FLOOR PLAN NOTES

- 22 EXISTING ELECTRIC WATER HEATER TO REMAIN.
- 23 REMOVE EXISTING FLOOR MOUNTED WATER CLOSET AND REPLACE WITH NEW WALL HUNG TYPE. RE: NEW WORK. MAINTAIN WATER PIPING FOR CONNECTION TO NEW WATER CLOSET. MODIFY AS NEEDED FOR NEW CONNECTION. REMOVE ASSOCIATED VENT AND WASTE PIPE. CAP WASTE BELOW FLOOR. PATCH FLOOR AS INSTRUCTED BY ARCHITECT.
- 24 APPROXIMATE LOCATION OF EXISTING 2-1/2" COLD WATER PIPE UP THROUGH FLOOR THAT RUNS HORIZONTALLY WITHIN CHASE. FIELD VERIFY EXACT LOCATION. REMOVE/MODIFY MAIN AND ASSOCIATED CONNECTIONS TO FIXTURES AS NECESSARY FOR CONNECTION TO NEW PLUMBING FIXTURE LAYOUT. CAP ANY UNUSED TAPS. RE: PLUMBNG PLAN.
- 25 REMOVE EXISTING FURNACE. REMOVE ASSOCIATED GAS PIPING BACK TO MAIN AND CAP. REMOVE EXISTING FLUE AND REFRIGERANT PIPING UP THROUGH ROOF. FIELD VERIFY EXACT LOCATION. REMOVE ALL SUPPLY AND RETURN DUCTWORK. THE SUPPLY AIR DUCTWORK BELOW FLOOR TO BE ABANDONED IN PLACE. PROVIDE 1/4" STEEL PLATE OVER OPENING AND SECURE TO FLOOR.
- 26 REMOVE EXISTING LAVATORY AND ALL ASSOCIATED WASTE AND VENT PIPING. REMOVE EXISTING CARRIER, HANGERS, BRACKETS, ETC. REMOVE EXISTING HOT AND COLD WATER PIPES BACK TO WITHIN CHASE AND MAINTAIN FOR NEW CONNECTION TO NEW LAVATORY. FIELD VERIFY EXACT LOCATION. RE: PLUMBING PLAN FOR NEW CONNECTIONS
- 27 REMOVE EXISTING URINAL AND HANGER. REMOVE WASTE AND VENT PIPING AS NECESSARY MAINTAIN COLD WATER PIPING FOR CONNECTION TO NEW URINAL LAYOUT. RE: PLUMBING PLAN. EXISTING WASTE PIPE CAN BE USED FOR CONNECTION TO NEW URINAL WHERE POSSIBLE.
- 28 EXISTING VENT PIPE UP THROUGH ROOF TO REMAIN. FIELD VERIFY EXACT LOCATION.
- 29 REMOVE EXISTING CEILING EXHAUST FAN AND ALL ASSOCIATED DUCT. FIELD VERIFY EXACT
- 30 REMOVE EXISTING LAVATORY AND ALL ASSOCIATED PIPING TO WITHIN WALL, BELOW FLOOR AND/OR ABOVE CEILING AND CAP. FIELD VERIFY EXACT LOCATION.
- 31 RELOCATE EXISTING LAVATORY. DISCONNECT AND REMOVE EXISTING VENT AND WATER PIPING TO ABOVE CEILING. REMOVE WASTE PIPE AND CAP. MAINTAIN VENT AND WATER PIPING FOR EXTENSION TO NEW LAVATORY LOCATION. RE: NEW WORK
- 32 RELOCATE EXISTING SINK AND FAUCET. REMOVE ASSOCIATED WASTE AND VENT PIPING TO ABOVE CEILING AND/OR BELOW FLOOR AND CAP. REMOVE HOT AND COLD PIPING AND CAP. REMOVE P-TRAP FOR ICE MAKER. REMOVE WATER PIPES TO ICE MAKER AND COFFEE MAKER.
- 33 EXISTING URINAL TO REMAIN.
- 34 REMOVE EXISTING WATER CLOSET AND ALL ASSOCIATED PIPING TO WITHIN WALL, BELOW FLOOR AND/OR ABOVE CEILING AND CAP. FIELD VERIFY EXACT LOCATION.
- 35 APPROXIMATE LOCATION OF EXISTING MAIN COLD WATER PIPING TO REMAIN. FIELD VERIFY EXACT
- 36 REMOVE EXISTING WATER LINE TO COFFEE MAKER.
- 37 REMOVE EXISTING WATER AND DRAIN PIPE FOR ICE MAKER.
- 38 EXISTING ROOF DRAIN PIPING TO REMAIN. FIELD VERIFY EXACT LOCATION.
- 39 EXISTING GAS WATER HEATER AND ALL ASSOCIATED PIPING, VENT, ETC. TO REMAIN.
- 40 REMOVE EXISTING RETURN AIR GRILLE.
- 41 REMOVE EXISTING RETURN AIR DUCT DROP BACK TO DEMOLISHED ROOFTOP UNIT.
- 42 REMOVE EXISTING SUPPLY DUCT AND DROP BACK TO DEMOLISHED ROOFTOP UNIT.
- 43 REMOVE EXISTING SUPPLY DIFFUSER AND ALL ASSOCIATED DUCTWORK.
- 44 REMOVE EXISTING SUPPLY AND RETURN AIR DUCT DROPS FROM DEMOLISHED UNIT. MAINTAIN DOWNSTREAM SUPPLY AIR MAIN DUCT FOR CONNECTION TO NEW DUCT DROP. RE: NEW WORK.
- 45 REMOVE EXISTING SUPPLY AND RETURN AIR DUCT DROPS FROM DEMOLISHED UNIT. REMOVE EXISTING FIRE DAMPERS IN RATED LID. MAINTAIN DOWNSTREAM SUPPLY AIR MAIN DUCT FOR CONNECTION TO NEW DUCT DROP. RE: NEW WORK.
- 46 REMOVE EXISTING SUPPLY DIFFUSER AND ASSOCIATED BRANCH DUCT BACK TO MAIN. MAINTAIN TAKE-OFF FOR NEW CONNECTION. RE: NEW WORK.
- 47 EXISTING ROOF DRAIN IN ENTRY CANOPY ROOF.
- 48 EXISTING WATER CLOSET TO REMAIN.
- 49 EXISTING LAVATORY TO REMAIN.
- 50 REMOVE EXISTING LAVATORY AND ALL ASSOCIATED PIPING TO ABOVE FLOOR AND/OR ABOVE CEILING AND CAP.
- 51 REMOVE EXISTING WATER CLOSET AND ALL ASSOCIATED PIPING TO ABOVE FLOOR AND/OR ABOVE
- 53 REMOVE EXISTING FLOOR MOUNTED WATER CLOSET AND ALL ASSOCIATED PIPING. CAP PIPING
- BELOW FLOOR AND WITHIN CHASE AS NECESSARY. PATCH FLOOR AS INSTRUCTED BY ARCHITECT.
- 54 EXISTING RETURN AIR GRILLE AND ANY ASSOCIATED DUCTWORK TO BE REMOVED. FIELD VERIFY EXACT LOCATION. PATCH WALL PER ARCHITECT.
- 55 REMOVE EXISTING THERMOSTAT AND REPLACE. REMOVE AND REPLACE ALL ASSOCIATED WIRING AS NECESSARY. RE: NEW WORK.
- 56 REMOVE EXISTING THERMOSTAT AND ALL ASSOCIATED WIRING.
- 57 EXISTING GAS PIPE TO WATER HEATER TO REMAIN.



SUMMI

Drawn by: BGR Checked by: BGR Issue date: 02/01/20

Revised:

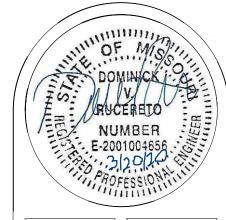


CONSTRUCTION
AS NOTED ON PLANS REVIEW **DEVELOPMENT SERVICES** LEE'S SUMMIT, MISSOURI

1 MECH & PLUM DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

1 ROOF PLAN DEMOLITION

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



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NW MURRAY RE SUMMIT, MO

LaTona Archi

1600

Drawn by: BGR
Checked by: BGR

Issue date: 02/01/20

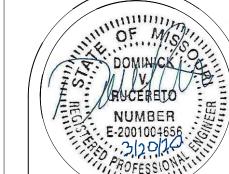
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Ph: 816.842.2800 CERTIFICATE OF AUTHORITY

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



NW MURRAY R

Y OF THE PRESENTATION

LaTona Archi

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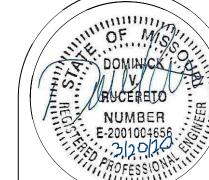
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NW MURE SUMMIT

Drawn by: BGR Checked by: BGR Issue date: 02/01/20

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2006007202

AT NO ADDITIONAL COST TO THE OWNER.

CHECKING AND INSPECTION.

WITH T-BAR SPECIFICATION.

FABRICATION AND INSTALLATION WITH ROOF.

INTENDED TO DESIGNATE THE REQUIRED TRIM.

R.) COORDINATION. COORDINATE WORK WITH THAT OF OTHER TRADES SO THAT

S.) ROOF CURBS. SOME ROOF AREAS ARE SLOPED. COORDINATE CURB

THE VARIOUS COMPONENTS OF THE SYSTEMS WILL BE INSTALLED AT THE

SERVICE ACCESS TO THOSE ITEMS REQUIRING MAINTENANCE. COMPONENTS

T.) DIMENSIONS. FIGURED DIMENSIONS SHALL BE TAKEN IN PREFERENCE TO SCALE

DIMENSIONS. CONTRACTOR SHALL TAKE HIS OWN MEASUREMENTS AT THE

U.) TRIM. PROVIDE MATERIALS WITH TRIM THAT WILL PROPERLY FIT THE TYPES OF

V.) CEILINGS. CONTRACTOR SHALL COORDINATE GRILLE/DIFFUSER TYPES WITH

W.) SUBSTITUTIONS. CONTRACTOR'S BIDS SHALL BE BASED ON THE MATERIAL

BE ACCEPTED. IF IN THE OPINION OF THE ARCHITECT/ENGINEER, THE

SUBSTITUTE MATERIAL IS OF A QUALITY AS GOOD OR BETTER THAN THE MATERIAL SPECIFIED, AND WILL SERVE WITH EQUAL EFFICIENCY AND

DEPENDABILITY, THE PURPOSE FOR WHICH THE ITEMS SPECIFIED WERE

INTENDED. THE BURDEN OF PROOF OF EQUALITY IS UPON THE PROPOSER.

X.) SHOP DRAWINGS. SHOP DRAWINGS AND CATALOG DATA ON ALL MAJOR ITEMS OF EQUIPMENT AND APPARATUS. AND SUCH OTHER ILLUSTRATIVE MATERIALS AS MAY BE CONSIDERED NECESSARY BY THE ARCHITECT/ENGINEER SHALL BE

MATERIAL LISTS, VERIFY THAT EQUIPMENT SUBMITTED IS MUTUALLY

COMPATIBLE AND SUITABLE FOR THE INTENDED USE AND WILL FIT THE

AVAILABLE SPACE AND ALLOW AMPLE ROOM FOR MAINTENANCE. THE

DIMENSIONS, DETAILS, SIZE OF MEMBERS, QUANTITIES, OMISSIONS OF

SUBMITTED BY THE CONTRACTOR IN ADEQUATE TIME TO PREVENT DELAY AND CHANGES DURING CONSTRUCTION. BEFORE SUBMITTING SHOP DRAWINGS AND

ENGINEER'S CHECKING AND SUBSEQUENT APPROVAL OF SUCH SHOP DRAWINGS

COMPONENTS OR FITTINGS; COORDINATION OF ELECTRICAL REQUIREMENTS; OR

WILL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR ERRORS IN

FOR COORDINATING ITEMS WITH ACTUAL BUILDING CONDITIONS. PROCEED

RECEIVING APPROVED SHOP DRAWINGS RELATIVE TO EACH ITEM. CATALOG

DATA SHALL BE PROPERLY BOUND, IDENTIFIED, INDEXED AND TABBED. EACH

INDICATED. LABEL THE CATALOG DATA WITH THE EQUIPMENT IDENTIFICATION

DIAGRAMS AND DEVIATIONS FROM SPECIFIED EQUIPMENT OR MATERIALS. MARK

ITEM OR MODEL NUMBER SHALL BE CLEARLY MARKED AND ACCESSORIES

PERFORMANCE CURVES, CAPACITIES, SIZES, MATERIALS, FINISHES, WIRING

OUT INAPPLICABLE ITEMS. SHOP DRAWINGS WILL BE RETURNED WITHOUT

Y.) PROTECTION. STORE AND PROTECT FROM DAMAGE EQUIPMENT AND MATERIALS

DELIVERED TO JOB SITE. COVER WITH WATERPROOF, TEAR RESISTANT, HEAVY

TARP OR POLYETHYLENE PLASTIC AS REQUIRED TO PROTECT FROM PLASTER,

CONTRACTOR IS OBLIGATED TO FURNISH NEW EQUIPMENT AND MATERIAL OF A

WHILE STORED AND INSTALLED DURING CONSTRUCTION WHEN NOT IN USE TO

MANUFACTURER-PROVIDED PROTECTIVE COVERINGS ON FLOOR DRAINS, FLOOR

SINKS AND TRENCH DRAINS DURING CONSTRUCTION. REMOVE COVERINGS AT

DIRT, PAINT, WATER OR PHYSICAL DAMAGE. EQUIPMENT AND MATERIAL THAT

HAS DAMAGED BY CONSTRUCTION ACTIVITIES WILL BE REJECTED AND THE

LIKE KIND. PLUG OR CAP OPEN ENDS OF DUCTWORK AND PIPING SYSTEMS

Z.) LICENSES/CODES. ALL PRODUCTS AND TYPES OF CONSTRUCTION SHALL MEET

CONFORMANCE WITH APPLICABLE NATIONAL, STATE AND LOCAL CODES HAVE

PERFORMED UNDER THIS CONTRACT SHALL BE IN STRICT COMPLIANCE WITH CURRENT APPLICABLE CODES ADOPTED BY THE LOCAL AHJ INCLUDING ANY AMENDMENTS AND STANDARDS AS SET FORTH BY THE NATIONAL FIRE

PROTECTION ASSOCIATION (NFPA), UNDERWRITERS LABORATORIES (UL),

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), AMERICAN

REFRIGERATION AND AIR CONDITIONING ENGINEERS (ASHRAE), AMERICAN

NATIONAL STANDARDS INSTITUTE (ANSI), AMERICAN SOCIETY OF TESTING

MATERIALS (ASTM) AND OTHER NATIONAL STANDARDS AND CODES WHERE

PAY FOR AND FURNISH CERTIFICATES OF INSPECTION TO THE OWNER. THE

CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY VIOLATION OF THE LAW.

MAINTAIN NECESSARY SIGNAL LIGHTS AND GUARDS FOR THE SAFETY OF THE PUBLIC. THE WORK SHALL COMPLY WITH THE EDITION OF THE APPLICABLE

STANDARDS, REGULATIONS AND CODES CURRENTLY IN FORCE OF ALL STATE

SPECIFIED ARE IN EXCESS OF THE STANDARD OR CODE REQUIREMENTS. THE

SPECIFICATIONS AND/OR DRAWINGS SHALL GOVERN. IN THE ABSENCE OF

AND LOCATION AUTHORITIES HAVING JURISDICTION. WHERE QUANTITIES, SIZES.

OTHER APPLICABLE LOCAL CODES, ACCEPTABLE TO THE ARCHITECT/ENGINEER.

AND UNIFORM PLUMBING AND MECHANICAL CODES SHALL APPLY TO THIS WORK.

APPLICABLE. WHERE THE CONTRACT DOCUMENTS EXCEEDS THE

REQUIREMENTS OF THE REFERENCED CODES, STANDARDS, ETC., THE

OR OTHER REQUIREMENTS INDICATED ON THE DRAWINGS OR HEREIN

SOCIETY OF MECHANICAL ENGINEERS (ASME), AMERICAN SOCIETY OF HEATING,

CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE. WHERE REQUIRED, OBTAIN,

JURISDICTION. EQUIPMENT FURNISHED AND ASSOCIATED INSTALLATION WORK

PREVENT THE ENTRANCE OF DEBRIS INTO THE SYSTEMS. KEEP TH

THE TERMINATION OF THE WORK AND POLISH EXPOSED SURFACES.

OR EXCEED THE LATEST EDITION OF APPLICABLE STANDARDS OF

PERFORMED UNDER THIS CONTRACT SHALL, AT A MINIMUM, BE IN

MANUFACTURER, TESTING, PERFORMANCE AND INSTALLATION. WORK

ACRONYM OR NUMBER AS USED ON THE DRAWINGS AND INCLUDE

REVIEW IF THE ABOVE REQUIREMENTS ARE NOT MET.

WITH THE PROCUREMENT AND INSTALLATION OF EQUIPMENT ONLY AFTER

REFLECTED CEILING PLAN. CONTRACTOR SHALL ALSO PROVIDE PLASTER

FRAMES FOR GYP BOARD INSTALLATIONS AND COORDINATE T-BAR GRILLES

MENTIONED OR SPECIFIED, AND ANY PROPOSALS FOR A SUBSTITUTION SHALL BE MADE IN WRITING TO THE ARCHITECT/ ENGINEER ALLOWING ADEQUATE TIME

FOR APPROPRIATE ACTION. THE PRODUCTS OF OTHER MANUFACTURERS MAY

CEILING, WALL OR FLOOR FINISHES ACTUALLY INSTALLED. MODEL NUMBERS LISTED IN THE SPECIFICATION OR SHOWN ON THE DRAWINGS ARE NOT

RESPONSIBLE FOR ERRORS THAT COULD OF HAVE BEEN AVOIDED BY PROPER

BUILDING, AS VARIATIONS MAY OCCUR. CONTRACTOR WILL BE HELD

WHICH ARE INSTALLED WITHOUT REGARD TO THE ABOVE SHALL BE RELOCATED

PROPER TIME, WILL FIT THE AVAILABLE SPACE, AND WILL ALLOW PROPER

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Drawn by: BGR

Revised:

Checked by: BGR Issue date: 02/01/20

CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

GENERAL NOTES

MECHANICAL SYMBOLS

RETURN OR EXHAUST DUCT

OR — NEW DUCTWORK

SUPPLY DUCT

SUPPLY DIFFUSER

RISE OR DROP IN DUCT

SUPPLY DUCT DOWN

SUPPLY DUCT UP

MANUAL VOLUME DAMPER

WALL MOUNTED DIFFUSER/GRILLE

FLEXIBLE DUCT CONNECTION

SENSOR, MOUNT AT 48"AFF.

MOTORIZED DAMPER

FIRE DAMPER

Exhaust Rate | Exhaust Rate

Number of

Fixtures

CFM per

FIXTURE

0 CFM

50 CFM

0 CFM

50 CFM

50 CFM

0 CFM

0 CFM

0 CFM

0 CFM

50 CFM

50 CFM

ELECTRICAL

300 CFM

THERMOSTAT, MOUNT AT 48"AFF

FAN CONTROLLER, MOUNT AT 48"AFF.

EQUIPMENT TYPE AND DESIGNATION

SUPPLY DIFFUSER, RETURN OR EXHAUST GRILLE TYPE

Exhaust

0 CFM

50 CFM

0 CFM

150 CFM

150 CFM

350 CFM

0 CFM

0 CFM

0 CFM

0 CFM

250 CFM

300 CFM

300 CFM

850 CFM

0 CFM

Provided

Exhaust

0 CFM

75 CFM

0 CFM

150 CFM

150 CFM

375 CFM

0 CFM

0 CFM

0 CFM

0 CFM

0 CFM

0 CFM

300 CFM

300 CFM

300 CFM

900 CFM

REMARKS

NOTE 1, 3, 4, 8

NOTE 1, 6

NOTE 2, 3, 6, 7, 9

NOTE 3, 5, 6, 7, 9

NOTE 1, 3, 6, 9

NOTE 1, 3, 4, 8

RETURN GRILLE

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A.) CONTRACTORS AND SUBCONTRACTORS SHALL CAREFULLY REVIEW THE IS DISPERSED THROUGHOUT THE DOCUMENT SET AND CAN NOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO THE COMPLETE DOCUMENT SET.

B.) COORDINATE WITH THE WORK OF OTHER SECTIONS, EQUIPMENT FURNISHED BY OTHERS. REQUIREMENT OF OWNER AND WITH THE CONSTRAINTS OF THE AS REQUIRED FOR FIELD INSTALLATION AND TRADE COORDINATION. NOTIFY

C.) DRAWINGS FOR HVAC WORK ARE DIAGRAMMATIC. SHOWING THE GENERAL LOCATION, TYPE, LAYOUT AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENT. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR DIMENSIONS. REFER TO MANUFACTURER'S STANDARD INSTALLATION DRAWING FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS. PROVIDE DUCTWORK, CONNECTIONS, ACCESSORIES, OFFSETS AND MATERIALS NECESSARY FOR A COMPLETE

D.) ALL WORK SHALL COMPLY WITH STATE AND LOCAL CODE REQUIREMENTS AS APPROVED AND AMENDED BY THE GOVERNING COUNTY, INCLUDING APPLICABLE SECTIONS OF NFPA, OSHA, BOCA, UBC, OR ANY INTERIM AMENDMENTS AT THE TIME OF THE PROPOSAL. PURCHASE ALL PERMITS ASSOCIATED WITH THE

E.) DUCT SIZES INDICATED ARE FREE AREA SIZES. WHERE LINER IS SPECIFIED

PATCHING OF FLOORS, WALLS, CEILING, ETC.

G.) ALL MATERIALS EXPOSED WITHIN DUCTS AND PLENUMS SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE DEVELOPED RATING OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH THE TEST FOR SURFACE BURNING CHARACTERISTICS OF BUILDING MATERIALS, UBC STANDARD

H.) ONLY PLENUM RATED PVC PIPING SHALL BE ALLOWED IN PLENUM.

J.) ALL NEW SMOKE DETECTORS ASSOCIATED WITH SMOKE DAMPERS AND HVAC SHUT-OFFS SHALL BE TESTED BY AN APPROVED TESTING AGENCY OR A QUALIFIED THIRD PARTY SPECIAL INSPECTOR. THE SPECIAL INSPECTOR/TESTING AGENCY SHALL BE AN INDEPENDENT THIRD PARTY INDIVIDUAL OR FIRM AND SHALL NOT BE THE INSTALLING CONTRACTOR. DUCT SMOKE DETECTORS SHALL BE CONNECTED TO THE BUILDING'S FIRE ALARM CONTROL PANEL. ACTIVATION OF A DUCT SMOKE DETECTOR SHALL INITIATE A VISIBLE AND AUDIBLE SUPERVISORY SIGNAL AT A CONSTANTLY ATTENDED LOCATION. DUCT SMOKE DETECTORS SHALL NOT BE USED AS A SUBSTITUTE

K.) FIRE DAMPERS TO BE DYNAMIC RATED WITH SHUTTER OUT OF THE AIR STREAM

L.) INSTALL DUCTWORK TIGHT TO STRUCTURE UNLESS NOTED OTHERWISE. COORDINATE DUCT ELEVATIONS WITH ARCHITECTURAL RCP AND ELEVATIONS. PROVIDE RISE/DROP AS NECESSARY TO KEEP DUCTWORK EXPOSED ABOVE

M.) CONTRACTOR SHALL CAULK/SEAL EVERY WALL PENETRATION AS SPECIFIED BY ARCHITECT OR ENGINEER. WHERE WALL IS SMOKE/FIRE RATED CONTRACTOR SHALL PROVIDE REQUIRED U.L. FIRE STOP. IF THE ARCHITECTURAL AND MECHANICAL SPECIFICATIONS REGARDING CAULKING/SEALING ARE NOT

N.) INTENT. BY SUBMITTING A BID THE CONTRACTOR ACCEPTS RESPONSIBILITY TO PROVIDE A COMPLETE HVAC SYSTEM BASED ON THE INTENT OF THESE DRAWINGS. THE DRAWINGS SHALL SERVE AS WORKING DRAWINGS FOR THE GENERAL LAYOUT OF THE VARIOUS ITEMS OF EQUIPMENT; ARE DIAGRAMMATIC; AND DO NOT NECESSARILY INDICATE EVERY REQUIRED ITEM. AS SUCH THE CONTRACTOR SHALL INCLUDE AS A PART OF HIS BID ALL WORK, MATERIALS. LABOR, EQUIPMENT, TOOLS, INSURANCE, TAXES, SERVICES, APPURTANCES, ETC. TO MAKE A COMPLETE OPERATIONAL SYSTEM. CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL OBLIGATIONS ASSOCIATED WITH COMPLETION OF

O.) CHANGES. CONTRACTOR SHALL NOT MAKE ANY CHANGE TO OR DEVIATE FROM THE CONTRACT DOCUMENTS WITHOUT WRITTEN APPROVAL FROM THE ARCHITECT/ENGINEER. THE ARCHITECT/ENGINEER WILL NOT BE RESPONSIBLE OR LIABLE FOR ANY CHANGES MADE WITHOUT THE ENGINEER'S KNOWLEDGE

P.) QUESTIONS. ANY QUESTIONS THAT ARISE IN THE FIELD OR UPON REVIEW OF THE CONTRACT DRAWINGS THE CONTRACTOR SHALL SUBMIT THE QUESTION IN WRITING TO THE ARCHITECT/ENGINEER FOR CLARIFICATION. A PHONE CALL IS PERMISSIBLE BUT MUST BE FOLLOWED BY WITH THE WRITTEN SUBMISSION.

Q.) DOCUMENTS. CONTRACTOR SHALL READ AND BE FAMILIAR WITH THE REQUIREMENTS WITHIN ALL DRAWINGS AND SPECIFICATIONS. HE SHALL EXAMINE THE ARCHITECTURAL, STRUCTURAL, AQUATIC, MECHANICAL AND BASIS FOR THE GRANTING OF ADDITIONAL COMPENSATION.

CONSTRUCTION DOCUMENTS. INFORMATION REGARDING THE COMPLETE WORK

EXISTING CONDITIONS OF THE PROJECT SITE. PROVIDE DUCT RISES AND DROPS ARCHITECT OF ANY DISCREPANCIES BEFORE BIDDING.

WORK. OBTAIN ALL INSPECTIONS REQUIRED BY CODE.

SHEET METAL SHALL BE INCREASED TO ACCOMMODATE THICKNESS OF LINER.

F.) REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS FOR CUTTING AND

I.) ROUND DUCT DIMENSIONS SHOWN ARE AIR SIDE RUNOUTS TO DIFFUSERS SHALL BE SAME SIZE AS DIFFUSER NECK UNLESS INDICATED OTHERWISE. LENGTH OF FLEXIBLE DUCTS ARE NOT TO EXCEED 5'-0".

FOR REQUIRED OPEN AREA DETECTION

CONSISTENT CONTRACTOR SHALL USE THE MOST STRINGENT

MECHANICAL WORK AS PROVIDED BY THE CONTRACT DOCUMENTS.

AND APPROVAL

REFER TO CONSTRUCTION MANAGER SCOPE OF WORK.

ELECTRICAL DRAWINGS AND SPECIFICATIONS TO FAMILIARIZE HIMSELF WITH THE TYPE OF CONSTRUCTION, MATERIALS, AND EQUIPMENT TO BE USED FOR ALL WORK AND HOW IT WILL AFFECT THE INSTALLATION OF HIS CONTRACT. BY THE ACT OF SUBMITTING A BID, THE CONTRACTOR WILL BE DEEMED TO HAVE MADE SUCH EXAMINATION. TO HAVE ACCEPTED SUCH CONDITIONS, TO HAVE MADE ALLOWANCE THEREFOR, AND INCLUDED ALL COSTS IN HIS PROPOSAL. FAILURE TO DETERMINE EXISTING CONDITIONS WILL NOT BE CONSIDERED A

CARRIER 0.75 | 105 | 34.9 | 29.7 80 | 67 | 58.0 | 57.8 | R-410A | 1 | 12.0 | 110.0 | 80.00 | 88.0 LENNOX LGH092H4BM1Y 3000 0.00 520 0.0 0.0 0 0 0.0 0.0 R-410A 2 | 0.0 | 180.0 | 80.00 | 144.0 | 0.0 | 0.0 | 0.0 208 | 3 | 60 | 42 | 50 0.00 LENNOX LGH120H4BH2Y 3920 0.00 690 0.00 0.0 | 0.0 | 0 | 0.0 | 0.0 | R-410A | 2 | 0.0 | 240.0 | 80.00 | 192.0 | 0.0 | 0.0 | 0.0 2 | 208 | 3 | 60 | 46 | 50 | 1450 RTU | 12 | CARRIER 48LCEB06A2M5 | 2000 | 1.50 | 350 | 0.75 | 105 | 55.0 | 43.4 | 80 | 67 | 59.5 | 58.9 | R-410A | 2 | 1 | 14.0 | 110.0 | 80.00 | 88.0 | 70.0 | 40.7 | 110.7 | 2 | 208 | 3 | 60 | 31 | 45 | 800 RTU 13 CARRIER 48FCEN07A2M5 | 2200 | 2.00 | 385 | 0.75 | 105 | 68.2 | 58.7 | 80 | 67 | 59.0 | 58.0 | R-410A | 2 | 1 | 11.0 | 110.0 | 80.00 | 88.0 | 70.0 | 34.0 | 104.0 | 2 | 208 | 3 | 60 | 28 | 45 | 810

COOLING DATA

ENTERING AIR | LEAVING AIR

58.7 80 67 59.0 58.0 R-410A

OUTSIDE AIR SCHEDULE1

Ventilation

CFM

Ventilation

CFM

295

400

400

220

ROOFTOP UNIT SCHEDULE

Rate CFM per Rate CFM per

0.06 CFM

Person

5 CFM

0 CFM

5 CFM

0 CFM

0 CFM

5 CFM

5 CFM

5 CFM

5 CFM

0 CFM

0 CFM

10 CFM

Required O.A.

