KIRBY BUILDING SYSTEMS
A NUCOR COMPANY

BETTER SOLUTIONS. BETTER BUILDINGS.

124 KIRBY DRIVE, PORTLAND, TN. 37148

MBMA
METAL BUILDING MANUFACTURERS ASSOCIATION
MEMBER

ACCREDITED
AC472

JOB NUMBER:	K17B0710
BUILDER:	TENNESSEE INDUSTRIAL MAINTENANCE LLC
CUSTOMER:	TDOT REGION 3
LOCATION:	NASHVILLE, TN

PRIMER COLOR DESIGNATION

RP – STANDARD RED PRIMER
GP – GRAY PRIMER
GZ – GALVANIZED

THIS DRAWING PACKET IS TO BE USED FOR PHASE A THRU D

TABLE OF CONTENTS

GENERAL NOTES:

1. MATERIALS

STRUCTURAL STEEL PLATE	A529 / A572 / A1011
HOT ROLLED MILL SHAPES	A36 / A529 / A572 / A500
COLD FORM SHAPES	A653 / A1011
ROOF AND WALL SHEETING	A653 / A792
BOLTS	A307 / A325
CABLE	A475
RODS	A572 / A108

2. A325 BOLT TIGHTENING REQUIREMENTS
BOLTED JOINTS SHALL BE CONNECTED AND INSPECTED IN ACCORDANCE WITH THE "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS," JUNE 30,2004, RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS. UNLESS NOTED OTHERWISE ON THE KBS ERECTION DRAWINGS, ALL A325 BOLTS LARGER THAN 1/2"ø ARE USED IN CONNECTIONS DEFINED AS TURN OF NUT
3. STRUCTURAL SHOP COAT PAINT
THE COAT OF SHOP PRIMER IS INTENDED TO PROTECT THE STEEL FRAMING FOR ONLY A SHORT PERIOD OF EXPOSURE TO ATMOSPHERIC CONDITIONS. SHOP COAT PRIMER DOES NOT PROVIDE THE APPEARANCE, DURABILITY AND/OR PROTECTION OF AN APPROPRIATE FIELD APPLIED FINISH. KIRBY STANDARD SHOP COAT PAINT SHALL MEET OR EXCEED THE REQUIREMENTS OF FEDERAL SPECIFICATION TTP–636.
4. TEMPORARY PANEL STORAGE
PAINTED BUILDING PANELS WITH FLUOROPOLYMER FINISH ARE HIGH–QUALITY CONSTRUCTION MATERIALS. WHILE IN THE BUNDLE, PANELS SHOULD BE PROTECTED FROM HIGH TEMPERATURE, HUMIDITY AND MOISTURE, OTHERWISE, DAMAGE CAN OCCUR TO THE PAINTED SURFACE OF THE PANEL. PLEASE REFER TO THE "WARNING LABEL" THAT KIRBY APPLIES TO EACH BUNDLE OF FLUOROPOLYMER FINISHED PANELS FOR PROPER STORAGE PROCEDURES.
5. TEMPORARY BRACING
BUILDER/CUSTOMER SHALL SPECIFICALLY NOTE THAT BRACING FURNISHED BY KIRBY IS INTENDED TO BE USED FOR THE COMPLETED BUILDING; KIRBY DOES NOT REPRESENT OR GUARANTEE THAT THE BRACING WILL BE ADEQUATE AS TEMPORARY BRACING DURING ERECTION OF THE BUILDING.
6. PANEL HANDLING
METAL BUILDING PANELS ARE WAXED OR OILED FOR FINISH PROTECTION DURING SHIPPING AND STORAGE. THE WAX OR OIL MAKES THE PANELS SLIPPERY AND HAZARDOUS TO WALK ON OR STAND ON. THE WAX OR OIL CAN BUILD UP ON SHOES, GLOVES, AND CLOTHING MAKING CLIMBING OR WALKING ON OTHER COMPONENTS HAZARDOUS.
7. ERECTION NOTES
THE BUILDING MUST BE ERECTED ACCORDING TO THE FRAMING PLANS, STANDARD DETAILS, SPECIAL DETAILS, AND NOTES TO ASSURE COMPLIANCE WITH DESIGN LOADS AND BUILDING CODE REQUIREMENTS. FIELD MODIFICATION OF THE BUILDINGS OR BUILDING COMPONENTS WHICH WILL AFFECT THE STRUCTURAL INTEGRITY OF THE BUILDING WILL NOT BE ALLOWED WITHOUT PRIOR APPROVAL BY AN AUTHORIZED REPRESENTATIVE OF KIRBY BUILDING SYSTEMS.
8. WELDING SPECIFICATIONS
ALL SHOP WELDS ON MATERIALS GREATER THAN OR EQUAL TO 0.125" IN THICKNESS WERE PRODUCED IN ACCORDANCE WITHIN THE 2010 AWS D1.1 STRUCTURAL WELDING CODE – STEEL. THE REMAINING WELDS ON OTHER THINNER MATERIALS WERE PRODUCED IN ACCORDANCE WITH THE 2008 AWS D1.3 STRUCTURAL WELDING CODE – SHEET STEEL. ALL WELDING WAS PERFORMED BY AWS CERTIFIED WELDERS.
9. BUILDING MAINTENANCE MANUAL
AVAILABLE AT http://www.kirbybuildingsystems.com/for_metal_building_systems_builders.asp

BUILDING LOADS / DESCRIPTION:

CERTIFICATION EXTENDS ONLY FOR THE LOADS SPECIFIED ON KIRBY'S PURCHASE ORDER TO THE STRUCTURAL COMPONENTS OF THE BUILDING DESIGNED AND SUPPLIED BY KIRBY BUILDING SYSTEMS, INC., IF ERECTED AS INDICATED. NOTE THAT KIRBY'S ENGINEER IS NOT ENGINEER OF RECORD FOR THIS CONSTRUCTION PROJECT. DESIGN LOADS HAVE BEEN APPLIED IN ACCORDANCE WITH THE FOLLOWING.

THIS STRUCTURE IS DESIGNED UTILIZING THE LOADS INDICATED AND APPLIED AS REQUIRED BY : IBC 12

THE CONTRACTOR IS TO CONFIRM THAT THESE LOADS COMPLY WITH THE REQUIREMENTS OF THE LOCAL BUILDING DEPARTMENT.

ROOF DEAD LOAD: 2.0 PSF (ROOF PANELS & PURLINS)
OCCUPANCY CATEGORY: II – Normal
COLLATERAL LOAD: 1.0 PSF
GROUND SNOW LOAD: 15.0 PSF Is: 1.0 Ct: 1.2 Ce: 3.0
ROOF SNOW LOAD: 11.34 PSF MINIMUM SNOW LOAD: 15.0 PSF
RAIN ON SNOW SURCHARGE: N/A PSF RAIN W/ SNOW (IF REQ'D) N/A PSF
ROOF LIVE LOAD: 20.0 PSF TRIBUTARY REDUCTION Yes
FRAME LIVE LOAD: 12.0 PSF
BASIC WIND SPEED: 115 MPH EXPOSURE: B Iw: 1.0 KZT: 1.0
SEISMIC CRITERIA: Ss: 0.62 S1: 0.23 SDS: 0.54 SD1: 0.30
SEISMIC USE GROUP: SITE CLASS: D Ie: 1.0
SEISMIC DESIGN CATEGORY: D TL: 12

ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE
LATERAL DIRECTION – BASE SHEAR: 1.10 KIPS R:3.50 CS:0.100
STRUCTURAL SYSTEM: ORDINARY STEEL MOMENT FRAMES, OSMF
LONGITUDINAL DIRECTION – BASE SHEAR: 2.45 KIPS R:1.25 CS:0.281
STRUCTURAL SYSTEM: CANTILEVERED COLUMN SYSTEM TO CONFORM TO THE REQUIREMENTS OF OSMF, CCS
DEAD LOAD: NORMAL WEIGHT OF METAL BUILDING COMPONENTS AS SUPPLIED BY THE MANUFACTURER

THIS BUILDING IS DESIGNED AS AN OPEN STRUCTURE. ALL EXTERIOR COMPONENTS (DOORS, WINDOWS, ETC.) MUST BE DESIGNED TO WITHSTAND THE WIND LOADINGS SPECIFIED FOR THE DESIGN OF COMPONENTS AND CLADDING IN THE DESIGN CODE LISTED ABOVE. ALL EXTERIOR COMPONENTS (WINDOWS, DOORS, ETC) MUST MEET WIND LOADING REQUIREMENTS FOR THE BUILDING CODE LISTED ABOVE OR MUST BE ADEQUATELY PROTECTED DURING A HIGH WIND EVENT. ALL GLAZING AND OTHER APPLICABLE OPENINGS IN WINDBORNE DEBRIS REGIONS MUST BE IMPACT–RESISTANT OR PROTECTED WITH AN IMPACT–RESISTANT COVERING. IMPACT RESISTANT MATERIALS MUST MEET THE LARGE AND/OR SMALL MISSILE TEST OF ASTM E 1996 AND ASTM E 1886.

OTHER LOADS

ENGINEER NOTES

NO SHEATHING TO BE ADDED WITHOUT AN ENGINEERING REVIEW.

PRIMER:

STRUCTURAL FRAMING: RP
SECONDARY FRAMING: RP

ROOF PANELS:

TYPE: KIRBYRIB II 26 Ga.
COLOR: ZINC ALUMINUM

HAROLD W. GREGORY
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 100854
STATE OF TENNESSEE

ENGINEER SEAL

STANDING SEAM ROOF SYSTEMS
INSULATION & FASTENER RECOMMENDATIONS

INSULATION / FASTENERS	KLS/KLM "LOW SYSTEM"	KLS/KLM "HIGH SYSTEM"	KLM W/ 5" Tall Clip	RL/RL+ "LOW SYSTEM"	RL/RL+ "HIGH SYSTEM"
NO INSULATION THERMAL BLOCK FASTENER	OK 3/8" SYB05A FD26CP	N/R	N/R	OK 3/8" SYB11 FA07 CP	N/R
R10 THERMAL BLOCK FASTENER	OK NONE FD26CP	OK 1" SYB09 FD26CP	N/R	OK NONE FA07CP	OK 5/8" SYB12 FA07CP
R11 THERMAL BLOCK FASTENER	OK NONE FD26CP	OK 1" SYB09 FD26CP	N/R	OK NONE FA07CP	OK 5/8" SYB12 FA07CP
R13 THERMAL BLOCK FASTENER	OK NONE FD26CP	OK 1" SYB09 FD26CP	N/R	OK NONE FA07CP	OK 5/8" SYB12 FA07CP
R16 THERMAL BLOCK FASTENER	OK* NONE FD29CP	OK 3/4" SYB07 FD29CP	N/R	N/R	OK 3/8" SYB11 FC09CP
R19 THERMAL BLOCK FASTENER	OK* NONE FD29CP	OK 3/4" SYB07 FD29CP	N/R	N/R	OK 3/8" SYB11 FC09CP
R25 THERMAL BLOCK FASTENER	N/R	OK 3/4" SYB07 FD29CP	N/R	N/R	N/R
R30 THERMAL BLOCK FASTENER	N/R	N/R	OK 1" SYB05C FD29CP	N/R	N/R

REFERENCE NOTES
- OK - Kirby approved application
- OK* - Kirby application conditionally approved. Application requires extra effort during erection to hold panel coverage and may induce oil canning or pillo wing. **(REQUIRES DISCLAIMER)**
- N/R - Not Recommended due to aesthetic issues or difficulty of installation. **(REQUIRES MANAGEMENT APPROVAL)**

FASTENERS
- FD26CP ¼ - 14 x 1¼ TEK2 W/ WASHER (CADMIUM PLATED)
- FD29CP ¼ - 14 x 1½ TEK2 W/ WASHER (CADMIUM PLATED)
- FA07CP 12 - 14 x 1¼" HWH BLAZER DP2 NO WASHER (CADMIUM PLATED)
- FC09CP 12 - 14 x 1½" HWH BLAZER DP2 NO WASHER (CADMIUM PLATED)

Nominal Insulation Thicknesses
- R10 – 3.25" (range of 2.95" to 3.4")
- R11 – 3.5" (range of 3.3" to 3.75")
- R13 – 4.25" (range of 3.85" to 4.375")
- R16 – 5" (range of 5.0" to 5.30")
- R19 – 6.25" (range of 5.6 " to 6.375")
- R25 – 8" (range of 7.5" to 8.0")
- R30 – 9.25" (range of 8.7" to 9.50")

THRU-FASTENED ROOF & WALL SYSTEMS
INSULATION & FASTENER RECOMMENDATIONS

INSULATION / FASTENERS	KIRBY RIB ROOF PANEL	KR, KW & KRP WALL PANELS
NO INSULATION FASTENER	OK FA01	OK FA07
R10, R11 FASTENER	OK FA01	OK FA07
R13, R16 FASTENER	OK FA01	OK FC08
R19 FASTENER	OK* FA02	OK* FC08
R19 THERMAL BLOCK FASTENER	OK* 1" SYB08 FA14	N/R

REFERENCE NOTES:
Insulation thicknesses are nominal

OK - Kirby approved application

OK* - Kirby application conditionally approved. Application requires extra effort during erection to hold panel coverage and may induce oil canning, dimpling or pillowing. **(REQUIRES DISCLAIMER)**

N/R - Not Recommended due to aesthetic issues or difficulty of installation. **(REQUIRES MANAGEMENT APPROVAL)**

FASTENERS
- FA01 12 - 14 x 1¼" HWH DP2 BLAZER ZINC HEAD
- FA02 12 - 14 x 1¼" HWH DP2 BLAZER ZINC HEAD
- FA07 12 - 14 x 1¼" HWH BLAZER DP2, NO WASHER
- FC08 12 - 14 x 1¼" HWH BLAZER FLANGE DP3
- FA14 12 - 14 x 2" HWH DP2 BLAZER ZINC HEAD

Nominal Insulation Thicknesses
- R10 – 3.25" (range of 2.95" to 3.4")
- R11 – 3.5" (range of 3.3" to 3.75")
- R13 – 4.25" (range of 3.85" to 4.375")
- R16 – 5" (range of 5.0" to 5.30")
- R19 – 6.25" (range of 5.6 " to 6.375")
- R25 – 8" (range of 7.5" to 8.0")
- R30 – 9.25" (range of 8.7" to 9.50")

FASTENER REQUIREMENTS

ROOF MEMBER FASTENERS

12-14 X 1¼" HWH
DP2 BLAZER ZINC HEAD

FA01__

WALL MEMBER FASTENERS

12-14 X 1½" HWH
BLAZER DP2, NO WASHER

FA07__

ROOF STITCH/TRIM FASTENERS

1/4-14 X 7/8" HWH
VRT DP1 BLAZER
ZINC HEAD

FA03__

WALL STITCH/TRIM FASTENERS

1/4-14 X 7/8" HWH
BLAZER VRT DP1, NO WASHER

FA11__

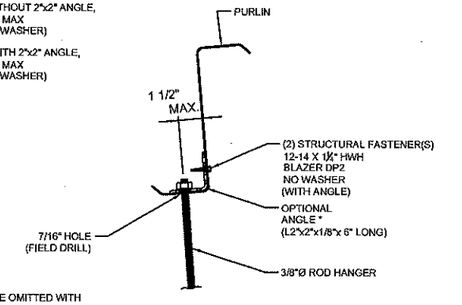
MISCELLANEOUS FASTENERS

12-14 X 1½" HWH
BLAZER DP2, NO WASHER
SECONDARY TO SECONDARY
CONNECTIONS

FA07CP

50# CAPACITY WITHOUT 2"x2" ANGLE,
ROOF SLOPE 1:12 MAX
(WITHOUT BEVEL WASHER)

200# CAPACITY WITH 2"x2" ANGLE,
ROOF SLOPE 1:12 MAX
(WITHOUT BEVEL WASHER)



* ANGLE MAY BE OMITTED WITH HANGER LOADS 50 LBS. OR LESS.

NOTE:
PURLIN LIP MUST NOT BE DISTORTED.

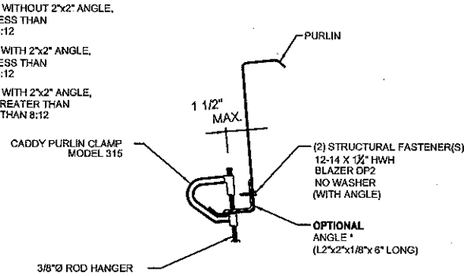
NOTE:
USE OF THIS DETAIL WILL REQUIRE THE ROD HANGER TO BE BENT AFTER INSTALLATION SO THAT IT HANGS VERTICALLY. THE METAL BUILDING SUPPLIER IS NOT RESPONSIBLE FOR THE DESIGN OR ADEQUACY OF THE BENT ROD HANGER.

