

Record Plans

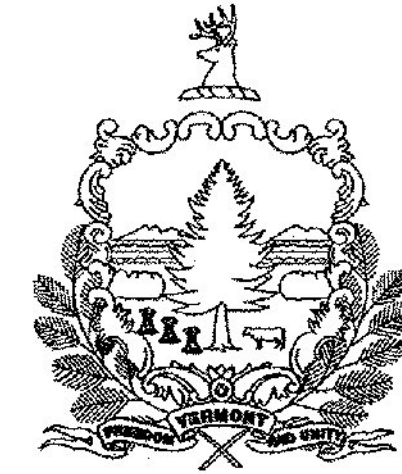
Robert Suckert

Prime Contractor: Blow and Cote Inc.

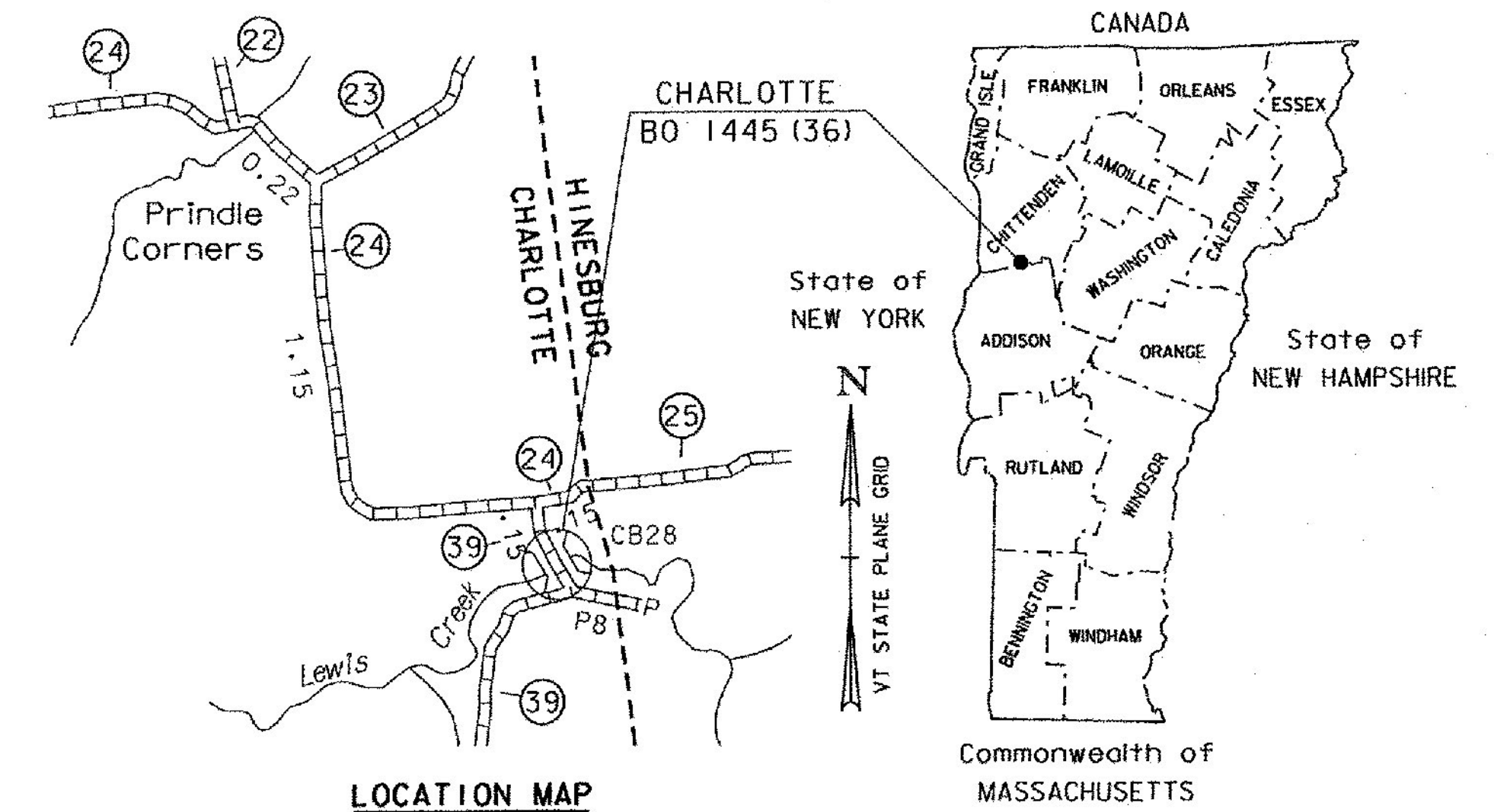
Construction Began Date: 7/18/16

Substantial Completion Date: 12/9/16

STATE OF VERMONT AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT BRIDGE PROJECT TOWN OF CHARLOTTE COUNTY OF CHITTENDEN



ROUTE NO : TH 39; CLASS 3 BRIDGE NO : 28

PROJECT LOCATION : ON TH 39 BEGINNING APPROXIMATELY 0.2 MILE SOUTH FROM ITS INTERSECTION WITH TH 24 AND EXTENDING SOUTHERLY APPROXIMATELY 0.01 MILE. ✓

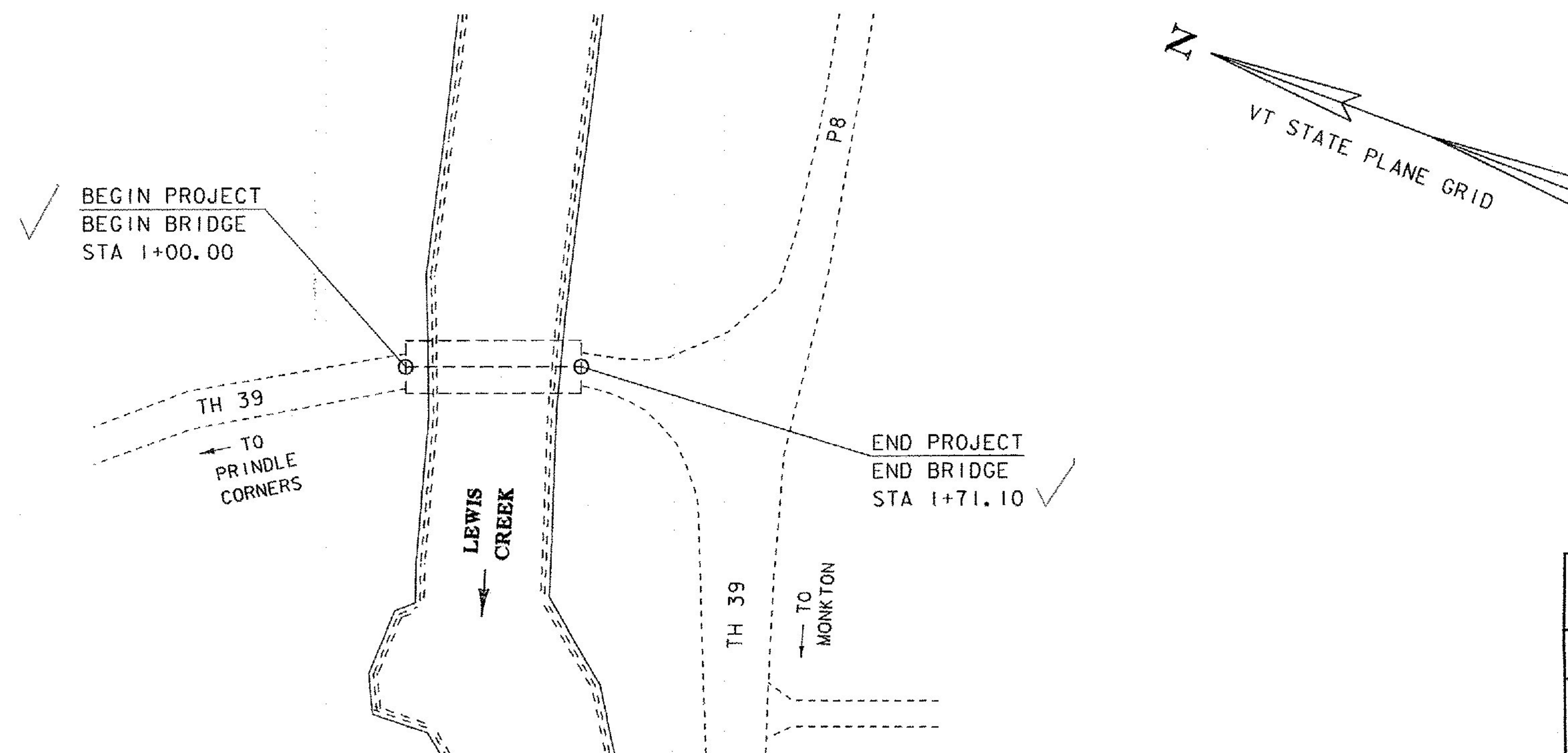
PROJECT DESCRIPTION : REHABILITATION OF THE SEGUIN COVERED BRIDGE, INCLUDING TIMBER SUPERSTRUCTURE, BRIDGE SEATS AND MINOR APPROACH WORK. ✓

LENGTH OF STRUCTURE : 71.1 ± FEET
LENGTH OF ROADWAY : 0.0 FEET ✓
LENGTH OF PROJECT : 71.1 ± FEET

RECORD PLANS	
CONTRACTOR:	BLOW & COTE INC. - MORRISVILLE, VT
RESIDENT ENGINEER:	ROBERT SUCKERT
CONSTRUCTION BEGAN:	JULY 18, 2016
CONSTRUCTION COMPLETE:	DECEMBER 9, 2016
RECORD PLANS BY:	ROBERT SUCKERT & JESSE IVES
I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.	
BY:	<i>[Signature]</i> RESIDENT ENGINEER
DATE:	4-27-17
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.	

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JULY 20, 2011 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

QUALITY ASSURANCE PROGRAM : LEVEL 2	
SURVEYED BY :	NA
SURVEYED DATE :	NA
DATUM	
VERTICAL	NA
HORIZONTAL	NA



NOT TO SCALE

DIRECTOR OF PROJECT DELIVERY	
APPROVED:	<i>[Signature]</i> DATE 2/2/2017
PROJECT MANAGER : M. SARGENT	
PROJECT NAME :	CHARLOTTE
PROJECT NUMBER :	BO 1445 (36)
SHEET 1 OF 13 SHEETS	

INDEX OF SHEETS

1	TITLE SHEET
2	INDEX OF SHEETS AND PROJECT DATA
3	PROJECT NOTES AND MATERIALS TABLE
4	QUANTITY SHEET
5	TYPICAL SECTIONS
6	TOP AND BOTTOM CHORD PLAN
7	TRUSS ELEVATIONS
8	DECK PLAN AND CONNECTION DETAILS
9	NEW POST AND BEARING BLOCK DETAILS
10	ABUTMENT AND END POST DETAILS
11	REINFORCING STEEL SCHEDULE
12	DETOUR LAYOUT
13	TRAFFIC SIGN SUMMARY

DESIGN CRITERIA

1. DESIGN LIVE LOAD AASHTO	H-7 (INVENTORY)	
2. DESIGN SPAN	64 FEET (TRUSS)	
3. ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL ON LEDGE	N/A	
4. ALLOWABLE LOAD FOR PILING	N/A	
TYPE	N/A	
ESTIMATED LENGTH	N/A	
5. STRUCTURAL STEEL AASHTO M270/M270M GRADE	N/A	
6. REINFORCING STEEL GRADE	N/A	
7. CONCRETE, HIGH PERFORMANCE CLASS A f _c :	N/A	
CONCRETE, HIGH PERFORMANCE CLASS B f _c :	N/A	
8. DESIGN SOIL UNIT WEIGHT	N/A	
9. DESIGN LOAD FOR SPREAD FOOTINGS ON SOIL	N/A	

HIGHWAY SAFETY & DESIGN DETAILS

HSD-621.06 GUARDRAIL TERMINAL LABEL DETAIL
11-03-2015

LIST OF STANDARDS

E-121	STANDARD SIGN PLACEMENT-CONVENTIONAL ROAD	08-08-1995
E-141	REGULATORY SIGN DETAILS	09-20-1995
G-1	STEEL BEAM GUARDRAIL DETAILS (POST, DELINEATOR, TYPICALS)	11-10-2015
G-1d	STEEL BEAM GUARDRAIL DETAILS (END TERMINAL, ANCHOR, MEDIUM)	02-10-2014
T-1	TRAFFIC CONTROL GENERAL NOTES	08-06-2012
T-10	CONVENTIONAL ROADS CONSTRUCTION APPROACH SIGNING	08-06-2012
T-28	CONSTRUCTION SIGN DETAILS	08-06-2012
T-30	CONSTRUCTION SIGN DETAILS	08-06-2012
T-35	CONSTRUCTION ZONE LONGITUDINAL DROP-OFFS	08-06-2012
T-36	CONSTRUCTION ZONE LONGITUDINAL DROP-OFFS FOR PAVING	08-06-2012

ASD LOAD RATING (TONS)

LOADING LEVELS (LOAD FACTOR)	TRUCK					
	H	HS	3S2	6 AXLE 3A, STR.	4A, STR.	5A, SEMI.
INVENTORY						
† POSTED	7					
OPERATING						

COMMENTS:
† COUNTERBRACE CONTROLS LOAD RATING.

NOTE: 3RD END POST CONTROLS RATING FOR DEAD LOAD PLUS 70% SNOW LOAD CASE.

PROJECT NAME: CHARLOTTE
PROJECT NUMBER: BO 1445(36)

FILE NAME: sl4j235+yp.dgn	PLOT DATE: 21-MAR-2016
PROJECT LEADER: M. SARGENT	DRAWN BY: G. ROY
DESIGNED BY: J. WEAVER	CHECKED BY: J. WEAVER
INDEX OF SHEETS AND PROJECT DATA	SHEET 2 OF 13

GENERAL

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011 AND ITS LATEST REVISIONS, THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FIFTH EDITION, DATED 2010 AND ITS LATEST REVISIONS AND THE AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS THIRD EDITION, DATED 2010 AND ITS LATEST REVISIONS.
2. ALL INFORMATION, DIMENSIONS, AND DETAILS PROVIDED IN THE PLANS SHALL BE CHECKED AND VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCING THE WORK.
3. ALL WORK IS TO BE COMPLETED WITHIN THE AVAILABLE TOWN-OWNED RIGHT-OF-WAY. THE THREE ROD R.O.W. PORTION IS ASSUMED TO BE APPROXIMATELY CENTERED ABOUT THE EXISTING CENTER LINE OF THE BRIDGE OR ROADWAY. NO PROVISIONS HAVE BEEN MADE TO GO OUTSIDE THE EXISTING RIGHT-OF-WAY AND NO WORK SHALL BE PERFORMED OR PAID FOR OUTSIDE THE EXISTING TOWN-OWNED RIGHT-OF-WAY LIMITS. SHOULD THE CONTRACTOR REQUIRE ADDITIONAL R.O.W, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL EASEMENTS AT NO ADDITIONAL COST TO THE STATE.
4. GREAT CARE SHALL BE TAKEN BY THE CONTRACTOR TO PREVENT ANY MATERIAL FROM ENTERING THE STREAM BED PER SECTION 105 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION. ANY MATERIAL THAT DOES ESCAPE THE CONTRACTOR'S CONTAINMENT SYSTEM WILL BE RECOVERED IMMEDIATELY.
5. ALL WORK SHALL PROCEED IN A CAREFUL, ORDERLY MANNER SO THAT AFFECTED HISTORIC STRUCTURES ARE NOT DAMAGED IN ANY WAY. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL DAMAGE TO THE STRUCTURE AS A RESULT OF ITS OPERATIONS AT NO COST TO THE STATE. ALL DAMAGE WILL BE REPORTED TO THE PROJECT MANAGER IMMEDIATELY AND NO REPAIRS WILL BE MADE UNTIL APPROVED BY THE AGENCY.
6. THE BRIDGE WILL REMAIN CLOSED DURING CONSTRUCTION. PRIOR TO ANY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL SUBMIT A SEQUENCE OF CONSTRUCTION FOR THE ENGINEER'S APPROVAL. THE SEQUENCE OF CONSTRUCTION SUBMITTAL WILL BE CONSIDERED INCIDENTAL TO THE WORK REQUIRED FOR ITEM 635.11, MOBILIZATION/DEMobilIZATION. GENERAL PLACEMENT OF APPROACH SIGNING AND "ROAD CLOSED" SIGNS SHALL BE PLACED ACCORDING TO THE MUTCD.
7. EXCEPT AS NOTED OTHERWISE, ITEM 529.20, PARTIAL REMOVAL OF STRUCTURE, WILL INCLUDE ANY WORK NECESSARY TO FACILITATE AND ACCOMPLISH THE PROJECT SCOPE OF WORK AS DEFINED BY THE CONTRACT DOCUMENTS AND AS DIRECTED BY THE ENGINEER: REMOVING AND DISPOSING OF SUPERSTRUCTURE MEMBERS AND PORTIONS OF MEMBERS; AS WELL AS REMOVING AND STOCKPILING MEMBERS AND PORTIONS OF MEMBERS FOR RE-USE, INCLUDING REMOVING AND STOCKPILING MEMBERS AND PORTIONS OF MEMBERS FOR THE CONTRACTOR'S METHOD OF REHABILITATION. NO BURNING OF REMOVED MATERIALS AT THE PROJECT SITE WILL BE ALLOWED. EXISTING COVERED BRIDGE LUMBER AND TIMBERS MAY CONTAIN HAZARDOUS WOOD PRESERVATIVES. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE STATE, ITS OFFICERS, AND EMPLOYEES HARMLESS REGARDING THE CONTRACTOR'S HANDLING OF THESE MATERIALS AND SUBSEQUENT USE, RE-USE, AND DISPOSAL OF THIS LUMBER OR TIMBERS.
8. EXCEPT AS NOTED, ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1" X 1".
9. WHERE NOT NOTED, ALL LUMBER AND TIMBER DIMENSIONS ARE IN INCHES.
10. UNLESS NOTED OTHERWISE, ALL NEW STRUCTURAL LUMBER AND TIMBER SHALL BE UNTREATED, FULL SAWN (TO THE INDICATED CROSS SECTION DIMENSIONS) ROUGH SURFACE MEMBERS OR BOARDS. WHEN SPECIFIED, PRESSURE TREATMENT SHALL BE TYPE II, PER SECTION 726 OF THE STANDARD SPECIFICATIONS.
11. THE WORK PAID FOR UNDER ITEM 506.60, STRUCTURAL STEEL, WILL INCLUDE: NEW GALVANIZED ½" X 10" X 10" STEEL PLATES; 1" DIA. TIE RODS, TURNBUCKLES, NUTS AND WASHERS AS WELL AS RAIL POST ANCHOR BOLTS, NUTS AND WASHERS. FABRICATION PLAN AND ERECTION PLAN SUBMITTALS WILL NOT BE REQUIRED FOR STEEL COMPONENTS FURNISHED UNDER PAY ITEM 506.60. ALL ROD ASSEMBLIES SHALL BE SNUG TIGHT OR TIGHTENED AS DIRECTED BY THE ENGINEER.
12. THE EXISTING CAMBER OF THE SUPERSTRUCTURE IS ASSUMED TO BE ADEQUATE AND SHALL BE MAINTAINED DURING REHABILITATION CONSTRUCTION ACTIVITIES, UNTIL COMPLETION OF THE PROJECT. SEE SPECIAL PROVISION 900.645, REHABILITATING COVERED BRIDGE SUPERSTRUCTURE. AT THE BEGINNING AND END OF THE PROJECT, THE CONTRACTOR SHALL MEASURE EXISTING CAMBER, TAKING ROD SHOTS AT EACH PANEL POINT OR CROSS TIE LOCATION FOR EACH TRUSS, AND SUBMITTING THESE RESULTS TO THE ENGINEER. PAYMENT WILL BE CONSIDERED INCIDENTAL TO ITEM 900.645 SPECIAL PROVISION (REHABILITATING COVERED BRIDGE SUPERSTRUCTURE).

TIMBER CONNECTORS

13. EXCEPT AS SPECIFIED IN THE STRUCTURAL STEEL NOTES, PAYMENT FOR STRUCTURAL LUMBER AND TIMBER AND NON-STRUCTURAL LUMBER QUANTITIES SHALL BE FULL COMPENSATION FOR DETAILING, FURNISHING, TRANSPORTING, HANDLING, PLACING AND INSTALLING NEW AND REUSED TIMBER CONNECTORS WHICH ARE USED TO CONNECT NEW LUMBER AND TIMBER MEMBERS WITH EXISTING LUMBER AND TIMBER MEMBERS.
14. EXCEPT AS SPECIFIED IN THE STRUCTURAL STEEL NOTES, DETAILING, FURNISHING, TRANSPORTING, HANDLING, AND INSTALLING NEW AND REUSED TIMBER CONNECTORS WHICH ARE USED TO CONNECT EXISTING LUMBER AND TIMBER MEMBERS SHALL BE CONSIDERED INCIDENTAL TO THE WORK REQUIRED FOR ITEM 900.645 SPECIAL PROVISION (REHABILITATING COVERED BRIDGE SUPERSTRUCTURE).