CFM

336

294

(°F) | (mBtu/h) | (mBtu/h) | (°F) | (°F) | (°F) | (°F) | REFR | STAGES | COMP. | EER | (mBtu/h) | (%) | (mBtu/h) | (°F) | (°F) | STAGES | VOLTS | Ø | HZ | MCA | MOCP | (lbs.)

Exhaust Rate

0.00 CFM

HEATING DATA

INPUT | EFF | OUTPUT | E.A.T. | ΔT | L.A.T.

1 | 11.0 | 110.0 | 80.00 | 88.0 | 70.0 | 34.0 | 104.0 |

ALUMINUM BIRDSCREEN, CURB SEAL AND MOTOR WITH THERMAL OVERLOADS.

O.A. Provided | CFM per SF

337

346

520

299

1040

Exhaust per

SQ.FT.

0 CFM

BAROMETRIC RELIEF DAMPERS, 2" MERV FILTERS, BAROMETRIC RELIEF HOOD, HAIL GUARDS, HUMIDITY SENSOR, AND MOTORIZED OUTSIDE AIR INTAKE DAMPER WITH HIGH EFFICIENT INTAKE, CRANKCASE HEATER, OVERLOAD

REMARKS: 1.) PROVIDE WITH 7-DAY PROGRAMMABLE THERMOSTAT, DISCONNECT SWITCH, GFCI OUTLET, DEHUMIDIFICATION WITH HOT GAS REHEAT, ADJUSTABLE ENTHALPY ECONOMIZER, SUPPLY AIR GAS HEAT TEMPERING,

FLOW E.S.P. AMB. TOTAL SENSIBLE D.B. W.B. D.B. W.B.

PROTECTION, HIGH PRESSURE SWITCH AND LOW AMBIENT CONTROL. 2.) UNIT IS PROVIDED BY OWNER AND AT SITE. SERIAL #5611L04697 MANUFACTURED IN DEC. 2011.

3.) PROVIDE RETURN AIR SMOKE DETECTOR AND WIRED TO SHUTDOWN UNIT SUPPLY FAN. 4.) PROVIDE UNIT WITH ADAPTER CURB. CONTRACTOR SHALL FIELD MEASURE EXISTING CURB AND SUBMIT DIMENSIONS TO MANUFACTURER.

Area per

Person

0 SF

0 SF

84 SF

11 SF

14 SF

0 SF

203 SF

0 SF

0 SF

24 SF

32 SF

28 SF

0 SF

0 SF

0 SF

212 SF

125

127

128

136

137

105

108

110

111

112

116

101

102

115

118

120

(cfm)

87 SF

64 SF

84 SF

676 SF

849 SF

2061 SF

197 SF

48 SF

203 SF

171 SF

207 SF

1945 SF

1945 SF

2550 SF

1223 SF

259 SF

296 SF

296 SF

637 SF

5836 SF

AIRFLOW DATA

STOR

VESTIBULE

RECONCIL

N. SANCT. EXP

S. SANCT. EXP

VESTIBULE

REST ROOM

SACRISTY

WOMEN

MULLIGAN ROOM

SOUTH GATHERING

GATHERING

WOMEN

WORK ROOM

REMARKS: 1.) BASED ON ASHRAE STANDARD 62.1-2012.

IDENTITY DATA

MANUFACTURE

CARRIER

Number of

People

44

139

5.) UNIT IS PROVIDED BY OWNER AND AT SITE. SERIAL #5611L04696 MANUFACTURED IN DEC. 2011

6.) PROVIDE WITH 14" HIGH INSULATED ROOF CURB.

MODEL

7.) PROVIDE WITH 7-DAY PROGRAMMABLE THERMOSTAT.

8.) PROVIDE WITH CO2 SENSOR FOR DEMAND CONTROL VENTILATION.

9.) PROVIDE WITH RESTRAINED SPRING ISOLATOR ON CURB.

	AIR TERMINAL SCHEDULE							
IDENTITY DATA								
MARK	MANUFACTURER	MODEL NO.	PRODUCT DESCRIPTION	FACE SIZE	NECK SIZE	MOUNTING TYPE	FINISH	REMARKS
EA	EH PRICE	PDDR	PERFORATED FACE	24"x24"	10"Ø	LAYIN	WHITE	
RA	EH PRICE	535L	LOUVER FACE RETURN GRILLE	24"x24"	22"x22"	LAYIN	WHITE	NOTE 1
RB	EH PRICE	535L	LOUVER FACE RETURN GRILLE	24"x24"	22"x22"	SURFACE	WHITE	NOTE 1, 2
SA	EH PRICE	SCD SERIES	SQUARE CONE DIFFUSER	24"x24"	10"Ø	LAYIN	WHITE	
SB	EH PRICE	SCD SERIES	SQUARE CONE DIFFUSER	24"x24"	8"Ø	LAYIN	WHITE	
SC	EH PRICE	SCD SERIES	SQUARE CONE DIFFUSER	24"x24"	8"Ø	SURFACE	WHITE	NOTE 2

REMARKS:	1.) LESS SCREW HOLES.
	2.) PROVIDE WITH PLASTER FRAM

EQUIPMENT

RTU-1 & 13

RTU-9 & 12

MARK #

RTU-2

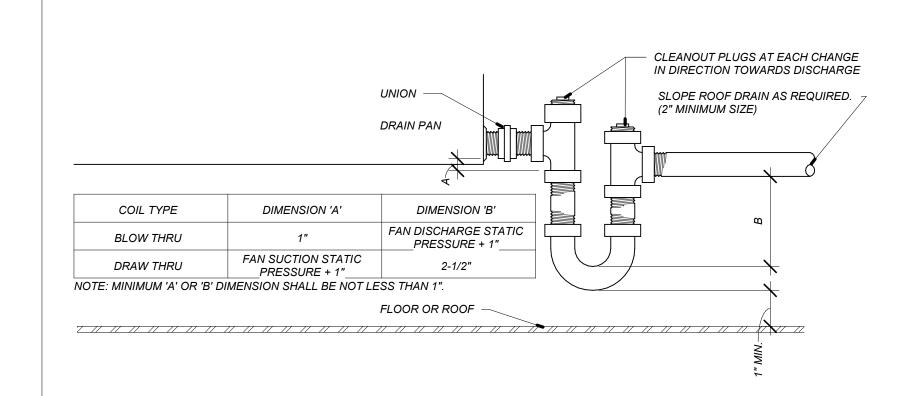
IDENTITY DATA							ELECTRICAL DATA								
MARK	#	MANUFACTURER	MODEL NO.	PRODUCT DESCRIPTION	FLOW (cfm)	HP	RPM	E.S.P. RPM (in-wg)	DRIVE	VOLTS	ø	HZ	WEIGHT (lbs.)	CONTROLS NOTES	REMARKS
EF	1	GREENHECK	G-123-VG	ROOF MOUNTED DIRECT DRIVE EXAUST FAN	600	1/4	1024	0.70	DIRECT	120	1	60	60	LIGHTS	NOTE 1

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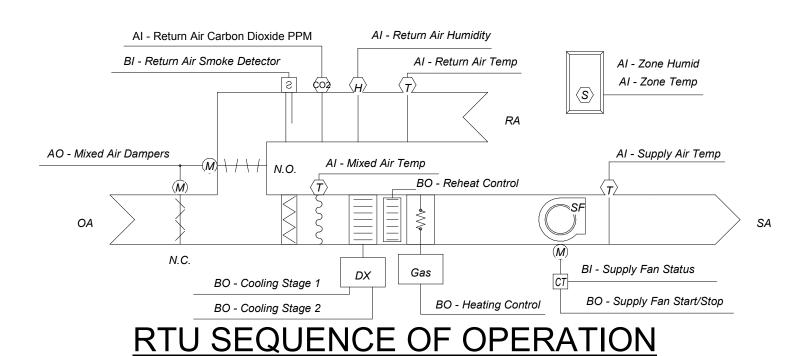
PROJECT DES	GIGN CRITERIA
LOCATION:	LEE'S SUMMIT, MO
COOLING: DESIGN OUTSIDE TEMPERATURES: DESIGN INSIDE TEMPERATURES:	99°F DB, 75°F WB 74°F, 50% RH
<u>HEATING:</u> DESIGN OUTSIDE TEMPERATURE: DESIGN INSIDE TEMPERATURE ALL OCCUPIED AREAS:	2°F 72°F
OUTSIDE AIR QUANTITY: PER ASHRAE 62.1 2010 INCLUDING LATEST ADDENDUMS:	RE: OUTSIDE AIR CALCULATION TABLE
EXHAUST AIR QUANTITY: PUBLIC TOILETS:	75 CFM PER WC OR URINAL
<u>INTERNAL LOAD ALLOWANCE:</u> LIGHTS: 120 VOLT POWER:	1.0 WATTS PER SQUARE FOOT 0.5 WATTS PER SQUARE FOOT
EXTERNAL ALLOWANCE: GLASS-1 GLASS-2 GLASS-3 WALL-1 WALL-2 WALL-3	U=0.56 SC=0.88 U=0.34 SC=0.44 U=0.56 SC=0.65 U=0.08 U=0.095 U=0.2
ROOF-1	U=0.05

CERTIFICATE OF AUTHORITY # 2006007202

DUCT STANDARDS DETAIL



5 HVAC CONDENSATE TRAP DRAIN DETAIL SCALE: NONE



UNIT SHALL OPERATE BASED ON A TIME OF DAY SCHEDULE--OCCUPIED/UNOCCUPIED AS DEFINED BY OWNER.

UNIT SUPPLY FAN SHALL BE OFF, OUTSIDE AIR DAMPER SHALL BE CLOSED, HEATING AND COOLING SHALL BE OFF. IF SPACE TEMPERATURE RISES ABOVE 78°F (OR DROPS BELOW 68°F) THE SPACE UNOCCUPIED SETPOINT THE UNIT SHALL RUN AS DESCRIBED BELOW TO SATISFY UNOCCUPIED SETPOINT EXCEPT THAT OUTSIDE AIR DAMPER SHALL BE CLOSED.

RTU-1, 2, 8, 9, 12 & 13

UNIT SUPPLY FAN SHALL BE ON AND THE OUTSIDE AIR DAMPER SET TO THE MINIMUM POSITION. UPON A CALL FOR COOLING (ABOVE 74°F) THE CONDENSING UNIT STAGE TO SATISFY THE OCCUPIED COOLING SETPOINT. GAS VALVE SHALL BE CLOSED.

UPON A CALL FOR HEATING (BELOW 70°F) THE GAS HEATING VALVE SHALL MODULATE TO SATISFY THE OCCUPIED HEATING SETPOINT. CONDENSING UNIT SHALL BE OFF. CO2 SPACE SENSOR (WHERE SPECIFIED) SHALL CONTROL THE POSITION OF THE OUTSIDE AIR DAMPER. THE OCCUPIED MAXIMUM AND MINIMUM

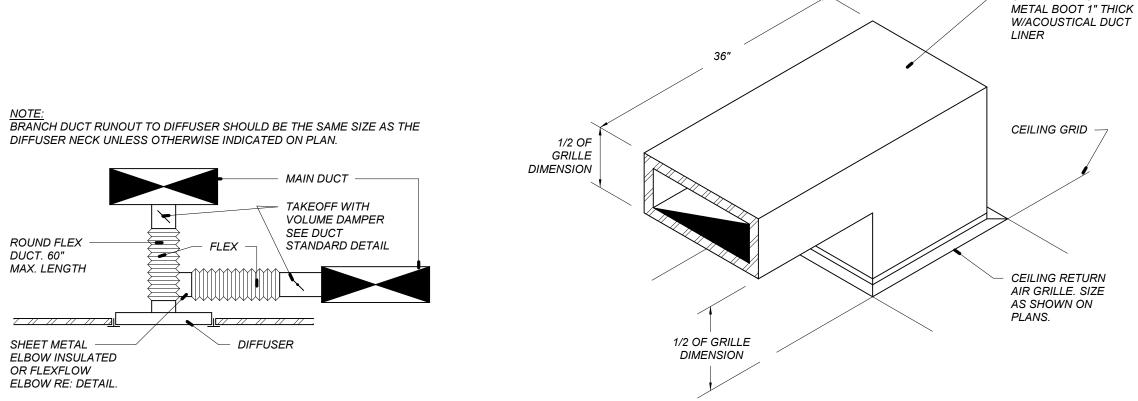
POSITIONS SHALL BE SET FOR CFM INDICATED IN THE RTU SCHEDULE. WHEN CO2 LEVELS EXCEED 1000PPM THE OUTSIDE AIR DAMPER SHALL BE FULLY OPENED UNTIL IT DROPS TO 600PPM. BETWEEN CO2 LEVELS OF 0-600 PPM OUTSIDE AIR DAMPER SHALL BE SET TO 35% of SCHEDULED UPON A CALL FOR DEHUMIDIFICATION, ABOVE 60% RELATIVE HUMIDITY, (ADJUSTABLE) THE HUMIDISTAT SHALL OVERRIDE COOLING CYCLE AND

START THE CONDENSING UNIT. THE REHEAT SOLENOID VALVE SHALL DIVERT HOT GAS TO THE REHEAT COIL. THE REHEAT COILS SHALL PROVIDE 68°F-75°F SUPPLY AIR DURING DEHUMIDIFICATION. UPON A CALL FOR ECONOMIZER MODE, OUTDOOR AIR ENTHALPY IS LESS THAN SETPOINT, CONDENSING UNIT SHALL BE OFF AND GAS VALVE

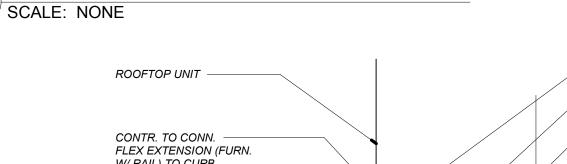
SHALL BE CLOSED. OUTDOOR AIR DAMPER SHALL MODULATE TO MAINTAIN COOLING SETPOINT.

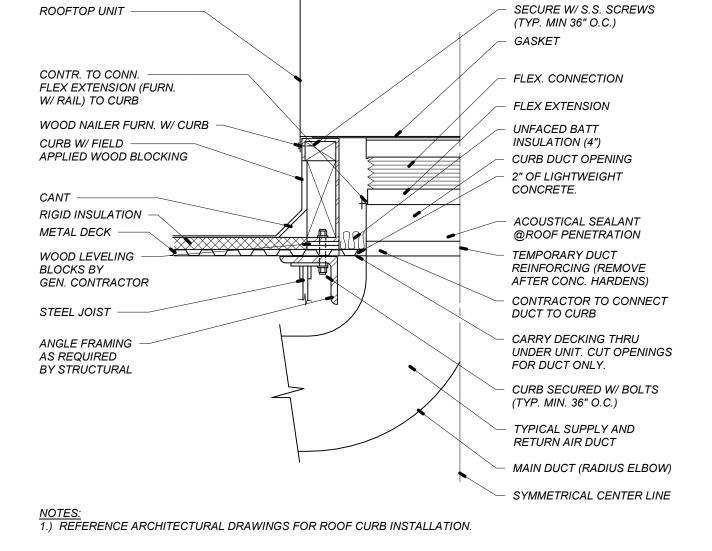
DISCHARGE AIR TEMPERATURE SHALL BE TEMPERED WITH HEAT TO MAINTAIN A NEUTRAL (70°F) SUPPLY TEMPERATURE WHEN THE THERMOSTAT DOES NOT CALL FOR HEAT.











GALVANIZED SHEET

NOTE: INSTALL ROOFTOP UNIT LEVEL. FLASH AND COUNTERFLASH ALL ROOF PENETRATIONS. CURB SHALL BE FULL PERIMETER TYPE TO MATCH JOIST SPACING. COORDINATE CURB INSTALLATION

DIRT LEG

WITH STRUCTURAL FRAMING.

UNION -

DOUBLE SWING

JOINT AND

SEE PLAN FOR

GAS PIPE MAIN

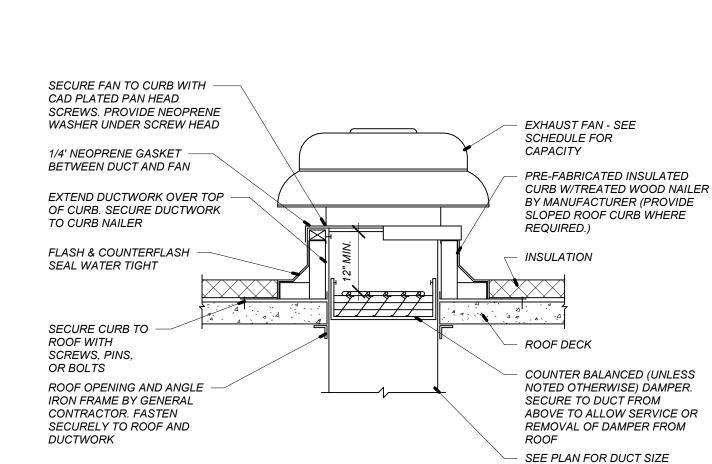
REDUCER

PIPE SIZE

SEE PIPE -

SUPPORT DETAIL





ROOFTOP UNIT CONNECTIONS DETAIL

TYPICAL ROOFTOP UNIT-PROVIDE OPENING THROUGH

ROOF NO LARGER THAN

PASSAGE OF DUCTWORK

REQUIRED TO ALLOW

THREADED PIPE TO

CONDENSATE WASTE

PVC PIPE TRAP WITH 4"

DEPTH, SAME SIZE AS

UNIT CONNECTION. SEE

ROUTE TO ROOF DRAIN

HVAC CONDENSATE

TRAP DRAIN DETAIL

CURB

ROOF

PVC ADAPTER ON

CONNECTION(S).

NOTES:
1.) REFERENCE ARCHITECTURAL DRAWINGS FOR ROOF CURB INSTALLATION.

8 ROOF MOUNTED EXHAUST FAN DETAIL



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SUMMIT

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Drawn by: BGR Checked by: BGR Issue date: 02/01/20

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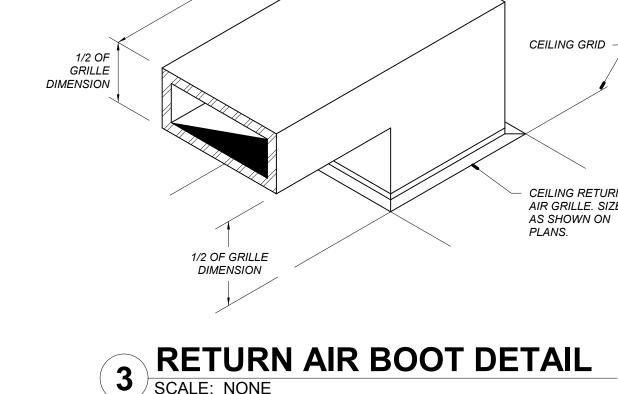
RELEASE FOR **CONSTRUCTION** AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES

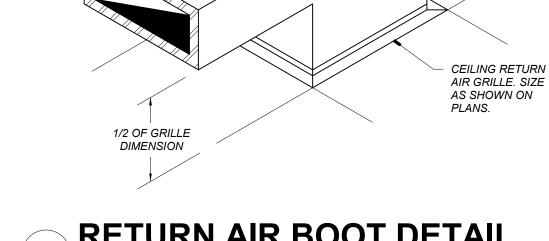
LEE'S SUMMIT, MISSOURI 05/08/2020

Ph: 816.842.2800

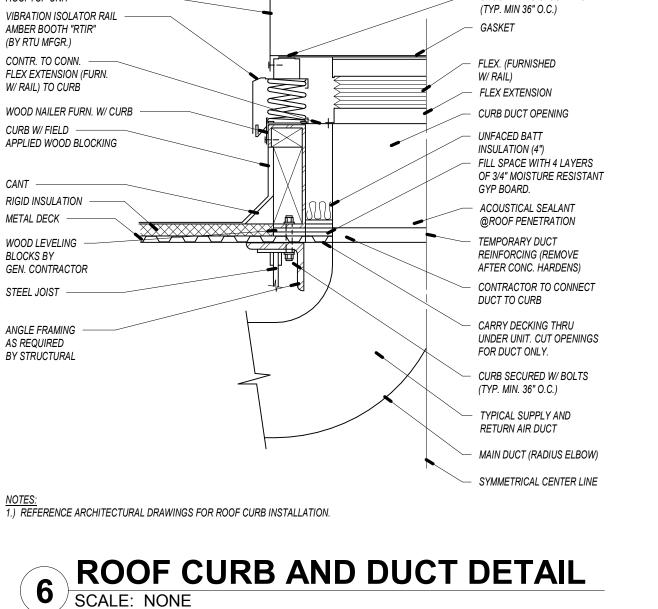
CERTIFICATE OF AUTHORITY

2006007202









ROOFTOP UNIT

CONTR. TO CONN. -

W/ RAIL) TO CURB

CURB W/ FIELD -

RIGID INSULATION

WOOD LEVELING

GEN. CONTRACTOR

ANGLE FRAMING

AS REQUIRED

BY STRUCTURAL

METAL DECK

BLOCKS BY

STEEL JOIST

CANT

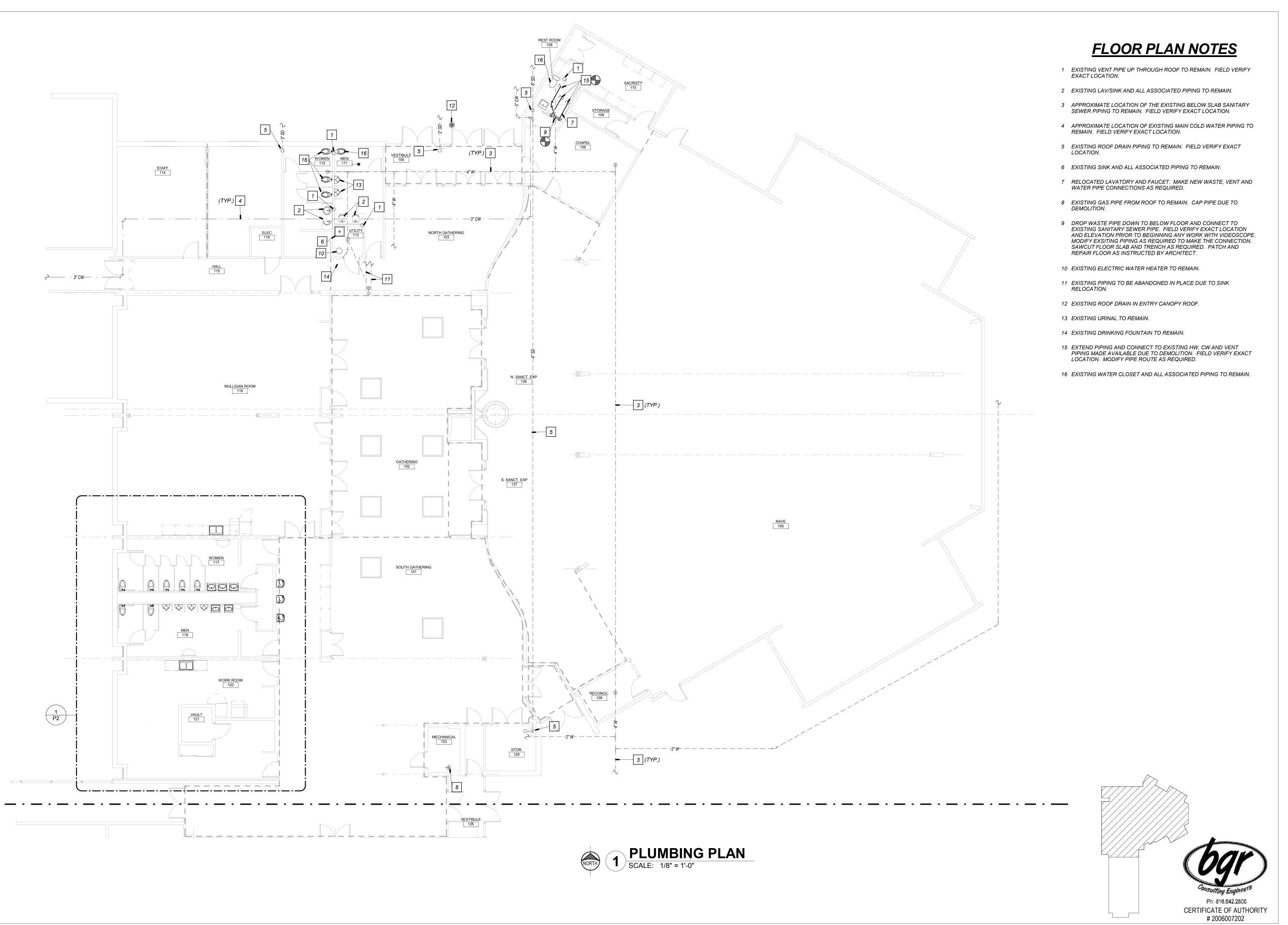
FLEX EXTENSION (FURN.

WOOD NAILER FURN. W/ CURB

APPLIED WOOD BLOCKING

VIBRATION ISOLATOR RAIL AMBER BOOTH "RTIR" (BY RTU MFGR.)





