

CLIENT

OHANA ALLIANCE GROUP, INC.

9105 BRUCEVILL RD.
SUITE 6A
ELK GROVE,
CA 95758

PROJECT

HERITAGE RV STORAGE

975 HWY 99 WEST
CORNING, CA 96021

SHEET TITLE

GENERAL STRUCTURAL NOTES

REV. DATE COMMENT

PROJECT MANAGER **JE**

DRAWN BY: **DB**

DATE: **03/29/2021**

JOB NUMBER: **21-126**

FILE NAME:

SHEET NUMBER:

SO.1

TERMS AND ABBREVIATIONS

ABBRV	TERM
(#)	NUMERICAL QUANTITIES WHEN ENCLOSED IN PARENTHESES
A/E	ARCHITECT/ENGINEER
AB	ANCHOR BOLT
ABC	AGGREGATE BASE COURSE
ARCH	ARCHITECT
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
BD	BOTTOM OF DECK
BOS	BOTTOM OF STEEL
CIP	CAST-IN-PLACE
CJ	CONSTRUCTION JOINT
CL	CONTROL JOINT
CLR	CENTERLINE
CMU	CLEAR CONCRETE MASONRY UNIT
DIA	DIAMETER
DIM	DIMENSION
DL	DEAD LOAD
EA	EACH
EJ	EACH FACE
EJ	EXPANSION JOINT
EL	ELEVATION
EOS	EDGE OF SLAB
EQ	EQUAL
(E)	EXISTING
EW	EACH WAY
(F)	FUTURE
FF	FINISH FLOOR ELEVATION
FLR	FLOOR
FEET	FEET
FTG	FOOTING
GA	GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GLB	GLUED LAMINATED WOOD BEAM
GSN	GENERAL STRUCTURAL NOTES
HORIZ	HORIZONTAL
HSS	HOLLOW STRUCTURAL SECTION MOMENT OF INERTIA
IBC	INTERNATIONAL BUILDING CODE
ID	INSIDE DIAMETER
INT	INTERIOR
KIP, K	ONE THOUSAND POUNDS
KLF	KIP PER LINEAR FOOT
LB	STEEL ANGLE
LB	POUND
LLB	LIVE LOAD
LLH	LONG LEG BACK TO BACK
LLV	LONG LEG HORIZONTAL
LSL	LONG LEG VERTICAL
LSL	LAMINATED STRAND LUMBER
LSH	LONG SIDE HORIZONTAL
LSV	LONG SIDE VERTICAL
MCJ	MASONRY CONTROL JOINTS
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM
NA	NOT APPLICABLE
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OPP	OPPOSITE
OSB	ORIENTED STRAND BOARD
PERP	PERPENDICULAR
PLF	POUNDS PER LINEAR FOOT
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSL	PARALLEL STRAND LUMBER
PT	POST TENSIONED
QA	QUALITY ASSURANCE
QC	QUALITY CONTROL
REQD	REQUIRED
RFI	REQUEST FOR INFORMATION
RTU	ROOF TOP UNIT
SF	SQUARE FOOT
SIM	SIMILAR
STD	STANDARD
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
TOB	TOP OF BEAM
TOC	TOP OF CONCRETE
TOD	TOP OF DECK
TOP	TOP OF FOOTING
TOM	TOP OF MASONRY
TOP	TOP OF PARAPET
TOS	TOP OF STEEL
TOW	TOP OF WALL
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
W/C	WATER TO CEMENT RATIO
WLD	WELD
WF	WORK POINT
WWF	WELDED WIRE FABRIC

CODE:

2019 EDITION OF THE CALIFORNIA BUILDING CODE (CBC)

DESIGN LOADS:

- ROOF:
 - LIVE LOAD (UNREDUCIBLE) _____ 20 PSF
 - DEAD LOAD _____ 6 PSF
- WIND LOAD:
 - RISK CATEGORY _____ II
 - BASIC WIND SPEED, V _____ 34 MPH
 - EXPOSURE CATEGORY _____ C
 - IMPORTANCE FACTOR, I_w _____ 1.0
 - MEAN ROOF HEIGHT _____ 15 FT
 - G_r _____ 0.85
 - K_e _____ 1.0
 - K_z _____ 1.0
 - K_z _____ 0.85
 - ENCLOSURE CLASSIFICATION: _____ OPEN BUILDING
- SEISMIC LOADS:
 - RISK CATEGORY _____ II
 - IMPORTANCE FACTOR, I_e _____ 1.0
 - SEISMIC SITE CLASS _____ DEFAULT
 - S_s _____ 0.798
 - S₁ _____ 0.388
 - S_D _____ 0.638
 - S_D _____ 0.483
 - SEISMIC DESIGN CATEGORY _____
 - BASIC SEISMIC FORCE RESISTING SYSTEM _____
 - STEEL ORDINARY CANTILEVER COLUMN SYSTEMS _____
- SNOW LOAD:
 - RISK CATEGORY _____ II
 - GROUND SNOW LOAD, P_g _____ 5.0 PSF
 - IMPORTANCE FACTOR, I_s _____ 1.0
 - THERMAL FACTOR, T_e _____ 1.2
 - DECK PROPERTIES:
 - DEPTH: 1 1/2"
 - WIDTH: 36"
 - GAUGE: 28"
 - MINIMUM YIELD STRESS: 80 KSI
 - MINIMUM S_{xy}: 0.0432 INCHES³ PER FOOT OF WIDTH
 - MINIMUM I: 0.0788 INCHES⁴ PER FOOT OF WIDTH
 - SPAN MINIMUM: 3 SPAN
 - FINISH: PAINTED OR GALVANIZED

GENERAL:

- THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES.
- THE CONTRACTOR IS RESPONSIBLE FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK THAT CONFORMS TO THE REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) SAFETY AND HEALTH STANDARDS FOR THE CONSTRUCTION INDUSTRY.
- WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE LATEST EDITION AND/OR ADDENDUM.
- OPTIONS ARE FOR CONTRACTOR'S CONVENIENCE. HE SHALL BE RESPONSIBLE FOR ALL CHANGES NECESSARY IF HE CHOOSES AN OPTION AND HE SHALL COORDINATE ALL DETAILS.
- NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS, WHERE NO SPECIFIC DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT.
- TYPICAL DETAILS ARE NOT CUT ON DRAWINGS, BUT APPLY UNLESS NOTED OTHERWISE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS WITH ACTUAL SITE CONDITIONS AND GENERAL CONTRACTOR PRIOR TO START OF CONSTRUCTION. ALL DIMENSIONS SHOWN ON STRUCTURAL DRAWINGS ARE TO ASSIST CONTRACTOR IN VERIFICATION. DO NOT SCALE DIMENSIONS FROM DRAWINGS.
- ITEMS SHOWN BY OTHER DISCIPLINES WITH REFERENCE TO STRUCTURAL DRAWINGS BUT NOT SHOWN ON THESE STRUCTURAL DRAWINGS SHALL BE CONSIDERED DESIGN BUILT ITEMS. CONTRACTOR SHALL SUBMIT DESIGN BY OTHERS FOR REVIEW AND APPROVAL.

FOUNDATIONS:

- GEOTECHNICAL CONSULTANT: NA
- DESIGN SOIL BEARING VALUES WERE ASSUMED IN ACCORDANCE WITH SOIL CLASS 4 AS DEFINED IN IBC/CBC TABLE 1908.2 "PRESUMPTIVE LOAD-BEARING VALUES". DESIGN BEARING VALUE OF 1,500 PSF AND LATERAL BEARING VALUE OF 100 PSF/FT WAS USED IN DESIGN. IF ACTUAL SOIL CONDITIONS DIFFER FROM THE DESIGN, THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER PRIOR TO PROCEEDING WITH WORK.
- SPREAD FOOTINGS SHALL BEAR ON COMPACTED NATIVE SOILS. BOTTOM OF FOOTINGS SHALL BEAR AT A DEPTH NOT LESS THAN 2.0 FT BELOW LOWEST ADJACENT GRADE WITHIN 5 FEET OF STRUCTURE OR FOUNDATION. FOUNDATION EXCAVATIONS SHALL BE INSPECTED BY GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF CONCRETE.
- DRILLED POLE FOUNDATIONS SHALL BEAR ON MACHINE CLEANED, INSPECTED SOIL STRATA. POLE FOUNDATIONS WERE DESIGNED IN ACCORDANCE WITH THE PRESCRIPTIVE METHOD OF IBC/CBC SECTION 1807.3.2. FOR TOP OF POLE FOUNDATION ELEVATIONS, SEE FOUNDATION PLANS AND SECTIONS. IF WATER IS ENCOUNTERED DURING DRILLING, STOP AND CONSULT STRUCTURAL ENGINEER OR GEOTECHNICAL ENGINEER FOR RESOLUTION.

STRUCTURAL STEEL:

- LATEST AISC AND AWS CODES APPLY. THE WORK APPROVED INSPECTION 4.4 OF THE AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES IS REDEFINED AS REVIEWED.
- STEEL SHALL BE FINISHED AT LOCATIONS EXPOSED TO WEATHER WITH A CORROSION RESISTANT COATING APPLICABLE TO WEATHER AND EXPOSURE CONDITIONS OF PROJECT LOCATION.
- WHEN STRUCTURAL STEEL IS FURNISHED TO A SPECIFIED MINIMUM YIELD POINT GREATER THAN 36 KSI, THE ASTM OR OTHER SPECIFICATION DESIGNATION SHALL BE INCLUDED NEAR THE ERECTION MARK ON EACH SHIPPING ASSEMBLY OR IMPORTANT CONSTRUCTION COMPONENT OVER ANY SHOP COAT OF PAINT PRIOR TO SHIPMENT FROM THE FABRICATOR'S PLANT.
- IF IT IS NECESSARY TO SPLICE ANY MEMBER, SPLICE LOCATIONS ARE SUBJECT TO REVIEW BY STRUCTURAL ENGINEER. SPLICES SHALL BE FULL PENETRATION WELDED AND TESTED PER THIS SECTION. INDICATE ALL SPLICE LOCATIONS, AND WELDING PROCEDURES ON SHOP DRAWINGS FOR REVIEW PRIOR TO FABRICATION.
- ALL BEAMS SHALL BE ERRECTED WITH THE NATURAL CAMBER UPWARDS.
- ALL BOLTS SHALL BE INSTALLED WITH STEEL WASHERS.
- ALL WELDING BY WELDERS HOLDING VALID CERTIFICATES AND HAVING CURRENT EXPERIENCE IN TYPE OF WELD SHOWN ON THE DRAWINGS OR NOTES, CERTIFICATES SHALL BE THOSE ISSUED BY AN INDEPENDENT TESTING AGENCY.
- ALL WELDING DONE BY E70 SERIES LOW HYDROGEN RODS. USE E90 SERIES FOR ASTM A706 REINFORCING BARS.
- ALL WELDING PER AMERICAN WELDING SOCIETY STANDARDS. ALL WELDS ON DRAWINGS ARE SHOWN AS SHOP WELDS. CONTRACTOR MAY SHOP WELD OR FIELD WELD AT THEIR DISCRETION. SHOP WELDS OR FIELD WELDS SHALL BE SHOWN ON SHOP DRAWINGS.
- SLAG SHALL BE REMOVED FROM ALL COMPLETED WELDS, AND THE WELD AND ADJACENT BASE METAL SHALL BE CLEANED BY BRUSHING OR OTHER SUITABLE MEANS. WELDED JOINTS SHALL NOT BE PAINTED UNTIL AFTER WELDING HAS BEEN COMPLETED AND THE WELD ACCEPTED.
- ALL STRUCTURAL STEEL SHALL BE FABRICATED BY A FABRICATOR WITH ANY ONE OF THE FOLLOWING MINIMUM QUALIFICATIONS. QUALIFICATIONS SHALL BE IN EFFECT AT TIME OF BID.
 - AISC CERTIFIED FABRICATOR (STD).
- STEEL PROPERTIES
 - WIDE FLANGE COLUMNS, BEAMS AND TEES: ASTM A992 (F_y = 50 KSI)
 - STEEL PLATES: ASTM A572 (F_y = 50 KSI)
 - CHANNELS AND ANGLES: ASTM A36 (F_y = 36 KSI)
 - HSS RECTANGULAR STEEL: ASTM A500 Gr. B (F_y = 46 KSI)
 - BOLTS: ASTM A325 OR ASTM A F1852 TWIST-OFF TYPE
 - ANCHOR RODS: ASTM F1554 Gr. 55 (F_y = 35 KSI)