MATERIALS FOR LUMBER AND TIMBER

MEMBER TYPE	PROPOSED SIZE (SAWN TO ACTUAL SIZE UNLESS NOTED OTHERWISE)	PROPOSED SPECIES & STRESS GRADE	PRESERVATIVE PRESSURE TREATMENT	FINISH	PAY ITEM FOR COMPONENT
TRUSS - TOP CHORDS	10" X 10"	SOUTHERN YELLOW PINE NO.1		ROUGH	522.20 STRUCTURAL LUMBER AND TIMBER, UNTREATED
TRUSS - BOTTOM CHORDS	8" X 8"	SOUTHERN YELLOW PINE NO.1		ROUGH	522.20 STRUCTURAL LUMBER AND TIMBER, UNTREATED
TRUSS - ARCHES (REPAIR AS REQUIRED)	4 ¾" X 11 ¾"	EASTERN HEMLOCK NO.1		ROUGH	522.20 STRUCTURAL LUMBER AND TIMBER, UNTREATED
TRUSS - DIAGONALS	10" X 8"	SOUTHERN YELLOW PINE NO.1		ROUGH	522.20 STRUCTURAL LUMBER AND TIMBER, UNTREATED
TRUSS - POSTS	10" X 17 ½" (MAX.)	SOUTHERN YELLOW PINE NO.1		ROUGH	522.20 STRUCTURAL LUMBER AND TIMBER, UNTREATED
TRUSS - UPPER CHECK BRACES	9 ¾" X 3 ½"	EASTERN HEMLOCK NO.1		ROUGH	522.20 STRUCTURAL LUMBER AND TIMBER, UNTREATED
KNEE BRACES	4 ¾" X 4"	EASTERN HEMLOCK NO.1		ROUGH	522.20 STRUCTURAL LUMBER AND TIMBER, UNTREATED
STRUCTURAL SIDING NAILERS	1 ½" X 5 ½", 1 ¼" X 4"	EASTERN SPRUCE NO.1		ROUGH	522.20 STRUCTURAL LUMBER AND TIMBER, UNTREATED
SIDING	1" X 8"	EASTERN HEMLOCK NO.1 COMMON		ROUGH	522.30 NONSTRUCTURAL LUMBER, UNTREATED
SIDING TRIM	MATCH EXISTING	EASTERN SPRUCE NO.1 COMMON		ROUGH	522.30 NONSTRUCTURAL LUMBER, UNTREATED
BLOCKING	AS NOTED	* DOUGLAS FIR NO.1, UNLESS NOTED OTHERWISE	TYPE II	ROUGH	522.25 STRUCTURAL LUMBER AND TIMBER, TREATED
WEARING SURFACE	1 ¾" X 10"	WHITE OAK NO.2		ROUGH	522.20 STRUCTURAL LUMBER AND TIMBER, UNTREATED
GLULAM FLOOR BEAMS	12 ¾" X 10 ½"	16F - V2 SP/SP	TYPE II	INDUSTRIAL APPEARANCE	522.40 STRUCTURAL GLUED LAMINATED TIMBER
GLULAM FLOOR DECKING	5 ½" X 33" DECK PANELS W/ 5 ½" X 5 ½" TRANSVERSE STIFFENERS	16F - V2 SP/SP	TYPE II	INDUSTRIAL APPEARANCE	522.40 STRUCTURAL GLUED LAMINATED TIMBER
WOOD TRUNNELS	1 ¼" DIA.	WHITE OAK			900.645 SPECIAL PROVISION (REHABILITATING COVERED BRIDGE SUPERSTRUCTURE)

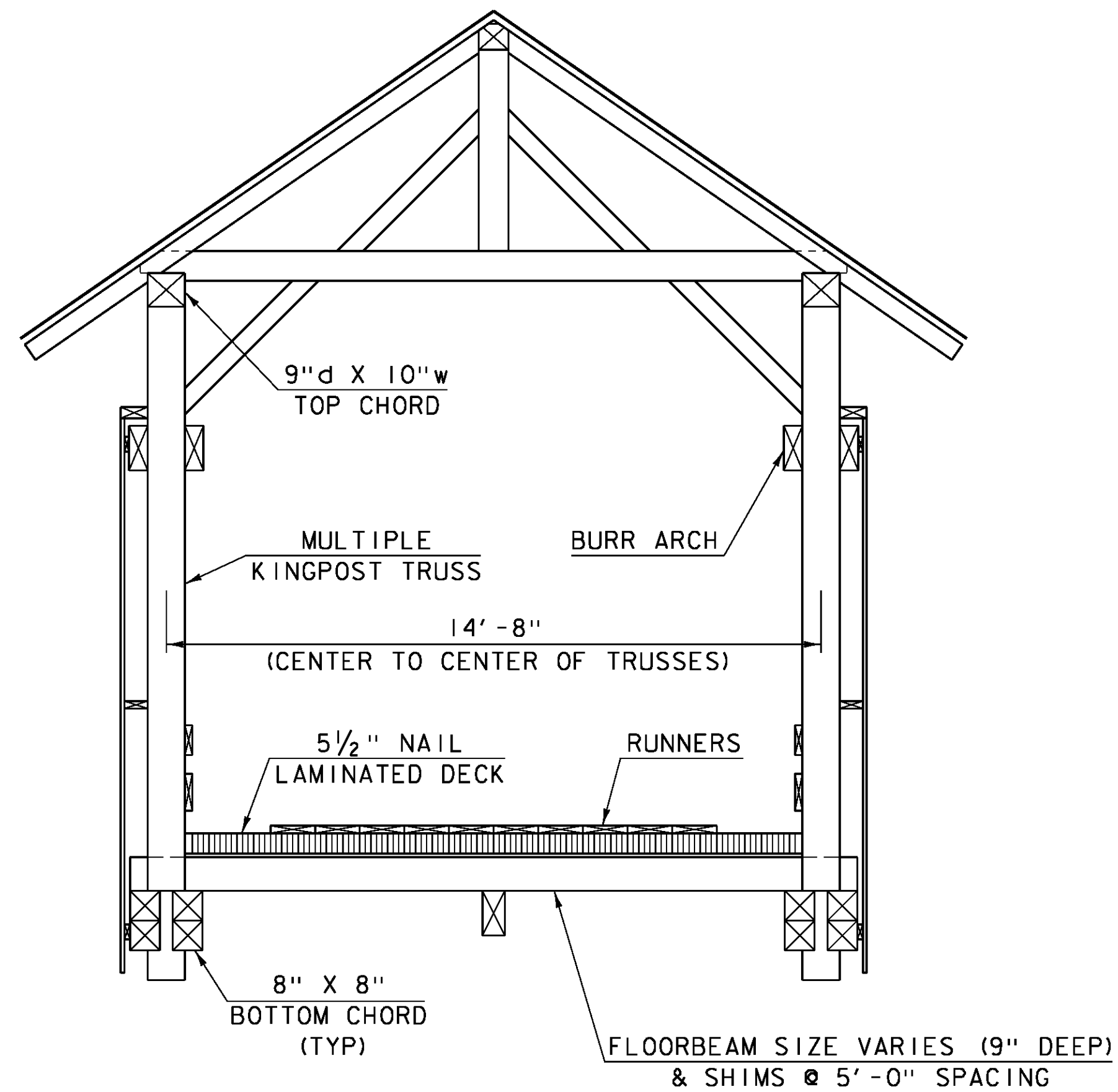
* UNTREATED BLACK LOCUST BLOCKING MAY BE SUBSTITUTED. IN THIS CASE, MOISTURE CONTENT AND CERTIFICATION REQUIREMENTS OF THE STANDARD SPECIFICATIONS SHALL BE WAIVED.

PROJECT NAME:	CHARLOTTE
PROJECT NUMBER:	BO 1445(36)
FILE NAME:	sl4j235notes.dgn
PROJECT LEADER:	M. SARGENT
DESIGNED BY:	J. WEAVER
PROJECT NOTES AND MATERIALS TABLE	
PLOT DATE:	26-FEB-2016
DRAWN BY:	G. ROY
CHECKED BY:	J. WEAVER
SHEET	3 OF 13

QUANTITY SHEET

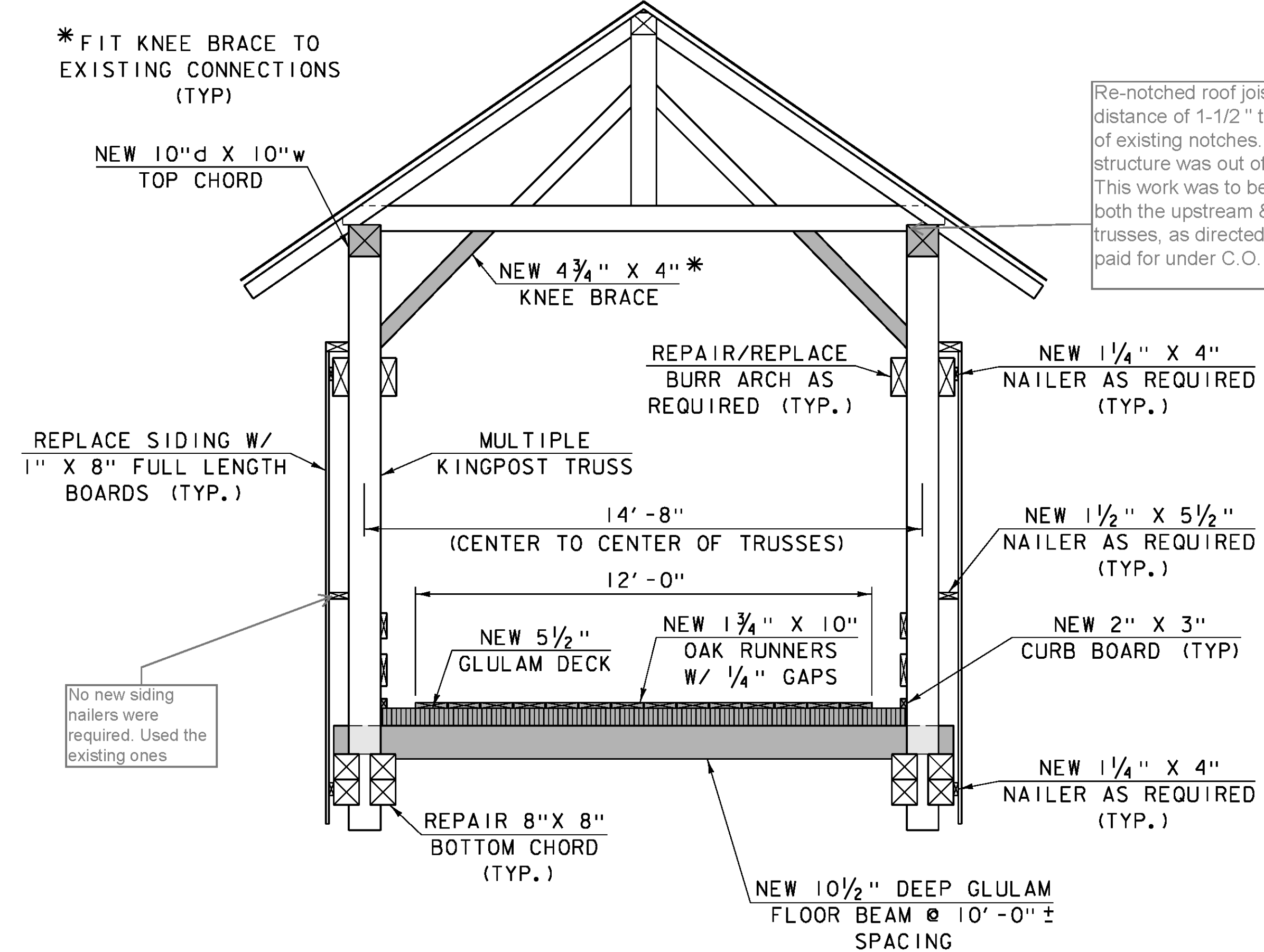
SUMMARY OF ESTIMATED QUANTITIES										TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES			
								ROADWAY	BRIDGE	FULL C.E. ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
								1			1		CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)	204.22				
									4		4		CY	STRUCTURE EXCAVATION	204.25				
									4		4		CY	GRANULAR BACKFILL FOR STRUCTURES	204.30				
									13		13		CY	CONCRETE, HIGH PERFORMANCE CLASS B	501.34				
									1		1		LS	SHORING SUPERSTRUCTURE	502.10				
									760		760		LB	STRUCTURAL STEEL	506.60				
									830		830		LB	REINFORCING STEEL, LEVEL I	507.11				
									16		16		LF	DRILLING AND GROUTING DOWELS	507.16				
									2		2		GAL	WATER REPELLENT, SILANE	514.10				
									4.8		4.8		MFBM	STRUCTURAL LUMBER AND TIMBER, UNTREATED	522.20				
									0.7		0.7		MFBM	STRUCTURAL LUMBER AND TIMBER, TREATED	522.25				
									2		2		MFBM	NONSTRUCTURAL LUMBER, UNTREATED	522.30				
									1		1		LS	STRUCTURAL GLUED LAMINATED TIMBER (2.1 MFBM)(FLOORBEAMS)	522.40				
									1		1		LS	STRUCTURAL GLUED LAMINATED TIMBER (5.4 MFBM)(DECK)	522.40				
									20		20		LF	BRIDGE RAILING REPAIR, TYPE III	525.60				
									1		1		EACH	PARTIAL REMOVAL OF STRUCTURE	529.20				
									8		8		CY	REMOVAL OF CONCRETE OR MASONRY	529.25				
									10		10		SY	REPAIRING STONE MASONRY	602.40				
								45			45		LF	REMOVE AND RESET GUARDRAIL	621.75				
										1	1		LS	FIELD OFFICE, ENGINEERS	631.10				
										3000	3000		DL	FIELD OFFICE TELEPHONE (N.A.B.I.)	631.26				
									1		1		LS	MOBILIZATION/DEMobilIZATION	635.11				
									1		1		LS	TRAFFIC CONTROL	641.10				
									1		1		LS	TIMBER PAINTING, ENVIRONMENTAL PROTECTION	660.10				
									1		1		LS	TIMBER PAINTING, FIRE RETARDANT	660.20				
									1		1		LS	TIMBER PAINTING, INSECTICIDE/FUNGICIDE	660.30				
								10			10		SF	TRAFFIC SIGNS, TYPE A	675.20				
								2			2		EACH	REMOVING SIGNS	675.50				
									1		1		LS	SPECIAL PROVISION (REHABILITATING COVERED BRIDGE SUPERSTRUCTURE)	900.645				

PROJECT NAME: CHARLOTTE
 PROJECT NUMBER: BO 1445(36)
 FILE NAME: sl4j235qs.dgn
 PROJECT LEADER: M. SARGENT
 DESIGNED BY: J. WEAVER
 QUANTITY SHEET
 PLOT DATE: 26-FEB-2016
 DRAWN BY: G. ROY
 CHECKED BY: J. WEAVER
 SHEET 4 OF 13



EXISTING TRUSS TYPICAL SECTION

SCALE: 3/8" = 1'-0"



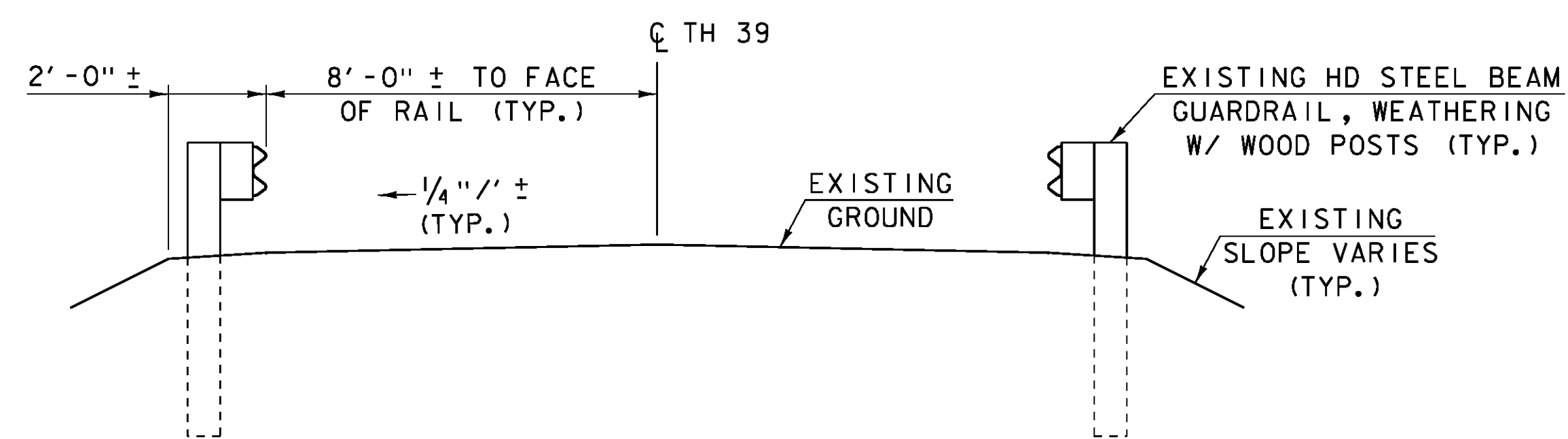
PROPOSED TRUSS TYPICAL SECTION

SCALE: 3/8" = 1'-0"

NEW MEMBERS

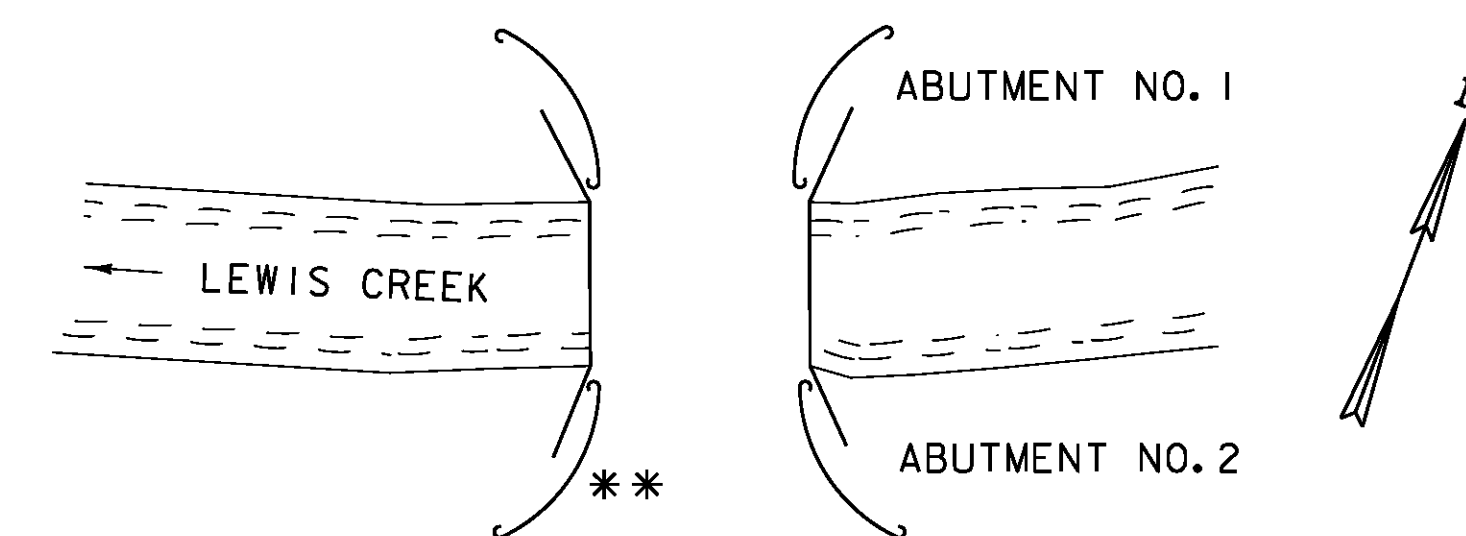
Re-notched roof joists to a distance of 1-1/2" to the outside of existing notches. Existing structure was out of plumb by 4". This work was to be performed at both the upstream & downstream trusses, as directed by W.O.# 6 & paid for under C.O. # 004.

