<u>GENERAL</u>

DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH PROVISIONS OF THE 2021 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC)

ELEVATIONS (XXX'-XX") SHOWN ON PLANS ARE TO TOP OF CONCRETE, STEEL, OR WOOD DECK U.N.O. ELEVATIONS SHOWN ARE BASED ON FIRST FLOOR ELEVATION OF 100'-00" CONFIRM WITH ARCHITECTURAL.

ALL CONTRACTORS AND ANY SUB-CONTRACTORS SHALL VERIFY AND COORDINATE ALL DIMENSIONS AND DETAILS AS SHOWN ON STRUCTURAL DRAWINGS WITH ARCHITECTURAL DRAWINGS. WHERE DISCREPANCIES ARISE THE ARCHITECT AND ENGINEER SHALL BE NOTIFIED.

4. ALL CONTRACTORS AND ANY SUB-CONTRACTORS SHALL CONSULT ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR VERIFICATION OF LOCATION AND DIMENSIONS OF CURBS, PADS, INSERTS, SLEEVES, DRIPS, REGLETS, REVEALS, FINISHES, DEPRESSIONS, DOOR CLOSERS, AND OTHER PROJECT REQUIREMENTS NOT SHOWN ON THE STRUCTURAL DRAWINGS.

SIZE AND LOCATION OF ALL ROOF, FLOOR, AND WALL OPENINGS TO BE VERIFIED WITH MECHANICAL AND ELECTRICAL DRAWINGS AND CONTRACTORS. OPENINGS LESS THAN 12 INCHES ARE GENERALLY NOT SHOWN.

THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE ACTS, ERRORS, OR OMISSIONS OF THE CONTRACTOR OR ANY SUB-CONTRACTOR, OR ANY OF THE CONTRACTOR OR SUBCONTRACTORS AGENTS OR EMPLOYEES, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE MEANS AND MANNER OF CONSTRUCTION AND FOR THE SAFETY OF PERSONS AND PROPERTY. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL SAFETY PRECAUTIONS AND REGULATION DURING THE WORK. THE ENGINEER WILL NOT ADVISE ON NOR ISSUE DIRECTION AS TO SAFETY PRECAUTION AND PROGRAMS.

THE ARCHITECT, CONTRACTOR, OWNER, AND END-USER OF THE STRUCTURE SHOULD EXPECT TO SEE SOME DEGREE OF RANDOM CRACKING IN THE SLAB-ON-GRADE. RANDOM CRACKING INCLUDES, BUT IS NOT LIMITED TO: SHRINKAGE CRACKS, CRACKS AT RE-ENTRANT CORNERS, AND CRACKS ADJACENT TO POINTS OF SLAB FIXITY. RANDOM CRACKING GENERALLY DOES NOT INCLUDE CRACKS WITH VERTICAL DISPLACEMENT. RANDOM CRACKS WITHIN THE SLAB-ON-GRADE DO NOT TYPICALLY IMPACT THE STRUCTURAL INTEGRITY OF THE SLAB AND ARE NOT NECESSARILY INDICATIVE OF STRUCTURAL ISSUES OR CONCERNS.

MECHANICAL UNITS AND EQUIPMENT SUPPORTED BY ROOF AND ELEVATED FLOOR STRUCTURE ARE SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER, AND MUST BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR VERIFICATION OF UNIT SIZE, WEIGHT, AND LOCATION.

THE STRUCTURAL DRAWINGS HEREIN REPRESENT THE FINISHED STRUCTURE. DURING ERECTION OF THE BUILDING, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR TEMPORARY GUYING. SHORING. BRACING. FORMING, ETC., TO HOLD THE STRUCTURE IN PROPER ALIGNMENT AND TO WITHSTAND ALL LOADS TO WHICH THE STRUCTURE MAY BE SUBJECTED; INCLUDING LATERAL LOADS, TEMPERATURE DIFFERENTIALS, AND STOCKPILES OF MATERIAL AND EQUIPMENT. SUCH MEASURES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED FOR SAFETY AND UNTIL ALL FRAMING AND CONNECTIONS ARE IN PLACE. THE INVESTIGATION, DESIGN, SAFETY, ADEQUACY AND INSPECTION OF SUCH TEMPORARY MEASURES ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

CONSTRUCTION DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO APPROVAL BY THE ENGINEER.

11. ALL STRUCTURAL SYSTEMS WHICH ARE TO BE COMPOSED OF COMPONENTS TO BE FIELD ERECTED SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE, AND ERECTION IN ACCORDANCE WITH THE SUPPLIERS INSTRUCTIONS AND REQUIREMENTS.

12. CONTRACTOR AND SUB-CONTRACTORS SHALL THOROUGHLY REVIEW ALL DRAWINGS AND SPECIFICATIONS PRIOR TO SUBMITTING BIDS. MISCELLANEOUS FASTENERS, CLIPS, ETC., THAT ARE NOT DETAILED ON THE DRAWINGS BUT ARE PART OF THE REQUIREMENTS FOR FULL INSTALLATION OF ALL STRUCTURAL SYSTEMS ARE TO BE PART OF THE BID. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO THE BID TO ASCERTAIN CONDITIONS WHICH MY ADVERSELY AFFECT THE BID.

13. ALL OMISSIONS AND CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE CONSTRUCTION DRAWINGS AND/OR SPECIFICATION AND/OR EXISTING CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE WORK.

14. CONTRACTOR SHALL REVIEW, STAMP, SIGN, AND DATE ALL SHOP DRAWINGS PRIOR TO FORWARDING TO THE ARCHITECT/ENGINEER. THE ENGINEER'S REVIEW IS TO BE FOR CONFORMANCE WITH THE DESIGN CONCEPT AND GENERAL COMPLIANCE WITH THE RELEVANT CONTRACT DOCUMENTS. THE ENGINEER'S REVIEW DOES NOT RELIEVE THE CONTRACTOR OF THE SOLE RESPONSIBILITY TO REVIEW, CHECK, AND COORDINATE THE SHOP DRAWINGS PRIOR TO SUBMISSION. THE CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF THE SHOP DRAWINGS AS THEY PERTAIN TO MEMBER SIZES, DETAILS, DIMENSION, ETC..

15. THE CONTRACTOR SHALL COORDINATE WITH ALL TRADES ALL DEPRESSIONS, DIMENSIONS, ELEVATIONS, SLEEVES, CHASES, HANGERS, OPENING, INSERTS, ANCHORS, EQUIPMENT SUPPORTS, AND DETAILS WITH THE ENTIRE CONTRACT DOCUMENT PACKAGE. INCLUDING SPECIFICATIONS AND ARCHITECTURAL. STRUCTURAL MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS. FOR CONCRETE CONSTRUCTION, THE INSERTS, EMBEDDED PLATES, ETC., SHALL NOT INTERFERE WITH REINFORCEMENT LOCATIONS.

THESE DRAWINGS INCLUDE SPECIFIED COMPONENTS AND PRODUCTS, I.E. EPOXY, METAL DECK. IF A SUPPLIER/MANUFACTURER DIFFERENT THAN SPECIFIED ON THESE DRAWINGS IS DESIRED AS A SUBSTITUTE. A SUBMITTAL SHOWING THE SUBSTITUTE IS EQUIVALENT TO THE PRODUCT SPECIFIED MUST BE PROVIDED TO AND APPROVED BY THE ENGINEER OF RECORD. IT IS THE SUBMITTERS RESPONSIBILITY TO SHOW THE SUBSTITUTE IS EQUIVALENT, NOT THE ENGINEER OF RECORD.

17. THE OWNER SHALL EMPLOY A SPECIAL INSPECTOR TO PERFORM INSPECTIONS IN ACCORDANCE WITH CHAPTER 17 OF THE IBC AS REQUIRED BY THE BUILDING OFFICIAL. INSPECTION REPORTS FOR THE ITEMS LISTED IN THE SPECIAL INSPECTION SCHEDULE SHALL BE FURNISHED TO THE STRUCTURAL ENGINEER OF RECORD IN A TIMELY MANNER AND SHALL INDICATE THAT WORK INSPECTED WAS DONE IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES THAT ARE NOT CORRECTED SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER OF RECORD PRIOR TO THE COMPLETION OF THAT PHASE OF WORK. A FINAL REPORT DOCUMENTING THE REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED TO THE OWNER AND STRUCTURAL ENGINEER OF RECORD.

# DESIGN LOADS

- ROOF LIVE LOAD
- ROOF LIVE LOAD (PATIO)
- FLOOR LIVE LOAD (TYPICAL)
- FLOOR LIVE LOAD (CORRIDOR)
- GROUND SNOW LOAD
- ROOF SNOW LOAD
- OCCUPANCY CATEGORY
- BASIC WIND SPEED (ASCE/SEI 7)
- WIND COMPONENTS AND CLADDING
- SEISMIC DESIGN CATEGORY (ASCE/SEI 7) 10.

SDS SD1

> SITE CLASS SEISMIC FORCE RESISTING SYSTEM

# **EXISTING CONSTRUCTION**

FIELD VERIFY GRADES, SIZES, LOCATIONS AND CONDITIONS OF ALL ITEMS ON PLANS AND DETAILS BEFORE STARTING WORK. REPORT DISCREPANCIES THAT WILL PREVENT CONFORMANCE TO CONSTRUCTION DOCUMENTS TO THE ENGINEER OF RECORD.

EXISTING STRUCTURE TO REMAIN IS SHOWN SCREENED (LIGHT). EXISTING STRUCTURE TO BE

REMOVED IS NOT SHOWN. ALL EXISTING CONSTRUCTION AFFECTED BY DEMOLITION SHALL BE SHORED UNTIL NEW

CONSTRUCTION SUPPORT MEMBERS ARE IN PLACE.

# **FOUNDATION**

FOOTINGS TO BE 3'-0" BELOW FINISH GRADE UNO.

UNLESS NOTED OTHERWISE; CENTER COLUMN FOOTINGS ON COLUMN CENTERLINES, CENTER WALL FOOTINGS ON FOUNDATION WALLS.

SLAB ON GRADE SHALL BE UNDERLAIN BY VAPOR BARRIER AND 6 INCHES MINIMUM OF FILL ALL CELL FORCING WITH GROUT IN LIFTS NOT EXCEEDING 4'-0" IN HEIGHT. FILL CRUSHED ROCK OR CONCRETE. REINFORCE ALL SLABS ON GRADE WITH #3 AT 18 INCHES EACH WAY IN OTHER CELES WITH GROUD AS INDICATED ON DRAWINGS. ALL REINFORCEMENT SHALL BE IN PLACE TOP 1/3 OF SLAB UNLESS NOTED OTHERWISE. AT DROPPED OR DEPRESSED SLABS ON GRADE PRIOR TO GROUTING WITH VERTICAL BARS HELD AT TOP, BOTTOM AND 120 BAR DIAMETERS MAXIMUM MAINTAIN GRAVEL THICKNESS, SLAB DEPTH, REINFORCEMENT AND REINFORCEMENT POSITION. ON CENTER. URUE SHALL SECONSOLIDATED BY MECHANICAL VIBRATION DURING PLACING.

BACK FILL AROUND THE EXTERIOR FOUNDATION WALLS WITH A FREE DRAINING GRANULAR MATERIAL TO THE ELEVATION OF THE ROUGH GRADE. PLACEMENT OF BACKFILL IS NOT ALLOWED UNTIL THE SLAB ON GRADE IS IN PLACE AND THE MAIN FLOOR DIAPHRAGM IS COMPLETED. TUNNEL CONCRETE WORK, FREE STANDING AND FOUNDATION WALLS SHALL BE COMPLETE AND AT DESIGN STRENGTH BEFORE BACKFILL IS PLACED.

CONTRACTOR TO KEEP EXCAVATIONS DRY AND PROTECTED FROM FROST AT ALL TIMES PROVIDE HORIZONTAL TRUSS-TYPE REINFORCING AT 16" ON CENTER MAXIMUM UNO. DURING THE FOUNDATION CONSTRUCTION. NOTIFY ENGINEER IF NATURE OF SOIL AT DEPTHS SHOWN IS NOT SUITABLE FOR FOUNDATIONS. NON-BEARING INTERIOR PARTITIONS SHALL STOP 1" BELOW STRUCTURAL SLABS OR STEEL

## CAST-IN-PLACE CONCRETE

- MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS FOOTINGS
  - INTERIOR SLABS ON GRADE
  - SLABS OVER STEEL DECK EXPOSED CONCRETE SLABS AND GARAGE SL

FOUNDATION WALLS, WALLS, COLUMNS AND B = 0.45 CONTROL AND EXPANSION JOINTS SHALL BE PROVIDED IN MASONRY WALLS AT 30' MAXIMUM EXTERIOR EXPOSED CONCRETE SHALL HAVE 4 TO 6% ENTRAINED AIR. SLABS WITH HARD PER TYPICAL MASONRY DETAILS. SEE ARCHITECTURAL FOR LOCATIONS. TROWELLED FINISH TO HAVE NO AIR ENTRAINMENT ADDED. COORDINATE WITH ARCHITECTURAL FOR FINISHES.

AGGREGATE FOR NORMAL WEIGHT CONCRETE SHALL MEET ASTM C33. MIX DESIGN SHALL CONTAIN A MINIMUM OF 50% COARSE AGGREGATES BY GRADATION REQUIREMENTS (NO.67 GRADING) SET FORTH IN ASTM C33.

NO ALUMINUM SHALL BE PLACED IN THE CONCRETE.

CONSTRUCTION TO BE IN ACCORDANCE WITH ACI 318-05 (R-05), "CHAPTER 3 FOR STANDARDS 14 PROVIDE 1/2" AIR GAP AROUND SIDES, TOP AND END OF WOOD STRUCTURAL MEMBERS FOR TESTS & MATERIALS, CHAPTERS 4, 5, 6 & 7 FOR CONSTRUCTION REQUIREMENTS". REFER TO ACI BEARING ON MASONRY. 302.1R-04 FOR SLAB ON GRADE MIX DESIGN.

PIPE OR ELECTRICAL CONDUIT EMBEDDED IN CONCRETE SHALL NOT BE LARGER IN OUTSIDE DIAMETER AT ITS WIDEST (OR FITTING) THAN 1/3 THE THICKNESS OF THE SLAB OR WALL. SLEEVES. STEEL JOISTS BEARING CONNECTIONS SHALL BE BY WELDED UNO. PROVIDE ERECTION BOLTS AT LOCATION REQUIRED BY SJI SPECIFICATIONS. WHERE JOIST BEARING CONDITIONS CONDUIT, OR PIPES THROUGH SLABS AND WALLS SHALL BE PLACED NO CLOSER THAN THREE REQUIRE NON-STANDARD BEARING ENDS, JOIST FABRICATOR SHALL PROVIDE SPECIAL BEARING DIAMETERS ON CENTER AND THEY DO NOT DISPLACE REINFORCING. DO NOT CUT HOLES IN CONCRETE SLABS, BEAMS, COLUMNS, OR WALLS WITHOUT PRIOR APPROVAL OF THE ENGINEER. ENDS AS REQUIRED TO ACCOMMODATE SUCH CONDITIONS.

SUSPENSION OF ANY MISCELLANEOUS ITEMS FROM THE JOISTS SHALL BE ONLY AT TOP LOCATION OF ALL CONSTRUCTION AND CONTROL JOINTS SHALL BE LOCATED AND DETAILED AND BOTTOM CHORD PANEL POINTS UNLESS SPECIFICALLY DETAILED OTHERWISE. ON SHOP DRAWINGS AND ARE SUBJECT TO ENGINEERS APPROVAL. IF SLAB ON GRADE CONTROL JOINTS ARE NOT SPECIFICALLY LOCATED ON DRAWINGS, PROVIDE CONTROL JOINTS AT 10'-0" ON CENTER MAXIMUM WITH A LENGTH TO WIDTH RATIO OF 1.5. PROVIDE (2) #4x4'-0" AT ALL NON-JOIST FABRICATOR SHALL PROVIDE JOIST BRIDGING PER SJI RECOMMENDATIONS. ALL JOISTS AND JOIST BRIDGING SHALL BE DESIGNED TO RESIST THE UPLIFT PRESSURES SHOWN ON CONTINUOUS CONTROL JOINTS. PROVIDE (2) #4x4'-0" AND (1) #4x24"x24" CORNER BAR AT ALL THE PLANS. REENTRANT CORNERS OF SLAB ON GRADE.

REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION AND DIMENSION OF CONCRETE REVEALS, NOTCHES, REGLETS, DRIPS, PADS, CURBS, CHAMFERS BLOCKOUTS AT DOORWAYS, AND ALL OTHER PROJECT REQUIREMENTS NOT SHOWN ON STRUCTURAL DRAWINGS. CHAMFER ALL EXPOSED CORNERS OF BEAMS, COLUMNS, JOISTS AND WALLS, SUBJECT TO ARCHITECTS APPROVAL

### REINFORCING STEEL

- TRUSS TYPE MASONRY JOINT REINFORCEMENT: W1.7 (9 GAGE), ASTM A1064, FY=70,000 PSI 1.
- WELDED WIRE REINFORCING (WWR): ASTM A82 AND A185 2.
- DEFORMED BARS (REBAR): ASTM A615, GRADE 40 FOR #3; GRADE 60 FOR #4 AND LARGER; ASTM A706 FOR WELDED CONDITIONS.

# LAP SPLICES:

MASONRY:	<b>48-BAR DIAMETERS AT CEL</b>
	64-BAR DIAMETERS AT CEL
CONCRETE:	CLASS "B' LAP SPLICE, TYPI
WELDED WIRE FABRIC:	WIRE SPACING +2"

SPECIFIED BELOW U.N.O. ON THESE DRAWINGS:

CONCRETE CAST AGAINST SOIL FORMED CONCRETE EXPOSED TO EARTH OR W FORMED CONCRETE EXPOSED TO EARTH OR W CONCRETE NOT EXPOSED TO EARTH OR WEAT CONCRETE NOT EXPOSED TO EARTH OR WEAT SLAB ON GRADE

SECURELY TIE ALL REINFORCING IN PLACE WITH DOUBLE ANNEALED 16-GAUGE IRON WIRE OR APPROVED CLIPS PRIOR TO CONCRETE OR GROUT PLACEMENT.

ENGINEER PRIOR TO FABRICATION.

# **TYPICAL CMU WALL REINFORCING**

UNLESS NOTED OTHERWISE ON THESE DRAWINGS, REINFORCE CMU WALLS AS FOLLOWS:

### **8" CMU WALLS - INTERIOR** #5 VERT @ 48" O.C. CENTER OF WALL (2) #5 VERT AT EACH CORNER OF WALL

TRUSS TYPE HORIZ JOINT REINFORCEMENT @ 16" O.C.

SOLID GROUT AT REINFORCED CELLS ONLY UNO PROVIDE (2) TYPICAL VERT FULL HEIGHT JAMB STEEL EACH SIDE OF OPENINGS PROVIDE (2) #4 HORIZ BOND BEAM AT FLOOR AND ROOF LEVELS AND TOP OF WALL

5 PSF 39 PSF (WALLS) 0.064 0.04

SHEAR WALLS

105 M.P.H. EXPOSURE C

20 PSF

100 PSF

40 PSF

100 PSF

5 PSF

DESIGN ALLOWABLE SOIL BEARING PRESSURE OF 1500 PSF HAS BEEN ASSUMED. ALL EXTERIOR 1

YS	
	3500 PSI MAX. W/C RATIO OF 0.50
	4000 PSI MAX. W/C RATIO OF 0.45
	3500 PSI MAX. W/C RATIO OF 0.45
ABS	4000 PSI MAX. W/C RATIO OF 0.45
BEAMS	4000 PSI MAX. W/C RATIO OF 0.45

CELLS WITH SINGLE BAR (HORIZ. AND VERT.) CELLS WITH TWO BARS (HORIZ, AND VERT.) TYPICAL UNLESS NOTED OTHERWISE

CONCRETE COVER FOR CAST-IN-PLACE AND NON-PRE-STRESSED CONCRETE SHALL BE AS

	3"
WEATHER (#6 OR GREATER)	2"
WEATHER (#5 OR LESS)	1 1/2"
THER (SLAB, WALL, JOIST)	3/4"
THER (BEAM, COLUMN)	1 1/2"
	1 1/2"

SUBMIT SHOP DRAWINGS OF REINFORCING STEEL FOR REVIEW BY THE ARCHITECT AND



CONTRACTOR SHALL PROVIDE BRACING FOR MASONRY WALLS, AS REQUIRED, UNTIL CONNECTION TO FLOOR AND/OR ROOF DIAPHRAGMS ARE COMPLETED.

STRENGTH OF MASONRY ASSEMBLY SHALL BE DETERMINED BY THE UNIT STRENGTH METHOD IN ACCORDANCE WITH SECTION 2105.2.2.1 OF THE 2006 IBC.

ASTM C90 CONCRETE MASONRY UNITS WITH NET AREA

AT 28 DAYS. ASTM C476 GROUT WITH MINIMUM COMPRESSIVE

VAREA COMPRESSIVE STRENGTH OF MASONRY, F'M = 1,500

,900 PSI. ASTM C270 MORTAR TYPE S, MINIMUM

FRAMING U.N.O. WHERE BOND BEAMS INTERSECT AT CORNERS AT DIFFERENT ELEVATIONS, RUN EACH BOND

BEAM AROUND CORNER FOR TWO BLOCK LENGTHS MINIMUM. WHERE BOND BEAMS INTERSECT PARALLEL AT DIFFERENT ELEVATIONS, LAP BOND BEAMS FOUR BLOCK LENGTHS MINIMUM.

PROVIDE CORNER AND INTERSECTION BARS IN ALL BOND BEAMS.

PROVIDE (2) #4 VERTICAL EACH SIDE OF ALL OPENINGS IN MASONRY WALLS UNO. COORDINATE WITH LINTEL SCHEDULE AND PROVIDE GREATER REINFORCING REQUIREMENTS.

PROVIDE (2) #4 VERTICAL AT ALL WALL CORNERS, ENDS AND INTERSECTIONS UNO. 12 COORDINATE WITH LINTEL SCHEDULE AND PROVIDE GREATER REINFORCING REQUIREMENTS.

PROVIDE BOND BEAM WITH (2) #4 CONTINUOUS BENEATH ALL SLAB AND BEAM BEARINGS UNO. 13.

STEEL JOISTS

UNLESS NOTED OTHERWISE ALL ROOF JOISTS TO BE DESIGNED FOR A 150 LB ADD-LOAD AND 150 LB BEND-CHECK ALL FLOOR JOISTS TO BE DESIGNED FOR A 300 LB ADD-LOAD AND 300 LB BEND-CHECK

JOIST MANUFACTURER MAY NOT DESIGN JOISTS FOR LESS THAN LOADS SPECIFIED IN THE SJI CAPACITY TABLES FOR JOIST DESIGNATIONS SHOWN ON PLANS.

STRUCTURAL AND MISCELLANEOUS STEEL

STEEL CONSTRUCTION MANUAL, 14TH EDITION MATERIAL SPECIFICATIONS U.N.O.

WIDE FLANGE AND S SHAPES	A
CHANNELS, ANGLES, PLATES AND BARS	Α
HOLLOW STRUCTURAL SHAPES (HSS)	Α
PIPE	Α
STRUCTURAL BOLTS (U.N.O.)	Α
MACHINE BOLTS (WHERE NOTED)	Α
ANCHOR BOLTS AND RODS AND THREADED RODS	Α
HIGH STRENGTH ANCHOR BOLTS AND RODS (AS NOTED)	Α
HEADED OR THREADED STUD ANCHORS (H.S.A. OR T.S.Á.)	Α
DEFORMED BAR ANCHORS (D.B.A.)	Α
WELDING ELECTRODES	Е
NON-SHRINK GROUT (7,000 PSI)	Α
POWDER ACTUATED FASTENER (PAF OR PDF)	Н
EXPANSION BOLTS (CONCRETE)	Н
EXPANSION BOLTS (MASONRY)	Н
EPOXY ADHESIVE - CONCRETE	Н
EPOXY ADHESIVE - MASONRY	Н

ASTM A992, FY=50KSI ASTM A36, FY=36KSI ASTM A500 GR. B, FY=46KSI ASTM A53, GR. B, FY=35KSI ASTM A325 ASTM A307 ASTM F1554 GRADE 36KSI ASTM F1554 GRADE 105KSI ASTM A108-69T ASTM A496 OR ASTM A706 E70XX ASTM C1107, GR. A HILTI X-U (0.157" DIA) HILTI KWIK BOLT TZ HILTI KWIK BOLT 3 HILTI HIT-HY 200 HILTI HIT-HY 70 W/ SCREEN TUBE

ALL STRUCTURAL STEEL ERECTION AND FABRICATION SHALL BE ACCORDING TO THE CURRENT EDITION OF AISC "SPECIFICATIONS FOR DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".

ALL STRUCTURAL BOLTED CONNECTIONS SHALL BE ACCORDING TO THE CURRENT EDITION OF RCSC "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS" FOR SNUG TIGHTENED. PRETENSIONED, OR SLIP-CRITICAL JOINTS. ALL STRUCTURAL BOLTED CONNECTIONS TO BE SNUG TIGHTENED UNO. FOR SLIP-CRITICAL JOINTS, AS NOTED, THE USE OF TENSION INDICATING WASHERS OR TWIST-OFF BOLT ASSEMBLIES SHALL BE PERMITTED ONLY ACCORDING TO THE ABOVE MENTIONED STANDARD.

4. ALL WELDING SHALL BE PREFORMED IN ACCORDANCE WITH AWS D1.1. ALL WELDING SHALL BE PREFORMED BY AWS CERTIFIED WELDERS. ALL WELDING OF STRUCTURAL STEEL SHALL BE PREFORMED IN THE SHOP WHENEVER PRACTICAL. AN EFFORT HAS BEEN MADE TO INDICATE WELDS THAT CAN BE OR SHOULD BE FIELD WELDED. IT IS, HOWEVER, THE FABRICATORS RESPONSIBILITY TO DECIDE WHERE AND HOW THE WELDING IS TO BE ACCOMPLISHED TO ACHIEVE THE INTENDED RESULT.

COMPLETE JOINT PENETRATION (CJP) WELDING: PROVIDE BACKER BARS, RUN OFF TABS, AND ACCESS HOLES PER AWS D1.1. BACKER BARS SHALL BE REMOVED AFTER WELDING, THE ROOT WELD BACK GOUGED AND REPAIRED IF NECESSARY AND REINFORCED WITH A FILLET. RUN OFF TABS SHALL BE REMOVED AFTER WELDING WITH THE FLANGE EDGE GROUND SMOOTH.

STEEL FABRICATOR SHALL BE AN AISC CERTIFIED SHOP FOR CATEGORY 1 STEEL STRUCTURES AND SHALL MAINTAIN DETAILED QUALITY CONTROL PROCEDURES.

BEAMS SHALL BE FABRICATED FOR PLACEMENT OF NATURAL CAMBER UP.

STRUCTURAL STEEL SUPPLIER SHALL FURNISH COLUMN ANCHOR RODS.

HOLES IN STEEL SHALL BE DRILLED OR PUNCHED. ALL SLOTTED HOLES SHALL BE PROVIDED WITH SMOOTH EDGES. BURNING OF HOLES AND TORCH CUTTING AT THE SITE IS NOT PERMITTED. PROVIDE CONNECTIONS REQUIRED FOR ATTACHMENT OF WOOD AND STEEL MEMBERS.

10. USE CONNECTIONS AS DETAILED ON PLANS. WHEREVER CONNECTIONS ARE NOT DETAILED FABRICATOR SHALL REQUEST ENGINEER TO SUPPLY CONNECTION DETAIL.

11. ALL COLUMNS, ANCHOR BOLTS, BASE PLATES, ETC., HAVE BEEN DESIGNED FOR THE FINAL COMPLETED CONDITION AND HAVE NOT BEEN INVESTIGATED FOR POTENTIAL LOADINGS ENCOUNTERED DURING STEEL ERECTION AND CONSTRUCTION. CONFORMANCE TO OR DEVIATION FROM ALLOWABLE CAPACITIES DURING STEEL ERECTION IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR (SEE GENERAL SECTION OF G.S.N.)

12. PRIOR TO GROUTING, COLUMNS SHALL BE ERECTED AND ALIGNED AS TO PLUMBNESS AND ELEVATION BY MEANS OF STEEL SHIMS OR LEVELING NUTS UNDER THE BASE PLATES. SETTING PLATES SHALL ONLY BE USED AS TEMPLATES TO LOCATE ANCHOR BOLTS DURING CONCRETE PLACEMENT.

13. STRUCTURAL STEEL PERMANENTLY EXPOSED TO VIEW SHALL RECEIVE COMMERCIAL BLAST CLEANING. PRIME WITH 5 MILS EPOXY PRIMER, TOP COAT SHALL BE 3 DRY MILS ALIPHATIC URETHANE, THIN FILM. ARCHITECT TO APPROVE COATING AND COLOR. DAMAGE DURING TRANSPORT, ERECTION, AND FIELD WELDING PROCESSES SHALL BE REPAIRED TO MATCH THE SHOP APPLIED COATING.

# <u>WOOD</u>

ALL WOOD BEARING ON CONCRETE OR MASONRY, IF LESS THAN 4'-0" ABOVE FINISH GRADE, SHALL BE PRESSURE TREATED. WHEREVER NECESSARY TO CUT OR DRILL TREATED LUMBER, TREAT THE CUT OR BORED SURFACES WITH TWO HEAVY COATS OF THE SAME PRESERVATIVE AS USED IN ORIGINAL TREATMENT.

# LUMBER MINIMUM PROPERTIES SCHEDULE

	SPECIES/PRODUCT	GRADE	Fb (PSI)	Ft (PSI)	Fv (PSI)	Fc (PSI)	Fc (PSI)	E (PSI)
	SPRUCE-PIN-FIR (NORTH)	No. 2	875	450	135	425	1150	1,400,000
	MICROLLAM LVL	1.9E	2,600	1,555	285	750	2,510	1,900,000
	PARALLAM PSL	1.8E	2,400	1,755	190	425	2,500	1,800,000
	PARALLAM PSL	2.0E	2,900	2,025	290	750	2,900	2,000,000
	TIMBERSTRAND LSL	1.55E	2,325	1,070	310	800	2,050	1,550,000

PLYWOOD SHEATHING SHALL CONFORM TO THE CURRENT EDITION OF THE U.S. DEPARTMENT OF COMMERCE VOLUNTARY PRODUCT STANDARD 1 OR 2 (DOC PS 1 OR 2) OR THE APA PANEL DESIGN SPECIFICATION (PDS) AND SHALL BE INSTALLED IN STAGGERED PATTERN.

BOLT HOLES IN WOOD SHALL BE DRILLED 1/16" MAXIMUM OVERSIZE. HOLES FOR SCREWS AND LAG SCREWS SHALL BE FIRST BORED FOR THE SAME DEPTH AND DIAMETER OF THE SHANK, THEN THE REMAINDER OCCUPIED BY THE THREAD PORTION SHALL BE BORED NOT LARGER IN DIAMETER THAN THE ROOT OF THE THREAD. ALL SCREWS SHALL BE SCREWED NOT DRIVEN INTO PLACE. PROVIDE WASHERS UNDER ALL NUTS AND HEADS OF BOLTS AND LAG SCREWS

PROVIDE SOLID BLOCKING AT MID-HEIGHT OF ALL WALLS U.N.O.

PROVIDE SOLID BLOCKING BETWEEN JOISTS AT ALL SUPPORTS

WOOD FRAMING AND CONSTRUCTION SHALL CONFORM TO THE CURRENT EDITION OF THE NATIONAL DESIGN SPECIFICATION (NDS) FOR WOOD CONSTRUCTION.

7. ALL COLUMNS SHOWN ON STRUCTURAL DRAWINGS SHALL BE CONTINUOUS U.N.O.

8. SET ALL JOISTS WITH CROWN UP.

TYPICAL FRAMING ANCHORS SHALL BE "SIMPSON STRONG TIE" OR APPROVED EQUIVALENT AS INDICATED ON DRAWINGS. INSTALL AND CONNECT PER MANUFACTURER RECOMMENDATIONS.