- STEEL BOLTS SHALL BE PRETENSIONED UNLESS OTHERWISE NOTED AS A SNUG-TIGHT CONNECTION ON THE DRAWINGS OR DETAILS. ONE OF THE FOLLOWING METHODS SHALL BE USED TO ASSURE ADEQUATE PRETENSIONING IS ACHIEVED:
 - TURNOFF-NUT METHOD
 - DIRECT TENSION INDICATOR WASHERS
 - CALIBRATED WRENCH
 - TWIST-OFF TYPE BOLT

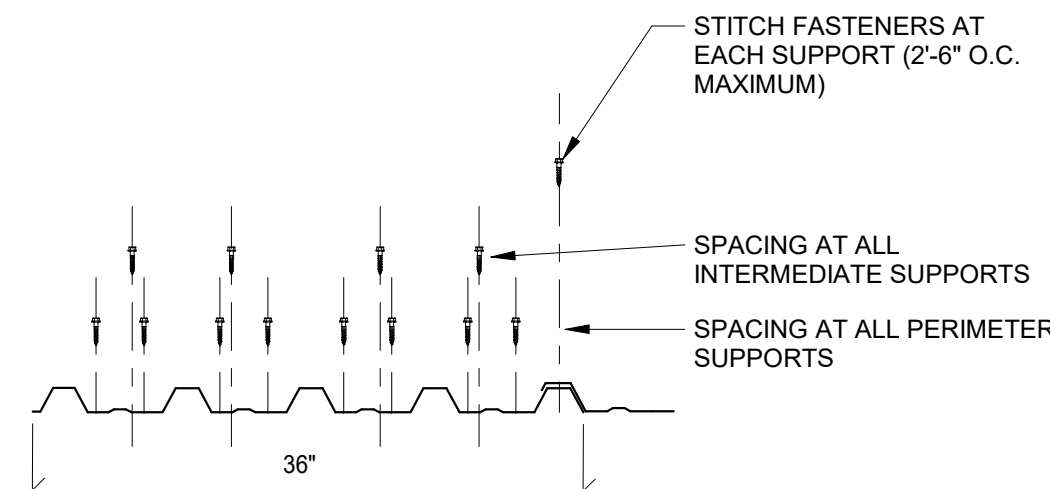
- CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH. 3" #6 AND LARGER: 2"
- FORMED CONCRETE EXPOSED TO EARTH OR WEATHER: 2" #5 AND SMALLER: 1 1/2"

SHOP DRAWINGS:

- SHOP DRAWINGS SHALL BE SUBMITTED FOR ALL STRUCTURAL ITEMS AND ITEMS REQUIRED BY ARCHITECTURAL SPECIFICATIONS. UNITED STRUCTURAL DESIGN, LLC ASSUMES NO RESPONSIBILITY FOR THE FAILURE OF THE CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR REVIEW.
- ITEMS NOT IN ACCORDANCE WITH CONTRACT DOCUMENTS SHALL BE FLAGGED UPON CONTRACTORS REVIEW.
- THE CONSTRUCTION DOCUMENTS MAY NOT BE REPRODUCED FOR USE AS SHOP DRAWINGS.
- ELECTRONIC FILES OF CONSTRUCTION DOCUMENTS WILL NOT BE MADE AVAILABLE FOR USE AS SHOP DRAWINGS.
- FIELD VERIFY ALL DIMENSIONS AND FINISHED GRADE PRIOR TO CONSTRUCTION AND PRIOR TO BEGINNING SHOP DRAWINGS.
- THE ENGINEER OF RECORD HAS THE RIGHT TO APPROVE OR DISAPPROVE ANY CHANGES TO CONTRACT DOCUMENTS AT ANYTIME BEFORE OR AFTER SHOP DRAWING REVIEW.
- ITEMS OMITTED OR SHOWN INCORRECTLY AND ARE NOT FLAGGED BY THE STRUCTURAL ENGINEER OR ARCHITECT SHALL NOT BE CONSIDERED CHANGES TO THE CONTRACT DOCUMENTS.
- SHOP DRAWINGS DO NOT REPLACE THE CONTRACT DOCUMENTS. REVIEWING IS INTENDED ONLY AS AN AID TO THE CONTRACTOR IN OBTAINING CORRECT SHOP DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE ALL ITEMS ARE CONSTRUCTED ACCORDING TO THE CONTRACT DOCUMENTS.

STEEL ROOF DECKING AT PARKING CANOPIES:

- SHEETS SHALL HAVE LAPPED ENDS. MINIMUM LAP = 2'.
- 2" MINIMUM BEARING AT ALL SUPPORTS.
- THE FIRST SHEET OF STEEL DECK ADJACENT AND PARALLEL TO WALLS, PERIMETER MEMBERS OR MEMBERS IDENTIFIED AS CHORD, COLLECTOR OR DRAG MEMBERS (ON ONE OR BOTH SIDES AS APPLICABLE) SHALL BE FULL PANEL WIDTH SHEETS.
- SCREW FASTENERS SHALL BE CADMIUM PLATED, SELF-DRILLING, SELF-TAPPING SCREWS WITH NEOPRENE WASHERS. ALL SCREWS REFERENCED IN THE DRAWINGS SHALL BE DRILL-FLEX BY HILTI OR APPROVED EQUIVALENT (ICC ESR-3332).
- DECK PROPERTIES:
 - DEPTH: 1 1/2"
 - WIDTH: 36"
 - GAUGE: 28"
 - MINIMUM YIELD STRESS: 80 KSI
 - MINIMUM S_{xy}: 0.0432 INCHES³ PER FOOT OF WIDTH
 - MINIMUM I: 0.0788 INCHES⁴ PER FOOT OF WIDTH
 - SPAN MINIMUM: 3 SPAN
 - FINISH: PAINTED OR GALVANIZED
- DECK ATTACHMENT (REFERENCE DETAILS):
 - (2) #10 SCREWS PER LOWER FLUTE AT PERIMETER OF STRUCTURE AND END LAPS.
 - (1) #10 SCREWS AT INTERMEDIATE SUPPORTS.
 - #10 SCREWS AT 5" O.C. MAXIMUM AT SIDE SEAM ATTACHMENTS.
 - #10 SCREWS AT 6" O.C. TO ALL END CAPS.



CONCRETE:

- CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI 301, "STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE" AND ACI 318, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE."
- ADDITION OF WATER TO THE BATCH FOR MATERIAL WITH INSUFFICIENT SLUMP WILL NOT BE PERMITTED, UNLESS THE SUPPLIER HAS SPECIFICALLY WITHHELD WATER FROM THE BATCH AT THE PLANT. IN SUCH CASE THE MIX DESIGN AND TRUCK TICKET MUST CLEARLY STATE THE MAXIMUM AMOUNT OF WATER THAT CAN BE ADDED TO THE BATCH ON SITE. IN NO CASE SHALL THE DESIGN WATER TO CEMENTITIOUS MATERIAL RATIO BE EXCEEDED.
- MECHANICALLY VIBRATE ALL CONCRETE WHEN PLACED, EXCEPT THAT SLABS ON GRADE NEED BE VIBRATED ONLY AROUND SLAB EDGES. REINFORCING AND COLUMNS, MECHANICALLY VIBRATE ONLY THE TOP 5 FEET OF DRILLED PIER CONCRETE. REVIBRATE TOP OF DRILLED PIER 15 MINUTES AFTER PLACING CONCRETE.
- TEST DATA FOR CONCRETE SUBMITTALS SHALL BE SUBMITTED FOR REVIEW PRIOR TO PLACEMENT OF CONCRETE. REFERENCE ACI 318 CHAPTER 8, TABLES 8.3 FOR SPECIFIC REQUIREMENTS.
- DRILLED PIER CONCRETE SHALL BE CHANNIELED TO FREE FALL DOWN THE SHAFT WITHOUT STRIKING THE REINFORCING OR THE SIDES OF THE SHAFT. MAXIMUM HEIGHT OF FREE-FALL IS 10'-0".
- CONCRETE PROPERTIES:
 - 16 GAUGE MATERIAL - 0.059 INCHES
 - 14 GAUGE MATERIAL - 0.075 INCHES
 - 12 GAUGE MATERIAL - 0.105 INCHES
 - 10 GAUGE MATERIAL - 0.134 INCHES

CONCRETE USE	MINIMUM 28 DAY COMPRESSIVE
STRENGTH	
UNLESS NOTED OTHERWISE	3,000 PSI
ALL CONCRETE SHALL BE	

COLD-FORMED STEEL FRAMING:

- ALL COLD-FORMED STEEL FRAMING SHALL BE FABRICATED AND ERRECTED IN ACCORDANCE WITH THE LATEST EDITION OF SPECIFICATIONS FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS BY THE AMERICAN IRON AND STEEL INSTITUTE AND THE STEEL STUD MANUFACTURERS ASSOCIATION AND ICC ESR-304(P).
- STEEL FOR ALL MEMBERS AND FOR ALL STRAPS SHALL HAVE A MINIMUM YIELD STRENGTH OF 55,000 PSI.
- STEEL SHALL BE GALVANIZED AT LOCATIONS EXPOSED TO WEATHER AND WHENEVER NOTED ON THE DRAWINGS.
- ALL MEMBERS SHALL BE SECURELY SEATED FOR FULL BEARING UNLESS NOTED OTHERWISE.
- ALL WELDING SHALL BE PERFORMED BY WELDERS EXPERIENCED IN LIGHT GAGE STEEL FRAMING WORK.
- ALL SCREWS REFERENCED IN THE DRAWINGS FOR LIGHT GAUGE CONNECTIONS SHALL BE DRIL-FLEX BY HILTI OR APPROVED EQUIVALENT (ICC ESR-3332).
- STEEL STUD SIZES ARE AS INDICATED IN PLANS AND KEYNOTES. THICKNESSES REFERENCED IN THE DRAWINGS ARE AS FOLLOWS:
 - 16 GAUGE MATERIAL - 0.059 INCHES
 - 14 GAUGE MATERIAL - 0.075 INCHES
 - 12 GAUGE MATERIAL - 0.105 INCHES
 - 10 GAUGE MATERIAL - 0.134 INCHES

NOTE: THE UNCOATED MINIMUM STEEL THICKNESS OF THE COLD-FORMED STEEL PRODUCTS AS DELIVERED TO THE JOB SITE SHALL NOT AT ANY LOCATION BE LESS THAN 95 PERCENT OF THE DESIGN THICKNESS INDICATED ABOVE.