No new siding nailers were required. Used the existing ones



EXISTING ROADWAY APPROACH TYPICAL SECTION

SCALE: 3/8" = 1'-0"



GUARDRAIL SCHEMATIC PLAN
NOT TO SCALE

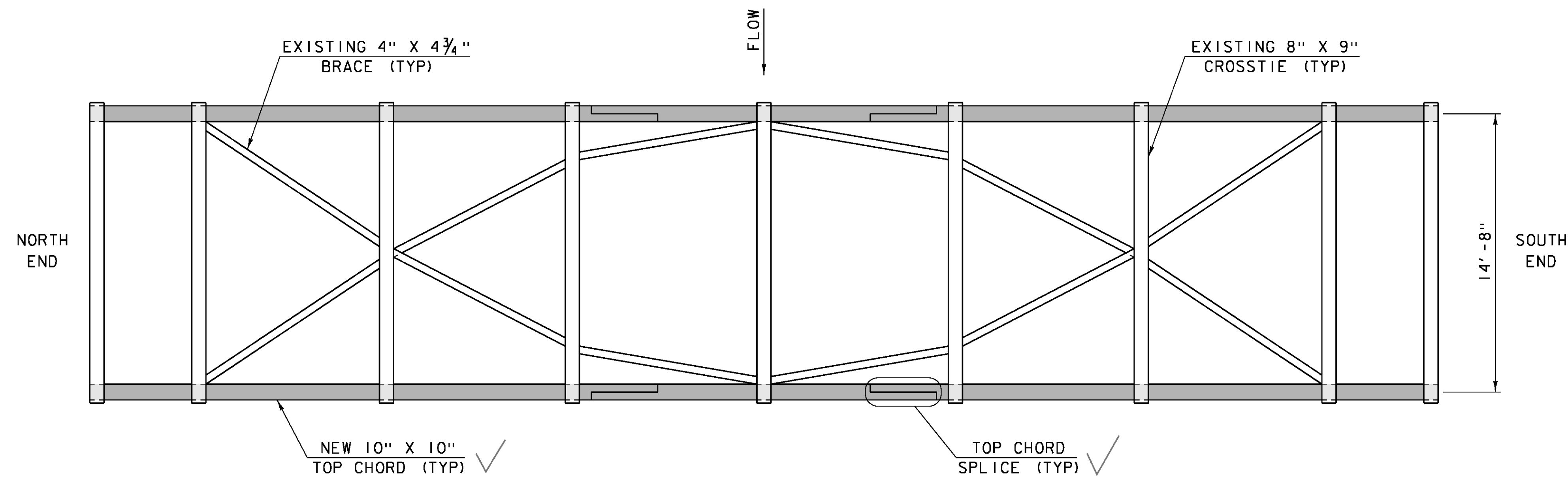
Guardrail was in poor condition. All of the rail on the North side of the bridge was replaced with new steel beam rail, weathered. All of the rail on the South side of the bridge was removed and reset.

** LIMITS OF REMOVE AND RESET GUARDRAIL = 45'-0" AT THIS LOCATION. WILL BE PAID FOR UNDER ITEM 621.75, REMOVE AND RESET GUARDRAIL. OTHERWISE, REWORK GUARDRAIL AND ADD END POSTS AT EACH PORTAL CORNER. WILL BE PAID FOR UNDER ITEM 525.60, BRIDGE RAILING REPAIR, TYPE III. SEE "ABUTMENT AND END POST DETAILS", SHEET 10, FOR DETAILS.

PROJECT NAME: CHARLOTTE
PROJECT NUMBER: BO 1445(36)

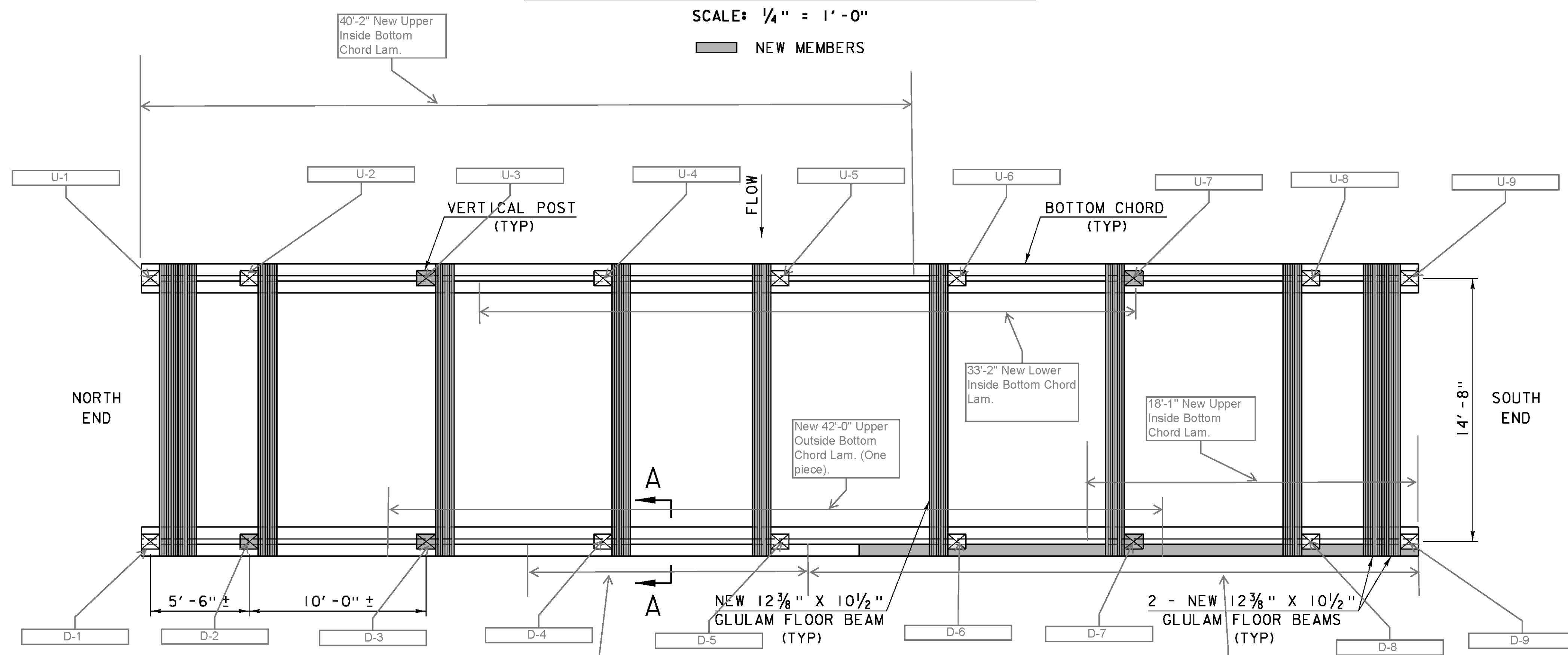
FILE NAME: sl4j235typ.dgn
PROJECT LEADER: M. SARGENT
DESIGNED BY: J. WEAVER
TYPICAL SECTIONS

PLOT DATE: 26-FEB-2016
DRAWN BY: G. ROY
CHECKED BY: J. WEAVER
SHEET 5 OF 13



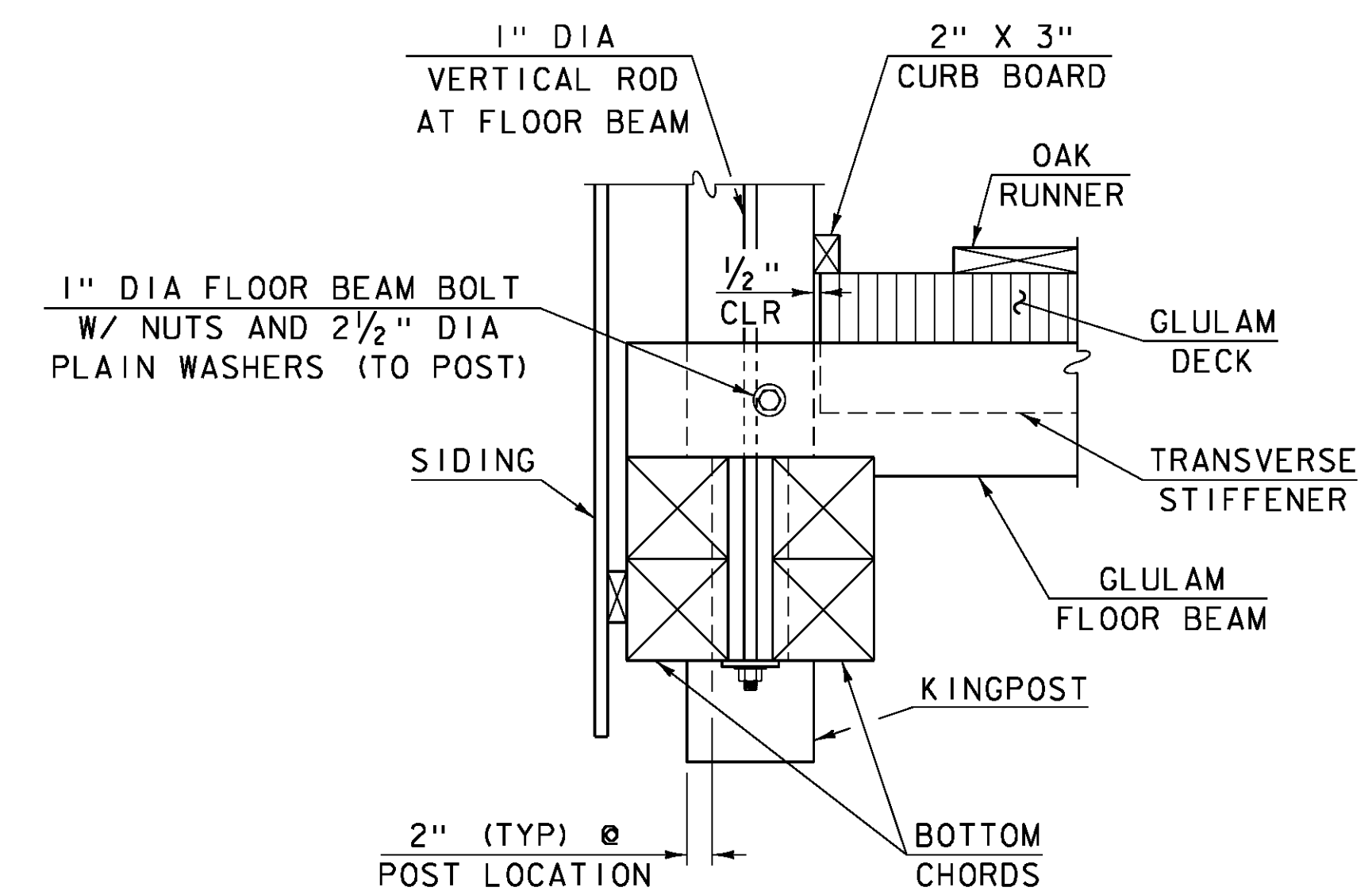
TOP CHORD AND BRACING PLAN

SCALE: 1/4" = 1'-0"
 ■ NEW MEMBERS



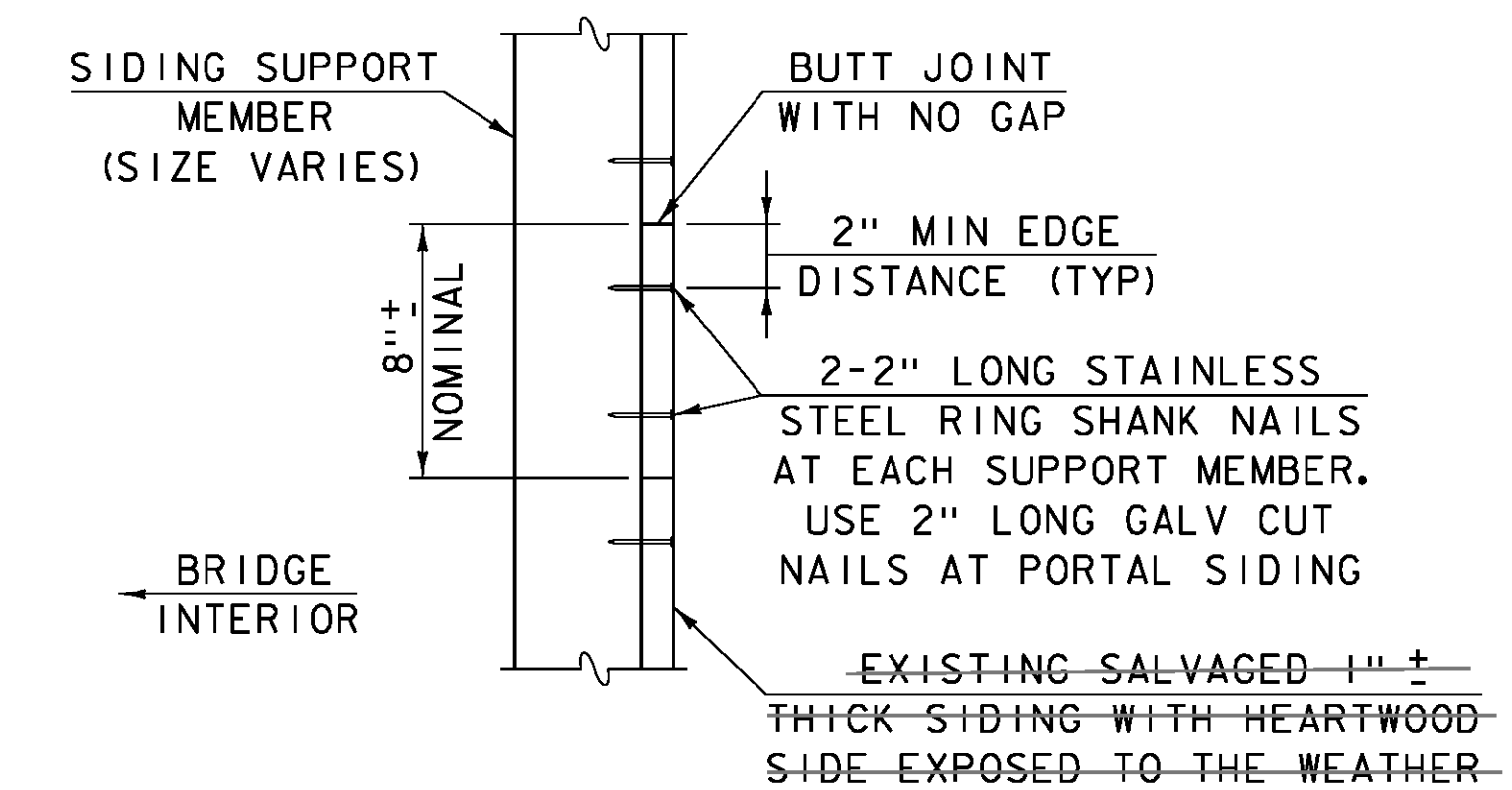
BOTTOM CHORD AND FLOOR BEAM PLAN

SCALE: 1/4" = 1'-0"
 ■ NEW MEMBERS



SECTION A-A

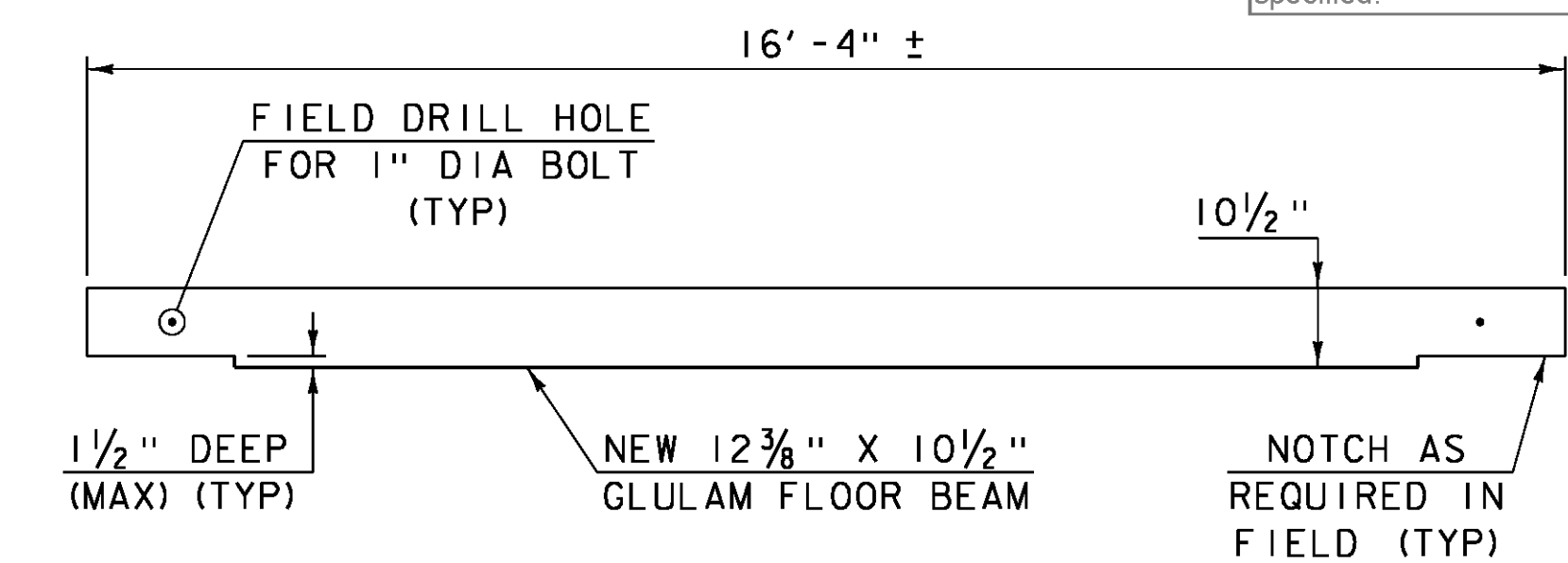
SCALE: 1" = 1'-0"



SIDING DETAIL

(PLAN VIEW)
 NOT TO SCALE

This is a generic detail. All Siding was replaced with 1"x 8" Eastern Hemlock, No. 1 Common. See Plan Sheet #5 where replacement of the siding is specified.



