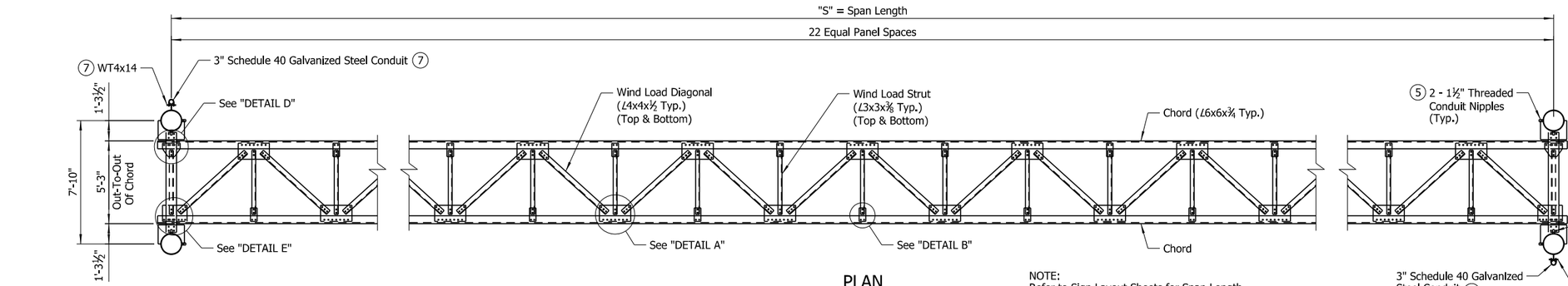
DATE REVISED	DATE REVISED	FED. ROAD DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.			
		OVERHEAD SIGN STR. (101' TO 115') - 55096A				



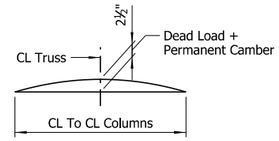
PLAN
No Scale

NOTE:
Refer to Sign Layout Sheets for Span Length "S" and Foundation Types required for each structure.

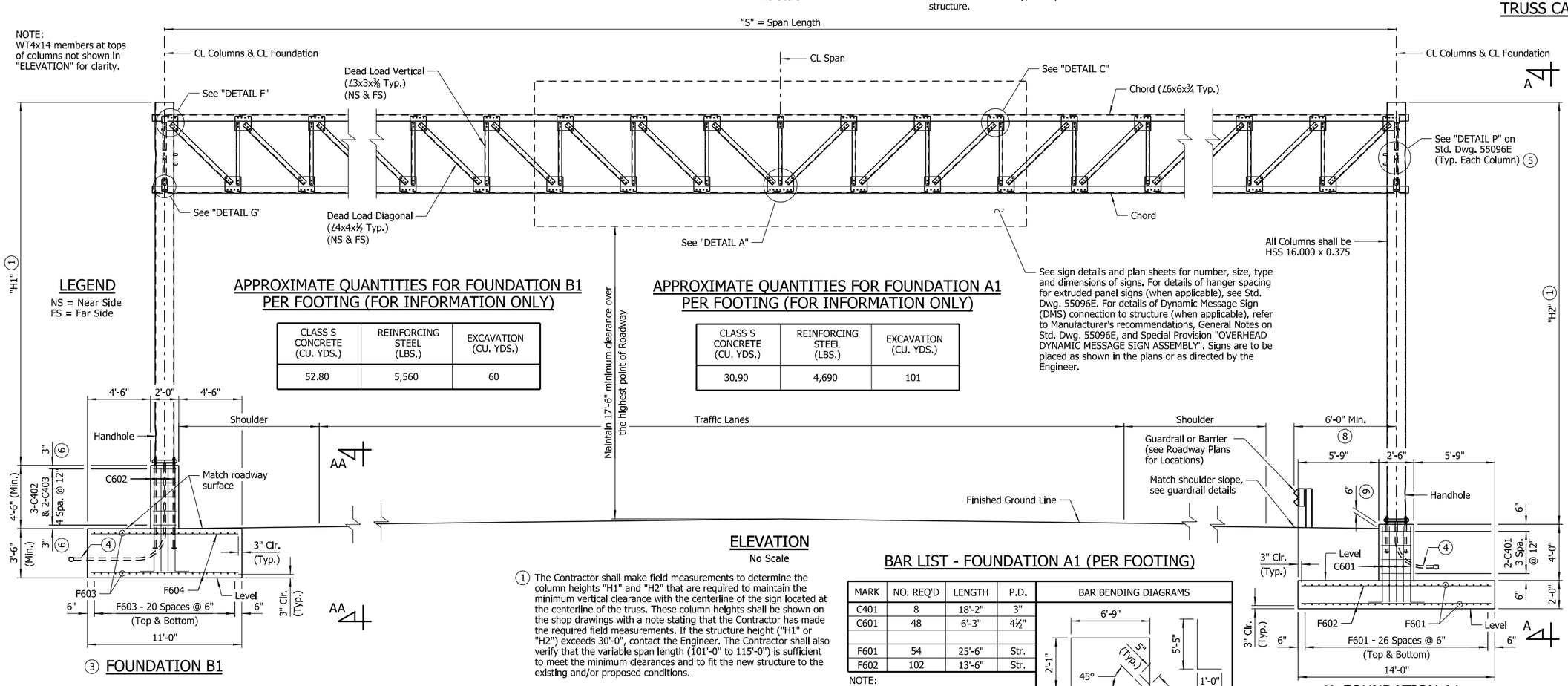
NOTES:
For "VIEW A-A", see Std. Dwg. 55096B.

For "DETAIL A" thru "DETAIL G", see Std. Dwg. 55096C.

For "VIEW AA-AA", see Std. Dwg. 55096D.



TRUSS CAMBER DIAGRAM
No Scale



LEGEND
NS = Near Side
FS = Far Side

APPROXIMATE QUANTITIES FOR FOUNDATION B1 PER FOOTING (FOR INFORMATION ONLY)

CLASS S CONCRETE (CU. YDS.)	REINFORCING STEEL (LBS.)	EXCAVATION (CU. YDS.)
52.80	5,560	60

APPROXIMATE QUANTITIES FOR FOUNDATION A1 PER FOOTING (FOR INFORMATION ONLY)

CLASS S CONCRETE (CU. YDS.)	REINFORCING STEEL (LBS.)	EXCAVATION (CU. YDS.)
30.90	4,690	101

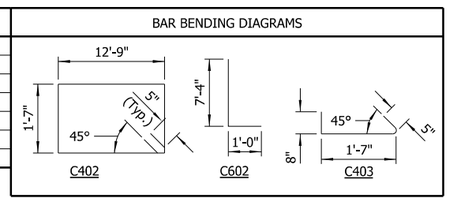
ELEVATION
No Scale

③ FOUNDATION B1

BAR LIST - FOUNDATION B1 (PER FOOTING)

MARK	NO. REQ'D	LENGTH	P.D.
C402	15	29'-2"	3"
C403	10	2'-7"	3"
C602	124	8'-2"	4½"
F603	42	29'-6"	Str.
F604	118	10'-6"	Str.

BAR BENDING DIAGRAMS



NOTE:
Dimensions of bars are out-to-out.

BAR LIST - FOUNDATION A1 (PER FOOTING)

MARK	NO. REQ'D	LENGTH	P.D.
C401	8	18'-2"	3"
C601	48	6'-3"	4½"
F601	54	25'-6"	Str.
F602	102	13'-6"	Str.

BAR BENDING DIAGRAMS

NOTE:
Dimensions of bars are out-to-out.

1. The Contractor shall make field measurements to determine the column heights "H1" and "H2" that are required to maintain the minimum vertical clearance with the centerline of the sign located at the centerline of the truss. These column heights shall be shown on the shop drawings with a note stating that the Contractor has made the required field measurements. If the structure height ("H1" or "H2") exceeds 30'-0", contact the Engineer. The Contractor shall also verify that the variable span length (101'-0" to 115'-0") is sufficient to meet the minimum clearances and to fit the new structure to the existing and/or proposed conditions.

2. Foundation A1 allowed only when foundation is outside clear zone or is protected by guardrail or barrier. For alternate drilled shaft foundation (Foundation A2), see Std. Dwg. 55096F.

3. Foundation B1 is required when the foundation is located in a median, within the clear zone, and is not protected by guardrail or barrier. Foundation B1 requires adjacent Roadway Median Barrier to transition to match the ends of the pedestal. For alternate drilled shaft foundation (Foundation B2), see Std. Dwg. 55096F.

4. 2" Non-Metallic Conduit (Schedule 80) with 16" Min. Bend Radius (2 Conduits per Column). At Foundation B1, conduit shall not be provided if cabling on that side of the sign structure is not required per Electrical and/or ITS plans. At Foundation A1, conduit shall always be provided. If cabling in the conduit at Foundation A1 is not required per Electrical and/or ITS plans, the end of conduit in the ground shall be capped for future use with a manufactured water-tight cap.

