# A NEW ENVIORNMENTAL IMPROVMENT FOR

# PRESCOTT FIRE DEPARTMENT #71

# 335 WHITE SPAR RD.

# PRESCOTT, ARIZONA 86303

INTERIOR ELEVATIONS AND SECTION

ENLARGED REFLECTED CEILING PLAN

ROOF FRAMING PLAN

MECHANICAL BUILDING PLAN MECHANICAL FLOOR PLAN

PLUMBING BUILDING PLAN

OVERALL ELECTRICAL PLAN

IN ATTACHED SHEETS FROM FROST ENGINEERING

CONTRACT DOCUMENT SHEET INDEX

ENLARGED PLUMBING FLOOR PLAN

STRUCTURAL ANALYSIS OF DUCT OPENING AND RTU BEARING

MECHANICAL & PLUMBING SPECIFICATIONS

ENLARGED LIGHTING/POWER/HVAC PLANS SCHEDULES / LOAD CALCS / ONE LINE DIAGRAM

DIMENSIONED AND ANNOTATED ENLARGED FLOOR PLAN

- THE GENERAL CONTRACTOR, HEREINAFTER REFERRED TO AS "THE CODES, ORDINANCES, AND STANDARDS PRIOR TO BIDDING AND SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THESE STANDARDS

- ITEMS NOT INDICATED IN THESE DOCUMENTS THAT CAN BE LEGITIMATELY
- CONTRACT DOCUMENTS. THE CONTRACT SHALL BE BASED ON COMPLETE
- DIMENSIONS TAKE PRECEDENCE OVER SCALE ON CONSTRUCTION DOCUMENTS. DO NOT SCALE DRAWINGS.
- THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING HIS THE WORK UNDER THE CONTRACT.
- 9. ALL WORK SHALL BE EXECUTED IN A NEAT AND WORKMANLIKE MANNER.
- 10. WHEN WORK NOT SPECIFICALLY CALLED OUT IS REQUIRED TO COMPLETE THE PROJECT, IT SHALL BE PROVIDED AND BE OF MATERIALS AND WORKMANSHIP THAT THE PROJECT BUDGET ALLOWS.
- 11. CONTRACTOR SHALL GUARANTEE ALL WORKMANSHIP AND MATERIALS FOR A PERIOD OF TWO YEARS FROM THE DATE OF SUBSTANTIAL COMPLETION
- 12. UNLESS OTHERWISE SPECIFICALLY NOTED, THE CONTRACTOR SHALL PROVIDE AND PAY FOR ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, CONSTRUCTION EQUIPMENT AND MACHINERY, TRANSPORTATION, AND OTHER FACILITIES AND SERVICES NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK IN ACCORDANCE WITH PROJECT BUDGET.
- 13. THE CONTRACTOR WARRANTS TO THE OWNER AND THE ARCHITECT THAT ALL MATERIALS AND EQUIPMENT FURNISHED UNDER THIS CONTRACT WILL BE NEW UNLESS OTHERWISE SPECIFIED, AND THAT ALL WORK WILL BE GOOD QUALITY, FREE FROM FAULTS AND DEFECTS, AND IN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS. ALL WORK NOT SO CONFORMING TO THESE STANDARDS MAY BE CONSIDERED DEFECTIVE.
- 14. THE WARRANTIES AND GUARANTEES PROVIDED IN THE CONSTRUCTION DOCUMENTS SHALL BE IN ADDITION TO, AND NOT IN LIMITATION OF, ANY OTHER WARRANTY, GUARANTY, OR REMEDY REQUIRED BY LAW OR BY THE CONSTRUCTION DOCUMENTS.
- 15. ALL MERCHANDISE AND EQUIPMENT SUPPLIED BY CONTRACTOR CARRIES THE MANUFACTURES STANDARD WARRANTY ONLY AND SHALL BE VOIDED BY ABUSE, MISUSE, OR MISAPPLICATION.
- 16. PORTABLE FIRE EXTINGUISHERS PER NFPA #10 2A:10B:C RATED MINIMUM SHALL BE PROVIDED AS SHOWN ON THE DRAWINGS.
- 17. EXITWAYS SHALL BE ILLUMINATED BY BACK-UP POWER, THE CONTRACTOR SHALL PROVIDE EMERGENCY LIGHTING TESTING PRIOR TO INSPECTION BY DISCONNECTING THE MAIN.
- 18. THE UNLATCHING OF ANY LEAF OF ANY EXIT DOOR SHALL NOT REQUIRE MORE THAN ONE OPERATION. MANUALLY OPERATED EDGE-OF-SURFACE MOUNTED FLUSH BOLTS ARE PROHIBITED. ALL EXITS TO BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE.
- 19. HANDLES, PULLS, LATCHES, AND LOCKS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST TO OPERATE.
- 20. IT IS THE CONTRACTOR'S AND/OR SUBCONTRACTOR'S RESPONSIBILITY TO VERIFY IF ANY REVISIONS HAVE BEEN MADE TO THESE PLANS AND TO OBTAIN THE CURRENT PERMITTED SET OF PLANS PRIOR TO COMMENCING THE WORK.

CONTRACTOR GENERAL NOTES



VICINITY MAP

OCCUPANCY: **EDUCATION** 525 SQ. FT. BUSINESS 1,056 SQ. FT. 5,359 SQ. FT. S-1 ACCESSORY R-2 RESIDENTIAL 647 SQ. FT. CIRCULATION, TOILET, 1,709 SQ. FT. STORAGE ROOMS TYPE OF CONSTRUCTION: TYPE II FULLY NFPA-13 SPRINKLERED GROSS SF. FOR FLOOR 1 AND 2 10,417 SQ. FT.

**ACTUAL BUILDING AREA:** FLOOR 2 SF. 739 SQ. FT. TOTAL SF. 11,156 SQ. FT. MAXIMUM STORIES ALLOWABLE:

MAXIMUM BUILDING HEIGHT: ACTUAL: **EXISTING** EXITS PROVIDED: EXITS REQUIRED: (PER TABLE 1006.3.2)

OFF-STREET PARKING: EXISTING PARKING SPOTS PROVIDED TO REMAIN

CODE ANALYSIS

# **GOVERNING BUILDING CODES**

ALL CONSTRUCTION SHALL COMPLY WITH THE FOLLOWING CODES AND AMENDMENTS PER THEIR ADOPTING ORDINANCES:

2018 INTERNATIONAL BUILDING CODE 2018 INTERNATIONAL MECHANICAL CODE 2018 INTERNATIONAL PLUMBING CODE 2012 INTERNATIONAL FIRE CODE 2017 NATIONAL ELECTRICAL CODE 2018 INTERNATIONAL FUEL GAS CODE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN 2018 INTERNATIONAL ENERGY CONSERVATION CODE CITY OF PRESCOTT LAND DEVELOPMENT CODE DEEPWELL RANCH MASTER PLAN

GOVERNING BUILDING CODES

INCLUDING ALL CITY OF PRESCOTT AMMENDMENTS TO ANY APPLICABLE LISTED CODE

ALL PRODUCTS LISTED BY I.C.B.O./N.E.R. NUMBER(S) SHALL BE INSTALLED PER THE REPORT AND MANUFACTURER'S WRITTEN INSTRUCTIONS. PRODUCT SUBSTITUTION(S) FOR PRODUCT(S) LISTED SHALL ALSO HAVE I.C.B.O. APPROVED EVALUATION REPORT(S) OR BE APPROVED AND LISTED BY OTHER NATIONALLY RECOGNIZED TESTING AGENCIES.

CITY OF PRESCOTT 201 N. MONTEZUMA ST. PRESCOTT, ARIZONA 86301-3055

MICHAEL TAYLOR ARCHITECTS, INC. 118 SOUTH PLEASANT STREET PRESCOTT, ARIZONA 86303 (928) 445-0626

FROST ENGINEERING 1678 OAKLAWN DRIVE SUITE C PRESCOTT, ARIZONA 86305 (928) 776-4757

MECHANICAL, ELECTRICAL, PLUMBING ENGINEER BOWIE TIGLAS ENGINEERING, INC.

24820 NORTH 16TH AVENUE SUITE 170 PHOENIX, ARIZONA 85085 (602) 992-3900

CITY OF PRESCOTT 210 N. MONTEZUMA ST. PRESCOTT, ARIZONA 86303 (928) 777-1371

**AUTHORITY HAVING JURISDICTION** 

THE PROJECT INVOLVES THE PARTIAL INTERIOR REMODEL OF THE FIRST-STORY IN AN EXISTING TWO-STORY BUILDING CURRENTLY BEING USED AS A FIRE STATION. THE EXISTING BUILDING FOOTPRINT OF 11,156 SQUARE FEET WILL NOT BE CHANGED. TWO ROOMS WILL BE ADDED NEAR THE ENTRANCE CURRENTLY USED BY FIRE FIGHTERS AS A DESIGNATED TURNOUT LOCKER ROOM AND SEPARATE FACILITIES ROOM. THEY WILL SERVE AS AN ENVIRONMENTAL IMPROVEMENT TO THE OVERALL FIRE STATION. NO EXTERIOR CHANGES WILL BE MADE TO THIS STRUCTURE.

PROJECT DESCRIPTION

PROJECT ADDRESS: PARCEL #:

SECTION TOWNSHIP RANGE:

SUBDIVISION / LOT #: JURISDICTION:

PROJECT DATA

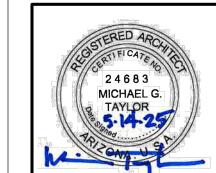
CITY OF PRESCOTT BR - BUSINESS REGIONAL S04-T13N-R02W

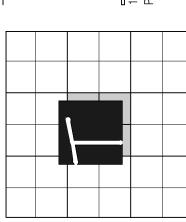
335 WHITE SPAR ROAD

109-15-024A

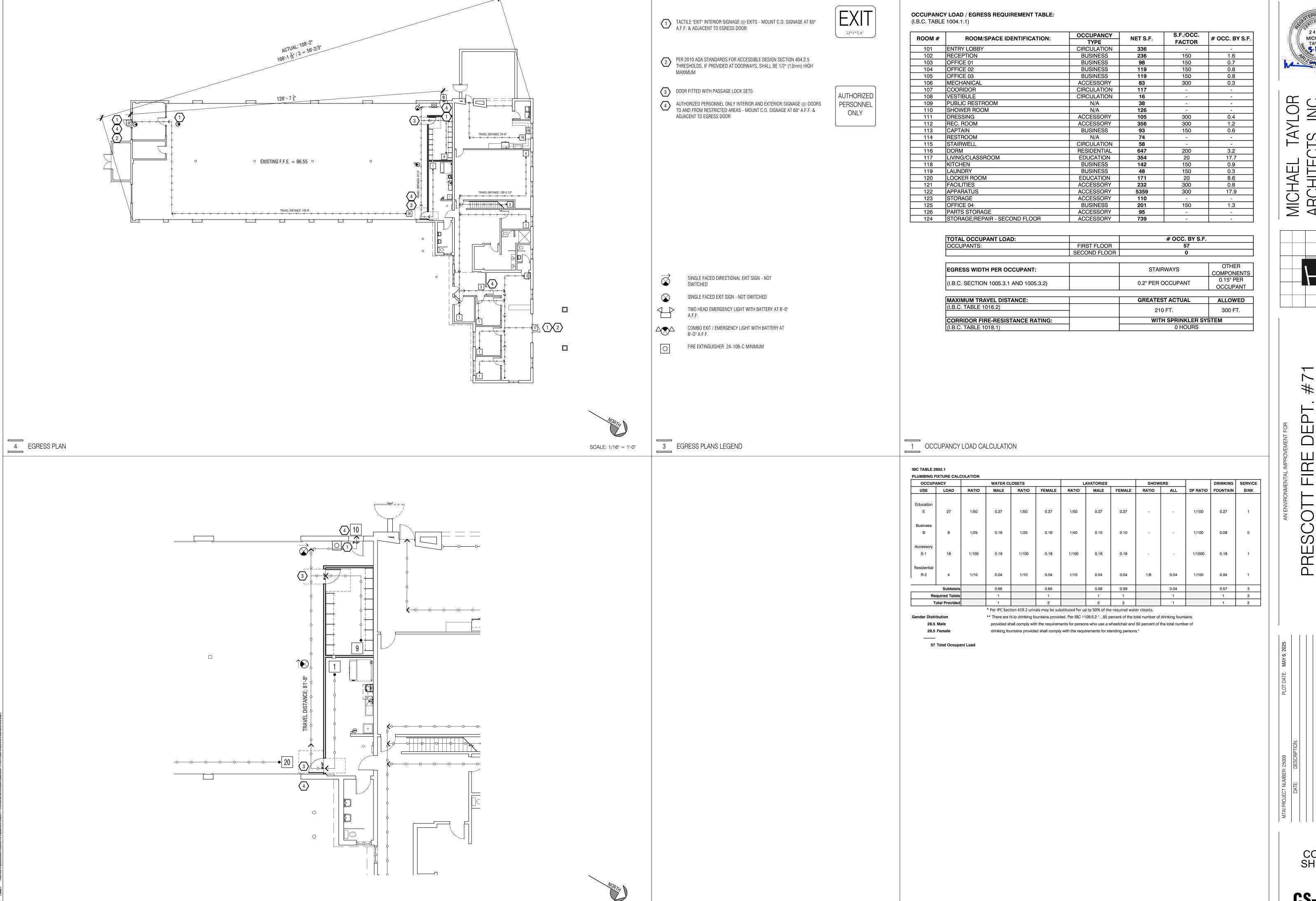
COVER SHEET

G-001





MAY 6, 20					
PLOT DATE: MAY 6, 20					
3ER: 25009	DESCRIPTION:				
JECT NUMBER: 25009	DATE:				



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

5 ENLARGED EGRESS PLAN

24683 MICHAEL G.

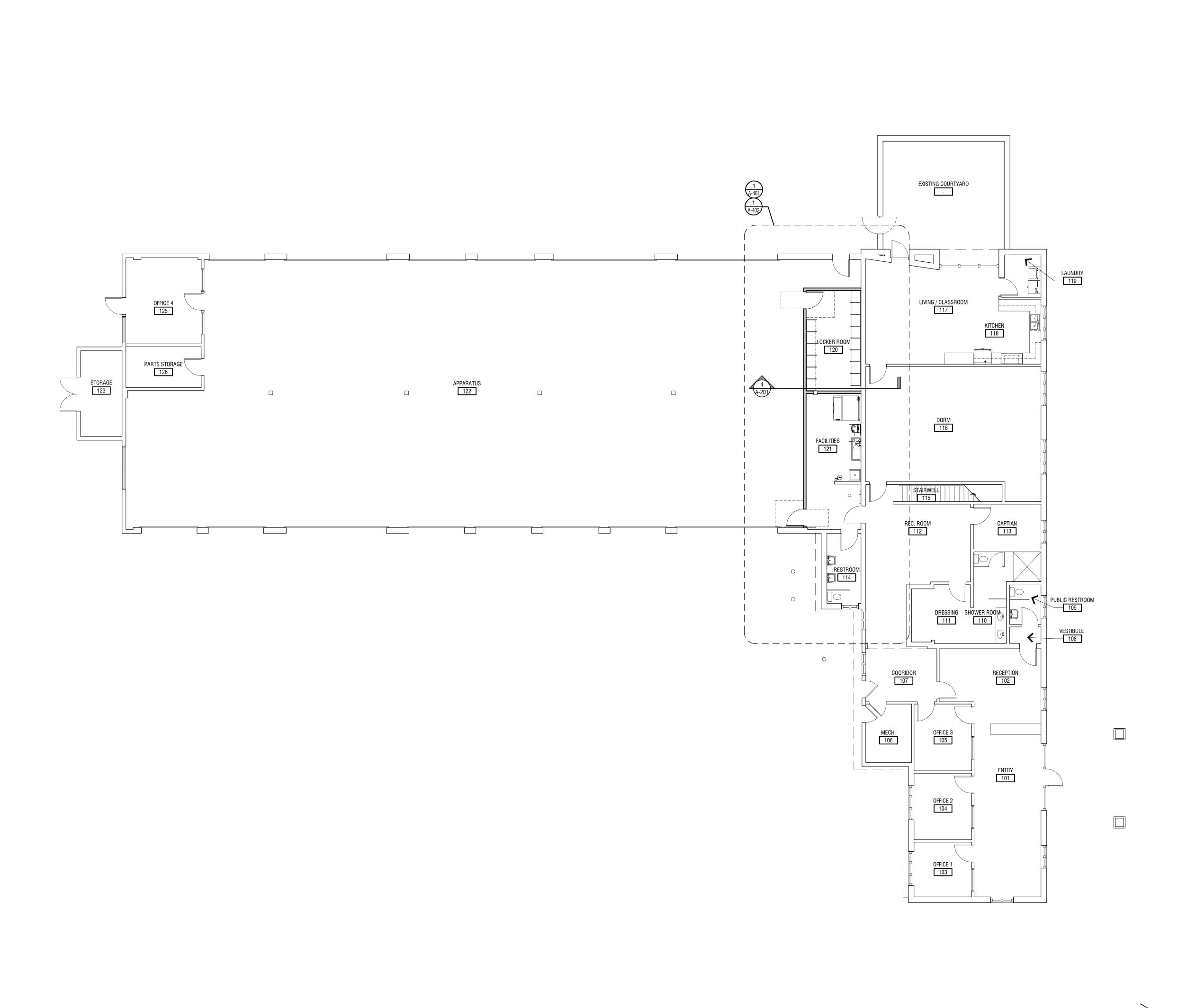
AYLOR S, INC.

MICHAEL ARCHITE(

CODE SHEET

**CS-101** 

2 PLUMBING FIXTURE CALCULATION



GENERAL PROJECT REQUIREMENTS

(0.00) NEW WALL TO BE PLACED BETWEEN THE EXISTING MECHANICAL UNIT AND EXISTING COLUMN (NOW ENCAPSULATED IN WALL) - VERIFY LOCATION IN FIELD

(0.01) COLUMN TO BE FLUSH ON LOCKER ROOM SIDE OF THE WALL

(0.02) FIELD VERIFY MEASUREMENT

**EXISTING CONDITIONS** 

(2.00) CONCRETE SLAB - EXISTING

(2.01) MASONRY WALL - EXISTING (2.02) PONY WALL - 2X4 @ 16" O.C. FRAME WALL - EXISTING

(2.03) STEEL SINK - EXISTING - VERIFY NEW LOCATION

(2.04) BASE AND UPPER CABINETS - TO BE REMOVED 2.05) DRINKING FOUNTAIN AND BOTTLE FILLING STATION - EXISTING - VERIFY NEW LOCATION

(2.06) COLUMN - EXISTING

(2.07) BEAM - EXISTING

(2.08) OVERHEAD GARAGE DOOR - EXISTING

(2.09) UNIT HEATER - EXISTING

(2.10) ICE MACHINE - EXISTING - VERIFY NEW LOCATION

(2.11) ELECTRICAL PANEL - EXISTING (2.12) CEILING AND ROOF - EXISTING

THERMAL AND MOISTURE PROTECTION

7.00 FIBER REINFORCED PANEL (FRP) BEHIND MOP SINK

(8.00) HOLLOW CORE METAL DOOR IN HOLLOW CORE METAL FRAME, SEE SCHEDULE

9.00 SUSPENDED ACOUSTICAL CEILING SYSTEM 2' X 4' - 10'-0" A.F.F.

(9.01) GWB WALLS - T&T, PAINTED - COLOR T.B.D.

