A – GENERAL

A1 STRUCTURAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE "BOCA NATIONAL BUILDING CODE", 1999 EDITION.
A2 EXAMINE ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR VERIFICATION OF LOCATION AND DIMENSIONS OF CHASES, INSERTS, OPENINGS, SLEEVES, WASHES, DRIPS, REVEALS, DEPRESSIONS, AND OTHER PROJECT REQUIREMENTS NOT SHOWN ON STRUCTURAL DRAWINGS.
A3 VERIFY AND COORDINATE DIMENSIONS RELATED TO THIS PROJECT.
A4 PROVIDE AND INSTALL NECESSARY MATERIAL TO CONNECT ELEVATOR SUPPORT BEAMS. LOCATION AND SIZE OF BEAMS AND ANY INSERTS REQUIRED SHALL BE DETERMINED BY THE ELEVATOR MANUFACTURER.
A5 OPENINGS IN SLABS AND WALLS LESS THAN 12" MAXIMUM DIMENSION ARE GENERALLY NOT SHOWN ON STRUCTURAL DRAWINGS. OPENINGS SHOWN ON STRUCTURAL DRAWINGS SHALL NOT BE REVISED WITHOUT PRIOR WRITTEN APPROVAL OF THE ARCHITECT.
A6 TYPICAL DETAILS AND NOTES SHOWN ON STRUCTURAL DRAWINGS S001 THRU S003 SHALL BE APPLICABLE TO ALL PARTS OF THE STRUCTURAL WORK EXCEPT WHERE SPECIFICALLY REQUIRED OTHERWISE BY CONTRACT DOCUMENTS.
A7 THE CONTRACTOR IS TO SUBMIT COMPLETE SHOP DRAWINGS FOR ALL PARTS OF THE WORK, AND CONSTRUCTION METHODS AND SEQUENCING WHERE APPLICABLE. NO PERFORMANCE OF THE WORK INCLUDING, BUT NOT LIMITED TO FABRICATION OR ERECTION OF NEW STRUCTURAL ELEMENTS, SHALL COMMENCE WITHOUT REVIEW OF THE SHOP DRAWINGS BY THE ARCHITECT.

B – FOUNDATIONS

B1 FOUNDATIONS FOR THIS PROJECT CONSIST OF SPREAD FOOTINGS ON UNDISTURBED SOIL/ROCK OR COMPACTED CONTROLLED GRANULAR FILL WITH AN ALLOWABLE BEARING PRESSURE OF 2.0 TONS PER SQUARE FOOT.
B2 NO RESPONSIBILITY IS ASSUMED BY THE ARCHITECT FOR THE VALIDITY OF THE SUBSURFACE CONDITIONS DESCRIBED ON THE DRAWINGS, SPECIFICATIONS, TEST BORINGS, OR TEST PITS. THESE DATA ARE INCLUDED ONLY TO ASSIST THE CONTRACTOR DURING BIDDING AND SUBSEQUENT CONSTRUCTION AND REPRESENT CONDITIONS ONLY AT THESE SPECIFIC LOCATIONS AT THE PARTICULAR TIME THEY WERE MADE.
B3 FOUNDATION UNITS SHALL BE CENTERED UNDER SUPPORTED STRUCTURAL MEMBERS, UNLESS NOTED OTHERWISE ON THE DRAWINGS.
B4 EXTERIOR CONSTRUCTION SHALL BE CARRIED DOWN BELOW FINISHED EXTERIOR GRADE TO A MINIMUM DEPTH OF 4'–6", UNLESS NOTED OTHERWISE.
B5 PROVIDE TEMPORARY OR PERMANENT SUPPORTS, WHETHER SHORING, SHEETING, OR BRACING, SO THAT NO HORIZONTAL MOVEMENT OR VERTICAL SETTLEMENT OCCURS TO EXISTING STRUCTURES, STREETS, OR UTILITIES ADJACENT TO THE PROJECT SITE.
B6 CARRY OUT CONTINUOUS CONTROL OF SURFACE AND SUBSURFACE WATER DURING CONSTRUCTION SUCH THAT FOUNDATION WORK IS DONE IN DRY AND ON UNDISTURBED SUBGRADE MATERIAL, AS APPLICABLE.
B7 CARRY OUT CONTINUOUS CONTROL OF SURFACE AND SUBSURFACE WATER UNTIL SUFFICIENT DEAD LOAD HAS ACCUMULATED TO PREVENT FLOTATION OF ANY PART OF THE STRUCTURE, INCLUDING ELEVATOR PIT(S).
B8 BACKFILL UNDER ANY PORTION OF THE STRUCTURE SHALL BE COMPACTED IN 6" LIFTS PER SPECIFICATIONS REQUIREMENTS.
B9 NO FOUNDATION CONCRETE SHALL BE PLACED IN WATER OR ON FROZEN SUBGRADE MATERIAL.
B10 PROTECT IN–PLACE FOUNDATIONS AND SLABS FROM FROST PENETRATION UNTIL THE PROJECT IS COMPLETED.
B11 DO NOT BACKFILL BEHIND FOUNDATION WALLS UNTIL PERMANENT LATERAL STRUCTURAL SUPPORT SYSTEM IS IN PLACE AND OF FULL STRENGTH.
B12 SHEETING, SHORING AND BRACING FOR THE LATERAL SUPPORT OF EXCAVATION SHALL REMAIN IN PLACE UNTIL ALL PERMANENT STRUCTURAL SYSTEMS BELOW GROUND LEVEL ARE COMPLETE. FOR FURTHER INFORMATION ON LATERAL SUPPORT OF EXCAVATION SEE EARTHWORK SPECIFICATIONS.

C – CONCRETE

C1 CONCRETE WORK SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318–95)," AND "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI 301–95)."
C2 CONCRETE SHALL BE CONTROLLED CONCRETE, PROPORTIONED, MIXED, AND PLACED IN THE PRESENCE OF A REPRESENTATIVE OF AN APPROVED TESTING AGENCY.

C3 UNLESS NOTED OTHERWISE, CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH AND BE OF A TYPE AS FOLLOWS:
(A) SLAB ON GRADE ..... 4000 PSI (NORMALWEIGHT)
(B) BASEMENT WALLS ..... 4000 PSI (NORMALWEIGHT)
(C) CONCRETE ON STEEL DECK ..... 4000 PSI (LIGHTWEIGHT)
(D) FOOTINGS AND OTHER CONCRETE ..... 3000 PSI (NORMALWEIGHT)

C4 CONCRETE TO BE EXPOSED TO FREEZING TEMPERATURES IN THE FINISHED PROJECT SHALL BE AIR ENTRAINED PER SPECIFICATIONS REQUIREMENTS.
C5 PROVIDE VAPOR BARRIER UNDER INTERIOR SLABS CAST ON GRADE.
C6 CONSTRUCTION JOINTS SHOWN ON DRAWINGS ARE MANDATORY. OMISSIONS, ADDITIONS, OR CHANGES SHALL NOT BE MADE EXCEPT WITH THE SUBMITTAL OF A WRITTEN REQUEST TOGETHER WITH DRAWINGS OF THE PROPOSED JOINT LOCATIONS FOR APPROVAL OF THE ARCHITECT.
C7 WHERE CONSTRUCTION JOINTS ARE NOT SHOWN, OR WHEN ALTERNATE LOCATIONS ARE PROPOSED, DRAWINGS SHOWING LOCATION OF CONSTRUCTION AND CONTROL JOINTS AND CONCRETE PLACING SEQUENCE SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL PRIOR TO PREPARATION OF THE REINFORCEMENT SHOP DRAWINGS.
C8 SIZE OF CONCRETE PLACEMENTS UNLESS NOTED OTHERWISE SHALL BE AS FOLLOWS:

	MAX LENGTH (FEET)	MAX AREA (SQ FT)
(A) FOOTINGS AND WALLS	30*	–
(B) SLABS ON GRADE	30*	–
(C) CONCRETE ON STEEL DECK	90	8100

* EXCEED ONLY WHERE INTERMEDIATE CONTROL JOINTS ARE PROVIDED

C9 MINIMUM OF 72 HOURS SHALL ELAPSE BETWEEN ADJACENT CONCRETE PLACEMENTS.
C10 CONCRETE SHALL BE PLACED WITHOUT HORIZONTAL CONSTRUCTION JOINTS EXCEPT WHERE SHOWN OR NOTED. VERTICAL CONSTRUCTION JOINTS AND STOPS IN CONCRETE WORK SHALL BE MADE AT MIDSPAN OR AT POINTS OF MINIMUM SHEAR.
C11 CONCRETE SLABS, INCLUDING CONCRETE PLACED ON STEEL DECK, SHALL BE PLACED SO THAT THE SLAB THICKNESS IS AT NO POINT LESS THAN THAT INDICATED ON THE DRAWINGS. (THIS WILL REQUIRE THAT THE SLAB NOT BE CAST DEAD LEVEL WHERE SUPPORTING BEAMS OR GIRDERS HAVE AN UPWARD CAMBER.)
C12 STRUCTURAL STEEL BELOW GRADE SHALL BE ENCASED IN CONCRETE WITH A MINIMUM COVER OF 2".

D – REINFORCEMENT

D1 REINFORCEMENT WORK OF DETAILING, FABRICATION, AND ERECTION SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318–95)," "ACI DETAILING MANUAL–1988 (SP–66)," "CRSI MANUAL OF STANDARD PRACTICE (MSP 1–90)," AND "STRUCTURAL WELDING CODE – REINFORCING STEEL (AWS D1.4–92)."
D2 STEEL REINFORCEMENT, UNLESS NOTED OTHERWISE, SHALL CONFORM TO THE FOLLOWING:
(A) BARS, TIES, AND STIRRUPS ..... ASTM A615 GRADE 60 (YIELD STRESS 60,000 PSI)
(B) WELDED WIRE FABRIC (WWF) ..... ASTM A185
D3 PROVIDE AND SCHEDULE ON SHOP DRAWINGS THE NECESSARY ACCESSORIES TO HOLD REINFORCEMENT SECURELY IN POSITION. MINIMUM REQUIREMENTS SHALL BE: HIGH CHAIRS, 4'–0" O.C. WITH CONTINUOUS #5 SUPPORT BAR; SLAB BOLSTERS, CONTINUOUS AND 3'–6" O.C.; BEAM BOLSTERS, 5'–0" O.C.
D4 MINIMUM CONCRETE PROTECTIVE COVERING FOR REINFORCEMENT, UNLESS NOTED OTHERWISE, SHALL BE AS FOLLOWS:
(A) UNFORMED SURFACES CAST AGAINST AND PERMANENTLY IN CONTACT WITH EARTH ..... 3.0"
(B) FORMED SURFACES IN CONTACT WITH EARTH OR EXPOSED TO WEATHER
#6 THROUGH #11 BARS ..... 2.0"
#5 BARS, 5/8" DIAMETER WIRE, AND SMALLER ..... 1.5"

(C) SURFACES NOT IN CONTACT WITH EARTH OR EXPOSED TO WEATHER
WALLS AND SLABS
#11 BARS AND SMALLER ..... 1.0"

BEAMS, GIRDERS, AND COLUMNS:
PRINCIPAL REINFORCEMENT, TIES, STIRRUPS, OR SPIRALS ..... 1.5"

D5 WHERE CONTINUOUS REINFORCEMENT IS REQUIRED IN SECTION, REINFORCEMENT IS CONSIDERED TYPICAL WHEREVER THE SECTION APPLIES.
D6 WHERE REINFORCEMENT IS REQUIRED IN SECTION, REINFORCEMENT IS CONSIDERED TYPICAL WHEREVER THE SECTION APPLIES.
D7 REINFORCEMENT SHALL BE CONTINUOUS THROUGH CONSTRUCTION JOINTS.
D8 DOWELS SHALL MATCH BAR SIZE AND NUMBER, UNLESS NOTED OTHERWISE.
D9 WELDED WIRE FABRIC SHALL LAP 8" OR 1–1/2 SPACES, WHICHEVER IS LARGER, AND SHALL BE WIRED TOGETHER.
D10 REINFORCEMENT SHALL NOT BE TACK WELDED.
D11 INSTALLATION OF REINFORCEMENT SHALL BE COMPLETED AT LEAST 24 HOURS PRIOR TO THE SCHEDULED CONCRETE PLACEMENT. NOTIFY ARCHITECT OF COMPLETION AT LEAST 24 HOURS PRIOR TO THE SCHEDULED COMPLETION OF THE INSTALLATION OF REINFORCEMENT.

E – STRUCTURAL STEEL

E1 STRUCTURAL STEEL WORK SHALL CONFORM TO "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS (AISC 1989);" "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS & BRIDGES (AISC 1992);" AND "STRUCTURAL WELDING CODE – STEEL (AWS D1.1–96)."
E2 STRUCTURAL STEEL SHALL BE DETAILED IN ACCORDANCE WITH "DETAILING FOR STEEL CONSTRUCTION (AISC)" AND, WHERE REQUIRED, DESIGNED IN ACCORDANCE WITH THE CITED REFERENCES.
E3 STRUCTURAL STEEL DETAILS NOT SPECIFICALLY SHOWN SHALL BE TAKEN AS BEING SIMILAR TO THOSE SHOWN FOR THE MOST NEARLY SIMILAR CONDITION AS DETERMINED BY THE ARCHITECT.
E4 STRUCTURAL STEEL SHALL BE NEW STEEL CONFORMING TO THE FOLLOWING:
(A) WIDE FLANGE SHAPES ..... ASTM A572 GRADE 50 (Fy = 50 KSI)
(B) ANGLES, CHANNELS AND PLATES ..... ASTM A36 (Fy = 36 KSI)
(C) HOLLOW STRUCTURAL SECTIONS (HSS) ..... ASTM A500, ROUND– GRADE C (Fy=46 KSI)
(D) ANCHOR BOLTS ..... ASTM A307 UNO
(E) HIGH STRENGTH BOLTS ..... ASTM A325
E5 ANCHOR BOLTS OR BEARING PLATES SHALL BE LOCATED AND BUILT INTO CONNECTING WORK, PRESET BY TEMPLATES OR SIMILAR METHODS. PLATES SHALL BE SET IN FULL BEDS OF NON–SHRINK GROUT.
E6 BOLTED CONNECTIONS SHALL BE AS FOLLOWS:
(A) MINIMUM BOLT DIAMETER – 3/4", TWO BOLTS MINIMUM.
(B) STANDARD, OVERSIZED, OR HORIZONTAL SHORT SLOTTED HOLES IN WEBS OF BEAMS.
(C) SHEAR CONNECTIONS FOR MOMENT CONNECTED MEMBERS – FRICTION TYPE HIGH STRENGTH BOLTS IN SINGLE SHEAR.
(D) SHEAR CONNECTIONS FOR OTHER MEMBERS – SIMPLE SHEAR CONNECTIONS WITH EITHER FRICTION TYPE HIGH STRENGTH BOLTS IN SINGLE SHEAR OR BEARING TYPE HIGH STRENGTH BOLTS (THREADS INCLUDED IN SHEAR PLANE) IN SINGLE OR DOUBLE SHEAR.
(E) SIMPLE SHEAR CONNECTIONS SHALL BE CAPABLE OF END ROTATION PER AISC REQUIREMENTS FOR "UNRESTRAINED MEMBERS."
E7 WELDED CONNECTIONS SHALL BE MADE BY APPROVED CERTIFIED WELDERS USING FILLER METAL CONFORMING TO E70XX OR F7X–EXXX WITH LOW HYDROGEN.
E8 WELDS SHALL DEVELOP THE FULL STRENGTH OF THE MATERIALS BEING WELDED, UNLESS NOTED OTHERWISE, EXCEPT THAT FILLET WELDS SHALL BE A MINIMUM OF 1/4".
E9 BEAM CONNECTIONS: DESIGN CONNECTION FOR REACTIONS SHOWN ON PLAN, WHERE NO REACTION IS GIVEN IT IS LESS THAN 8 KIPS.
E10 ENDS OF COLUMNS AT SPLICES AND AT OTHER BEARING CONNECTIONS SHALL BE "FINISHED TO BEAR" TO COMPLETE TRUE BEARING.
E11 PROVIDE STIFFENERS "FINISHED TO BEAR" UNDER ALL LOAD CONCENTRATIONS ON SUPPORTING MEMBERS, OVER COLUMNS, AND WHERE SHOWN ON DRAWINGS.
E12 PROVIDE TEMPORARY ERECTION BRACING AND SUPPORTS TO HOLD STRUCTURAL STEEL FRAMING SECURELY IN POSITION. SUCH TEMPORARY BRACING AND SUPPORTS SHALL NOT BE REMOVED UNTIL PERMANENT BRACING HAS BEEN INSTALLED AND CONCRETE FOR FLOOR SLABS HAVE ATTAINED 75% OF SPECIFIED CONCRETE STRENGTH.
E13 STRUCTURAL STEEL FRAMING SHALL BE TRUE AND PLUMB BEFORE CONNECTIONS ARE FINALLY BOLTED OR WELDED.
E14 FIELD CUTTING OF STRUCTURAL STEEL OR ANY FIELD MODIFICATIONS OF STRUCTURAL STEEL SHALL NOT BE MADE WITHOUT PRIOR WRITTEN APPROVAL BY ARCHITECT FOR EACH SPECIFIC CASE.
E15 STRUCTURAL STEEL MEMBERS SHALL BE FIREPROOFED PER SPECIFICATIONS.
E16 STRUCTURAL STEEL MEMBERS AND CONNECTIONS EXPOSED TO THE WEATHER SHALL BE GALVANIZED, EXCEPT PEDESTRIAN BRIDGE WHICH IS TO BE PAINTED, SEE SPECIFICATIONS.
E17 CAMBER SHALL BE BY COLD–FORMED PROCESS IN CONFORMANCE WITH AISC SPECIFICATION AND TOLERANCE.

F – STEEL DECK AND SHEAR CONNECTOR

F1 STEEL DECK AND SHEAR CONNECTOR WORK SHALL CONFORM TO THE "SPECIFICATION FOR DESIGN OF LIGHT GAGE COLD–FORMED STEEL STRUCTURAL MEMBERS (AISI)"; "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS (AISC 1993);" "STRUCTURAL WELDING CODE – STEEL (AWS D1.1–96)"; AND "STRUCTURAL WELDING CODE – SHEET STEEL (AWS D1.3–89)."
F2 STEEL DECK CROSS SECTIONS ARE ONLY REPRESENTED DIAGRAMMATICALLY ON THE DRAWINGS.
F3 STEEL DECK PANELS SHALL BE FORMED FROM STEEL SHEETS CONFORMING TO ASTM A653, GRADE 33, WITH A MINIMUM YIELD POINT OF 33,000 PSI, ASTM A570 (UNGALV.) GRADE 33, OR ASTM A611 (UNGALV.), GRADE C, WITH A MINIMUM YIELD POINT OF 33,000 PSI AND A THICKNESS NOT THINNER THAN 20 GAGE.
F4 FLOOR AND ROOF CONSTRUCTION IN GENERAL CONSISTS OF CONCRETE FILL CAST ON STEEL DECK AND COMPOSITE IN ACTION WITH THE STRUCTURAL STEEL BEAMS BY MEANS OF WELDED SHEAR CONNECTORS.
F5 SHEAR CONNECTORS SHALL CONFORM TO ASTM A108, GRADES 1010, 1015, 1017, OR 1020. TYPICALLY SHEAR CONNECTORS SHALL BE 3/4 " DIAMETER X 4" LONG HEADED STUDS UNO, BUT IN NO CASE SHALL SHEAR CONNECTORS EXTEND LESS THAN 1–1/2" ABOVE STEEL DECK.
F6 THE NUMBER OF SHEAR CONNECTORS REQUIRED PER BEAM IS INDICATED BY "+32", ETC. ON THE DRAWINGS (SEE BEAM EXPLANATION DIAGRAM ON DRAWING S0.03.) WHERE NO SHEAR CONNECTORS ARE INDICATED FOR A BEAM WHICH SUPPORTS A CONCRETE SLAB PROVIDE SHEAR CONNECTORS AT 24" O.C.
F7 SHEAR CONNECTORS SHALL BE EQUALLY SPACED OVER THE LENGTH OF THE BEAM. WHERE THE NUMBER OF STEEL DECK CORRUGATIONS AVAILABLE IS LESS THAN THE NUMBER OF SHEAR CONNECTORS, USE PAIRS OF SHEAR CONNECTORS STARTING FROM EACH END OF BEAM AND CONTINUING TOWARD THE CENTER UNTIL IT IS POSSIBLE TO RETURN TO A SINGLE SHEAR CONNECTOR IN EACH CORRUGATION. SHEAR CONNECTORS SHALL BE SPACED NOT CLOSER THAN 3" TRANSVERSELY AND 4" LONGITUDINALLY.
F8 HORIZONTAL CLEARANCE SHALL BE A MINIMUM OF 1" FROM THE EDGE OF ANY SHEAR CONNECTOR TO THE FACE OF CONCRETE, STEEL DECK RIB, OR SIMILAR ADJACENCY.
F9 EDGE DISTANCE FROM THE CENTER OF A SHEAR CONNECTOR TO THE EDGE OF A STRUCTURAL STEEL BEAM SHALL PREFERABLY BE 2", BUT IN NO CASE LESS THAN 1–1/4".

