GENERAL NOTES

DESIGN DATA:
APPLICABLE DESIGN LOADS: PER ASCI/SEI 7-16

FLOOR LIVE LOAD: 40 PSF	FLOOR DEAD LOAD: 15PSF
ROOF LIVE LOAD: 20 PSF	ROOF DEAD LOAD: 15PSF
BASIC WIND SPEED: 96 MPH	EXPOSURE: D
STRUCTURAL CATEGORY: II	SEISMIC DESIGN CATEGORY = D

ALL PRESSURES SHOWN ARE BASED ON ASD DESIGN,

SHEAR WALL SCHEDULE

SHEAR WALL SCHEDULE 2019 C.B.C.

S.W. TYPE	SHEAR PANEL DESCRIPTION	ALLOWABLE SHEAR (PLF)	SILL BOLT'G @ FOUNDATION	TOP PL. TO BLK'G.	SILL NAILING UPPER STORIES
△1	7/8" STUCCO OVER PAPER BACKED LATH W/ 16 GA STAPLES AT 6" O.C. AT TOP & BOTTOM PLATES, EDGE OF SHEAR WALL AND ON FIELD (CBC TABLE 2306.4.5) SEE NOTE 3 BELOW.	180 *180	5/8" @ 48" O.C. 5/8" @ 24" O.C.	A35 @ 16" A35 @ 16"	16d @ 8" O.C. 16d @ 4" O.C.
△2	15/32" APA RATED PLYWOOD SHT'G. STRUCT I WITH 8d COMMON NAILS @ 6" O.C. AT EDGES & 12" O.C. FIELD (TABLE 2306.4.1 CBC) SEE NOTES 1,2,8,9, AND 10 BELOW.	280 *560	5/8" @ 32" O.C. 5/8" @ 16" O.C.	A35 @ 16" A35 @ 8"	16d @ 6" O.C. 16d @ 3" O.C.
△3	15/32" APA RATED PLYWOOD SHT'G. STRUCT I WITH 8d COMMON NAILES @ 4" O.C. AT EDGES & 12" O.C. FIELD (TABLE 2306.4.1. CBC) SEE NOTES 1,2,4,5,8,9, AND 10 BELOW.	430 *860	5/8" @ 24" O.C. 5/8" @ 14" O.C.	A35 @ 8" LTP4 @ 6"	16d @ 4" O.C. 16d @ 2" O.C.
△4	15/32" APA RATED PLYWOOD SHT'G STRUCT I WITH 8d COMMON NAILS @ 3" O.C. AT EDGES & 12" O.C. FIELD (TABLE 2306.4.1. CBC) SEE NOTES 1,2,4,5,8,9, AND 10 BELOW.	550 *1100	5/8" @ 20" O.C. 3/4" @ 16" O.C.	A35 @ 8" LTP4 @ 6"	16d @ 3" O.C. 1/4"Ø X 3-1/2" LAG SC. @ 2" O.C.
△5	15/32" APA RATED PLYWOOD SHT'G. STRUCT I WITH 8d COMMON NAILS @ 2" O.C. AT EDGES & 12" O.C. FIELD (TABLE 2306.4.1. CBC) SEE NOTES 1,2,4,5,8,9, AND 10 BELOW.	730 *1460	5/8" @ 16" O.C. 3/4" @ 16" O.C.	A35 @ 8" LTP4 @ 6"	16d @ 2-1/2" O.C. 1/4" Ø X 3-1/2" LAG SC. @ 2" O.C.
△6	15/32" APA RATED STRUCT. I SHT'G. WITH 10d COMMON NAILS @ 2" O.C. AT EDGES & 12" O.C. FIELD OVER 3 X STUDS (TABLE 2306.4.1 CBC) SEE NOTES 1,4,5,8,9, AND 10 BELOW.	870 *1740	3/4" @ 16" O.C. 3/4" @ 8" O.C.	A35 @ 6" LTP4 @ 4-1/2"	#12 X 3-1/2" WD. SC. @ 2" O.C. 1/4" Ø X 3-1/2" LAG SC. @ 1-1/2" O.C.

NOTES:

1. ALL EDGES OF PLYWOOD SHEAR WALLS MUST BE BLOCKED WITH 2X SOLID BLOCKING.
2. DESIGNATES SILL BOLTING OR NAILING WHERE SHEAR WALL PANELS ARE TO BE APPLIED TO BOTH SIDES OF WALL.
3. PAPER BACKED SELF-FURRING EXPANDED METAL OR WOVEN WIRE LATH AND PORTLAND CEMENT PLASTER.
4. FRAMING AT ADJOINING PANEL EDGES SHALL BE 3-INCH NOMINAL OR WIDER AND NAILS SHALL BE STAGGERED. (USE 3X SILL PLATE @ FOUND., FOR SHEAR LOADS LESS THAN 350 PLF 2X SILL PLATE MAY BE USED.)
5. WHERE PANELS ARE APPLIED ON BOTH FACES OF A WALL AND NAILS SPACING IS LESS THAN 6" O.C. ON EITHER SIDE. PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS OR FRAMING SHALL BE 3" NOMINAL OR THICKER & NAILS ON EACH SIDE SHALL BE STAGGERED. (USE 3 X SILL PLATE @ FOUND.)
6. ALL CONTINUOUS EXTERIOR AND INTERIOR SHEAR/BEARING WALL FOOTINGS TO HAVE 5/8"Ø A.B.'S @ 48" O.C. WITH 3" X 3" X 1/4" PLATE WASHERS U.N.O. MINIMUM OF TWO BOLTS PER EACH PIECE OF SILL PLATE AT 4" TO 12" CLEARANCE TO THE END AND 7" MINIMUM EMBEDMENT.(FOR TWO POUR SYSTEM,BOLTS SHALL BE EMBEDDED 4 INCH MIN. INTO FIRST POUR.)

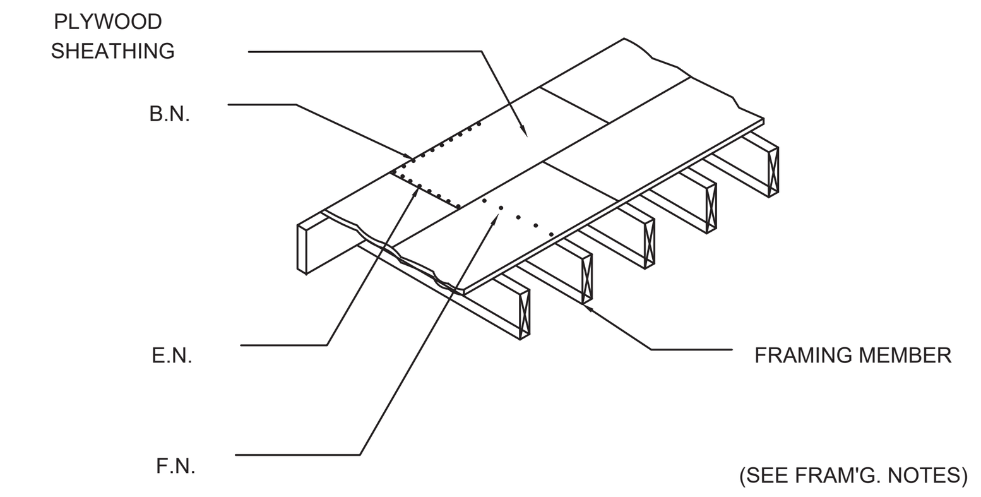
(SEE NOTE 12 FOR A.B. LENGTH.)

7. ALL INTERIOR NON-BEARING FTGS TO HAVE 3/16" Ø SHOT PINS AT 32" O.C., I.E., HILTI SHOT PINS (ICC ESR-1663).
8. USE APA RATED PLYWOOD SHEATHING. OR O.S.B. PANEL. ALL PLYWOOD SHALL BE DOUGLAS FIR. 4-PLY MIN. OTHER SPECIES MAY REQUIRE CHANGES.
9. USE 3 X 3 X 1/4 PLATE WASHERS WITH 5/8"Ø A.B. AT ALL SHEAR WALLS. USE 3 X 3 X 5/16 PLATE WASHERS WITH 3/4"Ø A.B. AT ALL SHEAR WALLS.
10. AT EXISTING FOOTINGS, USE THREADED RODS W/ SIMPSON "SET-XP" EPOXY 7" MIN. EMB. W/MIN. EDGE DIST. OF 1-7/8" (ICC ESR-2508) (SPECIAL INSPECTION REQ'D.)
11. ALL ANCHOR BOLTS SHALL CONFORM TO ASTM A-307 U.N.O.

12. ANCHOR BOLT SPEC.:

	BOLT LENGTH	
	SINGLE POUR	DOUBLE POUR
2X SILL	12"	16"
3X SILL	14"	18"

PLYWOOD DIAPHRAGM



NAILING: (EXCEPT WHERE NOTED OTHERWISE)

	ROOF NAIL'G	FLOOR NAIL'G
B.N. = BOUNDARY NAILING	8d @ 6" O.C.	10d @ 6" O.C.
E.N. = EDGE NAILING	8d @ 6" O.C.	10d @ 6" O.C.
F.N. = FIELD NAILING	8d @ 12" O.C.	10d @ 10" O.C.

NOTES:

1. NAILS SHALL BE GALV. COMMON(HOT-DIPPED OR TUMBLED), PLACED NOT LESS THAN 3/8" FROM PANEL EDGES AND SHALL BE FIRMLY DRIVEN.
2. NO UNBLOCKED PIECE LESS THAN 12" SHALL BE USED.
3. WOOD STRUCTURAL PANELS SHALL COMPLY WITH 2019 CBC STANDARD AND SHALL BE APA RATED EXPOSURE I.
4. WOOD STRUCTURAL PANELS, WHEN USED, SHALL COMPLY WITH THE REQUIREMENTS FOR THEIR TYPE IN DOC PSI-95 OR PS2-92.
5. ALL PANELS SHALL BE IDENTIFIED BY TRADE MARK OF AN APPROVED TESTING & GRADING AGENCIES, APA, TECO OR PITTSBURG.

NAILING SCHEDULE

CONNECTION:(TABLE 2304.9.1)

	CONNECTION	NAILING
1.	JOISTS TO SILL OR GURDER, TOE NAIL	3 - 8d
2.	BRIDGING TO JOISTS, TOE NAIL EA. END	2 - 8d
3.	1X6 SUBFLR. OR LESS TO EA. JST., FACE NAIL	2 - 8d
4.	WIDER THAN 1X6 SUBFLR. TO EA. JST., FACE NAIL	3 - 8d
5.	2" SUBFLR. TO JST. OR GURDER, BUND & FACE NAIL	2 - 16d
6.	SILL PLATE TO JST. OR BLK'G., FACE NAIL	16d @ 16" O.C.
7.	TOP PLATE TO STUD, END NAIL	2 - 16 d
8.	RAFT. BLK'G TO TOP PLATE, FACE OR TOE NAIL	16d @ 8" O.C.
9.	STUD TO SILL PLATE, TOE NAIL	4 - 8d
10.	DOUBLE STUDS, FACE NAIL	16d @ 24" O.C.
11.	DOUBLE TOP PLATES, FACE NAIL	16d @ 16" O.C.
12.	TOP PLATES LAPS & INTERSECTIONS, FACE NAIL	2 - 16d
13.	CONTINUOUS HEADER, TWO PIECES	16d @ 16" O.C. ALONG EA. SIDE
14.	CEILING JOISTS TO PLATE, TOE NAIL	3 - 8d
15.	CONTINUOUS HEADER TO STUD, TOE NAIL	4 - 8d
16.	CEILING JOISTS, LAPS O/ PARTITIONS, FACE NAIL	3 - 16d
17.	CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL	3 - 16d
18.	RAFTER TO TOP PLATE, TOE NAIL	3 - 8d
19.	1" BRACE TO EA. STUD & PLATE, FACE NAIL	2 - 8d
20.	1X8 SHT'G. OR LESS TO EA. BEARING WALL FACE NAIL	2 - 8d
21.	WIDER THAN 1X8 SHT'G. TO EA. BEARING WALL FACE NAIL	3 - 8d
22.	BUILT-UP CORNER STUDS	16d @ 24" O.C.
23.	BUILT-UP GRADERS & BEAMS	20d @ 32" O.C. @ TOP & BOT. & STAGG. 2 - 20d @ END & @ EA. SPLICE
24.	2" PLANKS	2 - 16d @ EA. BRG.
25.	PARTICLE BD. - WALL SHTG. (TO FRMG.)	8d
26.	PLYWOOD -	
	SUBFLR. RF. & WALL SHTG. (TO FRMG.):	
	1/2" & LESS	8d
	5/8" - 3/4"	8d
	7/8" - 1"	8d
	1 1/8" - 1 1/4"	10d
	COMBINATION SUBFLR. / UNDERLAYMENT (TO FRMG.):	
	3/4" & LESS	8d
	7/8" - 1"	8d
	1 1/8" - 1 1/4"	10d
	FIBERBD. SHTG.:	
	1/2"	NO. 11 GA. 6d, NO. 16 GA.
	25/32"	NO. 11 GA. 6d, NO. 18 GA.

NOTE:

1. ALL NAILS SHALL BE COMMON WIRE NAILS. WHERE DRIVING OF NAILS CAUSES SPLITTING HOLES FOR THE NAILS SHALL BE SUB DRILLED.
2. FASTENERS IN PRESERVATIVE-TREATED WOOD SHALL BE OF HOT-DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER.(CBC 2304.9.5)

GENERAL NOTES:

1. CONTRACTOR TO ASSUME FULL RESPONSIBILITY FOR ABIDING TO ALL APPLICABLE CALIFORNIA BUILDING CODES, LOCAL CITY ORDINANCES, ZONING REQUIREMENTS, AND LICENSING/PERMIT REQUIREMENTS. CONTRACTOR IS FULLY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES INCLUDING WITHOUT LIMITATION TO DEMOLITION, EXCAVATION AND ERECTION PROCEDURES.
2. THE CONTRACTOR SHALL EXAMINE THE CONSTRICTION DOCUMENTS AND NOTIFY THE PROJECT ENGINEER & ARCHITECT OF ANY DISCREPANCIES, ERRORS, OR OMISSIONS SHE/HE MAY FIND BEFORE PROCEEDING WITH THE WORK.
3. NOTIFY THE PROJECT ENGINEER OF ANY DESIGN CHANGES PROPOSED BY OWNER OR THE CONTRACTOR DURING THE COURSE OF CONSTRUCTION. SUCH CHANGES AFFECTING ROOM ADDITION DESIGN MAY ALSO AFFECT STRUCTURAL DESIGN.
4. ANY SUBCONTRACTOR WHICH AGREES TO CONSTRUCT THE PROJECT PURSUANT TO THESE PLANS FULLY ASSUMES THE RISK OF ALL ERRORS AND OMISSIONS WHICH SHOULD HAVE BEEN DETECTED BY A CAREFUL REVIEW BY A KNOWLEDGEABLE LICENSED CONTRACTOR, THAT WHICH FOR ANY REASON WERE NOT RESOLVED DURING THE BIDDING OR NEGOTIATION PROCESS. FURTHER, THE CONTRACTOR SHALL CAREFULLY REVIEW THESE PLANS AS THE WORK PROGRESSES IN ORDER TO IDENTIFY ANY SIGNIFICANT ERRORS AND OMISSIONS AND TO ASCERTAIN ALL NECESSARY INFORMATION BEFORE PROCEEDING WITH THE AFFECTED WORK, AND ASSUMES THE RISK OF ANY AND ALL LOSS, INCLUDING DELAY, WHICH MAY BE CAUSED OR CONTRIBUTED TO BY THE FAILURE TO ASCERTAIN CORRECT OR NECESSARY INFORMATION IN A TIMELY MANNER.
5. ALL TRADES SHALL, AT ALL TIMES, KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIALS OR RUBBISH CAUSED BY THEIR WORK, AND AT THE COMPLETION OF THE WORK SHALL REMOVE ALL RUBBISH FROM AND ABOUT THE JOBSITE AND ALL THEIR TOOLS, SCAFFOLDING AND SURPLUS MATERIALS, AND SHALL LEAVE THE JOB BROOM CLEAN, INCLUDING REMOVING ALL LABELS, STICKERS, PAINT SMEARS, ETC.., FROM LIGHTING FIXTURES, PLUMBING FIXTURES, GLASS SURFACES, FINISH HARDWARE, CABINETS, COUNTER TOPS, ETC.
6. EXCEPT WHERE MORE STRINGENT REQUIREMENTS ARE NOTED OR SHOWN ON THE PLANS, WORKMANSHIP & MATERIALS SHALL CONFORM, TO THE LATEST EDITION OF THE C.B.C. OR LOCAL CODE.
7. THE PLANS SHALL BE REVIEWED FOR DIMENSIONAL & EXISTING SITE CONFORMANCE WITH THE PLANS BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE ARCHITECT & ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES.
8. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS IN THE FIELD; AND ALL QUESTIONS AS TO DIMENSIONS AND FIELD CONDITIONS SHALL BE RESOLVED BEFORE THE AFFECTED WORK PROCEEDS. NO DIMENSIONS SHALL BE OBTAINED BY SCALING THESE PLANS.
9. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR DIMENSIONS AND CONDITIONS OF THE JOB.
10. THE PRECISE DIMENSIONS AND LOCATIONS OF ALL DOOR, WINDOW AND ROOF OPENINGS SHALL BE DETERMINED FROM DRAWINGS AND OTHER FLOOR, WALL OPENING REQUIRED BY MECHANICAL OR ELECTRICAL SHALL BE VERIFIED FROM SHOP DRAWINGS, EQUIPMENT DATA SHEETS, ETC. AS REQUIRED.
11. ITEMS IDENTIFIED BY TRADE NAMES MAY BE SUBSTITUTED BY APPROVED EQUALS.
12. NOTES & DETAILS ON DRAWINGS SHALL PRECEDE THESE GENERAL NOTES.
13. PROVIDE ANY SHORING & OR BRACING PRIOR TO REMOVING EXISTING WALLS, BEAMS, OR SUPPORTS FOR CONSTRUCTION. REMOVE SHORING ONLY WHEN NEW SUPPORTS ARE IN PLACE AND SECURED.
14. PROVIDE RED HEADS INTO EXISTING CONCRETE AT ALL SHEAR WALLS PER MFG. SPECIFICATIONS. SEE SHEAR WALL SCHEDULE FOR SIZE AND SPACING.
15. PROVIDE SIMPSON ST-6224 BETWEEN NEW WALLS AND EXISTING WALLS AT THE DOUBLE TOP PLATE.
16. THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON DRAWINGS AND PROTECT THEM FROM DAMAGE
17. DO NOT CUT POST TENSION SLABS. CONTRACTOR TO DETERMINE EXISTING CONDITIONS PRIOR TO START OF CONSTRUCTION.
18. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS FOR FOOTING, BEAMS AND JOISTS, SIZES, LOCATIONS, ETC., AND SHALL NOTIFY THE ARCHITECT & ENGINEER OF ANY DISCREPANCIES.
19. DOWEL NEW INTO EXISTING SLABS W/ #4 REBAR @ 24" O.C. AND FOOTINGS W/ DOWELS TO MATCH NEW REINF. SIZE/ LOCATION.