10. CONNECTORS, ANCHORS, AND FASTENERS ATTACHED TO PRESSURE TREATED WOOD TREATED WITH ACQ-C OR ACQ-D SHALL BE GALVANIZED AND SHALL MEET ONE OF THE FOLLOWING SPECIFICATIONS: ASTM-A653-G185 OR GREATER; ASTM-A123-2.0 OZ/FT2 MIN; ASTM-A153; ASTM-B695-CLASS 110.

11. IF WOOD TREATMENT IS OTHER THAN LISTED ABOVE, CONTACT THE TREATMENT SUPPLIER FOR CORROSION PROTECTION REQUIREMENTS AND SUBMIT TO ARCHITECT/ENGINEER FOR APPROVAL. CONNECTIONS SHOULD NOT INCORPORATE DISSIMILAR METALS OR METALLIC COATINGS IN CONTACT WITH EACH OTHER.

3	r 2	3
a		a
2	(1)	2
		$\mathbb{N}$
3	r 2	3

UPL	UPLIFT PRESSURE (PSF)				
COMPONENT	F	ROOF ZONES	S		
AREA (SF)	1	2	3		
10	28.7	48.2	72.6		
100	26.3	31.2	31.2		
PRESSUR ROOF SU 2. COMPON TRIBUTAF INTERPOI	RES SHOWN RFACE. ENT AREA S RY TO THE C LATION IS A SQUARE FE	AND CLADE ACT AWAY HOWN IS T COMPONEN LLOWED BE ET.	FROM THE HE AREA T. LINEAR		



**ABBREVIATIONS** 

AB

ADD'L

AESS

ARCH

ATTM

BLDG

BLKG

BOT

**BSM1** 

BTWN

CFS

C.IP

CI R

CMU

COL

CONC

CONN

CONT

DBA

DET

DIA

DIR

DF-L

EMBE

EOR

EXIST

EXP

FDN

FIN

FLR

FN

FRF

FTG

FV

GA

GR

HK

HS

HSA

HSS

INFO

LBS

LG

LLH

LLV

LSL

LVL

MAX

MECH

MFR

MIN

MTL

NIC

NS

OC

OD

OPP

OSB

PEMB

PAF

PL

PLF

PSF

PSI

PSL

QTY

REINF

REM

REQ'D

RTU

SCHD

SIM

SLV

SOG

SPF

SQ

STD

T&B

THK

TOF

TOM

TOS

TOW

TSA

TYP

VERT

UNO

W/

WF

WWR

PT

IBC

ID

HORIZ

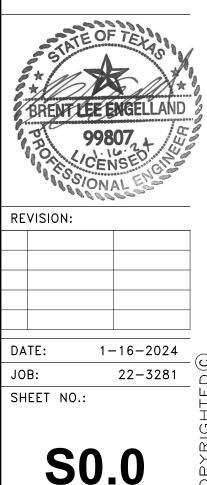
ΕW

COORD

ALT

NUMBER ANCHOR BOLT ADDITIONAL ARCHITECTURALLY EXPOSED STRUCTURAL STEEL ALTERNATE ARCHITECTURAL ATTACHMENT BUILDING BLOCKING BOTTOM BASEMENT BETWEEN COLD FORMED STEEL CONTROL OR CONSTRUCTION JOINT COMPLETE JOINT PENETRATION WEL CENTERLINE CLEAR CONCRETE MASONRY UNITS COLUMN CONCRETE CONNECTION CONTINUOUS COORDINATE DEFORMED BAR ANCHOR DETAIL DIAMETER DIMENSION DIRECTION DOUGLAS FIR-LARCH EACH EACH FACE EMBEDDED EDGE NAILING ENGINEER OF RECORD EQUAL EACH WAY EXISTING EXPANSION FOUNDATION FINISH FLOOR FIELD NAILING FIBER-REINFORCED POLYMER FOOTING FIELD VERIFY GAUGE GRADE HOOK HORIZONTAL HIGH STRENGTH HEADED STUD ANCHOR HOLLOW STRUCTURAL SHAPE INTERNATIONAL BUILDING CODE INSIDE DIAMETER INFORMATION POUNDS LONG LONG LEG HORIZONTAL LONG LEG VERTICAL LAMINATED STRAND LUMBER LAMINATED VENEER LUMBER MAXIMUM MECHANICAL MANUFACTURER MINIMUM METAL NOT IN CONTRACT NON-SHRINK ON CENTER OUTSIDE DIAMETER OPPOSITE ORIENTED STRAND BOARD POWDER ACTUATED FASTENER PRE-ENGINEERED METAL BUILDING PLATE POUNDS PER LINEAR FOOT POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH PARALLEL STRAND LUMBER POINT QUANTITY REINFORCING REMAINDER REQUIRED ROOF TOP UNIT SCHEDULE SIMILAR SHORT LEG VERTICAL SLAB-ON-GRADE SPRUCE-PINE-FIR SQUARE STANDARD TOP AND BOTTOM THICK TOP OF FOOTING TOP OF MASONRY TOP OF STEEL TOP OF WALL THREADED STUD ANCHOR TYPICAL VERTICAL UNLESS NOTED OTHERWISE WITH WIDE FLANGE WELDED WIRE REINFORCING







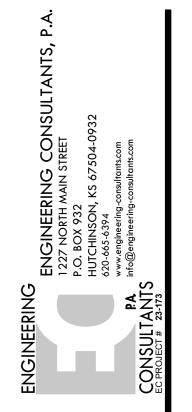
# MATERIAL / ACTIVITY 1. Fabricator and erector documents (Verify repo certificates as listed in AISC 360, chapter N, para for compliance with construction documents) 2. Material verification of structural steel Embedments (Verify diameter, grade, type, le embedment. See 1705.3 for anchors) 4. Verify member locations, braces, stiffeners, ar application of joint details at each connection cor construction documents 5. Structural steel welding: a. Inspection tasks Prior to Welding (Observe, perform for each welded joint or member, the C listed in AISC 360, Table N5.4-1) b. Inspection tasks During Welding (Observe, for each welded joint or member, the QA tasks AISC 360, Table N5.4-2) c. Inspection tasks After Welding (Observe, or for each welded joint or member, the QA tasks AISC 360, Table N5.4-3) 6. Structural steel bolting: a. Inspection tasks Prior to Bolting (Observe, tasks for each bolted connection, in accordanc tasks listed in AISC 360, Table N5.6-1) b.Inspection tasks During Bolting (Observe the listed in AISC 360, Table N5.6-2) Snug-tight joints c. Inspection tasks After Bolting (Perform tasks bolted connection in accordance with QA tasks AISC 360, Table N5.6-3) 1705.2.2 1. Material verification of cold-formed steel deck a. Identification markings Manufacturer's certified test reports . Connection of cold-formed steel deck to suppo a. Welding b. Other fasteners (in accordance with AISC 360,Section N6) 1) Verify fasteners are in conformance with a submittal 2) Verify fastener installation is in conforman approved submittal and manufacturer's recommendations Inspection of reinforcing steel installation (see or welding) 3. Inspection of anchors cast in concrete 4. Inspection of anchors and reinforcing steel pos in hardened concrete: Per research reports inclu verification of anchor type, anchor dimensions, dimensions, hole cleaning procedures, anchor sp edge distances, concrete minimum thickness, an embedment and tightening torque 5. Verify use of approved design mix Fresh concrete sampling, perform slump and a tests and determine temperature of concrete Inspection of concrete placement for proper a techniques 8. Inspection for maintenance of specified curing temperature and techniques 12. Inspection of formwork for shape, lines, locat dimensions 13. Concrete strength testing and verification of compliance with construction documents (A) Level A, B and C Quality Assurance: 1. Verify compliance with approved submittal (B) Level B Quality Assurance: 1. Verification of f'm and f'AAC prior to constru (D) Levels B and C Quality Assurance: 1. Verification of Slump Flow and Visual Stat (VSI) of self-consolidating grout as delivered project 2. Verify compliance with approved submittal 3. Verify proportions of site-mixed mortar, gro prestressing grout for bonded tendons 4. Verify grade, type, and size of reinforceme anchor bolts, and prestressing tendons and anchorages 5. Verify construction of mortar joints 7. Verify grout space prior to grouting 9. Verify size and location of structural mason elements 10. Verify type, size, and location of anchors, i details of anchorage of masonry to structural r frames, or other construction. 12. Verify preparation, construction, and prote masonry during cold weather (temperature b or hot weather (temperature above 90°F) 18. Prepare grout and mortar specimer 19. Observe preparation of prisms 20. Inspection of anchors and reinforcing steel p installed (epoxy, expansion, etc.): Per research r including verification of anchor type, anchor dime hole dimensions, hole cleaning procedures, anch spacing, edge distances, location to masonry join masonry minimum thickness, anchor embedmen ghtening torque G.E. Geotechnical Engineer S.I. Special Inspector - Not Yet Selecte Notes: 1. The inspection and testing agent(s) shall be engag whose work is to be inspected or tested. Any co. The qualifications of the Special Inspector(s) and

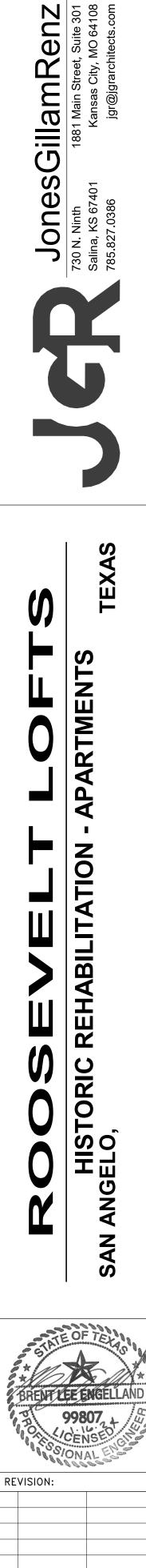
- the Design Professional. 2. If the list of Inspection Agents is noted as "Not Yet
- agencies for approval by the Building Offical and the 3. Special Insepctions as required by Section 1704.2.5
- IBC Section 1704.2.5.2
- 4. Observe on a random basis, operations need not be delayed pending these inspections. Perform these tasks for each welded joint, bolted connection, or steel element.
- 5. NDT of welds completed in an approved fabricator's shop may be performed by that fabricator when approved by the AHJ. Refer to AISC 360, N7.

STATEMENT OF SPECIAL INSPECTIONS

- 1. THIS STRUCTURAL STATEMENT OF SPECIAL INSPECTIONS IS INCLUDED AS A CONDITION FOR PERMIT ISSUANCE IN ACCORDANCE WITH THE BUILDING CODE. THE TABLE OF REQUIRED SPECIAL INSPECTIONS IDENTIFIES THE STRUCTURAL ITEMS TO BE INSPECTED APPLICABLE TO THIS PROJECT AS WELL AS IDENTIFYING THE APPROVED AGENCIES TO BE RETAINED FOR CONDUCTING THESE INSPECTIONS AND TESTS.
- 2. SPECIAL INSPECTIONS SHALL BE PERFORMED BY PERSONNEL AS INDICATED IN THE TABLE.
  - S.I. SPECIAL INSPECTOR G.E. GEOTECHNICAL ENGINEER
- 3. IF SPECIAL INSPECTION IS WAIVED BY THE GOVERNING AUTHORITIES, THE GENERAL CONTRACTOR SHALL PROVIDE THE ENGINEER OF RECORD A COPY OF THE BUILDING OFFICIALS WRITTEN EXEMPTION FOR SPECIAL INSPECTION PRIOR TO STARTING WORK.

SCHEDULE OF SF	PECIAL INSPECTION S	ERVICES		
/ ACTIVITY	SERVICE	INSPECTION EXTENT AGENT*		
	5.2 Steel Construction			
iments (Verify reports and 60, chapter N, paragraph 3.2 on documents)	Submittal Review	Each submittal	S.I.	
tural steel ter, grade, type, length, nchors)	Shop (3) and field inspection Field inspection	Periodic Periodic	S.I. S.I.	
aces, stiffeners, and ach connection comply with	Field inspection	Periodic	<u> </u>	
Welding (Observe, or		Observe or Perform as	<u> </u>	
it or member, the QA tasks .4-1) /elding (Observe, or perform	Shop (3) and field inspection	noted (4)	S.I.	
lding (Observe, or perform	Shop (3) and field inspection	Observe (4)	S.I.	
nber, the QA tasks listed in	Shop (3) and field inspection	Observe or Perform as noted (4)	S.I.	
Bolting (Observe, or perform	Shop (3) and field inspection	Observe or Perform as	S.I.	
tion, in accordance with QA ble N5.6-1)		noted (4)	S.I.	
olting (Observe the QA tasks .6-2)		Observe (4) Periodic	S.I. S.I.	
ting (Perform tasks for each ance with QA tasks listed in		Perform (4)	S.I.	
	truction Other Than Structu	ral Steel	S.I.	
formed steel deck:	Field inspection Submittal Review	Periodic Each submittal	<u> </u>	
steel deck to supporting	Shop (3) and field inspection	Periodic	S.I. S.I.	
ance with AISC			S.I.	
onformance with approved		Periodic	S.I.	
on is in conformance with anufacturer's	-	Periodic	S.I.	
1705.3 el installation (see 1705.2.2	Concrete Construction Shop (3) and field inspection	Periodic		
n concrete	Shop (3) and field inspection	Periodic	S.I. S.I.	
einforcing steel post-installed earch reports including chor dimensions, hole cedures, anchor spacing, mum thickness, anchor	Field inspection	Periodic or as required by the research report issued by an approved source		
que gn mix	Shop (3) and field inspection	Periodic	S.I. S.I.	
erform slump and air content ire of concrete	Shop (3) and field inspection	Continuous	S.I.	
ement for proper application	Shop (3) and field inspection	Continuous	S.I.	
of specified curing shape, lines, location and	Shop (3) and field inspection	Periodic	S.I.	
and verification of	Field inspection Field testing and review of laboratory reports	Periodic	<u>S.I.</u> S.I.	
1705.4	Masonry Construction		0	
Assurance:	B - Quality Assurance			
pproved submittals ce:	Field Inspection	Periodic	S.I.	
AC prior to construction	Testing by unit strength method or prism test method	Periodic	S.I.	
w and Visual Stability Index grout as delivered to the	Field testing	Continuous	S.I.	
pproved submittals -mixed mortar, grout and	Field inspection Field Inspection	Periodic	S.I.	
led tendons size of reinforcement and			S.I.	
sing tendons and	Field Inspection Field Inspection	Periodic	<u>S.I.</u>	
routing	Field Inspection	Level C - Continuous	<u>S.I.</u> S.I.	
of structural masonry	Field Inspection	Periodic	S.I.	
ation of anchors, including onry to structural members, construction. struction, and protestion of	Field inspection	Level B - Periodic Level C - Continuous	S.I. S.I.	
struction, and protestion of ler (temperature below 40°F) <u>e above 90°F)</u>	Field inspection	Periodic	S.I.	
d mortar specimens	Field testing	Level B - Periodic Level C - Continuous	S.I. S.I.	
aration of prisms	Field inspection	Level B - Periodic Level C - Continuous	S.I. S.I.	
c.): Per research reports type, anchor dimensions, procedures, anchor ion to masonry joints, anchor embedment and	Field inspection	Periodic or as required by the research report issued by an approved source	S.I.	
*   FIRM	NSPECTION AGENTS	ADDRESS		
ineer - Not Yet Selected				
agent(s) shall be engaged by the Own octed or tested. Any conflict of interes Special Inspector(s) and/or testing ago ts is noted as "Not Yet Selected" the Building Offical and the Design Prof	ner or the Owner's Agent, and not by the o st must be disclosed to the Building Offici encies may be subject to the approval of t General Contractor shall coordinate subn essional. ired where the fabricator is approved in a	al prior to commencing work. the Building Official and/or nittal of special inspection		





