lawn and landscape plantings. No fields or other agricultural crops exist near the project. Impacts to vegetation will be limited to that which are effected by the construction of the new bridge along a new alignment. Some mature 300 - 500 (12" - 20") trees, both softwood and hardwood, will be removed, however, a gabion retaining wall along the western approach to the bridge will reduce these impacts along the stream bank by allowing a steeper transition from the road grade to native ground.

Following construction of the new bridge, the existing bridge and roadway approaches will be removed, the slopes stabilized with stone fill and vegetation reestablished with standard seed & mulch practices. Included are three 80 mm caliper maple trees to be planted to help restore the site.

SOILS:
The Soil Conservation Service has mapped the soils throughout Franklin County. The soil type identified for this project site is WxD (Woodstock-Rock outcrop complex). This soil type is described as '...Moderately steep and hilly, shallow, somewhat excessively drained and excessively drained soils and rock outcrop in irregularly shaped areas on bedrock ridges... they have a surface layer of very dark grayish brown fine sandy loam 2 inches thick. The subsoil is friable, brown to dark brown gravelly fine sandy loam 10 inches thick. Hard, massive schist bedrock is at a depth of 12 inches....Permeability is moderately rapid...The hazard of erosion is severe. Runoff is rapid on the rock outcrop part of this complex.'

The listed Soil Erodibility Coefficient (K-value) for this soil type is 0.20. Generally, K-values indicate the following: 0.0 - 0.23 = low erodibility; 0.24 - 0.36 = moderate erodibility; 0.37 and higher = higher erodibility.

SENSITIVE RESOURCE AREAS:
No 'Threatened & Endangered Species' have been identified within the project limits and there will be no adverse effect to Historic or Archaelogical features. Pacific Brook is the only identified resource and being a steep, high gradient stream, there are no wetlands within the vicinity of the project.

RIPARIAN BUFFER:
A 15 meter (50') riparian conservation buffer boundary will be maintained. Earth disturbances within this buffer zone shall be minimized.

PROXIMITY TO NATURAL OR MAN-MADE WATER FEATURES:
Disturbance of soils near natural or man-made waterways consists of that which is necessary to construct two new concrete bridge abutments and applicable roadway approaches as well as the removal of the existing crossing. Stabilization of disturbances to stream banks will be accomplished with Stone Fill, Type II.

TEMPORARY EROSION PREVENTION & SEDIMENT CONTROL

Temporary erosion prevention measures to be utilized include:

"Project Demarcation Fencing," denoted -PDF- on the plans, to delineate the limits the contractor can access with construction equipment. This measure limits the area that can be disturbed and exposed to erosion.

Seeding, mulching and biodegradable erosion control matting, or an equivalent product, will be ulitized on all slopes steeper than 3H:1V that are not lined with stone fill. Areas at stations 1+125 - 1+135 RT and 1+147 - 1+160 LT will require this technique. These slopes shall be stabilized within 48 hours of reaching final grade or during intermitant phases of construction activity.

Tracking of all exposed slopes, combined with temporary mulching, will also be utilized on a regular basis. Any slopes to be exposed for several days prior to final grading shall be tracked and mulched. The forecast of rainfall events shall also trigger protection of exposed slopes.

Temporary stone check dams will be placed in ditches to reduce flow velocities and thus reduce the potential for erosion. Check dams will be placed along the ditches such that the elevation of the top of each check dam corresponds with the elevation of the toe of the preceding upslope check dam. See 'Erosion Controls Details' sheet. The check dams may be removed once the stone lining of the ditches is complete and the surrounding area stabilized.

Temporary measures to control sediment transport include:

Silt fence will be installed a distance of 1500 - 3000 (5'-10') from the toe of slopes to prevent sediment transport to down gradient areas. Each line of silt fence will be placed along the contour with ends turned slightly uphill to create a ponding effect should water try to run along the fencing and around the ends. The maximum slope length between separate runs of silt fence is 30 000 (100'). Silt fence shall be installed prior to any upslope earthwork.

Sand bags filled with clean, small diameter stone, or an equivalent barrier, will be utilized around the drop inlet to create a temporary ponding area for particles to settle out as water drains through the barrier. Inlet protection shall be installed as soon as there is the possibility of water flowing to the structure. The height of the barrier shall be limited such that the ponding area does not present a hazard to the traveling public. Alternative inlet control measures shall be approved by the Engineer prior to implementation.

Measures such as temporary stone check dams, silt fence, and sand bags shall be checked regulary for accumulation of sediment. Sediment build-up shall be removed when the level of sediment reaches one-half the height of the control measure. Sediments shall be disposed of in an approved area such that they will not be subject to erosion.

Stabilized construction entrances to the project site, staging areas, as well as to waste and borrow areas shall be established. The minimum size of a stabilized construction entrance is 3700 x 15 000 (12' x 50'). All surface water flowing to or diverted towards a construction entrance shall be piped under the stone. Pipes shall be appropriately sized for the contributing area, however, no pipes smaller than 150mm diameter shall be used. See typical detail on 'Erosion & Sediment Control Plan' sheet for materials and construction method to be utilized when constructing a stabilized entrance.

PERMANENT EROSION CONTROL MEASURES

Several permanent erosion control measures will be utilized:

Stone lining of roadway ditches with clean, angular Stone Fill, Type I will be used to prevent erosion during storm events. See 'Erosion Control Details' sheet for typical ditch section.

Stone lining of the stream banks with Stone Fill, Type II as specified by VTrans Hydraulics personnel is specified. This stone will protect from stream bank erosion during design storm events.

Stone Fill, Type I will be utilized at culvert outlets to dissipate water velocities and reduce erosion potential.

Grass, or other suitable ground cover will be established outside of the roadway limits where stone lining has not been specified. Specifically, stations 1+020 - 1+050 RT, the 3H on 1V slope shall be seeded and mulched promptly upon achieving final grade.

GENERAL EROSION & SEDIMENT CONTROL GUIDELINES

The Erosion Control Plans are meant as a guideline for preventing erosion and controlling sediment transport. The work outlined in this narrative consists of applying measures throughout the life of the project to control erosion and minimize the sedimentation of receiving waters. The measures include stabilization and structural practices, stormwater controls and other pollution prevention controls.

Coordinate the installation, use, and removal of erosion and sediment control measures with contruction activities to ensure economical, effective and continuous erosion and sediment control. Employ temporary stabilization practices in incremental stages as construction proceeds. The contractor will use additional erosion control measures as necessitated by the sequence of construction and as directed by the Engineer. See section 105.23 of the Vermont AOT Standard Specifications for Construction, dated 2001.

Install all erosion and sediment control measures as shown in the Erosion Control Plan or as directed by the Engineer. Do not modify the type, size or location of any control or practice without approval of the Engineer. Any changes shall be noted on the plans, in the weekly inspection report, and reported to the appropriate authority in a timely manner. Inspect all control measures weekly and after each rainfall event. Repair measures promptly once damage is discovered.

Preventing initial soil erosion is much more effective than treating eroded sediment. Therefore, stabilize all disturbed areas promptly after construction activity has temporarily or permanently ceased. Temporary vegetation shall be established if the area is to be without construction activity for a period of 14 days. Perimeter control measures shall be installed following clearing, but prior to the start of any grubbing or grading activity, install other temporary controls in incremental stages as construction proceeds.

Maintaining vegetated buffers along stream banks, wetlands or other sensitive areas is a crucial erosion and sediment control measure that should be established wherever possible.

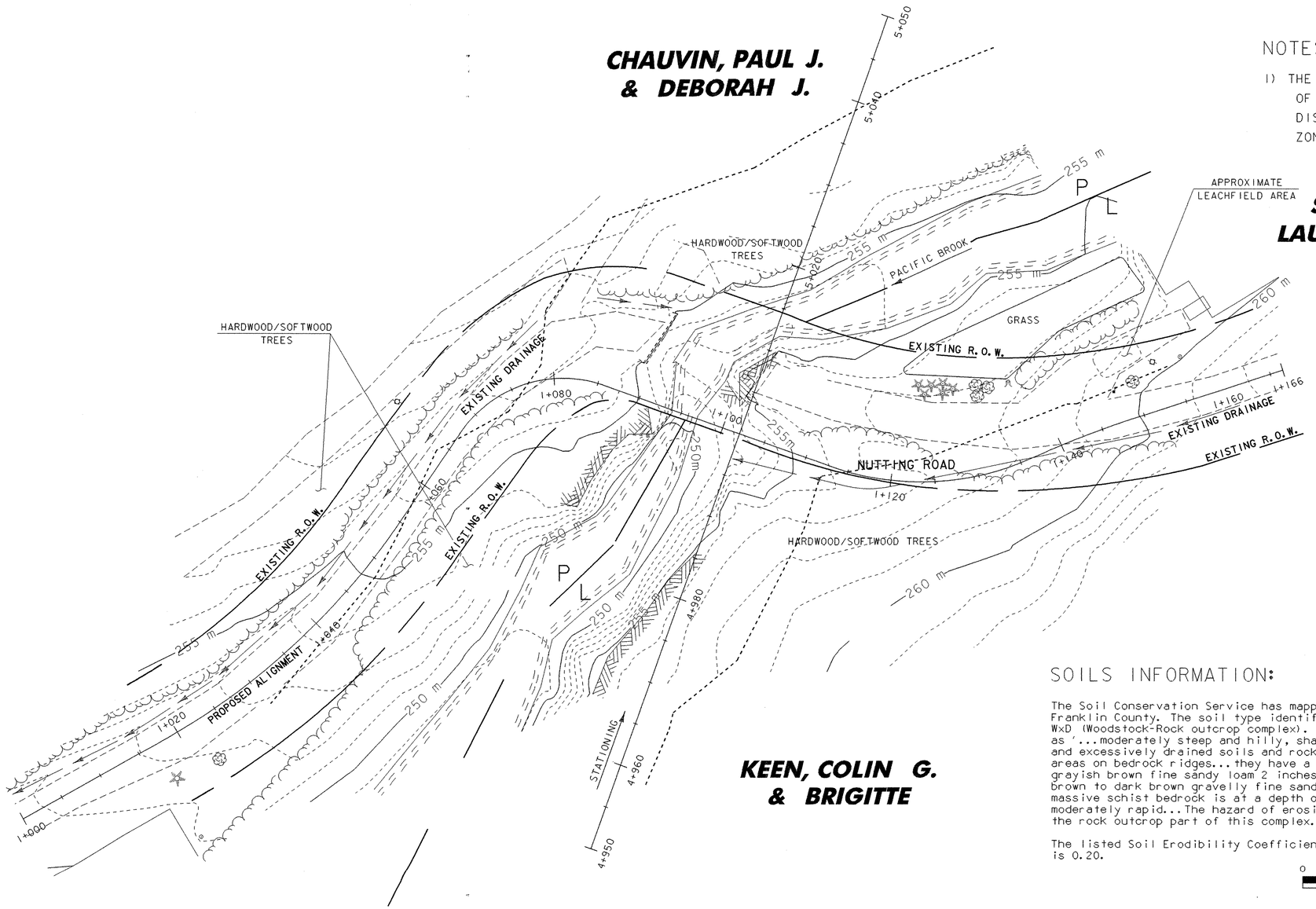
Control only sediment-laden runoff generated by the project site. Collect and route clean offsite runoff around or through the project site using diversion berms, diversion channels, culverts and/or temporary pipes.

Do not allow construction equipment to operate on the downslope side of perimeter control measures.

PROJECT NAME:	**MONTGOMERY**		
PROJECT NUMBER:	**BRO 1448(20)**		
FILE NAME:	**/PW/94j124/sj124ecn.xls**	PLOT DATE:	**9/29/2005**
PROJECT LEADER:	**R. WHITCOMB**	DRAWN BY:	**J. GILMORE**
DESIGNED BY:	**D. BONNEAU**	CHECKED BY:	**D. BONNEAU**
EROSION CONTROL NARRATIVE		SHEET	**18** OF **50**

Metric

N VT STATE PLANE GRID



NOTES:

1) THE RIPARIAN BUFFER IS A RESOURCE OF SPECIFIC CONCERN. EARTH DISTURBANCES WITHIN THE BUFFER ZONE SHALL BE MINIMIZED.

SOILS INFORMATION:

The Soil Conservation Service has mapped the soils throughout Franklin County. The soil type identified for this project site is WxD (Woodstock-Rock outcrop complex). This soil type is described as '...moderately steep and hilly, shallow, somewhat excessively drained and excessively drained soils and rock outcrop in irregularly shaped areas on bedrock ridges... they have a surface layer of very dark grayish brown fine sandy loam 2 inches thick. The subsoil is friable, brown to dark brown gravelly fine sandy loam 10 inches thick. Hard, massive schist bedrock is at a depth of 12 inches....Permeability is moderately rapid...The hazard of erosion is severe. Runoff is rapid on the rock outcrop part of this complex.'

The listed Soil Erodibility Coefficient (K-value) for this soil type is 0.20.

0 10 20

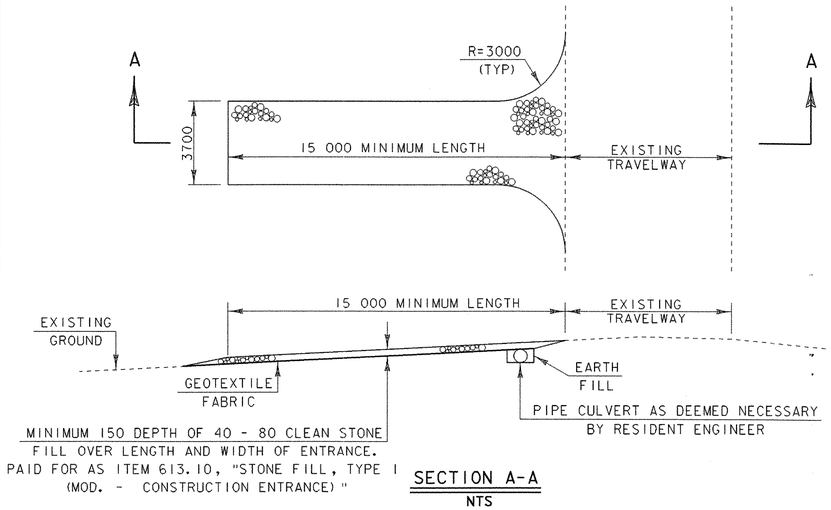
SCALE 1:250

LEGEND	
----------	RIPARIAN BUFFER

DATUM	
VERTICAL	NAVD88
HORIZONTAL	NAD 83/92

SHEET NAME: EXISTING CONDITIONS SITE PLAN

PROJECT NAME:	MONTGOMERY	HIGHWAY NO.:	TH 35
PROJECT NUMBER:	BRO 1448(20)	BRIDGE NO.:	24
		OVER:	PACIFIC BROOK
FILE NAME: /PW/94J124/sJ124ero.dgn		PLOT DATE:	06-DEC-2005
PROJECT MANAGER: R. WHITCOMB		DRAWN BY:	T. HUSK
DESIGNED BY: D. BONNEAU		IPARM NAME:	sJ124ec2.1
BRIDGE SHEET NUMBER:		SHEET	19 OF 50



SECTION A-A
NTS

STABILIZED CONSTRUCTION ENTRANCE

NOTES:

SILT FENCE INSTALLATION MAY REQUIRE PHASING TO MAXIMIZE EFFECTIVENESS. INSTALL AND/OR MOVE SILT FENCE AS CONSTRUCTION PROGRESSES TO OBTAIN THE GREATEST PREVENTION OF SEDIMENT TRANSPORT. ALL SILT FENCE INSTALLATION SHALL BE PROPERLY KEYED INTO THE GROUND AND SUPPORTED AS DETAILED ON THE 'EROSION CONTROL DETAILS' SHEET. SILT FENCE SHOULD BE INSTALLED ALONG THE CONTOURS TO PREVENT CONCENTRATION OF RUNOFF. THE ENDS OF EACH RUN OF SILT FENCE SHOULD BE TURNED UPHILL TO PROVIDE A SMALL POOL FOR SILT SHOULD WATER TRY TO RUN AROUND THE END OF THE SILT FENCE.

TEMPORARY STONE CHECK DAMS SHALL BE KEYED INTO THE GROUND AND CONSTRUCTED AS PER THE 'EROSION CONTROL DETAILS' SHEET. THE PURPOSE OF TEMPORARY CHECK DAMS IS TO REDUCE RUNOFF VELOCITIES THUS PREVENTING EROSION.

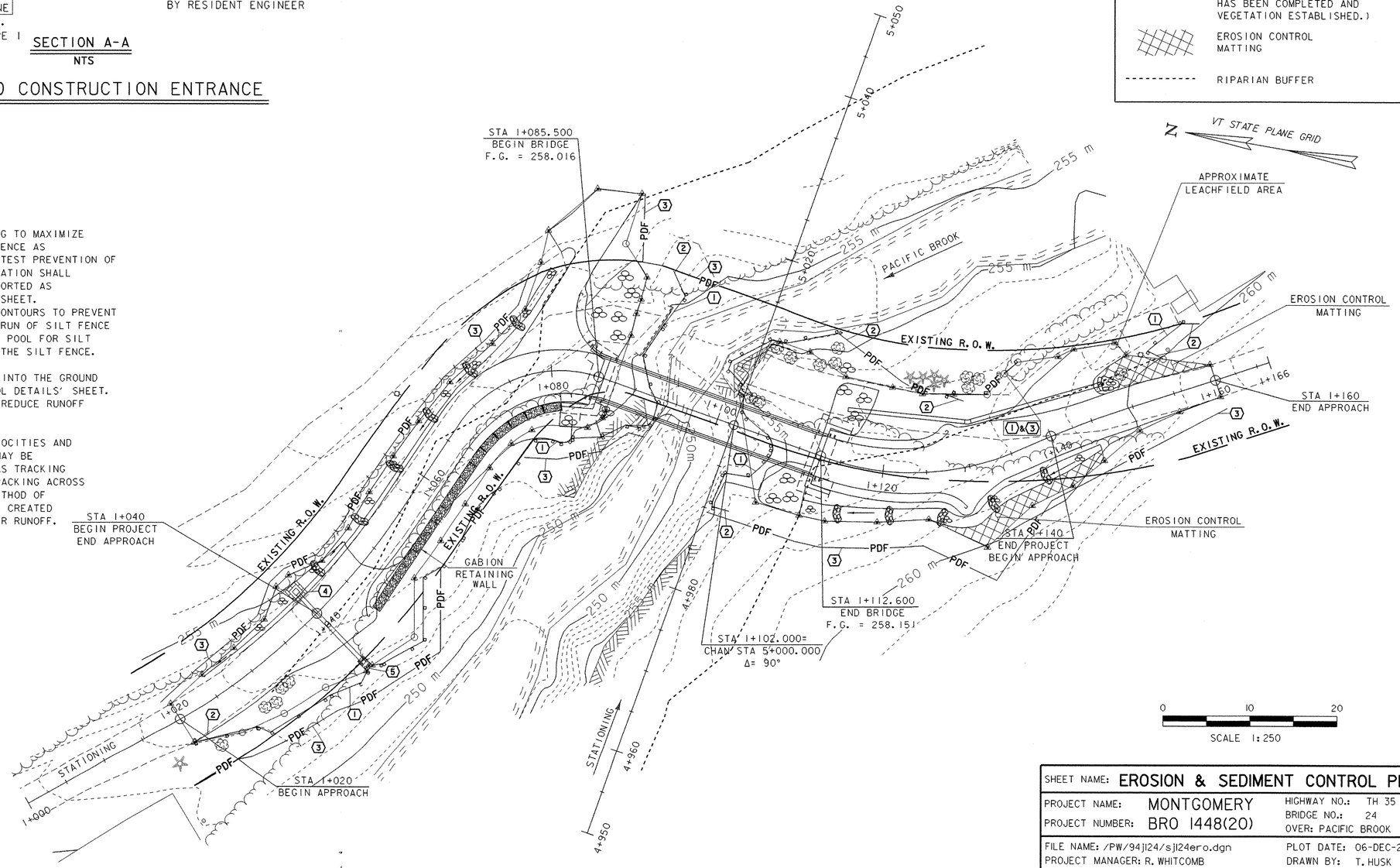
SURFACE ROUGHENING HELPS REDUCE RUNOFF VELOCITIES AND INCREASES INFILTRATION RATES. ROUGHENING MAY BE ACCOMPLISHED BY A NUMBER OF METHODS SUCH AS TRACKING UP AND DOWN THE SLOPE WITH A BULLDOZER, TRACKING ACROSS THE SLOPE WITH A WHEELED VEHICLE OR ANY METHOD OF SCARIFYING THE SLOPE SUCH THAT THE GROOVES CREATED RUN PERPENDICULAR TO THE DIRECTION OF WATER RUNOFF.

EROSION AND SEDIMENT CONTROL INDEX	
NO.	DESCRIPTION
(1)	INSTALL SILT FENCE TO CONTAIN EROSION AS INDICATED
(2)	ENDS OF FENCE TURNED UPHILL TO CREATE PONDING
(3)	PROJECT LIMITS DEMARCATION FENCE (SNOW FENCE (MOD.-PDF))
(4)	GRAVEL BAG DROP INLET PROTECTION, OR EQUIVALENT
(5)	STONE PAD OUTLET CONTROL

NOTE: ALL DISTURBED AREAS WITH SLOPES GREATER THAN 1:3 WILL REQUIRE TEMPORARY EROSION MATTING (SEE EROSION CONTROL DETAILS SHEET)

LEGEND

- SILT FENCE
- STONE FILL, TYPE I
- STONE FILL, TYPE II
- PDF — PROJECT DEMARCATION FENCE DEFINING LIMITS OF DISTURBANCE (SNOW FENCE (MOD.-PDF))
- STONE CHECK DAM (TEMP.), OR EQUIVALENT PRODUCT, (TO BE REMOVED ONCE STONE FILL, TYPE I IN DITCHES HAS BEEN COMPLETED AND VEGETATION ESTABLISHED.)
- EROSION CONTROL MATTING
- RIPARIAN BUFFER



DATUM	
VERTICAL	NAVD88
HORIZONTAL	NAD 83/92

SHEET NAME: EROSION & SEDIMENT CONTROL PLAN

PROJECT NAME:	MONTGOMERY	HIGHWAY NO.:	TH 35
PROJECT NUMBER:	BRO 1448(20)	BRIDGE NO.:	24
		OVER:	PACIFIC BROOK
FILE NAME:	/PW/94J124/sj124ero.dgn	PLOT DATE:	06-DEC-2005
PROJECT MANAGER:	R. WHITCOMB	DRAWN BY:	T. HUSK
DESIGNED BY:	D. BONNEAU	IPARM NAME:	sj124ec3.i
BRIDGE SHEET NUMBER:		SHEET	20 OF 50

EAST Metric

N VT STATE PLANE GRID

CHAUVIN, PAUL J. & DEBORAH J.

SCOTT, LAURA FALK

KEEN, COLIN G. & BRIGITTE

STA 1+085.500
BEGIN BRIDGE
F.G. = 258.016

STA 1+040
BEGIN PROJECT
END APPROACH

STA 1+020
BEGIN APPROACH

STA 1+112.600
END BRIDGE
F.G. = 258.151

STA 1+102.000=
CHAN STA 5+000.000
Δ= 90°

STA 1+140
END PROJECT
BEGIN APPROACH

STA 1+160
END APPROACH

EXISTING R.O.W.

PROPOSED EXISTING R.O.W.

PACIFIC BROOK

GABION RETAINING WALL

STATIONING

255 m

250 m

260 m

NOTE:
CONTOURS SHOWN INDICATE THE EXISTING SITE.
SEE CROSS SECTION AND CHANNEL SECTION SHEETS
FOR GRADE CHANGES.

0 10 20
SCALE 1:250

LEGEND

---------- RIPARIAN BUFFER

DATUM

VERTICAL NAVD88
HORIZONTAL NAD 83/92

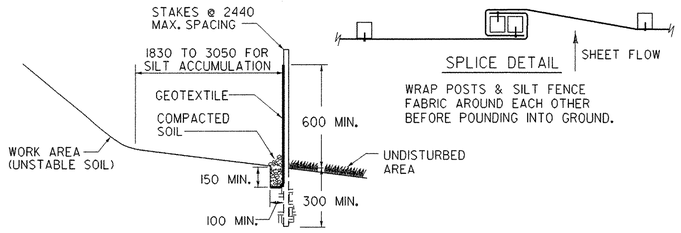
SHEET NAME: FINAL CONDITIONS SITE PLAN

PROJECT NAME: MONTGOMERY
PROJECT NUMBER: BRO 1448(20)
HIGHWAY NO.: TH 35
BRIDGE NO.: 24
OVER: PACIFIC BROOK

FILE NAME: /PW/94J124/sj124ero.dgn
PROJECT MANAGER: R. WHITCOMB
DESIGNED BY: D. BONNEAU
BRIDGE SHEET NUMBER:
PLOT DATE: 06-DEC-2005
DRAWN BY: T. HUSK
IPARM NAME: sj124ec4.I
SHEET 21 OF 50

NOTE: REFER TO THE 'VERMONT HANDBOOK FOR SOIL EROSION AND SEDIMENT CONTROL FOR CONSTRUCTION SITES' FOR ADDITIONAL EROSION CONTROL MEASURES.

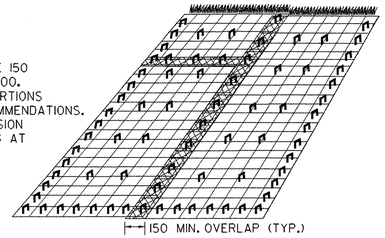
HAY BALES AND SILT FENCE ARE NOT TO BE USED ACROSS AREAS OF CONCENTRATED FLOW.



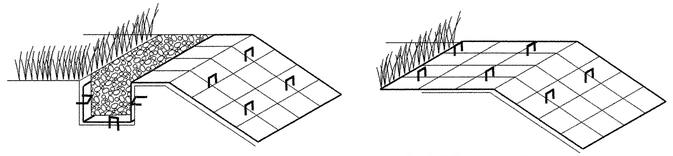
DETAIL "A"
SILT FENCE

NOTES :
1. DO NOT USE SILT FENCE IN STREAMS, DRAINAGE DITCHES, OR AREAS OF CONCENTRATED FLOW.
2. BACK WITH STAKED-IN-PLACE HAY BALES OR WIRE FENCE IF ADDITIONAL SUPPORT IS NEEDED.
3. MUST BE REMOVED WHEN SOIL IS STABILIZED.

NOTES:
1. ALL FABRIC OVERLAPS SHALL BE 150 MINIMUM WITH STAPLES EVERY 500.
2. STAPLE EDGES AND INTERIOR PORTIONS PER THE MANUFACTURERS RECOMMENDATIONS.
3. SEE "ANCHOR DETAILS FOR EROSION MATTING" DETAIL FOR ANCHORING AT TOPS OF SLOPES.



DETAIL "C"
EROSION MATTING FOR SLOPES STEEPER THAN 1:3



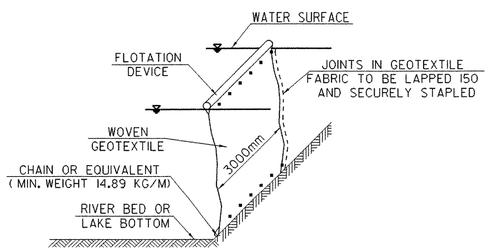
ANCHOR DETAIL 'E1'

INSERT & STAPLE FABRIC INTO 150 X 150 TRENCH PRIOR TO BACKFILLING & COMPACTING SOIL. USE 3 STAPLE PATTERN EVERY 500.

ANCHOR DETAIL 'E2'

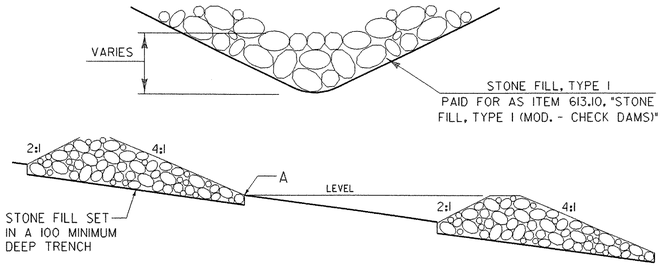
IF THE TOP OF SLOPE IS RELATIVELY FLAT EXTEND MATERIAL APPROXIMATELY 600 AND STAPLE EVERY 500 MINIMUM.

DETAIL "E"
ANCHOR DETAILS FOR EROSION MATTING



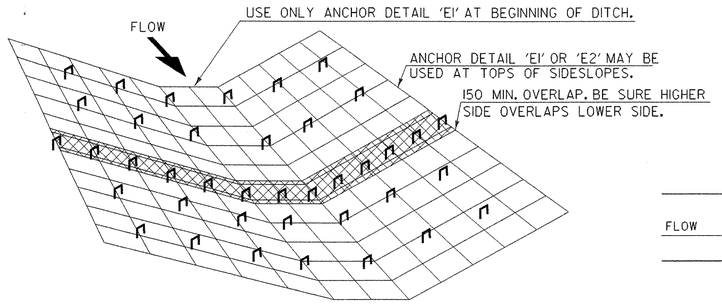
DETAIL "F"
FILTER CURTAIN

1. NOT TO BE USED ACROSS THE FLOW OF WATER
2. HEIGHT SHOULD BE SUFFICIENT TO ALLOW FOR FLUCTUATIONS IN WATER SURFACE ELEVATION
3. ANCHOR FIRMLY IN PLACE AS NEEDED
4. INSTALL PRIOR TO EARTH DISTURBING ACTIVITIES AND/OR INSTALLATION OF COFFERDAM WHERE APPLICABLE
5. LEAVE IN PLACE UNTIL UP-SLOPE AREAS ARE STABLE AND/OR COFFERDAM IS REMOVED
6. USE CARE DURING REMOVAL TO PREVENT THE RELEASE OF CAPTURED SEDIMENT AS MUCH AS POSSIBLE



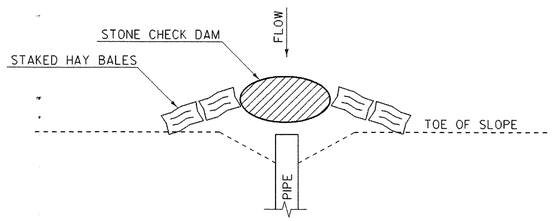
DETAIL "B"
TEMPORARY STONE CHECK DAM

NOTES :
1. CHECK DAMS TO BE USED PRIOR TO COMPLETION OF STONE LINING IN DITCHES
2. LOCATE DOWNSTREAM STRUCTURE SUCH THAT POINT "B" IS APPROXIMATELY LEVEL WITH THE LOWEST GROUND ELEVATION "A" OF THE UPSTREAM STRUCTURE
3. PAYMENT FOR STONE CHECK DAMS WILL BE MADE FOR THE QUANTITY OF STONE FILL USED. REMOVAL OF STONE CHECK DAMS WILL BE INCIDENTAL TO THE STONE FILL ITEM USED.

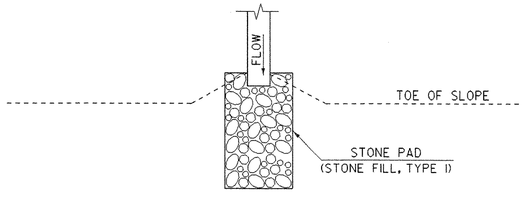


DETAIL "D"
EROSION MATTING FOR DITCHES

1. TO BE USED WHERE SLOPE OF DITCHLINE RANGES FROM 1% - 2.5%. SLOPES EXCEEDING 2.5% SHALL BE LINED WITH STONE FILL, TYPE I.
2. OVERLAPS SHALL BE 150 MINIMUM IN THE DIRECTION OF FLOW AND STAPLED EVERY 500 MIN. THROUGH BOTH FABRICS.
3. USE STAPLE SPACING PER MANUFACTURER'S RECOMMENDATIONS.



DETAIL "G"
EXISTING PIPE INLET CONTROL



DETAIL "H"
PIPE OUTLET CONTROL

SEEDING FORMULA
RURAL AREAS

% WT.	kg/ha	NAME	PUR %	GERM %
37.5	26.0	CREEPING RED FESCUE	98	85
37.5	26.0	TALL FESCUE	95	90
5.0	4.0	RED TOP	95	90
15.0	10.0	BIRDSFOOT TREFOIL	98	85
5.0	4.0	ANNUAL RYE GRASS	95	85
100.0	70.0			

GENERAL NOTES

SEED MIXTURE: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.

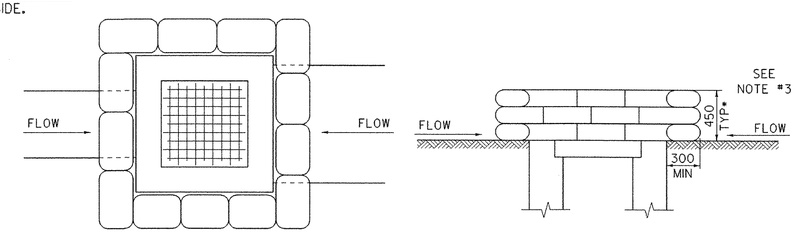
SEED: TO BE APPLIED PER SEEDING FORMULAS OR AS DIRECTED BY THE ENGINEER.

FERTILIZER: FORMULA 10-20-10. TO BE USED WITH SEED. APPLIED AT THE RATE OF 560 kg/ha. (HYDRO SEEDERS MAY USE 19-19-19 FORMULA).

AGRICULTURAL LIMESTONE: TO BE APPLIED AT THE RATE OF 4500 kg/ha, OR AS DIRECTED BY THE ENGINEER.

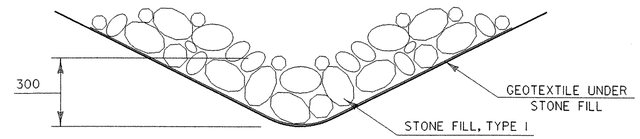
HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 4500 kg/ha, OR AS DIRECTED BY THE ENGINEER.

TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.



DETAIL "I"
PROPOSED PIPE INLET CONTROL
GRAVEL BAGS

1. THE PURPOSE OF DRAINAGE STRUCTURE INLET PROTECTION IS TO PREVENT SEDIMENT FROM ENTERING A DRAINAGE SYSTEM, CREATING AND MAINTAINING A SMALL PONDING AREA ALLOWS SEDIMENT TO FALL OUT OF SUSPENSION PRIOR TO ENTERING THE STRUCTURE.
2. GRAVEL BAGS ARE FILLED WITH CLEAN, SMALL DIAMETER STONE ALLOWING WATER TO SLOWLY PERCOLATE THROUGH RATHER THAN SAND WHICH WOULD CREATE A DAM EFFECT.
3. THE TOP OF THE INLET PROTECTION SHALL BE SET AT THE MAXIMUM DESIRED WATER LEVEL BASED ON FIELD LOCATION AND CONDITIONS.



TYPICAL ROADWAY DRAINAGE DITCH

NOTE: DETAILS NOT TO SCALE

SHEET NAME: EROSION CONTROL DETAILS			
PROJECT NAME:	MONTGOMERY	HIGHWAY NO.:	TH 35
PROJECT NUMBER:	BRO 1448(20)	BRIDGE NO.:	24
		OVER:	PACIFIC BROOK
FILE NAME: /PW/94jl24/sjl24ero.dgn		PLOT DATE:	06-DEC-2005
PROJECT MANAGER: R. WHITCOMB		DRAWN BY:	SQUAD 1
DESIGNED BY:	SQUAD 1	IPARM NAME:	sjl24ec5.i
BRIDGE SHEET NUMBER:		SHEET	22 OF 50

STATE OF VERMONT
AGENCY OF TRANSPORTATION

DRAINAGE DETAIL SHEET

Metric

STATION km + m	STATION km + m	POS.	ASKEW no. deg.	INLET/OUTLET TYPE INLET	INLET/OUTLET TYPE OUTLET	DITCH IN	DITCH OUT	PIPE ARCH SPAN mm	PIPE ARCH RISE mm	PIPE ARCH L m	PIPE D mm	PIPE L m	ALLOWABLE OPTIONS CSP mm		ALLOWABLE OPTIONS CPEP mm		ALLOWABLE OPTIONS CAAP mm		PIPE ELBOW no. deg.	ES ea	CB ea	PROCD'	DEPTH DI mm	CONC CLASS B m^3	REINF STEEL kg	DI GRATE type	CHAN ELEV ea	DRY RUBBLE MASONRY m^3	TRENCH EXCAVATION EARTH m^3	TRENCH EXCAVATION ROCK m^3	COMM EXC m^3	UNC CHAN EXC m^3	STRUCT EXCAV m^3	GRAN BKFILL STRUCT m^3	GRAN BORR m^3	EROS MATT m^2	STONE FILL m^3	STONE FILL type	MARKER POSTS LT ea	MARKER POSTS RT ea			REMARKS
1+040		LT/RT									450	11	X		X		X					1	1350			B			18					6			1.5	I		1			*DI AT INLET, 1500 X 1000 STONE FILL,TYPE I PAD AT OUTLET
1+113.900	1+147.500	LT									450	30	X		X		X		22.5									3	23					17			0.5	I					*3000 X 1500 STONE FILL, TYPE I PAD AT INLET W/ DRY RUBBLE MASONRY HEADWALL AT INLET
SUB-TOTAL												41										1				1			3	41					23			2						
ROUNDING												0																	2	9					7			3						
TOTAL												**41 m**										**1 EA**				**1 EA**			**5 m3**	**50 m3**					**30 m3**			**5 m3**						

PROJECT NAME:	**MONTGOMERY**
PROJECT NUMBER:	**BRO 1448(20)**
FILE NAME:	**/PW/94j124/sj124drn.xls**
PROJECT LEADER:	**R. WHITCOMB**
DESIGNED BY:	**C. CARLSON**
DRAINAGE DETAIL SHEET	
PLOT DATE:	**11/2/2005**
DRAWN BY:	**J. GILMORE**
CHECKED BY:	**C. CARLSON**
SHEET	**23** OF **50**

STATE OF VERMONT
AGENCY OF TRANSPORTATION

GENERAL NOTES

Metric

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE AGENCY OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2001, AND ITS LATEST REVISIONS, AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SEVENTEENTH EDITION, AND ITS LATEST REVISIONS.

2. THE BRIDGE IS DESIGNED FOR MS 22.5 LIVE LOAD WITH NO ALLOWANCE FOR FUTURE PAVEMENT.

3. IN-STREAM CONSTRUCTION SHALL BE RESTRICTED TO JUNE 1 TO OCTOBER 1, UNLESS THE CONTRACTOR OBTAINS WRITTEN PERMISSION FROM THE AGENCY OF NATURAL RESOURCES TO DO WORK OUTSIDE OF THAT TIME FRAME.

4. THE CONTRACTOR SHALL REVIEW AND UNDERSTAND ALL APPLICABLE ENVIRONMENTAL PERMITS AND PROJECT SPECIAL PROVISIONS TO INSURE THAT ALL CONDITIONS ARE MET, SPECIFICALLY, THE CONTRACTOR'S RESPONSIBILITY FOR TIMELY NOTIFICATION OF UTILITY PERSONNEL SHOULD ANY LINES REQUIRE MOVING.

5. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT SILTATION OR POLLUTION, ESPECIALLY THE DISCHARGE OF RAW CONCRETE, INTO THE PACIFIC BROOK.

6. THE EXISTING SUPERSTRUCTURE SHALL BE REMOVED UNDER THE PAY ITEM 529.20 "PARTIAL REMOVAL OF STRUCTURE." THIS INCLUDES EXISTING TRUSSES, BEAMS, H-PILES AND DECKING. THE REMOVED COMPONENTS WILL BECOME THE PROPERTY OF THE CONTRACTOR. THESE COMPONENTS MAY BE PAINTED WITH MATERIAL THAT CONTAINS LEAD. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE STATE, ITS OFFICERS AND EMPLOYEES HARMLESS CONCERNING THE CONTRACTOR'S USE OR DISPOSITION OF THESE COMPONENTS.

7. THE EXISTING ABUTMENTS SHALL BE REMOVED TO THE LIMITS SHOWN ON THE CHANNEL SECTIONS UNDER THE PAY ITEM 203.27 "UNCLASSIFIED CHANNEL EXCAVATION".

8. THE COST OF ON-PROJECT CONSTRUCTION SIGNS AND BARRICADES REQUIRED SHALL BE PAID FOR UNDER THE ITEM 641.40 "TRAFFIC CONTROL." THIS ITEM SHALL ALSO INCLUDE ALL WORK AND MATERIALS NECESSARY FOR THE SAFE SEPARATION OF TRAFFIC FROM WORK AREAS. THE PROPOSED METHOD FOR SEPARATING TRAFFIC FROM WORK AREAS MUST BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

9. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 20 DEGREES C UNLESS OTHERWISE NOTED.

10. ONE-WAY TRAFFIC WILL BE MAINTAINED ON THE EXISTING STRUCTURE, DURING CONSTRUCTION, TO BE PAID AS THE ITEM 527.10 "MAINTENANCE OF TRAFFIC FOR BRIDGE PROJECTS (MOD.)."

11. ACCESS TO DRIVES WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED. WHEN THE CONTRACTOR MUST TEMPORARILY RESTRICT ACCESS TO THE DRIVES, NOTICE TO THE PROPERTY OWNERS SHALL BE GIVEN IN ADVANCE BY THE CONTRACTOR. THIS WORK SHALL BE INCIDENTAL TO ITEM 527.10 "MAINTENANCE OF TRAFFIC FOR BRIDGE PROJECTS (MOD.)."

12. THE REMOVAL AND/OR RESETTING OF CONSTRUCTION TRAFFIC SIGNS, AS DEEMED NECESSARY BY THE RESIDENT ENGINEER, WILL BE PAID FOR UNDER THE ITEM 641.40 "TRAFFIC CONTROL."

13. BRIDGE RAILING AND HEAVY DUTY STEEL BEAM GUARD RAIL W/ WOOD POSTS SHALL BE WEATHERING STEEL. (SEE NOTE 4 ON STD. DWG. SB-R6-82.) THE HANDRAIL ON THE BRIDGE SHALL BE COLOR GALVANIZED BROWN (TO MATCH WEATHERING STEEL). THE COLOR GALVANIZING WILL BE PAID FOR UNDER THE ITEM 525.43, "BRIDGE RAILING, HDSB/FASCIA MOUNTED/HANDRAIL, TYPE E (MOD)."

14. THE CONTRACTOR SHALL INSPECT THE HOUSES AT STATIONS 1+000 RT AND 1+160 LT. THE INSPECTION WILL INCLUDE THE INSIDE AND OUTSIDE OF EACH HOUSE AND THE HOUSE FOUNDATIONS PRIOR TO COMMENCEMENT AND AFTER PROJECT COMPLETION. THIS WORK WILL BE INCIDENTAL TO THE STRUCTURE EXCAVATION PAY ITEM.

15. WATER QUALITY AND QUANTITY TESTS WILL BE PERFORMED FOR APPLICABLE WATER SUPPLIES LOCATED NEAR THE PROJECT. THIS WORK WILL BE PERFORMED BY AGENCY STAFF AND/OR DESIGNEES PRIOR TO AND IMMEDIATELY AFTER CONSTRUCTION.

16. THE CONTRACTOR SHALL AVOID PLACING HEAVY EQUIPMENT ON THE DRIVE AT STA 1+142 LT. THE LEACH FIELD FOR THIS PROPERTY OWNER IS LOCATED APPROXIMATELY IN THE DRIVEWAY. APPROPRIATE CARE SHALL BE USED. ANY DAMAGE THAT OCCURS WILL BE FIXED AND THE CONTRACTOR WILL PAY FOR THE DAMAGES.

17. FLOWERS LOCATED BETWEEN STATIONS 1+136 +/- LT TO 1+150 +/- LT SHALL BE REMOVED AND REPLANTED AS DIRECTED BY THE RESIDENT ENGINEER. THE RESIDENT ENGINEER SHALL CONSULT WITH THE PROPERTY OWNER TO DETERMINE THE LOCATION THE FLOWERS WILL BE TRANSPLANTED TO. THIS WORK WILL BE PAID FOR UNDER THE ITEM, "656.50, "TRANSPLANTING SHRUBS." ALL OF THE PLANTS IN THE FLOWER BED WILL BE PAID AS ONE UNIT OF PAYMENT. (I.E IF THE CONTRACTOR MOVES 10 PLANTS OR 20 PLANTS THEY WILL BE PAID ONLY FOR 1 (ONE).)

