



RENOVATION OF NORTH ANGELO BRANCH LIBRARY

TOM GREEN COUNTY

(TGC RFP #22-023)

3001 NORTH CHADBOURNE ST.
SAN ANGELO, TEXAS 76903

LIST OF BID ALTERNATES

GENERAL BID ALTERNATE NOTES:

UNDER "DEDUCT" BID ALTERNATES - CONTRACTOR SHALL INCLUDE ALL WORK SHOWN ON RELATED DRAWINGS & SPECIFICATIONS UNDER PROJECT'S BASE BID PROPOSAL. THEN, CONTRACTOR SHALL FURNISH CREDIT OR DEDUCT COSTS FOR MATERIAL & LABOR TO NOT PERFORM THE WORK LISTED UNDER THE SPECIFIC DEDUCT BID ALTERNATE.

UNDER "ADD" BID ALTERNATES - CONTRACTOR SHALL NOT INCLUDE THE MATERIALS & LABOR IN PROJECT'S BASE BID PROPOSAL. THEN, THE CONTRACTOR SHALL FURNISH ADDITIONAL COSTS TO PERFORM THE LISTED WORK UNDER THE SPECIFIC ADD BID ALTERNATE.

ADD BID ALTERNATE NO. 1:

- CONTRACTOR SHALL SUBMIT ADDITIONAL PRICING TO PERFORM WORK AS LISTED BELOW.
- DEMOLISH ALL EXISTING ASPHALT PAVING ON SITE (BID QTY, APPROX. 10,533 SQ/FT) & INSTALL NEW ASPHALT PAVING AS DESCRIBED IN NOTE 18.
 - FURNISH & INSTALL NEW 2" THICK HEAVY-DUTY ASPHALT PAVING ON NEW 8.5" THICK COMPACTED BASE ON 6" THICK MIN. COMPACTED EXISTING SUBGRADE. NEW PAVING SHALL FLUSH WITH EXISTING ADJOINING PAVING ALONG THE NORTH PROPERTY LINE, TOP OF PERIMETER CURBING AT STREETS, NEW CONC. DRIVE & NEW CONC. DRIVE APPROACH. PAVING CONTRACTOR SHALL DETERMINE SLOPE CONTOURS OF NEW PAVING TO PROVIDE PROPER SURFACE WATER DRAINAGE WITH NO PONDING.
 - PROVIDE CREDIT COSTS FOR MATERIAL & LABOR FOR ITEMS ALREADY INCLUDED IN OR NOT REQUIRED FROM BASE BID PROPOSAL. THESE ITEMS CONSIST OF SEAL COATING OF EXISTING ASPHALT PAVING, (3) PARKING SPACES WITH PAINTED TIRE STOPS, STRIPING & CONC. SEPARATION CURBING.
 - CONTRACTOR SHALL PROTECT ALL EXISTING CONC. CURBING, DRIVEWAYS, WALKS, POWER POLES, FIRE HYDRANTS, BUS STOP STRUCTURE, ADJACENT PROPERTY, ETC. DURING THE DEMOLITION PHASE AND NEW ASPHALT CONSTRUCTION PHASE.
 - SAWCUT EXISTING ASPHALT PAVING ALONG NORTHERN PROPERTY LINE AS SHOWN.
 - REFER TO BASE BID SITE PLAN FOR NEW GRADES ALONG SOUTH SIDE OF BUILDING.
 - REDUCT EAST SIDE OF EXISTING CURB CUT TO FORM NEW 12'-0" WIDE CONC. APPROACH, DRIVE & DUMPSTER PAD WITH BOLLARDS.

ADD BID ALTERNATE NO. 2:

- CONTRACTOR SHALL SUBMIT ADDITIONAL PRICING TO PERFORM WORK AS LISTED BELOW.
- INSTALL NEW ASPHALT PAVING AS DESCRIBED IN NOTE 28, IN EXISTING PLANTING HILL AREA (BID QTY, APPROX. 1,930 SQ/FT).
 - FURNISH & INSTALL NEW 2" THICK HEAVY-DUTY ASPHALT PAVING ON NEW 8.5" THICK COMPACTED BASE ON 6" THICK MIN. COMPACTED EXISTING SUBGRADE. NEW PAVING SHALL FLUSH WITH EXISTING ADJOINING PAVING ALONG THE NORTH PROPERTY LINE, TOP OF PERIMETER CURBING AT STREETS, NEW CONC. DRIVE & NEW CONC. DRIVE APPROACH. PAVING CONTRACTOR SHALL DETERMINE SLOPE CONTOURS OF NEW PAVING TO PROVIDE PROPER SURFACE WATER DRAINAGE WITH NO PONDING.
 - INSTALL (5) NEW 45 DEGREE PARKING SPACES COMPLETE WITH PAINTED CONC. TIRE STOPS & STRIPING. CORNER OF NEW TIRE STOPS SHALL LINE UP WITH EDGE OF SOUTH PROPERTY LINE.
 - CONTRACTOR SHALL PROTECT ALL EXISTING CONC. CURBING, DRIVEWAYS, WALKS, POWER POLES, ADJACENT PROPERTY, ETC. DURING THE DEMOLITION PHASE AND NEW ASPHALT CONSTRUCTION PHASE.
 - CONTRACTOR SHALL REMOVE (2) EXISTING TREES INCLUDING STUMPS.
 - REFER TO BASE BID SITE PLAN FOR NEW GRADES ALONG SOUTH SIDE OF BUILDING.

DEDUCT BID ALTERNATE NO. 3:

- CONTRACTOR SHALL SUBMIT CREDIT PRICING TO DELETE THE BELOW LISTED ITEMS.
- DELETE NEW BING & RELATED LIGHTING. REF. #A1.00 OF DWGS.
 - DELETE NEW PARKING LOT LIGHT POLE, HEADS & RELATED UNDERGROUND UTILITIES INCLUDING WORK FOR EXISTING POLE MOUNTED SIGN LOCATED OUT AT CHAD ST.

DEDUCT BID ALTERNATE NO. 4:

- CONTRACTOR SHALL SUBMIT CREDIT PRICING TO DELETE THE BELOW LISTED ITEMS.
- DELETE NEW 4'-0" WIDE CONC. SIDEWALKS LOCATED ON THE SOUTH & WEST SIDES OF THE EXISTING BUILDING.
 - DELETE NEW 5'-0" WIDE CONC. SIDEWALKS AND NEW ADA CURB RAMP ON CHADBOURNE ST. & 30TH ST.
 - DELETE DEMOLITION OF EXISTING SOUTHEAST CONC. DRIVEWAY & RELATED EXISTING CURBING ALONG 30TH ST.
 - DELETE INSTALLATION OF NEW SOUTHEAST CONC. DRIVEWAY APPROACH & RELATED NEW CURBING ALONG 30TH ST.

DEDUCT BID ALTERNATE NO. 5:

- CONTRACTOR SHALL SUBMIT CREDIT PRICING TO DELETE THE BELOW LISTED ITEMS.
- DELETE EXTERIOR WALL MOUNTED ROOF ACCESS METAL LADDER ASSEMBLY AS PER SPECIFICATION SECTION 05 5133.

DEDUCT BID ALTERNATE NO. 6:

- CONTRACTOR SHALL SUBMIT CREDIT PRICING TO DELETE THE BELOW LISTED ITEMS.
- DELETE DEMOLITION OF EXISTING WEST CHAINLINK FENCING & SHRUBBERY OVERGROWTH.
 - DELETE NEW 6'-0" HIGH METAL PANEL PRIVACY FENCING LOCATED ON WEST PROPERTY LINE AS PER SPECIFICATION SECTION 32 3200.

DEDUCT BID ALTERNATE NO. 7:

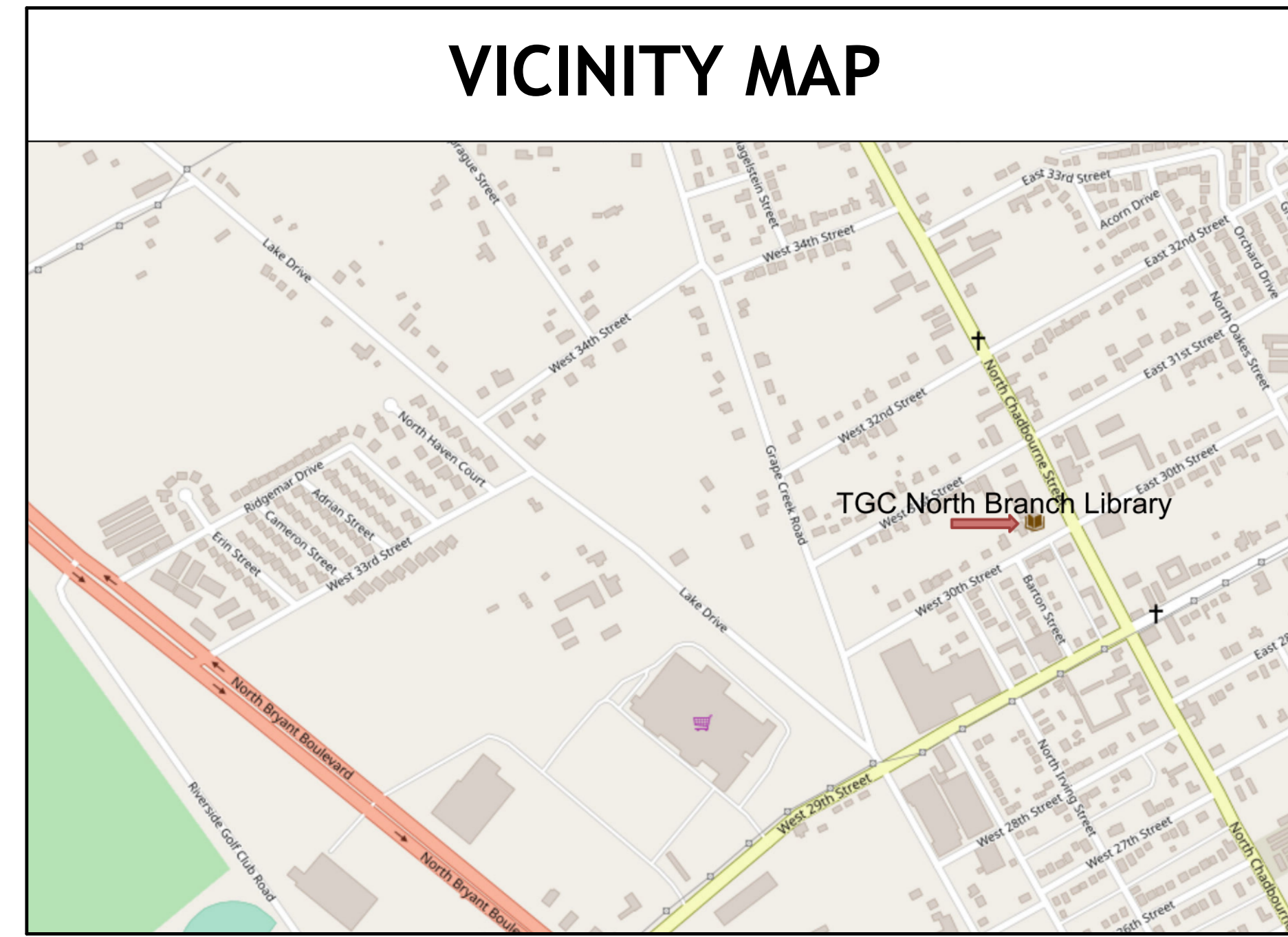
- CONTRACTOR SHALL SUBMIT CREDIT PRICING TO DELETE THE BELOW LISTED ITEMS.
- DELETE ALL EXTERIOR BUILDING REPAINTING OF EXISTING WALLS & FINISHES.

DEDUCT BID ALTERNATE NO. 8:

- CONTRACTOR SHALL SUBMIT CREDIT PRICING TO DELETE THE BELOW LISTED ITEMS.
- CLEAN & PREPARE EXISTING CONC. FLOORS FOR FINISH MATERIAL.
 - FURNISH & INSTALL CLEAR SEALED FINISH OVER EXISTING CONC. FLOORS IN LIEU OF LVT FLOORING TILE AS ORIGINALLY SCHEDULED IN BREAKROOM 108, JANITOR 111, IT/STOR. 112 & STORAGE 113.

DEDUCT BID ALTERNATE NO. 9:

- CONTRACTOR SHALL SUBMIT CREDIT PRICING TO DELETE THE BELOW LISTED ITEMS.
- FURNISH & INSTALL PLASTIC LAMINATE COUNTERTOPS, EDGES & SPLASHES IN LIEU OF SOLID SURFACING AT ALL COUNTERS. THIS INCLUDES INFO./CIRCULATION 104, STAFF WORKROOM 105 & BREAKROOM 108.



RENOVATED EXISTING LIBRARY BUILDING - IBC 2015 CODE REVIEW

<p>GENERAL INFORMATION: THIS IS AN EXISTING LIBRARY BUILDING ON A SINGLE LOT IN SAN ANGELO, TEXAS. THE HEATED SQUARE FOOTAGE IS APPROXIMATELY 2,954 SQUARE FEET. THE EXISTING FACILITY IS CONSTRUCTED WITH CMU MASONRY EXTERIOR WALLS. NOTE THAT THERE IS DRYWALL FRAMING WITH METAL PANEL EXTERIOR LOCATED ABOVE THE STOREFRONT MAIN ENTRY. THE NEW INTERIOR WALLS WILL BE METAL STUD WITH GYPSUM BOARD FINISH. THE EXISTING ROOF IS A FLAT TYPE AND SHALL BE REPLACED WITH A NEW SINGLE PLY-INSULATED ROOFING SYSTEM APPLIED WITH LOW PARAPETS AT 3' SIDES OF THE PERIMETER OF THE BUILDING (BUILDING ROOF SLOPES DOWN TO THE WEST). THERE IS AN EXISTING 516 SQUARE FOOT COVERED PORCH AT THE EAST MAIN ENTRANCE OF THE BUILDING. THIS EXISTING FACILITY'S FOUNDATION IS SLAB ON GRADE CONSTRUCTION. THERE ARE NO NEW BUILDING EXTERIOR ADDITIONS PLANNED UNDER THIS CONTRACT.</p>		<p>TABLE 716.5 - OPENING PROTECTIONS: 2 HOUR RATED FIRE PARTITIONS = 90 MINUTE RATED DOOR AND FRAME (NO GLAZING IN DOOR) 1 HOUR RATED FIRE BARRIERS = 60 MINUTE MINIMUM - THUS THESE BARRIERS WILL BE EQUIPPED WITH 90 MINUTE RATED FIRE DOORS AND FRAMES - AT EGRESS PASSAGEWAYS 1 HOUR RATED FIRE PARTITIONS = 45 MINUTE GATED DOOR AND FRAME 1 HOUR RATED SMOKE BARRIERS = 20 MINUTE RATED DOOR AND FRAME</p>												
<p>SECTION 305.1 - THE MAIN OCCUPANCY FOR THIS FACILITY IS "A-3" ASSEMBLY.</p>		<p>TABLE 716.5 - FIRE RATED GLAZING IN PROTECTED OPENINGS: 3/4 HOUR DOOR = 1,296 SQ. IN. WITH MAX. GLASS DIMENSION NOT TO EXCEED 54" IN HEIGHT AS WELL AS WIDTH. 1/3 HOUR DOOR = UNLIMITED GLAZING.</p>												
<p>SECTION 305.1 - OCCUPANCY CLASSIFICATION</p> <table border="1"> <tr> <th>1ST LEVEL</th> <th>GROUP A-3</th> <th>4,246 SQ. FT. TO THE PERIMETER OF EXTERIOR WALLS SOUTH COVERED WALKWAY</th> <th>GROUP A-3</th> <th>516 SQ. FT. - COVERED PORCH</th> </tr> <tr> <td colspan="5">TOTAL AREA OF EXISTING LIBRARY BUILDING 4,762 SQ. FT. - OVERALL BUILDING</td> </tr> </table>		1ST LEVEL	GROUP A-3	4,246 SQ. FT. TO THE PERIMETER OF EXTERIOR WALLS SOUTH COVERED WALKWAY	GROUP A-3	516 SQ. FT. - COVERED PORCH	TOTAL AREA OF EXISTING LIBRARY BUILDING 4,762 SQ. FT. - OVERALL BUILDING					<p>TABLE 716.6 - OPENING FIRE PROTECTION ASSEMBLIES, BATING AND MARKINGS: OTHER FIRE BARRIERS: WITH 1-HOUR RATING ON THE FIRE BARRIER, GLAZING IS REQUIRED TO CARRY 3/4 HOUR (45 MINUTES) FIRE-RATING WITH A GLAZING MARKING OF D-H.</p>		
1ST LEVEL	GROUP A-3	4,246 SQ. FT. TO THE PERIMETER OF EXTERIOR WALLS SOUTH COVERED WALKWAY	GROUP A-3	516 SQ. FT. - COVERED PORCH										
TOTAL AREA OF EXISTING LIBRARY BUILDING 4,762 SQ. FT. - OVERALL BUILDING														
<p>TABLE 504.4 ALLOWABLE NUMBER OF STORIES ABOVE GRADE: MAXIMUM BUILDING HEIGHT 40 FT/1 STORIES EXISTING BUILDING HEIGHT 13 FEET (1 STORY)</p>		<p>SECTION 717.5.2 - FIRE-BARRIERS - DUCTS AND AIR TRANSFER OPENINGS IN FIRE BARRIERS: REFER TO MEP DRAWINGS FOR FIRE DAMPER LOCATIONS.</p>												
<p>TABLE 506.2 ALLOWABLE AREA FACTOR - SQ. FT.: ASSEMBLY "A-3" OCCUPANCY, TYPE 5B CONSTRUCTION 6,000 SQ. FT. (ALLOWABLE AREA FACTOR) ACTUAL TOTAL SQUARE FOOTAGE OF THIS BUILDING INCLUDING PORCH 4,762 SQ. FT. (EXTERIOR FACE OF PERIMETER) TOTAL SQUARE FOOTAGE OF BUILDING IS (UNDER) ADJUSTED ALLOWABLE BY 1,238 SQ. FT.</p>		<p>SECTION 718.2 - FIRE-BLOCKING: FIRE BLOCKING IS NOT REQUIRED IN THIS FACILITY BECAUSE IT IS CONSTRUCTED WITH NON-COMBUSTIBLE MATERIALS.</p>												
<p>SECTION 508 MIXED USE AND OCCUPANCY: THERE IS NO MIXED USE IN THIS NEW FACILITY - "A-3" (ASSEMBLY).</p>		<p>SECTION 718.3 - DRAFTSTOPPING: THERE IS NO REQUIREMENT FOR DRAFT STOPPING IN THIS FACILITY - NO COMBUSTIBLES IN THE ATTIC AREA OF THIS FACILITY.</p>												
<p>SECTION 508.2.4 SEPARATION OF OCCUPANCIES: THE A-3 WILL BE SEPARATED FROM THE S-1 STORAGE AREAS.</p>		<p>TABLE 803.11 - INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY: "A-3" OCCUPANCY WITH NO SPRINKLER SYSTEM INSTALLED • EXIT ENCLOSURE AND EXIT PASSAGEWAYS = A • CORRIDORS = A • ROOMS AND ENCLOSED SPACES = B</p>												
<p>TABLE 508.4 - REQUIRED SEPARATION OF OCCUPANCIES IN HOURS: ALL VALUES ARE BASED ON A SPRINKLERED BUILDING: • SEPARATION BETWEEN ("A-3" ASSEMBLY) AND ("S-1" STORAGE) SHALL BE SEPARATED BY 2-HOUR FIRE RATING</p>		<p>SECTION 906.3.1 - PORTABLE FIRE EXTINGUISHERS FOR CLASS A FIRE HAZARDS MINIMUM NUMBER OF FIRE EXTINGUISHERS REQUIRED PER FLOOR AREA AS FOLLOWS: • 1ST LEVEL: 4,246 SF./3,000 (LIGHT HAZARD OCCUPANCY) = 2 EXTINGUISHERS (2 EXTINGUISHERS PROVIDED)</p>												
<p>TABLE 509 - INCIDENTAL USES - SEPARATION AND OR PROTECTION THERE ARE NO INCIDENTAL USE SPACES IN THIS FACILITY AS LISTED ON TABLE 509.</p>		<p>SECTION 907.2 GROUP "A-3" MANUAL FIRE ALARM SYSTEM: NOT REQUIRED DUE TO OCCUPANT LOAD BEING LESS THAN 300 OCCUPANTS.</p>												
<p>SECTIONS 601 & 602 FIRE RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS): ALL VALUES ARE BASED ON A NON-SPRINKLERED BUILDING FOR TYPE 5B CONSTRUCTION:</p> <table border="1"> <tr> <th>REQUIRED FIRE RATING</th> <th>PROVIDED FIRE RATING</th> </tr> <tr> <td>• PRIMARY STRUCTURAL FRAME</td> <td>= 0 HOURS</td> </tr> <tr> <td>• EXTERIOR BEARING WALLS</td> <td>= 0 HOURS</td> </tr> <tr> <td>• INTERIOR BEARING WALLS</td> <td>= 0 HOURS</td> </tr> <tr> <td>• NON-BEARING INTERIOR WALLS AND PARTITIONS</td> <td>= 0 HOURS</td> </tr> <tr> <td>• ROOF CONSTRUCTION AND SECONDARY MEMBERS</td> <td>= 0 HOURS</td> </tr> </table>		REQUIRED FIRE RATING	PROVIDED FIRE RATING	• PRIMARY STRUCTURAL FRAME	= 0 HOURS	• EXTERIOR BEARING WALLS	= 0 HOURS	• INTERIOR BEARING WALLS	= 0 HOURS	• NON-BEARING INTERIOR WALLS AND PARTITIONS	= 0 HOURS	• ROOF CONSTRUCTION AND SECONDARY MEMBERS	= 0 HOURS	<p>SECTION 1004.1.2 - MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT IN THE EXISTING LIBRARY: TOTAL BUILDING OCCUPANCY OF ASSEMBLY A-3 LIBRARY SPACE: 1) READING ROOMS AND COMPUTER AREAS (812 SQ/FT @ 50 NET) = 17 PERSONS 2) BOOK STACK AREAS (1,952 SQ/FT @ 100 GROSS) = 20 PERSONS 3) CLASSROOM (398 SQ/FT @ 20 NET) = 20 PERSONS 4) OFFICE, RECEPTION & BREAKROOM (457 SQ/FT @ 100 GROSS) = 5 PERSONS 5) ACCESSORY STORAGE & MECHANICAL AREAS (139 SQ/FT @ 300 GROSS) = 1 PERSON TOTAL BUILDING OCCUPANCY LOAD = 63 TOTAL PERSONS</p>
REQUIRED FIRE RATING	PROVIDED FIRE RATING													
• PRIMARY STRUCTURAL FRAME	= 0 HOURS													
• EXTERIOR BEARING WALLS	= 0 HOURS													
• INTERIOR BEARING WALLS	= 0 HOURS													
• NON-BEARING INTERIOR WALLS AND PARTITIONS	= 0 HOURS													
• ROOF CONSTRUCTION AND SECONDARY MEMBERS	= 0 HOURS													
<p>SECTION/TABLE 602 - FIRE-RESISTANCE RATING REQUIREMENTS OF EXT. WALLS: CLEARANCE AROUND THIS EXISTING BUILDING IS GREATER THAN 10 FEET, THUS NO RATING OF EXTERIOR WALLS IS REQUIRED.</p>		<p>SECTION 1005.3.2 - OTHER EGRESS COMPONENTS 63 TOTAL PERSONS X .7 = 44.1 OF TOTAL CLEARANCE REQUIRED AT THE EGRESS OPENINGS. THIS BUILDING HAS A TOTAL OF 108' OF OPENING CLEARANCE DIVIDED AMONG THREE (3) SEPARATE EXTERIOR EXITS IN THIS FACILITY.</p>												
<p>SECTION 403: TYPE VB CONSTRUCTION: THIS BUILDING'S AREA AND HEIGHT ENABLES THIS BUILDING TO BE A TYPE 5B CONSTRUCTION.</p>		<p>TABLE 1006.2.1 - COMMON PATH OF EGRESS TRAVEL: NON-SPRINKLERED BUILDING - COMMON PATH OF EGRESS TRAVEL DISTANCE FOR "A-3" OCCUPANCY = 75'-0".</p>												
<p>TABLE - 705.8 MAXIMUM AREA OF EXTERIOR WALL OPENINGS BASED ON FIRE SEPARATION DISTANCE</p> <table border="1"> <tr> <th>FIRE SEPARATION DISTANCE</th> <th>DEGREE OF OPENING PROTECTION</th> <th>ALLOWABLE AREA</th> </tr> <tr> <td>10 TO LESS THAN 15 FEET</td> <td>UNPROTECTED (UP-3)</td> <td>75%</td> </tr> </table>		FIRE SEPARATION DISTANCE	DEGREE OF OPENING PROTECTION	ALLOWABLE AREA	10 TO LESS THAN 15 FEET	UNPROTECTED (UP-3)	75%	<p>TABLE 1006.3.1 - MINIMUM NUMBER OF EXITS BASED ON OCCUPANT LOAD: MAXIMUM OCCUPANCY OF THE EXISTING LIBRARY = 63 PERSONS - THUS 2 EXITS ARE REQUIRED - THREE (3) EXITS ARE PROVIDED.</p>						
FIRE SEPARATION DISTANCE	DEGREE OF OPENING PROTECTION	ALLOWABLE AREA												
10 TO LESS THAN 15 FEET	UNPROTECTED (UP-3)	75%												
<p>SECTION 707.9: FIRE BARRIERS - CONTINUITY: FIRE BARRIERS SHALL EXTEND FROM THE TOP OF THE FOUNDATION BELOW TO THE UNDERSIDE OF THE ROOF SHEATHING, SUCH FIRE BARRIERS SHALL BE CONTINUOUS THROUGH CONCEALED SPACES, SUCH AS THOSE ABOVE SUSPENDED CEILING SYSTEMS. OPENING PROTECTION IS REQUIRED FOR ALL PENETRATIONS THROUGH THESE FIRE BARRIER ASSEMBLIES.</p>		<p>TABLE 1007.1.1 - TWO EXITS OR EXIT ACCESS DOORWAYS: TWO REQUIRED EXITS OUT OF A SPACE SHALL BE REQUIRED TO BE SEPARATED BY A DISTANCE OF A MINIMUM OF 1/2 THE DIAGONAL DISTANCE OF THE SPACE BETWEEN THE TWO OR MORE EXITS.</p>												
<p>SECTION 708.1 ITEM #3 - FIRE PARTITIONS: NO CORRIDOR WALLS ARE NOT INCLUDED IN PROJECT. REFER TO FLOOR PLAN FOR FIRE RATED PARTITION LOCATIONS.</p>		<p>TABLE 1017.2 - EXIT ACCESS TRAVEL DISTANCE: OCCUPANCY OF "A-3" WITH NO FIRE SPRINKLER SYSTEM INSTALLED - MAXIMUM TRAVEL DISTANCE = 200 LINEAR FEET TO AN EXIT OR EXIT PATHWAY OR EXIT ENCLOSURE.</p>												
<p>SECTION 714 - FIRE BARRIER "PENETRATIONS": ALL PENETRATIONS OF FIRE WALLS, FIRE BARRIERS AND FIRE PARTITIONS WILL BE EQUIPPED WITH FIRE RATED PROTECTED OPENINGS PER THIS SECTION OF THE CODE.</p>		<p>TABLE 1020.2 - MINIMUM CORRIDOR WIDTH: MINIMUM CORRIDOR WIDTH IS 42 INCHES. PROVIDED CORRIDOR WIDTH IS GREATER THAN 60 INCHES.</p>												
<p>SECTION 716.3: MARKING FIRE-RATED GLAZING ASSEMBLIES: MARKINGS ON FIRE-RATED GLAZING SHALL COMPLY WITH THIS SECTION OF THE CODE AS WELL AS TABLE 716.3.</p>		<p>SECTION 1020.4 - DEAD END CORRIDORS: DEAD END CORRIDORS IN "A-3" OCCUPANCY WITH NO FIRE SPRINKLER SHALL NOT EXCEED 20'-0". THERE ARE NO DEAD END CORRIDORS IN THIS FACILITY.</p>												

SHEET LIST	
Sheet Number	Sheet Name
A0.00	COVER SHEET
A1.00	SITE/ROOF PLAN & DETAILS
A2.01	EXIST. DEMO. & FINAL LAYOUT FLOOR PLANS, ROOM FINISH SCHEDULE & NOTES, DOOR SCHEDULE & DETAILS, WALL SCHEDULE KEY & DOOR/WINDOW ELEVS.
A3.01	RCP, LEGEND & DETAILS, EXT. BLDG. ELEVS. & BLDG. SECTIONS
A4.01	WALL SECTIONS & DETAILS
A5.01	INT. MILLWORK & TOILET ROOM ELEVS., FURNITURE LAYOUT FLOOR PLAN & SCHEDULE
S1.1	WALL OPENING PLAN & SECTIONS
S2.1	GENERAL NOTES & DETAILS
MPE-1	SITE UTILITY PLAN
MPE-2	ROOF PLAN
MPE-3	DEMOLITION PLAN
P-1	PLUMBING COVER SHEET
P-2	PLUMBING PLAN
P-3	PLUMBING RISER DIAGRAMS
M-1	MECHANICAL COVER SHEET
M-2	MECHANICAL PLAN
M-3	MECHANICAL DETAILS
E-1.0	ELECTRICAL COVER SHEET
E-1.1	ELECTRICAL COVER SHEET
E-2	ELECTRICAL PLAN
E-3	LIGHTING PLAN
E-4	ELECTRICAL RISER DIAGRAM, DETAILS & SCHEDULES

PROJECT TEAM

Architect of Record
KFW Architects
378 West Concho Ave.
San Angelo, TX 76903
(325) 653-2900

MEP Engineering
Power Systems, Inc.
Attn: Paul Wilkerson, P.E.
P.O. Box 2863
San Angelo, Texas 76902
(325) 659-2235

Structural Engineer
SKG Engineering, LLC
Attn: Jerry White, P.E.
706 South Abe Street
San Angelo, TX 76903
(325) 655-1288

PLUMBING CODE									
2015 INTERNATIONAL BUILDING CODE									
<p>GENERAL INFORMATION: EXISTING LIBRARY BUILDINGS MAIN FUNCTION IS "A-3" ASSEMBLY OCCUPANCY TYPE WITH 63 TOTAL PERSONS IN THE CONDITIONED BUILDING SPACE.</p>									
<p>SECTION 2901- GENERAL PLUMBING: 63 TOTAL PERSONS AS OCCUPANCY DIVIDED BY 2 = 32 MALE AND 32 FEMALE OCCUPANTS</p>									
<p>TABLE 2902.1 FOR THE MALES: THE FOLLOWING ARE THE PLUMBING FIXTURE COUNT TO ACCOMMODATE THE 32 TOTAL MALES IN THIS FACILITY:</p> <table border="1"> <tr> <td>32 MALES / 150 =</td> <td>1 WATER CLOSET REQUIRED</td> </tr> <tr> <td></td> <td>1 WATER CLOSET PROVIDED</td> </tr> </table>	32 MALES / 150 =	1 WATER CLOSET REQUIRED		1 WATER CLOSET PROVIDED	<p>TABLE 2902.1 FOR THE FEMALES: THE FOLLOWING ARE THE PLUMBING FIXTURE COUNT TO ACCOMMODATE THE 32 TOTAL FEMALES IN THIS FACILITY:</p> <table border="1"> <tr> <td>32 FEMALES / 75 =</td> <td>1 WATER CLOSET REQUIRED</td> </tr> <tr> <td></td> <td>1 WATER CLOSET PROVIDED</td> </tr> </table>	32 FEMALES / 75 =	1 WATER CLOSET REQUIRED		1 WATER CLOSET PROVIDED
32 MALES / 150 =	1 WATER CLOSET REQUIRED								
	1 WATER CLOSET PROVIDED								
32 FEMALES / 75 =	1 WATER CLOSET REQUIRED								
	1 WATER CLOSET PROVIDED								
<p>32 MALES / 200 =</p>	1 LAVATORY REQUIRED								
	1 LAVATORY PROVIDED								
	1 LAVATORY PROVIDED								
<p>DRINKING FOUNTAINS 63 OCCUPANTS / 1000 = 1 DRINKING FOUNTAIN IS REQUIRED 1 (HI-LOW) DRINKING FOUNTAINS (EWC) ARE PROVIDED</p>									
<p>SERVICE SINK 1 SERVICE SINK IS REQUIRED 1 SERVICE SINK PROVIDED</p>									
FIRE PARTITIONS									
<p>* REFER TO LIFE SAFETY PLANS FOR EACH BUILDING'S REQUIRED FIRE PARTITIONS *</p>									
SCHEDULE OF ALTERNATES									
<p>REFER TO SPECIFICATIONS SECTION 01 2300 & THIS SHEET FOR DESCRIPTION OF PROJECT ALTERNATES</p>									
ALLOWANCES									
<p>REFER TO SPECIFICATIONS SECTION 01 2100 FOR DESCRIPTION OF PROJECT ALLOWANCES</p>									

Drawn By _____
Checked By _____

STRUCTURAL ENGINEER
SKG ENGINEERING

MEP ENGINEER
POWER SYSTEMS, INC.

378 W. CONCHO AVE.
SAN ANGELO, TX 76903
KFWARCHITECTS.COM

KFW ARCHITECTS AIA

ISSUED FOR PERMIT, PRICING & CONSTRUCTION

MAY 6, 2022

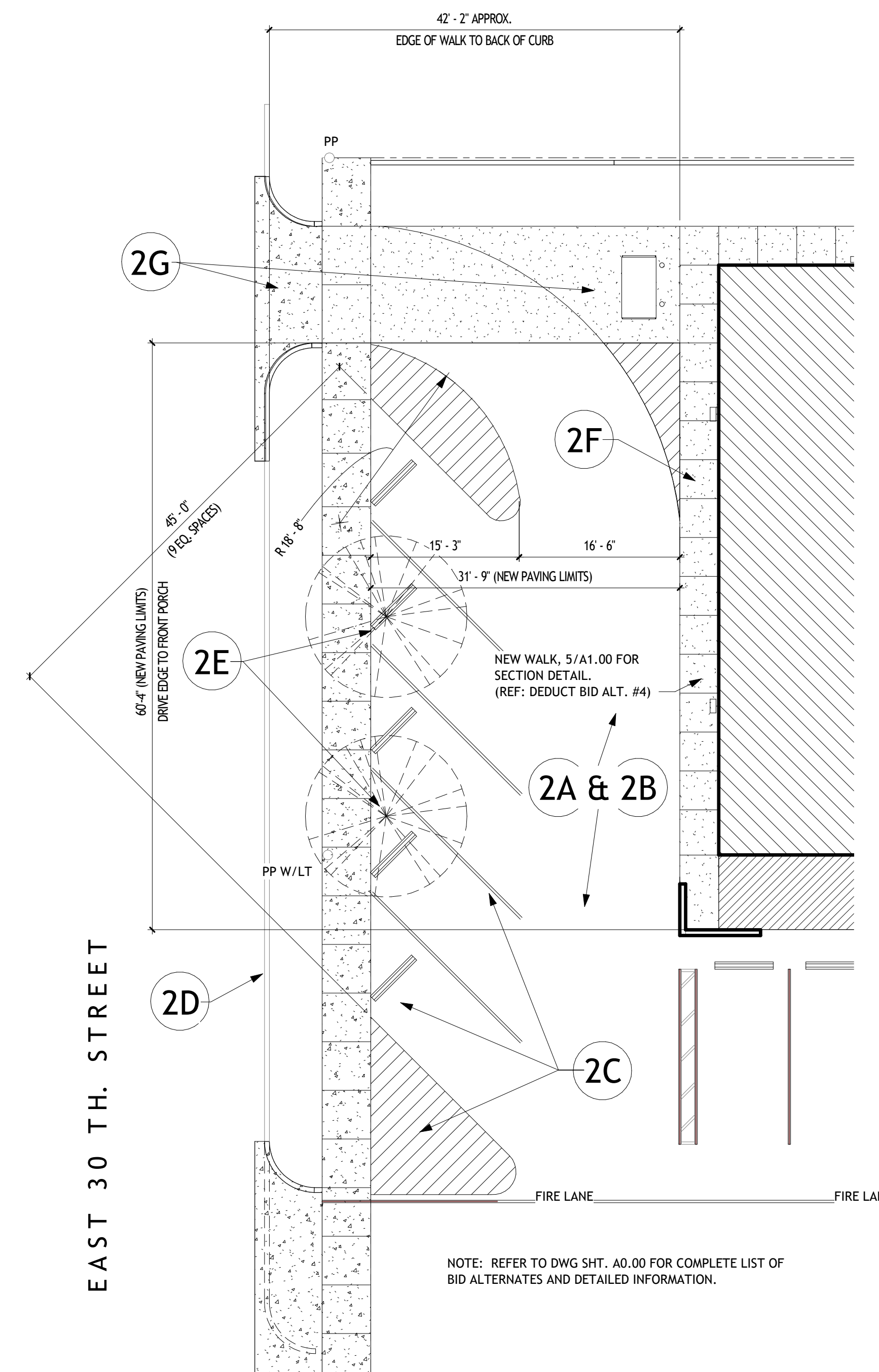


RENOVATIONS OF
NORTH ANGELO BRANCH LIBRARY
TOM GREEN COUNTY

Project No. 292-09-1020

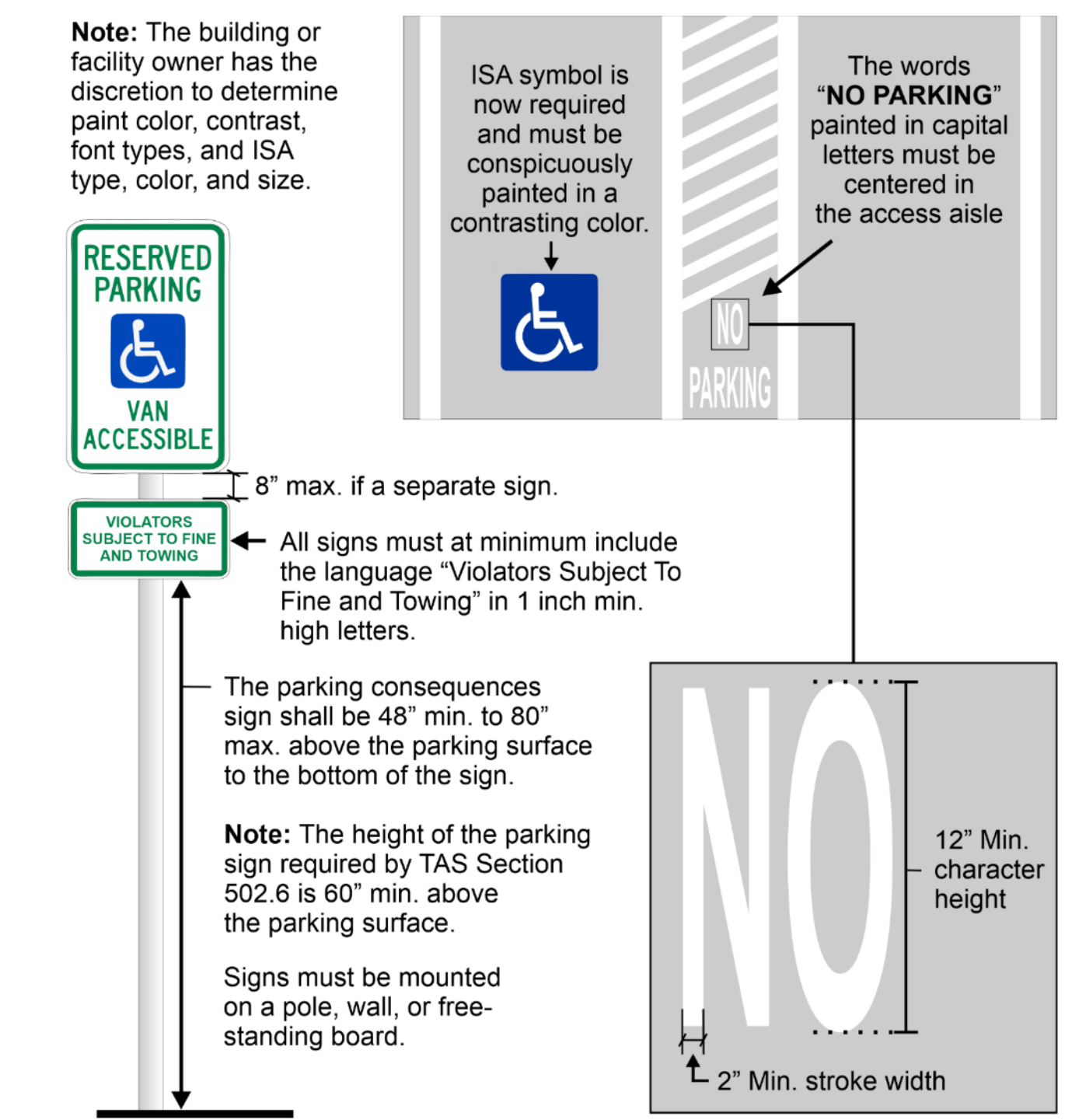
Date MAY 6, 2022

Sheet Number
A0.00



2 SITE PLAN - ADD BID ALTERNATE NO. 2 - SOUTH PARKING
1" = 10'-0"

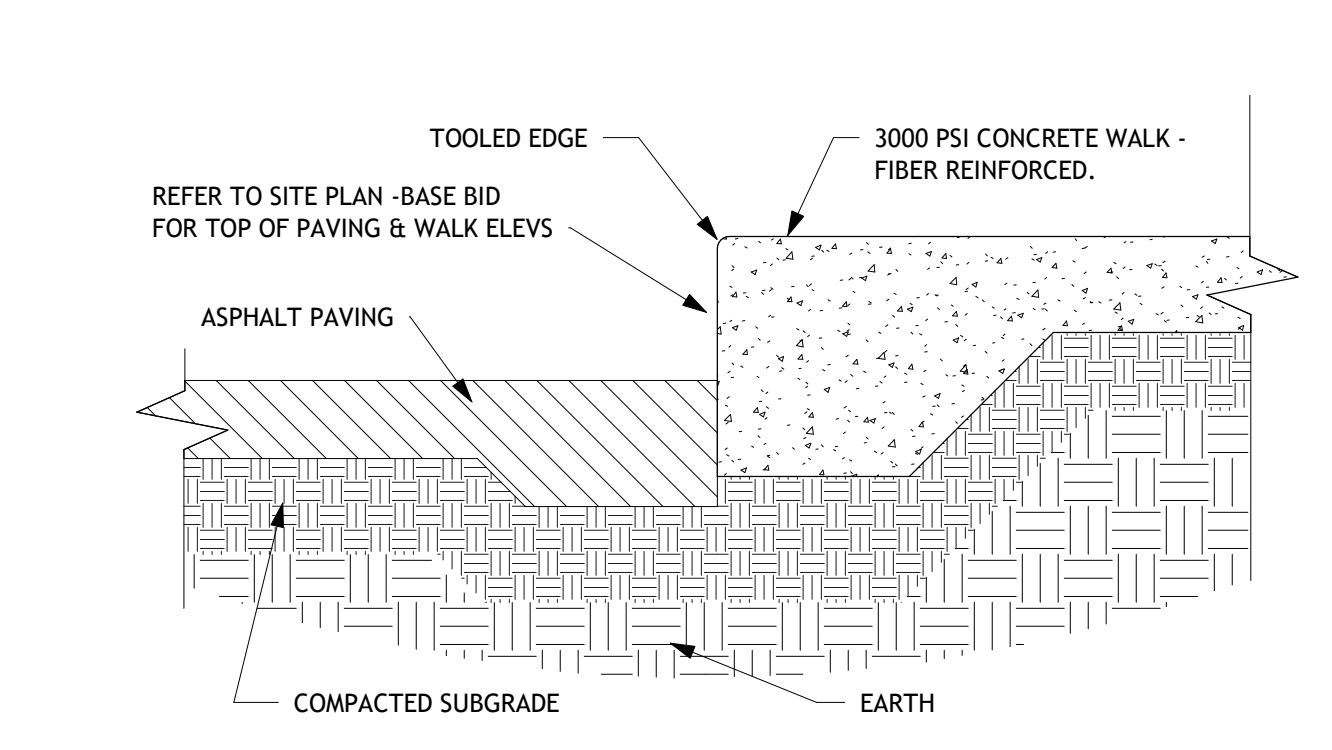
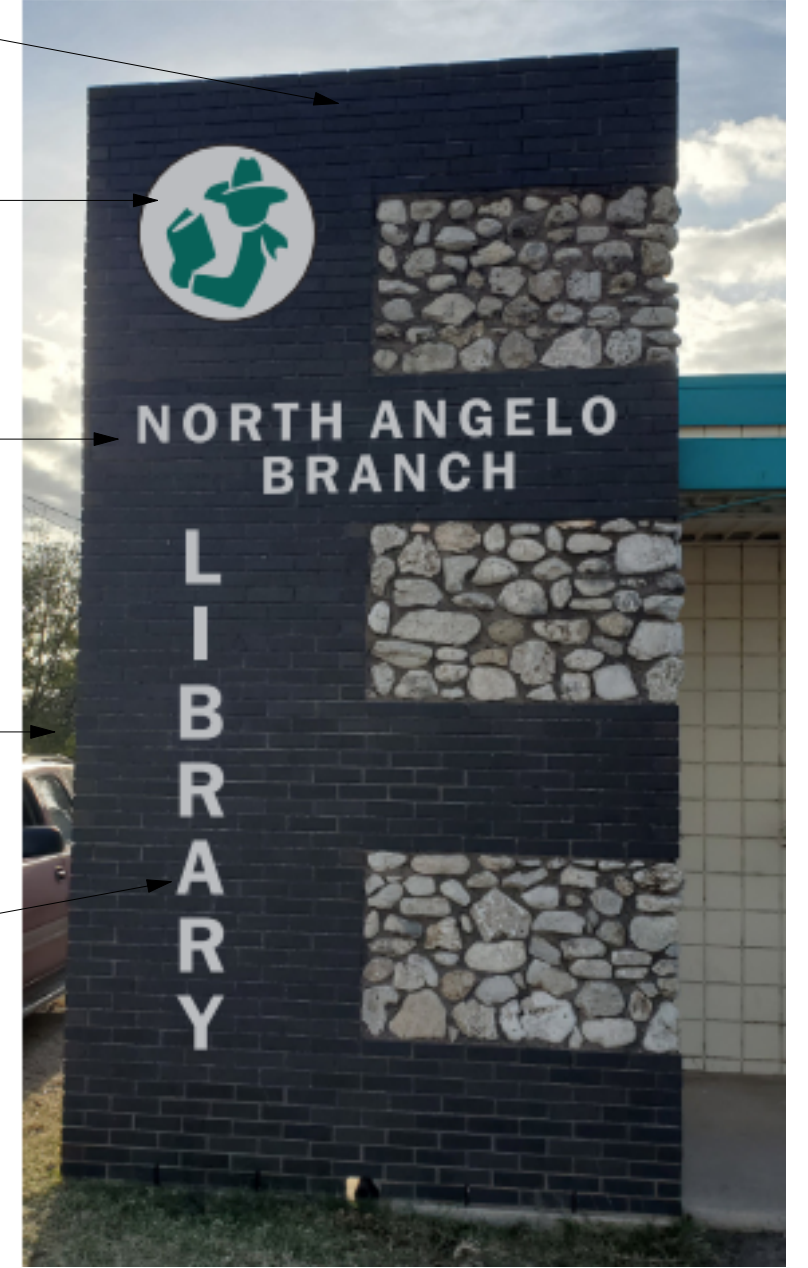
PROPERTY LEGAL DESCRIPTION:
BLOCKS 10 & 11, SUBDIVISION MATHER ADDITION NO. 1, SOUTH 105.75 FT. OF WEST 166.00 FT. OF BLOCKS 10 & 11.
3001 NORTH CHADBOURNE ST.
PROPERTY ZONING: "CG/CH" GENERAL COMMERCIAL /HEAVY COMMERCIAL



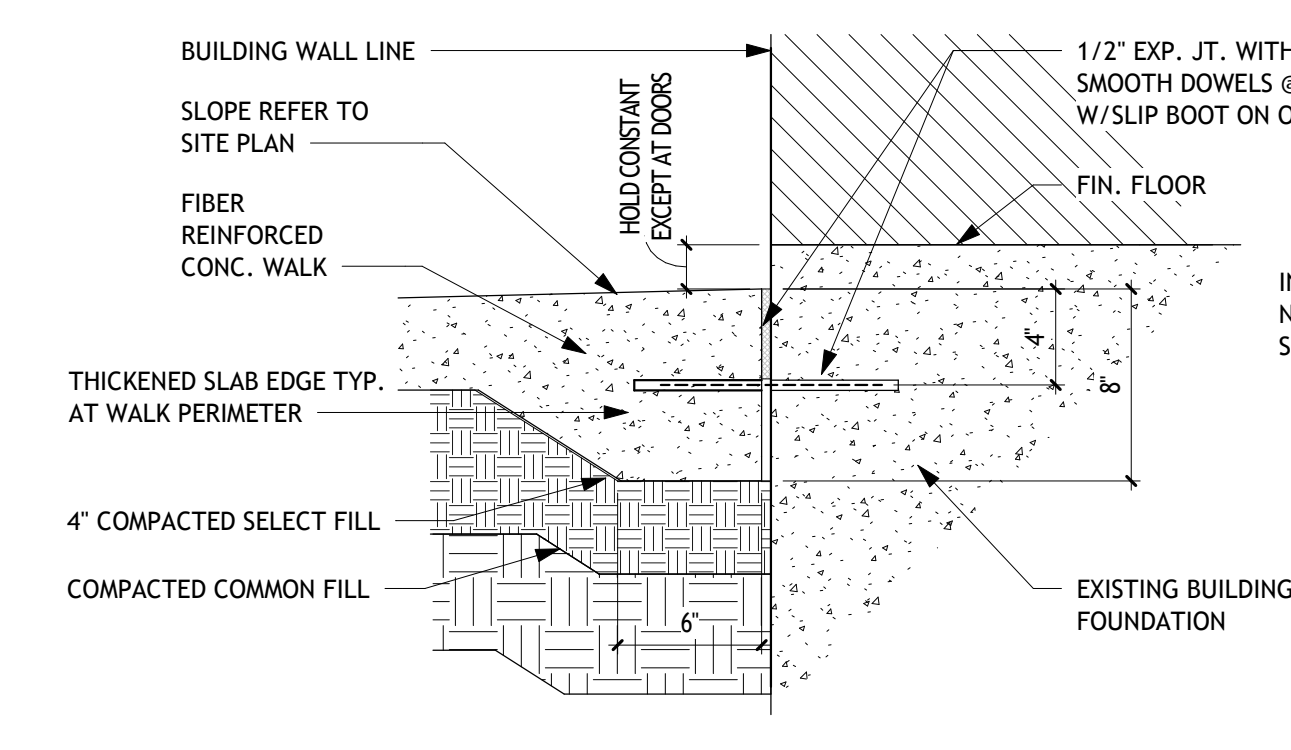
3 ACCESSIBLE PARKING SIGN & STRIPING DETAILS
(REF: BASE BID)

- SITE GENERAL NOTES**
- COORDINATE SECURITY MEASURES WITH OWNER BEFORE CONSTRUCTION STARTS.
 - GENERAL CONTRACTOR SHALL SECURE AND COMPLY WITH PERMITS FROM TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ), ON TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM (TPDES) PROGRAM. THIS PERMIT ALSO COVERS STORM WATER DISCHARGES. SOURCE FOR THIS INFORMATION WAS OBTAINED AT TCEQ WEBSITE - TPDES CONSTRUCTION STORM WATER PERMITS AT WWW.TNRCC.STATE.TX.US/PERMITTING/WATERPERM/CONSTRUCT.HTML.
 - G.C. SHALL TAKE EVERY PRECAUTION NECESSARY TO PROTECT THE EXISTING BUILDING, SITE COMPONENTS, EQUIPMENT, ETC. THAT ARE TO REMAIN DURING CONSTRUCTION. UTILITY LINES SHOWN ON THESE PLANS ARE LOCATED AS PER ORIGINAL PLOT PLAN DRAWINGS OR SURVEY, THEREFORE LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL VERIFY ACTUAL LOCATIONS OF UTILITY LINES AND SERVICES ON THE JOB SITE.
 - DEMOLITION OF ITEMS ON THIS SITE ARE TO BE REMOVED BY GENERAL CONTRACTOR UNLESS NOTED OTHERWISE.
 - REFER TO MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR MEP ENGINEER'S COORDINATION OF UTILITY INSTALLATION.
 - GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING SITE AND JOB CONDITIONS AND REPORT ANY DISCREPANCIES TO THE ARCHITECT BEFORE SUBMITTING BID.
 - G.C. IS TO VERIFY ALL FINISH GRADES WITH ARCHITECT, SO AS TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDINGS, WALKS AND TO ELIMINATE ANY PONDING. ANY DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT.
 - G.C. IS TO PROVIDE UNIFORM SLOPES FROM CONTOURS AND SPOT ELEVATIONS TO EXISTING GRADES.
 - PROVIDE PARKING LOT SEAL COATING AND STRIPING AS INDICATED ON THE DRAWINGS AND AS NOTED IN THE SPECIFICATIONS.
 - SAW CUT EXISTING ASPHALT PAVEMENT TO CLEAN STRAIGHT LINES WHERE NEW PAVING IS INSTALLED UNDER BID ALTERNATE NO. 1.
 - G.C. IS TO VERIFY THAT ALL HANDICAPPED ACCESSIBLE ROUTES ARE TO COMPLY WITH THE STATE STANDARDS 'TAS 2012' FOR SLOPE AND CROSS SLOPES.
 - GENERAL CONTRACTOR IS TO FOLLOW ALL TESTING REQUIREMENTS FOR ALL SITE COMPONENTS IN REGARDS TO BACKFILLING, COMPACTED SUBGRADE, COMPACTED SELECT FILL, COMPACTED ROAD BASE, ETC. OUTSIDE THE BUILDING LINE AS NOTED IN THE STRUCTURAL DOCUMENTS OF THIS CONTRACT DOCUMENT SET.
 - G.C. SHALL PROTECT ALL EXISTING TREES THAT ARE TO REMAIN.
 - G.C. SHALL PLACE EROSION CONTROL COR LOGS OR SILT FENCING AS REQUIRED.
 - GENERAL CONTRACTOR SHALL COORDINATE WITH AND MEET ALL STATE AND OR LOCAL REQUIREMENTS FOR THE DRIVEWAY ENTRANCES, ETC. CONTRACTOR IS TO VERIFY ANY AND ALL CHANGES REQUIRED WITH THE ARCHITECT. CONTRACTOR IS TO PAY ALL FEES AND INCLUDE PRICING FOR ANY CHANGES REQUIRED AT THE DRIVEWAY ENTRANCES DUE TO STATE AND OR LOCAL REQUIREMENTS.
 - G.C. WILL HAVE USE OF ENTIRE BUILDING AND PROPERTY DURING CONSTRUCTION. CONSULT WITH OWNER FOR CONSTRUCTION STAGING AREAS.