STEEL REINFORCING:

- ALL BARS PER CRSI SPECIFICATIONS AND HANDBOOK, LATEST ACI CODE AND DETAILING MANUAL, APPLY. SECURELY TIE ALL BARS IN LOCATION BEFORE PLACING CONCRETE. REINFORCING BAR SPACINGS GIVEN ARE MAXIMUM ON CENTERS.
- ALL REINFORCING TO BE WELDED SHALL BE WELDED IN ACCORDANCE WITH AWS D1.4. NO TACK WELDING OF REINFORCING BARS IS ALLOWED WITHOUT PRIOR REVIEW OF PROCEDURE BY STRUCTURAL ENGINEER.
- REINFORCING LAP SPLICES IN CONCRETE SHALL BE PER TYPICAL DETAIL UNLESS NOTED OTHERWISE. ALL SPLICE LOCATIONS ARE SUBJECT TO APPROVAL. PROVIDE BENT CORNER BARS TO MATCH AND LAP WITH HORIZONTAL BARS AT CORNERS AND INTERSECTIONS OF FOOTINGS AND WALLS.
- TYPICAL REINFORCING BAR STRENGTHS
- REINFORCING (WELDABLE): ASTM A706, DEFORMED, F_y = 60 KSI
- TYPICAL CLEAR CONCRETE COVERAGES
 - CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"
 - FORMED CONCRETE EXPOSED TO EARTH OR WEATHER: 2"
12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.

ALL OTHERS PER LATEST EDITION OF ACI 318.

SPECIAL STRUCTURAL INSPECTIONS:

PER IBC/CBC SECTION 1704 AND 1705 SPECIAL INSPECTIONS ARE IN ADDITION TO THE REQUIRED INSPECTION CONDUCTED BY THE BUILDING JURISDICTION PER IBC/CBC SECTION 110. THE TYPES OF WORK LISTED BELOW SHALL BE INSPECTED BY A SPECIAL INSPECTOR.

- ALL SPECIAL INSPECTORS SHALL BE UNDER THE SUPERVISION OF A REGISTERED CIVIL OR STRUCTURAL ENGINEER.
- THE QUALIFICATIONS OF ALL SPECIAL INSPECTORS SHALL BE REVIEWED AND APPROVED BY THE STRUCTURAL ENGINEER OF RECORD.
- THE MINIMUM QUALIFICATIONS FOR THE SPECIAL INSPECTORS ARE AS FOLLOWS:
 - CONCRETE INSPECTION - I.C.C. CERTIFICATION IN REINFORCED CONCRETE OR E.I.T. CERTIFICATION.
 - STRUCTURAL WELDING INSPECTION
 - VISUAL TESTING - I.C.C. CERTIFICATION IN STRUCTURAL STEEL AND WELDING OR A W.S. CERTIFIED WELD INSPECTOR (C.W.I.).
 - NON-DESTRUCTIVE TESTING - A.W.S. C.W.I.
- HIGH STRENGTH BOLTING INSPECTION - I.C.C. CERTIFICATION IN STRUCTURAL STEEL AND WELDING.
- SPECIAL CASES - EXPERIENCE ACCEPTABLE TO THE STRUCTURAL ENGINEER OF RECORD.
- DUTIES AND RESPONSIBILITIES OF THE SPECIAL INSPECTOR:
 - THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK REQUIRING SPECIAL INSPECTION FOR CONFORMANCE WITH THE APPROVED DESIGN DRAWINGS AND SPECIFICATIONS.
 - THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO BE KEPT AT THE SITE FOR USE BY THE BUILDING OFFICIAL, THE CONTRACTOR, THE STRUCTURAL ENGINEER OF RECORD, AND THE ARCHITECT OF RECORD. IF SPECIAL INSPECTION IS PROVIDED BY ANYONE OTHER THAN THE STRUCTURAL ENGINEER OF RECORD, INSPECTION REPORTS SHALL BE SUBMITTED TO THE OFFICE OF THE STRUCTURAL ENGINEER ON A WEEKLY BASIS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN IF UNCORRECTED, TO THE DESIGN AUTHORITY AND THE BUILDING OFFICIAL.
 - UPON COMPLETION OF THE ASSIGNED WORK, THE SPECIAL INSPECTOR SHALL COMPLETE AND SIGN A FINAL REPORT CERTIFYING THAT TO THE BEST OF HIS KNOWLEDGE, THE WORK IS IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS, AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE CODE.
- DUTIES AND RESPONSIBILITIES OF THE CONTRACTOR:
 - NOTIFY THE RESPONSIBLE INSPECTOR THAT WORK IS READY FOR INSPECTION AT LEAST ONE WORKING DAY (24 HOURS MINIMUM) BEFORE SUCH INSPECTION IS REQUIRED.
 - ALL WORK REQUIRING SPECIAL STRUCTURAL INSPECTION SHALL REMAIN ACCESSIBLE AND EXPOSED UNTIL IT IS OBSERVED BY THE SPECIAL STRUCTURAL INSPECTOR.
- SPECIAL INSPECTION
 - INSPECTION OF FABRICATORS
 - INSPECTION OF CONCRETE CONSTRUCTION
 - INSPECTION OF STRUCTURAL STEEL
 - INSPECTION OF SOILS

SEE TABLES ON GSN FOR ADDITIONAL INFORMATION.

1705.6 SPECIAL INSPECTION OF SOILS

SPECIAL INSPECTION FOR EXISTING SITE. SOIL CONDITIONS, FILL PLACEMENT AND LOAD-BEARING REQUIREMENTS SHALL BE AS REQUIRED BY TABLE 1705.6.

VERIFICATION AND INSPECTION TASK	CONTINUOUS	PERIODIC
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	---	X
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	---	X
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	---	X
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X	---
5. PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	---	X

1704.2.5 SPECIAL INSPECTION OF FABRICATORS:

SPECIAL INSPECTION OF FABRICATION OF STRUCTURAL STEEL BEING PERFORMED ON THE PREMISES OF A FABRICATOR'S SHOP IS REQUIRED.

EXCEPTION: SPECIAL INSPECTIONS OF FABRICATORS WITH ONE OF THE FOLLOWING QUALIFICATIONS IS NOT REQUIRED:

- INTERNATIONAL ACCREDITATION SERVICE, INC. (IAS) APPROVED FABRICATOR.
- AISC CERTIFIED FABRICATOR (STD).

THE SPECIAL INSPECTOR SHALL VERIFY THAT THE FABRICATOR MAINTAINS DETAILED FABRICATION AND QUALITY CONTROL PROCEDURES THAT PROVIDE A BASIS FOR INSPECTION CONTROL OF THE WORKMANSHIP AND THE FABRICATOR'S ABILITY TO CONFORM TO APPROVED CONSTRUCTION DOCUMENTS AND REFERENCED STANDARDS. THE SPECIAL INSPECTOR SHALL REVIEW THE PROCEDURES FOR COMPLETENESS AND ADEQUACY RELATIVE TO THE CODE REQUIREMENTS FOR THE FABRICATOR'S SCOPE OF WORK.

1705.3 SPECIAL INSPECTION OF CONCRETE CONSTRUCTION

SPECIAL INSPECTION AND VERIFICATIONS FOR CONCRETE CONSTRUCTION SHALL BE AS REQUIRED BY TABLE 1705.3.

- EXCEPTIONS: SPECIAL INSPECTIONS SHALL NOT BE REQUIRED FOR:
- ISOLATED SPREAD CONCRETE FOOTINGS OF BUILDING THREE STORIES OR LESS ABOVE GRADE PLANE THAT ARE FULLY SUPPORTED ON EARTH OR ROCK.
 - CONTINUOUS CONCRETE FOOTINGS SUPPORTING WALLS OF BUILDINGS THREE STORIES OR LESS ABOVE GRADE PLANE THAT ARE FULLY SUPPORTED ON EARTH OR ROCK WHERE:
 - THE FOOTINGS SUPPORT WALLS OF LIGHT-FRAME CONSTRUCTION.
 - THE STRUCTURAL DESIGN OF THE FOOTING IS BASED ON A SPECIFIED COMPRESSIVE STRENGTH, F_c, NO GREATER THAN 2,500 PSI REGARDLESS OF THE COMPRESSIVE STRENGTH SPECIFIED.
 - CONCRETE SLABS ON GRADE. STEEL REINFORCING STILL REQUIRES SPECIAL INSPECTION.

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCE STANDARD	IBC/CBC REFERENCE
1. INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT.	---	X	ACI 318: Ch. 20, 25.2, 25.3, 26.5.1-26.5.3	1908.4
2. REINFORCING BAR WELDING a. VERIFY WELDABILITY OF REINFORCING BARS b. INSPECT SINGLE PASS FILLET WELDS, MAXIMUM 5/16"	---	X	AWS D1.4 ACI 318: 26.5.4	---
c. INSPECT ALL OTHER WELDS.	X	X		
5. VERIFYING USE OF REQUIRED DESIGN MIX.	---	X	ACI 318: Ch 19, 28.4.3, 28.4.4	1904.1, 1904.2, 1908.2, 1908.3
7. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	X	---	ACI 318: 26.4.5	1908.6, 1908.7, 1908.8
8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	---	X	ACI 318: 26.4.7-26.4.9	1908.9
12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	---	X	ACI 318: 26.10.1 (b)	---

Sheet Number	Sheet Name
S0.1	GENERAL STRUCTURAL NOTES

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JORDAN ARCHITECTS INC



CLIENT

OHANA ALLIANCE GROUP, INC.