HANGER DETAIL AT PURLINS

250# CAPACITY WITHOUT 2"x2" ANGLE,
ROOF SLOPE LESS THAN
OR EQUAL TO 4:12

500# CAPACITY WITH 2"x2" ANGLE,
ROOF SLOPE LESS THAN
OR EQUAL TO 4:12

250# CAPACITY WITH 2"x2" ANGLE,
ROOF SLOPE GREATER THAN
4:12, BUT LESS THAN 8:12



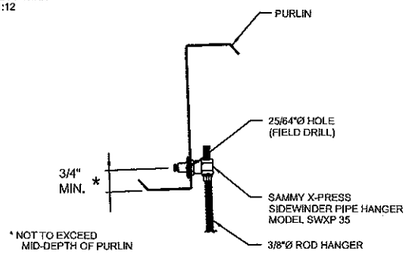
NOTE:
USE OF THIS DETAIL WILL REQUIRE THE ROD HANGER TO BE BENT AFTER INSTALLATION SO THAT IT HANGS VERTICALLY. THE METAL BUILDING SUPPLIER IS NOT RESPONSIBLE FOR THE DESIGN OR ADEQUACY OF THE BENT ROD HANGER.

NOTE:
PURLIN LIP MUST NOT BE DISTORTED.

* ANGLE MAY BE OMITTED WITH HANGER LOADS 250 LBS. OR LESS EXCEPT THAT ANGLE IS REQUIRED WITH SLOPE GREATER THAN 4:12, BUT LESS THAN 8:12.

HANGER DETAIL AT PURLINS
PURLIN CLAMP

500# CAPACITY
ROOF SLOPE LESS THAN
OR EQUAL TO 1:12



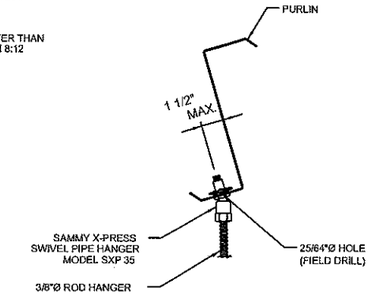
* NOT TO EXCEED MID-DEPTH OF PURLIN

NOTE:
USE OF THIS DETAIL WILL REQUIRE THE ROD HANGER TO BE BENT AFTER INSTALLATION SO THAT IT HANGS VERTICALLY. THE METAL BUILDING SUPPLIER IS NOT RESPONSIBLE FOR THE DESIGN OR ADEQUACY OF THE BENT ROD HANGER.

HANGER DETAIL AT PURLINS
ROOF SLOPES LESS THAN OR EQUAL TO 1:12

375# CAPACITY
ROOF SLOPE LESS THAN
OR EQUAL TO 4:12

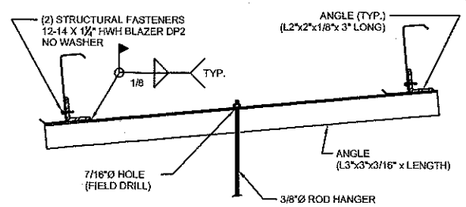
250# CAPACITY
ROOF SLOPE GREATER THAN
4:12, BUT LESS THAN 8:12



NOTE:
PURLIN LIP MUST NOT BE DISTORTED.

HANGER DETAIL AT PURLINS
ROOF SLOPES LESS THAN 8:12

400# CAPACITY PROVIDED ROD HANGER IS WITHIN CENTER ONE-THIRD OF 3"x3"ANGLE SPAN
(200# CAPACITY OTHERWISE)



NOTE: FIELD WELDING REQUIRED.

NOTE:
USE OF THIS DETAIL WILL REQUIRE THE ROD HANGER TO BE BENT AFTER INSTALLATION SO THAT IT HANGS VERTICALLY. THE METAL BUILDING SUPPLIER IS NOT RESPONSIBLE FOR THE DESIGN OR ADEQUACY OF THE BENT ROD HANGER.

HANGER DETAIL BETWEEN PURLINS

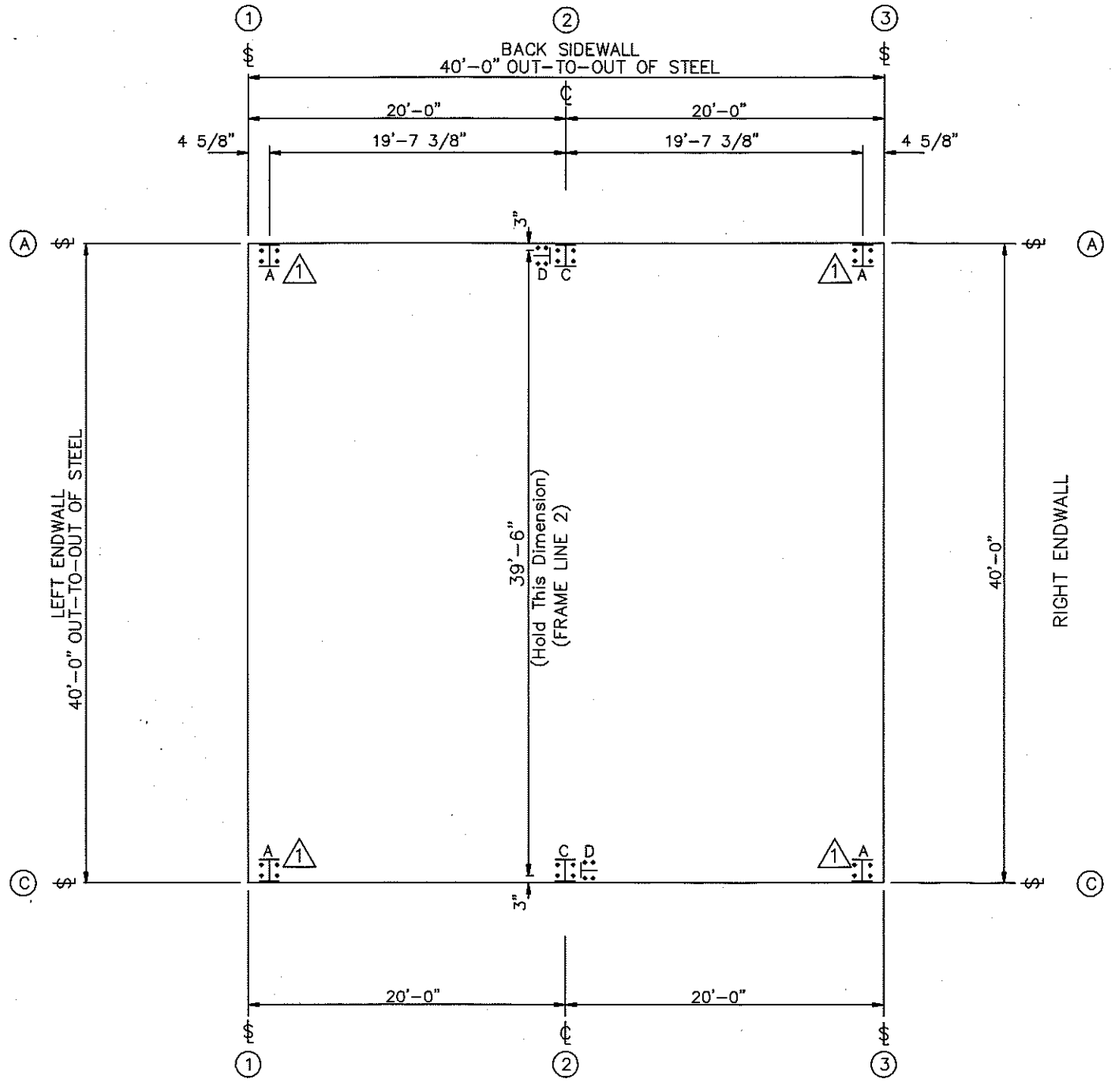
NOTE:
HANGER DETAILS ARE A SUGGESTED MEANS OF ATTACHMENT ONLY. KBS IS NOT THE SUPPLIER FOR HARWARE OR HANGER RODS.

NOTE:
ALL CAPACITIES THAT ARE SHOWN ON THIS DRAWING ARE MAXIMUM HANGER LOADS FOR THESE DETAILS ONLY. THE PURLINS MAY OR MAY NOT BE DESIGNED FOR THE REQUIRED HANGER LOADS. CONTACT KIRBY BUILDING SYSTEMS FOR SUSPENDED LOADS THAT EXCEED THE DESIGN COLLATERAL LOAD SPECIFIED FOR THIS PROJECT.

ISSUE	DESCRIPTION	BY	DATE
S	STRUCTURAL	TSK	6/28/16
0	CONSTRUCTION	SLW	7/6/16

KIRBY BUILDING SYSTEMS
METAL BUILDINGS. METAL BUILDINGS.

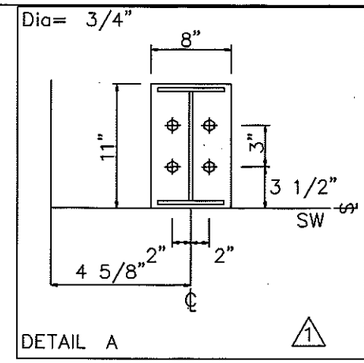
KIRBY BUILDING SYSTEMS 124 KIRBY DRIVE	PORTLAND, TN 37148
TITLE: FASTENER CHART	DRN.BY: SLW
BUILDER: TN INDUSTRIAL MAINT.	DATE: 7/6/16
CUSTOMER: TDOT REGION 3	CKD.BY: MRB/CPS
LOCATION: NASHVILLE, TN	DATE: 11/29/17
ID NUMBER: K17B0710 MBS	JOB NO. K17B0710
	DWG.NO.: C1 OF: 1

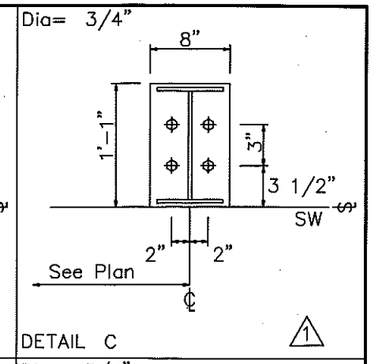


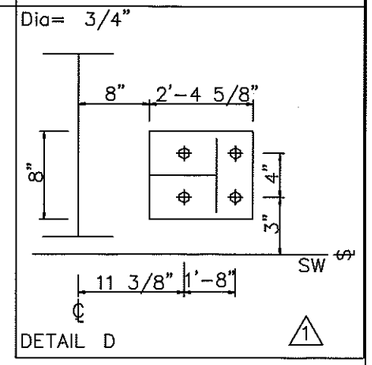
FRONT SIDEWALL

ANCHOR BOLT PLAN

NOTE: All Base Plates @ 100'-0" (U.N.)
NOTE: Finished Floor Elevation @ 100'-0" (U.N.)







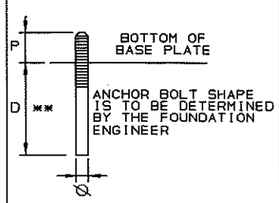
AH 2/15/18

1 FIXED PER CUSTOMER CHANGE

CERTIFICATION EXTENDS ONLY FOR THE LOADS SPECIFIED ON KIRBY'S PURCHASE ORDER AS APPLIED TO THE STRUCTURAL COMPONENTS OF THE BUILDING DESIGNED AND SUPPLIED BY KIRBY BUILDING SYSTEMS, IF ERECTED AS INDICATED. NOTE THAT KIRBY'S ENGINEER IS NOT ACTING AS THE ENGINEER OF RECORD FOR THIS CONSTRUCTION PROJECT.

GENERAL NOTES:
1. ALL DIMENSIONS ARE OUT TO OUT OF STEEL. IF CONCRETE NOTCH IS REQUIRED, THEN THE APPROPRIATE DIMENSIONS SHOULD BE ADDED TO OBTAIN THE OUT TO OUT OF CONCRETE DIMENSIONS.
2. CONCRETE STRENGTH = 3000 PSI MINIMUM.
3. ANCHOR BOLTS ARE NOT FURNISHED BY THE MANUFACTURER.
4. DRAWINGS ARE NOT TO SCALE.

A.B. SIZE AND PROJECTION



ANCHOR BOLT QUANTITY		ALLOW. LOAD TO BOLTS (LBS.)	PROJ. P (IN.)	MIN. EMBED D (IN.)
QTY.	BOLT DIA.			
AS REQ'D	¼"			
32	¾"	8400	2½"	**
	1"	15,000	3"	**
	1¼"	23,400	3½"	**
	1½"	33,700	3½"	**

BOLT MATERIAL = ASTM A36
** - ANCHOR BOLT EMBEDMENT LENGTH "D" IS TO BE DETERMINED BY THE FOUNDATION ENGINEER.

ISSUE	DESCRIPTION	BY	DATE
0	CONSTRUCTION	YHB	6/28/16
1	CONSTRUCTION	MRB	2/5/18

ID NUMBER: K1780710 MBS

KIRBY BUILDING SYSTEMS
A NUCOR COMPANY
BETTER SOLUTIONS. BETTER BUILDINGS.

KIRBY BUILDING SYSTEMS ○ 124 KIRBY DRIVE ○ PORTLAND, TN 37148

TITLE: ANCHOR BOLT PLAN	DRN.BY: MRA
BUILDER: TN INDUSTRIAL MANT.	DATE: 6/28/16
CUSTOMER: TDOT REGION 3	CKD.BY:
LOCATION: NASHVILLE, TN	DATE:
JOB NO: K1780710	DWG.NO: E1 OF: 8

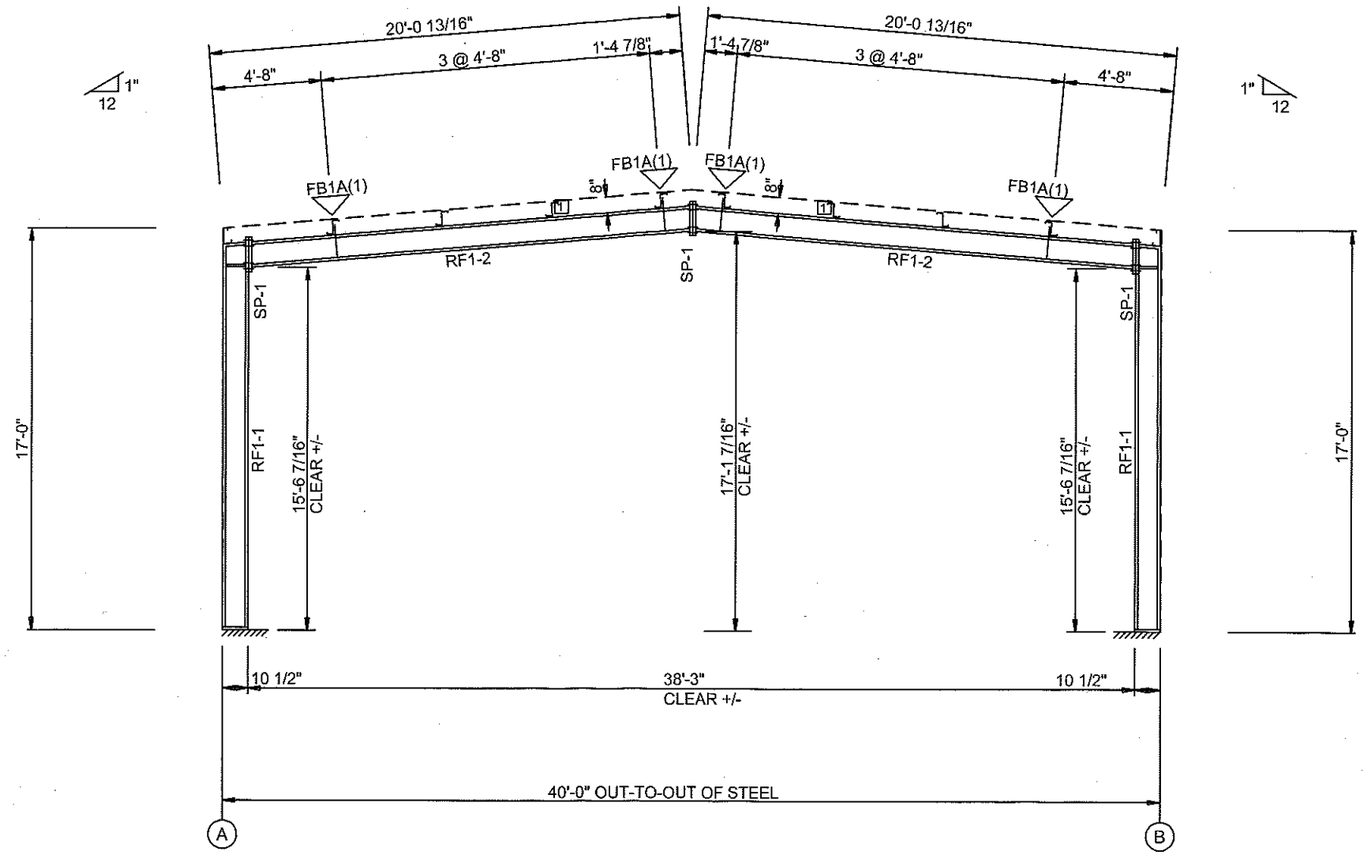
SPLICE PLATE & BOLT TABLE									
Mark	Qty Top	Bot	Int	Type	Dia	Length	Width	Thick	Length
SP-1	4	4	0	A325	3/4"	3"	6"	3/8"	1'-5 1/4"

STIFFENER TABLE				
Mark	Stiff Mark	Plate Size Width	Thick	Length
RF1-1	St-1	2.500	0.250	9.875

MEMBER TABLE						
Mark	Weight	Web Depth Start/End	Web Plate Thick	Length	Outside Flange W x Thk x Length	Inside Flange W x Thk x Length
RF1-1	236	10.0/10.0	0.135	196.2	5 x 1/4" x 195.3 5 x 1/4" x 10.3 5 x 3/16" x 229.4	5 x 1/4" x 182.6 5 x 3/16" x 229.4
RF1-2	234	10.0/10.0	0.135	230.3		

CONNECTION PLATES	
☐ ID	Mark/Part
1	PC20

▽FLANGE BRACES: (1) One Side; (2) Two Sides
FBxxA(1)
A - L188x099



RIGID FRAME ELEVATION: FRAME LINE 1 3

1. REFERENCE ELEVATION = 100'0".
2. ALL BASE PLATES AT REFERENCE ELEVATION UNLESS NOTED.
3. SEE ANCHOR BOLT PLAN FOR ANCHOR BOLT SIZES AND DETAILS.
4. FLANGE BRACES ARE REQUIRED ON TWO SIDES (2) OR ONE SIDE (1) AS NOTED.
5. ALL MAIN FRAME CONNECTION BOLTS ARE A325 BOLTS.
6. FOR FLANGE BRACE CONNECTIONS IN THE ROOF, SEE DETAIL BR105. FOR FLANGE BRACE CONNECTIONS IN THE WALLS, SEE DETAIL BR205
7. ALL FLANGE BRACE LOCATIONS MARKED TWO SIDES (2) AT EXPANDABLE END FRAMES REQUIRE ONE FLANGE BRACE TO BE INSTALLED AT THE TIME OF ERECTION, WHILE THE OTHER IS TO BE STORED AND USED AT THE TIME OF A FUTURE ADDITION.
8. ALL CONNECTION BOLTS OR FIELD WELDS, PURLINS AND ALL FLANGE BRACES MUST BE PROPERLY INSTALLED ON MAIN FRAMES AS THEY ARE ERECTED AND BEFORE ERECTION LOADS ARE APPLIED.