18. THE CEDAR TREES LOCATED APPROXIMATELY BETWEEN STATIONS 1+122 LT AND 1+130 LT SHALL BE SAVED. IF THEY ARE DAMAGED BY CONSTRUCTION ACTIVITIES, THE TREES SHALL BE REPLACED, IN KIND, AT THE EXPENSE OF THE CONTRACTOR.

19. THERE WILL BE 3 - (80 - 100 mm CALIPER) MAPLE TREES PLANTED NEAR THE SOUTHEAST END OF THE BRIDGE. THE EXACT LOCATION OF THESE TREES SHALL BE DETERMINED BY THE RESIDENT ENGINEER AND THE PROPERTY OWNER. THE APPROXIMATE LOCATIONS OF THESE TREES HAVE BEEN SHOWN ON SHEET 9. THE TREES WILL BE PAID FOR UNDER ITEM 656.30, "DECIDUOUS TREES".

CONCRETE

20. THE HEIGHT OF FILL BEHIND ABUTMENTS WILL BE LIMITED TO THE BRIDGE SEAT ELEVATION UNTIL THE DECK HAS BEEN POURED AND THE CURING PERIOD IS UP.

21. THE KEY IN CONCRETE CONSTRUCTION JOINTS SHALL BE MONOLITHIC AND CONTINUOUS FOR THE FULL LENGTH OF THE JOINT, ANY UPWARD KEY SHALL BE PLACED INTEGRALLY WITH THE CONCRETE BELOW THE JOINT.

22. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 25 mm BY 25 mm.

23. JOINTS AND SCORE MARKS IN CONCRETE SHALL BE CONSTRUCTED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

24. ALL REINFORCING STEEL SHALL BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH APPLICABLE PUBLICATIONS OF THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI).

25. REINFORCING PLACEMENT TOLERANCES SHALL BE:
SPACING +/- 25 mm
CLEARANCE +/- 5 mm

26. MINIMUM COVER FOR REINFORCING STEEL SHALL BE 50 mm ALONG THE BACK FACES OF WALLS AGAINST EARTH, 40 mm ALONG THE BOTTOM SURFACE OF THE DECK AND 80 mm ELSEWHERE, UNLESS OTHERWISE NOTED.

27. SURFACES OF BRIDGE SEATS UNDER BEARING DEVICES SHALL BE LEVEL, OTHER BRIDGE SEAT AREAS SHALL BE SLOPED 4.0 % TOWARDS MID-SPAN. THE ENTIRE BRIDGE SEAT SURFACE SHALL BE SMOOTHED WITH A MAGNESIUM FLOAT FINISH.

28. DECK POUR IS TO BE DONE IN ONE POUR WITHIN A MAXIMUM OF EIGHT HOURS. IF CIRCUMSTANCES BEYOND THE CONTRACTOR'S CONTROL PREVENT THIS FROM BEING ACCOMPLISHED, A MINIMUM DELAY OF NINETY-SIX (96) HOURS BETWEEN THE COMPLETION OF ONE DAY'S POUR AND THE BEGINNING OF ANY OTHER POUR WILL BE ADHERED TO. SEE SHEET 26 FOR DETAIL OF TRANSVERSE BRIDGE SLAB CONSTRUCTION JOINT.

29. WATER REPELLENT SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES EXCEPT THE UNDERSIDE OF THE DECK BETWEEN THE DRIP BEADS.

30. NO CONCRETE IN THE ABUTMENTS OR WINGWALLS SHALL BE PLACED ABOVE THE BRIDGE SEAT ELEVATIONS UNTIL THE BEAMS/GIRDERS HAVE BEEN PROFILED AND THE FINISHED GRADE OF THE DECK HAS BEEN DETERMINED.

31. ALL SUBSTRUCTURE CONCRETE SHALL BE CONCRETE, HIGH PERFORMANCE CLASS B UNLESS OTHERWISE NOTED.

32. THE DECK AND CURBS SHALL BE CONCRETE, HIGH PERFORMANCE CLASS A. THE DECK SHALL BE BROOM FINISHED PERPENDICULAR TO THE DIRECTION OF TRAFFIC. APPLYING A BROOM FINISH WILL NOT BE PAID SEPARATELY, BUT WILL BE MADE INCIDENTAL TO THE PAY ITEM 501.33 "CONCRETE, HIGH PERFORMANCE CLASS A".

STRUCTURAL STEEL

33. NOT USED.

34. ANY CONNECTIONS THAT ARE NOT DETAILED ON THE PLANS SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE STRUCTURES ENGINEER FOR APPROVAL.

35. ALL WELDING SHALL CONFORM TO THE PROVISIONS OF VERMONT SPECIFICATION 506.10.

36. ALL MEMBERS MARKED (CVN) MUST MEET THE CHARPY V-NOTCH TESTING REQUIREMENTS AS INDICATED IN SECTION 714 OF THE VERMONT AGENCY OF TRANSPORTATION SPECIFICATIONS FOR CONSTRUCTION.

37. ANY HOLES IN THE WEBS OF THE FASCIA BEAMS/GIRDERS THAT ARE NOT OTHERWISE FILLED, SHALL BE FILLED WITH EITHER BUTTON HEAD OR HEX HEAD BOLTS. THESE BOLTS SHALL BE TIGHTENED IN ACCORDANCE WITH VERMONT SPECIFICATION 506.19.

38. ALL FIELD CONNECTIONS SHALL BE MADE WITH 22 mm DIAMETER AASHTO DESIGNATION M 164M TYPE III BOLTS IN 24 mm DIAMETER HOLES.

39. THE DESIGN OF THE FLEMING BRACKETS SHALL BE LEFT UP TO THE CONTRACTOR BUT SHALL BE LIMITED TO A MAXIMUM OF 1.22 METER SPACING.

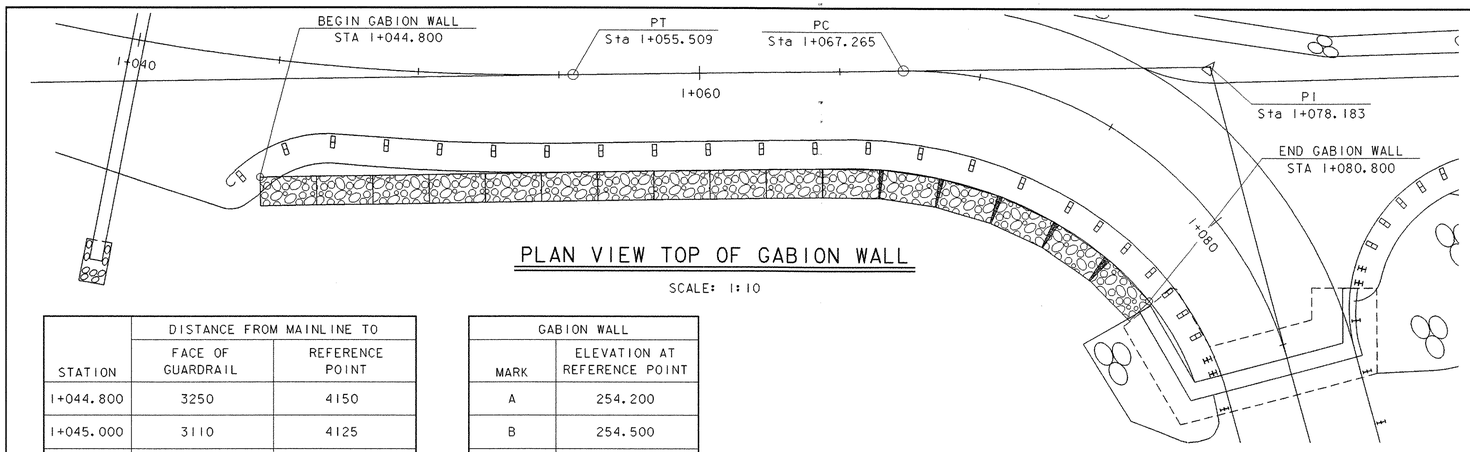
40. AFTER THE SUPERSTRUCTURE HAS BEEN ERECTED, ELEVATIONS SHALL BE TAKEN ALONG THE TOP OF THE BEAMS/GIRDERS, AS DIRECTED BY THE RESIDENT ENGINEER, FOR USE IN DETERMINING THE FINISHED GRADE.

LEDGE

41. IF LEDGE IS ENCOUNTERED MORE THAN 600 mm BELOW THE INDICATED BOTTOM OF FOOTING ELEVATIONS AS SHOWN ON THE PLANS, THE STRUCTURES SECTION SHALL BE CONTACTED. PROFILES OF THE LEDGE MAY BE REQUIRED TO ADJUST THE FOOTING ELEVATIONS AND SIZE. NO FURTHER WORK SHALL BE DONE ON THE FOOTINGS UNTIL A REPLY IS RECEIVED FROM THE STRUCTURES SECTION.

42. FOOTINGS SHALL BE PLACED ON SOUND, CLEAN LEDGE, ALL OVER BREAKAGE BELOW INDICATED BOTTOM OF FOOTING SHALL BE REPLACED WITH "CONCRETE, HIGH PERFORMANCE CLASS B." A MAXIMUM OF 150 mm AVERAGE DEPTH FOR OVER BREAKAGE SHALL BE PAID FOR AS "CONCRETE, HIGH PERFORMANCE CLASS B," AND ADDITIONAL CONCRETE REQUIRED BELOW THAT DEPTH SHALL BE PLACED AT THE CONTRACTOR'S EXPENSE. THE ADDITIONAL 150 mm OVERBREAKAGE QUANTITY IS INCLUDED IN THE QUANTITY OF "CONCRETE, HIGH PERFORMANCE CLASS B".

PROJECT NAME:	MONTGOMERY		
PROJECT NUMBER:	BRO 1448(20)		
FILE NAME:	/PW/94j124/sj124gen.xls	PLOT DATE:	10/25/2005
PROJECT LEADER:	R. WHITCOMB	DRAWN BY:	J. GILMORE
DESIGNED BY:	C. CARLSON	CHECKED BY:	C. CARLSON
GENERAL NOTES SHEET		SHEET 24	OF 50

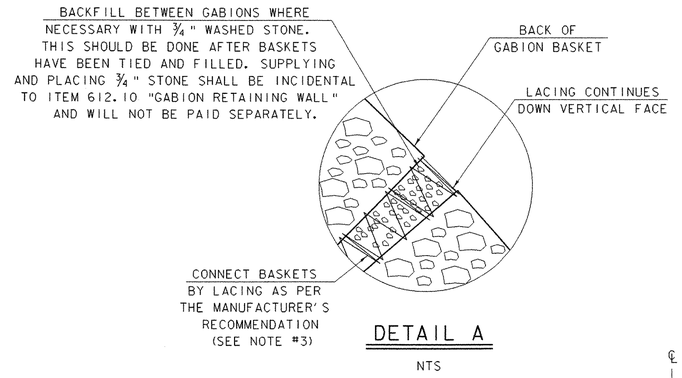


PLAN VIEW TOP OF GABION WALL

SCALE: 1:10

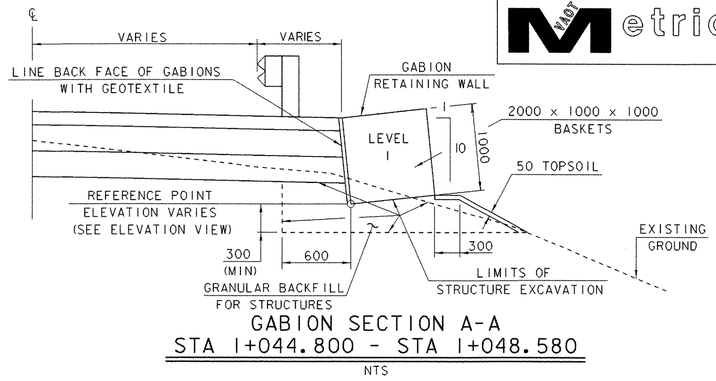
STATION	DISTANCE FROM MAINLINE TO	
	FACE OF GUARDRAIL	REFERENCE POINT
1+044.800	3250	4150
1+045.000	3110	4125
1+047.500	2400	3820
1+050.000	2400	3250
1+052.500	2400	3110
1+055.000	2400	3050
1+057.500	2400	2600
1+060.000	2400	2600
1+062.500	2400	2600
1+065.000	2400	2620
1+067.500	2570	2800
1+070.000	2775	3000
1+072.500	2865	3080
1+075.000	2855	3045
1+077.500	2780	3000
1+080.000	2670	2890
1+080.800	2620	2780

GABION WALL	
MARK	ELEVATION AT REFERENCE POINT
A	254.200
B	254.500
C	253.700
D	253.900
E	254.100
F	254.300
G	253.700
H	253.900
I	254.100
J	254.200
K	254.400
L	254.600
M	254.800
N	254.900
O	255.000
P	255.000



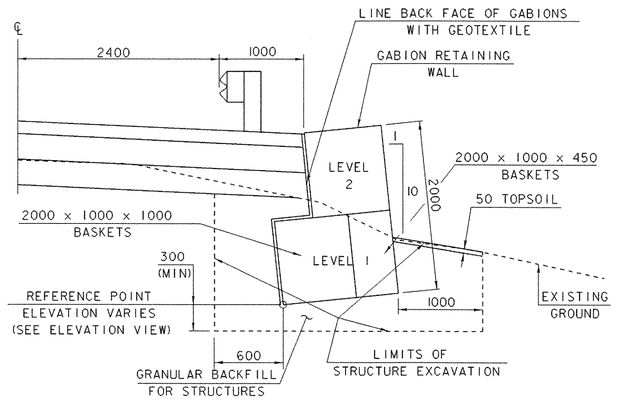
DETAIL A

NTS



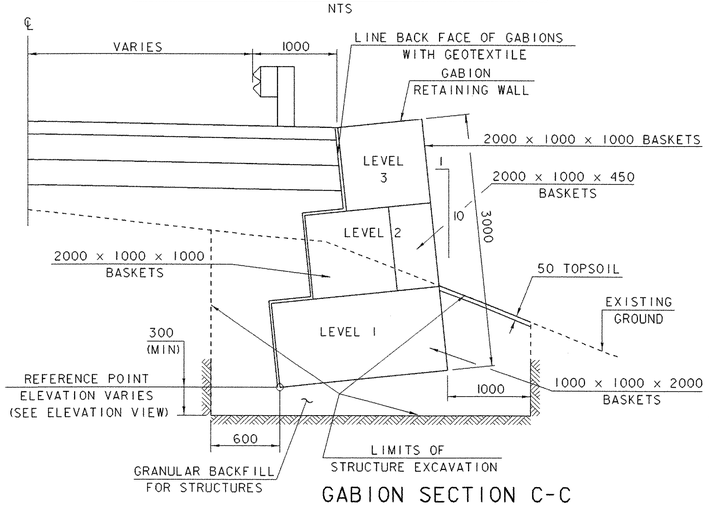
GABION SECTION A-A
STA 1+044.800 - STA 1+048.580

NTS



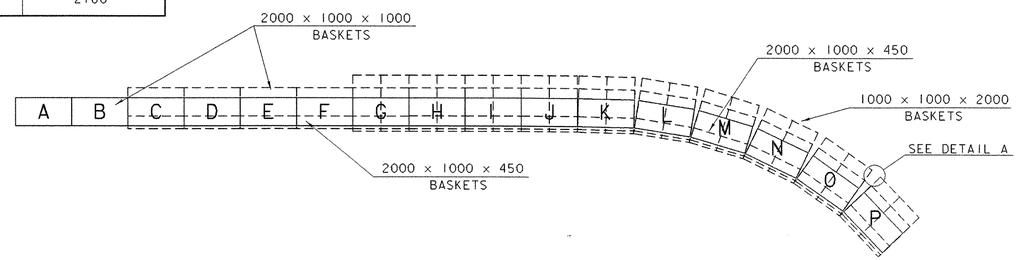
GABION SECTION B-B
STA 1+048.580 - STA 1+056.279

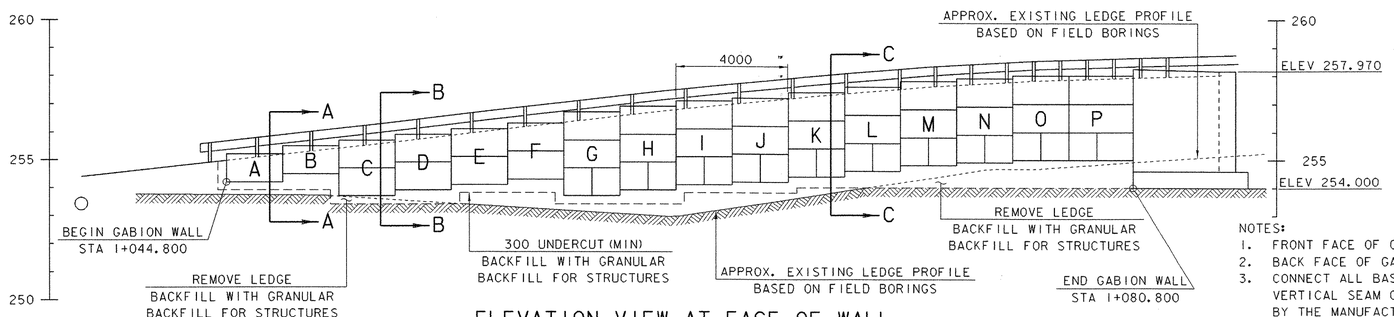
NTS



GABION SECTION C-C
STA 1+056.279 - STA 1+080.800

NTS





ELEVATION VIEW AT FACE OF WALL

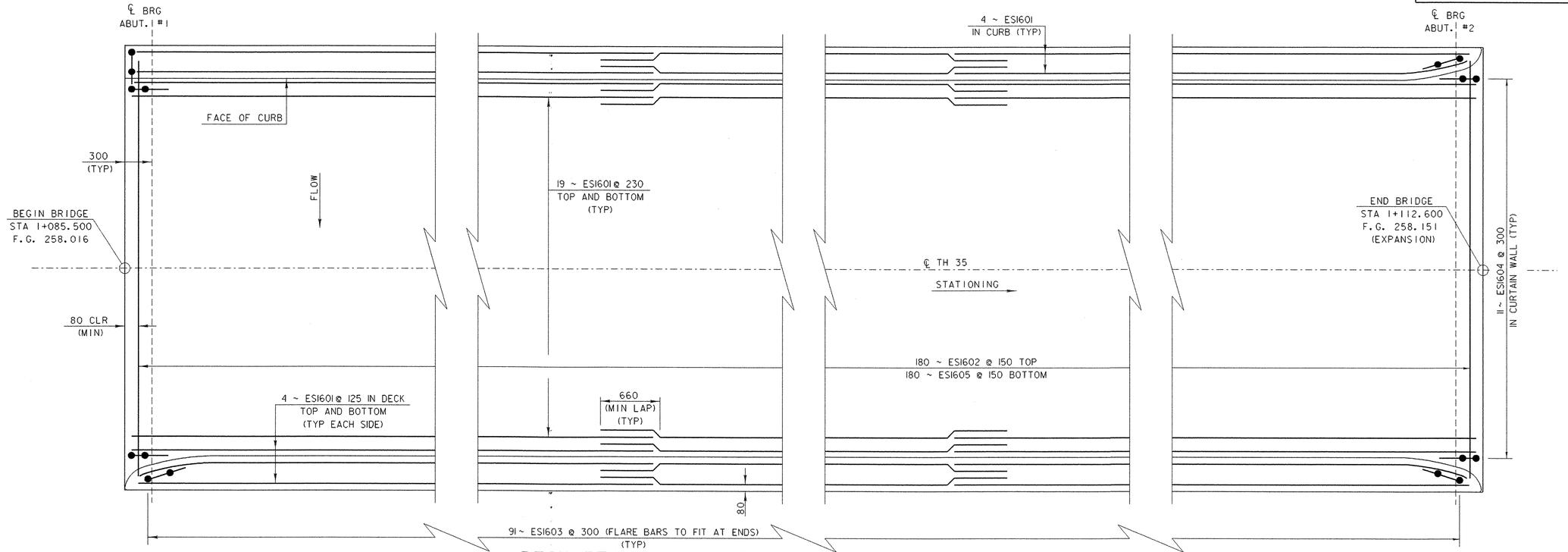
SCALE: 1:10

(ELEVATIONS ARE SHOWN AT THE BACK FACE OF GABION)

NOTES:

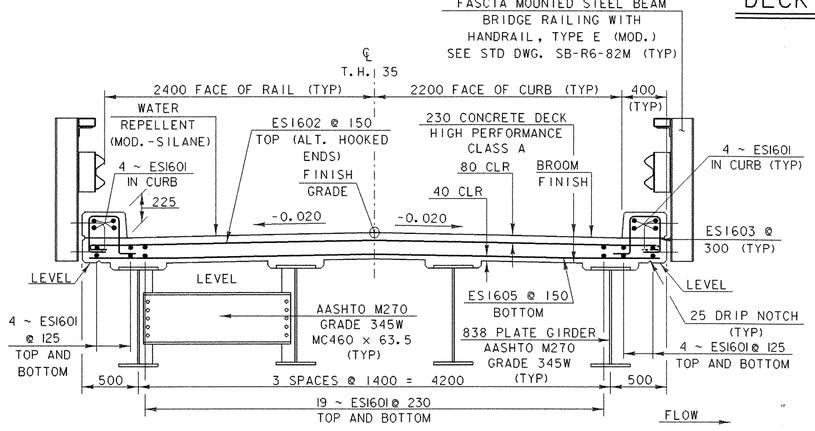
1. FRONT FACE OF GABION IS EXPOSED FACE.
2. BACK FACE OF GABION IS BURIED.
3. CONNECT ALL BASKETS AT EACH HORIZONTAL AND VERTICAL SEAM OR JOINT WITH WIRE LACING SUPPLIED BY THE MANUFACTURER AT THE RECOMMENDED SPACING. THIS WORK IS INCIDENTAL TO ITEM 612.10, "GABION RETAINING WALL".
4. GEOTEXTILE WILL BE PAID FOR UNDER ITEM 649.31, "GEOTEXTILE UNDER STONE FILL".

SHEET NAME:	GABION WALL DETAILS		
PROJECT NAME:	MONTGOMERY	HIGHWAY NO.:	TH 35
PROJECT NUMBER:	BRO 1448(20)	BRIDGE NO.:	24
		OVER:	PACIFIC BROOK
FILE NAME:	/PW/94jl24/sjl24gab.dgn	PLOT DATE:	12-DEC-2005
PROJECT MANAGER:	R. WHITCOMB	DRAWN BY:	T. HUSK
DESIGNED BY:	C. CARLSON	IPARM NAME:	sjl24grw.i
BRIDGE SHEET NUMBER:		SHEET	25 OF 50



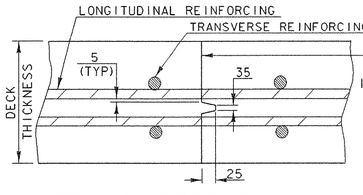
DECK REINFORCING PLAN

SCALE: 1:25



BRIDGE SECTION AT MIDSPAN

SCALE: 1:25



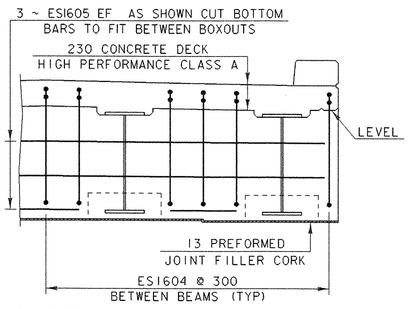
APPLY EPOXY BONDING COMPOUND BEFORE PLACING NEW CONCRETE. INCLUDE WITH COST BID FOR CONCRETE.

TRANSVERSE BRIDGE SLAB CONSTRUCTION JOINT DETAILS

NTS

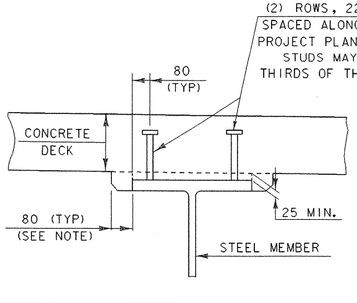
NOTES:

1. ALL REINFORCING STEEL SHALL BE EPOXY COATED.
2. ALL EPOXY COATED STEEL TO BE CUT IN FIELD IS TO BE SAW CUT AND THE EXPOSED END IS TO BE TREATED AS PER SECTION 507.04



CURTAIN WALL ELEVATION

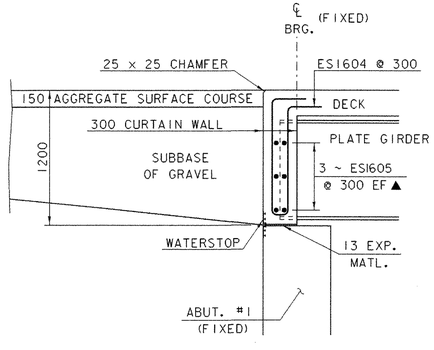
NTS



HAUNCH AND SHEAR CONNECTOR DETAILS

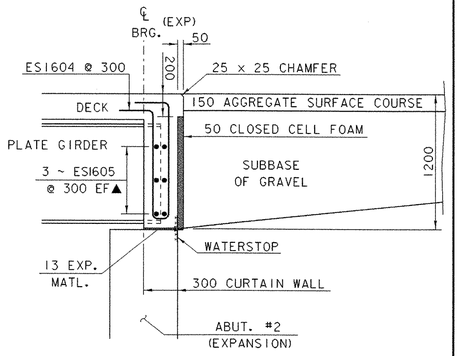
SCALE: 1:10

NOTE: THE 80 HORIZONTAL SECTION MAY BE ELIMINATED FOR FORMING SYSTEMS DESIGNED FOR THE CONSTRUCTION OF VERTICAL HAUNCHES IF APPROVED BY THE STRUCTURES ENGINEER. ANY HOLES RESULTING FROM FORMING THIS HAUNCH TYPE SHALL BE FILLED WITH MORTAR TYPE IV.



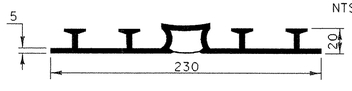
BEGIN BRIDGE DETAIL

NTS



END BRIDGE DETAIL

NTS

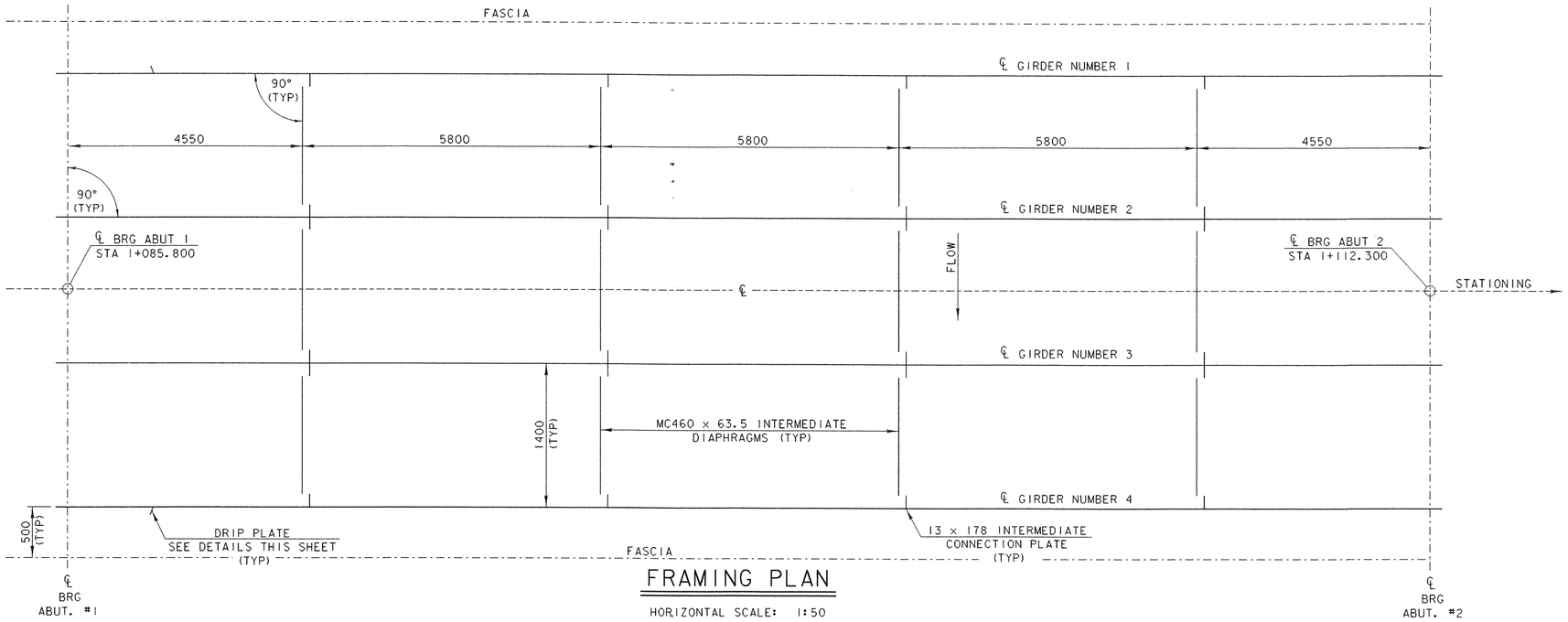


P.V.C. WATERSTOP FOR CONSTRUCTION JOINTS

THE COSTS FOR P.V.C. WATERSTOP SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONCRETE. OTHER CONFIGURATIONS MAY BE USED UPON APPROVAL OF THE STRUCTURES ENGINEER.

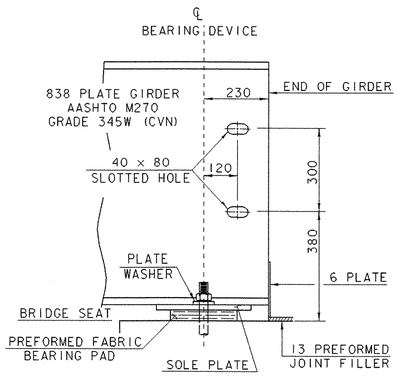
SHEET NAME: **DECK REINFORCING DETAILS**

PROJECT NAME:	MONTGOMERY	HIGHWAY NO.:	TH 35
PROJECT NUMBER:	BRO 1448(20)	BRIDGE NO.:	24
		OVER:	PACIFIC BROOK
FILE NAME:	/PW/94J124/sJ124sup.dgn	PLOT DATE:	06-DEC-2005
PROJECT MANAGER:	R. WHITCOMB	DRAWN BY:	J. GILMORE
DESIGNED BY:	D.BONNEAU	IPARM NAME:	sJ124drd.1
BRIDGE SHEET NUMBER:		SHEET	26 OF 50



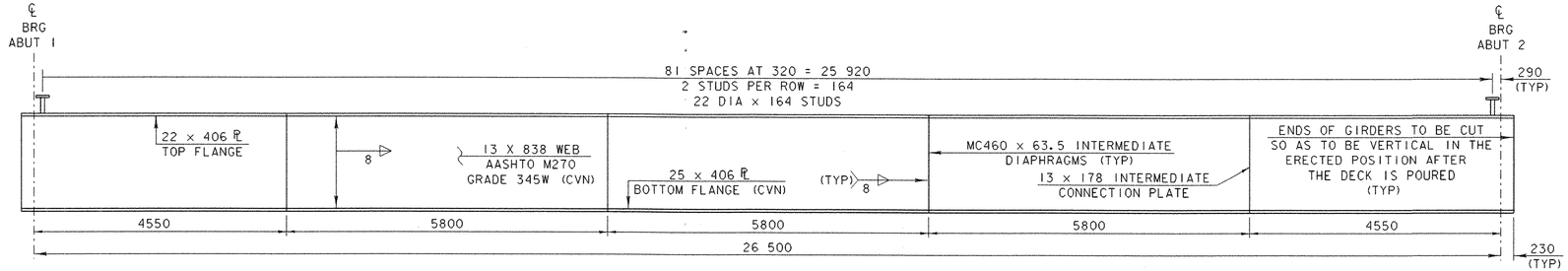
FRAMING PLAN

HORIZONTAL SCALE: 1:50
VERTICAL SCALE: 1:25



END GIRDER DETAIL

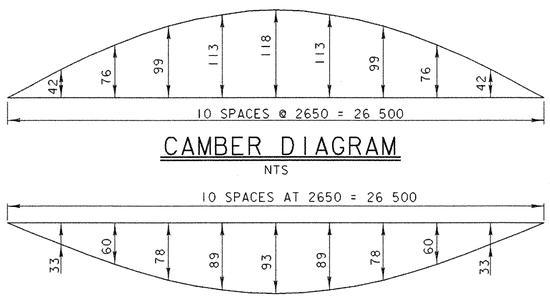
SCALE: 1:10



TYPICAL GIRDER ELEVATION

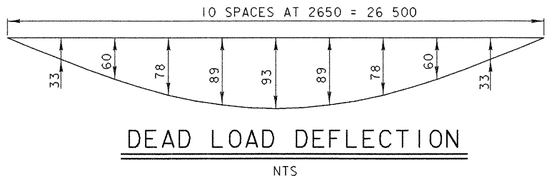
HORIZONTAL SCALE: 1:50
VERTICAL SCALE: 1:25

(CVN): CHARPY V-NOTCH TESTING



CAMBER DIAGRAM

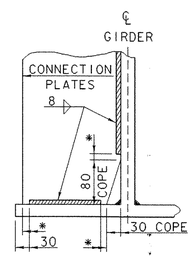
NTS



DEAD LOAD DEFLECTION

NTS

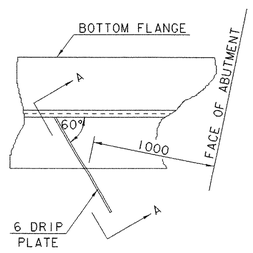
NOTE: DEAD LOAD DEFLECTION IS DUE TO GIRDER, DIAPHRAGMS, DECK, CURBS AND RAILING.



WELD TERMINATION AND COPING DETAILS

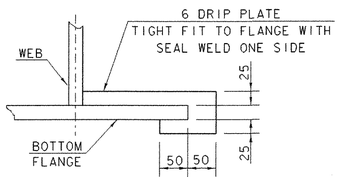
SCALE: 1:5

* NO WELD FOR 6 MIN, 13 MAX (EXCEPT MUST MAINTAIN 30 MIN FROM EDGE OF FLANGE.)

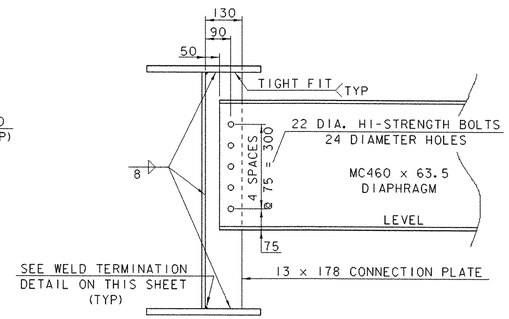


PLAN DRIP PLATE

NOTE: DRIP PLATES SHALL BE PLACED ON THE OUTSIDE EDGE OF FASCIA GIRDERS AS INDICATED ON PROJECT PLANS.



SECTION A - A

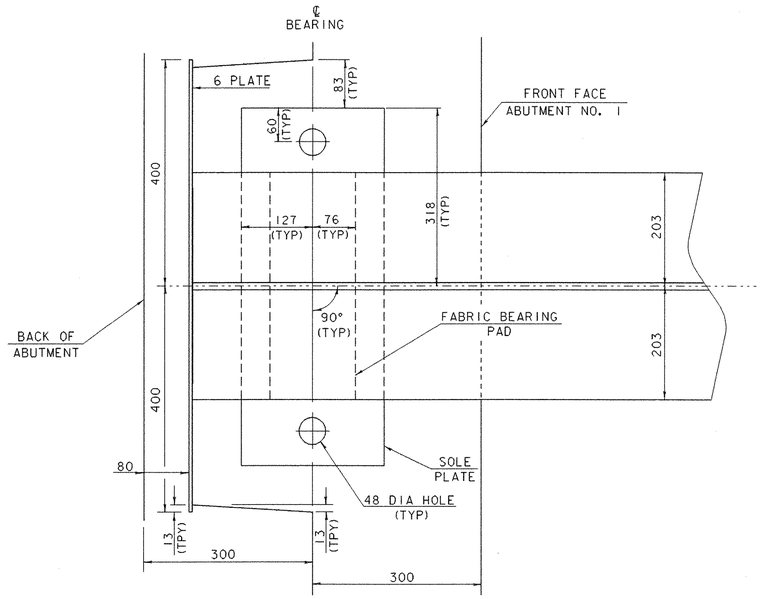


INTERMEDIATE DIAPHRAGMS

SCALE: 1:10

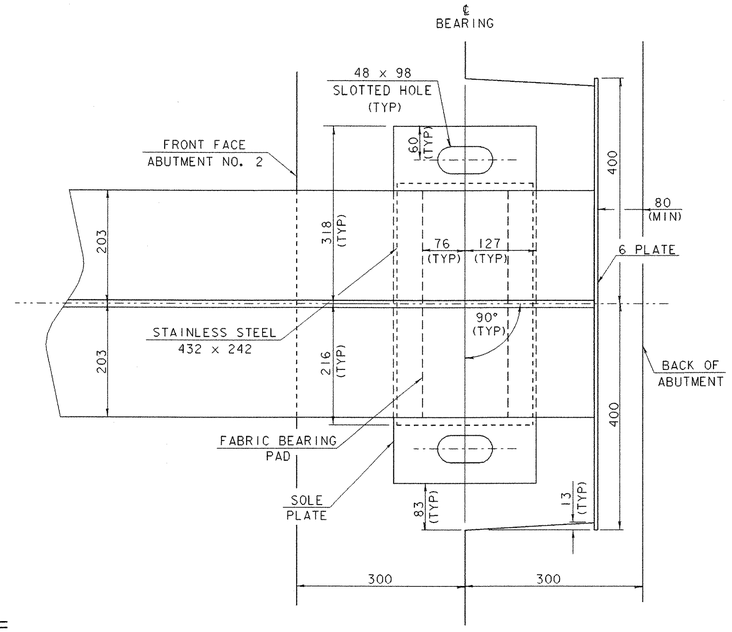
NOTE: HI-STRENGTH BOLTS, NUTS AND WASHERS SHALL CONFORM TO AASHTO DESIGNATION M 164.

SHEET NAME: **FRAMING PLAN**			
PROJECT NAME:	MONTGOMERY	HIGHWAY NO.:	TH 35
PROJECT NUMBER:	BRO 1448(20)	BRIDGE NO.:	24
		OVER:	PACIFIC BROOK
FILE NAME: /PW/94j124/sj124sup.dgn		PLOT DATE:	06-DEC-2005
PROJECT MANAGER: R. WHITCOMB		DRAWN BY:	J. GILMORE
DESIGNED BY:	D.BONNEAU	IPARM NAME:	sj124fp.i
BRIDGE SHEET NUMBER:		SHEET	27 OF 50



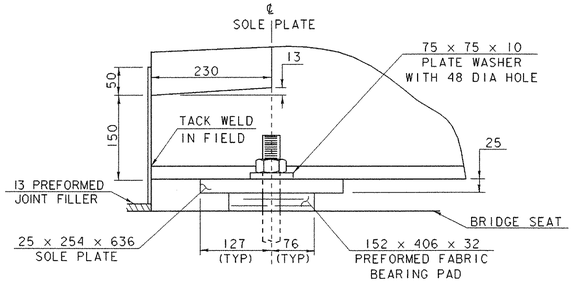
PLAN

SCALE: 1:5



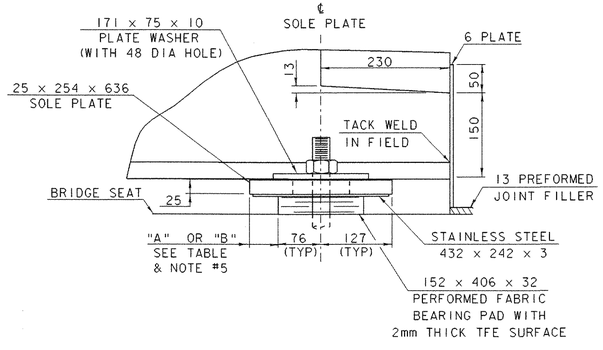
BEARING NOTES

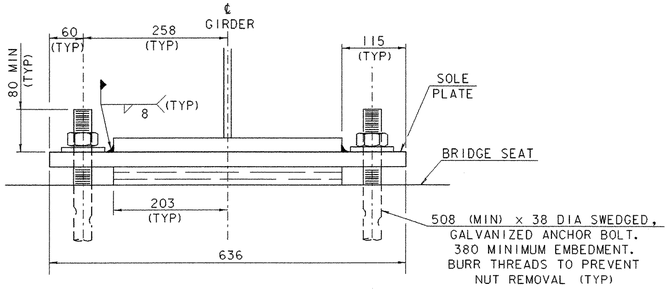
1. BEARINGS SHALL CONFORM TO APPLICABLE SUBSECTIONS OF SECTION 531 AND 731.
2. BEARINGS SHALL BE PAID FOR UNDER THE ITEM 531.10 "BEARING DEVICE ASSEMBLY (FABRIC)."
3. SHOP DRAWINGS CONFORMING TO SUBSECTION 531.03 SHALL BE SUBMITTED TO INCLUDE WELDING AND BONDING PROCEDURES.
4. THE CONCRETE SURFACE UNDER THE BEARING DEVICE SHALL BE LEVEL.
5. "A" DISTANCE IS THE FINAL SETTING FOR THE BEARING PAD AFTER THE CONCRETE SLAB, CURB AND BRIDGE RAIL ARE PLACED. "B" DISTANCE IS LISTED FOR SETTING THE BEARING AFTER THE STRUCTURAL STEEL IS ERECTED AND BEFORE THE CONCRETE DECK AND CURBS HAVE BEEN PLACED. THE DIFFERENCE IS THE THEORETICAL ELONGATION OF THE BOTTOM FLANGE DUE TO DEAD LOAD DEFLECTION. THE FINAL "A" DISTANCE, AS SHOWN IN THE TABLE, MUST BE ATTAINED WITHIN 2mm.
6. DESIGN CRITERIA:
   - A. BASE PLATE TO CONCRETE DESIGN PRESSURE = 7000 kPa MAXIMUM
   - B. MINIMUM ALLOWABLE DESIGN ROTATION = 0.015 RADIANS
   - C. HORIZONTAL CAPACITY SHALL BE A MINIMUM OF 10% OF THE VERTICAL LOAD
   - D. DESIGN LOAD PER BEARING = 377 kN
     - LL = 218 kN
     - DL = 141 kN
     - SDL = 18 kN
7. ALL STEEL IN BEARING DEVICES (EXCEPT STAINLESS) SHALL BE AASHTO M-270, GRADE 345.
8. ANCHOR BOLTS SHALL HAVE A MINIMUM OF 380 EMBEDMENT INTO THE CONCRETE AND SHALL CONFORM TO SUBSECTION 714.08 IN THE "VERMONT SPECIFICATIONS."
9. ALL BEARING DEVICES SHALL BE GALVANIZED OR METALIZED AS PER SUBSECTION 531.04(b) AND 506.15 OF THE GENERAL SPECIAL PROVISIONS. AREAS OF GALVANIZING OR METALIZING DAMAGED BY FIELD WELDING OR HANDLING SHALL BE PAINTED WITH A ZINC RICH PAINT IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 513.
10. ALL THE ANCHOR BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED. ALL WASHERS SHALL BE 10 PLATE (MINIMUM). PAYMENT FOR ANCHOR BOLTS, NUTS AND WASHERS SHALL BE INCLUDED IN THE UNIT BID PRICE FOR "BEARING DEVICE ASSEMBLY (FABRIC)."