G – STEEL JOISTS

G1 OPEN WEB JOISTS SHALL CONFORM TO THE REQUIREMENTS OF THE STEEL JOIST INSTITUTE.
G2 JOISTS SHALL BE DESIGNED IN ACCORDANCE WITH THE STEEL JOIST INSTITUTE SPECIFICATIONS, AND SHALL BE FABRICATED BY A MANUFACTURER WHO IS A MEMBER OF OR MEETS THE REQUIREMENTS OF THE STEEL JOIST INSTITUTE.
G3 FOR PAINTING REQUIREMENTS SEE SPECIFICATIONS.
G4 ROOF JOISTS SHALL BE DESIGNED AND ANCHORED TO RESIST A MINIMUM NET UPLIFT OF 35 PSF. BRACE BOTTOM CHORD FOR COMPRESSION STRESSES.
G5 PROVIDE CEILING EXTENSIONS ON ALL JOISTS.
G6 PROVIDE CROSS–BRIDGING IN ACCORDANCE WITH THE REQUIREMENTS OF THE STEEL JOIST INSTITUTE OR AS SHOWN ON PLAN.
G7 PROVIDE SEAT ANGLE CONNECTION WHERE JOISTS FRAME INTO COLUMNS.
G8 SUSPENDED LOADS SHALL BE APPLIED ONLY AT PANEL POINTS OF JOISTS. ALL NECESSARY SUPPLEMENTAL FRAMING SHALL BE PROVIDED BY THE CONTRACTOR RESPONSIBLE FOR THE SUSPENDED LOAD.
G9 DESIGN OF JOISTS SHALL BE BASED ON AN ALLOWABLE FIBER STRESS OF 30,000 PSI.
G10 EACH JOIST BEARING ON STEEL SHALL BE WELDED OR BOLTED THERETO. ALL JOIST SEATS SHALL BEAR FULLY ON SUPPORTING BEAMS.
G11 END JOISTS SHALL BE ANCHORED TO BEAM AT TOP AND BOTTOM CHORDS WITH LATERAL ANCHORS NOT OVER 4'–0" OC AS WELL AS AT ENDS OF BRIDGING LINES.
G12 FOR ATTACHMENTS TO JOIST, FIELD WELDS SHALL BE MADE PARALLEL TO THE LENGTH OF CHORD, NOT ACROSS THE CHORD. NO HOLES ARE TO BE DRILLED IN THE MEMBERS OF THE JOIST.
G13 JOISTS SHALL RECEIVE ONE SHOP COAT OF PAINT STANDARD WITH MANUFACTURER.
G14 LH–JOISTS SHALL HAVE A MINIMUM BEARING OF 4" ON STEEL AND MUST PROJECT AT LEAST 1" BEYOND WEB OF BEAM.
G15 K–JOISTS SHALL HAVE A MINIMUM BEARING OF 2–1/2" ON STEEL AND MUST PROJECT AT LEAST 1" BEYOND WEB OF BEAM.
G16 STEEL DECK AND TOP CHORD OF STEEL JOISTS SHALL EXTEND BEYOND CENTERLINE OF SPANDREL BEAMS, TYPICAL AT ROOF. SEE DRAWINGS FOR DETAILS.
G17 OUTRIGGERS AND CEILING EXTENSIONS SHALL BE FURNISHED AS REQUIRED.
G18 SPECIAL JOIST SEATS SHALL BE PROVIDED AS REQUIRED.
G19 JOIST MANUFACTURER SHALL PROVIDE CONNECTIONS FOR CROSS BRACING WHERE REQUIRED.
G20 THE CONTRACTOR SHALL SUBMIT CHECKED SHOP DRAWINGS SHOWING THE LOCATION OF ALL JOISTS AND THE REQUIRED DETAILS FOR PROPER INSTALLATION.

H – STRUCTURAL DESIGN LOADS

H1 DEAD LOADS.
(A) WEIGHT OF PERMANENT BUILDING COMPONENTS ..... AS REQUIRED
(B) TYPICAL OFFICE FLOOR PARTITIONS ALLOWANCE ..... 20 PSF
H2 LIVE LOADS
(A) OFFICES ..... 80 PSF
(B) MECHANICAL PENTHOUSE ..... 150 PSF OR EQUIP WT
(C) ROOF SNOW LOAD ..... 50 PSF PLUS DRIFT
H3 WIND LOAD – PER BOCA, SECTION 1609, EXPOSURE B, WIND SPEED 90 MPH, IMPORTANCE FACTOR 1.23
(A) 0' –50' ABOVE GRADE ..... 30 PSF
H4 EARTHQUAKE LOAD – PER BOCA, SECTION 1610; SEISMIC HAZARD EXPOSURE GROUP II; SEISMIC PERFORMANCE CATEGORY B;
(A) V = CsW; Cs = 1.2AvS/RT $^{2/3}$ Av = 0.10; C = 4.5; S = 1.5;
R = 5 (CONCENTRIC BRACED FRAMES)
W = DEAD LOAD OF STRUCTURE INCLUDING PARTITIONS AND 50% SNOW LOAD.

ABBREVIATIONS

"ABBREVIATION"	"WORD"
ASD	ALLOWABLE STRESS DESIGN
ALT	ALTERNATE
ACI	AMERICAN CONCRETE INSTITUTE
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AISI	AMERICAN IRON AND STEEL INSTITUTE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWS	AMERICAN WELDING SOCIETY
AB	ANCHOR BOLT
@	AT RATE OF
BAL	BALANCE
BM	BEAM
B or BOT	BOTTOM
BEW	BOTTOM EACH WAY
CIP	CAST–IN–PLACE
$	CENTERLINE
COL	COLUMN
CONC	CONCRETE
CMU	CONCRETE MASONRY UNIT
CRSI	CONCRETE REINFORCING STEEL INSTITUTE
CONN	CONNECTION
CONST	CONSTRUCTION
CONST JT or j	CONSTRUCTION JOINT
CONT	CONTINUOUS
CJ	CONTROL JOINTS
DEPR	DEPRESSION
DET	DETAIL
DIA or d	DIAMETER
DIM	DIMENSION
DIR	DIRECTION
DO	DITTO
DWLS	DOWELS
DN	DOWN
DWG	DRAWING
EA	EACH
EE	EACH END
EF	EACH FACE
ES	EACH SIDE
EW	EACH WAY
EL or e	ELEVATION
ELEV	ELEVATOR
EXP BOLT	EXPANSION BOLT
FF	FAR FACE
FT	FEET or FOOT
FIN	FINISH
FIN FL	FINISHED FLOOR
FL	FLOOR
FTG	FOOTING
FND	FOUNDATION
GALV	GALVANIZED
GA	GAUGE or GAGE
GENL	GENERAL
GR	GRADE
GUS p	GUSSET PLATES
HT	HEIGHT
HP	HIGH POINT
HS	HIGH STRENGTH
HSS	HOLLOW STRUCTURAL SECTIONS
H or HORIZ	HORIZONTAL
HEF	HORIZONTAL EACH FACE
HIF	HORIZONTAL INSIDE FACE
HOF	HORIZONTAL OUTSIDE FACE
IN	INCH
JT	JOINT
JST	JOISTS
K	KIP (1000 POUNDS)
LE	LEFT END
LRFD	LOAD & RESISTANCE FACTOR DESIGN
LOC	LOCATION
LLV	LONG LEG VERTICAL
LP	LOW POINT
LL	LOWER LAYER
MFR	MANUFACTURER
MECH	MECHANICAL
NF	NEAR FACE
NWC	NORMALWEIGHT CONCRETE
NO or #	NUMBER
OC	ON CENTER
OPNG	OPENING
OH	OPPOSITE HAND
OD	OUTSIDE DIAMETER
p	PLATE
PT	POINT
PVC	POLYVINYL CHLORIDE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
REF	REFERENCE
REINF	REINFORCE or REINFORCEMENT
REM	REMAINDER
RET	RETURN
RE	RIGHT END
SECT	SECTION
SC	SHEAR CONNECTOR
SLV	SHORT LEG VERTICAL
SIM	SIMILAR
SOG	SLAB ON GRADE
STD	STANDARD
STL	STEEL
SDI	STEEL DECK INSTITUTE
SF	STEP FOOTING
STIFF	STIFFENER
STR	STRUCTURAL
SUP	SUPPORT
SYM	SYMMETRICAL
THK	THICK or THICKNESS
THRD	THREADED
T	TOP
T & B	TOP & BOTTOM
TOC	TOP OF CONCRETE
TOS	TOP OF STEEL
TOW	TOP OF WALL
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
UL	UPPER LAYER
V or VERT	VERTICAL
VEF	VERTICAL EACH FACE
VIF	VERTICAL INSIDE FACE
VOF	VERTICAL OUTSIDE FACE
WWF	WELDED WIRE FABRIC
W/	WITH
WP	WORKING POINT

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1	STEEL BID PACKAGE	01/09/04

Einhorn Yaffee Prescott
Architecture & Engineering P.C.
24 School Street
Boston, MA 02108
Telephone 617 305 9800
Fax 617 305 9888

eypae.com

EYP/

LeMessurier Consultants, Inc.
STRUCTURAL ENGINEERS
675 MASSACHUSETTS AVENUE
CAMBRIDGE, MASSACHUSETTS 02139–3309
TEL: (617)868–1200 FAX: (617)661–7520

UNIVERSITY OF SOUTHERN MAINE
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seal

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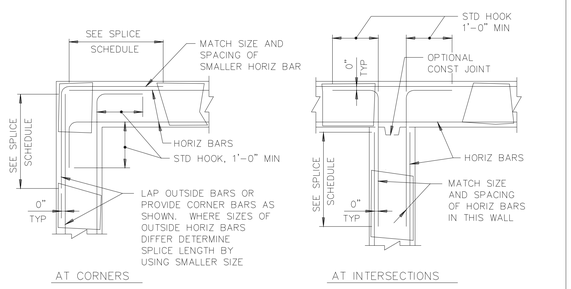
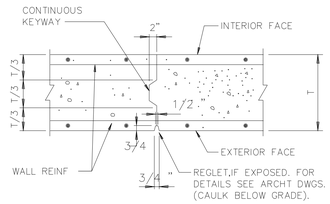
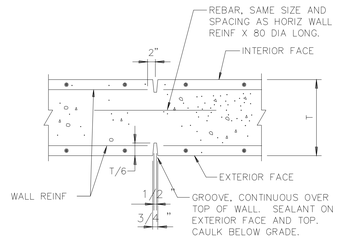


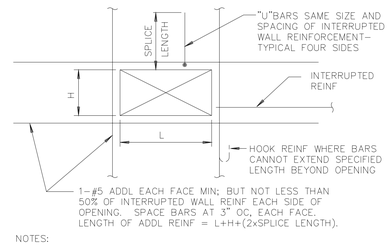
1 HORIZONTAL WALL REINFORCEMENT PLANS



2 VERTICAL CONSTRUCTION JOINT IN CONCRETE WALLS

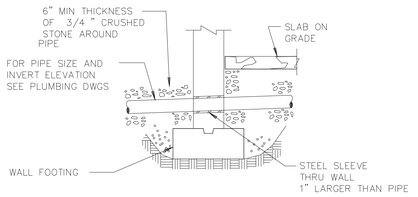


3 VERTICAL CONTROL JOINT IN CONCRETE WALLS



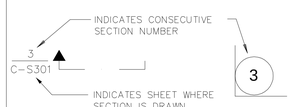
NOTES:
1. WALL OPENINGS SHALL BE COORDINATED AND DETAILED ON THE REINFORCEMENT SHOP DRAWINGS.

4 REINFORCEMENT AT OPENINGS IN REINFORCED CONCRETE WALLS

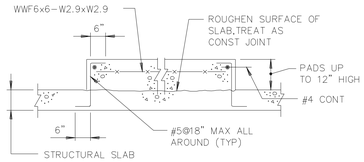


PIPE SHALL NOT PASS UNDER OR THRU WALL FOOTING. LOWER FOOTING BY STEPPING TO AVOID INTERFERENCE.

5 PIPE PENETRATION THRU EXTERIOR WALL

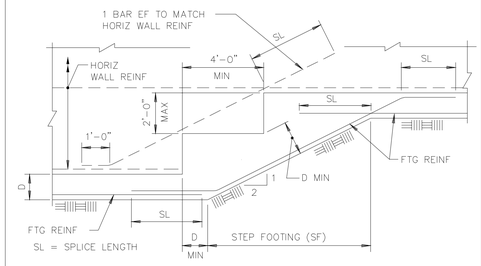


6 SECTION MARK EXPLANATION



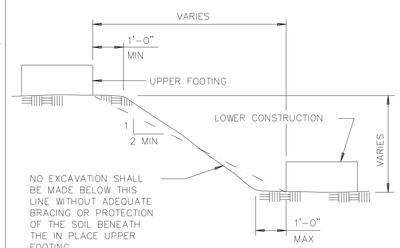
THE EXACT SIZE, SHAPE AND LOCATION OF EQUIPMENT (HOUSEKEEPING) PAD(S) SHALL BE DETERMINED BY THE CONTRACTOR AFTER APPROVAL OF SHOP DRAWINGS FOR EQUIPMENT. ANCHOR BOLTS WHERE REQUIRED SHALL BE SIZED AND LOCATED ACCORDING TO MANUFACTURER'S REQUIREMENTS.

7 CONCRETE EQUIPMENT PAD



SL = SPLICE LENGTH

8 ELEVATION OF STEPPED FOOTING AT FOUNDATION WALL



9 SLOPE BETWEEN FOOTING AND ADJACENT CONSTRUCTION

MINIMUM SPLICE AND EMBEDMENT LENGTH SCHEDULE
(UNLESS SHOWN OTHERWISE ON DRAWINGS)

CLASS B TENSION SPLICE — Fy=60000 PSI

f = 3000 PSI, NORMAL WEIGHT

BAR SIZE	TOP BARS CATEGORY 1	2	3	4	5	6	OTHER BARS CATEGORY 1	2	3	4	5	6
#3	21"	21"	21"	21"	21"	21"	16"	16"	16"	16"	16"	16"
#4	30"	28"	28"	28"	28"	28"	23"	22"	22"	22"	22"	22"
#5	46"	37"	35"	35"	35"	35"	36"	29"	27"	27"	27"	27"
#6	65"	52"	46"	42"	42"	42"	50"	40"	35"	32"	32"	32"
#7	89"	71"	63"	50"	49"	49"	69"	55"	48"	39"	38"	38"
#8	117"	94"	82"	66"	59"	56"	90"	72"	63"	51"	45"	43"
#9	148"	119"	104"	83"	74"	63"	114"	91"	80"	64"	57"	48"
#10	188"	151"	132"	106"	94"	76"	145"	116"	102"	81"	73"	58"
#11	231"	185"	162"	130"	116"	93"	178"	142"	125"	100"	89"	71"

f = 4000 PSI,NORMAL WEIGHT

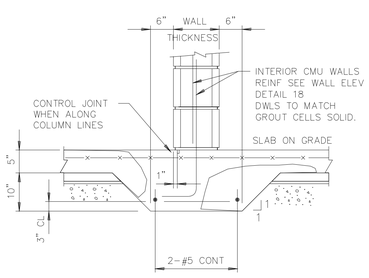
BAR SIZE	TOP BARS CATEGORY 1	2	3	4	5	6	OTHER BARS CATEGORY 1	2	3	4	5	6
#3	18"	18"	18"	18"	18"	18"	16"	16"	16"	16"	16"	16"
#4	26"	24"	24"	24"	24"	24"	20"	19"	19"	19"	19"	19"
#5	40"	32"	30"	30"	30"	30"	31"	25"	23"	23"	23"	23"
#6	57"	45"	40"	36"	36"	36"	44"	35"	31"	28"	28"	28"
#7	77"	62"	54"	43"	42"	42"	59"	48"	42"	33"	33"	33"
#8	102"	81"	71"	57"	51"	48"	78"	63"	55"	44"	39"	37"
#9	129"	103"	90"	72"	64"	55"	99"	79"	69"	56"	50"	42"
#10	163"	131"	114"	92"	82"	65"	126"	101"	88"	70"	63"	50"
#11	200"	160"	140"	112"	100"	80"	154"	123"	108"	86"	77"	62"

CATEGORY				
STRUCTURAL ELEMENT	CONCRETE COVER	CATEGORY ACCORDING TO CENTER-TO-CENTER BAR SPACING ≤3d_b	>3d_b <4d_b	≥4d_b <6d_b	≥6d_b
BEAMS, COLUMNS, AND INNER LAYER OF WALLS OR SLABS	≤d_b	1	1	1	2
	>d_b	1	3	5	6
ALL OTHERS	≤d_b	1	1	1	2
	>d_b <2d_b	1	3	3	4
	≥2d_b	1	3	5	6

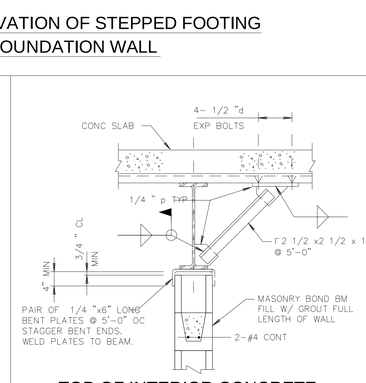
TYPICAL ABBREVIATIONS
d_b = NOMINAL BAR DIAMETER
> = GREATER THAN
≥ = EQUAL TO OR GREATER THAN
< = LESS THAN
≤ = EQUAL TO OR LESS THAN

1. AVOID SPLICES IN REGIONS OF MAXIMUM MOMENT. IF THIS IS NOT POSSIBLE STAGGER SPLICES SO THAT NOT MORE THAN 50% OF THE BARS ARE SPLICED WITHIN A REQUIRED SPLICE LENGTH OTHERWISE INCREASE SPLICE LENGTH BY 30%.
2. TOP BARS ARE DEFINED AS HORIZONTAL BARS WITH MORE THAN 12" OF CONCRETE CAST IN THE MEMBER BELOW THE REINFORCEMENT. WALL REINF IS CLASSIFIED AS OTHER BARS.
3. FOR LIGHTWEIGHT AGGREGATE CONCRETE MULTIPLY THE VALUES ABOVE BY 1.3.

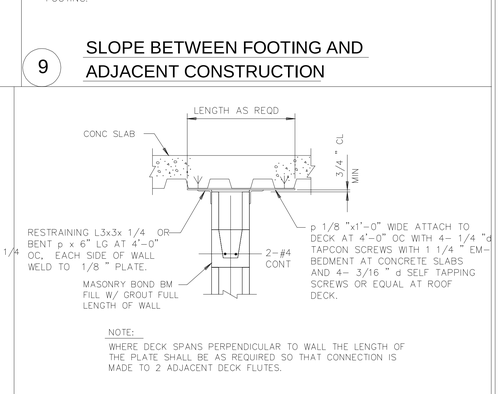
10



11 TRENCH FOOTING UNDER INTERIOR CONCRETE MASONRY PARTITIONS



12 TOP OF INTERIOR CONCRETE MASONRY PARTITION AT STEEL BEAM

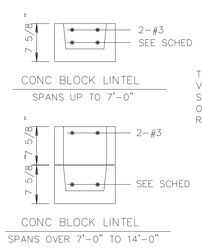


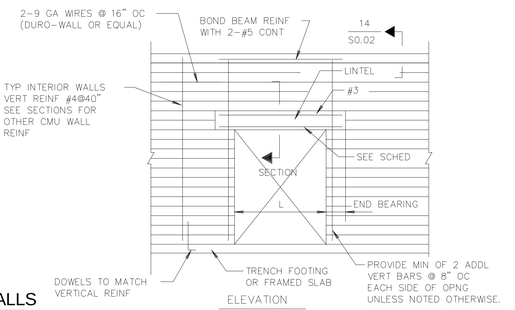
NOTE:
WHERE DECK SPANS PERPENDICULAR TO WALL THE LENGTH OF THE PLATE SHALL BE AS REQUIRED SO THAT CONNECTION IS MADE TO 2 ADJACENT DECK FLUTES.

