

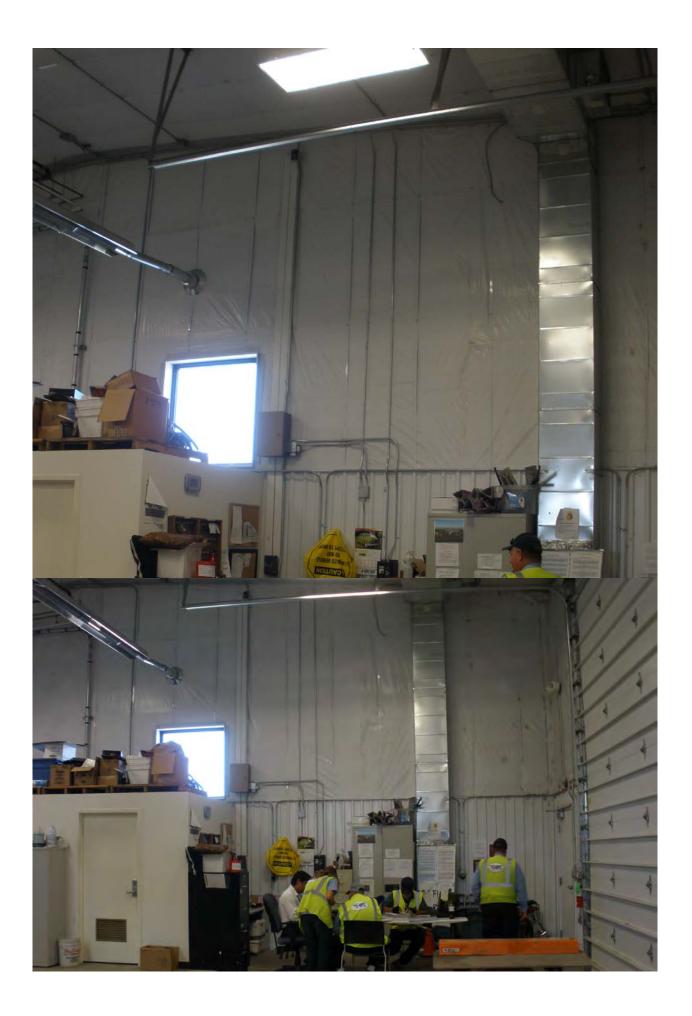


GVT Maintenance Facility (Exterior & Interior Pictures)