(9.02) BASEBOARDS - VINYL MATERIAL CUT TO FIT, TYP 4" - COLOR - TBD

SPECIALTIES (10.00) AUTOMATIC SOAP DISPENSER - BOBRICK B-2012 OR SIMILAR

(10.01) AUTOMATIC PAPER TOWEL DISPENSER - PACIFIC BLUE ULTRA 9" MINI OR SIMILAR

(10.02) TURNOUT LOCKERS - NEW AND EXISTING (14 TOTAL) (10.03) TACTILE "EXIT" INTERIOR SINAGE AT EXITS - MOUNT C.O. SINAGE AT 60" A.F.F. &

ADJACENT TO EGRESS DOORS

(22.00) MOP SINK - NEW

(22.01) EYE WASH STATION - VERIFY REPLACING

HEATING, VENTILATING, AND AIR CONDITIONING (23.00) NEW ROOF TOP UNIT

23.01) HVAC VENTS

26.00 LIGHTING FIXTURE, SEE ELECTRICAL

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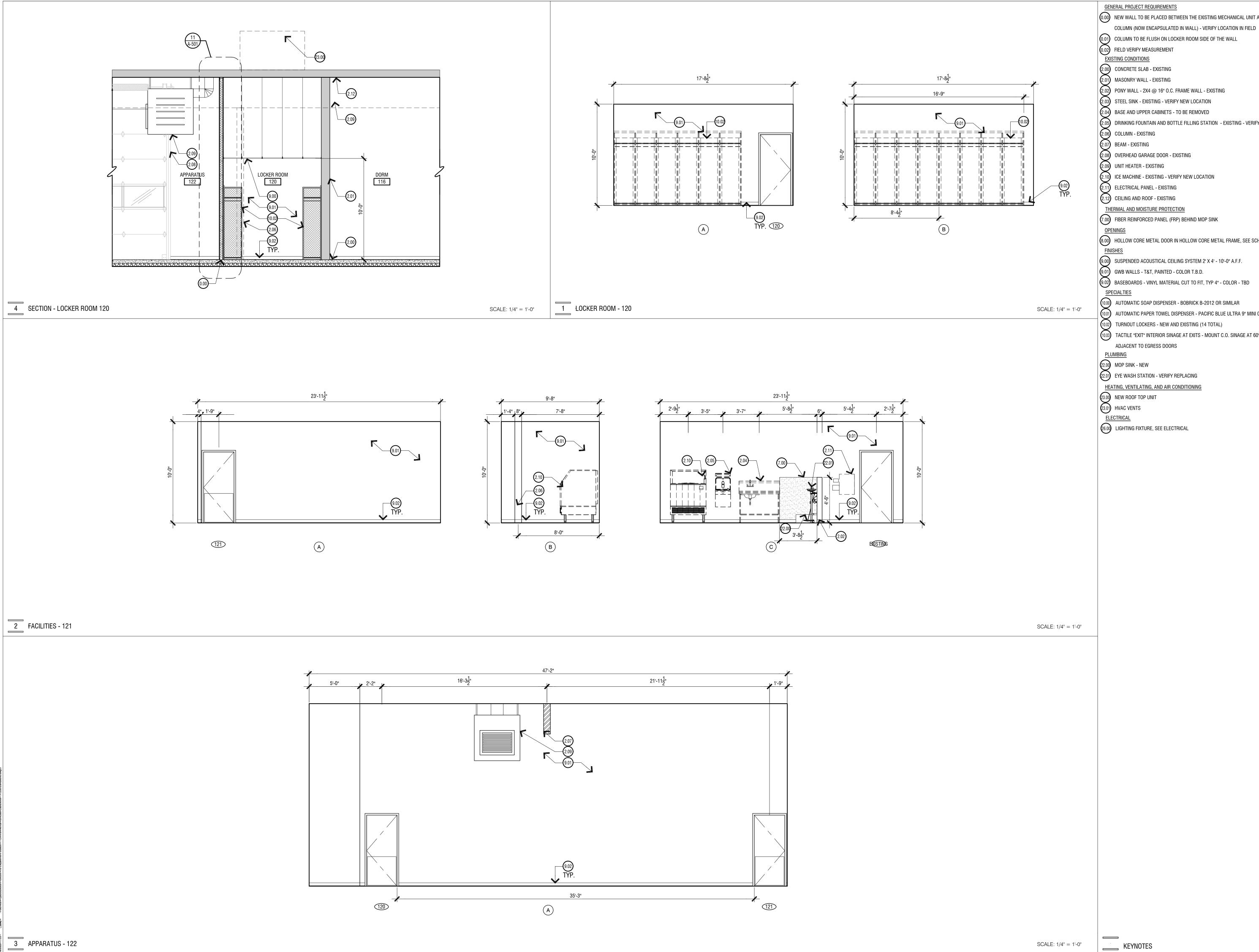
PRE

OVERALL FLOOR PLAN

A-101

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

1 PRELIMINARY FLOOR PLAN



(0.00) NEW WALL TO BE PLACED BETWEEN THE EXISTING MECHANICAL UNIT AND EXISTING

(0.01) COLUMN TO BE FLUSH ON LOCKER ROOM SIDE OF THE WALL

(2.03) STEEL SINK - EXISTING - VERIFY NEW LOCATION

2.05 DRINKING FOUNTAIN AND BOTTLE FILLING STATION - EXISTING - VERIFY NEW LOCATION

7.00 FIBER REINFORCED PANEL (FRP) BEHIND MOP SINK

(8.00) HOLLOW CORE METAL DOOR IN HOLLOW CORE METAL FRAME, SEE SCHEDULE

9.00) SUSPENDED ACOUSTICAL CEILING SYSTEM 2' X 4' - 10'-0" A.F.F.

(9.02) BASEBOARDS - VINYL MATERIAL CUT TO FIT, TYP 4" - COLOR - TBD

(10.00) AUTOMATIC SOAP DISPENSER - BOBRICK B-2012 OR SIMILAR (10.01) AUTOMATIC PAPER TOWEL DISPENSER - PACIFIC BLUE ULTRA 9" MINI OR SIMILAR

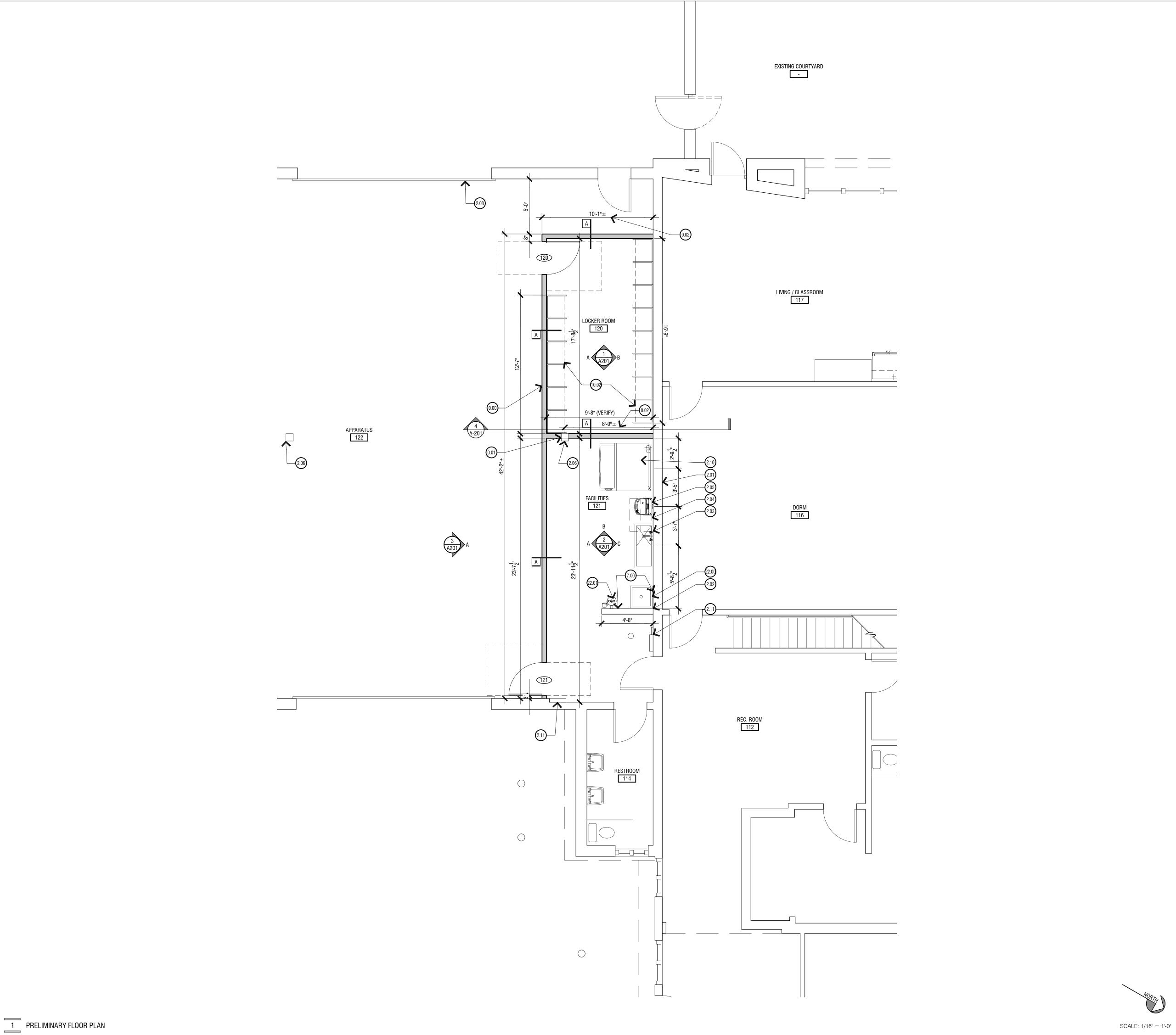
10.03 TACTILE "EXIT" INTERIOR SINAGE AT EXITS - MOUNT C.O. SINAGE AT 60" A.F.F. &

(22.01) EYE WASH STATION - VERIFY REPLACING

MICHAEL ARCHITE(

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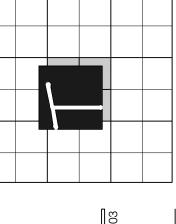
INTERIOR ELEVATIONS & SECTION **A-201** 



GENERAL PROJECT REQUIREMENTS

- 0.00 NEW WALL TO BE PLACED BETWEEN THE EXISTING MECHANICAL UNIT AND EXISTING COLUMN (NOW ENCAPSULATED IN WALL) - VERIFY LOCATION IN FIELD
- 0.01 COLUMN TO BE FLUSH ON LOCKER ROOM SIDE OF THE WALL
- (0.02) FIELD VERIFY MEASUREMENT
- **EXISTING CONDITIONS** (2.00) CONCRETE SLAB - EXISTING
- (2.01) MASONRY WALL EXISTING
- 2.02) PONY WALL 2X4 @ 16" O.C. FRAME WALL EXISTING
- 2.03 STEEL SINK EXISTING VERIFY NEW LOCATION
- (2.04) BASE AND UPPER CABINETS TO BE REMOVED
- 2.05 DRINKING FOUNTAIN AND BOTTLE FILLING STATION EXISTING VERIFY NEW LOCATION
- (2.06) COLUMN EXISTING
- (2.07) BEAM EXISTING
- 000 OVERHEAD GARAGE DOOR EXISTING
- (2.09) UNIT HEATER EXISTING
- (2.10) ICE MACHINE EXISTING VERIFY NEW LOCATION
- (2.11) ELECTRICAL PANEL EXISTING (2.12) CEILING AND ROOF - EXISTING
- THERMAL AND MOISTURE PROTECTION
- 7.00 FIBER REINFORCED PANEL (FRP) BEHIND MOP SINK
- (8.00) HOLLOW CORE METAL DOOR IN HOLLOW CORE METAL FRAME, SEE SCHEDULE
- 9.00 SUSPENDED ACOUSTICAL CEILING SYSTEM 2' X 4' 10'-0" A.F.F.
- (9.01) GWB WALLS T&T, PAINTED COLOR T.B.D.
- 9.02 BASEBOARDS VINYL MATERIAL CUT TO FIT, TYP 4" COLOR TBD
- (10.00) AUTOMATIC SOAP DISPENSER BOBRICK B-2012 OR SIMILAR (10.01) AUTOMATIC PAPER TOWEL DISPENSER - PACIFIC BLUE ULTRA 9" MINI OR SIMILAR
- (10.02) TURNOUT LOCKERS NEW AND EXISTING (14 TOTAL)
- 10.03) TACTILE "EXIT" INTERIOR SINAGE AT EXITS MOUNT C.O. SINAGE AT 60" A.F.F. & ADJACENT TO EGRESS DOORS
- (22.00) MOP SINK NEW
- 22.01 EYE WASH STATION VERIFY REPLACING
- HEATING, VENTILATING, AND AIR CONDITIONING 23.00 NEW ROOF TOP UNIT
- (23.01) HVAC VENTS
- 26.00 LIGHTING FIXTURE, SEE ELECTRICAL

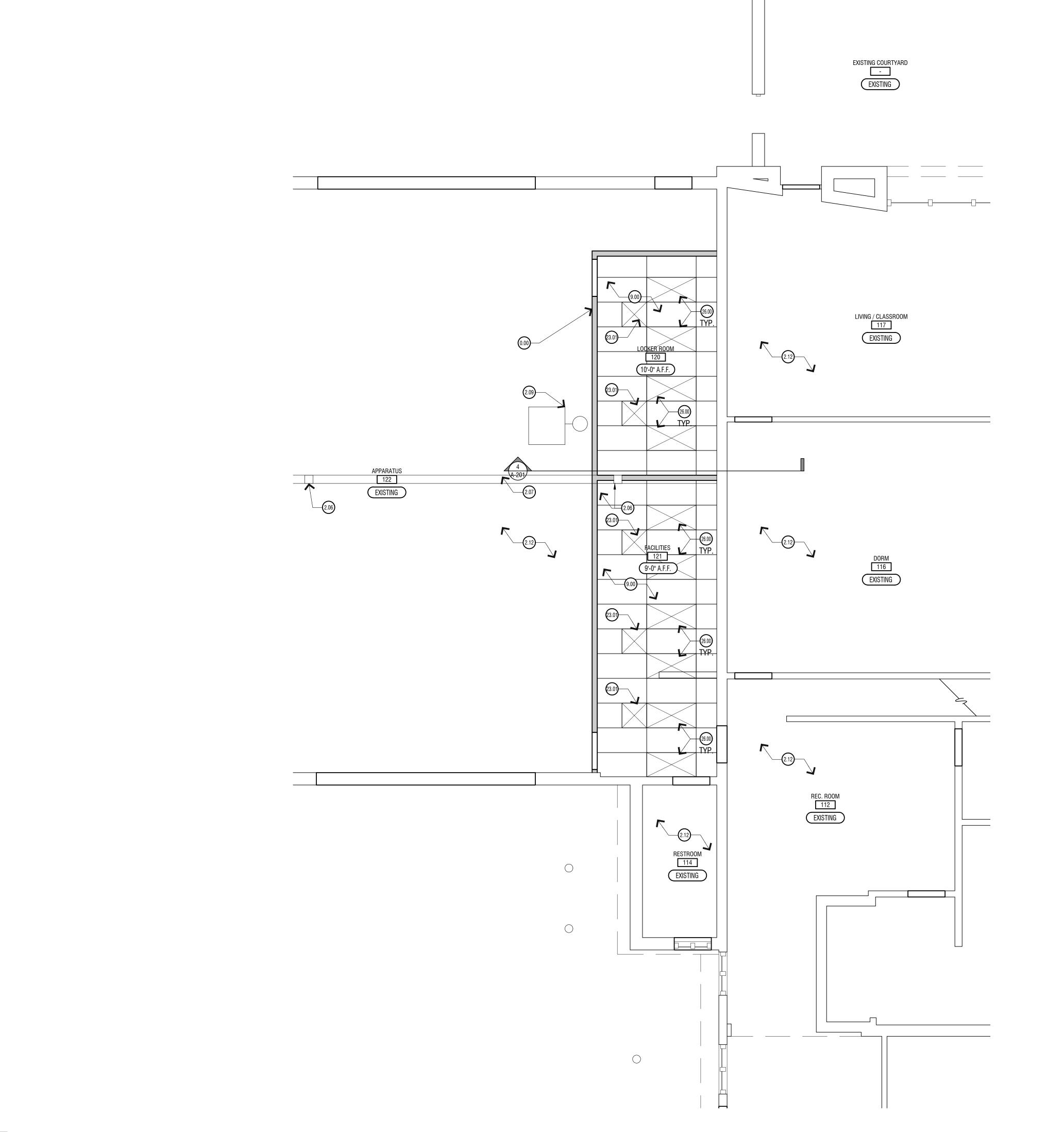
TAYLOR TS, INC.



DEP IRE

PRE

DIMENSIONED& ANNOTATED ENLARGED FLOOR PLAN A-401



GENERAL PROJECT REQUIREMENTS

(0.00) NEW WALL TO BE PLACED BETWEEN THE EXISTING MECHANICAL UNIT AND EXISTING

COLUMN (NOW ENCAPSULATED IN WALL) - VERIFY LOCATION IN FIELD

(0.01) COLUMN TO BE FLUSH ON LOCKER ROOM SIDE OF THE WALL

(0.02) FIELD VERIFY MEASUREMENT

**EXISTING CONDITIONS** (2.00) CONCRETE SLAB - EXISTING

(2.01) MASONRY WALL - EXISTING 2.02 PONY WALL - 2X4 @ 16" O.C. FRAME WALL - EXISTING

(2.03) STEEL SINK - EXISTING - VERIFY NEW LOCATION (2.04) BASE AND UPPER CABINETS - TO BE REMOVED

2.05) DRINKING FOUNTAIN AND BOTTLE FILLING STATION - EXISTING - VERIFY NEW LOCATION (2.06) COLUMN - EXISTING

(2.07) BEAM - EXISTING

(2.08) OVERHEAD GARAGE DOOR - EXISTING

(2.09) UNIT HEATER - EXISTING (2.10) ICE MACHINE - EXISTING - VERIFY NEW LOCATION

(2.11) ELECTRICAL PANEL - EXISTING

(2.12) CEILING AND ROOF - EXISTING THERMAL AND MOISTURE PROTECTION

7.00 FIBER REINFORCED PANEL (FRP) BEHIND MOP SINK

8.00 HOLLOW CORE METAL DOOR IN HOLLOW CORE METAL FRAME, SEE SCHEDULE

9.00 SUSPENDED ACOUSTICAL CEILING SYSTEM 2' X 4' - 10'-0" A.F.F.

(9.01) GWB WALLS - T&T, PAINTED - COLOR T.B.D. (9.02) BASEBOARDS - VINYL MATERIAL CUT TO FIT, TYP 4" - COLOR - TBD

SPECIALTIES

(10.00) AUTOMATIC SOAP DISPENSER - BOBRICK B-2012 OR SIMILAR

(10.01) AUTOMATIC PAPER TOWEL DISPENSER - PACIFIC BLUE ULTRA 9" MINI OR SIMILAR (10.02) TURNOUT LOCKERS - NEW AND EXISTING (14 TOTAL)

