

HYDROLOGIC DATA

DRAINAGE AREA= 92,720 sq km
 CHARACTER OF TERRAIN: RURAL, MOUNTAINOUS
 CHARACTER & TYPE OF STREAM: RURAL, HIGH ENERGY
 NATURE OF STREAMBED: 2.0% GRADIENT, COBBLE BED

Q2.33= 33.7 cms Q50= 128.3 cms
 Q10= 74.2 cms Q100= 156.9 cms
 Q25= 99.8 cms Q500=

DATE OF FLOOD OF RECORD: NOVEMBER 1927
 WATER SURFACE ELEV.: NOT AVAILABLE ESTIMATED DISCHARGE: NOT AVAILABLE
 NATURAL STREAM VELOCITY @ Q 25 3.4 m/s
 ICE CONDITIONS: MODERATE DEBRIS: LIGHT
 DOES THE STREAM REACH MAXIMUM HIGHWATER ELEVATION RAPIDLY? YES
 IS ORDINARY RISE RAPID? YES
 IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? NO
 IF YES, DESCRIBE:

WATERSHED STORAGE YES HEADWATERS UNIFORM THROUGHOUT WATERSHED X
 IMMEDIATELY ABOVE SITE

EXISTING STRUCTURE

STRUCTURE TYPE: STEEL PONY TRUSS W/ CONCRETE DECK BRIDGE YEAR BUILT: 1929
 CLEAR SPAN (NORMAL TO STREAM): 22.800
 VERTICAL CLEARANCE ABOVE STREAMBED: VARIES 3200 MM. TO 3600 MAX.
 WATERWAY OF FULL OPENING: 73,000 sq m
 DISPOSITION OF STRUCTURE: TO BE REMOVED AND DISPOSED OF

TYPE OF MATERIAL UNDER SUBSTRUCTURE: DENSE GRANULAR WITH BOULDERS

WATER SURFACE ELEV. @ Q2.33= 172.4 VELOCITY= 2.3 m/s
 Q10= 172.6 " 3.2 m/s
 Q25= 172.9 " 3.5 m/s
 Q50= 173.1 " 3.8 m/s
 Q100= 173.3 " 4.1 m/s

LONG TERM STREAM BED CHANGES: AGGREGATION AND DEPOSITION OF MATERIAL
 WITHIN THE UPSTREAM APPROACH

IS THE ROADWAY OVERTOPPED BELOW THE Q100? NO FREQUENCY: N/A
 RELIEF ELEVATION: N/A DISCHARGE OVER ROAD @ Q100: N/A

UPSTREAM STRUCTURE: TOWN: CLARENDON DISTANCE: 700.000
 HIGHWAY NO.: US 7 STRUCTURE NO.: 96
 STRUCTURE TYPE: SINGLE SPAN PLATE GIRDER
 CLEAR SPAN: 37.500 CLEAR HEIGHT: 3.100
 YEAR BUILT: 1968 FULL WATERWAY: 100.3 sq m

DOWNSTREAM STRUCTURE: TOWN: CLARENDON DISTANCE: 255.000
 HIGHWAY NO.: VERMONT RAILROAD STRUCTURE NO.: N/A
 STRUCTURE TYPE: RAILROAD PLATE GIRDER
 CLEAR SPAN: 33.200 CLEAR HEIGHT: 3.000
 YEAR BUILT: N/A FULL WATERWAY: 100.0 sq m

DESIGN CRITERIA:

- DESIGN LIVE LOAD AASHTO MS 22.5
- DESIGN SPAN 25.400 @ BRG TO @ BRG
- ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL 478 kPa ON LEDGE N/A
- ALLOWABLE LOAD FOR PILING N/A TYPE N/A ESTIMATED LENGTH N/A
- STRUCTURAL STEEL AASHTO 270M/270M GRADE N/A
- REINFORCING STEEL GRADE 420 160 MPa
- CONCRETE HIGH PERFORMANCE CLASS AA f'c 30 MPa
 CONCRETE HIGH PERFORMANCE CLASS B f'c 25 MPa

TRAFFIC MAINTENANCE:

- IS TRAFFIC TO BE MAINTAINED? YES IF YES, ON EXISTING STRUCTURE NO OR ON TEMPORARY BRIDGE YES
- TEMPORARY BRIDGE REQUIREMENTS: ONE OR TWO WAY TWO WAY TRAFFIC CONTROL SIGNALS REQUIRED NO
 MINIMUM CLEAR SPAN (NORMAL TO STREAM): 27.000 VERTICAL CLEARANCE ABOVE STREAMBED: 3.4 m
 WATERWAY OF FULL OPENING: 103 sq m
 ARE SIDEWALKS REQUIRED? NO IF SO, ON WHAT SIDE? N/A
 STRUCTURE TYPE: TWO SPAN BRIDGE

PROPOSED STRUCTURE

STRUCTURE TYPE: PRECAST CONCRETE BOX BEAM & CONCRETE DECK SUPERSTRUCTURE

CLEAR SPAN (NORMAL TO STREAM): 23.600
 VERTICAL CLEARANCE ABOVE STREAMBED: VARIES 3.200 MIN. TO 3.600 MAX.
 WATERWAY OF FULL OPENING: 78.0 sq m

WATER SURFACE ELEV. @ Q2.33= 172.3 VELOCITY= 2.4 m/s
 Q10= 172.7 " 3.1 m/s
 Q25= 172.9 " 3.5 m/s
 Q50= 173.1 " 3.8 m/s
 Q100= 173.3 " 4.0 m/s

IS THE ROADWAY OVERTOPPED BELOW THE Q100? NO FREQUENCY: N/A
 RELIEF ELEVATION: N/A DISCHARGE OVER ROAD @ Q100: N/A

AVERAGE LOW ELEVATION OF SUPERSTRUCTURE: 174.55
 VERTICAL CLEARANCE @ Q100 1240

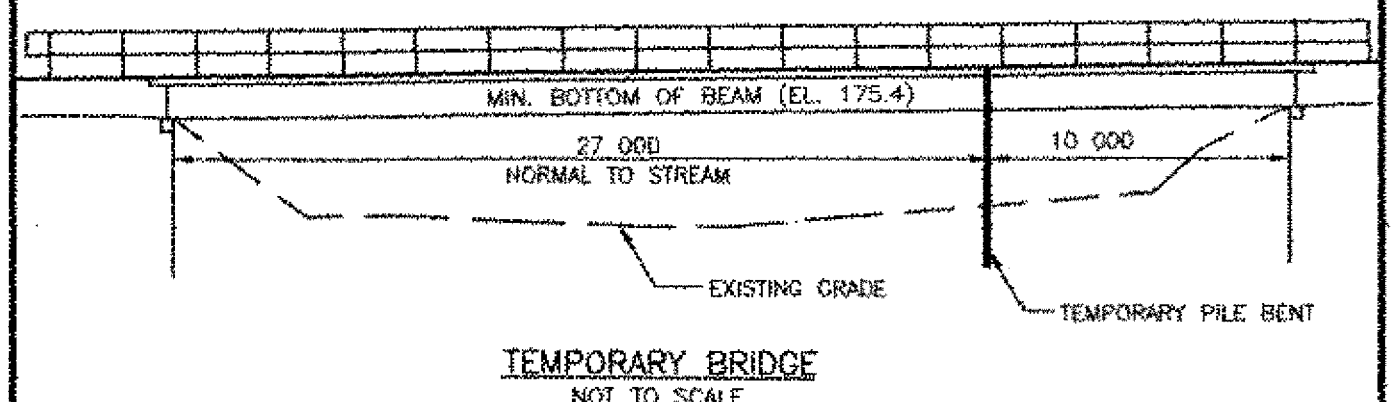
SCOUR: 1.0 m. CONTRACTION SCOUR
 REQUIRED CHANNEL PROTECTION: YES - TYPE III STONEFILL ON STREAM BED

PERMIT INFORMATION

AVERAGE DAILY FLOW: 2.1 cms DEPTH: 0.45
 ORDINARY LOW WATER: 1.0 cms DEPTH: 0.34
 ORDINARY HIGH WATER: 14.5 cms DEPTH: 0.92

ADDITIONAL COMMENTS

THERE IS EVIDENCE OF SCOUR ALONG THE LEFT DOWNSTREAM ABUTMENT



SEE VALUE
 ENGINEERING
 (FOLLOWING SHEET)

TYPICAL SECTIONS ROADWAY

- 40 BITUMINOUS CONCRETE PAVEMENT (TYPE III OR IV) OVER
 40 BITUMINOUS CONCRETE PAVEMENT (TYPE III OR IV) OVER
 70 BITUMINOUS CONCRETE PAVEMENT (TYPE I OR II) OVER
 450 DENSE GRADED CRUSHED STONE
- 450 SAND BORROW
- SHOULDERS:
 150 BITUMINOUS CONCRETE PAVEMENT
 (40 TYPE III OVER 50 TYPE II OVER 60 TYPE I)

MATERIAL ITEM	THICKNESS TOLERANCE IN MILLIMETERS
PAVEMENT (TOTAL DEPTH)	± 5
SUBBASE	± 25
GRANULAR BORROW	± 25
SAND BORROW	± 25

$$\text{STRENGTH RF} = \frac{0.9M_n - 1.3M_{DL}}{A \times M_{LL+1}}$$

$$\text{*SERVICEABILITY RF} = B \left[\frac{0.95F_y S_{LL+1} - M_{DL} S_{LL+1} - M_{SD} S_{LL+1}}{1.07 M_{LL+1}} \right]$$

LOAD RATING (METRIC TONS)

STRESS LEVELS	TRUCK					
	H	HS	3S2	6 AXLE	3A STR	4A STR
INVENTORY A=2.17, B=1.00	43	58				
POSTED A=1.55, B=1.40	73	101		119	93	94
OPERATING A=1.30, B=1.67		140	164	195		109

TYPICAL SECTION BRIDGE

- * TOP OF CONCRETE BOX BEAMS STRAIGHT -0.04
 ** 30 BIT. CONC. PAV. TYPE IV - 1st LIFT
 40 BIT. CONC. PAV. TYPE III - 2nd LIFT

SEEDING FORMULA
RURAL AREAS

% WT.	KG/HA	NAME	PURITY %	GERM %
37.1	26	CREeping RED FESCUE	98	85
37.1	26	TALL FESCUE	95	90
5.7	4	RED TOP	95	90
14.4	10	BIRDSFOOT TREFOIL	98	85
5.7	4	ANNUAL RYE GRASS	95	85
100.0	70			

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

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

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

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

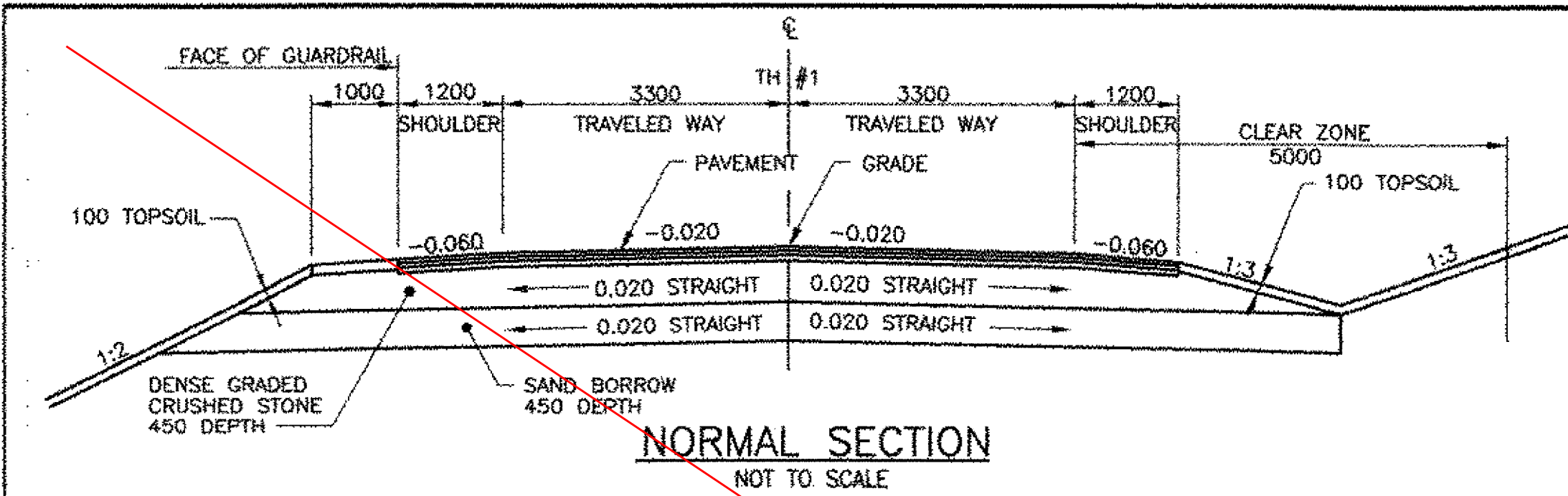
HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 4500 KG/HA OR AS DIRECTED BY THE ENGINEER.

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

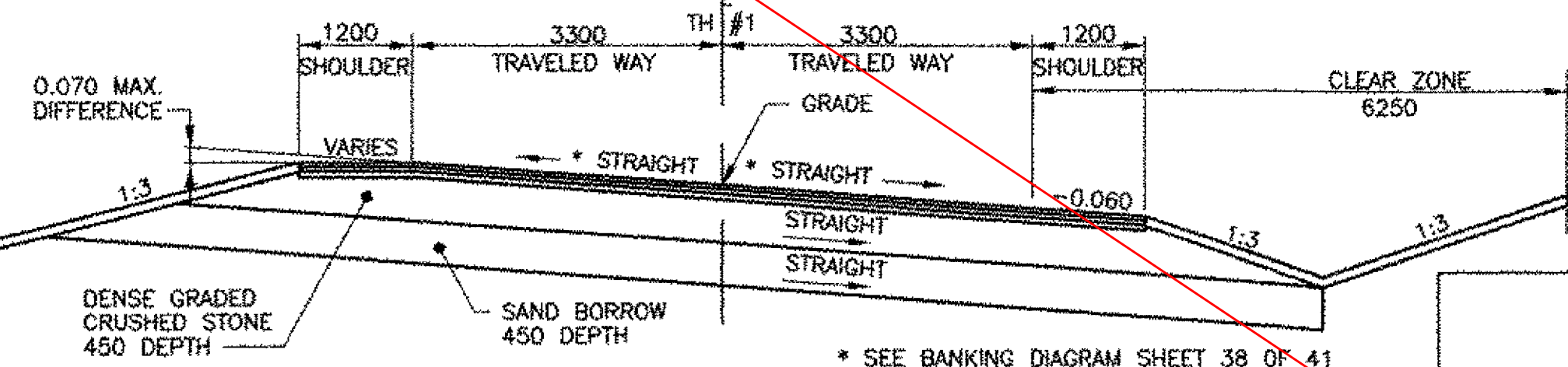
TACK COAT: EMULSIFIED ASPHALT IS TO BE APPLIED AT THE RATE OF 0.0679 L/m² BETWEEN SUCCESSIVE COURSES OF PAVEMENT AT THE DISCRETION OF THE ENGINEER.

NOTES

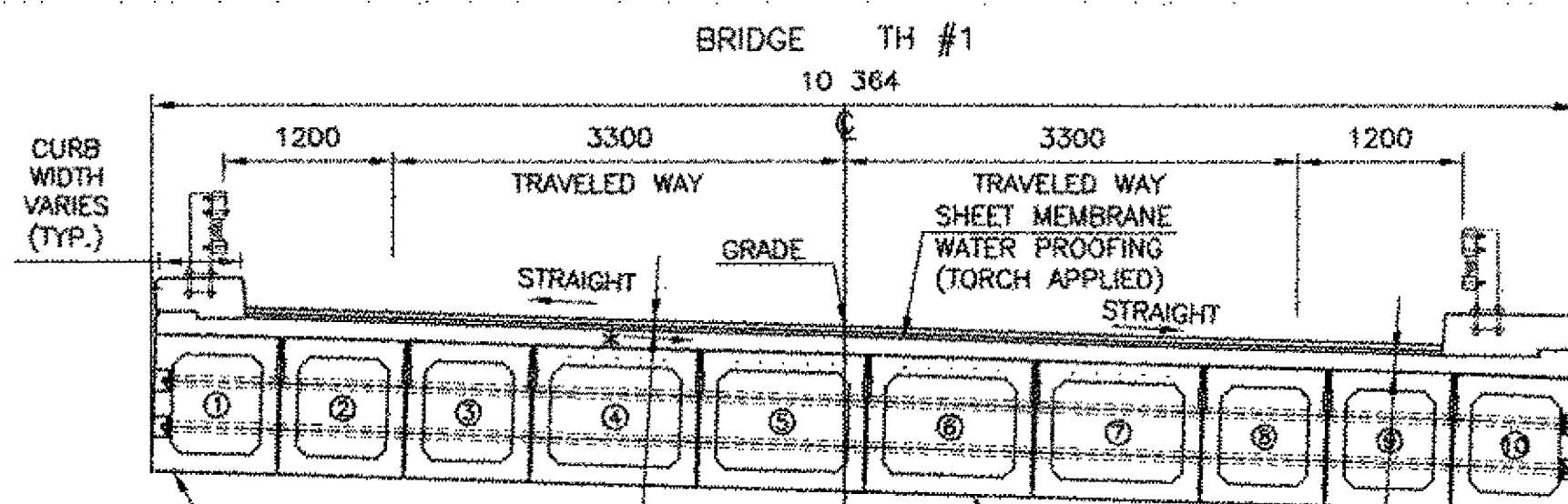
- COFFERDAM LIMITS TO BE DETERMINED BY THE CONTRACTOR.
- THE PAY LIMITS OF "COFFERDAM EXCAVATION, EARTH" AND "COFFERDAM EXCAVATION, ROCK" SHALL BE 600 OUTSIDE THE PERIMETER OF THE FOOTING, UP TO EXISTING GROUND OR BOTTOM OF SUBBASE, WHICHEVER IS LOWER.
- 300 UNDERCUT AS DETERMINED NECESSARY BY THE RESIDENT ENGINEER.
- IF A COFFERDAM IS CONSTRUCTED WHICH IS LARGER THAN THE INDICATED COFFERDAM EXCAVATION PAY LIMITS, PAYMENT FOR ALL UNCLASSIFIED CHANNEL EXCAVATION, INCLUDING THAT PORTION WHICH IS INSIDE THE COFFERDAM BUT OUTSIDE THE COFFERDAM EXCAVATION PAY LIMITS, WILL BE MADE AT THE CONTRACT UNIT PRICE FOR UNCLASSIFIED CHANNEL EXCAVATION.



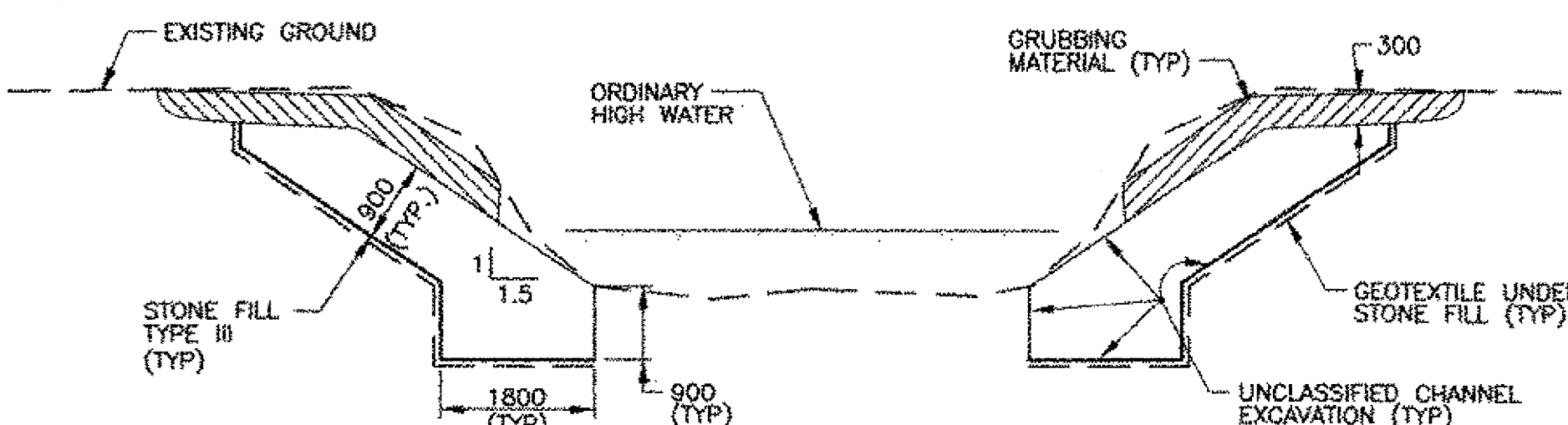
NORMAL SECTION
 NOT TO SCALE



MAXIMUM BANKED SECTION
 NOT TO SCALE

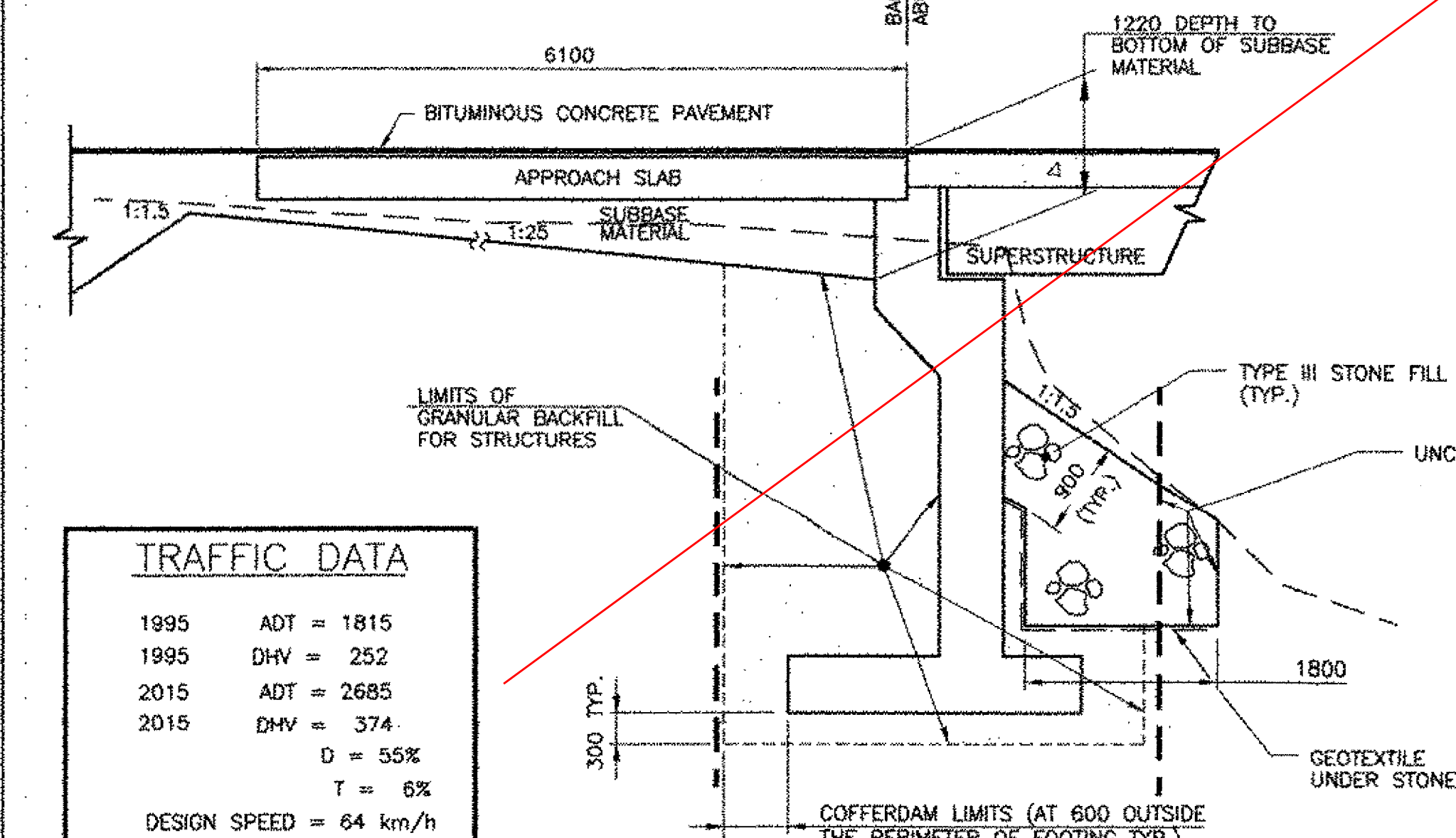


TYPICAL CONCRETE BOX BEAM CROSS SECTION
 SCALE 1:50



TYPICAL CHANNEL SECTION
 NOT TO SCALE

NOTE: GRUBBING MATERIAL SHALL NOT BE PLACED ON THE STONE FILL IN AREA UNDER THE BRIDGE. WHENEVER CHANNEL SLOPE INTERSECTS ROADWAY SUBBASE, GRUBBING MATERIAL SHALL BEGIN AT THE BOTTOM OF SUBBASE.



TYPICAL ABUTMENT SECTION
 NOT TO SCALE

TRAFFIC DATA

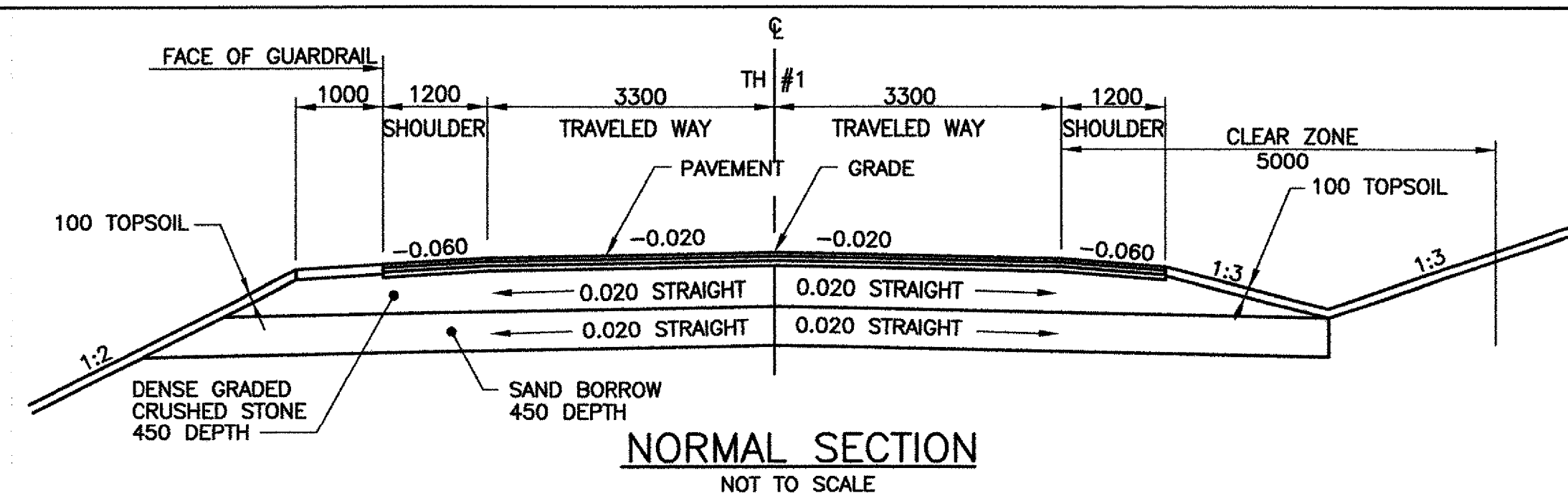
1995 ADT = 1815
 1995 DHV = 252
 2015 ADT = 2685
 2015 DHV = 374
 D = 55%
 T = 6%
 DESIGN SPEED = 64 km/h
 ESALS (FLEXIBLE) TOTAL BOTH DIRECTIONS (1995-2015) 196,000

REVISIONS		
NO.	DESCRIPTION	BY & DATE

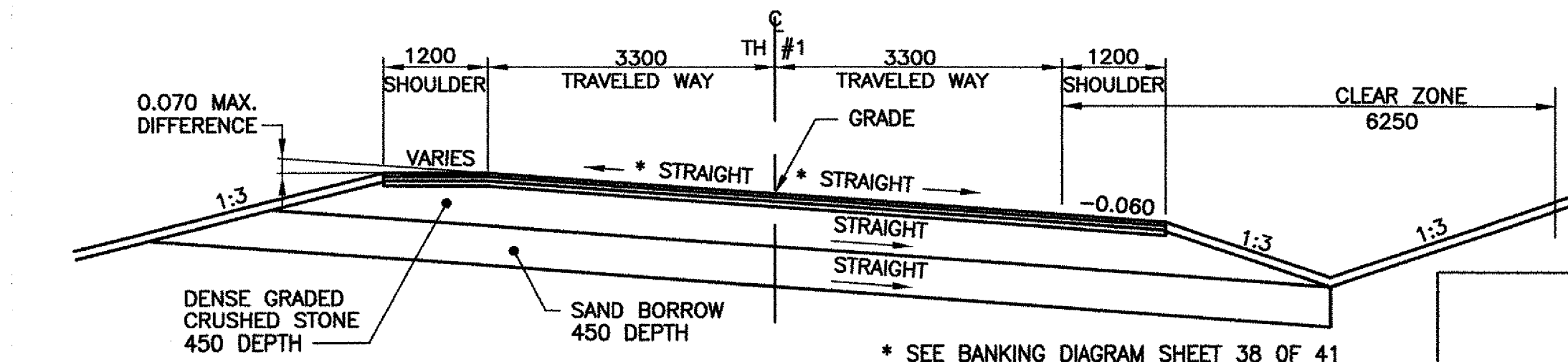
DuBois & King
 engineering planning management development

STATE OF VERMONT
AGENCY OF TRANSPORTATION

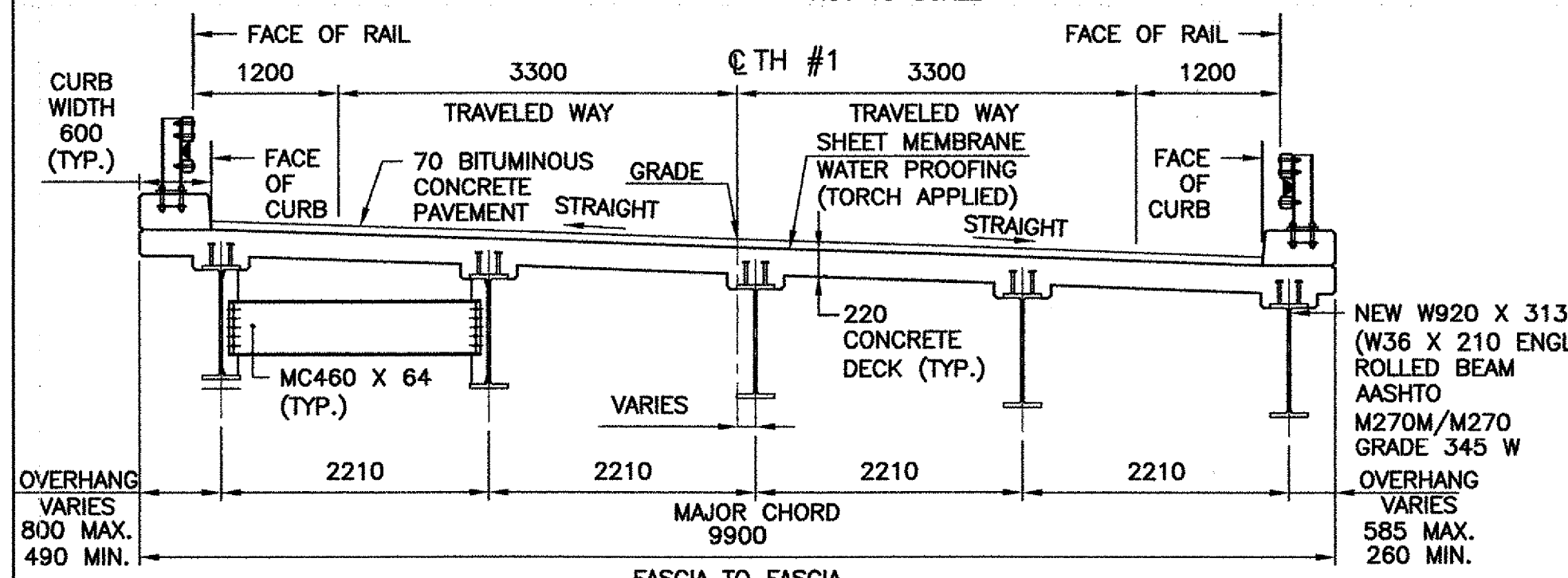
CLARENDON, VERMONT	Bridge No. 14
TOWN HIGHWAY NO. 1	Log Sta.
TOWN HIGHWAY NO. 1 OVER THE COLD RIVER	
PRELIMINARY INFORMATION SHEET	
Designed by: W.S. CHESBROUGH	Drawn by: N.B. DIMICK
Checked by: K. S. MARSHIA date 05/02	Bridge Design Supervisor J.W. TUCKER date 05/02
PROJECT CLARENDON	PROJECT NO. BRO 1443(29)
Bridge Sheet No.	SHEET 3 OF 41



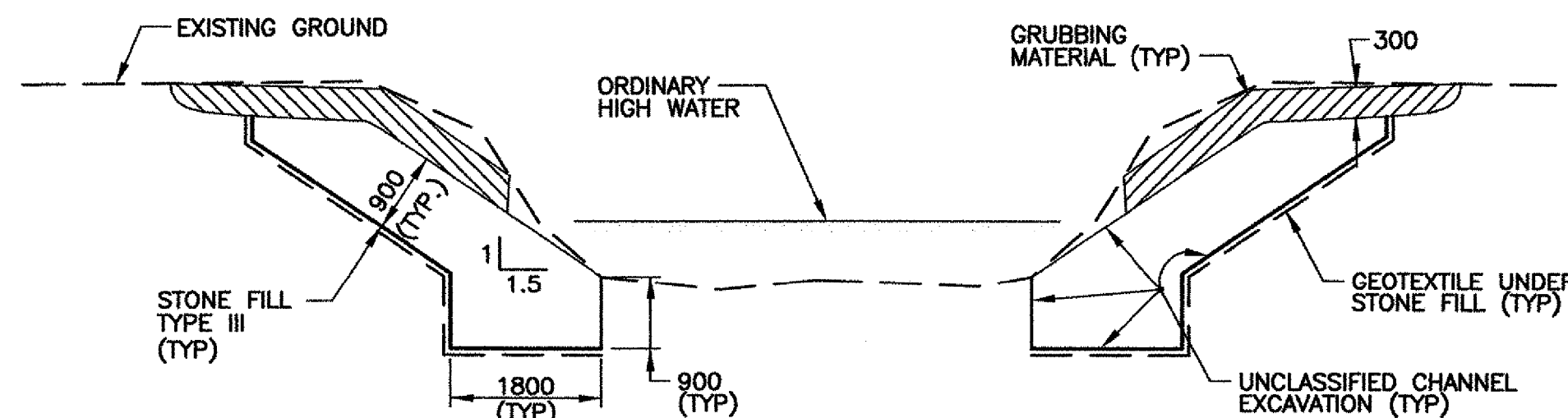
NORMAL SECTION
NOT TO SCALE



MAXIMUM BANKED SECTION
NOT TO SCALE

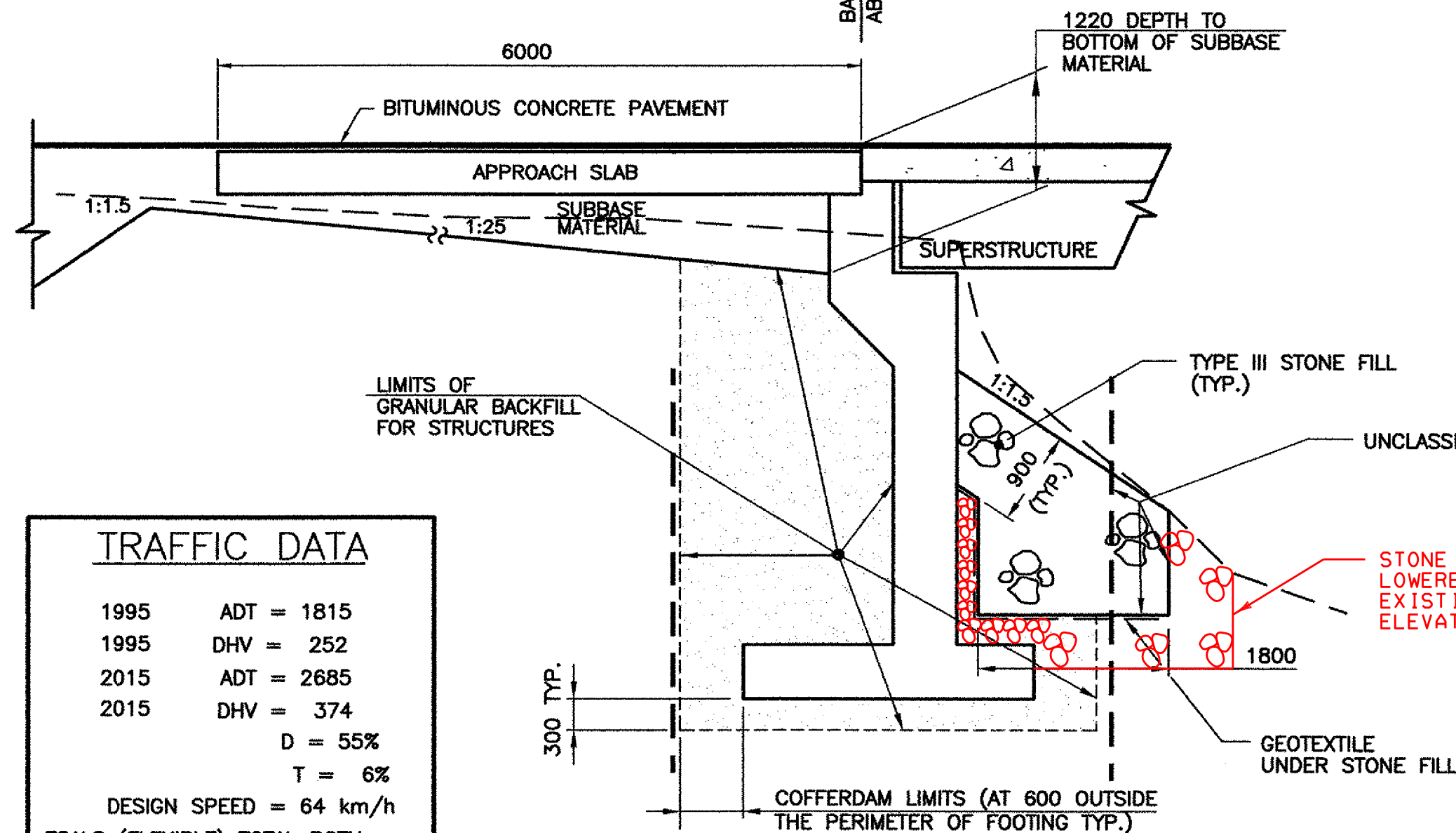


TYPICAL BRIDGE SECTION
SCALE 1:50



TYPICAL CHANNEL SECTION
NOT TO SCALE

NOTE: GRUBBING MATERIAL SHALL NOT BE PLACED ON THE STONE FILL IN AREA UNDER THE BRIDGE. WHENEVER CHANNEL SLOPE INTERSECTS ROADWAY SUBBASE, GRUBBING MATERIAL SHALL BEGIN AT THE BOTTOM OF SUBBASE.



TYPICAL ABUTMENT SECTION
NOT TO SCALE

TRAFFIC DATA

1995	ADT = 1815
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	D = 55%
	T = 6%
	DESIGN SPEED = 64 km/h
	ESALS (FLEXIBLE) TOTAL BOTH
	DIRECTIONS (1995-2015) 196,000

TYPICAL SECTIONS ROADWAY

- 40 BITUMINOUS CONCRETE PAVEMENT (TYPE III)
- 40-50 BITUMINOUS CONCRETE PAVEMENT (TYPE II)
- 70-60 BITUMINOUS CONCRETE PAVEMENT (TYPE I)
- 450 DENSE GRADED CRUSHED STONE
- 450 SAND BORROW
- SHOULDERS:
 - 150 BITUMINOUS CONCRETE PAVEMENT
 - (40 TYPE III OVER 50 TYPE II OVER 60 TYPE I)

MATERIAL ITEM	THICKNESS TOLERANCE IN MILLIMETERS
PAVEMENT (TOTAL DEPTH)	± 5
SUBBASE	± 25
GRANULAR BORROW	± 25
SAND BORROW	± 25

$$\text{STRENGTH RF} = \frac{\phi M_n - 1.3 M_{nL}}{A \times M_{nL+1}}$$

$$\text{*SERVICEABILITY RF} = B \left[\frac{.95 F_y S_{LL+1} - M_{DL} S_{LL+1} - M_{SD} S_{LL+1}}{1.67 M_{LL+1}} \right]$$

LOAD RATING (METRIC TONS)

STRESS LEVELS	TRUCK					
	M	MS	3S2	6 AXLE	3A STR	4A STR
INVENTORY A=2.17, B=1.00	35	48				
POSTED A=1.55, B=1.40	49	68		94	62	64
OPERATING A=1.30, B=1.67		81	95	112		73

TYPICAL SECTION BRIDGE

30 BIT. CONC. PAV. TYPE IV - 1st LIFT
40 BIT. CONC. PAV. TYPE III - 2nd LIFT

SEEDING FORMULA RURAL AREAS

% WT.	KG/HA	NAME	PURITY %	GERM %
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37.1	26	TALL FESCUE	95	90
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14.4	10	BIRDSFOOT TREFOIL	98	85
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100.0	70			

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

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

TACK COAT: EMULSIFIED ASPHALT IS TO BE APPLIED AT THE RATE OF 0.0679 L/m² BETWEEN SUCCESSIVE COURSES OF PAVEMENT AT THE DISCRETION OF THE ENGINEER.

