

THE FOLLOWING NOTES APPLY UNLESS NOTED OTHERWISE - ASTM'S NOTED ARE TO BE LATEST EDITION.

1. DESCRIPTION
BUILDING NAME & SITE LOCATION - COSTCO WHOLESALE - CHULA VISTA, CA

2. DESIGN CODE AND STANDARDS
APPLICABLE CODE (EDITION/NAME) - 2019 CALIFORNIA BUILDING CODE (CBC)
OTHER DOCUMENTS REFERENCED BY THESE NOTES SHALL BE THE SPECIFIC EDITION REFERENCED BY THE BUILDING CODE SPECIFIED ABOVE, OR IF NOT SPECIFIED, SHALL BE THE LATEST EDITION.

3. DESIGN LOADS
a. SEISMIC RISK CATEGORY II
Ss = 1.127, S1 = 0.380, IE = 1.0, SITE CLASS "D" AND
S2 = 0.788, S3 = 0.487.

b. LOAD COMBINATIONS ALL CODE REQUIRED LOAD COMBINATIONS ARE TO BE USED IN THE BUILDING DESIGN.

OSHA STANDARDS

THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PROVISIONS OF THE CURRENT OSHA STANDARDS. THE GENERAL CONTRACTOR SHALL REVIEW THESE STRUCTURAL DRAWINGS FOR ANY NONCOMPLIANCE WITH OSHA STANDARDS, TAKING INTO ACCOUNT THE GENERAL CONTRACTOR'S MEANS AND METHODS. THE GENERAL CONTRACTOR SHALL INFORM ENW OF ANY NONCOMPLIANCE SO THE DRAWINGS MAY BE MODIFIED FOR COMPLIANCE PRIOR TO CONSTRUCTION. THE GENERAL CONTRACTOR IS TOTALLY RESPONSIBLE FOR MEANS AND METHODS AS WELL AS JOBSITE SAFETY ON THIS PROJECT.

STRUCTURAL STEEL AND MISCELLANEOUS STEEL

ALL WORK IN ACCORDANCE WITH "AISC" SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS, AND THE "CODE OF STANDARD PRACTICE". STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING STANDARDS:

- WIDE FLANGE SHAPES ASTM A-992 (FY=50,000 PSI)
OTHER SHAPES AND PLATES ASTM A-36 (FY=36,000 PSI)
TUBE COLUMNS ASTM A-500, GRADE B (FY=46,000 PSI)
WELDHEAD STUDS ASTM A-108 (FY=55,000 PSI)
ALL-THREAD ASTM F1554, GRADE 36 (FY=36,000 PSI)
MACHINE BOLTS ASTM A-307
HIGH STRENGTH BOLTS ASTM A-325N (U.N.O.)

ALL STRUCTURAL STEEL BOLTED CONNECTIONS AT MECHANICAL PLATFORMS ARE ASTM A-325 TYPE "N" CONNECTIONS - BEARING TYPE WITH THREADS INCLUDED IN SHEAR PLANE. CONNECTIONS ARE NON-SLIP CRITICAL AND BOLTS NEED TO BE TIGHTENED "SNUG TIGHT" ONLY EXCEPT AT FRAMES. PROVIDE WASHERS AT OUTER PLYS WITH SLOTTED HOLES. INSTALL A-325 BOLTS IN ACCORDANCE WITH SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH STRENGTH BOLTS (1221019). PROVIDE MINIMUM EMBEDMENT FOR ANCHOR BOLTS AS NOTED ON DRAWINGS. ALL WELDING TO CONFORM WITH AWS D1.1 "CODE FOR WELDING IN BUILDING CONSTRUCTION". WELDS NOT SPECIFIED SHALL BE 1/4" CONTINUOUS FILLET MINIMUM. ALL WELDS BY CERTIFIED WELDERS. USE FRESH TOXIC ELECTRODES FOR MANUAL SHIELDED METAL-ARC WELDING OR EQUAL ELECTRODES. WELDHEAD STUDS (WHS) ARE TO BE MACHINE WELDED WITH PROPER EQUIPMENT. SEE SPECIFICATIONS FOR ITEMS TO BE GALVANIZED.

CONCRETE AND MASONRY ANCHORS (BOLTS, THREADED RODS AND REBAR DOWELS)

- DRILLED IN EXPANSION ANCHORS:
CONCRETE HILTI KWIK BOLT TZ PER ESR-1917
CMU HILTI KWIK BOLT 3 PER ESR-1385
ADHESIVE ANCHORS:
CONCRETE HILTI HIT-RE 500 V3 PER ESR-3814 AND HILTI HIT-HY 200-R PER ESR-3187
CMU HILTI HIT-HY 270 PER ESR-4143
UNREINFORCED MASONRY HILTI HIT-HY 270 PER ESR-4144
CAST IN PLACE ANCHORS:
CONCRETE EMBED PER PLANS AND SECTIONS
CMU EMBED PER PLANS AND SECTIONS
SCREW ANCHORS:
CONCRETE HILTI KWIK HUS-EZ (KH-EZ) AND HUS-EZ-I (KH-EZ I) PER ESR-3027
CMU HILTI KWIK HUS-EZ (KH-EZ) PER ESR-3026