5. Threaded Conduit Nipples shall be fitted with standard plugs until conduit is installed.

6. Minor adjustments are allowed to maintain C402 and C403 12" spacing for foundations located in longitudinal grades.

7. See "SECTION U-U" on Std. Dwg. 55096C. WT4x14 always required. 3" Conduit and Clamping U-Bolts only required when necessary to support ITS equipment or as directed by the Engineer. See ITS Plans.

8. Minimum dimension when guardrail is present. See Sign Layout Sheets and/or ITS Plans for actual dimension for each structure.

② FOUNDATION A1

9. Dimension from top of pedestal to Finished Ground Line shall be maintained along the perimeter of the pedestal.

THESE DETAILS ARE APPLICABLE UNLESS OTHERWISE SHOWN IN THE PLAN DETAILS, SPECIAL PROVISIONS, OR SUPPLEMENTAL SPECIFICATIONS.

SHEET 1 OF 6
STANDARD DETAILS OF 101' TO 115'
STEEL OVERHEAD SIGN STRUCTURE
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

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DRAWN BY:	CWT	DATE:	NOV. 2022	FILENAME: b55096a.dgn
CHECKED BY:	ABH	DATE:	NOV. 2022	SCALE: As Shown
DESIGNED BY:	STD.	DATE:	-	

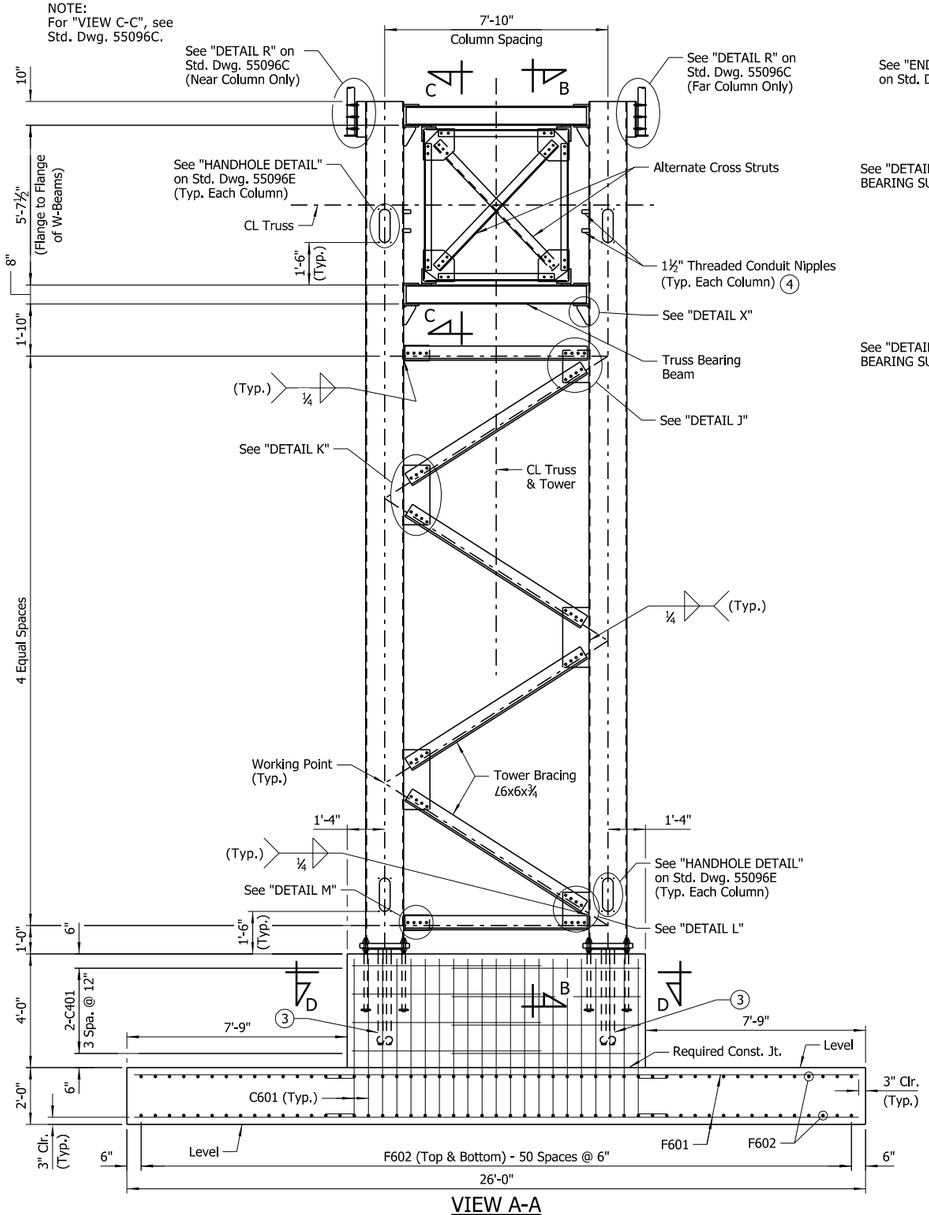
Scales shown are for full size 22"x34" drawings. When using 11"x17" drawings, reduce scale by one half.

DRAWING NO. 55096A

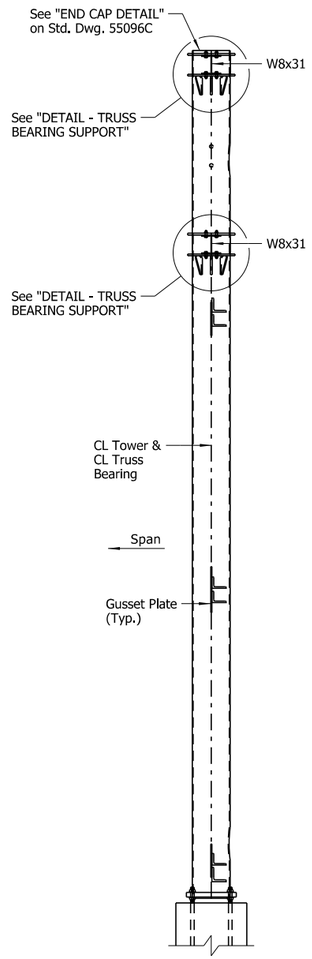
6/17/2026

DATE REVISED	DATE REVISED	FED. ROAD DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.			
		OVERHEAD SIGN STR. (101' TO 115') - 55096B				

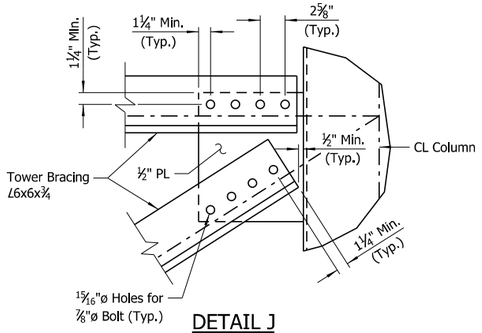
NOTE:
For "VIEW C-C", see Std. Dwg. 55096C.



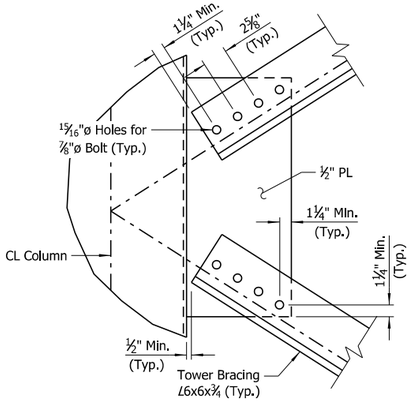
VIEW A-A
(Foundation A1)
No Scale



VIEW B-B
No Scale



DETAIL J
No Scale



DETAIL K
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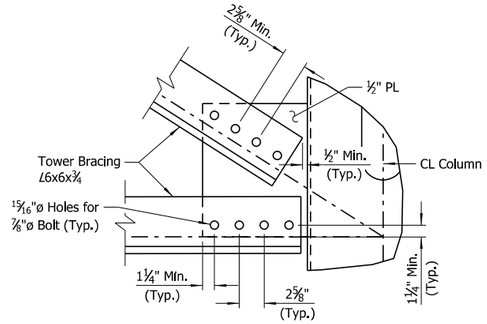
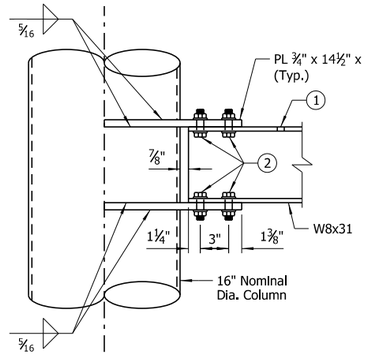
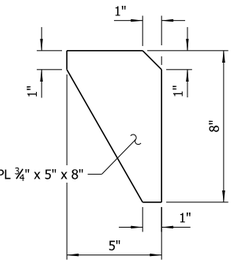