13 TOP OF INTERIOR CONCRETE MASONRY PARTITION

CLEAR SPAN L	REINF IN LINTELS 6" WALL	8" WALL	10" WALL	12" WALL	END BEARING
UP TO 4'-0"	1-#5	2-#4	2-#4	2-#4	8"
TO 5'-0"	1-#5	2-#4	2-#4	2-#4	8"
TO 6'-0"	2-#5	2-#4	2-#5	2-#5	8"
TO 7'-0"	2-#5	2-#5	2-#6	2-#6	8"
TO 8'-0"	2-#5	2-#6	2-#7	3-#6	8"
TO 9'-0"	2-#6	3-#6	2-#8	3-#6	12"

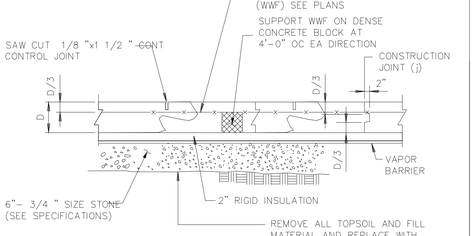
NOTES:
1. GROUT f'c = 3000 PSI
2. CMU f'm = 1500 PSI MIN



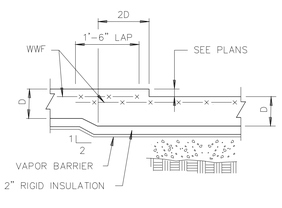


ELEVATION

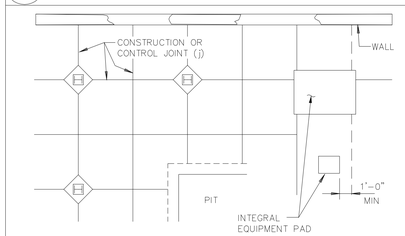
14 REINFORCED CONCRETE LINTELS FOR CONCRETE MASONRY WALLS



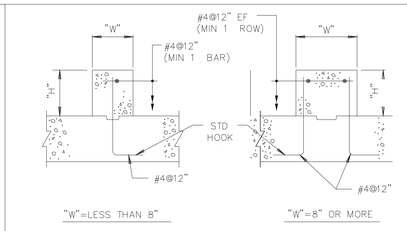
15 SLAB ON GRADE



16 SLAB ON GRADE AT DEPRESSION



17 LAYOUT OF CONTROL, AND CONSTRUCTION JOINTS IN CONCRETE SLABS ON GRADE



FOR CURB "W" AND "H" SEE ARCHT DWGS

18 CONCRETE CURB DETAIL

no.	revisions/submissions	date
2	GMP DOCUMENTS	01/19/04
1	STEEL BID PACKAGE	01/09/04

Einhorn Yaffee Prescott
Architecture & Engineering P.C.
24 School Street
Boston, MA 02108
Telephone 617 305 9800
Fax 617 305 9888
eypae.com

EYP/

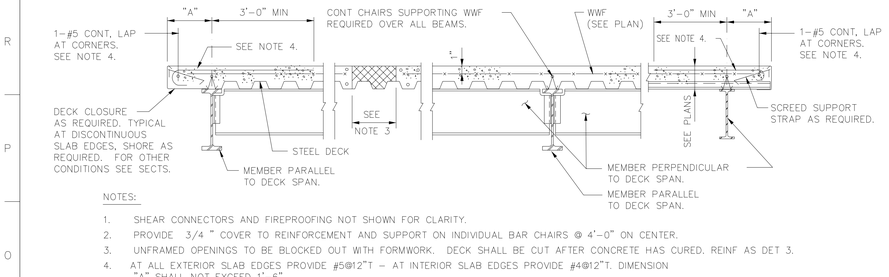
LeMessurier Consultants, Inc.
STRUCTURAL ENGINEERS
675 MASSACHUSETTS AVENUE
CAMBRIDGE, MASSACHUSETTS 02139-3309
TEL (617)868-1200 FAX (617)661-7520

UNIVERSITY OF SOUTHERN MAINE
COMMUNITY EDUCATION CENTER - PHASE 2
PORTLAND, MAINE

drawing title: TYPICAL DETAILS

seal

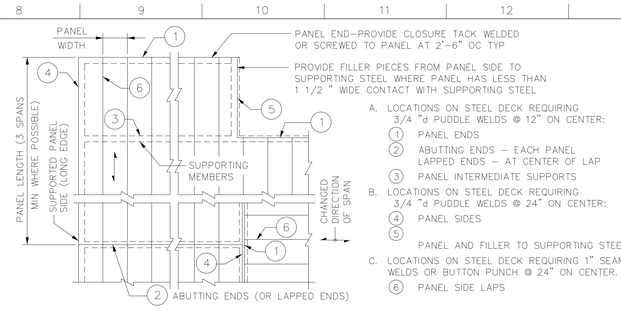
designed by SKH | project no. 5001024.00
drawn by EAM | CAD file no.
checked by AL | drawing no. C-S002
date 01 / 09 / 2004
scale NONE



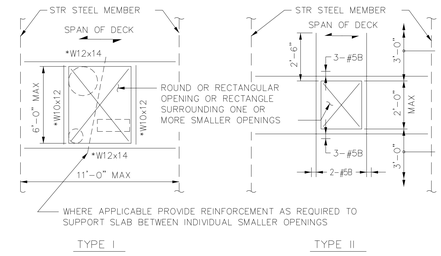
NOTES:

1. SHEAR CONNECTORS AND FIREPROOFING NOT SHOWN FOR CLARITY.
2. PROVIDE 3/4 " COVER TO REINFORCEMENT AND SUPPORT ON INDIVIDUAL BAR CHAIRS @ 4'-0" ON CENTER.
3. UNFRAMED OPENINGS TO BE BLOCKED OUT WITH FORMWORK. DECK SHALL BE CUT AFTER CONCRETE HAS CURED. REINF AS DET 3.
4. AT ALL EXTERIOR SLAB EDGES PROVIDE #5@12"T – AT INTERIOR SLAB EDGES PROVIDE #4@12"T. DIMENSION "A" SHALL NOT EXCEED 1'-6"

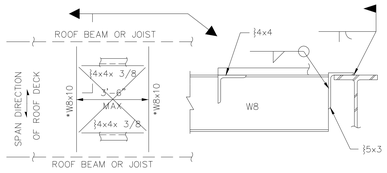
1 TYPICAL SECTION AT STEEL DECK SUPPORTED SLABS



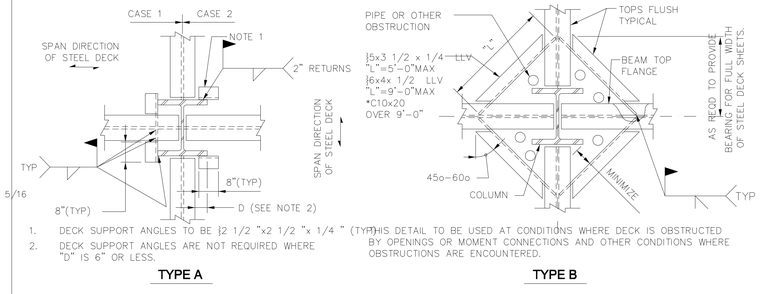
2 SCHEMATIC PLAN SHOWING TYPICAL CONNECTION OF STEEL DECK WITH CONCRETE (FOR ROOF DECK WITHOUT CONCRETE SEE SPECS FOR CONNECTION)



3 REINFORCEMENT AT OPENINGS IN SLABS WITH COMPOSITE STEEL DECK



4 FRAMING FOR OPENINGS IN STEEL ROOF DECK (NO CONCRETE)



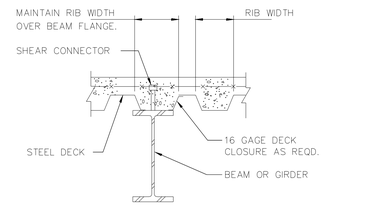
1. DECK SUPPORT ANGLES TO BE L2 1/2 "x2 1/2 "x 1/4 " (TYP)
2. DECK SUPPORT ANGLES ARE NOT REQUIRED WHERE "D" IS 6" OR LESS.

TYPE A

THIS DETAIL TO BE USED AT CONDITIONS WHERE DECK IS OBSTRUCTED BY OPENINGS OR MOMENT CONNECTIONS AND OTHER CONDITIONS WHERE OBSTRUCTIONS ARE ENCOUNTERED.

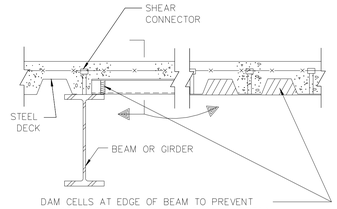
TYPE B

5 DECK SUPPORT AT COLUMNS AND OTHER OBSTRUCTIONS



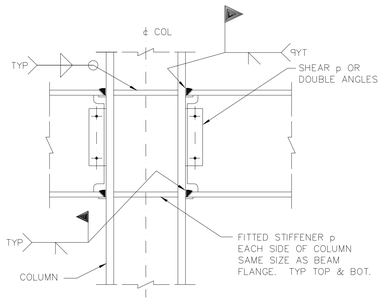
DECK MUST BE IN CONTACT WITH BEAM TO INSURE THAT FLANGE DOES NOT FALL UNDER HIGH CELL RESULTING IN UNBRACED BEAM.

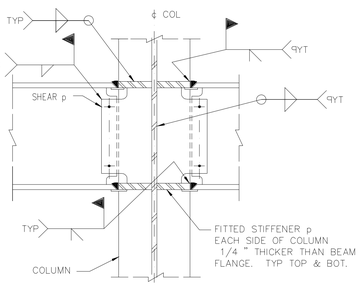
6 STEEL DECK SPANNING PARALLEL WITH STEEL BEAM



DAM CELLS AT EDGE OF BEAM TO PREVENT CONCRETE FROM ESCAPING, BUT MAKE CERTAIN THAT CONCRETE ENGAGES SHEAR CONNECTORS AND TOP FLANGE OF BEAM.

7 STEEL DECK DIRECTION CHANGE

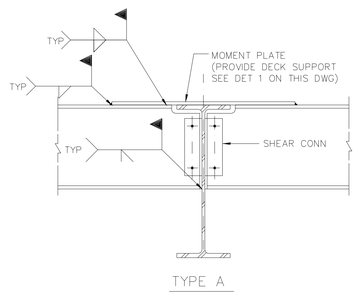


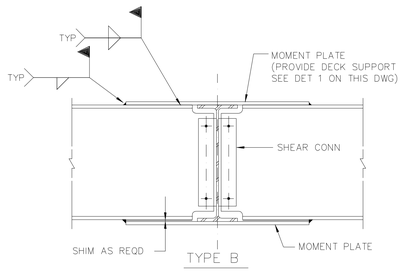


8 BEAM TO COLUMN MOMENT CONNECTION

⊖—⊣ SHOWN THUS ON PLAN

SHEAR CONNECTION SHALL BE DESIGNED FOR A MINIMUM OF THE END REACTIONS DERIVED FROM GENERAL NOTE E9 ON DRAWING S0.01 UNLESS NOTED OTHERWISE ON PLAN

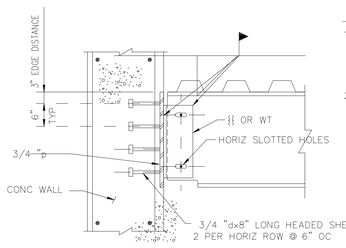




NOTES:

1. SHEAR CONNECTION SHALL BE DESIGNED FOR THE BEAM END REACTIONS.
2. DESIGN MOMENT PLATES FOR THE FULL MOMENT CAPACITY OF THE BEAM.

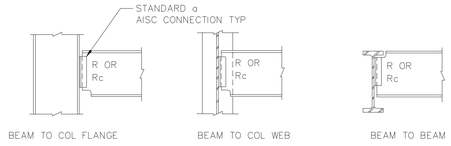
9 BEAM TO BEAM MOMENT CONNECTION



NOTES:

1. NUMBER OF STUDS SHALL BE 2 PER HORIZ ROW, UNO, AND TOTAL NUMBER OF STUDS SHALL NOT BE LESS THE FOLLOWING:
   W18 & W16 : 6 STUDS
   W14 & SMALLER : 4 STUDS
2. MINIMUM EDGE DISTANCE TO FREE EDGE IN DIRECTION OF SHEAR 8". MINIMUM EDGE DISTANCE TO FREE EDGE PARALLEL TO SHEAR 4".

10 TYPICAL BEAM SUPPORT AT CONCRETE WALLS



1. MINIMUM 2 BOLTS PER CONNECTION OR 8 KIPS CAPACITY.
2. FOR R AND Rc SEE GENERAL NOTES ON DRAWING S0.01.
3. PROVIDE ERECTION ANGLES AT ALL COLUMNS WHERE BEAM FRAMES INTO BOTH SIDES OF COLUMN WEB AND CONNECTION ANGLES ARE BOLTED TO COLUMN WEB IN FIELD. MIN ANGLE SIZE L4x4x 3/16 .

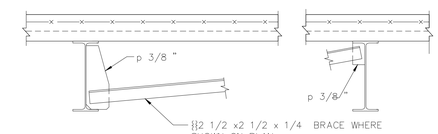
11 BEAM CONNECTION CONDITION

STEEL ANGLE LINTEL SCHEDULE
HOT DIP GALVANIZED

OPENING MASONRY OPENING	WALL THICKNESS		
	4" WALL	6" WALL	8" WALL
3'–0"	1–L3 1/2 x3 1/2 x 1/4 LLV	2–L3 1/2 x3 1/2 x 1/4 LLV	2–L3 1/2 x3 1/2 x 1/4
4'–0"	1–L4x3 1/2 x 1/4 LLV	2–L4x3 1/2 x 1/4 LLV	2–L4x3 1/2 x 1/4
5'–0"	1–L4x3 1/2 x 1/4 LLV	2–L4x3 1/2 x2 1/2 x 1/4 LLV	2–L5x3 1/2 x 1/4
6'–0"	1–L5x3 1/2 x 1/4 LLV	2–L5x3 1/2 x2 1/2 x 1/4 LLV	2–L5x3 1/2 x 1/4
8'–0"	1–L6x3 1/2 x 5/16 LLV	2–L6x3 1/2 x2 1/2 x 5/16 LLV	2–L6x3 1/2 x 3/8

1. PROVIDE AND INSTALL LINTEL ANGLES FOR MASONRY OPENINGS IN ACCORDANCE WITH THE SCHEDULE ABOVE. INSTALL LONG LEG VERTICAL. SEE ARCHT & MECH PLANS FOR LOCATIONS.
2. PROVIDE 6" MIN BEARING AT EACH END BUT NOT LESS THAN 1" PER FOOT OF SPAN. FILL 2 COURSES OF MASONRY BELOW BEARING WITH MORTAR.
3. WHERE MINIMUM BEARING CANNOT BE PROVIDED, ATTACH SECURELY TO ADJACENT STRUCTURAL MEMBERS OR PROVIDE SEPARATE SUPPORTS.
4. WHERE LINTELS OCCUR IN EXTERIOR WALLS MINIMUM LINTEL THICKNESS SHALL BE 5/16 ".

14



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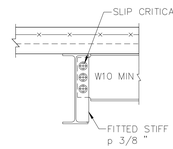
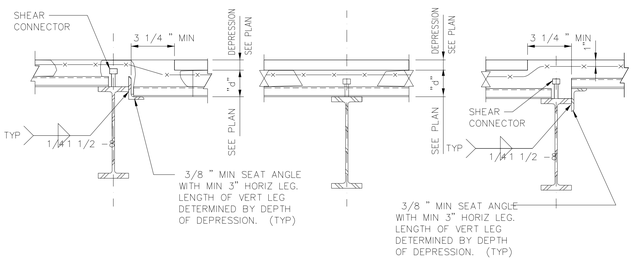


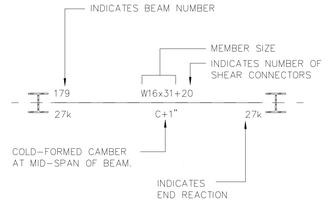
WHERE BEAM FRAMES INTO BRACING BEAM

SHEAR PLATE (SP)

16



12 STEEL DECK AT CHANGES IN SLAB ELEVATION OR SLAB THICKNESS



13 BEAM EXPLANATION DIAGRAM

no.	revisions/submissions	date
2	GMP DOCUMENTS	01/19/04
1	STEEL BID PACKAGE	01/09/04

Einhorn Yaffee Prescott
Architecture & Engineering P.C.
24 School Street
Boston, MA 02108
Telephone 617 305 9800
Fax 617 305 9888

eypae.com

EYP/

LeMessurier Consultants, Inc.
STRUCTURAL ENGINEERS
675 MASSACHUSETTS AVENUE
CAMBRIDGE, MASSACHUSETTS 02139–3309
TEL: (617)868–1200 FAX: (617)661–7520

UNIVERSITY OF SOUTHERN MAINE
COMMUNITY EDUCATION CENTER - PHASE 2
PORTLAND, MAINE

drawing title: TYPICAL DETAILS

seal

designed by SKH	project no. 5001024.00
drawn by EAM	CAD file no.
checked by AL	drawing no. C-S003
date 01 / 09 / 2004	
scale NONE	

USM – PARKING GARAGE & COMMUNITY EDUCATION CTR.
LEM #22125 A. LEWS/ N. MOAN
$LEMC–TIME–STAMP$

FOOTING SCHEDULE

ALLOWABLE BEARING PRESSURE 2.0 TONS PER SQ FT		
MARK	SIZE L x W x T	REINFORCEMENT
F1	4'-6"x4'-6"x1'-0"	7-#4B, EW
F2	5'-0"x5'-0"x1'-3"	5-#5B, EW
F3	5'-6"x5'-6"x1'-3"	6-#5B, EW
F4	6'-0"x6'-0"x1'-6"	6-#6B, EW
F5	6'-6"x6'-6"x1'-6"	6-#6B, EW
F6	7'-0"x7'-0"x1'-9"	7-#6B, EW
F7	7'-6"x7'-6"x1'-9"	6-#7B, EW
F8	8'-0"x8'-0"x2'-0"	9-#6B, EW
F9	8'-6"x8'-6"x2'-0"	10-#6B, EW
F10	SEE PLAN x 3'-0"x1'-2"	3-#5T&B, LB #4@12" ⌜⌟
F11	3'-0"x3'-0"x1'-0"	4-#4B, EW

NOTES:

1. FOOTINGS SHALL BE CENTERED UNDER COLUMNS AND (OR) GRIDS EXCEPT WHERE OTHERWISE DIMENSIONED ON PLAN.
2. LB INDICATES LONG BARS. SB INDICATES SHORT BARS.

NOTES (FOUNDATION AND BASEMENT):

1. FOR GENERAL NOTES AND ABBREVIATIONS SEE DRAWING C-S001. FOR TYPICAL DETAILS SEE DRAWING C-S002 & C-S003.
2. FOR COLUMN SCHEDULE AND DETAILS SEE DRAWING C-S201.
   ⊟ INDICATES COLUMN STARTS.
3. F2, ETC, INDICATES FOOTING TYPE, SEE SCHEDULE THIS DRAWING.
4. (28'-0"), ETC, INDICATES BOTTOM OF FOOTING ELEVATION. <18'-2"> INDICATES EXIST BOTTOM OF FDN ELEVATION.
5. TOP OF WALL FOOTINGS TO MATCH TOP OF COLUMN FOOTINGS. SF INDICATES STEPPED FOOTING, SEE DETAIL 8 ON DRAWING C-S002.
6. BR-1, ETC, INDICATES BRACING, FOR ELEVATIONS, MEMBER SIZES AND DETAILS SEE DRAWING C-S202.
7. P INDICATES PIER, SEE DETAIL 7 ON DRAWING C-S301.