SIDE ELEVATION

SCALE: 1:5

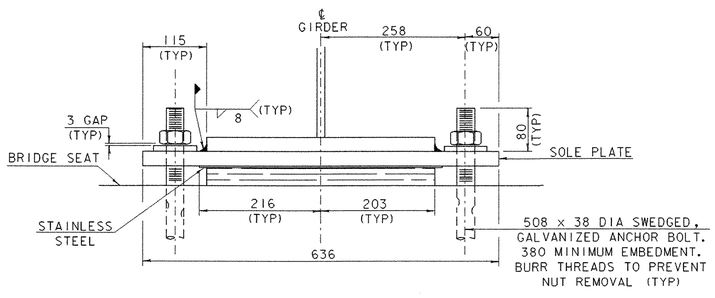




FIXED BEARING @ ABUT #1

FRONT VIEW

SCALE: 1:5



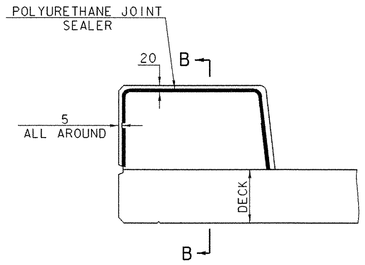
EXPANSION BEARING @ ABUT #2

TEMP	"A" DIST	"B" DIST
-34°C	73	64
-26°C	70	61
-18°C	68	59
-9°C	65	56
-1°C	63	53
7°C	60	51
16°C	57	48
24°C	55	46
32°C	52	43
41°C	50	40
49°C	47	38

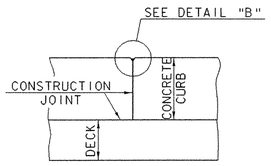
SHEET NAME: **BEARING DETAILS**

PROJECT NAME: MONTGOMERY
PROJECT NUMBER: BRO 1448(20)
HIGHWAY NO.: TH 35
BRIDGE NO.: 24
OVER: PACIFIC BROOK

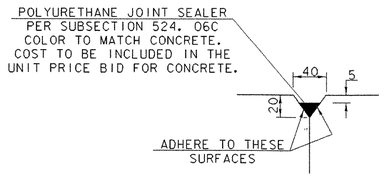
FILE NAME: /PW/94J124/sJ124sup.dgn
PROJECT MANAGER: R. WHITCOMB
DESIGNED BY: D.BONNEAU
BRIDGE SHEET NUMBER:
PLOT DATE: 06-DEC-2005
DRAWN BY: J. GILMORE
IPARM NAME: sJ124ber.I
SHEET 28 OF 50



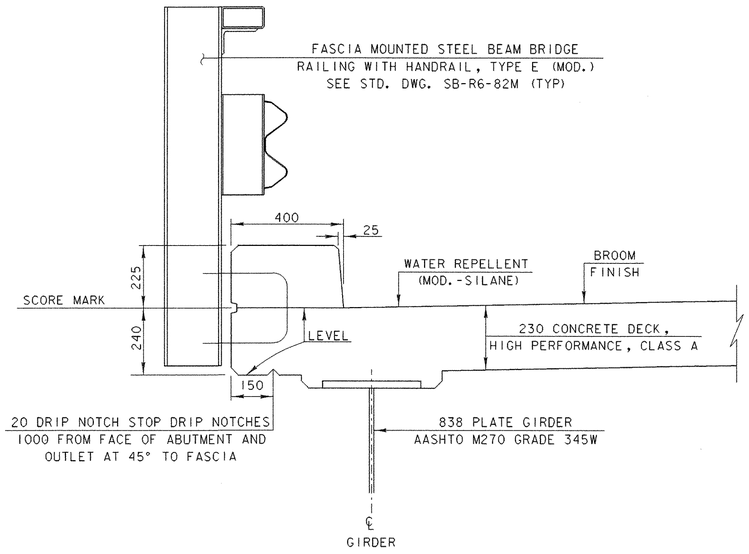
TYPICAL SECTION THROUGH CONCRETE CURB CONSTRUCTION JOINT



SECTION B - B

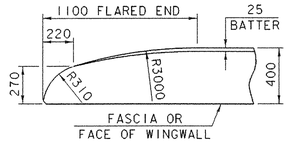


DETAIL "B"



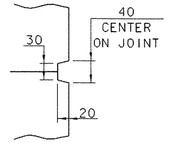
400 CURB SECTION

SCALE: 1:10

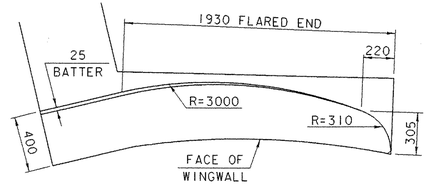


FLARED END FOR 400 CURB

BARS SHALL BE TURNED AS
REQUIRED TO FIT FLARED ENDS



SCORE MARK DETAIL



CURB FLARE DETAIL FOR WINGWALL #1

BARS SHALL BE TURNED AS
REQUIRED TO FIT FLARED ENDS
SEE SHT. 30 FOR MORE DETAILS.

NOTES:

1. CONSTRUCTION JOINTS THROUGH CONCRETE CURBS SHALL BE SPACED A MAXIMUM 3000 CENTER TO CENTER AND SHALL BE 450 MINIMUM FROM THE CENTER OF THE NEAREST BRIDGE RAIL POST. CONCRETE SHALL BE PLACED IN ALTERNATING SECTIONS WITH A MINIMUM OF 48 HOURS DELAY BETWEEN ADJACENT POURS.
2. LONGITUDINAL REINFORCING SHALL PASS THROUGH CONCRETE CURB CONSTRUCTION JOINTS.
3. CURB REINFORCING STIRRUP BARS SHALL BE TURNED AS REQUIRED TO FIT TAPERED ENDS.

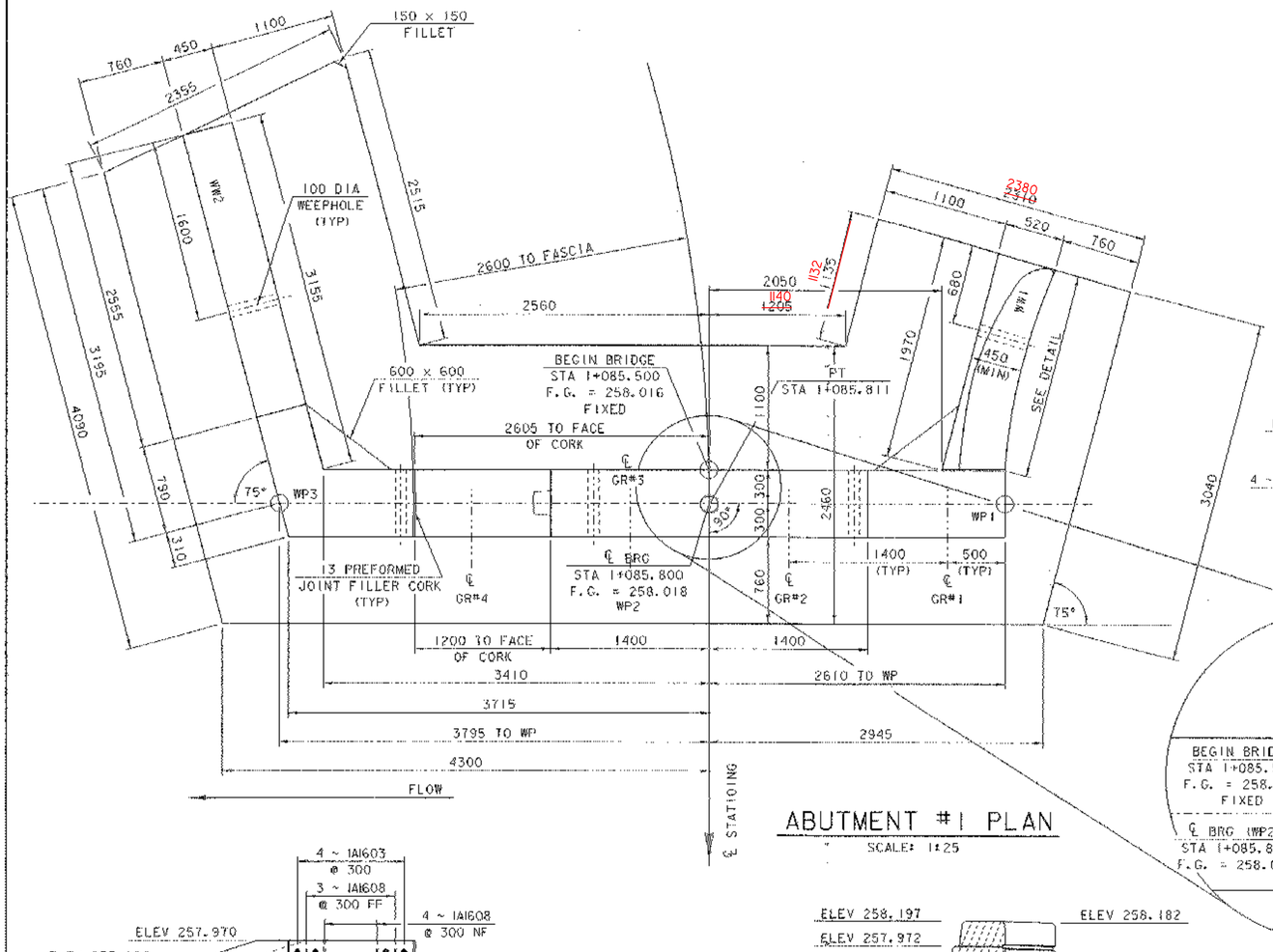
SHEET NAME: **CURB DETAILS**

PROJECT NAME:	MONTGOMERY	HIGHWAY NO.:	TH 35
PROJECT NUMBER:	BRO 1448(20)	BRIDGE NO.:	24
		OVER:	PACIFIC BROOK
FILE NAME: /PW/94J124/sj124sup.dgn		PLOT DATE:	06-DEC-2005
PROJECT MANAGER: R. WHITCOMB		DRAWN BY:	J. GILMORE
DESIGNED BY: D.BONNEAU		IPARM NAME:	sj124crb.I
BRIDGE SHEET NUMBER:		SHEET	29 OF 50

Metric

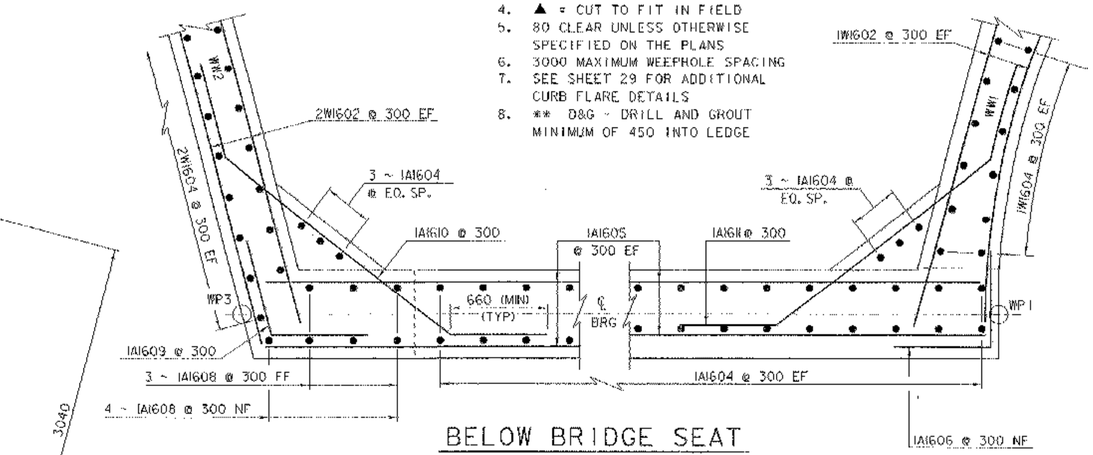
NOTES:

1. NF = NEAR FACE
2. FF = FAR FACE
3. EF = EACH FACE
4. ▲ = CUT TO FIT IN FIELD
5. 80 CLEAR UNLESS OTHERWISE SPECIFIED ON THE PLANS
6. 3000 MAXIMUM WEEPHOLE SPACING
7. SEE SHEET 29 FOR ADDITIONAL CURB FLARE DETAILS
8. ** D&G - DRILL AND GROUT MINIMUM OF 450 INTO LEDGE



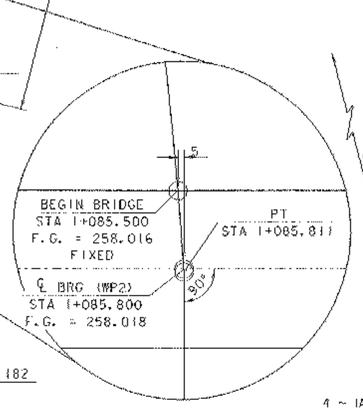
ABUTMENT #1 PLAN

SCALE: 1:25



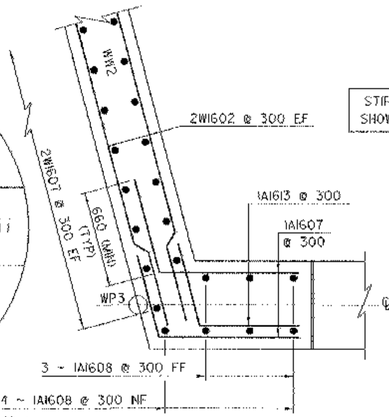
BELOW BRIDGE SEAT

SCALE: 1:20



℄ POINTS ABUTMENT #1

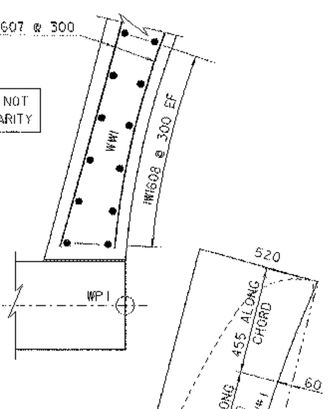
NTS



ABOVE BRIDGE SEAT

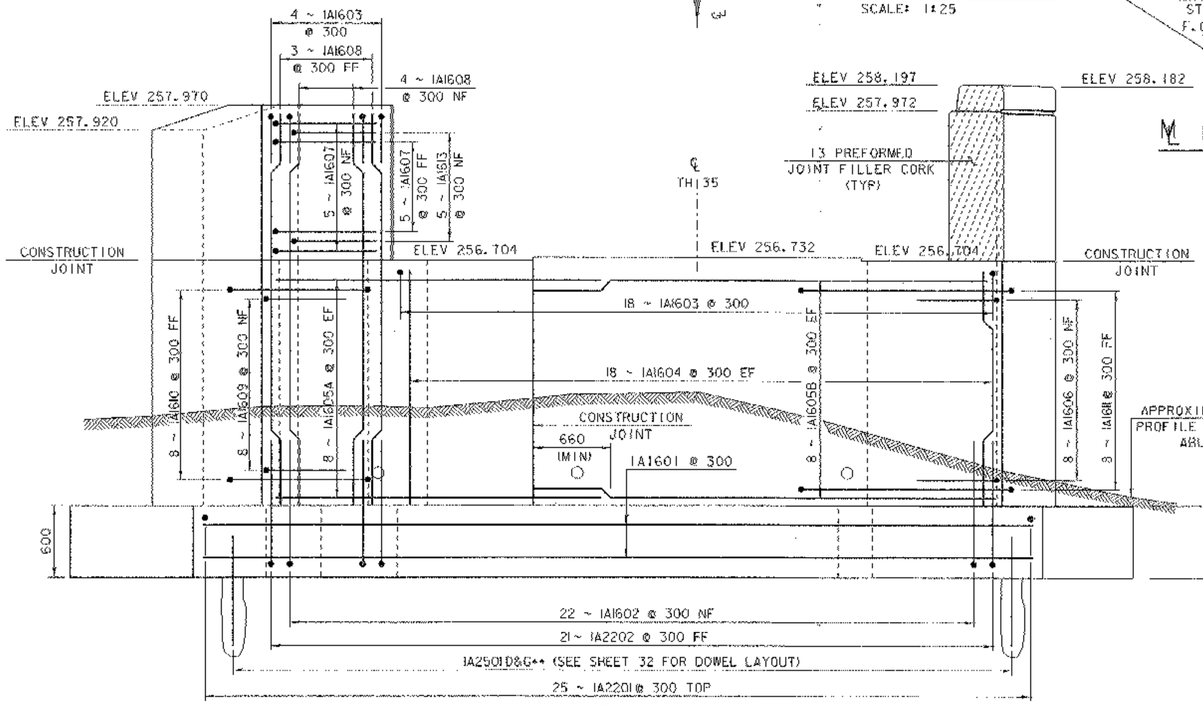
SCALE: 1:20

STIRRUP BARS NOT SHOWN FOR CLARITY



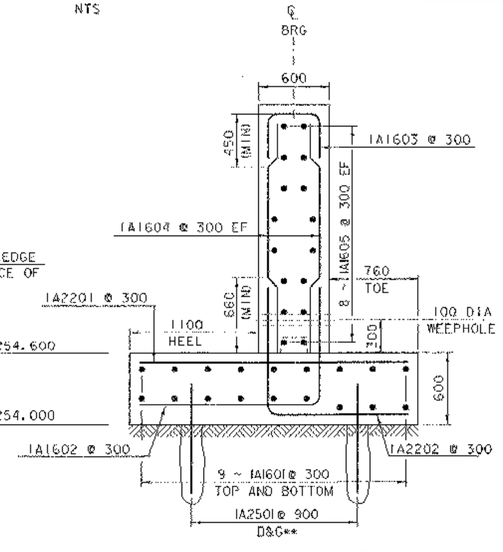
WW#1 CURVED FACE DETAILS

NTS



ABUTMENT #1 ELEVATION

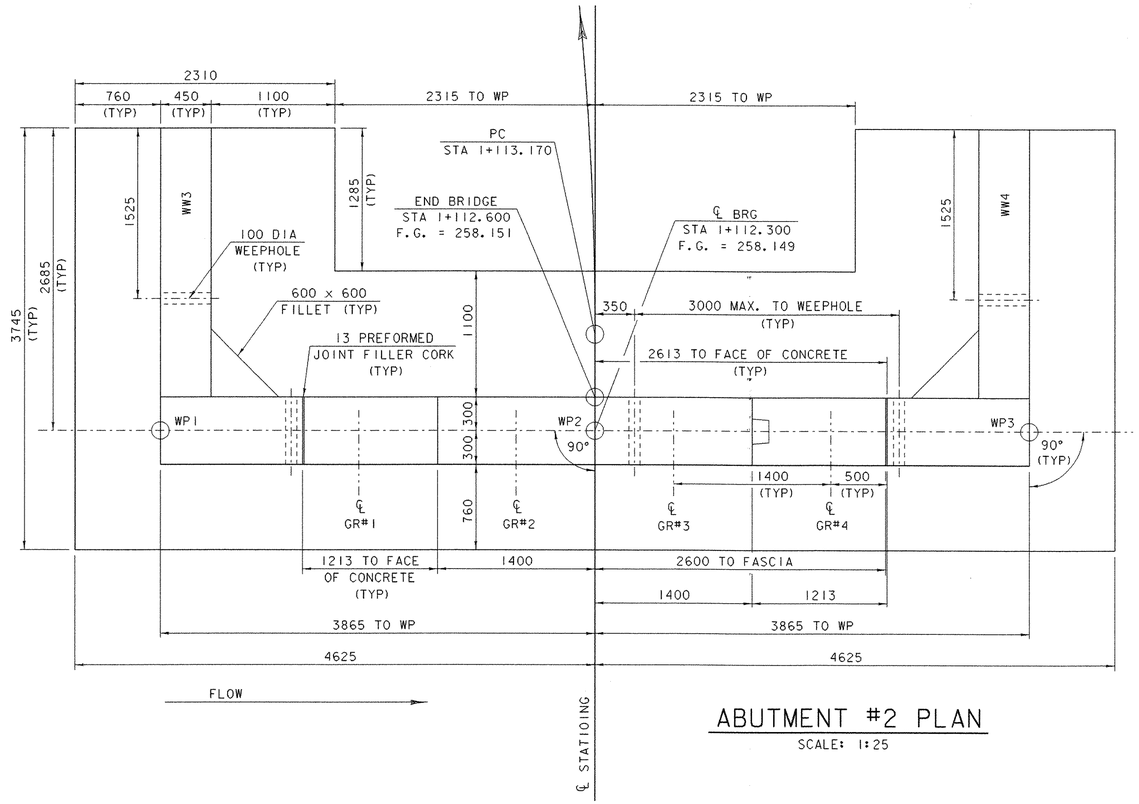
SCALE: 1:25



ABUTMENT #1 SECTION

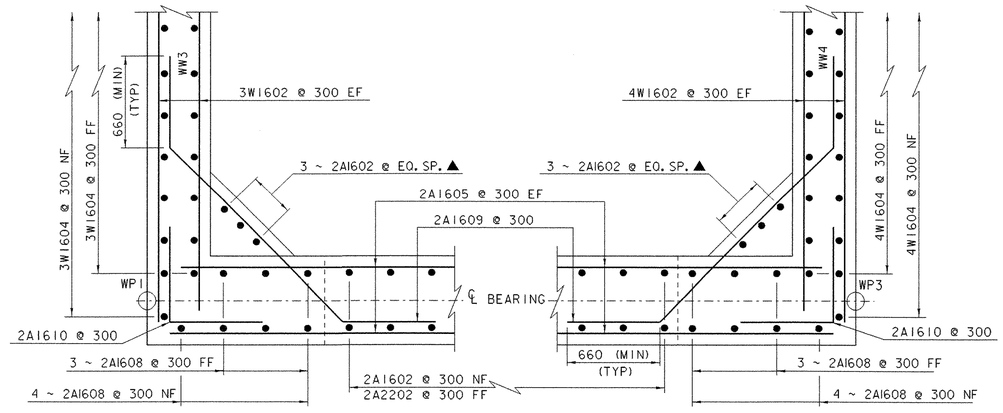
SCALE: 1:25

SHEET NAME:	ABUTMENT #1 DETAILS		
PROJECT NAME:	MONTGOMERY	HIGHWAY NO.:	TH 35
PROJECT NUMBER:	BRO 1448(20)	BRIDGE NO.:	24
		OVER:	PACIFIC BROOK
FILE NAME:	/PW/941124/sj1124sub.dgn	PLOT DATE:	06-DEC-2005
PROJECT MANAGER:	R. WHITCOMB	DRAWN BY:	J. GILMORE
DESIGNED BY:	D.BONNEAU	IPARM NAME:	sj1124ab1.i
BRIDGE SHEET NUMBER:		SHEET	30 OF 50



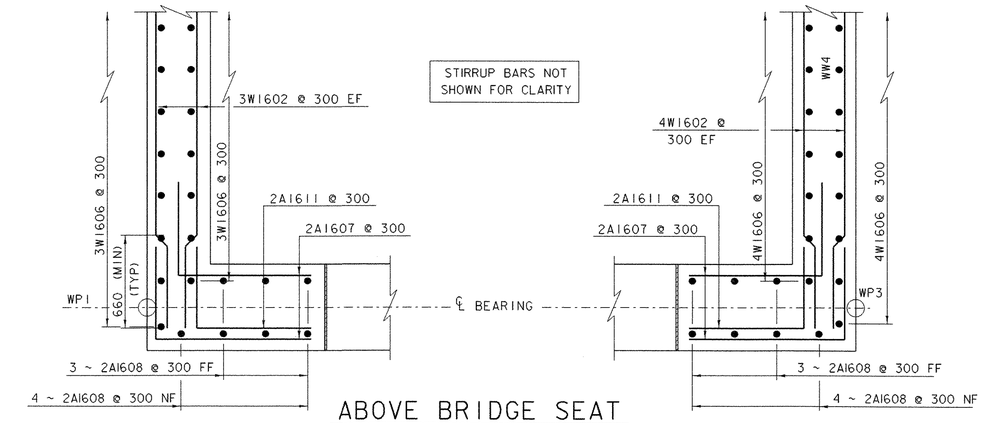
ABUTMENT #2 PLAN

SCALE: 1:25



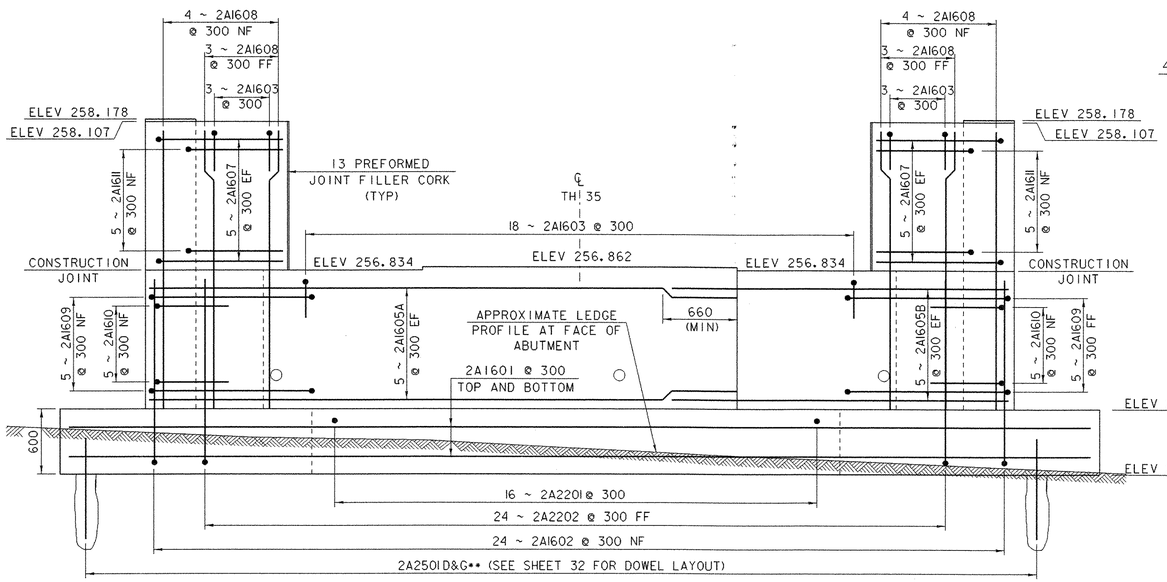
BELOW BRIDGE SEAT

SCALE: 1:20



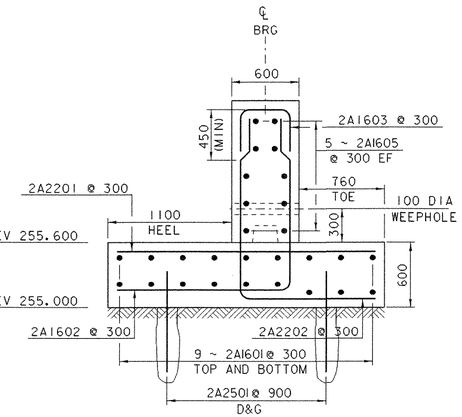
ABOVE BRIDGE SEAT

SCALE: 1:20



ABUTMENT #2 ELEVATION

SCALE: 1:25



ABUTMENT #2 SECTION

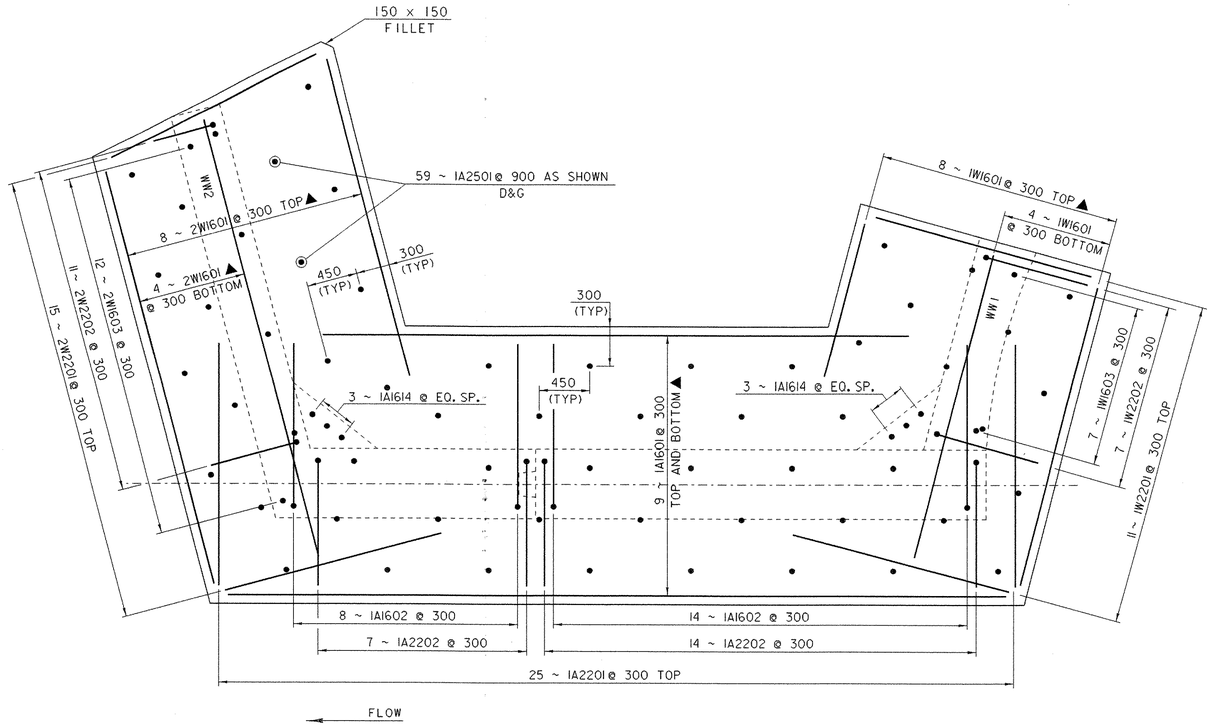
SCALE: 1:25

NOTES:

1. NF = NEAR FACE
2. FF = FAR FACE
3. EF = EACH FACE
4. ▲ = CUT TO FIT IN FIELD
5. 80 CLEAR UNLESS OTHERWISE SPECIFIED ON THE PLANS
6. 3000 MAXIMUM WEEPHOLE SPACING
7. ** D&G - DRILL AND GROUT MINIMUM 450 INTO LEDGE

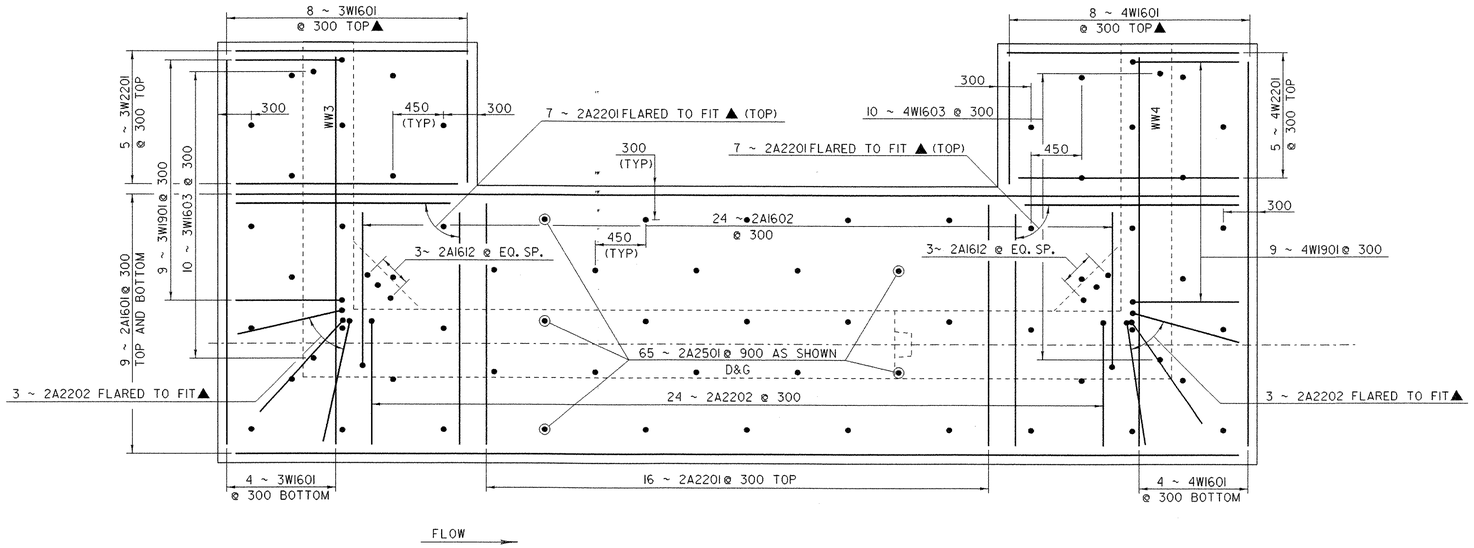
SHEET NAME: **ABUTMENT #2 DETAILS**

PROJECT NAME:	MONTGOMERY	HIGHWAY NO.:	TH 35
PROJECT NUMBER:	BRO 1448(20)	BRIDGE NO.:	24
		OVER:	PACIFIC BROOK
FILE NAME: /PW/94J124/sj124sub.dgn		PLOT DATE:	06-DEC-2005
PROJECT MANAGER: R. WHITCOMB		DRAWN BY:	J. GILMORE
DESIGNED BY:	D.BONNEAU	IPARM NAME:	sj124ab2.i
BRIDGE SHEET NUMBER:		SHEET	31 OF 50



ABUTMENT #1 FOOTING REINFORCING

SCALE: 1:25



ABUTMENT #2 FOOTING REINFORCING

SCALE: 1:25

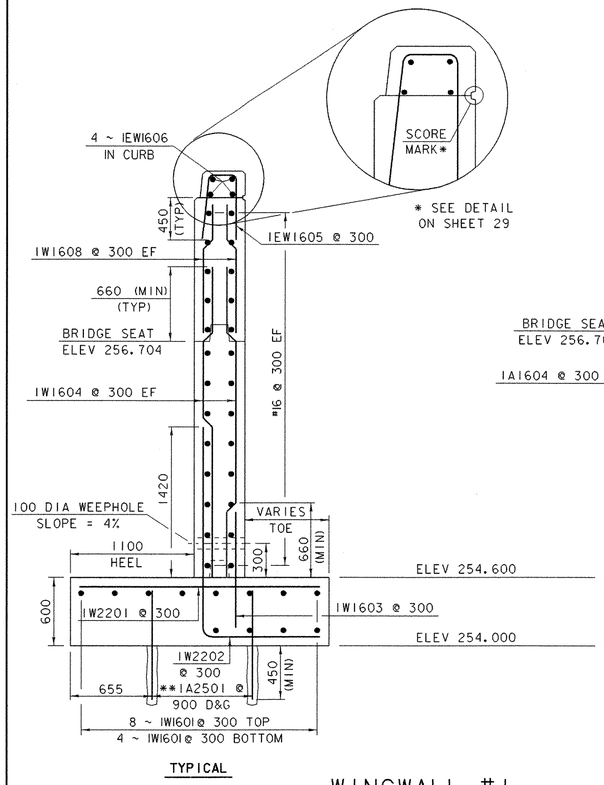
NOTES:

1. NF = NEAR FACE
2. FF = FAR FACE
3. EF = EACH FACE
4. ▲ = CUT TO FIT IN FIELD
5. 80 CLEAR UNLESS OTHERWISE SPECIFIED ON THE PLANS
6. D&G = DRILL AND GROUT, 450 MINIMUM DEPTH OF GROUTING

SHEET NAME: **FOOTING REINFORCING PLANS**

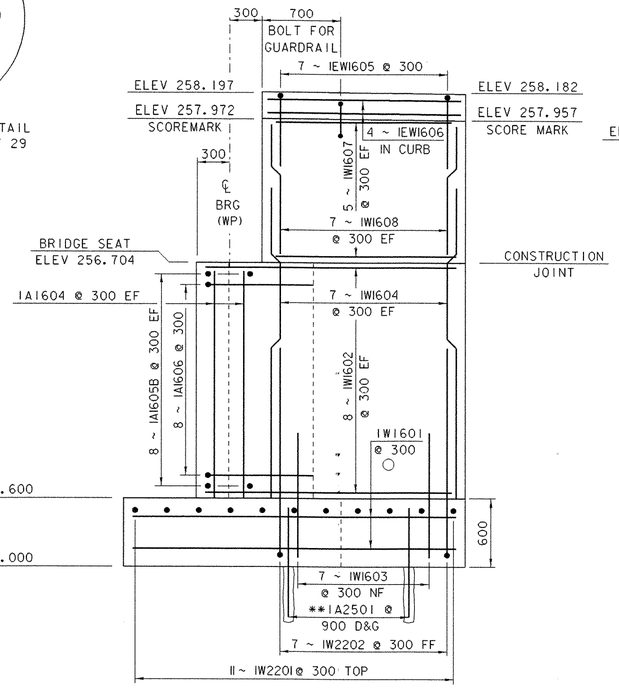
PROJECT NAME:	MONTGOMERY	HIGHWAY NO.:	TH 35
PROJECT NUMBER:	BRO 1448(20)	BRIDGE NO.:	24
		OVER:	PACIFIC BROOK
FILE NAME: /PW/94j124/sj124sub.dgn		PLOT DATE:	06-DEC-2005
PROJECT MANAGER: R. WHITCOMB		DRAWN BY:	J. GILMORE
DESIGNED BY: D.BONNEAU		IPARM NAME:	sj124frp.i
BRIDGE SHEET NUMBER:		SHEET	32 OF 50

Metric

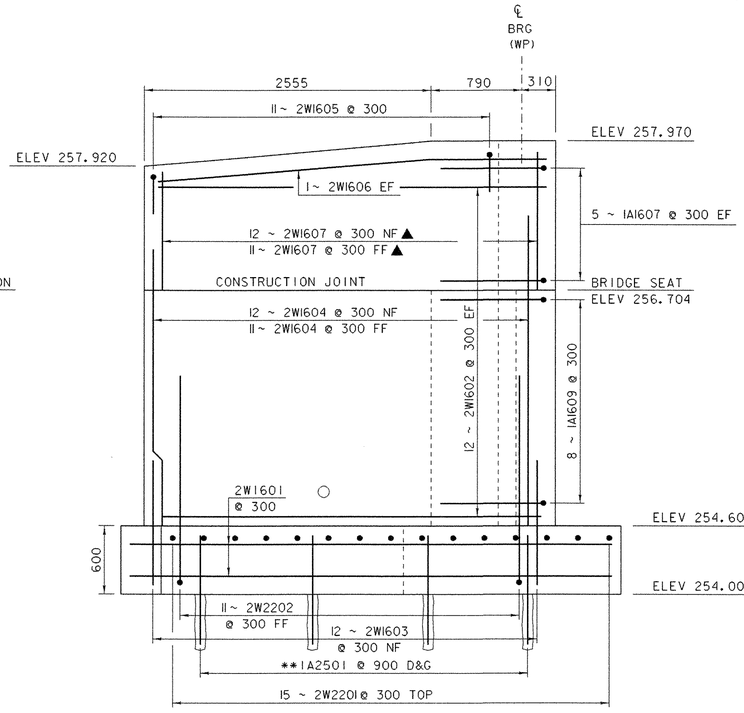


WINGWALL #1

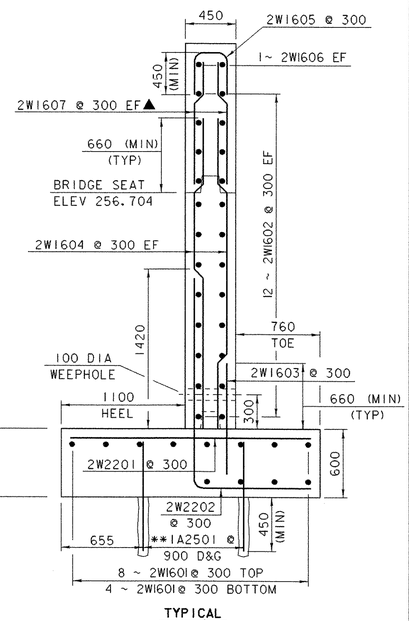
SCALE: 1:25



ELEVATION

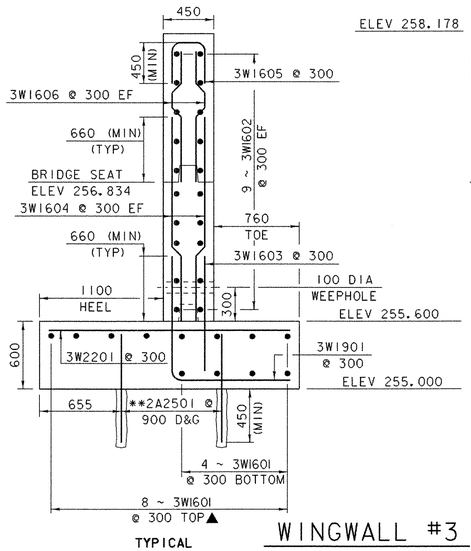


ELEVATION



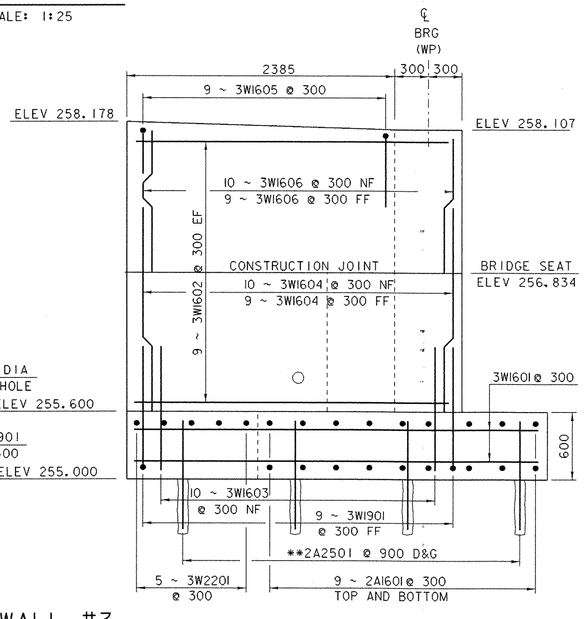
WINGWALL #2

SCALE: 1:25

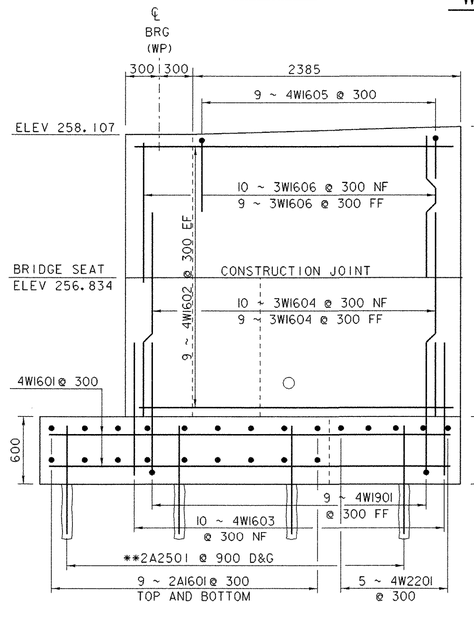


WINGWALL #3

SCALE: 1:25



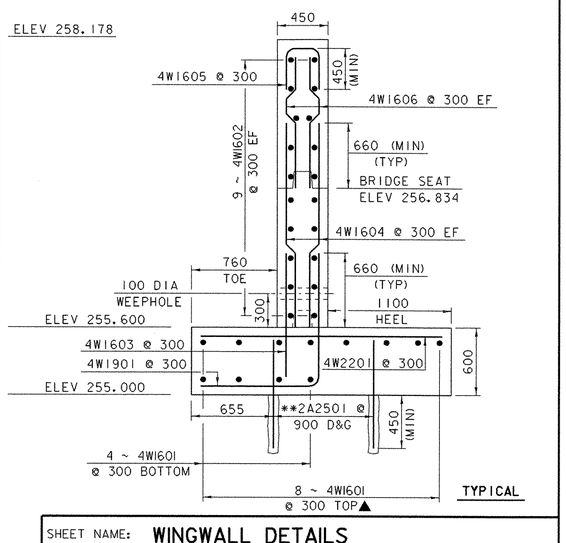
ELEVATION



ELEVATION

WINGWALL #4

SCALE: 1:25



NOTES:

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2. FF = FAR FACE
3. EF = EACH FACE
4. ▲ = CUT TO FIT IN FIELD
5. 80 CLEAR UNLESS OTHERWISE SPECIFIED ON THE PLANS
6. D&G = DRILL AND GROUT, 450 MINIMUM DEPTH OF GROUTING
7. ** = SEE FOOTING REINFORCING PLANS, SHEET 32 FOR LAYOUT OF 1A2501 AND 2A2501 BARS.

