NEW CONSTRUCTION FOR TRAVEL CENTER OF AMERICA
SITE PLAN AND TRUCK SERVICE BUILDING

1710 S. MOUNTAIN ROAD, TUCUMCARI, NM 88401

CITY OF TUCUMCARI, NM CONSTRUCTION CODES

2015	INTERNATIONL BUILDING CODE (IBC)
2015	INTERNATIONAL RESIDENTIAL CODE (IRC)
2015	INTERNATIONAL PLUMBING CODE (IPC)
2015	INTERNATIONAL MECHANICAL CODE (IMC)
2020	NATIONAL ELECTRIC CODE (NEC)
2015	INTERNATIONAL FUEL GAS CODE (IFGC)
2015	INTERNATIONAL ENERGY CONSERVATION CODE (IECC)
2015	FIRE CODE (IFC)
2010	ADA
	WITH NEW MEXICO AMMENDMENTS AND ORDINANCES

PROJECT INFORMATION

SCOPE OF WORK	NEW CONSTRUCTION OF TRUCK SERVICE BUILDING
PROJECT:	TRUCK WASH & SERVICE BUILDING
LOCATION	TUCUMCARI, NM
ZONING	XXX
PRIMARY OCCUPANCY	SERVICE CENTER- S-1
BUILDING HEIGHT	27'-10"
TYPE OF CONSTRUCTION	II-B
BUILDING AREA (SF)	14,400 SF GROSS CONDITIONED
SERVICE CENTER	- SF
CAR WASH	- SF
OFFICE	-
STORAGE	-
MECH/ELEC	
TOTAL OCCUPANCY	REFER TO EGRESS PLAN

SUBMITTALS

CONTRACTOR TO SUBMIT 2 COPIES EACH OF SHOP DRAWINGS, DATA SHEETS AND SAMPLES FOR THE ARCHITECT'S AND OWNER'S APPROVAL INCLUDING:

1. FLOOR FINISHES, INCLUDING TILE, GROUT & TRANSITIONS SAMPLES & PRODUCT DATA
2. PAINT SAMPLES ON (8.5"X11") SHEET AND PRODUCT DATA
5. DOOR FINISH AND DOOR HARDWARE PRODUCT DATA AND FINISH SAMPLES
6. EQUIPMENT, FIXTURES AND APPLIANCE TO BE SUPPLIED BY GC
7. BATHROOM ACCESSORIES, DATA SHEET AND FINISH SAMPLE
7. LIGHTING CUT SHEETS
8. MEP, REGISTERS, EQUIPMENT AND APPLIANCES TO BE SUPPLIED BY GC
9. ATTIC ACCESS HATCH IF APPLICABLE
10. INSULATION DATA SHEET INCLUDING R-VALUE AND STC RATING

GENERAL NOTES

1	ALL GENERAL NOTES APPLY U.N.O
2	A COPY OF THE LANDLORD APPROVED DWGS AND PERMIT SET COPY MUST BE KEPT ON SITE AT ALL TIMES
3	ANY DISCREPANCIES MUST BE REPORTED TO THE ARCHITECT PRIOR TO BIDDING FOR CLARIFICATION.
4	GENERAL CONTRACTOR SHALL VISIT THE SITE TO FAMILIARIZE HIMSELF WITH THE SCOPE OF WORK AND TO FIELD VERIFY EXISTING CONDITIONS PRIOR TO BIDDING THIS PROJECT. THE REUSE OF ANY EXISTING CONSTRUCTION, FINISHES, EQUIPMENT, OR ELECTRICAL, PLUMBING OR HVAC SYSTEMS CURRENTLY IN THE SPACE IS CONDITIONAL UPON IT BEIGN APPROPRIATE FOR RE-USE. ANY EXISTING CONDITION OR EQUIPMENT TO BE RE-USED MUST BE RESTORED TO LIKE NEW CONDITIONS.
5	ALL WORK INCLUDING MECHANICAL, PLUMBING, ELECTRICAL, & FIRE SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES, ORDINANCES, AND STATUTES.
6	ALL WORK SHALL CONFORM TO ACCEPATBLE CONSTRUCTION INDUSTRY STANDARDS
7	CONTRACTOR SHALL OBTAIN AND PAY FOR ALL APPLICABLE PERMITS AND INSPECTIONS. GC TO COORDINATE WITH THE OWNER ON REIMBUERSABLES
8	CONTRACTOR SHALL INSURE THAT SUBCONTRACTORS PULL RELATED APPLICABLE PERMITS INCLUDING MECHANICAL, ELECTRICAL, PLUMBING AND FIRE
9	DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES. WRITTEN DIMENSIONS SUPERSEDE SCALED DIMENSIONS
10	PRIOR TO COMMENCEMENT OF WORK, CONTRACTORE SHALL FIELD VERIFY ALL EXISTING SITE AND CONSTRUCTION CONDITIONS, INCLDING DIMENSIONS, UTILITY LOCATIONS AND SIZES, AND REPORT ANY DISCREPENCIES TO THE OWNER AND THE ARCHITECT
11	TRADE CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION.
12	ALL PLAN DIMENSIONS ARE TO FACE OF FINISH, FACE OF FOUNDATION, OR GRID LINES, U.N.O.
13	GC TO VERIFY SIZE, LOCATIONS, AND CHARACTERISTICS OF ALL EQUIPMENT TO BE FURNISHED BY MANUFACTURERS, SUPPLIERS, AND OWNER BEFORE BEGINNING CONSTRUCTION. INCLUDING PLUMBING AND ELECTRICAL STUB OUTS.
14	SEAL ALL PENETRATION, WALL BASE AND WALL HEAD AND ALL ROOF PENETRATIONS
15	PROVIDE IN-WALL FRTW BLOCKING AND AS REQUIRED FOR TOILET ACCESSORIES AND MILLWORK
16	AT THE END OF CONSTRUCTION, CONTRACTOR TO REPLACE ANY DAMAGED OR BROKEN ITEM, REPLACE AC FILTERS, HAND OVER ALL WARRANTIES AND MANUALS TO THE OWNER
17	CONTRACTOE TO PERFORM FINAL CLEANING, REMOVE ANY DEBRIES AND UNUSED MATERIAL FROM THE SITE AT THE END OF CONSTRUCTION
18	EXTERIOR SIGN SUPPLIED BY OWNER / INSTALLED BY OTHERS / GC TO COORDINATE WITH THE OWNER AND SIGN VENDOR - SIGNS UNDER SEPERATE PERMIT.
19	ANY ITEMS LISTED AS TBS OR TBD ARE TO BE GIVEN A COST ALLOWANCE IN THE BID BY GC, GC TO COORDINATE WTH THE OWNER
20	GC TO COORDINATE WITH THE OWNER ON ANY MATERIALS, EQUIPMENTS, FURNITURE TO BE SUPPLIED BY THE OWNER AND INSTALL BY GC
21	INTERIOR FINISHES TO COMPLY WITH IBC 2015 CHAPTER 8 SECTIONS 803, 804, 806,807, & 808
22	MATERIALS AND PRODUCTS SHALL NOT CONTAIN ASBESTOS, POLYCHLORINATED BIPHENYLS (PCB) OR OTHER HAZARDOUS MATERIALS
23	GENERAL CONTRACTOR MUST FURNISH AND INSTALL A TEMPORARY BARRICADE IN COMPLIANCE WITH CITY REQUIREMENTS, INCLUDING GRAPHICS

GENERAL NOTES

1. ALL CONSTRUCTION IS INTEND TO BE IN CONFORMANCE WITH FEDERAL AND STATE LAWS, CURRENT LOCAL ORDINANCES & BUILDING CODES AND THE AMERICANS WITH DISABILITIES ACT (ADA) ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES (ADAAG). REPORT ANY DISCREPANCIES TO THE ARCHITECT BEFORE PROCEEDING WITH WORK.
2. CONTRACTOR TO FIELD VERIFY ALL SITE CONDITIONS PRIOR TO COMMENCING CONSTRUCTION.
3. CONTRACTOR TO FIELD VERIFY DIMENSIONS OF PLUMBING FIXTURES (TOILET, WC, TUBS, AND SHOWERS) VS WALL PARTITION TYPES (WALL THICKNESS MAY VARY WITH SHEAR WALL CONDITIONS) BEFORE COMMENCING FRAMING.
4. CONTRACTOR TO VERIFY ALL DIMENSIONS WITH MANUFACTURER ON FIXTURES AND EQUIPMENT SUPPLIED, PRIOR TO CONSTRUCTION.
5. REFER TO ENLARGED PLANS FOR ADDITIONAL INFORMATION INCLUDING DIMENSIONS. ENLARGED PLANS TAKE PRECEDENCE OVER SMALLER DRAWINGS NOTIFY OWNER'S REPRESENTATIVE OF ANY CONFLICTS OR DISCREPANCIES BEFORE PROCEEDING.
6. CONTRACTOR RESPONSIBLE FOR ALL BLOCKING REQUIRED FOR ALL WALL HUNG EQUIPMENT. SUCH AS BUT NOT LIMITED TO THE FOLLOWING: TOILET ACCESSORIES, SHELVING, SHOWER SEATS, EXTERIOR LIGHT FIXTURES, WALL GUARDS, RAILING, ECT.
7. ALL FINISH FLOOR ELEVATIONS MUST BE FIELD VERIFIED. ALL OTHER STRUCTURAL AND DIMENSIONAL ISSUES MUST BE VERIFIED BY THE CONTRACTOR. IF DISCREPANCIES ARISE, THE CONTRACTOR MUST NOTIFY THE ARCHITECT IN WRITING OF SUCH DISCREPANCIES.
8. CONTRACTOR TO PROVIDE CAULKING AT THE FOLLOWING LOCATIONS UNO:
   A. AT CABINET ENDS, WHERE THEY MEET SPECIFIED WALL.
   B. AT HOLLOW METAL DOOR FRAMES, BOTH SIDES AND TOP.
   C. ALL WALL TILE AND WALL COVERINGS AT TRANSITIONS.
9. ALL WORK PERFORMED BY GC SHALL BE INSTALLED PER MANUFACTURES RECOMMENDATIONS AND SAFETY CODE REQUIREMENTS.
10. ALL WORK SHALL BE INSTALLED COMPLETE IN ANY RESPECT.
11. THE CONTRACTOR TO BE FULLY RESPONSIBLE FOR DAMAGES AND OMISSIONS OF THE SUB CONTRACTOR.
12. ALL TILE TO HAVE CEMENTITIOUS BACKING AS REQUIRED BY MANUFACTURER.
13. ALL EXPOSED EXTERIOR STEEL TO BE PAINTED OR GALVANIZED.
14. WHERE PAINTED GYPSUM WALL BOARD IS USED IN TOILET ROOMS - PROVIDE MOISTURE RESISTANT GYPSUM BOARD (SEE SPECS).
15. DRAWINGS INDICATE THE MINIMUM STANDARDS. IF WORK SHOULD BE FOUND TO BE SUBSTANDARD TO ANY LAWS, ORDINANCES, CODES, OR REGULATIONS, THE CONTRACTOR SHALL EXECUTE THE WORK CORRECTLY IN ACCORDANCE WITH SUCH LAWS, ORDINANCES, CODES, OR REGULATIONS WITH NO INCREASE IN CONTRACT AMOUNT.
16. THE GENERAL CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, INSPECTIONS, AND FEES REQUIRED TO PERFORM THE WORK.
17. PROVIDE TRANSITION STRIPS AT ALL AREAS WHERE DIFFERENT FLOORING MATERIALS ABUT.

PROJECT DIRECTORY

PROPERTY OWNER:
PROPERTY 30 ACRES LLC
500 INTERSTATE 45 N
HUNTSVILLE, TX 77320
CONTACT: AJ PAKKA
PHONE: 559-260-7530

ENGINEER:

JAKAN ENGINEERING
P.O.BOX 391
FRISCO, TEXAS 75034
CONTACT: SON NGO
PHONE: 682-561-9449

STATE OF NEW MEXICO
CONSTRUCTION INDUSTRIES DIVISION

☐ NO EXCEPTIONS TAKEN
☐ EXCEPTIONS AS NOTED

"REVIEWED PLANS" OR "APPROVED PLANS" DOES NOT INCLUDE PERMITS FOR CONSTRUCTION UNLESS NOTED. ALL CONTRACTORS AND SUBCONTRACTORS ARE REQUIRED TO PULL SEPERATE PERMITS FOR THEIR SCOPE OF WORK.

01/23/2024 2:59:13 PM
Chris Archuleta

ALL SECTIONS OF THE NEW MEXICO BUILDING, ELECTRICAL, MECHANICAL AND PLUMBING CODES MUST BE COMPLIED WITH.

NEW MEXICO BUILDING CODE REQUIRES ALL FACILITIES TO BE FULLY ACCISSIBLE FOR THE PHYSICALLY DISABLED

ALL INSPECTIONS MUST BE MADE AND FINAL SIGNATURES SHALL BE OBTAINED PRIOR TO THIS CONSTRUCTION BEEING OCCUPIED OR ISSUANCE OF CERTIFICATE OF OCCUPANCEY MAY BE OBTAINED.

IF INSPECTIONS ARE NOT PERFORMED WITHIN EVERY 180 DAYS ALL PERMITS WILL EXPIRE AND A RENEWAL FEE WILL BE REQUIRED FOR A NEW PERMIT.

VICINITY MAP

Mechanical approved by James Darnold
Exceptions has noted

Checking is only general conformance with the design concept of this project and general compliance with the information given in the contract documents. Any correction or comment are subject to the requirements of the plans and specifications. Contractor is responsible for dimensions which shall conform and correlated all of the job site, fabrication process and techniques of construction, coordination of work preformed with that of all trades and the satisfactory performance of work preformed and all codes requirements. All sections shall conform with all current adopted national and state mechanical codes

Mechanical approved by James Darnold
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SON H. NGO — NEW MEXICO — 28755 — PROFESSIONAL ENGINEER

REVIEWED GENERAL BUILDING
Chris Archuleta
01/23/2024 10:33:13 AM MST
A-15508

11-13-23

TA TRAVEL CENTER
PARCEL A, B, AND C WITHIN LOT 3 IN
SECTION 19, T11N, R31E, N.M.P.M.
TUCUMCARI, NM
NEW DEVELOPMENT

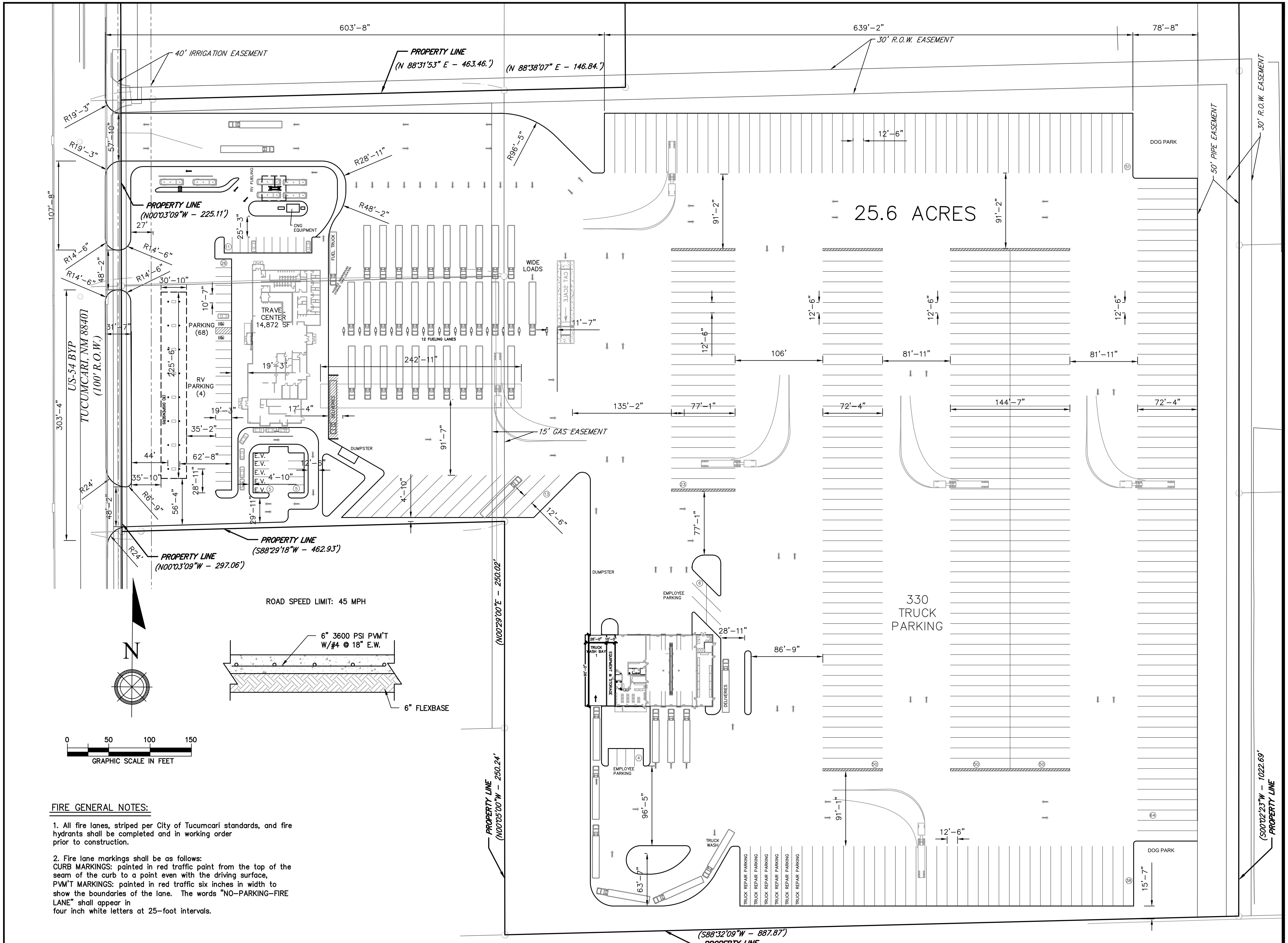
DATE: Nov. 2023

REVISIONS

SHEET TITLE
COVER SHEET

SHEET NUMBER
A000

ISSUE DATE
11/10/2023



603'-8"
639'-2"
78'-8"
40' IRRIGATION EASEMENT
PROPERTY LINE
(N 88°31'53" E – 463.46.')
(N 88°38'07" E – 146.84.')
30' R.O.W. EASEMENT
30' R.O.W. EASEMENT
50' PIPE EASEMENT
DOG PARK
25.6 ACRES
330
TRUCK
PARKING
US-54 BYP
TUCUMCARI, NM 88401
(100' R.O.W.)
PROPERTY LINE
(N00°03'09"W – 225.11')
PROPERTY LINE
(S88°29'18"W – 462.93')
PROPERTY LINE
(N00°03'09"W – 297.06')
(N00°29'00"E – 250.02')
PROPERTY LINE
(N00°05'00"W – 250.24')
(S00°02'23"W – 1022.69')
PROPERTY LINE
(S88°32'09"W – 887.87')
PROPERTY LINE
TRAVEL CENTER
14,872 SF
PARKING
(68)
RV
PARKING
(4)
RV FUELING
CNG
EQUIPMENT
FUEL TRUCK
WIDE
LOADS
CAT SCALE
12 FUELING LANES
15' GAS EASEMENT
DUMPSTER
E.V.
TRUCK
WASH BAY
EQUIPMENT & STORAGE
DELIVERIES
EMPLOYEE
PARKING
TRUCK
WASH
TRUCK REPAIR PARKING
ROAD SPEED LIMIT: 45 MPH
6" 3600 PSI PVM'T
W/#4 @ 18" E.W.
6" FLEXBASE
N
0
50
100
150
GRAPHIC SCALE IN FEET

FIRE GENERAL NOTES:

1. All fire lanes, striped per City of Tucumcari standards, and fire hydrants shall be completed and in working order prior to construction.

2. Fire lane markings shall be as follows:
CURB MARKINGS: painted in red traffic paint from the top of the seam of the curb to a point even with the driving surface,
PVM'T MARKINGS: painted in red traffic six inches in width to show the boundaries of the lane. The words "NO-PARKING-FIRE LANE" shall appear in four inch white letters at 25-foot intervals.

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8-09-23

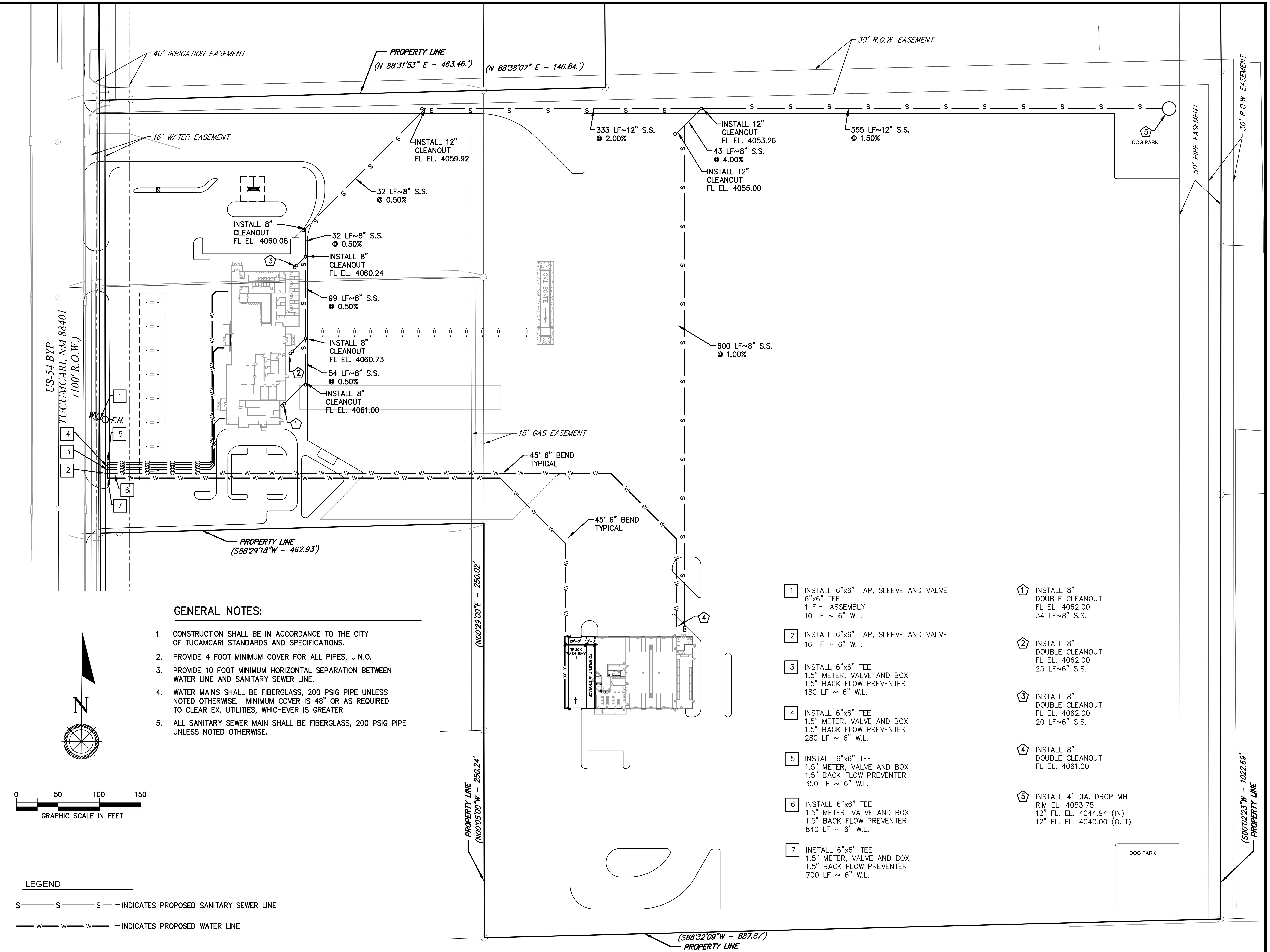
TA TRAVEL CENTER
PARCEL A, B, AND C WITHIN LOT 3 IN SECTION 19, T11N, R31E, N.M.P.M. TUCUMCARI, NM
NEW DEVELOPMENT

DATE: Aug 2023

REVISIONS

PROPOSED CONSTRUCTION SITE PLAN

C1.0



GENERAL NOTES:

1. CONSTRUCTION SHALL BE IN ACCORDANCE TO THE CITY OF TUCUMCARI STANDARDS AND SPECIFICATIONS.
2. PROVIDE 4 FOOT MINIMUM COVER FOR ALL PIPES, U.N.O.
3. PROVIDE 10 FOOT MINIMUM HORIZONTAL SEPARATION BETWEEN WATER LINE AND SANITARY SEWER LINE.
4. WATER MAINS SHALL BE FIBERGLASS, 200 PSIG PIPE UNLESS NOTED OTHERWISE. MINIMUM COVER IS 48" OR AS REQUIRED TO CLEAR EX. UTILITIES, WHICHEVER IS GREATER.
5. ALL SANITARY SEWER MAIN SHALL BE FIBERGLASS, 200 PSIG PIPE UNLESS NOTED OTHERWISE.

1 INSTALL 6"x6" TAP, SLEEVE AND VALVE
6"x6" TEE
1 F.H. ASSEMBLY
10 LF ~ 6" W.L.

2 INSTALL 6"x6" TAP, SLEEVE AND VALVE
16 LF ~ 6" W.L.

3 INSTALL 6"x6" TEE
1.5" METER, VALVE AND BOX
1.5" BACK FLOW PREVENTER
180 LF ~ 6" W.L.

4 INSTALL 6"x6" TEE
1.5" METER, VALVE AND BOX
1.5" BACK FLOW PREVENTER
280 LF ~ 6" W.L.

5 INSTALL 6"x6" TEE
1.5" METER, VALVE AND BOX
1.5" BACK FLOW PREVENTER
350 LF ~ 6" W.L.

6 INSTALL 6"x6" TEE
1.5" METER, VALVE AND BOX
1.5" BACK FLOW PREVENTER
840 LF ~ 6" W.L.

7 INSTALL 6"x6" TEE
1.5" METER, VALVE AND BOX
1.5" BACK FLOW PREVENTER
700 LF ~ 6" W.L.

1 INSTALL 8"
DOUBLE CLEANOUT
FL EL. 4062.00
34 LF~8" S.S.

2 INSTALL 8"
DOUBLE CLEANOUT
FL EL. 4062.00
25 LF~6" S.S.

3 INSTALL 8"
DOUBLE CLEANOUT
FL EL. 4062.00
20 LF~6" S.S.

4 INSTALL 8"
DOUBLE CLEANOUT
FL EL. 4061.00

5 INSTALL 4' DIA. DROP MH
RIM EL. 4053.75
12" FL. EL. 4044.94 (IN)
12" FL. EL. 4040.00 (OUT)

LEGEND

S——S——S— – INDICATES PROPOSED SANITARY SEWER LINE

—W——W——W— – INDICATES PROPOSED WATER LINE

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REVIEWED GENERAL BUILDING
01/23/2024
A-155008
PROFESSIONAL ENGINEER
9-14-23

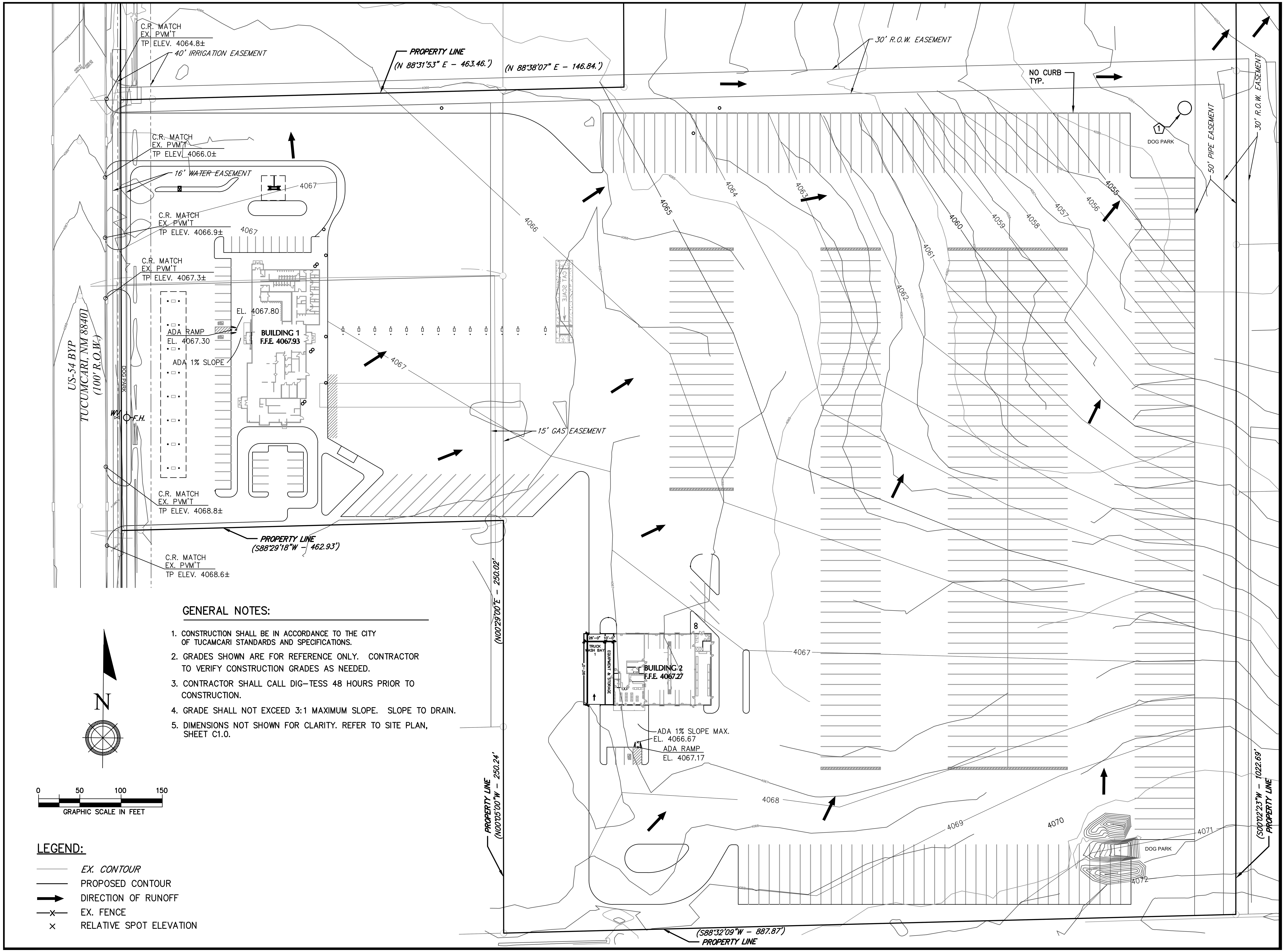
TA TRAVEL CENTER
PARCEL A, B, AND C WITHIN LOT 3 IN SECTION 19, T11N, R31E, N.M.P.M.
TUCUMCARI, NM
NEW DEVELOPMENT

DATE: Nov. 2023

REVISIONS

PROPOSED UTILITY SITE PLAN

C2.0



GENERAL NOTES:

1. CONSTRUCTION SHALL BE IN ACCORDANCE TO THE CITY OF TUCAMCARI STANDARDS AND SPECIFICATIONS.
2. GRADES SHOWN ARE FOR REFERENCE ONLY. CONTRACTOR TO VERIFY CONSTRUCTION GRADES AS NEEDED.
3. CONTRACTOR SHALL CALL DIG-TESS 48 HOURS PRIOR TO CONSTRUCTION.
4. GRADE SHALL NOT EXCEED 3:1 MAXIMUM SLOPE. SLOPE TO DRAIN.
5. DIMENSIONS NOT SHOWN FOR CLARITY. REFER TO SITE PLAN, SHEET C1.0.

0 50 100 150
GRAPHIC SCALE IN FEET

LEGEND:

- EX. CONTOUR
- PROPOSED CONTOUR
- DIRECTION OF RUNOFF
- EX. FENCE
- × RELATIVE SPOT ELEVATION

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REVIEWED GENERAL BUILDING
01/23/2024
A-155608
PROFESSIONAL ENGINEER
8-09-23

TA TRAVEL CENTER
PARCEL A, B, AND C WITHIN LOT 3 IN SECTION 19, T11N, R31E, N.M.P.M. TUCUMCARI, NM
NEW DEVELOPMENT

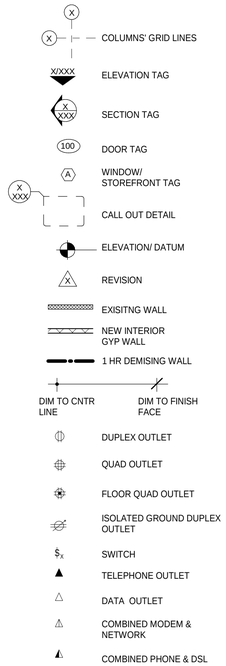
DATE: Nov. 2023

REVISIONS

PROPOSED GRADING SITE PLAN

C3.0

GRAPHIC SYMBOLS LEGEND



ABBREVIATIONS

@	AT
A, AMP	AMPERES
A/C	AIR CONDITION
A/V	AUDIO VISUAL
ABV	ABOVE
ACT	ACOUSTICAL CEILING TILE
ADJ	ADJACENT OR ADJUSTABLE
AFF	ABOVE FINISH FLOOR
AHU	AIR HANDLING UNIT
ALT	ALTERNATE
ALUM	ALUMINUM
AP	ACCESS PANEL
APPRO X	APPROXIMATE
ARCH	ARCHITECTURAL
AUX	AUXILIARY
B.O	BOTTOM OF
BD	BOARD
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BM	BEAM
BOH	BACK OF HOUSE
BRK	BRICK
BRKT	BRACKET
BRZ	BRONZE
BTU	BRITISH THERMAL UNIT
C-C	CENTER TO CENTER
CAB	CABINET
CAT	CATEGORY
CER	CERAMIC
CG	CORNER GUARD
CHR	CHROME
CJ	CONTROL JOINT
CL	CENTER LINE
CLG	CEILING
CLK	CAULK
CLO	CLOSET
CLR	CLEAR
CM	CONSTRUCTION MANAGER
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS
CORR	CORRIDOR
CORRUG	CORRUGATED
CPT	CARPET
CT	CERAMIC TILE
CTRTOP	COUNTERTOP
CTSK	COUNTERSUNK
CW	COLD WATER
CY	CUBIC YARD
DBL	DOUBLE
DEPT	DEPARTMENT
DIA	DIAMETER
DIM	DIMENSION
DISP	DISPENSER
DIV	DIVIDER OR DIVISION
DN	DOWN
DR	DOOR
DRN	DRAIN
DS	DOWNSPOUT
DTL	DETAIL
DW	DISHWASHER
DWG	DRAWING
DWGS	DRAWINGS
DWL	DOWEL
E	EAST
EA	EACH
EIFS	EXTERIOR INSULATION FINISH SYSTEM
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRIC OR ELECTRICAL
ELEV	ELEVATION OR ELVATOR
EMER	EMERGENCY
ENCL	ENCLOSURE
EPS	EXTERIOR PAINT SYSTEM
EQ	EQUAL
EQUIP	EQUIPMENT
EWC	ELECTRIC WATER HEATER
EXIST	EXISTING
EXT	EXTERIOR
F.O.F.	FACE OF FINISH
F.O.S.	FACE OF STUD
FB	FACE BRICK
FD	FLOOR DRAIN
FDTN	FOUNDATION
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FF	FINISH FLOOR
FHC	FIRE HOSE CABINET
FIN	FINISH
FLEX	FLEXIBLE
FLR	FLOOR
FLUOR	FLUORESCENT
FRP	
FRT	FIRE RETARDANT TREATED
FRZ	FREEZER
FS	FULL SIZE OR FLOOR SINK
FT	FOOT OR FEET
FTG	FOOTING
FUR	FURRING
GA	GAUGE
GALV	GALVINIZED
GB	GRAB BAR
GC	GENERAL CONTRACTOR
GL	GLASS
GND	GROUND
GR	GRADE
GWB	GYPSUM WALL BOARD
GYP BD	GYPSUM BOARD
HB	HOSE BIBB
HC	HANDICAPPED OR HOLLOW CORE
HDWD	HARDWOOD
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HR	HOUR
HT	HEIGHT
HVAC	HEATING, VENTILATION, AIR, CONDITION
IBC	INTERNATIONAL BUILDING CODE
IN	INCH
INCL	INCLUDE(D,ING)
INCL	INFORMATION
INSUL	INSULATION OR INSULATED
INT	INTERIOR
JAN	JANITOR

ABBREVIATIONS CONT'D

JST	JOIST
KIT	KITCHEN
KP	KICK PLATE
LAM	LAMINATE
LAV	LAVATORY
LF	LINEAR FOOT
LL	LIVE LOAD
LT	LIGHT
LW	LIGHTWEIGHT
M	METER
MAS	MASONRY
MATL	MATERIAL
MAX	MAXIMUM
MBL	MARBLE
MECH	MECHANICAL
MED	MEDIUM
MEMB	MEMBRANE
MFG	MANUFACTURER
MIN	MINIMUM
MIR	MIRROR
MISC	MISCELLANOUS
MTD	MOUNTED
MTL	METAL
MUL	MULLION
MW	MICROWAVE
N	NORTH
NA	NOT APPLICABLE
NIC	NOT IN CONTRACT
NO, #	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
O.C.	ON CENTER
OCC	OCCUPANT/S
OD	OUTSIDE DIAMETER
OFF	OFFICE
OH, OVHD	OVERHEAD
OPH	OPPOSITE HAND
OPP	OPPOSITE
PLAM	PLASTIC LAMINATE
PLBG	PLUMBING
PLSTR	PLASTER
PLYWD	PLYWOOD
PNL	PANEL
PNT	PAINT
POL	POLISHED
PRSTR	PRE-STRESSED
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	PRESSURE TREATED
PTD	PAPER TOWEL DISPENSER
PTR	PAPER TOWEL RECEPTACLE
PVC	POLYVINYL CHLORIDE
QT	QUARRY TILE
R	RADIUS
R/A	RETURN AIR
R/AG	RETURN AIR GRILLE
RCPP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
REF	REFERENCE
REINF	REINFORCED
REQD	REQUIRED
RES	RESILIENT
REV	REVISION
RFG	REFRIDGERATOR
RFL	REFLECTED
RGTR	REGISTER
RM	ROOM
RO	ROUGH OPENING
RV	ROOF VENT
RVS	REVERSE
S	SOUTH
SAN	SANITARY
SC	SOLID CORE
SCHED	SCHEDULE
SECT	SECTION
SF	SQUARE FOOT (FEET)
SH	SHELF
SHT	SHEET
SIM	SIMILAR
SPC	SPECIFY
SPEC(S)	SPECIFICATION(S)
SPKR	SPEAKER
SPKR	SPRINLER HEAD
SS	SOLID SURFACE MATERIAL
SS	STAINLESS STEEL
STD	STANDARD
STL	STEEL
STN	STONE
STO	STORAGE
STR	STRUCTURE
STRUC	STRUCTURAL
SUSP	SUSPENDED
SYM	SYMMETRICAL
SYS	SYSTEM
T&G	TONGUE AND GROOVE
T.O.	TOP OF
TBD	TO BE DETERMINED
TBS	TO BE SELECTED
THK	THICK
THRS	THRESHOLD
TYP	TYPICAL
U.N.O	UNLESS NOTED OTHERWISE
V	VOLTS
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VEST	VESTIBULE
VIF	VERIFY IN FIELD
VWC	VINYL WALL COVERING
W	WEST OR WIDTH OR WASHER OR WATTS
W-C	WALL COVERING
W/	WITH
W/O	WITHOUT
WC	WATER CLOSET
WD	WOOD
WH	WATER HEATER
WP	WATERPROOF
WT	WEIGHT
WWF	WELDED WIRE FABRIC

ARCHITECTURAL SPECIFICATIONS

GENERAL DESIGN CRITERIA
DESIGN CODES- ALL CODES LATEST EDITION OR AS INDICATED ON THE DRAWINGS. AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AMERICAN CONCRETE INSTITUTE
CRSI MANUAL OF STANDARD PRACTICE (FOR PLACING & DETAILING OF ALL REINFORCING) AMERICAN WELDING SOCIETY STANDARDS FOR WELDING AS MODIFIED BY A.I.S.C. SPEC. 2003 INTERNATIONAL BUILDING CODE

COORDINATION - CIVIL, ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL ITEMS
RECESSES, DEPRESSIONS, DIMENSIONS, ELEVATIONS, OPENINGS, EQUIPMENT SUPPORTS, AND DETAILS SHALL BE VERIFIED BY REFERENCE TO ARCHITECTURAL AND MECHANICAL DRAWINGS. MECHANICAL OR ELECTRICAL OPENINGS, REQUIRED BUT NOT SHOWN, MUST BE PLACED BETWEEN STRUCTURAL MEMBERS. IF STRUCTURAL DRAWINGS ARE PROVIDED THEY SHALL BE WORKED WITH ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS.

MASONRY LINTELS
ALL OPENINGS IN CONCRETE BLOCK WALLS NOT SPECIFICALLY INDICATED TO HAVE OTHER TYPES OF LINTELS SHALL HAVE REINFORCED BLOCK LINTELS AS FOLLOWS UNLESS NOTED OTHERWISE ON STRUCTURAL DRAWINGS:
UP TO 8'-0" SPAN TO BE 8" DEEP.
FROM 8'-0" TO 12'-0" TO BE 16" DEEP.
4" TO 6" WIDE UNITS TO BE REINFORCED WITH 1-#5 BTM.
8", 10" AND 12" WIDE UNITS TO BE REINFORCED WITH 2-#5 BTM.
WHERE ONE LINTEL BEAM IS CONTINUOUS OVER TWO OPENINGS, WITH INTERMEDIATE SUPPORT, USE #5 TOP AND #5 BOTTOM.
EXTEND ALL LINTELS A MINIMUM OF 8" BEYOND OPENING AND FILL (2) BLOCK COURSES BELOW LINTEL

BEARING WITH MORTAR.
ALL BLOCK LINTELS SHALL BE FILLED WITH 3,000 P.S.I. CONCRETE
NOTE: STRUCTURAL DRAWINGS AND NOTES SUPERSEDE THE ABOVE.

LINTELS GENERAL
EXTEND ALL LINTELS A MINIMUM OF 8" BEYOND EACH EDGE OF OPENING. WHERE LINTEL BEARS ON CONCRETE BLOCK FILL TWO COURSES OF BLOCK MIN. WITH CONCRETE.
IF OPENING OCCURS NEXT TO CONCRETE COLUMN BOLT 3-1/2 X 5/16 ANGLE TO COL. WITH TWO " DIA. X 6' EXPANSION BOLTS AND REST LINTEL ON ANGLE.
IF OPENING OCCURS NEXT TO STEEL COLUMN WELD 3-1/2 X 3-1/2 X 5/16 ANGLE TO COLUMN AND REST LINTEL ON ANGLE.
NOTE: STRUCTURAL DRAWINGS AND NOTES SUPERSEDE THE ABOVE.

DIMENSION LUMBER
DIMENSION LUMBER SHALL BE NO. 2 DOUGLAS FIR = 1250 OR EQUAL FOR JOISTS, BEAMS, HEADERS, ETC.
UNLESS NOTED OTHERWISE.
ALL MEMBER SIZES GIVEN ON DRAWINGS ARE NOMINAL DIMENSIONS.
WOOD LINTELS AND HEADERS SHALL HAVE A FULL 3' LENGTH OF BEARING AT EACH END.
NOTE: STRUCTURAL DRAWINGS AND NOTES SUPERSEDE THE ABOVE.

EXISTING CONDITIONS
VERIFY ALL DIMENSIONS, ELEVATIONS, AND DETAILS OF EXISTING STRUCTURE WHERE THEY AFFECT THIS CONSTRUCTION. NOTIFY OWNER IF THERE ARE ANY DEVIATIONS FROM THE CONTRACT DOCUMENTS.

0101 SUMMARY OF WORK
A. DESCRIPTION
1.1. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION INDICATED ON THESE CONSTRUCTION DOCUMENTS, WITH FINAL APPROVALS OF ALL WORK (AS REQUIRED) BY THE OWNER.
1.2. THE CONTRACTOR RESPONSIBLE FOR THE PORTION OF THE WORK REQUIRING INSPECTIONS BY GOVERNMENT AGENCIES, ARE CHARGED WITH REQUESTING ALL SUCH INSPECTIONS AND PAYING FOR ANY FEES CONNECTED THEREWITH.
1.3. CLOSE COORDINATION WILL BE REQUIRED BETWEEN GENERAL, MECHANICAL AND ELECTRICAL CONTRACTORS. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO COORDINATE SCHEDULING AND PHASING OF CONSTRUCTION. THE OWNER SHALL DESIGNATE ONE PERSON TO BE RESPONSIBLE FOR COORDINATION WITH GENERAL CONTRACTOR'S SUPERINTENDENT.
1.4. CLOSE COORDINATION OF FINIAL EQUIPMENT CONNECTION REQUIREMENTS AND CONDITIONS WILL BE NECESSARY ON THIS PROJECT. ENGINEERING OF GAS, ELECTRIC, WATER AND SEWER AND VENTILATION SERVICES MAY VARY WITH FINAL SELECTIONS. SUCCESSFUL CONTRACTORS SHALL WORK CLOSELY WITH EQUIPMENT SELECTED AND COORDINATE ALL CHANGES THROUGH THE MECHANICAL/ELECTRICAL ENGINEER.

0107 CUTTING AND PATCHING
A. DESCRIPTION 1.1. WORK INCLUDED: THIS SECTION ESTABLISHES GENERAL REQUIREMENTS PERTAINING TO CUTTING (INCLUDING EXCAVATING) FITTING AND PATCHING OF THE WORK REQUIRED TO: -SITE EXCAVATION, GRADING, AND BACK FILLING
-PERFORM UNDERGROUND INSTALLATION OF PLUMBING, MECHANICAL AND ELECTRICAL -ROOF OPENINGS
1.2. CONTRACTOR'S RESPONSIBILITY: GENERAL CONTRACTOR WILL PERFORM ALL INITIAL FLOOR CUTTING AND REMOVAL OF SPOILS. GENERAL CONTRACTOR WILL PROVIDE ALL CONCRETE FORM WORK AND POURING. GENERAL CONTRACTOR WILL PERFORM ALL ROOF CUTTING, & GENERAL CONTRACTOR WILL SUBCONTRACT WITH THE LANDLORD'S ROOFING CONTRACTOR FOR ALL RE-ROOFING WORK.
B. PRODUCTS
1.1. MATERIALS: FOR REPLACEMENT OF WORK REMOVED USE MATERIALS WHICH COMPLY WITH THE PERTINENT SECTIONS OF THESE SPECIFICATIONS.
C. EXECUTION
1.1. INSPECTIONS: INSPECT EXISTING CONDITIONS, INCLUDING ELEMENTS SUBJECT TO MOVEMENT OR DAMAGE DURING EXCAVATING, BACKFILLING, AND PATCHING. AFTER UNCOVERING INSPECT CONDITIONS AFFECTING INSTALLATION OF NEW WORK.
1.2. PERFORMANCE: PERFORM ALL REQUIRED EXCAVATING, BACKFILLING AND COMPACTING AS REQUIRED UNDER PERTINENT SECTIONS OF THESE SPECIFICATIONS. PERFORM CUTTING AND DEMOLITION BY METHODS, WHICH WILL PREVENT DAMAGE TO OTHER PORTIONS OF THE WORK AND WILL PROVIDE PROPER SURFACES TO RECEIVE INSTALLATION OF REPAIR AND NEW WORK. PERFORM FITTING AND ADJUSTMENT OF PRODUCTS TO PROVIDE FINISHED INSTALLATION COMPLYING WITH THE SPECIFIED TOLERANCES AND FINISHES.
1.3. PROVIDE DOWELING, PINNING AND OTHER REINFORCING AT ALL AREAS OF CONCRETE PATCHING. AT A MINIMUM CONTRACTOR TO UTILIZE #4 DOWELS @12" 0.0 EPDXY GROUT 6" INTO EXISTING SLAB OR AS OTHERWISE INDICATED OR APPROVED IN WRITING BY ARCHITECT.

0108 APPLICABLE STANDARDS
A. DESCRIPTION
1.1. WORK INCLUDED: THROUGHOUT THE CONTRACT DOCUMENTS, REFERENCE IS MADE TO CODES AND STANDARDS WHICH ESTABLISH QUALITIES AND TYPES OF WORKMANSHIP AND MATERIALS, AND WHICH ESTABLISH METHODS FOR TESTING AND REPORTING ON THE PERTINENT CHARACTERISTICS.
1.2. RELATED WORK DESCRIBED ELSEWHERE: SPECIFIC NAMING OF CODES OR STANDARDS OCCURS ON THE DRAWINGS AND IN OTHER SECTIONS OF THESE SPECIFICATIONS.
B. QUALITY ASSURANCE:
1.1. FAMILIARITY WITH PERTINENT CODES AND STANDARDS: IN PROCURING ALL ITEMS USED IN THIS WORK IT IS CONTRACTOR'S RESPONSIBILITY TO VERIFY THE DETAILED REQUIREMENTS OF THE PREVAILING CODES AND STANDARDS AND TO VERIFY THAT THE ITEMS PROCURED FOR USE IN THE WORK MEET OR EXCEED THE SPECIFIED REQUIREMENTS.
1.2. REJECTION OF NON-COMPLYING ITEMS: THE OWNER RESERVES THE RIGHT TO REJECT ITEMS INCORPORATED INTO THE WORK, WHICH FAIL TO MEET THE SPECIFIED MINIMUM REQUIREMENTS. THE OWNER FURTHER RESERVES THE RIGHT AND WITHOUT PREJUDICE TO OTHER RECOURSE THE OWNER MAY TAKE, TO ACCEPT NON-COMPLYING ITEMS SUBJECT TO AN ADJUSTMENT IN THE CONTRACT AMOUNT AS APPROVED BY THE OWNER.

1.3.APPLICABLE STANDARDS LISTED IN THESE SPECIFICATION INCLUDE, BUT ARE NOT NECESSARILY LIMITED TO STANDARDS PROMULGATED BY THE FOLLOWING AGENCIES AND ORGANIZATION:
AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)
AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC)
AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
AMERICAN PLYWOOD ASSOCIATION (APA)
AMERICAN SOCIETY OF TESTING AND MATERIALS (ASTM)
AMERICAN WELDING SOCIETY (AWS)
ARCHITECTURAL ALUMINUM MANUFACTURERS ASSOCIATION (AAMA)
ARCHITECTURAL WOODWORK INSTITUTE (AWI)
INTERNATIONAL BUILDING CODE (IBC)
COMMERCIAL SPECIFICATIONS (CS)
CONCRETE REINFORCING STANDARDS INSTITUTE (CRSI)
NATIONAL ACOUSTICAL CONTRACTORS ASSOCIATION
NATIONAL ASSOCIATION OF ARCHITECTURAL METAL MANUFACTURERS (NAAMA)
NATIONAL BUILDERS HARDWARE ASSOCIATION (NBHA)
NATIONAL CONCRETE MASONRY ASSOCIATION (NFPA)
NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)
NATIONAL SANITATION FOUNDATION (NSF)
NATIONAL WOODWORK MANUFACTURERS ASSOCIATION (NWMA)
TILE COUNCIL OF AMERICA (TCA)
UNDERWRITER LABORATORIES (UL)

0130 SUBMITTALS
A. DESCRIPTION:
1.1.SCOPE OF WORK: THIS SECTION DEFINES PROCEDURE FOR FOLLOWING SUBMITTALS REQUIRED BY THE CONTRACT DRAWINGS.
B. PRODUCTS
1.1.SHOP DRAWINGS, EQUIPMENT BROCHURES, AND PRODUCT DATA:
a. REQUIRED SUBMITTALS OF SHOP, FABRICATION, OR ERECTION DRAWINGS, EQUIPMENT BROCHURES AND/OR PRODUCT DATA, COMPOSITE SYSTEMS (INCLUDING THOSE BY ONE OR MORE SUBCONTRACTORS OR SUPPLIERS) AND SIMILAR INFORMATION SHALL BE SUBMITTED IN ACCORD WITH THIS ARTICLE.
b. SHOP DRAWINGS SHALL MEAN ALL SIMILAR TYPES OF PRODUCT DATA, INCLUDING SPECIALLY PREPARED DRAWINGS, STANDARD PRINTS, BROCHURES AND OTHER DESCRIPTIVE DATA.
c. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE OWNER / OWNER'S REPRESENTATIVE WITH SUCH PROMPTNESS AS TO CAUSE NO DELAY IN HIS WORK OR THE WORK OF ANY OTHER CONTRACTOR OR SUBCONTRACTOR ON THE PROJECT. ADEQUATE TIME SHALL BE ALLOWED FOR CHECKING BY THE OWNER.
d. REFER TO GENERAL CONDITIONS AND SECTION 0101 FOR COORDINATION AND COOPERATION OF CONTRACTORS. THE CONTRACTOR SHALL COOPERATE WITH ALL OTHER CONTRACTORS AS MAY BE REQUIRED TO COORDINATE THE WORK WITH ALL
CONTRACTORS AND SUBCONTRACTORS. SHOP DRAWINGS SHALL BE PROVIDED OR EXCHANGED AS NECESSARY OR BENEFICIAL TO THE COORDINATION EFFORT WITH THE EXCHANGE DIRECTLY BY THE CONTRACTORS INVOLVED.
1.1.TRANSPARENCIES WILL NOT BE REQUIRED FOR CATALOGUE CUTS. EQUIPMENT BROCHURES OR SIMILAR ITEMS HOWEVER LAYOUT DRAWINGS SHALL BE PREPARED WHERE NECESSARY OR REQUIRED BY THE OWNER. SUCH ITEMS SHALL BE SUBMITTED IN A MINIMUM OF THREE (3) COPIES, UNLESS OTHERWISE SPECIFIED. IF ACCEPTABLE, THE COPIES WILL BE SO STAMPED AND TWO (2) COPIES RETURNED TO THE CONTRACTOR. IF NOTATIONS INDICATE REVISION OF DATA IS REQUIRED, RESUBMIT AS DIRECTED. THE CONTRACTOR SHALL NOT FURNISH, FABRICATE, PROCEED WITH OR INSTALL WORK UNTIL SHOP DRAWINGS RECEIVE FINAL ACCEPTANCE.
1.2.SAMPLES: DELIVER SAMPLES OF MATERIALS, EQUIPMENT, ASSEMBLIES AND COMPONENTS AS REQUIRED BY SPECIFICATIONS TO OWNER (OR OTHER DESIGNATED LOCATION) WITH DELIVERY COSTS PREPAID. AT OWNER'S DIRECTION, REMOVE SAMPLES AFTER APPROVAL. SAMPLES SHALL BE OF LIKE KIND TO THE PRODUCT TO BE PROVIDED FOR BUILDING AND SHALL HAVE FINISH AND OTHER CHARACTERISTICS REQUIRED BY WORK. SAMPLES SHALL INDICATE TYPE OF CONSTRUCTION AND QUALITY PROPOSED FOR INSTALLATION IN THE PROJECT.
1.3.OTHER SUBMITTALS: PROVIDE OTHER REQUIRED SUBMITTALS AS SPECIFIED. IN PARTICULAR: PAYMENT REQUESTS
LIABILITY INSURANCE
TESTING AND INSPECTION IF REQUIRED
REPORTS
CERTIFICATES
SAMPLES
GUARANTEES (INCLUDING ROOF MAINTENANCE AND GUARANTEE IF REQUIRED) TECHNICAL SECTIONS
FULL AND PARTIAL LIEN WAIVERS

0171 CLEANING
A. DESCRIPTION:
1.1.SCOPE OF WORK: THROUGHOUT THE CONSTRUCTION PERIOD, MAINTAIN THE BUILDINGS AND SITE IN A STANDARD OF CLEANLINESS AS DESCRIBED IN THIS SECTION.
1.2.RELATED WORK: IN ADDITION TO STANDARDS DESCRIBED IN THIS SECTION, COMPLY WITH ALL REQUIREMENTS FOR CLEANING UP AS DESCRIBED IN VARIOUS OTHER SECTIONS OF THESE SPECIFICATIONS.
1.3.CODES OF STANDARDS: IN ADDITION TO THE STANDARDS DESCRIBED IN THIS SECTION, COMPLY WITH ALL PERTINENT REQUIREMENTS OF GOVERNMENTAL AGENCIES HAVING JURISDICTION.
B. PRODUCTS
1.1.CLEANING MATERIAL AND EQUIPMENT: PROVIDE ALL REQUIRED PERSONNEL, EQUIPMENT, AND MATERIALS NEEDED TO MAINTAIN THE SPECIFIED STANDARD OF CLEANLINESS.
1.2.COMPATIBILITY: USE ONLY THE CLEANING MATERIALS AND EQUIPMENT, WHICH ARE COMPATIBLE WITH THE SURFACE BEING CLEANED, AS RECOMMENDED BY THE MANUFACTURER OF THE MATERIAL OR AS APPROVED BY THE OWNER.
C. EXECUTION
1.1.PROGRESS CLEANING:
a. RETAIN ALL STORED ITEMS IN AN ORDERLY ARRANGEMENT ALLOWING MAXIMUM ACCESS, NOT IMPEDING DRAINAGE OR TRAFFIC AND PROVIDING THE REQUIRED PROTECTION OF MATERIALS.
b. DO NOT ALLOW THE ACCUMULATION OF SCRAP, DEBRIS WASTE MATERIAL AND OTHER ITEMS NOT REQUIRED FOR CONSTRUCTION OF THIS WORK.
•• SITE: MAINTAIN THE SITE IN A NEAT AND ORDERLY CONDITION AT ALL TIMES.
•• STRUCTURES: INSPECT THE STRUCTURES AND PICK UP ALL SCRAP, DEBRIS, AND WASTE MATERIAL. REMOVE ALL SUCH ITEMS TO THE PLACE DESIGNATED FOR THEIR STORAGE.

1.1.FINAL CLEANING:
a. DEFINITION: EXCEPT AS OTHERWISE SPECIFICALLY PROVIDED, "CLEAN" (FOR THE PURPOSE OF THIS ARTICLE) SHALL BE INTERPRETED AS MEANING THE LEVEL OF CLEANLINESS GENERALLY PROVIDED BY SKILLED CLEANERS USING COMMERCIAL QUALITY BUILDING MAINTENANCE EQUIPMENT AND MATERIALS.
b. GENERAL: PRIOR TO COMPLETION OF THE WORK, REMOVE FROM THE JOB SITE ALL TOOLS, SURPLUS MATERIALS, EQUIPMENT, SCRAP, DEBRIS, AND WASTE.
c. INTERIOR: VISUALLY INSPECT ALL INTERIOR SURFACES AND REMOVE ALL TRACES OF SOIL, WASTE MATERIAL, SMUDGES, AND OTHER FOREIGN MATTER. REMOVE ALL TRACES OF SPLASHED MATERIALS FROM ADJACENT SURFACES. REMOVE ALL PAINT DROPPINGS, SPOTS, STAINS, AND DIRT FROM FINISHED SURFACES. USE ONLY THE SPECIFIED CLEANING MATERIALS AND EQUIPMENT.

0320 CONCRETE REINFORCEMENT
A. DESCRIPTION:
1.1. WORK INCLUDED: THIS WORK SHALL CONSIST OF FURNISHING REINFORCING STEEL, BAR SUPPORT, WELDING TOOLS, SUPPLIES, EQUIPMENT AND SERVICES AND PLACING OF CONCRETE REINFORCEMENT IN THE SHAPE AND DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS, AND AS CALLED FOR IN THESE SPECIFICATIONS.
1.2.STORAGE: STORE REINFORCEMENT AT THE JOB SITE IN A MANNER TO PREVENT DAMAGE AND ACCUMULATION OF DIRT AND EXCESSIVE RUST.
1.3.REFER TO SECTION 0107 CUTTING AND PATCHING FOR DOWELING AND PINNING REQUIREMENTS ON CONCRETE PATCHING.

SEE STRUCTURAL FOR ADDITIONAL INFORMATION.

0330 CAST IN PLACE CONCRETE
A. DESCRIPTION:
1.1. WORK INCLUDED: PROVIDE ALL CAST-IN-PLACE CONCRETE, COMPLETE, IN PLACE AS INDICATED ON THE DRAWINGS SPECIFIED HEREIN AND NEED FOR A COMPLETE AND PROPER INSTALLATION.
1.2. RELATED WORK: CONCRETE REINFORCEMENT SECTION 0320
1.3. PROTECTION: USE ALL MEANS NECESSARY TO PROTECT THE MATERIALS OF THIS SECTION BEFORE, DURING AND AFTER INSTALLATIONS AND TO PROTECT THE WORK AND MATERIALS OF ALL OTHER TRADES.
1.4. REPLACEMENTS: IN THE EVENT OF DAMAGE, IMMEDIATELY MAKE ALL REPAIRS AND REPLACEMENTS NECESSARY TO THE APPROVAL OF THE ARCHITECT, AND AT NO ADDITIONAL COST TO THE OWNER.
1.5. TESTS: PROVIDE OWNER'S REPRESENTATIVE WITH WRITTEN REPORTS ON CONCRETE STRENGTH TESTS.
a. FOOTINGS: MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS. PROVIDE TWO TESTS OF FOOTING.
b. INTERIOR SLABS: MINIMUM COMPRESSIVE STRENGTH OF 3,500 PSI AT 28 DAYS. PROVIDE TWO TESTS OF INTERIOR SLABS.
c. EXTERIOR STOOPS, WALKS AND CURBS: MINIMUM COMPRESSIVE STRENGTH AT 4,000 PSI AT 28 DAYS. (AIR ENTRAINED AS PER ASTM C-260).
RETEMPERING OF CONCRETE WILL NOT BE PERMITTED.
SEE STRUCTURAL FOR ADDITIONAL INFORMATION.

0550 MISCELLANEOUS METALS
A. DESCRIPTION:
1.1. FURNISH AND INSTALL ALL MISCELLANEOUS METAL ITEMS WHICH INCLUDE BUT ARE NOT NECESSARILY LIMITED TO THE FOLLOWING:
a. NON-DETAILED LOOSE LINTELS, STRUCTURAL.
b. ANCHORS: EXPANSION BOLTS, EXPANSION SHIELDS, TOGGLE BOLTS, MOLLY SCREW ANCHORS, AS REQUIRED TO COMPLETE INSTALLATION OF ALL
MISCELLANEOUS METALS.
B. MATERIALS
1.1. STEEL A-36.
1.2. PLATES ASTM 283, GRADE C.
1.3. SHOP COAT: TNEMEC #99-G OR HENTZGEN "4080".
C. INSTALLATION
1.1. GENERAL
a. WELDED JOINTS GROUND SMOOTH, WHENEVER POSSIBLE.
b. FIELD CONNECTIONS: BOLTED.
c. TOUCH UP ALL CONNECTIONS, ABRADED SURFACES AFTER INSTALLATION.
d. BENDS SHALL E UNIFORM WITHOUT WRINKLES.
e. ERECT UNITS PLUMB, SQUARE AND TIGHT ALL CONDITIONS.

0610 ROUGH CARPENTRY
A. DESCRIPTION:
1.1. WORK INCLUDED: ALL LABOR AND MATERIAL NECESSARY TO COMPLETE THE ROUGH CARPENTRY WORK, INCLUDING BUT NOT LIMITED TO THE FOLLOWING: a. ALL FRAMING AND SHEATHING AS REQUIRED BY THE DETAILS AND PLANS.
• RELATED WORK: FINISH CARPENTRY SECTION 0620.
• QUALITY ASSURANCE: PROVIDE SUFFICIENT WORKMEN AND SUPERVISORS WHO SHALL BE PRESENT AT ALL TIMES DURING EXECUTION OF THIS PORTION OF THE WORK AND WHO SHALL BE THOROUGHLY FAMILIAR WITH THE TYPE OF CONSTRUCTION INVOLVED AND THE MATERIALS AND TECHNIQUES SPECIFIED.
• PRODUCT HANDLING: STORE ALL MATERIALS IN SUCH A MANNER AS TO ENSURE PROPER VENTILATION AND DRAINAGE, AND TO PROTECT AGAINST DAMAGE AND THE WEATHER.
• REPLACEMENTS: IN THE EVENT OF DAMAGE, IMMEDIATELY MAKE ALL REPAIRS AND REPLACEMENTS NECESSARY FOR THE APPROVAL OF THE OWNER AND AT NO ADDITIONAL COST TO THE OWNER.
B. PRODUCTS
1.1. BLOCKING & PLATES IN CONTACT WITH CONCRETE TO BE DOUGLAS FIR WESTERN LARCH OR WESTERN HEMLOCK, PRESERVATIVE TREATED, MOISTURE CONTENT 19% MAXIMUM AND FIRE RESISTANT AS REQUIRED BY APPLICABLE CODES. SEE DRAWINGS.
1.2. FRAMING LUMBER: 19% MOISTURE CONTENT, FIRE RESISTANT. IF REQUIRED BY CODE.
1.3. PLYWOOD SHEATHING: 1/2", 5/8 " CD INTERIOR, APA EXTERIOR GLUED, INDEX 32/16. NAILING TO BE 8D OR 6D (DEFORMED) AT 6" O.C. AT EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS.
PROVIDE MARINE PLYWOOD IN AREAS AND SIZES INDICATED ON DRAWINGS AND FIRE RESISTANT AS REQUIRED BY APPLICABLE CODES.

JAKAN ENGINEERING
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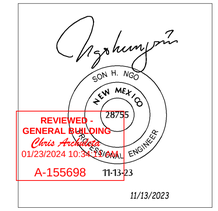


TA TRAVEL CENTER
PARCEL A, B, AND C WITHIN LOT 3 IN
SECTION 19, T11N, R31E, N.M.P.M.
TUCUMCARI, NM
NEW DEVELOPMENT

DATE: Nov. 2023

REVISIONS

SHEET TITLE
SPECIFICATION

SHEET NUMBER
A001

ISSUE DATE
11/10/2023

0330 CAST IN PLACE CONCRETE

A. DESCRIPTION:
1.1. WORK INCLUDED: PROVIDE ALL CAST-IN-PLACE CONCRETE, COMPLETE, IN PLACE AS INDICATED ON THE DRAWINGS SPECIFIED HEREIN AND NEED FOR A COMPLETE AND PROPER INSTALLATION.
1.2. RELATED WORK: CONCRETE REINFORCEMENT SECTION 0320
1.3. PROTECTION: USE ALL MEANS NECESSARY TO PROTECT THE MATERIALS OF THIS SECTION BEFORE, DURING AND AFTER INSTALLATIONS AND TO PROTECT THE WORK AND MATERIALS OF ALL OTHER TRADES.
1.4. REPLACEMENTS: IN THE EVENT OF DAMAGE, IMMEDIATELY MAKE ALL REPAIRS AND REPLACEMENTS NECESSARY TO THE APPROVAL OF THE ARCHITECT, AND AT NO ADDITIONAL COST TO THE OWNER.
1.5. TESTS: PROVIDE OWNER'S REPRESENTATIVE WITH WRITTEN REPORTS ON CONCRETE STRENGTH TESTS.
a. FOOTINGS: MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS. PROVIDE TWO TESTS OF FOOTING.
b. INTERIOR SLABS: MINIMUM COMPRESSIVE STRENGTH OF 3,500 PSI AT 28 DAYS. PROVIDE TWO TESTS OF INTERIOR SLABS.
c. EXTERIOR STOOPS, WALKS AND CURBS: MINIMUM COMPRESSIVE STRENGTH AT 4,000 PSI AT 28 DAYS. (AIR ENTRAINED AS PER ASTM C-260).
RETEMPERING OF CONCRETE WILL NOT BE PERMITTED.
SEE STRUCTURAL FOR ADDITIONAL INFORMATION.

0550 MISCELLANEOUS METALS

A. DESCRIPTION:
1.1. FURNISH AND INSTALL ALL MISCELLANEOUS METAL ITEMS WHICH INCLUDE BUT ARE NOT NECESSARILY LIMITED TO THE FOLLOWING:
a. NON-DETAILED LOOSE LINTELS, STRUCTURAL.
b. ANCHORS: EXPANSION BOLTS, EXPANSION SHIELDS, TOGGLE BOLTS, MOLLY SCREW ANCHORS, AS REQUIRED TO COMPLETE INSTALLATION OF ALL MISCELLANEOUS METALS.
B. MATERIALS
1.1. STEEL A-36.
1.2. PLATES ASTM 283, GRADE C.
1.3. SHOP COAT: TNEMEC #99-G OR HENTZGEN "4080".
C. INSTALLATION
1.1. GENERAL
a. WELDED JOINTS GROUND SMOOTH, WHENEVER POSSIBLE.
b. FIELD CONNECTIONS: BOLTED.
c. TOUCH UP ALL CONNECTIONS, ABRADED SURFACES AFTER INSTALLATION.
d. BENDS SHALL E UNIFORM WITHOUT WRINKLES.
e. ERECT UNITS PLUMB, SQUARE AND TIGHT ALL CONDITIONS.

0610 ROUGH CARPENTRY

A. DESCRIPTION:
1.1. WORK INCLUDED: ALL LABOR AND MATERIAL NECESSARY TO COMPLETE THE ROUGH CARPENTRY WORK, INCLUDING BUT NOT LIMITED TO THE FOLLOWING: a. ALL FRAMING AND SHEATHING AS REQUIRED BY THE DETAILS AND PLANS.
- RELATED WORK: FINISH CARPENTRY SECTION 0620.
- QUALITY ASSURANCE: PROVIDE SUFFICIENT WORKMEN AND SUPERVISORS WHO SHALL BE PRESENT AT ALL TIMES DURING EXECUTION OF THIS PORTION OF THE WORK AND WHO SHALL BE THOROUGHLY FAMILIAR WITH THE TYPE OF CONSTRUCTION INVOLVED AND THE MATERIALS AND TECHNIQUES SPECIFIED.
- PRODUCT HANDLING: STORE ALL MATERIALS IN SUCH A MANNER AS TO ENSURE PROPER VENTILATION AND DRAINAGE, AND TO PROTECT AGAINST DAMAGE AND THE WEATHER.
- REPLACEMENTS: IN THE EVENT OF DAMAGE, IMMEDIATELY MAKE ALL REPAIRS AND REPLACEMENTS NECESSARY FOR THE APPROVAL OF THE OWNER AND AT NO ADDITIONAL COST TO THE OWNER.

B. PRODUCTS
1.1. BLOCKING & PLATES IN CONTACT WITH CONCRETE TO BE DOUGLAS FIR WESTERN LARCH OR WESTERN HEMLOCK, PRESERVATIVE TREATED, MOISTURE CONTENT 19% MAXIMUM AND FIRE RESISTANT AS REQUIRED BY APPLICABLE CODES. SEE DRAWINGS.
1.2. FRAMING LUMBER: 19% MOISTURE CONTENT, FIRE RESISTANT. IF REQUIRED BY CODE.
1.3. PLYWOOD SHEATHING: 1/2", 5/8 " CD INTERIOR, APA EXTERIOR GLUED, INDEX 32/16. NAILING TO BE 8D OR 6D (DEFORMED) AT 6" O.C. AT EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS.
PROVIDE MARINE PLYWOOD IN AREAS AND SIZES INDICATED ON DRAWINGS AND FIRE RESISTANT AS REQUIRED BY APPLICABLE CODES.

C. EXECUTION:
1.1. INSPECTIONS: EXAMINE THE AREAS AND CONDITIONS UNDER WHICH WORK OF THIS SECTION WILL BE PERFORMED. CORRECT CONDITION DETRIMENTAL TO THE PROPER AND TIMELY COMPLETION OF THE WORK. DO NOT PROCEED UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.
1.2. WORKMANSHIP: ALL ROUGH CARPENTRY SHALL PRODUCE MEMBERS TRUE, TIGHT, AND WELL NAILED, WITH ALL MEMBERS ASSEMBLED IN ACCORDANCE WITH THE DRAWINGS AND WITH ALL PERTINENT CODES AND REGULATIONS.
1.3. SELECTION OF LUMBER PIECES: CAREFULLY SELECT ALL MEMBERS. SELECT INDIVIDUAL PIECES SO THAT KNOTS AND OBVIOUS DEFECTS WILL NOT INTERFERE WITH PLACING BOLTS, PROPER NAILING AND MAKING CONNECTIONS.
1.4. SHIMMING: DO NOT SHIM SILLS, JOISTS, SHORT STUDS, TRIMMERS, HEADERS, LINTELS, OR OTHER FRAMING COMPONENTS.
1.5. TREATED LUMBER: USE ONLY TREATED LUMBER FOR ALL WOOD BUCKS AND NAILING GROUNDS (OTHER THAN FOUNDATION GRADE REDWOOD), IN OR IN CONTACT WITH CONCRETE.
1.6. BLOCKING: INSTALL ALL BLOCKING TO SUPPORT ALL ITEMS OF FINISH AND TO CUT OFF ALL CONCEALED DRAFT OPENINGS BOTH VERTICAL AND HORIZONTAL BETWEEN CEILING AND FLOOR AREAS.
1.7. ALIGNMENT: ON ALL FRAMING MEMBERS TO RECEIVE A FINISHED WALL OR CEILING, ALIGN ADJACENT FRAMING AND FURRING MEMBERS.
1.8. INSTALLATION OF PLYWOOD: PLACE ALL PLYWOOD WITH FACE GRAIN PERPENDICULAR TO SUPPORTS AND CONTINUOUSLY OVER AT LEAST TWO SUPPORTS EXCEPT WHERE OTHERWISE SPECIFICALLY INDICATED ON THE DRAWINGS.
1.9. PROTECTION OF PLYWOOD: PROTECT ALL PLYWOOD FROM MOISTURE BY USE OF ALL REQUIRED WATERPROOF COVERINGS UNTIL THE PLYWOOD HAS IN TURN BEEN COVERED WITH THE NEXT SUCCEEDING COMPONENT OR FINISH.
1.10. NAILING: USE ONLY COMMON WIRE NAILS OR SPIKES OF THE DIMENSIONS SHOWN ON THE NAILING SCHEDULE, EXCEPT WHERE OTHERWISE CALLED FOR ON THE DRAWINGS.
1.11. BOLTING: DRIFT HOLES 1/16" LARGER IN DIAMETER THAN THE BOLTS BEING USED. DRILL STRAIGHT AND TRUE FROM ONE SIDE ONLY. BOLT THREADS SHALL NOT BEAR ON WOOD. USE WASHERS UNDER HEAD AND NUT WHERE BOTH BEAR ON WOOD USE WASHERS UNDER ALL NUTS.
1.12. SCREWS: FOR LAG SCREWS AND WOOD SCREWS, PRE-BORE HOLES SAME DIAMETER AS **ROOT OF THREAD, ENLARGE HOLES TO SHANK DIAMETER FOR LENGTH OF SHANK. SCREW, DO NOT DRIVE, ALL LAG SCREWS AND WOOD SCREWS.**

0620 FINISHED CARPENTRY

A. DESCRIPTION:
1.1. INSTALLATION OF ALL MILLWORK ITEMS BY FINISH CARPENTRY SUBCONTRACTOR.
1.2. MILLWORK TO INCLUDE BUT NOT NECESSARILY LIMITED TO ALL HARDWOOD TRIM, MOLDINGS, MILLWORK SUPPLIED BY CATAPOLT.
1.3. RELATED ITEMS BY OTHERS OR SPECIFIED ELSEWHERE.
a. FIXTURES AND EQUIPMENT BY EQUIPMENT SUPPLIERS. (SEE DRAWINGS).
B. MATERIALS
1.1. ALL HARDWOOD TRIMS, BOARDS, AND MISCELLANEOUS TRIM TO BE SELECT GRADE AND SMOOTH FINISH. SIZES AND CONDITIONS AS INDICATED ON DRAWINGS.
1.2. WOOD MOLDINGS.
1.3. WOOD DOORS AS SPECIFIED UNDER DIVISION 8.
1.4. COUNTER TOPS AT TOILET ROOMS TO BE AS INDICATED ON FINISH AND MATERIAL SCHEDULE.
C. INSTALLATION:
1.1. INSTALL ALL ITEMS PROVIDED BY MILLWORK CONTRACTOR AS SPECIFIED UNDER 0620 (B) ABOVE, ALL DOORS AND FRAMES SPECIFIED UNDER DIVISION 8, AND ALL OTHER RELATED ITEMS REQUIRING INSTALLATION.
1.2. FABRICATE TRIM IN SINGLE LENGTHS WITHOUT SPLICING WHERE POSSIBLE. JOIN ONLY WHERE SOLID FASTENING CAN BE MADE.
1.3. PROVIDE BLOCKING WHERE REQUIRED FOR SECURING ITEMS IN PLACE.
1.4. ALL WORK TO CONFORM TO CUSTOM GRADE STANDARDS OF QUALITY STANDARDS OF THE ARCHITECTURAL WOODWORK INDUSTRY", AWI.
1.5. ALL CORNERS TO BE MITERED AND TO FIT TIGHT AND SMOOTH.

0790 CAULKING & SEALANTS

A. DESCRIPTION:
1.1. WORK INCLUDED: SUPPLY AND INSTALL ALL CAULKING AND SEALANTS WORK AS SHOWN ON DRAWINGS AND SPECIFIED HEREIN. THIS SHALL INCLUDE BUT NOT LIMITED TO THE FOLLOWING:
a. ALUMINUM ENTRANCE SYSTEM & WINDOWS- SPECIFIED UNDER SECTION 0815 ALUMINUM ENTRANCE SYSTEM.
b. TOILET FIXTURES: CAULK BY PLUMBING CONTRACTOR, COLOR- WHITE.
c. WATER OR WASTE PENETRATIONS: CAULK BY PLUMBING CONTRACTOR, COLOR- WHITE
d. (COMPRESSION CUP MAY BE PROVIDED IN LIEU OF CAULK)
e. TILE CORNERS CAULK BY GENERAL CONTRACTOR, COLOR - TBD
f. TILE AT COOLER WALLS: CAULK BY GENERAL CONTRACTOR, COLOR -TBD
g. TILE AT CEILING GRID: CAULK BY GENERAL CONTRACTOR, COLOR- TBD
h. VANITY TOPS & WAITRESS STATION: CAULK BY GENERAL CONTRACTOR, COLOR- CLEAR.
i. PAPER TOWEL DISPENSER: CAULK BY GENERAL CONTRACTOR, COLOR- CLEAR.
j. HOLLOW METAL DOORS: CAULK BY GENERAL CONTRACTOR, COLOR- CLEAR
k. HOOD WALLS: CAULK BY GENERAL CONTRACTOR, COLOR- TBD
I. PASS THRU: CAULK BY GENERAL CONTRACTOR, COLOR- TBD
m. EXTERIOR SEALANTS: SEALANT BY GENERAL CONTRACTOR, COLOR - TBD
B. MATERIALS
1.1. GENERAL INTERIOR CAULK: ONE PART ACRYLIC LATEX CAULK. 90% SOLIDS MINIMUM, USE AS RECOMMENDED BY MANUFACTURER AS GENERAL PURPOSE INTERIOR SEALANT. ACCEPTABLE MANUFACTURER: DOW CORNING.
1.2. JOINT BACKING: COMPRESSIBLE ROD OF MATERIAL AS RECOMMENDED BY SEALANT MANUFACTURER FOR JOINT TYPES AND WIDTHS INDICATED ON CONSTRUCTION DRAWINGS.
1.3. JOINT CLEANER, SEALERS AND PRIMER SHALL BE USED AS RECOMMENDED BY MANUFACTURER.
C. INSTALLATION
1.1. JOINT BACKING MATERIAL SHALL BE A WIDTH GREATER THAN THE JOINT AS RECOMMENDED BY THE MANUFACTURER, TO GUARANTEE A TIGHT FIT WHEN FORCED INTO PLACE.
1.2. APPLY MATERIALS IN STRICT ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS: OBSERVE MANUFACTURER'S REQUIREMENTS REGARDING TEMPERATURE CONTROL, USABILITY OF MATERIALS AND PROTECTION OF ADJACENT SURFACES. MAKING SEALING SURFACE SLIGHTLY CONCAVE FREE OF WRINKLES AND SKIPS: UNIFORMLY SMOOTH AND WITH PERFECT ADHESION ALONG BOTH SIDES OF JOINT. PROTECT ADJACENT SURFACES FROM EXCESS MATERIALS LEAVE JOINTS IN A CLEAN NEAT CONDITION. DEFECTIVE JOINTS SHALL BE REMOVED, CLEANED AND REPLACED AT NO ADDITIONAL COST TO THE OWNER.
1.3. SET THRESHOLDS IN FULL BED OF CAULKING AND ANCHOR WITH EXPANSION ANCHORS.

0810 HOLLOW METAL DOORS & FRAMES

A. DESCRIPTION
1.1. REFER TO DOOR SCHEDULE FOR LOCATIONS AND TYPES OF DOORS REQUIRED.
B. PRODUCTS
1.1. HOLLOW METAL FRAMES- GENERAL
a. COLD ROLLED 18 GAUGE LABELED FRAMES WHERE REQUIRED.
b. FRAMES SHALL RECEIVE TWO COATS OF RUST INHIBITIVE PRIMER. PROVED THREE (3) RUBBER BUMPERS AT EACH DOOR.Z E
c. ALL FRAMES TO BE WELDED HOLLOW METAL.
D. SUPPLIED BY CATAPOLT
1.1.HOLLOW METAL FRAMES - SUPPLIED BY CATAPOLT
1.2. HOLLOW METAL DOORS
a. DOORS SHALL BE FLUSH DESIGN, OF SIZE INDICATED ON DOOR SCHEDULE
b. CORE SHALL CONSIST OF STRUCTURAL HONEYCOMB OR SOLID POLYSTYRENE CORE BANDED TO BOTH FACES.
c. SUPPLIED BY CATAPOLT

C. INSTALLATION
1.1. FRAMES, WHICH ARE SCHEDULED FOR LABEL CONSTRUCTION SHALL BE INSTALLED USING UL, APPROVED ANCHORING. FRAMES SHALL BE PROPERLY PREPARED TO RECEIVE UL APPROVED HARDWARE AND SHALL HAVE PROPER LABEL ATTACHED AT THE FACTORY.
1.2. ALL FRAMES SHALL BE COMPLETED WITH JAMB ANCHORS FOR ATTACHING TO MASONRY WALLS, OR OTHER ANCHORS AS REQUIRED BY THE PARTICULAR INSTALLATION.
1.3. AT THE TIME OF INSTALLATION, THE DOOR JAMBS SHOULD BE HELD "/s " OFF THE EXISTING CONCRETE FLOOR BEFORE FLOOR TILE IS INSTALLED.
1.4. INSTALL ALL HOLLOW METAL DOORS AND FRAMES ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
1.5. FILL ALL WELDED FRAMES WITH MORTAR.