9105 BRUCEVILL RD.
SUITE 6A
ELK GROVE,
CA 95758

PROJECT

HERITAGE RV STORAGE

975 HWY 99 WEST
CORNING, CA 96021

SHEET TITLE

TYPICAL DETAILS

REV.	DATE	COMMENT

PROJECT MANAGER JE

DRAWN BY: DB

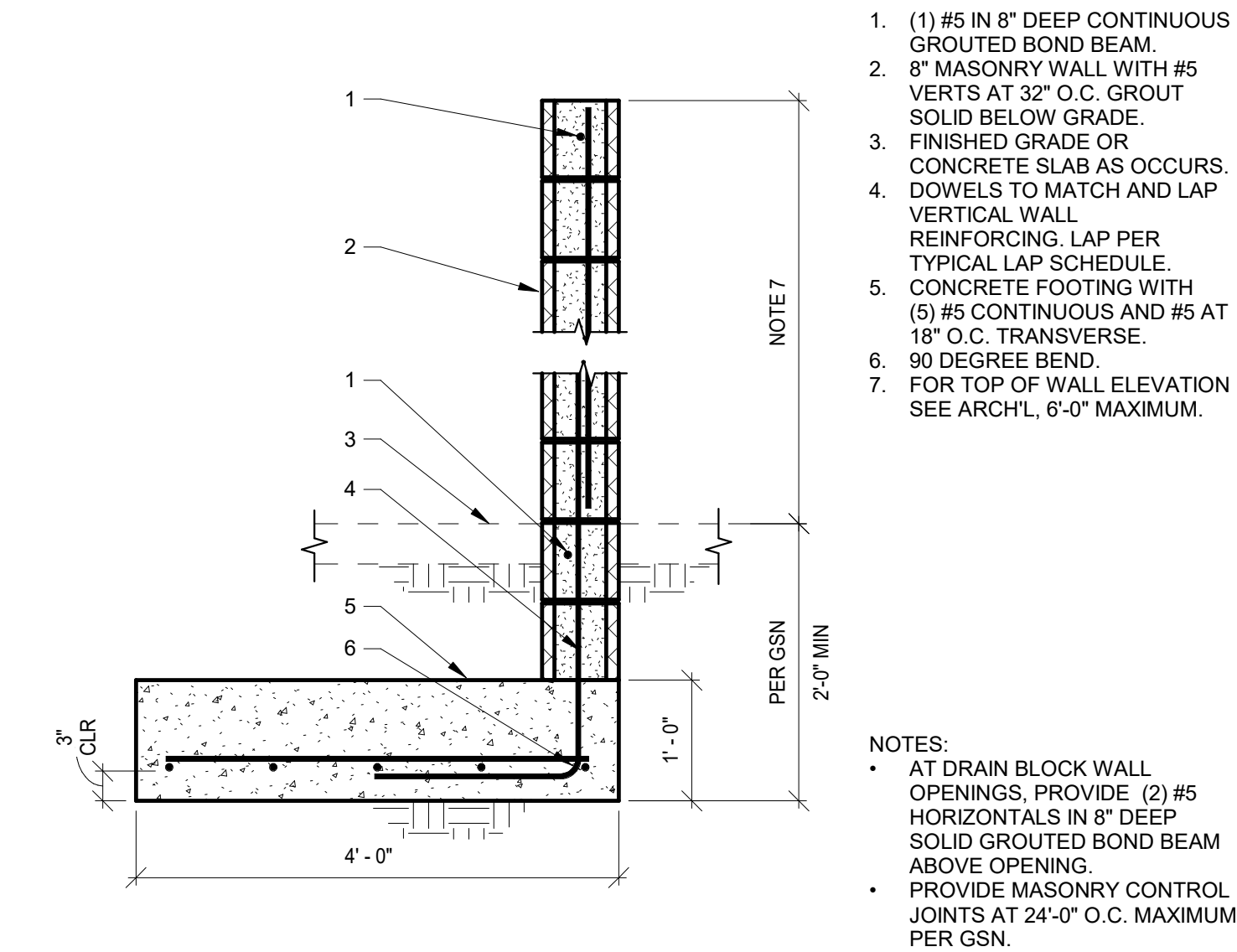
DATE: 03/29/2021

JOB NUMBER: 21-126

FILE NAME:

SHEET NUMBER:

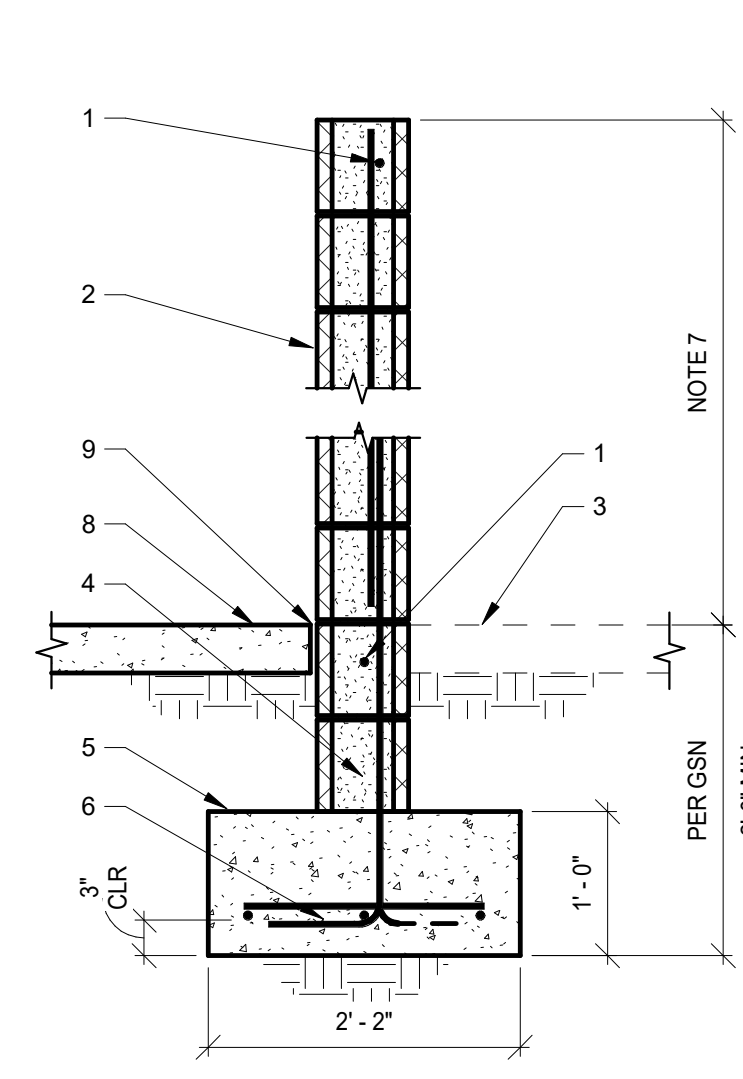
S1.1



C4 6'-0" MAXIMUM FREE STANDING MASONRY WALL AND PROPERTY LINE FOOTING
NO SCALE 198-04

- (1) #5 IN 8" DEEP CONTINUOUS GROUTED BOND BEAM.
- 8" MASONRY WALL WITH #5 VERTS AT 32" O.C. GROUT SOLID BELOW GRADE.
- FINISHED GRADE OR CONCRETE SLAB AS OCCURS. DOWELS TO MATCH AND LAP VERTICAL WALL REINFORCING. LAP PER TYPICAL LAP SCHEDULE.
- CONCRETE FOOTING WITH (3) #5 CONTINUOUS AND #5 AT 18" O.C. TRANSVERSE.
- 90 DEGREE BEND.
- FOR TOP OF WALL ELEVATION SEE ARCH'L, 6'-0" MAXIMUM.

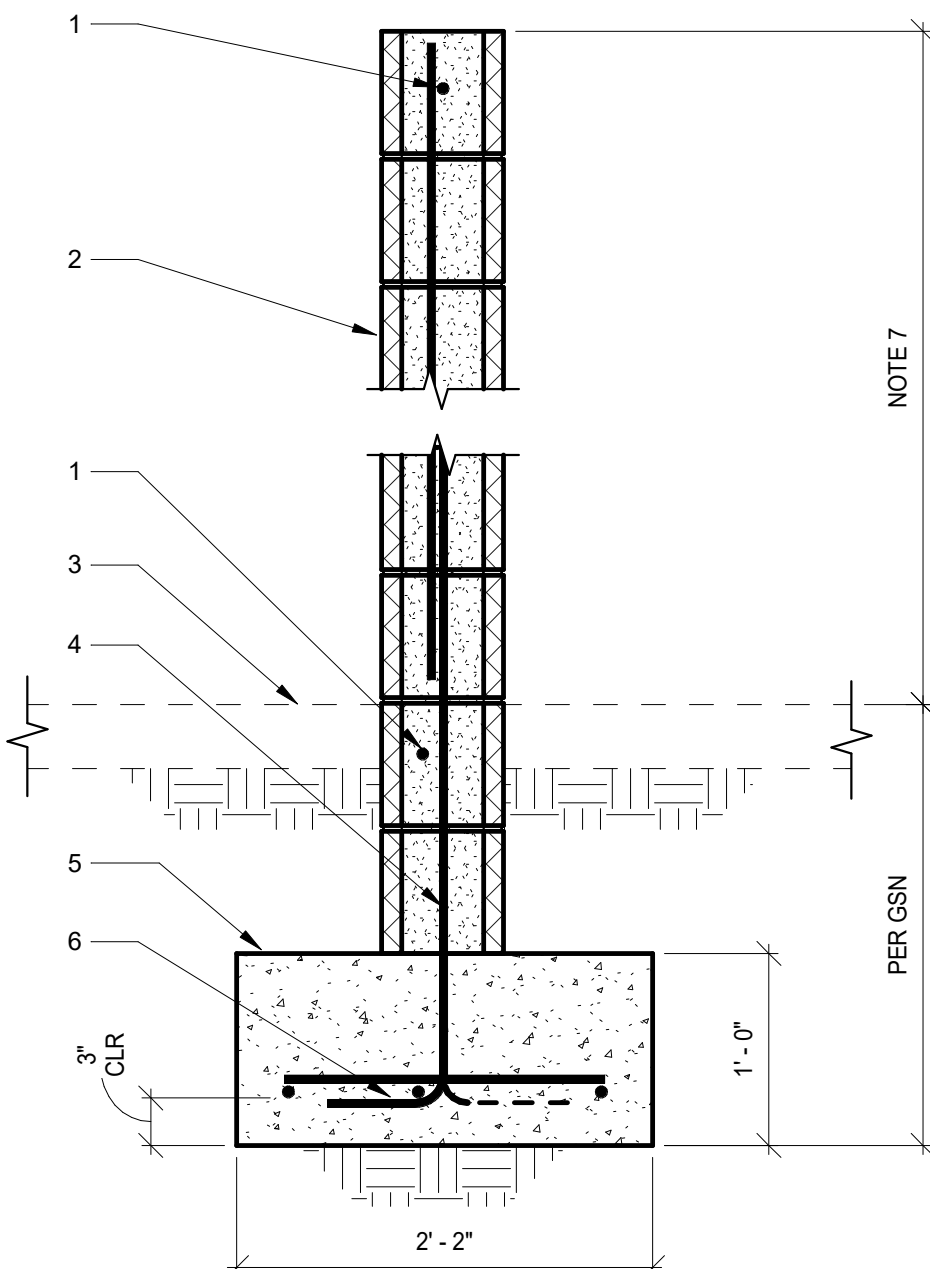
NOTES:
• AT DRAIN BLOCK WALL OPENINGS, PROVIDE (2) #5 HORIZONTALS IN 8" DEEP SOLID GROUTED BOND BEAM ABOVE OPENING.
• PROVIDE MASONRY CONTROL JOINTS AT 24'-0" O.C. MAXIMUM PER GSN.