SHEET NAME: **WINGWALL DETAILS**

PROJECT NAME:	MONTGOMERY	HIGHWAY NO.:	TH 35
PROJECT NUMBER:	BRO 1448(20)	BRIDGE NO.:	24
		OVER:	PACIFIC BROOK
FILE NAME:	/PW/94J124/sJ124sub.dgn	PLOT DATE:	06-DEC-2005
PROJECT MANAGER:	R. WHITCOMB	DRAWN BY:	J. GILMORE
DESIGNED BY:	D.BONNEAU	IPARM NAME:	sJ124ww.i
BRIDGE SHEET NUMBER:		SHEET	33 OF 50

STATE OF VERMONT
AGENCY OF TRANSPORTATION

REINFORCING STEEL SCHEDULE

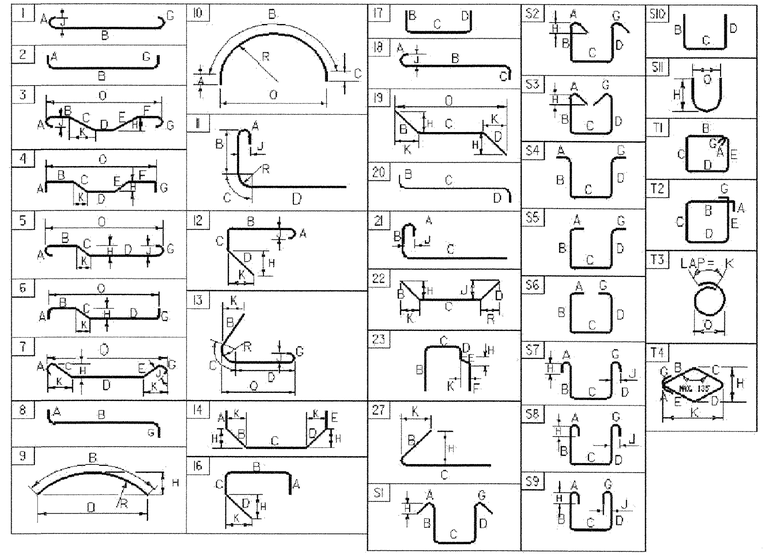
Metric

	EACH	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
	DECK																
	186	16	9420	ES1601	STR												
▲	192	16	5040	ES1605	STR												
⧺	180	16	5040	ES1602	1	180	5040					---					
	182	16	1510	ES1603	S5	300	335	240	335			300					
	22	16	3196	ES1604	S5	450	1153	170	973			450					
	ABUTMENT #1																
	18	16	7085	1A1601	STR												
	22	16	2720	1A1602	17		1540	1180	---								
	22	16	1340	1A1603	S10		450	440	450								
⧺	43	16	2050	1A1604	STR												
	16	16	2895	1A1605A	STR												
	16	16	3930	1A1605B	STR												
	8	16	1320	1A1606	17		660	660	---								
	10	16	1630	1A1607	19		660	970	---				640		170		1140
	7	16	3290	1A1608	STR												
	8	16	1320	1A1609	19		660	660	---				640		170		830
	8	16	3525	1A1610	22		660	2205	660				400		525		
	8	16	3520	1A1611	22		660	2200	660				400		525		
	(NOT USED)			1A1612													
	5	16	1335	1A1613	19		660	675	---				640		170		840
⧺	26	22	2300	1A2201	STR												
	22	22	2380	1A2202	17		1180	1200	---								
⧺	60	25	900	1A2501	STR												
	WINGWALL #1																
▲	12	16	2940	1W1601	STR												
	16	16	2270	1W1602	STR												
⧺	8	16	1180	1W1603	STR												
	14	16	2765	1W1604	STR												
	7	16	1610	1EW1605	S10		660	290	660								
	4	16	1810	1EW1606	STR												
	10	16	1670	1W1607	STR												
	14	16	1225	1W1608	STR												
	11	22	2210	1W2201	STR												
	7	22	2980	1W2202	S10		1940	1040	---								
	WINGWALL #2																
▲	12	16	4450	2W1601	STR												
	24	16	3335	2W1602	STR												
	12	16	1180	2W1603	STR												
	23	16	2765	2W1604	STR												
	11	16	1610	2W1605	S10		660	290	660								
	2	16	3650	2W1606	16	---	---	1025	2625				2615		215		
▲	23	16	1185	2W1607	STR												
⧺	16	22	2150	2W2201	STR												
	11	22	2990	2W2202	S10		1940	1050	---								
	ABUTMENT #2																
	18	16	9090	2A1601	STR												
	32	16	3320	2A1602	17		1700	1620	---								
	24	16	1340	2A1603	S10		450	440	450								
	NOT USED			2A1604													
	10	16	5158	2A1605A	STR												
	10	16	3045	2A1605B	STR												
	NOT USED			2A1606													
▲	20	16	1750	2A1607	17		660	1090	---								
	16	16	2420	2A1608	STR												
	10	16	3265	2A1609	22		660	1945	660				465		465		
	10	16	1320	2A1610	17		660	660	---								
	10	16	1460	2A1611	17		660	800	---								
⧺	31	22	2300	2A2201	STR												
	32	22	2900	2A2202	17		1700	1200	---								
⧺	66	25	900	2A2501	STR												
	WINGWALL #3																
▲	13	16	3585	3W1601	STR												
	18	16	2825	3W1602	STR												
	10	16	1180	3W1603	STR												
⧺	20	16	1895	3W1604	STR												
	9	16	1350	3W1605	S10		530	290	530								
	19	16	1190	3W1606	STR												
⧺	10	19	2230	3W1901	17		1180	1050	---								
⧺	6	22	2150	3W2201	STR												

ITEM	EACH	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
	WINGWALL #4																
▲	13	16	3585	4W1601	STR												
	18	16	2825	4W1602	STR												
	10	16	1180	4W1603	STR												
⧺	20	16	1895	4W1604	STR												
	9	16	1350	4W1605	S10		530	290	530								
	19	16	1190	4W1606	STR												
	9	19	2230	4W1901	17		1180	1050	---								
	5	22	2150	4W2201	STR												

~ NOTES ~

1. UNLESS OTHERWISE DESIGNATED, ALL BAR REINFORCEMENT FOR CONCRETE IN SIZES UP TO AND INCLUDING 55M SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT", AASHTO M 31M (ASTM A 615M-SI). ALL BARS SHALL BE GRADE 420, UNLESS OTHERWISE DESIGNATED.
2. FOR TYPICAL BENDING DETAILS, RECOMMENDED PIN DIAMETER "D" OF BENDS AND HOOKS, AND OTHER STANDARD PRACTICE, SEE CURRENT CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE".
3. BARS WHICH REQUIRE MORE ACCURATE BENDING THAN STANDARD PRACTICES SHOULD HAVE LIMITS INDICATED.
4. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" AND "G" ON STANDARD 180 DEGREE AND 135 DEGREE HOOKS.
5. "J" DIMENSION ON 180 DEGREE HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE. OTHERWISE, STANDARD HOOKS ARE TO BE USED.
6. "H" DIMENSION ON STIRRUPS TO BE SHOWN ONLY WHEN NECESSARY TO MAINTAIN CLEARANCES.
7. WHERE SLOPE DIFFERS FROM 45 DEGREES, DIMENSIONS "H" AND "K" MUST BE SHOWN.
8. ▲ DENOTES BARS TO BE CUT IN FIELD.
9. ⧺ DENOTES ONE EXTRA BAR ADDED FOR TESTING PURPOSES.
10. △ DENOTES TWO EXTRA BARS ADDED FOR TESTING PURPOSES.
11. "E" IN PREFIX DENOTES EPOXY COATED REINFORCING STEEL.



ASTM STANDARD REINFORCING BARS

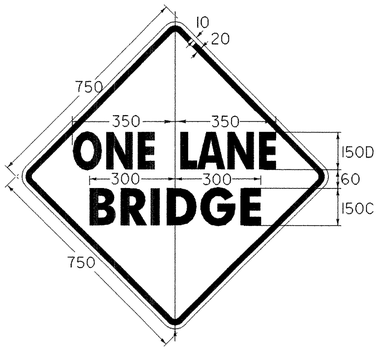
BAR SIZE	NOMINAL MASS (Kg/m)	NOMINAL DIMENSIONS ROUND SECTION		
		DIAMETER (mm)	CROSS SECTIONAL AREA (mm^2)	PERIMETER (mm)
#10	0.560	9.5	71	29.84
#13	0.994	12.7	129	39.90
#16	1.552	15.9	199	49.95
#19	2.235	19.1	284	60.00
#22	3.042	22.2	387	69.74
#25	3.973	25.4	510	79.80
#29	5.060	28.7	645	90.16
#32	6.404	32.3	819	101.47
#36	7.907	35.8	1006	112.47
#43	11.380	43.0	1452	135.09
#57	20.240	57.3	2581	180.01

PROJECT NAME: MONTGOMERY
PROJECT NUMBER: BRO 1448(20)

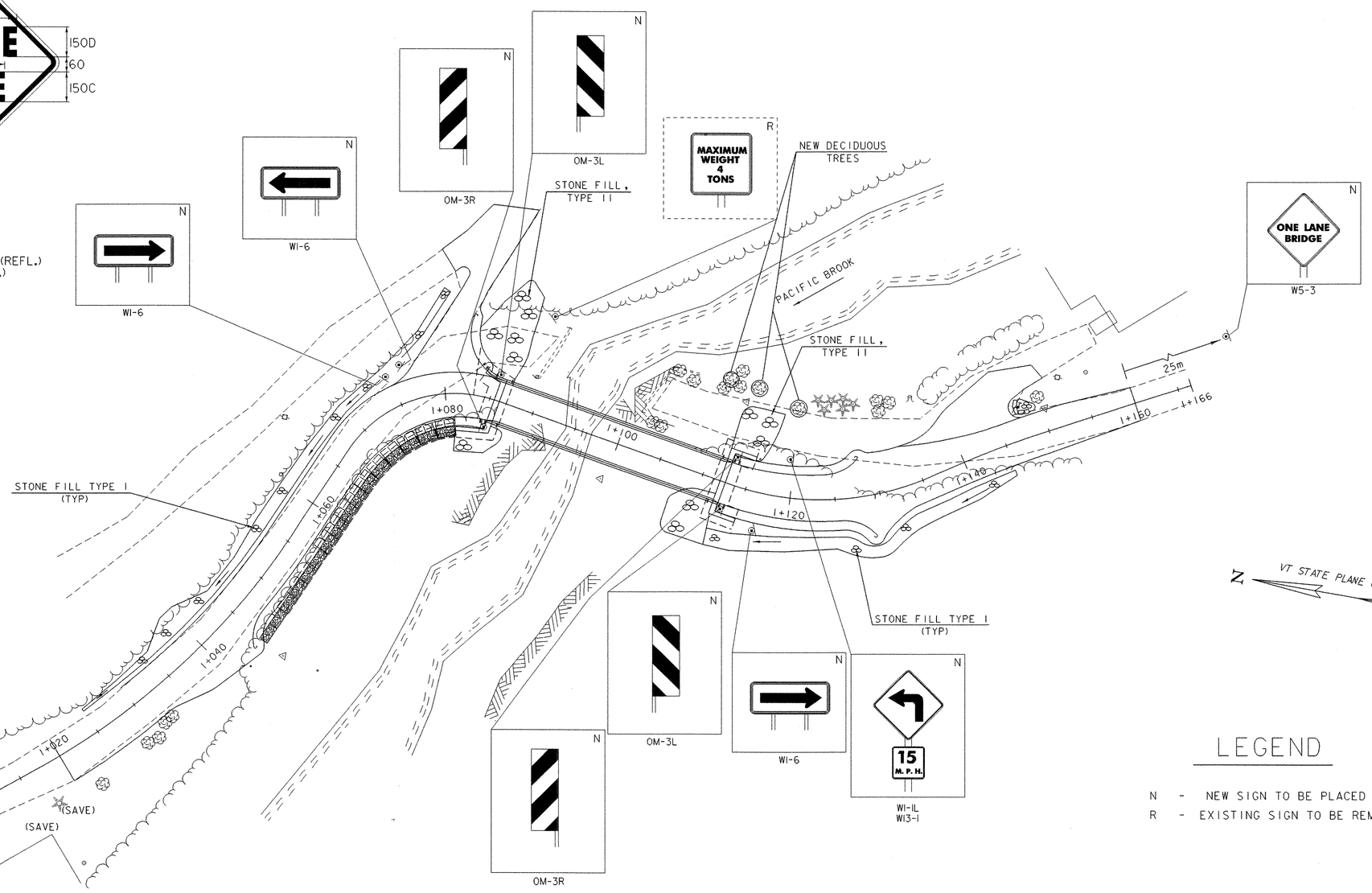
FILE NAME: /TransFANS/94j124/sj124rss.xl
PROJECT LEADER: R. WHITCOMB
DESIGNED BY: C. CARLSON
REINFORCING STEEL SCHEDULE SHEET

PLOT DATE: 10/27/2005
DRAWN BY: J.GILMORE
CHECKED BY: C. CARLSON
SHEET 34 OF 50

VAOT Metric



2¼R
VC-812
COLORS:
BLACK BORDER AND TEXT NON (REFL.)
YELLOW BACKROUND (REFL.)



N
VT STATE PLANE GRID

LEGEND

N - NEW SIGN TO BE PLACED
R - EXISTING SIGN TO BE REMOVED

NOTE: STATIONS FOR NEW SIGNS ARE SHOWN ON SHEET 36

0 10 20
SCALE 1:250

SHEET NAME:	SIGNING SHEET		
PROJECT NAME:	MONTGOMERY	HIGHWAY NO.:	TH 35
PROJECT NUMBER:	BRO 1448(20)	BRIDGE NO.:	24
		OVER:	PACIFIC BROOK
FILE NAME: /PW/94J124/sj124sgn.dgn		PLOT DATE:	06-DEC-2005
PROJECT MANAGER: R. WHITCOMB		DRAWN BY:	J. GILMORE
DESIGNED BY: C. CARLSON		IPARM NAME:	sj124sgl.i
BRIDGE SHEET NUMBER:		SHEET	35 OF 50

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

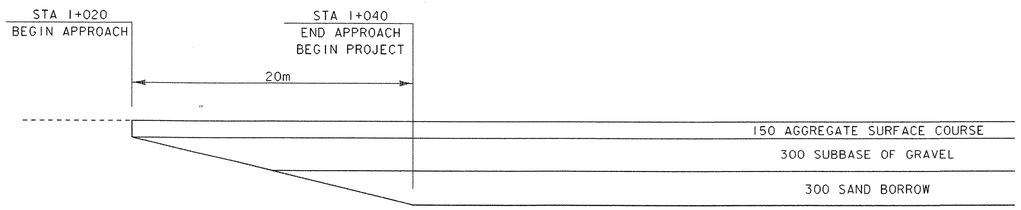
Last Metric

KILOMETER MARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (mm)	HEIGHT (mm)	NEW & SALVAGED SIGNS "A"	"B"	SALV SIGN	SALV TIS	EXIST POST RETAIN	EXIST POST SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL kg/m 1.7	3.0	4.5	SQUARE STEEL (mm) kg/m 44 3.4	50 3.9	63 5.0	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (mm) kg/m 75 1.9	100 2.5	100 MOD. 2.5	FOUNDATION	TUBULAR STEEL Ø (mm) kg/m 75 11.3	89 13.4	100 16.1	125 21.7	W-SHAPE STEEL FTG. SIZE 600 mm	750 mm	WEIGHT	POST SIZE	SIGN FRAMMED REQUIRED	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
											OPTION ITEMS																									
STA 0+960 RT		1	600	600	0.36						1		X			X		X															WI-IR		E-151
STA 0+960 RT		1	450	450	0.20																											WI3-1		E-155
STA 1+005 RT		1	750	750	0.56						1		X			X		X															W5-3		SEE SHEET 35
													X			X		X																	
STA 1+074.710 LT		1	900	450	0.41						1		X			X		X															WI-6		E-152
STA 1+076.230 LT		1	900	450	0.41						1		X			X		X															WI-6		E-152
STA 1+085 RT & STA 1+113 LT		2	300	900	0.54						1		X			X		X															OM-3R		E-120
STA 1+085 LT & STA 1+113 RT		2	300	900	0.54						1		X			X		X															OM-3L		E-120
STA 1+116.640 RT		1	900	450	0.41						1		X			X		X															WI-6		E-152
STA 1+120 LT		1	600	600	0.36						1		X			X		X															WI-IL		E-151
STA 1+120 LT		1	450	450	0.20																											WI3-1		E-155
STA 1+185 LT		1	750	750	0.56						1		X			X		X															W5-3		SEE SHEET 35

FINAL POST ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE."

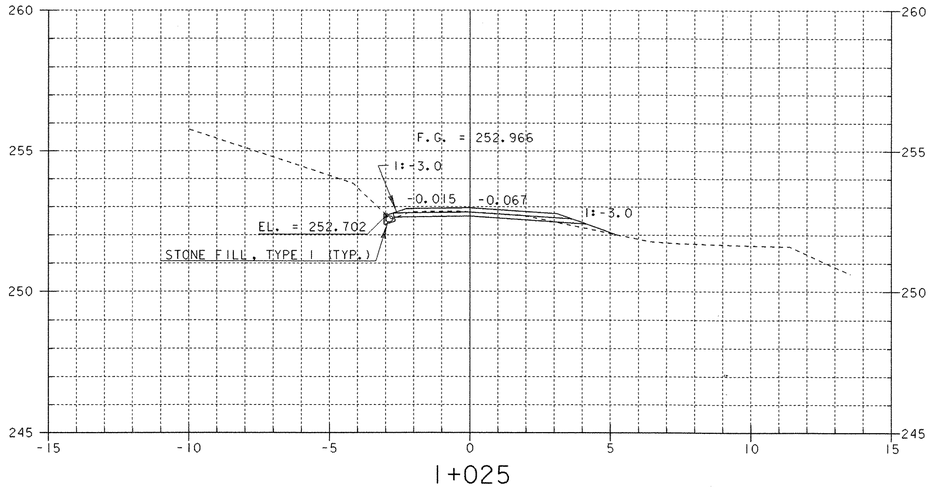
	m	m	m	m	m	m	EA.	kg	kg	kg	kg	kg	kg	kg	EA.	kg	EA.	EA.	kg
TOTALS	m^2 4.55	m^2	EA.	m^2		m 42.00		m 42.00		kg		EA.		kg		EA.	EA.	kg

SHEET NAME:	SIGN SUMMARY
PROJECT NAME:	MONTGOMERY
PROJECT NUMBER:	BRO 1448(20)
HIGHWAY NO.:	TH 35
BRIDGE NO.:	24
OVER:	PACIFIC BROOK
FILE NAME:	/PW/94J124/sj124sgn.dgn
PROJECT MANAGER:	R. WHITCOMB
DESIGNED BY:	C. CARLSON
BRIDGE SHEET NUMBER:	
PLOT DATE:	06-DEC-2005
DRAWN BY:	J. GILMORE
IPARM NAME:	sj124sg2.i
SHEET	36 OF 50

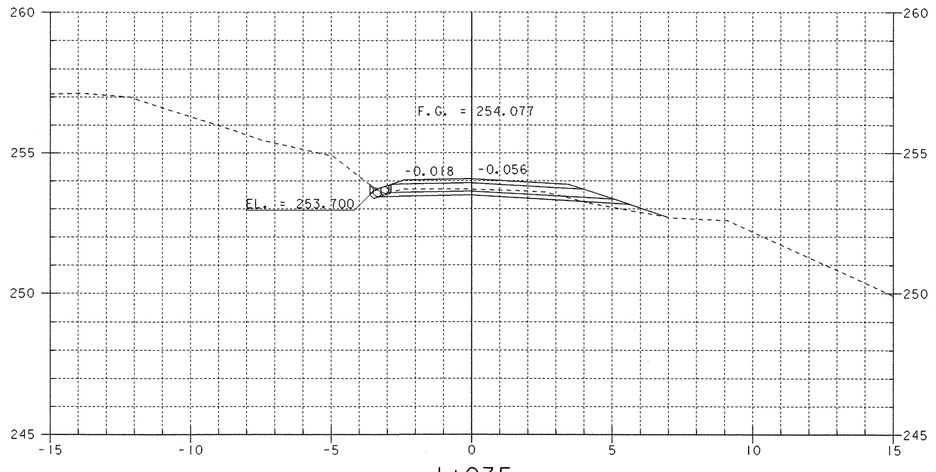


TRANSITION DIAGRAM

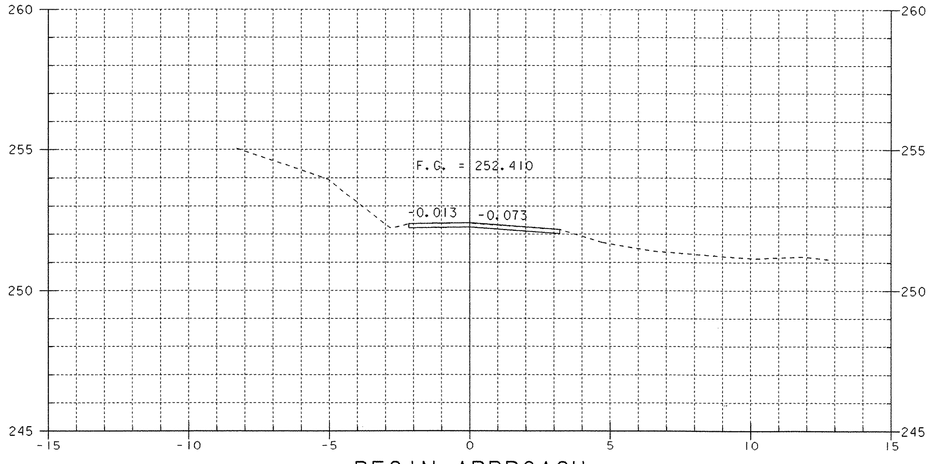
NTS



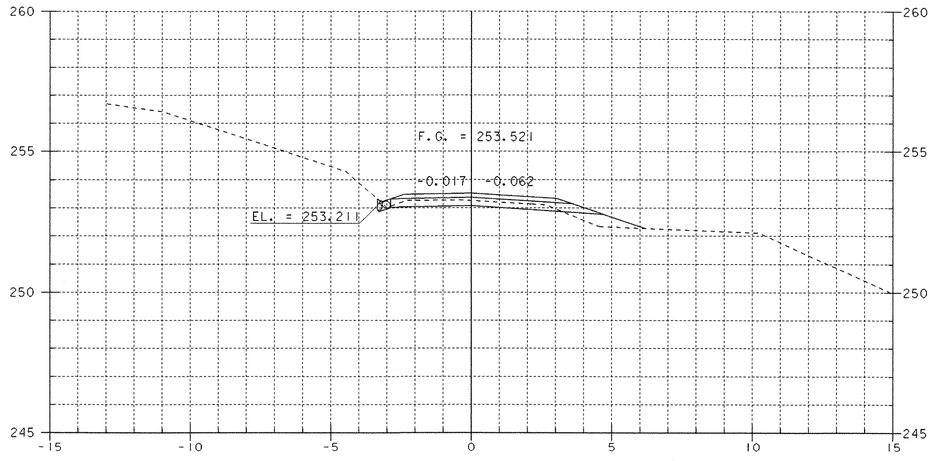
1+025



1+035



BEGIN APPROACH
1+020

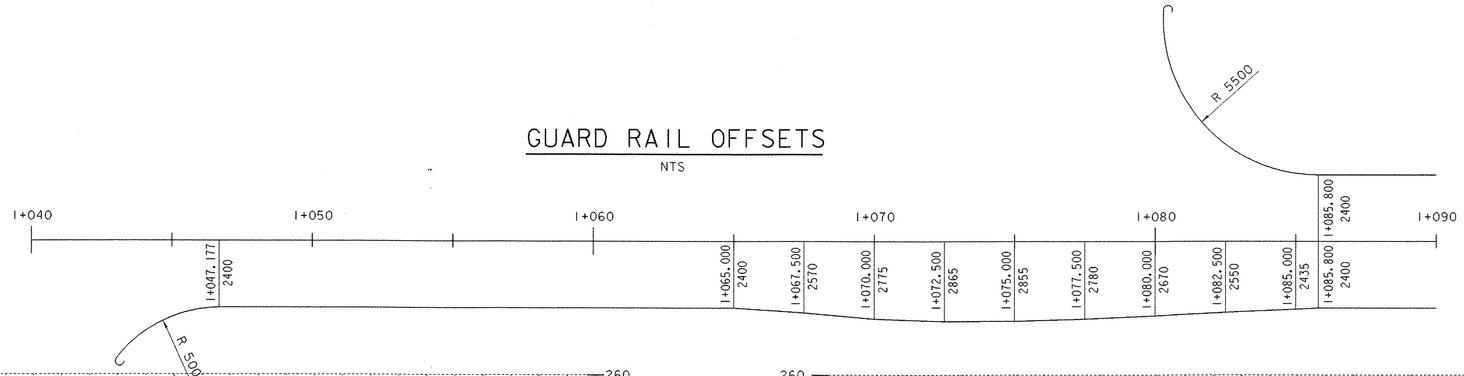


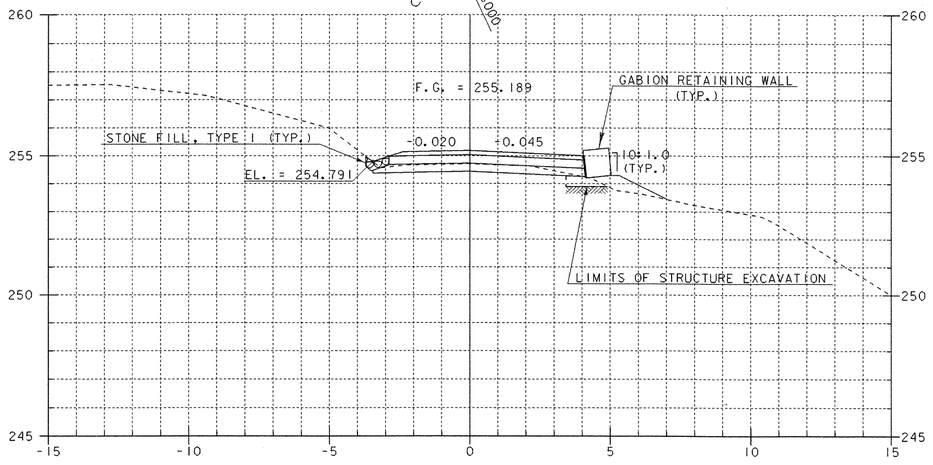
1+030

SHEET NAME:	**MAINLINE CROSS SECTIONS**		
PROJECT NAME:	MONTGOMERY	HIGHWAY NO.:	TH 35
PROJECT NUMBER:	BRO 1448(20)	BRIDGE NO.:	24
		OVER:	PACIFIC BROOK
FILE NAME:	/PW/94jl24/sjl24xsl.dgn	PLOT DATE:	06-DEC-2005
PROJECT MANAGER:	R. WHITCOMB	DRAWN BY:	J. GILMORE
DESIGNED BY:	C. CARLSON	IPARM NAME:	sjl24mxl.i
BRIDGE SHEET NUMBER:		SHEET	37 OF 50

GUARD RAIL OFFSETS

NTS

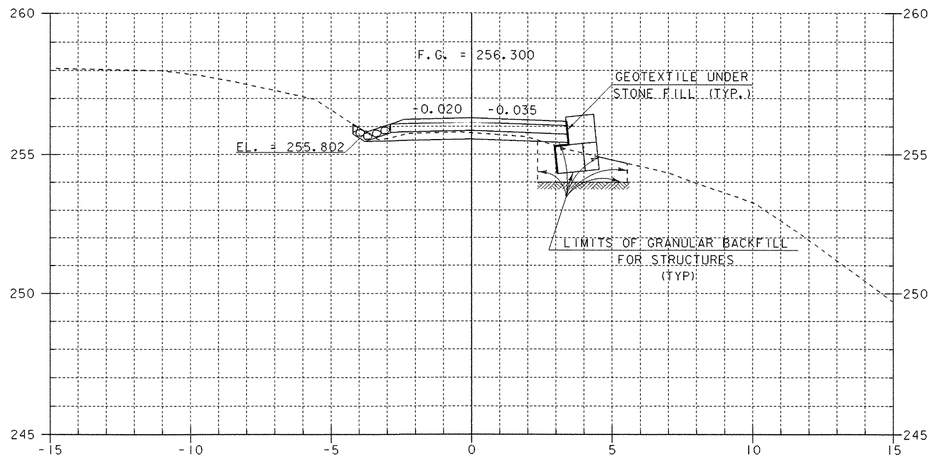




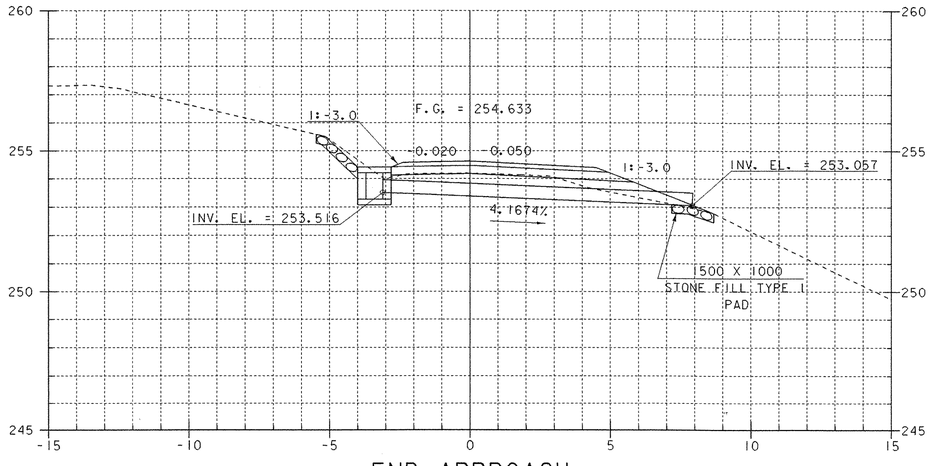
1+045

STA. 1+044.800 RT

BEGIN GABION RETAINING WALL



1+055

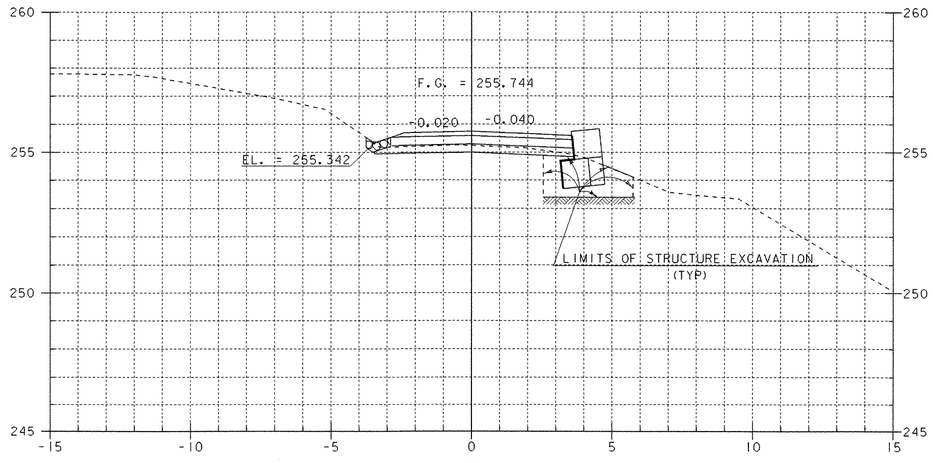


END APPROACH

BEGIN PROJECT

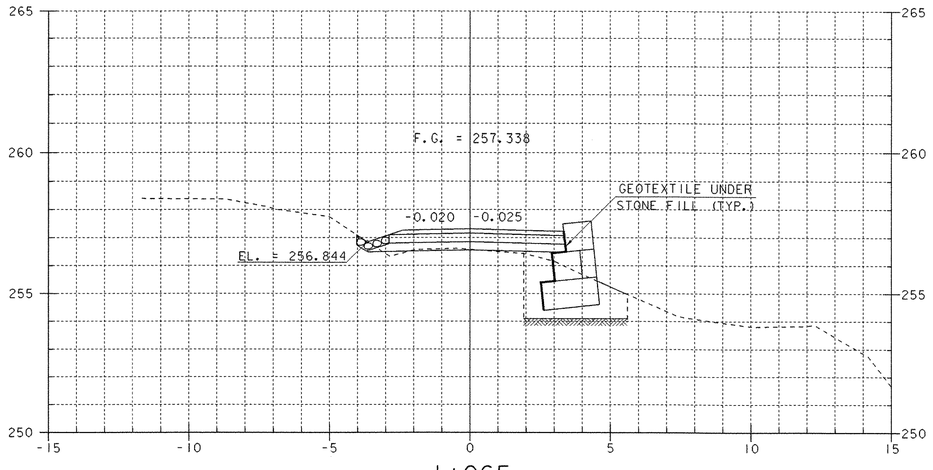
1+040

STA 1+040 CONSTRUCT
450 x 11 000 OPTION PIPE

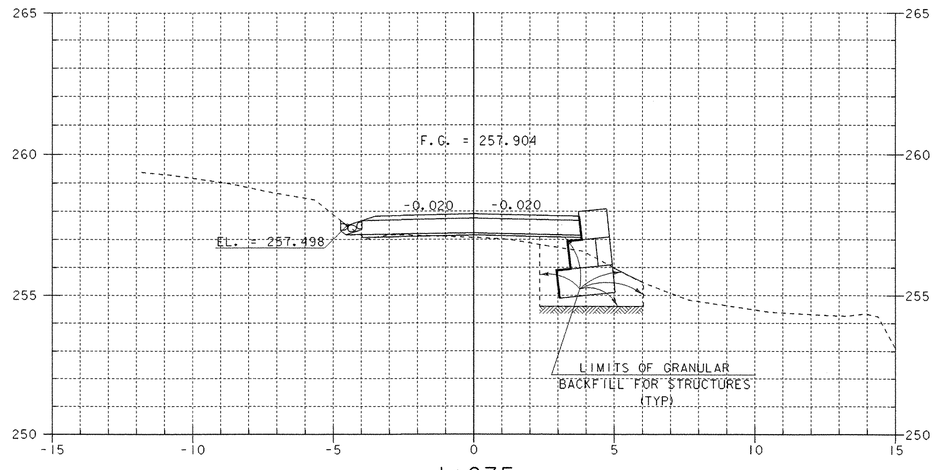


1+050

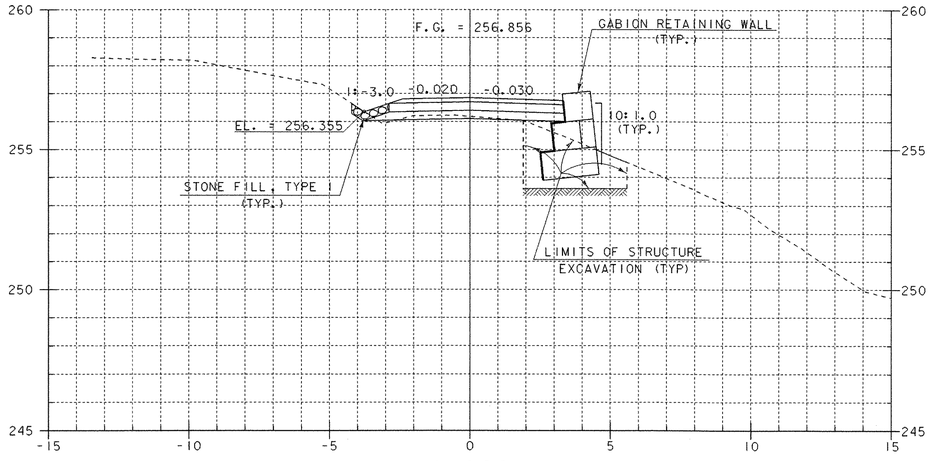
SHEET NAME:	MAINLINE CROSS SECTIONS		
PROJECT NAME:	MONTGOMERY	HIGHWAY NO.:	TH 35
PROJECT NUMBER:	BRO 1448(20)	BRIDGE NO.:	24
		OVER:	PACIFIC BROOK
FILE NAME: /PW/94j124/sj124xsl.dgn		PLOT DATE:	06-DEC-2005
PROJECT MANAGER: R. WHITCOMB		DRAWN BY:	J. GILMORE
DESIGNED BY: C. CARLSON		IPARM NAME:	sj124mx2.i
BRIDGE SHEET NUMBER:		SHEET	38 OF 50



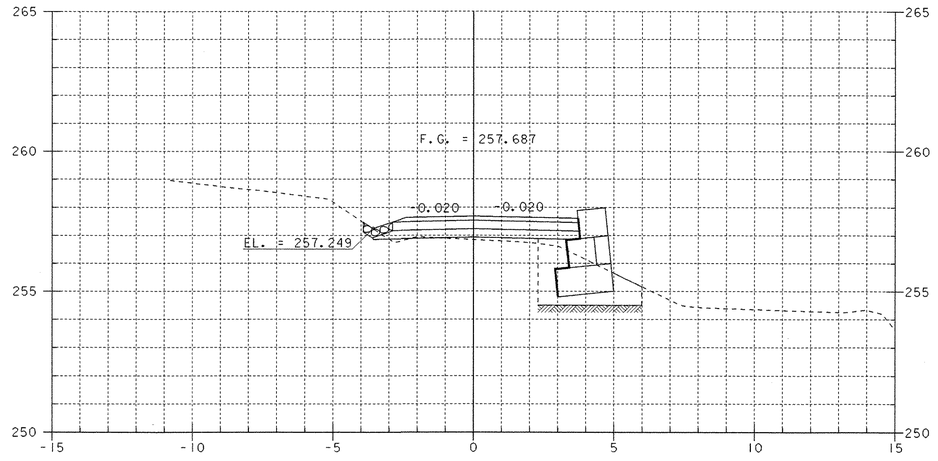
1+065



1+075



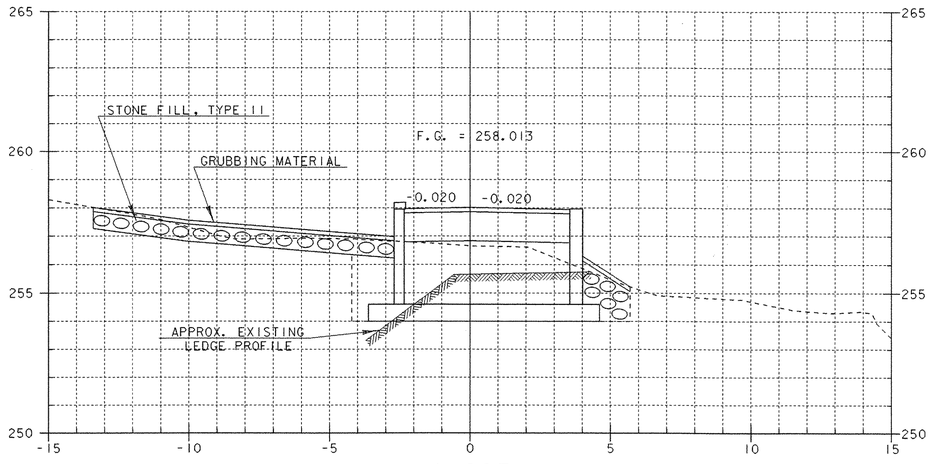
1+060



1+070

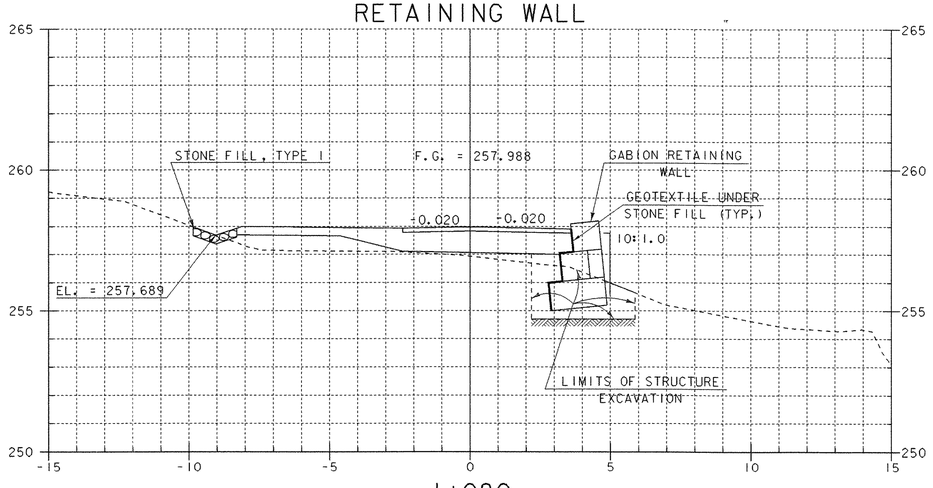
SHEET NAME: **MAINLINE CROSS SECTIONS**

PROJECT NAME: MONTGOMERY	HIGHWAY NO.: TH 35
PROJECT NUMBER: BRO 1448(20)	BRIDGE NO.: 24
	OVER: PACIFIC BROOK
FILE NAME: /PW/94jl24/sjl24xsl.dgn	PLOT DATE: 06-DEC-2005
PROJECT MANAGER: R. WHITCOMB	DRAWN BY: J. GILMORE
DESIGNED BY: C. CARLSON	IPARM NAME: sjl24mx3.I
BRIDGE SHEET NUMBER:	SHEET 39 OF 50