NOTES

- COFFERDAM LIMITS TO BE DETERMINED BY THE CONTRACTOR.
- THE PAY LIMITS OF "COFFERDAM EXCAVATION, EARTH" AND "COFFERDAM EXCAVATION, ROCK" SHALL BE 600 OUTSIDE THE PERIMETER OF THE FOOTING, UP TO EXISTING GROUND OR BOTTOM OF SUBBASE, WHICHEVER IS LOWER.
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FINAL HYDRAULICS REPORT



HYDROLOGIC DATA

DRAINAGE AREA= 92.720 sq km
CHARACTER OF TERRAIN: RURAL, MOUNTAINOUS
CHARACTER & TYPE OF STREAM: RURAL, HIGH ENERGY
NATURE OF STREAMBED: 2.0% GRADIENT, COBBLE BED

Q2.33=	33.7 cms	Q50=	128.3 cms
Q10=	74.2 cms	Q100=	156.9 cms
Q25=	99.8 cms	Q500=	

DATE OF FLOOD OF RECORD: NOVEMBER 1927
WATER SURFACE ELEV.: NOT AVAILABLE ESTIMATED DISCHARGE: NOT AVAILABLE
NATURAL STREAM VELOCITY @ Q 25 3.4 m/s
ICE CONDITIONS: MODERATE DEBRIS: LIGHT
DOES THE STREAM REACH MAXIMUM HIGHWATER ELEVATION RAPIDLY? YES
IS ORDINARY RISE RAPID? YES
IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? NO
IF YES, DESCRIBE:

WATERSHED STORAGE YES HEADWATERS UNIFORM THROUGHOUT WATERSHED X
IMMEDIATELY ABOVE SITE

EXISTING STRUCTURE

STRUCTURE TYPE: STEEL PONY TRUSS W/ CONCRETE DECK BRIDGE YEAR BUILT: 1929
CLEAR SPAN (NORMAL TO STREAM): 22.800
VERTICAL CLEARANCE ABOVE STREAMBED: VARIES 3200 MIN. TO 3600 MAX.
WATERWAY OF FULL OPENING: 73,000 sq m
DISPOSITION OF STRUCTURE: TO BE REMOVED AND DISPOSED OF

TYPE OF MATERIAL UNDER SUBSTRUCTURE: DENSE GRANULAR WITH BOULDERS

WATER SURFACE ELEV. @ Q2.33=	172.3	VELOCITY=	2.3 m/s
Q10=	172.6	"	3.2 m/s
Q25=	172.9	"	3.5 m/s
Q50=	173.1	"	3.8 m/s
Q100=	173.3	"	4.1 m/s

LONG TERM STREAM BED CHANGES: AGGRADATION AND DEPOSITION OF MATERIAL WITHIN THE UPSTREAM APPROACH

IS THE ROADWAY OVERTOPPED BELOW THE Q100? NO FREQUENCY: N/A
RELIEF ELEVATION: N/A DISCHARGE OVER ROAD @ Q100: N/A

UPSTREAM STRUCTURE: TOWN: CLARENDON DISTANCE: 700.000
HIGHWAY NO.: US 7 STRUCTURE NO.: 96
STRUCTURE TYPE: SINGLE SPAN PLATE GIRDER
CLEAR SPAN: 37.500 CLEAR HEIGHT: 3.100
YEAR BUILT: 1968 FULL WATERWAY: 100.3 sq m

DOWNSTREAM STRUCTURE: TOWN: CLARENDON DISTANCE: 255.000
HIGHWAY NO.: VERMONT RAILWAY STRUCTURE NO.: N/A
STRUCTURE TYPE: RAILROAD PLATE GIRDER
CLEAR SPAN: 33.200 CLEAR HEIGHT: 3.000
YEAR BUILT: N/A FULL WATERWAY: 100.0 sq m

DESIGN CRITERIA:

- DESIGN LIVE LOAD AASHTO MS 22.5
- DESIGN SPAN 25.400 @ BRG TO @ BRG (MEASURED ALONG CENTERLINE OF ROAD)
DESIGN SPAN 25.392 @ BRG TO @ BRG (MEASURED ALONG MAJOR CHORD)
- ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL 478 kPa ON LEDGE N/A ESTIMATED LENGTH N/A
- ALLOWABLE LOAD FOR PILING N/A TYPE N/A
- STRUCTURAL STEEL AASHTO M270M / M270 GRADE 345W
- REINFORCING STEEL GRADE 42 160 MPa
- CONCRETE HIGH PERFORMANCE CLASS A f'c 30 MPa
HIGH PERFORMANCE CLASS B f'c 25 MPa

TRAFFIC MAINTENANCE:

- IS TRAFFIC TO BE MAINTAINED? YES IF YES, ON EXISTING STRUCTURE NO OR ON TEMPORARY BRIDGE YES
- TEMPORARY BRIDGE REQUIREMENTS: ONE OR TWO WAY TWO WAY TRAFFIC CONTROL SIGNALS REQUIRED NO
MINIMUM CLEAR SPAN (NORMAL TO STREAM): 27.000 VERTICAL CLEARANCE ABOVE STREAMBED: 3.4 m
WATERWAY OF FULL OPENING: 103 sq m
ARE SIDEWALKS REQUIRED? NO IF SO, ON WHAT SIDE? N/A
STRUCTURE TYPE: TWO SPAN BRIDGE

PROPOSED STRUCTURE

STRUCTURE TYPE: SINGLE SPAN, NEW STEEL BEAMS WITH COMPOSITE CONCRETE DECK

CLEAR SPAN (NORMAL TO STREAM): 23.600
VERTICAL CLEARANCE ABOVE STREAMBED: VARIES 3.200 MIN. TO 3.600 MAX.
WATERWAY OF FULL OPENING: 78.0 sq m

WATER SURFACE ELEV. @ Q2.33=	172.3	VELOCITY=	2.4 m/s
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Q50=	173.1	"	3.8 m/s
Q100=	173.3	"	4.0 m/s

IS THE ROADWAY OVERTOPPED BELOW THE Q100? NO FREQUENCY: N/A
RELIEF ELEVATION: N/A DISCHARGE OVER ROAD @ Q100: N/A

AVERAGE LOW ELEVATION OF SUPERSTRUCTURE: 174.498
VERTICAL CLEARANCE @ Q100 1181

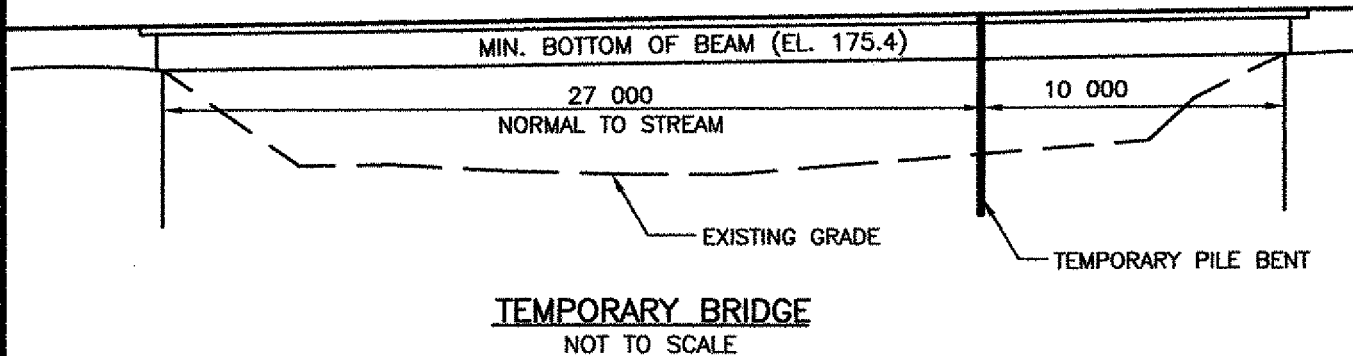
SCOUR: 1.0 m CONTRACTION SCOUR
REQUIRED CHANNEL PROTECTION: YES - TYPE III STONEFILL ON STREAM BED

PERMIT INFORMATION

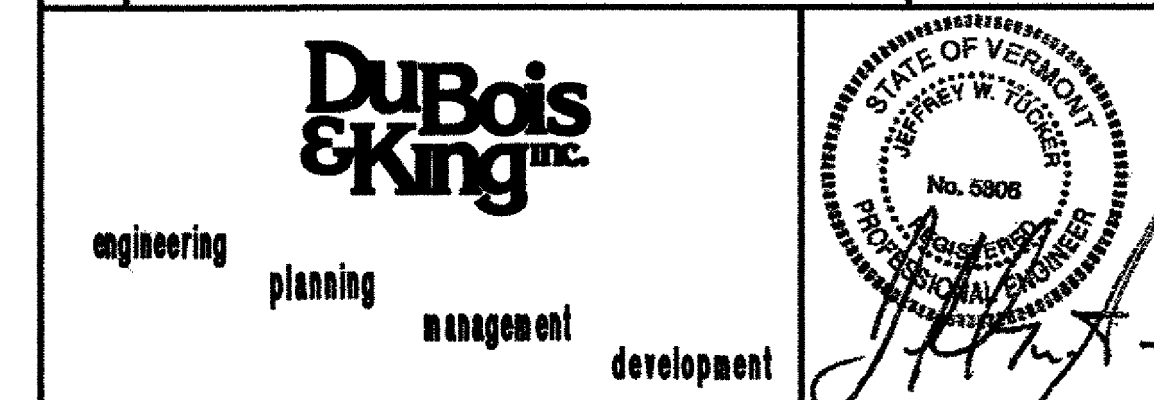
AVERAGE DAILY FLOW:	2.1 cms	DEPTH :	0.45
ORDINARY LOW WATER:	1.0 cms	DEPTH :	0.34
ORDINARY HIGH WATER:	14.5 cms	DEPTH :	0.92

ADDITIONAL COMMENTS

THERE IS EVIDENCE OF SCOUR ALONG THE LEFT DOWNSTREAM ABUTMENT



REVISIONS		
NO.	DESCRIPTION	BY & DATE

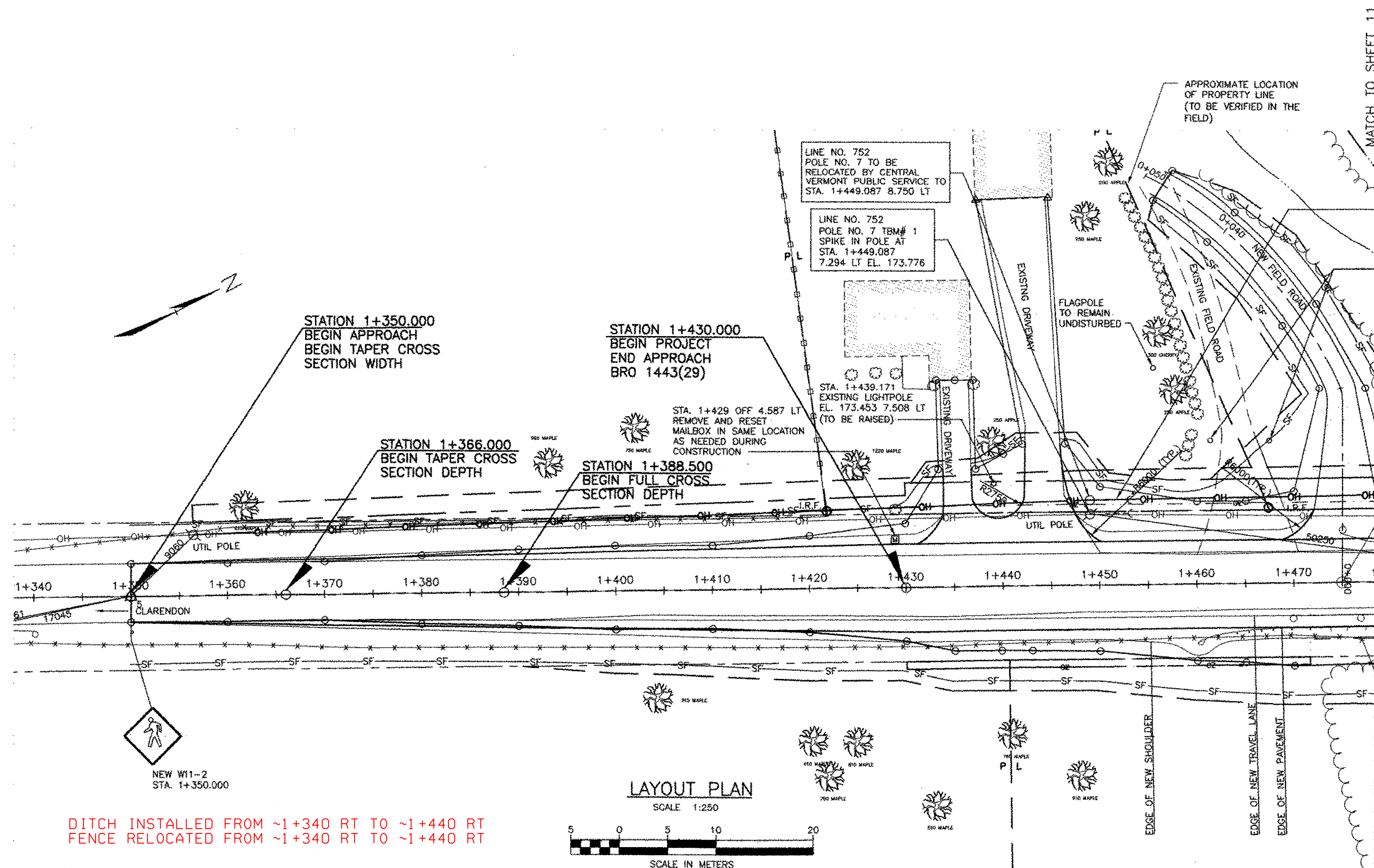


STATE OF VERMONT AGENCY OF TRANSPORTATION

CLARENDON, VERMONT	Bridge No. 14
TOWN HIGHWAY NO. 1	Log Sta.
TOWN HIGHWAY NO. 1 OVER THE COLD RIVER	Surv. Sta.
PRELIMINARY INFORMATION SHEET	
Designed by: A.P. GUYETTE	Drawn by: A.P. GUYETTE
Checked by: J.W. TUCKER date 1/06	Bridge Design Supervisor J.W. TUCKER date 1/06
PROJECT CLARENDON	PROJECT NO. BRO 1443(29)
Bridge Sheet No.	SHEET 3A OF 41

LEGEND

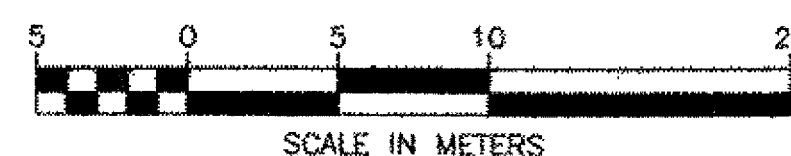
- DECIDUOUS TREE
- CONIFEROUS TREE
- STUMP
- EXISTING TREE LINE
- NEW TREE LINE
- EDGE OF NEW PAVEMENT
- OVERHEAD LINE
- EXISTING GRAVEL ROAD
- PROPOSED GRAVEL ROAD
- SURVEY CONTROL LOCATION
- BUILDINGS
- UTILITY POLE
- GUY WIRE
- MAIL BOX
- STONE WALL
- R.O.W.
- GUARD RAIL
- EDGE OF RIVER
- CLEAR ZONE
- TEMPORARY BRIDGE CONSTRUCTION LIMITS



DITCH INSTALLED FROM ~1+340 RT TO ~1+440 RT
FENCE RELOCATED FROM ~1+340 RT TO ~1+440 RT

LAYOUT PLAN

SCALE 1:250



NOTES:

- THE TOE OF SLOPE, UNLESS OTHERWISE NOTED WILL BE THE LIMITS OF CONSTRUCTION. ALL WORK MUST BE DONE FROM THE CENTER OF THE ROAD SO AS TO MINIMIZE THE IMPACT ON PROPERTY OWNERS.
- ALL TREES OUTSIDE THE LIMITS OF CONSTRUCTION ARE TO REMAIN UNTOUCHED. ALL OTHER TREES ARE AS NOTED.
- A MINIMUM RADIUS DRIVEWAY WILL BE CONSTRUCTED AS NOTED ON THE PLANS AT THE ENTRANCE OF EACH AFFECTED DRIVEWAY AND FIELD ROAD.
- TEMPORARY BENCHMARKS BASED OFF U.S.G.S. DISC J-16.
- DRIVE AT STATION 1+435.250 LT SHALL BE OVERLAYED WITH 40 MM OF BITUMINOUS CONCRETE PAVEMENT, TYPE III, TO THE LIMITS AS SHOWN.
- DRIVE AT STATION 1+444.900 LT SHALL HAVE THE EXISTING BITUMINOUS CONCRETE PAVEMENT REMOVED UNDER THE ITEM COMMON EXCAVATION AND REPAVED WITH 50 MM OF BITUMINOUS CONCRETE PAVEMENT, TYPE III, TO THE LIMITS AS SHOWN.

UTILITY RELOCATION PLAN:

- EXISTING UTILITY POLE NO. 752 STA. 1+449.087 7.294 LT TO BE RELOCATED OUTSIDE THE CLEAR ZONE TO STA. 1+449.087 8.750 LT BY CENTRAL VERMONT PUBLIC SERVICE.
- EXISTING CABLE TV POLE STA. 1+535.545 7.862 LT TO BE RELOCATED OUTSIDE THE CLEAR ZONE BY ADELPHIA CABLE AFTER THE TEMPORARY ROAD IS REMOVED.

REMOVE AND RESET FENCE
STA. 1+433 6.000 RT TO RIVER
REMOVE AS NECESSARY, AND TEMPORARILY RESET AS DIRECTED BY ENGINEER IN FIELD ADJACENT TO ROAD. THEN RESET WHEN CONSTRUCTION IS COMPLETED. PAYMENT FOR TEMPORARY RESET SHALL BE PAID UNDER ITEM 620.50, REMOVING AND RESETTNG FENCE

REVISIONS			STATE OF VERMONT AGENCY OF TRANSPORTATION	
NO.	DESCRIPTION	BY & DATE		
			CLARENDON, VERMONT	Bridge No. 14
			TOWN HIGHWAY NO. 1	Log Sta.
			TOWN HIGHWAY NO. 1 OVER THE COLD RIVER	
			LAYOUT SHEET	
			Designed by: W.S. CHESBROUGH	Drawn by: N.B. DIMICK
			Checked by: K.S. MARSHIA date 05/02	Bridge Design Supervisor J.W. TUCKER date 05/02
PROJECT			CLARENDON	PROJECT NO. BRO 1443(29)
Bridge Sheet No.			SHEET 10 OF 41	

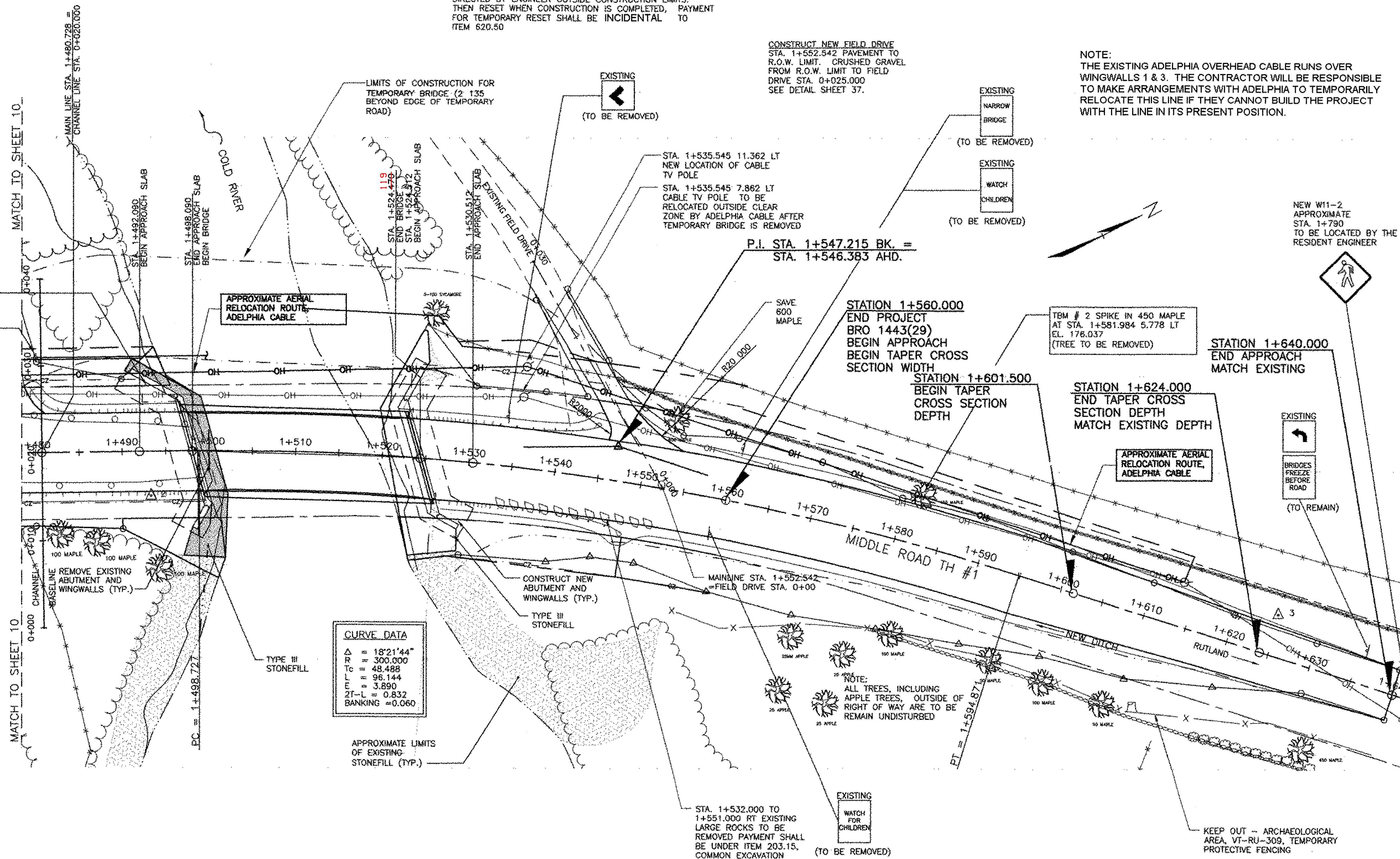
LEGEND

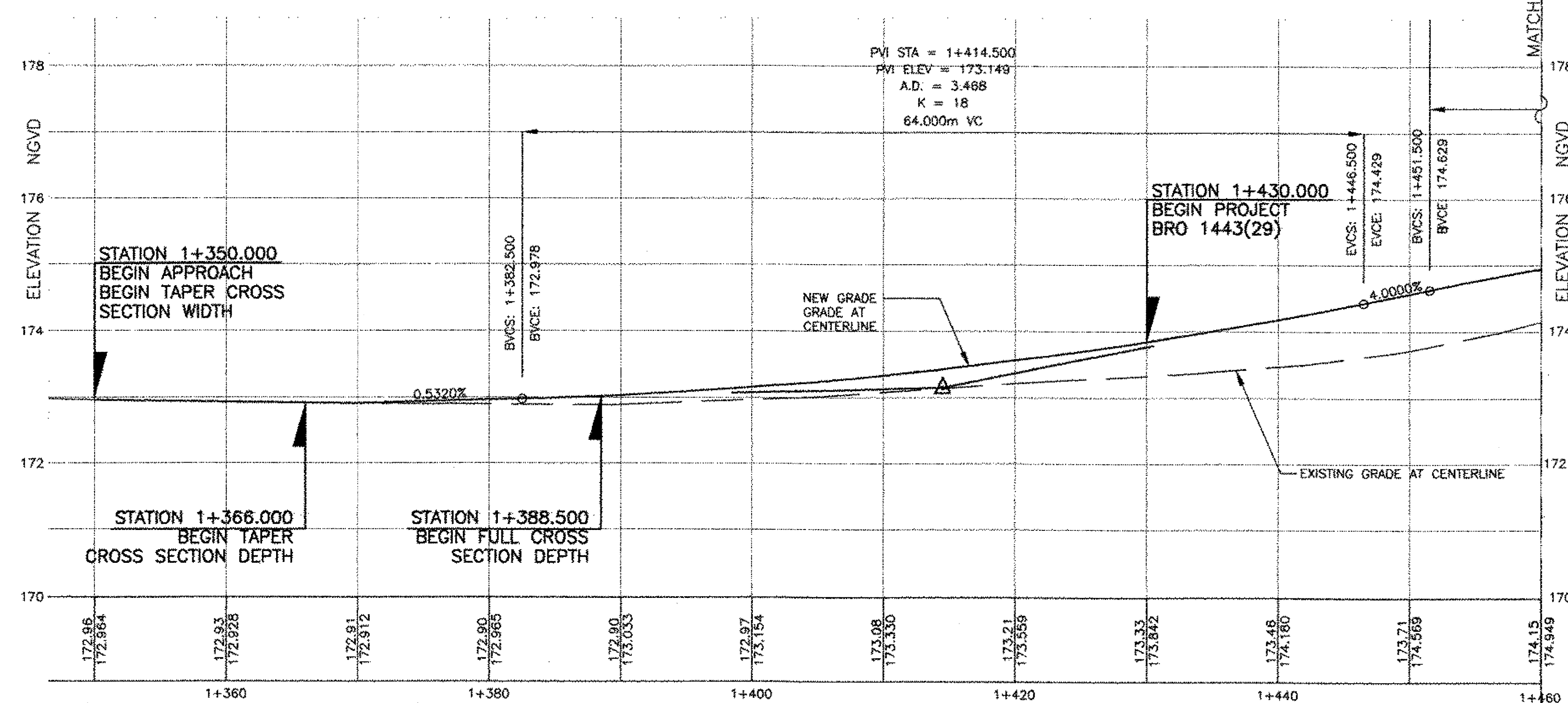
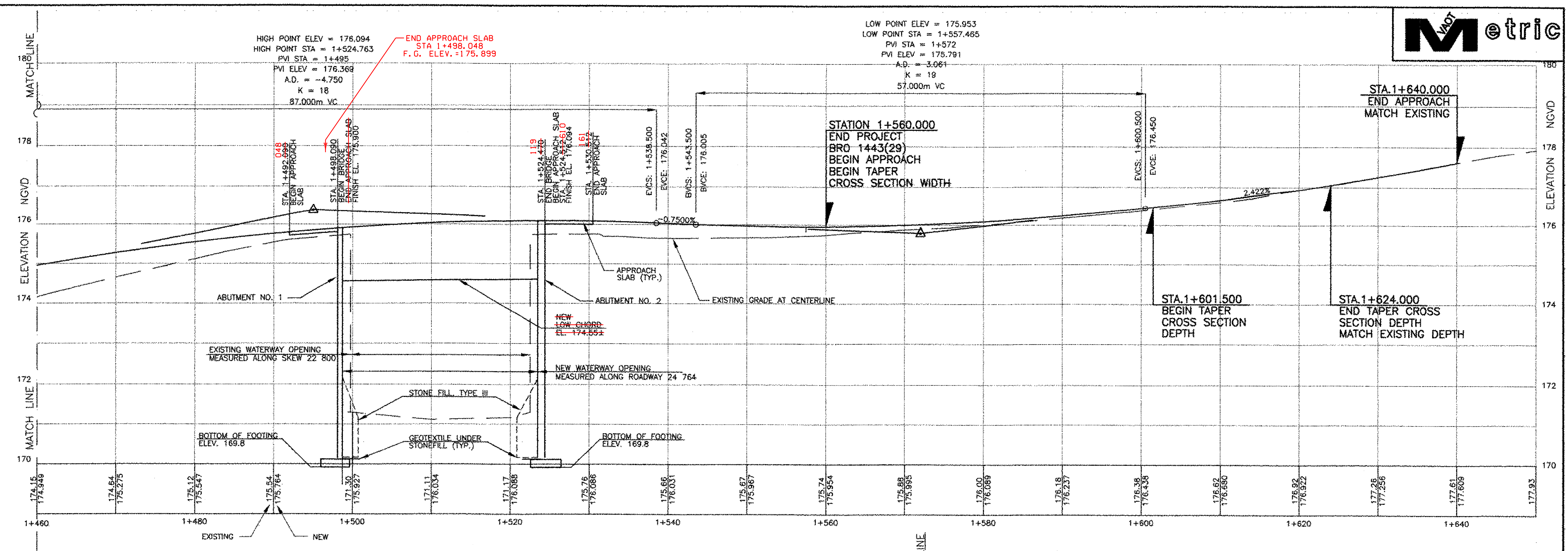
- 100 MAPLE DECIDUOUS TREE
- 100 PINE CONIFEROUS TREE
- STUMP
- EXISTING TREE LINE
- NEW TREE LINE
- EDGE OF NEW PAVEMENT
- OVERHEAD LINE
- EXISTING GRAVEL ROAD
- PROPOSED GRAVEL ROAD
- SURVEY CONTROL LOCATION
- UTILITY POLE
- GUY WIRE
- MAIL BOX
- STONE WALL
- R.O.W.
- EXISTING GUARD RAIL
- EDGE OF RIVER
- CLEAR ZONE
- TEMPORARY BRIDGE CONSTRUCTION LIMITS
- EXISTING STONEFILL
- TEMPORARY PROTECTIVE FENCING

REMOVE AND RESET FENCE
STA. 1+525.153 LT TO 1+545.117 LT
REMOVE AS NECESSARY, AND TEMPORARILY RESET AS - FENCE REMOVED
DIRECTED BY ENGINEER OUTSIDE CONSTRUCTION LIMITS.
THEN RESET WHEN CONSTRUCTION IS COMPLETED. PAYMENT
FOR TEMPORARY RESET SHALL BE INCIDENTAL TO
ITEM 620.50

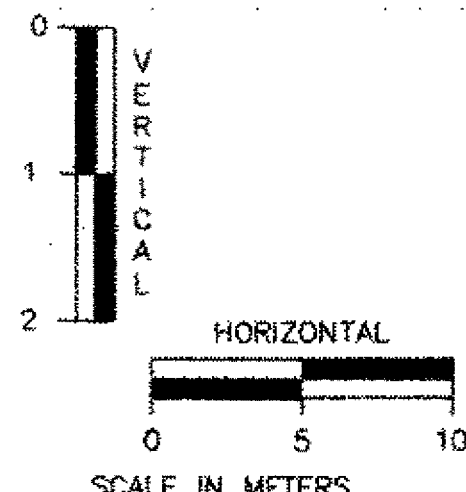
CONSTRUCT NEW FIELD DRIVE
STA. 1+552.542 PAVEMENT TO
R.O.W. LIMIT. CRUSHED GRAVEL
FROM R.O.W. LIMIT TO FIELD
DRIVE STA. 0+025.000
SEE DETAIL SHEET 37.

NOTE:
THE EXISTING ADELPHIA OVERHEAD CABLE RUNS OVER
WINGWALLS 1 & 3. THE CONTRACTOR WILL BE RESPONSIBLE
TO MAKE ARRANGEMENTS WITH ADELPHIA TO TEMPORARILY
RELOCATE THIS LINE IF THEY CANNOT BUILD THE PROJECT
WITH THE LINE IN ITS PRESENT POSITION.



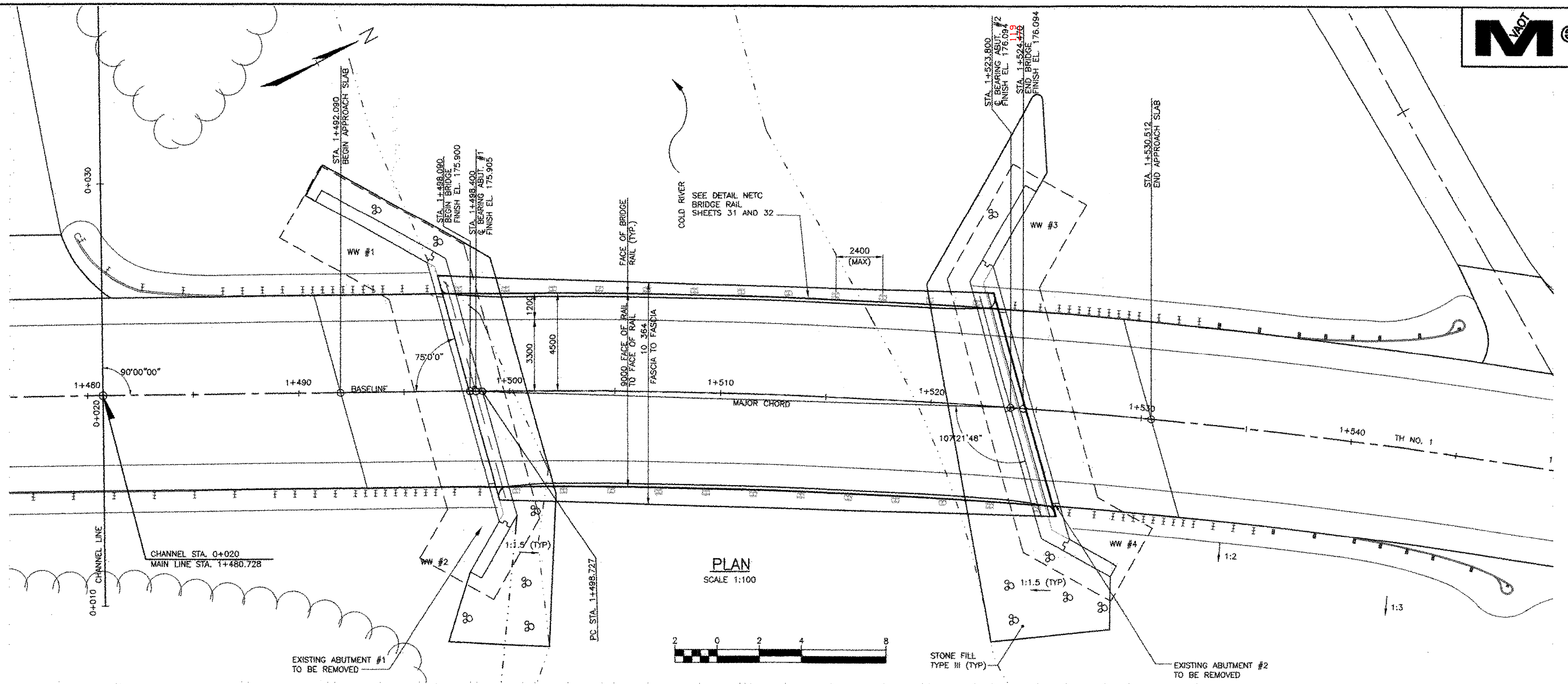


PROFILE SHEET
SCALE HORIZ. 1:250
VERT. 1:50

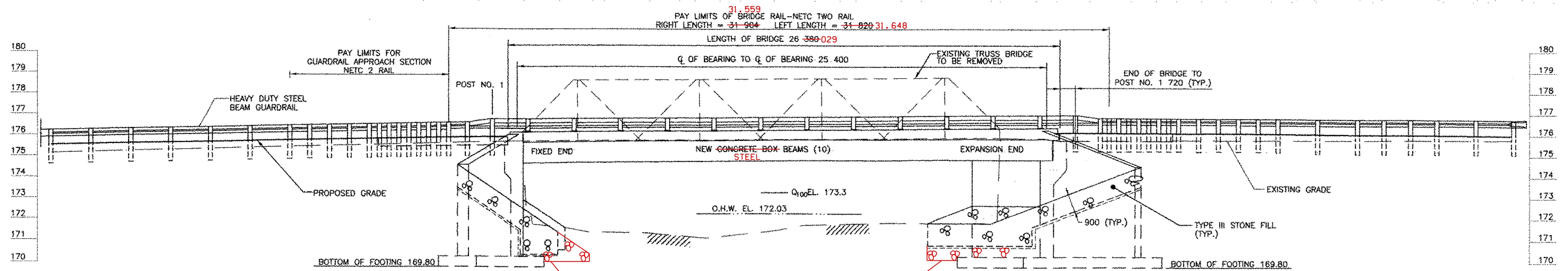
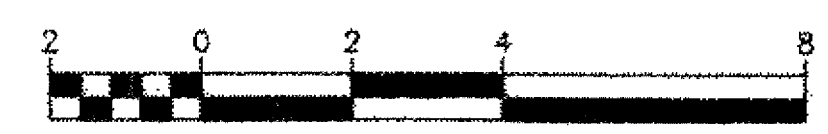


REVISIONS			STATE OF VERMONT AGENCY OF TRANSPORTATION	
NO.	DESCRIPTION	BY & DATE		
			CLARENDON, VERMONT	Bridge No. 14
			TOWN HIGHWAY NO. 1	Log Sta.
			TOWN HIGHWAY NO. 1 OVER THE COLD RIVER	
			PROFILE SHEET	
			Designed by: W.S. CHESBROUGH	Drawn by: N.B. DIMICK
			Checked by: K. S. MARSHIA date 05/02	Bridge Design Supervisor J.W. TUCKER date 05/02
			PROJECT CLARENDON	PROJECT NO. BRO 1443(29)
			Bridge Sheet No.	SHEET 12 OF 41

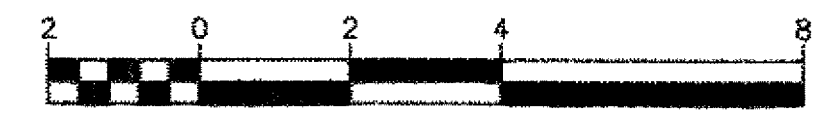
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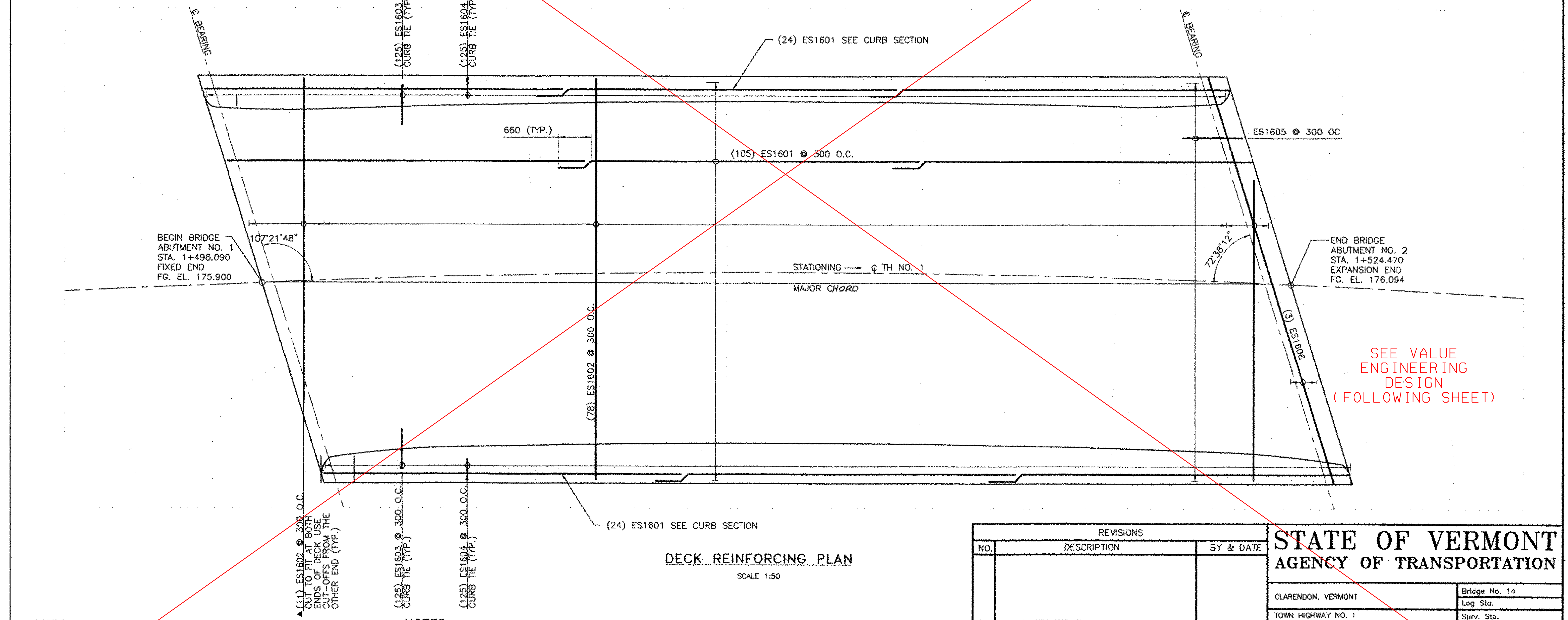
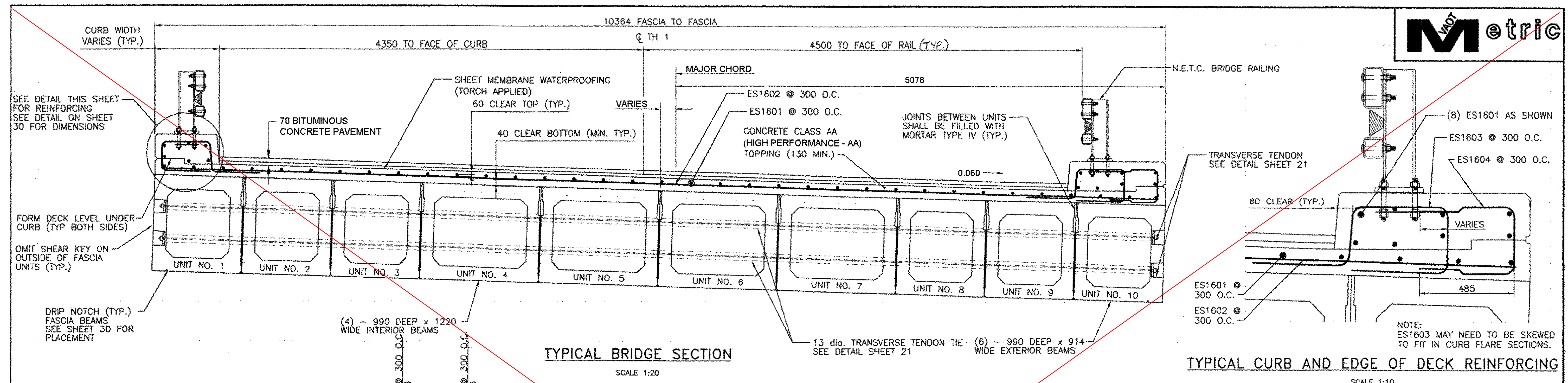
PLAN
SCALE 1:100



ELEVATION
SCALE HORIZ. 1:100
VERT. 1:100



REVISIONS			STATE OF VERMONT AGENCY OF TRANSPORTATION	
NO.	DESCRIPTION	BY & DATE		
			CLARENDON, VERMONT	Bridge No. 14
			TOWN HIGHWAY NO. 1	Log Sta.
				Surv. Sta.
 engineering planning management development			TOWN HIGHWAY NO. 1 OVER THE COLD RIVER	
			PLAN AND ELEVATION SHEET	
			Designed by: W.S. CHESBROUGH	Drawn by: N.B. DIMICK
			Checked by: K. S. MARSHIA date 05/02	Bridge Design Supervisor J.W. TUCKER date 05/02
			PROJECT CLARENDON	PROJECT NO. BRO 1443(29)
			Bridge Sheet No.	SHEET 15 of 41



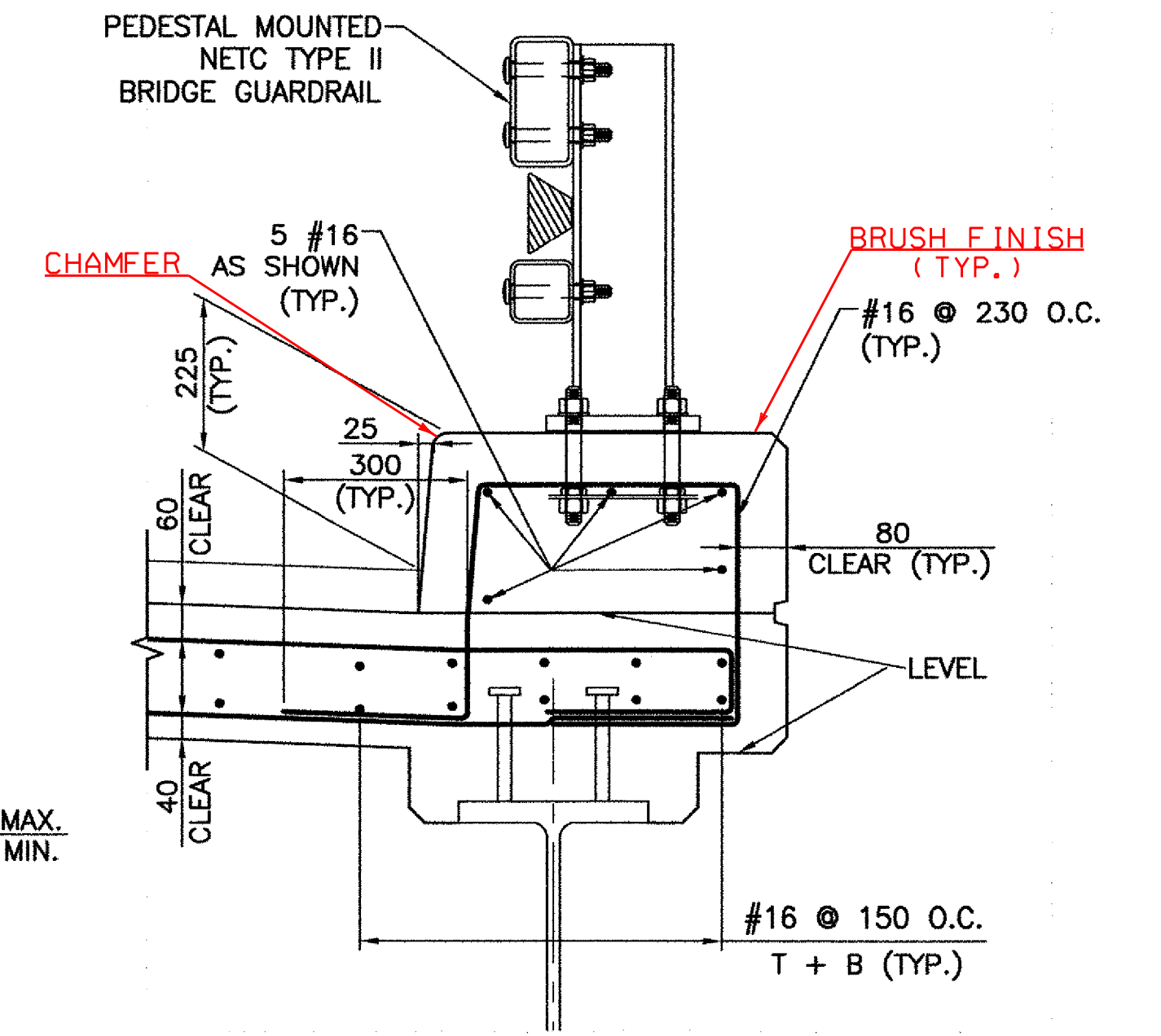
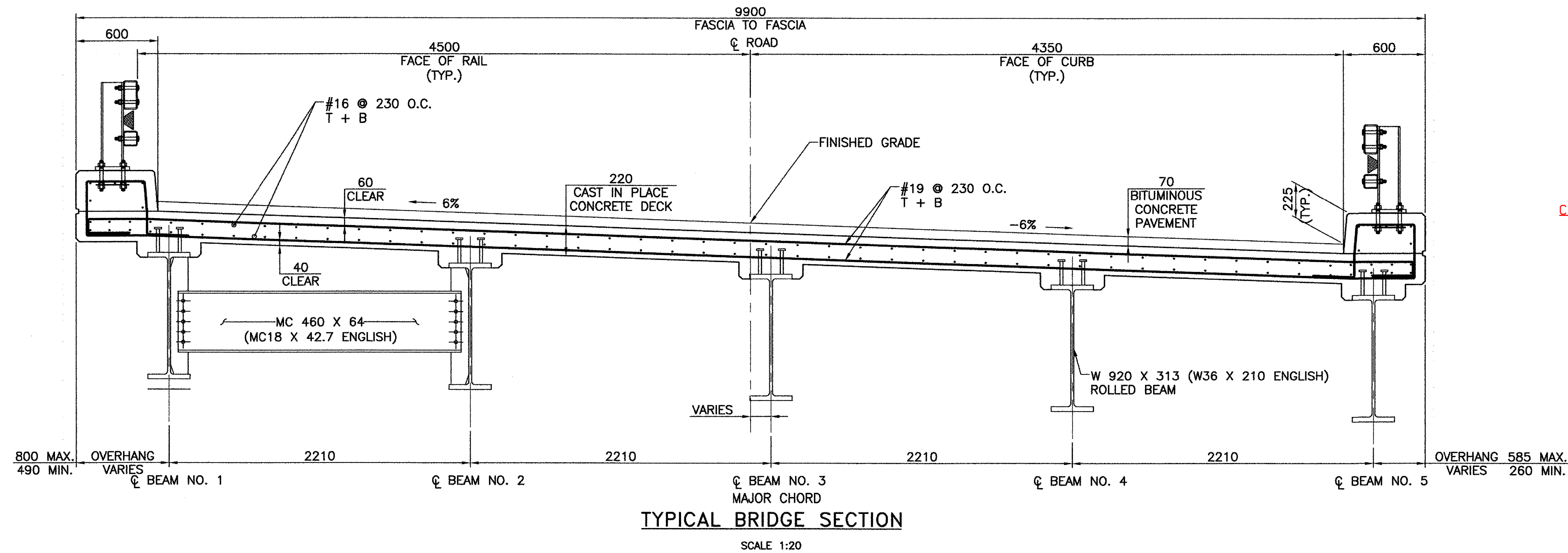
NOTES:
 NF = NEAR FACE
 FF = FAR FACE
 EF = EACH FACE
 ▲ = CUT TO FIT IN FIELD
 T-B = TOP AND BOTTOM
 OC = ON CENTER
 MINIMUM LAP LENGTH NOT DETAILED SHALL BE 660

NOTES:
 1. UNLESS OTHERWISE NOTE ALL STEEL SHALL HAVE A CLEAR OF 80
 2. "E" DENOTES EPOXY COATED BARS. ALL NON-PRESTRESSING REINFORCING STEEL SHALL BE EPOXY COATED
 3. TRANSVERSE REINFORCING SHALL BE ONE CONTINUOUS BAR NO SPLICING

SEE VALUE
ENGINEERING
DESIGN
(FOLLOWING SHEET)

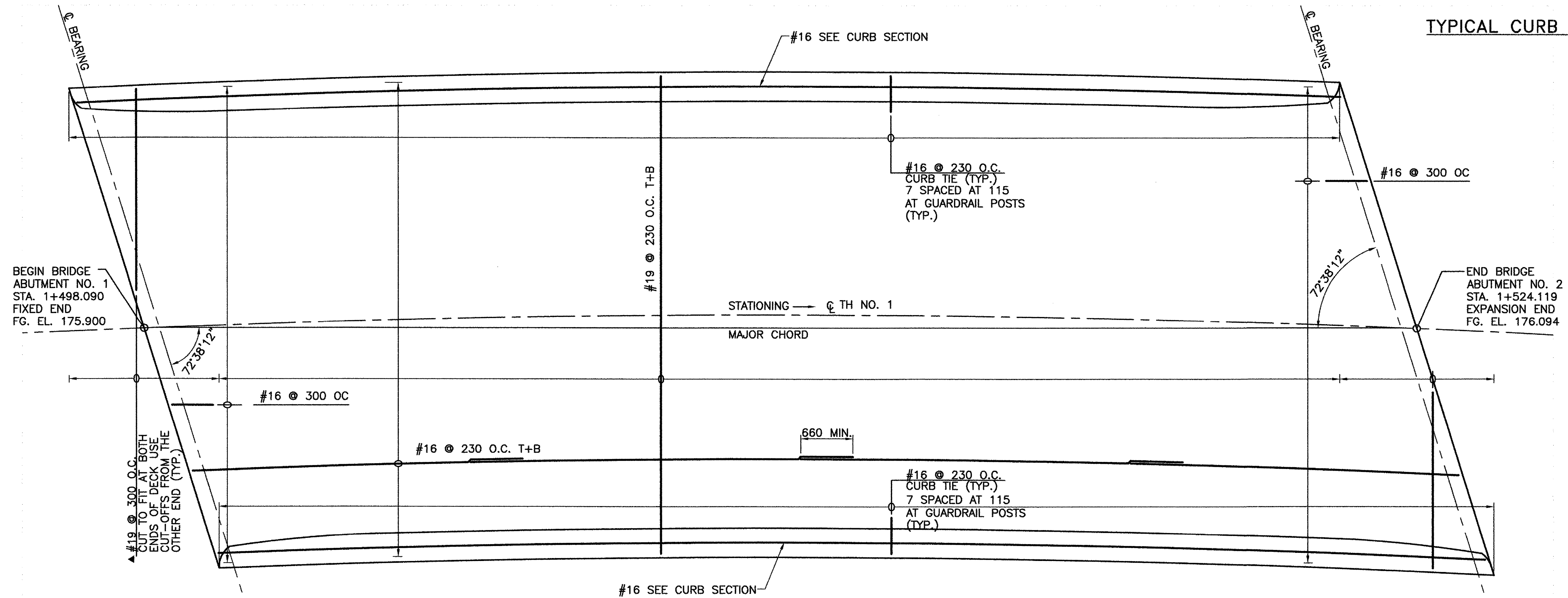
REVISIONS			STATE OF VERMONT AGENCY OF TRANSPORTATION	
NO.	DESCRIPTION	BY & DATE		
			CLARENDON, VERMONT	Bridge No. 14
			TOWN HIGHWAY NO. 1	Log Sta.
			Surv. Sta.	
TOWN HIGHWAY NO. 1 OVER THE COLD RIVER				
DECK REINFORCING PLAN AND DETAILS				
Designed by: B. C. AUSTIN			Drawn by: E. B. SMALL	
Checked by: K. S. MARSHA date 05/02			Bridge Design Supervisor J.W. TUCKER date 05/02	
PROJECT CLARENDON			PROJECT NO. BRO 1443(29)	
Bridge Sheet No.			SHEET 18 OF 41	

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NOTE:

SEE SHEET 20A FOR SHEAR STUD AND HAUNCH DETAILS



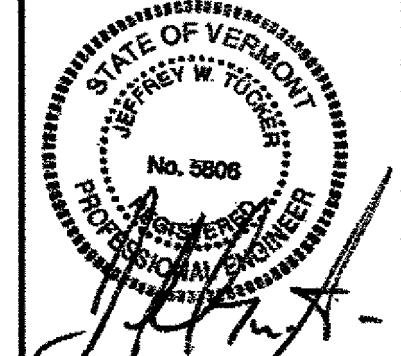
NOTES:

NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
▲ = CUT TO FIT IN FIELD
T+B = TOP AND BOTTOM
OC = ON CENTER
MINIMUM LAP LENGTH NOT DETAILED SHALL BE 660

NOTES:

1. ALL REINFORCEMENT IN DECK AND CURTAIN WALLS SHALL BE EPOXY COATED.
2. CONTRACTOR SHALL VERIFY ALL REINFORCING STEEL LENGTHS AND DIMENSIONS PRIOR TO ORDERING REINFORCEMENT. THE CURRENT REINFORCING STEEL SCHEDULE IS NOT ACCURATE AND SHALL NOT BE USED AS THE BASIS FOR ORDERING REINFORCEMENT.