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2	GMP DOCUMENTS	01/19/04
1	STEEL BID PACKAGE	01/09/04

Einhorn Yaffee Prescott
Architecture & Engineering P.C.
24 School Street
Boston, MA 02108
Telephone 617 305 9800
Fax 617 305 9888

eypae.com

EYP/

LeMessurier Consultants, Inc.
STRUCTURAL ENGINEERS
675 MASSACHUSETTS AVENUE
CAMBRIDGE, MASSACHUSETTS 02139-3309
TEL: (617)868-1200 FAX: (617)661-7520

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drawing title: FOUNDATION AND BASEMENT PLAN

seal	
designed by SKH	project no. 5001024.00
drawn by EAM	CAD file no.
checked by AL	drawing no. C-S100
date 01 / 09 / 2004	
scale 1/8"=1'-0"	

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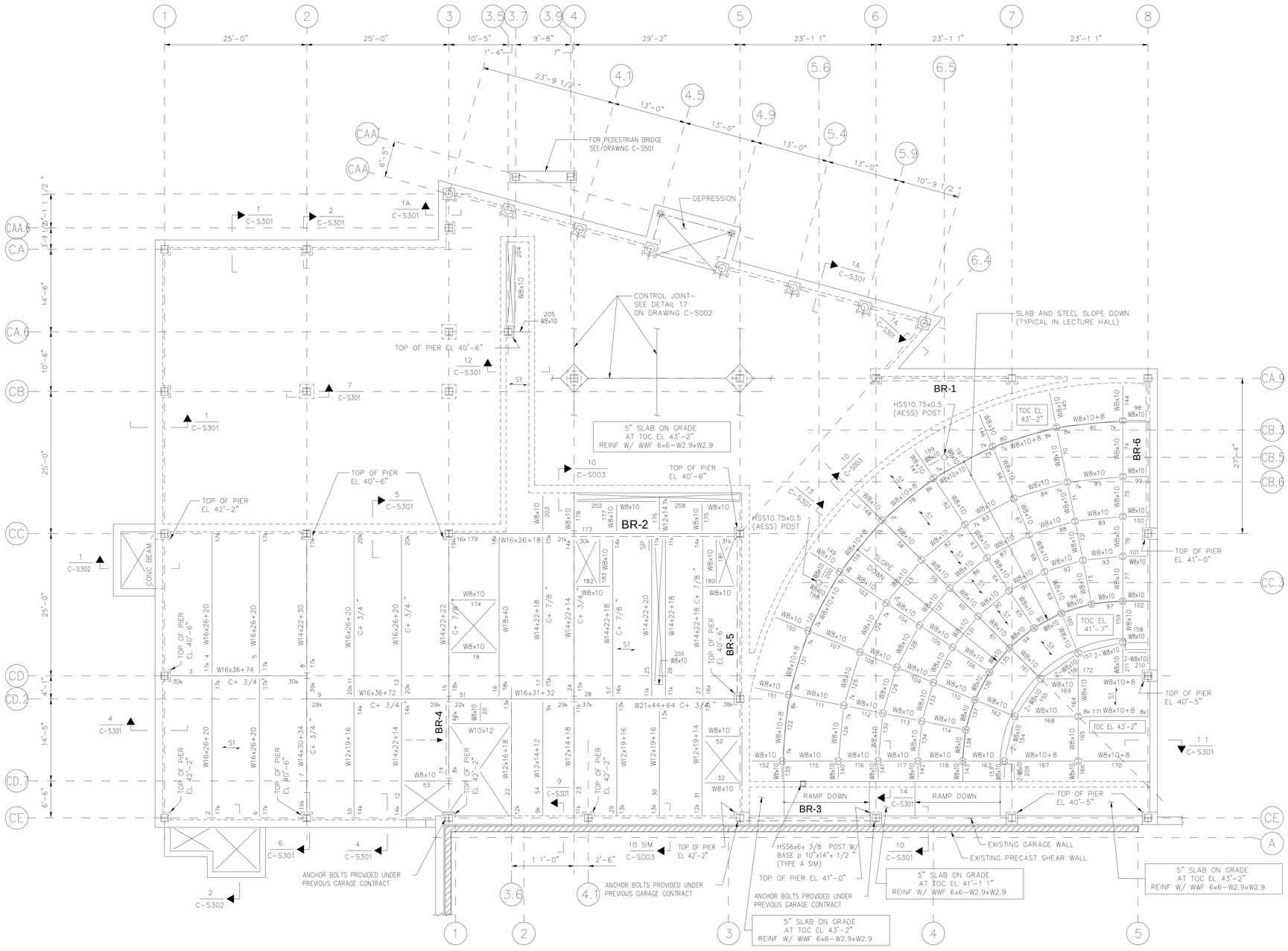

NOTES (GENERAL):

1. FOR GENERAL NOTES AND ABBREVIATIONS SEE DRAWING C-S001. FOR TYPICAL DETAILS SEE DRAWING C-S002 & C-S003.
2. FOR COLUMN SCHEDULE AND DETAILS SEE DRAWING C-S201.
   - INDICATES COLUMN STARTS.
   - INDICATES CONTINUOUS COLUMN.
   - INDICATES COLUMN STOPS.
3. INDICATES SPAN DIRECTION OF STEEL DECK.
4. INDICATES MOMENT CONNECTION, FOR DETAILS SEE DRAWING C-S003.
5. BR-1, ETC., INDICATES BRACING, FOR ELEVATIONS, MEMBER SIZES AND DETAILS SEE DRAWING C-S202.
6. INDICATES DOUBLE ANGLE BRACE WHERE SHOWN ON PLAN, SEE DETAIL 15 ON DRAWING C-S003.

   SP INDICATES SHEAR PLATE DETAIL. SEE DETAIL 16 ON C-S003.
7. AESS INDICATES STEEL MEMBER THAT SHALL CONFORM TO AISC "ARCHITECTURALLY EXPOSED STRUCTURAL STEEL".
8. FOR BEAM EXPLANATION DIAGRAM SEE DRAWING C-S003.
9. BEAMS ARE EQUALLY SPACED BETWEEN COLUMNS UNLESS NOTED OTHERWISE.

NOTES (FIRST FLOOR):

1. S1 INDICATES SLAB CONSTRUCTION SHALL BE 3 1/4 " LIGHTWEIGHT CONCRETE ON 2" DEEP, 19 GAGE COMPOSITE STEEL DECK. TOTAL THICKNESS = 5 1/4 ". REINFORCE SLAB WITH WWF 6x6-W2.9xW2.9.
2. TOP OF STRUCTURAL SLAB AT EL 43'-2" TOP OF STRUCTURAL STEEL AT EL 42'-8 3/4 ", UNLESS NOTED (+) OR (-) ON PLAN.
3. P INDICATES PIER, SEE DETAIL 7 ON DRAWING C-S301.

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2	GMP DOCUMENTS	01/19/04
1	STEEL BID PACKAGE	01/09/04

Einhorn Yaffee Prescott
Architecture & Engineering P.C.
24 School Street
Boston, MA 02108
Telephone 617 305 9800
Fax 617 305 9888

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LeMessurier Consultants, Inc.
STRUCTURAL ENGINEERS
675 MASSACHUSETTS AVENUE
CAMBRIDGE, MASSACHUSETTS 02139-3309
TEL (617)868-1200 FAX (617)661-7520

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drawing title: FIRST FLOOR FRAMING PLAN

seal

designed by SKH	project no. 5001024.00
drawn by EAM	CAD file no.
checked by AL	drawing no. C-S101
date 01 / 09 / 2004	
scale 1/8"=1'-0"	

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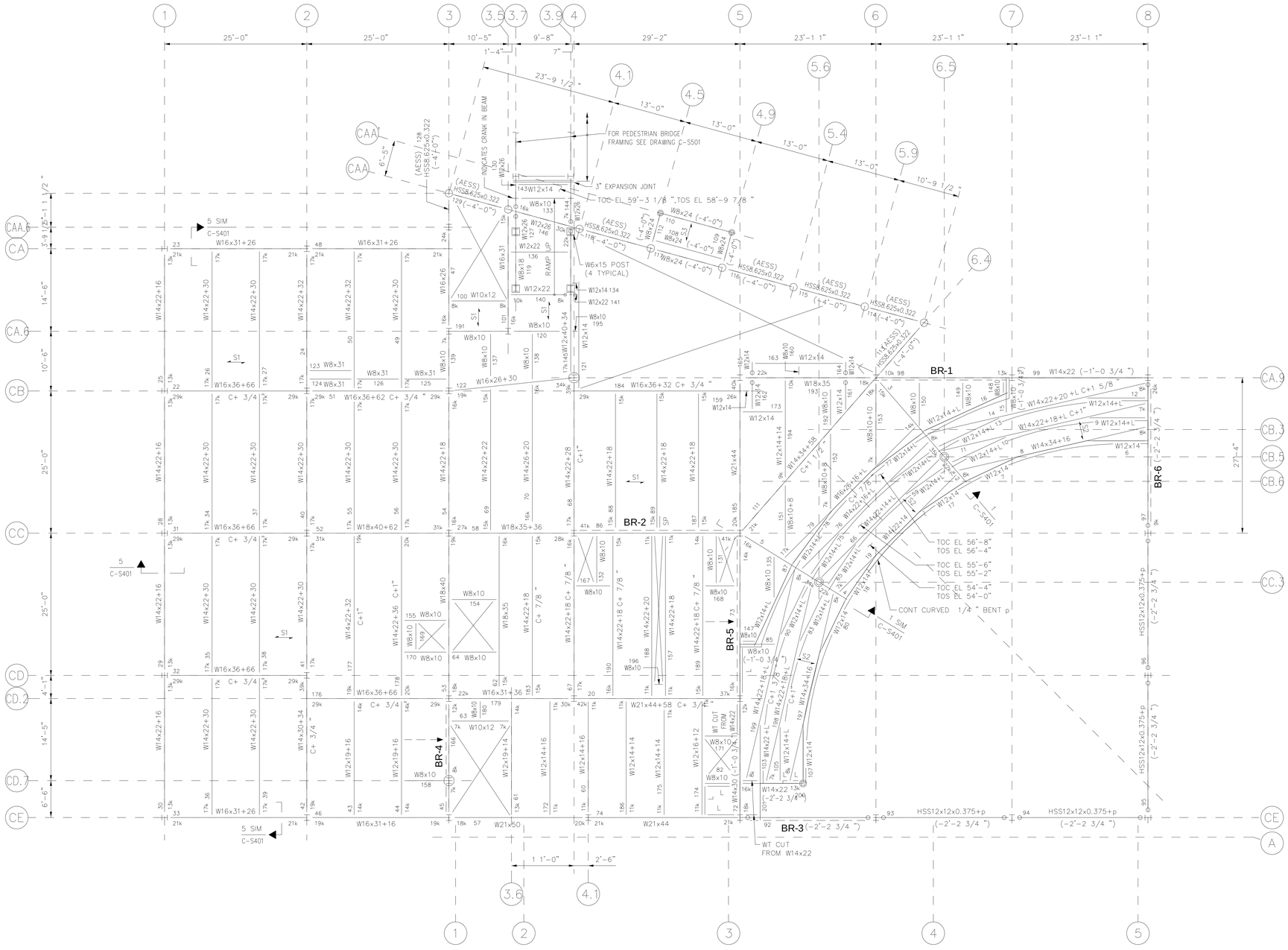

NOTES (GENERAL):

1. FOR GENERAL NOTES AND ABBREVIATIONS SEE DRAWING C-S001. FOR TYPICAL DETAILS SEE DRAWING C-S002 & C-S003.
2. FOR COLUMN SCHEDULE AND DETAILS SEE DRAWING C-S201.
   - ⊟ INDICATES COLUMN STARTS.
   - ⊢ INDICATES CONTINUOUS COLUMN.
   - (⊣) INDICATES COLUMN STOPS.
3. ←• INDICATES SPAN DIRECTION OF STEEL DECK.
4. ⊖—| INDICATES MOMENT CONNECTION, FOR DETAILS SEE DRAWING C-S003.
5. BR-1, ETC., INDICATES BRACING, FOR ELEVATIONS, MEMBER SIZES AND DETAILS SEE DRAWING C-S202.
6. – – → INDICATES DOUBLE ANGLE BRACE WHERE SHOWN ON PLAN, SEE DETAIL 15 ON DRAWING C-S003.
   SP INDICATES SHEAR PLATE DETAIL. SEE DETAIL 16 ON C-S003.
7. AESS INDICATES STEEL MEMBER THAT SHALL CONFORM TO AISC "ARCHITECTURALLY EXPOSED STRUCTURAL STEEL".
8. FOR BEAM EXPLANATION DIAGRAM SEE DRAWING C-S003.
9. BEAMS ARE EQUALLY SPACED BETWEEN COLUMNS UNLESS NOTED OTHERWISE.

NOTES (SECOND FLOOR):

1. S1 INDICATES SLAB CONSTRUCTION SHALL BE 3 1/4" LIGHTWEIGHT CONCRETE ON 2" DEEP, 19 GAGE COMPOSITE STEEL DECK. TOTAL THICKNESS = 5 1/4", REINFORCE SLAB WITH WWF 6x6–W2.9xW2.9, TYPICAL UNLESS NOTED OTHERWISE.
   - INDICATES AREA WHERE SLAB CONSTRUCTION SHALL BE 2" LIGHTWEIGHT CONCRETE ON 2" DEEP, 19 GAGE COMPOSITE STEEL DECK. TOTAL THICKNESS = 4". REINFORCE SLAB WITH WWF 6x6–W2.9xW2.9.
   - S3 INDICATES AREA WHERE ROOF CONSTRUCTION SHALL BE 1 1/2" DEEP, 20 GA. ROOF DECK.
2. TOP OF STRUCTURAL SLAB AT EL 57'–10" TOP OF STRUCTURAL STEEL AT EL 57'–4 3/4", UNLESS NOTED (+) OR (–) ON PLAN.
3. L INDICATES L3x3x 1/4 DECK SUPPORT ANGLE.

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Einhorn Yaffee Prescott
Architecture & Engineering P.C.
24 School Street
Boston, MA 02108
Telephone 617 305 9800
Fax 617 305 9888

eypae.com

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LeMessurier Consultants, Inc.
STRUCTURAL ENGINEERS
675 MASSACHUSETTS AVENUE
CAMBRIDGE, MASSACHUSETTS 02139–3309
TEL: (617)868–1200 FAX: (617)661–7520

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drawing title: SECOND FLOOR FRAMING PLAN

seal

designed by SKH	project no. 5001024.00
drawn by EAM	CAD file no.
checked by AL	drawing no. C-S102
date 01 / 09 / 2004	
scale 1/8"=1'-0"	

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NOTES (GENERAL):

1. FOR GENERAL NOTES AND ABBREVIATIONS SEE DRAWING C-S001.
   FOR TYPICAL DETAILS SEE DRAWING C-S002 & C-S003.
2. FOR COLUMN SCHEDULE AND DETAILS SEE DRAWING C-S201.
   - INDICATES COLUMN STARTS.
   - INDICATES CONTINUOUS COLUMN.
   - INDICATES COLUMN STOPS.
3. INDICATES SPAN DIRECTION OF STEEL DECK.
4. INDICATES MOMENT CONNECTION, FOR DETAILS SEE DRAWING C-S003.
5. BR-1, ETC., INDICATES BRACING, FOR ELEVATIONS, MEMBER SIZES AND DETAILS SEE DRAWING C-S202.
6. INDICATES DOUBLE ANGLE BRACE WHERE SHOWN ON PLAN, SEE DETAIL 15 ON DRAWING C-S003.

   SP INDICATES SHEAR PLATE DETAIL. SEE DETAIL 16 ON C-S003.
7. AESS INDICATES STEEL MEMBER THAT SHALL CONFORM TO AISC "ARCHITECTURALLY EXPOSED STRUCTURAL STEEL".
8. FOR BEAM EXPLANATION DIAGRAM SEE DRAWING C-S003.
9. BEAMS ARE EQUALLY SPACED BETWEEN COLUMNS UNLESS NOTED OTHERWISE.

NOTES (ROOF LEVEL):

1. S3 INDICATES ROOF CONSTRUCTION SHALL BE 1 1/2 " DEEP, 20 GA, ROOF DECK, TYPICAL UNLESS NOTED OTHERWISE.
2. INDICATES AREA WHERE SLAB CONSTRUCTION SHALL BE 2" LIGHTWEIGHT CONCRETE ON 1 1/2 " DEEP, 20 GA, COMPOSITE STEEL DECK. TOTAL THICKNESS = 3 1/2 ". REINF SLAB WITH WWF 6x6-W2.9xW2.9.
3. TOP OF STRUCTURAL STEEL REFERENCE EL 72'-4 1/2 ".

   [-7"], ETC, INDICATES DISTANCE FROM REFERENCE ELEVATION TO TOP OF STEEL OF ALL BEAMS FRAMING INTO COLUMN UNLESS NOTED OTHERWISE ("X").

   TOP OF STEEL FILLER BEAM ELEVATION SHALL BE FLUSH WITH GIRDERS, UNLESS NOTED OTHERWISE ("X").

no.	revisions/submissions	date
2	GMP DOCUMENTS	01/19/04
1	STEEL BID PACKAGE	01/09/04

Einhorn Yaffee Prescott
Architecture & Engineering P.C.
24 School Street
Boston, MA 02108
Telephone 617 305 9800
Fax 617 305 9888

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LeMessurier Consultants, Inc.
STRUCTURAL ENGINEERS
675 MASSACHUSETTS AVENUE
CAMBRIDGE, MASSACHUSETTS 02139-3309
TEL: (617)868-1200 FAX: (617)661-7520

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PORTLAND, MAINE

drawing title: ROOF FRAMING PLAN

seal	designed by SKH	project no. 5001024.00
	drawn by EAM	CAD file no.
	checked by AL	drawing no. C-S103
	date 01 / 09 / 2004	
	scale 1/8"=1'-0"	

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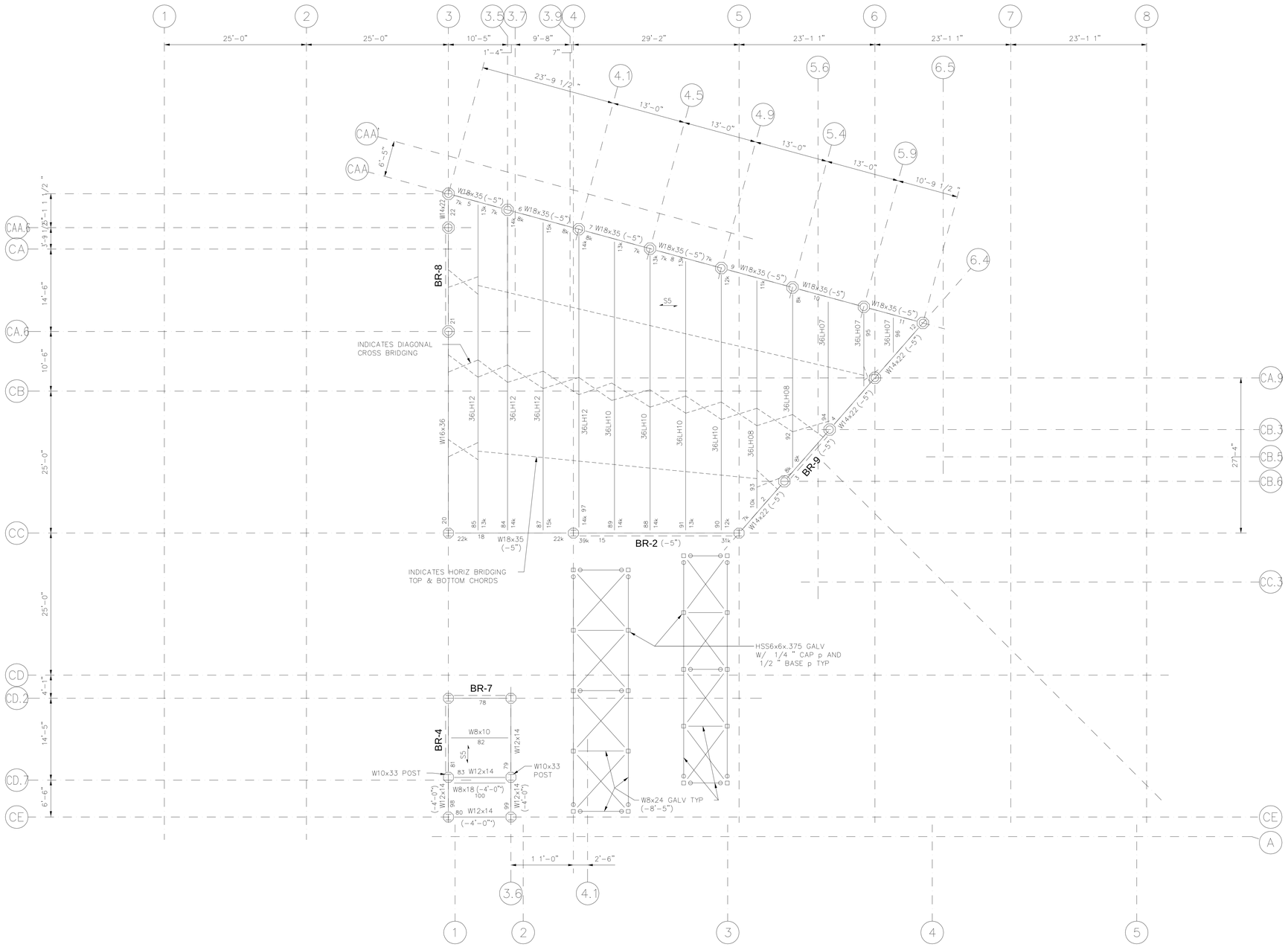

NOTES (GENERAL):

1. FOR GENERAL NOTES AND ABBREVIATIONS SEE DRAWING C-S001.
   FOR TYPICAL DETAILS SEE DRAWING C-S002 & C-S003.
2. FOR COLUMN SCHEDULE AND DETAILS SEE DRAWING C-S201.
   - H — INDICATES COLUMN STARTS.
   - H — INDICATES CONTINUOUS COLUMN.
   - (H) — INDICATES COLUMN STOPS.
3. ←→ INDICATES SPAN DIRECTION OF STEEL DECK.
4. ⊖—| INDICATES MOMENT CONNECTION, FOR DETAILS SEE DRAWING C-S003.
5. BR-1, ETC., INDICATES BRACING, FOR ELEVATIONS, MEMBER SIZES AND DETAILS SEE DRAWING C-S202.
6. – – → INDICATES DOUBLE ANGLE BRACE WHERE SHOWN ON PLAN, SEE DETAIL 15 ON DRAWING C-S003.
   SP INDICATES SHEAR PLATE DETAIL. SEE DETAIL 16 ON C-S003.
7. AESS INDICATES STEEL MEMBER THAT SHALL CONFORM TO AISC "ARCHITECTURALLY EXPOSED STRUCTURAL STEEL".
8. FOR BEAM EXPLANATION DIAGRAM SEE DRAWING C-S003.
9. BEAMS ARE EQUALLY SPACED BETWEEN COLUMNS UNLESS NOTED OTHERWISE.

