# LUJAN REPAIR / WARM SHELL

# OFFICE / RETAIL

1414 CENTRAL AVE., SE ALBUQUERQUE, NM 87106 BERNALILLO COUNTY

### CODE REVIEW IBC 2021

OCCUPANCY GROUP - IBC 303.1.1 CONSTRUCTION TYPE - IBC 602.5 V-B FLOOR AREA ACTUAL **BASEMENT** TOTAL 5375 S.F. FLOOR AREA ALLOWABLE - IBC TBL, 506.2 9,000 S.F. NO. STORIES ACTUAL STORIES ALLOWABLE - IBC 504.4 OCCUPANT LOAD - IBC TBL 1004.1.2 CALCULATED FOR MERCANTILE FIRST FLOOR RETAIL - 3000 S.F. / 60 S.F. PER PERSON STOCK / SHIPPING - 1500 / 300 S.F. PERSON 5 BASEMENT STORAGE 875 S.F. / 300 S.F. PER PERSON FIRE SPRINKLERED: NO MANUAL FIRE ALARM- NO

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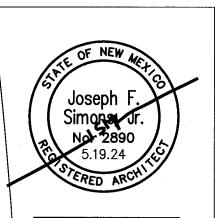
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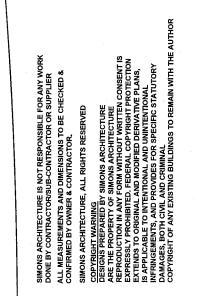
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Lenny

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SIMONS
ARCHITECTURE

LUJAN REPAIR / WARM SH 1414 CENTRAL AVE, SE ALBUQUERQUE, NM 87106 BERNALILLO COUNTY

JOB NUMBER
LUJ-001
DATE
5.19.24
REVISIONS

DESIGNED & DRAWN BY

**A**0

2015 INTERNATIONAL FIRE CODE

2. ALL PRODUCTS LISTED BY ICBO / N.E.R. NUMBERS SHALL BE INSTALLED PER THE REPORT AND MANUFACTURERS WRITTEN INSTRUCTIONS. PRODUCT SUBSTITUTIONS SHALL HAVE ICBO APPROVED REPORT OR BE APPROVED BY U.L. OR OTHER RECOGNIZED NATIONAL TESTING LABORATORY.

CONTRACTOR RESPONSIBLE FOR NOTES ON THIS SHEETS AS WELL AS ALL SHEETS. 4. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR, SUBCONTRACTORS, AND SUPPLIERS TO NOTIFY THE ARCHITECT OF ANY DESCREPANCIES AND / OMISSIONS IN THE CONSTRUCTION DOCUMENTS DURING THE BIDDING PROCESS TO ALLOW THE ARCHITECT TO PROVIDE ADDENDUM FOR THOSE ITEMS. ANY ITEMS CLAIMED TO BE OMISSIONS / DESCREPANCIES AFTER THE BID WILL BE THE RESPONSIBILITY OF THE SUBCONTRACTOR AND / OR SUPPLIER FOR THOSE ITEMS. SUBSITUTIONS ARE ALLOWED AT THE APPROVAL OF THE ARCHITECT / OWNER.

5. REFERENCE OTHER 8  $\frac{1}{2}$  X 11 SHEETS THAT MAY OR MAY NOT BE ATTACHED TO THIS SETOF DRAWINGS THESE SHEETS ARE ADDITIONAL SPECIFICATIONS AND ARE PART OF THE CONSTRUCTION DOCUMENTS AND THE RESPONSIBILITY OF THE GC TO APPLY TO THE PROJECT. SEISMIC ZONE FOR THIS PROJECT IS "D".

#### 01.1 BIDDING REQUIREMENTS

IT IS THE RESPONSIBILITY OF THE BIDDING G.C. TO FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO ANY ESTIMATES OF BIDDING. 2. IT IS THE RESPONSIBILITY OF THE BIDDING G.C. TO NOTIFY ARCHITECT OF ANY DISCREPANCIES, DEFICIENCIES, OR ERRORS PRIOR TO BIDDING AND ALLOW TIME FOR ARCHITECT TO NOTIFY ALL BIDDERS OF ANY RESULTING ADDENDA

#### 01.2 STRUCTURAL GENERAL REQUIREMENTS

1. THE DRAWINGS ARE INTENDED TO SHOW THE GENERAL ARRANGEMENT, DESIGN AND EXTENT OF THE WORK AND ARE PARTIALLY DIAGRAMMATIC. THEY ARE NOT INTENDED TO BE SCALED FOR ROUGH-IN MEASUREMENTS, OR TO SERVE AS SHOP DRAWINGS OR PORTIONS

2. ALL DETAILS AND SECTIONS SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL BE CONSTRUED TO APPLY TO ANY SIMILAR SITUATION ELSEWHERE ON THE PROJECT, EXCEPT WHERE A DIFFERENT

DETAIL OR SECTION IS SHOWN. 3. PRIOR TO START OF CONSTRUCTION, THE CONTRACTOR AND ALL THE SUB-CONTRACTORS SHALL VERIFY ALL GRADES, LINES, LEVELS, DIMENSIONS AND COORDINATE EXISTING CONDITIONS AT THE JOB SITE WITH THE PLANS AND SPECIFICATIONS. THEY SHALL REPORT ANY INCONSISTENCIES OR ERRORS IN THE ABOVE TO THE ARCHITECT/ ENGINEER BEFORE COMMENCING WORK. THE CONTRACTOR AND HIS SUBCONTRACTORS SHALL LAY OUT THEIR WORK FROM ESTABLISHED REFERENCE POINTS AND BE RESPONSIBLE FOR ALL LINES, ELEVATIONS AND MEASUREMENTS IN CONNECTION WITH THEIR WORK.

4. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE AND TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENT PARTS DURING CONSTRUCTION. THIS INCLUDES ANY REQUIRED SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIE DOWNS WHICH MIGHT BE NECESSARY. SUCH MATERIAL SHALL REMAIN THE CONTRACTOR'S PROPERTY AFTER THE COMPLETION OF THE PROJECT.

5. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.

6. THE CONTRACTOR SHALL USE THE STRUCTURAL DRAWINGS AND SPECIFICATIONS TOGETHER WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL AND OTHER TRADE DRAWINGS AND SHOP DRAWINGS, TO COORDINATE ALL DETAILS, DIMENSIONS, ELEVATIONS, ETC. NOTIFY ARCHITECT/ENGINEER, IN WRITING, OF ANY POTENTIAL CONFLICTS BEFORE PROCEEDING WITH THE WORK. 7. SHOULD ANY OF THE DETAILED INSTRUCTIONS SHOWN ON THE PLANS

CONFLICT WITH THESE STRUCTURAL NOTES, THE SPECIFICATIONS, OR WITH EACH OTHER, THE STRICTEST PROVISION SHALL GOVERN.

#### 02 SITEWORK

1. THERE IS NO SITEWORK IN THIS CONTRACT. 2. ANY FOUNDATION WORK TO BE ON COMPACTED SOIL TO 95% PROCTOR DENSITY. REFER TO DRAWINGS AND SECTIONS.

#### 03 CONCRETE

CAPACITY WAS OBTAINED.

1. FOUNDATIONS ARE DESIGNED TO BEAR ON NATURAL GRADE OR FILL, WELL COMPACTED OF AN ALLOWABLE BEARING CAPACITY, INDICATED ON THE FOUNDATION PLAN. OVEREXCAVATE THE FOUNDATIONS BY 4'.

2. IT IS THE OPTION FOR THE OWNER TO HIRE A CERTIFIED TESTING SHALL BE ENGAGED BY THE OWNER TO PERFORM SOIL BORINGS, PROVIDE A FOUNDATION REPORT AND VERIFY THAT THE REQUIRED MINIMUM BEARING

3. PER OWNER'S DIRECTION, SOIL CAPACITY SHALL BE CERTIFIED AND TESTED BY A REGISTERED FOUNDATION ENGINEER, PRIOR TO CASTING OF CONCRETE IN THE FOOTINGS.

4. ALL LONGITUDINAL REBARS IN THE WALL FOOTINGS, SHALL BE CONTINUOUS AND SPLICED AS SPECIFIED. CONTINUE ALL HORIZONTAL REBARS AT BENTS AND CORNERS BY BENDING THE REBARS 48 BAR DIAMETERS AROUND THE CORNERS OR ADDING MATCHING CORNER BARS EXTENDING 48 BAR-DIAMETERS INTO FOOTING EACH SIDE OF CORNER OR

#### 03 CONCRETE

A. SPECIFICATIONS: IN GENERAL, COMPLY WITH ACI 301-(LATEST EDITION) "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS."

B. STRUCTURAL CONCRETE: CLASS LOCATION FOOTINGS, CAISSONS, & GRADE BEAMS 3,000 INTERIOR SLABS ON GRADE, AND ALL 3,500 INTERIOR CONCRETE NOT OTHERWISE IDENTIFIED 4,000 III. PIERS PLACED INTEGRALLY WITH WALLS, EXTERIOR SLABS ON GRADE, AND ALL EXTERIOR CONCRETE (WITH AIR) NOT

IV. BACKFILL BELOW FOOTINGS AND GRADE BEAMS C. ALL DEFORMED REINFORCING BARS: FY = 60,000, D. GALVANIZED WELDED WIRE FABRIC SHALL CONFORM TO ASTM A165

(LATEST EDITION). USE SHEET FORM, NOT ROLLED.