ENGINEERING NOTES

1. CONCRETE SLABS ON GRADE HAVE NOT BEEN DESIGNED BY THE STRUCTURAL ENGINEER.
2. THE VIBRATIONAL EFFECTS OF MECHANICAL EQUIPMENT HAVE NOT BEEN CONSIDERED BY THE STRUCTURAL ENGINEER.
3. THE DESIGN, ADEQUACY AND SAFETY OF ERECTION, BRACING SHORING, TEMPORARY SUPPORTS ETC., IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR, AND HAS NOT BEEN CONSIDERED BY THE STRUCTURAL ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE DURING THE ENTIRE COURSE OF CONSTRUCTION. THE ENGINEER SHALL NOT BE HELD RESPONSIBLE FOR FIELD INSPECTION/OBSERVATION OF THE ABOVE ITEMS.
4. ALLOWABLE SOILS PRESSURE TO BE A MINIMUM OF 1500 PSF UNLESS A SOILS REPORT IS PROVIDED. SOILS IN THE BUILDING AREA & 5 FEET BEYOND SHALL BE COMPACTED TO A MINIMUM OF 90% RELATIVE COMPACTION PER 2019-C.B.C.

REFER TO SOIL REPORT BY: ____________________

JOB NUMBER: ____________ DATED: ____________

STRUCTURAL SYMBOLS

△ INDICATES SHEAR WALL. SEE FOUNDATION, FRAMING PLAN AND SHEAR WALL SCHEDULE FOR TYPE, SILL BOLTING, SHTG., ETC. NOTE: FOR SILL BOLTING AT EXISTING FOOTINGS, USE 5/8" Ø THREADED RODS W/ SIMPSON "SET-XP" EPOXY 7" MIN. EMB. PER ICC ESR-2508 THE SAME SIZE & SPACING AS CALLED FOR ON PLANS

☒ INDICATES POST (BELOW BEAM)

MIN. POST SIZE/TYPE AS FOLLOWS U.N.O.:

BEAM SIZE	POST SIZE
4 X 12 & SMALLER	2-2X4 W/16d NAILS @ 12" O.C.
4 X 14 & LARGER	4X4
6 X 10 & SMALLER	4X6
6 X 12 & LARGER	6X6 SEE HOLDDOWN DETAILS AND TYPICAL WALL

FRAMING FOR FURTHER POST SIZE REQUIREMENTS. POSTS ARE TO CONTINUE DOWN TO FOUNDATION.

FOUNDATION NOTES

GENERAL

1. SOIL BENEATH FOOTINGS AND SLABS SHALL BE COMPACTED PER 2019 C.B.C. (90%) RELATIVE COMPACTION MINIMUM.
2. CONTINUOUS FOOTINGS AND GRADE BEAMS SHALL BE EXCAVATED TO THE DEPTH SHOWN ON THE DRAWINGS BELOW UNDISTURBED SOIL OR COMPACTED EARTH. PROVIDE 1-#4 HORIZONTAL BARS ON TOP AND BOTTOM U.N.O. ON FOUND. PLAN.
3. ALLOWABLE SOIL BEARING PRESSURE IS ASSUMED TO BE 1500. PSF IF NO SOILS REPORT IS PROVIDED.
4. SLAB ON GRADE: 4 INCH. NET CONCRETE SLAB WITH #3 BARS @ 18" O.C. EACH @ CENTER OF SLAB OVER 2 INCH. OF SAND OVER 6 MIL. VISQUEEN OVER 2" SAND BED OVER COMPACTED SOIL. U.N.O.
5. NO TRENCHES OR EXCAVATIONS FIVE FEET IN DEPTH OR GREATER INTO WHICH A PERSON SHALL BE REQUIRED TO DESCEND SHALL BE MADE WITHOUT PROPER PERMIT.
6. THE MINIMUM BOLTING FOR SILL PLATES TO FOUNDATION SHALL BE AS FOLLOWS: 5/8" DIAMETER ANCHOR BOLTS WITH 7" MIN EMBEDMENT IN CONCRETE WITH SPACING NO GREATER THAN 4 FEET O.C. NOR FURTHER THAN 12" FROM CORNERS (MIN 2 BOLTS PER PIECE). SEE THE FOUNDATION PLAN & SHEAR WALL SCHEDULE FOR FURTHER BOLTING REQUIREMENTS.(FOR TWO POUR SYSTEMS,BOLTS SHALL BE EMBEDDED 4 INCH MIN. INTO FIRST POUR.)
7. PIPES OR DUCTS THAT EXCEED ONE THIRD THE SLAB OR CONC. WALL THICKNESS SHALL NOT BE PLACED IN STRUCTURAL CONC. UNLESS SPECIFICALLY DETAILED. SEE MECHANICAL AND/OR ELECTRICAL DRAWINGS FOR LOCATION OF SLEEVES, ACCESSORIES, ETC.
8. PIPES MAY PASS THRU STRUCTURAL CONC. IN SLEEVES, BUT SHALL NOT BE EMBEDDED THEREIN.
9. PROVIDE 3/4" CAMBERS AT ALL EXPOSED CORNERS.
10. SEE ARCHITECTURAL PLANS FOR MOLDS, GROOVES, ORNAMENTS, CLIPS OR GROUNDS REQUIRED TO BE CAST IN CONCRETE, AND FOR LOCATION OF FLOOR FINISHES AND SLAB DEPRESSIONS.
11. LOCATION OF POUR JOINTS SHALL BE APPROVED BY THE STRUCTURAL ENGINEER.

CONCRETE

1. UNLESS OTHERWISE NOTED ON PLANS, CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI IN 28 DAYS.
2. FINE & COURSE AGGREGATE SHALL CONFORM TO A.S.T.M. C-33, USE 3000 P.S.I. CONC. @ GRADE BEAMS. CEMENT SHALL CONFORM TO A.S.T.M. C-150 (STANDARD BRAND PORTLAND CEMENT) TYPE II (USE TYPE V CEMENT IF NOTED IN SOILS REPORT)
3. CONCRETE SHALL BE MACHINE-MIXED USING A MAXIMUM OF '7' GALLONS OF WATER PER SACK OF CEMENT. READY MIX CONCRETE SHALL BE MIXED AND DELIVERED IN ACCORDANCE WITH ASTM C-94 MIXED AT A RATE OF 5 SACKS OF CEMENT PER CUBIC YARD. MAXIMUM SLUMP SHALL BE 4 INCH AS MEASURED BY THE ASTM "STANDARD METHOD OF TESTING FOR SLUMP OF PORTLAND CEMENT CONCRETE.
4. DRY PACK SHALL CONSIST OF 1 PART CEMENT, 4 PARTS SAND. BASED ON DRY LOOSE VOLUMES AND NOT LESS THAN 1/4 PART, NOR MORE THAN 1/2 PART, LINE PUTTY OR DRY HYDRATED LIME. DRY PACK SHALL OBTAIN A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 2000 PSI AT 28 DAYS.
5. ADDING CALCIUM CHLORIDE TO CONCRETE OR GROUT IS NOT PERMITTED.
6. CONC. SHALL BE KEPT MOIST FOR 10 DAYS FOR PROPER CURING.

REQUIREMENTS FOR CONCRETE EXPOSED TO SULFATE-CONTAINING SOLUTIONS (ACI 4.3)

SULFATE EXPOSURE	CEMENT TYPE	WATER-CEMENT RATIO	COMPRESSIVE STRENGTH
NEGLIGIBLE	NOT REGULATED	-	2500 psi
MODERATE	I, II	0.50	4000 psi
SEVERE	V	0.45	4500 psi
VERY SEVERE	V	0.45	4500 psi

CONCRETE BLOCK MASONRY

1. CONCRETE BLOCK SHALL CONFORM TO A.S.T.M. C-90 MED. WT. GRADE N UNITS, WITH MIN. COMP. STRENGTH OF 1500 PSI. ALL CMU BLOCKS SHALL BE LAID UP IN RUNNING OR COMMON BOND CONFIGURATION.
2. MORTAR SHALL CONFORM TO ASTM C-270, TYPE S, WITH MINIMUM COMPRESSIVE STRENGTH OF 2000. PSI AT 28 DAYS.

   MIX: 1 PART PORTLAND CEMENT.
   1/2 PART LIME PUTTY.
   4 PARTS SAND. } BY VOLUME

3. GROUT SHALL CONFORM TO ASTM C-476, WITH MINIMUM COMPRESIVE STRENGTH OF 2000. PSI AT 28 DAYS.

   MIX: 1 PART PORTLAND CEMENT.
   3 PARTS SAND
   2 PARTS PEA GRAVEL } BY VOLUME

   WATER SUFFICIENT TO ALLOW GROUT TO FLOW INTO ALL JOINTS.

4. CELLS SHALL BE IN VERTICAL ALIGNMENT TO PROVIDE A MIN. UNOBSTRUCTED CORE OF 3" X 3". DOWELS FROM FOOTINGS SHALL BE SET TO ALIGN WITH CORE REINFORCING.
5. ALL CELLS BELOW FINISHED GRADE AND ALL CELLS WITH REINFORCING, ANCHORS OR INSERTS SHALL BE FILLED SOLID WITH GROUT.
6. CONCRETE SURFACES SHALL BE CLEANED OF ALL LAITANCE PRIOR TO SETTING OF BLOCKS.
7. PROVIDE VERTICAL CONSTRUCTION JOINTS AT 40 FT. O.C.
8. MINIMUM LAP FOR ALL STEEL IS 40 BAR DIAMETER, OR 24 INCHES, WHICHEVER IS GREATER.
9. IF WORK IS STOPPED FOR ONE HOUR OR LONGER, PROVIDE HORIZONTAL CONSTRUCTION JOINTS BY STOPPING GROUT 1-1/2 INCH BELOW THE TOP OF THE BLOCK.

REINFORCED MASONRY (CMU)

1. ALL MASONRY SHALL BE REINFORCED CONCRETE MASONRY UNIT IN ACCORDANCE WITH THE LATEST EDDITION OF ACI 530/ASCE 5/TMS 402.
2. INSTALL ALL BLOCKS IN RUNNING BOND.
3. MINIMUM MASONRY BLOCK (ASTM C90) STRENGTH SHALL (F'M) BE 2000 PSI.
4. TYPE "S" MORTAR (ASTM C270) SHALL BE USED USING 3/8" FULL BEDDING REINFORCED W/ 9 GAGE GALVANIZED LADDER WIRE EVERY 2ND ROW.
5. FILLED CELLS SHALL BE REINFORCED WITH #5 REBAR @ 24" O.C. (UNLESS OTHERWISE IS SPECIFIED ON THE PLANS).
6. GROUT SHALL BE PEA ROCK PUMP MIX (ASTM C476) WITH A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI (28 DAY) (ASTM C1019). TARGETED SLUMP SHALL BE 8"-11".
7. EACH GROUTED CELL SHALL HAVE CLEANOUT OPENINGS AT THE BOTTOM. THERE SHALL BE NO LOOSE MORTAR OR OTHER DEBRIS IN THE BOTTOM OF THE CELL. USE BLAST PRESSURE WASHING FOR SURFACE PREPARATION.

REINFORCING STEEL

1. REINFORCING STEEL, #3 AND #4 GRADE 40, #5 AND LARGER GRADE 60 PER A.S.T.M. A615.
2. LOW HYDROGEN WELDING RODS SHALL BE USED FOR ALL WELDING OF REINFORCING BARS.
3. BARS NOTED AS "CONT" TYPICAL WALL REINFORCING AND VERTICAL COLUMN REINFORCING SHALL HAVE A MINIMUM SPLICE OF 50 BAR DIAMETERS LAP IN MASONRY OR 40 BAR DIAMETERS MINIMUM IN CONCRETE.
4. REINFORCING SHALL BE SPLICED ONLY AS SHOWN OR NOTED. OTHER SPLICES SHALL BE APPROVED BY THE STRUCTURAL ENGINEER.
5. SPLICES IN ADJACENT HORIZONTAL WALL REINFORCING BARS SHALL BE STAGGERED 4 FEET UNLESS OTHERWISE NOTED.
6. PROVIDE DOWELS IN FOOTINGS AND/OR GRADE BEAMS THE SAME SIZE AND NUMBER AS VERTICAL WALL OR COLUMN REINFORCING. DOWELS SHALL HAVE A MINIMUM PROJECTION EQUAL TO STANDARD LAP SPLICE UNLESS OTHERWISE NOTED.
7. ALL REINFORCING, ANCHOR BOLTS, AND OTHER INSERTS SHALL BE SECURED IN PLACE PRIOR TO PLACEMENT OF CONCRETE OR GROUTING OF MASONRY.
8. PROVIDE THE FOLLOWING MINIMUM PROTECTIVE COVERING OF CONCRETE:

BELOW GRADE (UNFORMED)	3" CLEAR
BELOW GRADE (FORMED)	2" CLEAR
WALLS	1" CLEAR
COLUMNS	1.5" CLEAR
BEAMS AND GIRDERS	1.5" CLEAR
STRUCTURAL SLAB (ABOVE GRADE)	3/4" CLEAR

9. #5 OR LARGER REINFORCING BARS SHALL NOT BE RE-BENT WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER.

GRADING NOTES

1. A GRADING PERMIT SHALL BE OBTAINED PRIOR TO ANY GRADING.
2. ALL FILL ONE FOOT & GREATER SHALL BE CERTIFIED AND TESTED AS TO RELATIVE COMPACTION PER U.B.C.
3. ALL FILL SHALL BE COMPACTED IN ACCORDANCE WITH ASTM D-1557, TO MAXIMUM OF 90% DENSITY.
4. ALL UTILITY TRENCH BACKFILLS SHALL BE IN ACCORDANCE WITH THE SOILS ENGINEER'S RECOMMENDATIONS.

STRUCTURAL STEEL

1. STRUCTURAL STEEL SHALL CONFORM TO ASTM A36,(Fy=36.KSI) FOR PLATES AND TO ASTM A992,(Fy=50.KSI) FOR W-SHAPE STEEL SECTIONS.
2. CORTEN STEEL SHALL CONFORM TO ASTM A588, Fy=50. KSI.
3. STAINLESS STEEL SHALL CONFORM TO ASTM A276 TYPE 304-HOT ROLLED, Fy=18. KSI.
4. FABRICATION, ERECTION & PAINTING SHALL COMPLY WITH THE AISC SPECS. CHAPTER M. (THIRTEENTH EDITION).
5. ALL BOLTS FOR STEEL MEMBERS SHALL CONFORM TO ASTM A325 OR A490, UNLESS OTHERWISE NOTED.
6. HIGH TENSILE BOLTS WHERE INDICATED ON THE PLANS OR DETAILS SHALL BE THE FRICTION TYPE AND THERE SHALL BE NO PAINT, OIL, LAQUER, OR GALVANIZING BETWEEN THE CONTACT SURFACES. HIGH TENSILE BOLTS SHALL CONFORM TO ASTM A325 OR A490.
7. HIGH STRENGTH BOLTS SHALL HAVE LOAD INDICATOR WASHERS TO SERVE AS A DIRECT TENSION INDICATOR INSTALLATION FOR HIGH STRENGTH BOLTS SHALL REQUIRE INSPECTION BY A DEPUTY INSPECTOR.
8. ANCHOR RODS SHALL BE ASTM F-1554 GRD. 55 KSI U.N.O. ALL ANCHOR RODS SHALL BE. HEADED RODS.ANCHOR ROD WASHER SHALL BE ASTM A436. NUTS SHALL BE ASTM A563.
9. PIPE COLUMNS SHALL CONFORM TO ASTM A-53 GRADE B.
10. STEEL TUBE SHAPED MEMBERS SHALL CONFORM TO ASTM A-501 OR OR A-500 GRADE B.
11. WHERE FINISH IS ATTACHED TO STRUCTURAL STEEL, PROVIDE HOLES FOR 1/2" WELDED STUDS AT 4 FEET O.C. FOR THE ATTACHMENT OF NAILERS. SEE ARCHITECTURAL DRAWINGS FOR FINISHES.
12. OPEN WEB JOISTS SHALL COMPLY WITH THE STANDARDS OR "THE STEEL JOIST INSTITUTE".
13. STEEL STUDS, JOIST, TRACKS & BRIDGING:
    ASTM A-570 GRADE "E" Fy = 50 KSI 12, 14 & 16 GA.
    ASTM A-570 GRADE "C" Fy = 33 KSI 18 & 20 GA.
14. SPECIAL INSPECTION OF HIGH-STRENGTH A325 AND A490 BOLTS SHALL BE IN ACCORDANCE WITH APPROVED NATIONALLY RECOGNIZED STANDARDS AND REQUIREMENT OF SECTION 1701.
15. SHOP DRAWINGS SHALL BE PROVIDED TO ENGINEER OR ARCHITECT OF RECORD FOR REVIEW PRIOR TO FABRICATION.

STRUCT. STEEL WELDING

1. WELDING SHALL BE DONE BY THE ELECTRIC SHIELDED ARC PROCESS W/E70-XX ELECTRODES AND SHALL COMPLY WITH A.W.S. SPECIFICATIONS FOR WELDING AND FABRICATION.
2. WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS WHO ARE APPROVED BY THE LOCAL AUTHORITY USING ARC PROCESS WITH E70XX ELECTRODES.
3. ALL FIELD WELDS SHALL HAVE CONTINUOUS INSPECTION PER CBC (1701) UNLESS OTHERWISE NOTED.
4. ALL BUTT WELDS SHALL BE FULL PENETRATION U.N.O.
5. A CERTIFICATE OF FABRICATION FROM THE SHOP PERFORMING WELDING OR A REPORT FROM THE SPECIAL INSPECTOR MUST BE FURNISHED TO THE JOB INSPECTOR PRIOR TO FRAMING APPROVAL.
6. WELDED, FULLY RESTRAINED CONNECTION BETWEEN MEMBERS OF ORDINARY MOMENT FRAMES OR SPECIAL MOMENT-RESISTING FRAMES SHALL HAVE SPECIAL CONTINUOUS INSPECTION AND CONNECTION TESTED BY NONDESTRUCTIVE METHODS PER SECTION 1703.
7. FIELD WELDING OF REINFOCING STEEL SHALL BE DONE BY WELDERS SPECIFICALLY CERTIFIED FOR REINFORCING STEEL WELDING .BEFORE WELDING,THE "CARBON EQUIVALENT" (CE) OF STEEL SHALL BE DETERMINED. IF THE (CE) OF STEEL IS MORE THAN 0.75% , THEY SHALL NOT BE WELDED.

FRAMING NOTES

1. FRAMING SHALL COMPLY WITH CHAPTER 23 OF THE 2019 CBC

FRAMING-GENERAL

1. USE SIMPSON U-HANGERS ON ALL JOIST/BEAM/BEAM CONNECTIONS UNLESS NOTED ON PLANS.
2. ALL POSTS SHALL HAVE SIMPSON "PC" CONNECTORS AT TOP AND SIMPSON "BC" OR "BCO" CONNECTORS AT BASES UNLESS OTHERWISE NOTED ON PLANS.
3. ALL CONNECTING HARDWARE, JOIST HANGERS, TIE STRAPS, ETC., SHALL BE SIMPSON "STRONG TIE" UNLESS OTHERWISE NOTED OR SHOWN ON PLANS.
4. FRAMING @ CHIMNEY ENCLOSURE SHALL BE 2x6 STUDS BALLOON FRAMED W/APPROVED STRAPS TO ROOF AND FLOOR DIAPHRAGMS.