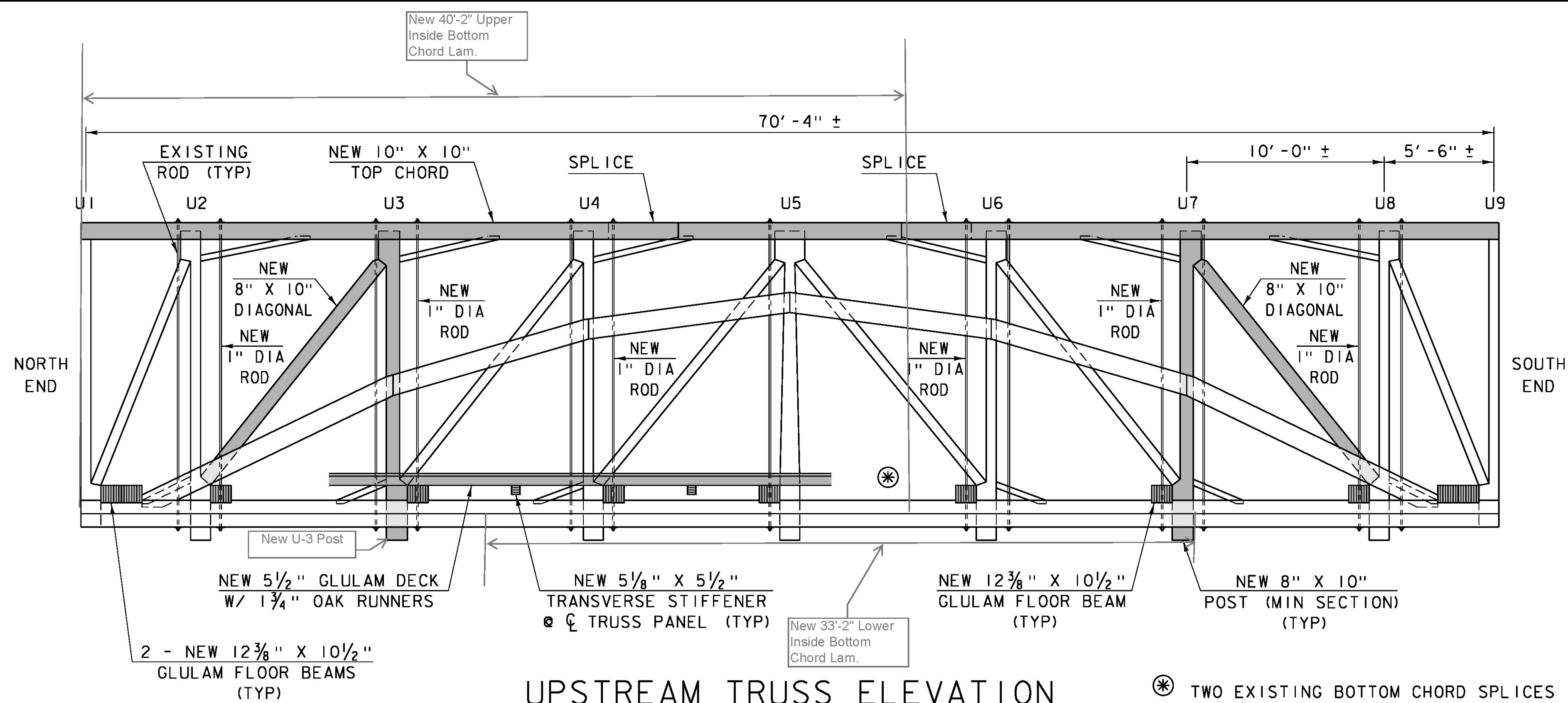
FLOOR BEAM DETAIL

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

PROJECT NAME: CHARLOTTE
 PROJECT NUMBER: BO 1445(36)

FILE NAME: sl4j235truss.dgn
 PROJECT LEADER: M. SARGENT
 DESIGNED BY: J. WEAVER
 TOP AND BOTTOM CHORD PLAN

PLOT DATE: 15-JAN-2016
 DRAWN BY: G. ROY
 CHECKED BY: J. WEAVER
 SHEET 6 OF 13



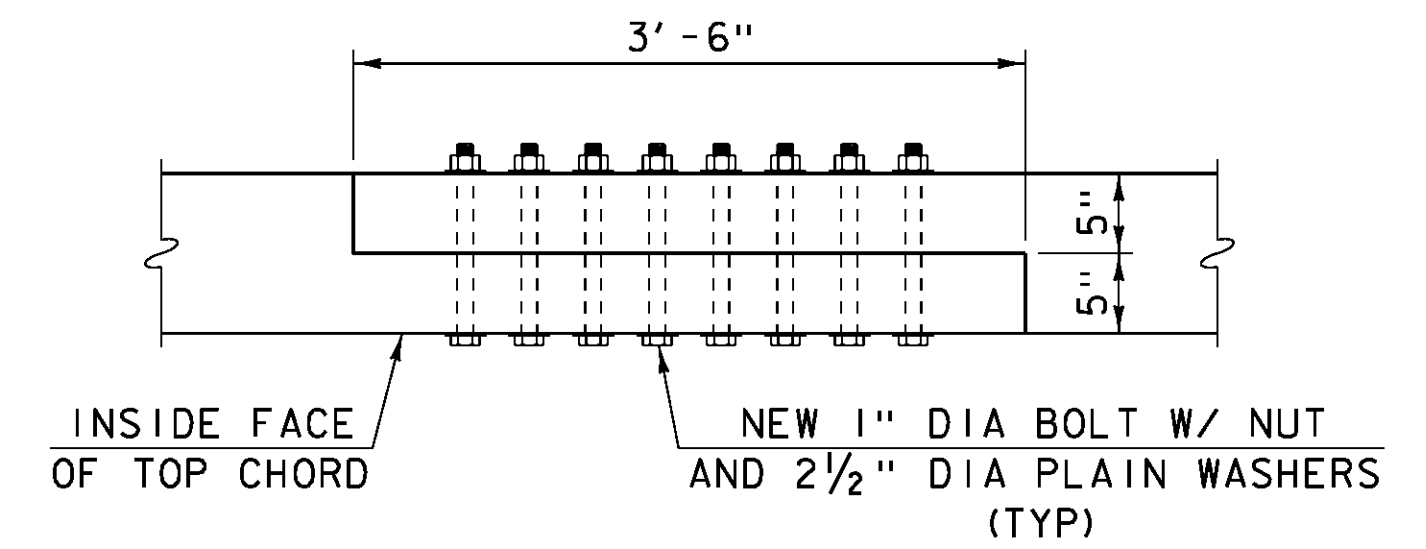
UPSTREAM TRUSS ELEVATION

SCALE: 1/4" = 1'-0"

(INSIDE VIEW)

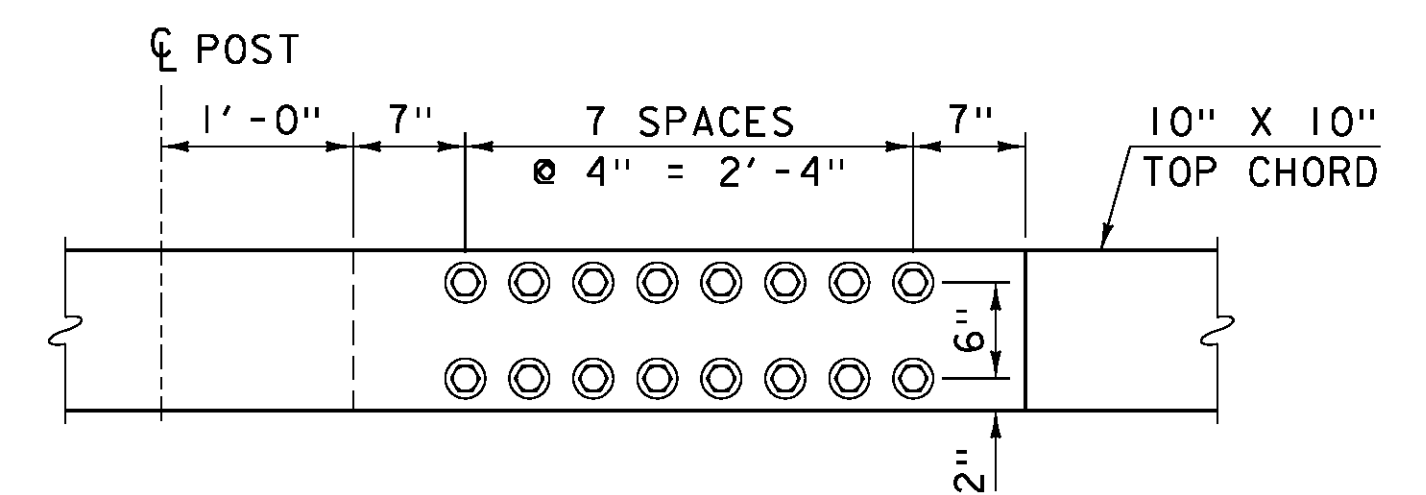
NEW MEMBERS

* TWO EXISTING BOTTOM CHORD SPLICES AT THIS PANEL. SEE ELEVATION VIEW BOTTOM CHORD SPLICE FOR DETAIL.



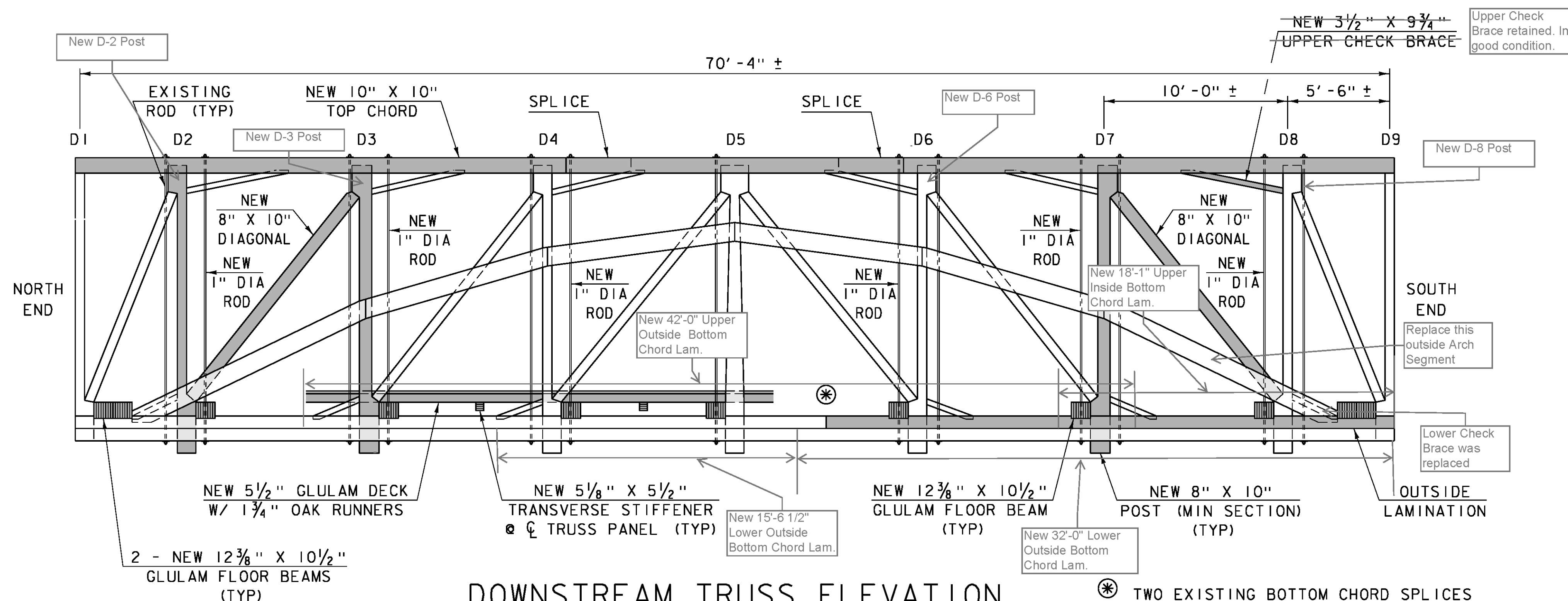
**PLAN VIEW
TOP CHORD SPLICE**

SCALE: 1" = 1'-0"



**ELEVATION VIEW
TOP CHORD SPLICE**

SCALE: 1" = 1'-0"



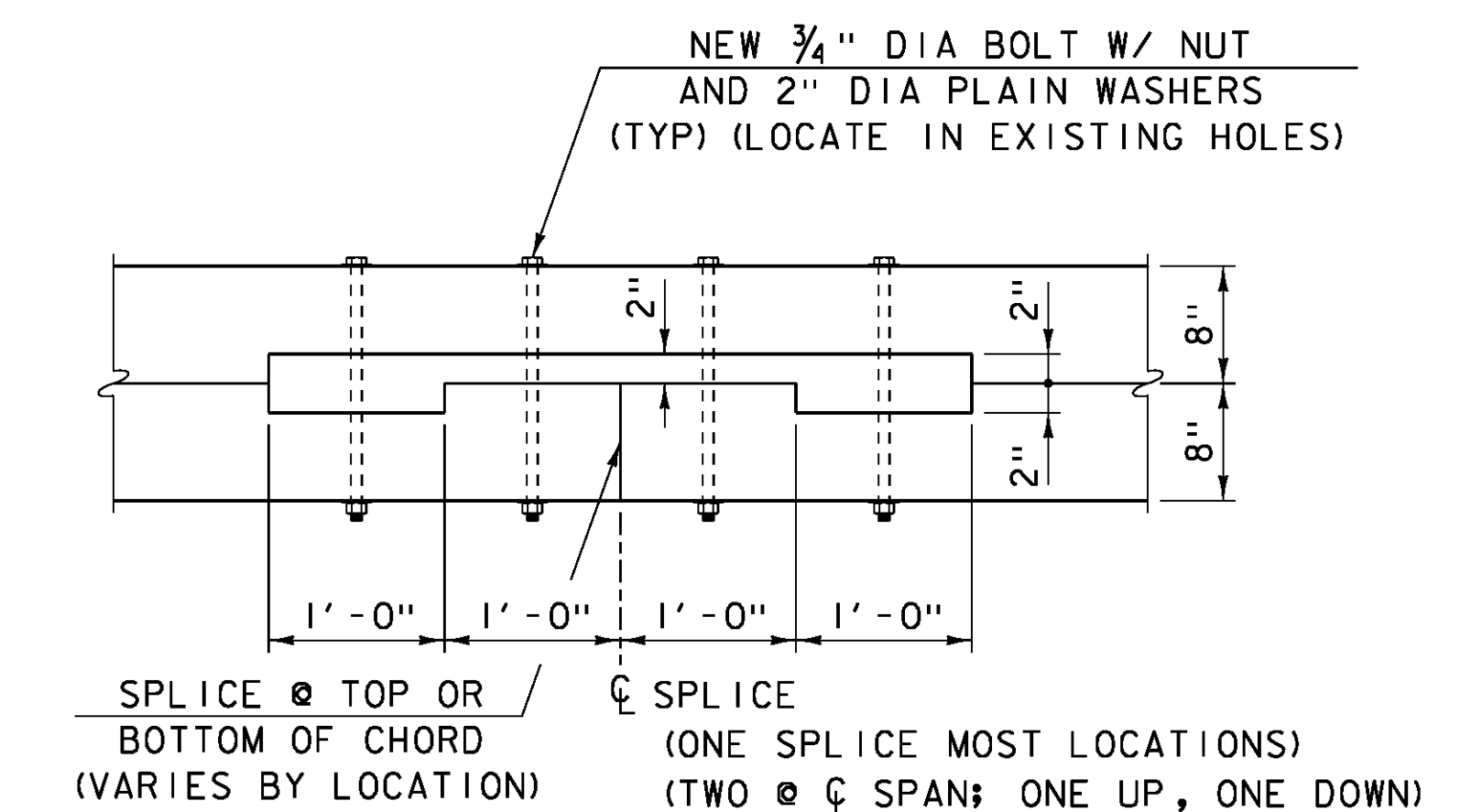
DOWNSTREAM TRUSS ELEVATION

SCALE: 1/4" = 1'-0"

(OUTSIDE VIEW)

NEW MEMBERS

* TWO EXISTING BOTTOM CHORD SPLICES AT THIS PANEL. SEE ELEVATION VIEW BOTTOM CHORD SPLICE FOR DETAIL.



**ELEVATION VIEW
BOTTOM CHORD SPLICE †**

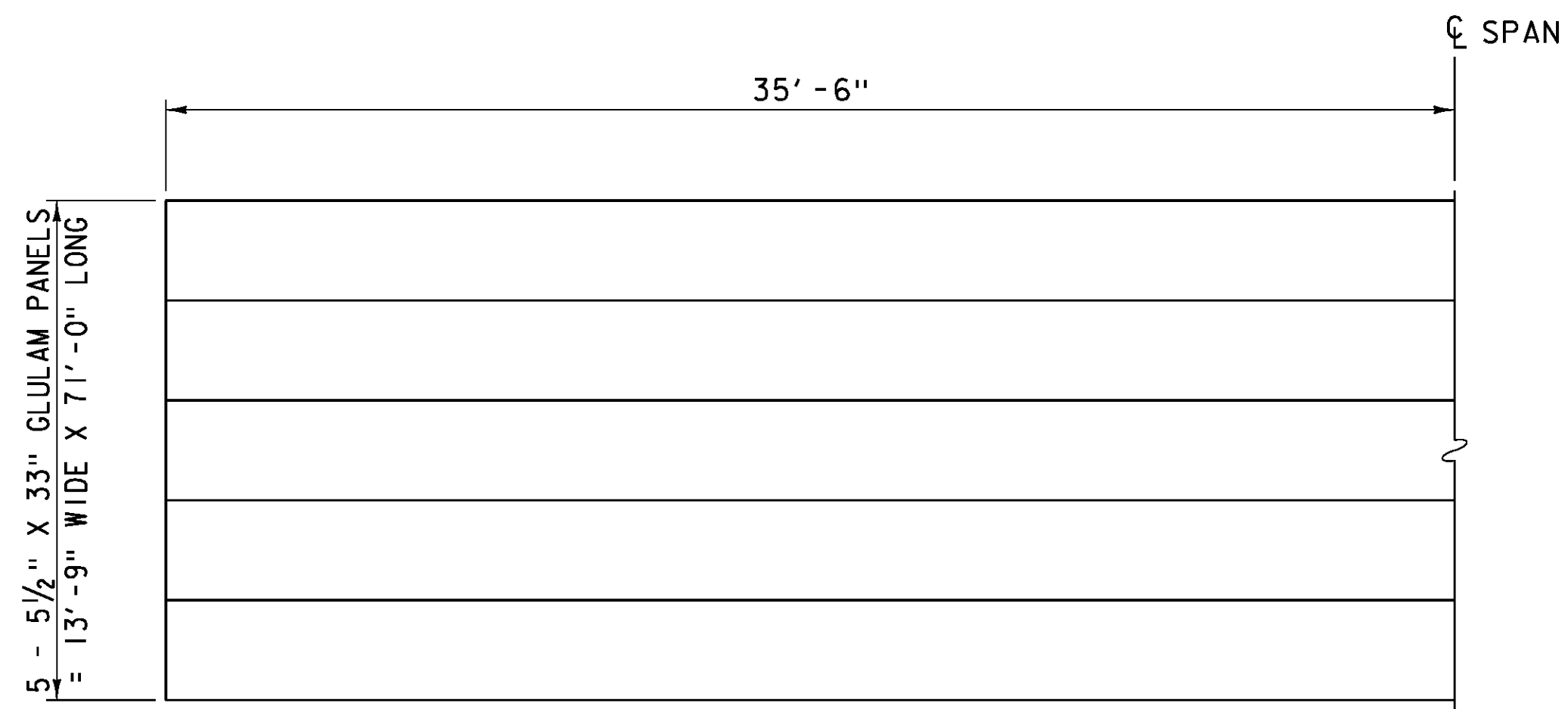
SCALE: 1" = 1'-0"

† PROVIDE NEW CHORD MEMBERS WHERE REQUIRED

PROJECT NAME: CHARLOTTE
PROJECT NUMBER: BO 1445(36)

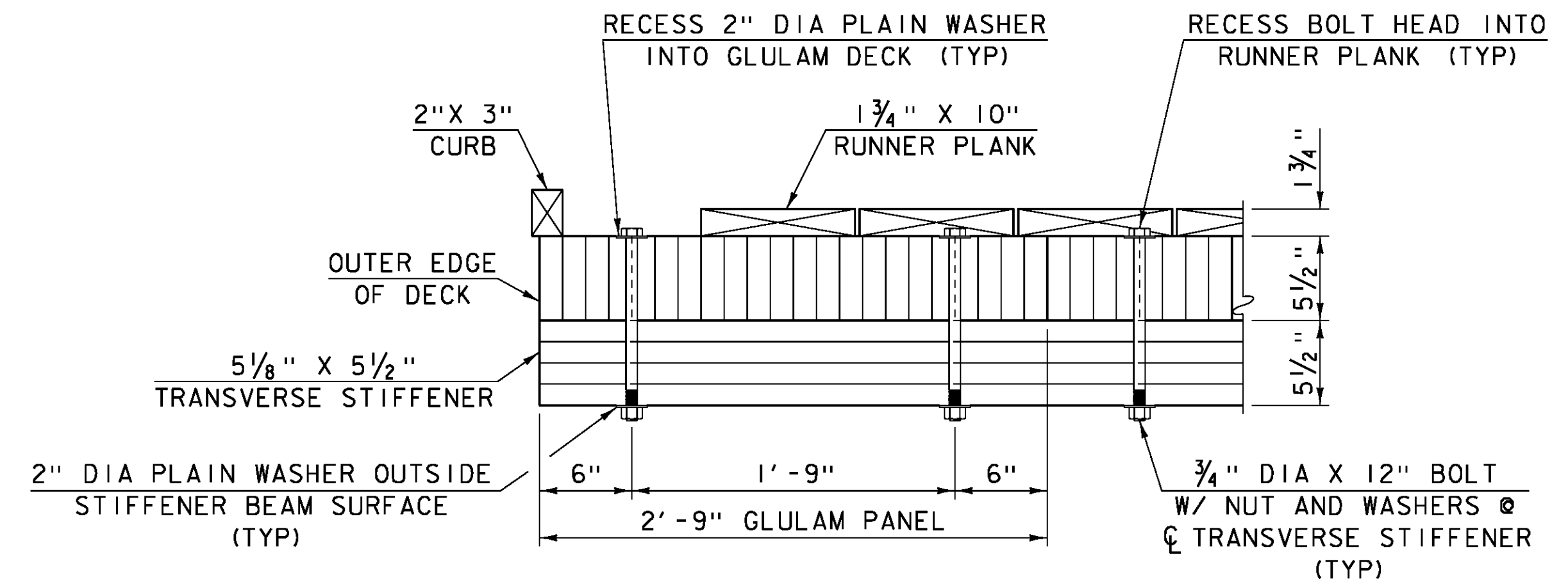
FILE NAME: sl4j235truss.dgn
PROJECT LEADER: M. SARGENT
DESIGNED BY: J. WEAVER
TRUSS ELEVATIONS