OTHERWISE IDENTIFIED

2. FIELD MANUAL: PROVIDE AT LEAST ONE COPY OF THE ACI FIELD REFERENCE MANUAL, SP-15, IN THE FIELD OFFICE AT ALL TIMES.

A. PROVIDE SUPPORTS AS REQUIRED TO MAINTAIN ALIGNMENT AND CONCRETE COVER OVER THE REINFORCING.

A. VERTICAL DOWELS IN FOOTINGS TO MATCH VERTICAL WALL B. PROVIDE LEAN CONCRETE (CLASS IV) UNDER FOUNDATIONS FOR

ACCIDENTAL OVER-EXCAVATION, SOFT SPOTS AND TRENCHES. 5. SPLICES: UNLESS NOTED OTHERWISE, MINIMUM LAP SPLICE LENGTHS TO BE AS FOLLOWS: VERTICAL BARS IN WALLS, PIERS,

OR COLUMNS (INCLUDING DOWELS) HORIZONTAL BARS IN SLABS & FOOTING **45 DIAMETER** HORIZONTAL BARS IN WALL

SAW-CUT & CONSTRUCTION JOINTS: PROVIDE JOINTS IN ALL SLABS-ON-GRADE, AS INDICATED ON THE FOUNDATION

CONCRETE COVER: UNLESS NOTED OTHERWISE, DETAIL REINFORCING TO PROVIDE CONCRETE COVER AS FOLLOWS: A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3 INCHES

B. CONCRETE EXPOSED TO EARTH OR WEATHER: 1-1/2 INCHES #5 BARS AND SMALLER 2 INCHES C. CONCRETE NOT EXPOSED TO EARTH OR WEATHER: BEAM AND COLUMN BARS INCLUDING TIES. STIRRUPS AND SPIRALS 1-1/2 INCHES SLABS, WALLS, JOISTS: 1 INCH #11 BARS AND SMALLER 1-1/2 INCHES OTHERS

#### 05 METALS

MATERIALS: A. STRUCTURAL STEEL: ASTM A36, FY = 36 KSI: ASTM A572. ANCHOR BOLTS: ASTM A307 OR A36: ELECTRODES: SERIES E70: EXPANSION BOLTS: HILTI "KWIK BOLTS" OR APPROVED EQUAL.

SPECIFICATIONS: WELDING PERSONNEL AND PROCEDURES ARE TO BE QUALIFIED PER AWS D1.1. UNLESS SPECIFICALLY SHOWN OTHERWISE, DESIGN, FABRICATION AND ERECTION TO BE GOVERNED BY: (ALL CODES - LATEST A. AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS. AISC CODE OF STANDARD PRACTICE.

STRUCTURAL WELDING CODE, AWS D1.1- OF THE AMERICAN WELDING CONNECTIONS: CONNECTIONS TO BE DESIGNED BY THE FABRICATOR TO DEVELOP FULL STRENGTH OF MEMBER OR FORCES SHOWN ON THE PLANS, WHICHEVER

4. GALVANIZING: ALL SHELF ANGLES, LINTELS IN EXTERIOR WALLS, AND ALL EXTERIOR STEEL EXPOSED TO THE ELEMENTS SHALL BE HOT DIP

GOVERNS. FOLLOW INSTRUCTIONS ON DRAWINGS FOR GENERAL

ARRANGEMENT OR PARTICULAR DETAILS.

6. MISCELLANEOUS: A. PROVIDE HOLES FOR OTHERS. IF OPENING IS NOT SHOWN ON THE

STRUCTURAL DRAWINGS, OBTAIN PRIOR APPROVAL. STEEL SUPPORTING OR CONNECTED TO HVAC AND OTHER EQUIPMENT AND ROOF OPENINGS AS SHOWN ON THE DRAWINGS IS SHOWN FOR BIDDING PURPOSES ONLY, CONTRACTOR SHALL RECONCILE EXACT SIZE AND LOCATION BEFORE PROCEEDING WITH HIS WORK. GROUT UNDER BEARING PLATES, BASE PLATES, AND SETTING PLATES

TO BE NON-SHRINKING TYPE. STEEL BELOW GRADE TO BE PROTECTED BY A MIN. OF 3 INCHES OF CONCRETE.

PROVIDE HEAVY WASHER AT ALL ANCHOR BOLTS. EMBEDMENT LENGTH OF EXPANSION BOLTS INTO SOLID MASONRY OR CONCRETE SHALL BE AS FOLLOWS: 1/2 INCH DIAMETER BOLTS — 3 1/2 INCHES EMBEDMENT 3/4

INCH DIAMETER BOLTS - 5 INCHES EMBEDMENT

#### 06 WOOD FRAMING

ANY SPECIFICATION ITEMS WRITTEN ON OTHER SHEETS SHALL OVERRIDE THESE ITEMS.

1. LUMBER: DOUGLAS FIR (SOUTH) STR. GRD. #2 MIN. PLYWD. FLR.: 3/4" T&G STANDARD SHEATHING PANEL INDEX, 48/24 DOUGLAS FIR (SOUTH) STR. GRD. #2 MIN., SANDED AND STAINED 5/8" OSB OR EQUAL W/ EXT. GLUE PANEL INDEX 48/24 1/2" T&G SIDING W/ VERTICLE RIB PATTERN W/ EXT. GLUE AND PANEL DOUGLAS FIR (SOUTH) STR. GRD. #2 MIN., R.S., SANDBLASTED, AND EXT. VEN. ET AL: RED OAK, SANDED AND STAINED INT. FIN.: ALL LUMBER SHALL SHALL

BEAR AN APPROVED GRADE STAMP.

OTHER SHEATHING SHALL CONFORM TO N.E.R. - 108.

2. ALL EXTERIOR BEARING AND NON-BEARING WALLS TO BE 2X6'S OR 2X8'S 16" O.C. ALL INTERIOR NON-BEARING WALLS TO BE 2X4'S 24" O.C. FIRE BLOCK STUD WALLS AT DROPPED CEILINGS, SOFFITS, AND AT 10'-0" HIGH INTERVALS. PLYWOOD, STRUCTURAL PARTICLE BOARD, COMPOSITE BOARD, WAFER BOARD AND ALL

BOTTOM PLATES WILL BE TREATED OF FOUNDATION REDWOOD. BUILD 18" HIGH PLATFORM UNDER ALL APPLIANCES INSTALLED OR ACCESSIBLE FROM GARAGE. COMPLY WITH 1997 UBC AND APPLICABLE CODES. PROVIDE FIREBLOCKING AT CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES, AT THE CEILING AND FLOOR LEVELS, AND AT 10' INTERVALS

BOTH VERTICLE AND HORIZONTAL. 10. PROVIDE FIREBLOCKING AT ALL INTERCONNECTIONS BET. CONCEALED VERTICLE AND HORIZONTAL SPACES SUCH AS SOFFITS, DROPPED CEILING, AND COVE CEILINGS. 11. PROVIDE FIREBLOCKING IN CONCEALED SPACES BETWEEN STAIR STINGERS, AT THE TOP

AND BOTTOM OF THE RUN AND BET. STUDS ALONG AND IN LINE WITH THE RUN OF STAIRS IF THE WALLS UNDER AR UNFINISHED. PROVIDE FIREBLOCKING IN OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS, FIREPLACES, AND SIMILIAR TYPE 12. OPENINGS WHICH WILL ALLOW FIRE PASSAGE AT CEILINGS AND FLOOR LEVELS; USE NON-COMBUSTIBLE MATERIALS. PROVIDE FIREBLOCKING AT OPENINGS BETWEEN ATTIC SPACES AND CHIMNEY CHASES FOR FACTORY-BUILT 13. FIREPLACES AND CHIMNEYS.

14. PROVIDE FIREBLOCKING AT WALLS HAVING PARALLEL OR STAGGERED STUDS FOR SOUND CONTROL; USE FIREBLOCKS OF MINERAL FIBER OR GLASS FIBER OR OTHER U.L. APPROVED 15. THE INTEGRITY OF ALL FIRE BLOCKING AND DRAFT STOPS WILL BE MAINTAINED. IF UNDERGROUND RETURN AIR IS USED, BUILD 18" HIGH PLATFORM ABOVE FLOOR.

16. REFERENCE THE FOLLOWING SPECIFICATION ITEMS REGARDING WOOD PRODUCTS:

#### 06.1 WOOD SPECIFICATION

1. A. STUDS: STRUCTURAL LUMBER: #2 PINE, OR APPROVED EQUAL: SIZE Fb Ft Fv Fc Fc 1165 525 135 2x6 1010 455 135 335 1100 1,100,000 2x8 930 420 135 335 1050 1,100,000 2x10 855 385 135 335 1000 1,100,000 2x12 775 350 135 335 1000 1,100,000

B. ROOF/WALL: ORIENTED STRAND BOARD: STRUCTURAL 1, EXPOSURE I, EXTERIOR GLUE. FOR ROOF AND WALLS PANEL IDENTIFICATION INDEX 24/16 -SIZE NOTED ON PLANS.

C. SILL PLATES: NO. 2 SPRUCE-PINE-FIR, OR EQUAL FC=675 PSI, FV=70 PSI, E=1,200,000 PSI

D. DOUGLAS FIR STRUCTURAL AND DECO LUMBER: Fb - 2175. Ft - 1500 Fc - 2100, MODULUS OF ELASTICITY - 1,900,000

2. SPECIFICATIONS: UNLESS SPECIFICALLY SHOWN OTHERWISE, DESIGN, FABRICATION AND ERECTION SHALL BE GOVERNED BY THE LATEST REVISIONS OF:

A. NATIONAL DESIGN SPECIFICATION FOR STRESS-GRADE LUMBER AND ITS FASTENINGS. B. U.S. PRODUCT STANDARD PS-1 FOR SOFTWOOD PLYWOOD -

CONSTRUCTION AND INDUSTRIAL. 3. CONNECTIONS:

A. JOISTS TO BEAMS - 16 GA. GALVANIZED STD. JOIST HANGERS, UNLESS SHOWN OTHERWISE. B. PLYWOOD TO ROOF TRUSSES OR RAFTERS - NAILED - USE 8d RING SHANK NAILS AT 6 INCHES O/C AT PANEL EDGES AND 12 INCHES C/C AT INTERMEDIATE SUPPORTS. PROVIDE PLYWOOD CLIPS AT MID-SPAN OF PLYWOOD

BETWEEN SUPPORTS. 4. ALL STRUCTURAL WOOD TO BE SURFACED FOUR (4) SIDES (S-4-S) A AND MAXIMUM MOISTURE CONTENT OF 19 PERCENT.