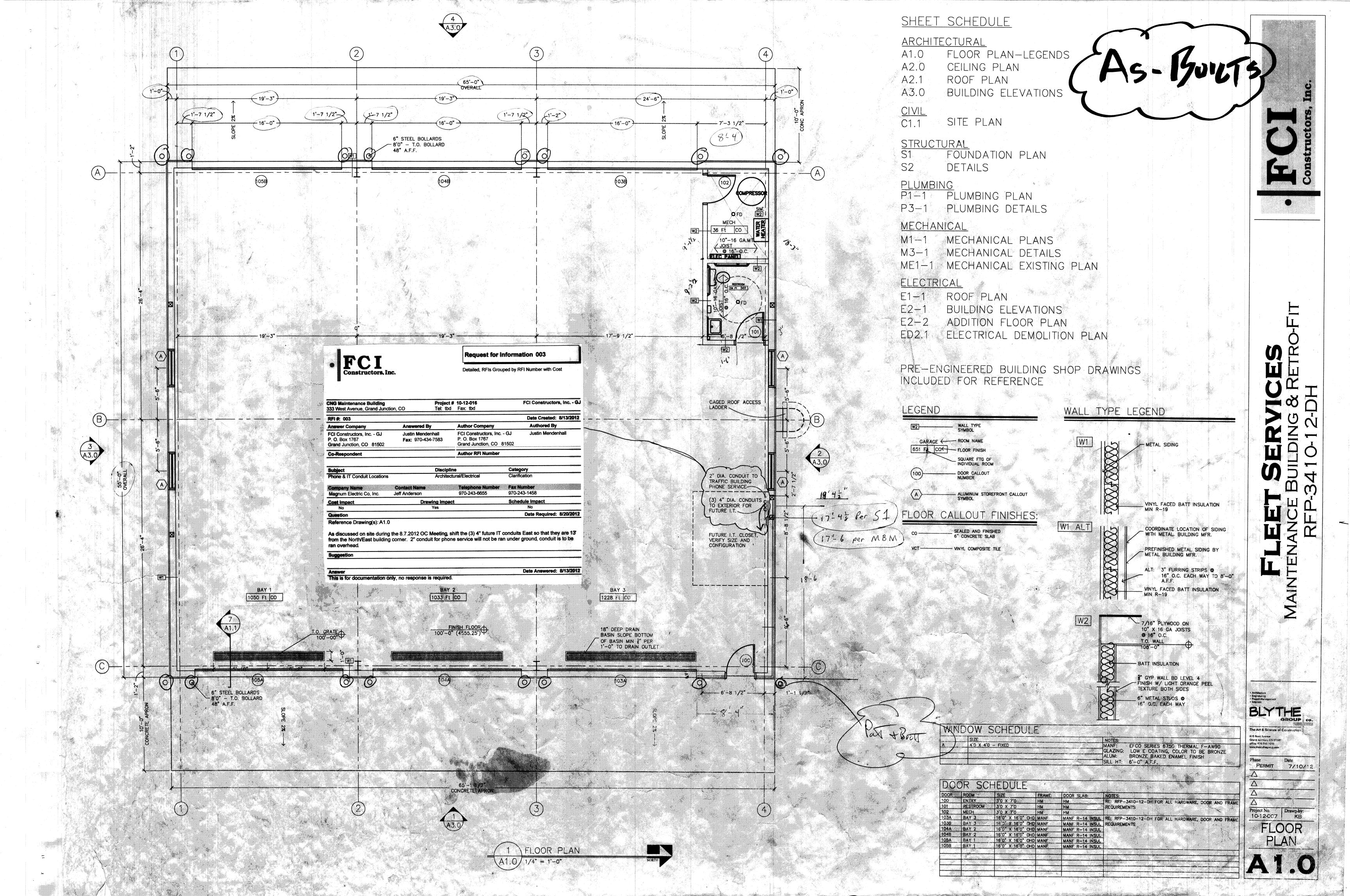




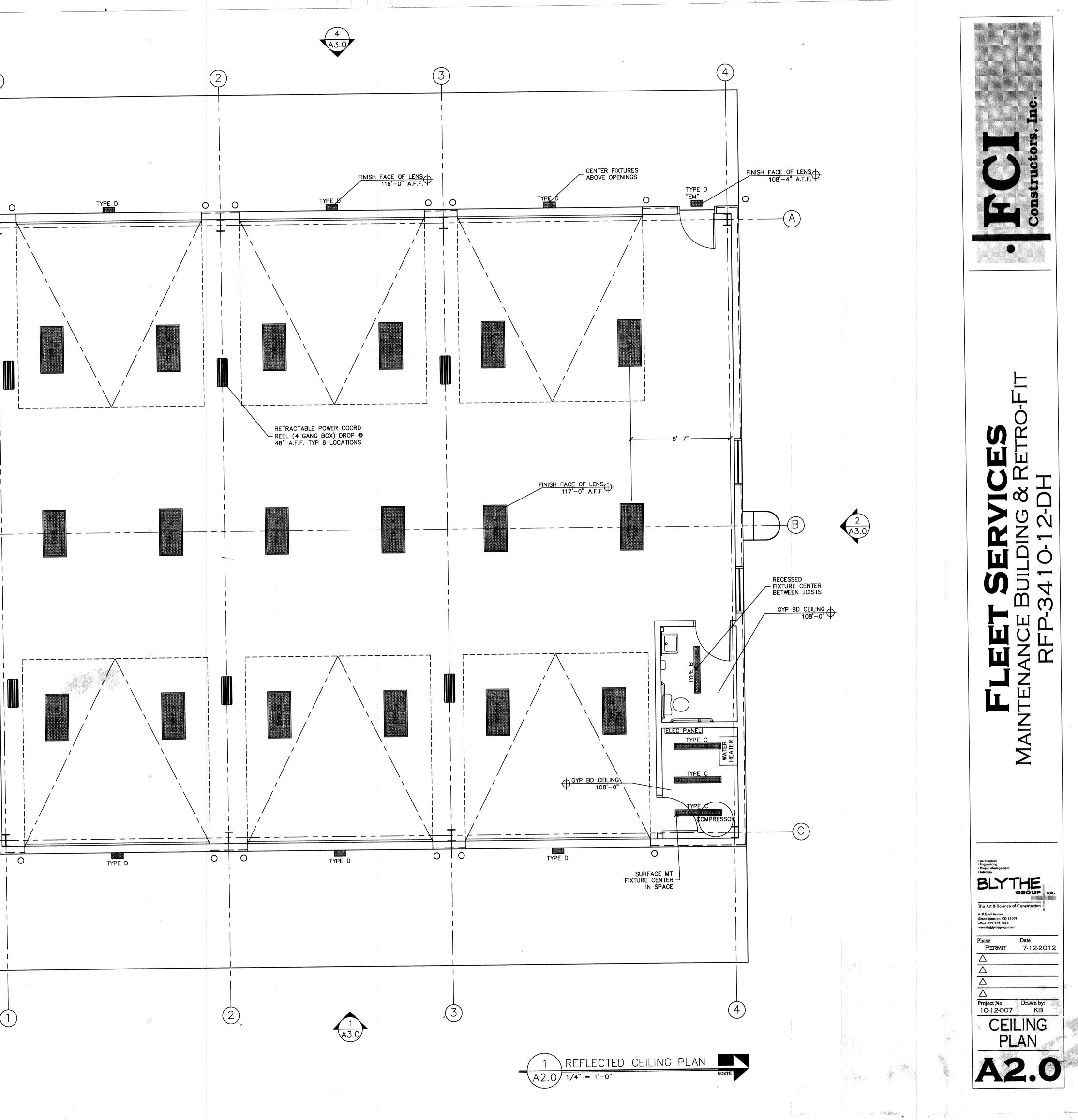


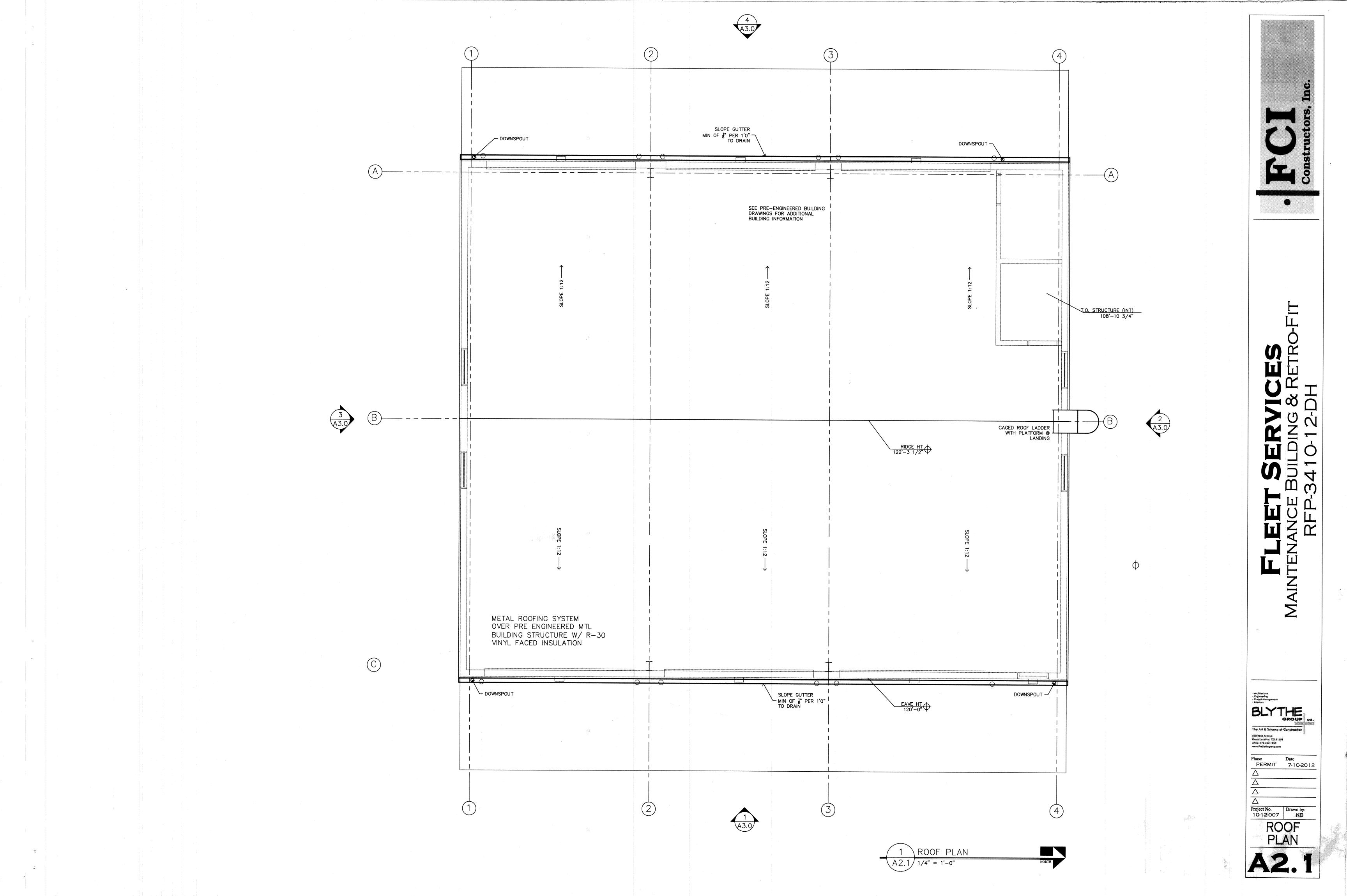


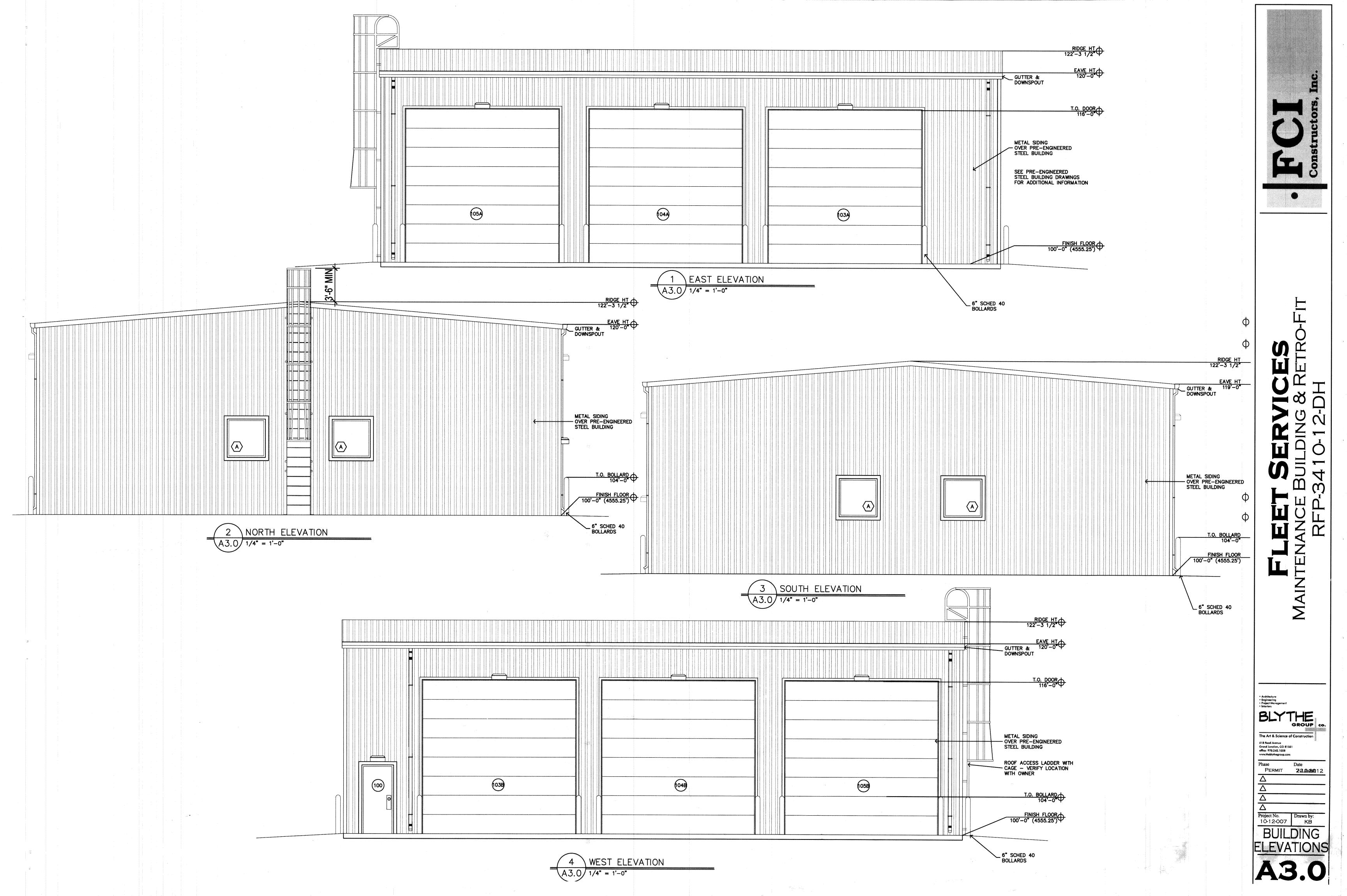


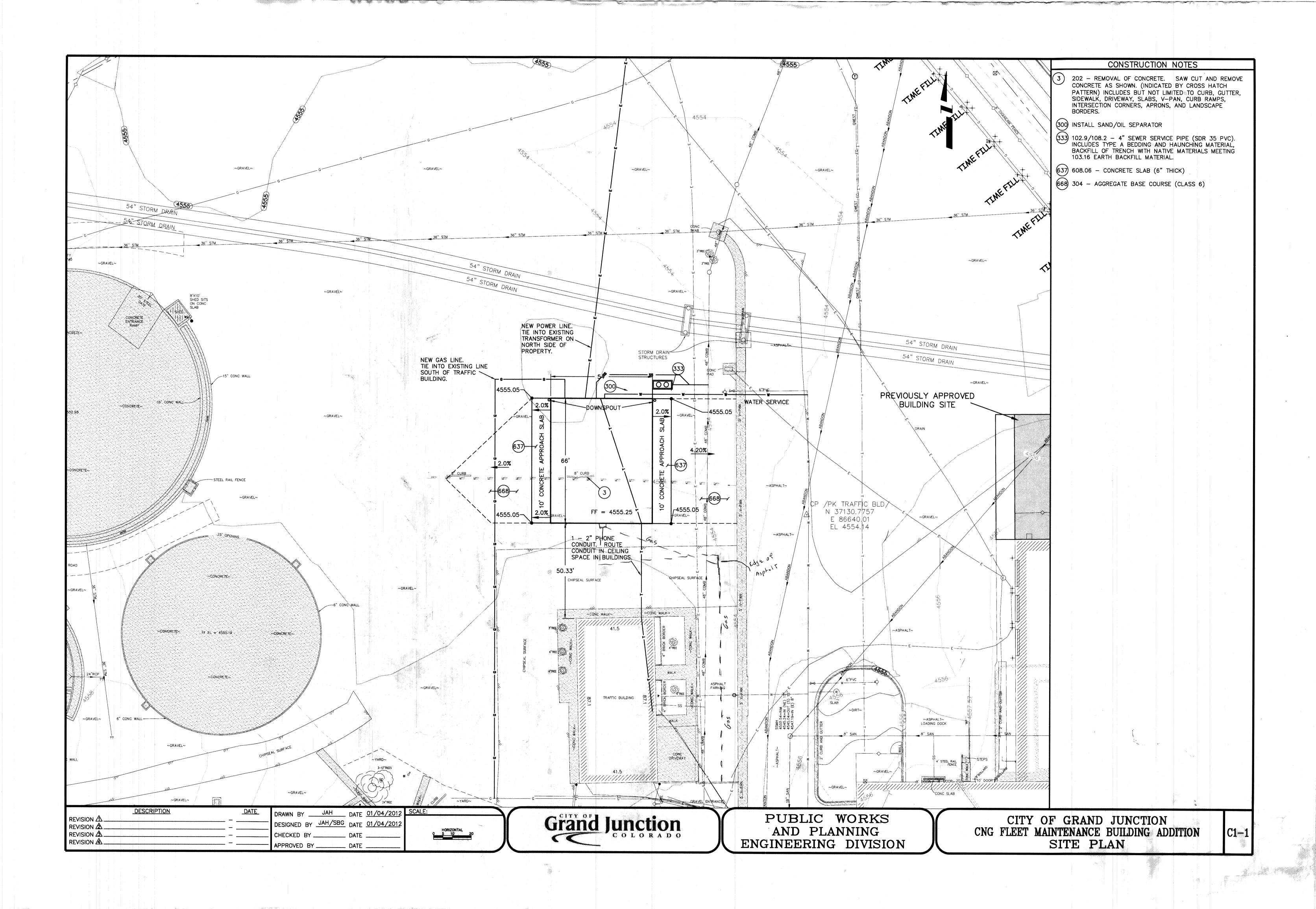