Drawn by: BGR Checked by: BGR Issue date: 02/01/20

Revised:

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FLOOR PLAN NOTES

- 1 APPROXIMATE LOCATION OF EXISTING DOMESTIC HOT AND COLD WATER PIPING ABOVE CEILING TO REMAIN. FIELD VERIFY EXACT
- 2 EXISTING VENT PIPE UP THROUGH ROOF TO REMAIN. FIELD VERIFY EXACT LOCATION.
- 3 APPROXIMATE LOCATION OF THE EXISTING BELOW SLAB SANITARY SEWER PIPING TO REMAIN. FIELD VERIFY EXACT LOCATION.
- 4 EXISTING DRINKING FOUNTAIN TO REMAIN.
- 5 EXISTING FLOOR DRAIN TO REMAIN. PROVIDE WITH NEW NICKEL-BRONZE GRATE. FIELD MEASURE EXACT SIZE.
- 6 NEW SINK. CONCEAL ALL PIPING WITH NEW ARCHITECTURAL CHASE/WALL. RE: BRANCH FIXTURE SCHEDULE FOR SIZES.
- 7 CONNECT TO EXISTING VENT PIPE UP THROUGH ROOF. FIELD VERIFY EXACT LOCATION.
- 8 ROUTE NEW WASTE FROM NEW PLUMBING FIXTURE DOWN THROUGH FLOOR AND CONNECT TO EXISTING WASTE PIPE. FIELD VERIFY EXACT LOCATION OF EXISTING WASTE PIPE PRIOR TO BEGINNING ANY WORK. SAWCUT SLAB AND TRENCH AS REQUIRED. MAKE NEW VENT CONNECTION AND ROUTE WITHIN CHASE AS SHOWN.
- 9 ROUTE NEW 2" WASTE FROM LAVATORIES DOWN THROUGH FLOOR AND CONNECT TO EXISTING WASTE PIPE. FIELD VERIFY EXACT LOCATION OF EXISTING WASTE PIPE PRIOR TO BEGINNING ANY WORK. SAWCUT SLAB AND TRENCH AS REQUIRED. MAKE NEW VENT CONNECTION AND ROUTE WITHIN CHASE AS SHOWN.
- 10 EXISTING GAS PIPE FROM ROOF TO WATER HEATER TO REMAIN.
- 11 EXISTING GAS FIRED WATER HEATER AND ALL ASSOCIATED PIPING TO REMAIN.
- 12 EXISTING WATER HEATER FLUE UP THROUGH ROOF TO REMAIN.
- 13 PROVIDE WITH MIXING VALVE. SET FOR A MAXIMUM HOT WATER TEMPERATURE OF 105F. VALVE SHALL BE SIMILAR TO LEONARD 170A-LF-BRKT UNIVERSAL UNDERSINK THERMOSTATIC MIXING VALVE.
- 14 APPROXIMATE LOCATION OF EXISTING 2-1/2" COLD WATER PIPE TO REMAIN THAT RUNS HORIZONTALLY WITHIN THE CHASE. FIELD VERIFY EXACT LOCATION. PROVIDE NEW CONNECTION FOR EACH NEW FIXTURE OR MODIFY EXISTING DROPS AS NEEDED TO CONNECT TO NEW FIXTURE LAYOUT. RE: BRANCH FIXTURE SCHEDULE FOR SIZES. CAP ANY UNUSED EXISTING DROPS DUE TO FIXTURE DEMOLITION.
- 15 CONNECT TO EXISTING HOT AND COLD WATER PIPING ABOVE CEILING. ROUTE TO NEW SINK. FIELD VERIFY EXACT LOCATION OF EXISTING PIPING AND MODIFY PIPE ROUTE AS REQUIRED.
- 16 CONNECT TO EXISTING SANITARY SEWER PIPE BELOW FLOOR. FIELD VERIFY EXACT LOCATION AND ELEVATION PRIOR TO BEGINNING ANY WORK WITH VIDEOSCOPE. MODIFY EXSITING PIPING AS REQUIRED TO MAKE THE CONNECTION.
- 17 ROUTE WASTE PIPE BELOW EXISTING FLOOR. SAWCUT FLOOR SLAB AND TRENCH AS REQUIRED. PATCH AND REPAIR FLOOR AS INSTRUCTED BY ARCHITECT.
- 18 INSTALL NEW FLOOR DRAIN IN EXISTING FLOOR. ROUTE WASTE PIPE BELOW FLOOR AS SHOWN TO EXISTING SANITARY PIPE IN CHASE AND CONNECT. SAWCUT FLOOR SLAB AND TRENCH AS REQUIRED. PATCH AND REPAIR FLOOR AS INSTRUCTED BY ARCHITECT.
- 19 PROVIDE ROUGH-IN FOR ICE MAKER CONNECTION. PROVIDE WITH 1/4
 TURN VALVE AND ESCUTCHEON. COORDINATE EXACT LOCATION
 WITH OWNER PRIOR TO INSTALLING.
- 20 INSTALL FLOOR DRAIN FOR ICE MAKER. COORDINATE EXACT LOCATION WITH OWNER. SAWCUT SLAB AS REQUIRED.
- 21 PROVIDE ABOVE COUNTER ROUGH-IN FOR COFFEE MAKER CONNECTION. PROVIDE WITH 1/4 TURN VALVE AND ESCUTCHEON. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO INSTALLING.
- 22 RELOCATED SINK AND FAUCET. MAKE NEW WASTE, VENT, HOT AND COLD WATER PIPE CONNECTIONS AS NECESSARY.
- 23 APPROXIMATE LOCATION OF EXISTING DOMESTIC HOT WATER PIPING ABOVE CEILING SERVING LAVATORIES FROM CHASE. PIPE TO REMAIN AND BE REUSED TO SUPPLY NEW LAVATORIES. FIELD VERIFY EXACT LOCATION.
- 24 ROUTE NEW WASTE FROM NEW FLOOR DRAIN AND CONNECT TO EXISTING WASTE PIPE BELOW FLOOR. FIELD VERIFY EXACT LOCATION OF EXISTING WASTE PIPE PRIOR TO BEGINNING ANY WORK. SAWCUT SLAB AND TRENCH AS REQUIRED. MAKE NEW VENT CONNECTION AND ROUTE WITHIN CHASE AS SHOWN.
- 25 CONNECT TO EXISTING HOT AND COLD WATER PIPING WITHIN CHASE MADE AVAILABLE DUE TO DEMOLITION. FIELD VERIFY EXACT LOCATION. MODIFY EXISTING DROPS AS NEEDED TO CONNECT TO NEW FIXTURE LAYOUT. RE: BRANCH FIXTURE SCHEDULE FOR SIZES. CAP ANY UNUSED EXISTING DROPS DUE TO FIXTURE DEMOLITION.
- 26 EXTEND HOT AND COLD WATER PIPING WITHIN CHASE AND CONNECT TO EXISTING PIPING. FIELD VERIFY EXACT LOCATION. MODIFY PIPE ROUTE AS REQUIRED.
- 27 NEW URINAL. EXISTING COLD WATER TAPS MADE AVAILABLE DUE TO DEMOLITION CAN BE REUSED FOR CONNECTION TO NEW URNIAL. OTHERWISE, PROVIDE NEW COLD WATER PIPING. PROVIDE NEW WASTE AND VENT PIPE CONNECTIONS AS SHOWN.
- 28 CONNECT NEW WATER CLOSET TO EXISTING COLD WAER PIPING MADE AVAILABLE DUE TO DEMOLITION. PROVIDE NEW WASTE AND VENT PIPE CONNECTIONS AS SHOWN.



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130 NW MURRAY F LEE'S SUMMIT, MO

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Drawn by: BGR
Checked by: BGR
Issue date: 02/01/20

Revised:

P2

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

05/08/2020

			PLUMBING FIXTURE SCHEDULE
MARK	MANUFACTURER	MODEL NO.	DESCRIPTION
WC-1 ADA	тото	ELONGATED WALL MOUNTED CT708EG	WALL HUNG WATER CLOSET(ADA): WHITE VITREOUS CHINA, LOW CONSUMPTION SIPHON JET ACTION, ELONGATED BOWL, WALL MOUNTED WATER CLOSET WITH SANAGLOSS CERAMIC GLAZE, 1 1/2" TOP SPUD INLET AND 1000 LBS. EXTRA HEAVY DUTY WALL HANGER. MOUNT SEAT HEIGHT AT 17"AFF.
	тото	TET1LA	1.28 GPF FLUSH VALVE. SELF GENERATING HYDRO POWER WITH BATTERY BACKUP, EXPOSED ECOPOWER SENSOR OPERATED FLUSHOMETER PISTON VALVE, VACUUM BREAKER TUBE, ANGLE VALVE, POSITIVE SEAL, SELF CLEANING DEBRIS SCREEN, FLUSHING SYSTEM TO MATINA TRAP SEAL EVERY 24 HOURS WHEN NOT USED. TOP SPUD, NEUTRAL ROUGH-IN, CHROME PLATED FINISH, 3 YEAR WARRANTY, COMPLIANT WITH ANSI/ASSEE 1037.
			MOUNT FLUSH VALVE HANDLE TO WIDE SIDE OF STALL. BENEKE 527 SS, WHITE OPEN FRONT SEAT LESS COVER, AND SELF SUSTAINING CHECK HINGES.
WC-2	ТОТО	ELONGATED WALL MOUNTED CT708EG	WALL HUNG WATER CLOSET: WHITE VITREOUS CHINA, LOW CONSUMPTION SIPHON JET ACTION, ELONGATED BOWL, WALL MOUNTED WATER CLOSET WITH SANAGLOSS CERAMIC GLAZE, 1 1/2" TOP SPUD INLET AND 1000 LBS. EXTRA HEAVY DUTY WALL HANGER. MOUNT SEAT HEIGHT AT 15"AFF.
	тото	TET1LA	1.28 GPF FLUSH VALVE. SELF GENERATING HYDRO POWER WITH BATTERY BACKUP, EXPOSED ECOPOWER SENSOR OPERATED FLUSHOMETER PISTON VALVE, VACUUM BREAKER TUBE, ANGLE VALVE, POSITIVE SEAL, SELF CLEANING DEBRIS SCREEN, FLUSHING SYSTEM TO MATINA TRAP SEAL EVERY 24 HOURS WHEN NOT USED. TOP SPUD, NEUTRAL ROUGH-IN, CHROME PLATED FINISH, 3 YEAR WARRANTY, COMPLIANT WITH ANSI/ASSEE 1037.
			MOUNT FLUSH VALVE HANDLE TO WIDE SIDE OF STALL. BENEKE 527 SS, WHITE OPEN FRONT SEAT LESS COVER, AND SELF SUSTAINING CHECK HINGES.
S-1	ELKAY ADA	LRAD3321	33"x21.5" DOUBLE COMPARTMENT SINK WITH TWO 13.5"x16" BOWLS: 18 GAUGE, TYPE 304 SELF RIMMING SINK, WITH TWO LK-35 DUO STRAINER WITH 1-1/2" TAILPIECE. PROVIDE TAILPIECE WITH 1 1/2" 17 GAUGE CHROME-PLATED SEMI-CAST BRASS P-TRAP WITH CLEANOUT, GRID DRAIN AND WASTE ARM TO WALL WITH ESCUTCHEON, STAINLESS STEEL BRAIDED RISERS WITH LOOSE KEY ANGLE STOPS. SET FIXTURE IN BED OF PUTTY. PROVIDE BEAD OF CLEAR SILICONE AROUND SINK EDGE.
	CHICAGO FAUCET	200-AXKABCP	FAUCET: CHROME PLATED BRASS, 8" ON CENTER BODY WITH DECK MOUNTED FITTING, 9-1/2" L9 SWIVEL SPOUT AND GRID DRAIN, 390 INDEXED HANDLES, QUATURN OPERATING CERAMIC CARTRIDGE AND VANDAL PROOF SOFTFLO AERATOR. PROVIDE WITH HONEYWELL MIXING VALVE AM-1 1070 WITH ASSE 1070 CERTIFICATION. SET OUTLET FOR 105°F.
	ADA		PROVIDE OFF SET GRID STRAINER DRAIN AND TAILPIECE WITH 1 1/4"x1 1/2" 17 GAUGE CHROME-PLATED SEMI-CAST BRASS P-TRAP WITH CLEANOUT AND WASTE ARM TO WALL WITH ESCUTCHEON, RISERS WITH LOOSE KEY ANGLE STOPS. PROVIDE INSULATION AND TRUBRO JACKET ON ALL EXPOSED PIPING BELOW SINK.
UR-1 ADA	тото	UT447E	WALL HUNG URINAL (ADA): WHITE VITREOUS CHINA, BACK OUTLET WASHOUT URINAL WITH 3/4" TOP SPUD AND WALL HANGER. MOUNT TOP OF RIM 17" A.F.F. EXISTING WALL HANGER CAN BE REUSED FOR FIXTURES THAT MATCH EXISTING LOCATIONS.
ADA	тото	TEU1LA	0.5 GPF FLUSH VALVE. SELF GENERATING HYDRO POWER WITH BATTERY BACKUP, EXPOSED ECOPOWER SENSOR OPERATED FLUSHOMETER VALVES: PISTON VALVE, POSITIVE SEAL, SELF CLEANING DEBRIS SCREEN; FLUSHING SYSTEM TO MAINTAIN TRAP SEAL EVERY 24 HOURS WHEN NOT USED; TOP SPUD; NEUTRAL ROUGH-IN; CHROME PLATED FINISH; 3 YEAR WARRANTY; COMPLYING WITH ANSI/ASSE 1037.
UR-2	ТОТО	UT447E	WALL HUNG URINAL (ADA): WHITE VITREOUS CHINA, BACK OUTLET WASHOUT URINAL WITH 3/4" TOP SPUD AND WALL HANGER. MOUNT TOP OF RIM 24" A.F.F. EXISTING WALL HANGER CAN BE REUSED FOR FIXTURES THAT MATCH EXISTING LOCATIONS.
	тото	TEU1LA	0.5 GPF FLUSH VALVE. SELF GENERATING HYDRO POWER WITH BATTERY BACKUP, EXPOSED ECOPOWER SENSOR OPERATED FLUSHOMETER VALVES: PISTON VALVE, POSITIVE SEAL, SELF CLEANING DEBRIS SCREEN; FLUSHING SYSTEM TO MAINTAIN TRAP SEAL EVERY 24 HOURS WHEN NOT USED; TOP SPUD; NEUTRAL ROUGH-IN; CHROME PLATED FINISH; 3 YEAR WARRANTY; COMPLYING WITH ANSI/ASSE 1037.
LV-1	ТОТО	LT307#01	ADA LAVATORY: VITREOUS CHINA, 20-1/2" X 18-1/4" RECTANGULAR WALL HUNG LAVATORY, BACK OVERFLOW, CONCEALED HANGER AND DRILLED FOR CONCEALED ARM CARRIER.
ADA	тото	TEL115	GOOSE NECK, AUTOMATIC INFRARED SENSOR OPERATED FAUCET WITH ECO POWER SELF GENERATING POWER SYSTEM, CHROME FINISH ANTI-SCALD, THERMAL MIXING CHAMBER SINGLE SUPPLY OPENING, MAXIMUM DISCHARGE 0.09 GALLONS PER 10 SECOND CYCLE, VANDAL PROOF SPRAY HEAD. PROVIDE WITH WATSS LFe480-10 MIXING VALVE. INSTALL THERMOSTATIC CONTROLLER/MIXING VALVE BELOW COUNTER AND SET FOR 105°F.
			PROVIDE PERFORATED GRID DRAIN WITH OFFSET AND 1-1/4" TAILPIECE SEMI-CAST BRASS P-TRAP WITH CLEANOUT, CHROME-PLATED RISERS WITH LOOSE KEY 1/4 TURN ANGLE STOPS. INSTALL P-TRAP PARALLEL AND ADJACENT TO WALL. INSULATE EXPOSED SUPPLIES AND DRAIN. COVER ALL INSULATION WITH TRUEBRO PVC JACKET.
FD-1	SIOUX CHIEF	833-Q	SQUARE CAST IRON FLOOR DRAIN WITH FLANGE, INTEGRAL REVERSIBLE CLAMPING COLLAR, SEEPAGE OPENINGS, 1/2" PLUGGED PRIMER TAP, AND 7" x 7" NICKEL BRONZE STRAINER WITH VANDAL-PROOF SCREWS. OUTLET SIZE PER PLAN. PROVIDE WITH SURE SEAL TRAP GUARD.

			BRA	NCH F	IXTURE	SCHE	DULE				
	DF	AIN-W	4STE-S	OIL-VE	ENT		OLD TER		OT TER		
PLUMBING FIXTURE OR ITEMS	TRAP	ARM	VERT	HORIZ	VENT	SUPPLY	BRANCH	SUPPLY	BRANCH	FIXTURE TYPE SEE SPECIFICATIONS	REMARKS
LAVATORY	1-1/2"	1-1/2"	1-1/2"	2"	1-1/2"	3/8"	1/2"	3/8"	1/2"	LV-1	1
WATER CLOSET (FV)	INT	3"	4"	4"	2"	1"	1-1/4"	-	-	WC-1, WC-2	1
URINAL	INT	2"	2"	2"	1-1/2"	3/4"	1"	-	-	UR-1, UR-2	1
SINK	1-1/2"	1-1/2"	2"	2"	1-1/2"	3/8"	1/2"	3/8"	1/2"	S-1	1
2" FLOOR DRAIN	2"	2"	2"	2"	2"	-	-	-	-	FD-1	

REMARKS: 1.) FIXTURE LV-1, WC-1, UR-1 AND S-1 FOR HANDICAP USE

PIPING SYSTEM	ABBREVIATION	PIPING MATERIAL
SANITARY WASTE AND VENT (ABOVE GRADE)	W OR V	HUBLESS CAST IRON
SANITARY WASTE AND VENT (BELOW GRADE)	W OR V	PVC
POTABLE WATER-2" & SMALLER (ABOVE GRADE)	CW	TYPE M HARD DRAWN COPPER
POTABLE WATER-2" & SMALLER (BELOW GRADE)	CW	TYPE K SOFT ANNEALED COPPER
CONDENSATE/INDIRECT DRAIN-1" & SMALLER	ID	TYPE M HARD DRAWN COPPER
CONDENSATE/INDIRECT DRAIN-1-1/4" LARGER	ID	TYPE DWV HARD DRAWN COPPER
FIRE PROTECTION-3" & LARGER (BELOW GRADE)	FP	DUCTILE IRON
FIRE PROTECTION (ABOVE GRADE)	FP	SCHEDULE 10 OR 30 BLACK STEEL

GENERAL NOTES

- A.) PLUMBING CONTRACTOR IS RESPONSIBLE TO SEE THAT WORK MEETS AND IS IN ACCORDANCE WITH ALL REQUIREMENTS OF FEDERAL, STATE, AND LOCAL LAWS AND CODES AND/OR REQUIREMENTS, INCLUDING HEALTH CODES AND BUILDING OWNER.
- B.) GAS PIPING INSTALLED IN CONCEALED LOCATIONS SHALL HAVE FITTINGS LISTED FOR CONCEALED INSTALLATIONS OR PIPE SHALL BE SLEEVED AND VENTED PER CODE.
- C.) COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO INSTALLATION TO AVOID ROUTING CONFLICTS. COORDINATION SHALL TAKE PLACE DURING ON SITE MEETINGS AND INCLUDE THE REVIEW OF SHOP DRAWINGS FROM THE FIRE PROTECTION AND SHEET METAL CONTRACTORS.
- D.) WASTE/VENT PIPING LOCATED ABOVE CEILING SHALL BE CAST IRON AS SPECIFIED. NO PVC PIPING WITHIN PLENUM IS ALLOWED.
- E.) DRAWINGS AREA DIAGRAMMATIC REPRESENTATION OF THE PLUMBING SYSTEM. CONTRACTOR SHALL CONFORM TO THE DRAWINGS INTENT BUT CHANGES IN ROUTING AND LOCATION ARE EXPECTED DUE TO ONSITE JOB CONDITIONS. ADDITIONAL COMPENSATION WILL NOT BE AWARDED FOR SUCH CHANGES AND SHOULD BE ACCOUNTED FOR IN CONTRACTOR'S BID.
- F.) CONTRACTOR SHALL PROVIDE COMPLETE PLUMBING SYSTEMS AS DETAILED ON THESE DRAWINGS. WORK CONSISTS OF FURNISHING MATERIALS, EQUIPMENT, AND SERVICES REQUIRED FOR COMPLETE SYSTEMS. INCLUDE ANY INCIDENTAL APPARATUS. APPLIANCES. MATERIAL LABOR AND SERVICES NECESSARY TO MAKE NEW WORK COMPLETE IN ALL RESPECTS AND FULLY READY FOR OPERATION.
- G.) WHERE VALVES OCCUR ABOVE DRYWALL OR PLASTER CEILINGS OR CONCEALED BEHIND WALLS, CONTRACTOR SHALL FURNISH AND INSTALL ACCESS PANELS. PANEL TO MATCH FINISH.
- H.) EXACT NUMBER AND TYPE OF PLUMBING FIXTURES SHALL BE DETERMINED FROM ARCHITECTURAL DRAWINGS. VERIFY SUCH LOCATIONS BEFORE PROCEEDING WITH ANY ROUGH-IN WORK.
- I.) PROVIDE DIELECTRIC UNIONS AT ALL CONNECTIONS BETWEEN DISSIMILAR PIPING METALS.
- J.) NO VENT THROUGH ROOF SHALL TERMINATE CLOSER THAN 10'-0" TO ANY OUTSIDE AIR INTAKE.
- K.) ALL EXTERIOR PIPING BELOW GRADE SHALL BE A MINIMUM OF 42" BELOW GRADE OR BURIED BELOW LOCAL FREEZE LINE, WHICHEVER IS
- L.) PIPING IN CONCRETE BLOCK WALLS SHALL BE INSTALLED AS BLOCK IS BEING LAID. DO NOT CUT BLOCK WALL.
- M.) PROVIDE ALL SINKS AND LAVATORIES WITH SLIP JOINT TRAP FITTING FOR CLEANOUT.
- N.) UPON COMPLETION OF WORK UNDER THIS CONTRACT, THE CONTRACTOR SHALL REMOVE ALL TOOLS, APPLIANCES, SURPLUS MATERIALS AND SCRAP.
- O.) WHEN CONFLICTS OCCURS IN SPECIFICATIONS OR IN THE DRAWINGS, OR BETWEEN EITHER, THE ITEMS OF GREATER QUALITY OR HIGHER COST SHALL BE INCLUDED.
- Q.) TRENCHING, BACKFILL AND CONCRETE WORK ASSOCIATED WITH PLUMBING SHALL BE PROVIDED IN ACCORDANCE WITH THE APPLICABLE SPECIFICATIONS.
- R.) ALL FLOOR DRAIN LOCATIONS SHALL BE COORDINATED WITH THE ARCHITECT BEFORE ROUGH-IN WORK SHALL BEGIN. CONTRACTOR SHALL COORDINATE FINAL FINISH OF ALL FLOOR DRAINS WITH
- S.) ALL FLOOR SINKS UNDER EQUIPMENT SHALL BE HALF EXPOSED AND READILY ACCESSIBLE FOR INSPECTION AND CLEANING. INSTALL FLOOR SINKS FLUSH WITH FINISHED FLOOR.
- T.) ALL ROOFING PENETRATIONS SHALL BE FLASHED AND COUNTER FLASHED. WORK SHALL BE COORDINATED WITH ROOFING
- U.) HANGER RODS AND DEVICES SHALL BE USED FOR ALL PIPING. PROVIDE HANGERS SIZED TO FIT INSULATION WITH GALVANIZED SADDLE AS REQUIRED. MAKE SHIFT DEVICES SHALL NOT BE ACCEPTABLE. SPACE HANGERS TO COMPLY WITH THE ACCEPTABLE SECTION OF THE INTERNATIONAL PLUMBING CODE.
- V.) DOMESTIC WATER PIPING SHALL BE DISINFECTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE STATE ADMINISTRATIVE CODE. PROVIDE CERTIFICATION CONFIRMING TESTING AND COMPLIANCE TO THE

W.) LICENSES/CODES. THE CONTRACTOR SHALL BE LICENSED TO PERFORM

- WORK IN THE MUNICIPALITY IN WHICH THE PROJECT IS LOCATED. ALL PRODUCTS AND TYPES OF CONSTRUCTION SHALL MEET OR EXCEED THE LATEST EDITION OF APPLICABLE STANDARDS OF MANUFACTURER, TESTING, PERFORMANCE AND INSTALLATION. WORK PERFORMED UNDER THIS CONTRACT SHALL, AT A MINIMUM, BE IN CONFORMANCE WITH APPLICABLE NATIONAL, STATE AND LOCAL CODES HAVE JURISDICTION. EQUIPMENT FURNISHED AND ASSOCIATED INSTALLATION WORK PERFORMED UNDER THIS CONTRACT SHALL BE IN STRICT COMPLIANCE WITH CURRENT APPLICABLE CODES ADOPTED BY THE LOCAL AHJ INCLUDING ANY AMENDMENTS AND STANDARDS AS SET FORTH BY THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), UNDERWRITERS LABORATORIES (UL), OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA). AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME), AMERICAN SOCIETY OF HEATING, REFRIGERATION AND AIR CONDITIONING ENGINEERS (ASHRAE), AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI), AMERICAN SOCIETY OF TESTING MATERIALS (ASTM) AND OTHER NATIONAL STANDARDS AND CODES WHERE APPLICABLE. WHERE THE CONTRACT DOCUMENTS EXCEEDS THE REQUIREMENTS OF THE REFERENCED CODES, STANDARDS, ETC. THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE. WHERE REQUIRED, OBTAIN, PAY FOR AND FURNISH CERTIFICATES OF INSPECTION TO THE OWNER. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY VIOLATION OF THE LAW. MAINTAIN NECESSARY SIGNAL LIGHTS AND GUARDS FOR THE SAFETY OF THE PUBLIC. THE WORK SHALL COMPLY WITH THE EDITION OF THE APPLICABLE STANDARDS, REGULATIONS AND CODES CURRENTLY IN FORCE OF ALL STATE AND LOCATION AUTHORITIES HAVING JURISDICTION. WHERE QUANTITIES, SIZES, OR OTHER REQUIREMENTS INDICATED ON THE DRAWINGS OR HEREIN SPECIFIED ARE IN EXCESS OF THE STANDARD OR CODE REQUIREMENTS. THE SPECIFICATIONS AND/OR DRAWINGS SHALL GOVERN. IN THE ABSENCE OF OTHER APPLICABLE LOCAL CODES, ACCEPTABLE TO THE ARCHITECT/ENGINEER, AND UNIFORM PLUMBING AND MECHANICAL CODES SHALL APPLY TO THIS WORK.
- X.) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACQUISITION AND PAYMENT OF ALL FEES, PERMITS AND INSPECTIONS REQUIRED. COORDINATE WITH THE WORK OF OTHER SECTIONS, EQUIPMENT FURNISHED BY OTHERS, REQUIREMENT OF OWNER AND WITH THE CONSTRAINTS OF THE EXISTING CONDITIONS OF THE PROJECT SITE. PROVIDE DUCT RISES AND DROPS AS REQUIRED FOR FIELD INSTALLATION AND TRADE COORDINATION. NOTIFY ARCHITECT OF ANY DISCREPANCIES BEFORE STARTING WORK.