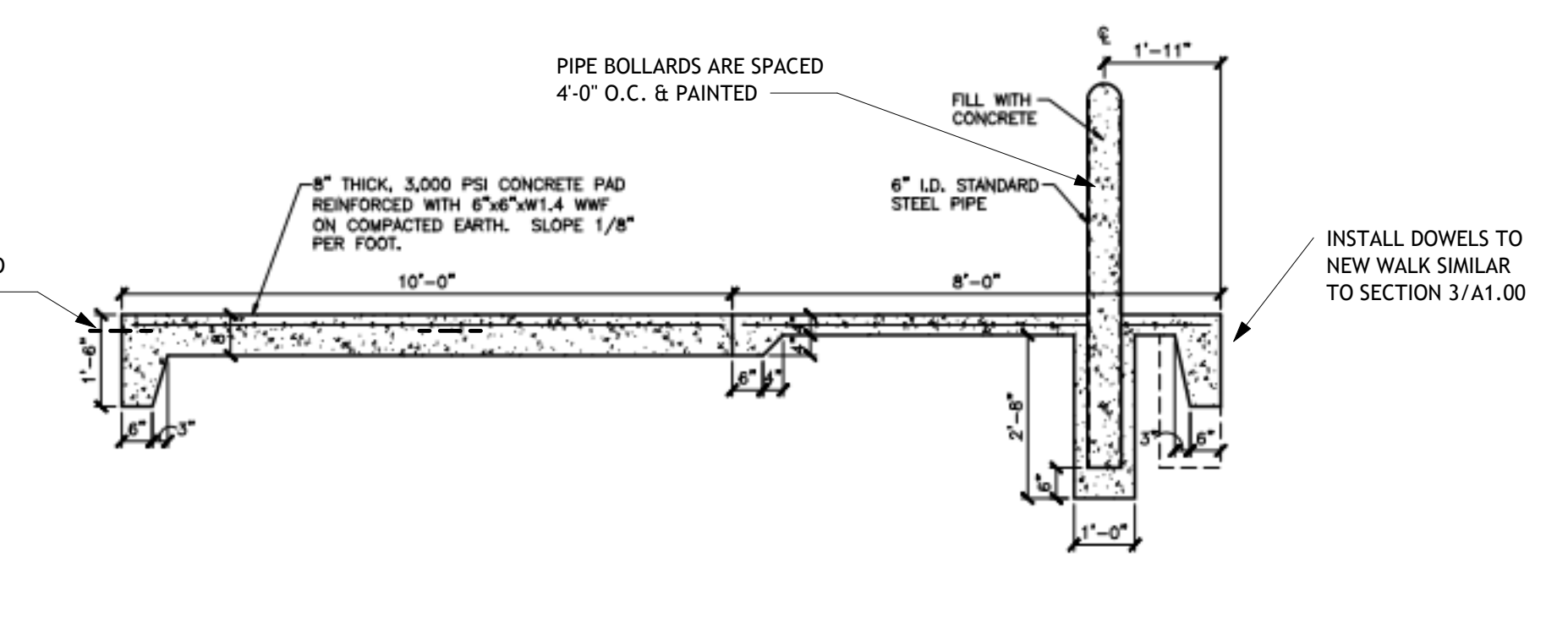
4 NEW BLDG. FRONT SIGNAGE ELEV.
(REF: DEDUCT BID ALT. #3)



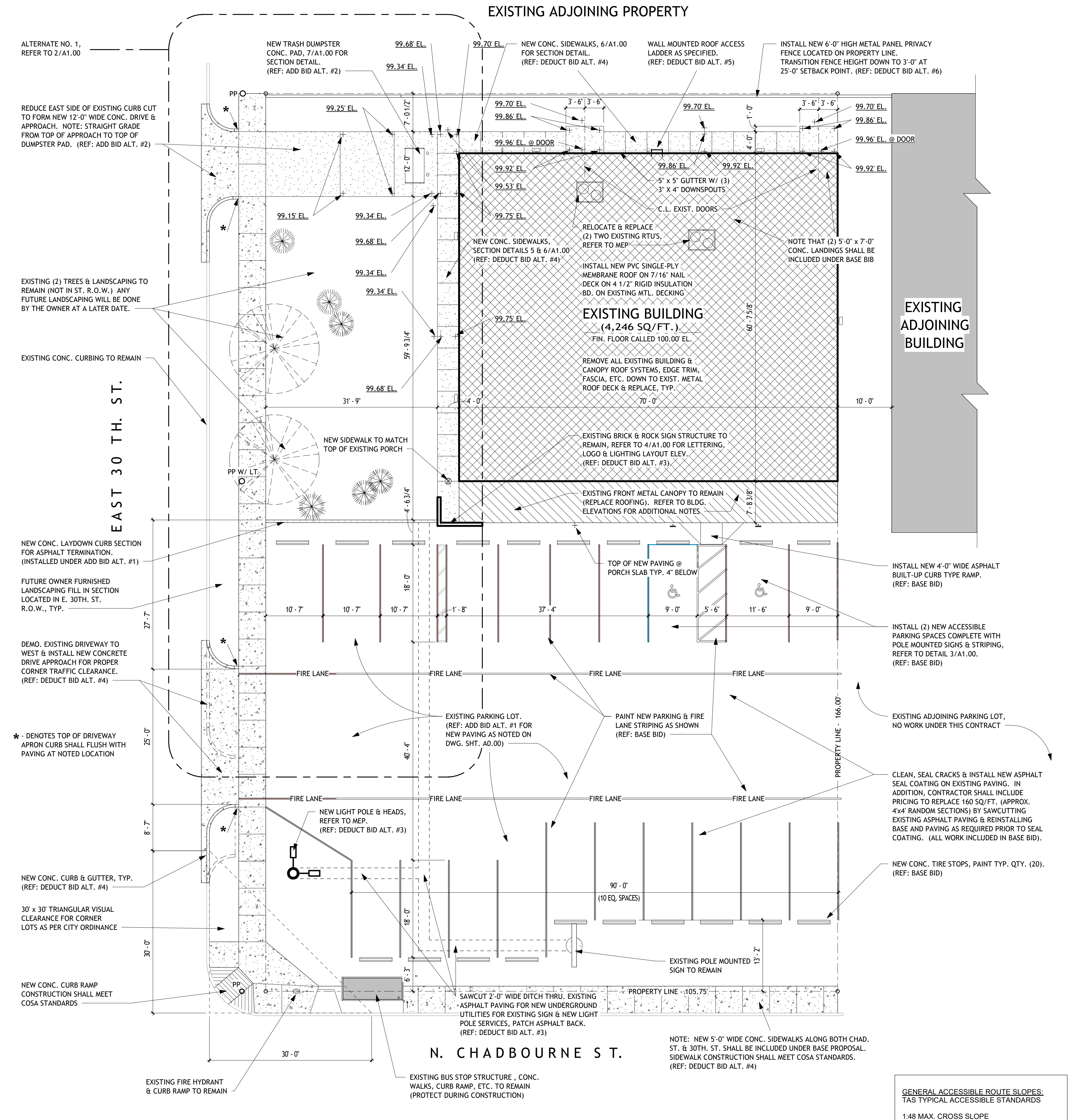
5 NEW ASPHALT PAVING TO WALK SECTION
1 1/2" = 1'-0" (REF: DEDUCT BID ALT. #4)



6 NEW CONC. WALK AT BLDG. SECTION
1 1/2" = 1'-0" (REF: DEDUCT BID ALT. #4)



7 DUMPSTER CONC. PAD & BOLLARD SECTION
3/8" = 1'-0" (REF: ADD BID ALT. #2)



1 SITE/ROOF PLAN - BASE BID
1" = 10'-0"

GENERAL ACCESSIBLE ROUTE SLOPES
TAS TYPICAL ACCESSIBLE STANDARDS
1:48 MAX. CROSS SLOPE
1:20 MAX. SLOPE WITH RUN OF WALK
1:12 MAX. SLOPE FOR RAMP AND REQUIRES HANDRAILS ON EACH SIDE, EXCEPT CURB RAMPS DO NOT REQUIRE HANDRAILS

Drawn By _____
Checked By _____

STRUCTURAL ENGINEER
SKG ENGINEERING

MEP ENGINEER
POWER SYSTEMS, INC.

378 W. CONCHO AVE.
SAN ANGELO, TX 76903
Kw Architects, Inc.

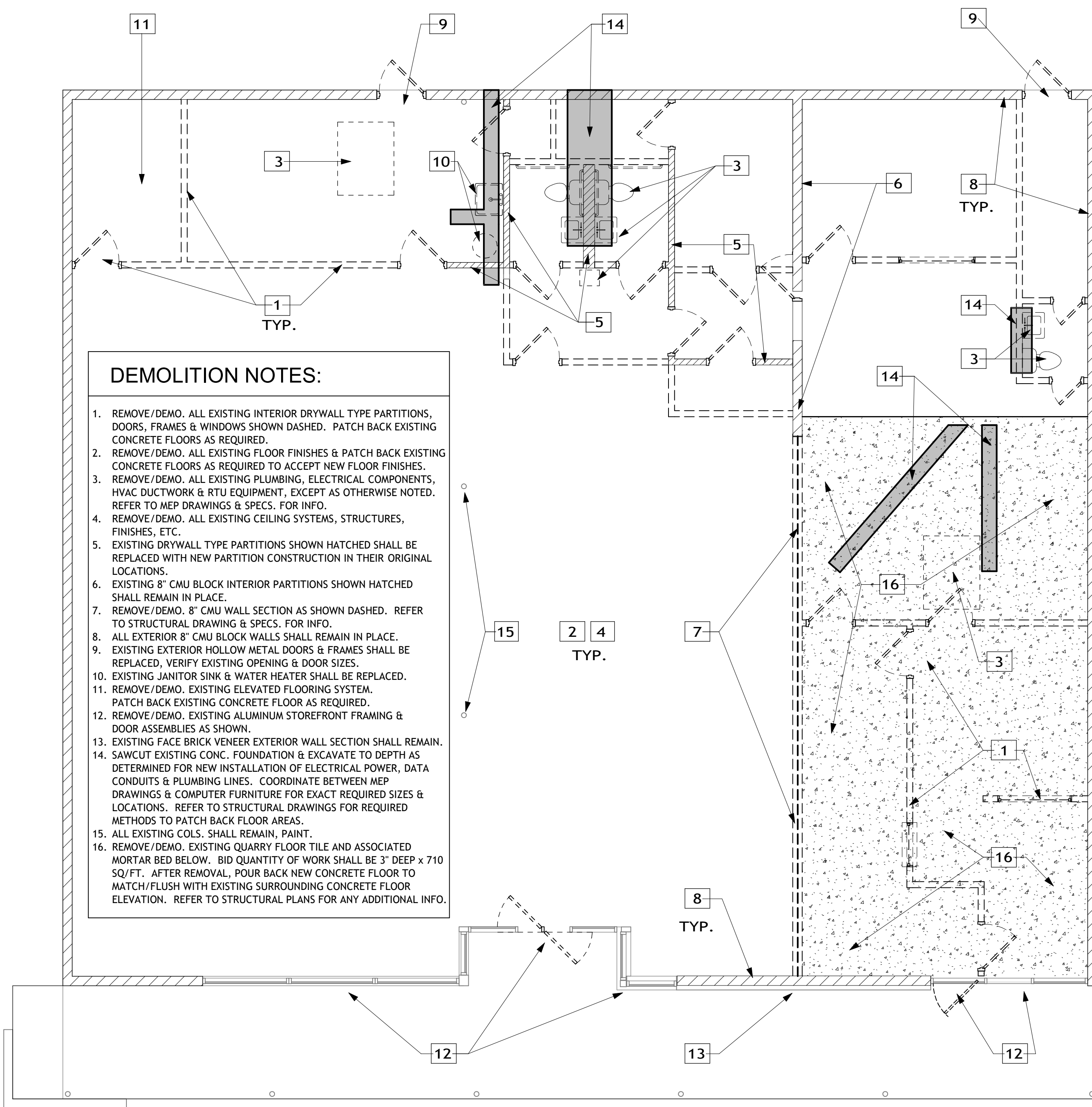
ISSUED FOR PERMIT, PRICING & CONSTRUCTION
MAY 6, 2022

REGISTERED ARCHITECT
STATE OF TEXAS
03/06/2022

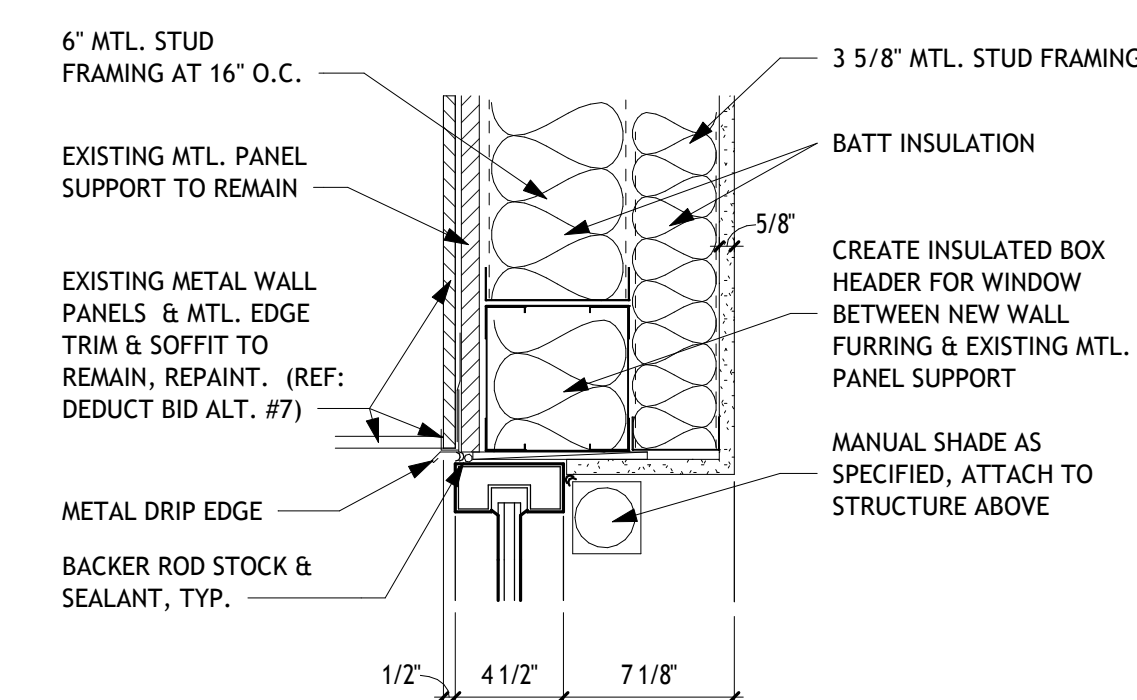
RENOVATIONS OF NORTH ANGELO BRANCH LIBRARY
TOM GREEN COUNTY

Project No. 292-09-1020
Date MAY 6, 2022
Sheet Number
A1.00

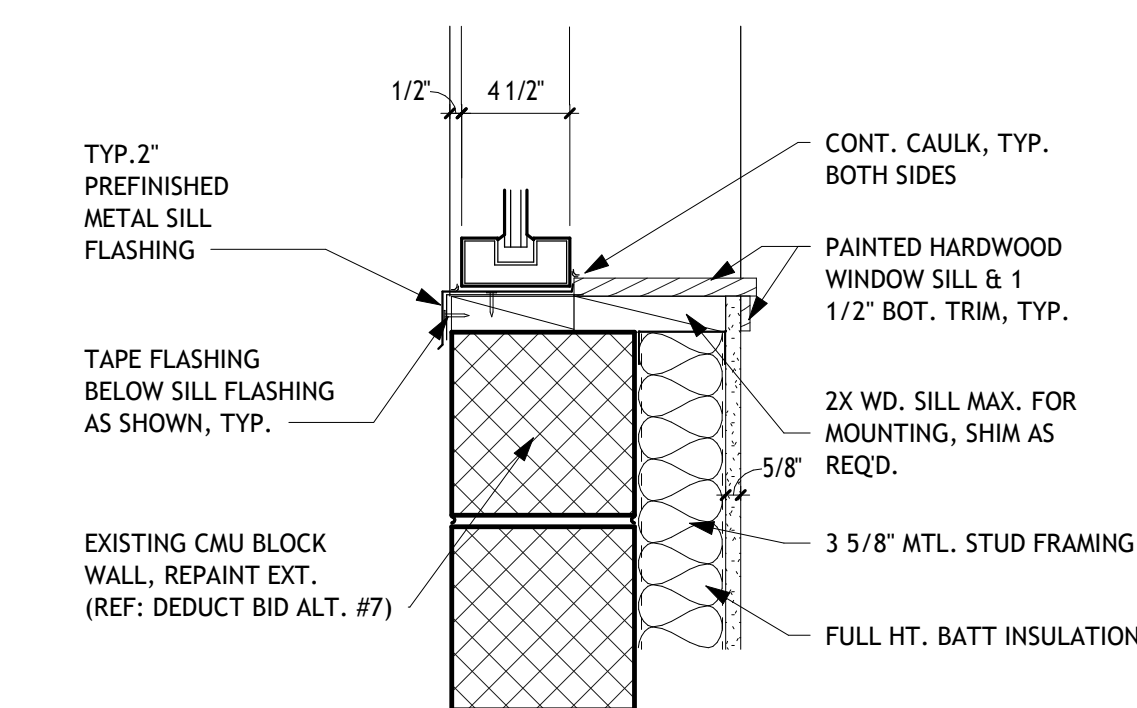
Copyright © KFW Architects AIA, Inc. 2022



2 FLOOR PLAN - EXISTING DEMO.
3/16" = 1'-0"

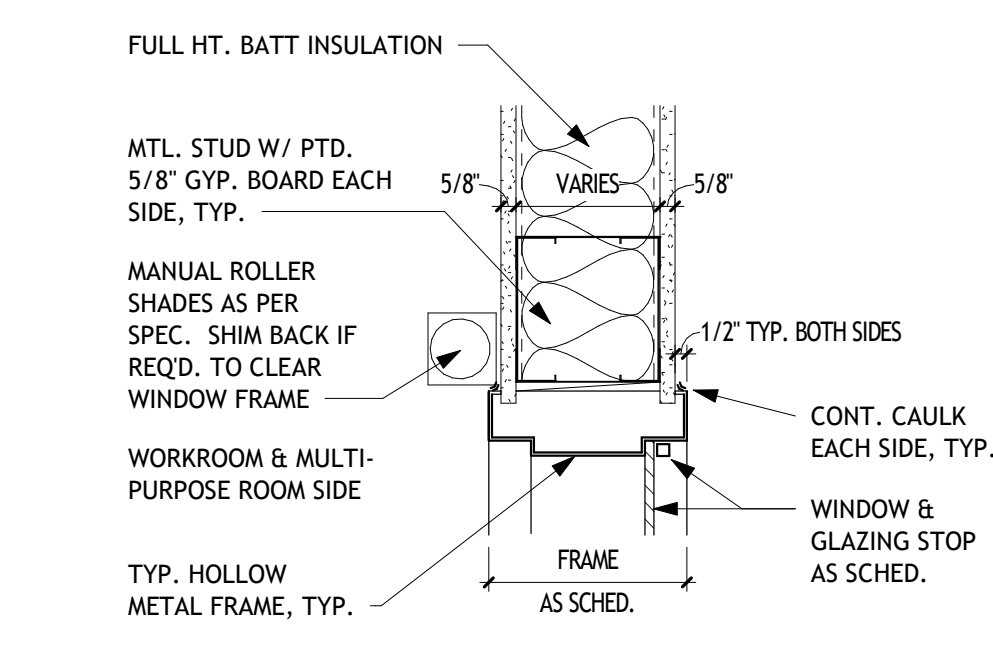


3 EXT. ALUM. WINDOW HEAD DTL.
1 1/2" = 1'-0"



4 EXT. ALUM. WINDOW SILL DTL.
1 1/2" = 1'-0"

5 INT. HM DOOR JAMB DTL.
1 1/2" = 1'-0"



6 INT. HM DOOR JAMB DTL.
1 1/2" = 1'-0"

FINISH SCHEDULE					
ROOM NO.	NAME	BASE	FLOOR	WALL	CEILING
101	ENTRY/RECEPTION	4" HIGH RUBBER	LVT	PAINTED GWB	NO CEILING, EXPOSED STRUCTURE
102	MAIN CIRCULATION BOOK AREA	4" HIGH RUBBER	CARPET TILE	PAINTED GWB	NO CEILING, EXPOSED STRUCTURE
103	CHILDREN'S AREA	4" HIGH RUBBER	CARPET TILE	PAINTED GWB	NO CEILING, EXPOSED STRUCTURE
104	INFO. & CIRCULATION	4" HIGH RUBBER	LVT	PAINTED GWB	NO CEILING, EXPOSED STRUCTURE
105	STAFF WORKROOM	4" HIGH RUBBER	LVT	PAINTED GWB	ACOUSTIC CLG. TILE
106	COMPUTER RESEARCH	4" HIGH RUBBER	LVT	PAINTED GWB	NO CEILING, EXPOSED STRUCTURE
107	MULTI-PURPOSE ROOM	4" HIGH RUBBER	LVT	PAINTED GWB	ACOUSTIC CLG. TILE
108	BREAK ROOM	4" HIGH RUBBER	LVT	PAINTED GWB	ACOUSTIC CLG. TILE
109	WOMEN	CERAMIC BASE	QUARRY TILE	CERAMIC TILE	PAINTED GYP. BD.
110	MEN	CERAMIC BASE	QUARRY TILE	CERAMIC TILE	PAINTED GYP. BD.
111	JANITOR	4" HIGH RUBBER	LVT	PAINTED GWB W/FRP	PAINTED GYP. BD.
112	I.T./STOR.	4" HIGH RUBBER	LVT	PAINTED GWB	ACOUSTIC CLG. TILE
113	STORAGE	4" HIGH RUBBER	LVT	PAINTED GWB	ACOUSTIC CLG. TILE
114	EXIT PASSAGE	4" HIGH RUBBER	LVT	PAINTED GWB	PAINTED GYP. BD.

ROOM FINISH NOTES:

- WALL MOUNTED CERAMIC TILE IN BOTH TOILET ROOMS 109 & 110 SHALL BE INSTALLED TO A HEIGHT OF 7'-2" AFF (TOP OF DOOR FRAME).
- CEILING CONSTRUCTION IN JANITOR 111 AND EXIT PASSAGE 114 SHALL HAVE 1-HOUR FIRE PROTECTION RATING. CEILING CONSTRUCTION SHALL BE EQUAL TO U.L. #1 501.
- WALL CONSTRUCTION AROUND JANITOR 111 AND EXIT PASSAGE 114 SHALL HAVE 1-HOUR FIRE PROTECTION RATING. WALL CONSTRUCTION SHALL BE EQUAL TO U.L. #U 419.
- ALL AREAS SCHEDULED WITH "NO CEILING, EXPOSED STRUCTURE" SHALL HAVE ALL EXISTING CEILING JOISTS, ROOF DECK, DUCTWORK, CONDUITS, PIPING, ETC. PAINTED.
- FIBERGLASS REINFORCED WALL PANELS & TRIM SHALL BE INSTALLED ON ALL WALLS IN JANITOR 111 TO BOTTOM OF CEILING AT 8'-0" AFF.
- WALL CONSTRUCTION AROUND STORAGE ROOM 113 (2 WALLS) SHALL HAVE 2-HOUR FIRE PROTECTION RATING. WALL CONSTRUCTION SHALL BE EQUAL TO U.L. #U 419.

WALL SCHEDULE KEY

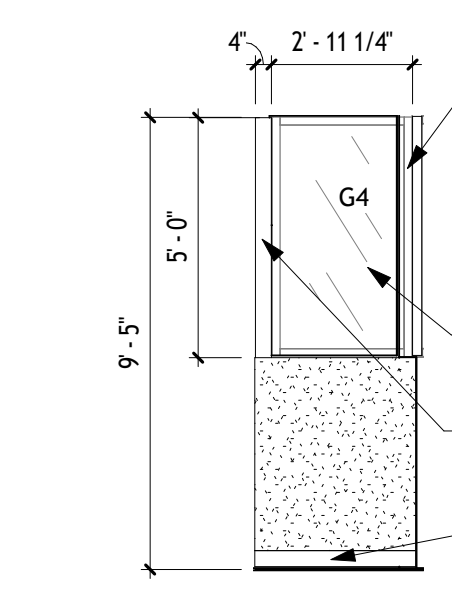
3 A 1
THIRD NUMBER
SECOND LETTER
FIRST NUMBER

FIRST NUMBER
3 = 3-5/8" METAL STUDS
6 = 6" METAL STUDS
8 = 8" METAL STUDS

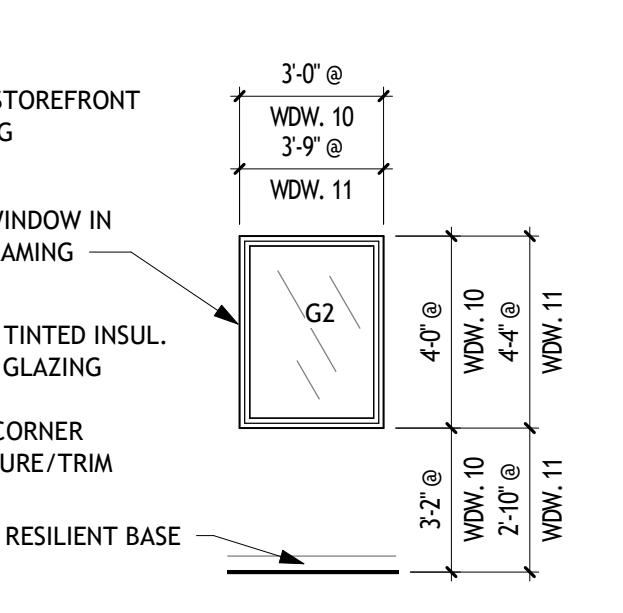
SECOND LETTER
A = 5/8" GYP BD ON ONE SIDE
B = 5/8" GYP BD ON BOTH SIDES OF STUDS
C = TILE ON 5/8" BACKER ON ONE SIDE OF STUDS - 5/8" GYP BD ON OTHER SIDE
D = TILE ON 5/8" BACKER ON ONE SIDE OF STUDS ONLY
E = (2) LAYERS 5/8" GYP BD ON BOTH SIDES OF STUDS

THIRD NUMBER
1 = STUDS EXTEND TO 2" BELOW BOTTOM OF CEILING JOISTS
2 = 1 HOUR RATED WALL TO DECK WITH ACOUSTIC BATT INSULATION IN CAVITY
3 = STUDS EXTEND TO DECK WITH THERMAL BATT INSULATION IN WALL CAVITY
4 = STUDS EXTEND 6" ABOVE ADJACENT CEILING - ACOUSTIC BATT INSULATION IN WALL CAVITY
5 = 2 HOUR RATED WALL TO DECK WITH ACOUSTIC BATT INSULATION IN CAVITY
6 = STUDS EXTEND TO DECK WITH ACOUSTIC BATT INSULATION IN WALL CAVITY
7 = 1 HOUR RATED WALL TO 8'-8" ABOVE FINISH FLOOR

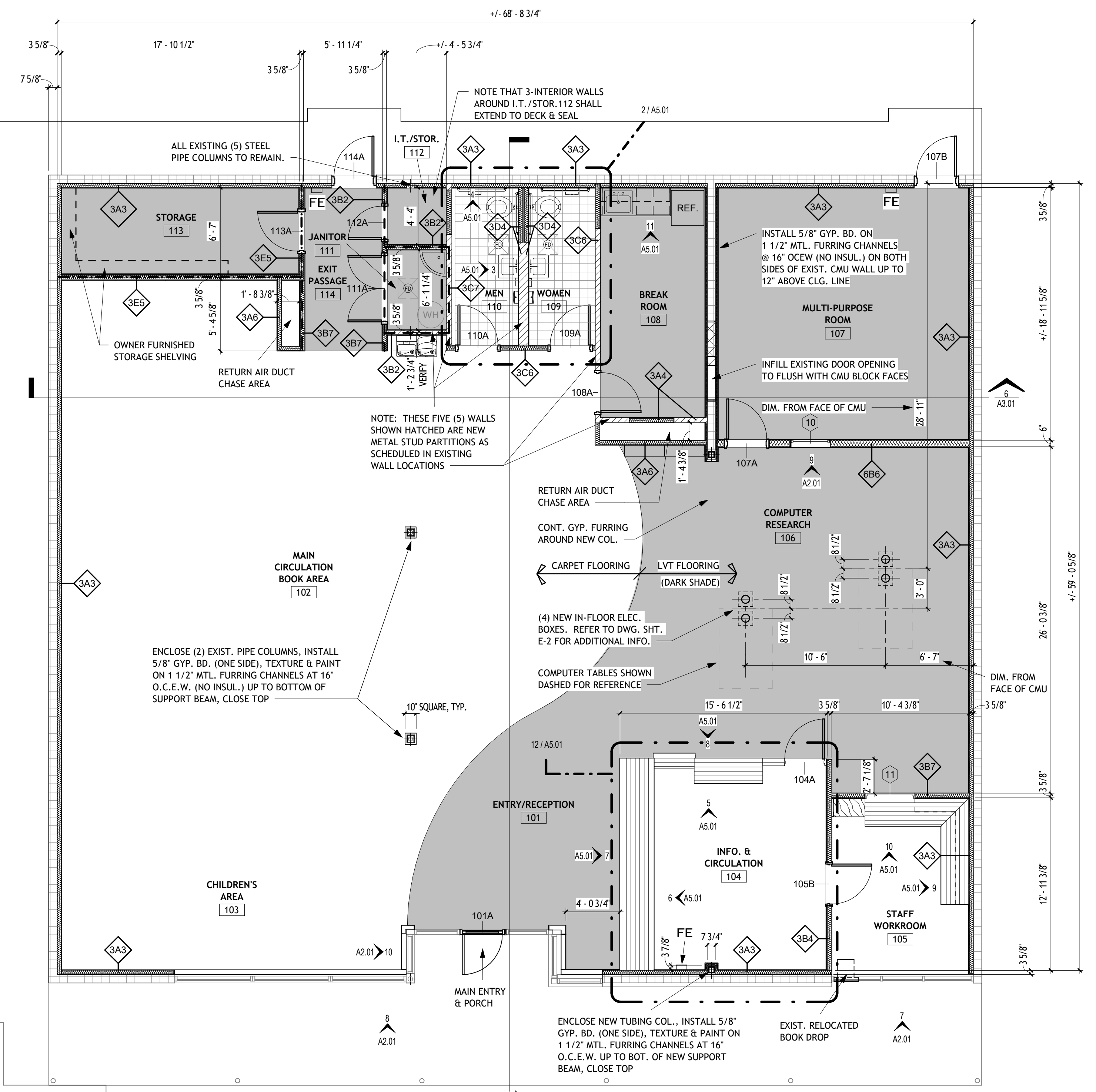
10 SF. EL. C
1/4" = 1'-0"



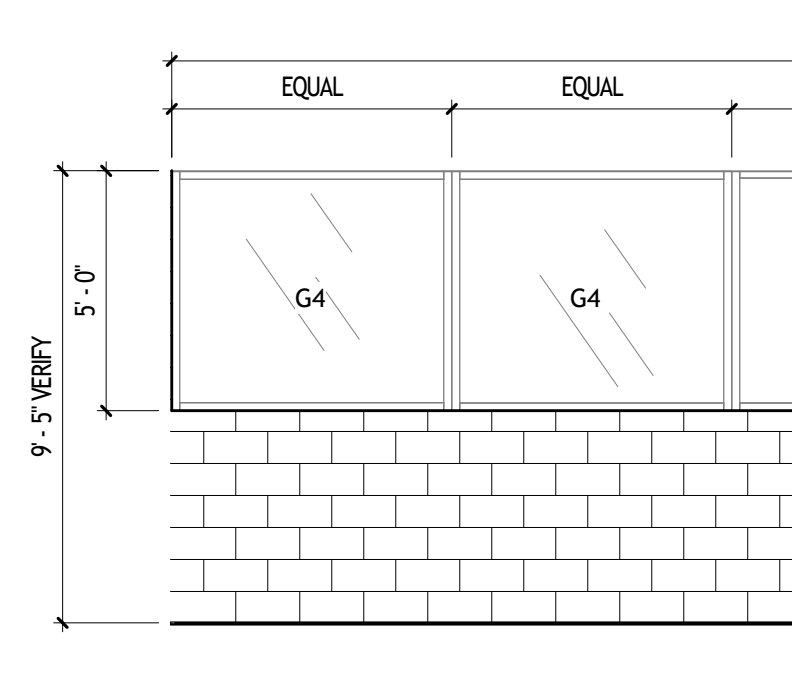
9 WDW. EL. 10-11
1/4" = 1'-0"



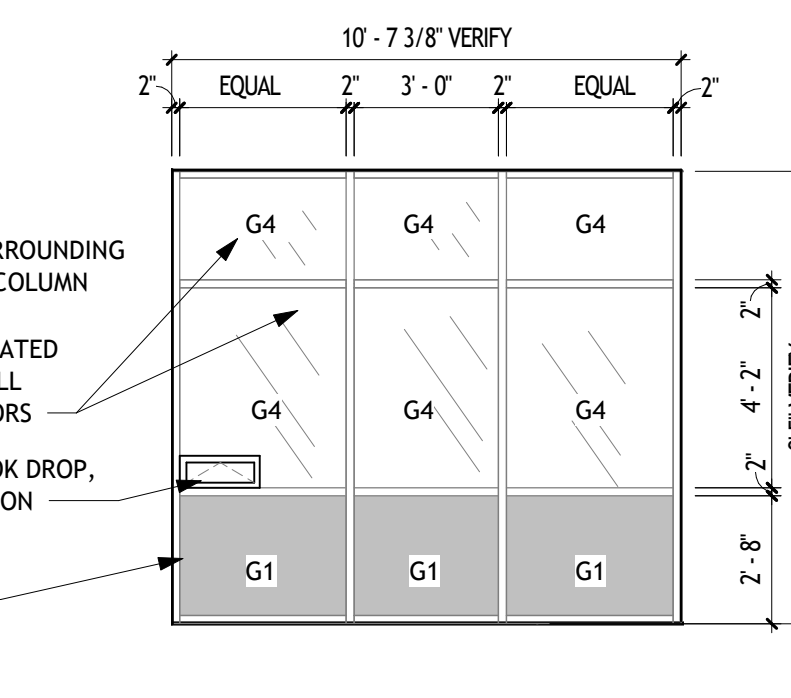
1 FLOOR PLAN - FINAL LAYOUT
3/16" = 1'-0"



8 STOREFRONT ELEV. A
1/4" = 1'-0"



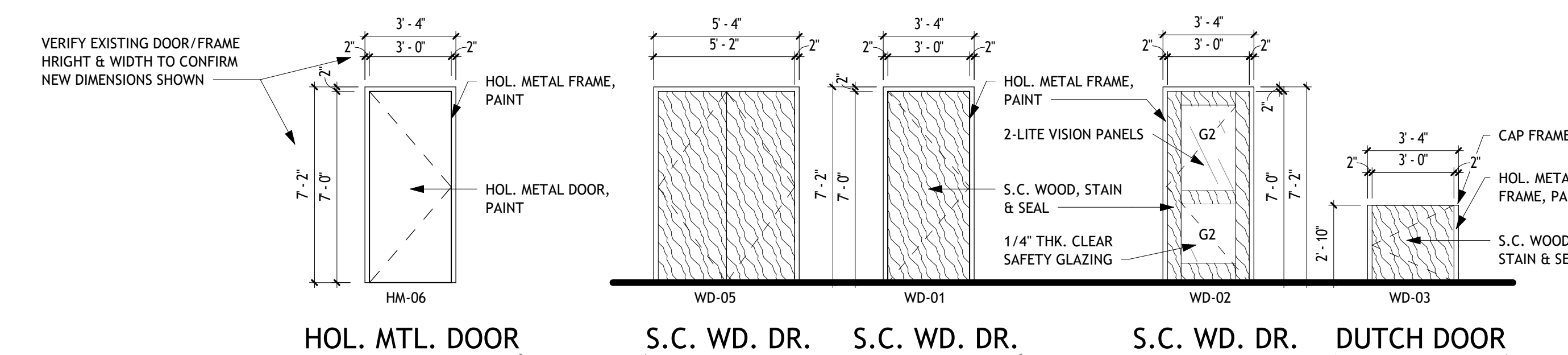
7 STOREFRONT ELEV. B
1/4" = 1'-0"



DOOR SCHEDULE									
DOOR NO.	DOOR			FRAME		OAL FR. DEPTH	ELEVATION	FIRE LABEL	
	WIDTH	HEIGHT	THICK	MATERIAL	FINISH				
101A	3'-0"	7'-0"	1 3/4"	ALUM.	CLEAR ANODIZED	0'-4 1/2"	AL-01		
104A	3'-0"	3'-1 1/2"	1 3/4"	WOOD	WOOD STAIN	0'-5 3/4"	WD-03		
105B	3'-0"	7'-0"	1 3/4"	WOOD	WOOD STAIN	0'-5 3/4"			
107A	3'-0"	7'-0"	1 3/4"	WOOD	WOOD STAIN	0'-5 3/4"			
107B	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	0'-8 1/4"	HM-06		
108A	3'-0"	7'-0"	1 3/4"	WOOD	WOOD STAIN	0'-5 3/4"	WD-01		
109A	3'-0"	7'-0"	1 3/4"	WOOD	WOOD STAIN	0'-5 3/4"	WD-01		
110A	3'-0"	7'-0"	1 3/4"	WOOD	WOOD STAIN	0'-5 3/4"	WD-01		
111A	5'-0"	7'-0"	1 3/4"	WOOD	WOOD STAIN	0'-5 3/4"	WD-05	45 MIN.	
112A	2'-6"	7'-0"	1 3/4"	WOOD	WOOD STAIN	0'-5 3/4"	WD-01	45 MIN.	
113A	3'-0"	7'-0"	1 3/4"	WOOD	WOOD STAIN	0'-7 1/4"	WD-01	90 MIN.	
114A	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	PAINTED	0'-8 1/4"	HM-06		

GLAZING KEY:	
G1	INSULATED BLACK SPANDREL GLAZING
G2	1/4" CLEAR TEMPERED, SAFETY GLAZING
G4	1" TINTED, TEMPERED, INSULATED GLAZING

INTERIOR DOOR ELEVATIONS

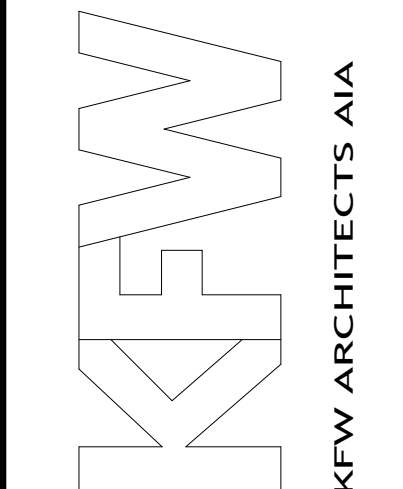


Drawn By
Checked By

STRUCTURAL ENGINEER
SKG ENGINEERING

M.E.P. ENGINEER
POWER SYSTEMS, INC.

378 W. CONCHO AVE.
SAN ANGELO, TX 76903
KFWARCHITECTS.COM



ISSUED FOR PERMIT, PRICING & CONSTRUCTION
MAY 6, 2022



05/06/2022

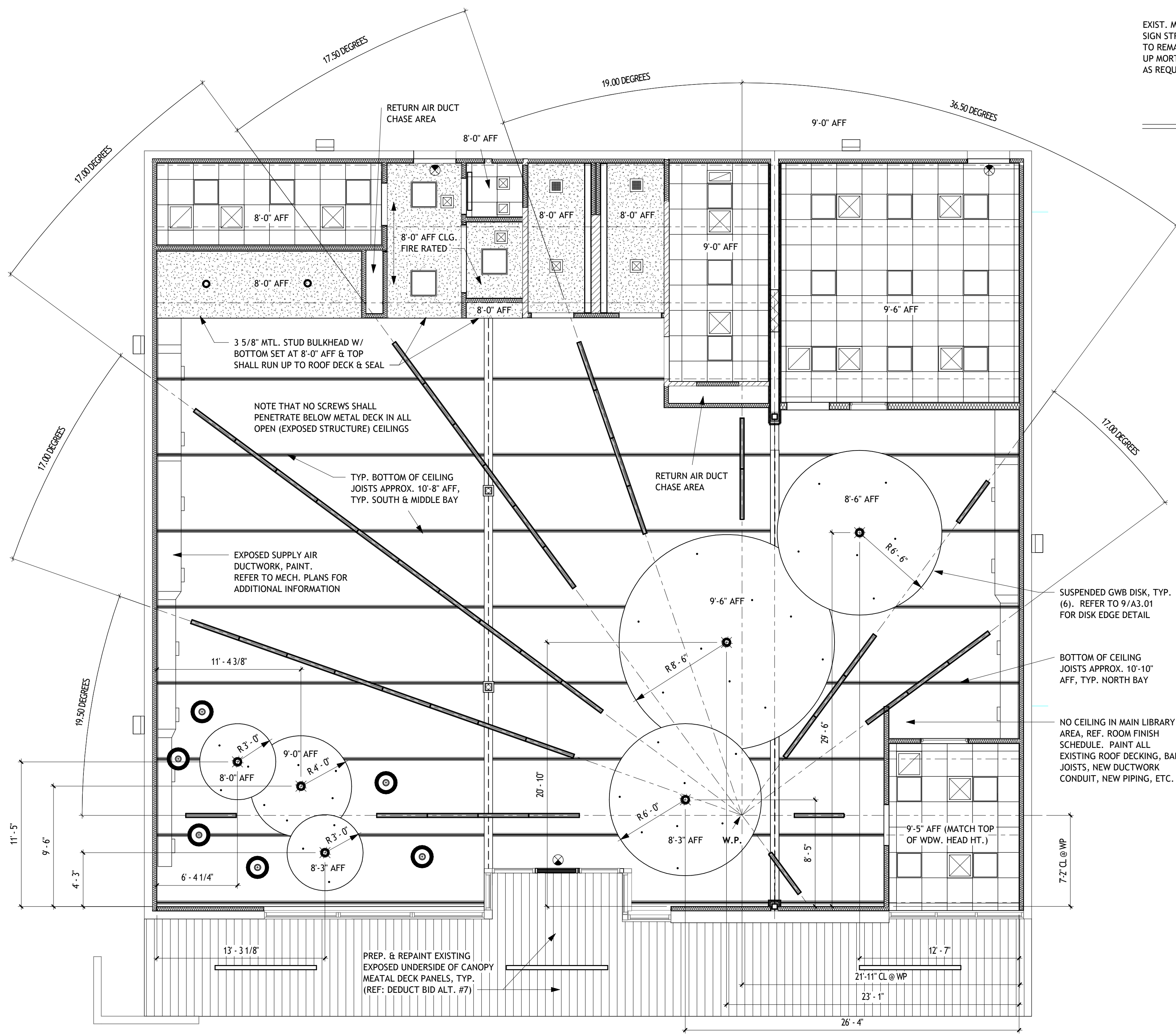
RENOVATIONS OF
NORTH ANGELO BRANCH LIBRARY
TOM GREEN COUNTY

Project No. 292-09-1020

Date MAY 6, 2022

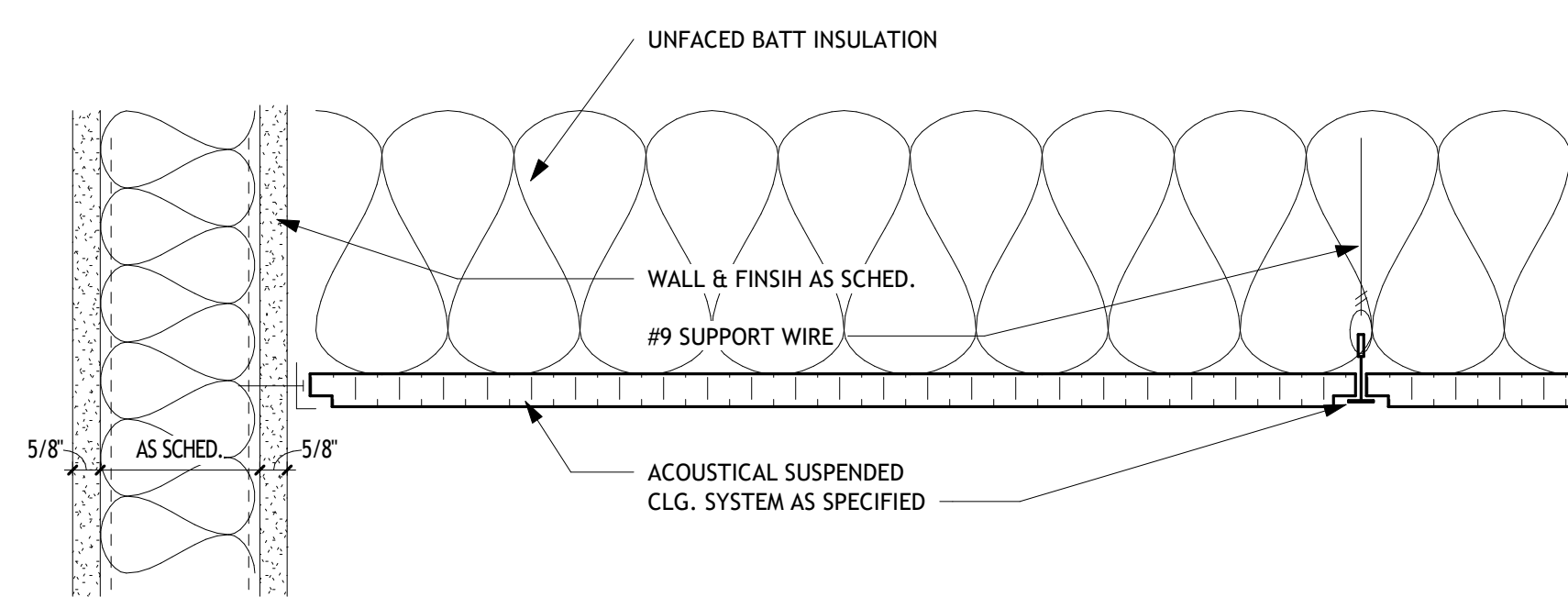
Sheet Number

A2.01

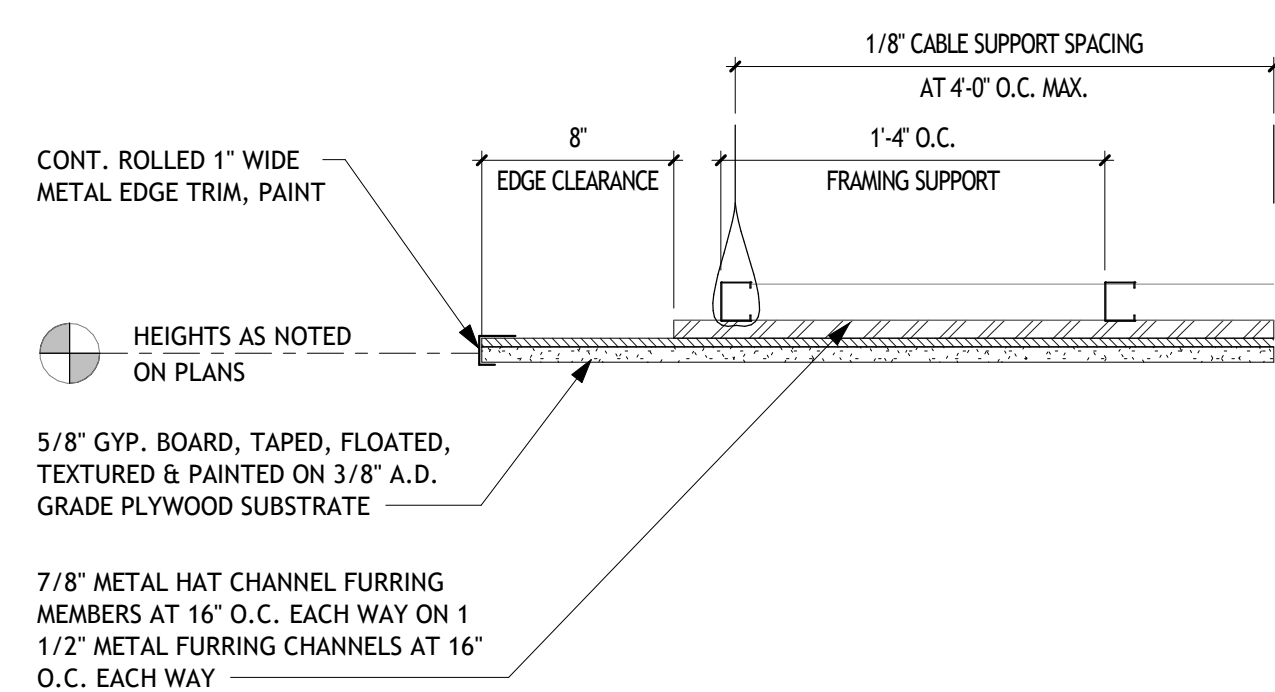


1 REFLECTED CEILING PLAN
3/16" = 1'-0"

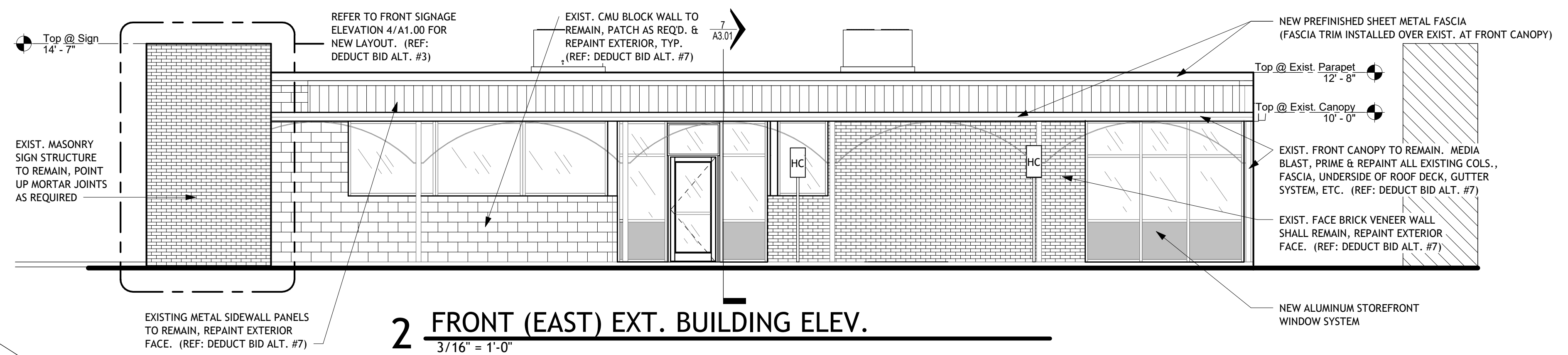
CEILING & SOFFIT LEGEND			
2' x 2' ACOUSTIC TILE IN MTL. GRID			RECESSED SUPPLY AIR GRILLE
PTD. GYPSUM BOARD			RECESSED 1' x 1' RETURN AIR GRILLE
CABLE SUSPENDED GYP. BOARD DISKS			RECESSED 2' x 2' LED LIGHT FIXTURE
EXISTING SHEET METAL SOFFIT/CANOPY PANELS, REFINISH & PAINT. (REF: DEDUCT BID ALT. #7)			EXIT SIGNS
SURFACE MOUNTED 2' x 2' LED LIGHT FIXTURE			4\"/>
CABLE SUSPENDED LINEAR LED LIGHT FIXTURE			SURFACE MOUNTED LINEAR LED LIGHT FIXTURE
SINGLE PENDANT LED ACCENT LIGHT FIXTURE			RECESSED 2' x 2' RETURN AIR GRILLE