0820 WOOD DOORS & WINDOWS

A. DESCRIPTION
1.1. REFER TO DOOR SCHEDULE FOR LOCATIONS AND TYPES OF DOORS REQUIRED.
1.2. ON DOORS WHERE A FIRE RATING IS REQUIRED, PROVIDE ODORS WHICH HAVE BEEN TESTED AND RATED BY UL FOR SINGLE-POINT HARDWARE AND WHICH ARE CERTIFIED BY MANUFACTURER TO COMPLY WITH NFPA PAMPHLET NO. 80 "FIRE DOORS AND WINDOWS" FOR THE REQUIRED CLASS OR RATING. PROVIDE VENEER AND FINISH TO MATCH NON-FIRE RATED DOORS IN THE SAME AREA OF THE BUILDING.
B. PRODUCTS
1.1. INTERIOR SOLID CORE FLUSH DOORS:
a. STANDARD THICKNESS VENEER AND HARDWOOD CROSS BANDING BONDED TO CORE WITH EXTERIOR RESIN GLUE.
b. EDGESTRIPS: HARDWOOD 1-1/2 " SIDES AND 1-1/4 " TOP AND BOTTOM.
c. FACE MATERIAL: REFER TO DOCUMENTS.
d. MANUFACTURER: G4RAHAM AS SUPPLIED BY CATAPOLT.
1.1. UL FIRE LABEL: MINERAL CORE DFM TYPE.
1.2. OTHER DOORS: REFER TO DOCUMENTS.
C. INSTALLATION
1.1. ACCLIMATE DOORS TO BUILDING CONDITION BEFORE HANDLING.
1.2. COMPLY WITH ALL RECOMMENDATIONS OF MANUFACTURER TO INSURE WARRANTY PROVISION SPECIFIED.
1.3. TRIM AND FIT DOORS TO LEAVE EQUAL WIDTH STILES ON EACH SIDE TO FIT FRAMES WITH UNIFORM SPACE 1/8" AT FRAMES, 3/4" AT FLOOR.
1.4. MAINTAIN CLEARANCES REQUIRED BY UL FOR ALL FIRE (LABELED) DOORS.
1.5. MAKE ALL HARDWARE AS DETAILED AND IN ACCORDANCE WITH APPROVED HARDWARE SCHEDULE.
1.6. LOCATE HARDWARE AS DETAILED AND IN ACCORDANCE WITH APPROVED HARDWARE SCHEDULE.
1.7. DO ALL CUTTING/ALTERING OF DOORS TO ACCOMMODATE LOUVERS, GLAZING, HARDWARE AND SIMILAR ITEMS WITHOUT IMPAIRING UTILITY OR STRENGTH OF DOOR. TEMPLATES SUPPLIED ON REQUEST.
1.8. DOORS WHICH WARP AND ARE FOUND TO HAVE UNFINISHED EDGES OR OTHER DEFECTS WILL BE REJECTED. IMMEDIATELY REPLACE WITH NEW DOORS, PROPERLY HUNG AND FINISHED.

0870 FINISH HARDWARE

A. DESCRIPTION

1.1. INSTALL ALL FINISH HARDWARE ON DOORS INDICATED ON DOOR SCHEDULE.
1.2. COORDINATION: HARDWARE TEMPLATES AND SCHEDULES SHALL BE SENT TO HOLLOW METAL MILLWORK WOOD DOOR SUPPLIER TO COORDINATE THE NECESSARY PREPARATION.
B. PRODUCTS
1.1. ALL HARDWARE TO MEET REQUIREMENTS LISTED IN THE DOOR SCHEDULE UNLESS OTHERWISE NOTED.
1.2. ALL ALUMINUM ENTRANCE SYSTEM HARDWARE ROLLING GRILLES & OVERHEAD FIRE DOORS & SHUTTER HARDWARE IS BY MANUFACTURER.
C. INSTALLATION
1.1. MOUNT ALL HARDWARE UNITS AT HEIGHTS RECOMMENDED IN "RECOMMEND LOCATIONS FOR BUILDERS HARDWARE" BY NBHA, EXCEPT AS OTHERWISE SPECIFICALLY INDICATED OR REQUIRED TO COMPLY WITH GOVERNING HANDICAPPED REGULATIONS. THESE SHALL BE AS FOLLOWS:
a. LOCK SETS AND LATCH SETS- 40"
b. EXIT DEVICE CROSSBAR- 37"
c. CENTER OF DOOR PULL- 42"
d. CENTER OF PUSH PLATE- 48"
e. DEADLOCK- 60"
1.1. INSTALL HARDWARE ITEMS COMPLYING WITH MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS. REMOVE HARDWARE FROM SURFACES TO BE FINISHED AFTER INSTALLATION AND STORE UNTIL SURFACE FINISH IS APPLIED, REINSTALL.
1.2. ADJUST EACH OPERATING ITEM OF HARDWARE TO INSURE PROPER OPERATION OF FUNCTION OF UNIT. LUBRICATE MOVING PARTS AS RECOMMENDED BY MANUFACTURER.
1.3. INSTALL ALL WEATHER-STRIPPING IN STRICT ACCORDANCE WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS. FIT WEATHER-STRIPPING TIGHTLY AT CORNERS TO MAINTAIN CONTINUITY AROUND PERIPHERY OF DOOR.
1.4. CLEAN HARDWARE AS RECOMMENDED BY MANUFACTURER.

0925 GYPSUM DRYWALL

A. DESCRIPTION
1.1. PROVIDE ALL LABOR AND MATERIALS NECESSARY TO COMPLETE THE INSTALLATION OF THE GYPSUM WALLBOARD AND METAL STUD FRAMING SYSTEM INDICATED.
1.2. COMPLY WITH ALL APPLICABLE REQUIREMENTS OF "AMERICAN STANDARDS SPECIFICATION FOR THE APPLICATION AND FINISHING OF GYPSUM WALLBOARD" BY THE AMERICAN STANDARDS ASSOCIATION EXCEPT WHERE MORE STRINGENT REQUIREMENTS ARE CALLED FOR HEREIN; IN LOCAL CODES; OR BY MANUFACTURER OF WALLBOARD.
1.3. MAINTAIN TEMPERATURE OF DRYWALL SPACE IN RANGE OF 55 DEGREES TO 90 DEGREES F. UNTIL BUILDING IS ENTIRELY CLOSED AND VENTILATED AS REQUIRED TO ELIMINATE EXCESSIVE MOISTURE BUILD UP IN THE BUILDING.
B. PRODUCTS
1.1. METAL FRAMING SYSTEM
a. RUNNER: MINIMUM 20 GAUGE EXTERIOR WALL GALVANIZED STEEL WITH LEGS NOT LESS THAN ONE INCH HIGH, SLIGHTLY BENT IN TO HOLD THE STUDS BY FRICTION.
b. STUDS: 20 GAUGE 6", 3-5/8", 2-1/2", AND 1-1/2" PUNCHED, SCREW-TYPE, MINIMUM ASTM C645. HOT DIPPED STEEL OR ELECTRO-GALVANIZED STEEL, WITH FLANGES NOT LESS THAN 1-1/4" SIDE. STUD DEPTH SHALL BE AS REQUIRED FOR WALL-FINISHED THICKNESS ON DRAWINGS.
c. FURRING CHANNELS: ASTM C 645, 22 GAUGE, HAT SHAPED.
d. MANUFACTURERS: CELOTEX, FLINTKOTE, JOHNS-MANVILLE: KAISER, NATIONAL GYPSUM, US GYPSUM, WHELLING CORRUGATING CO.

2.1. GYPSUM WALLBOARD
a. GYPSUM WALLBOARD: USE 5/8" TYPE X THROUGHOUT, UNLESS OTHERWISE INDICATED.
b. MOISTURE RESISTANT WALLBOARD: 5/8" ON ALL WET WALLS IN RESTROOMS, UTILITY, AND KITCHEN.
c. HARDWARE AND ACCESSORIES REQUIRED FOR COMPETE INSTALLATION TO BE PROVIDED BY THIS CONTRACTOR INCLUDING THE FOLLOWING:
d. CORNER BEAD, "L" TYPE METAL TRIM AT EXPOSED DRYWALL EDGES AND WHERE DRYWALL ABUTS DISSIMILAR CONSTRUCTION.
e. RESILIENT CHANNELS AND FURRING CHANNELS AS REQUIRED.
f. JOINT FINISHING MATERIALS TO BE MANUFACTURER'S BEST-RECOMMENDED MATERIALS FOR A THREE COMPOUND TREATMENT.
g. APPROVED DRYWALL MANUFACTURERS: CELOTEX, FLINTKOTE, GEORGIA-PACIFIC, JOHNS-MANVILLE, KAISER GYPSUM, NATIONAL GYPSUM, US GYPSUM.

C. INSTALLATION
1.1. FRAMING: ANCHORAGE RUNNER SHALL BE ALIGNED ACCURATELY AT FLOOR AND CEILING AND SECURELY ANCHORED APPROXIMATELY TWO (2) INCHES FROM THE RUNNER ENDS. FLOOR RUNNER AND CEILING RUNNER SHALL BE SECURED MAXIMUM 24" O.C.
1.2. TAPING & FINISHING
a. MIX JOINT AND FINISHING COMPOUND PER MANUFACTURER'S DIRECTIONS.
b. CENTER TYPE OVER JOINT AND EMBED IN UNIFORM LAYER OF JOINT COMPOUND OF SUFFICIENT WIDTH AND DEPTH TO PROVIDE FIRM AND COMPLETE BOND. APPLY SKIN COAT OVER EMBEDDED TAPE.
c. TREAT ANGLES WITH REINFORCING TAPE FOLDED TO CONFORM TO ADJACENT SURFACES AND STRAIGHT TRUE ANGLES.
d. ALLOW COMPOUND TO THOROUGHLY DRY FOR AT LEAST 24 HOURS.
e. OVER JOINT COMPOUND AND TAPE APPLY COAT OF FINISHING COMPOUND. SPREAD EVENLY AND FEATHER OUT BEYOND EDGE OF BOARD. AFTER FIRST FINISHING COAT IS THOROUGHLY DRY (AT LEAST 24 HOURS) COVER WITH SECOND COAT WITH EDGES FEATHERED OUT SLIGHTLY BEYOND PRECEDING COAT.
f. GIVE ALL DIMPLES AT FASTENER HEADS AND ALL MARRED SPOTS ON SURFACE OF BOARD ONE COAT JOINT COMPOUND AND TWO COATS FINISHING COMPOUND APPLIED AS EACH COAT IS APPLIED TO JOINTS.
g. INSTALL METAL CORNER REINFORCEMENT AT ALL EXTERNAL CORNERS, EXCEPT ENDS OF HOOD WALL. CONCEAL FLANGES OR METAL REINFORCEMENT WITH AT LEAST TWO COATS COMPOUND. WHEN COMPLETED COMPOUND SHALL EXTEND APPROXIMATELY 8 INCHES TO 10 INCHES ON EACH SIDE OF METAL NOSING.
h. AFTER EACH APPLICATION OF JOINT OR FINISHING COMPOUND HAS DRIED, LIGHTLY SAND ALL JOINTS. LEAVE ALL BOARD AND TREATED AREAS UNIFORMLY SMOOTH AND READY FOR TEXTURING. DO NOT ROUGH PAPER.

0930 TILE

A. DESCRIPTION
1.1. TILE CONTRACTOR TO SUPPLY LABOR AND MATERIALS. INSTALL ALL TILE WHERE INDICATED ON THE DRAWINGS AND AS HEREINAFTER SPECIFIED COMPLETE WITH ALL ADHESIVES, MORTAR, ETC. FOR COMPLETE INSTALLATION.
1.2. COORDINATE WITH ALL OTHER TRADES WHOSE WORK AFFECTS, CONNECTS WITH OR IS CONCEALED BY TILE INSTALLATION. BEFORE PROCEEDING MAKE CERTAIN ALL REQUIRED INSPECTIONS HAVE BEEN MADE AND THE WORK IS APPROVED.
1.3. EXAMINE ALL SUBSURFACE TO RECEIVE WORK AND REPORT IN WRITING TO GENERAL CONTRACTOR, WITH COPY TO OWNER ANY CONDITIONS DETRIMENTAL.
1.4. CONFORM WITH ALL APPLICABLE REQUIREMENTS OF THE AMERICAN STANDARDS ASSOCIATION SPECIFICATIONS (A-108 SERIES) AND THE "TILE HANDBOOK" OF THE TILE COUNCIL OF AMERICA.
B. PRODUCTS
1.1. FLOOR TILE - REFER TO DOCUMENTS.
C. INSTALLATION
1.1. ALL TILES SHALL BE SET BY EXPERT JOURNEYMAN TILE SETTERS.
1.2. LAY OUT WORK SO THAT WHERE POSSIBLE NO TILES LESS THAN HALF SIZE OCCUR. IN ANY EVENT INSTALL NO HALF TILES ABOVE FIRST COURSE UP FROM THE BOTTOM OR AWAY FORM FIRST VERTICAL COURSE AT INTERNAL AND EXTERNAL CORNERS. ALIGN ALL JOINTS, VERTICALLY AND HORIZONTALLY. CUT, FIT ADJUST AND ESTABLISH TILES NEATLY AND ACCURATELY TO ACCOMMODATE ACCESSORIES, INTERRUPTIONS, CHASES, RETURNS MECHANICAL AND ELECTRICAL OUTLETS, AND FINISH AT THEIR EXACT LOCATION (AS DETERMINED BY JOB-SITE CONDITIONS). MAXIMUM VARIATION SHALL BE 1/8 INCH + IN 10 FEET WHEN A STRAIGHT EDGE IS LAID ON THE SURFACE IN ANY DIRECTION.
1.3. FURNISH AND INSTALL ALL REQUIRED TRIM PIECES AS SPECIFIED OR DETAILED FOR THE VARIOUS TILE SPECIFIED.
1.4. THOROUGHLY WASH OUT JOINTS AND SATURATE WITH CLEAN WATER BEFORE GROUTING. THOROUGHLY GROUT INTO ALL JOINTS TO FILL ENTIRE LENGTH AND DEPTH. FILL FLUSH WITH FACE OF TILES MAKING A NEATLY FINISHED SMOOTH SURFACE. PREVENT STAINING OF GROUTED JOINTS.
1.5. WHERE STAINLESS STEEL CORNER GUARDS ARE INSTALLED, DELETE BULL NOSE.
1.6. VERIFY HEIGHT OF CORNER GUARDS.
1.7. CLEANING & PROTECTION
a. WIPE SURFACE CLEAN AFTER GROUTING, REMOVE ALL TRACES OF MORTAR AND GROUT. ANY OPEN OR CRACKED JOINTS SHALL BE POINTED UP.
b. CLOSE SPACES TO TRAFFIC OR OTHER WORK UNTIL ACCEPTANCE. REPAIR ALL DAMAGED WORK AT NO ADDITIONAL COST TO OWNER.

0950 ACOUSTICAL TREATMENT

A. DESCRIPTION
1.1. FURNISH AND INSTALL ALL GYPSUM CEILING PANELS AND ACOUSTICAL TILE CEILINGS INDICATED ON DRAWINGS, INCLUDING EDGE ANGLES, SUSPENSION SYSTEM, AND ALL MATERIALS AND LABOR NECESSARY FOR A COMPLETE FINISHED INSTALLATION. IF CARRYING CHANNELS ARE REQUIRED FOR INSTALLATION THEY SHALL BE PROVIDED UNDER THIS CONTRACT.
B. PRODUCTS
1.1. ACOUSTICAL TILE - REFER TO DOCUMENTS
1.2. SUSPENSION SYSTEM:
a. REFER TO DOCUMENTS FOR CEILING SUSPENSION SYSTEM. ALL MAIN RUNNERS AND ANGLES SHALL CONFORM TO ASTM C635 WITH COLOR AS SCHEDULED.
b. HANGER WIRES: NOT LESS THAN 12 GAUGE GALVANIZED STEEL.
C. INSTALLATION
1.1. INSTALLATION OF ACOUSTICAL MATERIALS SHALL BE MADE BY EXPERIENCED INSTALLERS IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS.
1.2. SUSPENSION SHALL BE SUPPORTED FROM STRUCTURAL MEMBERS ONLY, NOT FROM MECHANICAL OR ELECTRICAL WORK. METAL GRIDS SHALL BE PLACED TRUE TO LINE, ACCURATELY SPACED AND LEVEL. NO SAGS, WAVES, BUCKLES, OR CROOKED WORK WILL BE ACCEPTABLE. INSTALL EXTRA HANGER WIRES AT THE CORNER OF ALL LIGHT FIXTURES TO SUPPORT THE ADDITIONAL WEIGHT. MAXIMUM DEFLECTION= 1/360 OF SPAN.
1.3. FINGER MARKS, DIRT OR DAMAGE TO ACOUSTICAL MATERIALS WILL BE CAUSE FOR REJECTION OF WORK.
1.4. PROVIDE OWNER WITH "ATTIC STOCK" IN ACCORDANCE WITH DOCUMENTS.

0990 PAINTING

A. DESCRIPTION
1.1. THE CONTRACTOR SHALL DO ALL INTERIOR AND EXTERIOR PAINTING INDICATED ON THE DRAWINGS, INCLUDING WOOD, MASONRY, GYPSUM BOARD FERROUS METALS, PRIME COATED METAL SURFACES, REGISTERS AND GRILLES.
1.2. EXAMINE ALL SUBSURFACES TO RECEIVE WORK AND REPORT TO THE GENERAL CONTRACTOR WITH A COPY TO THE OWNER, ALL CONDITIONS DETRIMENTAL TO WORK. COMMENCEMENT OF WORK WILL BE CONSTRUED AS ACCEPTANCE OF ALL SUBSURFACES.
1.3. DELIVER MATERIALS AND EQUIPMENT IN ONE PLACE WHERE DIRECTED BY THE GENERAL CONTRACTOR'S FOREMAN. PROTECT FLOORS AND WALLS OF STORAGE ROOM. REMOVE OILY RAGS, WASTE ETC. FROM BUILDING EVERY NIGHT AND UNDER NO CIRCUMSTANCES ALLOW THEM TO ACCUMULATE.
B. PRODUCTS
1.1. ALL MATERIALS SHALL BE OF THE BEST GRADE MADE BY THE FOLLOWING MANUFACTURER:
BENJAMIN MOORE
C. INSTALLATION
1.1. THE CONTRACTOR SHALL EXAMINE ALL SURFACES TO BE FINISHED AND MAKE CERTAIN THAT THINGS CAN BE PUT IN PROPER CONDITION FOR FINISHING BY CUSTOMARY CLEANING, SANDING OR PUTTYING. THE CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR PRODUCING A SATISFACTORY JOB WITH THE MATERIALS SPECIFIED.
1.2. WORKMANSHIP SHALL BE OF THE VERY BEST ALL MATERIALS EVENLY SPREAD AND SMOOTHLY FLOWED ON GIVING A UNIFORM SHEEN AND COLOR WITHOUT RUNS AND SAGS. TRANSPARENT FINISHES SHALL HAVE ALL COATS BRUSHED OUT SMOOTH. SPRAYING IS ACCEPTABLE FOR PRIME COATS ONLY. ONLY SKILLED PAINTERS SHALL BE EMPLOYED AND ALL MATERIALS SHALL BE APPLIED IN STRICT ACCORDANCE WITH MANUFACTURERS DIRECTIONS. EXCEPT AS OTHERWISE SPECIFIED ONLY ONE MANUFACTURER'S MATERIALS SHALL BE USED IN EACH OF THE FINISHES SPECIFIED.
1.3. ALL SURFACES TO BE PAINTED OR ENAMELED SHALL BE CLEANED FREE OF LOOSE DIRT AND DUST BEFORE PAINTING IS STARTED. ALL KNOTS PITCH STREAKS AND SAPPY SPOTS SHALL FIRST BE TOUCHED UP WITH SHELLAC WHERE FINISH CALLS FOR PAINT OR ENAMEL.
1.4. ALL NECESSARY PUTTYING OF NAIL HOLES, CRACKS ETC SHALL BE DONE AFTER THE FIRST COAT WITH PUTTY OF A COLOR TO MATCH THAT OF THE FINISH.
1.5. ALL UNDERCOATS OF PAINT AND ENAMEL SHALL BE TINTED TO THE APPROXIMATE SHADE OF THE FINAL COAT. ALL SUCTION SPOTS OR HOT SPOTS IN CEMENT, AFTER THE APPLICATION OF THE FIRST COAT, SHALL BE TOUCHED UP BEFORE APPLYING THE SECOND COAT.
CONTRACTOR SHALL SECURE COLOR SCHEDULE FOR ROOMS BEFORE PRIMING WALLS.
1.6. TOPS AND BOTTOMS OF ALL DOORS SHALL BE FINISHED SAME AS BALANCE OF DOOR.
1.7. ALL PAINTING SHALL BE DONE TO CONFORM TO LOCAL HEALTH DEPARTMENT REGULATIONS.
1.8. PAINTING SCHEDULE: THE FOLLOWING SPECIFICATIONS FOR FINISHING IS NOT INTENDED TO MENTION EVERY PARTICULAR ITEM WHICH WILL RECEIVE PAINTERS FINISH, BUT IS INTENDED TO ESTABLISH TYPE AND QUALITY OF FINISH WHICH WILL BE REQUIRED ON VARIOUS MATERIALS.
INTERIOR AND EXTERIOR FERROUS METAL INCLUDING ELECTRICAL PANELS AT UTILITY AREA.
FIRST COAT- RUST INHIBITED PRIMER.
SECOND COAT- ENAMEL UNDERCOAT.
THIRD COAT- ALKYD SATIN FINISH ENAMEL.
WOOD:
FIRST COAT- POLYURETHANE VARNISH, SATIN FINISH, SANDED.
SECOND COAT- POLYURETHANE VARNISH, SATIN FINISH, SANDED.
THIRD COAT- POLYURETHANE VARNISH, SATIN FINISH, SANDED.
RECESSED LIGHT TRIMS: DIFFUSERS AND SPEAKER GRILLES 2 COATS.
1.9. COLOR SCHEDULE: REFER TO FINISH SCHEDULE. ANY QUESTIONS OR UNCLEAR COLOR SPECIFICATIONS SHOULD BE DIRECTED TO THE OWNER OR ITS REPRESENTATIVE.

0995 WALL COVERINGS

A. DESCRIPTION
1.1. INSTALLATION OF ALL WALL COVERING IS SPECIFIED UNDER THIS SECTION.
1.2. FIRE HAZARD CLASSIFICATION: WALL COVERING MATERIAL TO MEET OR EXCEED FEDERAL SPECIFICATION ASTM-E-84, DUB CCC -W-408A, CLASS A WITH A FLAME SPREAD OF 0, FUEL CONTRIBUTION OF 0, AND SMOKE DEVELOPMENT OF 5.

0998 FIBERGLASS REINFORCED PLASTIC PANELS (FRP)

A. DESCRIPTION
1.1. SUBMITTALS
a. SAMPLES: TWO 8" X 10" SAMPLES OF EACH PANEL, ONE 10" PIECE OF EACH TYPE OF TRIM AND MOLDING. SAMPLE FASTENERS.
b. DETAILED INSTALLATION GUIDE FORM #855.

B. PRODUCTS
1.1. FRP PANELS: GLASBORD- P AS MANUFACTURED BY CRANE COLOR- WHITE
1.2. CLEAN WALL SURFACE OF ALL FOREIGN MATERIAL AND PREPARE SURFACE AS REQUIRED BY FRP MANUFACTURER.

C. INSTALLATION
1.1. INSTALL PANELS IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION GUIDE.
1.2. APPLY ADHESIVE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS INSTALL SEAMS PLUMB AND NOT LESS THAN 6" FROM CORNERS HORIZONTAL SEAMS NOT PERMITTED.
1.3. REMOVE EXCESS ADHESIVE PROMPTLY; REPLACE PANELS, WHICH CANNOT BE COMPLETELY CLEANED.

JAKAN ENGINEERING
CIVIL • STRUCTURAL
P.O. BOX 391
Frisco, Texas 75034
TBPE No. F-13414
HUB #46945
Phone: 682-561-9449
#635-23

SON H. NGO
NEW MEXICO
28755
PROFESSIONAL ENGINEER
11-13-23
11/13/2023

REVIEWED - GENERAL BUILDING
Chris Archuleta
01/23/2024 10:38:11 AM
A-155698

TA TRAVEL CENTER
PARCEL A, B, AND C WITHIN LOT 3 IN SECTION 19, T11N, R31E, N.M.P.M.
TUCUMCARI, NM
NEW DEVELOPMENT

DATE: Nov. 2023

REVISIONS

SHEET TITLE
SPECIFICATION

SHEET NUMBER
A002

ISSUE DATE
11/10/2023

CHAPTER 3: BUILDING BLOCKS

302 Floor or Ground Surfaces

302.2 Carpet. Carpet or carpet tile shall be securely attached and shall have a firm cushion, pad, or backing or no cushion or pad. Carpet or carpet tile shall have a level loop, textured loop, level cut pile, or level cut/uncut pile texture.

Pile height shall be 1/2 inch (13 mm) maximum. Exposed edges of carpet shall be fastened to floor surfaces and shall have trim on the entire length of the exposed edge. Carpet edge trim shall comply with 303.

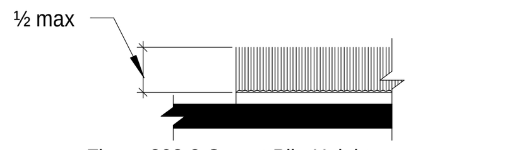


Figure 302.2 Carpet Pile Height

302.3 Openings. Openings in floor or ground surfaces shall not allow passage of a sphere more than 1/2 inch (13 mm) diameter except as allowed in 407.4.3, 409.4.3, 410.4, 810.5.3 and 810.10. Elongated openings shall be placed so that the long dimension is perpendicular to the dominant direction of travel.

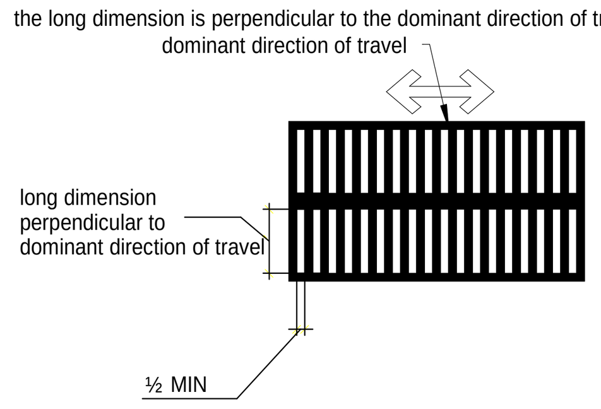


Figure 302.3 Elongated Openings in Floor or Ground Surfaces

303.2 Vertical. Changes in level of 1/4 inch (6.4 mm) high maximum shall be permitted to be vertical.

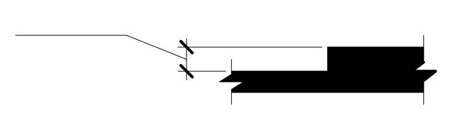


Figure 303.2 Vertical Change in Level

303.3 Beveled. Changes in level between 1/4 inch (6.4 mm) high minimum and 1/2 inch (13 mm) high maximum shall be beveled with a slope not steeper than 1:2.

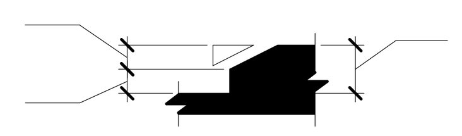


Figure 303.3 Beveled Change in Level

304 Turning Space

304.3.1 Circular Space. The turning space shall be a space of 60 inches (1525 mm) diameter min.

The space shall be permitted to include knee and toe clearance complying with 306.

304.3.2 T-Shaped Space. The turning space shall be a T-shaped space within a 60 inch (1525 mm) square minimum with arms and base 36 inches (915 mm) wide minimum. Each arm of the T shall be clear of obstructions 12 inches (305 mm) minimum in each direction and the base shall be clear of obstructions 24 inches (610 mm) minimum. The space shall be permitted to include knee and toe clearance complying with 306 only at the end of either the base or one arm.

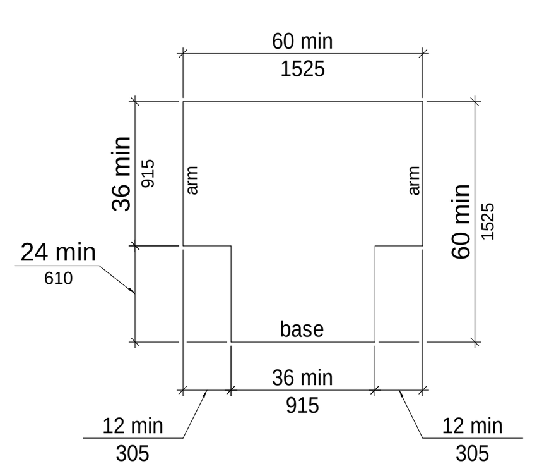


Figure 304.3.2 T-Shaped Turning Space

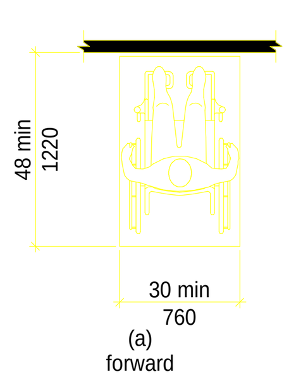


Figure 305.3 Clear Floor or Ground Space

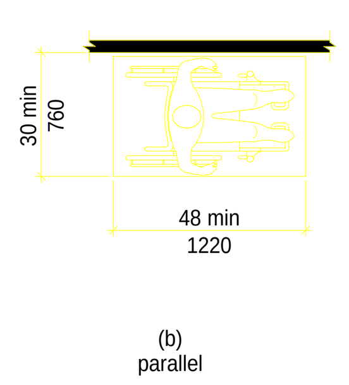


Figure 305.5 Position of Clear Floor or Ground Space

305.7.1 Forward Approach. Alcoves shall be 36 inches (915 mm)wide minimum where the depth exceeds 24 inches (610 mm).

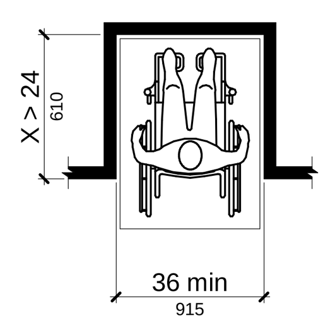


Figure 305.7.1 Maneuvering Clearance in an Alcove, Forward Approach

305.7.2 Parallel Approach. Alcoves shall be 60 inches (1525 mm) wide minimum where the depth exceeds 15 inches (380 mm).

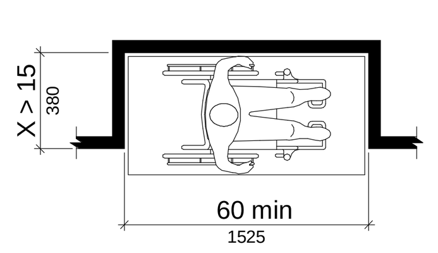


Figure 305.7.2 Maneuvering Clearance in an Alcove, Parallel Approach

306 Knee and Toe Clearance

306.2 Toe Clearance.

306.2.1 General. Space under an element between the finish floor or ground and 9 inches (230 mm) above the finish floor or ground shall be considered toe clearance and shall comply with 306.2.

306.2.2 Maximum Depth. Toe clearance shall extend 25 inches (635 mm) maximum under an element.

306.2.3 Minimum Required Depth. Where toe clearance is required at an element as part of a clear floor space, the toe clearance shall extend 17 inches (430 mm) minimum under the element.

306.2.4 Additional Clearance. Space extending greater than 6 inches (150 mm) beyond the available knee clearance at 9 inches (230 mm) above the finish floor or ground shall not be considered toe clearance.

306.2.5 Width. Toe clearance shall be 30 inches (760 mm) wide minimum.

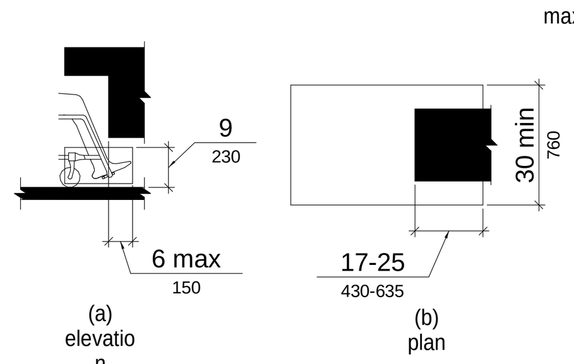


Figure 306.2 Toe Clearance

306.3 Knee Clearance.

306.3.1 General. Space under an element between 9 inches (230 mm) and 27 inches (685 mm) above the finish floor or ground shall be considered knee clearance and shall comply with 306.3.

306.3.2 Maximum Depth. Knee clearance shall extend 25 inches (635 mm) maximum under an element at 9 inches (230 mm) above the finish floor or ground.

306.3.3 Minimum Required Depth. Where knee clearance is required under an element as part of a clear floor space, the knee clearance shall be 11 inches (280 mm) deep minimum at 9 inches (230 mm) above the finish floor or ground, and 8 inches (205 mm) deep minimum at 27 inches (685 mm) above the finish floor or ground.

306.3.4 Clearance Reduction. Between 9 inches (230 mm) and 27 inches (685 mm) above the finish floor or ground, the knee clearance shall be permitted to reduce at a rate of 1 inch (25 mm) in depth for each 6 inches (150 mm) in height.

306.3.5 Width. Knee clearance shall be 30 inches (760 mm) wide minimum.

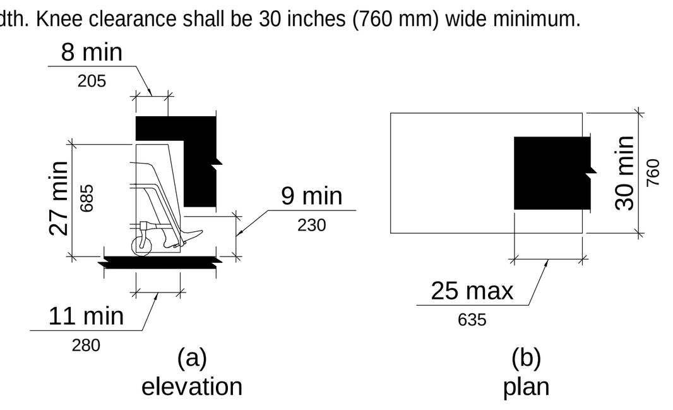


Figure 306.3 Knee Clearance

307 Protruding Objects

307.2 Protrusion Limits. Objects with leading edges more than 27 inches (685 mm) and not more than 80 inches (2030 mm) above the finish floor or ground shall protrude 4 inches (100 mm) maximum horizontally into the circulation path.

EXCEPTION: Handrails shall be permitted to protrude 4 1/2 inches (115 mm) maximum.

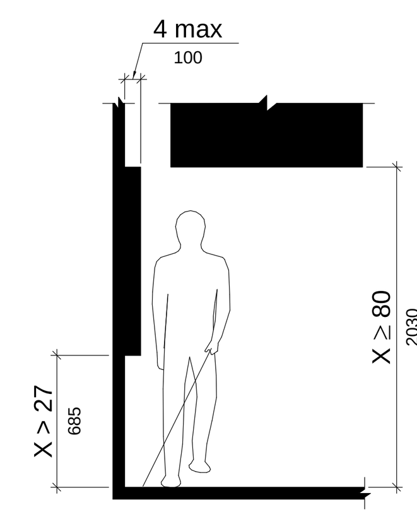


Figure 307.2 Limits of Protruding Objects

307.3 Post-Mounted Objects. Free-standing objects mounted on posts or pylons shall overhang circulation paths 12 inches (305 mm) maximum when located 27 inches (685 mm) minimum and 80 inches (2030 mm) maximum above the finish floor or ground. Where a sign or other obstruction is mounted between posts or pylons and the clear distance between the posts or pylons is greater than 12 inches (305 mm), the lowest edge of such sign or obstruction shall be 27 inches (685 mm) minimum or 80 inches (2030 mm) minimum above the finish floor or ground.

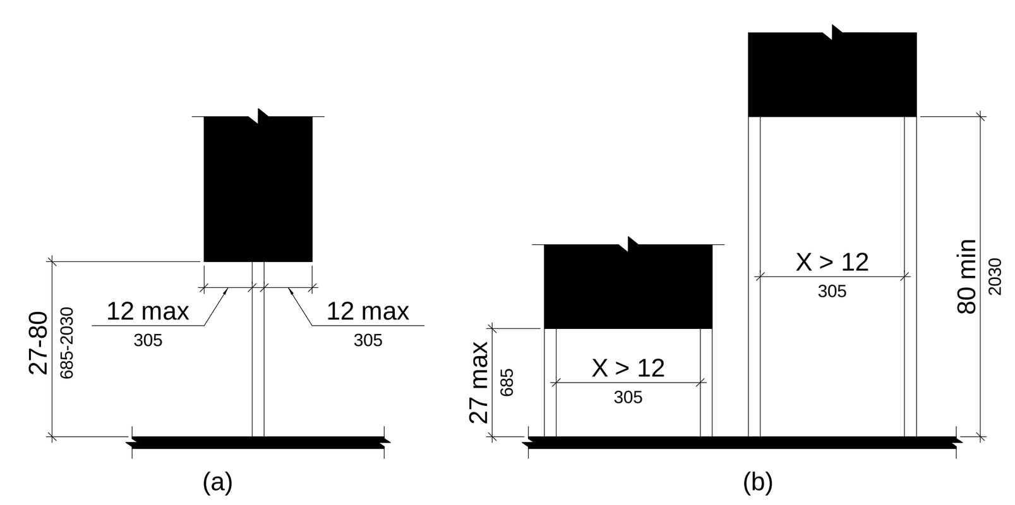


Figure 307.3 Post-Mounted Protruding Objects

307.4 Vertical Clearance. Vertical clearance shall be 80 inches (2030 mm) high minimum. Guardrails or other barriers shall be provided where the vertical clearance is less than 80 inches (2030 mm) high. The leading edge of such guardrail or barrier shall be located 27 inches (685 mm) maximum above the finish floor or ground.

EXCEPTION: Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the finish floor or ground.

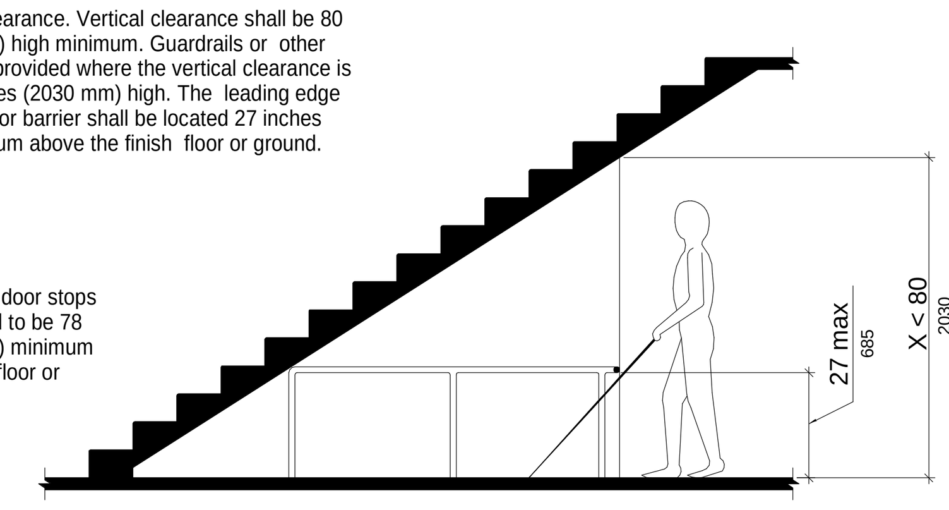


Figure 307.4 Vertical Clearance

308 Reach Ranges

Children's Reach Ranges

Forward or Side Reach	High (maximum)	Low (minimum)
Ages 3 and 4	36 in (915 mm)	20 in (510 mm)
Ages 5 through 8	40 in (1015 mm)	18 in (455 mm)
Ages 9 through 12	44 in (1120 mm)	16 in (405 mm)

308.2 Forward Reach.

308.2.1 Unobstructed. Where a forward reach is unobstructed, the high forward reach shall be 48 inches (1220 mm) maximum and the low forward reach shall be 15 inches (380 mm) minimum above the finish floor or ground.

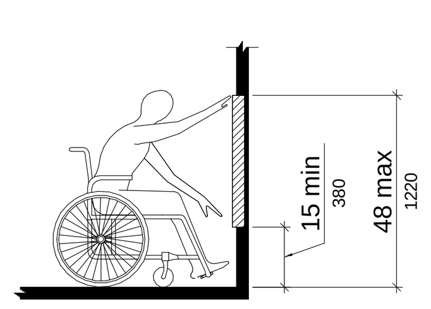


Figure 308.2.2 Obstructed High Forward Reach

308.2.2 Obstructed High Reach. Where a high forward reach is over an obstruction, the clear floor space shall extend beneath the element for a distance not less than the required reach depth over the obstruction. The high forward reach shall be 48 inches (1220 mm) maximum where the reach depth is 20 inches (510 mm) maximum. Where the reach depth exceeds 20 inches (510 mm), the high forward reach shall be 44 inches (1120 mm) maximum and the reach depth shall be 25 inches (635 mm) maximum.

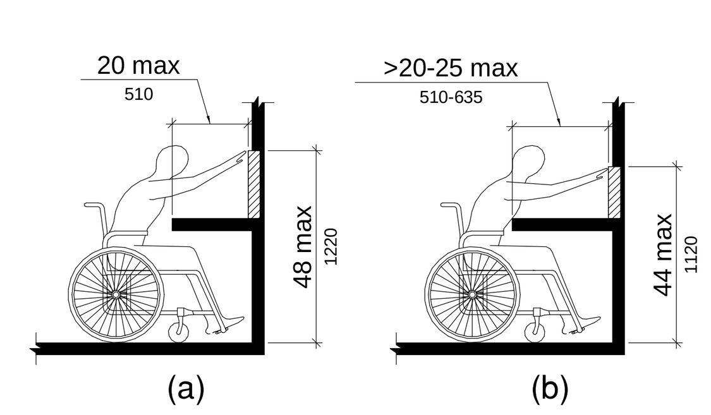
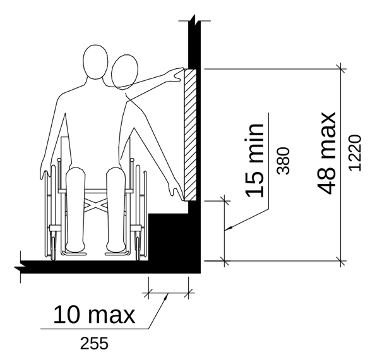


Figure 308.3.1 Unobstructed Side Reach

308.3 Side Reach.

308.3.1 Unobstructed. Where a clear floor or ground space allows a parallel approach to an element and the side reach is unobstructed, the high side reach shall be 48 inches (1220 mm) maximum and the low side reach shall be 15 inches (380 mm) minimum above the finish floor or ground.



308.3.2 Obstructed High Reach. Where a clear floor or ground space allows a parallel approach to an element and the high side reach is over an obstruction, the height of the obstruction shall be 34 inches (865 mm) maximum and the depth of the obstruction shall be 24 inches (610 mm) maximum. The high side reach shall be 48 inches (1220 mm) maximum for a reach depth of 10 inches (255 mm) maximum. Where the reach depth exceeds 10 inches (255 mm), the high side reach shall be 46 inches (1170 mm) maximum for a reach depth of 24 inches (610 mm) maximum.

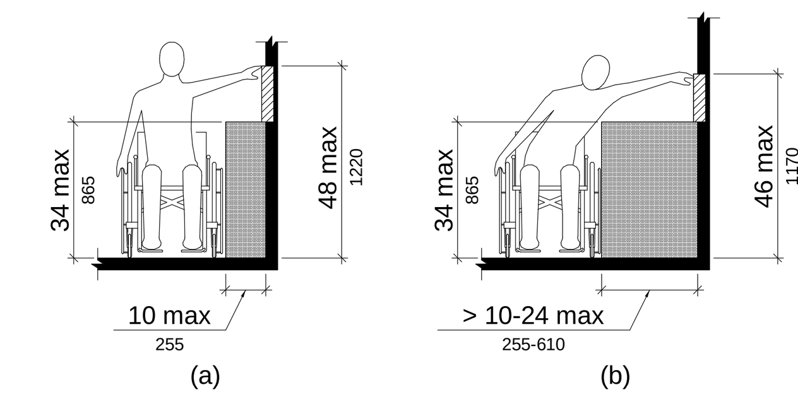


Figure 308.3.2 Obstructed High Side Reach

309 Operable Parts

309.2 Clear Floor Space. A clear floor or ground space complying with 305 shall be provided.

309.3 Height. Operable parts shall be placed within one or more of the reach ranges specified in 308.

309.4 Operation. Operable parts shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate operable parts shall be 5 pounds (22.2 N) maximum.

CHAPTER 4: ACCESSIBLE ROUTES

402.2 Components. Accessible routes shall consist of one or more of the following components: walking surfaces with a running slope not steeper than 1:20, doorways, ramps, curb ramps excluding the flared sides, elevators, and platform lifts. All components of an accessible route shall comply with the applicable requirements of Chapter 4.

Advisory 402.2 Components. Walking surfaces must have running slopes not steeper than 1:20, see 403.3. Other components of accessible routes, such as ramps (405) and curb ramps (406), are permitted to be more steeply sloped.

403 Walking Surfaces

403.1 General. Walking surfaces that are a part of an accessible route shall comply with 403.

403.2 Floor or Ground Surface. Floor or ground surfaces shall comply with 302.

403.3 Slope. The running slope of walking surfaces shall not be steeper than 1:20. The cross slope of walking surfaces shall not be steeper than 1:48.

403.4 Changes in Level. Changes in level shall comply with 303.

403.5 Clearances. Walking surfaces shall provide clearances complying with 403.5.

EXCEPTION: Within employee work areas, clearances on common use circulation paths shall be permitted to be decreased by work area equipment provided that the decrease is essential to the function of the work being performed.

403.5.1 Clear Width. Except as provided in 403.5.2 and 403.5.3, the clear width of walking surfaces shall be 36 inches (915 mm) minimum.

EXCEPTION: The clear width shall be permitted to be reduced to 32 inches (815 mm) minimum for a length of 24 inches (610 mm) maximum provided that reduced width segments are separated by segments that are 48 inches (1220 mm) long minimum and 36 inches (915 mm) wide minimum.

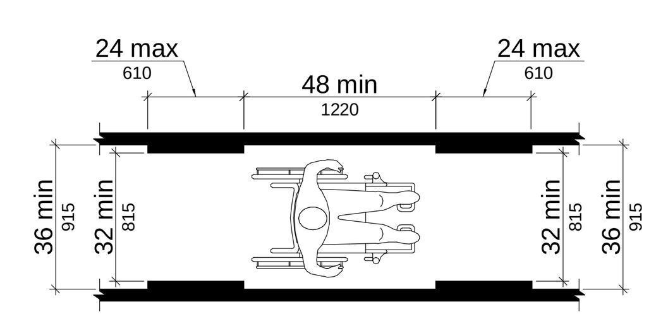


Figure 403.5.1 Clear Width of an Accessible Route

403.5.2 Clear Width at Turn. Where the accessible route makes a 180 degree turn around an element which is less than 48 inches (1220 mm) wide, clear width shall be 42 inches (1065 mm) minimum approaching the turn, 48 inches (1220 mm) minimum at the turn and 42 inches (1065 mm) minimum leaving the turn.

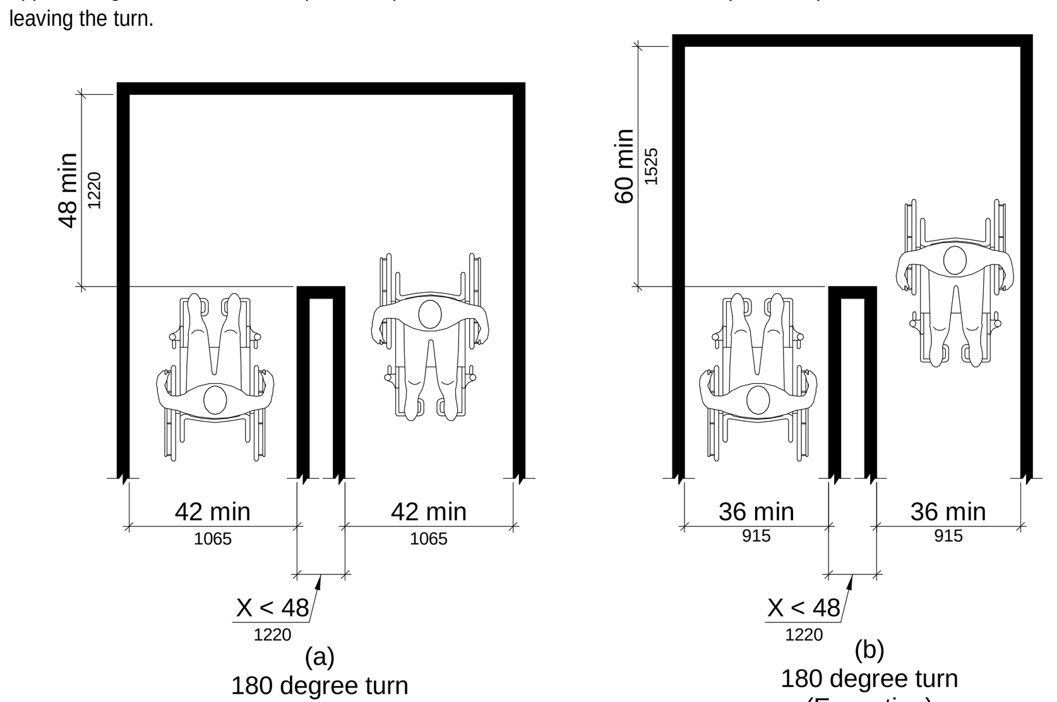


Figure 403.5.2 Clear Width at Turn

403.5.3 Passing Spaces. An accessible route with a clear width less than 60 inches (1525 mm) shall provide passing spaces at intervals of 200 feet (61 m) maximum.

404 Doors, Doorways, and Gates

404.2.3 Clear Width. Door openings shall provide a clear width of 32 inches (815 mm) minimum. Clear openings of doorways with swinging doors shall be measured between the face of the door and the stop, with the door open 90 degrees. Openings more than 24 inches (610 mm) deep shall provide a clear opening of 36 inches (915 mm) minimum. There shall be no projections into the required clear opening width lower than 34 inches (865 mm) above the finish floor or ground. Projections into the clear opening width between 34 inches (865 mm) and 80 inches (2030 mm) above the finish floor or ground shall not exceed 4 inches (100 mm).

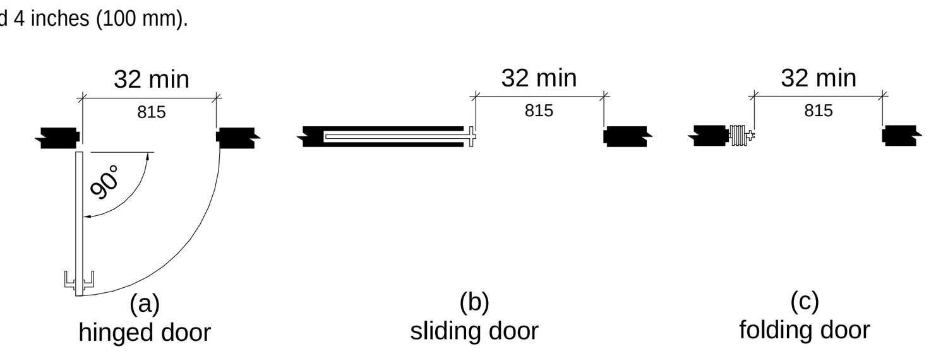


Figure 404.2.3 Clear Width of Doorways

404.2.4 Maneuvering Clearances. Minimum maneuvering clearances at doors and gates shall comply with 404.2.4. Maneuvering clearances shall extend the full width of the doorway and the required latch side or hinge side clearance.

404.2.4.3 Recessed Doors and Gates. Maneuvering clearances for forward approach shall be provided when any obstruction within 18 inches (455 mm) of the latch side of a doorway projects more than 8 inches (205 mm) beyond the face of the door, measured perpendicular to the face of the door or gate.

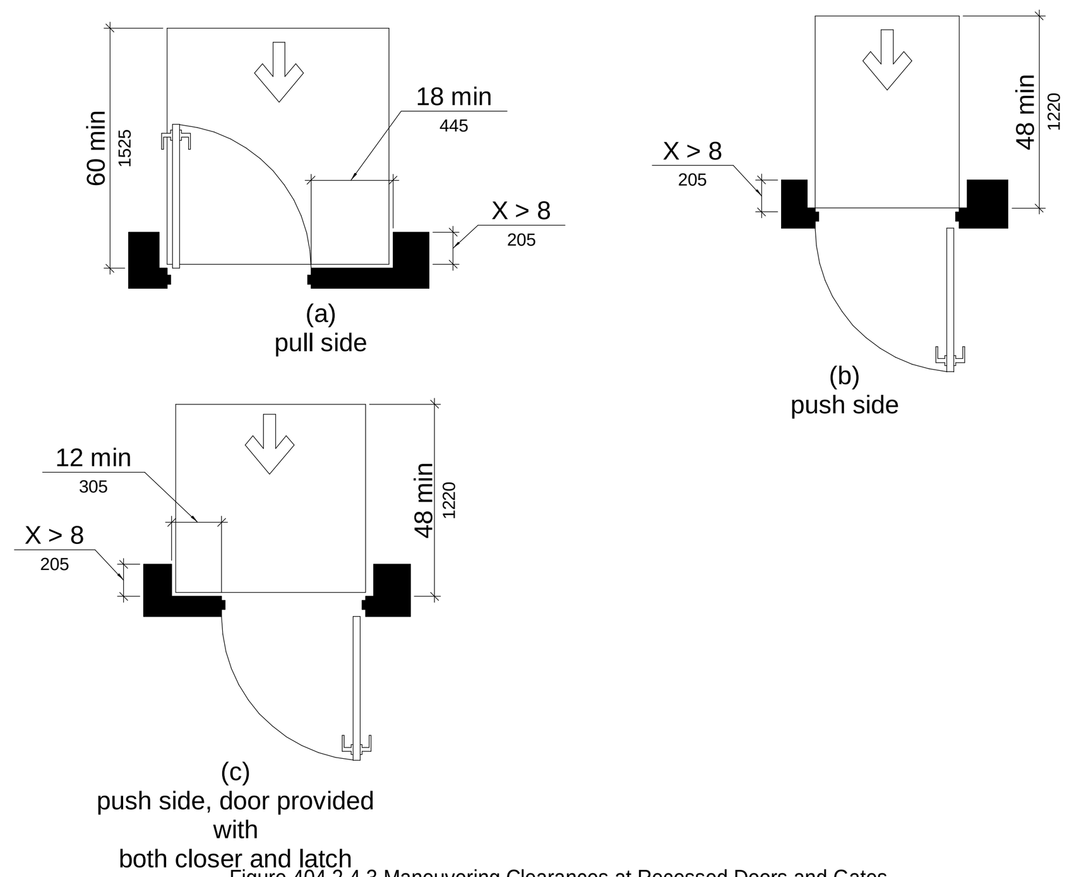


Figure 404.2.4.3 Maneuvering Clearances at Recessed Doors and Gates

404.2.6 Doors in Series and Gates in Series. The distance between two hinged or pivoted doors in series and gates in series shall be 48 inches (1220 mm) minimum plus the width of doors or gates swinging into the space.

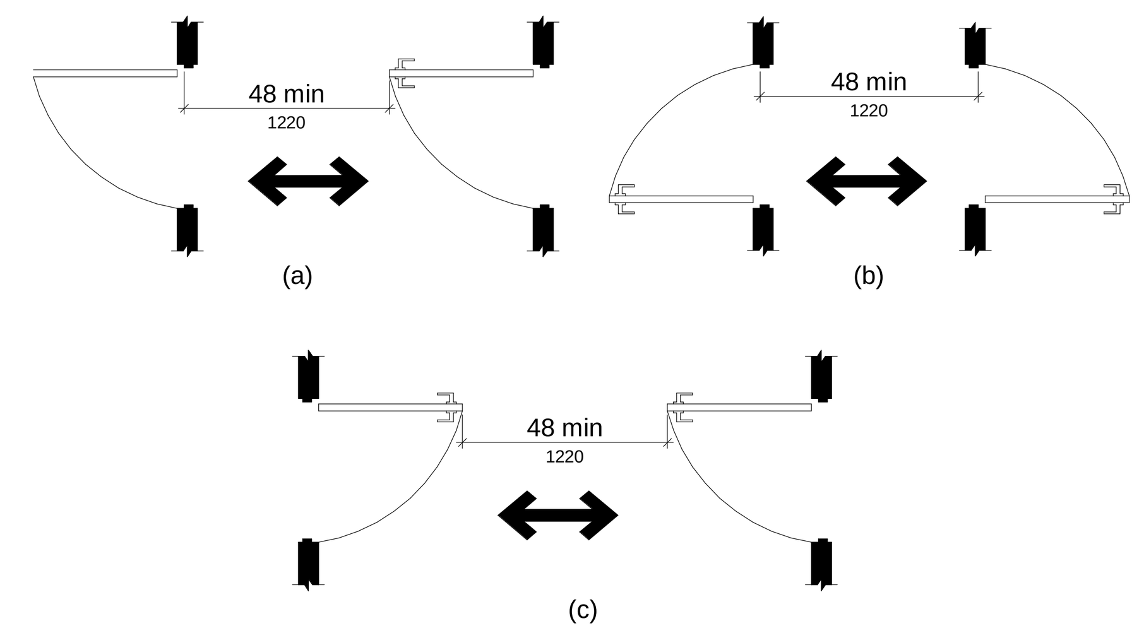


Figure 404.2.6 Doors in Series and Gates in Series

404.2.7 Door and Gate Hardware. Handles, pulls, latches, locks, and other operable parts on doors and gates shall comply with 309.4. Operable parts of such hardware shall be 34 inches (865 mm) minimum and 48 inches (1220 mm) maximum above the finish floor or ground. Where sliding doors are in the fully open position, operating hardware shall be exposed and usable from both sides.

404.2.8.1 Door Closers and Gate Closers. Door closers and gate closers shall be adjusted so that from an open position of 90 degrees, the time required to move the door to a position of 12 degrees from the latch is 5 seconds minimum.

404.2.8.2 Spring Hinges. Door and gate spring hinges shall be adjusted so that from the open position of 70 degrees, the door or gate shall move to the closed position in 1.5 seconds minimum.

404.2.9 Door and Gate Opening Force. Fire doors shall have a minimum opening force allowable by the appropriate administrative authority. The force for pushing or pulling open a door or gate other than fire doors shall be as follows:

1. Interior hinged doors and gates: 5 pounds (22.2 N) maximum.

2. Sliding or folding doors: 5 pounds (22.2 N) maximum.

These forces do not apply to the force required to retract latch bolts or disengage other devices that hold the door or gate in a closed position.

404.2.10 Door and Gate Surfaces. Swinging door and gate surfaces within 10 inches (255 mm) of the finish floor or ground measured vertically shall have a smooth surface on the push side extending the full width of the door or gate. Parts creating horizontal or vertical joints in these surfaces shall be within 1/16 inch (1.6 mm) of the same plane as the other. Cavities created by added kick plates shall be capped.

404.2.11 Vision Lights. Doors, gates, and side lights adjacent to doors or gates, containing one or more glazing panels that permit viewing through the panels shall have the bottom of at least one glazed panel located 43 inches (1090 mm) maximum above the finish floor.

404.3 Automatic and Power-Assisted Doors and Gates. Automatic doors and automatic gates shall comply with 404.3. Full-powered automatic doors shall comply with ANSI/BHMA A156.10 (incorporated by reference, see "Referenced Standards" in Chapter 1). Low-energy and power-assisted doors shall comply with ANSI/BHMA A156.19 (1997 or 2002 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1).

404.3.2 Maneuvering Clearance. Clearances at power-assisted doors and gates shall comply with 404.2.4. Clearances at automatic doors and gates without standby power and serving an accessible means of egress shall comply with 404.2.4.

404.3.7 Revolving Doors, Revolving Gates, and Turnstiles. Revolving doors, revolving gates, and turnstiles shall not be part of an accessible route.

405 Ramps

405.2 Slope. Ramp runs shall have a running slope not steeper than 1:12.

405.3 Cross Slope. Cross slope of ramp runs shall not be steeper than 1:48.

405.5 Clear Width. The clear width of a ramp run and, where handrails are provided, the clear width between handrails shall be 36 inches (915 mm) minimum.

405.6 Rise. The rise for any ramp run shall be 30 inches (760 mm) maximum.

405.7 Landings. Ramps shall have landings at the top and the bottom of each ramp run.

Landings shall comply with 405.7.

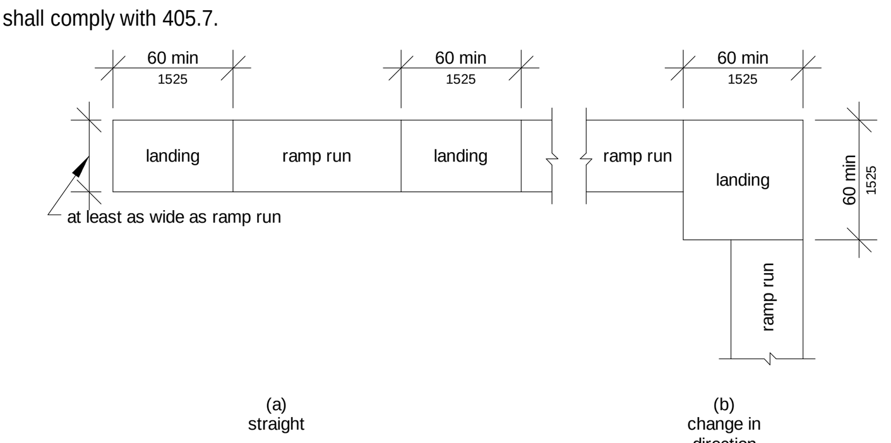


Figure 405.7 Ramp Landings

405.7.1 Slope. Landings shall have slope no steeper than 1:48. Changes in level are not permitted.

405.7.2 Width. The landing clear width shall be at least as wide as the widest ramp run leading to the landing.

405.7.3 Length. The landing clear length shall be 60 inches (1525 mm) long minimum.

405.7.4 Change in Direction. Ramps that change direction between runs at landings shall have a clear landing 60 inches (1525 mm) minimum by 60 inches (1525 mm) minimum.

405.7.5 Doorways. Where doorways are located adjacent to a ramp landing, maneuvering clearances required by 404.2.4 and 404.3.2 shall be permitted to overlap the required landing

405.8 Handrails. Ramp runs with a rise greater than 6 inches (150 mm) shall have handrails complying with 505.

405.9 Edge Protection. Edge protection complying with 405.9.1 or 405.9.2 shall be provided on each side of ramp runs and at each side of ramp landings.

405.9.1 Extended Floor or Ground Surface. The floor or ground surface of the ramp run or landing shall extend 12 inches (305 mm) minimum beyond the inside face of a handrail complying with 505.

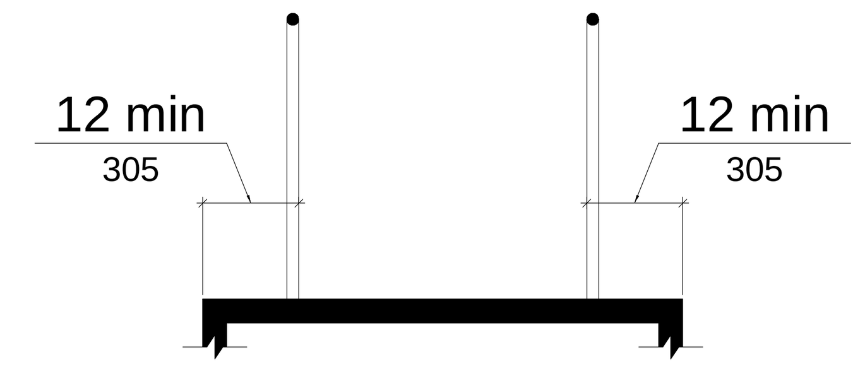


Figure 405.9.1 Extended Floor or Ground Surface Edge Protection

405.9.2 Curb or Barrier. A curb or barrier shall be provided that prevents the passage of a 4 inch (100 mm) diameter sphere, where any portion of the sphere is within 4 inches (100 mm) of the finish floor or ground surface.

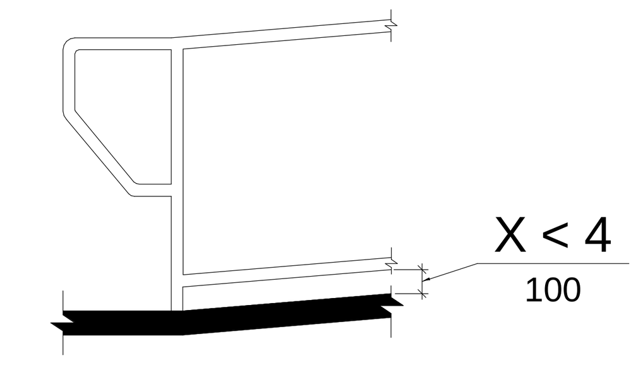


Figure 405.9.2 Curb or Barrier Edge Protection

406 Curb Ramps

406.1 General. Curb ramps on accessible routes shall comply with 406, 405.2 through 405.5, and 405.10.

406.2 Counter Slope. Counter slopes of adjoining gutters and road surfaces immediately adjacent to the curb ramp shall not be steeper than 1:20. The adjacent surfaces at transitions at curb ramps to walks, gutters, and streets shall be at the same level.

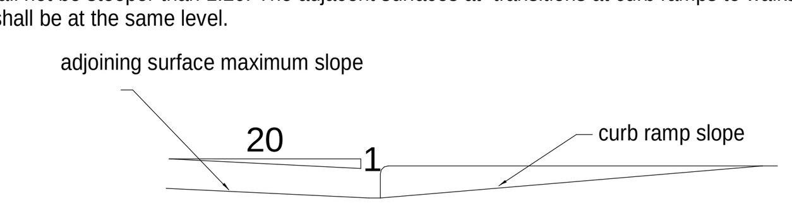


Figure 406.2 Counter Slope of Surfaces Adjacent to Curb Ramps

406.3 Sides of Curb Ramps. Where provided, curb ramp flares shall not be steeper than 1:10.

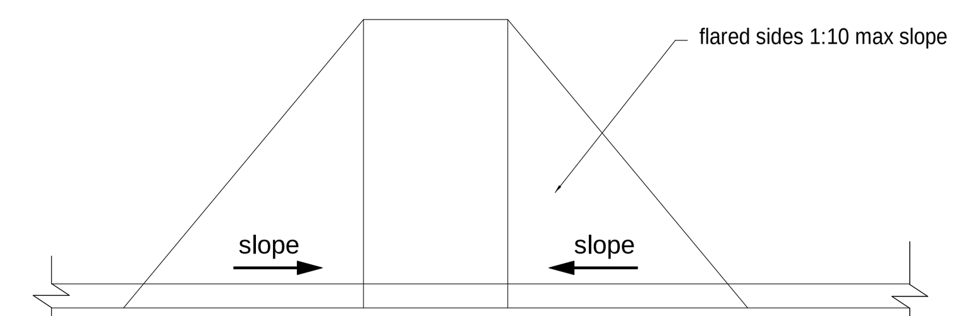


Figure 406.3 Sides of Curb Ramps

406.4 Landings. Landings shall be provided at the tops of curb ramps. The landing clear length shall be 36 inches (915 mm) minimum. The landing clear width shall be at least as wide as the curb ramp, excluding flared sides, leading to the landing.

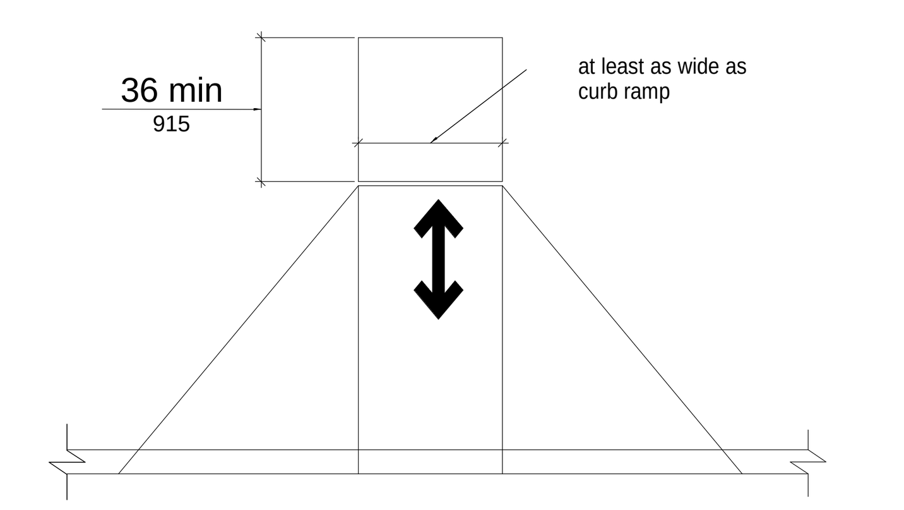


Figure 406.4 Landings at the Top of Curb Ramps

406.5 Location. Curb ramps and the flared sides of curb ramps shall be located so that they do not project into vehicular traffic lanes, parking spaces, or parking access aisles. Curb ramps at marked crossings shall be wholly contained within the markings, excluding any flared sides.

406.6 Diagonal Curb Ramps. Diagonal or corner type curb ramps with returned curbs or other well-defined edges shall have the edges parallel to the direction of pedestrian flow. The bottom of diagonal curb ramps shall have a clear space 48 inches (1220 mm) minimum outside active traffic lanes of the roadway. Diagonal curb ramps provided at marked crossings shall provide the 48 inches (1220 mm) minimum clear space within the markings. Diagonal curb ramps with flared sides shall have a segment of curb 24 inches (610 mm) long minimum located on each side of the curb ramp and within the marked crossing.

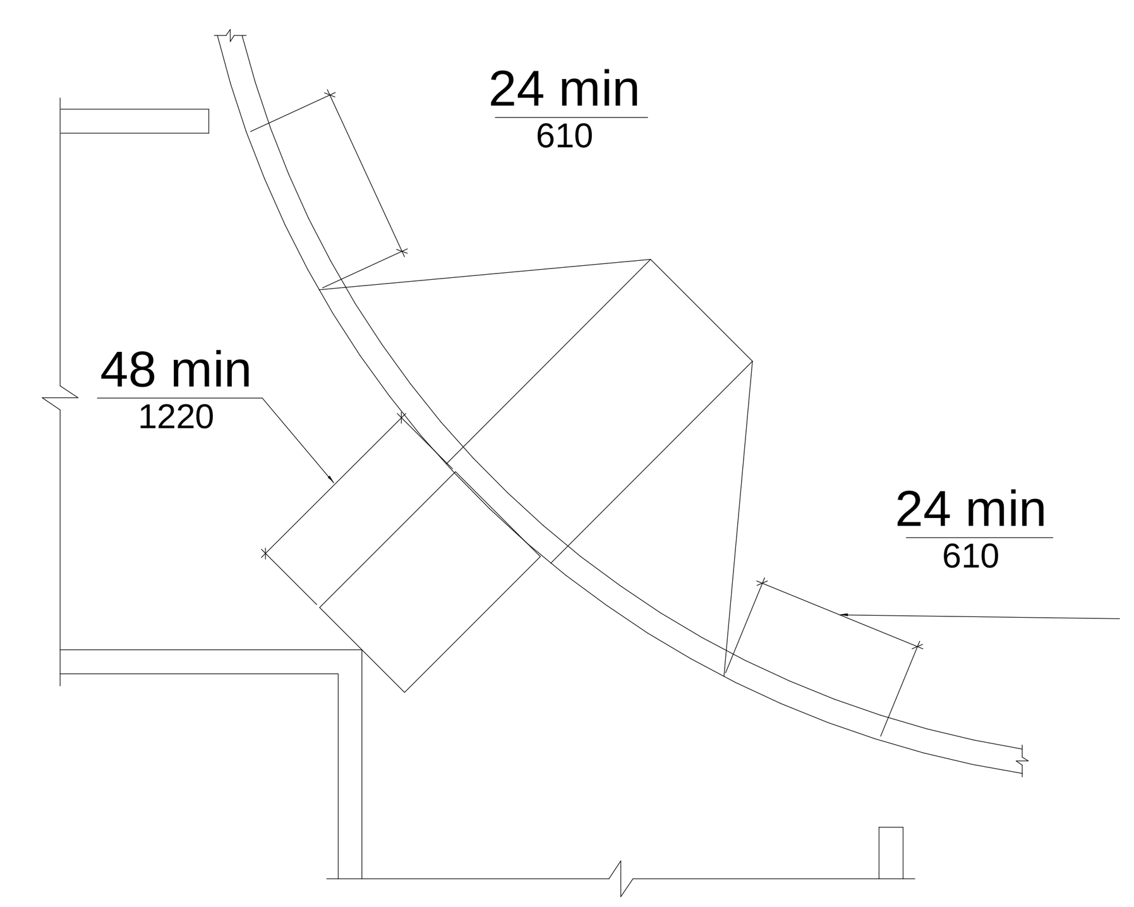


Figure 406.6 Diagonal or Corner Type Curb Ramps

406.7 Islands. Raised islands in crossings shall be cut through level with the street or have curb ramps at both sides. Each curb ramp shall have a level area 48 inches (1220 mm) long minimum by 36 inches (915 mm) wide minimum at the top of the curb ramp in the part of the island intersected by the crossings. Each 48 inch (1220 mm) minimum by 36 inch (915 mm) minimum area shall be oriented so that the 48 inch (1220 mm) minimum length is in the direction of the running slope of the curb ramp it serves. The 48 inch (1220 mm) minimum by 36 inch (915 mm) minimum areas and the accessible route shall be permitted to overlap.

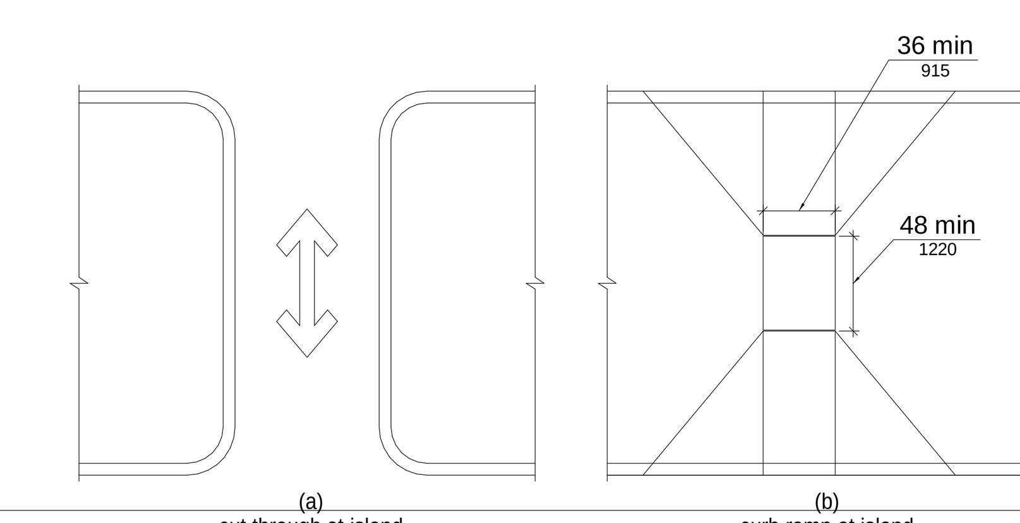


Figure 406.7 Islands in Crossings

JAKAN ENGINEERING
CIVIL • STRUCTURAL
P.O. BOX 391
Frisco, Texas 75034
TBPE No. F-13414
HUB #46945
Phone: 682-561-9449
#635-23

SON H. NGO
NEW MEXICO
28755
PROFESSIONAL ENGINEER
11-13-23
REVIEWED - GENERAL BUILDING
Chris Andrews
01/23/2024 10:34:51 AM
A-155698
11/13/2023

TA TRAVEL CENTER
PARCEL A, B, AND C WITHIN LOT 3 IN SECTION 19, T11N, R31E, N.M.P.M.
TUCUMCARI, NM
NEW DEVELOPMENT

DATE: Nov. 2023

REVISIONS

SHEET TITLE
ACCESSIBILITY STANDARDS

SHEET NUMBER
A003

ISSUE DATE
11/10/2023

CHAPTER 3: BUILDING BLOCKS

302 Floor or Ground Surfaces

302.2 Carpet. Carpet or carpet tile shall be securely attached and shall have a firm cushion, pad, or backing or no cushion or pad. Carpet or carpet tile shall have a level loop, textured loop, level cut pile, or level cut/uncut pile texture.

Pile height shall be 1/2 inch (13 mm) maximum. Exposed edges of carpet shall be fastened to floor surfaces and shall have trim on the entire length of the exposed edge. Carpet edge trim shall comply with 303.

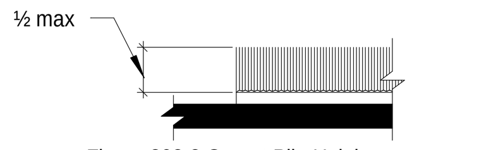


Figure 302.2 Carpet Pile Height

302.3 Openings. Openings in floor or ground surfaces shall not allow passage of a sphere more than 1/2 inch (13 mm) diameter except as allowed in 407.4.3, 409.4.3, 410.4, 810.5.3 and 810.10. Elongated openings shall be placed so that the long dimension is perpendicular to the dominant direction of travel.

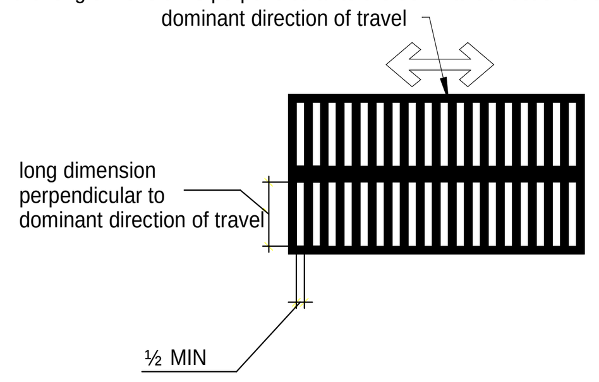


Figure 302.3 Elongated Openings in Floor or Ground Surfaces

303.2 Vertical. Changes in level of 1/4 inch (6.4 mm) high maximum shall be permitted to be vertical.

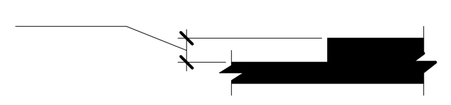


Figure 303.2 Vertical Change in Level

303.3 Beveled. Changes in level between 1/4 inch (6.4 mm) high minimum and 1/2 inch (13 mm) high maximum shall be beveled with a slope not steeper than 1:2.

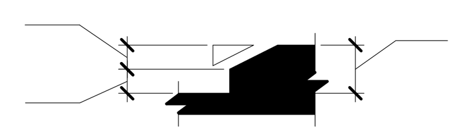


Figure 303.3 Beveled Change in Level

304 Turning Space

304.3.1 Circular Space. The turning space shall be a space of 60 inches (1525 mm) diameter min.

The space shall be permitted to include knee and toe clearance complying with 306.

304.3.2 T-Shaped Space. The turning space shall be a T-shaped space within a 60 inch (1525 mm) square minimum with arms and base 36 inches (915 mm) wide minimum. Each arm of the T shall be clear of obstructions 12 inches (305 mm) minimum in each direction and the base shall be clear of obstructions 24 inches (610 mm) minimum. The space shall be permitted to include knee and toe clearance complying with 306 only at the end of either the base or one arm.

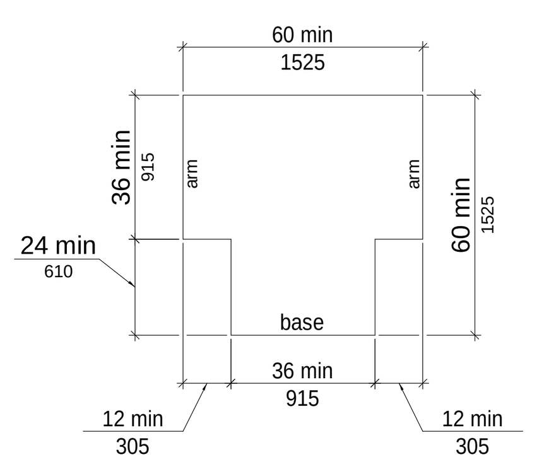


Figure 304.3.2 T-Shaped Turning Space

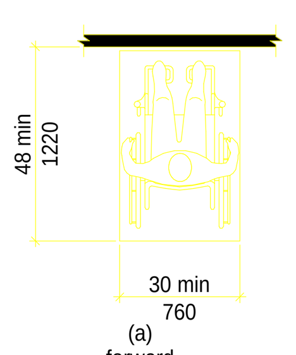


Figure 305.3 Clear Floor or Ground Space

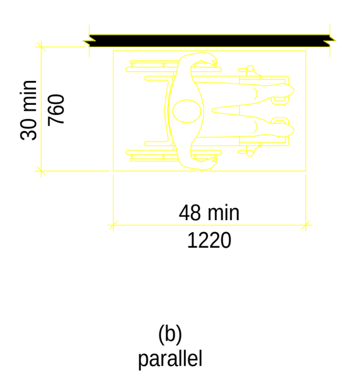


Figure 305.5 Position of Clear Floor or Ground Space

305.7.1 Forward Approach. Alcoves shall be 36 inches (915 mm)wide minimum where the depth exceeds 24 inches (610 mm).

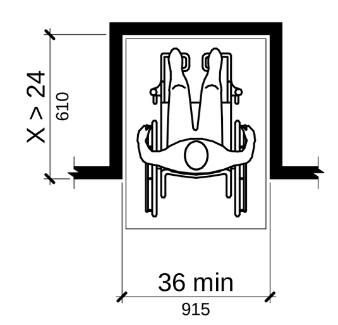


Figure 305.7.1 Maneuvering Clearance in an Alcove, Forward Approach

305.7.2 Parallel Approach. Alcoves shall be 60 inches (1525 mm) wide minimum where the depth exceeds 15 inches (380 mm).

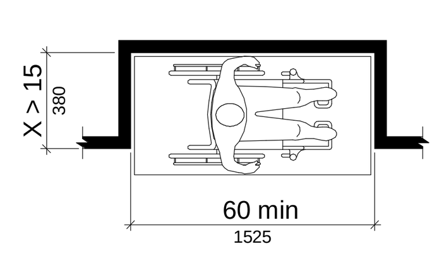


Figure 305.7.2 Maneuvering Clearance in an Alcove, Parallel Approach

306 Knee and Toe Clearance

306.2 Toe Clearance.

306.2.1 General. Space under an element between the finish floor or ground and 9 inches (230 mm) above the finish floor or ground shall be considered toe clearance and shall comply with 306.2.