A3 6'-0" MAXIMUM FREE STANDING TRASH ENCLOSURE MASONRY WALL AND FOOTING
NO SCALE 198-05

- (1) #5 IN 8" DEEP CONTINUOUS GROUTED BOND BEAM.
- 8" MASONRY WALL WITH #5 VERTS AT 8" O.C. GROUT SOLID.
- FINISHED GRADE OR CONCRETE SLAB AS OCCURS. DOWELS TO MATCH AND LAP VERTICAL WALL REINFORCING. LAP PER TYPICAL LAP SCHEDULE.
- CONCRETE FOOTING WITH (3) #5 CONTINUOUS AND #5 AT 48" O.C. TRANSVERSE.
- STANDARD 90 DEGREE HOOK. ALTERNATE BENDS.
- FOR TOP OF WALL ELEVATION SEE ARCH'L, 6'-0" MAXIMUM.
- 6" THICK CONCRETE SLAB ON WWF CENTERED IN SLAB OVER ABC FILL.
- EXPANSION FILLER.

NOTES:
• TRASH ENCLOSURE SHALL COMPLY WITH THE MINIMUM REQUIREMENTS OF CITY OR AHJ.



A4 TYPICAL 6'-0" MAXIMUM FREE STANDING MASONRY WALL AND FOOTING
NO SCALE 198-02

- (1) #5 IN 8" DEEP CONTINUOUS GROUTED BOND BEAM.
- 8" MASONRY WALL WITH #5 VERTS AT 48" O.C. GROUT SOLID BELOW GRADE.
- FINISHED GRADE OR CONCRETE SLAB AS OCCURS. DOWELS TO MATCH AND LAP VERTICAL WALL REINFORCING. LAP PER TYPICAL LAP SCHEDULE.
- CONCRETE FOOTING WITH (3) #5 CONTINUOUS AND #5 AT 48" O.C. TRANSVERSE.
- STANDARD 90 DEGREE HOOK. ALTERNATE BENDS.
- FOR TOP OF WALL ELEVATION SEE ARCH'L, 6'-0" MAXIMUM.

NOTES:
• AT DRAIN BLOCK WALL OPENINGS, PROVIDE (2) #5 HORIZONTALS IN 8" DEEP SOLID GROUTED BOND BEAM ABOVE OPENING.
• PROVIDE MASONRY CONTROL JOINTS AT 24'-0" O.C. MAXIMUM PER GSN.



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CORNING, CA 96021

SHEET TITLE
STRUCTURES PLAN AND SECTION

REV. DATE COMMENT

PROJECT MANAGER: JE
DRAWN BY: DB
DATE: 03/29/2021
JOB NUMBER: 21-126
FILE NAME:
SHEET NUMBER:

S2.1

SHEET NOTES

- a. FOR STRUCTURE LOCATIONS REFERENCE PROJECT SITE PLAN. COLUMN SPACING AND LOCATIONS SHALL BE COORDINATED WITH PROJECT ARCHITECT OR PROFESSIONAL RESPONSIBLE FOR SITE PLAN.
- b. VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION. DIMENSIONS, ELEVATIONS WHERE SHOWN ARE TO BE USED AS AN AID AND SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR PRIOR TO CONSTRUCTION.
- c. FOR ADDITIONAL INFORMATION, REFERENCE GENERAL STRUCTURAL NOTES.

KEYNOTES

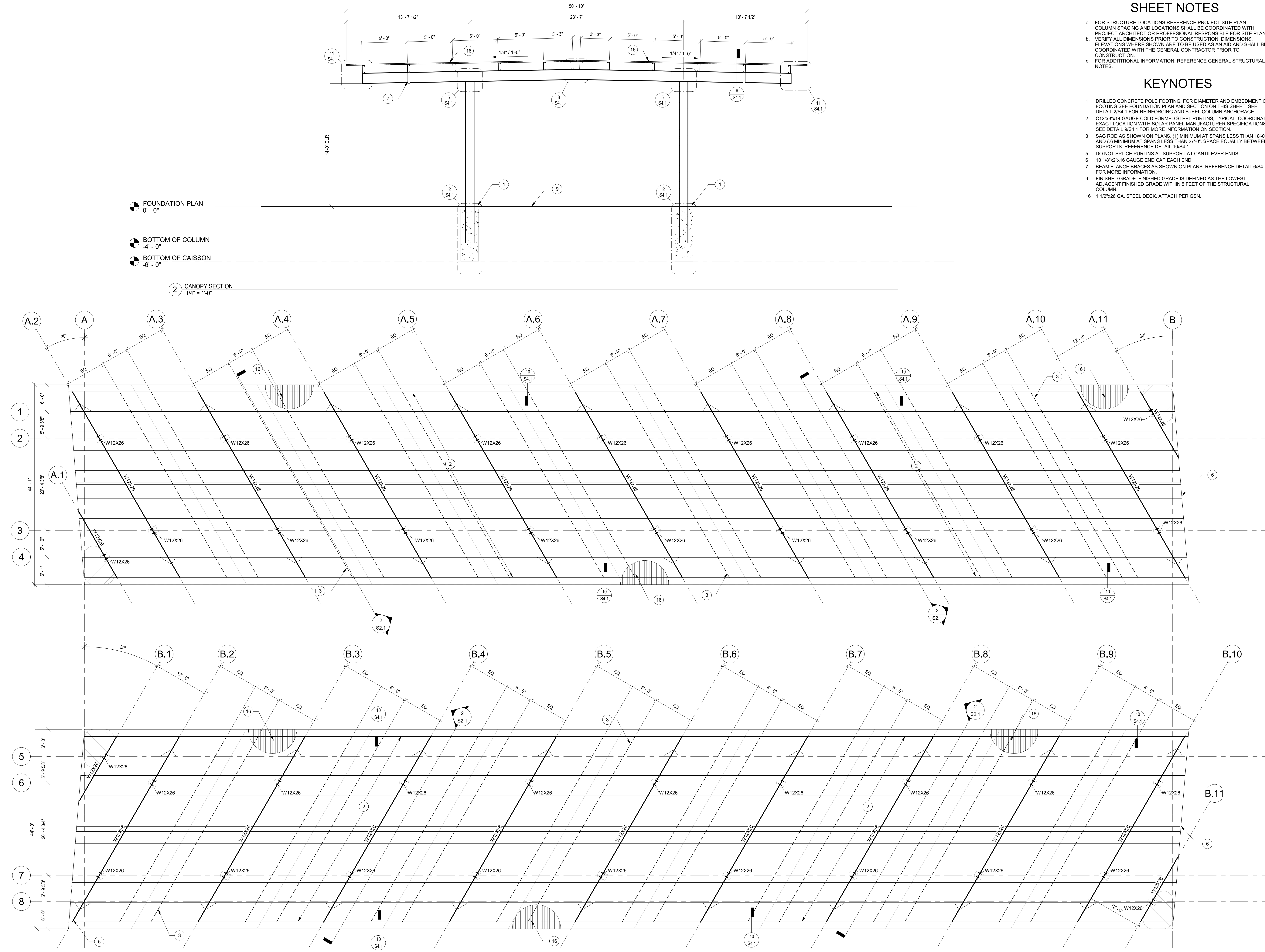
- 1 DRILLED CONCRETE POLE FOOTING. FOR DIAMETER AND EMBEDMENT OF FOOTING SEE FOUNDATION PLAN AND SECTION ON THIS SHEET. SEE DETAIL 2/S4.1 FOR REINFORCING AND STEEL COLUMN ANCHORAGE.
- 2 C12X3X14 GAUGE COLD FORMED STEEL PURLINS. TYPICAL. COORDINATE EXACT LOCATION WITH SOLAR PANEL MANUFACTURER SPECIFICATIONS. SEE DETAIL 9/S4.1 FOR MORE INFORMATION ON SECTION.
- 3 SAG ROD AS SHOWN ON PLANS. (1) MINIMUM AT SPANS LESS THAN 18'-0" AND (2) MINIMUM AT SPANS LESS THAN 27'-0". SPACE EQUALLY BETWEEN SUPPORTS. REFERENCE DETAIL 10/S4.1.
- 5 DO NOT SPLICE PURLINS AT SUPPORT AT CANTILEVER ENDS.
- 6 10 1/8"x2"x16 GAUGE END CAP EACH END.
- 7 BEAM FLANGE BRACES AS SHOWN ON PLANS. REFERENCE DETAIL 6/S4.1 FOR MORE INFORMATION.
- 9 FINISHED GRADE. FINISHED GRADE IS DEFINED AS THE LOWEST ADJACENT FINISHED GRADE WITHIN 5 FEET OF THE STRUCTURAL COLUMN.
- 16 1 1/2"x26 GA. STEEL DECK. ATTACH PER GSN.