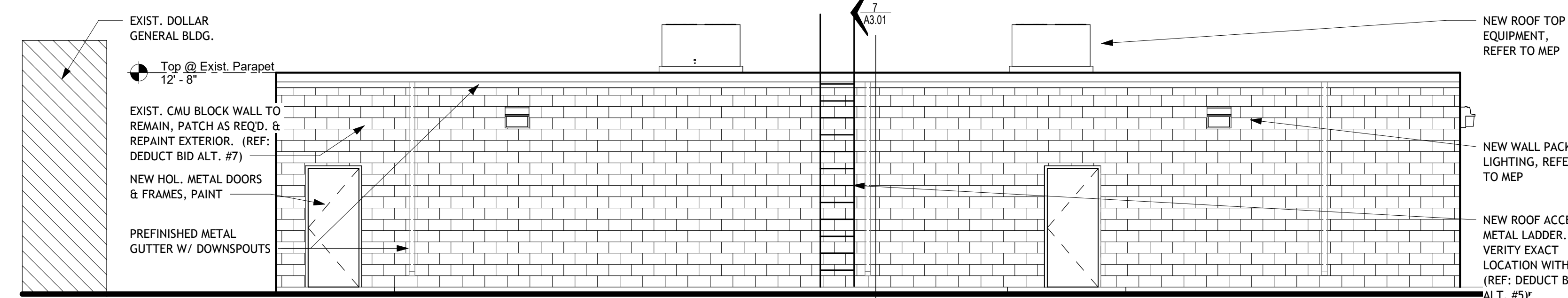
8 TYP. SUSPENDED CEILING DETAIL
3\"/>



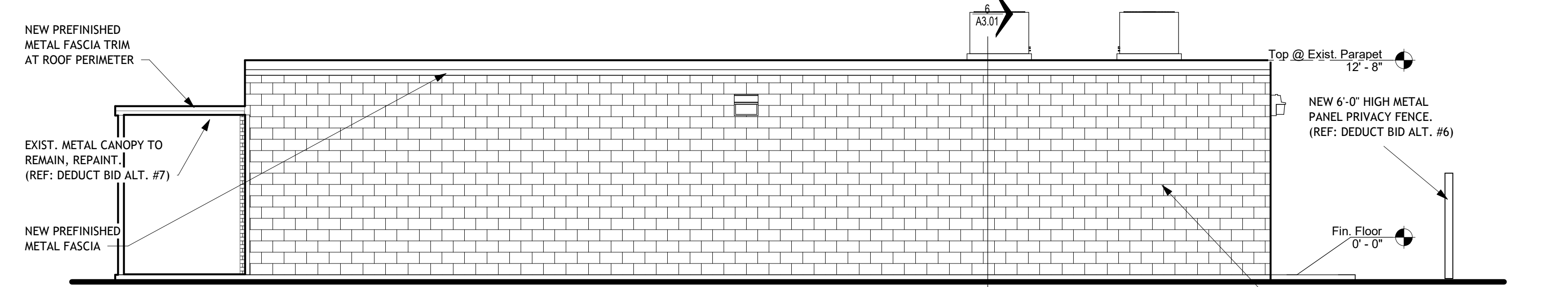
9 TYP. SUSPENDED GWB DISK EDGE DETAIL
1 1/2\"/>



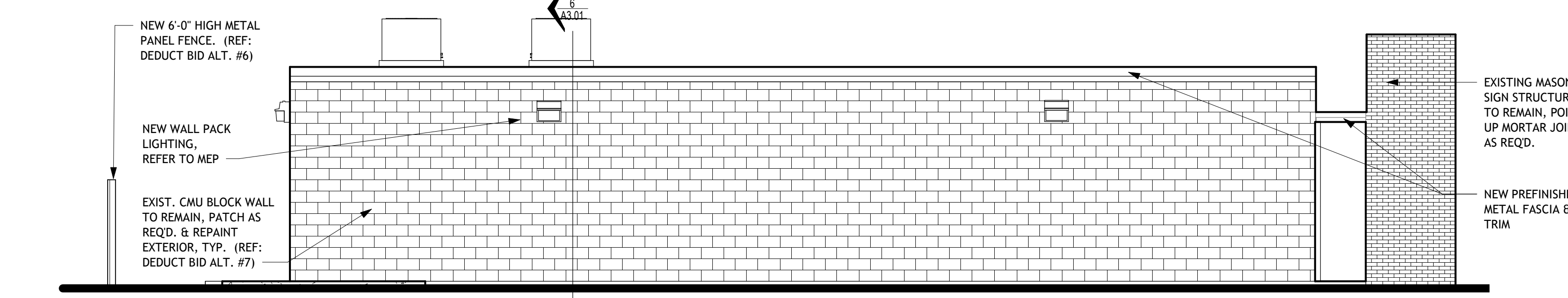
2 FRONT (EAST) EXT. BUILDING ELEV.
3/16" = 1'-0"



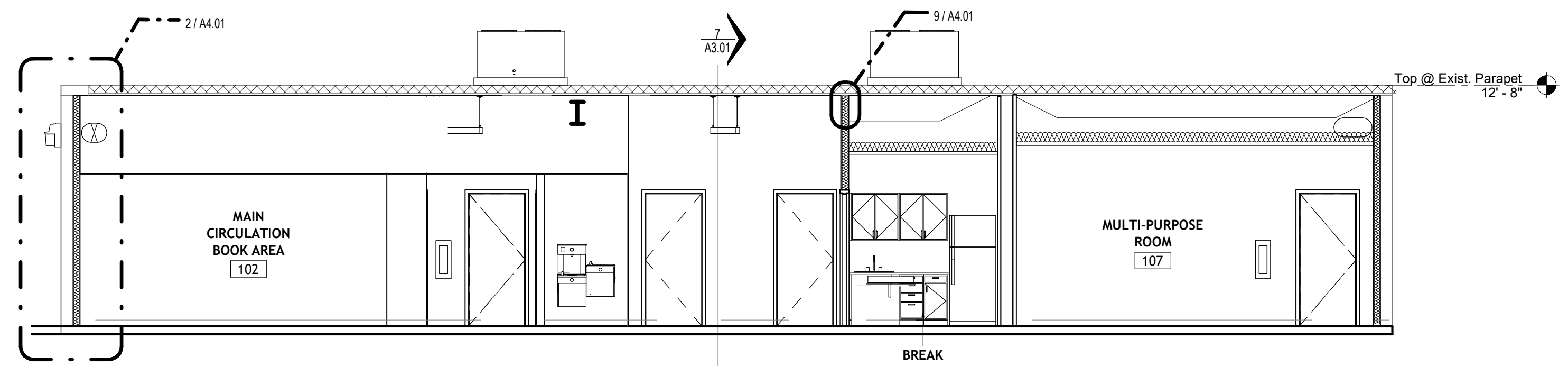
3 BACK (WEST) EXT. BUILDING ELEV.
3/16" = 1'-0"



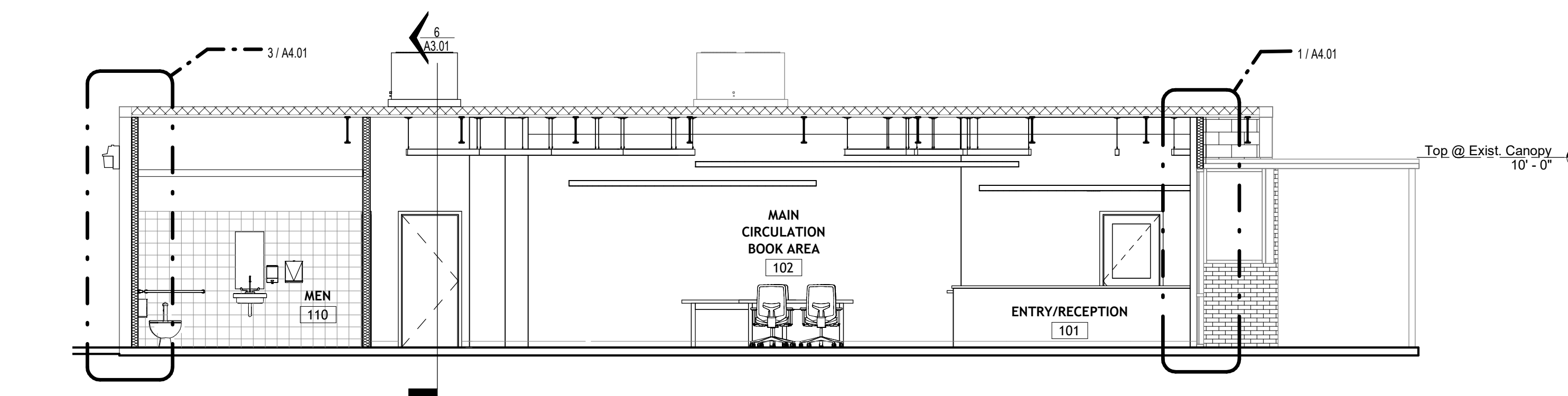
4 SIDE (NORTH) EXT. BUILDING ELEV.
3/16" = 1'-0"



5 SIDE (SOUTH) EXT. BUILDING ELEV.
3/16" = 1'-0"



6 BUILDING SECTION (LOOKING WEST)
3/16" = 1'-0"



7 BUILDING SECTION (LOOKING NORTH)
3/16" = 1'-0"

Drawn By
Checked By

STRUCTURAL ENGINEER
SKG ENGINEERING
MEP ENGINEER
POWER SYSTEMS, INC.

378 W. CONCHAO AVE.
SAN ANGELO, TX 76903
KFWarchitects.com
KFW
KFW ARCHITECTS AIA

ISSUED FOR PERMIT, PRICING & CONSTRUCTION
MAY 6, 2022



RENOVATIONS OF
NORTH ANGELO BRANCH LIBRARY
TOM GREEN COUNTY

Project No. 292-09-1020
Date MAY 6, 2022

Sheet Number
A3.01

Drawn By _____
 Checked By _____

STRUCTURAL ENGINEER
 SKG ENGINEERING
 MEP ENGINEER
 POWER SYSTEMS, INC.

378 W. CONCHAO AVE.
 SAN ANGELO, TX 76903
 KFWarchitects.com
KFW
 KFW ARCHITECTS AIA

ISSUED FOR PERMIT, PRICING & CONSTRUCTION
 MAY 6, 2022



RENOVATIONS OF
NORTH ANGELO BRANCH LIBRARY
 TOM GREEN COUNTY

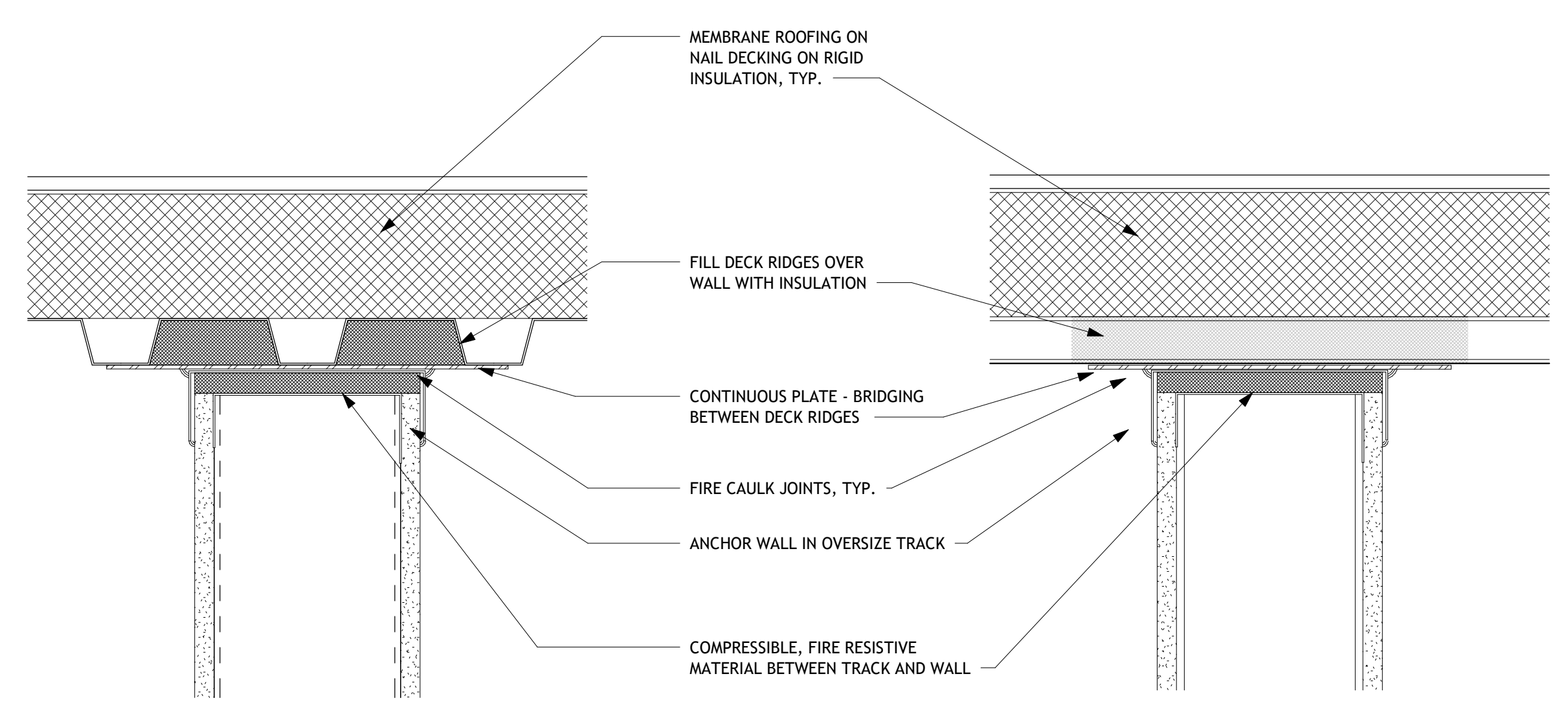
Project No. 292-09-1020

Date MAY 6, 2022

Sheet Number

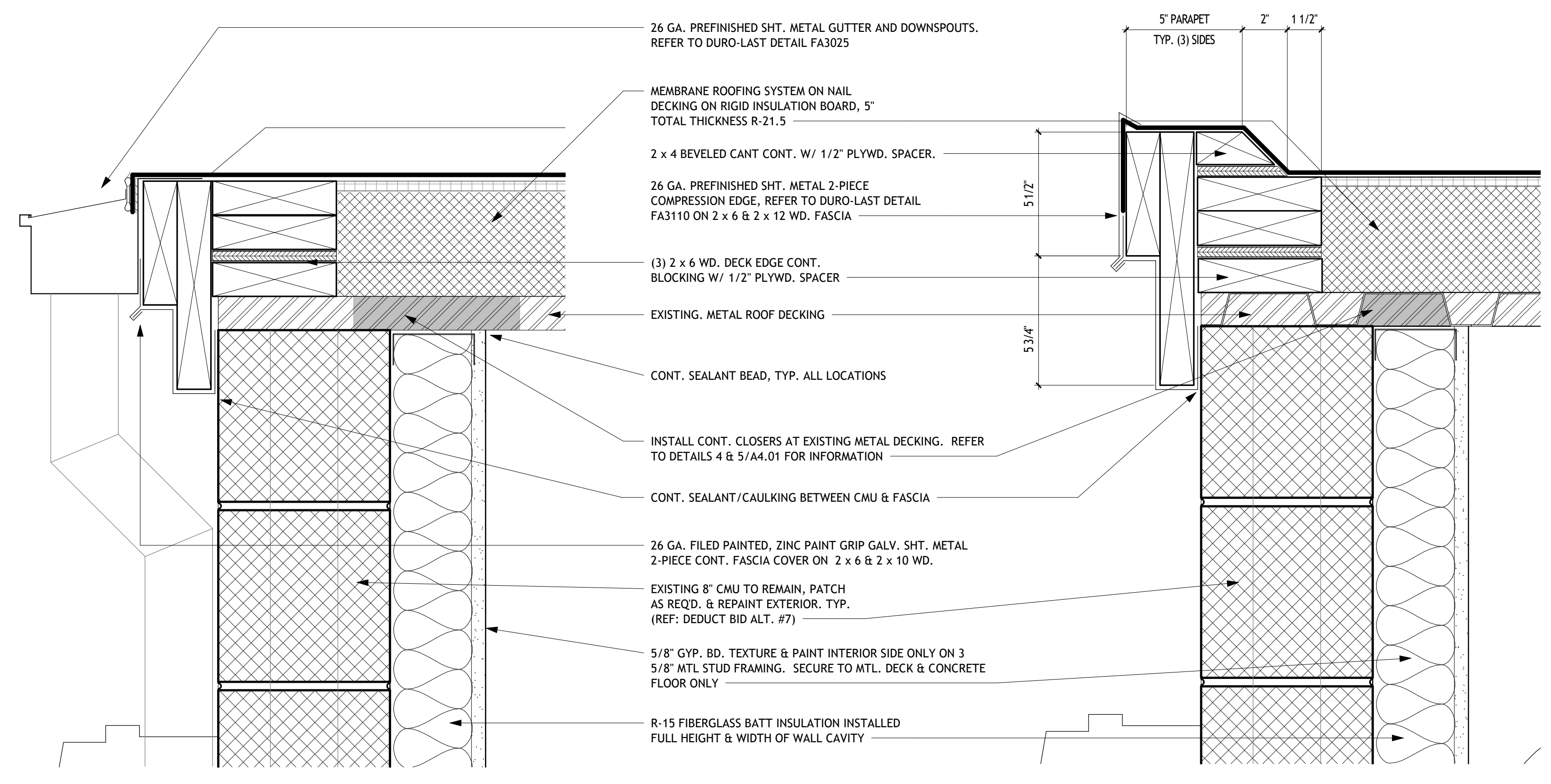
A4.01

Copyright © KFW Architects AIA, Inc. 2022



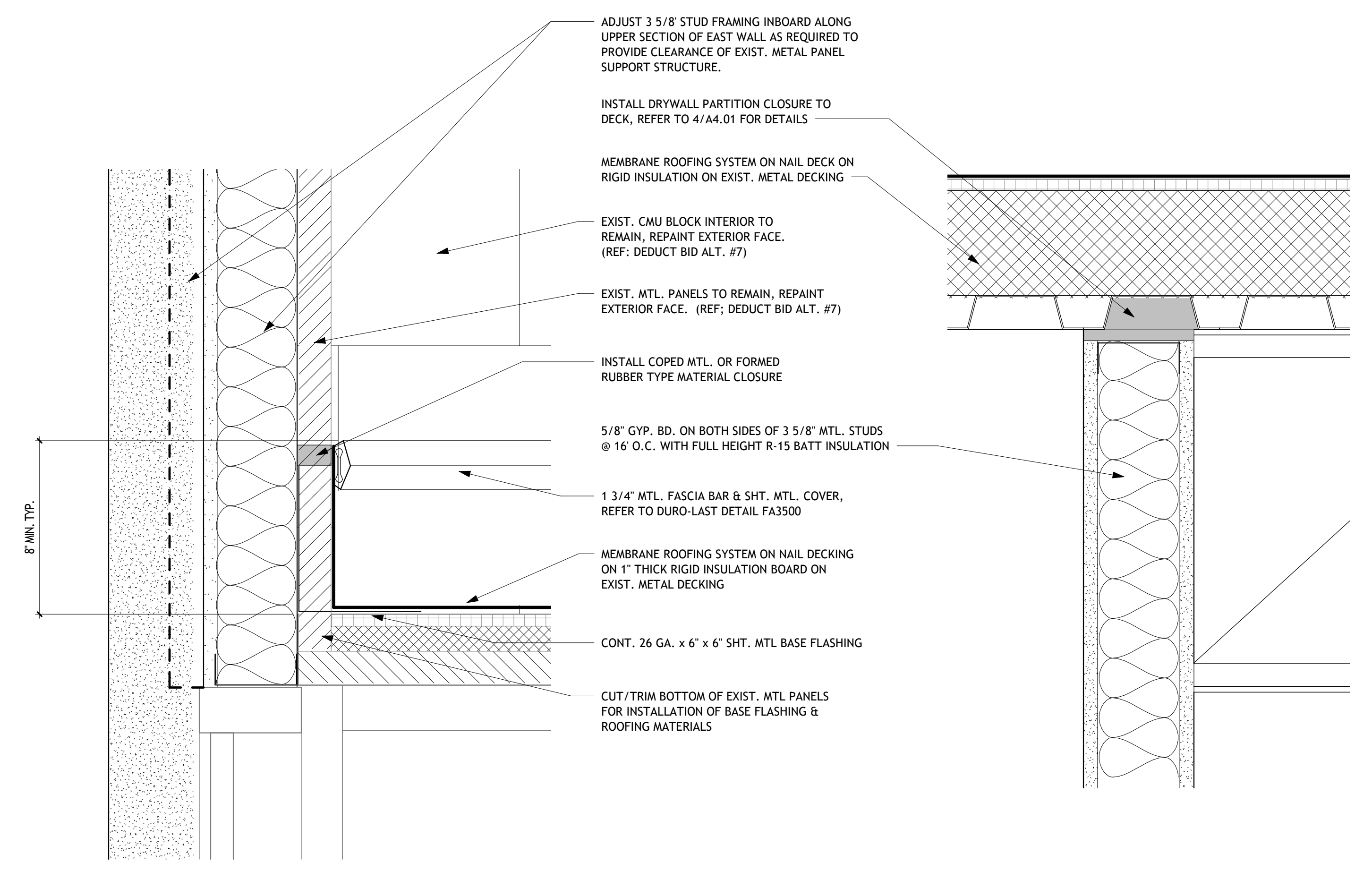
4 GWB CLOSURE TO DECK
 3" = 1'-0"

5 GWB CLOSURE TO DECK
 3" = 1'-0"



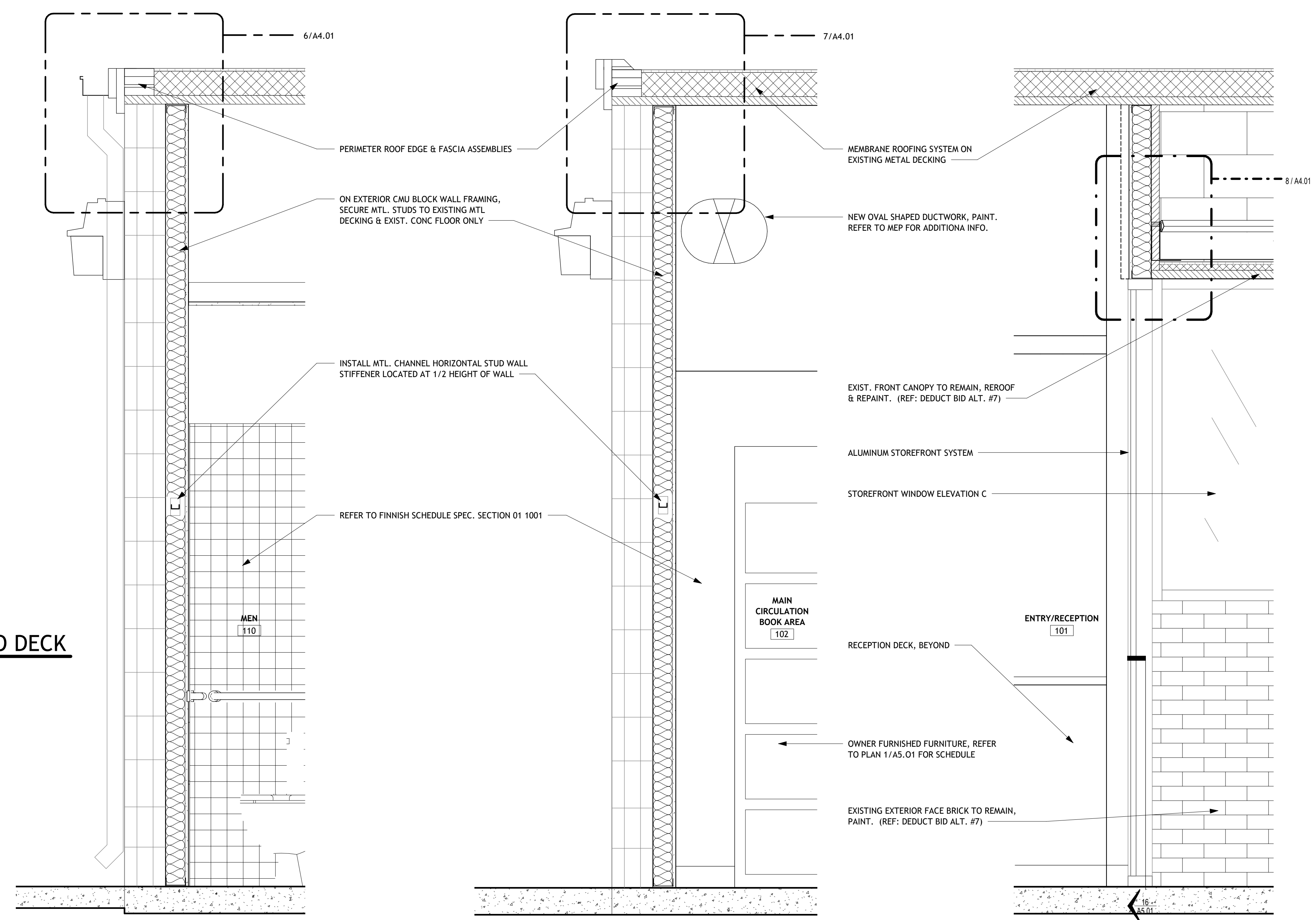
6 SECTION DETAIL - GUTTER
 3" = 1'-0"

7 SECTION DETAIL - TYP. FASCIA
 3" = 1'-0"



8 SECTION DETAIL- RECESSED ENTRY HEAD
 3" = 1'-0"

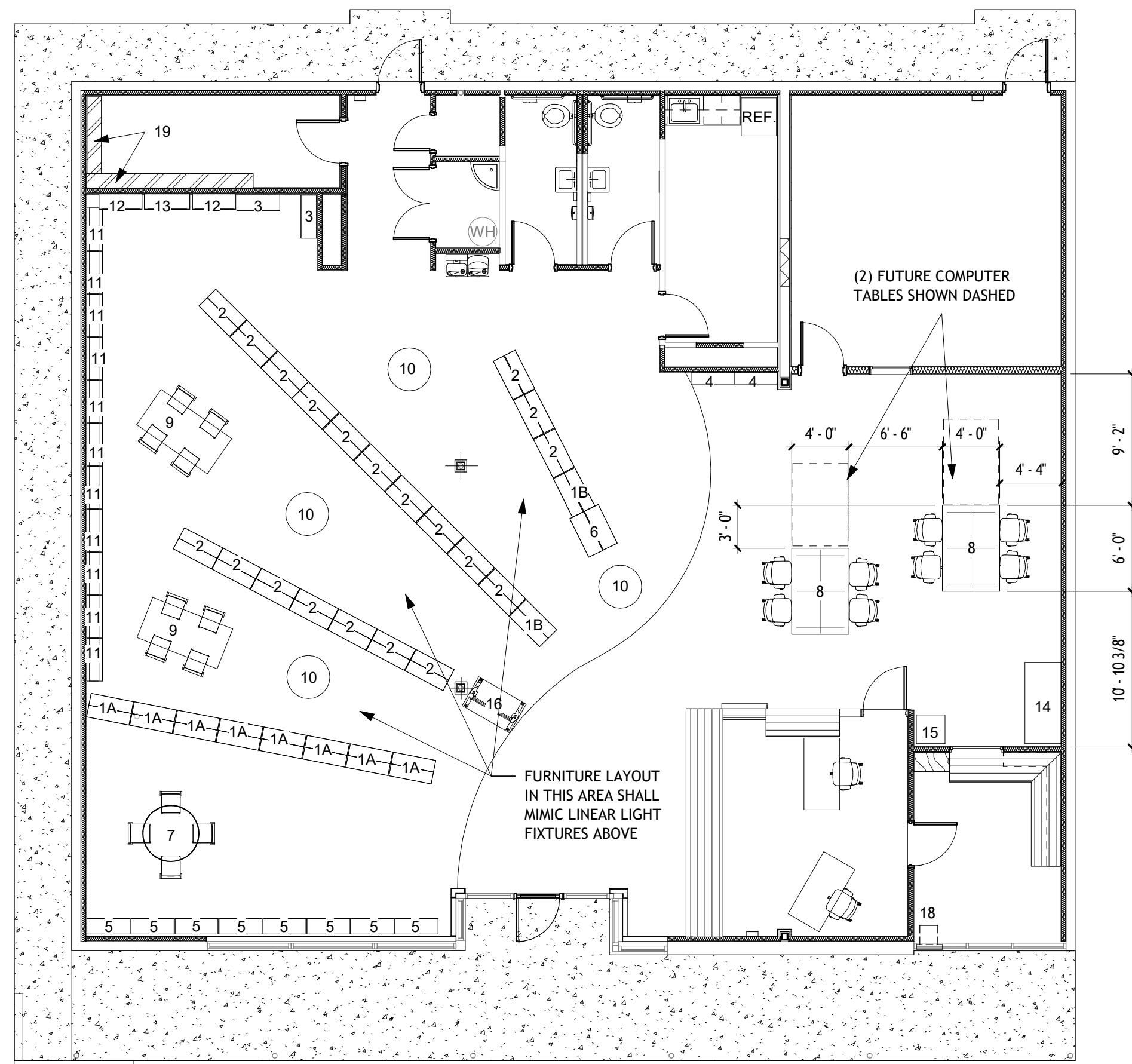
9 SECTION DETAIL - TYP. WALL TO DECK
 3" = 1'-0"



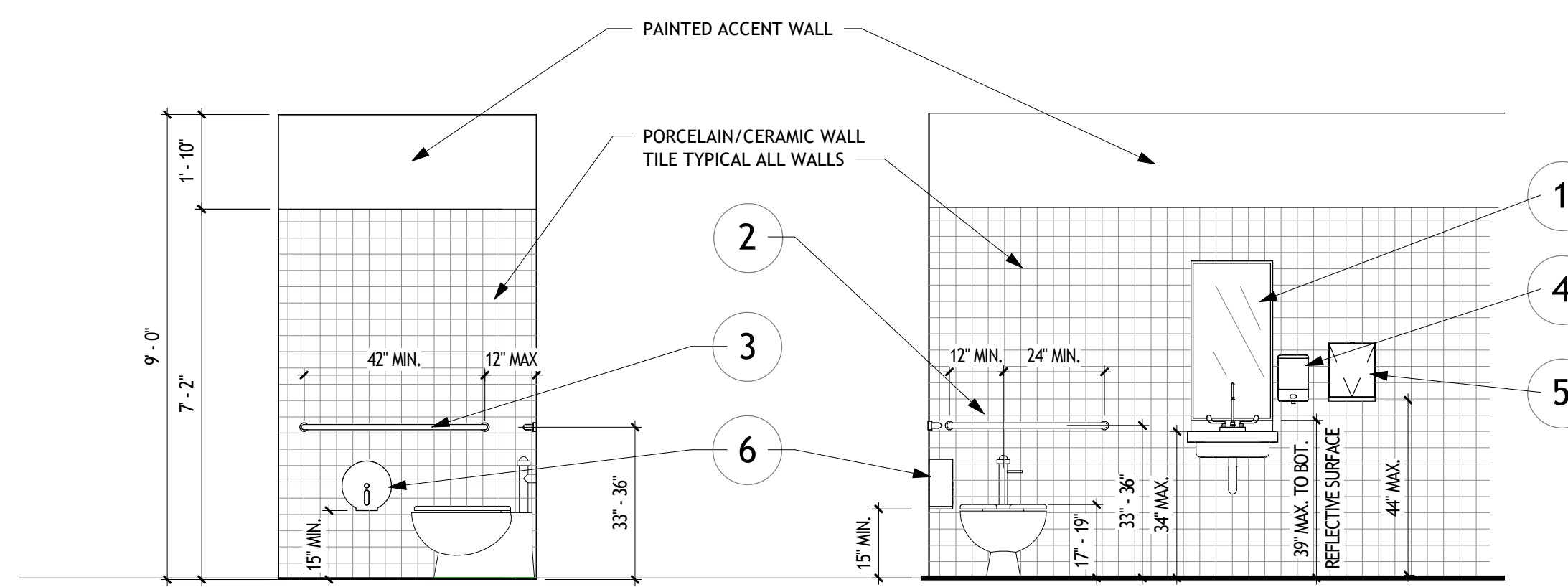
3 WALL SECTION - WEST WALL
 1" = 1'-0"

2 WALL SECTION - SOUTH WALL
 1" = 1'-0"

1 WALL SECTION - RECESSED ENTRY
 1" = 1'-0"



1 FLOOR PLAN - FURNITURE LAYOUT
1/8" = 1'-0"

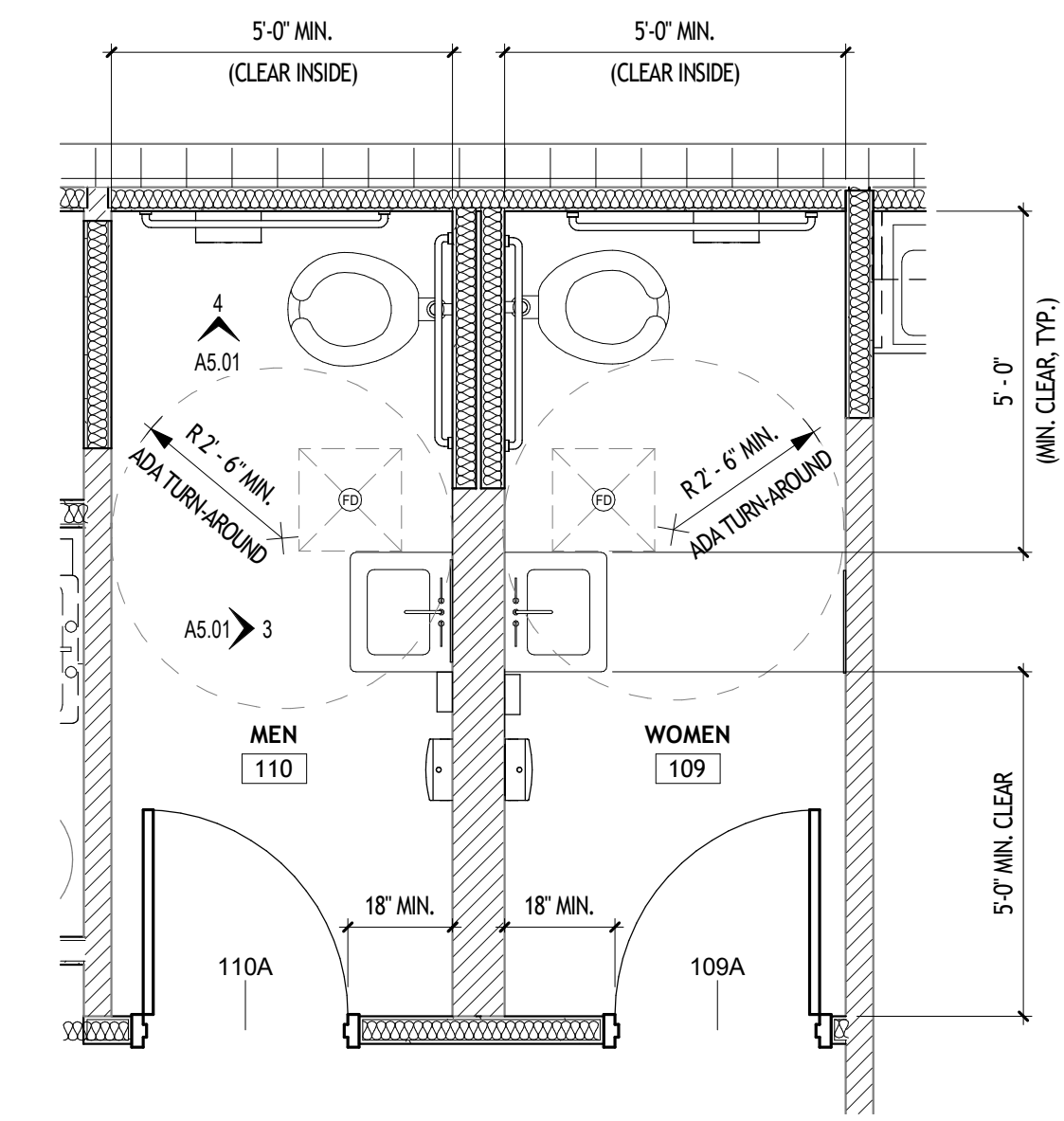


4 MEN'S WEST ELEV.
3/8" = 1'-0" (WOMEN'S 109 - OPPOSITE HAND)

3 MEN'S 110 NORTH ELEV.
3/8" = 1'-0" (WOMEN'S 109 - OPPOSITE HAND)

Toilet Accessories Schedule:

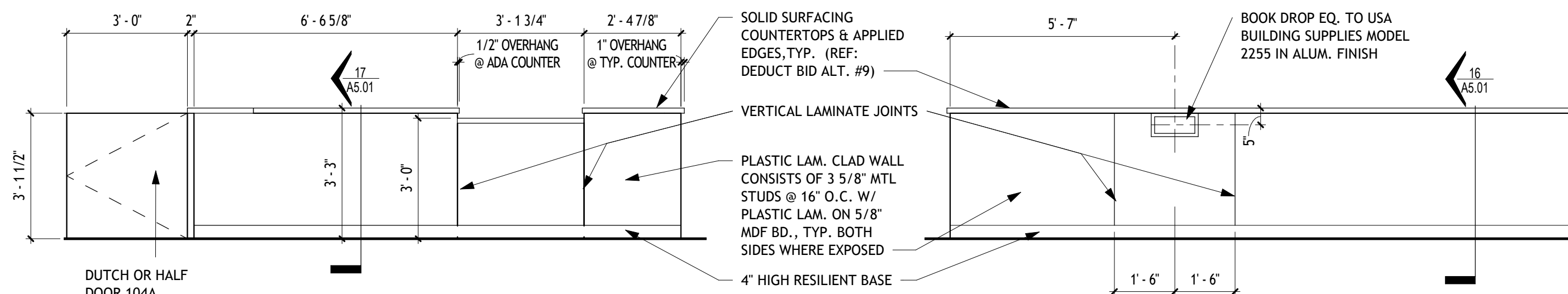
- (2) EACH 18" x 36" FRAMED MIRROR EQUAL TO "BOBRICK" #B-165 1836
- (2) EACH 1-1/2" DIA. x 36" LONG GRAB BAR EQUAL TO "BOBRICK" #B-6806 x 36"
- (2) EACH 1-1/2" DIA. x 42" LONG GRAB BAR EQUAL TO "BOBRICK" #B-6806 x 42"
- (2) EACH LIQUID SOAP DISPENSERS EQUAL TO "TORK" # 570028A, BLACK
- (2) EACH PAPER TOWEL DISPENSERS EQUAL TO "TORK" # 84TR, SMOKE
- (2) EACH TOILET PAPER 9" ROLL DISPENSERS EQUAL TO "TORK" # 66TR, SMOKE
- (2) EACH WASTE RECEPTACLES EQUAL TO "RUBBERMAID" # 8170-88 MARSHAL CLASSIC 25 GAL., BLACK



2 ENLARGED FLOOR PLAN - TOILET RMS.
3/8" = 1'-0"

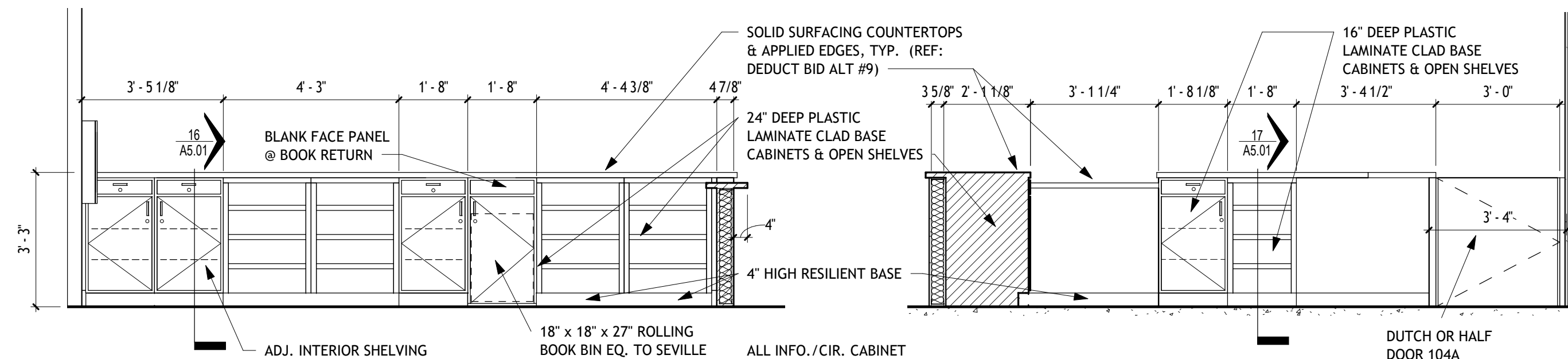
**NORTH ANGELO BRANCH LIBRARY
INTERIOR FURNITURE SCHEDULE**

- WOOD FINISH ENDS, DOUBLE SIDED METAL SHELVES:**
Item 1A 8 ea. 20"D. x 36"W. x 66"H.
Item 1B 2 ea. 16"D. x 36"W. x 66"H.
Item 2 20 ea. 16"D. x 36"W. x 82"H.
- SINGLE SIDED ADJUSTABLE METAL SHELVES:**
Item 3 2 ea. 15"D. x 36"W. x 90"H. (magazine racks)
- Item 4** 2 ea. 10"D. x 36"W. x 84"H.
- SINGLE SIDED METAL SHELVES:**
Item 5 8 ea. 13"D. x 36"W. x 41.5"H.
- DOUBLE SIDED AUDIO BOOK SHELVES:**
Item 6 1 ea. 25"D. x 73"W. x 57"H.
- TABLES:**
Item 7 1 ea. 48"Dia. x 26" H. (kids' table)
Item 8 2 ea. 48"D. x 72"W. x 30"H. (computer tables, double sided)
Item 9 2 ea. 36"D. x 60"W. x 39"H. (reading tables)
- BOOK CAROUSEL:**
Item 10A 1 ea. 38"Dia. x 54"H.
Item 10B 2 ea. 38"Dia. x 63"H.
Item 10C 1 ea. 38"Dia. x 62"H.
- SINGLE SIDED WOODEN SHELVES:**
Item 11 11 ea. 8"D. x 36"W. x 60"H.
Item 12 2 ea. 12"D. x 36"W. x 82"H.
Item 13 1 ea. 12.5"D. x 39"W. x 39"H.
- COPIER/PAYMENT TOWER:**
Item 14 1 ea. 30"D. x 65"W. x 46"H.
- FAX STAND:**
Item 15 1 ea. 24"D. x 24"W. x 48"H.
- AUTOMATED CHECK OUT AREA:**
Item 16 1 ea. 27"D. x 53"W. x 36"H.
- PAMPHLET RACK:**
Item 17 1 ea. 15"D. x 20"W. x 44"H.
- BOOK DROP:**
Item 18 1 ea. 22"W. x 31"D.
- STORAGE ROOM SHELVEING:**
Item 19 16 lin/ft. 18"D. x 72"H. Open Metal Shelving
- NOTE THAT ALL FURNITURE IS EXISTING EXCEPT FOR NEW COMPUTER TABLES NO. 8 & NEW STORAGE SHELVEING NO. 19**



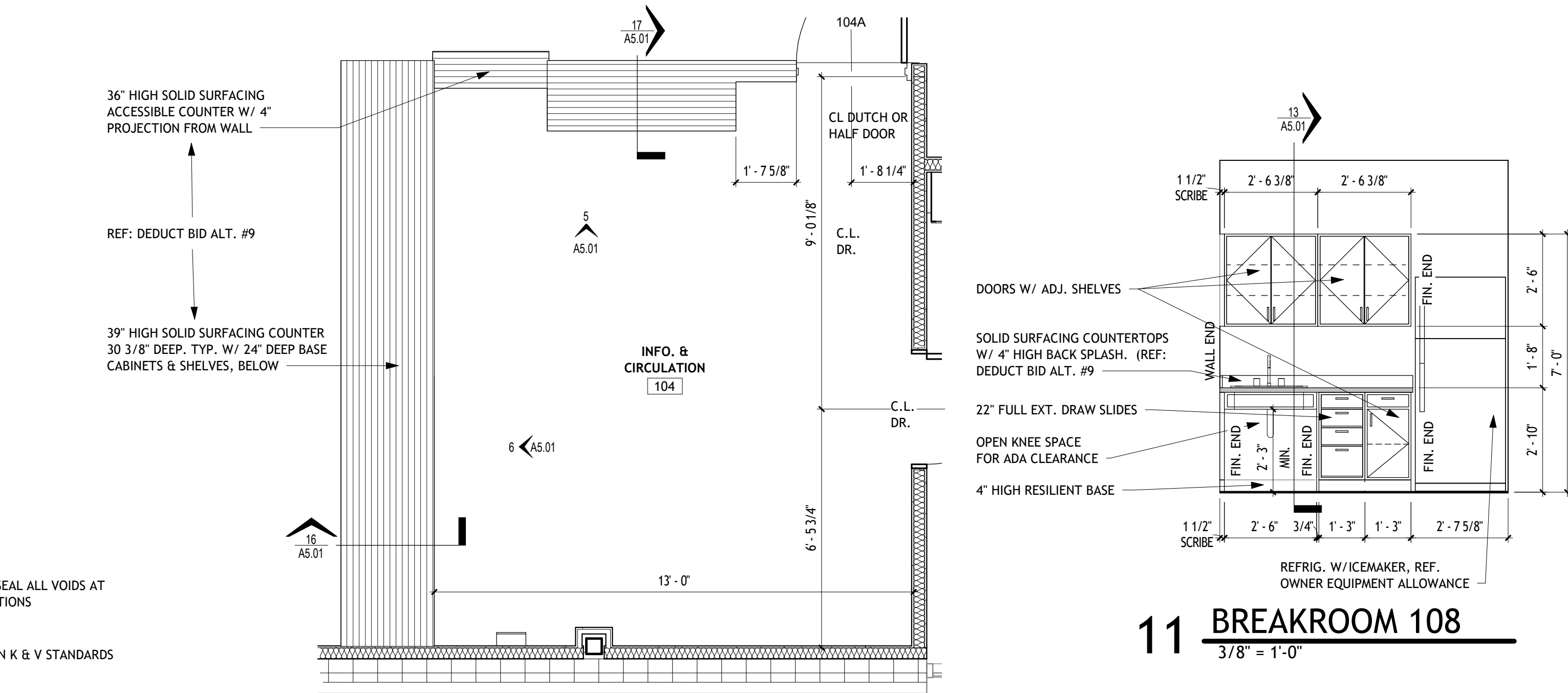
8 RECEPTION FRONT - WEST SIDE
3/8" = 1'-0"

7 RECEPTION FRONT - SOUTH SIDE
3/8" = 1'-0"



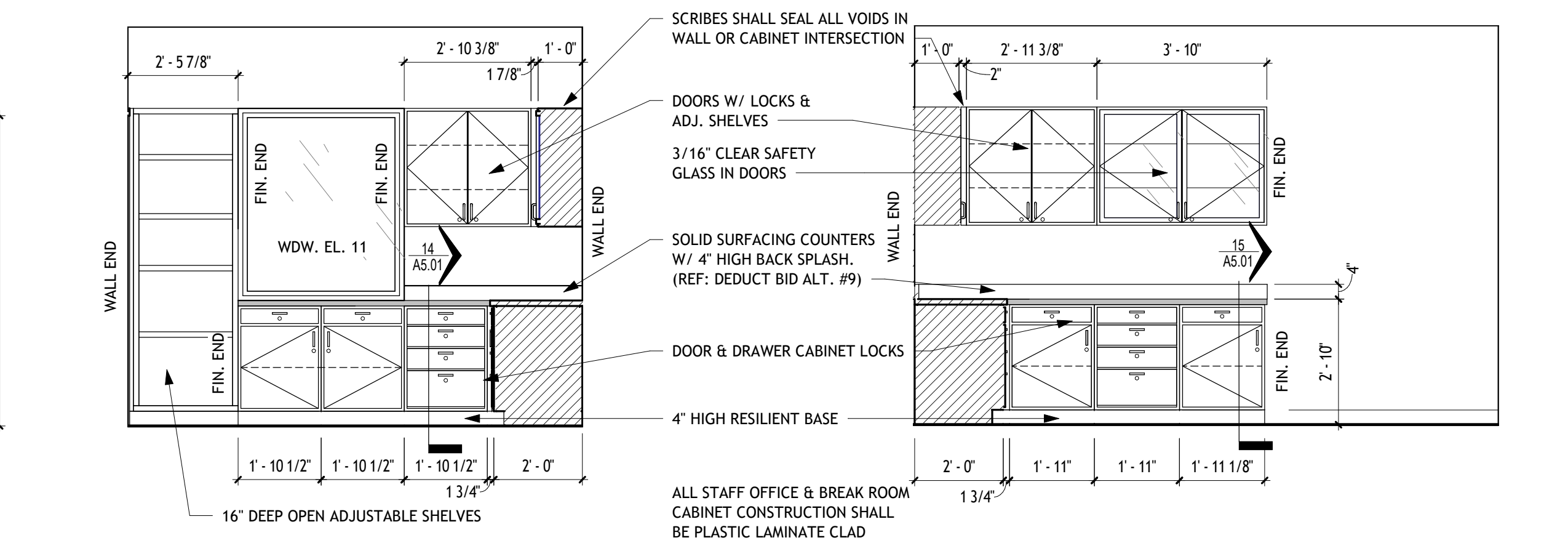
6 INFO./CIR. 104 - LOOKING SOUTH
3/8" = 1'-0"