GENERAL NOTES

- Y.) PROTECTION. STORE AND PROTECT FROM DAMAGE EQUIPMENT AND MATERIALS DELIVERED TO JOB SITE. COVER WITH WATERPROOF, TEAR RESISTANT, HEAVY TARP OR POLYETHYLENE PLASTIC AS REQUIRED TO PROTECT FROM PLASTER, DIRT, PAINT, WATER OR PHYSICAL DAMAGE. EQUIPMENT AND MATERIAL THAT HAS DAMAGED BY CONSTRUCTION ACTIVITIES WILL BE REJECTED AND THE CONTRACTOR IS OBLIGATED TO FURNISH NEW EQUIPMENT AND MATERIAL OF A LIKE KIND. PLUG OR CAP OPEN ENDS OF PIPING SYSTEMS WHILE STORED AND INSTALLED DURING CONSTRUCTION WHEN NOT IN USE TO PREVENT THE ENTRANCE OF DEBRIS INTO THE SYSTEMS. KEEP THE MANUFACTURER-PROVIDED PROTECTIVE COVERINGS ON FLOOR DRAINS, FLOOR SINKS AND TRENCH DRAINS DURING CONSTRUCTION. REMOVE COVERINGS AT THE TERMINATION OF THE WORK AND POLISH EXPOSED SURFACES.
- Z.) ELECTRONIC DRAWINGS. IN PREPARATION OF SHOP DRAWINGS. CONTRACTOR MAY AT THEIR OPTION, OBTAIN ELECTRONIC DRAWING FILES IN AUTOCAD FORMAT FROM THE ENGINEER FOR A SHIPPING AND HANDLING FEE OF \$20 PER SHEET, \$50 MINIMUM. CONTRACTOR SHALL CONTACT THE ARCHITECT FOR WRITTEN AUTHORIZATION FORM TO BE SIGNED AND RETURNED.
- AA.) FLOOR DRAINS THAT DO NOT SHOW A SLOPING FLOOR ON ARCHITECTURAL DRAWINGS SHALL HAVE A SLOPING DOME 6'-0" IN DIAMETER TOWARDS THE DRAIN.
- BB.) CONTRACTOR SHALL CAULK/SEAL EVERY WALL PENETRATION AS SPECIFIED BY ARCHITECT OR ENGINEER. WHERE WALL IS SMOKE/FIRE RATED CONTRACTOR SHALL PROVIDE REQUIRED U.L. FIRE STOP. IF THE ARCHITECTURAL AND MECHANICAL SPECIFICATIONS REGARDING CAULKING/SEALING ARE NOT CONSISTENT CONTRACTOR SHALL USE THE MOST STRINGENT.
- CC.) INTENT. BY SUBMITTING A BID THE CONTRACTOR ACCEPTS RESPONSIBILITY TO PROVIDE A COMPLETE PLUMBING SYSTEM BASED ON THE INTENT OF THESE DRAWINGS. THE DRAWINGS SHALL SERVE AS WORKING DRAWINGS FOR THE GENERAL LAYOUT OF THE VARIOUS ITEMS OF EQUIPMENT; ARE DIAGRAMMATIC; AND DO NOT NECESSARILY INDICATE EVERY REQUIRED ITEM. AS SUCH THE CONTRACTOR SHALL INCLUDE AS A PART OF HIS BID ALL WORK, MATERIALS, LABOR, EQUIPMENT, TOOLS, INSURANCE, TAXES, SERVICES, APPURTANCES, ETC. TO MAKE A COMPLETE OPERATIONAL SYSTEM. CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL OBLIGATIONS ASSOCIATED WITH COMPLETION OF MECHANICAL WORK AS PROVIDED BY THE CONTRACT DOCUMENTS.
- DD.) CHANGES. CONTRACTOR SHALL NOT MAKE ANY CHANGE TO OR DEVIATE FROM THE CONTRACT DOCUMENTS WITHOUT WRITTEN APPROVAL FROM THE ARCHITECT/ENGINEER. THE ARCHITECT/ENGINEER WILL NOT BE RESPONSIBLE OR LIABLE FOR ANY CHANGES MADE WITHOUT THE ENGINEER'S KNOWLEDGE AND
- EE.) QUESTIONS. ANY QUESTIONS THAT ARISE IN THE FIELD OR UPON REVIEW OF THE CONTRACT DRAWINGS THE CONTRACTOR SHALL SUBMIT THE QUESTION IN WRITING TO THE ARCHITECT/ENGINEER FOR CLARIFICATION. A PHONE CALL IS PERMISSIBLE BUT MUST BE FOLLOWED BY WITH THE WRITTEN SUBMISSION.
- FF.) DOCUMENTS. CONTRACTOR SHALL READ AND BE FAMILIAR WITH THE REQUIREMENTS WITHIN ALL DRAWINGS AND SPECIFICATIONS. INFORMATION REGARDING THE COMPLETE WORK IS DISPERSED THROUGHOUT THE DOCUMENT SET AND CAN NOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO THE COMPLETE DOCUMENT SET. HE SHALL EXAMINE THE ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS TO FAMILIARIZE HIMSELF WITH THE TYPE OF CONSTRUCTION, MATERIALS, AND EQUIPMENT TO BE USED FOR ALL WORK AND HOW IT WILL AFFECT THE INSTALLATION OF HIS CONTRACT. BY THE ACT OF SUBMITTING A BID. THE CONTRACTOR WILL BE DEEMED TO HAVE MADE SUCH EXAMINATION, TO HAVE ACCEPTED SUCH CONDITIONS, TO HAVE MADE ALLOWANCE THEREFOR, AND INCLUDED ALL COSTS IN HIS PROPOSAL. FAILURE DETERMINE EXISTING CONDITIONS WILL NOT BE CONSIDERED A BASIS FOR THE GRANTING OF ADDITIONAL COMPENSATION.
- GG.) SCHEDULING. COORDINATE WORK WITH THAT OF OTHER TRADES SO THAT THE VARIOUS COMPONENTS OF THE SYSTEMS WILL BE INSTALLED AT THE PROPER TIME. WILL FIT THE AVAILABLE SPACE. AND WILL ALLOW PROPER SERVICE ACCESS TO THOSE ITEMS REQUIRING MAINTENANCE. COMPONENTS WHICH ARE INSTALLED WITHOUT REGARD TO THE ABOVE SHALL BE RELOCATED AT NO ADDITIONAL COST TO THE OWNER.
- HH.) DIMENSIONS. FIGURED DIMENSIONS SHALL BE TAKEN IN PREFERENCE TO SCALE DIMENSIONS. CONTRACTOR SHALL TAKE HIS OWN MEASUREMENTS AT THE BUILDING, AS VARIATIONS MAY OCCUR. CONTRACTOR WILL BE HELD RESPONSIBLE FOR ERRORS THAT COULD OF HAVE BEEN AVOIDED BY PROPER CHECKING AND INSPECTION.
- II.) TRIM. PROVIDE MATERIALS WITH TRIM THAT WILL PROPERLY FIT THE TYPES OF CEILING. WALL OR FLOOR FINISHES ACTUALLY INSTALLED. MODEL NUMBERS LISTED IN THE SPECIFICATION OR SHOWN ON THE DRAWINGS ARE NOT INTENDED TO DESIGNATE THE REQUIRED TRIM.
- JJ.) DRAWING PRIORITY. THE ARCHITECTURAL AND STRUCTURAL DRAWINGS TAKE PRECEDENCE OVER THE MECHANICAL AND ELECTRICAL DRAWINGS IN THE REPRESENTATION OF THE GENERAL CONSTRUCTION
- KK.) SUBSTITUTIONS. CONTRACTOR'S BIDS SHALL BE BASED ON THE MATERIAL MENTIONED OR SPECIFIED, AND ANY PROPOSALS FOR A SUBSTITUTION SHALL BE MADE IN WRITING TO THE ARCHITECT/ ENGINEER ALLOWING ADEQUATE TIME FOR APPROPRIATE ACTION. THE PRODUCTS OF OTHER MANUFACTURERS MAY BE ACCEPTED, IF IN THE OPINION OF THE ARCHITECT/ENGINEER, THE SUBSTITUTE MATERIAL IS OF A QUALITY AS GOOD OR BETTER THAN THE MATERIAL SPECIFIED, AND WILL SERVE WITH EQUAL EFFICIENCY AND DEPENDABILITY, THE PURPOSE FOR WHICH THE ITEMS SPECIFIED WERE INTENDED. THE BURDEN OF PROOF OF EQUALITY IS UPON THE PROPOSER.
- P.) SHOP DRAWINGS. SHOP DRAWINGS AND CATALOG DATA ON ALL MAJOR ITEMS OF EQUIPMENT AND APPARATUS, AND SUCH OTHER ILLUSTRATIVE MATERIALS AS MAY BE CONSIDERED NECESSARY BY THE ARCHITECT/ENGINEER SHALL BE SUBMITTED BY THE CONTRACTOR IN ADEQUATE TIME TO PREVENT DELAY AND CHANGES DURING CONSTRUCTION. BEFORE SUBMITTING SHOP DRAWINGS AND MATERIAL LISTS, VERIFY THAT EQUIPMENT SUBMITTED IS MUTUALLY COMPATIBLE AND SUITABLE FOR THE INTENDED USE AND WILL FIT THE AVAILABLE SPACE AND ALLOW AMPLE ROOM FOR MAINTENANCE. THE ENGINEER'S CHECKING AND SUBSEQUENT APPROVAL OF SUCH SHOP DRAWINGS WILL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR ERRORS IN DIMENSIONS, DETAILS, SIZE OF MEMBERS, QUANTITIES, OMISSIONS OF COMPONENTS OR FITTINGS; COORDINATION OF ELECTRICAL REQUIREMENTS; OR FOR COORDINATING ITEMS WITH ACTUAL BUILDING CONDITIONS. PROCEED WITH THE PROCUREMENT AND INSTALLATION OF EQUIPMENT ONLY AFTER RECEIVING APPROVED SHOP DRAWINGS RELATIVE TO EACH ITEM. CATALOG DATA SHALL BE PROPERLY BOUND, IDENTIFIED, INDEXED AND TABBED. EACH ITEM OR MODEL NUMBER SHALL BE CLEARLY MARKED AND ACCESSORIES INDICATED. LABEL THE CATALOG DATA WITH THE EQUIPMENT IDENTIFICATION ACRONYM OR NUMBER AS USED ON THE DRAWINGS AND INCLUDE PERFORMANCE CURVES, CAPACITIES, SIZES, MATERIALS, FINISHES, WIRING DIAGRAMS AND DEVIATIONS FROM SPECIFIED EQUIPMENT OR MATERIALS. MARK OUT INAPPLICABLE ITEMS. SHOP DRAWINGS WILL BE RETURNED WITHOUT REVIEW IF THE ABOVE REQUIREMENTS ARE NOT MET.

DI IIMRING CVMROI C

PLUME	SING SYMBULS
	NEW PIPING
CW	COLD WATER
———НW———	HOT WATER
HWR	HOT WATER RECIRC.
V	SANITARY VENT ABOVE GND./FLOOR ABOVE
—v —	SANITARY VENT BELOW FLOOR
W	SANITARY WASTE ABOVE GND./FLOOR ABOV
— <i>—W</i> — —	SANITARY WASTE BELOW GROUND
AW	ACID WASTE
——————————————————————————————————————	ACID VENT
NG	NATURAL GAS (PRESSURE INDICATED IN PSI)
SD	PRIMARY STORM DRAIN
OD	EMERGENCY/SECONDARY STORM DRAIN
CD	CONDENSATE DRAIN
$-\!$	SHUT OFF VALVE
	GAS SHUT-OFF COCK
	CHECK VALVE
-	UNION
 ⇒•	PIPE DROP/PIPE RISE
	BOTTOM OUTLET TEE
	TOP OUTLET TEE
o— ∙ <i>WH</i>	WALL HYDRANT
со —	CLEAN OUT
wco⊢	WALL CLEAN OUT

SANITARY VENT THRU ROOF

FINISHED FLOOR CLEANOUT

PLUMBING FIXTURE DESIGNATION

FLOOR DRAIN

IN I

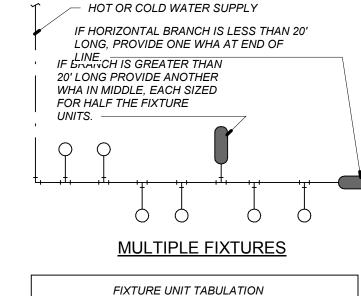
Drawn by: BGR Checked by: BGR Issue date: 02/01/20

Revised:

Ph: 816.842.2800

CERTIFICATE OF AUTHORITY

2006007202



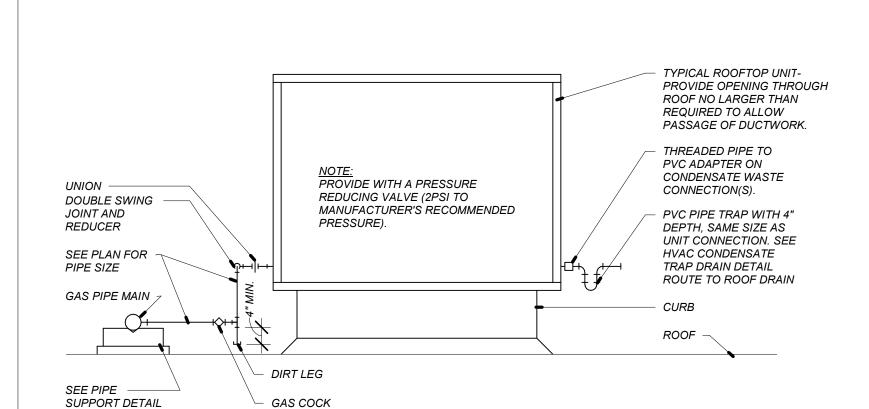
<u>ONOLE FIXTORE</u>						
PDI SIZE	PIPE SIZE	FIXTURE UNIT LOAD				
Α	1/2"	1-11				
В	3/4"	12-32				
С	1"	33-60				
D	1 1/4"	61-113				
Е	1 1/2"	114-154				
F	2"	155-330				

FIXTURE UNIT TA	BULATION	
FIXTURE	COLD	но
VALVE WATER CLOSET	10	
TANK WATER CLOSET	5	
URINAL	5	
LAVATORY/SINK	1.5	1.5
JANITOR'S SINK	3	3
SHOWER/BATHTUB	2	2

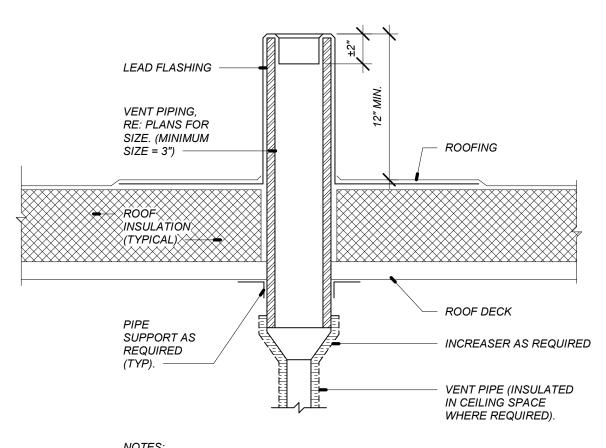
NOTES:

1.) DO NOT PROVIDE AIR CHAMBERS. PROVIDE WATER HAMMER ARRESTORS BY SIOUX CHIEF OR APPROVED EQUIVALENT WITH PISTON AND O-RING CONSTRUCTION, HAVING PDI #WH-201, ASSE # 1010, AND ANSI # A112.26.1M CERTIFICATION. INSTALL IN HORIZONTAL OR VERTICAL POSITION, BUT NEVER UPSIDEDOWN. INSTALL IN LINE WITH WATER FLOW DIRECTION IF POSSIBLE. SIZE THE UNITS PER THE TABLES SHOWN ABOVE. 2.) INSTALL PER PDI STANDARDS AND MANUFACTURER'S INSTRUCTIONS.

1 WATER HAMMER ARRESTOR DETAIL SCALE: NONE

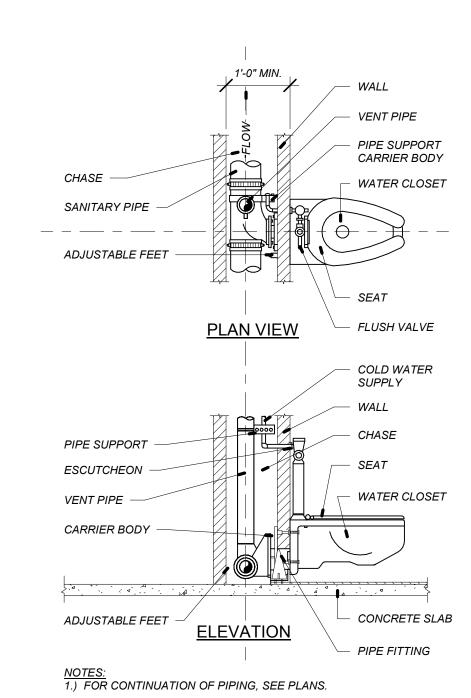


SCALE: NONE

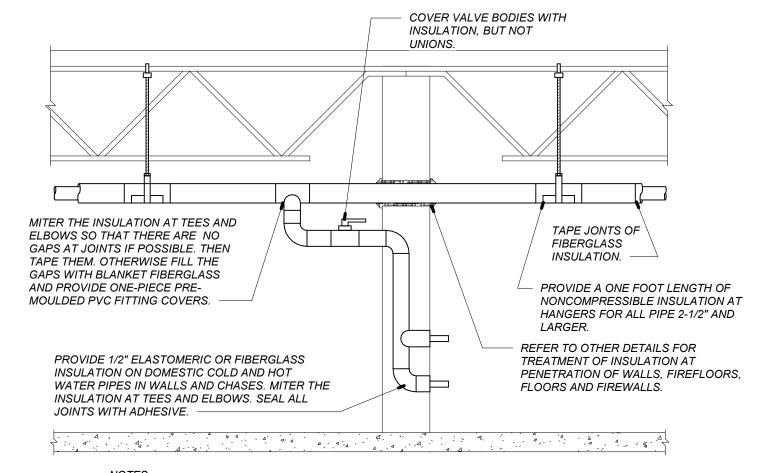


NOTES:
1.) LOCATION OF VENT THROUGH ROOF (VTR) A MINIMUM OF 10' FROM ANY BUILDING OPENINGS. MECHANICAL UNIT INTAKES. RELIEF OR INTAKE HOODS.

9 VENT THRU ROOF DETAIL
SCALE: NONE

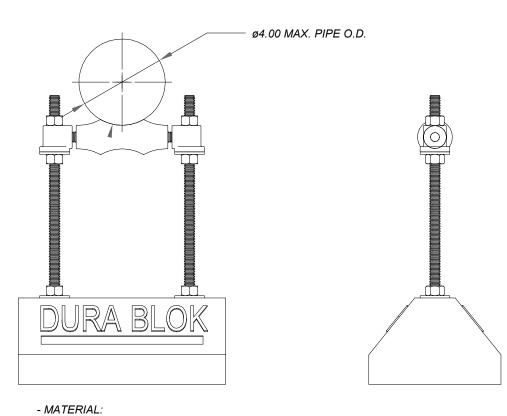


2 WALL HUNG WATER CLOSET DETAIL SCALE: NONE



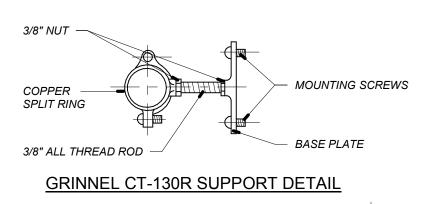
NOTES:
1.) PROVIDE 1/2" FIBERGLASS INSULATION WITH ALL-SERVICE JACKET WITH VAPOR BARRIER ON ALL SIZES OF DOMESTIC WATER AND CONDENSATE PIPING. PROVIDE 1" INSULATION ON ALL SIZES OF STORM DRAIN PIPING. REFER TO SPECIFICATIONS FOR FURTHER INFORMATION REGUARDING INSULATION. INSTALL ALL ITEMS PER SPECIFICATIONS AND MANUFACTURER'S INSTRUCTIONS. MAINTAIN VAPOR BARRIER ON COLD PIPING BY MEANS OF SEALANT AND TAPE. FLAME-SPREAD AND SMOKE-DEVELOPED INDEXES SHALL NOT EXCEED 25/50. SEAL EXPOSED ENDS OF FIBERGLASS INSULATION WITH ADHESIVE MASTIC. PROVIDE INSULATION 1/4" LARGER ON PIPE WITH HEAT TRACING.

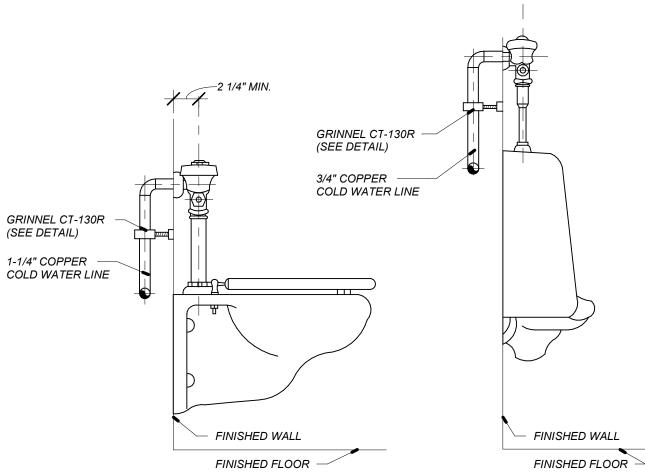
6 PIPE INSULATION DETAIL SCALE: NONF



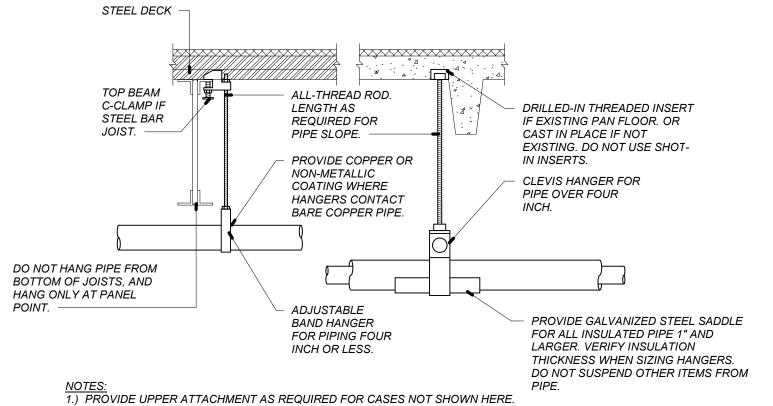
BASE - 100% RECYCLED RUBBER W/ URETHANE BINDER LEEDS CREDIT AVAILABLE. PIPE ROLLER - CAST IRON, ELECTRO-PLATED SOCKETS - MALLEABLE IRON, ELECTRO-PLATED THREADED ROD, AXLE, & HARDWARE - STEEL, ELECTRO-PLATED · UV RESISTANT AND APPROVED FOR MOST ROOFING MATERIAL OR OTHER FLAT SURFACES. - WT/PC: 6.46 LBS [2.93 KG] - ULTIMATE LOAD CAPACITY: 200 LBS [.89 KN]

ROOF PIPE SUPPORT DETAIL SCALE: NONE





3 FLUSH VALVE BRACKET SUPPORT DETAIL SCALE: NONE



NOTES:

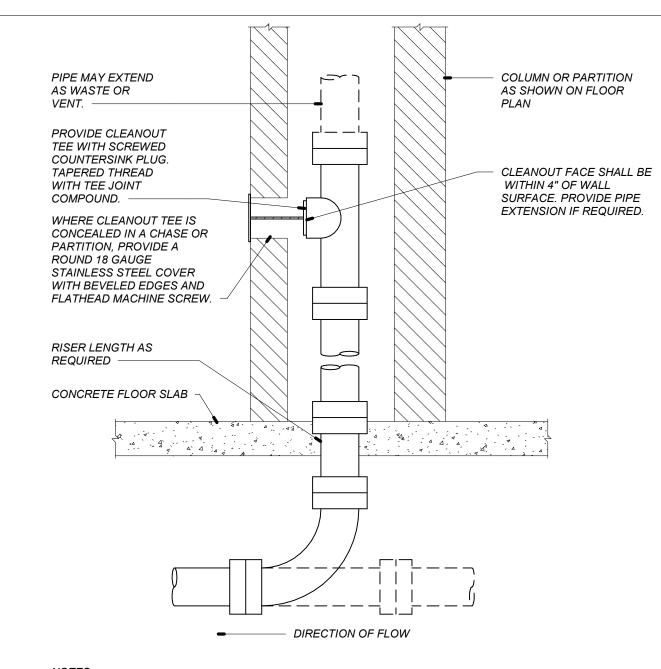
1.) PROVIDE UPPER ATTACHMENT AS REQUIRED FOR CASES NOT SHOWN HERE. 2.) DO NOT INSTALL HANGER INSIDE INSULATION OR OTHERWISE PENETRATE VAPOR

3.) DO NOT HANG ONE PIPE FROM ANOTHER EXCEPT IN CHASES. 4.) TRAPEZE HANGERS MAY BE USED FOR MULTIPLE PARALLEL PIPES. 5.) SLOPE ALL WATER PIPING SLIGHTLY TOWARD DRAINABLE LOCATIONS. 6.) LOCATE HANGERS AS CLOSE AS POSSIBLE TO TURNS AND TEES OF PIPE. 7.) PROVIDE SUPPLEMENTARY STEEL STRUTS BETWEEN JOISTS IF REQUIRED. 8.) LOCATE HANGERS TO TAKE LOAD OFF OF EQUIPMENT CONNECTIONS.

CHAINS OR PERFORATED STRAP IRON OR STEEL IS NOT ACCEPTABLE. 10) DO NOT SUSPEND PIPE FROM JOIST BRACING MEMBERS. 11.) REFER TO CODES AND SPECIFICATIONS FOR FURTHER INFORMATION. PROVIDE SEISMIC BRACING IF/AS REQUIRED BY LOCAL AUTHORITIES.

9.) ANCHOR WATER PIPE AGAINST SWAYING DUE TO CHANGES IN WATER VELOCITY

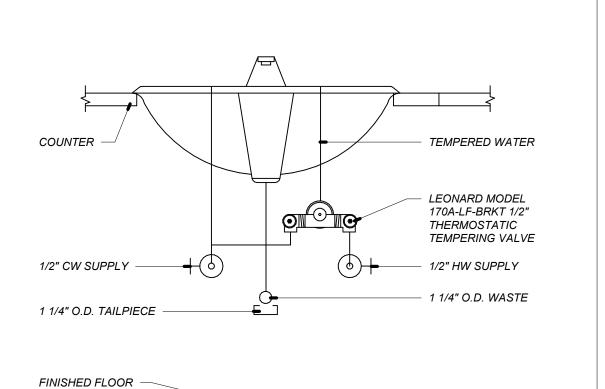
PIPE HANGER DETAIL SCALE: NONE



NOTES:

1.) PROVIDE WALL CLEANOUT WHERE SHOWN ON PLANS, AND ON SANITARY WASTE BRANCHES NOT SERVED WITH A FLOOR CLEANOUT. LOCATE ABOVE FIXTURE FLOOD RIM WITHIN FOUR FEET OF FLOOR. CONSULT LOCAL CODES FOR OTHER WCO REQUIREMENTS.

4 WALL CLEANOUT DETAIL SCALE: NONE



8 LOCAL MIXING VALVE DETAIL
SCALE: NONE



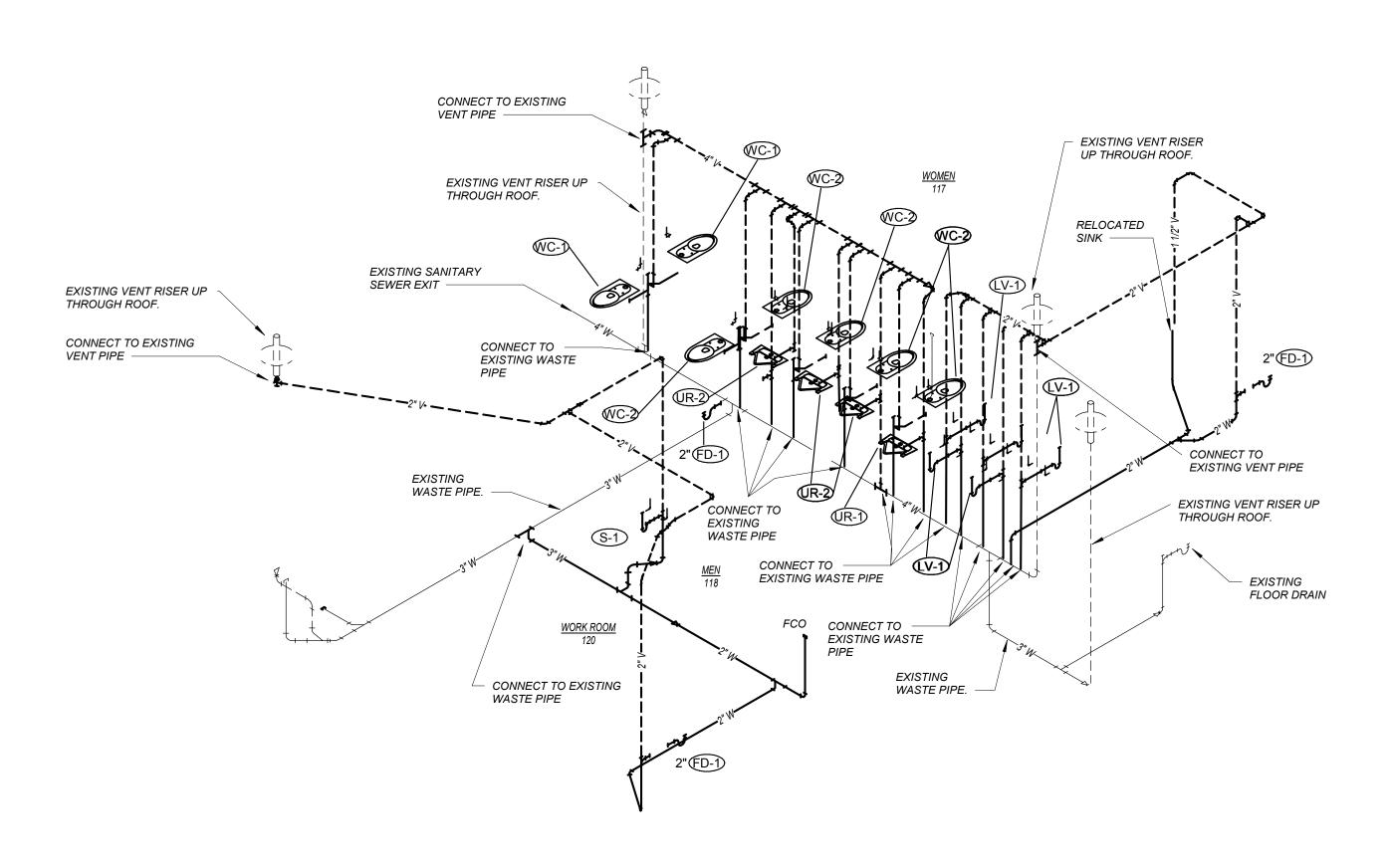
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Issue date: 02/01/20

Revised:

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1600 Genessee, Suite 410' Kansas City, Mo. 641

:**hitects** City, Mo. 64102, 816-471-0044



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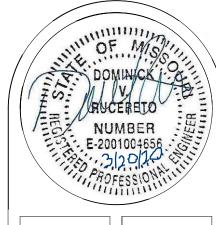
RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