NOTES (HIGH ROOF LEVEL):

1. S5 ←→ INDICATES ROOF CONSTRUCTION SHALL BE 1 1/2 " DEEP, 18 GA. ROOF DECK.
2. TOP OF STRUCTURAL STEEL REFERENCE EL 83'-5".
   [-6"], ETC. INDICATES DISTANCE FROM REFERENCE ELEVATION TO TOP OF STEEL OF ALL BEAMS FRAMING INTO COLUMN UNLESS NOTED OTHERWISE ("x").
   TOP OF STEEL FILLER BEAM ELEVATION SHALL BE FLUSH WITH GIRDERS, UNLESS NOTED OTHERWISE ("x").
3. COORDINATE ALL DIMENSIONS WITH EQUIPMENT MANUFACTURER BEFORE FABRICATING STRUCTURAL STEEL DUNNAGE.

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2	GMP DOCUMENTS	01/19/04
1	STEEL BID PACKAGE	01/09/04

Einhorn Yaffee Prescott
Architecture & Engineering P.C.
24 School Street
Boston, MA 02108
Telephone 617 305 9800
Fax 617 305 9888

eypae.com

LeMessurier Consultants, Inc.
STRUCTURAL ENGINEERS
675 MASSACHUSETTS AVENUE
CAMBRIDGE, MASSACHUSETTS 02139-3309
TEL: (617)868-1200 FAX: (617)661-7520

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drawing title: HIGH ROOF FRAMING PLAN

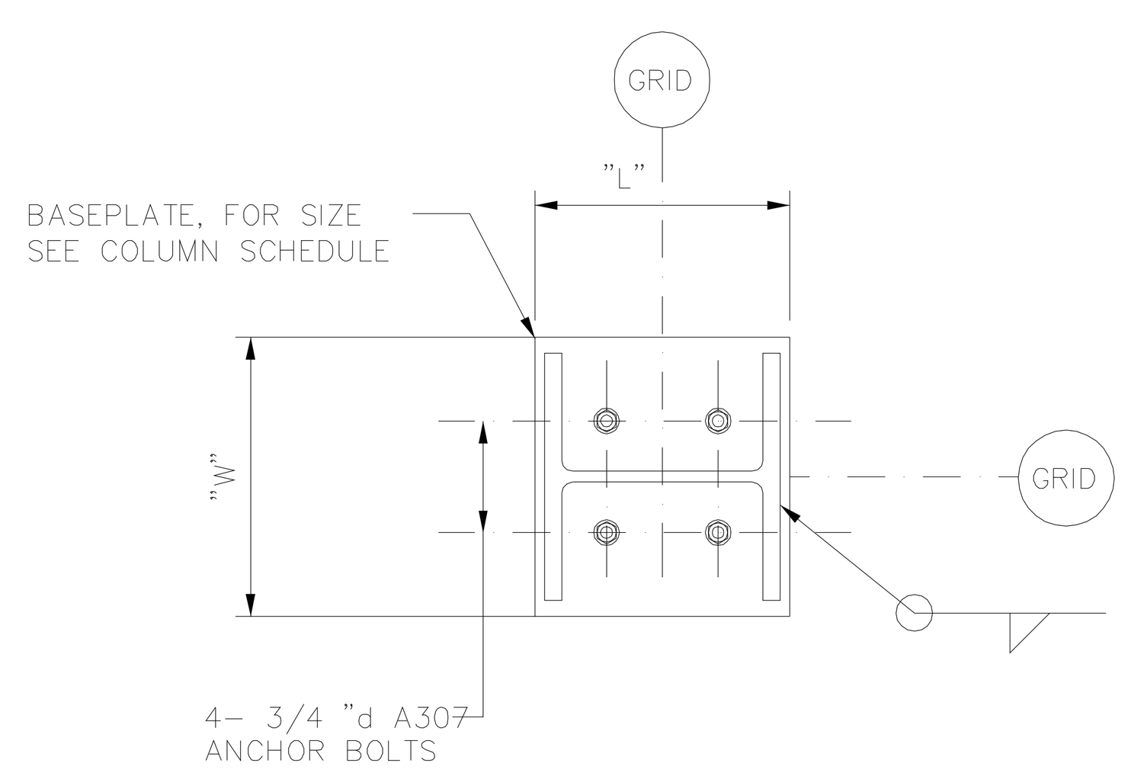
seal	designed by SKH	project no. 5001024.00
	drawn by EAM	CAD file no.
	checked by AL	drawing no. C-S104
	date 01 / 09 / 2004	
	scale 1/8"=1'-0"	

COLUMN SCHEDULE

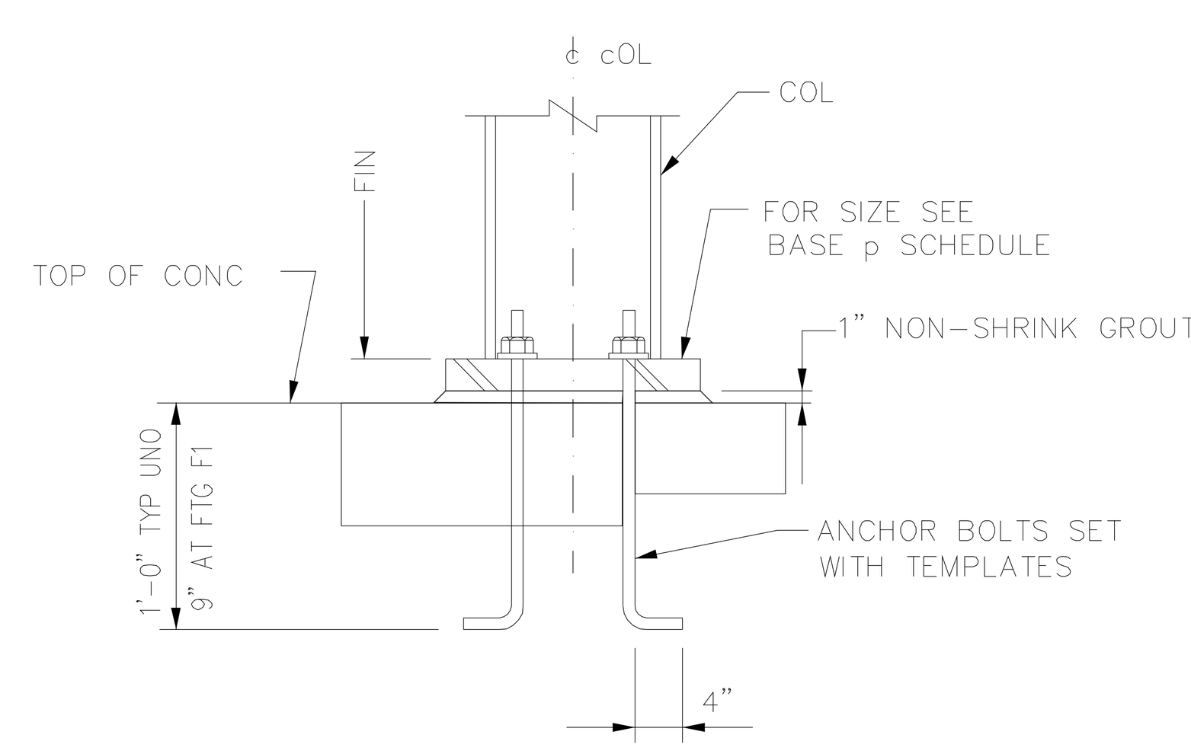
MARK	ROOF	2ND FLOOR	1ST FLOOR	1ST FLR PIER	BASEMENT	BASEPLATES TYPE	BASEPLATES SIZE WxLxT
CAA' 4.5			HSS6.625x0.280 (AESS) p=12k			A SIM	10x14x 1/2
CAA' 4.9			HSS6.625x0.280 (AESS) p=12k			A SIM	10x14x 1/2
CAA 3		HSS16x0.375 (AESS)	p=12k			A SIM	20x24x1
CAA 3.5		HSS16x0.375 (AESS)	p=73k			A SIM	20x24x1
CAA 4.1		HSS16x0.375 (AESS)	p=67k			A SIM	20x24x1
CAA 4.5		HSS16x0.375 (AESS)	p=32k			A SIM	20x24x1
CAA 4.9		HSS16x0.375 (AESS)	p=30k			A SIM	20x24x1
CAA 5.4		HSS16x0.375 (AESS)	p=19k			A SIM	20x24x1
CAA 5.9		HSS16x0.375 (AESS)	p=10k			A SIM	20x24x1
CAA 6.4		HSS16x0.375 (AESS)	p=4k			A SIM	20x24x1
CAA.6 3	HSS16x0.375 (AESS)	W10x49	p=59k			A	12x12x1
CA 1			W10x33 p=61k			A	10x12x1
CA 2			W10x39 p=92k			A	10x12x1
CA.6 3	HSS16x0.375 (AESS)	W10x33	p=45k			A	10x12x 3/4
CA.6 3.5			W10x33	p=31k		A	10x12x 3/4
CA.9 4			W10x33 p=62k			A	10x12x1
CA.9 5			W10x33 p=65k			A	10x12x1
CA.9 6	HSS16x0.375 (AESS)	W10x49	p=189k			B	20x20x2
CA.9 7			W10x49 p=119k			B	20x20x2
CA.9 8			W10x49 p=73k			B	20x20x2
CB 1			W10x33 p=91k			A	10x12x1
CB 2			W10x45 p=123k			A	10 1/2 x12 1/2 x1 1/4
CB 3			W10x39 p=98k			A	10x12x1 1/4
CB.3 6.4	HSS16x0.375 (AESS) p=11k					--	
CB.5 6.5			HSS10x0.375 (AESS)		p=51k	A SIM	14x18x 3/4
CB.6 6.4	HSS16x0.375 (AESS) p=13k					--	
CC 1			W10x33 p=91k			A	10x12x1
CC 2			W10x45	p=134k		A	10 1/2 x12 1/2 x1 1/4
CC 3		W10x49		p=185k		A	12x12x1 1/2
CC 4			W10x49		p=260k	B	20x20x2
CC 5		W10x49		p=256k		B	20x20x2
CC 8			W14x90 p=25k			B	24x24x2
CC.3 5.6			HSS10x0.375 (AESS)		p=43k	A SIM	14x18x 3/4
CD 1			W10x33	p=114k		A	10x12x1 1/4
CD 2			W10x45		p=178k	A	10 1/2 x12 1/2 x1 1/2
CD 8			W14x90	p=25k		B	24x24x2
CD.2 3			W10x49		p=199k	B	20x20x2
CD.2 3.6	W10x33 p=7k					--	
CD.2 4			W10x49		p=249k	A	12x12x1 3/4
CD.2 5			W10x49	p=162k		B	20x20x2
CD.7 3			W10x49		p=31k	B	20x20x2
CE 1			W10x33 p=61k			A	10x12x1
CE 2			W10x39	p=109k		A	10x12x1 1/4
CE 3		W10x49	p=97k			B	20x20x2
CE 3.6	W10x33 p=6k					--	
CE 4.1			W10x33 p=90k			A	10x12x1
CE 5			W10x49 p=92k			B	20x20x2
CE 6			W14x90 p=107k			B	24x24x2
CE 7			W14x90 p=105k			B	24x24x2
CE 8			W14x90 p=49k			B	24x24x2

BASEPLATES Fy=36 (UNO)

NOTE:
AESS INDICATES STEEL MEMBER THAT SHALL CONFORM TO AISC "ARCHITECTURALLY EXPOSED STRUCTURAL STEEL".