FRAMING - WALL

1. SIZE, SPACING & HEIGHT LIMITS FOR WOOD STUDS ARE AS FOLLOWS (UNLESS OTHERWISE NOTED ON PLANS):

   2X4 @ 16" OC (BEARING WALL) SUPPORTING A MAXIMUM OF ONE FLOOR AND ONE ROOF SHALL HAVE A MAXIMUM HEIGHT OF 10 FEET
   2X4 @ 16" OC (NON-BEARING WALL) SHALL HAVE A MAXIMUM HEIGHT OF 14 FEET

   2X6 @ 16" OC (BEARING WALL) SUPPORTING A MAXIMUM OF TWO FLOORS AND A ROOF SHALL HAVE A MAXIMUM HEIGHT OF 10 FEET
   2X6 @ 16" OC (NON-BEARING WALL) MAXIMUM HEIGHT IS 20 FEET

2. RAKE WALLS ADJACENT TO SLOPED CEILINGS SHALL BE BALLOON FRAMED. DOUBLE TOP PLATES SHALL ALWAYS BE SUPPORTED BY A ROOF OR CEILING DIAPHRAGM.
3. SHEAR WALL PANELS MUST BE CONTINUOUS TO THE TOP PLATE AT ROOF FRAMING. SHEATHING SHALL HAVE ALL EDGES BLOCKED & THE APPROPRIATE SHEAR TRANSFER THRU CEILING OR SOFFIT FRAMING.
4. BORING AND NOTCHING OF WALL STUDS SHALL BE PER CBC (2308.9)

   NOTCHING MAXIMUM: 25% OF WIDTH OF STUDS ON BEARING WALLS
   40% OF WIDTH OF STUDS ON NON-BEARING WALLS BORING

   MAXIMUM: 40% OF WIDTH OF STUDS ON BEARING WALLS
   60% OF WIDTH OF STUDS ON NON-BEARING WALLS

   NOTE: A MIN. 5/8" CLEARANCE FROM EDGE OF STUD TO HOLE SHALL BE PROVIDED.

5. DOUBLE 2X TOP PLATE SHALL BE LAPPED 48" AT ALL SPLICES AND SHALL OVERLAP AT CORNERS.
6. WALL BRACING SHALL BE PROVIDED PER CBC (2308.9.3)
7. HARDY FRAMES INSTALLATION PER MFR. SPECIFICATION (ICC ESR-2089)
8. STRONG WALL INSTALLATION PER MFR. SPECIFICATION (ICC-ESR-1267)

FRAMING - FLOOR

1. FLOOR SHEATHING (MIN) 5/8" STRUCTURAL I T & G PLYWOOD PANEL INDEX NO. 32/16 WITH EXTERIOR GLUE. USE 10d COMMON NAILS AT 6" OC AT ALL EDGES, BOUNDARIES, AND 10" O.C. FIELD. NO BLOCKING IS REQUIRED UNLESS NOTED ON PLAN. ALL EDGES BLOCKED AT DECKS.
2. PROVIDE DOUBLE FLOOR JOISTS UNDER ALL PARALLEL NON- BEARING PARTITIONS.
3. PROVIDE CONTINUOUS BLOCKING BETWEEN FLOOR JOISTS UNDER BEARING WALLS WHICH ARE PERPENDICULAR TO JOISTS.
4. FRAMING AROUND OPENINGS: TPT RIMMER AND HEADER JOISTS SHALL BE DOUBLED AND SUPPORTED BY HANGERS PER (CBC 2320.12.5).

FRAMING - ROOF

1. ROOF SHEATHING (MIN) 15/32" STRUC. I PLYWOOD SHEATHING PANEL INDEX NO. 32/16 WITH EXTERIOR GLUE. USE 8d COMMON NAILS AT 6" OC AT ALL EDGES, BOUNDARIES, AND 12" OC FIELD. NO BLOCKING IS REQUIRED UNLESS NOTED ON PLAN.
2. FRAMING AROUND OPENINGS: TPT RIMMER AND HEADER JOISTS SHALL BE DOUBLED AND SUPPORTED BY HANGERS PER CODE

FRAMING - CEILING (PER TABLE 2308.10.2)

1. CEILING JOISTS SHALL BE 2X6 @ 16" O.C. (MAX SPAN= 17'-8")
2. CEILING JOISTS SHALL BE 2X8 @ 16" O.C. (MAX SPAN= 23'-0")

FRAMING - JOISTS/RAFTERS

1. BORING AND NOTCHING OF JOISTS SHALL BE AS FOLLOWS: (CBC 2308.10) 2019 EDITION

   BORING- MAX DIA OF HOLE SHALL NOT EXCEED 1/3 OF DRESSED DEPTH OF JOIST WITH A MINIMUM EDGE CLEARANCE OF TWO INCHES.

   NOTCHING- MAX NOTCH AT ENDS SHALL NOT EXCEED 1/4 OF DEPTH. NO NOTCHING IS ALLOWED IN THE CENTER THIRD OF THE JOIST SPAN. MAX NOTCH IN TOP OR BOTTTOM OF THE JOIST SHALL NOT EXCEED 1/6 OF THE JOIST DEPTH.

2. WHERE THREE OR MORE (MULTI JOISTS) ARE USED, THE JOISTS SHALL BE BOLTED TOGETHER WITH 1/2" DIA. MACHINE BOLTS W/ WASHERS AT 24" OC STAGGERED. BOLTS SHALL BE RETIGHTENED PRIOR TO APPLYING FINISH MATERIALS.
3. JOISTS/RAFTERS SHALL LAP AT SPLICES A MIN. OF 4 INCHES WITH 3-16d NAILS OR USE SIMPSON ST 2115 @ 48 INCHES O.C.
4. CROSS BRIDGING OR 2X BLDG. SHALL BE PROVIDED @ 8'-0" O.C. MAX. FOR ALL JOISTS AND RAFTERS MORE THAN 8" IN DEPTH.
5. 2X SOLID BLOCKING SHALL BE PLACED BETWEEN JOISTS OR RAFTERS AT ALL SUPPORTS.

DRAINAGE NOTES

1. MINIMUM GRADIENTS ARE AS FOLLOWS: EARTH= 2%, PAVING= .5%
2. POSITIVE DRAINAGE AWAY FROM STRUCTURES SHALL BE AS FOLLOWS:

   2% MIN. TO 21% MAX
   SWALES TO BE 3 FEET MIN. AWAY FROM STRUCTURES.

FRAMING-BOLTING

1. ALL BOLTS BEARING ON WOOD SHALL HAVE WASHERS UNDER HEAD OR NUT. SEE S.W. SCHEDULE.
2. ALL BOLTS SHALL BE RETIGHTENED, PRIOR TO APPLICATION OF PLYWOOD, PLASTER, ETC.
3. HOLES FOR BOLTS SHALL BE BORED 1/32" TO 1/16" LARGER THAN NOMINAL BOLT DIAMETER.
4. FASTENERS IN PRESSURE-TREATED AND FIRE-RETARDANT,TREATED WOOD SHALL BE OF HOT-DIPPED,ZINC-COATED GALVANIZED STEEL,STAINLESS STEEL,SILICON BRONZE OR COPPER.

LUMBER

1. ALL LUMBER SHALL BE DOUGLAS FIR-LARCH OR THE FOLLOWING GRADES UNLESS OTHERWISE NOTED (MAX MOISTURE CONTENT SHALL NOT EXCEED 19% & GRADED IN ACCORDANCE WITH THE (WEST COAST LUMBERMAN'S ASSOCIATION.)

   REPETITIVE USE MEMBERS

   STUDS & PLATES NO. 2

   JOISTS & RAFTERS:

   2X4 TO 4X4 INCLUSIVE N0. 2
   2X6 TO 3X16 INCLUSIVE NO. 2

   SINGLE USE MEMBERS

   BEAMS:
   4X N0. 2
   6X OR LARGER N0. 1

   POSTS & MULLION:
   4X4 & SMALLER N0. 2
   4X6 & LARGER N0. 2
   6X6 & LARGER N0. 1

   BLOCKING, FURRING, ETC. N0. 3
   DECKING & SHEATHING
   2X, 3X, 4X CONST. GRADE

2. ALL WOOD BEARING ON CONCRETE OR MASONRY IF LESS THAN 4 FEET FROM GRADE SHALL BE PRESSURE TREATED DOUG. FIR.
3. GLUED-LAMINATED WOOD BEAMS SHALL BE DOUGLAS FIR COMB. 24F-V4 (*) DF/DF (Fb=2400 PSI, Fv=165 PSI, E=180,000 PSI) INDUSTRIAL APPEARANCE WITH EXTERIOR GLUE UNLESS OTHERWISE NOTED ON PLANS. A CERTIFICATE OF INSPECTION FOR EACH GLU-LAM BEAM FROM AN APPROVED TESTING AGENCY TO BE SUBMITTED AND APPROVED BY THE BUILDING DEPT. PRIOR TO ERECTION. (*) USE V8 FOR CANT. BEAMS AND V4 FOR SIMPLE SPANS BEAMS]
4. SHOP DRAWING SHALL BE PROVIDED TO ENGINEER OR ARCHITECT OF RECORD FOR REVIEW PRIOR TO FABRICATION.
5. ALL STRUCTURAL PLYWOOD SHALL BE IN ACCORDANCE WITH (PS 1-95)
6. PARALLAM PSL PER TRUS JOIST MACMILLAN (ICC ESR-1387) (Fb= 2900 PSI, Fv=290 PSI, E= 2,000,000 PSI)
7. TJI JOISTS INSTALLATION PER MANUFACTURE SPECIFICATION (ICC ES ESR-1153 AND ICC ES ESR-1387)

SPECIAL INSPECTION (PER CBC SECTION 1704,1706 & 1707)

1. SPECIAL INSPECTION BY A REGISTERED DEPUTY BUILDING INSPECTOR, APPROVED BY THE ARCHITECT AND THE CHECKING AGENCY, SHALL BE REQUIRED FOR THE FOLLOWING TYPES OF WORK. SEE PROJECT SPECIFICATIONS FOR SPECIFIC REQUIREMENTS. SPECIAL INSPECTIONS SHALL NOT BE REQUIRED WHEN THE WORK IS DONE ON THE PREMISES OF A FABRICATOR REGISTERED AND APPROVED BY THE BUILDING OFFICIAL TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTION.

ITEMS REQUIRE SPECIAL INSPECTION AS MARKED:

VERIFICATION & INSPECTION	CONTINUOUS	PERIODIC
1. STRUCTURAL EPOXY BOLTING.	☒	
2. WELDING.	☐	
2a: FIELD WELDING OF MOMENT RESISTING STEEL FRAMES.	☐	
2b: STRUCTURAL STEEL OR REINFORCING	☐	
2c: STEEL DECKING.	☐	
2d: SHEAR CONNECTORES.	☐	
3. PLACEMENT OF REINFORCING STEEL IN CMU WALL.	☐	
4. HIGH STRENGTH BOLTING	☐	
5. EXPANSION TYPE ANCHOR BOLTS.	☐	
6. HIGH STRENGTH BOLTING		☐
7. CONCRETE WHERE CONCRETE STRENGTH OF 3000 PSI OR GREATER IS SPECIFIED.		☐
8. DIAPHRAGM CONNECTION TO STEEL SUPPORT MEMBERS.		☐
10. WOOD SHEAR WALLS AND WOOD DIAPHRAGMS NAILING.		☐
11. WOOD STRUCTURAL PANEL SHEATHING.		☐
12. NOMINAL SIZE OF FRAMING MEMBERS AT PANEL EDGES.		☐
13. NAIL OR STAPLE DIAMETER AND LENGTH.		☐
14. COMPACTED FILL		☐
15. FOUNDATION -ANCHOR BOLT AND HOLD DOWN.		☒
16. INSPECTION OF LATERAL FORCE RESISTING ELEMENTS.		☐

"CONTRACTOR RESPONSIBILITY:

EACH CONTRACTOR OR SUB-CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF THE WIND AND/OR SEISMIC RESISTING SYSTEM THAT IS LISTED IN THE STATEMENT OF SPECIAL INSPECTIONS SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND THE OWNER PRIOR TO THE COMMENCEMENT OF WORK REQUIRING SPECIAL INSPECTION.
THE CONTRACTOR'S STATEMENT OF RESPONSIBILITY SHALL CONTAIN THE FOLLOWING:
1) ACKNOWLEDGMENT OF AWARENESS OF THE SPECIAL REQUIREMENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTIONS;
2) ACKNOWLEDGMENT THAT CONTROL WILL BE EXERCISED TO OBTAIN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS APPROVED BY THE BUILDING OFFICIAL;
3) PROCEDURES FOR EXERCISING CONTROL WITHIN THE CONTRACTOR'S ORGANIZATION, AND THE METHOD AND FREQUENCY OF REPORTING AND THE DISTRIBUTION OF THE REPORTS;
4) IDENTIFICATION AND QUALIFICATIONS OF THE PERSON(S) EXERCISING SUCH CONTROL AND THEIR POSITION(S) IN THE ORGANIZATION."

ABBREVIATIONS:

A.B.	ANCHOR BOLT
ABV.	ABOVE
BAR	REINF. BAR
BD	BOARD
BLKG.	BLOCKING
BLW.	BELOW
BM	BEAM
B.N.	BOUNDARY NAIL
B.W.	BOTH WAYS
CONT.FTG.	CONTINUOUS FOOTING
C.J.	CEILING JOIST
COL.	COLUMN
CONC.	CONCRETE
CONT.	CONTINUOUS
CLG.	CEILING
DP	DEEP
DBL	DOUBLE
D.F.	DOUGLAS FIR
DIA.	DIAMETER
DO	DITTO
(E)	EXISTING
E.W.	EACH WAY
E.J.	EXPANSION JOINT
E.N.	EDGE NAIL
EQ	EQUAL
FB	FLOOR BEAM
F.G.	FINISH GRADE
F.J.	FLOOR JOIST
FL	FLUSH
FMG.	FRAMING
F.N.	FIELD NAIL
F.O.C.	FACE OF CONCRETE
F.O.M.	FACE OF MASONRY
F.O.S.	FACE OF STUDS
F.P.	FULL PENETRATION
FTG	FOOTING
GA.	GAUGE
GALV.	GALVANIZED
GLB	GLUE-LAMINATED BEAM
GRD. BM.	GRADE BEAM
GWB	GYPSUM WALLBOARD
H	HIGH
HDR.	HEADER
HGT.	HEIGHT
HNGR.	HANGER
HORIZ.	HORIZONTAL
K.P.	KING POST
L	LENGTH
LT. WT.	LIGHT WEIGHT
LVL	LAMINATED VENEER LUMBER
MAS.	MASONRY
M.B.	MACHINE BOLT
MLB	MICRO=LAM BEAM
(N)	NEW
N.G.	NATURAL GRADE
O.C.	ON CENTER
P.A.	POST ABOVE
PSL	PARALLAM PSL BEAM
PLWD	PLYWOOD
P.T.	PRESSURE TREATED
R.B.	RIDGE BEAM
REINF.	REINFORCING
REQ'D.	REQUIRED
RF	ROOF
R.R.	ROOF RAFTER
SIM.	SIMILAR
T.R.	THREADED ROD
TYP.	TYPICAL

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Project Name and Address:

PORTSIDE LOFTS
600 FERRY STREET, MARTINEZ, CA 94513

Date: Nov. 10, 2020
Scale: 1/4" = 1'- 0"

DRAWING TITLE: STRUCTURAL NOTES

Sheet :

Page No. : S0. 0

No.	Revision/Issue	Date
△1	Issued for client approval	Nov. 05, 2019
△2	Issued for city submittal	Nov. 20, 2020
△		
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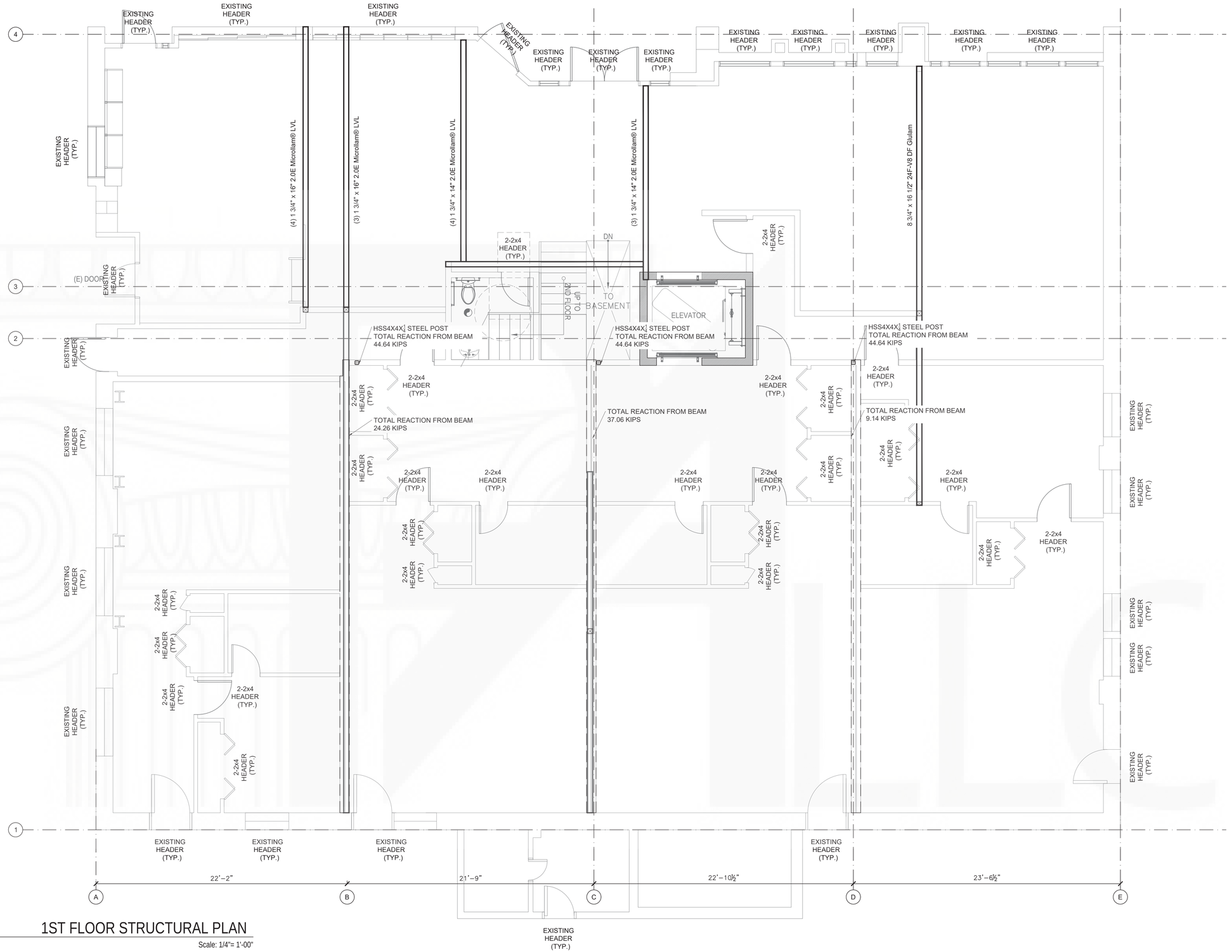

