

STATE OF VERMONT AGENCY OF TRANSPORTATION

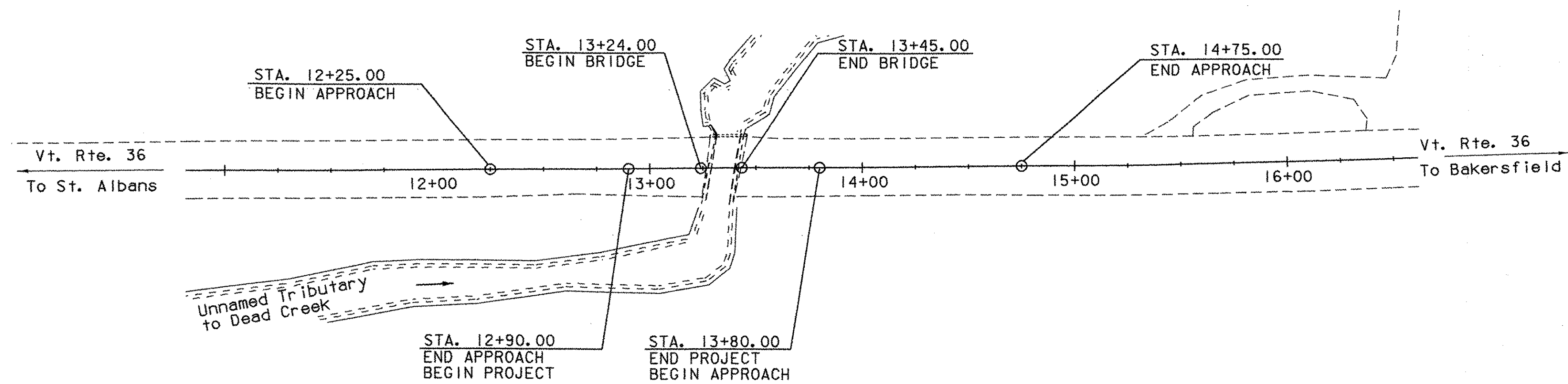
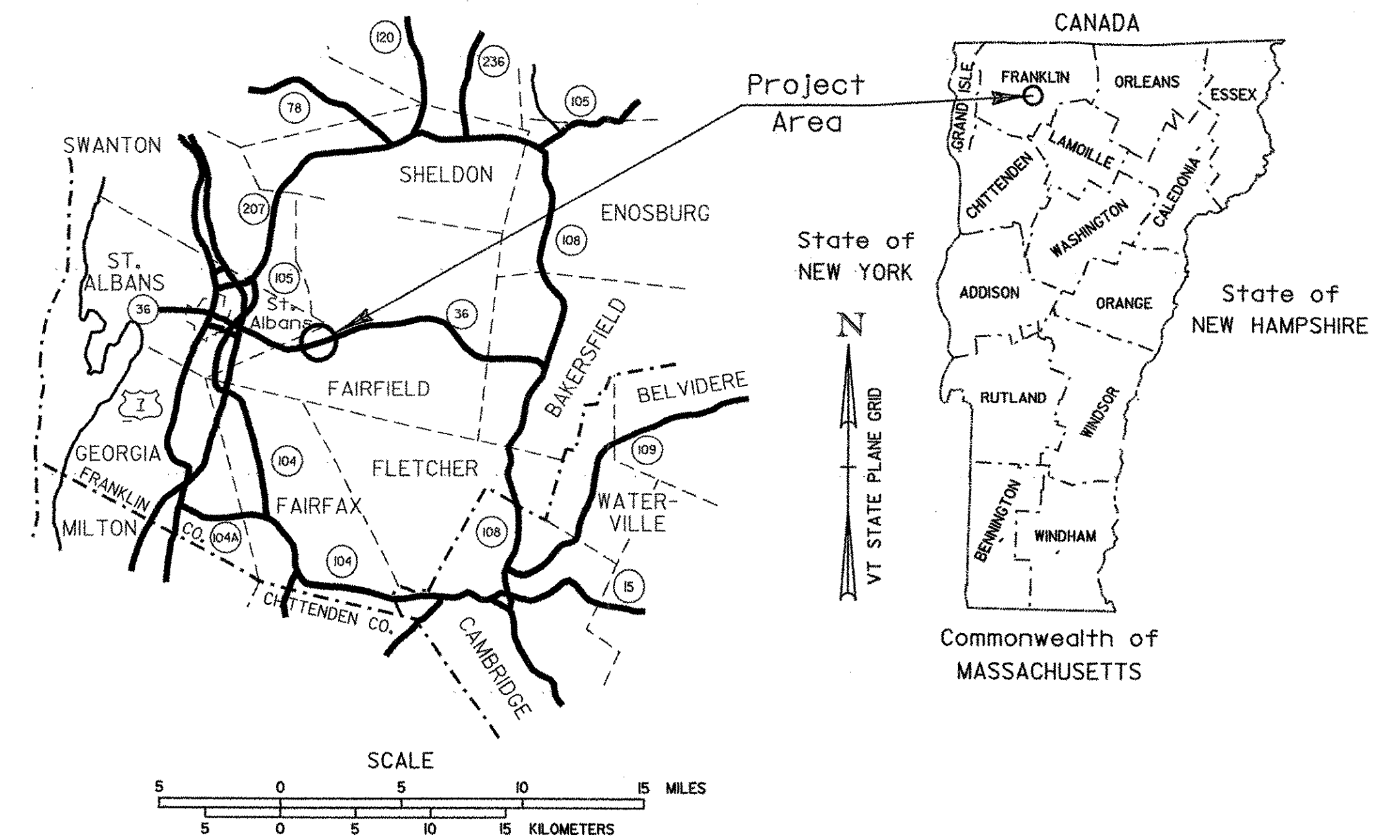


PROPOSED IMPROVEMENT BRIDGE PROJECT TOWN OF FAIRFIELD COUNTY OF FRANKLIN VT. ROUTE 36 (MAJOR COLLECTOR) BRIDGE #2

BEGINNING AT A POINT ON VT. ROUTE 36 APPROXIMATELY 1.06 MILES EASTERLY
OF THE ST. ALBANS/FAIRFIELD TOWN LINE AND EXTENDING EASTERLY FOR 0.017 MILES.

LENGTH OF ROADWAY = 69.00 FEET (0.013 MILES)
LENGTH OF BRIDGE = 21.00 FEET (0.004 MILES)
LENGTH OF PROJECT = 90.00 FEET (0.017 MILES)

WORK TO BE PERFORMED ON THIS PROJECT INCLUDES CONSTRUCTION OF A NEW BRIDGE
ON THE EXISTING ALIGNMENT, WITH NECESSARY APPROACH AND CHANNEL WORK.



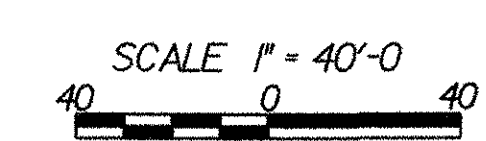
RECORD PLANS	
CONTRACTOR:	AL ST. ONGE CONTRACTOR, INC - MONTGOMERY, VT
RESIDENT ENGINEER:	CARL GLEASON
CONSTRUCTION BEGAN:	JULY 6, 2005
CONSTRUCTION COMPLETE:	NOVEMBER 2, 2005
RECORD PLANS BY:	C. GLEASON & N. GARBACIK
I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.	
BY:	<i>Carl Gleason</i> RESIDENT ENGINEER
DATE:	1/10/07
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. GILMAN
SURVEYED DATE : 12-24-01

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD-83 (96)

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.



DIRECTOR OF PROGRAM DEVELOPMENT	
APPROVED <i>Richard Fetscherle</i>	DATE 2/22/05
PROJECT MANAGER : C. KELLER	
PROJECT NAME : FAIRFIELD	
PROJECT NUMBER : AC STP ST0298(6)	
SHEET 1 OF 41 SHEETS	

22-FEB-2005

PRELIMINARY INFORMATION SHEET

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STANDARDS

E-100	CONSTRUCTION APPROACH SIGNS	1/2/2004
E-100A	SIDE ROAD CONSTRUCTION - APPROACH SIGNS	1/2/2004
E-101	CONSTRUCTION SIGN DETAILS	5/30/2003
E-102	CONSTRUCTION SIGN DETAILS	6/30/2003
E-102A	CONSTRUCTION SIGN DETAILS	5/1/2004
E-106	TRAFFIC CONTROL - MISCELLANEOUS DETAILS	3/1/2004
E-107	DELINEATION, BARRICADES AND DETOURS FOR U-TURNS ON DIVIDED HIGHWAY	6/30/2003
E-107A	BREAKAWAY BARRICADE DETAILS	8/8/1995
E-108	CONSTRUCTION ZONE LONGITUDINAL DROP OFFS	8/18/1995
E-110	MAJOR MAINTENANCE OPERATION LANE CLOSURE	8/8/1995
E-121	STANDARD SIGN PLACEMENT - CONVENTIONAL ROAD	8/8/1995
E-140	REGULATORY SIGN DETAILS	8/30/1996
E-142	REGULATORY SIGN DETAILS	9/20/1995
E-152	WARNING SIGN DETAILS	5/1/2004
E-153	WARNING SIGN DETAILS	5/1/2004
E-154	WARNING SIGN DETAILS	5/1/2004
E-160	FLANGED CHANNEL STEEL SIGN POST	5/20/1999
E-170	TRAFFIC CONTROL SIGNALS PEDESTAL POST MOUNTED	11/4/1999
E-171A	TRAFFIC CONTROL SIGNALS GENERAL NOTES & DETAILS	8/9/1995
E-171B	TRAFFIC CONTROL SIGNALS MISC. DETAILS	8/9/1995
E-171C	TRAFFIC CONTROL SIGNALS CANTILEVER MOUNTING DETAILS	8/9/1995
E-172	VEHICLE DETECTOR LOOP DETAILS	8/9/1995
E-175	POWER DROP STANCHIONS	11/17/1993
E-193	PAVEMENT MARKING DETAILS	8/18/1995
G-1	STEEL BEAM GUARDRAIL (50MPH & OVER) HEAVY DUTY STEEL BEAM GUARDRAIL TWISTED END TERMINAL ANCHOR FOR STEEL BEAM RAIL	1/3/2000
G-1D	STEEL BEAM GUARDRAIL (40MPH & LESS) HEAVY DUTY STEEL BEAM GUARDRAIL STEEL BEAM MEDIAN BARRIER ANCHOR FOR STEEL BEAM RAIL	1/3/2000
G-18	PRECAST CONCRETE TEMPORARY TRAFFIC BARRIER	6/1/1994
G-19	GENERIC GRADING PLANS FOR GUARDRAIL END TERMINALS	11/15/2002
SB-R6-82	BRIDGE RAILING - HEAVY DUTY STEEL BEAM	1/6/1995
SB-R7-90	BRIDGE RAILING - HEAVY DUTY STEEL BEAM	1/11/1995

FINAL HYDRAULIC REPORT

HYDROLOGIC DATA Date: 1/2/2003

DRAINAGE AREA : 3.9 square miles

CHARACTER OF TERRAIN : _____

STREAM CHARACTERISTICS : _____

NATURE OF STREAMBED : _____

PEAK FLOW DATA

Q 2.33 = 145 cfs Q 50 = 600 cfs

Q 10 = 360 cfs Q 100 = 675 cfs

Q 25 = 480 cfs Q 500 = _____

DATE OF FLOOD RECORD : N/A

ESTIMATED DISCHARGE : _____

WATER SURFACE ELEV. : _____

NATURAL STREAM VELOCITY : _____

ICE CONDITIONS : _____

DEBRIS : _____

DOES THE STREAM REACH MAXIMUM HIGHWATER ELEV. RAPIDLY? _____

IS ORDINARY RISE RAPID? _____

IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? _____

IF YES, DESCRIBE : _____

WATERSHED STORAGE : _____ HEADWATERS : _____

UNIFORM : _____ X

IMMEDIATELY ABOVE SITE : _____

EXISTING STRUCTURE INFORMATION

STRUCTURE TYPE: Slab Bridge

YEAR BUILT: 1938

CLEAR SPAN(NORMAL TO STREAM): 16

VERTICAL CLEARANCE ABOVE STREAMBED: 5

WATERWAY OF FULL OPENING: 70

DISPOSITION OF STRUCTURE: _____

TYPE OF MATERIAL UNDER SUBSTRUCTURE: _____

WATER SURFACE ELEVATIONS AT:

Q2.33 = _____ VELOCITY = _____

Q10 = _____ " _____

Q25 = _____ " _____

Q50 = _____ " _____

Q100 = _____ " _____

LONG TERM STREAMBED CHANGES: _____

IS THE ROADWAY OVERTOPPED BELOW Q100: NO

FREQUENCY: _____

RELIEF ELEVATION: _____

DISCHARGE OVER ROAD @Q100: _____

UPSTREAM STRUCTURE

TOWN: Fairfield DISTANCE: _____

HIGHWAY #: 55 STRUCTURE #: 17

CLEAR SPAN: _____ CLEAR HEIGHT: _____

YEAR BUILT: 1971 FULL WATERWAY: 43 sq. ft

STRUCTURE TYPE: 9' Culvert

DOWNSTREAM STRUCTURE

TOWN: _____ DISTANCE: _____

HIGHWAY #: _____ STRUCTURE #: _____

CLEAR SPAN: _____ CLEAR HEIGHT: _____

YEAR BUILT: _____ FULL WATERWAY: _____

STRUCTURE TYPE: _____

LFD LOAD RATING (TONS)

LOADING LEVELS	TRUCK						
	H	HS	3S2	6 AXLE	3A STR.	4A STR.	SA SEMI
INVENTORY	25	45					
POSTED	35	63	79		44	47	78
OPERATING		76	94	85	52	56	

COMMENTS: 0

TRAFFIC DATA

YEAR	ADT	DHV	% D	% T	ADTT
2006	2700	340	66	2	60
2026	3800	450	66	1	70

20 year ESAL for flexible pavement from 2006 to 2026 : 467,000

20 year ESAL for flexible pavement from 2006 to 2046 : 1,164,000

Design Speed : 50 MPH-km/h

PROPOSED STRUCTURE

STRUCTURE TYPE: Slab Bridge

CLEAR SPAN(NORMAL TO STREAM): 18 ft

VERTICAL CLEARANCE ABOVE STREAMBED: 7 ft

WATERWAY OF FULL OPENING: 80 sf

HEAD WATER SURFACE ELEVATIONS AT:

Q2.33 = 657.0 ft. VELOCITY= _____

Q10 = 658.0 ft. " _____

Q25 = 658.6 ft. " _____

Q50 = 658.9 ft. " _____

Q100 = 660.2 ft. " _____

IS THE ROADWAY OVERTOPPED BELOW Q100: NO

FREQUENCY: _____

RELIEF ELEVATION: _____

DISCHARGE OVER ROAD @Q100: None

AVERAGE LOW ELEVATION OF SUPERSTRUCTURE: 661.0 ft.

VERTICAL CLEARANCE: 7 ft

SCOUR: 6 Feet of Contraction Scour @ Q 500

REQUIRED CHANNEL PROTECTION: Type III Stone Fill

PERMIT INFORMATION

AVERAGE DAILY FLOW: 8 cfs DEPTH OR ELEVATION: _____

ORDINARY LOW WATER: 4 cfs 0.3 ft.

ORDINARY HIGH WATER: 60 cfs 3.5 ft.

TEMPORARY BRIDGE REQUIREMENTS

STRUCTURE TYPE: N/A

CLEAR SPAN (NORMAL TO STREAM): _____

VERTICAL CLEARANCE ABOVE STREAMBED: _____

WATERWAY AREA OF FULL OPENING: _____

ADDITIONAL INFORMATION

Tailwater Elevation @ Q 50 = 657.3 ft.

Outlet Velocity @ Q 50 = 10.3 fps

DESIGN CRITERIA

- DESIGN LIVE LOAD AASHTO: HS-25
- DESIGN SPAN: 21'-0"
- ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL: 7 KSF
- ALLOWABLE LOAD FOR PILING: N/A
- ESTIMATED LENGTH: _____
- STRUCTURAL STEEL AASHTO GRADE: N/A
- REINFORCING STEEL GRADE: 60
- CONCRETE, HIGH PERFORMANCE CLASS A f'c : 4000 psi
- CONCRETE, HIGH PERFORMANCE CLASS B f'c : 3500 psi
- SOIL UNIT WEIGHT: 140 pcf
- DESIGN LOAD FOR SPREAD FOOTINGS ON SOL: 3.3 KSF

TRAFFIC MAINTENANCE

- IS TRAFFIC TO BE MAINTAINED? YES
- IF YES, ON EXISTING STRUCTURE YES
- OR ON TEMPORARY BRIDGE NO
- TEMPORARY BRIDGE REQUIREMENTS: ONE OF TWO WAY TRAFFIC CONTROL SIGNALS REQUIRED YES
- MINIMUM CLEAR SPAN (NORMAL TO STREAM): _____
- WATERWAY OF FULL OPENING: _____
- VERTICAL CLEARANCE ABOVE STREAMBED: _____
- ARE SIDEWALKS REQUIRED? NO
- IF SO, ON WHAT SIDE? _____
- STRUCTURE TYPE: _____

PROJECT NAME: Fairfield

PROJECT NUMBER: AC STP ST 0298(6)

FILE NAME: /PW/01c162/sc182p1.xls PLOT DATE: 4/26/2005

PROJECT LEADER: C. Keller DRAWN BY: J. Reed

DESIGNED BY: J. Reed CHECKED BY: W. B. Symonds

PRELIMINARY INFORMATION SHEET SHEET 2 OF 41

QUANTITY SHEET

SUMMARY OF ESTIMATED QUANTITIES													TOTALS			DESCRIPTIONS			DETAILED SUMMARY OF QUANTITIES						
													FULL E&C	EROSION CONTROL	ROADWAY	BRIDGE QUANTITY	ROUND	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	QUANTITIES	UNIT	ITEMS
															550		550		CY	COMMON EXCAVATION	203.15			TEMPORARY EROSION CONTROL ITEMS	
																75		75		CY	UNCLASSIFIED CHANNEL EXCAVATION	203.27	1	HR	ALL PURPOSE EXCAVATOR RENTAL, TYPE 1
															550		550		CY	EXCAVATION OF SURFACES AND PAVEMENTS	203.28	10	CY	STONE FILL TYPE 1	
															675		675		SY	FINE GRADING-SUBGRADE	203.40	10	LB	SEED-WINTER RYE	
																10		10		CY	TRENCH EXCAVATION OF EARTH	204.20	10	SY	EROSION MATTING
																80		80		CY	GRANULAR BACKFILL FOR STRUCTURES	204.30			EARTHWORK SUMMARY
																575		575		CY	COFFERDAM EXCAVATION, EARTH	208.30	550	CY	COMMON EXCAVATION
																75		75		CY	COFFERDAM EXCAVATION, ROCK	208.35	75	CY	UNCLASSIFIED CHANNEL EXCAVATION
																1		1		LS	COFFERDAM (13+24) (MOD. - PHASED CONSTRUCTION)	208.40	550	CY	EXCAVATION OF SURFACES AND PAVEMENT
																1		1		LS	COFFERDAM (13+45) (MOD. - PHASED CONSTRUCTION)	208.40	10	CY	TRENCH EXCAVATION OF EARTH
																325		325		SY	COLD PLANING-BIT PAVEMENT	210.10	575	CY	COFFERDAM EXCAVATION, EARTH
																450		450		CY	SUBBASE OF DENSE GRADED CRUSHED STONE	301.35	75	CY	COFFERDAM EXCAVATION, ROCK
																8		8		CWT	EMULSIFIED ASPHALT	404.65	1	LS	COFFERDAM (13+24) (MOD. - PHASED CONSTRUCTION)
																175		175		TON	BITUMINOUS CONCRETE PAVEMENT (PG 58 - 28)	406.25	1	LS	COFFERDAM (13+45) (MOD. - PHASED CONSTRUCTION)
																100		100		CY	CONCRETE, HIGH PERFORMANCE CLASS A	501.33			EARTHWORK SUMMARY
																115		115		CY	CONCRETE, HIGH PERFORMANCE CLASS B	501.34	550	CY	COMMON EXCAVATION
																11030		11030		LB	REINFORCING STEEL	507.15	75	CY	UNCLASSIFIED CHANNEL EXCAVATION
																10610		10610		LB	EPOXY COATED REINFORCING STEEL	507.17	550	CY	EXCAVATION OF SURFACES AND PAVEMENT
																129		129		EACH	MECHANICAL BAR CONNECTOR (# 5)	507.19	10	CY	TRENCH EXCAVATION OF EARTH
																10		10		GAL	WATER REPELLENT (MOD. - SILANE)	514.10	575	CY	COFFERDAM EXCAVATION, EARTH
																50		50		LF	BRIDGE RAILING - HDSB STEEL BEAM / FASCIA MOUNTED / STEEL TUBING	525.44	75	CY	UNCLASSIFIED CHANNEL EXCAVATION
																1		1		LS	MAINTENANCE OF TRAFFIC FOR BRIDGE PROJECTS	527.10	550	CY	EXCAVATION OF SURFACES AND PAVEMENT
																1		1		EACH	REMOVAL OF STRUCTURE	529.15	10	CY	TRENCH EXCAVATION OF EARTH
																				HR	ALL PURPOSE EXCAVATOR RENTAL, TYPE I	608.25	575	CY	COFFERDAM EXCAVATION, EARTH
																				CY	STONE FILL, TYPE I	613.10	75	CY	UNCLASSIFIED CHANNEL EXCAVATION
																20		20		CY	STONE FILL, TYPE II	613.11	550	CY	EXCAVATION OF SURFACES AND PAVEMENT
																				CY	STONE FILL, TYPE III	613.12	10	CY	TRENCH EXCAVATION OF EARTH
																100		100		LF	REMOVAL OF EXISTING FENCE	620.55	575	CY	COFFERDAM EXCAVATION, EARTH
																615		615		LF	HEAVY DUTY STEEL BEAM GUARD RAIL (GALVANIZED)	621.21	75	CY	UNCLASSIFIED CHANNEL EXCAVATION
																5		5		EACH	ENERGY ABSORPTION ATTENUATOR	621.56	550	CY	EXCAVATION OF SURFACES AND PAVEMENT
																3		3		EACH	ANCHOR FOR STEEL BEAM RAIL	621.60	10	CY	TRENCH EXCAVATION OF EARTH
																60		60		LF	REMOVAL AND DISPOSAL OF GUARD RAIL	621.80	575	CY	COFFERDAM EXCAVATION, EARTH
																225		225		LF	TEMPORARY TRAFFIC BARRIER	621.90	75	CY	UNCLASSIFIED CHANNEL EXCAVATION
																50		50		HR	UNIFORMED TRAFFIC OFFICERS	630.10	550	CY	EXCAVATION OF SURFACES AND PAVEMENT
																500		500		HR	FLAGGERS	630.15	10	CY	TRENCH EXCAVATION OF EARTH
																				LS	FIELD OFFICE-ENGINEERS	631.10	575	CY	COFFERDAM EXCAVATION, EARTH
																				LS	TESTING EQUIPMENT - CONCRETE	631.16	75	CY	UNCLASSIFIED CHANNEL EXCAVATION
																				LS	TESTING EQUIPMENT - BITUMINOUS	631.17	550	CY	EXCAVATION OF SURFACES AND PAVEMENT
																				LU	FIELD OFFICE - TELEPHONE (N.A.B.I.)	631.25	10	CY	TRENCH EXCAVATION OF EARTH
																				LS	MOBILIZATION/DEMOBILIZATION	635.11	575	CY	COFFERDAM EXCAVATION, EARTH
																				LS	TRAFFIC CONTROL	641.10	75	CY	UNCLASSIFIED CHANNEL EXCAVATION

PROJECT NAME: **FAIRFIELD**
PROJECT NUMBER: **AC STP ST 0298(6)**
FILE NAME: /PW/01c182/sc182qs.xls PLOT DATE: 4/27/2005
PROJECT LEADER: C. Keller DRAWN BY: J. Reed
DESIGNED BY: J. Reed CHECKED BY: W.B. Symonds
QUANTITY SHEET #1 SHEET 3 OF 41

QUANTITY SHEET

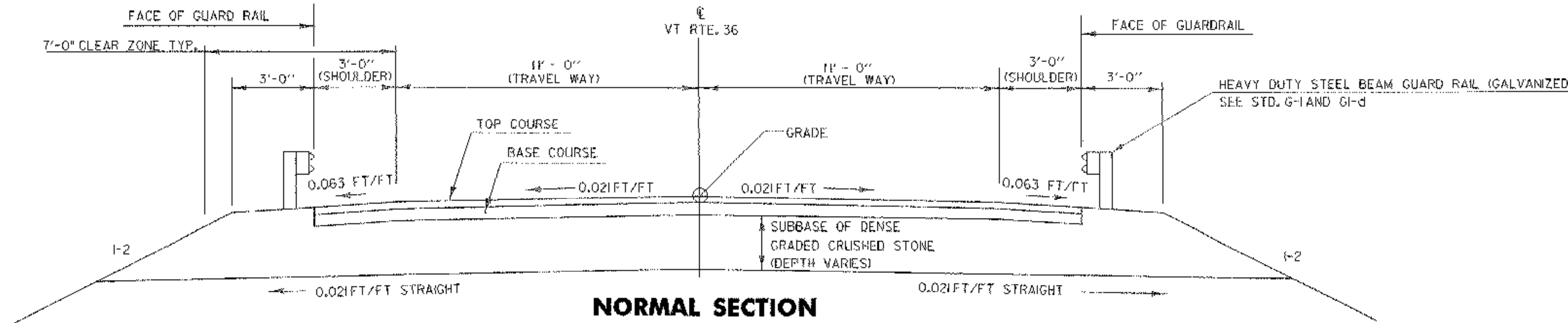
SUMMARY OF ESTIMATED QUANTITIES													TOTALS			DESCRIPTIONS			DETAILED SUMMARY OF QUANTITIES						
													FULL E&C	EROSION CONTROL	ROADWAY	BRIDGE QUANTITY	ROUND	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	QUANTITIES	UNIT	ITEMS
															600			600		LF	DURABLE 4" WHITE LINE (EPOXY PAINT)	646.40			
															600			600		LF	DURABLE 4" YELLOW LINE (EPOXY PAINT)	646.41			
															1200			1200		LF	TEMPORARY 4" WHITE LINE	646.60			
															1200			1200		LF	TEMPORARY 4" YELLOW LINE	646.61			
															50			50		LF	TEMPORARY 24" STOP BAR	646.66			
															400			400		SF	REMOVAL OF EXISTING PAVEMENT MARKINGS	646.85			
														125				125		SY	GEOTEXTILE UNDER STONE FILL	649.31			
														60				60		LB	SEED	651.15			
														10				10		LB	SEED-WINTER RYE	651.17			
														500				500		LB	FERTILIZER	651.18			
														2				2		TON	AGRICULTURAL LIMESTONE	651.20			
														2				2		TON	HAYMULCH	651.25			
														115				115		SY	GRUBBING MATERIAL	651.40			
														200				200		SY	EROSION MATTING	654.10			
															20			20		SF	TRAFFIC SIGNS, TYPE A	675.20			
																					BEGIN OPTION POSTS				
															45			45		LF	FLANGED CHANNEL SIGN POST	675.301			
															45			45		LF	SQUARE TUBE STEEL POSTS AND ANCHORS	675.341			
																					END OPTION POSTS				
															2			2		EACH	REMOVING SIGNS	675.50			
															1			1		EACH	TEMPORARY TRAFFIC SIGNAL SYSTEM	678.40			
															1			1		EACH	TEMPORARY DETECTOR (MOD.)	678.42			

PROJECT NAME: **FAIRFIELD**
PROJECT NUMBER: **AC STP ST 0298(6)**
FILE NAME: /PW/01c182/sc182qs.xls PLOT DATE: 4/25/2005
PROJECT LEADER: C. Keller DRAWN BY: J. Reed
DESIGNED BY: J. Reed CHECKED BY: W.B. Symonds
QUANTITY SHEET #2 SHEET 4 OF 41

TYPICAL SECTIONS

1 3/4" BITUMINOUS CONCRETE PAVEMENT, TYPE III
 4" BASE COURSE OF BITUMINOUS CONCRETE PAVEMENT, TYPE I (LIFT)
 VARIES SUBBASE OF DENSE GRADED CRUSHED STONE
 SHOULDERS: 5 3/4" BITUMINOUS CONCRETE PAVEMENT (1 3/4" TYPE III OVER 4" TYPE I)

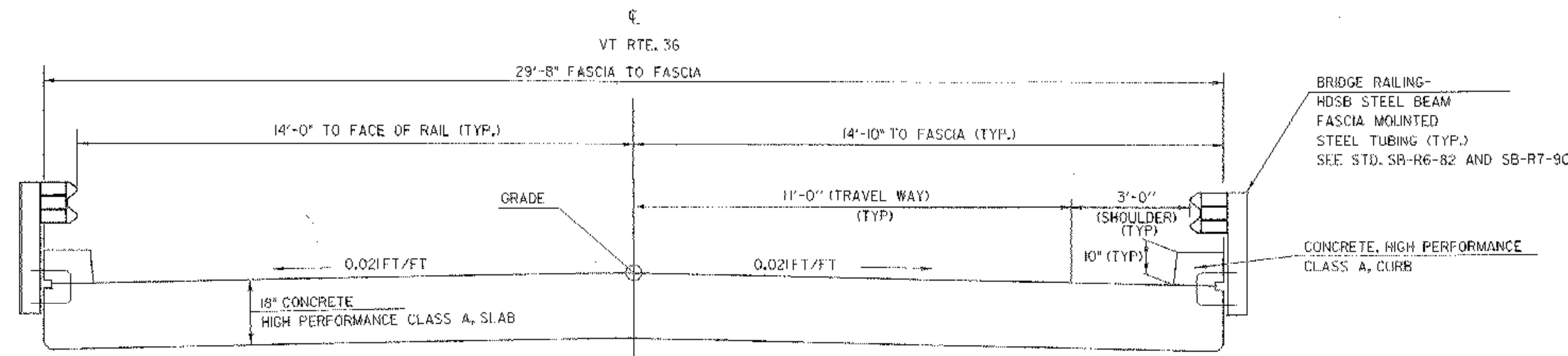
MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT (TOTAL DEPTH)	± 1/4"
SUBBASE	± 1"



NORMAL SECTION

SCALE 3/8" = 1'-0"
 0 1 2 3 4

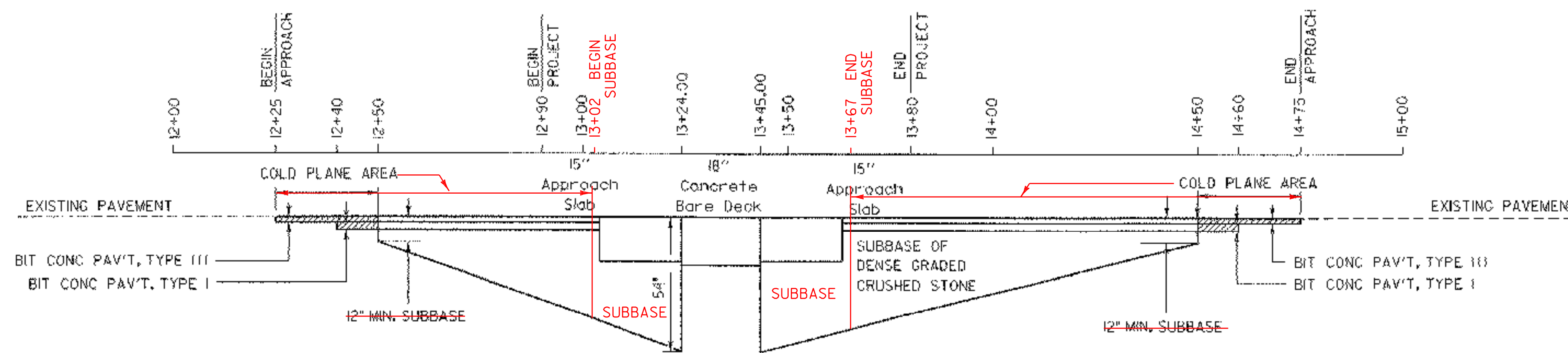
TRANSITION 0.021 SHOULDER SLOPE ON BRIDGE TO 0.063 SHOULDER SLOPE IN FIRST 50' FROM END OF BRIDGE. SEE BANKING DIAGRAM.



TYPICAL BRIDGE SECTION

SCALE 1/2" = 1'-0"
 0 1 2

CHANGES PER WRITTEN ORDER



MATERIAL TRANSITION DIAGRAM

N.T.S.

SEEDING FORMULA RURAL AREAS

% WT.	LBS./A.	NAME	PUR. %	GERM. %
37.5	22.5	CREeping RED FESCUE	98	85
37.5	22.5	TALL FESCUE	95	90
5.0	3.0	RED TOP	95	90
15.0	9.0	BIRDSFOOT TREFOIL	98	85
5.0	3.0	ANNUAL RYEGRASS	95	85
100.0	60.0			

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 500 LBS./ACRE. (HYDRO SEEDERS MAY USE 19-19-19 FORMULA).

AGRICULTURAL LIMESTONE: TO BE APPLIED AT THE RATE OF 2 TONS/ACRE, OR AS DIRECTED BY THE ENGINEER.

HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, OR AS DIRECTED BY THE ENGINEER.

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

MARKER POSTS: TO BE PLACED AS INDICATED OR AS DIRECTED BY THE ENGINEER.

SLOPE ROUNDING: ALL CUT SLOPES TO BE ROUNDED IN ACCORDANCE WITH STANDARD SHEET B-5.

PAY LIMITS OF SAND BORROW: WHEN USED IN CONJUNCTION WITH UNDERDRAIN - SEE STANDARD SHEET D - 2.

TYPICALS SHEET

PROJECT NAME: FAIRFIELD	PLOT DATE: 28-APR-2005
PROJECT NUMBER: AC STP ST 0298(6)	DRAWN BY: J. REED
FILE NAME: /str5/01c182/sc182typ.dgn	CHECKED BY: W. SYMONDS
PROJECT LEADER: C. KELLER	SHEET 5 OF 41
DESIGNED BY: J. REED	

GPS CONTROL POINTS

HVCTRL #1

STANDARD DISC STAMPED

LEGRAND AZ

** N = 34492.39

E = 11049.92

ELEV. = 632.91

GENERAL LOCATION, FAIRFIELD, VT .TO REACH FROM THE INTERSECTION OF VT ROUTE 36 AND VT ROUTE 104 IN ST ALBANS GO EAST ALONG VT ROUTE 36 FOR 3.2 MI (5.1 KM) TO THE INTERSECTION OF PION ROAD LEFT AND SWAMP ROAD RIGHT. CONTINUE STRIGHT AHEAD AND GO EAST ALONG VT ROUTE 36 FOR 0.7 MI (1.1 KM) TO THE INTERSECTION OF A GRAVEL DRIVE LEFT, LEADING TO A FISHING ACCESS. TURN LEFT AND GO NORTH ALONG THE GRAVEL DRIVE FOR ABOUT 0.05 MI (0.08 KM) TO THE FISHING ACCESS AND THE SITE OF THE MARK ON THE LEFT ON THE NORTH SIDE OF THE BOAT ACCESS RAMP . THE MARK IS SET FLUSH WITH GROUND SURFACE IN THE TOP OF A 1.1 M (3.6 FT) X 0.6 M (2.0 FT) ROCK OUTCROP. IT IS 2.1 M (6.9 FT) NORTH OF THE CENTERLINE OF THE BOAT ACCESS RAMP, 20.5 M (67.3 FT) SOUTHWEST OF THE MOST WESTERLY POST FOR A REGULATIONS SIGN, 8.1 M (26.6 FT) WEST SOUTHWEST OF A 30 CM MAPLE, 17.9 M (58.7 FT) NORTHWEST OF A 30 CM ELM, AND 3.6 M (11.8 FT) SOUTH OF A FIBERGLASS WITNESS POST.

HVCTRL #2

STANDARD DISC STAMPED

LEGRAND

** N = 34115.54

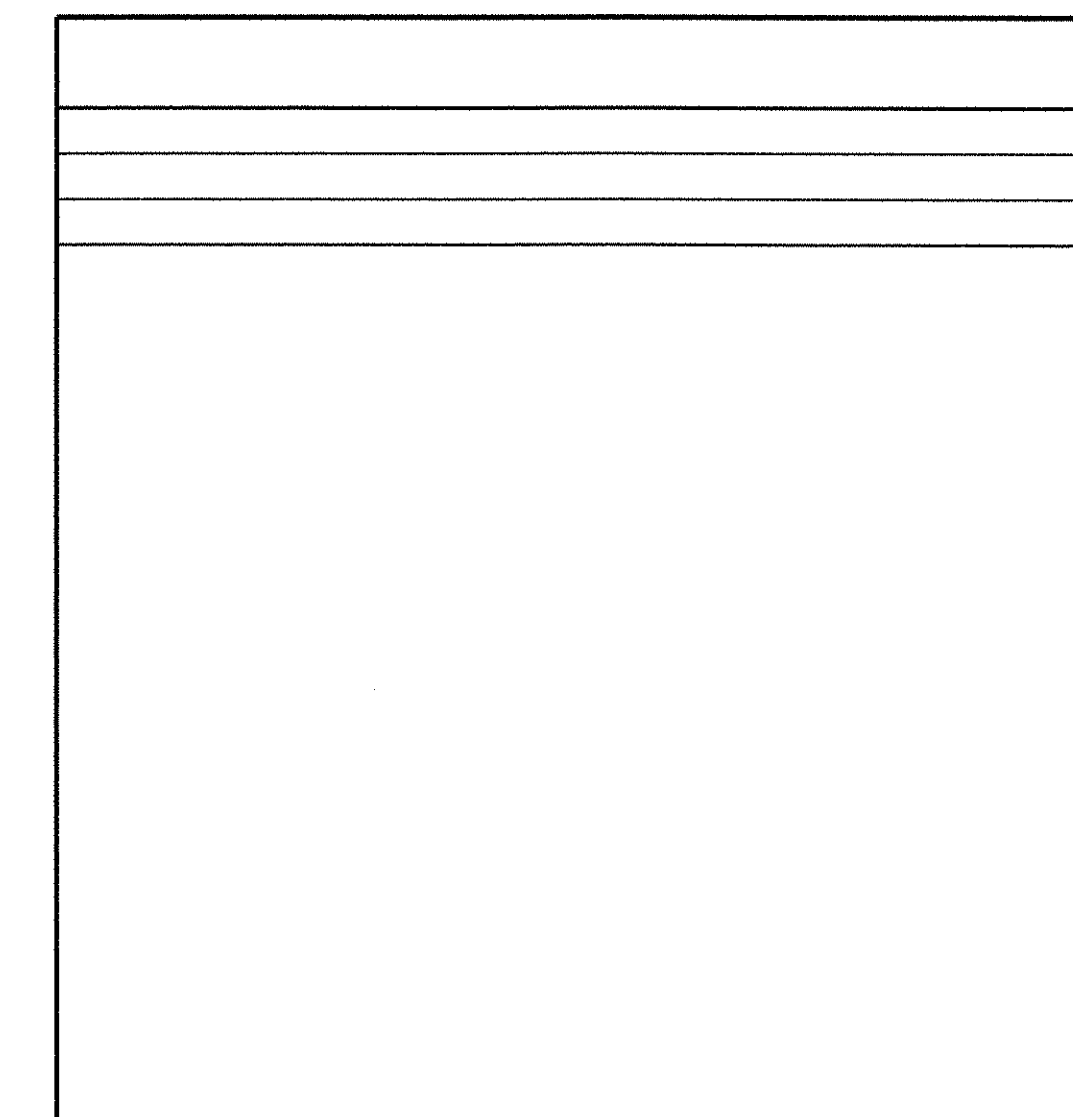
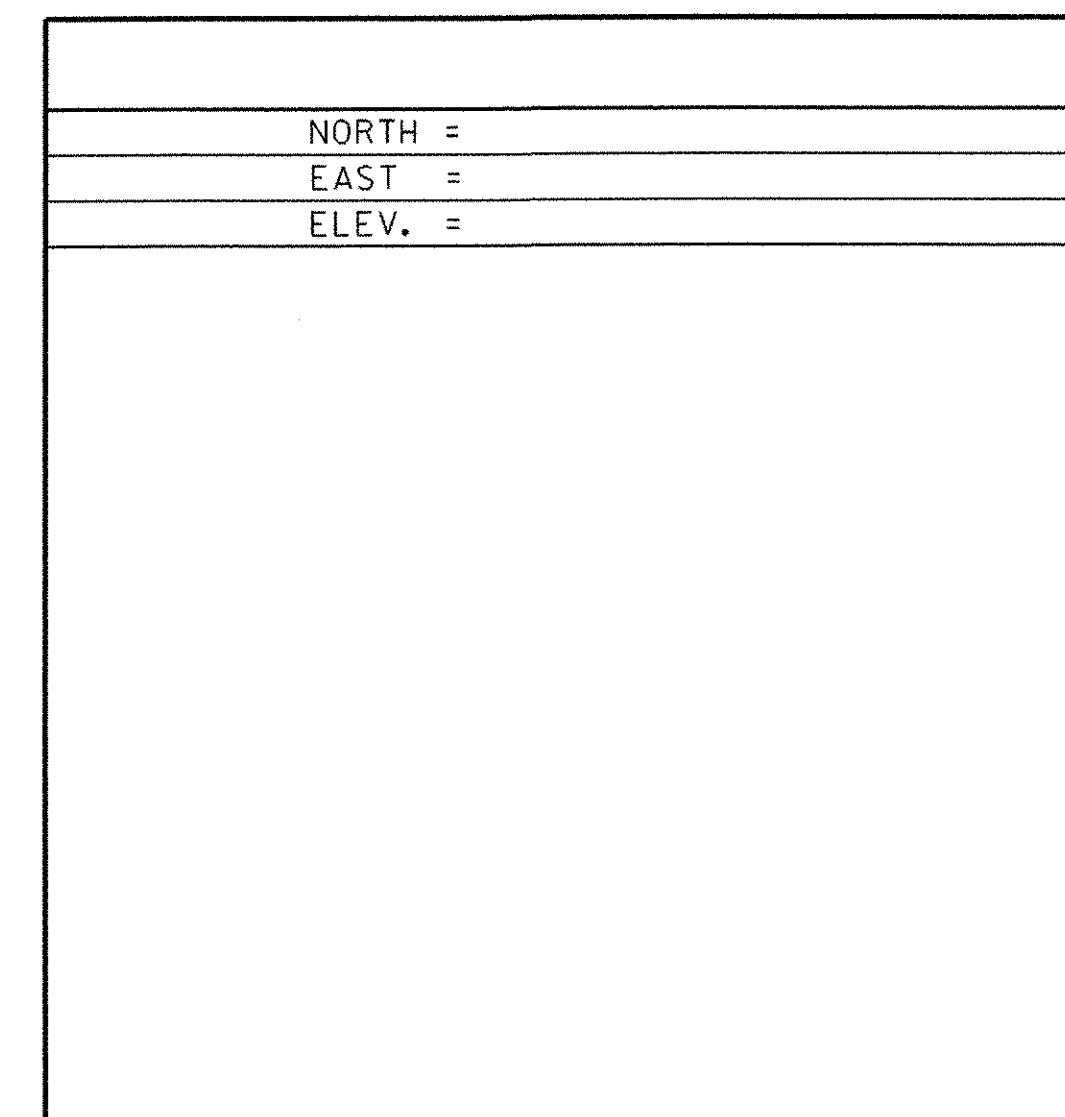
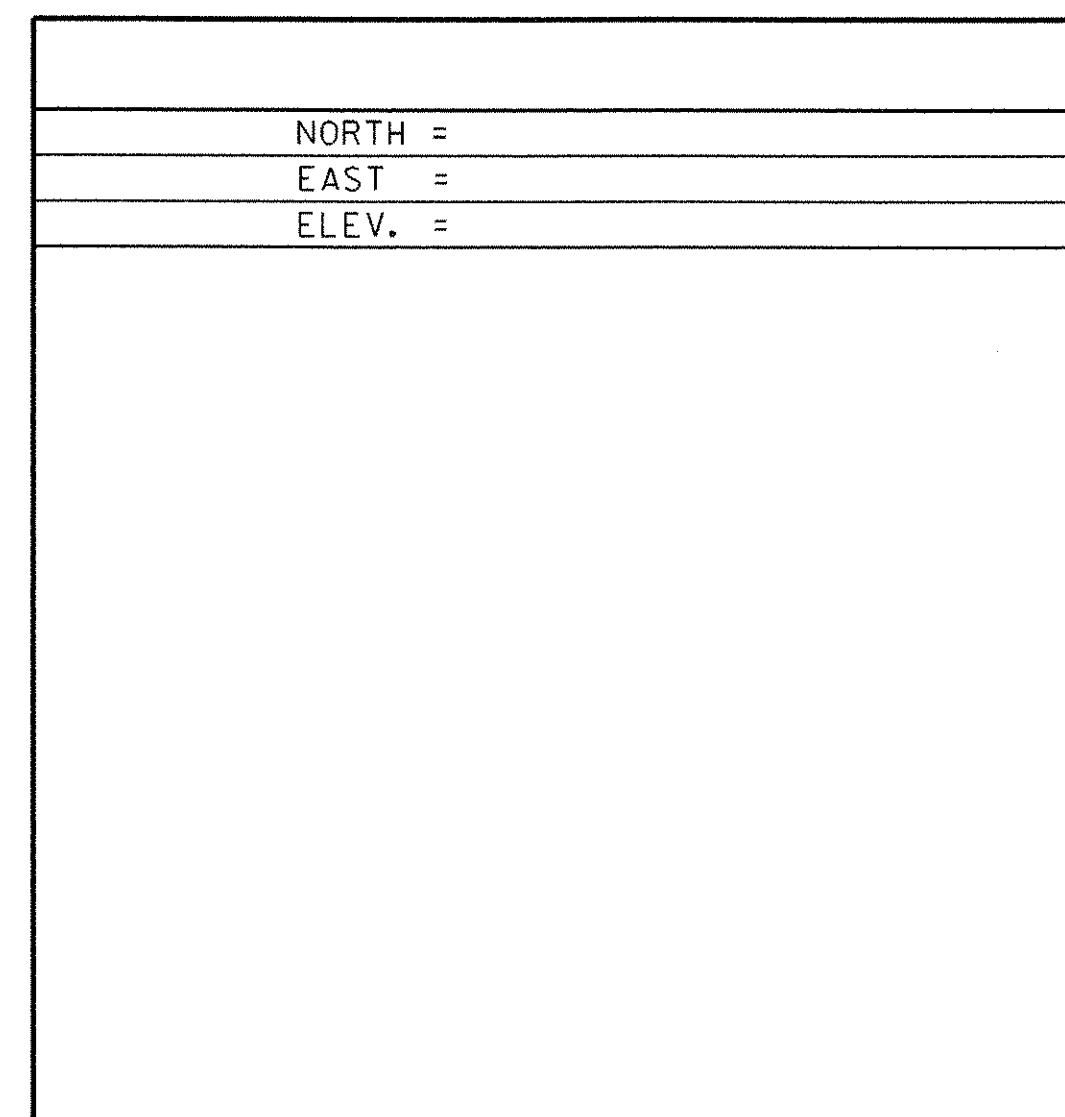
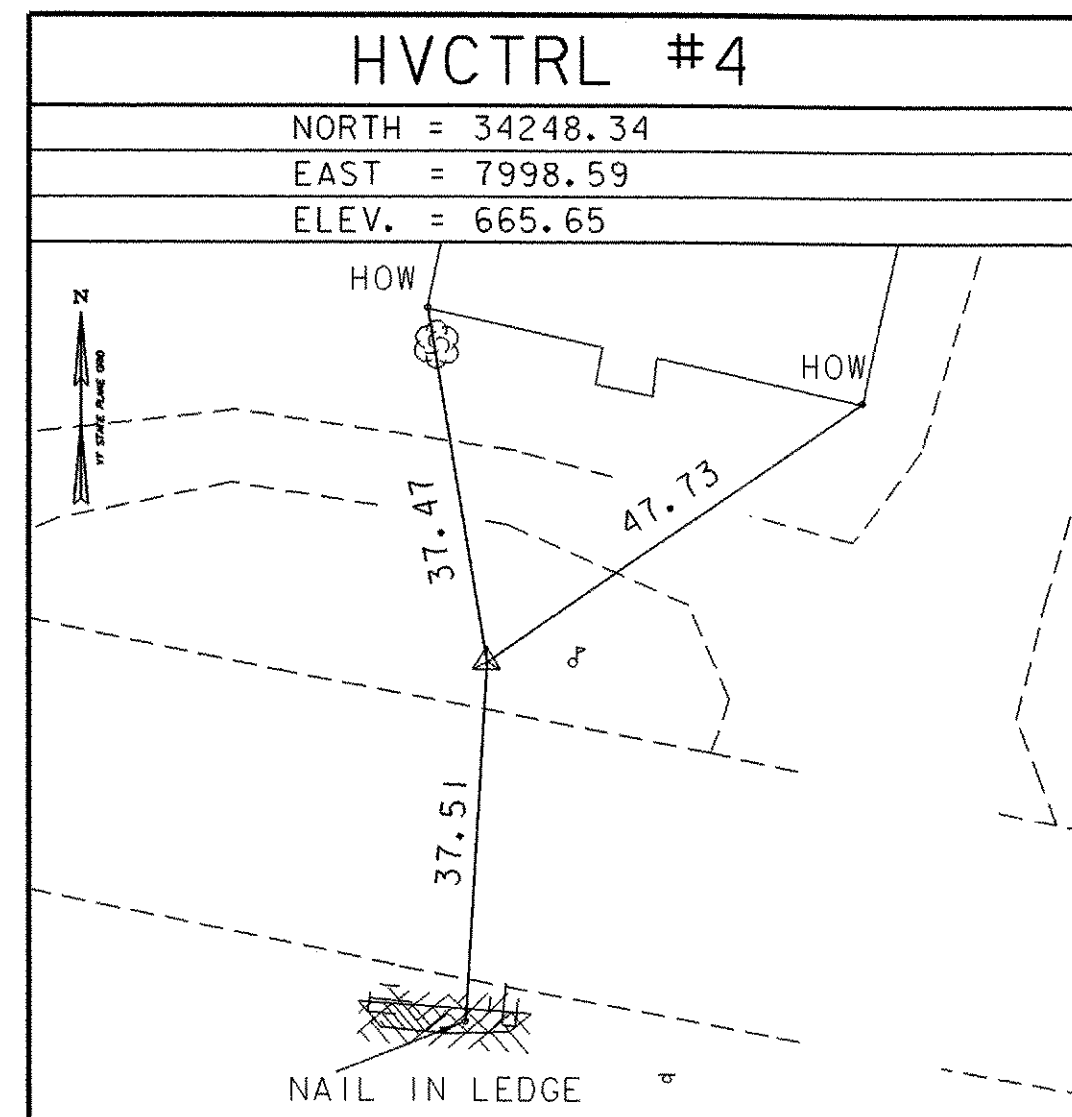
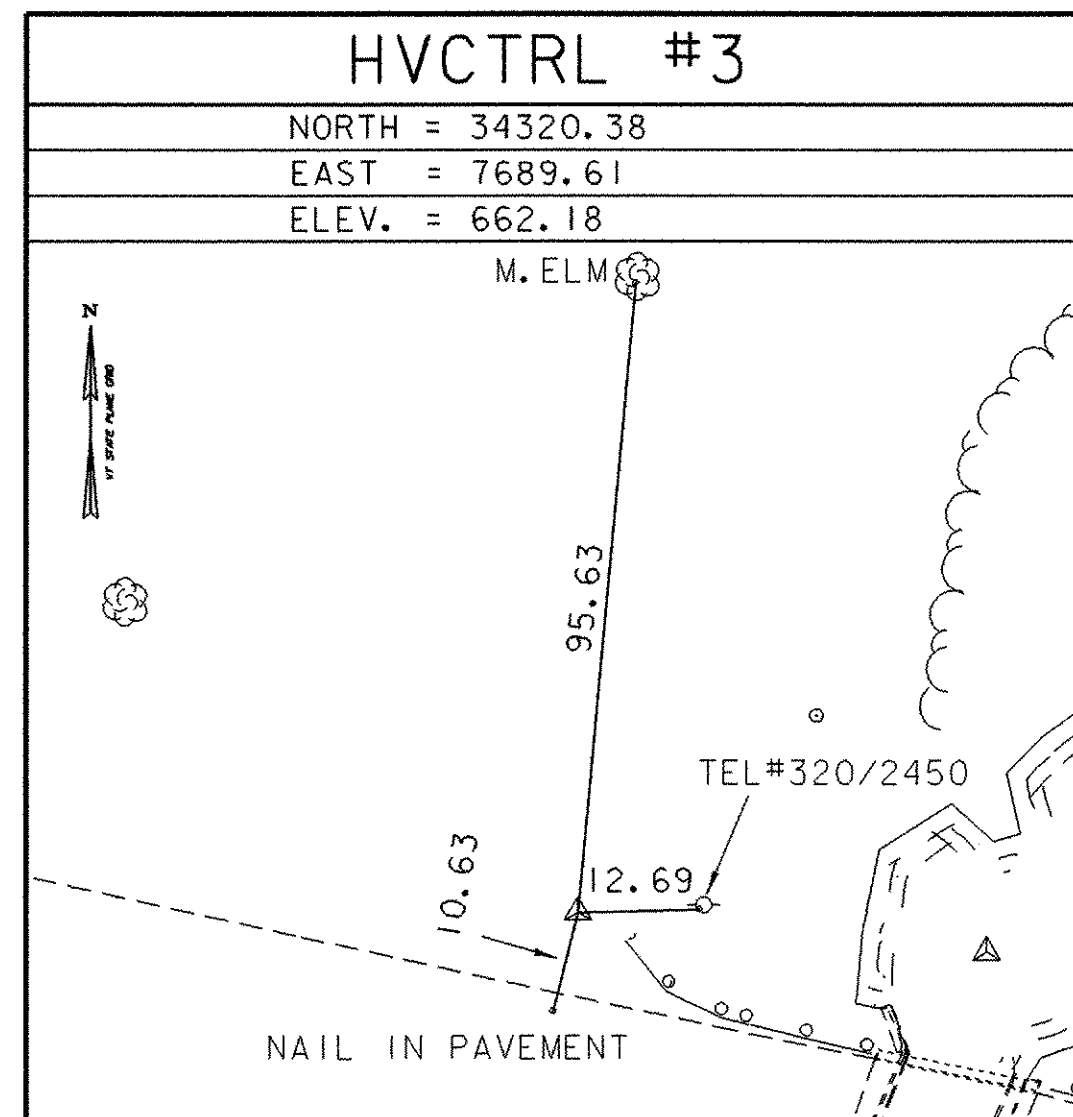
E = 7961.84

ELEV. = 676.51

GENERAL LOCATION, FAIRFIELD,VT. OWNERSHIP, LAURIE LEGRAND, 35 SWAMP ROAD, FAIRFIELD, VT 05455. TO REACH FROM THE INTERSECTION OF VT ROUTE 36 AND VT ROUTE 104 IN ST ALBANS GO EAST ALONG VT ROUTE 36 FOR 3.2 MI (5.1 KM) TO THE INTERSECTION OF PION ROAD LEFT AND SWAMP ROAD RIGHT. CONTINUE STRAIGHT AHEAD AND GO SOUTHEAST ALONG VT ROUTE 36 FOR 0.1 MI (0.2 KM) TO THE SITE OF THE MARK ON THE RIGHT IN AN OLD PASTURE. IT IS ABOUT OPPOSITE THE NORTHWEST END OF A 1+1/2 STORY HOUSE ON THE LEFT. THE MARK IS SET IN THE TOP OF A 0.7 M (2.3 FT) X 0.9 M (3.0 FT) ROCK OUTCROP WHICH PROJECTS ABOUT 3 CM ABOVE GROUND SURFACE ON THE EAST SIDE. IT IS 35.9 M (117.8 FT) SOUTH SOUTHWEST OF AND ABOUT 5 M (16.4 FT) HIGHER THAN THE CENTERLINE OF VT ROUTE 36, 53.7 M (176.2 FT) SOUTHEAST OF POLE NO 320/2449, 43.8 M (143.7 FT) WEST NORTHWEST OF POLE NO 2448, 15.5 M (50.9 FT) WEST OF A 13 CM CHERRY, AND 32.2 M (105.6 FT) SOUTHWEST OF A FIBERGLASS WITNESS POST.