FOUNDATION PLAN
0'-0"

BOTTOM OF COLUMN
-4'-0"
BOTTOM OF CAISSON
-6'-0"

2 CANOPY SECTION
1/4" = 1'-0"

1 FRAMING PLAN
1/8" = 1'-0"



2058 S. DOBSON RD. SUITE 10, MESA, AZ 85202
OFFICE: (480) 454-6408 | www.unitedstr.com
USD Project No.:21048



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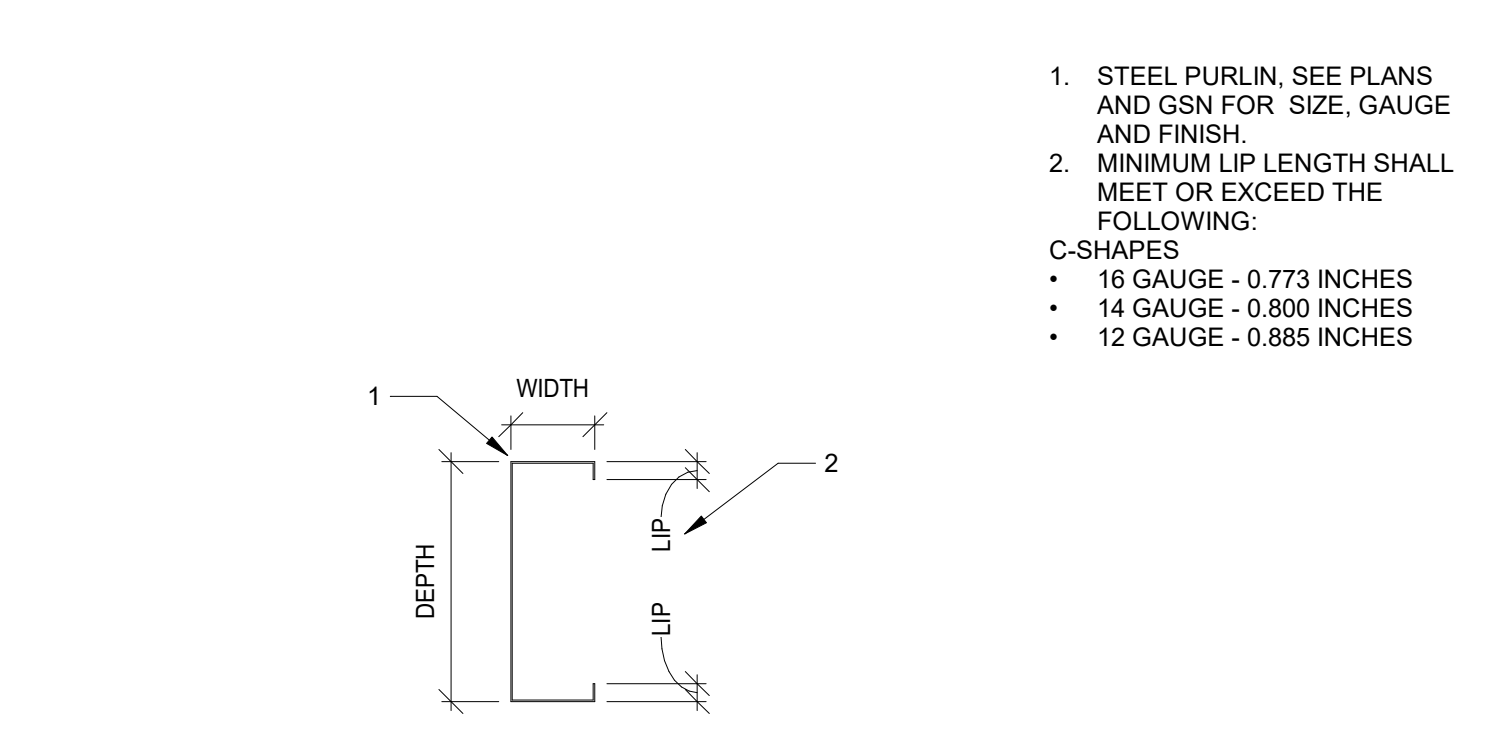
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DETAILS

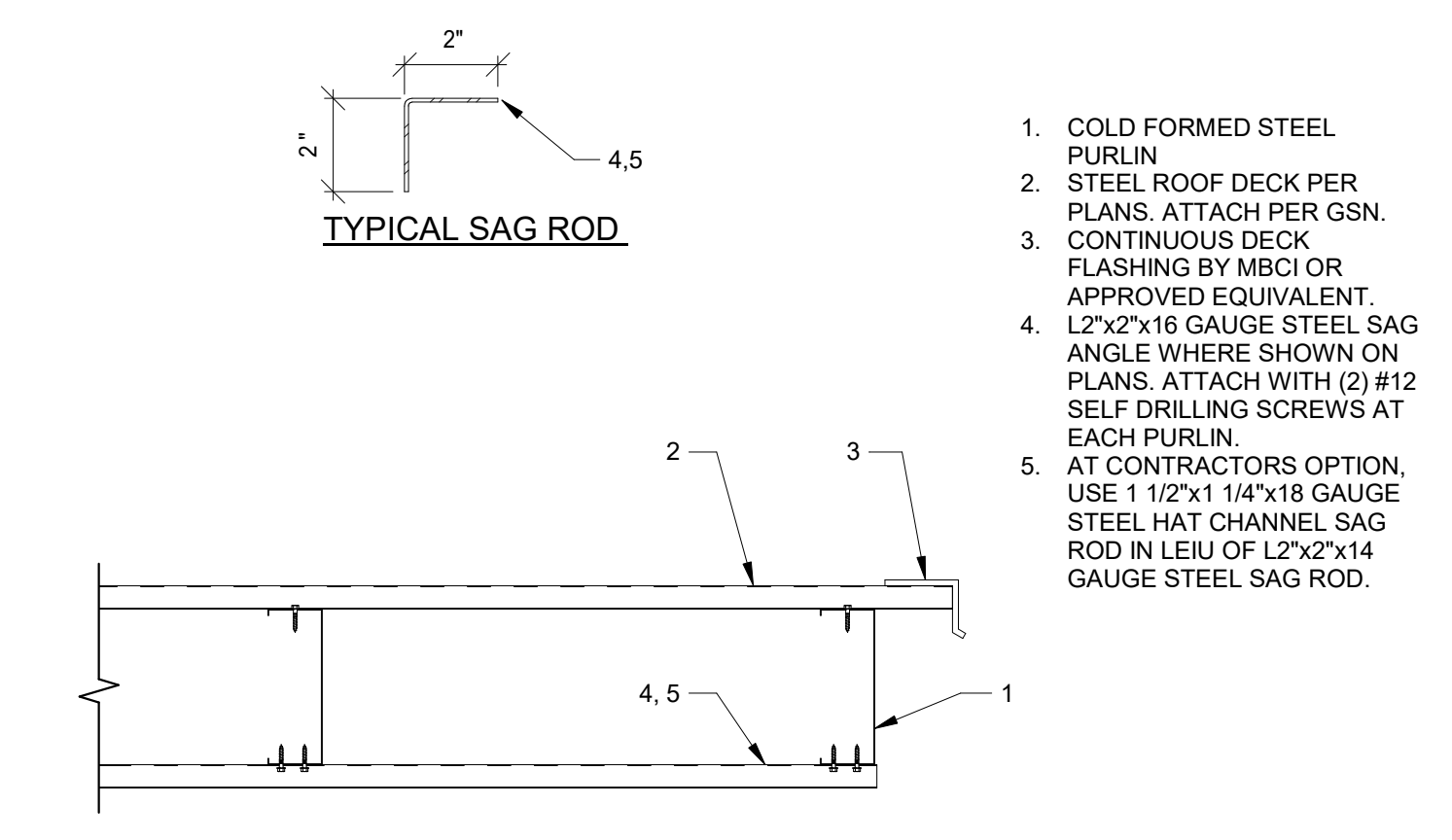
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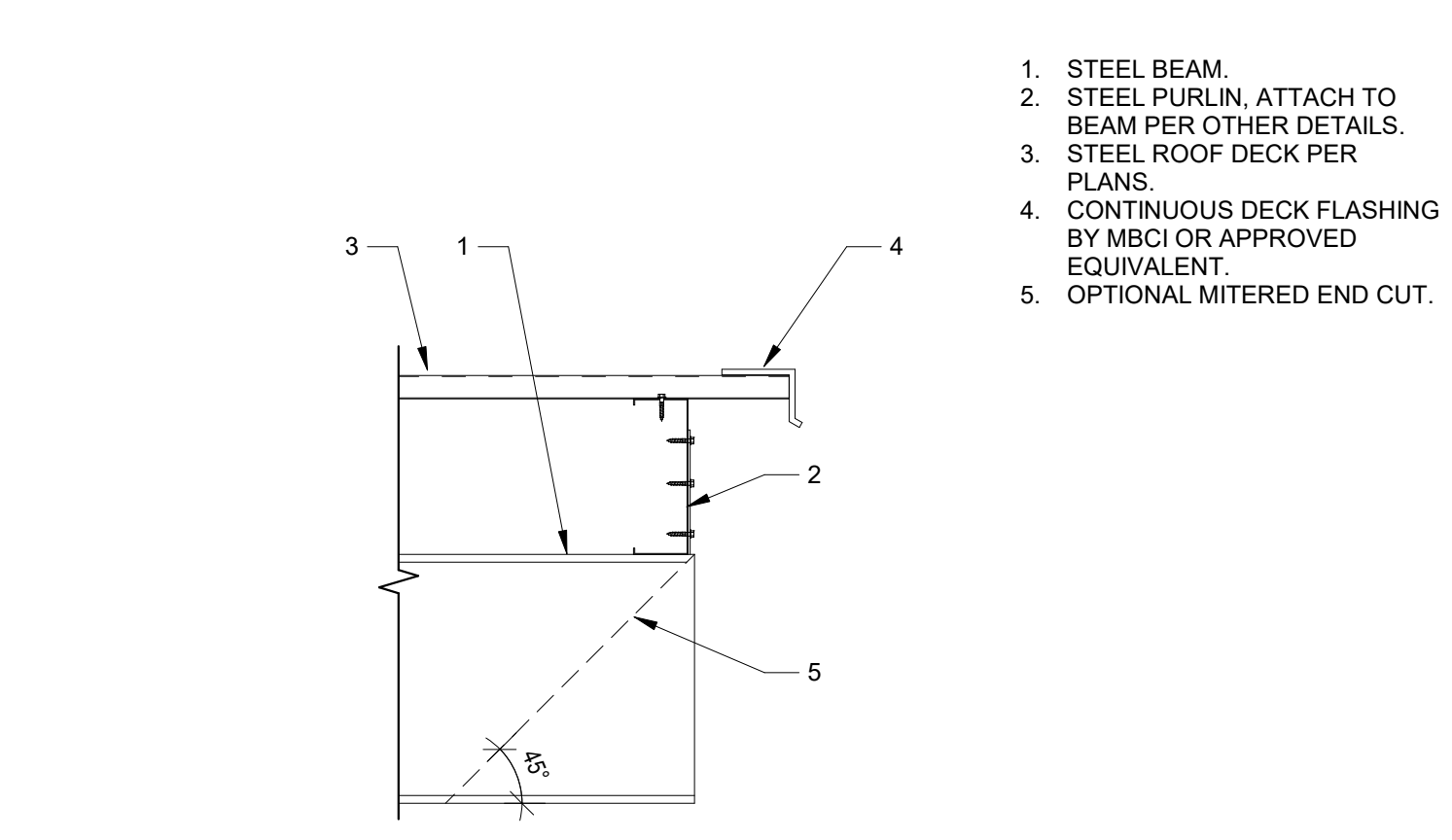
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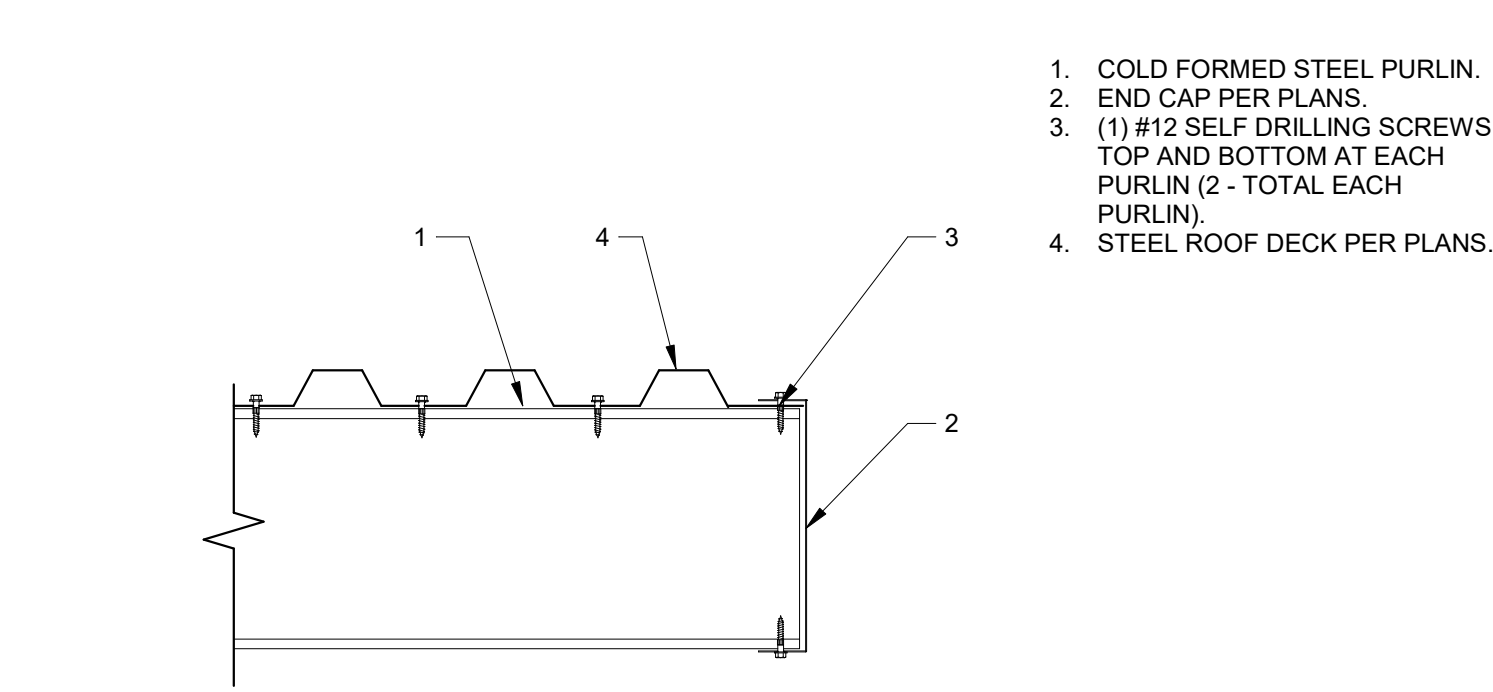
9 TYPICAL COLD FORMED STEEL PURLIN SECTION
NO SCALE