REVISIONS			STATE OF VERMONT AGENCY OF TRANSPORTATION	
NO.	DESCRIPTION	BY & DATE		
			CLARENDON, VERMONT	Bridge No. 14
			TOWN HIGHWAY NO. 1	Log Sta.
				Surv. Sta.
			TOWN HIGHWAY NO. 1 OVER THE COLD RIVER	
			DECK REINFORCING PLAN AND DETAILS	
			Designed by: A.P. GUYETTE	Drawn by: A.P. GUYETTE
			Checked by: J.W. TUCKER date 1/06	Bridge Design Supervisor J.W. TUCKER date 1/06
			PROJECT CLARENDON	PROJECT NO. BRO 1443(29)
			Bridge Sheet No.	SHEET 18A OF 41



Technical drawing of a box beam connection. The drawing shows a cross-section of a box beam with a 30 DIA. ANCHOR BOLT passing through it. The bolt is secured with a 130 x 130 x 20 THICK WASHER WITH A 35 DIA. HOLE AASHTO M270M/M270 GRADE 250. The washer is positioned on top of the box beam. The bolt is also secured with a 65 DIA. SLEEVE. The connection is sealed with HOT POURED JOINT SEALER. Dimensions are given in inches: 180 (TYP.) for the total width of the box beam, 5 (TYP.) for the distance from the centerline of the bolt to the side of the box beam, 70 for the height of the box beam, and 20 for the thickness of the washer. The top of the box beam is labeled 'TOP OF BOX BEAM'. The bottom of the box beam is labeled 'BOX BEAM'. The drawing is labeled 'CONNECTION' on the right side.

M 30 x 3.5 HEAVY HEX NUT

180 (TYP.)

5 (TYP.)

5 (TYP.)

TOP OF BOX BEAM

POCKET TO BE FILLED WITH HOT POURED JOINT SEALER

130 x 130 x 20 THICK WASHER WITH A 35 DIA. HOLE AASHTO M270M/M270 GRADE 250

70

20

65 DIA. SLEEVE

30 DIA. ANCHOR BOLT

BOX BEAM

CONNECTION

Technical drawing of a hexagonal nut. The drawing shows a top view and a side view. The top view is a hexagon with a central hole. The side view is a rectangle. Dimensions are given in parentheses as typical values:

- Top view:
 - Overall width: 180 (TYP.)
 - Inner hexagon width: 170 (TYP.)
 - Distance from center to edge: 5 (TYP.)
- Side view:
 - Height: 20 (TYP.)
 - Width: 130 (TYP.)

POCKET FOR TRANSVERSE TENDON
(TYP.) SEE DETAIL SHEET 21

30 DIA. ANCHOR BOLT CENTERED IN
65 DIA. SLEEVE THE ANCHOR BOLT
SHALL BE PROVIDED WITH A
130 x 130 x 20 THICK WASHER AND
M 30 x 3.5 HEAVY HEX NUT
(1) ONE PER BOX BEAM END

BEARING PAD
200 x 300 x 40 THICK
(2) TWO PER BOX BEAM

CORE 75 dia. x 600 HOLE FOR ANCHOR BOLT
PRIOR TO PLACING BEAMS. AFTER PLACING
BEAMS AND INSTALLING ANCHOR BOLTS,
SEE NOTE NO. 1

1. UPON APPROVAL THE CONTRACTOR SHALL DRILL AND THOROUGHLY CLEAN ALL HOLES. THE ANCHOR RODS SHALL BE SET USING A VAOAT MATERIALS AND RESEARCH APPROVED EPOXY BASED ADHESIVE IN ACCORDANCE WITH SPECIFICATION SECTION 530 . APPLICATION OF THE ADHESIVE AND INSTALLATION OF THE ANCHOR RODS SHALL BE IN STRICT ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS AND AS APPROVED BY THE ENGINEER.
2. ANCHOR BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AND CONFORM TO SECTION 714.07.
3. ALL COSTS TO SUPPLY AND INSTALL THE ANCHOR BOLTS, INCLUDING ALL ASSOCIATED DRILLING AND HARDWARE AND MATERIALS SHALL BE INCLUDED IN THE COSTS OF ITEM 510.21, "PRESTRESSED CONCRETE BOX BEAM (990 x 914)" AND ITEM 510.21, "PRESTRESSED CONCRETE BOX BEAM (990 x 1220)".

The diagram illustrates two methods for applying a torch-applied membrane at a bridge deck joint. The left side shows the membrane applied to the ends of the bridge deck, while the right side shows it applied to the approach slab, with a specific detail for the asphaltic plug joint. Key components labeled include the asphaltic plug joint, galvanized steel plate, bituminous concrete pavement, binder, heat-resistant backer rod, 40 closed cell foam, and the bridge deck/approach slab.

TORCH APPLIED MEMBRANE ENDS

TORCH APPLIED MEMBRANE (EXCEPT UNDER ASPHALTIC PLUG JOINT)

ASPHALTIC PLUG JOINT

GALVANIZED STEEL PLATE

BIT. CONC. PAVEMENT

BIT. CONC. PAVEMENT

BINDER

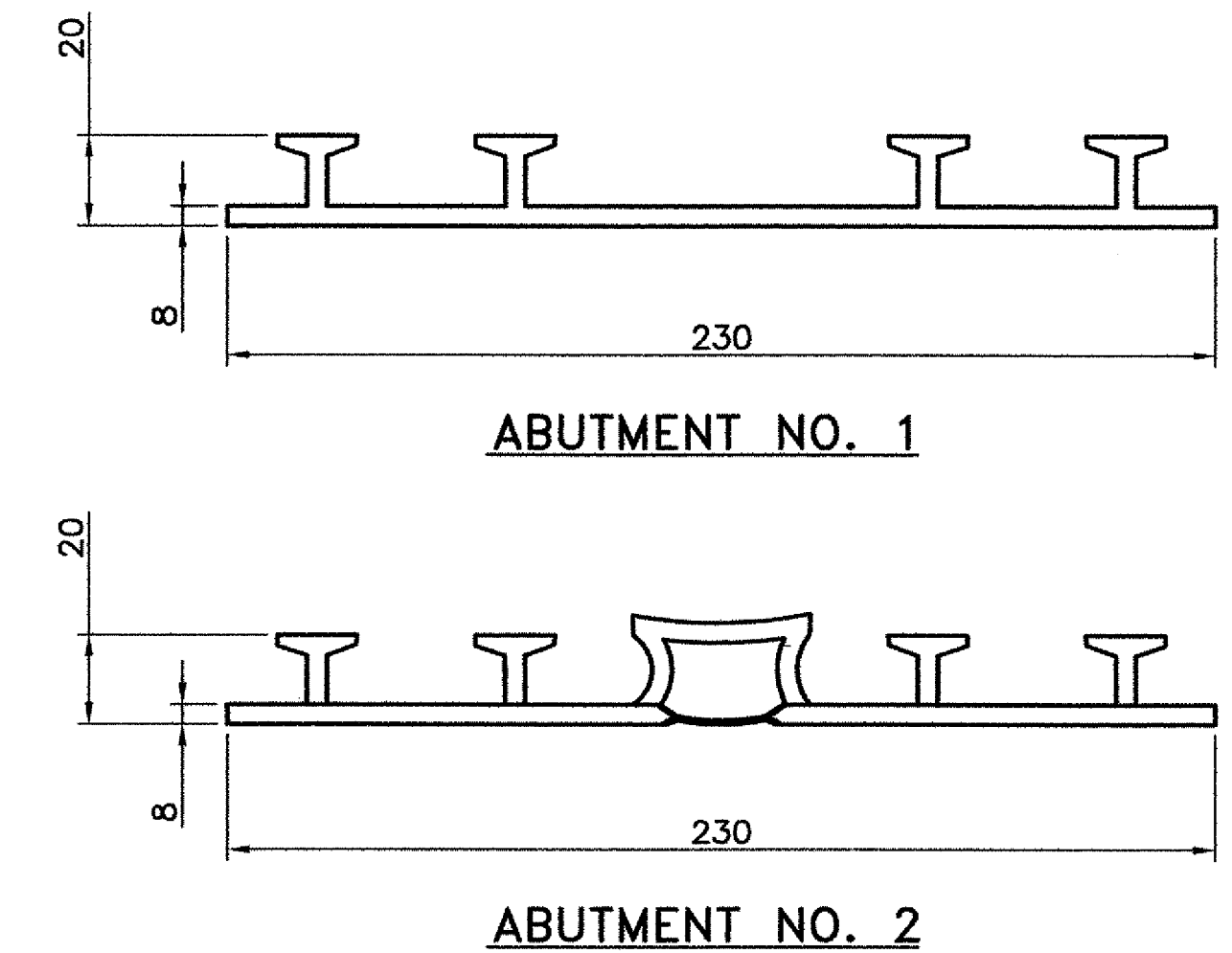
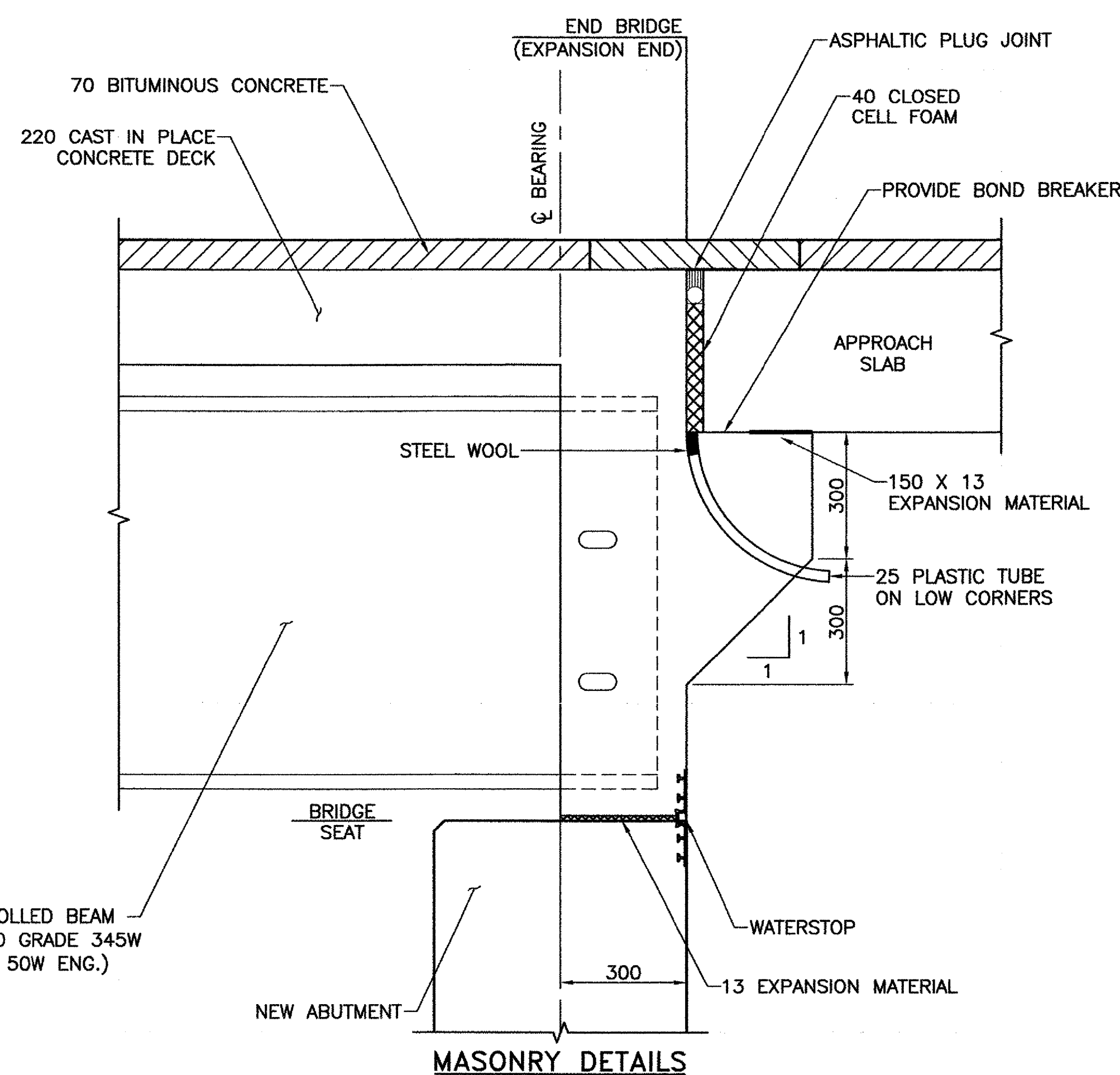
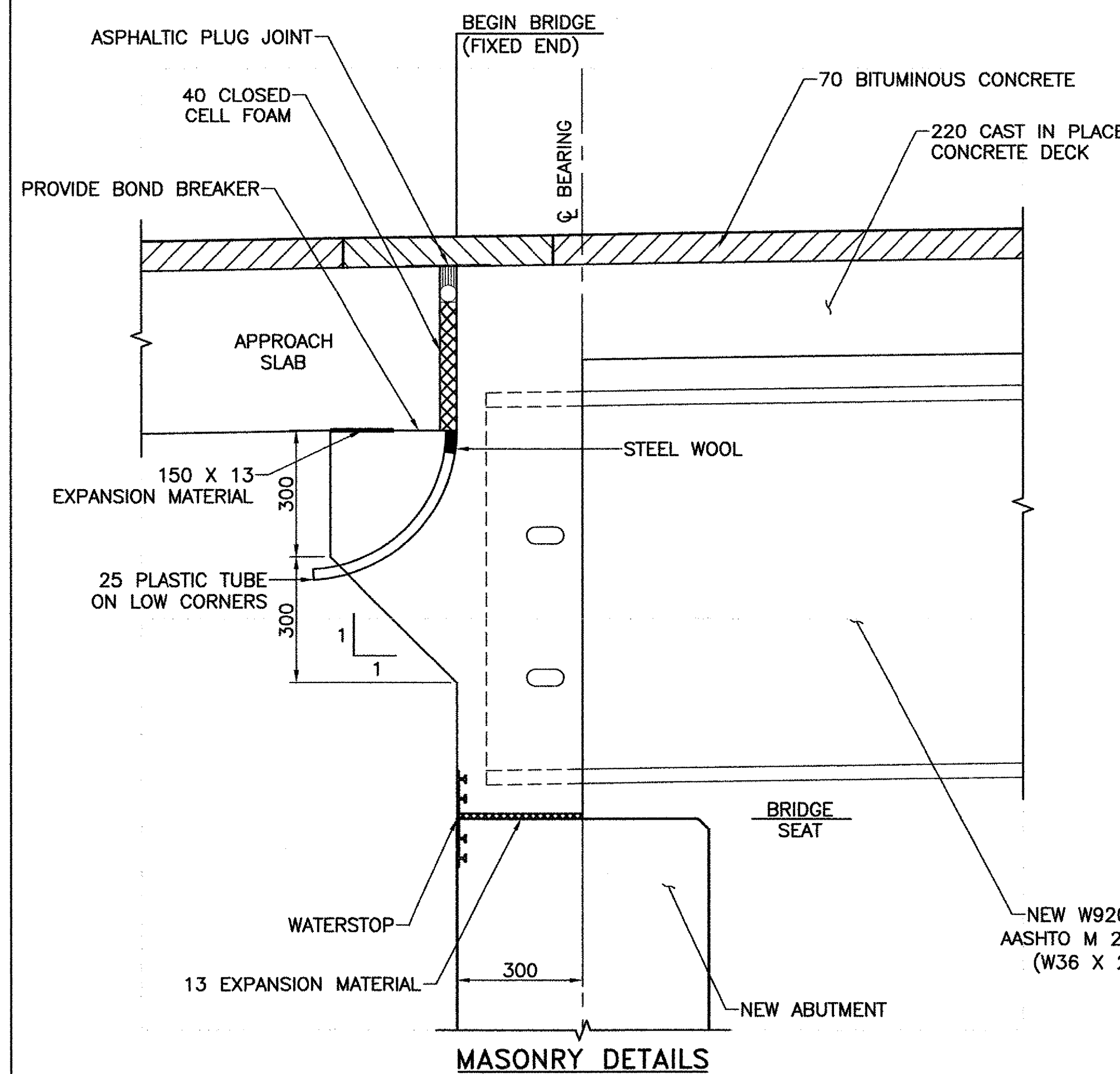
HEAT RESISTANT BACKER ROD

40 CLOSED CELL FOAM

BRIDGE DECK

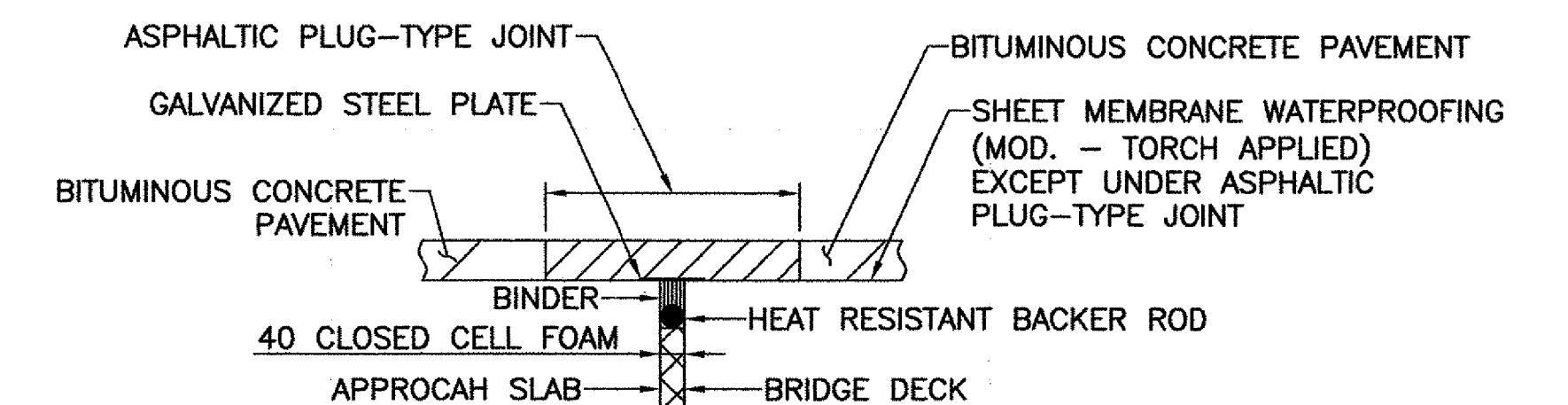
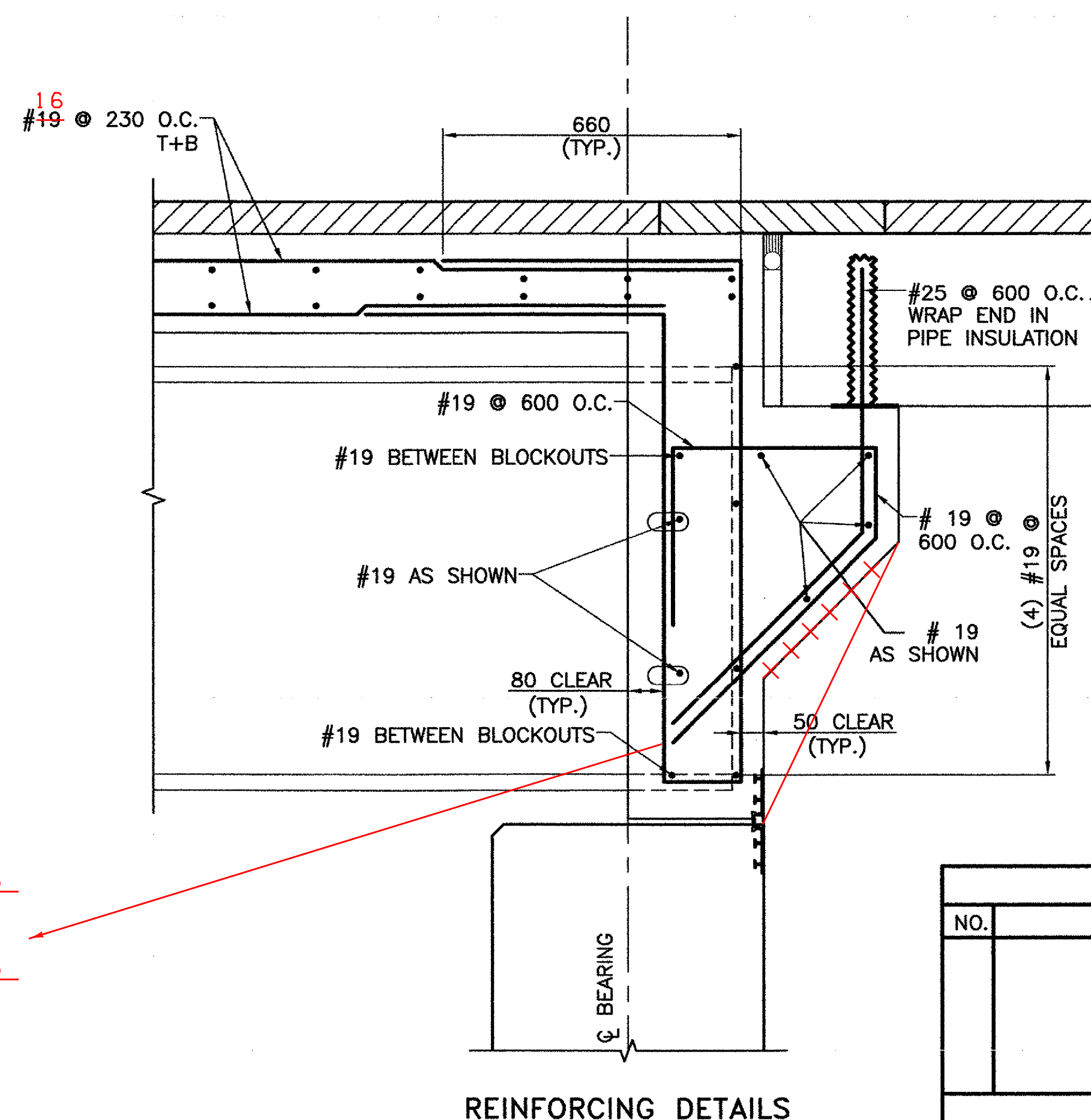
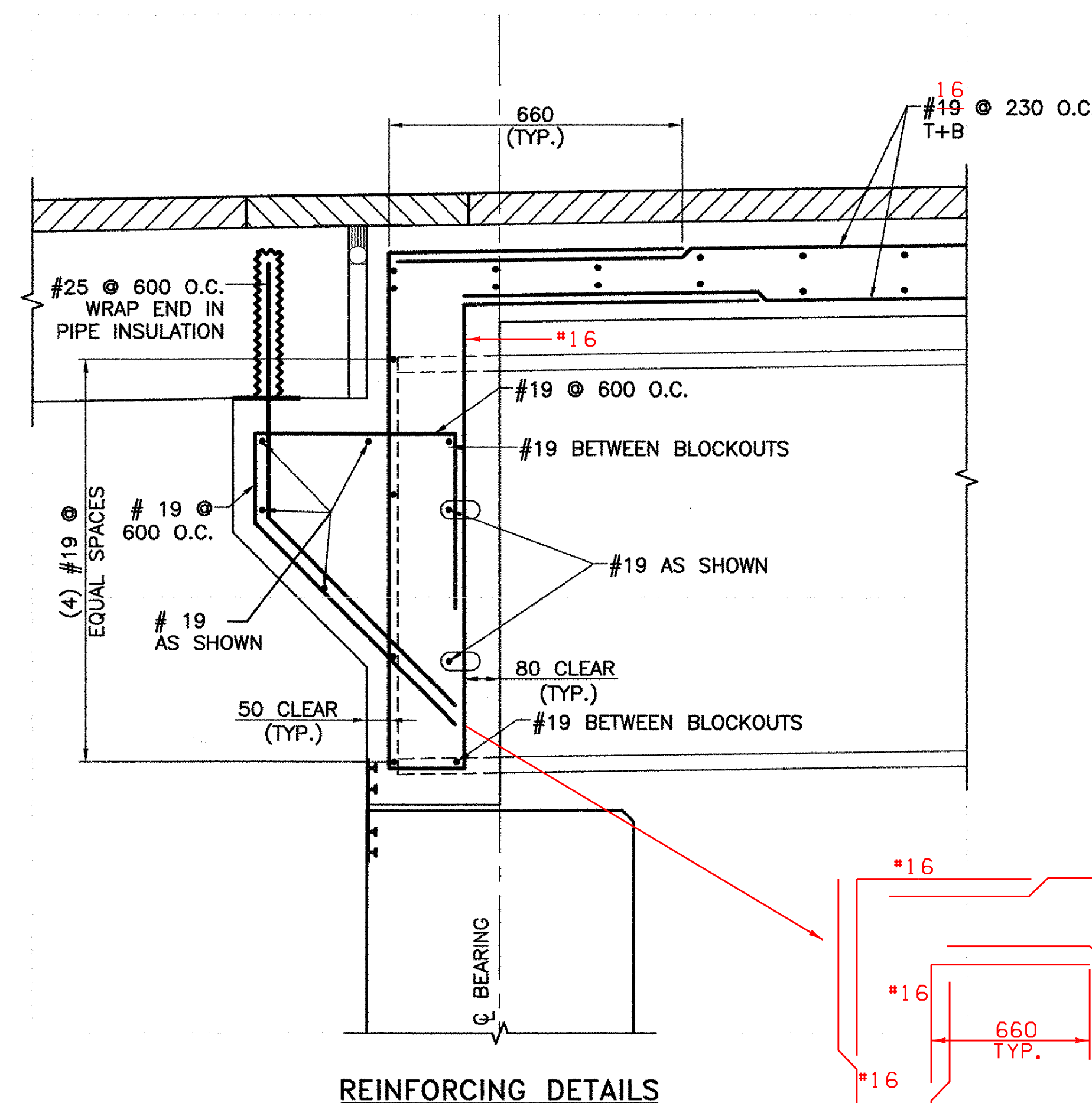
APPROACH SLAB

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P. V. C. WATERSTOP FOR JOINT AT BACKWALL

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



ASPHALTIC PLUG-TYPE JOINT DETAIL

NTS

NOTE:

1. ALL REINFORCEMENT IN DECK AND CURTAIN WALLS SHALL BE EPOXY COATED.
2. CONTRACTOR SHALL VERIFY ALL REINFORCING STEEL LENGTHS AND DIMENSIONS PRIOR TO ORDERING REINFORCEMENT. THE CURRENT REINFORCING STEEL SCHEDULE IS NOT ACCURATE AND SHALL NOT BE USED AS THE BASIS FOR ORDERING REINFORCEMENT.

NOTES:

NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
▲ = CUT TO FIT IN FIELD
T+B = TOP AND BOTTOM
OC = ON CENTER
MINIMUM LAP LENGTH NOT DETAILED SHALL BE 660

ABUTMENT NO. 1 DECK END DETAIL (FIXED END)

SCALE: 1:10

NOTE:

SECTIONS ARE PERPENDICULAR TO FACE OF ABUTMENT.

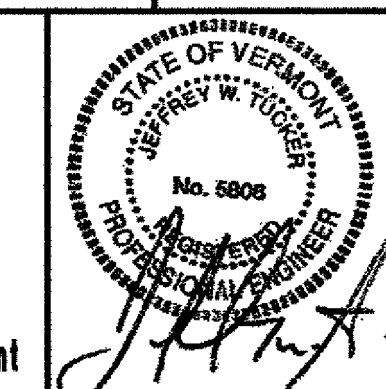
ABUTMENT NO. 2 DECK END DETAIL (EXPANSION END)

SCALE: 1:10

REVISIONS		
NO.	DESCRIPTION	BY & DATE

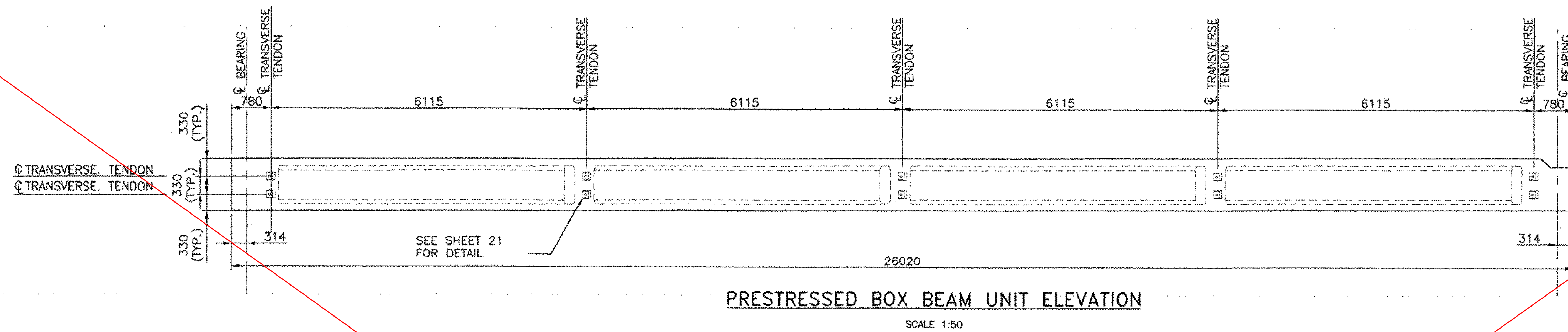
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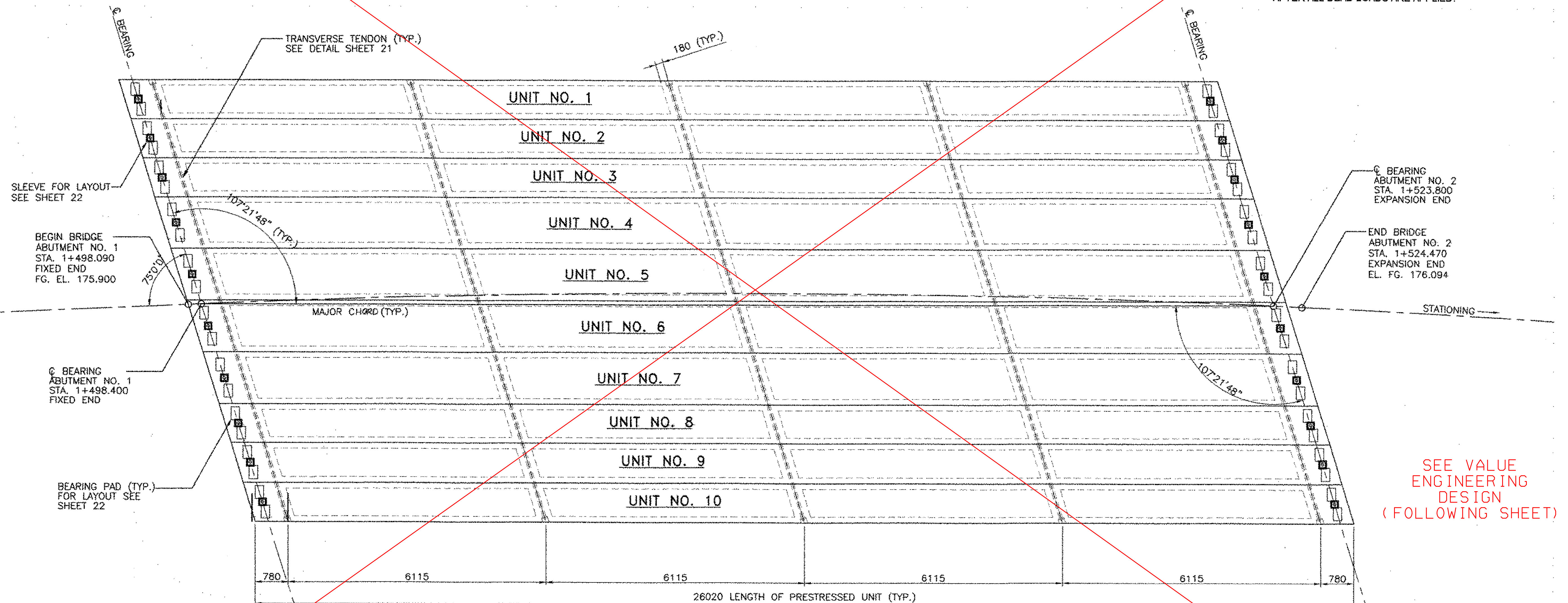


STATE OF VERMONT AGENCY OF TRANSPORTATION

CLARENDON, VERMONT	Bridge No. 14
TOWN HIGHWAY NO. 1	Log Sta.
TOWN HIGHWAY NO. 1 OVER THE COLD RIVER	Surv. Sta.
BRIDGE END DETAILS	
Designed by: A.P. GUYETTE	Drawn by: A.P. GUYETTE
Checked by: J.W. TUCKER date 1/06	Bridge Design Supervisor J.W. TUCKER date 1/06
PROJECT CLARENDON	PROJECT NO. BRO 1443(29)
Bridge Sheet No.	SHEET 19A OF 41



NOTES:
1. BOX BEAMS SHALL HAVE POSITIVE CAMBER AFTER ALL DEAD LOADS ARE APPLIED.



SEE VALUE
ENGINEERING
DESIGN
(FOLLOWING SHEET)

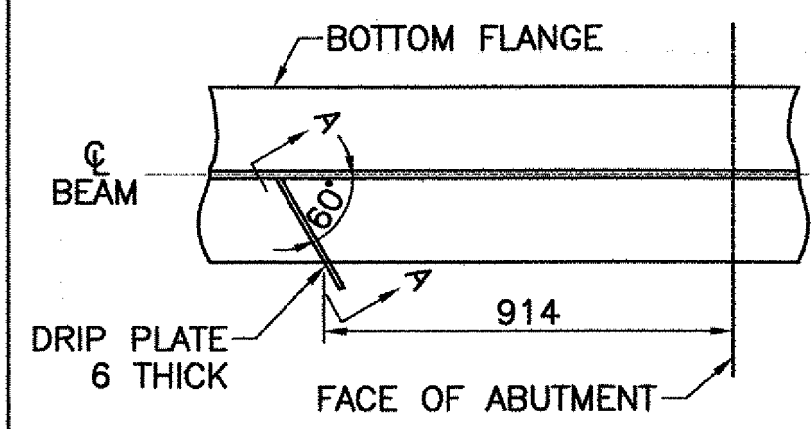
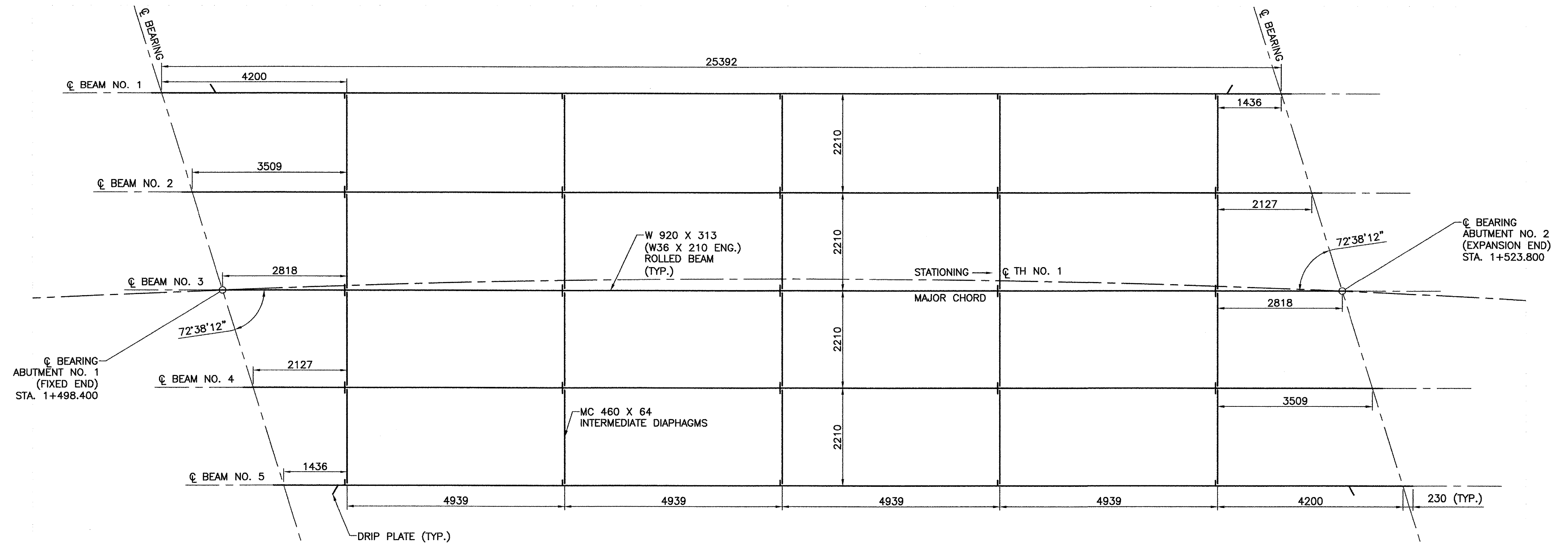
SERVICE LOADS PER UNIT (UNIT NO. 1, 2, 3, 8, 9 AND 10)		
MEMBER MOMENT, kNm (NON-COMPOSITE)	834	AT MIDSPAN
DECK MOMENT, kNm (NON-COMPOSITE)	361	AT MIDSPAN
SUPERIMPOSED DEAD LOAD MOMENT, kNm (COMPOSITE)	197	AT MIDSPAN
LIVE LOAD + IMPACT MOMENT, kNm (POSITIVE)	748	AT MIDSPAN
DEAD LOAD REACTION, kN AT ABUTMENTS	231	N/A
LIVE LOAD REACTION, kN AT ABUTMENTS	129	N/A
TOTAL REACTION, kN AT ABUTMENTS	360	N/A

SERVICE LOADS PER UNIT (UNIT NO. 4, 5, 6, AND 7)		
MEMBER MOMENT, kNm (NON-COMPOSITE)	995	AT MIDSPAN
DECK MOMENT, kNm (NON-COMPOSITE)	479	AT MIDSPAN
SUPERIMPOSED DEAD LOAD MOMENT, kNm (COMPOSITE)	233	AT MIDSPAN
LIVE LOAD + IMPACT MOMENT, kNm (POSITIVE)	748	AT MIDSPAN
DEAD LOAD REACTION, kN AT ABUTMENTS	276	N/A
LIVE LOAD REACTION, kN AT ABUTMENTS	129	N/A
TOTAL REACTION, kN AT ABUTMENTS	405	N/A

PRESTRESSED BOX BEAM UNIT PLAN
SCALE 1:50

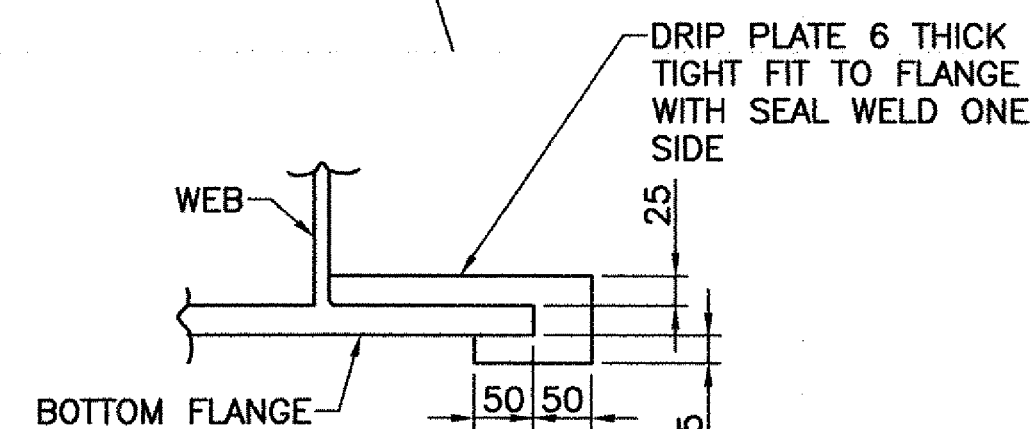
NOTES:
1. UNIT NO. 1, 2, 3, 8, 9, AND 10 ARE 914 WIDE x 990 DEEP
2. UNIT NO. 4, 5, 6 AND 7 ARE 1220 WIDE x 990 DEEP
3. SEE SHEET 18 FOR MORE DETAIL AT ABUTMENTS
4. PROVIDE 20 dia. WEEP HOLE AT BOTH ENDS OF ALL VOIDS

REVISIONS		
NO.	DESCRIPTION	BY & DATE
STATE OF VERMONT AGENCY OF TRANSPORTATION		
CLARENDON, VERMONT		Bridge No. 14
TOWN HIGHWAY NO. 1		Log Sta.
TOWN HIGHWAY NO. 1 OVER THE COLD RIVER		Surv. Sta.
PRESTRESSED UNIT DETAILS		
Designed by: B. C. AUSTIN	date 05/02	Drawn by: E. B. SMALL
Checked by: K. S. MARSHIA	date 05/02	Bridge Design Supervisor: J.W. TUCKER
PROJECT: CLARENDON	PROJECT NO. BRO 1443(29)	date 05/02
Bridge Sheet No.	SHEET 20 OF 41	



PLAN DRIP PLATE

NTS



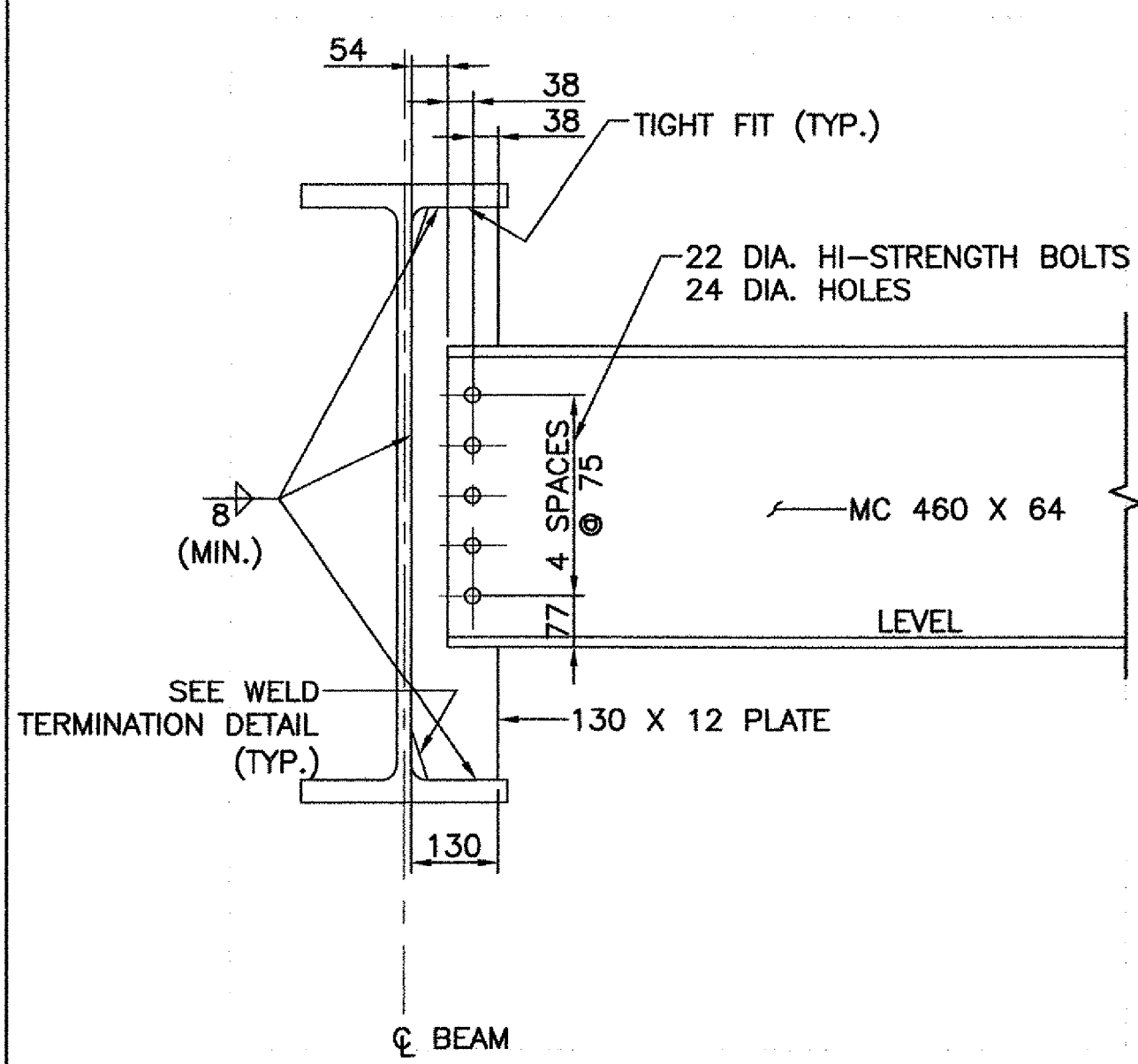
SECTION A-A

NTS

FRAMING PLAN

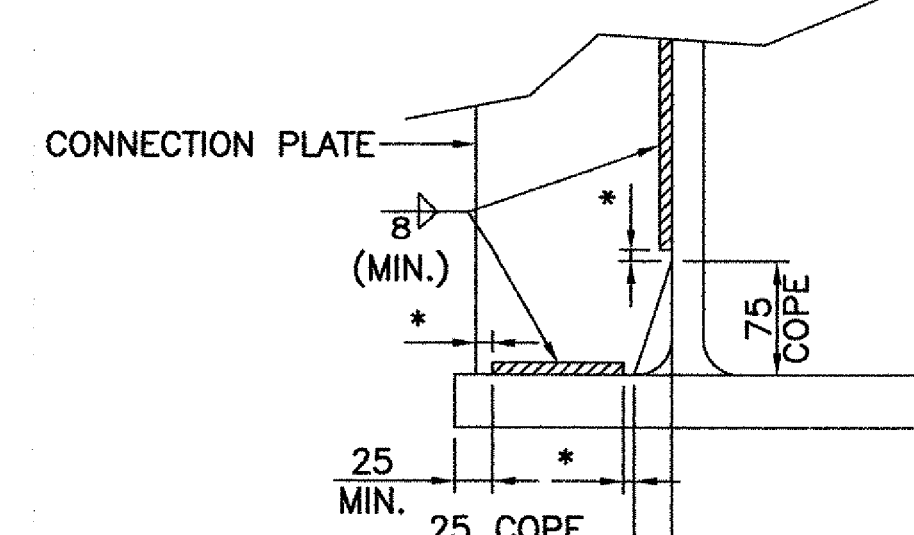
SCALE 1:50

NOTE:
DRIP PLATES SHALL BE PLACED ON OUTSIDE EDGES OF FASCIA CORNERS,
AND ON THE HIGH SIDE OF ALL ABUTMENTS OR AS INDICATED ON PROJECT PLANS.