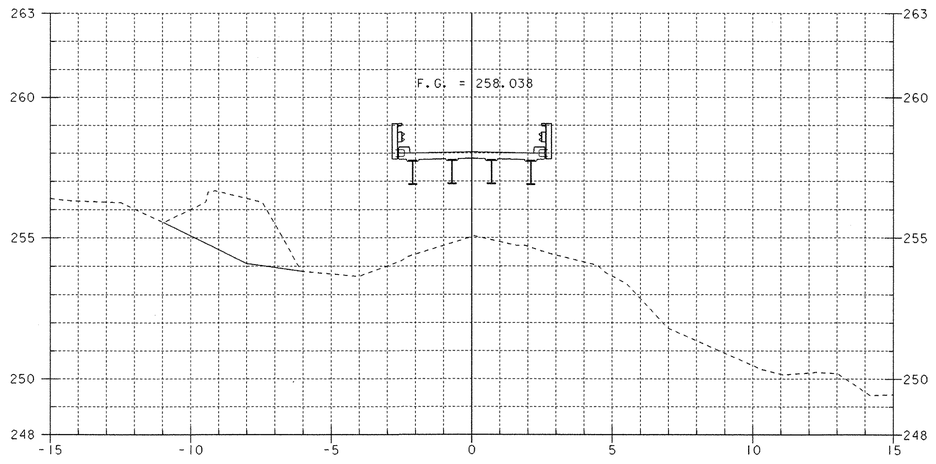


1+085

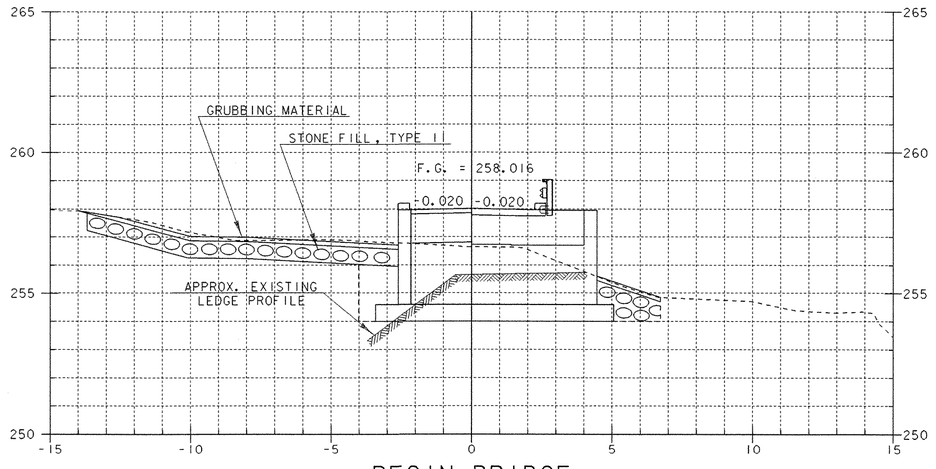
STA 1+080.800
END GABION
RETAINING WALL



1+080



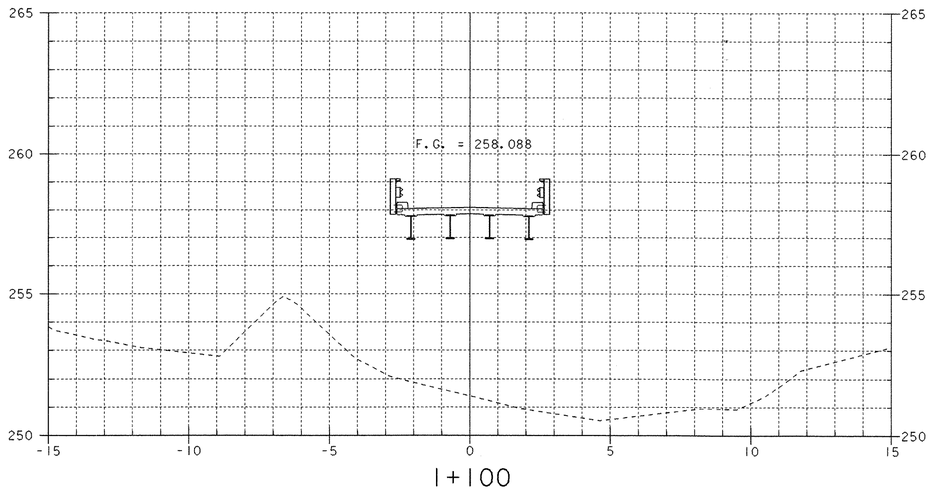
1+090



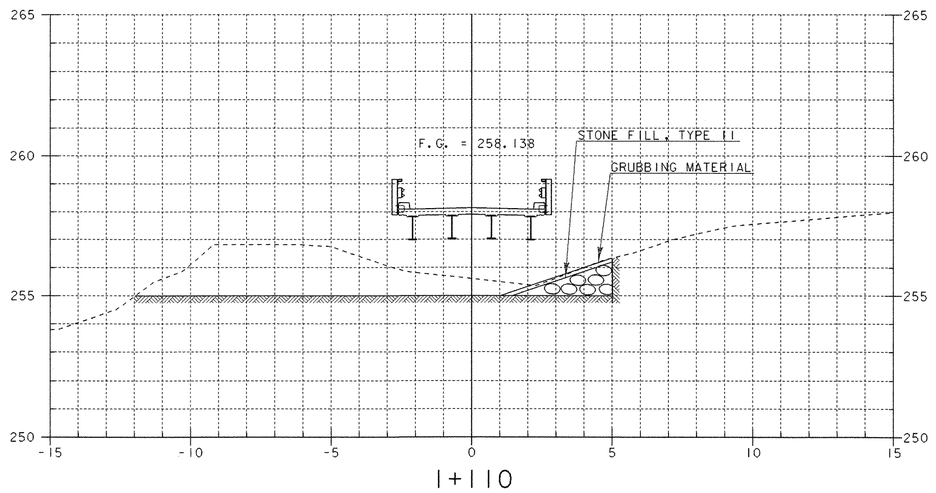
BEGIN BRIDGE

1+085.500

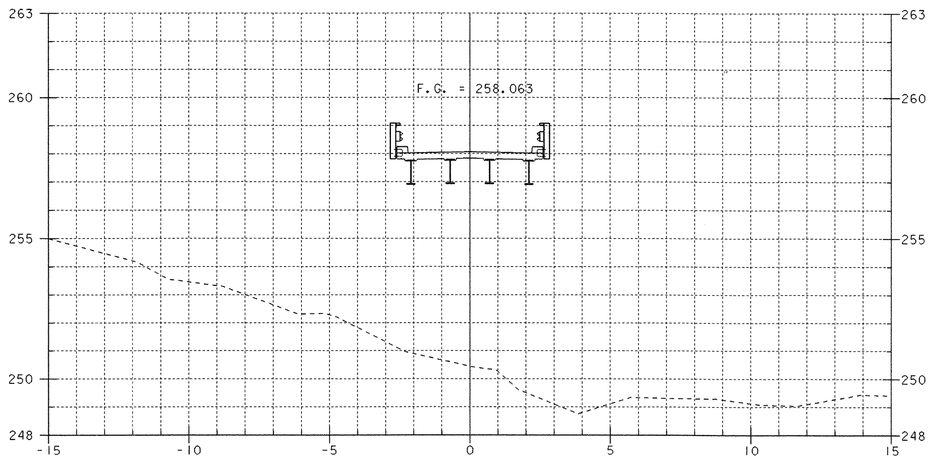
SHEET NAME:	**MAINLINE CROSS SECTIONS**		
PROJECT NAME:	MONTGOMERY	HIGHWAY NO.:	TH 35
PROJECT NUMBER:	BRO 1448(20)	BRIDGE NO.:	24
		OVER:	PACIFIC BROOK
FILE NAME:	/PW/94ji24/sji24xsl.dgn	PLOT DATE:	06-DEC-2005
PROJECT MANAGER:	R. WHITCOMB	DRAWN BY:	J. GILMORE
DESIGNED BY:	C. CARLSON	IPARM NAME:	sji24mx4.i
BRIDGE SHEET NUMBER:		SHEET	40 OF 50



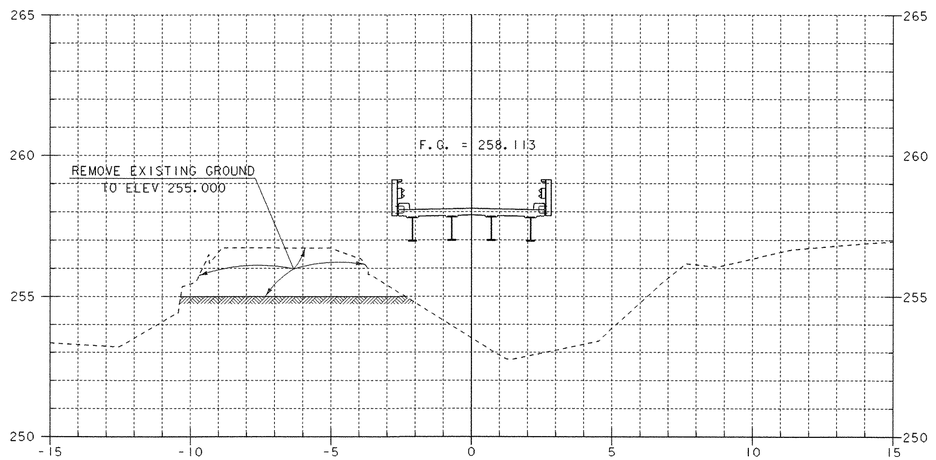
1+100



1+110

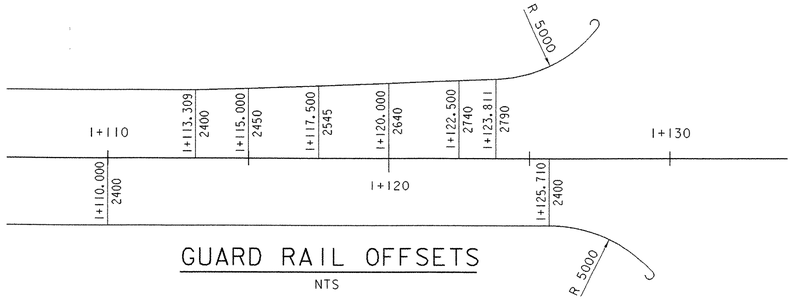


1+095



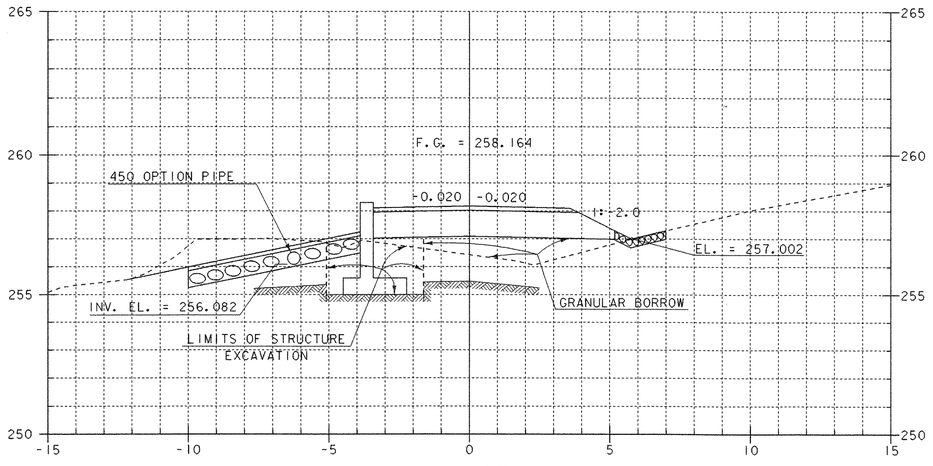
1+105

SHEET NAME:	MAINLINE CROSS SECTIONS		
PROJECT NAME:	MONTGOMERY	HIGHWAY NO.:	TH 35
PROJECT NUMBER:	BRO 1448(20)	BRIDGE NO.:	24
		OVER:	PACIFIC BROOK
FILE NAME:	/PW/94jl24/sjl24xsl.dgn	PLOT DATE:	06-DEC-2005
PROJECT MANAGER:	R. WHITCOMB	DRAWN BY:	J. GILMORE
DESIGNED BY:	C. CARLSON	IPARM NAME:	sjl24mx5.i
BRIDGE SHEET NUMBER:		SHEET	41 OF 50



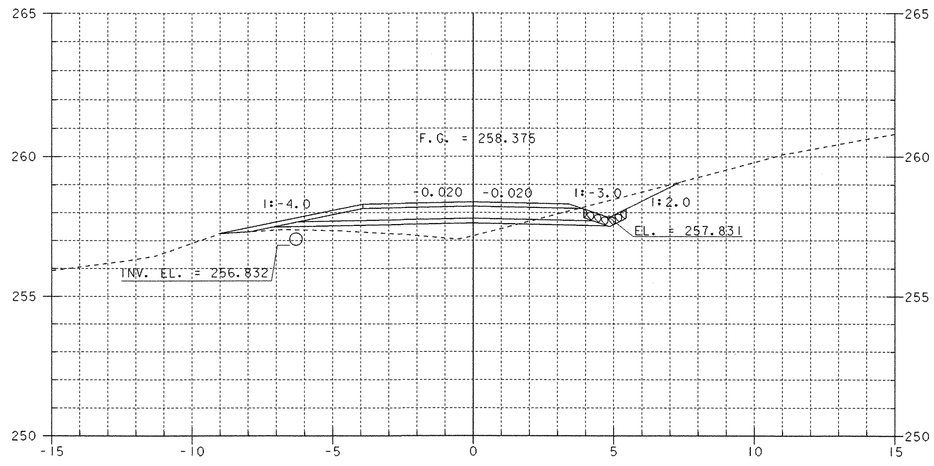
GUARD RAIL OFFSETS

NTS

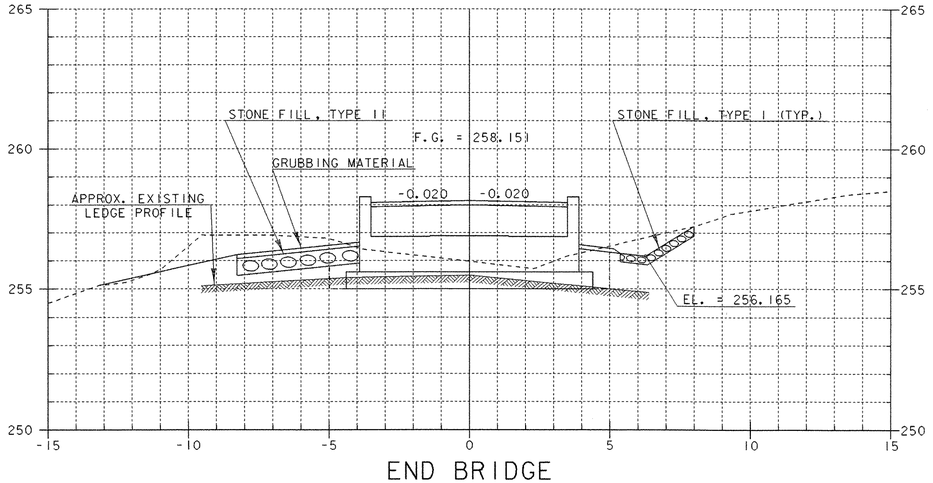


I+115

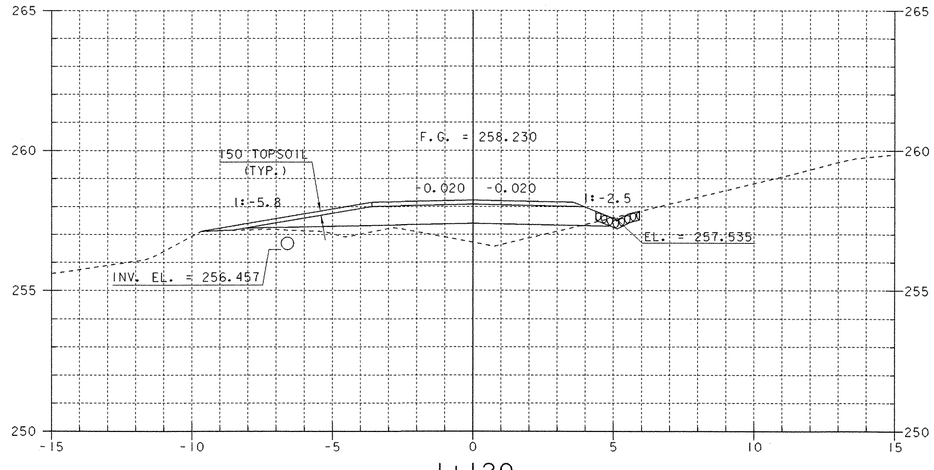
STA I+114
BEGIN GRANULAR BORROW
STA I+113.900 LT.
BEGIN 450 X 30 000 PIPE OPTION



I+125



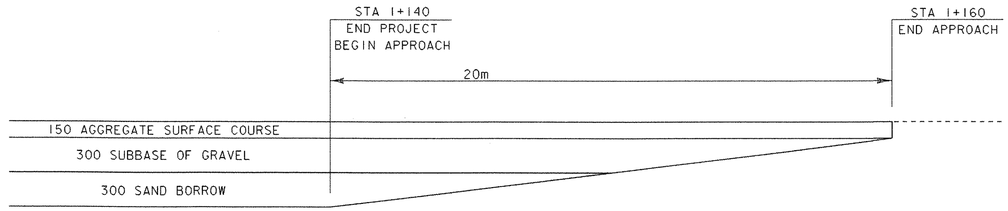
END BRIDGE
I+112.600



STA I+116.2 LT.
BEGIN 150 TOPSOIL

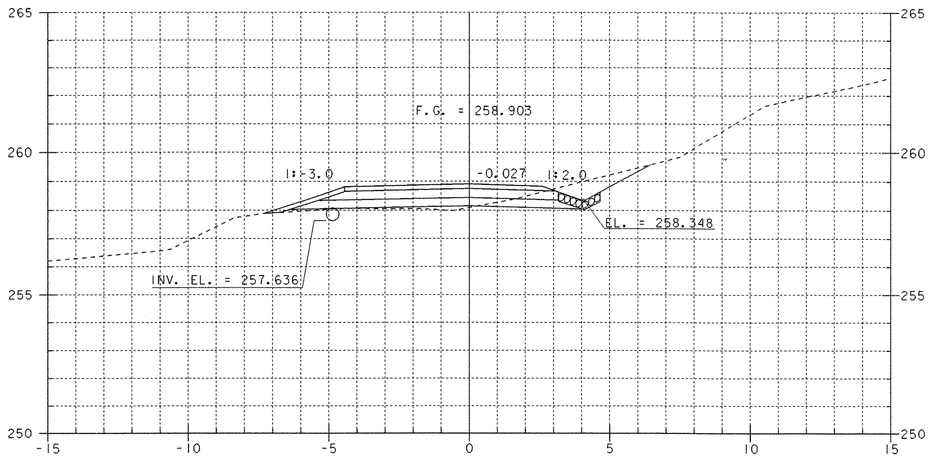
I+120

SHEET NAME:	**MAINLINE CROSS SECTIONS**		
PROJECT NAME:	MONTGOMERY	HIGHWAY NO.:	TH 35
PROJECT NUMBER:	BRO 1448(20)	BRIDGE NO.:	24
		OVER:	PACIFIC BROOK
FILE NAME:	/PW/94j124/sj124xsl.dgn	PLOT DATE:	06-DEC-2005
PROJECT MANAGER:	R. WHITCOMB	DRAWN BY:	J. GILMORE
DESIGNED BY:	C. CARLSON	IPARM NAME:	sj124mx6.i
BRIDGE SHEET NUMBER:		SHEET	42 OF 50

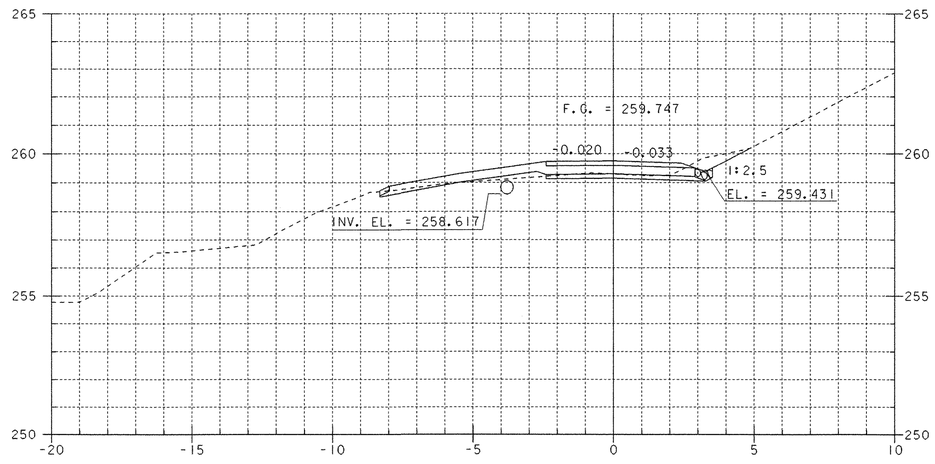


TRANSITION DIAGRAM

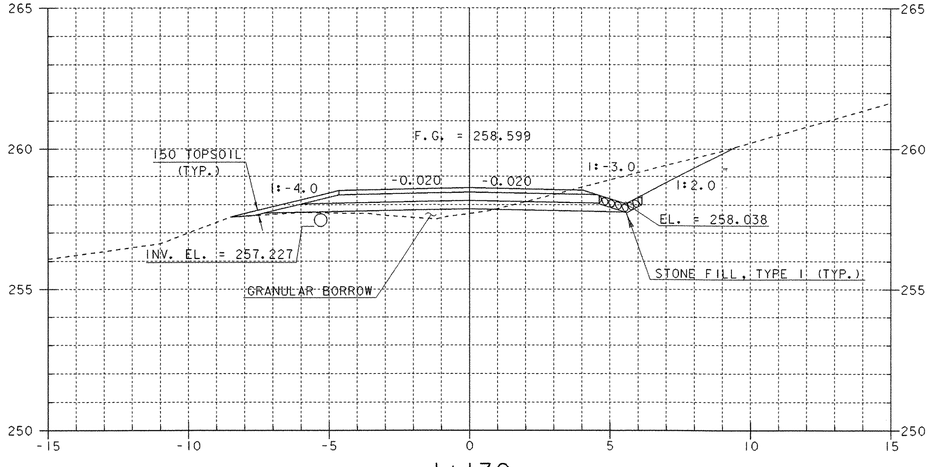
NTS



1+135

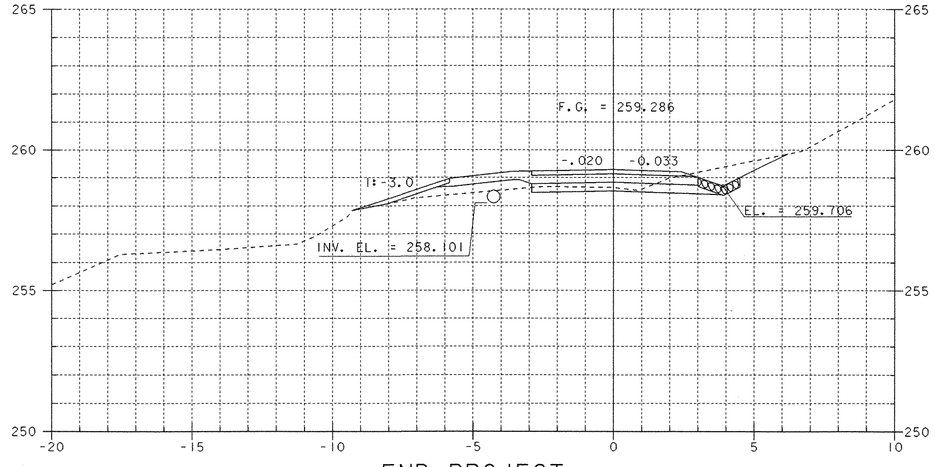


1+145



STA 1+130
END GRANULAR BORROW

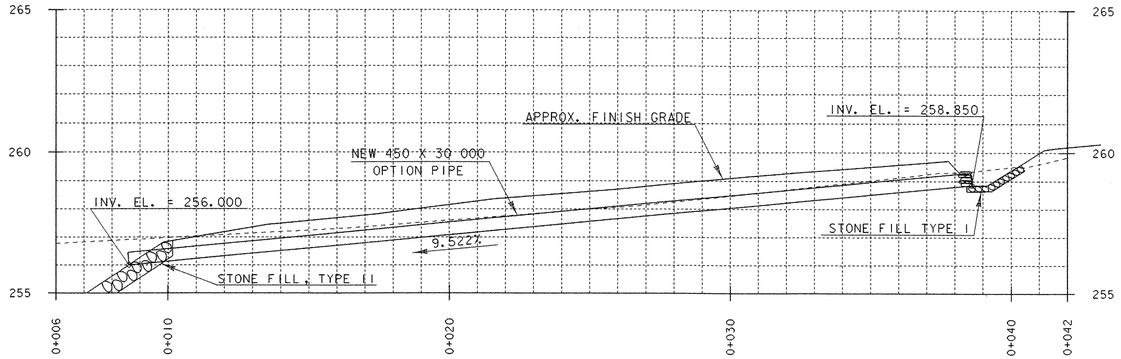
1+130



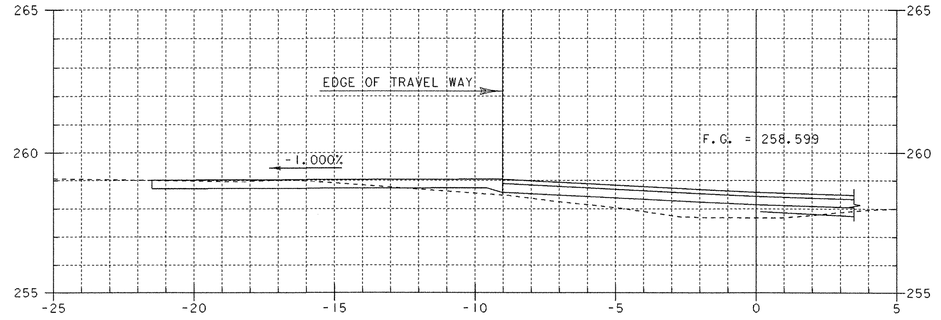
END PROJECT
BEGIN APPROACH
1+140

SHEET NAME: **MAINLINE CROSS SECTIONS**

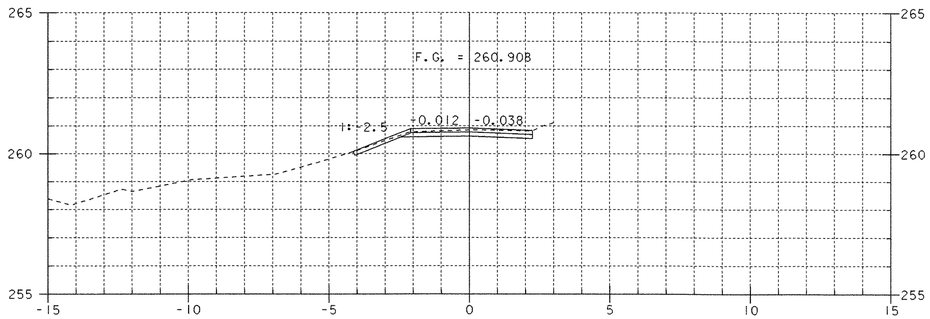
PROJECT NAME: MONTGOMERY	HIGHWAY NO.: TH 35
PROJECT NUMBER: BRO 1448(20)	BRIDGE NO.: 24
	OVER: PACIFIC BROOK
FILE NAME: /PW/94jl24/sjl24xsl.dgn	PLOT DATE: 06-DEC-2005
PROJECT MANAGER: R. WHITCOMB	DRAWN BY: J. GILMORE
DESIGNED BY: C. CARLSON	IPARM NAME: sjl24mx7.i
BRIDGE SHEET NUMBER:	SHEET 43 OF 50



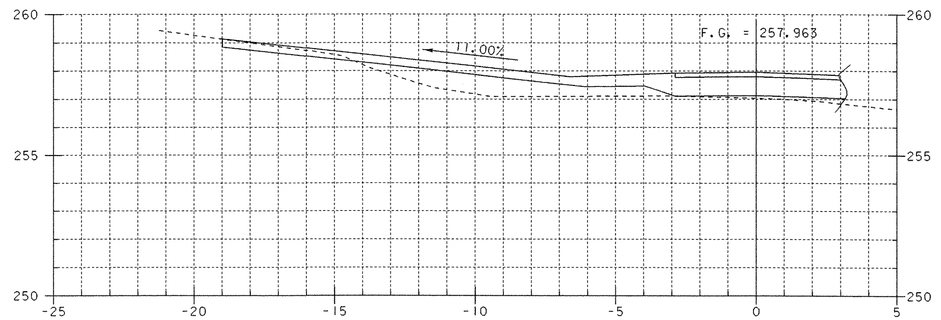
450 OPTION PIPE PROFILE
STATIONS 1+113.900 - 1+147.500 LT



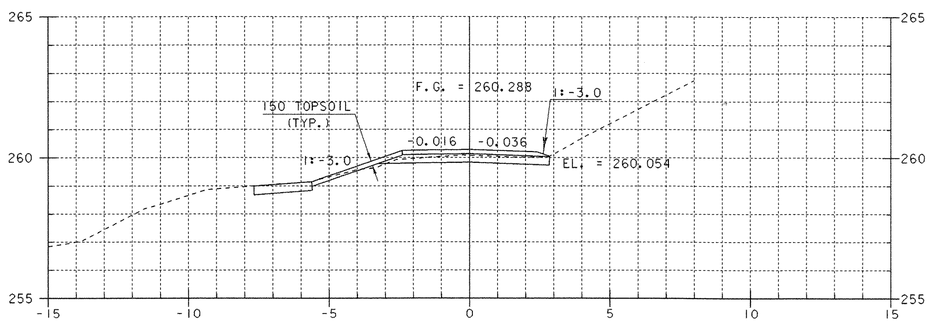
DRIVE AT STA 1+142 LT
SKEW = 138 DEGREES



1+155

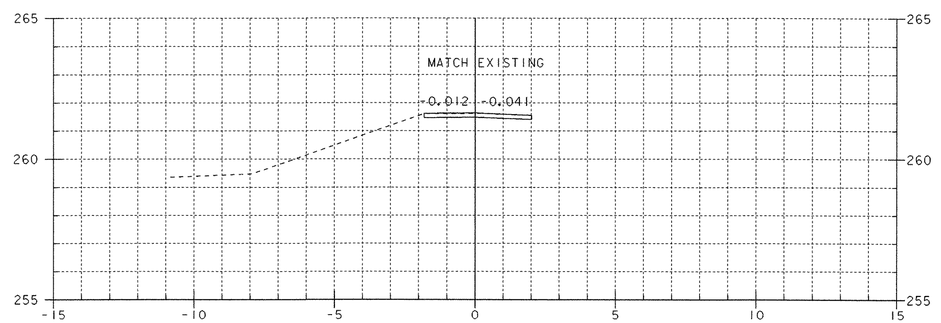


DRIVE AT STA 1+078 LT
SKEW = 40 DEGREES



1+150

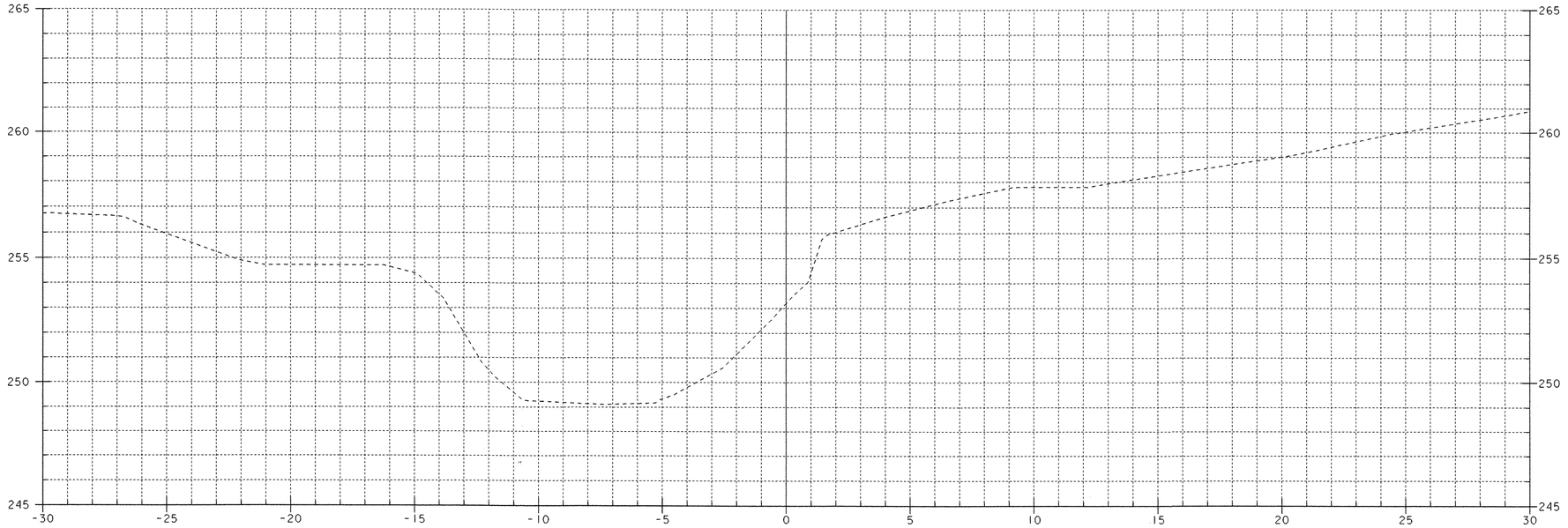
STA 1+147.500 LT.
END 450 X 30 000 PIPE OPTION



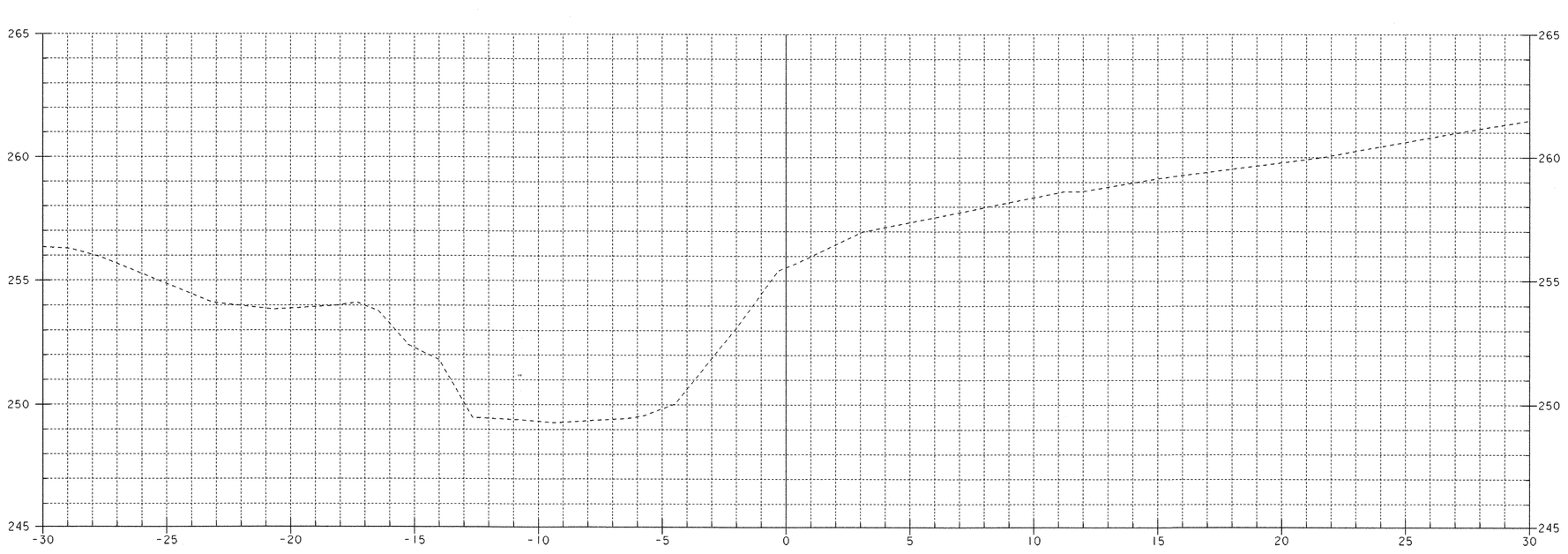
STA 1+160.0 LT.
END 150 TOPSOIL

END APPROACH
1+160

SHEET NAME:	**MAINLINE CROSS SECTIONS**		
PROJECT NAME:	MONTGOMERY	HIGHWAY NO.:	TH 35
PROJECT NUMBER:	BRO 1448(20)	BRIDGE NO.:	24
		OVER:	PACIFIC BROOK
FILE NAME: /PW/94J124/sJ124xsl.dgn		PLOT DATE:	06-DEC-2005
PROJECT MANAGER: R. WHITCOMB		DRAWN BY:	J. GILMORE
DESIGNED BY: C. CARLSON		IPARM NAME:	sJ124mx8.I
BRIDGE SHEET NUMBER:		SHEET	44 OF 50



4+990



4+985

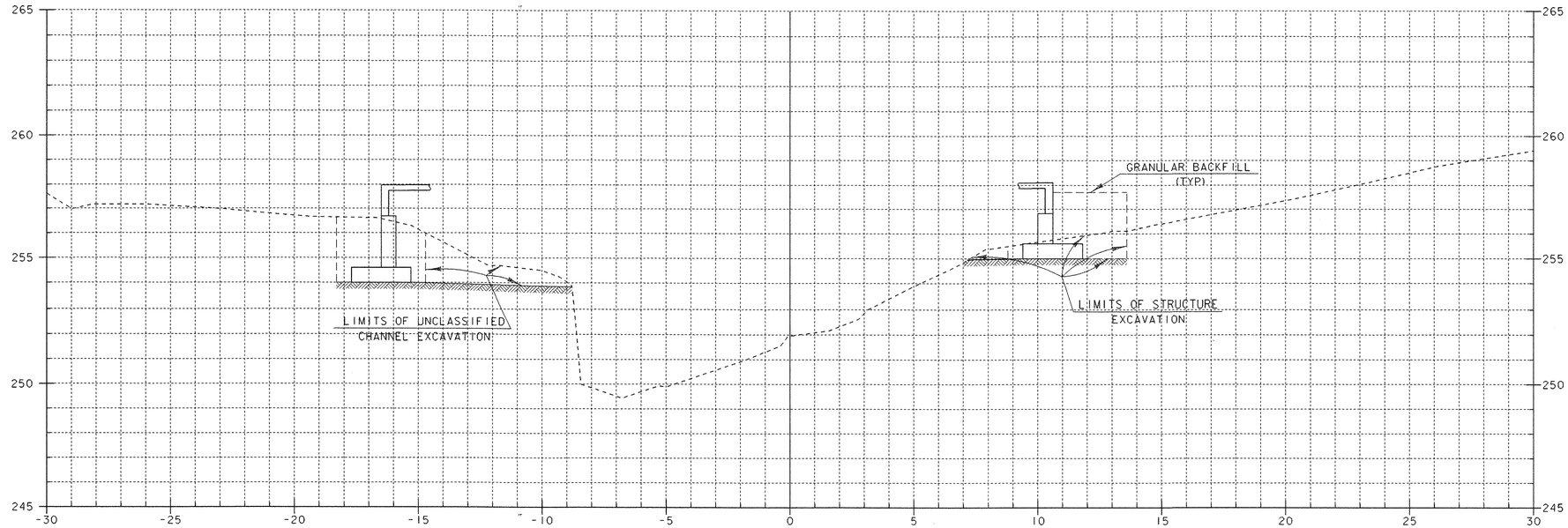
SHEET NAME: **CHANNEL CROSS SECTIONS**

PROJECT NAME: MONTGOMERY
PROJECT NUMBER: BRO 1448(20)

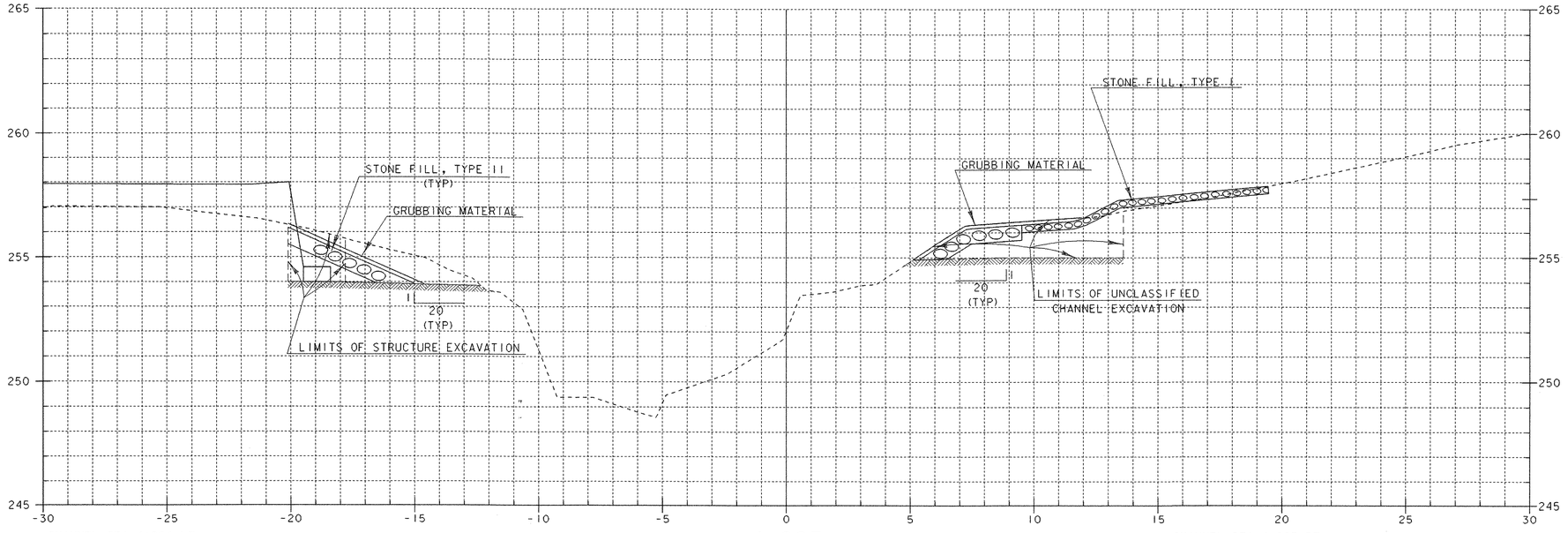
HIGHWAY NO.: TH 35
BRIDGE NO.: 24
OVER: PACIFIC BROOK

FILE NAME: /pw/94j124/sj124xsl.dgn
PROJECT MANAGER: R. WHITCOMB
DESIGNED BY: C. CARLSON
BRIDGE SHEET NUMBER:

PLOT DATE: 06-DEC-2005
DRAWN BY: J. GILMORE
IPARM NAME: sj124cx3.i
SHEET 45 OF 50



4+998



4+995

CHANNEL STA 4+994 LT
BEGIN STRUCTURE EXCAVATION
BEGIN GRANULAR BACKFILL FOR STRUCTURES

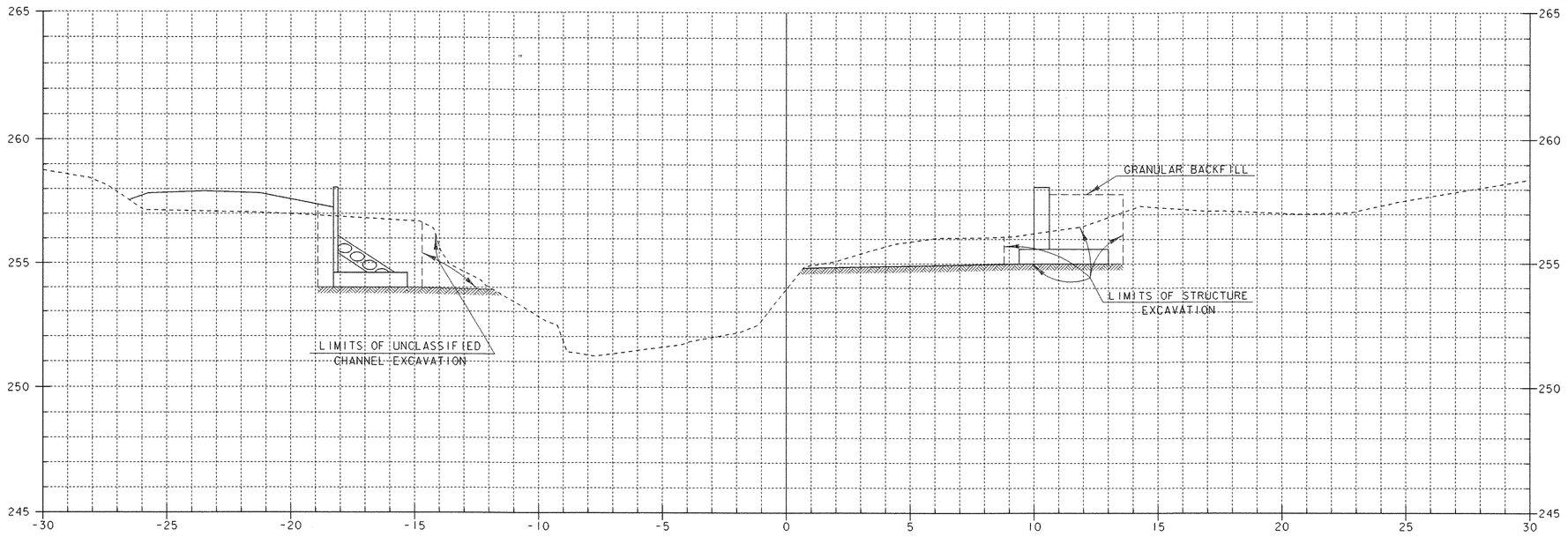
CHANNEL STA 4+993 LT
BEGIN UNCLASSIFIED CHANNEL EXCAVATION
BEGIN STONE FILL, TYPE II
BEGIN GRUBBING MATERIAL