(10.03) TACTILE "EXIT" INTERIOR SINAGE AT EXITS - MOUNT C.O. SINAGE AT 60" A.F.F. &

ADJACENT TO EGRESS DOORS

(22.00) MOP SINK - NEW

(22.01) EYE WASH STATION - VERIFY REPLACING HEATING, VENTILATING, AND AIR CONDITIONING

(23.00) NEW ROOF TOP UNIT 23.01) HVAC VENTS

26.00 LIGHTING FIXTURE, SEE ELECTRICAL

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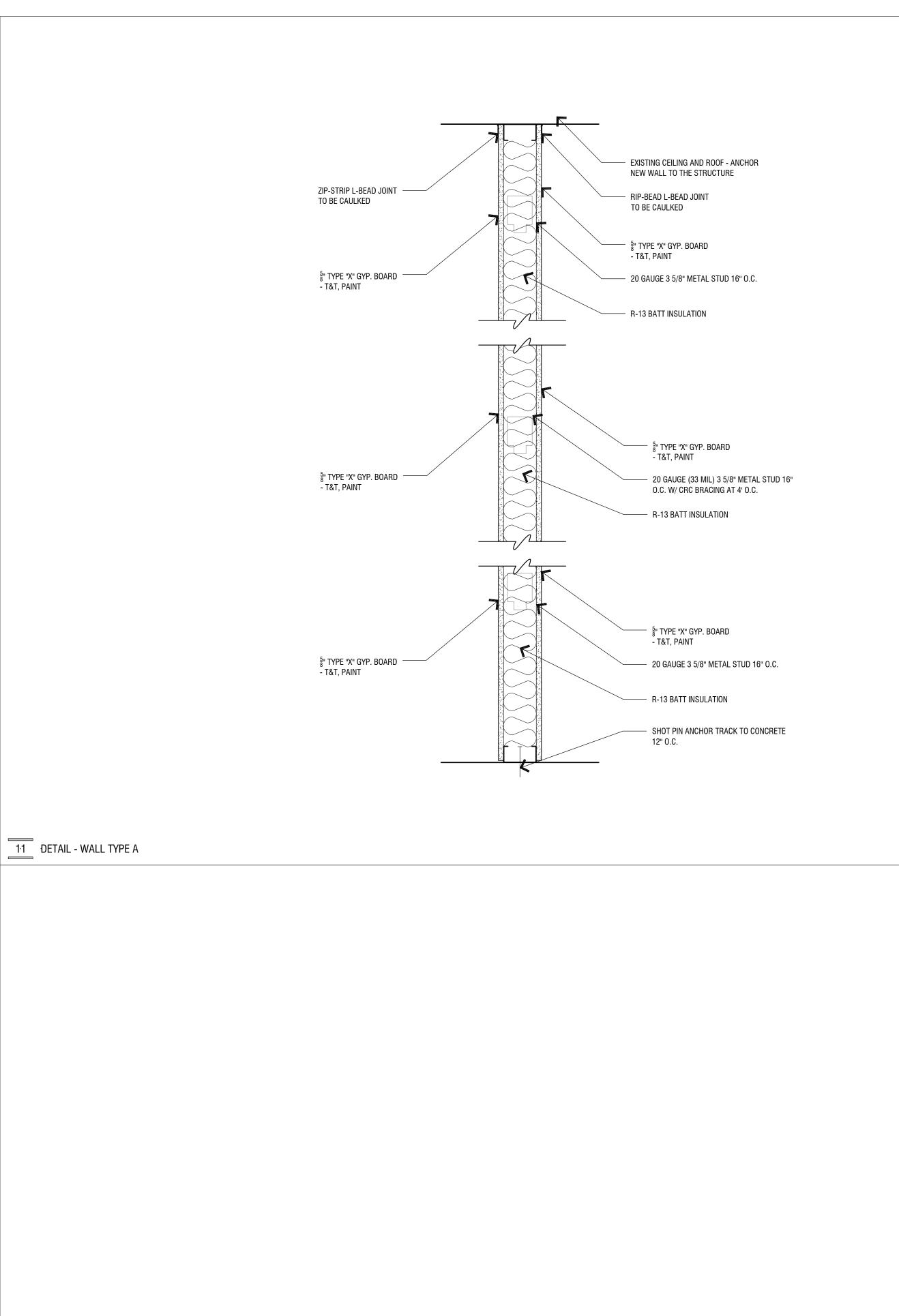
MICHAEL ARCHITE(

ENLARGED RCP

**A-402** 

1 PRELIMINARY FLOOR PLAN

SCALE: 1/16" = 1'-0"

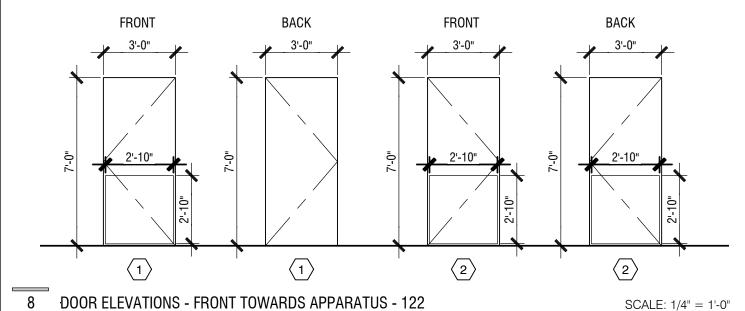


D00R DETAILS FRAME NUMBER FIRE RATING HARDWARE SIZE MATERIAL THRESHOLD TRANSOM 120 1 2 4 N/A 3'-0" x 7-0" FMC-HC --- 1 3 4 121 10/A-501 7/A-501 3'-0" x 7'-0" FMC-HC

1 DOOR SCHEDULE

HM HOLLOW METAL - WELDED

2 DOOR SCHEDULE KEY



1 3 EA HINGE
1 EA PASSAGE KNOB AND LOCK SET
1 EA CLOSER WITH HOLD OPEN FEATURE
2 EA ARMOR PLATE AND OR KICK PLATE - SEE REMARKS

1'-0" AARDWARE GROUPS

GROUP

ALL DOOR HARDWARE SHALL MEET THE 2018 IBC, 2018 IFC, AND 2010 ADA

ARMOR PLATE ON FRONT - 34" X 34"

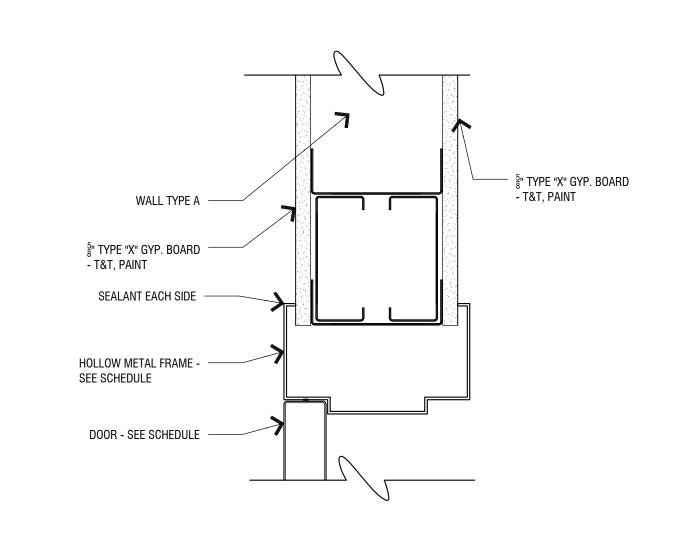
3 ARMOR PLATE ON BOTH FRONT AND BACK - 34" X 34"

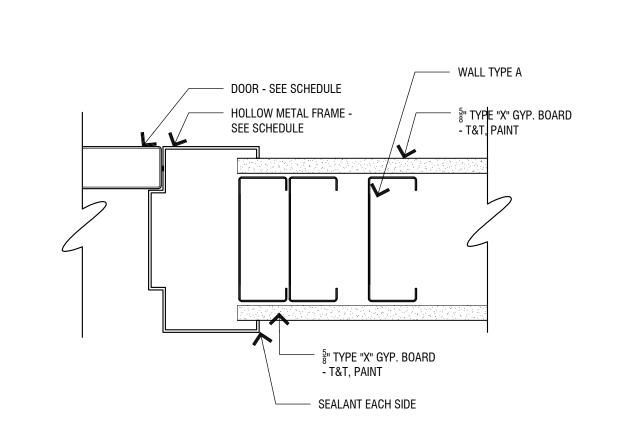
4 PAINTED FINISH TO MATCH EXISTING DOORS

9 DOOR FRAME ELEVATIONS

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

4 DOOR SCHEDULE REMARKS





10 DETAIL - DOOR HEAD SCALE: 3" = 1'-0" 5 DETAIL - DOOR JAMB SCALE: 3" = 1'-0"

		FLC	OOR		WALLS					CEILING											
NUMBER	ROOM NAME	FINISH	BASE		RTH	EA			JTH	WE		HEIGHT	MATERIAL	FINISH	REMARKS						
	Nombert Hoom Wille										MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH			
120	LOCKER ROOM	SC	VWB	GWB	PT	СМИ	PT	GWB	PT	GWB	PT	10'-0"	GWB	PT							
121	FACILITIES	SC	VWB	GWB	PT	CMU	PT	GWB	PT	GWB	PT	10'-0"	GWB	PT	FRP AT MOP SINK - 2 SIDES						

6 ROOM FINISH SCHEDULE

SCALE: 1 1/2" = 1'-0"

VT LUXURY VINYL TILES

SC SEALED CONCRETE

VB GYPSUM WALLBOARD

VB VINYL WALL BASE 4"

PAINT

CMU CONCRETE MASONRY UNIT

7 ROOM FINISH KEY

MTAI PROJECT NUMBER: 25009

DATE: DESCRIPTION:

2 4 6 8 3 MICHAEL G. TAYLOR

TAYLOR TS, INC.

MICHAEL ARCHITECT

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DETAILS & SCHEDULE

A-501

# GENERAL STRUCTURAL NOTES (APPLY UNLESS NOTED OTHERWISE ON PLANS/DETAILS)

# GENERAL REQUIREMENTS:

- 1. THESE DRAWINGS, AND THEIR ASSOCIATED STRUCTURAL CALCULATIONS, HAVE BEEN PERFORMED USING STANDARDS OF PROFESSIONAL CARE AND COMPLETENESS NORMALLY EXERCISED UNDER SIMILAR CIRCUMSTANCES BY REPUTABLE STRUCTURAL ENGINEER'S IN THIS OR SIMILAR LOCALITIES. THEY NECESSARILY ASSUME THAT THE WORK DEPICTED WILL BE PERFORMED BY AN EXPERIENCED CONTRACTOR AND/OR WORKMEN WHO HAVE A WORKING KNOWLEDGE OF THE INTERNATIONAL BUILDING CODE CONVENTIONAL FRAMING REQUIREMENTS AND OF INDUSTRY ACCEPTED STANDARD GOOD PRACTICE. AS NOT EVERY CONDITION OR FRAMING ELEMENT IS (OR CAN BE) EXPLICITLY SHOWN ON THESE DRAWINGS, IT IS UNDERSTOOD THAT THE CONTRACTOR WILL USE INDUSTRY ACCEPTED STANDARD GOOD PRACTICE FOR ALL MISCELLANEOUS WORK NOT EXPLICITLY SHOWN.
- 2. THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED CONSTRUCTION SUCH THAT DESIGN LIVE LOAD PER SQUARE FOOT AS STATED HEREIN IS NOT EXCEEDED. OPTIONS ARE FOR CONTRACTOR'S CONVENIENCE. IF AN OPTION IS USED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY CHANGES, AND SHALL COORDINATE ALL DETAILS, AT NO ADDITIONAL COST TO OWNER.
- 3. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL STRUCTURAL NOTES AND SPECIFICATIONS, THE GREATER REQUIREMENTS SHALL GOVERN. TYPICAL DETAILS AND NOTES ARE NOT NECESSARILY INDICATED ON THE PLANS, BUT SHALL APPLY NONE-THE-LESS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT. DETAILS MAY SHOW ONLY ONE SIDE OF CONNECTION OR MAY OMIT INFORMATION FOR CLARITY.
- 4. ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR ARCHITECTURAL, MECHANICAL, PLUMBING AND FLECTRICAL WITH APPROPRIATE TRADES, DRAWINGS AND SUBCONTRACTORS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. RESOLVE ANY DISCREPANCY WITH THE ARCHITECT AND STRUCTURAL
- 5. ANY INSPECTIONS, SPECIAL (IBC CHAPTER 17) OR OTHERWISE THAT ARE REQUIRED BY THE BUILDING CODES, LOCAL BUILDING DEPARTMENTS, OR BY THESE PLANS SHALL BE DONE BY AN INDEPENDENT INSPECTION COMPANY OR THE BUILDING DEPARTMENT, SITE VISITS BY THE STRUCTURAL ENGINEER DO NOT CONSTITUTE AN OFFICIAL INSPECTION, UNLESS SPECIFICALLY CONTRACTED FOR.

# BASIS FOR DESIGN:

1. BUILDING CODE: 2018 EDITION OF THE IBC WITH CITY/COUNTY AMENDMENTS.

RISK CATEGORY = II

2. VERTICAL LOADS:

LOCATION	LIVE / SNOW LOAD	DEAD LOAD
ROOF	30 PSF	12 PSF

# WOOD:

1. SAWN LUMBER: FRAMING LUMBER SHALL COMPLY WITH THE LATEST EDITION OF THE GRADING RULES OF THE WESTERN WOOD PRODUCTS ASSOCIATION (WWPA) OR THE WEST COAST LUMBER INSPECTION BUREAU (WCLIB). ALL SAWN LUMBER SHALL BE STAMPED WITH THE GRADE MARK OF AN APPROVED LUMBER GRADING AGENCY. SAWN LUMBER SHALL HAVE THE FOLLOWING MINIMUM GRADE UNLESS NOTED OTHERWISE IN SCHEDULES:

USE:	MATERIAL:
JOISTS, TOP PLATES AND ALL OTHER SAWN LUMBER	DOUGLAS-FIR NO. 2 OR BETTER
BEAMS AND POSTS	DOUGLAS-FIR NO. 2 OR BETTER

2. PLYWOOD: ALL PLYWOOD SHALL BE C-D OR C-C SHEATHING CONFORMING TO STANDARD PS 1-09. LAY UP PLYWOOD WITH FACE GRAIN IN PERPENDICULAR TO SUPPORTS (ON ROOFS WHERE PLYWOOD IS LAID UP WITH FACE GRAIN PARALLEL TO SUPPORTS, USE A MINIMUM OF 5-PLY PLYWOOD, STAGGER JOINTS). ALL NAILING, COMMON NAILS. BLOCKING AT PANEL EDGES WHERE INDICATED ON PLANS. ALL PLYWOOD SHALL BE OF THE FOLLOWING NOMINAL THICKNESS, SPAN/INDEX RATING AND SHALL BE NAILED AS FOLLOWS UNLESS NOTED OTHERWISE ON THE PLANS:

LOCATION:	NOMINAL THICKNESS:	SPAN INDEX RATING:	EDGE ATTACHMENT:	FIELD ATTACHMENT:
ROOF	1/2"	<sup>32</sup> ⁄ <sub>16</sub>	10d AT 6" O.C.	10d AT 12" O.C.

SCREWS AT FLOOR SHEATHING SHALL BE #8 SCREWS AND SHALL PENETRATE AT LEAST 1½" INTO THE SUPPORTING MEMBER. ALL FLOOR SHEATHING SHALL BE GLUED TO SUPPORTING MEMBERS WITH ANAPA AFG-01 QUALIFIED GLUE.

PLYWOOD ALTERNATE: AMERICAN PLYWOOD ASSOCIATION PERFORMANCE RATED SHEATHING MAY BE USED AS AN ALTERNATE TO PLYWOOD WITH PRIOR APPROVAL OF OWNER, ARCHITECT AND ROOFER. IT MAY NOT BE USED ON ROOFS WHERE BUILT-UP ROOF SYSTEM IS TO BE GUARANTEED BY ROOFER. RATED SHEATHING SHALL COMPLY WITH DOC PS 2-10 EXPOSURE 1, AND SHALL HAVE A SPAN RATING EQUIVALENT TO OR BETTER THAN THE PLYWOOD IT REPLACES. ATTACHMENT AND THICKNESS (WITHIN 1/32") Shall be the same as the plywood it replaces. Install per MANUFACTURER'S RECOMMENDATIONS.

- 3. GLUED-LAMINATED BEAMS (GLULAM): GLUED-LAMINATED BEAMS SHALL BE DOUGLAS FIR COMBINATION AT 24F-V4 AT SIMPLE SPAN BEAMS AND 24F-V8 AT CANTILEVERED BEAMS WITH THE FOLLOWING MINIMUM PROPERTIES: FB = 2,400 PSI, FV = 190 PSI, FC (PERPENDICULAR) = 650 PSI, E =1,800 KSI. ALL BEAMS SHALL BE FABRICATED USING WATERPROOF GLUE. FABRICATION AND HANDLING PER LATEST AITC AND WCLA STANDARDS. BEAMS TO BEAR GRADE STAMP AND AITC STAMP AND CERTIFICATE. CAMBER AS SHOWN ON DRAWINGS. STANDARD CAMBER IS BASED ON A RADIUS OF CURVATURE OF 2000 FEET.
- 4. SILL PLATES RESTING ON CONCRETE OR MASONRY WITHIN 12" OF SOIL SHALL BE OF TREATED FIR OR FOUNDATION GRADE REDWOOD. SHEAR WALLS AND EXTERIOR WALL SILLS AT CONCRETE SLAB SHALL HAVE A MINIMUM OF (2) 1/2" ANCHOR BOLTS PER PIECE. PROVIDE ANCHOR BOLT AT 9" MAXIMUM, 4" MINIMUM FROM THE END OF EACH PIECE AT SPLICE OR END OF WALL. MAXIMUM ANCHOR BOLT SPACING SHALL BE 72" ON CENTER UNLESS NOTED OTHERWISE ON PLANS OR DETAILS. ALL ANCHOR BOLTS (OTHER THAN BOLTS FOR HOLDOWNS) SHALL EMBED 7" INTO CONCRETE. ANCHOR BOLTS FOR HOLDOWNS SHALL NOT BE CONSIDERED AS PART OF REQUIRED ANCHOR BOLTS ON SHEAR WALLS. ALL EXTERIOR WALLS SHALL BE SECURED WITH MINIMUM ANCHOR BOLTS. INTERIOR WALLS MAY BE SECURED TO CONCRETE WITH EITHER ANCHOR BOLTS OR POWER DRIVEN SHOT PINS UNLESS NOTED OTHERWISE ON PLANS.
- 5. GENERAL: DO NOT NOTCH OR DRILL JOISTS, BEAMS OR LOAD BEARING STUDS WITHOUT PRIOR APPROVAL OF THE STRUCTURAL ENGINEER THROUGH THE ARCHITECT. DOUBLE UP FLOOR JOISTS AND BLOCKING UNDER PARTITIONS. PROVIDE 2" (NOMINAL) SOLID BLOCKING AT SUPPORTS OF ALL JOISTS, UNLESS NOTED OTHERWISE ON PLANS/DETAILS PROVIDE 2X SOLID BLOCKING AT MID-HEIGHT OF BEARING STUD WALLS. ALL NAILING NOT NOTED SHALL BE ACCORDING TO IBC TABLE 2304.9.1. JOIST HANGERS AND OTHER MISCELLANEOUS FRAMING ANCHORS SHALL BE AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, INC. OR OTHER MANUFACTURER WITH CURRENT ICBO APPROVAL.
- 6. BOLTING: ALL BOLTS IN WOOD CONNECTIONS SHALL CONFORM TO ASTM A307. BOLTS SHALL BE INSTALLED IN HOLES BORED WITH A BIT  ${
  m 1/46}^{\circ}$ LARGER THAN THE Ø (DIAMETER) OF THE BOLT. BOLTS AND NUTS SEATING ON WOOD SHALL HAVE CUT STEEL WASHERS UNDER HEADS AND NUTS. NICK THREADS TO PREVENT LOOSENING.

1. MATERIALS: ROLLED W SHAPES, SHALL CONFORM TO ASTM A992 (FY=50 KSI). ALL OTHER STRUCTURAL STEEL SHAPES, ROLLED SECTIONS, BARS AND PLATES SHALL CONFORM TO ASTM A36 (FY = 36 KSI). ALL PIPE STEEL SHALL BE ASTM A501 (FY = 36 KSI) OR ASTM A53, TYPE E OR S, GRADE B (FY = 35 KSI). ALL TUBULAR STEEL SHALL BE ASTM A500 (FY = 46 KSI).