5. ALL LUMBER AND PLYWOOD IN CONTACT WITH CONCRETE, STUCCO, MASONRY OR OTHER CEMENTITIOUS MATERIALS SHALL BE TREATED WITH AN E.P.A. ACCEPTABLE WOOD PRESERVATIVE (SUCH AS "AQC" - ALKALINE-COPPER-QUATERNARY OR "CBA-A" COPPER AZOLE TYPE A & B).

6. ALL WOOD CONNECTORS SHALL BE GALVANIZED STEEL OR RUST-PROOF PAINTED STEEL (U.O.N.). ALL GALVANIZED METAL CONNECTORS IN CONTACT WITH TREATED WOOD (ITEM #5) SHALL BE "TRIPLE-ZINK G-185" GALVANIZED. ANY FIELD WELDS (INTERIOR OR EXTERIOR) OF SUCH CONNECTORS SHALL BE WIRE BRUSH CLEANED AND RUST PROOF PAINTED.

7. MISCELLANEOUS: A. USE ONE LINE OF SOLID BLOCKING OR CROSS BRIDGING AT 8'- 0"

O/C MAX. FORALL JOISTS AND RAFTERS, USE SOLID BLOCKING AT JOIST AND RAFTER BEARING. B. USE SOLID BLOCKING AT MID-HEIGHT FOR ALL EXTERIOR STUD

WALLS AND INTERIOR BEARING PARTITIONS.

C. USE DOUBLE STUDS UNDER BEAM AND LINTEL BEARING, UNLESS SHOWN OTHERWISE.

#### FASTENING SCHEDULE

IBC 2304.9.1						
CONNECTION	FASTENING	LOCATION	CONNECTION		FASTENING	LOCATION
JOIST TO SILL OR GIRDER	3 - 8d COMMON 3 - 3" X 0.131" NAILS 3 - 3" 14 GA. STAPLES	TOENAIL	BUILT-UP CORNER STUDS		16d COMMON 3 3" X 0.131" NAILS 3 3" 14 GA. STAPLES	24" O.C. 16" O.C. 16" O.C.
BRIDGING TO JOIST	3 - 8d COMMON 3 - 3" X 0.131" NAILS 3 - 3" 14 GA. STAPLES	TOENAIL EA. END	BUILT-UP GIRDER AND BEAMS		20d COMMON 32" O.C. 3" X 0.131" NAIL 24" O.C. 3" 14 GA. STAPLES 24" O.C.	FACE NAIL TOP & BOTT, STAGG. OPP, SIDES
1X6 SUBFLOOR TO EACH JOIST	2 — 8d COMMON	FACE NAIL			2 - 20d COMMON	FACE NAIL @
WIDER THAN 1X6 SUBFLOOR TO EACH JOIST	3 - 8d COMMON	FACE NAIL			3 - 3" X 0.131" NAILS 3 - 3" 14 GA. STAPLES	ENDS AND © EACH SPLICE
2" SUBFLOOR TO JOIST OR GIRDER	2 - 8d COMMON	FACE NAIL	2" PLANKS		16d COMMON	@ EA. BEARING
SOLE PLATE TO JOIST OR BLOCKING	16d © 16" O.C. 3" X 0.131" NAILS 8" O.C. 3" 14 GA. STAPLES 12" O.C.	TYP. FACE NAIL	COLLAR TIE TO RAFTER		3 - 10d COMMON 4 - 3" X 0.131" NAILS 4 - 3" 14 GA. STAPLES	FACE NAIL
SOLE PLATE TO JOIST OR BLOCKING  BRACED WALL PANEL	3 - 16d @ 16" O.C. 4-3" X O.131" NAILS @ 16" 4-3" 14 GA. STAPLES PER 16"	BRACED WALL PANEL	JACK RAFTER TO HIP		3 - 10d COMMON 4 - 3" X 0.131" NAILS 4 - 3" 14 GA. STAPLES	TOE NAIL
TOP PLATE TO STUD	2 - 16d COMMON 3 - 3" X 0.131" NAILS 3 - 3" 14 GA. STAPLES	END NAIL			2 - 16d COMMON 3 - 3" X 0.131" NAILS	FACE NAIL
STUD TO SOLE PLATE	4 - 8d COMMON 4 - 3" X 0.131" NAILS 3 - 3" 14 GA. STAPLES	TOENAIL	ROOF RAFTER TO 2X RIDGE BEAM		3 - 3" 14 GA. STAPLES 2 - 16d COMMON 3 - 3" X 0.131" NAILS	FACE NAIL OR TOE NAIL
	2 - 16d COMMON 3 - 3" X 0.131" NAILS 3 - 3" 14 GA. STAPLES	ENDNAIL	JOIST TO HAND JOIST		3 - 3" 14 GA. STAPLES 3 - 16d COMMON 5 - 3" X 0.131" NAILS	FACE NAIL
DOUBLE STUDS	16d @ 24" O.C. 3" X 0.131" NAILS 8" O.C.	FACE NAIL	LEDGER STRIP		5 - 3" 14 GA. STAPLES  3 - 16d COMMON	FACE NAIL
DOUBLE TOP PLATES	3" 14 GA. STAPLES 8" O.C.	TYP. FACE	1		4 - 3" X 0.131" NAILS 4 - 3" 14 GA. STAPLES	
Sobber 101 TEMES	3" X 0.131" NAILS 12" O.C. 3" 14 GA. STAPLES 12" O.C.	NAIL	WOOD STRUCTURAL PANELS AND PARTICLE BOARD, SUB-	1"	6d COMMON 6d COMMON FOR ROOF —	ROOF - 4" O.C. EDGE
DOUBLE TOP PLATES	8 - 16d COMMON 12 - 3" X 0.131" NAILS 12 - 3" 14 GA. STAPLES	LAP SPLICE	FLOOR, ROOF AND WALL SHEATHING (TO FRAMING)		2 ⅔" X 0.113" NAIL 1 ⅔" 16 GA.—————	8" INT. SUPP. SUBFLR & WALL
BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE	3 - 8d COMMON 3 - 3" X 0.131" NAILS 3 - 3" 14 GA. STAPLES	TOENAIL				4" O.C. EDGE 8" INT. SUPP. ROOF
RIM JOIST TO TOP PLATE	8d @ 16" O.C. 3" X 0.131" NAILS 6" O.C. 3" 14 GA. STAPLES 6" O.C.	TOENAIL		₩ то	₹"8d COMMON	3" O.C. EDGE 6" INT. SUPP.
TOP PLATES, LAPS, AND INTERSECTIONS	2 - 16d COMMON 3 - 3" X 0.131" NAILS 3 - 3" 14 GA. STAPLES	FACE NAIL	,	2 8" X 0.113" NAIL		- 3" O.C. EDGE 6" INT. SUPP.
CONTINUOUS HEADER, 2 PIECES	16d COMMON	16" O.C. ALONG EDGE		18" to 14" 10d COMMON		
CEILING JOISTS TO PLATE	3 - 8d COMMON 5 - 3" X 0.131" NAILS 5 - 3" 14 GA. STAPLES	TOENAIL	SINGLE FLOOR (COMB. SUBFLOOR-UNDER- LAYMENT TO FRAMING)		6d DEFORMED SHANK  * 8d DEFORMED SHANK	
CONTINUOUS HEADER TO STUD	4 - 8d COMMON	TOENAIL			1‡" 10d COMMON	***************************************
CEILING JOISTS, LAP OVER PARTITIONS	3 - 16d COMMON MIN. 4 - 3" X 0.131" NAILS 4 - 3" 14 GA. STAPLES	FACE NAIL	PANEL SIDING (TO FRAMING)	1" 2" 5"	6d CORROSION RESISTANT 8d CORROSION RESISTANT	, destruction
CEILING JOISTS TO PARALLEL RAFTERS	3 - 16d COMMON MIN. 4 - 3" X 0.131" NAILS 4 - 3" 14 GA. STAPLES	FACE NAIL	FIBERBOARD SHEATHING	2"	NO. 11 GA. ROOFING NAIL, CORROSION RESIST. 6d COMMON NAIL NO. 16 GA. STAPLE.	3" O.C. EDGE
RAFTER TO PLATE	3 - 8d COMMON 3 - 3" X 0.131" NAILS 3 - 3" 14 GA. STAPLES	TOENAIL		25" 32"	CORROSION RESISTANT NO. 11 GA. ROOFING NAIL, CORROSION RESIST.	6" O.C. INTERMEDIATE SUPPORT
1" DIAG. BRACE TO EA. STUD AND PLATE	2 - 8d COMMON 2 - 3" X 0.131" NAILS 2 - 3" 14 GA. STAPLES	FACE NAIL			8d COMMON NAIL NO. 16 GA. STAPLE, CORROSION RESISTANT	
1"X8" SHEATHING TO EA. BEARING WALL	2 — 8d COMMON	FACE NAIL	INTERIOR PANELING	1" 4 3" 8	4d COMMON 6d CORROSION RESISTANT	

#### 07 THERMAL AND MOISTURE PROTECTION

1. SECTIONS FOR FURTHER NOTE DESCRIPTIONS OF MATERIALS IN THIS SECTION. 2. CONTRACTOR RESPONSIBLE TO PROVIDE ALL FLASHINGS, JOINERY, AND SEALANTS AND OTHER MATERIALS TO INSURE WATERTIGHT CONNECTIONS AT ALL INTERSECTIONS, PARALLEL AND PERPINDICULAR, HORIZONTAL AND VERT.