CHANNEL STA 4+995 RT
BEGIN STRUCTURE EXCAVATION
BEGIN GRANULAR BACKFILL FOR STRUCTURES

CHANNEL STA 4+992.5 RT
BEGIN UNCLASSIFIED CHANNEL EXCAVATION
BEGIN STONE FILL, TYPE II
BEGIN GRUBBING MATERIAL

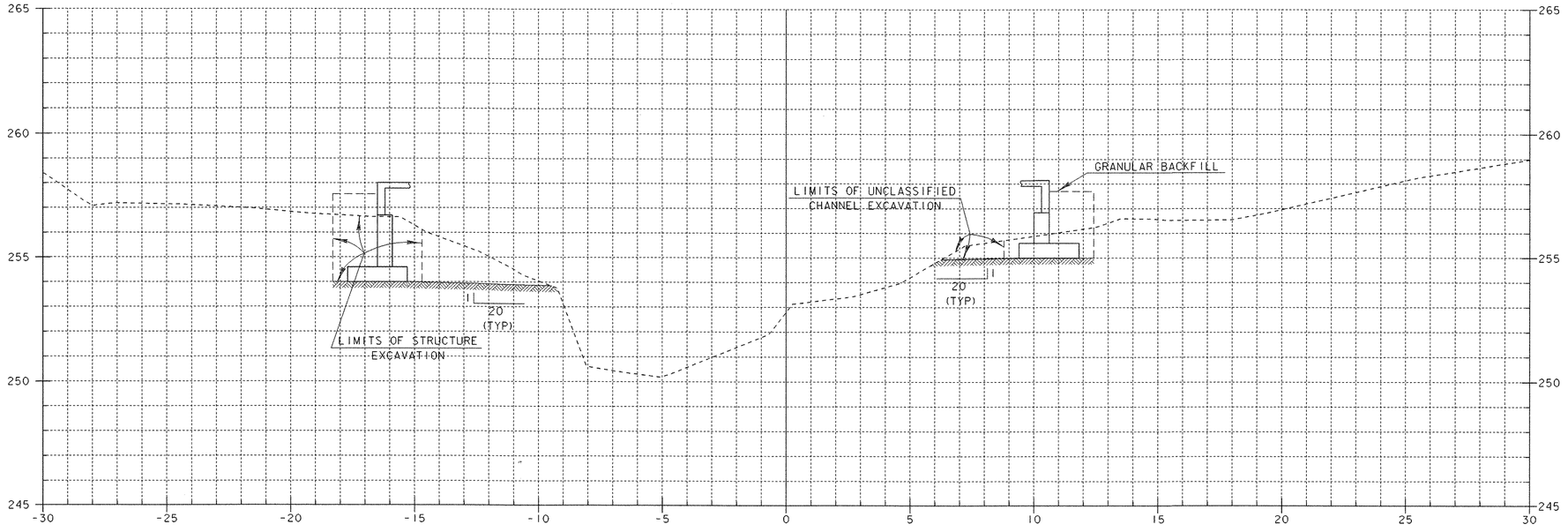
SHEET NAME: **CHANNEL CROSS SECTIONS**

PROJECT NAME: MONTGOMERY	HIGHWAY NO.: TH 35
PROJECT NUMBER: BRO 1448(20)	BRIDGE NO.: 24
	OVER: PACIFIC BROOK
FILE NAME: c:\pw\94jl24\sjl24xsl.dgn	PLOT DATE: 06-DEC-2005
PROJECT MANAGER: R. WHITCOMB	DRAWN BY: J. GILMORE
DESIGNED BY: C. CARLSON	IPARM NAME: sjl24cx4.i
BRIDGE SHEET NUMBER:	SHEET 46 OF 50



5+003

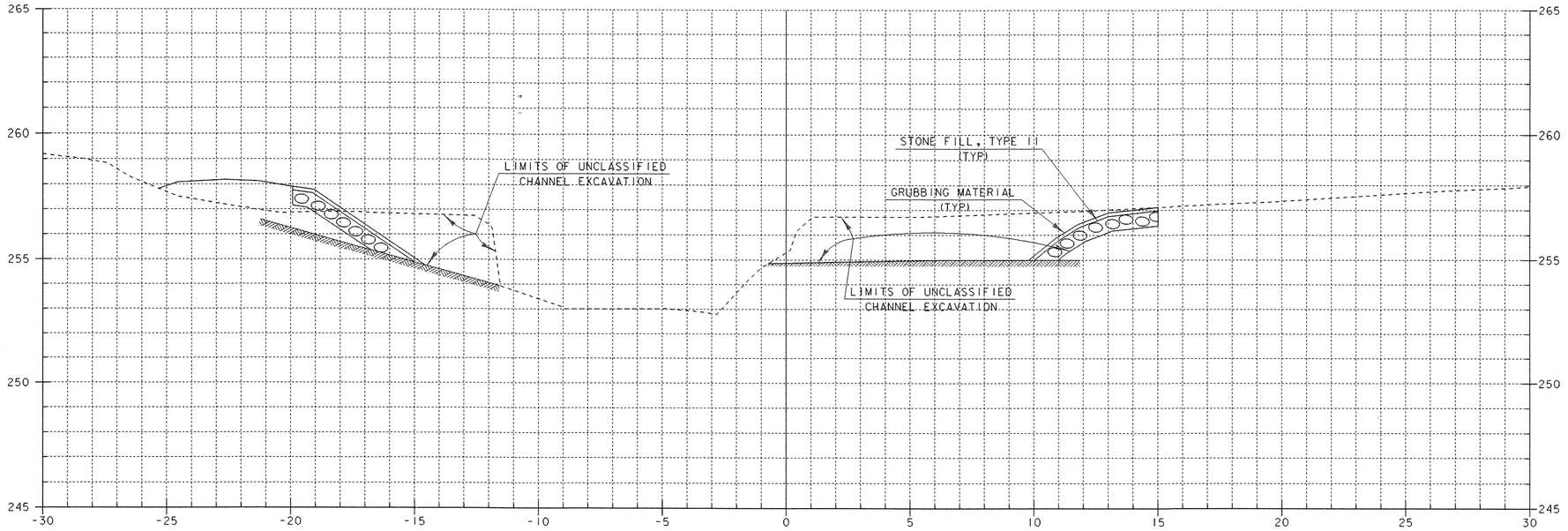
CHANNEL STA 5+002.5 LT + RT
BEGIN GRUBBING MATERIAL



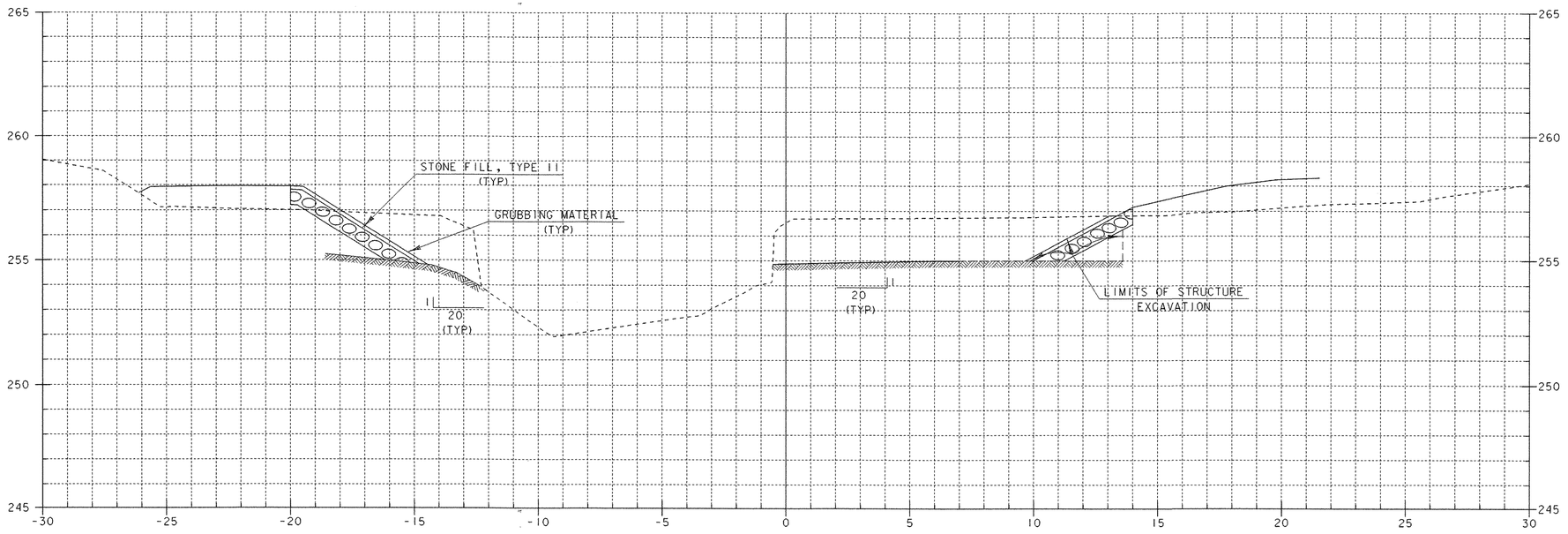
5+000

CHANNEL STA 4+997.5 LT + RT
END GRUBBING MATERIAL

SHEET NAME:	CHANNEL CROSS SECTIONS		
PROJECT NAME:	MONTGOMERY	HIGHWAY NO.:	TH 35
PROJECT NUMBER:	BRO 1448(20)	BRIDGE NO.:	24
		OVER:	PACIFIC BROOK
FILE NAME:	c:\pw\94j124\sj124xsl.dgn	PLOT DATE:	06-DEC-2005
PROJECT MANAGER:	R. WHITCOMB	DRAWN BY:	J. GILMORE
DESIGNED BY:	C. CARLSON	IPARM NAME:	sj124cx5.i
BRIDGE SHEET NUMBER:		SHEET	47 OF 50



5+008



CHANNEL STA 5+005 LT
END STRUCTURE EXCAVATION
END GRANULAR BACKFILL FOR STRUCTURES

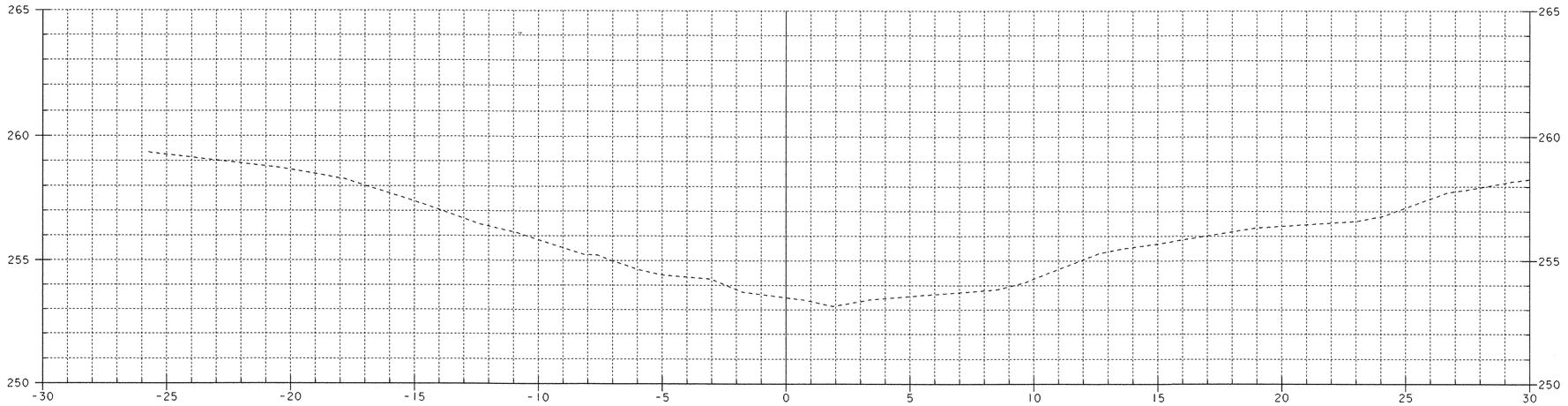
5+005

CHANNEL STA 5+005 RT
END STRUCTURE EXCAVATION
END GRANULAR BACKFILL FOR STRUCTURES

SHEET NAME: **CHANNEL CROSS SECTIONS**

PROJECT NAME:	MONTGOMERY	HIGHWAY NO.:	TH 35
PROJECT NUMBER:	BRO 1448(20)	BRIDGE NO.:	24
		OVER:	PACIFIC BROOK
FILE NAME:	c:\pw\94jl24\sjl24xsl.dgn	PLOT DATE:	06-DEC-2005
PROJECT MANAGER:	R. WHITCOMB	DRAWN BY:	J. GILMORE
DESIGNED BY:	C. CARLSON	IPARM NAME:	sjl24cx6.i
BRIDGE SHEET NUMBER:		SHEET	48 OF 50

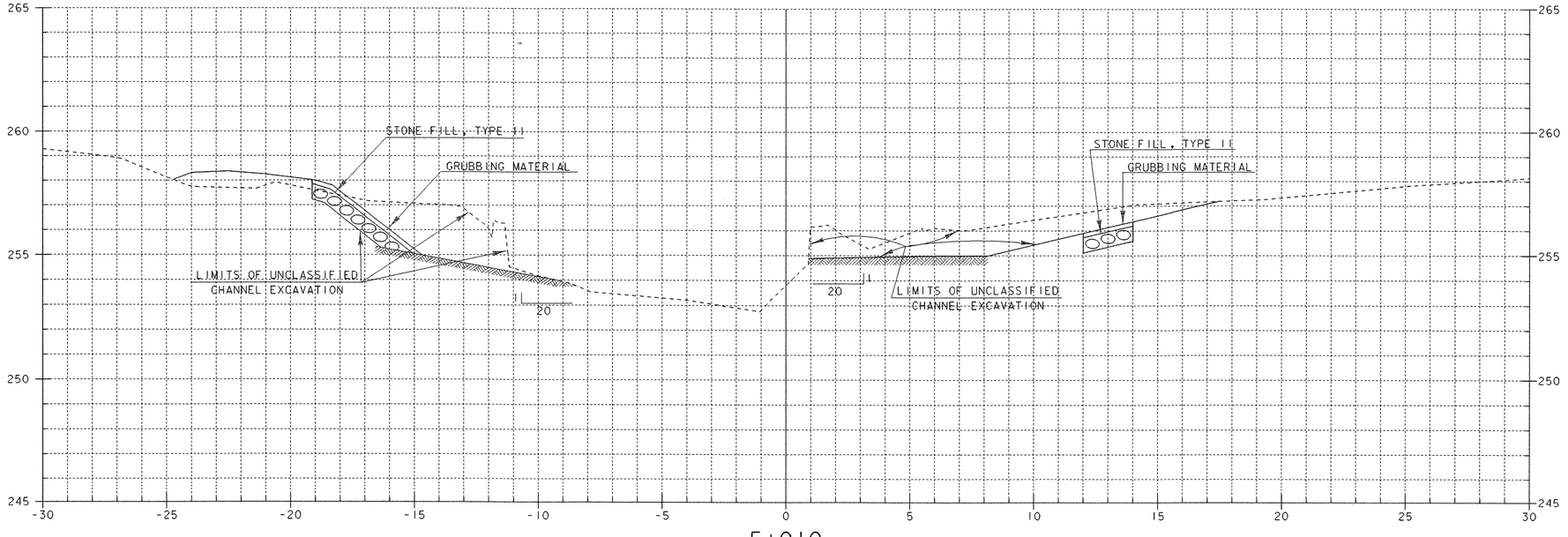
Metric



CHANNEL STA 5+012 LT
END STONE FILL, TYPE II
END GRUBBING MATERIAL
END UNCLASSIFIED CHANNEL EXCAVATION

5+015

CHANNEL STA 5+011.5 RT
END STONE FILL, TYPE II
END GRUBBING MATERIAL
END UNCLASSIFIED CHANNEL EXCAVATION



5+010

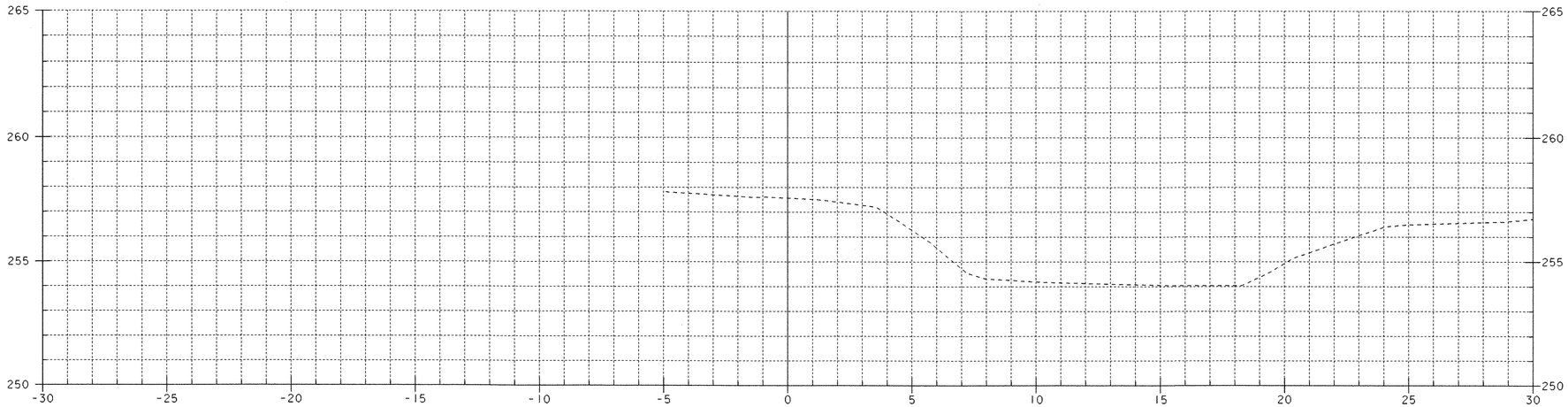
SHEET NAME: CHANNEL CROSS SECTIONS

PROJECT NAME: MONTGOMERY
PROJECT NUMBER: BRO 1448(20)

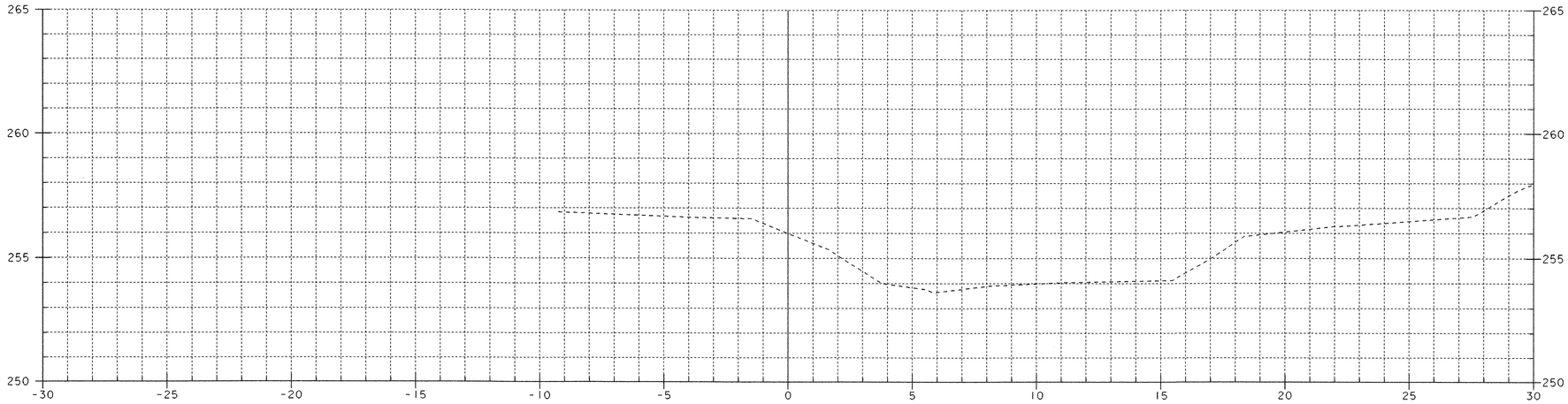
HIGHWAY NO.: TH 35
BRIDGE NO.: 24
OVER: PACIFIC BROOK

FILE NAME: c:\pw\94jl24\sjl24xsl.dgn
PROJECT MANAGER: R. WHITCOMB
DESIGNED BY: C. CARLSON
BRIDGE SHEET NUMBER:

PLOT DATE: 06-DEC-2005
DRAWN BY: J. GILMORE
IPARM NAME: sjl24cx7.i
SHEET 49 OF 50



5+025



5+020

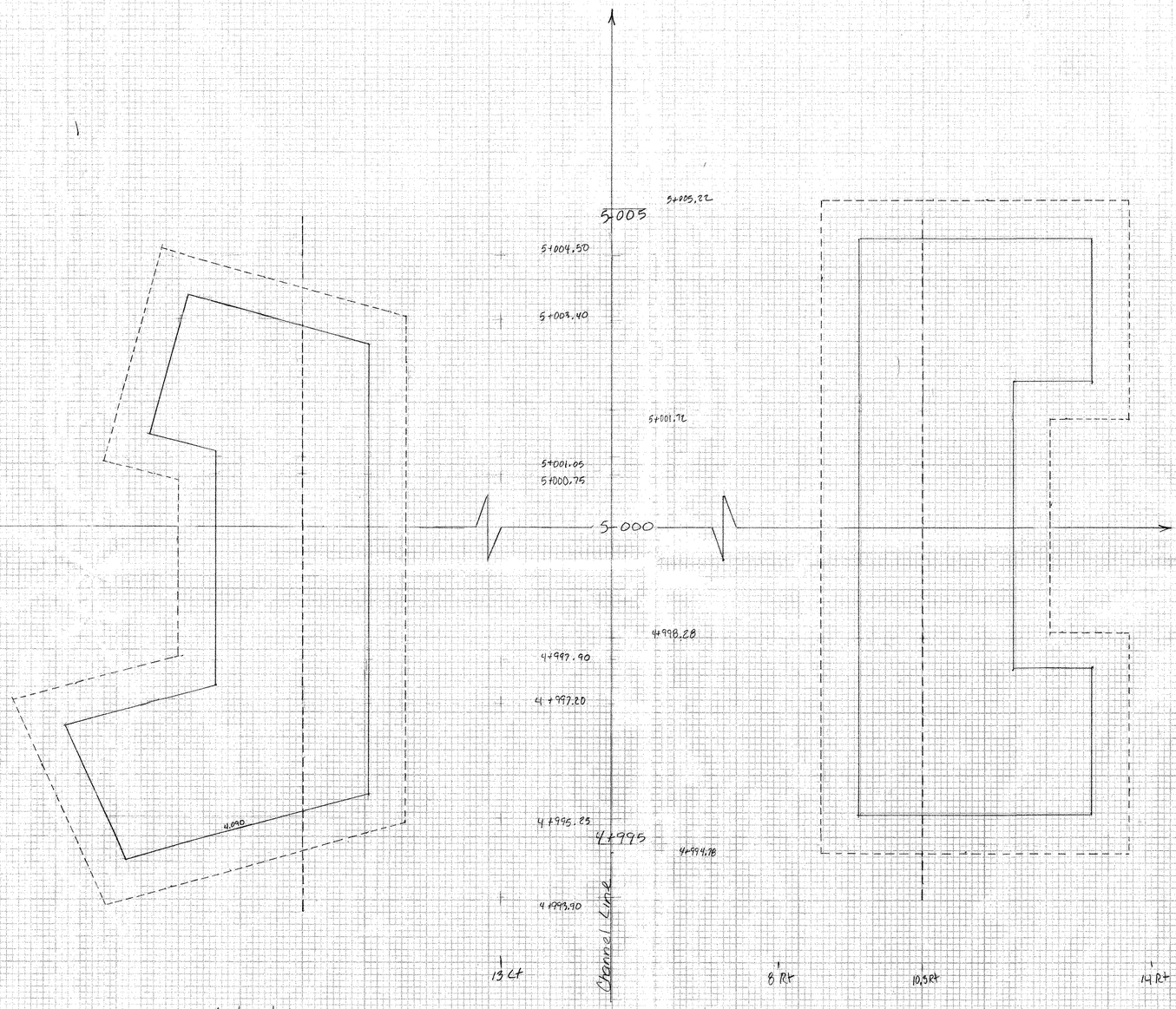
SHEET NAME: **CHANNEL CROSS SECTIONS**

PROJECT NAME: MONTGOMERY
PROJECT NUMBER: BRO 1448(20)

HIGHWAY NO.: TH 35
BRIDGE NO.: 24
OVER: PACIFIC BROOK

FILE NAME: (PW)94J124/sJ124xsl.dgn
PROJECT MANAGER: R. WHITCOMB
DESIGNED BY: C. CARLSON
BRIDGE SHEET NUMBER:

PLOT DATE: 06-DEC-2005
DRAWN BY: J. GILMORE
IPARM NAME: sJ124cx8.I
SHEET 50 OF 50

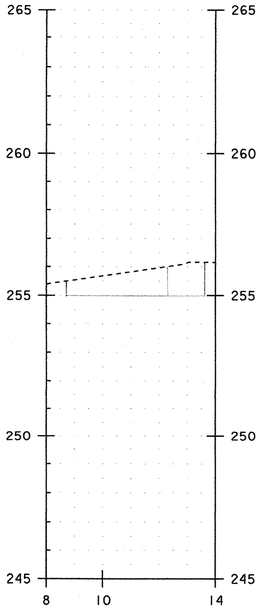


Structure Excavation

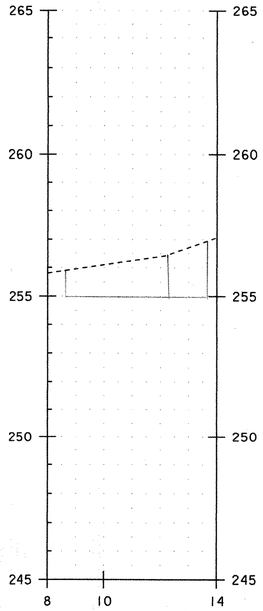
Montgomery 3RD 1448 (20)

051 CWG 4/3/00

Metric



4+998.28
8.64 12.30 13.58



5+001.72
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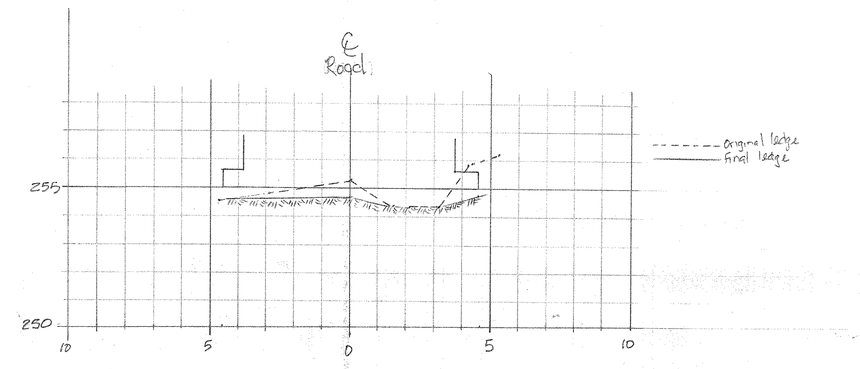
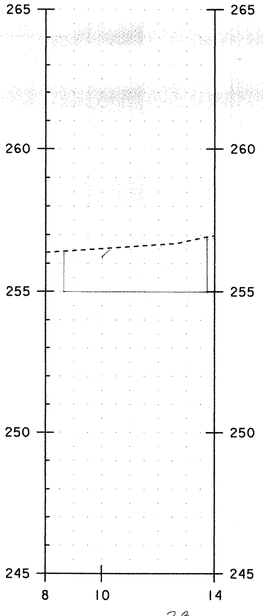
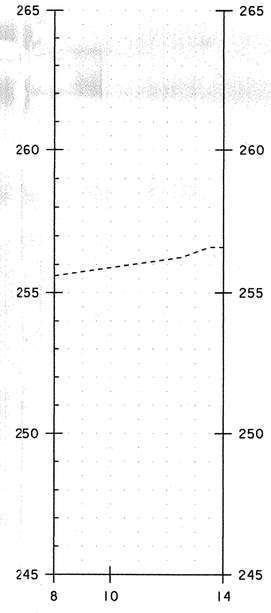


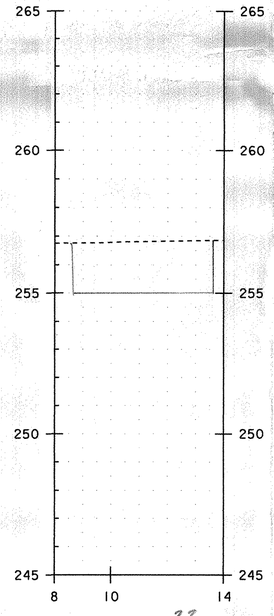
Abutment 2 ℄ Bearing Existing Ledge Profile
Final



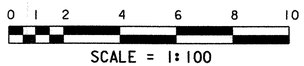
4+994.87
8.64 13.58



5+000.00
8.64 12.30 13.58



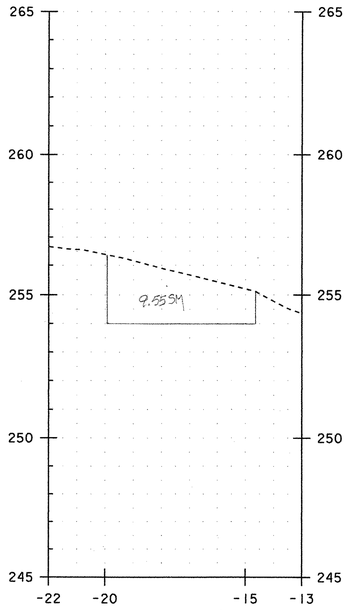
5+005.13
8.64 13.58



SCALE = 1:100

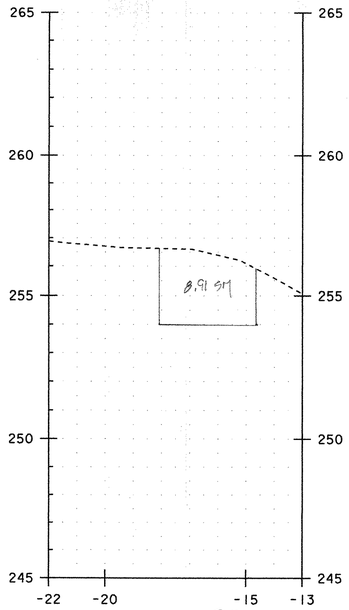
STA. 4+994.87 TO STA. 5+005.13

SHEET NAME: ABUT. NO. 2 CHANNEL CROSS SECTIONS			
PROJECT NAME:	MONTGOMERY	HIGHWAY NO.:	TH 35
PROJECT NUMBER:	BRO 1448(20)	BRIDGE NO.:	24
		OVER:	PACIFIC BROOK
FILE NAME: /PW/94jl24/sjl24xsl.dgn		PLOT DATE:	10-APR-2006
PROJECT MANAGER:	R. WHITCOMB	DRAWN BY:	G. ROY
DESIGNED BY:	C. CARLSON	IPARM NAME:	sjl24ab2cx.i
BRIDGE SHEET NUMBER:		SHEET	052 OF



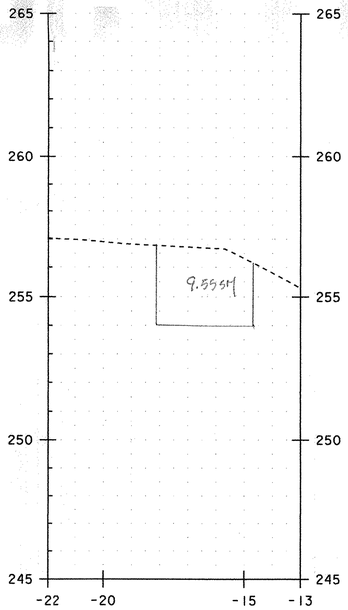
4+995.~~32~~ 25

20.00 14.54



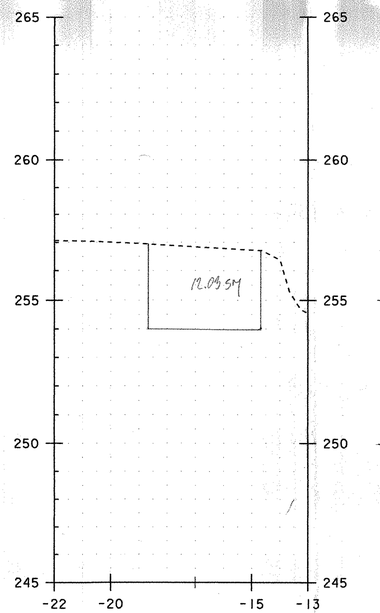
4+997.~~85~~ 90

18.20 14.54



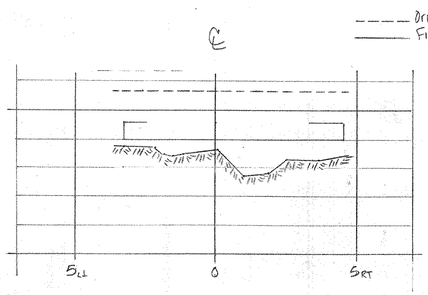
5+000.~~85~~ 75

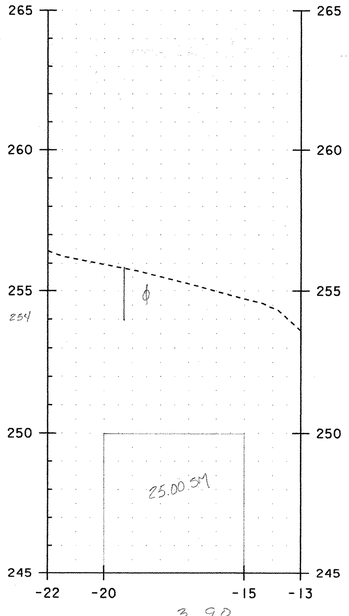
18.20 14.54



5+003.35 40

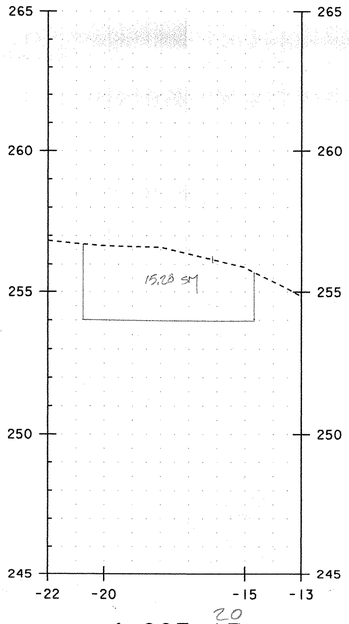
18.78 14.54





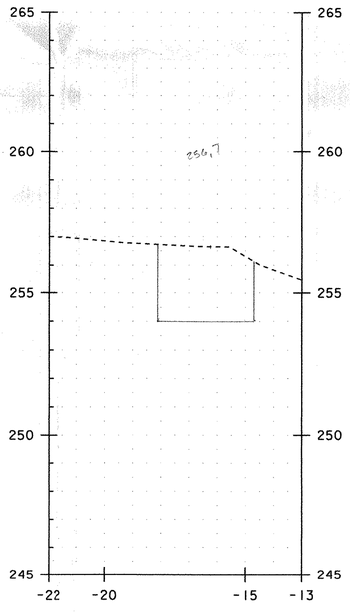
4+994.~~05~~ 3.90

18.58



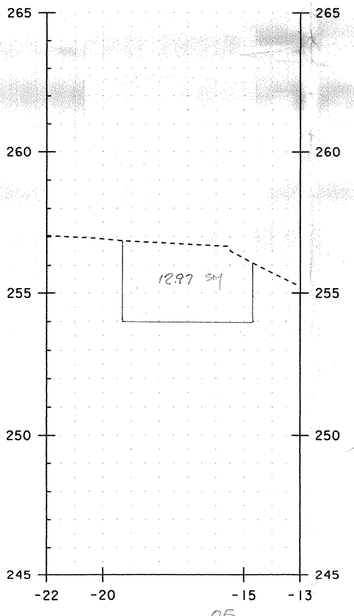
4+997.~~15~~ 20

20.20 14.54



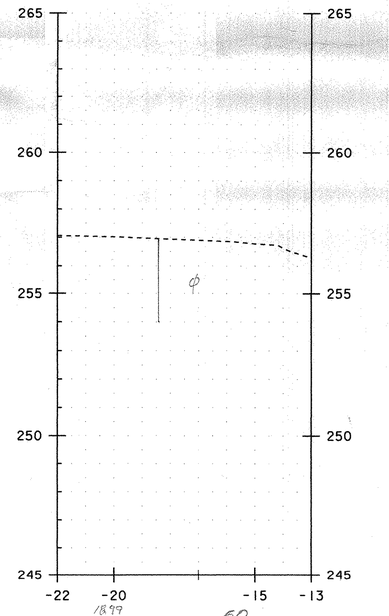
5+000.00

18.20 14.54



5+001.~~10~~ 05

19.40 14.54



5+004.~~40~~ 50

18.99

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SCALE = 1:100

STA. 4+994.05 TO STA. 5+004.40

SHEET NAME: ABUT. NO. 1 CHANNEL CROSS SECTIONS

PROJECT NAME: MONTGOMERY
PROJECT NUMBER: BRO 1448(20)

HIGHWAY NO.: TH 35
BRIDGE NO.: 24
OVER: PACIFIC BROOK

FILE NAME: /PW/94JI24/sJI24xsl.dgn
PROJECT MANAGER: R. WHITCOMB
DESIGNED BY: C. CARLSON
BRIDGE SHEET NUMBER:

PLOT DATE: 10-APR-2006
DRAWN BY: G. ROY
IPARM NAME: sJI24ablcx.I
SHEET 053 OF

RECEIVED
CK'D BY_____ OK'D BY JWC
APR 0 3 2006
RESUBMIT_____ APPROVED ✓

VT-06001 Contract #BRO 1448(20)

WELDING PROCEDURE FOR AWS PREQUALIFIED JOINTS BY CJC DATE 4/1/96

W2 - METRIC

PROCEDURE SPECIFICATIONS

MATERIAL SPECIFICATION_____ ASTM A709 GRADES: 250, 345, 345W
WELDING PROCESS_____ SHIELDED METAL ARC WELDING
MANUAL OR MACHINE_____ MANUAL
POSITION OF WELDING_____ ALL (EXCEPT AS NOTED BELOW)
FILLER METAL SPECIFICATION_____ AWS A5.1 AND A5.5
WELD METAL CLASSIFICATION_____ E7018/E7028 (TACKING ONLY) AND E8018-C3
WIRE/FLUX_____ D.N.A.
POLARITY_____ DC+ OR AC
ROOT TREATMENT_____ MANUAL CLEANING
PREHEAT AND INTERPASS TEMPERATURE_____ SEE PREHEAT CHART
ELECTRICAL STICK-OUT_____ D.N.A.
SHIELDING GAS_____ D.N.A.

REVISED: 7/27/98
ORIGINAL ISSUE: 4/9/96

WELDING PROCEDURE

PASS NO.	WIRE SIZE (mm)	CURRENT RANGE E7018 DC+	CURRENT RANGE E7018 AC	TRAVEL SPEED (mm/min)	JOINT DETAIL
1	3.2	90-150	110-170	152-228	TACK WELDS
1	4.0	120-190	135-225	203-330	GROOVE ROOT PASSES AND TACK WELDS

PASS NO.	WIRE SIZE (mm)	CURRENT RANGE E7028 DC+	CURRENT RANGE E7028 AC	TRAVEL SPEED (mm/min)	JOINT DETAIL (LIMITED TO FLAT AND HORIZONTAL TACK WELDS AND FLAT POSITION GROOVE ROOT PASSES)
1	4.0	170-240	180-270	203-330	GROOVE ROOT PASSES AND TACK WELDS

PASS NO.	WIRE SIZE (mm)	CURRENT RANGE E8018-C3 DC+	CURRENT RANGE E8018-C3 AC	TRAVEL SPEED (mm/min)	JOINT DETAIL
1	4.0	130-190	140-225	203-330	GROOVE ROOT PASSES, REPAIR WELDS AND TACKS
ALL	4.0	130-190	140-225	203-330	FILLET WELDS
ALL	4.8	180-270	210-290	228-381	FILLET WELDS (FLAT AND HORIZONTAL WELDS ONLY)
ALL	4.8	250-330	270-370	228-406	FILLET WELDS (FLAT AND HORIZONTAL WELDS ONLY)

• WELD SIZE DETERMINED BY TRAVEL SPEED

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054 SS W

RECEIVED
OK'D BY_____ OK'D BY Jsw
APR 0 3 2006
RESUBMIT_____ APPROVED ✓
BY CVL DATE 4/19/06

VT-06001 Contract #BRO 1448(20)

WELDING PROCEDURE FOR AWS PREQUALIFIED JOINTS

W14X - METRIC

PROCEDURE SPECIFICATIONS

MATERIAL SPECIFICATION	ASTM A709 GRADES: 250, 345, 345W
WELDING PROCESS	SUBMERGED ARC WELDING
MANUAL OR MACHINE	SEMIAUTOMATIC OR MACHINE
POSITION OF WELDING	2F
FILLER METAL SPECIFICATION	AWS A5.23
WELD METAL CLASSIFICATION	F8A2-EN1K-N1-H8
WIRE/FLUX	LINCOLN LA-75/960
WIRE DIAMETER	2.4mm
SINGLE OR MULTIPLE ARC	SINGLE ARC
POLARITY	DC-
ROOT TREATMENT	REMOVE ALL MILL SCALE
PREHEAT AND INTERPASS TEMPERATURE	SEE PREHEAT CHART
ELECTRICAL STICK-OUT	25.4mm
SHIELDING GAS	D.N.A.

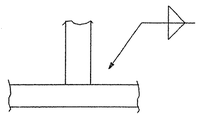
REVISED:

ORIGINAL ISSUE: 1/26/99

WELDING PROCEDURE

PASS NO.	WELDING CURRENT			TRAVEL SPEED (mm/m)	JOINT DETAIL
	AMPS	WIRE FEED SPEED	VOLTS		
1	461-550	3.9-5.0	35.0-39.5	432-533	8mm FILLET WELD

PRIMARY USE:
WEB TO FLANGE
(AND OTHER APPLICATIONS AS NEEDED)



AWS D1.5 FWST T-TEST-16
PROCEDURE QUALIFICATION RECORD AWS-05-01B (EXPIRES 6/26/10)

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055ss W

RECEIVED
CK'D BY_____ CK'D BY_____
APR 0 3 2006
RESUBMIT_____ APPROVED_____
BY DATE

VT-06001 Contract #BRO 1448(20)

WELDING PROCEDURE FOR AWS PREQUALIFIED JOINTS

W34X - METRIC

PROCEDURE SPECIFICATIONS

MATERIAL SPECIFICATION	ASTM A709 GRADES: 250, 345, 345W
WELDING PROCESS	SUBMERGED ARC WELDING
MANUAL OR MACHINE	SEMIAUTOMATIC OR MACHINE
POSITION OF WELDING	2F
FILLER METAL SPECIFICATION	AWS A5.17
WELD METAL CLASSIFICATION	F7A2-EM12K
WIRE/FLUX	LINCOLN L61/761
WIRE DIAMETER	2.4mm
SINGLE OR MULTIPLE ARC	SINGLE ARC
POLARITY	DC-
ROOT TREATMENT	MANUAL CLEANING
PREHEAT AND INTERPASS TEMPERATURE	SEE PREHEAT CHART
ELECTRICAL STICK-OUT	25.4mm
SHIELDING GAS	D.N.A.

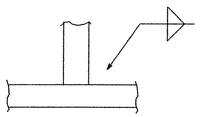
WELDING PROCEDURE

REVISED: 5/5/03

ORIGINAL ISSUE: 3/4/96

PASS NO.	WELDING CURRENT			TRAVEL SPEED (mm/m)	JOINT DETAIL
	AMPS	WIRE FEED SPEED	VOLTS		
1	360-440	2.9-3.7	29.0-36.0	279-686	8mm FILLET WELD

PRIMARY USE:
STIFFENER TO WEB
(AND OTHER APPLICATIONS AS NEEDED)



AWS D1.5 FWST T-TEST-10
PROCEDURE QUALIFICATION RECORD AWS-FCM-02-4 (EXPIRES 6/27/07)
PROCEDURE QUALIFICATION RECORD AWS-FCM-02-5A (EXPIRES 7/16/07)

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056 SSW

CK'D BY _____ CK'D BY _____

APR 0 3 2006

VT-06001 Contract #BRO 1448(20) RESUBMIT _____ APPROVED ✓

BY _____ DATE _____

WELDING PROCEDURE FOR AWS PREQUALIFIED JOINTS

W44X - METRIC

PROCEDURE SPECIFICATIONS

MATERIAL SPECIFICATION _____ ASTM A709 GRADES: 250, 345, 345W
WELDING PROCESS _____ SUBMERGED ARC WELDING
MANUAL OR MACHINE _____ SEMIAUTOMATIC OR MACHINE
POSITION OF WELDING _____ 2F
FILLER METAL SPECIFICATION _____ AWS A5.17
WELD METAL CLASSIFICATION _____ F7A2-EM12K
WIRE/FLUX _____ LINCOLN L61/761
WIRE DIAMETER _____ 2.4mm
SINGLE OR MULTIPLE ARC _____ SINGLE ARC
POLARITY _____ DC-
ROOT TREATMENT _____ MANUAL CLEANING
PREHEAT AND INTERPASS TEMPERATURE _____ SEE PREHEAT CHART
ELECTRICAL STICK-OUT _____ 25.4mm
SHIELDING GAS _____ D.N.A.