Consulting Engineers

Ph: 816.842.2800

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FP2

FIRE PROTECTION DESIGN CRITERIA

- A.) THE REMODELED AREA SHALL BE FULLY SPRINKLED BY EXPANSION OF EXISTING WET SYSTEM. FIRE PROTECTION SYSTEM SHALL BE DESIGNED AND INSTALLED AS DESIGN BUILD. CONTRACTORS ARE RESPONSIBLE TO PROVIDE DESIGN. PERMIT DRAWINGS AND CALCULATIONS SEALED BY A PROFESSIONAL ENGINEER AND COMPLETE CONSTRUCTION. ALL WORK SHALL COMPLY WITH STATE AND LOCAL CODE REQUIREMENTS AS APPROVED AND AMENDED BY THE GOVERNING CITY, INCLUDING APPLICABLE SECTIONS OF NFPA, OSHA, BOCA, UBC, OR ANY INTERIM AMENDMENTS AT THE TIME OF THE PROPOSAL. PURCHASE ALL PERMITS ASSOCIATED WITH THE WORK. OBTAIN ALL INSPECTIONS REQUIRED BY CODE.
- B.) CONTRACTOR SHALL COORDINATE WITH NEW REFLECTED CEILING PLAN, NEW DUCTWORK LAYOUT AND LIGHTING LAYOUTS. FURNISH ALL MATERIALS, LABOR, TOOLS. TRANSPORTATION. INCIDENTALS AND APPURTENANCES TO COMPLETE IN EVERY DETAIL AND LEAVE IN WORKING ORDER ALL ITEMS OF WORK REQUIRED FOR STRICT COMPLIANCE. ALL SPRINKLER LINES SHALL BE CONCEALED, AVOIDING INTERFERENCES WITH LIGHTS, DUCTS, PIPES, ETC... ALL SPRINKLER HEADS ARE TO BE CENTERED IN TILE. ALL PIPING TO BE XL WITH CAST IRON SCREWED FITTINGS.
- C.) FIRE PROTECTION CONTRACTOR SHALL PREPARE DETAILED AND COORDINATED SHOP DRAWINGS SO AS TO AVOID CONFLICTS IN THE FIELD. ALL COORDINATION SHALL TAKE PLACE PRIOR TO INSTALLATION. CONTRACTOR SHALL FILE ALL DRAWINGS, PAY ALL FEES AND OBTAIN PERMITS AND CERTIFICATES OF INSPECTIONS RELATIVE TO THIS WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION WITH OTHER TRADES, ARCHITECTURAL DETAILS, STRUCTURE, CEILINGS, ETC. CONTRACTOR MUST MEET WITH ARCHITECT PRIOR TO GENERATING DRAWINGS TO DISCUSS ACCEPTABLE PIPE LOCATIONS AND ROUTES.
- D.) ALL PIPING IN FINISHED AREAS (I.E. WITH CEILINGS) SHALL BE CONCEALED WITHIN WALLS OR CEILING PLENUMS.
- E.) HYDROSTATIC TEST SHALL BE IN ACCORDANCE WITH NFPA-13, SECTION 8-2.2 HYDROSTATIC TEST.
- F.) COMPLETE PLANS AND SPECIFICATIONS FOR AUTOMATIC SPRINKLERS AND OTHER FIRE-PROTECTION SYSTEMS SHALL BE SUBMITTED TO FIRE AND LIFE SAFETY UNDERWRITER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
- G.) SPRINKLER CONTRACTOR SHALL COORDINATE HEAD AND PIPING LOCATIONS WITH ALL SUB-CONTRACTORS. INSTALL WITH EQUAL SPACING IN TILES AND PER NFPA
- H.) INCLUDE ANY INCIDENTAL APPARATUS, APPLIANCES, MATERIAL LABOR AND SERVICES NECESSARY TO MAKE NEW WORK COMPLETE IN ALL RESPECTS AND FULLY READY FOR OPERATION.
- I.) MAKE SUCH OFFSETS AND DEVIATIONS FROM WORK SHOWN ON THE DRAWINGS, AS MAY BE NECESSARY TO FIT THE ACTUAL SPACE CONDITIONS.
- J.) INSTALLER SHALL NOT CUT ANY STRUCTURAL MEMBERS WITHOUT FIRST SECURING WRITTEN APPROVAL FROM THE ARCHITECT
- K.) CONTRACTOR SHALL ARRANGE FOR, OBTAIN AND BEAR THE COST OF NECESSARY PERMITS, BONDS AND FEES.
- L.) ALL MATERIALS SHALL BE U.L. LISTED AND BEAR THE U.L. LABEL.
- M.) PENETRATION THROUGH FIRE RATED ASSEMBLIES, PENETRATIONS FOR PIPES, CONDUITS OR OTHER PURPOSES THROUGH ASSEMBLIES (FLOORS, ROOF, WALLS, PARTITIONS, ETC.) WITH A REQUIRED FIRE STOP MATERIAL. FIRE STOP MATERIAL SHALL BE U.L. LISTED AND INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS TO MEET OR EXCEED THE FIRE RATING OF THE PENETRATED ASSEMBLY.
- N.) PROVIDE DEFLECTOR ON ELECTRICAL EQUIPMENT TO PREVENT WETTING PANELS. SPRINKLER PIPING SHALL NOT BE INSTALLED DIRECTLY ABOVE ELECTRICAL PANELS.
- O.) PROVIDE FLUSHING CONNECTION AT END OF SPRINKLER SYSTEM IN ACCESSIBLE LOCATION. ALL SPRINKLER PIPING THAT REQUIRED A CHANGE IN ELEVATIONS DUE TO COORDINATION ROUTING OF PIPING SHALL HAVE A FLUSH CONNECTION AT ALL LOWER ELEVATION. THE SPRINKLER SYSTEM SHALL BE INSTALLED WITH COMPLETE DRAINABLE SYSTEM.
- P.) WHEN CONFLICTS OCCUR IN SPECIFICATIONS OR IN THE DRAWINGS, OR BETWEEN EITHER, THE ITEMS OF GREATER QUALITY OR HIGHER COST SHALL BE PROVIDED.
- Q.) THE INSTALLER SHALL VISIT THE JOB SITE, INSPECT ALL EXISTING CONDITIONS AFFECTING THE WORK. SUBMISSION OF HIS/HER PROPOSAL SHALL BE CONSTRUED AS INDICATING SUCH KNOWLEDGE. NO ADDITIONAL PAYMENT WILL BE MADE ON CLAIMS THAT ARISE FROM THE CONTRACTOR'S FAILURE TO COMPLY WITH THIS REQUIREMENT.
- R.) THE CONTRACTORS IS RESPONSIBLE FOR CHECKING FIELD CONDITIONS PRIOR TO BIDDING AND REPORT ANY PROBLEMS/CONFLICTS TO THE ENGINEER WITHIN 2 DAYS OF DISCOVERY. ANY CHANGES RESULTING FROM CONDITIONS ARISING IN THE FIELD WHICH WERE NOT BROUGHT TO THE ENGINEER'S ATTENTION ARE TO BE MADE BY THIS CONTRACTOR WITH NO ADDITIONAL COST TO THE OWNER.
- S.) UPON COMPLETION OF THE WORK UNDER THIS CONTRACT, THE CONTRACTOR SHALL REMOVE ALL TOOLS, APPLIANCES, SURPLUS MATERIALS AND SCRAP.
- T.) CONTRACTORS AND SUBCONTRACTORS SHALL CAREFULLY REVIEW THE CONSTRUCTION DOCUMENTS. INFORMATION REGARDING THE COMPLETE WORK IS DISPERSED THROUGHOUT THE DOCUMENT SET AND CAN NOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO THE COMPLETE DOCUMENT SET.
- U.) COORDINATE WITH THE WORK OF OTHER TRADES. PROVIDE RISES AND DROPS AS REQUIRED FOR FIELD INSTALLATION AND TRADE COORDINATION. NOTIFY ARCHITECT OF ANY DISCREPANCIES BEFORE STARTING WORK.
- V.) CONTRACTOR SHALL CAULK/SEAL EVERY WALL PENETRATION AS SPECIFIED BY ARCHITECT OR ENGINEER. WHERE WALL IS SMOKE/FIRE RATED CONTRACTOR SHALL PROVIDE REQUIRED U.L. FIRE STOP. IF THE ARCHITECTURAL AND MECHANICAL SPECIFICATIONS REGARDING CAULKING/SEALING ARE NOT CONSISTENT CONTRACTOR SHALL USE THE MOST STRINGENT.
- W.) INTENT. BY SUBMITTING A BID THE CONTRACTOR ACCEPTS RESPONSIBILITY TO PROVIDE A COMPLETE DESIGN BUILD FIRE SPRINKLER SYSTEM BASED ON THE ENTIRE SET OF DRAWINGS AND ALL CODES. CONTRACTOR'S DRAWINGS SHALL BE STAMPED BY AN ENGINEER AND SUBMITTED TO THE CITY FOR REVIEW AS A PART OF THIS PERMIT.
- X.) THE CONTRACT DRAWINGS DO NOT NECESSARILY INDICATE EVERY REQUIRED ITEM. AS SUCH THE CONTRACTOR SHALL INCLUDE AS A PART OF HIS BID ALL WORK, MATERIALS, LABOR, EQUIPMENT, TOOLS, INSURANCE, TAXES, SERVICES, APPURTANCES, ETC. TO MAKE A COMPLETE OPERATIONAL SYSTEM. CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL OBLIGATIONS ASSOCIATED WITH COMPLETION OF WORK AS PROVIDED BY THE CONTRACT DOCUMENTS.
- Y.) QUESTIONS. ANY QUESTIONS THAT ARISE IN THE FIELD OR UPON REVIEW OF THE CONTRACT DRAWINGS THE CONTRACTOR SHALL SUBMIT THE QUESTION IN WRITING TO THE ARCHITECT/ENGINEER FOR CLARIFICATION. A PHONE CALL IS PERMISSIBLE BUT MUST BE FOLLOWED BY WITH THE WRITTEN SUBMISSION.
- Z.) DOCUMENTS. CONTRACTOR SHALL READ AND BE FAMILIAR WITH THE REQUIREMENTS WITHIN ALL DRAWINGS AND SPECIFICATIONS. HE SHALL EXAMINE THE ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS TO FAMILIARIZE HIMSELF WITH THE TYPE OF CONSTRUCTION, MATERIALS, AND EQUIPMENT TO BE USED FOR ALL WORK AND HOW IT WILL AFFECT THE INSTALLATION OF HIS CONTRACT. BY THE ACT OF SUBMITTING A BID, THE CONTRACTOR WILL BE DEEMED TO HAVE MADE SUCH EXAMINATION, TO HAVE ACCEPTED SUCH CONDITIONS, TO HAVE MADE ALLOWANCE THEREFOR, AND INCLUDED ALL COSTS IN HIS PROPOSAL. FAILURE TO DETERMINE EXISTING CONDITIONS WILL NOT BE CONSIDERED A BASIS FOR THE GRANTING OF ADDITIONAL COMPENSATION.
- AA.) SCHEDULE. COORDINATE WORK WITH THAT OF OTHER TRADES SO THAT THE VARIOUS COMPONENTS OF THE SYSTEMS WILL BE INSTALLED AT THE PROPER TIME, WILL FIT THE AVAILABLE SPACE, AND WILL ALLOW PROPER SERVICE ACCESS TO THOSE ITEMS REQUIRING MAINTENANCE. COMPONENTS WHICH ARE INSTALLED WITHOUT REGARD TO THE ABOVE SHALL BE RELOCATED AT NO ADDITIONAL COST TO THE OWNER.
- BB.) DIMENSIONS. FIGURED DIMENSIONS SHALL BE TAKEN IN PREFERENCE TO SCALE DIMENSIONS. CONTRACTOR SHALL TAKE HIS OWN MEASUREMENTS AT THE BUILDING, AS VARIATIONS MAY OCCUR. CONTRACTOR WILL BE HELD RESPONSIBLE FOR ERRORS THAT COULD OF HAVE BEEN AVOIDED BY PROPER CHECKING AND INSPECTION.
- CC.) TRIM. PROVIDE MATERIALS WITH TRIM THAT WILL PROPERLY FIT THE TYPES OF CEILING, WALL OR FLOOR FINISHES ACTUALLY INSTALLED. MODEL NUMBERS LISTED IN THE SPECIFICATION OR SHOWN ON THE DRAWINGS ARE NOT INTENDED TO DESIGNATE THE REQUIRED TRIM.
- DD.) PROTECTION. STORE AND PROTECT FROM DAMAGE EQUIPMENT AND MATERIALS DELIVERED TO JOB SITE. COVER WITH WATERPROOF, TEAR RESISTANT, HEAVY TARP OR POLYETHYLENE PLASTIC AS REQUIRED TO PROTECT FROM PLASTER, DIRT, PAINT, WATER OR PHYSICAL DAMAGE. EQUIPMENT AND MATERIAL THAT HAS DAMAGED BY CONSTRUCTION ACTIVITIES WILL BE REJECTED AND THE CONTRACTOR IS OBLIGATED TO FURNISH NEW EQUIPMENT AND MATERIAL OF A LIKE KIND. PLUG OR CAP OPEN ENDS OF DUCTWORK AND PIPING SYSTEMS WHILE STORED AND INSTALLED DURING CONSTRUCTION WHEN NOT IN USE TO PREVENT THE ENTRANCE OF DEBRIS INTO THE SYSTEMS. KEEP THE MANUFACTURER-PROVIDED PROTECTIVE COVERINGS ON FLOOR DRAINS, FLOOR SINKS AND TRENCH DRAINS DURING CONSTRUCTION. REMOVE COVERINGS AT THE TERMINATION OF THE WORK AND POLISH EXPOSED SURFACES.
- EE.) LICENSES/CODES. THE CONTRACTOR SHALL BE LICENSED TO PERFORM WORK IN THE MUNICIPALITY IN WHICH THE PROJECT IS LOCATED. ALL PRODUCTS AND TYPES OF CONSTRUCTION SHALL MEET OR EXCEED THE LATEST EDITION OF APPLICABLE STANDARDS OF MANUFACTURER, TESTING, PERFORMANCE AND INSTALLATION. WORK PERFORMED UNDER THIS CONTRACT SHALL, AT A MINIMUM, BE IN CONFORMANCE WITH APPLICABLE NATIONAL, STATE AND LOCAL CODES HAVE JURISDICTION. EQUIPMENT FURNISHED AND ASSOCIATED INSTALLATION WORK PERFORMED UNDER THIS CONTRACT SHALL BE IN STRICT COMPLIANCE WITH CURRENT APPLICABLE CODES ADOPTED BY THE LOCAL AHJ INCLUDING ANY AMENDMENTS AND STANDARDS AS SET FORTH BY THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), UNDERWRITERS LABORATORIES (UL), OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME), AMERICAN SOCIETY OF HEATING, REFRIGERATION AND AIR CONDITIONING ENGINEERS (ASHRAE), AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI), AMERICAN SOCIETY OF TESTING MATERIALS (ASTM) AND OTHER NATIONAL STANDARDS AND CODES WHERE APPLICABLE. WHERE THE CONTRACT DOCUMENTS EXCEEDS THE REQUIREMENTS OF THE REFERENCED CODES, STANDARDS, ETC., THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE. WHERE REQUIRED, OBTAIN, PAY FOR AND FURNISH CERTIFICATES OF INSPECTION TO THE OWNER. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY VIOLATION OF THE LAW. MAINTAIN NECESSARY SIGNAL LIGHTS AND GUARDS FOR THE SAFETY OF THE PUBLIC. THE WORK SHALL COMPLY WITH THE EDITION OF THE APPLICABLE STANDARDS, REGULATIONS AND CODES CURRENTLY IN FORCE OF ALL STATE AND LOCATION AUTHORITIES HAVING JURISDICTION. WHERE QUANTITIES, SIZES, OR OTHER REQUIREMENTS INDICATED ON THE DRAWINGS OR HEREIN SPECIFIED ARE IN EXCESS OF THE STANDARD OR CODE REQUIREMENTS. THE SPECIFICATIONS AND/OR DRAWINGS SHALL GOVERN. IN THE ABSENCE OF OTHER APPLICABLE LOCAL CODES, ACCEPTABLE TO THE ARCHITECT/ENGINEER, AND UNIFORM PLUMBING AND MECHANICAL CODES SHALL APPLY TO THIS WORK.
- FF.) CEILINGS. CONTRACTOR SHALL COORDINATE SPRINKLER TYPES WITH ARCHITECTURAL REFLECTED CEILING PLANS.
- GG.) SPRINKLER AREAS THAT ARE NOT PROVIDED WITH HEAT AND THEREFORE, SUSCEPTIBLE TO FREEZING SHALL UTILIZE A DRY TYPE SYSTEM.

FIRE PROTECTION DESIGN

PROVIDE WET PIPE AUTOMATIC SPRINKLERS THROUGHOUT REMODELED AREAS AND IN THE EXISTING CHURCH AS INDICATED ON FIRE PROTECTION PLANS. AREAS SHALL BE CLASSIFIED TO MEET CURRENT CODE REQUIREMENTS. DENSITY SHALL BE INCREASED FOR AREAS REQUIRING GREATER COVERAGE PER CODE. CONTRACTOR IS RESPONSIBLE FOR A DESIGN THAT MEETS THE GUIDELINES SET FORTH BY OWNER'S INSURANCE COMPANY AND NFPA. RE: FIRE PROTECTION DESIGN CRITERIA FOR ADDITIONAL REQUIREMENTS. COORDINATE WORK WITH ALL OTHER TRADES AND

PROVIDE ALL NECESSARY VALVING, ALARMS, BELLS, FLOW SENSORS, ETC. AS NECESSARY TO MAKE NEW CONNECTION TO THE EXISTING FIRE SUPPRESSION SYSTEM IN THE SCHOOL.

CONTRACTOR SHALL MODIFY CLASSIFICATION OF AREA SPECIFIED IF MORE STRINGENT SPRINKLER COVERAGE IS SPECIFIED BY NFPA AND APPLICABLE CODES ON OWNERS INSURANCE.

	FIRE SPRINKLER USAGE SCHEDULE						
		SPRINKLER					
AREA TYPE	TYPE (NOTES 1 & 2)	RESPONSE	FINISH	MANUFACTURER & MODEL	REMARKS		
NO CEILINGS	UPRIGHT PENDENT	QUICK	ROUGH BRASS	VIKING M, RELIABLE F1FR, TYCO TY-FRB, VICTAULIC V2704	NOTE 3		
LAY-IN ACT CEILINGS	SEMI-RECESSED PENDENT	QUICK	CHROME PLATED	VIKING M, RELIABLE F1FR, TYCO TY-FRB, VICTAULIC V2708	NOTE 3		
GYP BOARD CEILINGS	CONCEALER	QUICK	WHITE	VIKING 15765 OR EQUAL	NOTE 3		

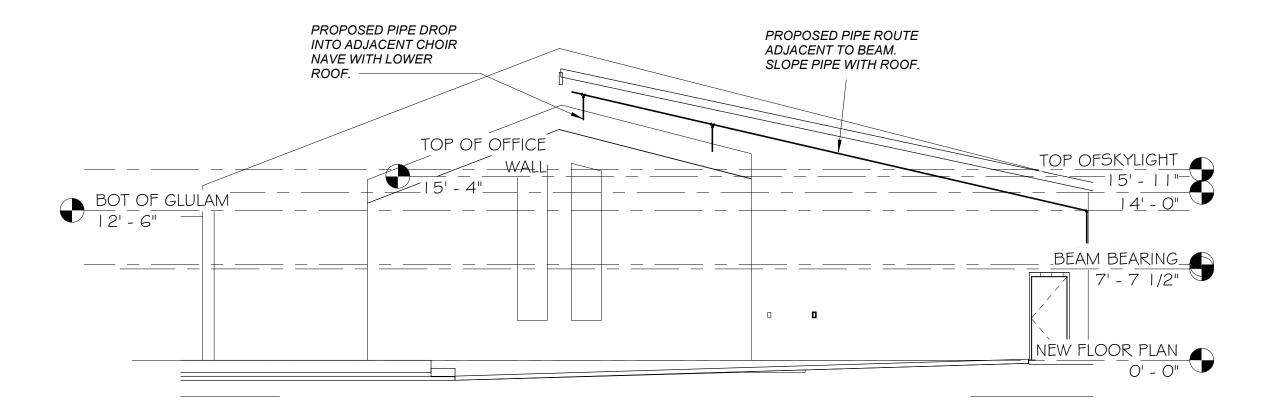
REMARKS: 1.) CONTRACTOR TO VERIFY SPRINKLER REQUIREMENTS BASED ON ACTUAL INSTALLATION, USAGE. ARCHITECTURAL CEILING PLAN AND NFPA 13 REQUIREMENTS.

2.) CONTRACTOR TO SUBMIT ALL SPRINKLER TYPE CUT SHEETS FOR REVIEW. 3.) ALL SPRINKLER SHALL BE UL LISTED.

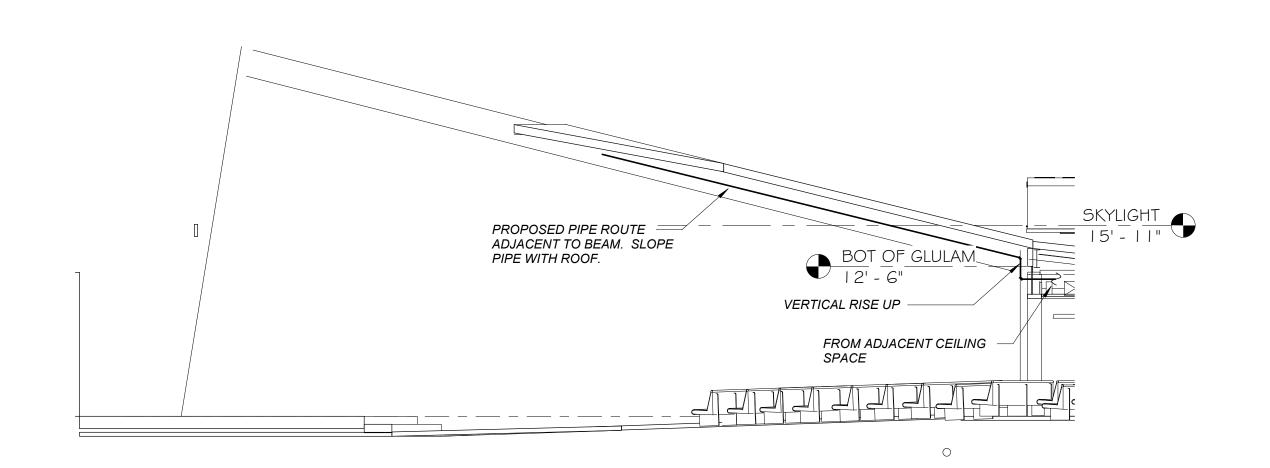
		FIRE SPRINKLER MATERIAL LIST
AUTOMATI C DRIP VALVE	VIKING B-1, TYCO AD-1, RELIABLE C	AUTOMATIC DRIP VALVE, 175 PSI WP, BRASS BAR, STAINLESS STEEL SPRING AND RETAINING RING, CLOSING PRESSURE 13.5 PSI WITH INCREASING PRESSURE, OPENING PRESSURE 12.5 PSI WITH DECREASING PRESSURE, 1/2" NPT INLET AND 1/4" NPT DRAIN OUTLET.
ANGLE VALVE	UNITED 126S UL, NIBCO KT-67-UL/T-301-W, KENNEDY 96 SD FPPL	ANGLE VALVE, 2", 175 PSI, BRONZE BODY, INTEGRAL SEAT, SOFT DISC, HANDWHEEL, THREADED, UL.
BUTTERFLY VALVE	GEM 8000FP, TYCO BFV, KENNEDY 01, NIBCO LD3510-8, GD-4765-BN, VICTAULIC 705-W KENNEDY	2" TO 12" BUTTERFLY VALVE, 175 PSI WP, LUGGED OR GROOVED TYPE, IRON BODY, ALUMINUM BRONZE OR EPDM COATED DISC, STAINLESS STEM AND SCREWS, EPDM SEAT, INTEGRAL MONITOR SWITCH, RATED FOR DEAD END SERVICE, UL/FM.
	MILWAUKEE BB-SCS OR APPROVED EQUAL	1" TO 2-1/2" SLOW CLOSE BUTTERFLY VALVE, 175 PSI WP, BRONZE BODY, TYPE 304 STAINLESS STEEL ELASTOMER COATED DISK, SLOW CLOSE MANUAL OPERATOR WITH INTEGRAL TAMPER SWITCH, GROOVED OR THREADED ENDS. UL/FM.
CHECK VALVE	VIKING D-1/G-1, TYCO CV-2, RELIABLE D OR G, KENNEDY 126A OR 426	2-1/2" TO 12" SWING CHECK VALVE, 175 PSI WP, FLANGED OR GROOVED, IRON BODY, BRONZE MOUNTED, BRONZE SEAT RING AND RUBBER CLAPPER FACING, SWING TYPE, UL/FM.
FIRE DEPARTMENT CONNECTION	GUARDIAN, POTTER-ROEMER, CROKER, ELKHART	SIAMESE FIRE DEPARTMENT CONNECTION, HARD-COATED WITH LOCKING BLIND CAP AND CHAIN. FEMALE NPT OUTLET CONNECTION, POLISHED CHROME PLATE FINISH, BRASS BASE PLATE LABELED "AUTO SPR". COORDINATE ALL REQUIREMENTS WITH THE KCMO FIRE DEPARTMENT.
FLOW SWITCH	SYSTEM SENSOR WFD SERIES, POTTOR ELECTRIC VSR-F	FLOW SWITCH: VANE TYPE FOR USE ON WET PIPE SPRINKLER SYSTEM TO DETECT A MINIMUM FLOW OF 10 GPM. TWO SINGLE POLE DOUBLE THROW SWITCHES WITH PNEUMATIC RETARD-ADJUSTABLE 0-90 SECONDS WITH AUTOMATIC RESET, TAMPER RESISTANT METAL HOUSING. UL/FM.
INSPECTOR'S TEST AND DRAIN VALVE	RELIABLE B, TYCO F350, AGF MODEL 1000	INSPECTOR'S TEST AND DRAIN VALVE WITH INTEGRAL SIGHT GLASS, BALL VALVE WITH INTEGRAL LABELED PLATE SHOWING OFF-TEST-DRAIN POSITIONS. FURNISHED TEST ORIFICE GIVING FLOW EQUIVALENT TO ONE SRINKLER OF A TYPE HAVING THE SMALLEST ORIFICE INSTALLED ON THE SYSTEM, UL.
TAMPER SWITCH	POTTER ELECTRIC OSYSU-1, SYSTEM SENSOR OSY2	MONITOR SWITCH: ELECTRIC, ONE SINGLE POLE, DOUBLE THROW CONTACT, CAST ALUMINUM HOUSING WITH CORROSION RESISTANT PARTS WITH J-BOLTS FOR MOUNTING, UL/FM. VERIFY ELECTRICAL CHARACTERISTICS WITH ELECTRICAL CONTRACTOR PRIOR TO PURCHASE.
VALVE CABINET	LARSEN'S, POTTER-ROEMER, CROKER	VALVE CABINET: RECESSED STAINLESS STEEL FRAME ABD DOOR WITH CONCEALED OR CONTINUOUS STEEL HINGE (BRASS PIN). CORNER SEAMS WELDED AND GROUND SMOOTH. BLACK VERTICAL DIE CUT LETTERING TO READ SPRINKLER CONTROL VALVE. VERIFY EXACT DIMENSIONS PER MANUFACTURER. UL.

EXPOSED PIPING

EXPOSED PIPING, ACCESSORIES, HANGERS, ETC. SHALL BE PAINTED TO MATCH BEAMS/ROOF DECK. PIPING SHALL BE INSTALLED PARALLEL TO ADJACENT BUILDING ELEMENTS CONTRACTOR TO HAVE ONSITE MEETING WITH ARCHITECT TO DISCUSS PIPE ROUTING PRIOR TO SUBMITTING SHOP DRAWINGS. OPPORTUNITIES FOR PENETRATING THROUGH BEAMS/COLUMNS SHALL BE PRESENTED TO STRUCTURAL ENGINEER FOR REVIEW.



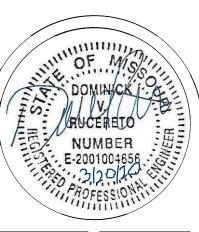








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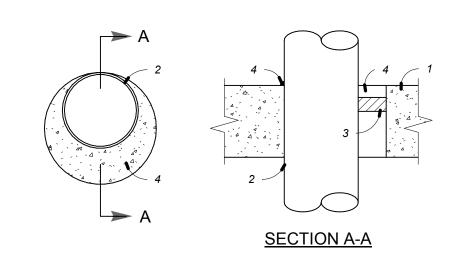


SUMMI Ш

Drawn by: BGR Checked by: BGR Issue date: 02/01/20

Revised:

RECESSED SPRINKLER HEAD DETAIL SCALE: NO SCALE



<u>SYSTEM NO. 49</u> F RATINGS - 2 AND 3 HR. (SEE ITEM 2A) T RATING - O HR.