 DATE:
 1-16-2024

 JOB:
 22-3281

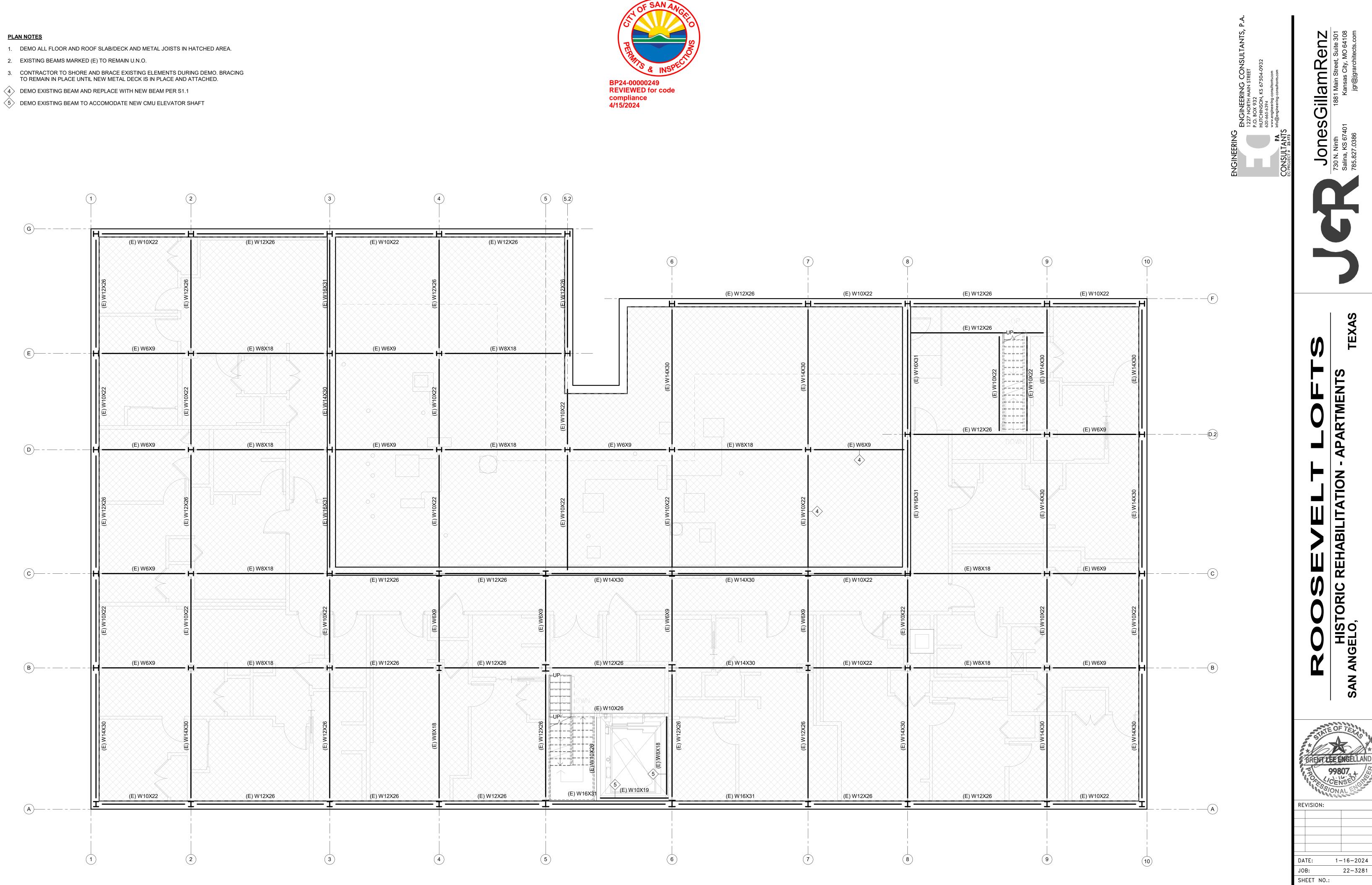
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**S0.1** 

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# PLAN NOTES

- 1. DEMO ALL FLOOR AND ROOF SLAB/DECK AND METAL JOISTS IN HATCHED AREA.
- 2. EXISTING BEAMS MARKED (E) TO REMAIN U.N.O.
- 3. CONTRACTOR TO SHORE AND BRACE EXISTING ELEMENTS DURING DEMO. BRACING







SD1.0

PLAN NOTES

NORTH

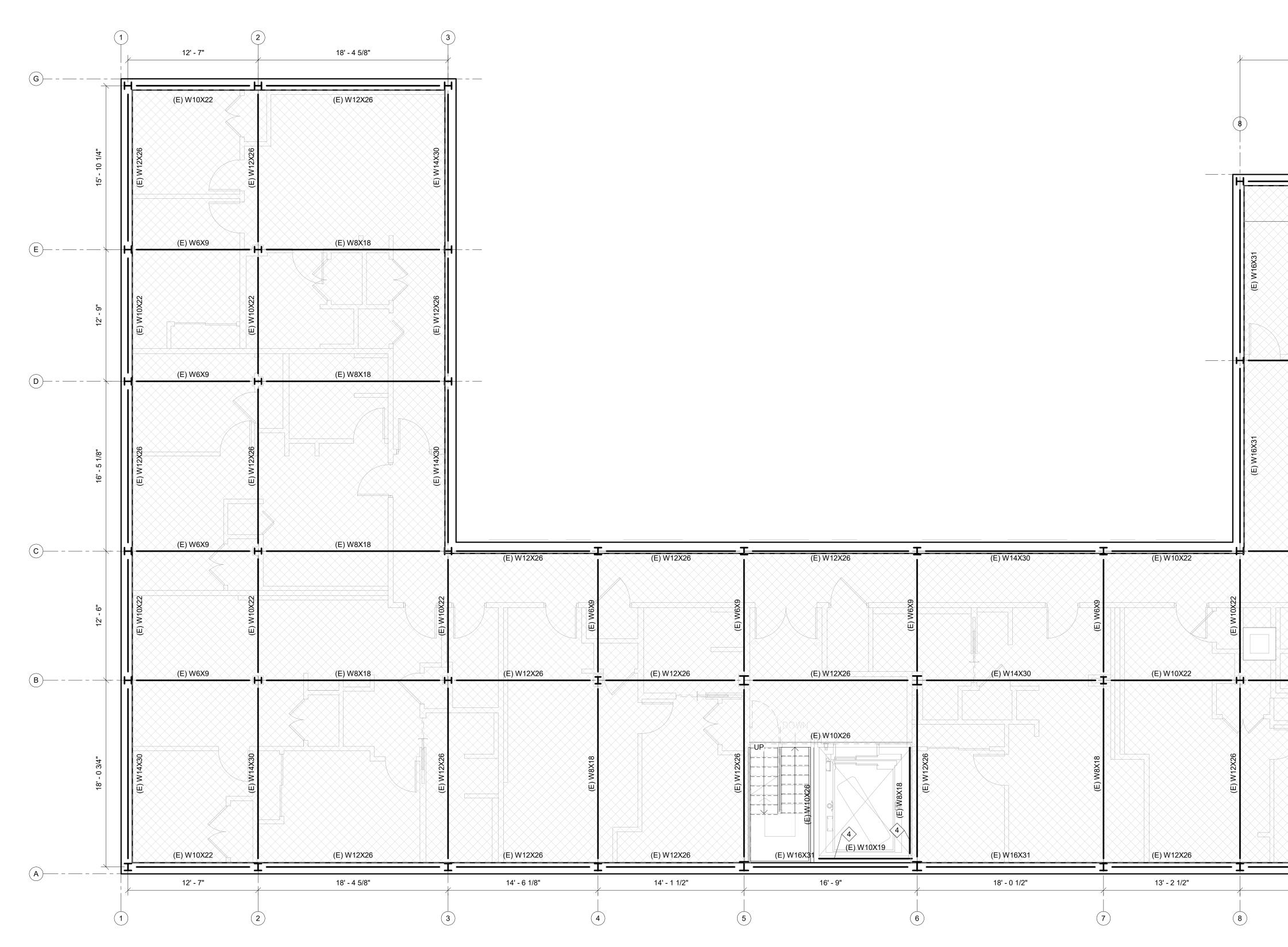
3D 3RD FLOOR DEMO PLAN 3/16" = 1'-0"

1. DEMO ALL FLOOR SLAB/DECK AND METAL JOISTS IN HATCHED AREA.

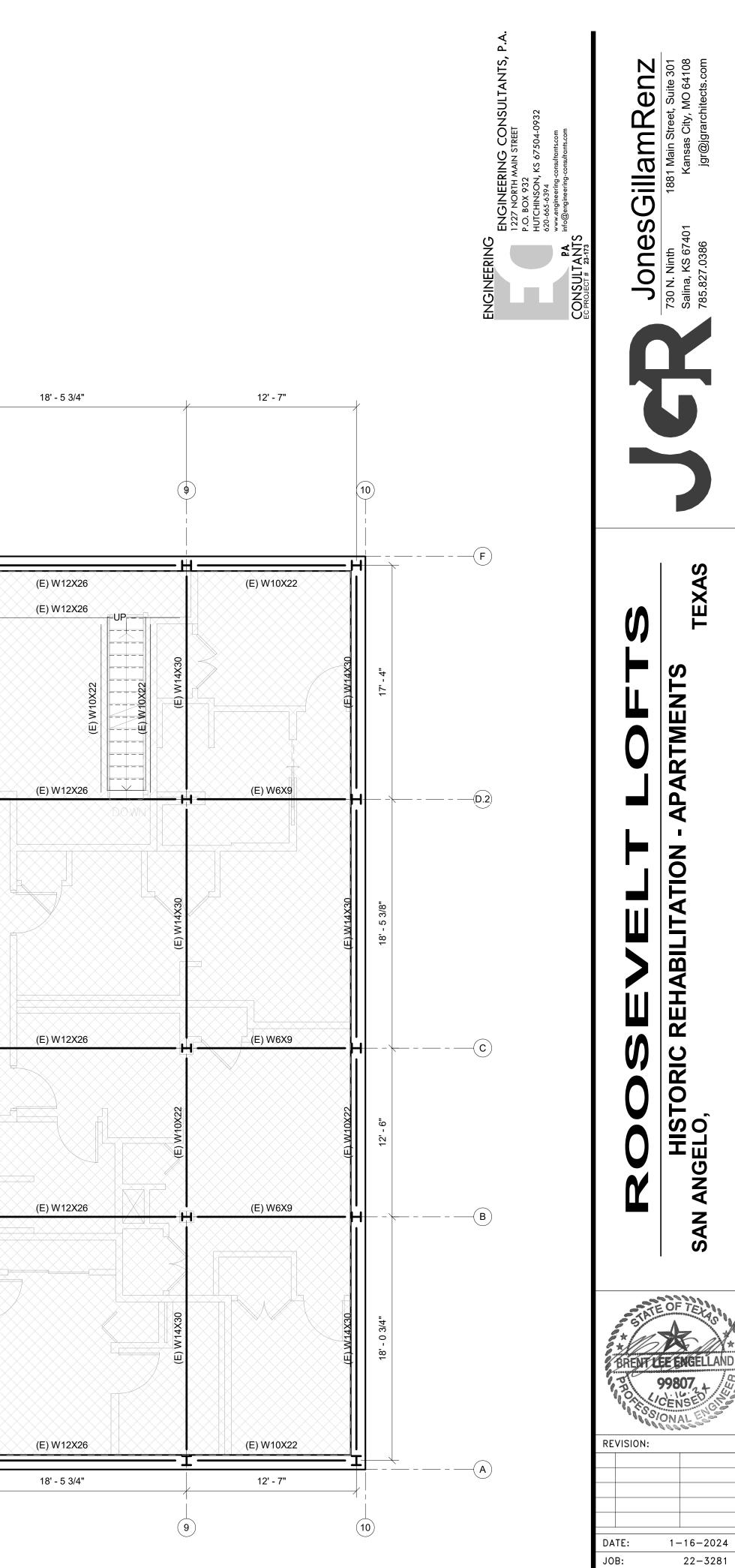
2. EXISTING BEAMS MARKED (E) TO REMAIN U.N.O.

3. CONTRACTOR TO SHORE AND BRACE EXISTING ELEMENTS DURING DEMO. BRACING TO REMAIN IN PLACE UNTIL NEW METAL DECK IS IN PLACE AND ATTACHED.

4 DEMO EXISTING BEAM TO ACCOMODATE NEW CMU ELEVATOR SHAFT







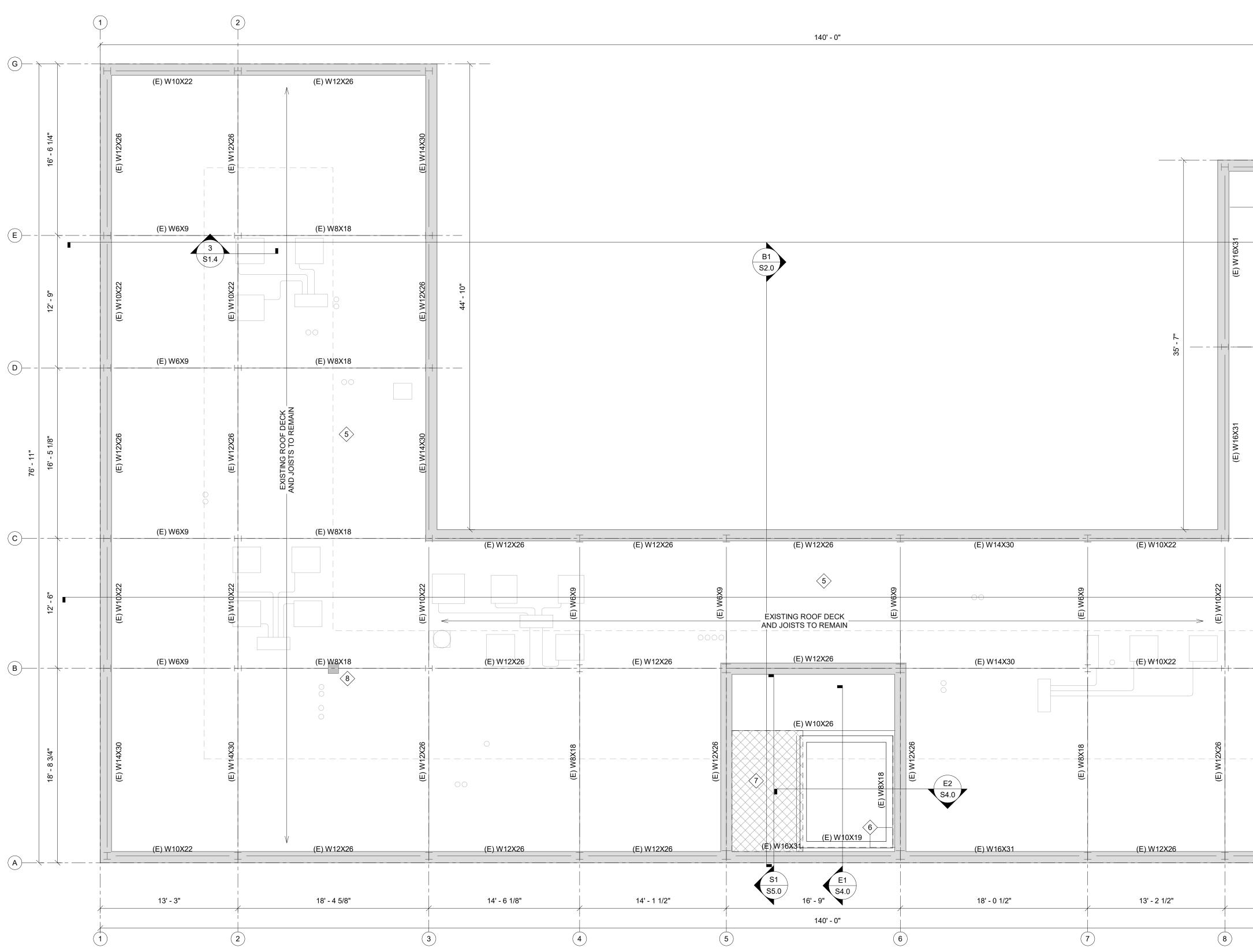
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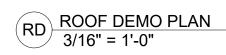
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PLAN NOTES 1. FOR GENERAL STRUCTURAL NOTES (GSN) SEE SHEET S0.0

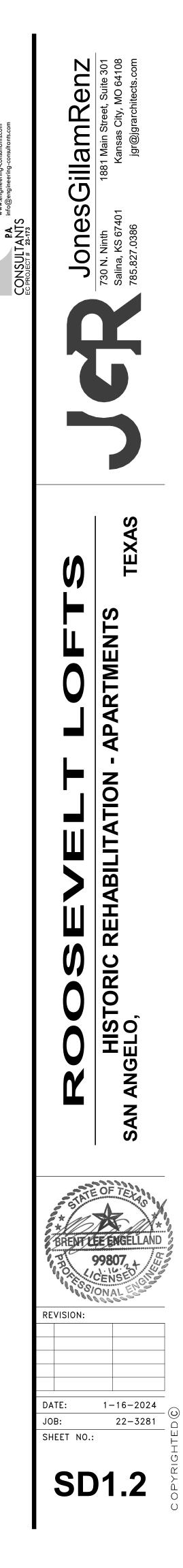
- 2. DIMENSIONS SHOWN HERE APPLY TO STRUCTURAL ELEMENTS ONLY. SEE ARCHITECTURAL FOR ANY DIMENSIONS NOT NOTED HERE.
- 3. ALL DIMENSIONS SHALL BE FIELD VERIFIED PRIOR TO STARTING WORK. DIMENSIONS SHOWN HERE ARE FOR REFERENCE ONLY.
- 4. EXISTING ROOF JOISTS & DECK TO REMAIN.
- 5 DEMO AND REPLACE ROOFING, COVER BOARDS, INSULATION, AND MEMBRANE PER ARCHITECTURAL DRAWINGS. TAKE CARE TO PROTECT EXISTING CONCRETE ROOF DECK DURING RE-ROOF WORK.
- (6) DEMO EXISTING BEAM TO ACCOMODATE NEW CMU ELEVATOR SHAFT
- $\langle 7 \rangle$  DEMO EXISTING CONCRETE FLOOR DECK IN HATCHED AREA.
- DEMO EXISTING CONCRETE STUB COLUMN ABOVE ROOF TO ACCOMODATE NEW<br/>RTU SUPPORT BEAM.