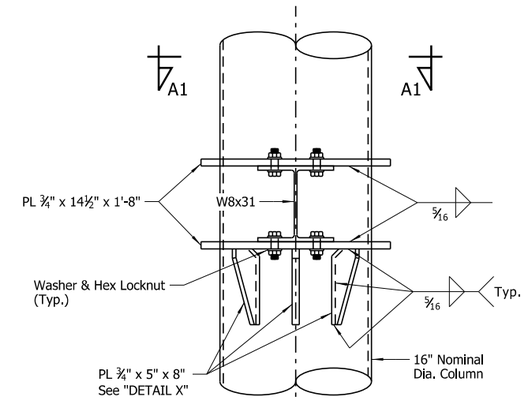
DETAIL L
No Scale



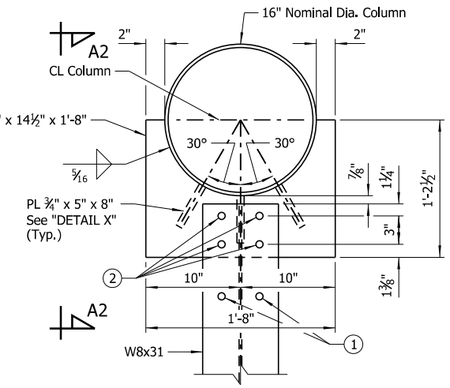
VIEW A2-A2
Scale: 1½" = 1'-0"
(¾" x 5" x 8" Plate not shown for clarity)



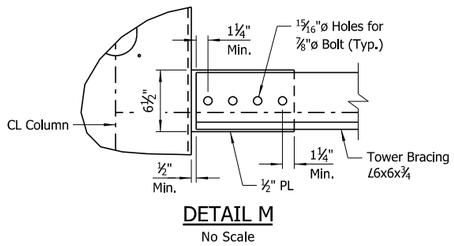
DETAIL X
Scale: 3" = 1'-0"



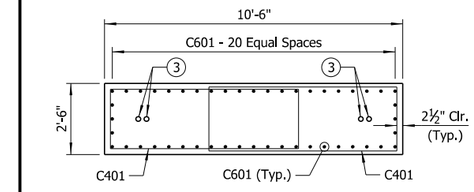
DETAIL - TRUSS BEARING SUPPORT
Scale: 1½" = 1'-0"



VIEW A1-A1
Scale: 1½" = 1'-0"



DETAIL M
No Scale



SECTION D-D
Scale: ⅜" = 1'-0"

1. Bolts shall be ¾"ø. Provide 13/16" x 2" slotted hole in gusset plate and chord angle. Use plate washer on gusset plate side. Provide 13/16"ø holes in ¾" shim plate and top or bottom beam flanges as required.
2. Bolts shall be ¾"ø. Provide 13/16"ø holes at top and bottom beam flanges and connection plates.
3. 2" Non-Metallic Conduit (Schedule 80) (2 Conduits per Column). An insulated bushing shall be installed at the top end of each conduit.
4. Threaded Conduit Nipples shall be fitted with standard plugs until conduit is installed.

THESE DETAILS ARE APPLICABLE UNLESS OTHERWISE SHOWN IN THE PLAN DETAILS, SPECIAL PROVISIONS, OR SUPPLEMENTAL SPECIFICATIONS.

SHEET 2 OF 6
STANDARD DETAILS OF 101' TO 115'
STEEL OVERHEAD SIGN STRUCTURE
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: CWT DATE: NOV. 2022 FILENAME: b55096b.dgn
CHECKED BY: ABH DATE: NOV. 2022 SCALE: As Shown
DESIGNED BY: STD. DATE: -

DRAWING NO. 55096B

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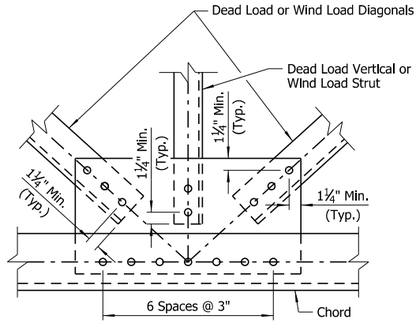
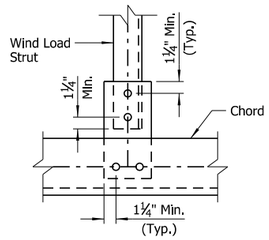
Scales shown are for full size 22"x34" drawings. When using 11"x17" drawings, reduce scale by one half.

6/17/2026

DATE REVISED	DATE REVISED	FED. ROAD DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.			
		OVERHEAD SIGN STR. (101' TO 115') - 55096C				



DETAIL A
No Scale



DETAIL B
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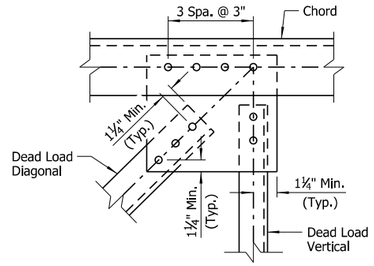
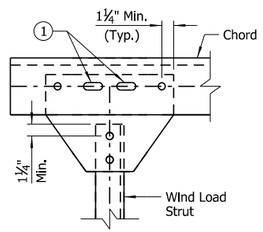
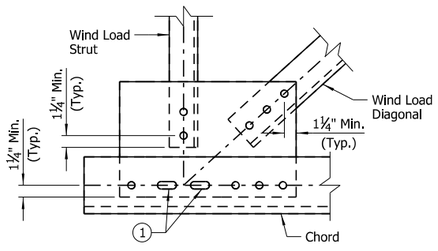


DETAIL C
No Scale

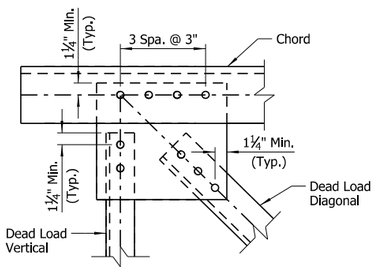


DETAIL D
No Scale

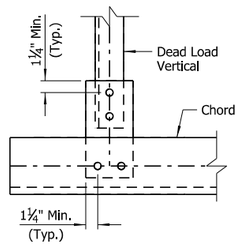
NOTE:
Unless otherwise noted, thickness of all Gusset Plates shall be ⅜".



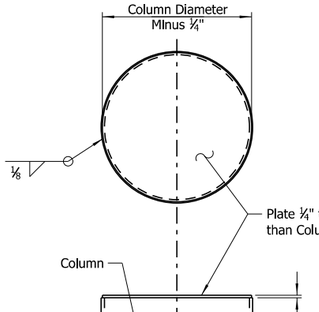
DETAIL E
No Scale



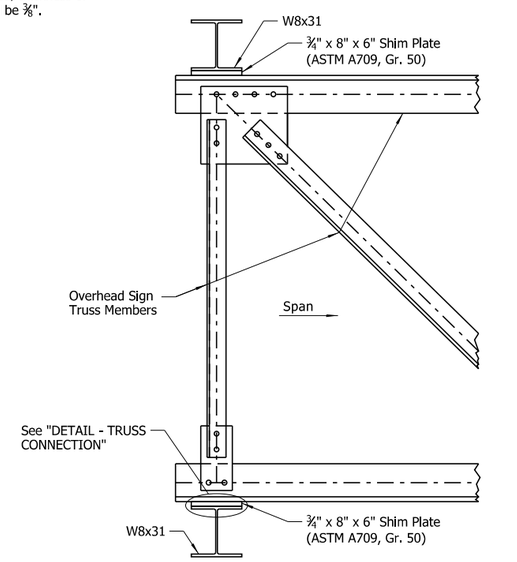
DETAIL F
No Scale



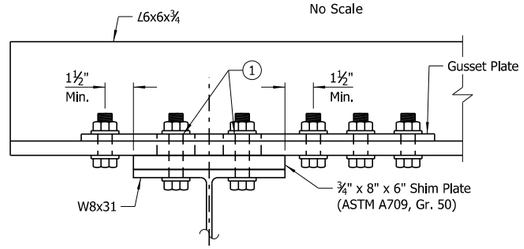
DETAIL G
No Scale



END CAP DETAIL
Scale: 1½" = 1'-0"