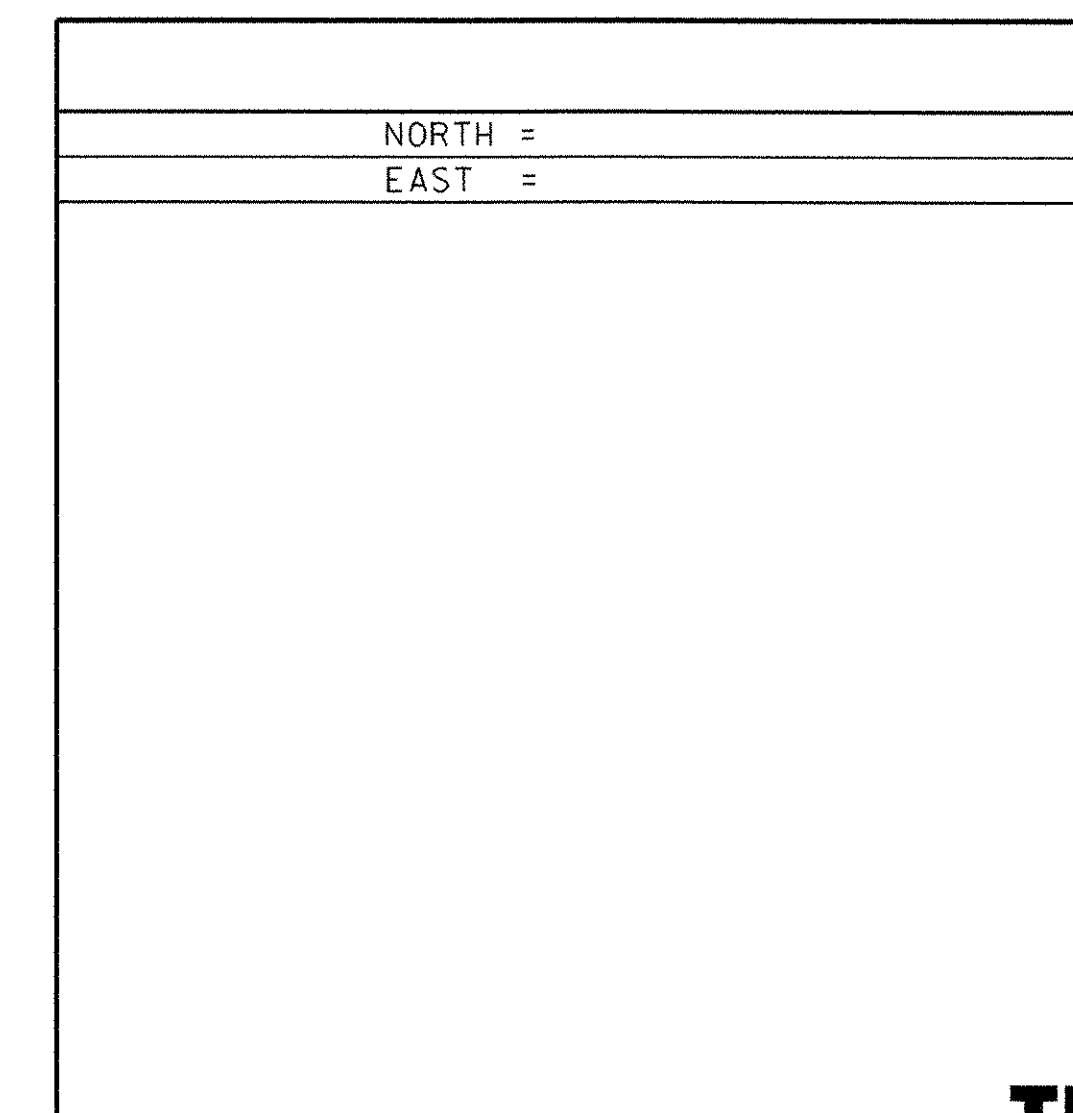
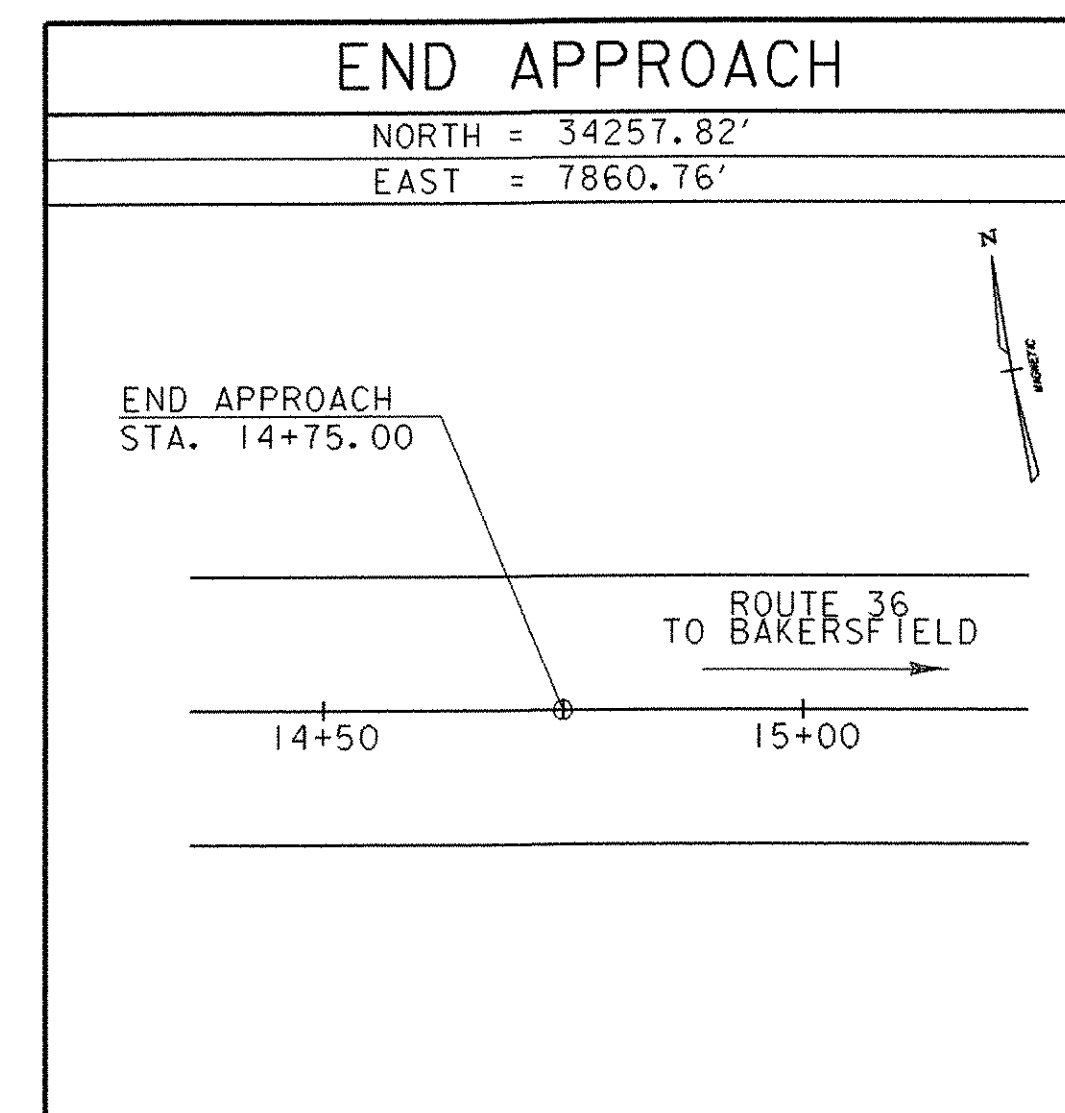
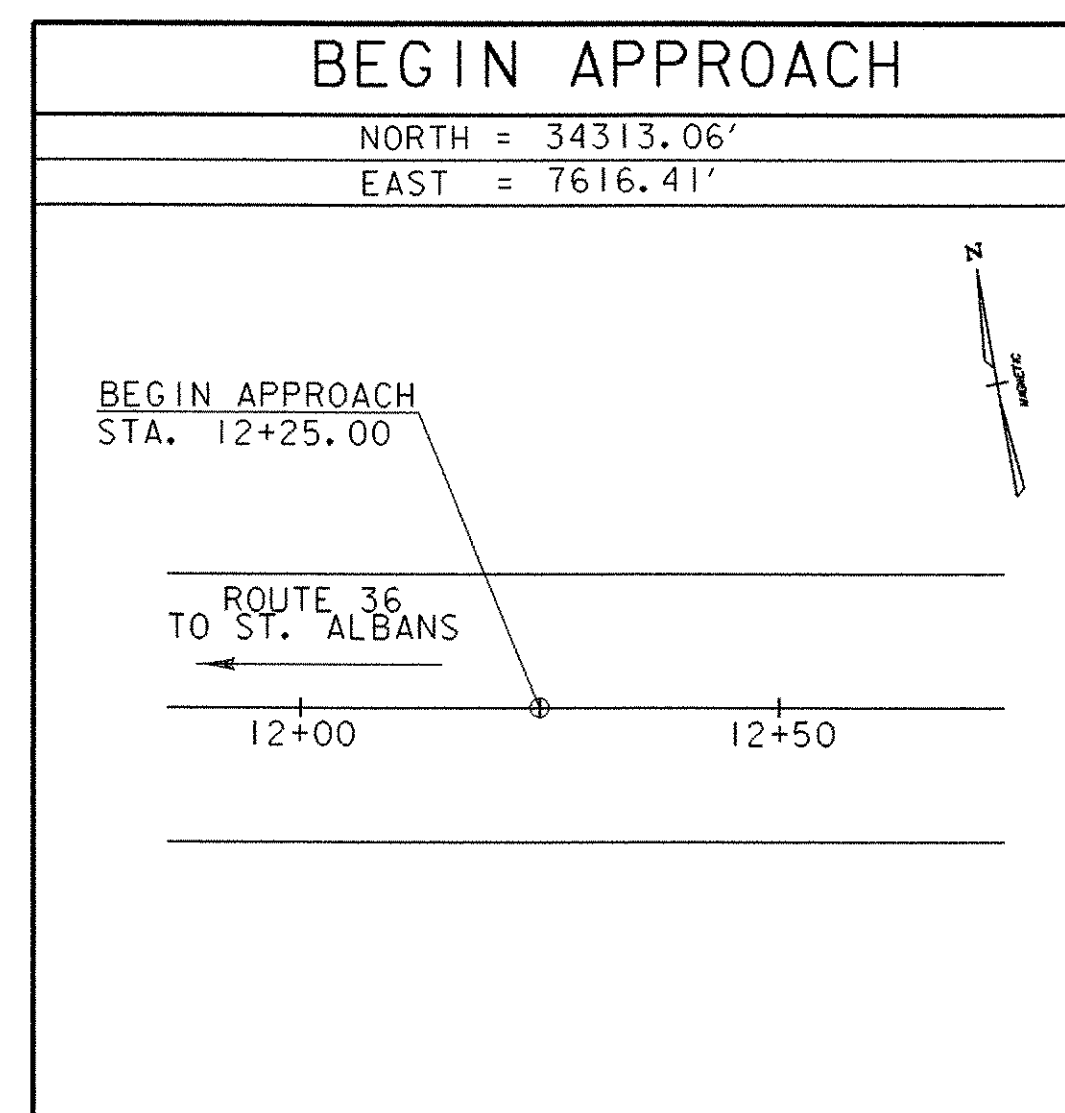
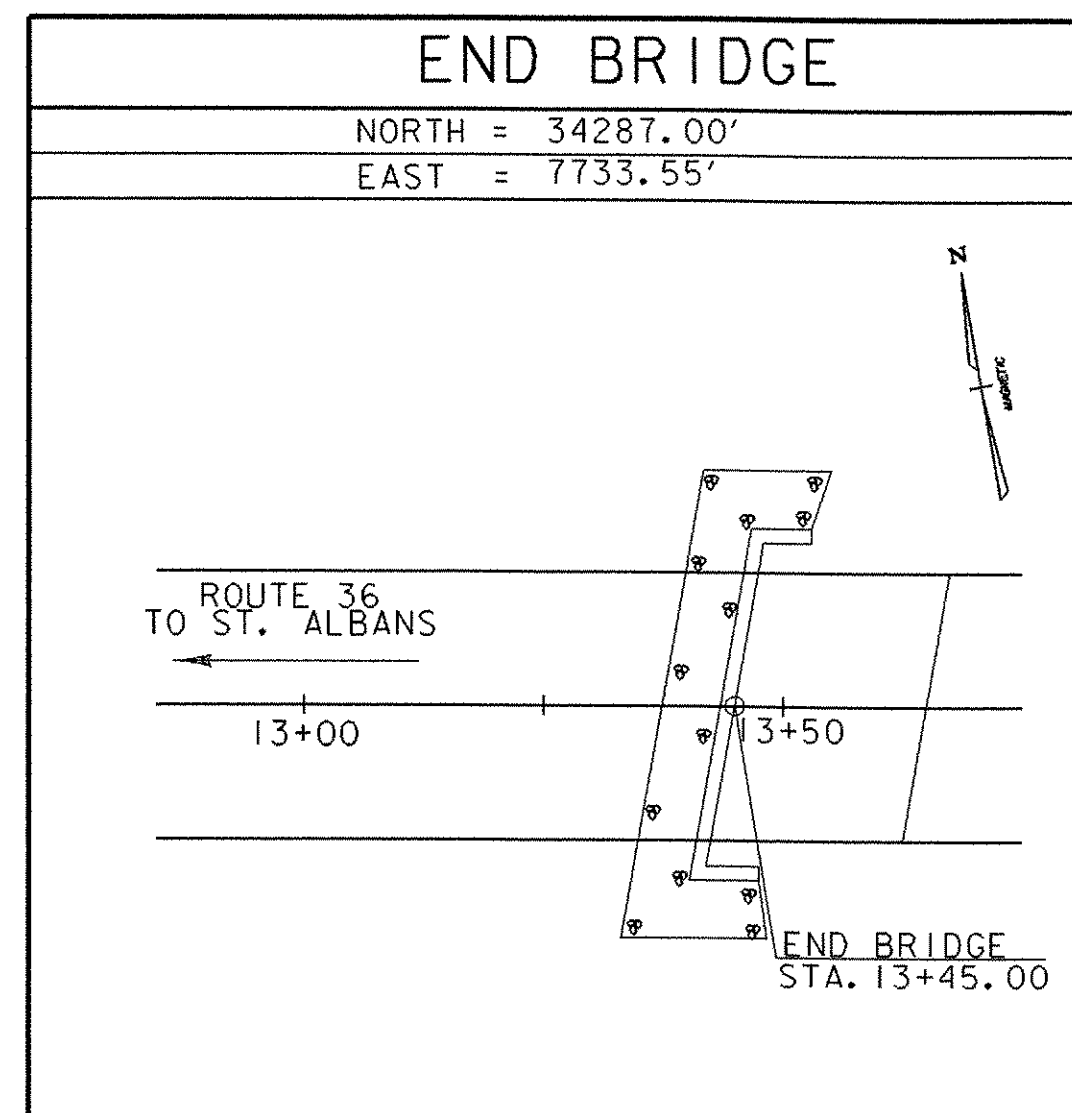
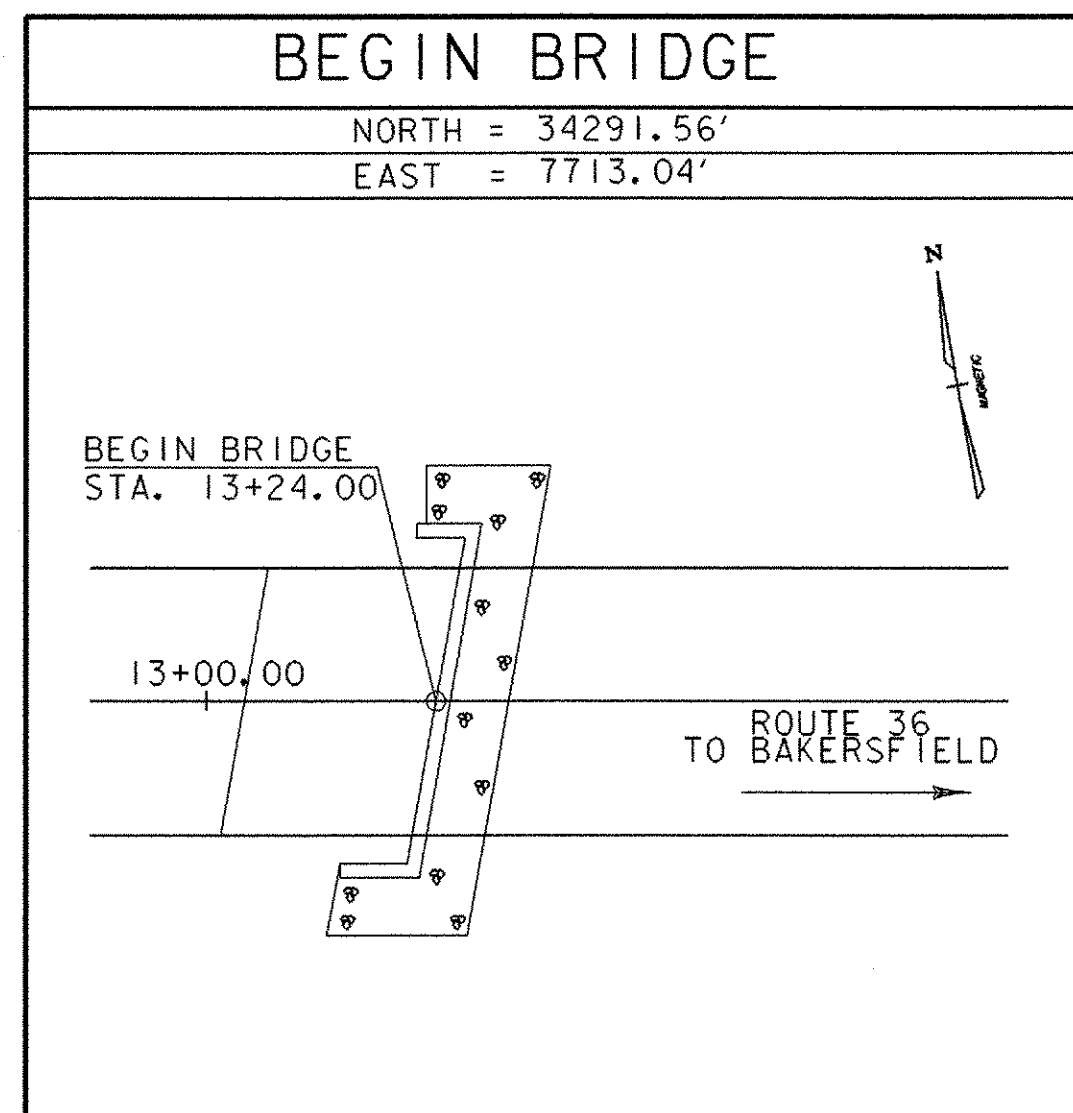
** TO ALLOW THE AGENCY DESIGN PLANE COORDINATES TO FIT THE STATE PLANE COORDINATES, ADD 800000 TO THE NORTHING & ADD 1500000 TO THE EASTINGS, TO THE ABOVE AND BELOW VALUES.
 * DESCRIPTION PROVIDED BY VERMONT AGENCY OF TRANSPORTATION GEODETIC SURVEY UNIT

TRAVERSE TIES



* MAIN TRAVERSE COMPLETED: DECEMBER 24, 2001 BY R.GILMAN, P.WINTERS, & D.BREER

ALIGNMENT TIES



DATUM

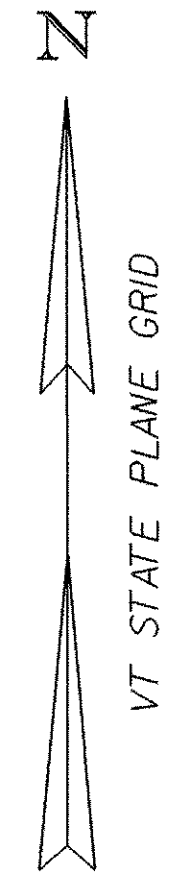
VERTICAL	NAVD88
HORIZONTAL	NAD-83 (96)
ADJUSTMENT	COMPASS

* ALIGNMENT STAKED

PROJECT NAME: FAIRFIELD
 PROJECT NUMBER: AC STP ST 0298(6)

FILE NAME: 01c182/survey/xcl82ti.dgn	PLOT DATE: 28-APR-2005
PROJECT LEADER: C. KELLER	DRAWN BY: J.HULETT
DESIGNED BY: J. REED	CHECKED BY: P.HODGE
sc182tie.i	SHEET 6 OF 41

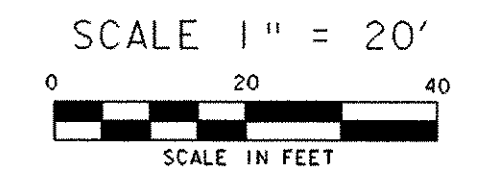
THE SHEET

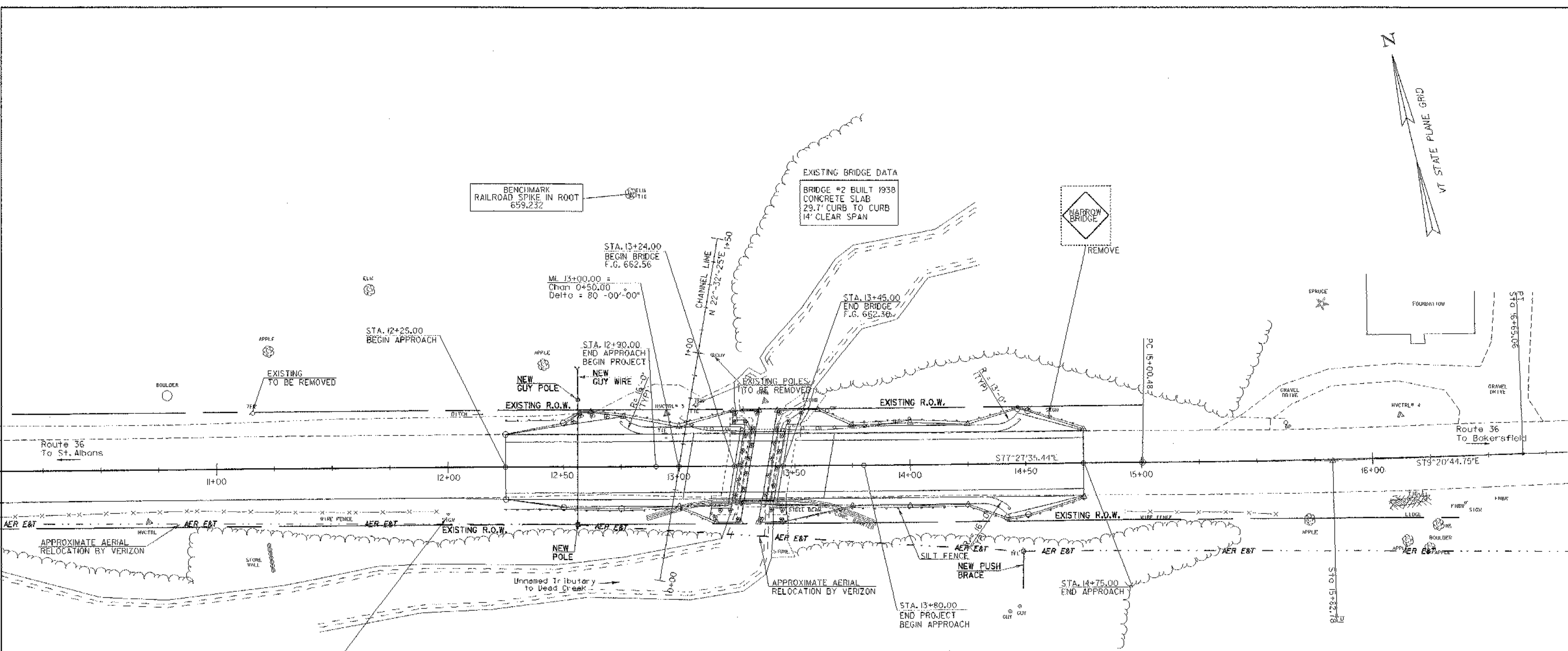
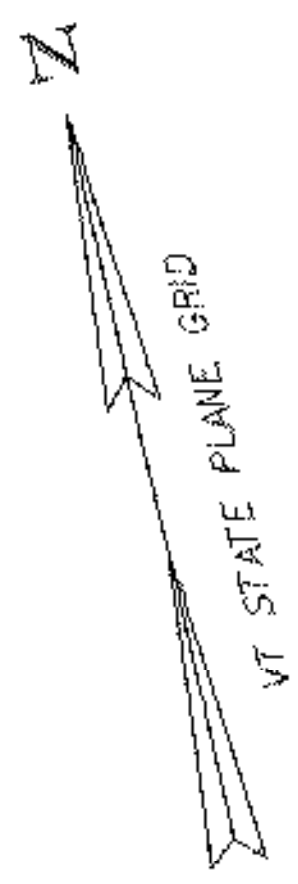


ENVIRONMENTAL RESOURCE	LEVEL	LINETYPE NAME	CHECKED BY	DATE
Wetlands	1	wetland-lf, wetland-rt	John Lepore	04-24-02
Historic/Historic District	2	historic dist.	Scott Gurley	04-24-02
Archaeological Site	3	arch. area	Jen Russell	04-24-02
4f Property	4	4f property	Scott Gurley	04-24-02
6f Property	5	6f property	Glenn Gingras	04-24-02
Agricultural Land	6	agricult. land	Glenn Gingras	04-24-02
Fish & Wildlife Habitat	7	artificial hab.	Glenn Gingras	04-24-02
Flood Plains	8	fld. plains	John Lepore	04-24-02
Endangered Species	9	thr. & end. spec.	Glenn Gingras	04-24-02
Hazardous Waste	10	haz. waste	Glenn Gingras	04-24-02

RESOURCE SHEET

PROJECT NAME: FAIRFIELD
 PROJECT NUMBER: AC STP ST 0298 (6)
 FILE NAME: /str5/01c082/sc182bdr.dgn
 PROJECT LEADER: Craig Keller
 DESIGNED BY: G. Shangraw
 sc182rsc.i
 PLOT DATE: 28-APR-2005
 DRAWN BY: J. Reed
 CHECKED BY: W. B. SYMONDS
 SHEET 7 OF 41





BENCHMARK
RAILROAD SPIKE IN ROOT
659.232

EXISTING BRIDGE DATA
BRIDGE #2 BUILT 1938
CONCRETE SLAB
29.7' CURB TO CURB
14' CLEAR SPAN

STA. 13+24.00
BEGIN BRIDGE
F.G. 662.56

ML 13+00.00 =
Chan 0+50.00
Delta = 80 - 00' - 00"

STA. 13+45.00
END BRIDGE
F.G. 662.30

STA. 12+25.00
BEGIN APPROACH

STA. 12+30.00
END APPROACH
BEGIN PROJECT

NARROW
BRIDGE
REMOVE

EXISTING
TO BE REMOVED

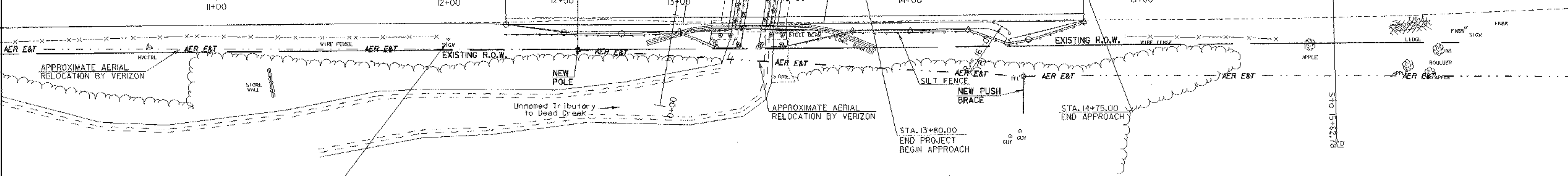
NEW
GUY POLE

EXISTING POLES
TO BE REMOVED

EXISTING R.O.W.

Route 36
To St. Albans

Route 36
To Bakersfield



NARROW
BRIDGE
REMOVE

DURABLE 4" YELLOW LINE (EPOXY)
STA. 12+25 - 14+75 LT.
STA. 12+25 - 14+75 RT.
11+50 - 15+00 LT & RT

DURABLE 4" WHITE LINE (EPOXY)
STA. 12+25 - 14+75 LT.
STA. 12+25 - 14+75 RT.
11+50 - 15+00 LT & RT

COLD PLANING
STA. 12+25 - 12+50
STA. 14+50 - 14+75

REMOVAL OF SIGNS
STA. 12+00 RT.
STA. 14+60 LT.

BRIDGE RAILING - HDSB STEEL BEAM
FASCIA MOUNTED/ STEEL TUBING
STA. 13+19.51 - 13+44.51 RT.
STA. 13+24.50 - 13+49.50 LT.

ANCHOR FOR STEEL BEAM GUARDRAIL
STA. 12+86 LT.
STA. 14+32 RT.
STA. 14+36 LT.

HEAVY DUTY STEEL BEAM GUARDRAIL
(GALVANIZED)
STA. 09+67 - 13+19.51 RT.
STA. 12+75 - 13+24.50 LT.
STA. 13+44.51 - 14+43 RT.
STA. 13+49.50 - 14+36 LT.

SILT FENCE
STA. 12+25 - 14+75 LT.
STA. 12+25 - 14+75 RT.

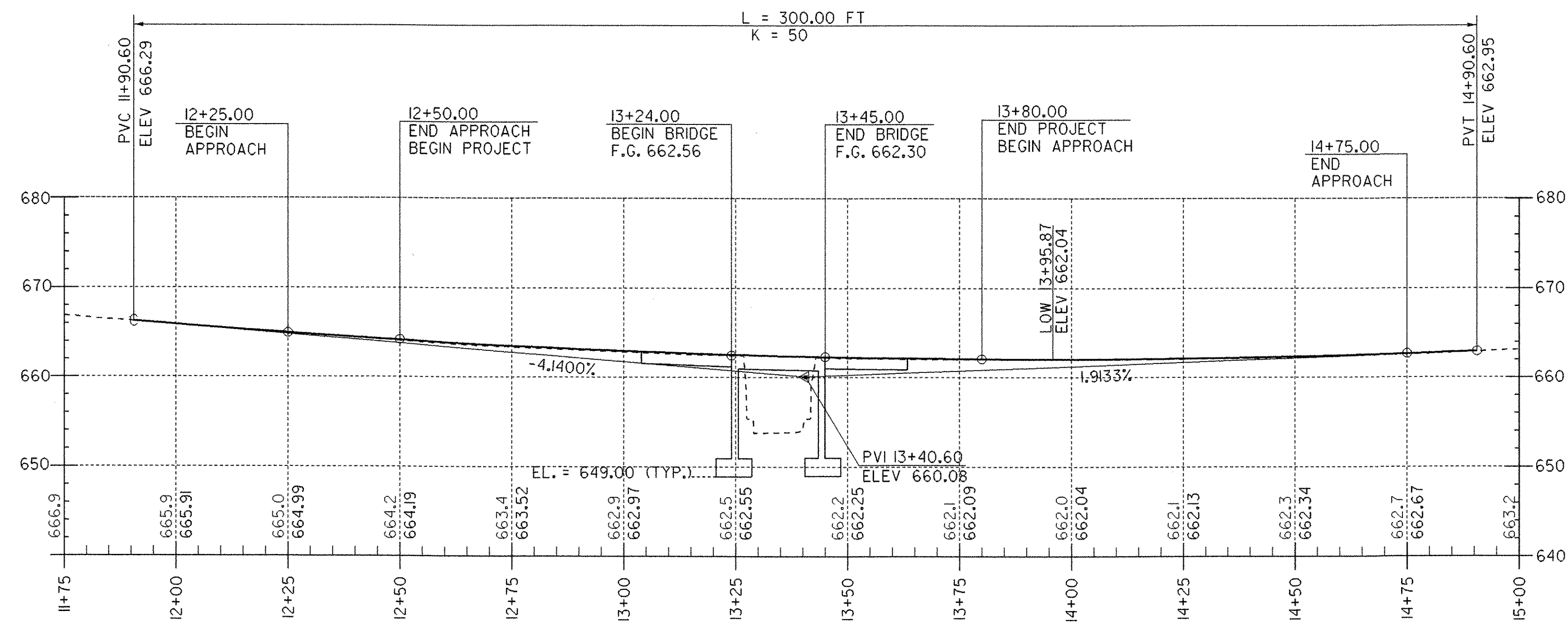
STONE FILL TYPE II
STA. 12+50 - 12+75 LT.

THE ITEM 620.55 THE REMOVAL OF EXISTING FENCE
IS TO BE USED AT THE DISCRETION OF THE ENGINEER

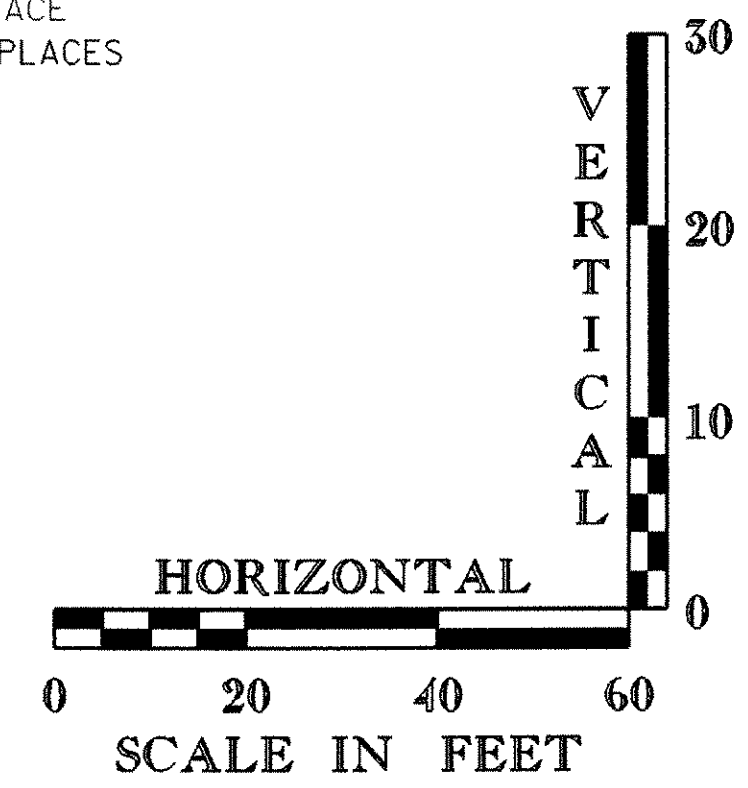


PLAN SHEET

PROJECT NAME:	FAIRFIELD	FILE NAME:	/s/r5/01c082/sc182bdr.dgn	PLOT DATE:	28-APR-2005
PROJECT NUMBER:	AC STP ST 0298 (6)	PROJECT LEADER:	Craig Keller	DRAWN BY:	J. Reed
		DESIGNED BY:	G. Shangraw	CHECKED BY:	W. B. SYMONDS
		sc1821.1		SHEET	8 OF 41

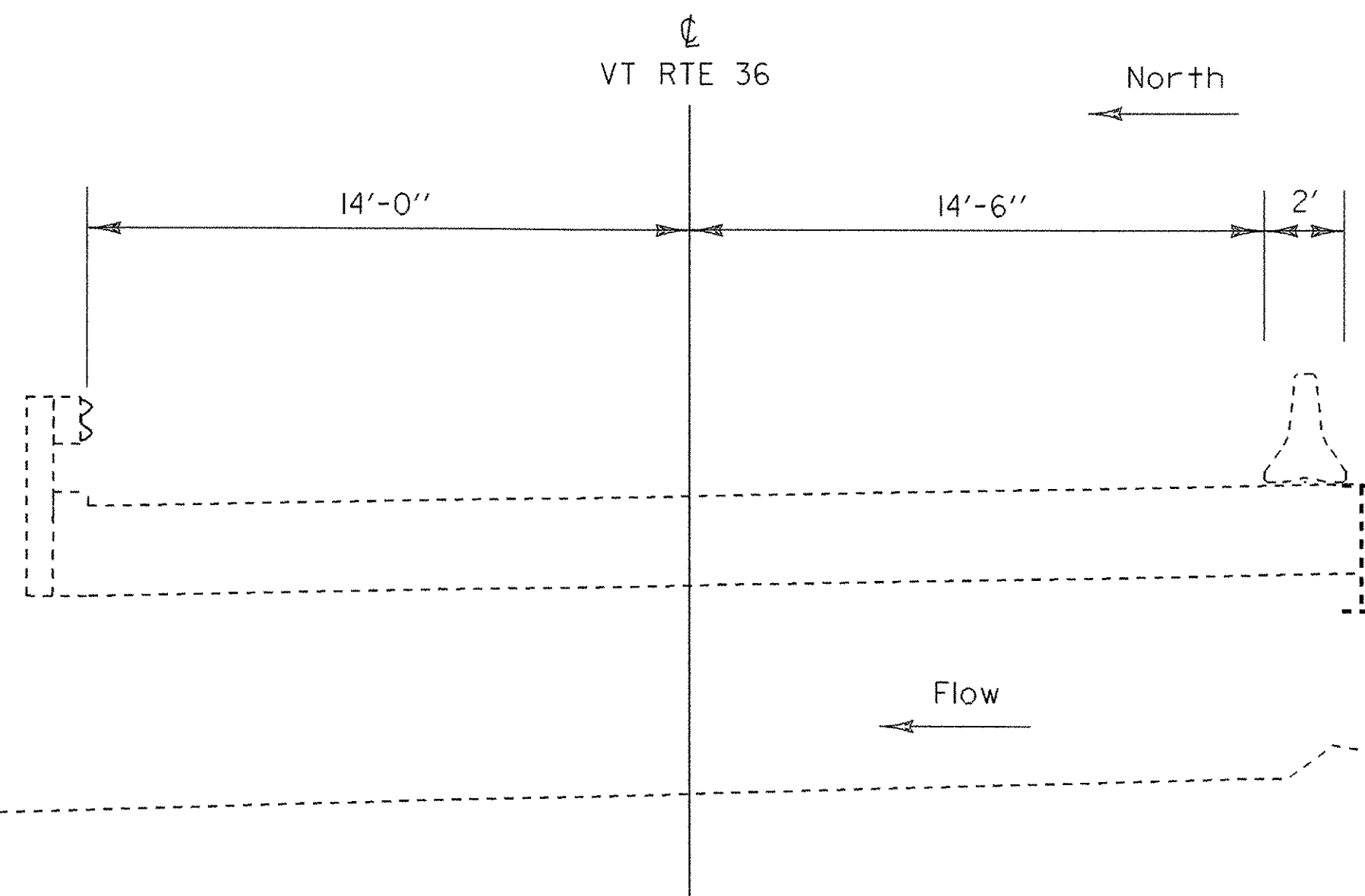


EXISTING GRADES SHOWN TO ONE DECIMAL PLACE
 PROPOSED GRADES SHOWN TO TWO DECIMAL PLACES

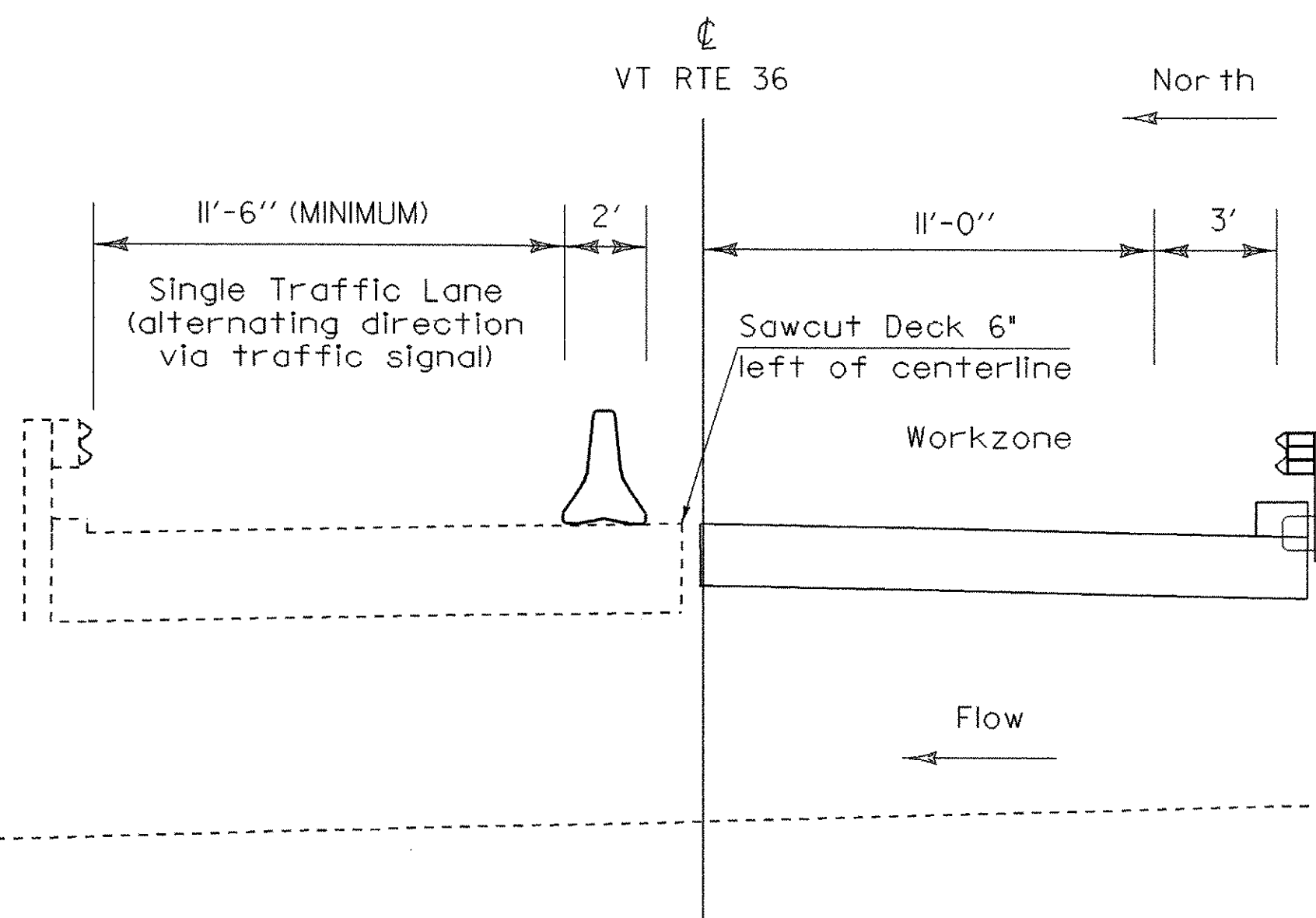


PROFILE SHEET

PROJECT NAME:	FAIRFIELD
PROJECT NUMBER:	AC STP ST 0298 (6)
FILE NAME:	/str5/01cl82/scl82wrk.dgn
PROJECT LEADER:	C. KELLER
DESIGNED BY:	J. REED
PLOT DATE:	28-APR-2005
DRAWN BY:	J. GEORGE
CHECKED BY:	W.B. SYMONDS
SHEET	9 OF 41

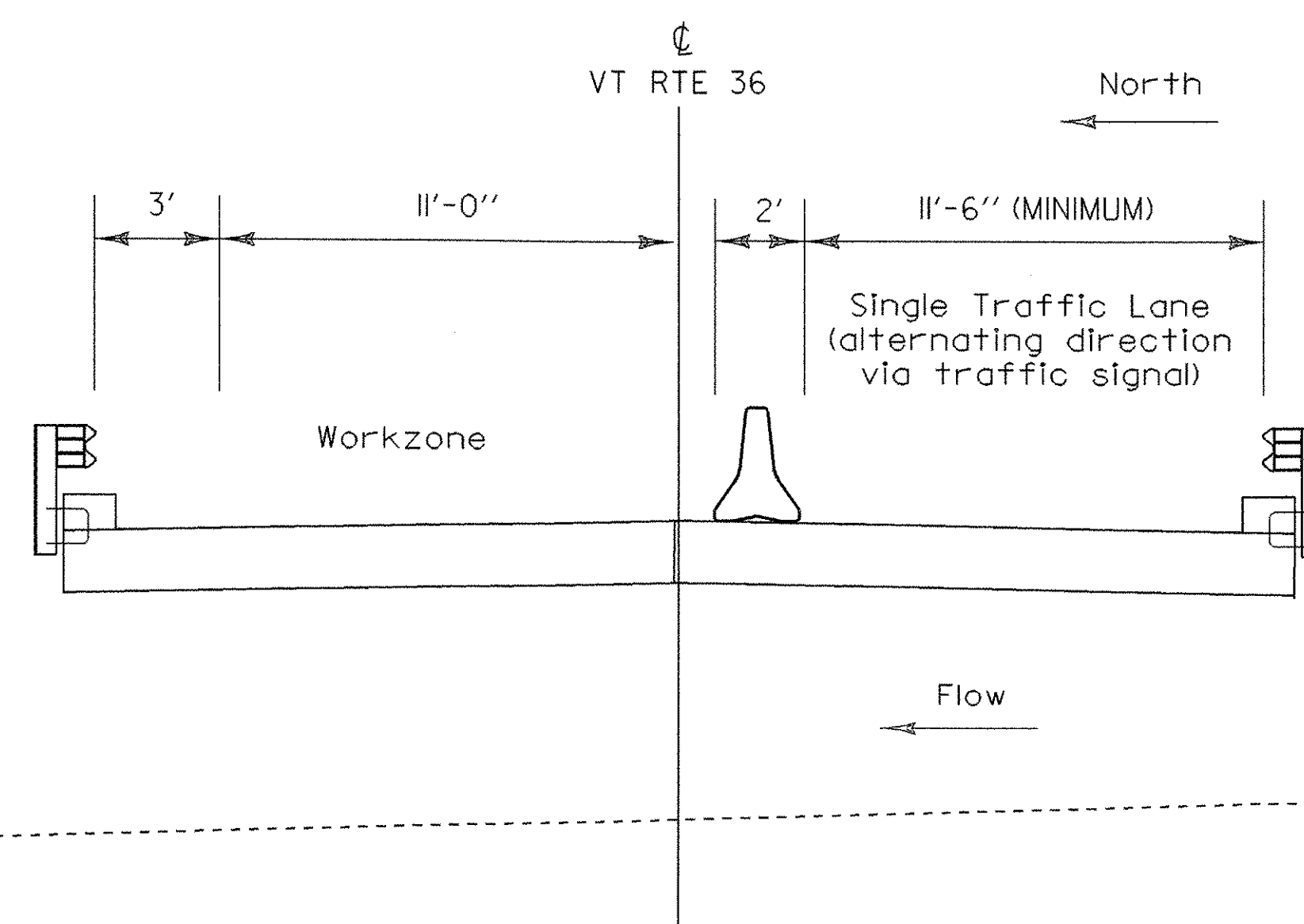


Existing



Phase One

Remove eastbound lane of existing concrete deck, existing temporary concrete barrier, and existing steelbeam. Construct upstream half of new bridge including wingwalls, stone fill, and new guardrail.



Phase Two

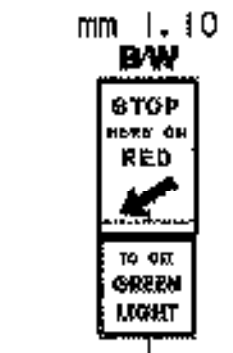
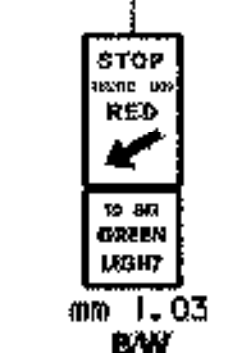
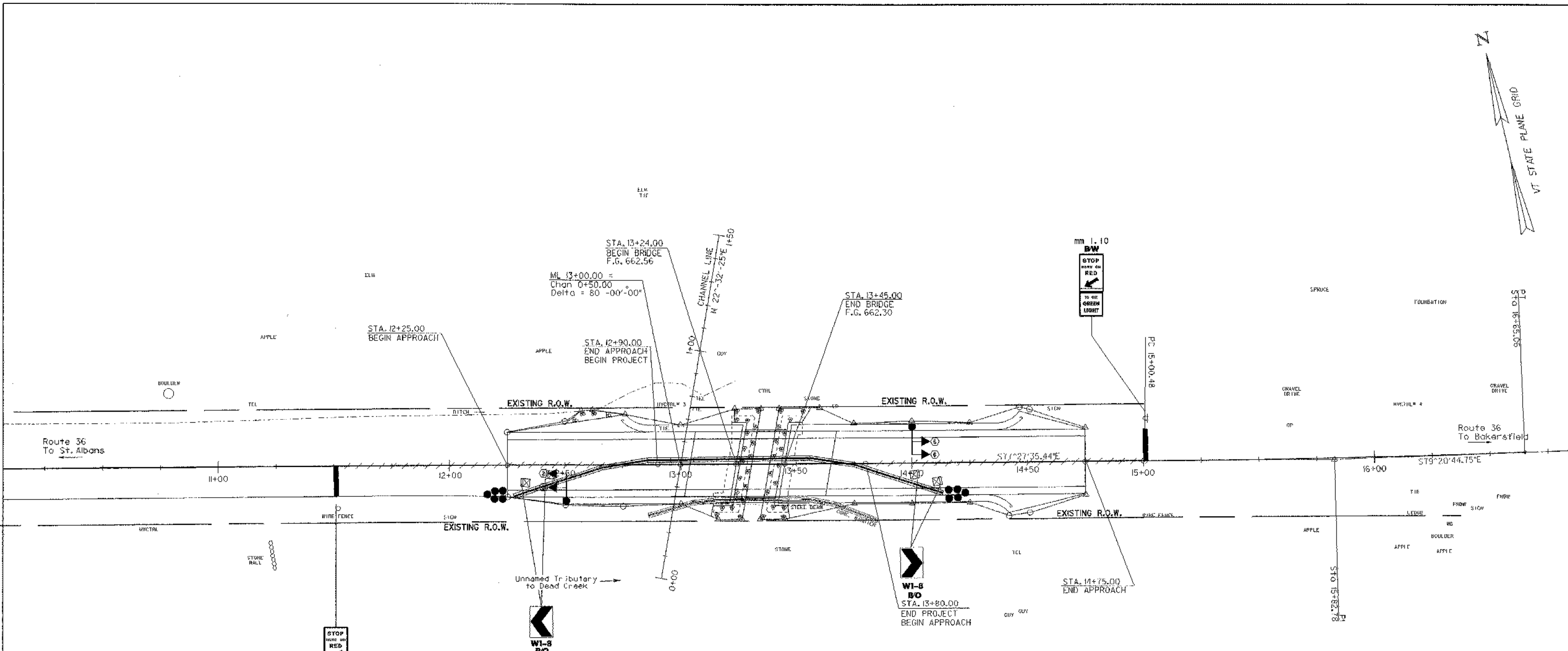
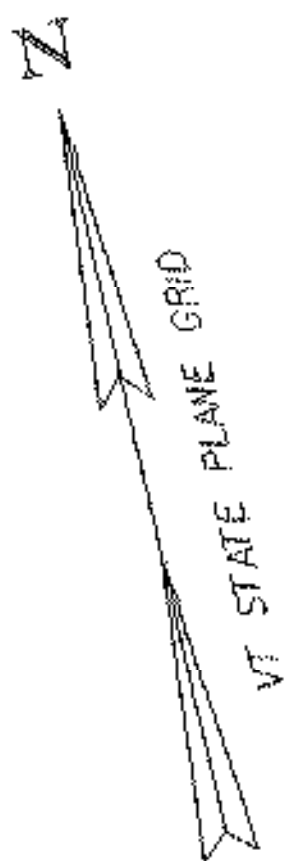
Traffic is transferred over to eastbound lane. Remove remaining portion of existing concrete deck. Construct second half of new bridge.

PHASING SEQUENCE

PROJECT NAME: Fairfield
PROJECT NUMBER: AC STP ST 0298(6)

FILE NAME: str5/01cl82/scl82bdr.dgn PLOT DATE: 28-APR-2005
PROJECT LEADER: C. Keller DRAWN BY: G. Shangraw
DESIGNED BY: J. Reed CHECKED BY: W.B. Symonds
scl82stage.i SHEET 10 OF 41

Not to Scale



- REMOVAL OF EXISTING PAVEMENT MARKINGS
 - ⊖ STA. 11+50 - 12+75
 - ⊖ STA. 13+75 - 14+75
- WHITE EDGELINE 11+50 - 15+00 LT
- TEMPORARY DETECTOR
 - STA. 11+50 RT.
- TEMPORARY TRAFFIC BARRIER
 - STA. 12+27 RT. - 14+13 RT.
- ENERGY ABSORPTION ATTENUATOR
 - STA. 12+27 RT.
 - STA. 14+13 RT.
- TEMPORARY 4" WHITE LINE
 - STA 11+50 - 1500 LT

11+50 - 15+00 LT & RT

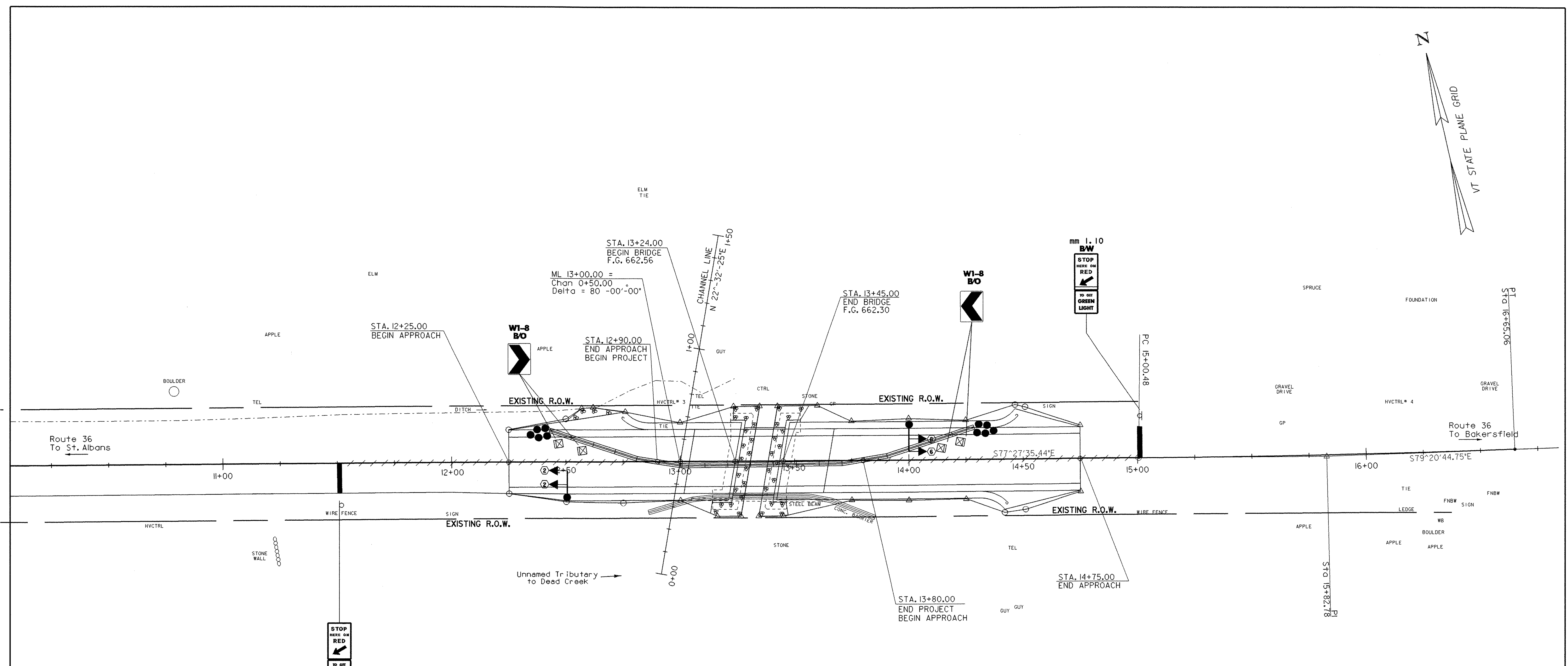
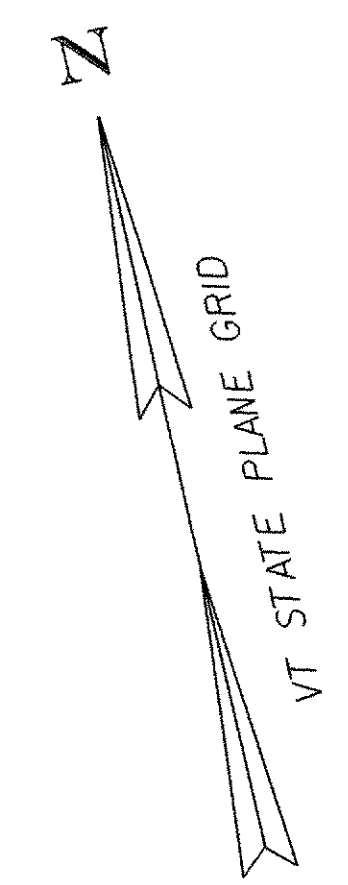
LEGEND	
●	TRAFFIC SIGNAL POLE
⊖	REFLECTORIZED PLASTIC DRUMS (SEE STD. E-1061. DRUM SPACING (IN FEET) IS EQUAL TO DETOUR SPEED (IN MPH))
⊠	TYPE III BARRICADES SEE STD. E-107A
⊠	TYPE III BARRICADES (MOD.) SEE STD. E-107A
///	PAVEMENT MARKING REMOVAL
⤴	SIGNAL HEAD AND PHASE
⊠	FLASHING BEACON
□	WORK ZONE
●	CRASH ATTENUATOR (BARREL TYPE)

NOTES
 1) PAVEMENT MARKING SHALL BE REMOVED IN AREAS OUTSIDE OF TEMPORARY TRAFFIC BARRIER.
 2) THE TYPE OF ENERGY ABSORPTION ATTENUATOR AND DESIGN OF THE ENERGY ABSORPTION ATTENUATOR SHALL BE PER SECTION 621 OF THE SPECIAL PROVISIONS. FINE SAND FILLED BARRELS ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY. IF SAND FILLED BARRELS ARE USED THE NUMBER MAY VARY PER DESIGN OF THE ATTENUATOR.



PHASE 1 PLAN

PROJECT NAME: FAIRFIELD	PLOT DATE: 28-APR-2005
PROJECT NUMBER: AC STP ST Q298 (6)	DRAWN BY: J. REED
FILE NAME: /s/5/01c182/sc182tr.f.dgn	CHECKED BY: W. B. SYMONDS
PROJECT LEADER: CRAIG KELLER	SHEET 11 OF 41
DESIGNED BY: J. REED	
sc182paz1.1	



STOP HERE ON RED
TO GET GREEN LIGHT
mm 1.03
B/W

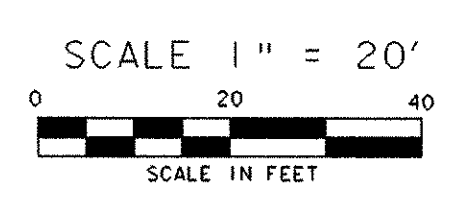
STOP HERE ON RED
TO GET GREEN LIGHT
mm 1.10
B/W

- REMOVAL OF EXISTING PAVEMENT MARKINGS
STA. 11+50 - 12+75
STA. 13+75 - 14+75
- TEMPORARY TRAFFIC BARRIER
STA. 12+43 LT. - 14+29 LT.
- TEMPORARY DETECTOR
STA. 11+50 RT.
- ENERGY ABSORPTION ATTENUATOR
STA. 12+43 LT.
STA. 14+29 LT.

LEGEND

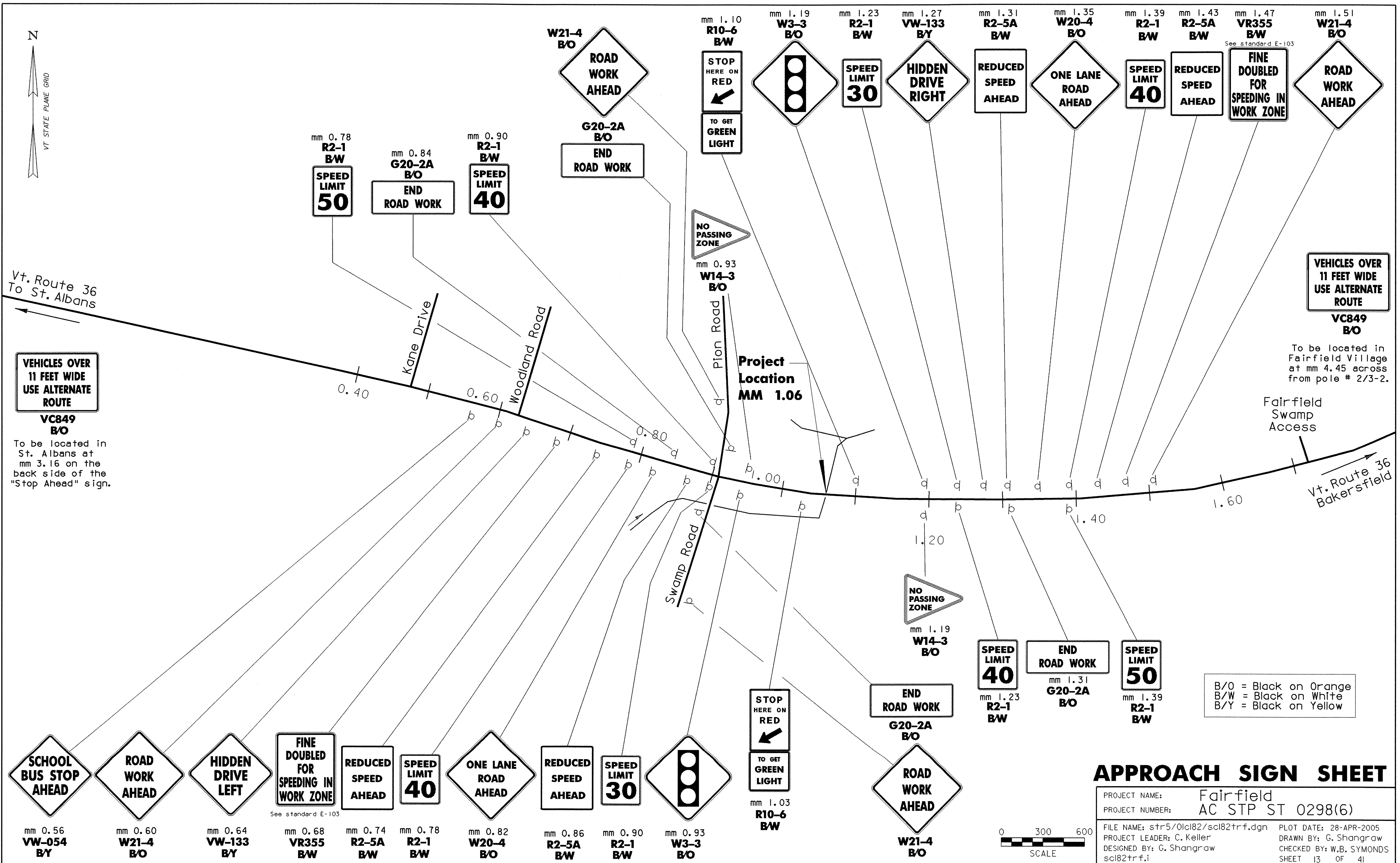
- — TRAFFIC SIGNAL POLE
- ⊙ — REFLECTORIZED PLASTIC DRUMS (SEE STD. E-106). DRUM SPACING (IN FEET) IS EQUAL TO DETOUR SPEED (IN MPH)
- ⊠ — TYPE III BARRICADES SEE STD. E-107A
- ⊞ — TYPE III BARRICADES (MOD.) SEE STD. E-107A
- /// — PAVEMENT MARKING REMOVAL
- ⤵ — SIGNAL HEAD AND PHASE
- ⊕ — FLASHING BEACON
- — WORK ZONE
- — CRASH ATTENUATOR (BARREL TYPE)

NOTES
1) PAVEMENT MARKING SHALL BE REMOVED IN AREAS OUTSIDE OF TEMPORARY TRAFFIC BARRIER.
2) THE TYPE OF ENERGY ABSORPTION ATTENUATOR AND DESIGN OF THE ENERGY ABSORPTION ATTENUATOR SHALL BE PER SECTION 621 OF THE SPECIAL PROVISIONS. FIVE SAND FILLED BARRELS ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY. IF SAND FILLED BARRELS ARE USED THE NUMBER MAY VARY PER DESIGN OF THE ATTENUATOR.