1 1ST FLOOR STRUCTURAL PLAN

Scale: 1/4"= 1'-00"

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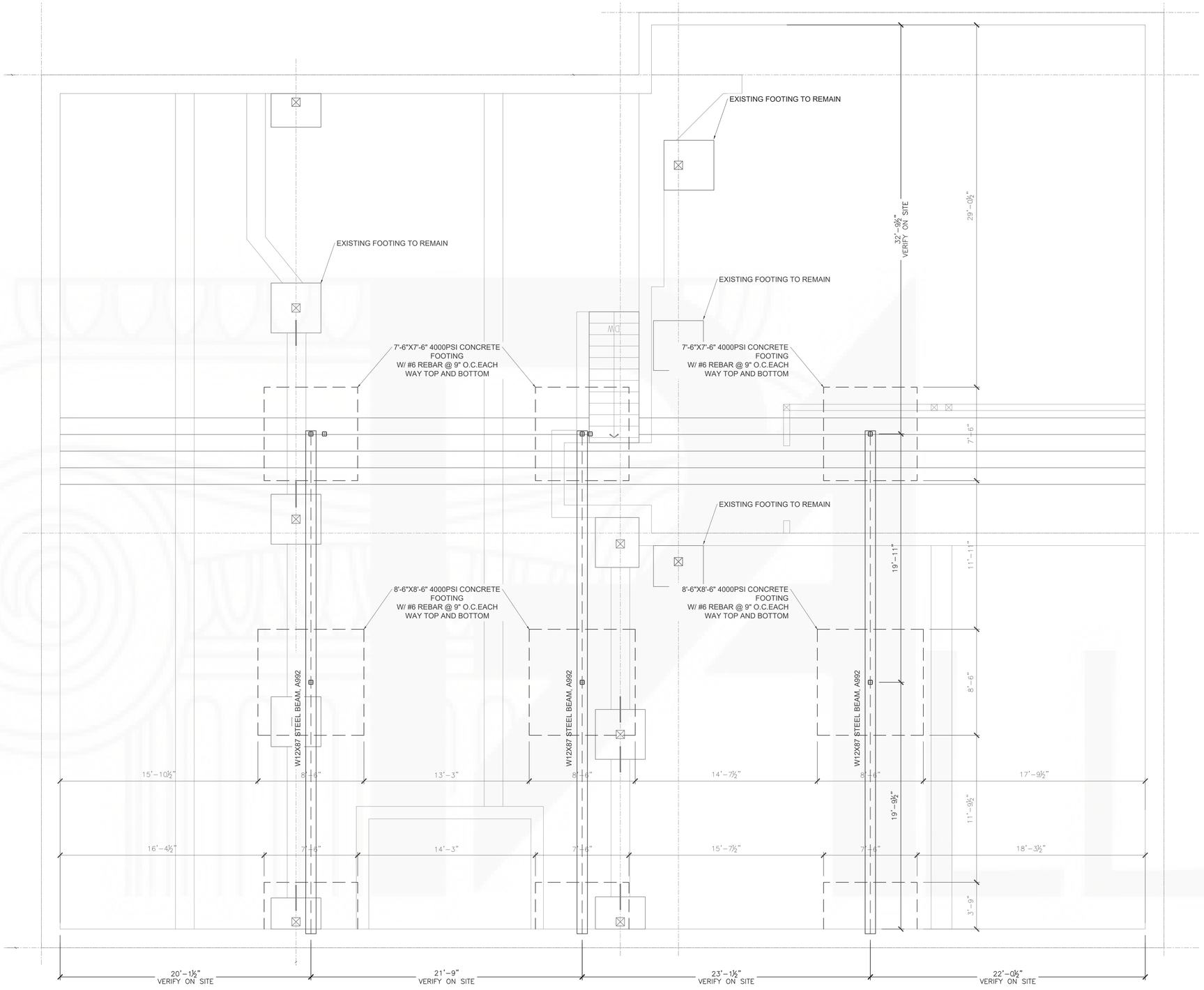

1 FOUNDATION & STRUCTURAL PLAN

Scale: 1/4"= 1'-00"

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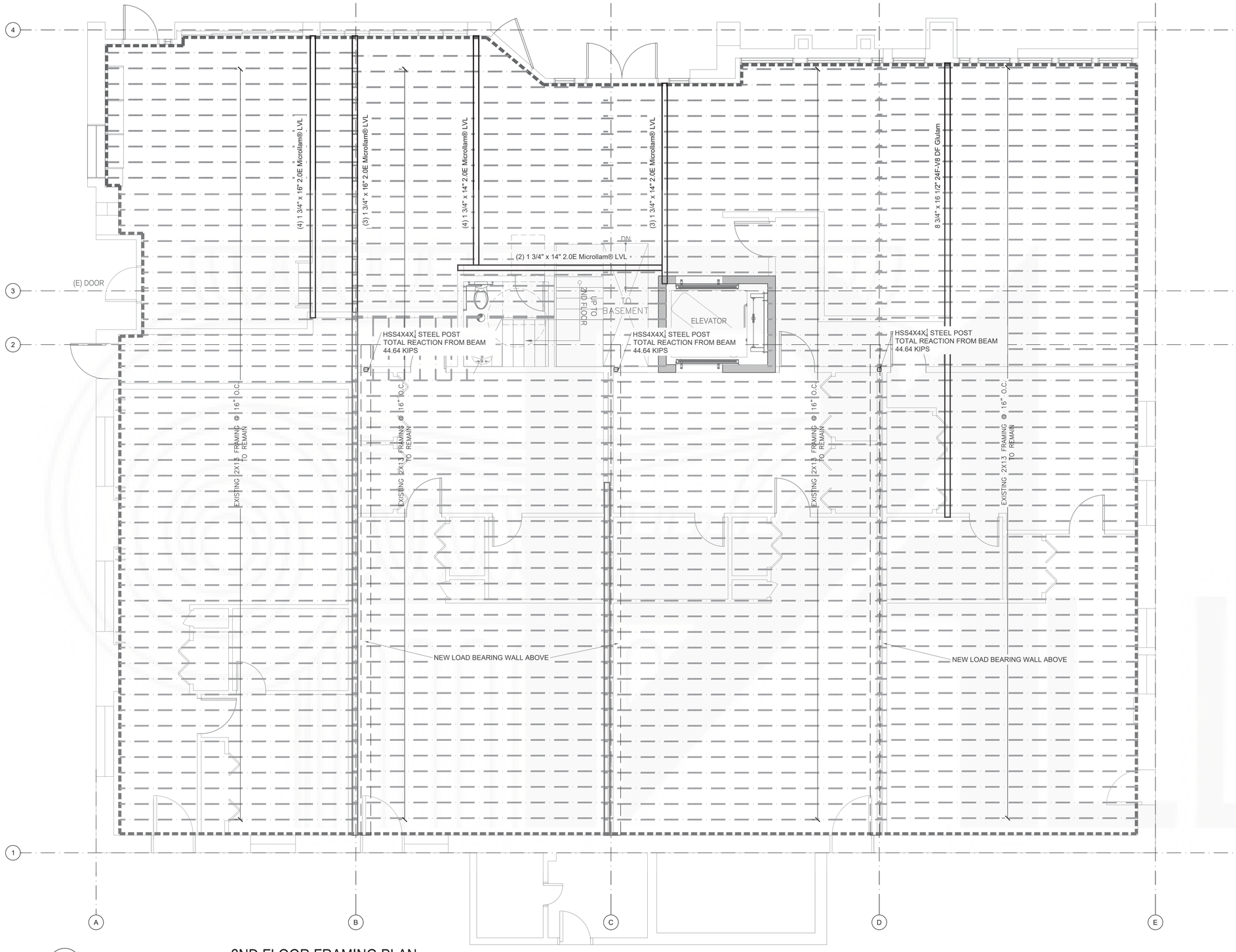

1 2ND FLOOR FRAMING PLAN

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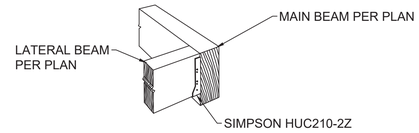

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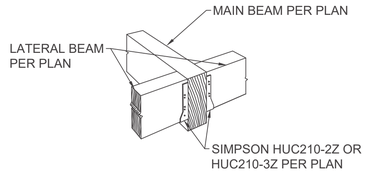

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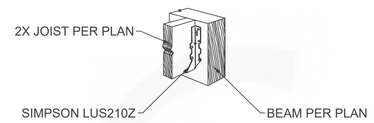

JOIST AND BEAM CONNECTION DETAIL

NOT TO SCALE

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Page No. :

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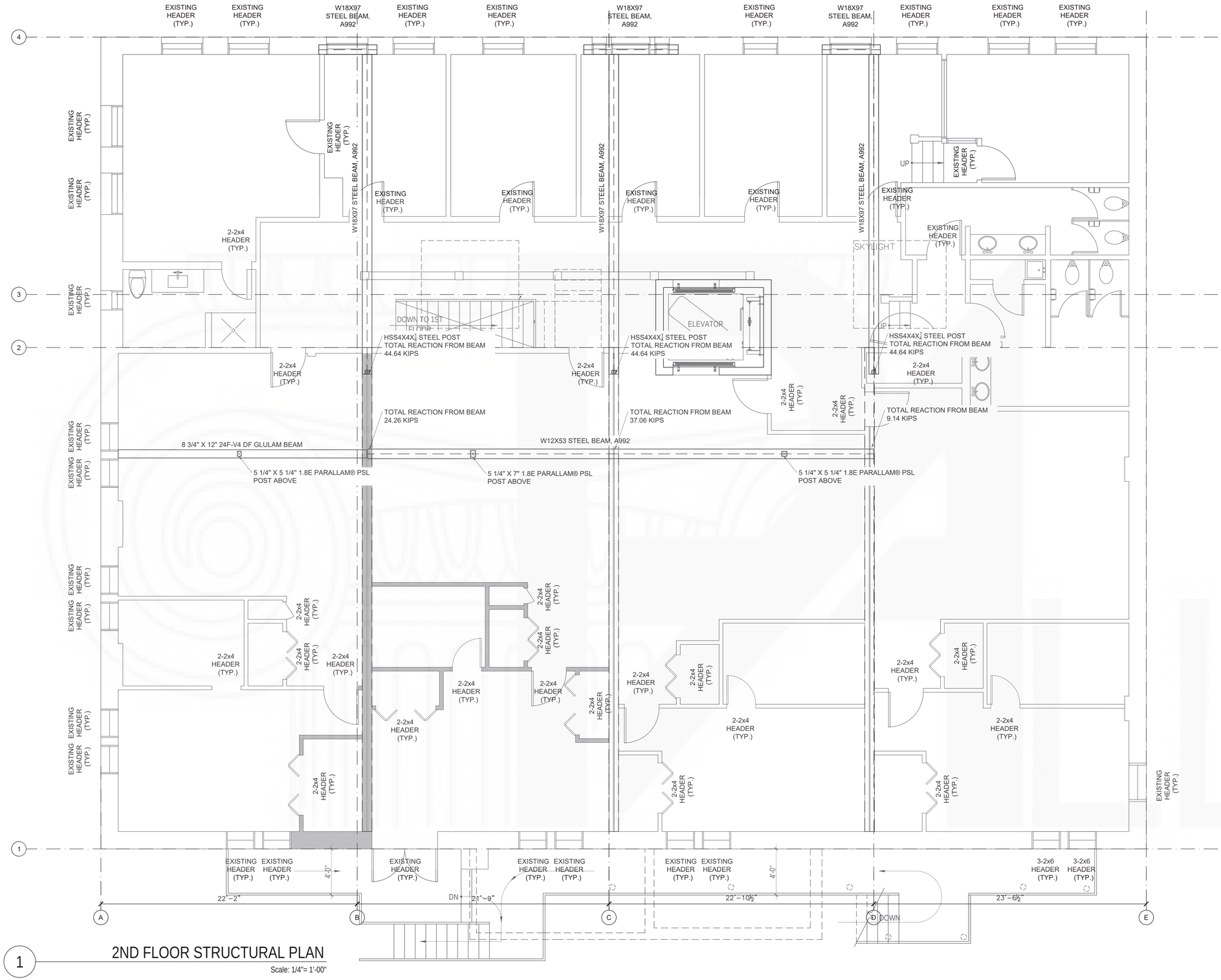

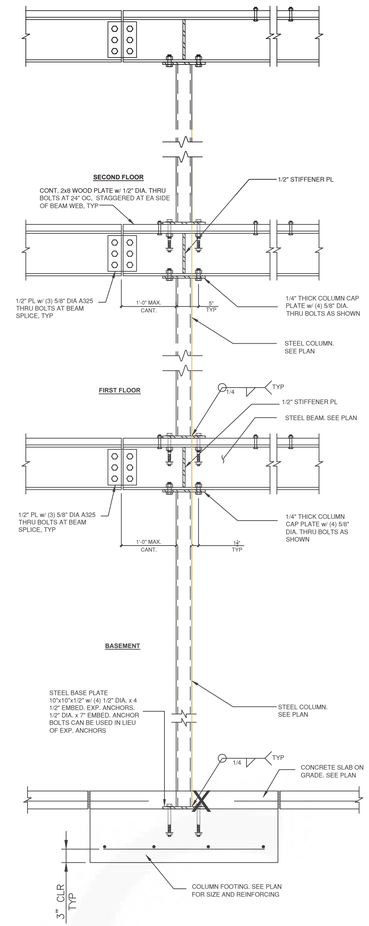

1 2ND FLOOR STRUCTURAL PLAN

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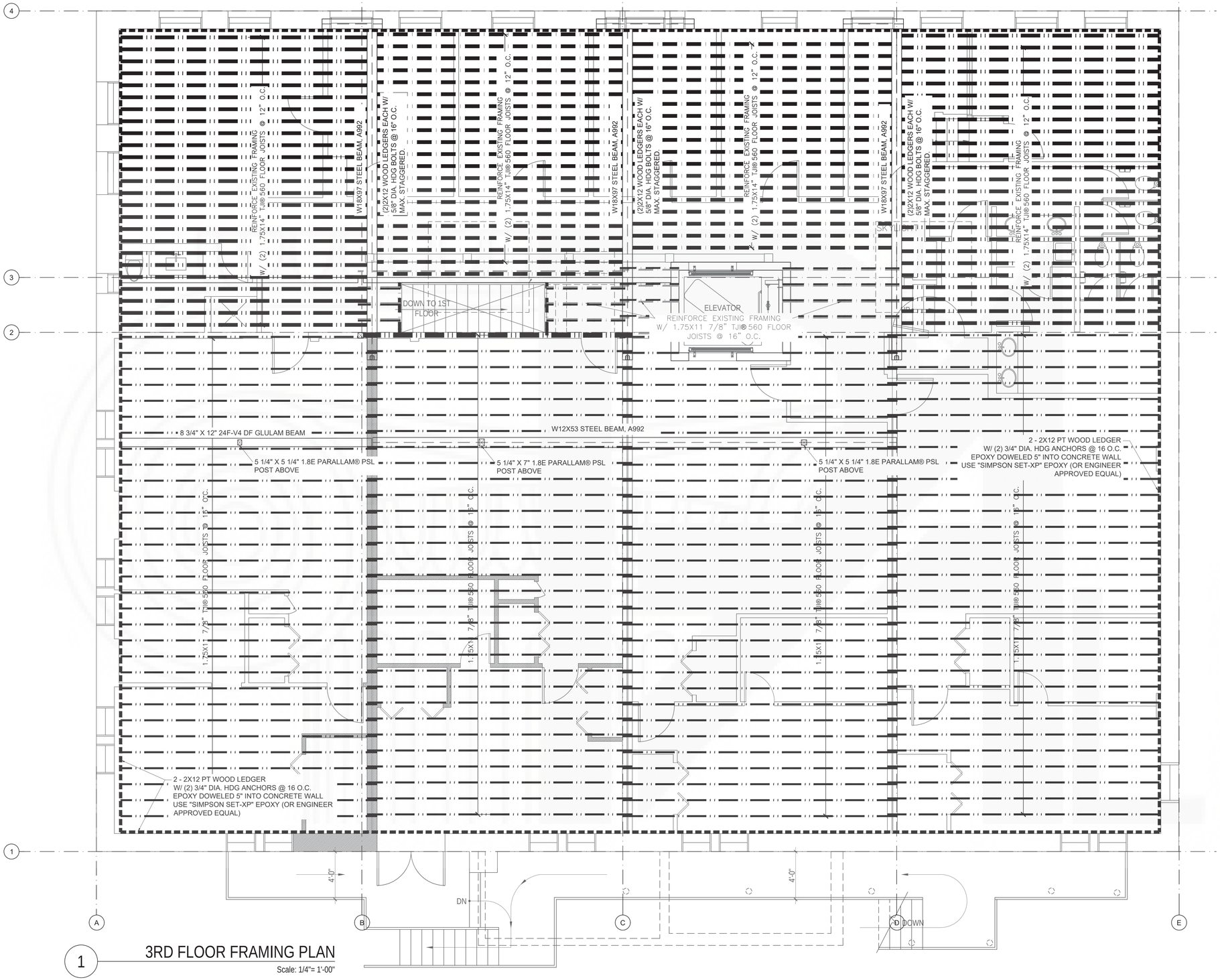

1 3RD FLOOR FRAMING PLAN

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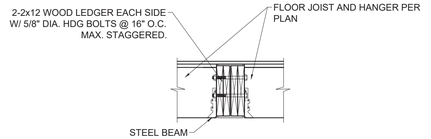


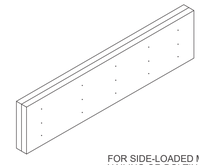
STEEL BEAM TO JOIST CONNECTION

SCALE 1"=1'-0"

1)MIN. OF 2 ROWS 16d (3D) NAILS @ 12" O.C.

2)MIN. OF 3 ROWS 16d (3D) NAILS @ 12" O.C. FOR 16" & 18" BEAMS

3)MULTIPLE PIECES OF MICROLLAM LVL CAN BE NAILED OR BOLTED TOGETHER TO FORM A HEADER OR BEAM OF THE REQUIRED SIZE, UP TO A MAX. WIDTH OF 7"



FOR SIDE-LOADED MULTIPLE MEMBER BEAMS, ADDITIONAL NAILING OR BOLTING MAY BE REQUIRED. SEE CURRENT TRUSS JOIST Mac MILLAN LITERATURE.