ADHESIVE ANCHORS SHALL BE INSTALLED IN CONCRETE HAVING A MINIMUM AGE OF 21 DAYS AT TIME OF INSTALLATION PER ACI 308.1-14 SECTION 17.1.2 INSTALLATION OF ADHESIVE ANCHORS HORIZONTALLY OR UPWARDLY INCURRED TO SUPPORT SUSTAINED TENSION LOADS SHALL BE PERFORMED BY CERTIFIED PERSONNEL IN CONFORMANCE TO ACI 318 - 14 SECTION 17.8.2.2.

FOLLOW INSTALLATION PROCEDURES OF ESR REPORT AND MANUFACTURER'S INSTRUCTIONS. PROVIDE SPECIAL INSPECTION AS NOTED AND/OR REQUIRED BY ESR REPORT. SUBSTITUTIONS ARE NOT ALLOWED UNLESS WRITTEN APPROVAL BY ENW IS RECEIVED. SUBSTITUTIONS MUST BE SUBMITTED TO ENW FOR REVIEW PRIOR TO CONSTRUCTION. PROVIDE STAINLESS STEEL OR GALVANIZED ANCHORS FOR EXTERIOR APPLICATIONS AS REQUIRED. ANCHORS RATED FOR DRY INTERIOR CONDITIONS MAY NOT BE USED FOR EXTERIOR APPLICATIONS PER ESR REPORT.

LIGHT GAGE STEEL FRAMING AND DECKING (SEE DRAWINGS)

SPECIAL INSPECTIONS

INSPECTIONS ARE TO BE PER THE CODE INDICATED ABOVE AND ARE TO BE BY AN INDEPENDENT TESTING LAB APPROVED PRIOR TO STARTING CONSTRUCTION BY THE BUILDING DEPT. AND THE ARCHITECT. INSPECT ALL SHOP WELDING UNLESS THE SHOP IS CERTIFIED BY THE LOCAL BUILDING DEPARTMENT.

CONC. EXPANSION & MASONRY ANCHORS & DRILLED-IN DOWELS: COPY OF ICC REPORT FOR ANCHORS OR ADHESIVE SYSTEM USED MUST BE AVAILABLE AT JOB SITE. VERIFY ANCHORS OR ADHESIVE SYSTEM INSTALLATION IN ACCORDANCE WITH REPORT. IN ACCORDANCE WITH TABLE ON S0.3 AND REFERENCED STANDARDS

CONTINUOUS INSPECTION: SLIP-CRITICAL (SC) HIGH STRENGTH BOLTED CONNECTIONS, COMPLETE AND PARTIAL PENETRATION GROOVE WELDS, NON-DESTRUCTIVE TESTING IS REQUIRED FOR ALL COMPLETE PENETRATION WELDS - SHOP AND FIELD, MULTIPASS FILLET WELDS, SINGLE-PASS FILLET WELDS GREATER THAN 5/16-INCH, WELDING OF REINFORCING IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, BOUNDARY ELEMENTS OF SPECIAL-REINFORCED CONCRETE SHEAR WALLS AND SHEAR REINFORCEMENT, PERIODIC INSPECTION: VERIFY HIGH-STRENGTH BOLT IDENTIFICATION MARKINGS CONFORM TO SPECIFIED ASTM STANDARDS, REVIEW OF MANUFACTURER'S CERTIFICATE OF COMPLIANCE, INSTALLATION OF BEARING-TYPE BOLTED CONNECTIONS, SINGLE-PASS FILLET WELDS 5/16-INCH OR LESS, FLOOR AND ROOF DECK WELDS, COLD-FORMED STEEL FRAME WELDING, WELDING OF STAIRS AND RAILINGS, WELDING OF STUDS, VERIFICATION OF WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A-706, WELDING OF REINFORCING STEEL OTHER THAN THAT REQUIRING CONTINUOUS INSPECTION, STEEL JOINTS AND CONNECTIONS FOR COMPLIANCE WITH PLANS.

LIGHT GAGE STEEL FRAMING: VERIFY SIZE, GAGE AND SPACING. INSPECT WELDING, VERIFY CERTIFICATION OF WELDERS.

SPECIAL CONDITIONS CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD AND SHALL PROVIDE ADEQUATE SHORING AND BRACING OF ALL STRUCTURAL MEMBERS DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER OF ALL FIELD CHANGES PRIOR TO INSTALLATION.