PHASE 2 PLAN

PROJECT NAME: FAIRFIELD	
PROJECT NUMBER: AC STP ST 0298 (6)	
FILE NAME: /str5/01c182/sc182tr.f.dgn	PLOT DATE: 28-APR-2005
PROJECT LEADER: CRAIG KELLER	DRAWN BY: J. REED
DESIGNED BY: J. REED	CHECKED BY: W. B. SYMONDS
sc182paz2.i	SHEET 12 OF 41



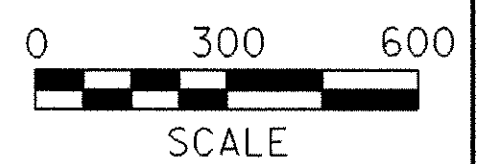
VEHICLES OVER 11 FEET WIDE USE ALTERNATE ROUTE
VC849 B/O
 To be located in St. Albans at mm 3.16 on the back side of the "Stop Ahead" sign.

VEHICLES OVER 11 FEET WIDE USE ALTERNATE ROUTE
VC849 B/O
 To be located in Fairfield Village at mm 4.45 across from pole # 2/3-2.

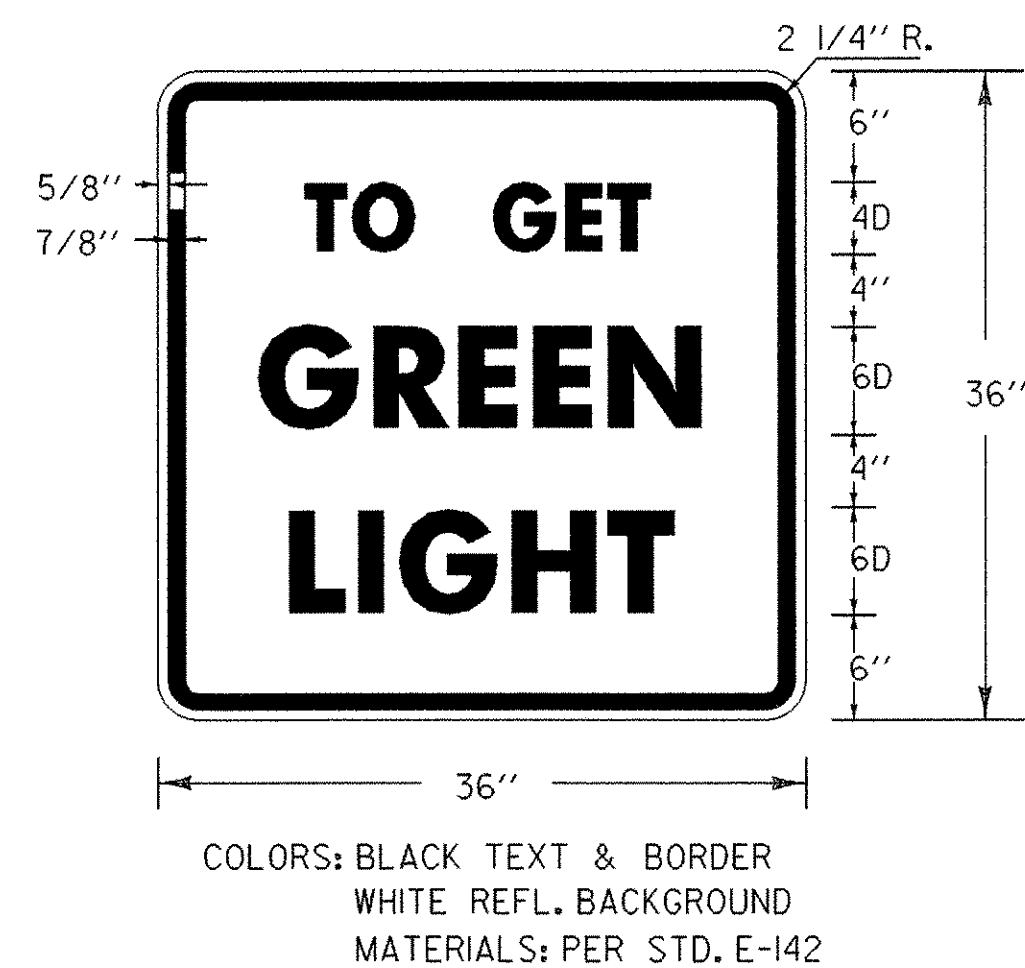
B/O = Black on Orange
 B/W = Black on White
 B/Y = Black on Yellow

APPROACH SIGN SHEET

PROJECT NAME: Fairfield
 PROJECT NUMBER: AC STP ST 0298(6)
 FILE NAME: str5/01cl82/sc182trf.dgn PLOT DATE: 28-APR-2005
 PROJECT LEADER: C. Keller DRAWN BY: G. Shangraw
 DESIGNED BY: G. Shangraw CHECKED BY: W.B. SYMONDS
 sc182trf.i SHEET 13 OF 41



See standard E-103



**GENERAL
TEMPORARY TRAFFIC SIGNAL NOTES**

- DESIGN OF THE SIGNAL SUPPORT(S) AND ANY REQUIRED GUYING IS THE RESPONSIBILITY OF THE CONTRACTOR.
- SIGNAL TIMING/TIMING ADJUSTMENTS REQUESTED BY THE RESIDENT ENGINEER SHALL BE ACCOMPLISHED WITHIN A 48 HOUR PERIOD AND PAYMENT SHALL BE INCIDENTAL TO THE TRAFFIC SIGNAL ITEM. THE ALL-RED CLEARANCE INTERVAL IS BASED ON AN ASSUMED SPEED OF 10-20 MPH. THE RESIDENT ENGINEER SHALL MAKE SEVERAL TRIAL RUNS TO DETERMINE THE PROPER ALL-RED CLEARANCE INTERVAL.
- SIGNAL FACES SHALL CONSIST OF 12 INCH LENSES. (RED, YELLOW, AND GREEN)
- THE BOTTOM OF THE HOUSING OF A SIGNAL FACE SUSPENDED OVER A ROADWAY SHALL NOT BE LESS THAN 16 1/2 FEET NOR MORE THAN 19 FEET ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY. THE BOTTOM OF A SIGNAL FACE NOT MOUNTED OVER A ROADWAY, SHALL NOT BE LESS THAN 8 FEET NOR MORE THAN 15 FEET ABOVE THE GROUND. CAUTION SHOULD BE USED TO INSURE COMPLIANCE WITH THE HEIGHT REQUIREMENTS IN THE EVENT THE NEW APPROACH GRADES DIFFER SIGNIFICANTLY FROM THE OLD ROAD GRADE.
- SIGNAL FACES FOR ANY ONE APPROACH SHALL NOT BE LESS THAN 8 FEET APART MEASURED HORIZONTALLY BETWEEN CENTER OF FACES.
- SIGNAL HEADS MAY BE HUNG ON A SPAN WIRE OR ON A CANTILEVER MAST ARM. AT LEAST ONE SIGNAL HEAD SHALL BE UNMISTAKABLY IN LINE WITH THE CENTER OF APPROACHING TRAFFIC AT ALL TIMES. THE SECOND SIGNAL HEAD MAY BE POST MOUNTED, LOCATED AT A DISTANCE NO GREATER THAN 14 1/2 FEET FROM THE CENTER OF THE APPROACH LANE WHEN THE STOP BAR IS 40 FEET FROM THE SIGNAL HEAD. CONSULT THE M.U.T.C.D. FOR ADDITIONAL INFORMATION CONCERNING SIGNAL PLACEMENT.
- SIGNAL HEAD PLACEMENT IS CRITICAL. HEADS SHALL BE ADJUSTED TO REFLECT LANE LOCATION CHANGES.
- THE SIGNAL SYSTEM SHALL CONSIST OF POLES, SIGNS AND POSTS, WARNING SIGN, LUMINAIRES, FLASHING BEACONS, AND SIGNAL EQUIPMENT TO PROVIDE FOR AN ADEQUATE DESIGN. IT ALSO INCLUDES PERMITS AND COST ASSOCIATED WITH PROVIDING ELECTRICAL POWER.
- THE CONTRACTOR SHALL PROVIDE AN ACTUATED CONTROLLER. THE APPROACHES NOTED SHALL HAVE A TEMPORARY VEHICLE DETECTOR. THE TYPE OF DETECTION SHALL BE AT THE OPTION OF THE CONTRACTOR, EXCEPT VEHICLE LOOPS IN THE PAVEMENT SHALL NOT BE USED. THE CONTROLLER, DETECTOR AND ALL OTHER SIGNAL EQUIPMENT SHALL MEET OR EXCEED ALL NEMA STANDARDS.
- INTERVAL TIMING SHOWN IN SECONDS.
- ON SEMI-ACTUATED SIGNAL, PARTICULARLY WITH LONG BRIDGES, THE CONTROLLER SHOULD BE LOCATED ON THE SAME SIDE OF THE BRIDGE AS THE DETECTOR.
- INTERCONNECT BETWEEN SIGNAL POLES BY WHATEVER MEANS POSSIBLE OR CONVENIENT TO PROVIDE FOR A SAFE INSTALLATION.
- PLACE TEMPORARY POLES BEHIND GUARDRAIL WHERE POSSIBLE.
- POLES SUPPORTING SPAN WIRES AND/OR MAST ARMS SHALL BE ADEQUATELY BRACED OR GUYED AND SHALL NOT BE PLACED SO AS TO CREATE A HAZARD TO THE TRAVELLING PUBLIC.
- ALL TEMPORARY SIGNAL EQUIPMENT, SIGNS, ETC., SHALL BELONG TO THE CONTRACTOR AT THE END OF THE PROJECT OR WHEN NO LONGER REQUIRED AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS REMOVAL, INCLUDING ANY TEMPORARY PAVEMENT MARKINGS, UTILITY POLES, WIRES, ETC.
- A 250 WATT MER/150 WATT HPS LUMINAIRE AND MAST ARM SHALL BE PROVIDED ON A POLE ON EACH APPROACH AT A MOUNTING HEIGHT OF 30' ABOVE ROADWAY CENTERLINE. THE INTENT IS TO LIGHT UP THE AREA AROUND THE SIGNAL HEADS AND STOP BAR FOR INCREASED VISIBILITY. THE RESIDENT ENGINEER SHALL DETERMINE THE ADEQUACY OF THE LIGHTING AND DIRECT CHANGES IF THE LIGHTING IS INSUFFICIENT.
- STOP BARS SHALL BE LOCATED A MINIMUM OF 40' AND A MAXIMUM OF 120' FROM THE NEAREST SIGNAL HEAD.
- PAYMENT FOR THE VEHICLE DETECTORS SHALL BE FOR EACH UNIT INSTALLED.
- SIGNS AND POSTS NOTED BELOW ARE SUBSIDIARY TO THE TRAFFIC CONTROL SIGNAL ITEMS (''STOP HERE ON RED'', ''SIGNAL AHEAD'', ''NO PASSING ZONE'', AND ''TO GET GREEN LIGHT'' ETC.) THE TEMPORARY STOP BARS SHOULD BE PAID UNDER THE TEMPORARY 24' STOP BAR ITEM.
- SEE STD. E-140 FOR ''STOP HERE ON RED'' SIGN DETAIL AND E-101 FOR ''SIGNAL AHEAD'' SYMBOL SIGN. SEE STANDARD E-121 FOR SIGN PLACEMENT. SEE STANDARD E-171A AND E-172 FOR ADDITIONAL INFORMATION ON SIGNALS AND DETECTORS.
- A ''SIGNAL AHEAD'' SIGN SHALL BE PLACED AT LEAST 750' FROM THE SIGNAL OR AT A POSITION TO BE DETERMINED BY THE ENGINEER.
- THE ''NO PASSING'' SIGN SHALL BE USED TO PREVENT PASSING FOR 750' IN ADVANCE OF THE STOP BAR. THE SIGN SHALL BE PER STANDARD E-102.
- ALL ELECTRICAL WORK SHALL MEET THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE AND STATE INSPECTOR.
- TWO-WAY TRAFFIC SHALL BE MAINTAINED WHENEVER POSSIBLE. DURING TWO-WAY TRAFFIC, THE SIGNALS SHALL BE SET ON FLASHING YELLOW.
- TRAFFIC CONTROL WARNING SIGNS SHALL BE PROVIDED ON EACH APPROACH PER STANDARD E-107. ADDITIONAL PROJECT CONSTRUCTION SIGNS SHALL BE INSTALLED AS REQUIRED BY THE RESIDENT ENGINEER PER STANDARD E-100, E-101, E-102 & E-102A. PAYMENT FOR THESE SIGNS, THE REFLECTORIZED PLASTIC DRUMS, ETC. SHALL BE PAID AS A PART OF THE ''TRAFFIC CONTROL'' ITEM.
- THE ''TO GET GREEN LIGHT'' SIGN IS TO BE USED ONLY ON APPROACHES WITH VEHICLE DETECTORS.
- NOT USED.
- IN SITUATIONS WHERE EXISTING PASSING ZONES EXTEND THROUGH THE AREA BETWEEN THE STOP BAR AND THE ''NO PASSING ZONE'' SIGN, THEN TEMPORARY DOUBLE YELLOW LINES SHALL BE INSTALLED FROM THE STOP BAR TO THE ''NO PASSING ZONE'' SIGN. THESE MARKINGS SHALL BE PAID UNDER THE ''TEMPORARY 4'' YELLOW LINE'' ITEM.
- WHEN TEMPORARY BARRIER IS USED, BARRIER ENDS FACING ONCOMING TRAFFIC SHALL BE TAPERED BEYOND THE CLEAR ZONE, OR PROTECTED WITH AN APPROVED END TREATMENT DESIGNED FOR THE 85TH PERCENTILE SPEED OR THE POSTED SPEED LIMIT OF THE ROAD WAY.
- PAYMENT FOR TEMPORARY BARRIER USED SHALL BE MADE UNDER THE APPROPRIATE ITEM.
- ALL SIGNAL RELATED SIGNS SHALL BE REMOVED OR COVERED WHEN THE SIGNAL IS NOT OPERATING.

**PHASING DIAGRAM AND SPECIAL NOTES
FOR EACH LOCATION**

PHASE	2		6		4	
MINIMUM	8	4	12	8	4	12
EXTENSION	2			2		
MAXIMUM	12			12		
HEAD 2	G	Y	R	R	R	R
HEAD 6	R	R	R	G	Y	R
HEAD 4						

APPROACH 4 IS A SIDE STREET APPROACH - IF REQUIRED

SPECIAL REQUIREMENTS

APPROACH	TEMPORARY VEHICLE DETECTOR	FLASHING BEACON ON ADVANCED WARNING SIGN
2	X	
6		
4		

ENTER CHECK MARK IN APPROPRIATE BOX WHEN REQUIRED ON THIS PROJECT

DETOUR DETAILS

/traf/misc/onewayrd.dgn : onewayrd.i		STDS. : E-100, E-101, E-102, E-102A, E-106, E-107, E-107A, E-121, E-140 REQUIRED E-170, E-171A, E-171B, E-171C, E-172, E-175
ORIGINAL PREPARED NOV. 1986		
DATE	REVISIONS	BY
5/88	LENGTHEN LOOPS, ADDED ''GREEN LIGHT'' SIGN, UPDATE STD.'S	DSP
3/91	ADD PAVEMENT MARKING NOTES & PHASE DIAGRAM	DSP
6/93	DELETE DETOUR&CHG.NOTES	RPD
9/95	MAJOR REVISIONS	EGF
BRIDGE NO. 2		ONE-WAY ROADWAY WITH TEMPORARY TRAFFIC SIGNAL
PREPARED BY G. SHANGRAW DATE 12/02/02		CHECKED BY W.B. SYMONDS DATE 2/20/03
DESIGN SUPERVISOR C. Keller DATE 2/20/03		PROJ. AC STP ST 0298(6)
TRAFFIC SHEET NO. _____ OF _____		SHEET 14 OF 41 SHEETS

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.O.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 P.S.F.	CONSISTENCY
<250	Very Soft
250-500	Soft
500-1000	Med. Stiff
1000-2000	Stiff
2000-4000	Very Stiff
>4000	Hard

CORRELATION GUIDE OF "N" TO DENSITY/CONSISTENCY

DENSITY (GRANULAR SOILS)		CONSISTENCY (COHESIVE SOILS)	
N	DESCRIPTIVE TERM	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

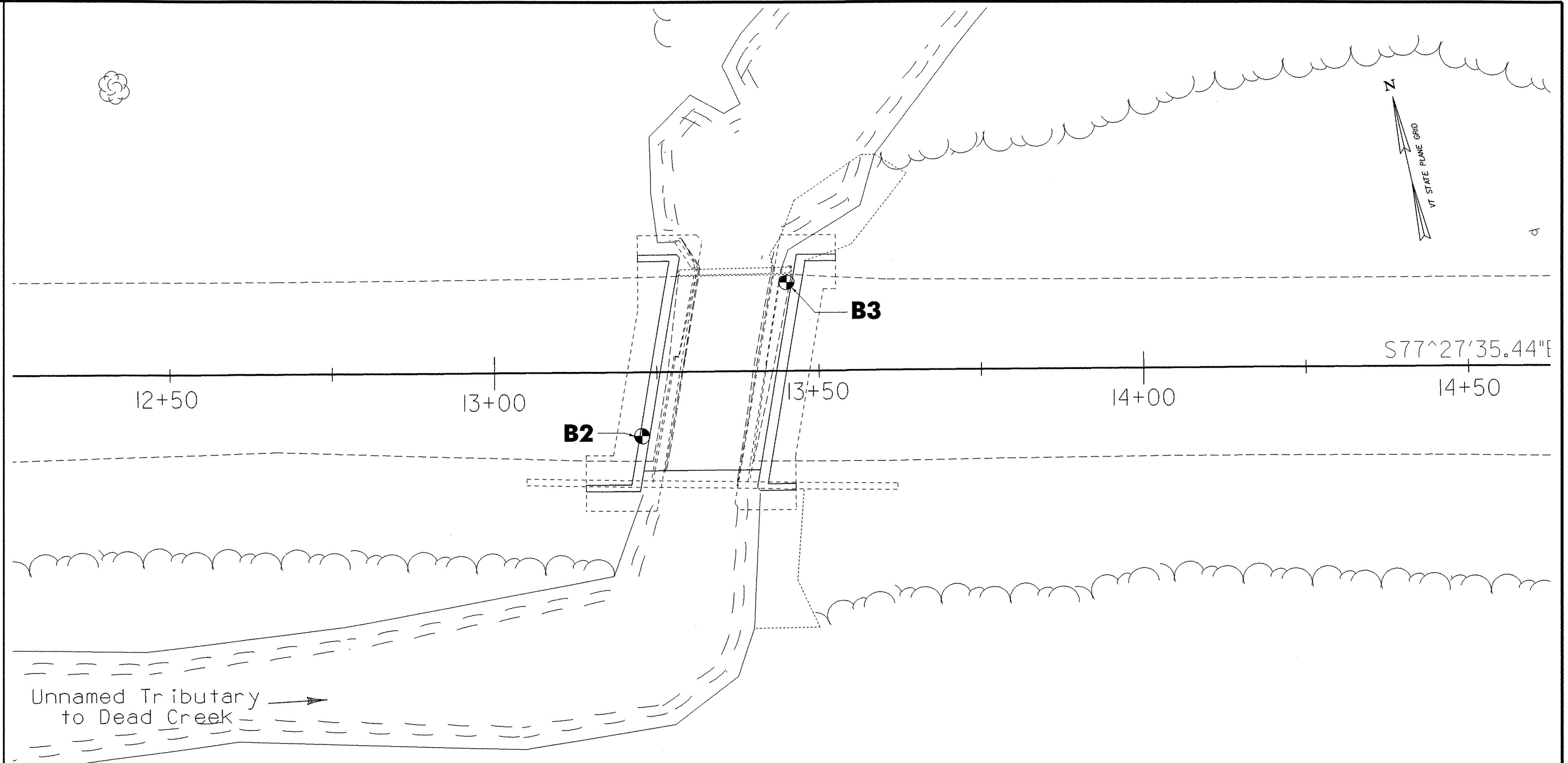
- ▼ Water Elevation
- ⊕ Standard Penetration Boring
- ⊕ Auger Boring
- ⊙ Rod Sounding
- S Sample
- N Standard Penetration Test
- Blow Count Per Foot For:
- 2" O.D. Sampler
- 1 3/8" I.D. Sampler
- Hammer Weight Of 140 Lbs.
- Hammer Fall Of 30"
- VS Field Vane Shear Test
- US Undisturbed Soil Sample
- B Blast
- DC Diamond Core
- MD Mud Drill
- WA Wash Ahead
- HSA Hollow Stem Auger
- AX Core Size 1 1/8"
- BX Core Size 1 5/8"
- NX Core Size 2 1/8"
- 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)

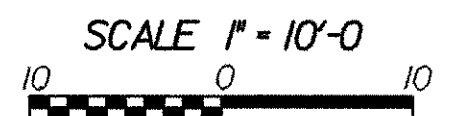
- BEDROCK (LEDGE)** - Rock in its native location of indefinite thickness.
- BOULDER** - A rock fragment with an average dimension > 12 inches.
- COBBLE** - Rock fragments with an average dimension between 3 and 12 inches.
- GRAVEL** - Rounded particles of rock < 3" and > 0.075" (#10 sieve).
- SAND** - Particles of rock < 0.075" (#10 sieve) and > 0.0029" (#200 sieve).
- SILT** - Soil < 0.0029" (#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 CHART

HOLE NO.	SURV. STATION	OFFSET	GROUND ELEV.	ELEV. TLOB
B2	13+22	9.5 RT	662.34	635.54
B3	13+45	13.5 LT.	661.95	629.95



BORING PLAN SHEET

- GENERAL NOTES**
- The subsurface explorations shown herein were made between 10/29/02 and 11/07/02 by the Agency.
 - 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.
 - 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.
 - 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.
 - 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.
 - 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.

STATE OF VERMONT AGENCY OF TRANSPORTATION			
Town Of	FAIRFIELD	Bridge No.	2
Highway No.	VT. RTE. 36	Log Sta.	
		Surv. Sta.	
VT. RTE. 36 OVER UNAMED TRIBUTARY			
BORING PLAN SHEET			
Designed By	J. REED	Drawn By	J. GEORGE
Checked By	W.B. SYMONDS	Date	1/8/03
		Bridge Design Supervisor	C. KELLER
		Date	1/8/03
PROJECT	FAIRFIELD	PROJECT NO.	AC STP ST 0298(6)
I.G.C. Info.			
Bridge Sheet No.		Sheet	18 of 41

STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH DIVISION SUBSURFACE INFORMATION				HOLE NO.: B-2 SHEET 1 OF 1 DATE STARTED: 11/5/02 DATE COMPLETED: 11/7/02					
PROJECT NAME: FAIRFIELD		PROJECT NUMBER: ST 0298(6)		SITE NO.: BR 17		OFFSET: 9.50			
SITE NAME: VT 36		GROUND EL.: 662.34		G.W. DEPTH: 6.0		11/07/02			
BORING CREW CREW CHIEF: TALLMAN DRILLER: TALLMAN LOGGER: RUSSELL				BORING RIG: LARGE SKID RIG BORING TYPE: WASH BORE SAMPLE TYPE: SPLIT BARREL					
DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
		0.0' - 1.0', Asphalt							
5		NXDC, 4.0' - 5.0', Cleaned out casing.	4	18.7	29.7	47.2	23.1		
		A-1-b, SiGrSa, brn, Moist, Rec. = 1.95'	Wood						
		6.75' - 8.0', Wood							
10		NXDC, 8.75' - 10.0', Cleaned out casing.	32	8.9	32.4	26.8	40.8		
		A-4, SaGrSi HP, gry, Moist, Rec. = 1.10'							
15		A few small Stones, No Rec.	R						
20		A-1-b, SaGr HP, gry, Moist, Rec. = 0.80'	R	8.3	53.2	30.8	16		
		Cobbles, 22.0' - 24.0'							
25		A-4, SaSi, gry, Moist, Rec. = 1.30'	78	10.3	6	41.7	52.3		
		Run#1: NXMDC, 26.8' - 31.8', Rec. = 2.10', See Geologist's Report.	RUN	REC% 42	RQD% 20	Dip° 40			
30		Run#2: NXMDC, 31.8' - 34.8', Rec. = 2.85', See Geologist's Report.	2	95	80	40			
35		Run#3: NXMDC, 34.8' - 37.8', Rec. = 2.95', See Geologist's Report.	3	98	98	40			
GEOLOGIST'S REPORT:				Hole stopped @ 37.80'					
Run#1: Greenish-gray quartzite, Hard, Unweathered, Poor RQD.									
Run#2: 31.8' - 33.5', Greenish-gray quartzite, Hard, Unweathered									
33.5' - 34.8', Phyllitic quartzite, Moderately to medium hard, Unweathered.									
Run#3: Phyllitic quartzite, Moderately to medium hard, Unweathered									
Run#2 & 3: Due to parting along cleavage planes caused during drilling, RQD is estimated.									

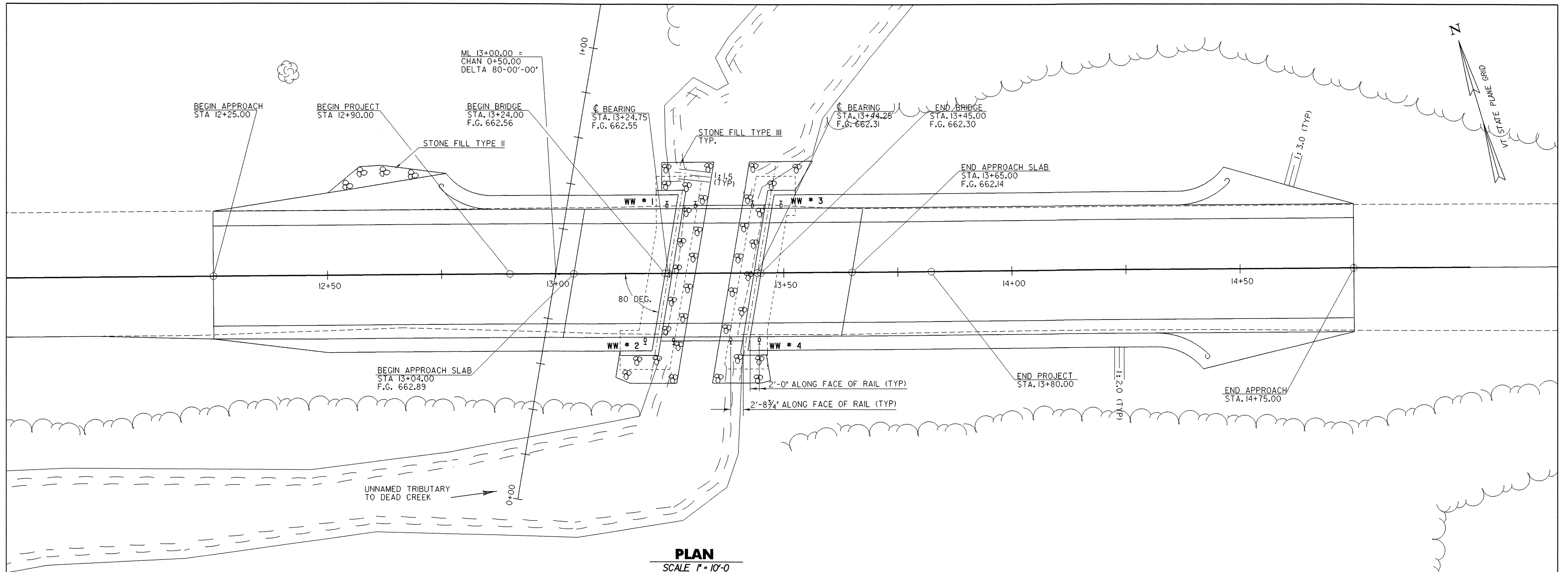
ABUTMENT 1 BOTTOM
OF FOOTING
EL 649.0

STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH DIVISION SUBSURFACE INFORMATION				HOLE NO.: B-3 SHEET 1 OF 1 DATE STARTED: 10/29/02 DATE COMPLETED: 10/31/02					
PROJECT NAME: FAIRFIELD		PROJECT NUMBER: ST 0298(6)		SITE NO.: BR 17		OFFSET: -13.50			
SITE NAME: VT 36		GROUND EL.: 661.95		G.W. DEPTH: 6.25		10/31/02			
BORING CREW CREW CHIEF: TALLMAN DRILLER: TALLMAN LOGGER: RUSSELL				BORING RIG: LARGE SKID RIG BORING TYPE: WASH BORE SAMPLE TYPE: SPLIT BARREL					
DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
		0.0' - 1.05', Asphalt							
5		A-4, SaSi, brn, Moist, Rec. = 1.70'	17	19.2	18.3	29.1	52.6		
10		A-4, GrSaSi HP, gry, Moist, Rec. = 1.60'	28	13.2	20.7	26.7	52.6		
15		A-4, GrSaSi HP, gry, Moist, Rec. = 1.75', Broken rock was within sample	95	9.6	22.7	26	51.3		
20		A-4, Si HP, gry, Moist, Rec. = 1.30'	91	12.4	12.8	14.1	73.1		
25		A-4, SaSi HP, gry, Moist, Rec. = 0.45', A-2-4, Sa HP, gry, Moist, Rec. = 1.40'	63	9.1	12.6	0.4	21.2	66.2	18.7
30		A-1-b, SiSaGr HP, gry, Moist, Rec. = 0.75', Broken rock was within sample	60	8.1	45.1	31.6	23.3		
		Run#1: NXMDC, 32.0' - 35.0', Rec. = 1.75', See Geologist's Report.	RUN	REC% 58	RQD% 58	Dip° 40			
35		Run#2: NXMDC, 35.0' - 38.0', Rec. = 2.15', See Geologist's Report.	2	72	72	40			
40		Run#3: NXMDC, 38.0' - 43.0', Rec. = 3.40', See Geologist's Report.	3	68	68	40			
GEOLOGIST'S REPORT:				Hole stopped @ 43.0'					
Run#1: Dark gray phyllite, Medium hard, Unweathered									
Run#2: Light gray phyllite, Medium hard, Unweathered									
Run#3: Light gray phyllite, Medium hard, Unweathered									
Runs#1,2,3: Due to parting along cleavage planes caused during drilling, RQD is estimated.									

ABUTMENT 2 BOTTOM
OF FOOTING
EL 649.0

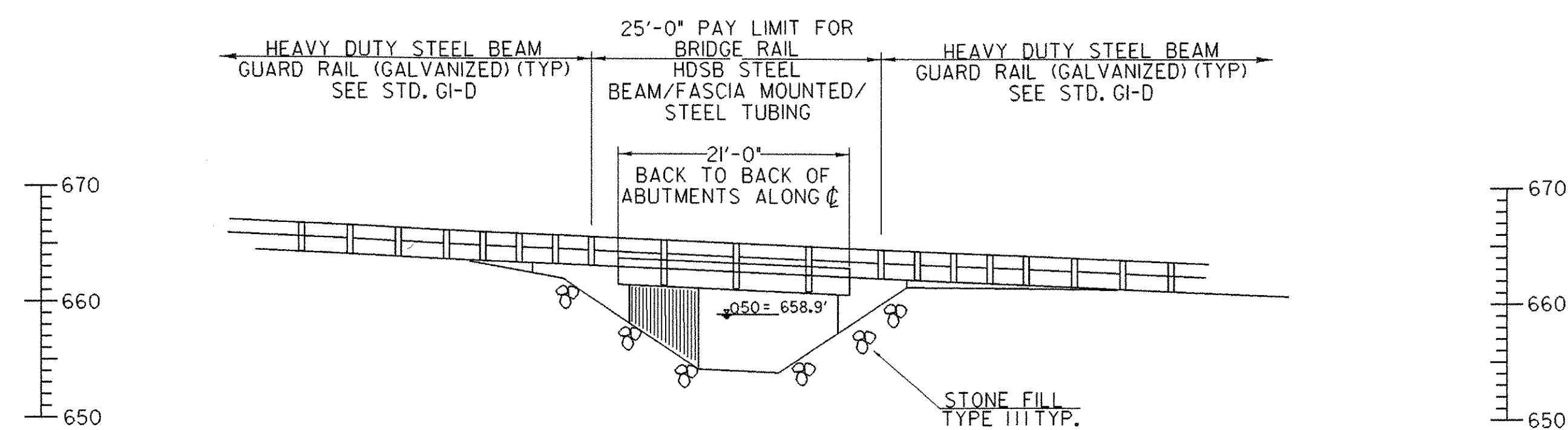
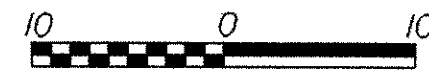
BORING LOGS

SURVEYED BY _____ DATE _____
 DRAWN BY J. TOUCHETTE DATE 11/02
 SQUAD LEADER C. C. BENDA
 DESIGN FILE NO. /M&R/01c182/mcl182bor.dgn
 IPARM FILE sci182bor2.1 DATE PLOTTED 28-APR-2005
 PROJ. NAME FAIRFIELD
 PROJ. NO. AC STP ST 0298(6)
 SHEET 19 OF 41 SHEETS



PLAN

SCALE 1" = 10'-0"



ELEVATION

SCALE 1" = 10'-0"



NOTE:
 SEE STANDARDS SB-R6-82 AND SB-R7-90 FOR BRIDGE RAIL INFORMATION. THE TRANSITION POST ON ALL FOUR CORNERS OF THE BRIDGE RAIL SHALL BE OMITTED.

PLAN AND ELEVATION SHEET

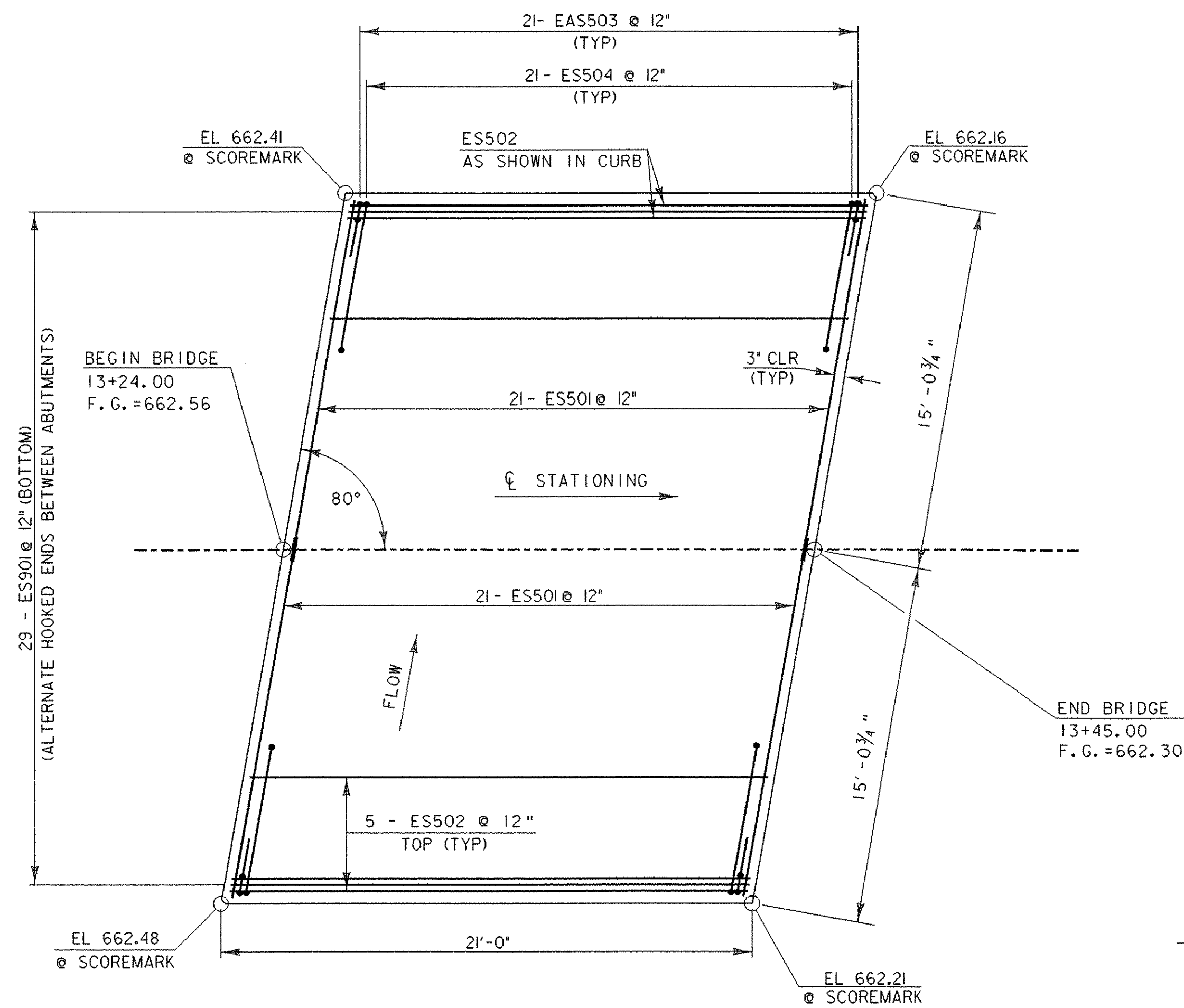
PROJECT NAME: FAIRFIELD	PLOT DATE: 28-APR-2005
PROJECT NUMBER: AC STP ST 0298(6)	DRAWN BY: J. REED
FILE NAME: /str5/01c182/sc182/sc182pe	CHECKED BY: W.B. SYMONDS
PROJECT LEADER: C. KELLER	SHEET 20 OF 41
DESIGNED BY: J. REED	
sc182pe.i	

GENERAL NOTES

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2001, AND ITS LATEST REVISIONS AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, DATED 1996, AND ITS LATEST REVISIONS.
2. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT SILTATION OR POLLUTION, ESPECIALLY THE DISCHARGE OF RAW CONCRETE INTO THE STREAM, AS DIRECTED BY THE ENGINEER AND STANDARD SPECIFICATION SECTION 105.
3. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVES, SIDE ROADS AND ENTRANCES TO BUILDINGS DURING CONSTRUCTION.
4. ONLY THE THREE PERMANENT SIGNS ARE PAID FOR UNDER SIGNS "TYPE A." THE REST ARE PAID FOR UNDER THE " TRAFFIC CONTROL" OR THE "TEMPORARY TRAFFIC SIGNAL SYSTEM" ITEMS.
5. THE COFFERDAM, ITEM 208.40, SHALL CONSIST OF STEEL SHEET PILING ONLY AND SHALL INCLUDE ALL STEEL SHEET PILING NECESSARY TO MAINTAIN TRAFFIC FOR PHASE CONSTRUCTION.
6. THE "REMOVAL OF STRUCTURE" ITEM SHALL INCLUDE ALL WORK NEEDED TO FULLY REMOVE THE EXISTING BRIDGE TO INCLUDE BUT NOT LIMITED TO DECK, ABUTMENTS, AND FOOTINGS.
7. EXCAVATION FOR THE PLACEMENT OF STONE FILL, TYPE III, OUTSIDE THE LIMITS OF "COFFERDAM" AND "REMOVAL OF STRUCTURE" SHALL BE PAID FOR UNDER THE ITEM "UNCLASSIFIED CHANNEL EXCAVATION".
8. IN-STREAM CONSTRUCTION SHALL BE RESTRICTED TO THE PERIOD FROM JUNE 1 TO OCTOBER 1, UNLESS THE CONTRACTOR OBTAINS WRITTEN PERMISSION FROM THE AGENCY OF NATURAL RESOURCES TO DO WORK OUTSIDE THAT TIME FRAME.
9. THE HEIGHT OF FILL BEHIND ABUTMENTS WILL BE LIMITED TO TWO FEET BELOW THE BRIDGE SEAT ELEVATION UNTIL THE SLAB HAS BEEN POURED AND CURED.
10. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1" X 1", UNLESS OTHERWISE DETAILED.
11. WATER REPELLENT (MOD. - SILANE) SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES INCLUDING THE APPROACH SLABS, EXCEPT THE UNDERSIDE OF THE SLAB BETWEEN DRIP NOTCHES.
12. THE KEY IN CONCRETE CONSTRUCTION JOINTS SHALL BE MONOLITHIC AND CONTINUOUS FOR THE FULL LENGTH OF THE JOINT. ALL HORIZONTAL JOINTS SHALL BE CONSTRUCTED WITH THE KEY IN THE UPWARD DIRECTION AND BE PLACED INTEGRALLY WITH THE CONCRETE BELOW THE JOINT.
13. REINFORCING PLACEMENT TOLERANCES SHALL BE:
SPACING +/- 1"
CLEARANCE +/- 1/4"
14. MINIMUM COVER FOR REINFORCING STEEL IN THE SUBSTRUCTURE SHALL BE TWO INCHES ALONG BACK FACES OF WALLS AGAINST EARTH AND THREE INCHES ELSEWHERE, UNLESS DETAILED OTHERWISE.
15. ALL REINFORCING STEEL IN THE CONCRETE DECK AND APPROACH SLABS SHALL BE EPOXY COATED AND PAID FOR UNDER THE ITEM 507.17. WHEN EPOXY COATED REINFORCING STEEL IS CUT, THE UNCOATED ENDS SHALL BE REPAIRED WITH MATERIALS AND PROCEDURES APPROVED BY THE COATING MANUFACTURER. FLAME CUTTING OF EPOXY COATED REINFORCING WILL NOT BE PERMITTED.
16. NO TRAFFIC SHALL BE ALLOWED ON THE NEW SLAB UNTIL THE CURE PERIOD IS UP AND THE 28 DAY DESIGN STRENGTH IS ATTAINED, AS EVIDENCED BY TEST CYLINDERS CURED UNDER FIELD CONDITIONS. SEE STANDARD SPECIFICATION, SECTION 501.18.
17. TACK COAT: EMULSIFIED ASPHALT IS TO BE APPLIED AT A RATE OF 0.015 GAL/SY BETWEEN SUCCESSIVE COURSES OF PAVEMENT OR AS DIRECTED BY THE ENGINEER.
18. JOINTS AND SCORE MARKS IN CONCRETE SHALL BE CONSTRUCTED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
19. CONCRETE PORTIONS OF THE ABUTMENT AND WINGWALL ABOVE THE ADJACENT BRIDGE SEAT ELEVATIONS SHALL NOT BE PLACED UNTIL THE FINISHED GRADE HAS BEEN DETERMINED BY THE ENGINEER.
20. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68°F OR AS NOTED OTHERWISE.
21. NOT USED.
22. CONCRETE SLAB DECK SHALL RECEIVE A LIGHT BROOM FINISH NORMAL TO THE CENTER LINE.
23. TEMPORARY VEHICLE DETECTOR MUST BE A MICROWAVE TYPE OR OTHER THAT WILL NOT DAMAGE THE PAVEMENT. IN-PAVEMENT LOOPS WILL NOT BE ALLOWED.
24. EROSION AND SEDIMENT CONTROL PROCEDURES SHALL BE GOVERNED BY SECTION 105.
25. ALL WORK WILL BE PERFORMED WITHIN THE EXISTING R.O.W.

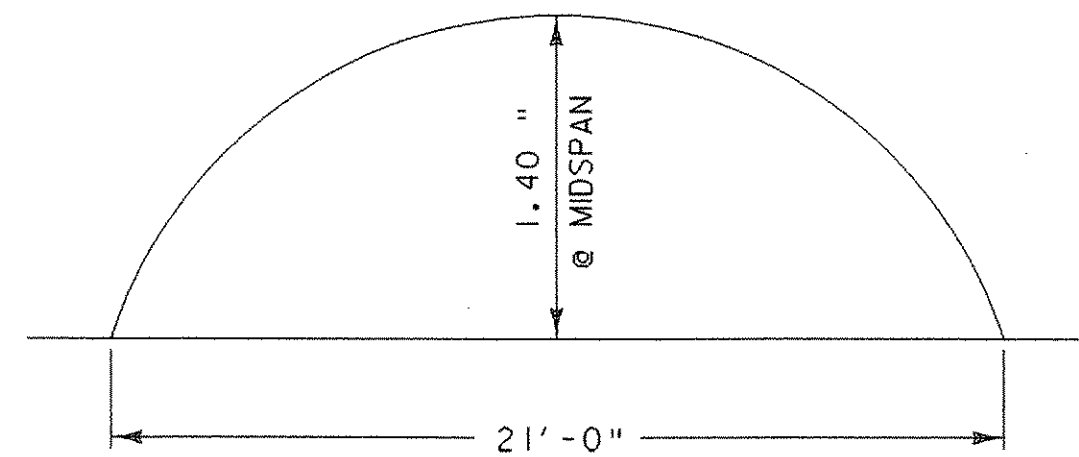
GENERAL NOTES

PROJECT NAME:	Fairfield
PROJECT NUMBER:	AC STP ST 0298(6)
FILE NAME: str5/01c182/sc182wrk.dgn	PLOT DATE: 28-APR-2005
PROJECT LEADER: C. Keller	DRAWN BY: J. Reed
DESIGNED BY: J. Reed	CHECKED BY: W.B. Symonds
sc182not.l	SHEET 21 OF 41



SLAB REINFORCING PLAN

SCALE 1/4" = 1'-0"
1 0 2 4 6

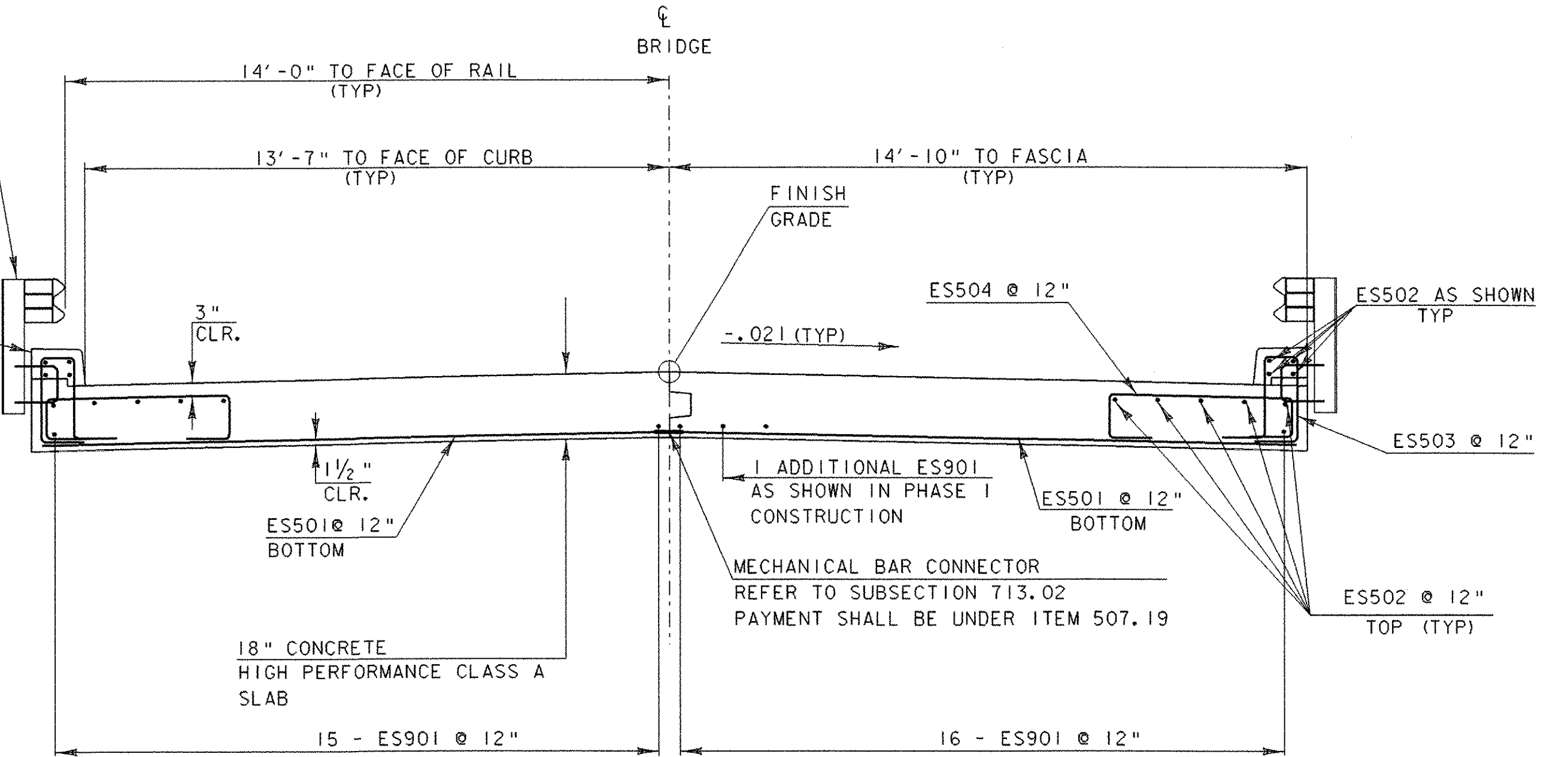


CAMBER DIAGRAM

nts

BRIDGE RAILING:
HDSB STEEL BEAM
FASCIA MOUNTED
STEEL TUBING
(TYP)
(SEE STD. SB-R7-90
AND STD. SB-R6-90)

CONCRETE CURB
HIGH PERFORMANCE
CLASS A

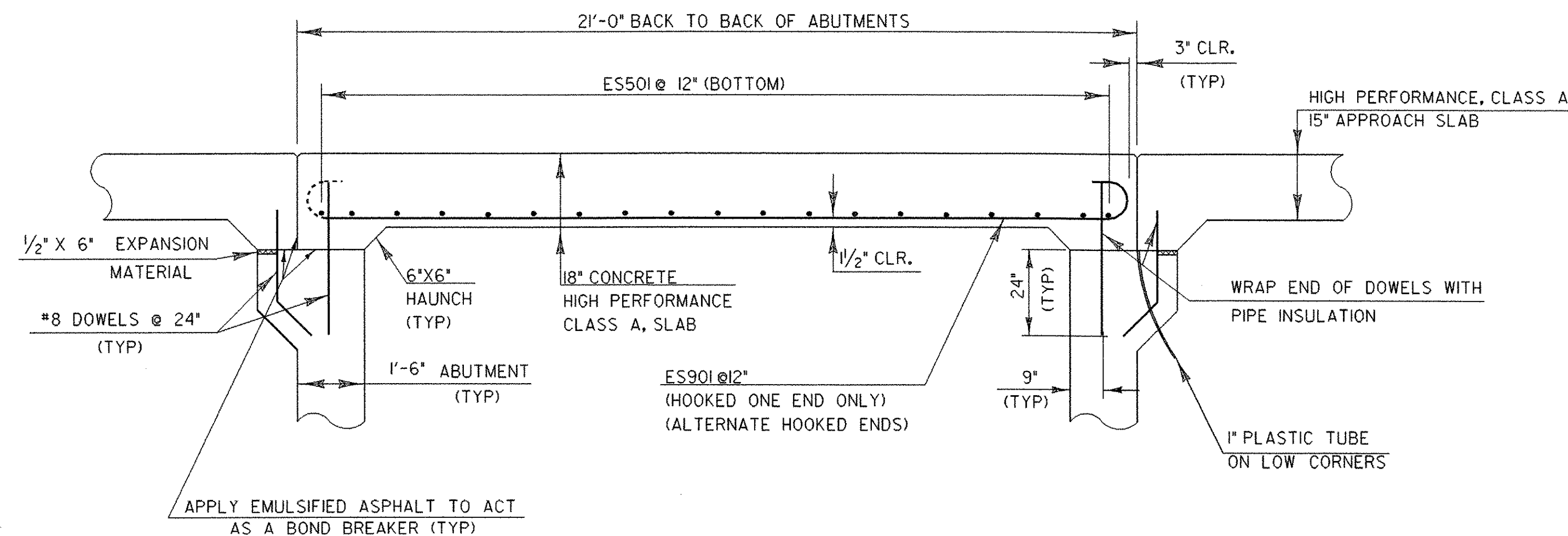


BRIDGE TYPICAL SECTION

SCALE 3/8" = 1'-0"
1 0 1 2 3 4

NOTES:

1. THE SLAB CAMBER SHALL APPROXIMATE A CIRCULAR CURVE.
2. COST OF PLASTIC TUBE, PIPE INSULATION AND ITS APPLICATION SHALL BE SUBSIDIARY TO CONCRETE HIGH PERFORMANCE, CLASS A.

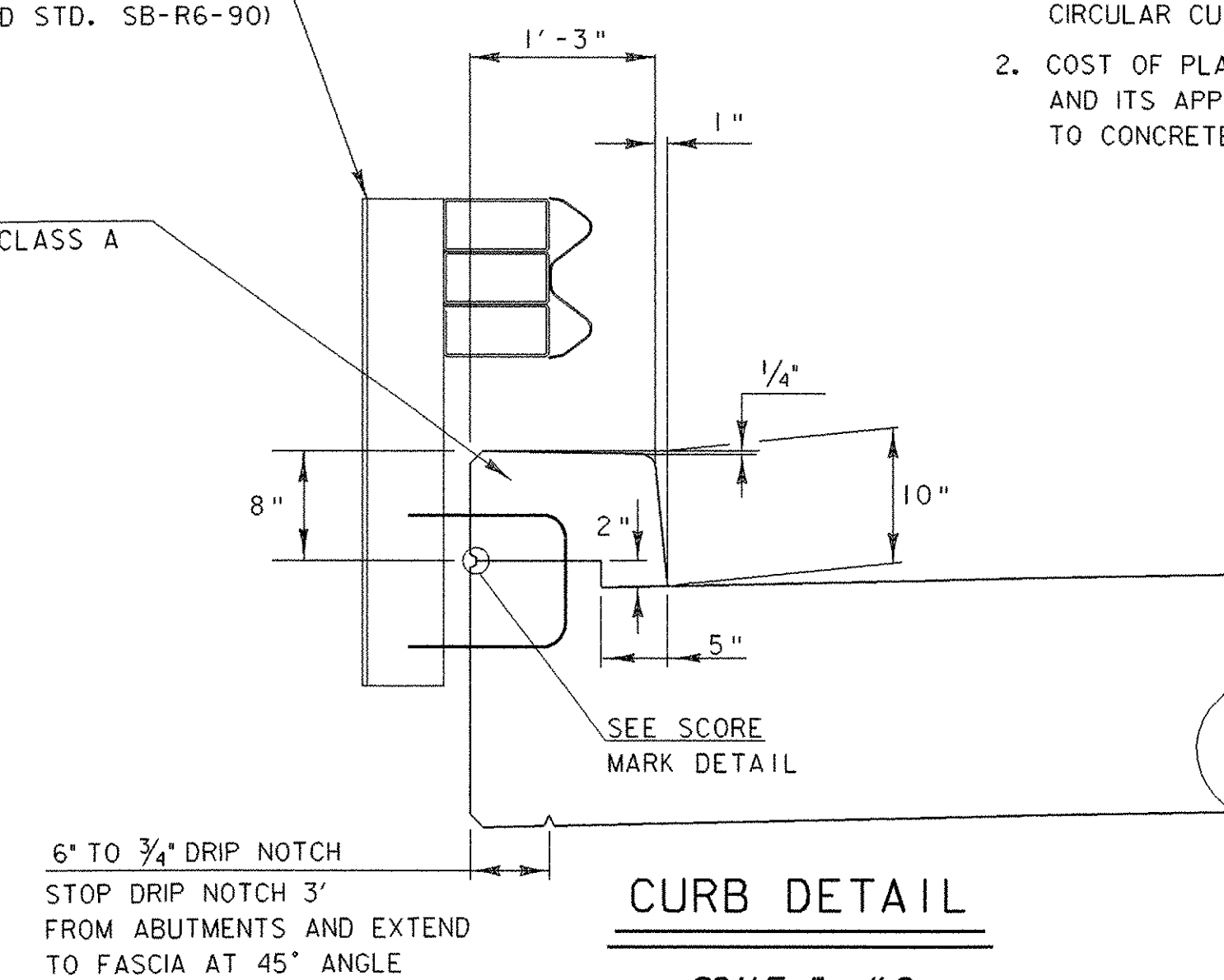


ELEVATION ALONG CL OF ROADWAY

SCALE 1/2" = 1'-0"
1 0 1 2

BRIDGE RAILING HEAVY DUTY STEEL BEAM
FASCIA MOUNTED (TYP)
(SEE STD. SB-R7-90 AND STD. SB-R6-90)

CONCRETE
HIGH PERFORMANCE CLASS A

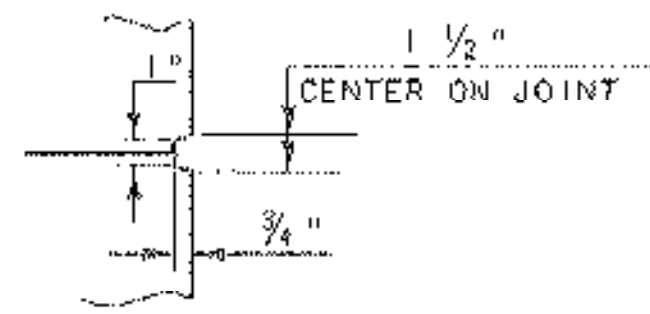


CURB DETAIL

SCALE 1" = 1'-0"
1 9 6 3 0 1 2

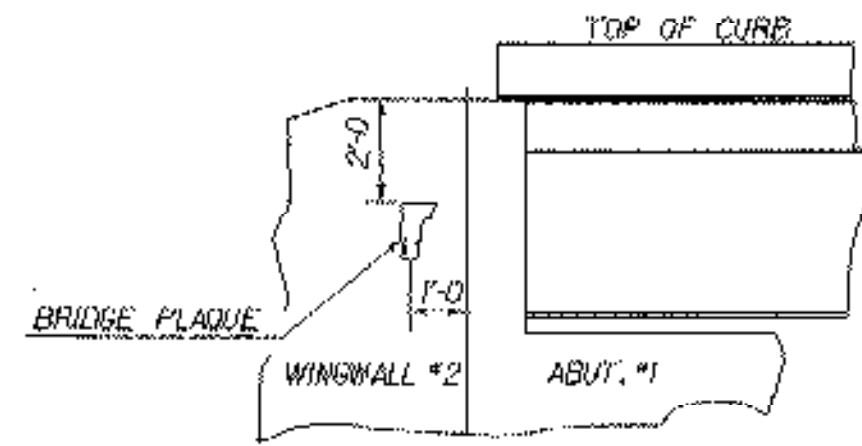
BRIDGE TYPICALS

PROJECT NAME:	FAIRFIELD	PLOT DATE:	28-APR-2005
PROJECT NUMBER:	AC STP ST 0298 (6)	DRAWN BY:	J. REED
FILE NAME:	str5/01cl182/sc182typ.dgn	DESIGNED BY:	J. REED
PROJECT LEADER:	C. KELLER	CHECKED BY:	W. B. SYMONDS
SC182br typ. i			SHEET 22 OF 41



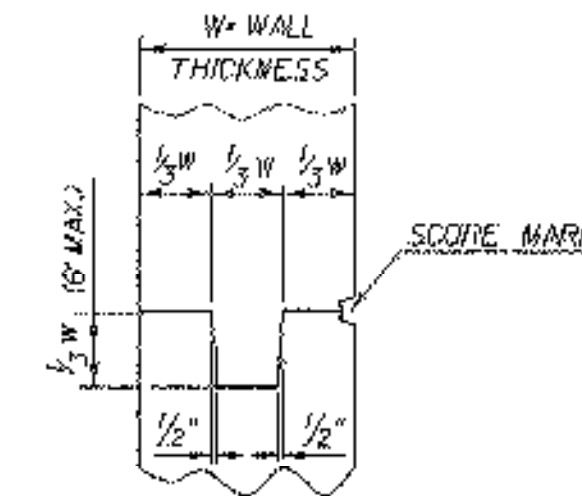
SCORE MARK DETAIL

NTS

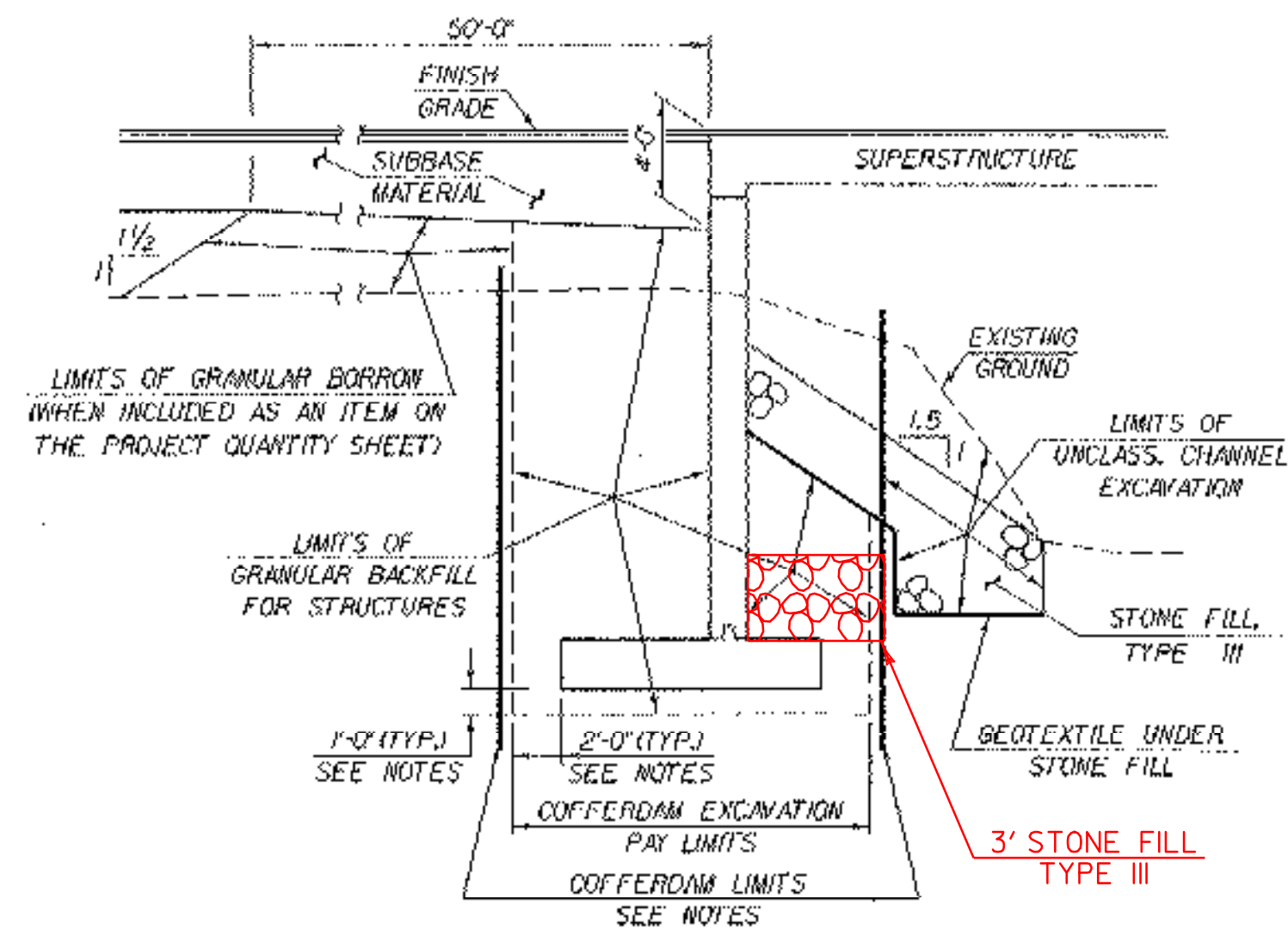


VIEW "A - A"
LOCATE BRIDGE PLAQUE

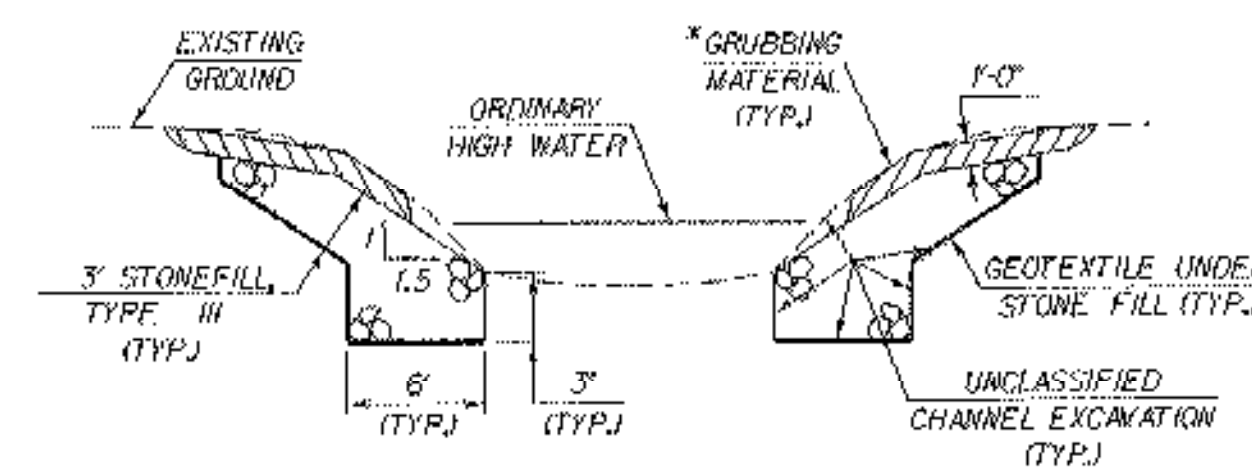
THE BRIDGE PLAQUE WILL BE SUPPLIED BY THE AGENCY OF TRANSPORTATION AND SHALL BE INSTALLED BY THE CONTRACTOR AT ABUTMENT #1 ON THE RIGHT SIDE AS SHOWN OR AS DIRECTED BY THE ENGINEER.