_IGH /PE	IT FIXTURE SC SIZE 2'X4' HIGH BAY FIXTURE 6"X4'0 RECESSED FLOURESCE 6"X4'0 SURFACE MOUNT FLOU 100W METAL HALIDE LAMP	NOTES: (6) F32T/8XX/XL/HL LAMPS (2) 3L-HP-HE-IS BALLASTS NON SHATTER PROTECTIVE LENSES STANDARD BALLASTS AND LAMPS STANDARD BALLASTS AND LAMPS EXT WALL PACK LIGHTING WITH PHOTOCELL			
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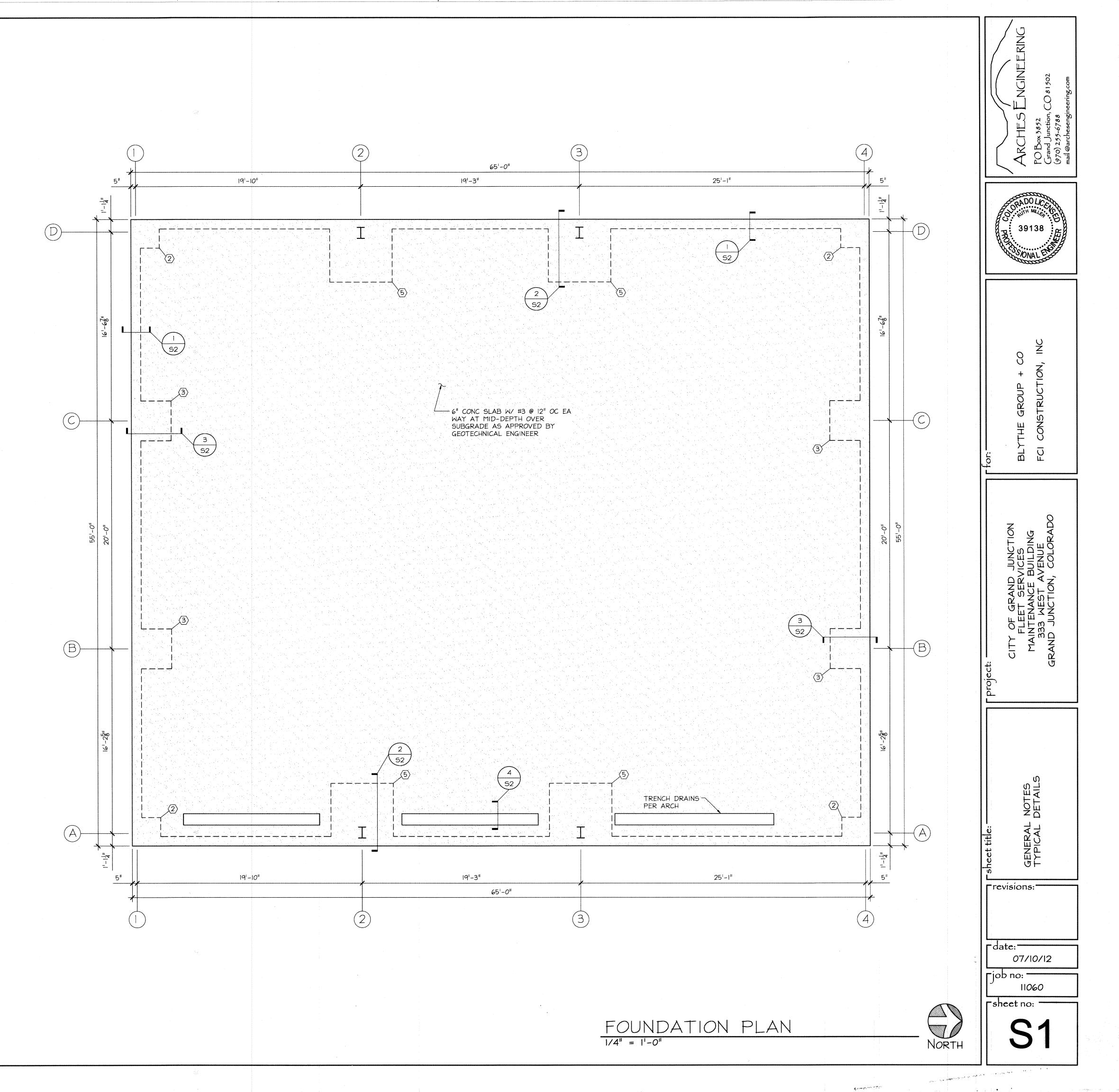