INTERMEDIATE DIAPHRAGMS

SCALE 1:10

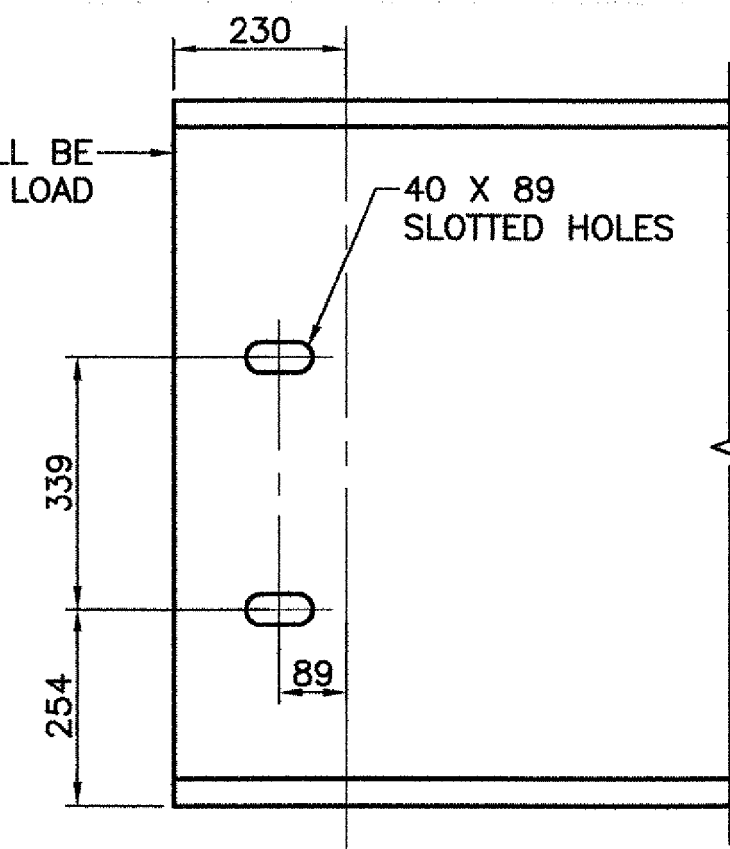


* NO WELD FOR 7 MIN. 12 MAX.
(EXCEPT MUST MAINTAIN 25 FROM EDGE OF FLANGE)

WELD TERMINATION AND COPING
DETAILS FOR STEEL BEAMS

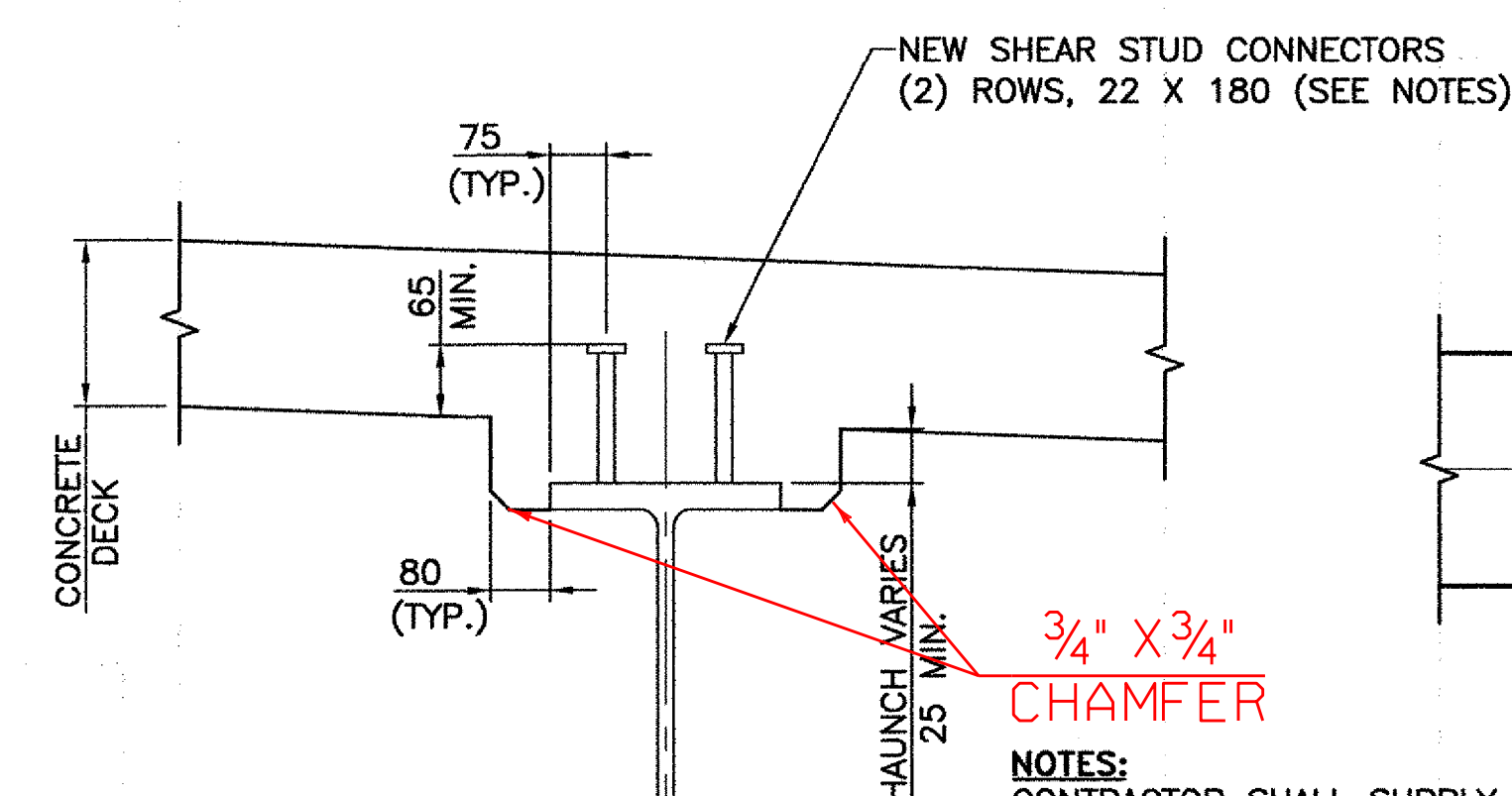
SCALE 1:5

END OF BEAM SHALL BE
PLUMB UNDER FULL DEAD LOAD



ELEVATION - END OF BEAM

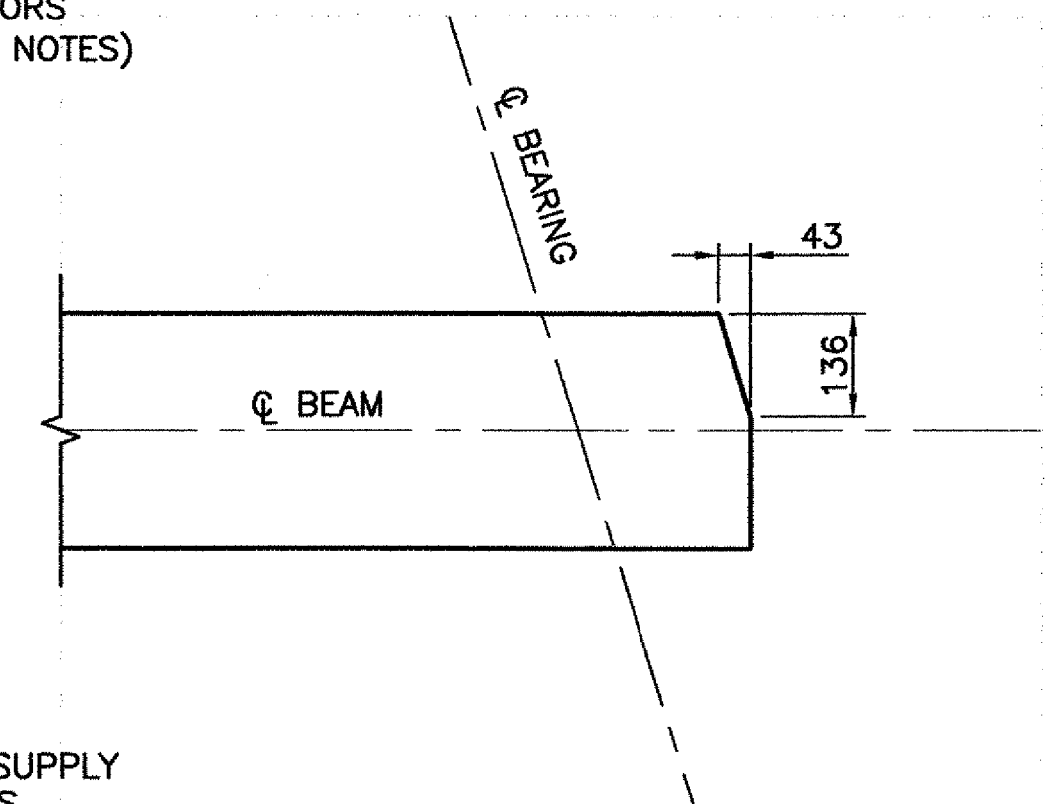
SCALE 1:10



HAUNCH DETAIL

SCALE 1:10

NOTES:
CONTRACTOR SHALL SUPPLY
LONGER SHEAR STUDS
WHERE NEEDED TO COMPLY
WITH MINIMUM EMBEDMENT
OF 65 ABOVE THE BOTTOM
OF THE DECK.

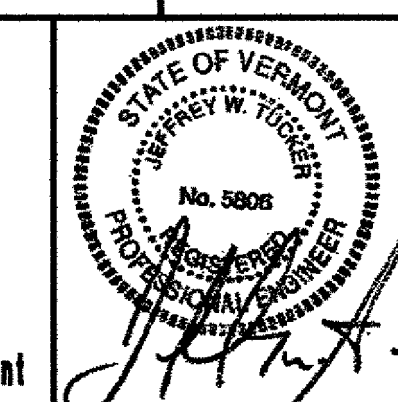


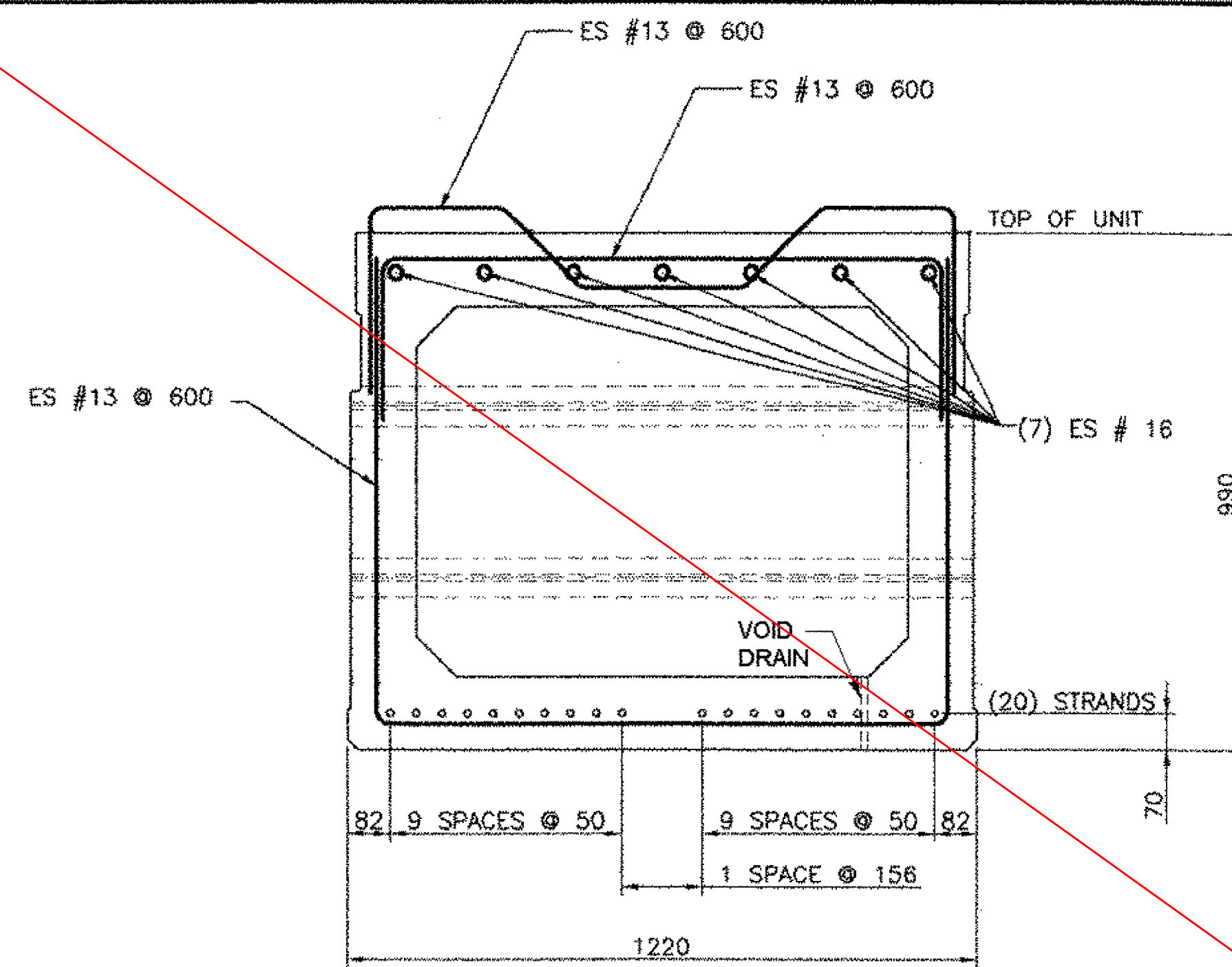
FLANGE CLIP

SCALE 1:10

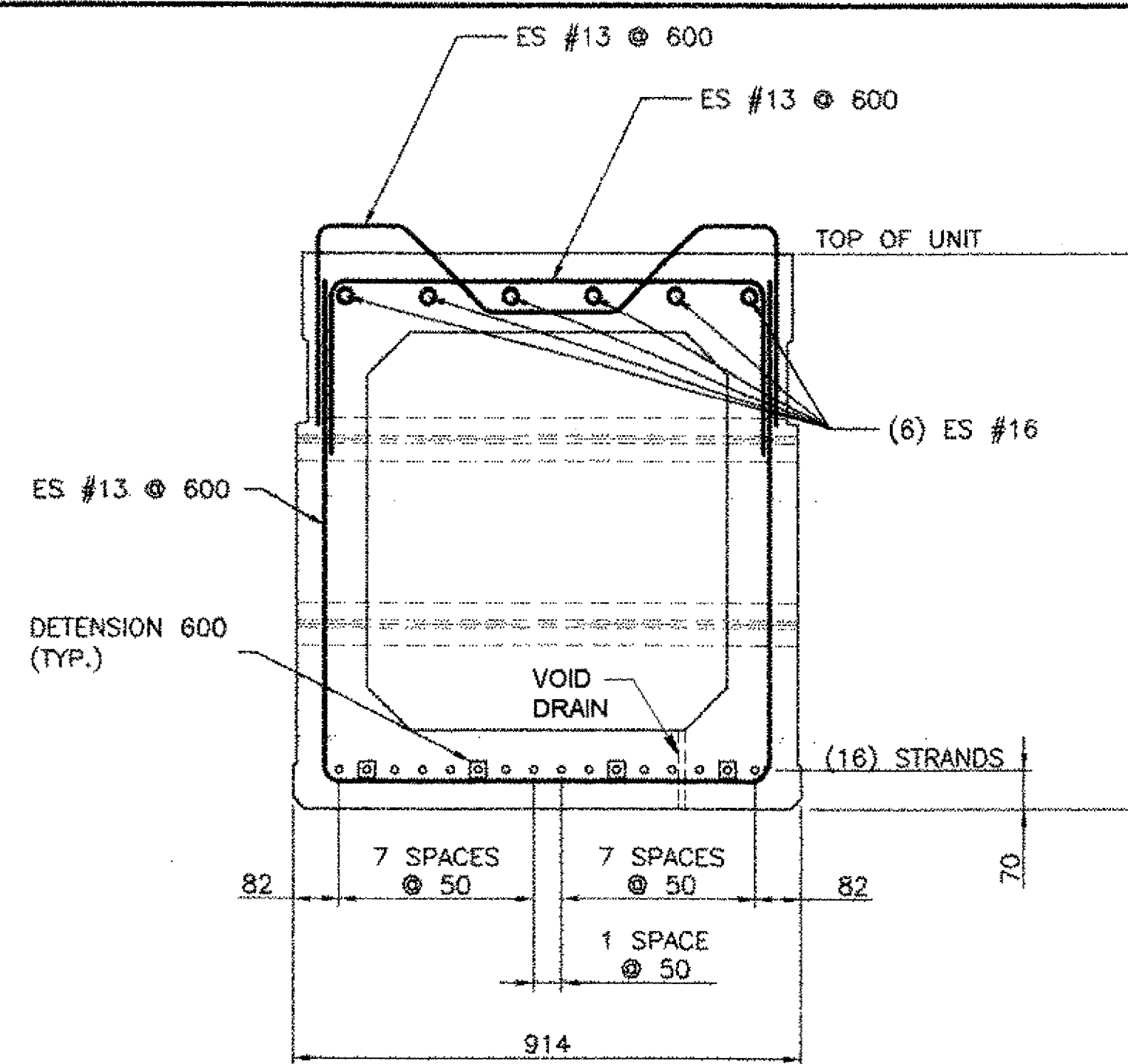
REVISIONS			STATE OF VERMONT AGENCY OF TRANSPORTATION	
NO.	DESCRIPTION	BY & DATE		
			CLARENDON, VERMONT	Bridge No. 14
			TOWN HIGHWAY NO. 1	Log Sta.
				Surv. Sta.
			TOWN HIGHWAY NO. 1 OVER THE COLD RIVER	
			FRAMING PLAN AND STEEL DETAILS	
			Designed by: A.P. GUYETTE	Drawn by: A.P. GUYETTE
			Checked by: J.W. TUCKER	Bridge Design Supervisor J.W. TUCKER
			date 1/06	date 1/06
			PROJECT CLARENDON	PROJECT NO. BRO 1443(29)
			Bridge Sheet No.	SHEET 20A OF 41

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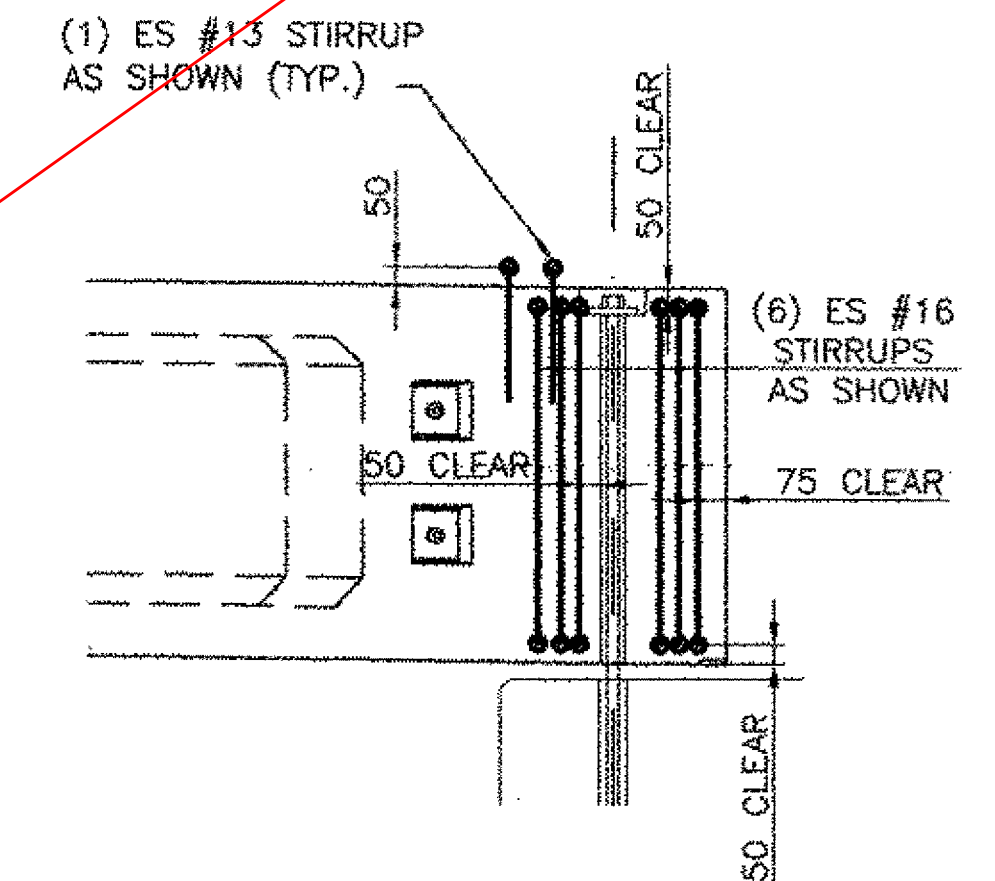




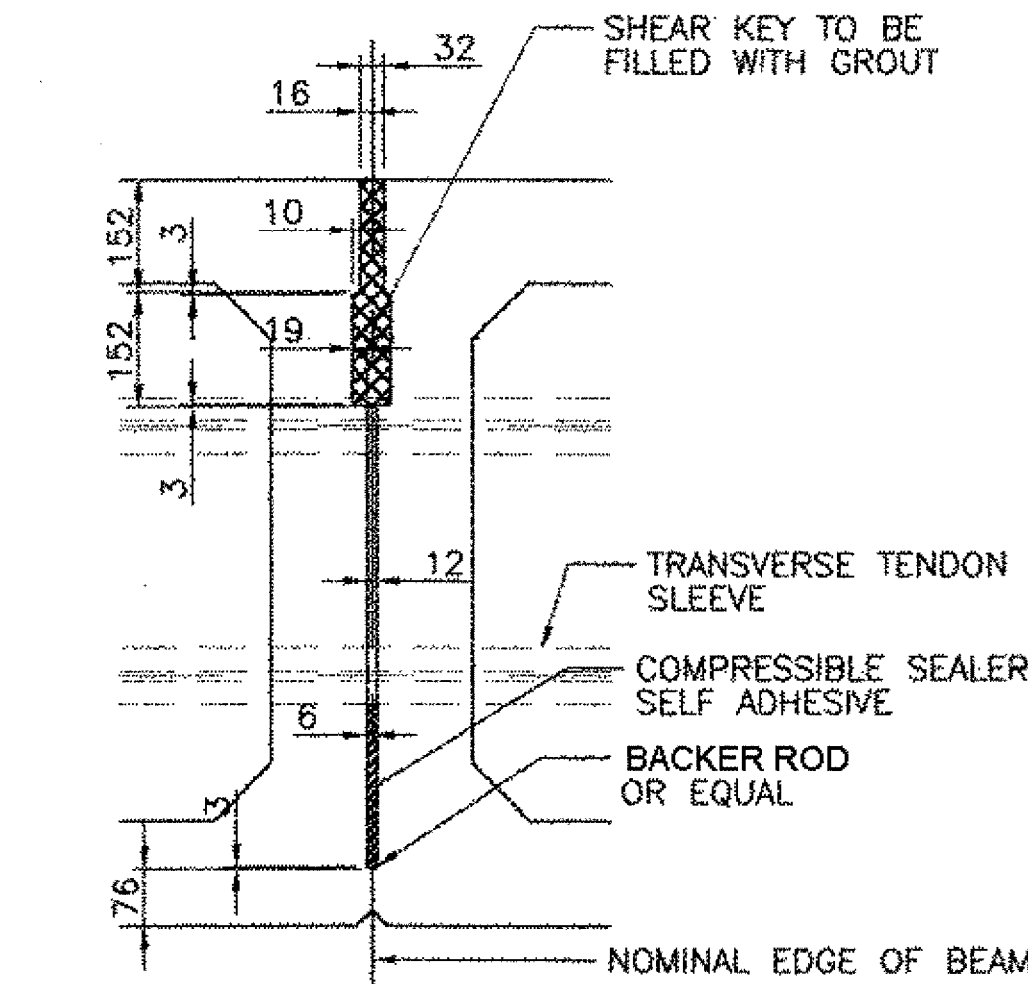
UNIT NO. 4, 5, 6 AND 7 SECTION
SCALE: 1 : 10



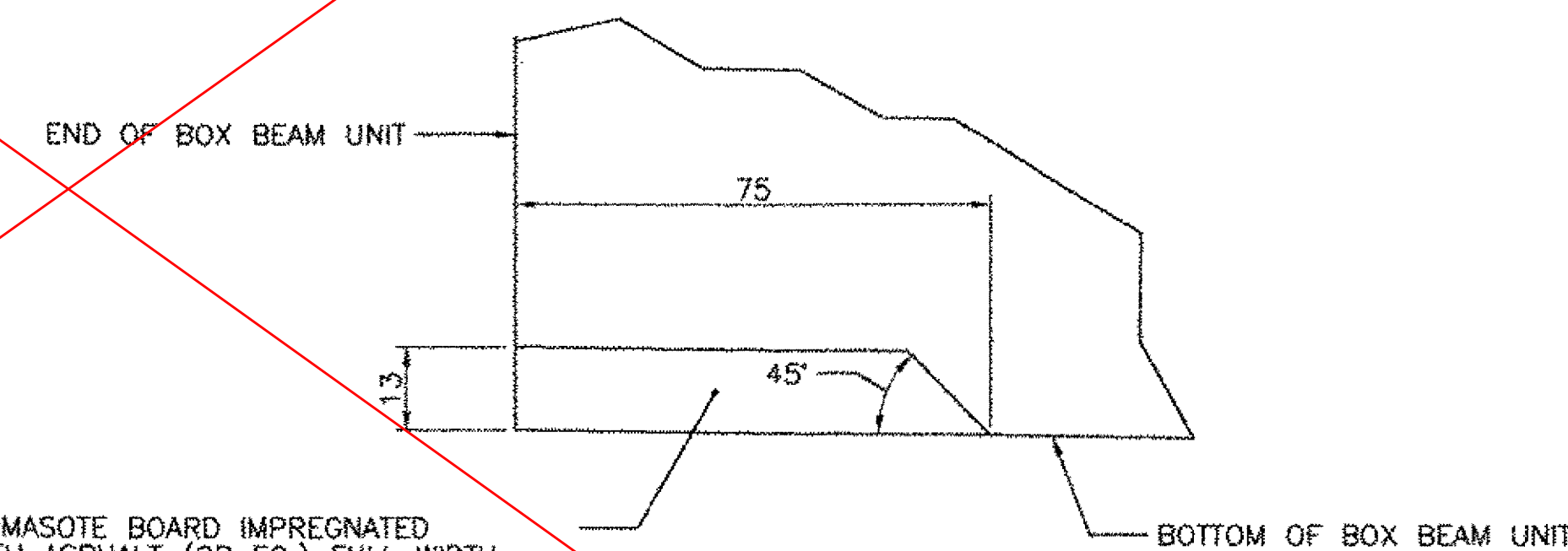
UNIT NO. 1, 2, 3, 8, 9 AND 10 SECTION
SCALE: 1 : 10



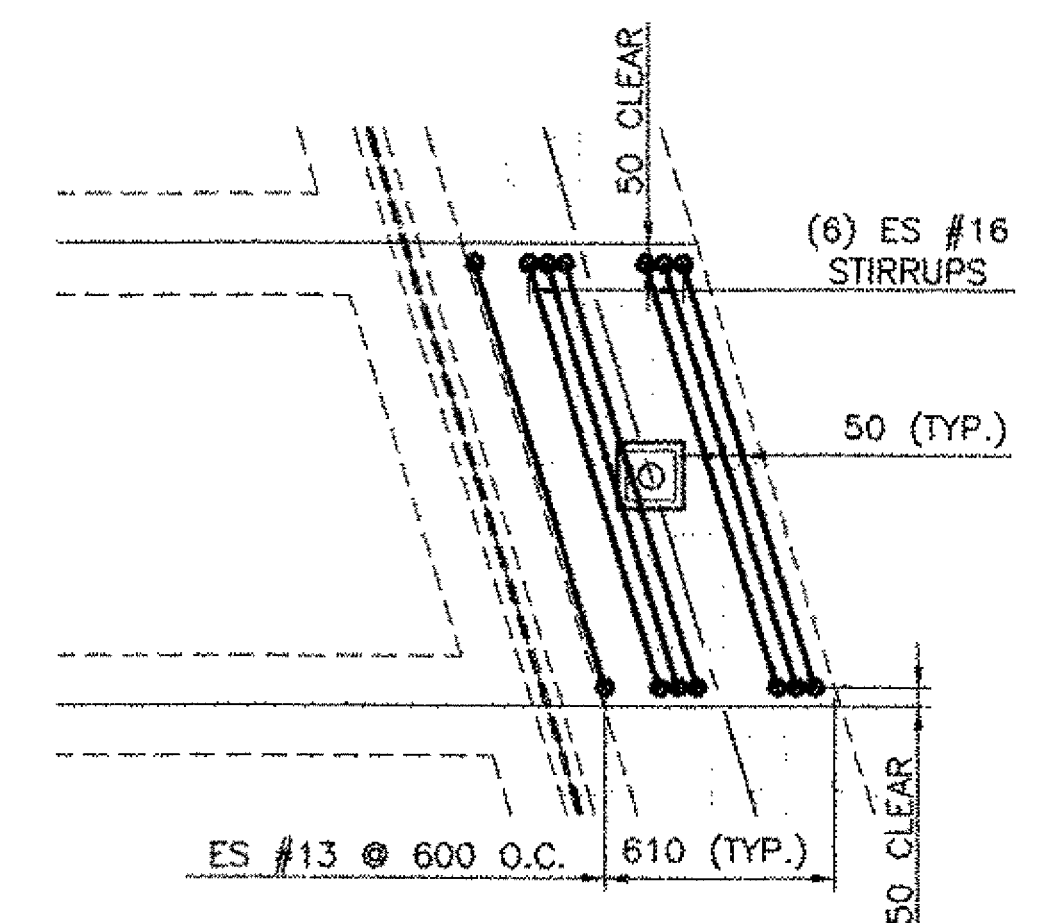
PRESTRESSED BOX BEAM UNIT
END DETAIL ELEVATION
SCALE: 1:20



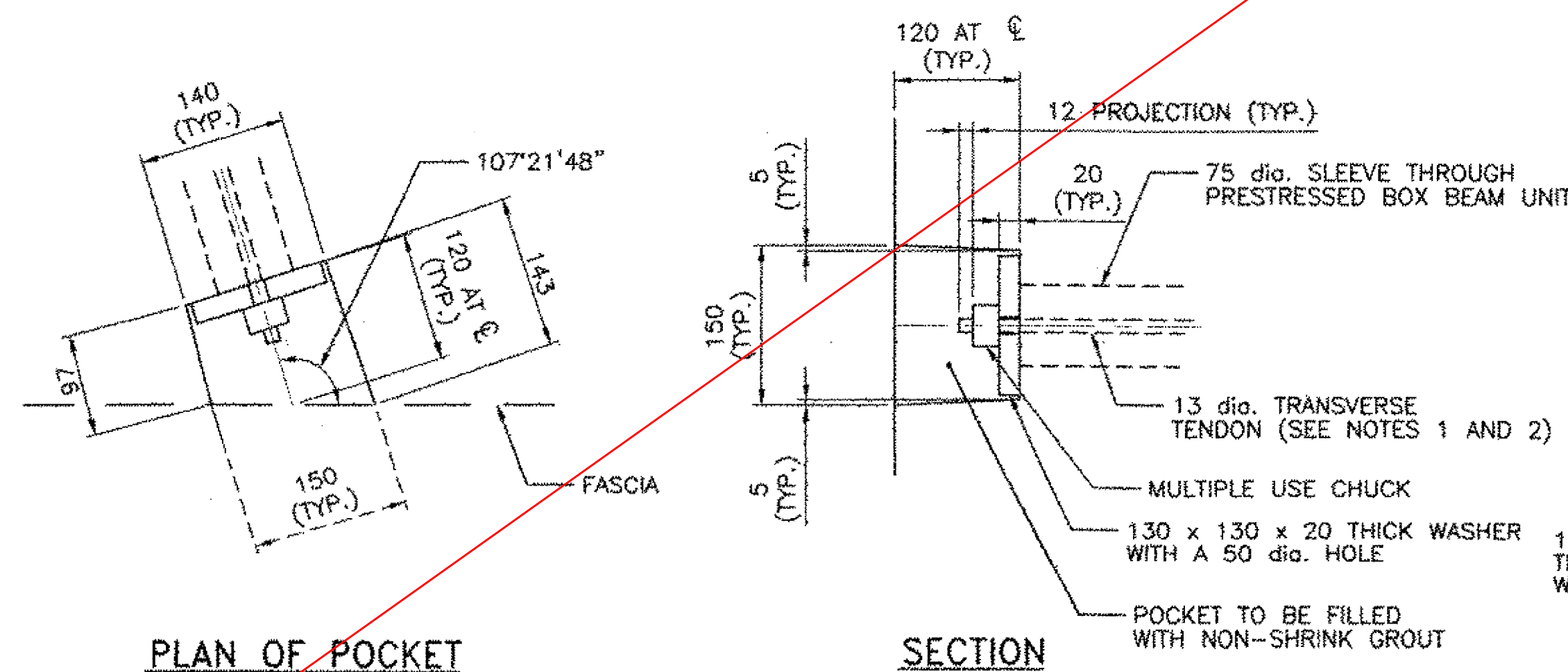
TYPICAL SHEAR KEY DETAIL
SCALE: 1 : 10



HOMASOTE DETAIL
FULL SCALE

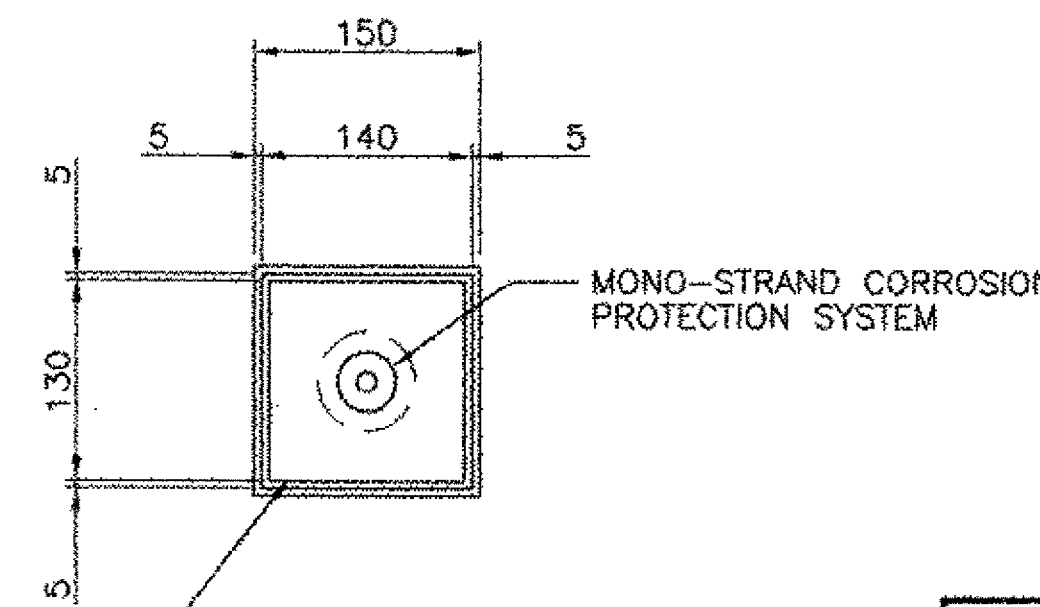


PRESTRESSED BOX BEAM UNIT
END DETAIL PLAN
SCALE: 1:20



PLAN OF POCKET

TRANSVERSE TENDON DETAIL
SCALE: 1:5

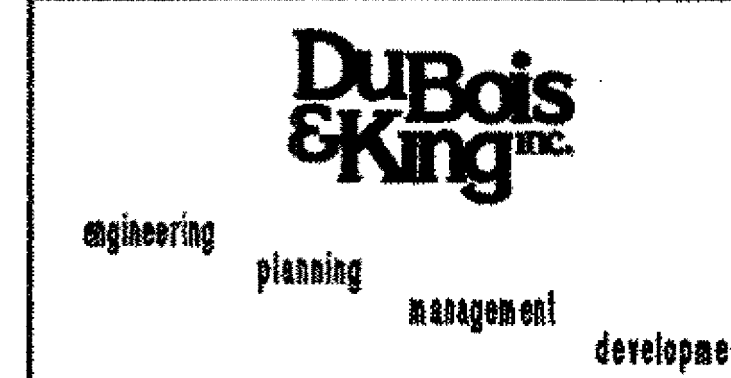


PLAN

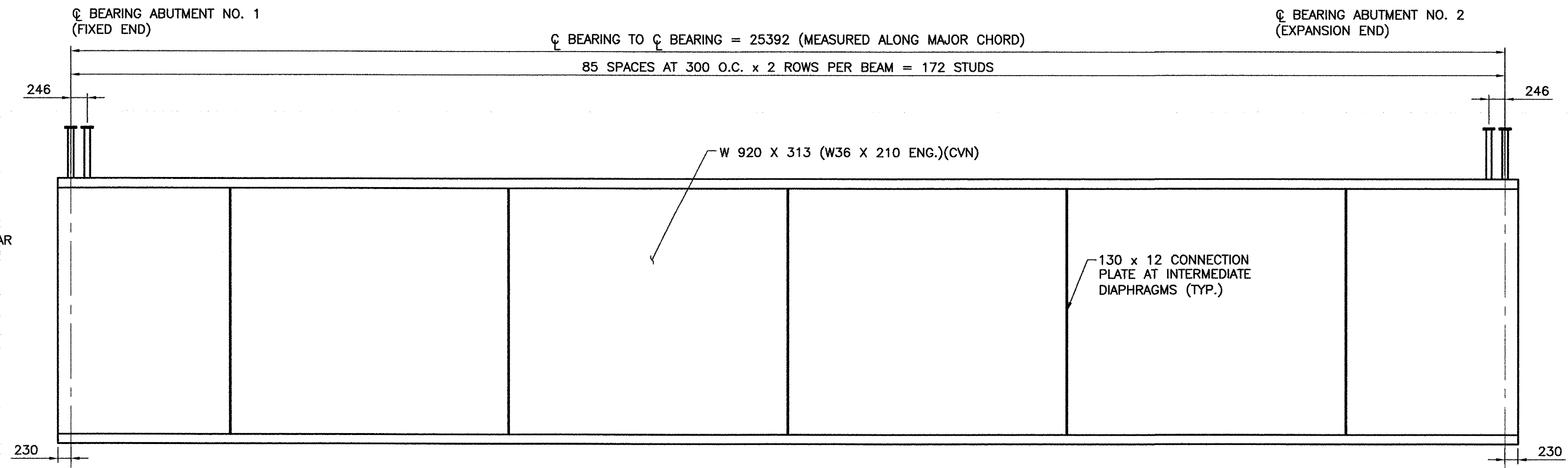
NOTES:

1. TRANSVERSE TIES SHALL BE COVERED BY SEAMLESS POLYPROPYLENE SHEATH (WITH CORROSION INHIBITOR GREASE BETWEEN SHEATH AND STRAND) FOR THE LENGTH OF STRAND. EXCEPT AT ANCHORAGE LOCATIONS, TIES SHALL BE TENSIONED TO 133.5 kN.
2. THE 20 THICK BAR SHALL CONFORM TO AASHTO M270/M270M GRADE 250, GALVANIZED AFTER FABRICATION, ACCORDING TO AASHTO M232. THE CHUCK SHALL ALSO BE GALVANIZED PER AASHTO M232.

REVISIONS			STATE OF VERMONT AGENCY OF TRANSPORTATION	
NO.	DESCRIPTION	BY & DATE		
			CLARENDON, VERMONT	Bridge No. 14
			TOWN HIGHWAY NO. 1	Log Sta.
				Surv. Sta.
			TOWN HIGHWAY NO. 1 OVER THE COLD RIVER	
			PRESTRESS UNIT DETAILS	
			Designed by: B. C. AUSTIN	Drawn by: E. B. SMALL
			Checked by: K. S. MARSHIA	Bridge Design Supervisor J.W. TUCKER
			PROJECT CLARENDON	PROJECT NO. BRO 1443(29)
			Bridge Sheet No.	SHEET 21 OF 41



SHEET NOT USED



NOTES:

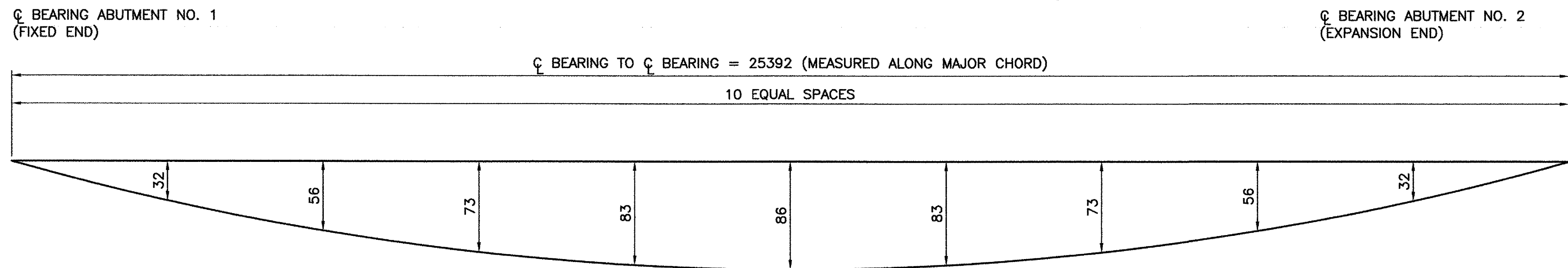
1. CONNECTION PLATES SHALL BE PERPENDICULAR TO THE FLANGES AND THE WEB.
2. ENDS OF THE BEAMS SHALL BE FABRICATED SO THAT THEY WILL BE PLUMB UNDER FULL DEAD LOAD.

NOTES:

1. CONNECTION PLATES AND DIAPHRAGMS TO BE LOCATED AS SHOWN ON FRAMING PLAN.
2. CVN = CHARPY V-NOTCH TEST REQUIRED PER SPECIFICATION.

TYPICAL BEAM ELEVATION

SCALE H: 1:50
V: 1:10



NOTES:

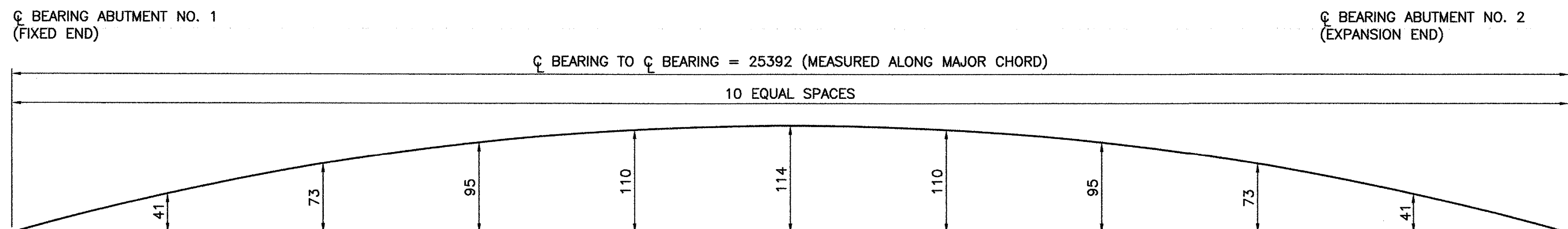
1. DEAD LOAD DEFLECTIONS INCLUDE ALL DEAD LOADS AND SUPERIMPOSED DEAD LOADS INCLUDING BEAM SELF WEIGHT AND DIAPHRAGM WEIGHT.