- ALL BOLTS AND STUDS SHALL BE ASTM A307, UNLESS NOTED OTHERWISE. ALL EXPANSION BOLTS TO HAVE CURRENT ICBO RATING FOR MATERIAL INTO WHICH INSTALLATION TAKES PLACE. HEADED STUDS SHALL CONFORM TO ALL REQUIREMENTS OF THE LATEST EDITION OF THE "RECOMMENDED PRACTICES FOR STUD WELDING" AND THE "STRUCTURAL WELDING CODE" PUBLISHED BY AWS. ALL BOLTS, ANCHOR BOLTS, EXPANSION BOLTS, ETC. SHALL BE INSTALLED WITH STEEL WASHERS AT FACE OF WOOD OR AT SLOTTED HOLES IN STEEL SECTIONS.
- 3. ALL STRUCTURAL AND MISCELLANEOUS STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS, LATEST EDITION.
- 4. WELDING SHALL BE BY WELDERS HOLDING VALID CERTIFICATES AND HAVING CURRENT EXPERIENCE IN THE TYPE OF WELD SHOWN ON THE DRAWINGS OR NOTES. ALL WELDING SHALL USE E70 SERIES LOW HYDROGEN RODS UNLESS NOTED OTHERWISE. ALL WELDING PER LATEST AMERICAN WELDING SOCIETY STANDARDS. ALL WELDS ON DRAWINGS ARE SHOWN AS SHOP WELDS. CONTRACTOR MAY SHOP WELD OR FIELD WELD AT HIS DISCRETION. ALL FULL PENETRATION WELDS SHALL BE TESTED AND CERTIFIED BY AN INDEPENDENT TESTING LABORATORY.
- 5. STEEL TO STEEL BOLTED CONNECTIONS: HIGH STRENGTH BOLTS SHALL BE ASTM A325N AND SHALL BE INSTALLED AS BEARING-TYPE CONNECTIONS WITH THREADS INCLUDED IN SHEAR PLANE (TYPE "N" CONNECTION). BOLTS MAY BE TIGHTENED USING ANY AISC APPROVED METHOD.
- 6. DRYPACK SHALL BE 5,000 PSI FIVE STAR NON-SHRINK GROUT OR EQUIVALENT. INSTALL DRYPACK UNDER BEARING PLATES BEFORE FRAMING MEMBER IS INSTALLED. AT COLUMNS, INSTALL DRYPACK UNDER BASE PLATES AFTER COLUMN HAS BEEN PLUMBED BUT PRIOR TO FLOOR OR ROOF INSTALLATION.

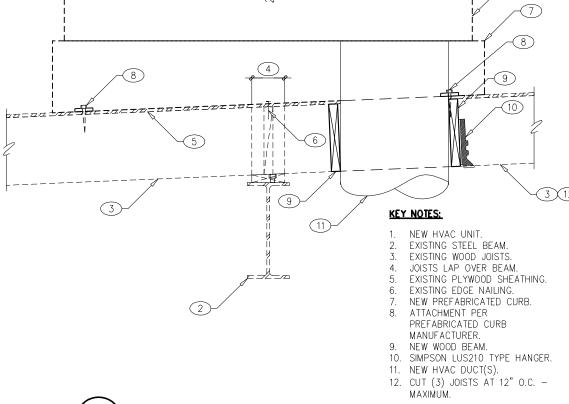
# SPECIAL INSPECTION ITEMS:

1. SPECIAL INSPECTION IS NOT REQUIRED AS FOLLOWS:

TYPE OF WORK:	REQUIRED:	REMARKS:
CONCRETE FOUNDATIONS	NO	FOUNDATION IS EXISTING
STEEL TO STEEL BOLTED CONNECTIONS	YES	STEEL CONNECTIONS ARE EXISTING.

SPECIAL INSPECTIONS NOT LISTED ABOVE ARE NOT REQUIRED BY FSE HOWEVER, ADDITIONAL SPECIAL INSPECTIONS MAY BE REQUIRED BY THE BUILDING OFFICIAL.

- 2. DESIGNATION OF SPECIAL INSPECTOR: A SPECIAL INSPECTION CERTIFICATE - CORRESPONDING TO THE REQUIREMENTS IN THE TABLE ABOVE HAS BEEN PROVIDED WITH THESE DRAWINGS BY FSE FOR PERMITTING PURPOSES.
- A. ACCORDING TO THE SI CERTIFICATE, THE SPECIAL INSPECTOR SHALL BE, OR WORK UNDER THE DIRECT SUPERVISION OF THE STRUCTURAL ENGINEER OF RECORD -FROST STRUCTURAL ENGINEERING(FSE) (928)776-4757. FSE IS NOT RESPONSIBLE FOR SPECIAL INSPECTIONS IF WE ARE NOT CONTACTED OR CONTRACTED TO DO
- B. TO SCHEDULE ANY SPECIAL INSPECTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE SPECIAL INSPECTOR AT LEAST ONE DAY IN ADVANCE.
- C. AN ALTERNATE SPECIAL INSPECTOR MAY BE USED BY OBTAINING A NEW SI CERTIFICATE, AND MAKE THE NECESSARY NOTIFICATIONS TO ALL PARTIES INVOLVED. THE ALTERNATE SPECIAL INSPECTOR SHALL BE AN ARIZONA LICENSED CIVIL OR STRUCTURAL ENGINEER OR AN ICC CERTIFIED SPECIAL INSPECTOR.
- D. FOR GEOTECHNICAL ITEMS LISTED ABOVE, THE SPECIAL INSPECTOR SHALL BE, OR WORK UNDER THE DIRECT SUPERVISION OF A GEOTECHNICAL ENGINEER OR THE BUILDING OFFICIAL.
- A. THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK ASSIGNED TO BE CERTAIN IT CONFORMS WITH THE APPROVED DESIGN DRAWINGS AND SPECIFICATIONS.
- B. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, AND TO THE STRUCTURAL ENGINEER OF RECORD. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN, IF UNCORRECTED, TO THE DESIGN AUTHORITY AND THE BUILDING
- C. UPON COMPLETION OF THE ASSIGNED WORK THE STRUCTURAL ENGINEER SHALL COMPLETE AND SIGN THE APPROPRIATE FORMS CERTIFYING THAT TO THE BEST OF HIS KNOWLEDGE THE WORK IS IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS, AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE INTERNATIONAL BUILDING CODE.



NEW HVAC UNIT AT EXISTING STEEL BEAM

	DRAWING INDEX	
SHEET	DESCRIPTION	DETAILS
S-100	GENERAL STRUCTURAL NOTES	200-SERIES
S-200	PARTIAL ROOF FRAMING PLAN	

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JOB NO.: 2025-049 PROJECT MANAGER: AGK CAD OPERATOR: AGK

Prescott, Arizona 86305

FROST STRUCTURAL ENGINEERING 1678 Oaklawn Drive, Suite C phone: 928.776.4757

www.frost-structural.com

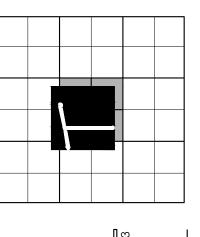
info@frost-structural.com

S-100



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**GENERAL STRUCTURAL NOTES** 

PARTIAL ROOF FRAMING PLAN

PLAN KEYNOTES

1) APPROXIMATE LOCATION OF NEW 750 LB HVAC UNIT.

SIMPSON LUS210 TYPE HANGER (OR SIMPSON HU9 IF LVL IS USED).

WALL SCHEDULE

NOTE: SEE PLAN SCHEDULES, DETAILS AND GENERAL STRUCTURAL NOTES FOR ADDITIONAL INFORMATION.

AS SEEN ON PLANS INDICATES-

EXISTING WALL BELOW.

NON-STRUCTURAL WALL BELOW.

ROOF FRAMING PLAN NOTES

VERIFY ALL DIMENSIONS WITH ALL ARCHITECTURAL DRAWINGS. FOR LOCATION OF DETAILS SEE SHEET INDEX ON SHEET S-100.

ALL SCHEDULED MARK DESIGNATIONS MAY NOT NECESSARILY BE FOUND ON THIS PLAN. SCHEDULES ARE TYPICAL TO THIS PROJECT. RJ1, RJ2, ETC. — AS SHOWN ON PLAN INDICATES A ROOF JOIST. SEE ROOF JOIST SCHEDULE FOR ADDITIONAL INFORMATION.

B1, B2, ETC. — AS SHOWN ON PLAN INDICATES A BEAM. SEE BEAM SCHEDULE FOR ADDITIONAL INFORMATION.

(E)RJ1, (E)RJ2, ETC. — AS SHOWN ON PLAN INDICATES EXISTING ROOF JOISTS. SEE ROOF JOIST SCHEDULE FOR ADDITIONAL INFORMATION.

(E)B1, (E)B2, ETC. — AS SHOWN ON PLAN INDICATES AN EXISTING BEAM. SEE BEAM SCHEDULE FOR ADDITIONAL INFORMATION.

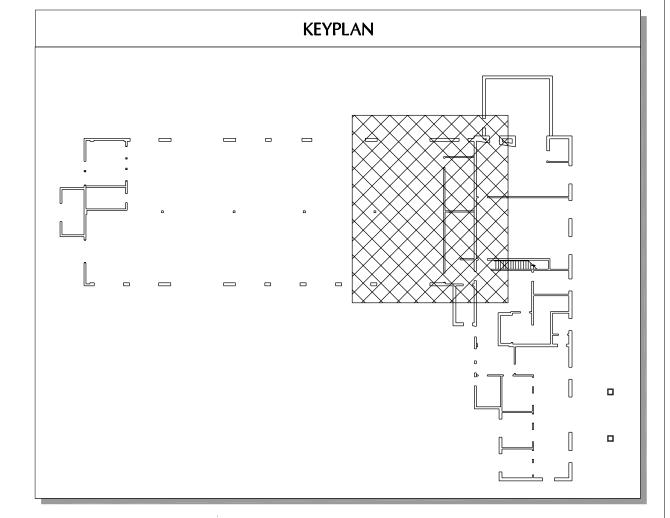
(E)L - AS SHOWN ON PLAN INDICATES AN EXISTING LEDGER.

(E)LN - AS SHOWN ON PLAN INDICATES AN EXISTING LINTEL. ). (E)RJ - AS SHOWN ON PLAN INDICATES EXISTING ROOF JOISTS.

OR IN ATTIC SPACE.

ROOF JOIST (RJ) SCHEDULE									
MARK	JOIST	REMARKS							
RJ1	2X12	PLACEMENT AS SHOWN ON PLAN							
(E)R J1	(2)2X12 AT 12" O.C.								

	BEAM (B) SCH	<b>I</b> EDULE
MARK	SIZE	REMARKS
B1	2X12 DF#2	OR 1.75"X11.25" 26F 2.0E LVL
(E)B1	EXISTING W16X36	



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JOB NO.: 2025-049 PROJECT MANAGER: AGK CAD OPERATOR: AGK

Prescott, Arizona 86305

FROST STRUCTURAL ENGINEERING

1678 Oaklawn Drive, Suite C phone: 928.776.4757 info@frost-structural.com www.frost-structural.com

LOR INC.

R

R

ROOF FRAMING PLAN

S-200

	PACKAGED AIR-CONDITIONER SCHEDULE:											
TAG	MANUF.	MODEL NUMBER	FAN PERFORMANCE (CFM)	TOT. COOLING CAPACITY (MBH)	SEN. COOLING CAPACITY (MBH)	ARI COOLING EFFICIENCY (SEER)	HEATING CAPACITY  FUEL INPUT (MBH) EFFICIENCY		ELECTRICAL: 208V/3Ø (FLA/MCA/MOCP)	WEIGHT (LBS)	NOTES:	
ΔC-4	CARRIER	48GEEM05A2A5	1600 @ 0.5" ESP	44.28	40.61	17.2	GAS	83.6	80% AFUE	21.8 / 28 / 40	750	1,2,4,5,6

NOTES: I. DESIGN CONDITIONS: R454B COOLING MODE = 80F/67F (DB/WB) EAT, I05F AMBIENT, 5100' ELEVATION.

INSTALL UNIT PER MANUFACTURER'S RECOMMENDATIONS PROVIDE MANUAL OSA INTAKE. BALANCE TO CFM RATE INDICATED ON PLANS.

4. PROVIDE 14" FACTORY ROOF CURB, 2" FILTER RACK, PROGRAMMABLE THERMOSTAT (WIFI ENABLED AND REMOTE TEMPERATURE SENSOR CAPABILITY).

# IECC CALCULATED **COOLING LOAD**

CALCULATED LOAD: 41.2 MBH SENSIBLE PER CARRIER HOURLY ANALYSYS PROGRAP (HAP) IN ACCORDANCE WITH THE 2012 IECC

PROVIDED CAPACITY: 44.28 MBH SENSIBLE

# COMcheck Software Version COMcheckWeb **Mechanical Compliance Certificate**

**Project Information** 

Energy Code: 2012 IECC Project Title: Prescott Fire Station #71 Prescott, Arizona Location: Climate Zone: Alteration Project Type:

Construction Site: Owner/Agent:

# **Mechanical Systems List**

#### Quantity System Type & Description 1 AC-4 (Single Zone):

Heating: 1 each - Central Furnace, Gas, Capacity = 83 kBtu/h
Proposed Efficiency = 80.00% Et, Required Efficiency: 80.00 % Et (or 78% AFUE) Cooling: 1 each - Single Package DX Unit, Capacity = 44 kBtu/h, Air-Cooled Condenser, No Economizer, Economizer exception: High Efficiency Equipment Proposed Efficiency = 17.20 SEER, Required Efficiency = 15.60 SEER

Designer/Contractor:

Proposed Part Load Efficiency = 0.00 , Required Part Load Efficiency = 0.00 Fan System: FAN SYSTEM 1 -- Compliance (Motor nameplate HP and fan efficiency method): Passes

FAN 1 Supply, Constant Volume, 1600 CFM, 0.5 motor nameplate hp

#### **Mechanical Compliance Statement**

Compliance Statement: The proposed mechanical alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2012 IECC requirements in COM*check* Version COM*check*Web and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title	Signature	Date

Project Title: Prescott Fire Station #71 Data filename:

Report date: 04/22/25 Page 1 of 7

# MECHANICAL GENERAL NOTES

SEE ARCHITECTURAL DRAWINGS FOR ANY NECESSARY SCREENING OF EQUIPMENT.

SEE ELECTRICAL DRAWINGS FOR WIRING. MECHANICAL CONTRACTOR SHALL VERIFY AND FIELD COORDINATE WITH ELECTRICAL CONTRACTOR FOR ALL POWER REQUIREMENTS INCLUDING VOLTAGE AND PHASE. PRIOR TO ORDERING ANY EQUIPMENT.

SUPPLY FANS FOR ALL AIR CONDITIONING EQUIPMENT ARE TO BE WIRED TO RUN AT ALL TIMES THE BUILDING IS OCCUPIED, TO PROVIDE FRESH AIR AND MAKEUP AIR REQUIREMENTS.

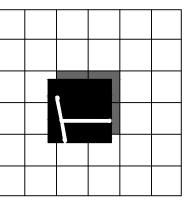
# MECHANICAL EQUIPMENT LIST

- EF-I GREENHECK SP-A200 CEILING EXHAUST FAN WITH FACTORY ROOF CAP WITH BDD, 150 CFM AT .2" ESP, I AMP, I20 VOLT, I PHASE, I.O SONES. PROVIDE SPEED CONTROLLER IN FAN CASING.
- CD-I TITUS SERIES TDC CEILING DIFFUSER WITH OBD, STEEL CONSTRUCTION, LAY-IN, ROUND NECK ADAPTOR, OFF-WHITE.
- RG-I TITUS SERIES 350 RL RETURN GRILLE, 3/4" SPACING, LAY-IN, STEEL CONSTRUCTION.



**TAYLOR** 

MICHAEL ARCHITE(



FIR

**PRESCOTT** 

PLOT DATE: 4.23.25						
25009	DESCRIPTION:					
ROJECT NUMBER: 25009	DATE:					

**Bowie Tiglas**Engineering Inc. Phone: 602.992.3900

24820 N 16TH AVE, STE 170

MECHANICAL SCHEDULES

MO

1 MECHANICAL SCHEDULES

**MECHANICAL KEYNOTES** 

I SEE ENLARGED PLAN ON SHEET INDICATED, TYPICAL.

**TAYLOR** 

MICHAEL TA' ARCHITECTS,

DEPT.

FIRE **PRESCOTT** 

MECHANICAL BUILDING PLAN

M1.0

Bowie Tiglas
Engineering Inc.
Consulting Engineers
Justin@BowieTiglas.com
BTE # 25038
Phoeni Phone: 602.992.3900 24820 N 16TH AVE, STE 170 Phoenix, AZ. 85085

1 MECHANICAL BUILDING PLAN

# **MECHANICAL KEYNOTES**

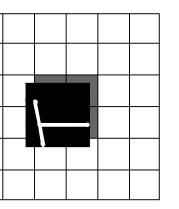
I AIR CONDITIONING UNIT (AC-#) MOUNTED ON FACTORY ROOF CURB WITH FULL SIZE DUCTS THRU ROOF WITH FLEX CONNECTORS, PROVIDE MANUAL OSA INTAKE, BALANCE TO CFM RATE INDICATED ON PLANS.

- 2 EXHAUST FAN (EF-#), IN CEILING WITH FULL SIZE DUCT THRU ROOF TO CAP, MINIMUM OF IO' FROM OUTSIDE AIR INTAKE.
- 3 EXISTING MECHANICAL EQUIPMENT TO BE RELOCATED TO NEW LOCATION INDICATED ON PLANS, MOUNT BELOW CEILING, SEE ARCHITECTURAL PLANS FOR EXACT MOUNTING HEIGHT, FIELD VERIFY EXISTING CONDITIONS.
- 4 DEMO EXISTING MECHANICAL FIXTURE, FIELD VERIFY EXISTING CONDITIONS.
- 5 EXISTING MECHANICAL FIXTURE TO REMAIN, SHOWN FOR REFERENCE ONLY, FIELD VERIFY EXISTING CONDITIONS.
- 6 24" X 24" RG-I, I6" ROUND NECK.
- 7 24" X 24" CD-1, 8" ROUND NECK, 4-WAY THROW.
- 8 24" X 24" CD-1, IO" ROUND NECK, 4-WAY THROW.

NOTE: NOT ALL KEYNOTES MAY BE USED.