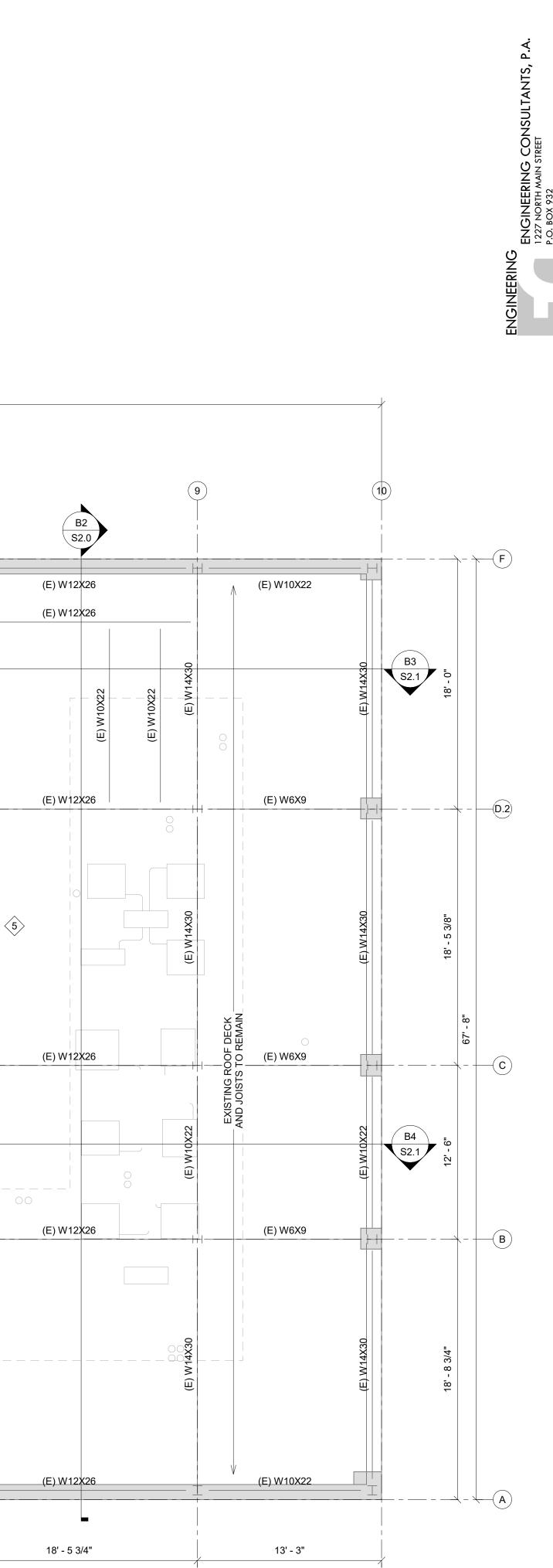




NORTH

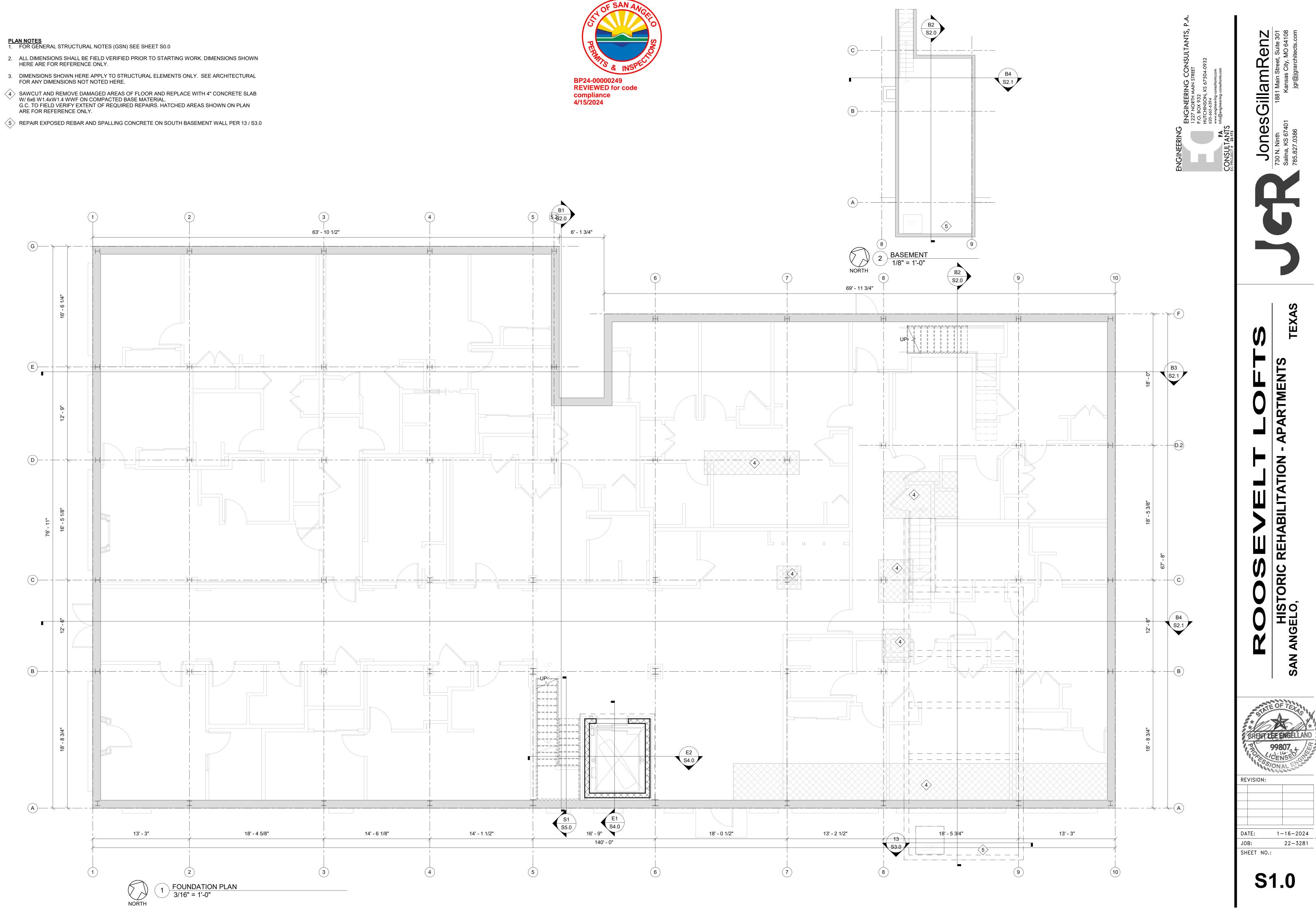






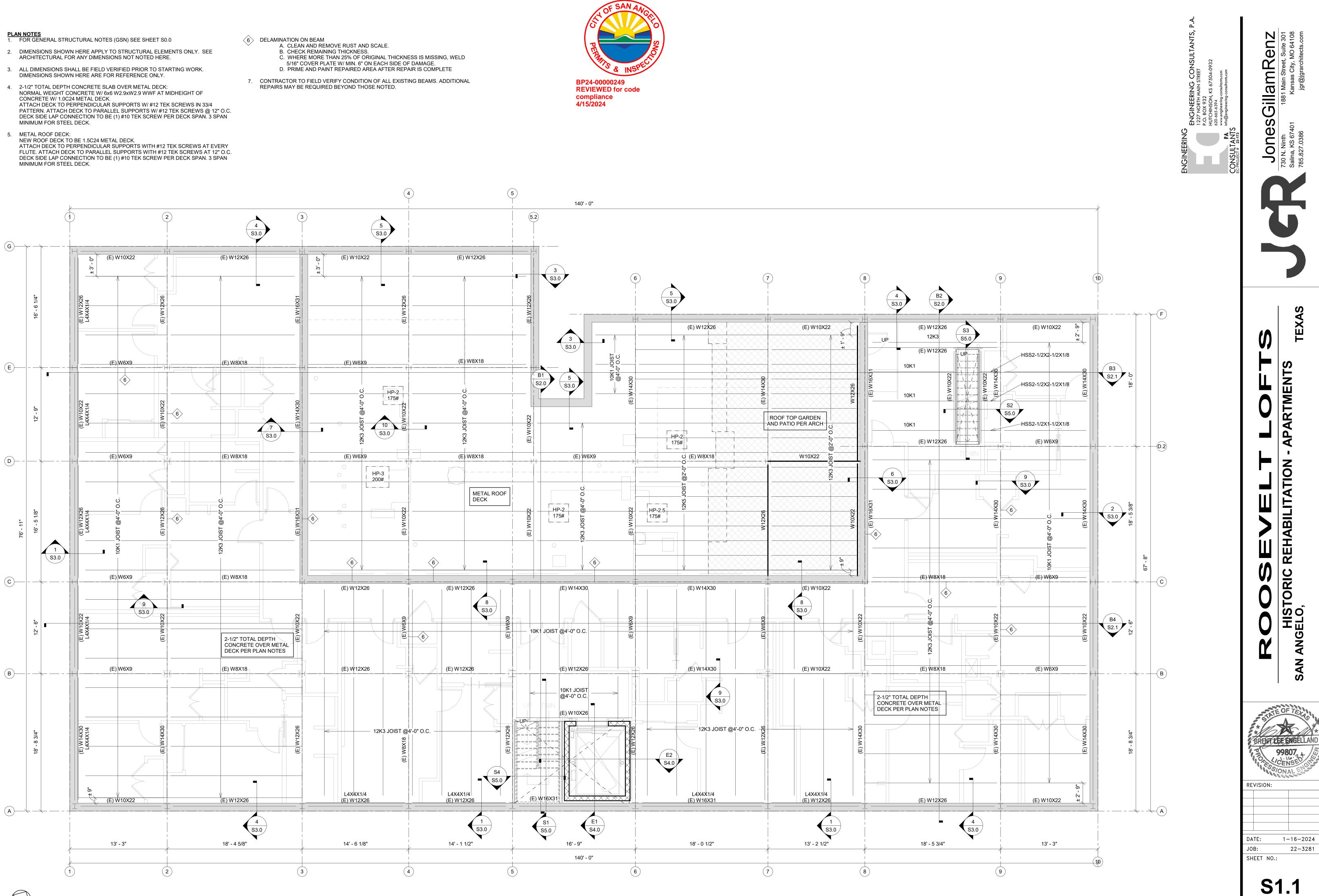
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(10)





- NORMAL WEIGHT CONCRETE W/ 6x6 W2.9xW2.9 WWF AT MIDHEIGHT OF CONCRETE W/ 1.0C24 METAL DECK. DECK SIDE LAP CONNECTION TO BE (1) #10 TEK SCREW PER DECK SPAN. 3 SPAN MINIMUM FOR STEEL DECK.
- NEW ROOF DECK TO BE 1.5C24 METAL DECK. ATTACH DECK TO PERPENDICULAR SUPPORTS WITH #12 TEK SCREWS AT EVERY FLUTE. ATTACH DECK TO PARALLEL SUPPORTS WITH #12 TEK SCREWS AT 12" O.C. DECK SIDE LAP CONNECTION TO BE (1) #10 TEK SCREW PER DECK SPAN. 3 SPAN

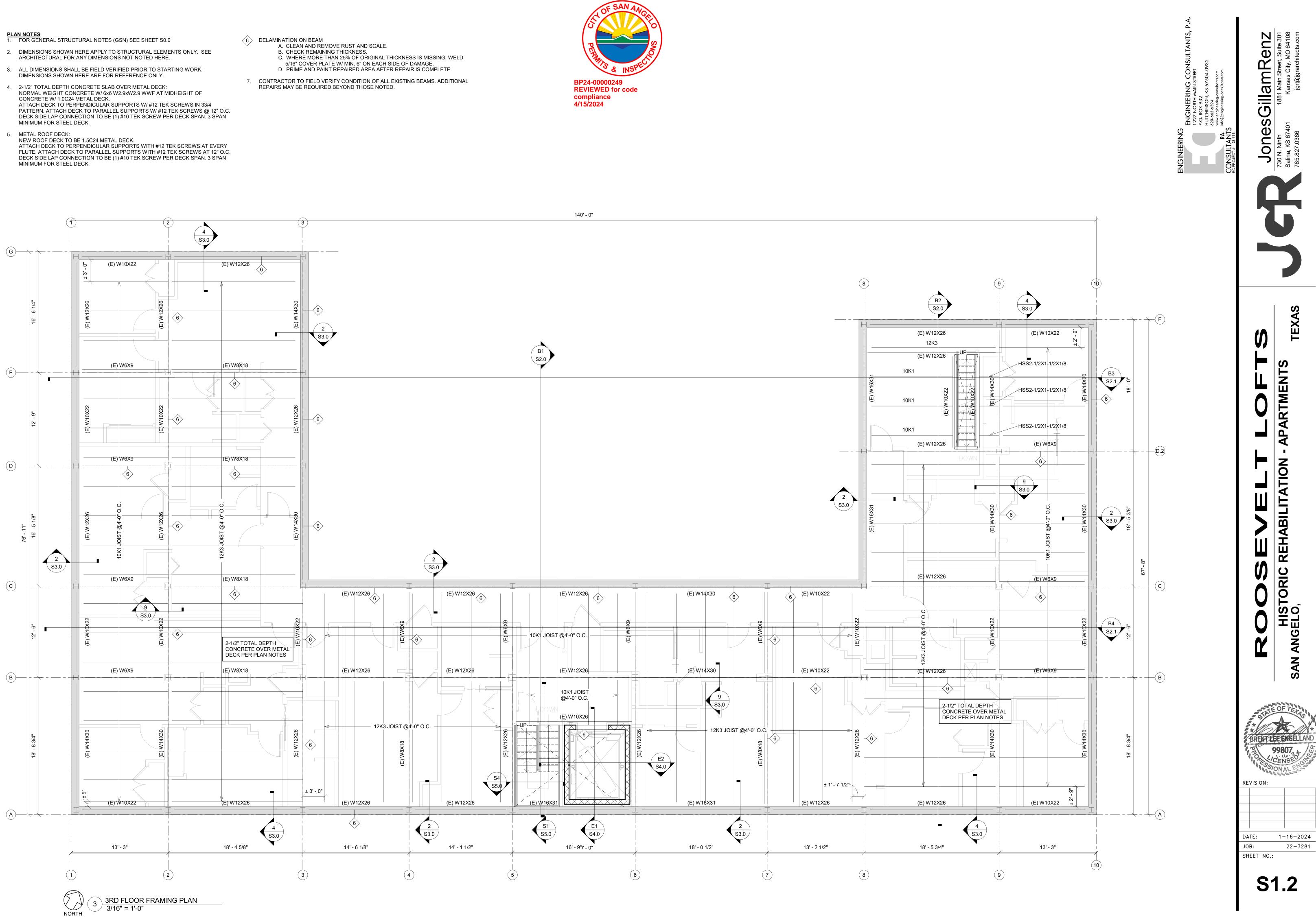


NORTH

2



- NORMAL WEIGHT CONCRETE W/ 6x6 W2.9xW2.9 WWF AT MIDHEIGHT OF CONCRETE W/ 1.0C24 METAL DECK. MINIMUM FOR STEEL DECK.
- NEW ROOF DECK TO BE 1.5C24 METAL DECK. ATTACH DECK TO PERPENDICULAR SUPPORTS WITH #12 TEK SCREWS AT EVERY FLUTE. ATTACH DECK TO PARALLEL SUPPORTS WITH #12 TEK SCREWS AT 12" O.C. DECK SIDE LAP CONNECTION TO BE (1) #10 TEK SCREW PER DECK SPAN. 3 SPAN