5 INFO./CIR. 104 - LOOKING WEST
3/8" = 1'-0"

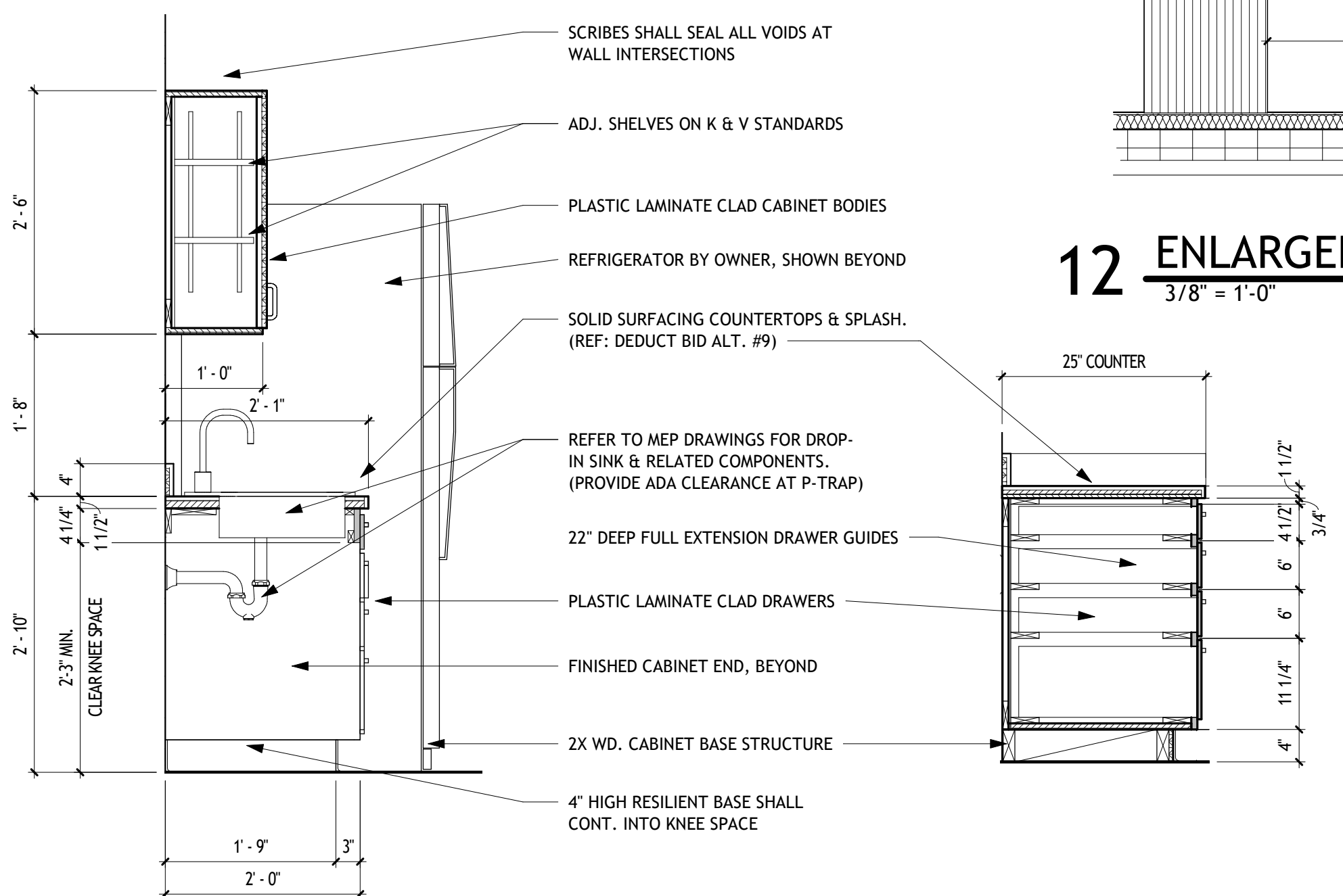


11 BREAKROOM 108
3/8" = 1'-0"

10 WORKROOM 105 - LOOKING WEST
3/8" = 1'-0"

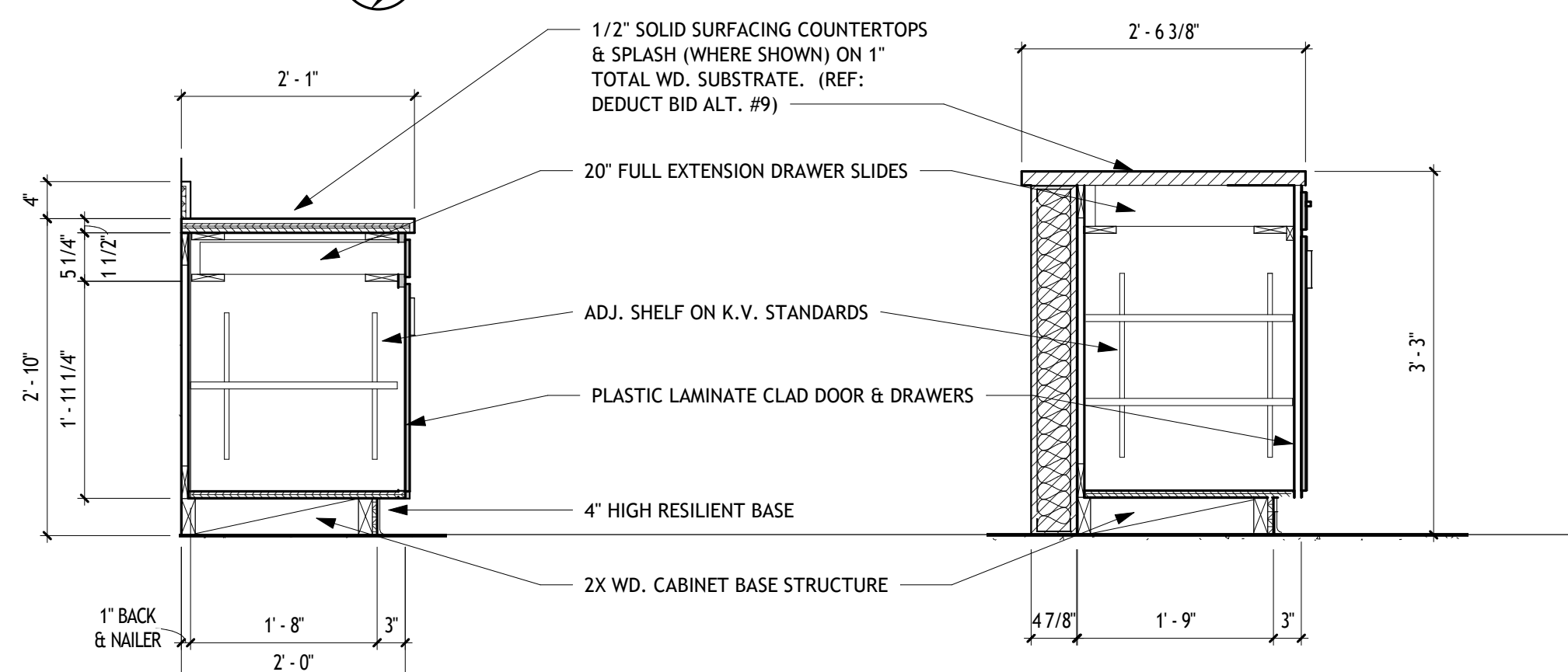


9 WORKROOM 105 - LOOKING NORTH
3/8" = 1'-0"



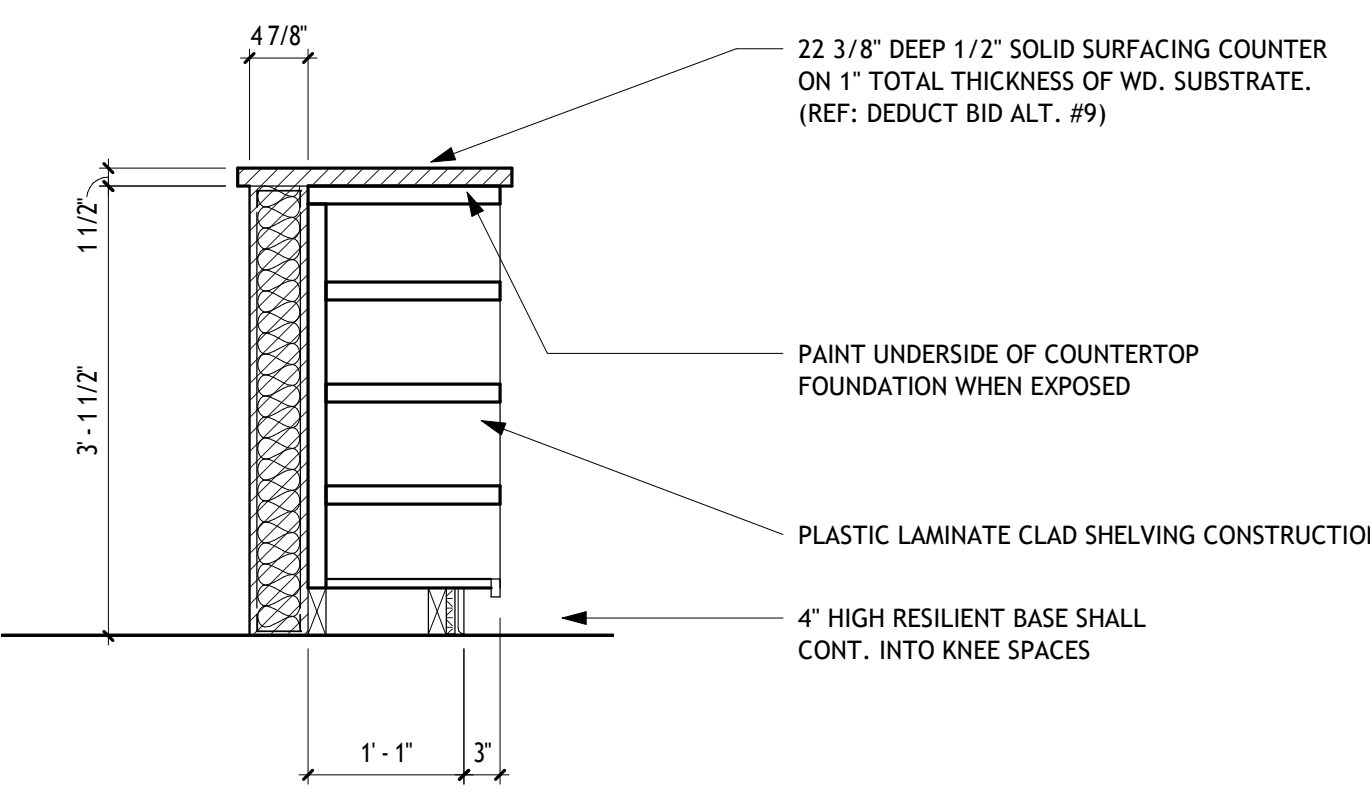
13 BREAK RM - ADA KNEE SPACE
3/4" = 1'-0"

14 WORK RM.4-DRAWER
3/4" = 1'-0"



15 WORK RM. DRAWER-DOOR
3/4" = 1'-0"

16 RECEP. DRAWER-DOOR
3/4" = 1'-0"



17 RECEP. OPEN SHELVING
3/4" = 1'-0"

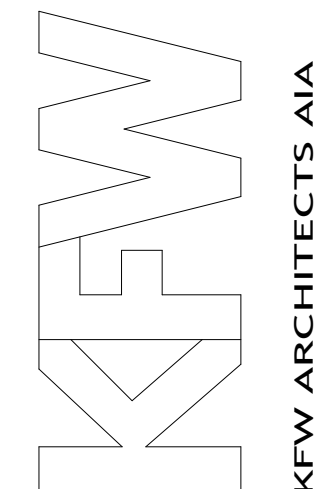
12 ENLARGED PLAN - RECEPTION COUNTER
3/8" = 1'-0"

Drawn By _____
Checked By _____

STRUCTURAL ENGINEER
SKG ENGINEERING

M.E.P. ENGINEER
POWER SYSTEMS, INC.

378 W. CONCHO AVE.
SAN ANGELO, TX 76903
KfwArchitects.com



ISSUED FOR PERMIT, PRICING & CONSTRUCTION
MAY 6, 2022



RENOVATIONS OF
NORTH ANGELO BRANCH LIBRARY
TOM GREEN COUNTY

Project No. 292-09-1020

Date MAY 6, 2022

Sheet Number

A5.01

Drawn By _____
 Checked By _____

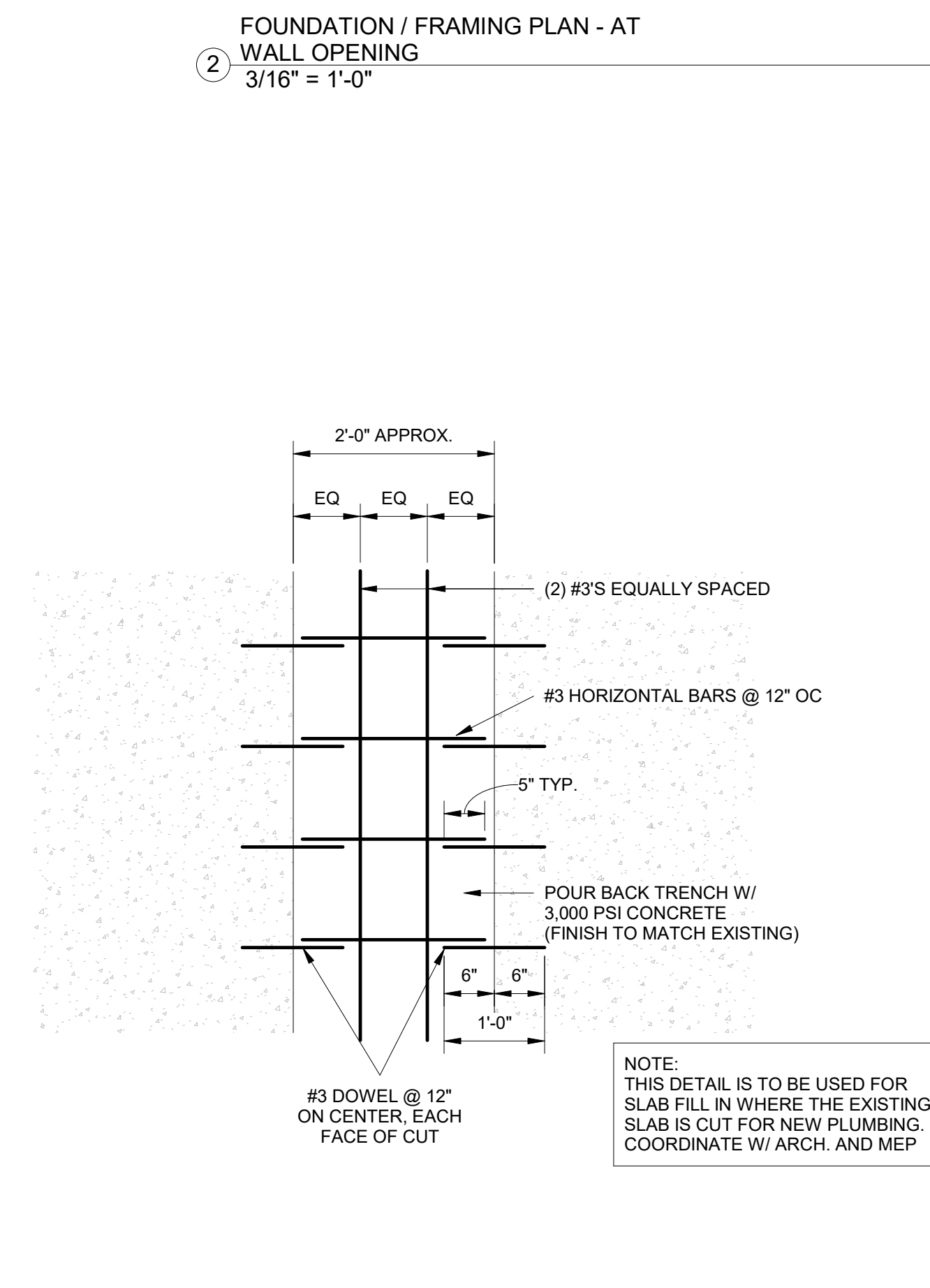
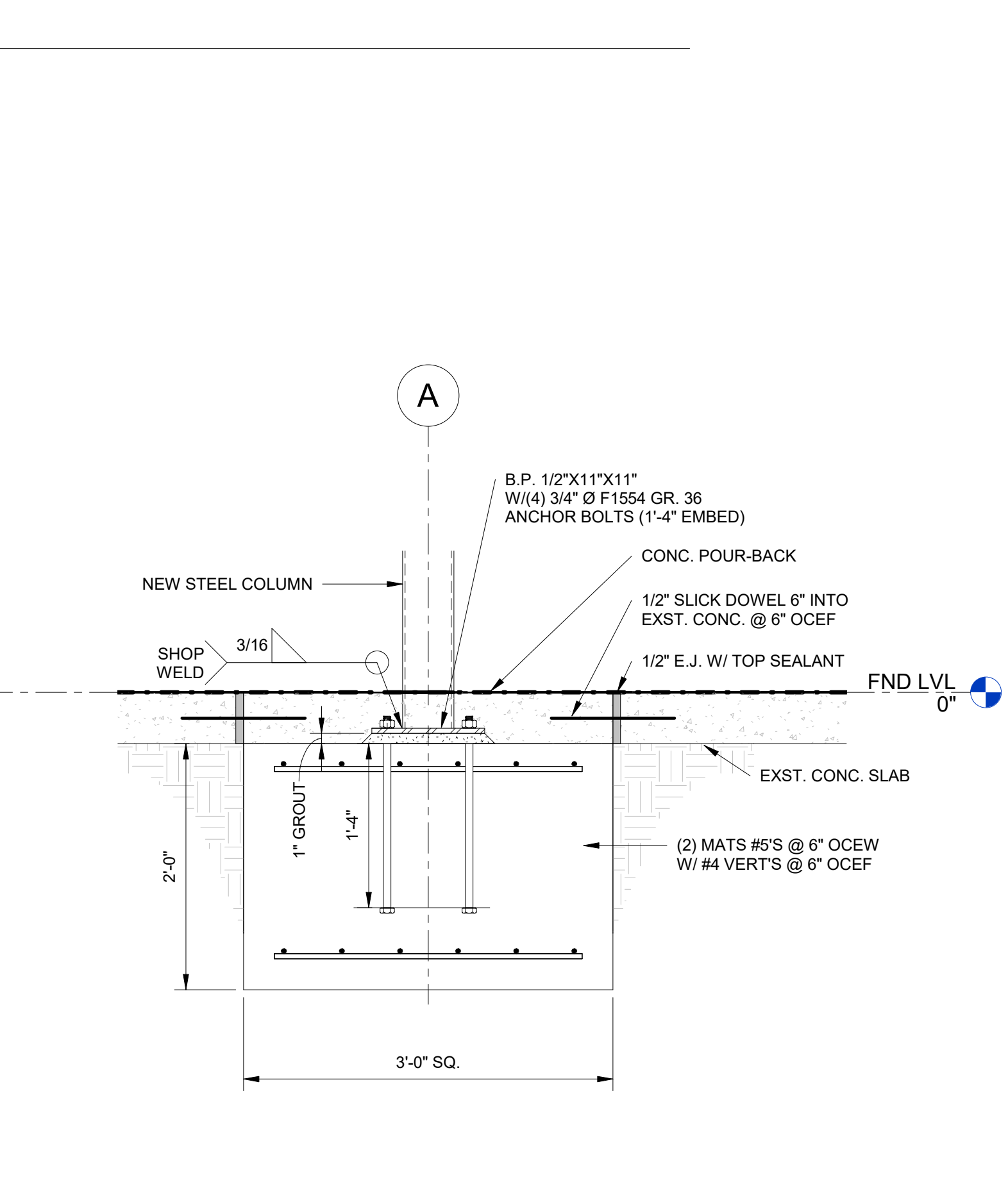
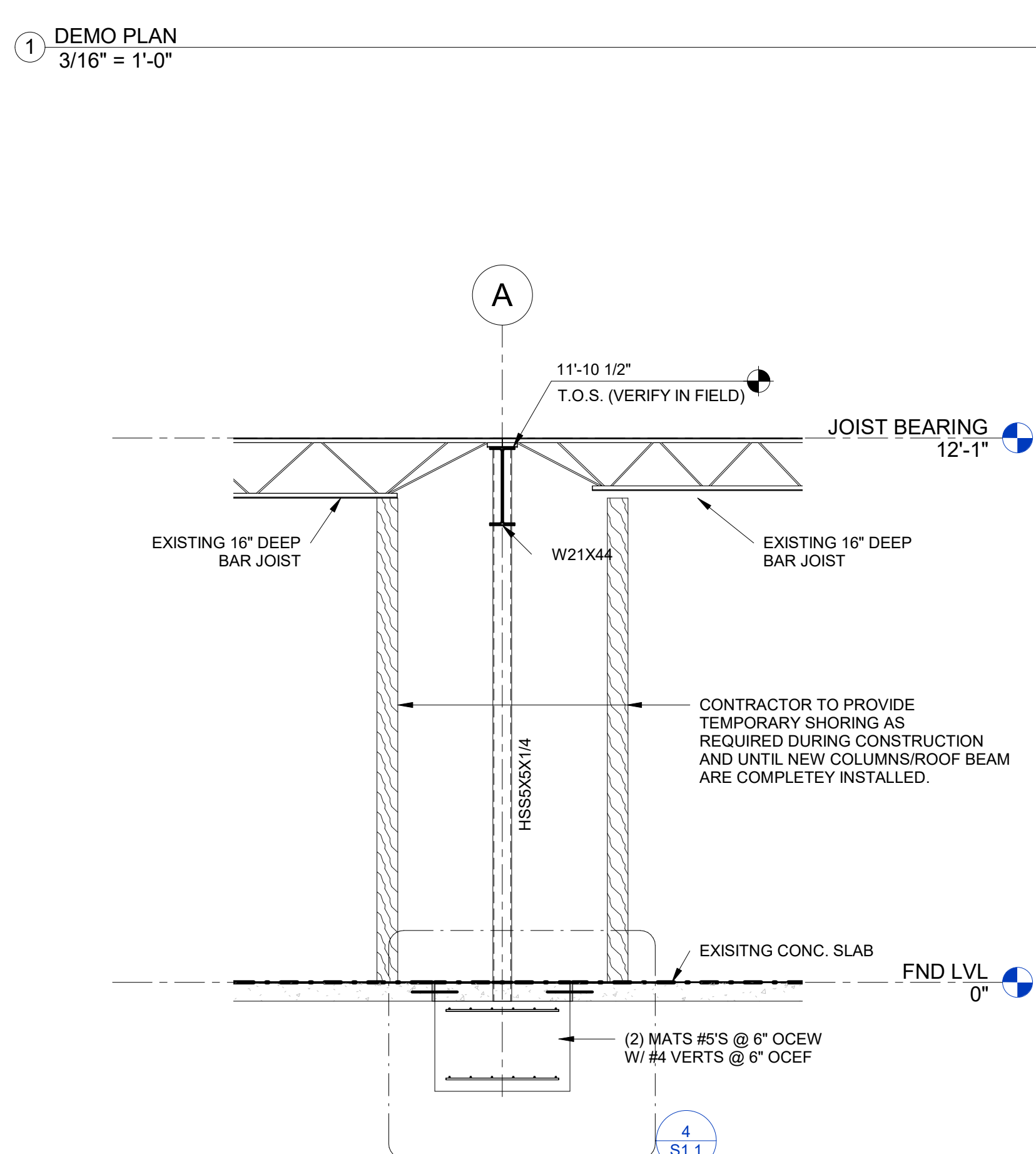
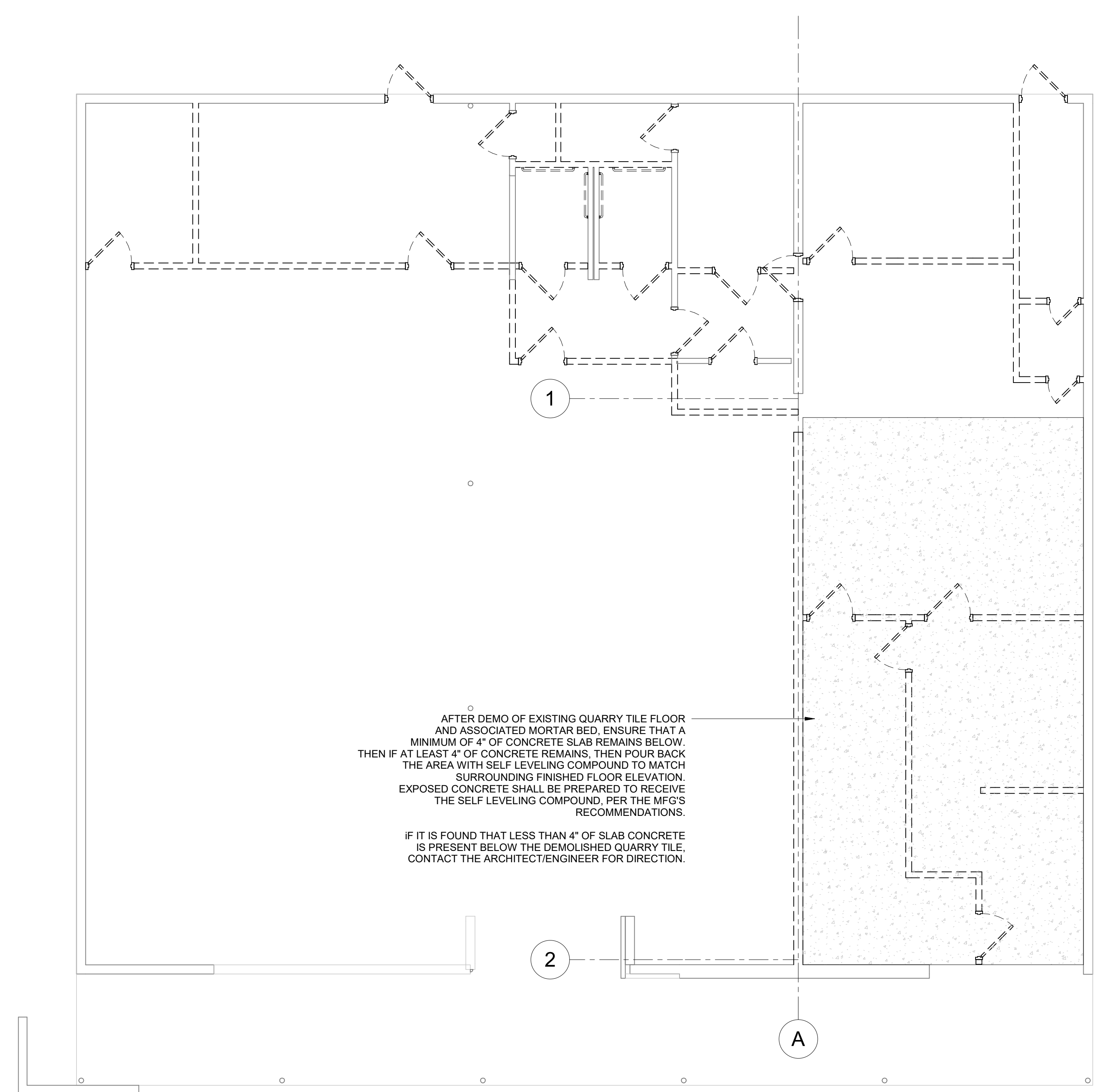
SKG ENGINEER
 POWER SYSTEMS, INC.

378 W. CONCHO AVE.
 SAN ANGELO, TX 76903
 KfwArchitects.com
KFW
 KFW ARCHITECTS AIA

ISSUED FOR PERMIT, PRICING & CONSTRUCTION
 MAY 6, 2022

**RENOVATIONS OF
 NORTH ANGELO BRANCH LIBRARY
 TOM GREEN COUNTY**

Project No. 292-09-1020
 Date MAY 6, 2022
 Sheet Number **S1.1**



IMPORTANT NOTE:

THE CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED TEMPORARY SHORING/BRACING OF EXISTING ROOF JOISTS, AS REQUIRED DURING CONSTRUCTION.

ROOF JOISTS ON EACH SIDE OF WALL TO BE DEMOLISHED SHALL BE FULLY SHORED IN PLACE PRIOR TO WALL DEMOLITION.

SKG ENGINEERING, LLC
 SURVEYING • ENVIRONMENTAL • LAB/CMT

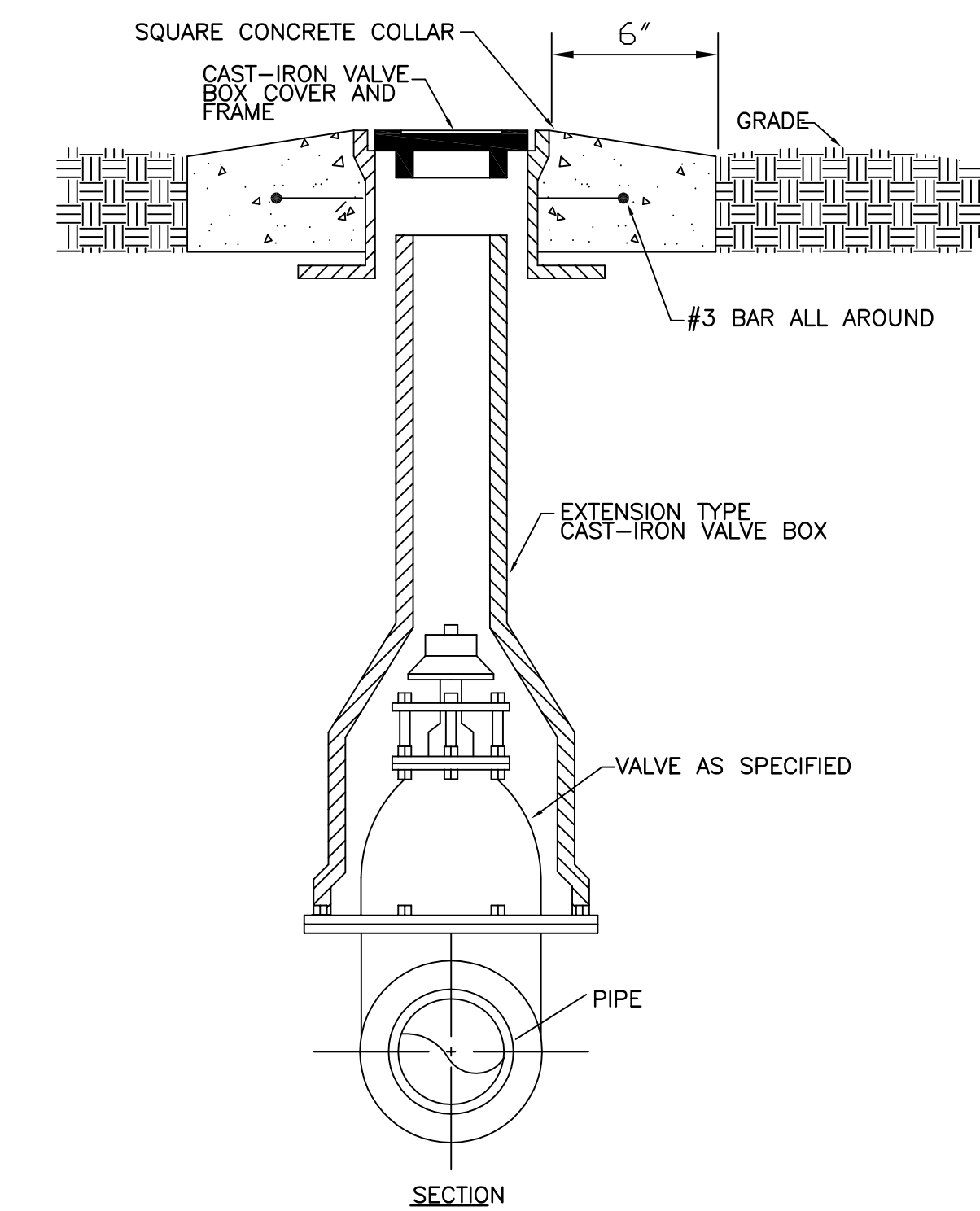
708 SOUTH ABE STREET
 SAN ANGELO, TEXAS 76903
 FIRM REGISTRATION NUMBER F-7008 & 10102400
 www.skge.com

PHONE: 325.655.1288
 FAX: 325.657.8189

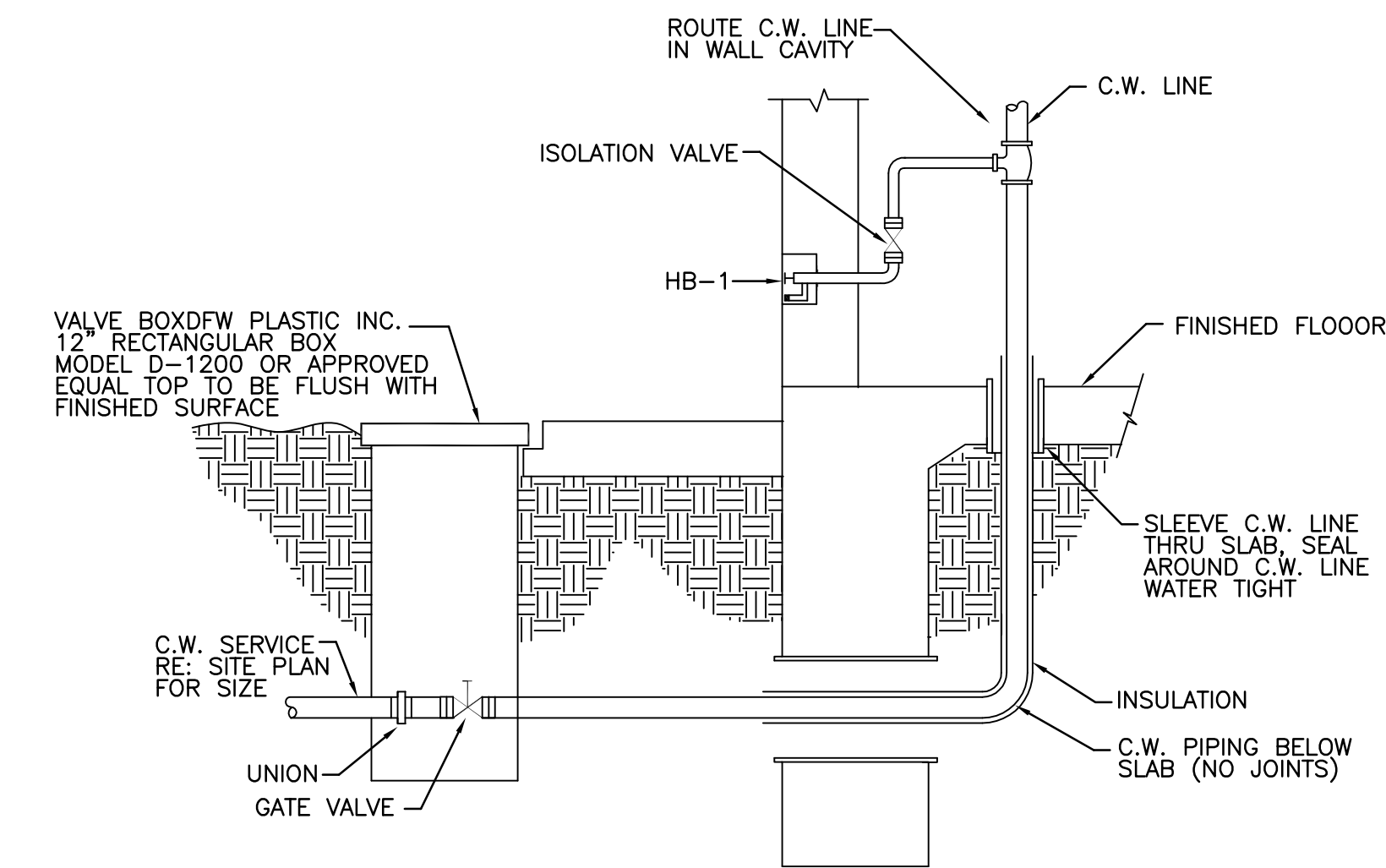
5/6/2022 21-E-0628

UTILITY NOTES:

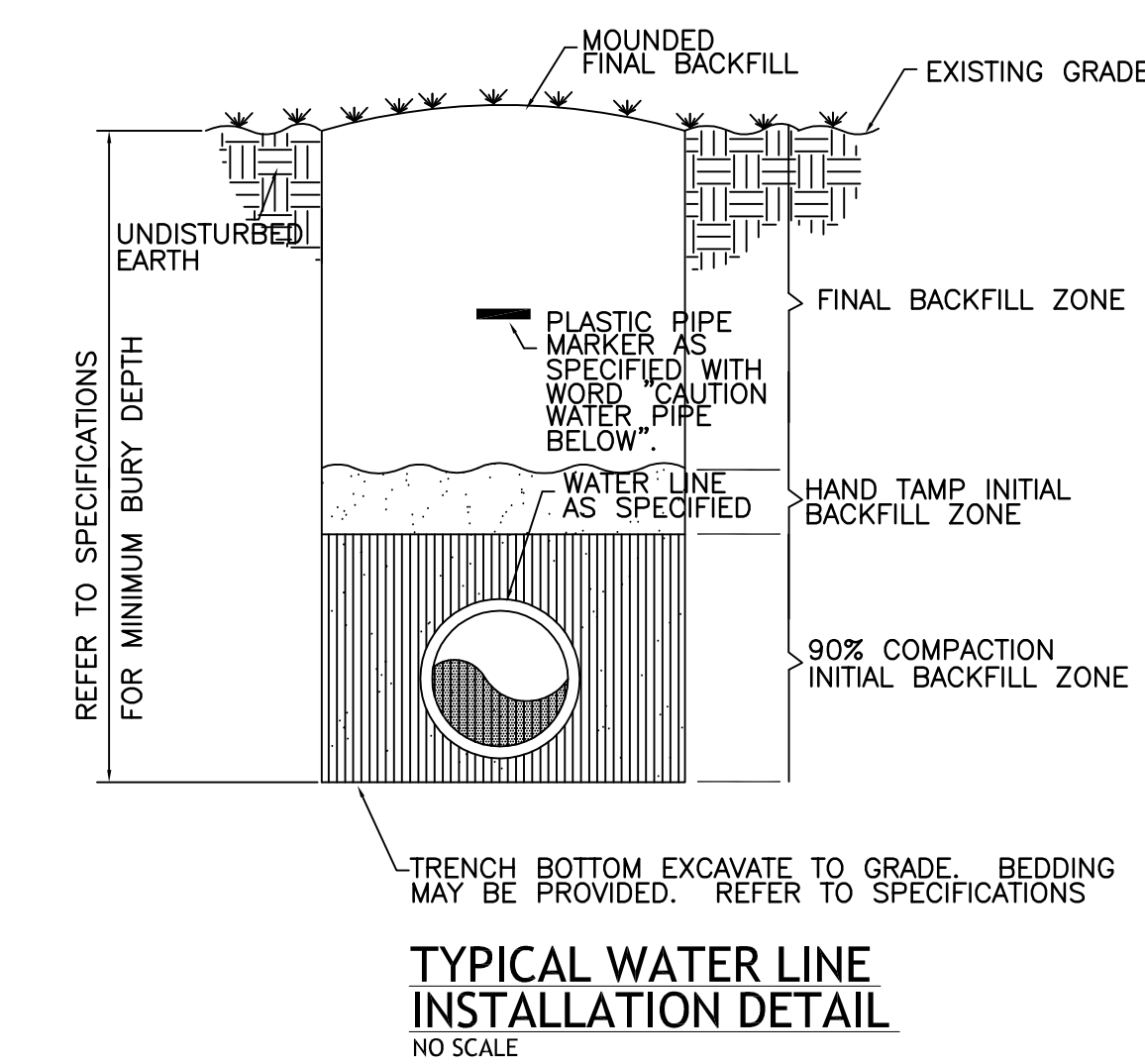
- 1 FOLLOW ALL NATIONAL, STATE AND LOCAL CODES FOR UTILITY INSTALLATION. EXISTING UTILITY LOCATIONS ARE REPRESENTATIVE IN NATURE ONLY. THIS SHEET IS INTENDED TO ILLUSTRATE NEW WORK ONLY.
- 2 MAINTAIN MINIMUM 10'-0" WORKING CLEARANCE FROM OVERHEAD POWER LINES TO ANY SIGNS OR STRUCTURES.
- 3 MAINTAIN MINIMUM SEPARATION BETWEEN SEWER AND WATER LINES OF 5'-0". MAINTAIN MINIMUM SEPARATION BETWEEN GAS AND ELECTRIC LINES OF 3'-0". MAINTAIN REQUIRED CLEARANCES BETWEEN ALL OTHER UTILITIES.
- 4 ELECTRICAL METER IS NEW. INSTALL NEW METER AND PANELS PER CODE AS SHOWN ON RISER DIAGRAM, SHEET E-4. INSTALL NEW SERVICE MAST.
- 5 SERVICE DELIVERY WILL BE FROM OVERHEAD XFMR'S WITH OVERHEAD SERVICE. CONTACT GARY PITTMAN 325-657-2866. SERVICE VOLTAGE IS 120/208V, THREE PHASE, CONNECTED LOAD FOR NEW BUILDING IS 180 AMPS.
- 6 PROVIDE FLUSH WITH GRADE BOXES FOR WATER SHUT-OFF VALVES AND NEW WATER METER.
- 7 ESTIMATED DOMESTIC PEAK DEMAND IS 28 GPM FOR NEW BUILDING. FURNISH 1" TAP AND METER. INSTALL 1 1/2" YARDLINE AS SHOWN. CONTACT THE CITY OF SAN ANGELO PUBLIC WORKS DEPARTMENT FOR CHARGES OR FEES.
- 8 ROUTE CONDENSATE DRAINS FOR RTU #1-21 AND RTU #2-21 TO MOP SINK DRAIN.
- 9 APPLICABLE CODES:
2015 INTERNATIONAL BUILDING CODE
2014 NATIONAL ELECTRICAL CODE
2015 INTERNATIONAL MECHANICAL CODE
2015 INTERNATIONAL PLUMBING CODE
2015 INTERNATIONAL FIRE CODE
2015 INTERNATIONAL ENERGY CONSERVATION CODE
2015 INTERNATIONAL FUEL GAS CODE
CITY OF SAN ANGELO ORDINANCES
- 10 VERIFY VOLTAGE OF ALL EQUIPMENT.
- 11 CONTRACTOR SHALL INSTALL NEW BUILDING DRAIN UNDERNEATH BUILDING TO 4" BUILDING SEWER IN REAR. INSTALL CLEANOUT EVERY 80'. REUSE BUILDING SEWER TO MAIN.
- 12 EXISTING FIRE HYDRANT IS WITHIN 400' OF NON-SPRINKLERED BUILDING.
- 13 NATURAL GAS SERVICE SHALL BE INSTALLED TO NEW ROOFTOP EQUIPMENT WITH EXISTING METER AND RISER TO THE ROOF. PEAK DEMAND FOR METER IS 250 CFH. CONTACT TIMOTHY BIGGS, 325-665-4524, WITH ATMOS FOR CHARGES OR FEES TO REACTIVATE NATURAL GAS SERVICE.
- 14 CONTROL SITE LIGHT WITH PHOTOCELL ON, TIMECLOCK OFF. FOR THIS FIXTURE REFER TO DEDUCT BID ALTERNATE #3.
- 15 SUDDENLINK WILL PROVIDE CATV, INTERNET AND TELEPHONE WITH EXISTING SERVICE. CONTACT KENNY OWEN, 325-212-7670.
- 16 INSTALL DOUBLE CLEANOUT OUTSIDE OF SIDEWALK IF POSSIBLE.



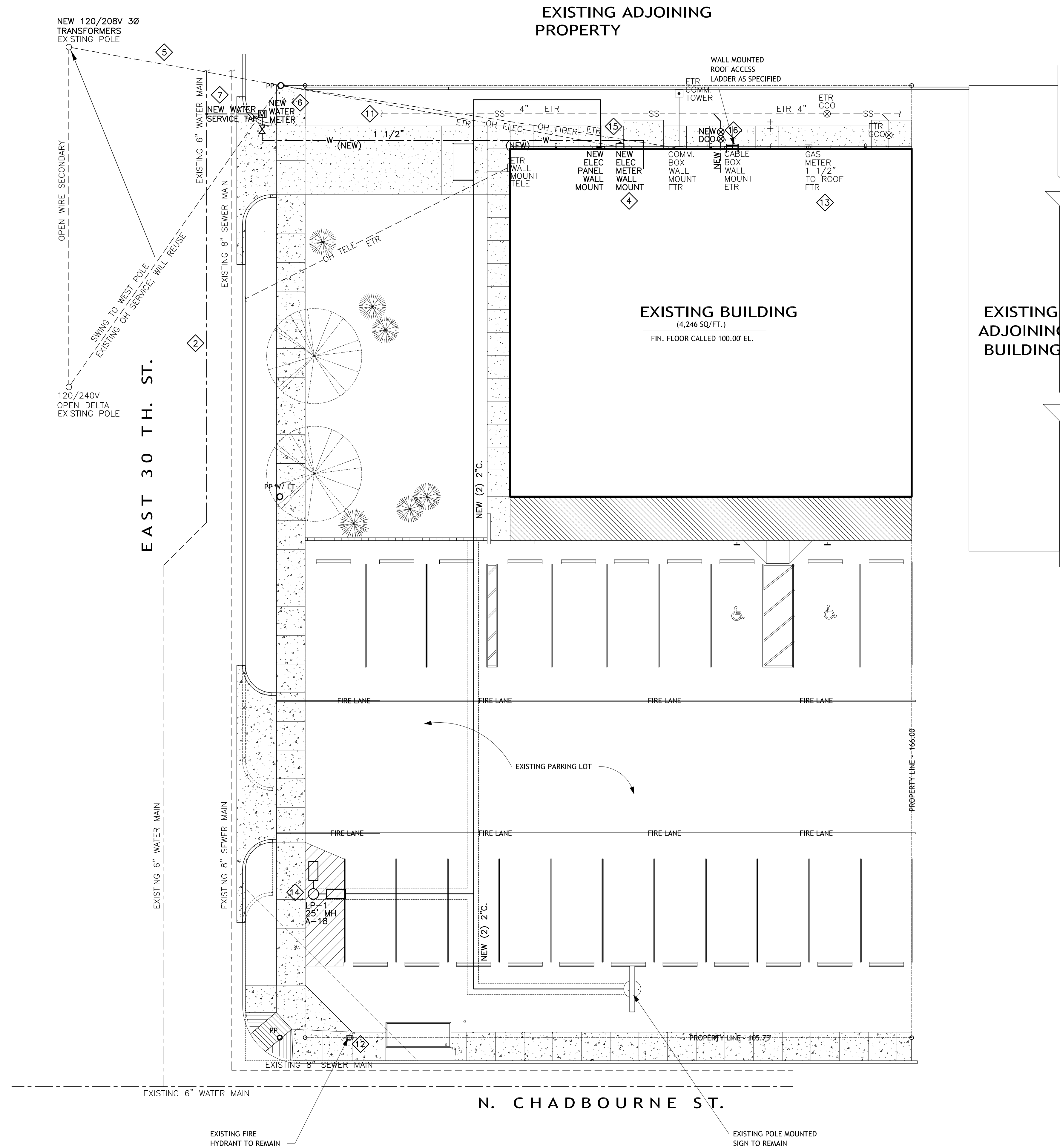
TYPICAL VALVE BOX DETAIL
NO SCALE



C.W. BUILDING ENTRY DETAIL
NO SCALE



TYPICAL WATER LINE INSTALLATION DETAIL
NO SCALE



SITE UTILITY PLAN
SCALE: 1" = 10'-0"



Drawn By _____
Checked By _____

STRUCTURAL ENGINEER
SKG ENGINEERING

MEP ENGINEER
POWER SYSTEMS, INC.

378 W. CONCHO AVE
SAN ANGELO, TX 76903
325-665-2866
mpe@skgarchitects.com

MEW
KFW ARCHITECTS AIA

ISSUED FOR PERMIT, PRICING & CONSTRUCTION
MAY 6, 2022

Paul R. Wilkerson
PAUL R. WILKERSON
REGISTERED PROFESSIONAL ENGINEER
NO. 90738
EXPIRES 05-01-25
05-06-22

**RENOVATIONS OF
NORTH ANGELO BRANCH LIBRARY
TOM GREEN COUNTY**

MRP PROJECT #2104
PowerSystems

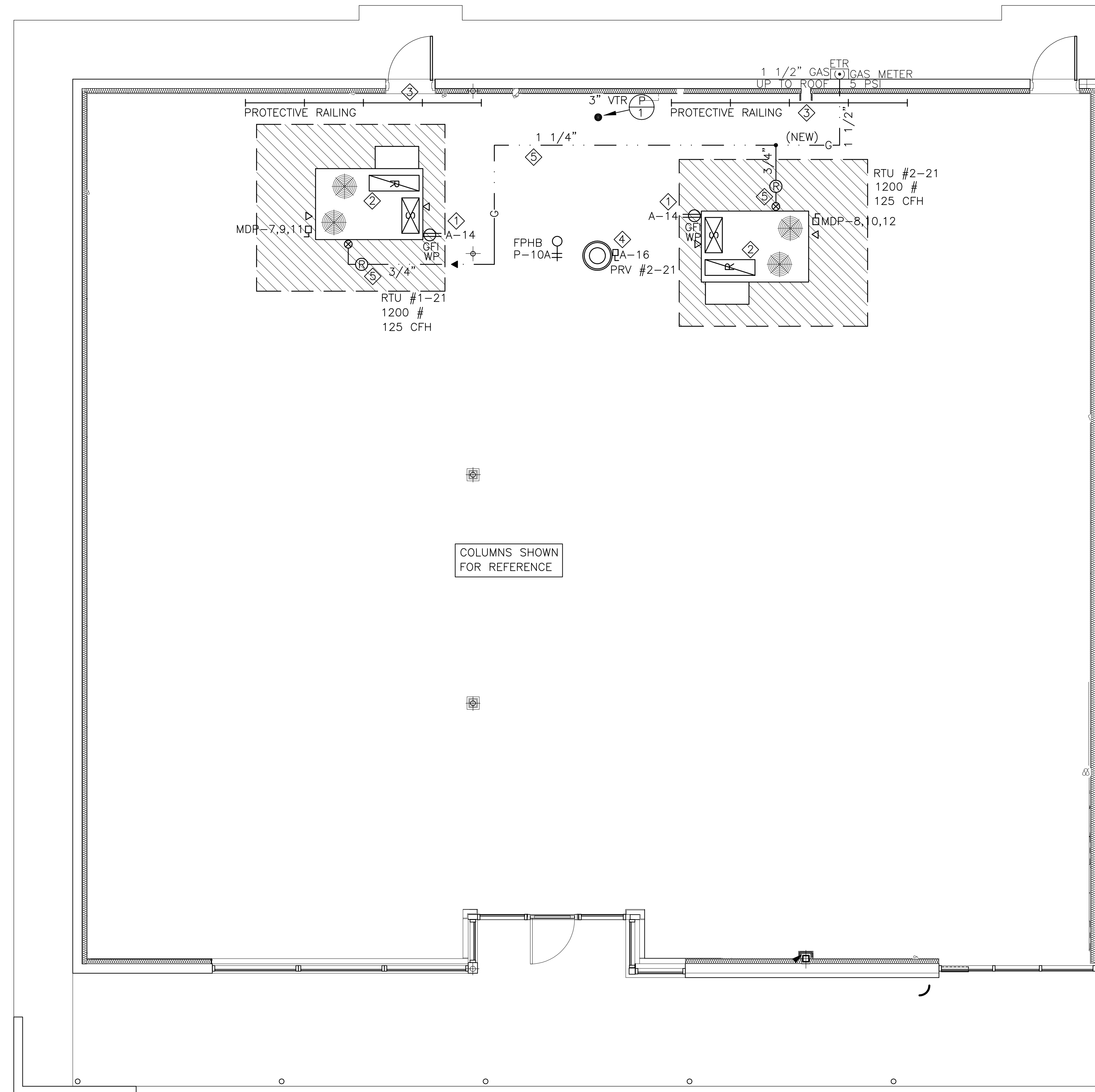
P.O. Box 2863
San Angelo, Texas 76902
325-650-2235
FIRM NO. P-6257

If this document is not SIGNED and DATED on the seal, then it is NOT FOR REGULATORY APPROVAL, PERMITTING OR CONSTRUCTION.
THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY PAUL R. WILKERSON, P.E. 90738 ON MAY 06, 2022. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

ORDINANCES
THIS DRAWING IS REPRESENTATIVE IN NATURE ONLY. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL STATE, COUNTY, MUNICIPAL AND FEDERAL LAWS AND/OR ORDINANCES GOVERNING THE PROJECT. IF IN ANY INSTANCE THE PLANS AND SPECIFICATIONS ARE IN DIRECT CONFLICT WITH SUCH LAWS AND/OR ORDINANCES, THE LAWS AND/OR ORDINANCES SHALL HAVE JURISDICTION.

Project No. 292-09-1020
Date MAY 6, 2022

Sheet Number
MPE-1
1 OF 14



MECHANICAL/ELECTRICAL/PLUMBING ROOF PLAN NOTES:

- CONTRACTOR IS TO READ THE GENERAL NOTES PRIOR TO READING THE FOLLOWING PLAN NOTES.
- FOR DUCTWORK RUNS - REFER TO MECHANICAL FLOOR PLAN. FOR CONDENSATE DRAIN LINES, REFER TO PLUMBING FLOOR PLAN. CONDENSATE LINE CONNECTIONS SHALL BE MADE TO CENTER OF RTU DRAIN PAN BELOW ROOF. DO NOT CONNECT ABOVE ROOF.
- LOCATE EQUIPMENT AND FIXTURES APPROXIMATELY AS SHOWN CONFORMING TO ALL ARCHITECTURAL AND STRUCTURAL ITEMS. PROVIDE ALL SUPPORTS, HANGERS AND OPENINGS REQUIRED FOR A COMPLETE INSTALLATION. CONTRACTOR SHALL COORDINATE WITH ALL TRADES FOR CLEARANCES AND EXACT LOCATIONS OF EQUIPMENT. ALL EQUIPMENT AND FIXTURES SHALL BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS AND IN FULL ACCORDANCE WITH ALL APPLICABLE CODES HAVING JURISDICTION.
- TRANSITION BETWEEN FULL SIZE OPENING FROM ROOFTOP EQUIPMENT AND DUCT SIZE SHOWN ON MECHANICAL PLAN IS TO BE MADE WITHIN CURB FOR EQUIPMENT ON TOP OF ROOF. FURNISH CURB WITH BOTTOM CONNECTION FOR ALL SERVICES.
- ROOFTOP EQUIPMENT WHICH IS FURNISHED WITHOUT A CURB SHALL BE INSTALLED ON TREATED WOOD RUNNERS SET IN MASTIC OR AS SPECIFIED BY ARCHITECTURAL PLANS.
- DUCTWORK EXPOSED TO WEATHER SHALL BE LINED WITH 2" INSULATION. INCREASE INSIDE DIMENSIONS OF DUCT ACCORDING TO THE ADDITION OF DUCT LINER AND PAINT TO MATCH HVAC UNIT. SEAL ALL PENETRATIONS THRU ROOF AND/OR WALL WITH SHEET METAL FLASHING.
- PLUMBING VENTS THRU ROOF SHALL BE LOCATED 10'-0" FROM ALL OUTSIDE AIR INTAKES AND 2'-0" FROM ALL VERTICAL STRUCTURES. TERMINATIONS ARE TO BE 12" MINIMUM ABOVE ROOF. IF WITHIN 10'-0" OF A PARAPET, TERMINATIONS SHALL BE AT TOP OF PARAPET. REFER TO ARCHITECTURAL DRAWINGS FOR PARAPET HEIGHT.
- LABEL ALL EQUIPMENT ON ROOF. USE #1-21 FOR RTUS, ETC.
- CURB MUST BE FABRICATED TO MATCH SLOPE OF ROOF.