PLOT DATE: 22-FEB-2016
DRAWN BY: G. ROY
CHECKED BY: J. WEAVER
SHEET 7 OF 13



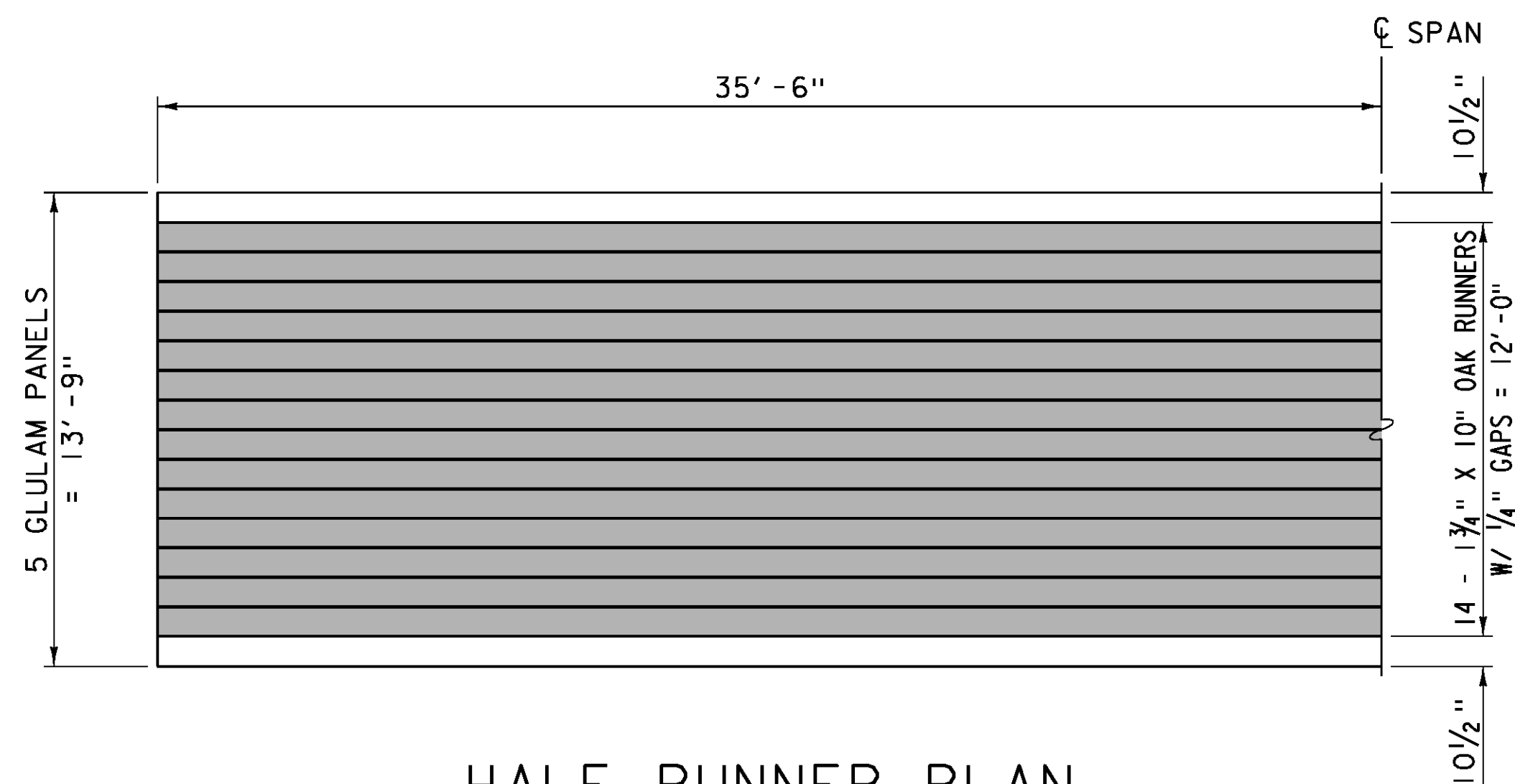
HALF DECK PANEL PLAN

SCALE: 1/4" = 1'-0"



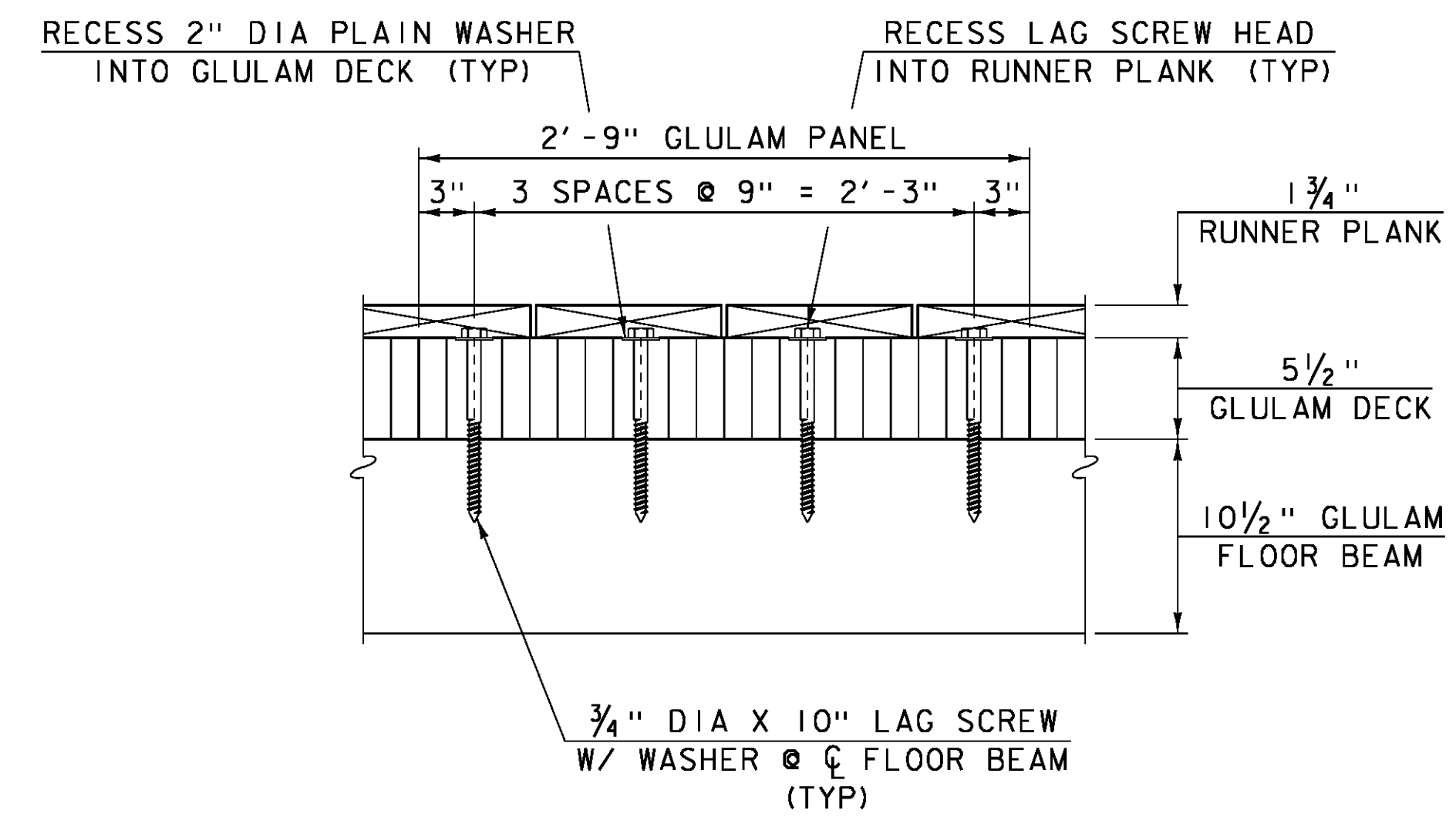
DECK DETAIL

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



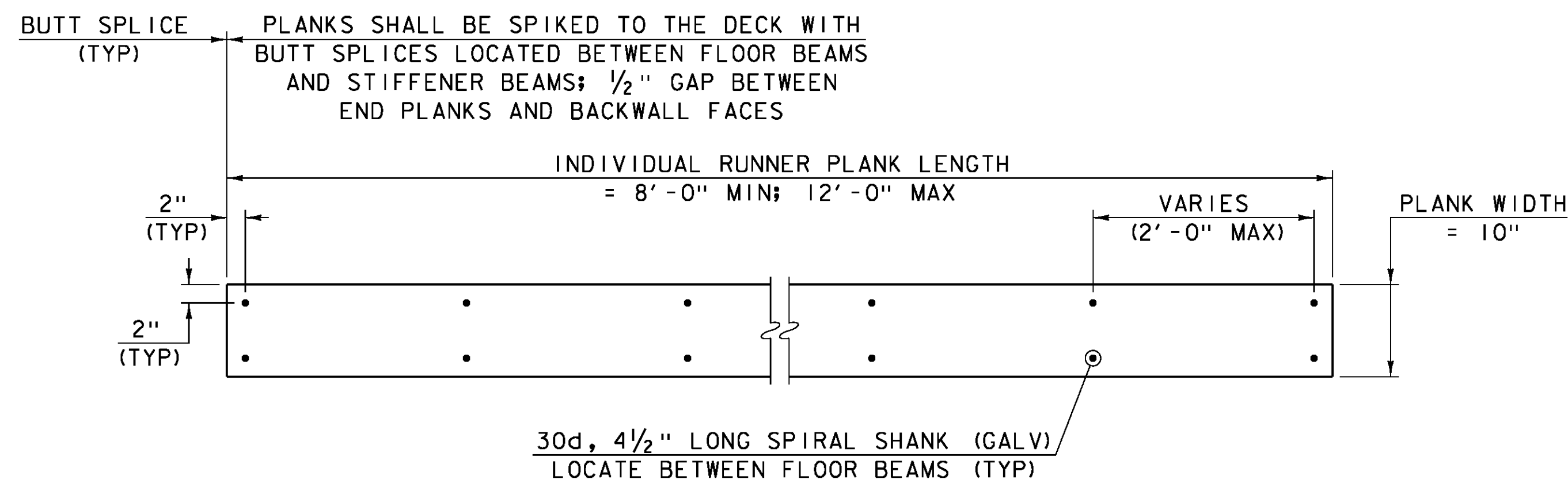
HALF RUNNER PLAN

SCALE: 1/4" = 1'-0"



FLOOR CONNECTION DETAIL

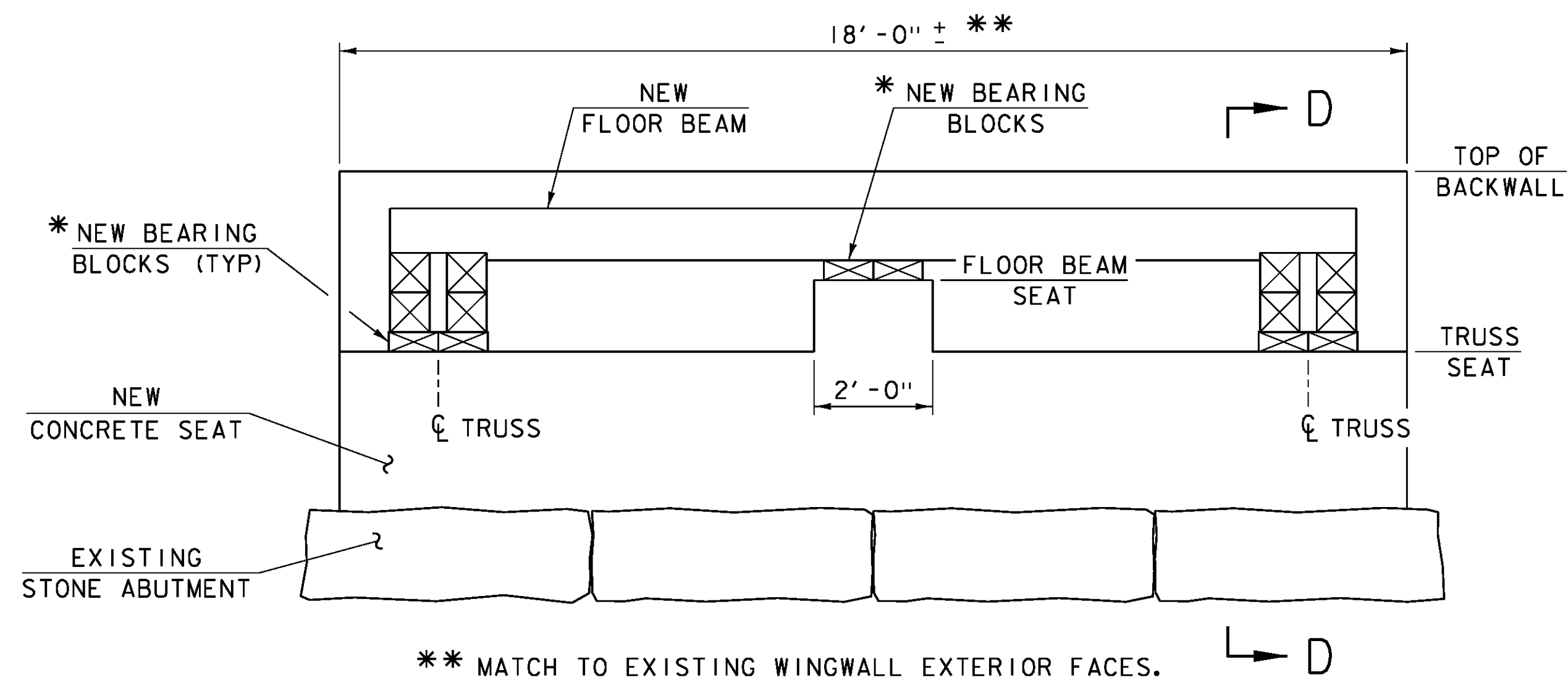
SCALE: 1 1/2" = 1'-0"



RUNNER PLANK ATTACHMENT DETAIL

SCALE: 1" = 1'-0"

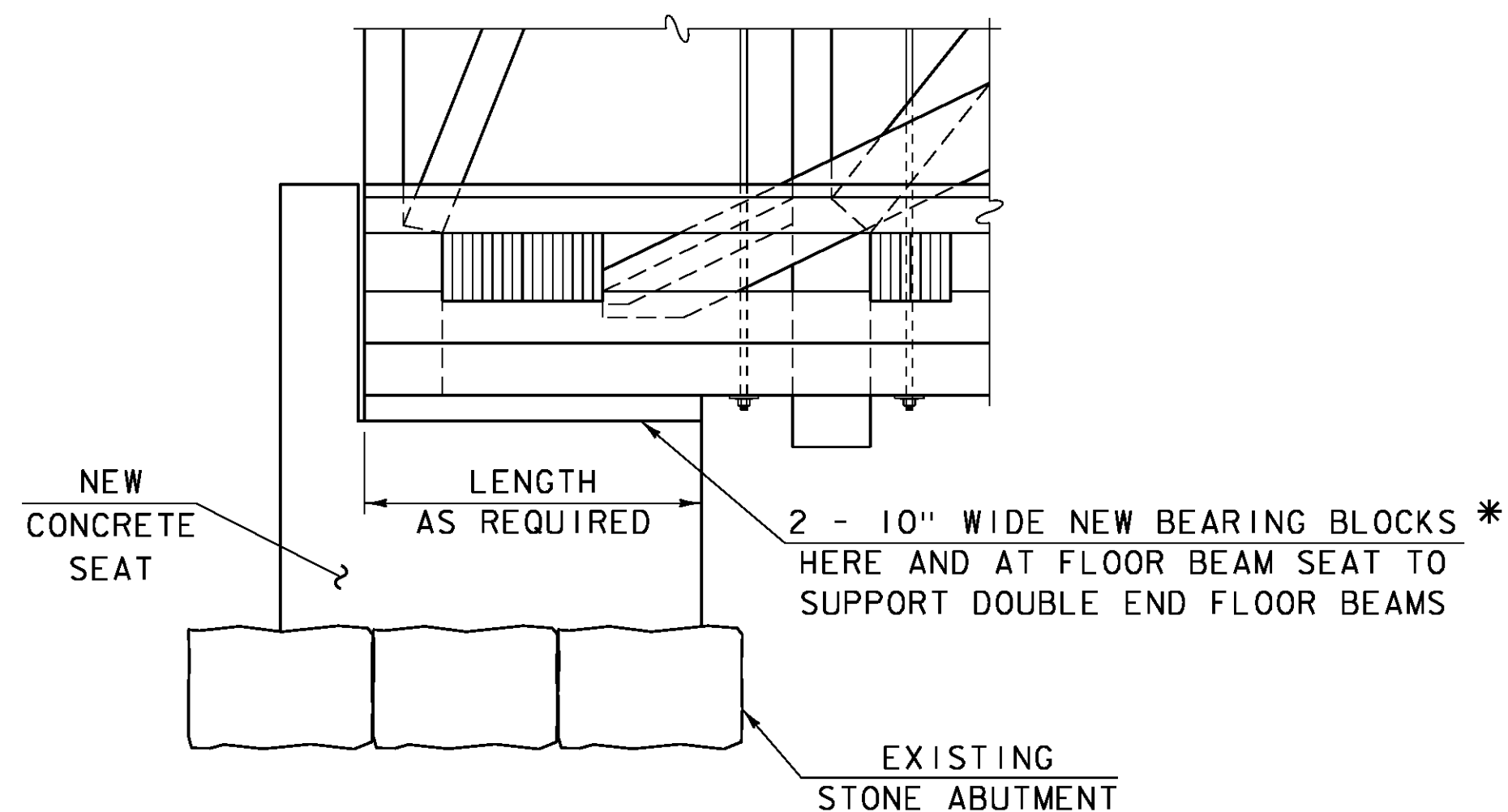
PROJECT NAME:	CHARLOTTE
PROJECT NUMBER:	BO 1445(36)
FILE NAME:	sl4j235truss.dgn
PROJECT LEADER:	M. SARGENT
DESIGNED BY:	J. WEAVER
DECK PLAN AND CONNECTION DETAILS	
PLOT DATE:	22-FEB-2016
DRAWN BY:	G. ROY
CHECKED BY:	J. WEAVER
SHEET	8 OF 13