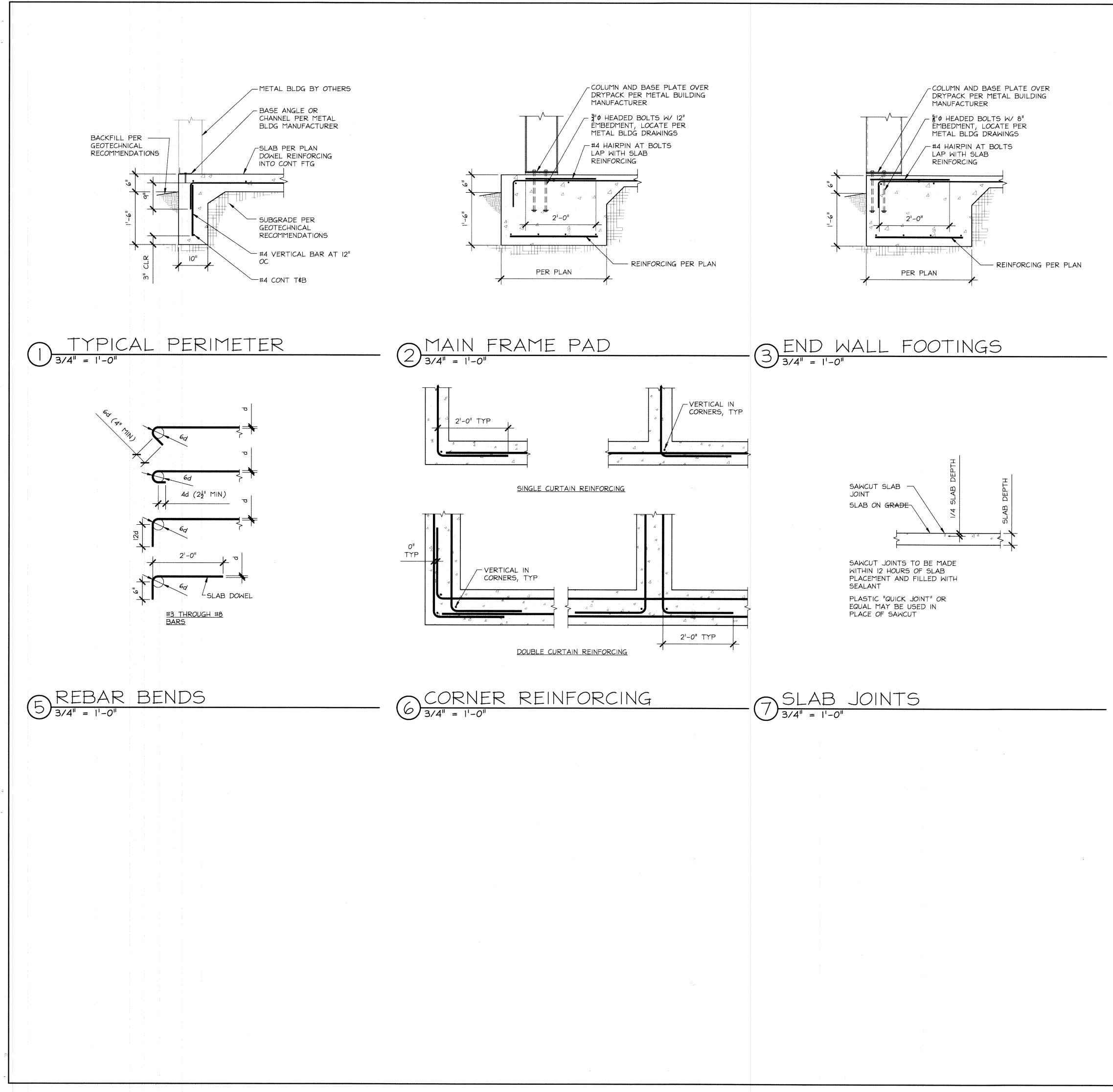


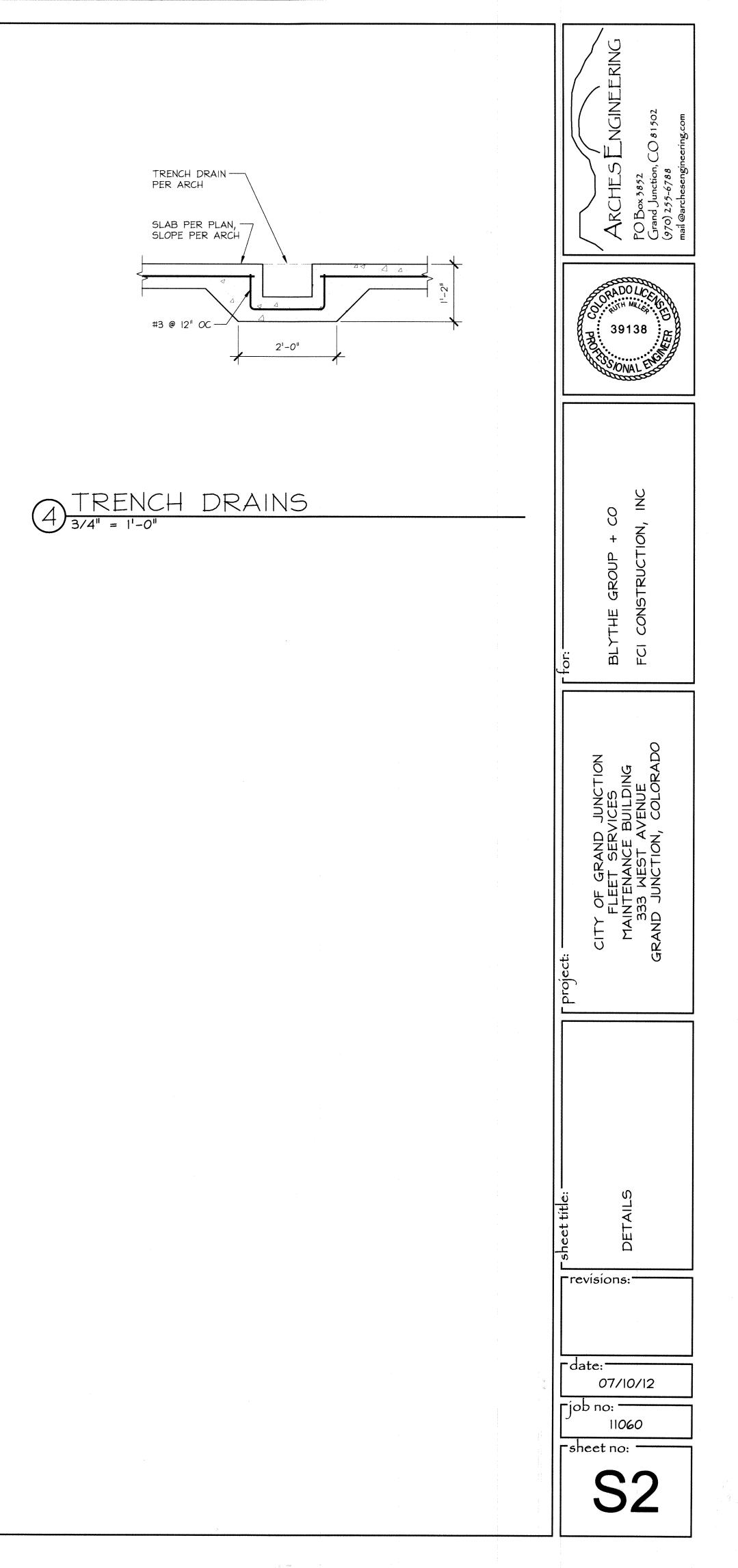


GENERAL NOTES	
I. WORK SHALL COMPLY WITH THE 2012 INTERNATIONAL BUILDING CODE (IBC) AND ANY APPLICABLE STATE AND LOCAL ORDINANCES, EXCEPT WHERE OTHER NOTES ARE MORE RESTRICTIVE.	
2. THESE DOCUMENTS DO NOT INCLUDE THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ANY JOB SITE VISIT BY THE ENGINEER IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES.	
3. DESIGN CRITERIA ROOF 30 PSF SNOW LOAD WIND SPEED 90 MPH EXPOSURE C I=1.0 SEISMIC DESIGN CATEGORY C SITE CLASS D I=1.0	
4. THE SOILS REPORT WAS PREPARED BY HUDDLESTON BERRY ENGINEERING & TESTING, PROJECT NO. 00214-0017, DATED 06/21/12 WITH AN ALLOWABLE SOIL BEARING PRESSURE OF 1000 PSF ON 30" OF STRUCTURAL FILL.	
5. FOUNDATION ENGINEERING DESIGN IS BASED ON DRAWINGS BY RIGID GLOBAL BUILDINGS, PROJECT NO. 96730, DATED JUNE 20 2012.	
6. VERIFY DIMENSIONS AND CONDITIONS SHOWN ON THESE DRAWINGS WITH THOSE SHOWN ON ARCHITECTURAL DRAWINGS AND METAL BUILDING DRAWINGS. PRIOR TO CONSTRUCTION, NOTIFY THE ARCHITECT AND ENGINEER OF DISCREPANCIES REQUIRING CLARIFICATION OR REVISIONS.	
7. TYPICAL DETAILS AND NOTES SHOWN ON DRAWINGS MAY NOT BE INDICATED ON THE PLANS BUT SHALL APPLY UNLESS NOTED OTHERWISE.	
8. SUBSTITUTIONS TO STRUCTURAL ELEMENTS TO BE APPROVED BY ENGINEER.	
9. VERIFY ALL OPENINGS IN FLOORS, ROOF AND WALLS WITH MECHANICAL AND ELECTRICAL REQUIREMENTS.	
10. EXISTING CONDITIONS INDICATED AS (E) OR VERIFY IN FIELD (VIF) REQUIRE THAT THE CONTRACTOR EITHER VERIFY THE PRESENCE OF SUCH CONDITIONS OR NOTIFY THE ARCHITECT/ENGINEER OF CONFLICTING CONDITIONS.	
II. OWNER AND CONTRACTOR SHALL IMMEDIATELY CONSULT WITH THE ARCHITECT OR ENGINEER WHERE VISUAL OBSERVATION OR DEMOLITION EXPOSES EXISTING CONDITIONS WHICH CONFLICT WITH THE DOCUMENTS OR REVEAL DAMAGED OR DETERIORATED ELEMENTS THAT ARE INTENDED TO REMAIN AS PART OF THE FINISHED PRODUCT.	
FOUNDATIONS	
I. FOOTINGS AND SLABS SHALL BEAR ON 30" OF COMPACTED STRUCTURAL FILL AS APPROVED BY THE GEOTECHNICAL ENGINEER. REFER TO THE GEOTECHNICAL REPORT FOR SOIL CONDITIONS AND RECOMMENDATIONS. GEOTECHNICAL ENGINEER SHALL EXAMINE THE OPEN EXCAVATION TO VERIFY SOIL CONDITIONS AND BEARING PRESSURE PRIOR TO CONSTRUCTION.	
2. FOOTINGS SHALL HAVE A MINIMUM OF 18" EMBEDMENT FOR FROST PROTECTION.	