3. ALL ROOFING MATERIALS TO CONFORM TO ICBO #3761. 4. INSULATION REQUIREMENTS: NOTED ON PLANS 5. ROOFING MISC.: ALL REQUIRED FASTERNERS, ROOF CLIPS, THERMAL SEALS. FLASHINGS, AND EXTRA PANELS PROVIDED BY ROOFING MANUFACTURER, AND INSTALLED BY A LICENSED INSTALLER. A BENDING MACHINE WILL BE REQUIRED

FOR SOME DETAILS. 6. TPO ROOFING - REF. SPECIFICATION SHEET A0.2

08 DOORS / WINDOWS

1. DOUBLE KEYED LOCKS ARE NOT AN APPROVED LOCKING SYSTEM, AND WILL

2. CYLINDER GUARD WILL BE CONSTRUCTED OF SOLID METAL; NO

3. HOLLOW SHELLS ALLOWED. 4. ALL EXTERIOR DOOR HINGES SHALL BE MOUNTED WITH THE HINGE ON THE

INTERIOR OF THE BUILDING OR NON-REMOVABLE HINGE PIN. 5. DEADBOLTS SHALL PROJECT ONE INCH WHEN EXTENDED IN THE LOCKED POSITION, DEADBOLTS WILL BE MADE OF CASE HARDENED STEEL, POWDERED STAINLESS STEEL, BAR BRASS, BRONZE, OR AINC.

6. THE STRIKE PLATE OR HOLING DEVICE FOR PROJECTING DEADBOLTS IN WOOD CONSTRUCTION WILL BE SECURED TO THE JAMB WITH A MINIMUM OF 2 SCREWS 1 7 1/2" MIN. LENGTH.

#### 09 FINISHES

1. REF. OTHER SHEETS IN THIS SET FOR NOTES NOT WRITTEN IN THIS SECTION. 2. WATER RESILIENT PAINT AT ALL WET AREAS; I.E. ANY ROOM THAT HAS

WATER PLUMBED TO IT ... 4. PAINT TO BE "SHERWIN WILLIAMS" OR EQUAL; COLOR PER OWNER; FIELD

COLOR PLUS 1 ACCENT COLOR WALL.; VERIFY COLORS AND LOCATIONS W/ OWNER. 5. STAIN TO BE "SHERWIN WILLIAMS" OR EQUAL FOR ALL WOOD TRIM; OPT. FOR

PAINT PER OWNER; COLOR PER OWNER. EXTERIOR GRADE FOR R.S. WOOD. THERE IS NO FLOOR FINISH ON THIS PROJECT.

9. STUCCO - STO "POWERWALL 6500" OR EQUAL APPROVED BY OWNER.

7. ALL DRYWALL TO BE 5/8" (UNLESS NOTED OTHERWISE.), STRAIGHT CORNERS, COMMERCIAL FINISH. 8. NO RESILIENT BASE ON THIS PROJECT.

GLAZING U FACTOR - 0.30

**IECC 2018 REQUIREMENTS:** 

SKYLIGHT U-FACTOR - 0.55 EXTERIOR DOOR U-FACTOR 0.30 CEILING R-VALUE - 49 WOOD FRAME WALL R-VALUE - R20 OR R13+5 FOUNDATION - R10 X 2'

WARM L AVE, SI

BUQI 以 4 **JOB NUMBER** LUJ-001

**DESIGNED & DRAWN BY** 

JFS

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SPECIFICATIONS
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DATE 5.19.24

REVISIONS

1.1 SECTION INCLUDES

A. Adhered TPO membrane roofing system

B. Cover board.

C. Roof insulation.

D. Vapor retarder.

E. Base sheet. F. Substrate board.

1.2 RELATED SECTIONS

A. Division 06 Section "Miscellaneous Rough Carpentry" for wood nailers, cants, curbs, and blocking.

Division 07 Section "Sheet Metal Flashing and Trim" flashings and counter flashings.

Division 22 Section "Storm Drainage Piping Specialties" for roof drains.

Roofing Terminology: Refer to the following publications for definitions of roofing work related terms in

1. ASTM D 1079 "Standard Terminology Relating to Roofing and Waterproofing."

2. Glossary of NRCA's "The NRCA Roofing and Waterproofing Manual."

Roof Consultants Institute "Glossary of Building Envelope Terms." B. Sheet Metal Terminology and Techniques: SMACNA "Architectural Sheet Metal Manual."

A. General: Installed roofing membrane system shall remain watertight; and resist specified wind uplift pressures, thermally induced movement, and exposure to weather without failure. B. Material Compatibility: Roofing materials shall be compatible with one another under conditions of

service and application required, as demonstrated by roofing system manufacturer based on testing and field Installer shall comply with current code requirements based on authority having jurisdiction.

Wind Uplift Performance: Roofing system shall meet the intent of systems that have been successfully tested by a qualified testing and inspecting agency to resist wind uplift pressure calculated in accordance with

E. FMG Listing: Roofing membrane, base flashings, and component materials shall comply with requirements in FMG 4450 and FMG 4470 as part of a roofing system and that are listed in FMG's "RoofNav" for Class 1 or noncombustible construction, as applicable. Identify materials with FMG markings.

Fire/Windstorm Classification: Class [1]

Hail Resistance: SH.

F. Fire-Test-Response Characteristics: Provide roofing materials with the fire-test-response characteristics indicated as determined by testing identical products per test method below by UL, FMG, or another testing and inspecting agency acceptable to authorities having jurisdiction. Materials shall be identified with appropriate markings of applicable testing and inspecting agency.

1. Exterior Fire-Test Exposure: Class [A]; UL 790, for application and roof slopes indicated.

1.5 SUBMITTALS

A. Product Data: Manufacturer's data sheets for each product to be provided.

B. Detail Drawings: Provide roofing system details and details of attachment to other work, including:

Base flashings and membrane terminations.

2. Tapered insulation, including slopes. 3. Crickets, saddles, and tapered edge strips, including slopes.

4. Insulation fastening and adhesive patterns.

C. Verification Samples: Provide for each product specified.

Installer Certificates: confirmation that installer is approved, authorized, or licensed by manufacturer to

install roofing system. Maintenance Data: Refer to Johns Manville's latest published documents on www.JM.com.

F. Guarantees: Provide manufacturer's current guarantee specimen.

Roofing sub-contractor shall provide a copy of the final System Assembly Letter issued by Johns Manyille Roofing Systems indicating that the products and system to be installed shall be eligible to receive the specified manufacturer's guarantee when installed by a certified JM contractor in accordance with our application requirements, inspected and approved by a JM Technical Representative.

H. Prior to roofing system installation, roofing sub-contractor shall provide a copy of the Guarantee Application Confirmation document issued by Johns Manville Roofing Systems indicating that the project has been reviewed for eligibility to receive the specified guarantee and registered.

1.6 QUALITY ASSURANCE

A. Installer Qualifications: Qualified firm that is approved, authorized, or licensed by roofing system manufacturer to install manufacturer's product and who is eligible to receive the specified manufacturer's

B. Manufacturer Qualifications: Qualified domestic U.S. owned and based manufacturer that has [UL

**listing**] or accredited testing agency listing for roofing system identical to that used for this Project.

Testing Agency Qualifications: An independent testing agency with the experience and capability to conduct the testing indicated, as documented according to ASTM E 329.

D. Test Reports:

Roof drain and leader test or submit plumber's verification.

Core cut, if required. Roof deck fastener pullout test, if required.

E. Moisture Survey, if required:

1. Submit prior to installation, results of a non-destructive moisture test of roof system completed by approved third party. Utilize one of the approved methods: a. Infrared Thermography

b. Nuclear Backscatter

Source Limitations: Obtain all components from the single source roofing manufacturer guaranteeing the roofing system. All products used in the system shall be labeled by the single source roofing manufacturer issuing the guarantee.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Deliver roofing materials in original containers with seals unbroken and labeled with manufacturer's name, product brand name and type, date of manufacture, and directions for storage.

B. Store liquid materials in their original undamaged containers in a clean, dry, protected location and within the temperature range required by roofing system manufacturer.

Handle and store roofing materials and place equipment in a manner to avoid permanent deflection of

Protect roof insulation materials from physical damage and from deterioration by sunlight, moisture, soiling, and other sources. Comply with insulation manufacturer's written instructions for handling, storing, and protecting during installation.

1.8 PROJECT CONDITIONS

N. Weather Limitations: Proceed with installation only when current and forecasted weather conditions permit roofing system to be installed in accordance with manufacturer's written instructions and guarantee requirements.

1.9 GUARANTEE

Provide manufacturer's system guarantee equal to Johns Manville's Peak Advantage No Dollar Limit

1. Single-source special guarantee includes roofing membrane, base flashings, roofing membrane accessories, roof insulation, fasteners, adhesives, cover board, substrate board, vapor retarder, base sheet, walkway products, manufacturer's expansion joints, manufacturer's edge metal **products**, and other approved single-source components of roofing system marketed by the manufacturer.

2. Guarantee Period: **20** years from date of Substantial Completion. 3. Contractor is required to list "Simons Architecture" as the Specifier/Consultant of record in the appropriate

fields ("Specifier Account") when applying for the manufacturer's warranty. B. Installer's Guarantee: Submit roofing Installer's guarantee, including all components of roofing system for the following guarantee period:

1. Guarantee Period: **Two** years from date of Substantial Completion.

Existing Guarantees: Guarantees on existing building elements should not be affected by scope of

1. Installer is responsible for coordinating with building owner's representative to verify compliance.

2.1 THERMOPLASTIC POLYOLEFIN ROOFING MEMBRANE - TPO

A. Fabric-Reinforced Thermoplastic Polyolefin Sheet: ASTM D 6878, uniform, flexible sheet formed from a thermoplastic polyolefin, internally fabric or scrim reinforced. Basis of design: [JM TPO]

1. Membrane Thickness: [80 mils (2.03 mm), nominal]

2. Fabric Fleece Backed Membrane Thickness: [80 mils (2.03 mm), nominal] Exposed Face Color: [White]

a. Exposed Face Color: White

b. Serviceable Installation Temperature: 20°F (-7°C) and above.