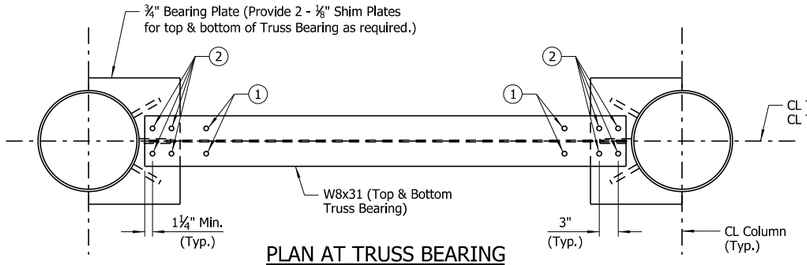
VIEW C-C
No Scale



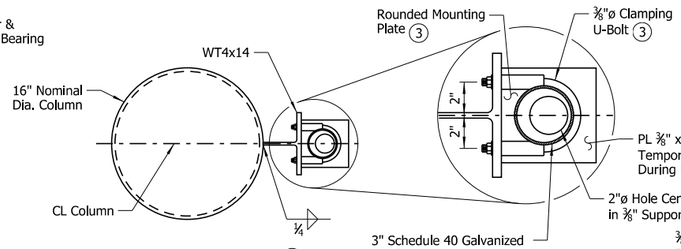
DETAIL - TRUSS CONNECTION
No Scale

(1) Bolts shall be ¾"ø. Provide $^{13}/_{16}$" x 2" slotted holes in gusset plate and chord angle. Clearance between end of slot and adjacent bolt hole shall be no less than 1½". Provide $^{13}/_{16}$"ø holes in ¾" shim plate and top or bottom beam flanges as required. Use plate washer on gusset plate side.

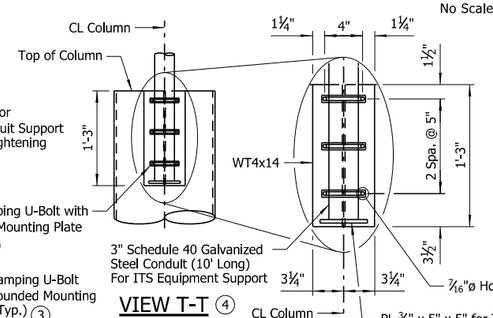
(2) Bolts shall be ¾"ø. Provide $^{13}/_{16}$"ø holes at top and bottom beam flanges and connection plates.



PLAN AT TRUSS BEARING
Scale: 1" = 1'-0"



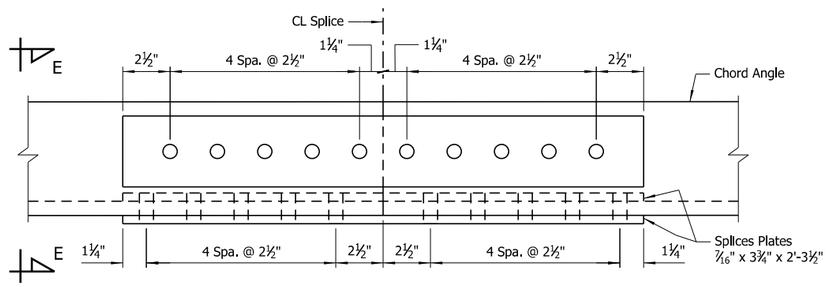
SECTION U-U (4)
Scale: 1½" = 1'-0"



VIEW T-T (4)
Scale: 1" = 1'-0"

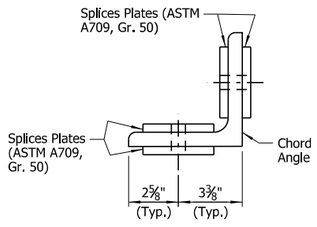
(3) When required per plans to support ITS equipment, or as directed by the Engineer, Clamping U-Bolt with Rounded Mounting Plate Assembly product shall be included in shop drawings for approval. Assembly shall be galvanized and shall meet the requirements of ASTM A36 at a minimum. Install per Manufacturer's Instructions.

(4) WT4x14 with ⅜" Temporary Support Plate always required. 3" Conduit and Clamping U-Bolts only required when necessary to support ITS equipment or as directed by the Engineer. See ITS Plans.

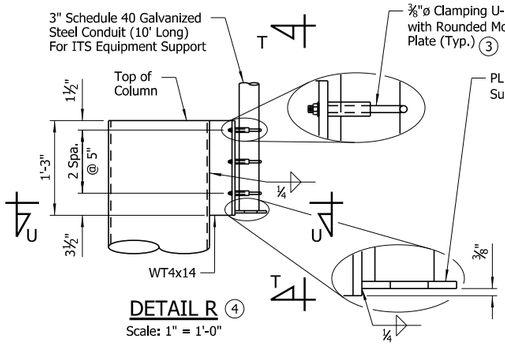


CHORD SPLICE
Scale: 3" = 1'-0"

NOTE:
Chord angles may be spliced in convenient lengths for galvanizing and sign placement.



VIEW E-E
Scale: 3" = 1'-0"



DETAIL R (4)
Scale: 1" = 1'-0"

THESE DETAILS ARE APPLICABLE UNLESS OTHERWISE SHOWN IN THE PLAN DETAILS, SPECIAL PROVISIONS, OR SUPPLEMENTAL SPECIFICATIONS.

SHEET 3 OF 6
STANDARD DETAILS OF 101' TO 115'
STEEL OVERHEAD SIGN STRUCTURE
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY:	CWT	DATE:	NOV. 2022	FILENAME:	b55096c.dgn
CHECKED BY:	ABH	DATE:	NOV. 2022	SCALE:	As Shown
DESIGNED BY:	STD.	DATE:	-		

DRAWING NO. 55096C

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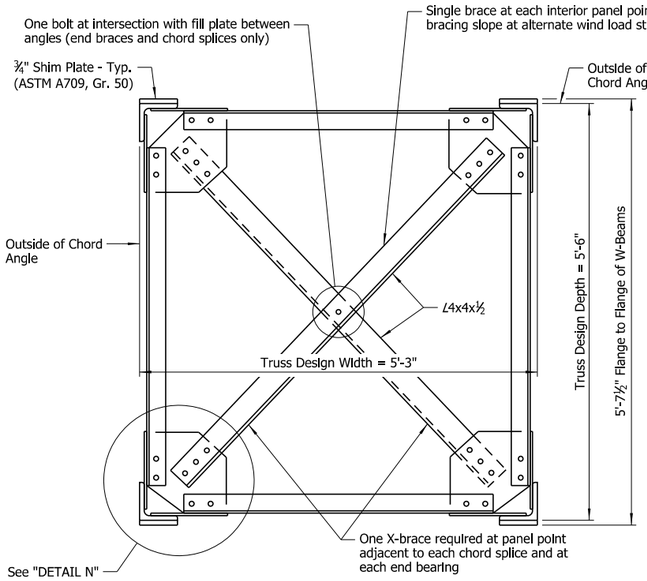
Scales shown are for full size 22"x34" drawings. When using 11"x17" drawings, reduce scale by one half.

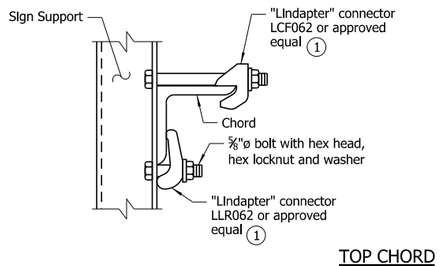
6/17/2026

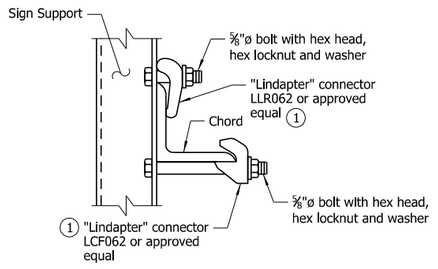
DATE REVISED	DATE REVISED	FED. ROAD DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.			
		OVERHEAD SIGN STR. (101' TO 115') - 55096D				



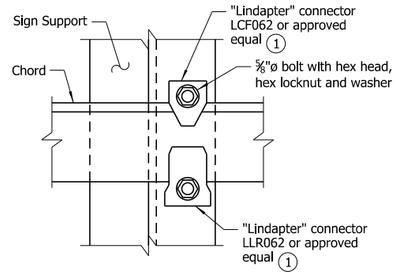
TRUSS SECTION

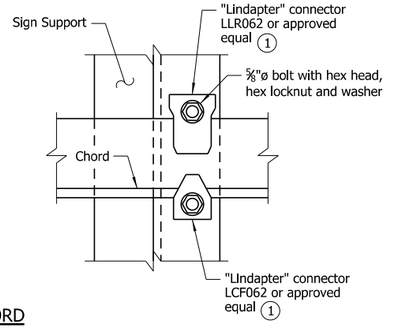
Scale: 1" = 1'-0"





TOP CHORD



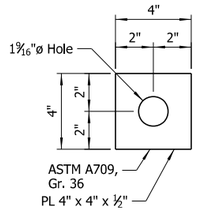


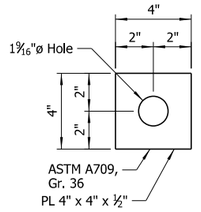
BOTTOM CHORD

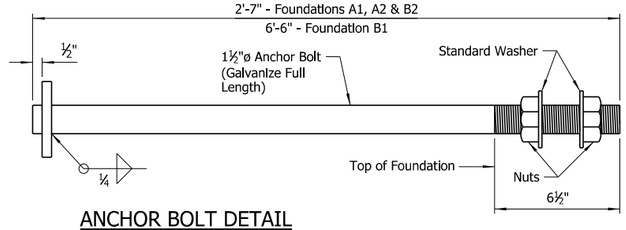
(1) All "Lindapter" connectors or approved equal shall be installed according to Manufacturer's recommendations. All connectors, bolts, nuts and washers shall be galvanized.