**TAYLOR** MICHAEL ARCHITECT



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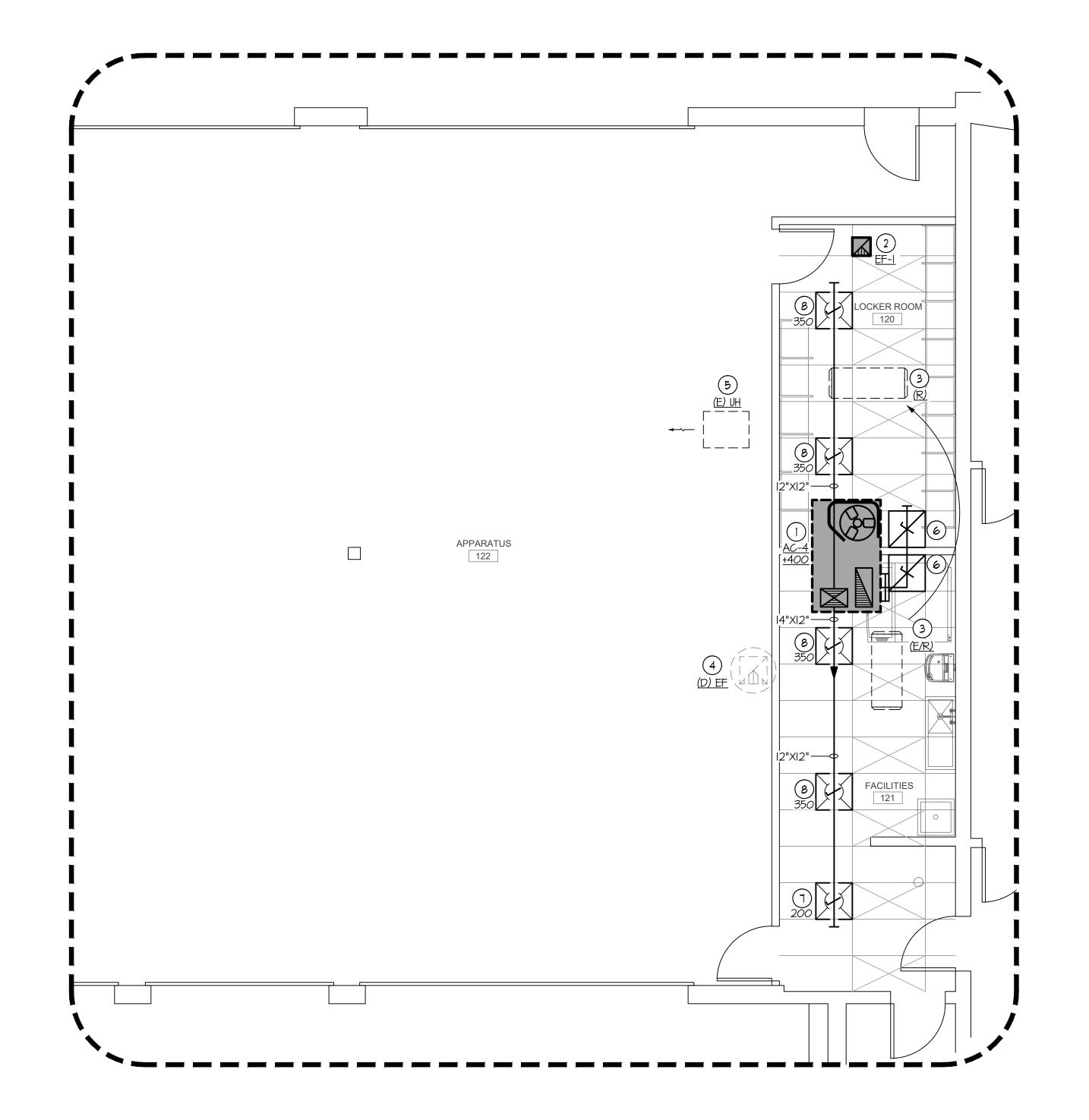
**PRESCOTT** 

Bowie Tiglas
Engineering Inc.
Consulting Engineers
Phone: 60 Phone: 602.992.3900 24820 N 16TH AVE, STE 170 Phoenix, AZ. 85085 Justin@BowieTiglas.com

BTE # 25038

MECHANICAL FLOOR PLAN

**M2.0** 



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

PLUMBING KEYNOTES

I SEE ENLARGED PLAN ON SHEET INDICATED, TYPICAL.

NOTE: NOT ALL KEYNOTES MAY BE USED.

# PLUMBING GENERAL NOTES

- SOLDERS & FLUX HAVING A LEAD CONTENT IN EXCESS OF TWO TENTHS OF ONE PERCENT SHALL NOT BE USED IN THE INSTALLATION OR REPAIR OF ANY FACILITIES PROVIDING WATER FOR HUMAN CONSUMPTION WHICH ARE CONNECTED TO PUBLIC WATER SYSTEMS.
- 2. EXPOSED TRIM AND APPURTENANCES WILL BE CHROME PLATED.
- 3. PROVIDE LOOSE KEY OR SCREWDRIVER STOPS BALL VALVES AT ALL DOMESTIC WATER CONNECTIONS TO FIXTURES.
- 4. AIR GAPS TO BE A MINIMUM OF 2 PIPE SIZE DIAMETERS ABOVE RIM OF RECEPTOR.
- 5. HOT WATER SHALL BE THE LEFT FITTING AT ALL FAUCETS.

# WATER CALCULATION

WATER CALCULATION

NEW FIXTURE UNITS = 6.5 DEMO'D FIXTURE UNITS = NET CHANGE =

THE TOTAL DEMO'D FIXTURE UNITS IS GREATER THAN THE NEW FIXTURE UNITS THEREFORE NO CHANGES ARE REQUIRED TO THE EXISTING METER & BUILDING SUPPLY.

### PLUMBING FIXTURE LIST

MS FIAT MODEL MSB-2424 MOP SERVICE BASIN WITH 830-AA SERVICE FAUCET WITH VACUUM BREAKER, SILICONE SEALANT, HOSE AND HOSE BRACKET, MOP HANGER, ALTERNATE STRAINER, AND ALUMINUM BUMPER GUARD.

**TAYLOR** 

MICHAEL ARCHITECT

FIR

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PLUMBING BUILDING PLAN

P1.0

Bowie Tiglas
Engineering Inc.
Consulting Engineers
Phone: 60 Phone: 602.992.3900 24820 N 16TH AVE, STE 170 Phoenix, AZ. 85085

BTE# 25038

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

1 PLUMBING BUILDING PLAN

PLUMBING KEYNOTES

I CONTRACTOR TO RELOCATE EXISTING ELECTRIC DRINKING FOUNTAIN TO NEW LOCATION INDICATED ON PLANS, PROVIDE (N) 1/2" DCW, TO TIE TO (E) 1/2" DCW FROM PREVIOUS FIXTURE LOCATION, EXTEND PLUMBING AS REQUIRED, 2" IW TO FLOOR SINK WITH AIR GAP, FIELD VERIFY EXISTING CONDITIONS.

- 2 CONTRACTOR TO RELOCATE ICE MACHINE TO NEW LOCATION INDICATED ON PLANS, PROVIDE (N) 1/2" DCW, TO TIE TO (E) 1/2" DCW FROM PREVIOUS FIXTURE LOCATION, EXTEND PLUMBING AS REQUIRED, 2" IW TO FLOOR SINK WITH AIR GAP, FIELD VERIFY EXISTING CONDITIONS.
- 3 DEMO EXISTING SHOWER BASE, EXISTING PLUMBING TO REMAIN FOR FUTURE FIXTURE IN SAME LOCATION, FIELD VERIFY EXISTING CONDITIONS.
- 4 MOP SINK (MS), 3/4" DCW, 3/4" DHW, 2" W, I I/2" V TIE TO EXISTING PLUMBING FROM PREVIOUS FIXTURE IN SAME LOCATION, FIELD VERIFY EXISTING CONDITIONS.
- 5 RELOCATE EXISTING SINK TO NEW LOCATION INDICATED ON PLANS, EXTEND EXISTING PLUMBING AS REQUIRED, FIELD VERIFY EXISTING CONDITIONS.
- 6 TIE NEW I" NATURAL GAS PIPE TO (E) 2" NATURAL GAS PIPE, FIELD VERIFY EXISTING

NOTE: SYSTEM HAS BEEN PREVIOUSLY SIZED FOR FUTURE MAKE-UP AIR UNITS\* TOTAL ALLOWABLE ADDITIONAL LOAD: 1200 CFH\* TOTAL ADDITIONAL LOAD ADDED: 144 CFH

\*PER AVAILABLE DRAWINGS DATED 8-31-90\*

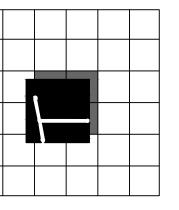
- 7 PROVIDE GAS COCK, UNION AND DIRT LEG, TYPICAL.
- 8 AIR CONDITIONING COIL, SEE MECHANICAL DRAWINGS, FIELD ROUTE 3/4" CONDENSATE TRAP AND VENT WITH DRAIN TO SLOPE AT 1/8" PER FOOT TO 'ELL' AT MOP SINK WITH
- 9 EXISTING PLUMBING FIXTURE TO REMAIN, SHOWN FOR REFERENCE ONLY.
- IO DEMO EXISTING PLUMBING FIXTURE, CAP/SEAL AT SOURCE, FIELD VERIFY EXISTING CONDITIONS.
- II FLOOR SINK (FS), 2" W, & I I/2" V. PROVIDE PROSET TRAP GUARD INSERT. ALL INDIRECT PIPING SHALL BE TRAPPED AND DISCHARGE TO FLOOR SINK WITH A MINIMUM AIR GAP. FLOOR SINK MUST BE ACCESSIBLE FOR CLEANING. FIELD ROUTE TO TIE TO (E) 4" WASTE MAIN AND (E) 3" VTR.

NOTE: NOT ALL KEYNOTES MAY BE USED.



**TAYLOR** 

MICHAEL ARCHITE(

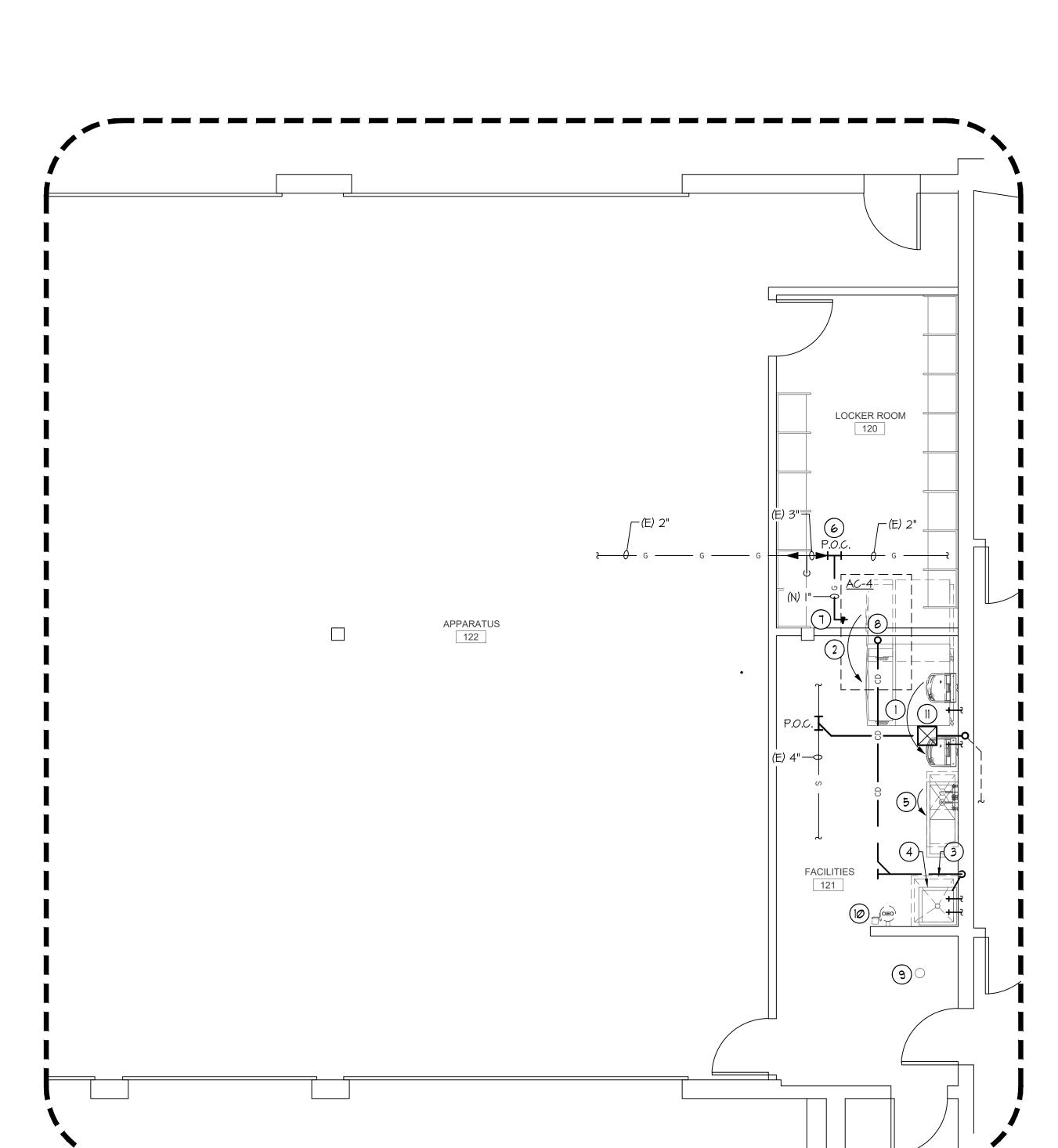


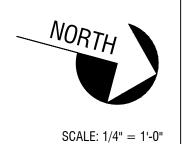
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**PRESCOTT** 

ENLARGED **PLUMBING** FLOOR PLAN

**P2.0** 





24820 N 16TH AVE, STE 170 Phoenix, AZ. 85085

# 15010 GENERAL PROVISIONS:

I. SCOPE: THIS SECTION ESTABLISHES AND DESCRIBES REQUIRED STANDARDS OF QUALITY AND PERFORMANCE FOR PRODUCTS, SYSTEMS AND METHODS ENCOMPASSED BY DIVISION 15000. THIS SECTION ALSO SUMMARIZES THE VARIOUS SYSTEMS TO BE INSTALLED UNDER DIVISION 15000.

#### 15010.1 SPECIAL CONDITIONS:

**SPECIFICATIONS** 

- I. THE SPECIFICATIONS AND ACCOMPANYING DRAWINGS ARE INTENDED TO COVER SYSTEMS WHICH WILL FIT THE AVAILABLE SPACE, WHICH WILL NOT INTERFERE WITH THE GENERAL STRUCTURAL DESIGN, CAREFULLY EXAMINE THE DRAWINGS FOR ALL BRANCHES OF WORK AND BE RESPONSIBLE FOR THE PROPER FITTING OF MATERIAL AND APPARATUS INTO THE BUILDING.NOTIFY ENGINEER/ARCHITECT OF ANY DISCREPANCIES, OMISSIONS OR QUESTIONS IMMEDIATELY.
- 2. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND NOTIFY ARCHITECT/ ENGINEER OF ANY DISCREPANCIES PRIOR TO BIDDING, ANY EXTRA EXPENSES AS A RESULT OF FAILURE TO ADEQUATELY REVIEW THE EXISTING CONDITIONS WILL BE BORNE BY THE CONTRACTOR.
- 3. ALL EQUIPMENT SHALL BE UL OR ETL LISTED.

#### 15010.2 REGULATIONS, CODES AND PERMITS:

GIVE ALL NECESSARY NOTICES, OBTAIN ALL PERMITS, AND PAY ALL TAX FEES AND OTHER COSTS IN CONNECTION WITH WORK; FILE ALL NECESSARY PLANS, PREPARE ALL DOCUMENTS AND OBTAIN ALL NECESSARY APPROVALS OF ALL REGULATING AUTHORITIES HAVING JURISDICTION; OBTAIN ALL REQUIRED CERTIFICATES OF INSPECTION FOR WORK AND DELIVER SAME TO ARCHITECT BEFORE REQUEST FOR ACCEPTANCE AND FINAL PAYMENT FOR WORK.

#### 15010.3 COORDINATION OF WORK:

DRAWINGS ARE DIAGRAMMATIC FOR PIPING, CONDUITS AND DUCTWORK THAT IS NOT INDICATED IN DETAIL. SIZES OF PIPING, CONDUITS, AND DUCTWORK AND THEIR LOCATIONS ARE INDICATED AS INSIDE CLEAR DIMENSIONS, BUT IS NOT INTENDED TO SHOW EVERY OFFSET OF FITTING OR EVERY STRUCTURAL DIFFICULTY THAT MAY BE ENCOUNTERED DURING INSTALLATION OF THE WORK. THE ALIGNMENT OF PIPING, CONDUIT, OR DUCTWORK SHALL BE VARIED FROM THAT INDICATED ON THE DRAWINGS WITHOUT EXTRA EXPENSE TO THE OWNER WHERE NECESSARY TO AVOID STRUCTURAL OR MECHANICAL DIFFICULTIES, OR TO AVOID THE WORK OF ANY OTHER TRADES.

#### 15010.4 WORKMANSHIP:

PERFORM LABOR IN A THOROUGH AND COMPLETE WORKMANLIKE MANNER AND WITH ALL REASONABLE RAPIDITY TO THE SATISFACTION OF THE ARCHITECT.

#### 15010.5 EXCAVATION AND BACKFILLING:

PERFORM ALL NECESSARY EXCAVATION, SHORING AND BACKFILLING REQUIRED FOR THE PROPER LAYING OF ALL PIPES AND CONDUITS INSIDE THE BUILDING AND PREMISES, AND OUTSIDE AS MAY BE NECESSARY.

#### 15010.6 ALTERNATES:

- I. ALTERNATE FIXTURES AND EQUIPMENT WILL BE ACCEPTED WITH PRIOR WRITTEN APPROVAL FROM THE ENGINEER.
- 2. ALTERNATE MATERIALS WILL ONLY BE ACCEPTABLE WITH PRIOR WRITTEN APPROVAL OF THE ENGINEER.
- 3. ADDITIONAL ENGINEERING REQUIREMENTS DUE TO ALTERNATE MATERIALS, FIXTURES OR EQUIPMENT WILL BE PERFORMED AT ENGINEERS STANDARD HOURLY RATES WITH A MINIMUM \$250.00 PAYABLE BY CONTRACTOR PRIOR TO PERFORMANCE OF WORK

## 15010.7 CUTTING AND PATCHING:

- CUT COMPLETED CONSTRUCTION WORK ONLY IF SLEEVES, OPENING, CHASES, ETC., WERE INADVERTENTLY OMITTED AND ONLY WITH THE SPECIFIED APPROVAL OF THE ARCHITECT. IN NO CASE SHALL REINFORCING STEEL BE CUT WITHOUT THE SPECIFIC PERMISSION OF THE ARCHITECT
- 2. WHERE CUTTING AND PATCHING OCCURS IN STREETS, SIDEWALKS, ALLEYS, AND THE LIKE, COOPERATE FULLY WITH THE OWNER AND MUNICIPAL AUTHORITIES TO MAINTAIN SAFE AND REQUIRED TRAFFIC FLOWS. NO EXTRAS WILL BE ALLOWED FOR TRAFFIC PATROLMEN OR OVERTIME WORK IF SUCH IS REQUIRED BY CITY, COUNTY, OR STATE OFFICIALS. PATCHING SHALL MEET ALL REQUIREMENTS OF MUNICIPAL OR OTHER GOVERNMENT BODIES.

# 15010.8 INSTALLATION INSTRUCTIONS:

- I. ALL EQUIPMENT SHALL BE UL LISTED & INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS. SHOULD ANY VARIANCE BETWEEN PLANS AND SPECIFICATIONS OCCUR WITH THESE INSTRUCTIONS, THE ARCHITECT OR ENGINEER SHOULD BE CONTACTED IMMEDIATELY SO THAT ANY VARIATIONS IN INSTALLATION CAN BE KNOWN BY ALL PARTIES CONCERNED.
- 2. UNLESS OTHERWISE NOTED ON THE EQUIPMENT SCHEDULE, ALL MECHANICAL EQUIPMENT SHALL BE MOUNTED ON VIBRATION ISOLATORS TO PREVENT THE TRANSMISSION OF VIBRATION AND MECHANICALLY TRANSMITTED SOUND TO THE BUILDING STRUCTURE. VIBRATION ISOLATORS SHALL BE SELECTED IN ACCORDANCE WITH THE WEIGHT DISTRIBUTION SO AS TO PRODUCE REASONABLY UNIFORM DEFLECTION.
- 3. INSTRUCT OWNER IN THE PROPER OPERATION AND MAINTENANCE OF EQUIPMENT. PROVIDE OWNER WITH BOUND OPERATING AND MAINTENANCE MANUALS, INCLUDE PARTS LIST, MAINTENANCE SCHEDULE, AND NAME, ADDRESS, AND PHONE NUMBER OF LOCAL PRODUCT REPRESENTATIVE.
- 4. PAINT INSIDE OF ALL DUCTWORK EXPOSED TO VIEW THRU GRILLES, REGISTERS & DIFFUSERS FLAT BLACK.
- 5. PROVIDE START-UP BY MANUFACTURER.