NOTE TO MECHANICAL AND ELECTRICAL TRADES CONTRACTOR SHALL SUBMIT PLANS SHOWING LOCATION, LOAD AND ANCHORAGE OF ALL HANGERS SUPPORTING ANY MECHANICAL, ELECTRICAL, PLUMBING OR SPRINKLER LOADS IN EXCESS OF 50 POUNDS. ANY ROOF MOUNTED EQUIPMENT SHALL BE INCLUDED IN THESE PLANS AND SHALL SHOW LOADS AND LOCATIONS. THESE SHALL BE SUBMITTED TO ENGINEERS NORTHWEST FOR REVIEW PRIOR TO INSTALLATION OF ANY OF THIS EQUIPMENT. SEE DETAILS ON DRAWING S5.1 FOR SUPPORTING LOADS FROM ROOF JOISTS. ALL DETAILS OF CONNECTIONS TO THE STRUCTURE FOR EQUIPMENT SHALL BE BY THE SUPPLIER OF THAT EQUIPMENT. THE BUILDING DEPARTMENT REQUIRES A SUBMITTAL FOR PLAN CHECK REGARDING THE DESIGN OF THESE DETAILS. IT IS THE RESPONSIBILITY OF THE EQUIPMENT SUPPLIER TO PROVIDE THIS SUBMITTAL.

ABBREVIATIONS

- ARCH. ARCHITECT
BAL. BALANCE
B. OR BOT. BOTTOM
BTWN. BETWEEN
BLDG. BUILDING
BRG. BEARING
C.I.P. CAST IN PLACE CONSTRUCTION JOINT
C.J. CENTERLINE
CL.R. CLEAR
CMU CONCRETE MASONRY UNIT
COL. COLUMN
CONC. CONCRETE
C.S.J. CLOSURE STRIP JOINT
EA. EACH
E.E. EACH END
E.F. EACH FACE
E.J. EXPANSION JOINT
EL. OR ELEV. ELEVATION
E.N.W. OR ENW ENGINEERS NORTHWEST
EQ. EQUAL
E.S. EACH SIDE
E.W. EACH WAY
F.O.C. FACE OF CONCRETE
F.O.S. FACE OF STUD
F.O.W. FACE OF WALL
FTG. FOOTING
GA. GAGE
GAL.V. HOT DIP GALVANIZED
G.B. GYPSUM WALL BOARD
H. OR HORIZ. HORIZONTAL
I.B.C. INTERNATIONAL BUILDING CODE
I.C.C. INTERNATIONAL CODE COUNCIL
I.F. INSIDE FACE
I.N.C. INCLUDING
K. KIP (1000 POUNDS)
L.W. LONG WAY
M.B.S. METAL BLDG SUPPLIER
N.F. NEAR FACE
N.T.S. NOT TO SCALE
OC ON CENTER
O.F. OUTSIDE FACE
O.S. OUTSIDE
O.T.O. OUT TO OUT
PL. PLATE
REIN.F. REINFORCING
REIN. REMANDER
R.O. ROUGH OPENING
SECT. SECTIONS
SIM. SIMILAR
S.J. SHIRKIN GAGE JOINT
STL. STEEL
SW. SHEARWALL
SYMM. SYMMETRICAL
T. TOP
T.B. TOP OF BEAM
T.F. TOP OF FOOTING
T.S. TOP OF STEEL
T.O.P. TOP OF SLAB
T.O.P.W. TOP OF WALL
T.W. TYPICAL AT ALL SIMILAR PLACES UNLESS NOTED OTHERWISE
U.N.O. UNLESS NOTED OTHERWISE
V.E.F. VERTICAL EACH FACE
VERT. VERTICAL
V.F.F. VERTICAL FAR FACE
V.FY. VERIFY
V.I.F. VERTICAL INSIDE FACE
V.N.F. VERTICAL NEAR FACE
V.N.F. VERTICAL OUTSIDE FACE
W.A.B.O. WASHINGTON ASSOC. OF BUILDING OFFICIALS
W. WITH
W/O WITH OUT
W.H.S. WELD HEAD STUD
@ AT