** MATCH TO EXISTING WINGWALL EXTERIOR FACES.

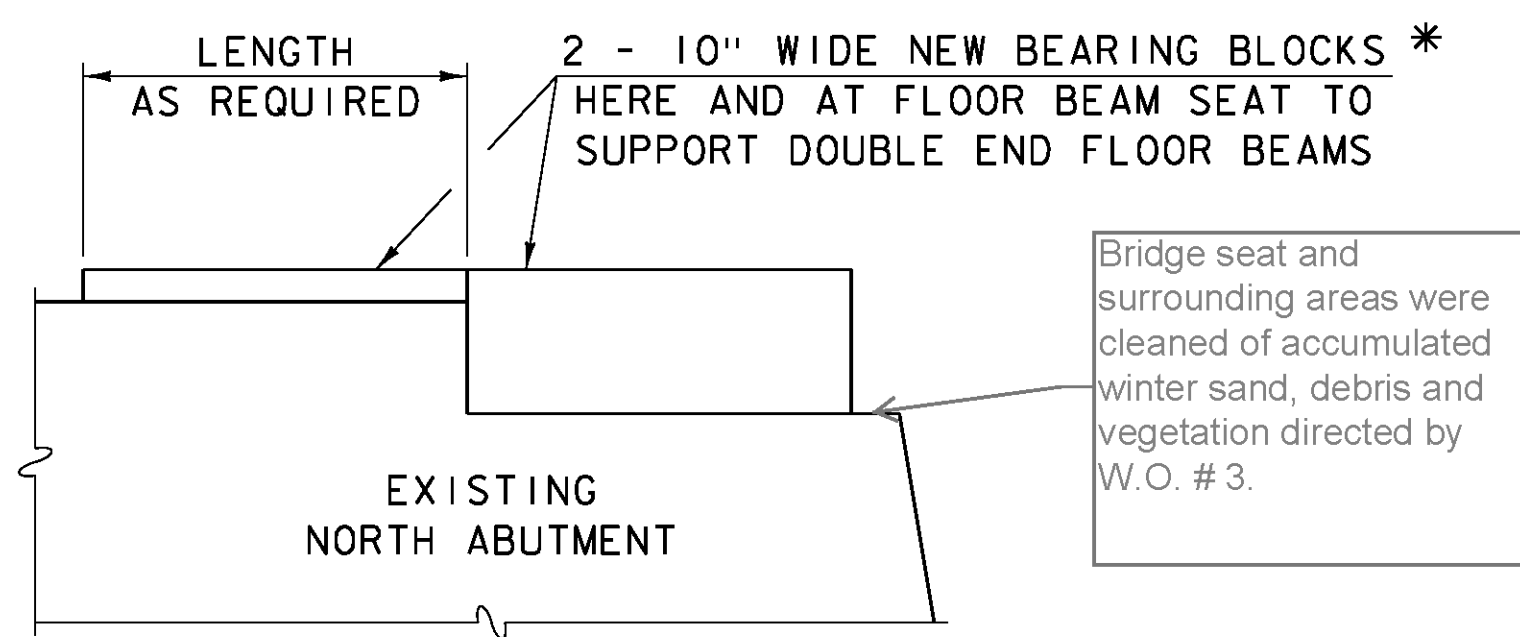
ELEVATION SOUTH ABUTMENT

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



SECTION D-D

NOT TO SCALE

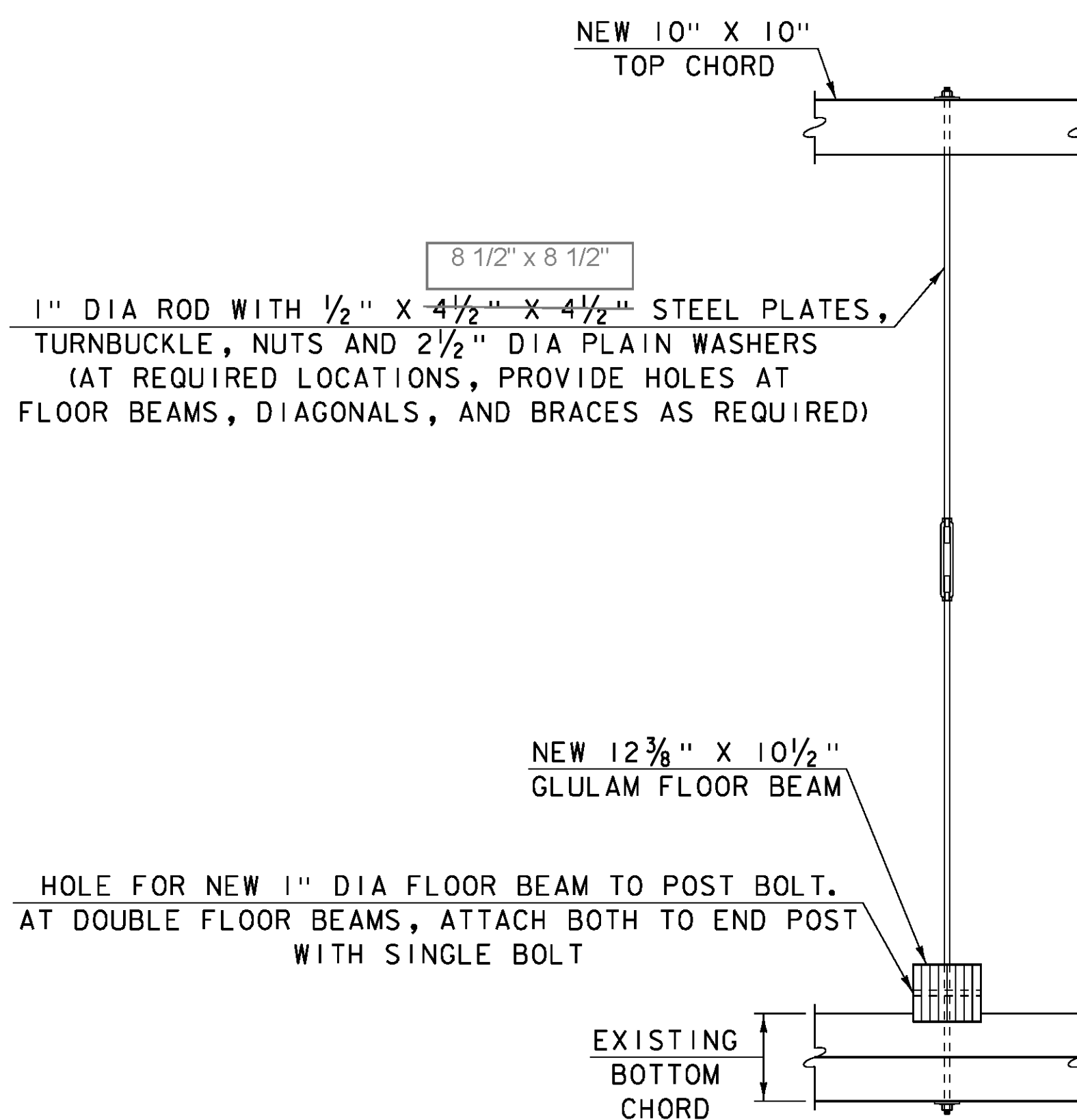


SECTION AT NORTH ABUTMENT

TRUSS SEAT

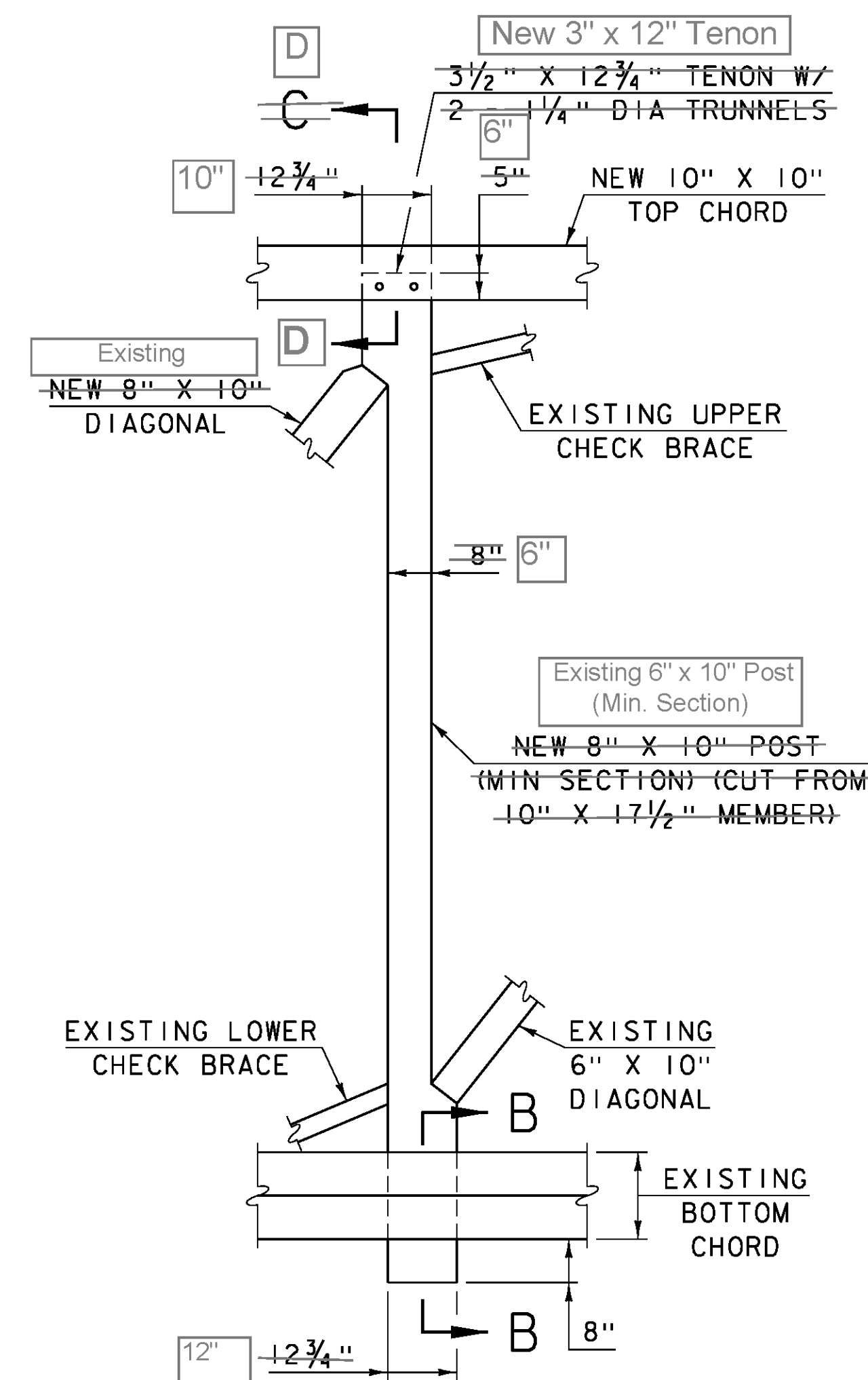
NOT TO SCALE

* DEPTH AS REQUIRED TO MEET EXISTING FINISH GRADES.



TRUSS ROD DETAIL

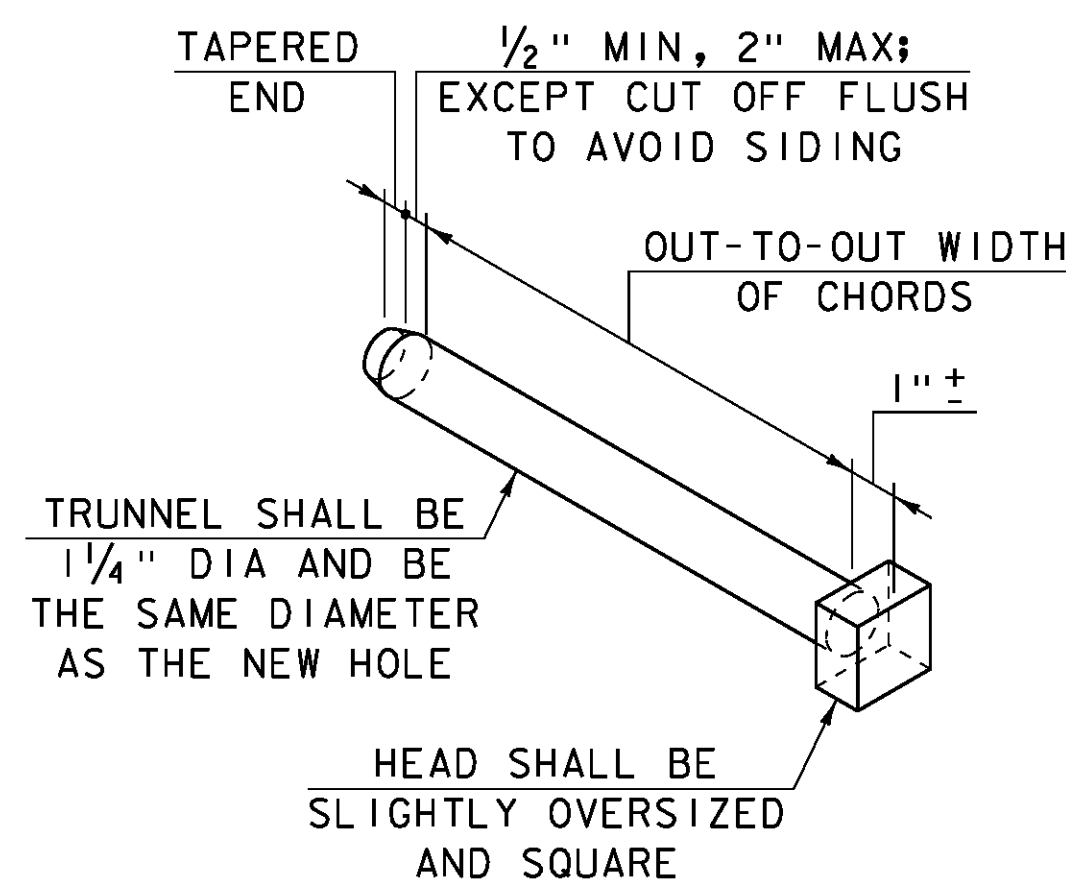
SCALE: 1/2" = 1'-0"



NEW POST DETAIL

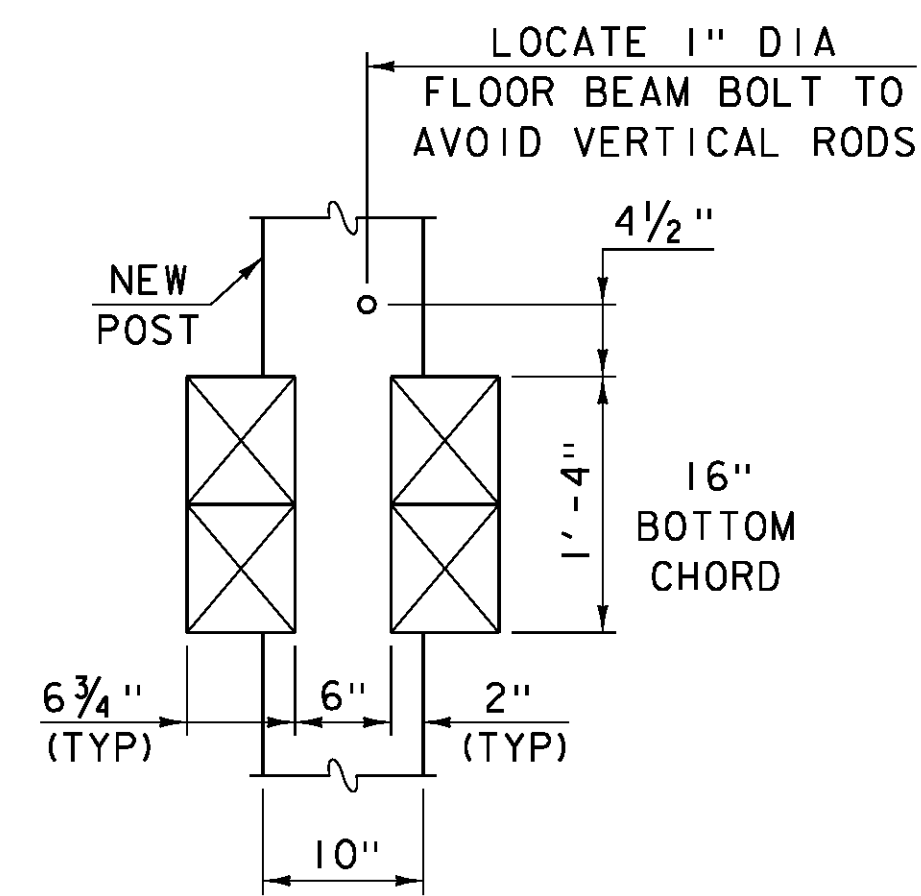
SCALE: 1/2" = 1'-0"

(VERTICAL RODS AND FLOOR BEAMS NOT SHOWN)



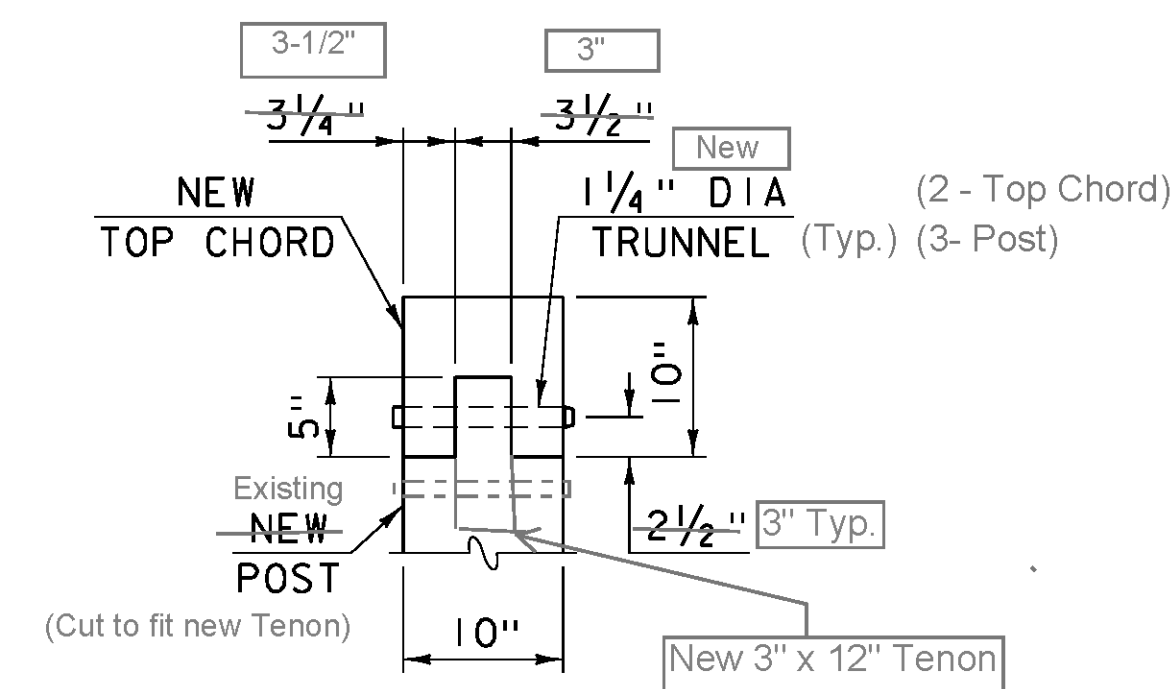
TRUNNEL DETAIL

NOT TO SCALE



SECTION B-B

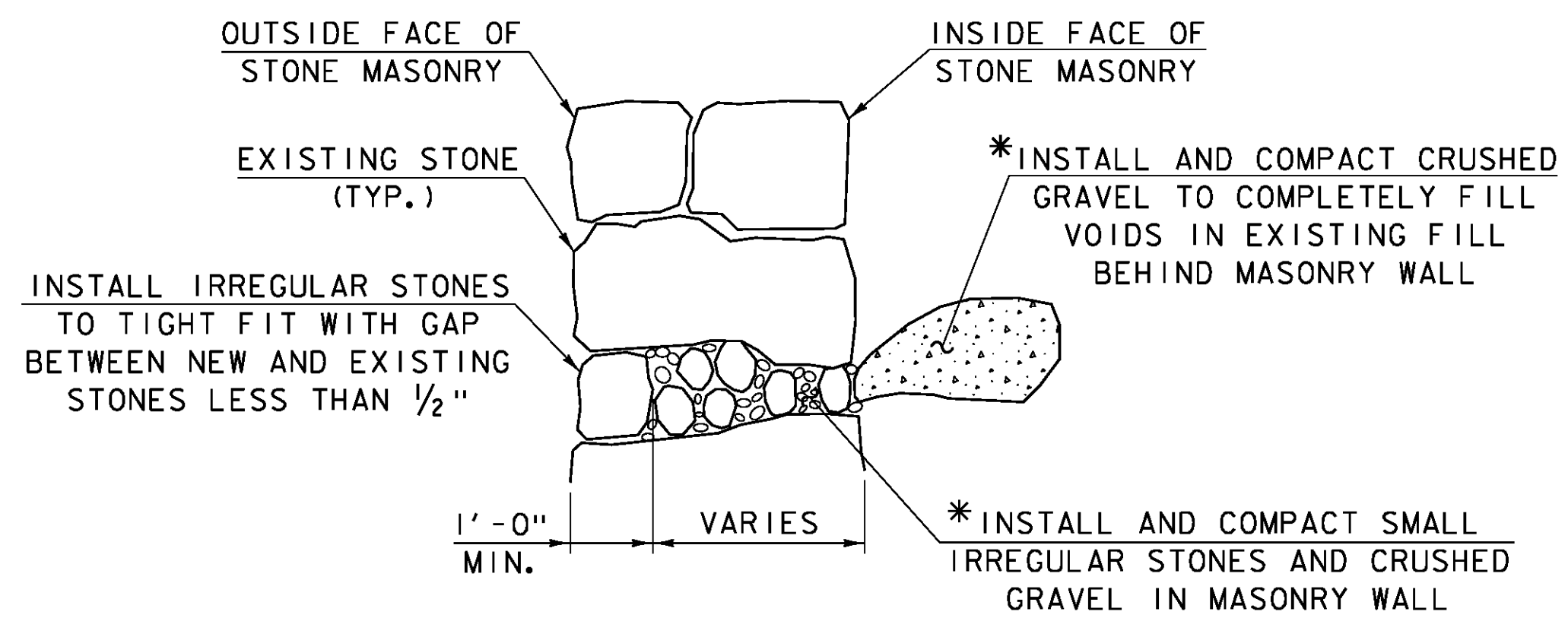
SCALE: 1" = 1'-0"



SECTION C-C D-D

SCALE: 1" = 1'-0"

PROJECT NAME: CHARLOTTE	PLOT DATE: 21-SEP-2015
PROJECT NUMBER: BO 1445(36)	DRAWN BY: G. ROY
FILE NAME: sl4j235truss.dgn	CHECKED BY: J. WEAVER
PROJECT LEADER: M. SARGENT	SHEET 9 OF 13
DESIGNED BY: J. WEAVER	
NEW POST AND BEARING BLOCK DETAILS	