ISSUE	DESCRIPTION	BY	DATE
S	STRUCTURAL	TSK	6/28/16
0	CONSTRUCTION	SLW	7/6/16

ID NUMBER: K17B0710 MBS

KIRBY BUILDING SYSTEMS
A NUCOR COMPANY
BETTER SOLUTIONS. BETTER BUILDINGS.

KIRBY BUILDING SYSTEMS ○ 124 KIRBY DRIVE ○ PORTLAND, TN 37148

TITLE: CROSS SECTION	DRN.BY: SLW
BUILDER: TN INDUSTRIAL MANT.	DATE: 7/6/16
CUSTOMER: TDOT REGION 3	CKD.BY: MRB/CPS
LOCATION: NASHVILLE, TN	DATE: 11/29/17
JOB NO: K17B0710	DWG.NO:E2 OF:8

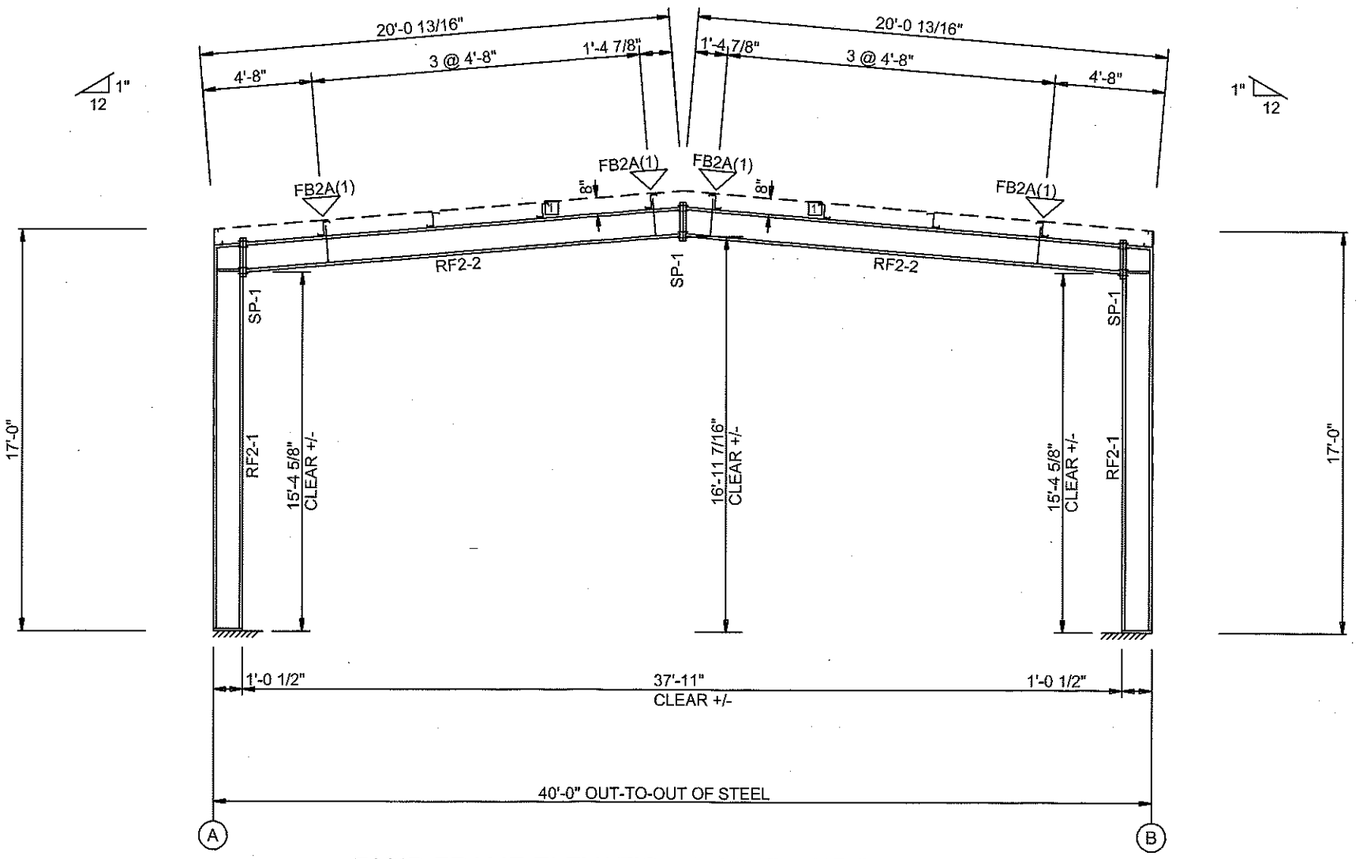
SPLICE PLATE & BOLT TABLE									
Mark	Qty Top	Bot	Int	Type	Dia	Length	Width	Thick	Length
SP-1	4	4	0	A325	3/4"	3"	6"	1/2"	1'-7 5/16"

STIFFENER TABLE				
Mark	Stiff Mark	Plate Size Width	Thick	Length
RF2-1	St- 1	2.500	0.250	11.88

MEMBER TABLE						
Mark	Weight	Web Depth Start/End	Web Plate Thick	Length	Outside Flange W x Thk x Length	Inside Flange W x Thk x Length
RF2-1	319	12.0/12.0	0.188	196.4	6 x 3/16" x 195.4 6 x 3/16" x 12.2	6 x 5/16" x 180.8
RF2-2	300	12.0/12.0	0.135	228.1	5 x 1/4" x 227.1	5 x 1/4" x 227.1

CONNECTION PLATE	
☐ ID	Mark/Part
1	PC20

▽FLANGE BRACES: (1) One Side; (2) Two Sides
FBxxA(1)
A - L188x099



RIGID FRAME ELEVATION: FRAME LINE 2

1. REFERENCE ELEVATION = 100'0".
2. ALL BASE PLATES AT REFERENCE ELEVATION UNLESS NOTED.
3. SEE ANCHOR BOLT PLAN FOR ANCHOR BOLT SIZES AND DETAILS.
4. FLANGE BRACES ARE REQUIRED ON TWO SIDES (2) OR ONE SIDE (1) AS NOTED.
5. ALL MAIN FRAME CONNECTION BOLTS ARE A325 BOLTS.
6. FOR FLANGE BRACE CONNECTIONS IN THE ROOF, SEE DETAIL BR105. FOR FLANGE BRACE CONNECTIONS IN THE WALLS, SEE DETAIL BR205
7. ALL FLANGE BRACE LOCATIONS MARKED TWO SIDES (2) AT EXPANDABLE END FRAMES REQUIRE ONE FLANGE BRACE TO BE INSTALLED AT THE TIME OF ERECTION, WHILE THE OTHER IS TO BE STORED AND USED AT THE TIME OF A FUTURE ADDITION.
8. ALL CONNECTION BOLTS OR FIELD WELDS, PURLINS AND ALL FLANGE BRACES MUST BE PROPERLY INSTALLED ON MAIN FRAMES AS THEY ARE ERECTED AND BEFORE ERECTION LOADS ARE APPLIED.

ISSUE	DESCRIPTION	BY	DATE
S	STRUCTURAL	TSK	6/28/16
0	CONSTRUCTION	SLW	7/6/16

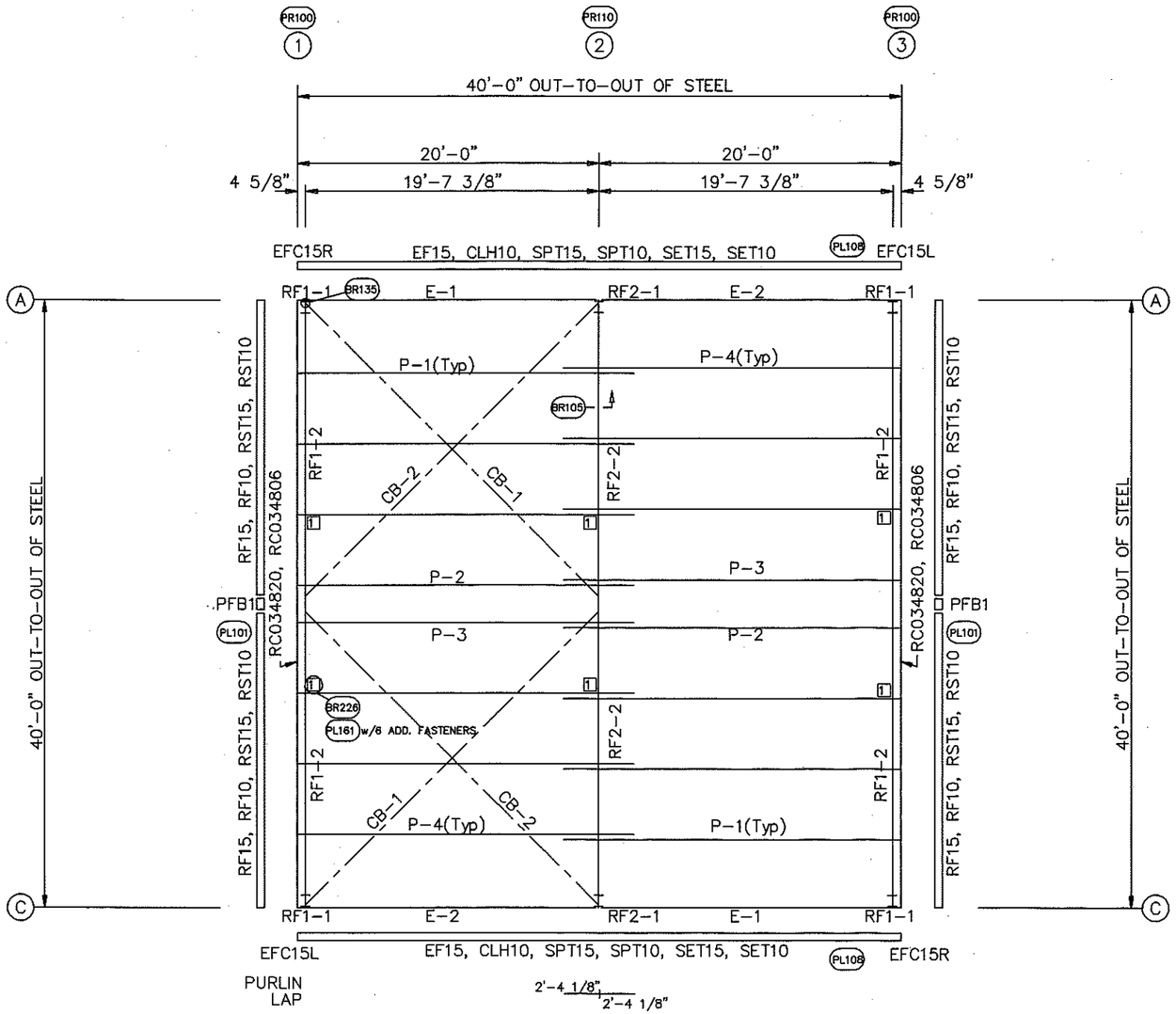
ID NUMBER: K17B0710 MBS

KIRBY BUILDING SYSTEMS
A NUCOR COMPANY
BETTER SOLUTIONS. BETTER BUILDINGS.

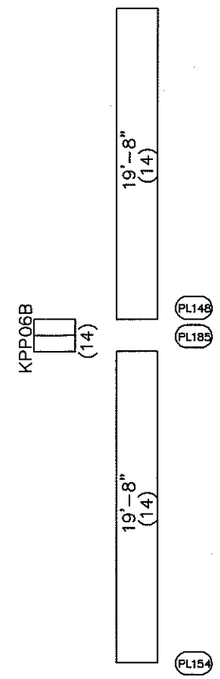
KIRBY BUILDING SYSTEMS ○ 124 KIRBY DRIVE ○ PORTLAND, TN 37148

TITLE: CROSS SECTION	DRN.BY: SLW
BUILDER: TN INDUSTRIAL MANT.	DATE: 7/6/16
CUSTOMER: TDOT REGION 3	CKD.BY: MRB/CPS
LOCATION: NASHVILLE, TN	DATE: 11/29/17
JOB NO: K17B0710	DWG.NO: E3 OF: 8

CONNECTION PLATES ROOF PLAN		
☐ID	QUAN	MARK/PART
1	6	PC20



ROOF FRAMING PLAN



ROOF SHEETING

PANELS: 26 Ga. KR2
ZINC ALUMINUM
Rake and Eave Trim:
BURNISHED SLATE

CERTIFICATION EXTENDS ONLY FOR THE LOADS SPECIFIED ON KIRBY'S PURCHASE ORDER AS APPLIED TO THE STRUCTURAL COMPONENTS OF THE BUILDING DESIGNED AND SUPPLIED BY KIRBY BUILDING SYSTEMS. IF ERECTED AS INDICATED. NOTE THAT KIRBY'S ENGINEER IS NOT ACTING AS THE ENGINEER OF RECORD FOR THIS CONSTRUCTION PROJECT.

GENERAL NOTES:

1. USE ¾" DIA. X 1¼" A325 BOLTS FOR ALL PURLIN LAP CONNECTIONS.
2. USE ¾" DIA. X 1¼" A325 BOLTS FOR PURLIN AND EAVE STRUT TO FRAME CONNECTIONS.
3. THE DIAMETER OF THE BRACING IS DENOTED BY THE THIRD AND FOURTH DIGITS OF THE PIECE MARK. (CABLE EX. 08 = ½"ø AND 10 = ⅝"ø) (ROD EX. 08 = ½"ø AND 10 = ⅝"ø)
4. ADEQUATE TEMPORARY BRACING MUST BE PROVIDED BY THE ERECTOR DURING THE ERECTION OF THE BUILDING.
5. ALL PRIMARY AND SECONDARY FRAMING, WIND BRACING, ETC. MUST BE INSTALLED, PROPERLY ALIGNED, BOLTED OR WELDED PRIOR TO THE INSTALLATION OF THE ROOF PANELS.
6. IT MAY BE NECESSARY DURING ERECTION TO MAKE MINOR ADJUSTMENTS AND ALIGNMENTS TO BOTH PURLINS AND GIRTS PRIOR TO INSTALLING PANELS.
7. DO NOT STAND OR WALK ON SECONDARY FRAMING MEMBERS SUCH AS GIRTS, PURLINS AND EAVE STRUTS UNLESS THEY ARE FIRMLY SECURED AT BOTH ENDS AND LATERALLY SUPPORTED.
8. DO NOT USE METAL BUILDING PANELS AS WALK BOARDS OR WORKING PLATFORMS. NEVER STAND OR WALK ON METAL BUILDING PANELS BETWEEN SUPPORTS UNLESS THE PANELS ARE FIRMLY FASTENED AT BOTH ENDS AND BOTH SIDES.
9. DRAWINGS ARE NOT TO SCALE.
10. FOR KIRBYLOK OR ROOFLOK ROOF PANELS, REF. APPROPRIATE ERECTION MANUAL FOR ERECTION PROCEDURES.
11. WARNING: PENCIL LEAD WILL CAUSE GALV. PANELS AND TRIM PIECES TO RUST. DO NOT USE PENCILS TO MARK ON PARTS.
12. A COPY OF KIRBY'S STANDING SEAM CHECKLIST CAN BE FOUND IN THE STANDING SEAM ERECTION MANUAL SENT WITH EACH PROJECT. TO ENSURE YOUR INSTALLER HAS A THOROUGH UNDERSTANDING OF THE STANDING SEAM SYSTEM, PLEASE REVIEW THE DETAILS PROVIDED IN THE ERECTION DRAWINGS AND THE STANDING SEAM MANUAL. HAVE THE ERECTOR OR YOUR PROJECT SUPERINTENDENT COMPLETE THE CHECKLIST.