1.) FLOOR OR WALL ASSEMBLY - MINIMUM 4 1/2" THICK LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. WALL ASSEMBLY MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS. MAXIMUM DIAMETER OF CIRCULAR THROUGH OPENING IS 22 1/2". SEE CONCRETE BLOCK (CAZT) CATEGORY IN FIRE RESISTANCE DIRECTORY FOR NAMES OF

1A.) STEEL SLEEVE - (OPTIONAL, NOT SHOWN) - NOMINAL 12" DIAMETER (OR SMALLER) SCHEDULE 40 (OR HÉAVIER) STEEL PIPÈ SLEEVE CAST INTO CONCRETE FLOOR OR WALL. SLEEVE TO BÉ FLUSH WITH OR PROJECT MAX 2" FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL.

2.) PIPE OR CONDUIT - NOMINAL 20" DIAMETER (OR SMALLER) SCHEDULE 10S (OR HEAVIER) STEEL PIPE, NOMINAL 6" DIAMETER (OR SMALLER) RIGID STEEL CONDUIT. NOMINAL 6" DIAMETER (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBE, NOMINAL 4" DIAMETER. (OR SMALLER) CAST IRON PIPE OR NOMINAL. 4" DIAMETER. (OR SMALLER) STEEL EMT. MAXIMUM ONE PIPE OR CONDUIT PER THROUGH OPENING. MAXIMUM ANNULAR SPACE BETWEEN THROUGH OPENING IS ZERO IN (POINT CONTACT). PIPE OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.

2A.) STEEL VENT DUCT - (NOT SHOWN) - AS AN ALTERNATE TO THE PIPE OR CONDUIT, NOMINAL 4" DIAMETER (OR SMALLER) NO. 28 GAUGE (OR HEAVIER) GALVANIZED STEEL VENT DUCT MAY BE USED IN THROUGH OPENINGS OF FLOOR ASSEMBLIES PROVIDED MAXIMUM ANNULAR SPACE DOES NOT EXCEED 7/8". WHEN STEEL VENT DUCT IS USED, F RATING IS 2 HRS.

3.) PACKING MATERIAL - POLYETHYLENE BACKER ROD OR NOMINAL 1" THICKNESS OF TIGHTLY- PACKED CERAMIC (ALUMINA SILICA) FIBER BLANKET, MINERAL-WOOL BATT OF GLASS FIBER INSULATION MATERIAL USED AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF CAULK FILL MATERIAL (ITEM 4). AS AN ALTERNATE WHEN MAXIMUM PIPE SIZE IS 10" DIAMETER AND WHEN MAXIMUM ANNULAR SPACE IS 1" OR LESS, A MINIMUM 1" THICKNESS OF TIGHTLY-PACKED CERAMIC FIBER BLANKET OR MINERAL-WOOL BATT PACKING MATERIAL MAY BE RECESSED MINIMUM 1/2" FROM BOTTOM SURFACE OF FLOOR OR FROM EITHER SIDE

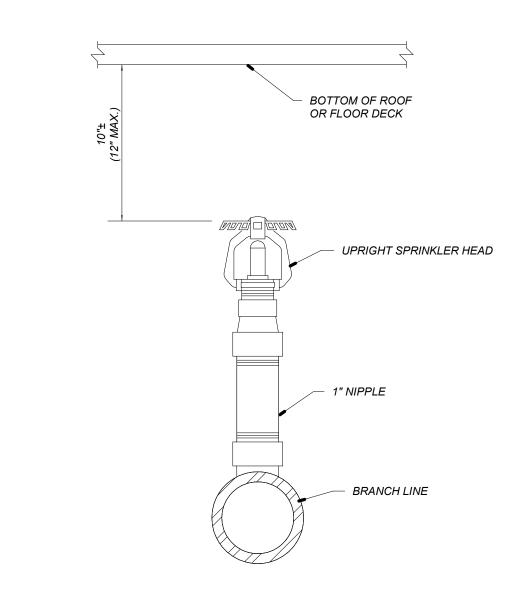
4MAXIMUM PIPER CAVITY MAXIMUM ANNULAR APPLIED TO FIL.PACKING MATERIAL\CE TO THE MINIMUM CAULK TYPE (a) THICKNESS (IN.) DIAMETER. (IN.))WN IN THE FOSPACE (IN.)4BLE: BR, CF, GF or MW CF or MW 1/2 (C) 2 /2 BR, CF, GF or MW

(a.) BR = POLYETHYLENE BACKER ROD. CF = CERAMIC FIBER BLANKET. GF = GLASS FIBER INSULATION. MW =

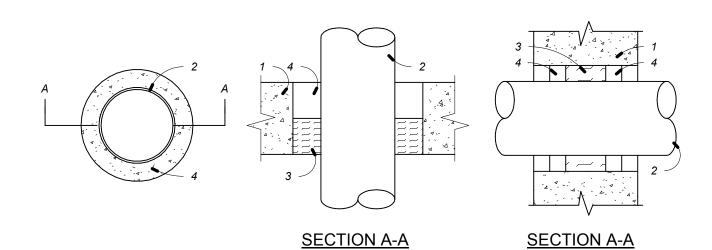
1 (b)

3 FIRE STOPPING DETAIL
SCALE: NONE

(b.) CAULK INSTALLED FLUSH WITH TOP SURFACE OF FLOOR OR BOTH SURFACE OF WALL. (c.) CAULK INSTALLED FLUSH WITH BOTTOM SURFACE OF FLOOR OR ONE SURFACE OF WALL. * BEARING THE UL CLASSIFICATION MARKING



2 UPRIGHT SPRINKLER HEAD DETAIL SCALE: NO SCALE



SYSTEM NO. CAJ1012 (FORMERLY SYSTEM NO. 129) FRATINGS - 1 HR. TRATING - O HR.

(FLOOR ASSEMBLY)

1.) FLOOR OR WALL ASSEMBLY - MINIMUM 5" THICK REINFORCED NORMAL WEIGHT (100 - 150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS*. MAXIMUM SEE CONCRETE BLOCKS (CAZT) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.

(WALL ASSEMBLY)

2.) THROUGH PENETRANTS - ONE METALLIC PIPE OR CONDUIT TO BE CENTERED WITHIN THE FIRESTOP SYSTEM, A NOMINAL ANNULAR SPACE OF 3/4" IS REQUIRED WITHIN THE FIRESTOP SYSTEM, PIPE OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES OR CONDUITS MAY BE USED: A. STEEL PIPE - NOMINAL 4" DIAMETER (OR SMALLER) SCHEDULE 5 (OR HEAVIER) STEEL

B. CONDUIT - NOMINAL 4" DIAMETER (OR SMALLER) ELECTRICAL METALLIC TUBING OR STEEL CONDUIT.

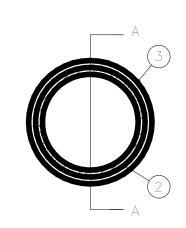
3.) PACKING MATERIAL - MINIMUM 3" THICKNESS OF MINIMUM 4.4 PCF MINERAL WOOL BATT INSULATION FÍRMLY PACKED INTO OPENING AS A PERMANENT FORM, PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL. PACKING MATERIAL TO BE CENTERED IN WALL'S MID-DEPTH AND RECESSED TO ALLOW FOR INSTALLATION OF FILL MATERIAL.

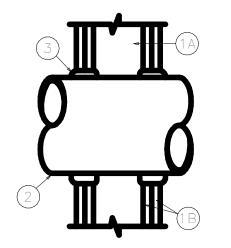
4.) FILL, VOID OR CAVITY MATERIAL* - SEALANT OR FOAM - MINIMUM 1/2" THICKNESS OF FILL MATERIAL APPLIED WITHIN ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR. IN WALL, FILL MATERIAL TO BE APPLIED ON EACH SIDE OF PACKING MATERIAL. FOAMED SILICONE TO BE INSTALLED AS DESCRIBED IN TIFILL MATERIALIRER'S APPLICATION INSTRUCTIONS AT A DEMINIMUM THICK OFNIMUM TO 21 PCF MIDENTIFICATION (IN.) FILL MATERIAL AS DEPENDENT FILL MATERIAL, (IN.) FILL MATERIAL AS SHOWN IN THE TABLE BELOW. TYPE FS FOAM 1 1/2 TYPE FS SEALANT OR FS SEALANT SL

DOW CORNING CORP. - TYPES FS SEALANT, FS SEALANT SL (FLOOR ONLY) OR FS * BEARING THE UL CLASSIFICATION MARKING.

SYSTEM NO. WL1001

(FORMERLY SYSTEM NO. 147) F RATINGS - 1,2,3 AND 4 HR. (SEE ITEM 2 & 3) T RATINGS - 0,1,2,3 AND 4 HR. (SEE ITEM 3)





SECTION A-A

- 1.) WALL ASSEMBLY THE 1, 2, 3 OR 4 HR FIRE-RATED GYPSUM WALLBOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U300 OR U400 SERIES WALL OR PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND
 - A. STUDS-WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS (MAX. 2 HR. FIRE RATED ASSEMBLIES) OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOM 2 BY 4 IN. LUMBER SPACED 16 IN. OC WITH NOM 2 BY 4 IN. LUMBER END PLATES AND CROSS BRACES. STEEL STUDS TO BE MIN. 3-5/8 IN. WIDE BY 1-3/8 IN. DEEP CHANNELS SPACED MAX. 24 IN O.C.
 - B. WALLBOARD, GYPSUM *-NOM 1/2 OR 5/8 IN. THICK, 4 FT WIDE WITH SQUARE OR TAPERED EDGES. THE GYPSUM WALLBOARD TYPE, THICKNESS, NUMBER OF LAYERS, FASTENER TYPE AND SHEET ORIENTATION SHALL BE AS SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES DESIGN IN THE UL FIRE RESISTANCE DIRECTORY. MAX DIAM OF OPENING IS 13-1/2 IN.
- 2.) PIPE OR CONDUIT NOM 12 IN. DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE, NOM 6 IN. DIAM (OR SMALLER) STEEL CONDUIT, NOM 4 IN. DIAM (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING OR TYPE L OR (OR HEAVIER) COPPER TUBING OR NOM 1 IN. DIAM (OR SMALLER) FLEXIBLE STEEL CONDUIT. WHEN COPPER PIPE OR FLEXIBLE STEEL CONDUIT IS USED, MAX F RATING OF FIRESTOP SYSTEM (ITEM 3) IS 2 HR. STEEL PIPES OR CONDUITS LARGER THAN NOM 4 IN. DIAM MAY ONLY BE USED IN WALLS CONSTRUCTED USING STEEL CHANNEL STUDS. A MAX OF ONE PIPE OR CONDUIT IS PERMITTED IN THE FIRESTOP SYSTEM. PIPE OR CONDUIT TO BE INSTALLED NEAR CENTER OF STUD CAVITY WIDTH AND TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY.
- 3.) FILL, VOID OR CAVITY MATERIAL *-CAULK-CAULK FILL MATERIAL INSTALLED TO COMPLETELY FILL ANNULAR SPACE BETWEEN PIPE OR CONDUIT AND GYPSUM WALLBOARD AND WITH A MIN. 1/4 IN. DIAM BEAD OF CAULK APPLIED TO PERIMETER OF PIPE OR CONDUIT AT ITS EGRESS FROM THE WALL. CAULK INSTALLED SYMMETRICALLY ON BOTH SIDES OF WALL ASSEMBLY. THE HOURLY F RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS SHOWN IN THE FOLLOWING TABLE. THE HOURLY T RATING OF THE FIRE-STOP SYSTEM IS DEPENDENT UPON THE TYPE OF SIZE OF THE PIPE OR CONDUIT AND THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS TABULATED BELOW:

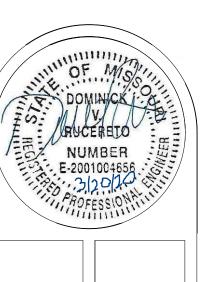
MAX PIPE	ANNULAR	F	Τ
OR CONDUIT	SPACE	RATING	RATING
DIAM IN.	IN	HR	OR
1	0 TO 3/16	1 OR 2	0+, 1 OR
1	1/4 TO 1/2	3 OR 4	3 OR 4
4	0 TO 1/4	1 OR 2	0
6	1/4 TO 1/2	3 OR 4	0
12	3/16 TO 3/8	1 OR 2	0

+ WHEN COPPER PIPE IS USED, T RATING IS 0 HR. MINNESOTA MINING & MFG. CO.-TYPE CP-25 S/L, CP-25 N/S, CP-25 WB, CP-25 WB+

* BEARING THE UL CLASSIFICATION MARKING.

FIRE STOPPING DETAIL

SCALE: NO SCALE



Drawn by: BGR Checked by: BGR Issue date: 02/01/20

Revised:

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2006007202

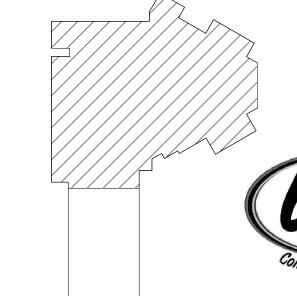


05/08/2020

FLOOR PLAN NOTES

- 12 EXISTING MOTORIZED DOOR OPERATOR TO REMAIN.
- 13 REMOVE EXISTING DEFIBRILATOR AND ALL ASSOCIATED WIRING.
- 14 REMOVE EXISTING LIGHT FIXTURE AND ALL ASSOCIATED CIRCUITRY. DISCONNECT AND REMOVE CONTROL WIRING. NEW LIGHTS TO BE CONTROLLED BY NEW MASTER DIMMING STATIONS.
- 15 REMOVE LIGHT SWITCH AND ALL ASSOCIATED WIRING. PROVIDE BLANK COVERPLATE ON OPEN J-BOX AS NECESSARY UNLESS NOTED OTHERWISE.
- 16 REMOVE EXISTING RECEPTACLE AND ALL ASSOCIATED CONDUIT AND WIRING BACK TO LAST DEVICE TO REMAIN. SPLICE CIRCUIT IF NECESSARY TO MAINTAIN POWER TO EXISTING DEVICES DOWNSTREAM.
- 17 REMOVE PUSH TO EXIT BUTTON AND ALL ASSOCIATED WIRING. PROVIDE BLANK COVERPLATE ON ABANDONED JUNCTION BOXES UNLESS NOTED OTHERWISE.
- REMAIN. SPLICE CIRCUIT IF NECESSARY TO MAINTAIN POWER TO ANY REMAINING DEVICES DOWNSTREAM.

- 21 REMOVE EXISTING CEILING RECEPTACLE AND ALL ASSOCIATED CONDUIT AND WIRING BACK TO LAST DEVICE TO REMAIN. SPLICE CIRCUIT IF NECESSARY TO MAINTAIN POWER TO EXISTING DEVICES DOWNSTREAM.
- 22 REMOVE EXISTING EXIT SIGN AND ALL ASSOCIATED CIRCUITRY.
- 23 RELOCATE EXISTING LIGHT SWITCH TO ACCOMMODATE NEW DOOR LOCATION. EXTEND CIRCUITRY AS
- 24 RELOCATE EXISTING FIRE ALARM ANNUNCIATOR PANEL. RE: NEW WORK FOR NEW LOCATION. EXTEND ALL
- 25 EXISTING ELECTRICAL PANEL TO REMAIN.
- 26 REMOVE EXISTING TV BOX AND RECEPTACLE. REMOVE ALL ASSOCIATED CONDUIT AND WIRING BACK TO LAST DEVICE TO REMAIN. SPLICE CIRCUIT IF NECESSARY TO MAINTAIN POWER TO EXISTING DEVICES
- 27 REMOVE EXISTING FIRE ALARM DEVICE AND ALL ASSOCIATED CONDUIT AND WIRING BACK TO LAST DEVICE TO REMAIN. SPLICE CIRCUIT IF NECESSARY TO MAINTAIN EXISTING DEVICES DOWNSTREAM.
- 28 EXISTING CEILING SPEAKER TO REMAIN. FIELD VERIFY EXACT LOCATION.
- 29 RELOCATE EXISTING UNDER CABINET LIGHT AND ASSOCIATED LIGHT SWTICH. FIELD VERIFY EXACT LOCATION.
- 30 RELOCATE EXISTING DOOR HOLD OPEN. FIELD VERIFY EXACT LOCATION. EXTEND ALL ASSOCIATED CIRCUITRY TO NEW LOCATION. RE: NEW WORK.
- 31 REMOVE EXISTING DOOR HOLD OPEN AND ALL ASSOCIATED CONDUIT AND WIRING BACK TO LAST DEVICE TO REMAIN. SPLICE CIRCUIT IF NECESSARY TO MAINTAIN POWER TO EXISTING DEVICES DOWNSTREAM.
- 32 REMOVE EXISTING LIGHT FIXTURE. MAINTAIN CIRCUITRY FOR CONNECTION TO NEW LIGHTS IN THIS AREA. NEW LIGHTS TO BE CONTROLLED BY NEW CEILING OCCUPANCY SENSORS.
- 33 EXISTING DATA/PHONE OUTLET TO REMAIN. FIELD VERIFY EXACT LOCATION.
- 34 REMOVE EXISTING CEILING SPEAKER AND ALL ASSOCIATED WIRING. SPLICE CIRCUITRY AS NECESSARY TO MAINTAIN EXISTING DEVICES DOWNSTREAM. FIELD VERIFY EXACT LOCATION.
- 35 REMOVE EXISTING VOLUME CONTROL AND ALL ASSOCIATED WIRING. SPLICE CIRCUITRY AS NECESSARY TO MAINTAIN EXISTING DEVICES DOWNSTREAM. FIELD VERIFY EXACT LOCATION.
- 36 EXISTING SMOKE DETECTOR RESET TO REMAIN. REINSTALL IN NEW CEILING AND CONNECT TO NEW DEVICE.
- 37 REMOVE EXISTING TV BOX AND RECEPTACLE. REMOVE ALL ASSOCIATED CONDUIT AND WIRING BACK TO LAST DEVICE TO REMAIN. SPLICE CIRCUIT IF NECESSARY TO MAINTAIN POWER TO EXISTING DEVICES
- 38 REMOVE/RELOCATE EXISTING VOLUME CONTROLS. EXTEND ALL ASSOCIATED CONDUIT AND WIRING TO NEW
- 39 RELOCATE PUSH BUTTON FOR POWER DOOR ACTIVATOR. EXTEND WIRING TO NEW LOCATION. RE: NEW
- 40 REMOVE AND RELOCATE EXISTING LIGHT SWITCH. LIGHT CONTROLS EXISTING CORRIDOR/HALLWAY LIGHTS. EXTEND CIRCUITRY TO NEW LOCATION. RE: NEW WORK.
- 41 EXISTING EXIT SIGN TO REMAIN. FIELD VERIFY EXACT LOCATION.
- 42 REMOVE EXISTING LIGHT SWITCH AND DISCONNECT CONTROL OF EXSITING LIGHT. CONTROL OF THE LIGHT IN THIS ROOM SHALL BE BY EXISTING SWITCH IN ADJACENT ROOM. RE: NEW WORK.
- 43 RELOCATE EXISTING LIGHT SWITCH TO ACCOMMODATE NEW WALL & DOOR. EXTEND CIRCUITRY AS REQUIRED.
- 44 RELOCATE EXISTING LIGHT FIXTURE TO ACCOMMODATE NEW WALL & DOOR. EXTEND CIRCUITRY AS
- 45 RELOCATE EXISTING LIGHT FIXTURE. RE: NEW WORK. REMOVE ALL ASSOCIATED CIRCUITRY BACK TO
- 46 REMOVE EXISTING CALL STATION AND ALL ASSOCIATED CONDUIT AND WIRING BACK TO LAST DEVICE TO
- 47 REMOVE EXISTING LIGHT FIXTURE AND ALL ASSOCIATED CIRCUITRY. NEW LIGHTS TO BE POWERED BY EXISTING DIMMING PANEL. DISCONNECT AND REMOVE CONTROL WIRING. NEW LIGHTS TO BE CONTROLLED BY EXISTING DIMMING STATIONS FOR SANCTUARY.
- 48 REMOVE EXISTING LIGHT FIXTURE AND ALL ASSOCIATED CIRCUITRY.



CERTIFICATE OF AUTHORITY # 2006007202

CONSTRUCTION
AS NOTED ON PLANS REVIEW **DEVELOPMENT SERVICES** LEE'S SUMMIT, MISSOURI

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CONDUIT AND WIRING BACK TO SOURCE OR LAST DEVICE TO REMAIN.

REMOVE EXISTING RECEPTACLE. REMOVE ALL ASSOCIATED CONDUIT AND WIRING BACK TO SOURCE OR LAST DEVICE TO REMAIN.

REMOVE EXISTING LIGHT AND ALL ASSOCIATED CONDUIT AND WIRING BACK TO SOURCE OR LAST DEVICE TO REMAIN.

REMOVE EXISTING LIGHT SWITCH AND ALL ASSOCIATED CONDUIT AND WIRING BACK TO SOURCE.

RELOCATE EXISTING PARKING LOT TIME CLOCKS. RE: NEW WORK.

JUNCTION BOX FOR PARKING LOT LIGHTING CONDUIT. DISCONNECT AND REMOVE J-BOX AND PREPARE CIRCUITRY FOR EXTENSION TO NEW ELECTRICAL ROOM. REFER TO NEW WORK AND RISER DIAGRAM.

RELOCATE EXISTING DIMMING WALL STATION CONTROLLER. EXTEND ALL CIRCUITRY TO NEW LOCATION AS REQUIRED. RE: NEW WORK.

RELOCATE EXISTING LEHIGH DX2 DIMMING SYSTEM. PROVIDE GUTTER ON EXISTING CONDUITS AND EXTEND TO NEW LOCATION. RE: NEW WORK AND RISER DIAGRAM.

RELOCATE EXISTING MDP PANEL. PROVIDE GUTTER ON EXISTING ABOVE GROUND CONDUITS AND EXTEND TO NEW LOCATION. INTERCEPT ONE BELOW SLAB CONDUIT BELOW FLOOR AND EXTEND UP IN NEW WALL (PANEL B). ABANDON THE OTHER BELOW GROUND CONDUIT (PANEL E) AND REMOVE FEEDERS. PANEL TO BE REFED FROM OVERHEARD. RE: NEW WORK AND RISER DIAGRAM.

RELOCATE EXISTING PANELBOARD. PROVIDE GUTTER ON EXISTING CONDUITS IN CEILING PLENUM AND EXTEND TO NEW LOCATION. RE: NEW WORK AND RISER DIAGRAM.

12 RELOCATE EXISTING FIRE ALARM EXTENDER PANEL. EXTEND EXISTING CONDUITS AND WIRE TO NEW LOCATION AS REQUIRED. RE: NEW WORK AND RISER DIAGRAM.

13 EXISTING LIGHT FIXTURE TO REMAIN. FIELD VERIFY EXACT LOCATION.

14 EXISTING RECEPTACLE TO REMAIN. FIELD VERIFY EXACT LOCATION.

15 EXISTING FIRE ALARM DEVICE TO REMAIN. FIELD VERIFY EXACT

16 EXISTING EMERGENCY LIGHT TO REMAIN. FIELD VERIFY EXACT LOCATION.

17 EXISTING LIGHT SWITCH TO REMAIN. FIELD VERIFY EXACT LOCATION.

18 REMOVE EXISTING RECEPTACLE AND ALL ASSOCIATED CONDUIT AND WIRING BACK TO LAST DEVICE TO REMAIN. SPLICE CIRCUIT IF NECESSARY TO MAINTAIN POWER TO EXISTING DEVICES DOWNSTREAM.

19 EXISTING DATA/PHONE OUTLET BOX AND ALL ASSOCIATED WIRING TO REMAIN. FIELD VERIFY EXACT LOCATION.

20 REMOVE SCHOOL SPEAKERM/BELL/INTERCOM DEVICE, CALL BUTTON AND ALL ASSOCIATED CONDUIT AND WIRING.

21 EXISTING CEILING RECEPTACLE FOR SMART BOARD TO REMAIN. FIELD VERIFY EXACT LOCATION.

22 EXISTING TV BOX AND RECEPTACLE TO REMAIN. FIELD VERIFY EXACT LOCATION.

23 EXISTING EXIT SIGN TO REMAIN. FIELD VERIFY EXACT LOCATION.

REMOVE EXISTING LIGHT SWITCH MAINTAIN J-BOX FOR INSTALLATION OF NEW 3-WAY SWITCH. NEW SWITCH TO WORK IN CONJUNCTION WITH NEW SWITCH IN ADJACENT ROOM TO CONTROL ALL LIGHTS IN THE LARGER COMBINED ROOM. RE: NEW WORK.

REMOVE EXISTING LIGHT FIXTURE AND ALL ASSOCIATED CIRCUITRY. DISCONNECT AND REMOVE CONTROL WIRING. NEW LIGHTS TO BE CONTROLLED BY NEW MASTER DIMMING STATIONS.

26 REMOVE EXISTING EXIT SIGN AND ALL ASSOCIATED CIRCUITRY.

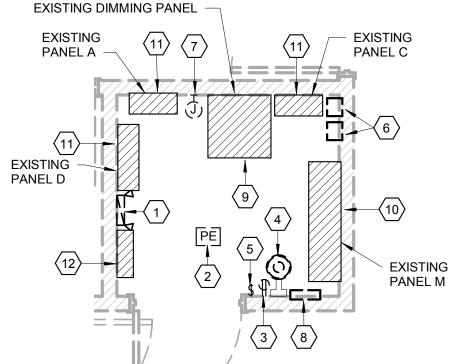
RELOCATE EXISTING FIRE ALARM DEVICE. EXTEND WIRING TO NEW LOCATION. RE: NEW WORK.

28 REMOVE LIGHT SWITCH AND ALL ASSOCIATED WIRING. PROVIDE BLANK COVERPLATE ON OPEN J-BOX AS NECESSARY UNLESS NOTED OTHERWISE.

29 EXISTING LIGHT FIXTURE TO REMAIN. FIELD VERIFY EXACT LOCATION. SPLIT LIGHTING CONTROLS SO THAT LIGHTS WILL BE CONTROLLED BY TWO SEPARATE SWITCHES AFTER CONSTRCUTION OF NEW WALL. RE: NEW WORK.

RELOCATE EXISTING LIGHT FIXTURE AS NECESSARY TO ACCOMMODATE NEW WALL CONSTRUCTION. FIELD VERIFY EXACT LOCATION. DISCONNECT CONTROLS SO THAT LIGHTS WILL BE CONTROLLED BY NEW LIGHTS SWITCH. RE: NEW WORK.