3. CONTRACTOR IS TO LOCATE CRACK CONTROL JOINTS IN SLABS. SAW CUT JOINTS ARE TO BE MADE AS SOON AS CONCRETE SET WILL ALLOW. SLAB CONTROL JOINTS SHALL BE SPACED PER ACI RECOMMENDATIONS AND NOT MORE THAN 12' IN EACH DIRECTION.	
4. CONCRETE FORM WORK SHALL BE ADEQUATELY TIED TOGETHER AND BRACED TO FORM TRUE LINES, SQUARE CORNERS, AND PLUMB WALLS. ALL EXCAVATIONS SHALL BE CLEANED OF DEBRIS. WATER AND LOOSE SOIL SHALL BE REMOVED PRIOR TO PLACING CONCRETE.	
CONCRETE	
I. CAST IN PLACE CONCRETE SHALL BE NORMAL WEIGHT MIX AND DEVELOP MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS. TYPE V OR MODIFIED I-II SULFATE RESISTANT CEMENT AND A MAXIMUM WATER/CEMENT RATIO OF 0.45 SHALL BE USED. CONCRETE QUALITY, MIXING AND PLACING SHALL CONFORM TO ACI 318 AND IBC SECTION 1905.	
2. CAST IN PLACE CONCRETE SHALL BE PLACED CONTINUOUSLY, WITH NO COLD JOINTS UNLESS INDICATED IN THE DRAWINGS. MATERIAL SHALL BE ADEQUATELY VIBRATED TO PREVENT THE OCCURRENCE OF AIR POCKETS AND HONEYCOMB EFFECTS. ROCK POCKETS AND VOIDS SHALL BE REPAIRED.	
3. NO CONCRETE SHALL BE PLACED SUBJECT TO FREEZING CONDITIONS OR ON FROZEN GROUND. REINFORCING	
I. REINFORCING STEEL SHALL CONFORM TO ASTM A-615 GRADE 60. REINFORCING STEEL SHALL BE KEPT CLEAN AND FREE OF RUST.	
2. REINFORCING STEEL SHALL BE DETAILED IN ACCORDANCE WITH THE ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING OF REINFORCED CONCRETE STRUCTURES."	
3. ALL REINFORCING BARS SHALL BE AS LONG AS PRACTICAL AND ALL BENDS SHALL BE COLD BENT. SECURELY TIE REINFORCING BARS AT EACH END AT CORNERS AND INTERSECTIONS. BARS SHALL BE SUPPORTED ON ACCEPTABLE CHAIRS OR HUNG FROM FORMS.	
4. MINIMUM CONCRETE COVER REQUIREMENTS FOR REINFORCING STEEL, UNO: 3" WHEN CAST AGAINST AND EXPOSED TO EARTH 2" WHEN FORMED AND EXPOSED TO EARTH OR WEATHER 3" WHEN NOT EXPOSED TO WEATHER OR GROUND	
METAL BUILDING NOTES	
I. METAL BUILDING FOUNDATION ENGINEERING DESIGN IS BASED ON LOADS PROVIDED IN THE METAL BUILDING DRAWINGS BY RIGID GLOBAL BUILDINGS, PROJECT NO. 96730, DATED JUNE 20 2012 FOR CITY OF GRAND JUNCTION FLEET SERVICES.	
2. ALL ANCHOR BOLTS SHALL BE ASTM A307 WITH 12" MINIMUM EMBEDMENT INTO CONCRETE. REFER TO METAL BUILDING DRAWINGS FOR ANCHOR BOLT DIAMETER, PROJECTION, SPACING AND EDGE DISTANCE REQUIREMENTS.	
3. SEE METAL BUILDING DRAWINGS FOR BOLTING, WELDING OR OTHER SPECIAL INSPECTION REQUIREMENTS.	