DETAIL KEY

DETAIL NO.

REFERENCE ERECTION DETAILS

ISSUE	DESCRIPTION	BY	DATE
S	STRUCTURAL	TSK	6/28/16
0	CONSTRUCTION	SLW	7/6/16

ID NUMBER: K17B0710 MBS

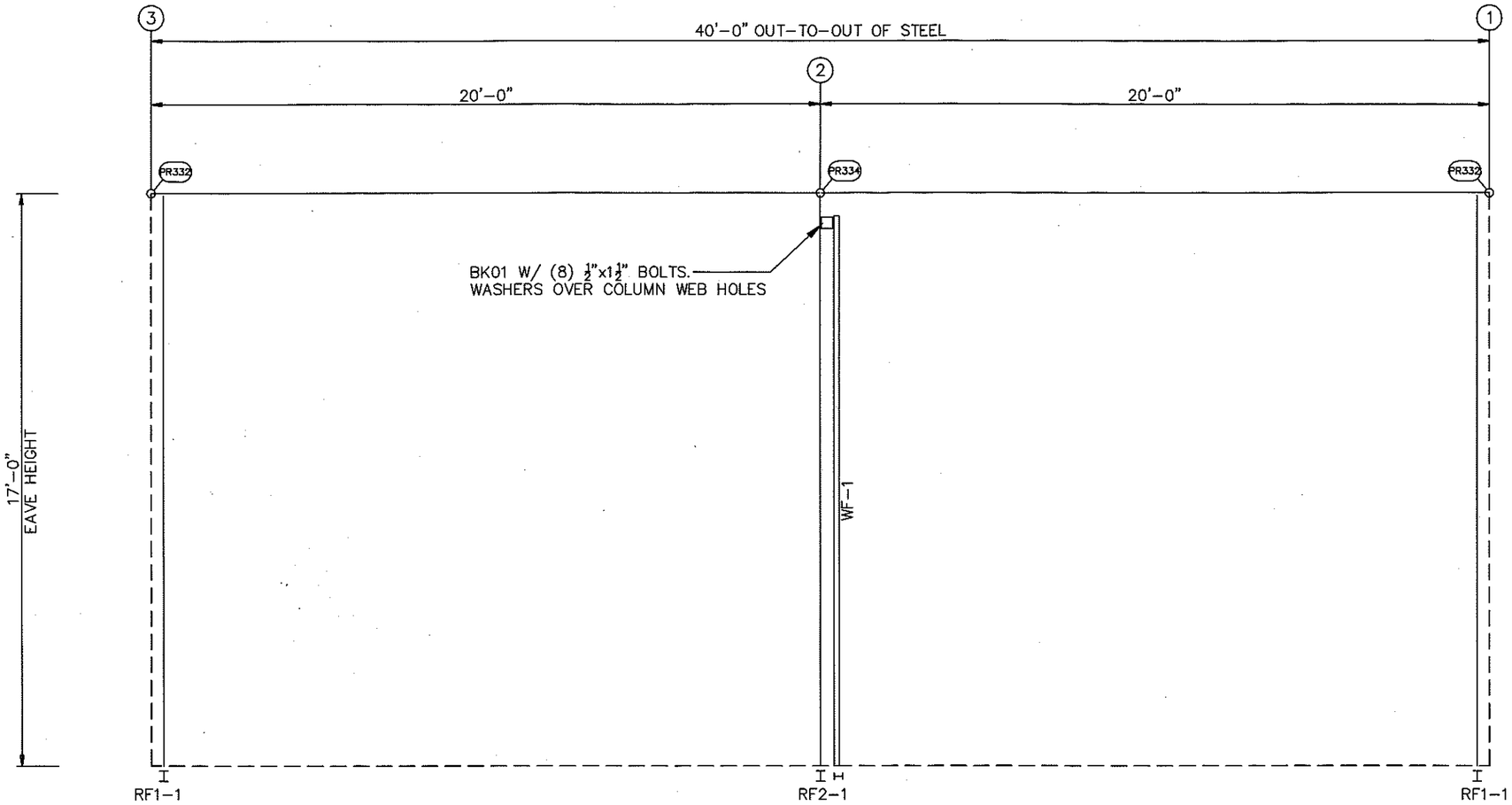
KIRBY BUILDING SYSTEMS
A NUCOR COMPANY
BETTER SOLUTIONS. BETTER BUILDINGS.

KIRBY BUILDING SYSTEMS ○ 124 KIRBY DRIVE ○ PORTLAND, TN 37148

TITLE: ROOF FRAMING PLAN	DRN.BY: SLW
BUILDER: TN INDUSTRIAL MANT.	DATE: 7/6/16
CUSTOMER: TDOT REGION 3	CKD.BY: MRB/CPS
LOCATION: NASHVILLE, TN	DATE: 2/1/18
JOB NO: K17B0710	DWG.NO: E4 OF: 8

BOLT TABLE FRAME LINE A				
LOCATION	QUAN	TYPE	DIA	LENGTH
WF-1- RFC-1 **	18	A325	1/2"	1 1/2"

** 1/2" WASHERS GO ON WEB SIDE



BACK SIDEWALL FRAMING: FRAME LINE A

CERTIFICATION EXTENDS ONLY FOR THE LOADS SPECIFIED ON KIRBY'S PURCHASE ORDER AS APPLIED TO THE STRUCTURAL COMPONENTS OF THE BUILDING DESIGNED AND SUPPLIED BY KIRBY BUILDING SYSTEMS, IF ERECTED AS INDICATED. NOTE THAT KIRBY'S ENGINEER IS NOT ACTING AS THE ENGINEER OF RECORD FOR THIS CONSTRUCTION PROJECT.

GENERAL NOTES:

1. USE ½"ø x 1½" A325 BOLTS FOR ALL GIRT LAP AND GIRT TO CLIP CONNECTIONS.
2. THE DIAMETER OF THE BRACING IS DENOTED BY THE THIRD AND FOURTH DIGITS OF THE PIECE MARK. (EX. 08 = ½"ø 10 = ⅝"ø)
3. ADEQUATE TEMPORARY BRACING MUST BE PROVIDED BY THE ERECTOR DURING THE ERECTION OF THE BUILDING.
4. ALL PRIMARY AND SECONDARY FRAMING, WIND BRACING, ETC. MUST BE INSTALLED, PROPERLY ALIGNED, BOLTED OR WELDED PRIOR TO THE INSTALLATION OF THE PANELS.
5. IT MAY BE NECESSARY DURING ERECTION TO MAKE MINOR ADJUSTMENTS AND ALIGNMENTS TO BOTH PURLINS AND GIRTS PRIOR TO INSTALLING PANELS.
6. ERECTOR TO FIELD SLOT FLUSH FRAME GIRTS FOR CABLE BRACING.
7. BUILDER TO FIELD CUT OR BACK LAP PANELS AS REQUIRED.
8. BEFORE INSTALLATION OF WALL PANELS, IT IS IMPORTANT TO REFERENCE WALL PANEL FASTENER LAYOUT DETAILS (PL153 KIRBYWALL PL149 KIRBYRIB II) TO INSURE CORRECT USAGE OF FASTENERS.
9. USE RVTCP AT 5'0" C/C FOR TEMPORARY INSTALLATION OF CLH TRIM.
10. DRAWINGS ARE NOT TO SCALE.
11. REF. PL357 FOR CAULKING AT TRIM LAPS
12. WARNING: PENCIL LEAD AND MARKER WILL CAUSE GALV. PANELS AND TRIM PIECES TO RUST. DO NOT USE THESE TO MARK ON PARTS.

DETAIL KEY

DETAIL NO.

REFERENCE ERECTION DETAILS

NOTE: ALL GIRT LAPS NOT INDICATED WILL BE 0'2½" DOOR GIRTS; ALL GIRTS ATTACHED AT ONE END TO A DOOR JAMB ARE 16 GAGE UNLESS NOTED OTHERWISE.

ISSUE	DESCRIPTION	BY	DATE
S	STRUCTURAL	TSK	6/28/16
0	CONSTRUCTION	SLW	7/6/16

ID NUMBER: K1780710 MBS

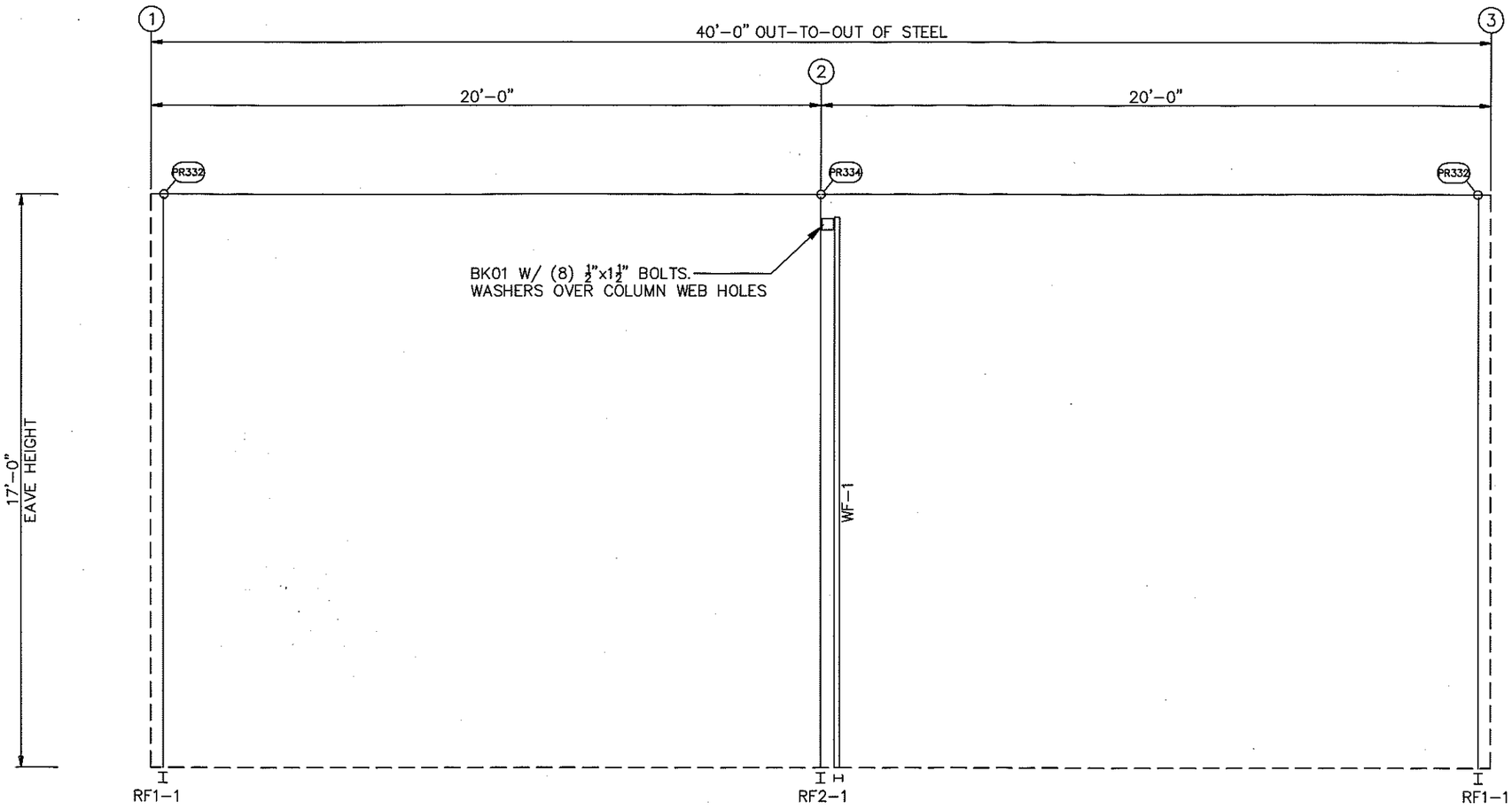
KIRBY BUILDING SYSTEMS
A NUCOR COMPANY
BETTER SOLUTIONS. BETTER BUILDINGS.

KIRBY BUILDING SYSTEMS ○ 124 KIRBY DRIVE ○ PORTLAND, TN 37148

TITLE: BACK SIDEWALL	DRN.BY: SLW
BUILDER: TN INDUSTRIAL MANT.	DATE: 7/6/16
CUSTOMER: TDOT REGION 3	CKD.BY: MRB/CPS
LOCATION: NASHVILLE, TN	DATE: 2/1/18
JOB NO: K1780710	DWG.NO.E5 OF.8

BOLT TABLE FRAME LINE C				
LOCATION	QUAN	TYPE	DIA	LENGTH
WF-1- RFC-1 **	18	A325	1/2"	1 1/2"

** 1/2" WASHERS GO WEB SIDE



FRONT SIDEWALL FRAMING: FRAME LINE C

CERTIFICATION EXTENDS ONLY FOR THE LOADS SPECIFIED ON KIRBY'S PURCHASE ORDER AS APPLIED TO THE STRUCTURAL COMPONENTS OF THE BUILDING DESIGNED AND SUPPLIED BY KIRBY BUILDING SYSTEMS, IF ERECTED AS INDICATED. NOTE THAT KIRBY'S ENGINEER IS NOT ACTING AS THE ENGINEER OF RECORD FOR THIS CONSTRUCTION PROJECT.

GENERAL NOTES:

1. USE ¾"Ø x 1¾" A325 BOLTS FOR ALL GIRT LAP AND GIRT TO CLIP CONNECTIONS.
2. THE DIAMETER OF THE BRACING IS DENOTED BY THE THIRD AND FOURTH DIGITS OF THE PIECE MARK. (EX. 08 = ½"Ø 10 = ⅝"Ø)
3. ADEQUATE TEMPORARY BRACING MUST BE PROVIDED BY THE ERECTOR DURING THE ERECTION OF THE BUILDING.
4. ALL PRIMARY AND SECONDARY FRAMING, WIND BRACING, ETC. MUST BE INSTALLED, PROPERLY ALIGNED, BOLTED OR WELDED PRIOR TO THE INSTALLATION OF THE PANELS.
5. IT MAY BE NECESSARY DURING ERECTION TO MAKE MINOR ADJUSTMENTS AND ALIGNMENTS TO BOTH PURLINS AND GIRTS PRIOR TO INSTALLING PANELS.
6. ERECTOR TO FIELD SLOT FLUSH FRAME GIRTS FOR CABLE BRACING.
7. BUILDER TO FIELD CUT OR BACK LAP PANELS AS REQUIRED.
8. BEFORE INSTALLATION OF WALL PANELS, IT IS IMPORTANT TO REFERENCE WALL PANEL FASTENER LAYOUT DETAILS (PL153 KIRBYWALL PL149 KIRBYRIB II) TO INSURE CORRECT USAGE OF FASTENERS.
9. USE RVTCP AT 5'0" C/C FOR TEMPORARY INSTALLATION OF CLH TRIM.
10. DRAWINGS ARE NOT TO SCALE.
11. REF. PL357 FOR CAULKING AT TRIM LAPS
12. WARNING: PENCIL LEAD AND MARKER WILL CAUSE GALV. PANELS AND TRIM PIECES TO RUST. DO NOT USE THESE TO MARK ON PARTS.

DETAIL KEY
DETAIL NO.
REFERENCE ERECTION DETAILS

NOTE: ALL GIRT LAPS NOT INDICATED WILL BE 0'2½" DOOR GIRTS; ALL GIRTS ATTACHED AT ONE END TO A DOOR JAMB ARE 16 GAGE UNLESS NOTED OTHERWISE.