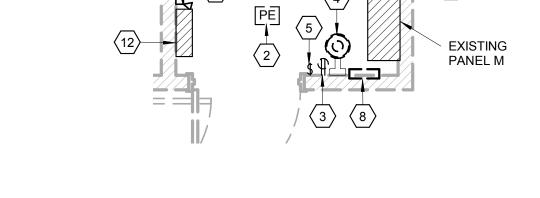
RELOCATE EXISTING RECEPTACLE AS NECESSARY TO

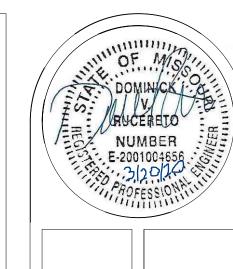












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CONSTRUCTION
AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI

1 ELECTRICAL DEMOLITION SOUTH PLAN
SCALE: 1/8" = 1'-0"

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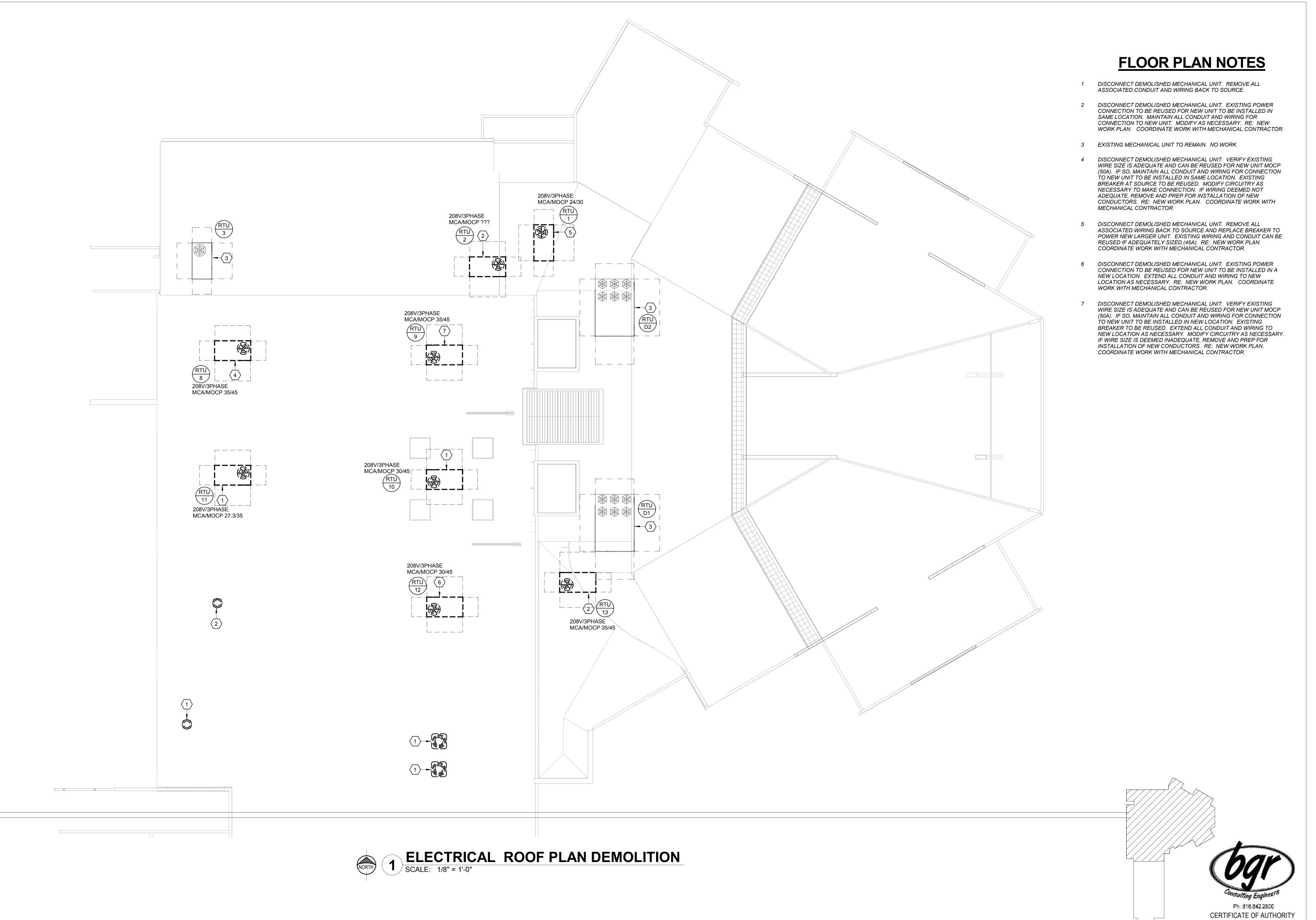
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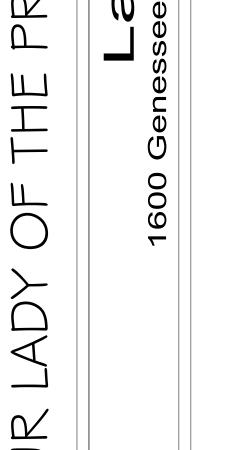
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RELEASE FOR
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DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI





- 1 NEW FIRE ALARM DEVICE TO BE INSTALLED BY THE FIRE ALARM CONTRACTOR. COORDINATE WITH THE FIRE ALARM CONTRATOR TO PROVIDE ROUGH-IN AND CIRCUIT PATH TO THE RELOCATED FIRE ALARM EXTENDER PANEL.
- 2 RELOCATED DOOR HOLD OPEN. EXTEND ALL ASSOCIATED CIRCUITRY TO NEW LOCATION AS REQUIRED. COORDINATE WORK WITH EXISTING FIRE ALARM AND FIRE ALARM CONTRACTOR.
- 3 EXISTING RECEPTACLE TO REMAIN. FIELD VERIFY EXACT LOCATION.
- 4 EXISTING FIRE ALARM DEVICE TO REMAIN. FIELD VERIFY EXACT LOCATION.
- 5 INTERCEPT EXISTING BELOW FLOOR CONDUIT TO EXISTING PANEL B AND EXTEND AS NECESSAR TO NEW WALL. SAWCUT FLOOR SLAB AS REQUIRED. ROUTE UP WITHIN WALL/CHASE TO ABOVE CEILING AND TERMINATE IN RELOCATED PANEL M. 2"C. (4) #3/0. RE: RISER DIAGRAM.
- 6 EXISTING ADA DOOR ACTIVATOR BUTTON TO REMAIN. FIELD VERIFY EXACT LOCATION.
- 7 EXISTING SMOKE DETECTOR RESET TO REMAIN. REINSTALL IN NEW CEILING AND CONNECT TO NEW DEVICE. RE: NEW WORK.
- 8 EXISTING VOLUME CONTROL TO REMAIN. FIELD VERIFY EXACT LOCATION. RECONNECT CONTROLLER TO ASSOCIATED RELOCATED SPEAKERS AS NECESSARY. COORDINATE ZONING WITH OWNER.
- 9 RELOCATED PUSH BUTTON FOR EXISTING POWER DOOR ACTIVATOR. EXTEND WIRING TO NEW LOCATION AS NECESSARY.
- 10 EXISTING MOTORIZED DOOR OPERATOR TO REMAIN.
- 11 RELOCATED EXISTING FIRE ALARM ANNUNCIATOR PANEL. EXTEND ALL WIRING AS REQUIRED TO NEW LOCATION. COORDINATE ALL WORK WITH EXISTING FIRE ALARM SYSTEM AND FIRE ALARM CONTRACTOR.
- 12 INTERCEPT EXISTING EXISTING CONDUITS MADE AVAILABLE DUE TO DEMOLITION AND EXTEND TO NEW ELECTRICAL ROOM. PROVIDE ALL NECESSARY GUTTERS AND JUNCTION BOXES. RE: RISER DIAGRAM.
- 13 INTERCEPT EXISTING BELOW FLOOR CONDUIT TO EXISTING PARKING LOT LIGHTS.
 SAWCUT FLOOR SLAB AS REQUIRED. ROUTE UP WITHIN WALL/CHASE TO ABOVE CEILING
 AND TERMINATE IN RELOCATED PANEL C. 1"C. RE: RISER DIAGRAM.
- 14 EXISTING DATA/PHONE OUTLET TO REMAIN. FIELD VERIFY EXACT LOCATION.
- 15 EXISTING ELECTRICAL PANEL TO REMAIN.

PANEL B

- 16 APPROXIMATE ROUTE OF EXISTING CONDUIT BELOW SLAB FOR EXISTING PANEL B. MAINTAIN FOR NEW PATH UP IN WALL AND SPLICE ABOVE CEILING.
- 17 NEW DEVICES SHOWN TO BE INSTALLED ON EXISTING MASONRY WALLS SHALL BE INSTALLED USING WIREMOLD #V500 SURFACE MOUNTED RACEWAY TO CONCEAL WIRES. PAINT RACEWAY TO MATCH THE SURROUNDING SURFACE AS CLOSE AS POSSIBLE. DEVICES SHOWN TO BE INSTALLED ON EXISTING GYP BOARD WALLS SHALL USE CONCEALED BOXES, RACEWAYS AND WIRING.
- 18 RELOCATED SPEAKER. REINSTALL SPEAKER INTO NEW CEILING. EXTEND WIRING TO NEW LOCATION AS REQUIRED. COORDINATE ZONING WITH OWNER.
- 19 EXISTING CEILING SPEAKER TO REMAIN. FIELD VERIFY EXACT LOCATION.
- 20 RELOCATE VOLUME CONTROLS. EXTEND ALL ASSOCIATED CONDUIT AND WIRING TO NEW LOCATION AS REQUIRED. COORDINATE SPEAKER CONTROL AND ZONING WITH OWNER PRIOR TO INSTALLING.
- 21 PROVIDE AND INSTALL RECEPTACLE FOR RANGE/OVEN. COORDINATE PLUG TYPE WITH EQUPMENT PRIOR TO ROUG IN. TERMINATE ON NEW 40A BREAKER IN AVAILABLE SPACE IN PANEL A OR C. IF NO SPACE IS AVAILABLE AFTER DEMOLITION NOTIFY ARCHITECT/ENGINEER.
- 22 PROVIDE ROUGH-IN FOR NEW CALL BUTTON AND INTERCOM FOR ACCESS. COORDINATE EXACT LOCATION AND ALL REQUIREMENTS WITH INSTALLER PRIOR TO ROUGH-IN.
- 23 TERMINATE ON SPARE BREAKER IN PANEL A OR C. IF NO SPARE BREAKER IS AVAILABLE PROVIDE NEW 20A BREAKER IN EXISTING SPACE.
- 24 PORTION OF EXISTING CONDUIT BELOW FLOOR TO BE ABANDONED IN PLACE.
- 25 PROVIDE 3/4" CONDUIT FOR FUTURE ENTRY LIGHTING.
- 26 PROVIDE INSTALL OUTLET FOR RANGE HOOD. COORDINATE ROUGH-IN LOCATION AND INSTALLATION REQUIREMENTS WITH MANUFACTURER'S RECOMMENDATIONS PRIOR TO INSTALLING
- 27 TERMINATE ICE MAKER CIRCUIT ON NEW 15A BREAKER IN AVAILABLE SPACE IN PANEL A OR C. IF NO SPACE IS AVAILABLE AFTER DEMOLITION NOTIFY ARCHITECT/ENGINEER.
- 28 TERMINATE MICROWAVE CIRCUIT ON SPARE 20A BREAKER IN AVAILABLE SPACE IN PANEL A OR C. IF NO SPARE IS AVAILABLE INSTALL NEW BREKAER IN AVAILABLE SPACE. IF NO SPACE IS AVAILABLE AFTER DEMOLITION NOTIFY ARCHITECT/ENGINEER.
- 29 TERMINATE RANGE HOOD CIRCUIT ON SPARE 20A BREAKER IN AVAILABLE SPACE IN PANEL A OR C. IF NO SPARE IS AVAILABLE INSTALL NEW BREKAER IN AVAILABLE SPACE. IF NO SPACE IS AVAILABLE AFTER DEMOLITION NOTIFY ARCHITECT/ENGINEER.
- 30 HOMERUN TO PANEL WITH 3#8 AND 1#10 GROUND WIRE IN A 3/4"C.
- 31 TERMINATE REFRIGERATOR CIRCUIT ON SPARE 20A BREAKER IN AVAILABLE SPACE IN PANEL A OR C. IF NO SPARE IS AVAILABLE INSTALL NEW BREKAER IN AVAILABLE SPACE. IF NO SPACE IS AVAILABLE AFTER DEMOLITION NOTIFY ARCHITECT/ENGINEER.



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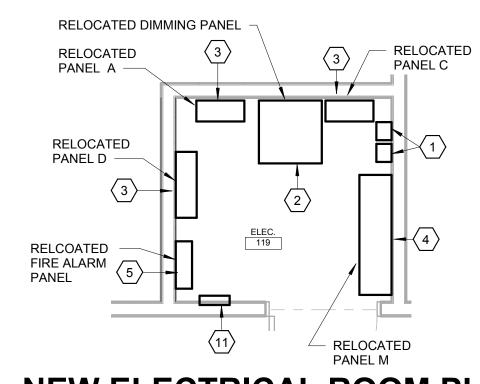
EXISTING

PANEL E

POWER PLAN SOUTH SCALE: 1/8" = 1'-0"

FLOOR PLAN NOTES

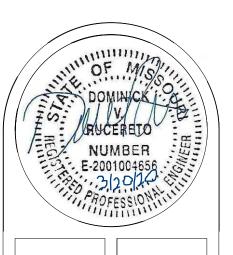
- 1 RELOCATED EXISTING PARKING LOT TIME CLOCKS. EXTEND CIRCUITRY AND REWIRE AS REQUIRED.
- RELOCATED LEHIGH DX2 DIMMING SYSTEM. EXTEND ALL EXISTING CONDUITS TO THIS LOCATION AS REQUIRED. PROVIDE GUTTERS AND JUNCTION BOXES AS REQUIRED. RE: RISER DIAGRAM.
- 3 RELOCATED PANELBOARD. EXTEND ALL EXISTING CONDUITS TO THIS LOCATION AS REQUIRED. PROVIDE GUTTERS AND JUNCTION BOXES AS REQUIRED. RE: RISER DIAGRAM.
- 4 RELOCATED MDP PANEL. EXTEND ALL EXISTING CONDUITS TO THIS LOCATION AS REQUIRED. PROVIDE GUTTERS AND JUNCTION BOXES AS REQUIRED. EXTEND NEW FEEDERS TO PANELS B & E. E TO BE OVERHEAD. B TO BE OVERHEAD TO NEW WALL WHERE EXISTING FEEDERS CAN BE SPLICED ABOVE CEILING. REUSE WIRING AS POSSIBLE. RE: RISER DIAGRAM.
- 5 RELOCATED FIRE ALARM EXTENDER PANEL. EXTEND EXISTING CONDUITS AND WIRE TO THIS LOCATION AS REQUIRED. POWER FROM PANEL A. RE: RISER DIAGRAM.
- 6 EXISTING CEILING RECEPTACLE FOR SMART BOARD TO REMAIN. FIELD VERIFY EXACT LOCATION.
- EXISTING TV BOX AND RECEPTACLE TO REMAIN. FIELD VERIFY EXACT LOCATION.
- 8 EXISTING RECEPTACLE TO REMAIN. FIELD VERIFY EXACT LOCATION.
- 9 EXISTING FIRE ALARM DEVICE TO REMAIN. FIELD VERIFY EXACT LOCATION.
- 10 EXISTING DATA/PHONE OUTLET BOX AND ALL ASSOCIATED WIRING TO REMAIN. FIELD VERIFY EXACT LOCATION.
- 11 RELOCATED DIMMING WALL STATION CONTROLLER. EXTEND CIRCUITRY TO NEW LOCATION AS REQUIRED.
- 12 RELOCATED RECEPTACLE IF NECESSARY TO ACCOMMODATE INSTALLATION OF NEW WALL.
- 13 TERMINATE ON SPARE BREAKER IN PANEL 5. IF NO SPARE BREAKER IS AVAILABLE PROVIDE NEW 20A BREAKER IN EXISTING SPACE.



NEW ELECTRICAL ROOM PLAN

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





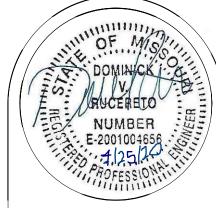
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1600 Genessee, Suite 410' Kansas City, M

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Checked by: BGR
Issue date: 02/01/2020

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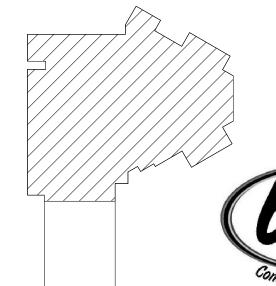
Issue date: 02/01/2020

Revised: 1 04/25/20 CITY COMMENTS

2006007202

FLOOR PLAN NOTES

- RELOCATED EXISTING DIMMING STATION. EXTEND CIRCUITRY TO NEW LOCATION AS REQUIRED.
- ROUTE HOMERUN TO EXISTING DIMMING CONTROL PANEL. TERMINATE ON NEW BREAKER IN AVAILABLE SPACE. REFERENCE DIMMING CONTROL PANEL SCHEDULE. REPROGRAM MASTER CONTROLLER TO INCLUDE ADDITIONAL LIGHT ZONE IN SANCTUARY. COORDINATE WITH OWNER.
- 9 EXISTING LIGHT SWITCH TO REMAIN. FIELD VERIFY EXACT LOCATION.
- 10 EXISTING EXTERIOR EGRESS LIGHT TO REMAIN. FIELD VERIFY EXACT
- PROVIDE AND INSTALL 8 ZONE LIGHTING CONTROL WALL STATION THE WALL STATION SHALL HAVE BUTTON CONTROLS FOR MANUAL ON, MANUAL/AUTO OFF, DIMMING RAISE AND LOWER FOR EACH OF THE 8-ZONES SEPARATELY. CONNECT TO THE ROOM CONTROLLER FOR THESE LIGHTS PER MANUFACTURER'S INSTRUCTIONS. SWITCH TO BE SIMILAR TO ACUITY nPODM8P OR EQUAL. SWITCH TO CONTROL INDICATED ZONES.
- PROVIDE AND INSTALL DUAL TECHNOLOGY LOW VOLTAGE CEILING MOUNTED OCCUPANCY SENSOR. PROVIDE POWER SUPPLY AS REQUIRED. PROVIDE ALL REQUIRED INTERCONNECTIONS BETWEEN MULTIPLE SENSORS WITHIN SPACE TO CONTROL THE LIGHTING. WIRE PER MANUFACTURER'S INSTALLATION REQUIREMENTS. SIMILAR TO ACUITY nCM-PDT-10 OR EQUAL.
- CONNECT THE EMERGENCY/EXIT LIGHT FIXTURE TO THE UN-SWITCHED CIRCUIT SERVING THE LIGHTING IN THIS AREA.
- 14 PROVIDE PIR WALL SWITCH. SET FOR MANUAL 'ON'/'AUTO' OFF.
- SINGLE CIRCUIT DIMMING ROOM CONTROLLER. INSTALL THE 0-10V DIMMING CIRCUITRY TO ALL OF THE DIMMABLE LIGHT FIXTURES CONNECTED TO THE CONTROLLER. CONTROLLER TO BE SIMILAR TO ACUITY nPP16 OR EQUAL COMPATIBLE WITH INSTALLED FIXTURES. INSTALL ABOVE ACCESSIBLE CEILING.
- CONNECT TO ASSOCIATED ROOM CONTROLLER WITH DESIGNATED
- RELOCATED EXISTING LIGHT FIXTURE. EXTEND CIRCUITRY AS
- EXISTING LIGHT SWITCH TO REMAIN. REWIRE SWITCH SO THAT IT CONTROLS ALL THE LIGHTS TO ACCOMODATE THE LARGER ROOM.
- RELOCATED EXISTING DIMMING WALL STATION CONTROLLER. EXTEND ALL CIRCUITRY TO NEW LOCATION AS REQUIRED.
- RELOCATED EXISTING LIGHT SWITCH. LIGHT SHALL BE WIRED TO CONTROL EXISTING CORRIDOR/HALLWAY LIGHTS. EXTEND CIRCUITRY TO NEW LOCATION AS REQUIRED AND RECONNECT LIGHTS AS NECESSARY.
- RELOCATED EXISTING LIGHT SWITCH. ROUGH-IN WITHIN EXISTING WALL. EXTEND CIRCUITRY AS REQUIRED.
- TERMINATE ON EXISTING BREAKER MADE AVAILABLE DUE TO DEMOLITION. (PANEL A #31)
- 23 RELOCATED EXISTING LIGHT SWITCH. ROUGH-IN WITHIN EXISTING WALL. EXTEND CIRCUITRY AS REQUIRED.
- 24 RELOCATED UNDERCOUNTER LIGHT. INSTALL BELOW UPPER CASEWORK AS REQUIRED AND CONNECT TO SWITCH.
- 25 RELOCATED CLOSET LIGHT. INSTALL OVER DOOR WITHIN CLOSET AS REQUIRED AND CONNECT TO SWITCH.
- 26 EXISTING CORRIDOR/HALLWAY LIGHTS IN THIS AREA TO REMAIN. WIRE LIGHTS TO RELOCATED LIGHT SWITCH AS NECESSARY FOR
- RELOCATED LEHIGH DX2 DIMMING SYSTEM. EXTEND ALL EXISTING
- CONDUITS TO THIS LOCATION AS REQUIRED. PROVIDE GUTTERS AND JUNCTION BOXES AS REQUIRED. RE: RISER DIAGRAM. 2 NEW ZONES TO BE ADDED TO PANEL FOR THE SANCTUARY. PROVIDE ADDITIONAL PROGRAMMING AS NECESSARY TO INCLUDE THESE NEW ZONES TO BE CONTROLLED BY THE EXISTING SANCTUARY DIMMING STATIONS. COORDINATE WORK WITH JOHN WILKINSON AT PREMIER LIGHTING 913.541.8239.
- CONNECT TO EXISTING CIRCUITRY MAINTAINED DURING DEMOLITION OF LIGHTS IN THIS AREA.
- 29 PROVIDE CONTROL CONNECTION TO EXHAUST FAN EF-1. RE: 2 ROOM EXHAUST FAN CONTROL DETAIL.
- 30 PROVIDE AND INSTALL SINGLE CIRCUIT POWER PACK TO CONTROL LIGHTS IN THIS AREA. INSTALL THE CIRCUITRY TO ALL OF THE LIGHT FIXTURES CONNECTED TO THE OCCUPANCY SENSORS. POWER PACK TO BE SIMILAR TO ACUITY PP-20 OR EQUAL COMPATIBLE WITH INSTALLED FIXTURES. MOUNT ON STRUCTURE WITHIN AN ENCLOSURE.
- CONNECT TO EXISTING CIRCUITRY MADE AVAILABLE DUE TO DEMOLITION OF LIGHTS IN THIS AREA.
- 32 TERMINATE ON EXISTING BREAKER MADE AVAILABLE DUE TO DEMOLITION. (PANEL A #7)



Ph: 816.842.2800 CERTIFICATE OF AUTHORITY

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RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI

1 LIGHTING PLAN - NORTH SCALE: 1/8" = 1'-0"

1 LIGHTING PLAN - SOUTH
SCALE: 1/8" = 1'-0"

FLOOR PLAN NOTES

- EXISTING LIGHT FIXTURE TO REMAIN. FIELD VERIFY EXACT
- EXISTING EMERGENCY LIGHT TO REMAIN. FIELD VERIFY EXACT
- 3 EXISTING LIGHT SWITCH TO REMAIN. FIELD VERIFY EXACT LOCATION.
- 4 EXISTING EXIT SIGN TO REMAIN. FIELD VERIFY EXACT LOCATION.
- 5 PROVIDE AND INSTALL NEW 3-WAY SWITCH IN BOX MADE AVAILABLE DUE TO DEMOLITION. WIRE TO THE EXISTING LIGHTS IN THIS ROOM AS REQUIRED TO PROVIDE 3-WAY SWITCH CONTROL OF ALL LIGHTS WITHIN ROOM.
- RELOCATED EXISTING LIGHT FIXTURE TO ACCOMMODATE NEW WALL CONSTRUCTION. FIELD VERIFY EXACT LOCATION. DISCONNECT CONTROLS SO THAT LIGHTS WILL BE CONTROLLED BY NEW LIGHTS SWITCH. EXTEND CIRCUITRY AS REQUIRED.
- EXISTING LIGHT FIXTURE TO REMAIN. FIELD VERIFY EXACT LOCATION. REWIRE LIGHTING CONTROLS TO MAKE ALL LIGHTS IN THIS ROOM CONTORLLED BY NEW SWITCH.
- EXISTING LIGHT FIXTURE TO REMAIN. FIELD VERIFY EXACT LOCATION. REWIRE LIGHTING CONTROLS TO MAKE ALL LIGHTS IN THIS ROOM CONTORLLED BY EXISTING SWITCH.
- 9 PROVIDE AND INSTALL NEW SWITCH. WIRE TO THE EXISTING LIGHTS
 IN THIS ROOM AS REQUIRED TO PROVIDE CONTROL OF ALL LIGHTS
 WITHIN ROOM.

10 CONNECT THE NEW EXIT LIGHT FIXTURE TO THE UN-SWITCHED

CIRCUIT SERVING THE LIGHTING IN THIS AREA. FIELD VERIFY EXACT LOCATION.

11 CONNECT THE NEW EXIT LIGHT FIXTURE TO THE UN-SWITCHED
CIRCUIT SERVING THE LIGHTING IN THIS AREA. FIELD VERIFY EXACT
LOCATION.



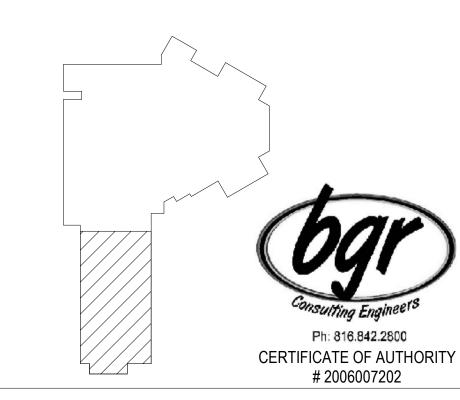
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Drawn by: BGR
Checked by: BGR
Issue date: 02/01/2020

Revised:
1 04/25/20
CITY COMMENTS

E5



	S	witchboard: EX PA	NEL M						
		Location: ELEC. 119 Supply From: Mounting: SURFACE Enclosure:		Volts: 120/ Phases: 3 Wires: 4	208 Wye		Mai Main	c. Rating: ins Type: MLO s Rating: 1200 A 3 Rating: 1200 A	
	СКТ	Circuit Desc	ription	# of Poles		Trip R		Load	
1	1	EX PANEL D		3	400 A	400		0 VA	
1	2	EX DIMMING CONTROL PANEL		3	400 A	200		0 VA	
1	3	PANEL E		3	400 A	20		0 VA	
1	4	EX PANEL A	3	225 A	150		0 VA		
1	5	EX PANEL B		3	225 A	200		0 VA	
1	6	EXISTING RTU-D1		3	225 A	110		27500 VA	
1	7	EX PANEL C		3	100 A	100		0 VA	
1	8	EXISTING RTU-D2		3	225 A	110) A	27500 VA	
	9								
	10				Total	Conn.	Loodi	55000 VA	
	E	XISTING PAN	EL		TOta	Total A		153 A	
	Load Cla	ssification	Connected Load	Demand Factor	Estimated De	emand		Panel Totals	
	HVAC		55000 VA	100.00%	55000 V	Ά			
							To	tal Conn. Load: 55000 VA	
							Tot	al Est. Demand: 55000 VA	
							Total	Conn. Current: 153 A	
							Tota	I Est. Demand 153 A	

REMARKS: 1.) EXISTING LOAD TO REMAIN.

	Location: Supply From: EX PANEL M Mounting: Surface Enclosure: Type 1	1			F	Volts: Phases: Wires:		8 Wye			N	A.I.C. Rating: Mains Type: MLO Mains Rating: 100 A MCB Rating:	
СКТ	Circuit Description	Trip	Poles	A	В	С	A	В	С	Poles	Trip	Circuit Description	(
1	RECONCILIATION ROOM RECEPT.	20 A	1	0			0			1	20 A	Spare	
3	Spare	20 A	1		0			0		1	20 A	Spare	
5	MULIGAN ROOM RECEPT.	20 A	1			0			0	1	20 A	Spare	
7	ELEC ROOM LIGHTING	20 A	1	0			0			1	20 A	BAPTISMAL	
9	Spare	20 A	1		0			0		1	20 A	Spare	
11	Spare	20 A	1			0			0	1	20 A	Spare	
13	Spare	20 A	1	0			0			1	20 A	Spare	
15	Spare	20 A	1		0			0	_	1	20 A	Spare	
17	Spare	20 A	1			0			0	1	20 A	Spare	
19	Spare	20 A	1	0			0			2	30 A	PARKING LOT LIGHTING	2
21	Spare	20 A	1		0			0		4	00.4	WED OAMEDA	2
23	Spare	20 A	1			0			0	1	20 A	WEB CAMERA	- 2
25	Spare	20 A	1	0			0			1	20 A	Spare	2
27 29	BAPTISMAL HEATER	60 A	2		0	0		0	0	2	30 A	PARKING LOT LIGHTING	2
31				0			0						
33	Spare	20 A	2		0			0		2	20 A	Spare	
35	Space					0			0			Space	- 3
'	·	Tota	l Load:	0	VA	0	VA	0	VA		 	,	
Load Cla	assification	Con	nected l	_oad	Den	nand Fa	actor	Estim	nated Do	emand		Panel Totals	
												Total Conn. Load: 0 VA	
												Total Est. Demand: 0 VA	
												Total Est. Demand. 0 VA	
											Total F	st. Demand Current: 0 A	
											· Otai L	on Domana Garrona 674	

REMARKS: 1.) EXISTING LOAD TO REMAIN.