# 15010.9 GUARANTEE:

EACH COMPLETED SYSTEM SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE OF THE WORK BY THE OWNER. THE CONTRACTOR SHALL GUARANTEE EACH SYSTEM IN WRITING TO BE FREE OF DEFECTS OF MATERIAL AND WORKMANSHIP AND TO PERFORM SATISFACTORILY UNDER ALL CONDITIONS OF LOAD OR SERVICE. THE GUARANTEES SHALL PROVIDE THAT ANY ADDITIONAL CONTROLS, PROTECTIVE DEVICES, OR EQUIPMENT WILL BE PROVIDED AS NECESSARY TO MAKE THE SYSTEMS OR EQUIPMENT OPERATE SATISFACTORILY, THAT ANY FAULTY MATERIALS OR WORKMANSHIP WILL BE REPLACED OR REPAIRED, AND THAT ON FAILURE OF THE GUARANTOR TO DO THE ABOVE AFTER WRITTEN NOTICE FROM THE OWNER, THE OWNER MAY HAVE THE WORK DONE AT THE COST OF THE GUARANTOR. PROVIDE EXTENDED 5 YEAR WARRANTY ON ALL AIR CONDITIONING COMPRESSORS AND PARTS.

# 15020 BASIC MATERIALS AND METHODS:

SCOPE: THIS SECTION SETS FORTH PRODUCTS AND METHODS OF INSTALLATION FOR PLUMBING, HEATING, VENTILATION AND AIR CONDITIONING.

# 15020.I SLEEVES:

WHERE PIPING, DUCTWORK, STACKS, ETC., PASSES THROUGH SUCH BUILDING ELEMENTS AS WALLS, FLOORS, ROOFS, FOOTINGS, ETC., PROVIDE SLEEVES UNLESS INDICATED OTHERWISE.

#### 15020.2 HANGERS AND SUPPORTS

SUPPORT HANGERS OF HORIZONTAL PIPE WITH VERTICALLY ADJUSTABLE HANGERS ON MALLEABLE SWIVEL RING OR WROUGHT STEEL CLEVIS TYPE HANGER SUSPENDED ON THREADED STEEL ROD HANGERS, EQUAL TO FEE AND MASON FIG. 199 AND FIG. 239 RESPECTIVELY WITH CLEVIS TYPE UTILIZED FOR LARGER PIPING.

#### 15020.3 VALVES:

ALL VALVES SHALL BE CRANE, JENKINS, STOCKHAM OR MUELLER, DESIGNED FOR 125 PSI MINIMUM WORKING PRESSURE. ALL WATER VALVES SHALL BE FULL PORT BALL I/4 TURN VALVES UNLESS OTHERWISE SPECIFIED OR REQUIRED FOR SPECIAL INSTALLATION OF FLOW CONTROL.

### 15030 INSULATION:

SCOPE: FURNISH ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY TO INSTALL INSULATION MATERIAL TO DUCTWORK, PIPES AS INDICATED ON DRAWINGS AND AS SPECIFIED HEREIN. THIS SECTION SETS FORTH PRODUCTS AND METHODS OF INSTALLATION FOR PLUMBING, AIR CONDITIONING, HEATING, AND VENTILATION SYSTEMS. FLAME-SPREAD INDEX OF LESS THAN 25 AND SMOKE DEVELOPED RATING OF LESS THAN 50.

#### 15030.1 DUCT INSULATION:

- I. ALL CONCEALED SUPPLY AND RETURN DUCT WORK SHALL BE EXTERNALLY WRAPPED WITH 2" THICK - 2 PCF DENSITY FIBERGLASS (FOIL BACKING), WIRING IN PLACE WITH 18 GAUGE GALVANIZED WIRE, 18" O.C. (R-8)
- 2. EXTERIOR DUCTWORK TO BE LINED WITH 2" ACOUSTICAL DUCT LINER (3 PCF) (R-8).
- 3. LINE DUCTWORK WITHIN IO' OF FAN W/ 2" ACOUSTICAL DUCT LINER (3 PCF) (R-8).

#### 15030.2 PIPE INSULATION:

- I. INSULATE CONDENSATE DRAIN PIPING WITH ASJ/SSL II I" THICK FIBERGLASS PIPE INSULATION. (R-3) MANVILLE PIPE INSULATION OR OWENS-CORNING PIPE INSULATION. ALL INSULATION SHALL BE INSTALLED AS DESCRIBED HEREIN AND SHALL BE APPLIED IN STRICT ACCORDANCE WITH THE TRADE PRACTICES AND MANUFACTURERS RECOMMENDATIONS.
- 2. INSULATE FIRST 8' OF DOMESTIC COLD WATER SUPPLY TO WATER HEATER/STORAGE TANKS AND 100% OF DOMESTIC HOT/ RECIRCULATING WATER PIPING WITH ASJ/SSL II FIBERGLASS PIPE INSULATION. MANVILLE PIPE INSULATION OR OWENS-CORNING PIPE INSULATION. ALL INSULATION SHALL BE INSTALLED AS DESCRIBED HEREIN AND SHALL BE APPLIED IN STRICT ACCORDANCE WITH THE TRADE PRACTICES AND MANUFACTURERS RECOMMENDATIONS. THICKNESS PER TABLE BELOW:

	MINIMUM PIPI	TABLE C403.11.3 E INSULATION THICKNESS	(in inches	) <sup>a,c</sup>			
FLUID OPERATING	INSULATION CO	ONDUCTIVITY	N	NOMINAL PIP	E OR TUBE S	IZE (inches)	
TEMPERATURE RANGE AND USAGE (°F)	Conductivity Btu • in./(h • ft2 • °F)	Mean Rating Temperature, °F	< 1	1 to < 1-1/2	1-1/2 to < 4	4 to < 8	≥8
105 – 140	0.21 – 0.28	100	1.0	1.0	1.5	1.5	1.5
141 200	0.25 0.20	125	1.5	1.5	2.0	2.0	2.0

- a. For piping smaller than 11/2 inches and located in partitions within conditioned spaces, reduction of these thicknesses by 1 inch shall be permitted (before thickness adjustment required in footnote b) but not to a thickness less than 1 inch.
- c. For direct-buried heating and hot water system piping, reduction of these thicknesses by 11/2 inches (38 mm) shall be permitted (before thickness adjustment required in footnote b but not to thicknesses less than 1 inch.
- 3. REFRIGERANT PIPING (SUCTION) I", (R4) CLOSED CELLULAR FOAM RUBBER.

#### 15040 WATER SYSTEMS:

SCOPE: DETERMINE IN ADVANCE OF CONSTRUCTION, THE LOCATION OF ALL PIPING SLEEVES HANGERS, FLOW LINE ELEVATION, ETC. INSTALL PIPING SUBSTANTIALLY AS INDICATED. PARALLEL WITH THE BUILDING WALLS, UNLESS INDICATED OTHERWISE. PROVIDE PRV WHERE INCOMING PRESSURE EXCEEDS 80 PSI.

# 15040.1 DOMESTIC WATER PIPING:

For SI: 1 inch = 25.4 mm. °C = [(°F) - 32]/1.8.

- I. DOMESTIC WATER PIPING (ABOVE GROUND): WATER PIPING SHALL BE HARD DRAWN TYPE "L" COPPER.
- 2. DOMESTIC WATER PIPING (BELOW GROUND): WATER PIPING SHALL BE TYPE "K" SOFT COIL (NO JOINTS) WROUGHT COPPER WITH TWO COATS OF POLYVINYL BLACK TAPE.
- 3. FITTINGS SHALL BE CAST BRASS OR WROUGHT COPPER SUITABLE FOR SWEAT OR BRAZED CONNECTIONS. SOLDER SHALL BE 95-5 (95% TIN AND 5% ANTIMONY), FOR PIPES I-I/2" AND SMALLER. USE 1050 DEGREE SILVER SOLDER FOR ALL OTHER SIZES. CLEAN JOINTS AND APPLY NON-CORROSIVE FLUX BEFORE SOLDERING. ALL COPPER PIPE INSTALLATION SHALL MEET ASTM B-88, ASTM B-813 AND ASTM B-828
- 4. HOT WATER TO BE LEFT FITTING AT ALL LOCATIONS.
- 5. PROVIDE DIELECTRIC INSULATOR ON ALL DISSIMILAR METALS.

# 15040.2 TEST AND INSPECTION:

- I. DOMESTIC WATER PIPING SHALL BE PRESSURE TESTED AND PROVEN TIGHT WITH A MINIMUM OF 100 PSI HYDROSTATIC TEST. NOTIFY CITY INSPECTOR PRIOR TO TEST. FINAL APPROVAL SHALL BE BY THE CITY INSPECTOR.
- 2. FLUSH AND DISINFECT POTABLE WATER SYSTEM IN ACCORDANCE WITH IPC SECTION 610 OR LOCAL CODE, WHICHEVER IS MORE STRINGENT.

# 15050 WASTE WATER SYSTEMS:

SCOPE: DETERMINE IN ADVANCE OF CONSTRUCTION LOCATION OF ANY AND ALL EXISTING WASTE PIPING UNDERGROUND ON SITE, AND IN THE ADJOINING STREETS. PIPING WILL BE AS INDICATED AND PARALLEL WITH BUILDING UNLESS OTHERWISE DIRECTED. FURNISH AND INSTALL A COMPLETE SANITARY WASTE SYSTEM, INCLUDING CONNECTION TO CITY SEWERS AND BUILDING PLUMBING FIXTURES.

# 15050.1 SOIL AND WASTE INSTALLATION:

- I. BURY ALL EXTERIOR SOIL LINES A MINIMUM OF 18" BELOW FINISHED GRADE.
- 2. SLOPE HORIZONTAL SOIL AND WASTE PIPES UNDER BUILDING 1/4" PER FOOT. SLOPE SHALL BE UNIFORM AND FREE OF DIPS, TRAPS, ETC.
- 3. ALL VENTS TO BE LOCATED A MINIMUM OF 10' FROM ANY OUTSIDE AIR INTAKE.
- 4. NOTIFY ENGINEER IMMEDIATELY IF UPPER MANHOLE RIM IS ABOVE FINISHED FLOOR. CONTRACTOR TO FIELD VERIFY.
- 5. UNDERGROUND (EXCEPT UNDER BUILDING SLAB) NONMETALLIC PIPING SHALL BE INSTALLED WITH INSULATED MIN. 18 GAUGE COPPER TRACER WIRE. PER LOCAL CODE.

# 15050.2 PIPING:

# ABOVE GROUND:

- STANDARD WEIGHT NO-HUB CAST IRON COATED INSIDE AND OUT.
- NO-HUB CAST IRON FITTINGS.
- 3. ALL MATERIALS, INCLUDING PIPE, FITTINGS AND COUPLINGS TO BE MADE IN AMERICA.

# UNDERGROUND:

- SOLID CORE SCHEDULE 40 ABS DWV (ASTM D 2661) OR SOLID CORE PVC DWV (ASTM D 2665).
- MATCHING FITTINGS.

### 15050.3 TESTS AND INSPECTIONS

- I. TEST SEWER, WASTE AND VENT PIPING UNDER A WATER PRESSURE EQUIVALENT TO THE HEIGHT OF THE HIGHEST VENT FOR NO LESS THAN 6 HOURS.
- 2. NOTIFY THE ARCHITECT PRIOR TO TESTING. APPROVAL WILL BE BY THE ARCHITECT, CITY INSPECTOR OR BOTH AS DIRECTED.

# 15055 OTHER PIPING SYSTEMS

- I. CONDENSATE DRAIN (CD) & DRAIN (D) PIPING SHALL BE COPPER TYPE 'M' HARD DRAWN PIPE TRAPPED & VENTED EQUIPMENT, SLOPE 1/8"/FT, PROVIDE CLEANOUT CAP AT ENDS OF PIPE.
- 2. A. FUEL GAS PIPING ABOVE GROUND 2" AND SMALLER BLACK STEEL SCHEDULE 40 W/ CLASS 150 MALLEABLE IRON THREADED FITTINGS. PROVIDE SUPPORT EVERY 6'.
- B. FUEL GAS PIPING ABOVE GROUND 2 1/2" AND LARGER, BLACK STEEL SCHEDULE 40 W/ WROUGHT STEEL BUTTWELDED FITTINGS. PROVIDE SUPPORT EVERY 10'.
- C. FUEL GAS PIPING UNDERGROUND (NOT UNDER BUILDING) POLYETHYLENE PE 3406 W/ ANODELESS RISERS. UNDERGROUND (EXCEPT UNDER BUILDING SLAB) NONMETALLIC PIPING SHALL BE INSTALLED WITH INSULATED MIN. 18 GAUGE COPPER TRACER WIRE. PER LOCAL CODE.
- D. FUEL GAS PIPING UNDERGROUND (UNDER SLAB) TRACPIPE PS-II CORRUGATED STAINLESS STEEL TUBING (CSST) WITH INTEGRAL VENTED SLEEVE.
- 3. ROOF/ OVERFLOW DRAIN PIPING SHALL BE STANDARD WEIGHT NO HUB CAST IRON.
- 4. GAS FIRED CONDENSATE (CD) PIPING SHALL BE PVC PIPE WITH TRAP, SLOPE I/8"/FT, PROVIDE CLEANOUT CAP AT ENDS OF PIPE. CONDENSATE PIPING SHALL BE ROUTED THRU A NEUTRALIZATION SYSTEM BEFORE BEING DISCHARGED.
- 5. COMPRESSED AIR PIPING SHALL BE TYPE 'L' COPPER TUBE.

### 15060 PLUMBING SPECIALTIES:

SCOPE: PROVIDE NEW FIXTURES, DRAINS, AND OTHER PLUMBING EQUIPMENT AS SPECIFIED HEREIN AND ON PLANS AND INSTALL TO OPERATE AS INTENDED.

## 15060.1 CLEANOUTS:

- I. INTERIOR FINISHED FLOORS OR SIDEWALKS.
- 2. CONCRETE AND TILE FLOORS: "ZURN" A-1400-2 WITH SCORIATED NICKEL BRONZE TOP.
- 3. INTERIOR FINISHED WALLS: "ZURN" Z-1445-1.
- 4. OUTSIDE YARD CLEANOUTS: "ZURN" Z-1450-6 WITH 12"X12" POURED CONCRETE PAD AT
- NOTE: PROVIDE ALL CLEANOUTS WITH HEAVY THREADED BRONZE PLUGS.

#### 15070 AIR DISTRIBUTION

WORK SPECIFIED HEREIN: FURNISH ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY TO INSTALL THE AIR DISTRIBUTION SYSTEM AND RELATED ITEMS IN ACCORDANCE WITH LATEST EDITION "SMACNA" STANDARDS AND/OR LOCAL CODE REQUIREMENTS AS SPECIFIED HEREIN AND INDICATED ON PLANS. (WHICHEVER IS MORE STRINGENT) IN ACCORDANCE WITH ULIBIA OR IBIB. FLEXIBLE DUCT WILL BE CLASS I (UL IBI). ALL MATERIALS, PRODUCTS AND SEALING TO BE IN ACCORDANCE WITH UL 181A OR UL 181B.

TRAVERSE JOINTS

# 15070.1 DUCTWORK:

THE DUCTWORK SHALL BE FABRICATED AND INSTALLED BY SKILLED MECHANICS IN A WORKMAN LIKE MANNER USING THE BEST PRACTICES OF THE TRADE AND BE MADE OF GALVANIZED SHEET METAL "DUCT SHEET" SIZED FROM THE FOLLOWING TABLE:

DIAMETER OR GREATEST U.S. GAUGE FOR I"X 18 GA

DUCT DIMENSION	GALVANIZED	DUCT SUPPORT	AND GRAZING
UP TO 12"	24	IO' ON CENTER	S-SLIP DRIVE SLIP I" POCKET LOCK ON 8' CENTER
UP TO 30"	22	10' ON CENTER	S-SLIP, I" POCKET LOCK ON 8' CENTERS

# 15070.2 HVAC DUCT SMOKE DETECTORS:

WHERE INDICATED ON PLANS, PROVIDE LISTED, COMPATIBLE SMOKE DETECTORS MOUNTED RIGIDLY IN THE DUCT IN ACCORDANCE WITH THE MANUFACTURERS INSTALLATION INSTRUCTIONS TO AUTOMATICALLY SHUT OFF THE SYSTEM WITHIN 30 SECONDS BY INTERRUPTING THE POWER SOURCE OF THE AIR MOVING EQUIPMENT. DUCT DETECTOR SHALL ACTIVATE A VISIBLE AND AUDIBLE SIGNAL NORMALLY OCCUPIED LOCATIONS. WHERE FIRE DETECTION OR ALARM SYSTEMS ARE PROVIDED, THE SMOKE DETECTORS SHALL BE SUPERVISED BY SUCH SYSTEMS. SMOKE DETECTORS SHALL BE READILY ACCESSIBLE INCLUDING ACCESS DOORS, AND SHALL BE PERMANENTLY LABELED. PROVIDE L.E.D. INDICATOR LIGHT @ CEILING UNDER THE PROTECTED UNIT. INSTALL IN ACCORDANCE WITH 2018 IMC, SECTION 606 AND NFPA 72.

# 15070.3 HVAC IDENTIFICATION:

PROVIDE A SECURELY FASTENED NAME PLATE OF 1/16" THICK BLACK BAKELITE WITH ENGRAVED WHITE CORE LETTERS AND 4 EDGE BEVEL, 2 1/2"X 3/4" PERMANENTLY IDENTIFYING EACH UNIT AND AREA SERVED.

# 15070.4 AIR BALANCE:

PROVIDE COMPLETE AIR BALANCE BY INDEPENDENT AABC OR NEBB CONTRACTOR AND PROVIDE REPORT TO OWNER AND ENGINEER, AND FOR REVIEW BY CITY IN ACCORDANCE WITH IMC 403.3.4.

# 15080 CONTROL:

WORK SPECIFIED HEREIN: FURNISH ALL LABOR, MATERIALS, EQUIPMENT, AND SERVICES TO INSTALL A COMPLETE ELECTRICAL CONTROL SYSTEM AS SPECIFIED HEREIN, AND AS SHOWN ON PLANS.

# TYPICAL SYMBOLS LIST

NOTE: NOT ALL MAY APPLY LOW YOLTAGE -DUCT SMOKE DETECTOR SEE FLOOR PLAN SEE KEYNOTE FOR FOR DUCT SIZE LOCATION SPLITTER FLEX -DAMPER CONNECTION rFLEX - 4' MAX. ACOUSTIC DUCT Lining 10' Min. REDUCER -/ BRANCH DUCT SIZE EQUALS DIFFUSER NECK SIZE - SPIN-IN DAMPER

# **DUCT CONSTRUCTION STANDARD**

POINT OF CONNECTION (P.O.C.)