306.2.2 Maximum Depth. Toe clearance shall extend 25 inches (635 mm) maximum under an element.

306.2.3 Minimum Required Depth. Where toe clearance is required at an element as part of a clear floor space, the toe clearance shall extend 17 inches (430 mm) minimum beneath the element.

306.2.4 Additional Clearance. Space extending greater than 6 inches (150 mm) beyond the available knee clearance at 9 inches (230 mm) above the finish floor or ground shall not be considered toe clearance.

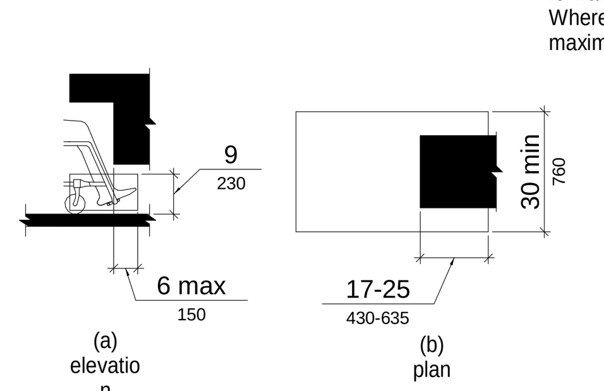


Figure 306.2 Toe Clearance

306.2.5 Width. Toe clearance shall be 30 inches (760 mm) wide minimum.

306.3 Knee Clearance.

306.3.1 General. Space under an element between 9 inches (230 mm) and 27 inches (685 mm) above the finish floor or ground shall be considered knee clearance and shall comply with 306.3.

306.3.2 Maximum Depth. Knee clearance shall extend 25 inches (635 mm) maximum under an element at 9 inches (230 mm) above the finish floor or ground.

306.3.3 Minimum Required Depth. Where knee clearance is required under an element as part of a clear floor space, the knee clearance shall be 11 inches (280 mm) deep minimum at 9 inches (230 mm) above the finish floor or ground, and 8 inches (205 mm) deep minimum at 27 inches (685 mm) above the finish floor or ground.

306.3.4 Clearance Reduction. Between 9 inches (230 mm) and 27 inches (685 mm) above the finish floor or ground, the knee clearance shall be permitted to reduce at a rate of 1 inch (25 mm) in depth for each 6 inches (150 mm) in height.

306.3.5 Width. Knee clearance shall be 30 inches (760 mm) wide minimum.

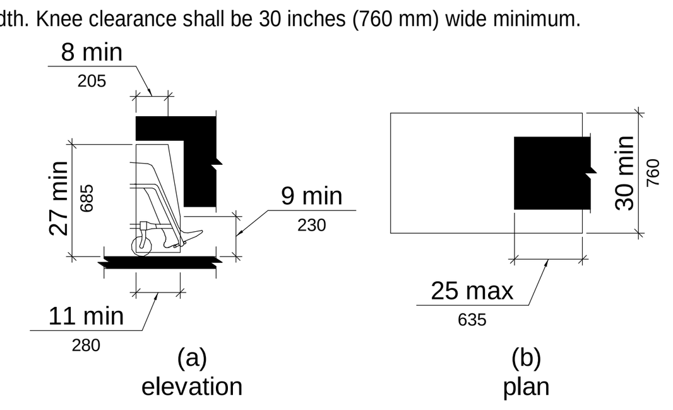


Figure 306.3 Knee Clearance

307 Protruding Objects

307.2 Protrusion Limits. Objects with leading edges more than 27 inches (685 mm) and not more than 80 inches (2030 mm) above the finish floor or ground shall protrude 4 inches (100 mm) maximum horizontally into the circulation path.

EXCEPTION: Handrails shall be permitted to protrude 4 1/2 inches (115 mm) maximum.

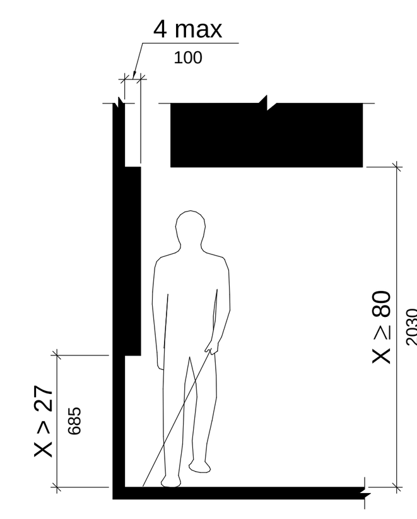


Figure 307.2 Limits of Protruding Objects

307.3 Post-Mounted Objects. Free-standing objects mounted on posts or pylons shall overhang circulation paths 12 inches (305 mm) maximum when located 27 inches (685 mm) minimum and 80 inches (2030 mm) maximum above the finish floor or ground. Where a sign or other obstruction is mounted between posts or pylons and the clear distance between the posts or pylons is greater than 12 inches (305 mm), the lowest edge of such sign or obstruction shall be 27 inches (685 mm) maximum or 80 inches (2030 mm) minimum above the finish floor or ground.

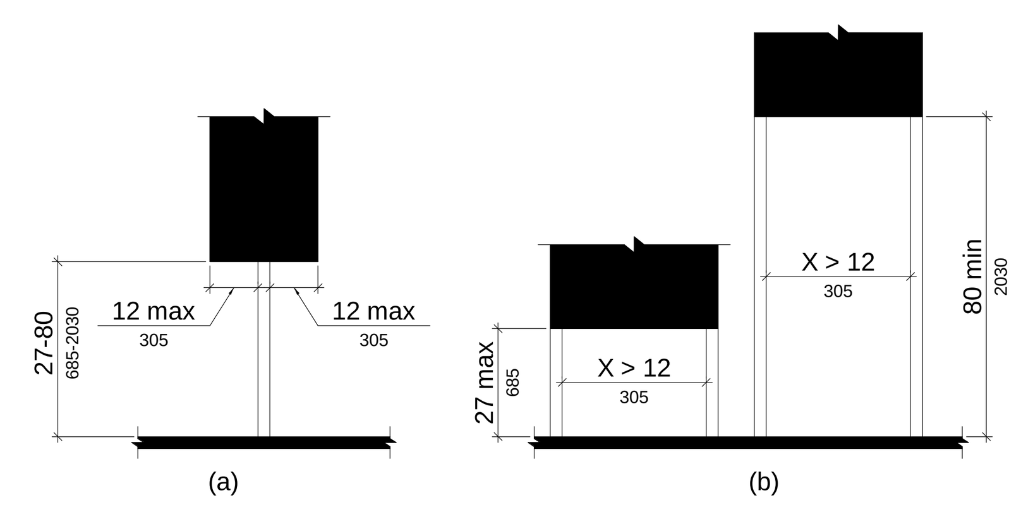


Figure 307.3 Post-Mounted Protruding Objects

307.4 Vertical Clearance. Vertical clearance shall be 80 inches (2030 mm) high minimum. Guardrails or other barriers shall be provided where the vertical clearance is less than 80 inches (2030 mm) high. The leading edge of such guardrail or barrier shall be located 27 inches (685 mm) maximum above the finish floor or ground.

EXCEPTION: Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the finish floor or ground.

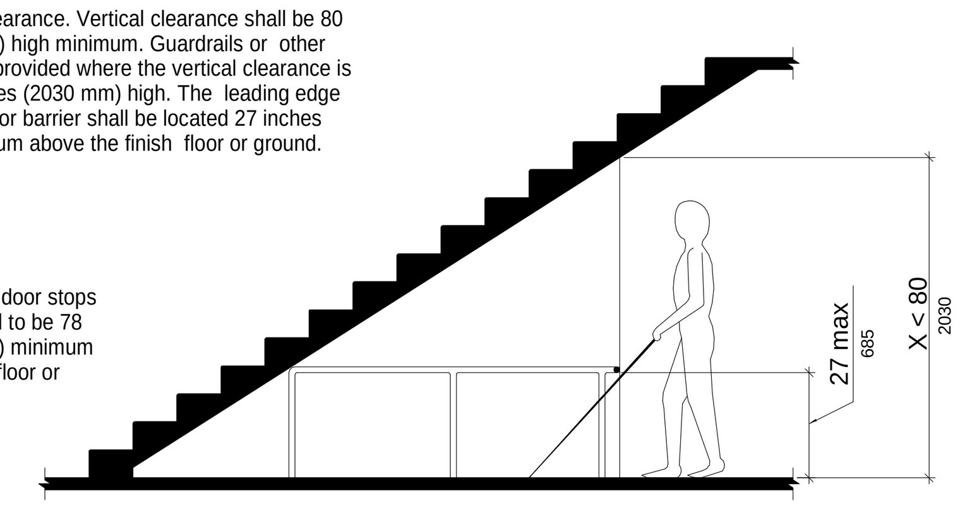


Figure 307.4 Vertical Clearance

308 Reach Ranges

Children's Reach Ranges

Forward or Side Reach	High (maximum)	Low (minimum)
Ages 3 and 4	36 in (915 mm)	20 in (510 mm)
Ages 5 through 8	40 in (1015 mm)	18 in (455 mm)
Ages 9 through 12	44 in (1120 mm)	16 in (405 mm)

308.2 Forward Reach.

308.2.1 Unobstructed. Where a forward reach is unobstructed, the high forward reach shall be 48 inches (1220 mm) maximum and the low forward reach shall be 15 inches (380 mm) minimum above the finish floor or ground.

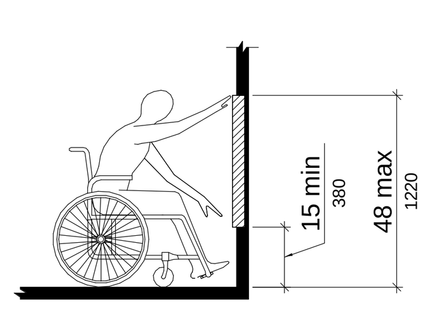


Figure 308.2.2 Obstructed High Forward Reach

308.2.2 Obstructed High Reach. Where a high forward reach is over an obstruction, the clear floor space shall extend beneath the element for a distance not less than the required reach depth over the obstruction. The high forward reach shall be 48 inches (1220 mm) maximum where the reach depth is 20 inches (510 mm) maximum. Where the reach depth exceeds 20 inches (510 mm), the high forward reach shall be 44 inches (1120 mm) maximum and the reach depth shall be 25 inches (635 mm) maximum.

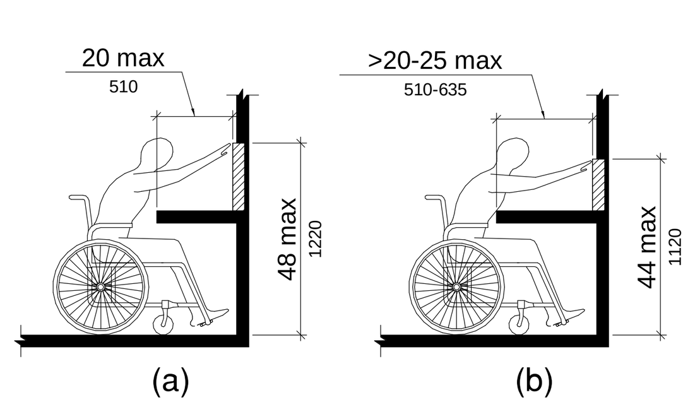
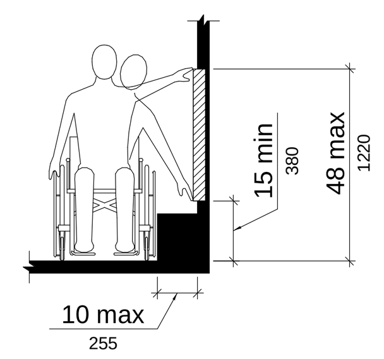


Figure 308.3.1 Unobstructed Side Reach

308.3 Side Reach.

308.3.1 Unobstructed. Where a clear floor or ground space allows a parallel approach to an element and the side reach is unobstructed, the high side reach shall be 48 inches (1220 mm) maximum and the low side reach shall be 15 inches (380 mm) minimum above the finish floor or ground.



308.3.2 Obstructed High Reach. Where a clear floor or ground space allows a parallel approach to an element and the high side reach is over an obstruction, the height of the obstruction shall be 34 inches (865 mm) maximum and the depth of the obstruction shall be 24 inches (610 mm) maximum. The high side reach shall be 48 inches (1220 mm) maximum for a reach depth of 10 inches (255 mm) maximum. Where the reach depth exceeds 10 inches (255 mm), the high side reach shall be 46 inches (1170 mm) maximum for a reach depth of 24 inches (610 mm) maximum.

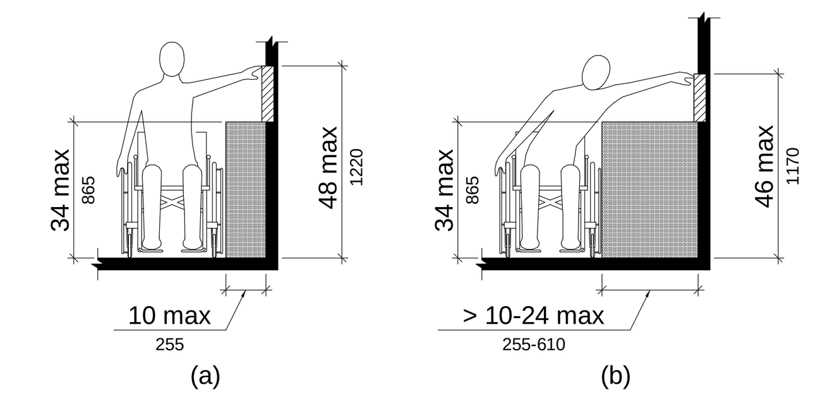


Figure 308.3.2 Obstructed High Side Reach

309 Operable Parts

309.2 Clear Floor Space. A clear floor or ground space complying with 305 shall be provided.

309.3 Height. Operable parts shall be placed within one or more of the reach ranges specified in 308.

309.4 Operation. Operable parts shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate operable parts shall be 5 pounds (22.2 N) maximum.

CHAPTER 4: ACCESSIBLE ROUTES

402.2 Components. Accessible routes shall consist of one or more of the following components: walking surfaces with a running slope not steeper than 1:20, doorways, ramps, curb ramps excluding the flared sides, elevators, and platform lifts. All components of an accessible route shall comply with the applicable requirements of Chapter 4.

Advisory 402.2 Components. Walking surfaces must have running slopes not steeper than 1:20, see 403.3. Other components of accessible routes, such as ramps (405) and curb ramps (406), are permitted to be more steeply sloped.

403 Walking Surfaces

403.1 General. Walking surfaces that are a part of an accessible route shall comply with 403.

403.2 Floor or Ground Surface. Floor or ground surfaces shall comply with 302.

403.3 Slope. The running slope of walking surfaces shall not be steeper than 1:20. The cross slope of walking surfaces shall not be steeper than 1:48.

403.4 Changes in Level. Changes in level shall comply with 303.

403.5 Clearances. Walking surfaces shall provide clearances complying with 403.5.

EXCEPTION: Within employee work areas, clearances on common use circulation paths shall be permitted to be decreased by work area equipment provided that the decrease is essential to the function of the work being performed.

403.5.1 Clear Width. Except as provided in 403.5.2 and 403.5.3, the clear width of walking surfaces shall be 36 inches (915 mm) minimum.

EXCEPTION: The clear width shall be permitted to be reduced to 32 inches (815 mm) minimum for a length of 24 inches (610 mm) maximum provided that reduced width segments are separated by segments that are 48 inches (1220 mm) long minimum and 36 inches (915 mm) wide minimum.

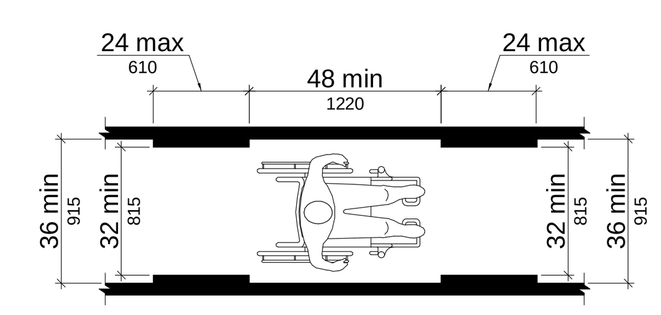


Figure 403.5.1 Clear Width of an Accessible Route

403.5.2 Clear Width at Turn. Where the accessible route makes a 180 degree turn around an element which is less than 48 inches (1220 mm) wide, clear width shall be 42 inches (1065 mm) minimum approaching the turn, 48 inches (1220 mm) minimum at the turn and 42 inches (1065 mm) minimum leaving the turn.

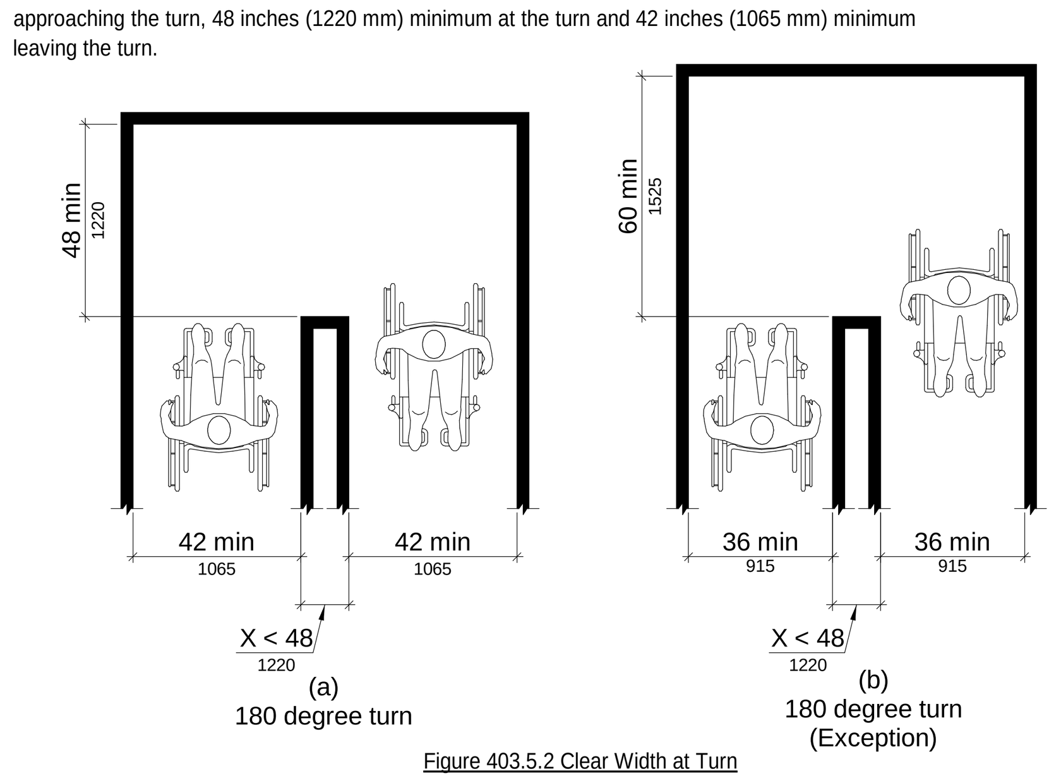


Figure 403.5.2 Clear Width at Turn

403.5.3 Passing Spaces. An accessible route with a clear width less than 60 inches (1525 mm) shall provide passing spaces at intervals of 200 feet (61 m) maximum.

404 Doors, Doorways, and Gates

404.2.3 Clear Width. Door openings shall provide a clear width of 32 inches (815 mm) minimum. Clear openings of doorways with swinging doors shall be measured between the face of the door and the stop, with the door open 90 degrees. Openings more than 24 inches (610 mm) deep shall provide a clear opening of 36 inches (915 mm) minimum. There shall be no projections into the required clear opening width lower than 34 inches (865 mm) above the finish floor or ground. Projections into the clear opening width between 34 inches (865 mm) and 80 inches (2030 mm) above the finish floor or ground shall not exceed 4 inches (100 mm).

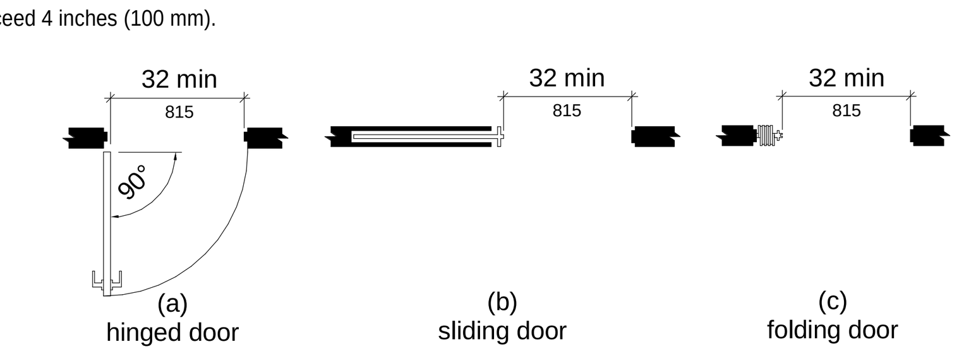


Figure 404.2.3 Clear Width of Doorways

404.2.4 Maneuvering Clearances. Minimum maneuvering clearances at doors and gates shall comply with 404.2.4. Maneuvering clearances shall extend the full width of the doorway and the required latch side or hinge side clearance.

404.2.4.3 Recessed Doors and Gates. Maneuvering clearances for forward approach shall be provided when any obstruction within 18 inches (455 mm) of the latch side of a doorway projects more than 8 inches (205 mm) beyond the face of the door, measured perpendicular to the face of the door or gate.

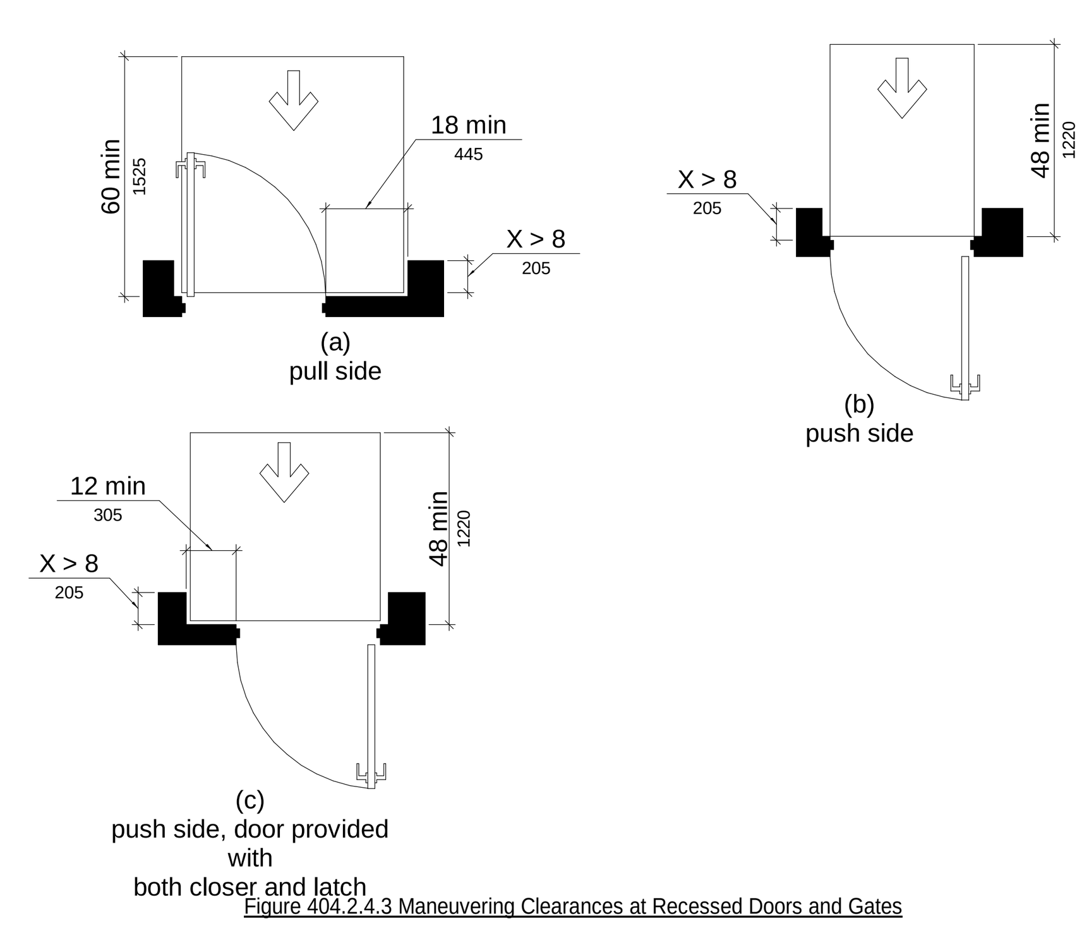


Figure 404.2.4.3 Maneuvering Clearances at Recessed Doors and Gates

404.2.6 Doors in Series and Gates in Series. The distance between two hinged or pivoted doors in series and gates in series shall be 48 inches (1220 mm) minimum plus the width of doors or gates swinging into the space.

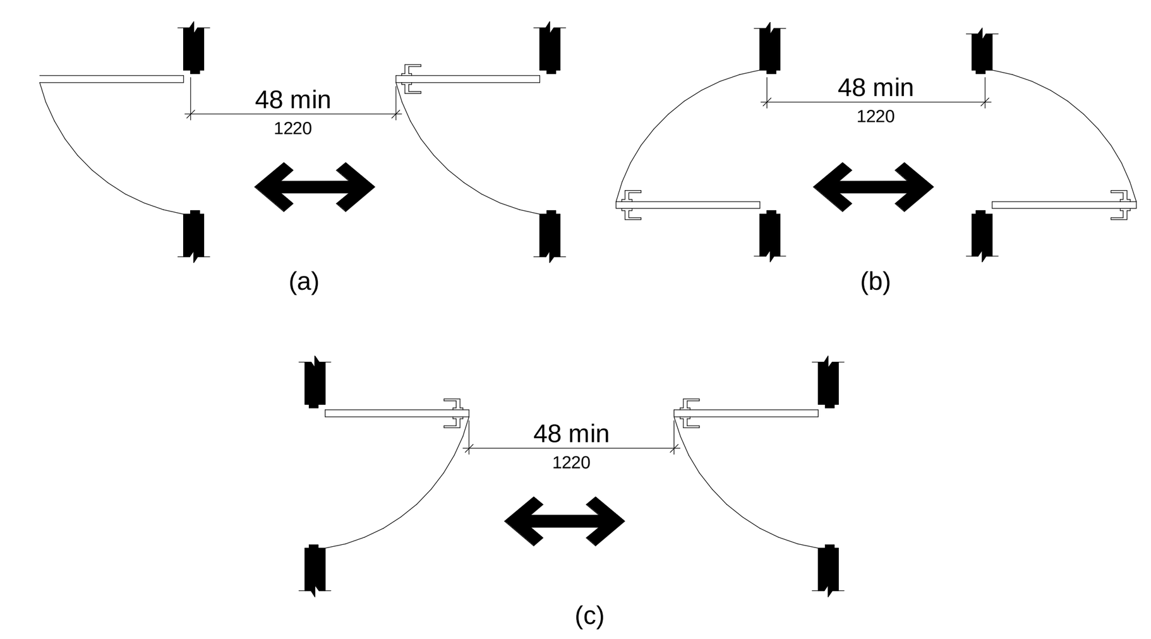


Figure 404.2.6 Doors in Series and Gates in Series

404.2.7 Door and Gate Hardware. Handles, pulls, latches, locks, and other operable parts on doors and gates shall comply with 309.4. Operable parts of such hardware shall be 34 inches (865 mm) minimum and 48 inches (1220 mm) maximum above the finish floor or ground. Where sliding doors are in the fully open position, operating hardware shall be exposed and usable from both sides.

404.2.8.1 Door Closers and Gate Closers. Door closers and gate closers shall be adjusted so that from an open position of 90 degrees, the time required to move the door to a position of 12 degrees from the latch is 5 seconds minimum.

404.2.8.2 Spring Hinges. Door and gate spring hinges shall be adjusted so that from the open position of 70 degrees, the door or gate shall move to the closed position in 1.5 seconds minimum.

404.2.9 Door and Gate Opening Force. Fire doors shall have a minimum opening force allowable by the appropriate administrative authority. The force for pushing or pulling open a door or gate other than fire doors shall be as follows:

1. Interior hinged doors and gates: 5 pounds (22.2 N) maximum.

2. Sliding or folding doors: 5 pounds (22.2 N) maximum.

These forces do not apply to the force required to retract latch bolts or disengage other devices that hold the door or gate in a closed position.

404.2.10 Door and Gate Surfaces. Swinging door and gate surfaces within 10 inches (255 mm) of the finish floor or ground measured vertically shall have a smooth surface on the push side extending the full width of the door or gate. Parts creating horizontal or vertical joints in these surfaces shall be within 1/16 inch (1.6 mm) of the same plane as the other. Cavities created by added kick plates shall be capped.

404.2.11 Vision Lights. Doors, gates, and side lights adjacent to doors or gates, containing one or more glazing panels that permit viewing through the panels shall have the bottom of at least one glazed panel located 43 inches (1090 mm) maximum above the finish floor.

404.3 Automatic and Power-Assisted Doors and Gates. Automatic doors and automatic gates shall comply with 404.3. Full-powered automatic doors shall comply with ANSI/BHMA A156.10 (incorporated by reference, see "Referenced Standards" in Chapter 1). Low-energy and power-assisted doors shall comply with ANSI/BHMA A156.19 (1997 or 2002 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1).

404.3.2 Maneuvering Clearance. Clearances at power-assisted doors and gates shall comply with 404.2.4. Clearances at automatic doors and gates without standby power and serving an accessible means of egress shall comply with 404.2.4.

404.3.7 Revolving Doors, Revolving Gates, and Turnstiles. Revolving doors, revolving gates, and turnstiles shall not be part of an accessible route.

405 Ramps

405.2 Slope. Ramp runs shall have a running slope not steeper than 1:12.

405.3 Cross Slope. Cross slope of ramp runs shall not be steeper than 1:48.

405.5 Clear Width. The clear width of a ramp run and, where handrails are provided, the clear width between handrails shall be 36 inches (915 mm) minimum.

405.6 Rise. The rise for any ramp run shall be 30 inches (760 mm) maximum.

405.7 Landings. Ramps shall have landings at the top and the bottom of each ramp run.

Landings shall comply with 405.7.

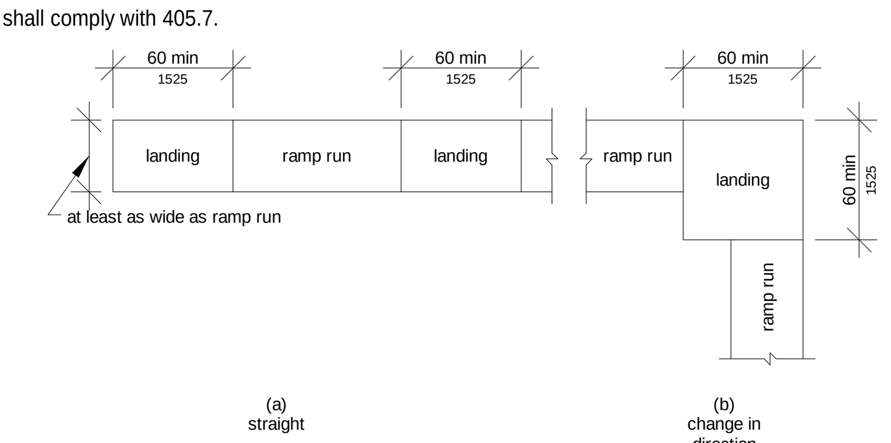


Figure 405.7 Ramp Landings

405.7.1 Slope. Landings shall have slope no steeper than 1:48. Changes in level are not permitted.

405.7.2 Width. The landing clear width shall be at least as wide as the widest ramp run leading to the landing.

405.7.3 Length. The landing clear length shall be 60 inches (1525 mm) long minimum.

405.7.4 Change in Direction. Ramps that change direction between runs at landings shall have a clear landing 60 inches (1525 mm) minimum by 60 inches (1525 mm) minimum.

405.7.5 Doorways. Where doorways are located adjacent to a ramp landing, maneuvering clearances required by 404.2.4 and 404.3.2 shall be permitted to overlap the required landing

405.8 Handrails. Ramp runs with a rise greater than 6 inches (150 mm) shall have handrails complying with 505.

405.9 Edge Protection. Edge protection complying with 405.9.1 or 405.9.2 shall be provided on each side of ramp runs and at each side of ramp landings.

405.9.1 Extended Floor or Ground Surface. The floor or ground surface of the ramp run or landing shall extend 12 inches (305 mm) minimum beyond the inside face of a handrail complying with 505.

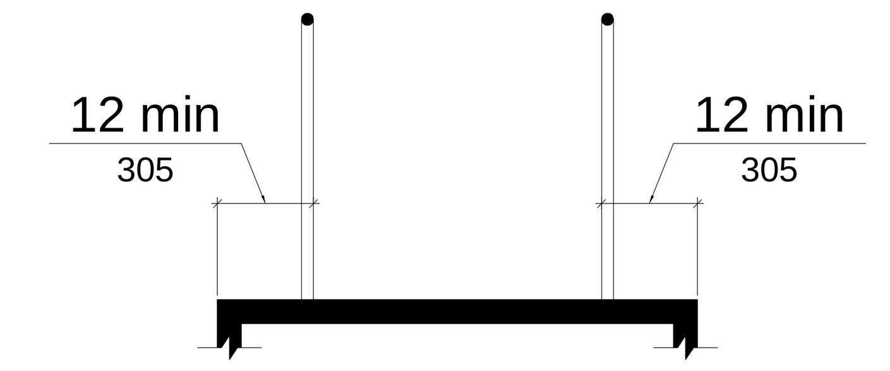


Figure 405.9.1 Extended Floor or Ground Surface Edge Protection

405.9.2 Curb or Barrier. A curb or barrier shall be provided that prevents the passage of a 4 inch (100 mm) diameter sphere, where any portion of the sphere is within 4 inches (100 mm) of the finish floor or ground surface.

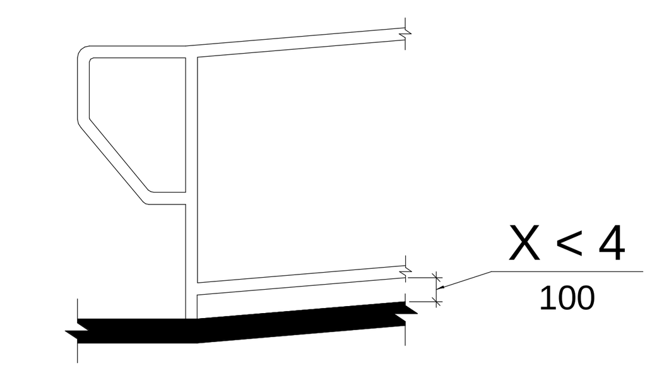


Figure 405.9.2 Curb or Barrier Edge Protection

406 Curb Ramps

406.1 General. Curb ramps on accessible routes shall comply with 406, 405.2 through 405.5, and 405.10.

406.2 Counter Slope. Counter slopes of adjoining gutters and road surfaces immediately adjacent to the curb ramp shall not be steeper than 1:20. The adjacent surfaces at transitions at curb ramps to walks, gutters, and streets shall be at the same level.

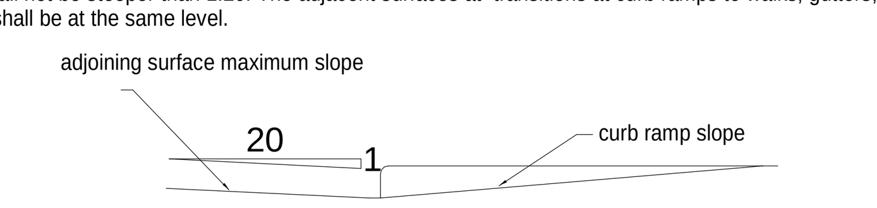


Figure 406.2 Counter Slope of Surfaces Adjacent to Curb Ramps

406.3 Sides of Curb Ramps. Where provided, curb ramp flares shall not be steeper than 1:10.

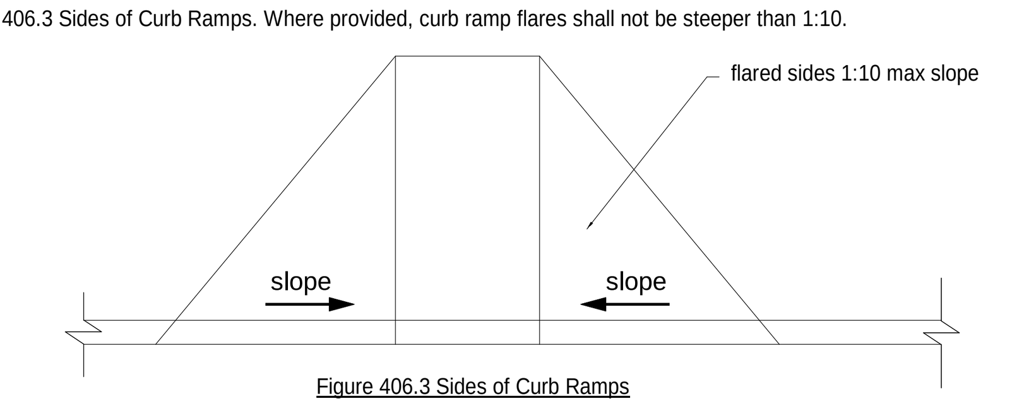


Figure 406.3 Sides of Curb Ramps

406.4 Landings. Landings shall be provided at the tops of curb ramps. The landing clear length shall be 36 inches (915 mm) minimum. The landing clear width shall be at least as wide as the curb ramp, excluding flared sides, leading to the landing.

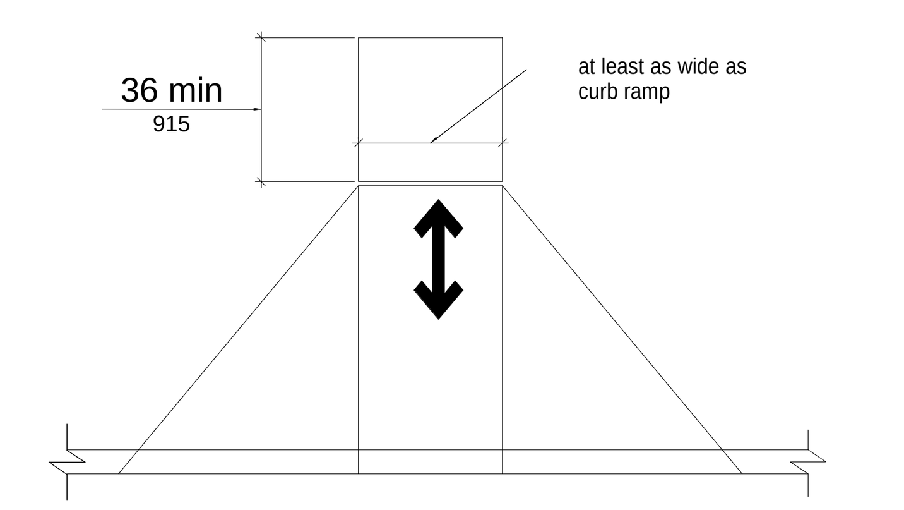


Figure 406.4 Landings at the Top of Curb Ramps

406.5 Location. Curb ramps and the flared sides of curb ramps shall be located so that they do not project into vehicular traffic lanes, parking spaces, or parking access aisles. Curb ramps at marked crossings shall be wholly contained within the markings, excluding any flared sides.

406.6 Diagonal Curb Ramps. Diagonal or corner type curb ramps with returned curbs or other well-defined edges shall have the edges parallel to the direction of pedestrian flow. The bottom of diagonal curb ramps shall have a clear space 48 inches (1220 mm) minimum outside active traffic lanes of the roadway. Diagonal curb ramps provided at marked crossings shall provide the 48 inches (1220 mm) minimum clear space within the markings. Diagonal curb ramps with flared sides shall have a segment of curb 24 inches (610 mm) long minimum located on each side of the curb ramp and within the marked crossing.

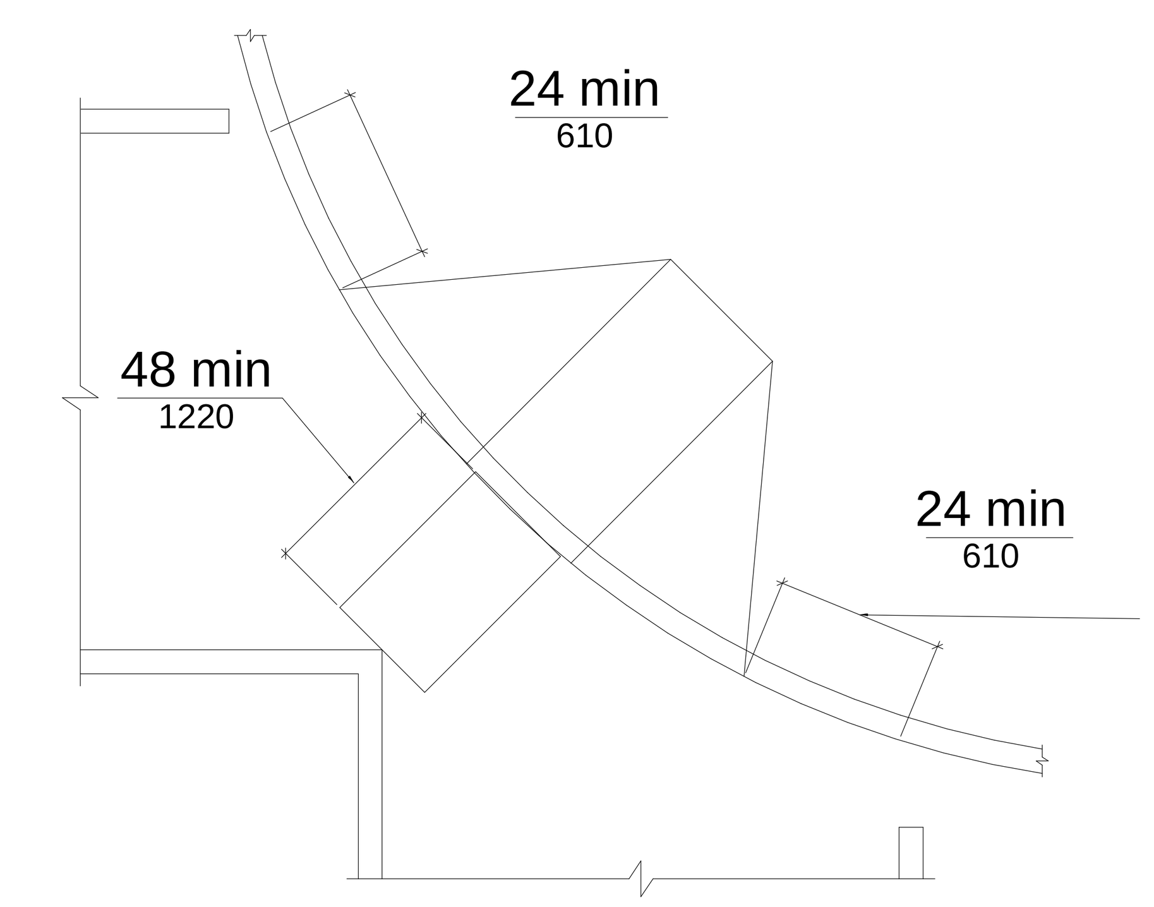


Figure 406.6 Diagonal or Corner Type Curb Ramps

406.7 Islands. Raised islands in crossings shall be cut through level with the street or have curb ramps at both sides. Each curb ramp shall have a level area 48 inches (1220 mm) long minimum by 36 inches (915 mm) wide minimum at the top of the curb ramp in the part of the island intersected by the crossings. Each 48 inch (1220 mm) minimum by 36 inch (915 mm) minimum area shall be oriented so that the 48 inch (1220 mm) minimum length is in the direction of the running slope of the curb ramp it serves. The 48 inch (1220 mm) minimum by 36 inch (915 mm) minimum areas and the accessible route shall be permitted to overlap.

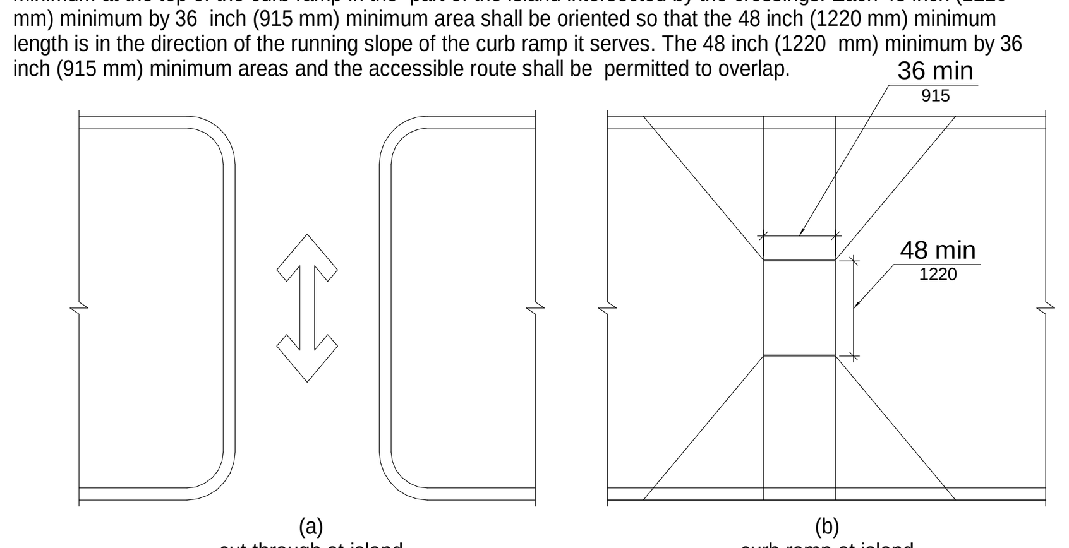


Figure 406.7 Islands in Crossings

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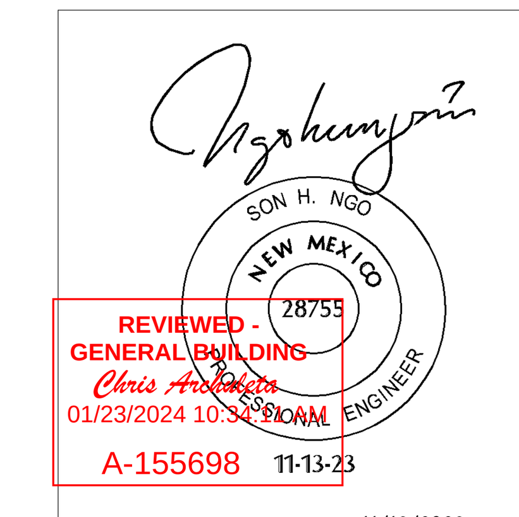

TA TRAVEL CENTER
PARCEL A, B, AND C WITHIN LOT 3 IN SECTION 19, T11N, R31E, N.M.P.M.
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NEW DEVELOPMENT

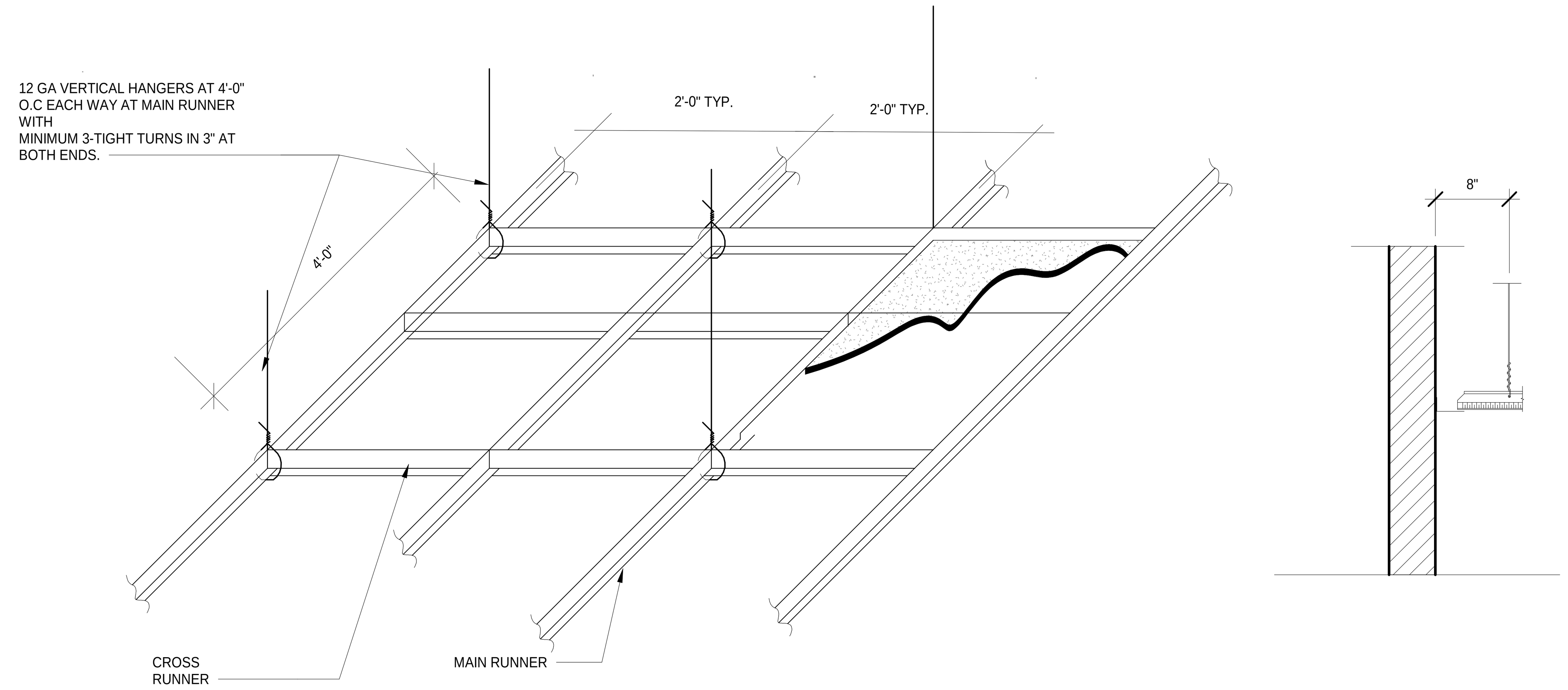
DATE: Nov. 2023

REVISIONS

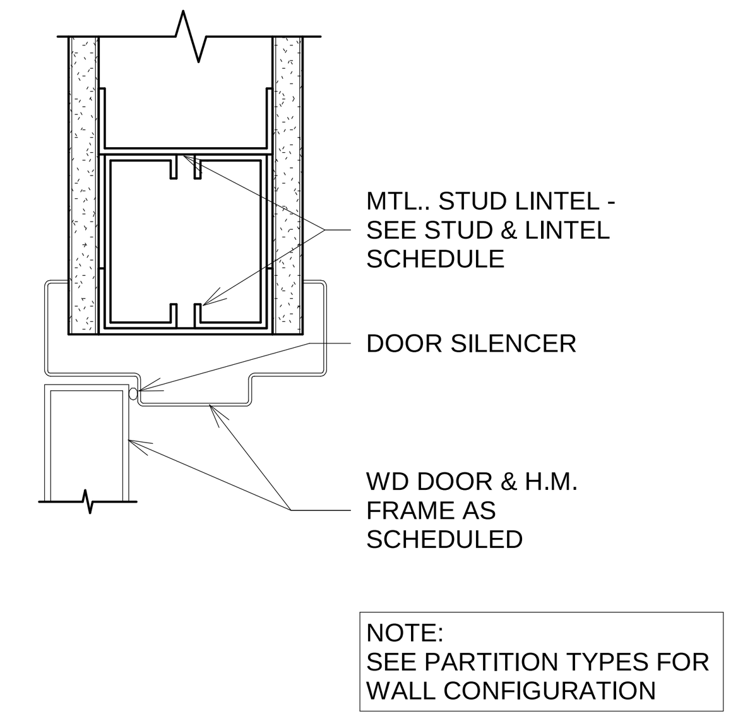
SHEET TITLE
ACCESSIBILITY STANDARDS

SHEET NUMBER
A003

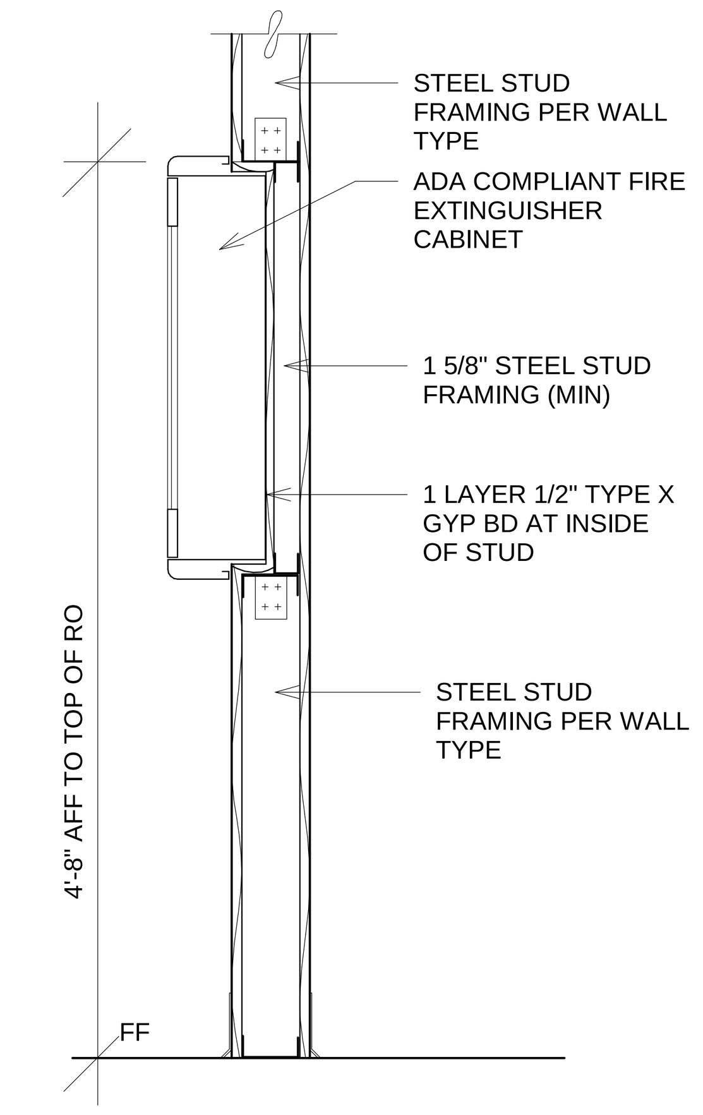
ISSUE DATE
11/10/2023



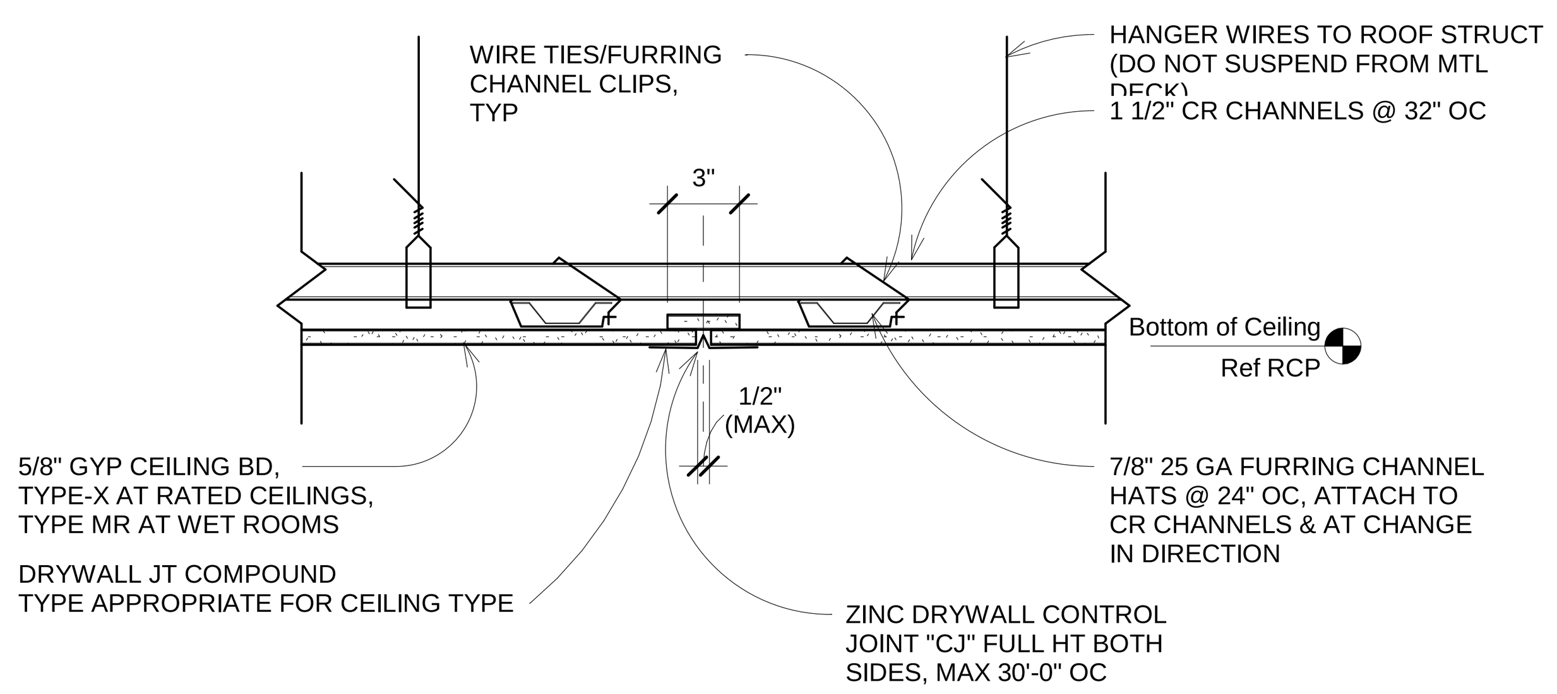
10 ACT CEILING DETAIL
SCALE: 1" = 1'-0"



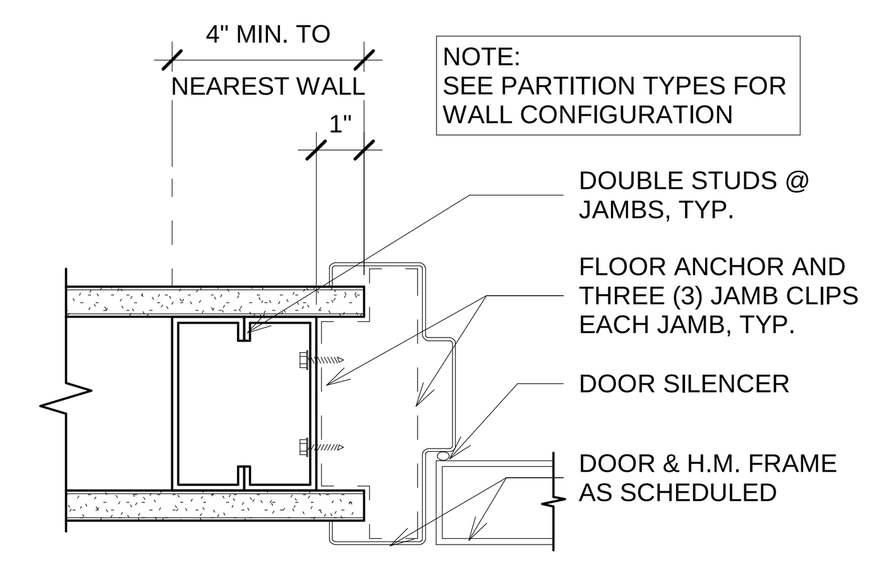
7 TYP. INTERIOR DOOR HEAD DTL
SCALE: 3" = 1'-0"



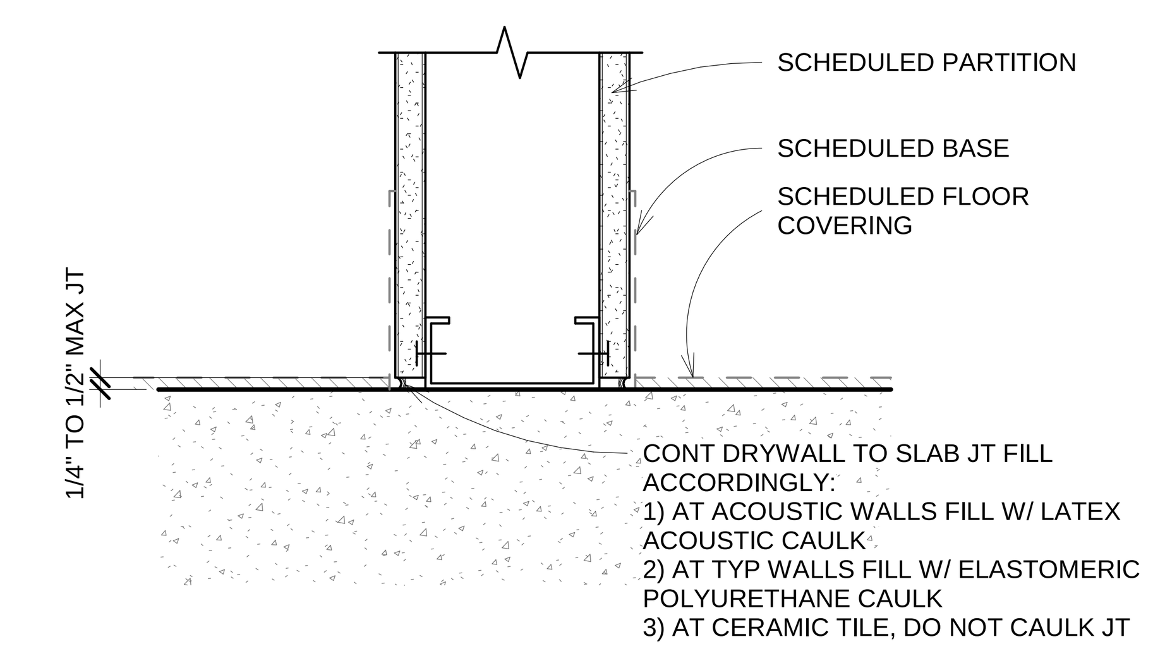
3 FIRE EXTINGUISHER CABINET
SCALE: 1" = 1'-0"



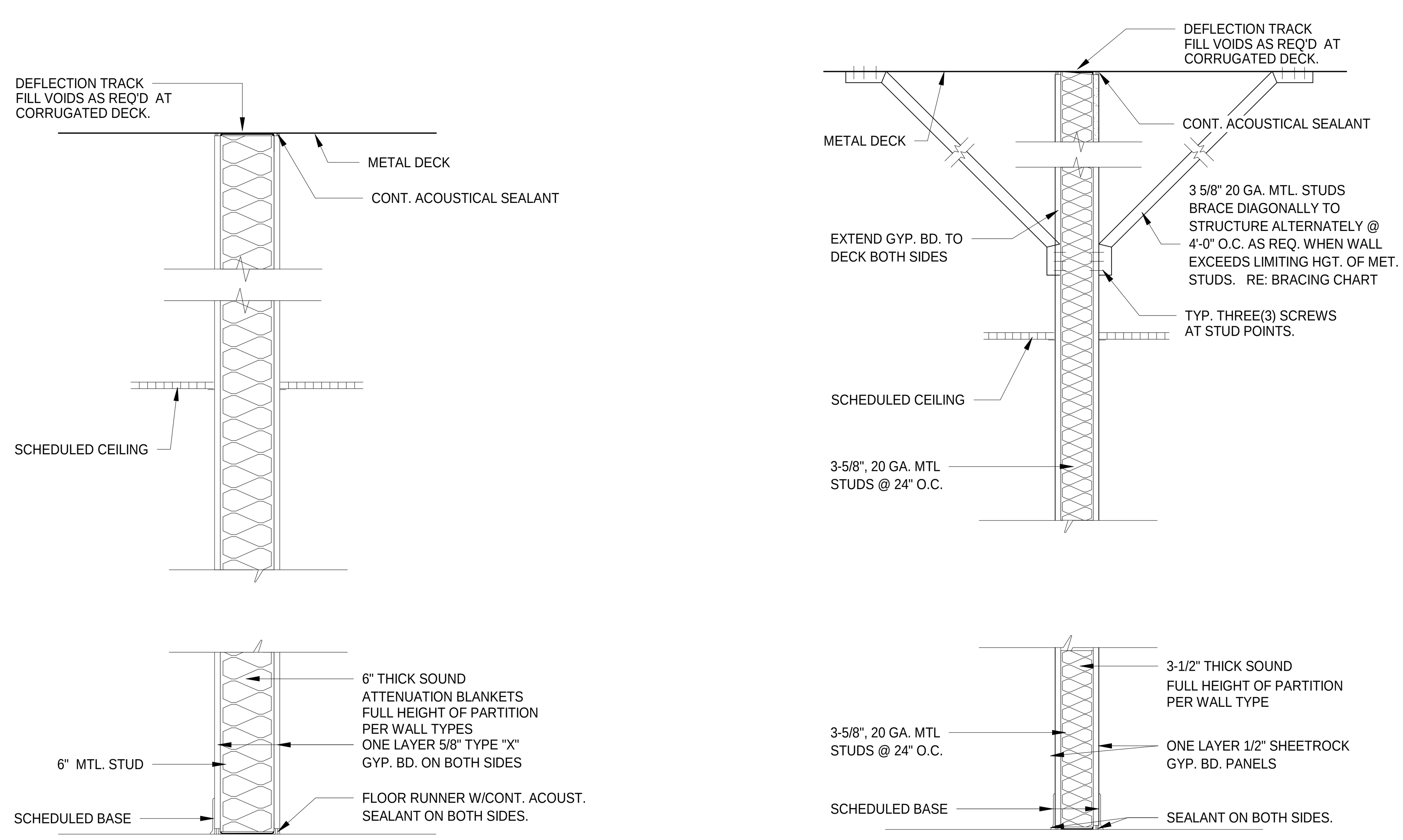
9 TYP. SUSP GYP BD CEILING DEATIL
SCALE: 1 1/2" = 1'-0"



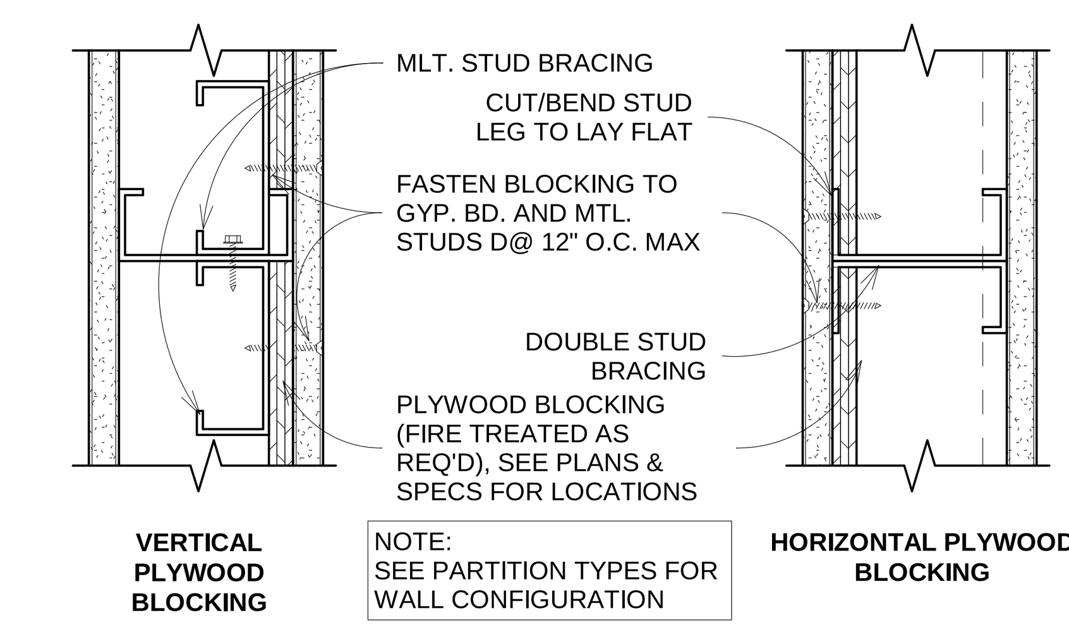
6 Detail @ H.M. Door Jamb
SCALE: 3" = 1'-0"



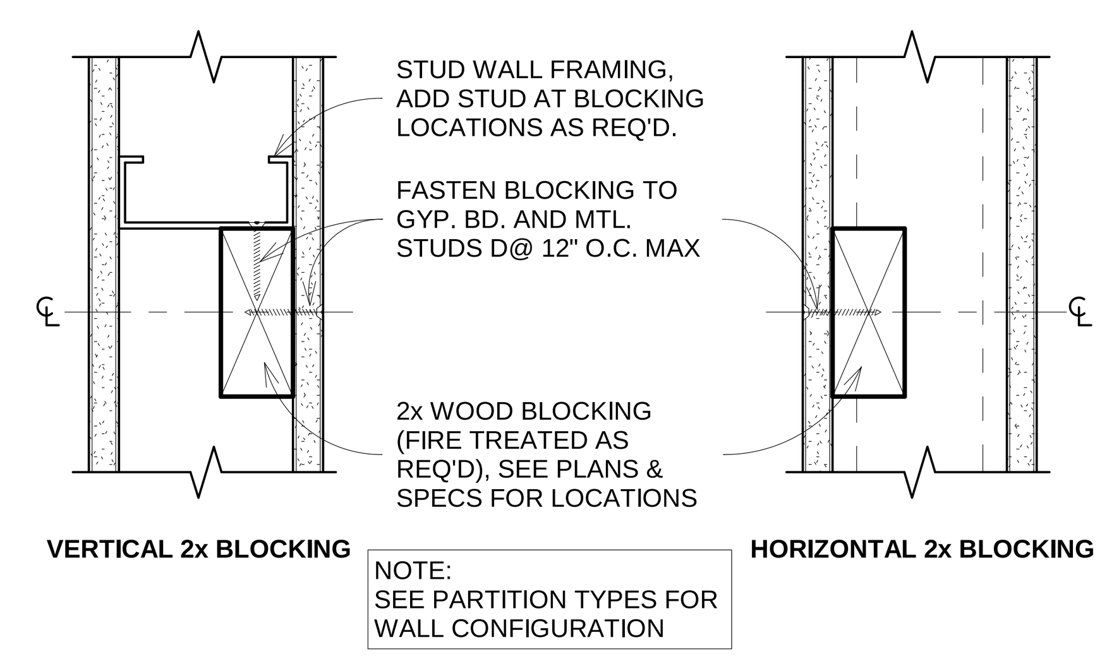
2 TYP. PARTITION BASE DTL.
SCALE: 3" = 1'-0"



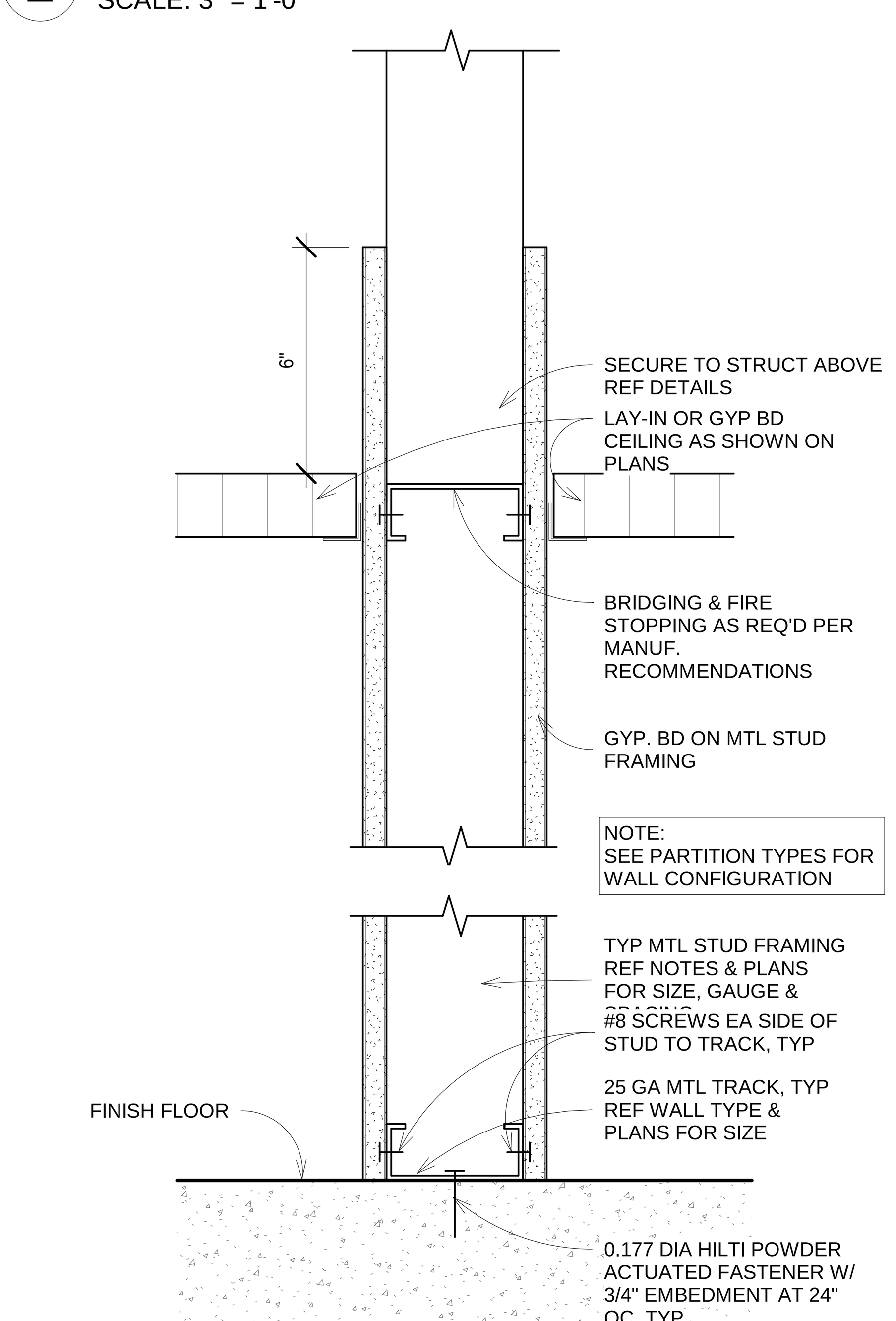
8 WALL TO DECK DETAILS
SCALE: 1" = 1'-0"



5 Plywood Blocking
SCALE: 3" = 1'-0"



4 2x Wood Blocking
SCALE: 3" = 1'-0"



1 TYP. PATITION TO CLG DTL
SCALE: 3" = 1'-0"

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TA TRAVEL CENTER
PARCEL A, B, AND C WITHIN LOT 3 IN SECTION 19, T11N, R31E, N.M.P.M.
TUCUMCARI, NM
NEW DEVELOPMENT

DATE: Nov. 2023

REVISIONS

SHEET TITLE
TYPICAL DETAILS

SHEET NUMBER
A005

ISSUE DATE
11/10/2023

CODE ANALYSIS	2015 IBC		
OCCUPANCY CLASSIFICATION;			
MAIN OCCUPANCY	S1- STORAGE		SECTION 311.2
SECONDARY OCCUPANCY	B- BUSINESS		SECTION 304.1
CONSTRUCTION TYPE;	II-B		
AUTOMATIC FIRE SPRINKLER:	SPRINKLERED		SECTION 903.2
NON SEPERATED OCCUPANIES:	MOST RESTRICTIVE		SECTION 508.3
GENERAL BUILDING AREA & HEIGHT:	B	S1	ACTUAL BLDG
ALLOWABLE HEIGHT- TABLE 504.3	75'	75'	27'-10"
ALLOWABLE # OF STORIES- TABLE 504.4	4	3	1
ALLOWABLE AREA (SF)- TABLE 506.2	92,000	70,000	14,400

FIRE PROTECTION

CONSTRUCTION TYPE: II-B		
FIRE RESISTANCE RATING FOR BUILDING ELEMENTS		TABLE 601
PRIMARY STRUCTURAL FRAME	0 HR	
EXT/INT BEARING WALL	0 HR	
NON BEARING INTERIOR WALLS/PARTITIONS	0 HR	
FLOOR CONSTRUCTION	0 HR	
ROOF CONSTRUCTION	0 HR	
NON BEARING EXTERIOR WALLS/ PARTITIONS		TABLE 602
OCCUPANCY GROUP B,S-2		
X<5	1 HR	
5≤ X <10	1 HR	
10≤ X <30	0 HR	
X ≥30	0 HR	

AUTOMATIC FIRE SPRINKLER- REQUIRED FOR FIRE AREA EXCEEDS 12,000 SF SEC 903.2.9.1
PORTABLE FIRE EXTINGUISHER: WHERE SHOWN ON PLAN SEC 906.3 AND NFPA 10
FIRE ALARM, GROUP S1: NOT REQUIRED SECTION 907.2

MISCELLANEOUS REQUIREMENTS:

MEANS OF EGRESS CLG HEIGHT 7'-6" MIN W/ EXCEPTIONS SECTION 1003.2
EGRESS HALLWAY CAPACITY .2 INCH PER OCCUPANT
MIN. NUMBER OF EXITS- 2 REQUIRED- COMMON PATH 100' TABLE 1006.2.1
- EXIT DOORS SHALL BE PIVOTED OR SIDE HINGED OR SLIDING DOOR PER EXCEPTION # 6
- EXIT DOORS SHALL BE OPERABLE FROM THE INSIDE W/O THE USE OF A KEY, CARD, TOOL OR ANY SPECIAL KNOWLEDGE.

EXIT ACCESS TRAVEL DISTANCE- B 250 TABLE 1017.2
DEAD ENDS CORRIDOR 50 SECTION 1020.4 EXC. #2

OCCUPANTS COUNT	TABLE 1004.5
SERVICE AREA-S-1	56 OCC
OFFICE AREA-B	32OCC
STORAGE AREA- S-1	16 OCC
CARWASH AREA-B	23 OCC
TOTAL OCCPANTS	127 OCC

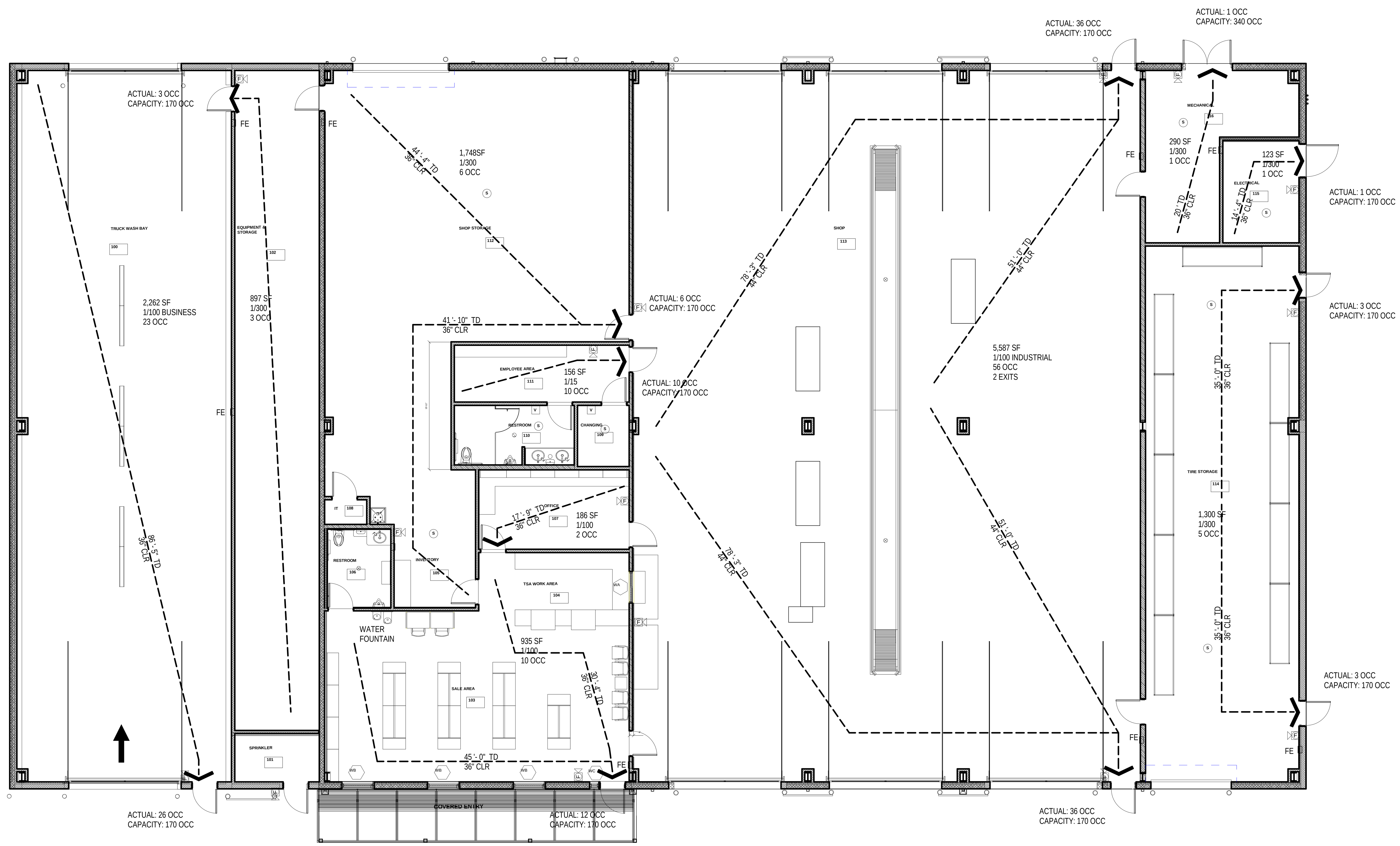
PLUMBING FIXTURE COUNT

78 OCCUPANTS TOTAL, 40 EACH SEX — 2015 IBC/ TAB 2902.1

OCCUPANTS LOAD	REQUIRED				PROVIDED			
	WC/ URINAL	LAV.	D.F.	SINK	WC/ URINAL	LAV.	D.F.	SINK
MALE/ FEMALE -S-1	1/25 (2)	1/40(1)	1/100	1	1 UR 1WC	1	1	1
MALE/ FEMALE -B	1/100 (1)	1/100(1)	1/1000	1	1 UR 1WC	1	1	-
MALE/ FEMALE- TOTAL	3	2	2	1	4	2	2	1

EGRESS LEGEND

X'- XX"	LENGTH OF SEGMENT
- - - - -	EGRESS PATH
XXXX	WIDTH OF PATH
- · - · -	1 HR RATED DEMISING WALL
←	EXIT
F	FIRE ALARM
FE	FIRE EXTINGUISHER
S	SMOKE DETECTOR
V	AUDIO/ VISUAL SIGNALING DEVICE



1 **EGRESS PLAN**
SCALE: 1/8" = 1'-0"

NOTE:
SECTIONS ____________________
OF THE ICC A117.1 STANDARD FOR ACCESSIBLE, USABLE BULDINGS AND FACILITIES.