NOTES INDICATED BY "◇":

- SERVE CONVENIENCE RECEPITS FROM INDEPENDENT CIRCUIT AS SHOWN. DO NOT FEED FROM RTU.
- SERVE DUCT SMOKE DETECTORS FROM INDEPENDENT CIRCUIT. DO NOT POWER FROM RTU.
- MAINTAIN 10'-0" CLEARANCE FROM ALL EQUIPMENT TO EDGE OF ROOF. CONTRACTOR IS RESPONSIBLE TO PROVIDE AND INSTALL GUARD RAILS EQUAL TO BLUEWATER MFG MODEL SAFETY RAIL 2000 FG. INCLUDE COST AND LABOR IN BID.
- CONTROL EXHAUST FAN ON ROOF WITH TIMER FOR 8 A.M. TO 6 P.M. DAILY OPERATION.
- GAS LINE ON ROOF IS NEW INTERMEDIATE PRESSURE FROM EXISTING RISER. PROVIDE GAS ROLLER SUPPORTS AS DETAILED ON SHEET P-3. PROVIDE MINIMUM SPACING PER MANUFACTURER INSTRUCTIONS. PROVIDE APPLIANCE REGULATOR AT EACH RTU.

Drawn By _____
Checked By _____

STRUCTURAL ENGINEER
SKG ENGINEERING

MEP ENGINEER
POWER SYSTEMS, INC.

378 W. CONCHO AVE
SAN ANGELO, TX 76903
MEPARCHITECTS.COM

KFW
KFW ARCHITECTS/AA

ISSUED FOR PERMIT, PRICING & CONSTRUCTION
MAY 6, 2022

Paul R. Wilkerson
PAUL R. WILKERSON
REGISTERED PROFESSIONAL ENGINEER
NO. 90738
EXPIRES 05-06-22

RENOVATIONS OF
NORTH ANGELO BRANCH LIBRARY
TOM GREEN COUNTY

Project No. 292-09-1020
Date MAY 6, 2022

Sheet Number
MPE-2
2 OF 14

MEP PROJECT #2104
Power Systems

P.O. Box 2863
San Angelo, Texas 76902
325-659-2235
FIRM NO. P-6257

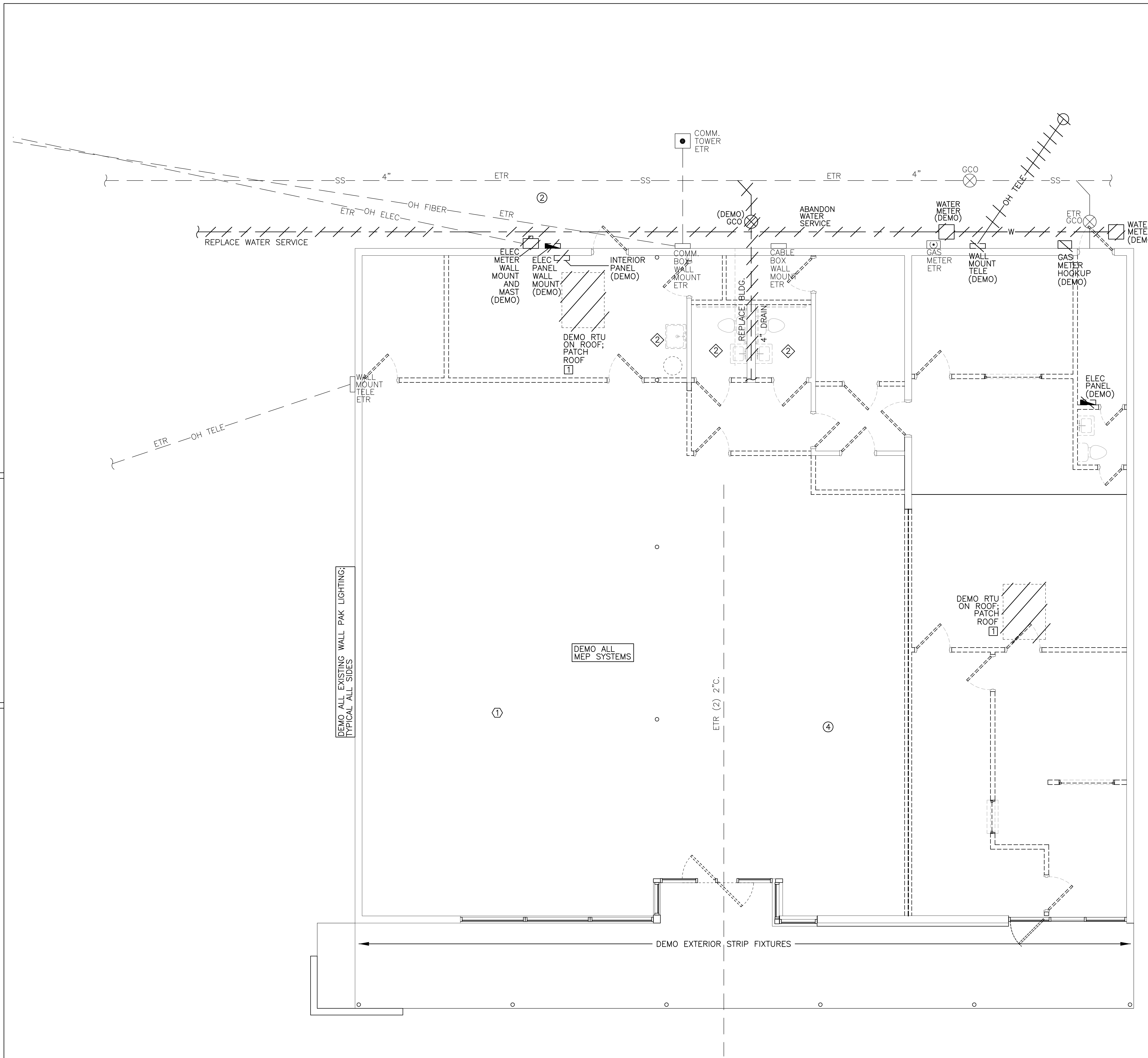
If this document is not SIGNED and DATED on the seal, then it is NOT FOR REGULATORY APPROVAL, PERMITTING OR CONSTRUCTION.

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY PAUL R. WILKERSON, P.E. 90738 ON MAY 06, 2022. ALTERATION OF A SEALED DOCUMENT WITHOUT HIS WRITTEN INSTRUCTIONS TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

ORDINANCES

THIS DRAWING IS REPRESENTATIVE IN NATURE ONLY. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL STATE, COUNTY, MUNICIPAL AND FEDERAL LAWS AND/OR ORDINANCES GOVERNING THE PROJECT. IF IN ANY INSTANCE THE PLANS AND SPECIFICATIONS ARE IN DIRECT CONFLICT WITH SUCH LAWS AND/OR ORDINANCES, THE LAWS AND/OR ORDINANCES SHALL HAVE JURISDICTION.

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



MECHANICAL DEMOLITION NOTES:

- 1 REMOVE ALL DIFFUSERS AND ASSOCIATED BRANCH DUCTS WHETHER SHOWN ON PLANS OR NOT.
- 2 REMOVE ALL GRILLES AND ASSOCIATED BRANCH DUCTS WHETHER SHOWN ON PLANS OR NOT.
- 3 REMOVE ALL ITEMS AS REQUIRED WHETHER SHOWN ON PLANS OR NOT. CONTRACTOR IS RESPONSIBLE TO CONDUCT A FIELD SURVEY OF THE PROJECT AND FAMILIARIZE HIMSELF WITH ALL CONTRACT DOCUMENTS BEFORE BIDDING THIS PROJECT.
- 4 REMOVE ALL DUCTWORK.

GENERAL MECHANICAL DEMOLITION NOTES:

1. EXERCISE EXTREME CAUTION WHEN WORKING.
2. LOCATIONS OF MECHANICAL SYSTEMS WERE TAKEN FROM A COMBINATION OF A FIELD SURVEY AND THE ORIGINAL DRAWINGS. CONTRACTOR TO FIELD VERIFY EXISTING SYSTEMS. WHERE REQUIRED, MODIFY LIMITS OF DEMOLITION AND CONSTRUCTION TO ACCOMMODATE FINISHED CONDITIONS. TYPICAL THROUGHOUT PROJECT. CONTACT ENGINEER/ARCHITECT FOR CLARIFICATIONS AS NEEDED.
3. REMOVE ALL ITEMS AS REQUIRED WHETHER SHOWN ON PLANS OR NOT. CONTRACTOR IS RESPONSIBLE TO CONDUCT A FIELD SURVEY OF THE PROJECT AND FAMILIARIZE HIMSELF WITH ALL CONTRACT DOCUMENTS BEFORE BIDDING THIS PROJECT.
4. REMOVE EXISTING DUCTWORK, AIR DEVICES, CONTROL COMPONENTS AND AIR DISTRIBUTION ACCESSORIES AS SHOWN AND AS REQUIRED FOR FINISHED CONDITIONS.
5. CAREFULLY REMOVE ALL CONTROL COMPONENTS, THERMOSTATS, FANS, AIR DEVICES, AIR DISTRIBUTION ACCESSORIES AND SIMILAR REUSABLE EQUIPMENT AS REQUIRED. TURN ALL OTHER ITEMS OVER TO OWNER. PROPERLY DISPOSE OF OTHER MATERIALS. IF LOCATED IN EXISTING WALL/CEILING TO REMAIN, PATCH AND MATCH EXISTING FINISH. VERIFY EXACT EQUIPMENT TO BE TURNED OVER WITH OWNER'S REPRESENTATIVE PRIOR TO START OF CONSTRUCTION.

GENERAL ELECTRICAL DEMOLITION NOTES:

1. EXERCISE EXTREME CAUTION SO AS NOT TO DAMAGE EQUIPMENT WHICH REMAINS.
2. PROVIDE PROPERLY PHASED REMOVAL OF ALL DEVICES AND EQUIPMENT UNLESS NOTED, OTHERWISE TO REMAIN.
3. ITEMS SHOWN ON THESE DRAWINGS ARE GIVEN AS AN AID TO THE CONTRACTOR IN BIDDING AND ARE BASED ON VISUAL SURVEY AND REVIEW OF ORIGINAL CONSTRUCTION DRAWINGS. WHERE REQUIRED, EXTEND LIMITS OF DEMOLITION TO ACCOMMODATE FINISHED CONSTRUCTION. TYPICAL THROUGHOUT PROJECT. CONTACT ENGINEER/ARCHITECT FOR CLARIFICATIONS AS NEEDED.
4. DISCONNECT ALL BRANCH CIRCUITS TO DEVICES UNLESS NOTED OTHERWISE AND REMOVE CONDUCTORS AND CONDUIT BACK TO SERVICE.
5. CAREFULLY REMOVE ALL LIGHTING FIXTURES AND DEVICES. RETURN LIGHTING FIXTURES TO OWNER. COORDINATE WITH OWNER'S REPRESENTATIVE PRIOR TO DEMOLITION WORK WITH THAT OF OTHER TRADES.
6. DEVICES NOT REMOVED SHALL BE KEPT IN SERVICE. CAREFULLY CONSIDER CONSTRUCTION PHASING IN PLANNING DEMOLITION WORK TO SATISFY THIS REQUIREMENT. VERIFY DEVICES AND CIRCUITS TO REMAIN ACTIVE WHICH ARE AFFECTED BY EACH PHASE OF DEMOLITION. MODIFY EXISTING BRANCH CIRCUIT CONDUIT/WIRING WHERE REQUIRED.
7. UNLESS OTHERWISE NOTED, ALL MATERIALS TO BE REMOVED SHALL BE REMOVED FROM THE SITE AND DISPOSED OF BY THE CONTRACTOR.
8. REPAIR ALL CEILINGS AND WALLS DAMAGED DURING DEMOLITION PHASE. REPAIR SURFACES TO ORIGINAL CONDITION AND PAINT/FINISH AS DIRECTED BY ARCHITECT. ALL REPAIRS MUST BE APPROVED BY THE ARCHITECT.
9. DEMOLITION OF ALL DATA, TELEPHONE AND TV CABLING SHALL BE PROVIDED BY THE CONTRACTOR UNLESS NOTED OTHERWISE.
10. RAISE, LOWER, OFFSET OR OTHERWISE RELOCATE EXISTING CONDUIT/WIRING/BOXES AS REQUIRED TO ACCOMMODATE NEW OR REVISED ABOVE CEILING SYSTEMS. REFERENCE ALSO MECHANICAL AND PLUMBING DRAWINGS AND COORDINATE WITH THOSE TRADES.

ELECTRICAL DEMOLITION NOTES:

- 1 REMOVE RECEPTACLE AND DEVICES IN AND ON WALL. PATCH WALL AS REQUIRED.
- 2 REMOVE ALL DEVICES AS REQUIRED, WHETHER SHOWN ON PLAN OR NOT. REMOVE ALL CONDUIT IN SCOPE OF WORK.
- 3 CONTRACTOR TO REMOVE EXISTING WIRELESS ACCESS PORT "WAP" DEVICES AND RETURN TO OWNER.
- 4 CONTRACTOR TO REMOVE EXISTING CAMERAS AND ALL SECURITY DEVICES AND RETURN TO OWNER.
- 5 CONTRACTOR TO REMOVE ALL SPEAKERS WHETHER SHOWN ON PLANS OR NOT. PATCH WALLS AS REQUIRED. RETURN SPEAKERS TO OWNER.

LIGHTING NOTES:

- 1 REMOVE ALL EXISTING LIGHT FIXTURES, WHETHER SHOWN ON PLAN OR NOT, OR AS NOTED.
- 2 VERIFY ANY DISCREPANCIES PRIOR TO ROUGH-IN AND INSTALLATION, TYPICAL THROUGHOUT.
- 3 REMOVE EXISTING SWITCHES AS SHOWN ON PLANS. PATCH WALL AS REQUIRED.
- 4 REMOVE ALL FIXTURES AND DEVICES AS REQUIRED, WHETHER SHOWN ON PLAN OR NOT.

PLUMBING DEMOLITION NOTES:

- 1 CONTRACTOR TO REMOVE ALL WATER LINES TO EXISTING PLUMBING FIXTURES THAT ARE TO BE REMOVED.
- 2 CONTRACTOR TO REMOVE ALL PLUMBING FIXTURES, SEWER LINES AND REQUIRED WATER LINES AS REQUIRED WHETHER, SHOWN ON PLAN OR NOT.
- 3 CONTRACTOR TO CAP ALL SEWER LINES AT SLAB. SEAL EXISTING FLOOR DRAINS. DEMO ALL EXPOSED CAST IRON PIPE IN SCOPE OF WORK.
- 4 CONTRACTOR IS TO REMOVE ALL VENT LINES SERVICING EXISTING PLUMBING FIXTURES THAT ARE TO BE REMOVED. PATCH ROOF AS REQUIRED. REWORK PENETRATIONS OF ROOF AS NEEDED.

GENERAL PLUMBING DEMOLITION NOTES:

1. READ THE SPECIFICATIONS.
2. LOCATIONS OF PLUMBING SYSTEMS TAKEN FROM A COMBINATION OF A VISUAL SURVEY AND ORIGINAL DRAWINGS. CONTRACTOR TO FIELD VERIFY EXISTING SYSTEMS. WHERE REQUIRED, EXTEND LIMITS OF DEMOLITION AND/OR REPLACE EXISTING PIPING TO ACCOMMODATE FINISHED CONSTRUCTION. CAP LINES AS REQUIRED. (INTENT IS TO REMOVE ALL PIPING THAT WILL NOT BE IN USE. ABANDONING IN PLACE IS NOT ACCEPTABLE UNLESS SPECIFICALLY NOTED.) TYPICAL THROUGHOUT PROJECT. CONTACT ENGINEER/ARCHITECT FOR CLARIFICATIONS AS NEEDED.
3. NOT ALL EXISTING PIPE IS SHOWN. FOR ADDITIONAL PIPING AND VALUES, SEE ORIGINAL BUILDING PLUMBING PLANS. (OBTAIN FROM OWNER DURING CONSTRUCTION.)
4. REMOVE PLUMBING FIXTURES AND PIPING (SANITARY, VENT, CW, HW, HWR) AS REQUIRED. CAP IN ACCESSIBLE LOCATION AND/OR PREPARE FOR FUTURE CONNECTIONS AS APPLICABLE. COORDINATE WITH GENERAL CONTRACTOR.
5. CAP AND SEAL ALL PLUMBING LINES AT POINT WHERE DEMO BEGINS AND NO NEW PIPING WILL BE CONNECTED. PROVIDE TEMPORARY CAPS ON LINES WHICH ARE TO BE CONNECTED TO NEW PIPING.
6. REMOVE ALL FLOOR DRAINS (UNLESS OTHERWISE NOTED) IN REMODELED AREAS AND CAP SANITARY PIPE BELOW FINISHED FLOOR. PATCH FLOOR AS REQUIRED.

CONTRACTOR SHALL VISIT SITE BEFORE BIDDING TO DETERMINE SCOPE.

MRP PROJECT #2104
Power Systems

P.O. Box 2863
 San Angelo, Texas 76902
 325-659-2235
 FIRM NO. P-6257

If this document is not SIGNED and DATED on the seal, then it is NOT FOR REGULATORY APPROVAL, PERMITTING OR CONSTRUCTION.

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY PAUL R. WILKERSON, P.E. 90738 ON MAY 06, 2022. ALTERATION OF A SEALED DOCUMENT WITHOUT HIS OR HIS SUCCESSOR'S SIGNATURE IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

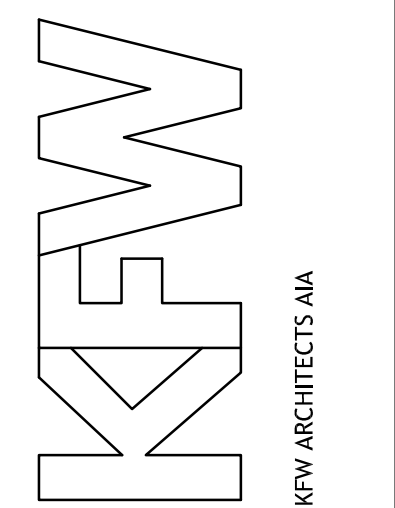
ORDINANCES

THIS DRAWING IS REPRESENTATIVE IN NATURE ONLY. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL STATE, COUNTY, MUNICIPAL AND FEDERAL LAWS AND/OR ORDINANCES GOVERNING THE PROJECT. IF IN ANY INSTANCE THE PLANS AND SPECIFICATIONS ARE IN DIRECT CONFLICT WITH SUCH LAWS AND/OR ORDINANCES, THE LAWS AND/OR ORDINANCES SHALL HAVE JURISDICTION.

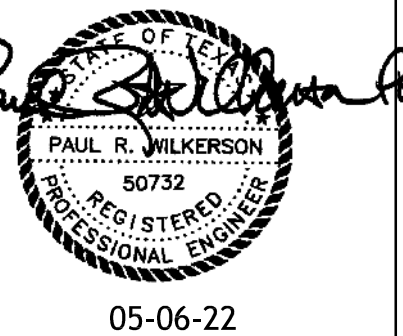
Drawn By _____
 Checked By _____

STRUCTURAL ENGINEER
 SKG ENGINEERING
 MEP ENGINEER
 POWER SYSTEMS, INC.

378 W. CONCHO AVE
 SAN ANGELO, TX 76903
 325-659-2235
 www.mpe-3.com



ISSUED FOR PERMIT, PRICING & CONSTRUCTION
 MAY 6, 2022



RENOVATIONS OF
NORTH ANGELO BRANCH LIBRARY
 TOM GREEN COUNTY

Project No. 292-09-1020

Date MAY 6, 2022

Sheet Number

MPE-3
 3 OF 14

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

MECHANICAL SYMBOL SCHEDULE	
SYMBOL	DESCRIPTION
	GATE VALVE
	GLOBE VALVE
	BALL VALVE
	MOTORIZED VALVE
	PRESSURE REDUCING VALVE
	PRESSURE RELIEF VALVE
	BUTTERFLY VALVE
	THREE-WAY MOTORIZED VALVE
	SOLENOID VALVE
	CHECK VALVE
	BALANCING VALVE
	GAUGE COCK
	A.S.M.E. TEMPERATURE & PRESSURE RELIEF VALVE
	GAS COCK
	PRESSURE GAUGE
	THERMOMETER
	GAS LINE
	AUTOMATIC AIR VENT
	STRAINER WITH DRAIN VALVE
	FLEXIBLE PIPE CONNECTION
	UNION
	PIPE ANCHOR
	WALL HYDRANT
	FLOW SWITCH
	THERMOSTAT
	HUMIDISTAT
	SANITARY SEWER LINE
	MANHOLE
	COLD WATER LINE
	HOT WATER LINE
	HOT WATER RECIRCULATING LINE
	180 HOT WATER LINE
	HOT WATER SUPPLY LINE
	HOT WATER RETURN LINE
	HYDRONIC SYSTEM SUPPLY LINE
	HYDRONIC SYSTEM RETURN LINE
	CHILLED WATER SUPPLY LINE
	CHILLED WATER RETURN LINE
	CONDENSATE DRAIN LINE WITH FLOW DIRECTION
	FLOW DIRECTION
	AIR LINE
	CUT-OFF VALVE
	VENT LINE
	STORM SEWER LINE
	90 ELL UP
	90 ELL DOWN
	TEE DROPPING DOWN
	TEE RISING UP

NOTE: ALL SYMBOLS DO NOT NECESSARILY APPEAR ON THESE DWGS

FAN SCHEDULE		
UNIT NUMBER	PEF #1-21	PRV #2-21
AREA SERVED	IT ROOM	REST ROOM
MANUFACTURER	GREENHECK	GREENHECK
MODEL NUMBER	CSPA-190	G-090-D
CFM	150	350
SP (IN. WC)	.25	.375
FAN HP/WATTS	48 WATTS	1/15
RPM	1400	1550
ELECTRICAL SERVICE	120/1/60	120/1/60
DUCT SIZE	7"Ø	10x8
ROOF/WALL OPENING	---	12.5"x12.5"

- NOTES:
- PRV FANS TO BE FURNISHED WITH ROOF CURB, GRAVITY DAMPER AND BIRDSCREEN.
 - FANS MAY BE APPROVED EQUAL, PROVIDED ALL LOCAL, STATE AND FEDERAL CODES WHICH ARE APPLICABLE ARE MET.
 - VERIFY ROOF OPENING DIMENSIONS WITH FAN MANUFACTURER.
 - ALL EXHAUST DUCTS ARE NEW, ALUMINUM.
 - CONTROL PRV #2-21 WITH TIMER TO OPERATE DAILY FROM 8AM TO 6PM. PEF#1-21 SHALL OPERATE CONTINUOUSLY.

PACKAGE UNIT SCHEDULE	
UNIT NUMBER	RTU #1-21, #2-21
CARRIER MODEL NO.	48HCDE08-5
NOMINAL CAPACITY (TONS)	7.5
TOTAL COOLING CAP. (BTUH)	85,640
SENSIBLE CAP. (BTUH)	69,390
CFM SUPPLY AIR	3000
CFM OUTSIDE AIR RTU #1	299
CFM OUTSIDE AIR RTU #2	414
EER	12.0
HEAT INPUT (BTUH)	125,000
ELEC. DATA	208/3Ø/60
MINIMUM CIRCUIT AMPS	41
MOCP	50
WEIGHT (LBS)	1,163
FAN HP	1.32

AIR CONDITIONING CONTRACTOR

- THE AIR CONDITIONING CONTRACTOR SHALL FURNISH AND INSTALL ALL AIR CONDITIONING UNITS, EXHAUST FAN CURB(S), DUCTWORK, INSULATION, DIFFUSERS, THERMOSTATS, AND FIRE DAMPERS.
- AIR CONDITIONING CONTRACTOR SHALL SUPPLY FULL SIZE 'P' TRAPS (USING TEES FOR CLEANING) FOR ALL CONDENSATE PAN CONNECTIONS.
- ALL FLEX DUCT SHALL BE U.L. LISTED, CLASSIFIED AS A CLASS 1 AIR DUCT, WITH AN R-6 VALUE, AND MEET LOCAL CODE REQUIREMENTS. MAXIMUM LENGTH OF FLEX DUCT IS 5'.
- SEAL ALL DUCTWORK PER SMACNA REQUIREMENTS.
- ALL DUCTWORK TO BE INDEPENDENTLY HUNG FROM STRUCTURAL MEMBERS.
- ALL DUCTWORK SHALL BE FABRICATED AND INSTALLED PER SMACNA LOW VELOCITY DUCT MANUAL (LATEST ISSUE)
- ALL TAPS INSTALLED IN A/C DUCTS/PLENUMS SHALL HAVE A VOLUME CONTROL DAMPER.
- AIR CONDITIONING CONTRACTOR SHALL COORDINATE DIFFUSER LOCATIONS WITH THE REFLECTED CEILING PLAN.
- THE AIR CONDITIONING CONTRACTOR SHALL FURNISH A WRITTEN GUARANTEE COVERING A ONE YEAR PERIOD FOR ALL PARTS, LABOR AND SHIPPING COSTS AND AN ADDITIONAL FOUR YEAR PERIOD FOR THE A/C COMPRESSOR AND HEAT EXCHANGER PARTS.
- ALL DOVETAILS INSTALLED IN A/C DUCTS/PLENUMS SHALL HAVE A VOLUME CONTROL DAMPER.
- ALL RECTANGULAR DUCT TO BE LINED WITH 1" LINER. SIZE GIVEN ON PLANS IS INSIDE FREE DIMENSIONS OF DUCT. WRAP ALL ROUND DUCT ABOVE CEILING WITH 2" FIBERGLASS WRAP.
- INSTALL MINIMUM 24 GA DOUBLE LOCKING BALANCING DAMPERS ON EACH BRANCH DUCT RUN AT MAIN DUCT. USE 4 SHEET METAL SCREWS AT EACH DAMPER.
- FURNISH AND INSTALL ALL LOW VOLTAGE CONTROL WIRING FOR A/C UNITS AND FANS.
- CONTROL EXHAUST FANS WITH LIGHT SWITCH AS SHOWN, UON.

ELECTRICAL CONTRACTOR

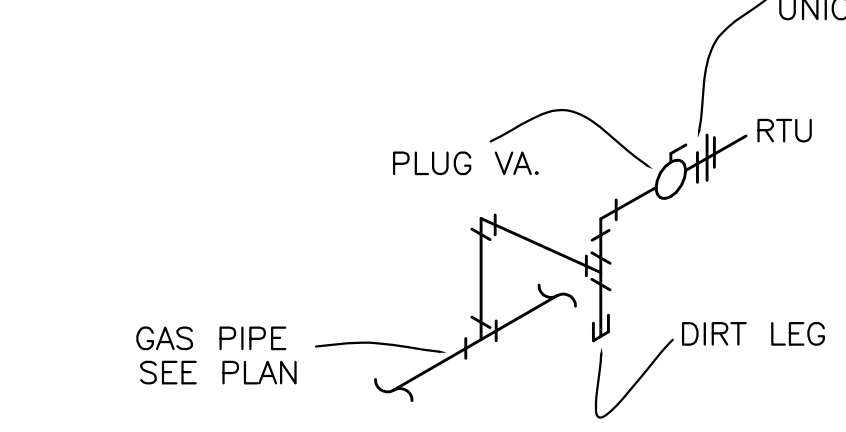
- THE ELECTRICAL CONTRACTOR SHALL INSTALL ALL LOW VOLTAGE CONTROL WIRING CONDUITS FOR AIR CONDITIONING UNITS AND ALL FANS. COORDINATE WITH AIR CONDITIONING AND ELECTRICAL PLANS. (LOW VOLTAGE WIRE SUPPLIED BY AIR CONDITIONING CONTRACTOR.)
- THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL DISCONNECTS FOR EQUIPMENT AS REQUIRED BY CODE.
- PROVIDE DATA CONNECTION AT ALL UNITS TO BE CONTROLLED BY DDC SYSTEM.
- THE ELECTRICAL CONTRACTOR SHALL VERIFY CONVENIENCE RECEPTACLES FOR AIR CONDITIONING UNITS ARE SUPPLIED WITH RTUS AND WIRE TO INDEPENDENT CIRCUIT SHOWN ON PLANS.
- ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL ALL AUDIBLE AND VISUAL ALARMS AND TEST STATIONS REQUIRED FOR SMOKE DETECTORS AND CONNECT TO FIRE ALARM SYSTEM.
- ELECTRICAL CONTRACTOR SHALL INSTALL POWER (CONDUIT AND WIRING) FROM OUTDOOR CU TO INDOOR FCU FOR DUCTLESS SPLIT SYSTEMS. IN ADDITION, PROVIDE COST IN BID TO SUPPLY INDEPENDENT CIRCUIT FOR FCU. PROVIDE REQUIRED HOOKUP IN FIELD; COORDINATE WITH AIR CONDITIONING CONTRACTOR AT SUBMITTALS.

PLUMBING CONTRACTOR

- PLUMBING CONTRACTOR TO PROVIDE AND INSTALL CONDENSATE DRAINS FOR ALL A/C UNITS ACCORDING TO LOCAL CODE REQUIREMENTS. PROVIDE FULL SIZE 'P' TRAPS.
- PLUMBING CONTRACTOR TO COORDINATE PLUMBING VENT STACKS WITH OUTSIDE AIR INTAKES OF A/C UNITS AND SUPPLY FANS. MAINTAIN AT LEAST 10"-0" MINIMUM CLEARANCE OR PER LOCAL CODE REQUIREMENTS.

GENERAL CONTRACTOR

- EXHAUST FAN OPENINGS ARE BASED ON GREENHECK EQUIPMENT. IF OTHER FANS ARE USED, VERIFY ROOF OPENING REQUIREMENTS. THE GENERAL CONTRACTOR SHALL LOCATE, CUT AND FRAME ROOF OPENINGS AS SHOWN FOR ALL ROOF-MOUNTED EQUIPMENT AND EXHAUST FANS.
- ANY FRAMING REQUIRED FOR DIFFUSER INSTALLATION IN CEILING SHALL BE BY THE GENERAL CONTRACTOR.
- AIR CONDITIONING ROOF OPENING SIZES AND ROOF CURBS ARE BASED ON CARRIER EQUIPMENT. IF OTHER EQUIPMENT IS USED VERIFY ROOF OPENING SIZES.



TYP. GAS CONNECTION NOT TO SCALE

FRESH AIR CALCULATION

ROOM/SPACE	AREA	NO OF PEOPLE	CFM/PERSON	FA FOR AREA	TOTAL FA REQ	EXHAUST	UNIT
MAIN BOOK AREA 102 / CHILDREN'S AREA 103	1,637	16	5	.12	276	---	RTU #1-21
JANITOR 111	32	---	---	.12	3	---	RTU #1-21
I.T. / STOR. 112	19	---	---	.12	2	---	RTU #1-21
STORAGE 113	115	---	---	.12	14	---	RTU #1-21
EXIT PASSAGE 114	71	---	---	.06	4	---	RTU #1-21
SUBTOTAL	1,874				299	---	
ENTRY 101 / INFO 104 / COMPUTER RESEARCH 106	1,151	12	5	.12	198	----	RTU #2-21
STAFF OFFICE 105	149	1	5	.06	14	----	RTU #2-21
MULT-PURPOSE ROOM 107	408	14	10	.12	189	----	RTU #2-21
BREAKROOM 108	135	1	5	.06	13	----	RTU #2-21
WOMEN 109	59	---	---	---	---	70	RTU #2-21
MEN 110	59	---	---	---	---	70	RTU #2-21
SUBTOTAL	1,961				414	140	
TOTAL FA REQUIRED					713	140	
TOTAL FA PROVIDED					713	140	

NOTE: FRESH AIR CALCULATIONS IN ACCORDANCE WITH 2015 IMC TABLE 403.3 & 405.1.

NOTES:

- CARRIER UNIT SHOWN. TRANE, LENNOX OR YORK EQUIVALENTS ACCEPTABLE. R-22 REFRIGERANT IS NOT ALLOWED.
- SUPPLY ALL UNITS WITH DISPOSABLE FILTERS, OUTSIDE AIR HOOD AND DAMPER. PACKAGE UNIT SHALL COMPLY WITH LOCAL CODES.
- PROVIDE 14" ROOF CURB WITH BOTTOM CONNECTIONS FOR UNIT.
- PROVIDE DURABLE ECONOMIZER DAMPER FOR OUTSIDE AIR CONTROL. PROVIDE BAROMETRIC RELIEF DAMPER ON EACH RTU. PROVIDE OUTDOOR AIR AND RETURN AIR ENTHALPY SENSORS FOR ECONOMIZER CONTROL.
- UNIT SHALL BE VERTICAL SUPPLY AND VERTICAL RETURN.
- CONTROL SYSTEM SHALL BE THERMOSTAT THAT COMPLIES WITH 2015 IECC.
- RTU TO BE FURNISHED WITH HINGED ACCESS PANELS, UNPOWERED CONVENIENCE OUTLET, STAINLESS STEEL HEAT EXCHANGERS, HAIL GUARDS, AND LOW AMBIENT COOLING CONTROLS AND THRU-THE-BASE CONNECTIONS FOR CONTROL & UNIT POWER.
- ROUTE CONDENSATE DRAIN TO MOP SINK.
- PROVIDE CARRIER SAFE-T-SWITCH, MODEL SS3 A/C CONDENSATE PAN OVER FLOW SWITCH IN DRAIN PAN FOR ALL UNITS.

GENERAL NOTES

- THE GENERAL CONTRACTOR SHALL PROVIDE ALL WALL OPENINGS. HE SHALL VERIFY SIZES AND LOCATIONS IN THE FIELD BEFORE OPENING IS INSTALLED.
- THE HVAC UNITS AND ACCESSORIES, SUPPLY REGISTERS, RETURN GRILLES, FILTERS, AND CONTROL COMPONENTS FOR THE HEATING AND AIR CONDITIONING SYSTEMS ARE PROVIDED AND INSTALLED BY THE MECHANICAL CONTRACTOR. UNLESS OTHERWISE NOTED.
- ALL WORK SHALL BE PERFORMED BY A LICENSED CONTRACTOR. CONTRACTOR SHALL INSTALL SYSTEMS, EQUIPMENT & COMPONENTS IN ACCORDANCE WITH MINIMUM REQUIREMENTS SHOWN IN THESE PLANS. ANY DEVIATION FROM THE DESIGN PLANS SHALL ONLY BE PERFORMED IF APPROVED BY THE OWNER REPRESENTATIVE OR DESIGN ENGINEER. ALL WORK SHALL MEET OR EXCEED THE MINIMUM REQUIREMENTS OF ALL APPLICABLE CODES AND STANDARDS. HOWEVER, ANY DEVIATION FROM THE DESIGN PLANS IMPLIED BY LOCAL CODES THAT SUGGESTS INSTALLATION OF LESS THAN THE REQUIREMENTS SPECIFIED IN THESE DESIGN PLANS SHALL NOT BE ALLOWED WITHOUT APPROVAL BY THE OWNER REPRESENTATIVE OR THE DESIGN ENGINEER.
- FLEXIBLE RATED AIR DUCT SHALL CONFORM TO REQUIREMENTS OF U.L. 181. UNLESS OTHERWISE NOTED ON PLAN, FLEXIBLE DUCT RUN-OUTS SHALL BE RUN AS STRAIGHT AS POSSIBLE AND BE ADEQUATELY SUPPORTED. FLEX DUCT SHALL BE STRETCHED OUT TO BE SMOOTH; DO NOT KINK, TWIST, OR COMPRESS FLEX. PROVIDE SHEETMETAL FITTING AT ALL DUCT CONNECTIONS TO AIR DEVICES. FLEXIBLE AIR CONNECTORS SHALL NOT BE ACCEPTABLE.
- MECHANICAL CONTRACTOR SHALL PROVIDE/INSTALL HUMIDISTAT, REMOTE TEMPERATURE SENSORS, THERMOSTATS AND MAKE ALL FINAL CONNECTIONS. E.C. SHALL PROVIDE J-BOXES, CONDUIT, AND WIRING FOR TEMPERATURE SENSORS, HUMIDISTAT, AND THERMOSTATS.
- THE MECHANICAL CONTRACTOR SHALL PROVIDE AN OPERATION AND MAINTENANCE MANUAL TO THE BUILDING OWNER UPON COMPLETION OF THE JOB. THE MANUAL SHALL INCLUDE BASIC DATA RELATING TO THE OPERATION AND MAINTENANCE OF HVAC SYSTEMS AND EQUIPMENT AS WELL AS NAMES AND ADDRESSES OF QUALIFIED SERVICE AGENCIES. REQUIRED ROUTINE MAINTENANCE ACTIONS SHALL BE CLEARLY IDENTIFIED. HVAC CONTROL DIAGRAMS, SCHEMATICS, CONTROL SEQUENCE DESCRIPTIONS, AND CALIBRATION INFORMATION SHALL BE INCLUDED. THE MANUAL SHALL INCLUDE A COPY OF THE CONTROL SYSTEMS TESTING REPORT MENTIONED IN GENERAL NOTE 17.
- PROVIDE BALANCING DAMPERS IN ALL BRANCH DUCTS AS SHOWN FOR SYSTEM BALANCING.
- BUILDING AIR FLOW

NORMAL OPERATION BUILDING MUST BE BALANCED AND TESTED AND COMMISSIONED FOR PROPER OPERATION BY THE INDEPENDENT TESTING AGENCY. M.C. SHALL BALANCE THE BUILDING AND INSURE A POSITIVE PRESSURE IN THE BUILDING WITH ALL AIR HANDLING UNITS, EXHAUST FANS, AND SUPPLY FANS RUNNING AS SHOWN IN THE FRESH AIR SCHEDULE, SHEET M-1.0. DO NOT RUN INDOOR SUPPLY FANS IN CONSTANT FAN MODE.

GENERAL HVAC NOTES

- A ALL DUCT DIMENSIONS SHOWN ARE INSIDE FREE AREA DIMENSIONS.
- B ALL DUCTWORK SHALL BE INSTALLED CONCEALED AS HIGH AS POSSIBLE UNLESS OTHERWISE SHOWN
- C AIR DEVICES ARE SHOWN IN APPROXIMATE LOCATION ONLY. REFER TO ARCHITECT AND/OR ARCHITECTURAL DRAWINGS FOR EXACT LOCATION.
- D PROVIDE FLEXIBLE DUCT CONNECTIONS AT ALL EQUIPMENT CONNECTION POINTS.
- E CONTRACTOR SHALL COORDINATE ALL WORK SHOWN ON DRAWINGS WITH ALL ARCHITECTURAL, STRUCTURAL, ELECTRICAL AND PLUMBING DRAWINGS AND REPORT ANY DISCREPANCIES TO OWNER IMMEDIATELY.
- F FLEX DUCT TO BE CLASS I, R-6 INSULATION. MAX FLEX DUCT LENGTH IS 5 FEET.
- G COMPLY WITH 2015 INTERNATIONAL MECHANICAL CODE & 2015 IECC.
- H EQUIPMENT SHOWN ON THE FLOOR PLANS AND ELEVATIONS ILLUSTRATE THE GENERAL ARRANGEMENT AND SPACE ALLOCATIONS. THE CONTRACTOR SHALL VERIFY THE SPACE REQUIREMENTS FOR EACH SYSTEM COMPONENT USING MANUFACTURER CERTIFIED SHOP DRAWINGS AND MAKE THE NECESSARY ADJUSTMENTS IN EQUIPMENT PLACEMENT AND CONNECTION IN ORDER TO ACCOMMODATE THE EXACT EQUIPMENT TO BE INSTALLED.
- I DRAWINGS ARE SCHEMATIC IN NATURE AND SHALL NOT BE SCALED. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ROUTING OF EQUIPMENT WITH ALL OTHER TRADES.
- J PROVIDE FULL SIZE P-TRAP FOR ALL CONDENSATE DRAINS. PLUMBING CONTRACTOR IS RESPONSIBLE FOR ALL CONDENSATE DRAINS.
- K UPON COMPLETION, PROVIDE COMPLETE TEST AND BALANCE OF ALL EQUIPMENT TO MEET OWNER'S REQUIREMENTS.

HVAC LEGEND

	THERMOSTAT
	EXHAUST FAN
	CEILING EXHAUST GRILLE
	DOOR GRILLE
	VOLUME DAMPER
	FD FIRE DAMPER
	SUPPLY DIFFUSER
	RETURN AIR DIFFUSER
	NECK SIZE / DIFFUSER STYLE CFM
	SUPPLY FAN
	EMS SENSOR
	DT DUCT TRANSITION
	RECTANGULAR CEILING DIFFUSER WITH ROUND DUCT
	G.I. DUCT W/ACOUSTICAL DUCT LINER
	RETURN AIR REGISTER (OR GRILLE)
	SPLITTER DAMPER
	RECTANGULAR CEILING DIFFUSER
	SIDE WALL SUPPLY AIR REGISTER, W/EXTRACTOR.
	RECTANGULAR TO ROUND ADAPTER
	DT DUCT TRANSITION (SINGLE LINE)
	HUMIDISTAT
	DUCT SMOKE DETECTOR

HVAC EQUIPMENT LEGEND

	POWER ROOF VENTILATOR, INSTALL ON FACTORY ROOF CURB. PROVIDE PROPER ROOF CURB FOR ROOF TYPE AND SLOPE.
	VENTILATION EXHAUST FAN. PROVIDE WITH WALL COLLAR, WEATHERHOOD AND OSHA APPROVED MOTORSIDE GUARD.
	PACKAGE EXHAUST FAN. INSTALL ABOVE CEILING PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
	ROOFTOP PACKAGE UNIT. INSTALL ON 14" HIGH FACTORY ROOF CURB. PROVIDE PROPER CURB FOR ROOF TYPE AND SLOPE.
	AIR HANDLING UNIT WITH COOLING COIL AND ELECTRIC HEAT. PROVIDE HORIZONTAL UNITS WITH 3" DRAIN PAN WITH FLOATING SWITCH.
	CONDENSING UNIT. INSTALL ON 4" THICK CONCRETE PAD. CONCRETE PAD TO EXTEND 6" BEYOND UNIT ON ALL SIDES.
	PACKAGE TERMINAL AIR CONDITIONING UNIT. PROVIDE A WALL SLEEVE.
	OPPOSED BLADE MANUALLY OPERABLE BALANCING DAMPER. NATIONAL CONTROLLED AIR OR APPROVED EQUAL.
	CASED FAN COIL UNIT WITH ELECTRIC HEAT. PROVIDE HORIZONTAL UNITS WITH 3" DRAIN PAN WITH FLOATING SWITCH.
	ROOF SUPPLY FAN. INSTALL ON FACTORY ROOF CURB. PROVIDE PROPER ROOF CURB FOR ROOF TYPE AND SLOPE.

DIFFUSER SCHEDULE

SYMBOL	NOMINAL SIZE	TYPE	FINISH	TITUS MODEL NO.	COMMENTS
S-1	18 x 6	SUPPLY WALL	WHITE	DL	DRUM LOUVER, FLANGE MOUNT, OBD
S-4	24 x 24	SUPPLY 4 WAY	WHITE	TMS	FULL LAY-IN PANEL, BORDER TYPE 3
S-5	12 x 12	SUPPLY 4 WAY	WHITE	TMS	BORDER TYPE 1, FLANGE MOUNT
S-6	VARIES	SUPPLY WALL	WHITE	300RL	BORDER TYPE 1 FOR FLANGE MOUNT, ALUMINUM
R-1	24 x 24, 24 x 12	RETURN GRILLE	WHITE	50R	FULL LAY-IN PANEL, EGGRATE
R-2	12 x 12	RETURN GRILLE	WHITE	50R	EGGRATE, BORDER TYPE 1
R-3	VARIES	RETURN GRILLE WALL	WHITE	350ZRL	FLANGED PANEL, 0" DEFLECTION
R-4	18 x 48	RETURN GRILLE WALL	WHITE	350ZRL	FLANGED PANEL, 0" DEFLECTION
DG-1	18 x 6	DOOR GRILLE	WHITE	T-700L	DOOR RETURN GRILLE, STEEL, BORDER TYPE 1

NOTE: ALL DIFFUSERS ARE NOT NECESSARILY USED ON THIS PROJECT.

MEP PROJECT #2104
PowerSystems

P.O. Box 28663
San Angelo, Texas 76902
325-659-2235
FIRM NO. P-6257

IF THIS DOCUMENT IS NOT SIGNED AND DATED ON THE SEAL, THEN IT IS NOT FOR REGULATORY APPROVAL, PERMITTING OR CONSTRUCTION.
THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY PAUL R. WILKERSON, P.E. 00732 ON MAY 06, 2022. ALTERATION OF A SEALED DOCUMENT WITHOUT WRITTEN PERMISSION TO THE REGISTERED PROFESSIONAL ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

ORDINANCES
THIS DRAWING IS REPRESENTATIVE IN NATURE ONLY. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL STATE, COUNTY, MUNICIPAL AND FEDERAL LAWS AND/OR ORDINANCES GOVERNING THE PROJECT. IF IN ANY INSTANCE THE PLANS AND SPECIFICATIONS ARE IN DIRECT CONFLICT WITH SUCH LAWS AND/OR ORDINANCES, THE LAWS AND/OR ORDINANCES SHALL HAVE JURISDICTION.

Drawn By _____
Checked By _____

STRUCTURAL ENGINEER
SKG ENGINEERING

MEP ENGINEER
POWER SYSTEMS, INC.

378 W. CONCHO AVE
SAN ANGELO, TX 76903
www.powerst.com

KFW
KFW ARCHITECTS/AA

ISSUED FOR PERMIT, PRICING & CONSTRUCTION
MAY 6, 2022

RENOVATIONS OF
NORTH ANGELO BRANCH LIBRARY
TOM GREEN COUNTY

Project No. 292-09-1020
Date MAY 6, 2022

Sheet Number
M-1
4 OF 14

Drawn By _____
 Checked By _____

STRUCTURAL ENGINEER
 SKG ENGINEERING

MEP ENGINEER
 POWER SYSTEMS, INC.

378 W. CONCHO AVE
 SAN ANGELO, TX 76903
 254-353-8888
 www.kfwarchitects.com

KFW
 KFW ARCHITECTS, AIA

ISSUED FOR
 PERMIT, PRICING &
 CONSTRUCTION

MAY 6, 2022

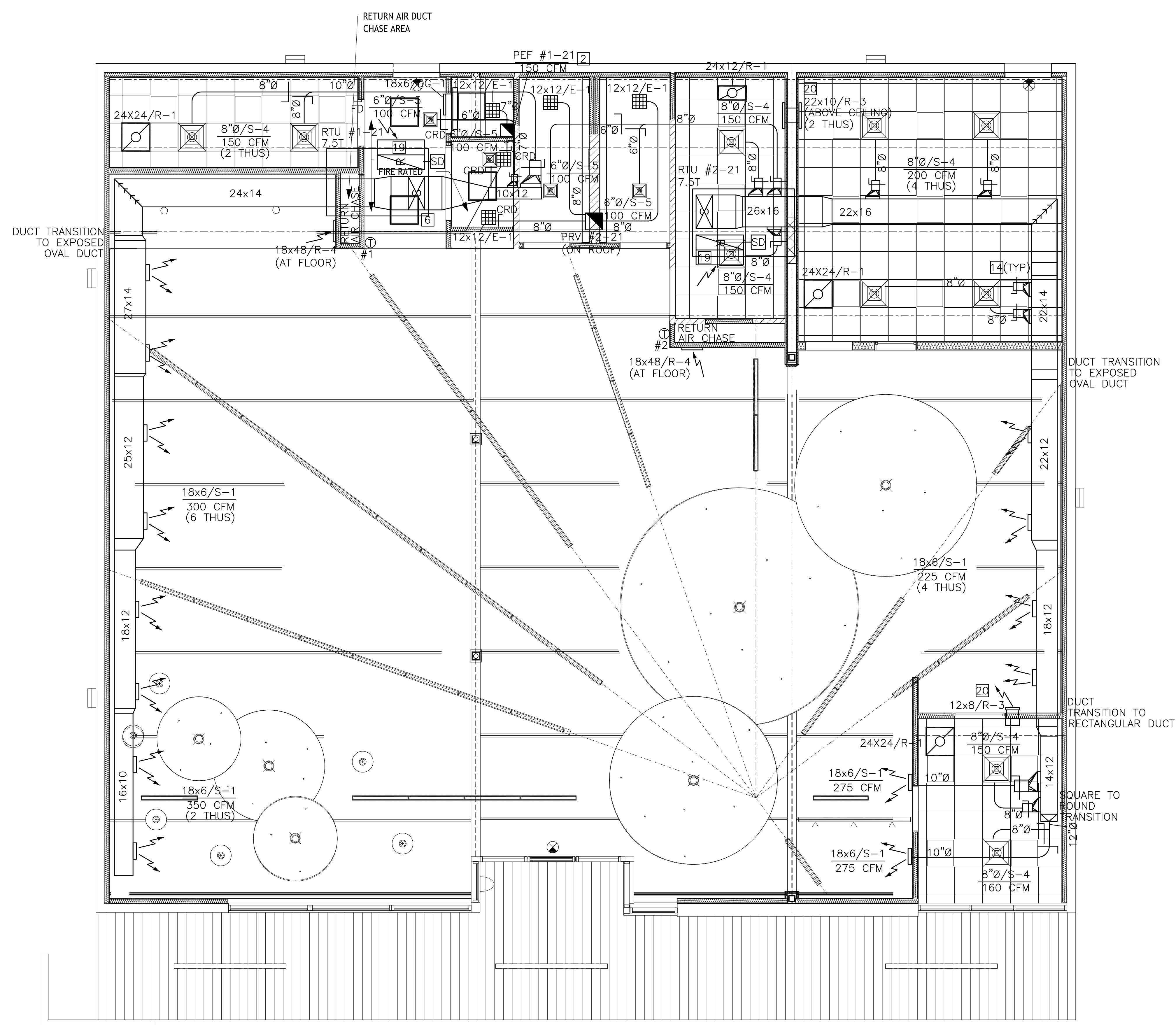
Paul R. Wilkerson
 PAUL R. WILKERSON
 00738
 05118
 REGIONAL ENR.
 05-06-22

RENOVATIONS OF
NORTH ANGELO BRANCH LIBRARY
 TOM GREEN COUNTY

Project No. 292-09-1020
 Date MAY 6, 2022

Sheet Number
M-2
 5 OF 14

Copyright © KFW Architects AIA, Inc. 2022



MECHANICAL NOTES INDICATED BY "□":

- 1 TEST AND BALANCING AND COMMISSIONING SHALL BE PERFORMED BY INDEPENDENT LICENSED TESTING SERVICE AND REPORTS SUPPLIED TO ENGINEER.
- 2 PEF #1-21 SHALL OPERATE CONTINUOUSLY.
- 3 WRAP ALL RECTANGULAR DUCT WITH 2" LINER ABOVE CEILING, UON INSULATION IS AT ROOF DECK.
- 4 MAINTAIN 10'-0" MINIMUM BETWEEN EXHAUST AND FRESH AIR INTAKE.
- 5 SIZE OF DUCT SHOWN ON PLANS INDICATES FREE AREA OF DUCT IN ALL CASES.
- 6 PROVIDE SPLITTER AT DUCT CONNECTION, AS SHOWN.
- 7 CONTROL ALL UNITS WITH STAND ALONE THERMOSTAT COMPLIANT WITH 2015 IECC.
- 8 PROVIDE ECONOMIZER, ENTHALPY CONTROL, FOR PACKAGE UNIT.
- 9 ALL EXHAUST DUCTS AND GRILLES SHALL BE ALUMINUM.
- 10 CONTRACTOR TO FIELD VERIFY CONDITIONS AND DIMENSIONS BEFORE CONSTRUCTING ANY DUCT.
- 11 DUCT WORK IS CONCEALED ABOVE CEILINGS. EXPOSED DUCT SHALL BE OVAL SPIRAL EQUAL TO XXX. WORKMANSHIP TO BE HIGH QUALITY.
- 12 10x8 DUCT UP TO EXHAUST FAN ON ROOF. PROVIDE OFFSET AND TRANSITION AS REQUIRED.
- 13 UNIT EVAPORATOR FANS TO CYCLE WITH COMPRESSOR UNITS. DO NOT OPERATE IN CONSTANT FAN MODE.
- 14 ALL RECTANGULAR DUCT ABOVE CEILING SHALL BE INSULATED WITH 2"x15 1/2 LB DENSITY DUCT INSULATION WITH FIRE RATED VAPOR BARRIER (R-8). FLAME/SMOKE RATING SHALL BE 25/50.
- 15 INSTALL FIRE DAMPER TO PROTECT OPENINGS IN RATED WALLS.
- 16 DUCT SMOKE DETECTORS ARE INDEPENDENT. THESE DETECTORS ARE THE FULL RESPONSIBILITY OF THE MECHANICAL CONTRACTOR. PROVIDE UNIT SHUTDOWN AND KEYED TEST SWITCH.
- 17 ALL HVAC UNITS SHALL BE PROVIDED WITH AN ELECTRICAL DISCONNECT BOX.
- 18 SPACE ABOVE ALL CEILINGS IS A RETURN AIR PLENUM.
- 19 PROVIDE RADIUS ELL AT UNIT RETURN AIR PLENUM FOR NOISE MITIGATION.
- 20 PROVIDE LINED DUCT SOUNDTRAP AT RETURN GRILLE. REFER TO DETAIL SHEET M-3.