DETAILS OF SIGN SUPPORT CONNECTION TO TRUSS

No Scale

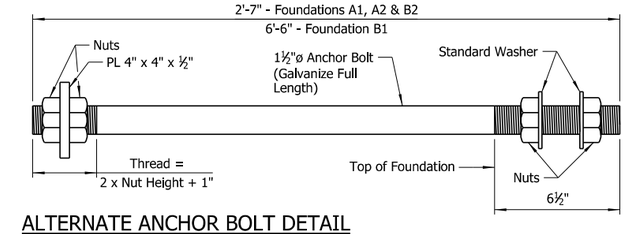






ANCHOR BOLT DETAIL

No Scale

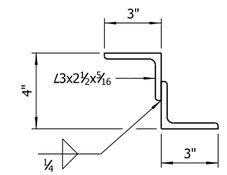


ALTERNATE ANCHOR BOLT DETAIL

No Scale

NOTE:
Unless otherwise noted, thickness of all Gusset Plates shall be ⅜".

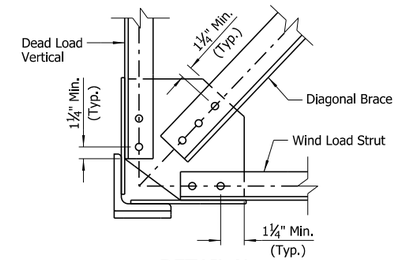
NOTE:
Install all support connectors clear of the gusset plates and splice locations.



NOTE:
Structural Z Support may be fabricated from angles as shown.

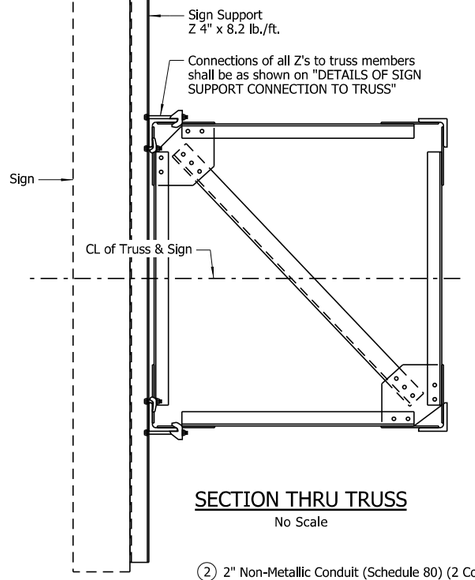
DETAILS OF ALTERNATE Z SUPPORT

No Scale



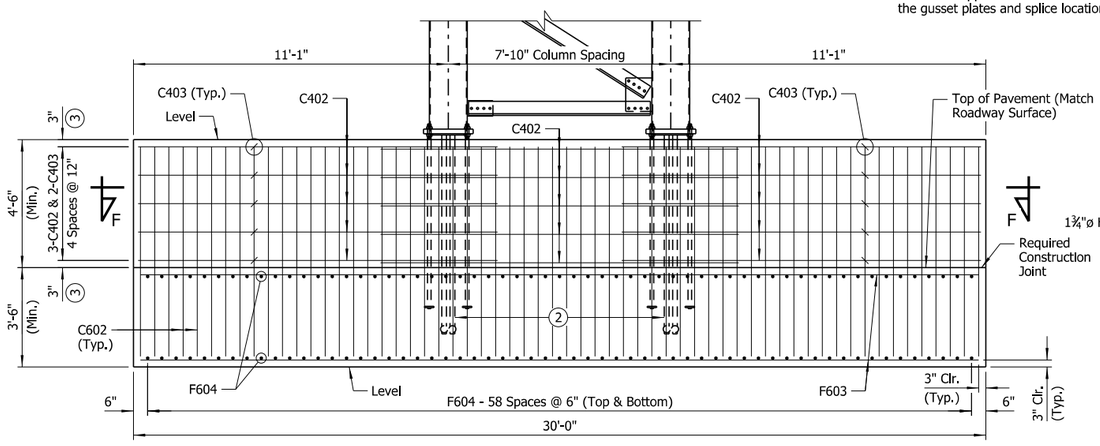
DETAIL N

Scale: 1½" = 1'-0"



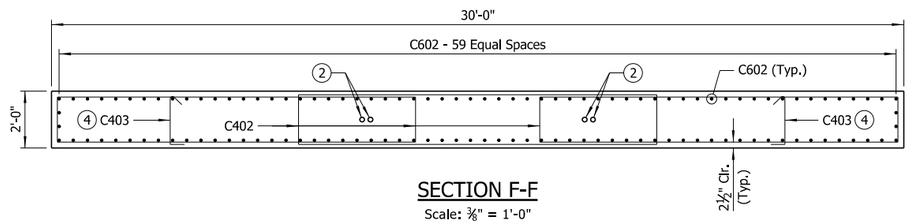
SECTION THRU TRUSS

No Scale



VIEW AA-AA

(Foundation B1)
Scale: ⅜" = 1'-0"



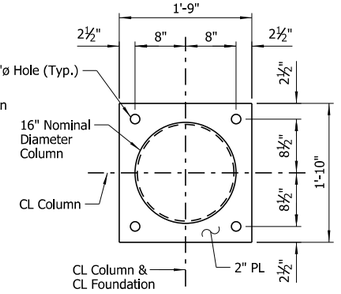
SECTION F-F

Scale: ⅜" = 1'-0"

(2) 2" Non-Metallic Conduit (Schedule 80) (2 Conduits per Column). An insulated bushing shall be installed at the top end of each conduit. Conduit shall not be provided if cabling at Foundation B1 is not required per Electrical and/or ITS plans.

(3) Minor adjustments are allowed to maintain C402 and C403 12" spacing for foundations located in longitudinal grades.

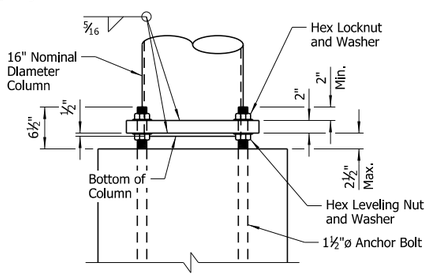
(4) Alternate C403 ties end for end at each layer of reinforcing.



PLAN - COLUMN BASE

Scale: 1" = 1'-0"

NOTE:
Diameter of hole in base plate to be ⅛" larger than column diameter.



ELEVATION - COLUMN BASE

Scale: 1" = 1'-0"

THESE DETAILS ARE APPLICABLE UNLESS OTHERWISE SHOWN IN THE PLAN DETAILS, SPECIAL PROVISIONS, OR SUPPLEMENTAL SPECIFICATIONS.

SHEET 4 OF 6
STANDARD DETAILS OF 101' TO 115'
STEEL OVERHEAD SIGN STRUCTURE
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

This document was originally issued by ARDOT Bridge Division. A sealed and signed original is held on file. This copy is not a signed and sealed document.

DRAWN BY: CWT DATE: NOV. 2022 FILENAME: b55096d.dgn
CHECKED BY: ABH DATE: NOV. 2022 SCALE: As Shown
DESIGNED BY: STD. DATE: -

Scales shown are for full size 22"x34" drawings. When using 11"x17" drawings, reduce scale by one half.

DRAWING NO. 55096D

6/17/2026

DATE REVISED	DATE REVISED	FED. ROAD DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.			
		OVERHEAD SIGN STR. (101' TO 115') - 55096E				

GENERAL NOTES:

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction, 2014 Edition, with applicable Supplemental Specifications and Special Provisions. Section and Subsection refer to the Specifications unless otherwise noted in the plans.

DESIGN SPECIFICATIONS: AASHTO LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, First Edition, 2015 with current interim revisions.

Basic Wind Speed = 120 mph
Fatigue Category: I

This structure is approved for a maximum sign area equal to 75% of the span length times a sign height of 15 feet. This structure is approved for a maximum sign weight (total of all signs and hangers) of 10,780 lbs. Use of additional sign area or a heavier sign must be approved by the Engineer. If the structure height ("H1" or "H2") exceeds 30'-0", contact the Engineer.