TYPICAL CONCRETE CONSTRUCTION JOINT



TYPICAL ABUTMENT SECTION
(NOT TO SCALE)



TYPICAL CHANNEL SECTION
(NOT TO SCALE)

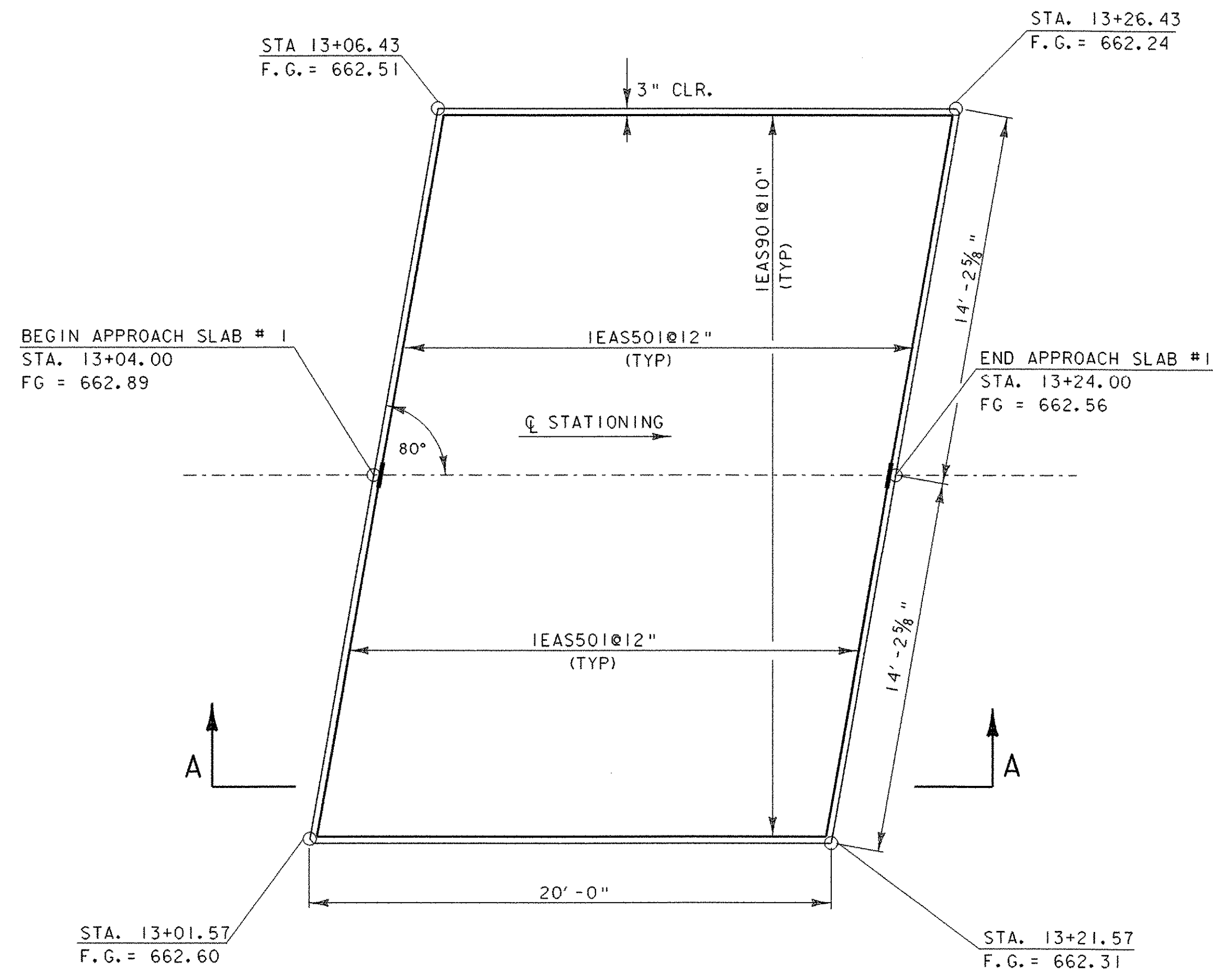
* GRUBBING MATERIAL SHALL NOT BE PLACED ON THE STONE FILL IN THE AREA UNDER THE BRIDGE.

NOTES

1. COFFERDAM LIMITS TO BE DETERMINED BY THE CONTRACTOR
2. FOR THE PURPOSE OF ESTIMATING EARTHWORK QUANTITIES, THE LIMITS OF COFFERDAM HAVE BEEN ASSUMED TO BE 2'-0" OUTSIDE THE PERIMETER OF THE FOOTING
3. ONE FOOT UNDERCUT AS DETERMINED NECESSARY BY THE ENGINEER
4. IF A COFFERDAM IS CONSTRUCTED WHICH IS MORE THAN THE INDICATED MINIMUM DISTANCE OUTSIDE THE FOOTING LIMITS, PAYMENT FOR ALL UNCLASSIFIED CHANNEL EXCAVATION INCLUDING THAT PORTION WHICH IS INSIDE THE COFFERDAM BUT OUTSIDE THE MINIMUM COFFERDAM LIMITS SHOWN WILL BE MADE AT THE CONTRACT UNIT PRICE FOR UNCLASSIFIED CHANNEL EXCAVATION.

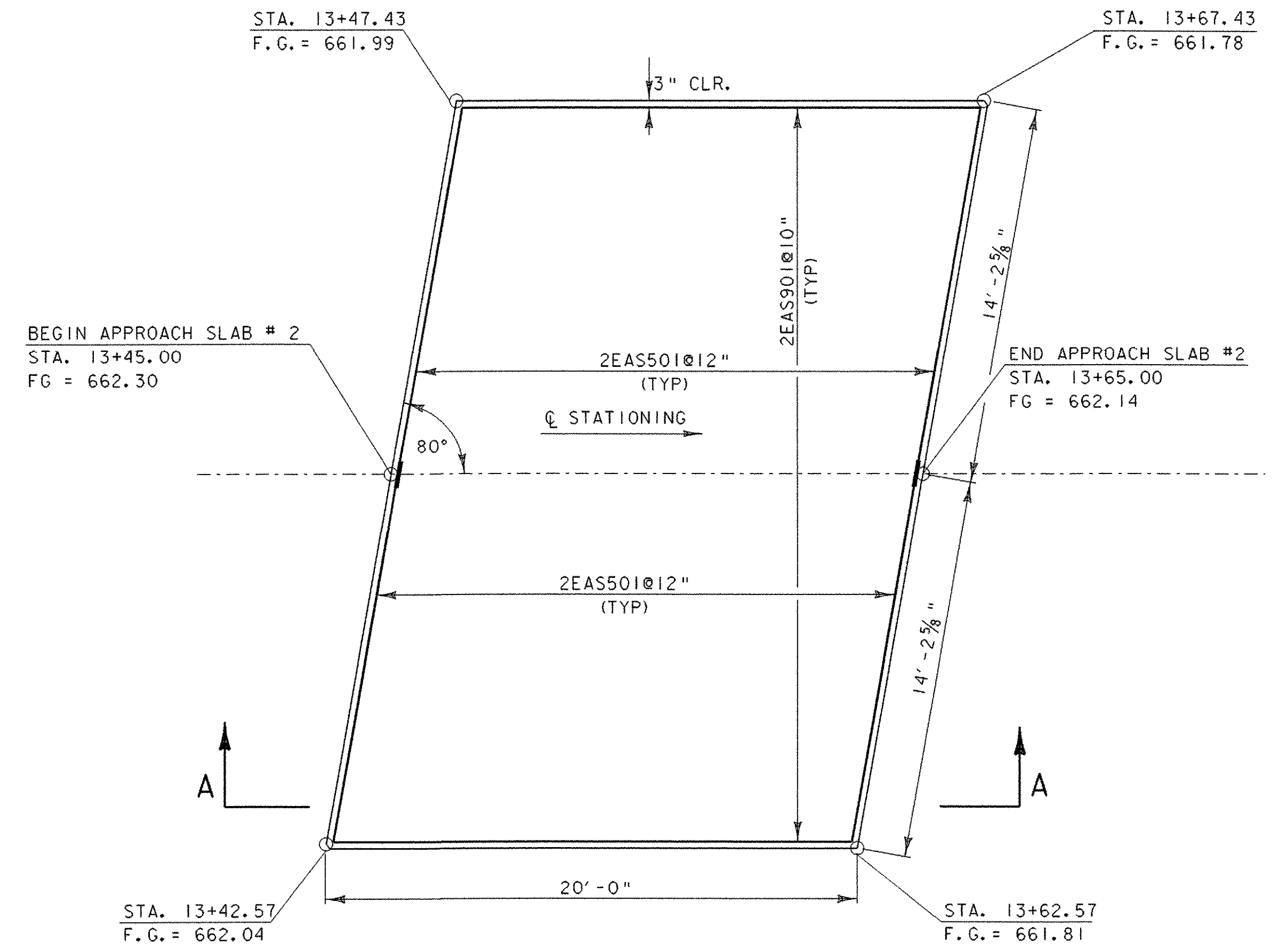
BRIDGE DETAILS

PROJECT NAME:	FAIRFIELD	FILE NAME:	str5/01c182/sq182typ.dgn	PLOT DATE:	28-APR-2005
PROJECT NUMBER:	AC STP ST 0298 (6)	PROJECT LEADER:	C. KELLER	DRAWN BY:	K. RUTTER
		DESIGNED BY:	J. REED	CHECKED BY:	W.B. SYMONDS
			sq182typ.d	SHEET	23 OF 41



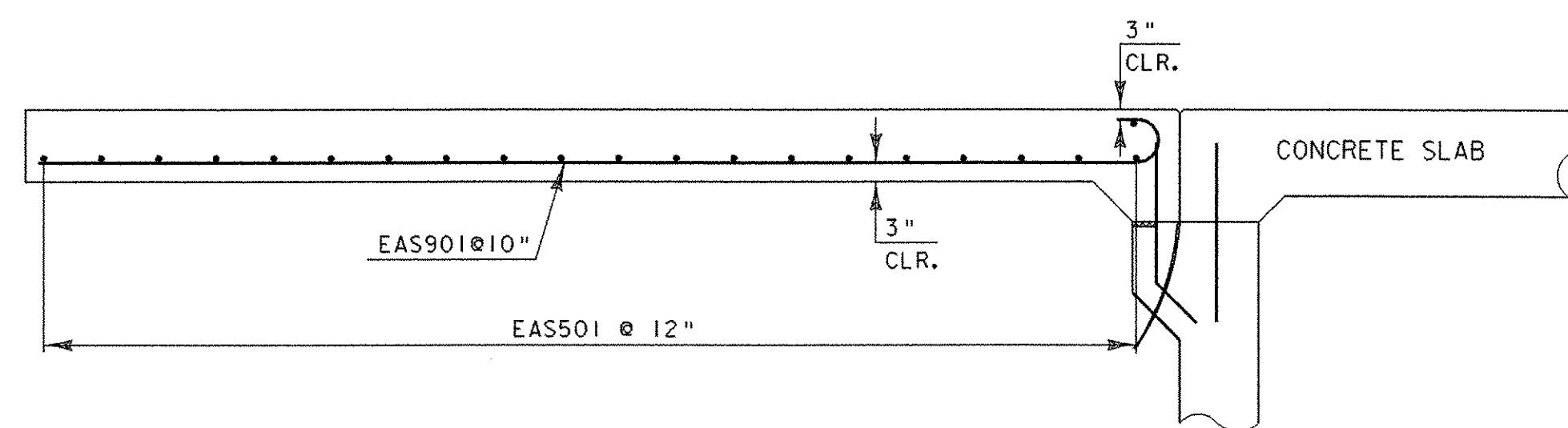
APPROACH SLAB #1 PLAN

SCALE 1/4" = 1'-0"
1 0 2 4 6



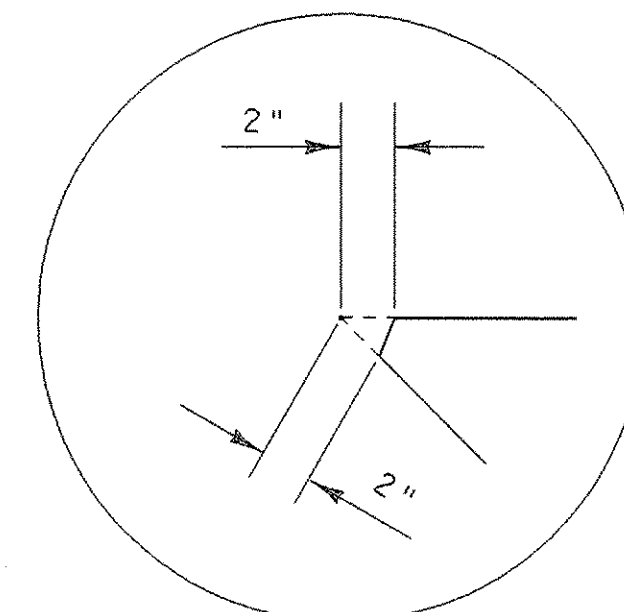
APPROACH SLAB #2 PLAN

SCALE 1/4" = 1'-0"
1 0 2 4 6

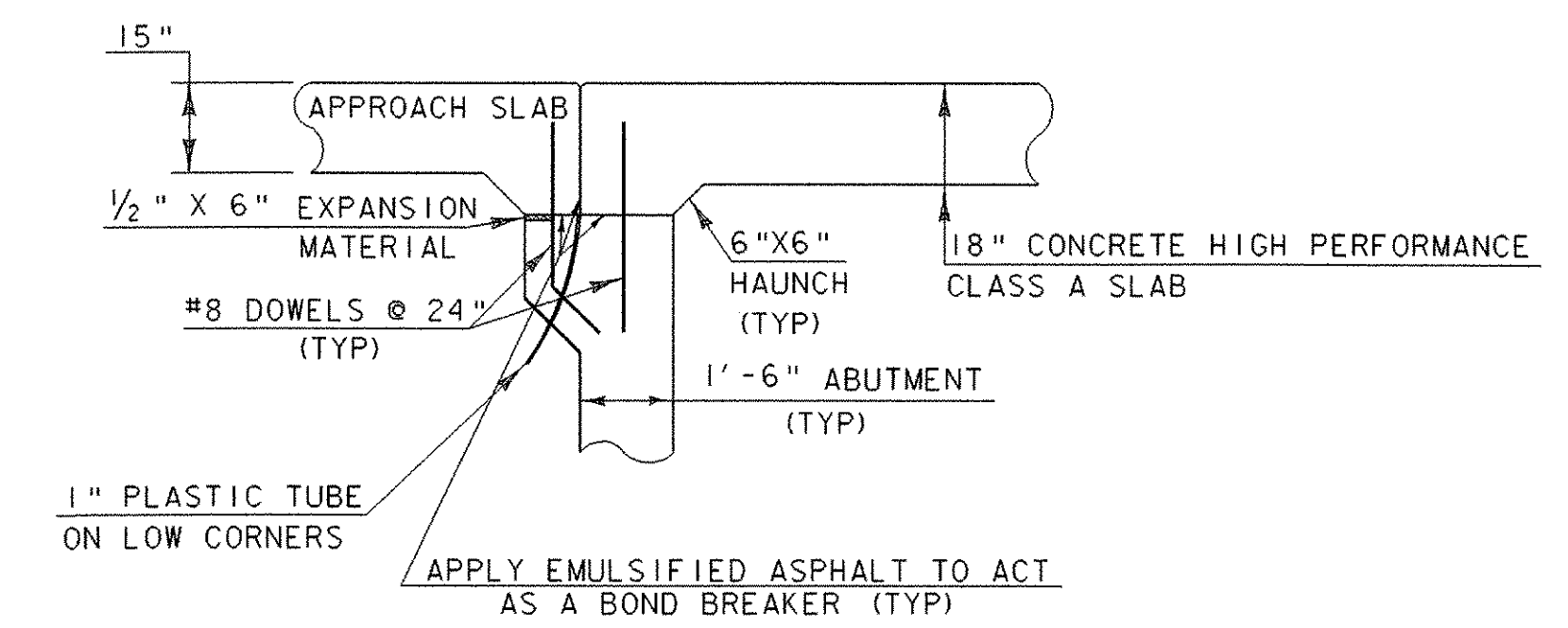


SECTION A-A

SCALE 3/8" = 1'-0"
1 0 1 2 3 4



CORNER DETAIL
(TYPICAL FOR ACUTE ANGLES ONLY)
NTS

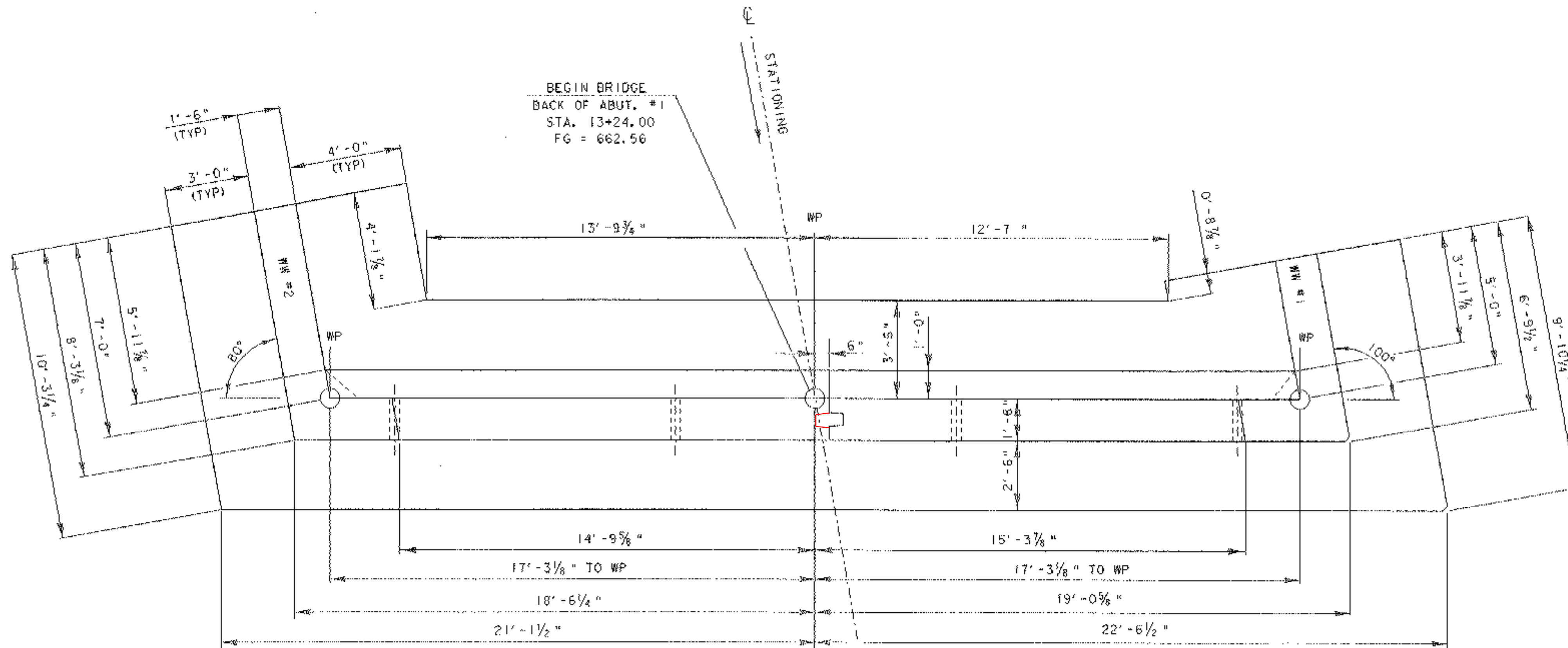


TYPICAL END SECTION

SCALE 3/8" = 1'-0"
1 0 1 2 3 4

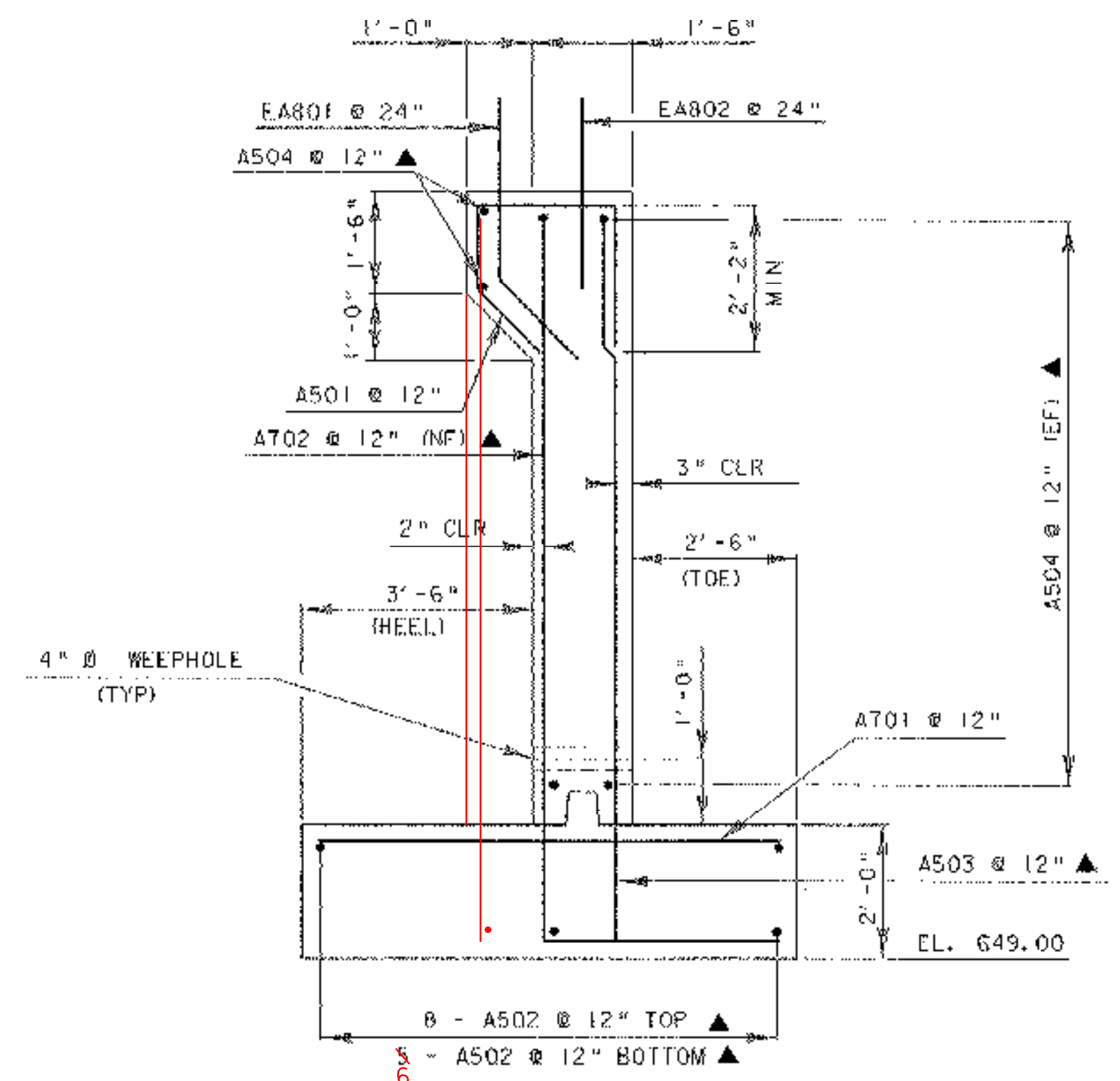
APPROACH SLAB

PROJECT NAME:	FAIRFIELD
PROJECT NUMBER:	AC STP ST 0298 (6)
FILE NAME:	str5/01cl82/scl82+typ.dgn
PROJECT LEADER:	C. KELLER
DESIGNED BY:	J. REED
PLLOT DATE:	28-APR-2005
DRAWN BY:	J. REED
CHECKED BY:	W. B. SYMONDS
FILE NAME:	scl82apslb.i
SHEET	24 OF 41



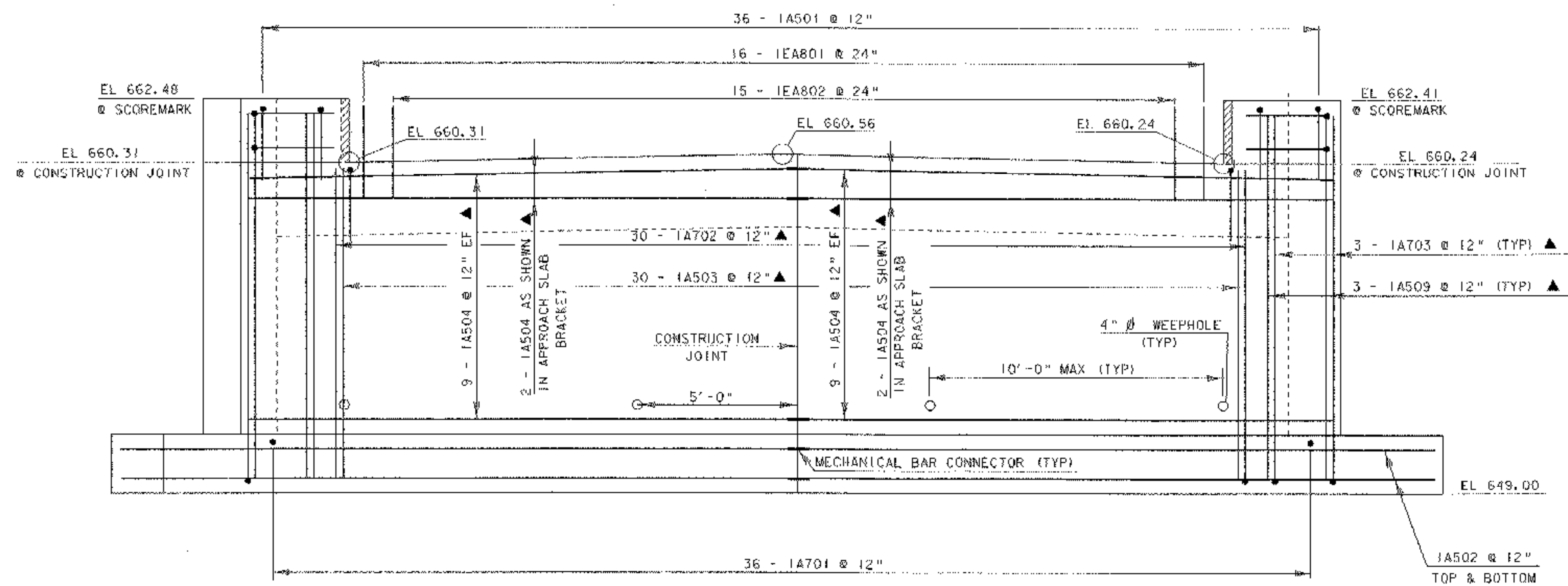
ABUTMENT #1 PLAN

SCALE 3/8" = 1'-0"
 1 0 1 2 3 4



TYPICAL ABUTMENT SECTION

SCALE 1/2" = 1'-0"
 1 0 1 2



ABUTMENT #1 ELEVATION

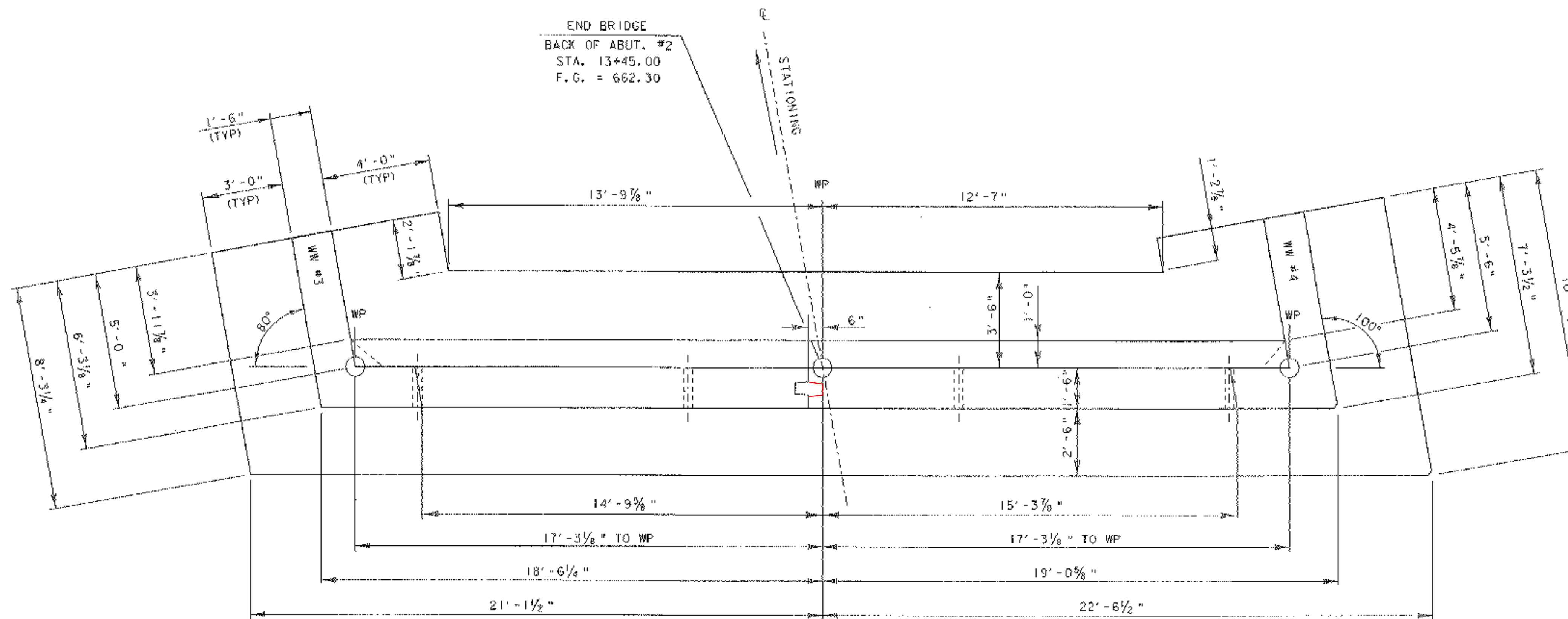
SCALE 3/8" = 1'-0"
 1 0 1 2 3 4

NOTE:

- NF = NEAR FACE
- FF = FAR FACE
- EF = EACH FACE
- ▲ = CUT TO FIT IN FIELD
- 3" CLR. UNLESS OTHERWISE SPECIFIED ON THE PLANS.
- ALL LAPS ARE 2'-2" UNLESS OTHERWISE NOTED.

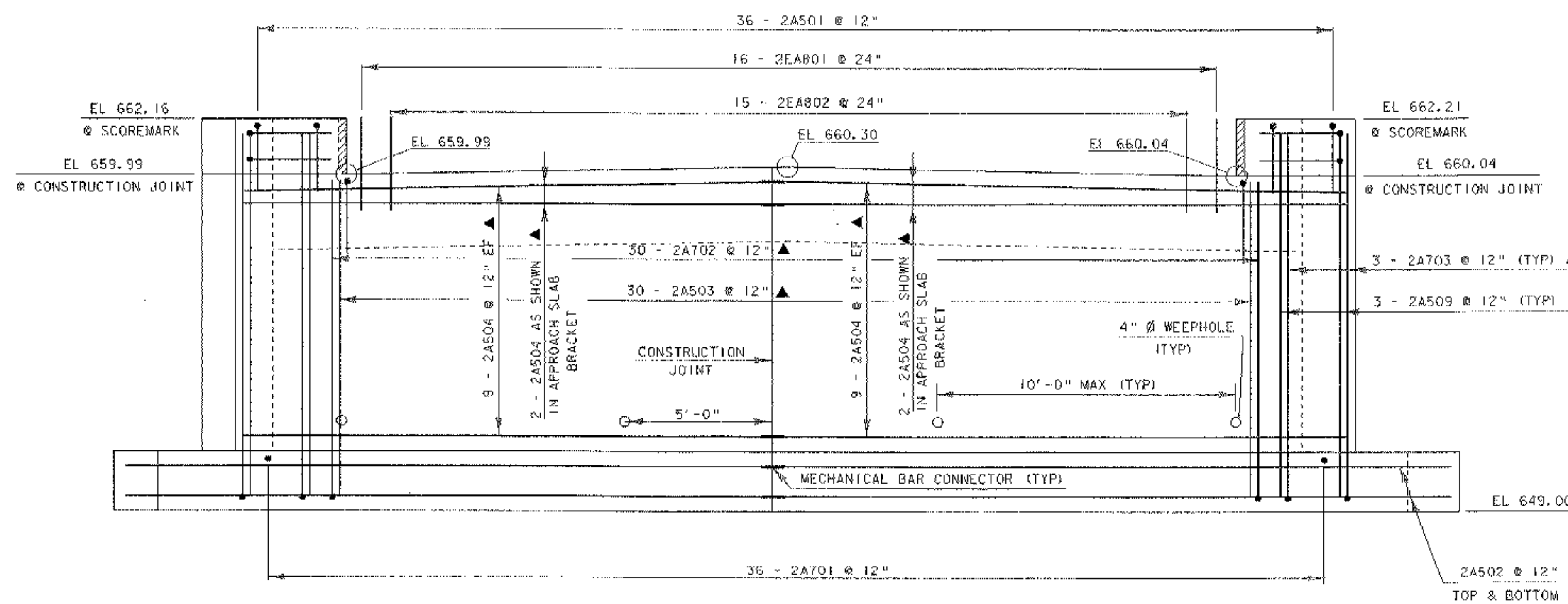
**ABUTMENT DETAIL:
 ABUTMENT #1**

PROJECT NAME:	FAIRFIELD	PLOT DATE:	28-APR-2005
PROJECT NUMBER:	AC STP ST 0298 (6)	DRAWN BY:	K. RUTTER
FILE NAME:	/s/r/5/010182/scf182sub.dgn	CHECKED BY:	M.B. SYMONDS
PROJECT LEADER:	C. KELLER	SHEET	25 OF 41
DESIGNED BY:	K. RUTTER		



ABUTMENT #2 PLAN

SCALE 3/8" = 1'-0"
 1 0 1 2 3 4



ABUTMENT #2 ELEVATION

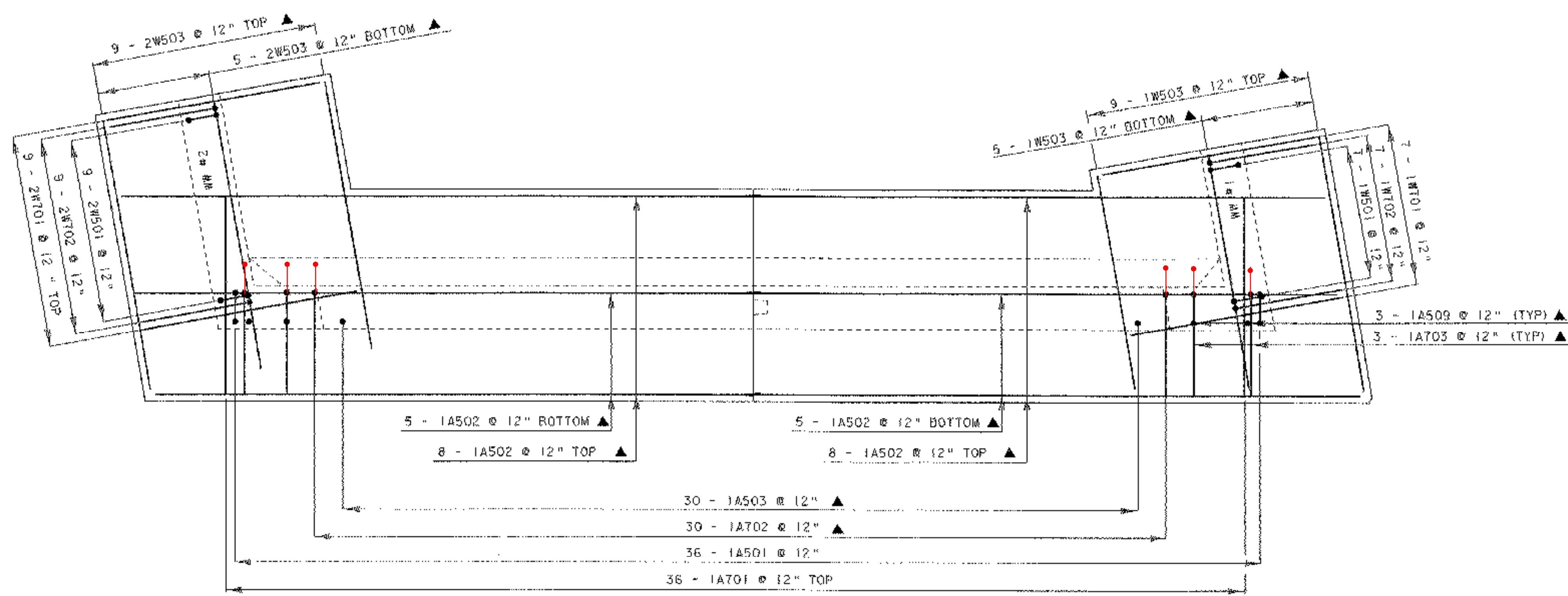
SCALE 3/8" = 1'-0"
 1 0 1 2 3 4

NOTE:

- NF = NEAR FACE
- FF = FAR FACE
- EF = EACH FACE
- ▲ = CUT TO FIT IN FIELD
- 3" CLR. UNLESS OTHERWISE SPECIFIED ON THE PLANS.
- ALL LAPS ARE 2'-2" UNLESS OTHERWISE NOTED.

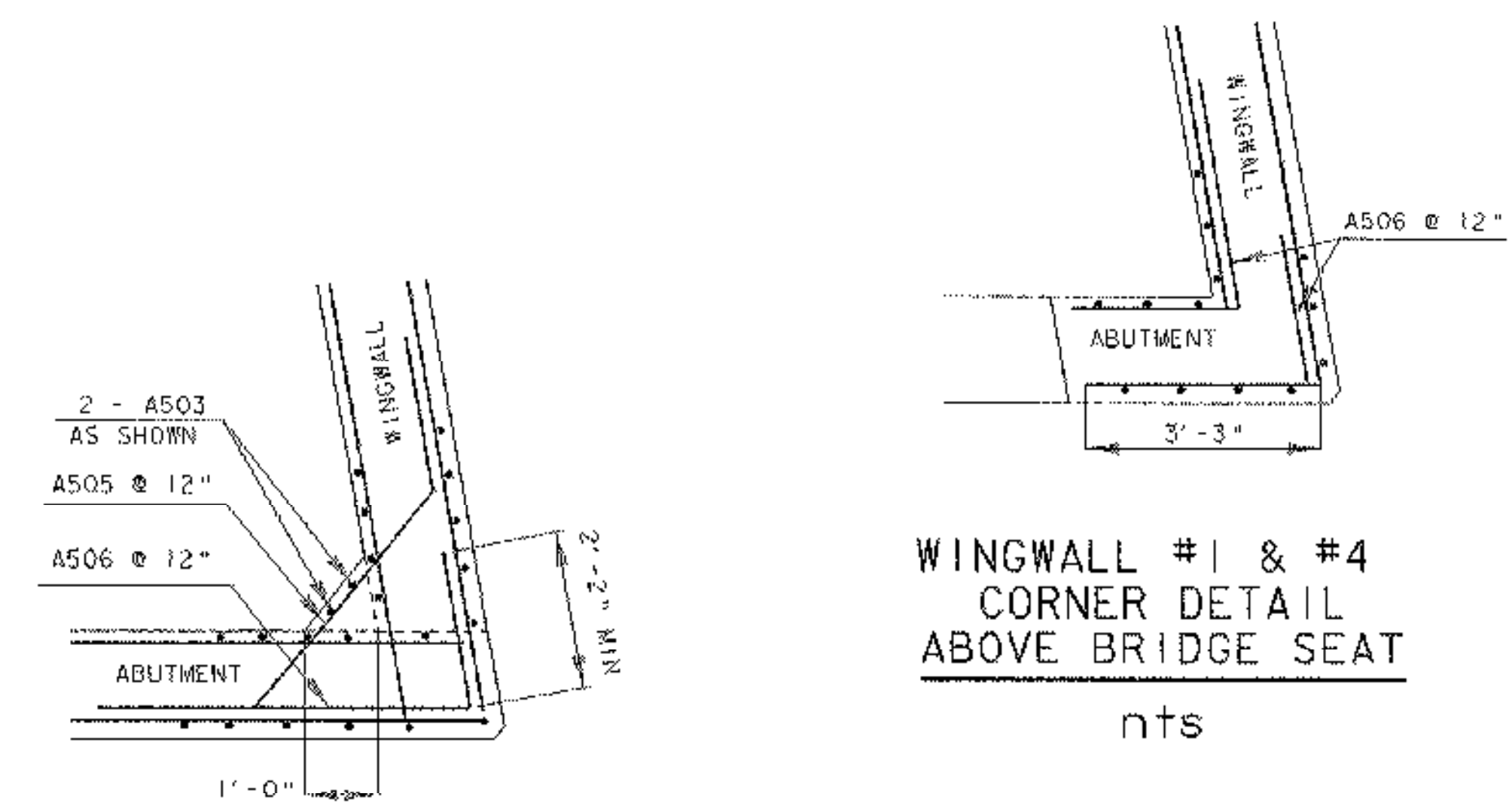
**ABUTMENT DETAIL:
 ABUTMENT #2**

PROJECT NAME:	FAIRFIELD	PLOT DATE:	28-APR-2005
PROJECT NUMBER:	AC STP ST 0298 (6)	DRAWN BY:	K. RUTTER
FILE NAME:	/s1r5/01c182/sc182sub.dgn	CHECKED BY:	W.B. SYMONDS
PROJECT LEADER:	C. KELLER	SHEET	26 OF 41
DESIGNED BY:	K. RUTTER		



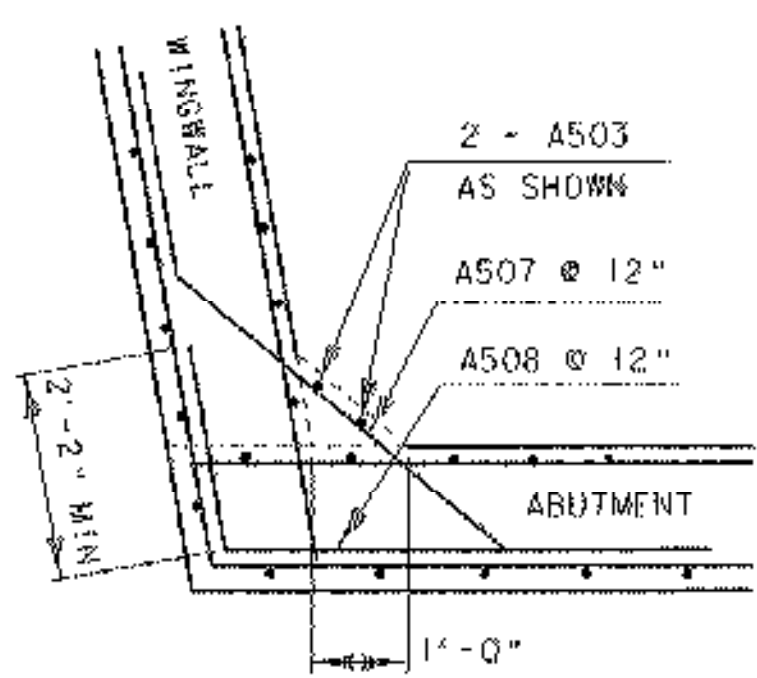
ABUTMENT # 1 PLAN

SCALE 3/8" = 1'-0"
 1 0 1 2 3 4



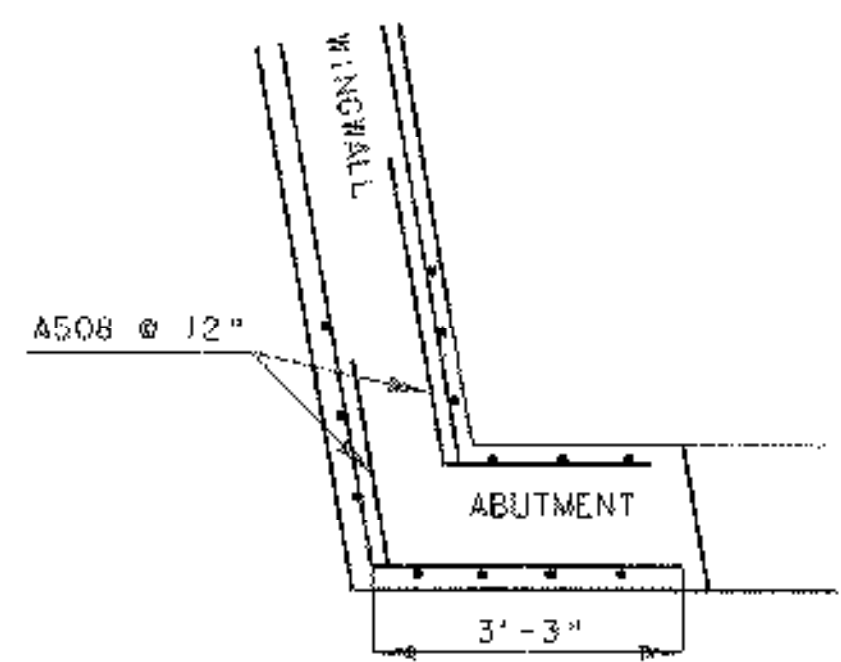
WINGWALL #1 & #4
 CORNER DETAIL
 BELOW BRIDGE SEAT

nts



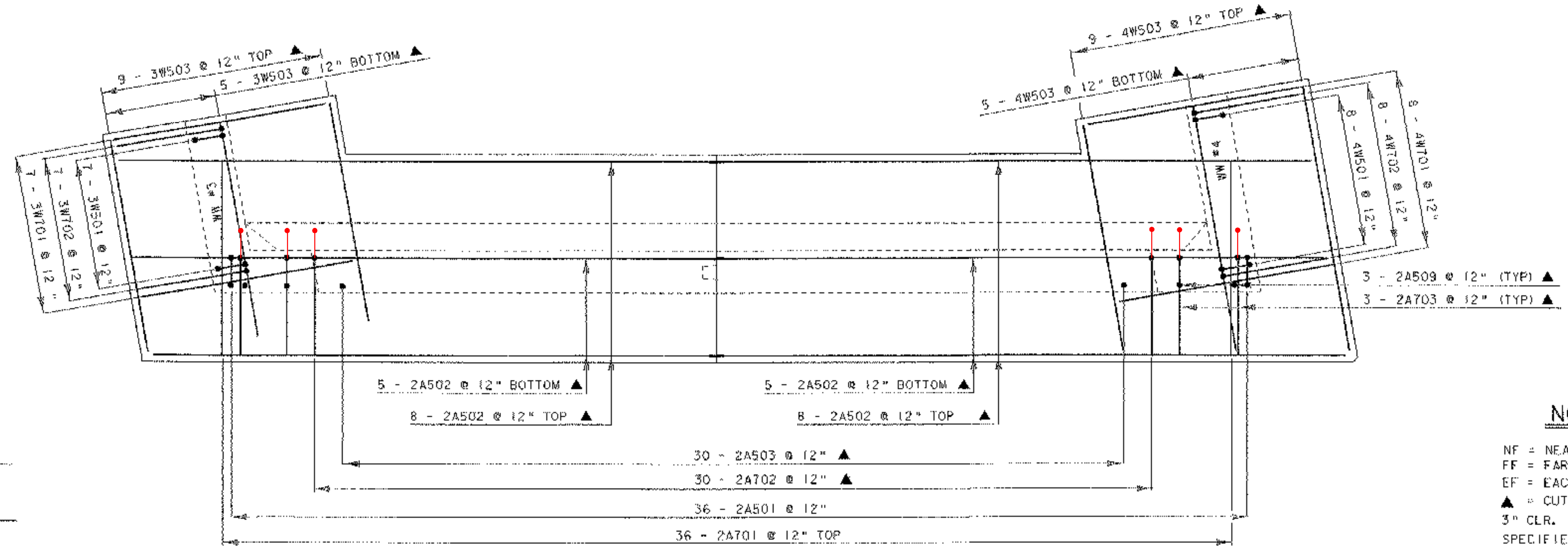
WINGWALL #2 & #3
 CORNER DETAIL
 BELOW BRIDGE SHEET

nts



WINGWALL #2 & #3
 CORNER DETAIL
 ABOVE BRIDGE SEAT

nts



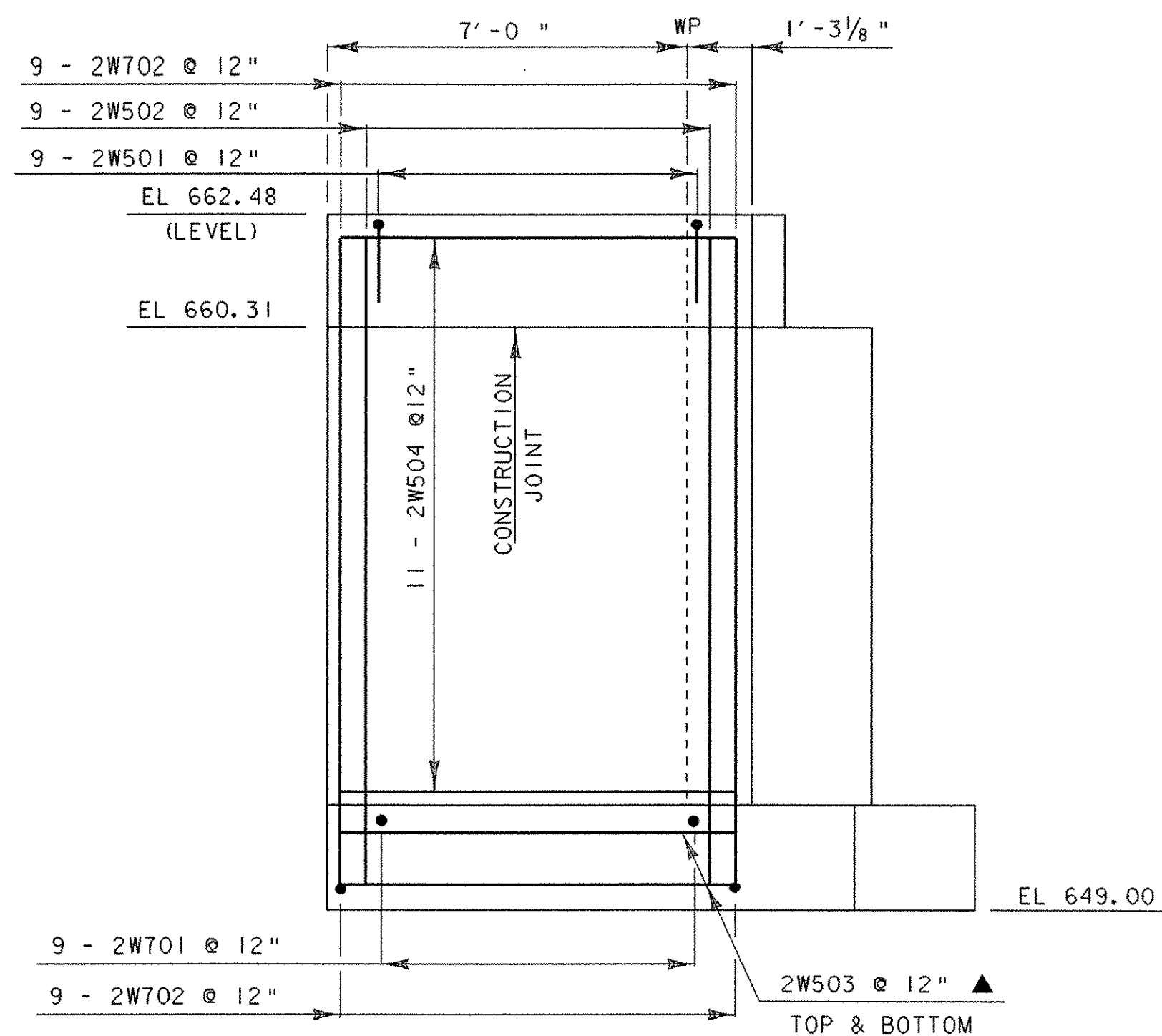
ABUTMENT # 2 PLAN

SCALE 3/8" = 1'-0"
 1 0 1 2 3 4

NOTE:
 NF = NEAR FACE
 FF = FAR FACE
 EF = EACH FACE
 ▲ = CUT TO FIT IN FIELD
 3" CLR. UNLESS OTHERWISE
 SPECIFIED ON THE PLANS.
 ALL LAPS ARE 2'-2" UNLESS
 OTHERWISE NOTED.