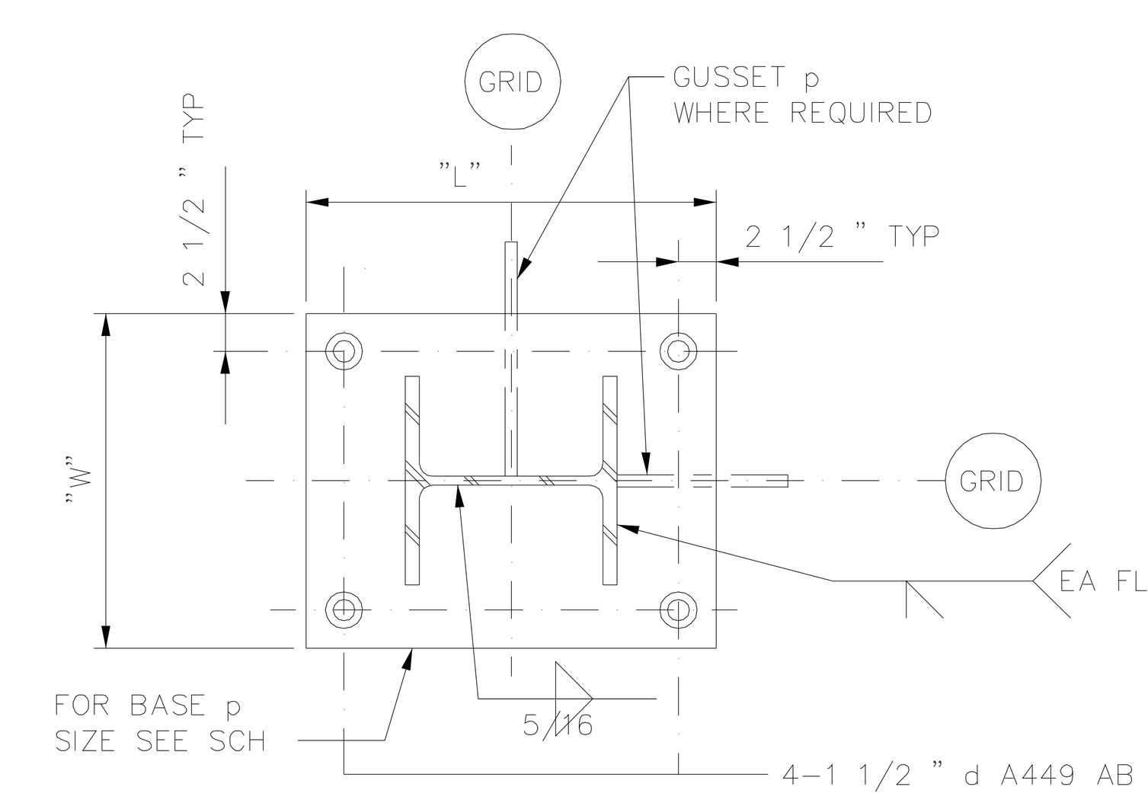


PLAN DETAIL

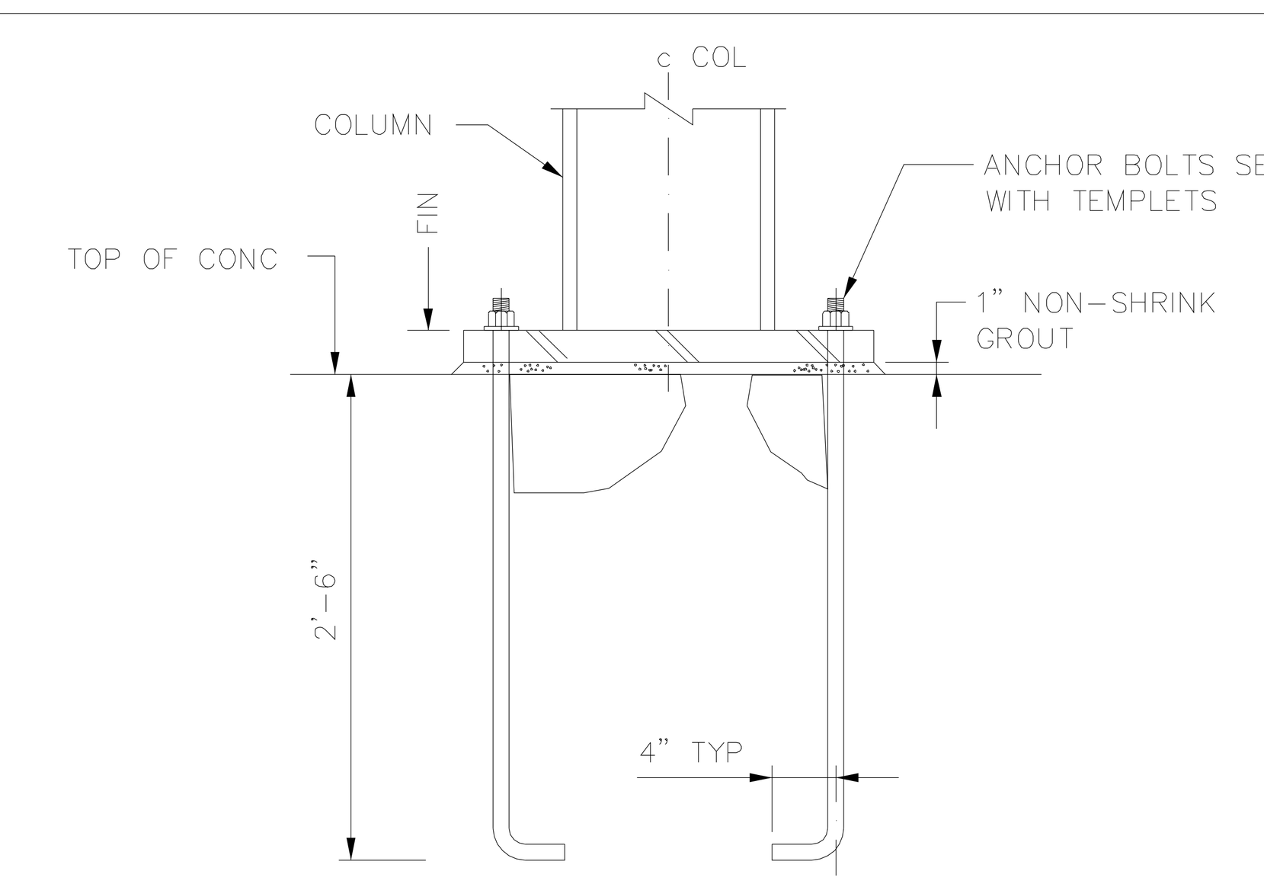


ELEVATION

1 BASEPLATE TYPE "A"

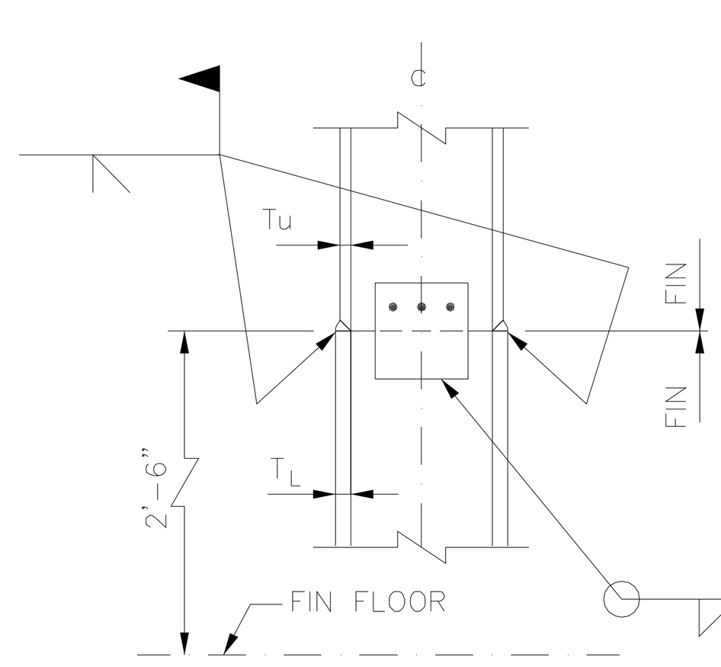


PLAN DETAIL



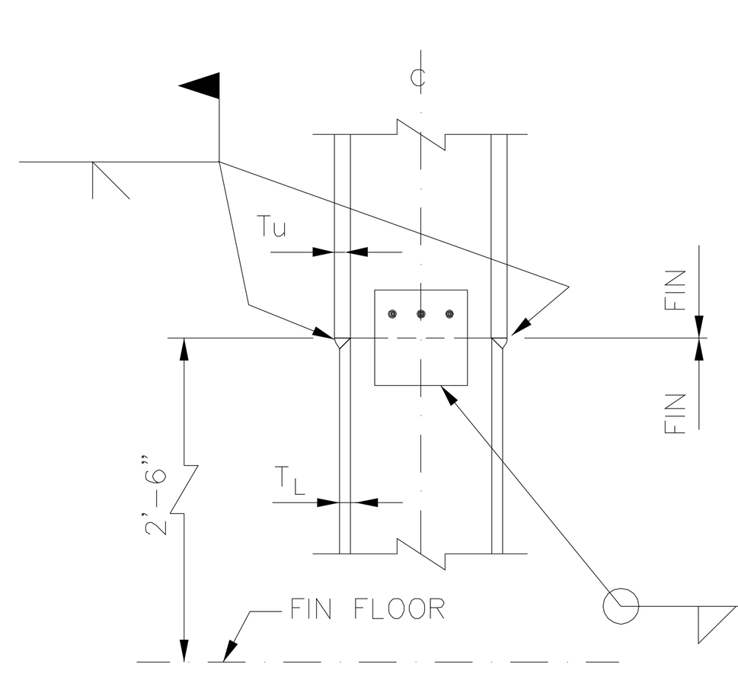
ELEVATION

2 BASEPLATE TYPE "B"



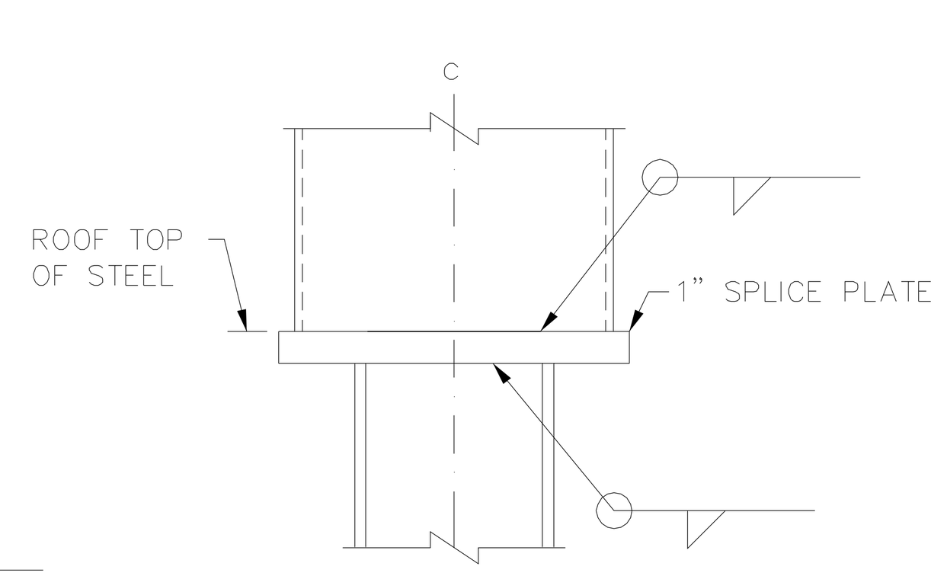
CASE A

WHERE Tu ≤ T L



CASE B

WHERE Tu > T L

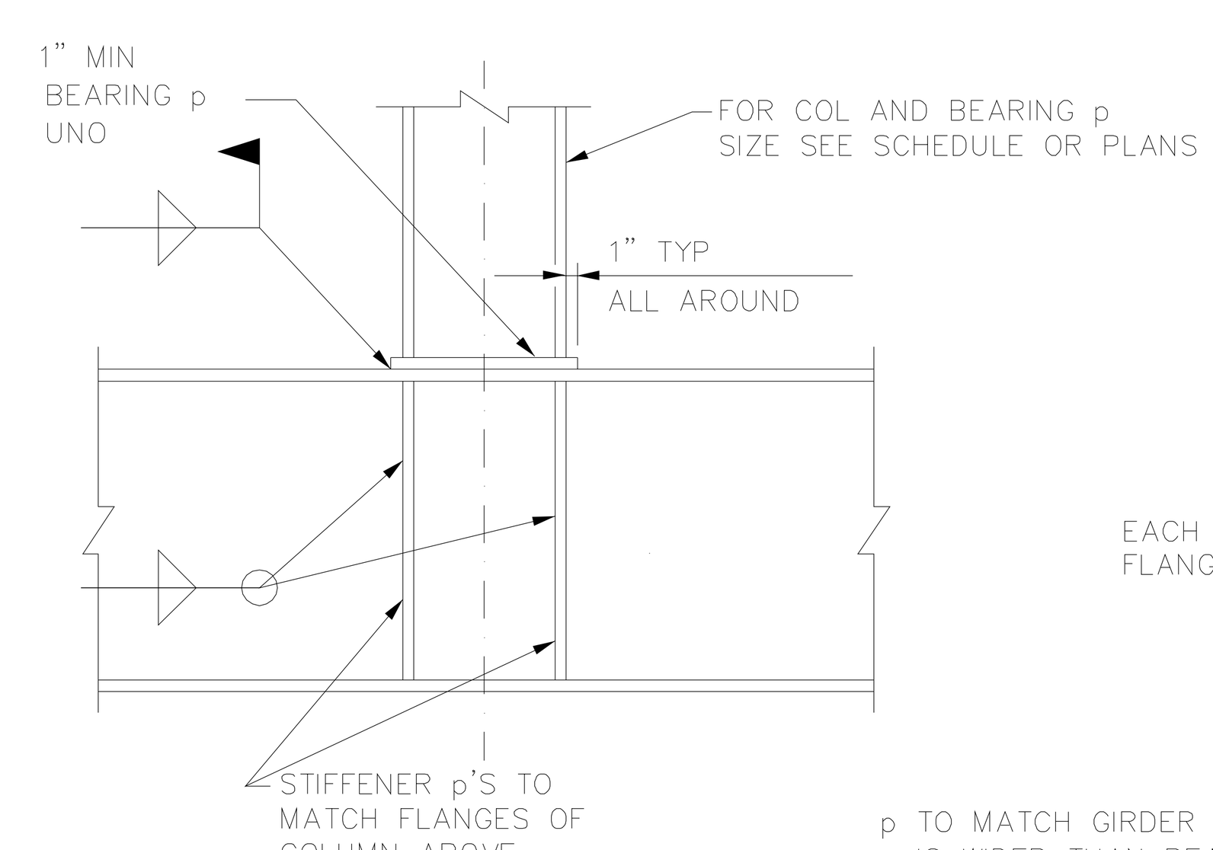


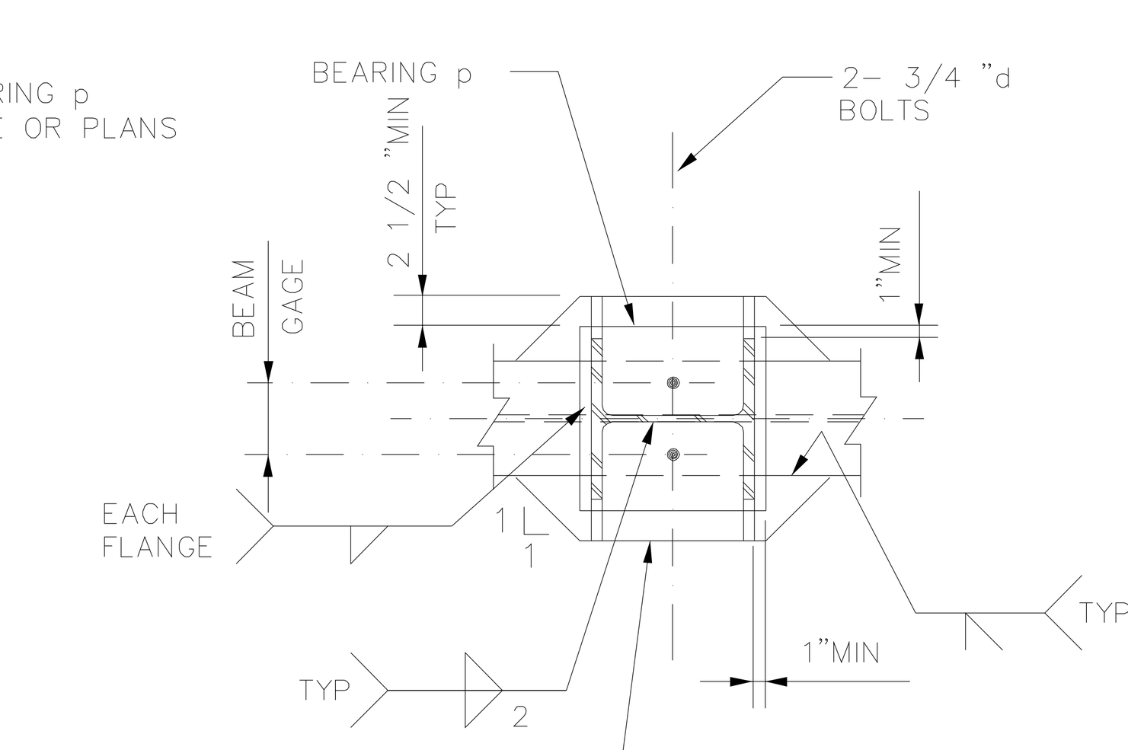
CASE C

UPPER AND LOWER TIER NOMINALLY THE SAME

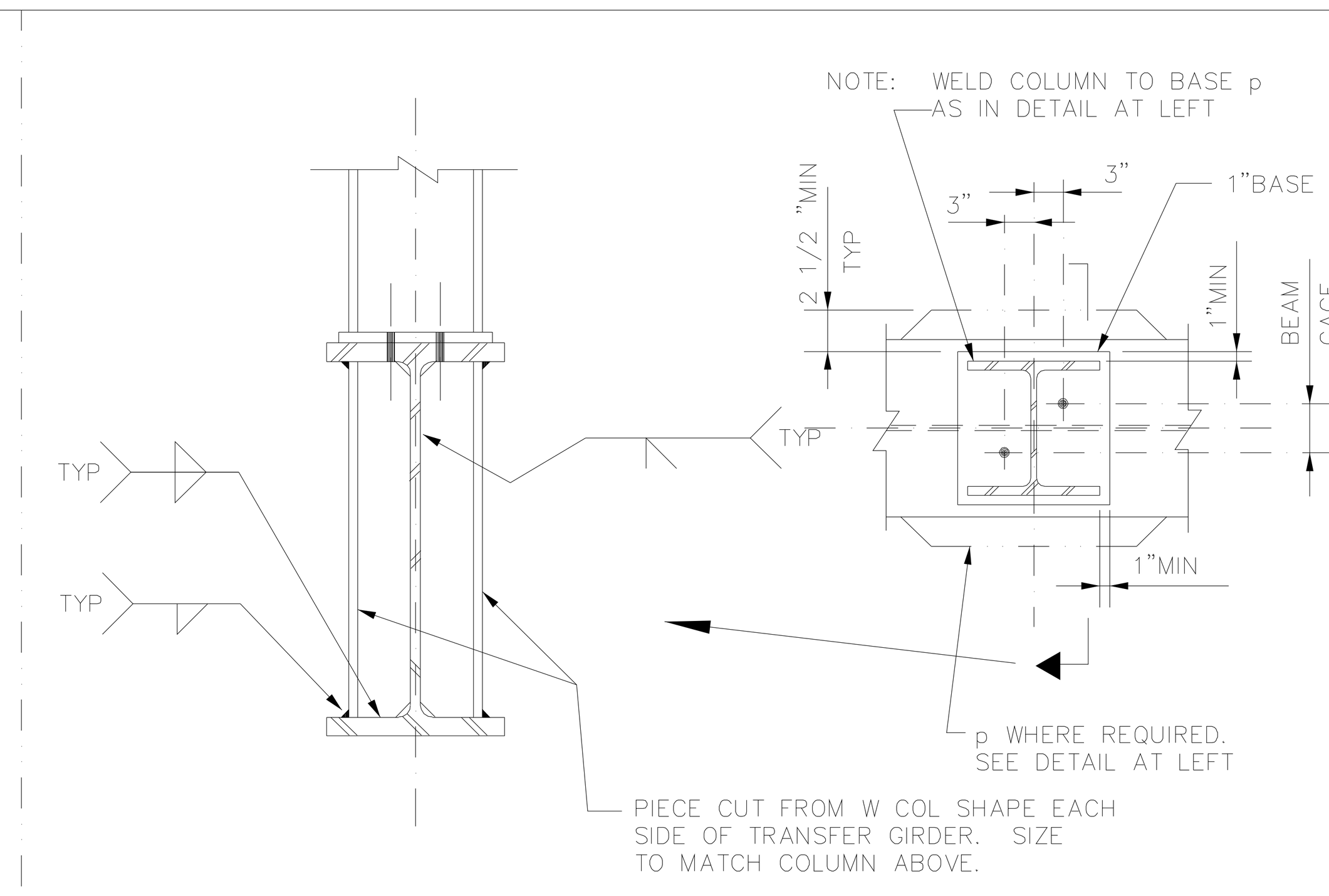
(SPLICES SHALL BE AS SHOWN IN THE AISC MANUAL, "DETAILING FOR STEEL CONSTRUCTION",1983 PAGE C-18 CASE VIII.

3 TYPICAL COLUMN SPLICE DETAILS





p TO MATCH GIRDER FLANGE WHEN BASE p IS WIDER THAN BEAM FLANGE AND IS PERPENDICULAR TO SUPPORTING BEAMS.



4 TYPICAL DETAIL AT BASE PLATE OF COLUMN TRANSFER BEAM

no.	revisions/submissions	date
2	GMP DOCUMENTS	01/19/04
1	STEEL BID PACKAGE	01/09/04

Einhorn Yaffee Prescott
Architecture & Engineering P.C.
24 School Street
Boston, MA 02108
Telephone 617 305 9800
Fax 617 305 9888
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LeMessurier Consultants, Inc.
STRUCTURAL ENGINEERS
675 MASSACHUSETTS AVENUE
CAMBRIDGE, MASSACHUSETTS 02139-3309
TEL: (617)868-1200 FAX: (617)661-7520

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PORTLAND, MAINE

drawing title: COLUMN SCHEDULE AND DETAILS

seal

designed by SKH | project no. 5001024.00
drawn by EAM | CAD file no.
checked by AL | drawing no. C-S201
date 01 / 09 / 2004
scale NONE

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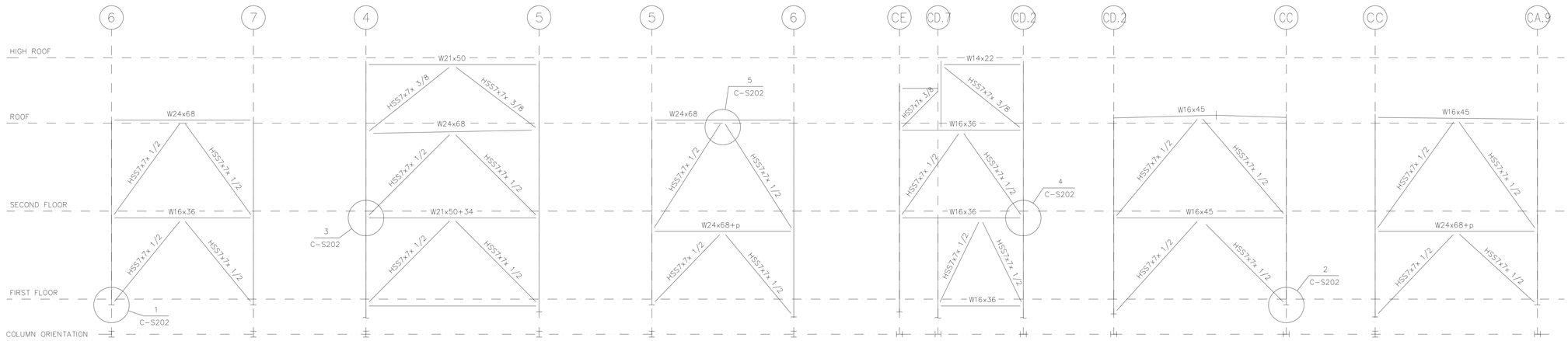


BR-1
LINE CA.9

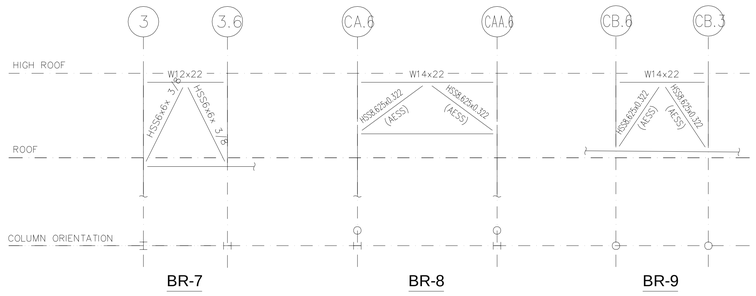
BR-2
LINE CC

BR-3
LINE CE

BR-4
LINE 3

BR-5
LINE 5

BR-6
LINE 8



BR-7
LINE CD.2

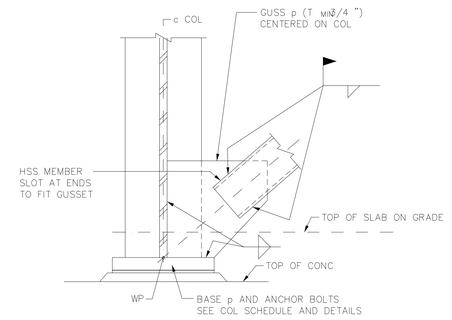
BR-8
LINE 3

BR-9
LINE 6.4

NOTES: (BRACING)

1. FOR COLUMN SIZES, BASE PLATE SIZES AND TYPES, SEE SCHEDULE ON DRAWING C-S201.
2. FOR COLUMN BASE PLATE DETAILS, SEE DRAWING C-S201.
3. SEE PLANS FOR ALL TOP-OF-STEEL ELEVATIONS, UNO.
4. ALL WORKING POINTS SHALL BE AT CENTER LINES OF COLUMNS AND NEUTRAL AXES OF BEAMS AND DIAGONALS.
5. LOCATE WORKING POINTS FOR CHEVRON AND V BRACES AT MID-POINT BETWEEN SUPPORTS UNLESS DIMENSIONED OTHERWISE.
6. WHERE STUD QUANTITIES ARE NOT GIVEN PROVIDE A MINIMUM OF ONE STUD PER FOOT ON ALL FRAME BEAMS. DISTRIBUTE STUDS UNIFORMLY ALONG BEAM LENGTH. STUDS ARE NOT REQUIRED ON BEAMS (OR PORTIONS OF BEAMS) WHICH ARE NOT CONNECTED TO A CONCRETE SLAB.
7. MINIMUM GUSSET p THICKNESS IS 3/4 ", UNLESS NOTED OTHERWISE.
8. FOR BEAM VERTICAL REACTION, R (KIPS) SEE PLANS.
9. <25k> ETC, INDICATES THE DIAGONAL BRACE AXIAL FORCE, P (KIPS), TO BE USED FOR BRACE CONNECTION DESIGN (+ = TENSION, - = COMPRESSION). THESE FORCES ARE IN ADDITION TO THE VERTICAL REACTIONS.
10. ALL FORCES SHOWN ARE "WORKING STRESS" LEVEL TO BE USED WITH ALLOWABLE STRESS DESIGN (ASD) METHODS. ALLOWABLE STRESSES MAY NOT BE INCREASED ABOVE AISC ASD VALUES. IF THE CONTRACTOR'S ENGINEER PREFERS LOAD AND RESISTANCE FACTOR DESIGN (LRFD) METHODS, ALL FORCES SHALL BE INCREASED BY A FACTOR OF 1.50. IF THE FORCE SHOWN OR CALCULATED EXCEEDS THE CAPACITY OF THE MEMBER, DESIGN THE CONNECTION FOR THE FULL CAPACITY OF THE MEMBER.