GENERAL MECHANICAL NOTES:

1. REFER TO ARCHITECTURAL DRAWINGS FOR CORRECT MOUNTING HEIGHT FOR ALL WALL GRILLES AND REGISTERS.
2. PROVIDE KEYED TEST SWITCH AND INDICATING LIGHT FOR EACH DUCT SMOKE DETECTOR AT APPROVED LOCATION ON WALL.
3. PROVIDE PROGRAMMABLE THERMOSTATS THAT COMPLY WITH REQUIREMENTS OF THE 2015 IECC. MOUNT THERMOSTATS ON WALL AT 48" A.F.F. AT LOCATIONS SHOWN.
4. REFER TO PLUMBING PLAN, SHEET P-2 FOR CONDENSATE DRAIN ROUTING.
5. DO NOT BLOCK FILTER ACCESS FOR AIR HANDLING UNITS WITH PIPING OR DUCT.
6. OBSERVE ALL EQUIPMENT CLEARANCE REQUIREMENTS.
7. PROVIDE ECONOMIZER, ENTHALPY CONTROL, FOR PACKAGE UNITS.
8. ALL GRILLES TO HAVE OBD OR MEANS OF CONTROLLING AIR FLOW.
9. REFER TO SHEET M-3 FOR DETAILS.
10. PROVIDE OVAL DUCT SIZES TO CLOSELY MATCH THE NOMINAL SIZES SHOWN ON THE PLAN. OVAL DUCT SHALL BE DOUBLE WALL WITH SOLID METAL LINER FOR NOISE ATTENUATION. DUCT SHALL BE EQUAL TO OVALIZER BY SPIRAL-HELIX. SHALL BE STANDARD SMACNA GAUGES FOR LOW PRESSURE DUCTWORK AND SHALL HAVE DURAFRANGE RINGS FOR CONNECTING DUCT SECTIONS.

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

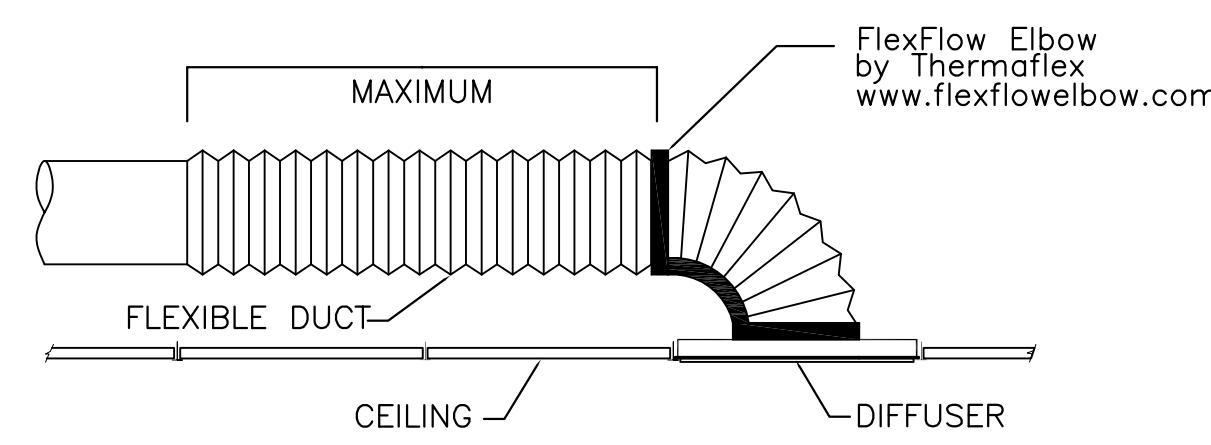
MEP PROJECT #2104
PowerSystems

P.O. Box 2863
 San Angelo, Texas 76902
 325-659-2235
 FIRM NO. P-6257

If this document is not SIGNED and DATED on the seal, then it is NOT FOR REGULATORY APPROVAL, PERMITTING OR CONSTRUCTION.

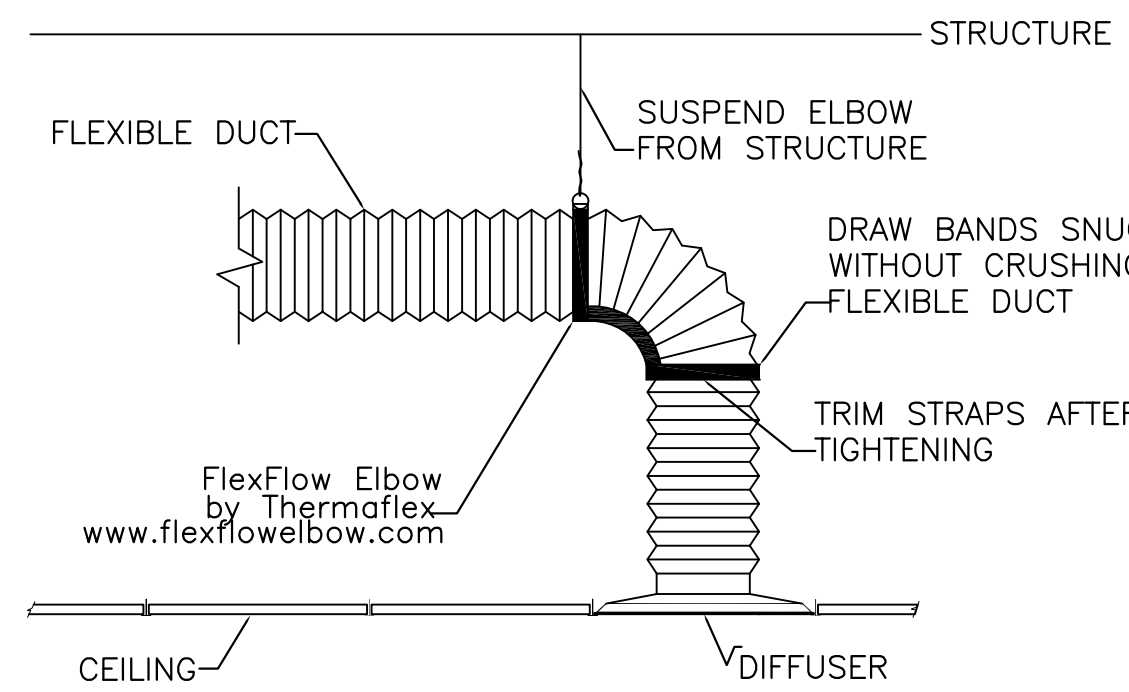
THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY PAUL R. WILKERSON, P.E. 00738 ON MAY 06, 2022. ALTERATION OF A SEALED DOCUMENT WITHOUT HIS WRITTEN INSTRUCTIONS TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

ORDINANCES
 THIS DRAWING IS REPRESENTATIVE IN NATURE ONLY. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL STATE, COUNTY, MUNICIPAL AND FEDERAL LAWS AND/OR ORDINANCES GOVERNING THE PROJECT. IF IN ANY INSTANCE THE PLANS AND SPECIFICATIONS ARE IN DIRECT CONFLICT WITH SUCH LAWS AND/OR ORDINANCES, THE LAWS AND/OR ORDINANCES SHALL HAVE JURISDICTION.



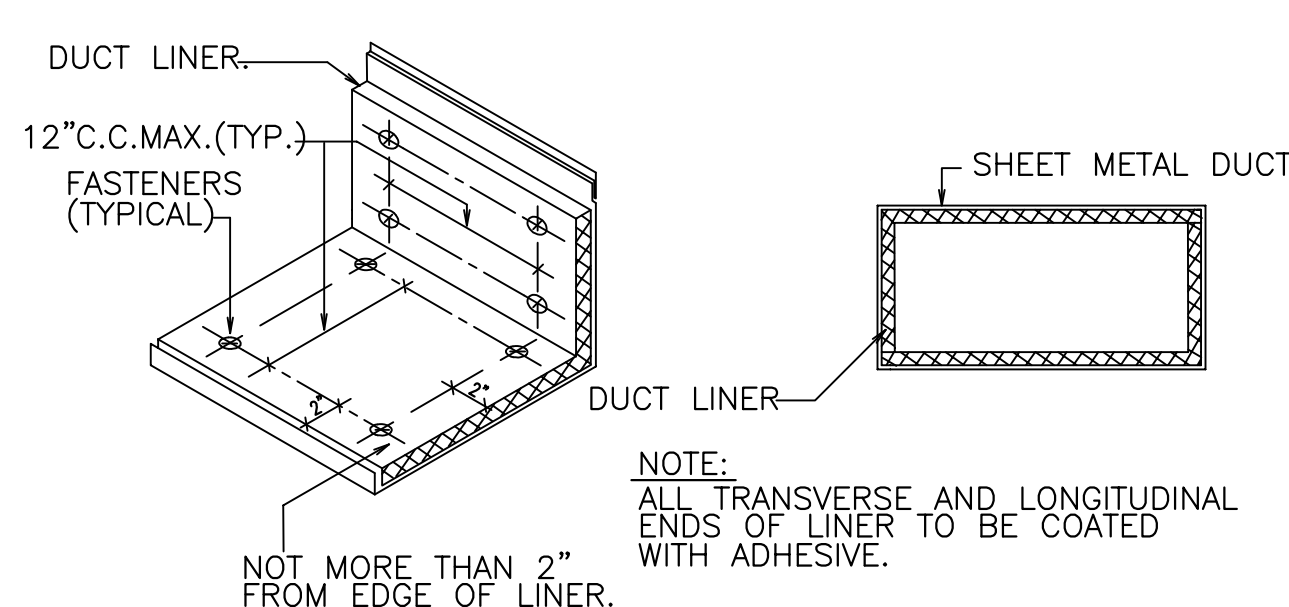
NOTE: INSTALL FLEXIBLE DUCTWORK SUPPORTS AT ALL ROUND NECK OUTLETS/INLETS UNLESS OTHERWISE NOTED ON DRAWINGS.

FLEXIBLE DUCT CONNECTION TO AIR OUTLET / INLET
NOT TO SCALE

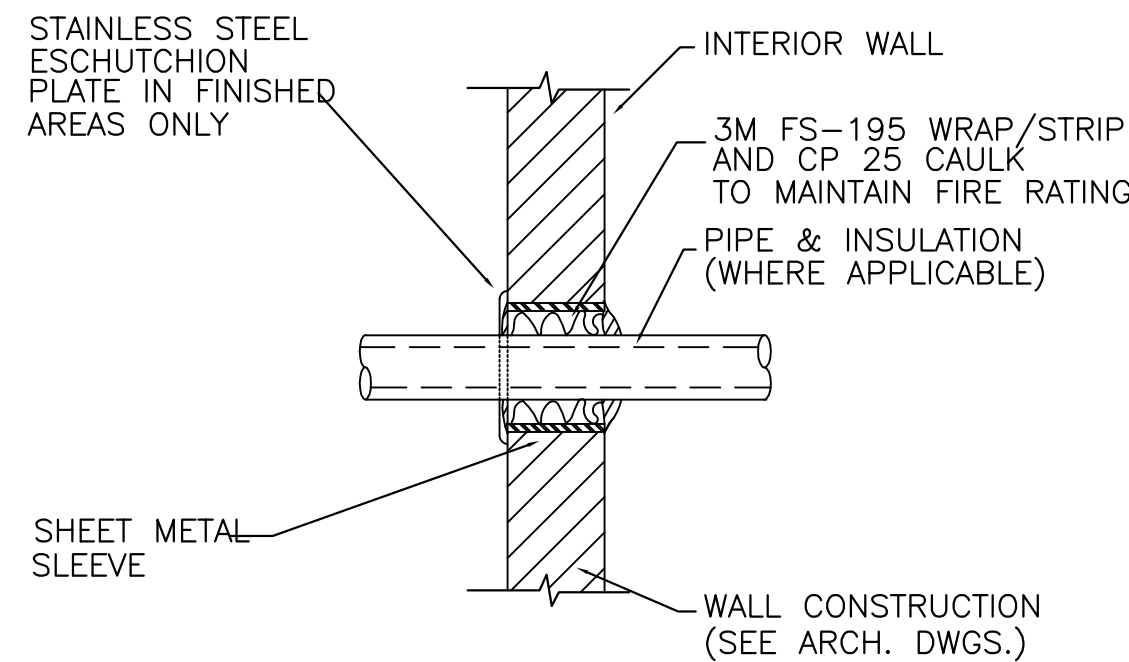


NOTE: INSTALL FLEXIBLE DUCTWORK SUPPORTS AT ALL ROUND NECK OUTLETS/INLETS UNLESS OTHERWISE NOTED ON DRAWINGS.

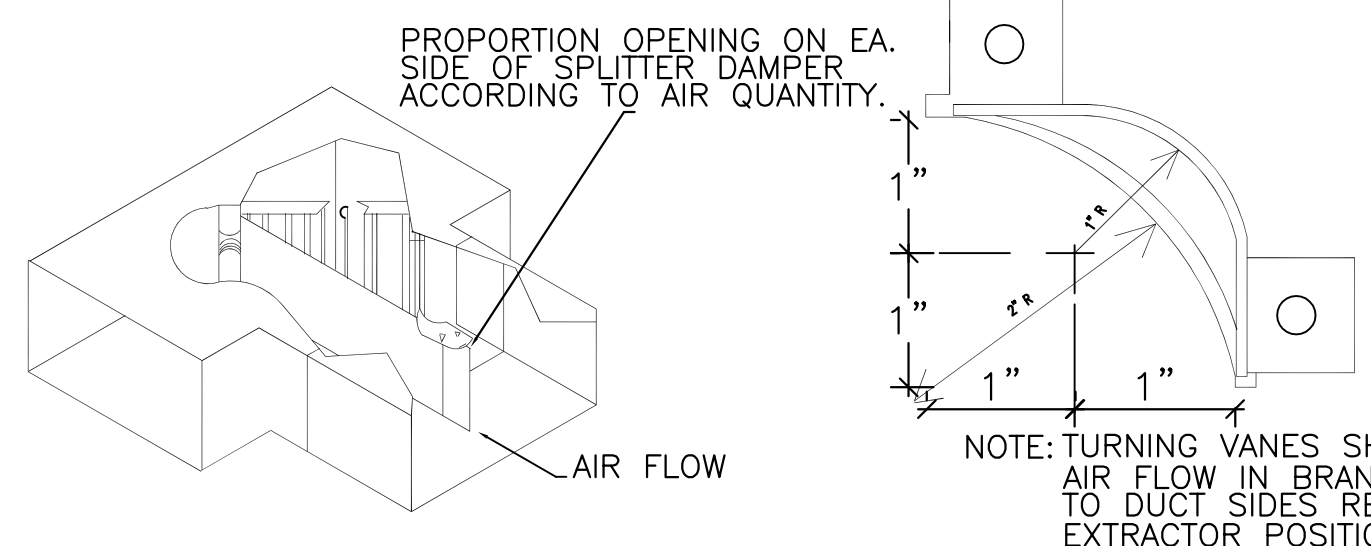
FLEXIBLE DUCT CONNECTION TO AIR OUTLET / INLET
NOT TO SCALE



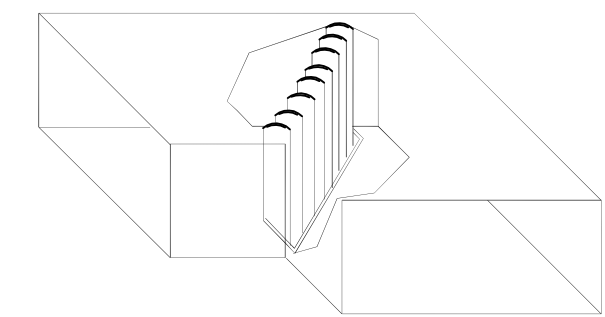
DUCT LINER DETAIL
NO SCALE



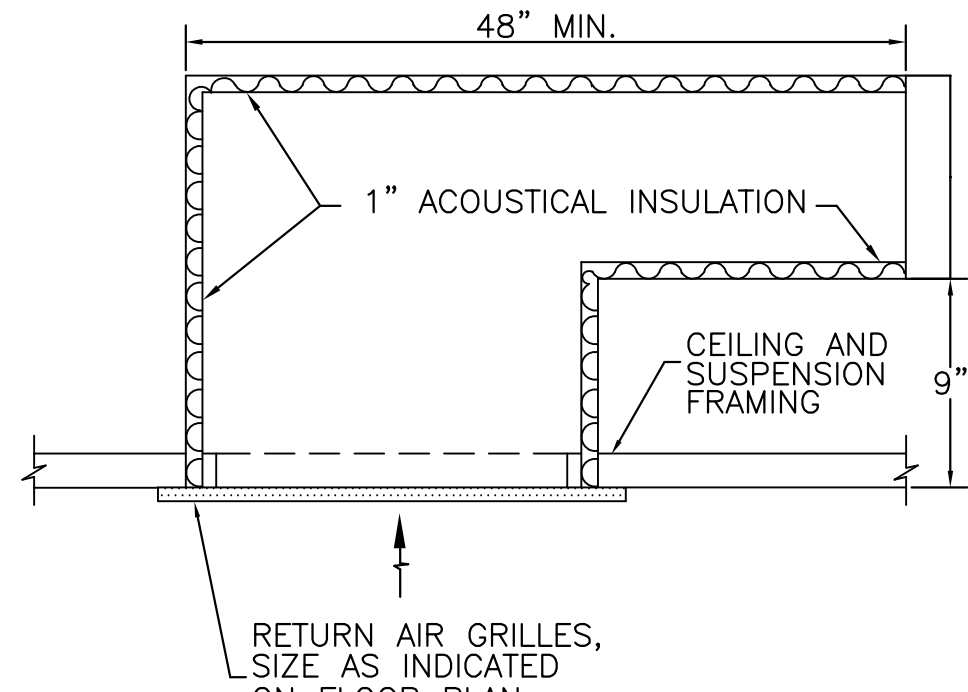
RATED WALL PENETRATION DETAIL
NTS



TYPICAL SPLITTER DAMPER
NO SCALE

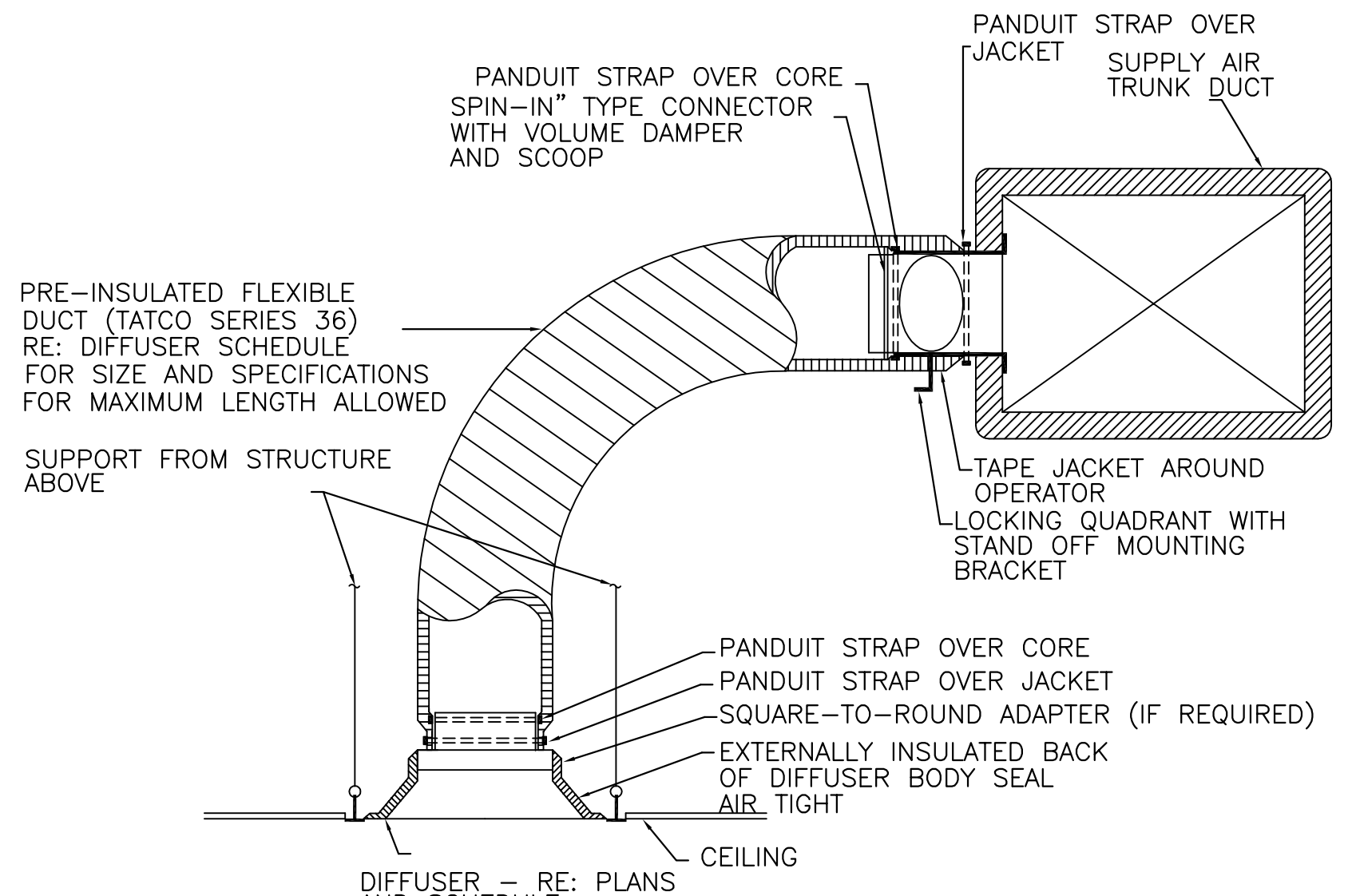


TYPICAL ELBOW NO SCALE
DUCT TURNS 2 1/2" O.C.

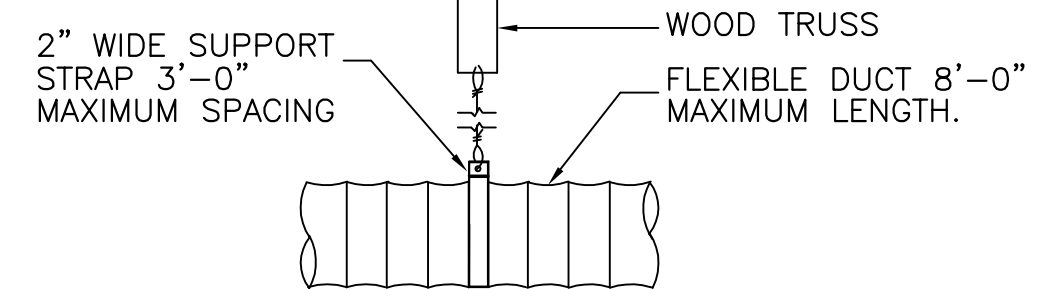
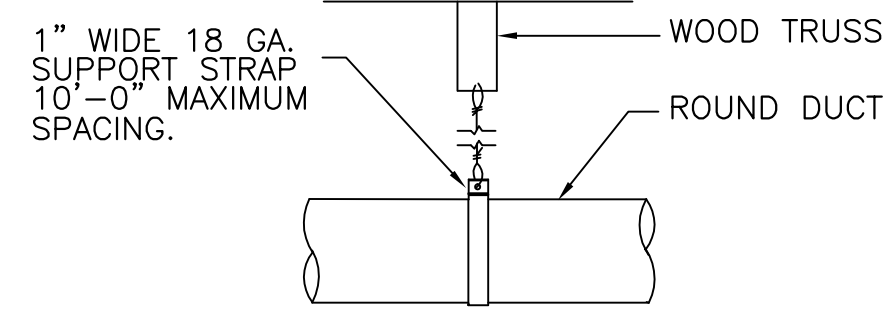


TYPICAL RETURN AIR SOUND ATTENUATING BOOT DETAIL
NO SCALE

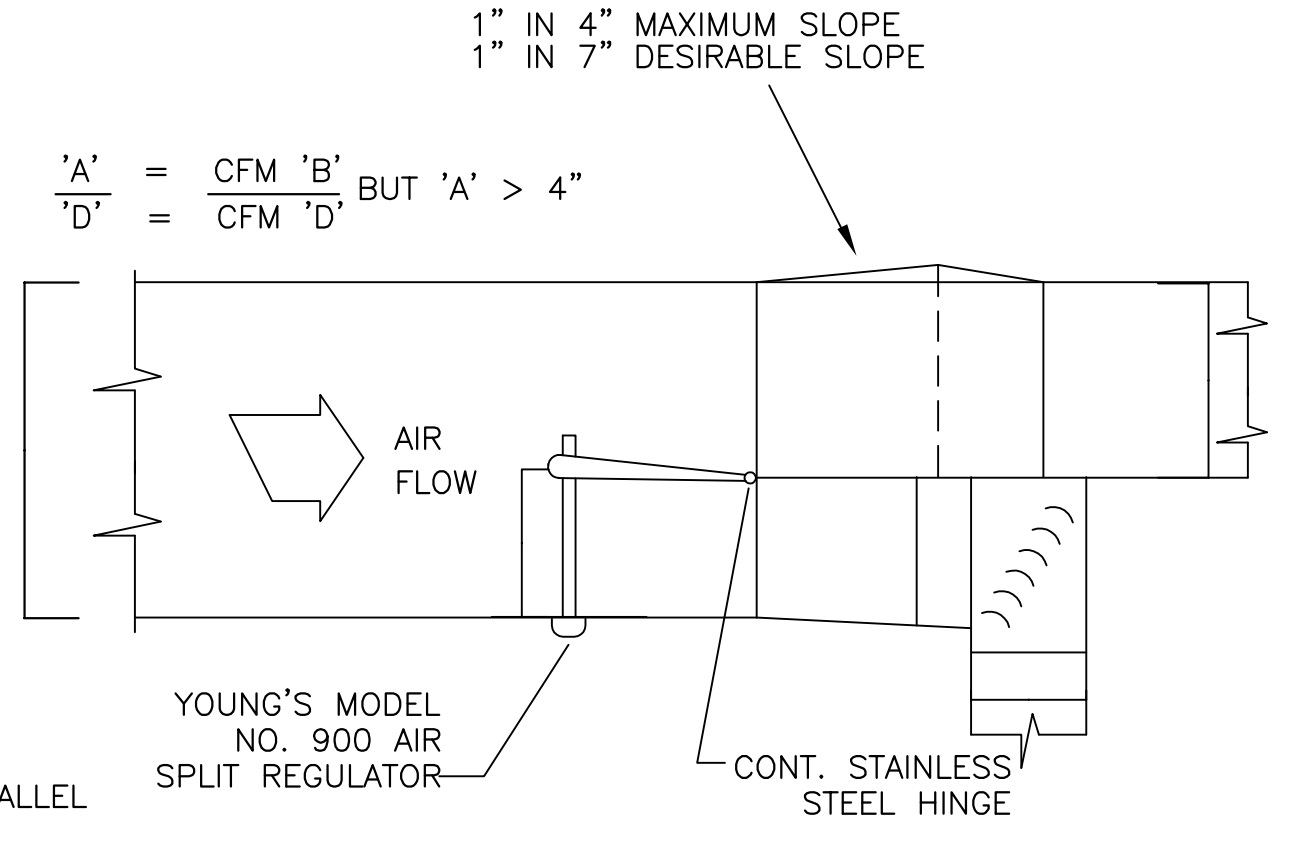
NOTE: INSTALL AT ALL RETURN GRILLES, UNLESS PRECLUDED BY STRUCTURAL CONSIDERATIONS.



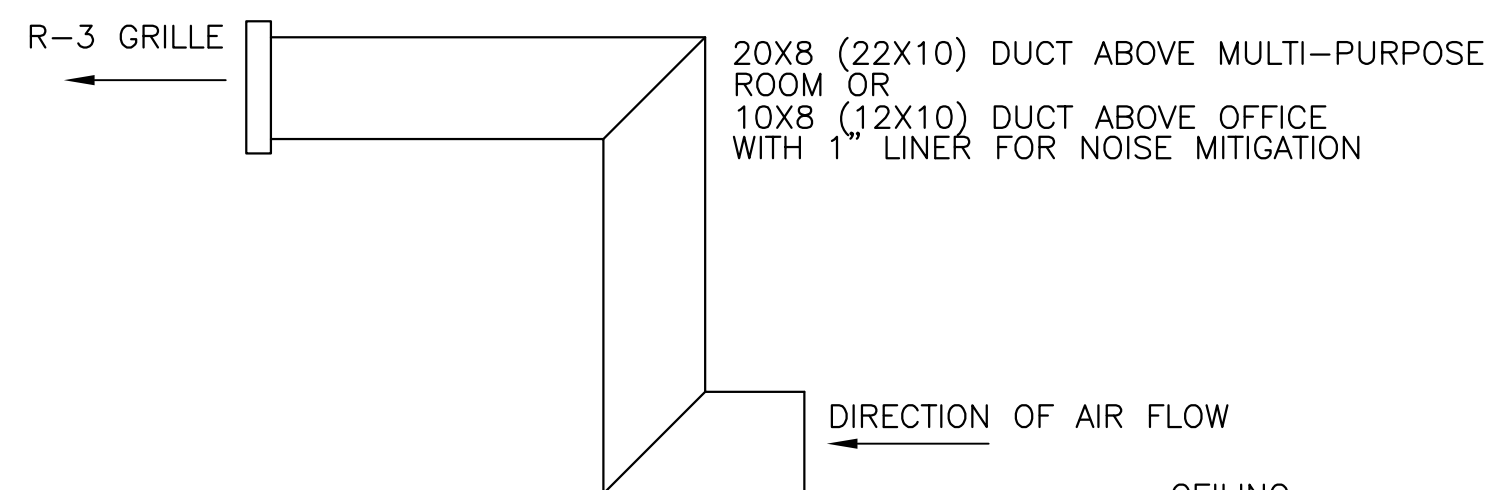
CEILING DIFFUSER DETAIL
NO SCALE



DUCT SUPPORT DETAILS
NOT TO SCALE

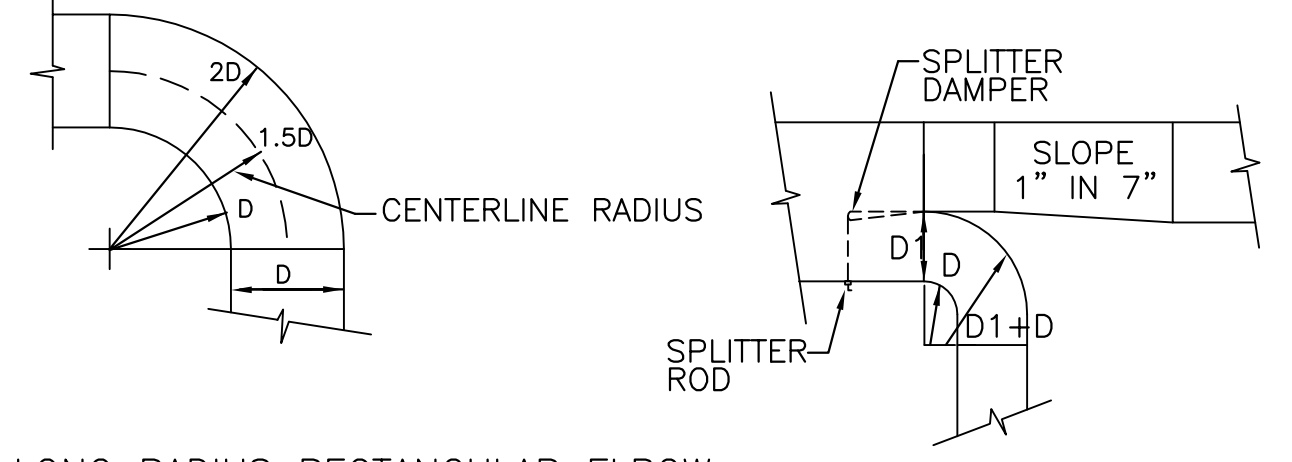


FULL ELBOW TAKE-OFF DETAIL
NO SCALE

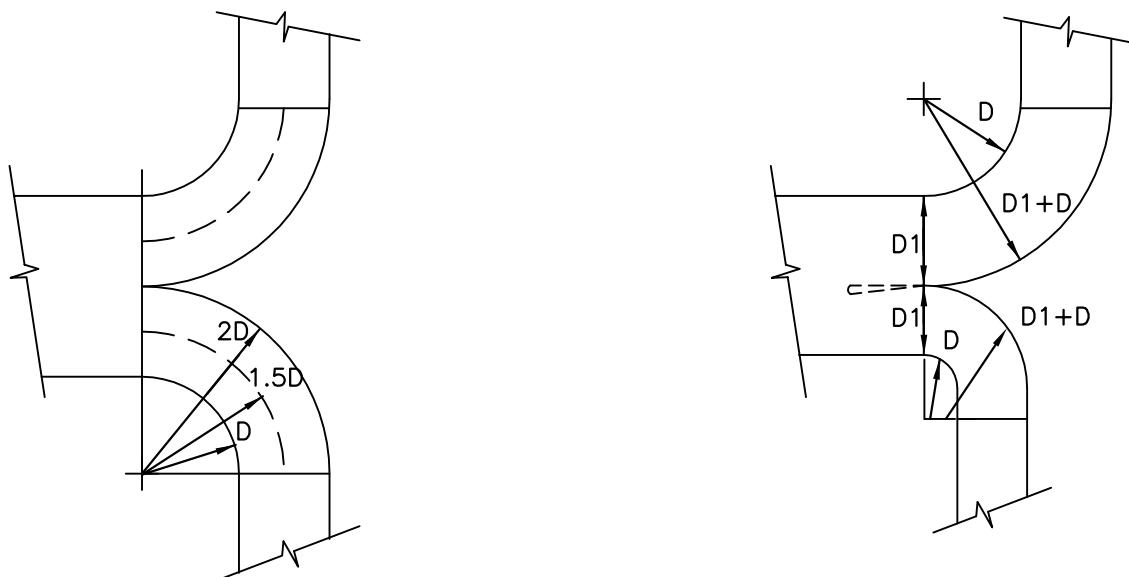


LINED DUCT SOUNDTRAP DETAIL
NO SCALE

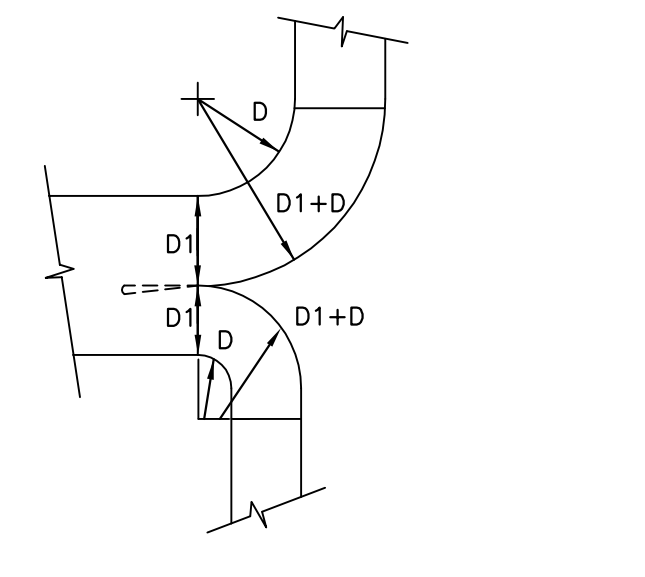
MECHANICAL DETAILS
SCALE: NONE



LONG RADIUS RECTANGULAR ELBOW



EQUAL SPLIT LONG RADIUS

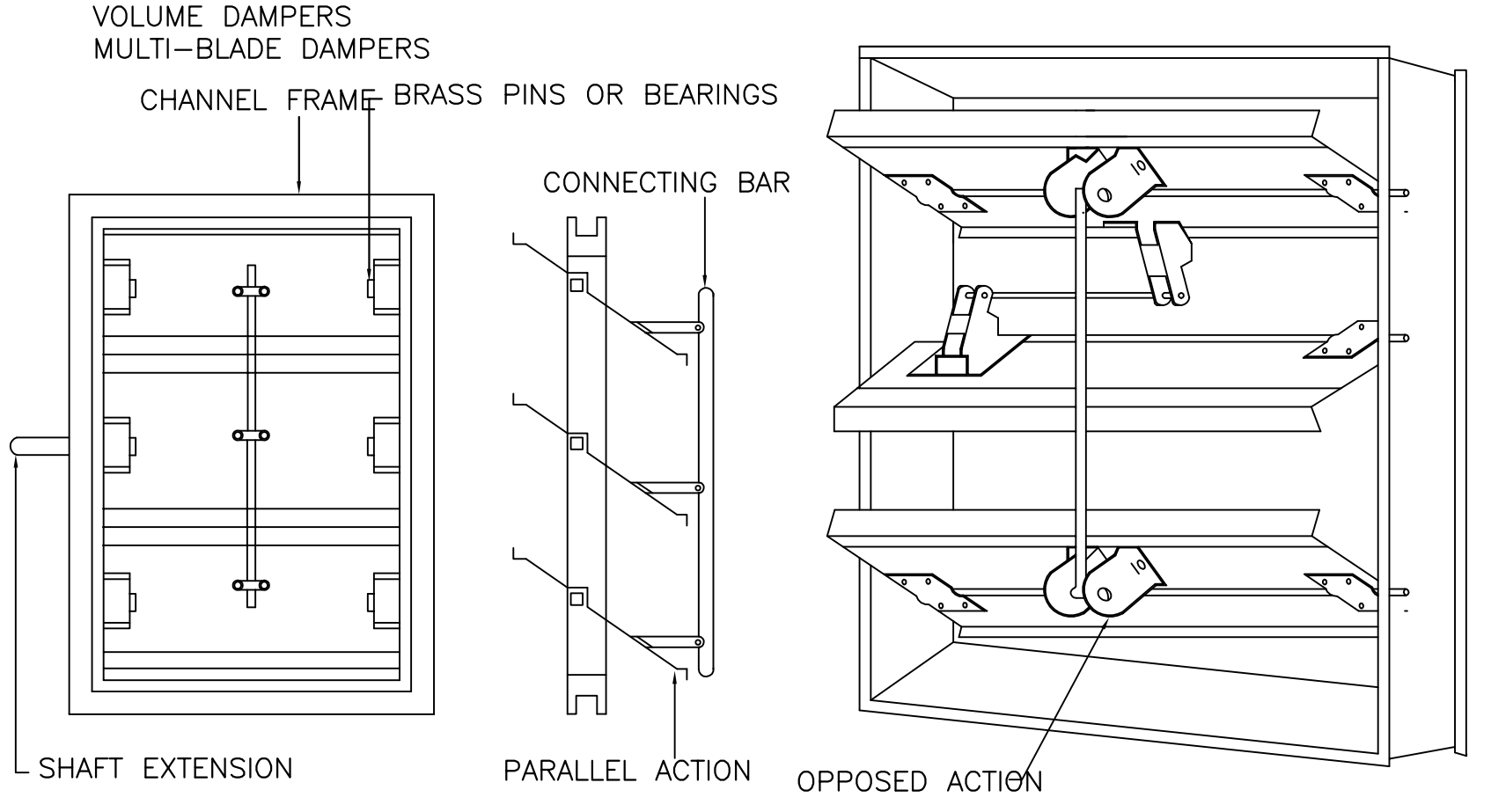


UNEQUAL SPLIT LONG RADIUS

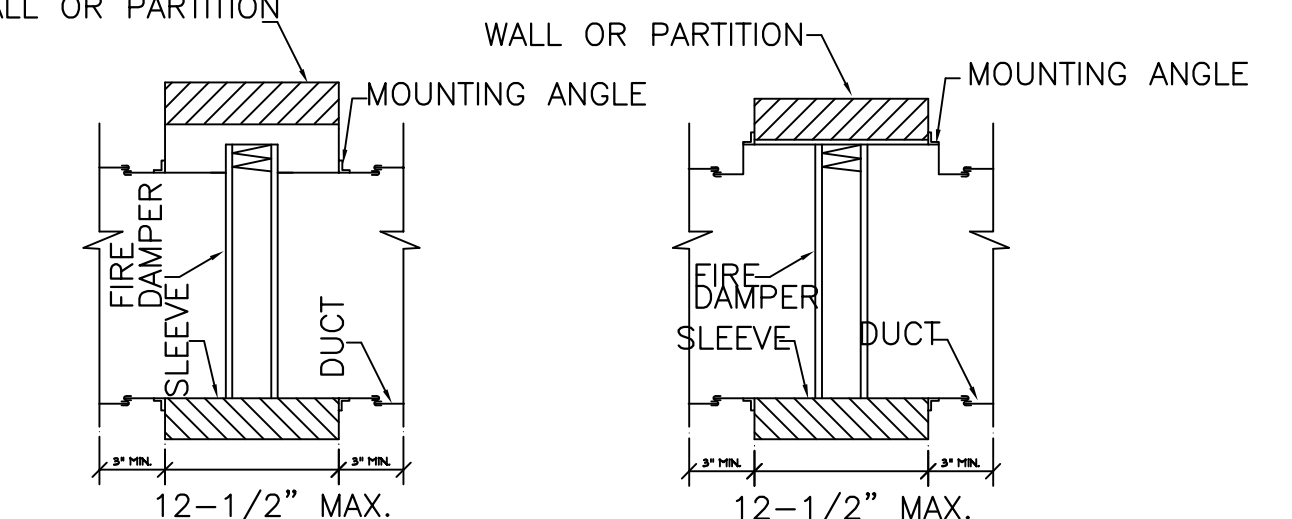
SPLITTER DETAIL
NO SCALE

- DAMPER SHALL BE INSTALLED WITHIN FIRE WALL OR FLOOR SLAB. DAMPER SHALL BE MOUNTED IN A SLEEVE, FACTOR APPLIED OR FIELD FABRICATED WITH INSIDE DIMENSIONS EQUAL TO NOMINAL DUCT DIMENSIONS.
- SLEEVE SHALL NOT BE LESS THAN 16 GAUGE STEEL FOR SIZED 36 WIDTH OR 24 HEIGHT AND UNDER, AND MUST NOT BE LESS THAN 14 GAUGE STEEL OVER 36 WIDTH OR 24 HEIGHT.
- DAMPER SHALL BE INSTALLED IN SLEEVE WITH #10X1/2 S.M. SCREWS OR 1/4X1/2 BOLTS AND NUTS. FASTENERS SHALL BE NO MORE THAN 9 INCHES ON CENTER, AND 2-3/4 INCHES FROM CORNERS.
- MOUNTING AND EXPANSION CLEARANCE: WHEN SIZING MASONRY OPENING, TWO ADDITIONS HAVE TO BE MADE TO LISTED DIMENSIONS. ALLOW 3/4" OVER BOTH LISTED WIDTH AND LISTED HEIGHT FOR SLEEVE METAL THICKNESS AND DAMPER FASTENER CLEARANCE. PROVIDE AN ADDITIONAL 1/8" FOR EACH 12 INCHES OF BOTH LISTED WIDTH FOR THERMAL EXPANSION. FOR VERTICAL INSTALLATION, ALL VERTICAL CLEARANCE SHOULD BE ABOVE TOP OF SLEEVE. ALL HORIZONTAL CLEARANCE SHOULD BE DIVIDED EQUALLY ON BOTH SIDES OF SLEEVE. FOR HORIZONTAL INSTALLATION, ALL CLEARANCES ARE DIVIDED EQUALLY ON ALL SIDES.
- SLEEVE SHALL NOT BE ATTACHED TO WALL (OR SLAB), BUT RETAINED ON EACH SIDE BY A 1-1/2"X1/8" MOUNTING ANGLE FRAME ATTACHED TO SLEEVE BY #10X1/2 S.M. SCREWS, OR 1/4X1/2 BOLTS - NOT OVER 8 INCHES ON CENTER. THIS ANGLE FRAME ALSO CLOSES ALL CLEARANCE BETWEEN SLEEVE AND WALL (OR SLAB) AND SHALL OVERLAP WALL A MINIMUM OF ON ALL FOUR SIDES.
- A SUITABLE TIGHTLY COVERED, ACCESS TO THE DAMPER MUST BE PROVIDED IN THE DUCTING TO ALLOW INSPECTION AND MAINTENANCE.
- SLEEVE SHALL BE INSTALLED SO DAMPER BLADE LOCKS ARE UPPERMOST IN HORIZONTAL INSTALLATIONS AND TOWARD ACCESS DOOR IN ALL CASES.
- FOR INSTALLATION REQUIRING FLUSH MOUNTING, ANGLE FRAME MAY BE NOTCHED TO ALLOW IT TO BE MOUNTED FACING INTO THE WALL (OR SLAB).
- THE FOLLOWING DUCT-SLEEVE CONNECTIONS MAY BE USED ON ALL SYSTEMS:

A. INSIDE SLIP	I. CLIP SLIP
B. PLAN "S" SLIP	J. DRIVE SLIP
C. HEMMED "S" SLIP	K. POCKET LOCK
D. BAR SLIP	L. ANGLE REINFORCED STANDING SEAM
E. ALTERNATE BAR SLIP (STANDING SLIP)	M. ANGLE REINFORCED POCKET LOCK
F. REINFORCED BAR SLIP (CLEAT)	N. COMPANION ANGLES
G. ANGLE SLIP	O. METAL FASTENERS SHALL BE SPACED A MINIMUM
H. DOUBLE "S" SLIP	P. OF APPROXIMATELY 16" ON CENTER
- MAXIMUM SINGLE DAMPER OF MULTIPLE DAMPER ASSEMBLY SHALL BE 40"X40" IN VERTICAL MOUNTINGS, 42" HEIGHT X 36" WIDTH IN HORIZONTAL MOUNTINGS.
- IN MULTIPLE DAMPER ASSEMBLIES, UNITS SHALL BE FASTENED TOGETHER USING MOUNTING HOLES AS PROVIDED.
- AS WITH ALL JOINTS, CONTRACTOR MUST SEAL SLEEVE, IN FIELD, AFTER INSULATION.
- UL LABEL SHALL BE RIVETED TO FIRE DAMPER.



FIRE DAMPER INSTALLATION DETAILS
NO SCALE



TYPICAL FIRE DAMPER INSTALLATIONS
NO SCALE

MRP PROJECT #2104
PowerSystems

P.O. Box 2863
San Angelo, Texas 76902
325-650-2235
FIRM NO. P-6257

If this document is not SIGNED and DATED on the seal, then it is NOT FOR REGULATORY APPROVAL, PERMITTING OR CONSTRUCTION.
THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY PAUL R. WILKERSON, P.E. 90739 ON MAY 06, 2022. ALTERATION OF A SEALED DOCUMENT WITHOUT WRITTEN INSTRUCTIONS TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

ORDINANCES
THIS DRAWING IS REPRESENTATIVE IN NATURE ONLY. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL STATE, COUNTY, MUNICIPAL AND FEDERAL LAWS AND/OR ORDINANCES GOVERNING THE PROJECT. IF IN ANY INSTANCE THE PLANS AND SPECIFICATIONS ARE IN DIRECT CONFLICT WITH SUCH LAWS AND/OR ORDINANCES, THE LAWS AND/OR ORDINANCES SHALL HAVE JURISDICTION.

Drawn By _____
Checked By _____

STRUCTURAL ENGINEER
SKG ENGINEERING
MEP ENGINEER
POWER SYSTEMS, INC.

JRW W. CONCHAO AIA
326 W. ANGELO, TX 76903
325-650-2235
www.skgsystems.com
KFW
KFW ARCHITECTS/AIA

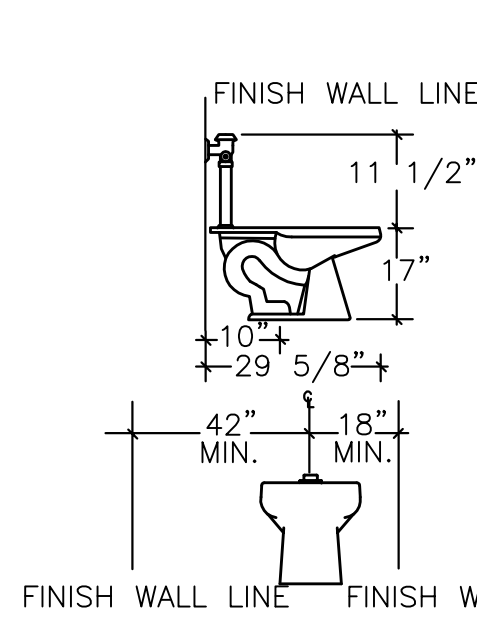
ISSUED FOR PERMIT, PRICING & CONSTRUCTION
MAY 6, 2022

Paul R. Wilkerison
PAUL R. WILKERSON
90739
2025
P.E.
REG. ENG.
05-06-22

RENOVATIONS OF
NORTH ANGELO BRANCH LIBRARY
TOM GREEN COUNTY

Project No. 292-09-1020
Date MAY 6, 2022

Sheet Number
M-3
6 OF 14



WATER CLOSET: P-1A

KOHLER K-4368, "HIGHCLIFF LITE" OR APPROVED EQUAL, 17" TALL, FLOOR MOUNTED, 1.28 GALLON PER FLUSH SIPHON JET, ELONGATED BOWL, 1 1/2" TOP SPUD, VITREOUS CHINA WITH BOLT CAPS, SLOAN ROYAL NO. 111-1.28 ROYAL 1.28 GALLON FLUSH VALVE, 1" SCREWDRIVER ANGLE STOP AND FLUSH CONNECTION, BEMIS 1955C, WHITE, OPEN FRONT, SOLID PLASTIC SEAT COVER WITH CONCEALED CHECK HINGE.

ROUGH-IN: CW 1" HW 3" WASTE 3" VENT 2"

NOTE: THIS IS A HANDICAPPED ACCESSIBLE FIXTURE AND MUST STRICTLY COMPLY WITH ALL A.D.A. REQUIREMENTS TO IT. WHEN MOUNTED AT 17" A.F.F. TO TOP OF SEAT.

LAVATORY: P-3A

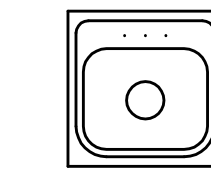
FIXTURE: AMERICAN STANDARD 9024.001EC, "DECORUM" WHITE, WALL MOUNT VITREOUS CHINA, 20" x 18", SINGLE HOLE.
 SUPPLY: AMERICAN STANDARD 2064.101, MANUAL OPERATION, 1.5 GPM. PROVIDE WATTS USG-B THERMOSTATIC MIXING VALVE, CHECKSTOPS, LIMIT SET AT 110° F. MIXING VALVE MUST COMPLY WITH ASSE 1070.

STRAINER: K-13885 OFFSET DRAIN OR SD R7308 1 1/4" OFFSET GRID DRAIN.
 P-TRAP: SANITARY DASH R 367, 1 1/4" CHROME TRAP, WITHOUT CLEANOUT, PROVIDE ESCUTCHEON.
 STOPS: EASTMAN 5M12 LAVATORY SUPPLY, FLEX CHROME RISERS AND OVAL HANDLE STOPS.
 CARRIER: JOSAM 17100 CONCEALED WALL SUPPORT.
 GUARDS: TRUEBRO 102W INSULATION GUARDS FOR SUPPLY & TRAP. TRUEBRO 105W INSULATION GUARD FOR DRAIN.

ROUGH-IN: CW 1/2" HW 1/2" WASTE 2" VENT 1 1/2"

NOTE: THIS IS A HANDICAPPED ACCESSIBLE FIXTURE AND MUST STRICTLY COMPLY WITH ALL ADA REQUIREMENTS PERTAINING TO IT WHEN MOUNTED AT 34" AFF TO LIP. EC SHALL FURNISH POWER FOR SENSOR TRANSFORMER.

SINGLE SINK: P-5A



FIXTURE: ELKAY GECR2521, SINGLE BOWL DROP-IN SINK, 25"x21.25" SS SINK, 5 3/8" DEPTH MAX.
 SUPPLY: DELTA 190, WATERFALL SERIES; LEVER HANDLE, HIGH SPOUT WITH RO SPIGOT (SEE P-12 SPECIFICATION)
 STRAINER: LK-35
 P-TRAP: SANITARY DASH R426 STRAINER SANITARY DASH R371 P-TRAP.

STOPS: EASTMAN 5M12 SUPPLY, FLEX RISERS
 GUARDS: TRUEBRO 102W INSULATION GUARDS FOR SUPPLY AND TRAP. TRUEBRO 105W INSULATION GUARD FOR DRAIN IF NOT COVERED.

ROUGH-IN: CW 1/2" HW 1/2" WASTE 2" VENT 1 1/2"

NOTE: THIS IS A HANDICAPPED ACCESSIBLE FIXTURE AND MUST STRICTLY COMPLY WITH ALL ADA REQUIREMENTS PERTAINING TO IT.

ELECTRIC WATER COOLER: P-6A

ELKAY LZSTLGBW SSK OR APPROVED EQUAL WITH LZWSR BOTTLE FILLER AND FILTER, STAINLESS STEEL FINISH, LEAD FREE, SELF CONTAINED ELECTRIC REFRIGERATED WATER. COOLER WITH CAPACITY TO CHILL WATER FROM 80° TO 50° AT 8 GPH FLOW RATE. UNIT SHALL BE DESIGNED TO CONFORM WITH THE AMERICAN DISABILITIES ACT (ADA) STANDARDS. ELECTRICAL CHARACTERISTICS SHALL BE 120V, 60HZ, SINGLE PHASE. REFER TO ARCHITECT'S DRAWINGS FOR MOUNTING HEIGHTS. MOUNT AT 36" A.F.F. TO LOWER BUBBLER ORIFICE. PROVIDE CANE APRON IF REQUIRED.