NOTE:
SECTIONS 2902.1
OF THE INTERNATIONAL BUILDING CODE MUST BE COMPLIED WITH.
(N.M. COMMERCIAL BUILDING CODE)
MIN. PLUMB. FIX. - DRINKING FOUNTAIN

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TUCUMCARI, NM
NEW DEVELOPMENT

DATE: Nov. 2023

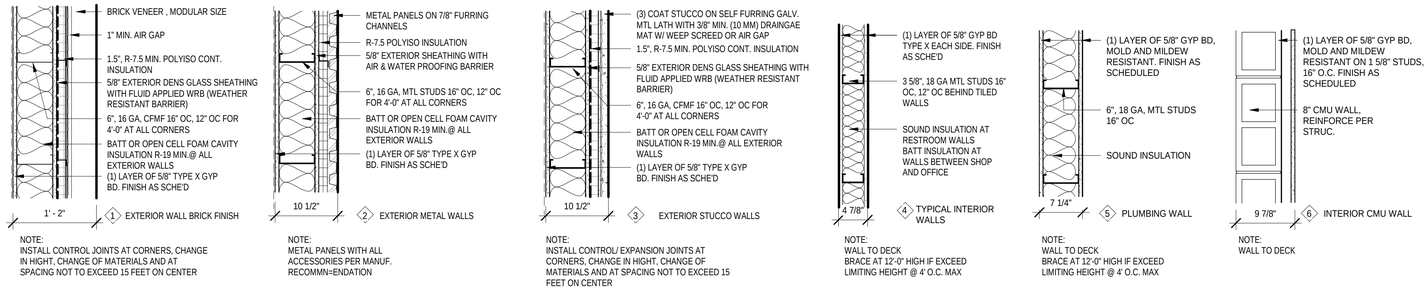
REVISIONS

SHEET TITLE
EGRESS PLAN

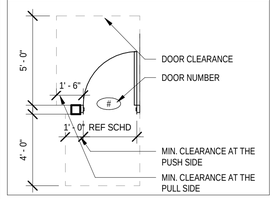
SHEET NUMBER
A006

ISSUE DATE
11/10/2023

WALL AND PARTITION TYPES



DOOR KEY



GENERAL FLOOR PLAN NOTES:

1. FIELD VERIFY EXISITNG CONDITIONS AND INFORM THE ARCHITECT AND THE OWNER OF ANY DISCREPENCIES
2. DO NOT SCALE THESE DRAWINGS.
3. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE CODES, TRADE STANDARDS, AND MANUFACTURER'S SPECIFICATIONS.
4. ALL DIMENSIONS ARE TAKEN FROM FACE OF FINISHES UNO. (ALLOW FOR SUBSTRATE/ DRY WALL SHEATHING & FINISHES)
5. REFER TO STRUCTURAL DRAWINGS FOR EXTERIOR WALLS FRAMING.
6. REFER TO WALL TYPES FOR EXTERIOR AND INTERIOR WALL ASSEMBLY
7. ALL INTERIOR WALLS ARE TO EXTEND 8" ABOVE CEILING WHEN NOT EXTENDED TO UNDERSIDE OF ROOF DECK
8. TYPICAL INTERIOR METAL STUD WALLS TO BE 20 GA @ 16" O.C., 12" O.C @ WALLS TO RECEIVE TILE FINISH AND WITHIN 4' FROM ALL CORNERS.
9. CONTRACTOR TO REFERENCE CLARK DIETRICH FRAMING GUILDLINES FOR METAL STUDS LIMITING HEIGHTS AND WALL SPANS AND REPORT CHANGES IN HEIGHT OR GAUGES TO THE ARCHITECT IF APPLICABLE
10. GYP BD TO BE 5/8" TYPE X TYP UNO.
11. ALL FLOOR TRACKS TO BE SET IN A CONTINUOUS BEAD OF SEALANT
12. PROVIDE FIRE RETARDANT BLOCKING FOR ALL WALL MOUNTED ACCESSORIES, FIXTURES AND DEVICES.
13. LUMBER IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED.
14. DRYWALL TO RECEIVE TAPE, BED AND SKIM COAT AND TO HAVE LEVEL 4 FINISH. PAINT-PER SCHEDULE
15. PROVIDE OUTSIDE, INSIDE CORNER REINFORCING BEADS AND END WALL CAP PER NATIONAL GYPSUM BOARD CONSTRUCTION RECOMMENDATIONS
16. PROVIDE FULL HEIGHT 7/16" CEMENT BOARD IN RESTROOMS, AROUND SHOWER ENCLOSURE AND WALLS TO RECEIVE TILE
17. PROVIDE MOLD AND MELDEW RESISTANCE GYP BD IN ALL WET AREAS.
18. STAGGER, 12" MIN, C.C, ELECTRICAL OUTLETS ON BOTH SIDES ON INTERIOR WALLS
19. ALL OUTLET COVERS, BLANK COVERS, ETC. SHOULD MATCH ADJACENT WALL FINISH. BROWN, BLACK OR ALMOND WILL BE ACCEPTABLE FOR MOST CONDITIONS, COORDINATE FINAL COLOR SELECTION WITH THE OWNER.
20. PROVIDE WEATHER STRIPPING AROUND ALL EXTERIOR DOORS.
21. REFER TO UL RATED PARTITION ASSEMBLY DESCRIPTION FOR FIRE RATED DEMISING WALLS

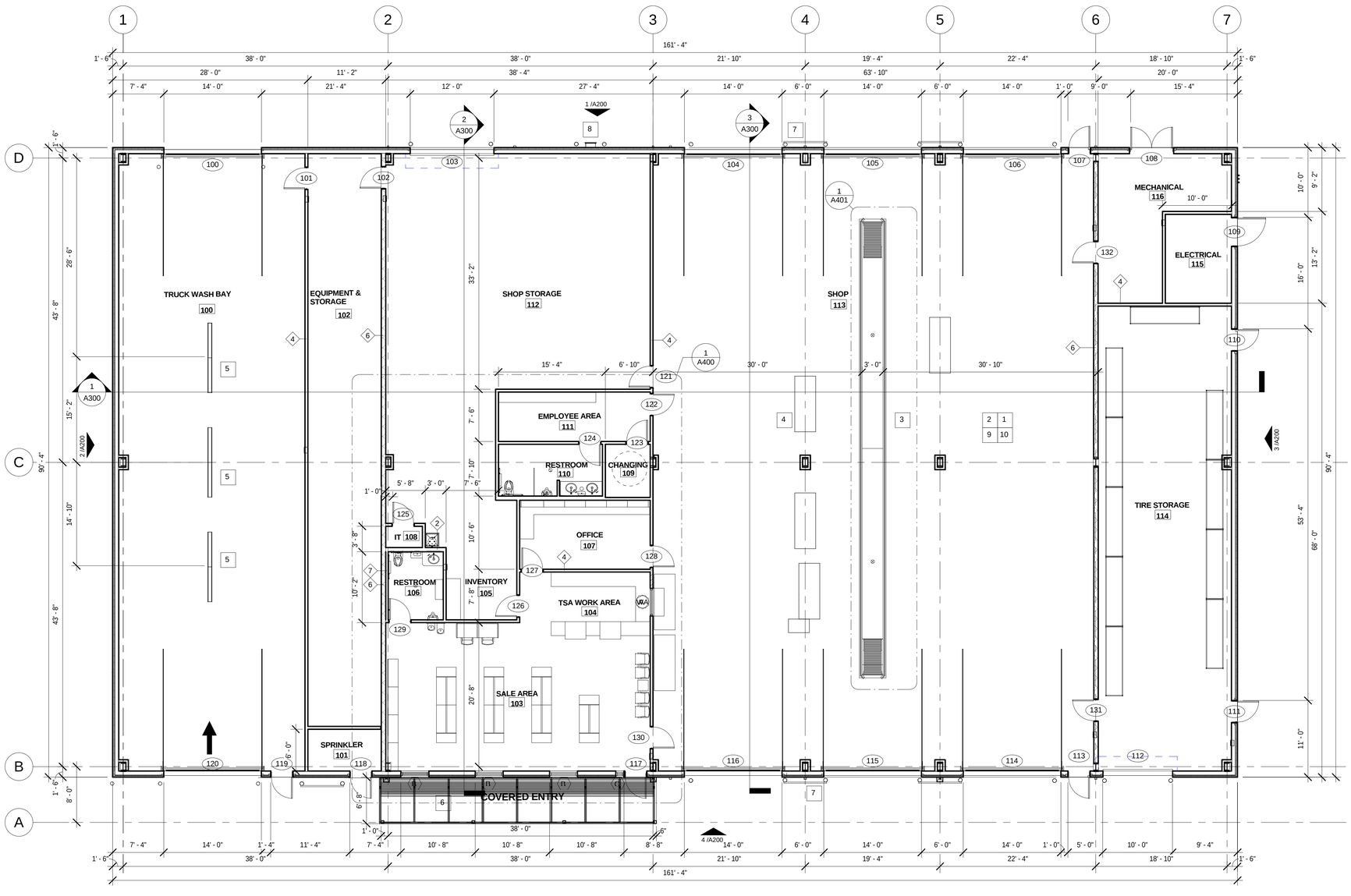
GENERAL WALL & PARTITION TYPE NOTES:

1. ALL INTERIOR WALLS ARE TO EXTEND TO UNDERSIDE OF ROOF DECK, OR 8" ABOVE CEILING AS APPLICABLE. BRACE WALLS THAT EXCEED 12' IN HEIGHT @ 48" OC MAX WHEN EXCEEDS LIMITING HEIGHTS
2. TYPICAL INTERIOR METAL STUD WALLS TO BE 20 GA @ 16" O.C., 12" O.C @ WALLS TO RECEIVE TILE FINISH AND WITHIN 4' FROM ALL CORNERS.
3. CONTRACTOR TO REFERENCE CLARK DIETRICH FRAMING GUILDLINES FOR METAL STUDS LIMITING HEIGHTS AND WALL SPANS AND REPORT CHANGES IN HEIGHT OR GAUGES TO THE ARCHITECT IF APPLICABLE
4. ALL FLOOR TRACKS TO BE SET IN A CONTINUOUS BEAD OF SEALANT
5. GYP BD TO BE 5/8" TYPE X TYP UNO
6. PROVIE WATER AND MOLD RESISTANT GYP BD SHEATHING ON WALLS BEHIND AND ADJACENT PLUMBING FIXTURES
7. PROVIDE 5/8" CEMENT BOARD SHEATHING FOR WALLS TO RECEIVE TILE FINISH
8. STAGGER, 12" MIN, C.C, ELECTRICAL OUTLETS ON BOTH SIDES ON INTERIOR WALLS
9. REFER TO UL RATED PARTITION ASSEMBLY DESCRIPTION FOR CONSTRUCTION DETAILS

FLOOR PLAN KEY NOTES:

KEY NOTE TAG

1. TYPICAL EXTERIOR WALLS TYPE 1 UNO. REFER TO ELEVATION FOR FINISHES
2. TYPICAL INTERIOR WALLS TYPE 4 UNO.
3. SERVICE PIT. REFER TO A405 FOR DETAILS
4. CONTRACTOR TO COORDINATE EXACT LOCATION OF OWNER'S PROVIDED FIXTURES AND EQUIPMENT AS WELL AS POWER REQUIREMENT
5. 6" WIDE TRENCH DRAIN, 10' EA. ZURN INDUSTRIES
6. EXTERIOR COVERED ENTRY. SLOPE 1/4" PER FT AWAY FROM BUILDING. PRE ENGINEERED CANOPY ABOVE. REFER TO DETAILS
7. TYP. ROOF DRAIN PROTECTION. REFER TO ROOF PLAN FOR LOCATION
8. ROOF ACCESS LADDER W/ CAGE AND WALK THRU BY BC SITE SERVICE OR EQUAL
9. ENSURE ALL THERMOSTATS, FIRE ALARM PULL STATIONS, LIGHT SWITCHES, OUTLETS & OTHER USER OPERATED CONTROLS ARE DESIGNED & MOUNTED IN COMPLIANCE WITH ADA, NATIONAL AND LOCAL REGULATORY STANDARDS.
10. REFER TO STRUCTURAL AND MEP DRAWINGS FOR ADDITIONAL INFORMATION



2 FIRST FLOOR PLAN

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

N

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11-13-23

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PARCEL A, B, AND C WITHIN LOT 3 IN SECTION 19, T11N, R31E, N.M.P.M.
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NEW DEVELOPMENT

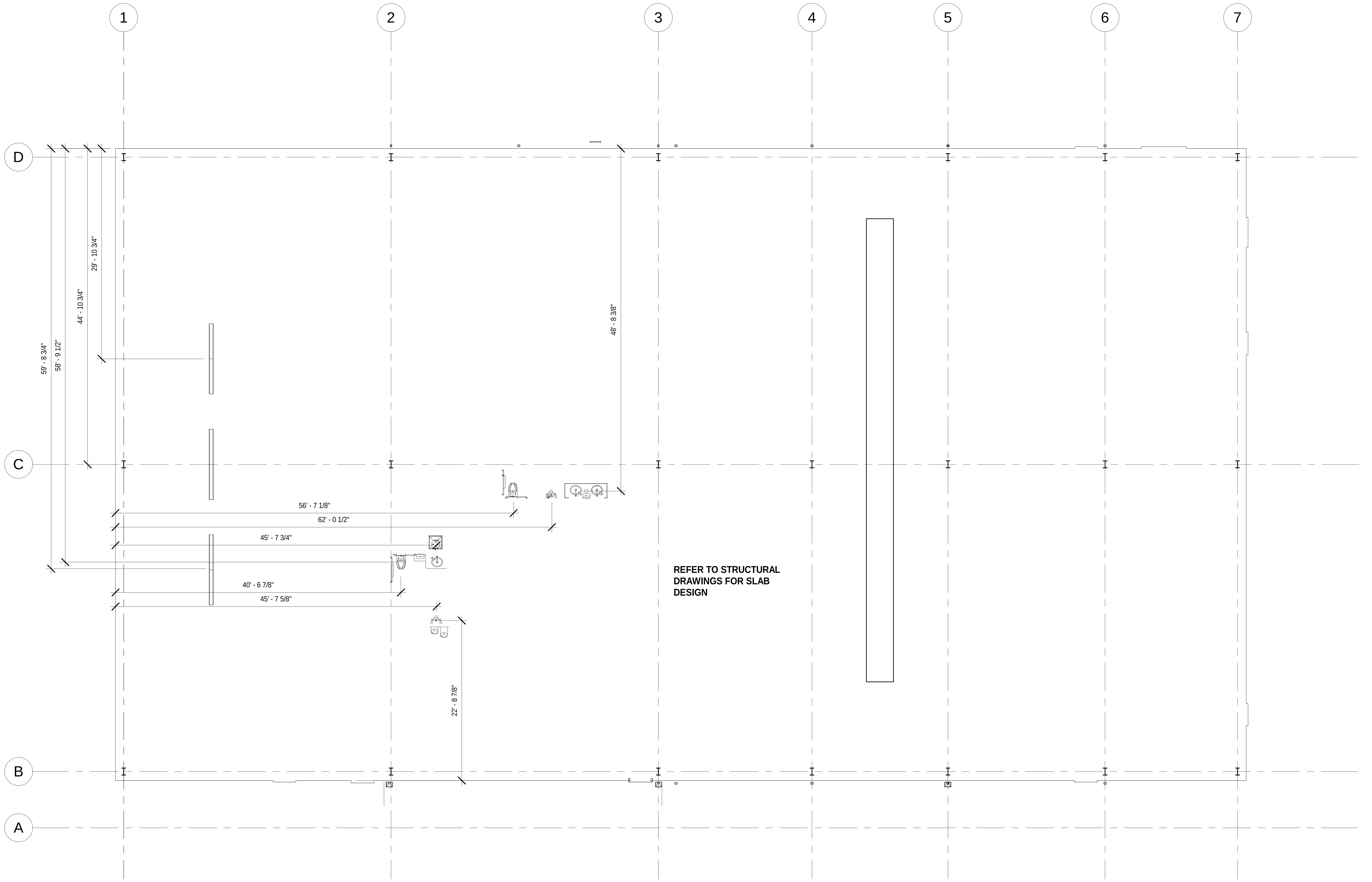
DATE: Nov. 2023

REVISIONS

SHEET TITLE
BUILDING FLOOR PLAN

SHEET NUMBER
A101

ISSUE DATE
11/10/2023



1 SLAB LAYOUT

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

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NEW DEVELOPMENT

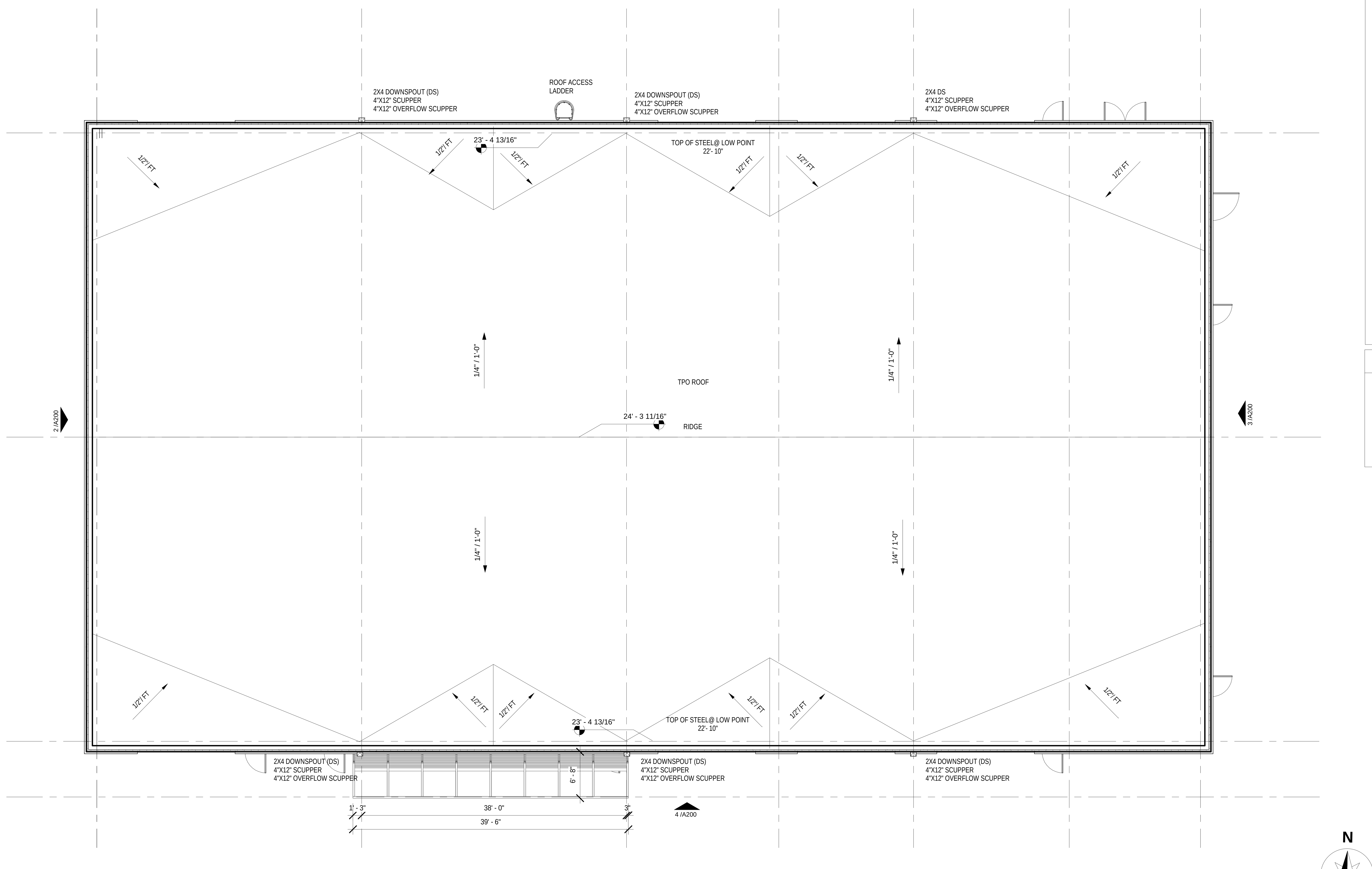
DATE: Nov. 2023

REVISIONS

SHEET TITLE
SLAB/ PLUBING ROUGH-IN

SHEET NUMBER
A101A

ISSUE DATE
11/10/2023



1 ROOF PLAN

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

MEMBERANE ROOF ASSEMBLY

- GAF 60-MIL TPO SINGLE- PLY ROOFING EVERGUARD EXTREME, EXTRA WHITE
- 1/2" HIGH STRENGTH COVERBOARD SET IN HOT ASPHALT
- CONTINUOUS RIGID INSULATION, R-25 MIN
- 1.5" METAL ROOF DECK. REF. TO STRUC.

GENERAL ROOF NOTES:

1.FOR TYPICAL ROOF PENETRATION DETAILS REFER TO SHEET A2.0. FOR ADDITIONAL ROOF PENETRATION DETAILS REFER TO MEP DOCS.

2.STRUCTURAL SHOWN ON PLAN ARE FOR GENERAL CONCEPT ONLY. REFER STRUCTURAL DRAWINGS FOR EXACT TOS/BOD ELEVATIONS.

3.REFER PLUMBING DOCUMENTS FOR ROOF DRAIN LEADERS, CONNECTIONS TO STORM DRAIN, AND NOZZLES.

4.PROVIDE OVERFLOW SCUPPER AT EACH ROOF DRAIN AS INDICATED ON THE DRAWINGS. REFER ROOF PLAN AND BUILDING ELEVATIONS FOR LOCATIONS. ADJUST PLACEMENT AS REQ'D PER PLUMBING DWGS

5.PROVIDE SPLASH BLOCKS AT ALL ROOF LEADER NOZZLES THAT SPILL ONTO GROUND - REFER PLUMBING DOCUMENTS FOR LOCATIONS

6.REFER STRUCTURAL DOCUMENTS FOR EQUIPMENT SUPPORTS, CURB DETAILS, AND SHEET A101 FOR TYPICAL PIPE SUPPORT DETAIL.

7.PROVIDE WALKWAY PAD AT PIPE SUPPORT LOCATIONS. REFER MEP DOCS FOR PIPE SUPPORTS LOCATION AND TYPE. PAD SHALL BE MIN 2" WIDER THAN SUPPORT IN ALL DIRECTIONS.

8.WOOD BLOCKING AT ROOF EDGES, RIDGES, ETC SHALL BE MIN 2x6s FRTWD BLKG. PROVIDE LARGER 2X AS REQD PER DETAIL DIMENSIONS

9. WHERE WOOD BLOCKING EXCEEDS 6" THICKNESS AT TAPERED INSULATION, PROVIDE STEM WALL CONSTRUCTED OF 6" GALV CFMF AT 16"OC W/ CONT TRACK TOP AND BOTTOM AND W/ 3/4" EXT GRADE PLYWOOD AT EA SIDE, TOP OF STEM WALL TO SLOPE W/ TAPERED INSULATION

MEMBRANE ROOFING NOTES:

1. ROOF MEMBERANE: 60 MIL MIN PVC ROOFING, ENERGY STAR, WHITE. GAF EVERGUARD 60 MIL PVC, ENERGY STAR, MECHANICALLY FASTENED WITH ALL ACCESSORIES PER MANUFACTURER RECOMMENDATION

2. ROOFING SRI AND 3 YEAR AGEND SRI SHALL BE MIN OF 64 FOR ROOFS WITH SLOPE OF EQUAL OR LESS THAN 2:12 AND MIN OF 25 FOR ROOFS WITH SLOPES OF MORE THAN 2:12

3. CONTINUE ROOFING MEMBRANE VERTICALLY ON PARAPET WALLS. HEAT WELD ALL JOINTS PER MANUFACTURER RECOMMENDATION

4. ROOF SLOPE 1/4" PER FOOT TO DRAINS REFER TO STRUCTURAL

5. PROVIDE MTL. FLASHING AT ALL ROOF PENTRATIONS AND AT MECHANICAL EQUIPMENT CURBS PER MANUFACTURER RECOMMENDATION

6. PROVIDE SUPPORTS AND FLASHING AS REQUIRED AT GAS PIPING ON THE ROOF AS INDICATED

7. EXPOSED METAL FLASHING/TRIM PIECES ARE TO BE PREFIN GALV STL, UNO. PAINT EXPOSED METAL FLASHING/TRIM PIECES THAT ARE NOT PREFIN, AND ALL EXPOSED MISC STL PIECES BLACK

8. FLASHING AND STRIPPING MATERIALS, BASE PLY SHEETS, INSULATION AND ACCESSORIES SHOULD BE RECOMMENDED BY THE ROOFING MANUFACTURER FOR INTEDED USE AND COMPATIBILITY WITH THE MEMBRANE ROOFING SYSTEM UNO

9. TAPERED INSULATION SHALL BE 1/4"/FT MIN SLOPE TO DRAIN. ROOF PLAN SHOWS TAPERED INSULATION AT NTS AND IS GRAPHIC ONLY, TO SHOW SLOPE AND APPROX LOCATION. (VERIFY INSULATION REQD TO MAINTAIN SLOPE, PRIOR TO INSTALLATION).

10. ROOF INSULATION: ENERGY GUARD POLYISO R-25 MIN CONTINUOUS INSULATION ABOVE DECK

11. PROVIDE TAPERED INSULATION CRICKETS (1/2"/FT MIN. SLOPE) AT HIGH SIDE OF ALL MECH UNITS AND MISC ROOF PENETRATIONS TO INSURE POSITIVE ROOF DRAINAGE

12. PROVIDE 1/2" COVER BOARD ABOVE INSULATION, GAF HD COVER BOARD OR BETTER

13. PROVIDE CONTINUOUS METAL COPING AT ALL PARAPETS OR SLOPE CONCRETE COPING 1/4" PER FT TOWARDS THE ROOF SIDE

14. PROVIDE ROOF HATCH 30"X 48" AND A LADDER IN RISER ROOM FOR ROOF ACCESS. COORDINATE LOCATION WITH EQUIPMENTS AND THE OWNER

ROOF DRAINS SIZING:

2021 IPC SECTION 1106.7

GPM= R * A* 0.0104 — SECTION 1106.2.1 EQUATION 11-1
R- RAINFALL INTENSITY= 3 IN PER HOUR
AREA= 14,136 + 1,242 (50% OF VERT. WALLS AREA)
GPM= 3* 15,378* 0.0104= 480 GPM (6-80 GPM EACH) — EQUATION 11-1
VERTICAL DRAIN SIZE= 3", 87 GPM (≈9.5" CIRCUMFERENCE) — TABLE 1106.2
SCUPPERS SIZE= (6) 4" X 12" EA
2X4 VERTICAL LEADER CAPACITY= 92 GPM AT EACH PRIMARY SCUPPER — TABLE 1106.3
OVER FLOW SCUPPER= (6) 4"X 12"

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Chris Archuleta
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TA TRAVEL CENTER
PARCEL A, B, AND C WITHIN LOT 3 IN SECTION 19, T11N, R31E, N.M.P.M.
TUCUMCARI, NM
NEW DEVELOPMENT

DATE: Nov. 2023

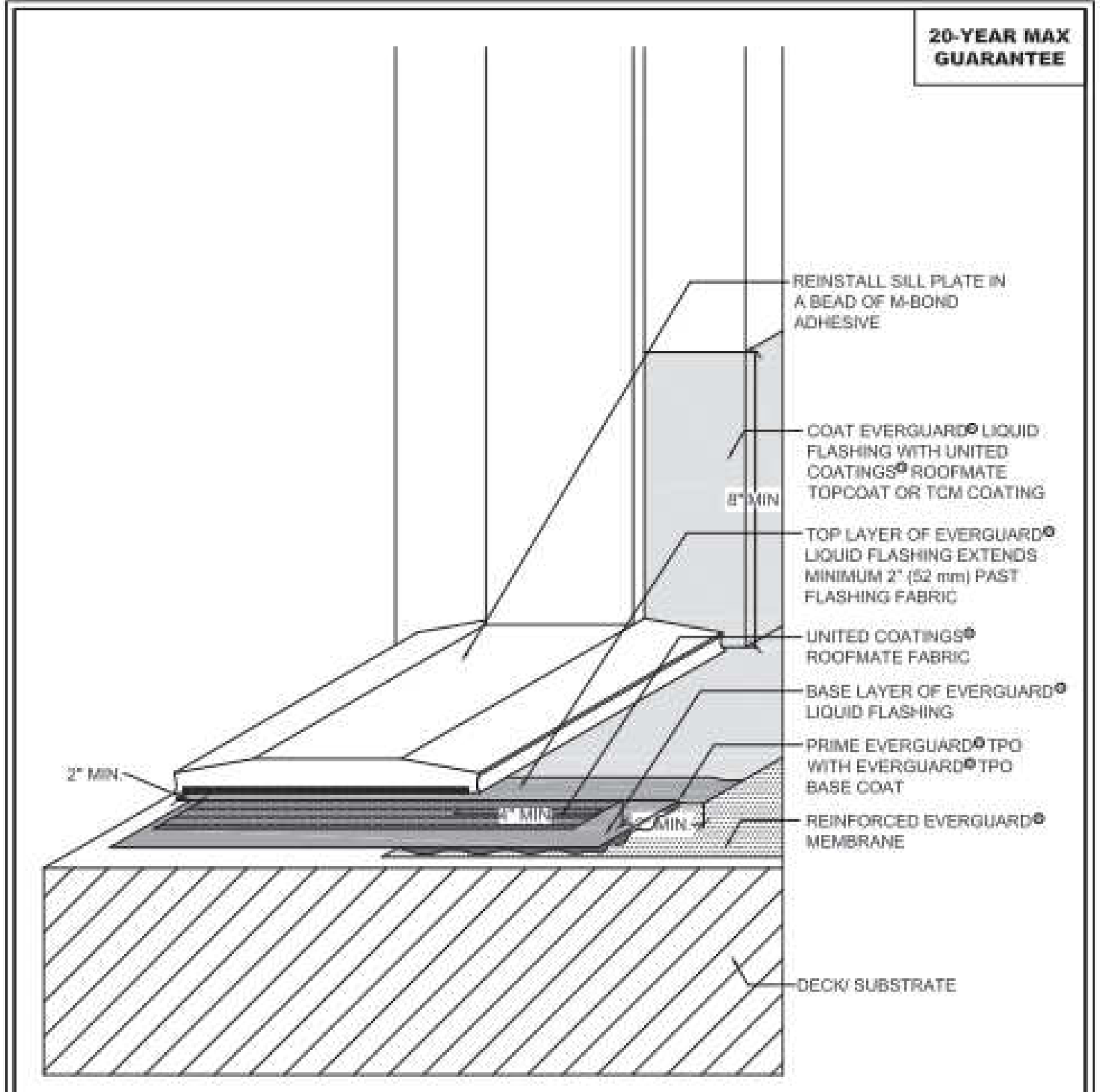
REVISIONS

SHEET TITLE
BUILDING ROOF PLAN

SHEET NUMBER
A102

ISSUE DATE
11/10/2023

300 Series Wall and Curb

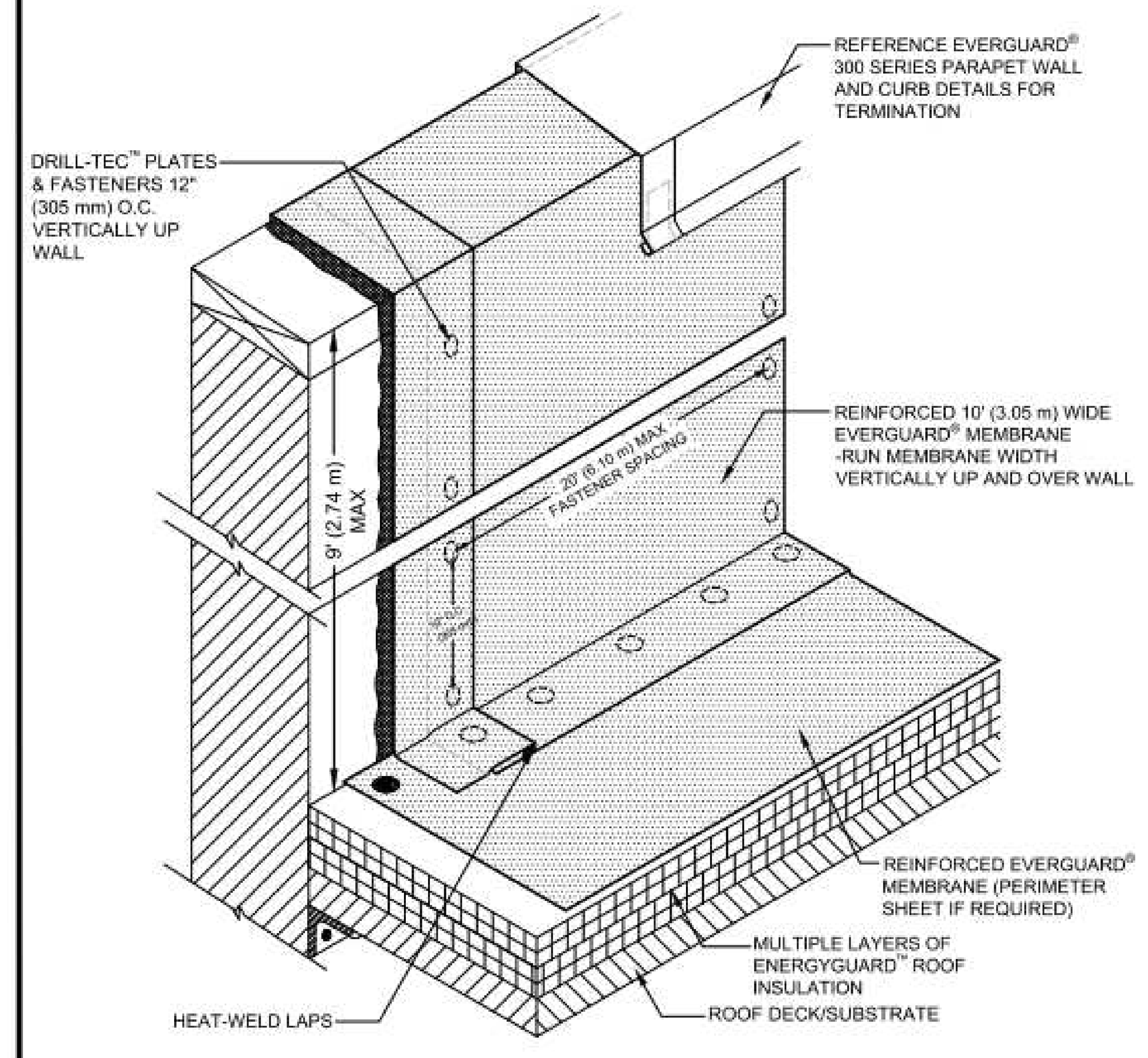


NOTE:
1. EVERGUARD® TPO MEMBRANE MUST BE PRIMED WITH EVERGUARD® TPO BASE COAT IN ALL AREAS THAT EVERGUARD® LIQUID FLASHING OR ROOFMATE COATING WILL BE USED.

GAF EverGuard PARAPET WALL & CURB SERIES | 343 | FLUSH DOOR SILL FLASHING | ALL SYSTEMS | N.T.S. | 10-3-17

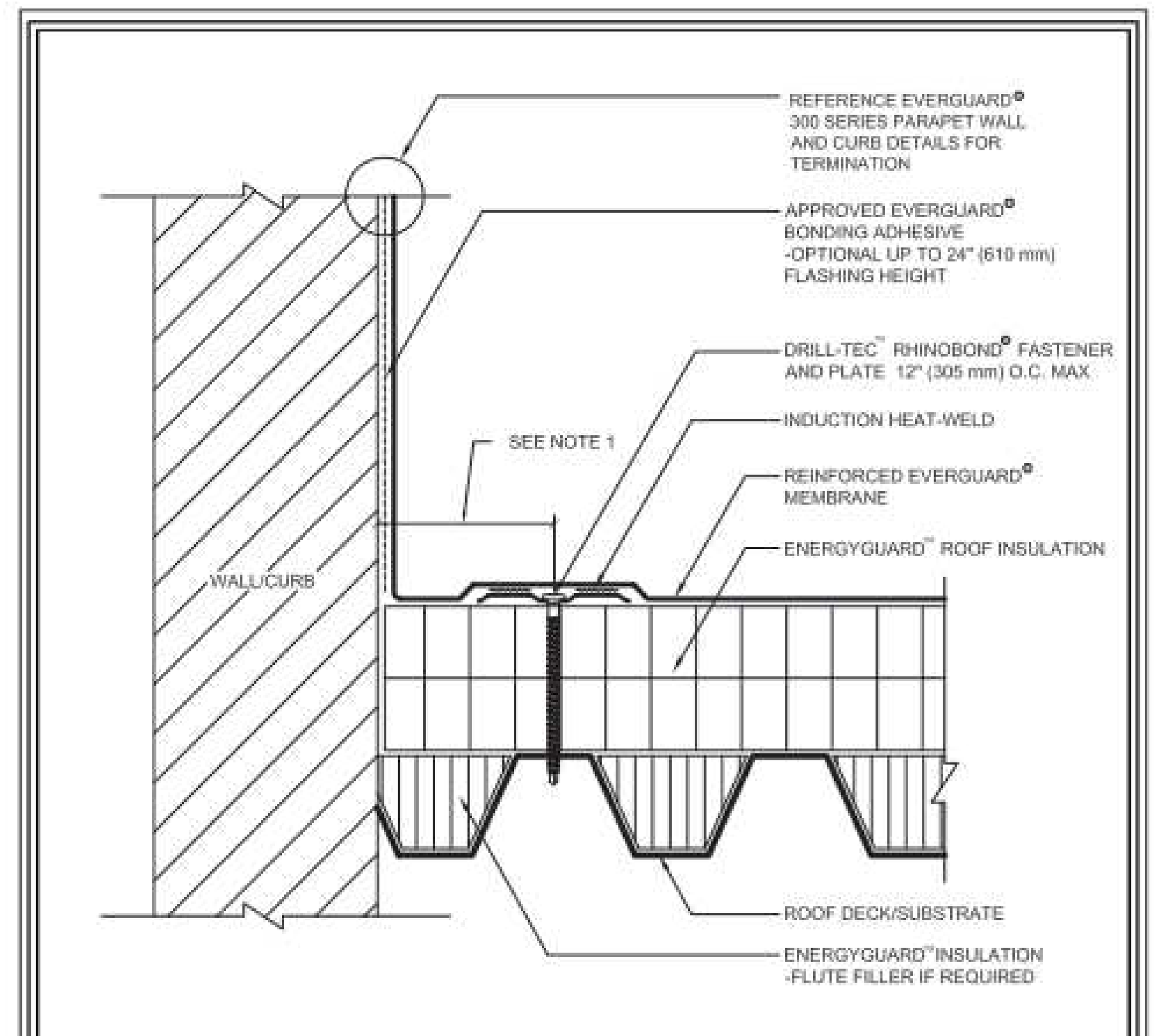
SINGLE-PLY: TPO & PVC

REFERENCE EVERGUARD® DETAIL 317D FOR VERTICAL SHEET LAYOUT



NOTE:
1. MUST BE FASTENED VERTICALLY ON THE WALL A MINIMUM 10' (3.05 m) FROM ALL ENDS OR CORNERS OF WALL, THEN MAX 20' (6.10 m) THEREAFTER. DRILL-TEC™ FASTENERS SPACED 12" (305 mm) O.C.
2. MAX PARAPET WALL HEIGHT NOT TO EXCEED THE WIDTH OF A 10' (3.05 m) SHEET. PARAPET WALL SHOULD BE NO TALLER THAN 9' (2.74 m) TO USE A FULL 10' (3.05 m) SHEET OF MEMBRANE AS FLASHING.

GAF | HIGH WALL FLASHING WITH 10' (3.05 m) WIDE SHEETS | 317A | ALL SYSTEMS | 8/24/20 | N.T.S.

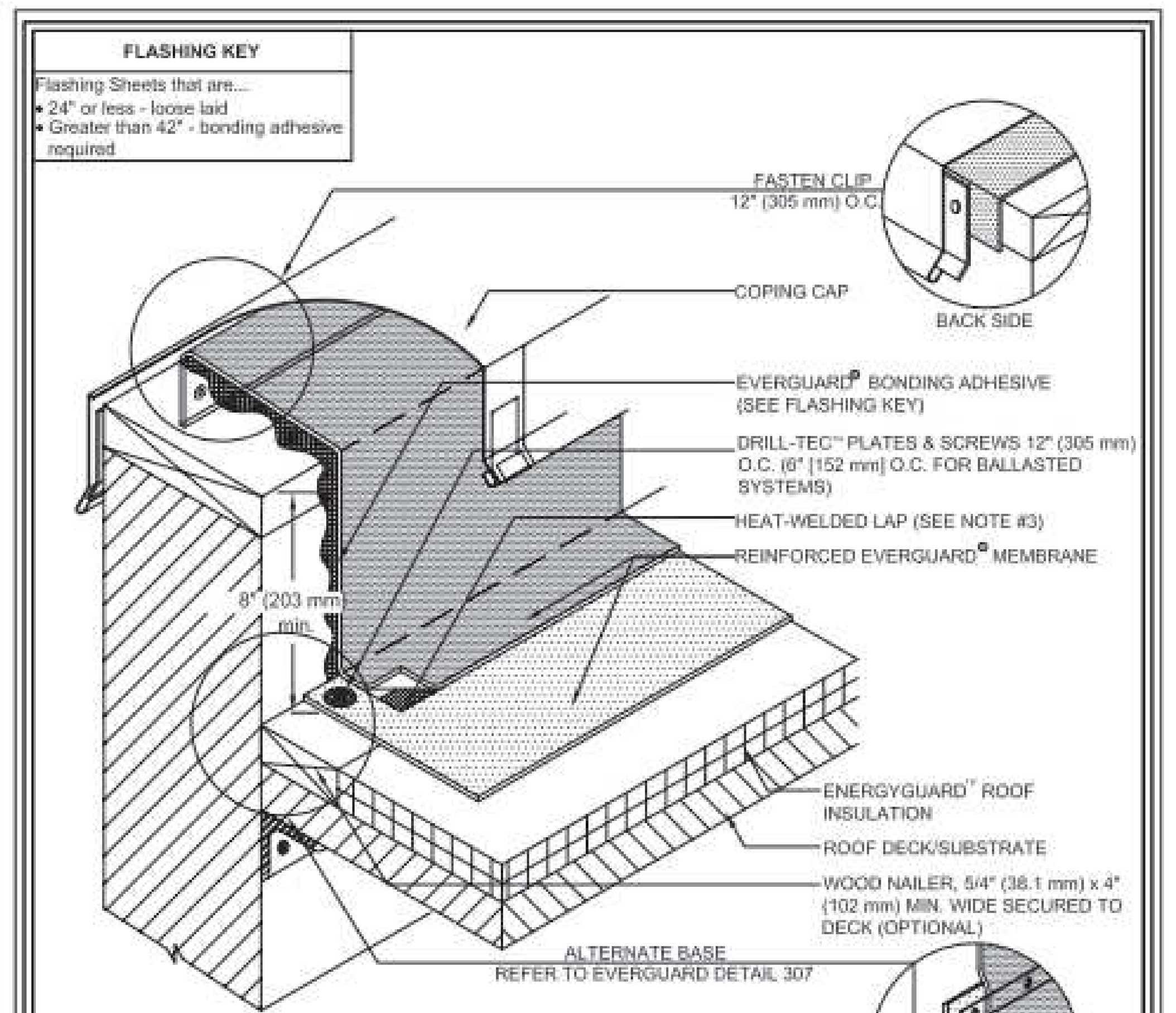


NOTE:
1. DRILL-TEC™ RHINOBOND® FASTENER & PLATE MUST BE INSTALLED A MAXIMUM 6" (152 mm) FROM THE ANGLE CHANGE.
2. REFER TO THE DRILL-TEC™ RHINOBOND® ATTACHMENT TABLES FOR DETAILED INSTALLATION REQUIREMENTS REGARDING DECK TYPE, PLATE & FASTENER TYPE, AND MIN. EMBEDMENT.

GAF EverGuard PARAPET WALL & CURB SERIES | 307B | BASE TIE-IN CONTINUOUS FLASHING AT ANGLE CHANGE DETAIL | RHINOBOND® ATTACHMENT SYSTEMS | N.T.S. | 12-12-17

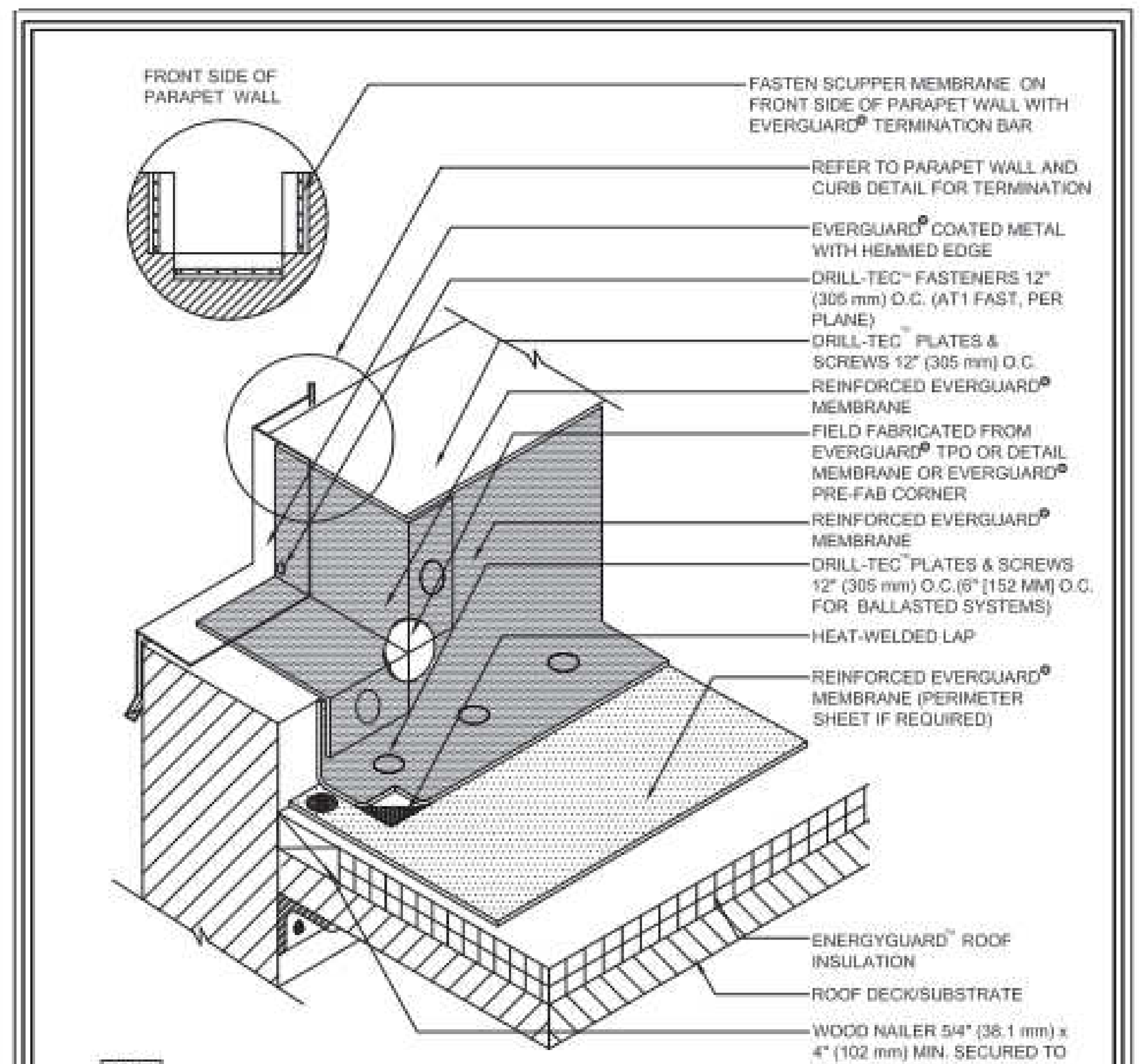
300 Series Wall and Curb

300 Series Wall and Curb



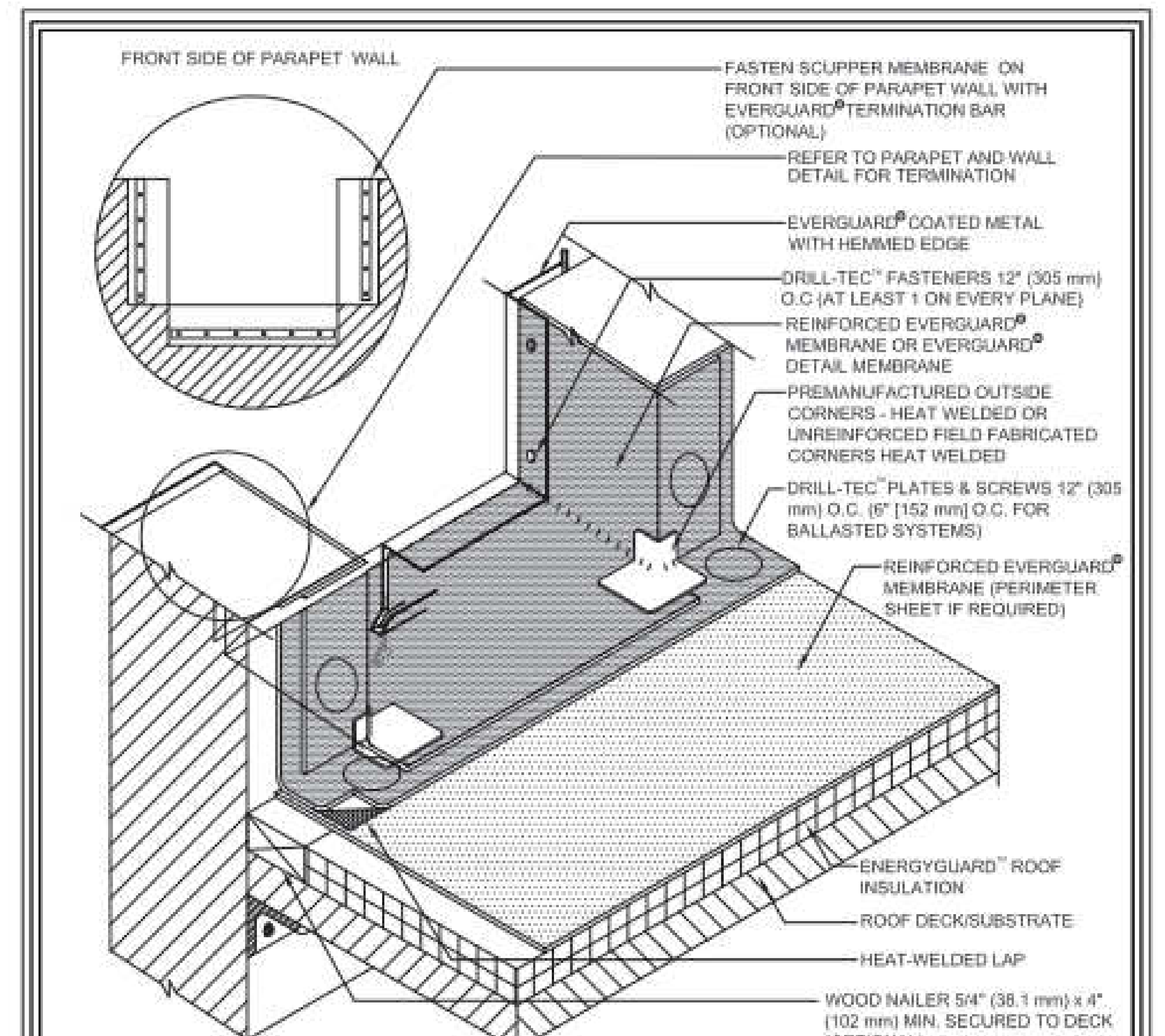
NOTE:
1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A HARD BOARD IS REQUIRED ON MECHANICALLY FASTENED SYSTEMS ONLY.
2. IF EVERGUARD® FREEDOM™ MEMBRANE IS USED, BONDING ADHESIVE IS NOT NEEDED AND WALL MUST BE PRIMED.
3. APPLY EVERGUARD® TPO CUT EDGE SEALANT TO ALL CUT REINFORCED TPO EDGES (REFER TO EVERGUARD® DETAIL 115).
4. FOR SELF-ADHERED RAPIDSEAM™ TECHNOLOGY SYSTEMS, SEE EVERGUARD® DETAIL 330 FOR LAP APPLICATION.

GAF EverGuard PARAPET WALL & CURB SERIES | 303 | WALL CAP DETAIL | ALL SYSTEMS | N.T.S. | 12-12-17



NOTE:
1. DETAIL TO BE USED IN CONJUNCTION WITH STANDARD GUIDE SPECIFICATION CONTAINING REQUIREMENTS FOR NAILERS, INSULATION ETC.
2. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A HARD BOARD IS REQUIRED ON MECHANICAL SYSTEMS ONLY.
3. IF EVERGUARD® FREEDOM™ MEMBRANE IS USED, BONDING ADHESIVE IS NOT NEEDED AND WALL MUST BE PRIMED.
4. APPLY EVERGUARD® TPO CUT EDGE SEALANT TO ALL CUT REINFORCED TPO EDGES (REFER TO EVERGUARD® DETAIL 115).

GAF EverGuard PARAPET WALL & CURB SERIES | 323 | SCUPPER - FIELD FABRICATED OPEN TOP - OVERFLOW | ALL SYSTEMS | N.T.S. | 12-12-17



NOTE:
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2. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A HARD BOARD IS REQUIRED ON MECHANICAL SYSTEMS ONLY.
3. APPLY EVERGUARD® TPO CUT EDGE SEALANT TO ALL CUT REINFORCED TPO EDGES (REFER TO EVERGUARD® DETAIL 115).

GAF EverGuard PARAPET WALL & CURB SERIES | 322 | SCUPPER - FIELD FABRICATED OPEN TOP DETAIL | Adhered Systems, Ballasted Systems, Mechanically Attached Systems | N.T.S. | 5-24-16

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TUCUMCARI, NM
NEW DEVELOPMENT

DATE: Nov. 2023

REVISIONS

SHEET TITLE
ROOF DETAILS

SHEET NUMBER
A102A

ISSUE DATE
11/10/2023

LIGHT FIXTURE SCHEDULE

	H	EXTERIOR WALL MOUNT, BLACK FINISH, WALL BRACKET MOUNT AT 20'-0" A.F.F. TO BOTTOM OF FIXTURE	DSX2-LED-P8-50K-BLC-MVOLT-WBA-DBLXD	LITHONIA	LED	5000K	40837	431.0	GC / GC
	EM	EMERGENCY EGRESS REMOTE HEAD, METAL HOUSING , WHITE FINISH, LOW TEMPERATURE OPTION, 40'-0" SPACE & 30' PROJECTION AT 8.5, MOUNTING HEIGHT, COORDINATE FINISH WITH PM	NF3-WB-10L-WH-CL	EXITRONIX	LED	-		10.5	GC / GC
	EX	EMERGENCY EGRESS REMOTE HEAD, METAL HOUSING , WHITE FINISH, LOW TEMPERATURE OPTION, 40'-0" SPACE & 30' PROJECTION AT 8.5, MOUNTING HEIGHT, COORDINATE FINISH WITH PM	DSX2-LED-P8-50K-BLC-MVOLT-WBA-DBLXD	LITHONIA	LED			1.0	GC / GC

LIGHT FIXTURE SCHEDULE

LEGEND	MARK	DESCRIPTION	MODEL	MANUFACTURER	LAMP	KELVIN	SOURCE LUMENS	WATT	SUPPLIED BY / INSTALLED BY
	A	NARROW HIGH-BAY	IBGN-30000LM-SEF-ACL-WD-MOVOLT-GZ10-50K-80CRI-DEH	LITHONIA	LED	5000K	30000	174.0	GC / GC
	AE	NARROW HIGH-BAY WITH 20W EMERGENCY BATTERY BACKUP	IBGN-30000LM-SEF-ACL-WD-MOVOLT-GZ10-50K-80CRI-DEH-IE20WCPHE	LITHONIA	LED	5000K	30000	174.0	GC / GC
	B	2'X2' TROFFER, SATIN WHITE LENS	2GTL-2-48-FW-SWL-GZ10-LP850	LITHONIA	LED	5000K	4800	42.0	GC / GC
	BE	2'X2' TROFFER, SATIN WHITE LENS	2GTL-2-48-FW-SWL-GZ10-LP850	LITHONIA	LED	5000K	4800	42.0	GC / GC
	C4	4' STRIP FIXTURE, SWITCHABLE CCT AND LUMEN	CSS-L48-AL03-MVOLT-SWW3-80CRI	LITHONIA	LED	5000K	4000	43.9	GC / GC
	C8	8' STRIP FIXTURE, SWITCHABLE CCT AND LUMEN	CSS-L96-AL03-MVOLT-SWW3-80CRI	LITHONIA	LED	5000K	8000	71.7	GC / GC
	D	6" DOWNLIGHT, WHITE FINISH	LDN6-35/10-L06-WR-MVOLT-GZ1	LITHONIA	LED	3500K	1000	10.4	GC / GC
	E	4' PIT LIGHT	HJHL42-060-50-U-120	LITHONIA	LED	5000K	8000	60.0	GC / GC
	F	2' VANITY SCONCE, SATIN BRONZE FINISH, MOUNT ON WALL ABOVE SINKS IN RESTROOM	BDFV-24-LED-3-B-Z1-WSA-DIM	LIGHTWAY INDUSTRIES	LED	3500K	2420	18.0	GC / GC
	G	3' VANITY SCONCE, SATIN BRONZE FINISH, MOUNT ON WALL ABOVE SINKS IN RESTROOM	BDFV-36-LED-3-B-Z1-WSA-DIM	LIGHTWAY INDUSTRIES	LED	3500K	3630	27.0	GC / GC

1 **REFLECTED CEILING PLAN**
SCALE: 1/8" = 1'-0"

GENERAL RCP NOTES:

1. THIS DRAWING IS TO BE USED IN CONJUNCTION WITH MEP DRAWINGS.
2. ALL CEILING GRIDS TO BE CENTERED IN ROOM UNO
3. ALL SPRINKLER HEADS, DOWNLIGHTS AND OTHER CEILING COMPONENTS SHALL BE LOCATED IN THE CENTER OF CEILING TILE UNO
4. ALL DOWNLIGHT SHALL BE SELF-FLANGING.
5. EXIT SIGNS TO BE WALL MOUNTED @ 9' AFF
6. ALL MEP (EQUIPMENT, DUCTWORK, CONDUIT, PIPING...ETC.) TO BE HELD TIGHT TO ROOF/FLOOR DECK
7. NO DUCK BOARD ALLOWED
8. ENSURE ALL THERMOSTATS, FIRE ALARM PULL STATIONS, LIGHT SWITCHES, OUTLETS & OTHER USER OPERATED CONTROLS ARE DESIGNED & MOUNTED IN COMPLIANCE WITH ADA, NATIONAL AND LOCAL REGULATORY STANDARDS.
9. CONTRACTOR TO PROVIDE SUPPORT / BLOCKING FOR ALL SIGNAGE AND EQUIPMENT AS REQUIRED. LOCATION AND WEIGHT SHALL BE COORDINATED WITH THE OWNER AND SUPPLIERS AND SHOWN AS APPLICABLE ON SHOP DRAWINGS.
10. CONTRACTOR TO COORDINATE AND PROVIDE POWER FOR SIGNAGE AS REQUIRED.
11. CONTRACTOR TO RUN CONDUITS FOR LOW VOLTAGE AND COORDINATE LOCATIONS WITH OWNER'S VENDOR

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TUCUMCARI, NM
NEW DEVELOPMENT

DATE: Nov. 2023

REVISIONS

SHEET TITLE
BUILDING CEILING PLAN

SHEET NUMBER
A103

ISSUE DATE
11/10/2023

COLOR AND MATERIAL LEGEND

BK100	BRICK: COLOR TBS
BK101	BRICK SOLIDER COURSE
ST100	STUCCO OR EIFS- TEXTURED COLOR: TAN
ST101	STUCCO OR EIFS- SMOOTH COLOR: TAN
M100	STEEL/ PRE MANUF. CANOPY
M101	PREFINISHED METAL COPING
CJ	FRY REGLET TRIM
SF100	STEEL STOREFRONT COLOR: ANODIZE

EXTERIOR MATERIAL SCHEDULE

MARK	DESCRIPTION/ MODEL #	MANUFACTURER/ CONTACT
BK-100	BELDEN BRICK, MODULAR, RUNNING COURSE, COLOR: TBS	BRYAN HACKETT, bhackett@brick.COM
BK-101	BELDEN BRICK, SOLIDER COURSE, COLOR: TBS	BRYAN HACKETT, bhackett@brick.COM
ST-100	3 SYSTEM STUCCO OR EIFS, TEXTURED COLOR: WHITE, SMOOTH @ ST-101	GC CHOICE
M-100	PRE ENGINEERED METAL CANOPY, COLOR: BLACK. BASIS OF DESIGN: MAPES LUMISHADE	MAPES ARCHITECTURAL CANOPIES
M-101	4" PRE FINISHED METAL COPING, SLOPE TOWARDS ROOF	GC CHOICE
CJ	FRY REGLET 1" STUCCO REVEAL, PCS-100-100	FRY REGLET
SF-100	ALUMN STOREFRONT, KAWNEER TRIFAB VERSAGLAZE 601, 2" SIGHTLINE, 6" DEPTH, CENTER GLASS, WITH HIGH PERFORMANCE FLASHING	KAWNEER OR EQUAL

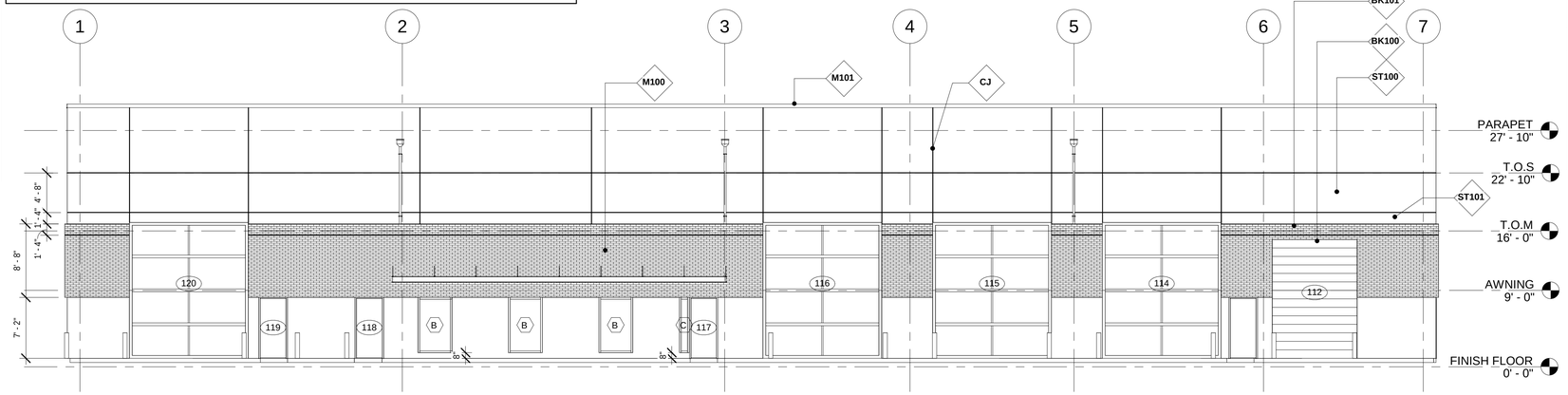
NOTE: GC TO SUBMIT (2) SAMPLES OF ALL FINISHES TO THE OWNER AND ARCHITECT FOR APPROVAL BEFORE ORDERING OR PURCHASING

ELEVATIONS NOTES:

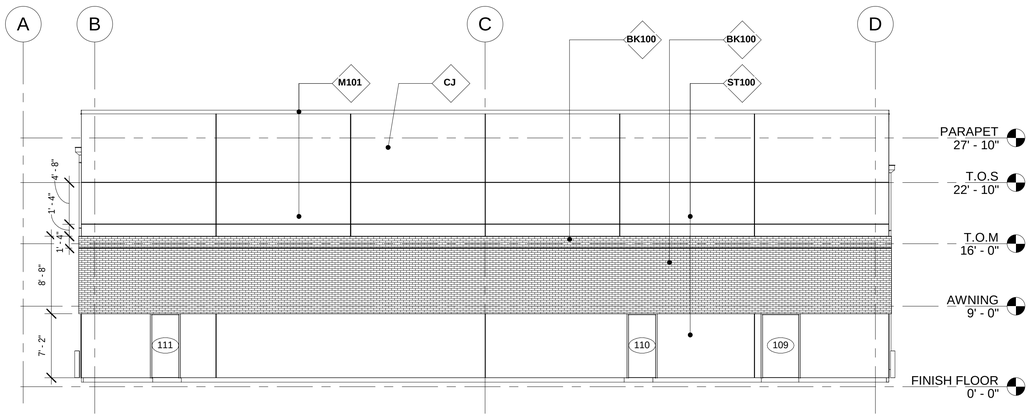
1. TYPICAL EXTERIOR CLADDING - TEXTURED STUCCO FINISH AND BRICK VENEER.
2. ALL BUILDING MOUNTED EQUIPMENT, AWNINGS, ETC. SHALL BE MOUNTED AFTER EXTERIOR FINISH IS APPLIED AND PAINTED. IF SEQUENCING OF CONSTRUCTION REQUIRES MOUNTING PRIOR TO THIS, CONTRACTOR SHALL SUBMIT METHOD OF MOUNTING AND WATERPROOFING TO ARCHITECT FOR APPROVAL. PLINTH BLOCKING REQUIRED AT ALL PENETRATIONS AND SURFACE MOUNTED FIXTURES.
3. ALL FINISH GRADE SHALL BE MINIMUM 6" FROM FINISH FLOOR AND SLOPE AWAY FROM BUILDING.
4. ALL ATTACHMENTS AND PENETRATIONS THROUGH THE EXTERIOR CLADDING SYSTEM MUST BE SEALED AGAINST POTENTIAL WATER INTRUSION.
5. ALL LOUVERS TO BE PAINT GRADE, AND TO BE PAINTED THE SAME COLOR AS THE ADJACENT WALL PANEL COLOR.
6. ALL DOWNSPOUTS TO GO TO UNDERGROUND STORM. VERIFY WITH CIVIL IF ALL DOWNSPOUTS ARE TIED TO UNDERGROUND AND IF NOT, TURN DOWNSPOUTS WITH 90° ELBOW AWAY FROM BUILDING.
7. FOR FOUNDATION, SEE STRUCTURAL DRAWINGS.

STUCCO FINISH NOTES:

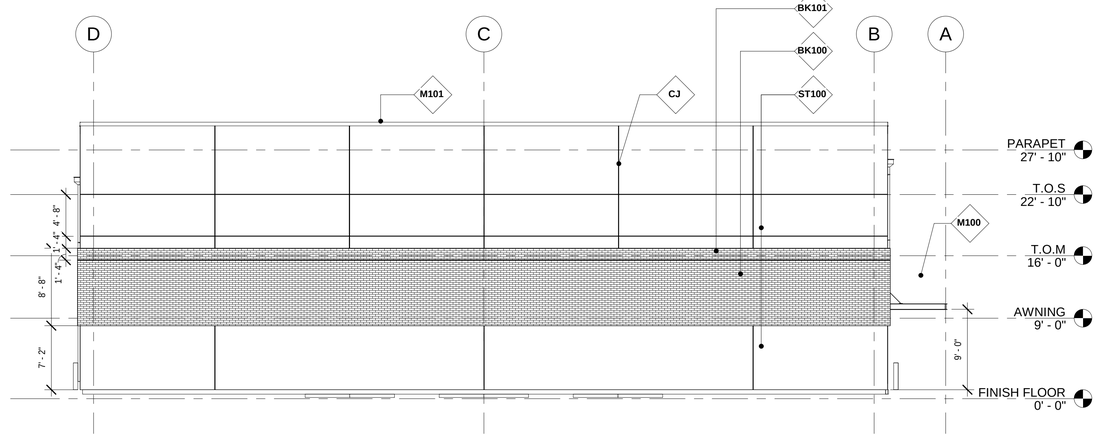
1. WEEP SCREED SHALL BE APPLIED AT FOUNDATION. PLACE LINE AT A MIN OF 6" ABOVE FINISHED GRADE AND MIN OF 2" ABOVE PAVED AREAS.
2. CONTROL JOINTS TO BE INSTALLED PER ASTM C-1063 INCLUDING THE FOLLOWING REQUIREMENTS:
   A. CONTROL JOINTS TO BE INSTALLED IN WALLS TO DELINEATE AREAS NOT MORE THAN 144 SQ FT.
   B. DISTANCE BETWEEN CONTROL JOINTS SHALL NOT EXCEED 18'-0" IN EITHER DIRECTION OR A LENGTH OR A LENGTH TO WIDTH RATIO OF 2-1/2" TO 1".
3. CONTROL JOINTS SHALL BE INSTALLED AT FLOOR LINES.



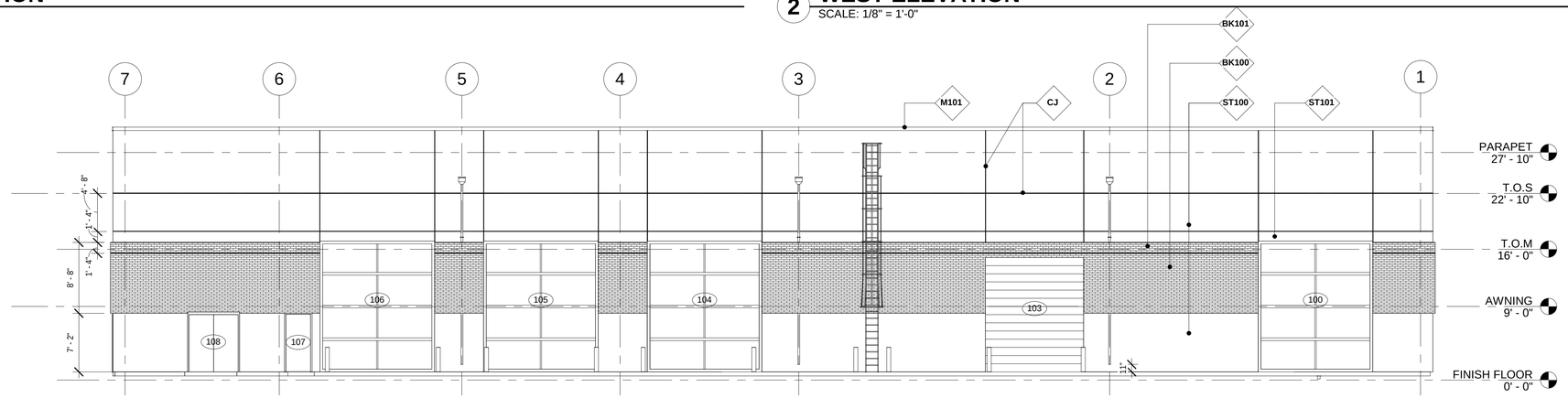
4 SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



3 EAST ELEVATION
SCALE: 1/8" = 1'-0"



2 WEST ELEVATION
SCALE: 1/8" = 1'-0"



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

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NEW DEVELOPMENT

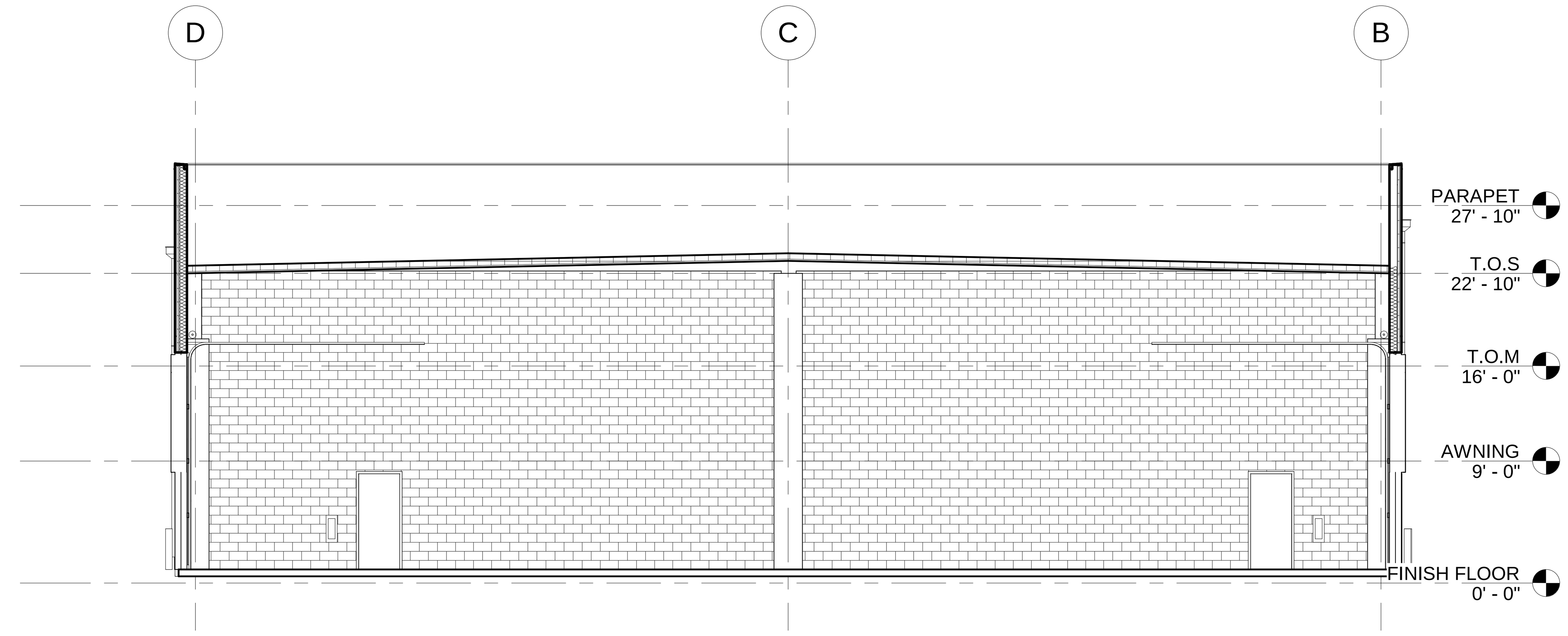
DATE: Nov. 2023

REVISIONS

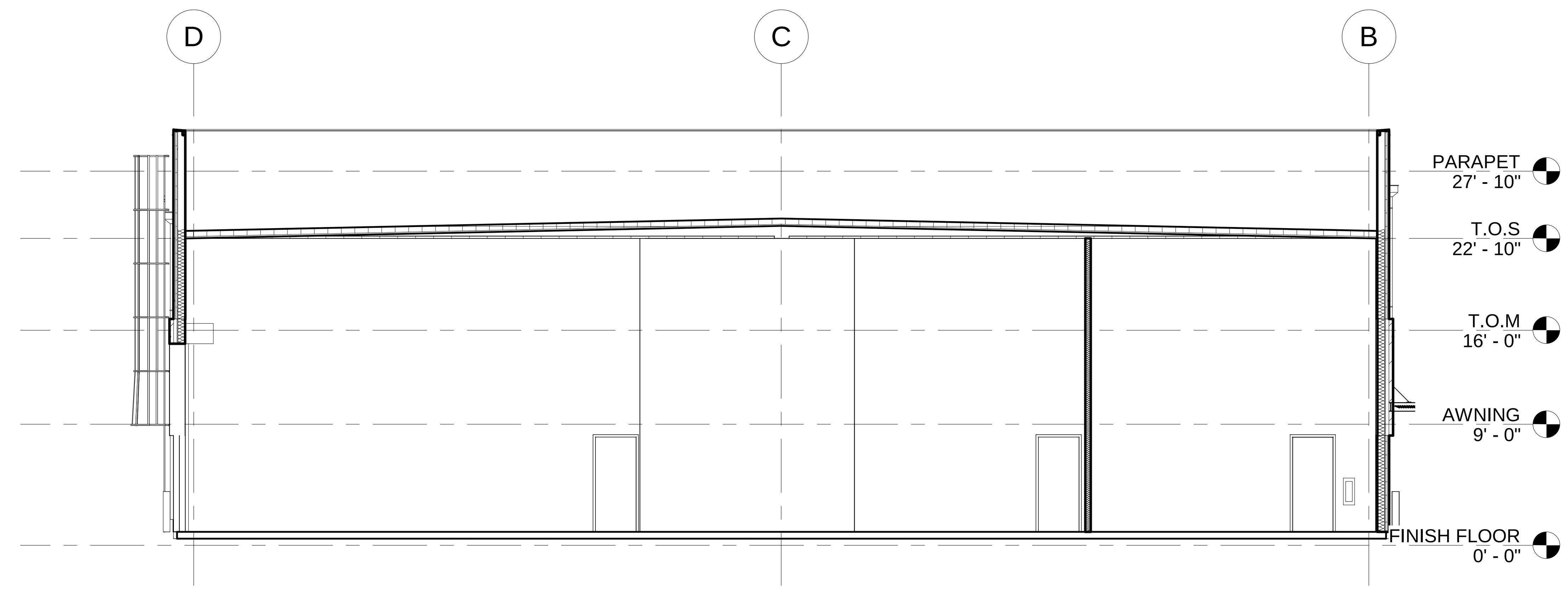
SHEET TITLE
BUILDING EXTERIOR ELEVATIONS

SHEET NUMBER
A200

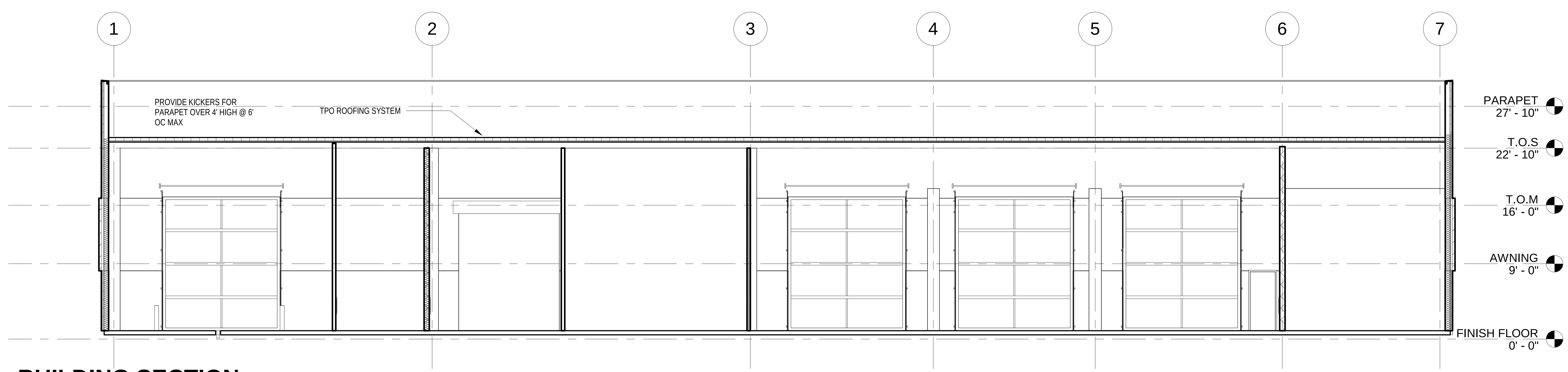
ISSUE DATE
11/10/2023



3 **BUILDING SECTION**
SCALE: 1/8" = 1'-0"



2 **BUILDING SECTION**
SCALE: 1/8" = 1'-0"



1 **BUILDING SECTION**
SCALE: 1/8" = 1'-0"

WALL SECTION GENERAL NOTES

1. NOTIFY ARCHITECT OF ANY CONFLIT OR DISCREPANCIES IN CONTRACT DOCUEMENTS BEFORE BEGINNING WORK.

ROOF FLASHING AND MISC. CONSTRUCTION

1. ALL ROOF WORK SHALL BE EXECUTED PER 'NRCA-NATIONAL ROOFING CONTRACTORS ASSOCIATION' MANUAL TYP.
2. ALL SHEET METAL WORK, COPING, FLASHING, ETC. SHALL BE DESIGNED AND EXECUTED PER 'SMACNA' MANUAL REQUIREMENTS, SEVENTH EDITION
3. WEEP HOLES SHALL BE AT 24" OC UNO; WEEP HOLES SHALL BE AT 32" OC AT CMU VENEER IN RUNNING BOND PATTERN IF APPLICABLE
4. REFER TO FLOOR PLANS FOR FIRE ASSEMBLY REQUIREMENTS, EXTENT AND LOCATION, TYP.
5. ALL PENETRATION IN RATED WALLS AND FLOORS SHALL HAVE FIRESTOPPING AS REQUIRED PER CODE, TYP.
6. REFER TO ELEVATIONS AND STRUCTURAL DOCS FOR VENEER MASONRY PATTERNS, BRICK LEDGES AND STEPS IN PARAPET, TYP.
7. REFER TO FLOOR PLANS FOR EXACT PLACEMENT OF WINDOWS, TYP.
8. REFER TO STRUCTURAL DOCUMENTS FOR EXACT LOCATIONS AND TYPES OF STRUCTURAL MEMBERS, FOR JOIST BEARING AND TOS ELEVATIONS, AND FOR COMPLETE DETAILS OF ALL STRUCTURAL CONNECTIONS. STRUCTURAL REFERENCES IN WALL SECTIONS ARE FOR COORDINATION PURPOSES ONLY. NOTIFY ARCHITECT OF ANY DISCREPANCIES.
9. PROVIDE AND INSTALL FIRE PROOFING ASSEMBLIES INDICATED ON EGRESS PLAN AS REQUIRED BY CODE
10. ALL PORTLAND CEMENT PLASTER SHALL BE ELASTO-METRIC COATED AS APPLICABLE

CFMF. STL STUD AND GDW CONST.