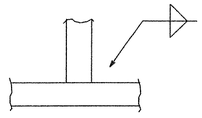
REVISED: 5/5/03

ORIGINAL ISSUE: 3/4/96

WELDING PROCEDURE

PASS NO.	WELDING CURRENT			TRAVEL SPEED (mm/m)	JOINT DETAIL
	AMPS	WIRE FEED SPEED	VOLTS		
1	360-440	2.9-3.7	29.0-36.0	279-686	8mm FILLET WELD

PRIMARY USE:
STIFFENER TO FLANGE
(AND OTHER APPLICATIONS AS NEEDED)



AWS D1.5 FWST T-TEST-10

PROCEDURE QUALIFICATION RECORD AWS-FCM-02-4 (EXPIRES 6/27/07)
PROCEDURE QUALIFICATION RECORD AWS-FCM-02-5A (EXPIRES 7/16/07)

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057SSW

RECEIVED
CK'D BY_____ OK'D BY JSK
APR 0 3 2006
RESUBMIT_____ APPROVED ✓
BY Ouk DATE 4/10/06

VT-06001 Contract #BRO 1448(20)

WELDING PROCEDURE FOR AWS PREQUALIFIED JOINTS

W71X-2 METRIC

PROCEDURE SPECIFICATIONS

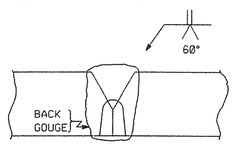
MATERIAL SPECIFICATION	ASTM A709 GRADES: 250, 345, 345W
WELDING PROCESS	SUBMERGED ARC WELDING
MANUAL OR MACHINE	SEMIAUTOMATIC OR MACHINE
POSITION OF WELDING	1G
FILLER METAL SPECIFICATION	AWS A5.23
WELD METAL CLASSIFICATION	F8A2-EN1K-N1-H8
WIRE/FLUX	LINCOLN LA-75/960
WIRE DIAMETER	2.4 mm
SINGLE OR MULTIPLE ARC	SINGLE ARC
POLARITY	DC+
ROOT TREATMENT	MANUAL CLEANING
PREHEAT AND INTERPASS TEMPERATURE	SEE PREHEAT CHART
ELECTRICAL STICK-OUT	25.4 mm
SHIELDING GAS	D.N.A.

WELDING PROCEDURE

REVISED:

ORIGINAL ISSUE: 3/10/03

PASS NO.	AMPS	WIRE FEED SPEED (m/MIN.)	VOLTS	TRAVEL SPEED (mm/MIN.)	JOINT DETAIL
ALL	448-550	2.3-3.2	31.0-38.0	381-635	B-L2c-S



PROCEDURE QUALIFICATION RECORD AWS-04-1 (EXPIRES 4/29/09)
PROCEDURE QUALIFICATION RECORD AWS-04-2 (EXPIRES 2/2/09)

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CK'D BY_____ OK'D BY JWC
APR 0 3 2006
RESUBMIT_____ APPROVED ✓
BY _____ DATE 4/10/06

VT-06001 Contract #BRO 1448(20)

MINIMUM PREHEAT AND INTERPASS TEMPERATURE

SHIELDED METAL-ARC WELDING WITH LOW HYDROGEN ELECTRODES, OR SUBMERGED ARC WELDING, OR FLUX CORED ARC WELDING

THICKNESS OF THICKEST PART AT POINT OF WELDING - (mm)	ASTM A-36, A-572, AND A-588 M183, M223, AND M222 ASTM A709, GRADE 36 (250) ASTM A709, GRADE 50 (345) ASTM A709, GRADE 50W (345W)
TO 20, INCL.	10°C
OVER 20 TO 40, INCL.	20°C
OVER 40 TO 60, INCL.	65°C
OVER 60	110°C

THE MAXIMUM PREHEAT TEMPERATURE SHALL NOT EXCEED 232°C.
THE MAXIMUM INTERPASS TEMPERATURE SHALL NOT EXCEED 288°C.

REFER TO THE FOLLOWING CHART FOR EQUIVALENT STEEL TYPES.
ASTM A-36 AND A-709 GRADE 36 AND AASHTO M183
ASTM A-572 AND A-709 GRADE 50 AND AASHTO M223
ASTM A-588 AND A-709 GRADE 50W AND AASHTO M222

CONTACT QUALITY CONTROL FOR PREHEAT REQUIREMENTS ON ANY STEEL NOT SPECIFICALLY NOTED ABOVE

REVISED:
ORIGINAL ISSUE: 3/4/96

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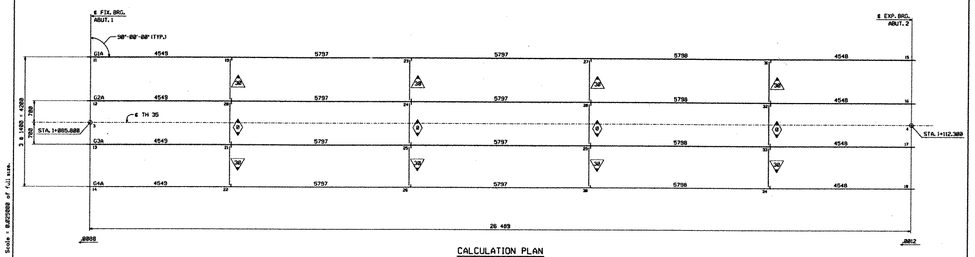
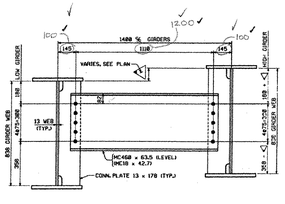
059SSW

METRIC 1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED. 2. ALL WEIGHTS ARE IN KILOGRAMS.

FED. HWY. ADM. NO. | STATE | PROJ. NO. REVISION NO.
VT



CALCULATION PLAN



INTERMEDIATE DIAPHRAGM LAYOUT
(LOOKING STATIONS AHEAD)

RECEIVED
CK'D BY MH OK'D BY CWC
MAR 17 2006
RESUBMIT ____ APPROVED AS NOTED
BY CWC DATE 4.11.06

NOTES:
DIMENSIONS ON PLAN ALONG GIRDERS ARE GIVEN TO THE CHORD AT THE BOTTOM OF WEB IN FULLY CAMBERED POSITION. ALL OTHER DIMENSIONS ARE GIVEN HORIZONTALLY.
DIMENSIONS PLACED ON THE GIRDER LINES REPRESENT DIAPHRAGM SPACING.
FIGURES GIVEN THUS ▱ ARE THE GRADES OF THE GIRDERS AT THE BEARINGS IN FINAL POSITION. ARROW POINTS DOWNGRADE.
ALL STIFFENER AND CONNECTION PLATE SPACINGS ARE GIVEN TO ℄ PLATE.
ENDS OF GIRDERS TO BE VERTICAL IN FINAL POSITION.
ALL STEEL TO BE AASHTO M270M GRADE 345W (U.N.O.).
ALL FIELD CONNECTIONS TO BE MADE WITH ⅞" H.S. (AASHTO M164 TYPE 3) BOLTS IN 1⅛" HOLES (U.N.O.).
FIGURES GIVEN THUS ◇ ARE THE DIFFERENCES IN ELEVATIONS OF GIRDERS ON THE PLANE OF THE DIAPHRAGM IN ERECTED POSITION AT DIAPHRAGMS. ARROW POINTS TOWARD LOW GIRDER.
ALL STATIONS ARE GIVEN IN METERS.

NOTE
THE PURPOSE OF THIS DRAWING IS TO COORDINATE GEOMETRIC CONTROL INFORMATION. THIS DRAWING IS SUBMITTED FOR INFORMATION ONLY AND IS NOT INTENDED FOR SHOP FABRICATION. THIS DRAWING IS FOR REFERENCE ONLY. APPROVAL IS NOT REQUIRED.

NO.	REVISION	BY	DATE

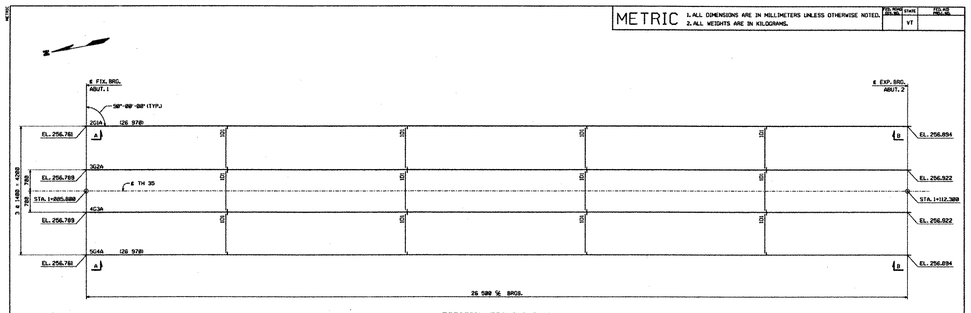
HIGH STEEL STRUCTURES, INC.
P.O. Box 1000 Lancaster, PA 17608-1000
(717) 397-7621
A Walter P Moore Company

WORKSHEET - CALCULATION PLAN
RTE. NO. TH 35 (BRIDGE NO. 241) OVER PACIFIC BROOK
RTE. NO. TH 35 STA. 1+865.688 TO STA. 1+112.388
TOWN OF MONTGOMERY
FRANKLIN COUNTY, VERMONT
STATE OF VERMONT, AGENCY OF TRANSPORTATION
STATE CONTRACT OR REF. NO. ... PROJECT NO. BRO 1448 (28)
CONTRACTOR A. L. ST. ONGE CONTRACTOR, INC.
DRAWN BRITTAIN CHK'D BY ... DATE 3/3/06
CONTRACT DRAWING NO. VT-06001-1 SHEET NO. WS1 OF WS1

060 55

06001 X1 3/9/06 3/9/06Approval TO:A.L. St. Onge Contractor

METRIC 1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED. 2. ALL WEIGHTS ARE IN KILOGRAMS.



ERECTION FRAMING PLAN

SHIPPING PIECE MARK	WEIGHT EA (KG)
G1A	6,405
G2A	6,465
G3A	6,465
G4A	6,405

FIELD BOLT SUMMARY

I2I ADDITIONAL BOLTS ADDED + 3 EA. FOR TESTING

AASHTO M164 TYPE 3 BOLTS WITH HVY. HEX HEAD AND AASHTO M25 GRADE DH3 HVY. HEX NUT

125 - 7/8" HIGH STRENGTH BOLTS x 8"-2S4 (RCT1)

125 HARD. FLAT AASHTO M293 WEATHERING WASHERS FOR 7/8" H.S. BOLTS (RCT1)

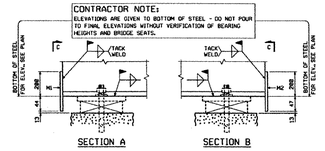
(RCT1) INDICATES ROTATIONAL CAPACITY TESTED BOLTS. DO NOT MIX NUTS, BOLTS AND WASHERS FROM DIFFERENT CONTAINERS UNLESS ALL NUTS, BOLTS AND WASHERS HAVE THE SAME LOT NUMBER.

LOOSE MATERIAL

4 - MISC. END PLATE - MK. M1
4 - MISC. END PLATE - MK. M2

RECEIVED
CK'D BY MH CK'D BY CWC
MAR 17 2006
RESUBMIT APPROVED
BY DATE

CONTRACTOR NOTE:
ELEVATIONS ARE GIVEN TO BOTTOM OF STEEL - DO NOT POUR TO FINAL ELEVATIONS WITHOUT VERIFICATION OF BEARING HEIGHTS AND BRIDGE SEATS.



NOTES:
NO CREDIT WILL BE ALLOWED FOR WORK PERFORMED BY OTHERS IN REPLACING OR CORRECTING MATERIALS OR WORKMANSHIP COVERED BY THIS DRAWING UNLESS EXPRESSLY AUTHORIZED BY HIGH STEEL STRUCTURES, INC.
ALL FIELD CONNECTIONS TO BE MADE IN ACCORDANCE WITH THE FIELD BOLT SUMMARY.
ALL DIMENSIONS ARE GIVEN HORIZONTALLY U.N.O.
DIMENSIONS GIVEN THUS: I2G 978# ARE THE SHIPPING LENGTHS OUT TO OUT OF FASCIA GIRDERS.
HIGH STEEL STRUCTURES, INC. DOES NOT SUPPLY SHEAR STUDS, BEARING ASSEMBLIES INCLUDING PADS AND ANCHOR BOLTS AND HOLES OR BOLTS FOR FLOKING BRACKETS.
NOTICE: WEIGHTS OF MEMBERS LISTED ON THESE DRAWINGS ARE ESTIMATED WEIGHTS AND ACTUAL WEIGHTS WILL VARY. HIGH STEEL STRUCTURES, INC. WILL NOT BE RESPONSIBLE FOR ANY ERECTION PROCEDURES, SHIPPING PROCEDURES, ETC. DEVELOPED USING ESTIMATED WEIGHTS AS SHOWN.
ERECTION NOTE: ALL BOLTS MUST BE LOCATED IN ACCORDANCE WITH THE FIELD BOLT SUMMARY. HIGH STEEL STRUCTURES WILL NOT BE RESPONSIBLE FOR FURNISHING ADDITIONAL BOLTS OR ANY OTHER RELATED COSTS OR DAMAGES RESULTING FROM IMPROPER LOCATION OF BOLTS.
ALL FIELD BOLTS THRU WEB OF FASCIA GIRDERS ARE TO HAVE HEADS TOWARD WEATHER.
THE SHIPPING MARKS SHOWN CONSIST OF THE PREFIX INDICATING THE SHEET NUMBER UPON WHICH THE PIECE IS DETAILED ALONG WITH THE SHIPPING PIECE MARK.
ALL ELEVATIONS AND STATIONS ARE GIVEN IN METERS.

NO.	REVISION	BY	DATE

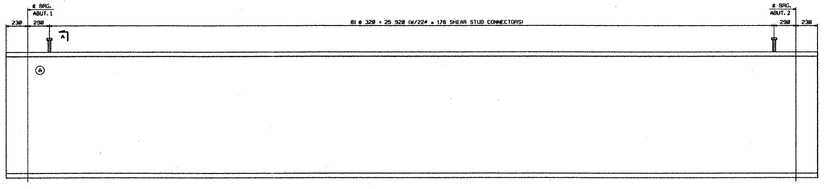
HIGH STEEL STRUCTURES, INC.

ERECTION FRAMING PLAN
RTE. NO. TH 35 BRIDGE NO. 241 OVER PACIFIC BROOK
RTE. NO. TH 35 STA. 1+895.889 TO STA. 1+112.388
TOWN OF MONTGOMERY
FRANKLIN COUNTY, VERMONT
STATE OF VERMONT, AGENCY OF TRANSPORTATION
STATE CONTRACT NO. VT-86801-1 PROJECT NO. BRO 1448 (28)
CONTRACTOR A.L. ST. ONGE CONTRACTOR, INC.
DRAWING NO. BRETTAUN (28) MADE BY JDC CHK'D BY MBW DATE 3/2/06
CONTRACT NUMBER VT-86801-1 SHEET NUMBER E1 OF E2

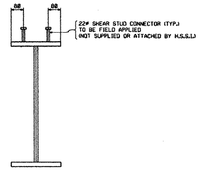
06155

06001 X1 3/9/06 3/9/06Approval TO:A.L. St. Onge Contractor,

METRIC 1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
2. ALL WEIGHTS ARE IN KILOGRAMS.



SHEAR STUD CONNECTOR LOCATION LAYOUT



SECTION A

RECEIVED
OK'D BY MH OK'D BY
MAR 17 2006
RESUBMIT APPROVED
BY DATE

NOTES:
FOR NOTES, SEE DRAWING E1.
WORK THIS DRAWING WITH DRAWING E1.
(A) INDICATES SUFFIX MARK OF SHIPPING PIECE.

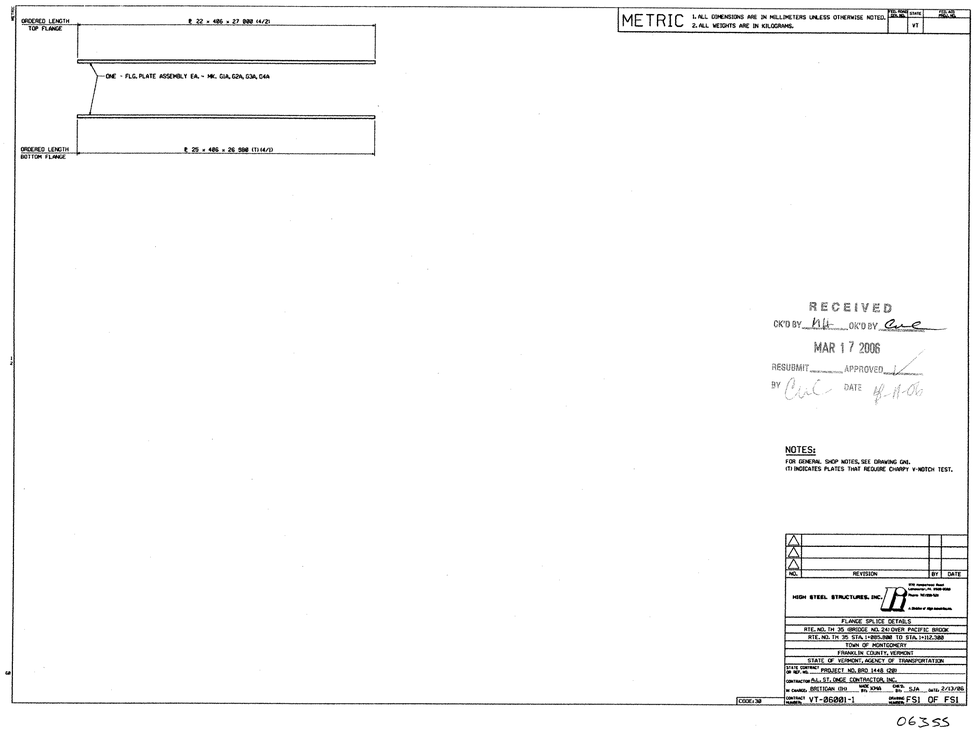
NO.	REVISION	BY	DATE

HIGH STEEL STRUCTURES, INC.

ERECTION FRAMING PLAN - STUD LAYOUTS
RTE. NO. TH 35 (BRIDGE NO. 241 OVER PACIFIC BROOK
RTE. NO. TH 35 STA. 1+805.888 TO STA. 1+103.388
TOWN OF MONTGOMERY
FRANKLIN COUNTY, VERMONT
STATE OF VERMONT, AGENCY OF TRANSPORTATION
STATE CONTRACT PROJECT NO. BRO 1448 (28)
OR AID NO.
CONTRACTOR A.L. ST. ONGE CONTRACTOR, INC.
DR CHKD. BRETIGAN /DG MDE BY AC DWG. BY MSK DATE 3/3/06
CONTRACT NUMBER VT-06001-1 DRAWING NUMBER E2 OF E2

062 55

06001 X1 3/9/06 3/9/06Approval TO:A.L. St. Onge Contractor.

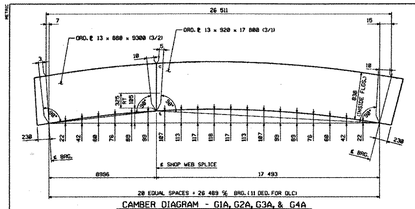


06355

06001 X1 3/9/06 3/9/06Approval TO:A.L. St. Onge Contractor,

METRIC 1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED. 2. ALL WEIGHTS ARE IN KILOGRAMS.

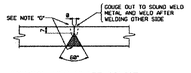
FED. HWY. ADM. NO. | STATE | FED. AID PROJ. NO.
VT



CAMBER DIAGRAM - G1A, G2A, G3A, & G4A

RECEIVED
CK'D BY MH OK'D BY CWC
MAR 17 2006
RESUBMIT ____ APPROVED ✓
BY CWC DATE 4-11-06

NOTES:
FOR GENERAL SHOP NOTES, SEE DRAWING GN1.
ALL WEB PLATES REQUIRE CHARPY V-NOTCH TEST.
THE LETTERS "A" & "J" AT WEB SPLICES INDICATE TENSION AND COMPRESSION EDGES AT SPLICES.
RT INDICATES RADIOGRAPHIC TESTING FOR 1/4 OF THE WEB DEPTH AT TENSION EDGE PLUS 25% OF THE REMAINDER.



TYPICAL WEB PLATE SPLICE
FOR WEB PLATES 13 mm TO 38 mm THICK @=1.2x-51

NOTE "G"
ALL WELDS MAY HAVE A MAXIMUM REINFORCEMENT OF 3 mm. GRIND THE WELDS SMOOTH IN THE AREAS TO BE TESTED AND FOR THE FULL DEPTH OF WEB ON G1A (F.S.) AND G4A (A.S.).

NO.	REVISION	BY	DATE

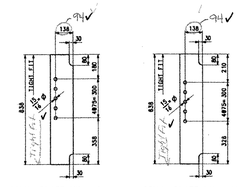
HIGH STEEL STRUCTURES, INC.
175 Hoffman Road, Lancaster, PA 17603-9338
Phone: 717-393-9701
A Member of HSS Industries

WEB CAMBER DIAGRAMS
RTE. NO. TH 25 BRIDGE NO. 241 OVER PACIFIC BROOK
RTE. NO. TH 25 STA. 1+897.588 TO STA. 1+107.388
TOWN OF MONTGOMERY
FRANKLIN COUNTY, VERMONT
STATE OF VERMONT, AGENCY OF TRANSPORTATION
STATE CONTRACT NO. ____ PROJECT NO. BRO 1448 (28)
CONTRACTOR A.L. ST. ONGE CONTRACTOR, INC.
DRAWING BY BRITTIAN CHS CHK'D BY KMA CHK'D BY SJA DATE 2/13/06
CONTRACT DRAWING NO. VT-06001-1 SHEET NO. WC1 OF WC1

COOK/JB

06455

06001 X1 3/9/06 3/9/06Approval TO:A.L. St. Onge Contractor,



CONN. PLATE MK. x1a

CONN. PLATE MK. x1b

BILL OF MATERIAL

SHIP	QTY. EA.	MARK	COMM.	DESCRIPTION	LENGTH	SPEC	GRADE	TEST	REMARKS	GRP.	ITEM	PIECE WEIGHT EA. (KG)
1	16	x1a	PL	13 x 178	838	M270M	345W			7	1	15.22
1	8	x1b	PL	13 x 178	838	M270M	345W			7	1	15.22

RECEIVED
MAR 17 2006

OK'D BY _____ OK'D BY _____
RESUBMIT _____ APPROVED AS NOTED
BY _____ DATE 4-11-06

NOTES:
HOLES: AS NOTED
BOLTS: NONE
PAINT: NONE
FOR GENERAL SHOP NOTES, SEE DWG. GN1.

CODE: 30

NO.	REVISION	BY	DATE

HIGH STEEL STRUCTURES, INC.

GIRDER JOB STANDARDS
RTE. NO. TH 35 (BRIDGE NO. 241 OVER PACIFIC BROOK
RTE. NO. TH 35 STA. 1+055.800 TO STA. 1+112.300
TOWN OF MONTGOMERY
FRANKLIN COUNTY, VERMONT
STATE OF VERMONT, AGENCY OF TRANSPORTATION
STATE CONTRACT OR REF. NO. PROJECT NO. BRO 1448 (28)
CONTRACTOR A.L. ST. ONGE CONTRACTOR, INC.
DRAWN BY BRITTIGAN (28) DATE BY MGK DATE 3/3/06
CONTRACT NUMBER VT-0600 1-1 DRAWING NUMBER X1 OF X2

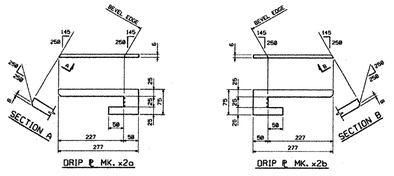
06SS

06001 X1 3/9/06 3/9/06Approval TO:A.L. St. Onge Contractor,

METRIC 1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
2. ALL WEIGHTS ARE IN KILOGRAMS.

BILL OF MATERIAL

MARK	QTY	SHAPE	DIAGRAM	DESCRIPTION	LENGTH	EPOXY	GRADE	TEST	REMARKS	MASS (KG)	TOTAL MASS (KG)
1	1	426	PL	6 x 75	277	M270M	345W			7	2
1	1	426	PL	6 x 75	277	M270M	345W			7	2



DRIP @ MK. x2a

DRIP @ MK. x2b

RECEIVED
CK'D BY MH OK'D BY Cue
MAR 17 2006
RESUBMIT _____ APPROVED _____
BY DATE

SHOP NOTE
HOLES: NONE
BOLTS: NONE
PAINT: NONE
FOR GENERAL SHOP NOTES, SEE DWG. GN1.

NO.	REVISION	BY	DATE
△			
△			
△			

HIGH STEEL STRUCTURES, INC.
GIRDER JOB STANDARDS
RTE. NO. TH 35 /BRIDGE NO. 241/OVER PACIFIC BROOK
RTE. NO. TH 35 STA. 1+893.688 TO STA. 1+932.388
TOWN OF MONTGOMERY
FRANKLIN COUNTY, VERMONT
STATE OF VERMONT, AGENCY OF TRANSPORTATION
STATE CONTRACT ID NO. VA. PROJECT NO. BRO 1448 (28)
CONTRACTOR A.L. ST. ONGE CONTRACTOR, INC.
DRAWN BY BRITTANY ROY DES. BY MK CHK'D BY MK DATE 3/3/06
CONTRACT NUMBER VT-06001-1 DRAWING NUMBER X2 OF X2

CODE:38

D6655

06001 X1 3/9/06 3/9/06Approval TO:A.L. St. Onge Contractor.

METRIC 1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED. 2. ALL WEIGHTS ARE IN KILOGRAMS.

FED. ROAD DIV. NO. | STATE | FED. AID PROJ. NO.
VT

GENERAL SHOP NOTES

SPECIFICATIONS:
ALL MATERIAL AND WORKMANSHIP TO BE IN ACCORDANCE WITH THE STATE OF VERMONT, AGENCY OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2001, WITH CURRENT MODIFICATIONS AND ADDITIONS.

MATERIAL:
UNLESS NOTED OTHERWISE, ALL STEEL TO BE AASHTO M270M GRADE 345W.
(T) INDICATES ZONE 2 CHARPY V-NOTCH TESTING REQUIRED.

SHOP PROCEDURE:
ALL WEB PLATE SPLICES TO BE MADE BEFORE FINAL FITTING AND WELDING INTO GIRDER.
CAMBER TOLERANCE: -0 mm TO +19 mm
ALL RE-ENTRANT CUTS TO HAVE 25 MIN. RADIUS.
BEARING AREA, AS NOTED ON GIRDER DETAILS, INDICATES AREA THAT MUST BE FLAT AND TRUE TO RECEIVE SOLE PLATE.
(CG) INDICATES CORNER GRINDING.
CORNER GRINDING IS REQUIRED FOR MAIN MEMBER FLANGE PLATES.
ALL SHARP CORNERS AND EDGES THAT ARE MARRED, CUT OR ROUGHENED IN HANDLING SHALL BE GROUND TO 1.6 mm RAD.
ONLY LOW STRESS DIE STAMPS MAY BE USED FOR MARKING IN AREAS NOT EXPOSED ON THE FINISHED STRUCTURE.

INSPECTION:
SHOP INSPECTION BY THE VERMONT AGENCY OF TRANSPORTATION

WELDING:
ALL WELDING IS TO CONFORM TO AWS D1.5-02.
WELDING METHODS, PROCEDURES, AND MATERIALS SHALL COMPLY WITH THE SPECIFIC PROCEDURE DESIGNATED IN THE WELD SYMBOL TAIL.
FOR WELDING STIFFENERS AND CONNECTION PLATES TO GIRDERS, SEE TYPICAL WELDING DETAIL.

IDENTIFICATION OF HOLE PLACEMENT:
UNLESS NOTED OTHERWISE, BOLT HOLES IN MATERIAL 16mm OR LESS IN THICKNESS MAY BE CNC (COMPUTER NUMERICALLY CONTROLLED) PUNCHED OR CNC DRILLED FULL SIZE UNASSEMBLED. ALL MATERIAL THICKER THAN 16mm IS TO BE DRILLED.

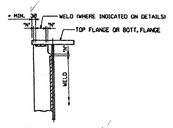
NON-DESTRUCTIVE TESTING:
WEB PLATE SPLICES TO BE RADIOGRAPHICALLY TESTED, AS CALLED FOR ON DRAWING PREFIXED "WC", BY N.S.S.I.

MAGNETIC PARTICLE INSPECTION IS REQUIRED ON AT LEAST 300 mm OF EVERY 3000 mm LENGTH OF FILLET WELDS AND 300 mm OF SUCH WELDS LESS THAN 3000 mm IN LENGTH ON GIRDER WEB TO FLANGE AND CONNECTION PLATES TO WEB AND FLANGE WELDS. TESTING PER THE YOKE METHOD, USING DC.

CLEANING:
ALL STEEL TO BE BLAST CLEANED TO SSPC-SP10 (NEAR WHITE).

PAINTING:
NO PAINT

DRAWING REFERENCE:
FLANGE SPLICES -PREFIXED "FS"
WEB CAMBERS -PREFIXED "WC"
GIRDER JOB STANDARDS -PREFIXED "S"



STIFFENER WELDING DETAIL
* WELDS MUST STOP 38 MINIMUM FROM EDGE OF FLANGE

RECEIVED
OK'D BY ____ OK'D BY ____
MAR 17 2006
RESUBMIT ____ APPROVED ✓
BY ____ DATE 4/4/06

NO.	REVISION	BY	DATE

HIGH STEEL STRUCTURES, INC.

GENERAL SHOP NOTES
RTE. NO. TH 35 (BRIDGE NO. 241 OVER PACIFIC BROOK
RTE. NO. TH 35 STA. 1+805.888 TO STA. 1+932.388
TOWN OF MONTGOMERY
FRANKLIN COUNTY, VERMONT
STATE OF VERMONT, AGENCY OF TRANSPORTATION
STATE CONTRACT OR "BY" WK. ____ PROJECT NO. BRO 1448 (28)
CONTRACTOR P.K.L. ST. ONGE CONTRACTION, INC.
IN CHARGE BRITTIGAN (JH) DATE 6/06 CHK'D BY SJA DATE 2/13/06
CONTRACT NUMBER VT-06B01-1 DRAWING NUMBER GNI OF GNI

06755

06001 X1 3/9/06 3/9/06Approval TO:A.L. St. Onge Contractor,

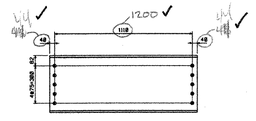
METRIC 1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
2. ALL WEIGHTS ARE IN KILOGRAMS.

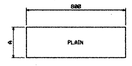
FED. HWY. ADM. NO. | STATE | FED. AID PROJ. NO.
VT

BILL OF MATERIAL

MARK	QTY EA.	MARK	COMMENTS	DESCRIPTION	LENGTH	SPEC	GRADE	TEST	RUBBING	HOLE	ITEM	ASSY WEIGHT EA.
				DIAPHRAGM								
1	12	D1		MC	480 x 63.5	1.190 M270M 1828	345W		(MC18 x 42.7)	10	1	75.57
				MISC. END PLATES								
1	4	M1		PL	6 x 244	800	M270M	345W			7	3	9.18
1	4	M2		PL	6 x 247	800	M270M	345W			7	3	9.31

TOTAL WEIGHT THIS SHEET: 680.77 kg





MISC. END PLATE
(CODE: 38)

MARK	A
M1	244
M2	247

RECEIVED
CK'D BY MH CK'D BY CWL
MAR 17 2006
RESUBMIT APPROVED AS NOTED
BY CWL DATE 4/4/06

SHOP NOTE
HOLES: 13/16"ø
BOLTS: NONE
PAINT: NONE
FOR GENERAL SHOP NOTES, SEE DWG. GN1.

NO.	REVISION	BY	DATE

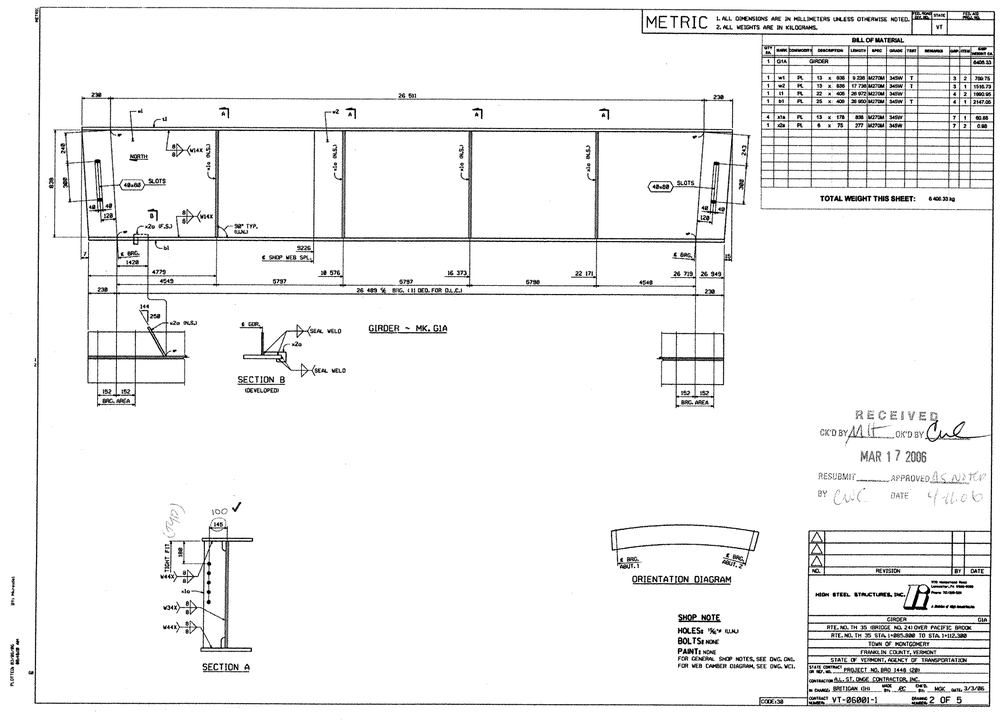
HIGH STEEL STRUCTURES, INC.
1853 Industrial Road, Box 1709, Lancaster, PA 17608-1709, Phone: 717-299-7621
A Member of HSS Industries

DIAPHRAGM & MISC. END PLATES D1, M1 & M2
RTE. NO. TH 25 (BRIDGE NO. 241 OVER PACIFIC BROOK
RTE. NO. TH 25 STA. 1+805.888 TO STA. 1+922.388
TOWN OF MONTGOMERY
FRANKLIN COUNTY, VERMONT
STATE OF VERMONT, AGENCY OF TRANSPORTATION
STATE PROJECT NO. PROJECT NO. BRO 1448 (28)
FED. NO. NO.
CONTRACTOR A.L. ST. ONGE CONTRACTOR, INC.
w. Dunlap, DRAFTSMAN 12/19 MADE BY AC CHK'D BY MSK DATE 3/3/06
CONTRACT NUMBER VT-06001-1 DRAWING NUMBER 1 OF 5

CODE/USE ELM.1 38

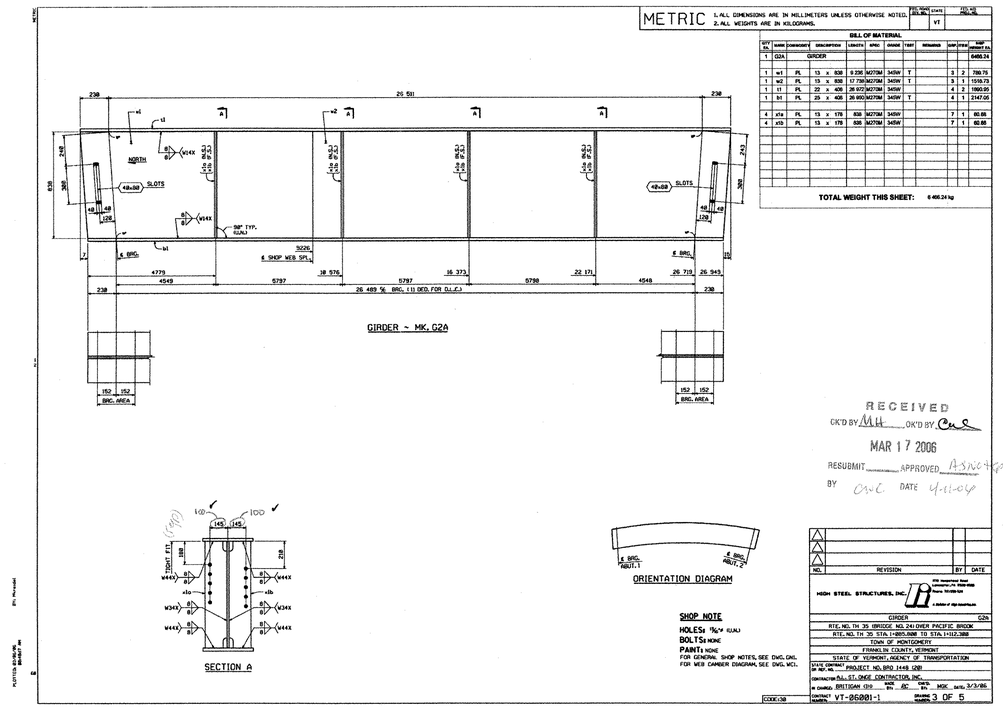
D6855

06001 X1 3/9/06 3/9/06Approval TO:A.L. St. Onge Contractor,



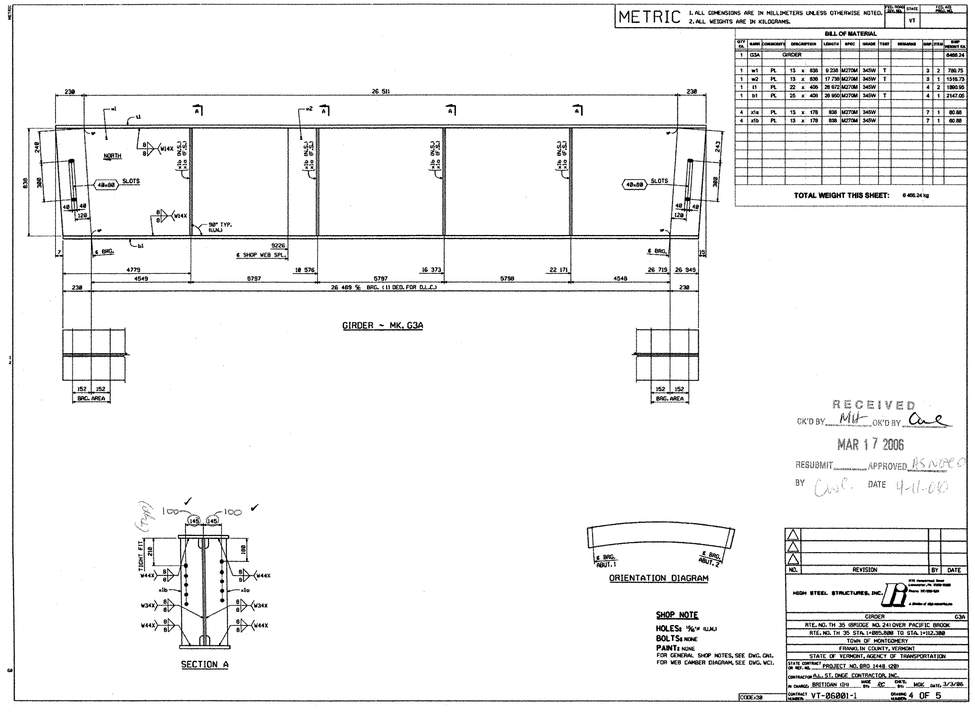
069 SS

06001 X1 3/9/06 3/9/06Approval TO:A.L. St. Onge Contractor,



070 55

06001 X1 3/9/06 3/9/06Approval TO:A.L. St. Onge Contractor,



071 SS

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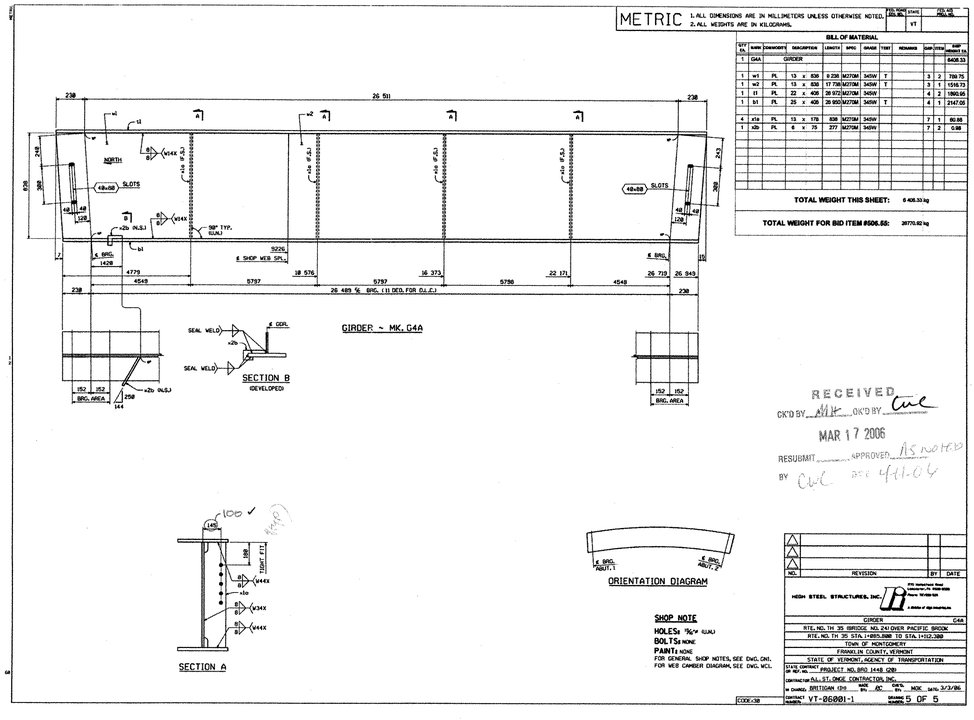


072 55

06001 X1 3/9/06 3/9/06Approval TO:A.L. St. Onge Contractor,

STATE OF VERMONT
HIGHWAY TH36
BRIDGE #24 OVER PACIFIC BROOK
PROJECT NO. BRO 1448(20)
MONTGOMERY, VT

COSMEC INC.

WELDING PROCEDURE SPECIFICATION

SPECIFICATIONS AND CODE: D1.6 (D1.3)
MATERIAL SPECIFICATION ASTM A240 TYPE 304 TO ASTM A709 GR 50W
WELDING PROCESS---------- GTAW
MANUAL OR MACHINE------- MANUAL
POSITION OF WELDING----- 1F & 2F
FILLER METAL SPECIFICATION ER309L — CLASSIFICATION: A5.9
MANUFACTURER: HARRIS WELCO — TRADENAME:
FLUX------- INTERNAL
SHIELDING GAS---------- ARGON — FLOW RATE 45 CFH
SINGLE OR MULTIPLE PAS S SINGLE
SINGLE OR MULTIPLE ARC SINGLE
WELDING CURRENT---------- DC
POLARITY : REVERSE (EN)
WELDING PROGRESSION----------
ROOT TREATMENT---------- CLEANED & PREPARED BRIGHT METAL
PREHEAT AND INTERPASS TEMPERATURE---------- SEE BELOW
POSTHEAT TEMPERATURE N/A
HEAT IMPUT MIN.---------- MAX.----

WELDING PROCEDURE

PASS NO.	ELECTRODE SIZE	WELDING CURRENT AMPERES	VOLTS	TRAVEL SPEED	JOINT DETAIL
ALL	3/32"	130--155	14-17	6.75--8.5	LAP JOINT
		16 GA THRU 10 GA BM THICKNESS			

PREHEAT TEMPS. ***PREHEAT UNTIL NO MOSITURE PRESENT

THICKNESS	TEMP.
UP TO 3/4"	100 DEG.
OVER 3/4" TO 1 1/2"	100 DEG.
OVER 1 1/2" TO 2 1/2"	100 DEG.
OVER 2 1/2"	100 DEG.