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



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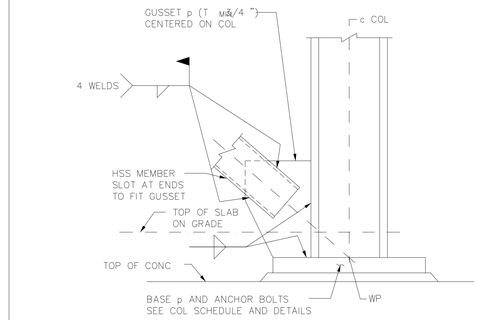

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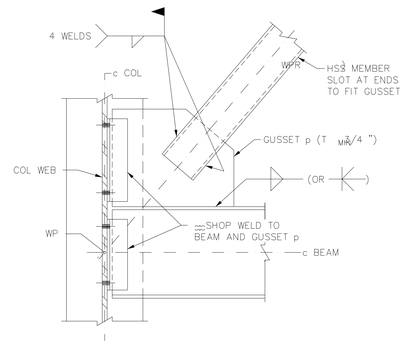

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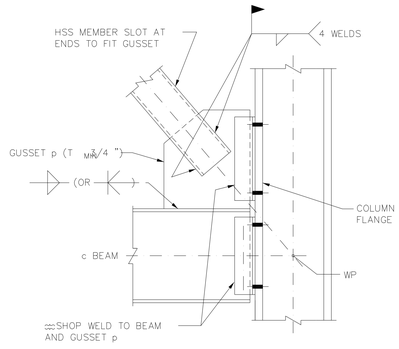

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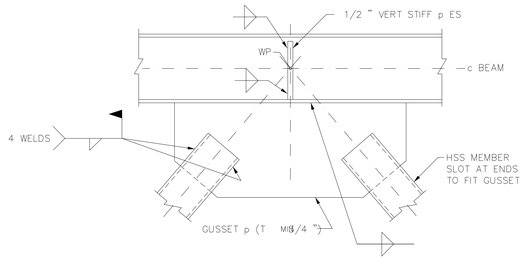

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SCALE: NONE

NOTES: (BRACING CONNECTION DESIGN)

1. ANALYSIS AND DESIGN PROCEDURE SHALL FOLLOW THE UNIFORM FORCE METHOD AS SHOWN IN THE AISC LRFD MANUAL OF STEEL CONSTRUCTION VOLUME II - CONNECTIONS, 2ND EDITION, P. 11-20 TO 11-48.
2. NON-UNIFORM FORCES ON THE GUSSET INTERFACES ARE ALLOWED; HOWEVER, ANY ECCENTRICITY MUST BE TAKEN OUT IN THE GUSSET-TO-BEAM OR GUSSET-TO-BASE p WELD. SEE P. 11-26 & 11-27 IN THE AISC MANUAL.
3. AT TWO-SIDED CONDITIONS, COLUMN-TO-BASEPLATE WELD SHOULD BE SIZED BASED ON WORST CASE CONDITION WHERE BRACE FORCES HAVE OPPOSITE SIGNS, I.E., LEFT = COMPRESSION, RIGHT = TENSION OR VICE-VERSA.
4. AT CORNER CONDITIONS, COLUMN-TO-BASEPLATE WELD SHOULD BE SIZED BASED ON WORST DIRECTION LOAD CASE, I.E.,SIMULTANEOUS LOADING IN BOTH DIRECTIONS NEED NOT BE CONSIDERED.
5. TWO-SIDED BEAM/COLUMN CONDITIONS SHOULD BE ANALYZED AS TWO INDEPENDENT ONE-SIDED CONDITIONS.
6. AXIAL BEAM/COLUMN THRU-FORCES, INDICATED BY H = 50k, ETC., SHOWN ON PLANS OR ELEVATIONS SHALL BE ADDED TO FORCES GENERATED BY THE DIAGONAL BRACE FORCES, P, AND THE BEAM END REACTIONS, R, FOR DESIGN OF THE BEAM-TO-COLUMN CONNECTION.
7. PRIOR TO THE SUBMITTAL OF ANY PIECE SHOP DRAWINGS, THE CONTRACTOR SHALL SUBMIT TO THE ARCHITECT FOR APPROVAL SAMPLE CONNECTION DESIGN CALCULATIONS FOR REPRESENTATIVE CONNECTION TYPES TO BE DETAILED. CALCULATIONS SHALL BE PREPARED UNDER THE SUPERVISION OF A REGISTERED PROFESSIONAL ENGINEER.
8. DETAIL GUSSET p's AND BRACE MEMBERS TO PROVIDE ADEQUATE ERECTION TOLERANCE.

no.	revisions/submissions	date
2	GMP DOCUMENTS	01/19/04
1	STEEL BID PACKAGE	01/09/04

Einhorn Yaffee Prescott
Architecture & Engineering P.C.
24 School Street
Boston, MA 02108
Telephone 617 305 9800
Fax 617 305 9888

eypae.com

EYP/

LeMessurier Consultants, Inc.
STRUCTURAL ENGINEERS
675 MASSACHUSETTS AVENUE
CAMBRIDGE, MASSACHUSETTS 02139-3309
TEL: (617)868-1200 FAX: (617)661-7520

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PORTLAND, MAINE

drawing title: BRACING ELEVATIONS AND DETAILS

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	drawn by EAM
	CAD file no.
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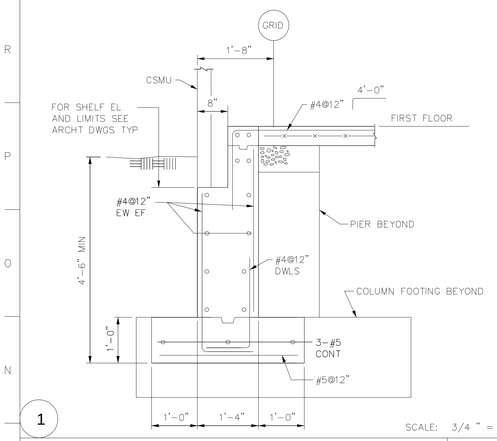

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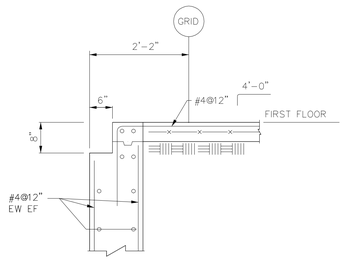

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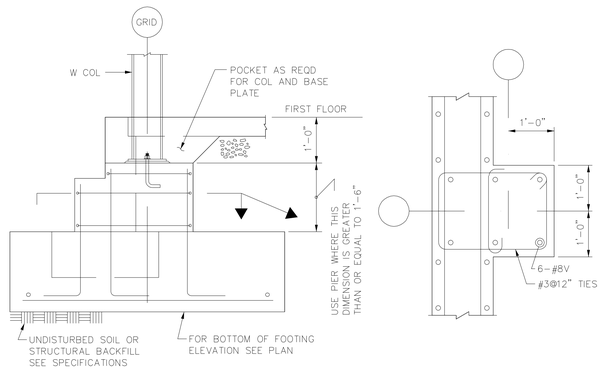

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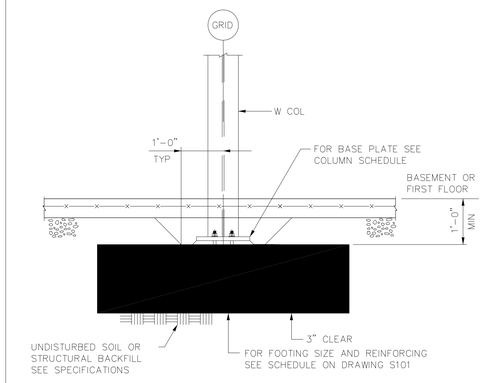

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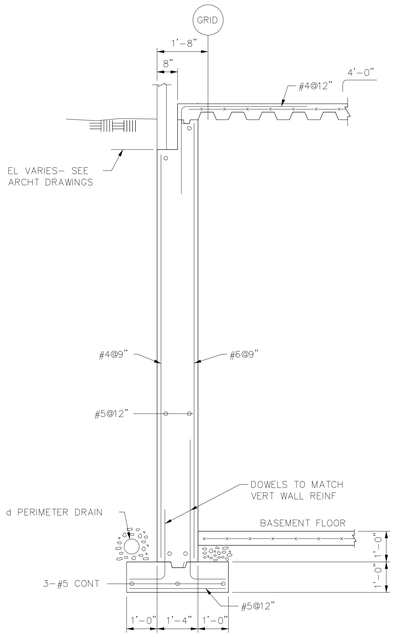

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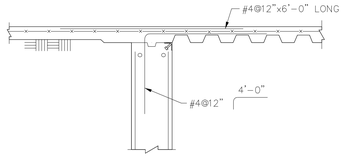

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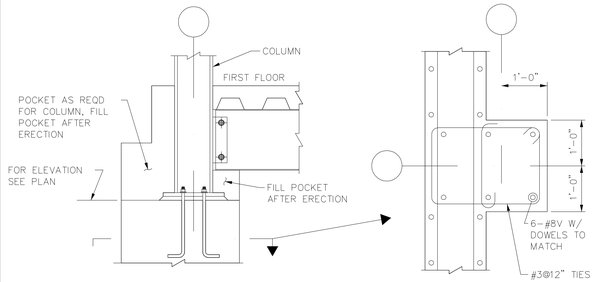

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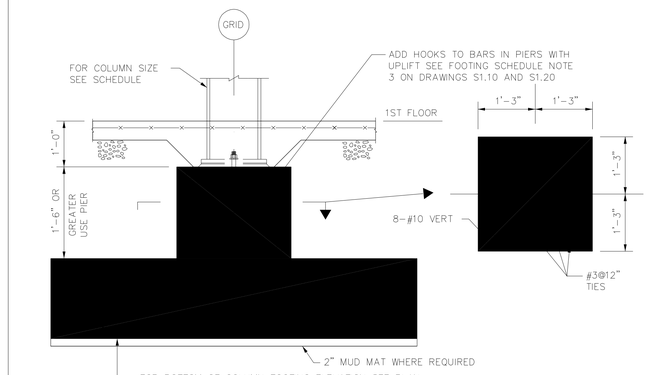

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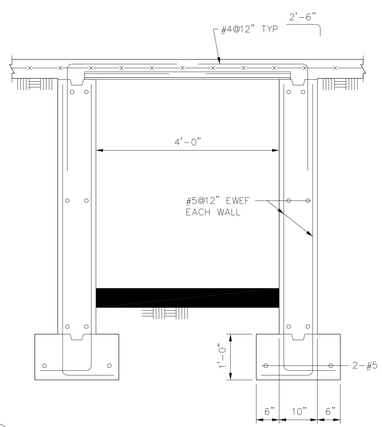

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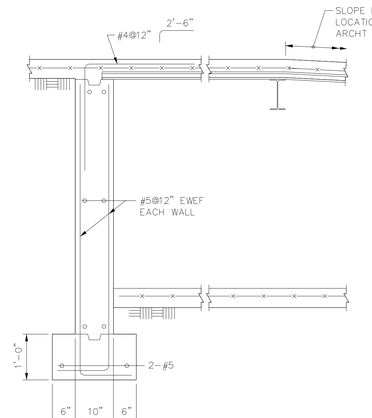

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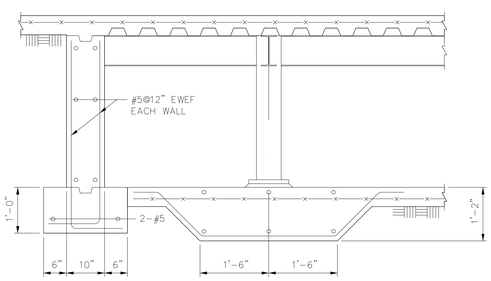

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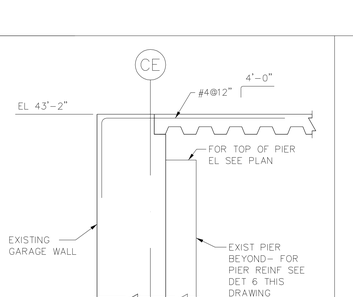

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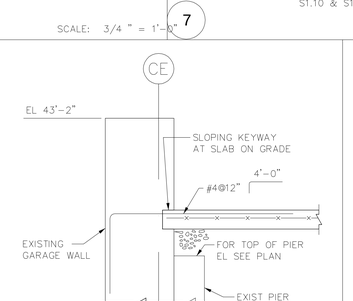

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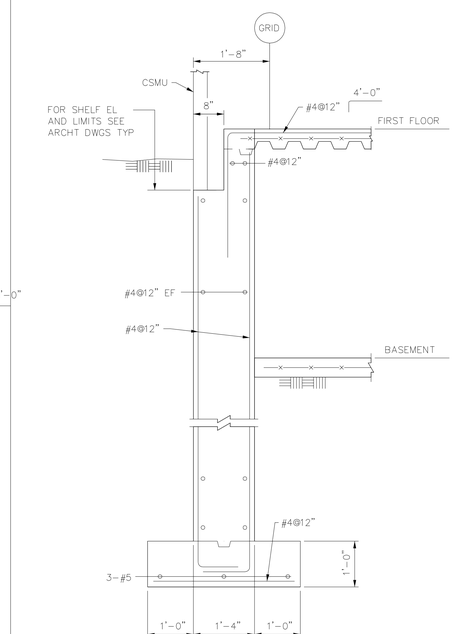

11 SCALE: 3/4 " = 1'-0"

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Einhorn Yaffee Prescott
Architecture & Engineering P.C.
24 School Street
Boston, MA 02108
Telephone 617 305 9800
Fax 617 305 9888

eypae.com

EYP/

LeMessurier Consultants, Inc.
STRUCTURAL ENGINEERS
675 MASSACHUSETTS AVENUE
CAMBRIDGE, MASSACHUSETTS 02139-3309
TEL (617)868-1200 FAX (617)661-7520

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drawing title: FOUNDATION SECTIONS AND DETAILS

seal

designed by SKH	project no. 5001024.00
drawn by EAM	CAD file no.
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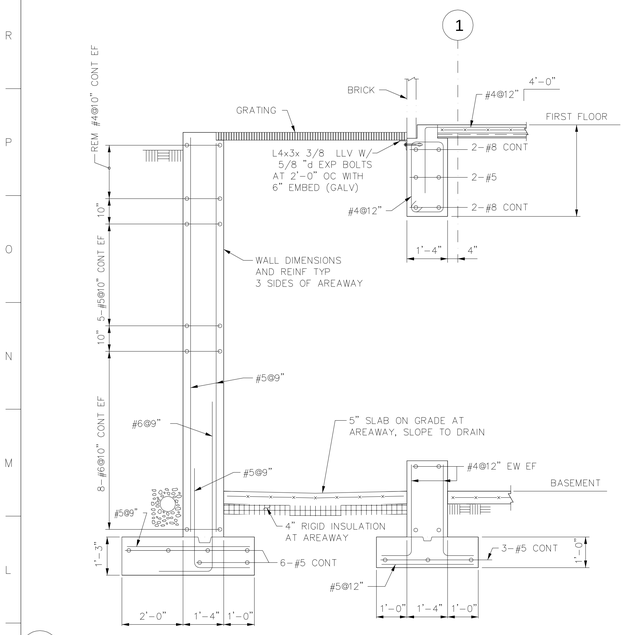

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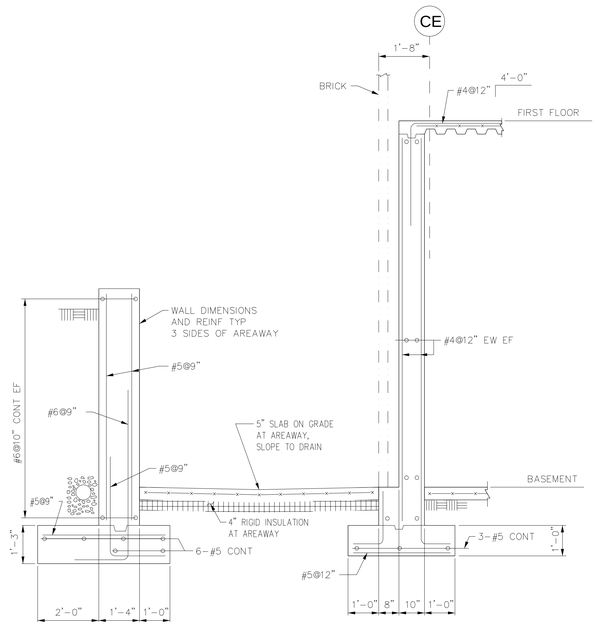

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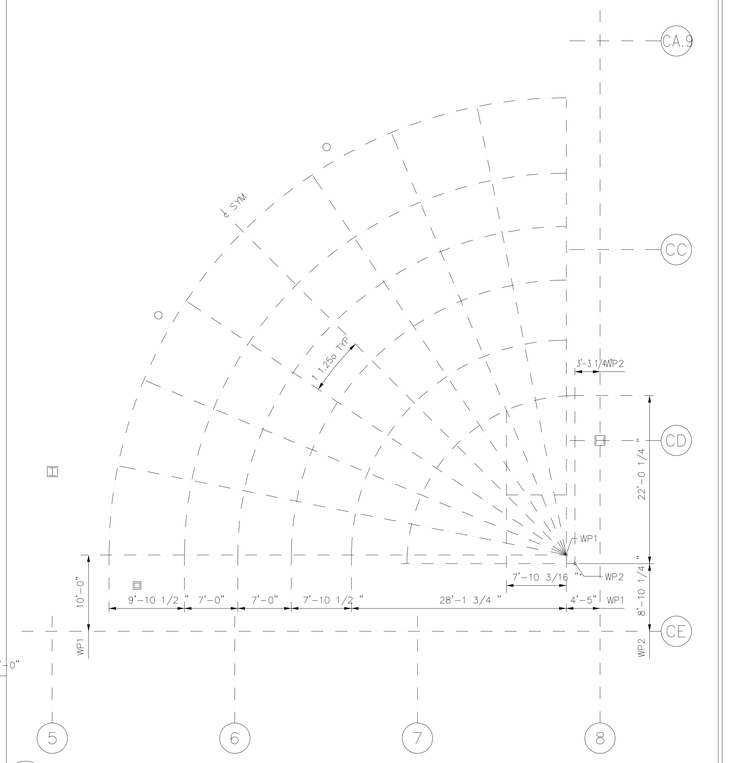

3 PLENUM POST LOCATION PLAN SCALE: 1/8 " = 1'-0"

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Einhorn Yaffee Prescott
Architecture & Engineering P.C.
24 School Street
Boston, MA 02108
Telephone 617 305 9800
Fax 617 305 9888

eypae.com

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LeMessurier Consultants, Inc.
STRUCTURAL ENGINEERS
675 MASSACHUSETTS AVENUE
CAMBRIDGE, MASSACHUSETTS 02139-3309
TEL: (617)868-1200 FAX: (617)661-7520

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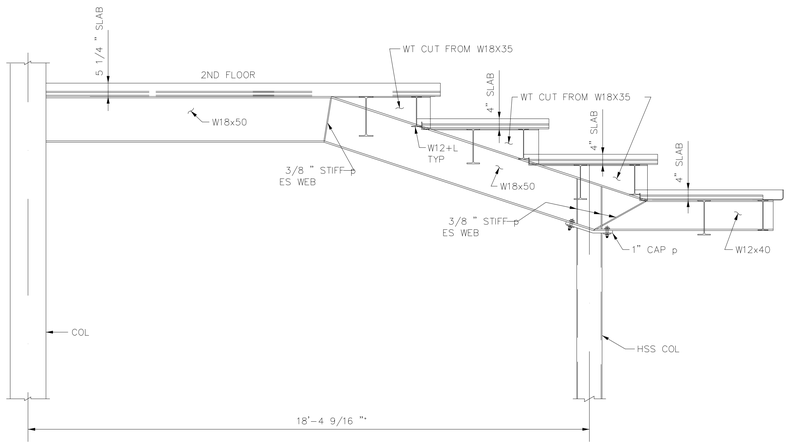
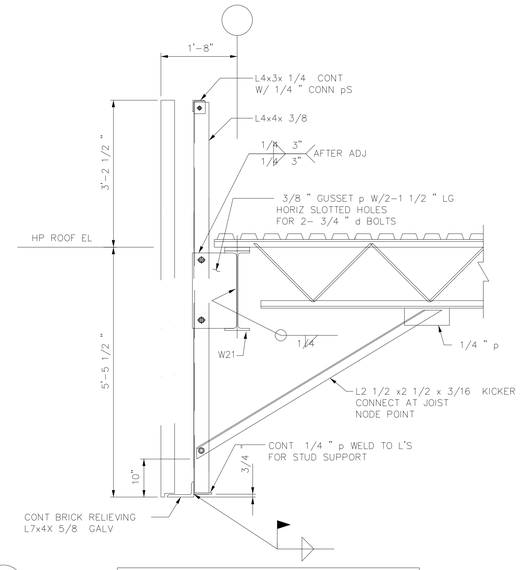