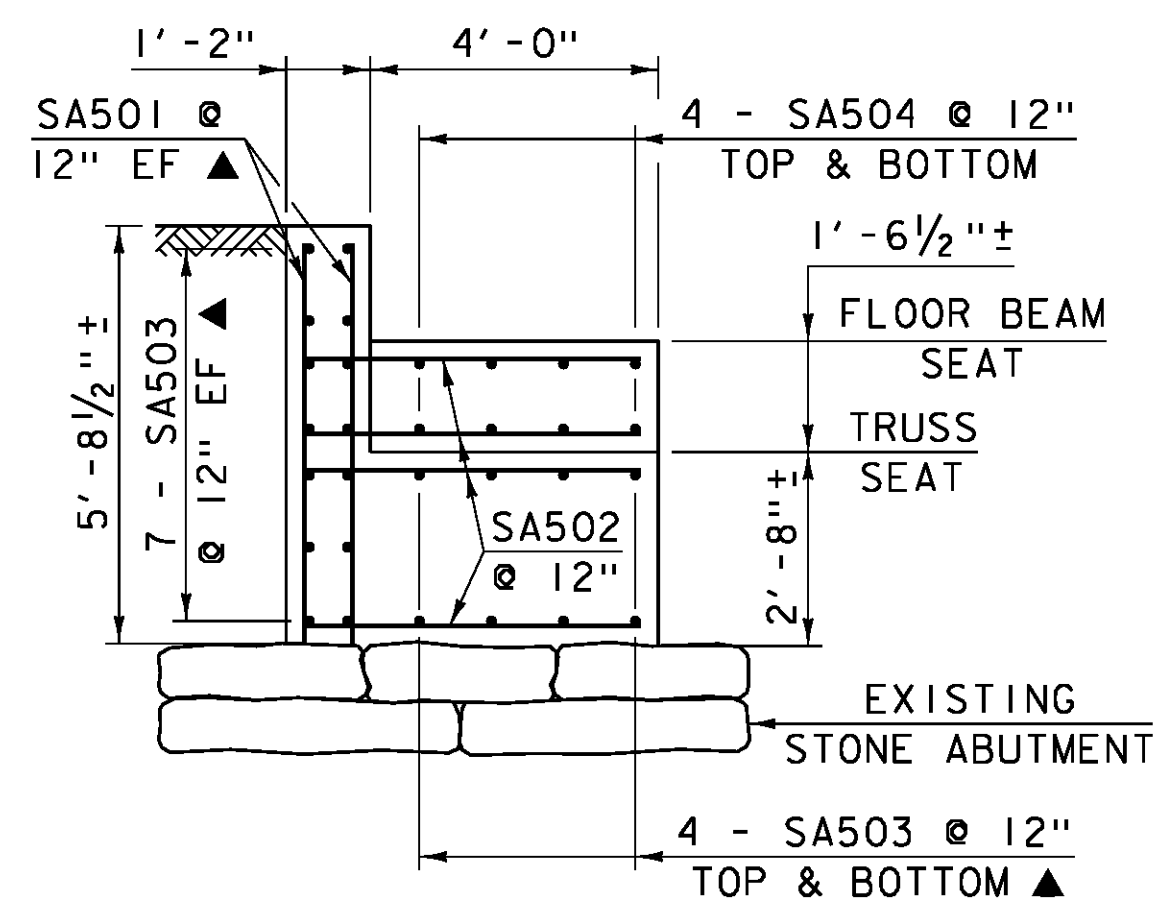


MASONRY REPAIR DETAIL

NOT TO SCALE

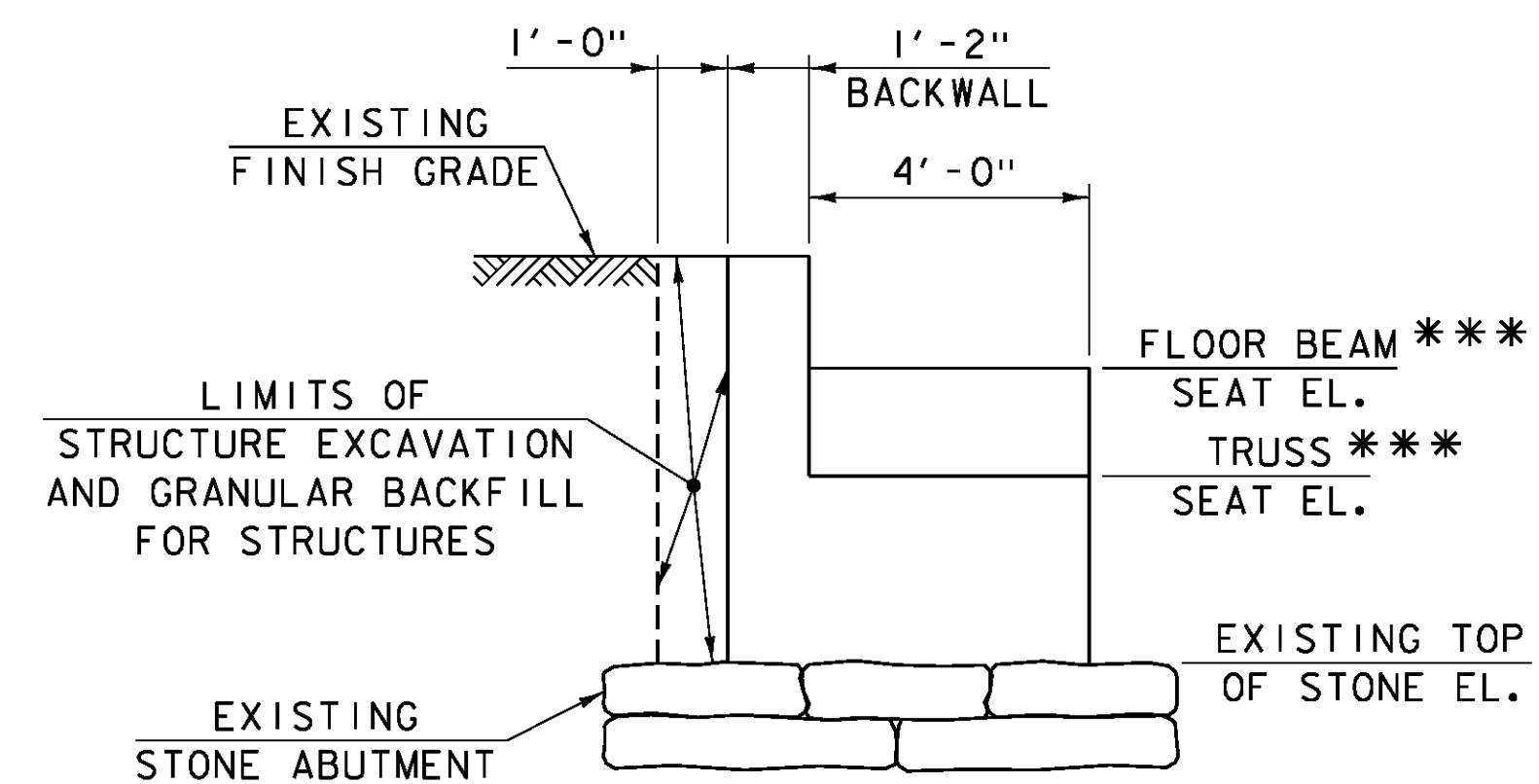
* USE TAMPING RODS OR OTHER METHODS ACCEPTABLE TO THE ENGINEER.

MASONRY REPAIR WILL BE PAID FOR UNDER ITEM 602.40, REPAIRING STONE MASONRY.



REINFORCING DETAIL @ SOUTH ABUTMENT

SCALE: 3/8" = 1'-0"

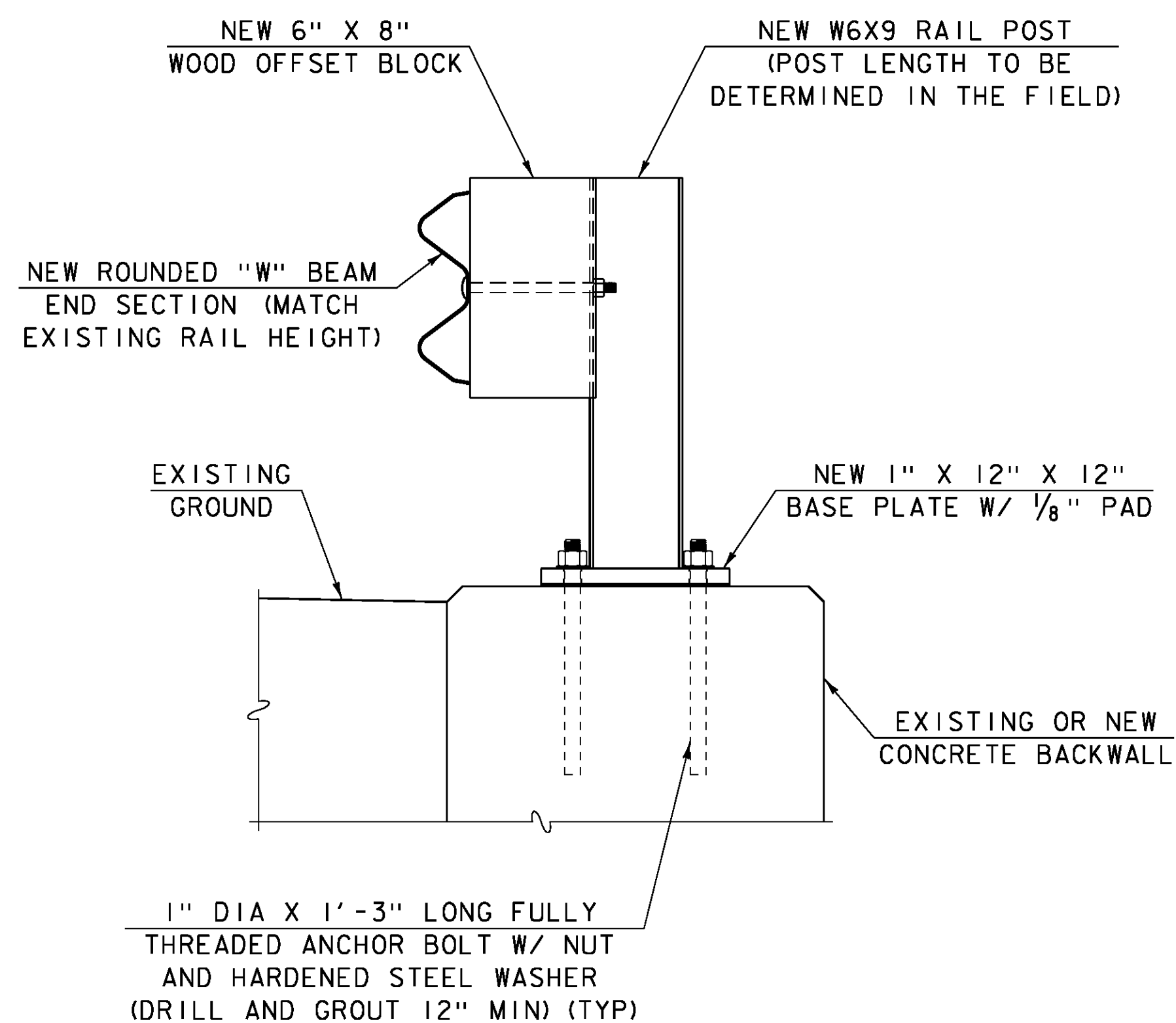


NEW CONCRETE SEAT @ SOUTH ABUTMENT

SCALE: 3/8" = 1'-0"

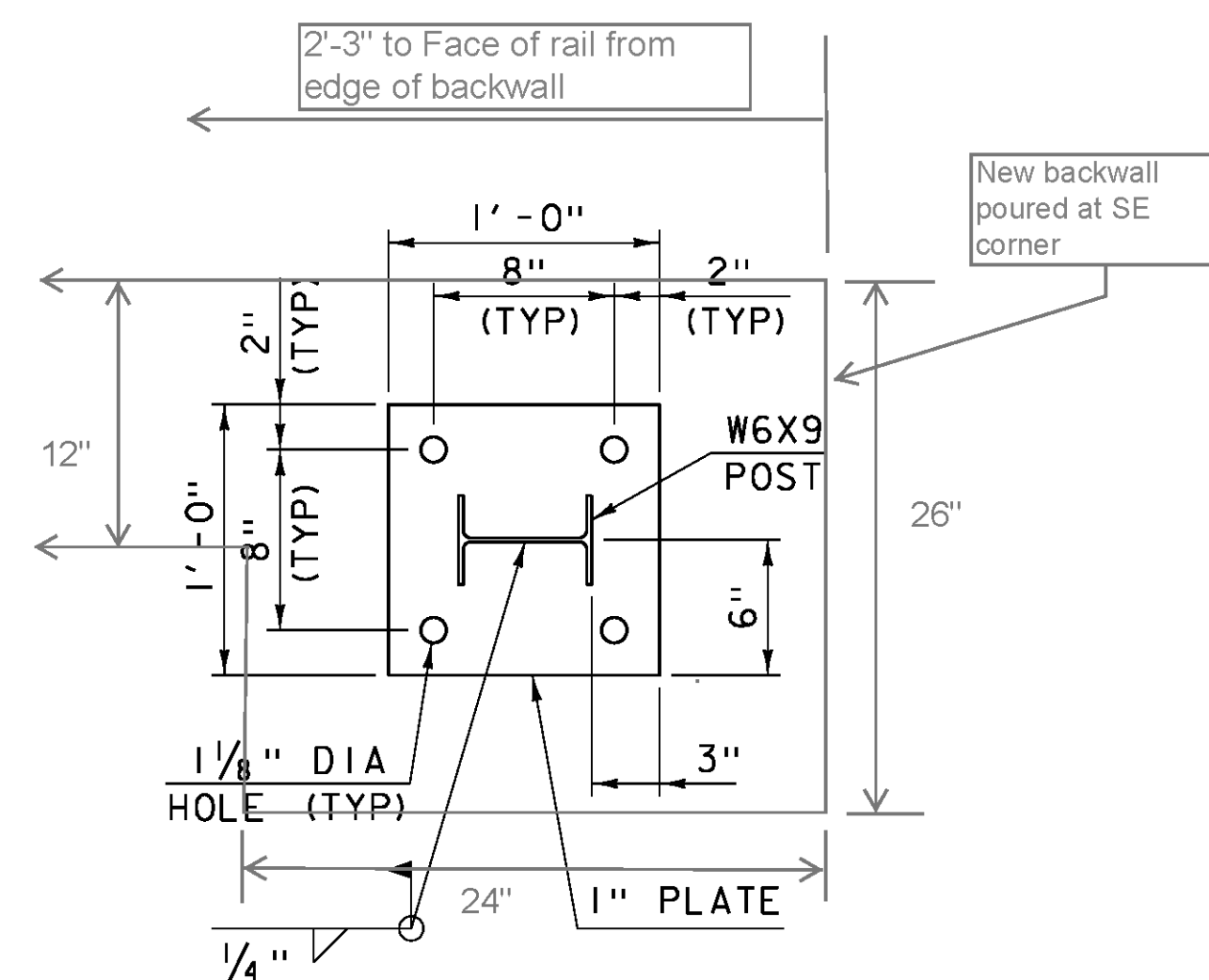
*** TO BE DETERMINED IN THE FIELD.

NOTE: REMOVE EXISTING CONCRETE BRIDGE SEAT AND BACKWALL ABOVE EXISTING TOP OF STONE ELEVATION. WORK TO BE PAID FOR UNDER PAY ITEM 529.25, "REMOVAL OF CONCRETE OR MASONRY".



END POST DETAIL

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

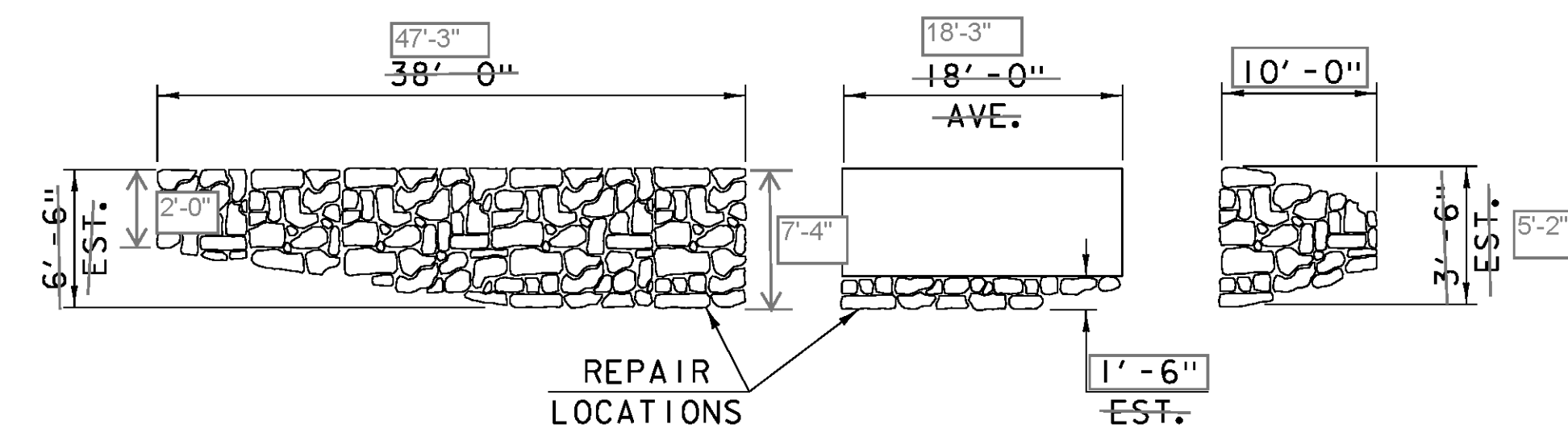


BASE PLATE DETAIL

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

END POST NOTES:

1. ANCHOR BOLTS SHALL BE ASTM A 449, 15" LONG, FULLY THREADED. WORK FOR DRILLING AND GROUTING WILL BE PAID FOR UNDER ITEM 507.16, DRILLING AND GROUTING DOWELS.
2. MAINTAIN 1" CLEARANCE BETWEEN END OF NEW ROUNDED "W" BEAM END SECTION AND PORTAL BOARDING.
3. ALL RAIL COMPONENTS, FASTENERS, AND ANCHORS BOLTS SHALL BE GALVANIZED PER SECTION 525 OF THE STANDARD SPECIFICATIONS.