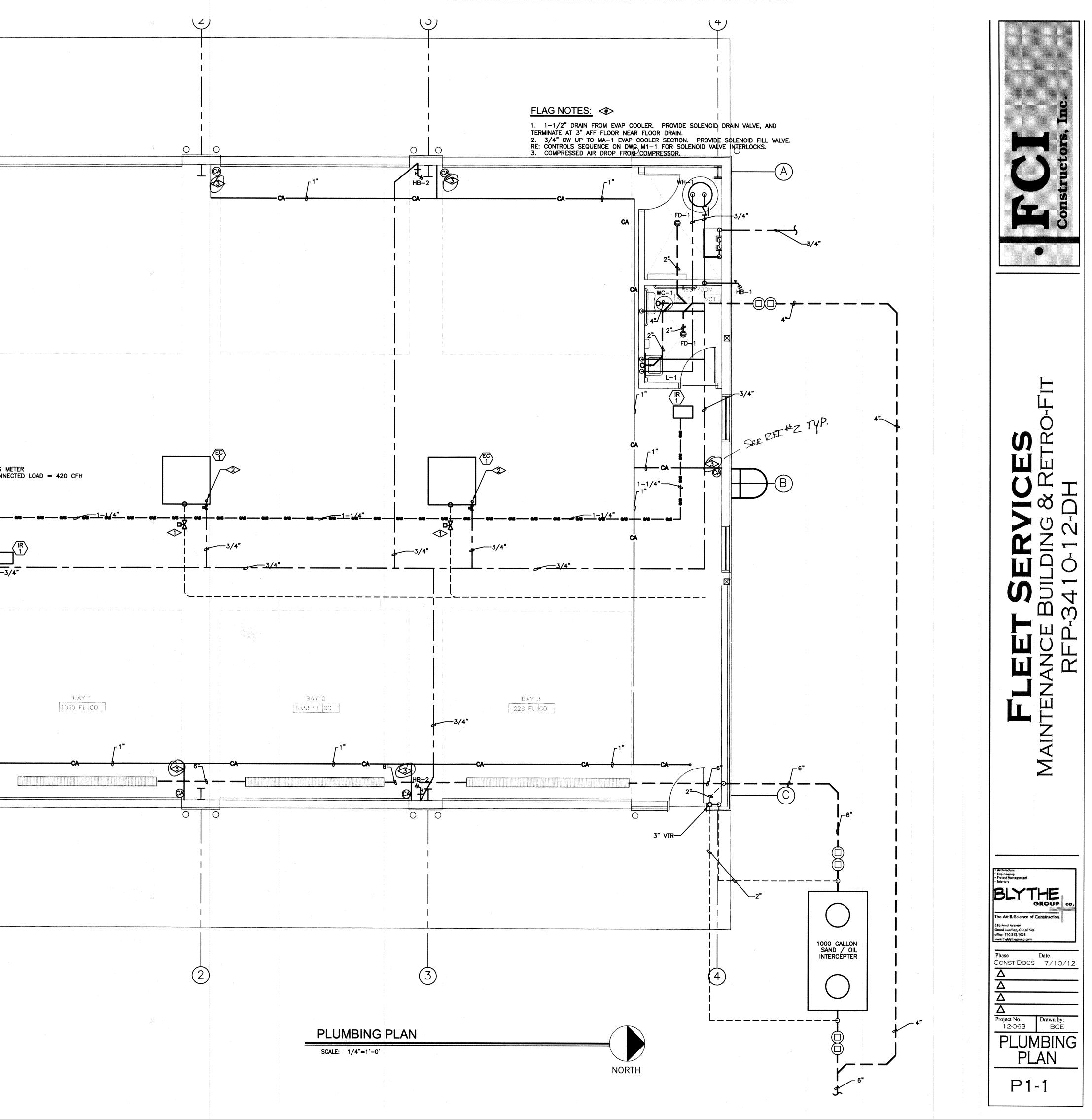
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MARK	CONCRETE PAD SIZE	DEPTH	REINFORCING
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2	2'-6"x2-6"	1	(3) #4 EA WAY
3	3'-6"x3'-6"	1	(4) #5 EA WAY
4	4'-6"x4'-6"	r	(5) #5 EA WAY
(5)	5'-6"x5'-6"		(6) #5 EA WAY