2 CONN. OF MULTIPLE PIECES OF TOP-LOADED BEAMS

SCALE: NTS

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PORTSIDE LOFTS

600 FERRY STREET, MARTINEZ, CA 94513

Date: Nov. 10, 2020

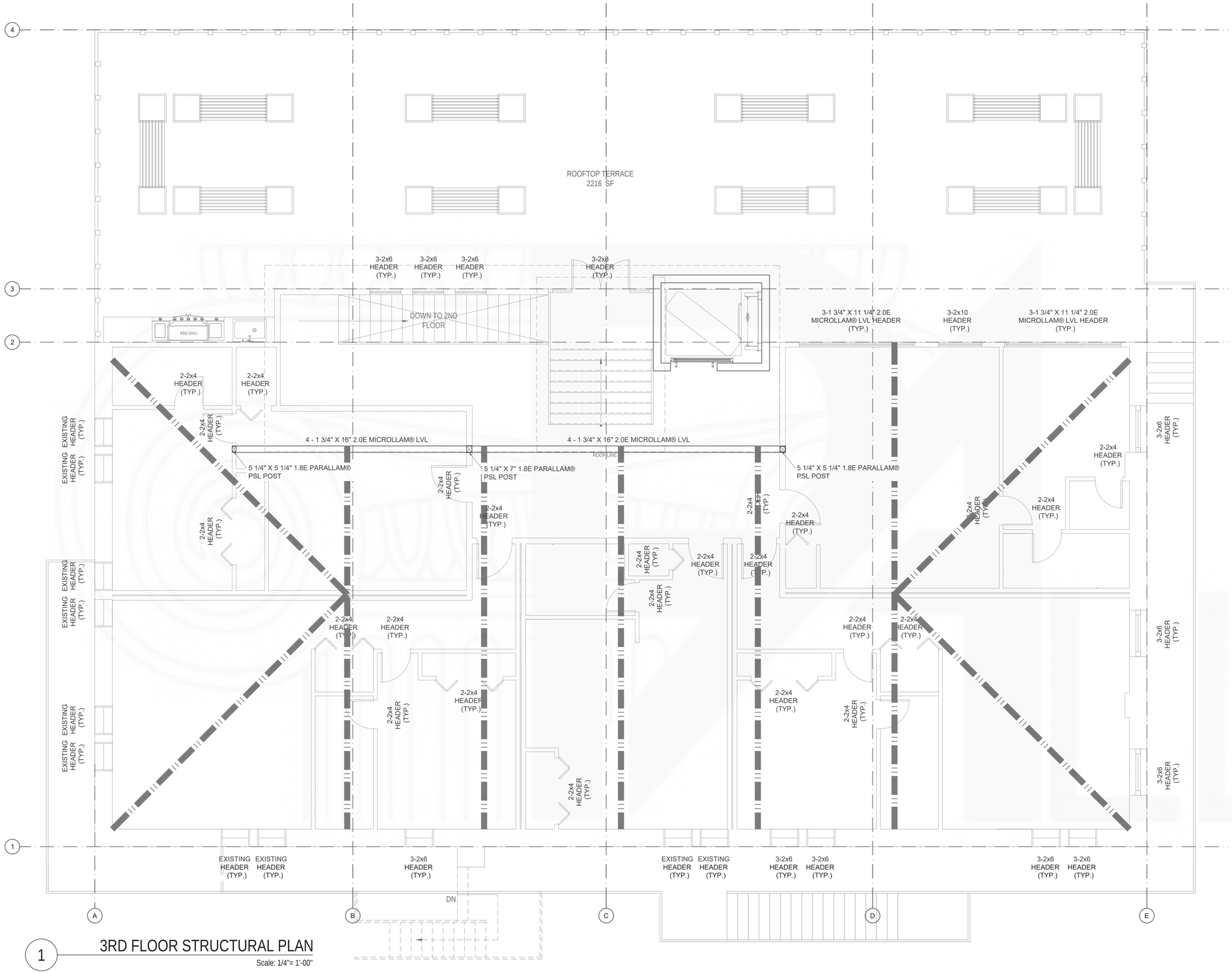
Scale: 1/4" = 1'- 0"

DRAWING TITLE: 3RD FLOOR FRAMING PLAN

Sheet : S4. 0

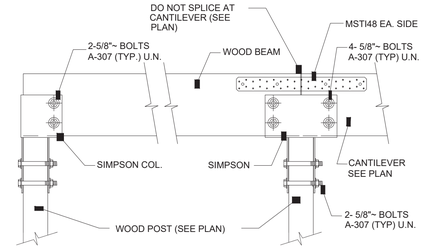
Page No. :

No.	Revision/Issue	Date
1	Issued for client approval	Nov. 05, 2019
2	Issued for city submittal	Nov. 20, 2020



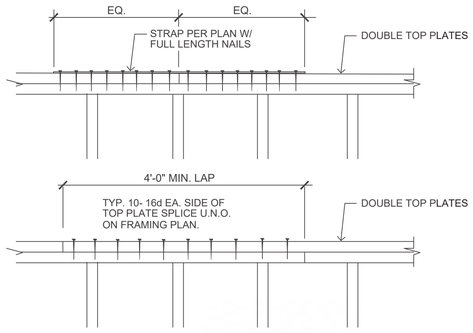
1 3RD FLOOR STRUCTURAL PLAN

Scale: 1/4"= 1'-00"



2 TYP. BEAM TO COLUMN DETAIL

SCALE: 1"=1'-0"



3 TOP PLATE SPLICE DETAIL

SCALE: NTS

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PORTSIDE LOFTS

600 FERRY STREET, MARTINEZ, CA 94513

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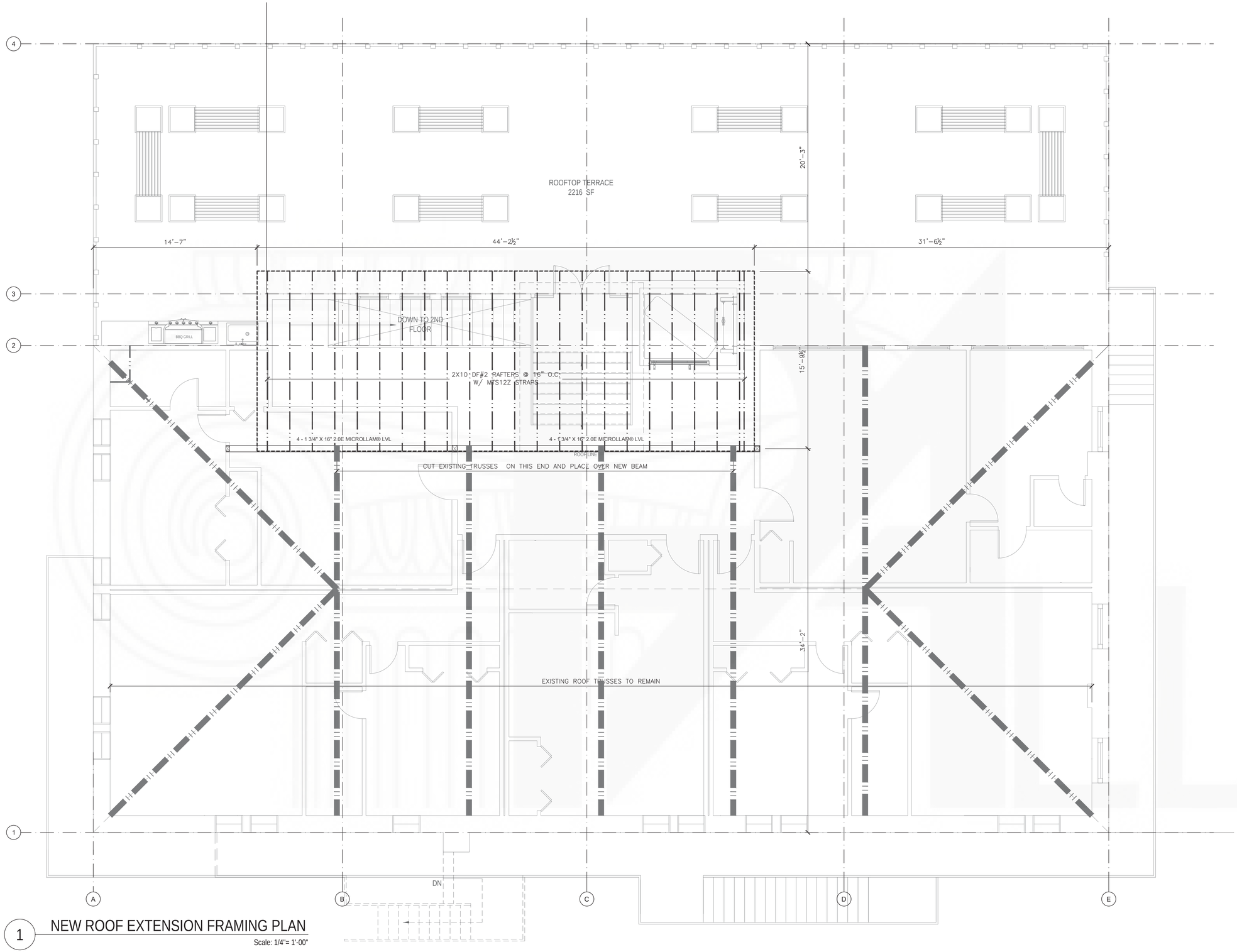
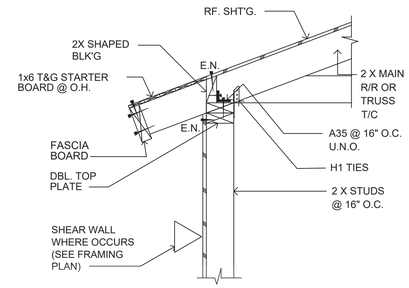


1 NEW ROOF EXTENSION FRAMING PLAN

Scale: 1/4"= 1'-00"



2 SHEAR TRANSFER SECTION B

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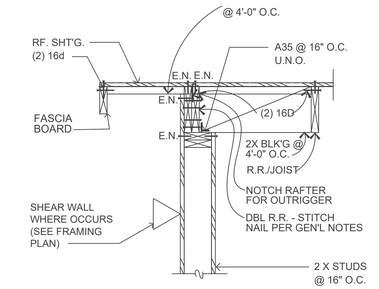

3 ROOF FRAMING @ RAKE WALL

SCALE: 1"=1'-0"

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600 FERRY STREET, MARTINEZ, CA 94513

Date: Nov. 10, 2020

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DRAWING TITLE: NEW ROOF EXTENSION FRAMING PLAN

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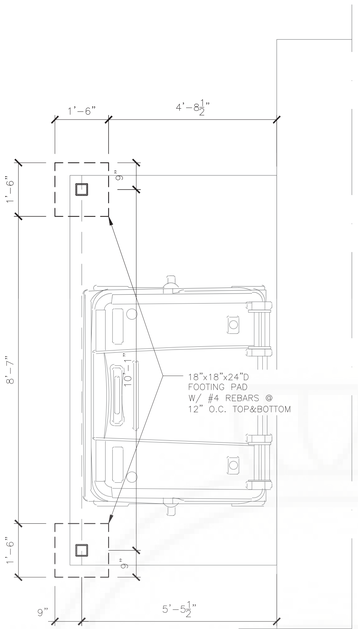
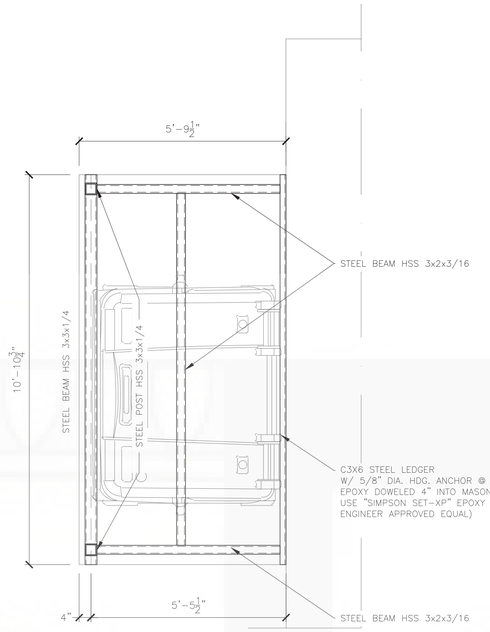


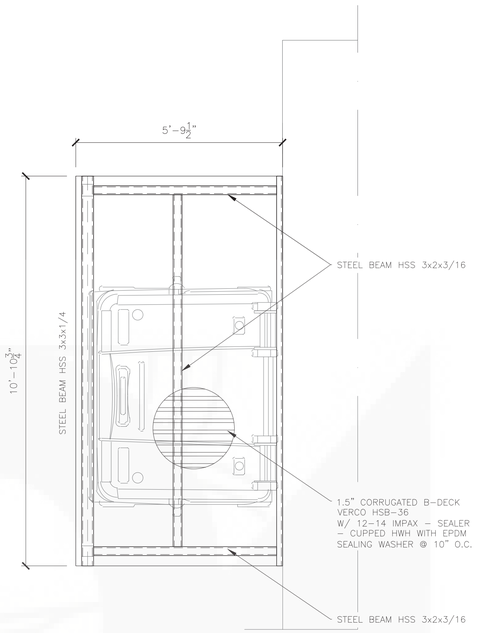
1 FOUNDATION PLAN

Scale: 1/2"= 1'-00"



2 STRUCTURAL PLAN

Scale: 1/2"= 1'-00"



3 ROOF FRAMING PLAN

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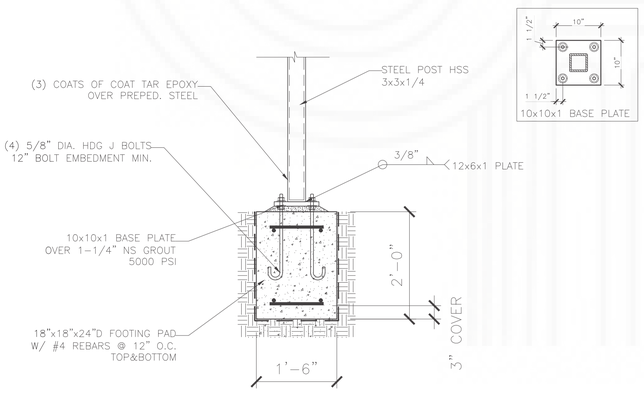

4 FOUNDATION DETAIL

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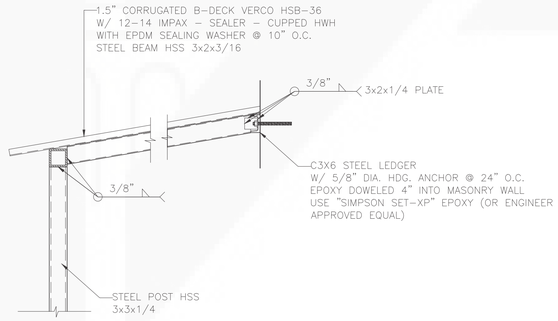

5 ROOF SECTION

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DRAWING TITLE: COVER FOR DUMPSTER

Sheet :

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S7. 0

No.	Revision/Issue	Date
1	Issued for client approval	Nov. 05, 2019
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GENERAL NOTES

A. GENERAL

1. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND SHALL NOTIFY THE ENGINEER OF ANY DEVIATIONS BETWEEN EXISTING CONDITIONS AND THE ORIGINAL DESIGN DRAWINGS.
2. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND FRAMING OR CONNECTION DETAILING SHOWN IN THESE DRAWINGS. CONTRACTOR SHALL SUBMIT REVISED SHOP DRAWINGS SHOWING ANY REQUIRED MODIFICATION TO THE ORIGINAL DESIGN.
3. INFORMATION CONTAINED IN THE ORIGINAL DESIGN DRAWINGS HAS BEEN SUPPLEMENTED BY STRUCTURE SURVEYS. CONTRACTOR SHALL UTILIZE SURVEY RESULTS IN THE DESIGN OF TEMPORARY WORKS, ERECTION PROCEDURES, AND CONNECTION DETAILING AS NECESSARY. SURVEY REPORTS ARE AVAILABLE THROUGH BROOKFIELD PROPERTIES DEVELOPER LLC AND ON 450 WEST 33RD STREET BASE BUILDING MODIFICATION PROJECT PREPARED BY SOM IN 2014.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PERFORMANCE OF ANY ADDITIONAL SURVEY WORK REQUIRED PRIOR TO CONSTRUCTION. CONTRACTOR SHALL SUBMIT ADDITIONAL SURVEY RESULTS TO THE ENGINEER. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN THE EXISTING CONDITIONS ASSUMED IN THESE DRAWINGS AND THE FINDINGS OF ADDITIONAL SURVEYS.
5. DRAWINGS ARE BASED ON THE ORIGINAL DESIGN DRAWINGS FOR THE WEST YARD DISTRIBUTION CENTER PREPARED BETWEEN 1966 AND 1969 AND PROVIDED BY BROOKFIELD PROPERTIES DEVELOPER LLC, AND ON 450 W. 33RD ST REPOSITIONING PROJECT PREPARED BY SOM IN 2015.
6. CONTRACTOR SHALL INDEPENDENTLY VERIFY LOADS AND LOAD LOCATIONS IMPOSED ONTO THE PRIMARY BUILDING STRUCTURE BY MECHANICAL EQUIPMENT, DUNNAGES, BUILDING MAINTENANCE UNITS, OR SIMILAR ITEMS THAT MAY CHANGE OR MAY BE ADDED RELATIVE TO THE CURRENTLY DOCUMENTED DESIGN AS PART OF "TENANT'S DESIGN" WORKS. THE CONTRACTOR SHALL INFORM THE ENGINEER OF SUCH CHANGES.
7. GRID LINES SHOWN MATCH THOSE FOR THE ORIGINAL BUILDING CONSTRUCTION. GRID LINES ARE TO BE ESTABLISHED ON SITE AND AGREED WITH THE ARCHITECT PRIOR TO CONSTRUCTION.
8. CONTRACTOR SHALL PROVIDE A COMPLETE AND COMPREHENSIVE METHODS STATEMENT INCLUDING SEQUENCES, DETAILS, DRAWINGS, PROCEDURES FOR ALL STRUCTURAL WORK INCLUDING REMOVAL, SHOP DRAWING PREPARATION, FABRICATION, NEW INSTALLATION, QUALITY ASSURANCE PROGRAM PRIOR TO THE START OF ANY WORK.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR THE STRUCTURAL DESIGN, INSTALLATION, SEQUENCING, AND REMOVAL OF ALL TEMPORARY WORKS INCLUDING SHORING AND BRACING TO SUPPORT FRAMING DURING CONSTRUCTION CONDITIONS. ALL NOTES AND DIAGRAMS SHOWN IN THESE DRAWINGS PERTAINING TO TEMPORARY WORKS ARE SUGGESTIVE ONLY AND SHALL BE VERIFIED BY THE CONTRACTOR.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING ALL TEMPORARY WORKS SUCH AS BRACING, SHORING AND TEMPORARY CONNECTIONS FOR SATISFACTORY PERFORMANCE DURING ALL WORKS.
11. CONTRACTOR SHALL COMPLETE THE INSTALLATION OF NEW STRUCTURAL STEEL IN AREAS OF EXISTING REINFORCED CONCRETE REMOVAL PRIOR TO THE REMOVAL OF ANY EXISTING CONCRETE UNO IN PLANS.
12. CONTRACTOR SHALL ENSURE THAT TEMPORARY CONSTRUCTION LOADS WILL NOT EXCEED LIVE LOAD ALLOWANCES SPECIFIED IN THESE DRAWINGS NOR LIVE LOAD ALLOWANCES SPECIFIED IN THE ORIGINAL DESIGN DRAWINGS, WHICHEVER GOVERNS.
13. SUGGESTED TEMPORARY COLUMN BRACING SCHEME. THE CONTRACTOR AND/OR STRUCTURAL STEEL ERECTOR SHALL PROVIDE FULL BRACING DETAIL PRIOR TO INSTALLATION.
14. THE CONTRACTOR SHALL IMPLEMENT A CONTINUOUS SURVEY MONITORING PROGRAM THAT DOCUMENTS THE GEOMETRY OF EXISTING AND NEW STRUCTURE DURING ALL REMOVAL AND INSTALLATION WORKS. CONTRACTOR SHALL SUBMIT A MONITORING METHOD STATEMENT OUTLINING SURVEY POINT LOCATIONS. MONITORING SHALL INCLUDE:
    a. WALLS INCLUDING ALL WALLS SUBJECT TO REMOVAL WORKS, WALLS LOCATED DIRECTLY ADJACENT TO SLAB REMOVAL WORK, AND WALLS LOCATED WITHIN THE SAME BUILDING PORTION AS A WALL THAT IS SUBJECT TO REMOVAL WORK. MONITOR TWO (2) HORIZONTAL AND ONE (1) VERTICAL COORDINATES PER MEASURING POINT AT THREE (3) FLOOR ELEVATIONS AS A MINIMUM INCLUDING THE TOP OF THE WALL.
    b. COLUMNS SUBJECT TO ADJACENT WALL OR SLAB REMOVAL WORKS. MONITOR TWO (2) HORIZONTAL AND ONE (1) VERTICAL COORDINATES PER MEASURING POINT AT THREE (3) FLOOR ELEVATIONS AS A MINIMUM INCL. THE TOP OF THE COLUMN.
    c. COLUMNS SUBJECT TO ADJACENT WALL OR SLAB REMOVAL WORKS. MONITOR TWO (2) HORIZONTAL AND ONE (1) VERTICAL COORDINATES PER MEASURING POINT AT THREE (3) FLOOR ELEVATIONS AS A MINIMUM INCL. THE TOP OF THE COLUMN.
15. SEE TECHNICAL SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS NOT NOTED IN THESE DRAWINGS.
16. DRILLING INTO OR SURFACE DEMOLITION OF EXISTING CONCRETE STRUCTURE TO REMAIN SHALL BE PERFORMED IN A MANNER WHICH AVOIDS DAMAGE TO EXISTING REINFORCEMENT UNLESS SPECIFICALLY ACCEPTED BY THE ENGINEER.
17. CUT SURFACES SHALL BE THOROUGHLY CLEANED, DRIED, COATED WITH BONDING AGENTS AS REQUIRED, AND PATCHED WHERE REQUIRED WITH SUITABLE COMPOUND MATERIAL.
18. EXPOSED REINFORCING BARS IN CUT SURFACES SHALL BE CUT OFF AND GROUND FLUSH WITH THE NEW CONCRETE SURFACE AND COATED WITH SUITABLE EPOXY REBAR COATING.
19. WHERE EXISTING CONCRETE REINFORCEMENT IS TO BE REUSED IN-PLACE, CONCRETE SHALL BE REMOVED IN A MANNER WHICH MINIMIZES DAMAGE TO THE REINFORCEMENT. REINFORCEMENT SHALL BE CLEANED OF ANY DEBRIS AND LOOSE CONCRETE, DAMAGED OR CUT REINFORCEMENT SHALL BE REPLACED BY METHODS ACCEPTABLE TO THE ENGINEER.