LIGHT GAGE & MISC. PARTS SCHEDULE

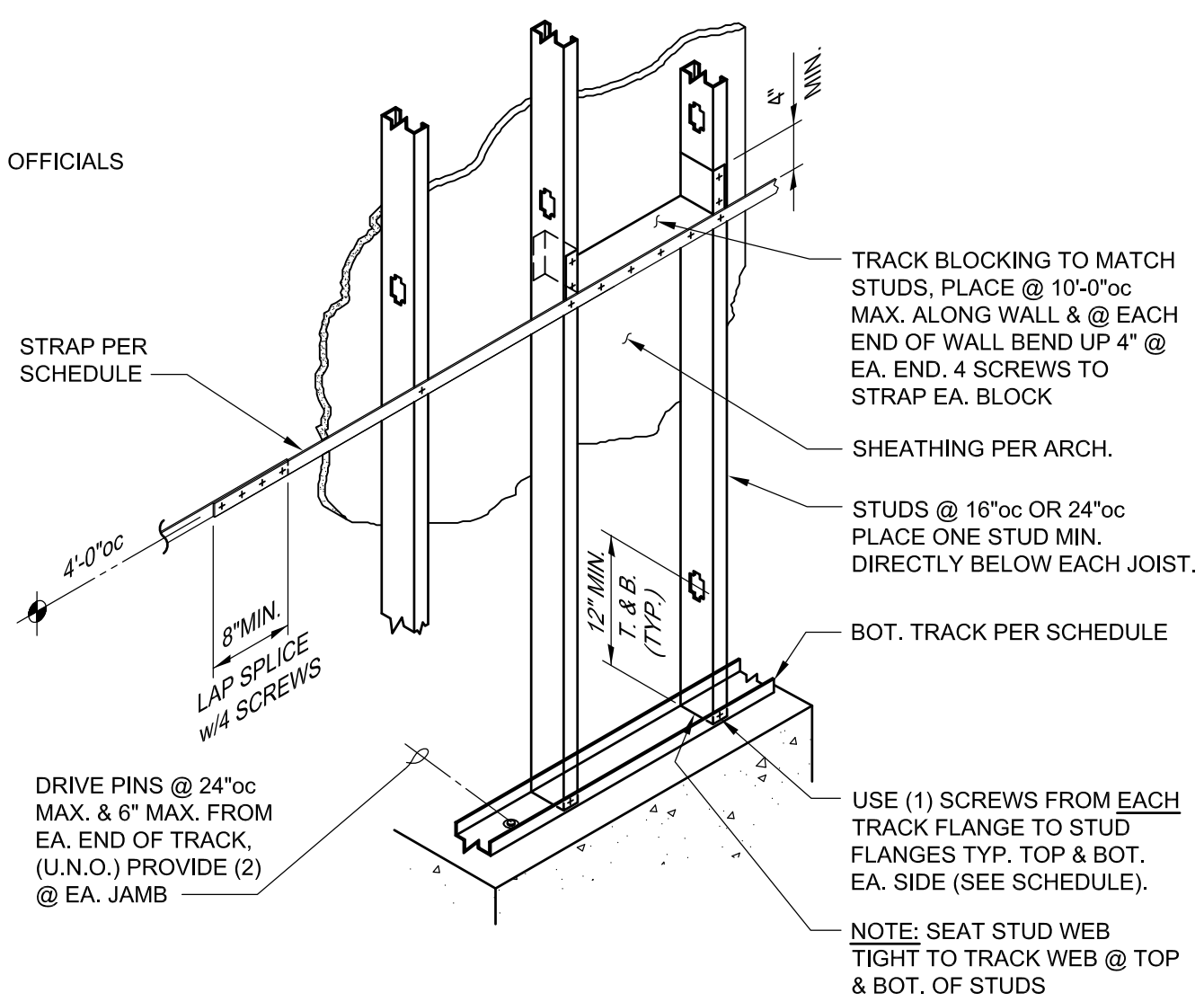
Table with columns: ITEM, CALLOUT, MINIMUM PROPERTIES (Fy, l/in., S(in.), A(in.), ry), * APPROVED SUPPLIERS & THEIR CALLOUT FOR THESE ITEMS (SSMA I.C.C. ESR-3064P)

- NOTES:
1.) * SUBSTITUTION OF OTHER SUPPLIERS FOR THESE ITEMS NOT ALLOWED.
** THESE JOIST & TRACK MEMBERS TO BE UNPUNCHED.
2.) SINGLE FRAMING MEMBER SHOWN THUS: []
3.) DOUBLE FRAMING MEMBER SHOWN THUS: []