1. ALL METAL FRAMING FOR EXTERIOR WALLS SHALL BE CFMF AND ALL INTERIOR METAL FRAMING TO BE STEEL STUDS, UON
2. ALL UNDESIGNATED CFMF SHALL BE 18GA MIN WITH 1 5/8" WIDE FLANGES AT 16" OC, TYP (12" OC FOR 4'-0" EACH SIDE ALL OUTSIDE CORNERS REFER TO WALL TYPES AND DETAILS . CFMF SYSTEMS SUPPORTING VENEER MASONRY SHALL RESIST CODE REQUIRED WIND PRESSURES AT DEFLECTION LESS THAN OR EQUAL TO L/360. NOTIFY ARCHITECT OF ANY DISCREPANCIES BETWEEN THESE CRITERIA AND INDICATED CFMF MEMBERS SIZES AND SPACINGS.
3. ALL CFMF STUD MEMBERS SHALL BE BRACED. WHERE THERE IS NO SHEATHING OR FINISH MATERIAL CALLED OUT, PROVIDE V-BAR BRACING OR BRIDGING AT 24" OC OR AS RECOMMENDED BY FRAMING MANUFACTURER, TYP.
4. ALL CFMF BRIDGING SHALL BE 6" x18GA AT 16" OC UON, TYP.
5. BATT INSULATION IN EXTERIOR WALLS SHALL BE UNFACED. FOAM INSULATION SHALL BE OPEN CELL. PROVIDE CONTINUOUS INSULATION AS SPEC'D AT EXTERIOR FACE OF STUD

BRICK AND CMU VENEERS

1. PROVIDE CONTROL JOINTS IN BRICK AND CMU VENNER 30' OC MAX. REF. ELEVATIONS

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TA TRAVEL CENTER
PARCEL A, B, AND C WITHIN LOT 3 IN SECTION 19, T11N, R31E, N.M.P.M.
TUCUMCARI, NM
NEW DEVELOPMENT

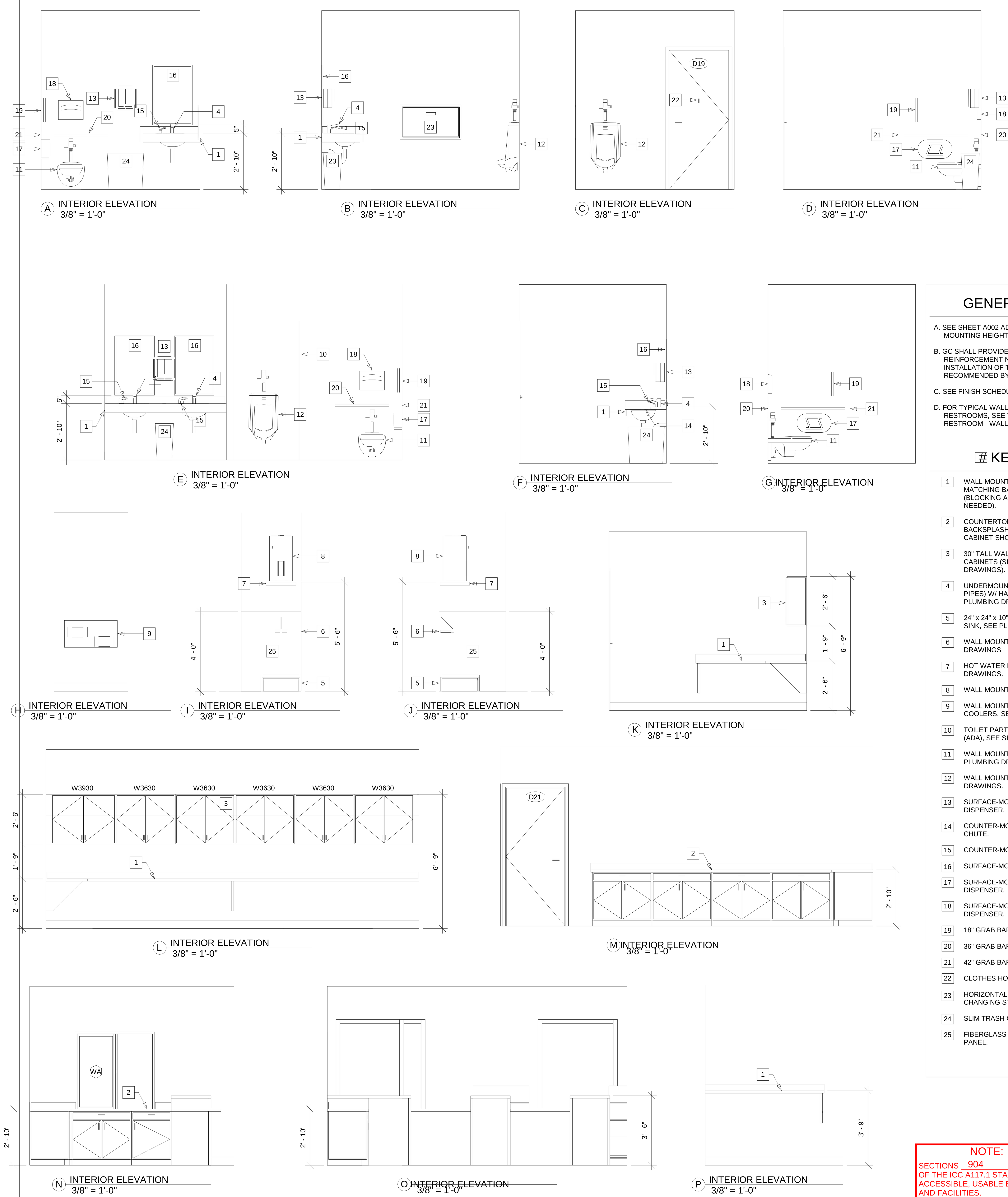
DATE: Nov. 2023

REVISIONS

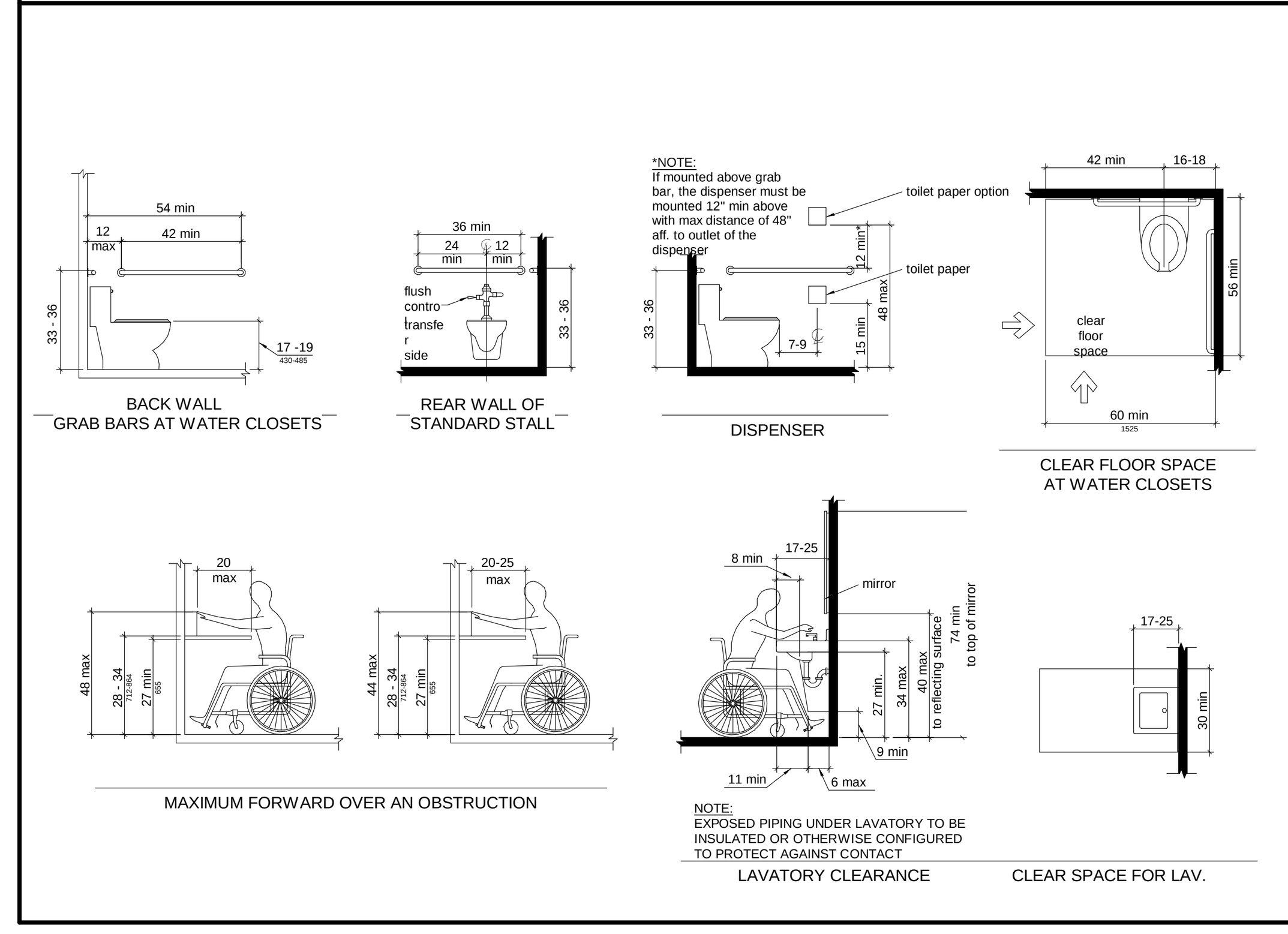
SHEET TITLE
BUILDING SECTIONS

SHEET NUMBER
A300

ISSUE DATE
11/10/2023



PLUMBING FIXTURES MOUNTING HEIGHT



PLUMBING FIXTURES / ACCESSORIES SCHEDULE

REF	DESCRIPTION	QTY
A	TOILET - AMERICAN STANDARDS 2954.128.020 MADERA/ ADA/ 1.28 GPF, EVER CLEAN WITH MANUAL FLUSH VALVE, WHITE AND ALL REQUIRED PARTS/ACCESSORIES.	2
B	SINK -AMERICAN STANDARD/ COMRADE WALL MOUNTED SINK / MODEL # 0124.024.020/ WHITE	3
C	FAUCET -KOHLER/ KATUN/ SINGLE HOLE SINGLE HANDLE/ MODEL # K-R78037-4D-CP FINISH: POLISHED CHROME	3
D	TOILET PAPER HOLDER - TBS	2
E	42" GRAB BAR - BOBRICK #B-6806 SERIES, CONCEALED MOUNTING, POLISHED CHROME FINISH @ ADA RESTROOM ONLY	2
F	36" GRAB BAR - BOBRICK #B-6806 SERIES, CONCEALED MOUNTING SATIN CHROME FINISH @ ADA RESTROOM ONLY	2
H	SOAP DISPENSER, TBS	2
J	PAPER TOWEL DISPENSER/ HAND DRYER/ TRASH RECEPTACLE, TBS	2

NOTES:
1. GC TO ENSURE RESTROOMS TO COMPLY WITH ADA REQUIREMENTS FOR CLEARANCE AND FIXTURES HEIGHT
2. GC TO ENSURE RESTROOMS TO COMPLY WITH ALL CODES AND CITY REGULATIONS
3. ALL FIXTURES AND ACCESSORIES TO BE PROVIDED BY GC AND INSTALLED BY GC
4. COORDINATE ALL FIXTURE AND ACCESSORIES SPECIFICATION WITH THE OWNER BEFORE PURCHASING AND INSTALLING
5. ALL EXPOSED PIPING UNDER THE SINK TO BE INSULATED AND COVERED
6. GC TO PROVIDE BLOCKING BEHIND ALL FIXTURES AND ACCESSORIES AS REQUIRED

GENERAL NOTES

A. SEE SHEET A002 ADA COMPLIANCE DATA FOR MOUNTING HEIGHTS.

B. GC SHALL PROVIDE ALL WALL REINFORCEMENT NECESSARY FOR COMPLETE INSTALLATION OF TOILET ACCESSORIES AS RECOMMENDED BY MANUFACTURES.

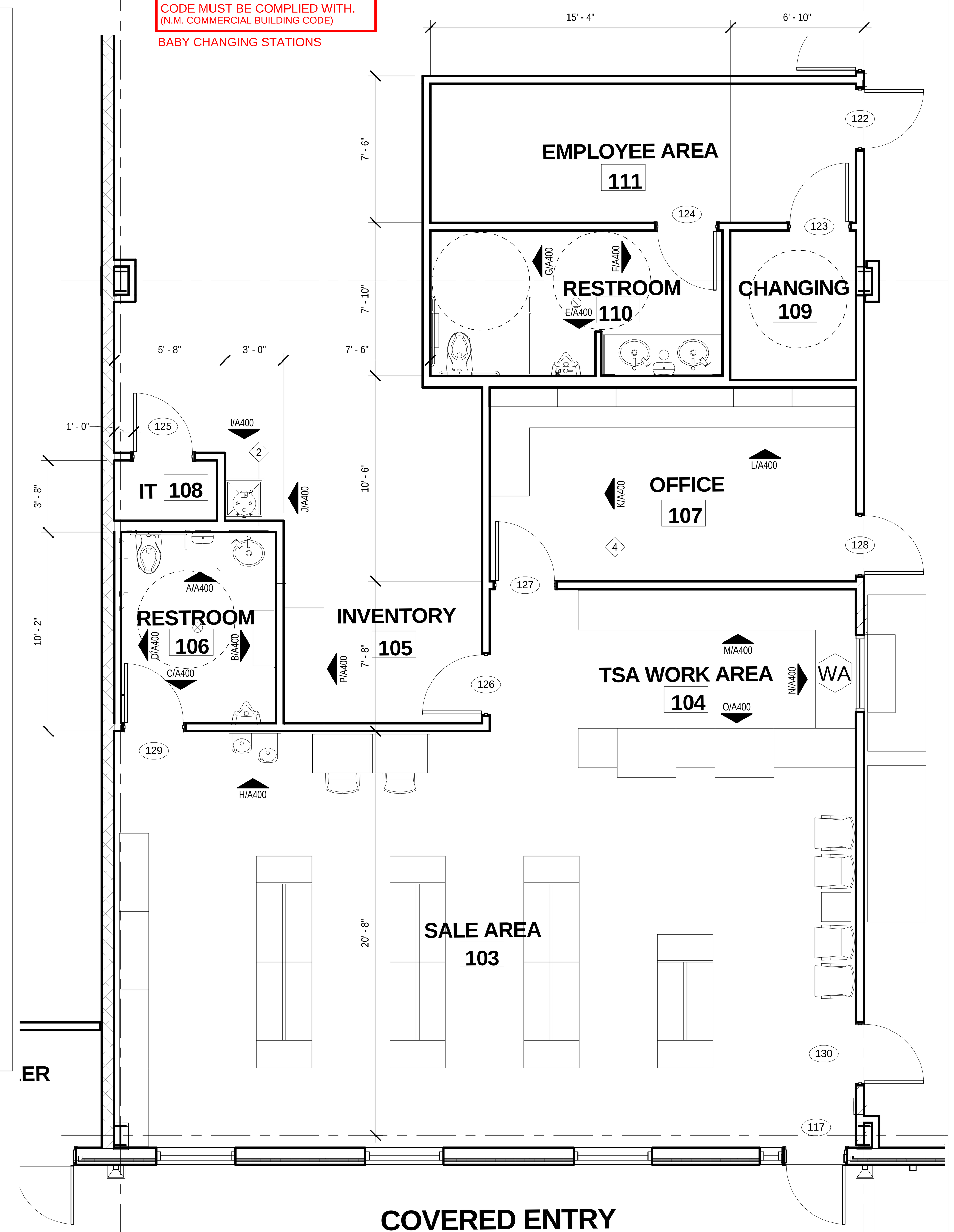
C. SEE FINISH SCHEDULE FOR WALL FINISHES.

D. FOR TYPICAL WALL TILE DESIGN IN RESTROOMS, SEE TYPICAL PUBLIC RESTROOM - WALL TILE DETAIL ON SHEET A60?

KEY NOTES

1. WALL MOUNTED COUNTERTOP W/ 4" TALL MATCHING BACKSPLASH AND SKIRTING (BLOCKING AND SUPPORT BRACKET AS NEEDED).
2. COUNTERTOP W/ 4" TALL MATCHING BACKSPLASH OVER BASE CABINETS (SEE CABINET SHOP DRAWINGS).
3. 30" TALL WALL MOUNTED UPPER CABINETS (SEE CABINET SHOP DRAWINGS).
4. UNDERMOUNT LAVATORY SINK (INSULATE PIPES) W/ HANDSFREE FAUCET, SEE PLUMBING DRAWINGS.
5. 24" x 24" x 10" FLOOR MOUNTED MOP SINK, SEE PLUMBING DRAWINGS.
6. WALL MOUNTED FAUCET, SEE PLUMBING DRAWINGS
7. HOT WATER HEATER, SEE PLUMBING DRAWINGS.
8. WALL MOUNTED EQUIPMENT PLATFORM.
9. WALL MOUNTED ELECTRICAL WATER COOLERS, SEE PLUMBING DRAWINGS.
10. TOILET PARTITION W/ 36" WIDE DOOR (ADA), SEE SHOP DRAWINGS.
11. WALL MOUNTED WATER CLOSET, SEE PLUMBING DRAWINGS.
12. WALL MOUNTED URINAL, SEE PLUMBING DRAWINGS.
13. SURFACE-MOUNTED PAPER TOWEL DISPENSER.
14. COUNTER-MOUNTED CIRCULAR WASTE CHUTE.
15. COUNTER-MOUNTED SOAP DISPENSER.
16. SURFACE-MOUNTED MIRROR (24" x 36").
17. SURFACE-MOUNTED TOILET TISSUE DISPENSER.
18. SURFACE-MOUNTED TOILET SEAT COVER DISPENSER.
19. 18" GRAB BAR.
20. 36" GRAB BAR.
21. 42" GRAB BAR.
22. CLOTHES HOOK WITH BUMPER.
23. HORIZONTAL, WALL MOUNTED BABY CHANGING STATION.
24. SLIM TRASH CAN.
25. FIBERGLASS REINFORCED PLASTIC WALL PANEL.

NOTE:
SECTIONS 14.5.2.8 - H
OF THE NEW MEXICO BUILDING CODE MUST BE COMPLIED WITH.
(N.M. COMMERCIAL BUILDING CODE)
BABY CHANGING STATIONS



NOTE:
SECTIONS 904
OF THE ICC A117.1 STANDARD FOR ACCESSIBLE, USABLE BUILDINGS AND FACILITIES.
SALES AND SERVICE COUNTERS

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28755
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REVIEWED - GENERAL BUILDING
Chris Archuleta
01/23/2024 10:34:11 AM
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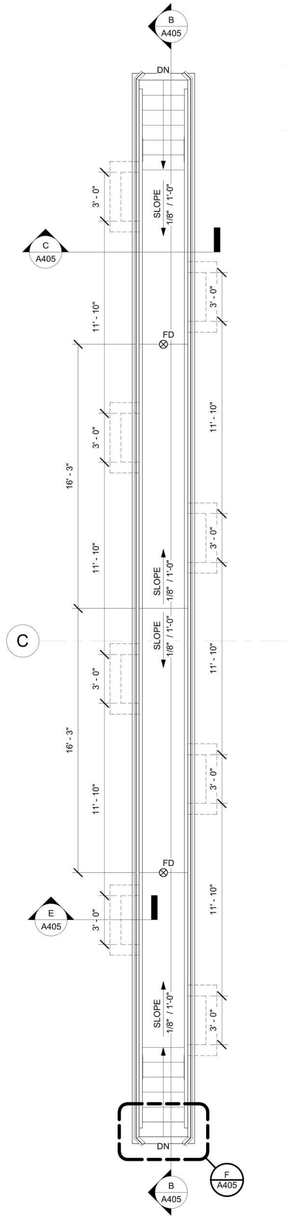
REVISIONS

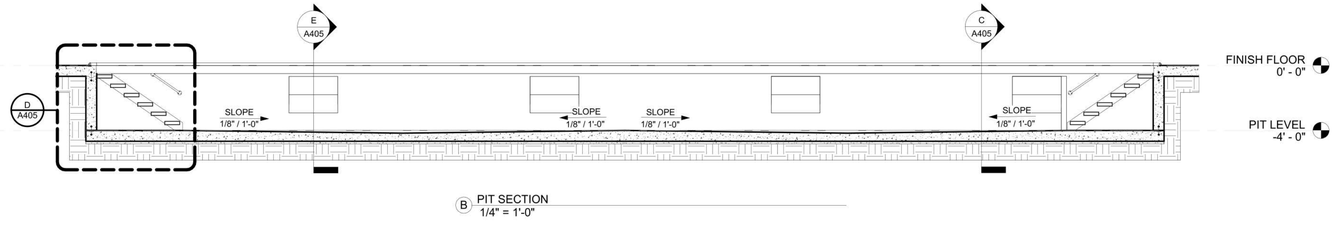
SHEET TITLE
ENLARGED PLANS

SHEET NUMBER
A400

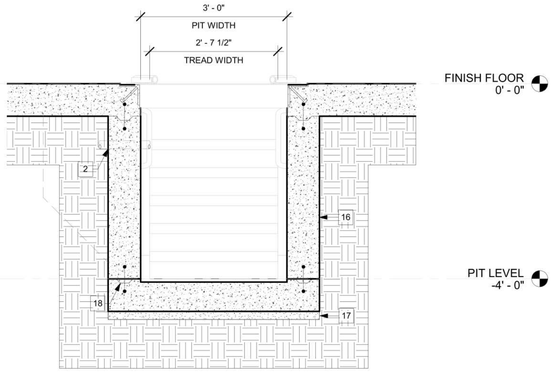
ISSUE DATE
11/10/2023



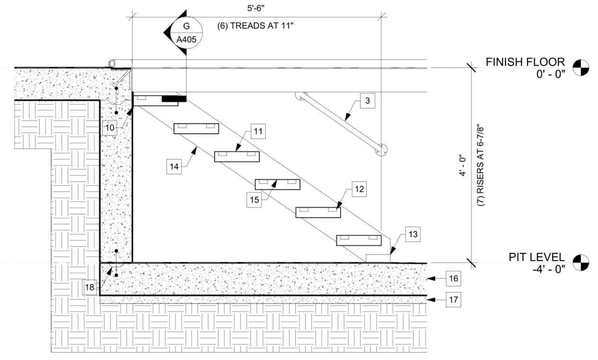
A PIT ENLARGED FLOOR PLAN
1/4" = 1'-0"



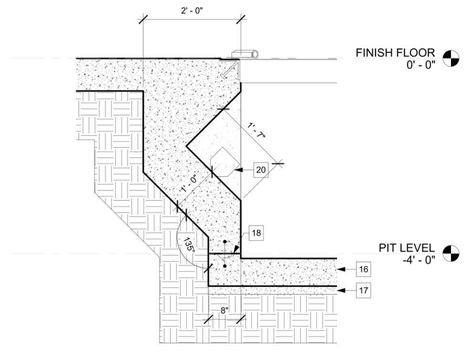
B PIT SECTION
1/4" = 1'-0"



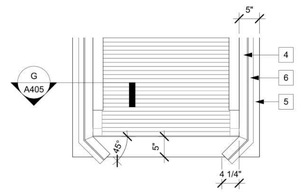
C PIT SECTION
3/4" = 1'-0"



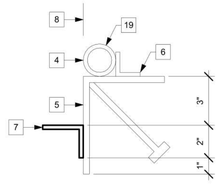
D PIT STAIRS
3/4" = 1'-0"



E PIT LIGHT DETAIL
3/4" = 1'-0"



F PIT PIPE / ANGLE DETAIL
3/4" = 1'-0"



G PIPE /ANGLE CONNECTION
3" = 1'-0"

KEY NOTES

1. SEE STRUCTURAL DRAWINGS FOR REINFORCING.
2. FOR ALL PENETRATIONS USE LINK SEAL MODULAR SEALS FOR MORE INFORMATION GO TO WWW.LINKSEAL.COM
3. 2'-0" LONG HANDRAIL, TYPICAL.
4. 2"Ø x .50" WALL PIPE, CONTINUOUS AROUND PIT, TYPICAL OR EQUAL.
5. 5" x 6" x 7/16" LLH ANGLE CONTINUOUS, W/ 6" NELSON STUDS 1/2"Ø AT 24" OC, TYPICAL.
6. 1-1/2" x 1-1/2" x 1/4" ANGLE, CONTINUOUS.
7. 2" x 2-1/2" x 1/4" ANGLE, CONTINUOUS.
8. PIPE FLUSH W/ INSIDE OF PIT.
9. EDGE ANGLE.
10. 6-1/2" x 4" x 3/8" P WELDED TO TUBE W/ 2-1/2"Ø x 4" EXP BOLT EACH SIDE.
11. TS 2 x 12 x 1/4" STRINGER W/ CLOSURE PLATES WELDED AND GROUND SMOOTH EACH END. COLOR: SAFETY YELLOW.
12. WELD BRACKETS TO INSIDE OF CHANNEL 1-1/4" x 1-1/4" x 3".
13. 2" x 6" x 3/8" CLIP ANGLE WELD TO STAIR BOLT TO FLOOR w/ 2-1/2"Ø x 3" EXP BOLT
14. PAINTED METAL LINEAR PANEL ON BOTTOM OF STAIRS.
15. 11-3/4" WIDE x 2" x 2'-5" LONG GRIP STRUT TREAD (14 GA), TYPICAL.
16. XYPEX ADDITIVE TO BE ADDED TO CONCRETE FOR WATERPROOFING.
17. MINIMUM 2" PEA GRAVEL BASE.
18. KEY W/ WATERSTOPS CONTINUOUS AT PIT WALL.
19. ALL PIPE AND ANGLES TO BE PAINTED SAFETY YELLOW.
20. VAPOR PROOF LIGHT FIXTURE, SEE ELECTRICAL DRAWINGS.

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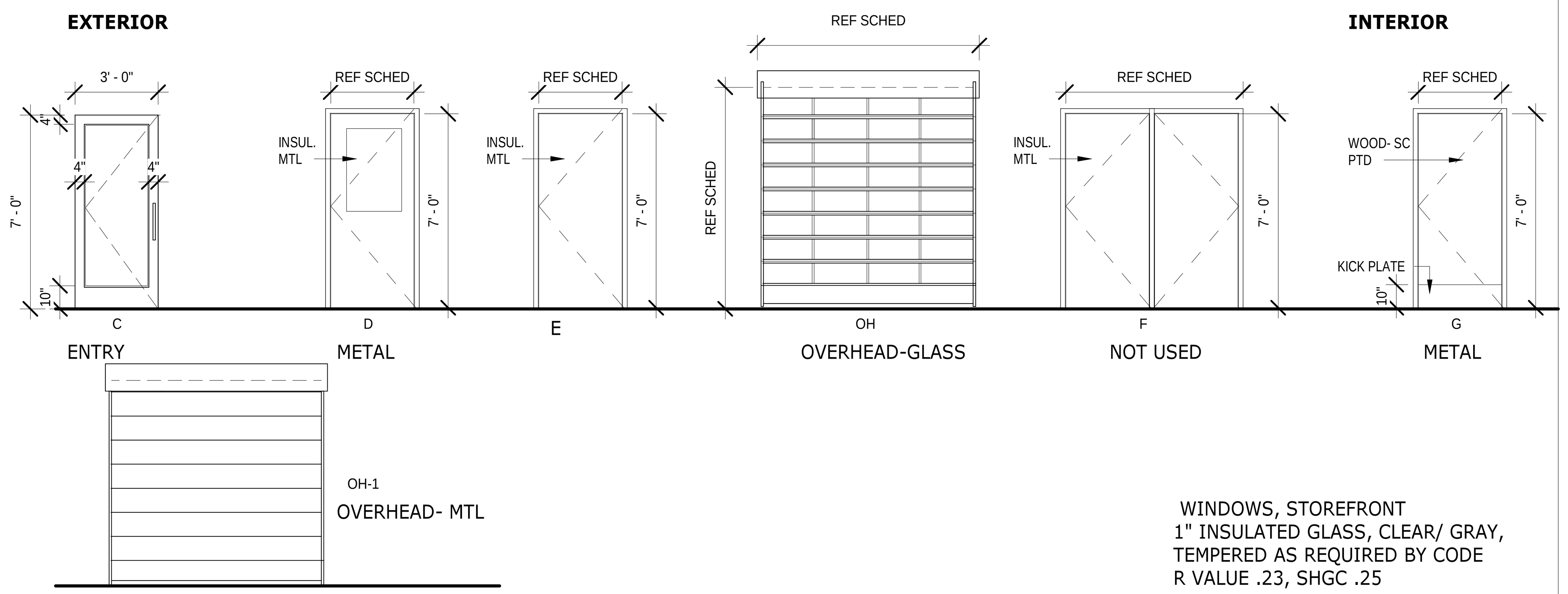
REVISIONS

SHEET TITLE
PIT DETAILS

SHEET NUMBER
A401

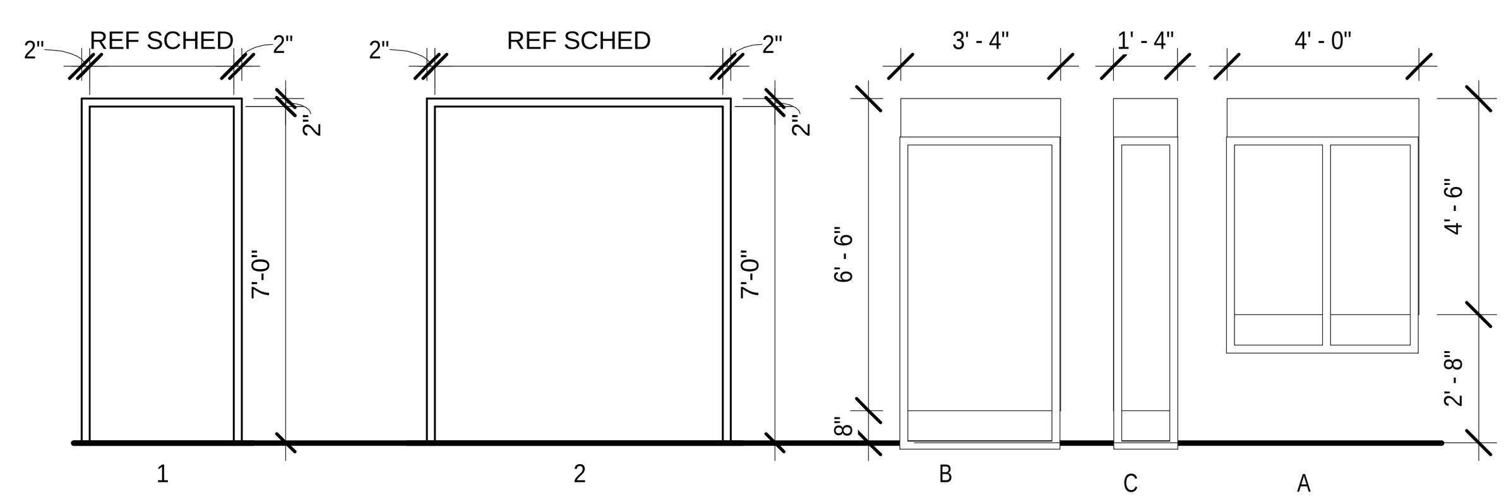
ISSUE DATE
11/10/2023

DOOR TYPES



WINDOWS, STOREFRONT
1" INSULATED GLASS, CLEAR/ GRAY,
TEMPERED AS REQUIRED BY CODE
R VALUE .23, SHGC .25

FRAME/ WINDOW TYPES-



DOOR NOTES:

1. ALL DOOR AND DOOR HARDWARE TO MEET LOCAL AND NATIONAL CODES, 2012 TAS AND ADA REQUIREMENT
2. ALL STEEL DOORS TO BE 18 GA IN 16 GA FRAMES, REPUBLIC DL SERIES
3. ALL DOORS AND HARDWARE TO BE COMMERCIAL GRADE, LOCKS TO BE MORTISE LOCKSET, GRADE 1
4. ALL DOORS TO BE 1 3/4" THICK
5. LOCKING DEVICE IS READILY DISTINGUISHABLE AS LOCKED
6. DOOR HARDWARE, PULLS/ HANDLES TO BE SELECTED BY OWNER, GC TO GIVE AN ALLOWANCE IN BASE BID
7. ALL KNOBS TO BE LEVER, ADA COMPLIANT
8. GC TO COORDIANTE KEYING WITH THE OWNER
9. THRESHOLDS SHALL NOT EXCEED 1/2" IN HEIGHT
10. ALL SIGNS MOUNT ADJACENT TO LATCH SIDE, TO MEET ADA W/ BRAILLE, SEE SHEET A-003
11. CONTRACTOR TO VERIFY OWNER PROVIDED EQUIPMENTS TO FIT DOOR SIZE AND SPACE ALOCATED AND REPORT ANY CONFLICT OR OMISSION TO THE ARCHITECT

HARDWARE SET:

1. EXTERIOR DOORS
   CONTINUOUS HINGE EA ,
   1 SECURITY LOCKSET EA
   1 PUSH/ PULL PLATE EA AND
   1 SILENCER EA
2. INTERIOR SWING DOORS
   3 HINGES, EA
   PUSH BAR, EA
   1 PULL , EA
   1 OFFICE LOCKSET
   1 SILENCER EA
3. INTERIOR SWING DOORS
   RESTROOM DOORS
   3 HINGES, EA
   PUSH BAR, EA
   1 PULL , EA
   PRIVACY LOCKSET
   2 KICK PLATE, EA,
   1 CLOSER EA, AND
   1 SILENCER EA
4. EXTERIOR OVERHEAD/ SECTIONAL
   BY MANUFACTURER
   WEATHER SEALED
5. EXTERIOR ALUM. STOREFRONT
   GC CHOICE,
   2" X 6" SECTION, THEMAL BREAK, COLOR: ANODIZE
   1" INSULATED GLASS, CLEAR/ GRAY, TRMPERED

HARDWARE SET NOTES

DOOR 117 SHALL BE EQUIPPED WITH A DEADBOLT OPERATED FROM THE OUTSIDE BY KEY AND FROM THE INSIDE BY TURN LEVER. EGRESS DOORS SHALL BE READILY OPENABLE FROM THE SIDE FROM WHICH EGRESS IS TO BE MADE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT.

DEADBOLT SHALL BE OF HARDENED STEEL OR WITH HARDENED STEEL INSERT AND HAVE A MINIMUM ONE (1") INCH THROW, THE LOCKED POSITION OF THE INSIDE TURN LEVER OR KNOB SHALL BE PERMANENTLY IDENTIFIED, CYLINDER LOCKS PROJECTING BEYOND THE EXTERIOR FACE OF THE DOOR SHALL BE EQUIPPED WITH A FULLY LEVELED, ROTATABLE CYLINDER GUARD OR RING TO PROTECT CYLINDER FROM WRENCHING, CUTTING, DRILLING, PULLING, OR PRYING.

DOORS SWINGING OUT SHALL BE EQUIPPED TO PREVENT REMOVAL OF HINGE PINS WHEN THE DOOR IS CLOSED.

STRIKE PLATES EQUIPPED WITH INTEGRAL STRIKE BOXES SHALL BE PROVIDED FOR BOTH DEADBOLT AND LATCH.

STEEL DOORS AND FRAMES MUST BE SHOP PRIMED, ABRASIONS AND RUST SHOULD BE CLEANED AND RE-PRIMED PRIOR TO INSULATION.

STEEL FRAMES SHALL BE FACTORY REINFORCED FOR STILES WITH AT LEAST FOURTEEN GAUGE STEEL REINFORCING SECURELY ATTACHED AND PROTECTED BY PLASTER (MORTAR) GUARDS.

EXTERIOR DOORS TO HAVE THRESHOLD SEALED WITH SILICONE CAULK AT INSIDE TO PREVENT WATER ENTERING.

ALL EXTERIOR DOORS TO HAVE EXTERIOR SWEEPS TO PREVENT WATER ENTERING BETWEEN THRESHOLD AND BOTTOM OF DOOR. D9. PRIOR TO SUPPLIER ORDERING THESE FRAMES, CONSULT WITH GENERAL CONTRACTOR ON SIZE OF FRAMES AND WALL THICKNESS.

PROVIDE WOOD BLOCKING FOR ALL WALL MOUNTED DOOR STOPS.

PROVIDE 1'-0" SOLID BLOCKING EACH SIDE OF STRIKE PLATE.

ALL EXTERIOR HINGES TO HAVE NON RISING PINS.

ACCESSIBLE DOORS
1. THRESHOLDS AT DOORWAYS SHALL NOT EXCEED 1/2". RAISED THRESHOLD NOT EXCEED 1/2". RAISED THRESHOLD SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1:2.
2. HANDLES, PULLS LATCHES, LOCKS AND OTHER OPERATING DEVICES ON ACCESSIBLE DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP ITH ONE HAND AND DOES NOT REQUIRE TIGHT RASPING, OR TWISTING OF THE WRIST TO PERATE. LEVER- OPERATED MECHANISMS, USH-TYPE MECHANISMS, AND U-SHAPED ANDLES ARE ACCEPTABLE DESIGNS.
3. HARDWARE FOR REQUIRED ACCESSIBLE C DOOR PASSAGE SHALL BE MOUNTED NO HIGHER THAT 48" ABOVE FINISH FLOOR. THIS I NCLUDES SLIDE BOLT AND THUMB TURN LOCKS ON GLASS DOORS.
4. DOORS w/ CLOSERS SHALL HAVE A SWEEPS D PERIOD SO THAT FROM AN OPEN POSITION OF 70 DEGREES, THE WILL TAKE AT LEAST 3 SECONDS TO MOVE TO A POINT 3" FROM THE LATCH, MEASURED TO THE LEADING EDGE OF THE DOOR.
5. DOOR OPENING FORCE SHALL BE: E FIRE DOORS = MINIMUM ALLOWABLE PER CODE EXTERIOR HINGED DOORS = 8.5 LBS. INTERIOR HINGED DOORS = 5.0 LBS SLIDING DOOR = 5.0 LBS D14.PADDLE LOCK RELEASE MOUNTED ON THE EGRESS SIDE, MOUNTING HEIGHT LISTED ABOVE ALONG w/ PRESSURE. MOUNTED AT EXIT EGRESS DOOR SIGNAGE ALL DOORS AT STAIR, EXIT PASSAGEWAYS AND EXITING DIRECTLY OUTSIDE SHALL HAVE "Tactile" EXIST SIGNAGE COMPLYING WITH ADAAG 4.30. SIGNS SHALL HAVE BRAILLE AND RAISED CHARACTERS TO IDENTIFY DOORS AS AN EXIT. SIGN SHALL BE MOUNTED ON WALL AT LATCH SIDE OF DOOR AT 60" TO CENTERLINE ABOVE FLOOR. IF NO SIDE WALL IS AVAILABLE, SIGN SHALL BE MOUNTED ON THE NEAREST ADJACENT WALL. SIGN SHALL BE MOUNTED SUCH THAT A PERSON CAN GET WITHIN 3" OF SIGN WITHOUT OBSTRUCTION - INCLUDING THE SWING OF THE DOOR.

DOORS SCHEDULE- PHASE I- BUILDING II (FOR STOREFRONTS REF TO FRAME TYPES)

Mark	TYPE	DOOR WIDTH	DOOR HEIGHT	DOOR THICKNESS	DOOR MATERIAL	DOOR FINISH	FIRE RATING	HARDWARE	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	COMMENTS
100	OH-1	0' - 0"	0' - 0"	0' - 0"	STEEL INS					-		
101	C	3' - 0"	7' - 0"	0' - 1 3/4"	STEEL					HM	PTF	
102	C	3' - 0"	7' - 0"	0' - 1 3/4"	STEEL INS					HM	PTD	
103	OH	12' - 0"	14' - 0"	0' - 3"	STEEL					-		
104	OH-1	0' - 0"	0' - 0"	0' - 0"	ALUM					-		
105	OH-1	0' - 0"	0' - 0"	0' - 0"	ALUM					-		
106	OH-1	0' - 0"	0' - 0"	0' - 0"	ALUM					-		
107	C	3' - 0"	7' - 0"	0' - 1 3/4"	STEEL INS					HM	PTD	
108	H	6' - 0"	7' - 0"	0' - 1 3/4"	STEEL					HM	PTD	
109	C	4' - 0"	7' - 0"	0' - 1 3/4"	STEEL					HM	PTD	
110	C	3' - 0"	7' - 0"	0' - 1 3/4"	STEEL INS					HM	PTD	
111	C	3' - 0"	7' - 0"	0' - 1 3/4"	STEEL INS					HM	PTD	
112	OH	10' - 0"	14' - 0"	0' - 3"	STEEL					-		
113	C	3' - 0"	7' - 0"	0' - 1 3/4"	STEEL INS					HM	PTD	
114	OH-1	0' - 0"	0' - 0"	0' - 0"	ALUM					-		
115	OH-1	0' - 0"	0' - 0"	0' - 0"	ALUM					-		
116	OH-1	0' - 0"	0' - 0"	0' - 0"	ALUM					-		
117	C	3' - 0"	7' - 0"	0' - 1 3/4"	SF					HM	PTD	
118	C	3' - 0"	7' - 0"	0' - 1 3/4"	STEEL					HM	PTD	
119	C	3' - 0"	7' - 0"	0' - 1 3/4"	STEEL					HM	PTD	
120	OH-1	0' - 0"	0' - 0"	0' - 0"	STEEL					-		
121	C	3' - 0"	7' - 0"	0' - 1 3/4"	STEEL INS					HM	PTD	
122	C	3' - 0"	7' - 0"	0' - 1 3/4"	STEEL INS					HM	PTD	
123	C	3' - 0"	7' - 0"	0' - 1 3/4"	STEEL					HM	PTD	
124	C	3' - 0"	7' - 0"	0' - 1 3/4"	STEEL					HM	PTD	
125	C	3' - 0"	7' - 0"	0' - 1 3/4"	STEEL					HM	PTD	
126	C	3' - 0"	7' - 0"	0' - 1 3/4"	STEEL					HM	PTD	
127	C	10'- 0"	12'- 0"	0' - 1 3/4"	STEEL					HM	PTD	
128	C	3' - 0"	7' - 0"	0' - 1 3/4"	STEEL INS					HM	PTD	
129	C	3' - 0"	7' - 0"	0' - 1 3/4"	STEEL					HM	PTD	
130	C	3' - 0"	7' - 0"	0' - 1 3/4"	STEEL INS					HM	PTD	
131	C	3' - 0"	7' - 0"	0' - 1 3/4"	STEEL INS					HM	PTD	
132	C	3' - 0"	7' - 0"	0' - 1 3/4"	STEEL INS					HM	PTD	
		12'- 0"	10'- 0"									

ROOM FINISH SCHEDULE (TYP. OFFICE)

NUMBER	ROOM NAME	FLOOR	BASE	WALL	CEILING	CEILING HEIGHT	COMMENTS
100	TRUCK WASH BAY						
101	RISER ROOM						
102	EQUIPMENT & STORAGE						
103	SALE AREA						
104	TSA WORK AREA						
105	INVENTORY						
106	RESTROOM						
107	OFFICE						
108	IT						
109	CHANGING						
110	RESTROOM						
111	EMPLOYEE BREAKROOM						
112	SHOP STORAGE						
113	SHOP						
114	TIRE STORAGE						
115	ELECTRICAL						
116	MECHANICAL						

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REVISIONS

SHEET TITLE
BUILDING SCHEDULES

SHEET NUMBER
A500

ISSUE DATE
11/10/2023

1 GENERAL CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE 2021 INTERNATIONAL BUILDING CODE (IBC) ASCE 7 AND ALL ASSOCIATED CODES.
2. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR LOCATION AND SIZE OF OPENINGS, BLOCKOUTS, FLOOR DEPRESSIONS, CURBS, DIMENSIONS, ETC., NOT SHOWN ON THE STRUCTURAL DRAWINGS. THE LOCATION AND SIZE OF MECHANICAL AND ELECTRICAL OPENINGS IN THE SLABS, WALLS, AND DECKS SHALL BE COORDINATED BY THE CONTRACTOR. PROVIDE ALL ADDITIONAL FRAMING OR REINFORCING TO ACCOMMODATE OPENINGS AS REQUIRED BY THE APPLICABLE, STANDARD DETAILS SHOWN OR NOTED ON THE STRUCTURAL DRAWINGS.
3. DRAWINGS SHALL NOT BE SCALED.
4. ALL CONNECTIONS AND FASTENING SHALL BE IN ACCORDANCE WITH THE IBC
5. ROOFING SHALL BE INSTALLED IN ACCORDANCE WITH INDUSTRY STANDARDS WITH DRIP EDGING INSTALLED PER IBC.
6. ALL DIMENSIONS REFERRING TO EXISTING STRUCTURES SHALL BE FIELD VERIFIED PRIOR TO FABRICATION AND CONSTRUCTION.
7. ROOF DECK SHALL BE SET WITH METAL CUP EDGE SPACERS.

2 STRUCTURAL STEEL:

1. ALL FIELD-BOLTED SHEAR CONNECTIONS SHALL BE MADE WITH 3/4 INCH DIAMETER A325-N BOLTS, UNLESS NOTED OTHERWISE.
2. WHEN THE FILLET WELD SIZE IS NOT INDICATED ON A WELD SYMBOL, PROVIDE SIZE ACCORDING TO THE MINIMUM FILLET WELD SCHEDULE PER AISC.
3. WHERE THE WORK OF OTHER TRADES REQUIRES CUTS OR HOLES TO BE MADE IN STRUCTURAL STEEL MEMBERS, WRITTEN APPROVAL SHALL BE OBTAINED FROM THE ENGINEER. SUCH OPENINGS SHALL BE MADE IN THE SHOP AND CLEARLY INDICATED ON THE SHOP DRAWINGS.
4. CONTRACTOR SHALL PROVIDE ALL TEMPORARY GUYING AND BRACING REQUIRED TO ERECT AND HOLD THE STEEL FRAME IN PROPER ALIGNMENT UNTIL ALL FLOOR AND ROOF DECK, DIAGONAL BRACING, FLOOR SLABS, WELDED CONNECTIONS, ETC. ARE IN PLACE AND THE CONCRETE HAS DEVELOPED A STRENGTH OF MINIMUM 3000 PSI.

3 CONCRETE:

1 ALL REINFORCING SHALL BE DETAILED, FABRICATED, AND PLACED IN ACCORDANCE WITH ACI 315.

2. CONCRETE STRENGTH SHALL BE A MINIMUM OF 3500 PSI AT 28 DAYS UNLESS NOTED OTHERWISE.

4 DEFORMED BAR & HEADED STUD ANCHORS:

1. HEADED STUDS AND DEFORMED BAR ANCHORS SHALL BE ELECTRIC-ARC STUD WELDED TO THE SUPPORT PER MANUFACTURER'S RECOMMENDATIONS. FILLET WELDING OF DEFORMED BARS AND HEADED STUDS IS NOT ALLOWED.
2. ANCHORS SHALL COMPLY WITH ASTM A-108 AND A-496 WITH A MINIMUM YIELD STRENGTH OF 70 KSI. DEFORMED BARS TO COMPLY WITH ASTM A-705 WITH A MINIMUM YIELD STRENGTH OF 60KSI.

5 CODES:

1. BUILDING CODE: 2015 INTERNATIONAL BUILDING CODE (IBC).
2. STRUCTURAL CONCRETE: CODE REQUIREMENTS FOR ENVIRONMENTAL ENGINEERING CONCRETE STRUCTURAL, ACI 318
3. STRUCTURAL STEEL: SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, AMERICAN INSTITUTE OF STEEL CONSTRUCTION, AISC 360.
4. MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, ASCE 7

6 DESIGN LOADS:

1. DESIGN DEAD LOAD:
   ACTUAL WEIGHT OF MATERIAL USED
   ROOF:
   DEAD LOAD = 15 PSF

2. DESIGN LIVE LOAD:

ROOF =	20 PSF
2ND FLOOR =	40 PSF
CORRIDOR =	100 PSF
STORAGE =	125 PSF
STAIRS =	100 PSF

3. WIND LOAD:

BASIC WIND VELOCITY =	115 MPH
IMPORTANCE FACTOR =	1.0
EXPOSURE CATEGORY =	C
RISK CATEGORY =	III

4. SNOW LOAD:

GROUND SNOW LOAD =	5 PSF
EXPOSURE FACTOR =	C
IMPORTANCE FACTOR =	1.0

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#635-23

SON H. NGO
NEW MEXICO
28755
PROFESSIONAL ENGINEER
11-10-23

REVIEWED - GENERAL BUILDING
Chris Archuleta
01/23/2024 10:34:12 AM
A-155698

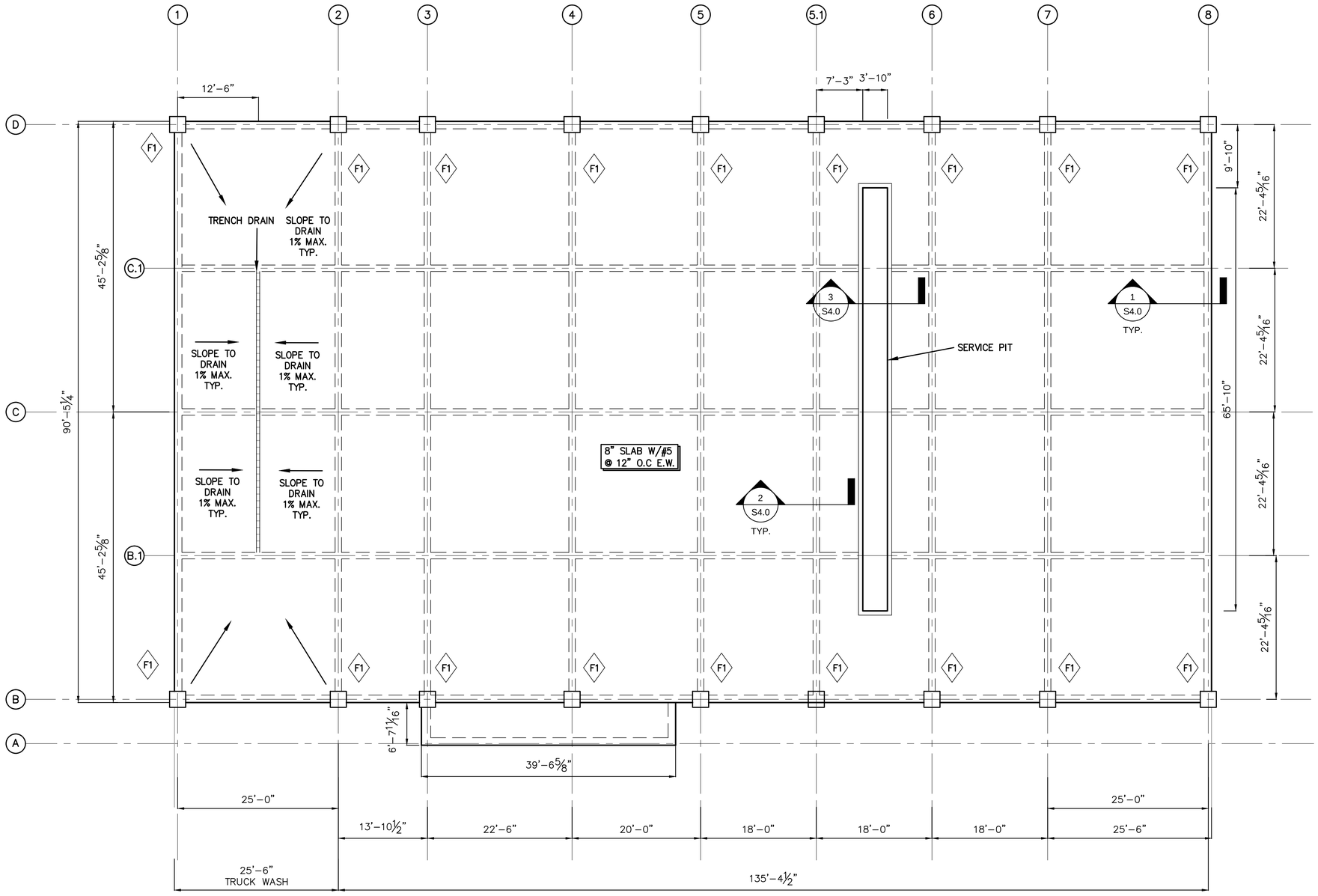
TA TRAVEL CENTER
PARCEL A, B, AND C WITHIN LOT 3 IN SECTION 19, T11N, R31E, N.M.P.M.
TUCUMCARI, NM
NEW DEVELOPMENT

DATE: Nov. 2023

REVISIONS

TRUCK SERVICE GENERAL NOTES

S0.0



MARK	SPREAD FOOTING	REINFORCEMENT
F1	42"x42"x24"	#5 @ 12" O.C.E.W. TOP & BOTTOM

GENERAL NOTES:

1. ALL CONNECTIONS TO BE WELDED UNLESS NOTED OTHERWISE.
2. ALL WELDS SHALL BE PERFORMED BY CERTIFIED WELDER
3. STEEL SHALL MEET AISC CURRENT STANDARDS
4. ALL REINFORCING STEEL SHALL BE GRADE 60 U.N.O.
5. PROVIDE 1.5" REINFORCING CLEAR COVER U.N.O.
6. CONCRETE STRENGTH, f'c = 4000 PSI @ 28 DAYS
7. REFER TO SITE AND ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
8. CAP ALL EXPOSED TUBE STEEL ENDS U.N.O.
9. CONSTRUCTION SHALL BE IN ACCORDANCE TO THE CITY OF TUCUMCARI STANDARDS AND SPECIFICATIONS.

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SON H. NGO
NEW MEXICO
28755
PROFESSIONAL ENGINEER
11-10-23

REVIEWED FOR GENERAL CODE COMPLIANCE ONLY
City of Tucumcari
01/23/2024 10:32:20 AM
A-115698

TA TRAVEL CENTER
PARCEL A, B, AND C WITHIN LOT 3 IN
SECTION 19, T11N, R31E, N.M.P.M.
TUCUMCARI, NM
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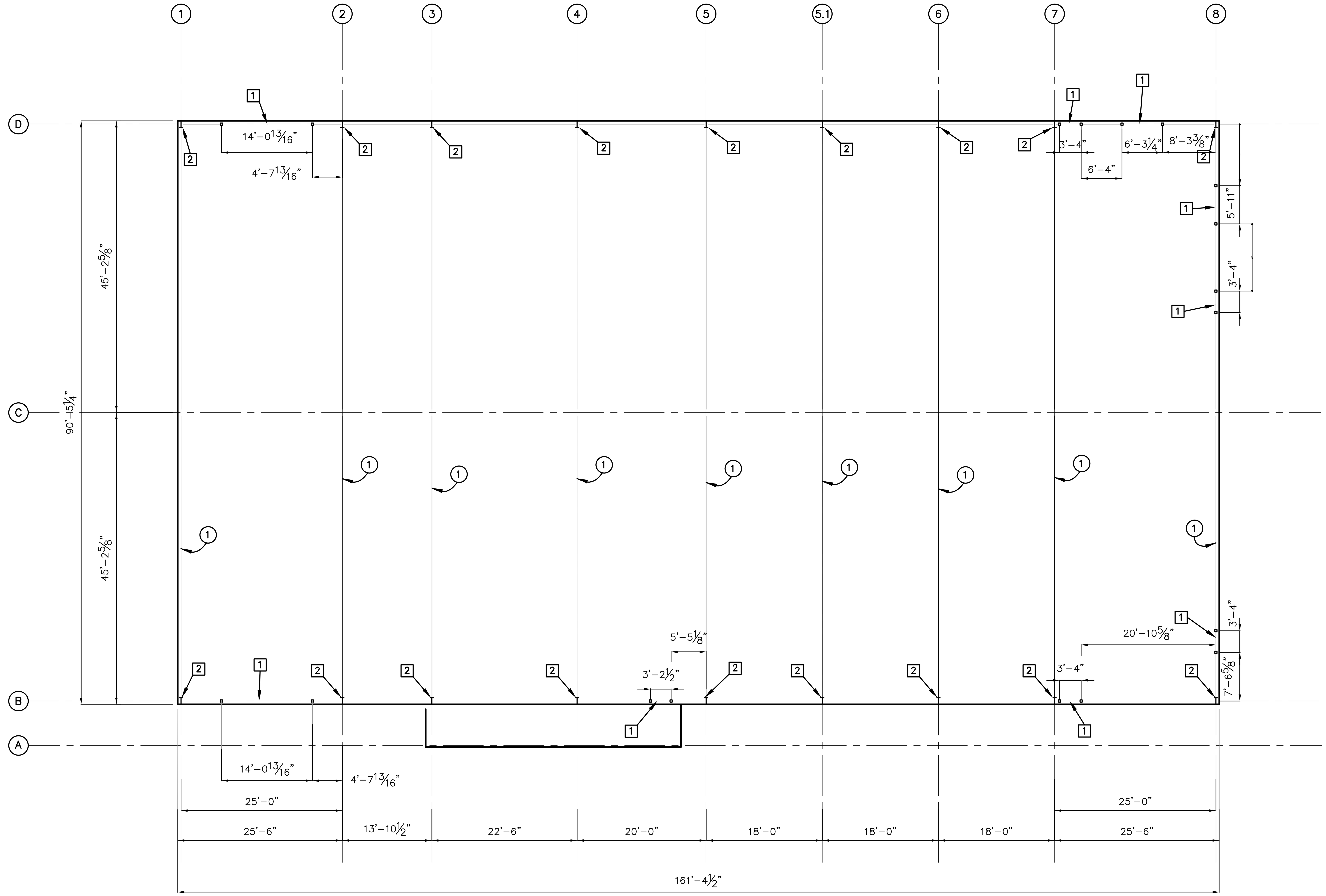
REVISIONS

TRUCK SERVICE FOUNDATION PLAN
S1.0



NOTE:
SECTIONS 2205
OF THE INTERNATIONAL BUILDING CODE MUST BE COMPLIED WITH.
(N.M. COMMERCIAL BUILDING CODE)
STRUCTURAL STEEL

PRE-ENGINEER METAL BUILDING FRAMING

FOR REFERENCE ONLY – MUELLER PEMB PACKAGE SHALL BE PROVIDED DURING CONSTRUCTION OR EQUAL, SIGNED AND SEALED BY A LICENSED NEW MEXICO PROFESSIONAL ENGINEER.
SEE SHEET S0.0 FOR DESIGN LOADING REQUIREMENTS.

CONSTRUCTION NOTES:

- [1] FRAME OPENING
- [2] SUPPORT COLUMN
- (1) MAIN FRAME

GENERAL NOTES:

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4. ALL REINFORCING STEEL SHALL BE GRADE 60 U.N.O.
5. PROVIDE 1.5" REINFORCING CLEAR COVER U.N.O.
6. CONCRETE STRENGTH, f'c = 3500 PSI @ 28 DAYS
7. REFER TO SITE AND ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
8. CAP ALL EXPOSED TUBE STEEL ENDS U.N.O.
9. CONSTRUCTION SHALL BE IN ACCORDANCE TO THE CITY OF TUCUMCARI STANDARDS AND SPECIFICATIONS.

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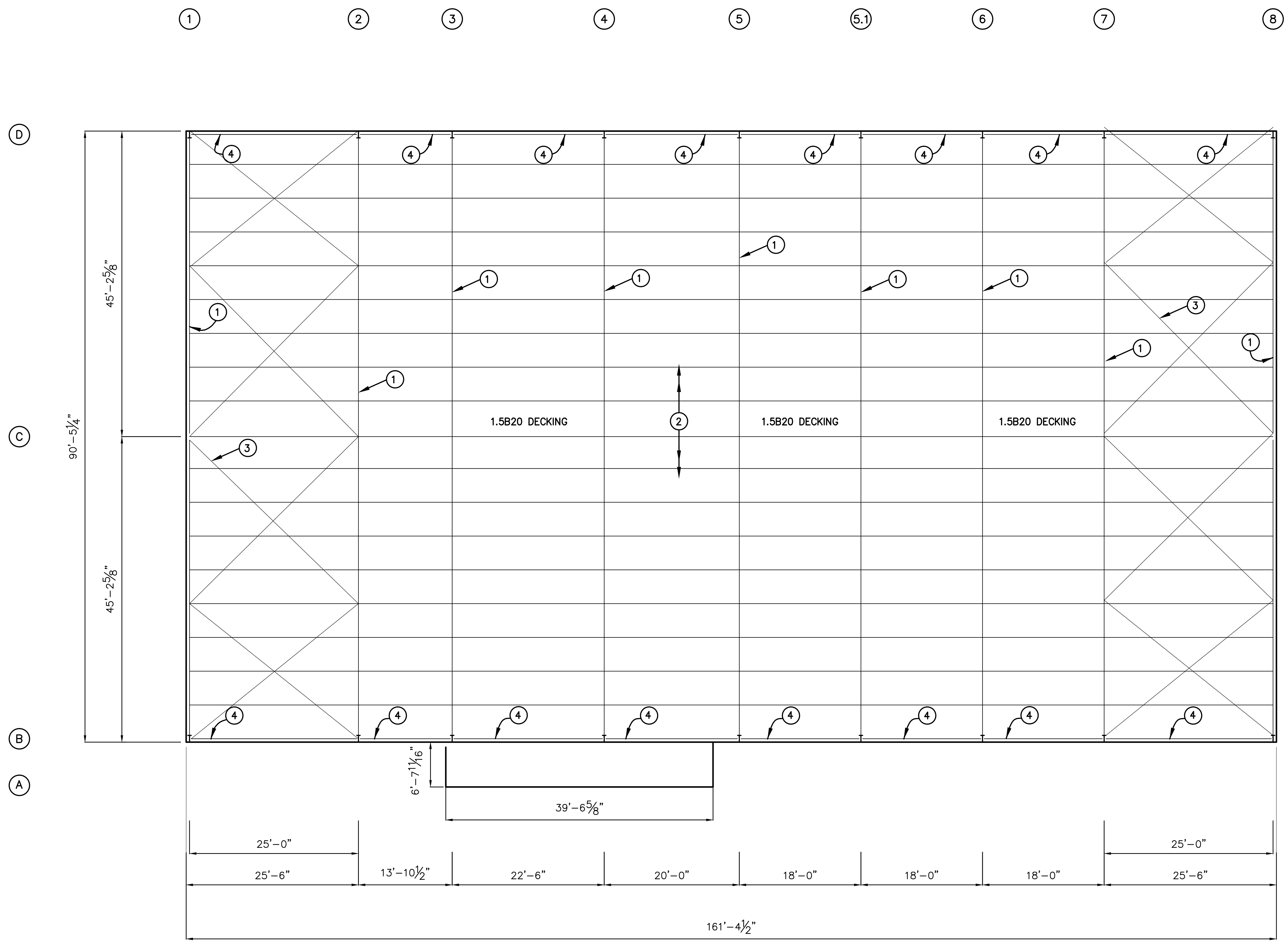
TA TRAVEL CENTER
PARCEL A, B, AND C WITHIN LOT 3 IN SECTION 19, T11N, R31E, N.M.P.M.
TUCUMCARI, NM
NEW DEVELOPMENT

DATE: Nov. 2023

REVISIONS

TRUCK SERVICE FRAMING PLAN
S2.0



CONSTRUCTION NOTES:

1. PEMB MAIN FRAME
2. ROOF Z–PURLINGS @ 8' O.C. MAX.
3. ROOF X–BRACE SHOWN FOR REFERENCE ONLY SHALL BE PROVIDE IN ACCORDANCE TO S&S PEMB PACKAGE.
4. WALL GIRTS @ 6' O.C. MAX.

GENERAL NOTES:

1. ALL CONNECTIONS TO BE WELDED UNLESS NOTED OTHERWISE.
2. ALL WELDS SHALL BE PERFORMED BY CERTIFIED WELDER
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5. PROVIDE 1.5" REINFORCING CLEAR COVER U.N.O.
6. CONCRETE STRENGTH, f'c = 3500 PSI @ 28 DAYS
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8. CAP ALL EXPOSED TUBE STEEL ENDS U.N.O.
9. CONSTRUCTION SHALL BE IN ACCORDANCE TO THE CITY OF TUCUMCARI STANDARDS AND SPECIFICATIONS.

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11-10-23

TA TRAVEL CENTER
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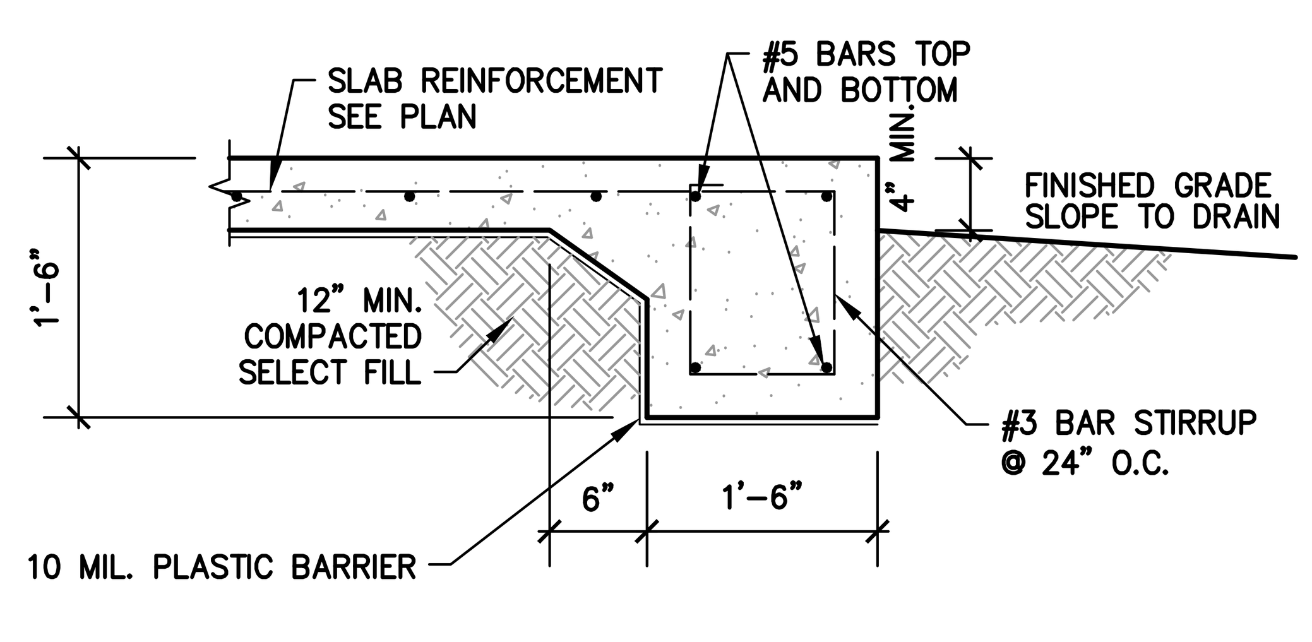
NEW DEVELOPMENT

DATE: Nov. 2023

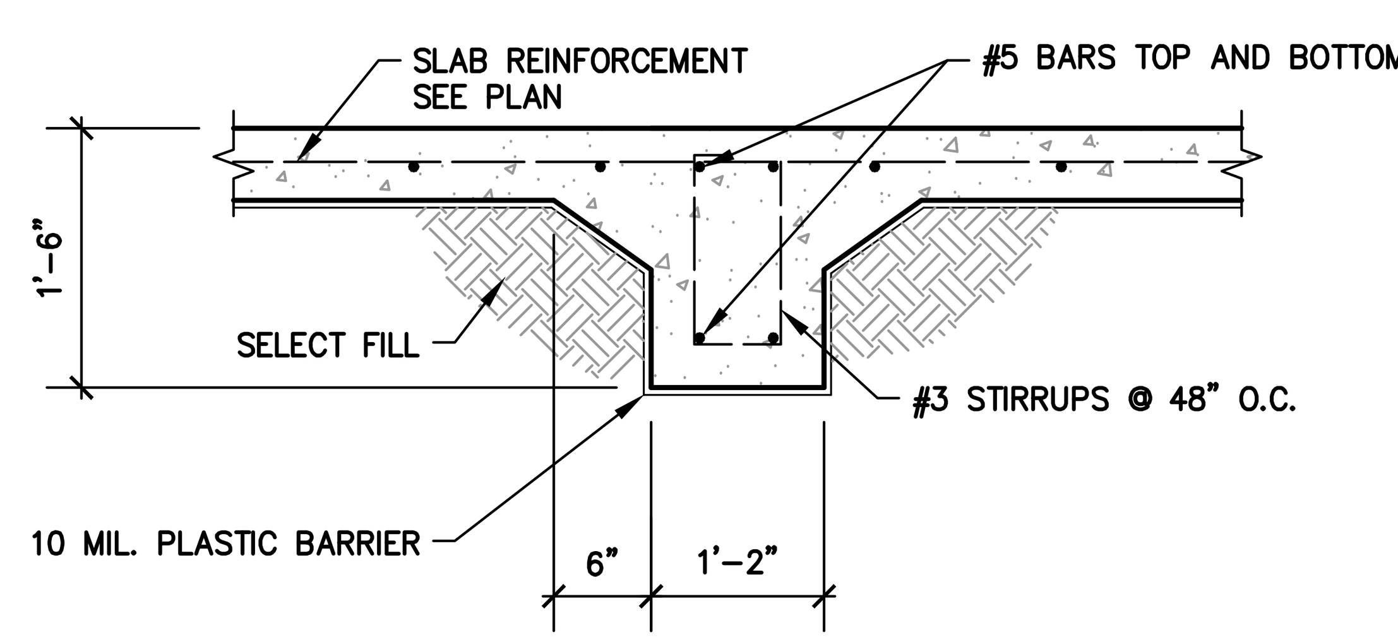
REVISIONS

TRUCK SERVICE ROOF FRAMING PLAN

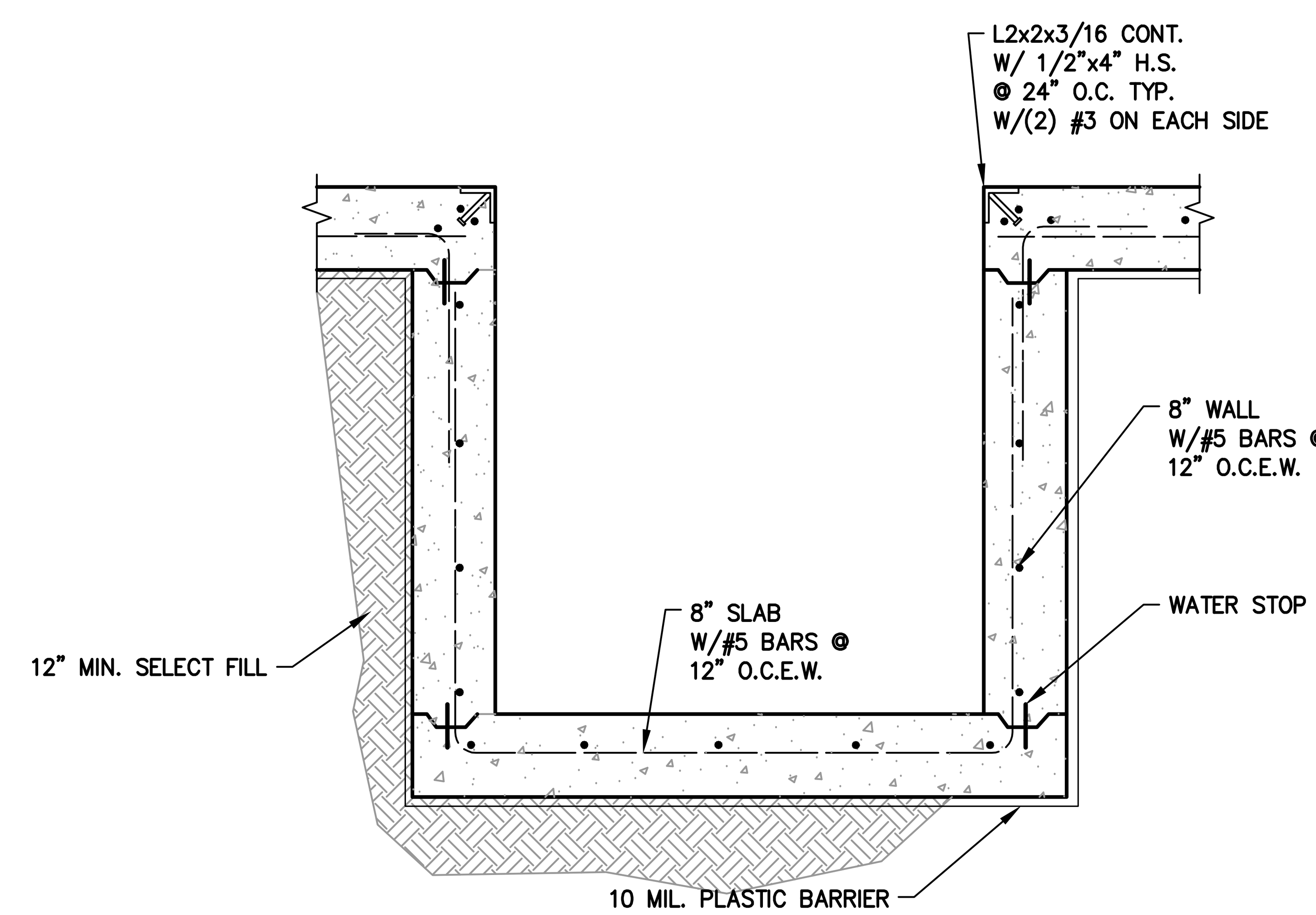
S3.0



1 S4.0 **EDGE BEAM**



2 S4.0 **CENTER BEAM**



3 S4.0 **SERVICE PIT**

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11-10-23

REVIEWED
GENERAL
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TA TRAVEL CENTER
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NEW DEVELOPMENT