FOUNDATION MATERIALS AND STRENGTHS:

Class S Concrete	f'c = 3,500 psi
Reinforcing Steel (Gr. 60, AASHTO M 31 or M 322, Type A)	fy = 60,000 psi

Spread footings for the structure have been designed assuming a factored bearing resistance of 2.0 ksf. Contractor shall be responsible for evaluating and verifying that the foundation soils are adequate to achieve the assumed factored bearing capacity, utilizing SPT (Standard Penetration Test), CPT (Cone Penetration Test), DCP (Dynamic Cone Penetration) test, or other suitable means, prior to or after footing excavation, whichever is appropriate. If the foundation soils are verified to be adequate, then the footing shall be constructed in accordance with the planned dimensions. Otherwise, the Design Engineer shall be contacted. Costs for foundation soil evaluation and verification shall be included in the item "STEEL OVERHEAD SIGN STRUCTURE (_)".

Structural steel sign support members shall comply with the following specifications:

Angles:	ASTM A709, Gr. 36 (Fy = 36,000 psi)
Plate, W-Section:	ASTM A709, Gr. 50 (Fy = 50,000 psi)
(1) Pipe:	ASTM A139, Gr. C, straight-seam welded (Fy = 42,000 psi), ASTM A500, Gr. B (Fy = 42,000 psi), ASTM A501, Gr. B (Fy = 50,000 psi)
Z-Shapes:	ASTM A709, Grade 36 (Fy = 36,000 psi)
Shim Plates:	ASTM A1011, SS, Grade 36, Type 2, or Grade 40
Bolts:	ASTM F3125, Grade A325, Type 1
Locknuts - Approved Type:	ASTM A563, Grade DH or AASHTO M 292, Grade 2H
Washers:	ASTM F436
Nuts:	ASTM A563, Grade DH or AASHTO M 292, Grade 2H

The Contractor shall make check measurements in the field and make any adjustments necessary to meet the required clearances and to fit the new structure to the existing and/or proposed conditions.

Drawings show general features of design only. Shop drawings shall be made in accordance with Subsection 807.04, submitted, and approval secured before fabrication is begun.

Requests for substitution of structural steel shapes shown with shapes of greater size must be submitted by the Contractor to the Engineer for approval. Steels of equal or greater strengths will be accepted only when shown on the approved shop drawings. Shapes and materials shown in the plans will be the basis of payment and no additional compensation will be made for any adjustments due to substitutions.

All steel shall be galvanized according to Subsection 807.19. Steel completely encased in concrete may not be galvanized. Galvanized coating damaged during transport, handling or erection shall be field repaired in accordance with Subsection 807.88.

All main load carrying tension members greater than ½" in thickness shall conform to the requirements of the Longitudinal Charpy V-Notch test specified for Zone 1 minimum service temperature. This work and materials shall be paid for in accordance with Special Provision "STEEL SIGN STRUCTURES".

Field splices shall be located in order to avoid sign panel connections. There shall be a maximum of two field splices, and they shall be spaced a minimum of 15 feet apart.

Truss field sections shall be shop assembled. Entire truss shall be fully assembled and lifted into place as one unit on to tower supports. All truss member connections shall be bolted connections.

All welding that is to be done during fabrication of structural steel, including temporary welds, shall be detailed on the shop drawings and submitted for approval. If additional welds are required, whether temporary or permanent, a formal request with detailed drawings shall be submitted to the Engineer for approval. All welding shall conform to Subsection 807.26 except welding of tubular sections shall conform to AWS D1.1 Structural Welding Code.

No circumferential butt welds will be allowed in any pipe sections.

All fillet welds of critical members shall be tested according to AWS D1.1 Structural Welding Code - Steel using the magnetic particle method. Critical welds shall include: column to base plate and truss bottom support to column.

Connections shall be bolted with high-strength bolts. Unless otherwise noted, bolts shall be ¾" diameter and open holes shall be $^{13}/_{16}$" diameter. Bolt spacing shall be 2½" for ¾" diameter bolts unless otherwise noted. Bolts shall be placed with heads on the outside face of all members.

All truss frame bolts shall comply with ASTM F3125, Grade A325, Type 1, galvanized according to Subsection 807.06. Nuts and washers for ASTM F3125, Grade A325, Type 1 bolts shall be furnished and galvanized in accordance with Subsection 807.06.

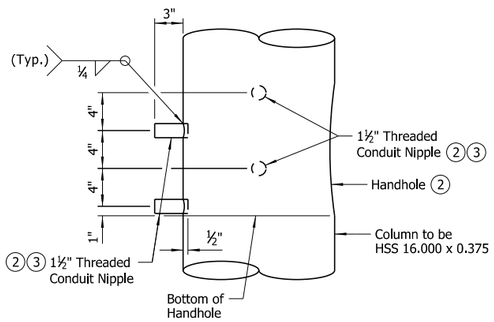
Locknuts shall be equipped with nylon locking inserts or other approved type locking system. Locknuts shall be installed according to Manufacturer's recommendations.

Anchor bolts shall comply with AASHTO M 314, Grade 55, including Supplementary Requirement S1, and shall be galvanized according to Subsection 807.07. Nuts and washers for anchor bolts shall be furnished and galvanized in accordance with Subsection 807.07. Anchor bolts shall be pretensioned in accordance with Special Provision "STEEL SIGN STRUCTURES".

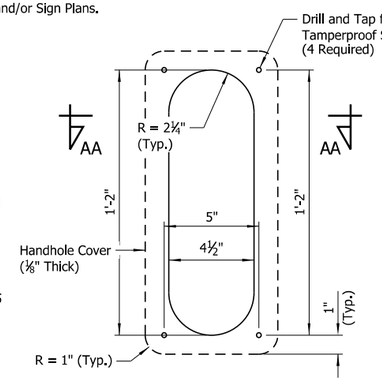
Shoring may be required to protect existing shoulders or other elements during excavation. Any shoring required shall not be paid for directly, but shall be considered incidental to the item "STEEL OVERHEAD SIGN STRUCTURE (_)". The excavations for the footings shall be backfilled before the structure is attached to the foundations.

DYNAMIC MESSAGE SIGN (WHEN APPLICABLE): The Dynamic Message Sign (DMS) supplier shall be responsible for the attachment method and materials used to attach the DMS and its accessories to the structure. The method of attachment shall not facilitate any corrosion of the structure. For additional information regarding the DMS, see Special Provision "OVERHEAD DYNAMIC MESSAGE SIGN ASSEMBLY".

For location of each 101' to 115' overhead sign structure to be used, refer to ITS and/or Sign Plans.



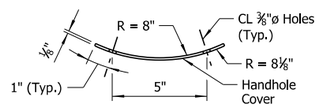
DETAIL P
Scale: 1½" = 1'-0"



HANDHOLE DETAIL (2)
Scale: 3" = 1'-0"

(2) See details on Std. Dwgs. 55096A & 55096B for location and orientation of handholes and threaded conduit nipples.

(3) Threaded conduit nipples shall be fitted with standard plugs until conduit is installed.

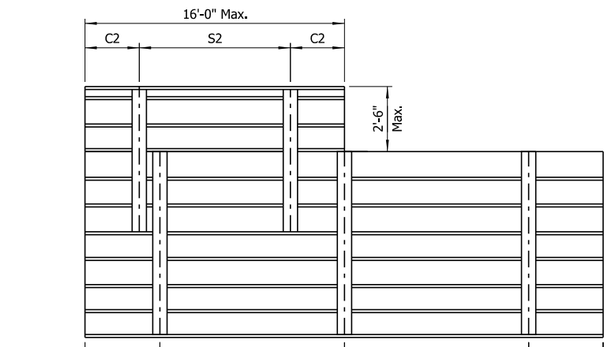


SECTION AA-AA
Scale: 3" = 1'-0"

NOTE:
Provide handhole covers with chain, waterproof grommet, and tamperproof screws.

Handhole covers shall be galvanized and meet the requirements of ASTM A36 at a minimum.

Tamperproof screws shall be galvanized and meet the requirements of ANSI/ASME B18.6.3.



NOTE:
See sign details and plan sheets for number, size and dimensions of signs.