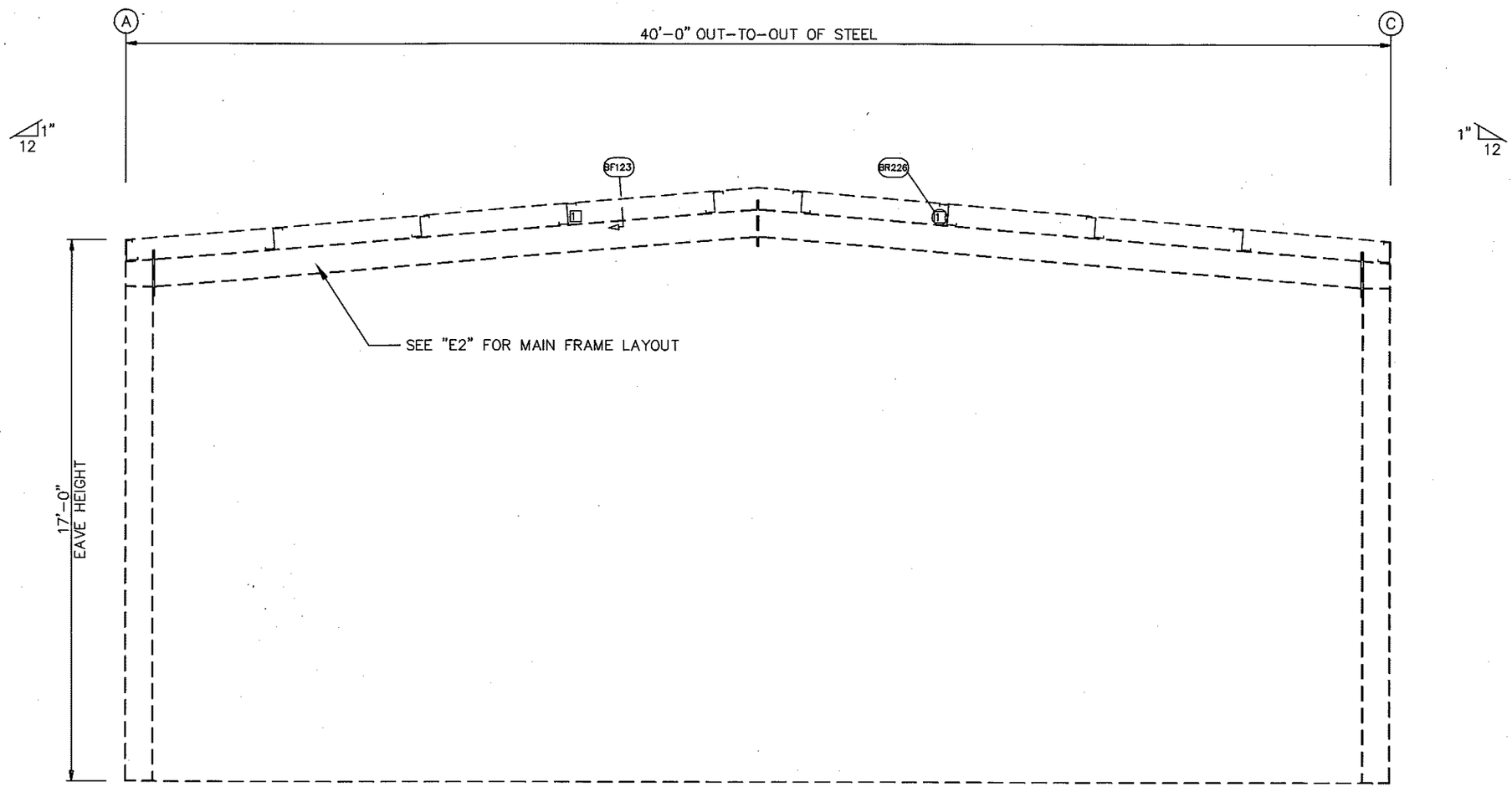
ISSUE	DESCRIPTION	BY	DATE
S	STRUCTURAL	TSK	6/28/16
0	CONSTRUCTION	SLW	7/6/16

ID NUMBER: K17B0710 MBS

KIRBY BUILDING SYSTEMS
A NUCOR COMPANY
BETTER SOLUTIONS. BETTER BUILDINGS.

KIRBY BUILDING SYSTEMS ○ 124 KIRBY DRIVE ○ PORTLAND, TN 37148

TITLE: FRONT SIDEWALL	DRN.BY: SLW
BUILDER: TN INDUSTRIAL MANT.	DATE: 7/6/16
CUSTOMER: TDOT REGION 3	CKD.BY: MRB/CPS
LOCATION: NASHVILLE, TN	DATE: 2/1/18
JOB NO: K17B0710	DWG.NO: E6 OF: 8



CONNECTION PLATES FRAME LINE 3		
ID	QUAN	MARK/PART
1	2	PC20 W/ 6 ADDITIONAL FASTENERS

LEFT ENDWALL FRAMING: FRAME LINE 1

GENERAL NOTES:

1. USE ⅝"ø x 1¼" A325 BOLTS FOR ALL GIRT LAP AND GIRT TO CLIP CONNECTIONS.
2. REFER TO BEARING FRAME DETAILS [BF] FOR CONNECTION REQUIREMENTS OF RAFTER TO RAFTER AND RAFTER TO COLUMN.
3. ADEQUATE TEMPORARY BRACING MUST BE PROVIDED BY THE ERECTOR DURING THE ERECTION OF THE BUILDING.
4. ALL PRIMARY AND SECONDARY FRAMING, WIND BRACING, ETC. MUST BE INSTALLED, PROPERLY ALIGNED, BOLTED OR WELDED PRIOR TO THE INSTALLATION OF THE WALL PANELS.
5. IT MAY BE NECESSARY DURING ERECTION TO MAKE MINOR ADJUSTMENTS AND ALIGNMENTS TO BOTH PURLINS AND GIRTS PRIOR TO INSTALLING PANELS.
6. BUILDER TO FIELD CUT OR BACK LAP PANELS AS REQUIRED.
7. BUILDER TO FIELD CUT PANELS AS REQ'D
8. DRAWINGS ARE NOT TO SCALE.
9. REF. [PL357] FOR CAULKING AT TRIM LAPS
10. WARNING: PENCIL LEAD AND MARKER WILL CAUSE GALV. PANELS AND TRIM PIECES TO RUST. DO NOT USE THESE TO MARK ON PARTS.

DETAIL KEY

DETAIL NO.

REFERENCE ERECTION DETAILS

NOTE: ALL GIRT LAPS NOT INDICATED WILL BE 0'-2½"

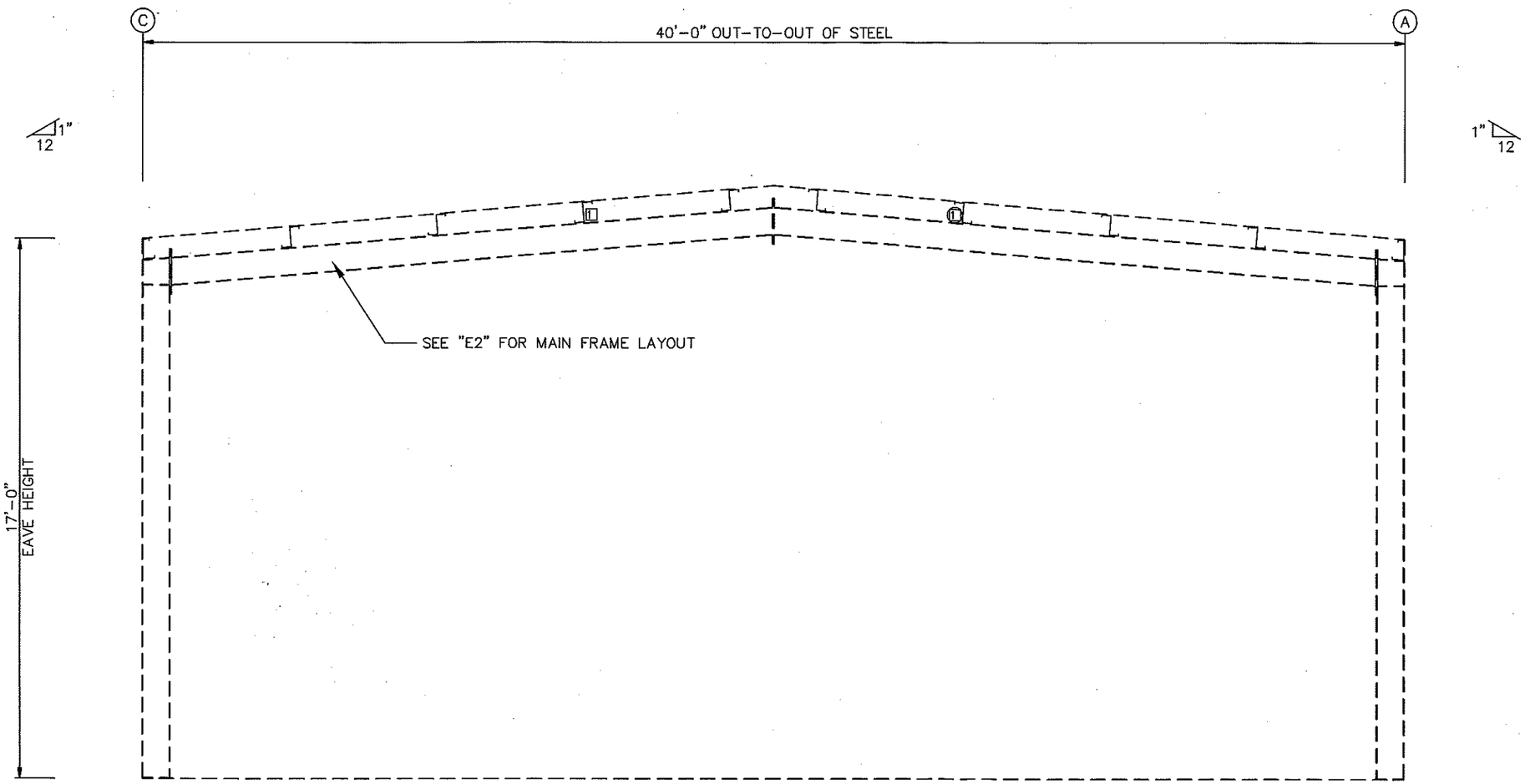
DOOR GIRTS:
ALL GIRTS ATTACHED AT ONE END TO A DOOR JAMB ARE 16 GAGE UNLESS NOTED OTHERWISE.

ISSUE	DESCRIPTION	BY	DATE
S	STRUCTURAL	TSK	6/28/16
0	CONSTRUCTION	SLW	7/6/16

ID NUMBER: K1780710 MBS

KIRBY BUILDING SYSTEMS
A NUCOR COMPANY
BETTER SOLUTIONS. BETTER BUILDINGS.
KIRBY BUILDING SYSTEMS ◦ 124 KIRBY DRIVE ◦ PORTLAND, TN 37148

TITLE: LEFT ENDWALL	DRN.BY: SLW
BUILDER: TN INDUSTRIAL MANT.	DATE: 7/6/16
CUSTOMER: TDOT REGION 3	CKD.BY: MRB/CPS
LOCATION: NASHVILLE, TN	DATE: 2/1/18
JOB NO: K1780710	DWG.NO: E7 OF: 8



CONNECTION PLATES FRAME LINE 3		
☐ID	QUAN	MARK/PART
1	2	PC20 W/ 6 ADDITIONAL FASTENERS

RIGHT ENDWALL FRAMING: FRAME LINE 3

GENERAL NOTES:

1. USE ¾"ø x 1¾" A325 BOLTS FOR ALL GIRT LAP AND GIRT TO CLIP CONNECTIONS.
2. REFER TO BEARING FRAME DETAILS [BF] FOR CONNECTION REQUIREMENTS OF RAFTER TO RAFTER AND RAFTER TO COLUMN.
3. ADEQUATE TEMPORARY BRACING MUST BE PROVIDED BY THE ERECTOR DURING THE ERECTION OF THE BUILDING.
4. ALL PRIMARY AND SECONDARY FRAMING, WIND BRACING, ETC. MUST BE INSTALLED, PROPERLY ALIGNED, BOLTED OR WELDED PRIOR TO THE INSTALLATION OF THE WALL PANELS.
5. IT MAY BE NECESSARY DURING ERECTION TO MAKE MINOR ADJUSTMENTS AND ALIGNMENTS TO BOTH PURLINS AND GIRTS PRIOR TO INSTALLING PANELS.
6. BUILDER TO FIELD CUT OR BACK LAP PANELS AS REQUIRED.
7. BUILDER TO FIELD CUT PANELS AS REQ'D
8. DRAWINGS ARE NOT TO SCALE.
9. REF. [PL357] FOR CAULKING AT TRIM LAPS
10. WARNING: PENCIL LEAD AND MARKER WILL CAUSE GALV. PANELS AND TRIM PIECES TO RUST. DO NOT USE THESE TO MARK ON PARTS.

DETAIL KEY

DETAIL NO.

REFERENCE ERECTION DETAILS

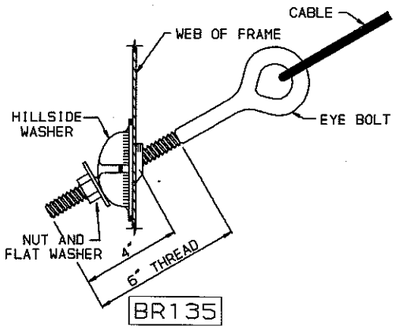
NOTE: ALL GIRT LAPS NOT INDICATED WILL BE 0'2½" DOOR GIRTS. ALL GIRTS ATTACHED AT ONE END TO A DOOR JAMB ARE 16 GAGE UNLESS NOTED OTHERWISE.

ISSUE	DESCRIPTION	BY	DATE
S	STRUCTURAL	TSK	6/28/16
0	CONSTRUCTION	SLW	7/6/16

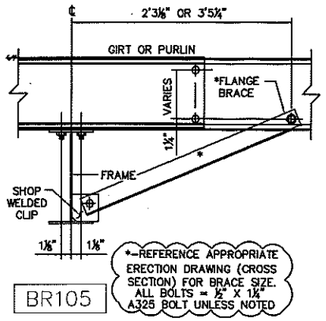
ID NUMBER: K17B0710 MBS

KIRBY BUILDING SYSTEMS
A NUCOR COMPANY
BETTER SOLUTIONS. BETTER BUILDINGS.
KIRBY BUILDING SYSTEMS ○ 124 KIRBY DRIVE ○ PORTLAND, TN 37148

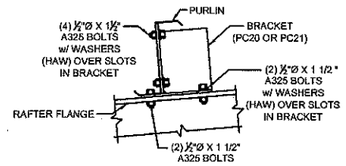
TITLE: RIGHT ENDWALL	DRN.BY: SLW
BUILDER: TN INDUSTRIAL MANT.	DATE: 7/6/16
CUSTOMER: TDOT REGION 3	CKD.BY: MRB/CPS
LOCATION: NASHVILLE, TN	DATE: 2/1/18
JOB NO: K17B0710	DWG.NO:E8 OF:8



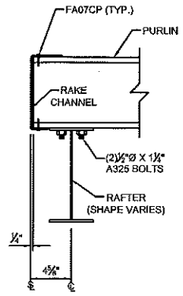
BR135



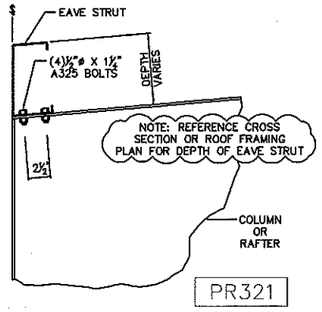
BR105



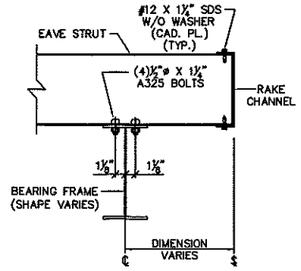
BR226



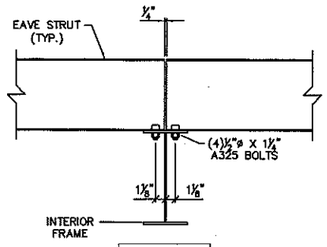
PR100



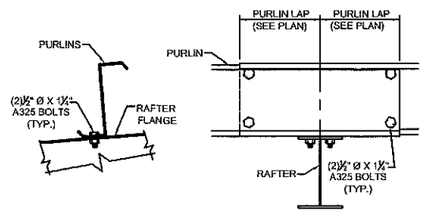
PR321



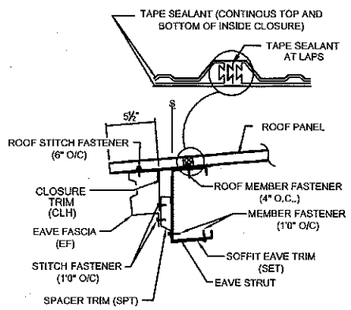
PR332



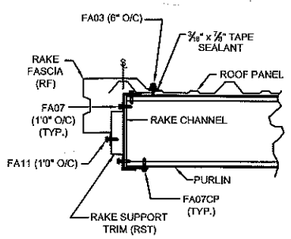
PR334



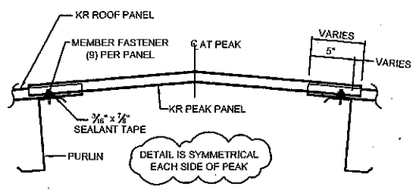
PR110



PL108



PL101



PL185

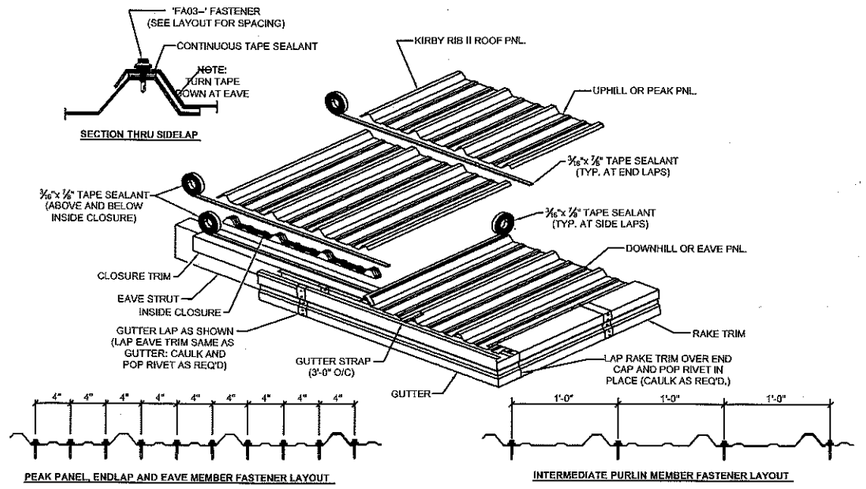
NOTES:
1. SHEETING AND TRIM FASTENERS ARE THE SAME COLOR AS THE FIRST PIECE OF SHEET METAL THROUGH WHICH THE FASTENER PASSES.
2. BLIND RIVETS ARE PROVIDED IN ALL FLUOROPOLYMER COLORS.
3. BRONZE COLORED TUBE SEALANT IS PROVIDED FOR DARK BRONZE SHEETING AND TRIM APPLICATIONS. WHITE TUBE SEALANT IS PROVIDED FOR ALL OTHER COLORS.
4. FASTENERS FOR ALL TRIM ARE REQUIRED AT 1'0" ON CENTER UNLESS NOTED OTHERWISE. USE TUBE SEALANT AT ALL TRIM SPLICES.
5. BOLT LENGTH MAY VARY IF NOTED ON ERECTION DRAWINGS.
6. BOLT STRENGTH MAY VARY IF NOTED ON ERECTION DRAWINGS.
7. USE 1/2" X 1 1/4" A325 BOLTS AT ALL PURLIN LAPS.
8. USE 1/2" X 1 1/4" A325 BOLTS AT ALL PURLIN TO FRAME CONNECTIONS.
9. DRAWINGS ARE NOT TO SCALE.
10. WARNING: PENCIL LEAD AND MARKER WILL CAUSE GALV. PANELS AND TRIM PIECES TO RUST. DO NOT USE THESE TO MARK ON PARTS.