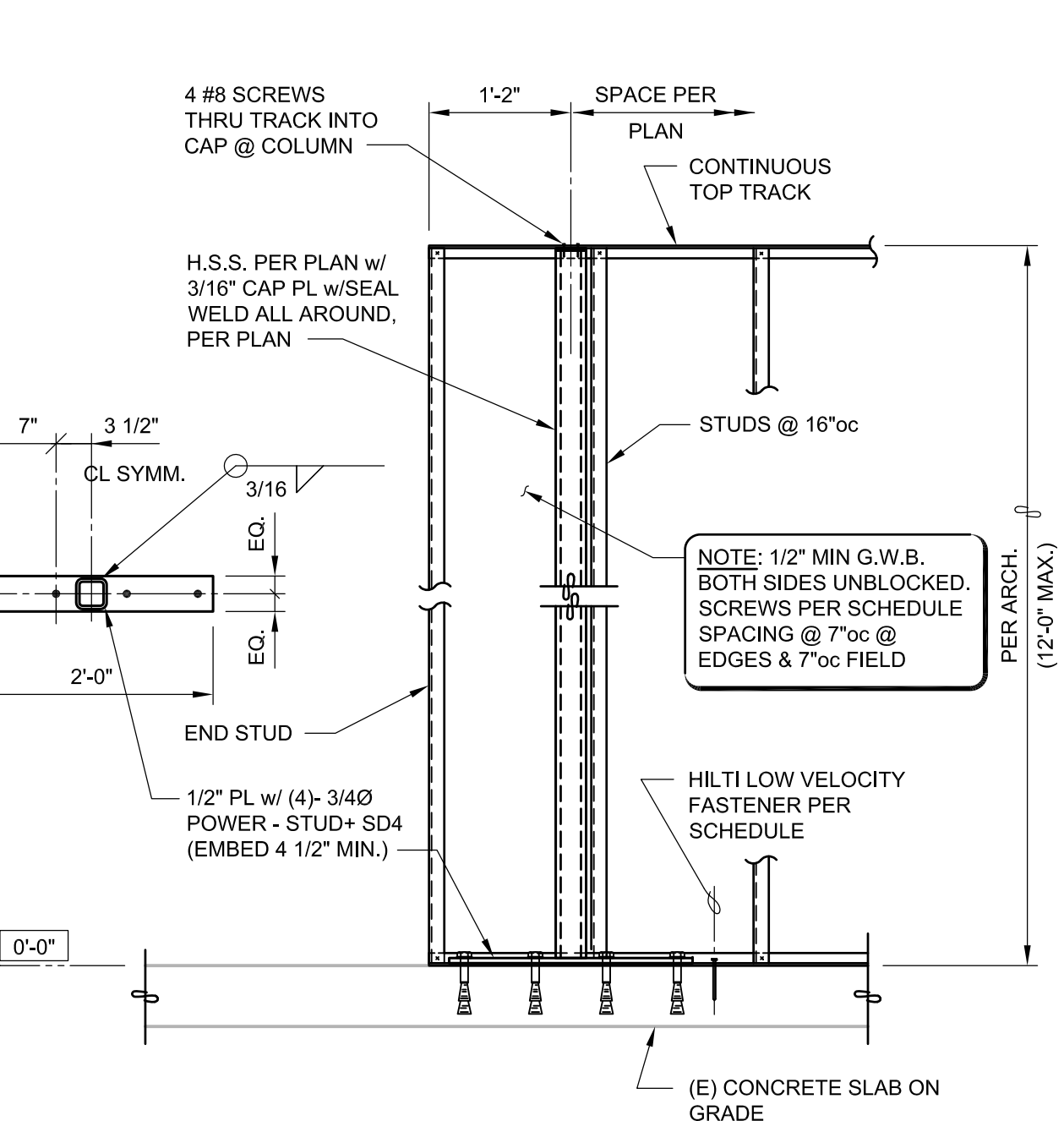
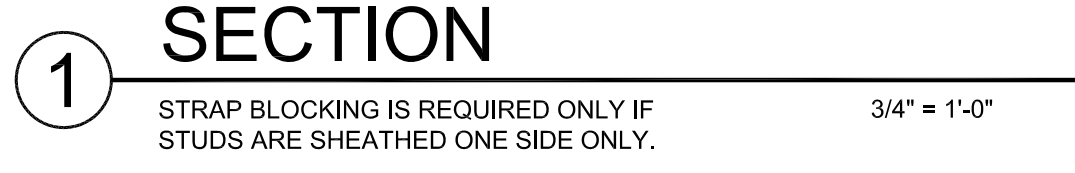
THICKNESS OF STEEL COMPONENTS 1