HANGER SPACING DETAILS FOR EXTRUDED PANEL SIGNS

No Scale

(1) In addition to material requirements, all pipe used for welded applications shall have a maximum carbon equivalency (CE) of 0.4 using the following equation:

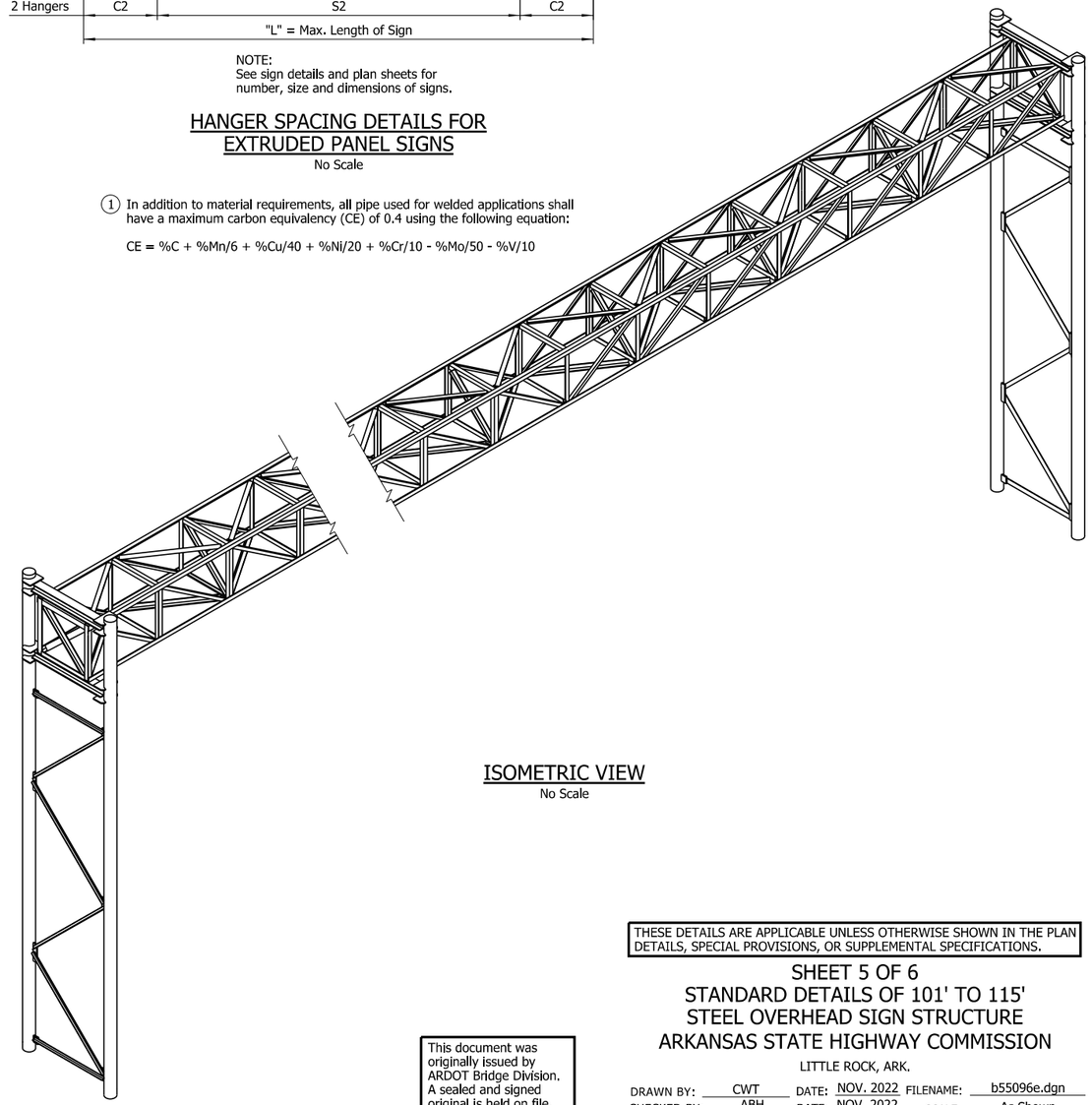
CE = %C + %Mn/6 + %Cu/40 + %Ni/20 + %Cr/10 - %Mo/50 - %V/10

HANGER VARIABLES

(For Extruded Panel Signs)

Max. Length of Sign = "L"	"n" Hangers	Cantilever Length "Cn"	Hanger Spacing "Sn"
15'-0"	2 Hangers	0.21 x "L"	0.58 x "L"
30'-0"	3 Hangers	0.145 x "L"	0.355 x "L"
45'-0"	4 Hangers	0.107 x "L"	0.262 x "L"

NOTE:
Hanger spacing and cantilever length shall be rounded to the nearest inch.



ISOMETRIC VIEW
No Scale

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SHEET 5 OF 6
STANDARD DETAILS OF 101' TO 115'
STEEL OVERHEAD SIGN STRUCTURE
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

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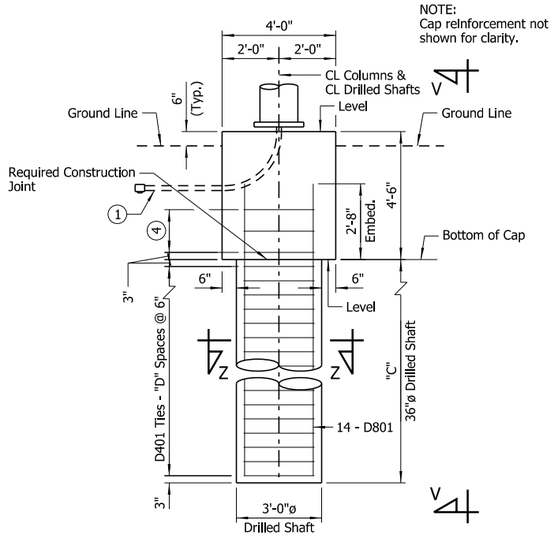
DRAWN BY:	CWT	DATE:	NOV. 2022	FILENAME:	b55096e.dgn
CHECKED BY:	ABH	DATE:	NOV. 2022	SCALE:	As Shown
DESIGNED BY:	STD.	DATE:	-		

Scales shown are for full size 22"x34" drawings. When using 11"x17" drawings, reduce scale by one half. DRAWING NO. 55096E

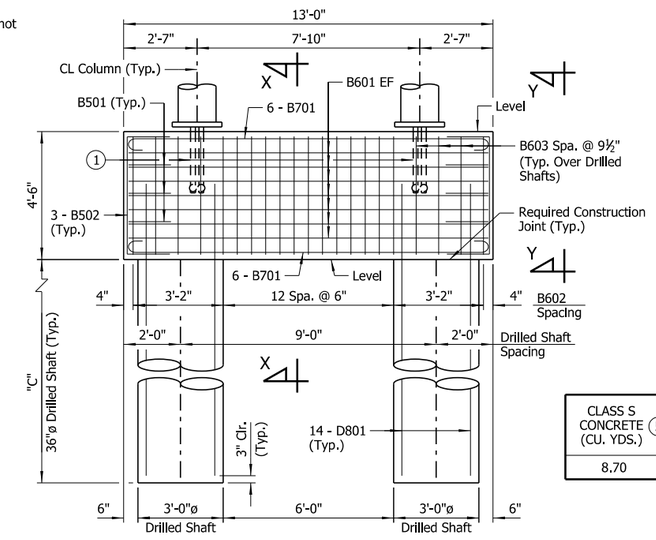
6/17/2026

DATE REVISED	DATE REVISED	FED. ROAD DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.			
		OVERHEAD SIGN STR. (101' TO 115') - 55096F				



ELEVATION - FOUNDATION A2 (2)

Scale: ⅜" = 1'-0"



VIEW V-V

Scale: ⅜" = 1'-0"

1. 2" Non-Metallic Conduit (Schedule 80) with 16" Min. Bend Radius (2 Conduits per Column). An insulated bushing shall be installed at the top end of each conduit. At Foundation B2, conduit shall not be provided if cabling on that side of the sign structure is not required per Electrical and/or ITS plans. At Foundation A2, conduit shall always be provided. If cabling in the conduit at Foundation A2 is not required per Electrical and/or ITS plans, the end of conduit in the ground shall be capped for future use with a manufactured water-tight cap.
2. Foundation A2 allowed only when foundation is outside clear zone or is protected by guardrail or barrier.
3. Foundation B2 is required when the foundation is located in a median, within the clear zone, and is not protected by guardrail or barrier. Foundation B2 requires adjacent Roadway Median Barrier to transition to match the ends of the cap. See Roadway Plans for additional information.
4. C401 Ties - 2 Spaces @ 9"

APPROX. QUANTITIES FOR FOUNDATION A2 (FOR INFORMATION ONLY)

CLASS S CONCRETE (5) (CU. YDS.)	REINFORCING STEEL (LBS.) (6)	EXCAVATION (CU. YDS.)	DRILLED SHAFT (36" DIA.) (LIN. FT.)	CROSSHOLE SONIC LOGGING (36" DIA.) (EACH)
8.70	1,230	17	"G"	1

APPROX. QUANTITIES FOR FOUNDATION B2 (FOR INFORMATION ONLY)

(5) CLASS S CONCRETE (CU. YDS.)	(6) REINFORCING STEEL (LBS.)	DRILLED SHAFT (36" DIA.) (LIN. FT.)	CROSSHOLE SONIC LOGGING (36" DIA.) (EACH)
8.70	1,230	"G"	1

5. Does not include Class S Concrete for Drilled Shafts
6. Does not include D401 and D801 Bars in Drilled Shafts
7. Tabulated SPT N60 values are raw SPT N values corrected by SPT hammer efficiency and represent average values along the plan shaft penetration. If the SPT N60 values in the foundation soils within 2 shaft diameters below the plan tip elevation are less than the average SPT N60 values along the plan shaft penetration, the Engineer shall be contacted.