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REVISIONS

STRUTURAL DETAILS
S4.0

MECHANICAL SPECIFICATIONS

1. GENERAL PROVISIONS
   - A. THE PROVISIONS OF THE INSTRUCTIONS TO BIDDERS, GENERAL CONDITIONS, SUPPLEMENTARY CONDITIONS, ALTERNATES, ADDENDA'S, AND DIVISION 1 ARE A PART OF THIS SPECIFICATION. CONTRACTORS AND SUBCONTRACTORS SHALL EXAMINE SAME AS WELL AS OTHER DIVISIONS OF THE SPECIFICATIONS WHICH AFFECT WORK UNDER THIS DIVISION.
   - B. THIS CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT, SUPPLIES, SERVICES, AND SHALL PERFORM ALL WORK COMPLETE AND IN STRICT ACCORDANCE WITH THIS SPECIFICATION AND APPLICABLE DRAWINGS. ANY DEVIATIONS SHALL BE CLEARLY DEFINED AND ITEMIZED IN ACCORDANCE WITH SECTION 10.F OF THIS SPECIFICATION.
   - C. THIS CONTRACTOR IS INSTRUCTED TO READ CAREFULLY THE SPECIFICATIONS FOR ALL PARTS OF THE WORK, WHICH INCLUDE THE ARCHITECTURAL, ELECTRICAL, MECHANICAL, PLUMBING, FIRE PROTECTION, CIVIL, STRUCTURAL AND ALL OTHER DRAWINGS AS WELL AS THE SPECIFICATIONS FOR ALL THE DIVISIONS THAT ARE PART OF THE CONTRACT DOCUMENTS.
   - D. ALL ITEMS OF LABOR, MATERIAL, AND EQUIPMENT NOT SPECIFICALLY MENTIONED HEREIN OR SHOWN ON PLAN, BUT INCIDENTAL TO, OR REQUIRED FOR THE COMPLETE INSTALLATION AND PROPER OPERATION OF THE WORK, SHALL BE FURNISHED AS IF CALLED FOR IN DETAIL BY THE SPECIFICATIONS OR DRAWINGS.
   - E. AS USED IN THIS SPECIFICATION, "PROVIDE"MEANS "FURNISH AND INSTALL". "FURNISH"MEANS "TO PURCHASE AND DELIVER TO THE PROJECT SITE COMPLETE WITH EVERY NECESSARY APPURTENANCE AND SUPPORT,"AND "INSTALL"MEANS "TO UNLOAD AT THE DELIVERY POINT AT THE SITE AND PERFORM EVERY OPERATION NECESSARY FOR PROPER INSTALLATION PER CODES AND MANUFACTURERS REQUIREMENTS, TO ESTABLISH SECURE MOUNTING AND CORRECT OPERATION AT THE PROPER LOCATION IN THE PROJECT."
2. PERMITS, CODES, INSPECTIONS AND TESTS.
   - A. THE HVAC CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND INSPECTIONS REQUIRED FOR THE PROSECUTION OF HVAC WORK. ALL PERMITS AND CERTIFICATES OF INSPECTION AND APPROVAL SIGNED BY THE CONTROLLING BUILDING DEPARTMENT SHALL BECOME PROPERTY OF THE OWNER
   - B. DRAWINGS INDICATE THE MINIMUM DESIGN REQUIREMENTS. NATIONAL, STATE, AND LOCAL CODES SHALL BE FOLLOWED, COMPLY WITH THE LATEST EDITIONS OF THE STATE MECHANICAL CODE, NFPA, SMACNA, AND ASHRAE STANDARDS. THE CONTRACTOR SHALL INCLUDE THE COST OF SATISFYING SUCH CODES AND STANDARDS IN THE BID.
   - C. FOLLOWING COMPLETION OF THE HVAC WORK, FURNISH TO THE OWNER, IN DUPLICATE, CERTIFICATES OF INSPECTION AND APPROVAL BY REGULATORY AGENCIES HAVING JURISDICTION.
     1. DEMONSTRATE TO THE OWNER'S SATISFACTION THE PROPER OPERATION OF EACH OF THE SYSTEMS COMPRISING THIS CONTRACT BEFORE FINAL PAYMENT.
     2. IMMEDIATELY CORRECT ANY WORK FOUND AT VARIANCE WITH THESE SPECIFICATIONS, THE NATIONAL, STATE, AND LOCAL CODES, AND REQUIREMENTS OF GOVERNING REGULATORY AGENCIES.
     3. TEST PIPING FOR LEAKS: REPAIR LEAKS IN COPPER TUBING BY SWEATING OUT JOINT; THOROUGHLY CLEANING BOTH TUBE AND FITTING, AND RESOLDERING. CORRECT LEAKS IN SCREWED JOINT BY REPLACING THREAD OR FITTING OR BOTH.
     4. PROVIDE SERVICES OF A CERTIFIED A.A.B.C. OR N.E.E.B. TEST AGENCY. CONDUCT ALL TESTS IN ACCORDANCE WITH ASSOCIATED AIR BALANCE COUNCIL STANDARDS. TEST AND ADJUST AIR HANDLING SYSTEM TO WITHIN 5% OF DESIGN REQUIREMENTS.
3. VISIT TO THE SITE
   - A. THE CONTRACTOR SHALL VISIT THE SITE OF THE WORK AND BECOME FAMILIAR WITH ALL CONDITIONS AFFECTING THE WORK. THE SUBMISSION OF A PROPOSAL SHALL PRESUPPOSE KNOWLEDGE OF ALL SUCH CONDITIONS AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED WHERE EXTRA LABOR OR MATERIALS ARE REQUIRED BECAUSE OF IGNORANCE OF THESE CONDITIONS.
4. PROTECTION
   - A. THE HVAC CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTION FROM DIRT AND WATER DURING CONSTRUCTION NECESSITATED BY HVAC WORK. PROTECTION METHODS ARE SUBJECT TO APPROVAL BY THE ARCHITECT.
5. EQUIPMENT AND MATERIALS
   - A. ALL EQUIPMENT AND MATERIALS SHALL BE NEW AND SHALL CONFORM TO UNDERWRITERS' LABORATORIES STANDARDS, WHERE APPLICABLE. WHERE SPECIFICATIONS DESCRIBE, OR PLANS SHOW, MATERIALS OR EQUIPMENT OF HIGHER QUALITY THAN REQUIRED BY CODE AND LOCAL RULING, THE DRAWINGS AND SPECIFICATIONS SHALL GOVERN THE QUALITY OF THE MATERIAL OR EQUIPMENT. USED EQUIPMENT OR MATERIALS ARE PROHIBITED UNLESS NOTED OTHERWISE.
   - B. NEW OR EXISTING TO REMAIN EQUIPMENT SHALL NOT BE OPERATED DURING CONSTRUCTION. HVAC CONTRACTOR SHALL COORDINATE WITH OTHER TRADES AND PROVIDE TEMPORARY SPACE CONDITIONING IN ORDER TO MAINTAIN TEMPERATURES AND HUMIDITY LEVELS AS REQUIRED FOR GENERAL CONSTRUCTION.
   - C. THE CONTRACTOR SHALL SUBMIT PROOF, IF REQUESTED BY THE OWNER, THAT THE MATERIALS, APPLIANCES, EQUIPMENT OR DEVICES FURNISHED AND INSTALLED UNDER THIS CONTRACT MEET THE REQUIREMENTS OF THE UNDERWRITERS' LABORATORIES, INC. IN REGARDS TO FIRE AND CASUALTY HAZARDS. THE LABEL OF OR LISTING BY THE UNDERWRITERS' LABORATORIES, INC. WILL BE ACCEPTED AS CONFORMING TO THIS REQUIREMENT. IN LIEU OF THE LABEL OR LISTING, THE CONTRACTOR MAY SUBMIT INDEPENDENT PROOF SATISFACTORY TO THE ARCHITECT THAT THE MATERIAL, APPLIANCES OR DEVICES CONFORM TO THE PUBLISHED STANDARDS, INCLUDING METHODS OF TEST FOR THE UNDERWRITERS' LABORATORIES INCORPORATED. UNDERWRITERS LABORATORIES, INC. AND ITS PUBLICATIONS WILL BE REFERRED TO HEREINAFTER BY THE ABBREVIATION UL. WITH OR WITHOUT ADDITIONAL IDENTIFYING SYMBOLS.
6. GUARANTEE
   - A. THE HVAC CONTRACTOR SHALL GUARANTEE FOR A PERIOD OF ONE YEAR THAT ALL WORK AND EQUIPMENT WILL REMAIN FREE FROM ALL DEFECTS IN WORKMANSHIP AND MATERIALS, AND THAT IT WILL COMPLY WITH ALL THE SPECIFIC REQUIREMENTS OF THE SPECIFICATIONS AND OTHER CONTRACT DOCUMENTS GOVERNING THE WORK.
   - B. ALL WORK FOUND BY THE ENGINEER TO BE DEFECTIVE WILL BE REPLACED WITH NEW WORK MEETING ALL THE REQUIREMENTS OF THE CONTRACT. THE HVAC CONTRACTOR WILL BEAR ALL COSTS OF SUPPLYING SUCH NEW, AND INSTALLING AND FINISHING SAME, AND WILL ASSUME ALL COSTS FOR REPLACING OTHER WORK DAMAGED BY THE REMOVAL AND REPLACEMENT OF ANY OF THE WORK. THE HVAC CONTRACTOR WILL BEAR ALL COSTS FOR FREIGHT, DRAYAGE AND DEMURRAGE, AND ALL LABOR IN CONNECTION THEREWITH.
7. CUTTING, PATCHING, FIRESTOPPING AND PAINTING
   - A. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING ALL HOLES REQUIRED FOR INSTALLATION OF HVAC WORK. HOLES SHALL BE CUT IN A NEAT MANNER SATISFACTORY TO THE ARCHITECT.
   - B. CONTRACTOR SHALL EMPLOY AN BUILDING OWNER APPROVED ROOFING CONTRACTOR FOR ALL ROOF PENETRATIONS. ROOF SHALL BE REPAIRED SO AS NOT TO VOID ROOF WARRANTY.
   - C. UNLESS NOTED OTHERWISE, ALL HOLES OR DAMAGE CAUSED BY THE REMOVAL OF EXISTING WORK OR THE INSTALLATION OF NEW WORK SHALL BE PROPERLY PATCHED BY THIS CONTRACTOR. HOLES SHALL BE NEATLY PATCHED AND PAINTED WITH SUITABLE MATERIAL TO MATCH EXISTING SURFACES. HOLES THROUGH FLOORS OR FIRE WALLS SHALL BE SEALED WITH THE APPROPRIATE INTUMESCENT CAULK, PUTTY, STRIP OR SHEET FIRE BARRIER PRODUCT.
   - D. FIRESTOP SYSTEM (REQUIRED FIRESTOPPING MATERIALS) SHALL BE DETERMINED BY THE WALL OR FLOOR/CEILING ASSEMBLY AND PENETRATION TYPE AND SHALL BE UL LISTED AND TESTED IN ACCORDANCE WITH ASTM E814, FIRE RATING OF THE FIRESTOP SYSTEM SHALL BE EQUIVALENT TO THE ASSEMBLY WHICH IS PENETRATED.
   - E. ACCEPTABLE FIRE BARRIER PRODUCTS: HILTI "FS-ONE"NELSON FLAMESEAL"OR APPROVED EQUAL AS MANUFACTURED BY 3M.
8. CLEANING AND PAINTING
   - A. CLEAN NEW PIPING AFTER WORK IS COMPLETE TO REMOVE PIPE DOPE. LOOSE MILL SCALE, AND OTHER EXTRANEOUS MATERIALS.
   - B. TOUCH UP AND REPAIR ANY DAMAGED FACTORY FINISHES ON EQUIPMENT AND MATERIALS FURNISHED. OTHER PAINTING WILL BE DONE UNDER THE PAINTING DIVISION OF THE SPECIFICATIONS.
9. COORDINATION AND CONDUCT OF WORK
   - A. HVAC DRAWINGS ARE DIAGRAMMATIC, INDICATING GENERAL ARRANGEMENT, APPROXIMATE SIZES, GENERAL LOCATIONS OF EQUIPMENT AND PIPING. VERIFY DIMENSIONS IN FIELD; ADJUST TO MANUFACTURER'S SHOP DRAWINGS. DO NOT SCALE DRAWINGS.
   - B. ALL REQUESTS FOR INFORMATION SUPPLEMENTAL TO THE CONSTRUCTION DOCUMENTS SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT FOR DISTRIBUTION TO THE APPROPRIATE PARTY(S).
   - C. DRAWINGS AND SPECIFICATIONS ARE TO BE CONSIDERED AS SUPPLEMENTING EACH OTHER. WORK SPECIFIED BUT NOT SHOWN, OR SHOWN BUT NOT SPECIFIED, SHALL BE PERFORMED OR FURNISHED AS THOUGH MENTIONED IN BOTH SPECIFICATIONS AND DRAWINGS.
   - D. ANY DISCREPANCIES BETWEEN THE DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER.
   - E. ARCHITECTURAL AND STRUCTURAL DRAWINGS SUPERSEDE HVAC DRAWINGS. DETERMINE THAT WORK OF THIS DIVISION CAN BE ACCOMMODATED WITHIN SPACES PROVIDED. NOTIFY ARCHITECT OF ANY INTERFERENCE BEFORE STARTING INSTALLATION.
   - F. DETERMINE SIZES, LOCATIONS FOR CHASES AND OPENINGS NECESSARY FOR INSTALLATION OF HVAC WORK, COOPERATE WITH OTHER TRADES IN PROVIDING SLEEVES, INSERTS AND HANGERS.
   - G. COORDINATE THIS WORK WITH ALL TRADES. ARRANGE OPERATIONS SO AS NOT TO DELAY COMPLETION OF INSTALLATION OF ANY PARTS OF INTERRELATED WORK SO THAT CONSTRUCTION MAY PROCEED ON SCHEDULE.
   - H. COOPERATE WITH ALL TRADES IN PREPARING INTERFERENCE DRAWINGS FOR AREAS WHERE THERE IS POSSIBLE CONFLICT BETWEEN TRADES. EXACT LOCATION OF PIPES, DUCTS AND EQUIPMENT SHALL BE BASED ON FIELD MEASUREMENT WITH FINAL ARRANGEMENT DETERMINED BY INTRA-TRADE AGREEMENTS SUBJECT TO ARCHITECT'S APPROVAL.
   - I. ARCHITECT RESERVES THE RIGHT TO MAKE REASONABLE CHANGES IN INDICATED LOCATIONS WITHOUT EXTRA COST TO THE OWNER.
   - J. ALL WORK SHALL BE INSTALLED IN NEAT AND WORKMANLIKE MANNER BY FIRST-CLASS MECHANICS. THE CONTRACTOR SHALL PROVIDE ADEQUATE AND COMPETENT SUPERVISION OF THE JOB AS REQUIRED.
   - K. DUCTWORK, PIPING AND EQUIPMENT SHALL BE ARRANGED SUBSTANTIALLY AS INDICATED. ANY CHANGE RESULTING IN A SAVINGS IN LABOR OR MATERIAL SHALL BE MADE ONLY IN ACCORDANCE WITH A CONTRACT CHANGE ORDER. DEVIATIONS SHALL BE MADE ONLY WHERE NECESSARY TO AVOID INTERFERENCES AND ONLY AFTER DRAWINGS SHOWING THE PROPOSED DEVIATIONS HAVE BEEN SUBMITTED TO AND APPROVED BY THE ARCHITECT.
   - L. COORDINATE ALL SHUTDOWNS OF ANY HVAC SYSTEM IN ADVANCE WITH THE OWNER.
10. SUBMITTALS
   - A. SUBMIT AN ELECTRONIC FILE CONTAINING SHOP DRAWINGS/SUBMITTALS FOR ALL SCHEDULED AND/OR SPECIFIED EQUIPMENT FOR APPROVAL BY THE ARCHITECT AND ENGINEER. INFORMATION SHALL INCLUDE, BUT IS NOT LIMITED TO; CFM, HP, GPM, MBH, EER, COP, %EFF, VOLTAGE/PHASE, MCA, CONNECTION SIZES, WEIGHT, DIMENSIONS, SCHEDULED EQUIPMENT, DIFFUSERS, DAMPERS, LISTED ACCESSORIES, ETC. AND OTHER COMPONENTS REQUIRED FOR A COMPLETE INSTALLATION.
   - B. WHERE ONLY ONE MAKE OF EQUIPMENT IS NAMED, IT SHALL BE PROVIDED AS SPECIFIED.
   - C. VERBAL REQUESTS OF APPROVALS FOR ANY SUBSTITUTION WILL NOT BE BINDING ON THE ARCHITECT, ENGINEER AND OWNER.
   - D. THIS CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR ALL COSTS FOR REDESIGN AND CHANGES NECESSARY BY ALL TRADES TO ACCOMMODATE THE USE OF EQUIPMENT NOT SPECIFIED ON PROJECT DOCUMENTS.
   - E. BIDS SHALL BE BASED UPON THE SPECIFIED PRODUCTS OR LISTED ALTERNATIVES. DRAWINGS AND SPECIFICATIONS ARE BASED ON THE PRODUCTS SPECIFIED BY TYPE, MODEL, AND SIZE, AND THUS ESTABLISH MINIMUM QUALITIES, WHICH SUBSTITUTES MUST MEET TO QUALIFY FOR REVIEW.
   - F. SHOULD THE CONTRACTOR PROPOSE TO FURNISH MATERIALS, EQUIPMENT, AND DEVICES, OTHER THAN THOSE SPECIFIED AND LISTED. THE CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST FOR SUBSTITUTIONS TO THE ENGINEER AT LEAST FOURTEEN (14) CALENDAR DAYS PRIOR TO BID OPENING. THE REQUEST SHALL BE AN ALTERNATE TO THE ORIGINAL BID AND SHALL INCLUDE AND BE ACCOMPANIED WITH COMPLETE SPECIFICATION CUT SHEET SUBMITTALS AS OUTLINED IN SECTION 10.A OF THIS SPECIFICATION SECTION, COMPLETE WITH DESCRIPTIVE (MANUFACTURER, BRAND NAME, CATALOG NUMBER, ETC) AND TECHNICAL DATA FOR ALL ITEMS. INDICATE ANY ADDITIONS OR DEDUCTIONS TO THE CONTRACT PRICE ON BOTH THE SUBSTITUTION SUBMITTAL AND THE BID FORM. FAILURE TO PERFORM THESE ACTIONS EQUATES TO ACKNOWLEDGEMENT THAT THE PROJECT HAS BEEN BID WITH STRICT ACCORDANCE TO THIS SPECIFICATION AND APPLICABLE DRAWINGS.
   - G. ACCEPTANCE OR REJECTION OF THE PROPOSED SUBSTITUTIONS SHALL BE SUBJECT TO APPROVAL OF THE ARCHITECT AND ENGINEER. IF REQUESTED, THE CONTRACTOR SHALL SUBMIT INSPECTION SAMPLES OF BOTH THE SPECIFIED AND THE PROPOSED SUBSTITUTE ITEMS.
   - H. IF ANY SUBSTITUTIONS ARE APPROVED, AN ADDENDUM LISTING THE APPROVED ITEMS(S) WILL BE ISSUED TO ALL BIDDING CONTRACTORS PRIOR TO THE BID DATE.
   - I. IN ALL CASES WHERE SUBSTITUTIONS ARE PERMITTED, THE CONTRACTOR SHALL BEAR ANY EXTRA COST OF EVALUATING THE EQUALITY OF THE MATERIAL AND EQUIPMENT TO BE INSTALLED.
11. EQUIPMENT IDENTIFICATION
   - A. THE CONTRACTOR SHALL FURNISH AND INSTALL A SYSTEM OF NAMEPLATES DESIGNED TO IDENTIFY EACH PIECE OF EQUIPMENT.
     1. NAMEPLATE LETTERS AND NUMBERS SHALL MATCH EQUIPMENT DESIGNATION AS INDICATED ON THE DRAWINGS.
     2. NAMEPLATES SHALL BE LAMINATED PHENOLIC WITH BLACK SURFACE AND WHITE CORE. USE 1/16"THICK MATERIAL FOR PLATES UP TO 2"BY 4". FOR LARGER SIZES USE 1/8"THICK. LETTERS AND NUMBERS SHALL BE A MINIMUM OF ½"HIGH.
     3. FASTEN NAMEPLATES TO ALL EQUIPMENT BY THE USE OF STAINLESS STEEL SHEET METAL SCREWS.
12. AS-BUILT DRAWINGS
   - A. AS WORK PROGRESSES, RECORD ON A SET OF "AS-BUILT"PRINTS ANY DEVIATIONS FROM DESIGN DRAWINGS. DELIVER THIS SET TO THE OWNER BEFORE SUBMITTING REQUEST FOR FINAL PAYMENT. THE "AS-BUILT"PRINTS SHALL BE AN ACCURATE DEPICTION OF THE PROJECT AS COMPLETED.
13. OPERATING AND MAINTENANCE MANUALS
   - A. PROVIDE TO OWNER AT PROJECT TURNOVER, ONE (1) HARDBOUND COPY OF, AND AN ELECTRONIC COPY OF, ALL OPERATING AND MAINTENANCE MANUALS FOR ALL EQUIPMENT AND SYSTEMS INSTALLED.
   - B. MANUALS SHALL INCLUDE ALL RELEVANT INFORMATION NEEDED FOR DAY-TO-DAY OPERATION AND MANAGEMENT OF EACH SYSTEM AND EQUIPMENT MAINTENANCE INFORMATION REQUIRED TO SUPPORT THE MAINTENANCE PROGRAM.
   - C. MANUALS SHALL INCLUDE THE SEQUENCE OF OPERATION FOR EACH SYSTEM WHICH DESCRIBES THE CONTROL COMPONENTS AND HOW THE SYSTEM WILL START, STOP AND OPERATE.
14. INSULATION
   - A. PROVIDE ALL INSULATION MATERIALS (INSULATION, JACKETS, FITTING COVERS, ADHESIVES, CEMENTS, MASTICS, SEALERS AND FINISHES) WITH A FLAME-SPREAD INDEX OF 25 OR LESS AND SMOKE DEVELOPED INDEX OF 50 OR LESS. AS TESTED UNDER PROCEDURE ASTM E-84 (NFPA 255)
   - B. ALL INSULATION SHALL BE INSTALLED OVER CLEAN, DRY SURFACES. INSULATION MUST BE DRY AND IN GOOD CONDITION. WET OR DAMAGED INSULATION IS NOT ACCEPTABLE. NO INSULATION SHALL BE APPLIED PRIOR TO PRESSURE TEST COMPLETION OF THE RESPECTIVE SYSTEM.
   - C. ALL INSULATION SHALL BE CONTINUOUS (INCLUDING VAPOR BARRIER) THROUGH WALL AND CEILING OPENINGS AND SLEEVES. OVERLAP AT SEAMS PER MANUFACTURER'S RECOMMENDATIONS.
   - D. ALL INSULATION PRODUCTS SHALL BE APPLIED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN RECOMMENDATION. THE WORKMANSHIP SHALL BE FIRST CLASS AND ALL JOINTS SHALL BE MADE TIGHT.
   - E. INSULATION MUST MEET ADOPTED ASHRAE 90.1 STANDARDS.
   - F. INSULATE CONCEALED SUPPLY AIR DUCTWORK WITH 2"THICK OWENS-CORNING FIBERGLASS DUCTWRAP WITH FOIL FACED ALL-SERVICE JACKET.
   - G. INSULATE SUPPLY AIR DUCTWORK LOCATED IN PLENUM SPACES WITH 1-1/2"THICK OWENS-CORNING FIBERGLASS DUCTWRAP WITH FOIL FACED ALL-SERVICE JACKET.
   - H. INSULATE OUTDOOR AIR DUCTWORK/LOUVER PLENUMS WITH 1-1/2"THICK OWENS-CORNING FIBERGLASS DUCTWRAP WITH FOIL FACED ALL-SERVICE JACKET.
   - I. INSULATE ALL REFRIGERANT PIPING (SUCTION AND LIQUID LINES) WITH 1" ELASTOMERIC FOAM INSULATION WITH JOINTS AND SEAMS SEALED VAPOR TIGHT. INSULATION LOCATED OUTSIDE ON ROOF SHALL BE COVERED WITH PVC JACKETING FOR WEATHER AND UV PROTECTION.
   - J. INTERNAL DUCT INSULATION SHALL BE USED ON EXPOSED SUPPLY AIR DUCTWORK.
   - K. REPAIR OR REPLACE EXISTING INSULATION WHERE REMOVED FOR NEW CONNECTIONS OR WHERE DAMAGED DURING CONSTRUCTION.
   - L. ALL INSULATION USED AS PLENUM WRAP COVERING FOR COMBUSTIBLE MATERIALS IN A PLENUM SPACE SHALL BE 3M PLENUM PROTECTION SYSTEM (PP-100-P), ONE LAYER OF 3M FIRE BARRIER DUCT WRAP 5A, IN ACCORDANCE WITH UL910 & UL1887.
   - M. ACOUSTICAL DUCT LINING:
     1. INTERNALLY LINE FIRST TEN FEET OF SUPPLY AND RETURN DUCTWORK CONNECTED TO ROOFTOP HVAC UNITS.
     2. FIBROUS GLASS, COMPLYING WITH THERMAL INSULATION MANUFACTURERS ASSOCIATION (TIMA) AHC-101.
     3. ASTM C 1071, TYPE II, WITH COATED SURFACE EXPOSED TO AIRSTREAM TO PREVENT EROSION OF GLASS FIBERS 1"THICK. 1-½ LB. DENSITY. COATING MATERIAL SHALL BE ANTI-MICROBIAL AND COMPLY WITH NFPA 90A AND 90B.
     4. K-FACTOR"EQUAL TO 0.28 OR BETTER, AT MEAN TEMPERATURE OF 75 DEG. F.
     5. FLAME SPREAD INDEX SHALL BE 25 OR LESS AND SMOKE DEVELOPED INDEX SHALL BE 50 OR LESS, AS TESTED IN ACCORDANCE WITH ASTM C 411.
     6. DUCT LINING ADHESIVE SHALL COMPLY WITH ASTM C 916 SPECIFICATIONS FOR ADHESIVES FOR "DUCT THERMAL INSULATION". DUCT LINING FASTENERS ALL COMPLY WITH SMACNA DUCT CONSTRUCTION STANDARDS, ARTICLE S2.11
     7. ALTERNATE DUCT LINING MATERIAL -ARMACELL AP ARMAFLEX SA BLACK DUCT LINER, 3/4"THICK, MICROBAN ANTI-MICROBIAL PROTECTION.
15. METAL DUCTWORK
   - A. HVAC CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO FABRICATION OF DUCTWORK. ANY CONFLICTS OR INTERFERENCES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
   - B. GALVANIZED DUCTWORK SHALL BE FABRICATED OF NO.1 PRIME GALVANIZED SHEET METAL OF LOCK FORMING QUALITY.
   - C. SEALING MATERIALS SHALL BE SUITABLE FOR; USE WITH AIR DISTRIBUTION DUCTWORK. ACCEPTABLE MANUFACTURERS ARE MONOCO INDUSTRIES, 3M, OR UNITED SHEET METAL.
   - D. PROVIDE ALL DUCTWORK AS INDICATED ON THE DRAWINGS, MAKING ALL NECESSARY OFFSETS (WHETHER OR NOT SPECIFICALLY INDICTED) AS REQUIRED TO MEET THE VARIOUS BUILDING CONDITIONS. DUCTWORK INSTALLATION SHALL NOT CONFLICT WITH EQUIPMENT OR PIPING.
   - E. EXPOSED DUCTWORK SHALL BE PRIMED AND PAINTED. COORDINATE WITH ARCHITECTURAL PLANS FOR COLOR SELECTION.
   - F. ALL CHANGES IN CROSS SECTION SHALL BE MADE WITHOUT REDUCING THE DESIGN AREA OF THE DUCT OR RAISING THE PRESSURE DROP PER 100 FEET OF DUCT SHOWN ON DOCUMENTS.
   - G. NO PIPE OR OTHER OBSTRUCTIONS SHALL PASS THROUGH AIR DUCTS, UNLESS SPECIFICALLY SHOWN ON PLANS.
   - H. CAP ALL OPEN ENDS TO DUCTWORK DURING CONSTRUCTION TO PREVENT ENTRANCE OF DUST, DEBRIS, MOISTURE ETC.
   - I. INSTALL DUCTWORK RUN ABOVE CEILING AS HIGH AS POSSIBLE SO AS TO MAINTAIN DESIGN CEILING HEIGHTS. EXPOSED DUCTWORK SHALL BE INSTALLED TO PROVIDE MAXIMUM HEADROOM OR AT HEIGHT SPECIFIED ON PLANS.
   - J. DUCTWORK SHALL NOT BE HUNG FROM EQUIPMENT, PIPING, CONDUIT, ROOF DECKING OR OTHER DUCTWORK.
   - K. ALL DUCTWORK JOINTS AND SEAMS SHALL BE AIR-TIGHT PER SMACNA TABLE 1.1. POORLY MADE JOINTS, SPLITS, VISIBLE HOLES AT CORNERS, ETC SHALL BE REWORKED AND REPAIRED. WHERE EXCESSIVE PULSATING OF DUCTWORK IS FOUND, ADDITIONAL STIFFENERS SHALL BE ADDED. ANY CRACKING IN THE SEALANT THAT IS APPARENT UPON INSPECTION SHALL BE SUFFICIENT TO WARRANT REJECTION.
   - L. IF THE INTERIOR OF SHEET METAL IS EXPOSED TO VIEW THROUGH AIR DISTRIBUTION DEVICES IN FINISHED AREAS OF THE BUILDING, IT SHALL BE COATED WITH PRIMER AND A FLAT BLACK FINISH COAT.
   - M. ALL DUCTWORK SHALL BE SUPPORTED PER SMACNA REQUIREMENTS.
   - N. RECTANGULAR DUCTWORK FITTINGS.
     1. BRANCH CONNECTIONS SHALL BE 45 DEGREES ENTRY. STRAIGHT TAPS ARE NOT PERMITTED.
     2. CHANGES IN DIRECTION SHALL BE MADE WITH FULL RADIUS ELBOWS WITH RADIUS EQUAL TO 1-1/2 TIMES THE HORIZONTAL WIDTH OF THE DUCT OR WITH SQUARE ELBOWS WITH TURNING VANES. TURNING VANES SHALL BE DOUBLE THICKNESS TYPE CONSTRUCTED OF THE SAME MATERIAL AS THE SURROUNDING DUCTWORK, PER SMACNA REQUIREMENTS.
   - O. ROUND DUCTWORK FITTINGS:
     1. BRANCH CONNECTIONS SHALL BE MADE WITH 45 DEGREE ENTRY TEES.
     2. CHANGE IN DIRECTION SHALL BE MADE WITH FULL RADIUS ELBOWS WITH RADIUS EQUAL TO 1-1/2 TIMES THE DIAMETER OF THE DUCT.
   - P. LOW PRESSURE DUCTWORK SHALL BE CONSTRUCTED PER SMACNA "HVAC DUCT CONSTRUCTION STANDARDS" FOR 2 INCH STATIC PRESSURE, SEAL CLASS "B".
   - Q. HANGERS AND SUPPORTS
     1. PROVIDE GALVANIZED STEEL STRAPS, ALL-THREAD ROD AND HORIZONTAL ANGLE SUPPORTS SIZED PER SMACNA REQUIREMENTS.
     2. DUCT ATTACHMENTS SHALL BE MADE USING SHEET METAL SCREWS COMPATIBLE WITH DUCT MATERIALS.
     3. BUILDING ATTACHMENTS SHALL BE CONCRETE INSERTS OR STRUCTURAL STEEL FASTENERS APPROPRIATE FOR THE BUILDING MATERIALS. DO NOT USE POWER ACTIVATE CONCRETE FASTENERS. "C TYPE MALLEABLE IRON BEAM CLAMPS ARE ACCEPTABLE ONLY IF USED WITH CARBON STEEL RETAINER STRAP.
17. FLEXIBLE DUCTWORK
   - A. TESTED AND CLASSIFIED BY UNDERWRITERS LABORATORIES, INC. AS CLASS I AIR DUCT AND LABELED IN ACCORDANCE WITH U.L. 181, STANDARD FOR AIR DUCTS". THE FLAME SPREAD RATING SHALL BE 25 OR LESS AND THE SMOKE DEVELOPED RATING SHALL BE 50 OR LESS.
   - B. LINER SHALL BE CONSTRUCTED OF ALUMINUM FOIL, FIBERGLASS AND ALUMINIZED POLYESTER, MECHANICALLY LOCKED WITHOUT ADHESIVES, HELIX SHALL BE GALVANIZED STEEL, FORMED AND MECHANICALLY LOCKED TO FABRIC.
   - C. WHERE DUCTWORK IS TO BE INSULATED, FLEXIBLE DUCTWORK LINER SHALL BE COVERED BY A FACTORY WRAPPED, 1-1/2"THICK, 3/4 POUND DENSITY FIBERGLASS INSULATION BLANKET WITH A FIRE RETARDANT REINFORCED ALUMINUM OUTER JACKET.
   - D. INSTALL FLEXIBLE DUCTWORK FULLY EXTENDED, FREE OF SAGS AND KINKS. MAXIMUM LENGTH OF FLEXIBLE DUCTWORK SHALL BE 3'-0". FASTEN FLEXIBLE DUCTWORK TO RIGID DUCTWORK AND DEVICES WITH SELF-LOCKING 100 PERCENT NYLON, ADJUSTABLE DIAMETER CLAMPS.
   - E. ACCEPTABLE MANUFACTURERS ARE THERMAFLEX, FLEXMASTER U.S.A. INC. AND CLEVAFLEX.
18. BALANCING DAMPERS
   - A. PROVIDE BALANCING DAMPERS FOR ALL AIR TERMINAL DEVICES (SUCH AS BUT NOT LIMITED TO, DIFFUSERS, REGISTERS, GRILLES, ETC.) AND BRANCH DUCTWORK REQUIRED FOR PROPER BALANCING OF SYSTEM.
   - B. ROUND DAMPERS SHALL BE SINGLE BLADE TYPE CONSTRUCTION, MINIMUM 18 GAUGE GALVANIZED STEEL. PIVOT ROD SHAFT SHALL BE CONTINUOUS.
   - C. RECTANGULAR DAMPERS SHALL BE SINGLE BLADE OR MULTIPLE (OPPOSED BLADE) TYPE CONSTRUCTION. MAXIMUM BLADE WIDTH IS 8 INCHES.
   - D. ALL BALANCING DAMPERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS"
   - E. FURNISH ALL BALANCING DAMPERS WITH YOUNG REGULATOR COMPANY VALCALOX REGULATORS WITH HANDLE PERMANENTLY ATTACHED. DAMPER HANDLE POSITION SHALL BE SECURELY LOCKED IN PLACE BY TIGHTENING OF A LOCK NUT. WHERE DUCTWORK IS EXTERNALLY INSULATED, REGULATOR BASE HEIGHT SHALL ACCOMMODATE INSULATION THICKNESS.
   - F. PROVIDE ALL MANUAL BALANCING DAMPERS WHERE INDICATED ON THE DRAWINGS AND WHERE NECESSARY TO PROPERLY DISTRIBUTE AND BALANCE THE AIR.
19. GRILLES AND DIFFUSERS
   - A. PROVIDE REGISTERS, GRILLS AND DIFFUSERS WHERE SHOWN ON THE DRAWINGS, OF SIZE TYPE, AND MATERIAL AS INDICATED AND AS REQUIRED FOR A COMPLETE INSTALLATION.
   - B. BORDER TYPES SHALL BE COMPATIBLE WITH THE CEILINGS WHERE THE GRILLES AND DIFFUSERS ARE TO BE INSTALLED.
   - C. ALL GRILLES AND DIFFUSERS SHALL BE FINISHED WITH A FACTORY APPLIED OFF-WHITE FINISH UNLESS NOTED OTHERWISE.
   - D. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF GRILLES AND DIFFUSERS.
20. VIBRATION ISOLATION
   - A. PROVIDE ADEQUATE VIBRATION ISOLATION FOR EACH PIECE OF EQUIPMENT.
   - B. PROVIDE FLEXIBLE CONNECTIONS WITH 1"SLACK BETWEEN DUCTS AND FANS/ROOFTOP UNITS AS MANUFACTURED BY DURO-DYNE, OR EQUIVALENT.
   - C. PROVIDE FLEXIBLE FITTING ON PIPING CONNECTIONS TO EQUIPMENT.
21. REFRIGERATION AND AIR CONDITIONING CONDENSATE PIPING SYSTEMS
   - A. USE TYPE DWV COPPER PIPING WITH BRAZED DRAINAGE FITTINGS FOR CONDENSATE PIPING.
   - B. USE TYPE ACR COPPER PIPING WITH BRAZED WROUGHT COPPER FITTINGS FOR ALL REFRIGERATION PIPING.
   - C. PITCH PUMPED AND GRAVITY CONDENSATE PIPING AT 1/8 INCH PER FOOT IN DIRECTION OF FLOW.
   - D. INSULATE ALL INTERIOR CONDENSATE PIPING AND REFRIGERATION SUCTION PIPING WITH 3/4 INCH ARMACELL CLOSED CELL SELF SEALING ARMAFLEX INSULATION.
22. EXHAUST FANS
   - A. CEILING MOUNTED DIRECT DRIVE CENTRIFUGAL EXHAUST VENTILATOR. FANS SHALL BE UL LISTED AND BEAR THE AMCA CERTIFIED RATING SEAL FOR SOUND AND AIR PERFORMANCE.
   - B. ALL FASTENERS SHALL BE CORROSION RESISTANT. ALUMINUM BASE SHALL HAVE CONTINUOUSLY WELDED CURB CAP CORNERS. MOTOR, BEARINGS AND DRIVE SHALL BE MOUNTED ON A STEEL ASSEMBLY, ISOLATED FROM THE FAN STRUCTURE WITH RUBBER VIBRATION ISOLATORS.
   - C. WHEEL SHALL BE CENTRIFUGAL BACKWARD INCLINED TYPE, CONSTRUCTED OF ALUMINUM, WITH A MACHINED CAST ALUMINUM HUB.
   - D. MOTOR SHALL BE HEAVY DUTY TYPE WITH PERMANENTLY LUBRICATED SEALED BALL BEARINGS.
   - E. FAN BEARINGS SHALL BE HEAVY DUTY REGREASABLE BALL TYPE WITH A CAST IRON HOUSING, RATED IN EXCESS OF 200,000 HOURS AT MAXIMUM CATALOGED OPERATING SPEED.
   - F. BELTS SHALL BE OIL AND HEAT RESISTANT, NON-STATIC TYPE. DRIVES SHALL BE MACHINED CAST IRON, KEYED AND SECURELY ATTACHED TO WHEEL AND MOTOR SHAFTS AND SIZED FOR 150 PERCENT OF THE INSTALLED MOTOR HORSEPOWER
   - G. ACCEPTABLE MANUFACTURERS: BROAN, PENN VENTILATOR, COOK GREENHECK AND ACME.
   - H. ACCEPTABLE MANUFACTURERS: RUSKIN, GREENHECK
23. MOTOR OPERATED DAMPERS
   - A. GALVANIZED STEEL, LOW LEAKAGE CONTROL DAMPERS WITH 16 GAUGE REINFORCED GALVANIZED STEEL HAT CHANNEL FRAME. BLADES SHALL BE 16 GAUGE REINFORCED SINGLE SKIN GALVANIZED STEEL.
   - B. EDGE SEALS SHALL BE PVC COATED POLYESTER FABRIC MECHANICALLY LOCKED INTO THE BLADE EDGE. ADHESIVE OR CLIP-ON STYLES ARE NOT ACCEPTABLE.
   - C. JAMB SEALS SHALL BE FLEXIBLE METAL, COMPRESSION TYPE TO PREVENT LEAKAGE BETWEEN BLADE END AND DAMPER FRAME. BLADE END OVERLAPPING FRAME IS UNACCEPTABLE.
   - D. BEARINGS SHALL BE CORROSION RESISTANT. AXLES SHALL BE SQUARE OR HEXAGONAL POSITIVELY LOCKED INTO THE DAMPER BLADE. LINKAGE SHALL BE OUT OF THE AIRSTREAM.
   - E. DAMPER ACTUATORS SHALL BE FURNISHED AND INSTALLED BY THE TEMPERATURE CONTROL CONTRACTOR.
   - F. ACCEPTABLE MANUFACTURERS: RUSKIN, GREENHECK
24. TEMPERATURE CONTROLS
   - A. SYSTEMS SHALL BE STAND-ALONE WITH 7-DAY PROGRAMMABLE THERMOSTATS.
   - B. IN ADDITION TO STAND-ALONE CONTROLS, THE TOXALERT GAS DETECTION SYSTEM SHALL BE INTEGRATED WITH THE MAKEUP AIR UNIT (MAU-1) AND SHOP BAY EXHAUST FANS (EF-4 & 5). SEE NOTES ON HVAC PLAN AND HVAC SCHEDULES FOR SEQUENCES.
   - C. ALL TEMPERATURE CONTROL COMPONENTS, WIRING AND CONDUIT SHALL BE THE RESPONSIBILITY OF THE HVAC CONTRACTOR.
   - D. WIRING AND CONDUIT
     1. ALL 24 VOLT WIRING SHALL BE INSTALLED IN CONDUIT, IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE.
25. PROJECT COMPLETION:
   - A. UPON COMPLETION OF PROJECT THIS CONTRACTOR SHALL PROVIDE NEW FILTERS WITHIN ALL FAN POWERED EQUIPMENT.
   - B. ALL FAN POWERED EQUIPMENT SHALL HAVE THEIR EXTERIOR CLEANED WITH A MILD SOAP AND WATER SOLUTION AND THOROUGHLY DRIED.
   - C. PROVIDE 3 COPIES OF FINAL TEST AND BALANCE REPORT TO OWNER/ARCHITECT.

HVAC GENERAL NOTES:

1. GENERAL NOTES SHALL APPLY TO ALL HVAC DRAWINGS.
2. ALL KEY NOTES INDICATED ON THE DRAWINGS AS "TYPICAL"ARE TO BE CONSIDERED AS SHOWN AT ALL OTHER SIMILAR CONDITIONS WHETHER NOTED OR NOT.
3. ALL HVAC WORK SHALL BE COMPLETE AND READY FOR SATISFACTORY SERVICE.
4. THE CONTRACT DRAWINGS ARE DIAGRAMMATIC AND ARE INTENDED TO CONVEY THE GENERAL ARRANGEMENT OF THE WORK.
5. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS, METHODS, AND WORK SCHEDULING ASSOCIATED WITH THE INSTALLATION OF THE HVAC SYSTEMS.
6. EXAMINE THE SITE AND OBSERVE THE CONDITIONS UNDER WHICH THE WORK WILL BE INSTALLED. NO ALLOWANCES WILL BE MADE FOR ERRORS OR OMISSIONS RESULTING FROM THE FAILURE TO COMPLETELY EXAMINE THE SITE.
7. VERIFY SIZE AND LOCATIONS OF ALL EXISTING SERVICES. NOTIFY THE ENGINEER OF ALL DISCREPANCIES THAT EXIST BETWEEN THE CONTRACT DOCUMENTS AND THE EXISTING SERVICES BEFORE MAKING ANY CONNECTIONS TO THE EXISTING SERVICES.
8. COORDINATE THE SIZE AND LOCATION OF ROOF PENETRATIONS AND FLASHING REQUIREMENTS WITH THE WORK OF OTHER TRADES.
9. ROUTE PIPING AND DUCT SYSTEMS PARALLEL AND PERPENDICULAR TO THE BUILDING LINES. MOUNT AS CLOSE AS POSSIBLE TO THE UNDERSIDE OF THE BUILDING STRUCTURE.
10. COORDINATE THE INSTALLATION OF HVAC SYSTEMS WITH THE WORK OF OTHER TRADES. PROVIDE OFFSETS IN PIPING AND DUCTWORK AS REQUIRED AT NO ADDITIONAL COST TO AVOID OBSTRUCTIONS.
11. MOUNT ROOM SENSORS AND SWITCHES AT 4'-0". ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE.
12. SUPPORT ALL EQUIPMENT FROM THE BUILDING STRUCTURE TO PROVIDE A VIBRATION-FREE INSTALLATION.
13. DUCTWORK DIMENSIONS SHOWN ON THE DRAWINGS ARE INTERNAL AIRFLOW DIMENSIONS. INCREASE THE SHEET METAL DUCTWORK DIMENSIONS BY 2 IN. TO ACCOMMODATE 1-IN. DUCT LINER WHERE REQUIRED.
14. PROVIDE FLEXIBLE DUCT CONNECTORS ON ALL DUCTWORK CONNECTIONS TO FANS AND ROOFTOP HVAC UNITS.
15. PROVIDE ½-IN. MESH ALUMINUM SCREEN OVER THE OPENING OF ALL OPEN-ENDED DUCTWORK.
16. ENSURE THAT ADEQUATE CLEARANCE EXISTS FOR THE INSTALLATION AND MAINTENANCE OF ALL WORK SHOWN ON THE DRAWINGS AND DESCRIBED IN THE SPECIFICATIONS.
17. PROVIDE ACCESS PANELS (INSTALLED IN WALLS OR CEILINGS) AND/OR ACCESS DOORS (INSTALLED IN DUCTWORK) THAT ARE INDICATED OR REQUIRED FOR ACCESS TO CONCEALED HVAC DEVICES THAT MAY REQUIRE FUTURE INSPECTION, REPAIR, OR ADJUSTMENT.
18. PROVIDE SLEEVES AND CAULK ALL PIPING PENETRATIONS THROUGH WALLS AND FLOORS AND PATCH TO MATCH THE ADJACENT CONSTRUCTION. PROVIDE CHROME-PLATED ESCUTCHEONS ON ALL PIPING PENETRATIONS IN EXPOSED LOCATIONS.
19. PROVIDE SLEEVES AND PATCH ALL DUCT PENETRATIONS THROUGH WALLS AND FLOORS TO MATCH THE EXISTING CONSTRUCTION. SLEEVE DIMENSIONS SHALL BE 1 IN. LARGER THAN INSULATED DUCT DIMENSIONS. THE SPACE BETWEEN THE DUCT AND THE SLEEVE SHALL BE PACKED WITH MINERAL FIBER AND CAULKED.
20. FIRESTOP ALL PENETRATIONS THROUGH FIRE-RESISTANCE-RATED WALLS, FLOORS, OR ASSEMBLIES IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS.
21. SEAL ALL PENETRATIONS THROUGH WATERPROOF CONSTRUCTION IN ACCORDANCE WITH THE WATERPROOFING MANUFACTURER'S INSTRUCTIONS. ALL WORK SHALL BE PERFORMED BY APPROVED CONTRACTORS IF REQUIRED BY THE MANUFACTURER TO MAINTAIN THE WARRANTY ON THE MATERIAL.
22. PROVIDE ALL LOW PRESSURE DUCTWORK SIZED EQUAL TO OR LESS THAN 0.1" W.G./100' (TYP.) UNLESS SCHEDULED OTHERWISE. INDICATE ALL DUCT SIZES ON SHOP DRAWINGS.
23. PROVIDE MINIMUM DUCT RADIUS ON ELBOWS AT 1-1/2 TIMES DUCT SIZE.
24. ALL DUCTS SHALL BE FREE FROM CONTACT WITH ALL: PIPING, WALLS, ELECTRICAL CONDUITS, CEILING SUSPENSION SYSTEMS, ETC.
25. PROVIDE THROAT WITH PROPORTIONAL SPLIT AND TURNING VANES ON TEE TRANSITIONS. (BULLHEAD TEE'S WILL NOT BE PERMITTED.
26. ALL PIPING AND DUCTWORK SHALL FREELY PASS THROUGH ALL WALLS AND FLOORS WITHOUT RIGID CONNECTIONS. PENETRATION POINTS SHALL BE SLEEVED TO ALLOW PASSAGE OF PIPING OR DUCTWORK AND MAINTAIN 3/4" TO 1-1/4" CLEARANCE AROUND THE OUTSIDE SURFACES. THIS CLEARANCE SHALL BE TIGHTLY PACKED WITH ONE POUND DENSITY GLASS FIBER, AND CAULKED AIR TIGHT WITH NON-HARDENING SEALANT AFTER INSTALLATION OF PIPING OR DUCTWORK.
27. PROVIDE FIRE DAMPERS WITH ACCESS IN ALL RATED WALLS IN ACCORDANCE WITH LOCAL CODES.
28. FABRICATE, INSTALL, SEAL, AND INSULATE ALL DUCTWORK IN STRICT CONFORMANCE WITH THE REQUIREMENTS OF THE STATE MECHANICAL CODE AND ASME STANDARDS.
29. ALL EQUIPMENT, MATERIALS AND WORK SHALL CONFORM TO THE APPLICABLE CODES OF THE STATE BUILDING, FIRE, MECHANICAL, AND NATIONAL ELECTRICAL CODES AS ADOPTED BY THE CITY AND ALL OTHER CODES, SAFETY ORDERS AND REGULATIONS AS ENFORCED BY THE STATE AND CITY FIRE MARSHALL'S PERTAINING TO THIS PROJECT
30. PROTECTIVE BARRIERS SHALL BE INSTALLED IN FRONT OF EQUIPMENT WHERE EQUIPMENT IS SUBJECT TO MECHANICAL DAMAGE.
31. SUITABLE OPENINGS WITH TIGHTLY FITTED COVERS SHALL BE PROVIDED TO MAKE FIRE DAMPERS ACCESSIBLE FOR INSPECTION.
32. ACCESSIBILITY: ALL EQUIPMENT SHOWN IN WALLS OR ABOVE NON-ACCESSIBLE CEILINGS SHALL BE INSTALLED WITHIN 24" OF, AND BEHIND, AN ACCESS PANEL.
33. SPECIFICATION: THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH, AND BE CONSIDERED TO BE A PART OF THE SPECIFICATIONS.
34. PATCHING: THE CONTRACT SHALL BE RESPONSIBLE FOR PATCHING AND REPAIRING ALL AREAS WHICH ARE EXCAVATED AND/OR DAMAGED BY HIS OPERATIONS.

HVAC ABBREVIATIONS

AC	AIR CONDITIONING UNIT
AFF	ABOVE FINISH FLOOR
ARCH	ARCHITECTURAL
BDD	BACKDRAFT DAMPER
BLDG	BUILDING
BOT	BOTTOM
CD	CEILING DIFFUSER
CFM	CUBIC FEET PER MINUTE
CLG	CEILING
CO	CARBON MONOXIDE
CU	CONDENSING UNIT
DIA(ø)	DIAMETER
EA	EXHAUST AIR
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
EG	EXHAUST GRILLE
ELEC	ELECTRICAL
EUH	ELECTRIC UNIT HEATER
GC	GENERAL CONTRACTOR
GUH	GAS UNIT HEATER
HP	HORSEPOWER
HVAC	HEATING, VENTILATION, AIR CONDITIONING
KW	KILOWATT
L	LOUVER
MA	MAKE-UP AIR
MAU	MAKE-UP AIR UNIT
MAX	MAXIMUM
MBH	1,000 BTUH
MC	MECHANICAL CONTRACTOR
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM
NTS	NOT TO SCALE
OA	OUTSIDE AIR
PH (Ø)	PHASE
PVC	POLYVINYL CHLORIDE
RA	RETURN AIR
REQ'D	REQUIRED
SA	SUPPLY AIR
STRUCT	STRUCTURAL
TYP (T/)	TYPICAL
UL	UNDERWRITER'S LABORATORY
UNO	UNLESS NOTED OTHERWISE
V	VOLTS
VD	VOLUME DAMPER
VERT	VERTICAL
W	WATTS

HVAC LEGEND

SD — DUCT-TYPE SMOKE DETECTOR WITH REMOTE TEST STATION AND AUXILIARY RELAY FURNISHED AND WIRED BY ELECTRICAL CONTRACTOR; INSTALLED IN DUCTWORK BY MECHANICAL CONTRACTOR PER CODE. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR AND MANUFACTURER. PROVIDE CONDUIT AND WIRING NECESSARY TO SHUT DOWN HVAC UNIT UPON ACTIVATION OF SMOKE DETECTOR.

- DUCTWORK BELOW GRADE/FLOOR
- MOD — MOTOR OPERATED DAMPER
- T — THERMOSTAT
- S — SENSOR
- XX-X — EQUIPMENT TAG
- SUPPLY OR OUTDOOR AIR DUCT
- RETURN OR EXHAUST AIR DUCT
- DUCT LINING
- DUCT UP
- DUCT DOWN
- UCD — 3/4" DOOR UNDERCUT

LENNOX EQUIPMENT PACKAGE

TRAVEL CENTERS OF AMERICA HAS A NATIONAL ACCOUNT AGREEMENT WITH THE LENNOX COMPANY. ALL HVAC CONTRACTORS ARE DIRECTED TO CONTACT THE LENNOX NATIONAL ACCOUNTS OFFICE AT 1-800-367-6285 (LENNOXNATIONALACCOUNTS@LENNOXIND.COM) OR ACCOUNT MANAGER: RAZI DOLE AT 1-614-886-0719 (RAZI.DOLE@LENNOXIND.COM) WITH PRODUCT RELATED QUESTIONS AND TO OBTAIN PRICING INFORMATION ON ANY APPLICABLE EQUIPMENT.

THE MECHANICAL CONTRACTOR (OR GENERAL CONTRACTOR) SHALL PURCHASE THE EQUIPMENT FROM LENNOX NATIONAL ACCOUNTS. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR COORDINATING AND ACCEPTING THE MATERIAL, VERIFYING PROPER QUANTITIES AND MODEL

Must comply with all national and state adopted codes

JAKAN ENGINEERING
CIVIL • STRUCTURAL
P.O. BOX 391
Frisco, Texas 75034
TBPE No. F-15945
HUB #15945
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#635-23

SON H. NGO
NEW MEXICO
28755
PROFESSIONAL ENGINEER
11-13-23

REVIEWED - GENERAL BUILDING
Chris Archuleta
01/23/2024 10:34:12 AM
A-155698

8-09-23

TA TRAVEL CENTER
PARCEL A, B, AND C WITHIN LOT 3 IN
SECTION 19, T11N, R31E, N.M.P.M.
TUCUMCARI, NM
NEW DEVELOPMENT

DATE: Nov. 2023

REVISIONS

HVAC PLANS

M-T 001

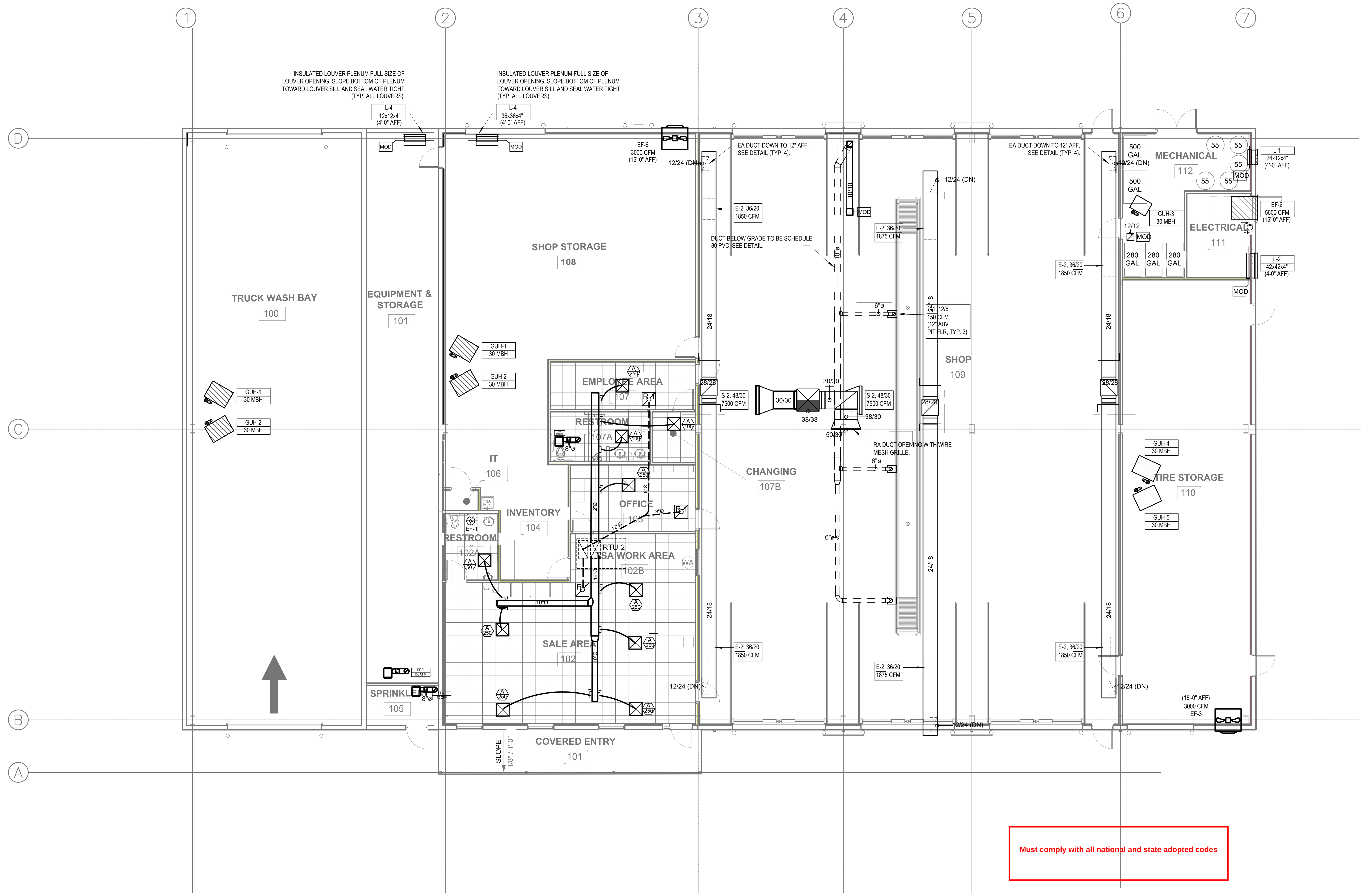
LENNOX EQUIPMENT PACKAGE

TRAVEL CENTERS OF AMERICA HAS A NATIONAL ACCOUNT AGREEMENT WITH THE LENNOX COMPANY. ALL HVAC CONTRACTORS ARE DIRECTED TO CONTACT THE LENNOX NATIONAL ACCOUNTS OFFICE AT 1-800-367-6285 (LENNOXNATIONALACCOUNTS@LENNOXIND.COM) OR ACCOUNT MANAGER: RAZI DOLE AT 1-614-886-0719 (RAZI.DOLE@LENNOXIND.COM) WITH PRODUCT RELATED QUESTIONS AND TO OBTAIN PRICING INFORMATION ON ANY APPLICABLE EQUIPMENT.

THE MECHANICAL CONTRACTOR (OR GENERAL CONTRACTOR) SHALL PURCHASE THE EQUIPMENT FROM LENNOX NATIONAL ACCOUNTS. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR COORDINATING AND ACCEPTING THE MATERIAL, VERIFYING PROPER QUANTITIES AND MODEL

CODED NOTES:

1. PROVIDE ONE (1) VENTILATION SYSTEM CONTROL PANEL (TOXALERT TOX CONTROL CONTROLLER OR EQUIVALENT) AND CO/NO2 SENSORS AS REQUIRED (TOXALERT MODEL TOX-CO/ANA FOR CO DETECTION AND TOXALERT MODEL TOX-NO2/ANA FOR NO2 DETECTION). EACH SENSOR SHALL BE WIRED DIRECTLY TO CONTROL PANEL PER MANUFACTURER. CONTROL PANEL SHALL ACTIVATE EF-4 AND EF-5 AND INCREASE MAU-1 OUTDOOR AIRFLOW TO MAXIMUM (LOW LEVEL WARNING STAGE) AND ROLL UP SHOP BAY DOORS (HIGH LEVEL ALARM STAGE) UPON ACTIVATION OF ANY OF THE SENSORS. COORDINATE WITH EC FOR PROVISION OF A 120/1/60 CIRCUIT AS REQUIRED FOR POWER. COORDINATE SENSOR DC POWER AND COMMUNICATION REQUIREMENTS WITH MANUFACTURER PRIOR TO PURCHASE AND INSTALLATION. ALL SENSOR COMMUNICATION AND POWER WIRING TO BE IN CONDUIT PER THE ELECTRICAL DRAWINGS. SYSTEM CONTROL PANEL SHALL INCLUDE: TWO (2) FIELD ADJUSTABLE ALARM LEVELS, WARNING/ALARM SENSOR MALFUNCTION INDICATOR, DIGITAL DISPLAY OF GAS CONCENTRATIONS AND BACNET/ANALOG OUTPUT FOR CONNECTION TO MAKEUP AIR UNIT AND EXHAUST FANS.



Must comply with all national and state adopted codes

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SON H. NGO, NEW MEXICO, 28755, PROFESSIONAL ENGINEER
11-13-23

REVIEWED - GENERAL BUILDING
Chris Archuleta
01/23/2024 10:34:12 AM
A-155698

8-09-23

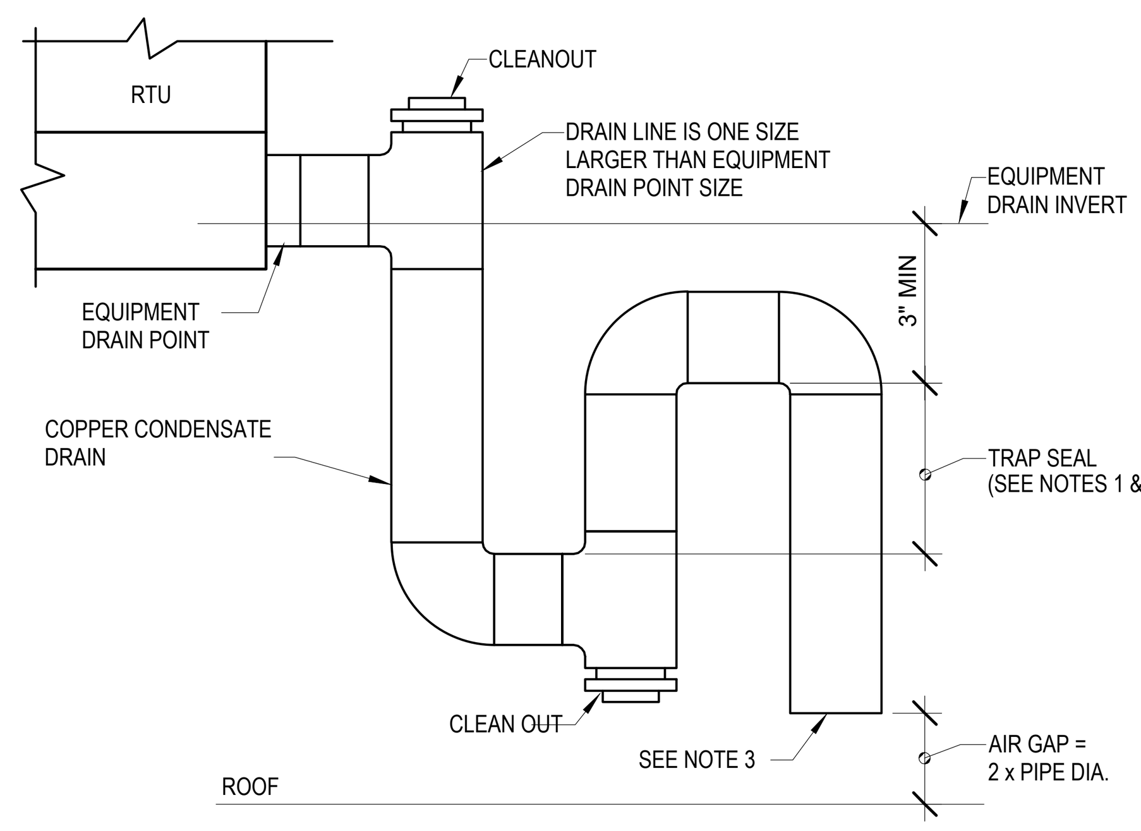
TA TRAVEL CENTER
PARCEL A, B, AND C WITHIN LOT 3 IN SECTION 19, T11N, R31E, N.M.P.M.
TUCUMCARI, NM
NEW DEVELOPMENT

DATE: Nov. 2023

REVISIONS

HVAC PLANS

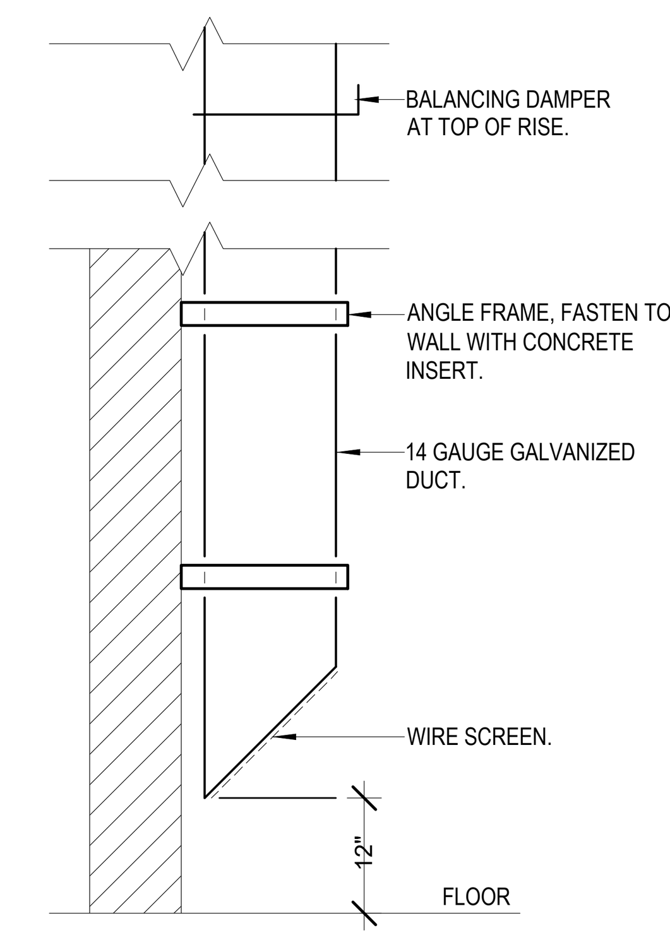
M-T 101



NOTES:
1. FOR DRAINS ON SUCTION SIDE OF FAN USE 3" MIN. TRAP SEAL OR MAX. FAN SUCTION PRESSURE PLUS 1" WHICHEVER IS GREATER.
2. FOR DRAINS ON DISCHARGE SIDE OF FAN USE 6" MIN. TRAP SEAL OR MAX. FAN DISCHARGE PRESSURE PLUS 1" WHICHEVER IS GREATER.
3. DISCHARGE ONTO SPLASH BLOCK ON ROOF.

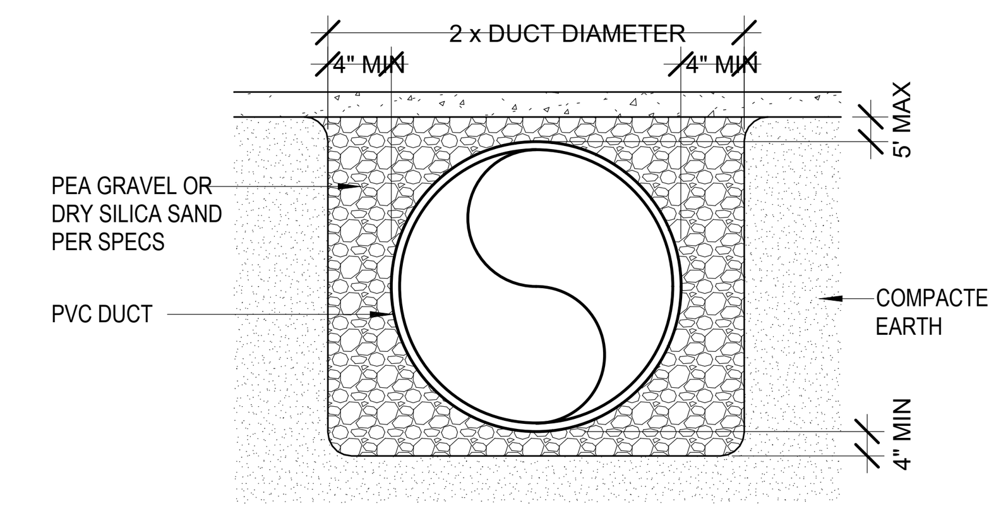
CONDENSATE DRAIN ROOF/FLOOR DETAIL

12" = 1'-0"



SERVICE BAY EXHAUST DUCT DROP DETAIL

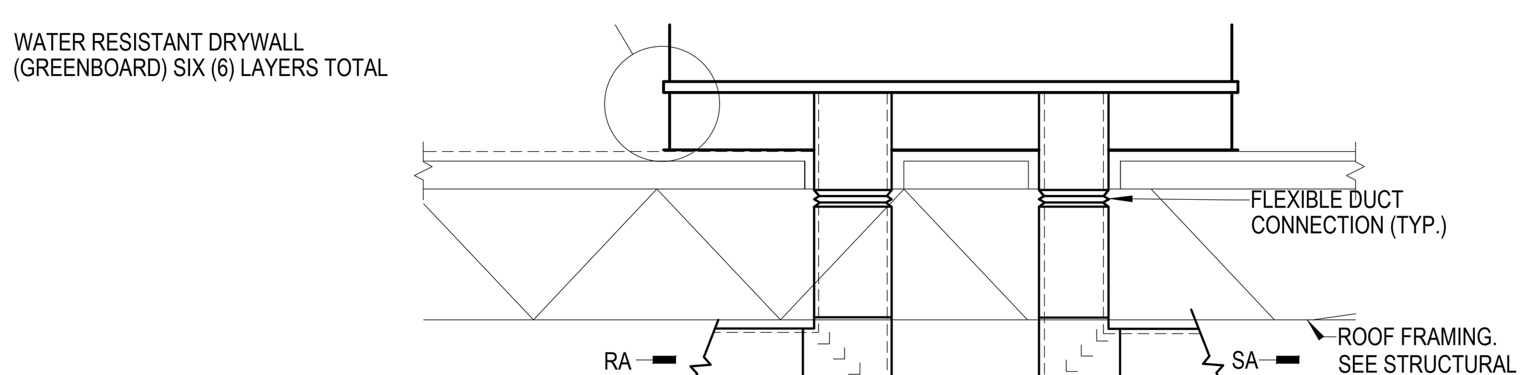
NO SCALE



NOTES:
1. FOLLOW MANUFACTURER INSTRUCTIONS FOR INSTALLATION OF SCHEDULE 80 PVC BELOW SLAB.
2. PRESSURE TEST DUCTWORK FOR 0% LEAKAGE PRIOR TO BACKFILL.
3. SCHEDULE 80 PVC SHALL BE SHIPPED IN THE LONGEST SECTIONS POSSIBLE TO MINIMIZED FIELD JOINTS.
4. COORDINATE BACKFILL MATERIAL WITH GENERAL CONTRACTOR PRIOR TO INSTALLATION.

SCHEDULE 80 PVC DUCTWORK INSTALLATION DETAIL

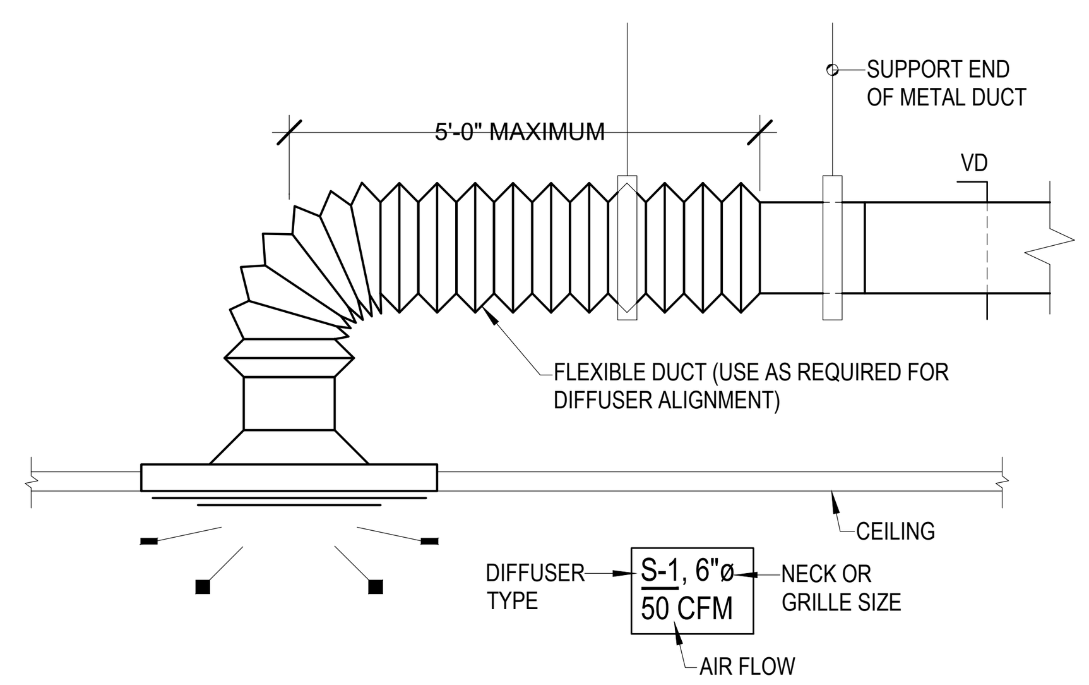
NO SCALE



NOTES:
1. FOR UNITS NOT SUPPLIED WITH SMOKE DETECTORS INSTALL SMOKE DETECTORS, PROVIDED BY THE ELECTRICAL CONTRACTOR, IN DUCTWORK WHERE INDICATED ON PLANS.
2. PROVIDE 1" ACOUSTICAL DUCT LINING IN SUPPLY AND RETURN DUCTS FROM UNIT CONNECTION TO POINTS INDICATED ON PLANS.
3. TRANSITION SUPPLY AND RETURN UNIT CONNECTIONS TO SIZES INDICATED ON PLANS.

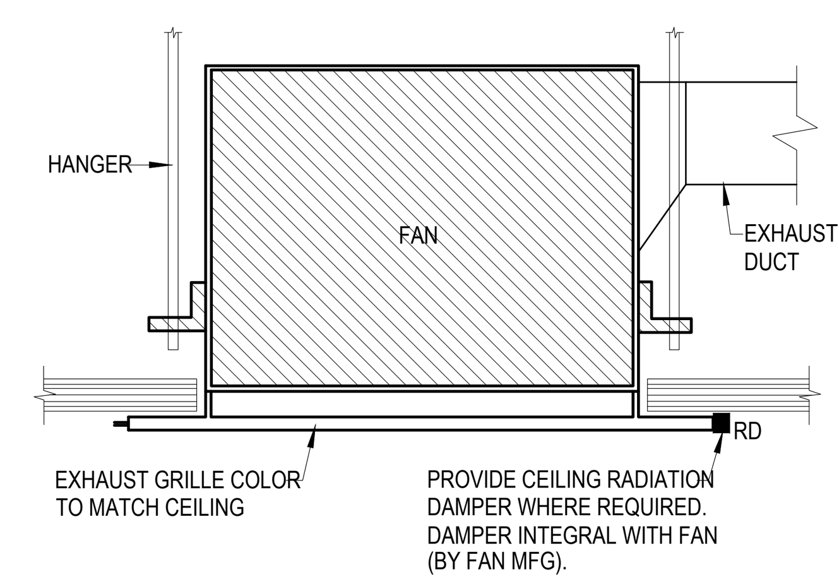
ROOFTOP UNIT INSTALLATION DETAIL

12" = 1'-0"



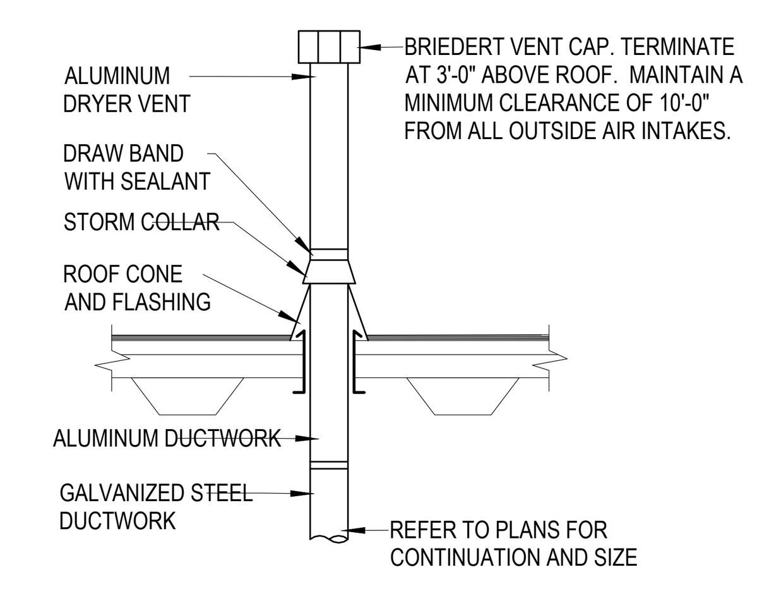
CEILING DIFFUSER WITH FLEX CONNECTION DETAIL

NO SCALE



CEILING/SUSPENDED FAN DETAIL

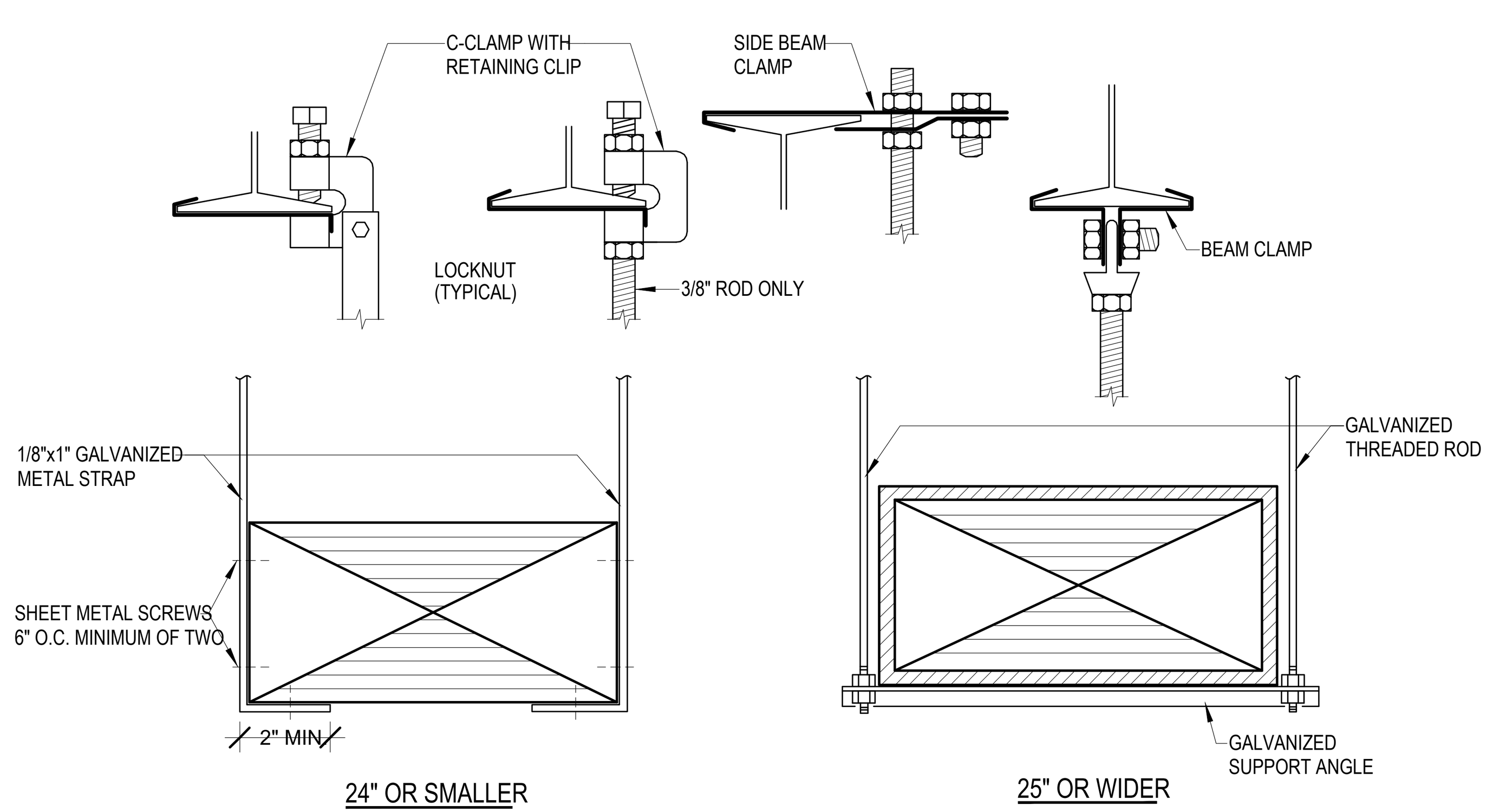
NO SCALE



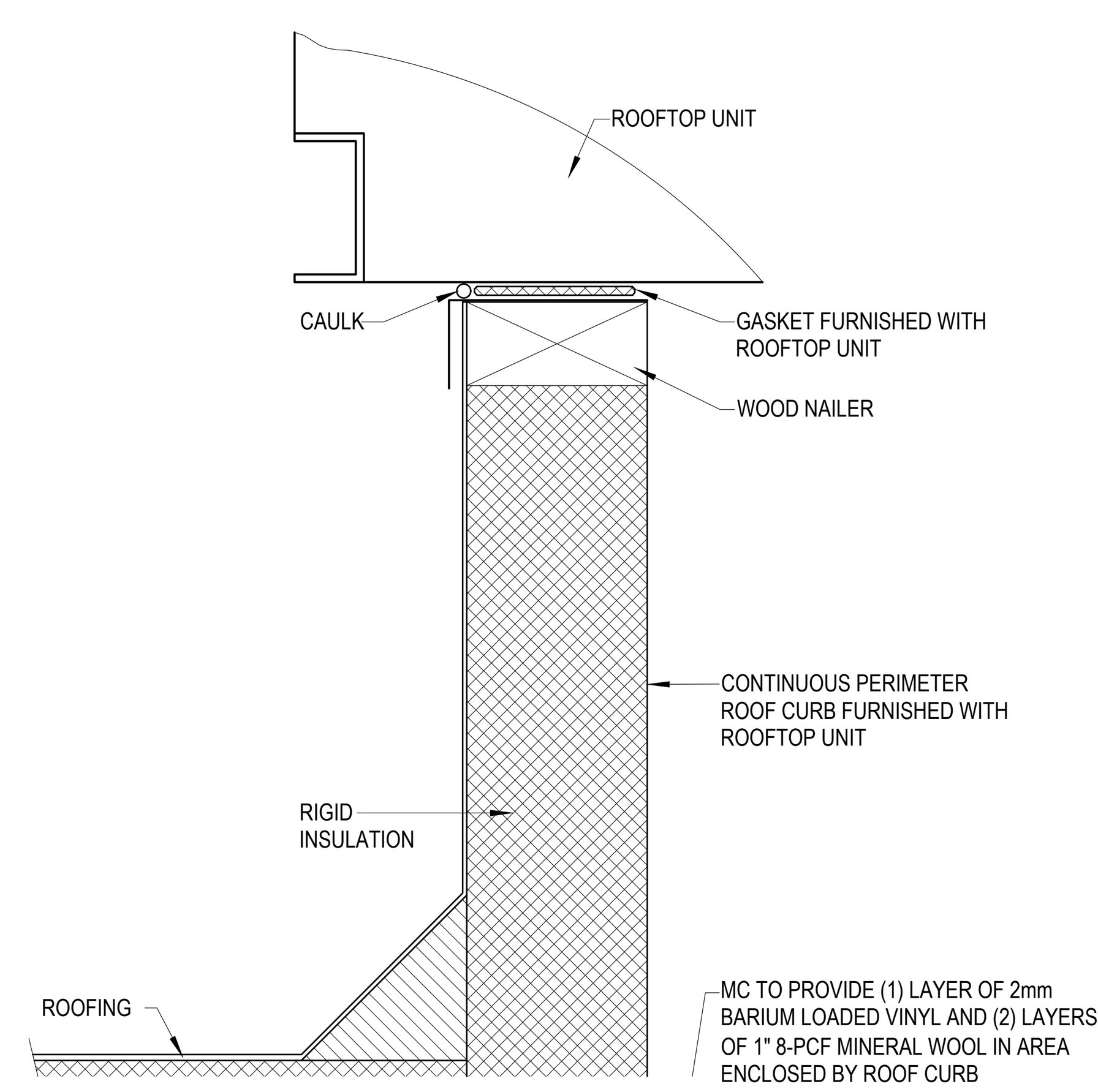
NOTE:
ROUTE VENT TO AVOID ROOF JOISTS

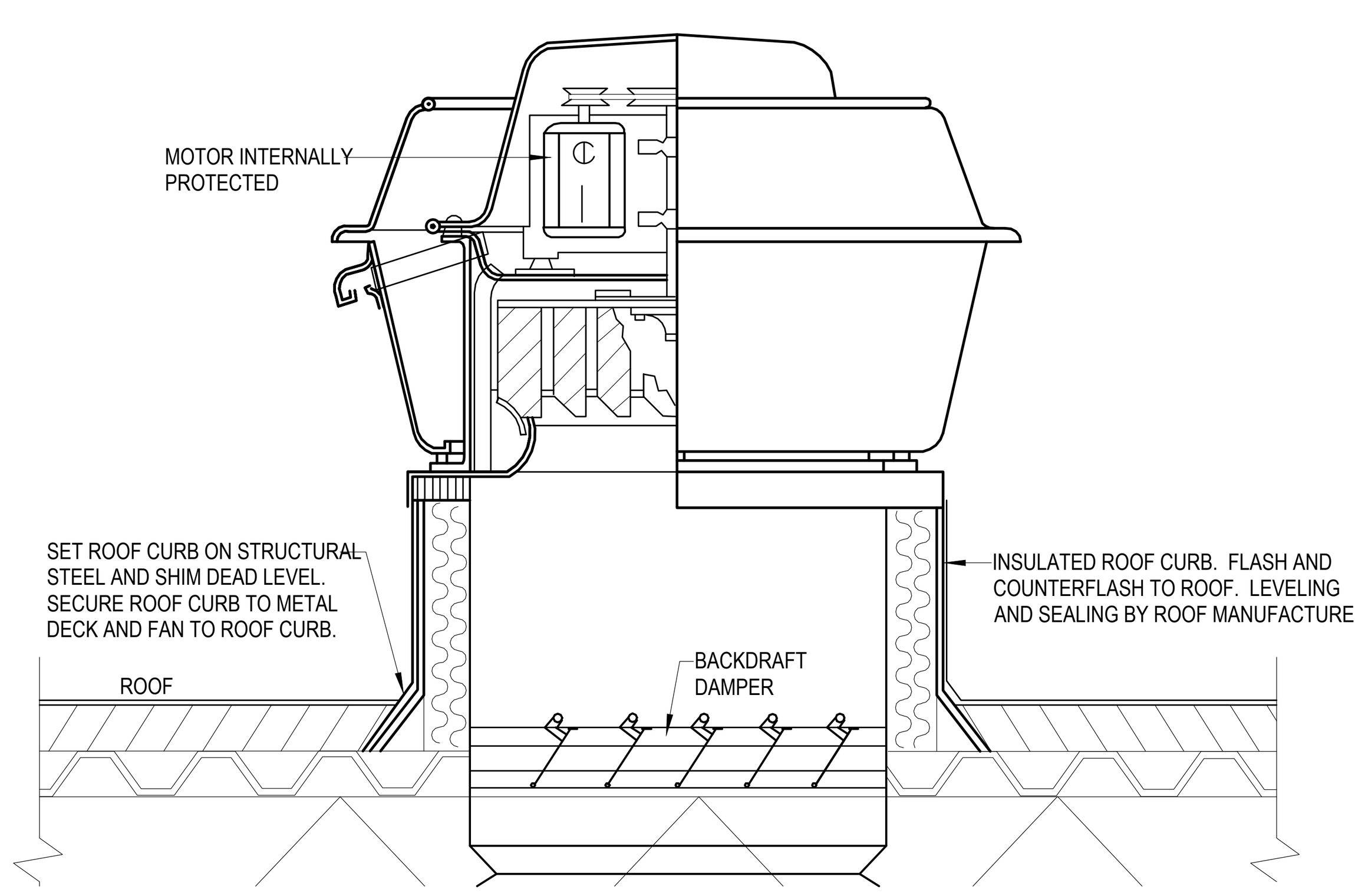
EXHAUST VENT THROUGH ROOF DETAIL

NO SCALE



DUCT	ROD	SUPPORT ANGLE OR	MAXIMUM	MAXIMUM





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HVAC DETAILS

M-T 301

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ROOFTOP UNIT SCHEDULE (GAS HEAT)

REMARKS:

1. NON-FUSED DISCONNECT SWITCH
2. ECONOMIZER WITH BAROMETRIC RELIEF
3. MEDIUM STATIC, BELT DRIVE
4. HIGH STATIC, BELT DRIVE
5. VERTICAL SUPPLY AND RETURN
6. 14" HIGH ROOF CURB
7. ACOUSTICALLY LINE FIRST 10'-0" OF BOTH SUPPLY AND RETURN AIR DUCTS
8. TWO SETS OF FILTERS
9. THERMOSTAT PROVIDED WITH LOCKING COVER AND ACCESS CODE
10. OUTDOOR AIR FILTER
11. INLET HOOD
12. TWO STAGE COOLING
13. LOW AMBIENT CONTROLS
14. HAILGUARD

MARK	NOMINAL TONS	CFM	MIN. OUTSIDE AIR CFM	EXTERNAL STATIC PRESSURE ("WC)	SUPPLY FAN HP	ELECTRICAL				COOLING CAPACITY		HEATING CAPACITY		MANUFACTURER	MODEL	EER	SEER	WEIGHT (LBS)	REMARKS
						VOLT.	PH.	MCA	MOCP	TOTAL (MBH)	SENSIBLE (MBH)	INPUT (MBH)	OUTPUT (MBH)						
RTU1	5	2000	700	0.5	1.0	208	1	15.50	25	63.3	47.5	108	86	LENNOX	LGH060H4E	12.7	17.1	900	1-13

MAKEUP AIR UNIT SCHEDULE (RECIRCULATING W/GAS HEAT)

REMARKS:

1. PROVIDE WITH DISCONNECT SWITCH, INSULATED ROOF CURB, OUTDOOR AIR AND RETURN AIR DAMPERS, SUPPLY FAN VFD, MICROPROCESSOR UNIT CONTROLS AND SPACE MOUNTED 7-DAY PROGRAMMABLE THERMOSTAT. UNIT TO RUN CONTINUOUSLY WHEN BUILDING IS OCCUPIED AND SHALL CYCLE HEATING AS REQUIRED TO MAINTAIN SPACE TEMPERATURE SETPOINT. DURING NORMAL OPERATING CONDITIONS THE UNIT SHALL DELIVER THE MINIMUM AMOUNT OF OUTSIDE AIR TO THE SPACE. WHEN THE TRUCK BAY GAS DETECTION SYSTEM ENTERS THE LOW LEVEL WARNING STAGE, THE OUTSIDE AIR VOLUME SHALL BE INCREASED TO MAXIMUM UNTIL THE GAS DETECTION SYSTEM IS NO LONGER IN ALARM. MAU MUST BE INTEGRATED WITH THE GAS DETECTION SYSTEM CONTROL PANEL.