2.2 AUXILIARY ROOFING MATERIALS - SINGLE PLY A. General: Auxiliary materials recommended by roofing system manufacturer for intended use and

compatible with membrane roofing. 1. Liquid-type auxiliary materials shall meet VOC limits of authorities having jurisdiction.

Sheet Flashing: Manufacturer's internally reinforced or scrim reinforced. Basis of design: JM TPO 60

Bonding Adhesive: Manufacturer's standard solvent based bonding adhesive for membrane, and [solvent] [water]-based bonding adhesive for base flashings. Basis of design: JM Membrane Bonding

Adhesive (TPO&EPDM) 1. Serviceable Installation Ambient Air Temperature: 25°F and rising

Flashing Adhesive: Manufacturer's standard-solvent- based bonding adhesive for base flashings. Basis of design: JM Membrane Bonding Adhesive (TPO&EPDM)

1. Serviceable Installation Ambient Air Temperature: 25°F and rising. Self-Adhered Primer: One-part penetrating primer solution to enhance the adhesion of self-adhering

membranes. Basis of design: [SA Primer] [SA Primer Low VOC] Slip Sheet: Manufacturer's recommended slip sheet, of type required for application. Basis of design:

[JM 3 -oz Polyester Slipsheet] [ JM Polyester Mat Protection Slipsheet] G. Metal Termination Bars: Manufacturer's standard predrilled stainless-steel or aluminum bars, with

anchors. Basis of design: JM Termination Systems H. Fasteners: Factory-coated steel fasteners and metal plates meeting corrosion-resistance provisions in FMG 4470, designed for fastening membrane to substrate, and acceptable to membrane roofing system

manufacturer. Basis of design: [High Load Fasteners and Plates] Induction Welding Plate: A round specially coated Galvalume® plate with a recessed center and raised flat bonding surface specifically designed for induction welding application. Basis of design: JM TPO

J. Miscellaneous Accessories: Provide all accessories to meet the roofing manufacturer's guarantee requirements.

2.3 WALKWAYS AND SAFETY STRIPS

A. Flexible Walkways: Factory-formed, nonporous, heavy-duty, slip-resisting, surface-textured walkway pads sourced from membrane roofing system manufacturer. Basis of design: [JM TPO Safety Walkpad]

Safety Strips: Manufacturer's minimum 65 mils total thickness, comprise of 30 mil yellow non-reinforced TPO membrane laminated to 35 mil white cured seaming tape. Basis of design: JM Single Ply Safety Strip

1. Exposed Face Color: Yellow

2.4 COVER BOARD

Polyisocyanurate Board: ASTM C 1289, Type II, Class [1], Grade [3 (25 psi)], polyisocyanurate bonded in-line to [fiber glass reinforced] facer. Basis of design: [SeparatoR] High-Density Polvisocyanurate: ASTM C 1289, Type II, Class 4, Grade 1, High-density Polyisocyanurate technology bonded in-line to inorganic coated glass facers with greater than 80 lbs of

compressive strength. Basis of design: ProtectoR HD Thickness: 1/2 inch (13 mm)

R-value: 2.5

2.5 ROOF INSULATION

General: Preformed roof insulation boards that comply with requirements and referenced standards, selected from manufacturer's standard sizes and of thicknesses indicated.

B. Polyisocyanurate Board Insulation: ASTM C 1289, Type II, Class [1], Grade 3 (25 psi), Basis of design: [ [ENRGY 3 25 PSI]

1. Provide insulation package with minimum R Value: [R-30].

Provide insulation package with minimum thickness: [6"]. Provide insulation package in multiple layers.

4. Minimum Long-Term Thermal Resistance (LTTR): 5.7 per inch.

a. Determined in accordance with CAN/ULC S770 at 75°F (24°C)

Tapered Insulation: ASTM C 1289, Type II, Class [1], Grade [3 (25 psi)], provide factory-tapered insulation boards fabricated to slope of 1/4 inch per 12 inches (1:48), unless otherwise indicated. Basis of design: [Tapered ENRGY 3 25 PSI]

INSULATION ACCESSORIES

A. General: Roof insulation accessories recommended by insulation manufacturer for intended use and compatible with membrane roofing.

B. Provide saddles, crickets, tapered edge strips, and other insulations shapes where indicated for sloping to drain. Fabricate to slopes indicated. Basis of design: Tapered Fesco Edge Strips.

C. Fasteners: Factory-coated steel fasteners and metal or plastic plates meeting corrosion-resistance

E. Wood Nailer Strips: Comply with requirements in Division 06 Section "Miscellaneous Rough

provisions in FMG 4470, designed for fastening roof insulation to substrate, and furnished by roofing system manufacturer. Basis of design: [UltraFast Fasteners and UltraFast Plates] D. Urethane Adhesive: Manufacturer's two component polyurethane adhesive formulated to adhere insulation to substrate. Basis of design: [JM Two-Part Urethane Insulation Adhesive (UIA)]

Carpentry."

2.8 BASE-SHEET MATERIALS A. Base Sheet: ASTM D 4601, Type II non-perforated, asphalt-impregnated and -coated, glass-fiber

sheet, dusted with fine mineral surfacing on both sides. Basis of design: [PermaPly 28] B. Base Sheet: ASTM D 4897, Type II, venting, non-perforated, heavyweight, asphalt-impregnated and -coated, glass-fiber base sheet with coarse granular surfacing or embossed venting channels on bottom surface. Basis of design: Ventsulation Felt

C. Base Sheet Fasteners: 32 gauge, 1-5/8" diameter tin caps with 11-gauge annular ring shank nails.

2.9 EDGE METAL COMPONENTS

A. Expansion Joints: Provide factory fabricated weatherproof, exterior covers for expansion joint openings consisting of flexible rubber membrane, supported by a closed cell foam to form flexible bellows, with two metal flanges, adhesively and mechanically combined to the bellows by a bifurcation process. Provide product from single-source roofing system supplier that is included in the No Dollar Limit guarantee. Basis of design: [Expand-O-Flash]

B. Coping System: Manufacturer's factory fabricated coping consisting of a base piece and a snap-on cap. Provide product from single-source roofing system supplier that is included in the No Dollar Limit guarantee. Basis of design: [Presto-Lock Gold Coping]- 29 GA. COLOR TO MATCH STUCCO. Metal Edge System: Manufacturer's factory fabricated metal edge system used to terminate the roof at

the perimeter of the structure. Provide product from single-source roofing system supplier that is included in the

No Dollar Limit guarantee. Basis of design: [Presto-Weld Drip Edge] [JM TPO-Coated Metal] D. Metal Flashing Sheet: Metal flashing sheet is specified in Division 07 Section "Sheet Metal Flashing

PART 3 - EXECUTION

and Trim."

3.1 EXAMINATION

A. Examine substrates, areas, and conditions for compliance with the requirements affecting performance of roofing system.

 General: a. Verify that roof openings and penetrations are in place and set and braced and that roof drains are

securely clamped in place. b. Verify that wood cants, blocking, curbs, and nailers are securely anchored to roof deck at penetrations

and terminations and that nailers match thicknesses of insulation.

a. Verify that wood decking is visibly dry and free of moisture.

b. Verify that wood has ability to provide minimum fastener pull-out resistance. 1) Provide documentation of pull-out resistance values in accordance with ANSI/SPRI FX-1 2016.

B. Unacceptable panels should be brought to the attention of the General Contractor and Project Owner's Representative and shall be corrected prior to installation of roofing system.

3.2 PREPARATION

A. Clean and remove from substrate sharp projections, dust, debris, moisture, and other substances detrimental to roofing installation in accordance with roofing system manufacturer's written instructions. B. Prevent materials from entering and clogging roof drains and conductors and from spilling or migrating

C. If applicable, prime surface of deck at a rate recommended by roofing manufacturer and allow primer to

D. Proceed with each step of installation only after unsatisfactory conditions have been corrected. 3.3 RE-ROOF PREPARATION

onto surfaces of other construction.

A. Remove all roofing membrane, surfacing, coverboards, insulation, fasteners, asphalt, pitch, adhesives,

1. Remove an area no larger than can be re-roofed in one day.

B. Tear out all base flashings, counterflashings, pitch pans, pipe flashings, vents, sumps and like components necessary for application of new membrane.

C. Remove abandoned equipment curbs, skylights, smoke hatches, and penetrations.

1. Install decking to match existing as directed by Owner's Representative. D. Raise (disconnect by licensed craftsmen, if necessary) all HVAC units and other equipment supported

by curbs to conform with the following: 1. Modify curbs as required to provide a minimum 8" base flashing height measured from the surface of the new membrane to the top of the flashing membrane.

2. Secure of flashing and install new metal counterflashing prior to re-installation of unit.

3. Perimeter nailers shall be elevated to match elevation of new roof insulation. Immediately remove all debris from roof surface. Demolished roof system may not be stored on the roof surface.

manufacturer's written instructions.

3.4 BASE-SHEET INSTALLATION Install one lapped base sheet course and mechanically fasten to substrate per roofing system

1. Enhance fastening rate in perimeter and corner zones per code requirements, wind uplift system approvals or manufacturer's guarantee requirements, whichever is more stringent.

INSULATION INSTALLATION A. Coordinate installation of roof system components so insulation and cover board are not exposed to precipitation or left exposed at the end of the workday.

B. Comply with roofing system manufacturer's written instructions for installation of roof insulation and

Install insulation boards with long joints in a continuous straight line. Joints should be staggered

Trim surface of insulation boards where necessary at roof drains so completed surface is flush and

B. Comply with roofing system manufacturer's written instructions for installing roof insulation.

C. Install tapered insulation under area of roofing to conform to slopes indicated.

between rows, abutting edges and ends per manufacturer's written instructions. Fill gaps exceeding 1/4 inch (6 mm) with like material. Install 2 or more layers with joints of each succeeding layer staggered from joints of previous layer a minimum of 6 inches (150 mm) in each direction.

does not restrict flow of water. Install tapered edge strips at perimeter edges of roof that do not terminate at vertical surfaces. Mechanically Fastened with Subsequent Layers Adhered Insulation: Secure first layer of insulation to deck

using mechanical fasteners designed and sized for fastening specified board-type to deck type. Fasten first layer to resist uplift pressure at corners, perimeter, and field of roof.