ϕ BEARING TABLE

BEAM	1	2	3	4	5
ϕ BEARING ABUT. NO. 1	1+497.201	1+497.801	1+498.400	1+499.001	1+499.612
ϕ BEARING ABUT. NO. 2	1+522.255	1+523.022	1+523.800	1+524.589	1+525.391

DEAD LOAD DEFLECTION DIAGRAM

SCALE H: 1:50
V: NTS



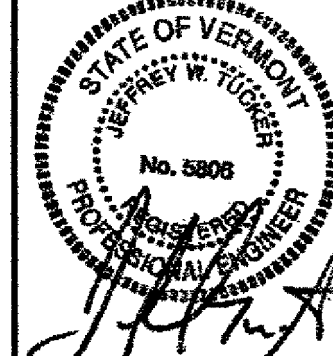
BEAM CAMBER DIAGRAM

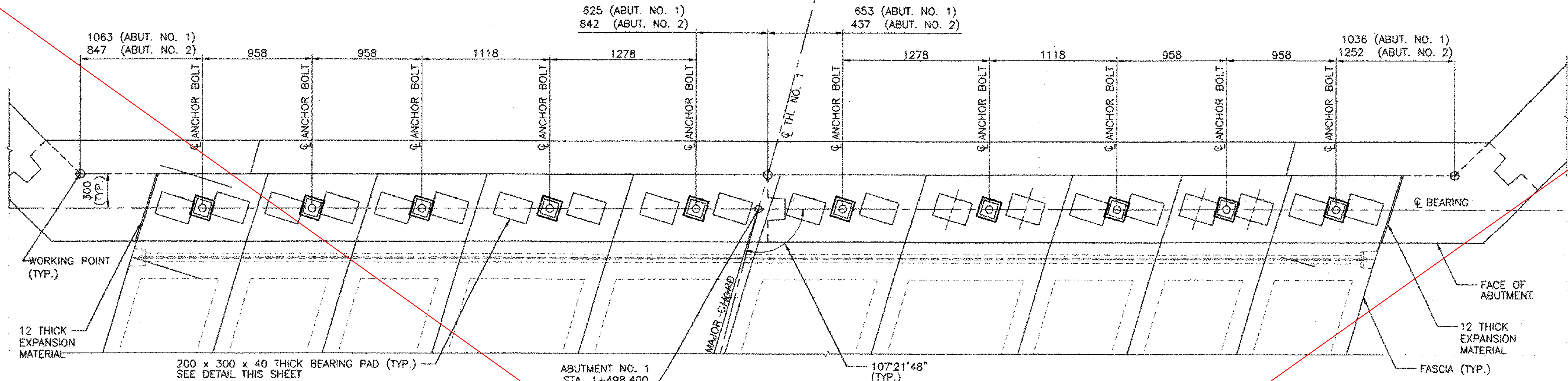
SCALE H: 1:50
V: NTS

REVISIONS			STATE OF VERMONT AGENCY OF TRANSPORTATION	
NO.	DESCRIPTION	BY & DATE		
			CLARENDON, VERMONT	Bridge No. 14
			TOWN HIGHWAY NO. 1	Log Sta.
				Surv. Sta.
TOWN HIGHWAY NO. 1 OVER THE COLD RIVER				
STRUCTURAL STEEL DETAILS				
Designed by: A.P. GUYETTE			Drawn by: A.P. GUYETTE	
Checked by: J.W. TUCKER date 1/06			Bridge Design Supervisor J.W. TUCKER date 1/06	
PROJECT CLARENDON			PROJECT NO. BRO 1443(29)	
Bridge Sheet No.			SHEET 21A OF 41	



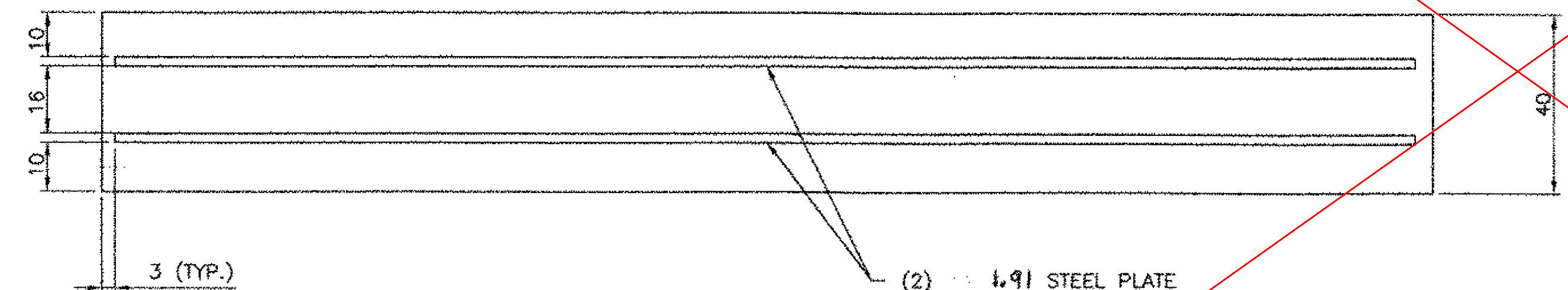
engineering planning management development





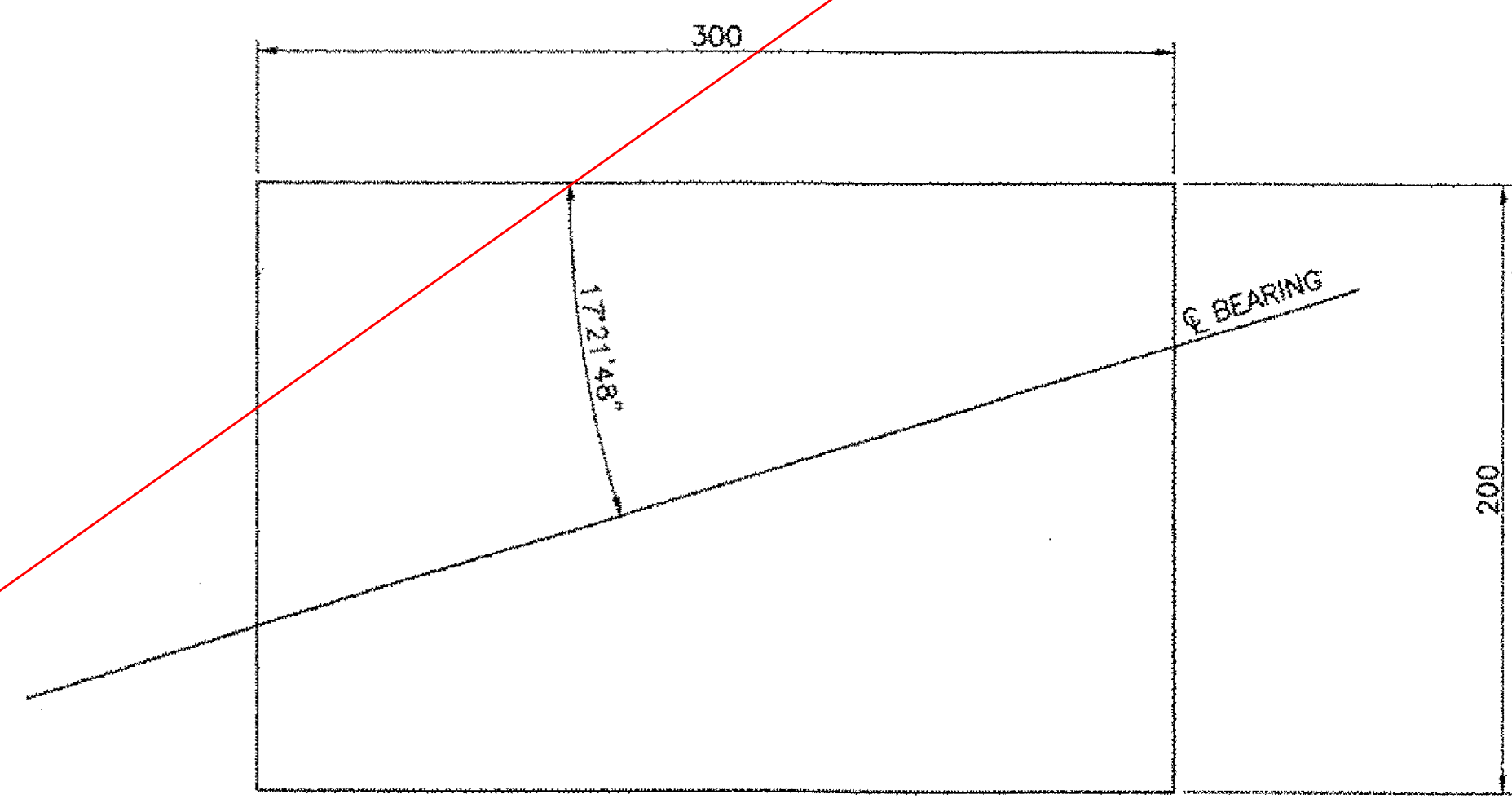
TYPICAL BEARING PAD PLACEMENT PLAN

SCALE 1:20



BEARING PAD DETAIL (CROSS SECTION)

FULL SCALE



BEARING PAD DETAIL (PLAN)

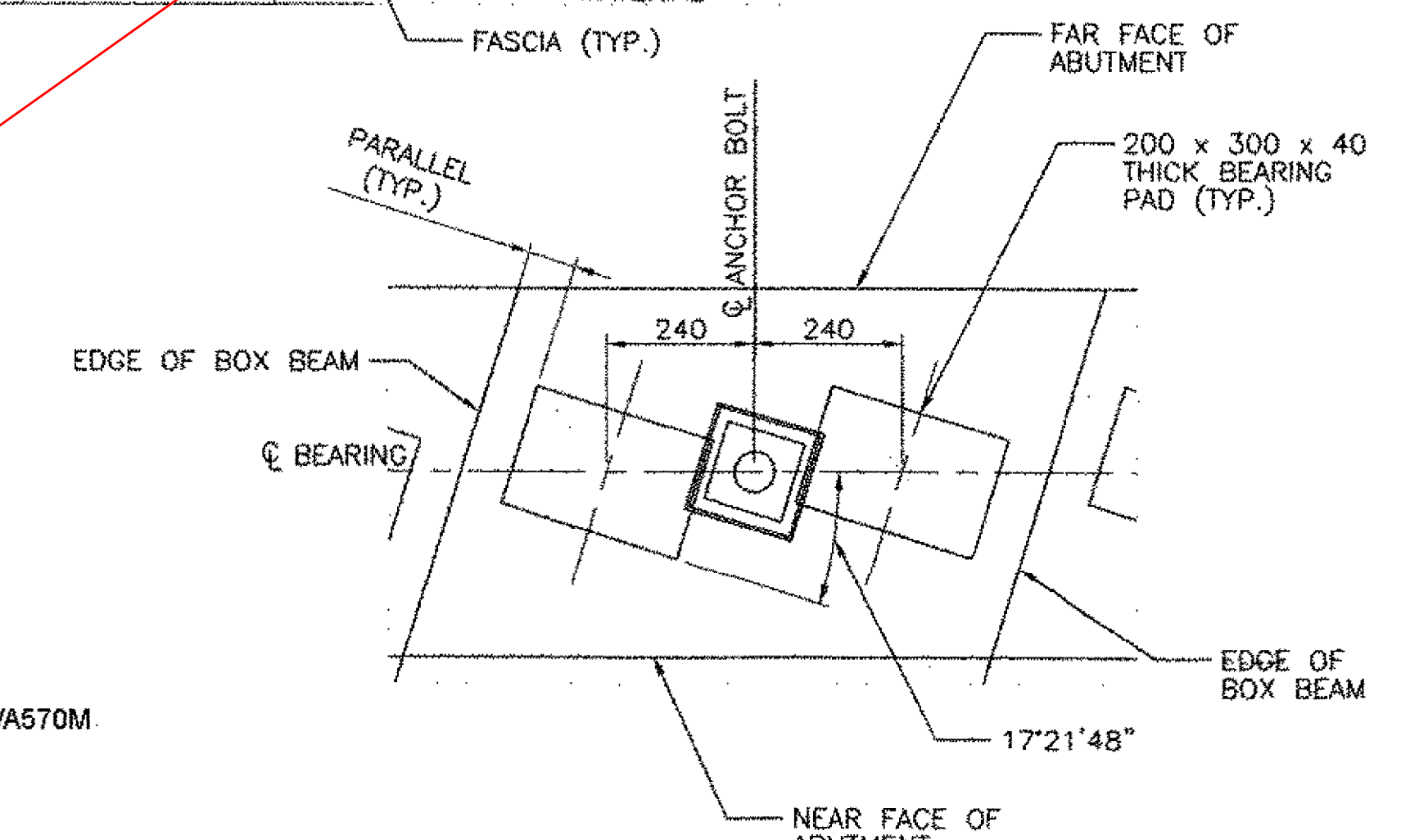
SCALE: 1:2

BEARING NOTES:

1. BEARING PADS ARE TO BE SET PARALLEL TO THE EDGES OF THE PRESTRESSED UNITS.
2. THERE WILL BE 40 BEARING PADS REQUIRED.
3. A TOTAL OF 20 ANCHOR BOLT ASSEMBLIES WILL BE REQUIRED.
4. ALL REINFORCEMENT BETWEEN LAYERS OF ELASTOMERIC SHALL BE STEEL GRADE 250-ASTM A570/A570M. NO FABRIC REINFORCEMENT WILL BE PERMITTED.
5. ELASTOMERIC BEARINGS REINFORCED WITH STEEL SHALL HAVE A 3 EDGE SEAL OF ELASTOMERIC INTEGRAL WITH THE BEARING OVER ALL PLATES.
6. ALL MATERIALS AND FABRICATION SHALL BE PER AASHTO DIVISION II SECTION 18.2 AND AASHTO MATERIAL SPECIFICATION M251.
7. DESIGN CRITERIA:
 - A) TEMPERATURE RANGE: 26.95 c
 - B) 60 DUROMETER ELASTOMERIC
 - C) MAXIMUM BEARING STRESS: 6.89 MPa
 - D) DESIGN ROTATION: 0.014 RADIAN
 - D) BEARING SHAPE FACTOR
8. WITH APPROVAL ALTERNATE CONFIGURATION ARE ALLOWABLE.

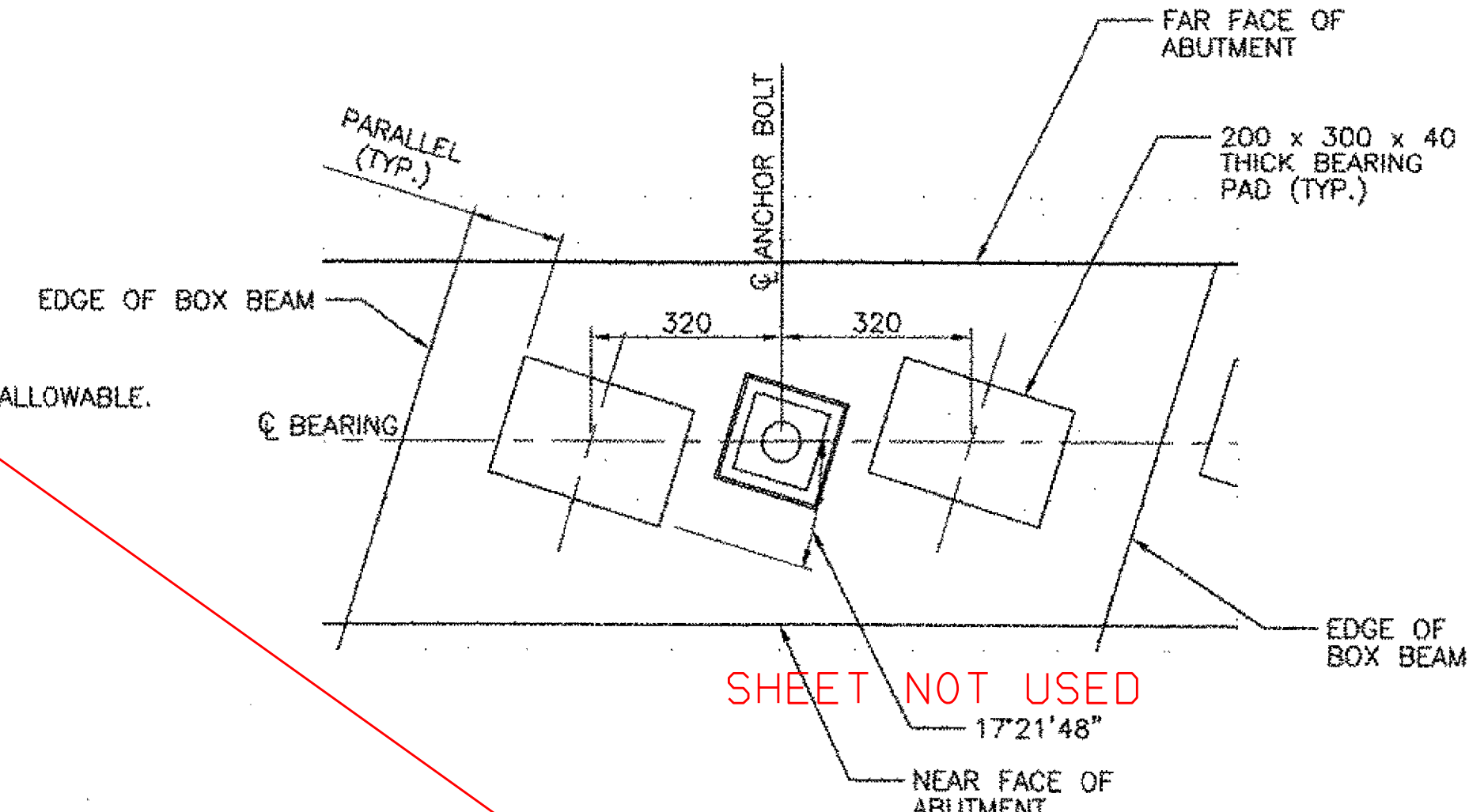
NOTE:

ALL WORK AND MATERIALS REQUIRED FOR BEARINGS SHALL BE PAID UNDER PAY ITEM NO. 531.10 "BEARING DEVICE ASSEMBLY (ELASTOMERIC)"



TYPICAL BEARING PAD PLACEMENT UNIT 1, 2, 3, 8, 9 AND 10

SCALE: 1:10



TYPICAL BEARING PAD PLACEMENT UNIT 4, 5, 6 AND 7

SCALE: 1:10

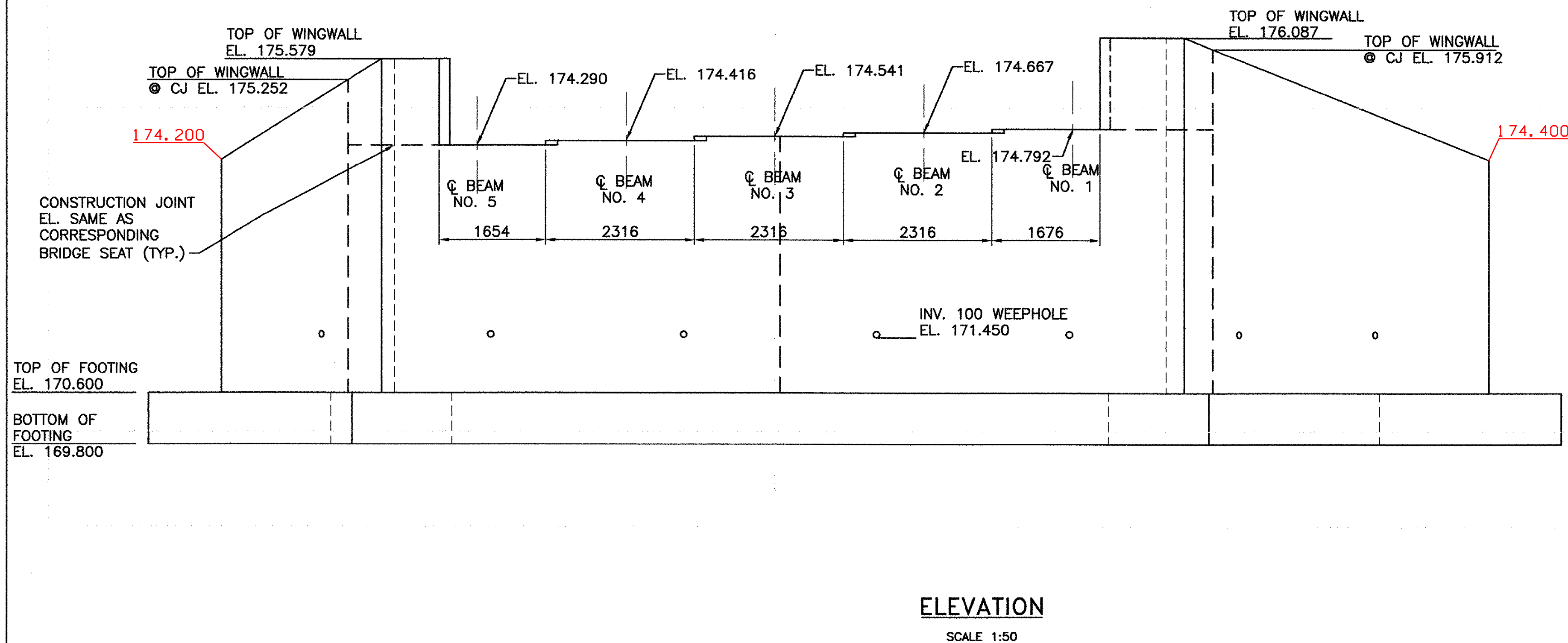
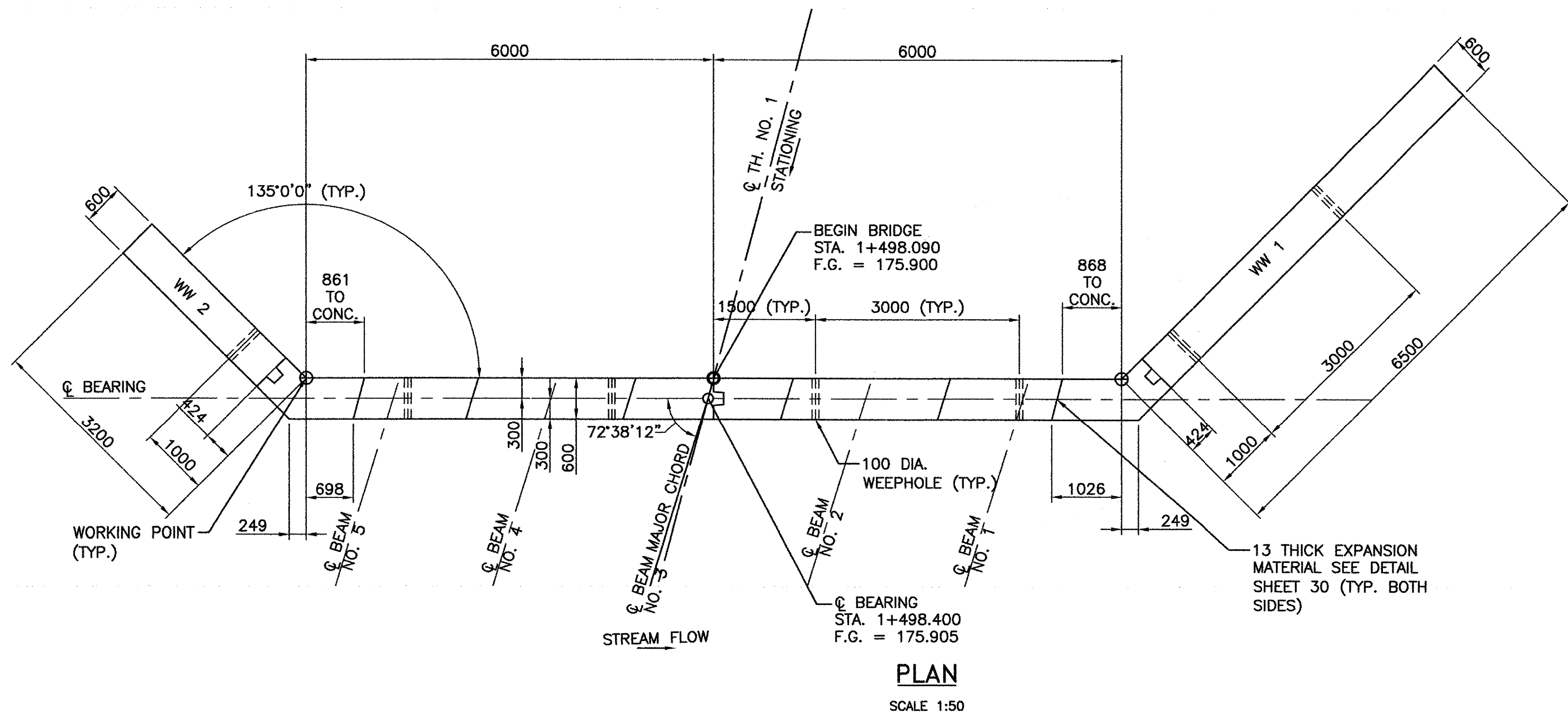
SHEET NOT USED

REVISIONS			STATE OF VERMONT AGENCY OF TRANSPORTATION	
NO.	DESCRIPTION	BY & DATE		
			CLARENDON, VERMONT	Bridge No. 14
			TOWN HIGHWAY NO. 1	Log Sta.
				Surv. Sta.
TOWN HIGHWAY NO. 1 OVER THE COLD RIVER				
BEARING DETAILS				
Designed by: B. C. AUSTIN			Drawn by: E. B. SMALL	
Checked by: K. S. MARSHIA date 05/02			Bridge Design Supervisor J.W. TUCKER date 05/02	
PROJECT CLARENDON			PROJECT NO. BRO 1443(29)	
Bridge Sheet No.			SHEET 22 OF 41	

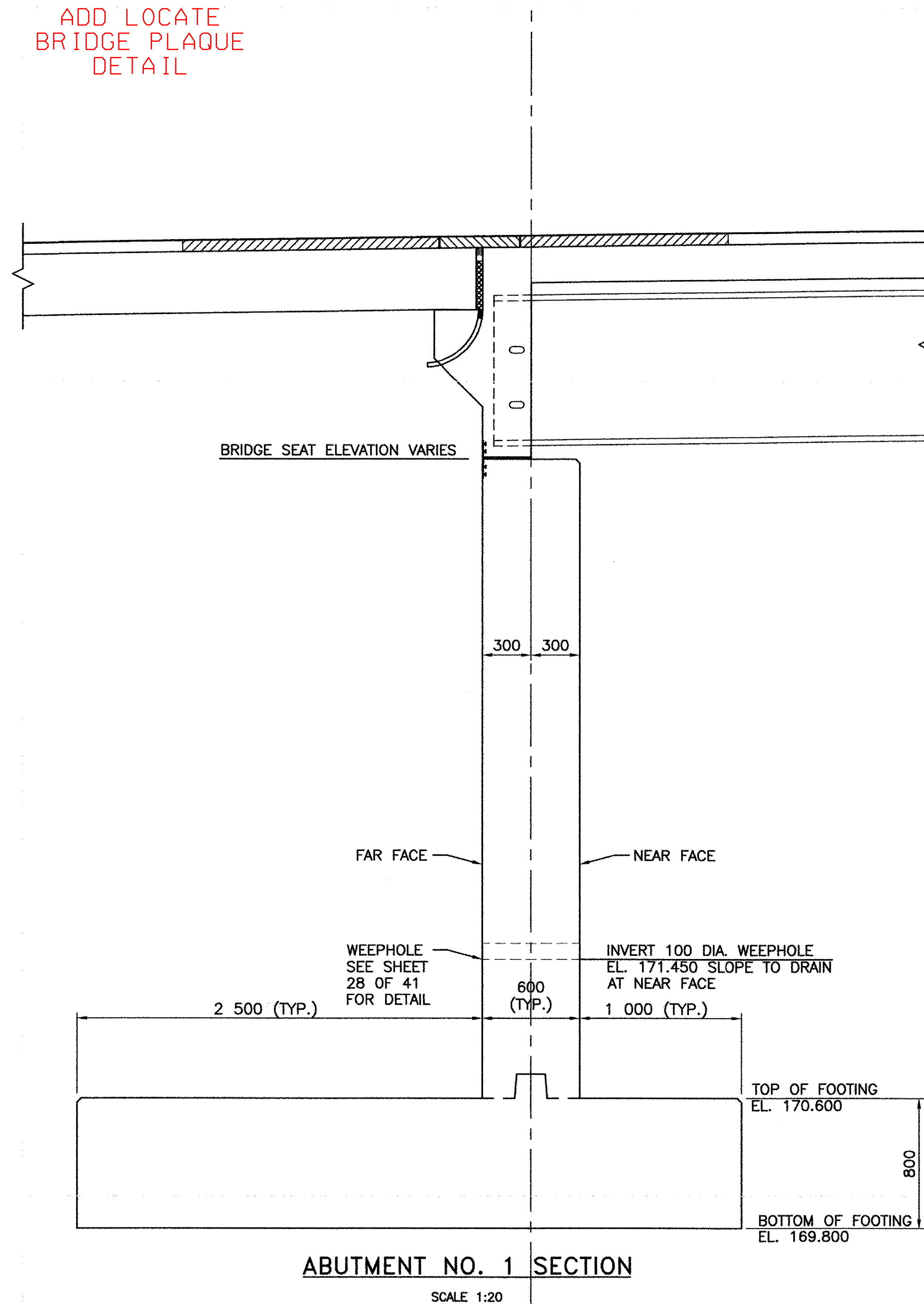
DuBois & King
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REVISIONS			STATE OF VERMONT AGENCY OF TRANSPORTATION	
NO.	DESCRIPTION	BY & DATE		
			CLARENDON, VERMONT	
			Bridge No. 14	
			Log Sta.	
			TOWN HIGHWAY NO. 1	
			Surv. Sta.	
 DuBois & King Inc. engineering planning management development			TOWN HIGHWAY NO. 1 OVER THE COLD RIVER	
			ABUTMENT NO. 1 MASONRY	
			Designed by: B. C. AUSTIN	
			Drawn by: E. B. SMALL	
			Checked by: K. S. MARSHIA date 05/02	
			Bridge Design Supervisor J.W. TUCKER date 05/02	
			PROJECT CLARENDON	PROJECT NO. BRG 1443(29)
			Bridge Sheet No.	SHEET 23 OF 41

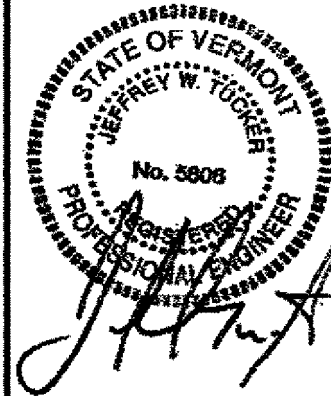


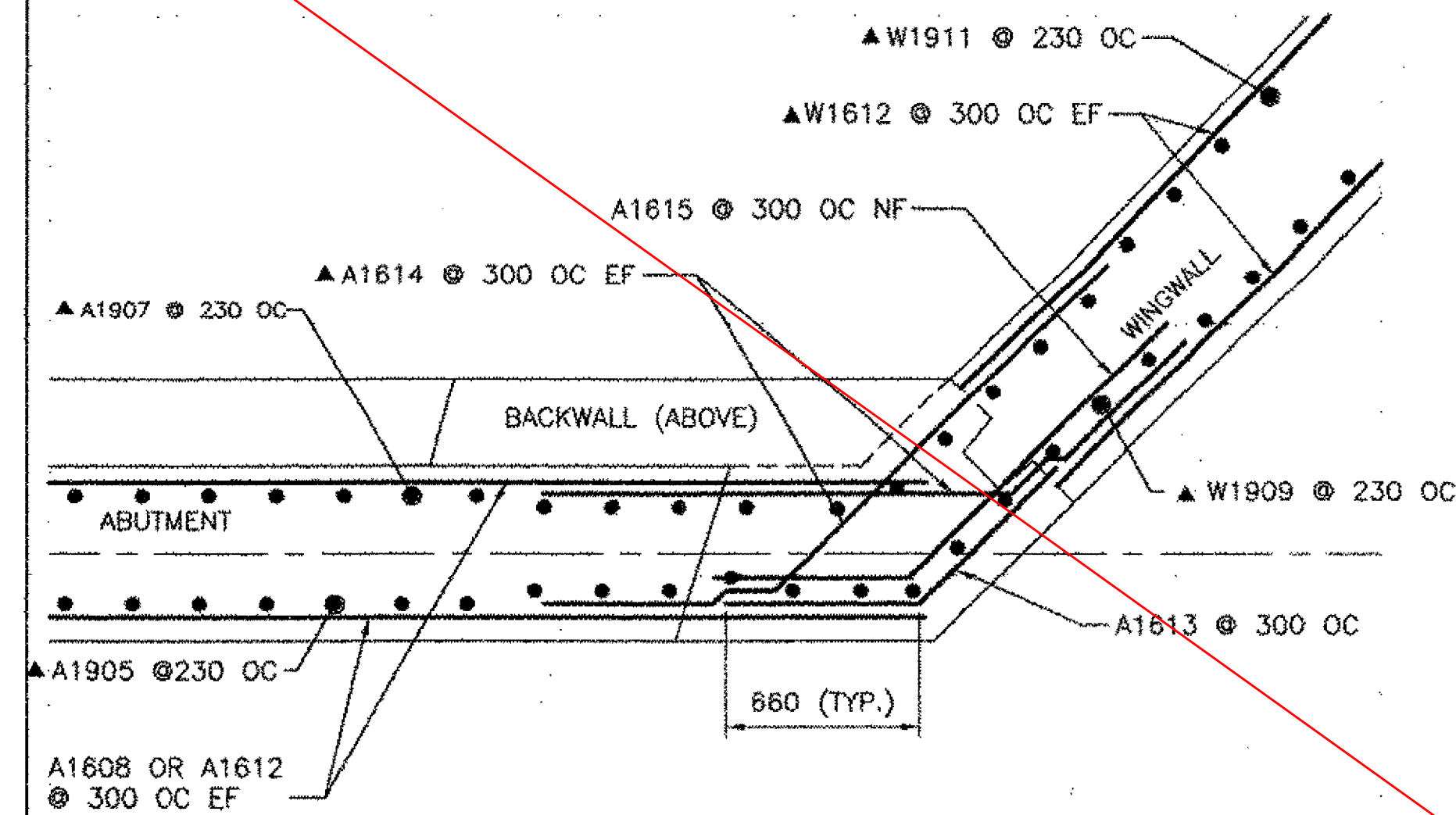
ADD LOCATE
BRIDGE PLAQUE
DETAIL



REVISIONS			STATE OF VERMONT AGENCY OF TRANSPORTATION	
NO.	DESCRIPTION	BY & DATE		
			CLARENDON, VERMONT	Bridge No. 14
			TOWN HIGHWAY NO. 1	Log Sta.
				Surv. Sta.
			TOWN HIGHWAY NO. 1 OVER THE COLD RIVER	
			ABUTMENT NO. 1 MASONRY	
			Designed by: A.P. GUYETTE	Drawn by: A.P. GUYETTE
			Checked by: J.W. TUCKER date 1/06	Bridge Design Supervisor J.W. TUCKER date 1/06
			PROJECT CLARENDON	PROJECT NO. BRO 1443(29)
			Bridge Sheet No.	SHEET 23A OF 41

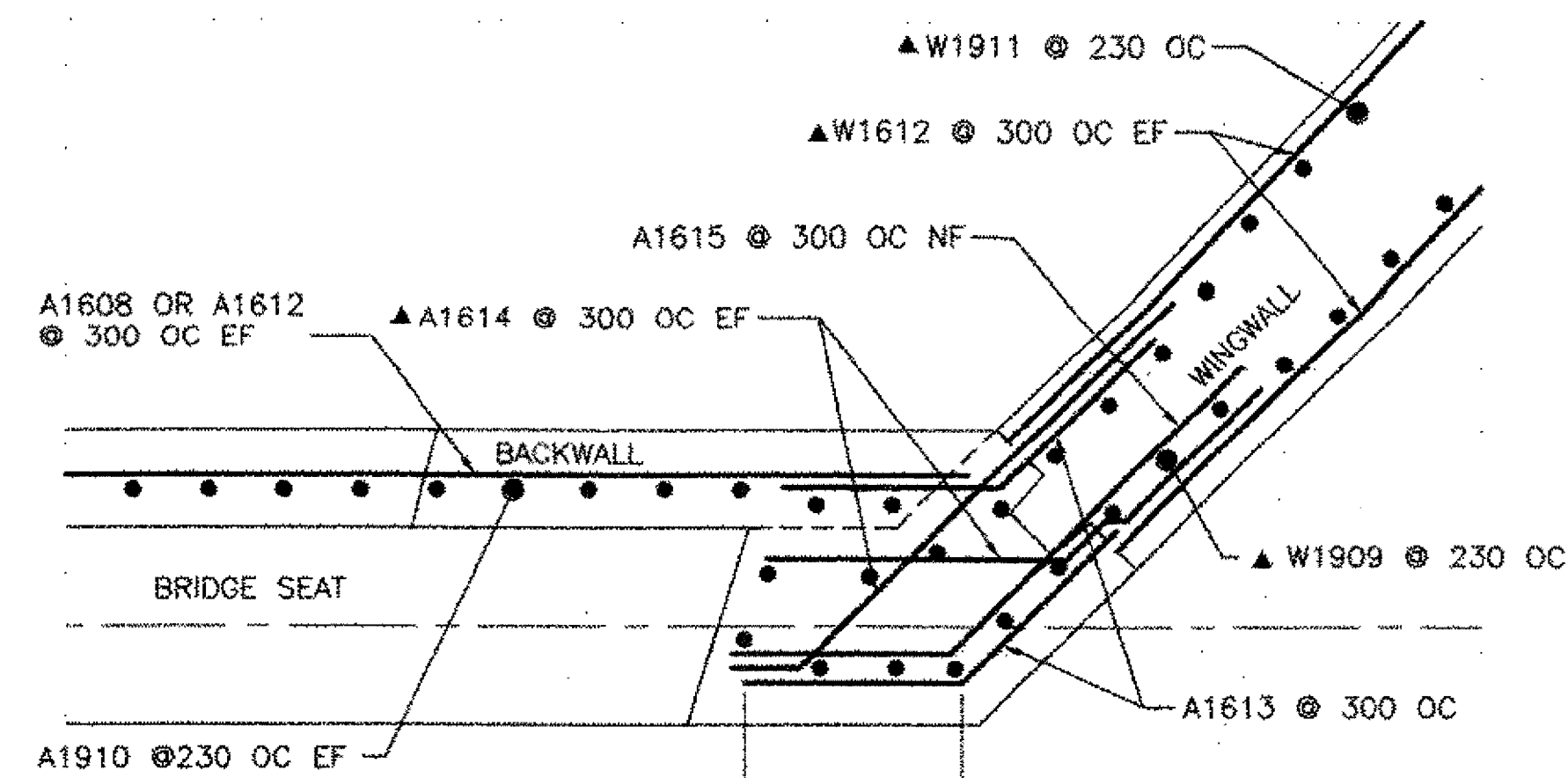
DuBois & King
engineering planning management development





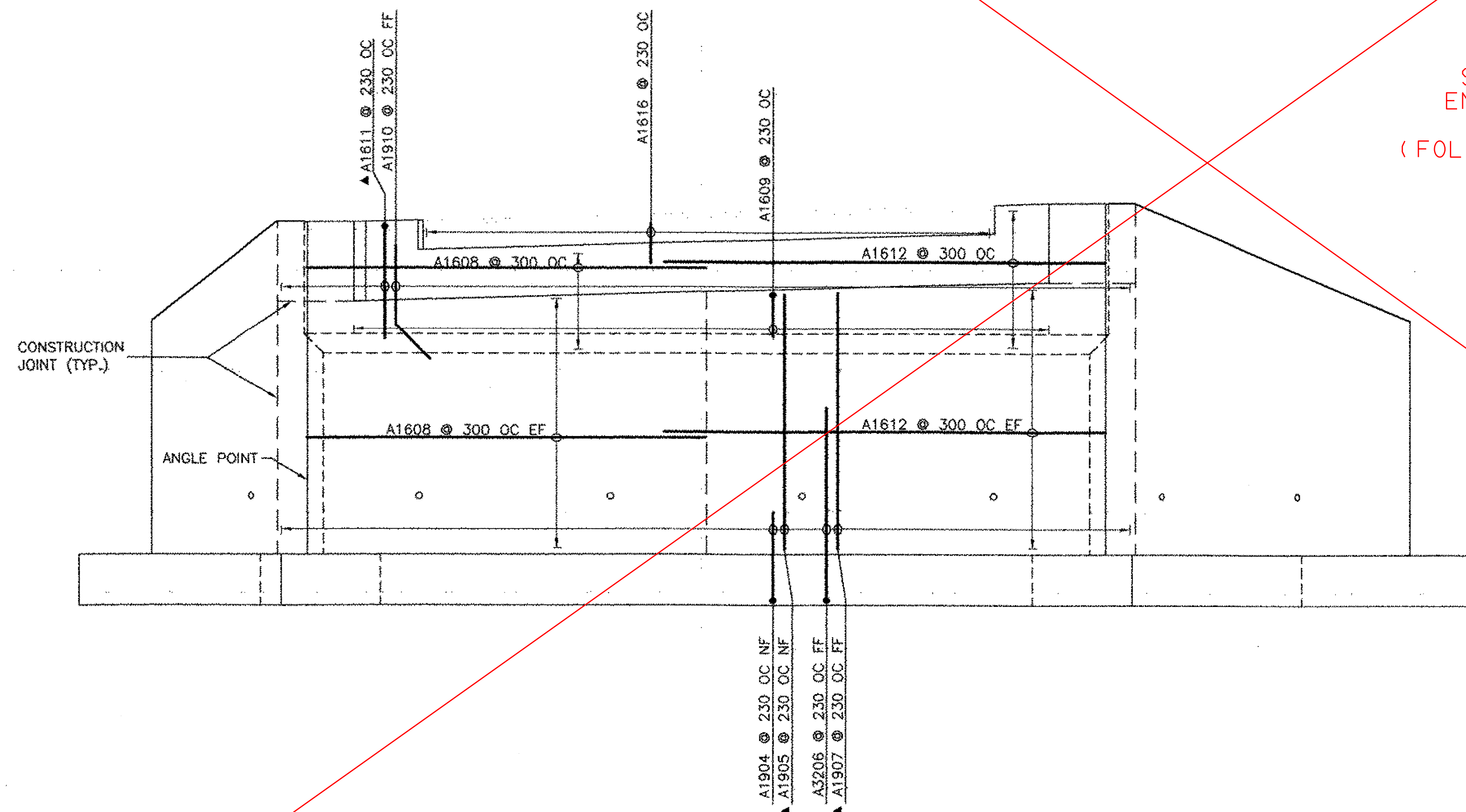
TYPICAL CORNER DETAIL ABUTMENT NO. 1
BELOW HAUNCH

SCALE 1:20



TYPICAL CORNER DETAIL ABUTMENT NO. 1
ABOVE BRIDGE SEAT

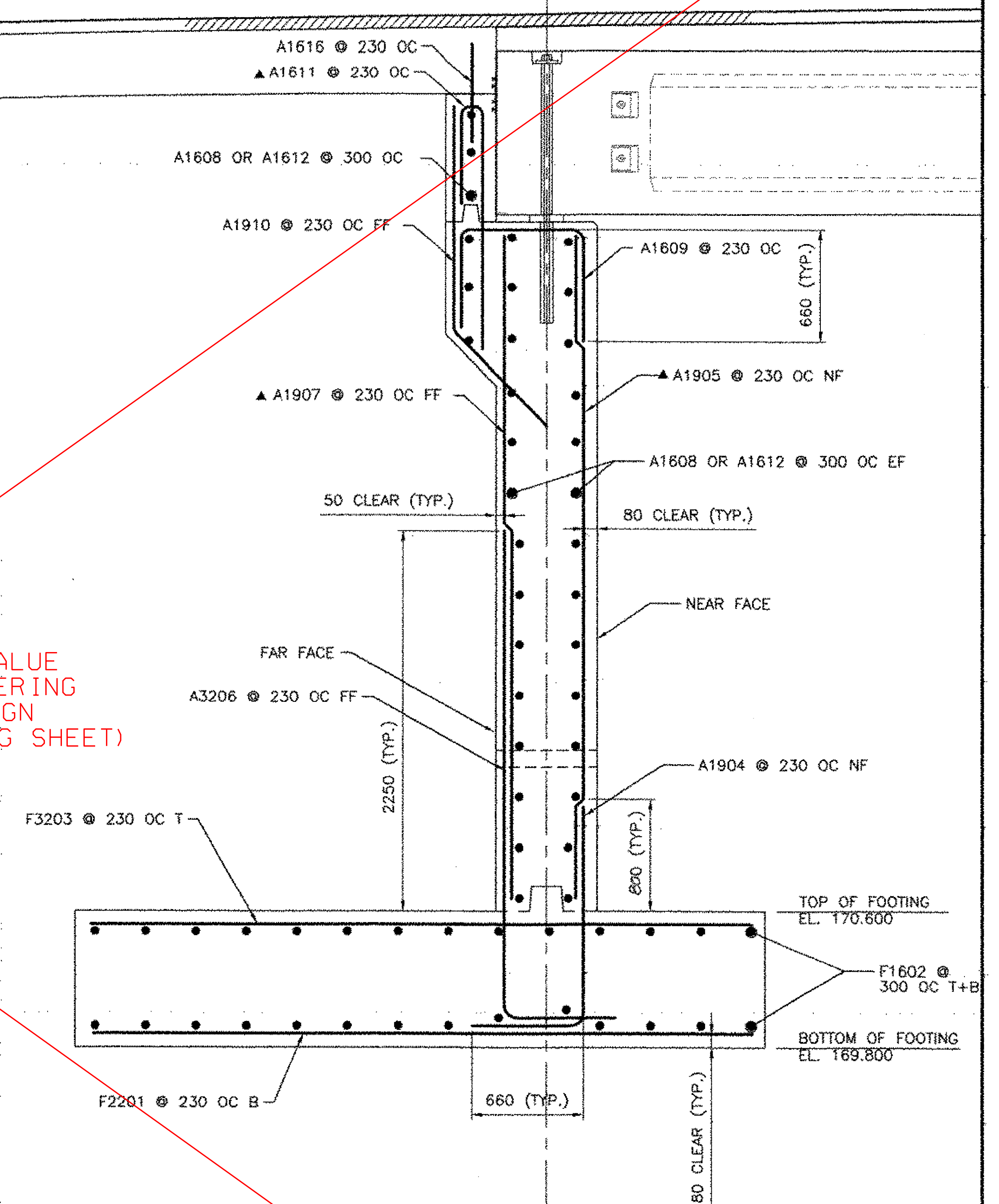
SCALE 1:20



ELEVATION

SCALE 1:50

SEE VALUE
ENGINEERING
DESIGN
(FOLLOWING SHEET)