MARK	SUPPLY AIR (CFM)	OUTDOOR AIR (CFM MIN/MAX)	RETURN AIR (CFM MIN/MAX)	EXTERNAL STATIC PRESSURE ("WC)	SUPPLY FAN HP	ELECTRICAL				INPUT (MBH)	OUPUT (MBH)	EFFICIENCY (%)	MANUFACTURER	MODEL	WEIGHT (LBS)	REMARKS
						VOLT.	PH.	MCA	MOCP							
MAU 1	15,000	3,000/11,000	4,000/12,000	0.5	15	208	3	59.70	100	1127	1037	92	GREENHECK	GDX-P127-H32-MF3	2000	1

GAS UNIT HEATER SCHEDULE

REMARKS:

1. DISCONNECT SWITCH
3. MOUNTING KIT
4. COMBUSTION CONCENTRIC VENT KIT PER MANUFACTURER REQUIREMENTS
4. REMOTE THERMOSTAT, MAINTAIN 55 DEGREE SETPOINT
5. ACCEPTABLE MANUFACTURERS: LENNOX, TRANE, MODINE

MARK	QTY.	SERVICE	CFM	INPUT (MBH)	OUTPUT (MBH)	EFFICIENCY (%)	ELECTRICAL		MANUFACTURER	MODEL	WEIGHT (LBS)	REMARKS
							VOLT.	PH.				
GUH1	1	SHOP STORAGE	370	30	24.9	83	120	1	TRANE	GTNE 003	200	1-4
GUH2	1	SHOP STORAGE	370	30	24.9	83	120	1	TRANE	GTNE 003	200	1-4
GUH3	1	MECHANICAL	370	30	24.9	83	120	1	TRANE	GTNE 003	200	1-4
GUH4	1	TIRE STORAGE	370	30	24.9	83	120	1	TRANE	GTNE 003	200	1-4
GUH5	1	TIRE STORAGE	370	30	24.9	83	120	1	TRANE	GTNE 003	200	1-4

DUCTLESS SPLIT SYSTEM SCHEDULE

REMARKS:

1. LOW AMBIENT WIND BAFFLE KIT AND WALL MOUNTED THERMOSTAT
2. R-410A REFRIGERANT
3. INDOOR UNIT POWERED FROM OUTDOOR UNIT BY EC
4. 5-YEAR COMPRESSOR WARRANTY
5. MOUNT OUTDOOR CONDENSING UNIT ON MIN. 18" STAND PER MANUFACTURER INSTRUCTIONS (DIVERSITECH OR EQUAL).

MARK	NOMINAL TONS	RATED COOLING CAPACITY (MBH)	RATED HEATING CAPACITY (MBH)	CFM RANGE	ELECTRICAL VOLT.	PH.	SEER	MANUFACTURER	MODEL	REMARKS
AC1	1	12	NA	300-400	208	1	15.2	MITSUBISHI	PKA-A12HAP	2,3,4
CU1	1	12	NA	1000	208	1	-	MITSUBISHI	PUY-A12NHA	1,2,4,5

ELECTRIC UNIT HEATER SCHEDULE

REMARKS:

1. PROVIDE WITH DISCONNECT SWITCH AND INTEGRAL THERMOSTAT.
2. PROVIDE WITH DISCONNECT SWITCH, INTEGRAL THERMOSTAT AND T-BAR MOUNTING FRAME....

MARK	QTY.	SERVICE	CFM	MBH	ELECTRICAL					MANUFACTURER	MODEL	WEIGHT (LBS)	REMARKS
					KW	VOLT.	PH.	MCA	MOCP				
EUH1	1	SPRINKLER	350	-	3.0	208	1	14.50	25	QMARK	MUH-0381	27	1
EUH2	1	RESTROOM	150	10.3	3.0	208	1	14.40	25	QMARK	EFF-4004	30	2

FAN SCHEDULE

REMARKS:

1. DISCONNECT SWITCH
2. BACKDRAFT DAMPER
3. CONTROLLED VIA REVERSE ACTING THERMOSTAT SET TO 80°F
4. WALL SWITCH
5. SPEED CONTROL
6. TO RUN CONTINUOUSLY WHEN BUILDING IS OCCUPIED.
7. VENT CAP
8. INTEGRAL MOTORIZED LOUVER
9. CONTROLLED VIA SHOP BAY GAS DETECTION SYSTEM AND ADDITIONAL WALL TIMER SWITCH FOR MANUAL ACTIVATION (ADJUSTABLE).
10. EXTENDED LUBE LINES, NEOPRENE VIBRATION ISOLATORS, MOTOR COVERS
11. MOTORIZED DAMPER ON OA INTAKE LOUVER IN SPACE TO OPEN WHEN FAN IS IN OPERATION
12. TERMINATE BELOW ROOF WITH WIRE MESH GRILLE

MARK	QTY.	SERVICE	CFM	STATIC PRESSURE ("WC)	RPM	dBA	ELECTRICAL			MANUFACTURER	MODEL	WEIGHT (LBS)	REMARKS
							HP or WATTS	VOLT.	PH.				
EF1	1	MECHANICAL	500	0.25	1342	50	1/10 HP	115	1	GREENHECK	G-090-VG	30	1,2,3,5,12
EF2	1	MECH / ELEC	5600	0.25	1725	68	1/2 HP	115	1	GREENHECK	SBE-1H30-5	130	1,2,3,8,11
EF3	1	TIRE STORAGE	3000	0.25	865	67	1/3 HP	115	1	GREENHECK	SBE-1H24-3	90	1,2,3,4,5,8,11
EF4	1	SHOP BAY	7500	0.25	635	67	1.5 HP	208	3	GREENHECK	GB-260-15	300	1,2,9,10
EF5	1	SHOP BAY	7500	0.25	635	67	1.5 HP	208	3	GREENHECK	GB-260-15	300	1,2,9,10
EF6	1	SHOP STORAGE	3000	0.25	865	67	1/3 HP	115	1	GREENHECK	SBE-1H24-3	90	1,2,3,4,5,8,11
EF7	1	SHOP BAY PITS	450	0.5	1536	54	1/10 HP	115	1	GREENHECK	G-090-VG	30	1,2,5,6
EF8	1	EMPL RR	150	0.25	1400	37	55 W	115	1	GREENHECK	SP-A190	17	1,2,6,7
EF9	1	RR	150	0.25	1400	37	55 W	115	1	GREENHECK	SP-A190	17	1,2,6,7

GRILLE AND DIFFUSER SCHEDULE

REMARKS:

MARK	QTY.	MANUFACTURER	MODEL	DAMPER	FRAME / BORDER	MODULE SIZE	PATTERN	FINISH	REMARKS
SUPPLY									
S-1	9	PRICE	SCD	MVD IN DUCT	LAY-IN	24x24	4-WAY THROW	WHITE	-
S-2	2	PRICE	22	MVD IN DUCT	DUCT MTD	SEE PLANS	DOUBLE DEFLECTION	WHITE	-
RETURN									
R-1	5	PRICE	85	NA	LAY-IN	SEE PLANS	45° DEFLECTION	WHITE	-
EXHAUST									
E-1	3	PRICE	98	ALUM OBD AT GRILLE	SURFACE	SEE PLANS	45° DEFLECTION	WHITE	-
E-2	8	PRICE	60	ALUM OBD AT GRILLE	DUCT MTD	SEE PLANS	45° DEFLECTION	WHITE	-

LOUVER SCHEDULE

REMARKS:

1. INSTALL PER MANUFACTURER RECOMMENDATIONS.
2. PROVIDE COLOR ANODIZED FINISH, COLOR TO BE SELECTED BY ARCHITECT.
3. REFER TO ARCHITECTURAL ELEVATIONS FOR EXACT LOCATIONS.
4. TRANSITION TO FULL SIZE LOUVER.
5. PROVIDE INSULATED PLENUM BOX, SLOPE BOTTOM OF PLENUM TO LOUVER SILL.

MARK	SERVICE	CFM	STATIC PRESSURE ("WC)	VELOCITY (FPM)	MIN. FREE AREA (FT^2)	SIZE (W"xH"xD")	MANUFACTURER	MODEL	REMARKS
L1	MECHANICAL (OA)	500	0.2	1,000	0.5	24x12x4	GREENHECK	EHH-401	1-5
L2	MECH / ELEC (OA)	5600	0.2	1,000	5.5	42x42x4	GREENHECK	EHH-401	1-5
L3	TIRE STORAGE (OA)	3000	0.15	850	3.5	36x36x4	GREENHECK	EHH-401	1-5
L4	SHOP STORAGE (OA)	3000	0.15	508	3.5	36x36x4	GREENHECK	EHH-401	1-5

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REVISIONS

HVAC SCHEDULES

M-T 601

PLUMBING SPECIFICATIONS

1. GENERAL PROVISIONS
   A. THE PROVISIONS OF THE INSTRUCTIONS TO BIDDERS, GENERAL CONDITIONS, SUPPLEMENTARY CONDITIONS, ALTERNATES, ADDENDA'S', AND DIVISION 1 ARE A PART OF THIS SPECIFICATION. CONTRACTORS AND SUBCONTRACTORS SHALL EXAMINE SAME AS WELL AS OTHER DIVISIONS OF THE SPECIFICATIONS WHICH AFFECT WORK UNDER THIS DIVISION.
   B. THIS CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT, SUPPLIES, SERVICES, AND SHALL PERFORM ALL WORK COMPLETE AND IN STRICT ACCORDANCE WITH THIS SPECIFICATION AND APPLICABLE DRAWINGS. ANY DEVIATIONS SHALL BE CLEARLY DEFINED AND ITEMIZED IN ACCORDANCE WITH SECTION 10.F OF THIS SPECIFICATION.
   C. THIS CONTRACTOR IS INSTRUCTED TO READ CAREFULLY THE SPECIFICATIONS FOR ALL PARTS OF THE WORK, WHICH INCLUDE THE ARCHITECTURAL, ELECTRICAL, MECHANICAL, PLUMBING, FIRE PROTECTION, CIVIL, STRUCTURAL AND ALL OTHER DRAWINGS AS WELL AS THE SPECIFICATIONS FOR ALL THE DIVISIONS THAT ARE PART OF THE CONTRACT DOCUMENTS.
   D. ALL ITEMS OF LABOR, MATERIAL AND EQUIPMENT NOT SPECIFICALLY MENTIONED HEREIN OR SHOWN ON PLANS, BUT INCIDENTAL TO, OR REQUIRED FOR THE COMPLETE INSTALLATION AND PROPER OPERATION OF THE WORK, SHALL BE FURNISHED AS IF CALLED FOR IN DETAIL BY THE SPECIFICATIONS OR DRAWINGS.
   E. AS USED IN THIS SPECIFICATION, "PROVIDE" MEANS "FURNISH AND INSTALL". "FURNISH" MEANS "TO PURCHASE AND DELIVER TO THE PROJECT SITE COMPLETE WITH EVERY NECESSARY APPURTENANCE AND SUPPORT," AND "INSTALL" MEANS "TO UNLOAD AT THE DELIVERY POINT AT THE SITE AND PERFORM EVERY OPERATION NECESSARY FOR PROPER INSTALLATION PER CODES AND MANUFACTURERS REQUIREMENTS, TO ESTABLISH SECURE MOUNTING AND CORRECT OPERATION AT THE PROPER LOCATION IN THE PROJECT.
2. PERMITS, CODES, INSPECTIONS, AND TESTS
   A. THE PLUMBING CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND INSPECTIONS REQUIRED FOR THE PROSECUTION OF PLUMBING WORK. ALL PERMITS AND CERTIFICATES OF INSPECTION AND APPROVAL SIGNED BY THE CONTROLLING BUILDING DEPARTMENT SHALL BECOME PROPERTY OF THE OWNER.
   B. DRAWINGS INDICATE THE MINIMUM DESIGN REQUIREMENTS. NATIONAL, STATE, AND LOCAL CODES SHALL BE FOLLOWED. COMPLY WITH THE LATEST EDITIONS OF THE LOCAL GOVERNING PLUMBING CODE, LOCAL GOVERNING MECHANICAL CODE, AND NFPA STANDARDS. THE CONTRACTOR SHALL INCLUDE THE COST OF SATISFYING SUCH CODES AND STANDARDS IN HIS BID.FOLLOWING COMPLETION OF THE PLUMBING WORK, FURNISH TO THE OWNER, IN DUPLICATE, CERTIFICATES OF INSPECTION AND APPROVAL BY REGULATORY AGENCIES HAVING JURISDICTION.
      1. DEMONSTRATE TO THE OWNER'S SATISFACTION THE PROPER OPERATION OF EACH OF THE SYSTEMS COMPRISING THIS CONTRACT BEFORE FINAL PAYMENT.
      2. IMMEDIATELY CORRECT ANY WORK FOUND AT VARIANCE WITH THESE SPECIFICATIONS, THE NATIONAL, STATE, AND LOCAL CODES, AND REQUIREMENTS OF GOVERNING REGULATORY AGENCIES.
      3. TEST PIPING FOR LEAKS; REPAIR LEAKS IN COPPER TUBING BY SWEATING OUT JOINTS, THOROUGHLY CLEANING BOTH TUBE AND FITTING, AND RE-SOLDERING OR RE-BRAZING; CORRECT LEAKS IN SCREWED JOINTS BY REPLACING THREAD OR FITTING OR BOTH.
         a. DOMESTIC WATER SHALL BE TESTED WITH WATER AT A PRESSURE OF 125 PSI FOR 6 HOURS.
         b. NATURAL GAS SHALL BE TESTED WITH COMPRESSED AIR AT A PRESSURE OF 1-1/2 TIMES THE PROPOSED MAXIMUM WORKING PRESSURE (BUT NOT LESS THAN 3 PSI) FOR 24 HOURS. TESTING PROCEDURE SHALL CONFORM TO NFPA 54 "NATIONAL FUEL GAS CODE" AND ICC FUEL GAS CODE REQUIREMENTS.
         c. SANITARY DRAIN AND VENT AND STORM PIPING SHALL BE TESTED WITH WATER PER GOVERNING PLUMBING CODE AND THE LOCAL AUTHORITY.
3. VISIT TO THE SITE
   A. THE CONTRACTOR SHALL VISIT THE SITE OF THE WORK AND BECOME FAMILIAR WITH ALL CONDITIONS AFFECTING THE WORK. THE SUBMISSION OF A PROPOSAL SHALL PRESUPPOSE KNOWLEDGE OF ALL SUCH CONDITIONS AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED WHERE EXTRA LABOR OR MATERIALS ARE REQUIRED BECAUSE OF IGNORANCE OF THESE CONDITIONS.
4. PROTECTION
   A. THE PLUMBING CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTION FROM DIRT AND WATER DURING CONSTRUCTION NECESSITATED BY PLUMBING WORK. PROTECTION METHODS ARE SUBJECT TO APPROVAL BY THE ARCHITECT.
5. EQUIPMENT AND MATERIALS
   A. ALL EQUIPMENT AND MATERIALS SHALL BE NEW AND SHALL CONFORM TO UNDERWRITERS' LABORATORIES STANDARDS, WHERE APPLICABLE. WHERE SPECIFICATIONS DESCRIBE, OR PLANS SHOW, MATERIALS OR EQUIPMENT OF HIGHER QUALITY THAN REQUIRED BY CODE AND LOCAL RULING, THE DRAWINGS AND SPECIFICATIONS SHALL GOVERN THE QUALITY OF THE MATERIAL OR EQUIPMENT.
   B. THE CONTRACTOR SHALL SUBMIT PROOF, IF REQUESTED BY THE OWNER THAT THE MATERIALS, APPLIANCES, EQUIPMENT OR DEVICES FURNISHED AND INSTALLED UNDER THIS CONTRACT, MEET THE REQUIREMENTS OF THE UNDERWRITERS' LABORATORIES, INC., AS REGARDS FIRE AND CASUALTY HAZARDS. THE LABEL OF OR LISTING BY THE UNDERWRITERS' LABORATORIES, INC. WILL BE ACCEPTED AS CONFORMING WITH THIS REQUIREMENT. IN LIEU OF THE LABEL OR LISTING, THE CONTRACTOR MAY SUBMIT INDEPENDENT PROOF SATISFACTORY TO THE ARCHITECT THAT THE MATERIALS, APPLIANCES OR DEVICES CONFORM TO THE PUBLISHED STANDARDS, INCLUDING METHODS OF TEST OF THE UNDERWRITERS' LABORATORIES, INC. UNDERWRITERS' LABORATORIES, INC. AND ITS PUBLICATIONS WILL BE REFERRED TO HEREINAFTER BY THE ABBREVIATION UL, WITH OR WITHOUT ADDITIONAL IDENTIFYING SYMBOLS.
6. GUARANTEE
   A. THE PLUMBING CONTRACTOR SHALL GUARANTEE FOR A PERIOD OF ONE YEAR THAT ALL WORK AND EQUIPMENT WILL REMAIN FREE FROM ALL DEFECTS IN WORKMANSHIP AND MATERIALS, AND THAT IT WILL COMPLY WITH ALL THE SPECIFIC REQUIREMENTS OF THE SPECIFICATIONS AND OTHER CONTRACT DOCUMENTS GOVERNING THE WORK.
   B. ALL WORK FOUND BY THE ENGINEER TO BE DEFECTIVE WILL BE REPLACED WITH NEW WORK MEETING ALL THE REQUIREMENTS OF THE CONTRACT. THE PLUMBING CONTRACTOR WILL BEAR ALL COSTS OF SUPPLYING SUCH NEW WORK, AND INSTALLING AND FINISHING SAME, AND WILL ASSUME ALL COSTS FOR REPLACING OTHER WORK DAMAGED BY THE REMOVAL AND REPLACEMENT OF ANY OF THE WORK. THE PLUMBING CONTRACTOR WILL BEAR ALL COSTS FOR FREIGHT, DRAYAGE AND DEMURRAGE, AND ALL LABOR IN CONNECTION THEREWITH.
7. CUTTING, PATCHING, FIRESTOPPING AND PAINTING
   A. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING ALL HOLES REQUIRED FOR INSTALLATION OF PLUMBING WORK. HOLES SHALL BE CUT IN A NEAT MANNER SATISFACTORY TO THE ARCHITECT.
   B. CONTRACTOR SHALL EMPLOY AN BUILDING OWNER APPROVED ROOFING CONTRACTOR FOR ALL ROOF PENETRATIONS. ROOF SHALL BE REPAIRED SO AS NOT TO VOID ROOF WARRANTY.
   C. UNLESS NOTED OTHERWISE, ALL HOLES OR DAMAGE CAUSED BY THE REMOVAL OF EXISTING WORK OR THE INSTALLATION OF NEW WORK SHALL BE PROPERLY PATCHED BY THIS CONTRACTOR. HOLES SHALL BE NEATLY PATCHED AND PAINTED WITH SUITABLE MATERIAL TO MATCH EXISTING SURFACES. HOLES THROUGH FLOORS OR FIRE WALLS SHALL BE SEALED WITH THE APPROPRIATE INTUMESCENT CAULK, PUTTY, STRIP OR SHEET TYPE FIRE BARRIER PRODUCT.
   D. FIRESTOP SYSTEM (REQUIRED FIRESTOPPING MATERIALS) SHALL BE DETERMINED BY THE WALL OR FLOOR/CEILING ASSEMBLY AND PENETRATION TYPE AND SHALL BE UL LISTED AND TESTED IN ACCORDANCE WITH ASTM E814. FIRE RATING OF THE FIRESTOP SYSTEM SHALL BE EQUIVALENT TO THE ASSEMBLY WHICH IS PENETRATED.
   E. ACCEPTABLE FIRE BARRIER PRODUCTS: HILTI "FS-ONE", NELSON "FLAMESEAL"OR APPROVED EQUAL AS MANUFACTURED BY 3M.
8. EXCAVATING, TRENCHING, AND BACKFILLING:
   A. FURNISH MATERIALS, TOOLS, LABOR AND SUPERVISION NECESSARY TO PROVIDE ALL EXCAVATING, TRENCHING AND BACKFILLING REQUIRED FOR THE PROPER INSTALLATION OF EQUIPMENT AND PIPING.
   B. EXACT ROUTING OF TRENCHING SHALL BE DETERMINED BY THE CONTRACTOR AND APPROVED, IN ADVANCE, BY THE OWNER.
   C. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE GOVERNING AUTHORITIES.
   D. WHERE TRENCHES ARE EXCAVATED SUCH THAT THE BOTTOM OF THE TRENCH FORMS THE BED FOR THE PIPE, SOLID AND CONTINUOUS LOAD-BEARING SUPPORT SHALL BE PROVIDED BETWEEN JOINTS. BELL HOLES, HUB HOLES AND COUPLED HOLES SHALL BE PROVIDED AT POINTS WHERE THE PIPE IS JOINED. SUCH PIPE SHALL NOT BE SUPPORTED ON BLOCKS TO GRADE.
9. CLEANING AND PAINTING
   A. CLEAN NEW PIPING AFTER WORK IS COMPLETE TO REMOVE PIPE DOPE, LOOSE MILL SCALE AND OTHER EXTRANEOUS MATERIALS.
   B. TOUCH UP AND REPAIR ANY DAMAGED FACTORY FINISHES ON EQUIPMENT AND MATERIALS FURNISHED. OTHER PAINTING WILL BE DONE UNDER THE PAINTING DIVISION OF THE SPECIFICATIONS.
10. COORDINATION AND CONDUCT OF WORK
   A. PLUMBING CONTRACTOR SHALL COORDINATE ALL NEW (GAS, DOMESTIC WATER, SANITARY) UTILITY CONNECTIONS AND METERING REQUIREMENTS WITH LOCAL UTILITY COMPANY.
   B. PLUMBING DRAWINGS ARE DIAGRAMMATIC, INDICATING GENERAL ARRANGEMENT, APPROXIMATE SIZES, GENERAL LOCATIONS OF EQUIPMENT, AND PIPING. VERIFY DIMENSIONS IN FIELD; ADJUST TO MANUFACTURER'S SHOP DRAWINGS. DO NOT SCALE DRAWINGS.
   C. ALL REQUESTS FOR INFORMATION SUPPLEMENTAL TO THE CONSTRUCTION DOCUMENTS SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT FOR DISTRIBUTION TO THE APPROPRIATE PARTY(S).
   D. DRAWINGS AND SPECIFICATIONS ARE TO BE CONSIDERED AS SUPPLEMENTING EACH OTHER. WORK SPECIFIED BUT NOT SHOWN, OR SHOWN BUT NOT SPECIFIED, SHALL BE PERFORMED OR FURNISHED AS THOUGH MENTIONED IN BOTH SPECIFICATIONS AND DRAWINGS.
   E. ARCHITECTURAL AND STRUCTURAL DRAWINGS SUPERSEDE PLUMBING DRAWINGS. DETERMINE THAT WORK OF THIS DIVISION CAN BE ACCOMMODATED WITHIN SPACES PROVIDED. NOTIFY ARCHITECT OF ANY INTERFERENCES BEFORE STARTING INSTALLATION.
   F. DETERMINE SIZES, LOCATIONS FOR CHASES AND OPENINGS NECESSARY FOR INSTALLATION OF PLUMBING WORK. COOPERATE WITH OTHER TRADES IN SETTING SLEEVES, INSERTS AND HANGERS.
   G. COORDINATE THIS WORK WITH ALL TRADES. ARRANGE OPERATIONS SO AS NOT TO DELAY INSTALLATION OR COMPLETION OF ANY PARTS OF INTERRELATED WORK SO THAT CONSTRUCTION MAY PROCEED ON SCHEDULE.
   H. COOPERATE WITH ALL TRADES IN PREPARING INTERFERENCE DRAWINGS FOR AREAS WHERE THERE IS POSSIBLE CONFLICT BETWEEN TRADES. EXACT LOCATION OF PIPES, AND EQUIPMENT SHALL BE BASED ON FIELD MEASUREMENTS WITH FINAL ARRANGEMENT DETERMINED BY INTRA-TRADE AGREEMENTS SUBJECT TO ARCHITECT'S APPROVAL.
   I. ARCHITECT RESERVES THE RIGHT TO MAKE REASONABLE CHANGES IN INDICATED LOCATIONS WITHOUT EXTRA COST TO THE OWNER.
   J. ALL WORK SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER BY FIRST-CLASS MECHANICS. THE CONTRACTOR SHALL PROVIDE ADEQUATE AND COMPETENT SUPERVISION OF THE JOB AS REQUIRED.
   K. PIPING AND EQUIPMENT SHALL BE ARRANGED SUBSTANTIALLY AS INDICATED. ANY CHANGE RESULTING IN A SAVINGS IN LABOR OR MATERIAL SHALL BE MADE ONLY IN ACCORDANCE WITH A CONTRACT CHANGE ORDER. DEVIATIONS SHALL BE MADE ONLY WHERE NECESSARY TO AVOID INTERFERENCES AND ONLY AFTER DRAWINGS SHOWING THE PROPOSED DEVIATIONS HAVE BEEN SUBMITTED TO AND APPROVED BY THE ARCHITECT.
   L. COORDINATE ALL SHUTDOWNS OF THE PLUMBING SYSTEM IN ADVANCE WITH THE OWNER.
11. SUBMITTALS
   A. PROVIDE A MINIMUM OF SIX (6) SUBMITTAL DRAWINGS FOR PLUMBING FIXTURES, EQUIPMENT, AND ALL OTHER SPECIFIED COMPONENTS FOR APPROVAL BY THE ARCHITECT AND ENGINEER.
   B. WHERE ONLY ONE MAKE OF EQUIPMENT IS NAMED, IT SHALL BE PROVIDED AS SPECIFIED.
   C. VERBAL REQUESTS OF APPROVALS FOR ANY SUBSTITUTION WILL NOT BE BINDING ON THE ARCHITECT AND OWNER.
   D. THIS CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR ALL COSTS FOR REDESIGN CHANGES NECESSARY BY ALL TRADES TO ACCOMMODATE THE USE OF EQUIPMENT NOT SPECIFIED ON PROJECT DOCUMENTS.
   E. BIDS SHALL BE BASED UPON THE SPECIFIED PRODUCTS OR LISTED ALTERNATIVES.DRAWINGS AND SPECIFICATIONS ARE BASED ON THE PRODUCTS SPECIFIED BY TYPE, MODEL, AND SIZE AND THUS ESTABLISH MINIMUM QUALITIES, WHICH SUBSTITUTES MUST MEET TO QUALIFY FOR REVIEW.
   F. SHOULD THE CONTRACTOR PROPOSE TO FURNISH MATERIALS, EQUIPMENT, AND DEVICES, OTHER THAN THOSE SPECIFIED AND LISTED, THE CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST FOR SUBSTITUTIONS, TO THE ENGINEER, AT LEAST FOURTEEN (14) CALENDAR DAYS PRIOR TO BID OPENING.THE REQUEST SHALL BE AN ALTERNATE TO THE ORIGINAL BID AND SHALL INCLUDE AND BE ACCOMPANIED WITH COMPLETE SPECIFICATIONS CUT SHEET SUBMITTAL AS OUTLINED IN SECTION 11.A OF THIS SPECIFICATION SECTION, COMPLETE WITH DESCRIPTIVE (MANUFACTURER, BRAND NAME, CATALOG NUMBER, ETC.) AND TECHNICAL DATA FOR ALL ITEMS.INDICATE ANY ADDITIONS OR DEDUCTIONS TO THE CONTRACT PRICE WITH THE SUBSTITUTION SUBMITTAL AND ON THE BID FORM. FAILURE TO PERFORM THESE ACTIONS EQUATES TO ACKNOWLEDGEMENT THAT THE PROJECT HAS BEEN BID WITH STRICT ACCORDANCE TO THIS SPECIFICATION AND APPLICABLE DRAWINGS.
   G. ACCEPTANCE OR REJECTION OF THE PROPOSED SUBSTITUTIONS SHALL BE SUBJECT TO APPROVAL OF THE ARCHITECT AND ENGINEER.IF REQUESTED, THE CONTRACTOR SHALL SUBMIT INSPECTION SAMPLES OF BOTH THE SPECIFIED AND THE PROPOSED SUBSTITUTE ITEMS.
   H. IF ANY SUBSTITUTIONS ARE APPROVED, AN ADDENDUM LISTING THE APPROVED ITEM(S) WILL BE ISSUED TO ALL BIDDING CONTRACTORS PRIOR TO THE BID DATE.
   I. IN ALL CASES WHERE SUBSTITUTIONS ARE PERMITTED, THE CONTRACTOR SHALL BEAR ANY EXTRA COST OF EVALUATING THE EQUALITY OF THE MATERIAL AND EQUIPMENT TO BE INSTALLED.
   J. WHERE ONLY ONE MAKE IS NAMED IN THE SPECIFICATIONS OR ON THE DRAWINGS, IT SHALL BE PROVIDED.
   K. VERBAL REQUESTS OR APPROVALS SHALL NOT BE BINDING ON THE ENGINEER OR OWNER.
12. EQUIPMENT AND PIPING IDENTIFICATION
   A. LABEL ALL PIPING SYSTEMS WITH PIPE MARKERS INSTALLED ADJACENT TO VALVES, WHERE PIPES PASS THROUGH WALLS OR FLOORS, NEAR ALL BRANCHES AND CHANGES OF DIRECTION, AT 20 FEET INTERVALS ON STRAIGHT RUNS OF PIPE, AND AT ACCESS DOOR LOCATIONS. ALL PIPE MARKERS SHALL CONFORM TO ANSI A13.1 "SCHEME FOR THE IDENTIFICATION OF PIPING SYSTEMS".
   B. THE CONTRACTOR SHALL FURNISH AND INSTALL A SYSTEM OF NAMEPLATES DESIGNED TO IDENTIFY EACH PIECE OF EQUIPMENT.
      1. NAMEPLATE LETTER AND NUMBERS SHALL MATCH EQUIPMENT DESIGNATION AS INDICATED ON THE DRAWINGS.
      2. NAMEPLATES SHALL BE LAMINATED PHENOLIC WITH BLACK SURFACE AND WHITE CORE. USE 1/16" THICK MATERIAL FOR PLATES UP TO 2" BY 4". FOR LARGER SIZES USE 1/8" THICK. LETTERS AND NUMBERS SHALL BE A MINIMUM OF 1/2" HIGH.
      3. FASTEN NAMEPLATES TO ALL EQUIPMENT BY THE USE OF STAINLESS STEEL SHEET METAL SCREWS.
13. AS-BUILT DRAWINGS
   A. AS WORK PROGRESSES, RECORD ON A SET OF "AS-BUILT" PRINTS ANY DEVIATIONS FROM DESIGN DRAWINGS. DELIVER TO THE OWNER BEFORE SUBMITTING REQUEST FOR FINAL PAYMENT. THE "AS-BUILT" PRINTS SHALL BE AN ACCURATE DEPICTION OF THE PROJECT AS COMPLETED.
14. OPERATING AND MAINTENANCE MANUALS
   A. PROVIDE TO OWNER, AT PROJECT TURNOVER, THREE (3) HARDBOUND COPIES OF OPERATING AND MAINTENANCE MANUALS FOR ALL EQUIPMENT AND SYSTEMS INSTALLED. MANUALS SHALL INCLUDE ALL RELEVANT INFORMATION NEEDED FOR DAY-TO-DAY OPERATION AND MANAGEMENT OF EACH SYSTEM, AS WELL AS EQUIPMENT MAINTENANCE INFORMATION REQUIRED TO SUPPORT THE MAINTENANCE PROGRAM.
15. OPERATING INSTRUCTIONS
   A. PROVIDE TO OWNER AFTER ALL EQUIPMENT IS IN OPERATION AND AT AN AGREEABLE TIME, INSTRUCTIONS FOR THE PURPOSE OF TRAINING OWNER'S PERSONNEL IN ALL PHASES OF OPERATION AND MAINTENANCE OF EQUIPMENT AND SYSTEMS. SCHEDULE TRAINING WITH OWNER, PROVIDE AT LEAST SEVEN DAYS PRIOR NOTICE. PROVIDE THIS TRAINING TO ALL PERSONNEL AND ON ALL SHIFTS.
16. INSULATION
   A. PROVIDE ALL INSULATION MATERIALS (INSULATION, JACKETS, FITTING COVERS, ADHESIVES, CEMENTS, MASTICS, SEALERS AND FINISHES) WITH A FLAME-SPREAD INDEX OF 25 OR LESS AND SMOKE DEVELOPED INDEX OF 50 OR LESS, AS TESTED UNDER PROCEDURE ASTM E-84 (NFPA 255).
   B. ALL INSULATION SHALL BE INSTALLED OVER CLEAN, DRY SURFACES. INSULATION MUST BE DRY AND IN GOOD CONDITION. WET OR DAMAGED INSULATION IS NOT ACCEPTABLE. NO INSULATION SHALL BE APPLIED PRIOR TO PRESSURE TEST COMPLETION OF THE RESPECTIVE PIPING SYSTEM.
   C. ALL INSULATION SHALL BE CONTINUOUS (INCLUDING VAPOR BARRIER) THROUGH WALL AND CEILING OPENINGS, SLEEVES, AND PIPE HANGER LOCATIONS.
   D. ALL INSULATION PRODUCTS SHALL BE APPLIED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS. THE WORKMANSHIP SHALL BE FIRST CLASS AND ALL JOINTS SHALL BE MADE TIGHT.
   E. INSULATE VALVE BONNETS AND UNIONS ON DOMESTIC WATER PIPING WITH INSULATION MATCHING PIPE INSULATION.
   F. INSULATE DOMESTIC COLD WATER PIPING AND FITTINGS WITH OWENS-CORNING ONE-PIECE FIBERGLASS PIPE INSULATION WITH ALL SERVICE JACKET, 1/2" THICKNESS FOR PIPING LESS THAN OR EQUAL TO 1.5", 1" THICKNESS FOR PIPES LARGER THAN 1.5". INSULATE DOMESTIC HOT WATER PIPING AND FITTINGS WITH THE SAME INSULATION, 1" THICKNESS FOR PIPING LESS THAN OR EQUAL TO 1.5", 2" THICKNESS FOR PIPING LARGER THAN 1.5". INSULATE DOMESTIC HOT WATER RETURN PIPING AND FITTINGS WITH MINIMUM 1" THICKNESS.
   G. INSULATE HORIZONTAL STORM PIPING AND ROOF DRAIN SUMPS WITH OWENS-CORNING ONE PIECE FIBERGLASS PIPE INSULATION WITH ALL SERVICE JACKET, 1/2" THICKNESS.
   H. INSULATE ELECTRIC WATER COOLER TRAP AND WASTE PIPING WITHIN CABINET WITH 1/2" THICK ARMAFLEX AP PIPING INSULATION.
   I. REPAIR EXISTING INSULATION WHERE REMOVED FOR NEW CONNECTION. INSULATION SHALL BE THE SAME AS SPECIFIED FOR NEW SERVICE.
   J. ALL INSULATION USED AS PLENUM WRAP COVERING FOR COMBUSTIBLE MATERIALS IN A PLENUM SPACE SHALL BE 3M PLENUM PROTECTION SYSTEM (PP-100-P), ONE LAYER OF 3M FIRE BARRIER DUCT WRAP 5A, IN ACCORDANCE WITH UL910 & UL1887.
17. MATERIALS
   A. PIPE AND FITTINGS
      1. DOMESTIC WATER SHALL BE TYPE "L" COPPER.
      2. DOMESTIC WATER BELOW FLOOR SHALL BE TYPE "K"SOFT COPPER.
      3. NATURAL GAS SHALL BE SCHEDULE 40 BLACK STEEL.
      4. SANITARY DRAIN AND VENT SHALL BE SCHEDULE 40 PVC PLASTIC PIPE (TYPE DWV) WHERE POSSIBLE.
      5. SANITARY DRAIN AND VENT PIPING LOCATED IN PLENUM RETURN OR RATED WALLS SHALL BE SERVICE WEIGHT NO HUB CAST IRON PIPE. ALL CAST IRON PIPE AND FITTINGS SHALL COMPLY WITH ASTM A 888 (OR A 74) AND BE MARKED WITH THE COLLECTIVE TRADEMARK OF THE CAST IRON SOIL PIPE INSTITUTE (CISPI) AND BE LISTED BY THE NSF INTERNATIONAL.
      6. FITTINGS FOR COPPER PIPE SHALL BE WROUGHT COPPER SOLDER JOINT TYPE. ONLY LEAD FREE SOLDER IS ACCEPTABLE.
      7. FITTINGS FOR BLACK STEEL PIPE 2" AND SMALLER SHALL BE 150 PSIG SWP MALLEABLE IRON SCREWED FITTINGS. FOR 2-1/2" AND LARGER, FITTINGS SHALL BE FACTORY FORMED WELDING FITTINGS.
      8. FITTINGS FOR STORM DRAIN, SANITARY DRAIN AND VENT PIPING SHALL BE SCHEDULE 40 PVC PLASTIC PIPE (TYPE DWV) WITH SOLVENT CEMENT PVC (DWV) FACTORY FORMED FITTINGS.
      9. FITTINGS FOR STORM DRAIN, SANITARY DRAIN AND VENT PIPING LOCATED IN PLENUM RETURN OR RATED WALLS SHALL BE SERVICE WEIGHT NO HUB CAST IRON PIPE WITH STAINLESS STEEL MECHANICAL JOINT COUPLINGS. COUPLINGS SHALL COMPLY WITH "CISPI 310". THE ELASTOMERIC SEALING SLEEVE SHALL CONFORM TO "ASTM C 564"AND SHALL BE PROVIDED WITH A CENTER STOP. MECHANICAL JOINT COUPLINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
   B. DOMESTIC WATER VALVES
      1. DOMESTIC WATER SHUT-OFF VALVES SHALL BE BRONZE BODY, TWO PIECE, FULL PORT, LEVER HANDLE BALL VALVES WITH TEFLON SEATS, CHROME PLATED BRASS BALL, BRASS STEM AND SOLDER ENDS. 600 PSI WOG. ACCEPTABLE MANUFACTURERS: MILWAUKEE, HAMMOND, APOLLO
      2. HORIZONTAL CHECK VALVES SHALL BE BRONZE BODY, SWING TYPE DESIGN, BRONZE DISC, STAINLESS STEEL LEVER WITH SOLDER ENDS. 200 PSI WOG. ACCEPTABLE MANUFACTURERS: MILWAUKEE, HAMMOND, APOLLO
      3. MANUAL BALANCING VALVES SHALL BE BRONZE BODY, COMBINATION VENTURI AND BALL VALVE WITH TWO PRESSURE/TEMPERATURE TEST PORTS, MEMORY STOP, INLET UNION CONNECTION AND THREADED ENDS, 400 PSI AT 250°F. ACCEPTABLE MANUFACTURERS: FLOW DESIGN INC. "FLOWSET".
   C. NATURAL GAS VALVES
      1. 2" AND SMALLER -WRENCH-OPERATED, RECTANGULAR PORT, CYLINDRICAL LUBRICATED PLUG VALVES WITH CAST IRON BODY, PLUG AND BASEPLATE, TFE GASKET, STAINLESS STEEL BASEPLATE SPRING, STEEL SEALANT SCREW AND THREADED ENDS. 200 PSI WOG. U.L. LISTED.
      2. 2-1/2" AND LARGER -WRENCH-OPERATED, RECTANGULAR PORT, CYLINDRICAL LUBRICATED PLUG VALVES WITH CAST IRON BODY, PLUG AND BASEPLATE, TFE GASKET, STAINLESS STEEL BASEPLATE SPRING, STEEL SEALANT SCREW AND FLANGED ENDS. 200 PSI WOG. U.L. LISTED.
      3. PROVIDE ALL VALVES WITH A REMOVABLE WRENCH TO MATCH OPERATOR SQUARE HEAD SIZE. WRENCHES SHALL BE LOCKED IN PLACE WITH A SET SCREW.
18. PIPING INSTALLATION
   A. PROVIDE MACHINE CUT STEEL PIPE SLEEVE 1" LARGER THAN OUTSIDE DIAMETER OF PIPE. WHERE FLOORS ARE CORE DRILLED, STEEL SLEEVES ARE NOT REQUIRED. SEAL OPENINGS TO MAINTAIN THE INTEGRITY OF THE FIRE RATING.
   B. PROVIDE ALL INSERTS, FASTENERS AND SUPPORTS TO PROPERLY SUPPORT AND RETAIN PIPING; TO CONTROL EXPANSION, CONTRACTION, ANCHORAGE, DRAINAGE, AND PREVENT SWAY AND VIBRATION. PIPING SHALL BE SO SUPPORTED AS NOT TO PLACE A STRAIN ON VALVES, FIXTURES OR EQUIPMENT.
   C. THE DRAWINGS INDICATE THE GENERAL LOCATION AND ARRANGEMENT OF THE PIPING SYSTEMS. SO FAR AS PRACTICAL, INSTALL PIPING AS INDICATED MAKING CONNECTIONS TO ALL EQUIPMENT AND FIXTURES. INSTALL PIPING AS DIRECT AS POSSIBLE AVOIDING UNNECESSARY OFFSETS. HOWEVER, IF OFFSETS ARE REQUIRED IN ORDER TO OBTAIN MAXIMUM HEADROOM OR TO AVOID CONFLICT WITH OTHER WORK, THEY SHALL BE MADE AS REQUIRED OR AS REQUESTED BY THE ARCHITECT WITHOUT ADDITIONAL COST TO THE OWNER. THE ARCHITECT RESERVES THE RIGHT TO MAKE MINOR CHANGES IN THE LOCATION OF PIPING AND EQUIPMENT DURING THE ROUGHING-IN, WITHOUT ADDITIONAL COST TO THE OWNER. ALL CHANGES PROPOSED BY OTHERS SHALL BE APPROVED BY THE ARCHITECT.
   D. INSTALL PIPING FREE OF SAGS OR BENDS
   E. ALL PIPING SYSTEMS MUST BE INSTALLED SO THEY CAN BE COMPLETELY DRAINED. PROVIDE TEE FITTING, BALL VALVE WITH HOSE THREAD FITTING AND CAP AT ALL LOW POINTS, TRAPPED SECTIONS, BASES OF RISERS, AND ON EQUIPMENT SIDE OF SHUT OFF VALVES TO PERMIT DRAINING. PROVIDE BALL VALVES AT ALL HIGH POINTS TO ALLOW VENTING. ALL DRAIN VALVES AND VENTS SHALL BE ACCESSIBLE
   F. TERMINATE PLUMBING VENT PIPES AT LEAST 12 INCHES ABOVE ROOF.
   G. BUILDING DRAINS SHALL BE PITCHED A MINIMUM SLOPE OF 1/4 INCH PER FOOT FOR PIPES UP TO 2-1/2 INCH AND 1/8 INCH PER FOOT FOR PIPES GREATER THAN 2-1/2 INCHES.
   H. PROVIDE WATER HAMMER ARRESTERS WHERE QUICK-CLOSING VALVES ARE UTILIZED, AND INSTALL IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
   I. PROVIDE CHECK VALVES WHERE BACKFLOW PROTECTION IS REQUIRED, AND INSTALL IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. PROVIDE AT FIXTURES SUCH AS, BUT NOT LIMITED TO; DISHWASHERS, COFFEE MAKERS, ICE MACHINES, BEVERAGE DISPENSERS, REFRIGERATORS. PROVIDE WATTS 007 OR EQUIVALENT.
   J. PROVIDE DIELECTRIC UNIONS AT COUPLING OF DISSIMILAR METALS
19. DISINFECTION
   A. CHLORINATE ALL DOMESTIC WATER SYSTEMS AS FOLLOWS. FIRST FLUSH SYSTEM WITH CLEAN POTABLE WATER UNTIL DIRTY WATER DOES NOT APPEAR AT OUTLETS. THEN FILL WITH A WATER/CHLORINE SOLUTION (50PPM CHLORINE) AND ALLOW TO STAND FOR 24 HOURS. FOLLOWING STANDING TIME, FLUSH THE SYSTEM WITH CLEAN POTABLE WATER UNTIL CHLORINE IS PURGED FROM THE SYSTEM. REPEAT CHLORINATION, IF NECESSARY, UNTIL NO BACTERIOLOGICAL CONTAMINATION IS PRESENT IN THE SYSTEM. PROCEDURE SHALL CONFORM TO AWWA C651 AND BE ACCEPTED BY THE LOCAL HEALTH DEPARTMENT.
20. PLUMBING FIXTURES AND EQUIPMENT
   A. GENERAL
      1. PROVIDE FIXTURES OF TYPE, STYLE AND MATERIAL AS SCHEDULED ON THE DRAWINGS. INCLUDE ALL TRIM, CARRIERS, SEATS, ETC. AS INDICATED OR RECOMMENDED BY MANUFACTURER AS REQUIRED FOR A COMPLETE INSTALLATION.
      2. PROVIDE VACUUM BREAKERS AS PART OF THE FIXTURE OR EQUIPMENT TRIM WHEREVER THERE IS A POSSIBILITY OF BACK SIPHONING.
      3. PROVIDE DOUBLE CHECK VALVES FOR PLUMBING FIXTURE OR SPECIAL EQUIPMENT WHERE BACKFLOW PROTECTION IS REQUIRED, AND INSTALL IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS, USE WATTS SERIES 7 BRONZE DUAL CHECK VALVE.
      4. PROVIDE FIXTURES CONSTRUCTED OF VITREOUS CHINA WITH ALL VISIBLE SURFACES GLAZED. FURNISH ENAMELED CAST IRON FIXTURES CONSTRUCTED WITH NON-STAINING, ACID RESISTANT, PORCELAIN ENAMELED COAT THOROUGHLY FUSED ON THE SURFACES. FURNISH STAINLESS STEEL SINKS WITH SATIN FINISH, UNLESS NOTED OTHERWISE.
      5. PROVIDE ALL STOPS, SUPPLIES, TRAPS AND ESCUTCHEONS NECESSARY FOR A COMPLETE INSTALLATION. ALL COMPONENTS SHALL BE CHROME PLATED BRASS.
      6. STOPS SHALL BE STRAIGHT OR ANGLE TYPE AS REQUIRED BY THE INSTALLATION, WITH LOOSE KEY, METAL STEM AND WASHER CUP WITH SET SCREW WASHER RETAINER.
      7. SUPPLIES SHALL BE FLEXIBLE CHROME PLATED COPPER.
      8. TRAPS SHALL BE 17 GAUGE CHROME PLATED BRASS WITH CLEAN-OUT PLUG. FURNISH WITH SLIP NUTS, WALL BEND AND ESCUTCHEON.
      9. PROVIDE CARRIERS AND SUPPORTS AS REQUIRED FOR PROPER FIXTURE INSTALLATION. TYPE SHALL PERMIT FIELD ADJUSTMENT TO FIT VARIATIONS IN CONSTRUCTION. UNLESS NOTED OTHERWISE, SUPPORT ALL WALL MOUNTED PLUMBING FIXTURES ON CONCEALED CHAIR CARRIERS WITH FOOT SUPPORT.
      10. PROVIDE FAUCET AERATORS AND OUTLETS OF TYPES APPROVED BY THE LOCAL HEALTH DEPARTMENT AND LOCAL PLUMBING CODE, REFER TO IPC TABLE 604.4.
      11. INSULATE ALL EXPOSED WATER SUPPLIES AND TRAPS WHERE FIXTURES ARE INDICATED TO COMPLY WITH THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT. INSULATION KITS SHALL BE 3/16" THICK MOLDED CLOSED CELL VINYL CONSTRUCTION WITH PVC SATIN WHITE COVER.

PLUMBING GENERAL NOTES:

1. CONTRACTOR SHALL VERIFY EXACT LOCATIONS OF ALL UTILITIES TO BE USED FOR POINTS OF CONNECTION PRIOR TO SUBMITTING BID AND START OF WORK, AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.
2. FIXTURE: EXACT LOCATIONS. MOUNTING HEIGHTS AND COLORS OF PLUMBING FIXTURES SHALL BE OBTAINED FROM THE ARCHITECTURAL AND KITCHEN EQUIPMENT DRAWINGS.
3. DISABLED ACCESS FIXTURES: SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS AND MOUNTING HEIGHTS, INSTALLATION SHALL COMPLY WITH A.D.A. REQUIREMENTS.
4. INTERFERENCE: ALL PLUMBING WORK SHALL BE INSTALLED SO AS TO AVOID STRUCTURAL FRAMING, MECHANICAL AND ELECTRICAL EQUIPMENT.
5. CLEANOUTS: ALL CLEANOUTS SHALL BE INSTALLED WHERE READILY ACCESSIBLE, WHERE INDICATED AND AS REQUIRED BY CODE. THE CONTRACTOR SHALL COORDINATE ALL CLEAN OUTS LOCATIONS WITH EQUIPMENT, CABINETS, ETC., AND THE ARCHITECT PRIOR TO ANY INSTALLATION.
6. VENT TERMINATION: ALL PLUMBING FIXTURE VENTS TO TERMINATE A MIN. OF 12 INCHES FROM ANY VERTICAL SURFACE AND 10 FEET FROM OR TERMINATED 3'-0" ABOVE ANY OUTSIDE AIR INTAKES.
7. FULL SIZE: ALL VALVES, UNIONS. ETC. TO BE SAME SIZE AS LINE SIZE UNLESS OTHERWISE INDICATED ON DRAWINGS.
8. LATERAL SUPPORT: ALL EQUIPMENT SHALL BE LATERALLY SUPPORTED IN ALL DIRECTIONS TO RESIST A MIN. OF 50% OF THE EQUIPMENT'S OPERATING WEIGHT.
9. CODE COMPLIANCE: ALL WORK AND MATERIAL SHALL BE PERFORMED AND INSTALLED IN COMPLIANCE WITH THE FOLLOWING CODES AS ADOPTED AND AMENDED BY THE INSPECTING AUTHORITY. NOTHING IN THESE DRAWINGS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES OR OTHERS APPLICABLE TO THIS PROJECT:
   A. GEORGIA BUILDING CODE.
   B. GEORGIA MECHANICAL CODE.
   C. GEORGIA PLUMBING CODE.
   D. NATIONAL ELECTRICAL CODE.
   E. NFPA
   F. SMACNA GUIDELINES
10. FIELD VERIFICATION: BEFORE FABRICATION OR INSTALLATION. THIS CONTRACTOR SHALL VERIFY EXACT LOCATIONS OF ALL MECHANICAL EQUIPMENT AND EQUIPMENT PROVIDED UNDER ANOTHER SECTION OF SPECIFICATIONS. EXACT ROUGH-IN LOCATIONS AND REQUIREMENTS SHALL BE COORDINATED IN FIELD.
11. ISOMETRICS: THE CONTRACTOR SHALL PROVIDE ALL RISER DIAGRAMS OR ISOMETRICS THAT MAYBE REQUIRED BY GOVERNING AUTHORITIES.
12. COORDINATION: THE PLUMBING CONTRACTOR SHALL COORDINATE ALL REQUIREMENTS FOR ALL POINTS OF CONNECTION WITH THE GENERAL CONTRACTOR AND OTHER TRADES PRIOR TO BID.
13. PIPE SLOPE: ALL WASTE AND VENT PIPING SHALL SLOPE AT 1% UNLESS OTHERWISE INDICATED.
14. ACCESSIBILITY: ALL VALVES, OR OTHER EQUIPMENT SHOWN IN WALLS OR ABOVE NON-ACCESSIBLE CEILINGS SHALL BE INSTALLED WITHIN 24" OF, AND BEHIND, AN ACCESS PANEL.
15. SPECIFICATION: THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH, AND BE CONSIDERED TO BE A PART OF THE SPECIFICATIONS.
16. PATCHING: THE CONTRACT SHALL BE RESPONSIBLE FOR PATCHING AND REPAIRING ALL AREAS WHICH ARE EXCAVATED AND/OR DAMAGED BY HIS OPERATIONS.
17. EXISTING PIPING DAMAGED: ALL EXISTING PIPING DAMAGED DURING EXCAVATION SHALL BE REPAIRED WITH MATERIALS TO MATCH EXISTING BY THE CONTRACTOR.
18. SAW CUTTING/CORE DRILLING: ALL CUTTING OF EXISTING PAVING, WALKS AND/OR FLOORS SHALL BE BY MACHINE SAW CUTTING. HOLES FOR PIPING IN CONCRETE WALLS OR FLOORS SHALL BE DONE USING CORE DRILLING EQUIPMENT.
19. INCOMPATIBLE MATERIAL CONNECTION: CONNECTION BETWEEN INCOMPATIBLE MATERIALS ABOVE GRADE AND INSIDE BUILDING SHALL BE MADE WITH 2 DIELECTRIC UNIONS SEPARATED BY A 12" SECTION OF RED BRASS PIPE.
20. SUBMITTALS AND SHOP DRAWINGS: THE PLUMBING CONTRACTOR SHALL SUBMIT SHOP DRAWING ON ALL WORK AND SUBMITTALS ON ALL FIXTURES, EQUIPMENT AND ACCESSORIES FOR REVIEW PRIOR TO ORDERING, FABRICATION AND INSTALLATION.

PLUMBING LEGEND

Symbol	Description
CW	DOMESTIC COLD WATER PIPING
HW	DOMESTIC HOT WATER PIPING
RHW	DOMESTIC RECIRCULATING HOT WATER PIPING
HW (140°)	DOMESTIC HOT WATER PIPING -140°F
D	DRAIN LINE PIPING
SAN	SANITARY SEWER PIPING
V	VENT PIPING
G	GAS PIPING
	PIPING ABOVE GRADE/FLOOR
	PIPING BELOW GRADE/FLOOR
	VALVE -BALANCE VALVE
	VALVE -CHECK VALVE
	VALVE -MODULATING VALVE
	VALVE -PRESSURE REGULATING / REDUCING VALVE
	VALVE -RELIEF VALVE
	VALVE -SHUTOFF VALVE
	PRESSURE GAUGE W/COCK
	STRAINER
	THERMOMETER
	PIPE UNION
M	UTILITY METER
	DIRECTION OF FLOW
	POINT OF CONNECTION
XX-X	EQUIPMENT TAG

PLUMBING ABBREVIATIONS

A	AMPS	EQ	EQUIPMENT	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
ACU	AIR CONDITIONING UNIT	ETR	EXISTING TO REMAIN	NIC	NOT IN CONTRACT
AD	AREA DRAIN	EWC	ELECTRIC WATER COOLER	NTS	NOT TO SCALE
ADD'L	ADDITIONAL	EWH	ELECTRIC WATER HEATER	OC	ON CENTER
AFC	ABOVE FINISH COUNTER	EXIST (E)	EXISTING	OD	OVERFLOW DRAIN
AFF	ABOVE FINISH FLOOR	EXP	EXPANSION	P	PUMP
AFG	ABOVE FINISH GRADE	F	FURNACE	PC	PLUMBING CONTRACTOR
AHU	AIR HANDLING UNIT	FA	FIRE ALARM	PH (Ø)	PHASE
AP	ACCESS PANEL	FCO	FLOOR CLEAN-OUT	PNL	PANEL
ARCH	ARCHITECTURAL	FCU	FAN COIL UNIT	PRV	PRESSURE REDUCING VALVE
B	BOILER	FD	FLOOR DRAIN	PSF	POUNDS/SQUARE FOOT
BFP	BACKFLOW PREVENTER	FFE	FINISH FLOOR ELEVATION	PSI	POUNDS/SQUARE INCH
BLDG	BUILDING	FPC	FIRE PROTECTION CONTRACTOR	PVC	POLYVINYL CHLORIDE
BOT	BOTTOM	FS	FLOW SWITCH	RAD	RADIUS
BT	BATHTUB	FT	FIN TUBE / FEET	RD	ROOF DRAIN
C	CONDENSER	GA	GAUGE	REQ'D	REQUIRED
CB	CATCH BASIN	GALV	GALVANIZED	RH	ROOF HYDRANT
CC	COOLING COIL	GC	GENERAL CONTRACTOR	RHC	REHEAT COIL
CFH	CUBIC FEET PER HOUR	GCO	GRADE CLEANOUT	RPBP	REDUCED PRESSURE BACKFLOW PREVENTER
CH	CHILLER	GND	GROUND	RPZ	REDUCED PRESSURE ZONE ASSEMBLY
CI	CAST IRON	GUH	GAS UNIT HEATER	RTU	ROOF TOP UNIT
CJ	CONTROL JOINT	GWH	GAS WATER HEATER	SECT	SECTION
CL	CENTERLINE	H	HUMIDIFIER	SH	SHOWER
CLG	CEILING	HB	HOSE BIBB	SK	SINK
CO	CLEANOUT	HC	HEATING COIL	SOVB	SHUT-OFF VALVE BOX
COL	COLUMN	HOA	HAND-OFF-AUTOMATIC	SQ	SQUARE
CONST	CONSTRUCTION	HORIZ	HORIZONTAL	SS	SERVICE SINK
CONT	CONTINUOUS	HP	HORSEPOWER	STL	STEEL
CONTR	CONTRACTOR	HVAC	HEATING, VENTILATION, AIR CONDITIONING	STRUCT	STRUCTURAL
CONV	CONVECTOR	HX	HEAT EXCHANGER	SW	SAFE WASTE
CS	CLINIC SINK	INV EL / IE	INVERT ELEVATION	SYM	SYMMETRICAL
CT	COOLING TOWER	JB	JUNCTION BOX	TC	TEMPERATURE CONTROL
CTX	CONNECT TO EXISTING	KEC	KITCHEN EQUIPMENT CONTRACTOR	TCC	TEMPERATURE CONTROL CONTRACTOR
CU	CONDENSING UNIT	KVA	KILOVOLT AMPERE	TD	TRENCH DRAIN
DCBP	DOUBLE CHECK BACKFLOW PREVENTER	KW	KILOWATT	TPV	TRAP PRIMER VALVE
DCDA	DOUBLE CHECK DETECTOR ASSEMBLY	LAV	LAVATORY	TS	TAMPER SWITCH
DET	DETAIL	LT	LAUNDRY TUB	TYP (T/)	TYPICAL
DF	DRINKING FOUNTAIN	LTG	LIGHTING	UH	UNIT HEATER
DIA(ø)	DIAMETER	MAU	MAKE-UP AIR UNIT	UL	UNDERWRITER'S LABORATORY
DN	DOWN	MAX	MAXIMUM	UNO	UNLESS NOTED OTHERWISE
DS	DOWN SPOUT	MB	MOP BASIN	UR	URINAL
DSW	DISCONNECT SWITCH	MBH	1,000 BTUH	V	VOLTS
DT	DRAIN TILE	MC	MECHANICAL CONTRACTOR	VERT	VERTICAL
DWG	DRAWING	MECH	MECHANICAL	VT	VITRIFIED TILE
DWH	DOMESTIC WATER HEATER	MH	MANHOLE	VTR	VENT THRU ROOF
EC	ELECTRICAL CONTRACTOR	MFR	MANUFACTURER	W	WATTS
EJ	EXPANSION JOINT	MIN	MINIMUM	W/	WITH
EL	ELEVATION	MTD	MOUNTED	WC	WATER CLOSET
ELEC	ELECTRICAL	(N)	NEW	WCO	WALL CLEANOUT
ELEV	ELEVATOR	NEC	NATIONAL ELECTRIC CODE	WH	WALL HYDRANT
EM	EMERGENCY	NF	NON FUSED	WP	WEATHERPROOF
				YH	YARD HYDRANT

Must comply with all national and state adopted codes

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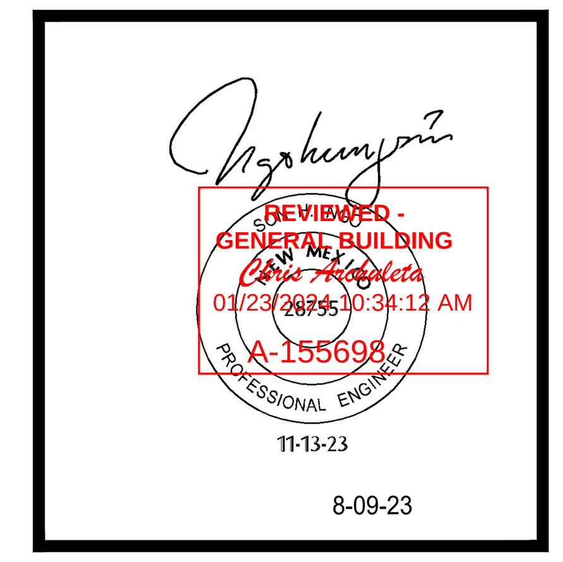

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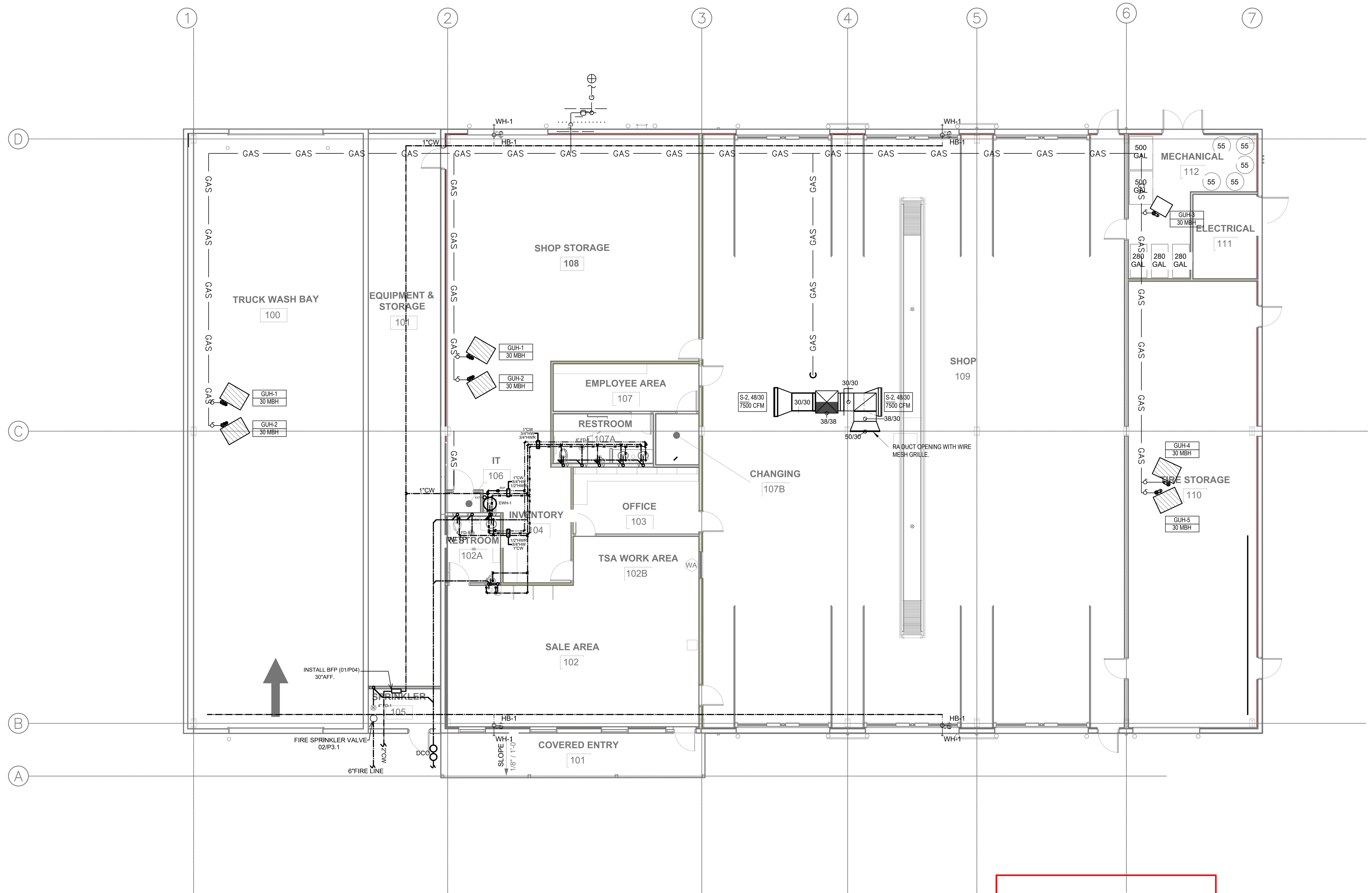
PARCEL A, B, AND C WITHIN LOT 3 IN SECTION 19, T11N, R31E, N.M.P.M.
TUCUMCARI, NM
NEW DEVELOPMENT

DATE: Nov. 2023

REVISIONS

PLUMBING SPECIFICATIONS AND LEGEND

P-T 001



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01 FIRST PLUMBING PLAN

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

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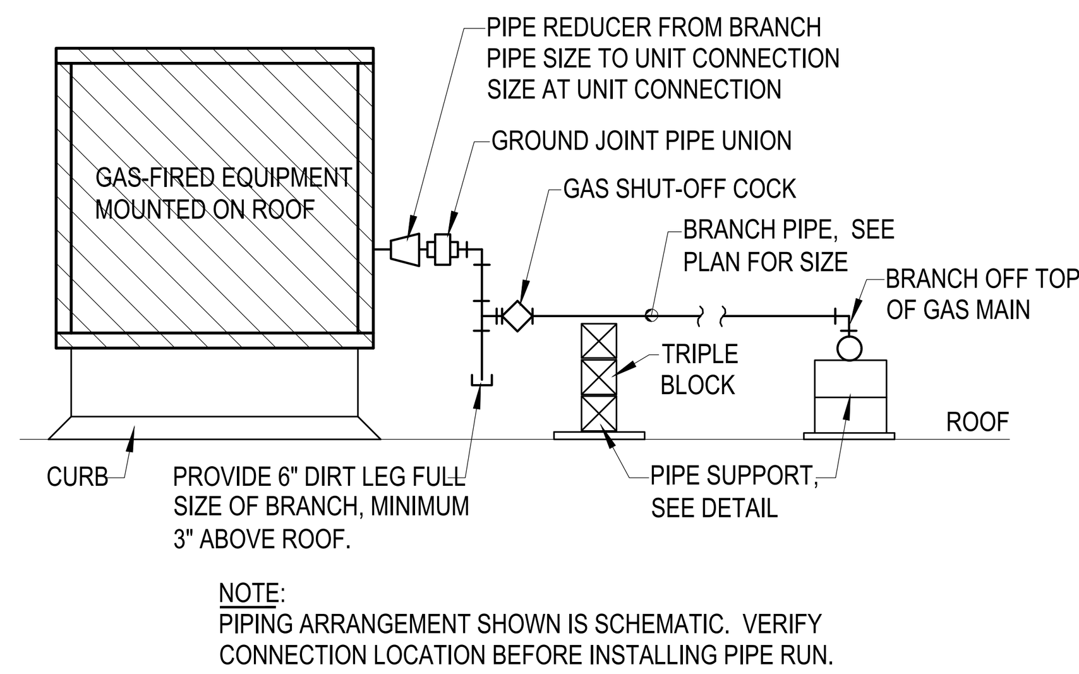
REVISIONS

PLUMBING PLANS

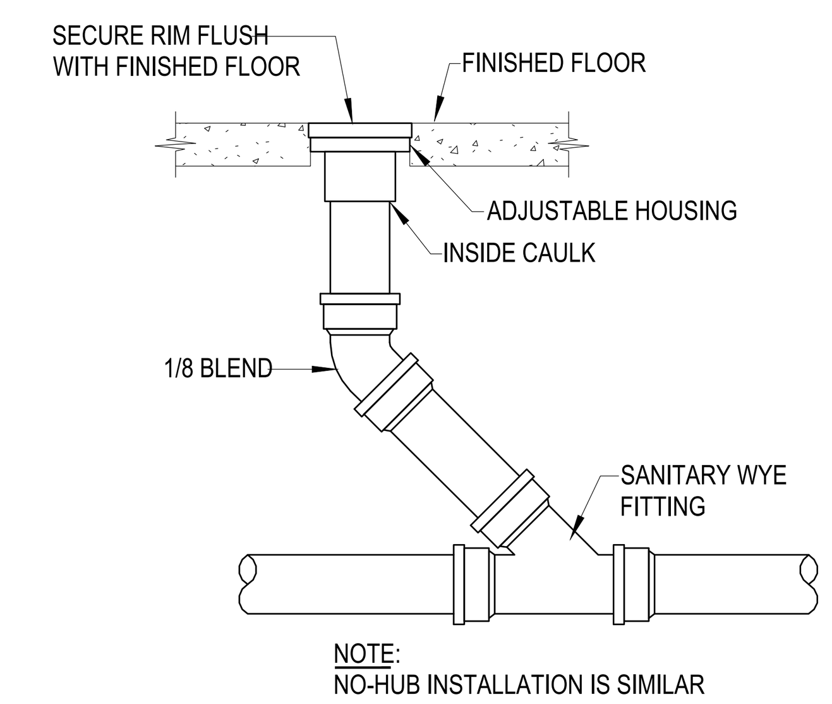
P-T 101



NOTE:
PIPING ARRANGEMENT SHOWN IS SCHEMATIC. VERIFY CONNECTION LOCATION BEFORE INSTALLING PIPE RUN.

GAS EQUIPMENT CONNECTION DETAIL

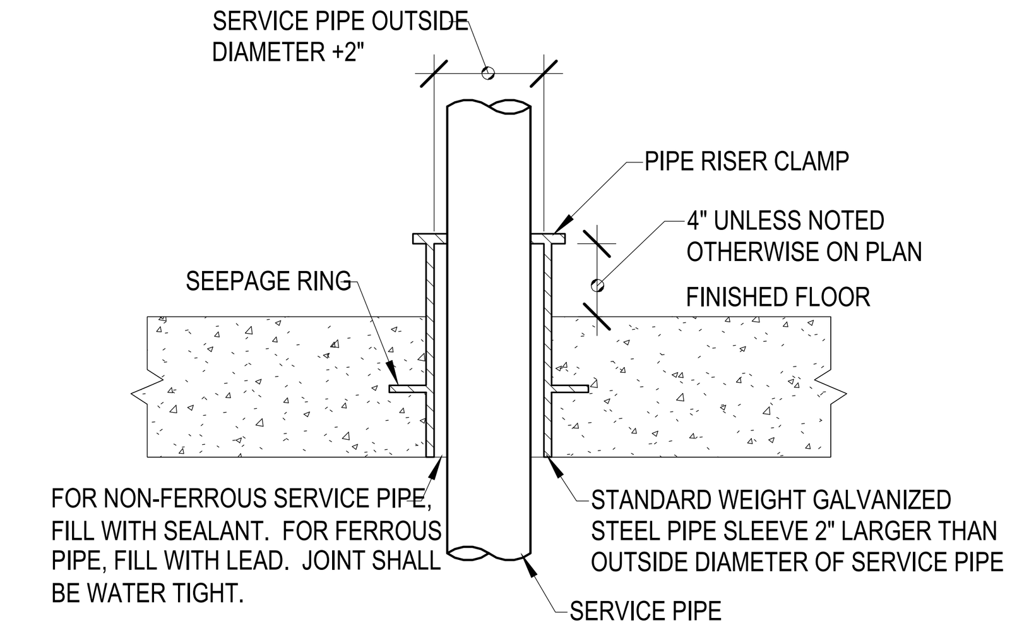
NO SCALE



NOTE:
NO-HUB INSTALLATION IS SIMILAR

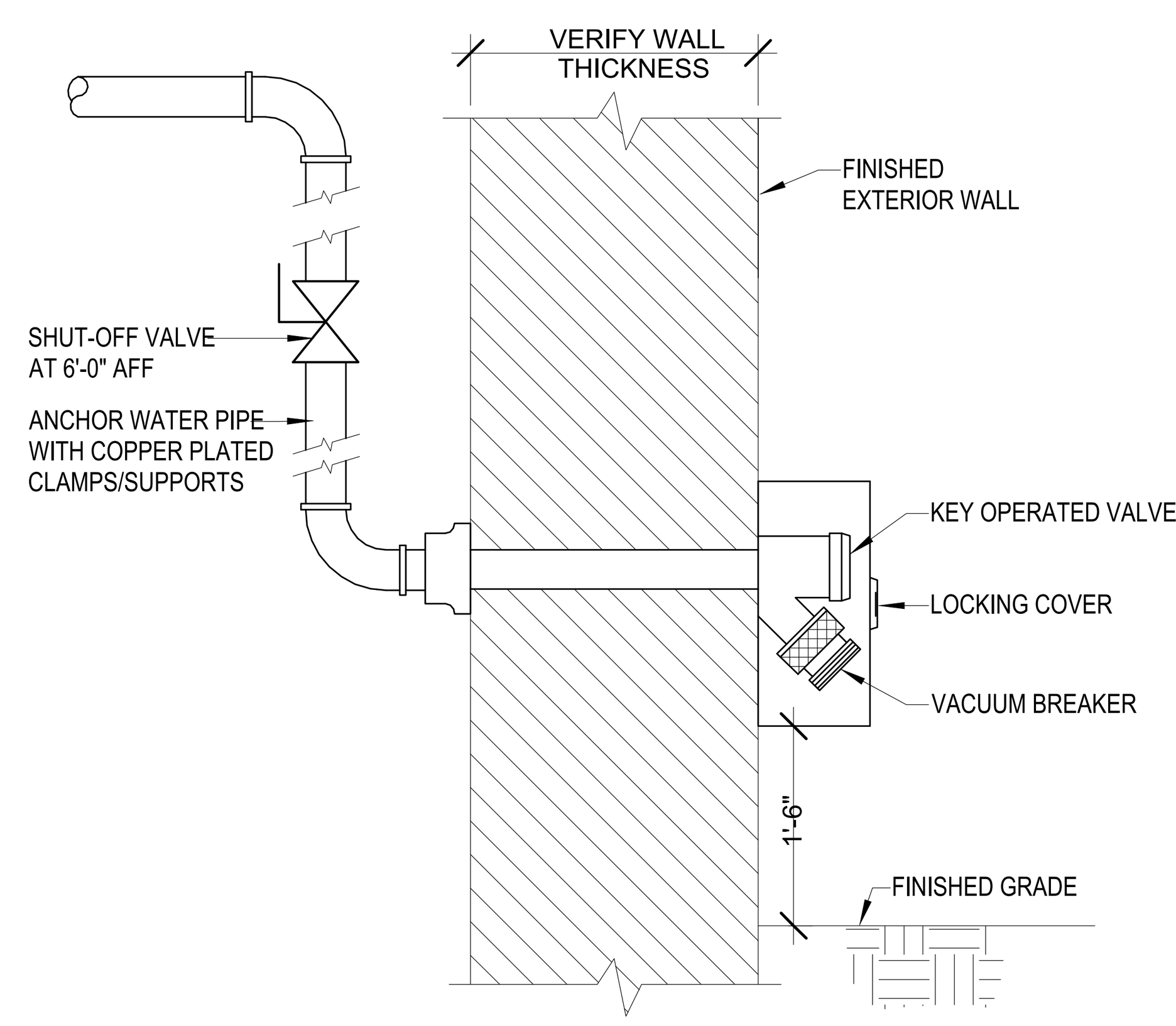
FLOOR CLEANOUT DETAIL

NO SCALE



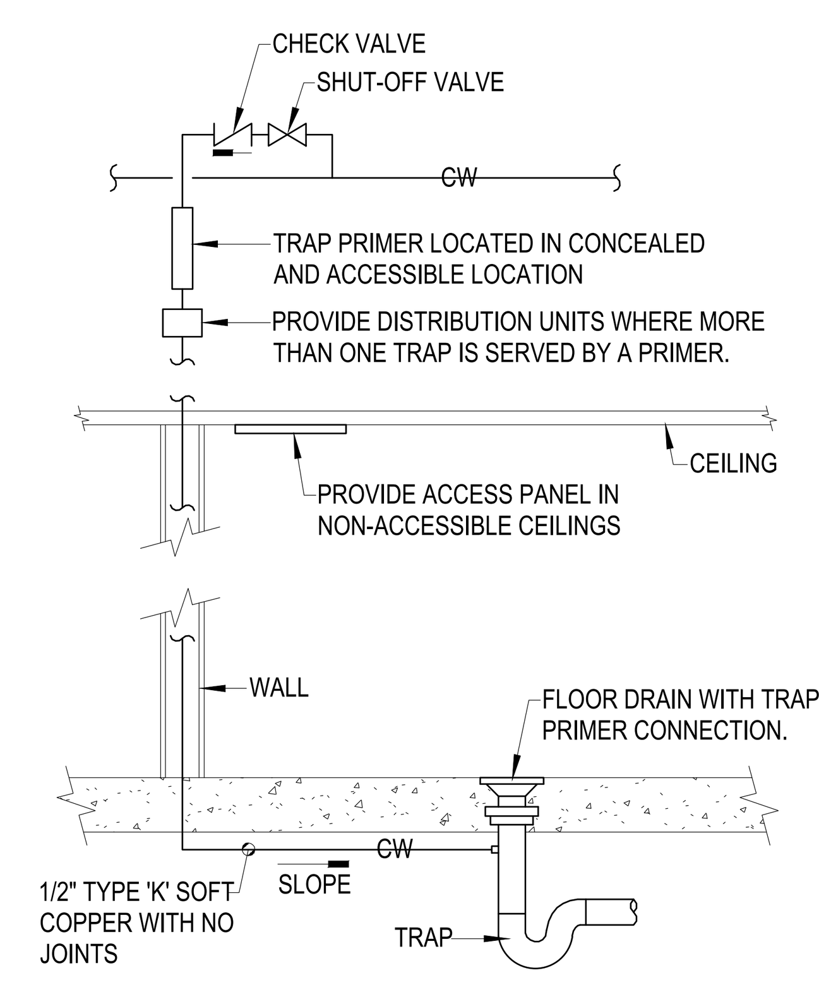
PIPE FLOOR SLEEVE DETAIL

NO SCALE



WALL HYDRANT DETAIL

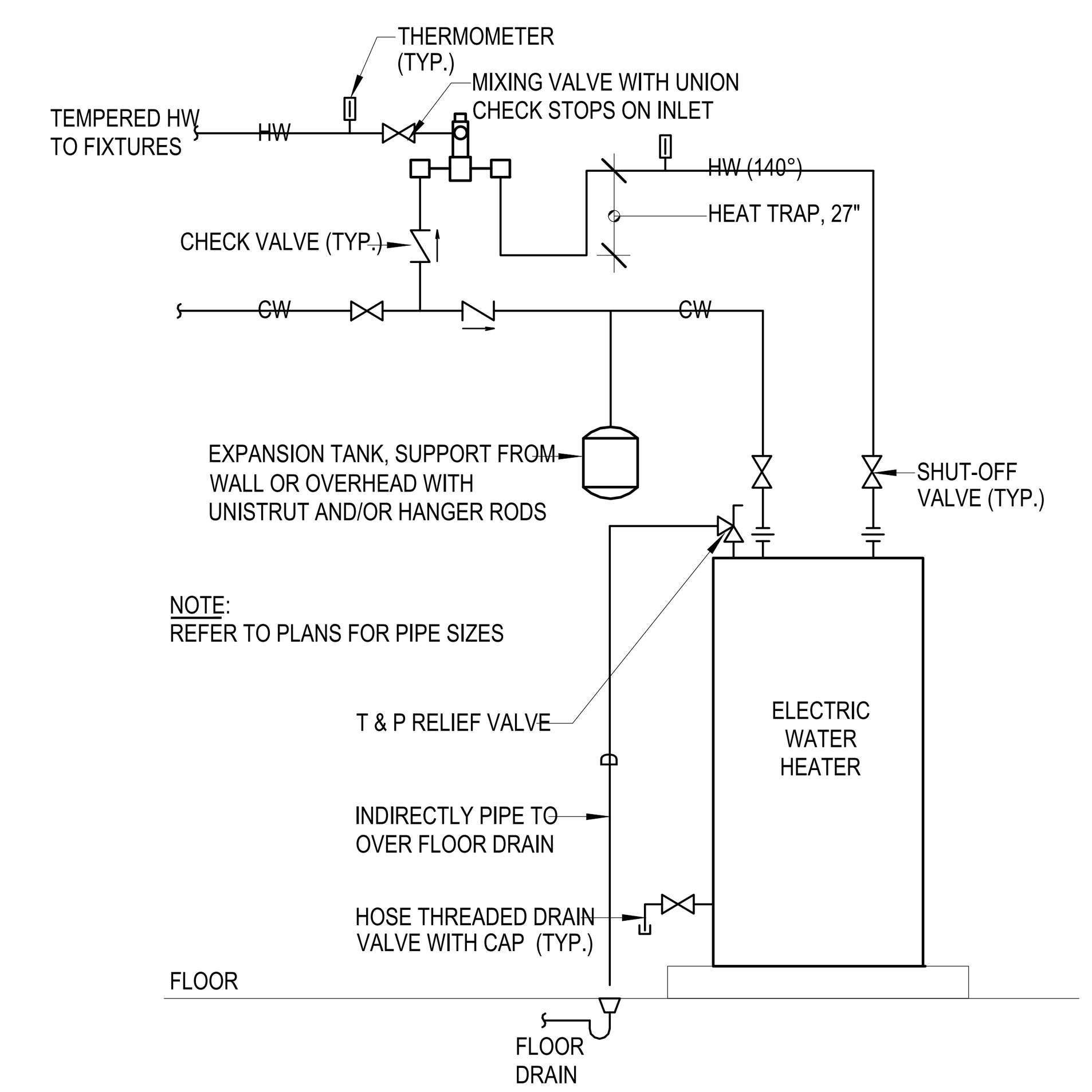
NO SCALE



NOTES:
1. ALL FLOOR DRAINS AND FLOOR SINKS TO BE PROVIDED WITH TRAP PRIMER.
2. OPERATING RANGE OF TRAP PRIMER IS 35 TO 75 PSIG.