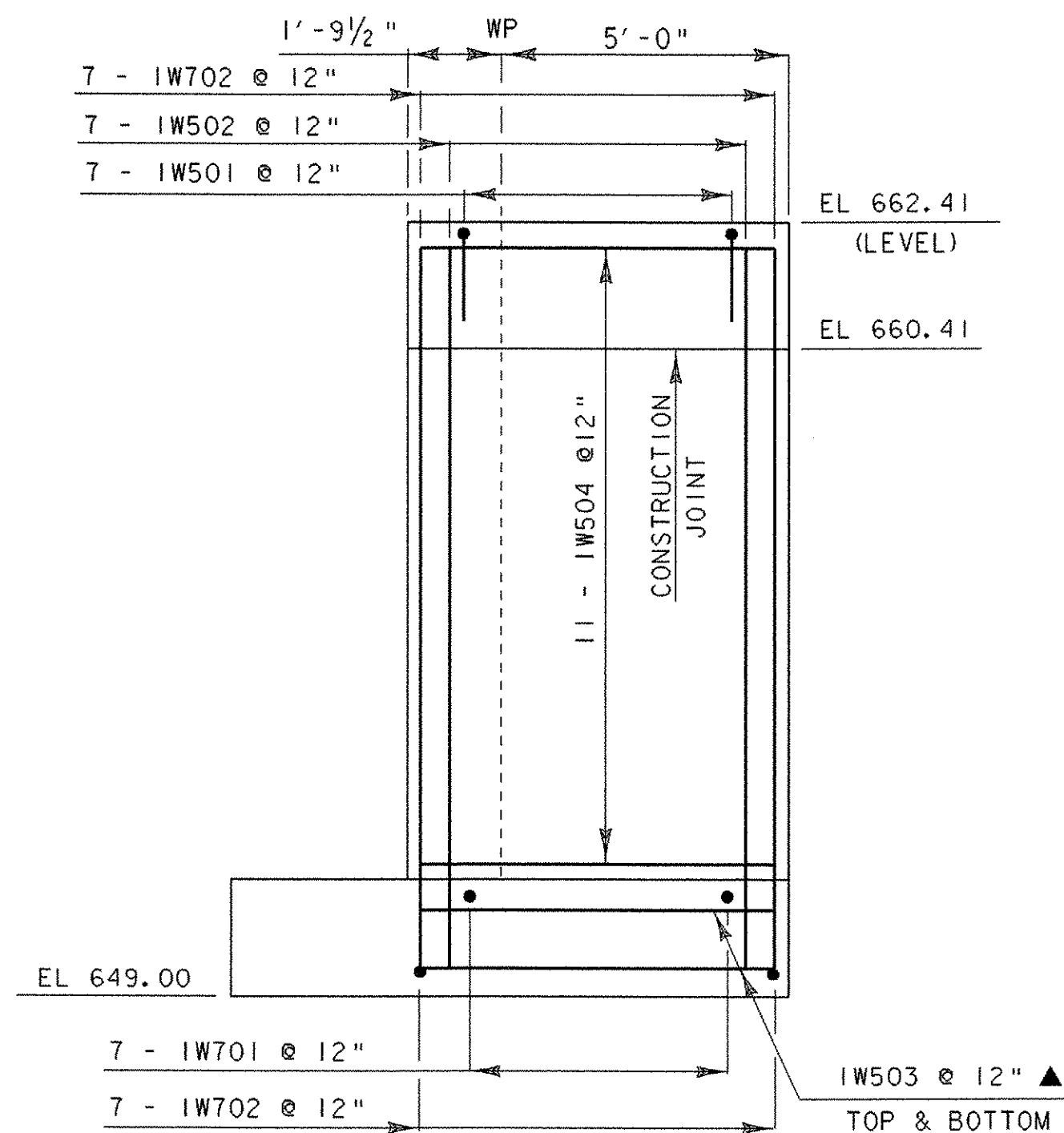
ABUTMENT REINFORCING DETAILS

PROJECT NAME:	FAIRFIELD
PROJECT NUMBER:	AC STP ST 0298 (6)
FILE NAME:	/str5/01c182/sc182sub.dgn
PROJECT LEADER:	C. KELLER
DESIGNED BY:	K. RUTTER
PL01 DATE:	28-APR-2005
DRAWN BY:	K. RUTTER
CHECKED BY:	W. B. SYMONDS
sc182subbr.s.1	SHEET 27 OF 41



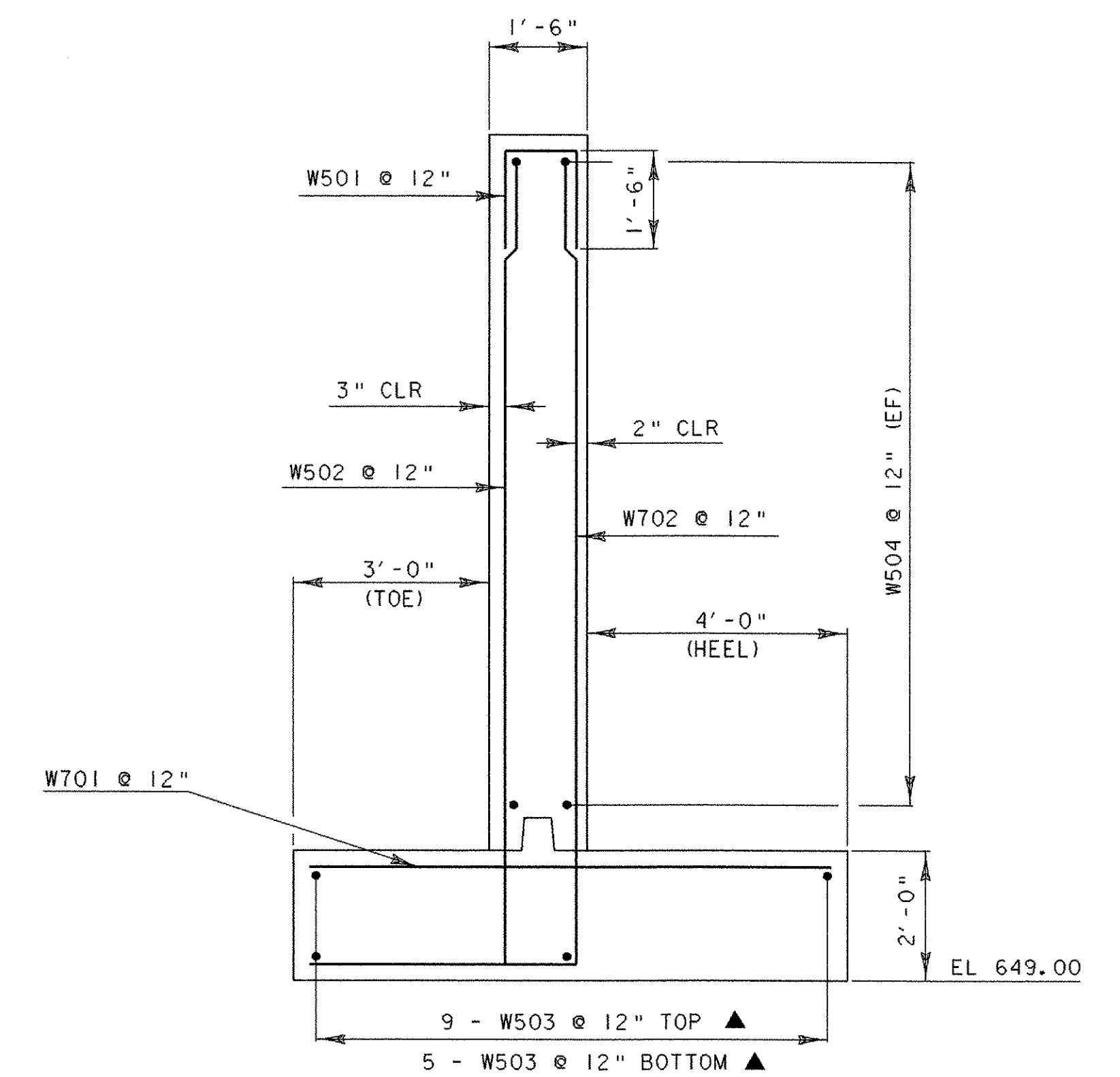
WINGWALL #2 ELEVATION

SCALE 3/8" = 1'-0"
 1 0 1 2 3 4



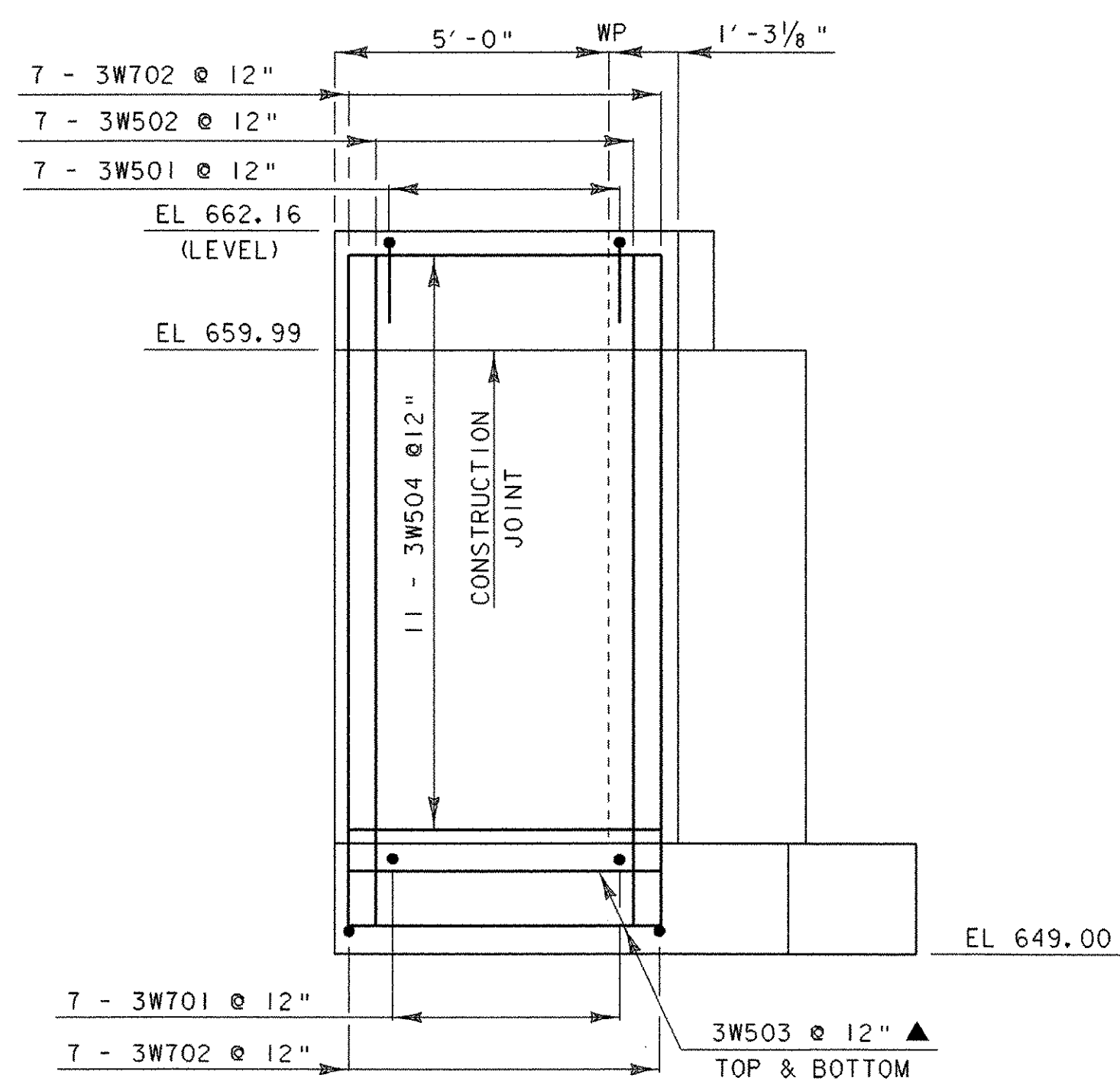
WINGWALL #1 ELEVATION

SCALE 3/8" = 1'-0"
 1 0 1 2 3 4



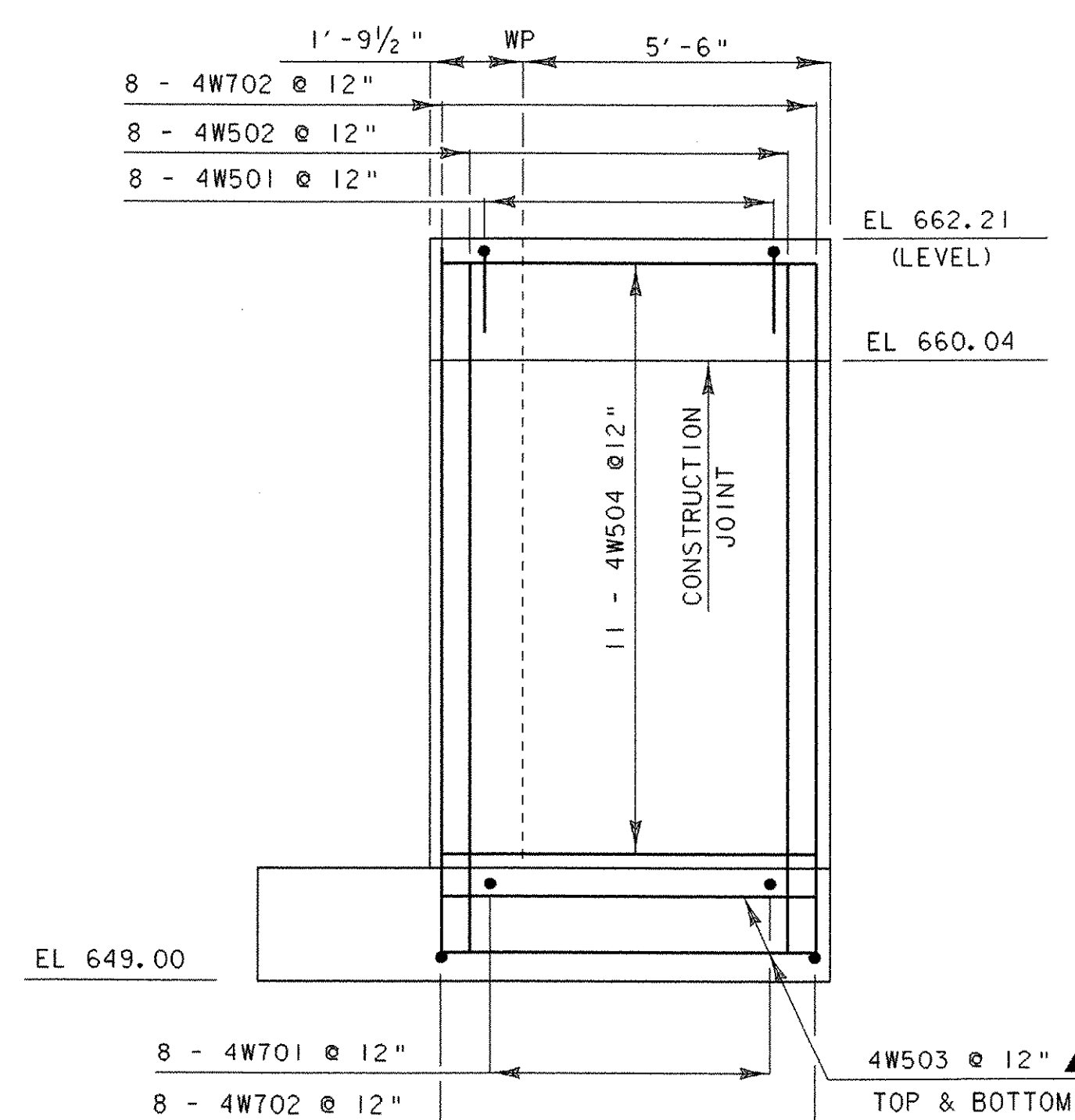
TYPICAL WINGWALL SECTION

SCALE 1/2" = 1'-0"
 1 0 1 2



WINGWALL #3 ELEVATION

SCALE 3/8" = 1'-0"
 1 0 1 2 3 4



WINGWALL #4 ELEVATION

SCALE 3/8" = 1'-0"
 1 0 1 2 3 4

NOTE:

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- FF = FAR FACE
- EF = EACH FACE
- ▲ = CUT TO FIT IN FIELD
- 3" CLR. UNLESS OTHERWISE SPECIFIED ON THE PLANS.
- ALL LAPS ARE 2'-2" UNLESS OTHERWISE NOTED.

WINGWALL DETAILS

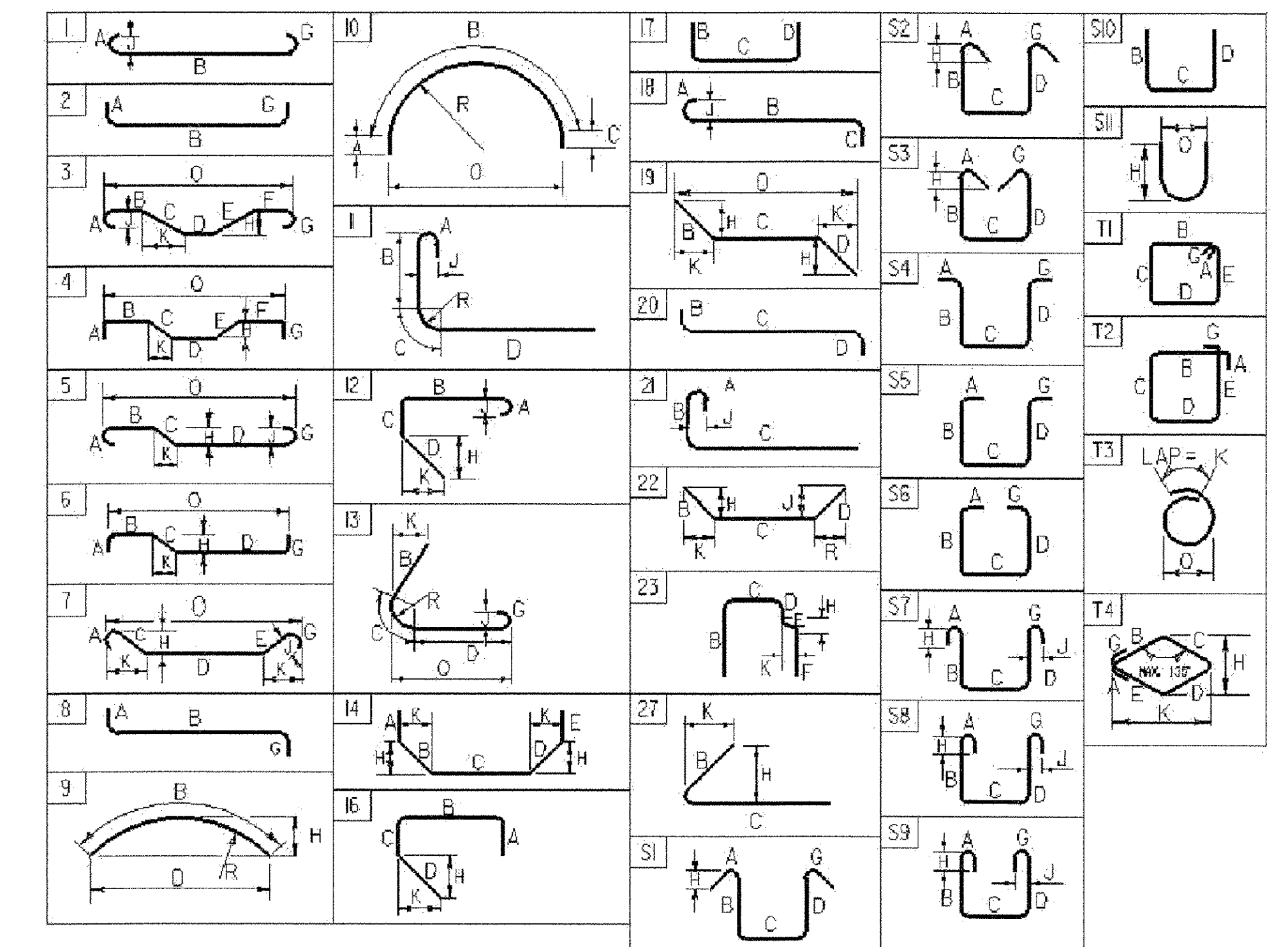
PROJECT NAME:	FAIRFIELD	PLOT DATE:	28-APR-2005
PROJECT NUMBER:	AC STP ST 0298 (6)	DRAWN BY:	K. RUTTER
FILE NAME:	/str5/01c182/sc182sub.dgn	CHECKED BY:	W.B. SYMONDS
PROJECT LEADER:	C. KELLER	SHEET	28 OF 41
DESIGNED BY:	K. RUTTER		

REINFORCING STEEL SCHEDULE

EACH	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O	ITEM	EACH	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O		
DECK																	WINGWALL 3																			
	42	5	14'- 7"	ES501	STR												7	5	4'- 0"	3W501	S10		1'- 6"	1'- 0"	1'- 6"											
*	19	5	20'- 6"	ES502	STR												7	5	12'- 8"	3W502	STR															
	42	5	6'- 2"	ES503	S5	1'- 0"	1'- 10"	0'- 8"	1'- 8"							1'- 0"	14	5	7'- 9"	3W503	STR	▲														
	42	5	8'- 8"	ES504	S6	1'- 0"	1'- 1"	4'- 6"	1'- 1"							1'- 0"	22	5	5'- 9"	3W504	STR															
*	32	9	21'- 9"	ES901	1	1'- 3"	20'- 6"						0'- 11"				*	8	7	8'- 0"	3W701	STR														
																	7	7	16'- 8"	3W702	17		4'- 0"	12'- 8"												
APPROACH SLAB 1																	WINGWALL 4																			
*	43	5	13'- 11"	1EA501	STR												8	5	4'- 0"	4W501	S10		1'- 6"	1'- 0"	1'- 6"											
	29	9	20'- 8"	1EA501	1	1'- 3"	19'- 5"						0'- 11"				8	5	12'- 9"	4W502	STR															
																	14	5	9'- 8"	4W503	STR	▲														
																	22	5	6'- 9"	4W504	STR															
APPROACH SLAB 2																	WINGWALL 4																			
	42	5	13'- 11"	2EA501	STR												*	8	7	8'- 0"	4W701	STR														
*	30	9	20'- 8"	2EA501	1	1'- 3"	19'- 5"						0'- 11"				9	7	16'- 9"	4W702	17		4'- 0"	12'- 9"												
ABUTMENT 1																																				
	36	5	7'- 10"	1A501	16	2'- 7"	2'- 1"	1'- 2"	2'- 0"																											
	26	5	22'- 0"	1A502	STR	▲																														
*	35	5	11'- 0"	1A503	STR	▲																														
	40	5	22'- 0"	1A504	STR	▲																														
	9	5	8'- 7"	1A505	22		2'- 2"	4'- 3"	2'- 2"			1'- 8"	1'- 8"	1'- 5"	1'- 5"																					
	13	5	5'- 5"	1A506	22		3'- 3"	2'- 2"	0'- 0"			2'- 2"	0'- 0"	2'- 2"	0'- 0"																					
	9	5	9'- 4"	1A507	22		2'- 2"	5'- 0"	2'- 2"			1'- 5"	1'- 5"	1'- 8"	1'- 8"																					
	13	5	4'- 4"	1A508	22		3'- 3"	2'- 2"	0'- 0"			2'- 2"	0'- 0"	2'- 2"	0'- 0"																					
	6	5	13'- 3"	1A509	STR																															
	36	7	7'- 0"	1A701	STR																															
	30	7	14'- 6"	1A702	17		3'- 6"	▲																												
	6	7	16'- 9"	1A703	17		3'- 6"	▲																												
*	17	8	3'- 6"	1EA801	22		1'- 0"	2'- 6"	0'- 0"																											
*	16	8	2'- 6"	1EA802	STR																															
WINGWALL 1																																				
	7	5	4'- 0"	1W501	S10																															
*	8	5	12'- 11"	1W502	STR																															
	14	5	9'- 4"	1W503	STR	▲																														
	22	5	6'- 3"	1W504	STR																															
	7	7	8'- 0"	1W701	STR																															
	7	7	16'- 11"	1W702	17		4'- 0"	12'- 11"																												
WINGWALL 2																																				
	9	5	4'- 0"	2W501	S10																															
	9	5	13'- 0"	2W502	STR																															
	14	5	9'- 9"	2W503	STR	▲																														
	22	5	7'- 9"	2W504	STR																															
	9	7	8'- 0"	2W701	STR																															
*	10	7	17'- 0"	2W702	17		4'- 0"	13'- 0"																												
ABUTMENT 2																																				
	36	5	7'- 10"	2A501	16	2'- 7"	2'- 1"	1'- 2"	2'- 0"																											
	26	5	22'- 0"	2A502	STR	▲																														
	34	5	11'- 0"	2A503	STR	▲																														
	40	5	22'- 0"	2A504	STR	▲																														
	9	5	8'- 7"	2A505	22		2'- 2"	4'- 3"	2'- 2"			1'- 8"	1'- 8"	1'- 5"	1'- 5"																					
	13	5	4'- 4"	2A506	22		2'- 2"	2'- 2"	0'- 0"			2'- 2"	0'- 0"	2'- 2"	0'- 0"																					
	9	5	9'- 4"	2A507	22		2'- 2"	5'- 0"	2'- 2"			1'- 5"	1'- 5"	1'- 8"	1'- 8"																					
	13	5	4'- 4"	2A508	22		2'- 2"	2'- 2"	0'- 0"			2'- 2"	0'- 0"	2'- 2"	0'- 0"																					
	6	5	13'- 3"	2A509	STR																															
	36	7	7'- 0"	2A701	STR																															
	30	7	14'- 6"	2A702	17		3'- 6"	▲																												
	6	7	16'- 9"	2A703	17		3'- 6"	▲																												
*	17	8	3'- 6"	2EA801	22		1'- 0"	2'- 6"	0'- 0"																											
*	16	8	2'- 6"	2EA802	STR																															

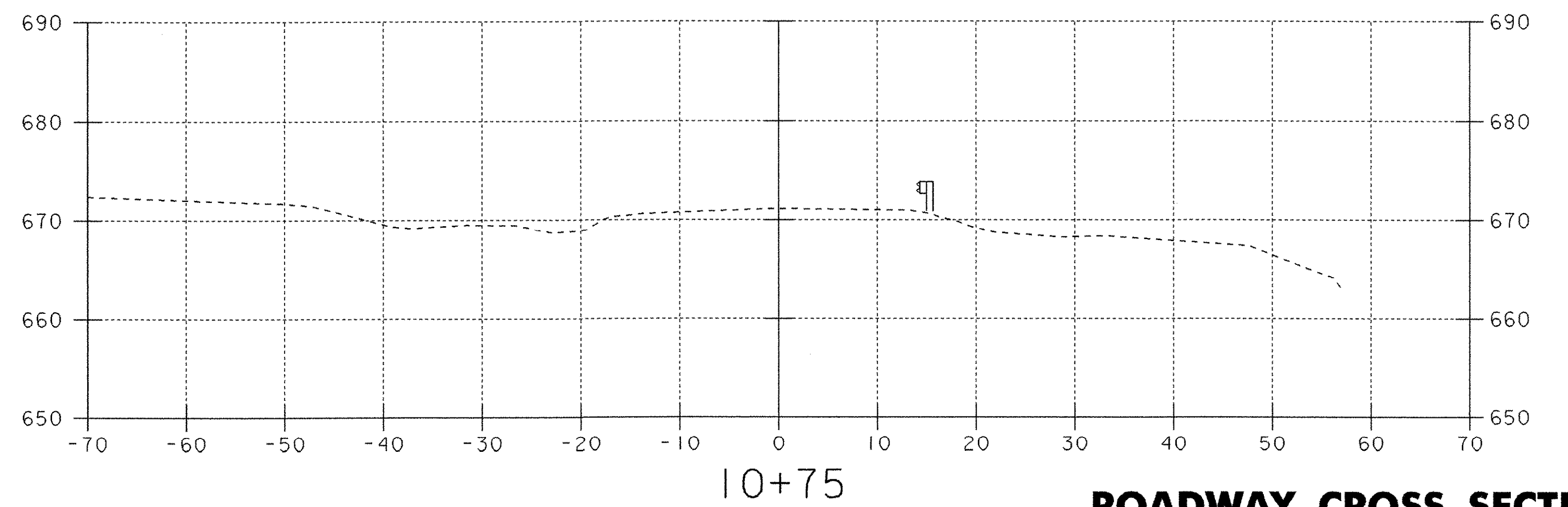
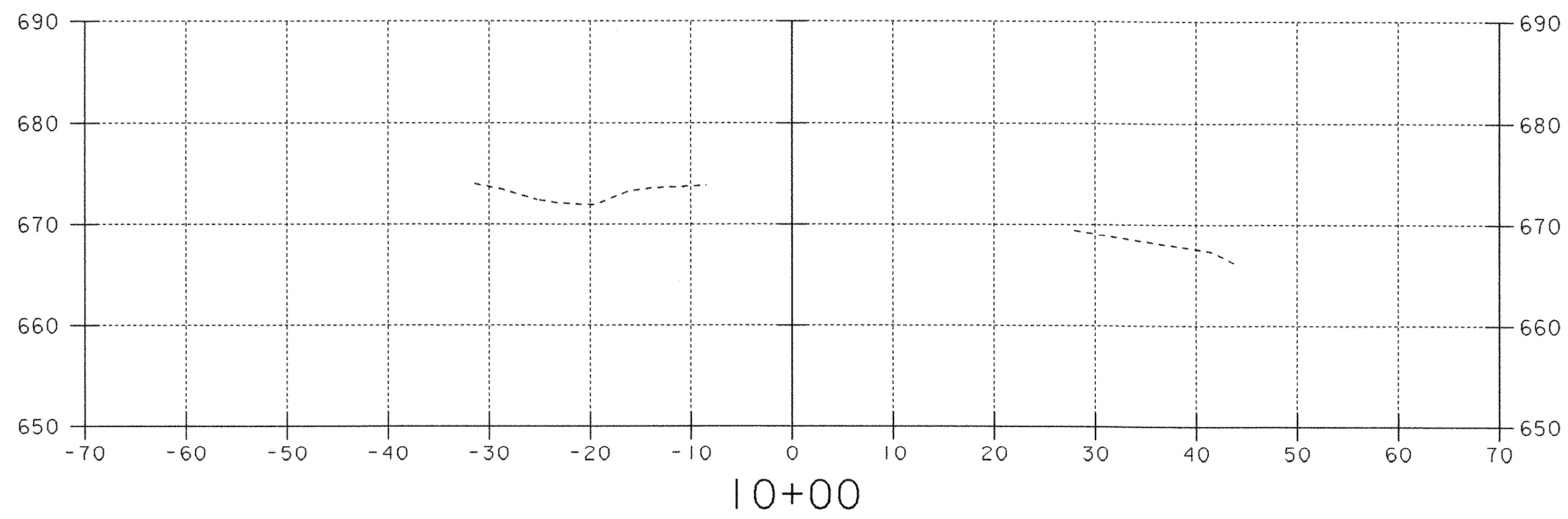
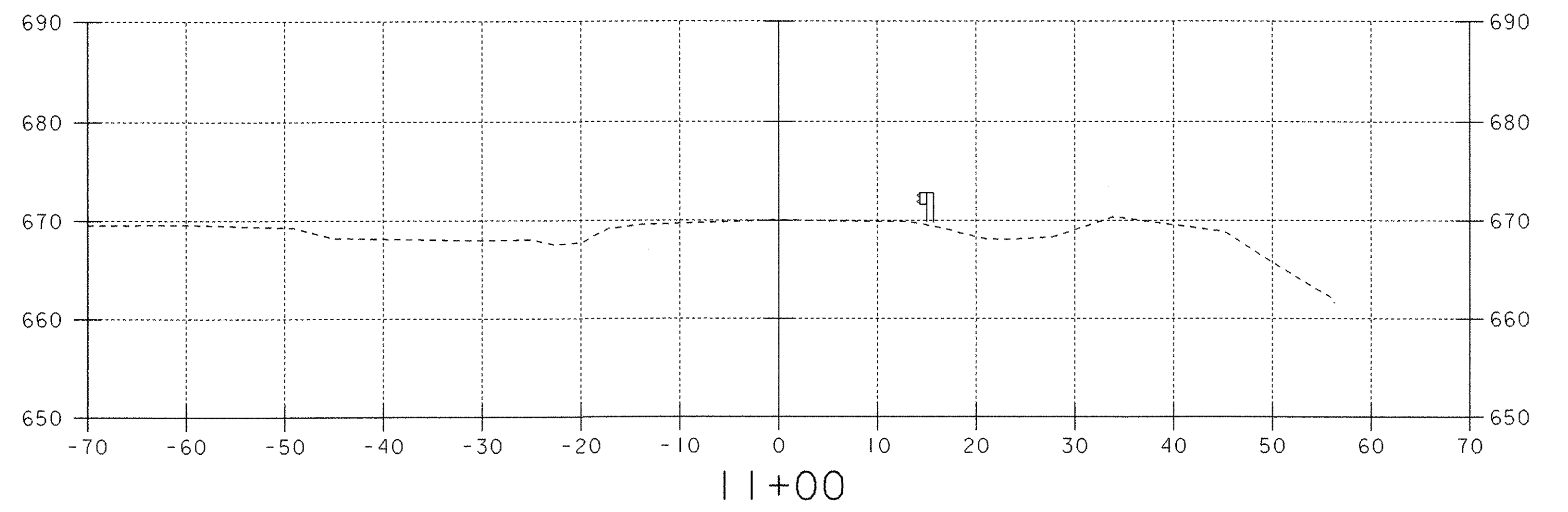
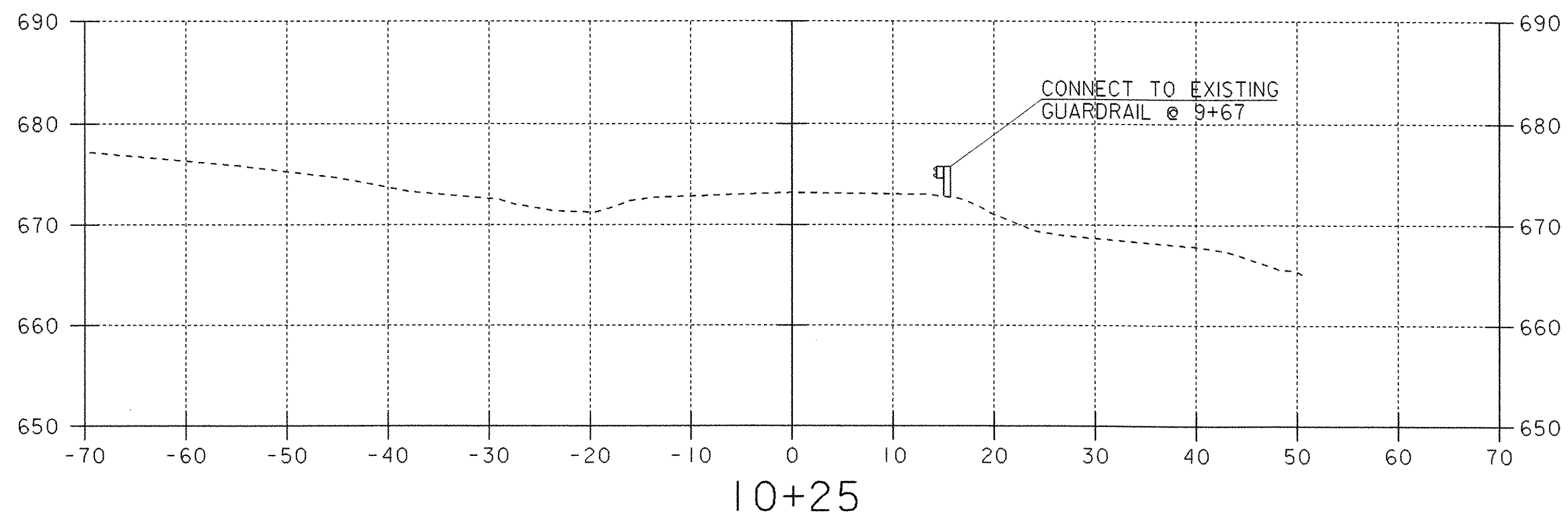
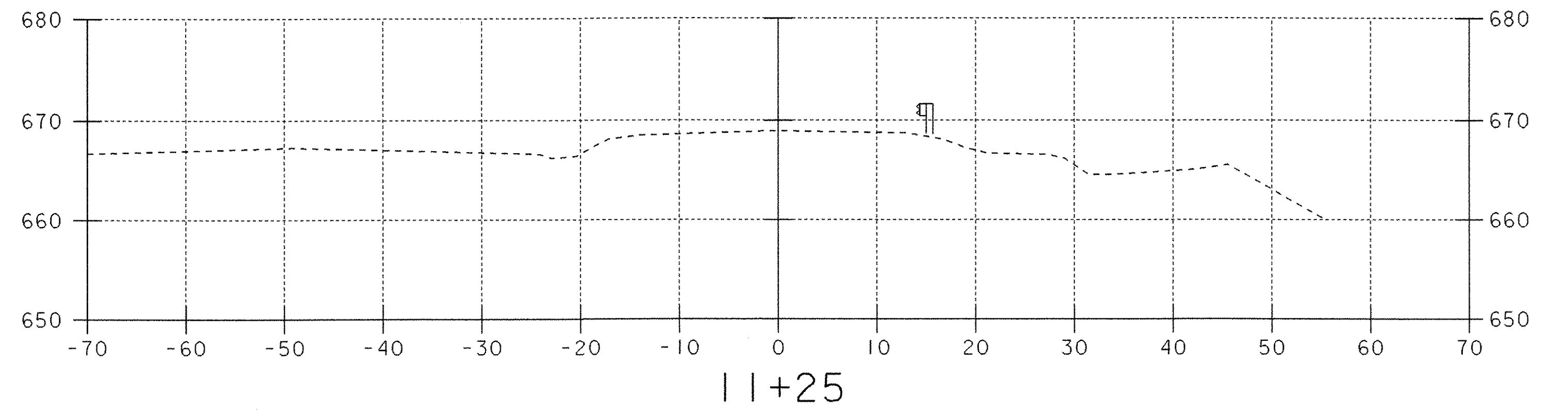
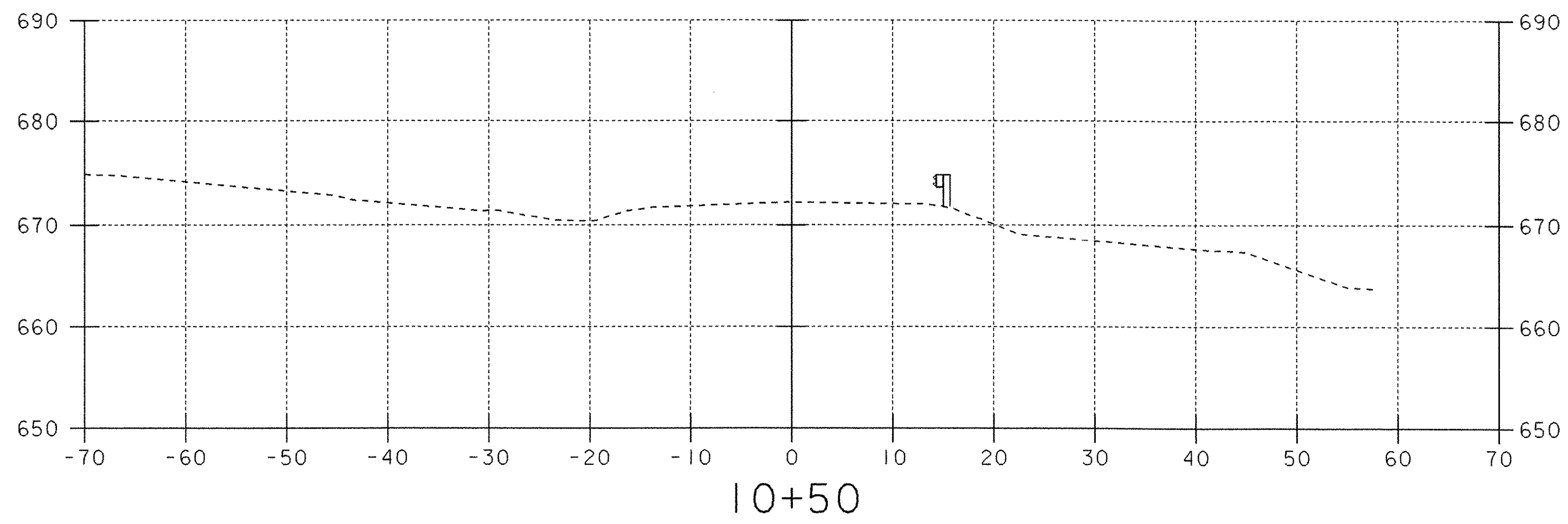
~ NOTES ~

- UNLESS OTHERWISE DESIGNATED, ALL BAR REINFORCEMENT FOR CONCRETE IN SIZES UP TO AND INCLUDING NO. 18 SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT", AASHTO M 31 (ASTM A 615-SI). ALL BARS SHALL BE GRADE 60, UNLESS OTHERWISE DESIGNATED.
- 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".
- BARS WHICH REQUIRE MORE ACCURATE BENDING THAN STANDARD PRACTICES SHOULD HAVE LIMITS INDICATED.
- ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" AND "G" ON STANDARD 180 DEGREE AND 135 DEGREE HOOKS.
- "J" DIMENSION ON 180 DEGREE HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE. OTHERWISE, STANDARD HOOKS ARE TO BE USED.
- "H" DIMENSION ON STIRRUPS TO BE SHOWN ONLY WHEN NECESSARY TO MAINTAIN CLEARANCES.
- WHERE SLOPE DIFFERS FROM 45 DEGREES, DIMENSIONS "H" AND "K" MUST BE SHOWN.
- ▲ DENOTES BARS TO BE CUT IN FIELD.
- * DENOTES ONE EXTRA BAR ADDED FOR TESTING PURPOSES.
- △ DENOTES TWO EXTRA BARS ADDED FOR TESTING PURPOSES.
- "E" IN PREFIX DENOTES EPOXY COATED REINFORCING STEEL.



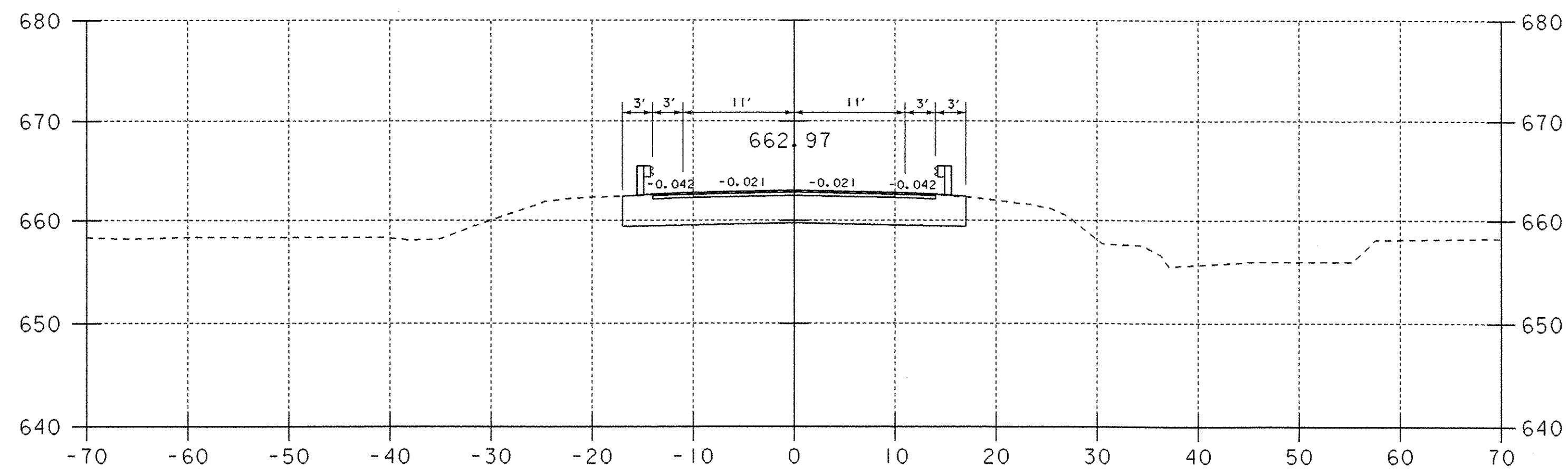
ASTM STANDARD REINFORCING BARS			
BAR SIZE DESIGNATION	WEIGHT POUNDS PER FOOT	NOMINAL DIMENSIONS ROUND SECTION	
		DIAMETER INCHES	PERIMETER INCHES
#3	0.376	0.375	1.178
#4	0.668	0.500	1.571
#5	1.043	0.625	1.963
#6	1.502	0.750	2.356
#7	2.044	0.875	2.749
#8	2.670	1.000	3.142
#9	3.400	1.128	3.544
#10	4.303	1.270	3.990
#11	5.313	1.410	4.430
#14	7.65	1.693	5.32
#18	13.60	2.257	7.09

PROJECT NAME: **Fairfield**
 PROJECT NUMBER: **AC STP ST 0298(6)**
 FILE NAME: **/PW01c182/sc182rss.xls** PLOT DATE: **4/25/2005**
 PROJECT LEADER: **Craig Keller** DRAWN BY: **Kristen Rutter**
 DESIGNED BY: **Jeremy Reed** CHECKED BY: **Wayne Symonds**
 REINFORCING STEEL SCHEDULE SHEET SHEET **29** OF **41**

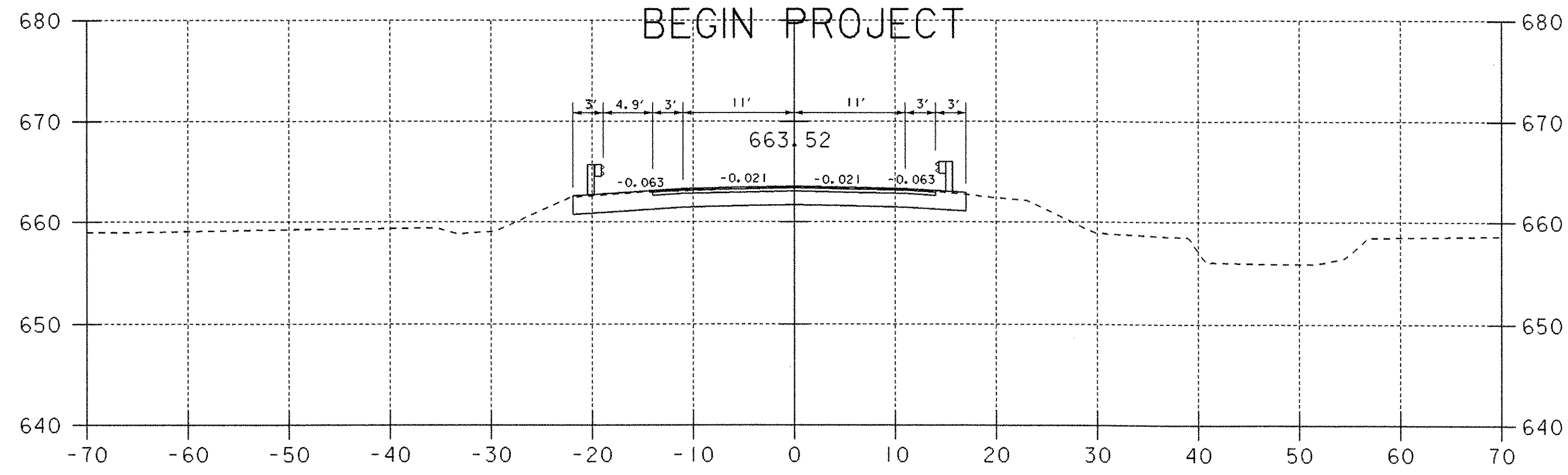


ROADWAY CROSS SECTIONS

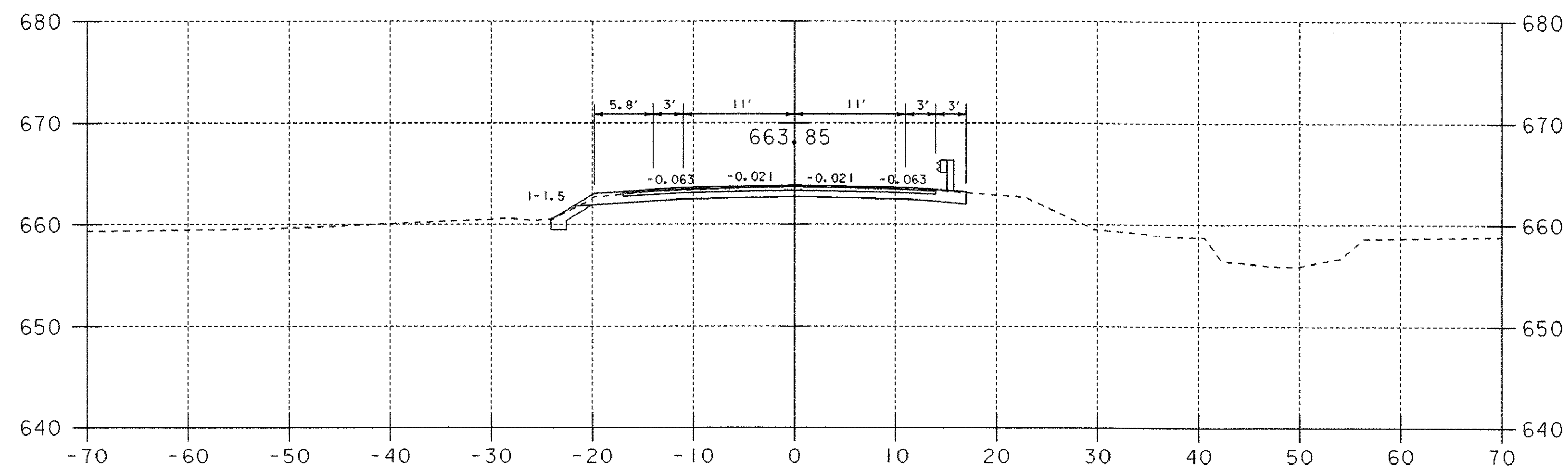
PROJECT NAME:	FAIRFIELD	PLOT DATE:	28-APR-2005
PROJECT NUMBER:	AC STP ST 0298 (6)	DRAWN BY:	J. Reed
FILE NAME:	str5/01c182/sc182bdr.dgn	CHECKED BY:	W.B. Symonds
PROJECT LEADER:	C. Keller	SHEET	30 OF 41
DESIGNED BY:	J. Reed		
sc182xsl.i			



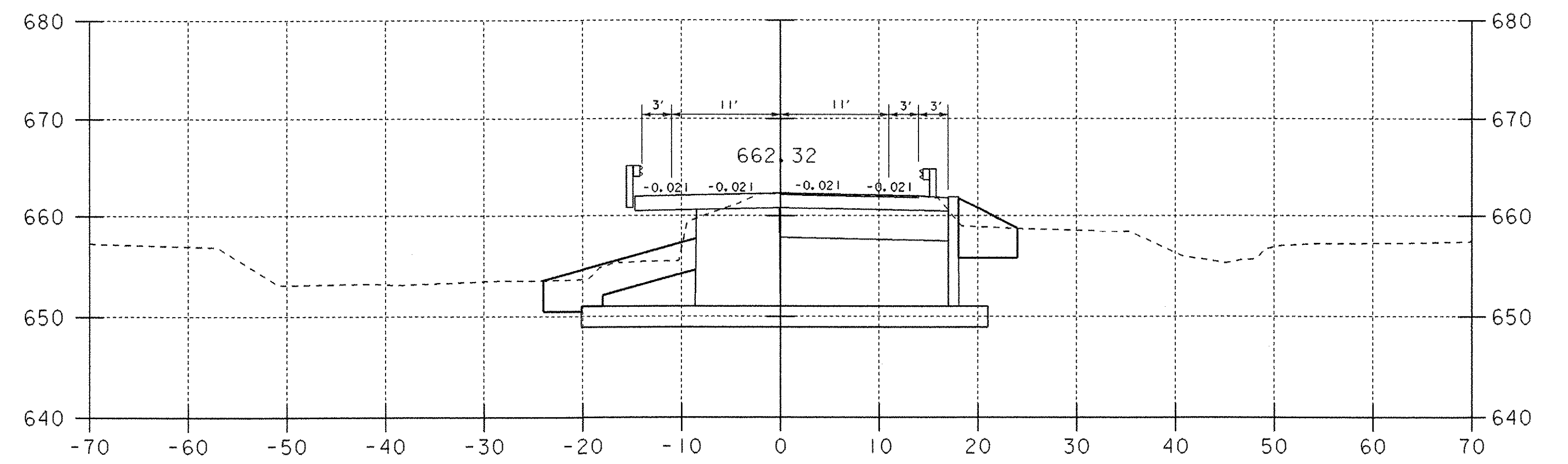
13+00
12+90.00
END APPROACH
BEGIN PROJECT



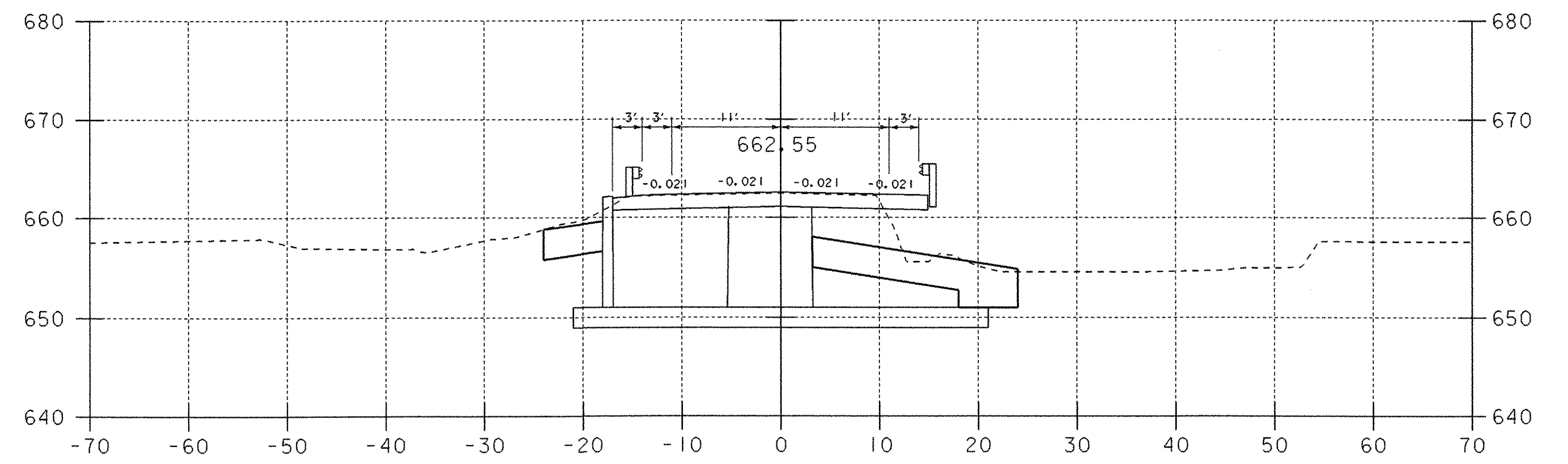
12+75



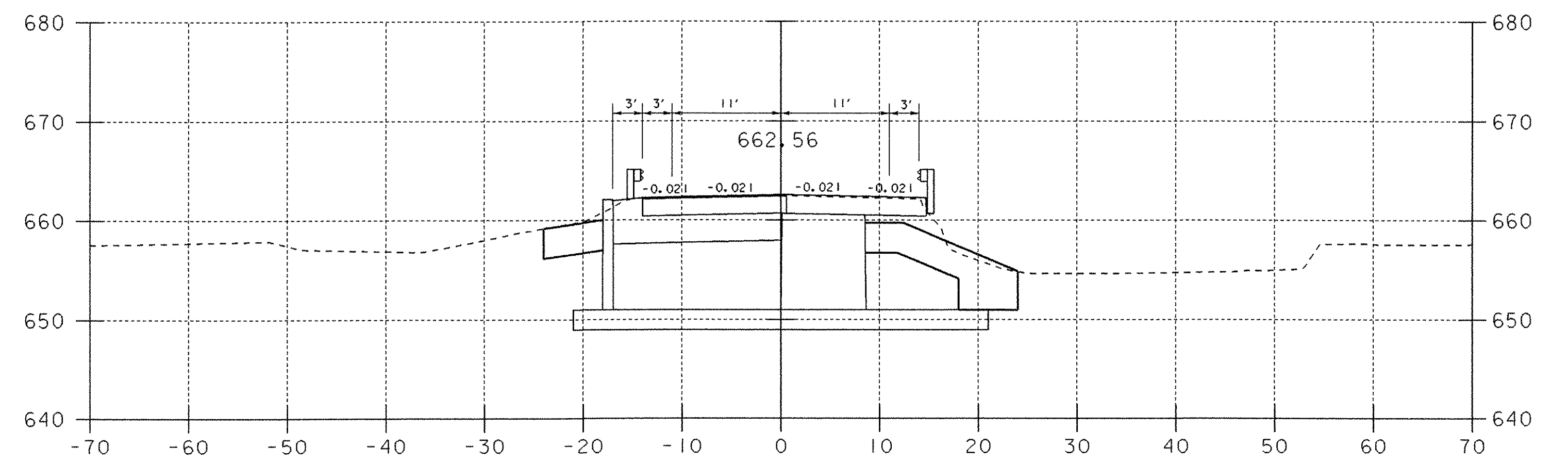
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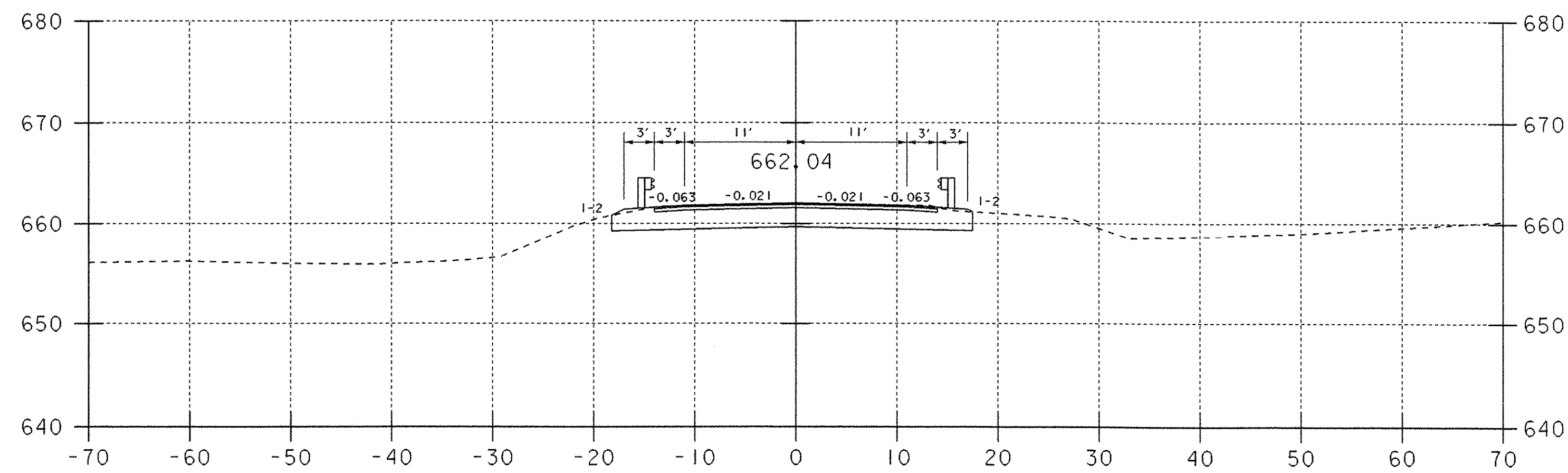
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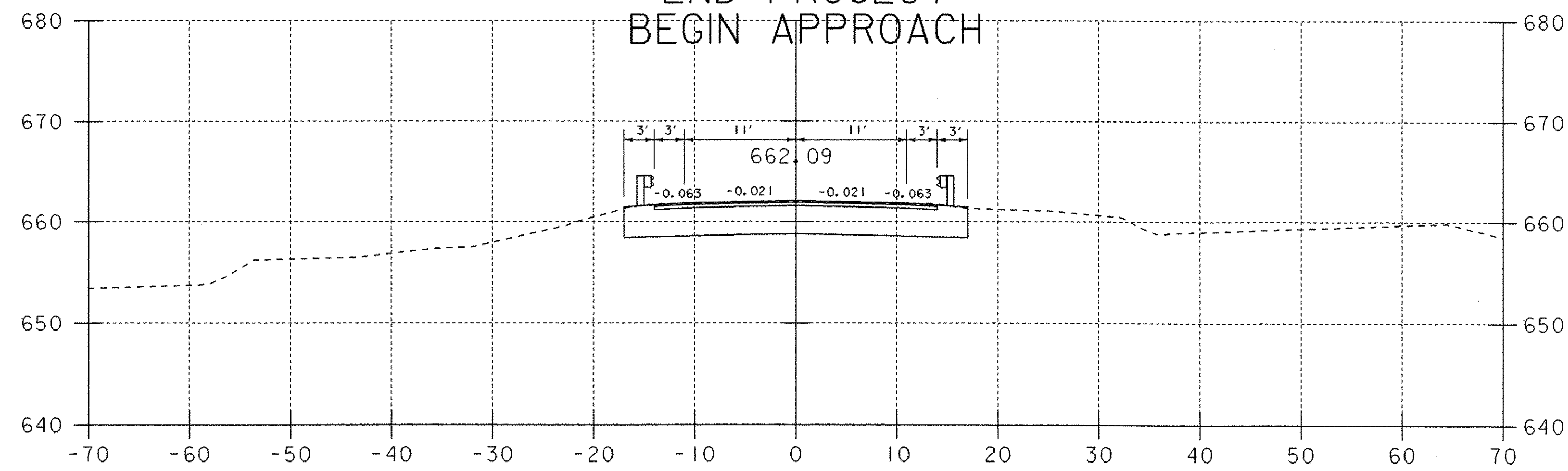
ROADWAY CROSS SECTIONS

PROJECT NAME:	FAIRFIELD	FILE NAME:	str5/01c182/sc182bdr.dgn	PLOT DATE:	28-APR-2005
PROJECT NUMBER:	AC STP ST 0298 (6)	PROJECT LEADER:	C. Keller	DRAWN BY:	J. Reed
		DESIGNED BY:	J. Reed	CHECKED BY:	W.B. Symonds
			sc182xs3.i		SHEET 32 OF 41