ABUTMENT NO. 1 SECTION

SCALE 1:20

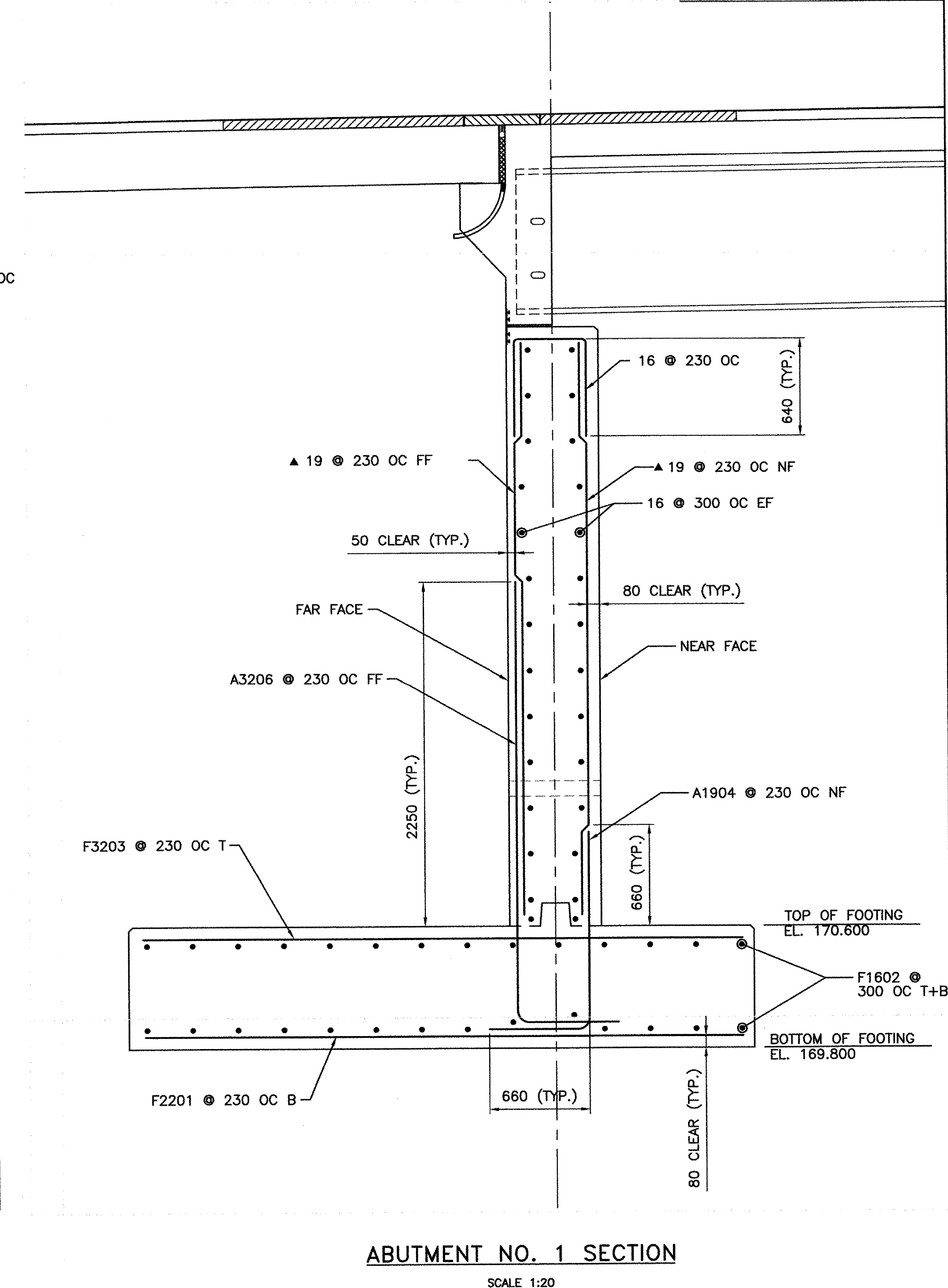
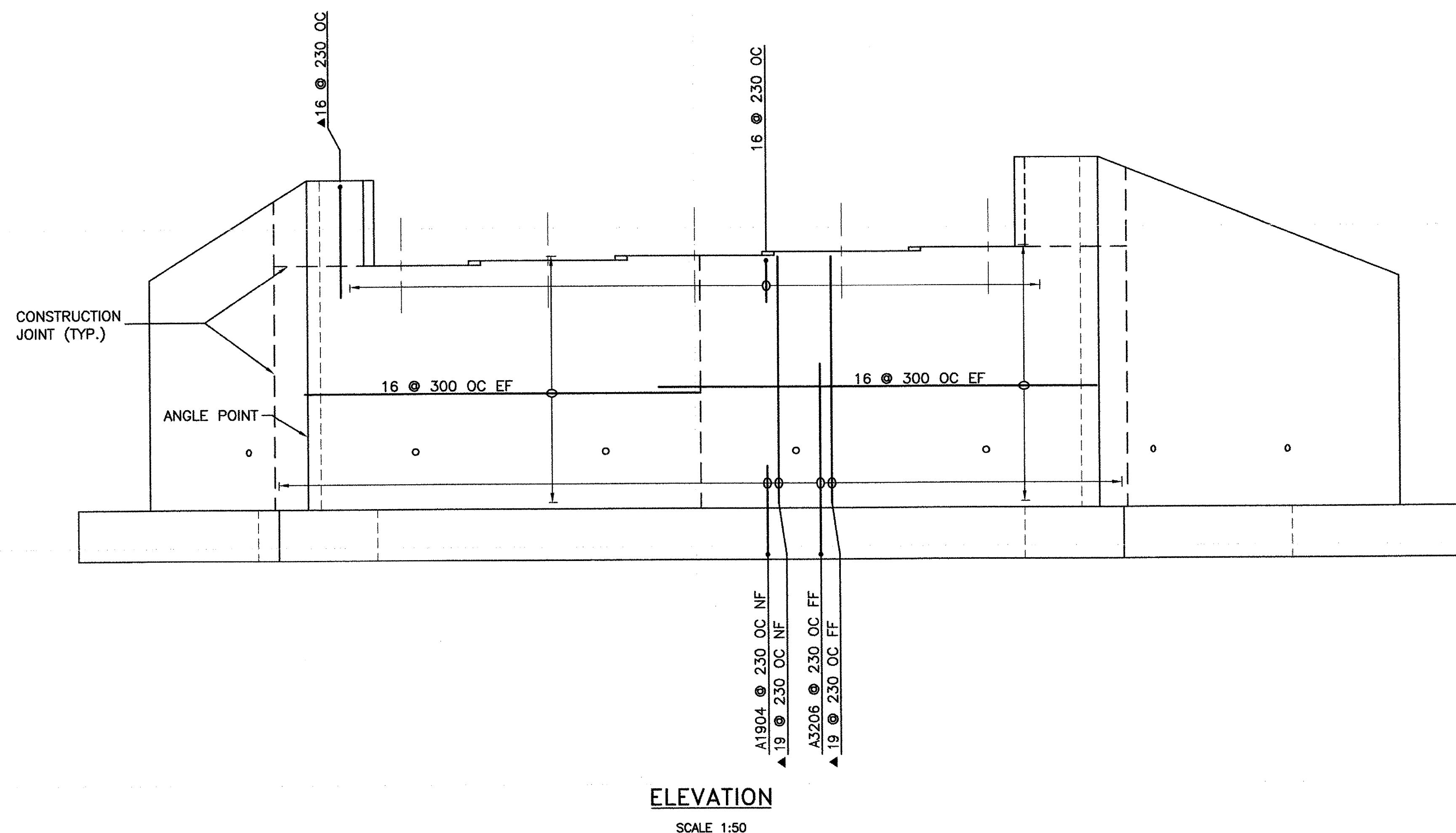
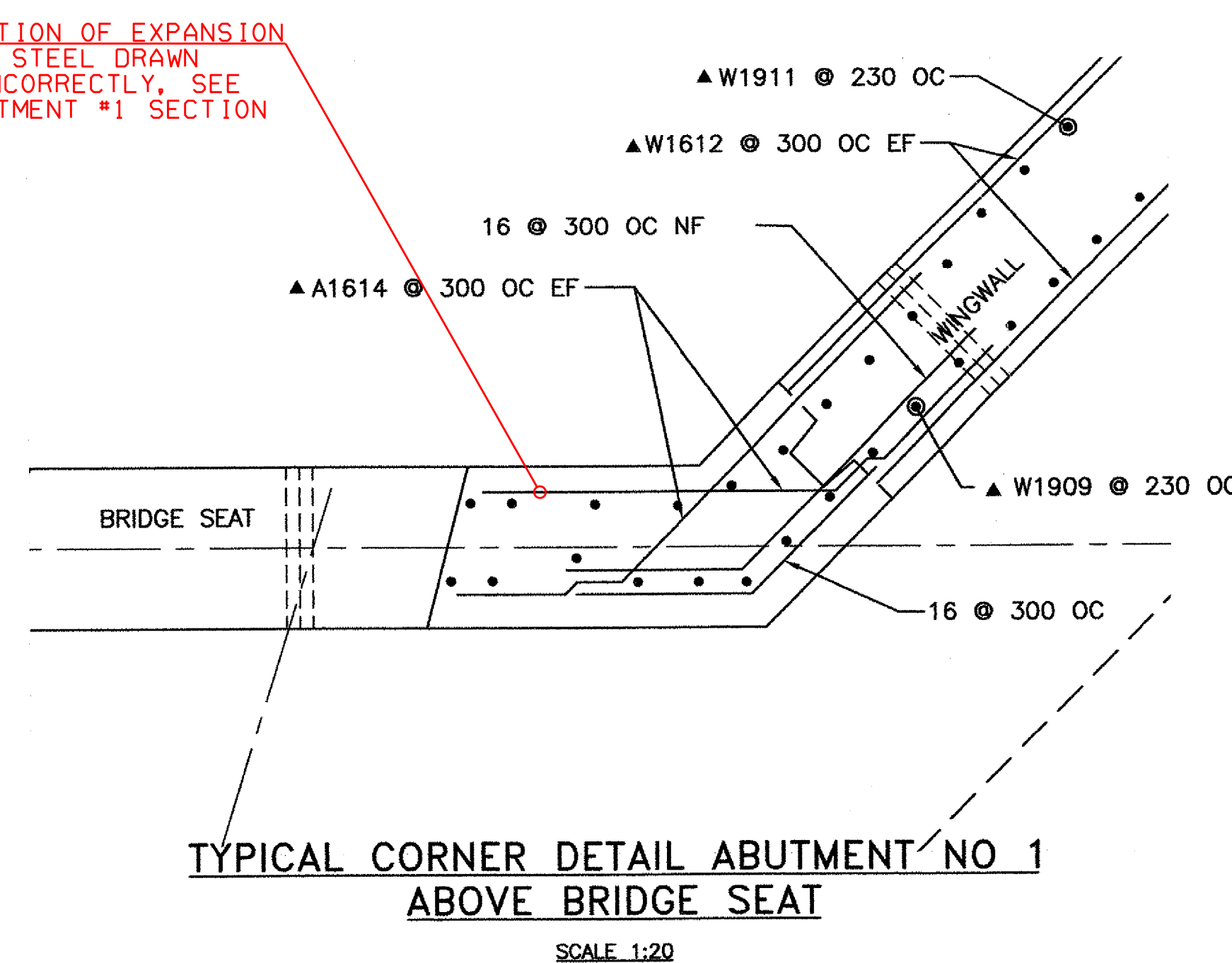
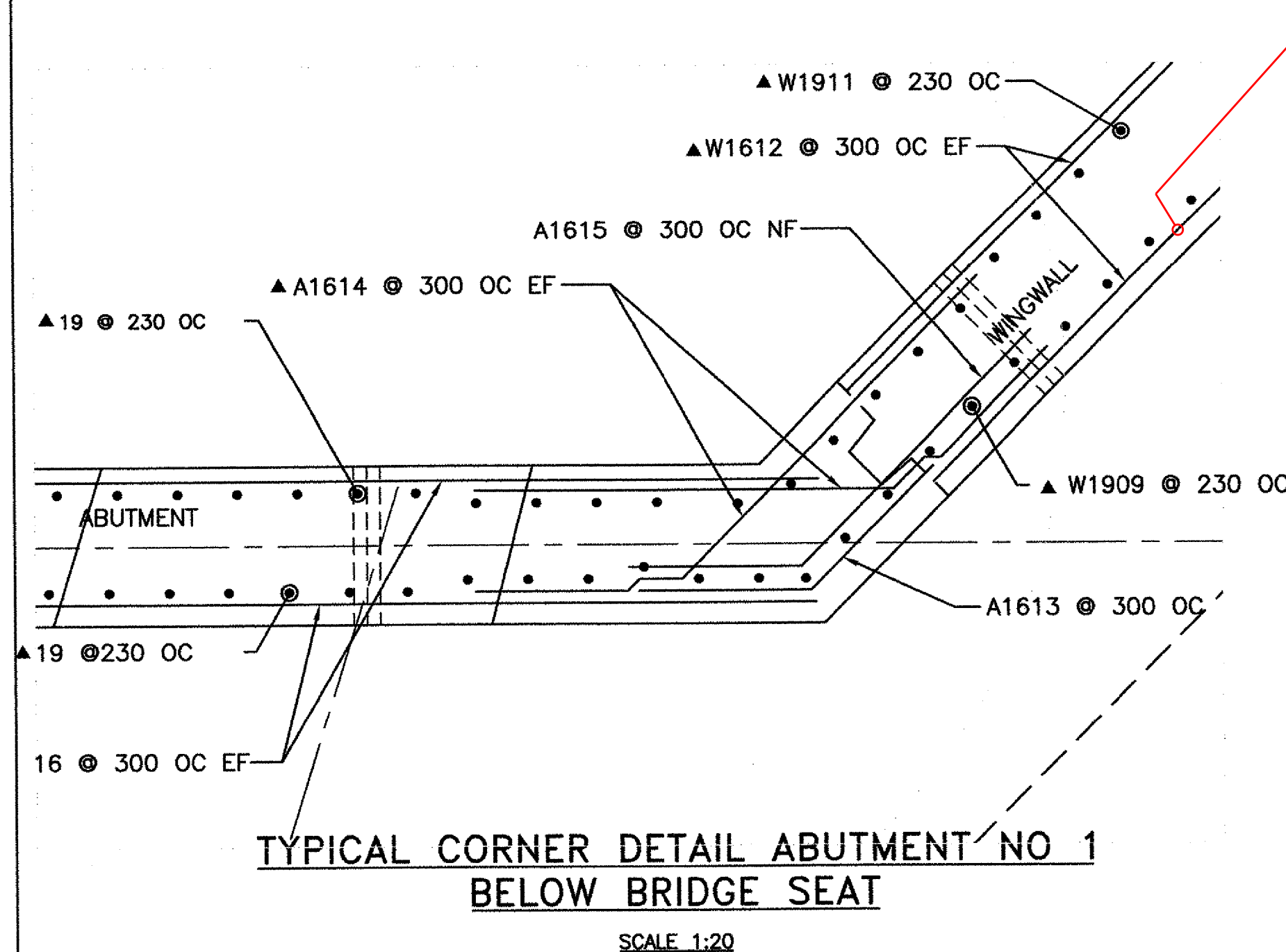
NOTES:

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- FF = FAR FACE
- EF = EACH FACE
- ▲ = CUT TO FIT IN FIELD
- T+B = TOP AND BOTTOM
- OC = ON CENTER
- MINIMUM LAP LENGTH NOT DETAILED SHALL BE 660

REVISIONS			STATE OF VERMONT AGENCY OF TRANSPORTATION	
NO.	DESCRIPTION	BY & DATE		
			CLARENDON, VERMONT	
			TOWN HIGHWAY NO. 1	
			TOWN HIGHWAY NO. 1 OVER THE COLD RIVER	
			ABUTMENT NO. 1 REINFORCING	
			Designed by: B. C. AUSTIN	
			Checked by: K. S. MARSHIA	
			PROJECT NO. CLARENDON	
			Bridge Sheet No.	
			Bridge No. 14	
			Log Sta.	
			Surv. Sta.	
			Drawn by: E. B. SMALL	
			Bridge Design Supervisor J.W. TUCKER	
			date 05/02	
			PROJECT NO. BRO 1443(29)	
			SHEET 24 OF 41	

DuBois & King

engineering planning management development



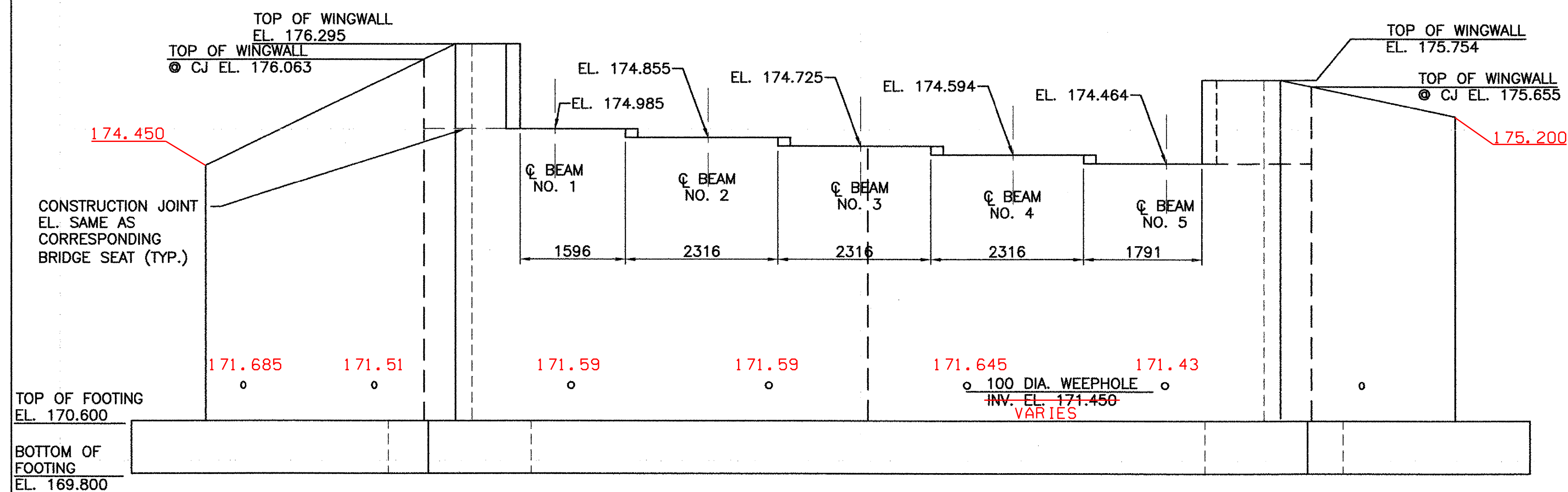
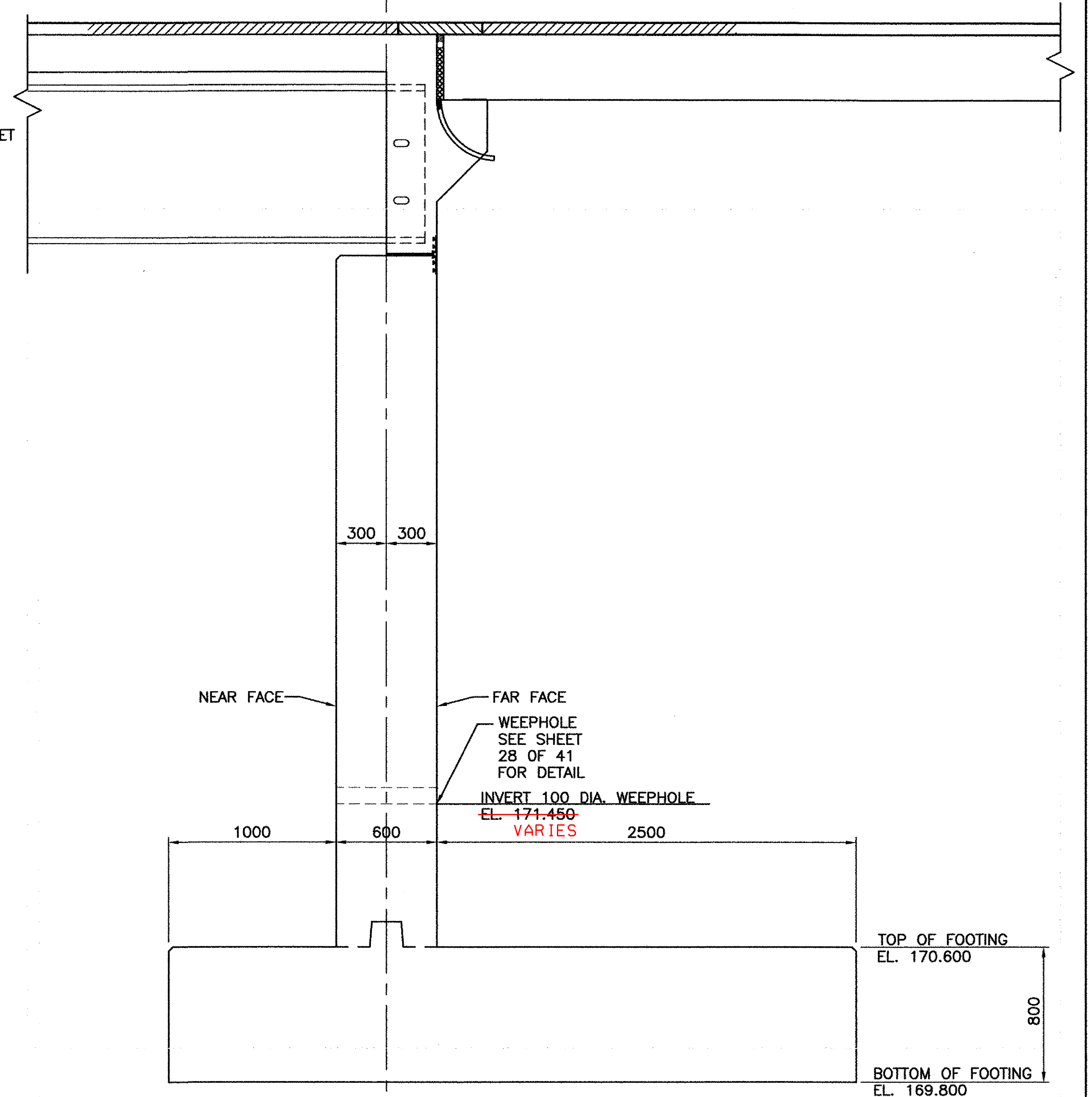
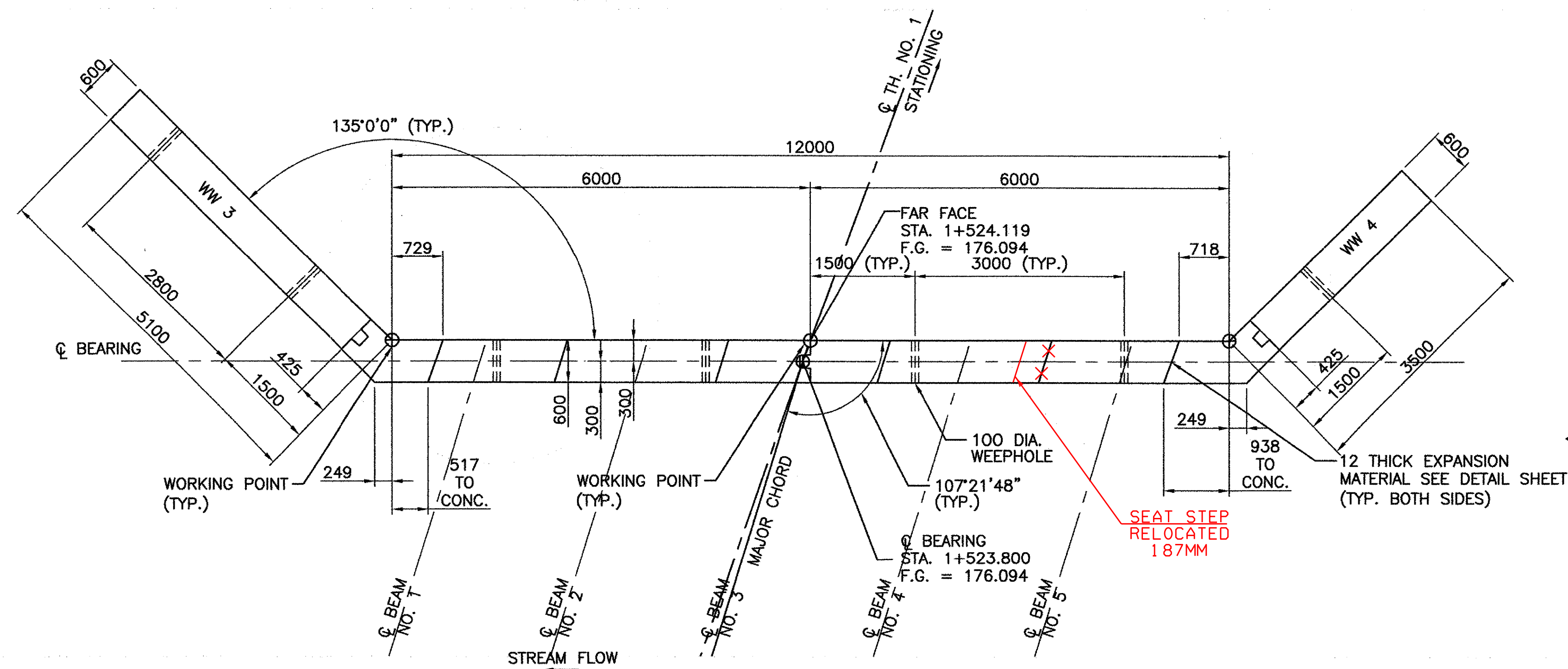
NOTES:
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EF = EACH FACE
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OC = ON CENTER
MINIMUM LAP LENGTH NOT DETAILED SHALL BE 660

NOTE:
CONTRACTOR SHALL VERIFY ALL REINFORCING STEEL LENGTHS AND DIMENSIONS PRIOR TO ORDERING REINFORCEMENT. THE CURRENT REINFORCING STEEL SCHEDULE IS NOT ACCURATE AND SHALL NOT BE USED AS THE BASIS FOR ORDERING REINFORCEMENT.

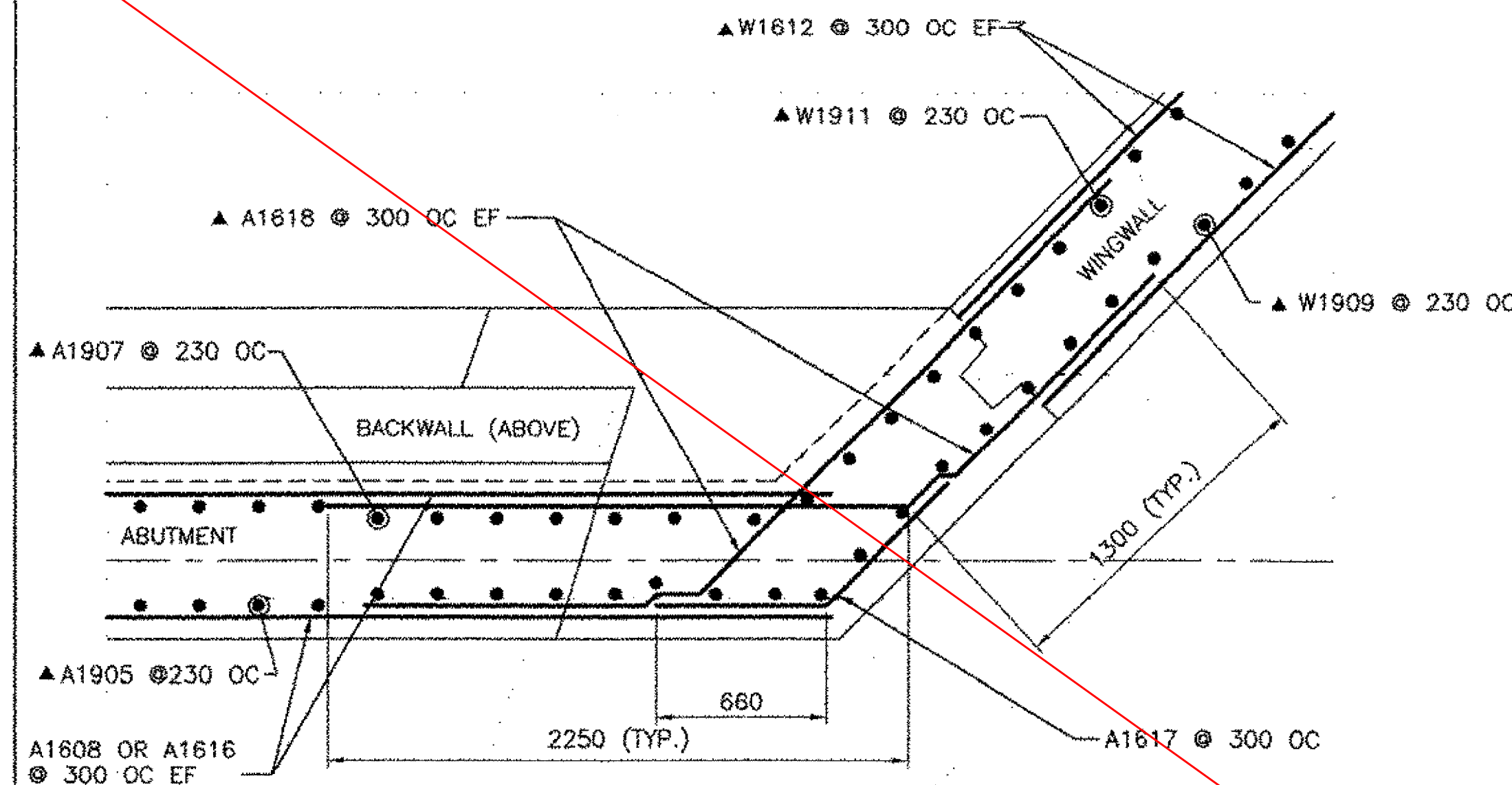
REVISIONS			STATE OF VERMONT AGENCY OF TRANSPORTATION	
NO.	DESCRIPTION	BY & DATE		
			CLARENDON, VERMONT	
			TOWN HIGHWAY NO. 1	
			TOWN HIGHWAY NO. 1 OVER THE COLD RIVER	
			ABUTMENT NO. 1 REINFORCING	
			Designed by: A.P. GUYETTE	Drawn by: A.P. GUYETTE
			Checked by: J.W. TUCKER	Bridge Design Supervisor J.W. TUCKER
			PROJECT CLARENDON	PROJECT NO. BRO 1443(29)
			Bridge Sheet No.	SHEET 24A OF 41

engineering planning management development

REVISIONS			STATE OF VERMONT AGENCY OF TRANSPORTATION	
NO.	DESCRIPTION	BY & DATE		
			CLARENDON, VERMONT	
			Bridge No. 14	
			Log Sta.	
			TOWN HIGHWAY NO. 1	Surv. Sta.
 DuBois & King inc. engineering planning management development			TOWN HIGHWAY NO. 1 OVER THE COLD RIVER	
			ABUTMENT NO. 2 MASONRY	
			Designed by: B. C. AUSTIN	
			Drawn by: E. B. SMALL	
			Checked by: K. S. MARSHIA date 05/02	
			Bridge Design Supervisor J.W. TUCKER date 05/02	
PROJECT			PROJECT NO.	
CLARENDON			BRO 1443(29)	
Bridge Sheet No.			SHEET	25 OF 41

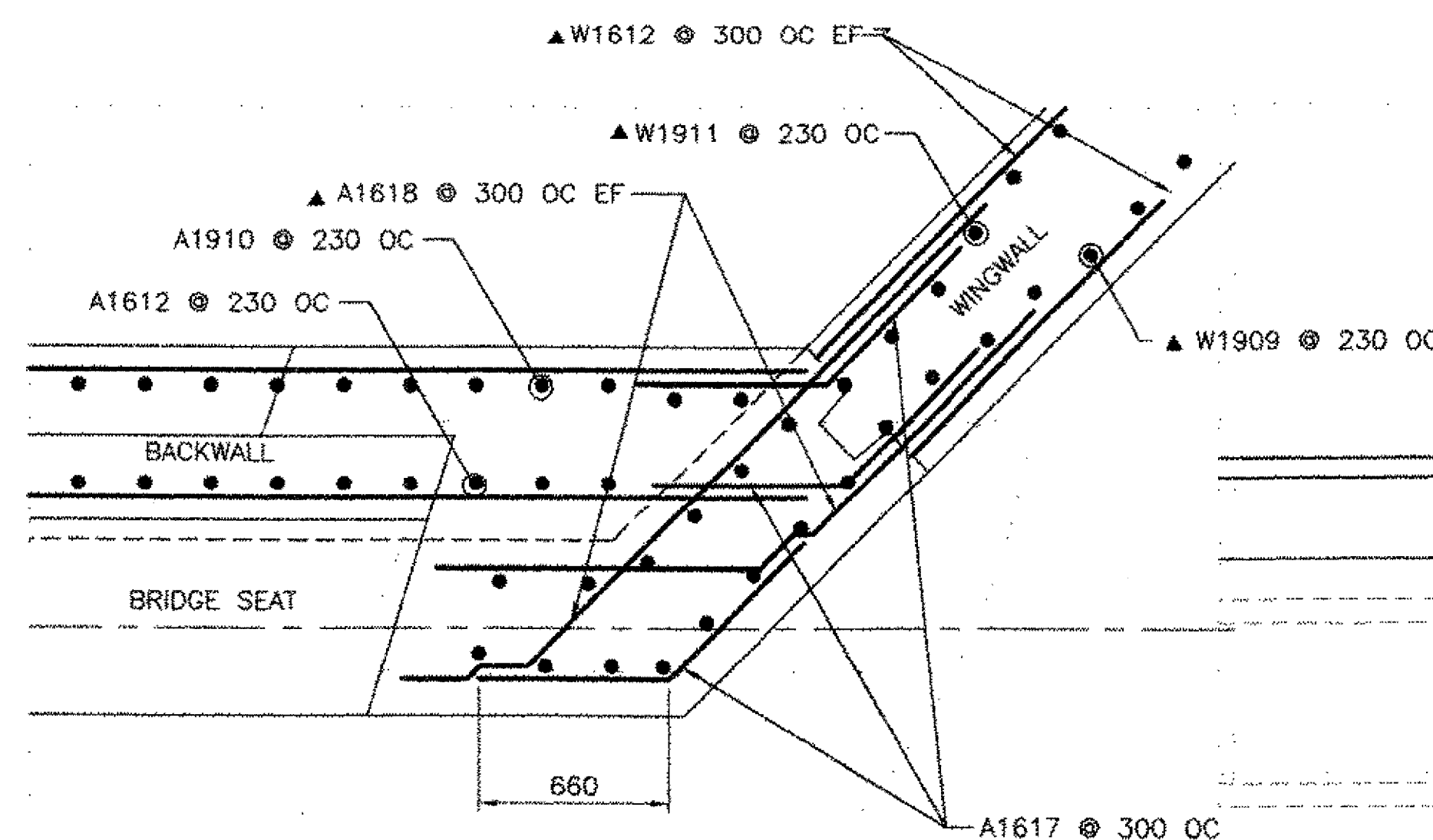


REVISIONS			STATE OF VERMONT AGENCY OF TRANSPORTATION	
NO.	DESCRIPTION	BY & DATE		
			Bridge No. 14 Log Sta. Surv. Sta.	
			TOWN HIGHWAY NO. 1 OVER THE COLD RIVER ABUTMENT NO. 2 MASONRY	
			Designed by: A.P. GUYETTE Checked by: J.W. TUCKER date 1/06 PROJECT CLARENDON	
			Drawn by: A.P. GUYETTE Bridge Design Supervisor J.W. TUCKER date 1/06 PROJECT NO. BRO 1443(29)	
Bridge Sheet No.			SHEET 25A OF 41	



TYPICAL CORNER DETAIL ABUTMENT NO 2
(BELOW HAUNCH)

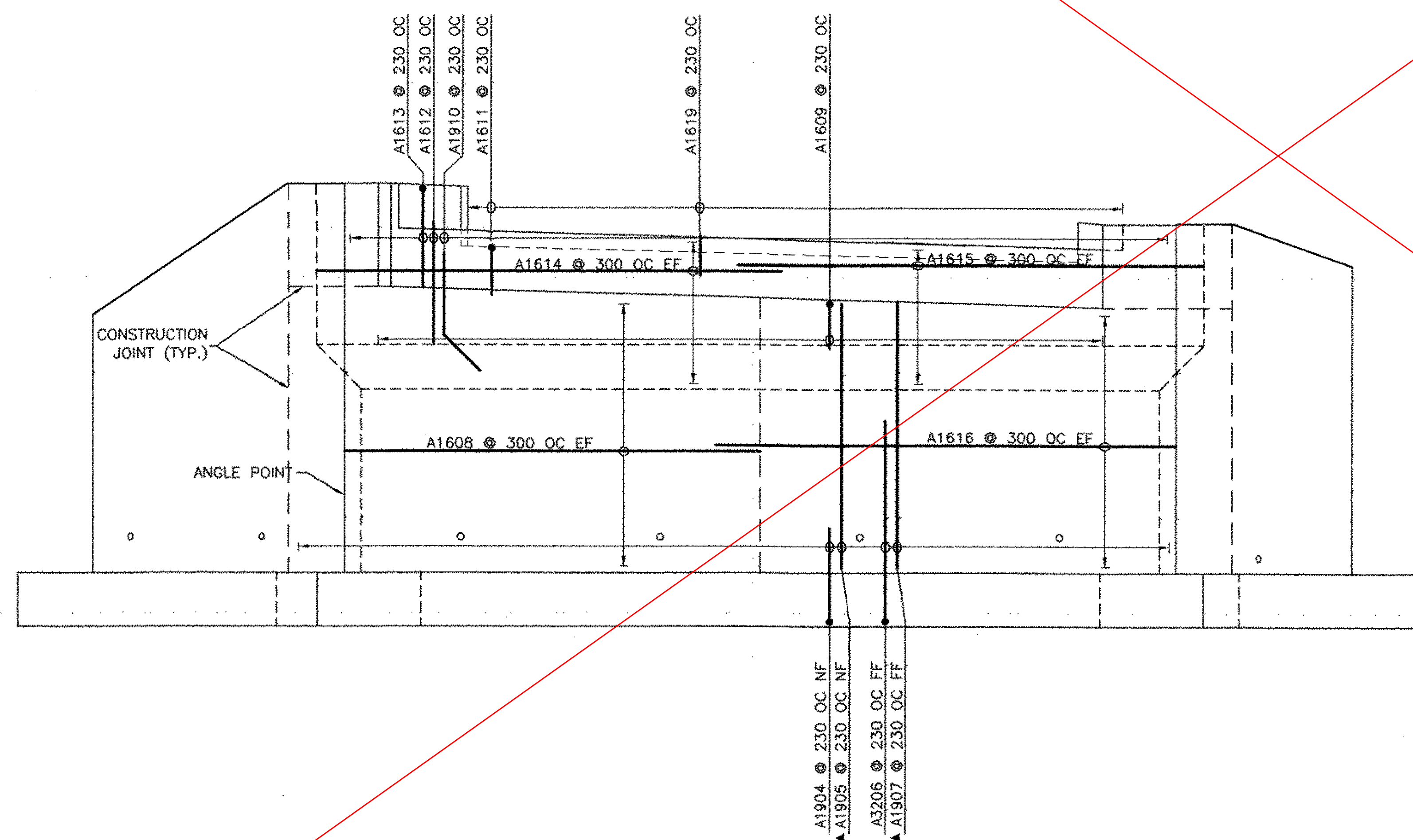
SCALE 1:20



TYPICAL CORNER DETAIL ABUTMENT NO 2
(ABOVE BRIDGE SEAT)

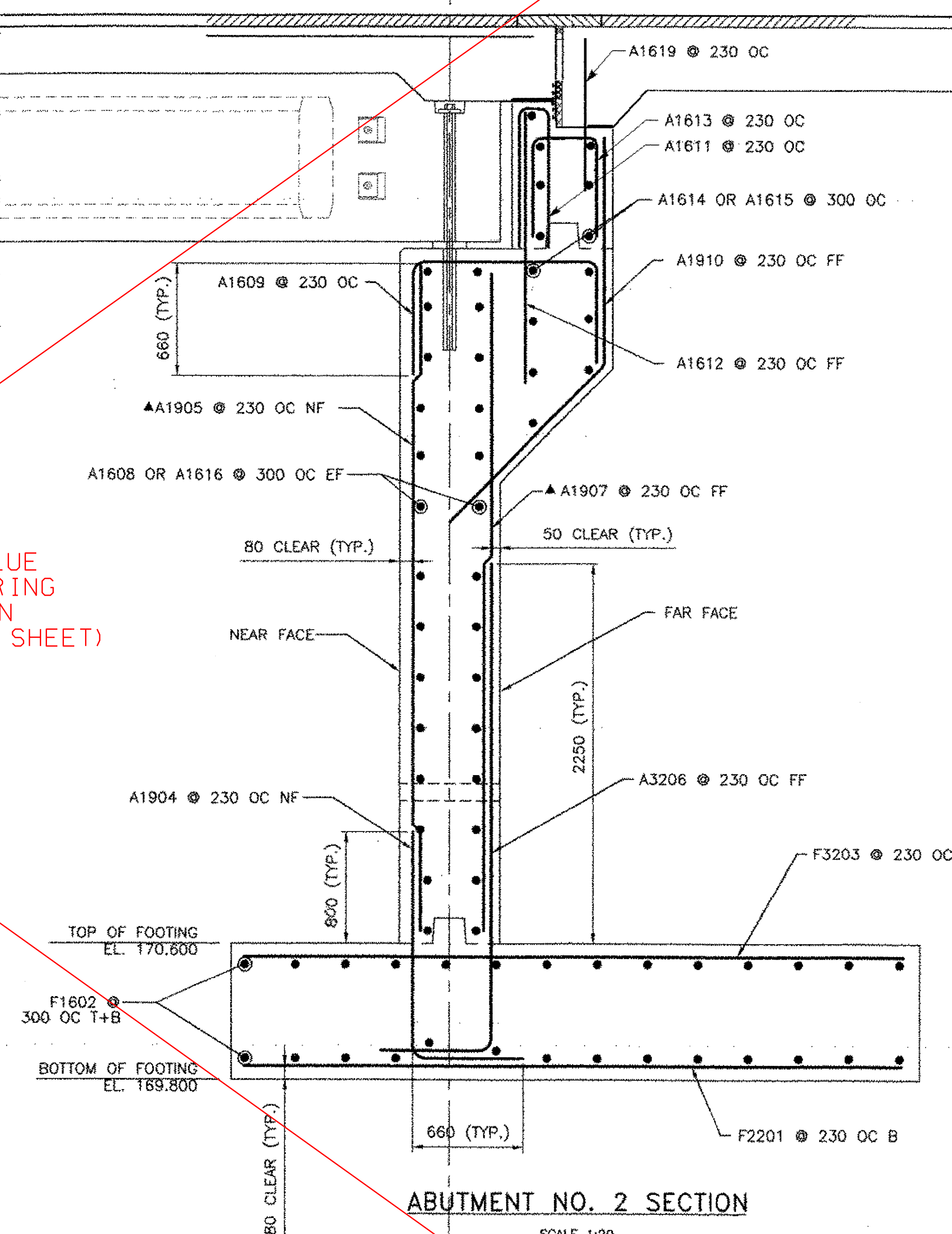
SCALE 1:20

SEE VALUE
ENGINEERING
DESIGN
(FOLLOWING SHEET)