- TURNING VANE

DUCT UP / DOWN

EVAPORATIVE COOLER WALL SWITCH EXHAUST

--- L/S--- LIQUID SUCTION LINES

RETURN GRILLE SUPPLY DIFFUSER (CD) 4-WAY THROW

SUPPLY DIFFUSER (CD) 3-WAY THROW

THERMOSTAT MOUNTED @ +4'-0" AFF

DRAIN VALVE AT 4'-O" AFF WITH HOSE END

SUPPLY DIFFUSER (CD) 2-WAY THROW

E EXISTING

E/R EXISTING TO BE RELOCATED

R RELOCATED DEMOLITION OF EXISTING FIXTURE

NEW, MATCH EXISTING

FBO FURNISHED BY OTHERS --- CD --- CONDENSATE DRAIN (CD)

——D—— DRAIN (D)

- CW - EXISTING COLD WATER

----HW --- EXISTING HOT WATER

----- S ---- EXISTING SOIL/WASTE

- · - DOMESTIC COLD WATER (DCW)

---- V ---- EXISTING VENT PIPING

— · · — DOMESTIC HOT WATER (DHW)

---TW--- TEMPERED WATER (TW) HOSE BIBB WITH VACUUM BREAKER (HB W/ VB)

GAS COCK & DIRT LEG

— G — GAS PIPING POINT OF CONNECTION

→ PIPE DOWN 

O PIPE UP SHUT-OFF VALVE (SOV)

— M SHUT-OFF VALVE IN CONCRETE YARD BOX WITH CAST IRON COVER

ACCESS PANEL

SURFACE CLEAN OUT (SCO)

----- SOIL/WASTE

- Ø Q - 2-WAY SURFACE CLEAN OUT (SCO)

---- VENT PIPING (V) VENT THRU ROOF (VTR) LOCATE IO' FROM FRESH AIR SOURCE

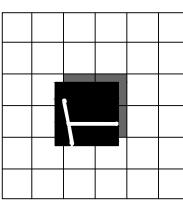
→ WALL CLEAN OUT (MCO)

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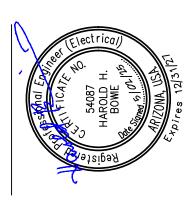
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**MECHANICAL** & PLUMBING SPECIFICATIONS

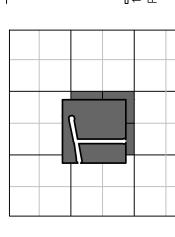
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MECHANICAL & PLUMBING SPECIFICATIONS



MICHAEL TAYLOR ARCHITECTS, INC.



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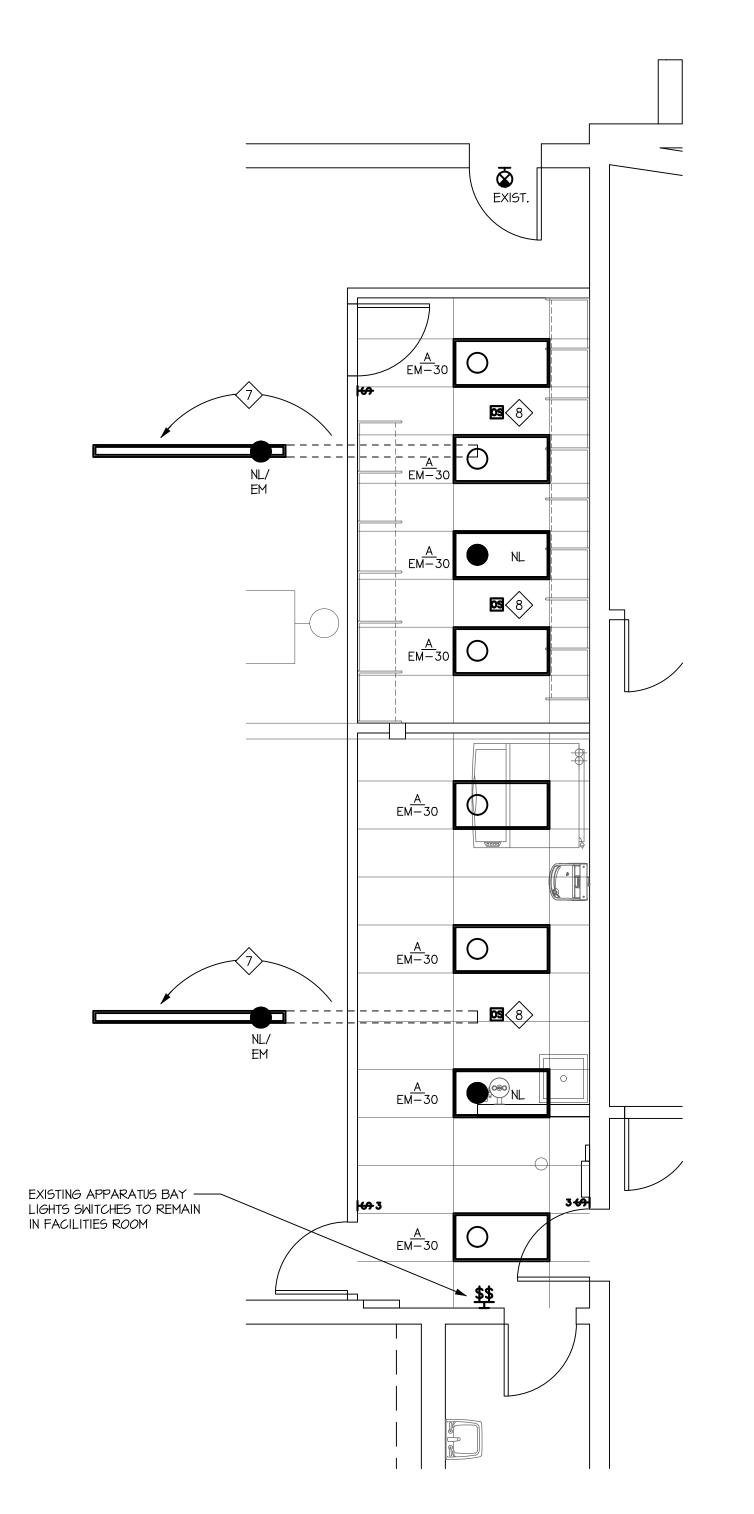
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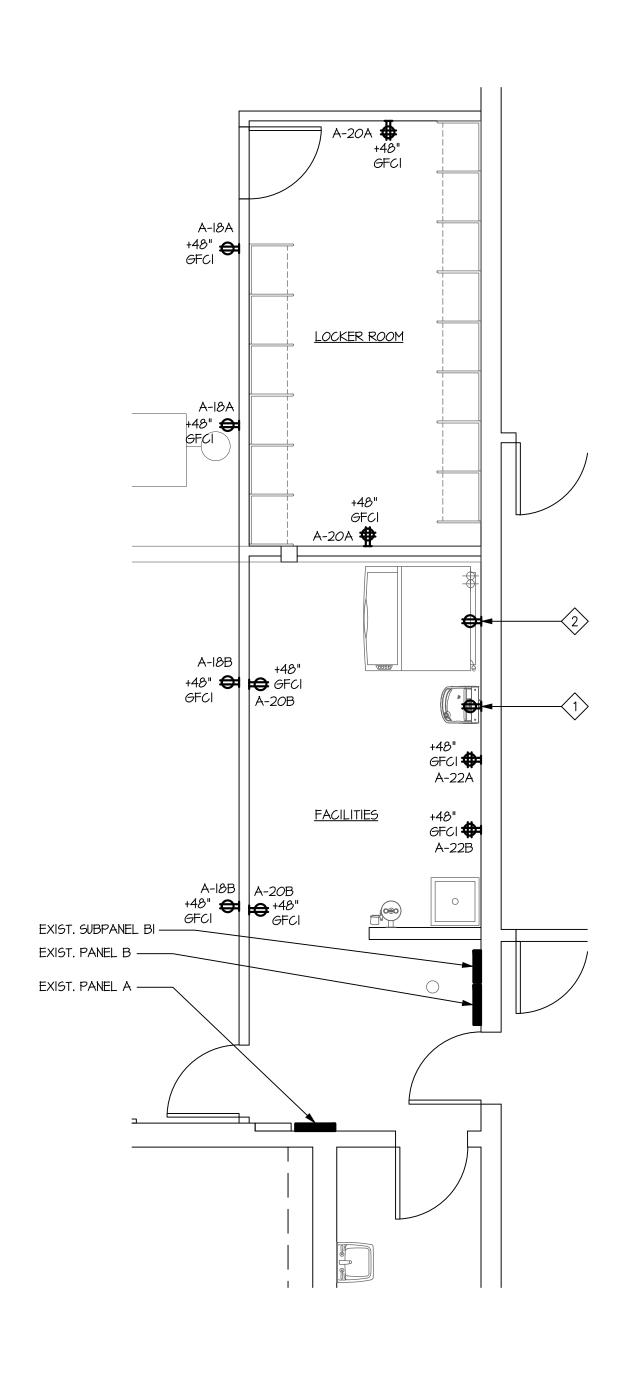
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LI	LIGHT FIXTURE SCHEDULE											
LTR	FIXTURE							MANUFACTURER/				
TYPE	TYPE	MOUNTING	LUMENS	WATTS	CCT	DIMMING	VOLTAGE	CATALOG SERIES	NOTES			
Α	2'x4' LED EDGE LIT PANEL	RECESSED	5631	40	3500	0-10V	120/277	LITHONIA				
								CPX 2x4 5000LMHE 80CRI 35K SWL MIN10 ZT MVOLT WITH E10WLCP WHERE NOTED "EM"				











# ENLARGED HVAC POWER PLAN N SCALE: 1/4'=1'-0'

**r** A-27,29,31

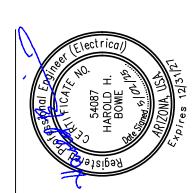


# **GENERAL NOTES**

- A. PROVIDE ALL CUTTING, PATCHING (INCLUDING FIRE STOPPING) OF FLOORS, WALLS, OR CEILINGS REQUIRED FOR THE NEW POWER SYSTEMS. PATCH TO MATCH ADJACENT SURFACES.
- B. VERIFY MOUNTING HEIGHTS OF ALL RECEPTACLES, TELE/DATA OUTLETS, ETC. PRIOR TO ROUGH IN. REFER TO THE ARCHITECTURAL ELEVATIONS.
- C. SEAL ALL CONDUIT/ RACEWAY PENETRATIONS OF SMOKE OR FIRE RATED WALLS OR FLOOR WITH INTUMESCENT TYPE FIRE BARRIER.
- D. FOR BRANCH CIRCUITS (120V/ 20 AMPS) PROVIDE WIRE SIZE AS FOLLOWS FOR TOTAL CONDUCTOR LENGTH OF CIRCUIT: 0-75 FEET: #12 AMG CU, 76-115 FEET: #10 AMG CU, 116-170 FEET: #8 AWG CU, ITI-270 FEET: #6 AWG CU. ALL 20 AMP/ I20 VOLT CIRCUITS ARE TO BE 1/2" C.- 2#12,1#12 GND HOMERUN UNLESS NOTED OTHERWISE OR MODIFIED FOR LENGTH.
- PROVIDE ALL CONDUIT, BACK BOXES, AND RACEWAYS FOR TELE/DATA AND SECURITY OUTLETS SHOWN ON PLAN. PROVIDE PULLSTRING IN EACH CONDUIT.
- F. ALL I PHASE RECEPTACLES RATED 150 VOLTS TO GROUND OR LESS AND 50 AMPS OR LESS, AND 3 PHASE RECEPTACLES RATED 150 VOLTS TO GROUND OR LESS AND 100 AMPS OR LESS IN BATHROOMS, KITCHENS, ROOFTOPS, OUTDOORS, WITHIN 6' OF A SINK OR OTHER INDOOR WET LOCATION, LOCKER ROOMS WITH SHOWER FACILITIES, AND GARAGE AND SERVICE BAYS ARE TO BE GFCI PROTECTED PER NEC 210.8. ALL GFCI RECEPTACLES ARE TO BE INSTALLED IN A READILY ACCESSIBLE LOCATION OR A GFCI CIRCUIT BREAKER IS TO BE INSTALLED IN LIEU OF A GFCI RECEPTACLE.
- G. ALL CONDUITS OR RACEWAYS THAT ENTER A BUILDING FROM OUTSIDE (INCLUDING SPARE OR UNUSED RACEWAYS) SHALL BE SEALED PER NEC 225.27.

# KEY NOTES

- (1) RELOCATE 120V/20A GFCI RECEPTACLE TO NEW ELECTRIC DRINKING FOUNTAIN LOCATION AS REQUIRED.
- RELOCATE 120V/20A GFCI RECETACLE TO NEW ICE MAKER LOCATION AS REQUIRED.
- 3 RELOCATE EXISTING AIR HAWK PURIFICATION UNIT AND 20A/208V CIRCUIT AND DISCONNECT TO
- NEW LOCATION AS REQUIRED. NEW ROOFTOP A/C UNIT AC-4. 21.8 FLA/ 28 MCA/ 40 MOCP-208V-30. PROVIDE 60A/3P WP FUSED DISC. SWITCH AT UNIT AND 3/4" C.- 3#10,1#10 GND HOMERUN.
- (5) EXISTING EXHAUST FAN TO BE DEMOLISHED BY MECH. CONTRACTOR. REMOVE CONDUIT AND WIRE
- COMPLETELY BACK TO SOURCE.
- PROVIDE NEW WP/GFCI RECEPTACLE AND 1/2" C.- 2#12,1#12 GND HOMERUN ON ROOF WITHIN 25' OF NEW ROOFTOP HVAC EQUIPMENT.
- 7> DEMOLISH EXISTING 8' STRIP LIGHT TO ACCOMMODATE NEW WALL. RELOCATE EXISTING NL/EM FIXTURE DOWN ONE POSITION AS SHOWN.
- (8) PROVIDE CEILING MOUNTED OCCUPANCY SENSOR AND POWER PACK TO CONTROL FIXTURES IN AREA SHOWN.



-AYLOR 9 **ARCHITECTS** 

MICHAEL

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**PRESCOT** 

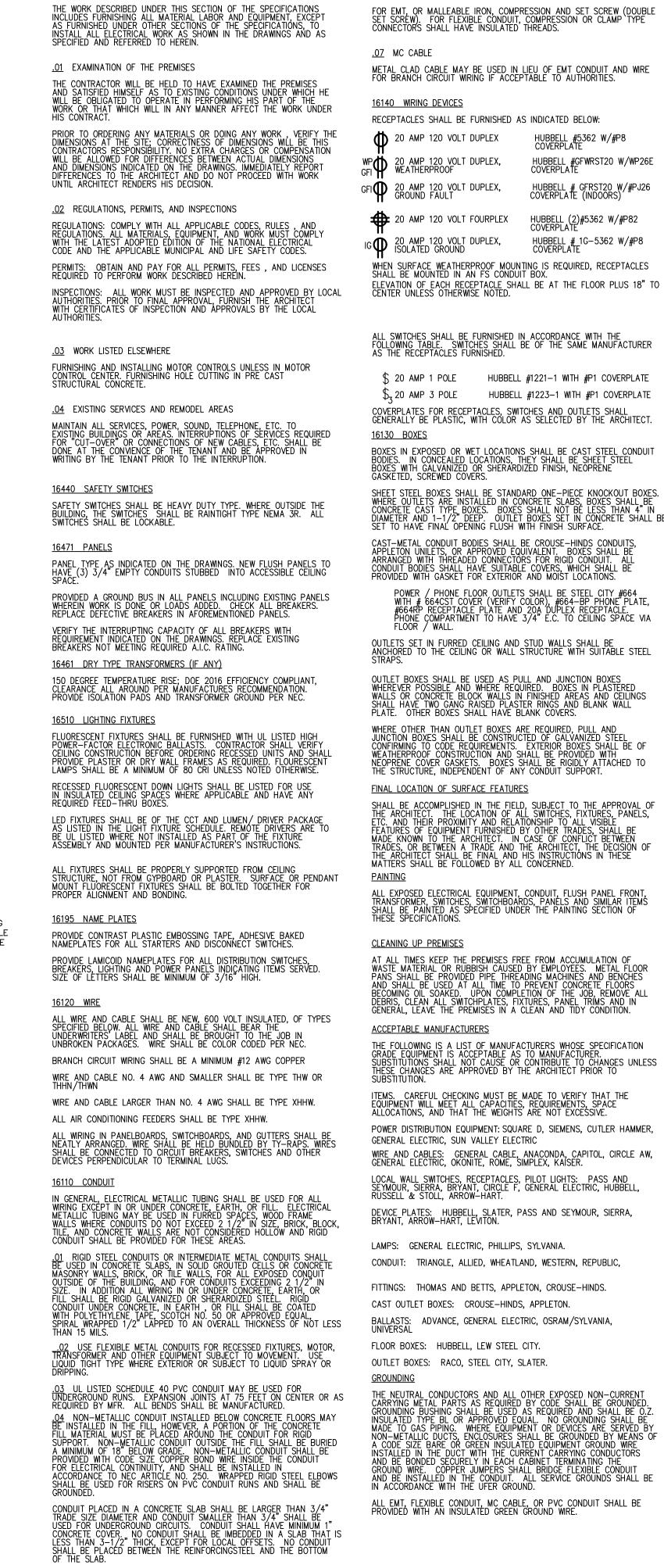
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BTE# 25038E

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# **SPECIFICATIONS** ELECTRICAL SYMBOLS 16001 SCOPE OF WORK SURFACE FIXTURE RECESSED OR SURFACE DOWNLIGHT RECESSED WALL WASHER, WALL MOUNTED FIXTURE AND BRACKET WALL MOUNTED EXIT SIGN, SHADING INDICATES THE ILLUMINATED FACES CEILING MOUNTED EXIT SIGN, SHADING INDICATES THE ILLUMINATED FACES BATTERY PACK, NORMAL POWER POLE, BASE AND FIXTURE(S). CIRCLES INDICATE # OF HEADS PER POLE, NORMAL POWER TRACK HEADS AND TRACK ASSEMBLY LIGHT FIXTURE DESIGNATION A **←**LIGHT FIXTURE TYPE SWITCH, WHERE "X" CAN BE ONE OF THE FOLLOWING: 2 = DOUBLE POLE 3 = THREE WAY4 = FOUR WAYLV = LOW VOLTAGEMC = MOMENTARY WITH RTC a = SWITCH LEG INDICATOR (blank) = SINGLE POLE OCCUPANCY SENSOR WALL SWITCH DUAL TECH UNLESS NOTED OTHERWISE DIMMER SWITCH, OPERATING WATTAGE INDICATED OCCUPANCY SENSOR, WHERE "Y" IS THE RATED AREA OF COVERAGE AND "X" IS ONE OF THE FOLLOWING: DT - DUAL TECHNOLOGY US - ULTRASONIC OR MICROPHONIC PIR - PASSIVE INFRARED DUPLEX RECEPTACLE, NORMAL POWER DUPLEX RECEPTACLE, ABOVE COUNTER FOURPLEX RECEPTACLE 208/240V RECEPTACLE DISCONNECT SWITCH MOTOR STARTER SWITCH WITH OVERLOAD PROTECTION MAGNETIC MOTOR STARTER WITH EQUIPMENT NUMBER INDICATED COMBINATION MOTOR STARTER AND FUSED DISCONNECT WITH EQUIPMENT NUMBER INDICATED MOTOR CONNECTION 208/120 VOLT PANELBOARD 480/277 VOLT PANELBOARD 4" BACKBOX WITH SINGLE GANG MUDRING AND 3/4" CONDUIT TO ABOVE ACCESSIBLE CEILING SPACE UNLESS NOTED OTHERWISE JUNCTION BOX, RECESSED WALL JUNCTION BOX, RECESSED CEILING TELEVISION RECEIVER PUSHBUTTON



ALL EMPTY CONDUITS SHALL BE PROVIDED WITH PULL WIRE.