2. Install subsequent layers in a two-part urethane adhesive according to roofing system manufacturer's 3. Install each layer to resist uplift pressure at corners, perimeter, and field of roof.

3.6 COVER BOARD INSTALLATION

A. Coordinate installing membrane roofing system components so cover board is not exposed to precipitation or left exposed at the end of the workday.

Comply with membrane roofing system manufacturer's written instructions for installing roof cover

D. Trim surface of cover board where necessary at roof drains so completed surface is flush and does not

Install cover board with long joints in a continuous straight line. Joints should be staggered between rows, abutting edges and ends per manufacturer's written instructions. Fill gaps exceeding 1/4 inch (6 mm) with

1. Cut and fit cover board within 1/4 inch (6 mm) of nailers, projections, and penetrations.

1. Install tapered edge strips at perimeter edges of roof that do not terminate at vertical surfaces. Mechanically Fastened Cover Board: Install cover board and secure to deck using mechanical fasteners designed and sized for fastening specified cover board to deck type.

1. Fasten to resist uplift pressure at corners, perimeter, and field of roof.

3.7 ROOFING MEMBRANE INSTALLATION, GENERAL

Install roofing membrane in accordance with roofing system manufacturer's written instructions, applicable recommendations of the roofing manufacturer and requirements in this Section. Cooperate with testing and inspecting agencies engaged or required to perform services for installing roofing system.

C. Coordinate installing roofing system so insulation and other components of the roofing membrane system not permanently exposed are not subjected to precipitation or left uncovered at the end of the workday or

1. Provide tie-offs at end of each day's work to cover exposed roofing membrane sheets and insulation.

2. Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofing system. 3. Remove and discard temporary seals before beginning work on adjoining roofing.

D. Substrate-Joint Penetrations: Prevent roofing asphalt from penetrating substrate joints, entering building, or damaging roofing system components or adjacent building construction.

3.8 ADHERED ROOFING MEMBRANE INSTALLATION Install roofing membrane over area to receive roofing in accordance with membrane roofing system manufacturer's written instructions.

1. Unroll roofing membrane and allow to relax before installing. B. Accurately align roofing membrane and maintain uniform side and end laps of minimum dimensions required by manufacturer. Stagger end laps. Solvent Based Bonding Adhesive for smooth backed membranes: Apply solvent-based bonding adhesive to substrate and underside of roofing membrane at rate required by manufacturer and allow to partially dry before

installing roofing membrane. Do not apply bonding adhesive to splice area of roofing membrane. Mechanically fasten roofing membrane securely at terminations, penetrations, and perimeter of roofing.

Apply roofing membrane with side laps shingled with roof slope, where possible.

membrane according to manufacturer's written instructions to ensure a watertight seam installation. 1. Test lap edges with probe to verify seam weld continuity. Apply lap sealant to seal cut edges of roofing

2. Verify field strength of seams a minimum of twice daily and repair seam sample areas. a. Remove and repair any unsatisfactory sections before proceeding with installation. 3. Repair tears, voids, and incorrectly lapped seams in roofing membrane that do not meet requirements.

Seams: Clean seam areas, overlap roofing membrane, and hot-air weld side and end laps of roofing

G. Spread sealant or mastic bead over deck drain flange at deck drains and securely seal roofing membrane in place with clamping ring.

roofing system manufacturer's written instructions.

3.9 BASE FLASHING INSTALLATION Install sheet flashings and preformed flashing accessories and adhere to substrates per membrane B. Apply solvent-based bonding adhesive at required rate and allow to partially dry. Do not apply bonding adhesive to seam area of flashing.

C. Apply water-based bonding adhesive in two-sided application, at required rate, and allow to partially dry. Do not apply bonding adhesive to seam area of flashing.

Self-Adhere membrane to smooth approved substrates, when substrate temperatures are 40°F (4.5°C)

1. The use of SA Primer or SA LVOC Primer is required for flashing applications on curbs and parapet walls for temperatures between 40°F (4.5°C) and 20°F (-7°C). 2. The use of SA Primer or SA LVOC Primer is required for flashing applications over approved substrates

with a porous or rough surface, including: Dens Deck Prime, Dens Deck, DEXcell, concrete and smooth Apply single ply liquid applied flashing system per manufacturer's written instructions.

Flash penetrations and field-formed inside and outside corners per manufacturer's installation G. Clean seam areas and overlap and firmly roll sheet flashings into the adhesive. Weld side and end

Terminate and seal top of sheet flashings and mechanically anchor to substrate through termination

3.10 EDGE METAL INSTALLATION

A. Examine substrates and conditions under which sheet metal flashing and trim are to be installed and verify that work may properly commence. Do not proceed with installation until unsatisfactory conditions have

B. Provide edge details as indicated on the Drawings. Install in accordance with the membrane manufacturer's requirements and SMACNA's "Architectural Sheet Metal Manual." C. Join individual sections in accordance with the membrane manufacturer's requirements and SMACNA's "Architectural Sheet Metal Manual."

products to substrate according to roofing system manufacturer's written instructions.

3.11 WALKWAY INSTALLATION A. Flexible Walkways: Install walkway products in locations indicated. Heat weld and adhere walkway

B. Roof-Paver Walkways: Install walkway roof pavers with applicable slip sheet per manufacturer's written instructions in locations indicated, to form walkways. 3.12 FIELD QUALITY CONTROL

B. Owner will engage a qualified independent testing and inspecting agency to perform roof tests and inspections and to prepare test reports. C. Final Roof Inspection: Arrange for roofing system manufacturer's technical representative to inspect

A. Owner or designated representative will provide on-site observation and inspection during installation.

roofing installation on completion and submit report to Architect. D. Repair or remove and replace components of roofing system where test results or inspections indicate that they do not comply with specified requirements.

E. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance

C. Clean overspray and spillage from adjacent construction using cleaning agents and procedures

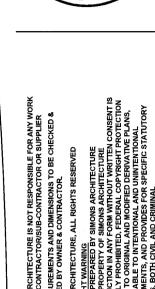
TPO SPECIFICATIONS

of replaced or additional work with specified requirements.

3.13 PROTECTION AND CLEANING A. Protect roofing system from damage and wear during remainder of construction period. B. Correct deficiencies in or remove roofing system that does not comply with requirements, repair substrates, and repair or reinstall roofing system to a condition free of damage and deterioration at time of

Substantial Completion and according to warranty requirements.

recommended by manufacturer of affected construction. END OF SECTION



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DESIGNED & DRAWN BY

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**JOB NUMBER** LUJ-001

REVISIONS

NM 87106 OUNTY

DATE 5.19.24

## **GENERAL FIRE2 NOTE**

FIRE PROTECTION SYSTEMS, IF REQUIRED, SHALL BE DEFERRED SUBMITTALS AND AS FOLLOWS:

SHOP DRAWINGS WILL BE SUBMITTED TO THE FIRE MARSHALS OFFICE FOR REVIEW AND APPROVAL OF ANY INSTALLATION OR MODIFICATION TO THE FIRE SPRINKLER SYSTEM, FIRE ALARM SYSTEM, KITCHEN SUPPRESSION SYSTEM, OR ANY OTHER FIRE RELATED SYSTEM.

THE FIRE SPRINKLER SYSTEM WILL BE SUPERVISED WHEN REQUIRED BY THE 2015 INTERNATIONAL FIRE CODE.

### CODE REVIEW IBC 2021

TOTAL

OCCUPANCY GROUP - IBC 303.1.1 CONSTRUCTION TYPE - IBC 602.5 FLOOR AREA ACTUAL FIRST FLOOR BASEMENT

V-B 4500 S.F. 875 S.F. 5375 S.F.

FLOOR AREA ALLOWABLE - IBC TBL. 506.2

9,000 S.F.