COMPOSITE METAL DECK NOTES

1. ALL COMPOSITE METAL DECK SHALL BE FABRICATED FROM STEEL TYPE ASTM A653/A653M HAVING A MINIMUM YIELD STRENGTH OF 33,000 PSI ALL COMPOSITE METAL DECKING SHALL BE HOT-DIPPED GALVANIZED AS INDICATED IN SPECIFICATIONS "STEEL DECKING".
2. ALL COMPOSITE METAL DECK AND METAL DECK ACCESSORIES SHALL BE DESIGNED FOR THE SPAN AND LOADING CONDITIONS SHOWN ON THE STRUCTURAL DRAWINGS.
3. COMPOSITE METAL DECK SECTION PROPERTIES SHALL BE COMPUTED IN ACCORDANCE WITH THE AISI "SPECIFICATION FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS", LATEST EDITION, UNLESS NOTED OTHERWISE.
4. THE MINIMUM GAGE OF ALL COMPOSITE METAL DECKS SHALL BE 18 GAGE BUT NOT LESS THAN THE GAGE INDICATED IN THE CONTRACT DRAWINGS.
5. THE METAL DECK CONTRACTOR SHALL SUBMIT, FOR REVIEW, STRUCTURAL ENGINEERING CALCULATIONS AND/OR OTHER DESIGN DOCUMENTATION FOR ALL DETAILS DECK CLOSURE, SLAB EDGE ENCLOSURE, AND OTHER ACCESSORIES, PREPARED AND SEALED BY A QUALIFIED, STRUCTURAL ENGINEER REGISTERED IN THE STATE OF NEW YORK.
6. THE CONTRACTOR SHALL PROVIDE DETAILED, COORDINATED, AND CHECKED SHOP DRAWINGS INDICATING LOCATION, GAGE AND SIZE OF EACH PIECE OF DECKING AND RELATED ACCESSORIES. THE DRAWINGS SHALL CLEARLY SHOW WELDING DETAILS TO STRUCTURAL FRAMING ELEMENTS, SIDE LAP CONNECTION DETAILS, DECK OPENING/EDGE CLOSURES, AND WHERE REQUIRED, SUPPLEMENTARY DECK AND/OR CLOSURE REINFORCING.
7. ALL COMPOSITE DECKING SHALL BE WELDED TO STRUCTURAL STEEL BY QUALIFIED WELDERS USING PRE-QUALIFIED PROCEDURES. THE TECHNICAL SPECIFICATIONS ESTABLISH A PROCEDURE FOR PRE-QUALIFICATIONS OF THE PLUG WELDING OF THE STEEL DECKING TO THE STRUCTURAL STEEL FOR THE PARTICULAR GAGES USED. PRIOR TO THE START OF ERECTION OF THE STEEL DECK, EACH WELDER SHALL BE QUALIFIED USING THIS PROCEDURE AS WITNESSED BY THE CONTRACTOR'S STRUCTURAL STEEL TESTING LABORATORY.
8. ALL COMPOSITE METAL DECK SHALL BE WELDED AT 12 INCHES MAXIMUM ON CENTER TO THE SUPPORTING STEEL WITH A 5/8 INCH DIAMETER PLUG WELD. SIDE LAPS SHALL BE FASTENED WITH #10 TEK SCREWS AT 1'-6" INCHES MAXIMUM ON CENTER.
9. THE DECK SHALL BE DESIGNED FOR AN ASSUMED SUITABLE CONSTRUCTION LIVE LOAD TAKING INTO CONSIDERATION SPAN AND LOAD CONDITIONS INDICATED BY THE SUPPORTING FRAMEWORK, OPENINGS, AND ACTUAL DECK PIECE SIZES UTILIZED. THE ASSUMED CONSTRUCTION LIVE LOAD SHALL NOT BE LESS THAN 20 PSF. ADDITIONALLY,FOLLOW ALL APPLICABLE CITY, LOCAL, AND AISI REQUIREMENTS FOR TEMPORARY CONSTRUCTION LOADINGS, IF MORE STRINGENT.
10. PROVIDE CONTINUOUS DECK CLOSURES AT ALL DECK ENDS AND EDGES.
11. PROVIDE, AS REQUIRED, COLUMN CLOSURES, SUMP PLATES AT PIPING PENETRATIONS, AND RECESSED SUMP PANS AT DRAINS. PROVIDE SUPPLEMENTAL FRAMING, INCLUDING REINFORCING PLATES AND STEEL ANGLES AT OPENINGS AS REQUIRED TO SUPPORT THE METAL DECK. ALL OPENINGS SHALL BE COORDINATED WITH THE ARCHITECTURAL AND MECHANICAL DRAWINGS. STEEL AND/OR METAL DECK SHOP DRAWINGS SHALL INCLUDE ALL SUPPLEMENTAL DECK SUPPORT ANGLES, PLATES AND OTHER ACCESORIES NECESSARY TO SUPPORT AND CLOSE THE COMPOSITE DECK AT EDGES, COLUMN LOCATIONS ETC.
12. NO LOADS EXCEEDING 50 LBS. SHALL BE PERMITTED TO BE HUNG FROM THE DECK. ALL HANGERS FOR DUCTWORK, PIPING, ETC. SHALL BE HUNG DIRECTLY FROM STRUCTURAL STEEL FRAMING OR SUPPLEMENTARY MEMBERS. ALL HANGING LOAD DETAILS SHALL BE SUBMITTED FOR REVIEW.
13. SHEAR STUDS:
    a. ALL SHEAR STUD PLACEMENT DIAGRAMS SHOWN REPRESENT IDEALIZED CONDITIONS, AND ACTUAL FRAMING CONFIGURATIONS MAY REQUIRE ADDITIONAL MODIFICATIONS AND INTERPRETATION.
    b. THE CONTRACTOR SHALL SUBMIT CHECKED SHOP DRAWINGS INDICATING THE SHEAR STUD LAYOUT, INCLUDING SIZE, SPACING AND GROUPING, FOR EACH BEAM.
    c. THE NUMBER OF STUDS PER BEAM AS SHOWN ON THE DRAWINGS INCLUDES REDUCTIONS BASED ON RIB WIDTH, NUMBER OF STUDS PER CELL, DECK-RIB ORIENTATION, AND SLAB THICKNESS AS PER AISC SPECIFICATIONS FOR COMPOSITE CONSTRUCTION, LATEST EDITION. THE METAL DECK CONTRACTOR SHALL SUBMIT LOAD TEST DATA VERIFYING THE HORIZONTAL SHEAR CAPACITY OF SHEAR STUDS FOR DIFFERENT DECK TYPES AND CELL CONFIGURATIONS, AS DETAILED ON THE SHOP DRAWINGS. IF ANY OF THE ASSUMPTIONS LISTED ABOVE ARE VIOLATED, THE METAL DECK CONTRACTOR SHALL SUBMIT STRUCTURAL DESIGN CALCULATIONS, PREPARED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK, BASED ON THE DETAILED SHOP DRAWINGS. PROVIDE ALL EXTRA STUDS AS MAY BE REQUIRED TO ACHIEVE THE TOTAL HORIZONTAL SHEAR CAPACITY.
    d. MAXIMUM SPACING OF STUDS SHALL BE 12" ON CENTER.
    e. SHEAR STUDS SHALL BE EITHER WELDED DIRECTLY TO STRUCTURAL STEEL ELEMENTS AT LOCATIONS WITHOUT DECK OR WELDED TYPE THROUGH THE METAL DECK BY PREQUALIFIED METHODS. IF THROUGH DECK WELDING IS UNFEASIBLE, THE STUDS SHALL BE INSTALLED IN PRE-PUNCHED HOLES IN THE METAL DECK. THE CONTRACTOR SHALL ESTABLISH SPECIFIC WELDING REQUIREMENTS FOR EACH THICKNESS OF FRAMING ELEMENT AND/OR GAGE OF METAL DECK.
14. 14. THE CONTRACTOR'S TESTING AGENCY SHALL INSPECT AND TEST ALL METAL DECK AND SHEAR STUD INSTALLATION WORK. SEE TECHNICAL SPECIFICATION SECTION "STEEL DECK" FOR ADDITIONAL TESTING AND INSPECTION REQUIREMENTS.

STRUCTURAL STEEL NOTES

A. GENERAL

1. STRUCTURAL STEEL DETAILING, FABRICATION, AND ERECTION SHALL CONFORM TO AISC STEEL CONSTRUCTION MANUAL, LATEST EDITION, 2008 NEW YORK CITY BUILDING CODE, AND THE TECHNICAL SPECIFICATIONS FOR THIS PROJECT. ALL CONTRACTOR ALTERNATIVE DESIGNS SHALL MEET THESE RESPECTIVE DESIGN CRITERIA.
2. WELDING WORK SHALL CONFORM TO THE AWS D1.1 "STRUCTURAL WELDING CODE - STEEL," LATEST EDITION, AND SHALL BE PERFORMED BY AWS CERTIFIED WELDERS.
3. THERE SHALL BE NO FIELD CUTTING OF STRUCTURAL STEEL MEMBERS FOR THE WORK OF OTHER TRADES WITHOUT PRIOR REVIEW BY THE ARCHITECT/STRUCTURAL ENGINEER
4. AFTER FABRICATION AND JUST PRIOR TO PAINTING, ALL STEEL SHALL BE CLEANED OF ALL RUST, LOOSE MILL SCALE, AND OTHER FOREIGN MATERIALS. ALL STRUCTURAL STEEL PRIMING AND PAINTING REQUIREMENTS ARE PROVIDED IN SECTION E, "STRUCTURAL STEEL PRIMING AND PAINTING" OF THE NOTES ON THIS SHEET.
5. SEE TECHNICAL SPECIFICATION SECTION "STRUCTURAL STEEL," FOR ADDITIONAL REQUIREMENTS NOT NOTED HEREIN.
6. THE CONTRACTOR SHALL MEET ALL ADDITIONAL REQUIREMENTS OF LOCAL AND GOVERNMENTAL CODES AND REGULATIONS FOR ALL WORK.
7. ELEVATIONS ARE RELATIVE ELEVATIONS IN FEET AND INCHES. REFER TO ARCHITECTURAL DRAWINGS FOR DEFINITION OF REFERENCE DATUM.
8. THE STRUCTURAL STEEL FABRICATOR, IN COORDINATION WITH THE STRUCTURAL STEEL ERECTOR SHALL SUBMIT A COMPLETE METHODS STATEMENT FOR ALL FABRICATION WORK AND QUALITY ASSURANCE.
9. SEE / REFERENCE THE ARCHITECTURAL DRAWINGS FOR MISC. STEEL DOOR FRAMING, MISC. STAIR SUPPORT STEEL ETC. NOT INDICATED ON THE STRUCTURAL DRAWINGS.
10. STRUCTURAL STEEL SHALL BE FIRE-PROOFED AS PER THE REQUIREMENTS OF APPLICABLE CODES AND STANDARDS.

B. MATERIALS

1. STRUCTURAL STEEL GRADES SHALL BE AS FOLLOWS:

STRUCTURAL STEEL WIDE-FLANGE SHAPES (W & WT, SHAPES):	ASTM A992 GR 50
STRUCTURAL GENERAL CONNECTIONS, GUSSET PLATES:	ASTM A36 & ASTM A529 GR 50
STRUCTURAL BASE PLATES, & MISC.:	ASTM A572 GR 42
STRUCTURAL STEEL HSS SHAPES:	ASTM A1085
STRUCTURAL STEEL ANGLES (L SHAPES), CHANNELS, RODS:	ASTM A36
STRUCTURAL STEEL PIPE:	ASTM A53 GR B
COLUMN BASE PLATE ANCHOR BOLTS:	ASTM F1554 GR 36
WELDING ELECTRODES:	E70XX
BUILT-UP SECTIONS FROM PLATE:	ASTM A529 GR 50 & ASTM A529 GR50

2. CONNECTION BOLTS, NUT AND WASHERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F3125 TYPE 1, GROUP A AND GROUP B, AS INDICATED IN THE STRUCTURAL DRAWINGS.
3. FAYING SURFACES SHALL BE PREPARED TO SSPC-SPX STANDARD OR BETTER AND SHALL BE SHOP CLEANED AND PRIMED (ONLY) IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION SECTION "STRUCTURAL STEEL".

C. CONNECTIONS

1. CONNECTIONS, EXCEPT FOR THOSE CONNECTIONS COMPLETELY DESIGNED ON THE DRAWINGS, SHALL BE DESIGNED AND DETAILED BY THE FABRICATOR. DETAILING SHALL BE PERFORMED USING RATIONAL ENGINEERING DESIGN AND STANDARD PRACTICE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. THE GENERAL DETAILS SHOWN ON THE DRAWINGS ARE CONCEPTUAL ONLY AND DO NOT INDICATE THE REQUIRED NUMBER OF BOLTS OR WELD SIZES, UNLESS SPECIFICALLY NOTED. THE CONTRACTOR SHALL SUBMIT ENGINEERING CALCULATIONS AND CONNECTION DETAIL DRAWINGS FOR EACH CONNECTION TYPE, MEMBER SIZE, AND REACTION INDICATED ON THE DRAWINGS FOR REVIEW BY THE ARCHITECT PRIOR TO THE SUBMITTAL OF THE STRUCTURAL STEEL SHOP DRAWINGS. AFTER REVIEW BY THE ARCHITECT, THESE DETAIL DRAWINGS SHALL BE UTILIZED AS THE STANDARD FOR FABRICATION AND SHOP DRAWING DETAILING. THE DESIGN CALCULATIONS SHALL BE PREPARED AND SEALED BY A QUALIFIED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK.
2. CONNECTIONS, UNLESS NOTED OTHERWISE, SHALL BE SIMPLE SHEAR CONNECTIONS UTILIZING "SHORT- SLOTTED" HOLES AND HIGH-STRENGTH BOLTS IN BEARING-TYPE CONNECTIONS WITH THREADS EXCLUDED FROM THE SHEAR PLANE. THE CONNECTION CAPACITIES SHALL BE AS SHOWN IN NOTE C5 BELOW, OR AS NOTED ON THE STRUCTURAL...
3. MOMENT CONNECTIONS SHALL BE PROVIDED WHERE SHOWN ON THE DRAWINGS. MOMENT CONNECTIONS SHALL BE DESIGNED TO DEVELOP 80% OF THE TENSILE CAPACITY OF THE BEAM FLANGE. ALL BOLTED MOMENT CONNECTIONS SHALL UTILIZE STANDARD CLEARENCE HOLES AND HIGH-STRENGTH BOLTS IN FRICTION TYPE CONNECTIONS. THE WEB SHEAR CONNECTION FOR THESE MEMBERS SHALL UTILIZE SINGLE SHEAR PLATE SLIP-CRITICAL TYPE CONNECTIONS WITH HIGH-STRENGTH BOLTS. REFER TO THE REQUIRED SHEAR CAPACITIES SHOWN IN NOTE C4 BELOW.

ULTIMATE END REACTION CAPACITIES FOR STANDARD ROLLED SHAPES (FACTORED LOADS):

BEAM END REACTION SCHEDULE	
BEAM SIZE	LOAD
W30	125 kips
W27	110 kips
W24	90 kips
W21	70 kips
W18, W16	50 kips
W14	25 kips
W12	20 kips
W10, W8	15 kips

BEAM END REACTION SCHEDULE	
BEAM SIZE	LOAD
HSS20, HSS18	60 kips
HSS16, HSS14	40 kips
HSS12	25 kips
HSS10	20 kips
HSS8, HSS6, HSS4	15 kips
C15	30 kips
C12, C10	20 kips

5.