	<u>.06</u> EMT OR FLEX FITTINGS	
	FOR EMT, OR MALLEABLE IRON, COMI SET SCREW). FOR FLEXIBLE CONDUI CONNECTORS SHALL HAVE INSULATED	PRESSION AND SET SCREW (DOUBLE T, COMPRESSION OR CLAMP TYPE ) THREADS.
	<u>.07</u> MC CABLE  METAL CLAD CABLE MAY BE USED IN FOR BRANCH CIRCUIT WIRING IF ACC	I LIEU OF EMT CONDUIT AND WIRE EPTABLE TO AUTHORITIES.
	16140 WIRING DEVICES	
E	RECEPTACLES SHALL BE FURNISHED  20 AMP 120 VOLT DUPLEX	AS INDICATED BELOW:  HUBBELL #5362 W/#P8 COVERPLATE
_	WP 20 AMP 120 VOLT DUPLEX, WEATHERPROOF	HUBBELL #GFWRST20 W/WP26E COVERPLATE
	GFI 20 AMP 120 VOLT DUPLEX, GROUND FAULT	HUBBELL # GFRST20 W/#PJ26 COVERPLATE (INDOORS)
	20 AMP 120 VOLT FOURPLEX 20 AMP 120 VOLT DUPLEX,	HUBBELL (2)#5362 W/#P82 COVERPLATE HUBBELL # 1G-5362 W/#P8 COVERPLATE
	IG 20 AMP 120 VOLT DUPLEX, ISOLATED GROUND  WHEN SURFACE WEATHERPROOF MOU SHALL BE MOUNTED IN AN FS CONDI	NTING IS REQUIRED. RECEPTACLES
AL	ELEVATION OF EACH RECEPTACLE SH CENTER UNLESS OTHERWISE NOTED.	
	ALL SWITCHES SHALL BE FURNISHED FOLLOWING TABLE. SWITCHES SHALL AS THE RECEPTACLES FURNISHED.	IN ACCORDANCE WITH THE BE OF THE SAME MANUFACTURER
	\$ 20 AMP 1 POLE HUBBEL $$$ 20 AMP 3 POLE HUBBEL	L #1221-1 WITH #P1 COVERPLATE L #1223-1 WITH #P1 COVERPLATE
	COVERPLATES FOR RECEPTACLES, SW GENERALLY BE PLASTIC, WITH COLOR 16130 BOXES	ITCHES AND OUTLETS SHALL
	BOXES IN EXPOSED OR WET LOCATION BODIES. IN CONCEALED LOCATIONS, BOXES WITH GALVANIZED OR SHERAR GASKETED, SCREWED COVERS.	THEY SHALL BE SHEET STEEL
	SHEET STEEL BOXES SHALL BE STAN WHERE OUTLETS ARE INSTALLED IN C CONCRETE CAST TYPE BOXES. BOXE DIAMETER AND 1–1/2" DEEP. OUTLE SET TO HAVE FINAL OPENING FLUSH	DARD ONE-PIECE KNOCKOUT BOXES. CONCRETE SLABS, BOXES SHALL BE S SHALL NOT BE LESS THAN 4" IN ETT BOXES SET IN CONCRETE SHALL E WITH FINISH SURFACE
	CAST-METAL CONDUIT BODIES SHALL APPLETON UNILETS, OR APPROVED E ARRANGED WITH THREADED CONNECT CONDUIT BODIES SHALL HAVE SUITAE PROVIDED WITH GASKET FOR EXTERIO	BE CROUSE—HINDS CONDUITS, QUIVALENT. BOXES SHALL BE ORS FOR RIGID CONDUIT. ALL
	POWER / PHONE FLOOR OUTLE WITH # 664CST COVER (VERIFY #664RP RECEPTACLE PLATE AN PHONE COMPARTMENT TO HAVE	TS SHALL BE STEEL CITY #664 COLOR), #664-BP PHONE PLATE, ID 20A DUPLEX RECEPTACLE. 3/4" E.C. TO CEILING SPACE VIA
	FLOOR / WALL.  OUTLETS SET IN FURRED CEILING ANI ANCHORED TO THE CEILING OR WALL STRAPS.	O STUD WALLS SHALL BE STRUCTURE WITH SUITABLE STEEL
	OUTLET BOXES SHALL BE USED AS F WHEREVER POSSIBLE AND WHERE REC WALLS OR CONCRETE BLOCK WALLS SHALL HAVE TWO GANG RAISED PLAS PLATE. OTHER BOXES SHALL HAVE	QUIRED. BOXES IN PLASTERED IN FINISHED AREAS AND CEILINGS STER RINGS AND BLANK WALL
	WHERE OTHER THAN OUTLET BOXES JUNCTION BOXES SHALL BE CONSTRUCONFIRMING TO CODE REQUIREMENTS. WEATHERPROOF CONSTRUCTION AND NEOPRENE COVER GASKETS. BOXES THE STRUCTURE, INDEPENDENT OF A	ICTED OF GALVANIZED STEEL  EXTERIOR BOXES SHALL BE OF SHALL BE PROVIDED WITH SHALL BE RIGIDLY ATTACHED TO
	FINAL LOCATION OF SURFACE FEATURES SHALL BE ACCOMPLISHED IN THE FIE	
	SHALL BE ACCOMPLISHED IN THE FIE THE ARCHITECT. THE LOCATION OF ETC. AND THEIR PROXIMITY AND RELATED TO THE ARCHITECT. IN TRADES, OR BETWEEN A TRADE AND THE ARCHITECT SHALL BE FINAL AND MATTERS SHALL BE FOLLOWED BY ALL AND THE ARCHITECT SHALL BE FINAL AND THE ARCHITECT SHALL BE FINAL AND THE ARCHITECT SHALL BE FINAL BY ALL AND THE ARCHITECT SHALL BE FINAL BY ALL AND THE ARCHITECT SHALL BY	BY OTHER TRADES, SHALL BE N CASE OF CONFLICT BETWEEN THE ARCHITECT, THE DECISION OF HIS INSTRUCTIONS IN THESE
ΙΤ	PAINTING  ALL EXPOSED ELECTRICAL EQUIPMENT TRANSFORMER, SWITCHES, SWITCHBOASHALL BE PAINTED AS SPECIFIED UNTHESE SPECIFICATIONS.	T, CONDUIT, FLUSH PANEL FRONT, ARDS, PANELS AND SIMILAR ITEMS DER THE PAINTING SECTION OF
	CLEANING UP PREMISES	DEE EDOM ACCUMULATION OF
	AT ALL TIMES KEEP THE PREMISES F WASTE MATERIAL OR RUBBISH CAUSE PANS SHALL BE PROVIDED PIPE THRI AND SHALL BE USED AT ALL TIME TO BECOMING OIL SOAKED. UPON COMP DEBRIS, CLEAN ALL SWITCHPLATES, F GENERAL, LEAVE THE PREMISES IN A	ID BY EMPLOYEES. METAL FLOOR EADING MACHINES AND BENCHES O PREVENT CONCRETE FLOORS LETION OF THE JOB, REMOVE ALL IXTURES, PANEL TRIMS AND IN
	ACCEPTABLE MANUFACTURERS  THE FOLLOWING IS A LIST OF MANUF GRADE EQUIPMENT IS ACCEPTABLE A SUBSTITUTIONS SHALL NOT CAUSE OF THESE CHANGES ARE APPROVED BY SUBSTITUTION.	S TO MANUFACTURER. R CONTRIBUTE TO CHANGES UNLESS
	ITEMS. CAREFUL CHECKING MUST BE EQUIPMENT WILL MEET ALL CAPACITIE ALLOCATIONS, AND THAT THE WEIGHT	S ARE NOT EXCESSIVE.
S	POWER DISTRIBUTION EQUIPMENT: SQU GENERAL ELECTRIC, SUN VALLEY ELE WIRE AND CABLES: GENERAL CABLE GENERAL ELECTRIC, OKONITE, ROME,	CTRIC , ANACONDA, CAPITOL, CIRCLE AW, SIMPLEX, KAISER.
V	LOCAL WALL SWITCHES, RECEPTACLES SEYMOUR, SIERRA, BRYANT, CIRCLE FRUSSELL & STOLL, ARROW—HART.  DEVICE PLATES: HUBBELL, SLATER, BRYANT, ARROW—HART, LEVITON.	GENERAL ELECTRIC, HUBBELL,
K <b>,</b>	LAMPS: GENERAL ELECTRIC, PHILLIP CONDUIT: TRIANGLE, ALLIED, WHEATI	
	FITTINGS: THOMAS AND BETTS, APP	LETON. CROUSE-HINDS.

PUO AMP DATINO		-	200					VOLTAGE 208/120 MAIN CIRCUIT BREAKER SURFACE PANEL MOUI											
PANEL LAE	 BEL	В				VOL1	AGE	208/	/120				MAIN CI	RCUIT B	REAKER	R [	SURFACE	PANEL MOUNTING	
																	TOTAL AMP	8 123.6	
A PHASE 3532	B PHASE 17212	C PHASE 13772	TOTAL 44516	VA													TOTAL KV		
		TOTALS	6612	7612	6772							•	6920	9600	7000				
RYER ENGIN	NE KUUIVI			2500	2500	30	2	33 35	В	34 36	20	1		1080	1080		S - SOUTH GA S - SOUTH GA		
DVED ENG!	NE DOOM		2616	0500		20		31	A	32	20	1	1080	1000			S - SOUTH GA		
21.8 FLA)					2616			29	С	30	20/1	50/2			5200	COKE MA			
EW ROOFTO	OP A/C UNIT AC-4	ļ		2616		40	3	27	В	28	20/1	50/2		5200		50A OUTL	ET UNDER F	'ANEL/	
								23 25	C A	24 26	50	2				SPARE			
PARE						50	3	21	В	22	20/1	20/1		720			EPTS FACIL	TIES	
PARE/SPARI	E					20/1	20/1	19	Α	20	20/1	20/1	1080			NEW REC	EPTS - LOCK	KER/ FACILITIES	
PARE/SPARI						20/1	20/1	17	С	18	20/1	20/1			720	NEW REC	EPTS - APPA	ARATUS BAY	
EATER NOR PARE/SPARI			1500			20/1	20/1	13 15	A B	14 16	60		2600	2600		ΕΛΙ <b>31.</b> Α/	C UNIT ABOV	E WEUT. RUUM	
EATER NOD	TH/ SDADE		1500			20/1	20/1	11	C 	12	60	2	2600			EYIST A	C LINIT ABOV	Æ MECH. ROOM	
								9	В	10									
PARE						40	3	7	Α	8	30	3				SPARE			
XIST. AIR CO	OMPRESSOR				1656	20	1	5	С	6	20/1	30/2				SPARE/ S			
XIST. AIR CC	OMPRESSOR		2496	2496		30	2	3	A B	4	20/1	20/1 30/2	2160			SPARE/ S	S/RECEPTS SPARE		
VICT AID CC	OMDDECCOD.		A 2406	В	С		POLE			CKT	AMP	POLE 20/4	A 2460	В	С	DECEDIO	V DECEDIO		
CIRCUIT DE	ESCRIPTION		LOA	D (VA)		BREA					BREA	KER	LOA	D (VA)		CIRCUI	IT DESCRIPT	ION	
/OLTAGE		208			-	EXIS	I. BRY	/AN I	LOA	ID CE	ENTER	₹	1			1			
PANEL LOCATION SEE PLAN MINIMUM AIC RATING 10,000						YES	] 		DUND				] FEED	THROUG	GH LUGS	5	1	NEMA RATING	
						WIRE	<u>.</u> 1		4	5			SUB FEED LUGS						
												200	7				Full	PANEL NEUTRAL BUS	
	US AMP RATING 200				PHAS		3			200	MAIN CIRCUIT BREAKER  MAIN LUGS ONLY				CONTROL				
PANEL LAE	DEI	Α				VOLT	-ACE	200	/120				NAAINI A	SIDOLIIT	DDEAK	-D	SURFACE	PANEL MOUNTING	

												1			
PANEL LABEL	В			-	VOLT	AGE	208	/120		-		MAIN C	IRCUIT	BREAK	SURFACE PANEL MOUNTING
BUS AMP RATING 200					PHASE 3						200	MAIN L	UGS ON		
PANEL LOCATION SEE PLAN MINIMUM AIC RATING 10,000				-	WIRE		4		_		SUB FEED LUGS			FULL PANEL NEUTRAL BUS	
					YES		GRO	DUND	BUS			_ FEED THROUGH LUGS			S 1 NEMA RATING
VOLTAGE 208				=	EXIS	T. CHA	ALLE	NGE	R PR	RL1 PA	NELB	OARD			
CIRCUIT DESCRIPTION		LOA	D (VA)		BREA	KER				BREA	KFR	LOAD (VA)			CIRCUIT DESCRIPTION
		A	В	С	AMP		ECKT	PH (	СКТ		POLE			С	1
EXIST. LOUNGE RECEPTS		540			20	1	1	Α	2	20	1	1080			EXISTING GARAGE RECEPTS
EXIST. WASHER			1500		20	1	3	В	4	20	1		1080		EXIST. APPARATUS RECEPTS
EXIST. COUNTER RECEPTS	3			180	20	1	5	С	6	20	1			1000	EXIST. MEZZANINE LIGHTS
EXIST. COUNTER RECEPTS	3	180			20	1	7	Α	8	20	1	1080			EXIST. MEZZANINE RECEPTS
EXIST. DW/ DISPOSAL			1500		20	1	9	В	10	20	1		1080		EXIST. MEZZANINE RECEPTS
EXIST. LIGHTS - OFFICES				1100	20	1	11	С	12	20	1			900	EXIST. OUTDOOR BUILDING LIGHTS
EXIST. DRINKING FOUNTAI	N	250			20	1	13	Α	14	20	1	900			EXIST. OUTDOOR BUILDING LIGHTS
EXIST. LIGHTS - DORM			1200		20	1	15	В	16	20	1		800		EXIST. OUTDOOR GROUND LIGHTS
EXIST. LIGHTS - LOUNGE				900	20	1	17	С	18	20	2			1000	EXIST. RICE COOKER
EXIST. IRRIGATION/ LAWN	STATUE	540			20	1	19	Α	20			1000			
SPARE (REMOVED RTU'S)					20	1	21	В	22	50	2				SPARE
SPARE (REMOVED RTU'S)					20	1	23	С	24						
EXIST. EXHAUST FAN		718			15	3	25	Α	26	20	3	1320			EXIST. MAKEU P AIR UNIT
			718				27	В	28				1320		
				718			29	С	30					1320	
EXIST. COMPRESSOR		5796			80	3	31	Α	32	100	2	3120			EXIST SUBFEED PANEL B1
			5796				33	В	34				3120		
				5796			35	С	36						BUSSED SPACE
EXIST. EXHAUST FAN		387			25	3	37	Α	38	25	3	1848			EXIST. A/C UNIT
			387				39	В	40				1848		
				387			41	С	42					1848	
	TOTALS	8411	11101	9081								10348	9248	6068	
A PHASE B PHASE 18759 20349	C PHAS 15149	E TOTAL 54257	VA												TOTAL KVA 54.3
															TOTAL AMPS 150.6

LOAD CALCULATIONS

= 123.6 AMPS

= 150.6 AMPS

= 120.3 AMPS

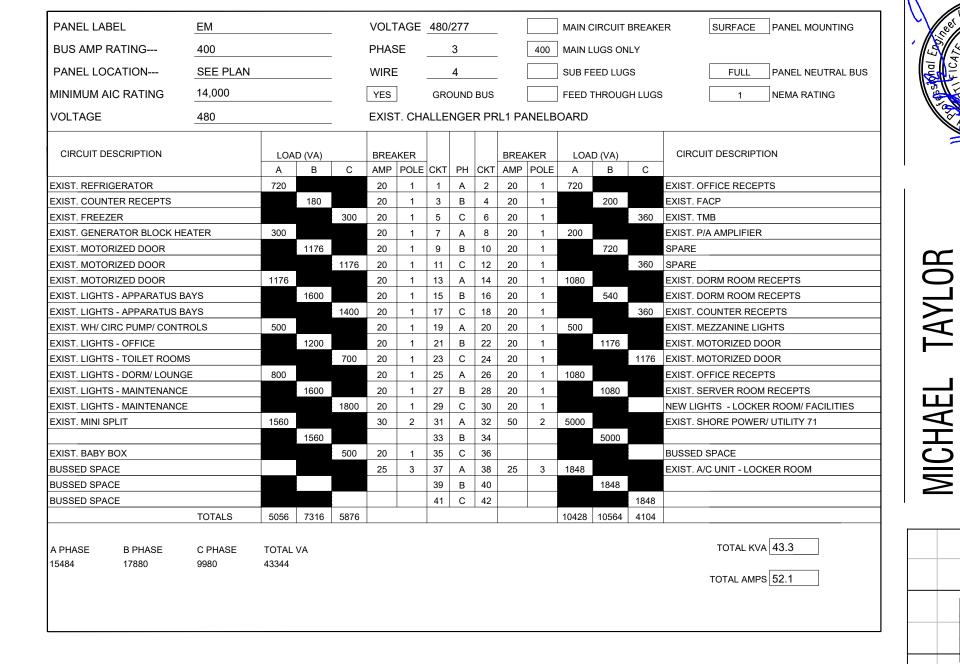
= 394.5 AMPS

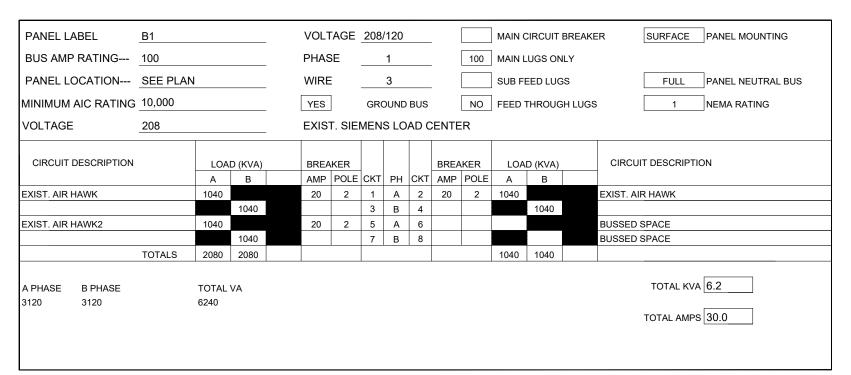
PANEL 'A'

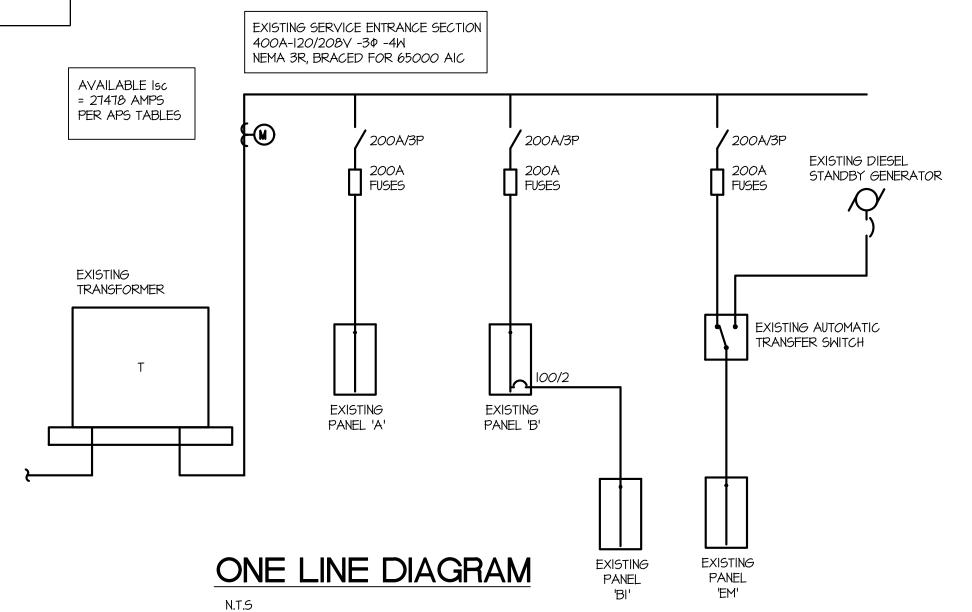
PANEL 'B'

PANEL 'EM'

SERVICE TOTAL







I. PROVIDE ARC FLASH HAZARD WARNING LABELS FOR ALL ELECTRICAL EQUIPMENT PER NEC IIO.I6. 2. PROVIDE CIRCUIT DIRECTORY AND SOURCE OF SUPPLY LABELS FOR ALL PANELBOARDS PER NEC 408.4. 3. PROVIDE AVAILABLE FAULT CURRENT LABEL AT SERVICE ENTRANCE PER NEC 110.24.

> **Bowie Tiglas Engineering Inc. Consulting Engineers**

> > BTE# 25038E

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OF 3 SHEETS

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