ABUTMENT NO. 2 REPAIRS (SOUTH ABUTMENT)

NOT TO SCALE

PROJECT NAME: CHARLOTTE
PROJECT NUMBER: BO 1445(36)

FILE NAME: sl4j235sub.dgn
PROJECT LEADER: M. SARGENT
DESIGNED BY: J. WEAVER
ABUTMENT AND END POST DETAILS

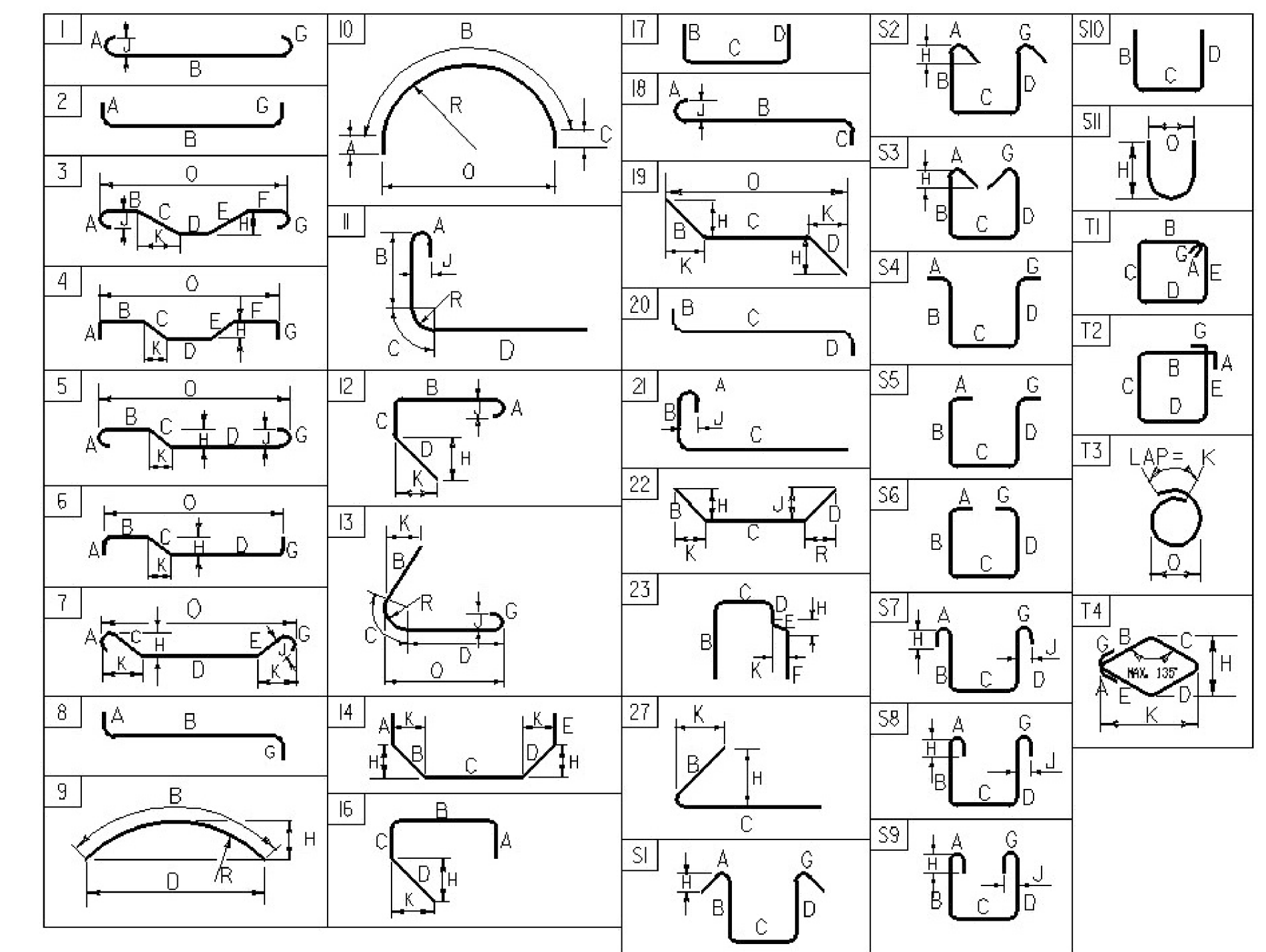
PLOT DATE: 15-JAN-2016
DRAWN BY: G. ROY
CHECKED BY: J. WEAVER
SHEET 10 OF 13

REINFORCING STEEL SCHEDULE

ITEM	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
SOUTH ABUTMENT																																			
▲ 36	5	5'- 6"	SA501	STR																															
42	5	4'- 8"	SA502	STR																															
▲ 22	5	17'- 6"	SA503	STR																															
8	5	1'- 6"	SA504	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 BAR MARK PREFIX DENOTES EPOXY COATED REINFORCING STEEL.



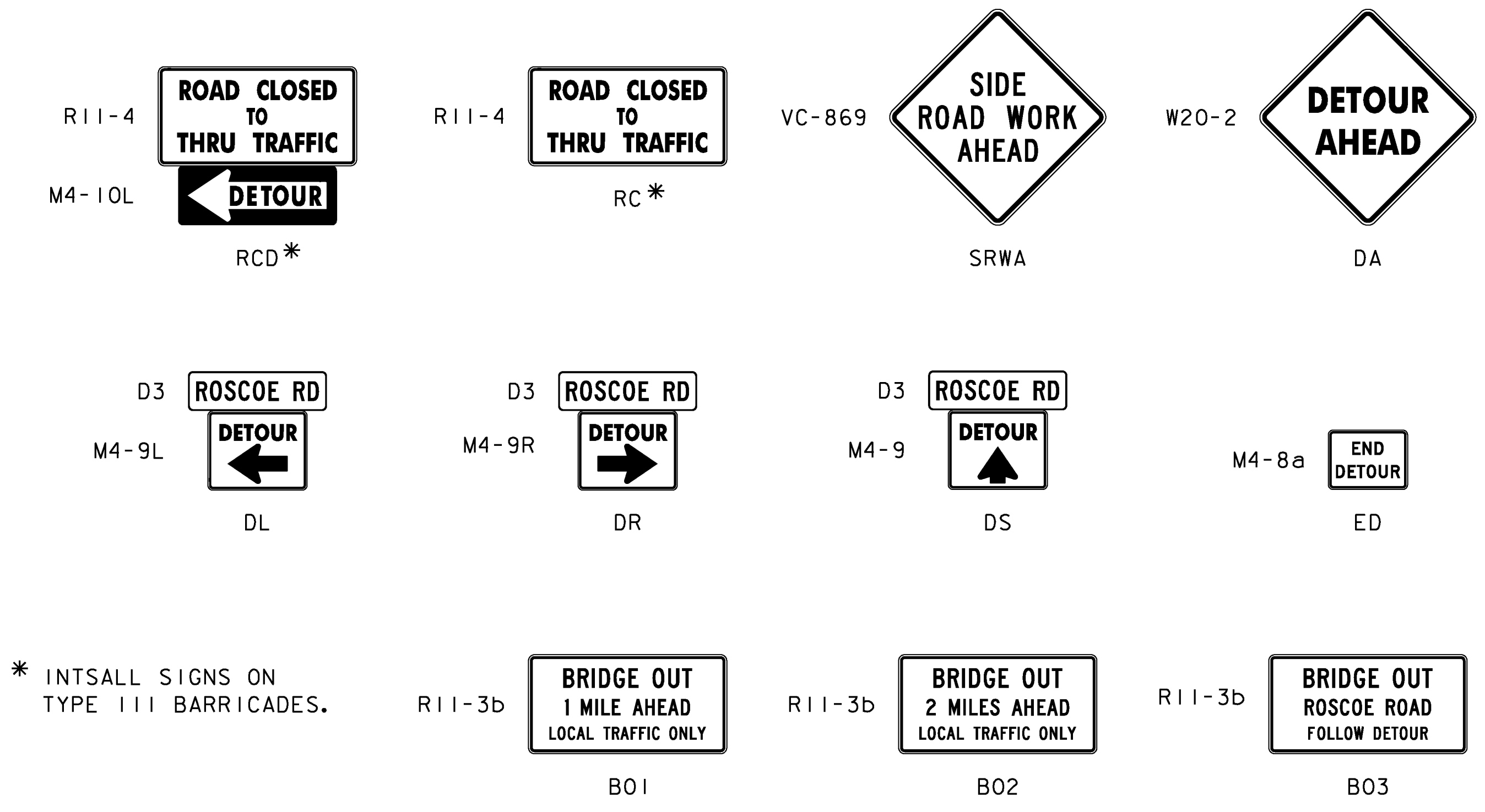
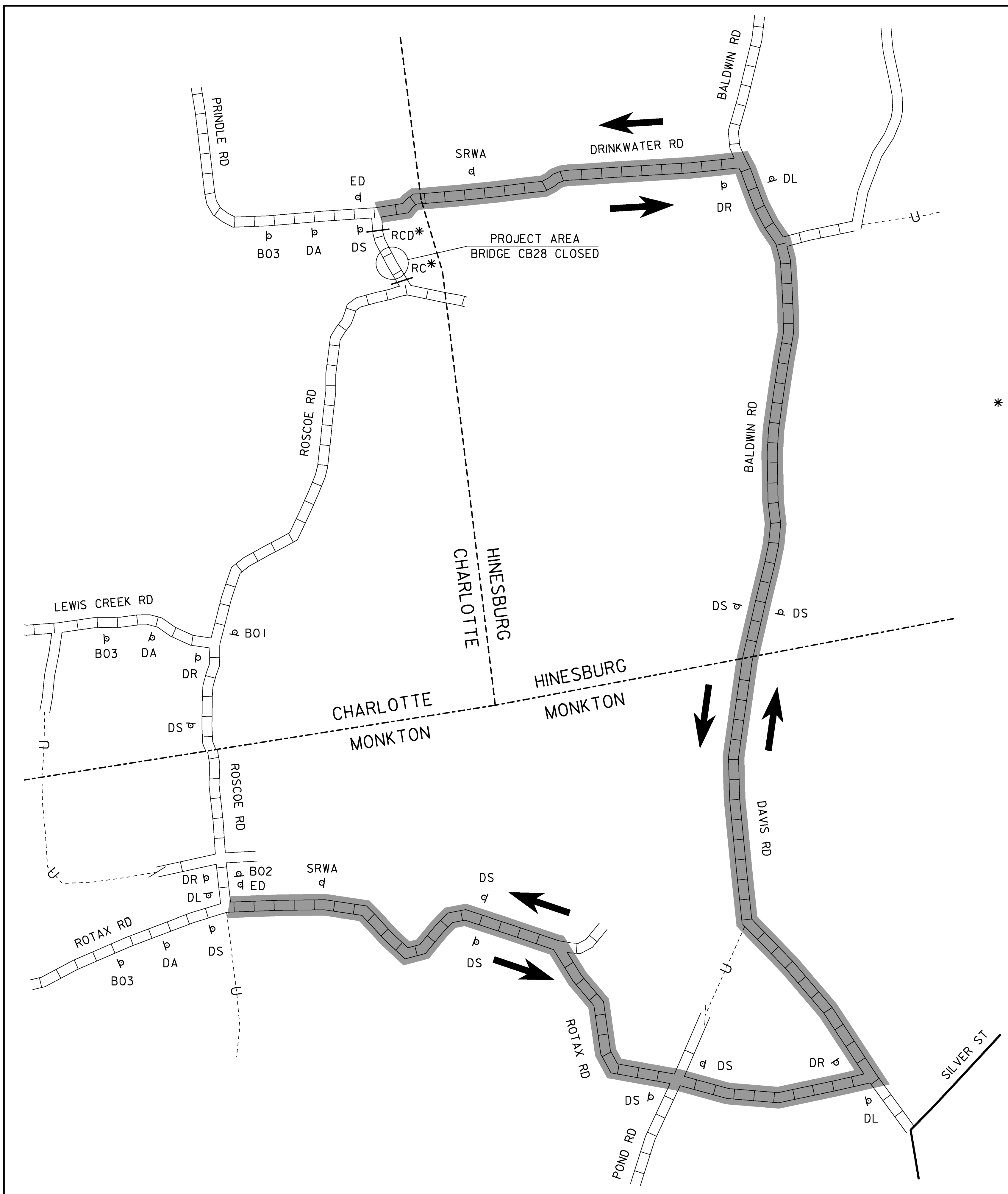
ASTM STANDARD REINFORCING BARS				
BAR SIZE	YIELD STRENGTH (ksi)	TENSILE STRENGTH (ksi)	ELONGATION (%)	WELDING TENSILE STRENGTH (ksi)
#3	0.376	0.375	0.11	1.178
#4	0.668	0.500	0.20	1.571
#5	1.043	0.625	0.31	1.963
#6	1.502	0.750	0.44	2.356
#7	2.04	0.875	0.60	2.749
#8	2.670	1.000	0.79	3.14
#9	3.400	1.13	1.00	3.54
#10	4.3	1.270	1.27	3.990
#11	5.31	1.410	1.56	4.430
#14	7.65	1.69	2.25	5.32
#18	13.60	2.26	4.00	7.09

~ REINFORCING STEEL CORROSION RESISTANCE LEVEL ~

THE REINFORCING STEEL MARKS IN THIS SCHEDULE INDICATE THE REQUIRED BAR CORROSION RESISTANCE LEVEL. CORROSION RESISTANCE LEVEL IS DENOTED WITH A .2 FOR LEVEL TWO SUFFIX OR .3 FOR LEVEL THREE SUFFIX. .1 FOR LEVEL ONE IS TO BE OMITTED. THE BAR MATERIAL TYPE AND BAR STEEL GRADE PROVIDED FOR EACH CORROSION LEVEL WILL BE RECORDED ON THE PLAN SET SHEET FOR AS-BUILT RECORD PLAN ARCHIVES.

PROJECT NAME: **CHARLOTTE**
 PROJECT NUMBER: **BO 1445(36)**
 FILE NAME: s14j235rss.dgn
 PROJECT MANAGER: **M. SARGENT**
 DESIGNED BY: **J. WEAVER**
 REINFORCING STEEL SCHEDULE

PLOT DATE: 14-SEP-2015
 DRAWN BY: **G. ROY**
 CHECKED BY: **J. WEAVER**
 SHEET 11 OF 13

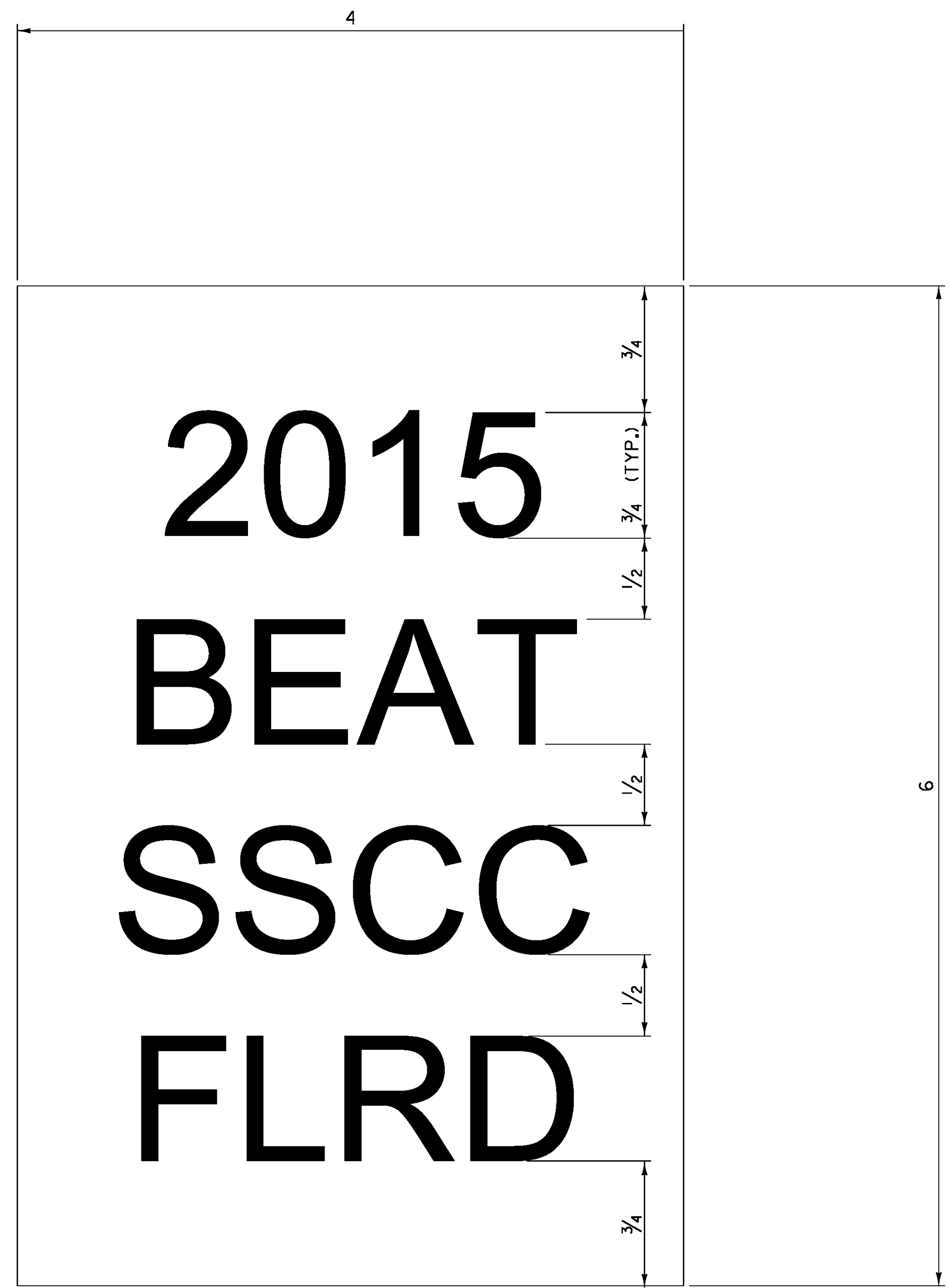


* INTSALL SIGNS ON TYPE III BARRICADES.

EACH	SIGN DIMENSIONS		2 IN SQ X 10 FT STEEL POST	MUTCD SIGN NUMBER / STD NUMBER
	WIDTH (in)	HEIGHT (in)		
2	60	30	-	R11-4 (ROAD CLOSED TO THRU TRAFFIC)
1	48	18	-	M4-10L (DETOUR ARROW LEFT)
2	48	48	2	VC-869 (SIDE ROAD WORK AHEAD) (SEE STD T-28)
3	48	48	2	W20-2 (DETOUR AHEAD)
16	42	12	-	D3 (ROSCOE RD)
3	30	24	1	M4-9L (DETOUR LEFT ARROW)
4	30	24	1	M4-9R (DETOUR RIGHT ARROW)
9	30	24	1	M4-9 (DETOUR VERTICAL ARROW)
2	24	18	1	M4-8a (END DETOUR)
1	60	30	2	R11-3b (BRIDGE OUT/1 MILE AHEAD/LOCAL TRAFFIC ONLY)
1	60	30	2	R11-3b (BRIDGE OUT/2 MILES AHEAD/LOCAL TRAFFIC ONLY)
1	60	30	2	R11-3b (BRIDGE OUT/ROSCOE ROAD/FOLLOW DETOUR)
			EA	
			14	
SQ FT			FT	
291			140	

DETOUR SIGNING WILL BE THE RESPONSIBILITY OF THE TOWN. PROPOSED DETOUR ROUTE AND SIGNAGE SHOWN IS NOT INCLUDED IN THE CONTRACT. USE FOR TOWN REFERENCE ONLY.

PROJECT NAME: CHARLOTTE
 PROJECT NUMBER: BO 1445(36)
 FILE NAME: sl4j235detour.dgn
 PROJECT LEADER: M. SARGENT
 DESIGNED BY: G. ROY
 DETOUR LAYOUT
 PLOT DATE: 26-FEB-2016
 DRAWN BY: G. ROY
 CHECKED BY: J. WEAVER
 SHEET 12 OF 13

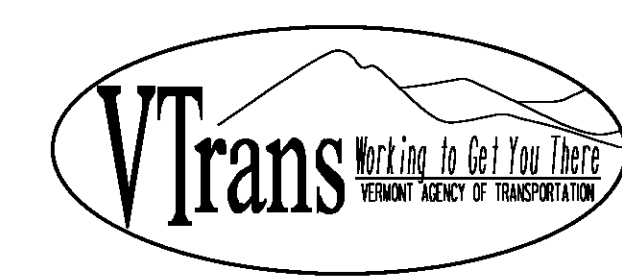


GENERAL NOTES:

1. LINE ONE SHALL INDICATE THE INSTALLATION YEAR (YYYY).
2. LINE TWO SHALL INDICATE THE MODEL AS IDENTIFIED ON THE APPROVED PRODUCTS LIST. FOR GENERIC INSTALLATIONS THE STANDARD DRAWING DESIGNATION OR NAME AS IDENTIFIED IN THE FHWA ELIGIBILITY LETTER SHALL BE USED.
3. LINE THREE SHALL INDICATE ADDITIONAL MODEL INFORMATION IF NECESSARY.
4. LINE FOUR SHALL INDICATE FLARED (FLRD) OR TANGENT (TANG).
5. LEGEND SHALL BE ONE ARIEL FONT.
6. LEGEND SHALL BE BLACK ON A WHITE BACKGROUND, LEGEND AND BACKGROUND SHALL NOT BE REFLECTIVE.
7. SUITABLE MATERIAL SHALL BE USED SO AS TO NOT DETERIORATE DURING EXPOSURE TO WEATHER.
8. LABELS SHALL BE APPLIED IN SUCH A WAY THAT THEY REMAIN INTACT DURING THE LIFE OF THE TERMINAL.
9. FOR W-BEAM GUARDRAIL, LABEL SHALL BE PLACED ON THE TOP OF POST ONE FACING AWAY FROM TRAFFIC.
10. FOR BOX BEAM GUARDRAIL, LABEL SHALL BE PLACED ON THE BOX BEAM ADJACENT TO POST ONE FACING AWAY FROM TRAFFIC.
11. PAYMENT SHALL BE INCIDENTAL TO OTHER TRAFFIC BARRIER ITEMS.
12. ALL DIMENSIONS IN INCHES.

REV.	DATE	DESCRIPTION
0	NOV. 3, 2015	ORIGINAL APPROVAL
OTHER DETAILS REQUIRED: NONE		
DETAILS APPROVED FOR USE BY HIGHWAY SAFETY & DESIGN		

GUARDRAIL TERMINAL LABEL DETAIL



HIGHWAY SAFETY & DESIGN DETAIL

HSD-621.06