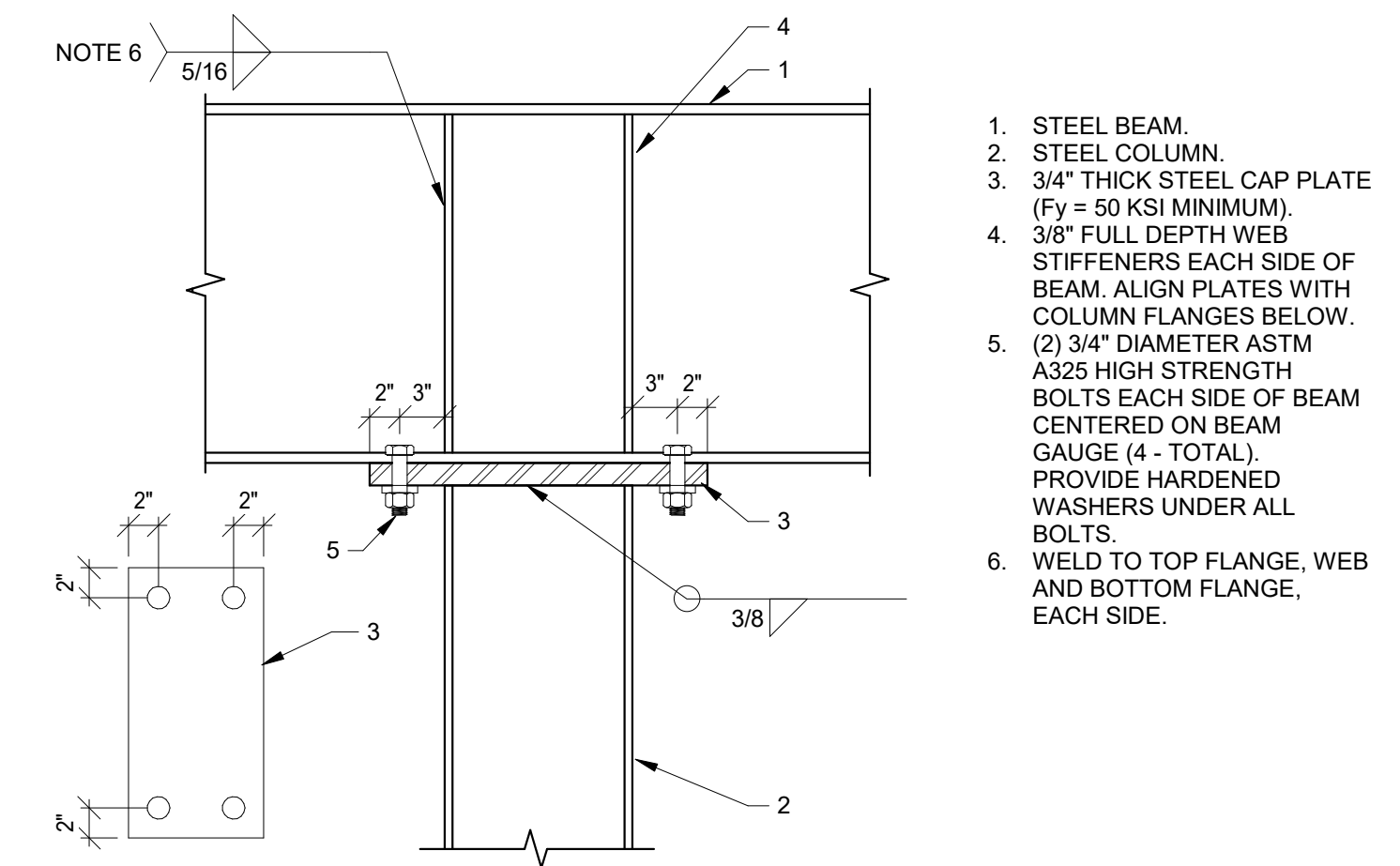
10 SAG ROD AT STEEL PURLINS ATTACHMENT
NO SCALE



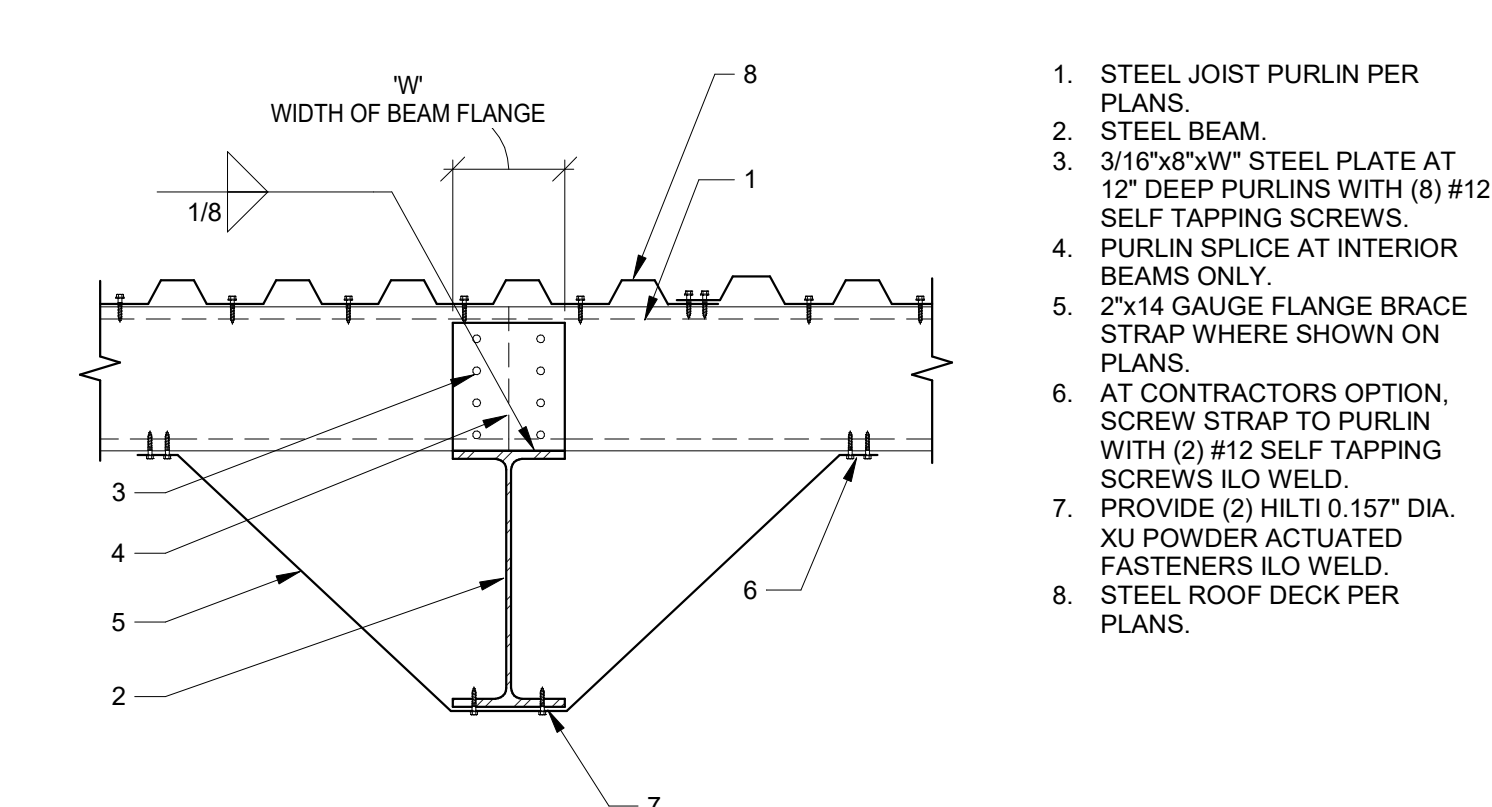
11 TYPICAL PURLIN TO STEEL BEAM CONNECTION
NO SCALE