ELEVATION

SCALE 1:50



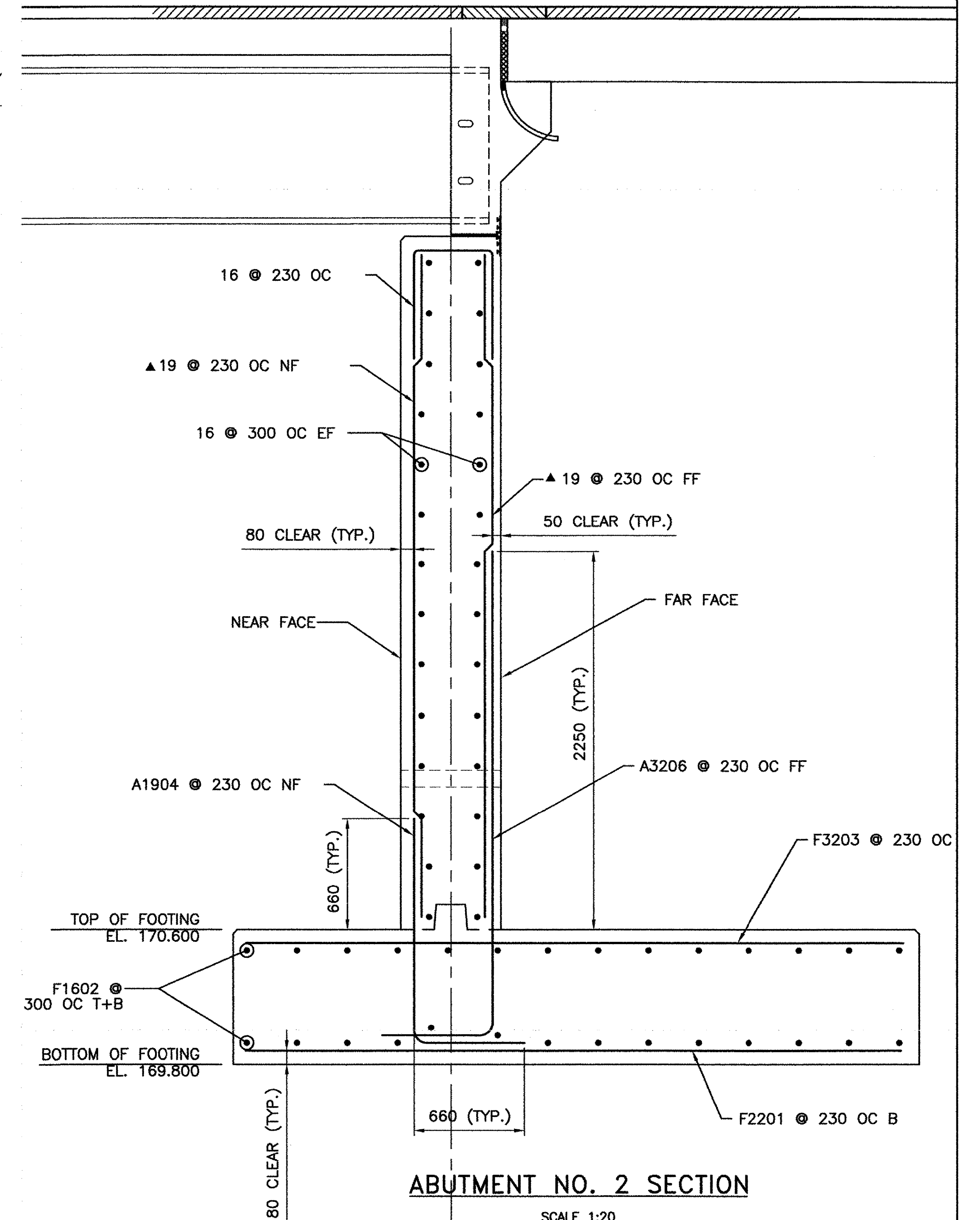
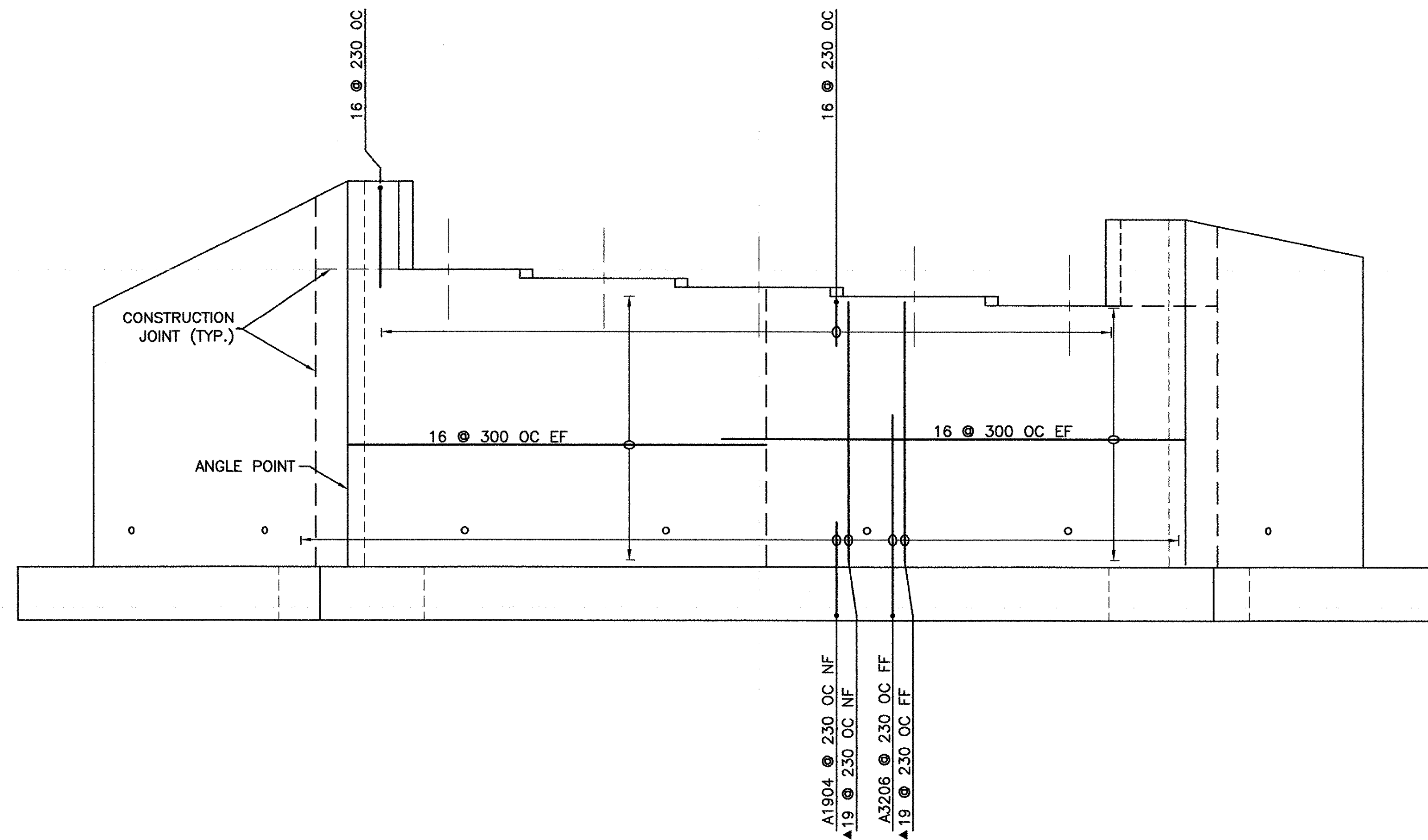
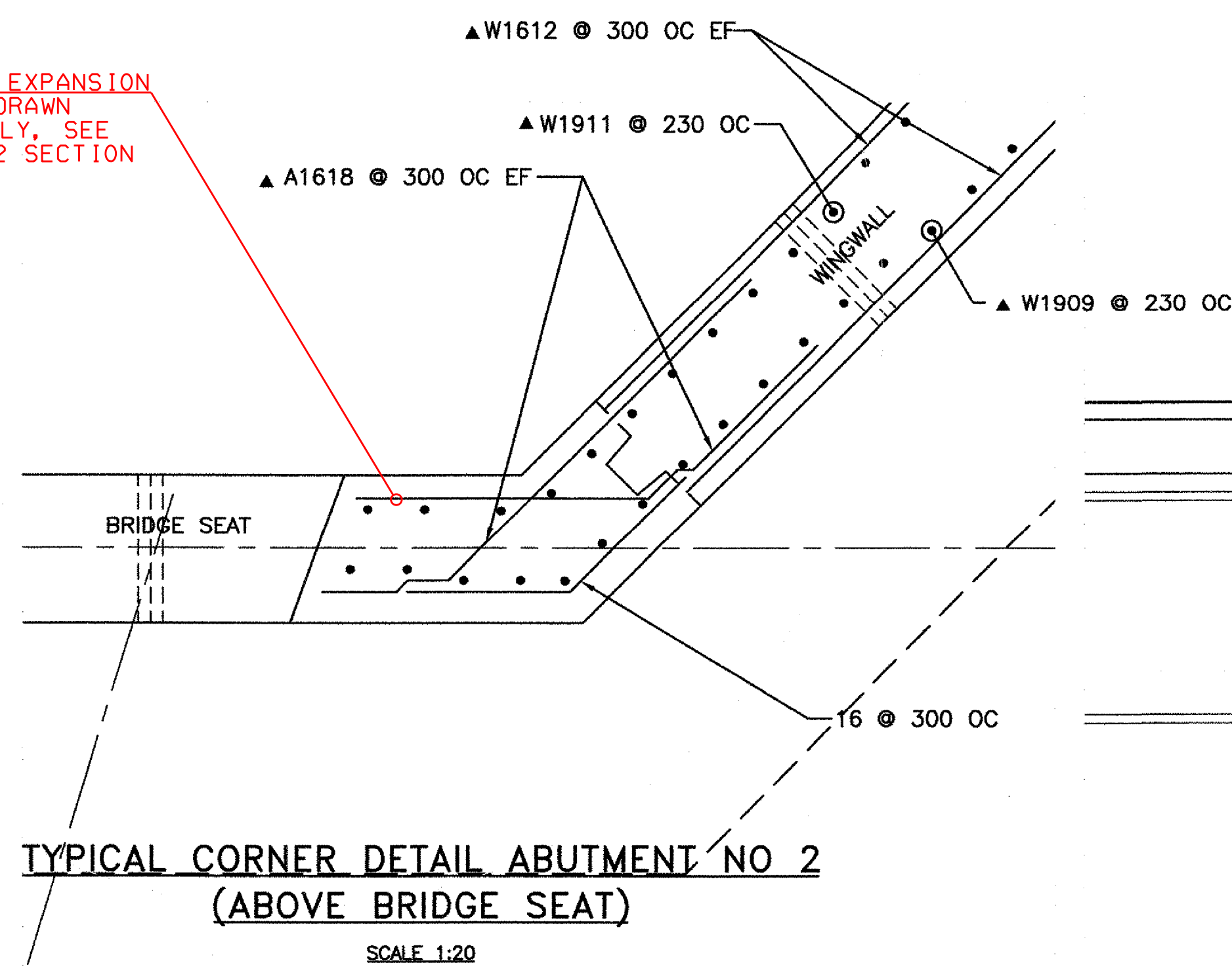
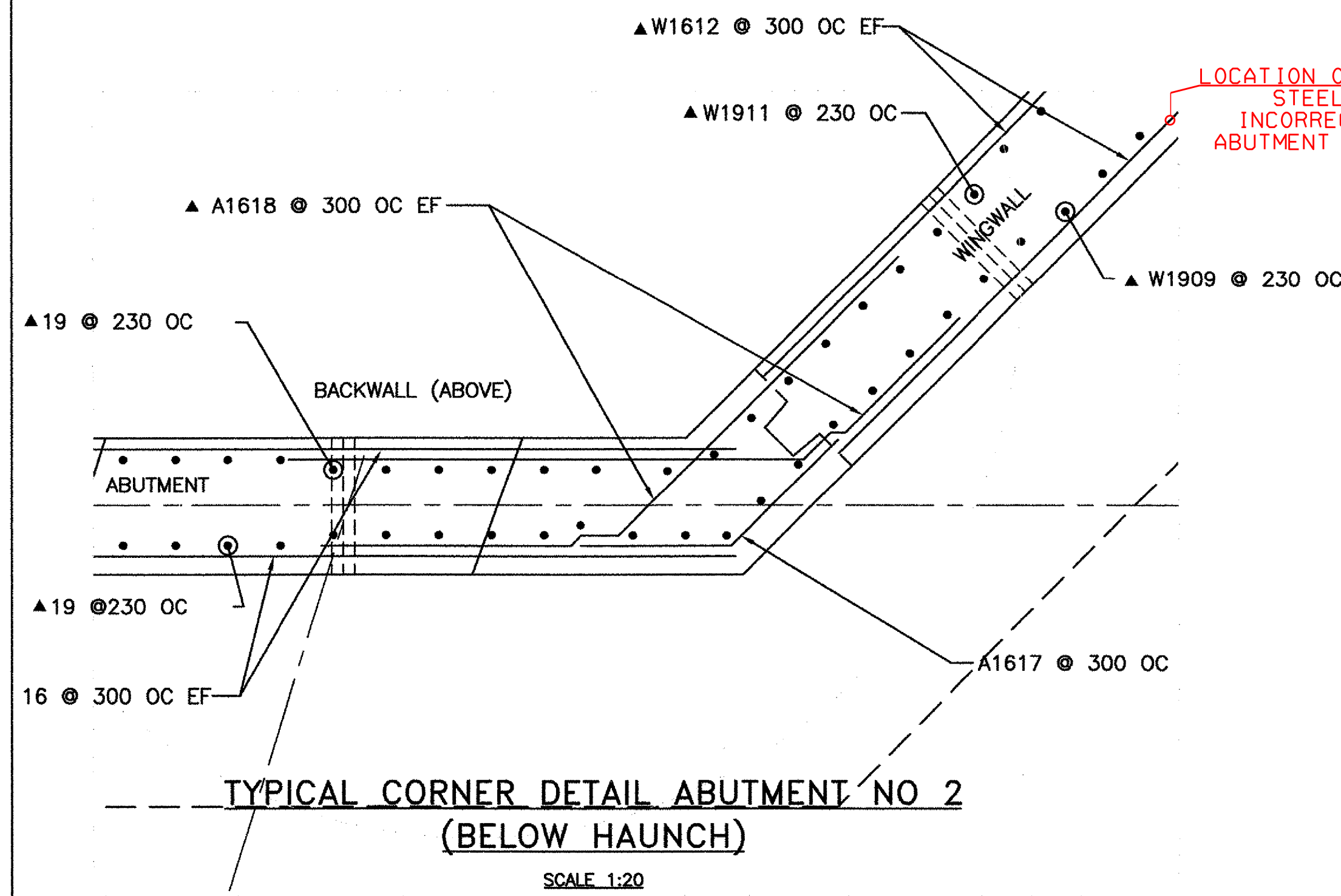
ABUTMENT NO. 2 SECTION

SCALE 1:20

NOTES:
NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
▲ = CUT TO FIT IN FIELD
T+B = TOP AND BOTTOM
OC = ON CENTER
MINIMUM LAP LENGTH NOT DETAILED SHALL BE 660

REVISIONS			STATE OF VERMONT AGENCY OF TRANSPORTATION	
NO.	DESCRIPTION	BY & DATE		
			CLARENDON, VERMONT	Bridge No. 14
			TOWN HIGHWAY NO. 1	Log Sta.
				Surv. Sta.
			TOWN HIGHWAY NO. 1 OVER THE COLD RIVER	
			ABUTMENT NO. 2 REINFORCING	
			Designed by: A. C. AUSTIN	Drawn by: F. B. SMALL
			Checked by: K. S. MARSHIA date 05/02	Bridge Design Supervisor J.W. TUCKER date 05/02
			PROJECT CLARENDON	PROJECT NO. BR0 1443(29)
			Bridge Sheet No.	SHEET 26 OF 41

DuBois & King Inc.
engineering planning management development

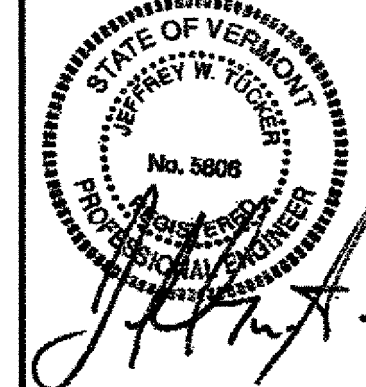


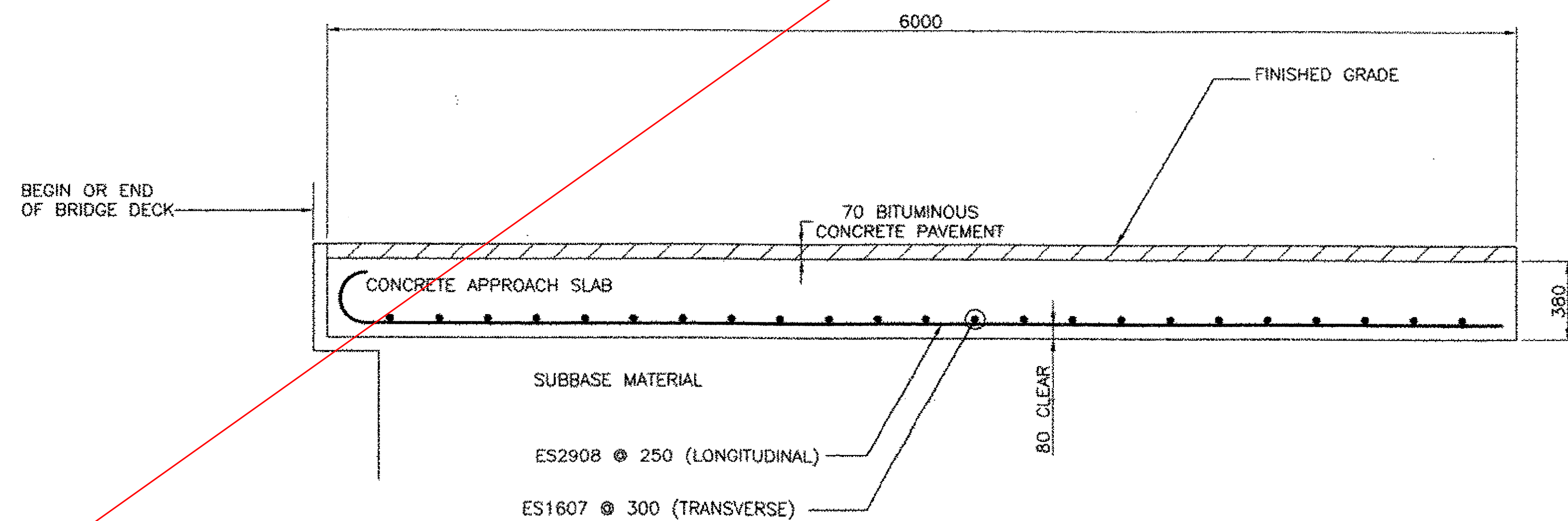
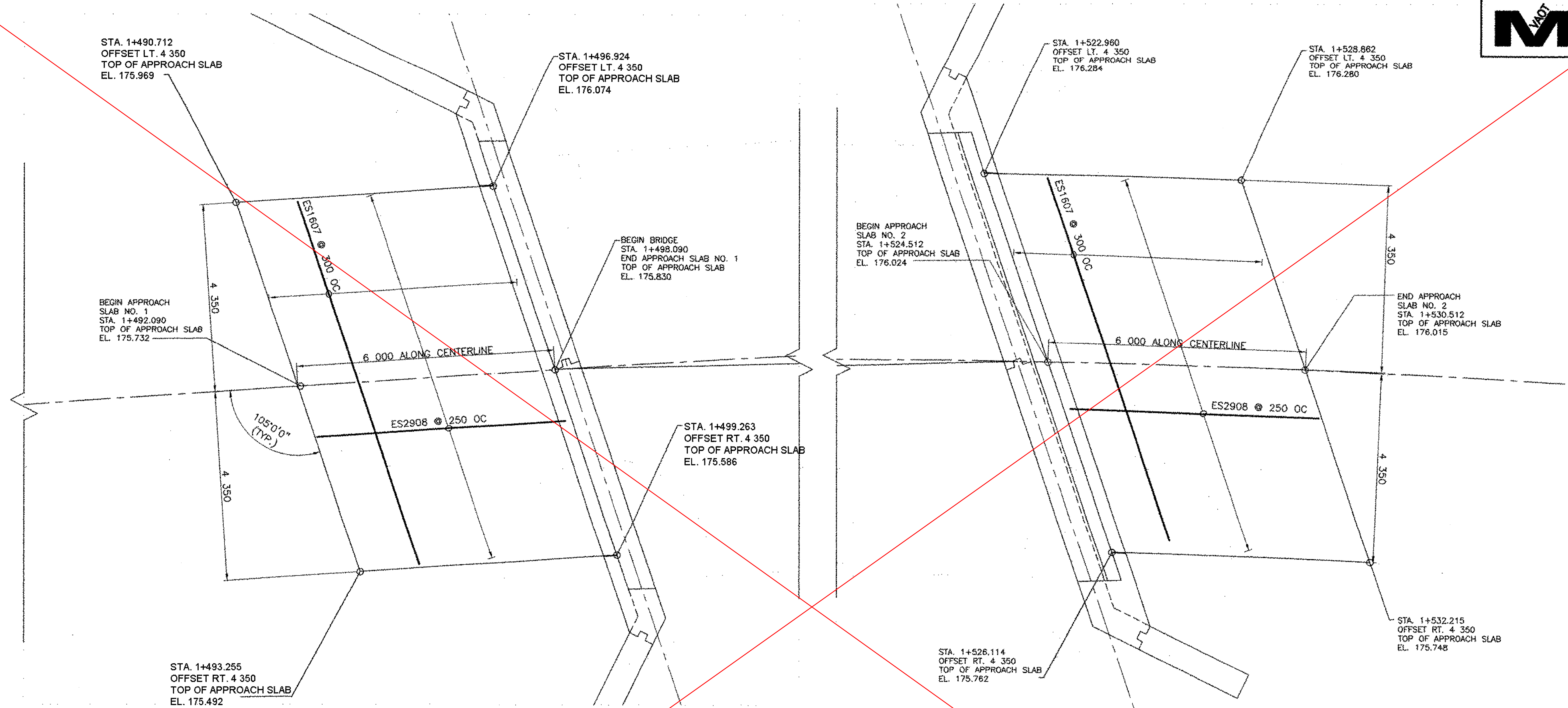
REVISIONS			STATE OF VERMONT AGENCY OF TRANSPORTATION	
NO.	DESCRIPTION	BY & DATE		
			CLARENDON, VERMONT	Bridge No. 14
			TOWN HIGHWAY NO. 1	Log Sta.
				Surv. Sta.
			TOWN HIGHWAY NO. 1 OVER THE COLD RIVER	
			ABUTMENT NO. 2 REINFORCING	
			Designed by: A.P. GUYETTE	Drawn by: A.P. GUYETTE
			Checked by: J.W. TUCKER date 1/06	Bridge Design Supervisor J.W. TUCKER date 1/06
			PROJECT CLARENDON	PROJECT NO. BRO 1443(29)
			Bridge Sheet No.	SHEET 26A OF 41

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NOTE:
 CONTRACTOR SHALL VERIFY ALL REINFORCING STEEL LENGTHS AND DIMENSIONS PRIOR TO ORDERING REINFORCEMENT. THE CURRENT REINFORCING STEEL SCHEDULE IS NOT ACCURATE AND SHALL NOT BE USED AS THE BASIS FOR ORDERING REINFORCEMENT.

DuBois & King
 engineering planning management development

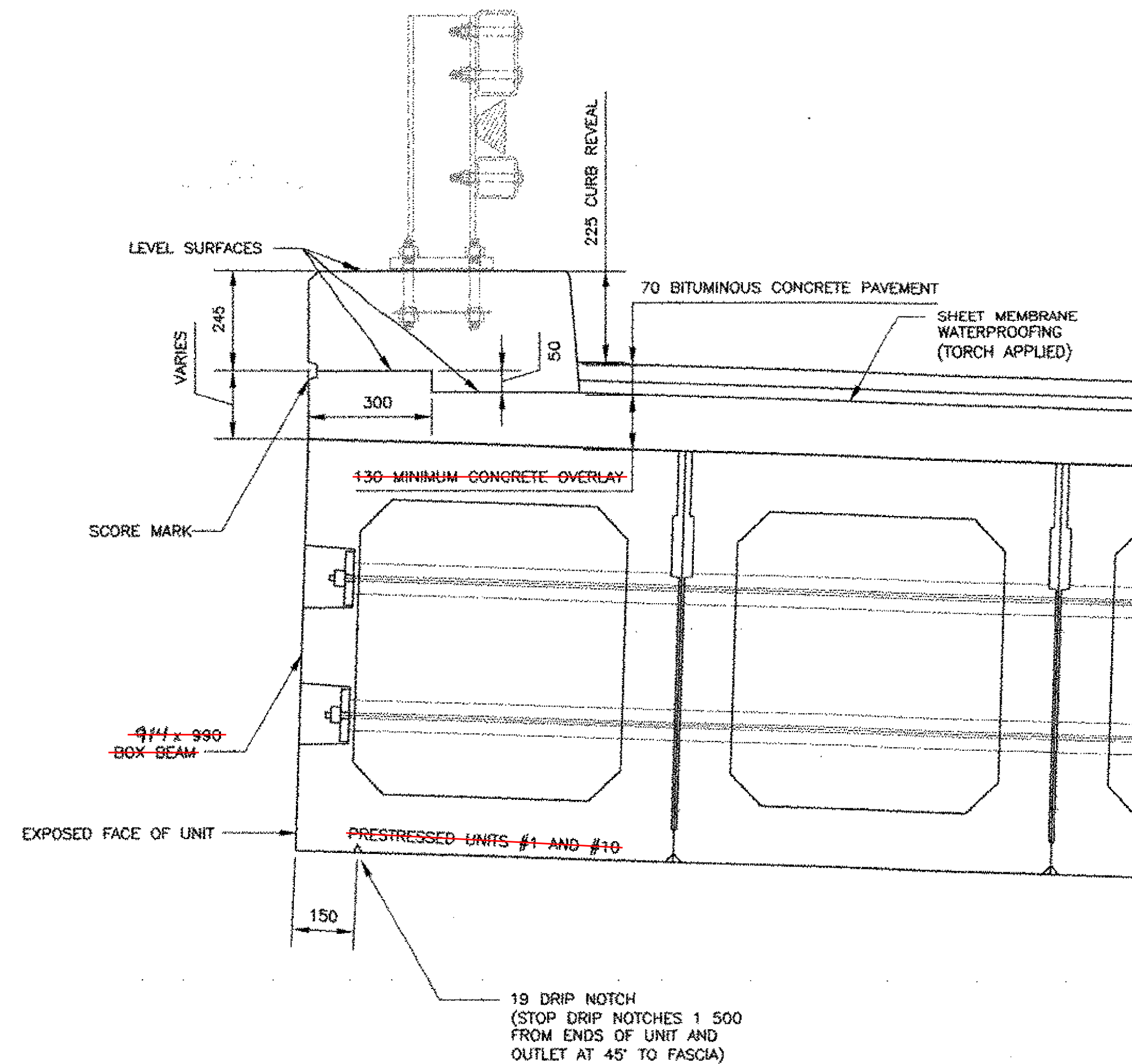




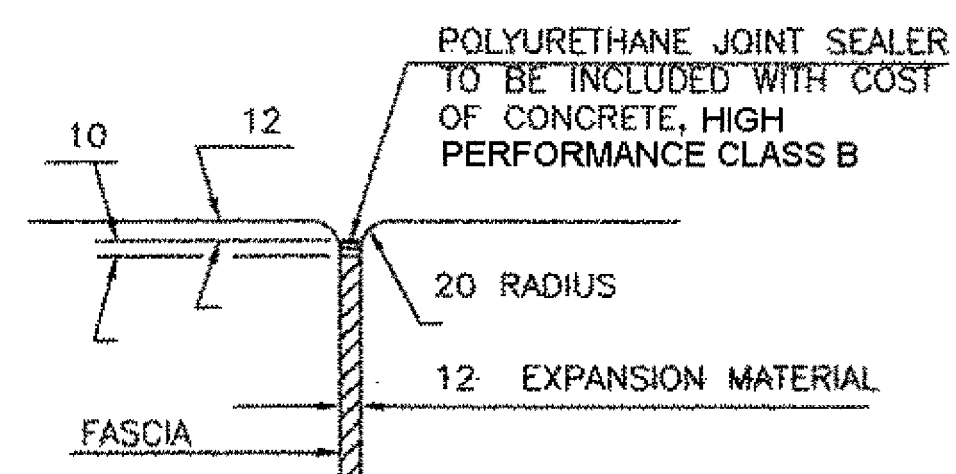
SEE VALUE
ENGINEERING
DESIGN
(FOLLOWING SHEET)

REVISIONS			STATE OF VERMONT AGENCY OF TRANSPORTATION	
NO.	DESCRIPTION	BY & DATE		
			CLARENDON, VERMONT	Bridge No. 14
			TOWN HIGHWAY NO. 1	Log Sta.
			TOWN HIGHWAY NO. 1 OVER THE COLD RIVER	Surv. Sta.
			APPROACH SLAB DETAILS	
			Designed by: B. C. AUSTIN	Drawn by: E. B. SMALL
			Checked by: K. S. MARSHIA date 05/02	Bridge Design Supervisor: J.W. TUCKER date 05/02
			PROJECT: CLARENDON	PROJECT NO. BRO 1443(29)
			Bridge Sheet No.	SHEET 29 OF 41

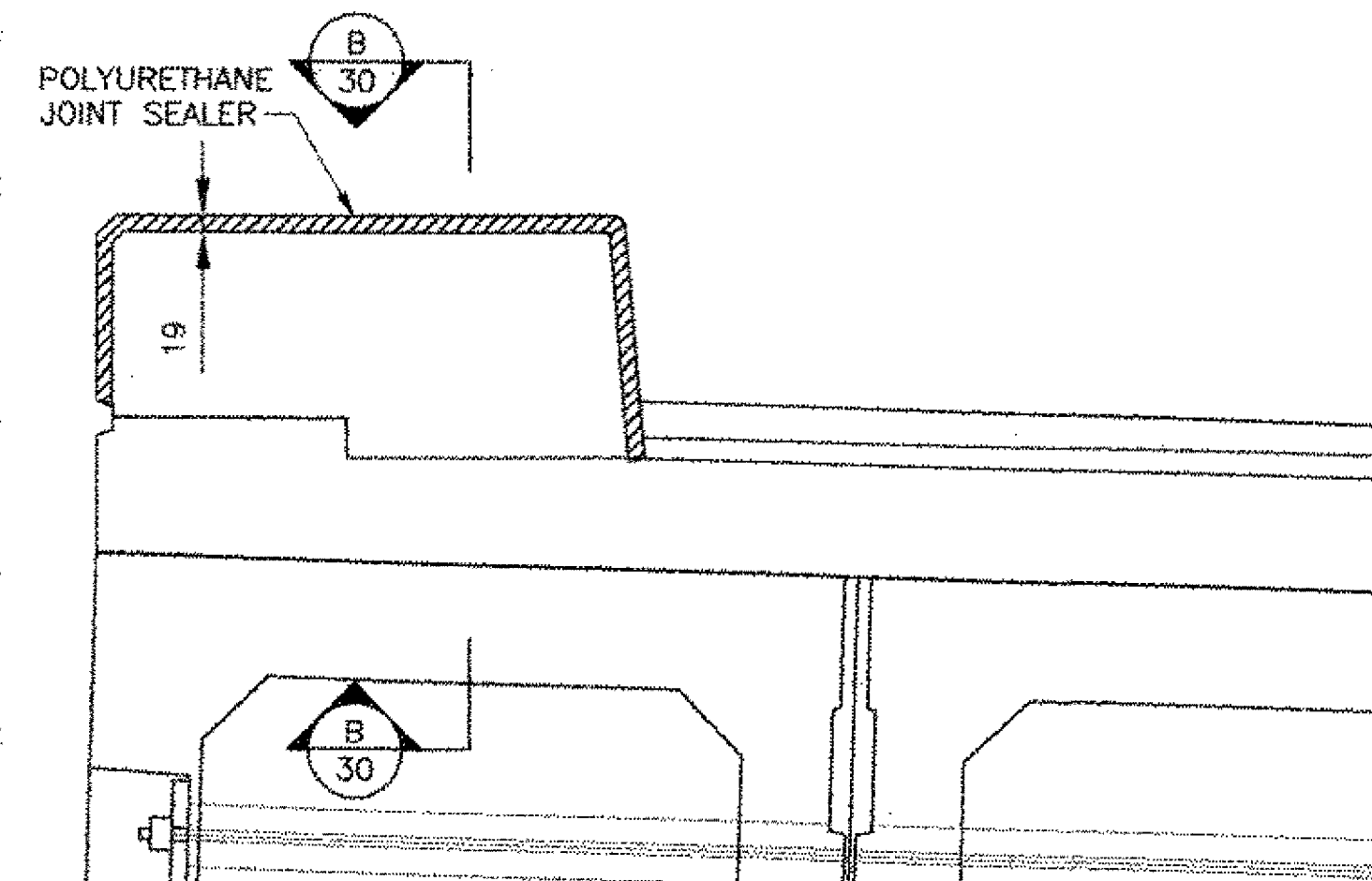
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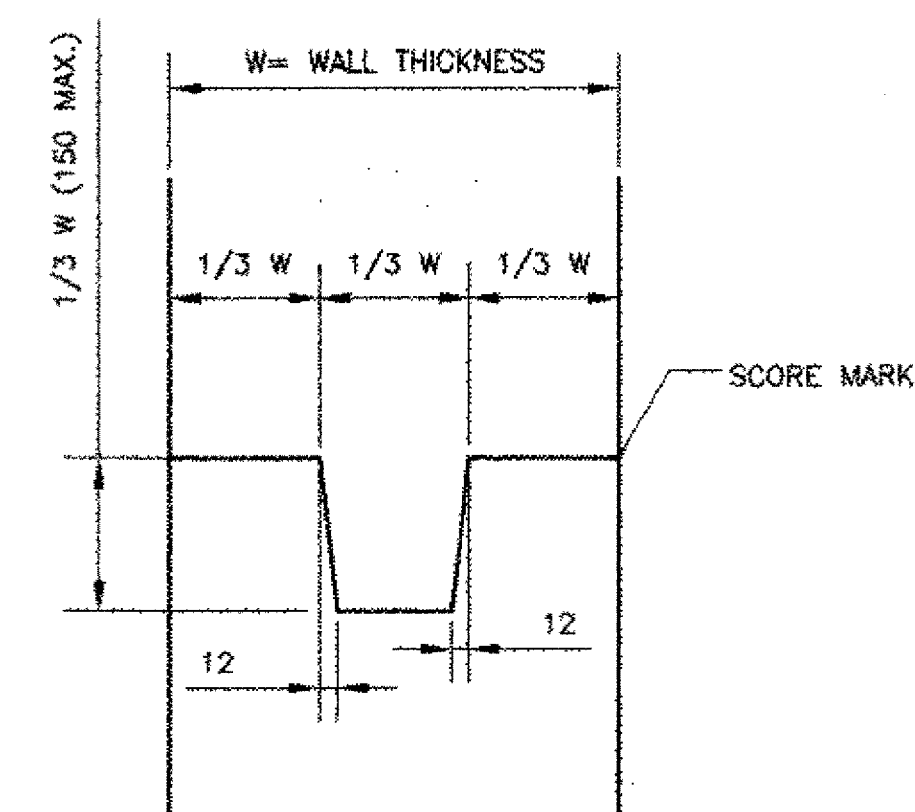
TYPICAL CURB SECTION
SCALE 1:10



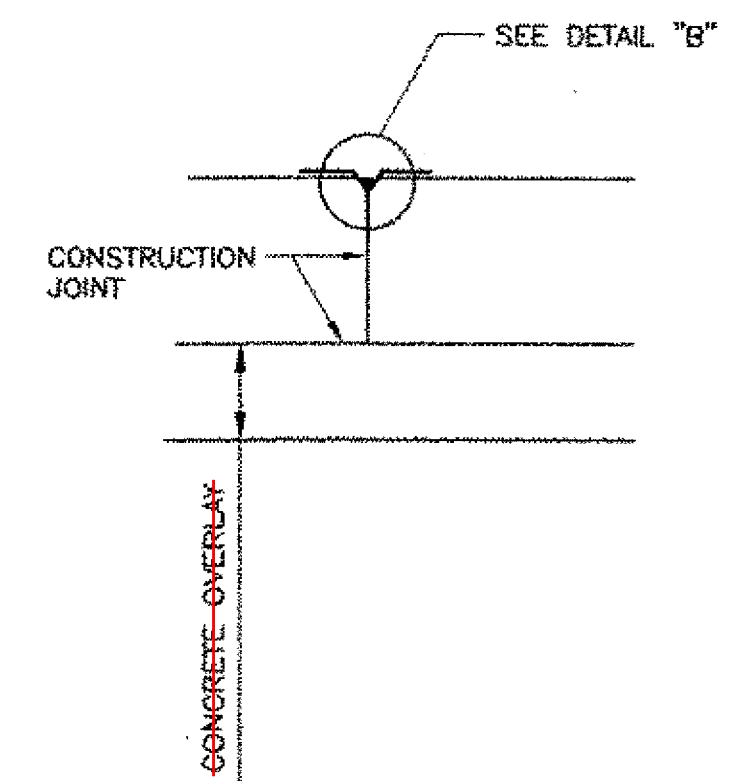
JOINT BETWEEN FASCIA AND WINGWALL



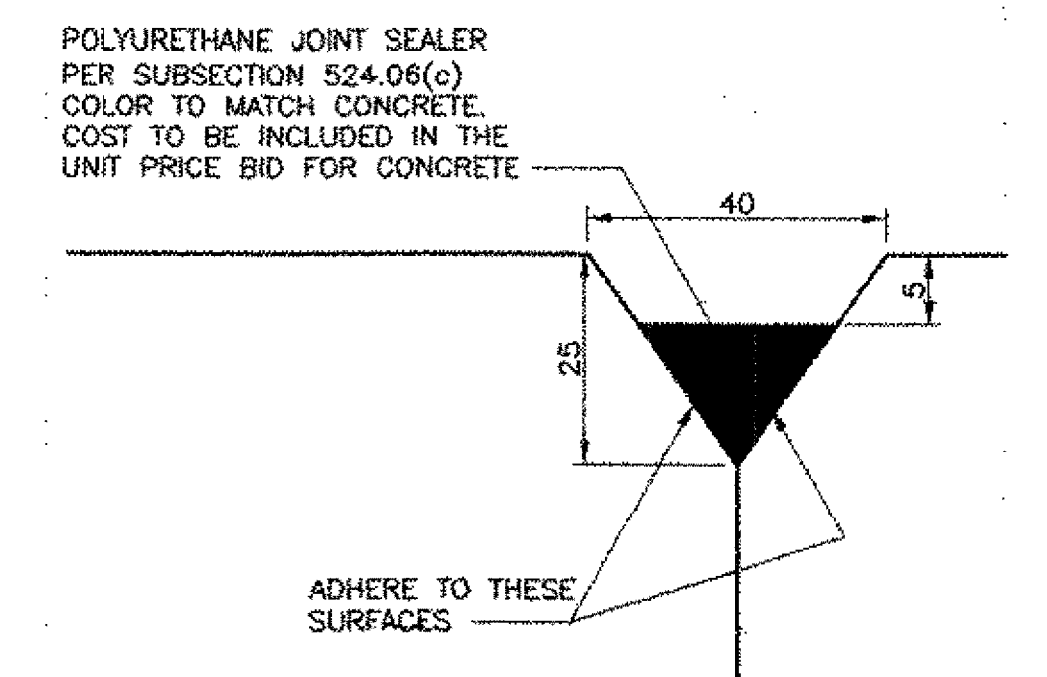
TYPICAL SECTION THROUGH CONCRETE CONSTRUCTION JOINT
SCALE 1:10



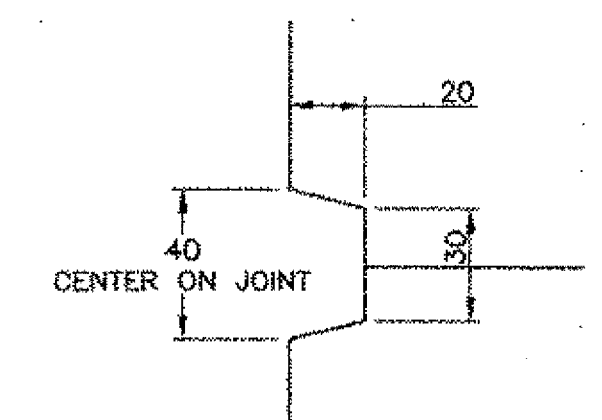
TYPICAL CONCRETE CONSTRUCTION JOINT



SECTION B-30



DETAIL "B"



SCORE MARK DETAIL
NOT TO SCALE

NOTES:

- POLYURETHANE MEMBRANE AND BLAST CLEANING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR SHEET MEMBRANE WATERPROOFING (TORCH APPLIED).
- SHEET MEMBRANE WATERPROOFING (TORCH APPLIED) SHALL EXTEND TO FACE OF CURB.
- "E" DENOTES EPOXY COATED BARS.
- CONSTRUCTION JOINTS IN THE CURBS SHALL BE PROVIDED AS SHOWN ABOVE. JOINTS SHALL BE SPACED MAXIMUM OF 4500 CENTER TO CENTER AND SHALL BE 480 MINIMUM FROM THE CENTER OF THE NEAREST BRIDGE RAIL POST. CONCRETE SHALL BE PLACED IN ALTERNATING SECTIONS WITH A MINIMUM OF 48 HOURS DELAY BETWEEN ADJACENT POURS.
- LONGITUDINAL REINFORCING SHALL PASS THROUGH CONCRETE CONSTRUCTION JOINTS.
- ALL EPOXY COATED STEEL THAT NEEDS TO BE CUT IN THE FIELD IS TO BE SAW CUT AND THE EXPOSED END IS TO BE TREATED AS PER SECTION 607.04.

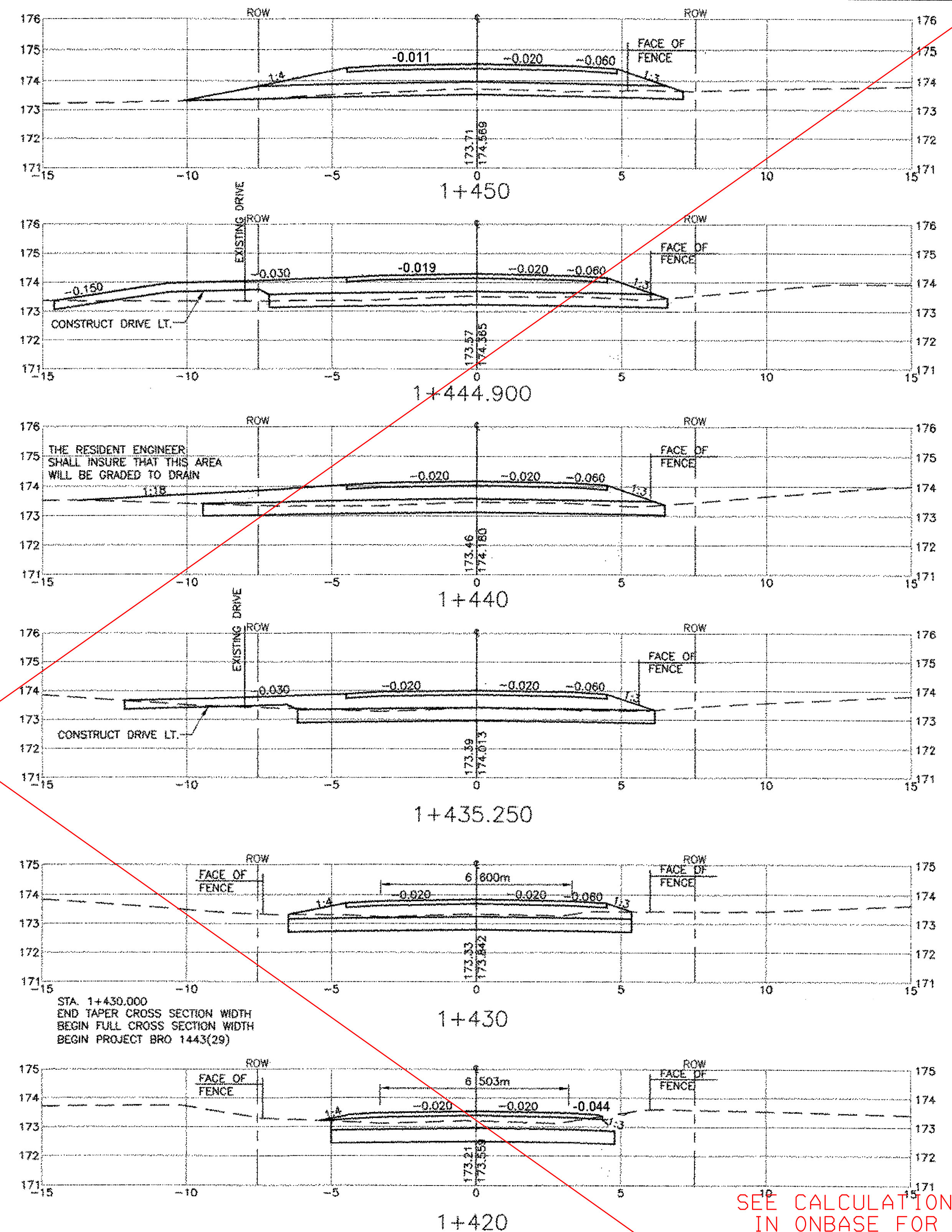
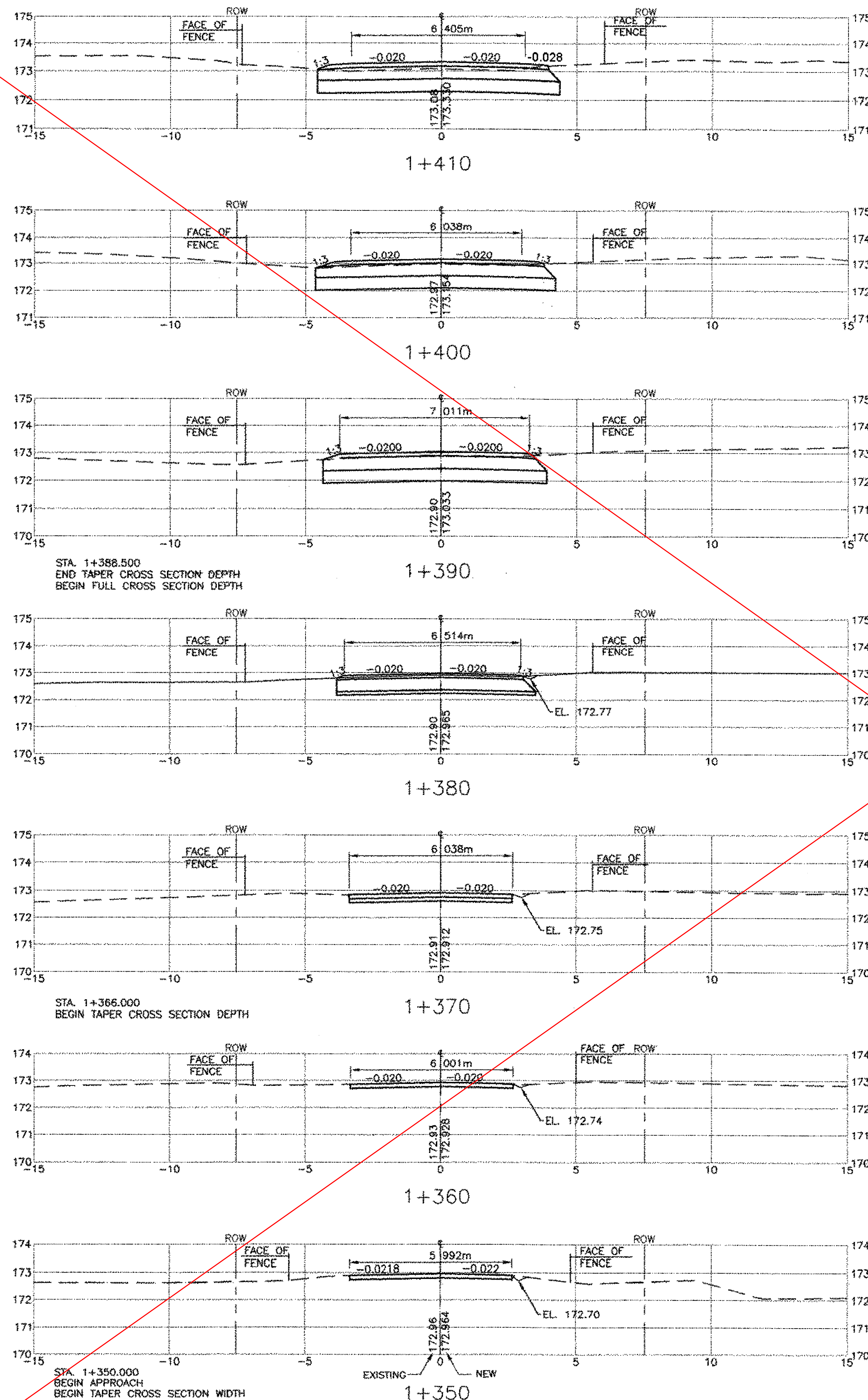
REVISIONS		STATE OF VERMONT AGENCY OF TRANSPORTATION	
DESCRIPTION	BY & DATE		
		CLARENDON, VERMONT	Bridge No. 14
		TOWN HIGHWAY NO. 1	Log Sta.
		TOWN HIGHWAY NO. 1 OVER THE COLD RIVER	
		CURB DETAILS	
Designed by: B. C. AUSTIN		Drawn by: E. B. SMALL	
Checked by: K. S. MARSHIA date 05/01		Bridge Design Supervisor J.W. TUCKER date 05/01	
PROJECT CLARENDON		PROJECT NO. BRO 1443(29)	
Bridge Sheet No.		SHEET 30 OF 40	

~ NOTES ~

- UNLESS OTHERWISE DESIGNATED, ALL BAR REINFORCEMENT FOR CONCRETE IN SIZES UP TO AND INCLUDING 55M SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT", AASHTO M31M (ASTM A 615M-S). ALL BARS SHALL BE GRADE 420, 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 BAR MARK PREFIX DENOTES EPOXY COATED REINFORCING STEEL.