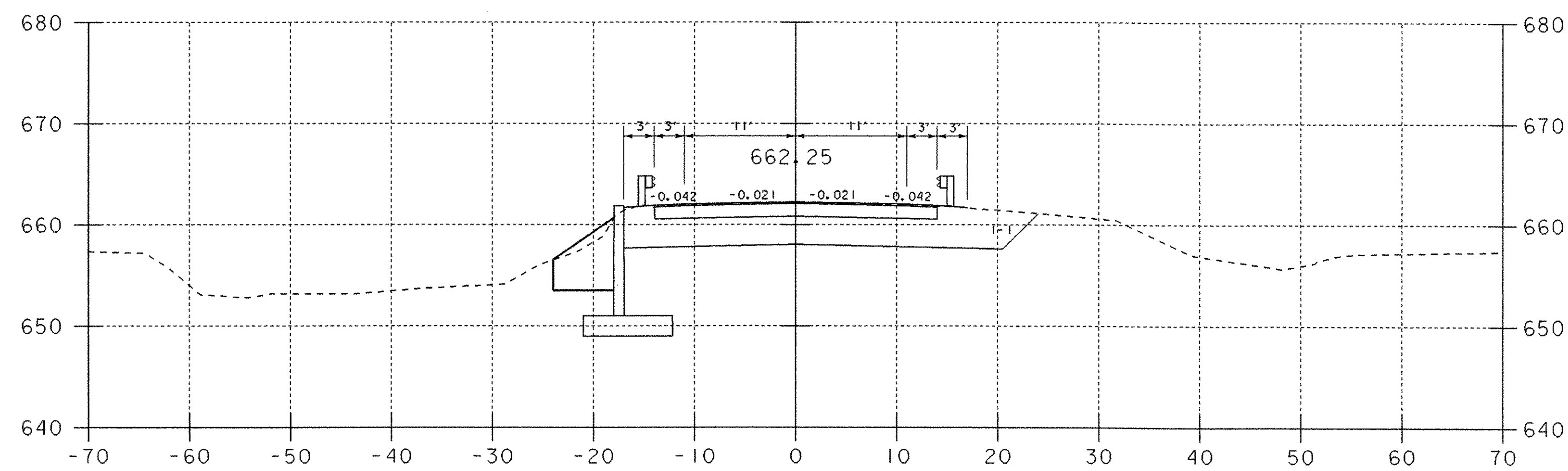


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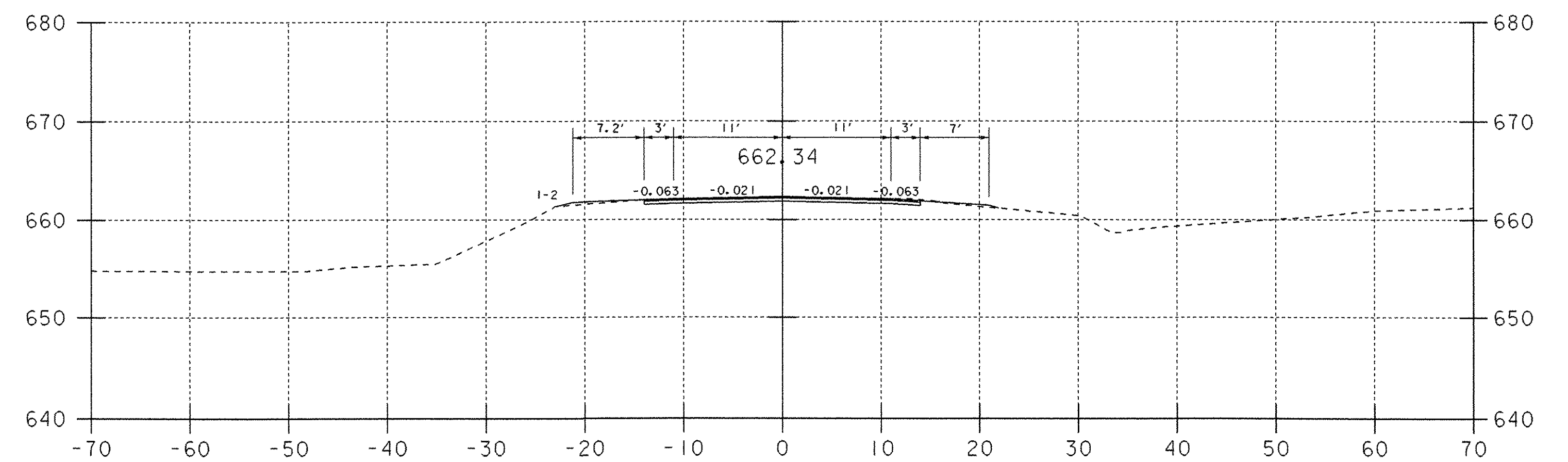
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BEGIN APPROACH



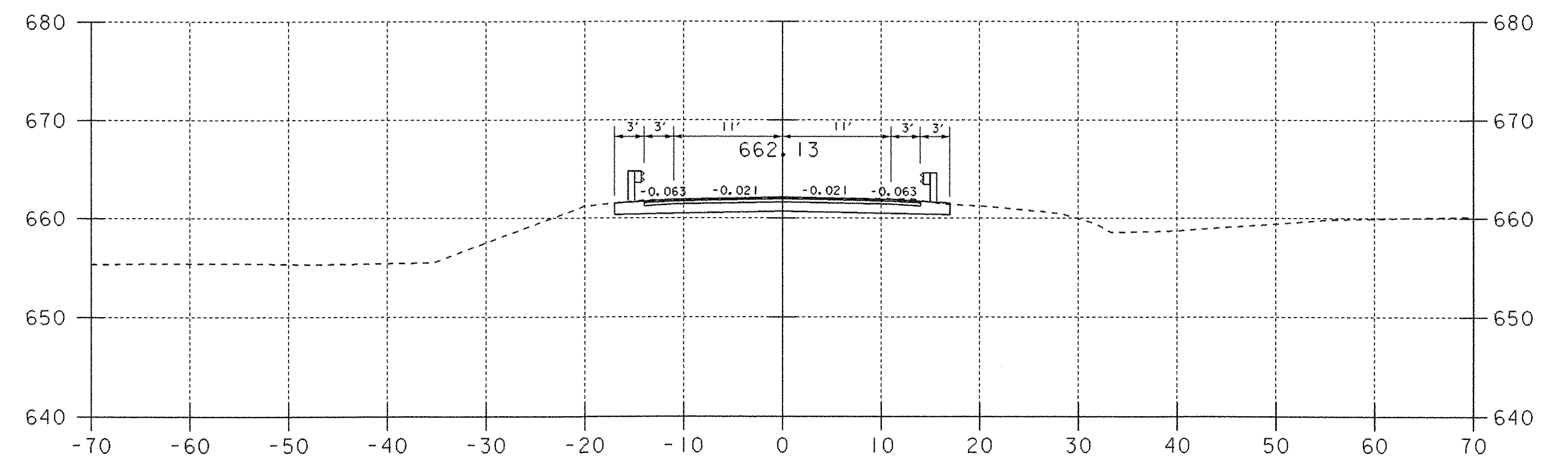
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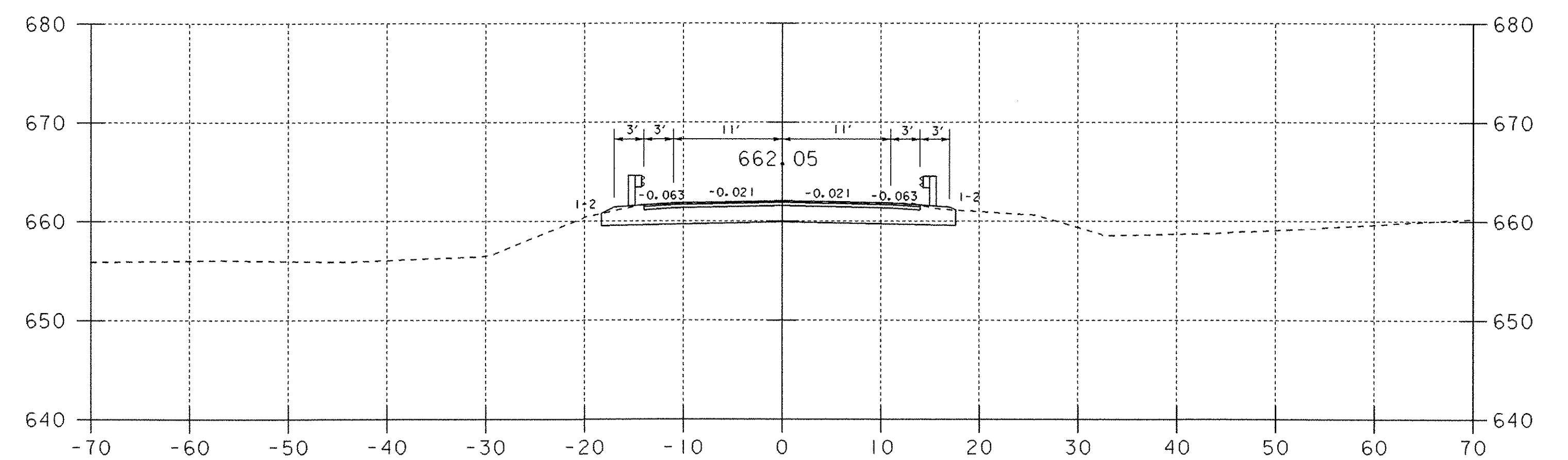
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14+50



14+25

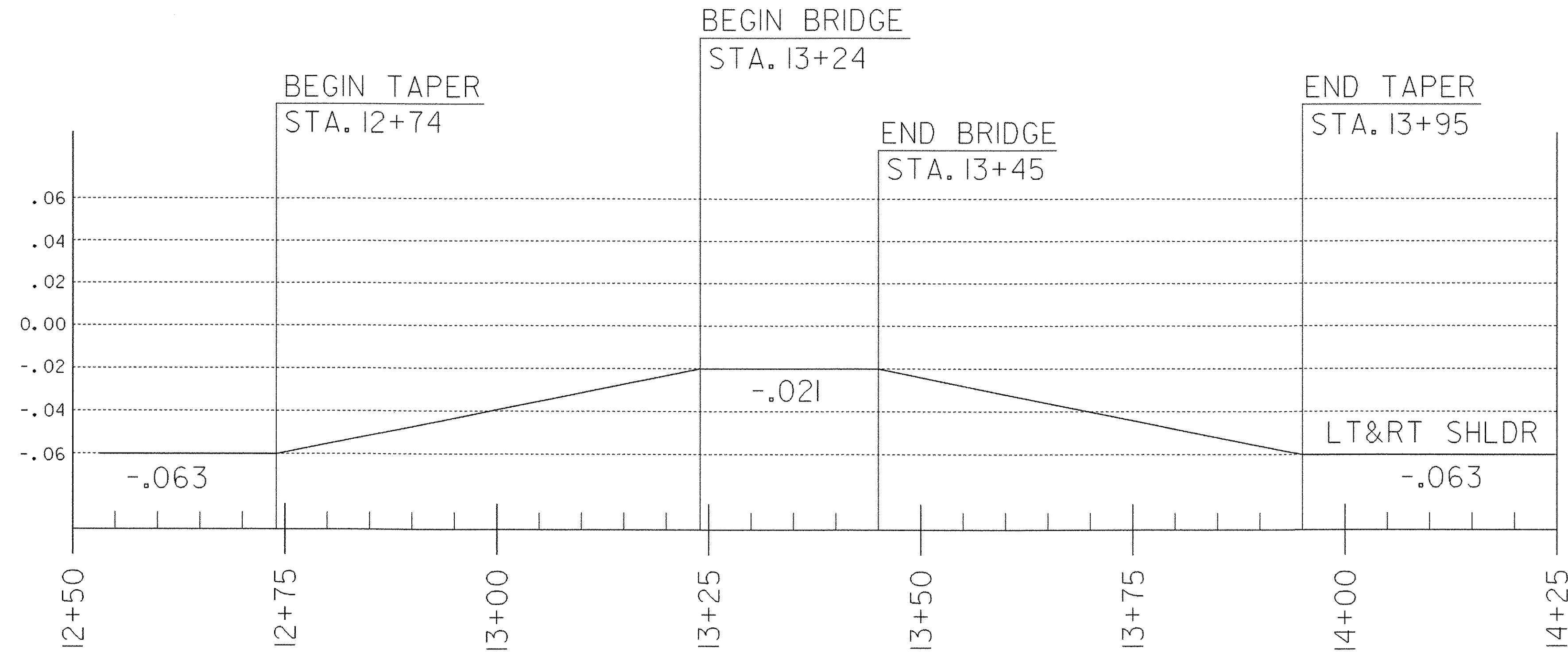


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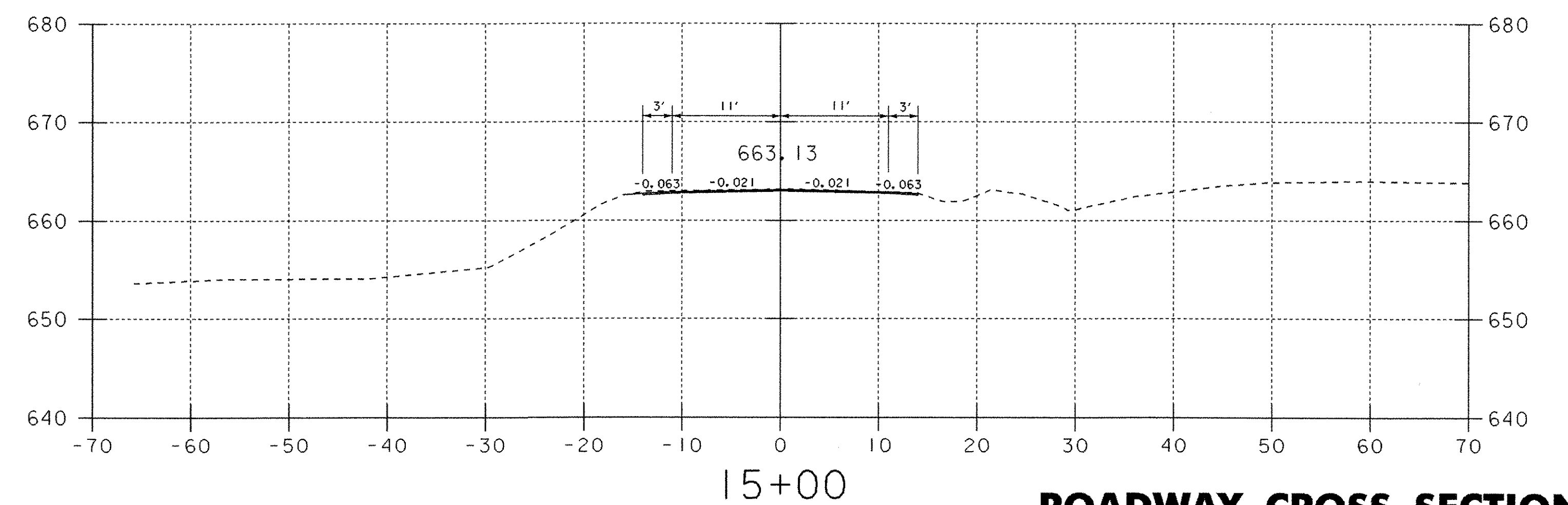
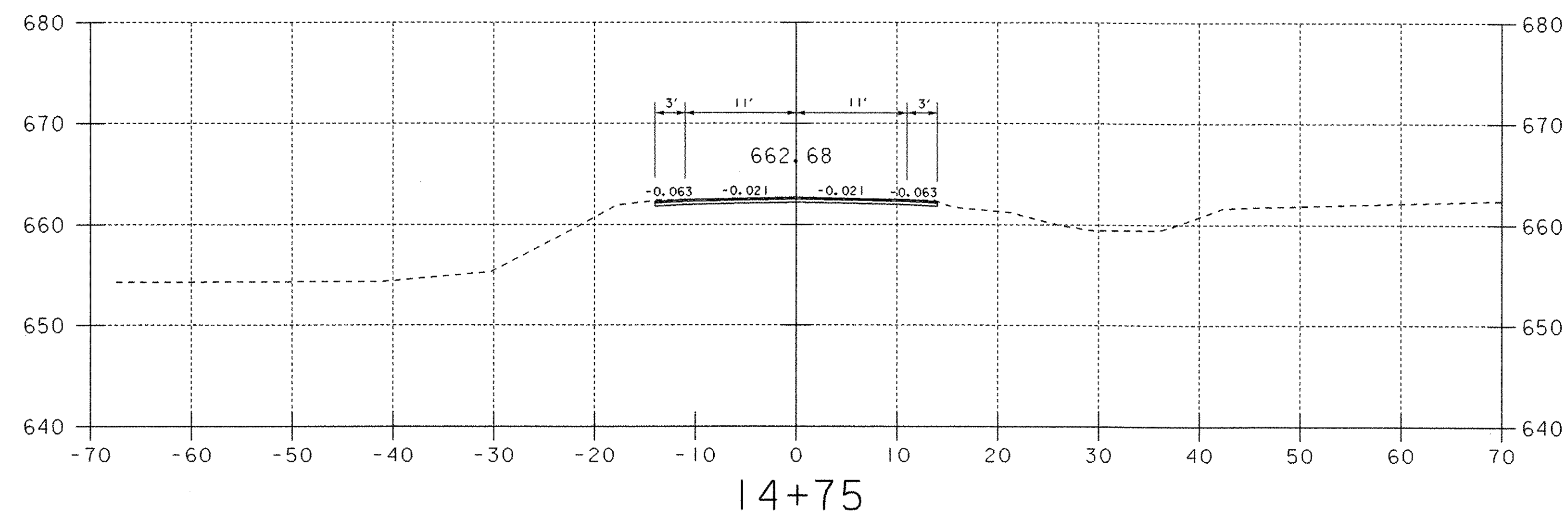
ROADWAY CROSS SECTIONS

PROJECT NAME:	FAIRFIELD	PLOT DATE:	28-APR-2005
PROJECT NUMBER:	AC STP ST 0298 (6)	DRAWN BY:	J. Reed
FILE NAME:	str5/01c182/sc182bdr.dgn	CHECKED BY:	W. B. Symonds
DESIGNED BY:	J. Reed	SHEET	33 OF 41

SHOULDER BANKING DIAGRAM

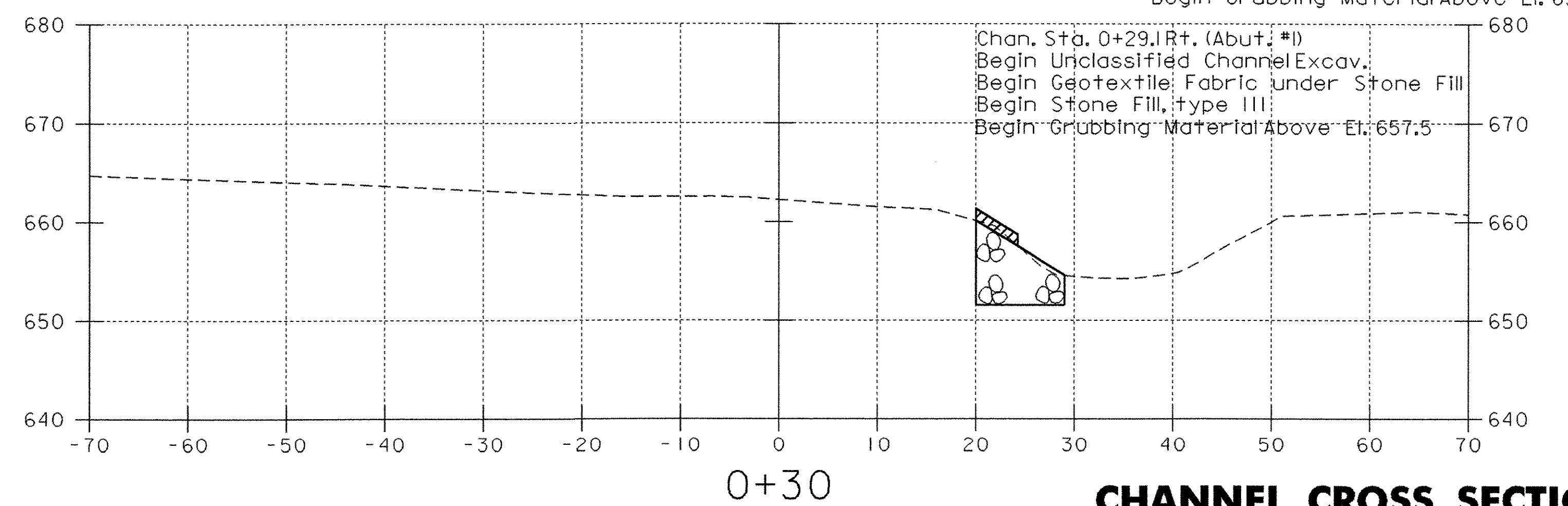
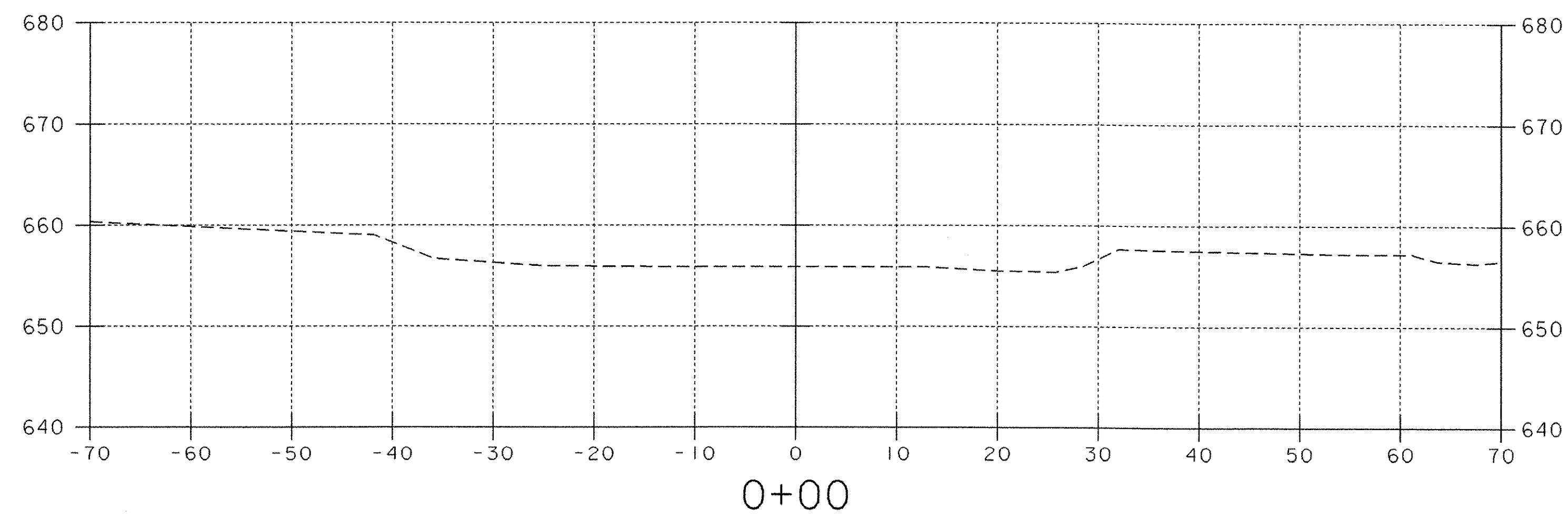
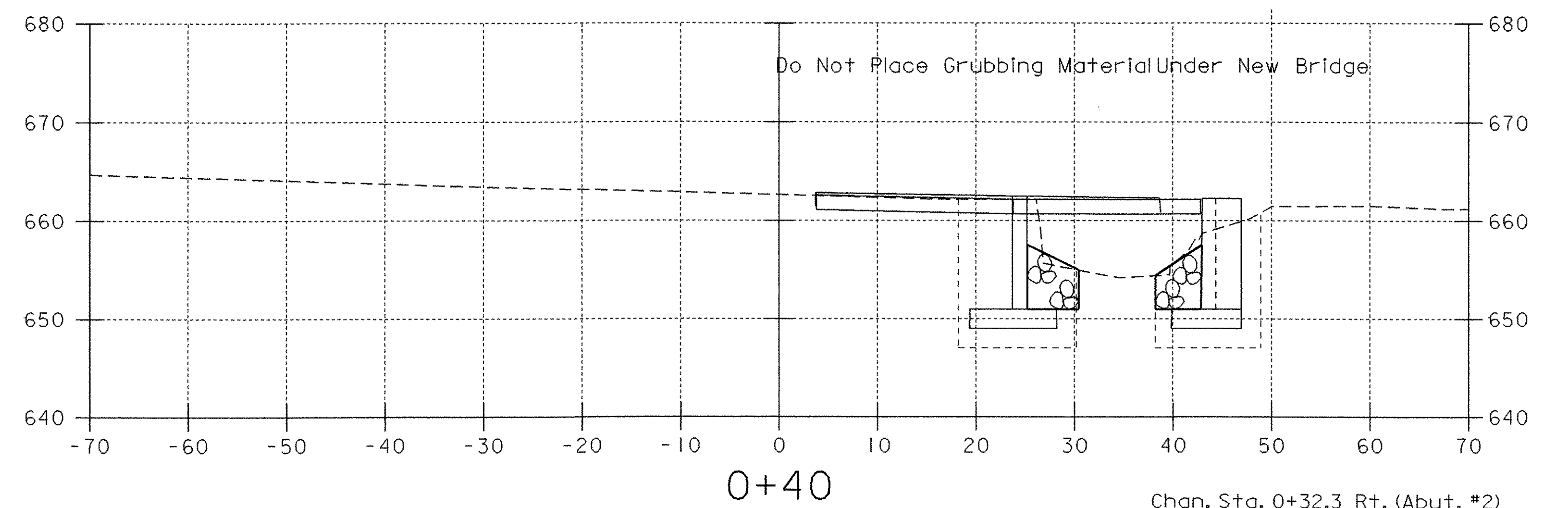
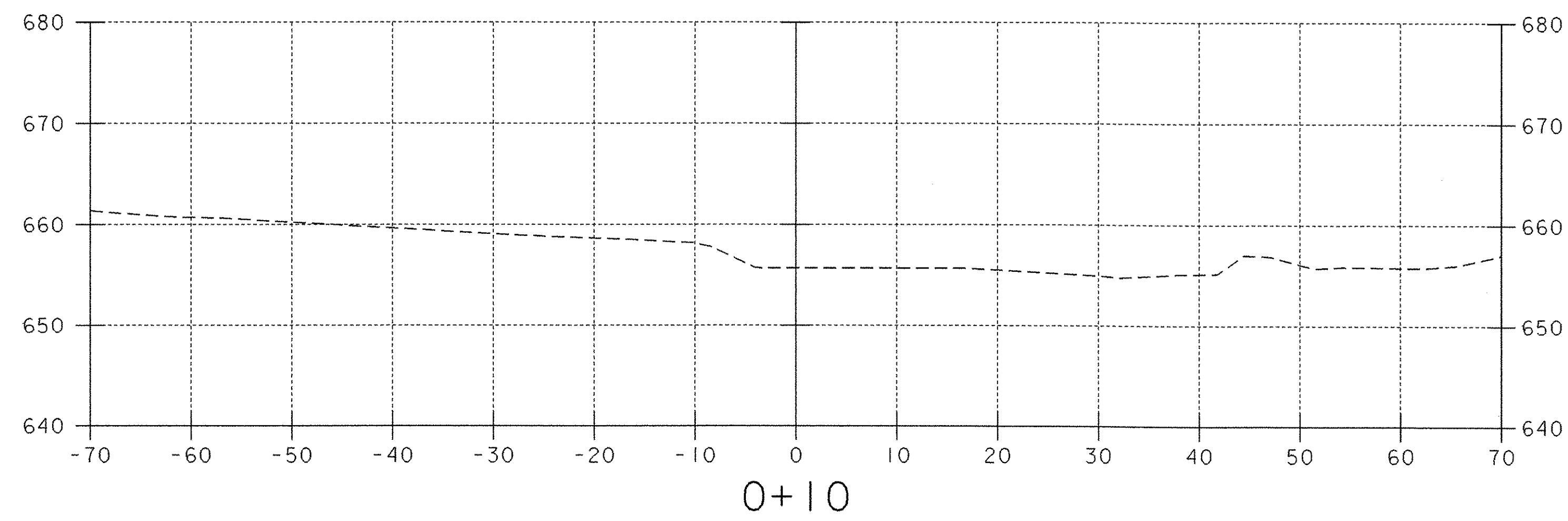
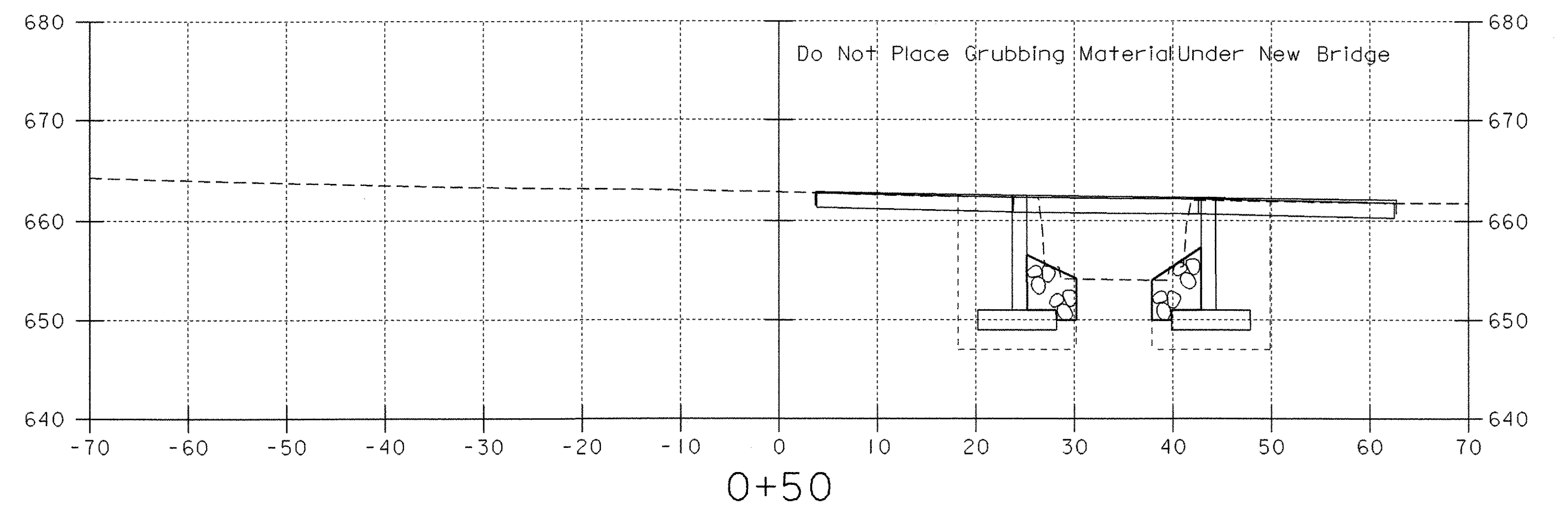
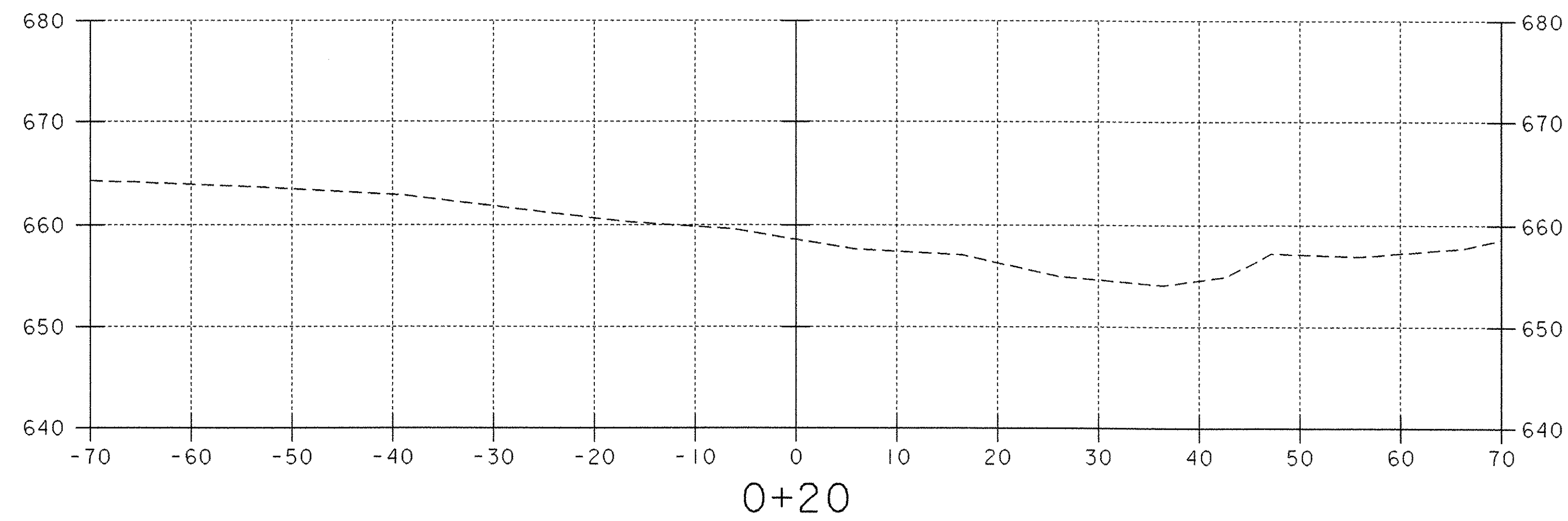


END APPROACH



ROADWAY CROSS SECTIONS

PROJECT NAME: FAIRFIELD	
PROJECT NUMBER: AC STP ST 0298 (6)	
FILE NAME: str5/01c182/sc182bdr.dgn	PLOT DATE: 28-APR-2005
PROJECT LEADER: C. Keller	DRAWN BY: J. Reed
DESIGNED BY: J. Reed	CHECKED BY: W. B. Symonds
sc182xs5.i	SHEET 34 OF 41

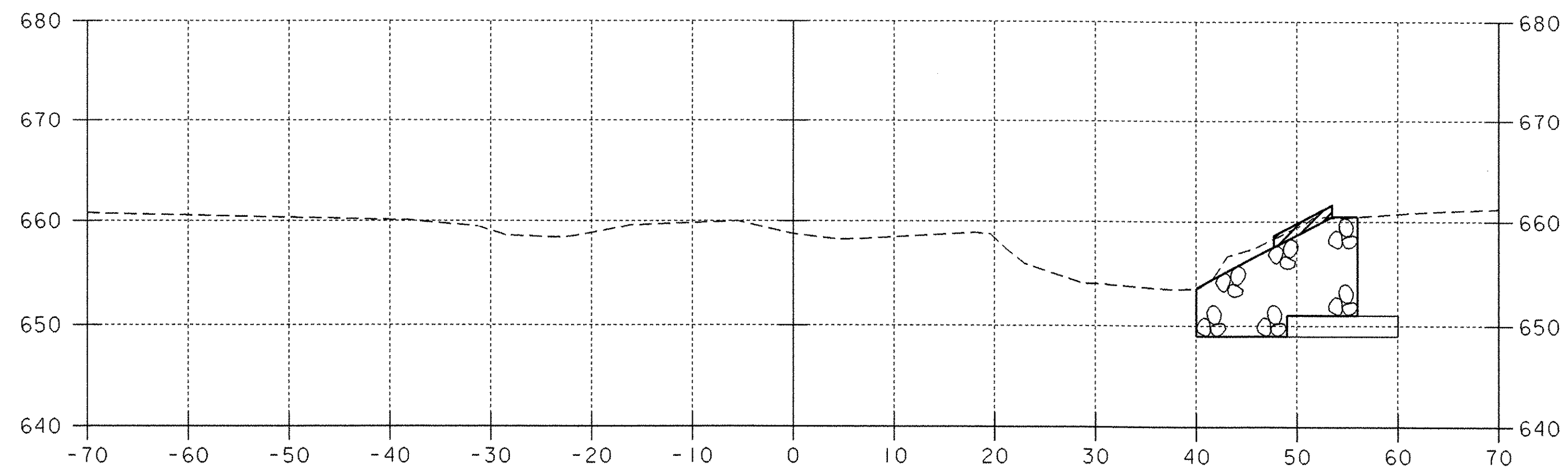


Chan. Sta. 0+32.3 Rt. (Abut. #2)
 Begin Unclassified Channel Excav.
 Begin Geotextile Fabric under Stone Fill
 Begin Stone Fill, type III
 Begin Grubbing Material Above El. 657.5

Chan. Sta. 0+29.1 Rt. (Abut. #1)
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 Begin Geotextile Fabric under Stone Fill
 Begin Stone Fill, type III
 Begin Grubbing Material Above El. 657.5

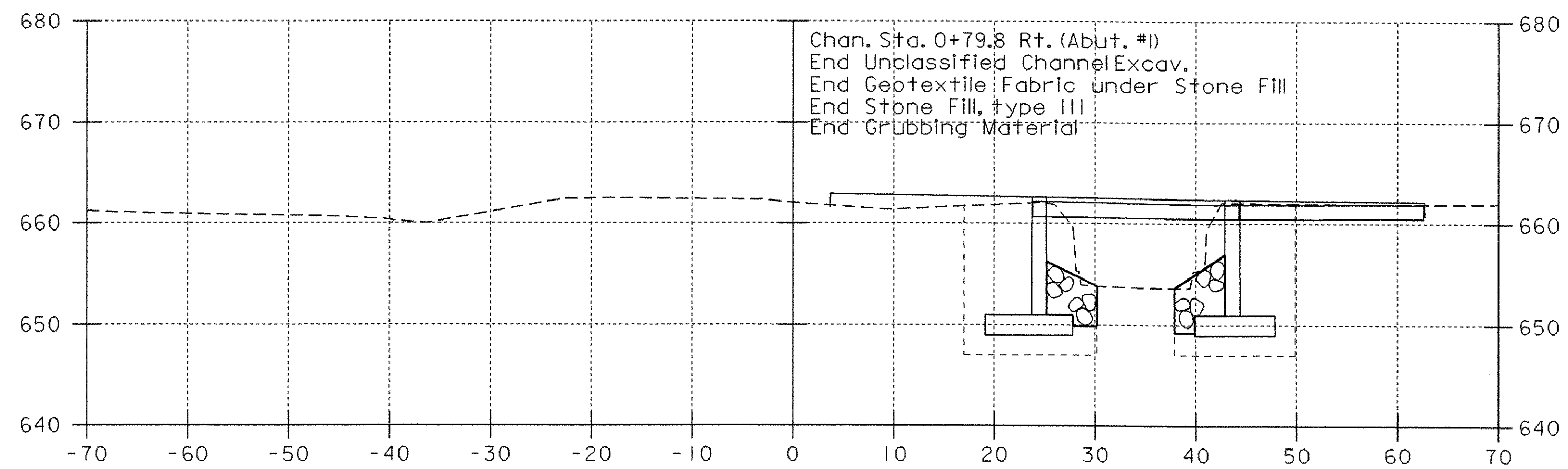
CHANNEL CROSS SECTIONS

PROJECT NAME:	FAIRFIELD	FILE NAME:	str5/01c182/sc182bdr.dgn	PLOT DATE:	28-APR-2005
PROJECT NUMBER:	AC STP ST 0298 (6)	PROJECT LEADER:	C. Keller	DRAWN BY:	J. Reed
		DESIGNED BY:	J. Reed	CHECKED BY:	W. B. Symonds
			sc182cs1.i	SHEET	35 OF 41



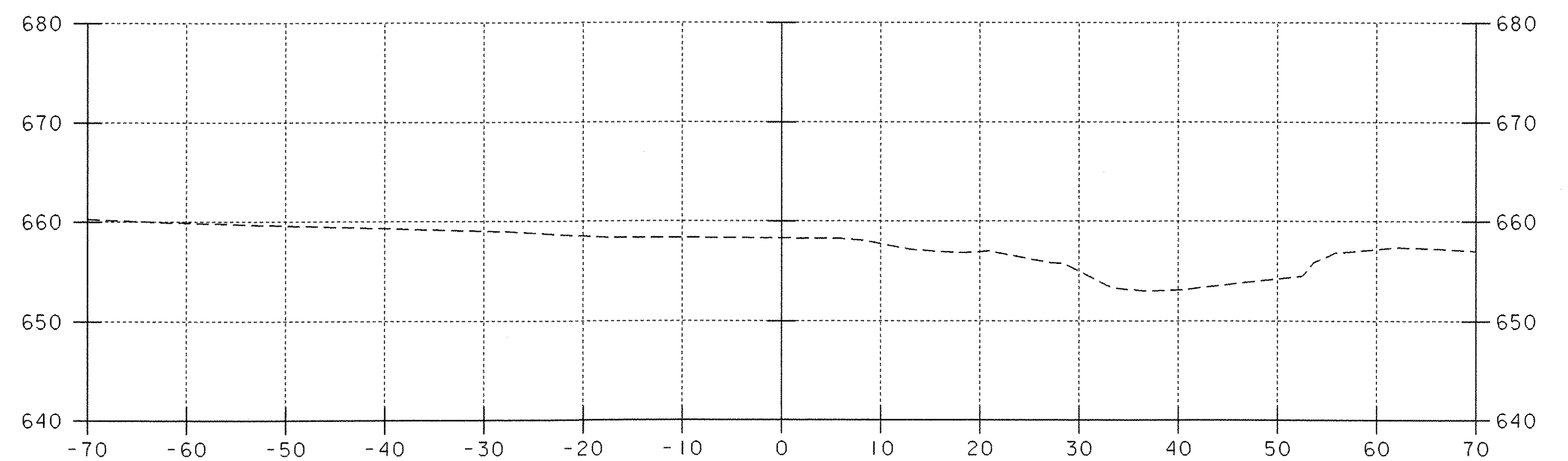
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 End Grubbing Material

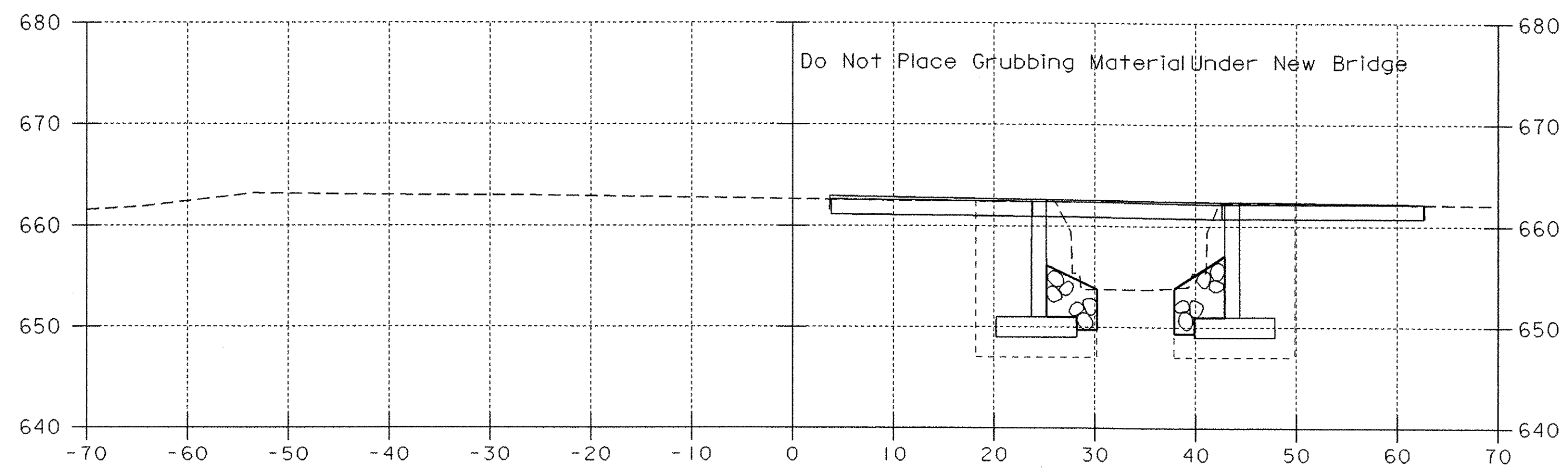


0+70

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 End Grubbing Material

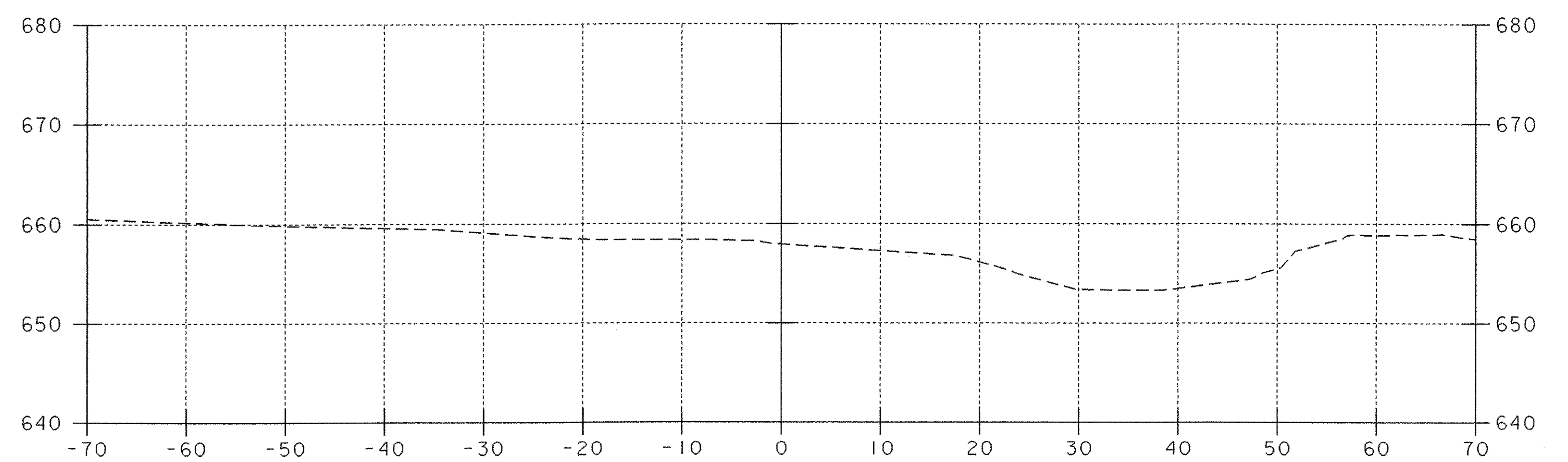


1+00



0+60

Do Not Place Grubbing Material Under New Bridge

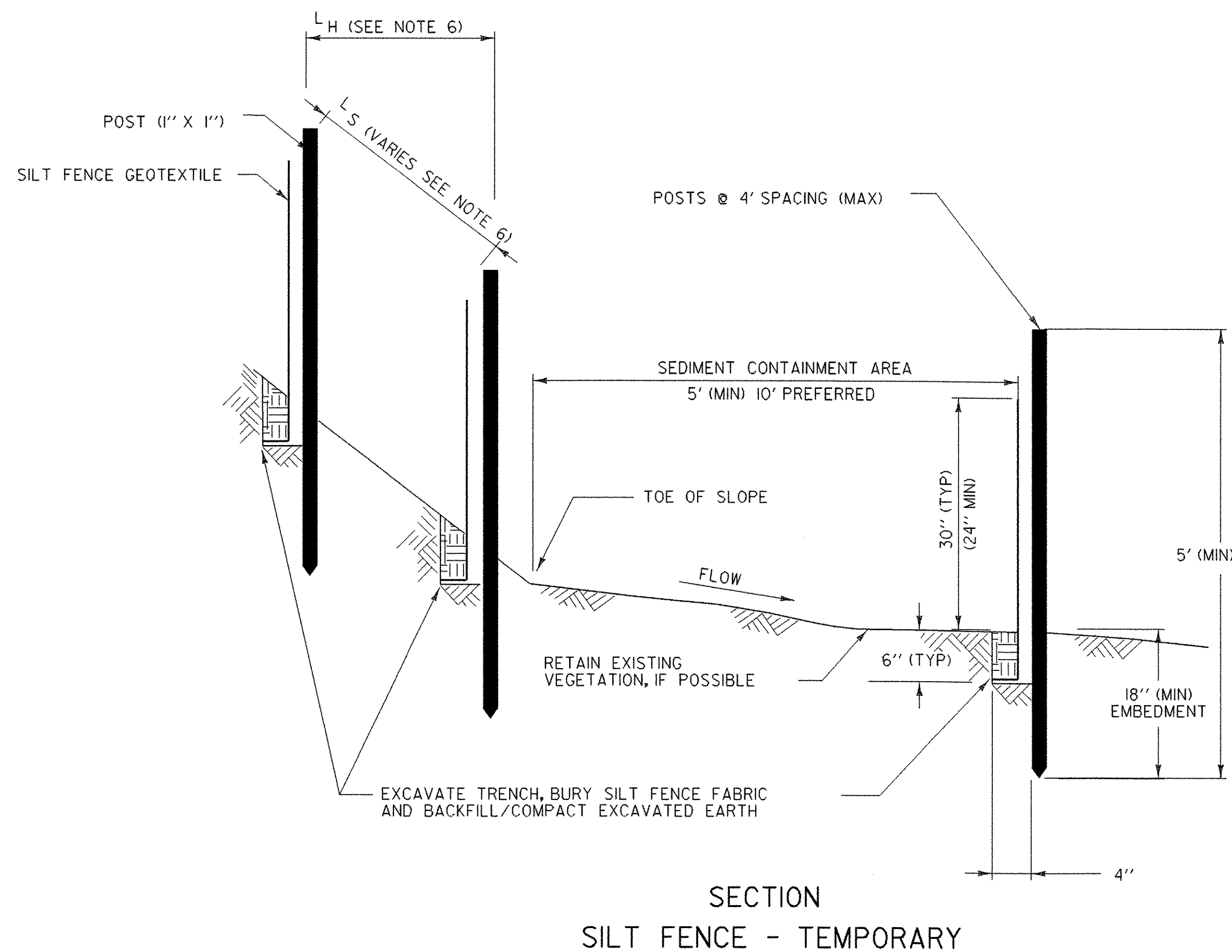
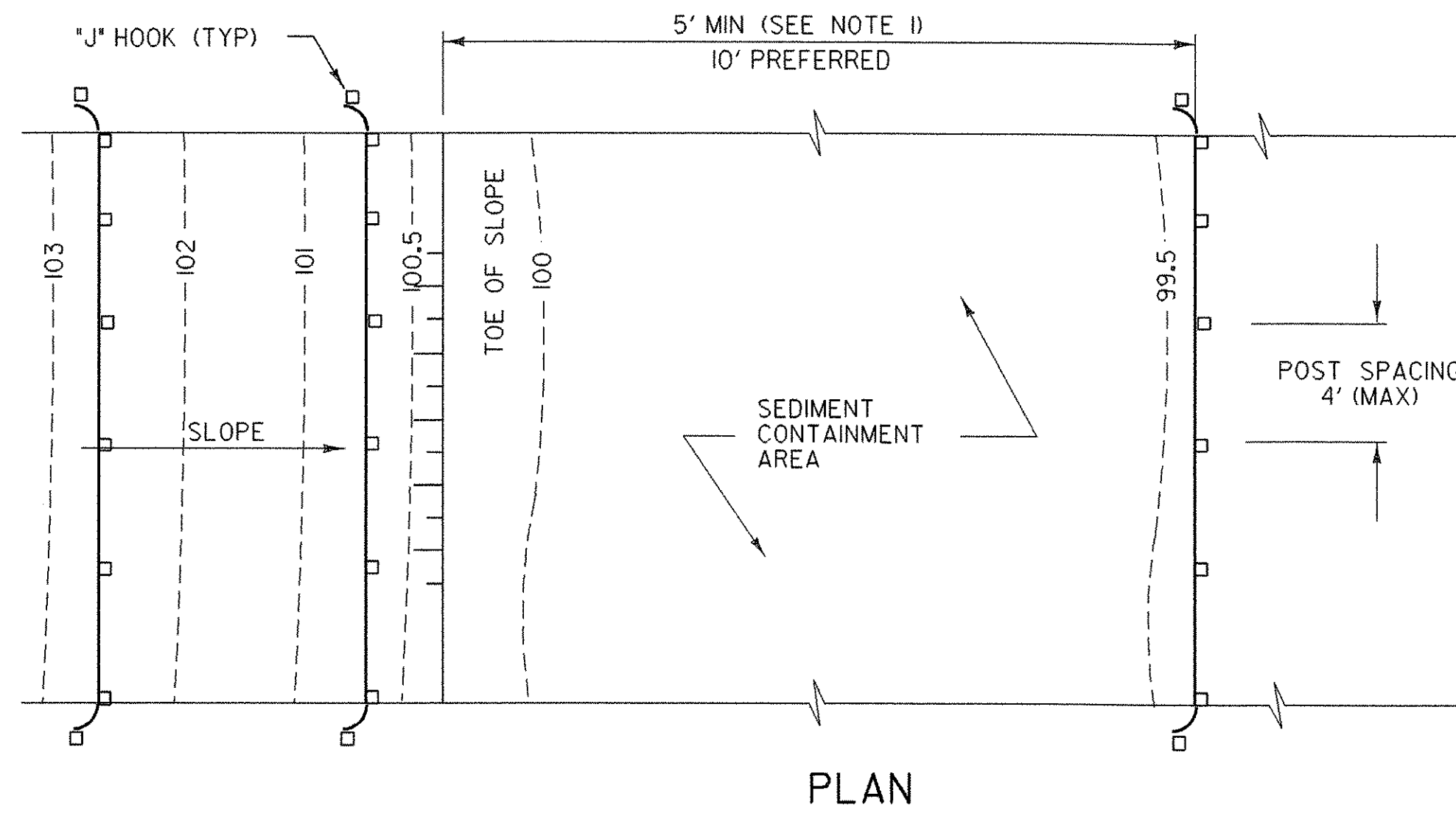


0+90

CHANNEL CROSS SECTIONS

PROJECT NAME:	FAIRFIELD	PLOT DATE:	28-APR-2005
PROJECT NUMBER:	AC STP ST 0298 (6)	DRAWN BY:	J. Reed
FILE NAME:	str5/01c182/sc182bdr.dgn	CHECKED BY:	W.B. Symonds
PROJECT LEADER:	C. Keller	SHEET	36 OF 41
DESIGNED BY:	J. Reed		
sc182cs2.i			

SILT FENCE



APPLICATION NOTES:

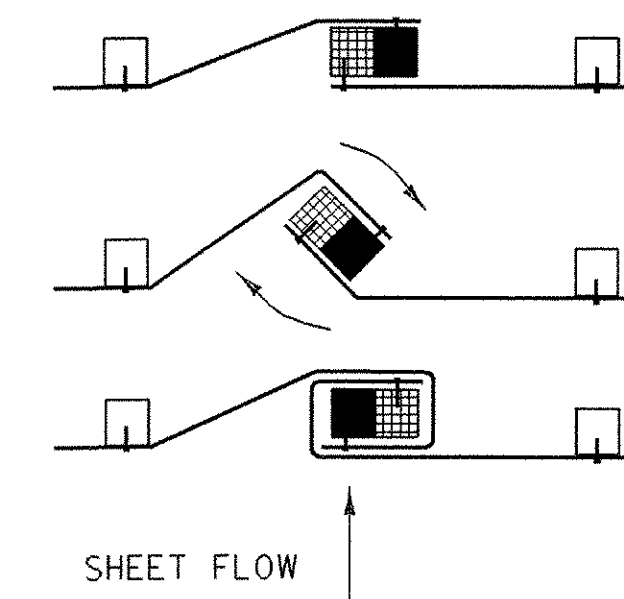
- THE PRIMARY PURPOSE OF SILT FENCE IS TO REDUCE RUNOFF VELOCITY AND TRAP SEDIMENT. VELOCITY IS REDUCED, WATER IS IMPOUNDED BEHIND THE MEASURE, AND SEDIMENT FALLS OUT OF SUSPENSION.
- SILT FENCE SHALL BE INSTALLED ON A LINE OF EQUAL ELEVATION (CONTOUR). IT MAY BE INSTALLED AT INTERMEDIATE POINTS UP SLOPES AS WELL AS AT THE BOTTOM, AS SHOWN IN THE DETAIL.
- SILT FENCE SHALL NOT BE USED ACROSS CONCENTRATED FLOW.

GENERAL NOTES:

- SILT FENCE SHALL GENERALLY BE PLACED A MINIMUM OF 5 FEET BEYOND TOE OF SLOPE, 10 FEET PREFERRED, TO PROVIDE ADEQUATE AREA FOR SEDIMENT STORAGE AND FACILITATE MAINTENANCE OF SEDIMENT CONTAINMENT AREA.
- ALL ENDS SHALL BE "J" HOOKED TO TRAP SEDIMENT.
- IN AREAS WITH TWO SLOPES, SILT FENCE SHALL BE USED TO ERECT A DAM AND TRAP SEDIMENT AT THE BASE OF THE STEEPER SLOPE.
- THE BOTTOM EDGE OF SILT FENCE SHALL BE BURIED A MINIMUM OF 6 INCHES BELOW GROUND, AND KEYED IN 4 INCHES. THE FENCE SHALL BE INSTALLED WITH THE POSTS ON THE DOWNSTREAM SIDE OF THE FABRIC.
- MAXIMUM DRAINAGE AREA TRIBUTARY TO 100 FEET OF SILT FENCE SHALL BE 0.25 ACRES.
- THE FOLLOWING ARE MAXIMUM SLOPE LENGTHS FOR THESE MEASURES:

CONSTRUCTED SLOPE	SLOPE LENGTH (LS) FT	HORIZONTAL LENGTH (LH) FT
3 : 1	80	75
4 : 1	130	125
5 : 1	200	200
> 5 : 1	250	250

- MEASURES SHALL BE INSPECTED EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF A STORM EVENT GREAT ENOUGH TO CAUSE WATER TO LEAVE THE CONSTRUCTION SITE.
- MEASURES SHALL BE CLEANED AND REPAIRED AS NEEDED. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATION REACHES ONE-HALF OF THE MEASURE HEIGHT. SEDIMENT SHALL BE DISPOSED OF AS UNSUITABLE MATERIAL.
- SILT FENCE SHALL BE REMOVED WHEN THE AREA HAS BEEN STABILIZED. AT TIME OF REMOVAL OF THE SILT FENCE, THE DISTURBED AREA SHALL BE REPAIRED AND STABILIZED.
- PAYMENT FOR INSTALLATION AND REMOVAL OF SILT FENCE SHALL BE MADE UNDER THE GEOTEXTILE FOR SILT FENCE ITEM.
- PAYMENT FOR MONITORING SILT FENCE SHALL BE MADE UNDER THE MONITORING EROSION & SEDIMENT CONTROL PLAN ITEM.
- PAYMENT FOR MAINTAINING SILT FENCE SHALL BE MADE UNDER THE FIELD MAINTENANCE OF EROSION & SEDIMENT CONTROL PLAN ITEM, UNLESS MAINTENANCE IS REQUIRED DUE TO POOR INSTALLATION PRACTICES.



- PLACE THE END POST OF ONE FENCE INSIDE THE END POST OF THE OTHER FENCE.
- ROTATE BOTH POSTS AT LEAST 180 DEGREES IN A CLOCKWISE DIRECTION TO CREATE A TIGHT SEAL WITH THE FABRIC MATERIAL.
- DRIVE BOTH POSTS 18 INCHES INTO THE GROUND AND BURY THE FLAP IN THE TRENCH.