DRILLED SHAFT NOTES (FOUNDATIONS A2 & B2)

Drilled shafts shall conform to Special Provision "DRILLED SHAFT FOUNDATIONS FOR STEEL SIGN STRUCTURES". Drilled shafts will not be paid for directly but shall be considered subsidiary to the unit price bid for "STEEL OVERHEAD SIGN STRUCTURE (_)". Temporary casing may be required. Unless approved by the Engineer, permanent steel casing shall not be used.

Crosshole Sonic Logging (CSL) shall be performed on one drilled shaft at each foundation and as directed by the Engineer. Testing shall be performed in accordance with Special Provision "NONDESTRUCTIVE TESTING OF DRILLED SHAFTS FOR STEEL SIGN STRUCTURES".

Concrete and reinforcing steel placed in drilled shafts will not be paid for directly but shall be considered subsidiary to the unit price bid for "STEEL OVERHEAD SIGN STRUCTURE (_)". No additional payment shall be made for spacers, additional splices or bracing needed for assembly, shipping, handling or erecting.

Concrete in drilled shafts shall be Class "S" as modified by Special Provision "DRILLED SHAFT FOUNDATIONS FOR STEEL SIGN STRUCTURES".

Drilled shaft lengths shall be determined based on the results of exploratory borings, which shall be performed by the Contractor prior to shaft excavation.

If competent rock is not encountered in the exploratory boring, the Standard Penetration Test (SPT) blow count corrected by the hammer efficiency, N60, shall be used to determine shaft lengths. See "TABLE OF VARIABLES".

If competent rock is encountered in the exploratory boring within 25'-0" of planned top of drilled shaft, the shafts shall be founded a minimum of 3'-0" into rock and have a minimum length of 25'-0".

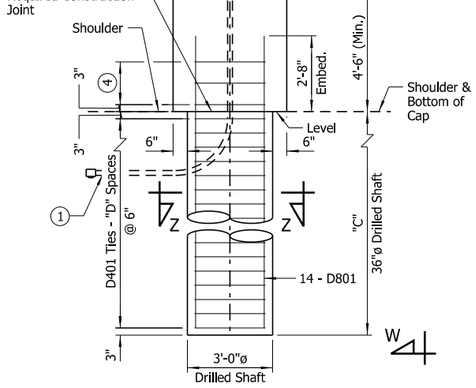
If competent rock is encountered in the exploratory boring below 25'-0" from planned top of drilled shaft, the shafts shall be founded a minimum of 3'-0" into rock or to the depth based on the SPT N60 value and associated shaft length in the "TABLE OF VARIABLES", whichever is shallower.

Testing results shall be submitted to the Engineer for review. Final drilled shaft lengths shall be approved by the Engineer prior to construction.

The cost of performing exploratory borings and in-situ strength testing shall be included in the item "STEEL OVERHEAD SIGN STRUCTURE (_)".

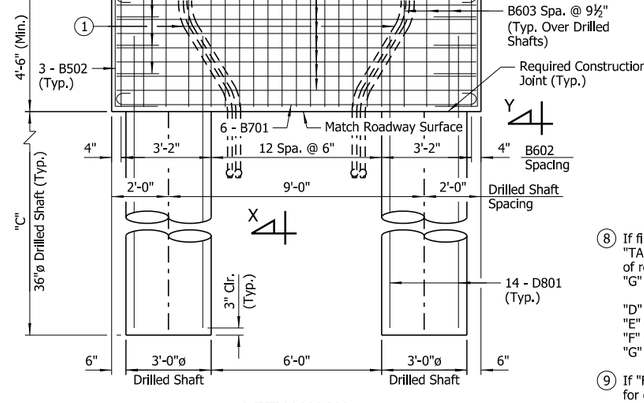
TABLE OF VARIABLES (8)

SPT N60 (7) (blows/ft.)	Min. Depth of Exploratory Boring	Drilled Shaft Length, "C"	"D"	"E"	"F" (9)	"G"
<5	-	Contact Engineer	-	-	-	-
5 To 7	107'-0"	101'-0"	201	404	103'-5"	202'-0"
7 To 9	90'-0"	84'-0"	167	336	86'-5"	168'-0"
9 To 11	67'-0"	61'-0"	121	244	63'-5"	122'-0"
11 To 13	53'-0"	47'-0"	93	188	49'-5"	94'-0"
>13	44'-0"	38'-0"	75	152	40'-5"	76'-0"



ELEVATION - FOUNDATION B2 (3)

Scale: ⅜" = 1'-0"



VIEW W-W

Scale: ⅜" = 1'-0"

8. If final drilled shaft length is not shown in "TABLE OF VARIABLES" due to the presence of rock or other factors, variables "D" through "G" shall be determined as follows:

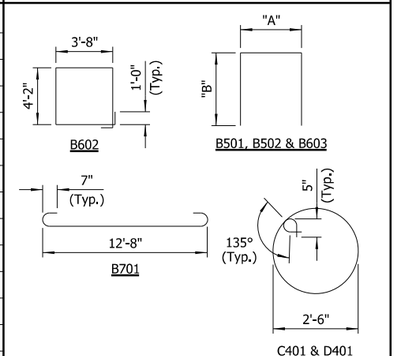
   "D" = (Shaft Length in Ft. - 0.5) / 0.5
   "E" = Shaft Length in Ft. x 4
   "F" = Shaft Length + 2'-5"
   "G" = Shaft Length x 2

9. If "F" exceeds 60'-0", a lap splice is required for each D801 bar at the midpoint of the drilled shaft. Min. lap splice length for D801 bar = 3'-6". Length shown in table does not include the additional length required for a lap splice.

BAR LIST - FOUNDATION A2 OR B2

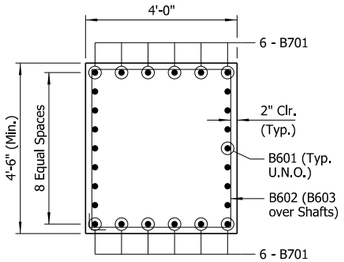
MARK	NO. REQ'D	LENGTH	"A"	"B"	P.D.
B501	6	6'-4"	3'-6"	1'-6"	2½"
B502	6	6'-10"	4'-0"	1'-6"	2½"
B601	14	12'-8"			Str.
B602	15	16'-10"			4½"
B603	6	11'-8"	3'-8"	4'-2"	4½"
B701	12	14'-4"			5¼"
C401	6	8'-11"			3"
D401	"E"	8'-11"			3"
D801	28	"F"			Str.

BAR BENDING DIAGRAMS



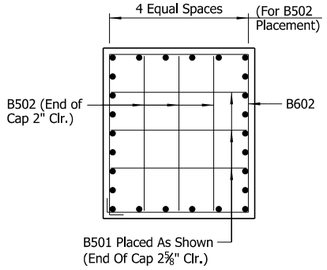
NOTES:
Dimensions of bars are out-to-out.

Number of bars shown is for one Foundation A2 or one Foundation B2.



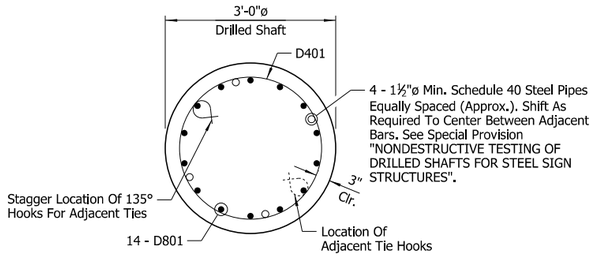
SECTION X-X

Scale: ½" = 1'-0"



VIEW Y-Y

Scale: ½" = 1'-0"



SECTION Z-Z

Scale: ¾" = 1'-0"

LEGEND

U.N.O. = Unless Noted Otherwise
EF = Each Face

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SHEET 6 OF 6
STANDARD DETAILS OF 101' TO 115'
STEEL OVERHEAD SIGN STRUCTURE
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: CWT DATE: JAN. 2023 FILENAME: b55096f.dgn
CHECKED BY: ABH DATE: JAN. 2023 SCALE: As Shown
DESIGNED BY: STD. DATE: -

Scales shown are for full size 22"x34" drawings. When using 11"x17" drawings, reduce scale by one half. DRAWING NO. 55096F

6/17/2026