Table with columns: GAGE, DESIGN THICKNESS, MINIMUM THICKNESS 2

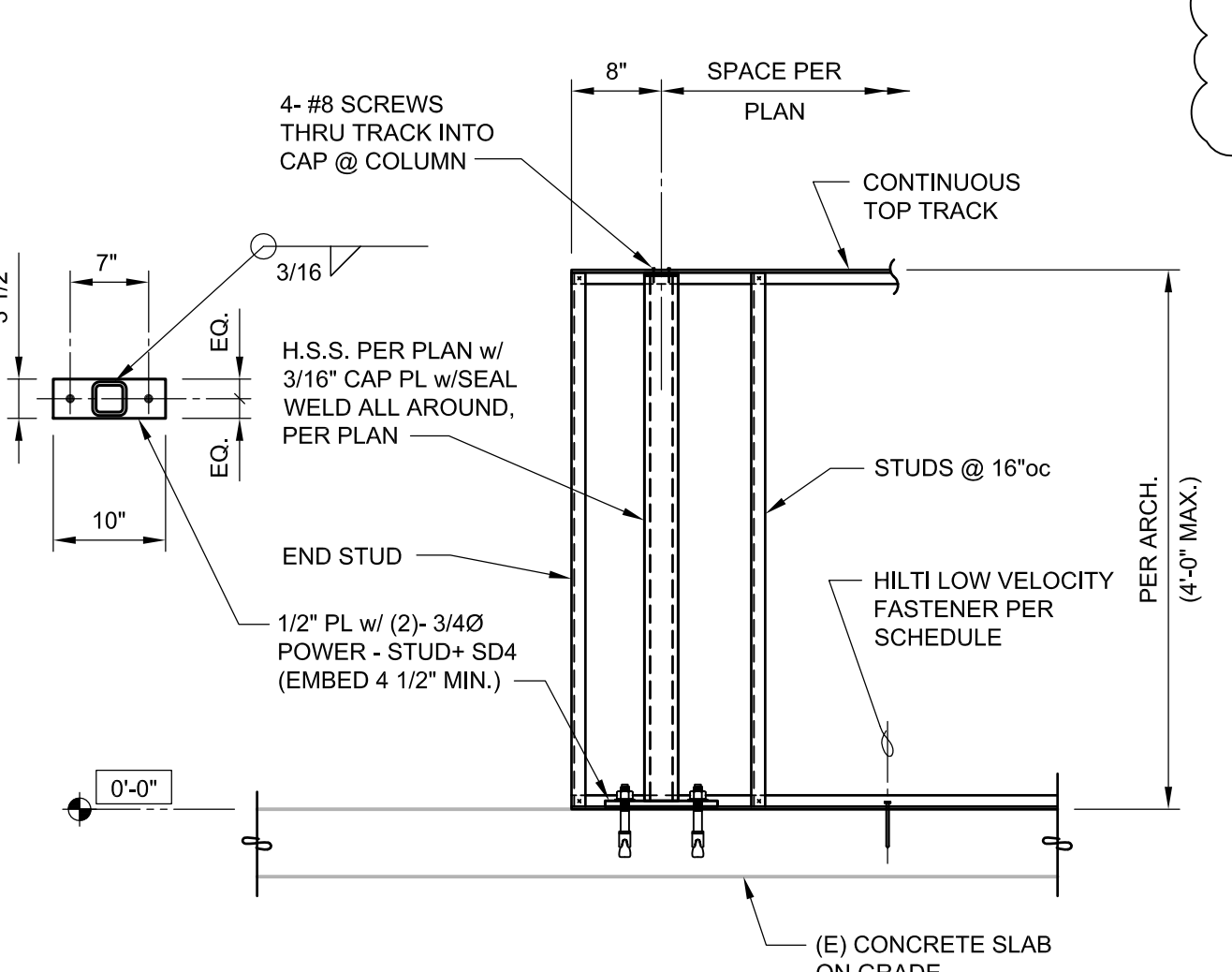
- NOTES:
1.) UNCOATED STEEL THICKNESS. THICKNESS IS FOR CARBON SHEET STEEL.
2.) MINIMUM THICKNESS REPRESENTS 95% OF DESIGN THICKNESS AND IS THE MINIMUM ACCEPTABLE THICKNESS DELIVERED TO THE JOB SITE BASED ON SECTION A2.4 OF THE 2007 A.I.S.I. CODE.