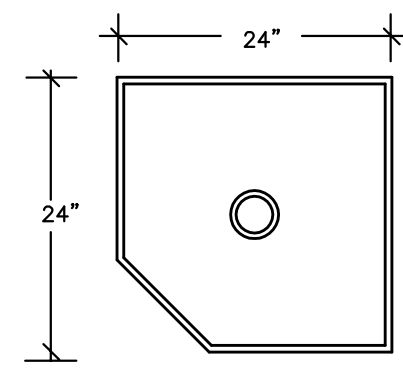
ROUGH-IN: CW 1/2" HW 2" WASTE 2" VENT 1 1/2"

NOTE: THIS IS A HANDICAPPED ACCESSIBLE FIXTURE AND MUST STRICTLY COMPLY WITH ALL A.D.A. REQUIREMENTS TO IT.

ELECTRIC WATER HEATER: P-7

FIXTURE: BRADFORD WHITE MODEL LE23053-3, 2 ELEMENT, HEAT TRAP, T & P VALVE, 30 GAL, 4.5 KW, 208 VOLT, SINGLE-PHASE, AS REQUIRED ENERGY FACTOR TO BE .95 MINIMUM. WATER HEATER SHALL BE ETL LISTED.

- NOTES
1. ALL HANDWASHING FIXTURES TO HAVE THERMOSTATIC MIXING VALVE.
 2. WATER HEATER SHALL COMPLY WITH DOE REGULATIONS EFFECTIVE 4/15/2015. ADJUST MODEL NUMBER AS REQUIRED.
 3. PROVIDE 3 YEAR WARRANTY.
 4. WATER HEATER TO BE UL LISTED.
 5. INSTALL WATTS N36 VACUUM RELIEF VALVE TO COLD WATER LINE.



MOP SINK: P-8

FIXTURE: FIAT TSBC-1610 24"x24"x12", 6" DROP FRONT, STAINLESS STEEL THRESHOLD, SPLASH CATCHER PANELS.
 SUPPLY: FIAT 830-AA MOP SINK FAUCET WITH VACUUM BREAKER, INTEGRAL STOPS, WALL BRACE, PAIL HOOK, 3/4" THREAD SPOUT, MOUNT AT 36" A.F.F. SUPPLY WITH 30" RUBBER HOSE, HOSE HANGAR AND MOP HANGAR. PROVIDE STAINLESS STEEL BACKSPLASH PANELS.

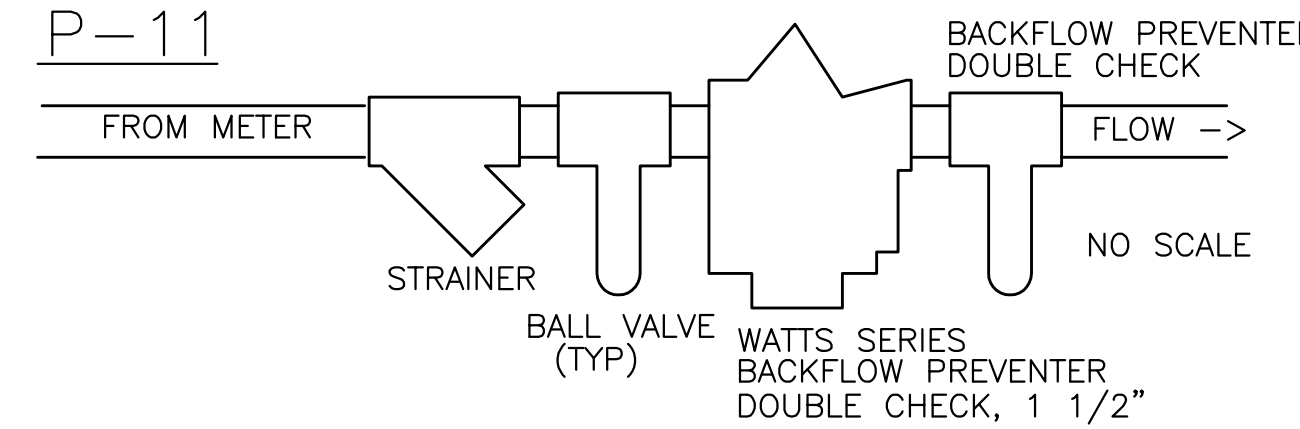
DRAIN: 3" CAST BRASS DRAIN.
 TRAP: DEEP SEAL P-TRAP

ROUGH-IN: CW 1/2" HW 1/2" WASTE 3" VENT

ROOF HYDRANT: P-10A

WOODFORD MODEL Y2 AUTOMATIC DRAINING FREEZELESS HYDRANT, BACKFLOW PREVENTER, 3/4" MALE HOSE THREAD. PROVIDE WITH ADEQUATE LENGTH TO INSTALL VALVE UNDER CEILING INSULATION. MOUNT HYDRANT 12" ABOVE ROOF. 1" NPT INLET. ATTACH DRAIN TO APPROVED DRAINAGE LOCATION OR NEAREST SERVICE SINK WITH INDIRECT WASTE CONNECTION.

BACKFLOW PREVENTER ASSEMBLY: P-11



FLOOR DRAIN FD (3"): P-13

FIXTURE: JOSAM 3000-6A, 6" DIAMETER CAST IRON FLOOR DRAIN WITH FLANGE, CLAMPING COLLAR, NICKEL ROUND TOP, BRONZE STRAINER AND TRAP PRIMER CONNECTION.

NOTE: PROVIDE 1/2" TRAP PRIMER FOR RESTROOM DRAINS.

GATE VALVE

FIXTURE: GRINELL #3000

SHOCK ABSORBER

PDI SYMBOL "A"

ISOLATION VALVE

GRINELL 3810 BALL VALVE

PLASTIC METER/VALVE BOX

FIXTURE: WIW #34P18 WITH CAST IRON RING AND COVER.

WALL CLEANOUT: WCO

FIXTURE: WADE-W-8480-R6 STAINLESS STEEL

EXTERIOR WALL CLEANOUT

FIXTURE: JOSAM 58890 STAINLESS STEEL COVER WITH SCREW AND BRASS CLEANOUT PLUG.

FLOOR CLEANOUT: FCO

FIXTURE: JAY R SMITH 4031 SERIES FINISHED FLOOR CLEANOUT WITH TWIS-TO-FLOOR ADJUSTABLE TOP, ROUND NICKEL BRONZE TOP, ABS PLUG,

WATER HAMMER ARRESTORS:

FIXTURE: JOSAM 75000-S

WATER CUT OFF VALVE

GRINELL:

PLUMBING SYMBOL SCHEDULE

SYMBOL	DESCRIPTION
	GATE VALVE
	GLOBE VALVE
	BALL VALVE
	MOTORIZED VALVE
	PRESSURE REDUCING VALVE
	PRESSURE RELIEF VALVE
	BUTTERFLY VALVE
	THREE-WAY MOTORIZED VALVE
	SOLENOID VALVE
	CHECK VALVE
	BALANCING VALVE
	GAUGE COCK
	A.S.M.E. TEMPERATURE & PRESSURE RELIEF VALVE
	GAS COCK
	PRESSURE GAUGE
	THERMOMETER
	GAS LINE
	AUTOMATIC AIR VENT
	STRAINER WITH DRAIN VALVE
	FLEXIBLE PIPE CONNECTION
	UNION
	PIPE ANCHOR
	WALL HYDRANT
	FLOW SWITCH
	THERMOSTAT
	HUMIDISTAT
	SANITARY SEWER LINE
	MANHOLE
	COLD WATER LINE
	HOT WATER LINE
	HOT WATER RECIRCULATING LINE
	180 HOT WATER LINE
	HOT WATER SUPPLY LINE
	HOT WATER RETURN LINE
	HYDRONIC SYSTEM SUPPLY LINE
	HYDRONIC SYSTEM RETURN LINE
	CHILLED WATER SUPPLY LINE
	CHILLED WATER RETURN LINE
	CONDENSATE DRAIN LINE WITH FLOW DIRECTION
	FLOW DIRECTION
	COMPRESSED AIR LINE
	CUT-OFF VALVE
	VENT LINE
	STORM SEWER LINE
	90 ELL UP
	90 ELL DOWN
	TEE DROPPING DOWN
	TEE RISING UP
	COMPRESSED AIR OUTLET

NOTE: ALL SYMBOLS DO NOT NECESSARILY APPEAR ON THESE DRAWINGS

NOTES:

1. FIXTURE SUBSTITUTION PERMITTED PROVIDED ARCHITECT CONCURRENCE OBTAINED AND ADA REQUIREMENTS ADHERED TO STRICTLY.
2. WATER CLOSET CONTROLS SHALL BE MOUNTED ON WIDE SIDE OF TOILET AREAS.
3. THIS PROJECT IS REQUIRED TO COMPLY WITH ADA AND THE STATE OF TEXAS ACCESSIBILITY STANDARDS (TAS) OF THE ARCHITECTURAL BARRIERS ACT, TAS 9102. ACCESSIBLE PLUMBING FIXTURES SHALL COMPLY WITH THE STANDARDS AND TABLE REQUIREMENTS.
4. CONTRACTOR TO INSURE THAT REQUIRED ADA CLEARANCES FOR ALL FIXTURES ARE MET AS MEASURED FROM CENTERLINE OF FIXTURE TO FINISHED WALL. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.
5. EXPOSED INSULATION ON PIPING AND DRAINS TO BE TRUEBRO OR EQUAL. WRAPPED INSULATION WILL NOT BE ALLOWED.

GENERAL PLUMBING NOTES

1. CONTRACTOR SHALL COMPLY WITH 2015 INTERNATIONAL PLUMBING CODE AND ALL APPLICABLE LOCAL CODES AND AMENDMENTS.
2. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES TO MINIMIZE CONFLICT.
3. CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS TO OWNER PROVIDED EQUIPMENT.
4. PLUMBING CONTRACTOR IS RESPONSIBLE FOR CONDENSATE DRAINS FROM FAN COIL UNITS.
5. SLEEVE AND FIRE CAULK ALL PENETRATIONS OF RATED ASSEMBLIES.
6. SLEEVE ALL PENETRATIONS OF SLAB.
7. PROVIDE UNIONS AT WATER HEATERS. PROVIDE COUPLINGS TO ALL EQUIPMENT AS REQUIRED. PROVIDE PHYSICAL PROTECTION FOR METERS AND PIPING AROUND BUILDING.
8. MAINTAIN 5" CLEARANCE BETWEEN WASTE AND WATER LINES.
9. PLUMBING FIXTURES MAY BE KOHLER, KILGORE, MANSFIELD, CRANE, AMERICAN STANDARD OR EQUAL. PROVIDE SUPPLY STOPS AT EACH FIXTURE RISER.
10. DO NOT SCALE DRAWINGS. FIELD VERIFY LOCATION OF FIXTURES AND LINES.
11. INSTALL WATER HAMMER ARRESTORS AT WATER HEATER AND ONE ARRESTOR FOR EACH FIXTURE GROUP IN AN ACCESSIBLE LOCATION.
12. MAINTAIN 10' CLEARANCE FROM VENT STACKS TO OUTSIDE AIR INTAKES.

Drawn By _____
 Checked By _____

STRUCTURAL ENGINEER
 SKG ENGINEERING

MEP ENGINEER
 POWER SYSTEMS, INC.

JRW W. CONCHO AVE
 SAN ANGELO, TX 76903
 Mpower@skg.com

MEW
 KPW ARCHITECTS/AA

ISSUED FOR PERMIT, PRICING & CONSTRUCTION
 MAY 6, 2022

Paul R. Wilkerson
 PAUL R. WILKERSON
 90739
 95118
 ORIGINAL ENG.
 05-06-22

RENOVATIONS OF
NORTH ANGELO BRANCH LIBRARY
 TOM GREEN COUNTY

Project No. 292-09-1020
 Date MAY 6, 2022

Sheet Number
P-1
 7 OF 14

MEP PROJECT #2104
PowerSystems

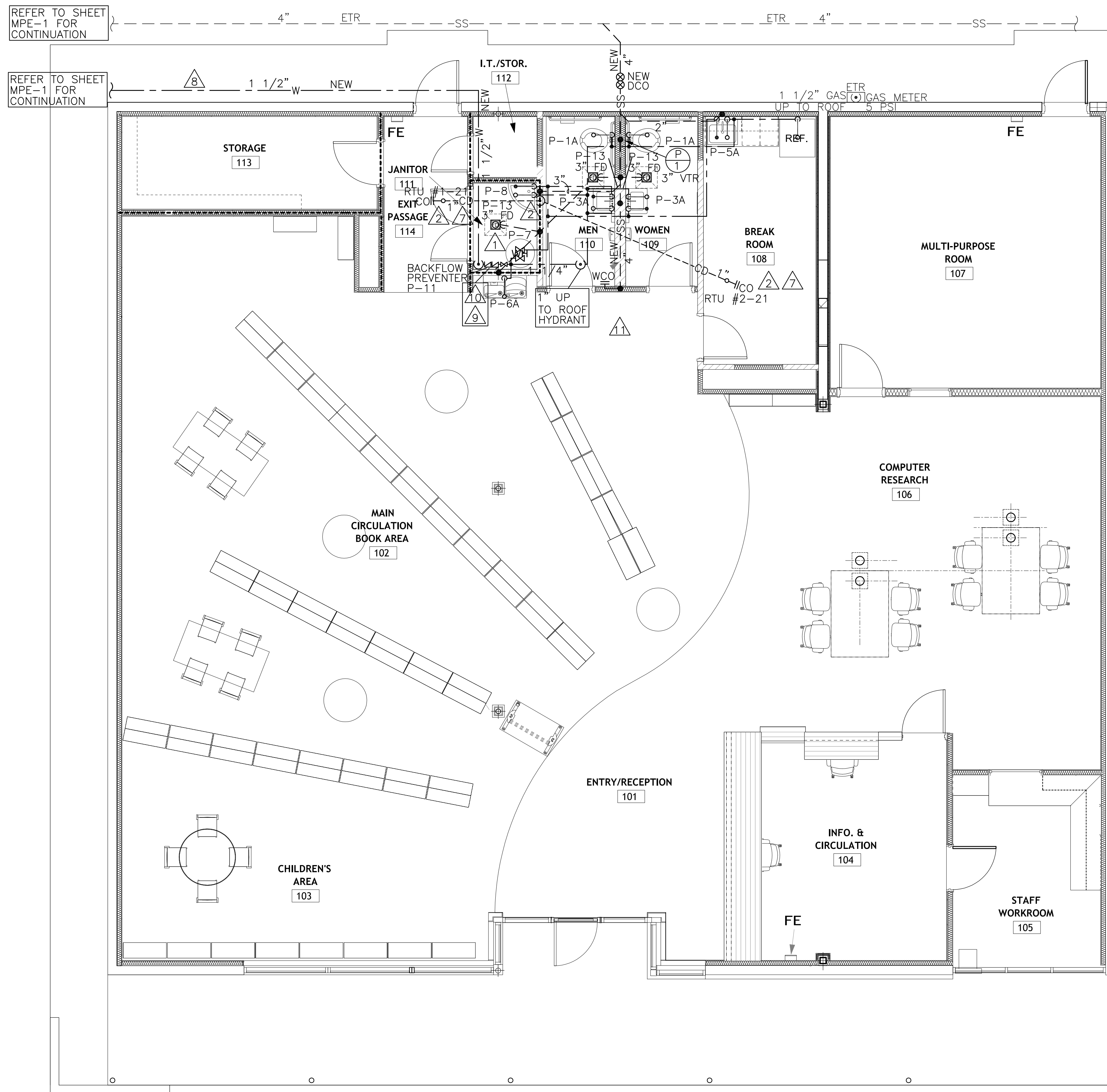
P.O. Box 2863
 San Angelo, Texas 76902
 325-650-2235
 FIRM NO. P-6257

If this document is not SIGNED and DATED on the seal, then it is NOT FOR REGULATORY APPROVAL, PERMITTING OR CONSTRUCTION.
 THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY PAUL R. WILKERSON, P.E. 90739 ON MAY 06, 2022. ALTERATION OF A SEALED DOCUMENT WITHOUT WRITING NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

ORDINANCES
 THIS DRAWING IS REPRESENTATIVE IN NATURE ONLY. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL STATE, COUNTY, MUNICIPAL AND FEDERAL LAWS AND/OR ORDINANCES GOVERNING THE PROJECT. IF IN ANY INSTANCE THE PLANS AND SPECIFICATIONS ARE IN DIRECT CONFLICT WITH SUCH LAWS AND/OR ORDINANCES, THE LAWS AND/OR ORDINANCES SHALL HAVE JURISDICTION.

REFER TO SHEET MPE-1 FOR CONTINUATION

REFER TO SHEET MPE-1 FOR CONTINUATION



GENERAL PLUMBING NOTES:

- DO NOT SCALE DRAWINGS. FIELD VERIFY LOCATION OF FIXTURES AND LINES.
- GENERAL CONTRACTOR AND PLUMBING CONTRACTOR SHALL VERIFY ALL REQUIREMENTS OF THIS PROJECT BEFORE BIDDING AND PROCEEDING WITH WORK.
- INSTALL ISOLATION VALVES AT ALL BRANCHES OF MAIN LINES.
- MOUNT WATER CLOSET CONTROLS ON WIDE SIDE OF STALL.
- PROVIDE COUPLINGS TO ALL EQUIPMENT AS REQUIRED.
- PROVIDE SUPPLY STOPS AT EACH FIXTURE RISER. ALL EXPOSED LINES TO BE CHROME PLATED.
- SLEEVE SEWER LINE AS IT EXTENDS THROUGH FOUNDATION BEAMS. COORDINATE SEWER LINE INSTALLATION WITH STRUCTURAL DRAWINGS TO AVOID FOUNDATION BEAMS AND COLUMNS.
- THE EQUIPMENT ROUGH-INS AS SHOWN ARE ACCURATE TO THE BEST OF OUR KNOWLEDGE. HOWEVER, THE OWNER OR SUPPLIER MAY SUBSTITUTE, OR THIS ITEM MAY VARY FROM THE PLANS. THEREFORE, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND PLACEMENT OF ROUGH-INS. THE CONTRACTOR IS RESPONSIBLE FOR THE CORRECT INSTALLATION OF THE FIXTURES AND EQUIPMENT.
- PROVIDE TRAP PRIMERS OR TRAP GUARDS ON ALL FLOOR DRAINS.
- INSTALL WATER HAMMER ARRESTERS PER ANSI A112.
- PROVIDE WOOD BLOCKING AS REQUIRED FOR FIXTURES AND PIPING.
- PLUMBING CONTRACTOR TO COORDINATE SEWER LINE INSTALLATION WITH FOUNDATION DRAWINGS. MAINTAIN 12" CLEARANCE FROM FOOTINGS.
- ALL EXPOSED WATER LINES TO BE INSTALLED TIGHT TO STRUCTURE ABOVE.
- PROVIDE WATTS MODEL USG-B THERMOSTATIC MIXING VALVE AT ALL HANDWASHING FIXTURES AND CHECKSTOPS, LIMIT SET AT 110°F. VALVE SHALL MEET ASSE 1070.
- INCREASE VTRS PER LOCAL CODES AND FROST REQUIREMENTS.
- CONTRACTOR TO INSTALL ALL SHUT-OFF VALVES AS SHOWN ON PLUMBING PLANS AND PLUMBING RISER DRAWINGS.
- INSTALL ISOLATION VALVES AT ALL DROPS TO FIXTURES.
- INSULATE ALL SUPPLY PIPING WITH FIBERGLASS JACKET INSULATION PER SPECS. LABEL ALL PIPING PER SPECS. PROVIDE INSULATION SHIELDS AT ALL HANGERS AND STRUTS.
- INSTALL ONE-PIECE BALL VALVES FOR SHUT-OFF AND ISOLATION VALVES.
- REFER TO THIS SHEET FOR RISERS AND ADDITIONAL PIPE SIZING.
- PROVIDE PHYSICAL PROTECTION FOR METERS AND PIPING AROUND BUILDING.
- PLUMBING CONTRACTOR TO COORDINATE VENT STACKS WITH OUTSIDE AIR INTAKES OF EQUIPMENT AND MAINTAIN AT LEAST 10'-0" CLEARANCE OR AS PER LOCAL CODE REQUIREMENTS.

- MAINTAIN 5' CLEARANCE BETWEEN WASTE AND WATER LINES OR PER LOCAL CODES.
- INSTALL DOUBLE CLEANOUTS AT EXTERIOR OF BUILDING AND AS REQUIRED BY LOCAL CODES. LOCATE ALL EXTERIOR CLEANOUTS AWAY FROM PEDESTRIAN TRAFFIC AREAS.
- CONTACT LOCAL UTILITIES FOR APPLICABLE FEES, PERMITS AND CHARGES FOR THIS PROJECT.
- CONTRACTOR TO COMPLY WITH ALL REQUIREMENTS OF ENERGY CODE DOCUMENTS INCLUDED WITH SPECIFICATIONS.
- OWNER PREFERS PEX PIPING. ALL PEX PIPING SHALL BE INSULATED OR FIRE WRAPPED, AND SUPPORTED ITS ENTIRE LENGTH. INSTALLATION SHALL BE AS NEAT AND PROFESSIONAL AS POSSIBLE.

PLUMBING NOTES INDICATED BY "△":

- △ PROVIDE EXPANSION TANK, DRAIN PANS AND ALL APPURTENANCES REQUIRED BY CODE FOR WATER HEATER. DRAIN PAN SHALL BE PIPED TO MOP SINK WITH INDIRECT CONNECTION.
- △ ROUTE 1" CONDENSATE DRAIN LINE TO 2" DRAIN DOWN IN WALL TO MOP SINK.
- △ INSTALLATION OF ALL PIPING SUSPENDED FROM STRUCTURE TO BE COORDINATED WITH MECHANICAL AND ELECTRICAL CONTRACTORS. PLUMBING CONTRACTOR TO PROVIDE INSTALLATION DRAWINGS FOR APPROVAL BY DESIGN TEAM SHOWING ROUTING AND ELEVATIONS OF ALL OVERHEAD PIPING BEFORE INSTALLING.
- △ INSULATE ALL EXPOSED PIPING PER SPECS. PROVIDE HANGERS AND SUPPORTS PER SPECS. LABEL ALL PIPING PER SPECS. ANY ITEM THAT DOES NOT MEET GOOD WORKMANSHIP STANDARDS WILL BE REPLACED AND CORRECTED AT CONTRACTOR'S EXPENSE.
- △ CONTRACTOR IS RESPONSIBLE TO PROVIDE A COMPLETELY OPERATIONAL SYSTEM. FURNISH ALL APPURTENANCES AND OPTIONS TO PROVIDE THE EQUIPMENT AND INSTALLATION ILLUSTRATED ON THESE PLANS.
- △ ALL EXPOSED PIPING TO BE COPPER.
- △ INSTALL FLOAT SWITCH OR FLOW SWITCH ACCORDING TO CODE FOR CONDENSATE LINES AT ALL HVAC EQUIPMENT.
- △ DOMESTIC WATER DEMAND IS 28 GPM FOR THIS BUILDING.
- △ INSTALL DOUBLE CHECK BACKFLOW PREVENTER.
- △ INSTALL PRESSURE REDUCING VALVE ON DOMESTIC WATER SERVICE IF SYSTEM WATER PRESSURE (STATIC) IS ABOVE 80 PSI.
- △ ALL PIPING NOT ENCAPSULATED IN WALL SHALL BE WRAPPED WITH 3M FIRE WRAP FOR PLENUM APPLICATION.

ALL PIPING AND CONDUITS BELOW BUILDING SLAB IS TO BE BEDDED IN SAND AND THE EXCAVATION FILLED WITH "FLOWABLE GROUT" TO THE BOTTOM OF THE NEW FLOOR SLAB. REFER TO STRUCTURAL FOR A DETAIL OF PIPING BACKFILL.

PIPING SHALL PENETRATE FOUNDATION BEAMS ONLY IN THE MIDDLE ONE-THIRD OF THE BEAM DEPTH.

PIPING AND CONDUITS SHALL BE BELOW THE FLOOR SLAB AND ARE TO PENETRATE BEAMS AND SLABS PERPENDICULAR TO THE ELEMENT FACE. ALL ELECTRICAL CONDUITS SHALL BE INSTALLED BELOW FOUNDATION BEAMS.

ELECTRICAL CONDUITS ARE NOT TO OCCUR IN THE BUILDING SLAB WHERE CONDUIT IS HORIZONTAL. PROVIDE A MINIMUM OF 3" CLEAR BETWEEN THE CONDUIT AND THE BOTTOM OF A FLOOR SLAB.

Drawn By _____
Checked By _____

STRUCTURAL ENGINEER
SKG ENGINEERING

MEP ENGINEER
POWER SYSTEMS, INC.

378 W. CONCHO AVE
SAN ANGELO, TX 76903
361.563.0000
www.skge.com

KFW

KFW ARCHITECTS AIA

ISSUED FOR PERMIT, PRICING & CONSTRUCTION

MAY 6, 2022

Paul R. Wilkerson

PAUL R. WILKERSON
REGISTERED PROFESSIONAL ENGINEER
NO. 00738
EXPIRES 05/31/2025
05-06-22

RENOVATIONS OF
NORTH ANGELO BRANCH LIBRARY
TOM GREEN COUNTY

MEP PROJECT #2104
PowerSystems

P.O. Box 2863
San Angelo, Texas 76902
325-659-2235
FIRM NO. P-6257

If this document is not SIGNED and DATED on the seal, then it is NOT FOR REGULATORY APPROVAL, PERMITTING OR CONSTRUCTION.

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY PAUL R. WILKERSON, P.E. 00738 ON MAY 06, 2022. ALTERATION OF A SEALED DOCUMENT WITHOUT THE SIGNATURE OF THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

ORDINANCES

THIS DRAWING IS REPRESENTATIVE IN NATURE ONLY. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL STATE, COUNTY, MUNICIPAL AND FEDERAL LAWS AND/OR ORDINANCES GOVERNING THE PROJECT. IF IN ANY INSTANCE THE PLANS AND SPECIFICATIONS ARE IN DIRECT CONFLICT WITH SUCH LAWS AND/OR ORDINANCES, THE LAWS AND/OR ORDINANCES SHALL HAVE JURISDICTION.

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

Project No. 292-09-1020
Date MAY 6, 2022

Sheet Number
P-2
8 OF 14

Drawn By _____
 Checked By _____

STRUCTURAL ENGINEER
 SKG ENGINEERING
 MEP ENGINEER
 POWER SYSTEMS, INC.

378 W. CONCHO AVE
 SAN ANGELO, TX 76903
 325-650-2235
 info@skgarchitects.com

NEW
 KPW ARCHITECTS AIA

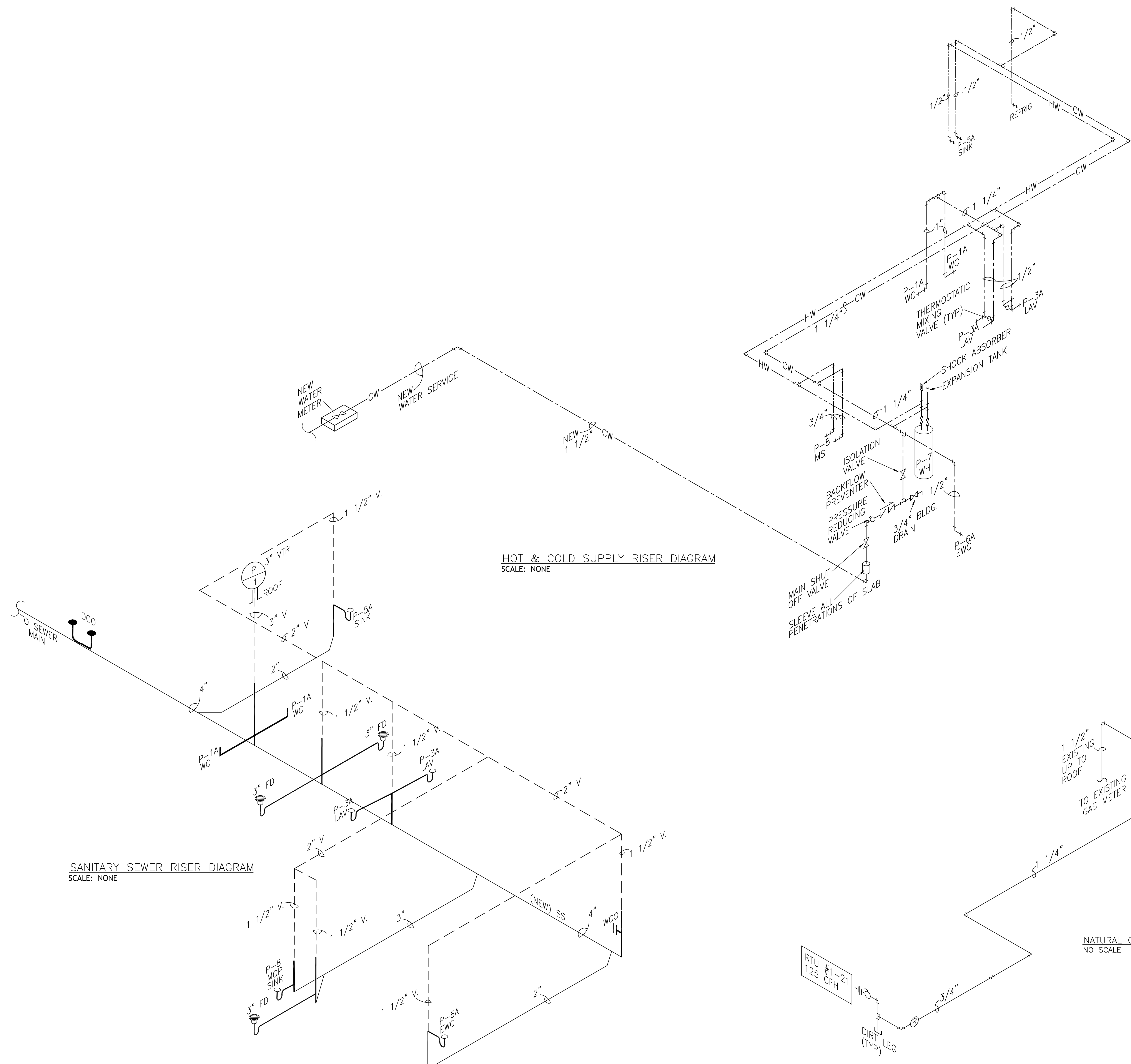
ISSUED FOR PERMIT, PRICING & CONSTRUCTION
 MAY 6, 2022

Paul R. Wilkerson
 PAUL R. WILKERSON
 007378
 007378
 007378
 05-06-22

RENOVATIONS OF
NORTH ANGELO BRANCH LIBRARY
 TOM GREEN COUNTY

Project No. 292-09-1020
 Date MAY 6, 2022

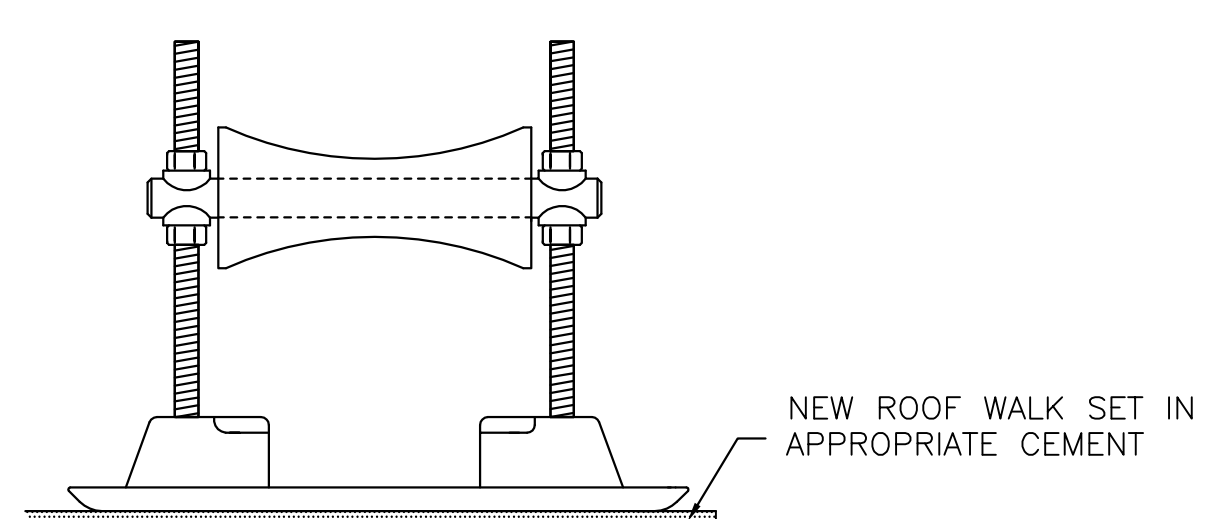
Sheet Number
P-3
 9 OF 14



HOT & COLD SUPPLY RISER DIAGRAM
 SCALE: NONE

SANITARY SEWER RISER DIAGRAM
 SCALE: NONE

NATURAL GAS RISER DIAGRAM
 NO SCALE



TYPICAL GAS LINE SUPPORT
 MODEL NO. MIRO 4-RAH-7 IS APPROVED

- NOTES
- 1.) NEW PIPE SUPPORTS SHALL BE LOCATED A MAX. 8'-0" o.c. AND AT EACH TRANSITION.
 - 2.) NEW PIPE SUPPORT BASE SHALL BE POLYCARBONATE SUITABLE FOR DURALAST ROOFING.
 - 3.) USE FOR GAS LINES WITH DIAMETERS OF 0'-4" AND SMALLER.

MEP PROJECT #2104
Power Systems
 P.O. Box 2863
 San Angelo, Texas 76902
 325-650-2235
 FIRM NO. P-6257

If this document is not SIGNED and DATED on the seal, then it is NOT FOR REGULATORY APPROVAL, PERMITTING OR CONSTRUCTION.

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY PAUL R. WILKERSON, P.E. 007378 ON MAY 06, 2022. ALTERATION OF A SEALED DOCUMENT WITHOUT HIS OR HER INSTRUCTIONS TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

ORDINANCES
 THIS DRAWING IS REPRESENTATIVE IN NATURE ONLY. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL STATE, COUNTY, MUNICIPAL AND FEDERAL LAWS AND/OR ORDINANCES GOVERNING THE PROJECT. IF IN ANY INSTANCE THE PLANS AND SPECIFICATIONS ARE IN DIRECT CONFLICT WITH SUCH LAWS AND/OR ORDINANCES, THE LAWS AND/OR ORDINANCES SHALL HAVE JURISDICTION.

Drawn By _____
 Checked By _____

STRUCTURAL ENGINEER
 SKG ENGINEERING

MEP ENGINEER
 POWER SYSTEMS, INC.

378 W. CONCHO AVE
 SAN ANGELO, TX 76903
 325-659-2235
 mep@power.com

KFW
 KFW ARCHITECTS/AIA

ISSUED FOR PERMIT, PRICING & CONSTRUCTION
 MAY 6, 2022

Paul R. Wilkerson
 PAUL R. WILKERSON
 90735
 90735
 ORIGINAL SEAL
 05-06-22

RENOVATIONS OF
NORTH ANGELO BRANCH LIBRARY
 TOM GREEN COUNTY

Project No. 292-09-1020
 Date MAY 6, 2022

Sheet Number
E-1.0
 10 OF 14

Copyright © KFW Architects AIA, Inc. 2022

FIRE ALARM SYMBOL SCHEDULE		
SYMBOL	DESCRIPTION	REMARKS
FACP	FIRE ALARM CONTROL PANEL	
ANNUN	FIRE ALARM PANEL	
FD	FIRE ALARM MANUAL PULL STATION, 46" AFF UON. SUBSCRIPT INDICATES ANNUNCIATION ZONE. NON-ADDRESSABLE	
SD	SMOKE DETECTOR	
SDS	DUCT SMOKE DETECTOR WITH SAMPLING TUBE	
P	CLEAN AGENT SYSTEM PULL STATION	
H	HEAT DETECTOR	
AV	AUDIBLE/VISUAL ALARM, 6"-8" AFF UON	
WP	WEATHERPROOF AUDIBLE ALARM	
EDH	ELECTROMAGNETIC DOOR HOLDER	
VA	VISUAL ALARM, 6"-8" AFF UON	
FS	SPRINKLER SYSTEM FLOW SWITCH	
TS	SPRINKLER SYSTEM TAMPER SWITCH	
HOOD	KITCHEN HOOD FIRE SUPPRESSION SYSTEM	
FASPS	FIRE ALARM SIGNAL POWER SUPPLY	
AVC	AUDIBLE/VISUAL ALARM CEILING MOUNT	
VA	VISUAL ALARM, 6"-8" AFF UON	

NOTE: ALL SYMBOLS DO NOT NECESSARILY APPEAR ON THESE DRAWINGS

DISTRIBUTION SYMBOL SCHEDULE		
SYMBOL	DESCRIPTION	REMARKS
A-1,3,5	HOMERUN-TO CIRCUIT NO. 1,3,5 ON PANEL "A"	
—N—	BRANCH CIRCUIT WIRING IN CONDUIT (NEUTRAL, PHASE, SWITCHLEG, GROUND)	
→	CKT ROUTED THRU CONTACTOR CONTROLLED BY TIME CLOCK AND/OR PHOTOCELL	
→→	CIRCUIT ROUTED THRU CONTACTOR	
—	BRANCH CIRCUIT CONCEALED IN WALL OR CEILING	
—	BRANCH CIRCUIT OR CONDUIT UNDER FLOOR	
—	BRANCH CIRCUIT OR CONDUIT EXPOSED AND/OR SURFACE MOUNTED	
⊙	PHOTOCELL	
⊙	JUNCTION BOX	
⊙	JUNCTION BOX, FLOOR MOUNTED PEDESTAL	
⊙	JUNCTION BOX, FLOOR MOUNTED FLUSH	
⊙M	MANUAL STARTER WITH THERMAL TRIP	
⊙	DISCONNECT SWITCH, AMP/POLE/NEUTRAL/FUSE/ENCLOSURE	
⊙	STARTER	
⊙	COMBINATION STARTER/DISC. SW., AMP/POLE/STARTER/FUSE/ENCLOSURE	
⊙	POWER AND/OR LIGHTING PANELBOARD, REFER TO PANELBOARD SCHEDULE	
⊙	SWITCHBOARD, REFER TO SWITCHBOARD SCHEDULE OR RISER	
⊙	RECESSED DOWNLIGHT	
⊙	SURFACE MOUNTED DOWNLIGHT	
⊙	FLUORESCENT LIGHT FIXTURE (CROSS HATCH INDICATES 24 HOUR OPERATION)	
⊙	WALL MOUNTED BELL	
⊙	GAME CLOCK	
⊙	CALL BUTTON FOR INTERCOM SYSTEM	

NOTE: ALL SYMBOLS DO NOT NECESSARILY APPEAR ON THESE DRAWINGS

MISCELLANEOUS SYMBOL SCHEDULE		
SYMBOL	DESCRIPTION	REMARKS
KP	ACCESS CONTROL KEYPAD	
I	AIPHONE VIDEO DOOR STATION JP-DV	
•	DOOR RELEASE PUSH BUTTON	
ES	ELECTRIC STRIKE	
CR	CARD READER	
DR	DOOR RELEASE	
DCC	DOOR CONTROL SYSTEM CABINET	
TVM	CLOSED CIRCUIT TELEVISION MONITOR	
DRA	RY-3DL DOOR RELEASE ADAPTOR	
TV	TELEVISION - CABLE CONNECTION REQUIRED	
360	360° CEILING MOUNTED MOTION DETECTOR	
CCTV	SURVEILLANCE TV CAMERA	
CCTV	SURVEILLANCE TV CAMERA; X DENOTES EXTERIOR	

NOTE: ALL SYMBOLS DO NOT NECESSARILY APPEAR ON THESE DRAWINGS

COMMUNICATION AND DATA SYMBOL SCHEDULE		
SYMBOL	DESCRIPTION	REMARKS
◀	RCA JACK/SPEAKER JACK	3/4" E.C. TO ABOVE CEILING
◀	DATA OUTLET, 18" AFF UON	1" E.C. TO ABOVE CEILING
TV	TELEVISION OUTLET, 80" AFF UON	3/4" E.C. TO ABOVE CEILING
⊙	CEILING MOUNT SPEAKER FOR INTERCOM	BACKBOX AS REQUIRED
◀(3-D)	DATA OUTLET - (REQ'D # OF PORTS)	1" E.C. TO ABOVE CEILING
◀WAF	WIRELESS ACCESS PORT	3/4" E.C. TO ABOVE CEILING
◀V	VIDEO CABLE JACK	2" E.C. TO ABOVE CEILING
◀(2-D) (1-1)	COMBINATION TELEPHONE & DATA OUTLET - (REQ'D # OF PORTS)	1" E.C. TO ABOVE CEILING
◀	HIGH DEFINITION MULTI-MEDIA INTERFACE	2" E.C. TO ABOVE CEILING

NOTE: ALL SYMBOLS DO NOT NECESSARILY APPEAR ON THESE DRAWINGS

GENERAL ELECTRICAL NOTES

A. ELECTRICAL CONTRACTOR SHALL COMPLY WITH THE 2014 NATIONAL ELECTRICAL CODE AND LOCAL CODES.

B. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH OTHER TRADES TO MINIMIZE CONFLICTS.

C. ALL WIRE AND CABLE SIZES ARE FOR COPPER. ALUMINUM WILL NOT BE ALLOWED. MINIMUM WIRE SIZE IS #12. MINIMUM CONDUIT SIZE IS 3/4 INCH. ALL POWER CONDUCTORS TO BE INSTALLED IN CONDUIT. TYPE MC AND AC CABLES ARE NOT ALLOWED ON THIS PROJECT. ALL CONDUITS #10 OR SMALLER SHALL BE STRANDED.

D. NO CONDUCTOR SHALL BE LOADED BEYOND ITS ALLOWABLE AMPACITY.

E. CONFIRM WITH LOCAL CODES, MECHANICAL CONTRACTOR AND EQUIPMENT VENDORS ON THE LOCATION AND MOUNTING METHOD FOR DISCONNECT SWITCHES, MANUAL MOTOR STARTERS, COMBINATION STARTER/DISCONNECTS, ETC. PRIOR TO ELECTRICAL ROUGH-IN AND INSTALLATION. COMPLY WITH ADA MOUNTING HEIGHTS.

F. ELECTRICAL CONTRACTOR SHALL DOUBLE CHECK ALL FEEDER CONDUCTOR AND CONDUIT SIZES WITH NEC AND LOCAL CODES PRIOR TO BID, ORDERING OR CUTTING CONDUCTORS.

G. ELECTRICAL CONTRACTOR SHALL COORDINATE WORK WITH ARCHITECTURAL DRAWINGS AND REPORT ANY DISCREPANCIES TO ARCHITECT/ENGINEER IMMEDIATELY.

H. UNLESS OTHERWISE NOTED, BRANCH CIRCUIT CONDUCTORS SHALL BE COPPER (THHN OR EQUAL) SIZED AS FOLLOWS:

BREAKER RATING	WIRE SIZE
20 AMP	#12 AWG
30	#10
40	#8
50	#6
60	#4
70	#4
80	#3
90	#2
100	#2
110	#2
125	#1
150	#1/0
175	#2/0
200	#3/0

ALL BRANCH CIRCUITS WITH AN OVERALL LENGTH IN EXCESS OF 75 FEET SHALL BE INCREASED IN WIRE SIZE TO ACCOMMODATE VOLTAGE DROP.

I. CONTRACTOR SHALL CONNECT MOTORIZED DAMPERS FROM ASSOCIATED UNITS POWER SUPPLY FOR ALL PRV, SEF, SSF MISCELLANEOUS FANS, ETC. COORDINATE EXACT REQUIREMENTS WITH MECHANICAL CONTRACTOR.

J. ELECTRICAL CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS TO OWNER PROVIDED EQUIPMENT.

K. ALL J-BOXES SHALL BE ACCESSIBLE FOR FUTURE SERVICE PER NEC. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TYPES AND POINTS OF ACCESS.

L. LIGHT FIXTURES SHALL BE OPERATED BY SWITCH LOCATED IN SAME ROOM UNLESS OTHERWISE NOTED.

M. CONDUITS SHALL NOT BE ROUTED EXPOSED IN FINISHED AREAS UNLESS NOTED.

N. SEE MECHANICAL FLOOR PLANS FOR THERMOSTAT LOCATIONS.

O. PROVIDE IVORY COVERPLATES WITH IVORY DEVICES EXCEPT WHERE NOTED.

P. SEAL AROUND ALL EXTERIOR WALL PENETRATIONS.

Q. DRAWINGS ARE SCHEMATIC IN NATURE AND MAY NOT BE DRAWN EXACTLY TO SCALE. CONTRACTOR IS RESPONSIBLE FOR COORDINATING EXACT ROUTING OF ALL SERVICES WITH EXISTING CONDITIONS AND ALL OTHER TRADES TO AVOID SPACING OR ROUTING PROBLEMS.

R. ALL PENETRATIONS OF FIRE RATED PARTITIONS DUE TO THE INSTALLATION OF THE ELECTRICAL SYSTEMS SHALL BE SEALED TO MAINTAIN THE FIRE RATING OF THE WALL.

S. INSTALL MARKING TAPE IN TRENCH FOR ALL UNDERGROUND UTILITIES.

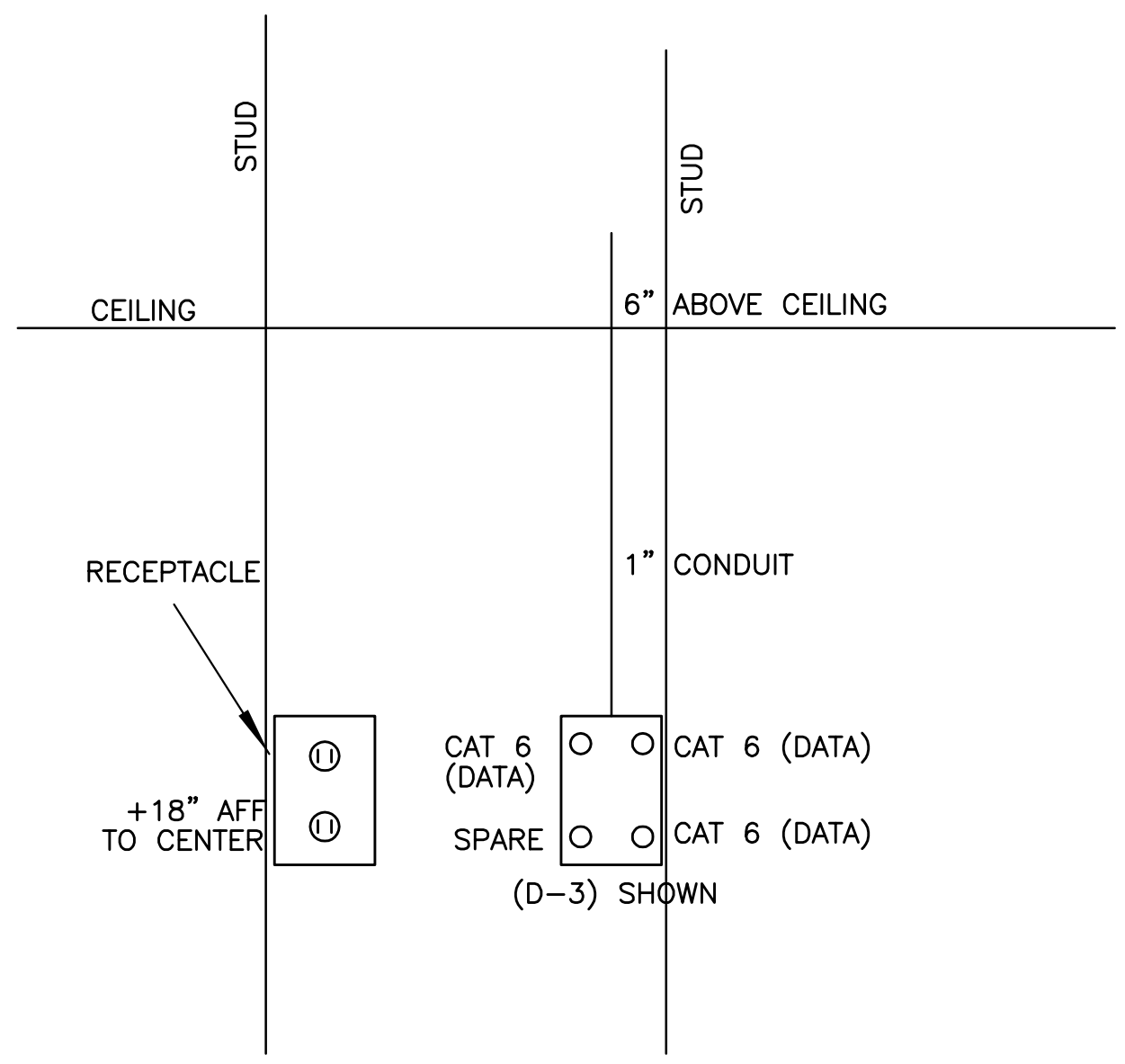
T. PERMANENTLY CONNECTED EQUIPMENT NOT SUPPLIED WITH ON/OFF UNIT SWITCH TO SERVE AS A DISCONNECTING MEANS SHALL BE SUPPLIED WITH DISCONNECT AS PER N.E.C. ELECTRICAL CONTRACTOR IS RESPONSIBLE TO FURNISH ALL DISCONNECTS.

U. ALL RESTROOM, EXTERIOR, KITCHEN AND ROOFTOP RECEPTACLES TO BE GFCL.

MISCELLANEOUS SYMBOL SCHEDULE		
SYMBOL	DESCRIPTION	REMARKS
⊙	DUPLEX RECEPTACLE 20A/120V 18" AFF UON	
⊙	RECEPTACLE MOUNTED ABOVE COUNTERTOP	
⊙ IG	RECEPTACLE WITH ISOLATED GROUND	
⊙	FOURPLEX RECEPTACLE 20A/120V 18" AFF UON	
⊙	DIGITAL CLOCK 90" AFF UON	
⊙	SPECIAL PURPOSE RECEPTACLE 18" AFF SEE PLANS FOR DETAILS	
⊙	RECEPTACLE MOUNTED HORIZONTALLY	
⊙	DUPLEX RECEPTACLE, FLOOR MTD. FLUSH	
⊙	DUPLEX RECEPTACLE, FLOOR MTD. PEDESTAL	
⊙ WP	WEATHER-PROOF RECEPTACLE 18" AFF UON, WEATHER RESISTANT COVER	
⊙ SP	DUPLEX RECEPTACLE W/SURGE SUPPRESSION 20A/125V 18" AFF UON	
\$	SINGLE POLE SWITCH 20A, 48" AFF UON	
\$ ³	THREE-WAY SWITCH 20A, 48" AFF UON	
\$ K	SINGLE POLE KEY OPERATED SWITCH 20A, 48" AFF UON	
\$ D	DIMMER SWITCH, 48" AFF UON	
\$ P	SWITCH WITH PILOT LIGHT, 48" AFF UON	
\$ V	VOLUME SWITCH FOR INTERCOM SYSTEM EQUAL TO SOUNDOLIER AT10 INDUCTIVE TYPE	
⊙ GF	RECEPTACLE WITH GROUND FAULT INTERRUPTER, 18" AFF UON	
⊙	DUPLEX RECEPTACLE, SWITCHED	
⊙ C	DUPLEX RECEPTACLE IN CEILING	
⊙	TWIST LOCK RECEPTACLE, MOUNT TO CABLE TRAY	
⊙	EMS SENSOR, 48" AFF UON	
⊙	TEST SWITCH FOR DUCT SMOKE DETECTORS, 80" AFF UON	
⊙	OCCUPANCY SENSOR FOR LIGHTING CONTROLS, CEILING MOUNT	

NOTE: ALL SYMBOLS DO NOT NECESSARILY APPEAR ON THESE DRAWINGS

ELECTRICAL ABBREVIATIONS			
A	AMPERES	MAX	MAXIMUM
A/C	AIR CONDITIONING	MCB	MAIN CIRCUIT BREAKER
AFF	ABOVE FINISHED FLOOR	MCC	MOTOR CONTROL CENTER
AUX	AUXILIARY	MDP	MAIN DISTRIBUTION PANEL
ATS	AUTOMATIC TRANSFER SWITCH	MECH	MECHANICAL
AWG	AMERICAN WIRE GAGE	MIN	MINIMUM
		MISC	MISCELLANEOUS
		MLO	MAIN LUG ONLY
		MSB	MAIN SWITCHBOARD
		MTD	MOUNTED
BLDG	BUILDING		
C	CONDUIT		
CB	CIRCUIT BREAKER		
CCTV	CLOSED CIRCUIT TELEVISION	NEC	NATIONAL ELECTRICAL CODE
CKT	CIRCUIT	NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
CLG	CEILING		
		NF	NON FUSED
		NIC	NOT IN CONTRACT
		N.C.	NORMALLY CLOSED
		N.O.	NORMALLY OPEN
DWG	DRAWING	NO	NUMBER
EA	EACH	NTS	NOT TO SCALE
EC	ELECTRICAL CONDUIT		
EF	EXHAUST FAN		
ELEC	ELECTRIC/ELECTRICAL		
EMT	ELECTRICAL METALLIC TUBING		
EPO	EMERGENCY POWER OFF	OC	ON CENTER
EQUIP	EQUIPMENT		
EWC	ELECTRIC WATER COOLER	PF	POWER FACTOR
FA	FIRE ALARM	PH	PHASE
FACP	FIRE ALARM CONTROL PANEL	PNL	PANEL
		PVC	POLYVINYL CHLORIDE
G	GROUND		
GFI	GROUND FAULT INTERRUPT	RECP	RECEPTACLE
		REL	REFER TO
		RGS	RIGID GALVANIZED STEEL
HP	HORSEPOWER		
HVAC	HEATING/VENTILATION/AIR CONDITIONING	TYP	TYPICAL
		UL	UNDERWRITER'S LABORATORIES
IG	ISOLATED GROUND	UON	UNLESS OTHERWISE NOTED
IMT	INTERMEDIATE METAL		
J-BOX	JUNCTION BOX	V	VOLTS
		VA	VOLT-AMPERES
KVA	KILOVOLT-AMPERES		
KW	KILOWATTS	WP	WEATHERPROOF



DATAPORT OUTLET DETAIL
 NO SCALE

DATAPORT SHALL BE RACO SERIES 260 BOX 4 11/16" X 4 11/16" X 3 1/4" D. T&B STEEL CITY O-JUSTABLE BRACKET MODEL SBOADJ MOUNTING BRACKET MUST BE USED FOR ALL MULTIPLE BOX INSTALLATIONS SHOWN ABOVE.