ISSUE	DESCRIPTION	BY	DATE
S	STRUCTURAL	TSK	6/28/16
0	CONSTRUCTION	SLW	7/6/16
ID NUMBER: K17B0710			MBS

KIRBY BUILDING SYSTEMS
A NUCOR COMPANY
BETTER SOLUTIONS. BETTER BUILDINGS.

KIRBY BUILDING SYSTEMS ○ 124 KIRBY DRIVE ○ PORTLAND, TN 37148

TITLE: ERECTION DETAILS	DRN.BY: SLW
BUILDER: TN INDUSTRIAL MANT.	DATE: 7/6/16
CUSTOMER: TDOT REGION 3	CKD.BY: MRB/CPS
LOCATION: NASHVILLE, TN	DATE: 11/29/17
JOB NO: K17B0710	DWG.NO: D1 OF: 2

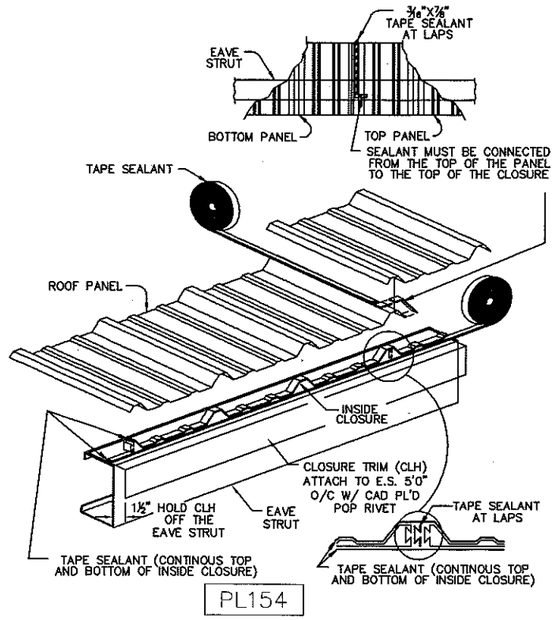


GENERAL NOTES:

1. LOCATE THE CENTER OF THE FIRST MAJOR RIB EXACTLY OVER STEEL LINE-ATTACH PANELS THEN ATTACH CAP SHEET.
2. EACH SIDE OF KIRBYRIB PANEL AND THE KIRBYRIB CAP MUST BE RUN IN CONJUNCTION THE OPPOSITE SIDE TO INSURE CORRECT ALIGNMENT.
3. REFER TO DIFFERENT SECTIONS ON ERECTION DRAWINGS FOR DETAILS RELATING TO EAVE ALIGNMENT OF ROOF PANELS, SEALER APPLICATION, FASTENER TYPES, AND SPACING AND BUILDING ACCESSORIES LOCATED ON ROOF.
4. ALL DAMAGED PAINT FINISHES ARE TO BE RETOUCHED TO PREVENT RUSTING. (THIS SHALL BE DONE AT THE END OF EACH DAY.)
5. IN THE EVENT A SCREW IS INSTALLED IN THE WRONG LOCATION OR SHOULD A SCREW BREAK DURING THE DRIVING PROCESS, REMOVE THE SCREW AND INSTALL ONE OF A LARGER DIAMETER TO PREVENT LEAKING. IF REMOVAL OF SCREW REMNANT IS NOT POSSIBLE, WATER PROOFING MEASURES ARE TO BE TAKEN TO PREVENT LEAKING.
6. CONCENTRATED HEAVY LOADS (PERSONNEL OR MATERIALS) OCCURING ON ROOF DURING CONSTRUCTION SHALL BE DISTRIBUTED UNIFORMLY OVER A LARGE AREA IN SUCH A MANNER AS TO PREVENT DAMAGE TO BUILDING COMPONENTS.
7. ALL METAL SHAVINGS OCCURING AS A RESULT OF DRILLING OPERATIONS ON THE ROOF ARE TO BE REMOVED IN SUCH A MANNER AS TO PREVENT DAMAGE OR STAINING OF ROOF FINISH.(THIS SHALL BE DONE AT THE END OF EACH DAY.)

SIDELAP FASTENER LAYOUT 'FA03'

PL148



PL154

NOTES:

1. SHEETING AND TRIM FASTENERS ARE THE SAME COLOR AS THE FIRST PIECE OF SHEET METAL THROUGH WHICH THE FASTENER PASSES.
2. BLIND RIVETS ARE PROVIDED IN ALL FLUOROPOLYMER COLORS.
3. BRONZE COLORED TUBE SEALANT IS PROVIDED FOR DARK BRONZE SHEETING AND TRIM APPLICATIONS. WHITE TUBE SEALANT IS PROVIDED FOR ALL OTHER COLORS.
4. FASTENERS FOR ALL TRIM ARE REQUIRED AT 1'0" ON CENTER UNLESS NOTED OTHERWISE. USE TUBE SEALANT AT ALL TRIM SPLICES.
5. BOLT LENGTH MAY VARY IF NOTED ON ERECTION DRAWINGS.
6. BOLT STRENGTH MAY VARY IF NOTED ON ERECTION DRAWINGS.
7. USE 1/2" X 1 1/4" A325 BOLTS AT ALL PURLIN LAPS.
8. USE 1/2" X 1 1/4" A325 BOLTS AT ALL PURLIN TO FRAME CONNECTIONS.
9. DRAWINGS ARE NOT TO SCALE.
10. WARNING: PENCIL LEAD AND MARKER WILL CAUSE GALV. PANELS AND TRIM PIECES TO RUST. DO NOT USE THESE TO MARK ON PARTS.

ISSUE	DESCRIPTION	BY	DATE
S	STRUCTURAL	TSK	6/28/16
0	CONSTRUCTION	SLW	7/6/16
ID NUMBER: K17B0710			MBS

KIRBY BUILDING SYSTEMS A NUCOR COMPANY
BETTER SOLUTIONS. BETTER BUILDINGS.

KIRBY BUILDING SYSTEMS ○ 124 KIRBY DRIVE ○ PORTLAND, TN 37148

TITLE: ERECTION DETAILS	DRN.BY: SLW
BUILDER: TN INDUSTRIAL MANT.	DATE: 7/6/16
CUSTOMER: TDOT REGION 3	CKD.BY: CPS
LOCATION: NASHVILLE, TN	DATE: 7/29/16
JOB NO: K17B0710	DWG.NO: D2 OF: 2

DESIGN CRITERIA:

DESIGN PER 2012 INTERNATIONAL BUILDING CODE, UNLESS NOTED OTHERWISE
BUILDING OCCUPANCY CLASSIFICATION: II

SEISMIC LOADS:
IMPORTANCE FACTOR, I=1.0
SITE CLASS D
SEISMIC DESIGN CATEGORY, D
MAPPED SPECTRAL RESPONSE ACCELERATION, S1=0.231
SPECTRAL DESIGN COEFFICIENTS: Sds=0.539, Sd1=0.299
BASIC SEISMIC FORCE RESISTING SYSTEM: ORDINARY STEEL MOMENT FRAMES
RESPONSE MODIFICATION FACTOR:
WIND COLUMNS, R=1.25
RIGID FRAMES, R=3.5
SEISMIC RESPONSE COEFFICIENT:
WIND COLUMNS, Cs=0.4310
RIGID FRAMES, Cs=0.1539
SEE P.E.M.B. REACTION CALCULATIONS FOR ADDITIONAL INFORMATION

WIND LOADS (ASCE 7-10):
BASIC WIND SPEED (Vult): 115 MPH
BASIC WIND SPEED (Vasd): 93 MPH
RISK CATEGORY: II
WIND EXPOSURE CATEGORY: B

P.E.M.B. FOUNDATIONS WERE DESIGNED USING THE DESIGN CRITERIA SHOWN ABOVE. THESE DESIGN CRITERIA WERE SELECTED TO REPRESENT APPROPRIATE LOADING SCENARIOS FOR TDOT REGIONS 1, 2, AND 3. DESIGNS REPRESENTED IN THIS DOCUMENT SHALL NOT BE CONSTRUCTED IN REGIONS OR AREAS THAT DO NOT ADHERE TO THE DESIGN CRITERIA OF THIS DOCUMENT.

CONCRETE (DESIGN PER TDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION)

MIX CLASS	F'c	W/CM RATIO (MIN)
MIX A	3,000 PSI	0.45

REFER TO TDOT SPEC SECTION 604 FOR ADDITIONAL INFORMATION.

ALL REINFORCING STEEL ASTM A615 GRADE 60.
REFER TO TDOT SPEC SECTION 907 FOR ADDITIONAL INFORMATION.

SOIL BEARING (DESIGN MAXIMUM):
SPREAD FOOTINGS 2,000 PSF

PRE-ENGINEERED METAL BUILDINGS:

ALL METAL BUILDING COMPONENTS SHALL BE DESIGNED IN ACCORDANCE WITH THE MBMA MANUAL AND THE 2012 INTERNATIONAL BUILDING CODE INCLUDING BUT NOT LIMITED TO THE LOADS LISTED UNDER "DESIGN LOADS"

THE METAL BUILDING MANUFACTURER SHALL BE SOLELY RESPONSIBLE FOR THE STRUCTURAL DESIGN AND FABRICATION OF THE SUPERSTRUCTURE. THIS INCLUDES, BUT IS NOT LIMITED TO, PURLINS, RIGID FRAMES, PORTAL FRAMES, WIND COLUMNS, GIRTS, BASEPLATES, ALL BRACING, AND ANCHOR BOLTS.

THE METAL BUILDING SHALL BE DESIGNED IN ACCORDANCE WITH THE 2012 IBC INCLUDING BUT NOT LIMITED TO DEFLECTION CRITERIA, LOADS, LOAD COMBINATIONS, ALLOWABLE STRESSES, ANALYSIS METHODS AND DESIGN REQUIREMENTS.

LATERAL DRIFT SHALL BE IN ACCORDANCE WITH THE CRITERIA CONTAINED IN "SERVICEABILITY DESIGN CONSIDERATIONS FOR STEEL BUIDINGS" PUBLISHED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION, INC. (COPYRIGHT 2003).

THE METAL BUILDING MANUFACTURER SHALL BE RESPONSIBLE FOR THE OVERALL DESIGN OF ANCHOR BOLTS TO ADEQUATELY TRANSFER BUILDING COLUMN REACTIONS TO THE FOUNDATION. THIS INCLUDES ANCHOR BOLT QUANTITY, LOCATION, DIAMETER, AND MATERIAL GRADE. MINIMUM EMBEDMENT LENGTH SHALL BE THE RESPONSIBILITY OF THE FOUNDATION ENGINEER AS SHOWN ON THESE PLANS.

ANCHOR BOLTS MUST BE LOCATED BY MEANS OF A TEMPLATE. DO NOT HAND SET ANCHOR BOLTS. ANCHOR BOLT LAYOUT, QUANTITY, DIAMETER, PROJECTION, EMBEDMENT AND MATERIAL IS AS SHOWN ON THE METAL BUILDING DRAWINGS.

CONTRACTOR SHALL VERIFY QUANTITY AND PLACEMENT LOCATIONS OF ANCHOR BOLTS WITH METAL BUILDING MANUFACTURER.

REFER TO DESIGN CRITERIA ABOVE FOR LOADING AND OTHER STRUCTURAL INFORMATION.

CONCRETE:

UNLESS NOTED OTHERWISE (UNO) ON THE DRAWINGS, MINIMUM COVER FOR REINFORCING SHALL BE AS FOLLOWS:
FOOTINGS:
BOTTOM AND SIDES - 3"
TOP - 2"
PEDESTALS: 2"

ALL REINFORCING SHALL BE HELD SECURELY IN POSITION WITH STANDARD ACCESSORIES IN CONFORMANCE W/ THE CRSI MANUAL OF STANDARD PRACTICE AND ACI 315 DURING THE PLACING OF THE CONCRETE.

ALL HOOKS IN REINFORCING BARS SHALL BE ACI STANDARD HOOKS, U.N.O.

PROVIDE 3/4" CHAMFER AT ALL EXPOSED CORNERS OF FOUNDATION PEDESTALS.

DETAILING, FABRICATION AND ERECTION OF REINFORCING STEEL, UNLESS OTHERWISE NOTED, SHALL CONFORM TO ACI 315, "DETAILS AND DETAILING OF REINFORCED CONCRETE STRUCTURES" AND THE CRSI, "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES."

REINFORCING STEEL SHALL NOT BE HEATED OR WELDED AND MUST BE DRY AND FREE OF CONTAMINANTS SUCH AS RUST, DIRT, GREASE, AND PROTECTIVE COATINGS.

ALL CONCRETE SHALL BE MECHANICALLY VIBRATED IN ACCORDANCE WITH ACI 304 AND ACI 309 OR TDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

FOUNDATIONS:

IF FOOTING ELEVATIONS SHOWN OCCUR IN A DISTURBED, UNSUITABLE, OR UNSTABLE SOIL, THE ENGINEER SHALL BE NOTIFIED.

A SITE SPECIFIC SOILS EXPLORATION REPORT WAS NOT PERFORMED FOR THIS PROJECT. AS A RESULT, ALL FOUNDATIONS WERE DESIGNED BASED ON AN ALLOWABLE BEARING CAPACITY OF 2000 PSF. THE ALLOWABLE BEARING PRESSURES ARE BASED ON BEARING AGAINST FIRM, NON-EXPANSIVE, UNDISTURBED SOIL. WHERE UNACCEPTABLE MATERIAL OCCURS, EXCAVATE AND REPLACE WITH ENGINEERED FILL AS DIRECTED BY A LOCAL GEOTECHNICAL ENGINEER ALL FOUNDATION BEARING SURFACES SHALL BE REVIEWED BY THE GEOTECHNICAL ENGINEER PRIOR TO STEEL OR CONCRETE PLACEMENT TO INSURE THE BEARING SURFACES ARE CONSISTENT WITH THE ASSUMED ALLOWABLE BEARING PRESSURES NOTED.

FOUNDATION CONCRETE SHOULD BE PLACED DURING THE SAME DAY EXCAVATION IS MADE. IN THE EVENT FOOTING EXCAVATIONS ARE LEFT OPEN FOR MORE THAN ONE DAY, THEY SHALL BE PROTECTED TO REDUCE EVAPORATION OR ENTRY OF MOISTURE.

CONTRACTOR SHALL KEEP ALL FREE STANDING WATER OUT OF EXCAVATION. CONTRACTOR SHALL PROVIDE DEWATERING MEASURES AS NECESSARY PRIOR TO PLACING CONCRETE.