6. BEAM-TO-BEAM AND BEAM-TO-COLUMN CONNECTIONS SHALL ALSO HAVE A TENSION CAPACITY EQUIVALENT TO THE ULTIMATE END REACTION CAPACITIES, IN ACCORDANCE WITH THE NEW YORK CITY BUILDING CODE.
7. BOLTS SHALL BE PRETENSIONED FOR BOTH SLIP-CRITICAL AND BEARING TYPE CONNECTIONS AND SHALL BE INSTALLED IN ACCORDANCE WITH THE RCSC SPECIFICATION.
8. THE MINIMUM NUMBER OF BOLTS PER CONNECTION SHALL BE TWO (2) 3/4" DIAMETER F3125 BOLTS UNLESS NOTED OTHERWISE.
9. MINIMUM FILLET WELD SIZES SHALL COMPLY WITH THE AISC SPECIFICATION REQUIREMENTS, BUT SHALL NOT BE LESS THAN 1/4", UNLESS NOTED OTHERWISE.

D. DETAILING

1. CONTRACTOR SHALL SUBMIT DETAILED, ENGINEERED, COORDINATED AND CHECKED SHOP DRAWINGS FOR ALL STRUCTURAL STEEL TO THE ARCHITECT FOR REVIEW PRIOR TO THE START OF FABRICATION AND/OR ERECTION.
2. BUILDING GRIDLINES AS DEFINED ON THESE DRAWINGS SHALL BE ESTABLISHED AND AGREED ON SITE WITH THE ARCHITECT.
3. ALL BEAMS SHALL BE FABRICATED WITH THE NATURAL CAMBER UP. PROVIDE CAMBERS AS INDICATED IN BRACKETS <XX> ON THE STRUCTURAL DRAWINGS.
4. ALL SIMPLE SHEAR CONNECTIONS SHALL BE CAPABLE OF END ROTATION AS PER THE REQUIREMENTS OF AISC SPECIFICATION, CHAPTER J1.2. "SIMPLE CONNECTIONS."
5. ALL BEAMS FRAMING INTO NEW CONCRETE WALLS SHALL BE DETAILED TO SUIT THE HORIZONTAL FIELD TOLERANCES ANTICIPATED FOR THE EXISTING CONCRETE WORK.
6. ALL BOLT HOLES SHALL BE DRILLED (REAMED ONLY WHERE REQUIRED AND APPROVED BY THE ARCHITECT/STRUCTURAL ENGINEER).

E. STRUCTURAL STEEL FRAMING AND PAINTING

1. ALL STRUCTURAL STEEL SHALL BE CLEANED AND PAINTED AS REQUIRED BY THE TECHNICAL SPECIFICATIONS SECTION "STRUCTURAL STEEL."
2. SPECIFICALLY, THE FOLLOWING STEEL SHALL RECEIVE PREPARATION, PRIMING, AND PAINTING AS FOLLOWS :
    a. STEEL IN INTERIOR MEP EQUIPMENT ZONES: SSPC-SP5
    b. INTERIOR EXPOSED STRUCTURAL STEEL: SSPC-SP5, PRIMED, (1) SHOP COAT, (1) FIELD COAT
    c. EXTERIOR EXPOSED STEEL: GALVANIZED STEEL. REFER TO SECTION F.

F. GALVANIZED STRUCTURAL STEEL FOR OUTDOOR DUNNAGE

1. ALL OUTDOOR DUNNAGE PRIMARY STRUCTURAL STEEL SHALL BE HOT-DIP GALVANIZED. PROVIDE HOT-DIP GALVANIZING AND THE CLEANING AND SURFACE PREPARATION OF FABRICATED ASSEMBLAGES AS PER THE SPECIFICATION 051200 AND THE REQUIREMENTS OF ASTM A123.
2. ALL OUTDOOR DUNNAGE PRIMARY STEEL BOLTED CONNECTIONS SHALL UTILIZE GALVANIZED ASTM A325 BEARING BOLTS, AS INDICATED IN THE STRUCTURAL DRAWINGS AND DETAILS. ALL BOLTS SHALL BE FULLY TENSIONED AND TESTED AS PER THE SPECIFICATION. ALL OUTDOOR DUNNAGE PRIMARY STRUCTURAL STEEL FAYING SURFACES SHALL BE "CLASS C" AND SHALL ACHIEVE A MINIMUM SLIP COEFFICIENT OF 0.5
3. THERE SHALL BE NO FIELD-WELDING NOR FIELD CUTTING OF EXPOSED STRUCTURAL OUTDOOR DUNNAGE STEEL OR ANY OTHER FIELD-MODIFICATIONS THAT COULD DAMAGE THE GALVANIZATION.
4. IF ADDITIONAL FIELD-SPLICES ARE DESIRED (TO ALLOW SMALLER PIECES), CONTACT THE ENGINEER AND ADDITIONAL BOLTED SPLICE CONNECTION DETAILS WILL BE PROVIDED
5. ALL OUTDOOR DUNNAGE PRIMARY STEEL CONNECTIONS TO THE EXISTING CONCRETE STRUCTURE SHALL UTILIZE HILTI HAS STAINLESS STEEL THREADED RODS AND THE HILTI HIT HY 200 ADHESIVE ANCHOR SYSTEM (OR EQUIVALENT, IF APPROVED IN ADVANCE BY THE ENGINEER). ALL ADHESIVE ANCHOR CONNECTIONS SHALL UTILIZE DOUBLE NUTS TO FACILITATE ALIGNMENT AND ADJUSTMENT. SUBSEQUENT TO FINAL ALIGNMENT OF THE STEEL, ALL BASE PLATE CONNECTION SHALL BE FULLY GROUTED WITH HIGH-STRENGTH, NON-SHRINK GROUT.

G. SURVEY AND ALIGNMENT

1. THE STRUCTURAL STEEL CONTRACTOR SHALL INDEPENDENTLY VERIFY THE LOCATION OF THE EXISTING STRUCTURE (INCLUDING STRUCTURAL STEEL COLUMNS, BEAMS, COLUMN ENCASEMENTS, SLAB RIBS AND SOFFITS) RELATIVE TO THE BUILDING GRID LINES. THE RESULTS OF THE SURVEY SHALL BE FURNISHED TO THE ARCHITECT/STRUCTURAL ENGINEER FOR VERIFICATION OF THE DESIGN NOT LESS THAN TWO WEEKS PRIOR TO THE BEGINNING OF STEEL FABRICATION.
2. THE CONTRACTOR SHALL FIELD-SURVEY ALL EXISTING BUILDING SERVICES (DUCT WORK, PIPING, ETC.) WITHIN AREAS OF NEW STRUCTURAL STEEL FRAMING THAT WILL REQUIRE TEMPORARY OR PERMANENT RELOCATION, CONTRACTOR SHALL SUBMIT TO THE ARCHITECT ALL MODIFICATION REQUIREMENTS ASSOCIATED WITH SUCH RELOCATION SUCH AS ADDITIONAL PENETRATIONS.
3. INSTALLATION AND ALIGNMENT OF ALL STEEL SHALL MEET THE REQUIREMENTS OF THE AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES.

H. TESTING AND INSPECTION

1. SEE TECHNICAL SPECIFICATION SECTION "STRUCTURAL STEEL," FOR ADDITIONAL TESTING AND INSPECTION REQUIREMENTS.
2. BOLTED CONNECTIONS: TEST WITH CALIBRATED TORQUE WRENCH, 25% OF SLIP-CRITICAL BOLTED CONNECTIONS.
3. MAGNETIC PARTICLE TESTING: TEST IN ACCORDANCE WITH ASTM E709, 10% OF FILLET WELDS AND PARTIAL JOINT PENETRATION WELDS.
4. ULTRASONIC TESTING: TEST IN ACCORDANCE WITH AWS D1.1, 100% OF COMPLETE JOINT PENETRATION WELDS.
5. TESTING OF STUD WELDS: PERFORM 100% VISUAL INSPECTION OF WELDS. CONDUCT STANDARD IN-PLACE SHEAR STUD BEND TEST ON 10% OF THE STUDS, SELECTED AT RANDOM, AND A MINIMUM OF 1 STUD PER FABRICATED MEMBER, IN ACCORDANCE WITH AWS D1.1.
6. ALL TESTING IS THE RESPONSIBILITY OF THE CONTRACTOR.

CONCRETE NOTES

A. GENERAL

1. ALL CAST-IN-PLACE CONCRETE SHALL HAVE MINIMUM 28 DAYS COMPRESSIVE CYLINDER STRENGTH F'c=5000 PSI.
2. CONCRETE SHALL CONTAIN AN APPROVED WATER REDUCING, PLASTICIZING ADMIXTURE. APPROVED, HIGH-RANGE, WATER REDUCING ADMIXTURES MAY BE UTILIZED. SELF CONSOLIDATED CONCRETE MAY BE USED WHERE SPECIFICALLY INDICATED IN THE PLANS.
3. NO CALCIUM CHLORIDE SHALL BE USED IN ANY CONCRETE.
4. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS SHOWING THE LOCATIONS OF ALL CONSTRUCTION JOINTS, CONTROL JOINTS, CURBS, SLAB DEPRESSIONS, SLEEVES, OPENINGS, ETC.
5. MINIMUM SLAB-ON-GRADE THICKNESSES SHALL BE 6 INCHES, UNLESS NOTED OTHERWISE.
6. CONCRETE BEAMS AND SLABS SHALL NOT BE SLEEVED OR BOXED-OUT OR HAVE THE REINFORCING INTERRUPTED, EXCEPT AS SHOWN ON THE STRUCTURAL DRAWINGS.
7. SEE ARCHITECTURAL DRAWINGS FOR TYPE AND LOCATION OF ALL FLOOR FINISHES, FLOOR DEPRESSIONS AND CURBS.
8. SEE ARCHITECTURAL DRAWINGS FOR GENERAL WATERPROOFING REQUIREMENTS. SPECIFIC DETAILS SHALL BE SUPPLIED BY THE WATERPROOFING CONTRACTOR/MANUFACTURER.
9. SEE ARCHITECTURAL, HVAC, ELECTRICAL AND PLUMBING DRAWINGS FOR ADDITIONAL SLAB OPENINGS NOT SHOWN ON STRUCTURAL DRAWINGS.
10. THE CONTRACTOR SHALL PERFORM AND SUBMIT INSTRUMENT SURVEYS, DAILY, OF ALL FINISHED REINFORCED CONCRETE AND METAL DECK CONCRETE SLAB SURFACES, BOTH BEFORE AND AFTER REMOVAL OF FORMWORK AND/OR SHORING SYSTEMS.
11. ALL CONCRETE SHALL BE MECHANICALLY VIBRATED, EXCEPT SELF CONSOLIDATING CONCRETE .
12. THE CONTRACTOR SHALL MEET ALL ADDITIONAL REQUIREMENTS OF LOCAL AND GOVERNMENTAL CODES AND REGULATIONS FOR ALL WORK.
13. EXISTING STRUCTURE TO REMAIN SHALL BE PROTECTED FROM DAMAGES. IF ANY DAMAGE OCCURS, THE CONTRACTOR SHALL PREPARE APPROPRIATE REMEDIAL PROCEDURES AND SUBMIT TO THE ENGINEER FOR APPROVAL.
14. AT LOCATIONS OF EXISTING ANCHORS, BOLTS, PLATES, OR INSERTS THAT ARE TO BE REMOVED FROM EXISTING CONCRETE STRUCTURES, SURFACES SHALL BE REPAIRED AFTER REMOVAL IN A MANNER THAT MATCHES THE MATERIAL QUALITY AND THE FINISH OF THE SURROUNDING AREA.

B. REINFORCING

1. ALL REINFORCING BARS SHALL CONFORM TO THE STANDARDS OF ASTM A615, GRADE 60.
2. ALL CONCRETE REINFORCEMENT SHALL BE DETAILED, FABRICATED, LABELED, SUPPORTED, SPACED IN FORMS, AND SECURED IN PLACE IN ACCORDANCE WITH THE PROCEDURES AND REQUIREMENTS OUTLINED IN ACI 318-08 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", ACI 315 "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", IBC 2006 AND 2008 NEW YORK CITY BUILDING CODE.
3. 3. THE CONTRACTOR SHALL SUBMIT FOR REVIEW, CHECKED SHOP DRAWINGS OF REINFORCING DETAILS INCLUDING BAR SIZES, SPACING AND INDICATING PLACEMENT AND SUPPORT DETAILS INCLUDING THE ADDITIONAL REBAR PROVIDED BY THE CONTRACTOR FOR MAIN REINFORCEMENT SUPPORT.
4. 4. ALL REINFORCING SPLICES SHALL DEVELOP 100% OF THE TENSILE CAPACITY OF THE REINFORCEMENT, UNO. ALTERNATIVE MECHANICAL SPLICES MAY BE CONSIDERED, PROVIDED THAT THEY DEVELOP FULL TENSILE STRENGTH CONFORMING TO ACI 318 REQUIREMENTS.
5. ALL WIRE MESH REINFORCEMENT SHALL CONFORM TO THE STANDARDS OF ASTM A185 AND BE GALVANIZED.
6. ALL WIRE MESH REINFORCEMENT SHALL BE LAPPED TWO (2) FULL MESH PANELS AND TIED SECURELY.
7. WHERE REQUIRED, DOWELS SHALL MATCH THE SIZE AND NUMBER OF MAIN REINFORCING, UNLESS NOTED OTHERWISE.
8. ADDITIONAL BARS SHALL BE PROVIDED AROUND ALL FLOOR AND WALL OPENINGS, AS SHOWN ON DETAILS.
9. ALL BAR SUPPORTS SHALL BE GALVANIZED. BAR SUPPORTS IN CONTACT WITH EXPOSED SURFACES SHALL ALSO BE PLASTIC TIPPED.
10. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT, UNLESS LARGER COVER IS NOTED ELSEWHERE:
11. ALL SLAB ON GRADE SHALL BE REINFORCED WITH AT LEAST (1) ONE LAYER OF 6X6XW2.9XW2.9 WWR UNO.

C. CONSTRUCTION JOINTS

1. CONSTRUCTION JOINTS IN ALL WALLS, SLABS AND BEAMS SHALL NOT BE FURTHER APART THAN 60 FT IN ANY DIRECTION.
2. ALL CONSTRUCTION JOINTS SHALL BE WIRE BRUSHED, CLEANED AND MOISTENED IMMEDIATELY PRIOR TO PLACING NEW CONCRETE.
3. PLACE ALL SLABS-ON-GRADE IN STRIP POURS OF MAXIMUM 30 FT WIDTH WITH A MINIMUM OF 24 HOURS BETWEEN ADJACENT POURS. SLABS SHALL HAVE SAWCUT CONTROL JOINTS AT 15 FT ON CENTER IN EACH DIRECTION AND SHALL CREATE SECTIONS OF SLAB WITH A MAXIMUM ASPECT RATIO OF 1.5:1
4. ALLOW A MINIMUM OF THREE (3) HOURS BETWEEN PLACEMENT OF CONCRETE FOR COLUMNS, WALLS OR PIERS AND PLACEMENT OF CONCRETE ON THE ADJACENT FLOOR.

D. CURING AND SEALING

1. PROVIDE APPROVED CURING COMPOUND AND SEALER FOR THE TOP SURFACE OF ALL SLAB WORK, UNLESS NOTED OTHERWISE.
2. PROVIDE APPROVED CURING COMPOUND, SEALER, AND HARDENER FOR ALL SLABS IN M.E.P. AND STORAGE AREAS, UNLESS NOTED OTHERWISE.

E. EMBEDDED/ATTACHED INSERTS FOR OTHER TRADES

1. ALL EMBEDDED OR ATTACHED INSERTS OR CONNECTORS, FOR THE WORK OF OTHER TRADES, ATTACHED TO ANY STRUCTURAL CONCRETE ELEMENT BEFORE OR AFTER THE PLACEMENT OF CONCRETE, SHALL NOT CUT, MOVE, OR RELOCATE ANY REINFORCING BAR OR REINFORCING BAR SUPPORT. THE LOCATIONS OF ALL SUCH INSERTS AND THE TYPE AND INTENDED LOAD APPLICATION OF EACH SUCH ITEM SHALL BE INDICATED BY THE CONTRACTOR ON A COORDINATED, MULTI-TRADE SHOP DRAWING, AND SUBMITTED FOR REVIEW PRIOR TO PLACEMENT OF THE INSERTS/CONNECTORS. ANY SUCH EMBEDDED AND/OR ATTACHED ITEM SHALL NOT RESULT IN DAMAGE TO THE CONCRETE FINISH, AND SHALL BE OF A MATERIAL TYPE COMPATIBLE WITH THE CONCRETE MATERIALS, AND ALSO BE NON-CORROSIVE IN MATERIAL TYPE.
2. NO ANCHORS OR REINFORCING BARS DRILLED AND GROUTED INTO EXISTING OR NEWLY CURED CONCRETE MUST DAMAGE EXISTING REINFORCING BARS. EXISTING REINFORCEMENT SHALL BE LOCATED AND ATTACHMENT DETAILS SHALL BE ADJUSTED AS REQUIRED.
3. CONDUIT AND PIPE SHALL NOT BE PLACED IN STRUCTURAL SLABS WITHOUT THE APPROVAL OF THE STRUCTURAL ENGINEER. THE CONTRACTOR SHALL SUBMIT CONDUIT PLACEMENT DRAWINGS INDICATING LOCATIONS OF CAST-IN-CONDUITS AND PIPES. ALL CONDUITS SHALL BE PLACED IN THE MIDDLE THIRD OF THE SLAB THICKNESS AND SHALL BE SPACED NO CLOSER THAN 3 DIAMETERS OR WIDTHS ON CENTER. NO CONDUIT GREATER THAN 2 INCH MAY BE PLACED IN THE STRUCTURAL SLABS.