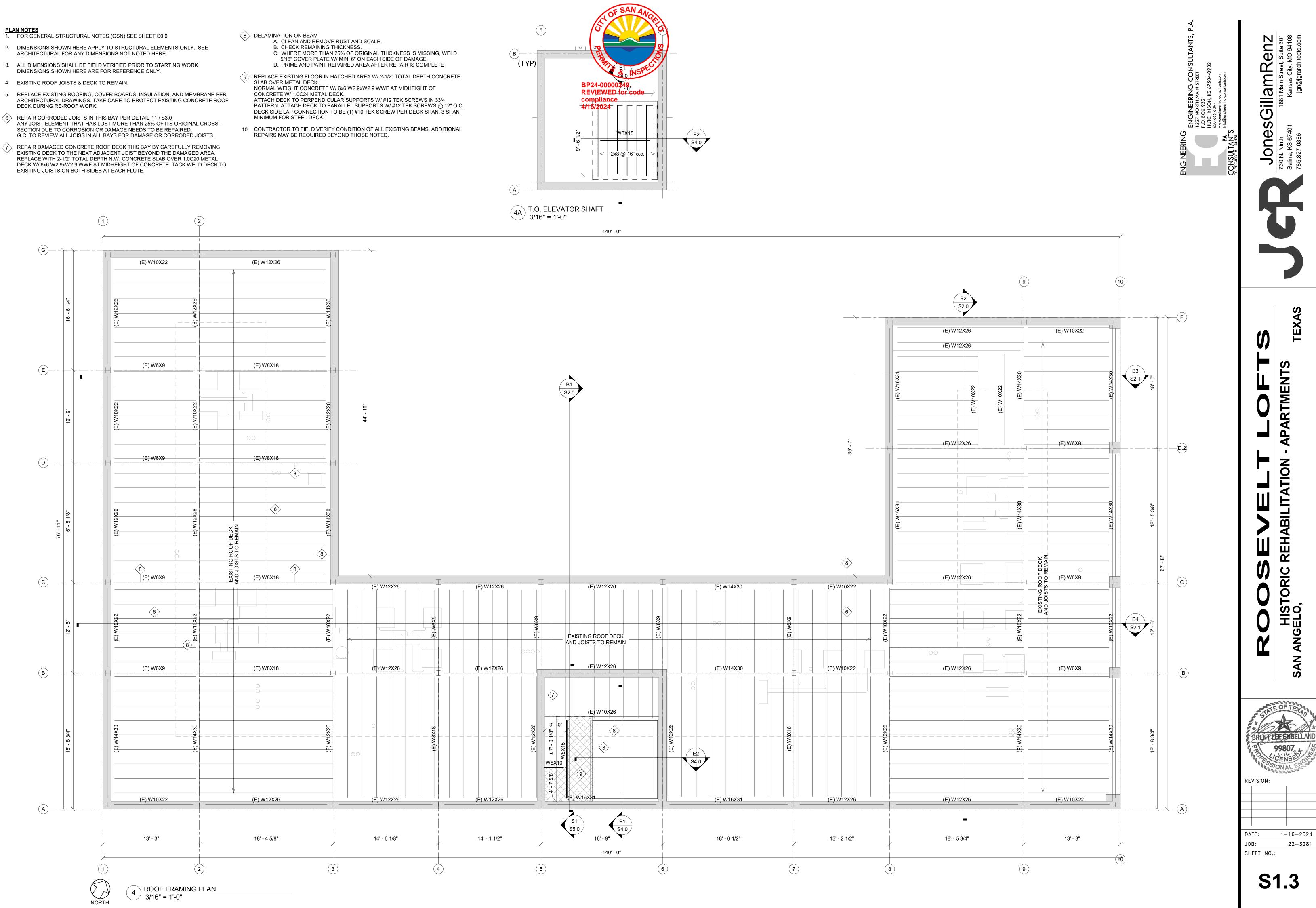
PLAN NOTES

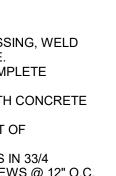
1. FOR GENERAL STRUCTURAL NOTES (GSN) SEE SHEET S0.0

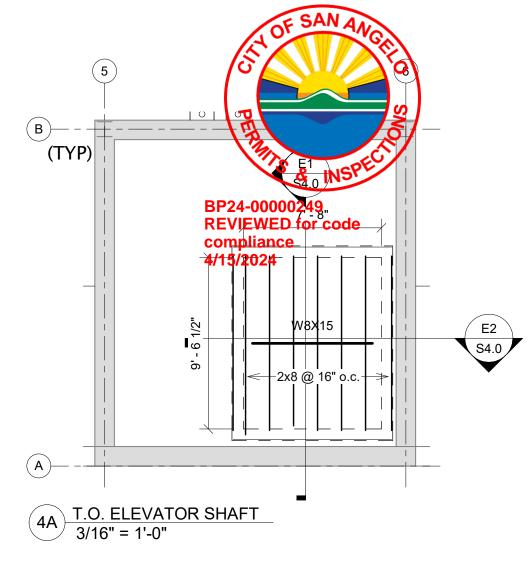
- 2. DIMENSIONS SHOWN HERE APPLY TO STRUCTURAL ELEMENTS ONLY. SEE

- 5. REPLACE EXISTING ROOFING, COVER BOARDS, INSULATION, AND MEMBRANE PER ARCHITECTURAL DRAWINGS. TAKE CARE TO PROTECT EXISTING CONCRETE ROOF DECK DURING RE-ROOF WORK.
- ANY JOIST ELEMENT THAT HAS LOST MORE THAN 25% OF ITS ORIGINAL CROSS-SECTION DUE TO CORROSION OR DAMAGE NEEDS TO BE REPAIRED.
- (7) REPAIR DAMAGED CONCRETE ROOF DECK THIS BAY BY CAREFULLY REMOVING EXISTING DECK TO THE NEXT ADJACENT JOIST BEYOND THE DAMAGED AREA. REPLACE WITH 2-1/2" TOTAL DEPTH N.W. CONCRETE SLAB OVER 1.0C20 METAL DECK W/ 6x6 W2.9xW2.9 WWF AT MIDHEIGHT OF CONCRETE. TACK WELD DECK TO EXISTING JOISTS ON BOTH SIDES AT EACH FLUTE.

- SLAB OVER METAL DECK: CONCRETE W/ 1.0C24 METAL DECK.