1 GIRDER ELEVATION AT BALCONY

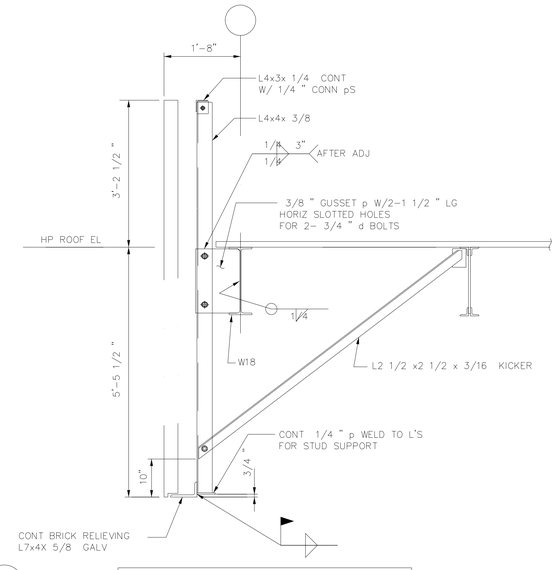
SCALE: 1/2 "=1'-0"



2

NOTE: SECTION OCCURS AT EACH JOIST, AT COLUMN ATTACH GUSSET p AND KICKER TO COLUMN

SCALE: 3/4 "=1'-0"



3

NOTE: SECTION OCCURS AT 5'-0" OC. AT COLUMN ATTACH GUSSET p AND KICKER TO COLUMN

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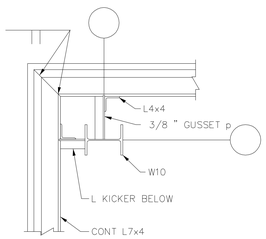
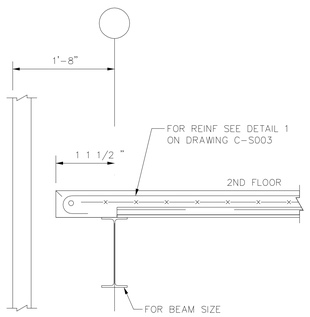


NOTE:
FOR INFORMATION NOT SHOWN
SEE SECTIONS 2 & 3 THIS DRAWING

PLAN

4

SCALE: 3/4 "=1'-0"



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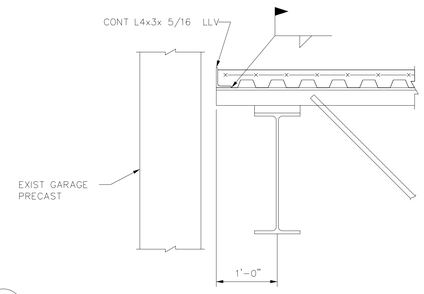

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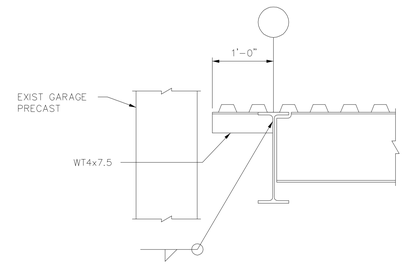

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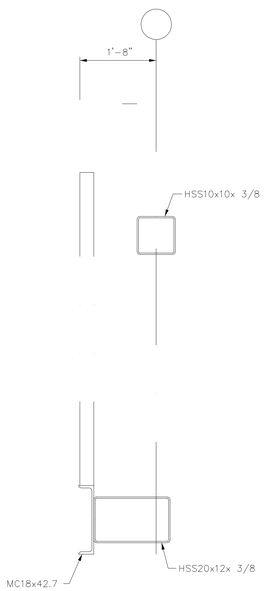

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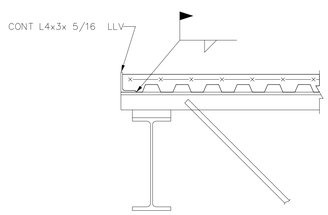

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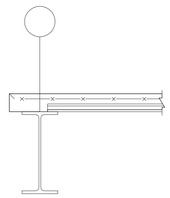

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SCALE: 1"=1'-0"

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Einhorn Yaffee Prescott
Architecture & Engineering P.C.
24 School Street
Boston, MA 02108
Telephone 617 305 9800
Fax 617 305 9888

eypae.com

EYP/

LeMessurier Consultants, Inc.
STRUCTURAL ENGINEERS
675 MASSACHUSETTS AVENUE
CAMBRIDGE, MASSACHUSETTS 02139-3309
TEL: (617)868-1200 FAX: (617)661-7520

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drawing title
SECTIONS AND DETAILS

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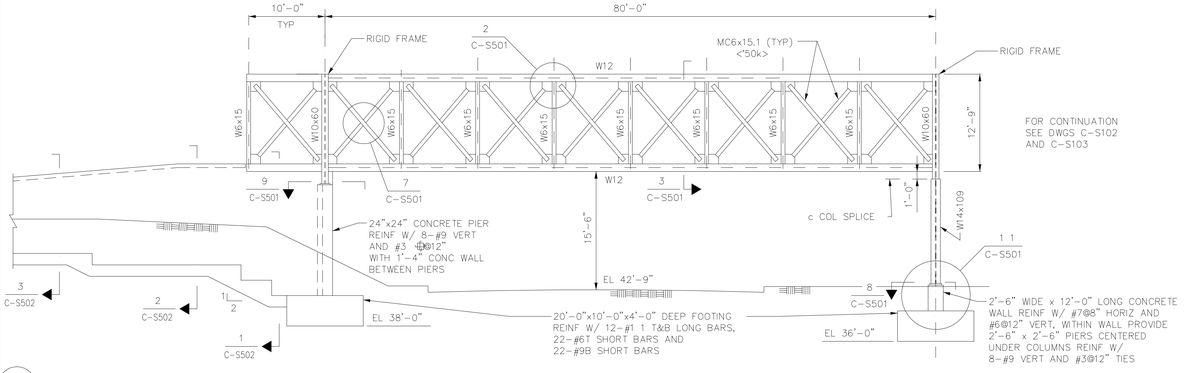
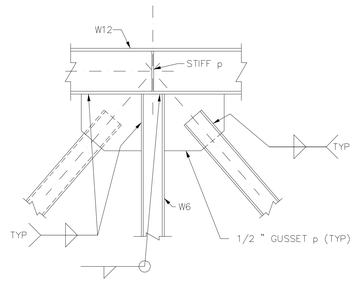


1 PEDESTRIAN BRIDGE ELEVATION

NOTE: MEMBER SIZES THE SAME EACH SIDE

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



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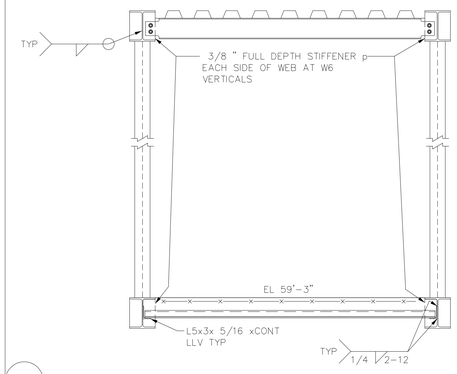

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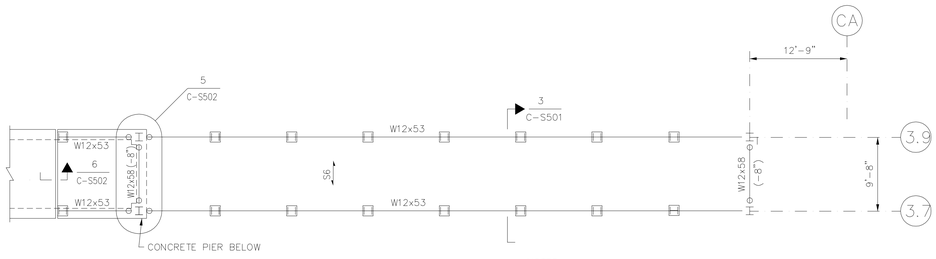
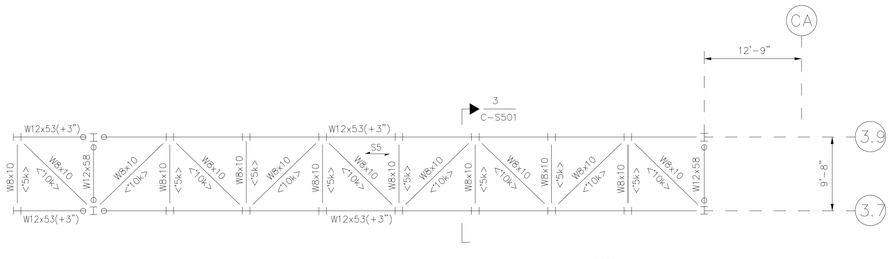


NOTES:

1. S6 INDICATES SLAB CONSTRUCTION SHALL BE 5" NORMALWEIGHT CONCRETE REINFORCED W/ WWF 6x6-W2.9xW2.9 ON 3" DEEP, 18 GAGE, GALVANIZED STEEL DECK, TOTAL THICKNESS 8".
2. TOP OF STRUCTURAL SLAB AT EL 59'-3" UNLESS NOTED OTHERWISE.
3. TOP OF STRUCTURAL STEEL AT EL 59'-3" UNLESS NOTED (+) OR (-) ON PLAN.

4 PEDESTRIAN BRIDGE FLOOR

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



NOTES:

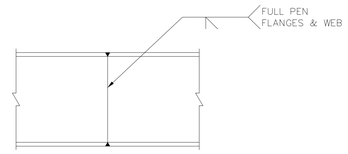
1. S5 INDICATES ROOF CONSTRUCTION SHALL BE 3", 18 GA, GALVANIZED ROOF DECK
2. TOP OF STRUCTURAL STEEL AT EL 70'-9" UNLESS NOTED (+) OR (-) ON PLAN.

5 PEDESTRIAN BRIDGE ROOF

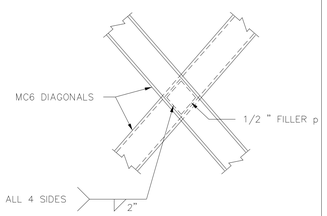
SCALE: 1/8 " = 1'-0"

NOTES:

1. FOR GENERAL NOTES AND ABBREVIATIONS SEE DRAWING C-S001.
   FOR TYPICAL DETAILS SEE DRAWING C-S002 & C-S003.
2. ALL STEEL BRIDGE MEMBERS SHALL CONFORM TO AISC "ARCHITECTURALLY EXPOSED STRUCTURAL STEEL" (AESS), AND BE PAINTED (SEE SPECIFICATIONS).
3. ←→ INDICATES SPAN DIRECTION OF STEEL DECK.
4. ⟜⟝ INDICATES MOMENT CONNECTION, FOR DETAILS SEE DRAWING C-S003.
5. FOR BEAM EXPLANATION DIAGRAM SEE DRAWING C-S003.
6. <"10k>, ETC, INDICATES AXIAL FORCE IN KIPS (+ = TENSION, − = COMPRESSION) FOR CONNECTION DESIGN. FORCES ARE IN ADDITION TO VERTICAL REACTIONS.
7. FORCES ARE UNFACTORED (ASD). NO STRESS INCREASE SHALL BE TAKEN FOR CONNECTION DESIGN.

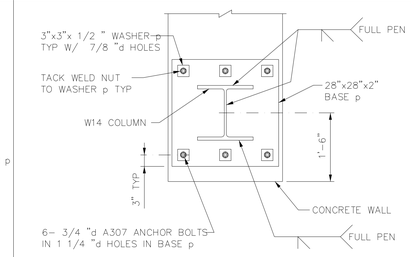


6 BEAM SPLICE DETAIL WHEN REQUIRED



7

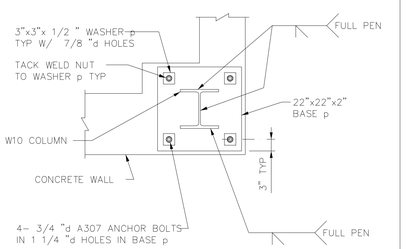
SCALE: 1" = 1'-0"



PLAN

8

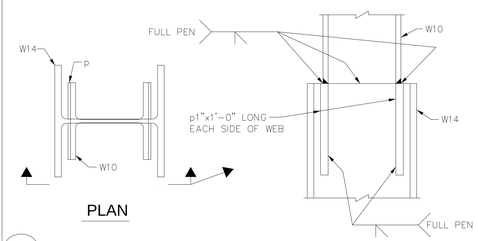
SCALE: 3/4 " = 1'-0"



PLAN

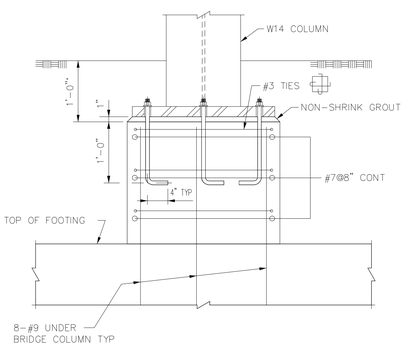
9

SCALE: 3/4 " = 1'-0"



10

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



11

SCALE: 1" = 1'-0"

no.	revisions/submissions	date
2	GMP DOCUMENTS	01/19/04
1	STEEL BID PACKAGE	01/09/04

Einhorn Yaffee Prescott
Architecture & Engineering P.C.
24 School Street
Boston, MA 02108
Telephone 617 305 9800
Fax 617 305 9888

eypae.com

EYP/

LeMessurier Consultants, Inc.
STRUCTURAL ENGINEERS
675 MASSACHUSETTS AVENUE
CAMBRIDGE, MASSACHUSETTS 02139-3309
TEL (617)868-1200 FAX (617)661-7520

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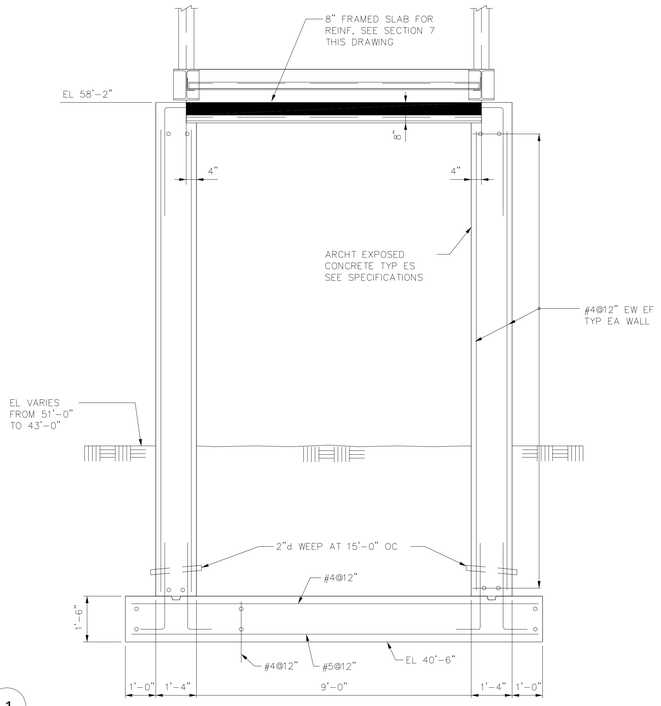
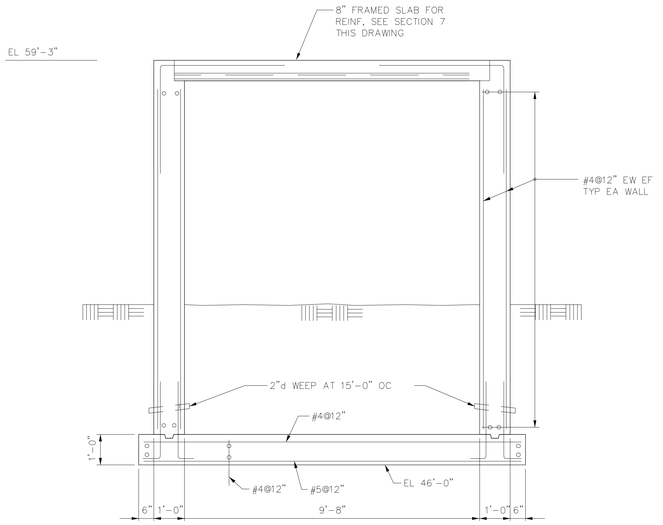
drawing title: PEDESTRIAN BRIDGE PLANS, ELEVATION AND DETAILS

seal	designed by SKH	project no. 5001024.00
	drawn by EAM	CAD file no.
	checked by AL	drawing no. C-S501
	date 01 / 09 / 2004	
	scale AS NOTED	



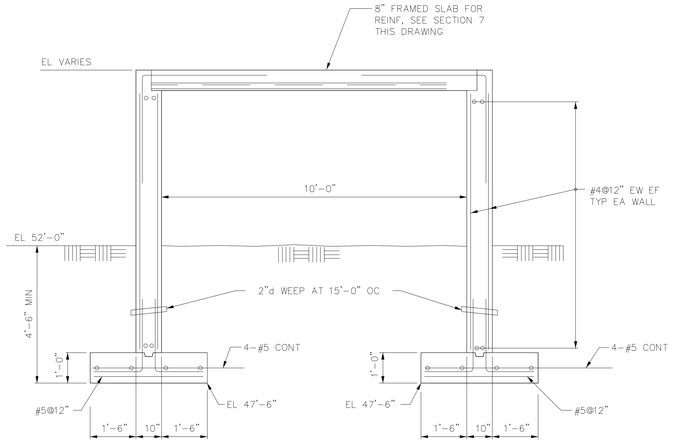
1

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



2

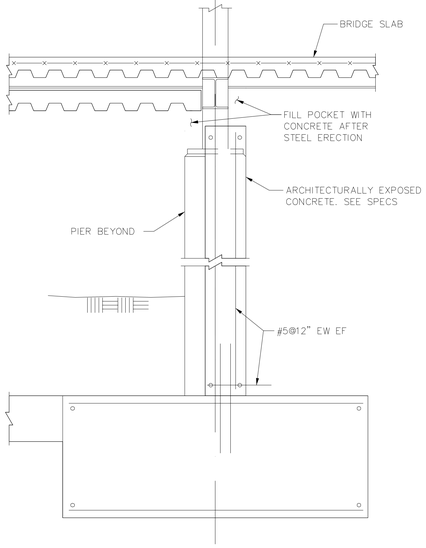
SCALE: 1/2 " = 1'-0"

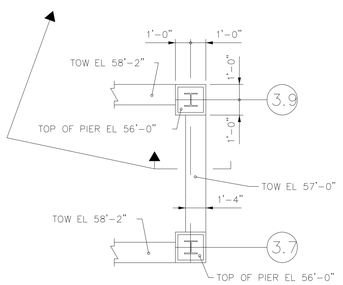


NOTE:
THIS SECTION APPLIES UNTIL THE TOP OF RAMP ELEVATION MEETS EL 52'-0"

3

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

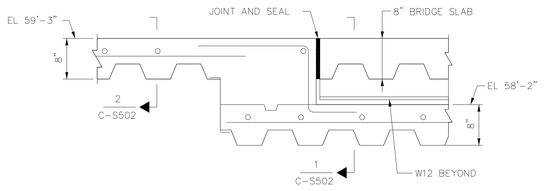




PLAN

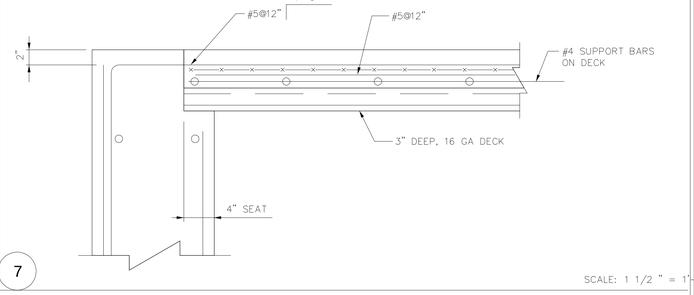
5

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



6

SCALE: 1" = 1'-0"



7

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

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seal

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