	Supply From: EX PANEL M Mounting: Surface Enclosure: Type 1				I	Phases: Wires:	3	8 Wye				A.I.C. Rating: Mains Type: MLO Mains Rating: 225 A MCB Rating:		
СКТ	Circuit Description	Trip	Poles	A	В	С	A	В	С	Poles	Trip	Circuit De	escription	СКТ
1	SOUTH NARTHEX RECEPT.	20 A	1	0			0			1	20 A	MULLIGAN F	ROOM DWH	2
3	RTU RECEPT.	20 A	1		0			0		1	20 A	ADORATION (CHAPEL DWH	4
5	MULLIGAN ROOM RECEPT.	20 A	1			0			0	1	20 A	SACR	RISTY	6
7	SOUTH NARTHEX LIGHTING	20 A	1	0			0			1	20 A	MULLIGAN RE	FR. RECEPT.	8
9	Spare	20 A	1		0			0		1	20 A	MULLIGAN ROOM		10
11	RESTROOM LIGHTING	20 A	1			0			0	1	20 A	MULLIGAN RC		12
13	NORTH ADORATION LIGHTING	20 A	1	0			0			1	20 A	MULLIGAN RC		14
15	NORTH OFFICE LIGHTING	20 A	1		0			0		1	20 A	MULLIGAN ROOM GA		16
17	ADORATION LIGHTING	20 A	1			0			0	1	20 A	MULLIGAN RO		18
19	NORTH PHOTOCELL	20 A	1	0			0			1	20 A	FIRE ALARM EX	TENDER PANEL	20
21	NORTH NARTHEX LIGHTING	20 A	1		0			0		1	20 A	Spa	are	22
23	NORTH DOOR OPENER	20 A	1			0			0	1	20 A	Spa		24
25	Spare	20 A	1	0			0			1	20 A	Spa		26
27	Spare	20 A	1		0			0		1	20 A	Spa		28
29	BAPTISTRY CONTROL	20 A	1			0			0	1	20 A	Spa		30
31	MULLIGAN ROOM LIGHTING	20 A	1	0			0			1	20 A	Spa		32
33	RESTROOM	20 A	1		0			0		1	20 A	Spa		34
35	RESTROOM	20 A	1			0			0	1	20 A	Spa		36
37	SPARE	20 A	2	0			0			1	30 A	Spa		38
39		2071	_		0			0		1	30 A	Spa	are	40
41	Space					0			0			Spa	ace	42
oad C	classification		Il Load: nected L	_ oad		0 v		Estim	ated De	emand		Panel	Totals	
		-										Total Conn. Load:		
												Total Est. Demand:	U VA	
											Total	Est. Demand Current:	0 A	

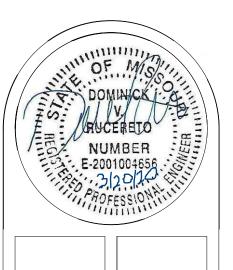
REMARKS: 1.) EXISTING LOAD TO REMAIN.
2.) CIRCUIT TO BE UTILIZED FOR NEW LIGHTS. SOUTH GATHERING.
3.) CIRCUIT TO BE UTILIZED FOR NEW LIGHTS. NORTH ENTRY.
4.) CIRCUIT TO BE UTILIZED FOR NEW LIGHTS. MID GATHERING.
5.) CIRCUIT TO BE UTILIZED FOR NEW LIGHTS. NORTH GATHERING.
6.) CIRCUIT PART OF RENOVATION.

•	Branch Panel: PANEL Location: Supply From: EX PANEL M Mounting: Surface Enclosure: Type 1	. D			ī	Volts: Phases: Wires:	3	8 Wye				A.I.C. Rating: Mains Type: MLO Wains Rating: 400 A MCB Rating:		
скт	Circuit Description	Trip	Poles	A	В	С	A	В	С	Poles	Trip	Circuit De	escription	СКТ
1	•			0			0						· ·	2
3	RTU (NEW RTU-13?)	50 A	3		0			0		3	50 A	DEMO'D RTU-1	0 (NEW RTU-8)	4
5						0			0					6
7				0			0							8
9	RTU-11 & 12 (NEW RTU-12)	40 A	3		0			0		3	50 A	????? (NE	EW RTU-2)	10
11						0			0					12
13				0			0							14
15	RTU (NEW RTU-1)	50 A	3		0			0		3	50 A	RTU-8 & 9 (I	NEW RTU-9)	16
17						0			0					18
19				0			0							20
21	RTU-6	40 A	3		0			0		3	40 A	RTU-	-3 & 5	22
23						0			0					24
25	Spare	20 A	1	0			0							26
27	Spare (RTU-3?)	40 A	2		0			0		3	30 A	RT	U-7	28
29						0			0					30
		Tota	al Load:	0	VA	0 \	VA	0	VA					
Load Cla	ssification	Con	nected	Load	Der	nand Fa	ctor	Estim	ated D	emand		Panel	Totals	
												Total Conn. Load:	0.1/4	
					-			1						
					-			-				Total Est. Demand:	UVA	
								1			Total	st. Demand Current:	0.4	
											i Olai E	St. Demand Current:	UA	
								1						
EX	(ISTING PANEL	1										EAKERS POWEF ANY WORK.	₹	

REMARKS: 1.) EXISTING BREAKER TO BE USED TO POWER NEW RTU-8. MOVE LOADS AS REQUIRED.
2.) EXISTING BREAKER TO BE USED TO POWER NEW RTU-9 ONLY. REMOVE ANY ADDITIONAL LOADS.
3.) REPLACE EXISTING BREAKER WITH NEW 45A. PROVIDE NEW CONDUCTORS IF NECESSARY TO POWER NEW RTU 12.
4.) REPLACE EXISTING BREAKER WITH NEW 45A TO POWER NEW ROOFTOP UNIT.

5.) EXISTING SPARE/LOAD TO REMAIN.

6.) REPLACE EXISTING BREAKER WITH NEW 30A TO POWER NEW ROOFTOP UNIT.



Drawn by: BGR Checked by: BGR Issue date: 02/01/2020

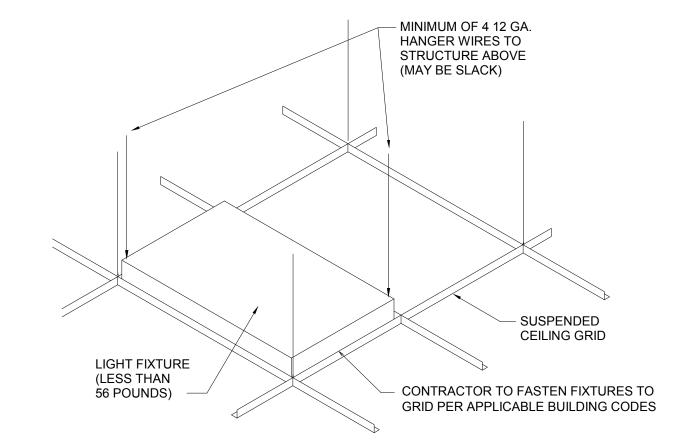
Revised:



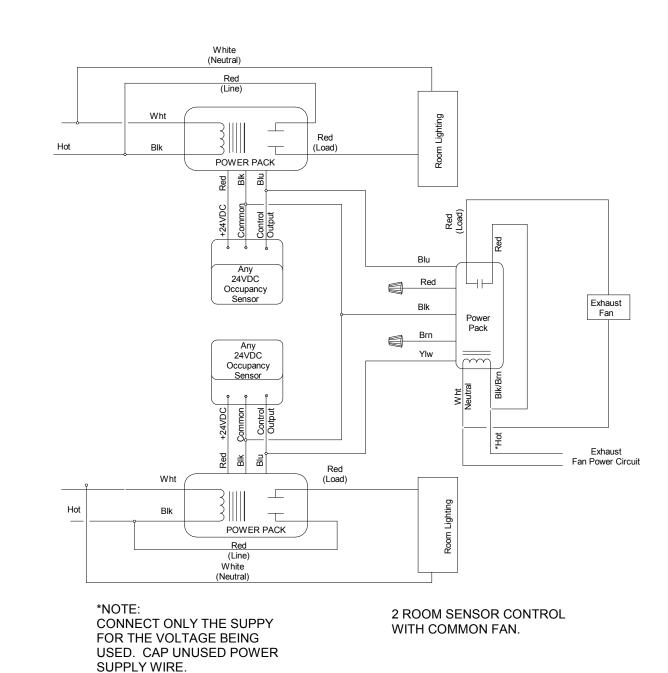


			LIGHT FIXTUR	E SCHEDULE
Туре	Manufacturer	Lamp	Voltage/Watts	Description
A	LITHONIA # 2GTL4-48LEZ1-LP835	LED 4777LMN 35K	MVOLT/36W	2'x4' LAY-IN CEILING, RECESSED FIXTURE WITH ACRYLIC #12 LENS AND LED DIMMING DRIVER.
A1	LITHONIA # 2TL2-33RW-A12EZ1-LP835	LED 3246LMN 35K	120V/29W	2'x2' LAY-IN CEILING, RECESSED FIXTURE WITH REGRESSED ACRYLIC #12 LENS AND LED DIMMING DRIVER.
A1E	LITHONIA # 2TL2-33RW-A12- -EZ1-LP835-EL7L-E10WLCP	LED 3246 LMN 35K	120V/29W	2'x2' LAY-IN CEILING, RECESSED FIXTURE WITH REGRESSED ACRYLIC #12 LEN, LED DIMMING DRIVER AND 700LMN EMERGENCY BATTERY BACKUP WITH SELF-DIAGNOSTICS.
С	INDY # L6-17LM-35K-120-G4-90CRI-FD L6-HW-CSS-PF OR EQUAL	LED 1847LMN 35K	120V/18W	6" LED DOWNLIGHT WITH INTEGRAL PHASE DIMMING DRIVER, HYPERBOLIC MEDIUM BAFFLE, WHITE TRIM AND CLEAR SEMI-SPECULAR LENS. LIGHT NEEDS TO BE COMPATIBLE WITH LEHIGH DX2 DIMMING PANEL.
C1	LITHONIA # LDN6-35/25-L06-WR-LSS-MVOLT-EZ10 OR EQUAL	LED 2500LMN 35K	120V/28W	6" LED DOWNLIGHT WITH INTEGRAL 0-10V DIMMING DRIVER, WHITE TRIM AND SEMI-SPECULAR LENS.
C1E	LITHONIA # LDN6-35/25-L06-WR-LSS-MVOLT-EZ10- ELSD OR EQUAL	LED 2500LMN 35K	120V/28W	6" LED DOWNLIGHT WITH INTEGRAL 0-10V DIMMING DRIVER, WHITE TRIM, SEMI-SPECULAR LENS AND EMERGENCY BATTERY BACKUP WITH SELF-DIAGNOSTICS.
E	LITHONIA # ELM4LSDRT OR EQUAL	LED 640LMN	120V/3.2W	LED EMERGENCY FIXTURE WITH MAINTENANCE FREE SEALED NICA BATTERY AND SELF-DIAGNOSTIC/SELF-TEST CIRCUITRY.
F	LITHONIA # WST LED P2 30K VF MVOLT PE E20WC	LED 3000 LMN	120V/25W	EXTERIOR WALL MOUNT TRAPEZOIDAL LED FIXTURE EQUIPPED WITH A COLD WEATHER EMERGENCY 20W BATTERY BACK-UP BALLAST TO POWER LAMP A MINIMUM OF 90 MINUTES AND PHOTOCELL CONTROL. FINISH TO BE SELECTED BY ARCHITECT.
S	LITHONIA # ZL1N L48 3000LM L/LENS MVOLT 35K 80CRI WH	LED	120V/25W	4' SURFACE MOUNT LED STRIP FIXTURE WITH 11-GAUGE WHITE POWDER COAT WIREGUARD.
X	LITHONIA # SOLO 1 OR 2 RMR-SEE PLANS FOR INDICATORSSD OR EQUAL	LED	120V/3W	CEILING/BACK MOUNT OVAL MIRROR LED EXIT SIGN WITH RED LETTERS, ALUMINUM HOUSING AND EMERGENCY BATTERY BACKUP PROVIDING 2-HOUR EMERGENCY RUN TIME WITH SELF-DIAGNOSTICS. CONTRCTOR SHALL VERIFY EXACT MOUNTING NUMBER OF FACES AND NUMBER OF CHEVRONS PRIOR TO

ORDERING. REFER TO PLANS.



1 LIGHT FIXTURE DETAIL SCALE: NONE



2 ROOM EXHAUST FAN CONTROL DETAIL SCALE: NONE

LIGHTING CONTROL NOTES

- A. THE CONTRACTOR SHALL PROVIDE START-UP, PROGRAMMING,
 TESTING AND OWNER TRAINING FOR THE LIGHTING CONTROLS.

 B. LIGHTING IN ROOMS SHALL BE CONTROLLED BY A SYSTEM.
- TESTING AND OWNER TRAINING FOR THE LIGHTING CONTROLS.

 B. LIGHTING IN ROOMS SHALL BE CONTROLLED BY A SYSTEM CONSISTING OF ROOM CONTROLLERS, DUAL TECHNOLOGY MOTION SENSORS, AND WALL MOUNTED DIGITAL CONTROL STATIONS. ALL WIRING SHALL BE INSTALLED BY THE CONTRACTOR. THE DIGITAL CONTROL STATIONS SHALL CONSIST OF PUSH BUTTONS CAPABLE OF TURNING LIGHTING ZONES ON AND OFF. LIGHTING CONTROLS SHALL BE BY WATTSTOPPER, ACUITY, OR LUTRON.
- C. LIGHTING IN SMALL ENCLOSED CLOSETS AND SIMILAR ROOMS SHALL BE CONTROLLED BY PIR WALL SWITCHES. THE SWITCHES SHALL BE CONFIGURED FOR MANUAL ON AND MANUAL/AUTO OFF OPERATION. SWITCHES SHALL BE BY WATTSTOPPER, LUTRON, OR ACUITY.
- D. MOTION SENSORS FOR LIGHTING CONTROL SHALL BE BY WATTSTOPPER, ACUITY, OR COOPER. THE CONTRACTOR SHALL COORDINATE WORK WITH THE SENSOR MANUFACTURER TO PROVIDE THE APPROPRIATE SENSOR COVERAGE. THE CONTRACTOR SHALL PROVIDE ALL THE LABOR, WIRING, AND COMPONENTS REQUIRED FOR A FULLY FUNCTIONAL LIGHTING CONTROL SYSTEM.

 E. THE CONTRACTOR SHALL HAVE THE LIGHTING CONTROL VENDOR
 - REVIEW THE OCCUPANCY SENSOR LAYOUT SHOWN ON THE PLANS TO VERIFY PLACEMENT, SENSOR QUANTITIES, AND THE SENSOR TYPE SPECIFIED. THE LIGHTING CONTROL VENDOR SHALL MAKE ANY REQUIRED ADJUSTMENTS TO THE LIGHTING CONTROLS AS REQUIRED TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM BASED ON THE INTENT WITHIN THESE DOCUMENTS. ALL COSTS WITH ASSOCIATED WITH ANY VENDOR MODIFICATIONS SHALL BE INCLUDED IN THE BASE BID. THE VENDOR SHALL PROVIDE SHOP DRAWINGS AND WIRING DIAGRAMS.

NEW CONDUIT NOTES

CONCEAL ALL CONDUIT AND WIRING WITHIN WALLS AND ABOVE CEILINGS WHEREVER POSSIBLE. ALL EXPOSED WIRING IN THE NAVE AND SANCTUARY SHALL BE INSTALLED IN WIREMOLD #V500 SURFACE MOUNTED RACEWAY PAINTED TO MATCH THE SURROUNDING SURFACE AS CLOSE AS POSSIBLE. RACEWAY TO BE INSTALLED NEXT TO FRAMING MEMBERS TO CONCEAL RACEWAY AS MUCH AS POSSIBLE. CONTRACTOR SHALL COORDINATE ALL EXPOSED RACEWAY LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION.

FIRE ALARM ALTERATION NOTES

- . FIRE ALARM CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL ASSOCIATED WORK TO LOCAL CITY AND FIRE DEPARTMENT FOR APPROVAL PRIOR TO
- BEGINNING ANY WORK.
 F.A.C. SHALL TEST FIRE DETECTION AND ALARM
 SYSTEMS IN PRESENCE OF FIRE CODE OFFICIAL.
 NOTIFY OFFICIAL A MINIMUM OF 48 HOURS PRIOR TO
 REQUIRED ACCEPTANCE AND PRIOR TO CERTIFICATE
 OF OCCUPANCY.
- C. ALL DUCT DETECTORS FOR NEW HVAC UNITS:

 XXXXXXXXXXX SHALL BE CONNECTED TO THE BUILDING
 FIRE ALARM SYSTEMS.

EMERGENCY EGRESS LIGHTING

EXIT DISCHARGE SHALL BE ILLUMINATED, BY NOT LESS THAN 1 FOOT CANDLE AT THE WALKING SURFACE AT ALL TIMES THE BUILDING IS

GENERAL NOTES (TYPICAL ALL SHEETS)

- A. REFER TO ARCHITECTS REFLECTED CEILING PLANS FOR EXACT PLACEMENT OF LIGHT
- FIXTURES, SPEAKER AND F.A. DEVICES IN THE CEILING SYSTEM.

 B. CONTRACTOR SHALL REFER TO ARCHITECTS DETAILS AND ELEVATIONS FOR COORDINATION
 OF LOCATION OF ALL WIRING DEVICES BEFORE ROUGH-IN OF J-BOXES.
- C. REFER TO ARCHITECTS PLANS FOR DETAIL OF ALL CONDUIT THRU ROOF PENETRATIONS.
 D. UPDATED, TYPEWRITTEN PANELBOARD DIRECTORY SHALL BE PROVIDED FOR EACH
- PANELBOARD THAT CIRCUITS HAVE BEEN ADDED TO OR MODIFIED.

 E. ALL LIGHT FIXTURES SHALL BE SUPPORTED PER UBC STANDARD 47-18 WITH A MINIMUM OF (4)
- E. ALL LIGHT FIXTURES SHALL BE SUPPORTED PER UBC STANDARD 47-18 WITH A MINIMUM OF (4) 12 GA. HANGER WIRES TO STRUCTURE ABOVE.
 F. EXIT AND EMERGENCY LIGHTS SHALL BE CONNECTED TO HOT LEG, NOT SWITCH LEG.
- G. CONTRACTOR SHALL COORDINATE INSTALLATION REQUIREMENTS AND SCHEDULING OF ALL SYSTEM FURNITURE WITH FURNITURE INSTALLER.
 H. DISCONNECTS FOR MECHANICAL EQUIPMENT ARE PROVIDED BY OTHERS. UNLESS NOTED
- I. FIRE ALARM IS A DESIGN BUILD SCOPE. THE FIRE ALARM CONTRACTOR SHALL SUBMIT STAMPED DESIGN/CONSTRUCTION DRAWINGS TO THE CITY AND ARCHITECT FOR REVIEW. THE CONTRACTOR SHALL INCLUDE IN BID ALL COSTS ASSOCIATED WITH FIRE ALARM MODIFICATIONS. THIS WORK SHALL INCLUDE POWER EXTENDER PANEL, SMOKE DETECTORS, HORN/STROBES, PULL STATIONS, REMOTE INDICATING LIGHTS AND ANY OTHER
- FIRE ALARM WORK SHOWN ON PLANS. ALL WIRING, PLENUM RATED CABLING, BETWEEN DEVICES SHALL BE INCLUDED IN WORK TO PROVIDE AN OPERATIONAL EXTENSION OF THE EXISTING FIRE ALARM SYSTEM.

 J. CONTRACTOR SHALL ALIGN ALL WIRING DEVICES IN VERTICAL ALIGNMENT. IF ANY DEVICE(S)
- ARE FOUND NOT TO BE INSTALLED PER DETAIL CONTRACTOR SHALL RELOCATE AND PAY ALL ASSOCIATED COSTS ASSOCIATED WITH THE RELOCATION(S).

 K. EXCEPT AS OTHERSIWSE NOTED OR APPROVED BY THE ARCHITECT THE CONTRACTOR
- SHALL INSTALL, ELECTRICAL FEEDER AND BRANCH CIRCUIT RACEWAYS IN A CONCEALED MANNER THROUGHOUT THEIR ROUTING. ROUTING PATHS AND METHODS SHALL BE COORDINATED WITH AND APPROVED BY THE ARCHITECT PRIOR TO INSTALLING RACEWAYS.

ELECTRICAL SYMBOLS

▶ ▶	BRANCH CIRCUIT CONCEALED IN CEILING OR WALL. ARROWS INDICATE HOMERUNS TO PANEL. ALL CONDUCTORS ARE #12 EXCEPT AS NOTED.
++	CONDUIT RUN UNDERGROUND OR CONCEALED IN FLOOR SLAB. ALL CONDUIT 3/4" EXCEPT AS NOTED

- GROUNDING CONDUCTOR #12 EXCEPT AS NOTED⊗ OR ⋈EXIT LIGHT SINGLE FACED ARROWS AS SHOWN
- EXIT LIGHT DOUBLE FACED ARROWS AS SHOWNWALL MOUNT EXIT LIGHT SINGLE FACED
- OR CEILING OR WALL MOUNTED EMERGENCY LIGHTING UNIT.



- FLUORESCENT STRIP FIXTURE
- RECESSED CEILING LIGHT FIXTURE

 PANELBOARD. INSTALL W/TOP 6'-0" AFF
- \$ SINGLE POLE SWITCH. +3'-10" AFF TO CENTERLINE OF DEVICE BOX

 \$ MS

 MOTION SENSOR SWITCH +3'-10" AFF TO CENTERLINE OF DEVICE BOX
 - DIMMER SWITCH +3'-10" AFF TO CENTERLINE OF DEVICE BOX
- CEILING MOUNTED OCCUPANCY SENSOR.
- CEILING MOUNTED DIRECTIONAL OCCUPANCY SENSOR.
- DUPLEX RECEPTACLE. +1'-6" AFF OR AS NOTED

 DUPLEX RECEPTACLE W/GROUND FAULT PROTECTION AND
- WEATHERPROOF PLATE. +1'-6" AFF OR AS NOTED

 DUPLEX RECEPTACLE W/GROUND FAULT PROTECTION. +1'-6" AFF OR
- DOUBLE DUPLEX RECEPTACLE. +1'-6" AFF OR AS NOTED
- DUPLEX RECEPTACLE INSTALLED ABOVE COUNTERTOP
- FLUSH FLOOR BOX OR POKE-THRU DEVICE
- VOICE OUTLET WITH 1" CONDUIT STUBBED UP OUT OF BOX TO ABOVE ACCESSIBLE CEILING OR AT LEAST 10'-0" AFF IN AREAS WITH NO CEILING. INSTALLED ABOVE COUNTERTOP. (W DENOTES WALL MOUNTED +48" AFF)
- DATA/VOICE OUTLET WITH 1" CONDUIT STUBBED UP OUT OF BOX
 TO ABOVE ACCESSIBLE CEILING OR AT LEAST 10'-0" AFF IN AREAS WITH NO CEIL
- TO ABOVE ACCESSIBLE CEILING OR AT LEAST 10'-0" AFF IN AREAS WITH NO CEILING. +1'-6" AFF OR AS NOTED.
- DATA/VOICE OUTLET WITH 1" CONDUIT STUBBED UP OUT OF BOX
 TO ABOVE ACCESSIBLE CEILING OR AT LEAST 10'-0" AFF IN AREAS WITH NO CEILING.
 INSTALLED ABOVE COUNTERTOP.
- A/V OUTLET DOUBLE GANG J-BOX WITH 1-1/2" CONDUIT TO ABOVE ACCESSIBLE CEILING. +1'-6" AFF OR AS NOTED.
- A/V OUTLET DOUBLE GANG J-BOX INSTALLED IN CEILING TILE.

 110cd WALL MOUNTED COMBINATION FIRE ALARM HORN/STROBE w/75cd RATING,
- (cd-DENOTES CANDELA RATING). +6'-8" A.F.F.

 WALL MOUNTED FIRE ALARM STROBE w/75cd RATING, UNLESS

FLUSH MOUNTED UNLESS NOTED OTHERWISE.

- WALL MOUNTED FIRE ALARM STROBE w/75cd RATING, UNLESS NOTED OTHERWISE. (cd-DENOTES CANDELA RATING). +6'-8" A.F.F. FIRE ALARM MANUAL PULL STATION. +3'-10" AFF
- CEILING MOUNTED PHOTO-ELECTRIC SMOKE DETECTOR (D-DENOTES IN DUCT)
- WALL MOUNTED JUNCTION BOX.
- JUNCTION BOX
- TV TELEVISION OUTLET
- CARD READER W/ SINGLE GANG BOX @ 3'-10" AFF. ROUTE CONCEALED 3/4" CONDUIT FROM BOX TO AN ACCESSIBLE SPACE ABOVE THE CEILING IN THE BUILDING.
- THERMOSTAT OUTLET BOX WITH 1/2"C, CONDUIT STUBBED UP OUT OF BOX TO ABOVE ACCESSIBLE CEILING. PROVIDE BUSHING
- ON END OF CONDUIT. THERMOSTAT AND WIRING BY OTHERS.
- INDICATES WIRING DEVICE ABOVE OR BELOW RE: DRAWING HEIGHT TO CENTERLINE OF OUTLET BOX ABOVE FINISHED FLOOR
- 12"X12" SPEAKER JUNCTION BOX WITH 1/2"C, CONDUIT STUBBED UP OUT OF BOX TO ABOVE ACCESSIBLE CEILING. PROVIDE BUSHING ON END OF CONDUIT. SPEAKER AND WIRING BY OTHERS.
- S) 8" CEILING SPEAKER MOUNTED IN 2'X2' TILE. NO ROUGH-IN REQUIRED.
 - RC DIMMING ROOM CONTROLLER
 - AFF ABOVE FINISH FLOOR
 - FA FIRE ALARM
- ETR EXISTING TO REMAIN

Consulting Engineers
Ph: 816.842.2800

Ph: 816.842.2800
CERTIFICATE OF AUTHORITY
2006007202

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/08/2020

Drawn by: BGR

Checked by: BGR

Revised:

1 04/25/20

Issue date: 02/01/2020

CITY COMMENTS

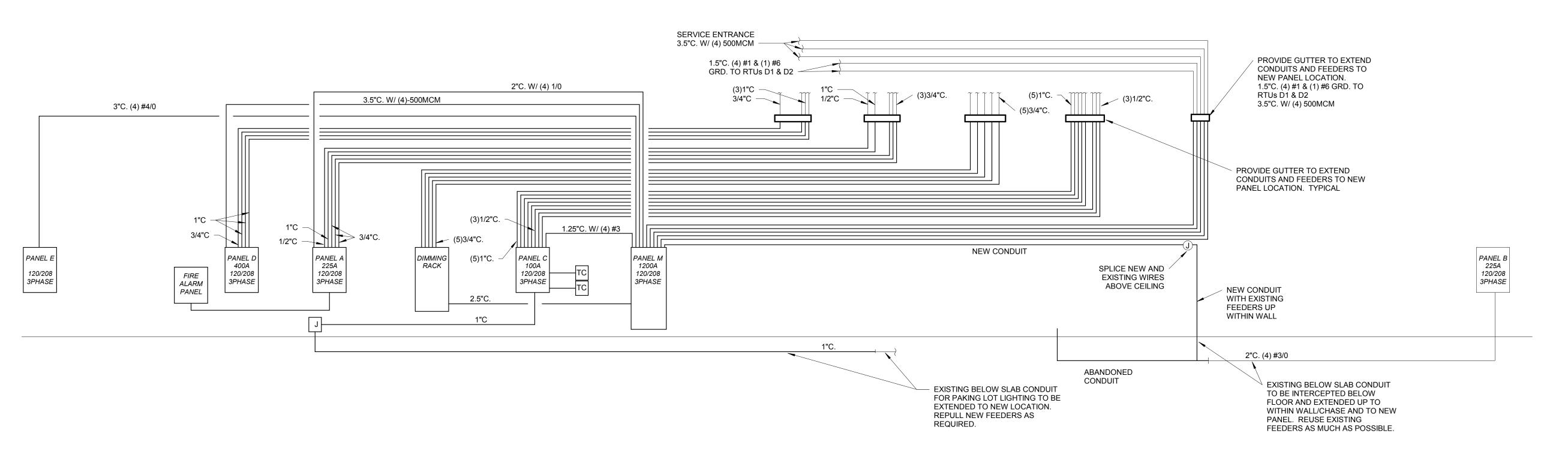
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S SUMMIT, N

Architects

DEMOLITION ELECTRICAL RISER



NEW ELECTRICAL RISER

1 EXISTING ONE-LINE DIAGRAM SCALE: NONE



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Drawn by: BGR Checked by: BGR

Revised:

Issue date: 02/01/2020

NW MURRAY S SUMMIT, MC