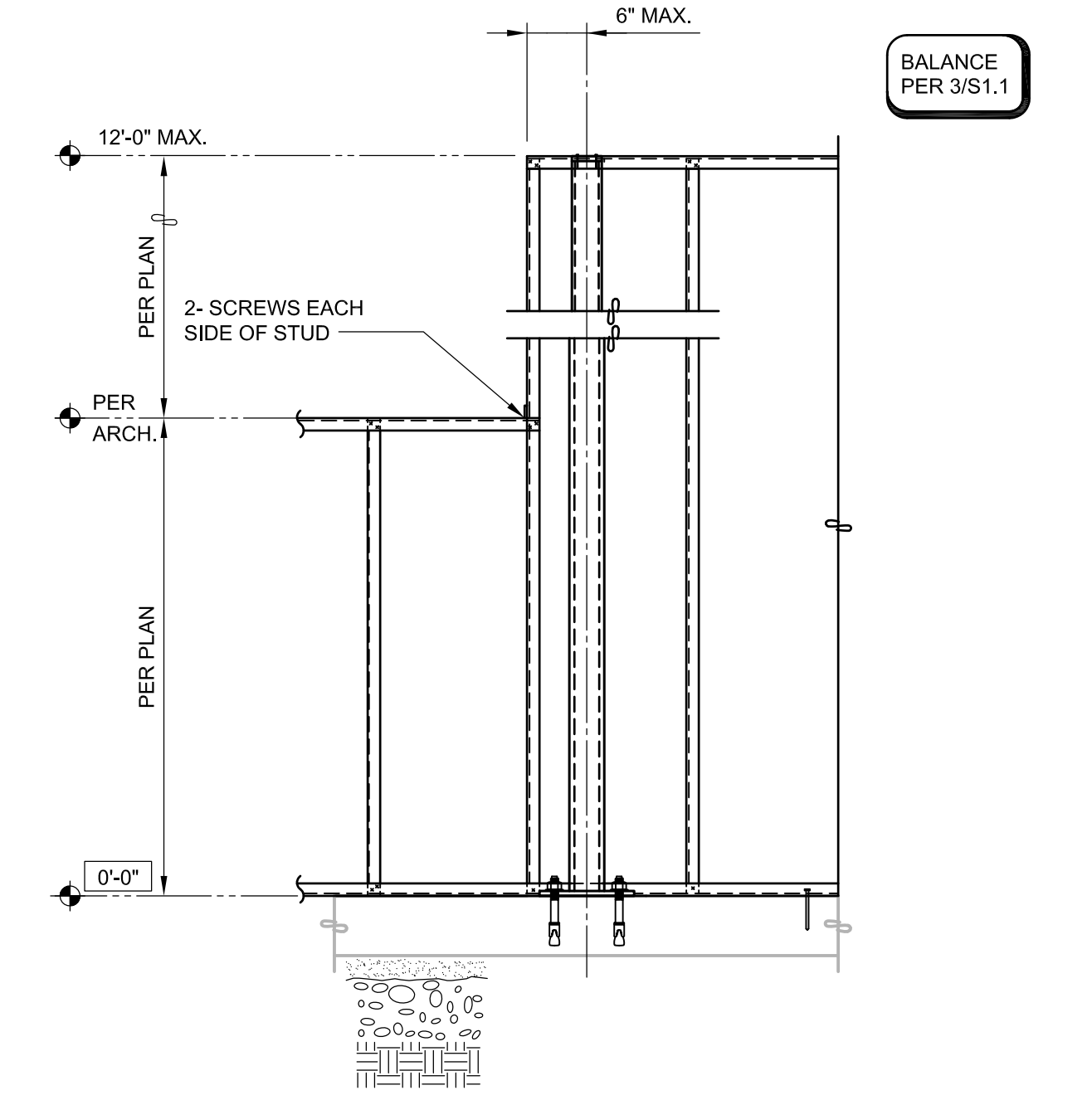
TYPICAL WALL, BLOCKING & STRAP DETAIL



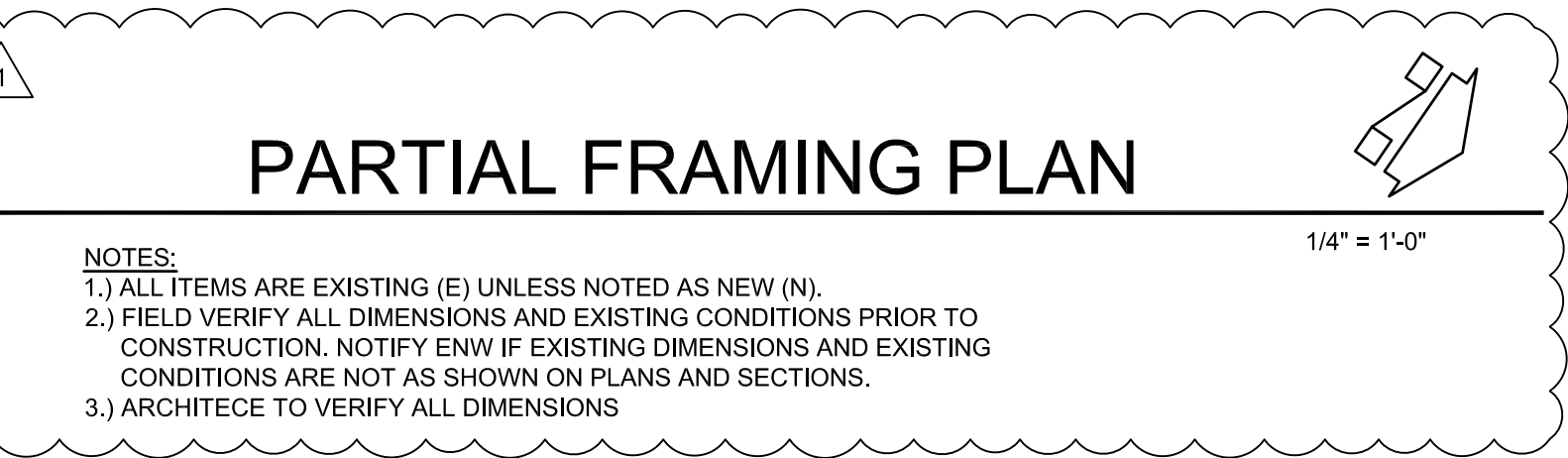
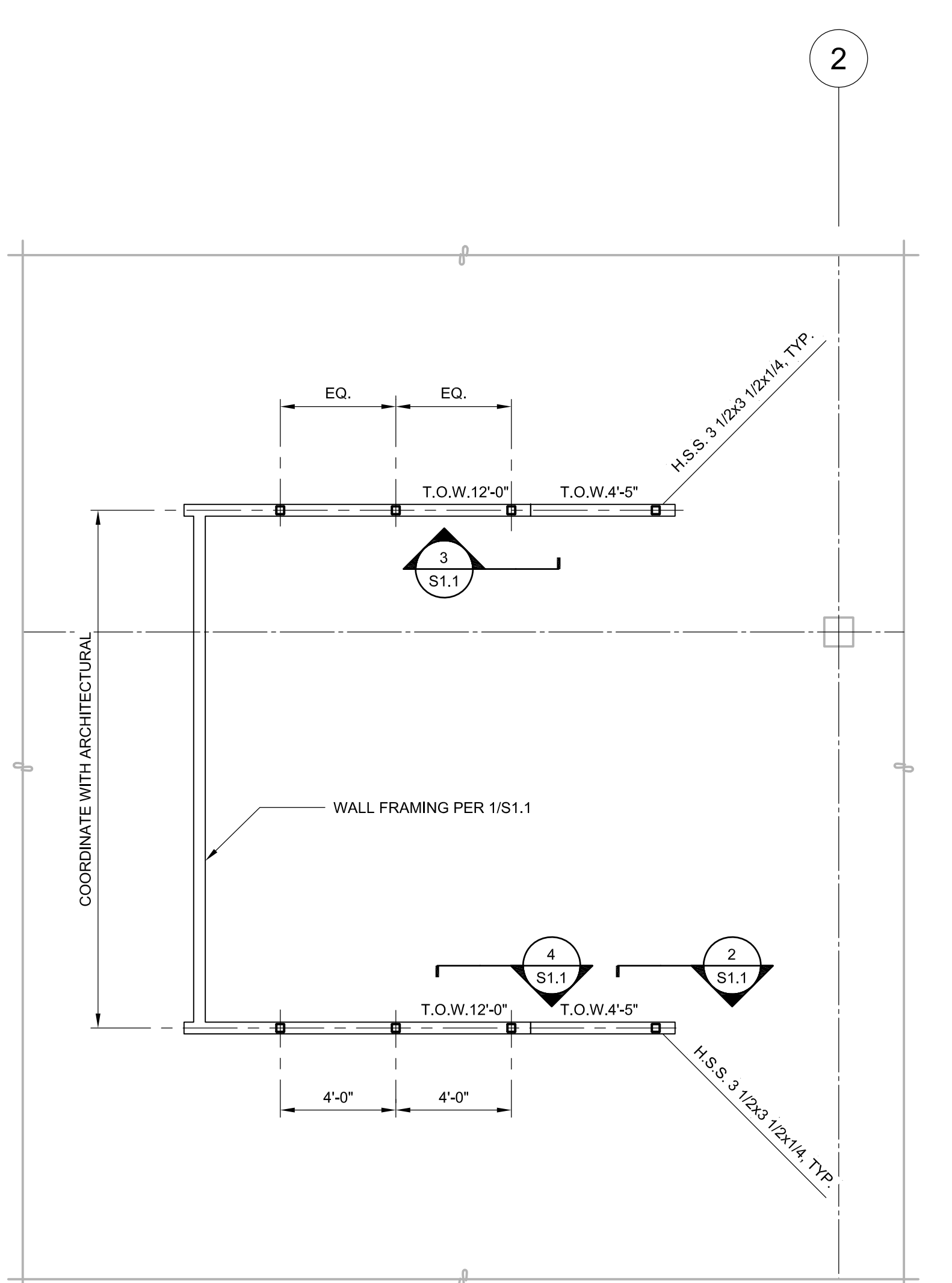
SECTION 3 with dimensions 3/4\"/>