THIS PROCEURE MAY VARY DUE TO FABRICATION SEQUENCE, FIT-UP, PASS SIZE, ETC.
WITHIN THE LIMITATION OF VARIABLES GIVEN IN SECTION 5.
SUPPORTING PQR: GTAW-WF-05
PROCEDURE NO. GTAW-WF — CONTRACTOR: COSMEC INC.
AUTHORIZED BY: DONALD VOSE
REVISION NO. 1 — CWI#:01100651 Donald Vose

DATE:--- 2/1/2005

VTRANS RECEIVED DATE JWC FEB 16 2005 RESIDENT RESIDENT V RLC 2/22/06

AWS QC 1 DONALD E. VOSE 01100651 CWI

073 BBW

STATE OF VERMONT
HIGHWAY TH36
BRIDGE #24 OVER PACIFIC BROOK
PROJECT NO. BRO 1448 (28)
MONTGOMERY, VT

COSMEC, INC.
70 SOUTH STREET
WALPOLE, MA 02081
PH# 508-668-6600
FAX# 508-660-1022

EMS-QC-110

VTRANS
RECEIVED
CK'D BY _____ OK'D BY JWC
FEB 16 2006
RESUBMIT: _____ APPROVED: ✓
BY RRW DATE 2/22/06

ENGINEERING AND MANUFACTURING STANDARD
PTFE FACING AND STEEL
OR PREFORMED FABRIC SUBSTRATE
SURFACE PREPARATION AND ADHESIVE PROCEDURE

The PTFE facing shall be prepared for bonding to a substrate material by chemically etching the face to be bonded using the sodium ammonia process.

The mating surface of the substrate shall be prepared for bonding using a three-step process as follows:

1. preliminary degrease using methyl ethyl ketone.
2. mechanically roughen to approx. 125 RMS and thoroughly brush and clean for final degreasing.
3. final degrease using methyl ethyl ketone

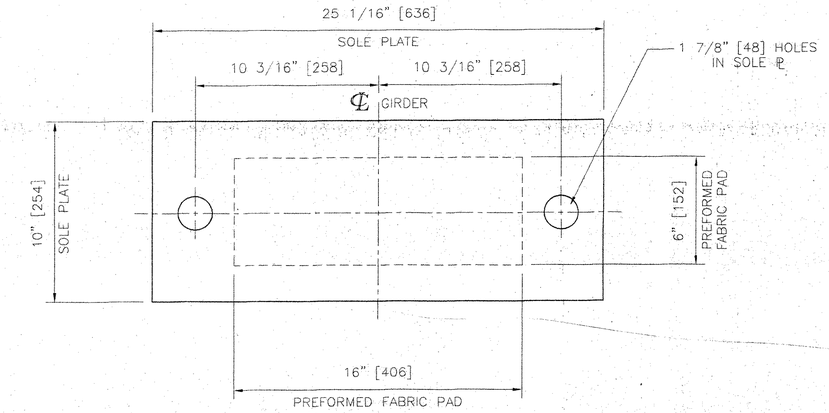
The PTFE and substrate mating surfaces shall be clean and dry with final degreasing performed within 30 minutes of bonding. Adhesive shall consist of a two-part epoxy adhesive system conforming to Military Specification MMM-A-134

The adhesive shall be applied to the full area of the contact surface in an even manner so as to establish a glue line not less than .002 inch nor more than .010 inch thick. Surfaces being bonded are to be assembled immediately with open assembly time not to exceed 20 minutes.

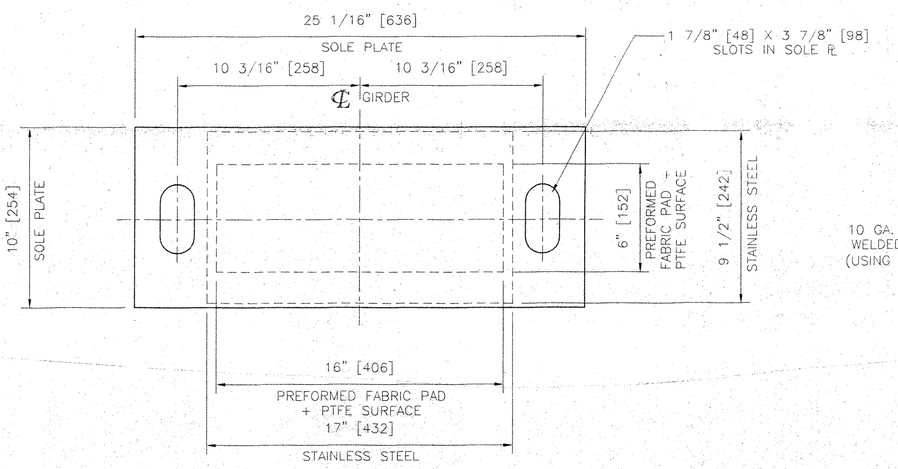
The PTFE material shall be greater in width and length than the substrate material by at least ½ inch when bonded. The PTFE shall be applied with contact starting at one edge and with contact progressing across entire bonded surface to eliminate air entrapment. The PTFE is to be in full contact with the steel or preformed fabric substrate. Curing of the bond shall be done under pressure of approx. 2-100 psi for 10-12 hours at approx. 70°F or other schedules as established by the manufacturer of the adhesive.

The PTFE shall be carefully trimmed to the same size as the substrate after bond curing and all bonds shall be visually inspected for bond retention.

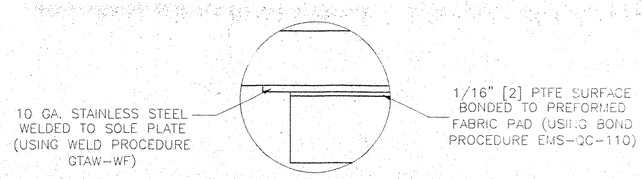
074 BBW



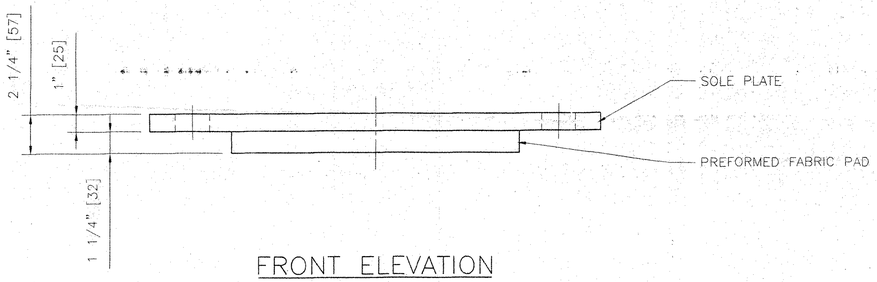
PLAN



PLAN



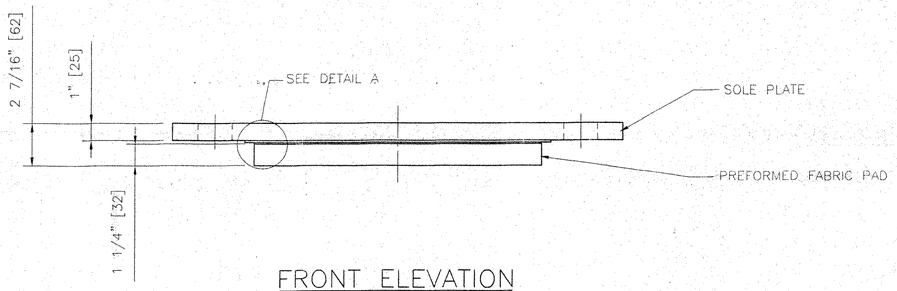
DETAIL A



FRONT ELEVATION

COSMEC FIXED PREFORMED FABRIC PAD BEARING

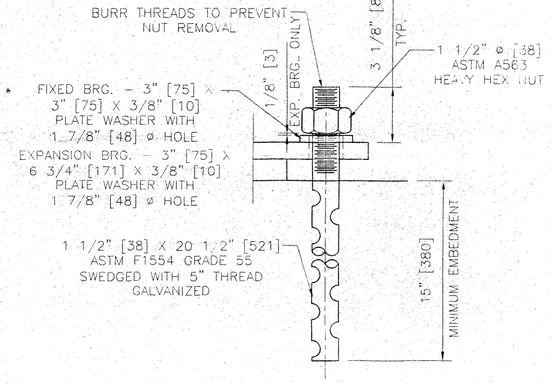
LOCATION: ABUTMENT 1
QUANTITY: 4



FRONT ELEVATION

COSMEC EXPANSION PREFORMED FABRIC PAD BEARING

LOCATION: ABUTMENT 2
QUANTITY: 4



ANCHOR BOLT DETAIL

BEARING NOTES

1. ALL MATERIALS USED IN THE FABRICATION OF THESE BEARINGS SHALL BE MADE IN THE U.S.A.
2. BEARINGS ARE TO BE SHIPPED AS COMPLETE UNITS, STEEL BANDED, AND SHALL BE WRAPPED TO PROTECT FROM MOISTURE AND DIRT DURING TRANSIT AND STORAGE.
3. LOCATION OF FABRICATION PLANT - 70 SOUTH STREET WALPOLE, MA 02081
4. COSMEC, INC. REPRESENTATIVE - MR. MATT McANDREWS (508) 668-6600
5. BEARINGS SHALL BE STORED IN A CLEAN, DRY, LEVEL UPRIGHT POSITION.
6. ALL EDGES OF STEEL PLATES SHALL HAVE 1/16" MINIMUM RADIUS.
7. DESIGN CRITERIA:
   A. BASE PLATE TO CONCRETE DESIGN PRESSURE = 7000 KPa MAXIMUM
   B. MINIMUM ALLOWABLE DESIGN ROTATION = 0.015 RADIANS
   C. HORIZONTAL CAPACITY SHALL BE A MINIMUM OF 10% OF THE VERTICAL LOAD
   D. DESIGN LOAD PER BEARING = 377 kN
      LL = 218 kN
      DL = 141 kN
      SDL = 18 kN

MATERIALS

STEEL - ASTM A709 GR. 50 ZINC METALIZED AND SEAL COATED

STAINLESS STEEL - ASTM A.240 TYPE 304, 10 RMS FINISH OR LESS ON SLIDING SURFACE

PREFORMED FABRIC PAD - AASHTO DIV. II SPEC. 18.4.9.1

PTFE - ASTM D4894 VIRGIN UNFILLED

ANCHOR BOLTS, NUTS & WASHERS - SEE DETAIL, ALL GALV.

Structures Copy

RECEIVED
FEB 10 2006
BY: JKC DATE: 2/13/06

Structures Copy

STATE OF VERMONT
HIGHWAY TH 36
BRIDGE #24 OVER PACIFIC BROOK
PROJECT NO. BRO 1448 (20)
MONTGOMERY, VT

COSMEC, INC. — 70 SOUTH STREET WALPOLE, MA. 02081

SCALE: 1/4"=1"	DRAWN BY: MRR	CHECKED BY: MCM
	DATE: 2/9/06	DATE 2/11/06

COSMEC FABRIC PAD BEARING

REV.		BY:	DATE	CK'D BY:	DATE

CUSTOMER	S.O. NUMBER	DRAWING NUMBER	REV.
A. L. ST. ONGE	60522	4619	

075 BB

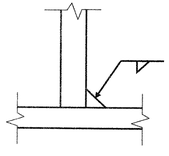
Highway Safety Corporation

Glastonbury, CT

Welding Procedure Specification

Material specification **A572 gr 50, ASTM A709 Gr 50, AASHTO M222**
Welding process **Gas Metal Arc Welding (GMAW)**
Manual, semi-automatic, or automatic **Semi-Automatic**
Position of welding **Flat (1F) or Horizontal (2F)**
Filler metal specification **AWS A5.18**
Filler metal classification **ER70S-3**
Electrode and manufacturer **Lincoln Electric Lincoln Weld L-50**
Flux and manufacturer **N/A**
Shielding gas **85% Argon / 15% CO2** Flow rate **19-27 L / min**
Single or multiple pass **Single**
Single or multiple arc **Single**
Welding current **DCEP**
Polarity **Reverse - electrode positive**
Welding progression **Stringers**
Root treatment **None**
Preheat and interpass temperature **base metal up to 3/4" (50ºF) ; over 3/4 thru 1-1/2" (150ºF) : over 1-1/2" thru 2-1/2" (225ºF)**
Postheat treatment **None**
Electrode extension **3/4" ± 1/4"**

WELDING PROCEDURE

Weld size	Pass no.	Electrode size	Welding parameters Amperes	Welding parameters Volts	Travel speed	Joint detail
1/4"	1	.062"	350 A ± 30	28 V ± 2	12 ipm ± 2	TYPICAL ALL FILLET WELDS 

VTRANS RECEIVED
CK'D BY ____ CK'D BY JWS
AUG 04 2006
RESUBMIT ____ APPROVED ✓
BY ____ DATE 8-8-06

This procedure may vary due to fabrication sequence, fit-up, pass size, etc. within the limitation of variables given in section 5 of latest edition AWS D1.5

AWS QC 1 PAUL A. RADICE 7007822E CWI

WPS no. **W-1562B**
Revision no. **0**
Supporting PQR no. **pre-qualified**
Project Name **Montgomery, Vermont**

Fabricator **Highway Safety Corporation**
Authorized by **Paul Radice**
Date **7/28/06**
Project Number **BRO 1448 (20)**

15788

Highway Safety Corporation

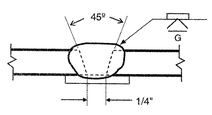
Glastonbury, CT

Welding Procedure Specification

Material specification **ASTM A500 Gr B**
Welding process **Shielded Metal Arc Welding (SMAW)**
Manual, semi-automatic, or automatic **Manual**
Position of welding **Flat (1G)**
Filler metal specification **AWS A5.1**
Filler metal classification **ER7018**
Electrode and manufacturer **Lincoln Electric Jet LH 78 MR**
Flux and manufacturer **N/A**
Shielding gas **N/A** Flow rate **N/A**
Single or multiple pass **Multiple**
Single or multiple arc **Single**
Welding current **AC**
Polarity **N/A**
Welding progression **Stringers**
Root treatment **None**
Preheat and interpass temperature **50ºF (min)**
Postheat treatment **None**
Electrode extension **N/A**

WELDING PROCEDURE

Weld size	Pass no.	Electrode size	Welding parameters Amperes	Welding parameters Volts	Travel speed	Joint detail
	ALL	5/32"	150 A to 220 A		VARIES	B-U2a



VTRANS RECEIVED
OK'D BY _____ OK'D BY JWC
AUG 04 2006
RESUBMIT _____ APPROVED ✓
BY _____ DATE 8-3-06

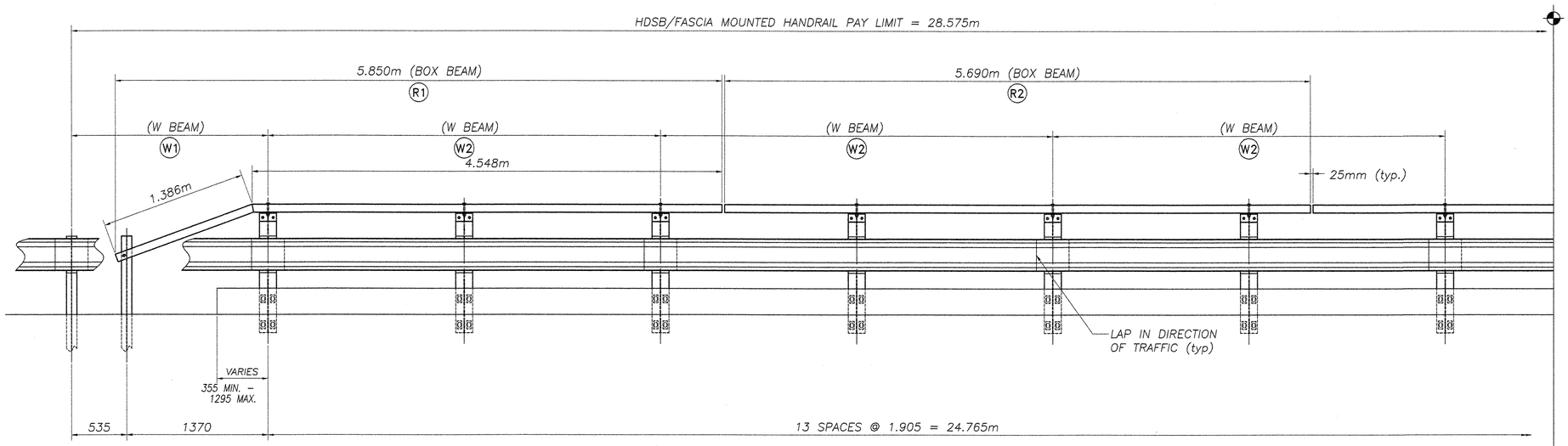
This procedure may vary due to fabrication sequence, fit-up, pass size, etc. within the limitation of variables given in section 5 of latest edition AWS D1.1

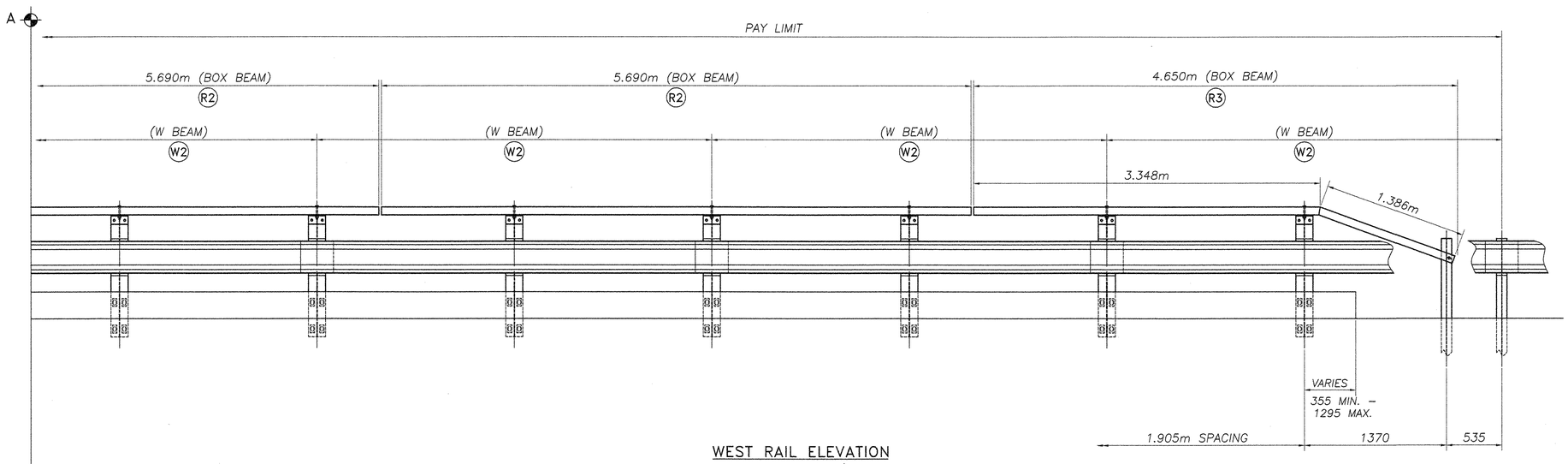
WPS no. **W-1562A**
Revision no. **0**
Supporting PQR no. **Pre-Qualified**
Project Name **Montgomery, Vermont**

Fabricator **Highway Safety Corporation**
Authorized by **Paul Radice**
Date **7/28/06**
Project Number **BRO 1448 (20)**

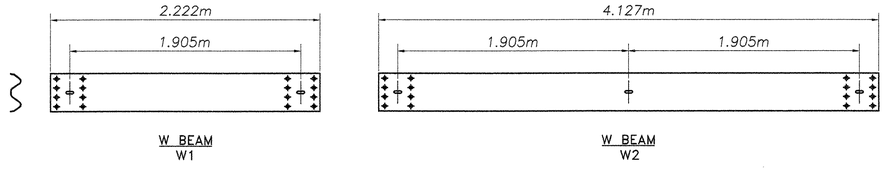
AWS QC 1 PAUL A. RADICE 98070221 CWI

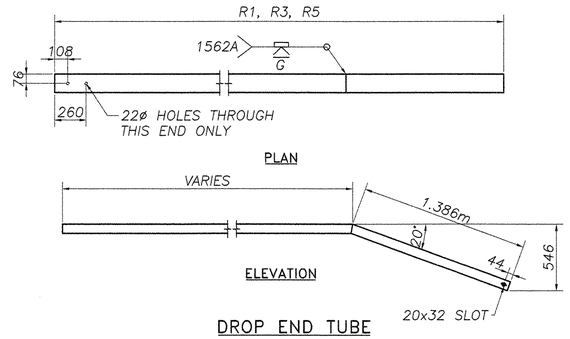
15 & BR





WEST RAIL ELEVATION
LOOKING WEST FROM ℄OF ROAD





DROP END TUBE

BILL OF MATERIAL (BOTH SIDES OF BRIDGE)					
MK. #	Qty.	Description	Size/Shape	Length	Material
		WEATHERING STEEL COMPONENTS			
		POST			
	29	fascia mounted post	W200 x 35.9	1270	AASHTO M222
	33	steel blockout	W150 x 13.5	360	AASHTO M222
	4	hex bolt w/ nut, flat washer & rec washer	M16	250	A307
	33	post bolt w/ hx nut, flat washer & rec washer	M16	50	A307
	136	post bolt w/ flat washer & hex nut	M16	38	A307
	29	hand rail attachment angle	L127 x 89 x 9.5	165	AASHTO M222
	58	post bolt w/ flat washer & hex nut	M16	50	A307
	8	driven post	W150 x 13.5	1829	AASHTO M222
	136	w beam splice bolt w/ DR nut	M16	32	A307
		GALVANIZED AND PAINTED STEEL COMPONENTS			
		HANDRAIL			
R1	1	hand rail tube w/ drop end	TS 152x75x6.4	5.850m	A500 gr B
R2	6	hand rail tube	TS 152x75x6.4	5.690m	A500 gr B
R3	1	hand rail tube w/ drop end	TS 152x75x6.4	4.560m	A500 gr B
R4	1	partially curved hand rail tube w/ drop end	TS 152x75x6.4	5.864m	A500 gr B
R5	1	hand rail tube w/ drop end	TS 152x75x6.4	6.555m	A500 gr B
	29	hex bolt w/2 flat washer & heavy hex nut	M16	120	A307
	16	splice plate	PL 20 x 127	787	AASHTO M223
	32	hex bolt w/ flat washer & heavy hex nut	M20	114	A307
		ITEMS FURNISHED BY OTHERS			
		W BEAM (by others)			
W1	2	w beam	1.905m		M180 B4
W2	13	w beam	3.810m		M180 B4
W3	1	w beam curved to 5.500m convex radius	1.905m		M180 B4
W4	1	w beam partially curved to 5.500m convex radius	3.810m		M180 B4
		ANCHORS (by others)			
	58	anchor u bolt w/ 4 hex nuts and 2 flat washers	25 x 250	305	A449
	116	plate washer	PL 6x55	130	AASHTO M222

NOTE:

1. WEATHERING STEEL HARDWARE PROVIDED, SUBJECT TO AVAILABILITY AT TIME OF DELIVERY. BOLTS MAY BE ALTERNATIVELY PROVIDED GALVANIZED WITH ALL SURFACES, EXPOSED TO VIEW AFTER FINAL INSTALLATION, TOUCED UP WITH BROWN PAINT. PAINTING OF EXPOSED HARDWARE SURFACES SHALL BE PAINTED AFTER INSTALLATION IN THE FIELD. TOUCH UP PAINT MATCHING THE SHOP APPLIED PAINT SYSTEM WILL BE FURNISHED FOR MINOR FIELD REPAIR AFTER INSTALLATION AND PAINTING OF HARDWARE IF NECESSARY.

2. TS 152 x 76 x 6 HAND RAIL TO BE GALVANIZED AND PAINTED BROWN, COLOR 20059 IN ACCORDANCE WITH VAOT SUPPLEMENTAL SPECIFICATION 513.06(f).

REVISIONS		
No.	Remarks	Date
0	Initial submittal	7/31/06
0	Second submittal	8/16/06

VTrans - PDD

SEP 0 6 2006

Structures Design Section

—Record Plans—

HIGHWAY SAFETY CORP.
GLASTONBURY, CT

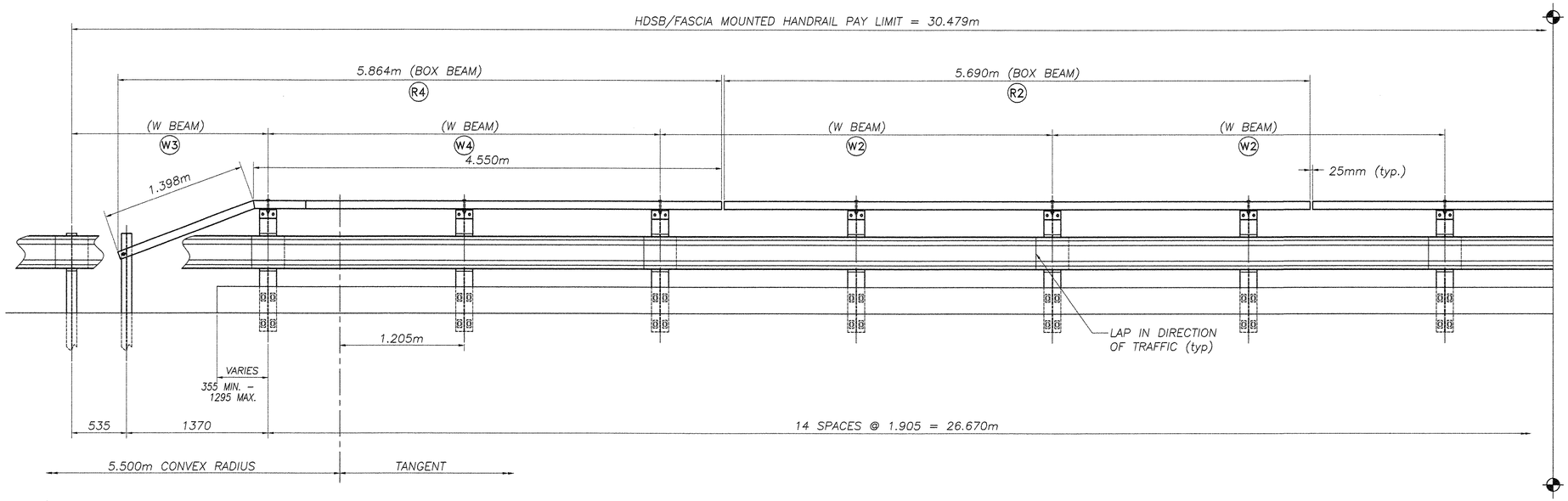
ITEM # 525.43 FASCIA MOUNTED HDSB WITH HANDRAIL
PROJECT NUMBER: BRO 1448 (20)
TOWN OF MONTGOMERY, VT
COUNTY OF FRANKLIN
ROUTE NO. TH 35, BRIDGE NO. 24

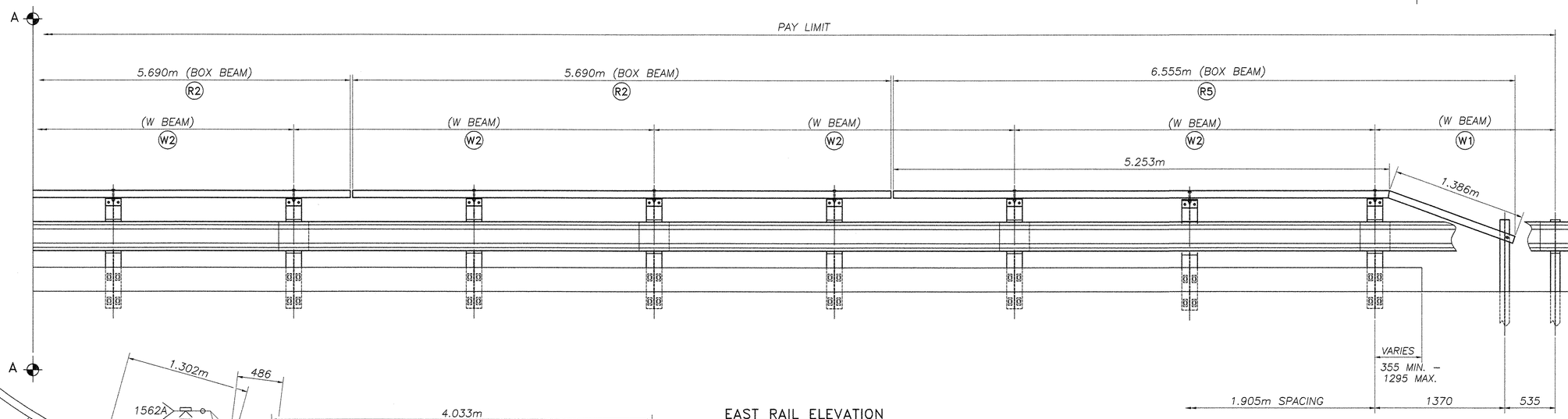
GENERAL CONTRACTOR

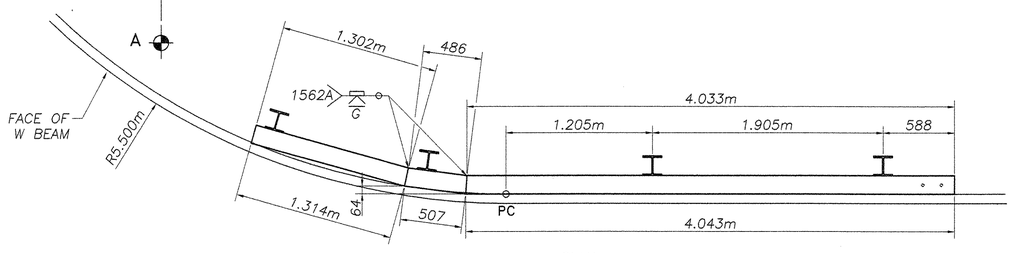
SUB CONTRACTOR F.R. LAFAYETTE INC.

DRAWN MHM
CHECKED
DATE 7/20/06
SCALE NTS
HSC REFERENCE NO. 1562
SIZE D REVISION 0
SHEET NO. 1 of 3

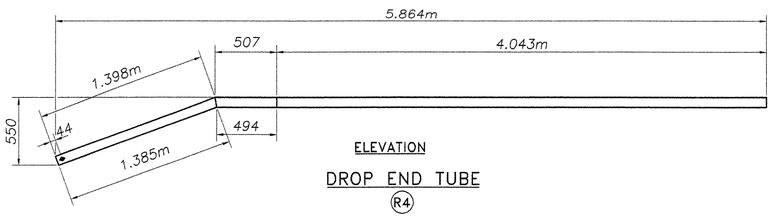
073 BR







PLAN



ELEVATION

DROP END TUBE

R4

EAST RAIL ELEVATION

LOOKING EAST FROM ℄ OF ROAD

REVISIONS		
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Structures Design Section

—RECORD PLANS—

HIGHWAY SAFETY CORP.

GLASTONBURY, CT

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CHECKED

DATE 7/20/06

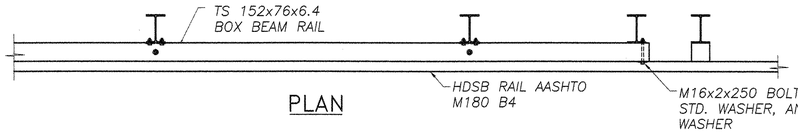
SCALE NTS

HSC REFERENCE NO. 1562

SIZE D REVISION 0

SHEET NO. 2 of 3

074 BR



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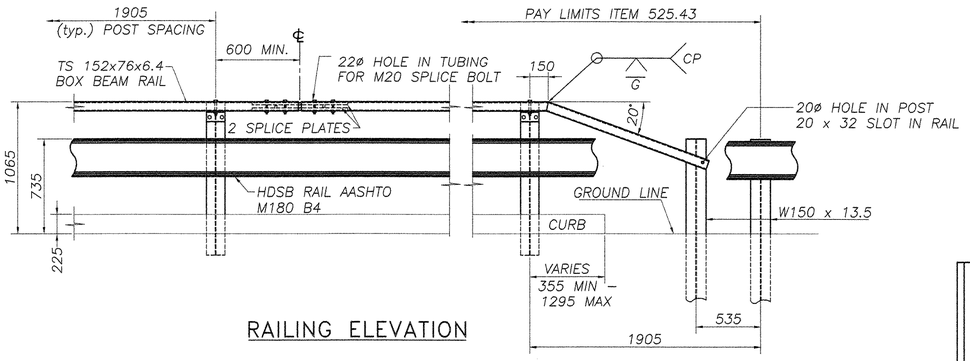
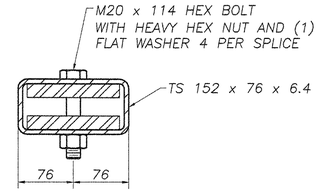
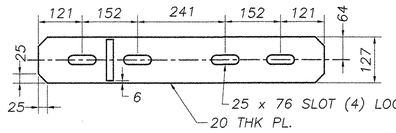
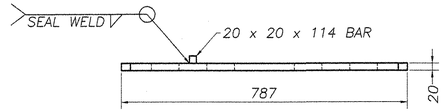


RAILING ELEVATION

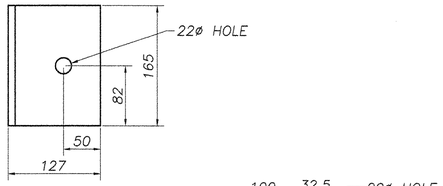


SPLICE SECTION

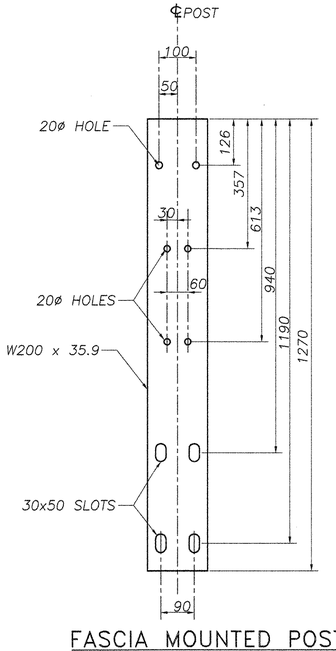




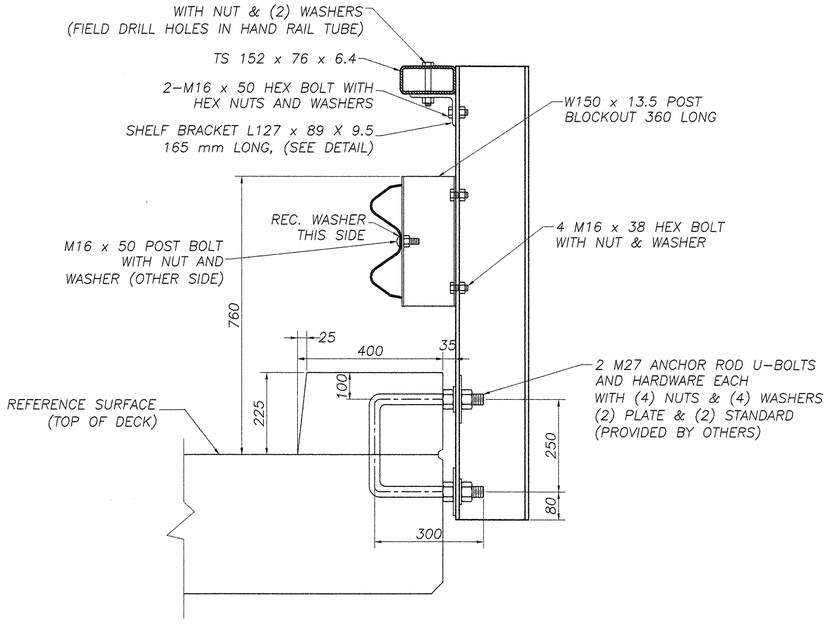
SPLICE PLATE DETAILS



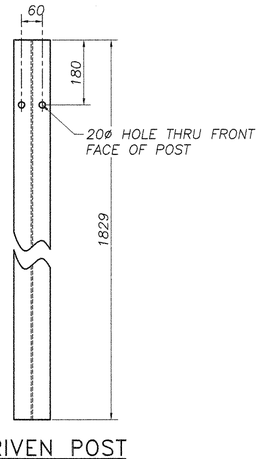
SHELF BRACKET



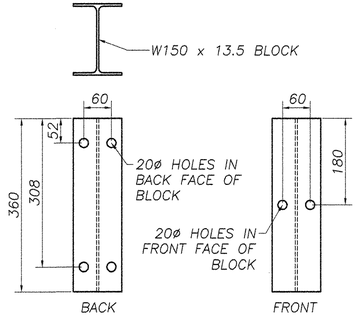
FASCIA MOUNTED POST



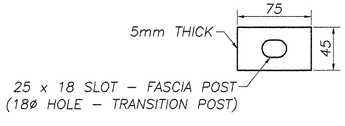
TYPICAL SECTION



DRIVEN POST
W150 x 13.5



OFFSET BLOCK DETAIL



RECTANGULAR WASHER

NOTES

1. SEE STANDARD G–1M & G–1dM FOR ADDITIONAL DETAILS OF STEEL BEAM GUARD RAIL AND STANDARD SB–R4a–82 FOR ADDITIONAL DETAILS OF BOX BEAM GUARD RAIL

2. ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED AND CONFORM TO SECTION 714.07 **BY OTHERS**

3. BRIDGE RAIL TYPES A, C & E: HEAVY DUTY STEEL BEAM RAIL SHALL BE AASHTO M180, CLASS B TYPE–II. POST AND BRACKETS, AS WELL AS PLATE AND SPECIAL WASHERS, SHALL BE AASHTO M223/M223M STEEL. BOLTS SHALL BE ASTM F568M, CLASS 4.6. ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION TO AASHTO MIII OR M232 (HARDWARE). PRIOR TO GALV, GRIND ALL EDGES OF SHAPES AND PLATES TO MIN. 2mm RADIUS

4. BRIDGE RAIL TYPE B & D: HEAVY DUTY STEEL BEAM RAIL SHALL BE AASHTO M180, CLASS B–TYPE 4 **BY OTHERS**. POSTS AND BRACKETS AS WELL AS PLATE AND SPECIAL WASHERS, SHALL BE AASHTO M222/M222M STEEL.

5. ALL POSTS SHALL BE SET TO NORMAL GRADE

6. BRIDGE APPROACH RAIL HEIGHT SHALL BE TRANSITIONED TO NORMAL ROADWAY HEIGHT IN 7.62m

7. APPROACH RAILING SHALL BE HEAVY DUTY STEEL BEAM AS DETAILED ON THE PLANS.

8. FOR THE TYPE A,B,C, OR D BRIDGE RAILING, THE TRANSITION POST SHALL HAVE AN OFFSET BLOCK AND BE LOCATED AS CLOSE AS PRACTICAL TO THE MID POINT BETWEEN THE BRIDGE END POST AND APPROACH RAIL POST I.

9. SPLICES SHALL LAP IN DIRECTION OF TRAFFIC FLOW

10. SEE STANDARD SHEET G–1M FOR DELINEATOR DETAILS AND PLACEMENT.

11. ERECT DELINEATOR ON EVERY FIFTH POST OR APPROXIMATELY 9m APART. PAYMENT SHALL BE SUBSIDIARY TO OTHER ITEMS.

12. THE DROP WEIGHT TEAR TEST IN SECTION 732 SHALL NOT APPLY TO THE STRUCTURAL TUBING.

REVISIONS		
No.	Remarks	Date
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0	Second submittal	8/16/06

VTrans - PDD

SEP 0 6 2006

Structures Design
Section

—RECORD PLANS—

HIGHWAY SAFETY CORP.
GLASTONBURY, CT

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PROJECT NUMBER: BRO 1448 (20)
TOWN OF MONTGOMERY, VT
COUNTY OF FRANKLIN
ROUTE NO. TH 35, BRIDGE NO. 24

GENERAL CONTRACTOR

SUB CONTRACTOR F.R. LAFAYETTE INC.

DRAWN	MHM
CHECKED	
DATE	7/20/06
SCALE	NTS
HSC REFERENCE NO.	1562
SIZE	D
REVISION	0
SHEET NO.	3 of 3

075BR

VTRANS
RECEIVED
OK'D BY _____ OK'D BY Jeff
AUG 0 4 2006
RESUBMIT _____ APPROVED ✓
BY DATE 8-14-06

August 6, 2006

Highway Safety Corp.
239 Commerce St.
Glastonburry, CT 06033

RE: Colorzinq® Coating over Galvanized surface.

Dear Marnie Sniezko,

The following is our proposed high performance coating system for the following project:
MONTGOMERY 1448(20) **HSC Job Reference#** 1562
Material to be galvanized to the ASTM A123, A153 galvanizing standards and coated with a Duplex System; Color: Brown Federal #20059, standard 595.

Our QC inspects all incoming material to check for damage from shipping and assure venting is suitable for the galvanizing process.
Material is cleaned of all oxidation, dirt and oils through repeated dipping in hot Alkali solutions. Next, any scale or rust is removed from the cleaned steel by dipping in a diluted ambient temperature Hydrochloric Solution. The pickled material is then transferred into a Zinc Ammonium chloride flux, (Dry Kettle Process) step.
The fluxed product is then completely immersed in a bath consisting of minimum 98% pure molten zinc.
After Galvanizing the material is air cooled, no quenching allowed on any material requiring Duplex Coatings.

15 BR

V & S **Colorzinq®** galvanizing and coating operations are all enclosed inside the same environmentally controlled facility. After galvanizing, the material is transported directly into the coating room.

The galvanized surfaces are prepared using the most current ASTM method D 6386-99 as described under Section 5.4.1. The method of lightly sweep abrading the zinc surface immediately before applying the primer removes even minuet amounts of oxides that have formed. We use a proprietary media that complies with the D 6386-99 guidelines. Our light sweep abrade at low pressure cleans the surface and provides a profile of 1.0 to 1.5 mills anchor pattern. Immediately material is transported via our automated over head rail system into the Primer booth. These steps will commence within a 24 hour window to further insure surface preparation integrity. This positive action approach to surface preparation eliminates any variables associated with a time sensitive surface preparation method.

Coatings are applied at a film thickness **International Paint** recommends. The epoxy prime coat of **Intercure 420 Epoxy Primer** will be applied at 5 – 6 mils DFT followed by a finish urethane coat of **Interthane 990HS** applied at 2-3 mils DFT. When applied to 4 mils of hot dip zinc, a total system thickness of 11 – 13 mils will be achieved. All coats will be cured by heating in our enclosed paint facility to promote maximum performance of the system. Our controlled heat curing process eliminates the variables normally associated with relying on existing ambient drying conditions.

International Paint is our proposed paint system and is not only equal to the other listed paint systems in performance but in many ways superior. International Paint is a division of the Akzo Nobel Corp. who is a global leader in innovative high performance coatings. All proposed coatings are well below the 3.5 lb. /gallon V.O.C. limit. The most important feature of our coating system is the **Intercure 420®** Micaceous Iron Oxide prime coat. With MIO plating effect, we have achieved superior barrier protection and adhesion to hot dip galvanize compared to conventional epoxy primers.

The **Interthane 990HS** ® Urethane Finish is listed on the current N.E.P.C.O.A.T approved listing and is used to protect many of the projects painted by area State

158BR

Departments of Transportation. These structures are exposed to many harsh environments and their coating systems are designed to withstand these conditions for many years. **International Paint** has a field technician available for our use during startup and throughout the duration of the project as needed.

Voigt and Schweitzer is an ISO 9002 company and as such are very comfortable with any inspections you may want to make. Our lead paint mechanics each have many years experience in the application of complex coating systems. All processes are documented and available to the project authorities.

Thank you for the opportunity. Voigt & Schweitzer are uniquely qualified to present a single source location for the galvanizing and coating of your project. If you need further information or clarifications please call me at (860) 294-1030.

Best regards,
Jay J. Besozzi
V&S Taunton Galvanizers, LLC.

159 BR