NO. STORIES ACTUAL STORIES ALLOWABLE - IBC 504.4

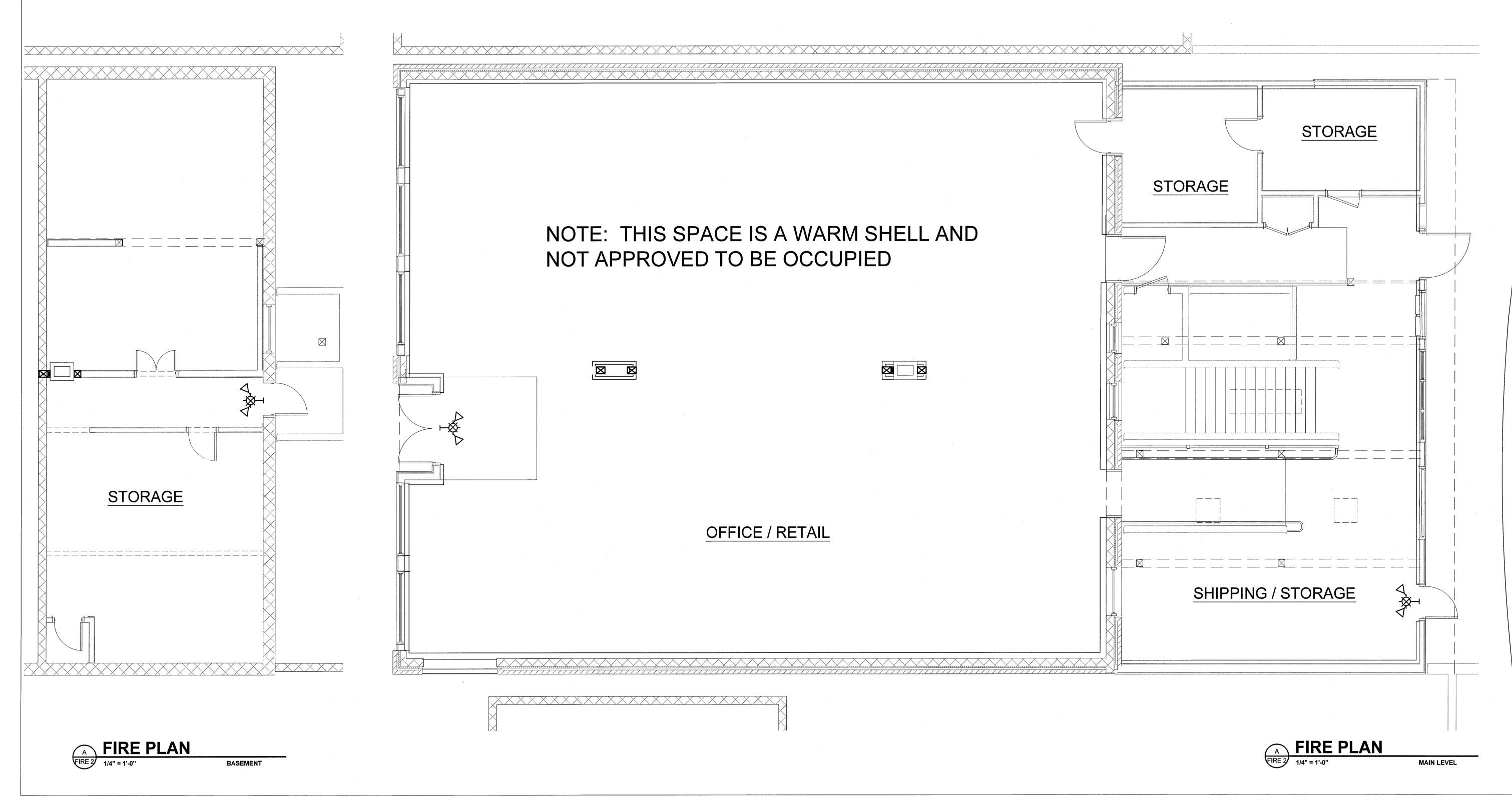
OCCUPANT LOAD - IBC TBL 1004.1.2 CALCULATED FOR MERCANTILE

FIRST FLOOR RETAIL - 3000 S.F. / 60 S.F. PER PERSON STOCK / SHIPPING - 1500 / 300 S.F. PERSON 5

STORAGE 875 S.F. / 300 S.F. PER PERSON

MANUAL FIRE ALARM- NO

FIRE SPRINKLERED: NO



JOB NUMBER REVISIONS

FIRE 2

C E N T R A L A V E N E EXISTING SIDEWALK NEW CRICKET EXISTING BUILDING EXISTING BUILDING EXISTING
ROOF
DROP EXISTING CRICKET— EXISTING ROOF DRAIN A L L E Y GRAPHIC SCALE ( IN FEET ) 1 inch = 10 ft.

A SITE PLAN
1" = 10'-0"

Joseph F.
Simonal Jr.
No. 2890
5.19.24
STERED ARCHITE

SIMONS ARCHITECTURE IS NOT RESPONSIBLE FOR ANY WORK DONE BY CONTRACTOR SUB-CONTRACTOR OR SUPPLIER ALL MEASUREMENTS AND DIMENSIONS TO BE CHECKED & CONFIRMED BY OWNER & CONTRACTOR.

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INTENDEMENTS, AND PROVIDES POR SPECIFIC STATUTORY

Joseph f. simons jr., aia nm lic 002890 p.o. box 67408 abq, n.m., 87193-7408 ph.505.480.4796

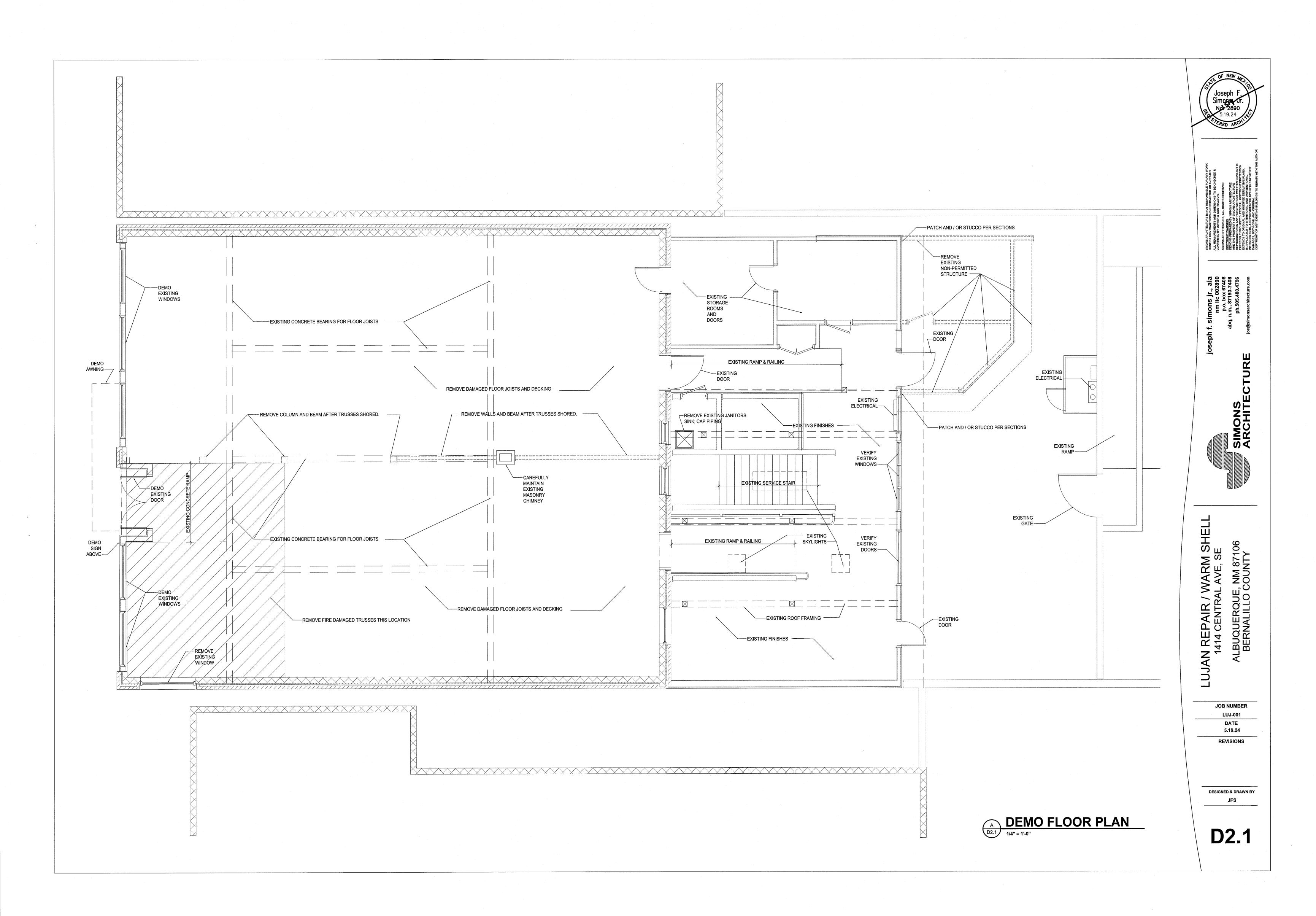
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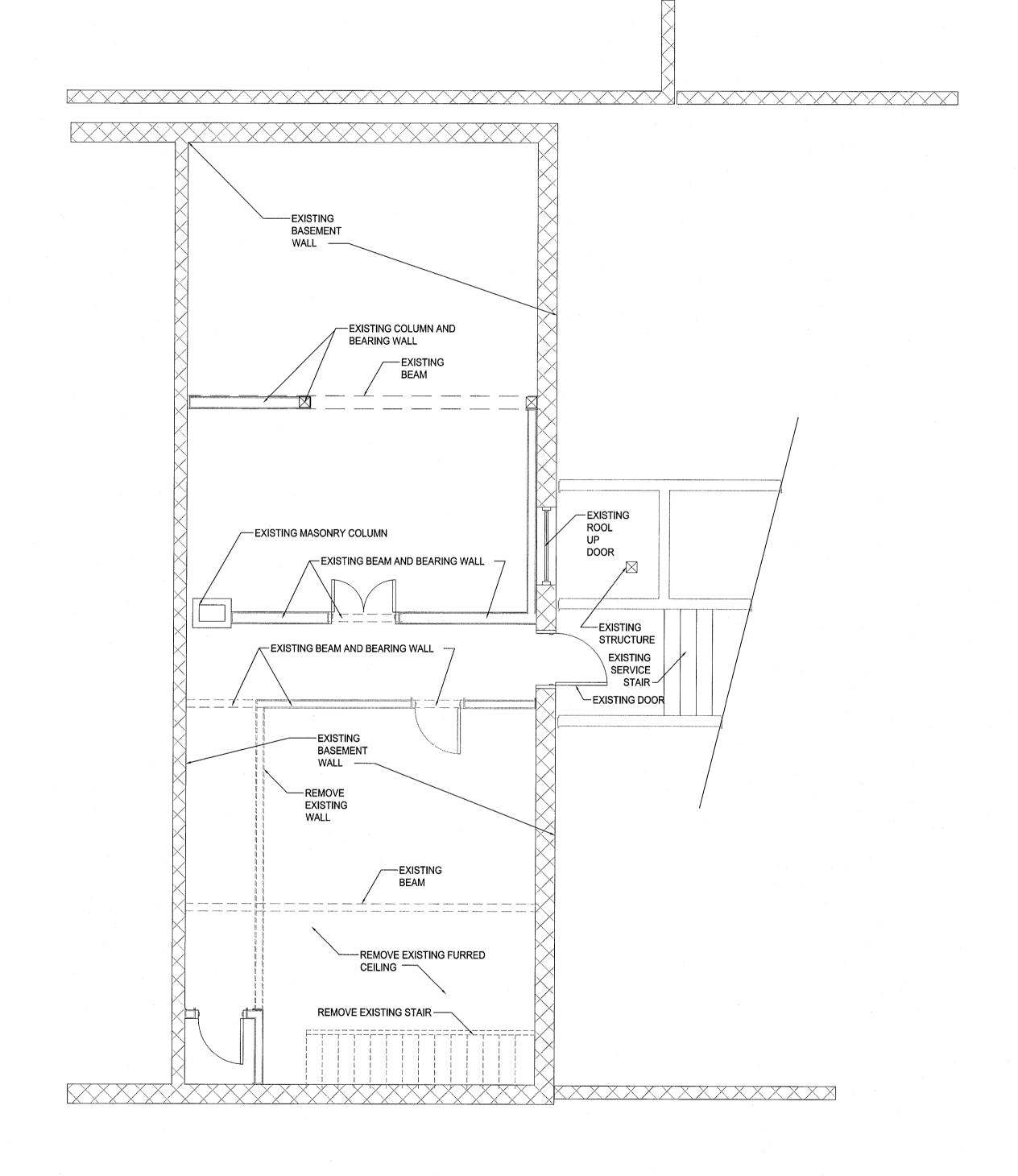
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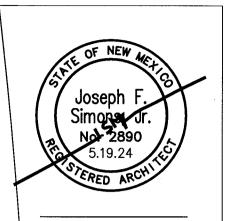
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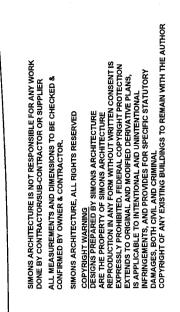
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SIMONS