IN THE EVENT OF INCLEMENT WEATHER, CONTRACTOR MAY PROVIDE A LEAN 2" THICK CONCRETE (2500 PSI) MUD MAT BELOW THE FOOTING TO STABILIZE THE SOIL PRIOR TO PLACING REINFORCING STEEL. MUD MAT SHALL EXTEND 1'-0" BEYOND FOOTPRINT OF FOOTING.

REINFORCEMENT PLACEMENT SHALL BE APPROVED BY THE TESTING AGENCY PRIOR TO CONCRETE PLACEMENT.

BACKFILL SHALL BE CLEAN, CRUSHED STONE (#57 STONE CONFORMING TO ASTM D448 OR EQUAL), SOIL APPROVED BY A QUALIFIED GEOTECHNICAL ENGINEER, OR CLASS "A" GRADING "D" MATERIAL PER TDOT STANDARD SPECIFICATION. INSTALL AND COMPACT PER 207.04 OF TDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

EXCAVATED/STRIPPED AREAS SHALL BE PROOF-ROLLED WITH SOFT AREAS BEING REPLACED BY APPROVED BACKFILL AS DIRECTED BY TDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

SUPPLEMENTARY NOTES:

PROVIDE ALL TEMPORARY BRACING, GUYING OR OTHER MEANS TO AVOID EXCESSIVE STRESSES AND TO HOLD STRUCTURAL ELEMENTS IN PLACE DURING CONSTRUCTION. THE STRUCTURE SHALL NOT BE CONSIDERED STABLE UNTIL ALL STRUCTURAL ELEMENTS HAVE BEEN CONSTRUCTED.

THE STRUCTURAL ENGINEER SHALL NOT HAVE CONTROL OR BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, PROCEDURES OR SEQUENCES. FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, OR ANY OTHER PERSONS PERFORMING THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

VERIFY ALL DIMENSIONS WITH OTHER DISCIPLINE DRAWINGS PRIOR TO CONSTRUCTION OR FABRICATION.

PROJECT NO.			YEAR	SHEET NO.
xxx-x-xxx(xx)			2018	
REVISIONS				
NO.	DATE	BY	BRIEF DESCRIPTION	

SEE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR EMBEDS, OPENINGS, SLEEVES, ETC. NOT SHOWN ON THE STRUCTURAL DRAWINGS.

ALL STRUCTURAL OPENINGS AROUND OR AFFECTED BY MECHANICAL, ELECTRICAL, AND PLUMBING EQUIPMENT SHALL BE VERIFIED WITH EQUIPMENT PURCHASED BEFORE PROCEEDING WITH STRUCTURAL WORK AFFECTED.

CONTACT ENGINEER IN WRITING FOR STRUCTURALLY-RELATED POST-INSTALLED ANCHORS NOT SPECIFICALLY DETAILED ON THE DRAWINGS.

ANY ENGINEERING DESIGN PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW SHALL BEAR THE SEAL OF AN ENGINEER LICENSED IN THE PROJECT STATE.

GENERAL CONTRACTOR MUST REVIEW AND APPROVE SHOP DRAWINGS PRIOR TO SUBMITTAL TO ARCHITECT/ENGINEER. SUBMITTALS WHICH DO NOT CONTAIN THE CONTRACTORS SHOP DRAWING OR STAMP OR HAVE BEEN MERELY "RUBBER STAMPED" SHALL BE RETURNED WITHOUT REVIEW.

CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND JOB SITE CONDITIONS PRIOR TO BEGINNING WORK. ARCHITECT/STRUCTURAL ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCY.

THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS, FOR DIMENSIONS TO BE CONFIRMED AT THE JOB SITE, FOR FABRICATION PROCESSES, FOR SAFE CONDITIONS AT THE JOB SITE, AND FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES OF CONSTRUCTION.

NO SUBSTITUTIONS OF MATERIAL WILL BE ALLOWED WITHOUT WRITTEN PERMISSION FROM THE ENGINEER. DO NOT SCALE DRAWINGS. IF DIMENSIONS ARE IN QUESTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING CLARIFICATION FROM THE ENGINEER BEFORE CONTINUING WITH CONSTRUCTION.

ALL EXCAVATIONS SHALL BE PROPERLY SHORED IN ACCORDANCE WITH O.S.H.A. STANDARDS AND REQUIREMENTS.

CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UNDERGROUND UTILITIES SUCH AS CONDUIT AND PIPING WHICH INTERFERE WITH THE INSTALLATION OF THE NEW FOUNDATIONS. ALL INTERFERENCES SHALL BE REPORTED TO THE OWNER PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL TAKE PRECAUTIONS TO PREVENT ANY DAMAGE DURING EXCAVATION.

CONTRACTOR SHALL COMPLY WITH LOCAL, STATE, FEDERAL AND OWNERS SAFETY REGULATIONS WHILE WORKING. ENGINEER DOES NOT ASSUME ANY RESPONSIBILITY FOR CONSTRUCTION SITE SAFETY.

TDOT MATERIALS AND TESTS OR A GEOTECHNICAL TESTING AND INSPECTION FIRM SHALL BE RESPONSIBLE FOR PERFORMING A SOIL SURVEY FOR SATISFACTORY SOIL MATERIALS, SAMPLING AND TESTING FOR QUALITY CONTROL AS PER THE RECOMMENDATIONS OF TDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION FOR THIS PROJECT. ALL EARTHWORK OPERATIONS SHALL BE PERFORMED TO THE SATISFACTION OF TDOT MATERIALS AND TESTS OR THE GEOTECHNICAL TESTING FIRM.

CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF TDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITIONS. EXCEPT AS MODIFIED BY THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

PROVIDE COMPRESSIVE STRENGTH TESTS CONFORMING TO TDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. SUBMIT RESULTS DIRECTLY TO ENGINEER.

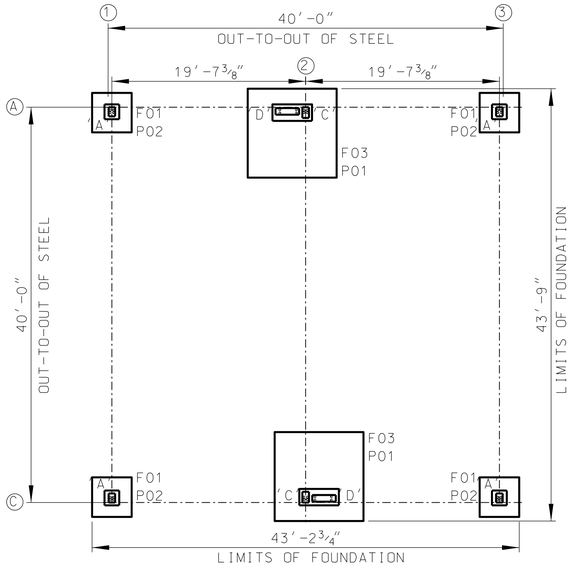
SSR
SSR CONSULTING ENGINEERS
2650 THOUSAND OAKS BLVD SUITE 1600
MEMPHIS, TN. 38118 • (901) 683-3900

DESIGNED BY	AJ MATHEWS	DATE 06-2018
DRAWN BY	W. HENKE	DATE 06-2018
SUPERVISED BY	I. ENGSTROM	DATE 06-2018
CHECKED BY	B. HOLLANDER	DATE 06-2018

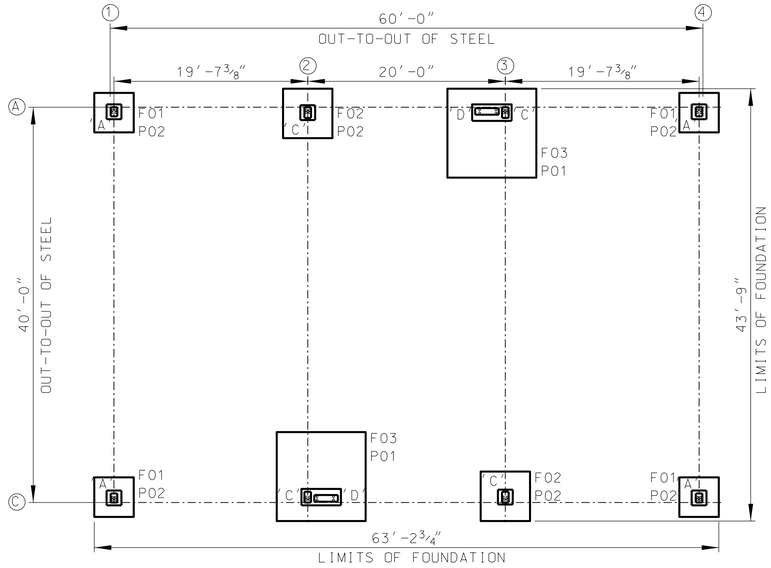
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ANDREW JAMES MATHEWS
REGISTERED ENGINEER
AGRICULTURE
STATE OF TENNESSEE

GENERAL NOTES
TDOT BRINE SHED STANDARD FOUNDATION REQUIREMENTS
REGIONS 1,2,&3
2018



"40X40" BUILDING FOUNDATION PLAN



"40X60" BUILDING FOUNDATION PLAN

NOTES:

1) GRIDLINES SHOWN ON PLAN VIEWS ARE TAKEN FROM THE PEMB SHOP DRAWINGS.
2) APPLY SIKADUR WDE PRIMER (BY SIKA) TO AREAS BEING TREATED WITH SIKAGARD DUOCHEM 7500 (BY SIKA).
3) REFER TO MANUFACTURER DATA SHEETS AND APPLICATION INSTRUCTIONS WHEN COATING AREAS WITH SIKADUR WDE PRIMER AND SIKAGARD DUOCHEM 7500 (BY SIKA).
4) EACH BUILDING SHALL BE CONSTRUCTED HAVING ALL BASE PLATES AT THE SAME ELEVATION TO ENSURE LEVELNESS. FOR THE PURPOSE OF THIS DOCUMENT, THE ELEVATION OF THE TOP OF THE FOOTING PEDESTAL SHALL BE REFERRED TO AS ELEVATION 0.0'. ALL OTHER ELEVATIONS WITHIN THESE CONSTRUCTION DOCUMENTS ARE MEASURED IN REFERENCE TO ELEVATION 0.0'. ACTUAL ELEVATIONS WILL VARY DEPENDING ON SITE CONDITIONS AT VARIOUS FUTURE BUILDING LOCATIONS.
5) FINISHED GRADE ELEVATION FOR EACH BUILDING SHALL BE 0'2" BELOW THE TOP OF FOOTING PEDESTALS AT ELEVATION -0.167'.
6) SEE PEMB DRAWINGS FOR DETAILS ON BASE PLATES 'A', 'C', & 'D'.
7) COMPACT LOOSE SOIL AFTER BACKFILLING ON TOPS OF FOOTINGS

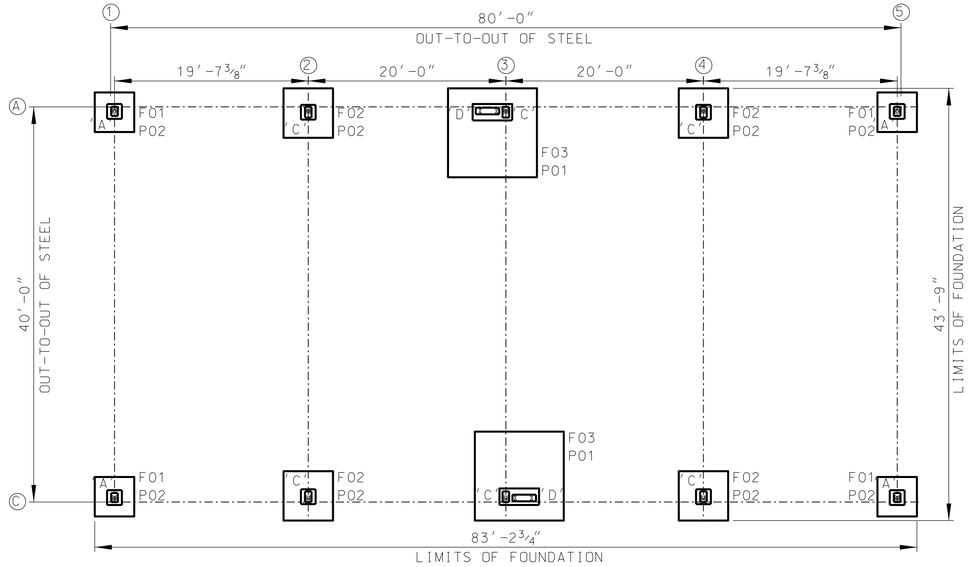
PROJECT NO.	YEAR	SHEET NO.
xxx-x-xxx(xx)	2018	

REVISIONS

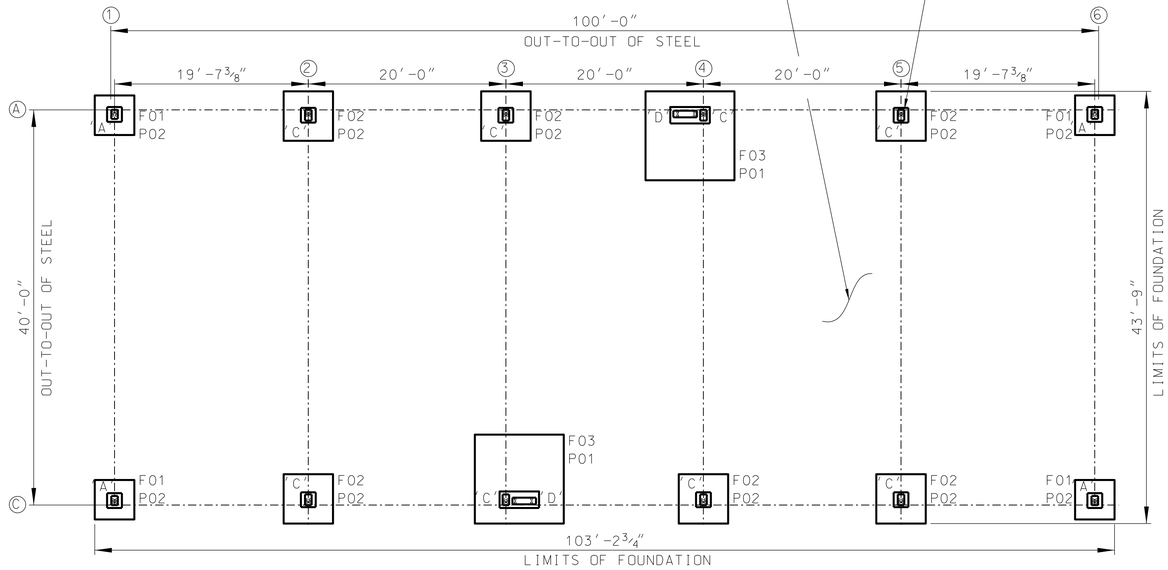
NO.	DATE	BY	BRIEF DESCRIPTION

GRADING, BACKFILLING, AND EQUIPMENT PLACEMENT PER OWNER (TYP. ALL BUILDINGS)

COAT STEEL BASEPLATES, EXPOSED PORTIONS OF ANCHOR RODS, AND BOTTOM 5' OF METAL BUILDING COLUMNS WITH SIKAGARD DUOCHEM 7500 (BY SIKA). SEE NOTES 2 AND 3. TYPICAL ALL BASEPLATE LOCATIONS ON ALL BUILDING FOUNDATIONS.