SECTION 2 with dimensions 3/4\"/>



SECTION 4 with dimensions 3/4\"/>

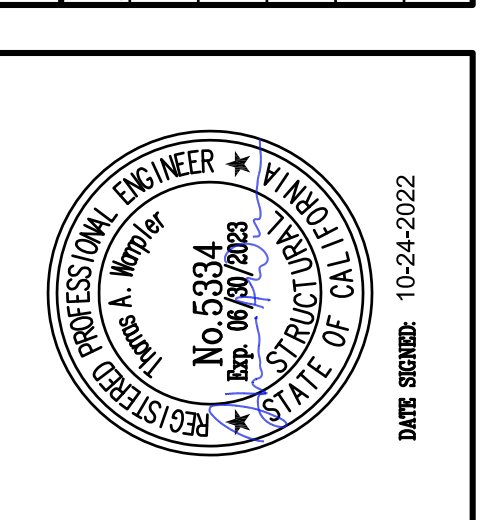


PARTIAL FRAMING PLAN

- NOTES:
1.) ALL ITEMS ARE EXISTING (E) UNLESS NOTED AS NEW (N).
2.) FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO CONSTRUCTION. NOTIFY ENW IF EXISTING DIMENSIONS AND EXISTING CONDITIONS ARE NOT AS SHOWN ON PLANS AND SECTIONS.
3.) ARCHITECT TO VERIFY ALL DIMENSIONS

Table with columns: DATE, DRAWING SUBMITTALS, NO.

Table with columns: DATE, DRAWING REVISIONS, NO., CITY COMMENTS



ENW STRUCTURAL ENGINEERS logo and contact information: 1920 38RD AVE W., Suite 303, Lynnwood, WA 98036

COSTCO WHOLESALE logo and project information: HAC REMODEL, 1130 BROADWAY, CHULA VISTA, CA. 91911. Includes sheet contents and job details.