ARCHITECTURE

LUJAN REPAIR / WARM SHELL 1414 CENTRAL AVE, SE ALBUQUERQUE, NM 87106 BERNALILLO COUNTY

JOB NUMBER
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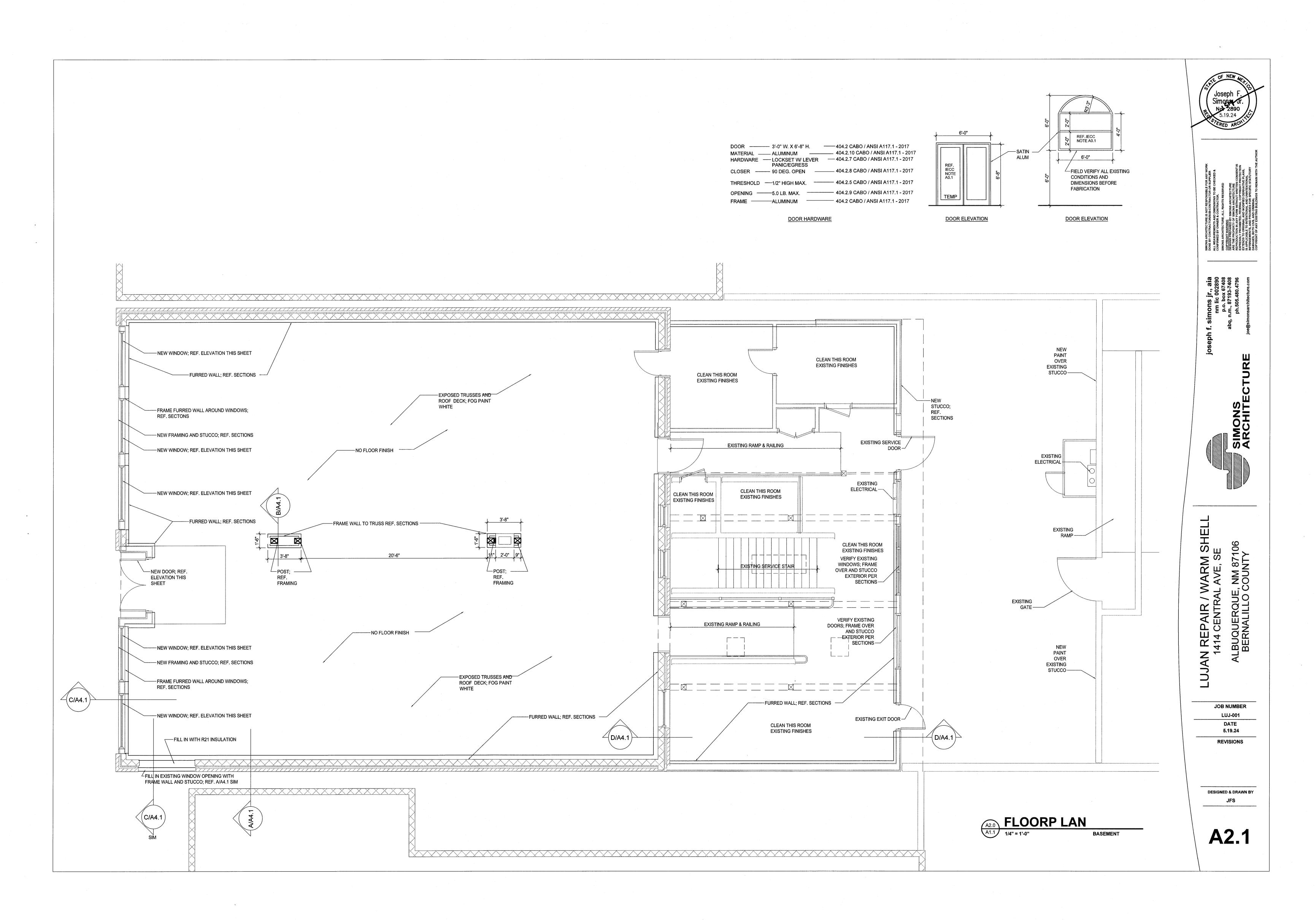
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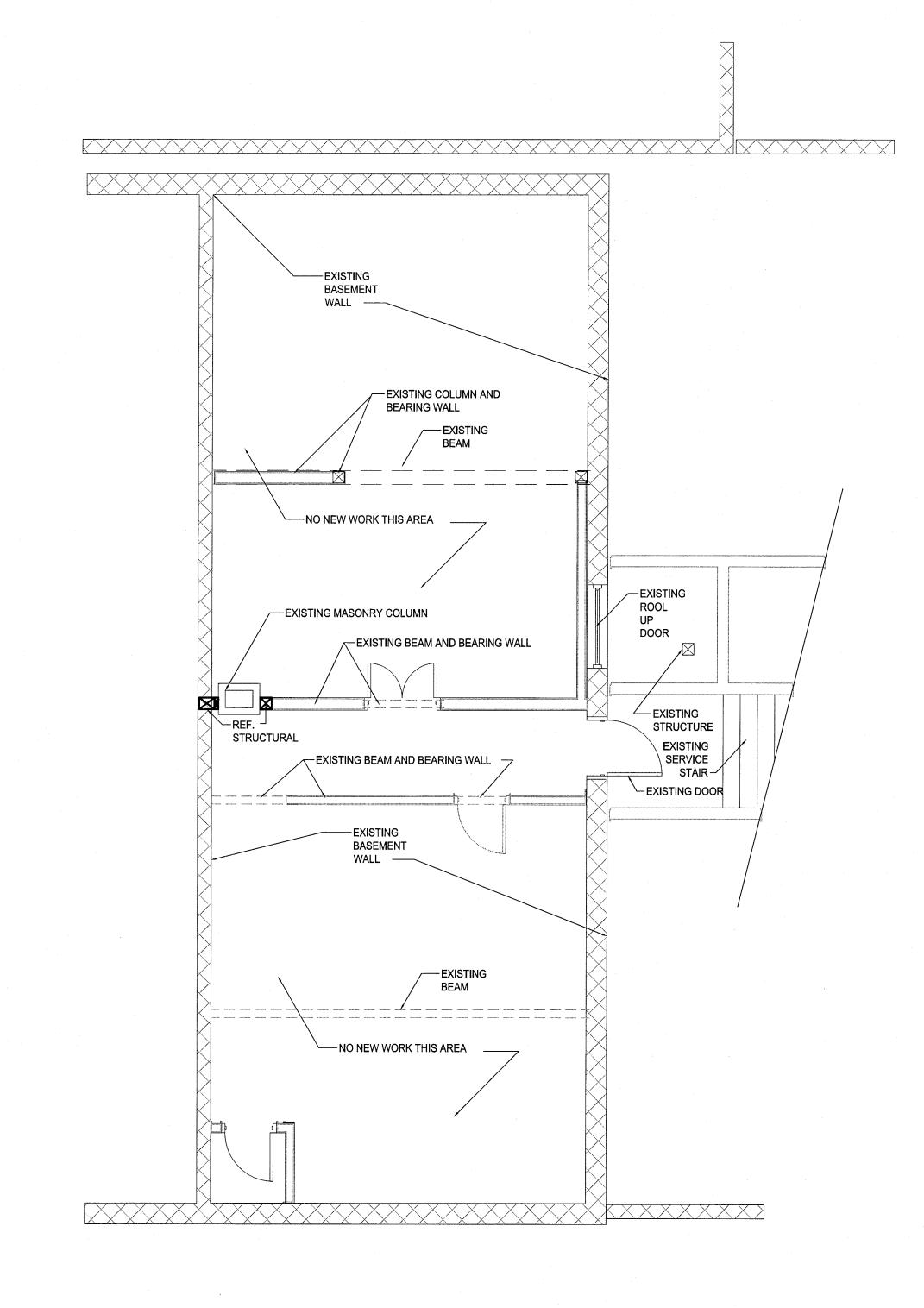
DEMO FLOOR PLAN

D2.2

1/4" = 1'-0"

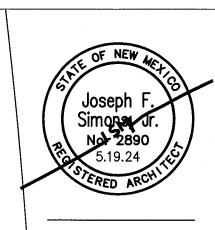
BASEMENT





A FLOORP LAN

A2.2 1/4" = 1'-0"



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