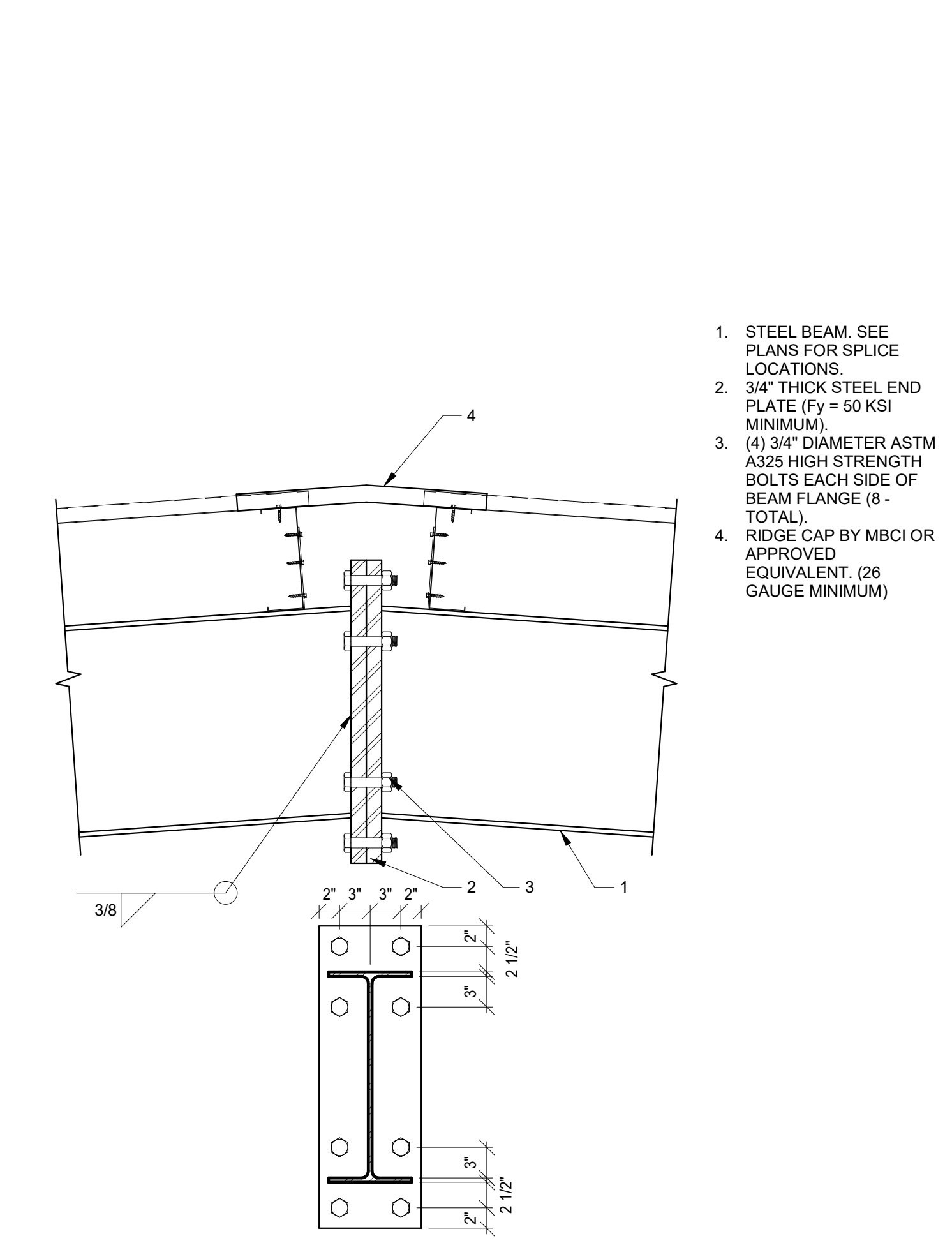
12 TYPICAL PURLIN END CAP DETAIL
NO SCALE



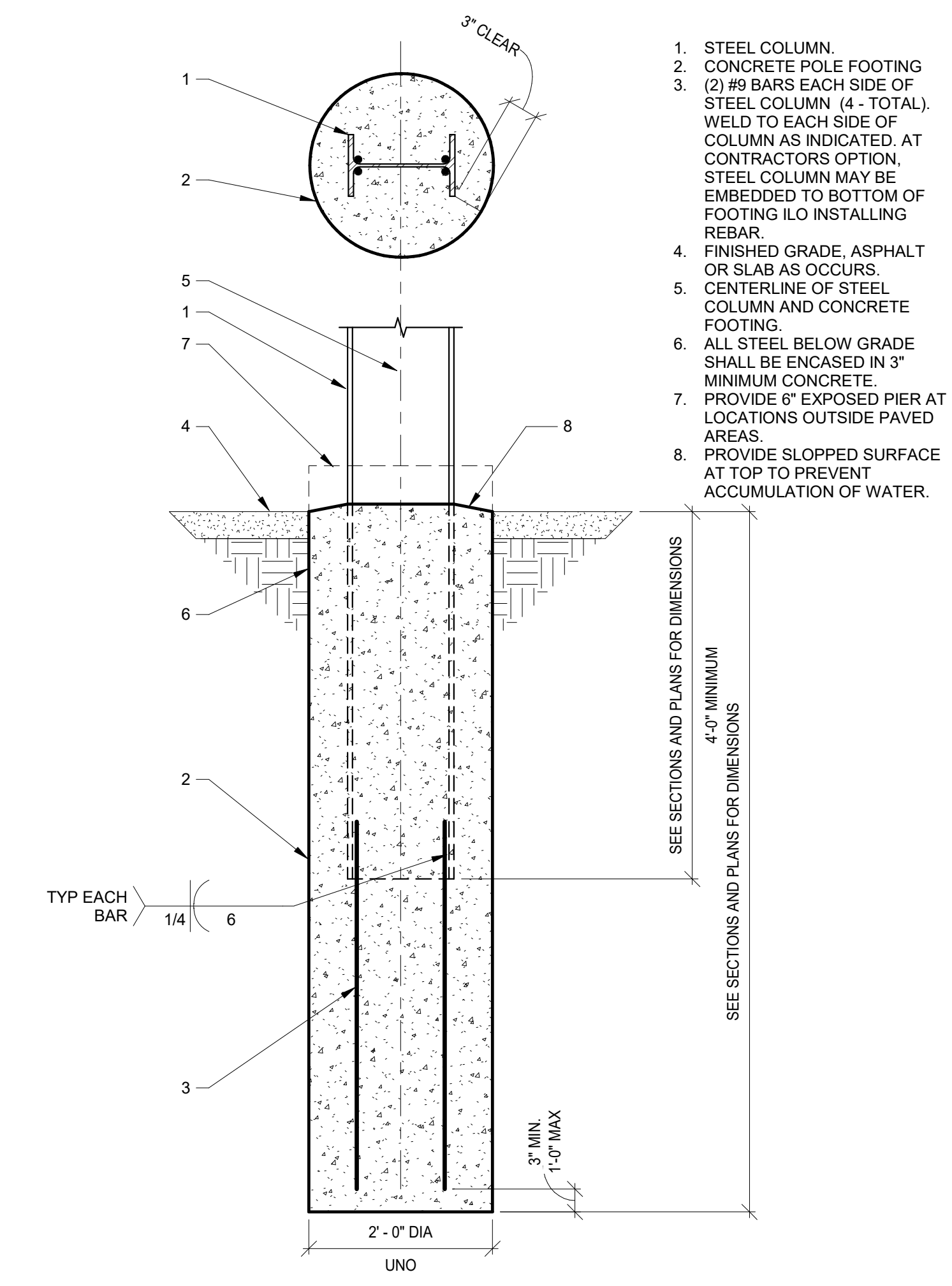
5 STEEL BEAM TO STEEL COLUMN CONNECTION
NO SCALE



6 TYPICAL PURLIN TO STEEL BEAM CONNECTION
NO SCALE



8 TYPICAL WF BEAM MOMENT SPLICE DETAIL
NO SCALE



2 STEEL COLUMN AT POLE FOOTING CONNECTION
NO SCALE

1. STEEL PURLIN. SEE PLANS AND GSN FOR SIZE, GAUGE AND FINISH. MINIMUM LIP LENGTH SHALL MEET OR EXCEED THE FOLLOWING:
C-SHAPES
• 16 GAUGE - 0.773 INCHES
• 14 GAUGE - 0.800 INCHES
• 12 GAUGE - 0.885 INCHES

1. STEEL BEAM.
2. STEEL COLUMN.
3. 3/4" THICK STEEL CAP PLATE (FY = 50 KSI MINIMUM).
4. 3/8" FULL DEPTH WEB STIFFENERS EACH SIDE OF BEAM. ALIGN PLATES WITH COLUMN FLANGES BELOW.
5. (2) 3/4" DIAMETER ASTM A325 HIGH STRENGTH BOLTS EACH SIDE OF BEAM CENTERED ON BEAM GAUGE (4 - TOTAL). PROVIDE HARDENED WASHERS UNDER ALL BOLTS.
6. WELD TO TOP FLANGE, WEB AND BOTTOM FLANGE, EACH SIDE.

1. STEEL COLUMN.
2. CONCRETE POLE FOOTING
3. (2) #6 BARS EACH SIDE OF STEEL COLUMN (4 - TOTAL). WELD TO EACH SIDE OF COLUMN AS INDICATED. AT CONTRACTORS OPTION, STEEL COLUMN MAY BE EMBEDDED TO BOTTOM OF FOOTING I/O INSTALLING REBAR.
4. FINISHED GRADE, ASPHALT OR SLAB AS OCCURS.
5. CENTERLINE OF STEEL COLUMN AND CONCRETE FOOTING.
6. ALL STEEL BELOW GRADE SHALL BE ENCASED IN 3" MINIMUM CONCRETE.
7. PROVIDE 6" EXPOSED PIER AT LOCATIONS OUTSIDE PAVED AREAS.
8. PROVIDE SLOPPED SURFACE AT TOP TO PREVENT ACCUMULATION OF WATER.

1. STEEL JOIST PURLIN PER PLANS.
2. STEEL BEAM.
3. 3/16"x2" STEEL PLATE AT 12" DEEP PURLINS WITH (8) #12 SELF TAPPING SCREWS.
4. PURLIN SPLICE AT INTERIOR BEAMS ONLY.
5. 2"x14 GAUGE FLANGE BRACE STRAP WHERE SHOWN ON PLANS.
6. AT CONTRACTORS OPTION, SCREW STRAP TO PURLIN WITH (2) #12 SELF TAPPING SCREWS I/O WELD.
7. PROVIDE (2) HLT 0.157" DIA. XU POWDER ACTUATED FASTENERS I/O WELD.
8. STEEL ROOF DECK PER PLANS.

1. STEEL BEAM. SEE PLANS FOR SPLICE LOCATIONS.
2. 3/4" THICK STEEL END PLATE (FY = 50 KSI MINIMUM).
3. (4) 3/4" DIAMETER ASTM A325 HIGH STRENGTH BOLTS EACH SIDE OF BEAM FLANGE (8 - TOTAL).
4. RIDGE CAP BY MBCI OR APPROVED EQUIVALENT, (26 GAUGE MINIMUM)