"40X80" BUILDING FOUNDATION PLAN



"40X100" BUILDING FOUNDATION PLAN

FOOTING SCHEDULE

MARK	LENGTH	WIDTH	DEPTH	T.O.F. ELEV. (FT)	REINFORCING	REMARKS
F01	4'-0"	4'-0"	1'-6"	-2.0	#5 @ 12" TOP & BTM. E.W.	STD. 180°HOOKS ON EACH END
F02	5'-0"	5'-0"	1'-6"	-2.0	#5 @ 12" TOP & BTM. E.W.	STD. 180°HOOKS ON EACH END
F03	9'-0"	9'-0"	1'-6"	-2.0	#9 @ 10" TOP & BTM. E.W.	STD. 180°HOOKS ON EACH END

SSR
SSR CONSULTING ENGINEERS
2650 THOUSAND OAKS BLVD SUITE 1600
MEMPHIS, TN. 38118 • (901) 683-3900

DESIGNED BY	AJ MATHEWS	DATE 06-2018
DRAWN BY	W. HENKE	DATE 06-2018
SUPERVISED BY	I. ENGSTROM	DATE 06-2018
CHECKED BY	B. HOLLANDER	DATE 06-2018

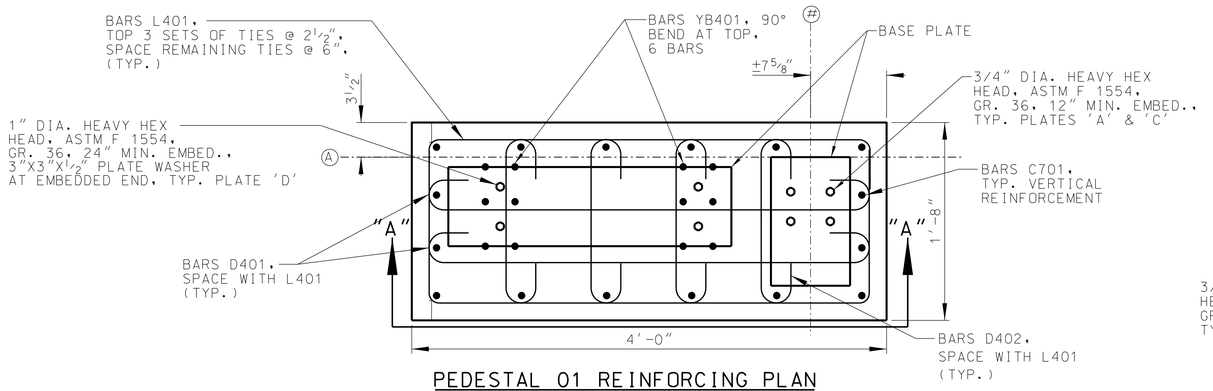
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

FOUNDATION PLAN
TDOT BRINE SHED STANDARD
FOUNDATION REQUIREMENTS
REGIONS 1,2,&3
2018

PROJECT NO.	YEAR	SHEET NO.
xxx-x-xxx(xx)	2018	

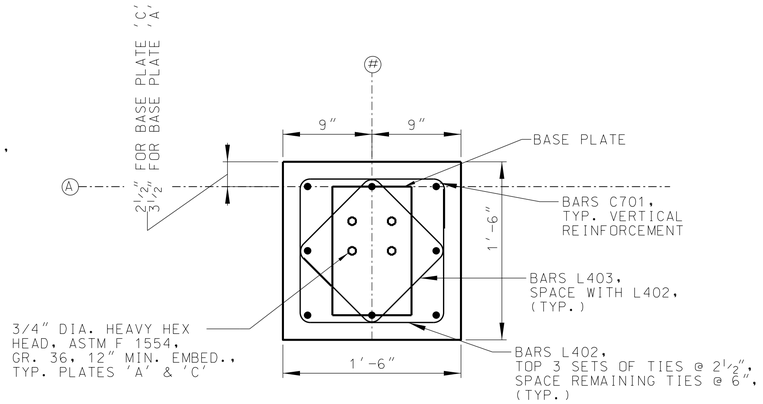
REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION



PEDESTAL 01 REINFORCING PLAN

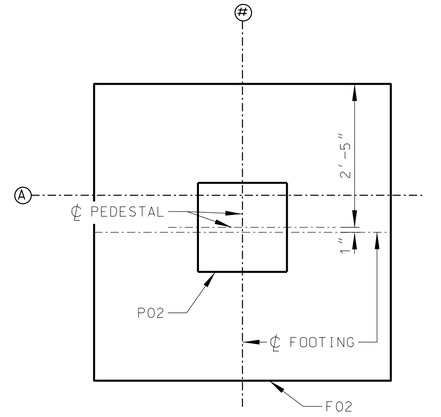
1) DETAILS SHOWN FOR GRIDLINE 'A', GRIDLINE 'C' SIMILAR
2) '#' REPRESENTS VERTICAL GRIDLINES FOR:
   - 40X40 BUILDING, GRIDLINE 2
   - 40X60 BUILDING, GRIDLINES 2C & 3A
   - 40X80 BUILDING, GRIDLINE 3
   - 40X100 BUILDING, GRIDLINES 3C & 4A
4) SEE BUILDING PLAN VIEW FOR POSITION OF VERTICAL ℄ PEDESTAL IN RELATION TO VERTICAL GRIDLINE



PEDESTAL 02 REINFORCING PLAN

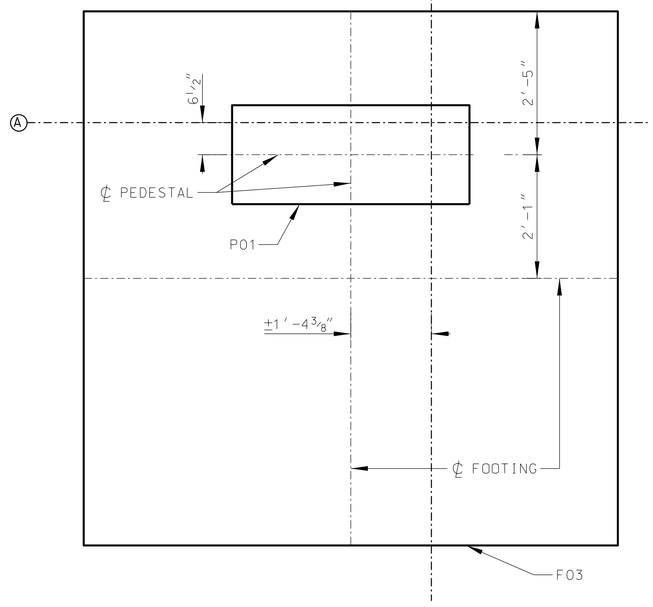
1) DETAILS SHOWN FOR GRIDLINE 'A', GRIDLINE 'C' SIMILAR
2) '#' REPRESENTS VERTICAL GRIDLINES FOR:
   - 40X40 BUILDING, GRIDLINES 1 & 3
   - 40X60 BUILDING, GRIDLINES 1, 2A, 3C & 4
   - 40X80 BUILDING, GRIDLINES 1, 2, 4 & 5
   - 40X100 BUILDING, GRIDLINES 1, 2, 3A, 4C, 5 & 6

NOTES:
1) SEE PEMB DRAWINGS FOR ANCHOR SPACINGS, PLATE DIMENSIONS, AND PLATE PLACEMENT FOR ALL COLUMN BASES.
2) ALL ANCHOR BOLTS, NUTS, WASHERS, AND PLATES SHALL BE ASTM A36, GALVANIZED.



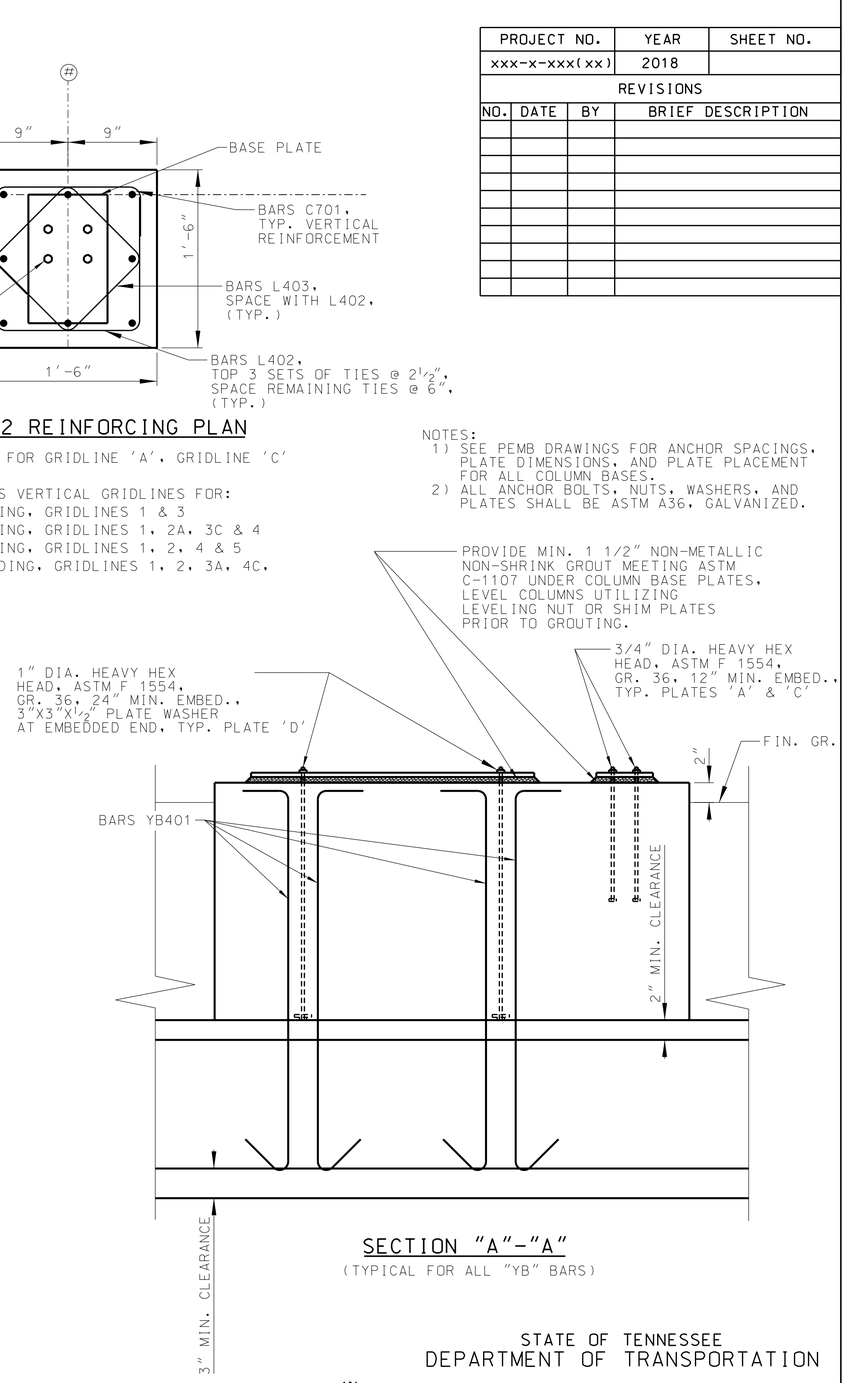
F02 ECCENTRIC PEDESTAL

1) SEE FOOTING SCHEDULE FOR FOOTING SIZES.
2) DETAILS SHOWN FOR GRIDLINE 'A', GRIDLINE 'C' SIMILAR.
3) '#' REPRESENTS VERTICAL GRIDLINES FOR:
   - 40X60 BUILDING, GRIDLINES '2A' & '3C'
   - 40X80 BUILDING, GRIDLINES '2' & '4'
   - 40X100 BUILDING, GRIDLINES '2', '3A', '4C' & '5'



F03 ECCENTRIC PEDESTAL

1) SEE FOOTING SCHEDULE FOR FOOTING SIZES.
2) DETAILS SHOWN FOR GRIDLINE 'A', GRIDLINE 'C' SIMILAR.
3) '#' REPRESENTS VERTICAL GRIDLINES FOR:
   - 40X40 BUILDING, GRIDLINE 2
   - 40X60 BUILDING, GRIDLINES 2C & 3A
   - 40X80 BUILDING, GRIDLINE 3
   - 40X100 BUILDING, GRIDLINES 3C & 4A
4) SEE BUILDING PLAN VIEW FOR POSITION OF VERTICAL ℄ PEDESTAL IN RELATION TO VERTICAL GRIDLINE



SECTION "A"-"A"

(TYPICAL FOR ALL "YB" BARS)

SSR
SSR CONSULTING ENGINEERS
2650 THOUSAND OAKS BLVD. SUITE 1600
MEMPHIS, TN. 38118 ● (901) 683-3900

DESIGNED BY	AJ MATHEWS	DATE 06-2018
DRAWN BY	W. HENKE	DATE 06-2018
SUPERVISED BY	I. ENGSTROM	DATE 06-2018
CHECKED BY	B. HOLLANDER	DATE 06-2018

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ANDREW JAMES MATHEWS — REGISTERED ENGINEER — AGRICULTURE — STATE OF TENNESSEE

FOUNDATION DETAILS
TDOT BRINE SHED STANDARD
FOUNDATION REQUIREMENTS
REGIONS 1,2,&3
2018

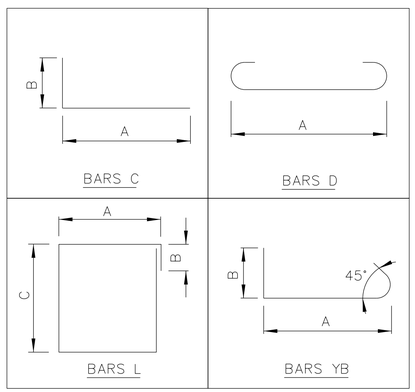
PROJECT NO.	YEAR	SHEET NO.
xxx-x-xxx(xx)	2018	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

BILL OF STEEL

40'X40' BUILDING									40'X60' BUILDING								
BAR	LOCATION	SIZE	NO. REQ'D	BENDING DIMENSIONS				LENGTH	BAR	LOCATION	SIZE	NO. REQ'D	BENDING DIMENSIONS				LENGTH
				A	B	C	D						A	B	C	D	
C701	P01 & P02 VERT. BARS	7	64	3'-0"	1'-2"			4'-2"	C701	P01 & P02 VERT. BARS	7	80	3'-0"	1'-2"			4'-2"
D401	P01 TIE	4	24					3'-8"	D401	P01 TIE	4	24					3'-8"
D402	P01 TIE	4	48					1'-4"	D402	P01 TIE	4	48					1'-4"
D501	F01 REINFORCING	5	80					3'-6"	D501	F01 REINFORCING	5	80					3'-6"
D502	F02 REINFORCING	5	0					4'-6"	D502	F02 REINFORCING	5	48					4'-6"
D901	F03 REINFORCING	9	96					8'-6"	D901	F03 REINFORCING	9	96					8'-6"
L401	P01 STIRRUP	4	12	3'-8"	0'-5"	1'-4"		10'-5"	L401	P01 STIRRUP	4	12	3'-8"	0'-5"	1'-4"		10'-5"
L402	P02 STIRRUP	4	24	1'-2"	0'-5"	1'-2"		5'-1"	L402	P02 STIRRUP	4	36	1'-2"	0'-5"	1'-2"		5'-1"
L403	P02 STIRRUP	4	24	0'-10.5"	0'-5"	0'-10.5"		3'-11"	L403	P02 STIRRUP	4	36	0'-10.5"	0'-5"	0'-10.5"		3'-11"
YB401	ANCHOR REINFORCING	4	24	3'-1"	0'-8"			3'-9"	YB401	ANCHOR REINFORCING	4	24	3'-1"	0'-8"			3'-9"
40'X80' BUILDING									40'X100' BUILDING								
C701	P01 & P02 VERT. BARS	7	96	3'-0"	1'-2"			4'-2"	C701	P01 & P02 VERT. BARS	7	112	3'-0"	1'-2"			4'-2"
D401	P01 TIE	4	24					3'-8"	D401	P01 TIE	4	24					3'-8"
D402	P01 TIE	4	48					1'-4"	D402	P01 TIE	4	48					1'-4"
D501	F01 REINFORCING	5	80					3'-6"	D501	F01 REINFORCING	5	80					3'-6"
D502	F02 REINFORCING	5	96					4'-6"	D502	F02 REINFORCING	5	144					4'-6"
D901	F03 REINFORCING	9	96					8'-6"	D901	F03 REINFORCING	9	96					8'-6"
L401	P01 STIRRUP	4	12	3'-8"	0'-5"	1'-4"		10'-5"	L401	P01 STIRRUP	4	12	3'-8"	0'-5"	1'-4"		10'-5"
L402	P02 STIRRUP	4	48	1'-2"	0'-5"	1'-2"		5'-1"	L402	P02 STIRRUP	4	60	1'-2"	0'-5"	1'-2"		5'-1"
L403	P02 STIRRUP	4	48	0'-10.5"	0'-5"	0'-10.5"		3'-11"	L403	P02 STIRRUP	4	60	0'-10.5"	0'-5"	0'-10.5"		3'-11"
YB401	ANCHOR REINFORCING	4	24	3'-1"	0'-8"			3'-9"	YB401	ANCHOR REINFORCING	4	24	3'-1"	0'-8"			3'-9"



ESTIMATED QUANTITIES (PER BUILDING)

DESCRIPTION	UNIT	40'X40'	40'X60'	40'X80'	40'X100'
DRY EXCAVATION	C.Y.	94	118	142	166
GRANULAR BACKFILL	TON	9	12	14	17
REINFORCING STEEL	LB.	4974	5468	5962	6456
CLASS A CONCRETE	C.Y.	15	18	21	24

NOTES:

1) GRANULAR BACKFILL SHALL BE CLASS "A" GRADING "D" MATERIAL PER TDOT STANDARD SPECIFICATION. INSTALL AND COMPACT BACKFILL MATERIAL UNDERNEATH GRADE BEAM PER 207.04 OF TDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
2) A MAXIMUM SPACING OF 6" SHALL NOT BE EXCEEDED BETWEEN YB BARS AND ITS NEAREST CORRESPONDING ANCHOR BOLT.

SSR
SSR CONSULTING ENGINEERS
2650 THOUSAND OAKS BLVD. SUITE 1600
MEMPHIS, TN. 38118 ★ (901) 683-3300

DESIGNED BY	AJ MATHEWS	DATE 06-2018
DRAWN BY	W. HENKE	DATE 06-2018
SUPERVISED BY	I. ENGSTROM	DATE 06-2018
CHECKED BY	B. HOLLANDER	DATE 06-2018

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

QUANTITIES AND BILL OF STEEL
TDOT BRINE SHED STANDARD
FOUNDATION REQUIREMENTS
REGIONS 1,2,&3
2018