REVISIONS AND CORRECTIONS

MAY 18, 2004 N. GARBICK

EROSION PREVENTION & SEDIMENT CONTROL DETAILS SILT FENCE

EROSION CONTROL DETAIL SHEET

PROJECT NAME: FAIRFIELD
 PROJECT NUMBER: AC STP ST 0298 (6)
 FILE NAME: str5/01c182/sc182bdr.dgn PLOT DATE: 28-APR-2005
 PROJECT LEADER: C. Keller DRAWN BY: J. Reed
 DESIGNED BY: J. Reed CHECKED BY:
 sc182epscl.i SHEET 37 OF 41

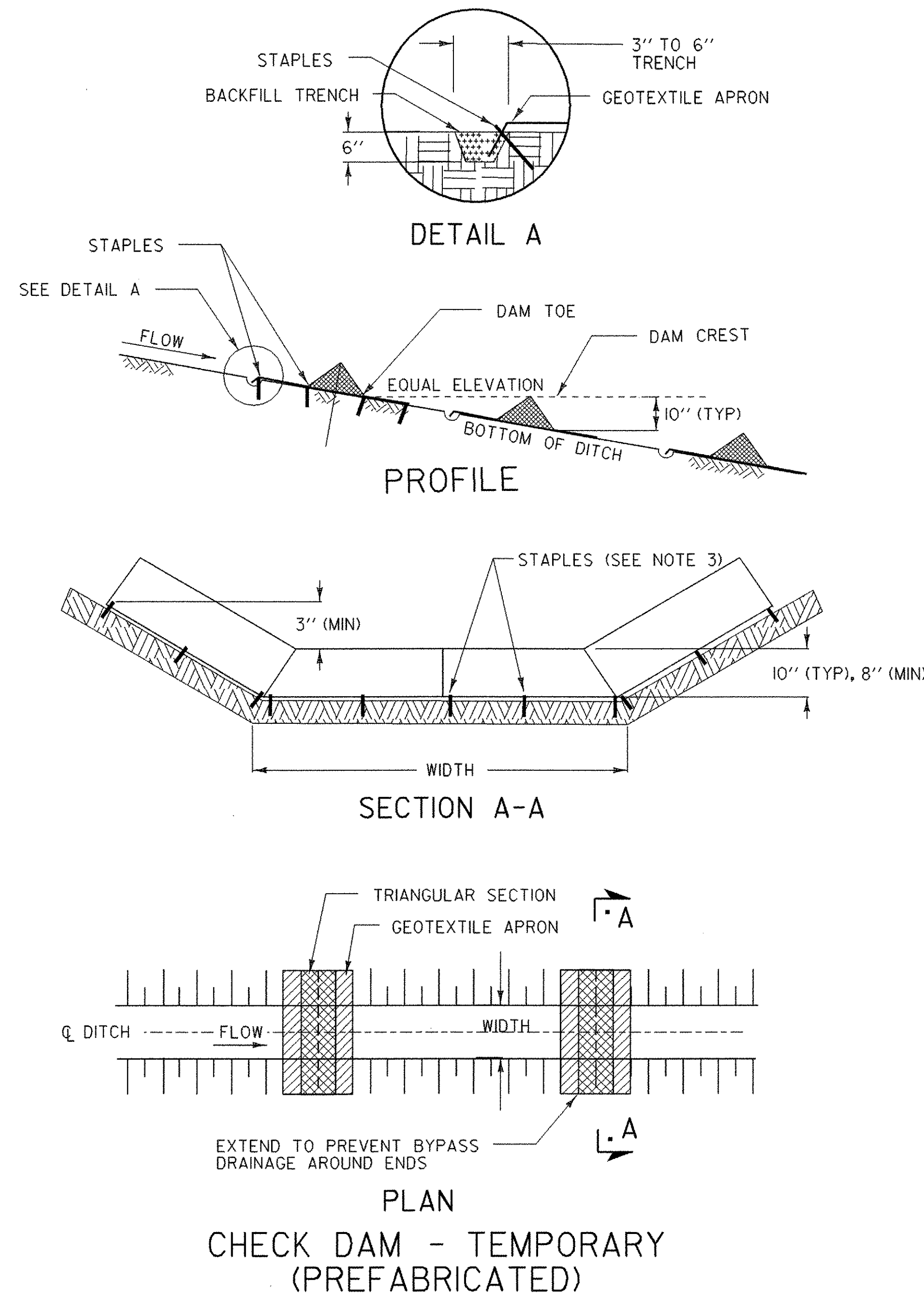
CHECK DAMS

APPLICATION NOTES:

- THE PRIMARY PURPOSE OF A CHECK DAM IS TO REDUCE EROSION IN A CHANNEL BY REDUCING FLOW VELOCITY.
- CHECK DAMS WILL CAPTURE SEDIMENT THAT FALLS OUT OF SUSPENSION BEHIND THE CHECK DAM DUE TO DECREASED VELOCITY.
- CHECK DAMS ARE NOT INTENDED TO FILTER SEDIMENT FROM TURBID WATER.
- DETAILS SHOWN SHALL BE USED FOR TEMPORARY INSTALLATION ONLY.
- PREFABRICATED DAMS ARE NOT TO BE USED ON SLOPES GREATER THAN 5% OR PER MANUFACTURER'S SPECIFICATIONS.
- PREFABRICATED DAM SPECIFICATIONS SHALL BE PROVIDED TO THE ENGINEER FOR APPROVAL PRIOR TO USE.

GENERAL NOTES:

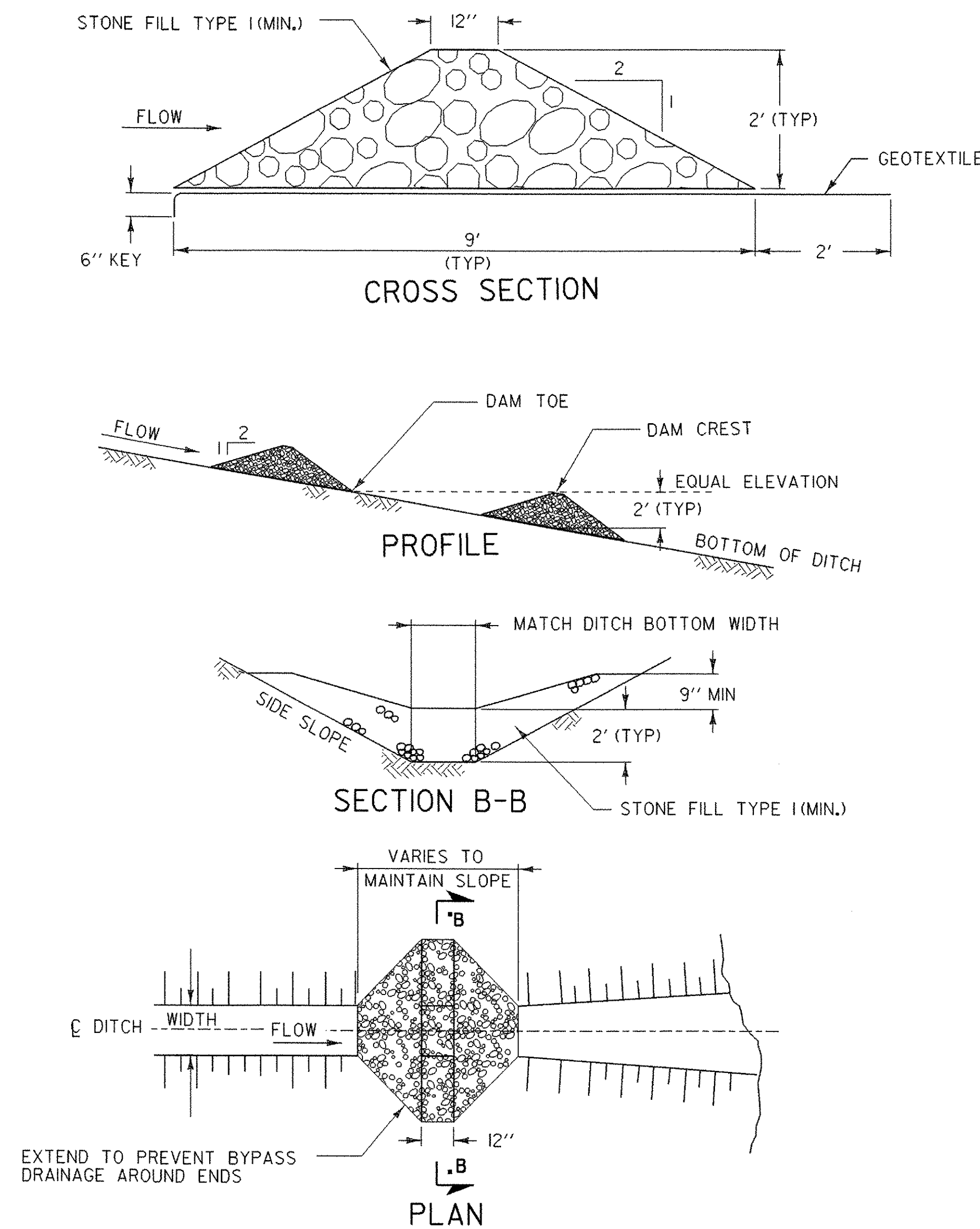
- GEOTEXTILE SHALL BE INSTALLED UNDER STONE FILL, IT SHALL BE KEYED IN ON THE UP HILL END AND SHALL EXTEND 2 FEET BEYOND THE STONE ON THE DOWN HILL END.
- CORE MATERIAL FOR THE STONE CHECK DAM SHALL MEET THE GRADATION REQUIREMENTS OF STONE FILL TYPE 1(MIN.). STONE SIZE SHOULD BE INCREASED WITH INCREASED SLOPE AND VELOCITY.
- THE UPHILL END OF THE APRON FOR THE PREFABRICATED CHECK DAM SHALL BE STAPLED AND BURIED AS SHOWN IN DETAIL "A" OR AS RECOMMENDED BY THE MANUFACTURER'S LITERATURE.
- MEASURES SHALL BE INSPECTED EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF A STORM EVENT GREAT ENOUGH TO CAUSE WATER TO LEAVE THE CONSTRUCTION SITE.
- MEASURES SHALL BE CLEANED AND REPAIRED AS NEEDED. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATION REACHES ONE-HALF OF THE MEASURE HEIGHT. SEDIMENT SHALL BE DISPOSED OF AS UNSUITABLE MATERIAL.
- AT TIME OF REMOVAL OF THE CHECK DAMS, THE DISTURBED AREA SHALL BE REPAIRED AND STABILIZED.
- PAYMENT FOR INSTALLATION AND REMOVAL OF CHECK DAMS SHALL BE MADE UNDER APPLICABLE ITEMS INCLUDED IN THE CONTRACT PLANS OR UNDER THE FIELD MAINTENANCE OF EROSION & SEDIMENT CONTROL PLAN ITEM.
- PAYMENT FOR MONITORING CHECK DAMS SHALL BE MADE UNDER THE MONITORING EROSION & SEDIMENT CONTROL PLAN ITEM.
- PAYMENT FOR MAINTAINING CHECK DAMS SHALL BE MADE UNDER THE FIELD MAINTENANCE OF EROSION & SEDIMENT CONTROL PLAN ITEM, UNLESS MAINTENANCE IS REQUIRED DUE TO POOR INSTALLATION PRACTICES.



PREFABRICATED CHECK DAM PLACEMENT INTERVAL

DITCH SLOPE	PLACEMENT INTERVAL **
1 %	50 FT
2 %	40 FT
3 %	25 FT
4 %	20 FT
5 %	15 FT

** BASED ON 10" TYPICAL HEIGHT



STONE CHECK DAM PLACEMENT INTERVAL

DITCH SLOPE	PLACEMENT INTERVAL **
1 %	200 FT
2 %	100 FT
3 %	65 FT
4 %	50 FT
5 %	40 FT
6 %	30 FT
8 %	25 FT
10 %	20 FT

** BASED ON 2' TYPICAL HEIGHT

REVISIONS AND CORRECTIONS

MAY 18, 2004 N. GARBACK

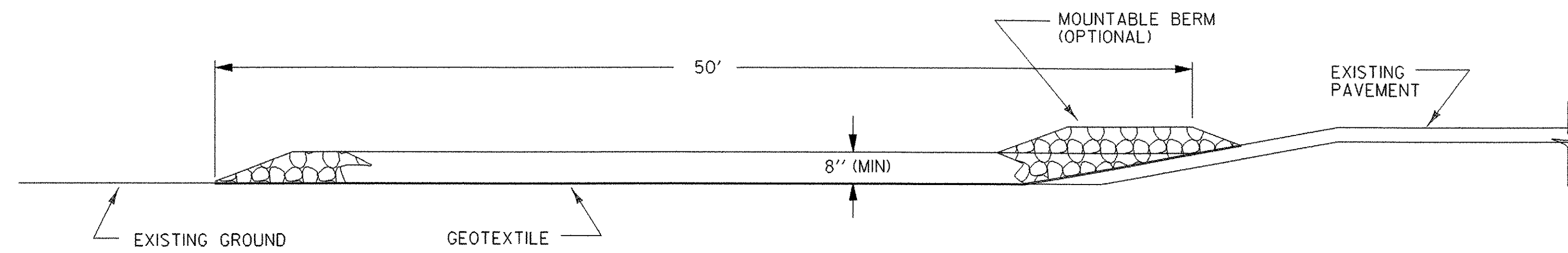
EROSION PREVENTION & SEDIMENT CONTROL DETAILS CHECK DAMS

EROSION CONTROL DETAIL SHEET

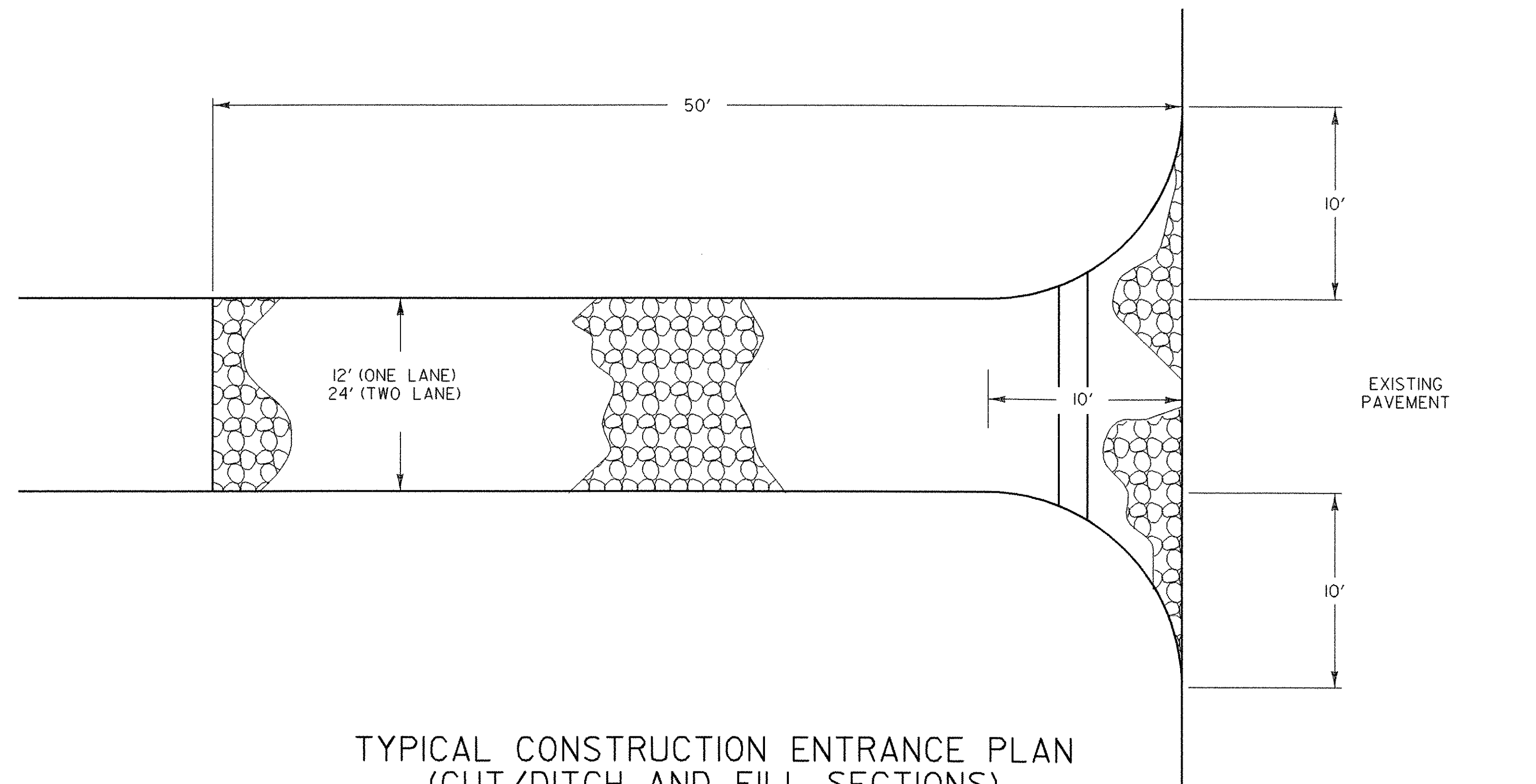
PROJECT NAME: FAIRFIELD
PROJECT NUMBER: AC STP ST 0298 (6)

FILE NAME: str5/01c182/sc182bdr.dgn PLOT DATE: 28-APR-2005
PROJECT LEADER: C. Keller DRAWN BY: J. Reed
DESIGNED BY: J. Reed CHECKED BY:
sc182epsc2.i SHEET 38 OF 41

STABILIZED CONSTRUCTION ENTRANCE



TYPICAL CONSTRUCTION ENTRANCE PROFILE
(CUT AND DITCH SECTIONS)



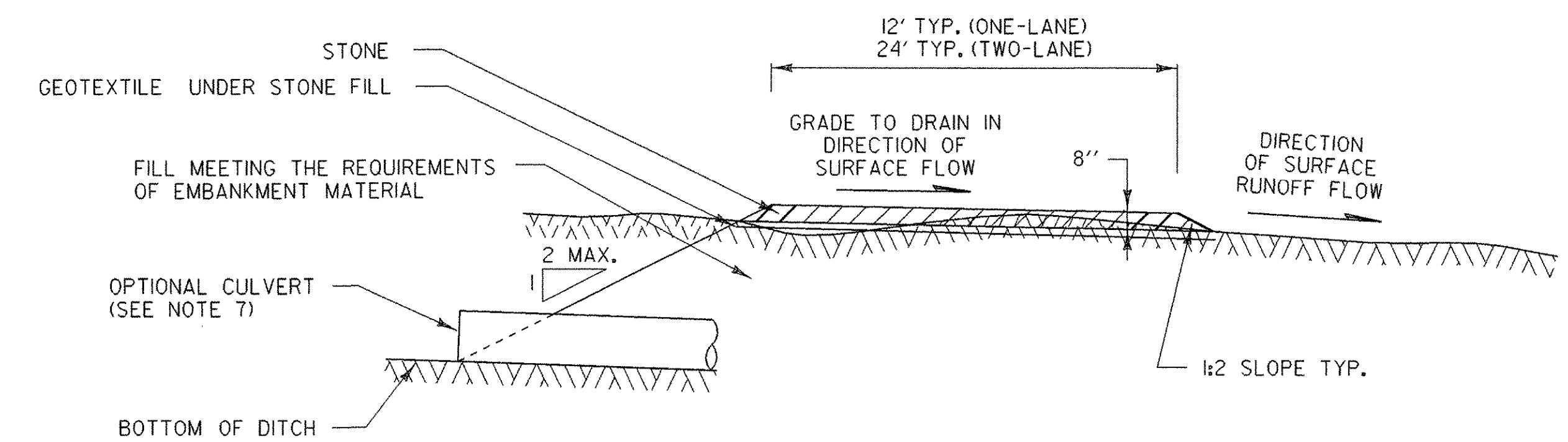
TYPICAL CONSTRUCTION ENTRANCE PLAN
(CUT/DITCH AND FILL SECTIONS)

APPLICATION NOTES:

A. THE PURPOSE OF A STABILIZED CONSTRUCTION ENTRANCE IS TO REDUCE OR ELIMINATE THE TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS OF WAY OR STREETS.

GENERAL NOTES:

1. STONE SIZE - USE CLEAN STONE WITH GRADATION BETWEEN 2 INCHES AND 4 INCHES .
2. LENGTH - 50 FEET (MIN)
3. THICKNESS - 18 INCHES (MIN)
4. WIDTH - 12 FEET (MIN)
5. GEOTEXTILE UNDER STONE WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE AS DIRECTED BY THE ENGINEER. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. PROPOSED DRAINAGE PIPES SHALL BE SIZED WITH SUFFICIENT CAPACITY TO CARRY DITCH FLOWS. ALTERNATIVE WAYS OF TRANSPORTING DITCH DRAINAGE ACROSS CONSTRUCTION ENTRANCES MAY BE PROPOSED BY THE CONTRACTOR FOR APPROVAL BY THE ENGINEER.
8. WHEN WASHING OF VEHICLE IS NECESSARY, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. MEASURES SHALL BE INSPECTED EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF A STORM EVENT GREAT ENOUGH TO CAUSE WATER TO LEAVE THE CONSTRUCTION SITE.
10. MAINTENANCE- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
11. AT THE TIME OF REMOVAL OF THE STABILIZED CONSTRUCTION ENTRANCE THE DISTURBED AREA SHALL BE REPAIRED AND STABILIZED.
12. PAYMENT OF THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE MADE UNDER APPLICABLE ITEMS INCLUDED IN THE CONTRACT PLANS OR UNDER THE FIELD MAINTENANCE OF EROSION & SEDIMENT CONTROL PLAN ITEM.
13. PAYMENT FOR MONITORING STABILIZED CONSTRUCTION ENTRANCES SHALL BE MADE UNDER THE MONITORING EROSION & SEDIMENT CONTROL PLAN ITEM.
14. PAYMENT FOR MAINTAINING THE CONSTRUCTION ENTRANCE SHALL BE MADE UNDER THE FIELD MAINTENANCE OF EROSION & SEDIMENT CONTROL PLAN ITEM, UNLESS MAINTENANCE IS REQUIRED DUE TO POOR INSTALLATION PRACTICES.



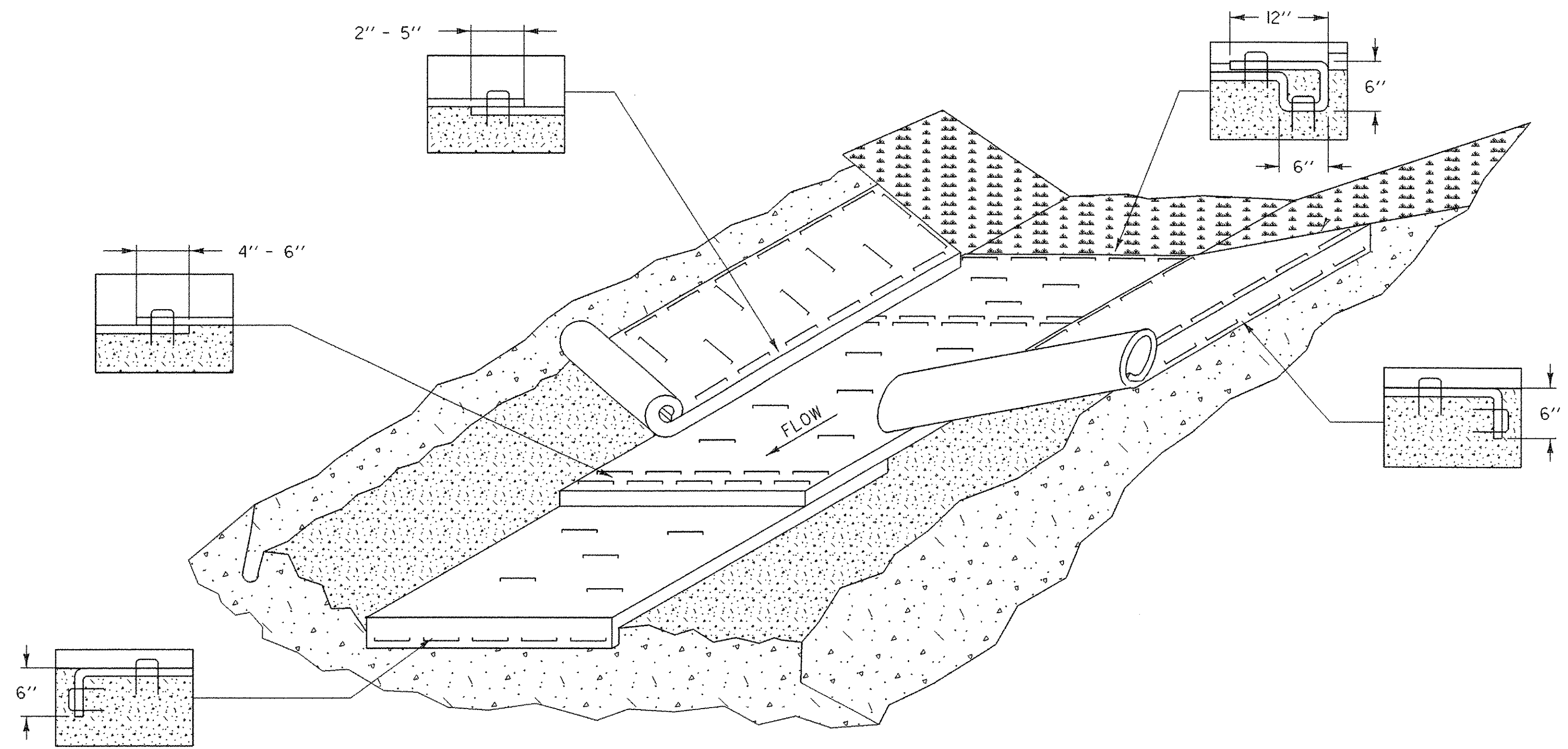
TYPICAL CONSTRUCTION ENTRANCE SECTION

REVISIONS AND CORRECTIONS
MAY 18, 2004 N. GARBACIK

EROSION PREVENTION & SEDIMENT CONTROL DETAILS CONSTRUCTION ENTRANCE

EROSION CONTROL DETAIL SHEET

PROJECT NAME:	FAIRFIELD	PLOT DATE:	28-APR-2005
PROJECT NUMBER:	AC STP ST 0298 (6)	DRAWN BY:	J. Reed
FILE NAME:	str5/01c182/sc182bdr.dgn	CHECKED BY:	
PROJECT LEADER:	C. Keller	SHEET	39 OF 41
DESIGNED BY:	J. Reed		
sc182epsc3.i			



EROSION PROTECTION FOR DITCHES

APPLICATION NOTES:

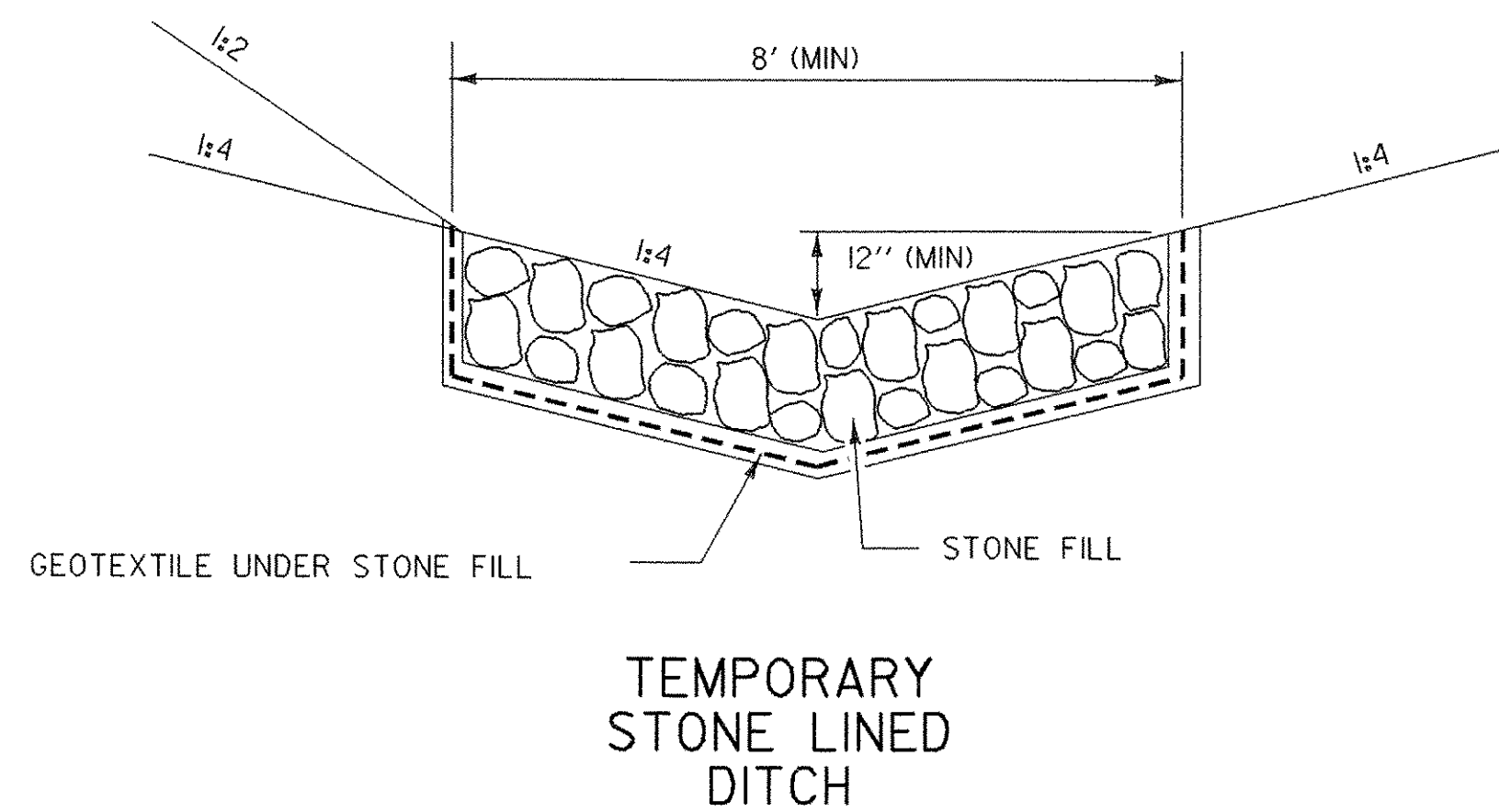
- A. THE PURPOSE OF LINING THE DITCH WITH EROSION MATTING IS TO REDUCE EROSION AND AID THE ESTABLISHMENT OF VEGETATION AT LOW VELOCITIES.
- B. THE FOLLOWING CHARTS SHALL BE USED TO DETERMINE THE APPROPRIATE EROSION CONTROL MEASURE:

DITCH AND CHANNEL PROTECTION	
SLOPE	LINING
< 1%	GRASS
1% TO 4%	EROSION MATTING
4% TO 10%	STONE FILL, TYPE I
> 10%	STONE FILL, TYPE II

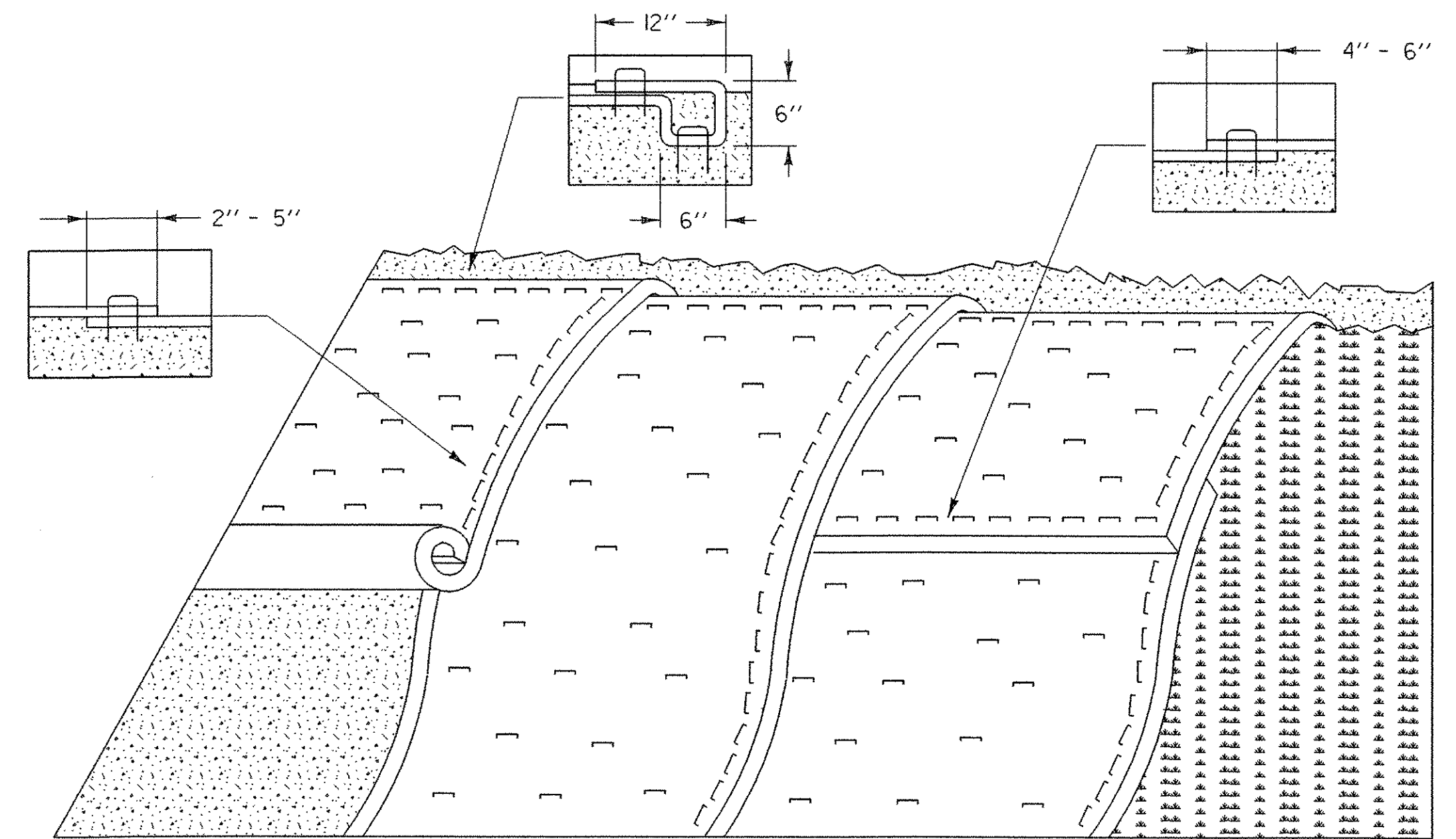
STONE FILL THICKNESS	
STONE FILL TYPE	THICKNESS
TYPE I	1 FT
TYPE II	2 FT

GENERAL NOTES:

1. WATER MAY NEED TO BE DIVERTED TO ALLOW PROPER MATTING INSTALLATION.
2. GRADE AND SMOOTH CHANNEL TO PROVIDE GOOD MATTING TO SOIL SURFACE CONTACT.
3. APPLY FERTILIZER, LIME, AND SEED PRIOR TO PLACING MATTING.
4. INSTALL MATTING IN THE CENTER OF THE CHANNEL, IN THE DIRECTION OF THE WATER FLOW.
5. INSTALL MATTING ON THE SIDE SLOPES OF THE CHANNEL, OVERLAPPING THE CENTER MAT.
6. ANCHOR MATTING AS SHOWN, UTILIZING ANCHOR STAPLES. STAPLE PLACEMENT SHALL BE DETERMINED BY THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
7. MEASURES SHALL BE INSPECTED EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF A STORM EVENT GREAT ENOUGH TO CAUSE WATER TO LEAVE THE CONSTRUCTION SITE.
8. MEASURES SHALL BE REPAIRED AND RESTAPLED AS NECESSARY TO ENSURE PROPER FUNCTION.
9. PAYMENT FOR INSTALLATION OF MATTING SHALL BE MADE UNDER THE EROSION CONTROL WITH MATTING ITEM.
10. PAYMENT FOR MONITORING EROSION CONTROL MATTING SHALL BE MADE UNDER THE MONITORING EROSION & SEDIMENT CONTROL PLAN ITEM.
11. PAYMENT FOR MAINTAINING DITCH PROTECTION SHALL BE MADE UNDER THE FIELD MAINTENANCE OF EROSION & SEDIMENT CONTROL PLAN ITEM, UNLESS MAINTENANCE IS REQUIRED DUE TO POOR INSTALLATION PRACTICES.



**TEMPORARY
STONE LINED
DITCH**



EROSION PREVENTION FOR SIDE SLOPES

APPLICATION NOTES:

- A. THE PURPOSE OF MATTING ON SIDE SLOPES IS TO REDUCE EROSION AND AID THE ESTABLISHMENT OF VEGETATION
- B. EROSION CONTROL MATTING SHALL BE USED FOR THE FOLLOWING REASONS:
 - SIDE SLOPES > 3H (H:V)
 - AREAS WHERE SEED AND MULCH WILL NOT STAY IN PLACE ALONE
 - WHERE SEEDING IS OUTSIDE THE GROWING SEASON.

GENERAL NOTES:

1. GRADE AND SMOOTH THE SLOPE TO PROVIDE GOOD MATTING TO SOIL SURFACE CONTACT.
2. APPLY FERTILIZER, LIME, AND SEED PRIOR TO PLACING MATTING.
3. ANCHOR MATTING AS SHOWN, UTILIZING ANCHOR STAPLES. STAPLE PLACEMENT SHALL BE DETERMINED BY THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
4. UNROLL MATTING VERTICALLY DOWN SLOPE IN THE DIRECTION OF WATER FLOW.
5. OVERLAP UPPER MATTING OVER LOWER MATTING AS SHOWN.
6. OVERLAP ADJACENT MATTING AS SHOWN.
7. CUT EXCESS MATTING AT END OF SLOPE AND ANCHOR THE END.
8. MEASURES SHALL BE INSPECTED EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF A STORM EVENT GREAT ENOUGH TO CAUSE WATER TO LEAVE THE CONSTRUCTION SITE.
9. MATTING SHALL BE REPAIRED AND RESTAPLED AS NECESSARY TO ENSURE PROPER FUNCTION.
10. PAYMENT FOR INSTALLATION OF MATTING SHALL BE MADE UNDER THE EROSION CONTROL WITH MATTING ITEM.
11. PAYMENT FOR MONITORING EROSION CONTROL MATTING SHALL BE MADE UNDER THE MONITORING EROSION & SEDIMENT CONTROL PLAN ITEM.
12. PAYMENT FOR MAINTAINING SLOPE PROTECTION SHALL BE MADE UNDER THE FIELD MAINTENANCE OF EROSION & SEDIMENT CONTROL PLAN ITEM, UNLESS MAINTENANCE IS REQUIRED DUE TO POOR INSTALLATION PRACTICES.

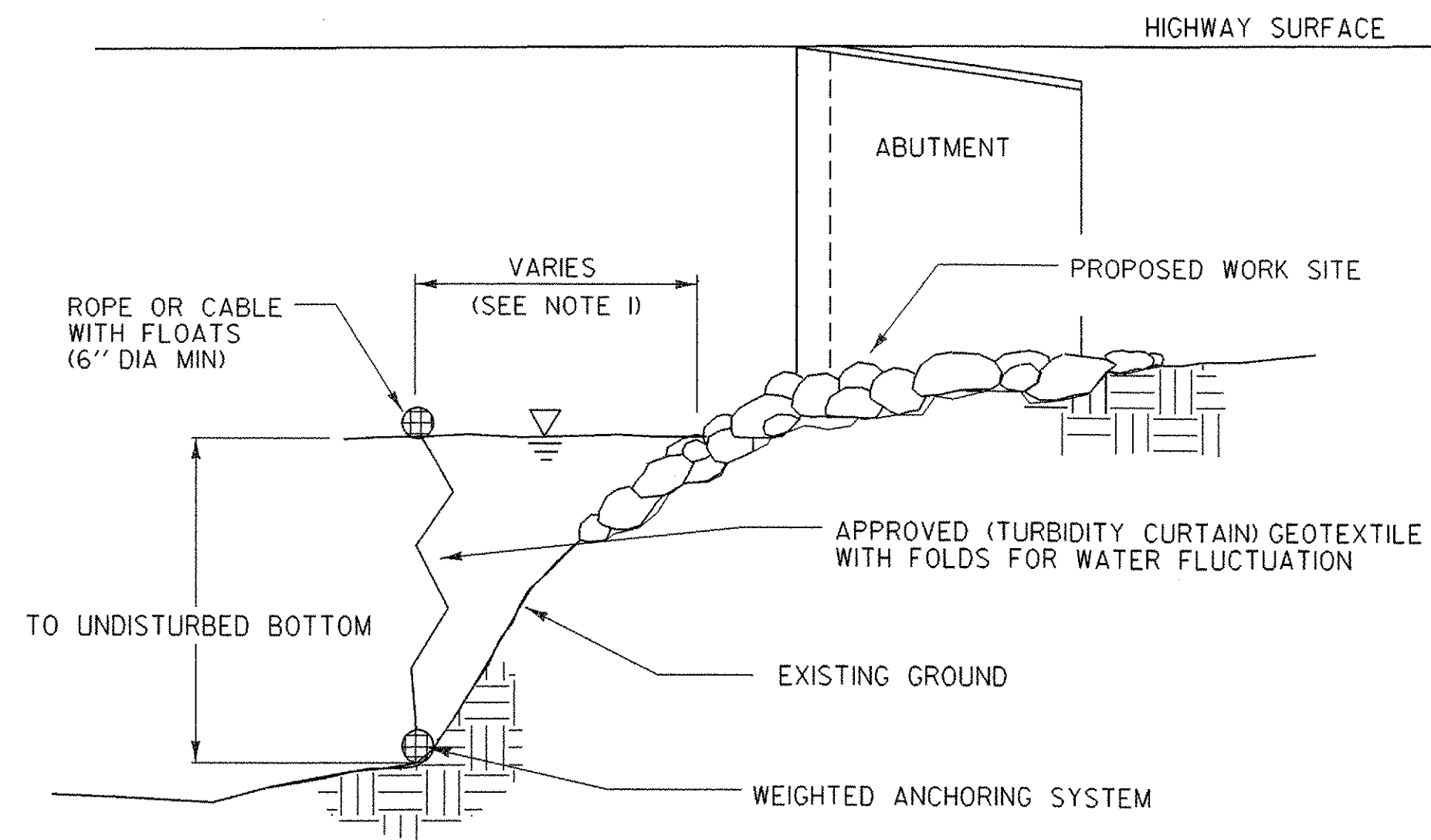
REVISIONS AND CORRECTIONS

MAY 18, 2004 N. GARBACK

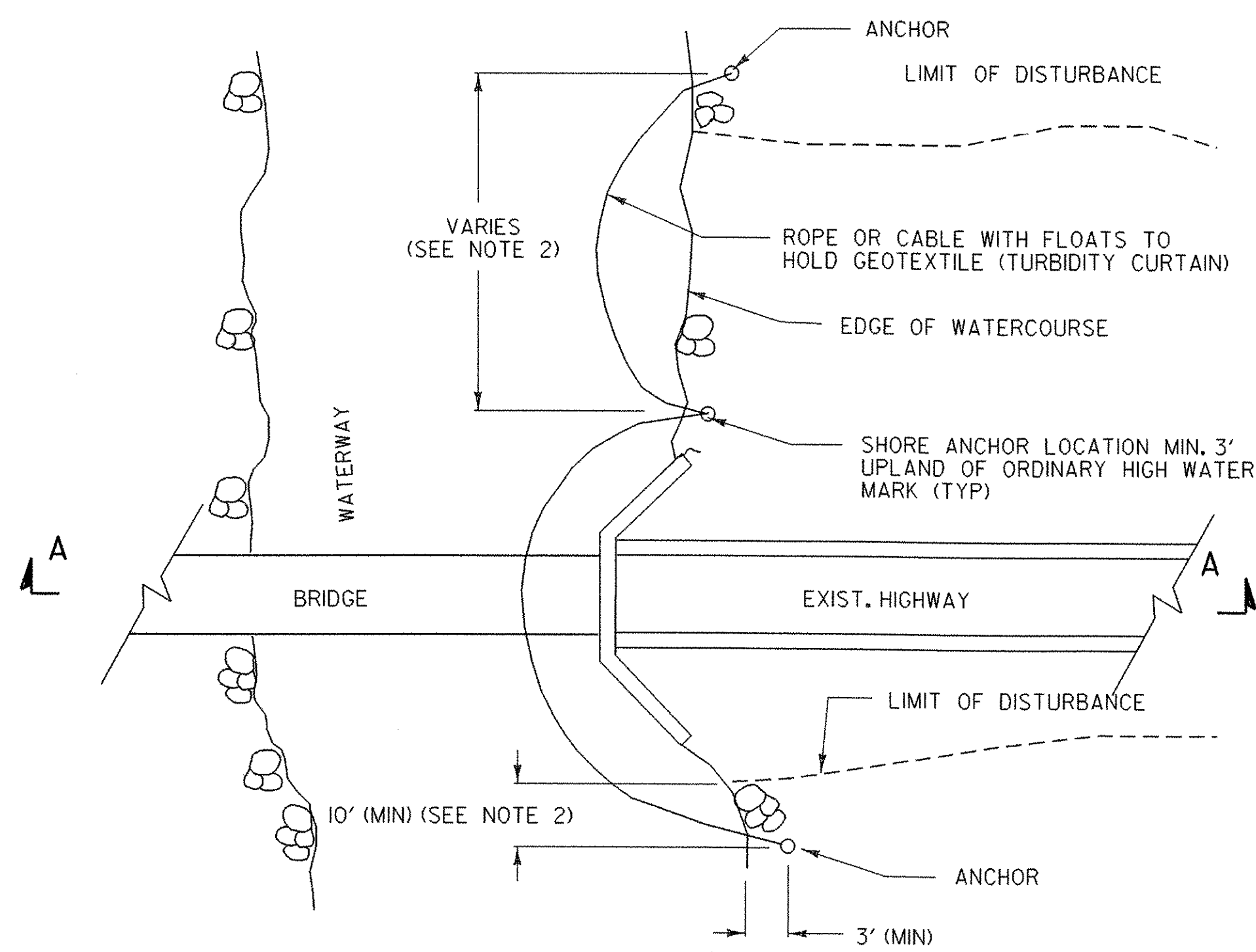
**EROSION PREVENTION &
SEDIMENT CONTROL DETAILS
DITCH & SLOPE PROTECTION**

EROSION CONTROL DETAIL SHEET

PROJECT NAME:	FAIRFIELD
PROJECT NUMBER:	AC STP ST 0298 (6)
FILE NAME: str5/01c182/sc182bdr.dgn	PLOT DATE: 28-APR-2005
PROJECT LEADER: C. Keller	DRAWN BY: J. Reed
DESIGNED BY: J. Reed	CHECKED BY:
sc182epsc4.i	SHEET 40 OF 41



SECTION A-A



PLAN

TURBIDITY CURTAIN - TEMPORARY

TURBIDITY CURTAIN

APPLICATION NOTES:

- A. THE PURPOSE OF A TURBIDITY CURTAIN IS TO SEPARATE WORK AREAS IN OR ADJACENT TO WATERS, TO PREVENT SEDIMENT FROM ENTERING THE WATERS.
- B. TURBIDITY CURTAIN SHALL NOT BE PLACED ACROSS A FLOWING WATERWAY, OR IN A WATERWAY WITH STREAM VELOCITIES GREATER THAN 1.5 FT/SEC.
- C. TURBIDITY CURTAIN SHALL NOT BE PLACED AT THE OUTLET OF A CULVERT OR DITCH UNLESS THE VELOCITY DOES NOT EXCEED 1.5 FT/SEC.
- D. THE DETAIL DEPICTS WORK AT A BRIDGE LOCATION, BUT TURBIDITY CURTAIN MAY BE APPLIED AT OTHER LOCATIONS.

GENERAL NOTES:

1. THE TURBIDITY CURTAIN SHALL BE PLACED AS CLOSE TO THE WORK AS POSSIBLE WITHOUT INTERFERING WITH CONSTRUCTION OPERATIONS.
2. THE TURBIDITY CURTAIN SHALL BE A MAXIMUM OF 100 FEET LONG BETWEEN ANCHORS. LAST SECTION SHALL TERMINATE A MINIMUM OF 10 FEET BEYOND THE LIMIT OF DISTURBANCE.
3. THE CONTRACTOR SHALL MONITOR THE TURBIDITY CURTAIN, TAKING INTO ACCOUNT WEATHER PATTERNS AND PREVAILING WIND DIRECTIONS THAT MAY AFFECT WATER LEVELS, VELOCITY AND MOVEMENT OF THE TURBIDITY CURTAIN.
4. THE TURBIDITY CURTAIN SHALL BE REMOVED BY SLOWLY PULLING TOWARD THE SHORE TO MINIMIZE ESCAPE OF SEDIMENTS INTO THE WATERWAY.
5. THE WEIGHTED ANCHOR SYSTEM SHALL BE A TYPE THAT ALLOWS THE CURTAIN TO CONFORM TO THE CONTOUR ON THE BOTTOM OF THE WATERWAY.
6. PAYMENT FOR INSTALLATION AND REMOVAL OF THE TURBIDITY CURTAIN SHALL BE MADE UNDER THE GEOTEXTILE FOR FILTER CURTAIN ITEM.
7. PAYMENT FOR MONITORING TURBIDITY CURTAIN SHALL BE MADE UNDER THE MONITORING EROSION & SEDIMENT CONTROL PLAN ITEM.
8. PAYMENT FOR MAINTAINING TURBIDITY CURTAIN SHALL BE MADE UNDER THE FIELD MAINTENANCE OF EROSION & SEDIMENT CONTROL PLAN ITEM, UNLESS MAINTENANCE IS REQUIRED DUE TO POOR INSTALLATION PRACTICES.

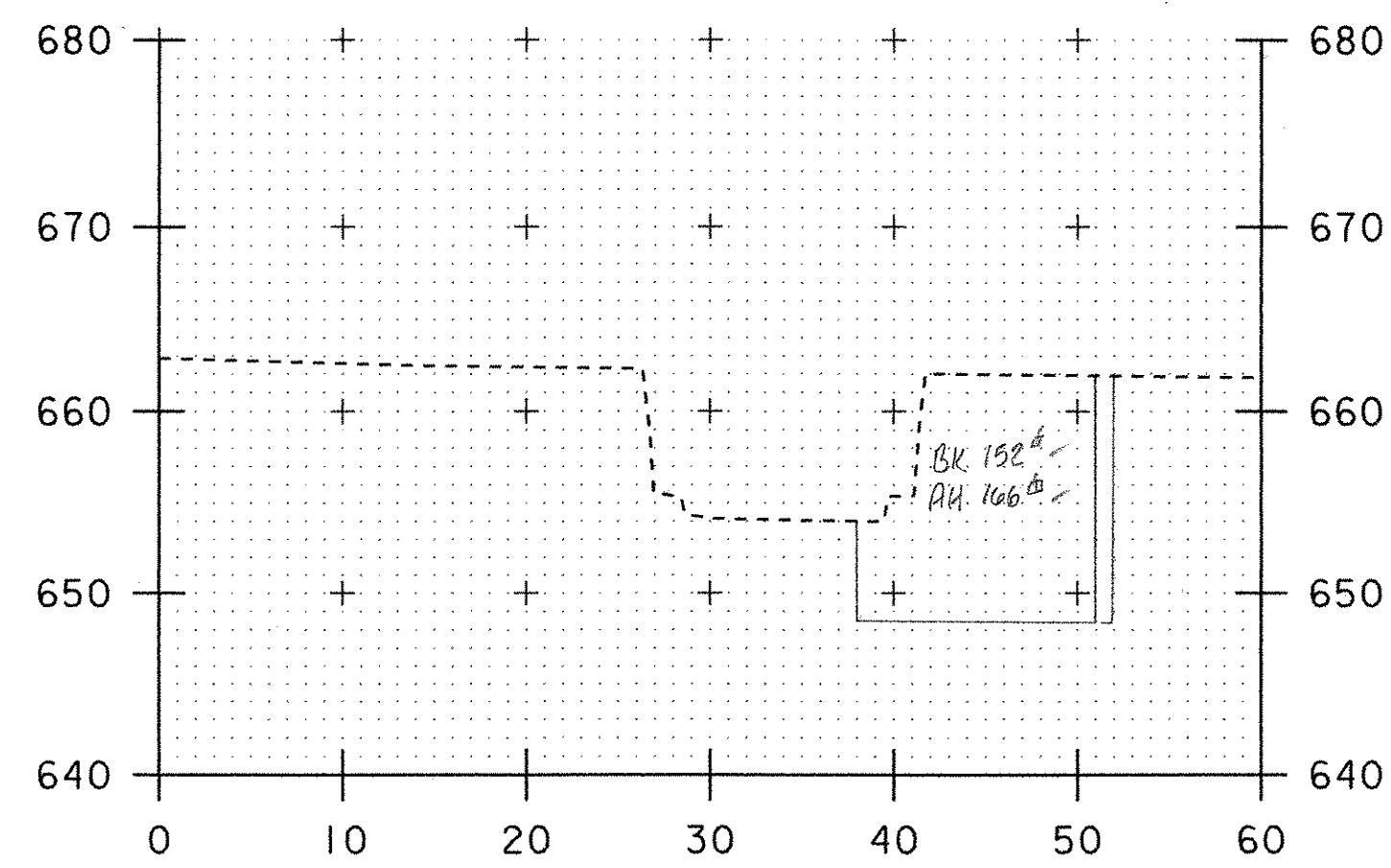
REVISIONS AND CORRECTIONS

MAY 18, 2004 N. GARBACK

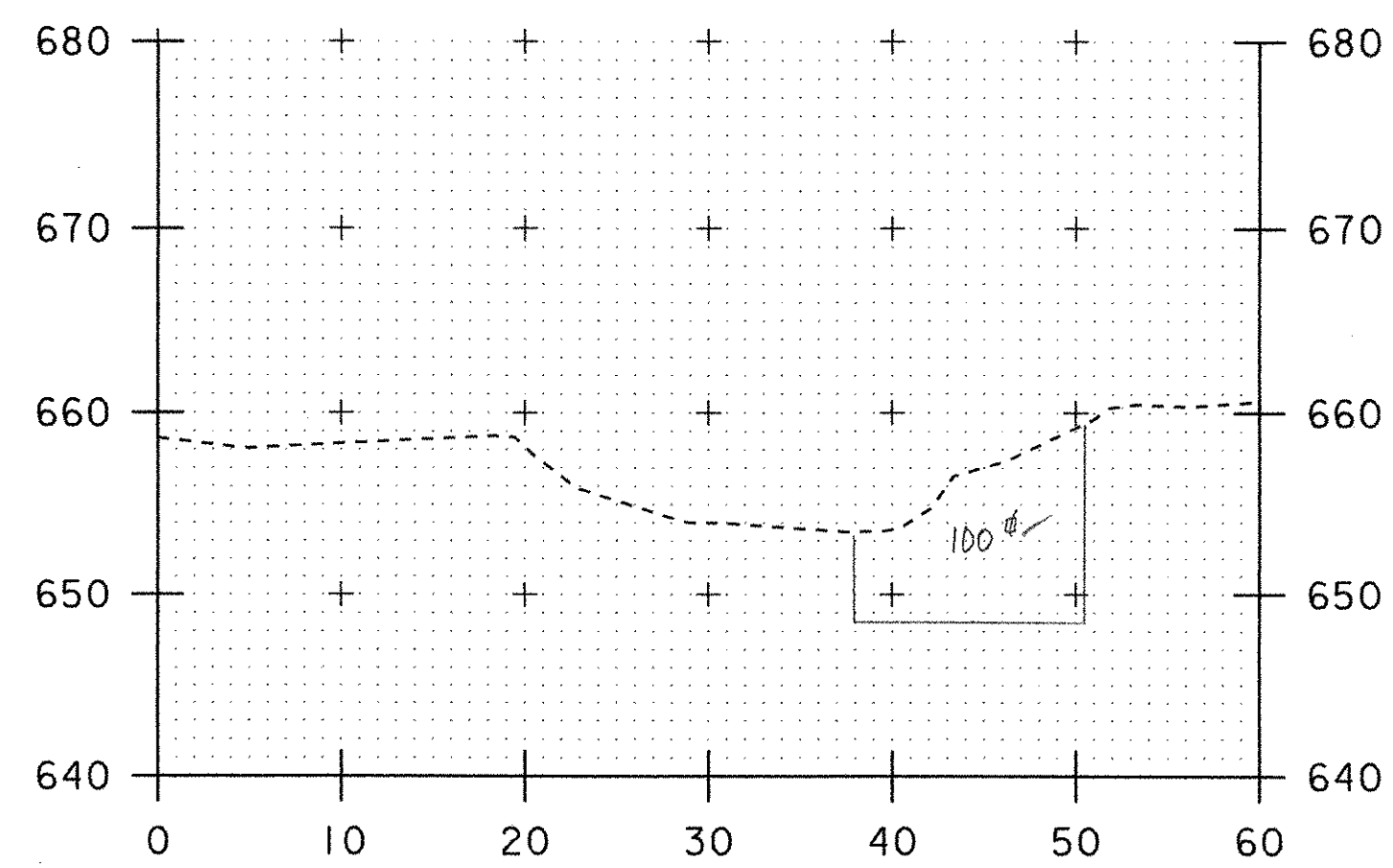
EROSION PREVENTION & SEDIMENT CONTROL DETAILS TURBIDITY CURTAIN

EROSION CONTROL DETAIL SHEET

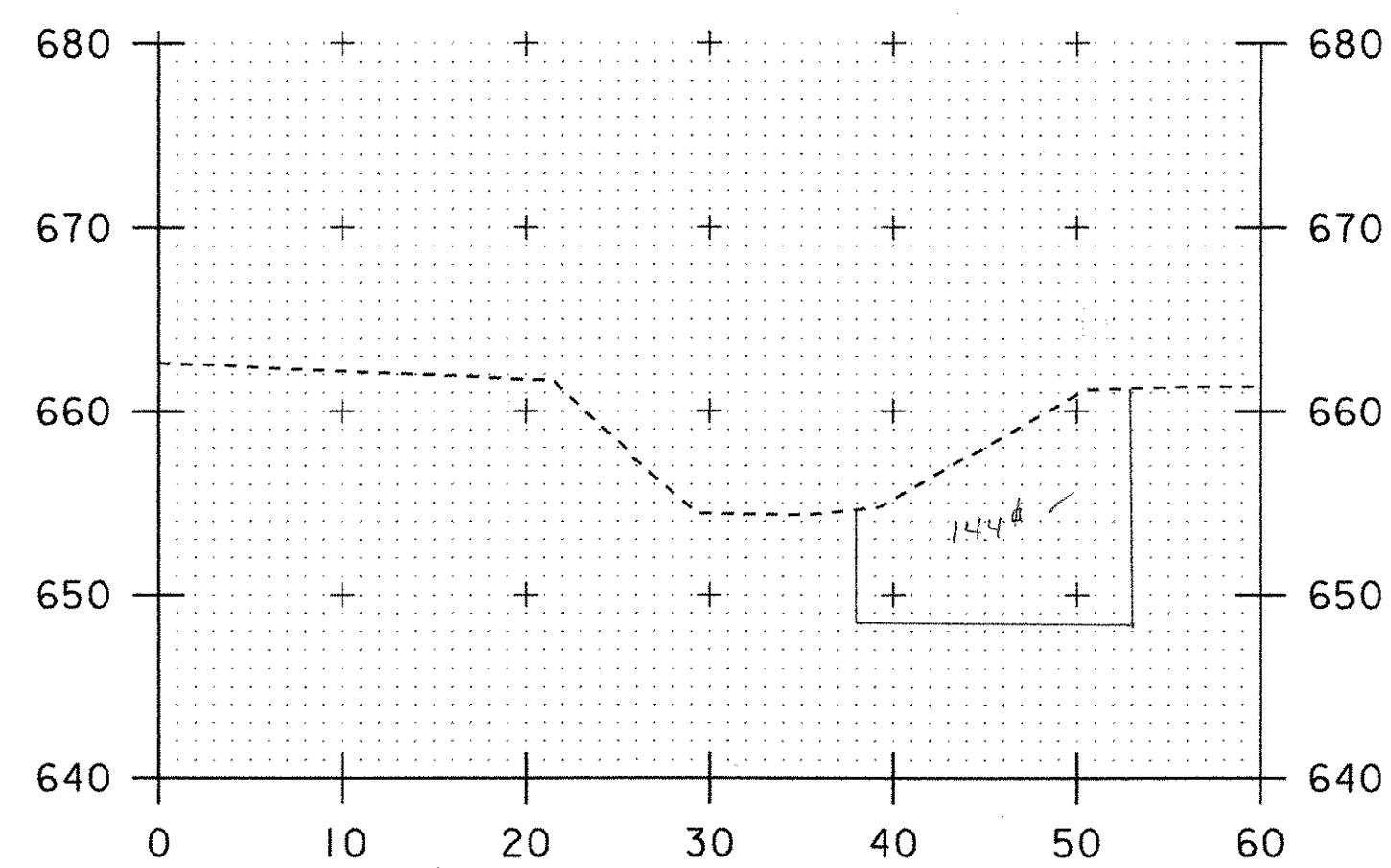
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PROJECT NUMBER:	AC STP ST 0298 (6)
FILE NAME: str5/01c182/sc182bdr.dgn	PLOT DATE: 28-APR-2005
PROJECT LEADER: C. Keller	DRAWN BY: J. Reed
DESIGNED BY: J. Reed	CHECKED BY:
sc182epsc5.i	SHEET 41 OF 41