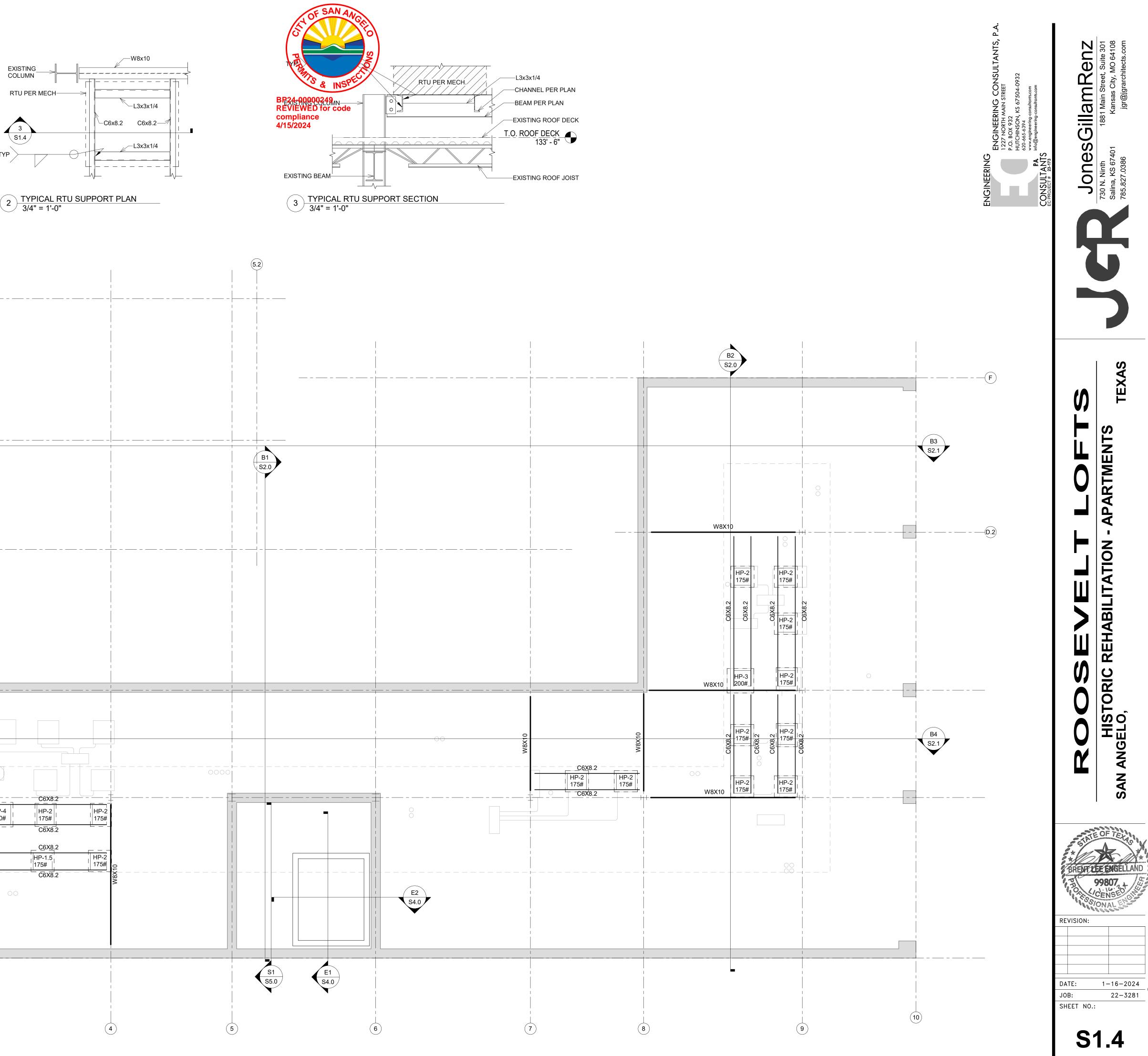


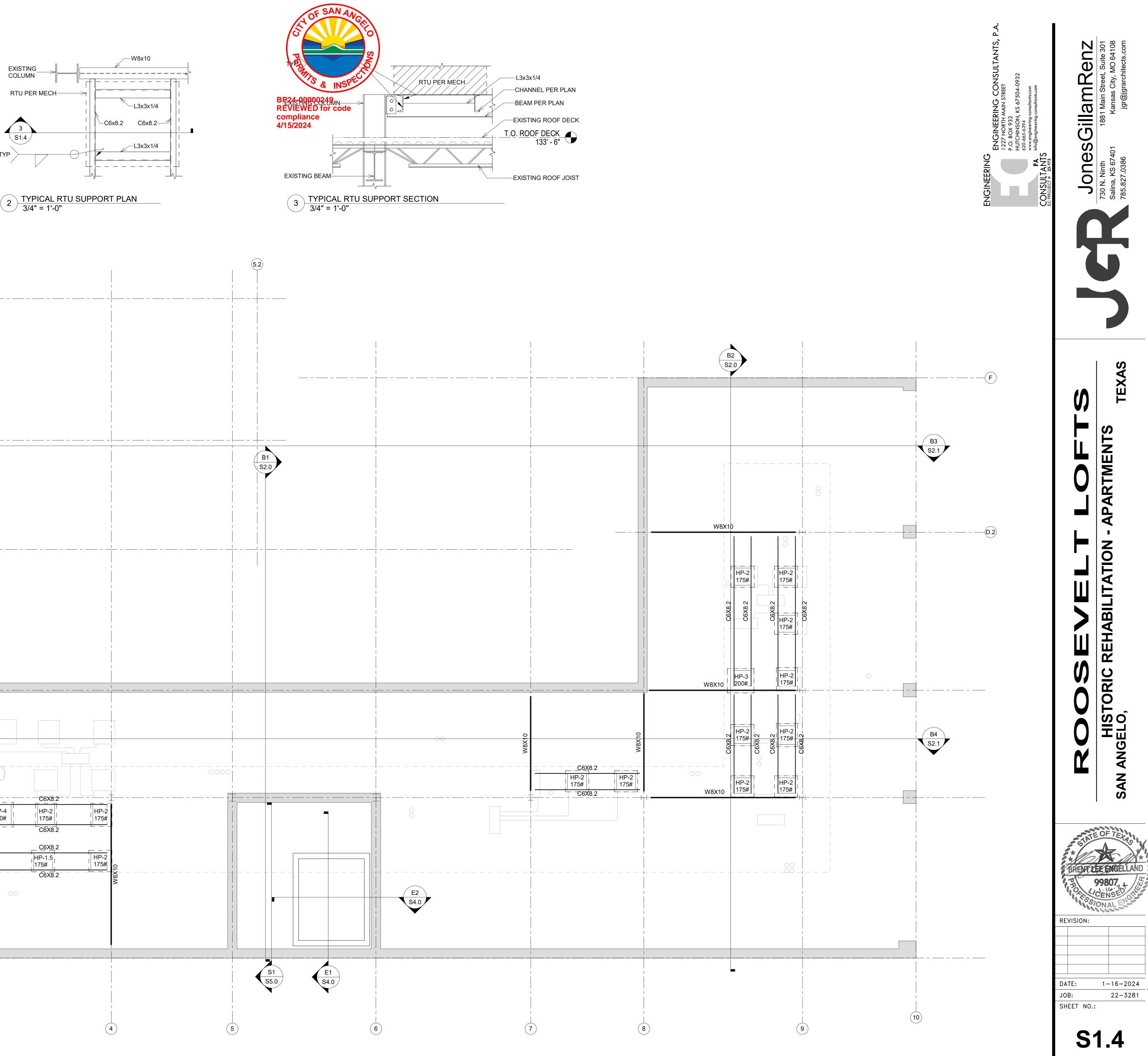


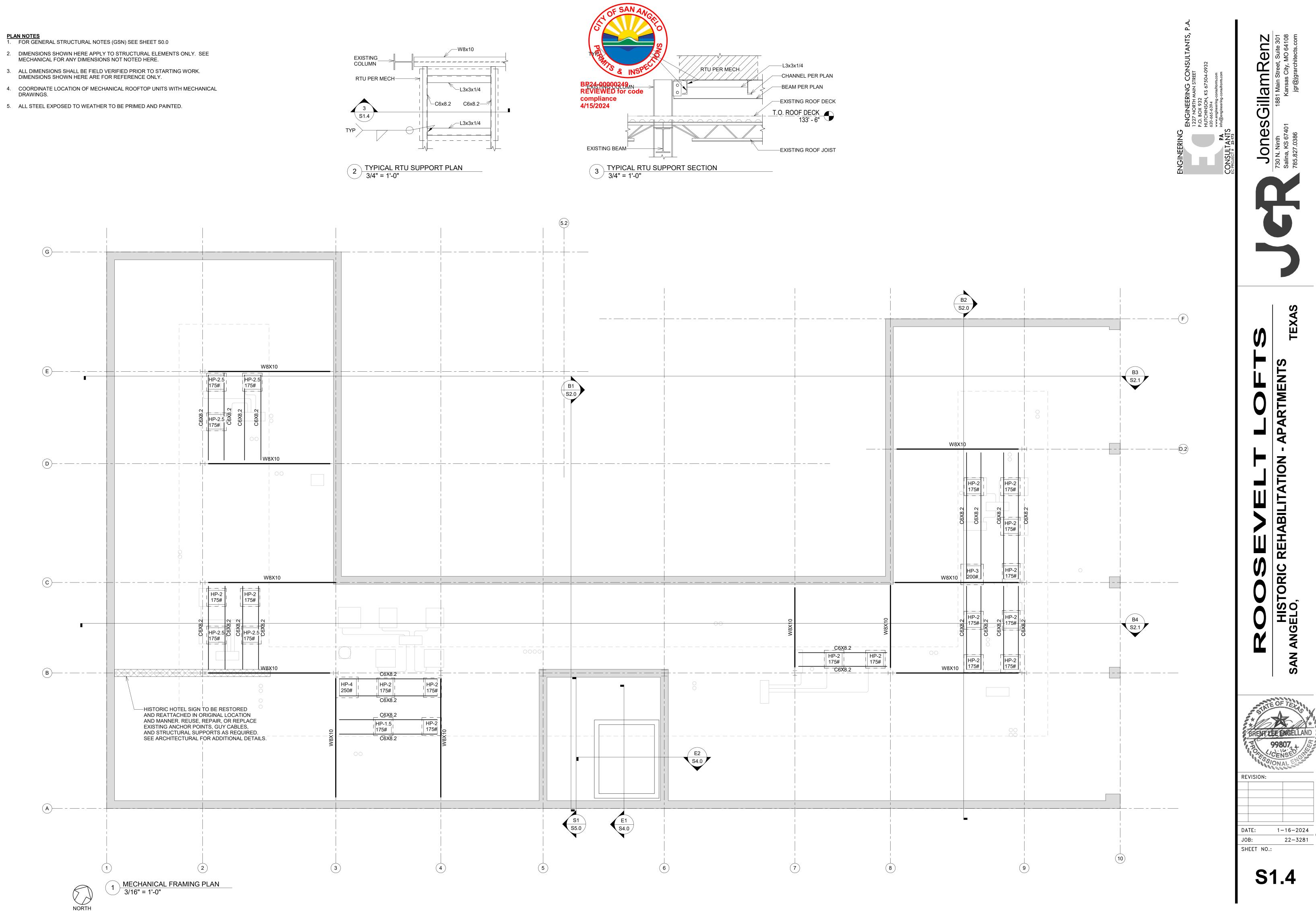


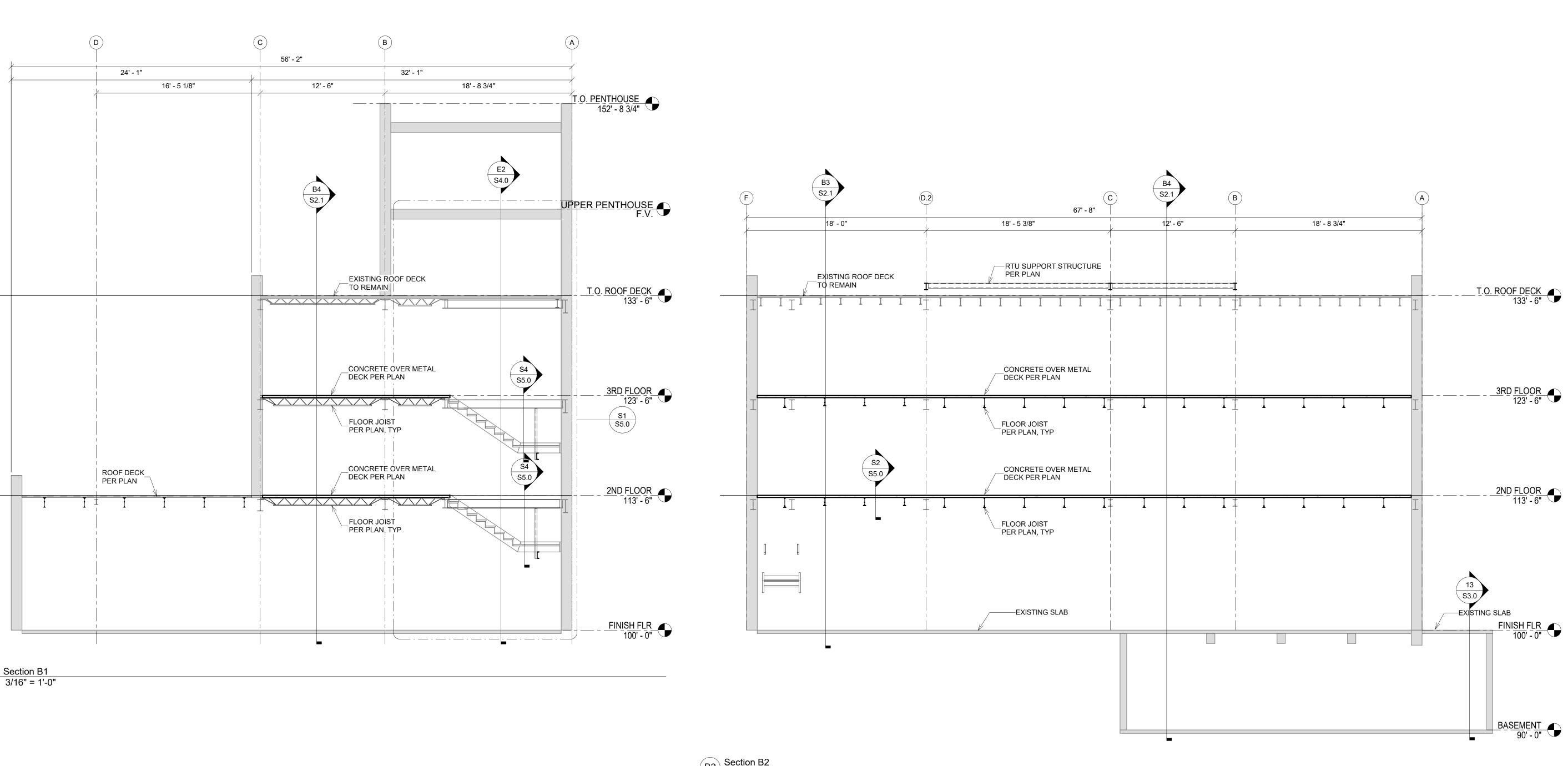
- 2. DIMENSIONS SHOWN HERE APPLY TO STRUCTURAL ELEMENTS ONLY. SEE MECHANICAL FOR ANY DIMENSIONS NOT NOTED HERE.

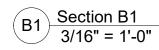
- 5. ALL STEEL EXPOSED TO WEATHER TO BE PRIMED AND PAINTED.



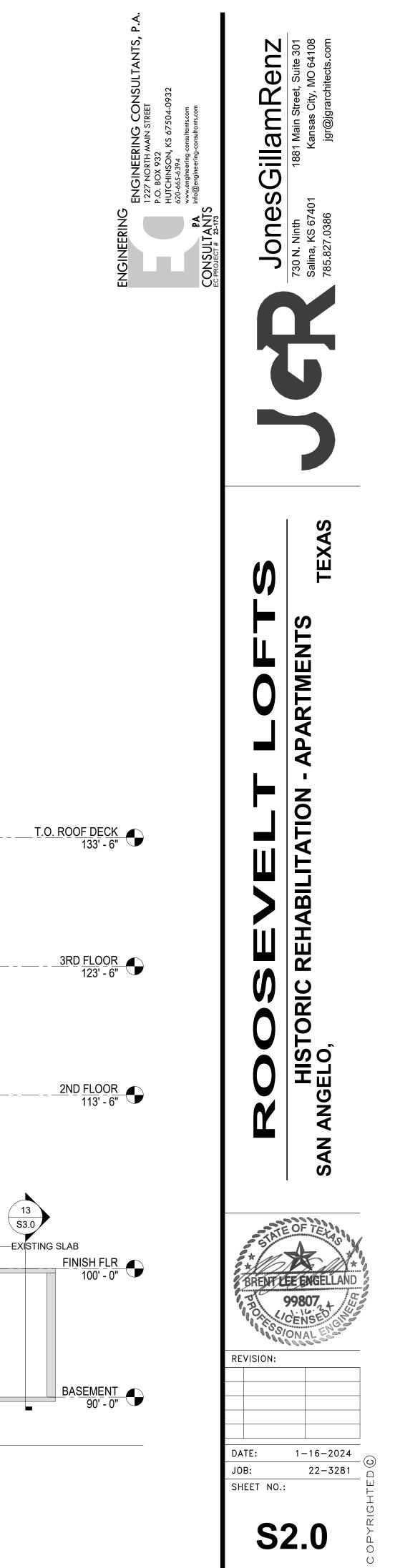


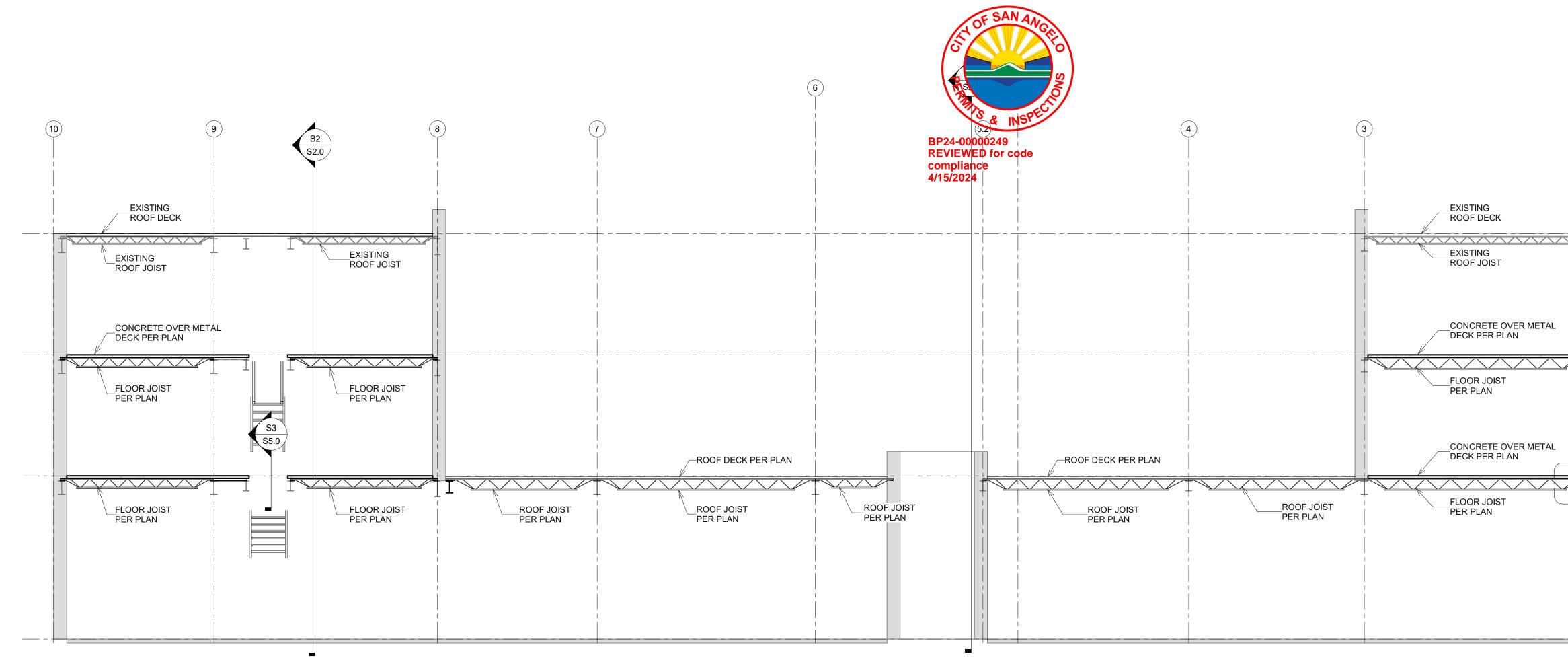




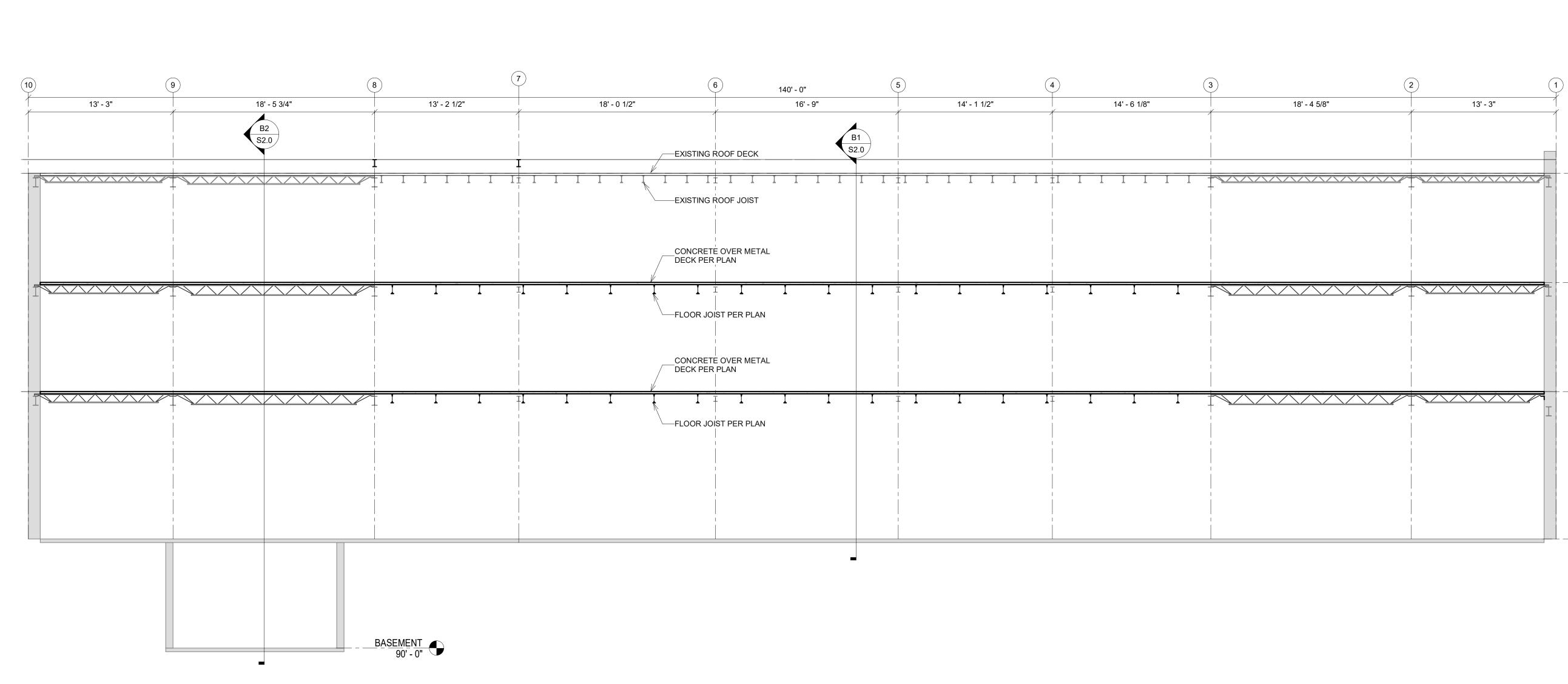


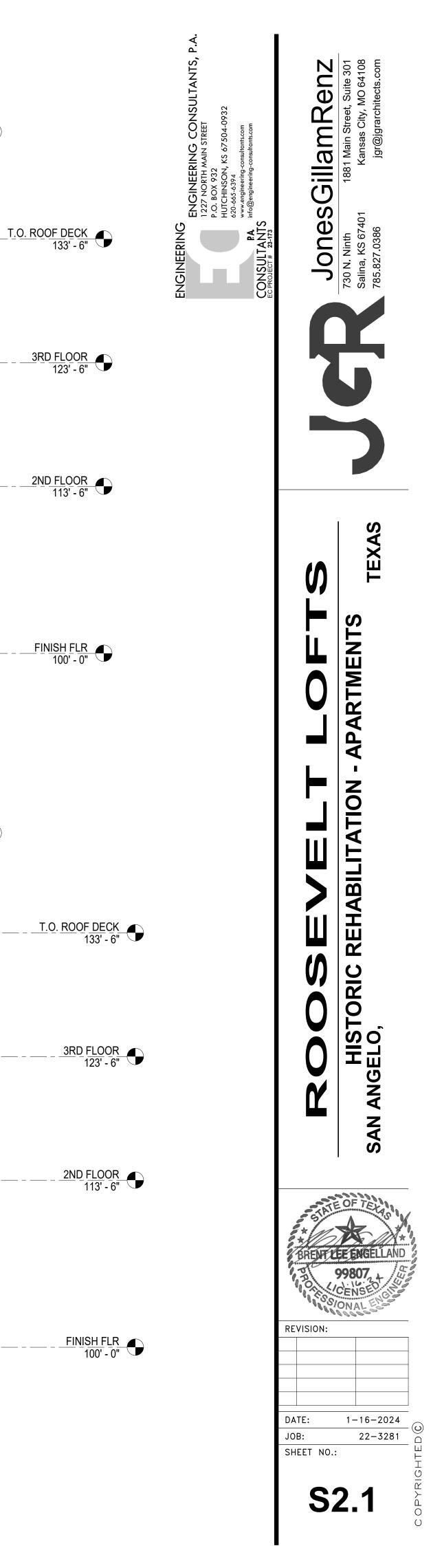






B3 Section B3 3/16" = 1'-0"