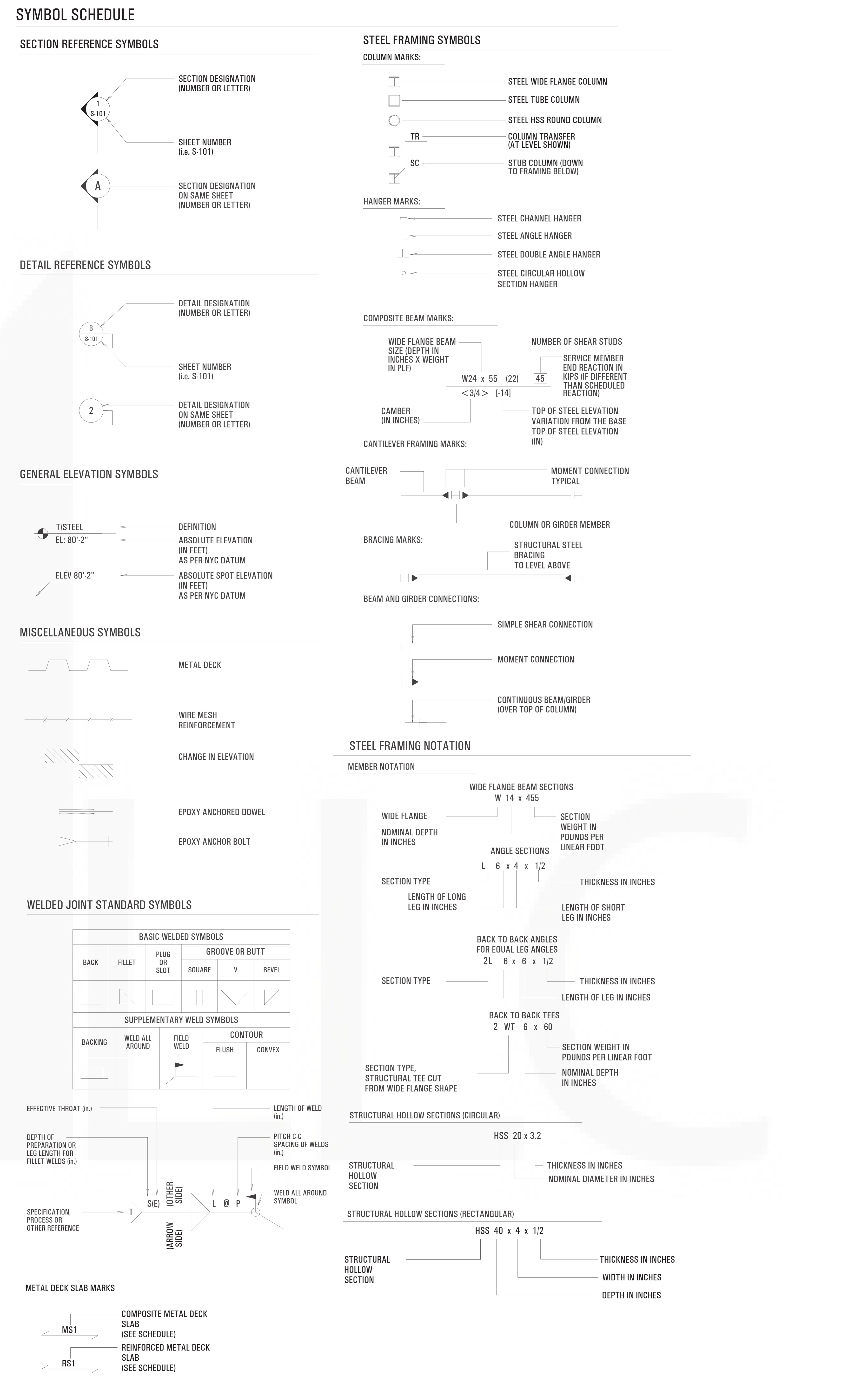
PROJECT DATA

APPLICABLE BUILDING CODE	2019 CALIFORNIA BUILDING CODE
APPLICABLE DESIGN LOADS:	ASCI/SEI 7-16
BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE	ACI 318-08 :
ALL PRESSURES SHOWN ARE BASED ON ASD DESIGN	

SEISMIC DESIGN CATEGORY D
BASIC WIND SPEED (95 MPH FOR RISK CATEGORY II,

FLOOR DEAD LOAD -	15 PSF
FLOOR LIVE LOAD -	100 PSF
GROUND SNOW LOAD -	0 PSF

SYMBOL SCHEDULE



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DRAWING TITLE: GENERAL NOTES

Sheet : S000

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No.	Revision/Issue	Date
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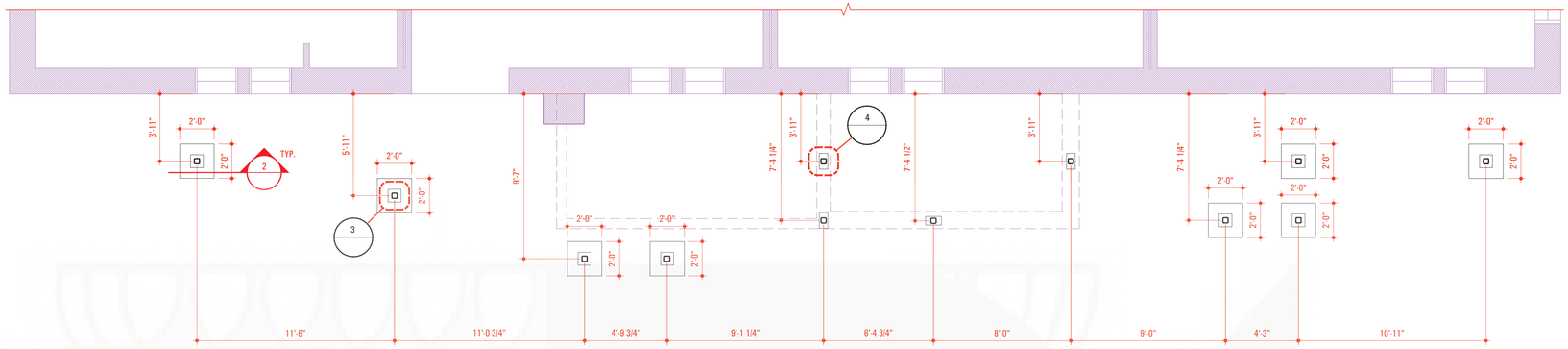
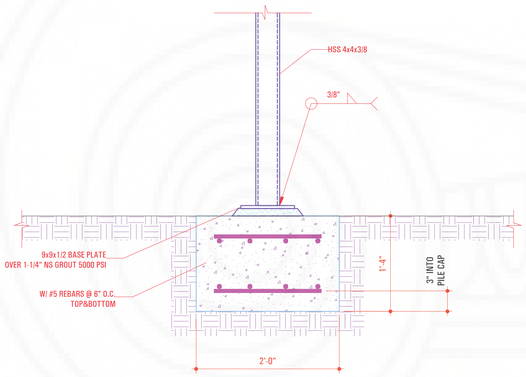


1 BALCONY FOUNDATION PLAN

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



2 SECTION

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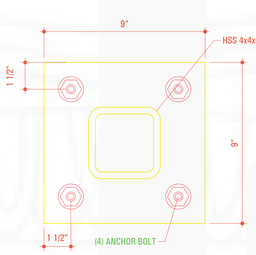

3 DETAIL

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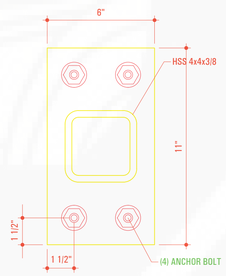

4 DETAIL

SCALE: 3" = 1'-0"

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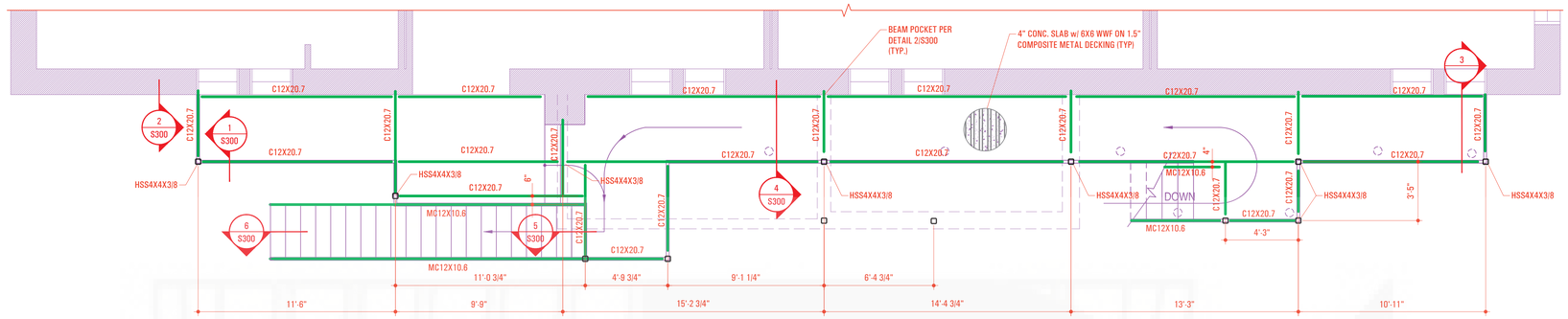

1 PROPOSED 2ND BALCONY FRAMING FLOOR PLAN

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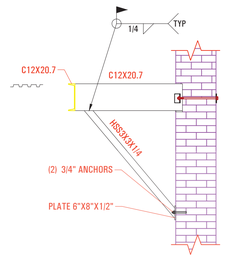

3 SECTION

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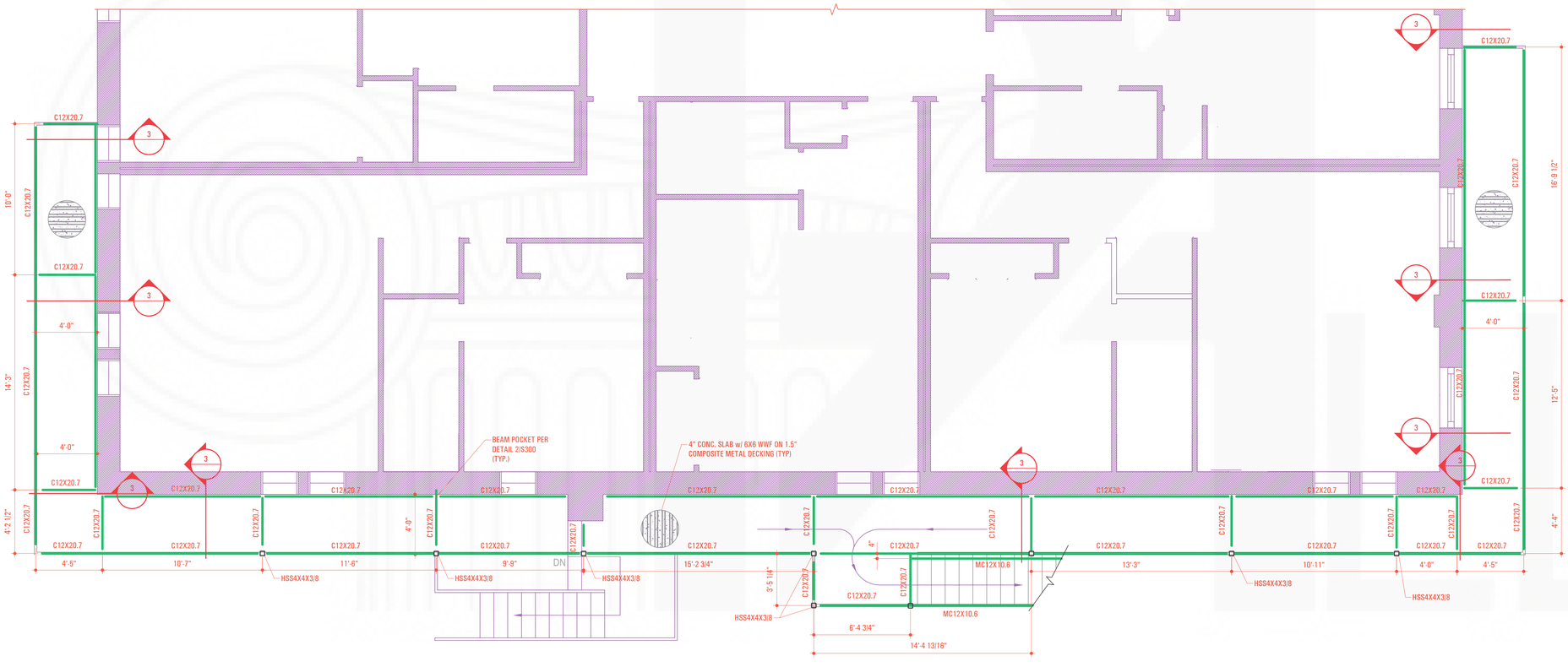

2 PROPOSED 3RD BALCONY FRAMING FLOOR PLAN

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

4 SECTION

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

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DRAWING TITLE: 2ND AND 3RD FLOORS BALCONY FRAMING PLANS

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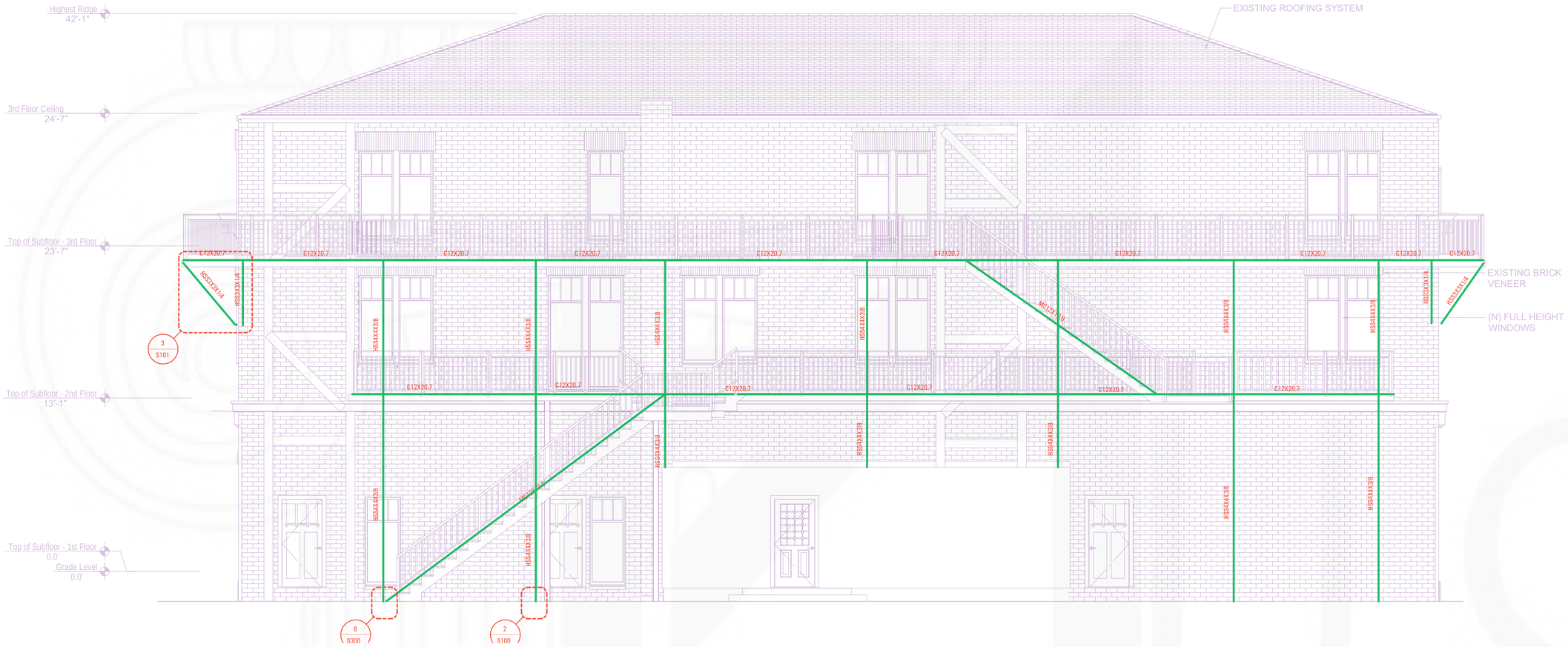

1 SOUTH ELEVATION

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

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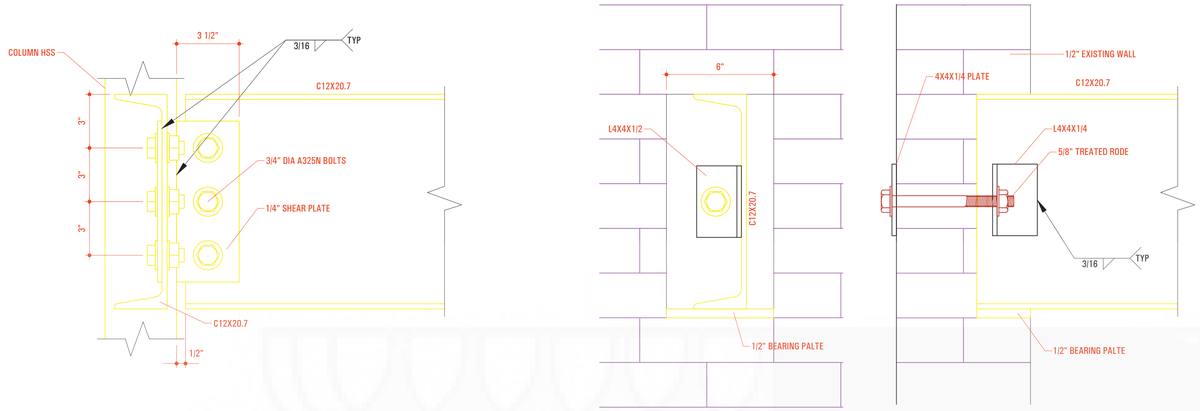
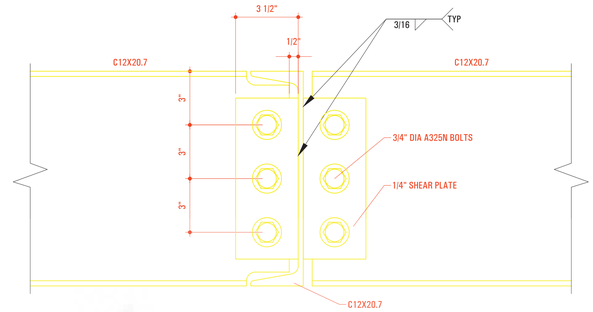


1 BEAM TO COLUMN TYPICAL CONECTION

SCALE: 3" = 1'-0"

2 BEAM POCKET DETAIL

SCALE: 3" = 1'-0"



3 BEAM TO BEAM TYPICAL CONECTION

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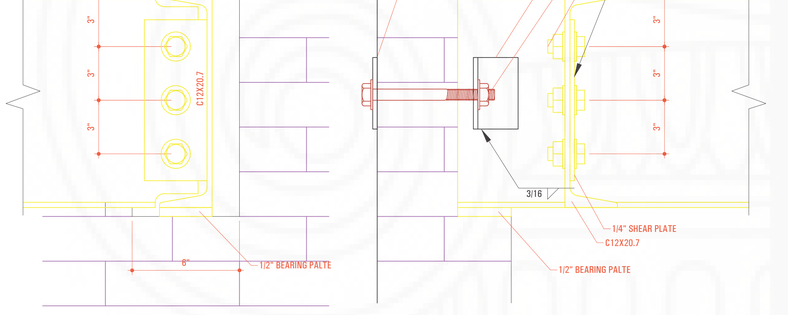

4 DETAIL

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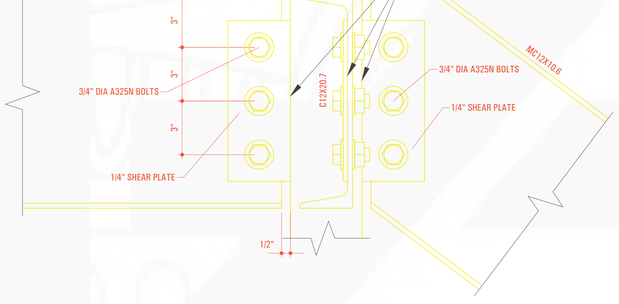

5 STRINGER TO COLUMN CONNECTION

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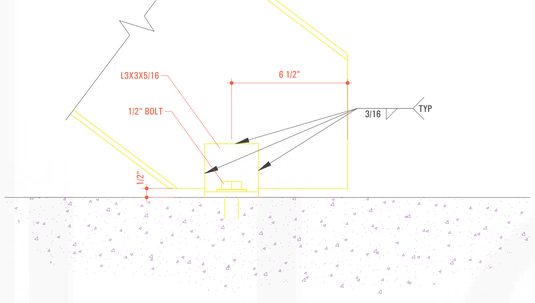

6 STRINGER TO SLAB CONNECTION

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