TRAP PRIMER DETAIL

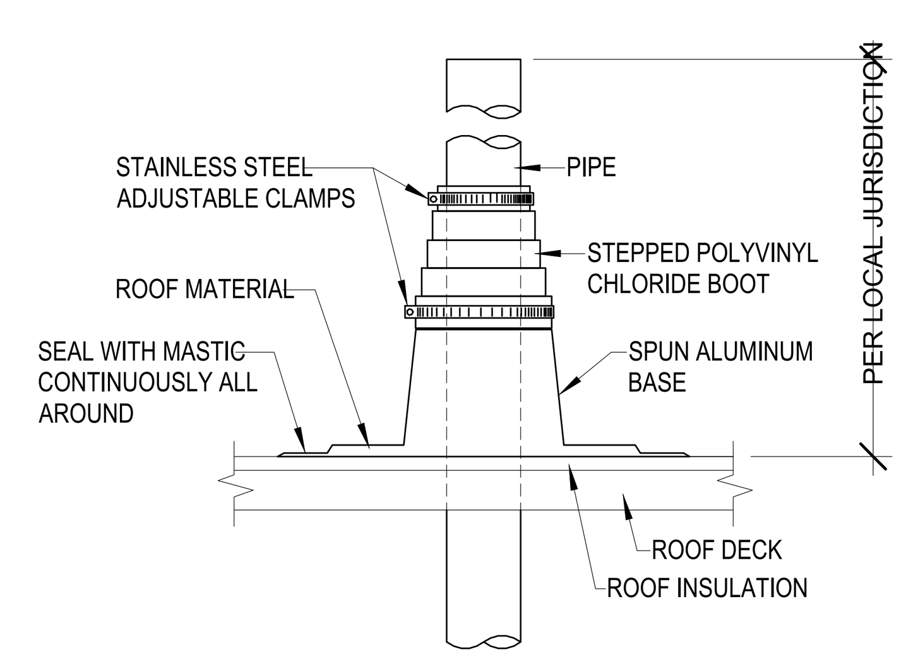
NO SCALE



NOTE:
REFER TO PLANS FOR PIPE SIZES

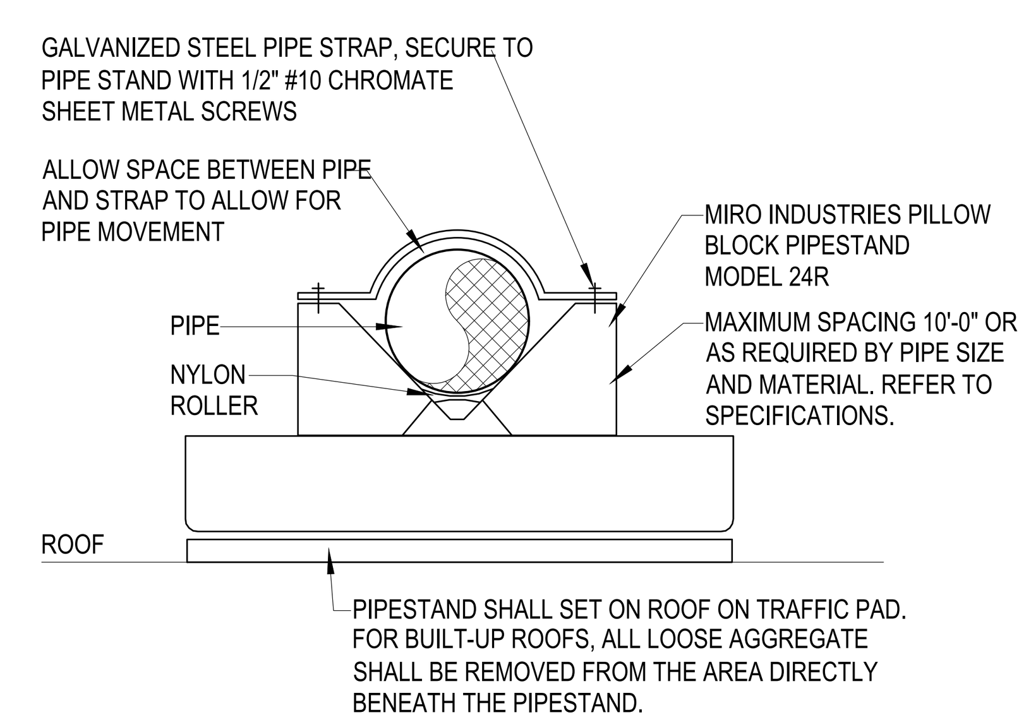
WATER HEATER DETAIL

NO SCALE



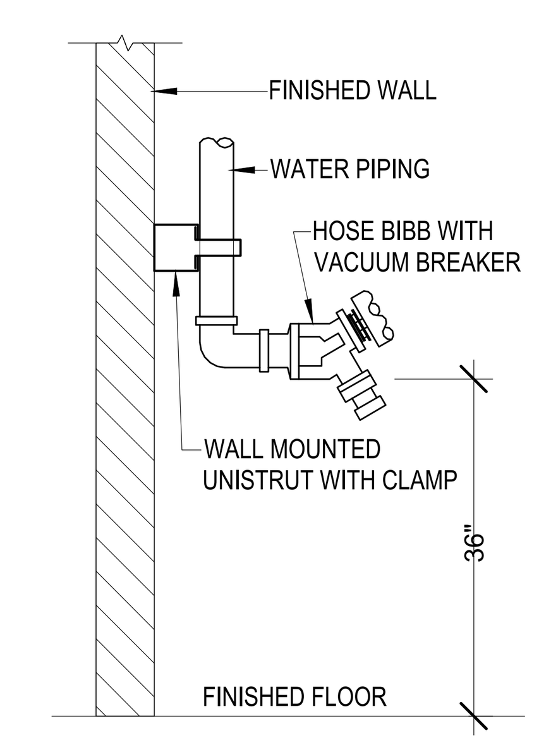
VENT THROUGH ROOF DETAIL

NO SCALE



ROOFTOP PIPE SUPPORT DETAIL

NO SCALE



WALL MOUNTED HOSE BIBB DETAIL

NO SCALE

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TA TRAVEL CENTER
PARCEL A, B, AND C WITHIN LOT 3 IN SECTION 19, T11N, R31E, N.M.P.M.
TUCUMCARI, NM
NEW DEVELOPMENT

DATE: Nov. 2023

REVISIONS

PLUMBING DETAILS

P-T 501

PLUMBING FIXTURE CONNECTION SCHEDULE

MARK	QTY	MANUFACTURER	MODEL	CW	HW	SAN	VENT	DESCRIPTION
WATER CLOSET								
WC-1 (ADA)	2	ZURN	Z5615-BWL	1-1/4"	-	4"	2"	VITREOUS CHINA, ELONGATED BOWL, TOP SPUD, SIPHON JET FLUSH ACTION, 1.28 GPF, WALL MOUNTED, ZURN AQUASENSE SENSOR OPERATED BATTERY POWERED FLUSH VALVE, ZURN Z5955SS-EL HEAVY DUTY PLASTIC, OPEN FRONT SEAT WITH STAINLESS STEEL CHECK HINGE. FIXTURE TO CONFORM TO ADA REQUIREMENTS.
LAVATORY								
LAV-1 (ADA)	3	KOHLER	BACHATA K-2609-SU	1/2"	1/2"	1-1/2"	1-1/2"	VITREOUS CHINA, OVER UNDERMOUNT SELF-RIMMING LAVATORY. KOHLER MODEL S53-3100 AND 6-3100 CRESTT SERIES DECK MOUNTED POLISHED CHROME SENSOR OPERATED BATTERY POWERED FAUCET AND SOAP DISPENSER, 0.5 GPM, GRID DRAIN AND TAILPIECE.
URINAL								
UR-1 (ADA)	2	ZURN	Z5755-U	3/4"	-	2"	1-1/2"	VITREOUS CHINA, WALL MOUNTED, ELONGATED RIM, 2" DRAIN, ZURN ZER6003AV-ULF-TM SENSOR OPERATED BATTERY POWERED FLUSH VALVE, 0.125 GPF. MOUNT FIXTURE AT HANDICAP HEIGHT.
SINK								
HS-1	1	BRADLEY	WF2703-A-STD-F-MMV-LSD	3/4"	3/4"	2"	1-1/2"	WALL MOUNTED, STAINLESS STEEL, 36" SEMI-CIRCULAR, STANDARD HEIGHT, FOOT CONTROL VALVE, MANUAL MIXING VALVE, LIQUID SOAP DISPENSER.
WATER COOLER								
EWC-1	1	OASIS	MMSL	1/2"	-	1-1/2"	1-1/2"	BI LEVEL WITH ROOF MOUNT COOLER, STAINLESS STEEL FINISH
EMERGENCY EYE WASH								
EW-1	1	BRADLEY	S19 224 SC	1/2"	-	1-1/2"	1-1/2"	HALO WALL MOUNTED EYE WASH WITH BOWL DUST COVER AND PUSH HANDLE ACTIVATION
SERVICE SINK								
SS-1	1	MOEN	FLORESTONE MSR-2424	3/4"	3/4"	3"	1-1/2"	MOLDED STONE BASIN WITH TILING FLANGES, STAINLESS STEEL SPLASH PANELS, MOP HANGER, HOSE WITH WALL HOOK, 3" DRAIN WITH DOME STRAINER AND LINT BASKET, CHICAGO MODEL 897 FAUCET WITH VACUUM BREAKER SPOUT, ADJUSTABLE WALL BRACE, PAIL HOOK AND 3/4" HOSE THREAD OUTLET.
HYDRANT								
WH-1	8	WOODFORD	MODEL 68	3/4"	-	-	-	CONCEALED, CHROME PLATED QUARTER TURN NON-FREEZE HYDRANT WITH 3/4" HOSE CONNECTION, BACKER PLATE, VACUUM BREAKER, "T" HANDLE KEY.
HOSE BIBB								
HB-1	4	CHICAGO	952	3/4"	-	-	-	EXPOSED INTERIOR HOSE BIBB, 3/4" HOSE THREAD, INTERNAL VACUUM BREAKER, REMOVABLE "T" HANDLE, POLISHED CHROME FINISH.
FLOOR DRAIN								
FD-1	4	J.R. SMITH	2205	-	-	SEE PLANS	SEE PLANS	DUCO CAST IRON BODY WITH FLASHING COLLAR AND ADJUSTABLE ROUND NICKEL BRONZE STRAINER HEAD, TRAP PRIMER CONNECTION.
CLEANOUT								
FCO	2	J.R. SMITH	4020	-	-	SEE PLANS	-	DUCO CAST IRON CLEANOUT WITH ROUND ADJUSTABLE SCORIATED SECURED NICKEL BRONZE TOP.
GCO	1	J.R. SMITH	4250	-	-	SEE PLANS	-	DUCO CAST IRON CLEANOUT AND DOUBLE FLANGED HOUSING WITH HEAVY DUTY SECURED SCORIATED CAST IRON COVER WITH LIFTING DEVICE.

ELECTRIC WATER HEATER SCHEDULE

REMARKS:
1. RECOVERY RATE BASED ON 40°F ENTERING WATER TEMPERATURE

MARK	STORAGE CAPACITY	STORAGE TEMPERATURE (°F)	RECOVERY AT 100°F (GPH)	NUMBER OF ELEMENTS	ELECTRICAL					MANUFACTURER	MODEL	WEIGHT FULL (LBS)	REMARKS
					KW	VOLT	PH.	MCA	MOCP				
EWH-1	30 GAL	140	36	2	4.5	208	1	43.20	60	A.O. SMITH	DEN-30	350	1

EXPANSION TANK SCHEDULE

REMARKS:

MARK	SERVICE	TYPE	STORAGE CAPACITY	SIZE (Ø" x L")	MANUFACTURER	MODEL	WEIGHT (LBS)	REMARKS
ET-1	EWH-1	DIAPHRAGM	2.1 GAL	10"ø x 10"H	AMTROL	ST-5C	5	-

MIXING VALVE SCHEDULE

REMARKS:
1. PROVIDE AT ALL HAND SINKS, LAVATORIES, AND EYEWASH
2. INTEGRAL RECIRCULATION SYSTEM RETURN MANIFOLD

MARK	SERVICE	TYPE	GPM	PRESSURE DROP (PSI)	INLET TEMP. (CW/HW °F)	OUTLET TEMP. (HW °F)	MANUFACTURER	MODEL	REMARKS
TMV-1	EWH	THERMOSTATIC	25	45	40 / 140	120	LEONARD	TM-26-LF	2
TMV-2	POINT-OF-USE	THERMOSTATIC	0.5	5	40 / 120	95	LEONARD	170-LF	1

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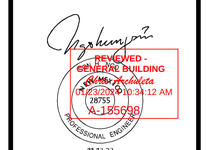

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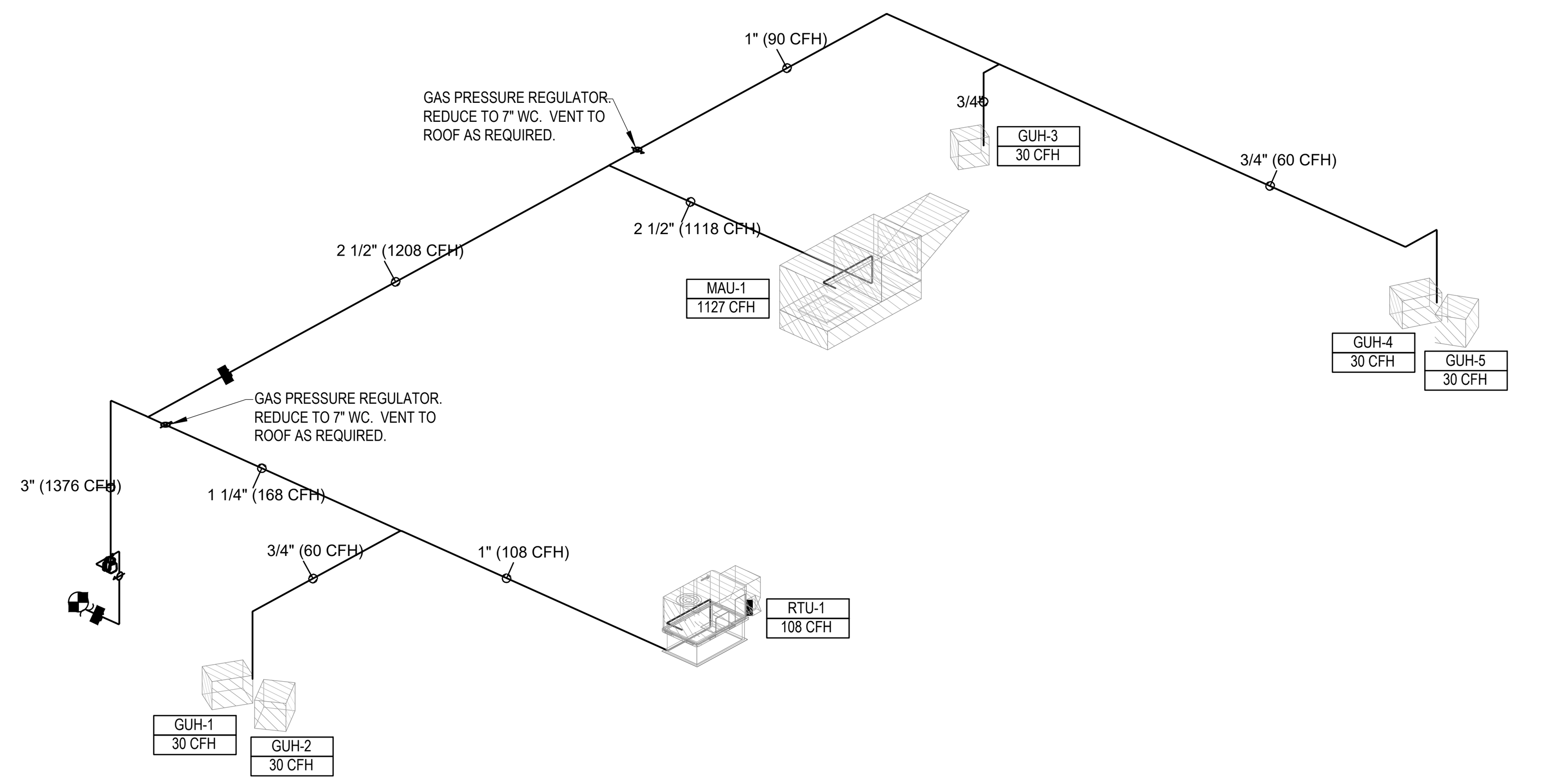
REVISIONS

PLUMBING SCHEDULES

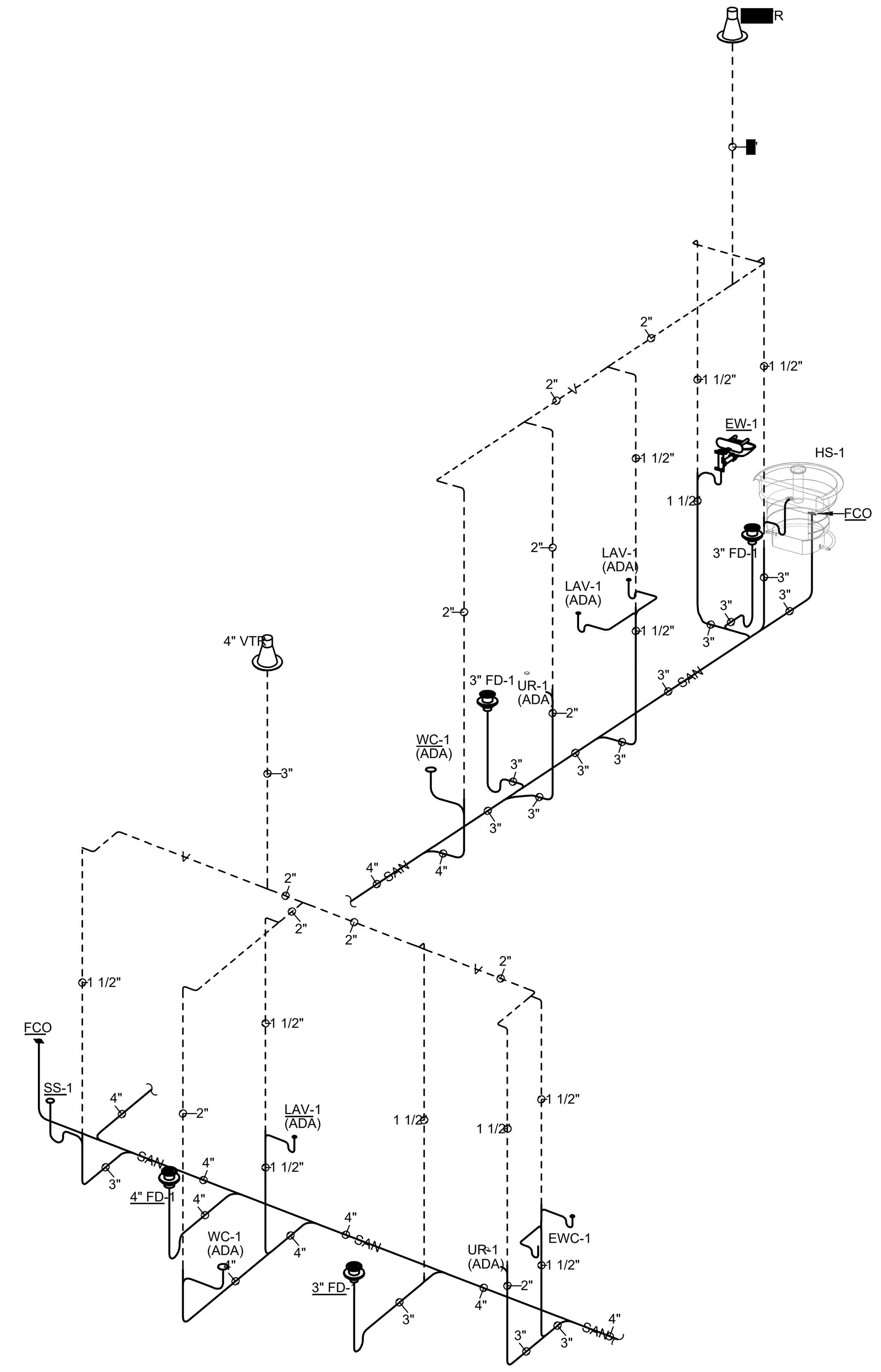
P-T 601



GAS LOAD SUMMARY			
TOTAL EQUIVALENT LENGTH OF GAS PIPING (LF)			170
DESIGN PRESSURE REQUIRED AFTER METER			14" W.C.
PRESSURE DROP			0.5
SPECIFIC GRAVITY			0.6
EQUIPMENT TAG	DESCRIPTION	QTY.	GAS INPUT (CFH)
GUH1		1	30
GUH2		1	30
GUH3		1	30
GUH4		1	30
GUH5		1	30
MAU1		1	1127
RTU1		1	108
TOTAL CONNECTED GAS LOAD:			1385

GAS ISOMETRIC DIAGRAM

NO SCALE



SANITARY ISOMETRIC DIAGRAM

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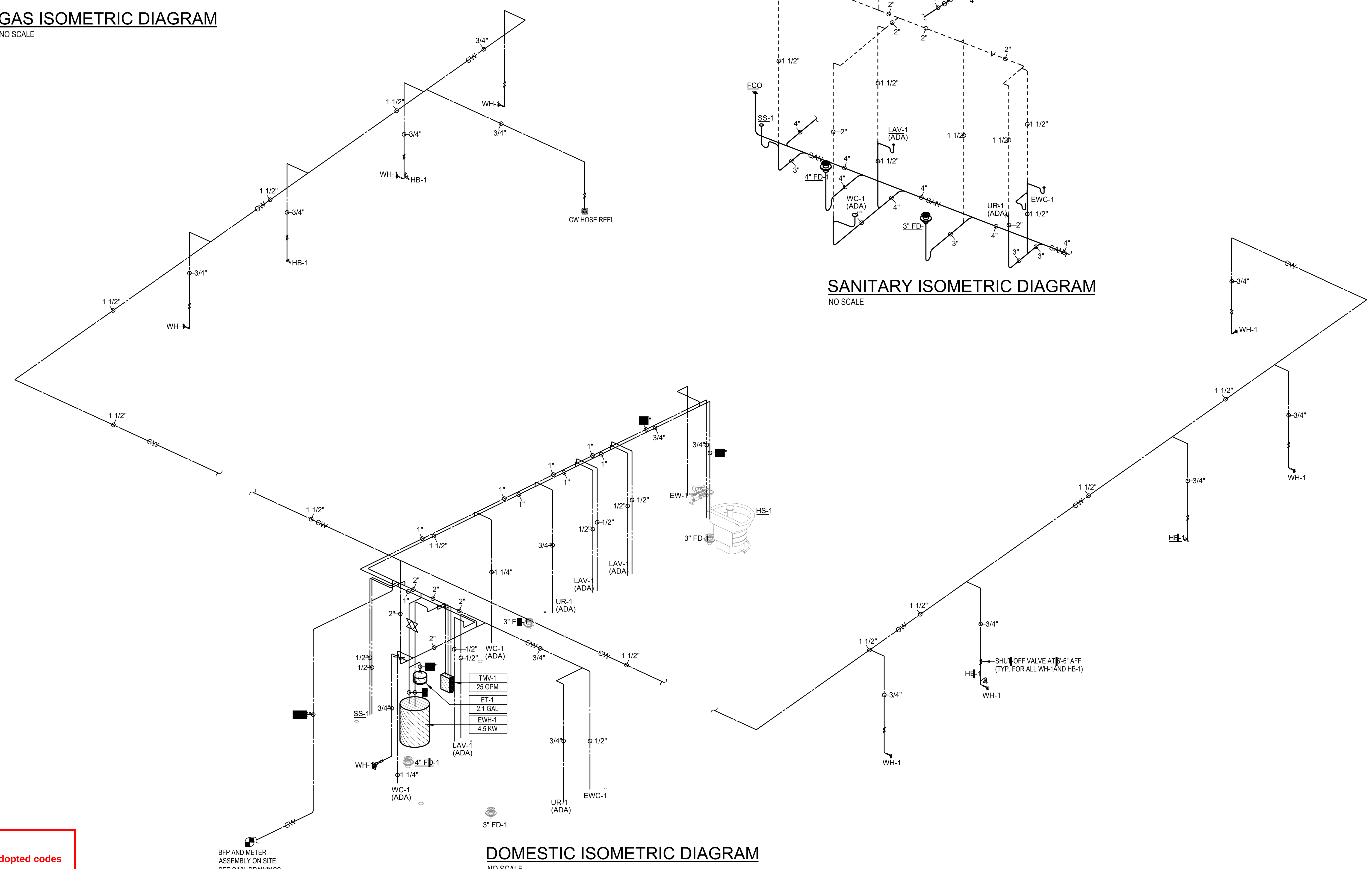

DOMESTIC ISOMETRIC DIAGRAM

NO SCALE

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PLUMBING ISOMETRIC DIAGRAMS

P-T 901

GENERAL ELECTRICAL NOTES

1. CONTRACTOR TO SURVEY THE PROJECT AND BECOME FAMILIAR WITH CONDITIONS AND SCOPE OF WORK. ALL COSTS SUBMITTED SHALL BE BASED ON A THOROUGH KNOWLEDGE OF ALL WORK AND MATERIALS REQUIRED, ANY ADDITIONAL COSTS DUE TO FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
2. PROVIDE LABOR MATERIALS, EQUIPMENT AND TRANSPORTATION TO RECEIVE, INSTALL, ADJUST, AND PUT INTO OPERATION COMPLETE ELECTRICAL SYSTEMS IN ACCORDANCE WITH THE INTENT OF THE CONTRACT DOCUMENTS. PROVIDE PRODUCTS NOT MENTIONED BUT OBVIOUSLY NECESSARY AND INCIDENTAL TO THE COMPLETION OF THIS WORK.
3. OBTAIN ALL PERMITS AND PAY ALL FEES.
4. ALL WORK DONE SHALL BE PERFORMED BY QUALIFIED ELECTRICIANS, UNDER THE SUPERVISION AND DIRECTION OF A SUPERINTENDENT HAVING SUCCESSFUL EXPERIENCE INSTALLING AND SUPERVISING EQUIPMENT AND SYSTEMS OF SIMILAR TYPE AND SIZE AS INDICATED BY CONTRACT DOCUMENTS.
5. COORDINATE WORK WITH ALL OTHER TRADES, GIVE SPECIAL CONSIDERATION TO COORDINATING INSTALLATION OF LIGHTING, SPRINKLER PIPING, AND DUCTWORK. COORDINATE WALL SWITCHES WITH DOOR SWINGS, VERIFY EXACT LOCATION, COLOR AND FINISH OF OUTLETS AND DEVICES WITH ARCHITECT, OR DESIGNATED TENANT REPRESENTATIVE PRIOR TO INSTALLATION
6. ALL PRODUCTS SHALL BE UL LISTED AND INSTALLED IN ACCORDANCE WITH NATIONALLY RECOGNIZED AND ACCEPTED STANDARDS AND PROCEDURES
7. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE RULES, REGULATIONS, INDUSTRY STANDARDS, LOCAL CODES, LAWS, AND ORDINANCES. IN THE EVENT THAT A DISCREPANCY IS FOUND IN THE CONTRACT DOCUMENTS, NOTIFY THE ENGINEER IMMEDIATELY.
8. FOR SUBMITTALS, PROVIDE A PDF FILE OF ELECTRICAL MATERIALS AND PRODUCTS.
9. ALL ELECTRICAL EQUIPMENT AND WIRING SYSTEMS SHALL BE THOROUGHLY TESTED AND ALL DEFECTS AND MALFUNCTIONING EQUIPMENT SHALL BE CORRECTED, REPAIRED OR REPLACED, ALL SYSTEMS SHALL BE TESTED, TEST DATA SHALL BE PROVIDED FOR OWNER'S RECORDS.
10. GC TO FURNISH AND INSTALL ENGRAVED PLASTIC LAMINATE NAMEPLATES FOR ALL PANELS, SWITCHGEAR, SWITCHES, AND ELECTRICAL EQUIPMENT.
11. PROVIDE GFCI RECEPTACLES AS REQUIRED BY NEC 2020 PANEL CLEARANCE SHALL BE IN ACCORDANCE WITH NEC 2020 REQUIREMENTS
12. CONTRACTOR TO FIELD VERIFY THE CONDITIONS INCLUDING SERVICE SIZE, PHASE, WIRE SIZE, CONDUIT SIZE, CONTRACTOR TO COORDINATE WITH THE OWNER AND UTILITIES COMPANY, AS REQUIRED
13. ALL ELECTRICAL EQUIPMENT INSTALLED SHALL BE PROPERLY GROUNDED IN ACCORDANCE WITH SECTION 250 OF NEC 2020
14. ALL WIRING SHALL BE INSTALLED IN CONDUITS, ALL CONDUITS WITHIN THE BUILDING SHALL BE GALVANIZED ELECTRICAL METALLIC TUBING (EMT), CONNECTION TO EQUIPMENT MAY BE MADE WITH FLEXIBLE CONDUIT AS ALLOWED BY CODE
15. OUTLET BOXES INSIDE THE BUILDING SHALL BE GALVANIZED, PRESSED STEEL TYPE, EXCEPT WHERE OTHERWISE REQUIRED, INSTALL SECTIONAL TYPE BOXES IN GYP BOARD WALL AND MASONRY TYPE BOXES IN MASONRY WALLS
16. SWITCHED SHALL BE ARROW-HART #1991-SL-1 AS REQUIRED OR EQUAL BY HUBBLEE, PASS AND SYMOUR, RECEPTACLES SHALL BE ARROW-HART #5262-1 OR EQUAL BY SWITCH MANUFACTURER, ALL ACCESSIBLE RECEPTACLES IN RESTROOMS, JANITOR CLOSET SHALL BE G.F.I TYPE OR PROTECTED BY G.F.I CIRCUIT BREAKERS
17. PANEL BOARD SHALL BE OF THE CIRCUIT BREAKER TYPE WITH TIN PLATED ALUMINUM BUSSING SIZED AS SHOWN ON THE PLANS AS MANUFACTURED BY GENERAL ELECTRIC OR SQUARE D. ALL PANEL BOARDS SHALL BE BUILT-IN TYPE CIRCUIT BREAKERS, FOR AIR CONDITIONING EQUIPMENT SHALL BE 'HACR' TYPE
18. GENERAL CONTRACTOR TO COORDINATE LIGHT SWITCHES LOCATION WITH THE OWNER
19. EMERGENCY AND EXIT SIGNS SHALL BE PROVIDED WITH BACKUP POWER SOURCE CAPABLE OF SUPPLYING A MINIMUM OF 90 MINUTES
20. ALL EMERGENCY AND EXIT LIGHTING SHALL BE WIRED TO THE EMERGENCY WIRING CIRCUIT CONDUCTOR AHEAD OF THE SWITCH LEG

LIGHTING KEY NOTES

① PIT LIGHTS ARE TO BE CONTROLLED BY THREE WAY SWITCHES- A WALL MOUNTED SWITCH AT ONE END AND AN EXPLOSION PROOF (CLASS1 DIVISION1) SWITCH IN SIDE THE PIT AT THE STAIRS.

② EMERGENCY INVERTER TO POWER ALL PIT LIGHTS FOR EMERGENCY LIGHTING. 1,000 VA WALL MOUNTED 8'-0" AFF. 15 AMPS CIRCUIT BREAKERS TO EACH RUN OF PIT LIGHTS

③ FIXTURE MOUNTED AT 18'-0" AFF TO BOTTOM OF FIXTURE TO CLEAR DOOR.

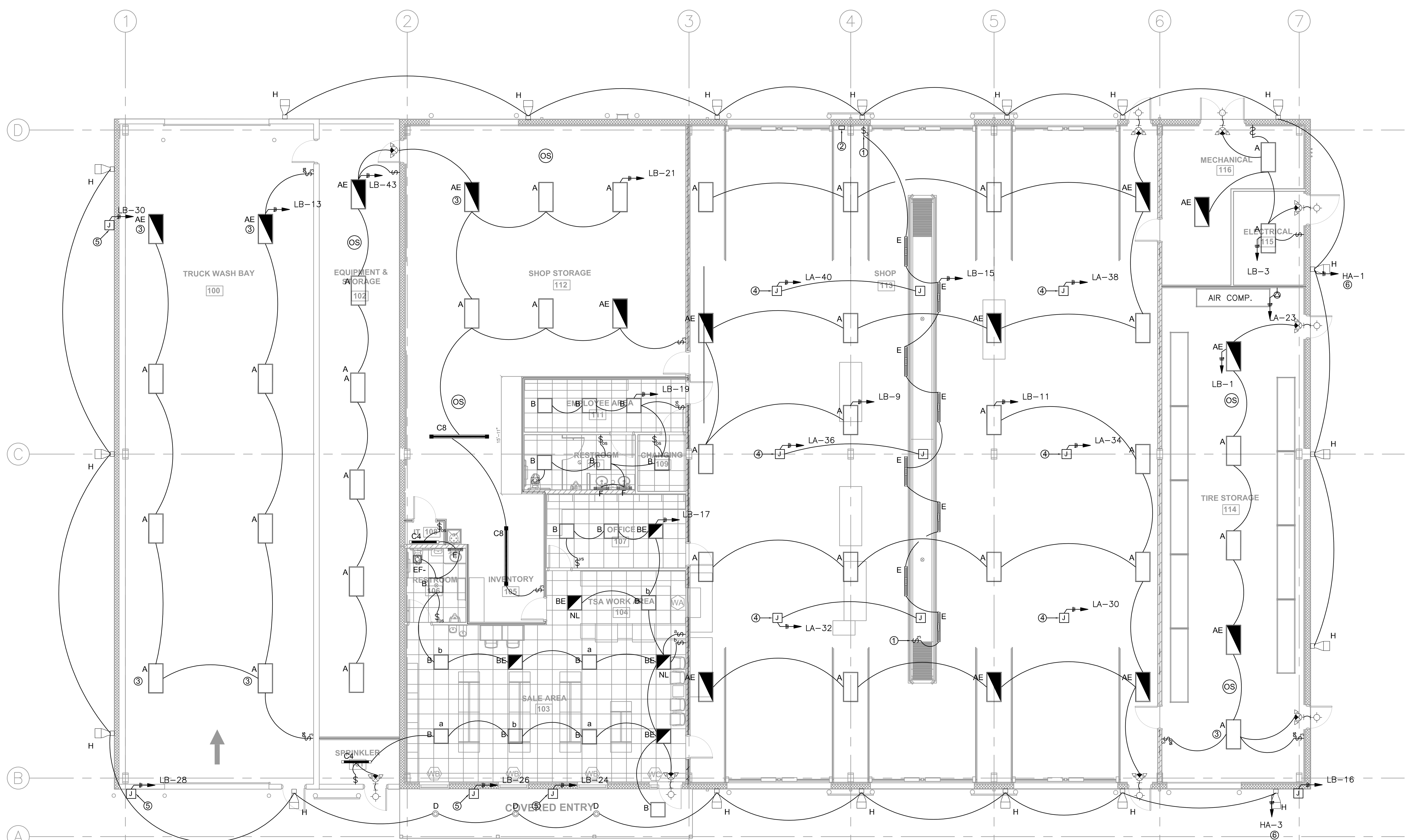
④ JUNCTION BOX MOUNTED AT CEILING FOR INDUSTRIAL FAN, COORDINATE EXACT LOCATION AND REQUIREMENTS WITH G.C PRIOR TO ROUGH-IN.

⑤ POWER FOR EXTERIOR SIGNAGE, WATERPROOF JUNCTION BOX COORDINATE EXACT LOCATION WITH ARCHITECT AND OWNER.

⑥ RUN THESE CIRCUIT THROUGH PHOTO-CELL & TIMER.

GENERAL LIGHTING NOTES:

1. EMERGENCY AND EXIT SIGNS SHALL BE PROVIDED WITH BACKUP POWER SOURCE CAPABLE OF SUPPLYING A MINIMUM OF 90 MINUTES.
2. ALL EMERGENCY AND EXIT LIGHTING SHALL BE WIRED TO THE EMERGENCY WIRING CIRCUIT CONDUCTOR AHEAD OF THE SWITCH LEG.
3. GENERAL CONTRACTOR TO COORDINATE LIGHT SWITCHES LOCATION WITH THE OWNER
4. GENERAL CONTRACTOR SHALL FURNISH AND INSTALL ALL LIGHT FIXTURES. GC TO COORDINATE WITH THE OWNER ON TYPE OF FIXTURES
5. GENERAL CONTRACTOR TO SUPPLY AND INSTALL LAMPS FOR ALL LIGHT FIXTURES UNO.
6. ALL LAMPS AND LIGHT FIXTURES TO CONFORM TO 2015 IECC



1 LIGHTING-PLAN
Scale: 1/8" = 1'-0"

WIRING SCHEDULE FOR 20A RECEPTACLE & LIGHTING CIRCUITS		
DISTANCE	120V	277V
1' - 100'	#12 AWG	#12 AWG
100' - 150'	#10 AWG	#12 AWG
150' - 200'	#10 AWG	#10 AWG
200' - 300'	#8 AWG	#10 AWG

ELECTICAL SYMBOLS:

- DUPLEX RECEPTACLE
- ABOVE COUNTER RECEPTACLE
- QUADRAPLEX RECEPTACLE
- CEILING MOUNTED QUADRAPLEX RECEPTACLE
- DATA/VOICE OUTLET
- J JUNCTION BOX
- DISCONNECT SWITCH
- FUSED DISCONNECT SWITCH
- MOTOR
- $ SWITCH
- $2 DOUBLE POLE SWITCH
- $3 THREE-WAY SWITCH
- $DM DIMMER- SWITCH
- $OS WALL MOUNTED OCCUPANCY SENSOR SWITCH
- OS CEILING MOUNTED OCCUPANCY SENSOR
- SP INTERCOM SYSTEM SPEAKER
- M MOTION DETECTOR SWITCH
- ELECTRICAL PANEL
- EMERGENCY LIGHTING FIXTURE
- EGRESS LIGHT
- EXIT LIGHT
- RECESSED CAN LIGHT
- A-PENDENT LIGHT
- TRACK LIGHT
- LINEAR LIGHTING

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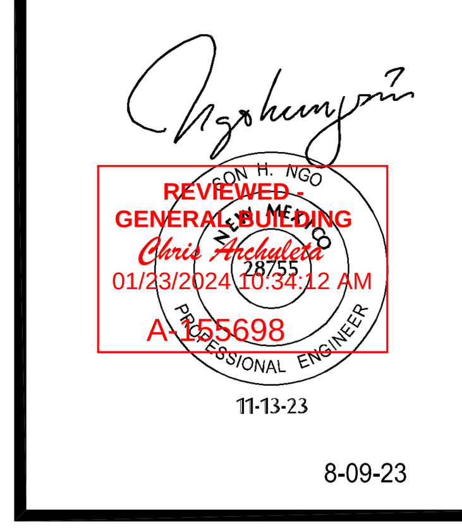


TA TRAVEL CENTER
PARCEL A, B, AND C WITHIN LOT 3 IN SECTION 19, T11N, R31E, N.M.P.M.
TUCUMCARI, NM
NEW DEVELOPMENT

DATE: Nov. 2023

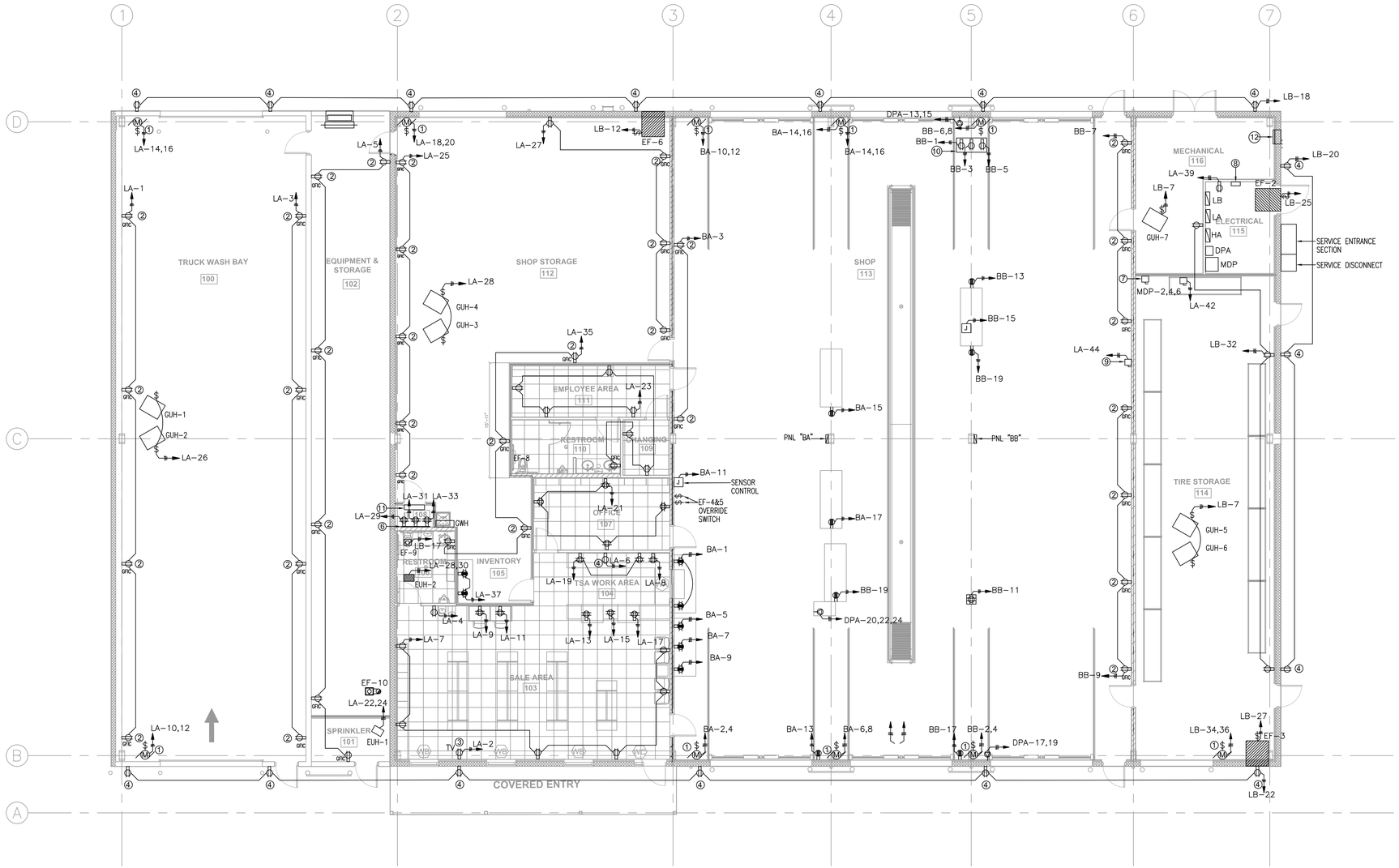
REVISIONS

LIGHTING PLAN

E-101

POWER KEY NOTES

1. AUTOMATIC DOOR OPENER MOTOR, MOUNTED 15'–0 AFF, COORDINATE EXACT LOCATION, CONNECTION TYPE, CONTROL,... ETC. WITH DOOR VENDOR PRIOR TO ROUGH–IN
2. CONVENIENCE RECEPTACLES TO BE GFCI PROTECTED TYPE, MOUNTED AT 48" AFF.
3. PROVIDE WALL MOUNTED THREE–GANG TV BOX WITH DUPLEX RECEPTACLE AND TWO DATA JACKS FOR TV COORDINATE MOUNTING HEIGHT WITH ARCHITECT PRIOR TO ROUGH–IN.
4. PROVIDE WALL MOUNTED THREE–GANG TV BOX WITH DUPLEX RECEPTACLE AND TWO DATA JACKS FOR TV MENU BOARD. COORDINATE MOUNTING HEIGHT WITH ARCHITECT PRIOR TO ROUGH–IN.
5. WATER PROOF CONVENIENCE RECEPTACLES OUTSIDE BUILDING TO BE GFCI PROTECTED TYPE, MOUNTED AT 48" AFF.
6. 4'X4'X¾" FIRE TREATED AC PLYWOOD PAINTED WHITE WITH FIRE RESISTANT PAINT ON WALL FOR IT EQUIPMENT. BOTTOM OF PLYWOOD TO BE 24" AFF
7. TWO STAGE DUPLEX AIR COMPRESSOR HAS TWO COMPRESSORS (480–3ø 10HP) TWO MOTOR STARTERS, AND CONTROLS MOUNTED ON FRAME, PROVIDE 30A 480–3P S/N NEMA–3R FSS WITH HOME RUN, RUN OVER TO J–BOX AND FINAL CONNECTIONS.
8. LIGHTING CONTACTORS
9. CONNECTION FOR UNDERGROUND TANKS' AIR PUMP CONTROL SOLENOID.
10. TECH WORK STATION PROVIDE THREE 20A GFIC RECEPTACLES ON DEDICATED CIRCUITS AND TWO–GANG DATA BOXES @48" AFF. COORDINATE REQUIREMENTS WITH EQUIPMENT SUPPLIER PRIOR TO ROUGH–IN FOR EACH DATA BOX, HOME RUN ½" CONDUIT OVERHEAD TO MECHANICAL CLOSET.
11. MINI–SPLIT UNIT FOR IT ROOM
12. MOTORIZED DAMPERS AND LOVERS INTERLOCKED/CONTROLLED BY EXH.FAN. COORDINATE CONTROL WIRING WITH MECH. CONTRACTOR.



1 POWER-PLAN
Scale: 1/8" = 1'-0"

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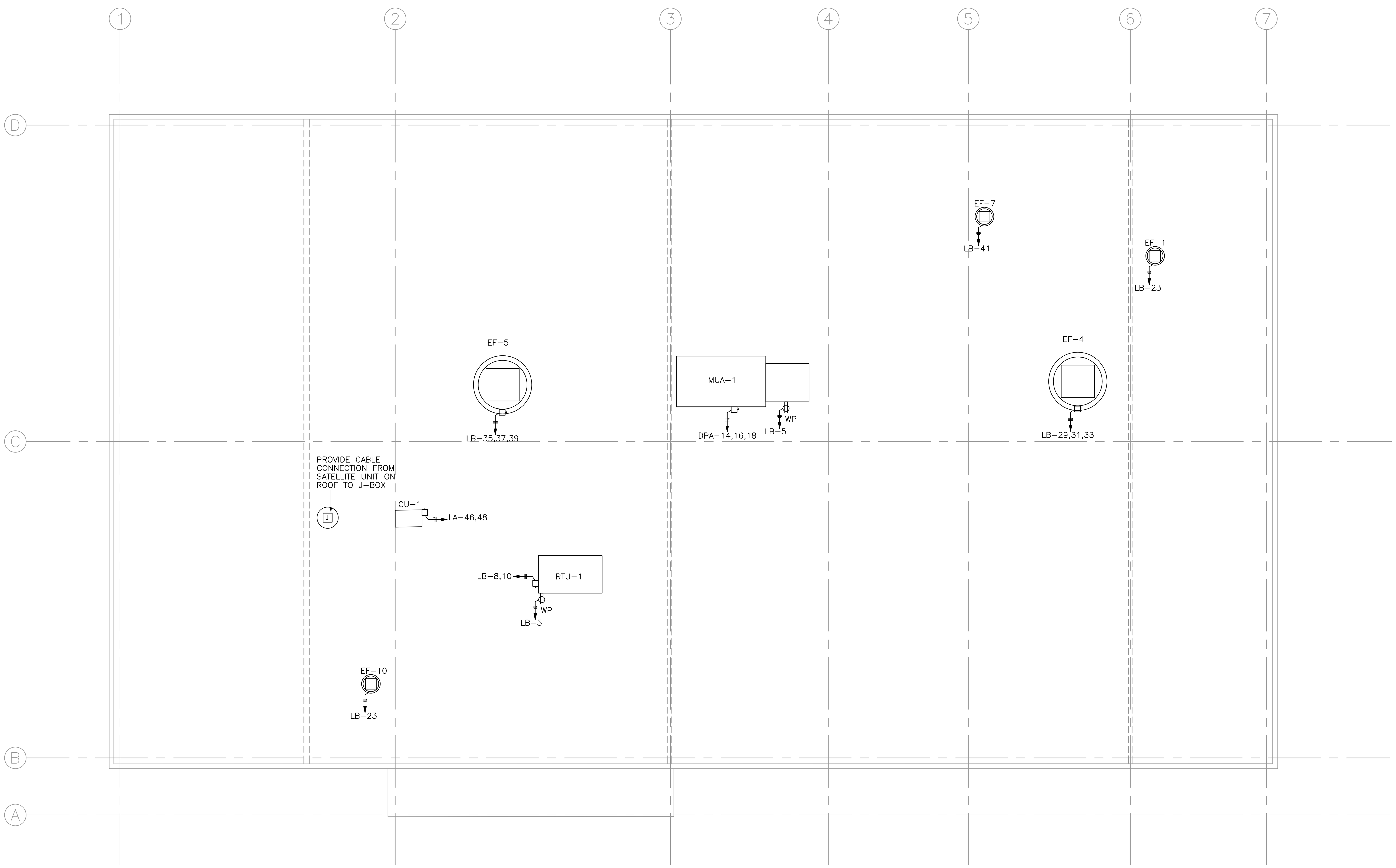
REVISIONS

POWER PLAN

E–102



1 ELECTRICAL-ROOF PLAN

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

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PROFESSIONAL ENGINEER

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REVISIONS

ELECTRICAL ROOF PLAN

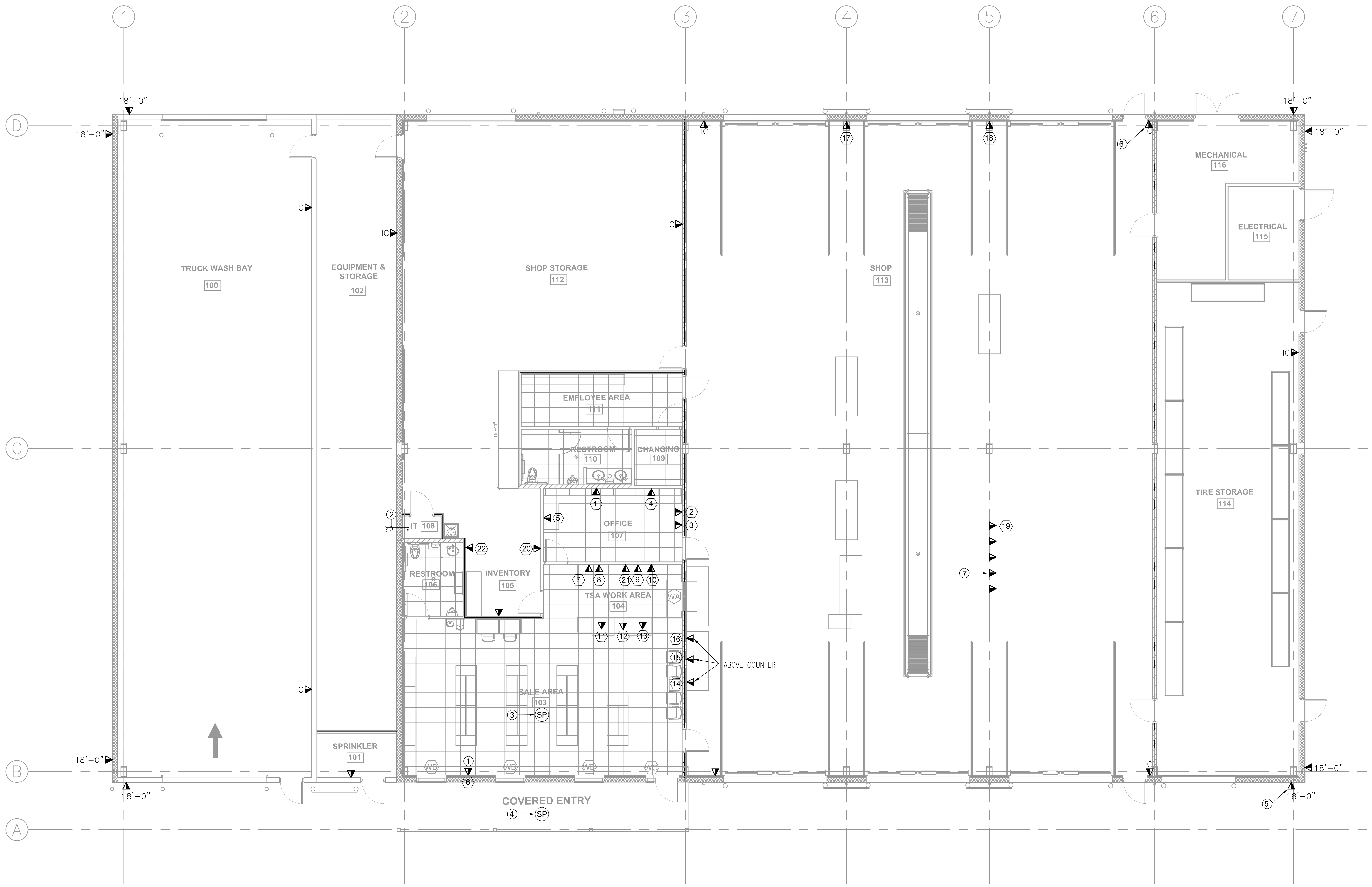
E-103

LOW VOTAGE KEY NOTES

1. WALL MOUNTED TV LOCATION, 10" DOWN FROM BOTTOM OF ACOUSTIC CEILING, NEXT TO RECEPTACLE.
2. PROVIDE (2) 3" CONDUIT WITH NYLON PULL-STRINGS FROM IT ROOM UNDERGROUND TO PLAZA. PROVIDE A 13"X24" PULL-BOX IN APPROXIMATELY THE MIDDLE OF THE RUN AS PULL POINT. FIELD COORDINATE DIRECTION & TERMINATION LOCATION IN PLAZA WITH OWNER'S REP.
3. 8" CEILING SPEAKER FOR INTERCOM SYSTEM. PROVIDE ½" CONDUIT BACK TO IT ROOM WITH (1) 18 GA AWG COMMUNICATION WIRE
4. 8" W.P. CEILING SPEAKER FOR INTERCOM SYSTEM. PROVIDE ½" CONDUIT BACK TO IT ROOM WITH (1) 18 GA AWG COMMUNICATION WIRE
5. EXTERIOR BLDG PORT PROVIDE ½" CONDUIT BACK TO IT ROOM PROVIDE 12" COILED CABLE IN WEATHERPROOF NEMA 3R BOX MOUNTED AT 18'-0" ABOVE GRADE (TYP.)
6. INTERCOM STATION-PROVIDE ½' CONDUIT BACK TO IT ROOM WITH 1 18GA AWG COMMUNICATION WIRE.(TYP.)
7. PROVIDE (4) DATA DROPS FROM CEILING TO 24" ABOVE SLAB

LOW VOLTAGE PLAN GENERAL NOTES:

1. CAT6 PLENUM RATED CABLE TO BE USED FOR ALL VOICE AND DATA RUNS.
2. ALL RUNS ARE TO BE TESTED, CERTIFIED, AND LABELED.
3. LABELING REQUIREMENTS TO BE SUPPLIED BY TA FOR CABLE RUNS, PATCH PANELS, AND WALL PLATES.
4. DATA CABLES WILL ALL TERMINATE TO PATCH PANELS USING A 568B CONNECTION
5. ALL VOICE/DATA OR VOICE/DATA/ANALOG COMBINATIONS WILL USE THE SAME CONDUIT DROP AND BOX UNLESS NOTED OTHERWISE.



DROP BOX LEGEND

BOX PRINT #	LOCATION	# OF CABLES	CONDUIT SIZE
1	SHOP MGR	2	2-1/2"
2	SHOP MGR	2	2-1/2"
3	SHOP COUNT	2	2-1/2"
4	SHOP COUNT	2	2-1/2"
5	PARTS ROOM	2	3/4"
6	MEDIA TV	1	1/2"
7	POS REAR	2	2-1/2"
8	POS REAR	2	2-1/2"
9	POS REAR	4	2-1/2"
10	POS REAR	4	2-1/2"
11	POS FRONT	4	2-1/2"
12	POS FRONT	4	2-1/2"
13	POS FRPNT	4	2-1/2"
14	TECH WINDOW	1	1/2"
15	TECH WINDOW	1	1/2"
16	TECH WINDOW	1	1/2"
17	TECH BAY	1	1/2"
18	TECH BAY	1	1/2"
19	WIRELESS AP	1	1/2"
20	VEEDER ROOT	1	1/2"
21	MENU BOARD	1	1/2"

1 **LOW VOLTAGE-PLAN**
Scale: 1/8" = 1'-0"

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REVISIONS

LOW VOLTAGE PLAN

E-104

LIGHT FIXTURE SCHEDULE

LEGEND	MARK	DESCRIPTION	MODEL	MANUFACTURER	LAMP	KELVIN	SOURCE LUMENS	WATT	SUPPLIED BY / INSTALLED BY
	A	NARROW HIGH-BAY	IBGN-30000LM-SEF-ACL-WD-MOVOLT-GZ10-50K-80CRI-DEH	LITHONIA	LED	5000K	30000	174.0	GC / GC
	AE	NARROW HIGH-BAY WITH 20W EMERGENCY BATTERY BACKUP	IBGN-30000LM-SEF-ACL-WD-MOVOLT-GZ10-50K-80CRI-DEH-IE20WCPHE	LITHONIA	LED	5000K	30000	174.0	GC / GC
	B	2'X2' TROFFER, SATIN WHITE LENS	2GTL-2-48-FW-SWL-GZ10-LP850	LITHONIA	LED	5000K	4800	42.0	GC / GC
	BE	2'X2' TROFFER, SATIN WHITE LENS	2GTL-2-48-FW-SWL-GZ10-LP850	LITHONIA	LED	5000K	4800	42.0	GC / GC
	C4	4' STRIP FIXTURE, SWITCHABLE CCT AND LUMEN	CSS-L48-AL03-MVOLT-SWW3-80CRI	LITHONIA	LED	5000K	4000	43.9	GC / GC
	C8	8' STRIP FIXTURE, SWITCHABLE CCT AND LUMEN	CSS-L96-AL03-MVOLT-SWW3-80CRI	LITHONIA	LED	5000K	8000	71.7	GC / GC
	D	6" DOWNLIGHT, WHITE FINISH	LDN6-35/10-L06-WR-MVOLT-GZ1	LITHONIA	LED	3500K	1000	10.4	GC / GC
	E	4' PIT LIGHT	HJHL42-060-50-U-120	LITHONIA	LED	5000K	8000	60.0	GC / GC
	F	2' VANITY SCONCE, SATIN BRONZE FINISH, MOUNT ON WALL ABOVE SINKS IN RESTROOM	BDFV-24-LED-3-B-Z1-WSA-DIM	LIGHTWAY INDUSTRIES	LED	3500K	2420	18.0	GC / GC
	G	3' VANITY SCONCE, SATIN BRONZE FINISH, MOUNT ON WALL ABOVE SINKS IN RESTROOM	BDFV-36-LED-3-B-Z1-WSA-DIM	LIGHTWAY INDUSTRIES	LED	3500K	3630	27.0	GC / GC
	H	EXTERIOR WALL MOUNT, BLACK FINISH, WALL BRACKET MOUNT AT 20'-0" A.F.F. TO BOTTOM OF FIXTURE	DSX2-LED-P8-50K-BLC-MVOLT-WBA-DBLXD	LITHONIA	LED	5000K	40837	431.0	GC / GC
	EM	EMERGENCY EGRESS REMOTE HEAD, METAL HOUSING , WHITE FINISH, LOW TEMPERATURE OPTION, 40'-0" SPACE & 30' PROJECTION AT 8.5, MOUNTING HEIGHT, COORDINATE FINISH WITH PM	NF3-WB-10L-WH-CL	EXITRONIX	LED	–	–	10.5	GC / GC
	EX	EMERGENCY EGRESS REMOTE HEAD, METAL HOUSING , WHITE FINISH, LOW TEMPERATURE OPTION, 40'-0" SPACE & 30' PROJECTION AT 8.5, MOUNTING HEIGHT, COORDINATE FINISH WITH PM	DSX2-LED-P8-50K-BLC-MVOLT-WBA-DBLXD	LITHONIA	LED	–	–	1.0	GC / GC

NOTES:

1. EMERGENCY AND EXIT SIGNS SHALL BE PROVIDED WITH BACKUP POWER SOURCE CAPABLE OF SUPPLYING A MINIMUM OF 90 MINUTES.
2. ALL EMERGENCY AND EXIT LIGHTING SHALL BE WIRED TO THE EMERGENCY WIRING CIRCUIT CONDUCTOR AHEAD OF THE SWITCH LEG.
3. GENERAL CONTRACTOR TO COORDINATE LIGHT SWITCHES LOCATION WITH THE OWNER
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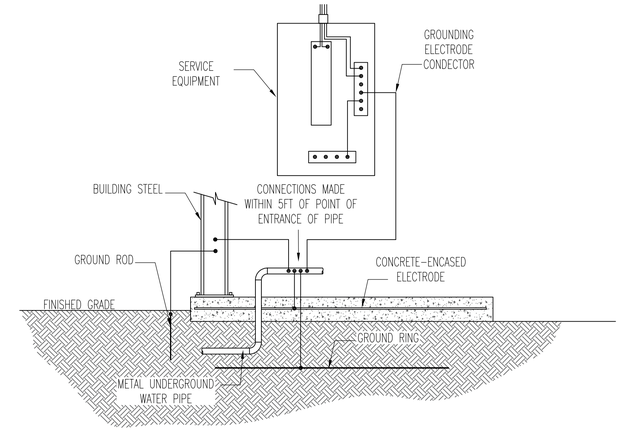
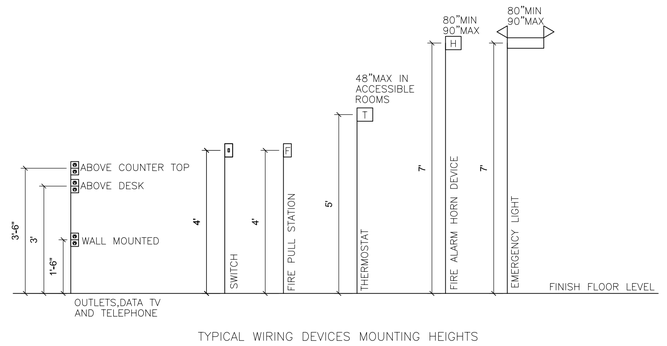
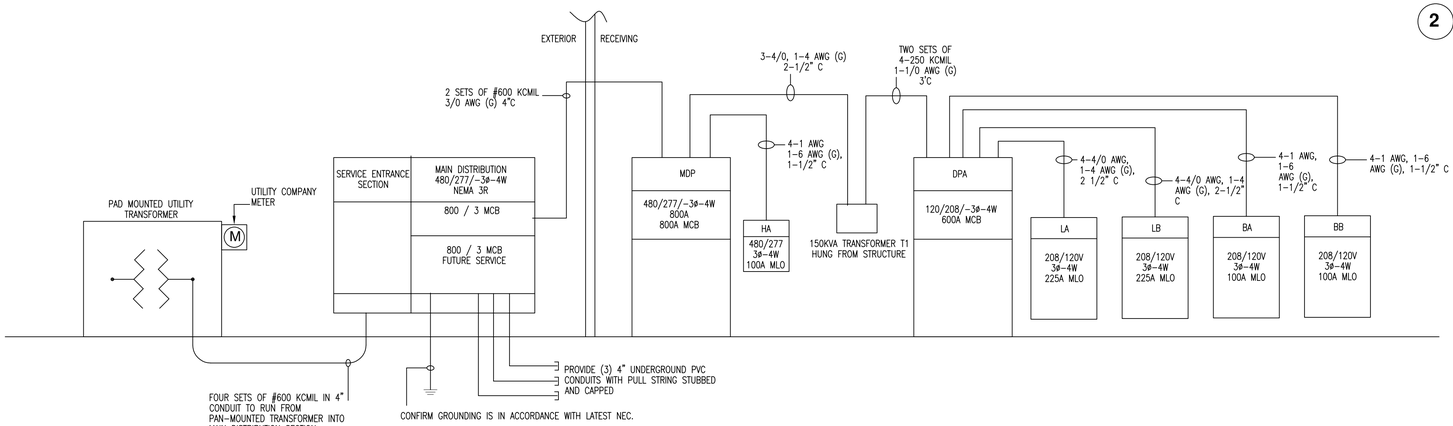


3 SERVICE GROUND DETAILS
Scale: NTS



TYPICAL WIRING DEVICES MOUNTING HEIGHTS

2 TYPICAL WIRING DEVICES MOUNTING HEIGHTS
Scale: NTS



1 POWER DISTRIBUTION DIAGRAM
Scale: NTS

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TA TRAVEL CENTER
PARCEL A, B, AND C WITHIN LOT 3 IN
SECTION 19, T11N, R31E, N.M.P.M.
TUCUMCARI, NM
NEW DEVELOPMENT

DATE: Nov. 2023

REVISIONS

SCHEDULE AND DETAILS

E-601

PANEL: MDP

PANEL: MDP	SURFACE	SERVES:	
800 AMP	VOLTS: 480/277	3 PHASE/4WIRE+GND	AIC RATING: 65,000

CCT	SERVES	VA	OCP	PH	CCT	SERVES	VA	OCP
1	PANEL 'DPA' VIA XFMR 'T1'	53214	225/3	A	2	AIR COMPRESSOR	3880	20/3
3	–	45170	–	B	4	–	3880	
5	–	41390	–	C	6	–	3880	
7	PANEL 'HA'	640	100/3	A	8			
9	–	1100	20/3	B	10			
11	–	1100		C	12			
13				A	14			
15				B	16			
17				C	18			

CONNECTED LOAD		DEMAND	
LOAD SUMMARY	CON. VA	DIV. FAC	D. VA
CONTINUOUS	31100	1.25	38800
RECEPTACLES	4860.0	1.00	13300
KITCHEN EQUIP.	0	0.65	0.0
HVAC	47300	1.00	47300
NON–CONTINUOUS	65400	1.00	65400
LARGEST MOTOR	0.0	0.25	0.0
TOTAL VA	152,044		190,055
TOTAL AMPS	183.1		228.8

LOAD BALANCE PER PHASE	
PHASE A	58.4
PHASE B	53.4
PHASE C	48.4
LOWEST PHASE PLUS 10%	
48.4 + (10% * 48.4)	52.84
PHASE ARE IN BALANCE	

LOCATION: ELECTRICAL ROOM

PANEL: HA

PANEL: HA	SURFACE	SERVES:	
100 AMP	VOLTS: 480/277	3 PHASE/4WIRE+GND	AIC RATING:65,000

CCT	SERVES	VA	OCP	PH	CCT	SERVES	VA	OCP
1	EXTERIOR BUILDING LIGHTING	500	20/1	A	2	SITE POLE LTG	2060	20/1
3			–	B	4	SITE POLE LTG	2040	20/1
5			–	C	6	SITE POLE LTG	2074	20/1
7				A	8	SITE POLE LTG	2060	20/1
9				B	10			
11				C	12			
13				A	14			
15				B	16			
17				C	18			
19				A	20			
21				B	22			
23				C	24			
25				A	26			
27				B	28			
29				C	30			

CONNECTED LOAD		DEMAND	
LOAD SUMMARY	CON. VA	DIV. FAC	D. VA
CONTINUOUS	9,800	1.25	12,200
RECEPTACLES	0.0	1.00	0.0
KITCHEN EQUIP.	0.0	0.65	0.0
HVAC	0.0	1.00	0.0
NON–CONTINUOUS	500	1.00	500
LARGEST MOTOR	0.0	0.25	0.0
TOTAL VA	9,800		12,200
TOTAL AMPS	11.7		18.3

LOAD BALANCE PER PHASE	
PHASE A	4,600
PHASE B	2,400
PHASE C	2,700
LOWEST PHASE PLUS 10%	
– + (10% * –)	
PHASE ARE IN BALANCE	

LOCATION: ELECTRICAL ROOM

PANEL: DPA

PANEL: DPA	SURFACE	SERVES:	
600 AMP	VOLTS: 208/120	3 PHASE/4WIRE+GND	AIC RATING: 42,000

CCT	SERVES	VA	OCP	PH	CCT	SERVES	VA	OCP
1	PANEL LA	12170	200/3	A	2	PANEL BA	6,740	100/3
3	–	12360	–	B	4	–	5,920	–
5	–	12650	–	C	6	–	3,620	–
7	PANEL 'LB'	9,404	200/3	A	8	PANEL BB	4,880	100/3
9	–	10880		B	10	–	3,480	–
11	–	4,160		C	12	–	3,220	–
13	WELDER REAR	4,160	50/2	A	14	MAU–1	7,170	100/3
15		4,160		B	16	–	7,170	–
17	WELDER FRONT	4,160	50/2	C	18	–	7,170	–
19		4,160		A	20	SPIN BALANCER	1,500	20/3
21				B	22	–	1,500	–
23				C	24	–	1,500	–

CONNECTED LOAD		DEMAND	
LOAD SUMMARY	CON. VA	DIV. FAC	D. VA
CONTINUOUS	0.0	1.25	0.0
RECEPTACLES	21,840	1.00	21,840
KITCHEN EQUIP.	0	0.65	0.0
HVAC	55,910	1.00	55,910
NON–CONTINUOUS	59,294	1.00	59,294
LARGEST MOTOR	0.0	0.25	0.0
TOTAL VA	137,044		137044
TOTAL AMPS	380.6		380.6

LOAD BALANCE PER PHASE	
PHASE A	53,214
PHASE B	45,470
PHASE C	41,390
LOWEST PHASE PLUS 10%	
41,390 + (10% * 41,390	45,529
REBANLANCE LOADS	

LOCATION: ELECTRICAL ROOM

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DATE: Nov. 2023

REVISIONS

PANEL SCHEDULE

E–602

PANEL: L A | SURFACE | SERVES: | NEMA 1
225 AMP MLO | VOLTS: 120/208 | 3 PHASE/4WIRE+GND | AIC RATING: 22,000

CCT	SERVES	VA	OCP	WIRE	PH	CCT	SERVES	VA	OCP	WIRE
1	RECEPT. TRUCK WASH BAY	720	20/1	12	A	2	TV. SALES AREA	250	20/1	12
3	RECEPT. TRUCK WASH BAY	720	20/1	12	B	4	WATER FOUNTAIN–SALES AREA	600	20/1	12
5	RECEPT. EQUIP & STORAGE	1080	20/1	12	C	6	TV. SALES AREA	250	20/1	12
7	RECEPT. SALES AREA	1080	20/1	12	A	8	COPY MACHINE–SALES AREA	1000	20/1	12
9	SALES TRUCKER WORKSTATION	360	20/1	12	B	10	OVERHEAD DOOR–TRUCK WASH BAY	1400	20/2	12
11	SALES TRUCKER WORKSTATION	360	20/1	12	C	12		1400		12
13	RECEPT. SALES COUNTER–TSA	360	20/1	12	A	14	OVERHEAD DOOR–TRUCK WASH BAY	1400	20/2	12
15	RECEPT. SALES COUNTER–TSA	360	20/1	12	B	16		1400		12
17	RECEPT. SALES COUNTER–TSA	360	20/1	12	C	18	OVERHEAD DOOR–TRUCK WASH BAY	1400	20/2	12
19	RECEPT. SALES COUNTER–TSA	720	20/1	12	A	20		1400		12
21	RECEPT. OFFICE AREA	1440	20/1	12	B	22	EUH–1 RISER ROOM	1500	25/2	10
23	RECEPT. EMPLOYEE AREA AND RR.	1260	20/1	12	C	24		1500		10
25	RECEPT. SHOP STORAGE AREA	900	20/1	12	A	26	GUH–1, 2	500	20/1	12
27	RECEPT. SHOP STORAGE AREA	720	20/1	12	B	28	GUH–3, 4	500	20/1	12
29	RECEPT. IT ROOM	360	20/1	12	C	30	CEILING FAN–SHOP AREA	1500	20/1	12
31	RECEPT. IT ROOM	360	20/1	12	A	32	CEILING FAN–SHOP AREA	1500	20/1	12
33	RECEPT. IT ROOM	360	20/1	12	B	34	CEILING FAN–SHOP AREA	1500	20/1	12
35	RECEPT. SHOP STORAGE AREA & RR.	480	20/1	12	C	36	CEILING FAN–SHOP AREA	1500	20/1	12
37	WORKSTATION–INVENTORY AREA	480	20/1	12	A	38	CEILING FAN–SHOP AREA	1500	20/1	12
39	RECEPT. GENERAL SERVICE ELE. ROOM	180	20/1	12	B	40	CEILING FAN–SHOP AREA	1500	20/1	12
41					C	42	AIR DRYER	1200	20/1	12
43					A	44	TANK AIR PUMP CONTROL SOLENOID	960	20/1	12
45					B	46	MINI–SPLIT UNIT CU–1	1350	15/2	12
47					C	48	–	1350		12
49					A	50				10
51					B	52				10
53					C	54				10
55					A	56				10
57					B	58				10
59					C	60				10

CONNECTED LOAD		DEMAND	
LOAD SUMMARY	CON. VA	DIV. FAC	D. VA
CONTINUOUS	0.0	1.25	0.0
RECEPTACLES	12,480	NEC	11,240
KITCHEN EQUIP.	0	0.65	–
HVAC	13,000	1.00	13,000
NON–CONTINUOUS	11,700	1.00	11,700
LARGEST MOTOR	0.0	0.25	0.0
TOTAL VA	37,180		35,940
TOTAL AMPS	103.2		99.8

LOAD BALANCE PER PHASE	
PHASE A	12170
PHASE B	12360
PHASE C	12650
LOWEST PHASE PLUS 10%	
12170 + (10% * 12170)	13387
PHASE ARE IN BALANCE	

LOCATION: ELECTRICAL ROOM

PANEL: L B | SURFACE | SERVES: | NEMA 1
225 AMP MLO | VOLTS: 120/208 | 3 PHASE/4WIRE+GND | AIC RATING: 22,000

CCT	SERVES	VA	OCP	WIRE	PH	CCT	SERVES	VA	OCP	WIRE
1	LTG. TIRE STORAGE AREA	870	20/1	12	A	2				
3	LTG. MECHANICAL & ELECTRICAL ROOM	530	20/1	12	B	4				
5	RECEPT. HVAC	360	20/1	12	C	6				
7	GUH 4,5,6	750	20/1	12	A	8	RTU–1	1610	25/2	10
9	LTG. SHOP AREA	1740	20/1	12	B	10	–	1610		10
11	LTG. SHOP AREA	1740	20/1	12	C	12	EF–7, ROOF MOUNTED	50	20/1	12
13	LTG. TRUCK WASH BAY	1390	20/1	12	A	14				
15	LTG. PIT	480	20/1	12	B	16				
17	LTG. OFFICE, SALES, IT & RISER	680	20/1	12	C	18	EXTERIOR RECEPT.	1260	20/1	12
19	LTG. EMPLOYEE AREA & RR.	310	20/1	12	A	20	EXTERIOR RECEPT.	540	20/1	12
21	LTG. SHOP STORAGE	1190	20/1	12	B	22	EXTERIOR RECEPT.	1080	20/1	12
23	EF–1, ROOF MOUNTED	30	20/1	12	C	24	EXTERIOR BUILDING SIGNAGE	1200	20/1	12
25	EF–2, ELECTRICAL ROOM	30	20/1	12	A	26	EXTERIOR BUILDING SIGNAGE	1200	20/1	12
27	EF–3, TIRE STORAGE	50	20/1	12	B	28	EXTERIOR BUILDING SIGNAGE	1200	20/1	12
29	EF–4, ROOF MOUNTED	550	15/3	12	C	30	EXTERIOR BUILDING SIGNAGE	1200	20/1	12
31	–	550		12	A	32	RECEPT. TIRE STORAGE	540	20/1	12
33	–	550		12	B	34	OVERHEAD DOOR–TRUCK WASH BAY	1400	20/2	12
35	EF–5, ROOF MOUNTED	550	15/3	12	C	36		1400		12
37	–	550		12	A	38				
39	–	550		12	B	40				
41	EF–7, ROOF MOUNTED	50	20/1	12	C	42				
43	LTG. EQUIP. & STORAGE	1044	20/1	12	A	44				
45					B	46				
47					C	48				

CONNECTED LOAD		DEMAND	
LOAD SUMMARY	CON. VA	DIV. FAC	D. VA
CONTINUOUS	0.0	1.25	0.0
RECEPTACLES	3,780	1.00	3,780
KITCHEN EQUIP.	0	0.65	–
HVAC	8,000	1.00	8,000
NON–CONTINUOUS	17,574	1.00	17,574
LARGEST MOTOR	0.0	0.25	0.0
TOTAL VA	29,354		29,354
TOTAL AMPS	81.5		81.5

LOAD BALANCE PER PHASE	
PHASE A	9,404
PHASE B	10880
PHASE C	9,070
LOWEST PHASE PLUS 10%	
9070 + (10% * 9070)	9,977
REBALANCE LOADS	

LOCATION: ELECTRICAL ROOM

PANEL: B A | SURFACE | SERVES: | NEMA 1
100 AMP MLO | VOLTS: 208/120 | 3 PHASE/4WIRE+GND | AIC RATING: 22,000

CCT	SERVES	VA	OCP	WIRE	PH	CCT	SERVES	VA	OCP	WIRE
1	RECEPT. SHOP BAY ONE	720	20/1	12	A	2	OVERHEAD DOOR–TRUCK WASH BAY	1400	20/2	12
3	RECEPT. SHOP BAY ONE	360	20/1	12	B	4	–	1400		12
5	RECEPT. SHOP BAY ONE	360	20/1	12	C	6	OVERHEAD DOOR–TRUCK WASH BAY	1400	20/2	12
7	RECEPT. SHOP BAY ONE	360	20/1	12	A	8	–	1400		12
9	RECEPT. SHOP BAY ONE	360	20/1	12	B	10	OVERHEAD DOOR–TRUCK WASH BAY	1400	20/2	12
11	TOXALERT SENSOR CONTROL	100	20/1	12	C	12	–	1400		12
13	TIRE INFLATOR	1100	20/1	12	A	14	OVERHEAD DOOR–TRUCK WASH BAY	1400	20/2	12
15	CHOP SAW	1000	20/1	12	B	16	–	1400		12
17	GENERAL BENCH RECEPT.	360	20/1	12	C	18				
19	GENERAL BENCH RECEPT.	360	20/1	12	A	20				
21					B	22				
23					C	24				
25					A	26				
27					B	28				
29					C	30				
31					A	32				
33					B	34				
35					C	36				
37					A	38				
39					B	40				
41					C	42				

CONNECTED LOAD		DEMAND	
LOAD SUMMARY	CON. VA	DIV. FAC	D. VA
CONTINUOUS	0.0	1.25	0.0
RECEPTACLES	2,880	1.00	2,880
KITCHEN EQUIP.	0	0.65	–
HVAC	13,400	1.00	13,400
NON–CONTINUOUS	–	1.00	–
LARGEST MOTOR	0.0	0.25	0.0
TOTAL VA	16,280		16,280
TOTAL AMPS	45.2		45.2

LOAD BALANCE PER PHASE	
PHASE A	6,740
PHASE B	5,920
PHASE C	3,620
LOWEST PHASE PLUS 10%	
3620 + (10% * 3620)	3,982
REBANLANCE LOADS	

LOCATION: SHOP

PANEL: B B | SURFACE | SERVES: | NEMA 1
100 AMP MLO | VOLTS: 208/120 | 3 PHASE/4WIRE+GND | AIC RATING: 22,000

CCT	SERVES	VA	OCP	WIRE	PH	CCT	SERVES	VA	OCP	WIRE
1	RECEPT. TECH STATION–BAY 2&3	360	20/1	12	A	2	OVERHEAD DOOR–TRUCK WASH BAY	1400	20/2	12
3	RECEPT. TECH STATION–BAY 2&3	360	20/1	12	B	4	–	1400		12
5	RECEPT. TECH STATION–BAY 2&3	360	20/1	12	C	6	OVERHEAD DOOR–TRUCK WASH BAY	1400	20/2	12
7	RECEPT. BAY 3	540	20/1	12	A	8	–	1400		12
9	RECEPT. BAY 3	720	20/1	12	B	10				
11	SHOP FLOOR BOX.	360	20/1	12	C	12				
13	OIL FILTER CRUSHER GENERAL RECEPT.	180	20/1	12	A	14				
15	OIL FILTER CRUSHER	1000	20/1	12	B	16				
17	TIRE INFLATOR	1100	20/1	12	C	18				
19	CHOP SAW	1000	20/1	12	A	20				
21					B	22				
23					C	24				
25					A	26				
27					B	28				
29					C	30				
31					A	32				
33					B	34				
35					C	36				
37					A	38				
39					B	40				
41					C	42				

CONNECTED LOAD		DEMAND	
LOAD SUMMARY	CON. VA	DIV. FAC	D. VA
CONTINUOUS	0.0	1.25	0.0
RECEPTACLES	2,700	1.00	2,700
KITCHEN EQUIP.	0	0.65	–
HVAC	0.0	1.00	0.0
NON–CONTINUOUS	8,880	1.00	8,880
LARGEST MOTOR	0.0	0.25	0.0
TOTAL VA	11,580		11,580
TOTAL AMPS	32.1		32.1

LOAD BALANCE PER PHASE	
PHASE A	4,880
PHASE B	3,480
PHASE C	3,220
LOWEST PHASE PLUS 10%	
3,220 + (10% * 3,220)	3,542
REBALANCE LOADS	

LOCATION: SHOP

JAKAN ENGINEERING
CIVIL • STRUCTURAL
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Frisco, Texas 75034 HUF #15815
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#635–23

REVIEWED FOR GENERAL CONFORMANCE
01/23/2024 2:13 AM
A205698
11-13-23

8-09-23

TA TRAVEL CENTER
PARCEL A, B, AND C WITHIN LOT 3 IN
SECTION 19, T11N, R31E, N.M.P.M.
TUCUMCARI, NM
NEW DEVELOPMENT

DATE: Nov. 2023

REVISIONS

PANEL SCHEDULE

E–603