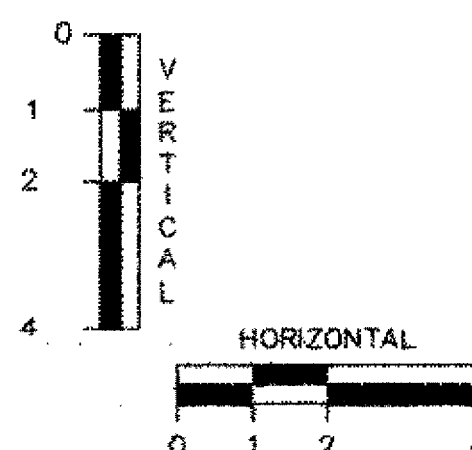
BAR SIZE	NOMINAL MASS (kg/m)	NOMINAL DIMENSIONS ROUND SECTION		
		DIAMETER (mm)	CROSS SECTIONAL AREA (mm²)	PERIMETER (mm)
#10	0.560	9.5	71	29.84
#13	0.994	12.7	129	39.90
#16	1.552	15.9	199	49.95
#19	2.235	19.1	284	60.00
#22	3.042	22.2	387	69.74
#25	3.973	25.4	510	79.80
#29	5.060	28.7	645	90.16
#32	6.404	32.3	819	101.47
#36	7.907	35.8	1006	112.47
#43	11.380	43.0	1452	135.09
#57	20.240	57.3	2581	180.01

PROJECT NAME:	Clarendon
PROJECT NUMBER:	BRO 1443(29)
FILE NAME:	93J019rss.xls
PROJECT MANAGER:	R. Whitcomb
DESIGNED BY:	Dubois & King
REINFORCING STEEL SCHEDULE SHEET #1	
PLOT DATE:	5/26/2005
DRAWN BY:	L. Bullock
CHECKED BY:	C. Carlson
SHEET	34 OF 41



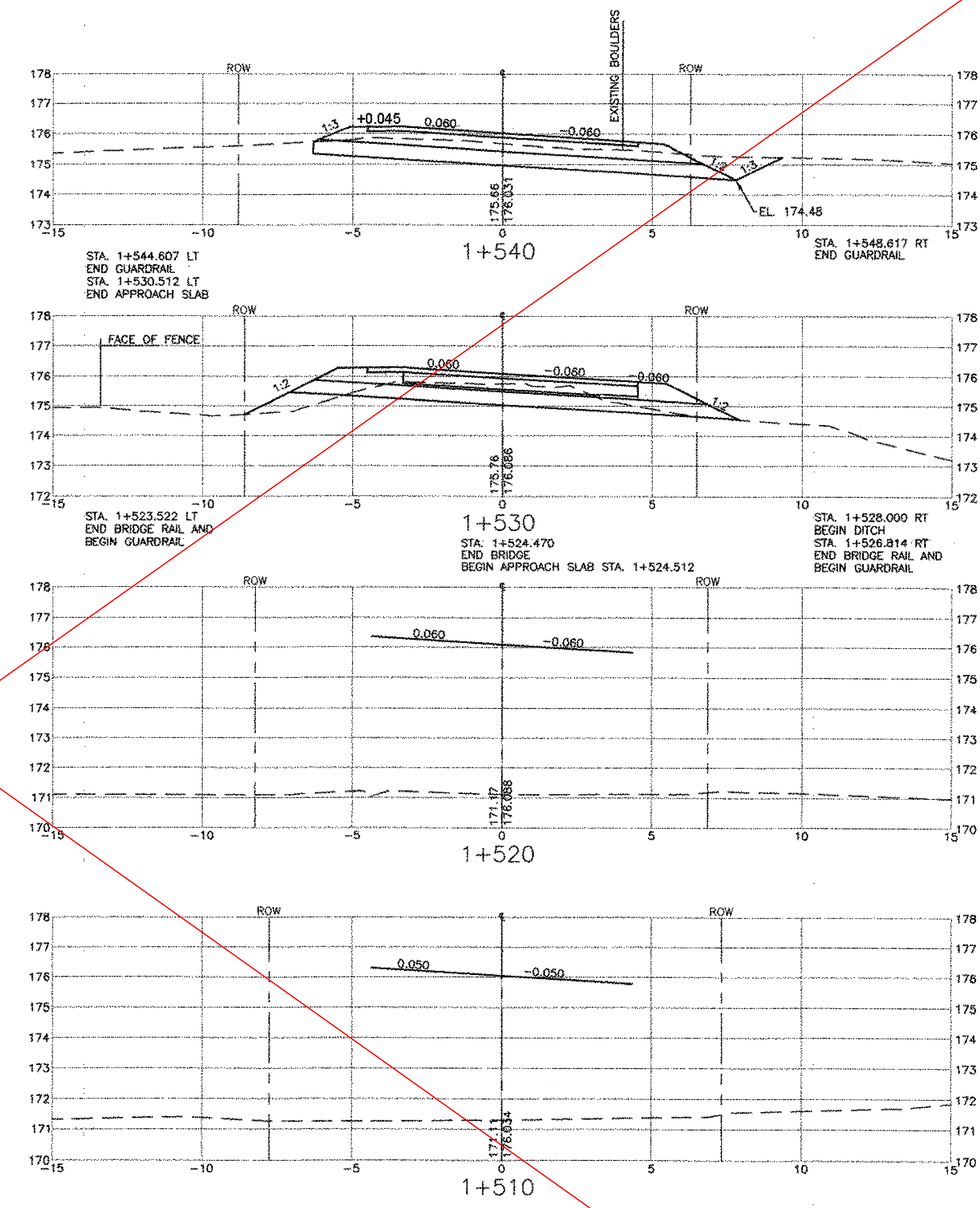
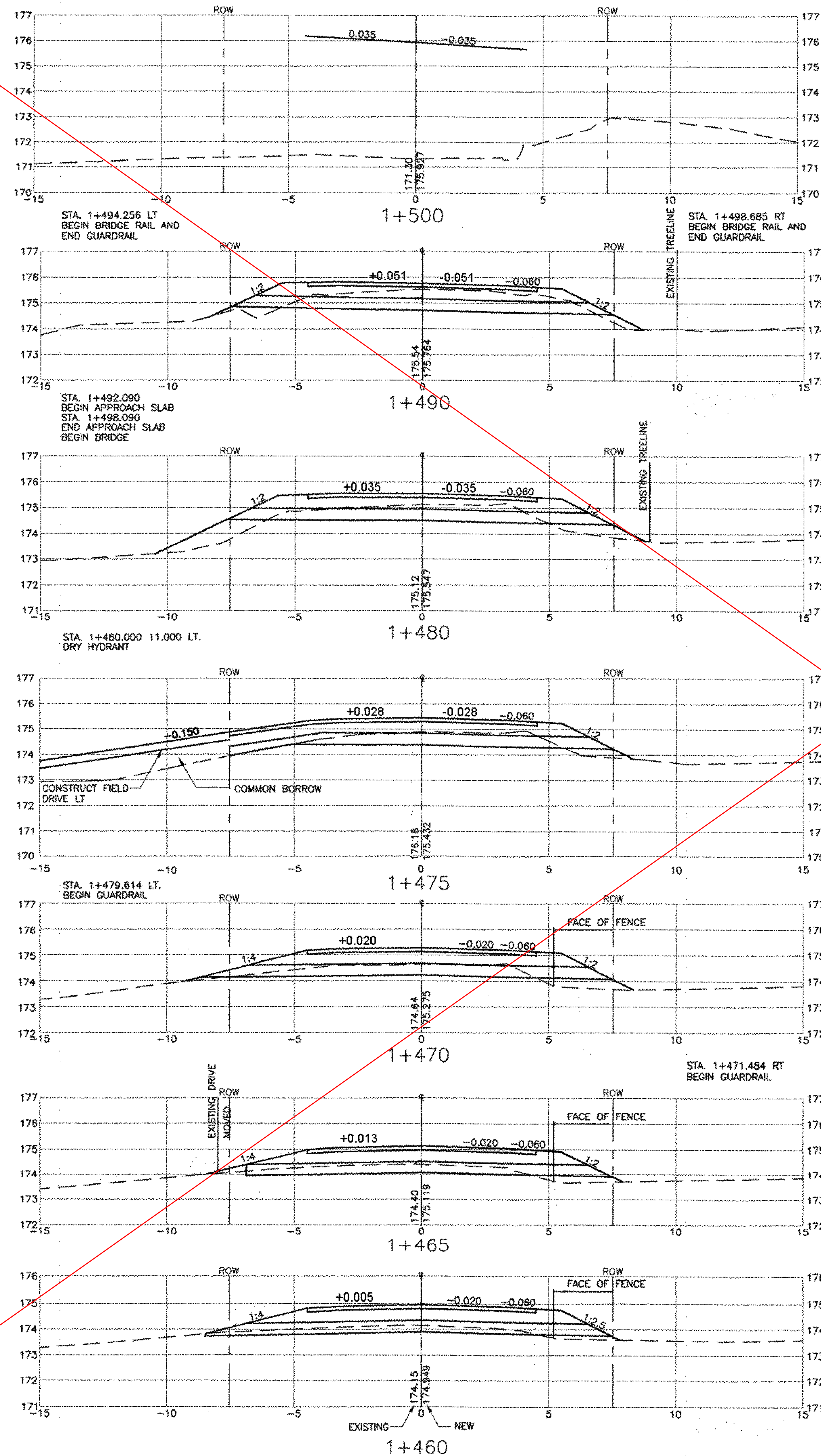
ROADWAY CROSS SECTIONS

SCALE: HORIZ. 1:100
VERT. 1:100



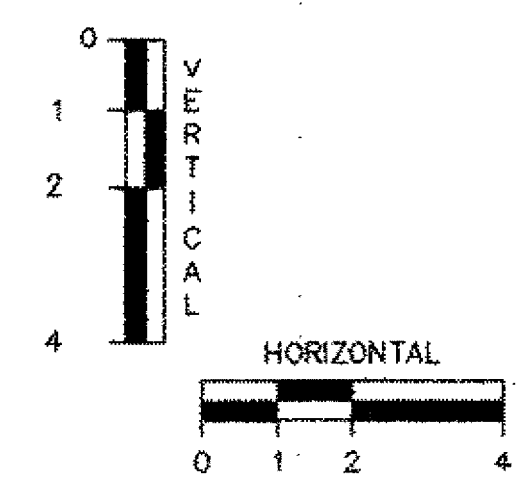
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NO.	DESCRIPTION	BY & DATE		
			CLARENDON, VERMONT	
			TOWN HIGHWAY NO. 1	
			TOWN HIGHWAY NO. 1 OVER THE COLD RIVER	
			ROADWAY CROSS SECTIONS	
Designed by: W.S. CHESBROUGH			Drawn by: N.B. DIMICK	
Checked by: K.S. MARSHIA date 05/02			Bridge Design Supervisor J.W. TUCKER date 05/02	
PROJECT CLARENDON			PROJECT NO. BRO 1443(29)	
Bridge Sheet No.			SHEET 35 OF 41	

SEE CALCULATIONS FILE
IN ONBASE FOR FINAL
CROSS SECTIONS



ROADWAY CROSS SECTIONS

SCALE: HORIZ. 1:100
VERT. 1:100



SEE CALCULATIONS FILE
IN ONBASE FOR FIANL
CROSS SECTIONS

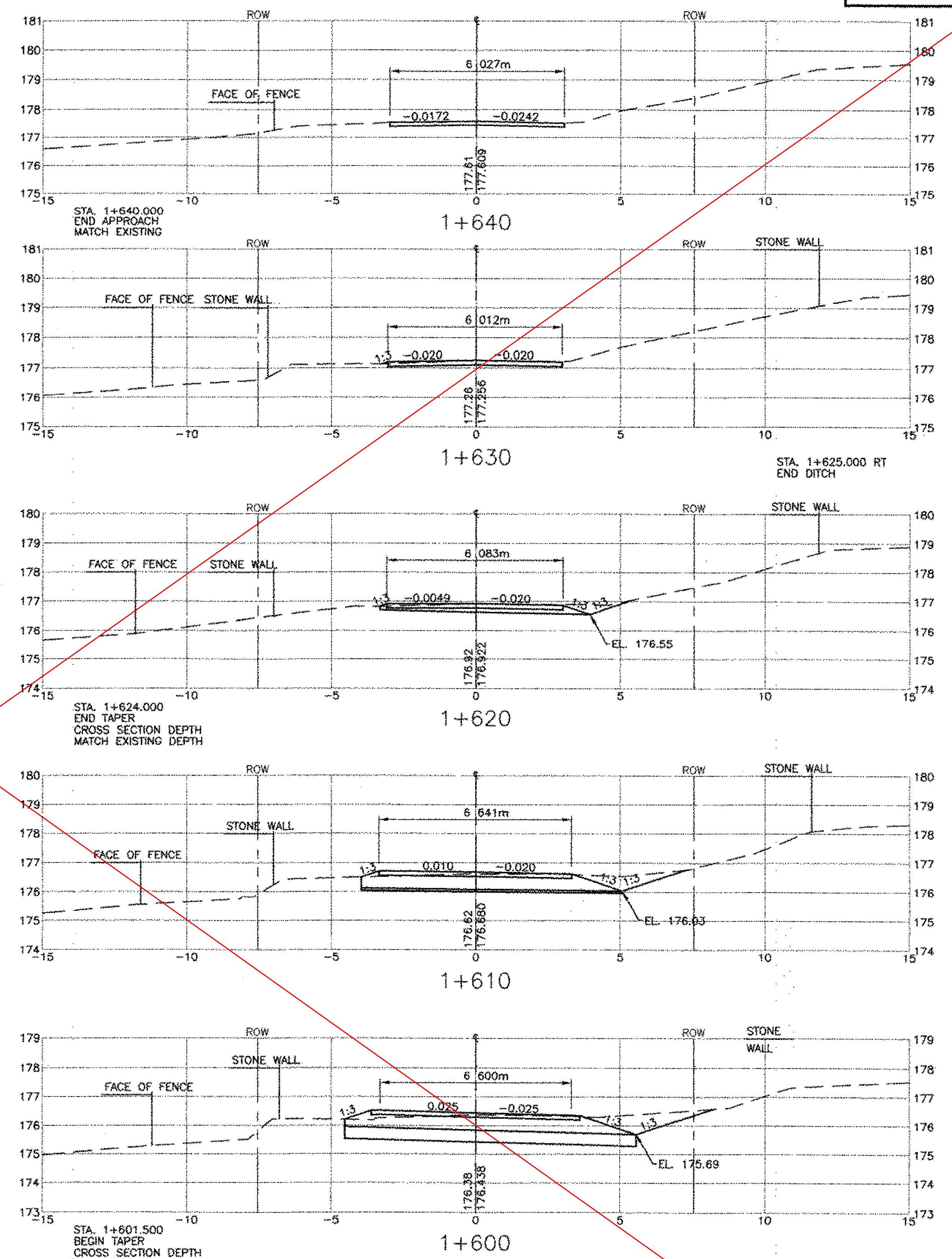
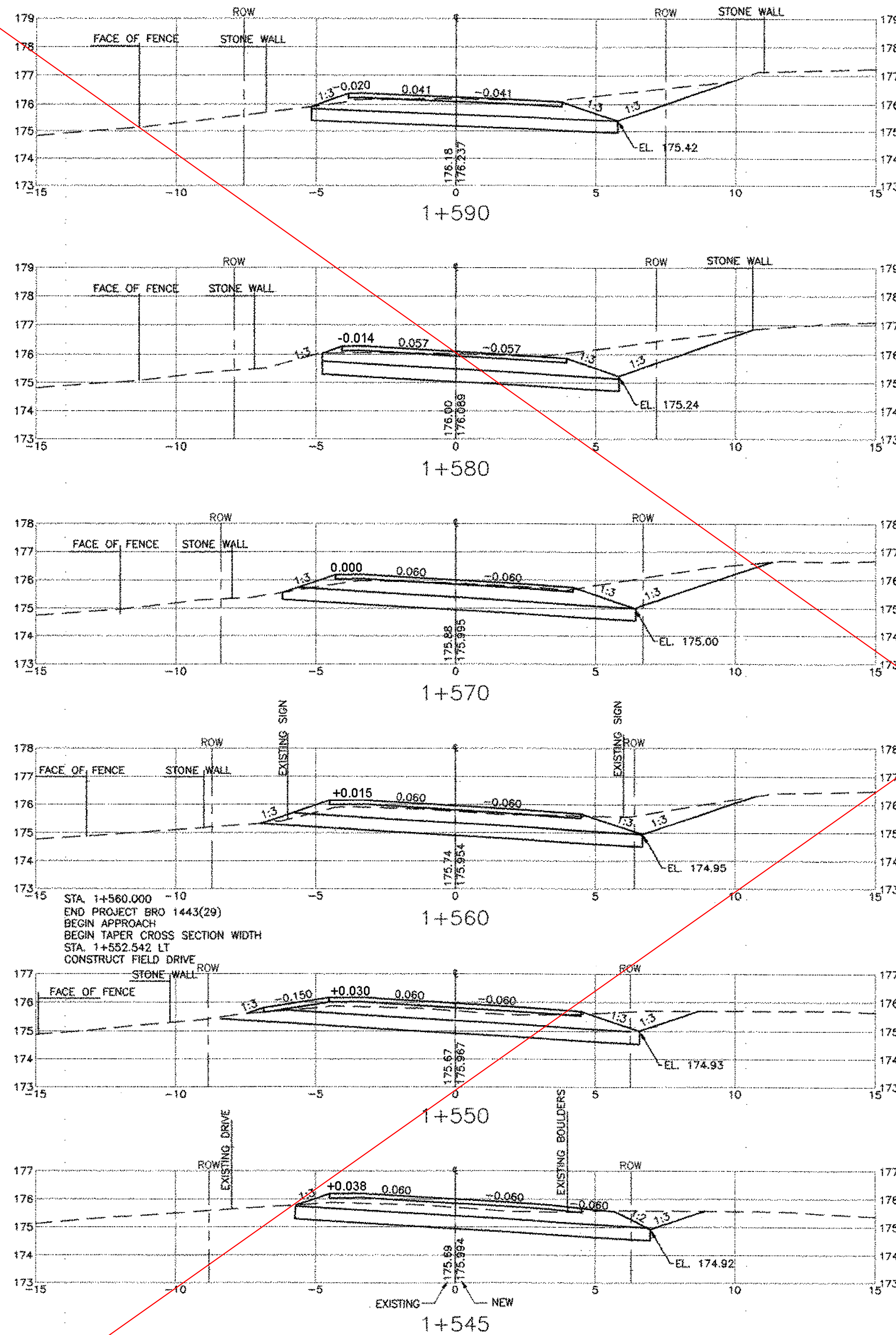
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NO.	DESCRIPTION	BY & DATE		
			CLARENDON, VERMONT	
			TOWN HIGHWAY NO. 1	
			TOWN HIGHWAY NO. 1 OVER THE COLD RIVER	
			ROADWAY CROSS SECTIONS	
			Designed by: W.S. CHESBROUGH	Drawn by: N.B. DIMICK
			Checked by: K.S. MARSHIA date 05/02	Bridge Design Supervisor J.W. TUCKER date 05/02
			PROJECT CLARENDON	PROJECT NO. BRO 1443(29)
			Bridge Sheet No.	SHEET 36 OF 41

engineering

planning

management

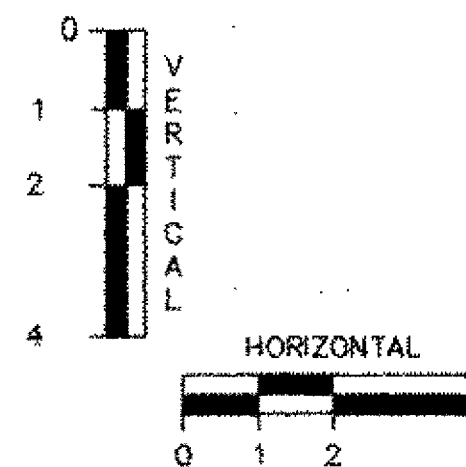
development



SEE CALCULATIONS FILE
IN ONBASE FOR FINAL
CROSS SECTIONS

ROADWAY CROSS SECTIONS

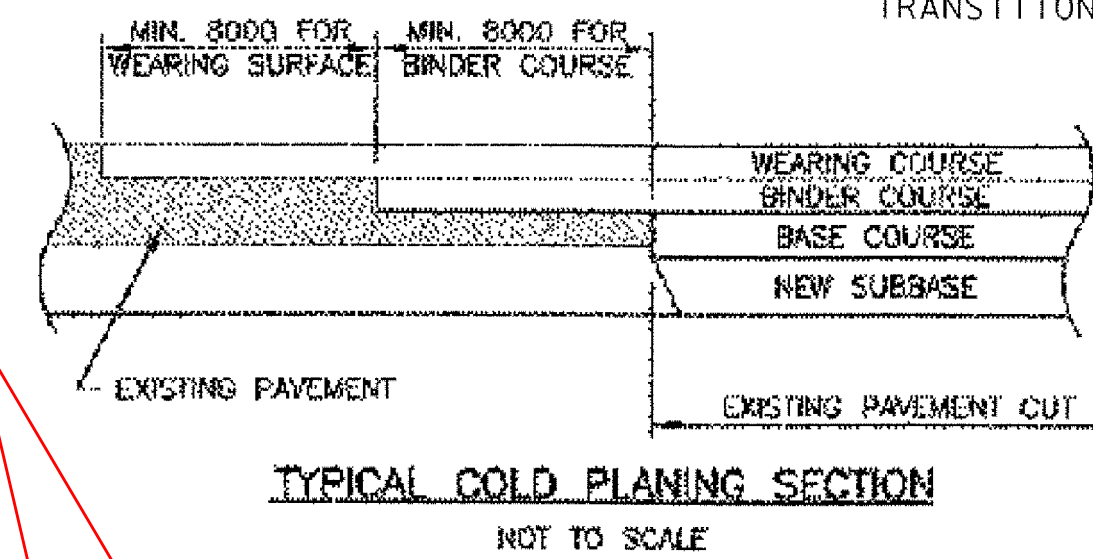
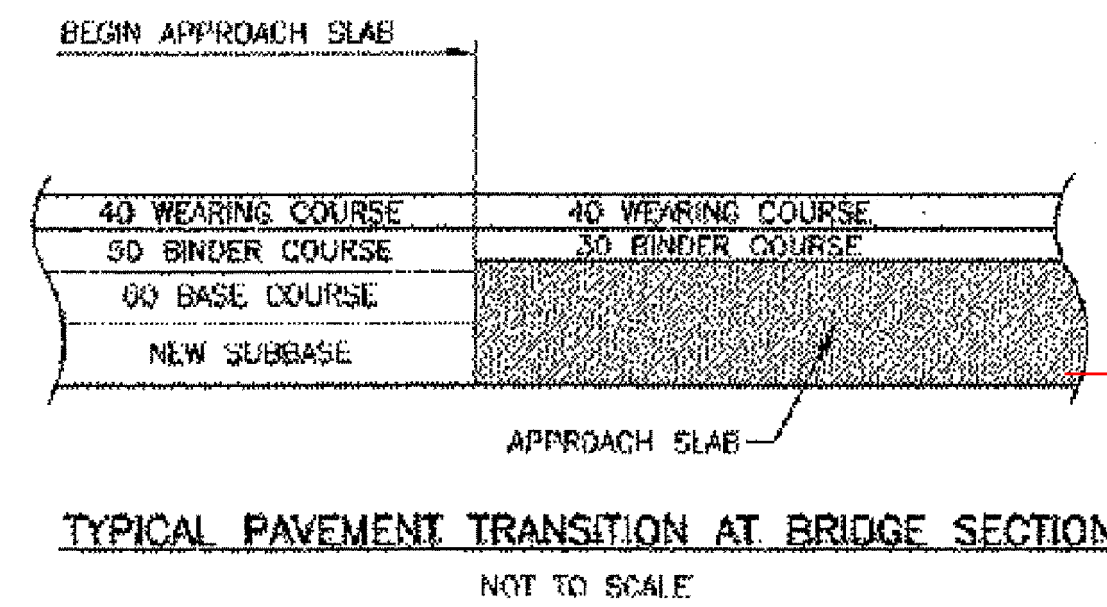
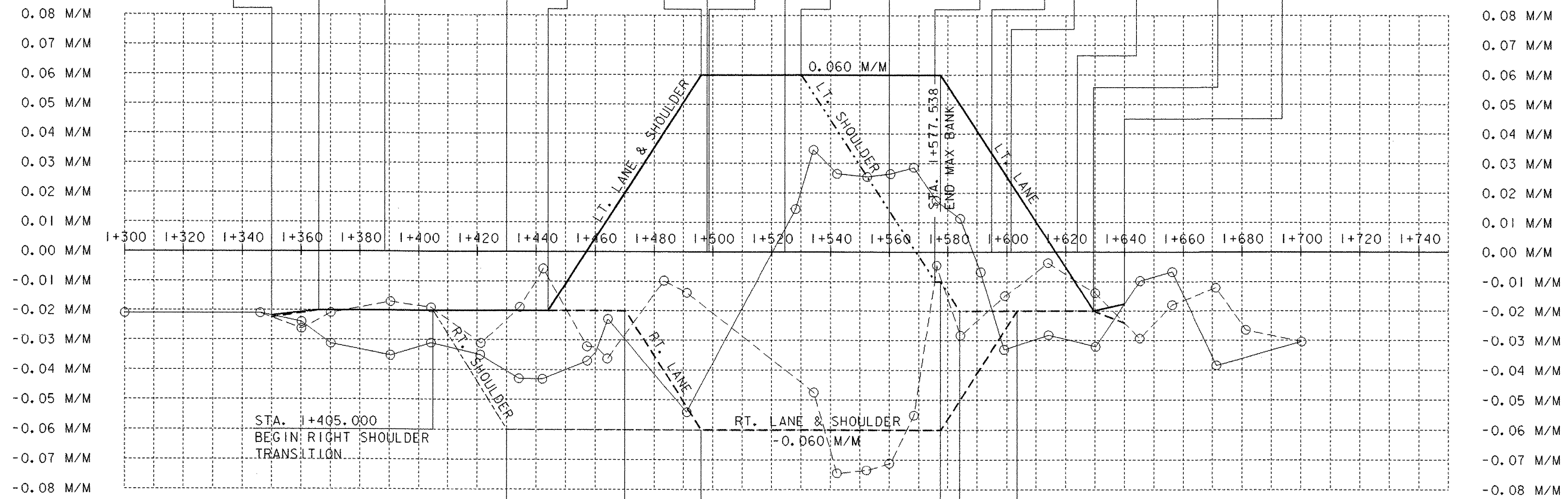
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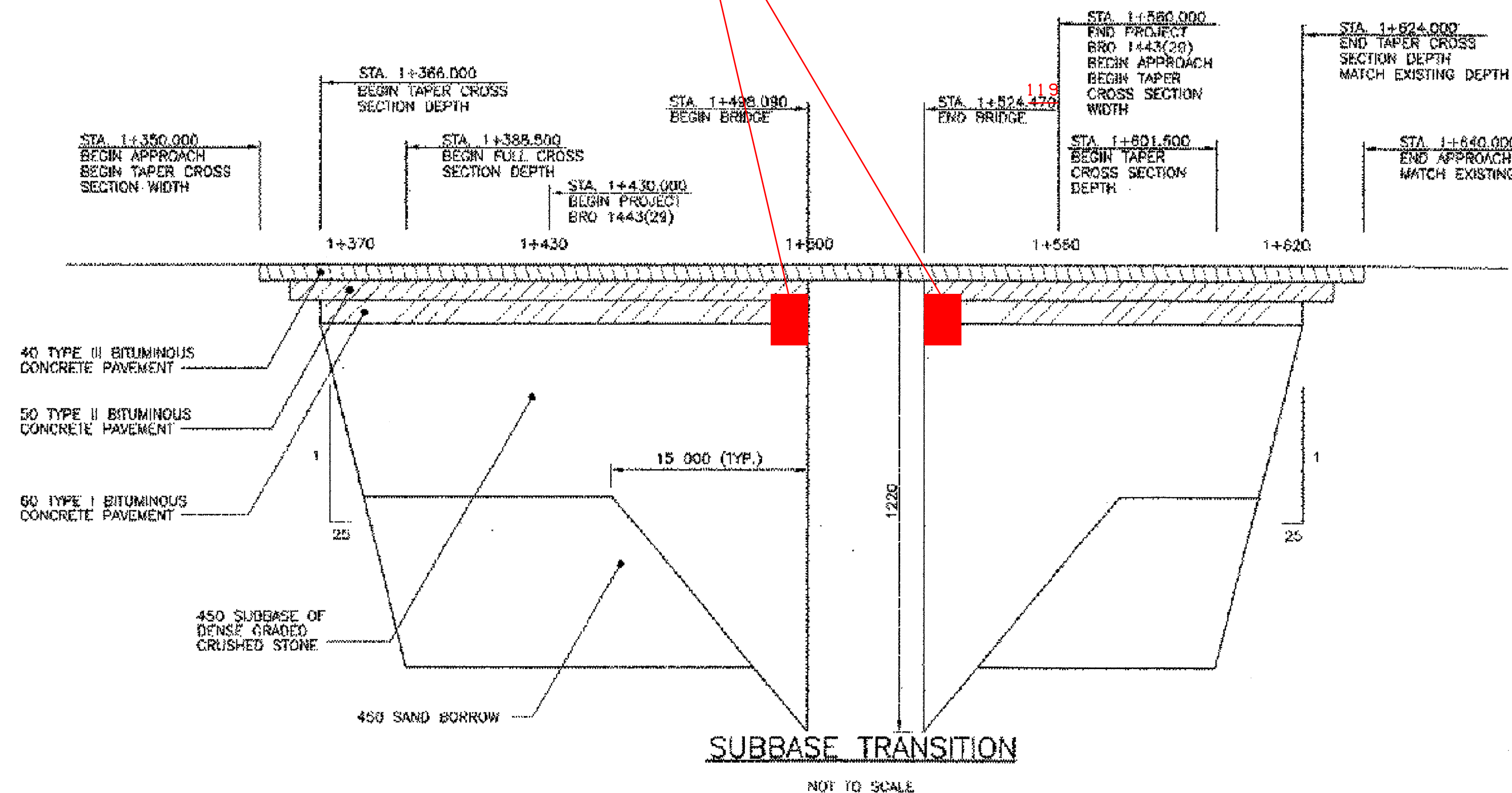
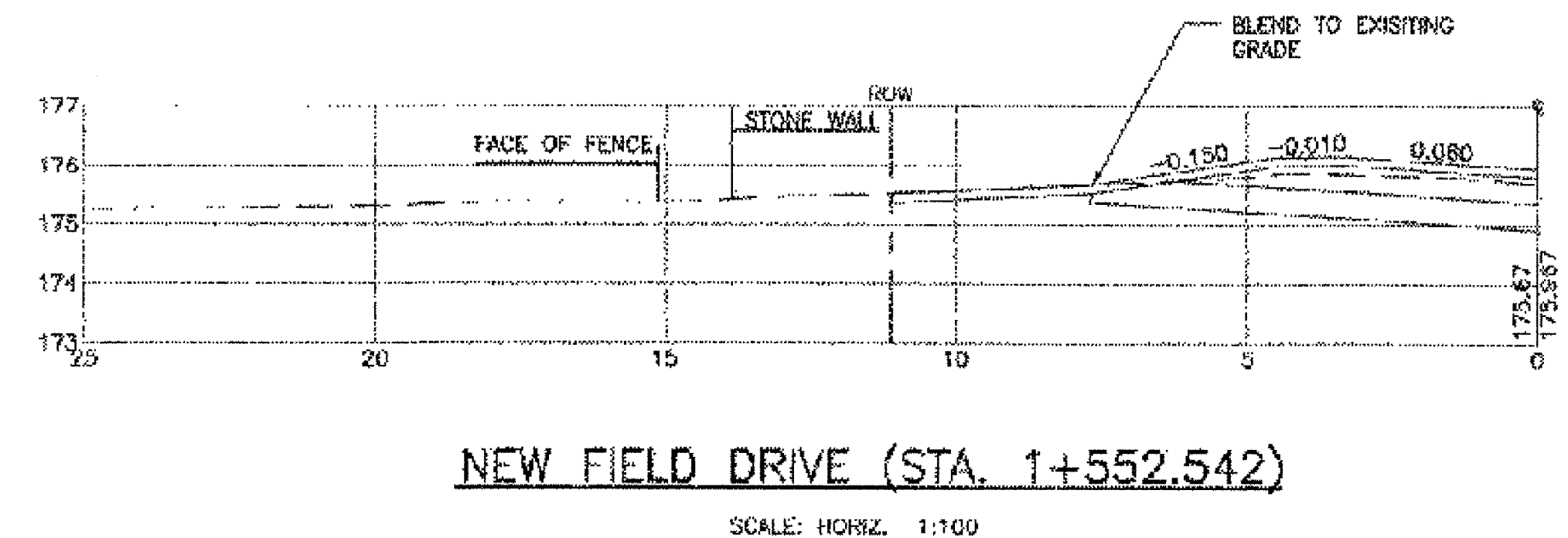
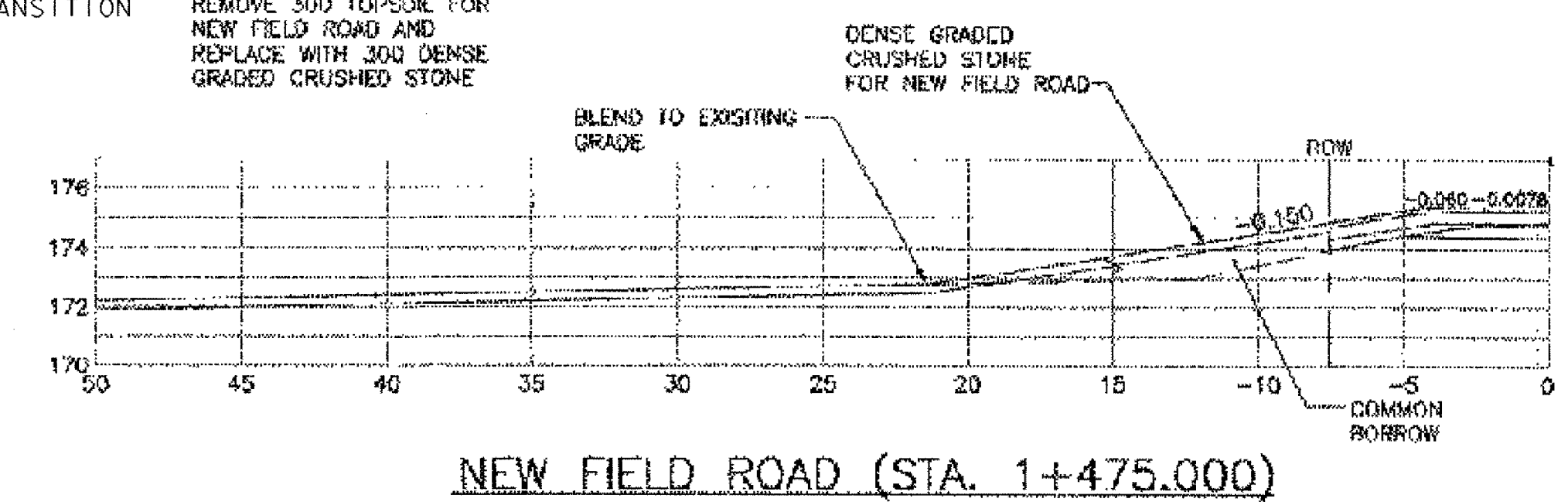
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NO.	DESCRIPTION	BY & DATE		
			CLARENDON, VERMONT	Bridge No. 14
			TOWN HIGHWAY NO. 1	Log Sta.
			TOWN HIGHWAY NO. 1 OVER THE COLD RIVER	Surv. Sta.
ROADWAY CROSS SECTIONS				
Designed by: W.S. CHESBROUGH			Drawn by: N.B. DIMICK	
Checked by: K.S. MARSHIA date 05/02			Bridge Design Supervisor J.W. TUCKER date 05/02	
PROJECT CLARENDON			PROJECT NO. BRO 1443(29)	
Bridge Sheet No.			SHEET 37 OF 41	

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- LEGEND**
- RIGHT EDGE OF EXISTING ROAD
 - LEFT EDGE OF EXISTING ROAD
 - RIGHT EDGE OF PROPOSED TRAVEL LANE
 - LEFT EDGE OF PROPOSED TRAVEL LANE
 - RIGHT EDGE OF PROPOSED SHOULDER
 - LEFT EDGE OF PROPOSED SHOULDER



BANKING DIAGRAM
SCALE: HORIZ. 1:100
VERT. 0.01 M/M



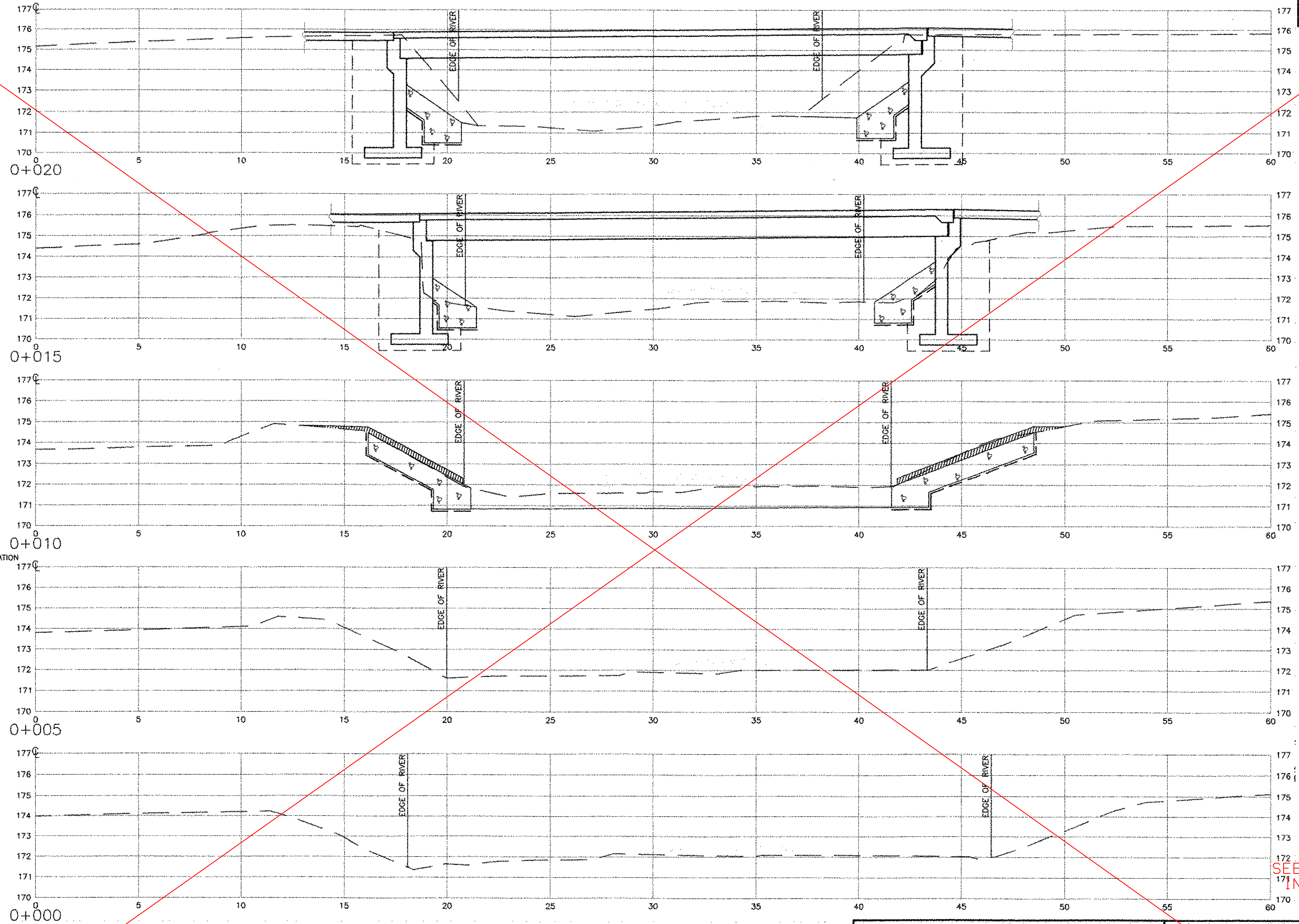
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NO.	DESCRIPTION	BY & DATE		
			CLARENDON, VERMONT	Bridge No. 14
			TOWN HIGHWAY NO. 1	Log Sta.
			Surv. Sta.	
TOWN HIGHWAY NO. 1 OVER THE GOLD RIVER				
BANKING DIAGRAM AND PAVEMENT TRANSITION				
Designed by: W.S. CHESBROUGH			Drawn by: E.D. SMALL	
Checked by: K. S. MARSHALL date 05/02			Bridge Design Supervisor: J.W. TUCKER date 05/02	
PROJECT: CLARENDON			PROJECT NO. BRO 1443(29)	
Bridge Sheet No.			SHEET 38 OF 41	

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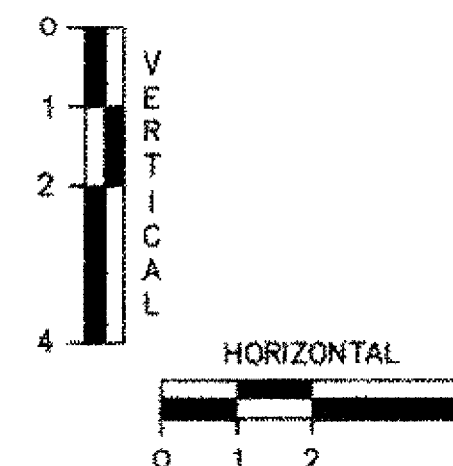
STA. 0+014.9 LT
END GRUBBING MATERIAL
STA. 0+014.1 RT
END GRUBBING MATERIAL

STA. 0+007.9 LT AND RT
BEGIN UNCLASSIFIED CHANNEL EXCAVATION
BEGIN GEOTEXTILE UNDER STONE FILL
BEGIN STONE FILL TYPE III
BEGIN GRUBBING MATERIAL



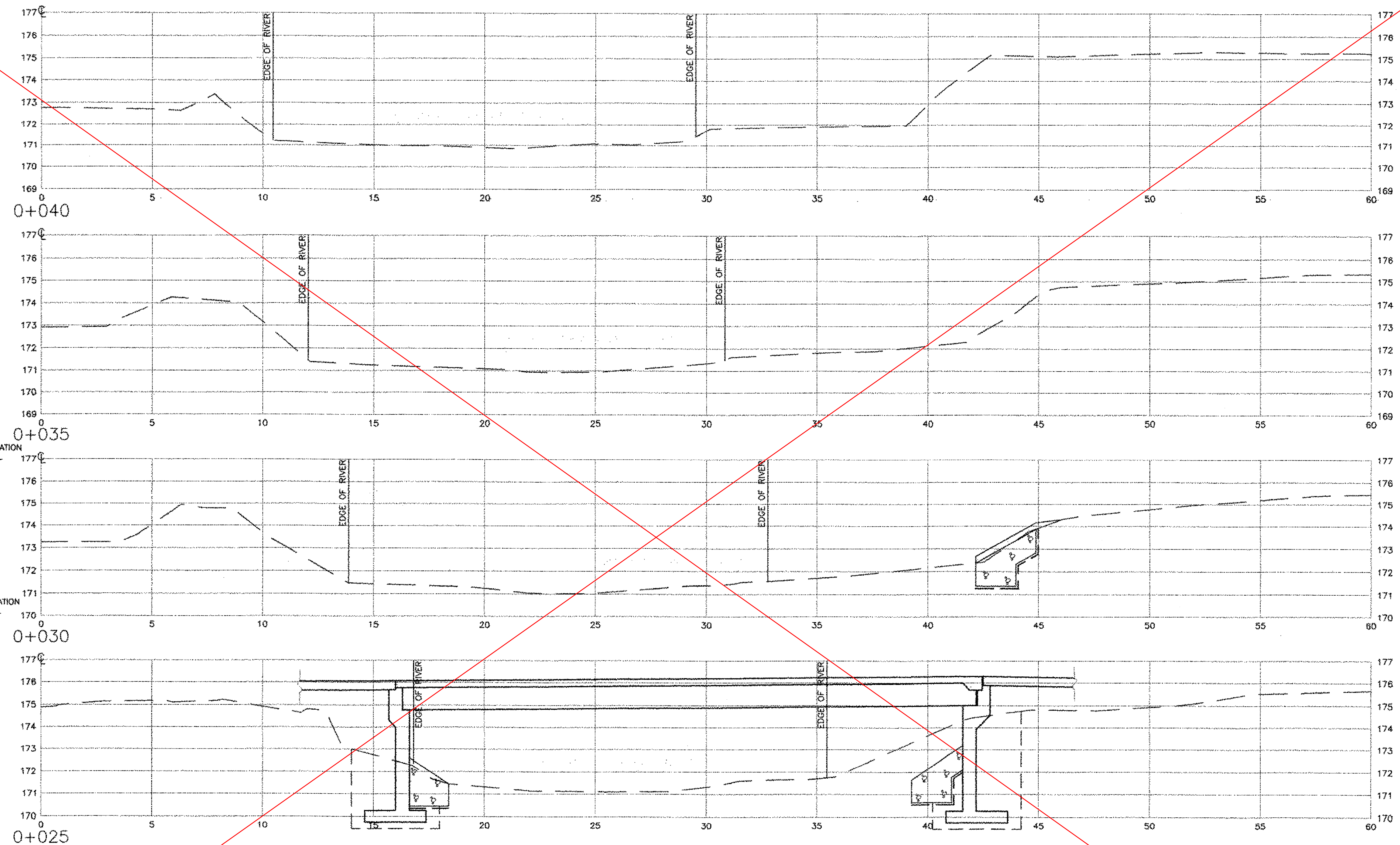
CHANNEL CROSS SECTIONS

SCALE: HORIZ. 1:100
VERT. 1:100



SEE CALCULATIONS FILE
IN ONBASE FOR FINAL
CROSS SECTIONS

REVISIONS			STATE OF VERMONT AGENCY OF TRANSPORTATION	
NO.	DESCRIPTION	BY & DATE		
 engineering planning management development			CLARENDON, VERMONT	
			TOWN HIGHWAY NO. 1	
			TOWN HIGHWAY NO. 1 OVER THE COLD RIVER	
			CHANNEL CROSS SECTIONS	
Designed by: W.S. CHESBROUGH		Drawn by: N.B. DIMICK		
Checked by: K. S. MARSHIA date 05/02		Bridge Design Supervisor: J.W. TUCKER date 05/02		
PROJECT: CLARENDON		PROJECT NO.: BRO 1443(29)		
Bridge Sheet No.		SHEET 40 of 41		



STA. 0+034.3 RT
END UNCLASSIFIED CHANNEL EXCAVATION
END GEOTEXTILE UNDER STONE FILL
END STONE FILL TYPE III
END GRUBBING MATERIAL

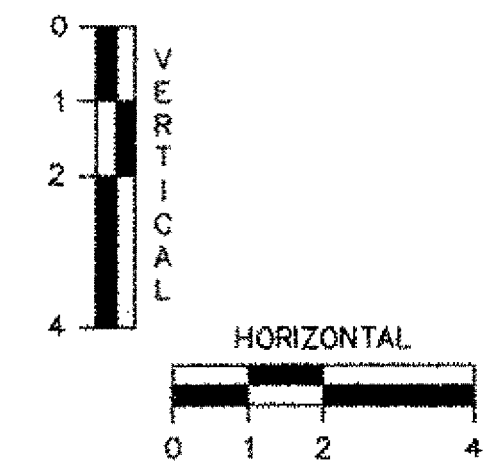
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END GEOTEXTILE UNDER STONE FILL
END STONE FILL TYPE III
END GRUBBING MATERIAL

STA. 0+025.1 LT
BEGIN GRUBBING MATERIAL

STA. 0+024.2 RT
BEGIN GRUBBING MATERIAL

SEE CALCULATIONS FILE
IN ONBASE FOR FINAL
CROSS SECTIONS

CHANNEL CROSS SECTIONS
SCALE: HORIZ. 1:100
VERT. 1:100



REVISIONS			STATE OF VERMONT AGENCY OF TRANSPORTATION	
NO.	DESCRIPTION	BY & DATE		
			CLARENDON, VERMONT	
			TOWN HIGHWAY NO. 1	
			TOWN HIGHWAY NO. 1 OVER THE COLD RIVER	
			CHANNEL CROSS SECTIONS	
			Designed by: W.S. CHESBROUGH	Drawn by: N.B. DIMICK
			Checked by: K. S. MARSHIA date 05/02	Bridge Design Supervisor: J.W. TUCKER date 05/02
			PROJECT: CLARENDON	PROJECT NO.: BRO 1443(29)
			Bridge Sheet No.	SHEET 41 of 41