MEP PROJECT #2104
Power Systems

P.O. Box 28663
 San Angelo, Texas 76902
 325-659-2235
 FIRM NO. P-6257

If this document is not SIGNED and DATED on the seal, then it is NOT FOR REGULATORY APPROVAL, PERMITTING OR CONSTRUCTION.

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY PAUL R. WILKERSON, P.E. 90735 ON MAY 06, 2022. ALTERATION OF A SEALED DOCUMENT WITHOUT WRITTEN NOTIFICATION TO THE REGISTERED ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

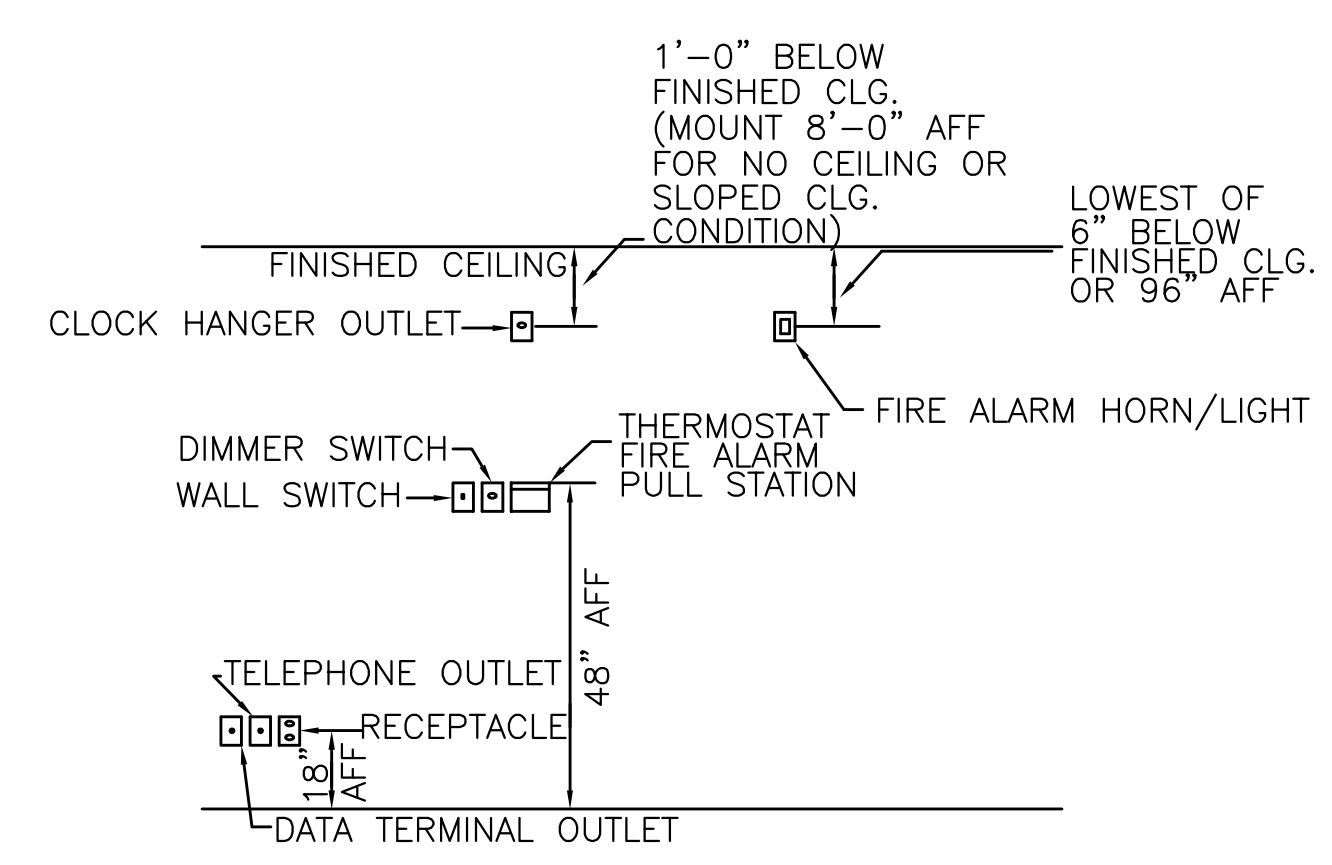
ORDINANCES

THIS DRAWING IS REPRESENTATIVE IN NATURE ONLY. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL STATE, COUNTY, MUNICIPAL AND FEDERAL LAWS AND/OR ORDINANCES GOVERNING THE PROJECT. IF IN ANY INSTANCE THE PLANS AND SPECIFICATIONS ARE IN DIRECT CONFLICT WITH SUCH LAWS AND/OR ORDINANCES, THE LAWS AND/OR ORDINANCES SHALL HAVE JURISDICTION.

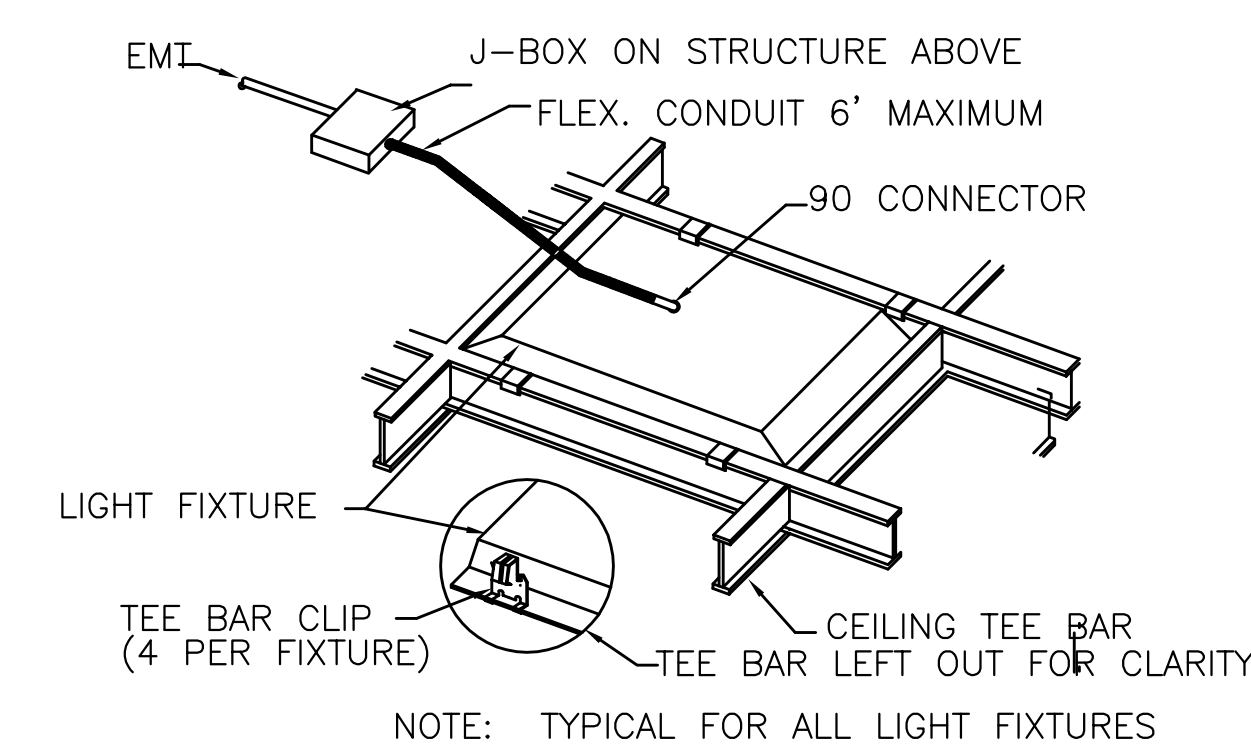
ELECTRICAL COVER SHEET
 SCALE: NONE

INTERIOR LIGHT FIXTURE SCHEDULE					
TYPE	CEILING HEIGHT	MANUF.	CATALOG NUMBER	LAMPS	REMARKS
A	VARIABLES	METALUX	22FP-4240C	39W LED 4000°K 4465 LUMENS	2'x2' RECESSED FLAT PANEL, DIMMABLE, 80 CRI, WHITE FROST LENS.
A1	8'-0"	METALUX	22FP-3240C-FPSURF22	29W LED 4000°K 3333 LUMENS	2'x2' RECESSED FLAT PANEL, DIMMABLE, 80 CRI, WHITE FROST LENS, SURFACE MOUNT KIT
A2	VARIABLES	METALUX	22FP-3240C	29W LED 4000°K 3333 LUMENS	2'x2' RECESSED FLAT PANEL, DIMMABLE, 80 CRI, WHITE FROST LENS
B	STRUCTURE	NEO-RAY	QS-S124-DIP-C-11950365U940-JB-4FO	57W LED 4000°K 6734 LUMENS	4" LED SUSPENDED DEFINE 4 PENDANT, DIRECT/INDIRECT, 48" LONG, MOUNT AT 10'-0" TO BOTTOM OF FIXTURE
D	VARIABLES	PORTFOLIO	LD4B-15-D010-EU4B-1020-90-40-4LB-W-1-LI	15.5 W LED 4000°K 1500 LUMENS	WIDE BEAM RECESSED DOWNLIGHT, 4" APERTURE, SELF FLANGED.
D1	VARIABLES	PORTFOLIO	LD2B-10-D010-EU2B-0510WFL55-90-40-2LB-D-X-LI	11 W LED 4000°K 1000 LUMENS	2" LED RECESSED DOWNLIGHT, PAINTABLE TRIM RING.
E	STRUCTURE	BASELITE DEEP BOWL	D627/43/LFHW//45W/4K/LDM120	45W LED 4000°K 2700 LUMENS	PENDANT DEEP BOWL, RED, WHITE CORD, STRAIGHT, VERIFY COLOR WITH ARCHITECT.
F	8'-0"	NEO-RAY	S123DRP-S-560D-840-GYP-11F8-1-U-DD-F-W	62W LED 4000°K 560 LUMENS/FT	LED RECESSED PERIMETER DIRECT, FLUSH LENS, WHITE
G	VARIABLES	HALO L808	L808-15-NF-90-40-P WITH L651-P TRACK	21W LED 4000°K 1506 LUMENS	FLATBACK CYLINDER TRACK, WHITE, NARROW FLOOD, SINGLE CIRCUIT TRAC SYSTEM, 4' LONG, MOUNT TO STRUCTURE.
⊗		SURELITES	ELX-X-70-R	1W LED 120V	EXIT LIGHT, SURFACE MOUNT, DIE-CAST ALUMINUM
☐		SURELITES	APEL	SELF CONTAINED	WALL MOUNT EMERGENCY LIGHT, 90 MINUTE RUN TIME

- NOTES:
 1. SUBSTITUTION OF FIXTURES PERMITTED WITH PRIOR APPROVAL.
 2. MOUNT FIXTURE AT HEIGHT DETERMINED BY ARCHITECT.
 3. ALL INTERIOR LIGHTING FIXTURES SHALL BE PROVIDED WITH 4000°K LAMPS, TYPE AS NOTED. EXTERIOR FIXTURES SHALL BE 4000°K, UNON.
 4. ALL FIXTURES IN THESE SCHEDULES WILL OPERATE AT 120 VOLTS UNLESS SPECIFICALLY NOTED OTHERWISE.

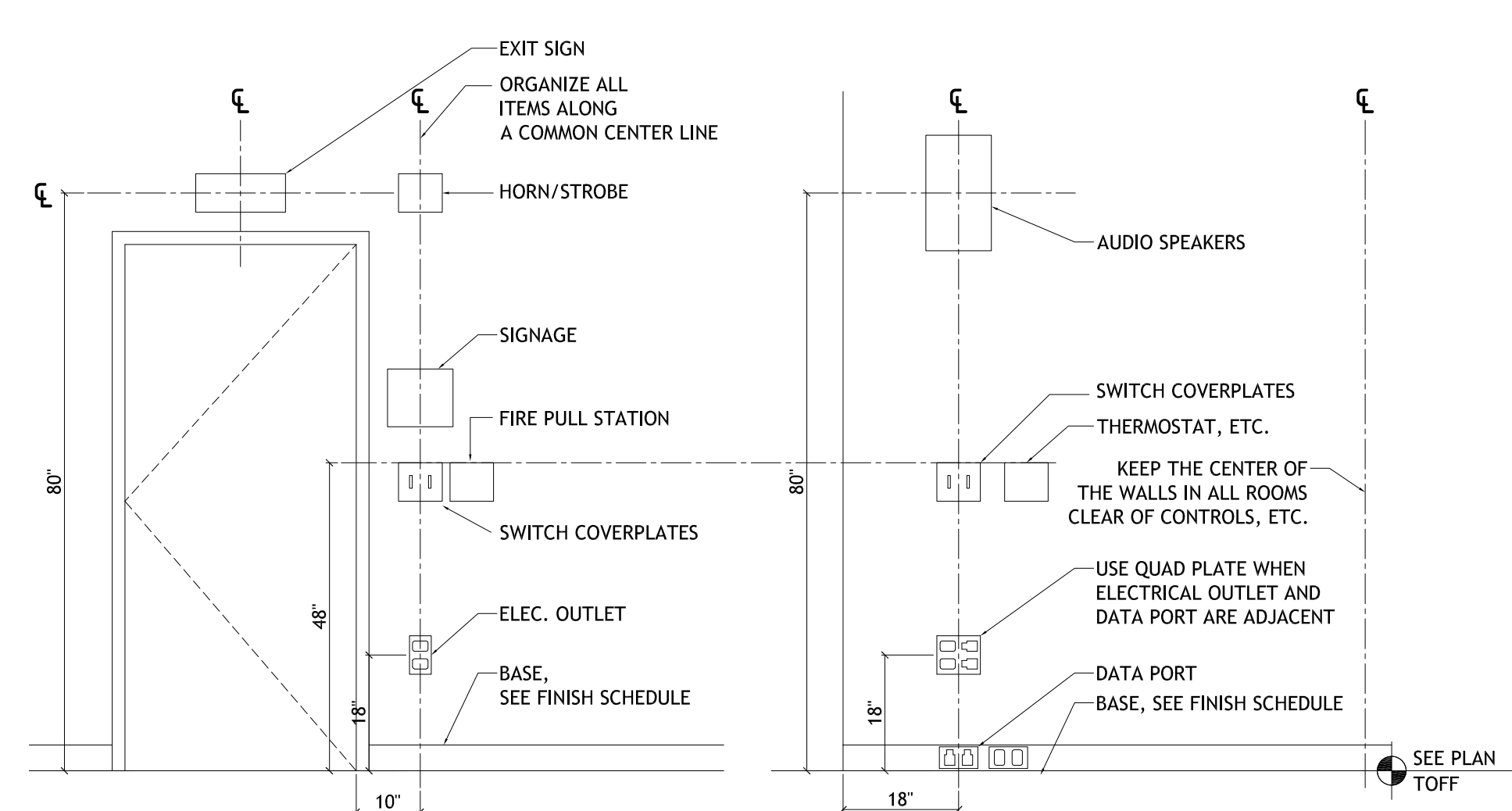


WIRING DEVICE MOUNTING HEIGHTS - TYPICAL
 NO SCALE
 NOTE: EMS SENSOR AT 60" AFF WIREMOLD AT HEIGHT SHOWN ON PLANS



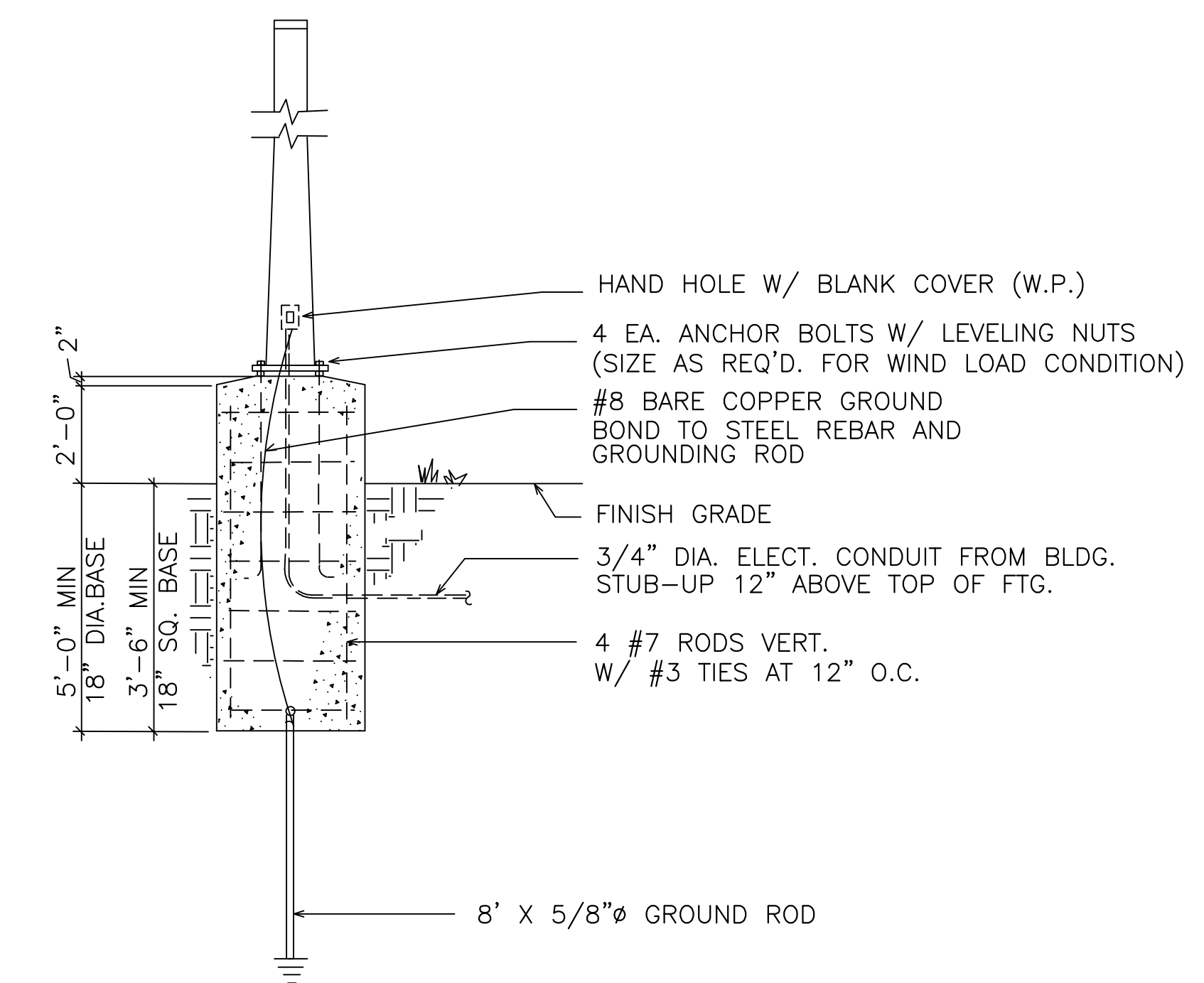
LAY-IN LIGHT FIXTURE DETAIL
 NO SCALE
 NOTE: TYPICAL FOR ALL LIGHT FIXTURES

EXTERIOR LIGHT FIXTURE SCHEDULE				
TYPE	MANUFACTURER	CATALOG NUMBER	LAMPS	REMARKS
LP-1	LUMARK	PRV-PA2A-740-U-T4W-BZ WITH 25" ROUND TAPERED STEEL POLE RTS6A255	113W LED 4000°K 15,560 LUMENS PER HEAD	PREVAIL SITE LUMINAIRE, 25' POLE, BRONZE 1.42 EPA, ARM MOUNT 2 @ 90° (REF. DEDUCT BID ALTERNOT NO. 3)
XA	MCGRAW-EDISON LIGHTING	IST-SAI-C-740-U-T2-BZ	34W LED 4000°K 4576 LUMENS	WALL MOUNT LUMINAIRE, BRONZE FINISH, WET LOCATION, TYPE II DISTRIBUTION, TRAPEZOID, 10'-4" AFF MOUNTING HEIGHT
XAE	MCGRAW-EDISON LIGHTING	IST-SAI-C-740-U-T2-BZ CBP	34W LED 4000°K 4576 LUMENS	WALL MOUNT LUMINAIRE, BRONZE FINISH, WET LOCATION, TYPE II DISTRIBUTION, TRAPEZOID, EMERGENCY BATTERY BACKUP
XB	STARTEK HYDRO BEAM	HYDROD-8-625-SD-40K-PW-U	42W LED 4000°K 4956 LUMENS	HYDRO BEAM DIRECT STRIP, WHITE WET LOCATION, MOUNT TO CANOPY
XCE	SIGNTEX INC LIGHTING	MDE-BB-10-B-PH	10W LED 4000°K 458 LUMENS	MOONLITE SERIES, EXTERIOR WALL MOUNT, EMERGENCY LED, BRONZE
XD	CORONET	ODL-LED-440-LTG2-UNV-DB	20W LED 4000°K 2240 LUMENS	EXTERIOR WALL MOUNT SIGN LIGHT, 360° ADJUSTABLE, WET LOCATION, CENTER ON ROCKWALL. (REF. DEDUCT BID ALTERNATE NO. 3)



NOTE: THE ABOVE ELEVATIONS DEPICT TYPICAL LOCATIONS FOR VARIOUS PIECES OF MECHANICAL/ELECTRICAL/SIGNAGE, ETC. IT IS THE INTENT THAT THESE ITEMS BE ORGANIZED ALONG A COMMON CENTERLINE WHETHER IT BE TWO ITEMS OR NUMEROUS ITEMS. ALL ITEMS SHOULD BE ALIGNED HORIZONTALLY, AS WELL. COORDINATION DRAWINGS MUST BE MADE OF ELEVATIONS WITH 4 OR MORE DEVICES. THE ARCHITECT SHALL BE NOTIFIED TO RESOLVE PLACEMENT OF ITEMS DEVIATING FROM AGREED UPON LOCATIONS. HEIGHTS SHALL BE GOVERNED BY THE APPLICABLE CODE.

DEVICE ALIGNMENT DETAIL
 SCALE: NONE



LIGHTING PEDESTAL DETAIL
 FOR "LP-1" POLE: MATCH EXISTING BASE FINISH; HEIGHT ABOVE GRADE.

MPR PROJECT #2104

 P.O. Box 2863
 San Angelo, Texas 76902
 325-659-2235
 FIRM NO. P-6257
 If this document is not SIGNED and DATED on the seal, then it is NOT FOR REGULATORY APPROVAL, PERMITTING OR CONSTRUCTION.
 THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY PAUL R. WILKERSON, P.E. 90739 ON MAY 06, 2022. ALTERATION OF A SEALED DOCUMENT WITHOUT HIS WRITTEN INSTRUCTIONS TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.
 ORDINANCES
 THIS DRAWING IS REPRESENTATIVE IN NATURE ONLY. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL STATE, COUNTY, MUNICIPAL AND FEDERAL LAWS AND/OR ORDINANCES GOVERNING THE PROJECT. IF IN ANY INSTANCE THE PLANS AND SPECIFICATIONS ARE IN DIRECT CONFLICT WITH SUCH LAWS AND/OR ORDINANCES, THE LAWS AND/OR ORDINANCES SHALL HAVE JURISDICTION.

ELECTRICAL NOTES INDICATED BY "○":

- 1 E.C. IS RESPONSIBLE TO VERIFY ELECTRICAL REQUIREMENTS OF ALL EQUIPMENT FURNISHED ON PROJECT AND INSTALL FACILITIES IN ACCORDANCE WITH REQUIREMENTS.
- 2 REFER TO SHEET E-4 FOR RISER DIAGRAM. REFER TO SHEET E-4 FOR PANEL SCHEDULES.
- 3 DEVICE PLATES SHALL BE IVORY; DEVICES SHALL BE IVORY.
- 4 REFER TO SHEET E-1.0 FOR SYMBOL LEGEND.
- 5 COORDINATE RECEPTACLE HEIGHTS WITH ARCHITECTURAL PLANS.
- 6 VERIFY MOUNTING HEIGHT OF RECEPTACLES AND SWITCHES WITH DETAIL SHOWN ON SHEET E-1.1. IN ALL CASES ENSURE COMPLIANCE WITH ADA REQUIREMENTS OF 48" MAX. FOR SWITCHES; 15" MIN. FOR RECEPTACLES AND JACKS; 48" MAX. FOR THERMOSTATS.
- 7 PROVIDE DISCONNECTS PER NEC FOR ANY PERMANENTLY CONNECTED EQUIPMENT WHICH DOES NOT HAVE INTEGRAL DISCONNECTS.
- 8 APPLICABLE CODES: 2014 NATIONAL ELECTRICAL CODE.
- 9 ALL CIRCUITS TO BE #12 THHN COPPER IN 3/4" CONDUIT UNLESS OTHERWISE NOTED OR REQUIRED. ALL CONDUCTORS #10 AND SMALLER SHALL BE STRANDED.
- 10 SWITCHES, RECEPTACLES, AND DEVICES TO BE HUBBELL COMMERCIAL SPECIFICATION GRADE OR EQUAL, IVORY.
- 11 CENTER RECEPTACLE WITH BACKSPLASH AT 38" A.F.F. INSTALL RECEPTACLE HORIZONTALLY IN BACKSPLASH.
- 12 COMPUTER/DATA/COMMUNICATIONS OUTLET TO BE FURNISHED WITH LEVITON QUICK PORT SYSTEM AND CATEGORY 6 CABLE. SEE DATA PORT DETAIL SHEET E-1.0. CAT-6 TERMINATIONS ARE TO 8 PIN. ALL CAT-6 CABLES FOR COMPUTER AND TELEPHONES, TERMINATIONS AND WALL PLATES TO BE FURNISHED AND INSTALLED BY CONTRACTOR. DATA, PHONE CABLES AND ALL LOW VOLTAGE WIRING SHALL BE PLENUM RATED. PROVIDE 1" C. UP FROM BOX TO ABOVE CEILING WITH BUSHING ON END OF CONDUIT.
- 13 CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL SYSTEMS ARE OPERATIONAL AT COMPLETION OF PROJECT.
- 14 CONCEAL HOME RUN CONDUITS IN STUD WALL. NO J-BOXES SHALL BE INSTALLED IN STRUCTURE.
- 15 ALL CAT 6 WIRING TO BE STANDARD EIA/TIA-568 B PLENUM RATED.
- 16 GFCI RECEPTACLES TO BE HUBBELL GF5252IA. PROVIDE GFCI RECEPTACLES FOR OUTDOOR CIRCUITS, RESTROOM RECEPTACLES AND WITHIN 6' OF SINKS. PROVIDE IN-USE COVERS FOR EXTERIOR RECEPT (WR).
- 17 MOUNT BACKBOXES FOR THERMOSTATS AT 48" AFF TO TOP OF BOX.
- 18 MOUNT ALL "WAP" DATAPORTS AS NOTED.
- 19 CONTRACTOR IS RESPONSIBLE TO VERIFY ALL EQUIPMENT RATINGS AND VOLTAGE REQUIREMENTS. INSTALL CORRECT OVERCURRENT DEVICE/SWITCH SIZE AND WIRE SIZE.
- 20 WALL BOXES FOR KEYPADS AND ANY CARD READERS, OR SECURITY DEVICES SHALL BE INSTALLED BY CONTRACTOR.
- 21 WALL WILL BE FURRED WITH 1 1/2" FURRING CHANNEL.
- 22 CONTRACTOR IS RESPONSIBLE TO PROVIDE AND INSTALL ANY AND ALL ELECTRICAL WORK FOR EQUIPMENT FURNISHED BY OTHERS, WHETHER SPECIFICALLY SHOWN ON PLAN OR NOT. THIS INCLUDES WIRING BETWEEN COMPONENTS.
- 23 SECURITY SYSTEM IS TO BE INSTALLED BY OWNER'S REPRESENTATIVE. TELEPHONE AND INTERCOM ARE TO BE INSTALLED BY OWNER'S REPRESENTATIVE. THE COMPUTER CABLEING SYSTEM SHALL BE INSTALLED BY ELECTRICAL CONTRACTOR. THE CATV CABLEING SHALL BE INSTALLED BY THE ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL TEST AND CERTIFY ALL LOW VOLTAGE CABLEING.
- 24 OWNER WILL FURNISH IT EQUIPMENT FOR PROJECT SUCH AS SERVER SWITCHES, PATCH PANELS, RACK, ETC. THIS EQUIPMENT WILL BE ASSEMBLED BY CONTRACTOR. CONTRACTOR SHALL ANCHOR AND MOUNT EQUIPMENT PERMANENTLY AS DIRECTED BY OWNER'S REP. CONTRACTOR SHALL TERMINATE ALL CABLEING, TEST THE ENTIRE SYSTEM FROM FIBER CONNECTION TO EACH END USER, AND PROVIDE A FULLY OPERATIONAL INSTALLATION. LABEL ALL CABLEING AT TERMINATIONS. LABEL ALL DEVICE WALL PLATES.
- 25 CONTRACTOR IS RESPONSIBLE TO COORDINATE ALL DEVICE AND BOX LOCATIONS WITH ARCHITECTURAL DRAWINGS AND EQUIPMENT SO THAT ALL WORK IS CONCEALED AS REQUIRED. IF DEVICES OR BOXES ARE NOT INSTALLED CORRECTLY, CONTRACTOR SHALL RELOCATE THESE AT NO EXPENSE TO OWNER.
- 26 CONTRACTOR IS RESPONSIBLE TO PROVIDE A TURN-KEY COMPLETELY OPERATIONAL SYSTEM FOR ALL SYSTEMS INDICATED ON PLANS AND ALSO MENTIONED IN THE SPECS. THIS SPECIFICALLY INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING: ALL CABLEING, ALL CONDUITS, ALL TERMINATIONS AND DEVICES, ALL EQUIPMENT, ALL TESTING AND ALL REPAIRS.
- 27 COMPLY WITH ALL REQUIREMENTS OF THE 2015 IECC ENERGY CODE CERTIFICATES APPENDED TO THE SPECIFICATIONS.
- 28 DATA CONTRACTOR SHALL RETAIN THE ELECTRICAL CONTRACTOR FOR ANY CONDUIT RUNS AND BOXES REQUIRED FOR HIS INSTALLATION. ELECTRICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE THE BOXES SHOWN ON THE ELECTRICAL PLANS AND CONDUIT IN THE WALLS UP TO STRUCTURE.

- 29 ALL CONDUIT SHALL BE CONCEALED IN BUILDING STRUCTURE OR INSTALLED PERPENDICULAR OR PARALLEL TO STRUCTURE.
- 30 CONTRACTOR SHALL INSTALL FLOOR DEVICES IN CONCRETE FLOOR BOX AS MANUFACTURED BY WIREMOLD RESOURCE RFB E SERIES; FOUR COMPARTMENTS MODEL # RFB4E-0G; WITH 6 CTCXX FLUSH STYLE EVOLUTION SERIES COVER ASSEMBLY. FINISH TO BE SELECTED BY ARCHITECT. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS FOR FLOOR BOXES. THE DESIGN INTENT IS TO PROVIDE ONE FLOOR BOX FOR EACH PROPOSED TABLE. FOR A TOTAL OF FOUR TABLES. EACH FLOOR BOX SHALL CONTAIN TWO DUPLEX RECEPTACLES, EACH ON A DIFFERENT CIRCUIT; AND FOUR CAT-6 DATAPORTS. PROVIDE DUPLEX PLATE MODEL RFB6DP; DATA PLATE MODEL RFB 6GFI AND COMPARTMENT DIVIDERS TO MAINTAIN SEPARATION BETWEEN POWER CABLES AND DATA CABLES.
- 31 PROVIDE 2 CIRCUITS TO QUAD RECEPTACLE, ONE FOR EACH DUPLEX.
- 32 CONTRACTOR RESPONSIBLE TO INSTALL DATA PORT PLATE IN SINGLE GANG BOX WITH PLASTIC IVORY WALL PLATE. CONTRACTOR TO PROVIDE 1" CONDUIT IN WALL FOR MULTIPLE CABLE RACEWAY.
- 33 CONTRACTOR SHALL EXTEND SUDENLINK SERVICE TO THIS ROOM FOR ISP CONNECTION. PROVIDE POWER CONNECTION FOR AMPLIFIER. REWORK UTILITY FEED AS REQUIRED.
- 34 PROVIDE CONDUITS BELOW SLAB FOR ALL IN-FLOOR DEVICES.
- 35 DATAPORT SHALL BE RACO SERIES 260 BOX 4 11/16"x4 11/16"x3 1/4"D. T&B STEEL CITY O-JUSTABLE BRACKET MODEL SBOADJ MOUNTING BRACKET MUST BE USED FOR ALL MULTIPLE BOX INSTALLATIONS SHOWN ABOVE.

GENERAL LOW VOLTAGE NOTES:

- A. ELECTRICAL CONTRACTOR SHALL PROVIDE CAT-6 DATA CABLE AND TERMINATIONS. TEST ALL CABLE LENGTHS AND TERMINATIONS WITH CAT-6 TESTER.
- B. CLASS-2 LOW VOLTAGE WIRING SHALL NOT BE MIXED WITH OR RUN IN LINE VOLTAGE RACEWAYS. SEPARATE LOW VOLTAGE RUNS FROM LINE VOLTAGE BY A MINIMUM DISTANCE OF 1 FOOT.
- C. ALL LOW VOLTAGE CABLEING SHALL BE INSTALLED IN CONDUIT CONCEALED IN WALL OR ABOVE CEILING.

ALL PIPING AND CONDUITS BELOW BUILDING SLAB IS TO BE BEDDED IN ISAND AND THE EXCAVATION FILLED WITH "FLOWABLE GROUT" TO THE BOTTOM OF THE NEW FLOOR SLAB. REFER TO STRUCTURAL FOR A DETAIL OF PIPING BACKFILL.

PIPING SHALL PENETRATE FOUNDATION BEAMS ONLY IN THE MIDDLE ONE-THIRD OF THE BEAM DEPTH.

PIPING AND CONDUITS SHALL BE BELOW THE FLOOR SLAB AND ARE TO PENETRATE BEAMS AND SLABS PERPENDICULAR TO THE ELEMENT FACE. ALL ELECTRICAL CONDUITS SHALL BE INSTALLED BELOW FOUNDATION BEAMS.

ELECTRICAL CONDUITS ARE NOT TO OCCUR IN THE BUILDING SLAB WHERE CONDUIT IS HORIZONTAL. PROVIDE A MINIMUM OF 3" CLEAR BETWEEN THE CONDUIT AND THE BOTTOM OF A FLOOR SLAB.

PROVIDE A \$10,000 ALLOWANCE IN BID TO ALLOW OWNER TO FURNISH IT EQUIPMENT AS LISTED IN KEYED NOTE 24.

MRP PROJECT #2104
Power Systems

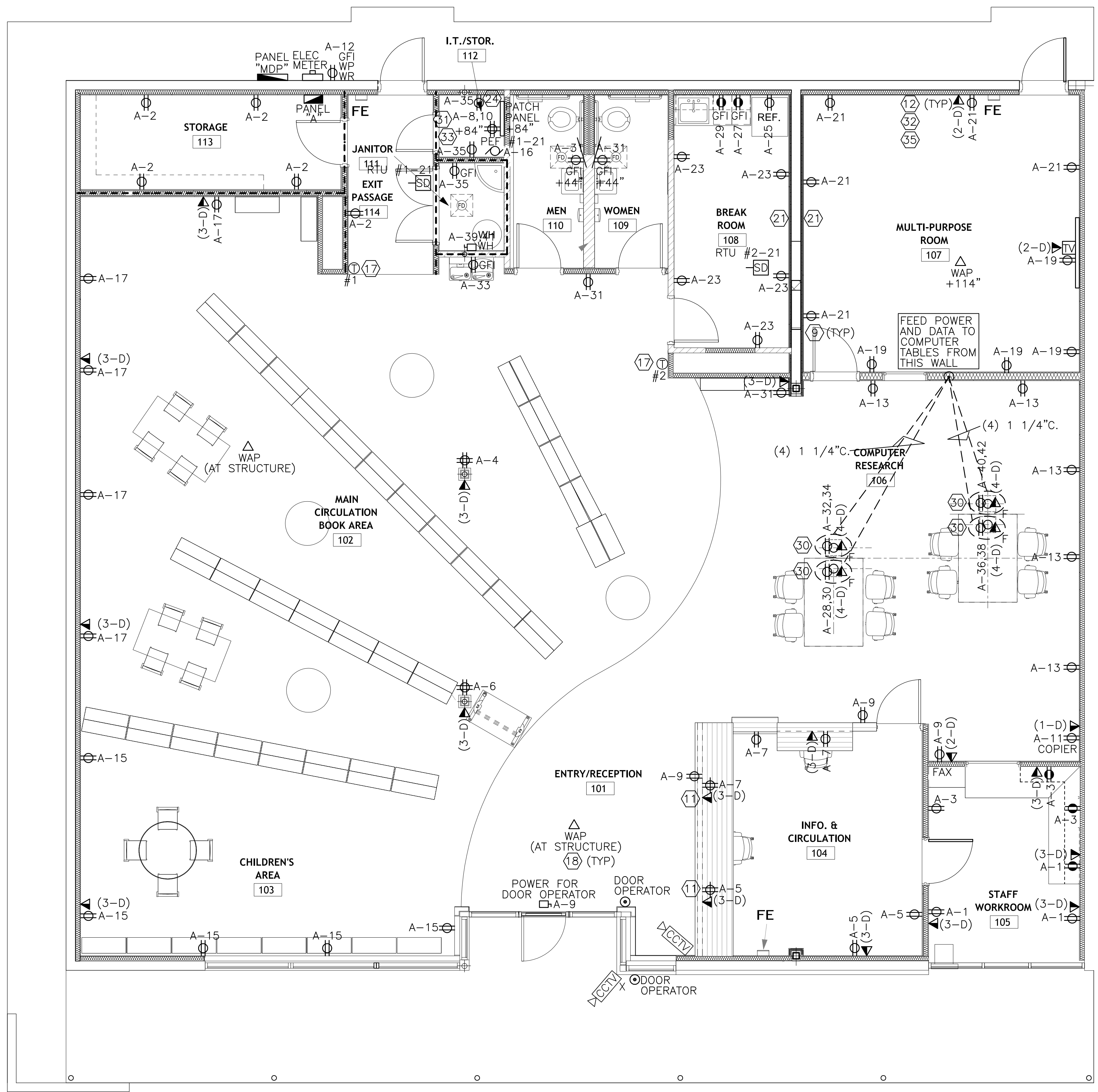
P.O. Box 2863
 San Angelo, Texas 76902
 325-659-2235
 FIRM NO. P-6257

If this document is not SIGNED and DATED on the seal, then it is NOT FOR REGULATORY APPROVAL, PERMITTING OR CONSTRUCTION.

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY PAUL R. WILKERSON, E.C. 90739 ON MAY 06, 2022. ALTERATION OF A SEALED DOCUMENT WITHOUT HIS WRITTEN INSTRUCTION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

ORDINANCES

THIS DRAWING IS REPRESENTATIVE IN NATURE ONLY. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL STATE, COUNTY, MUNICIPAL AND FEDERAL LAWS AND/OR ORDINANCES GOVERNING THE PROJECT. IF IN ANY INSTANCE THE PLANS AND SPECIFICATIONS ARE IN DIRECT CONFLICT WITH SUCH LAWS AND/OR ORDINANCES, THE LAWS AND/OR ORDINANCES SHALL HAVE JURISDICTION.



Drawn By _____
 Checked By _____

STRUCTURAL ENGINEER
 SKG ENGINEERING

MEP ENGINEER
 POWER SYSTEMS, INC.

378 W. CONCHO AVE
 SAN ANGELO, TX 76903
 361.659.2235
 skgarchitects.com

KFW
 KFW ARCHITECTS/AA

ISSUED FOR
 PERMIT, PRICING &
 CONSTRUCTION

MAY 6, 2022

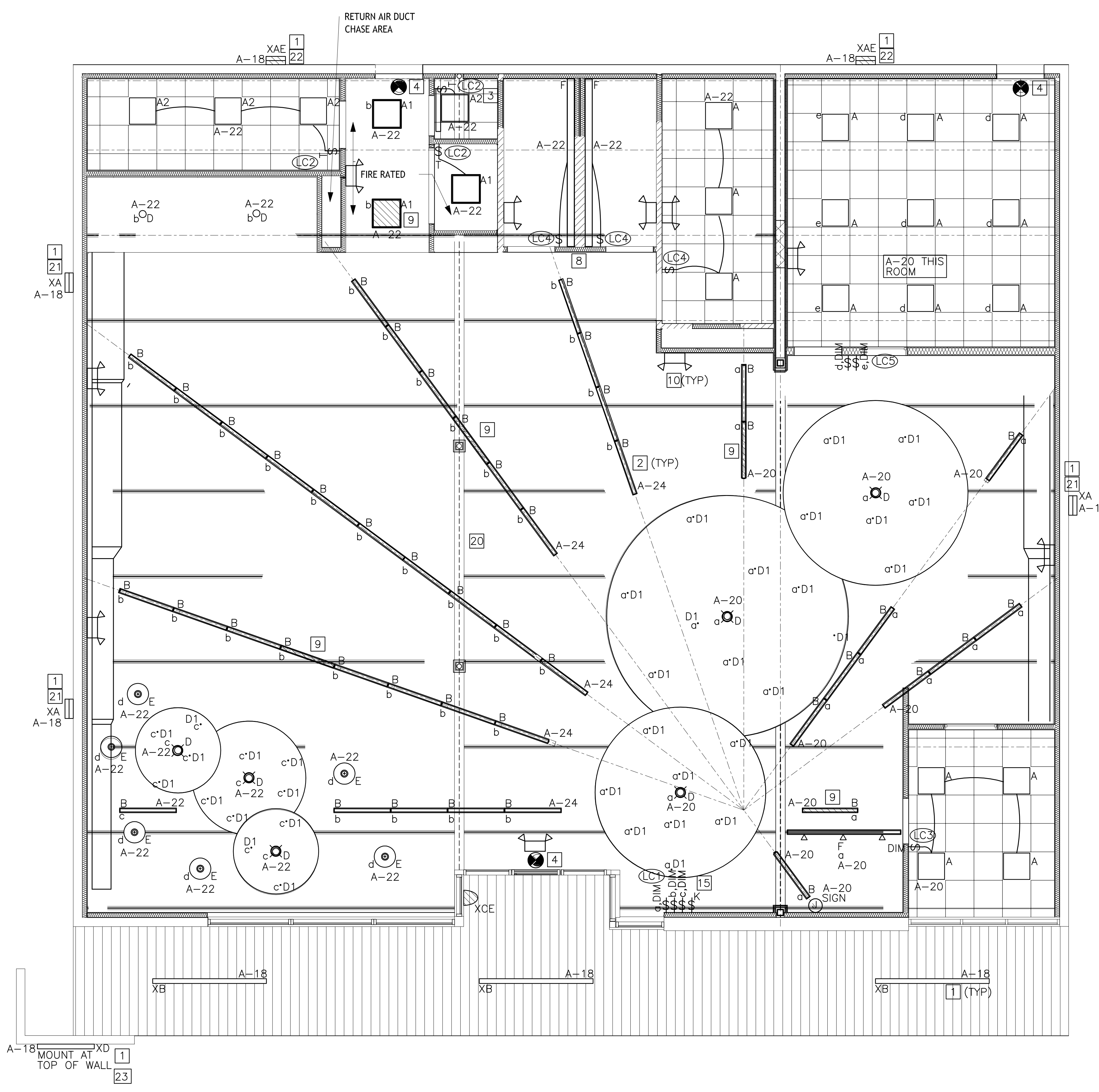
Paul R. Wilkerson
 PAUL R. WILKERSON
 00732
 05118
 PROFESSIONAL ENGINEER
 05-06-22

RENOVATIONS OF
NORTH ANGELO BRANCH LIBRARY
 TOM GREEN COUNTY

Project No. 292-09-1020
 Date MAY 6, 2022

Sheet Number
E-3
 13 OF 14

Copyright © KFW Architects AIA, Inc. 2022



- GENERAL LIGHTING NOTES:**
- 24/7 LIGHTING PROVIDED FOR SECURITY AS NOTED ON PLANS.
 - ALL CIRCUITS TO BE #12 THHN COPPER IN 3/4" CONDUIT UNLESS OTHERWISE NOTED OR REQUIRED. ALL CONDUCTORS #10 AND SMALLER SHALL BE STRANDED.
 - CONTRACTOR SHALL CHECK AND VERIFY FIXTURE QUANTITY AND MAKE ADJUSTMENTS FOR ANY CHANGES IN PLANS DUE TO ADDITIONAL REQUIREMENTS.
 - CONTRACTOR IS RESPONSIBLE TO INSURE THAT ALL SYSTEMS ARE OPERATIONAL AT COMPLETION OF PROJECT.
 - NO BREAKERS SHALL BE USED FOR SWITCHING DUTY.
 - ALL LIGHTING TO BE INSTALLED AND OPERATED IN STRICT ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL CODES.
 - TOGGLE SWITCHES SHALL BE HUBBELL COMMERCIAL SPECIFICATION GRADE, WHITE. WALL PLATES SHALL BE WHITE. CONTROL DEVICES SHALL BE WHITE.
 - LIGHTING CONTROLS SUPPLIER SHALL FURNISH A FLOOR PLAN SHOWING ALL DEVICES AND WIRING DIAGRAMS AS PART OF THEIR SUBMITTAL.

- LIGHTING NOTES INDICATED BY "□":**
- SWITCH EXTERIOR LIGHTS WITH PHOTOCELL ON, TIMECLOCK OFF. ALL EXTERIOR LIGHT FIXTURES SHALL BE WET LOCATION RATED.
 - MOUNT LIGHT FIXTURES "B" AT MOUNTING HEIGHT OF 10'-0" TO BOTTOM OF FIXTURE.
 - LIGHT FIXTURES IN IT, JANITOR'S ROOM AND STORAGE ROOM SHALL BE ON TIMER. PROVIDE 0-60 MINUTE TIMER SWITCH. WALL TIMER SWITCH SHALL BE EQUAL TO GREENGATE TSW-MV-W 5-120 MINUTE TIMER, WHITE.
 - SERVE EXIT SIGNS FROM CIRCUIT A-26. PROVIDE HLO-1 ON CIRCUIT BREAKER.
 - SWITCHES AND RECEPTACLES TO BE HUBBELL COMMERCIAL SPECIFICATION GRADE, IVORY.
 - SEAL ALL PENETRATIONS OF FIREWALLS.
 - ALL LIGHTING AND CONTROLS TO BE SUPPLIED BY CONTRACTOR AND SHALL BE FURNISHED BY THE SAME MANUFACTURER.
 - CONTROL EXHAUST FAN ON ROOF WITH TIMER FOR 8 A.M. TO 6 P.M. DAILY OPERATION.
 - FIXTURE TO OPERATE 24/7. DO NOT SWITCH.
 - SERVE EMERGENCY FIXTURE FROM NEAREST CONTINUOUSLY HOT CIRCUIT OF SAME PHASE AS LIGHTING CIRCUIT.
 - ALL LIGHTING CONTROLS ARE INDEPENDENT AND LOCAL FOR EACH ROOM OR SPACE.
 - FIXTURES IN BATHROOM TO BE UL LISTED FOR DAMP LOCATION.
 - ALL FIXTURES ON SHEET E-3 SHALL BE 120 VOLT. SEE SHEET E-1.1 FOR COMPLETE LIGHTING SCHEDULE. TEMPERATURE OF ALL LAMPS IS 4000°K UON.
 - INCLUDE THE COST OF COMMISSIONING AND PROGRAMMING FOR THE LIGHTING CONTROL SYSTEM.
 - KEYED OVERRIDE SWITCH STATION EQUAL TO INTELLIGENT LIGHTING CONTROLS MODEL KSS-1-MNA-N/A-PW.
 - INSTALL SWITCHES PER MOUNTING HEIGHT DETAIL PER SHEET E-1 FOR ACCESSIBILITY.
 - COMPLY WITH 2015 IECC ENERGY CODE CERTIFICATES PROVIDED AT BACK OF SPECIFICATIONS.
 - WALLBOX CONTROL SWITCH SHALL BE EQUAL TO GREENGATE MODEL WBS0-010-DEC-C1, LED LOAD CAPABILITY.
 - ANY LIGHT FIXTURE SUBSTITUTIONS MUST HAVE PRIOR APPROVAL, WITH A 10-DAY MINIMUM APPROVAL PERIOD BEFORE BID DATE.
 - IT IS THE DESIGN INTENT TO PROVIDE A TIME-CLOCK BASED OPERATION OF THE LIGHTS (ALL IN OPERATION) DURING NORMAL BUSINESS HOURS. AFTER HOURS THE KEYED WALL SWITCH WILL PROVIDE OVERRIDE FUNCTION. FURNISH LIGHTING CONTROL PANEL EQUAL TO INTELLIGENT LIGHTING CONTROLS MODEL LL-8-X AND RELAYS MODEL R40-1-4. SYSTEM SHALL HAVE 8 ZONES OF CONTROL.
 - INSTALL FIXTURE USING ORIGINAL ELECTRICAL BOX IN WALL.
 - MATCH EXISTING EXTERIOR WALL PACK HEIGHT.
 - FOR THIS FIXTURE REFER TO DEDUCT BID ALTERNATE #3.

LIGHTING CONTROL SYSTEM CHART FOR NORTH BRANCH LIBRARY

SYMBOL KEY	AREA	SWITCH TYPE	SWITCH CONTROL	MOTION SENSOR TYPE	SENSOR TIMEOUT	NOTES
LC1	STACK SPACE	WALLBOX DIMMER 18	ON/OFF, RAISE/LOWER	TIMECLOCK	N/A	20 TIME CLOCK ZONES "a", "b", "c"
LC2	IT ROOM/ STORAGE ROOM/ JANITOR ROOM	TIMER SWITCH 3	ON/OFF W/ TIMER	N/A	60 MIN.	20 TIME CLOCK ZONE "g"
LC3	OFFICE	WALLBOX DIMMER 18	ON/OFF, RAISE/LOWER	TIMECLOCK	N/A	20 TIME CLOCK ZONE "f"
LC4	RESTROOMS	TOGGLE SWITCH	ON/OFF	TIMECLOCK	N/A	20 TIME CLOCK ZONE "g"
LC5	MULTI-PURPOSE ROOM	WALLBOX DIMMERS 18	ON/OFF, RAISE/LOWER	TIMECLOCK	N/A	20 TIME CLOCK ZONES "d", "e"

NOTE:
 REFER TO LIGHTING CONTROL ONE-LINE DIAGRAM, THIS SHEET. THE DESIGN INTENT IS TO PROVIDE TIME CLOCK BASED OPERATION OF THE BUILDING LIGHTS (ALL IN OPERATION) DURING NORMAL BUSINESS HOURS. PROVIDE KEYED OVERRIDE SWITCH.

MRP PROJECT #2104
Power Systems
 P.O. Box 2863
 San Angelo, Texas 76902
 325-659-2235
 FIRM NO. P-6257

If this document is not SIGNED and DATED on the seal, then it is NOT FOR REGULATORY APPROVAL, PERMITTING OR CONSTRUCTION.

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY PAUL R. WILKERSON, P.E. 00732 ON MAY 06, 2022. ALTERATION OF A SEALED DOCUMENT WITHOUT THE WRITTEN INSTRUCTIONS TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

ORDINANCES
 THIS DRAWING IS REPRESENTATIVE IN NATURE ONLY. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL STATE, COUNTY, MUNICIPAL AND FEDERAL LAWS AND/OR ORDINANCES GOVERNING THE PROJECT. IF IN ANY INSTANCE THE PLANS AND SPECIFICATIONS ARE IN DIRECT CONFLICT WITH SUCH LAWS AND/OR ORDINANCES, THE LAWS AND/OR ORDINANCES SHALL HAVE JURISDICTION.

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