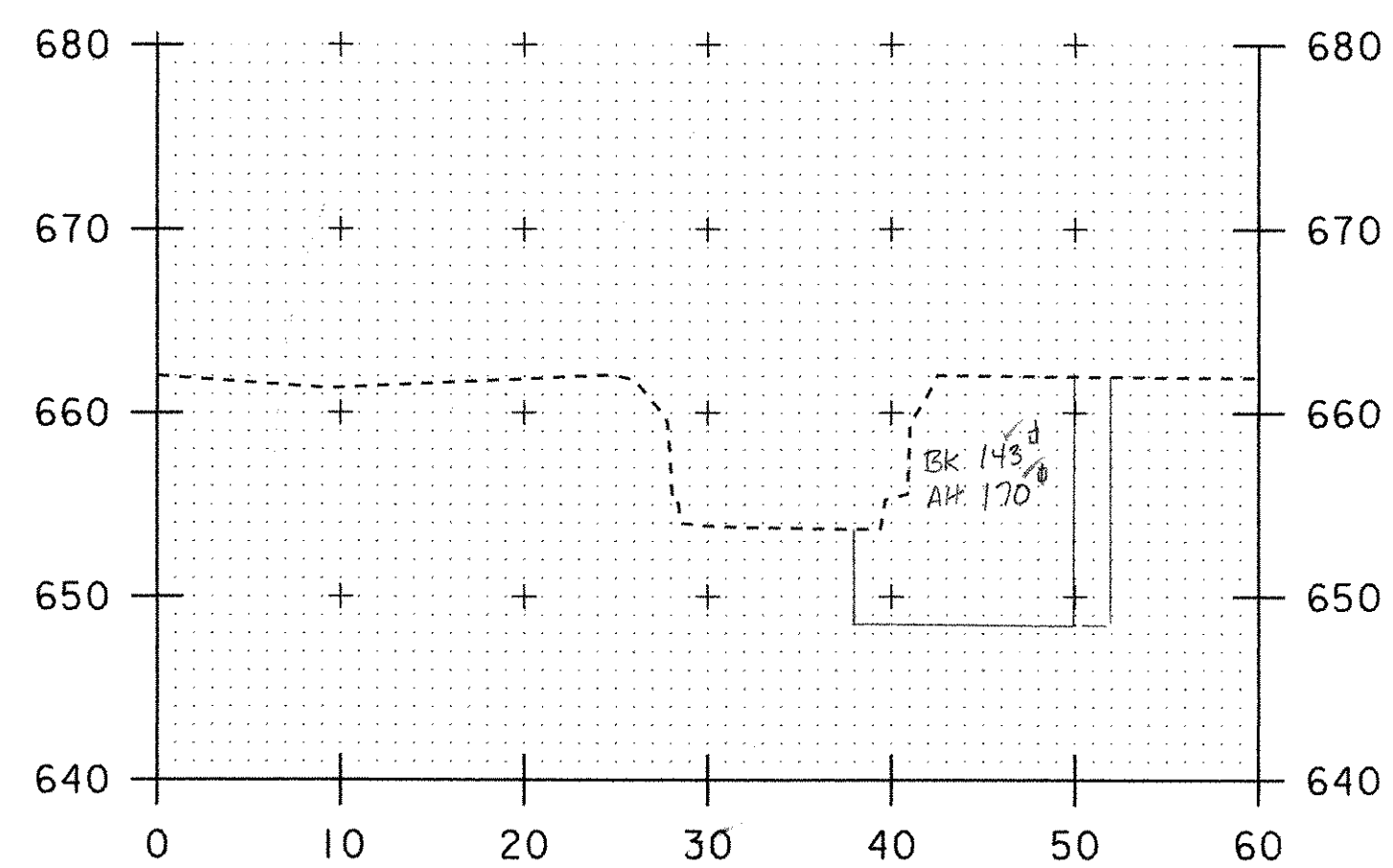
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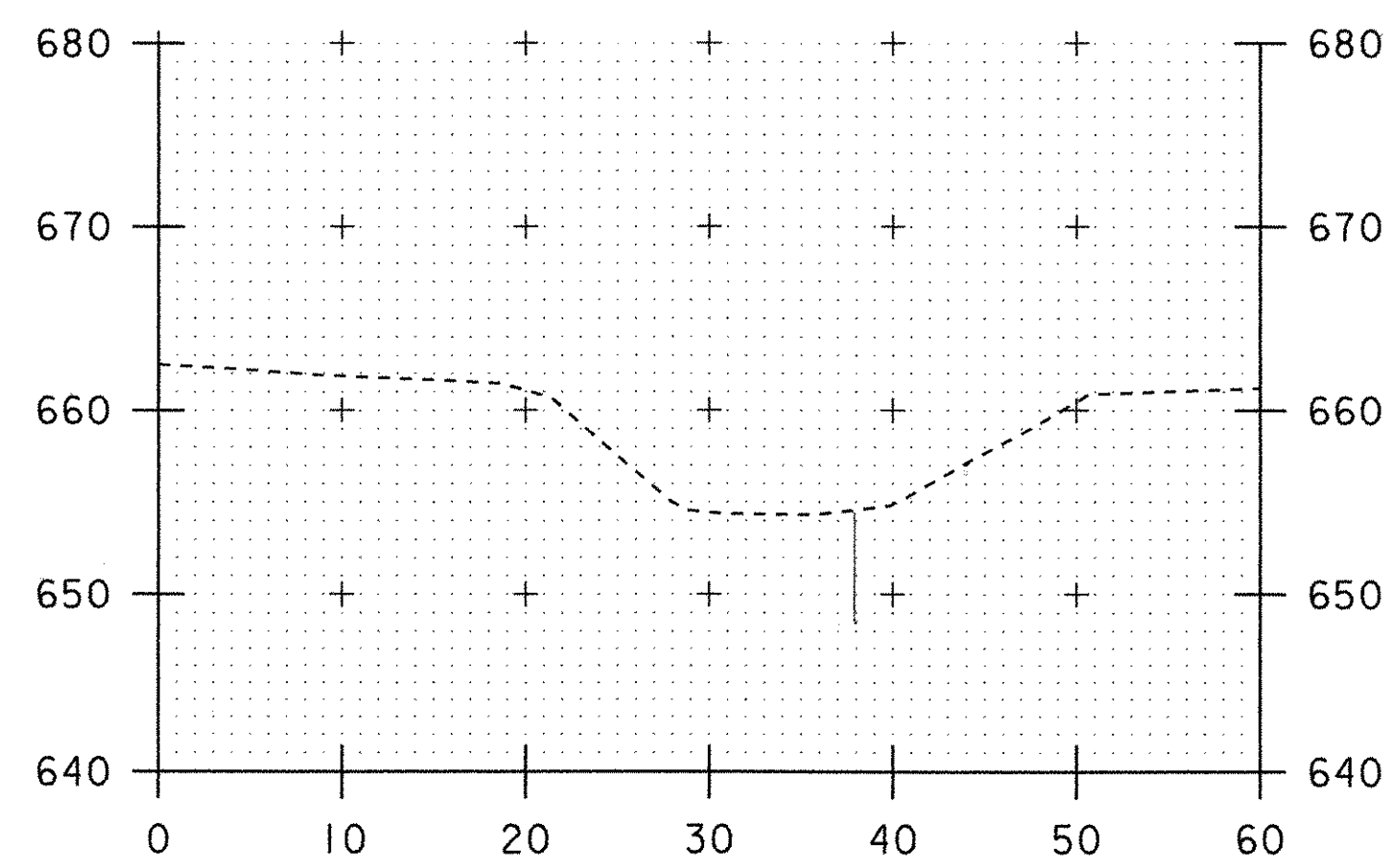
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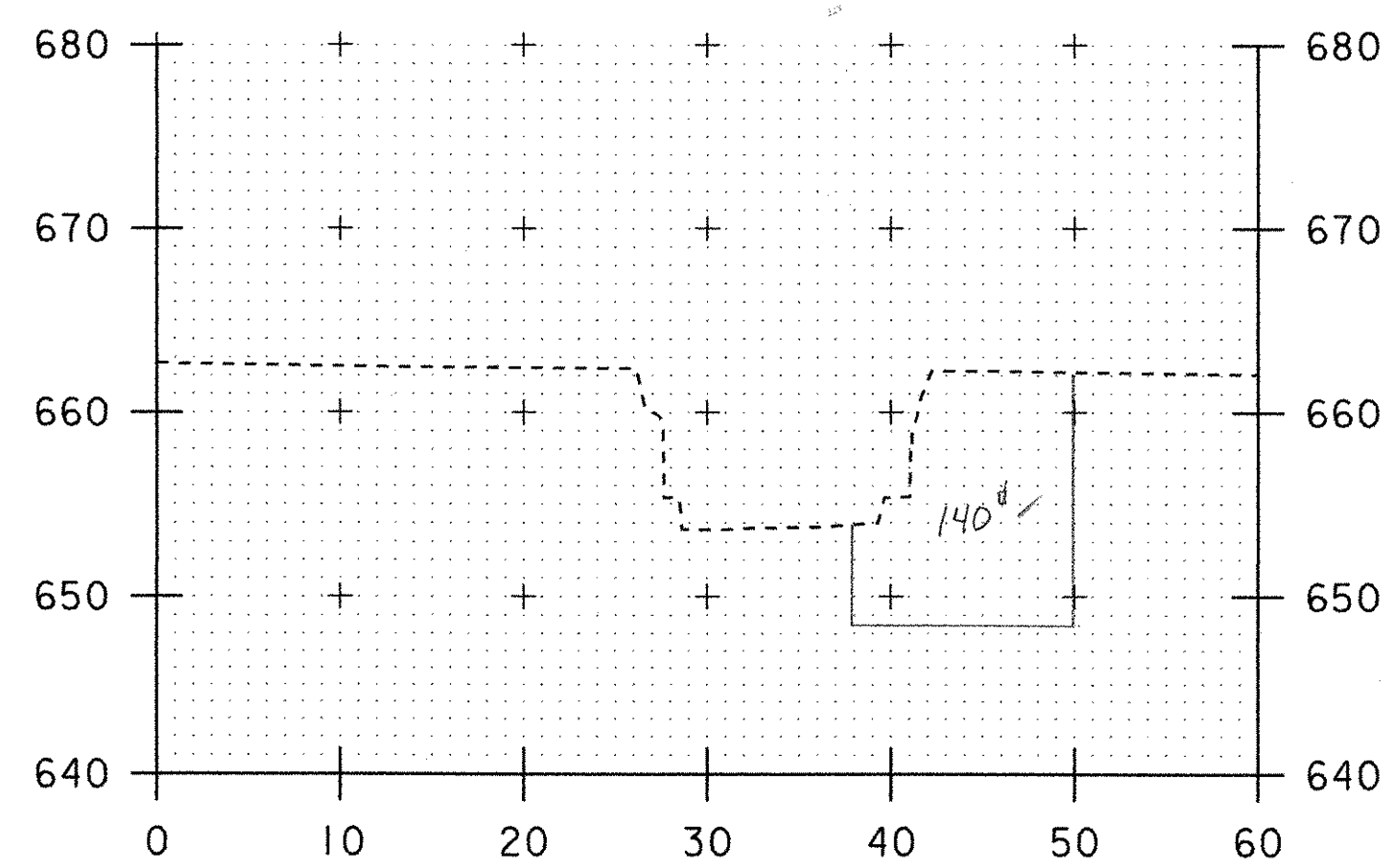
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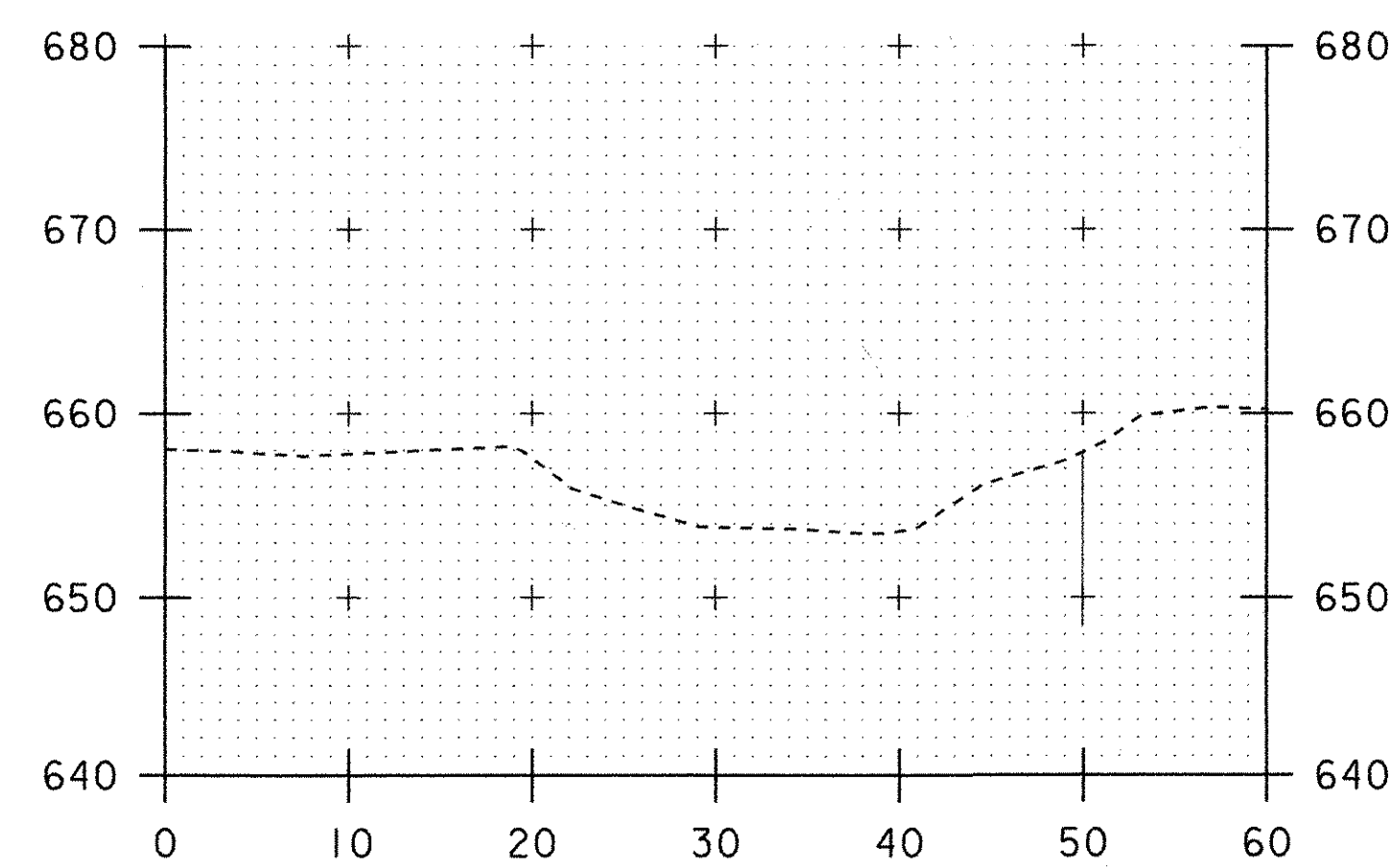
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0+33



0+58



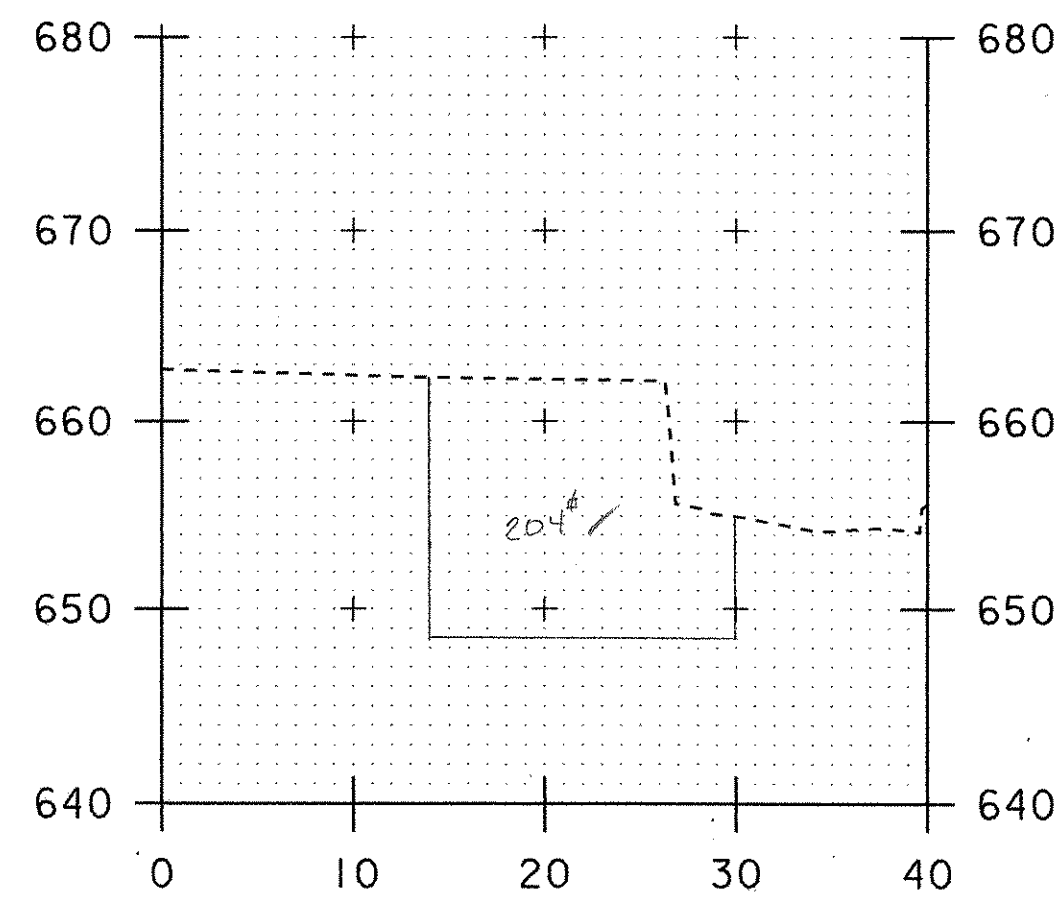
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CHANNEL CROSS SECTIONS

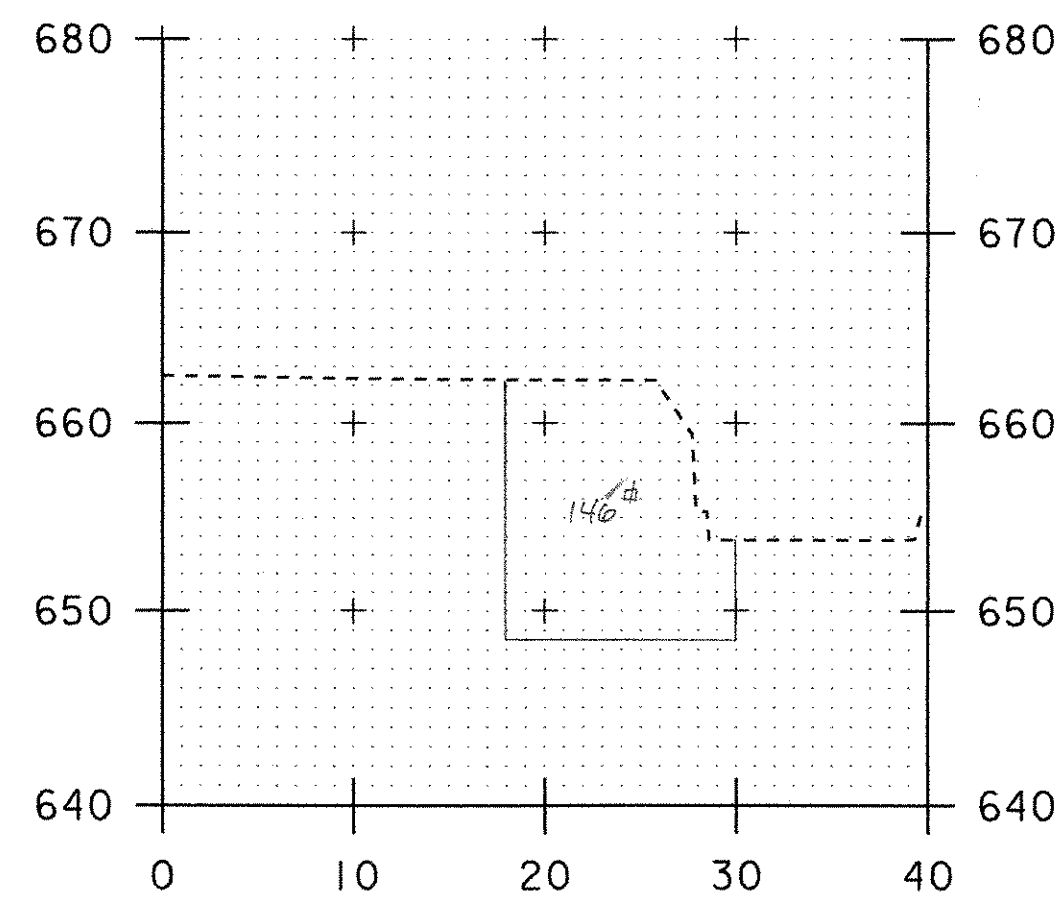
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PROJECT NUMBER:	AC STP ST 0298 (6)	DRAWN BY:	G. Shangraw
FILE NAME:	str5/01c182/sc182bdr.dgn	CHECKED BY:	
PROJECT LEADER:	C. Keller	SHEET	043 OF
DESIGNED BY:	J. Reed		

Item 208 Cofferdam Excavation

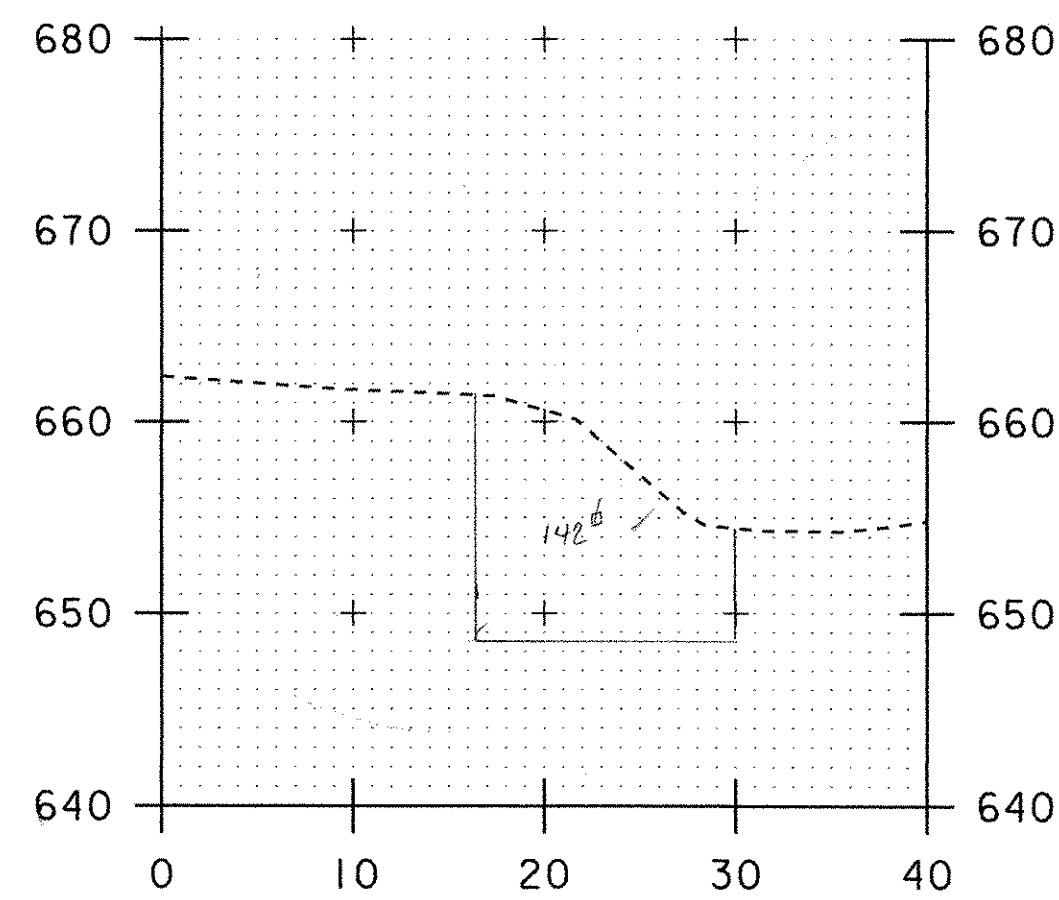
Abutment	Area	Dist	Vol.	
0+29	0	2.5	6.57 cy	
+31.5	142	9.5	60.67	
+41	204	1	6.44	ed 7/20 11-14-06
+42	144	12	54.22	11-14-06
+54	140	10	52.96	
+64	146	13	65.00	
+77	124	2	4.59	
+79	0			
				250.69 cy Earth & Rock
				259.54 cy 11-14-06
Abutment 2	0			
0+33	0	3	8.00	
+36	144	11.5	63.04	
+47.5 BK	192			
+47.5 AH	166			
+58	140	10.5	59.69	59.50 ed 7/20 11-14-06
+70 BK	145			
+70 AH	170			
+80.5	100	10.5	52.50	
+83	0	2.5	4.63	
				250.75 cy Earth & Rock
				250.54 cy 11-14-06



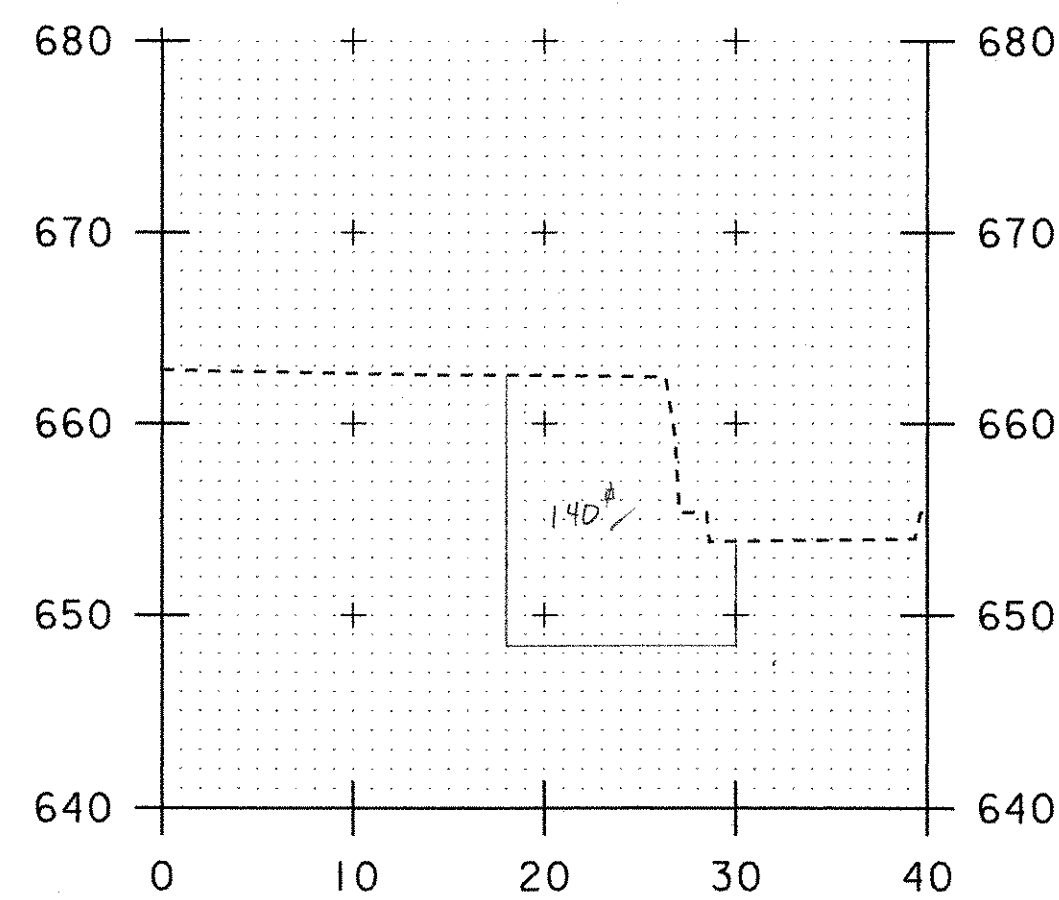
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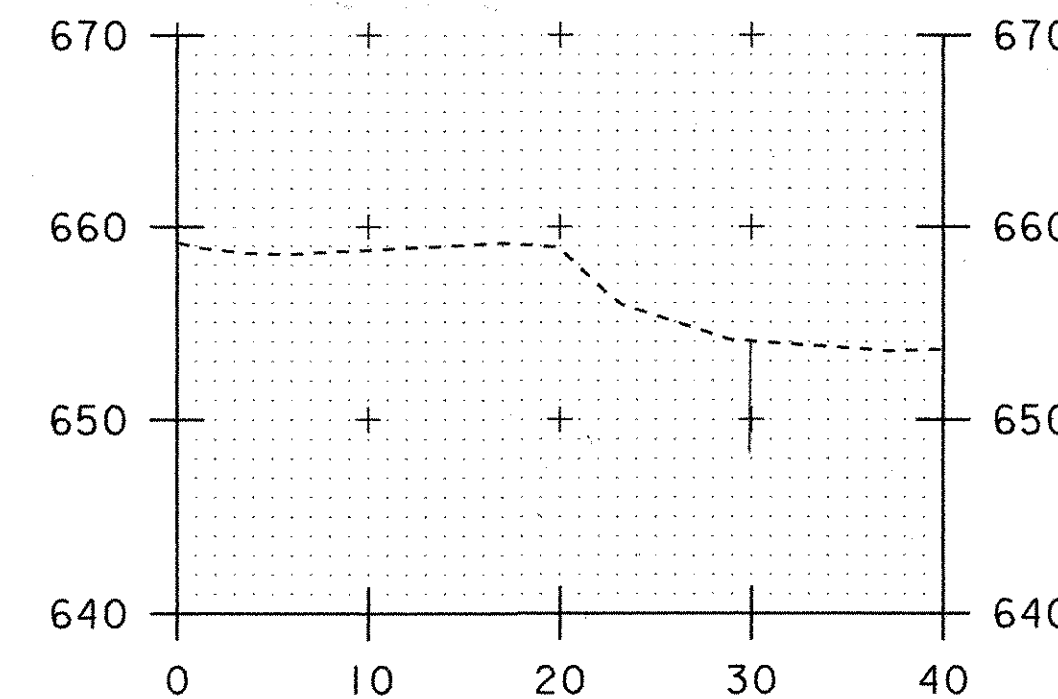
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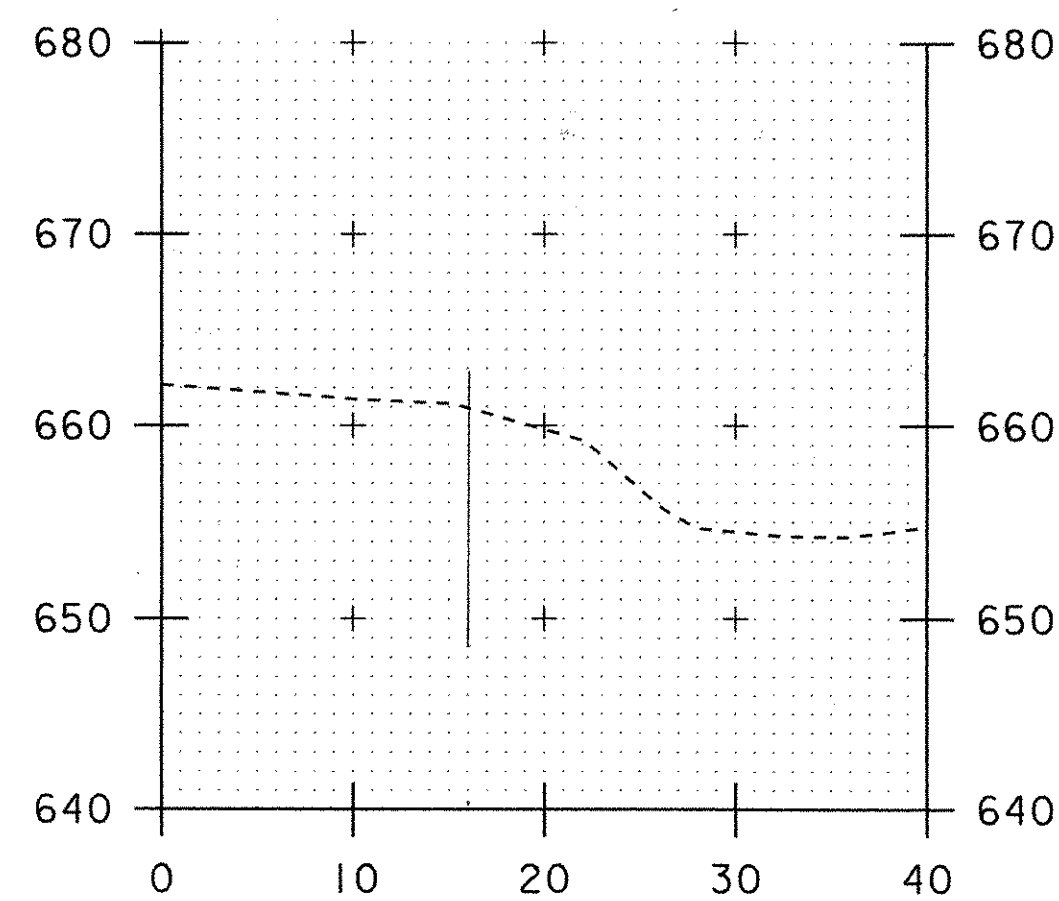
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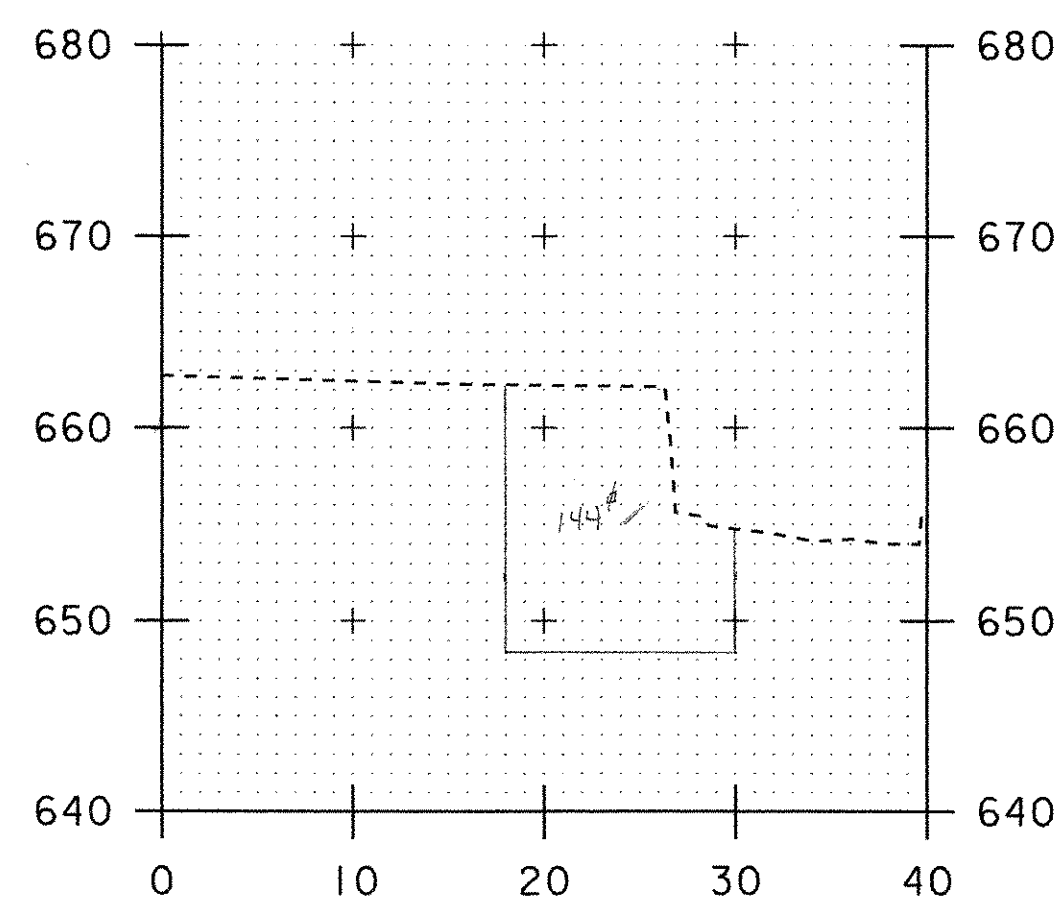
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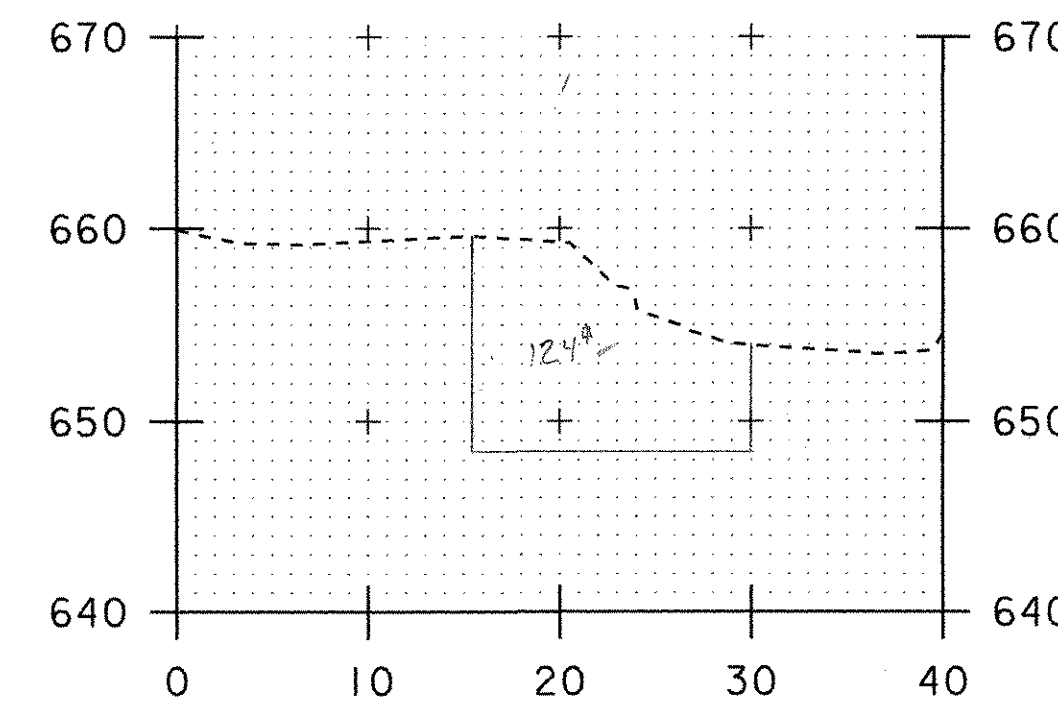
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0+29



0+42



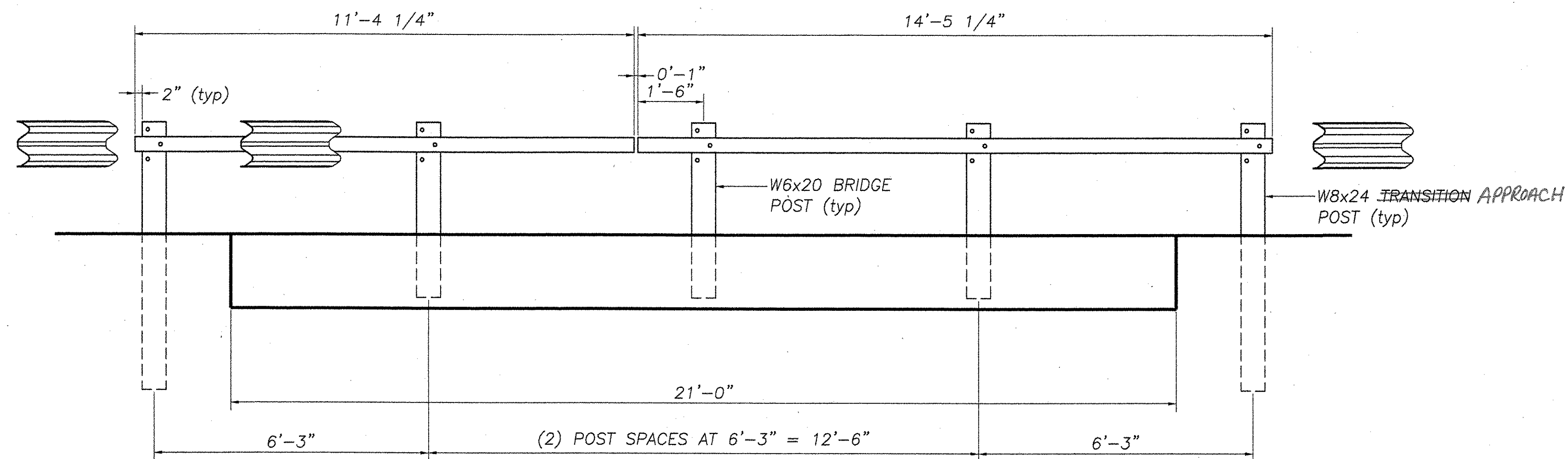
0+77

BK #1 P.

250.7
250.8
501.5
- 2.5 rock
499.0

CHANNEL CROSS SECTIONS

PROJECT NAME:	FAIRFIELD
PROJECT NUMBER:	AC STP ST 0298 (6)
FILE NAME: str5\01c182\sc182bdr.dgn	PLOT DATE: 09-AUG-2005
PROJECT LEADER: C. Keller	DRAWN BY: G. Shangraw
DESIGNED BY: J. Reed	CHECKED BY:
	SHEET 044 OF



ELEVATION – NORTH SIDE
 FACING FROM CENTERLINE OF ROADWAY
 SOUTH ELEVATION SIMILAR

TOTAL PAY LIMIT ITEM 525.44 (BRIDGE RAILING, HDSB FASCIA MOUNTED) = 50 L.F.

NOTE: STEEL TUBE BLOCKOUTS & PORTIONS OF HDSB RAIL REMOVED FROM THIS VIEW FOR CLARITY

RECEIVED
 OK'D BY TCS OK'D BY _____
 JUL 07 2005
 RESUBMIT _____ APPROVED AS NOTED
 BY TAS DATE 7.20.05

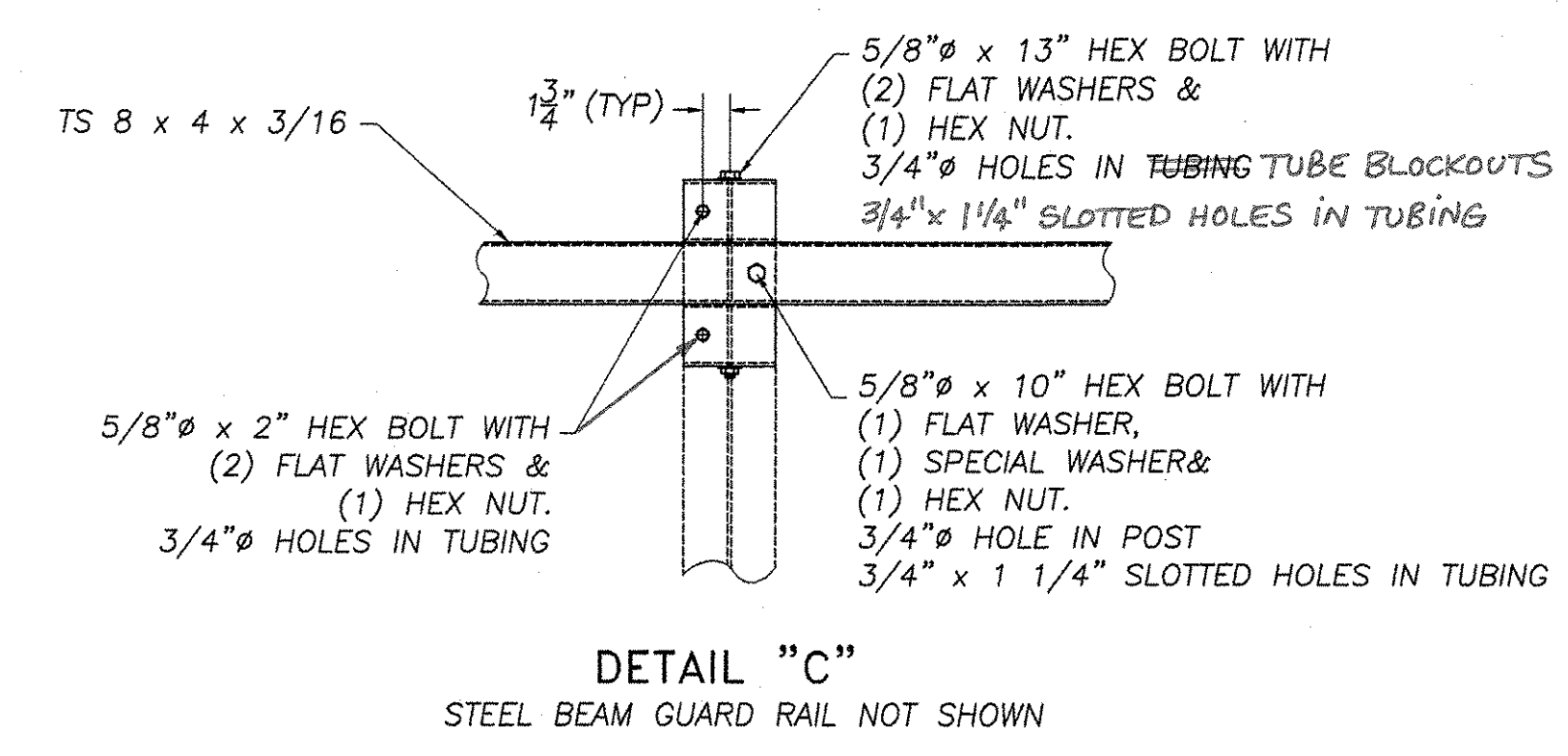
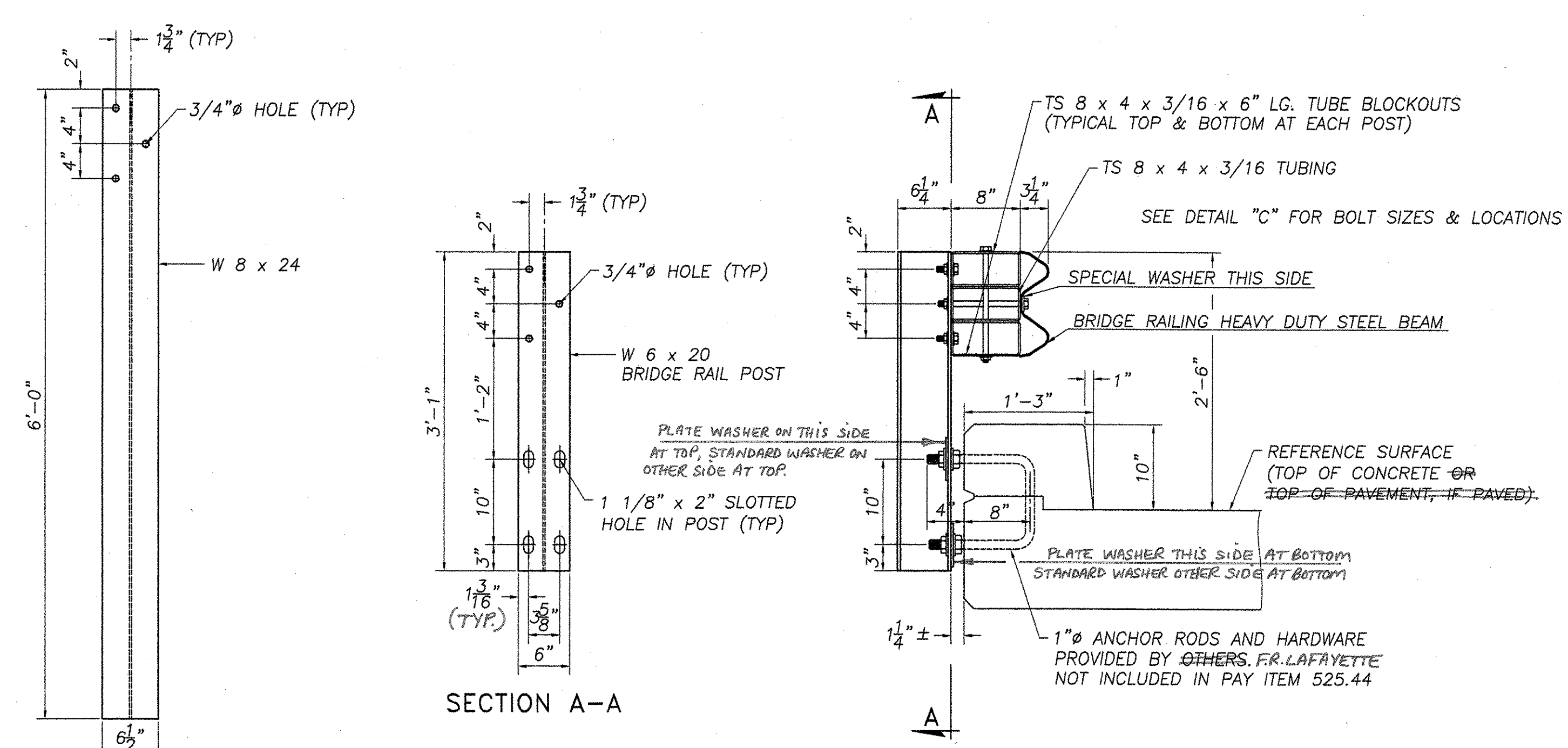


HIGHWAY SAFETY CORP.
 GLASTONBURY, CT

ITEM 525.44 BRIDGE RAILING HDSB FASCIA MOUNTED STEEL TUBING
 TOWN OF FAIRFIELD, VERMONT
 VT ROUTE 36 OVER UNNAMED BROOK- BRIDGE NO. 2
 PROJECT AC STP ST 0298(w)
 HSC REFERENCE NO. **1512**
 GENERAL CONTRACTOR _____ SIZE D REVISION 0
 SUB CONTRACTOR **F.R. LAFAYETTE, INC.** SHEET NO. **1 of 2**

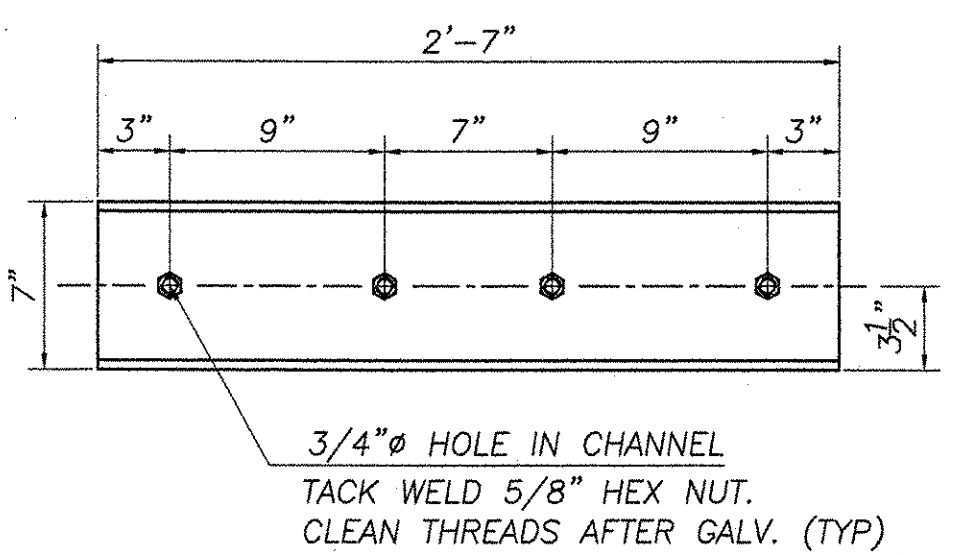
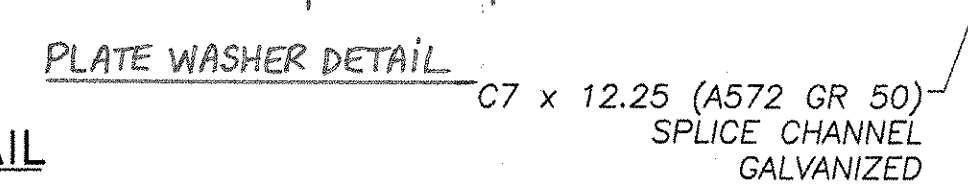
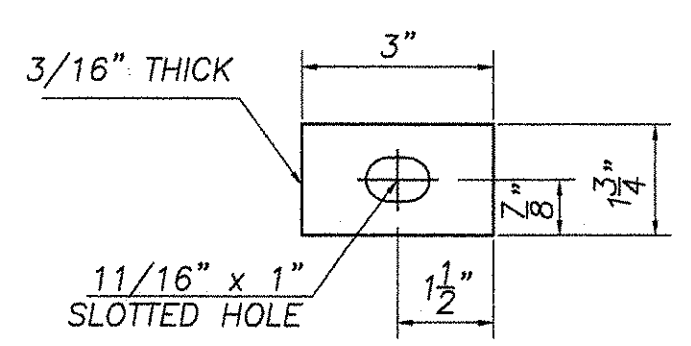
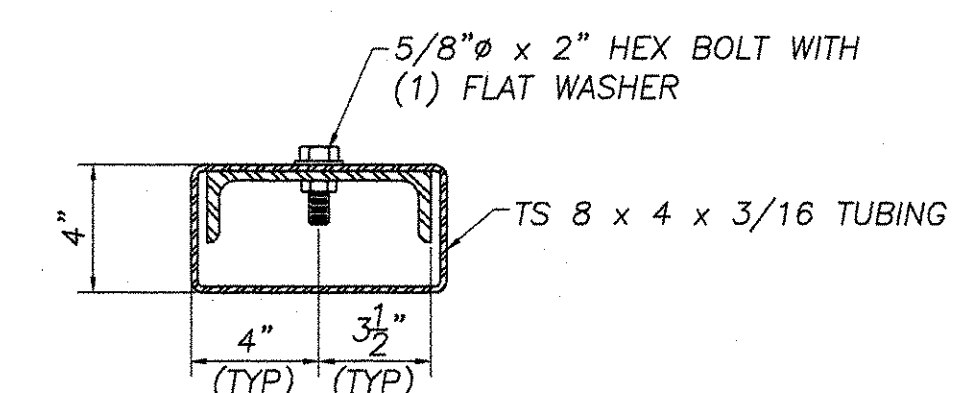
REVISIONS		
No.	Remarks	Date
0	Initial submittal	6/20/05

BILL OF MATERIAL					
Mk.	Qty.	Description	Size	Length	Material
POST					
6		fascia mounted post	W6 x 20	3'-1"	A572 gr 50
4		APPROACH transition post	W8 x 24	6'-0"	A572 gr 50
*	12	u shaped anchor bolt	1" ø	12"	A449
*	24	plate washer	1/4" x 2"	5"	A572 gr 50
*	24	hex nut	1" ø	---	A563 gr DH
*	24	round washer	1" ø	---	F436
TUBE					
2		bridge rail tube	TS 8" x 4" x 3/16"	11' 4-1/4"	A500 gr B
2		bridge rail tube	TS 8" x 4" x 3/16"	14' 5-1/4"	A500 gr B
10		hex bolt	5/8" ø	10"	A325
10		hex nut	5/8" ø	---	A563 gr DH
10		washer	5/8" ø	---	F436
10		special plate washer	3/4" x 1-3/4"	3"	A36
2		splice bracket	C7 x 12.25	2'-7"	A572 gr 50
8		hex bolt	5/8" ø	2"	A325
8		hex nut	5/8" ø	---	A563 gr DH
8		washer	1/4" x 1-3/4"	3"	F436
TUBING BLOCKOUT					
20	12	blockout	TS 8" x 4" x 3/16"	6"	A500 gr B
20	12	hex bolt	5/8" ø	2"	A325
10		hex bolt	5/8" ø	13"	A325
30	22	hex nut	5/8" ø	---	A563 gr DH
60	44	washer	5/8" ø	---	F436
W BEAM					
4		10 ga w beam railing	6'-3" spacing	12'-6"	M180 b2
48	24	splice bolt	5/8" ø	1-1/4"	A307
48	24	double recess hex nut	5/8" ø	---	A563 gr A



APPROACH
TRANSITION POST
W8x24 (A588)

FASCIA MOUNTED POST WITH CURB
W6x20



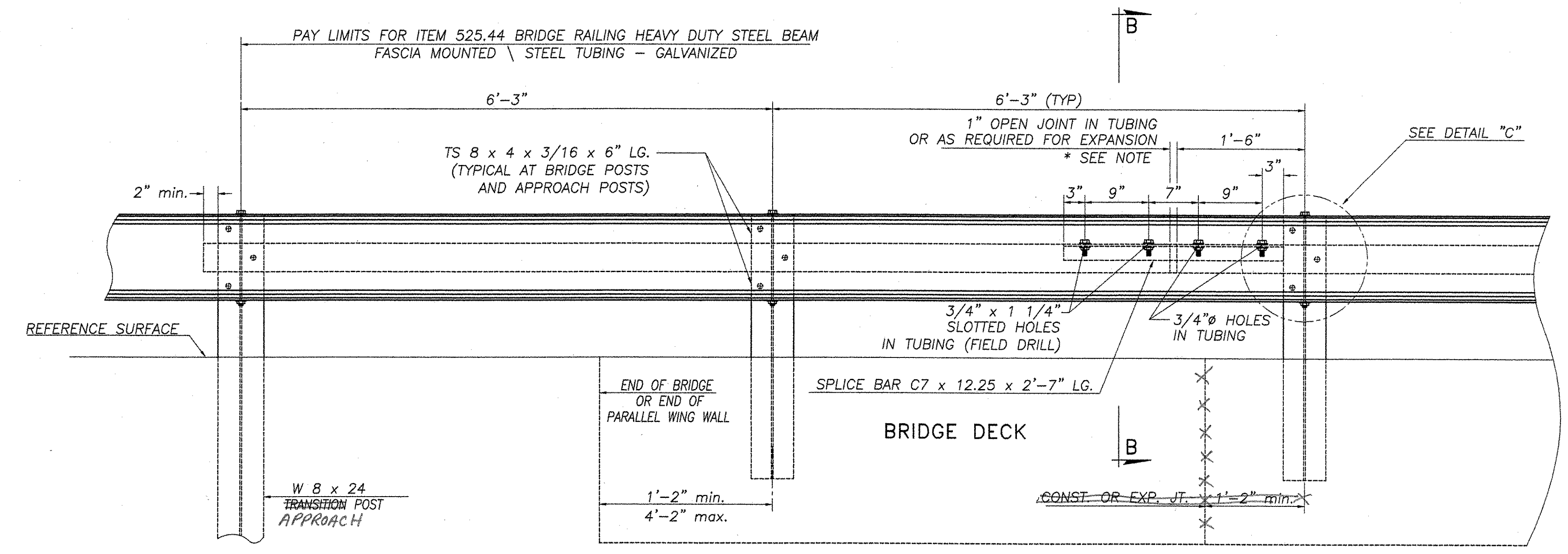
PARTIAL SECTION B-B
SHOWING TUBE & SPLICE ONLY

SPECIAL WASHER DETAIL

SPlice BAR DETAIL

GENERAL ERECTION NOTES

- Heavy duty steel beam guard rail shall conform to VT specification 732.
- Structural steel tubing shall conform to VT specification 732 galvanized after fabrication in accordance with AASHTO M 111
- Anchor bolts, nuts and washers shall be galvanized in accordance with AASHTO M232 and shall conform to VT specification 714 unless otherwise noted
- Bridge rail posts, special washers, plate washers and splice bars shall conform to AASHTO M223/M223M galvanized after fabrication in accordance with AASHTO M 111
- All bolts and related hardware shall conform to AASHTO M164 type 1 bolts, hot dipped or mechanically galvanized per specification.
- All posts shall be set to normal grade
- Splices shall lap in direction of traffic flow.
- Erect delineator every 5th post or approximately 30 feet apart. payment shall be subsidiary to other items.
- A railing joint splice shall be provided at each superstructure expansion joint
- all field cut or drilled areas shall be coated with zinc rich paint.
- For radii less than 950ft, the steel tubing shall be shop bent to fit the applicable curve.
- The drop-weight tear test in section 732 shall not apply to the structural tubing on this standard.



RAILING ELEVATION VIEW
(SHOWN LOOKING FROM C WITHOUT CURB)

* NOTE 3/4" min. SPLICE OPENING WILL VARY DEPENDING ON AMOUNT OF EXPANSION REQUIRED
BOLTS IN SLOTTED HOLES SHALL NOT BE SO TIGHT AS TO PREVENT SLIDING BETWEEN THE TUBING AND THE SPLICE CHANNEL

REVISIONS		
No.	Remarks	Date
0	Initial submittal	6/20/05

RECEIVED
CK'D BY: T.E. OK'D BY: _____
JUL 07 2005
RESUBMIT: _____ APPROVED AS NOTED
BY TAD DATE 7-20-05

HIGHWAY SAFETY CORP.
GLASTONBURY, CT

ITEM 525.44 BRIDGE RAILING HDSB
FASCIA MOUNTED STEEL TUBING
TOWN OF FAIRFIELD, VERMONT
VT ROUTE 6 OVER UNNAMED BROOK- BRIDGE NO. 2
PROJECT AC STP ST0298(0)

DRAWN C CRAMER
CHECKED [Signature]
DATE 6/16/05
SCALE NTS
HSC REFERENCE NO. 1512
SIZE D REVISION 0
SHEET NO. 2 of 2

GENERAL CONTRACTOR
SUB CONTRACTOR F.R. LAFAYETTE, INC.