(2)

(1)

EXISTING

ROOF JOIST

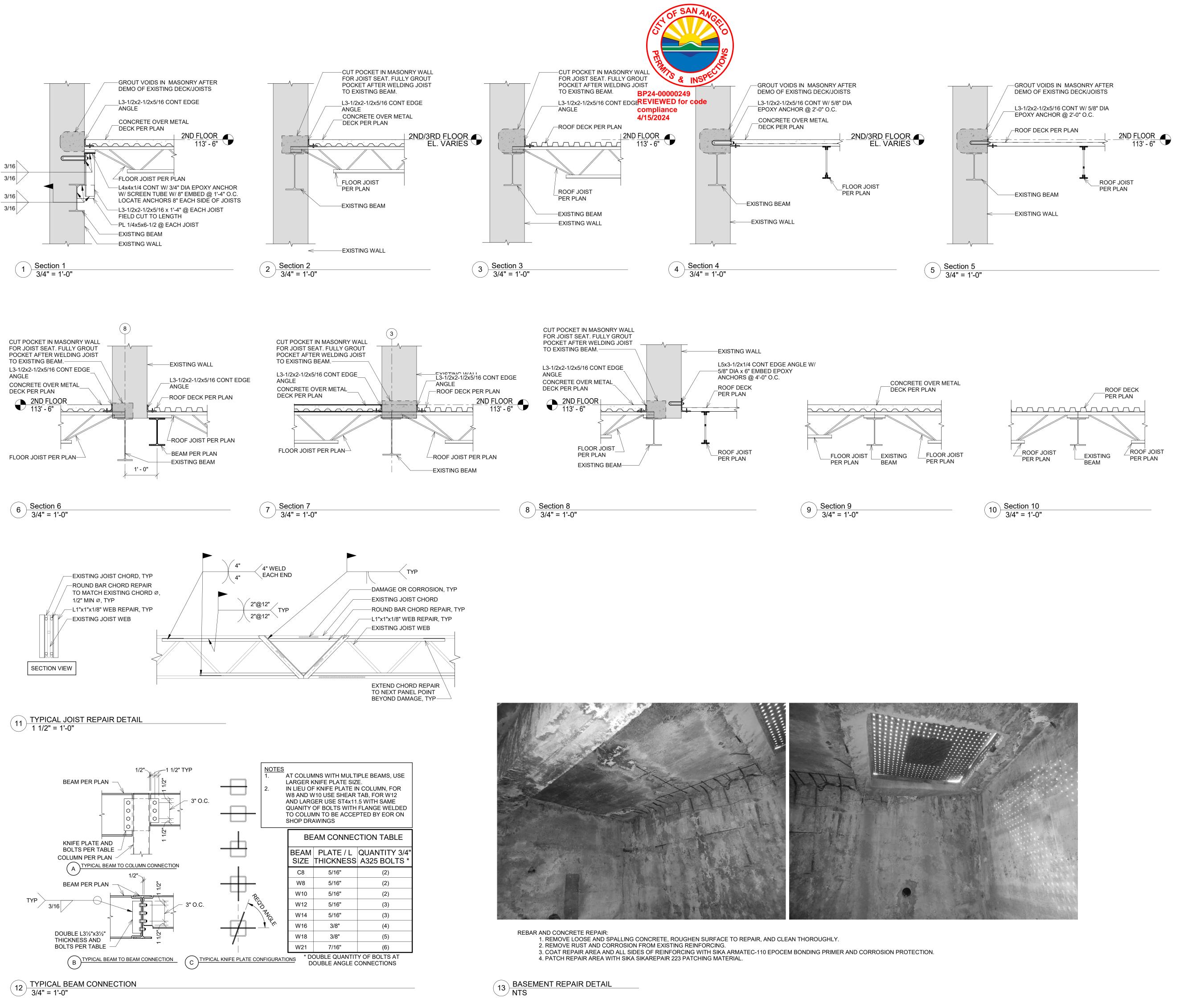
\_\_FLOOR JOIST

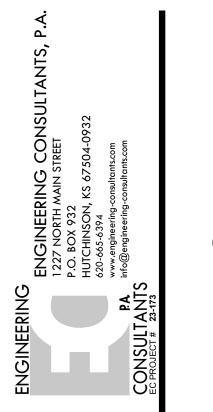
\_FLOOR JOIST

PER PLAN

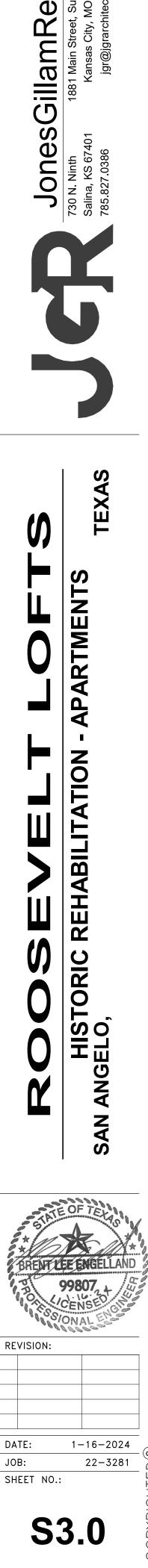
PER PLAN

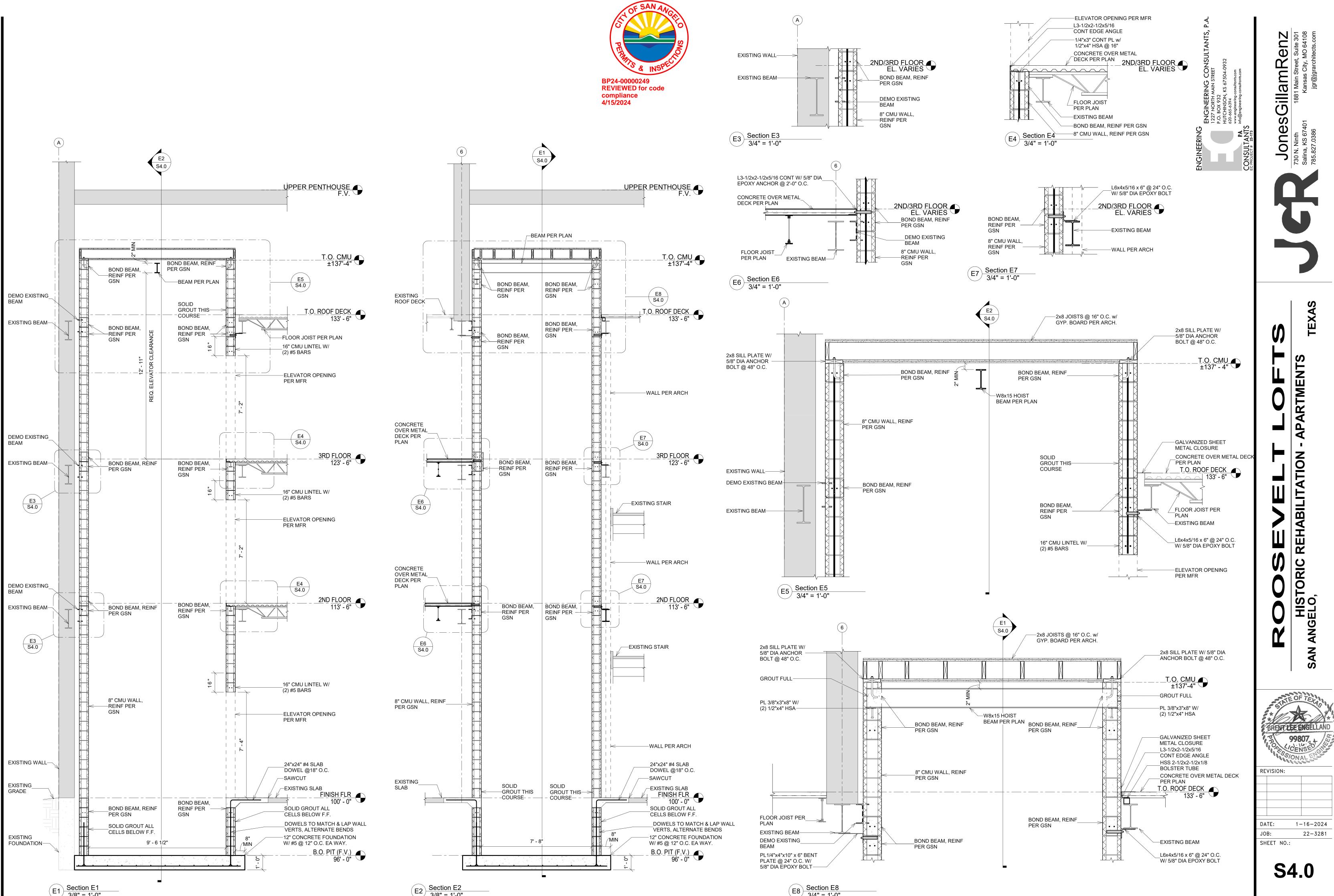
9 S3.0





N 

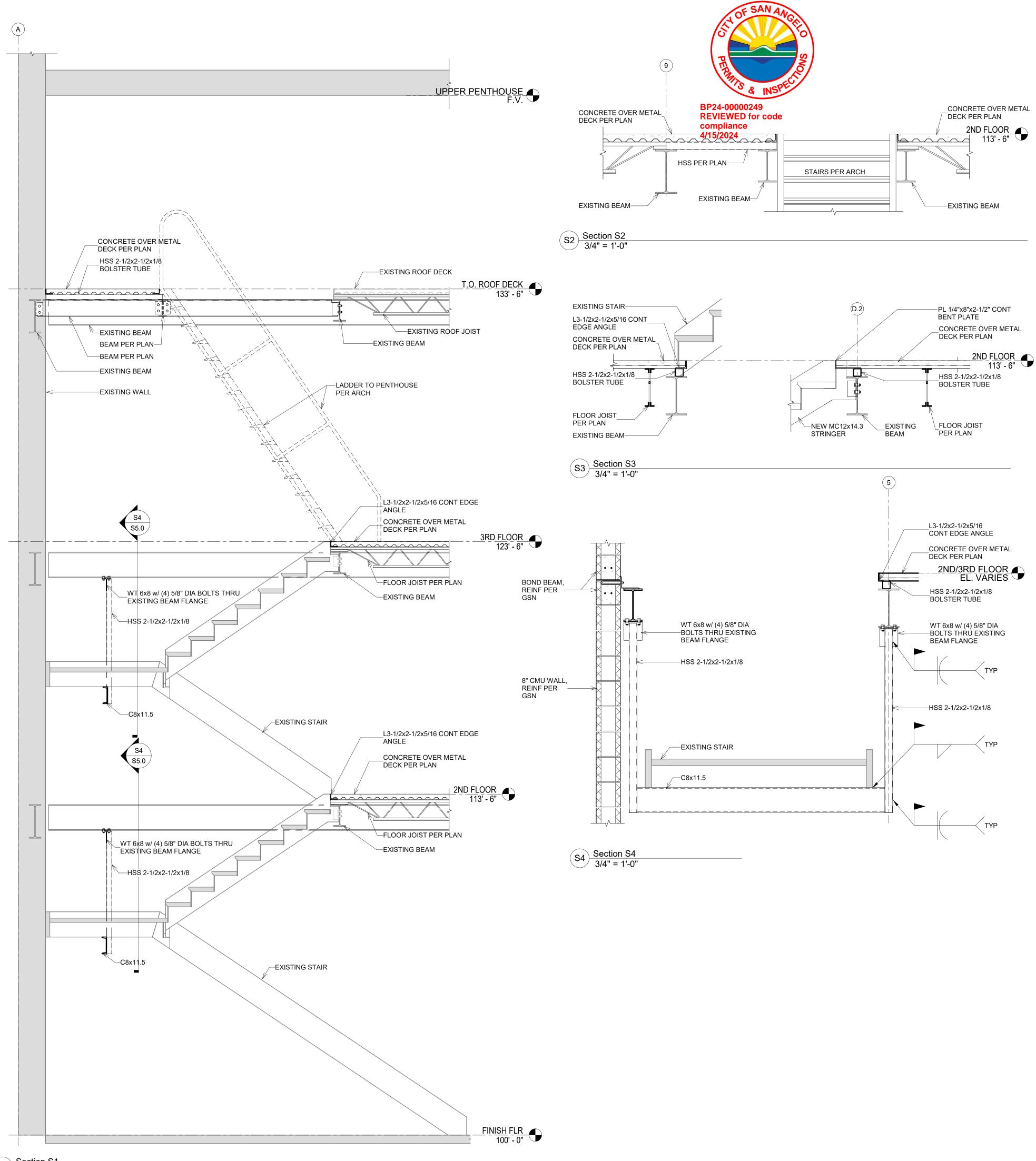


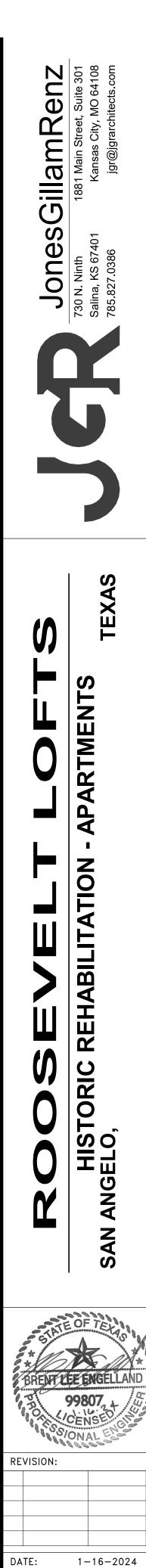


(E8) Section E8 3/4" = 1'-0" 3/4" = 1'-0"

3/8" = 1'-0"

3/8" = 1'-0"

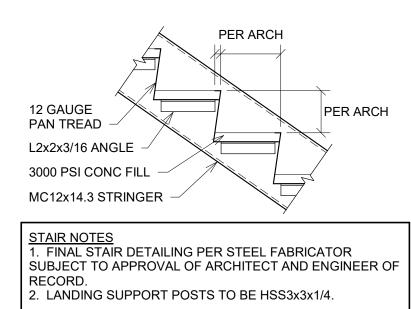




ED 1227 1227 1227 620-6

LID/

A R Z



T1 TYPICAL STAIR DETAIL 3/4" = 1'-0"

JOB:

SHEET NO.:

**S5.0**