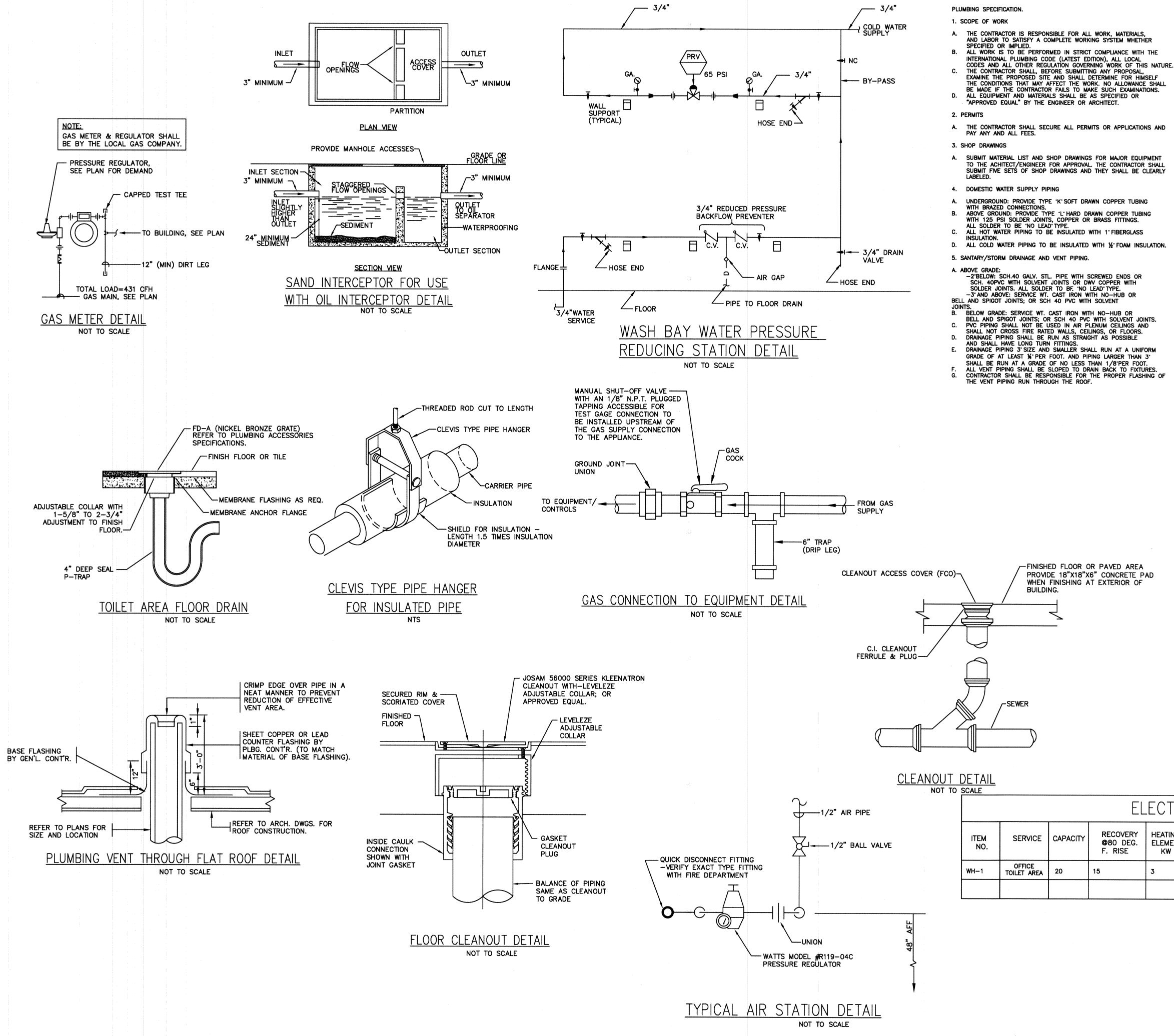






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TO GAS MAIN RE: CALL PLAN 1-1/2 GAS SOLENOD VAVE. INTERCOCED WITH IR-1 AND EF-1 RE: CONTROLS SEQUENCE ON DWO MI-1 HB-1 H			equired	Date Answered: 7/24/2012		
AS SULENDO VALVE, INTERLOOKIDUS SEQUENCE ON DWO MI-1 HB-1, C		This is for documentation only, no response is n	syuneu.		$\mathbb{B} $	- P COR
GAS SOLENOD VALVE, INTERLOCKED WITH IR-1 AND EF-1 RE: CONTROLS SECUENCE ON DWG M1-1 IB-1 AU C C C	GAS SOLDNOU VALVE, INTERLOOKED WITH IR-1 AND EF-1 RE: CONTROLS SEQUENCE ON DWO M1-1 HB-1 A HB-1 A HB			TO GAS MAIN RE:		
				WITH IR-1 AND SEQUENCE ON D	EF-1 RE: CONTROLS WG M1-1	
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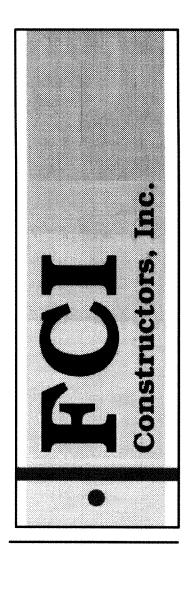
- 6. ALL STUB-INS AND/OR SLAB OR WALL PENETRATION TO BE PER INTERNATIONAL PLUMBING CODE (LATEST EDITION).ALL PIPING PENETRATIONS OF BUILDING FOUNDATIONS OR FOOTINGS SHALL BE SLEEVED.
- 7. PIPE SUPPORTS
- A. ABOVE GRADE ALL PIPE SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE IN A NEAT AND WORKMANLIKE MANNER. THE USE OF WIRE AND PERFORMED METAL TO SUPPORT PIPES WILL NOT BE PERMITTED. SPACING OF PIPE SUPPORTS SHALL BE AS SPECIFIED IN INTERNATIONAL PLUMBING
- CODE (LATEST EDITION). B. BELOW GRADE EARTH SHALL BE EXCAVATED TO A MINIMUM DEPTH WITH AN EVEN SURFACE TO INSURE SOLID BEARING OF PIPE FOR ITS ENTIRE LENGTH. -INTERIOR: THE PIPE SHALL BE INSTALLED (UNLESS OTHERWISE SPECIFIED) A MINIMUM OF 4 INCHES BELOW THE BOTTOM OF THE SLAB AND SHALL NOT BE IN ANY DIRECT CONTACT WITH THE CONCRETE AT ANY POINT. -EXTERIOR: THE WATER PIPE SHALL HAVE A MINIMUM OF 42" OF COVER
- AND THE SANITARY WASTE PIPE SHALL HAVE A MINIMUM OF 24" OF COVER. 8. MISCELLANEOUS
- A. COORDINATE INSTALLATION OF ALL ROOFS FLASHING AT ROOF PENETRATION. B. DO NOT SCALE THIS DRAWING FOR EXACT DIMENSIONS. VERIFY ALL FIGURES, CONDITIONS AND DIMENSIONS AT THE JOB SITE. C. THE PLUMBING PLANS ARE INTENDED TO BE DIAGRAMMATIC AND ARE
- BASED ON ONE MANUFACTURE'S EQUIPMENT. THEY ARE NOT INTENDED TO SHOW EVERY ITEM IN ITS EXACT LOCATION. THE TAKE NOT INTENDED TO SHOW EVERY ITEM IN ITS EXACT LOCATION. THE EXACT DIMENSIONS OR ALL THE DETAILS OF THE EQUIPMENT. THE CONTRACTOR SHALL VERIFY THE ACTUAL DIMENSIONS OF THE EQUIPMENT PROPOSED TO ENSURE THAT THE EQUIPMENT WILL FIT THE AVAILABLE SPACE.
- 9. TESTING
- A. PLUMBING SYSTEM SHALL BE FLOW AND PRESSURE TESTED IN ACCORDANCE WITH THE INTERNATIONAL PLUMBING CODE (LATEST EDITION).
- 10. GUARANTEE
- A. MATERIALS, EQUIPMENT AND INSTALLATION SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE. DEFECTS WHICH APPEAR DURING THAT PERIOD SHALL BE CORRECTED AT THIS
- CONTRACTOR'S EXPENSE. B. FOR THE SAME PERIOD. THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO PREMISES CAUSED BY DEFECTS IN WORKMANSHIP OR IN THE WORK OR EQUIPMENT FURNISHED AND/OR INSTALLED BY HIM.

	PLUMB	ING FIXTURE	SCHEDULE	
ITEM	MANUFACTURER	MODEL	TRIM/ACCESSORIES	NOTES
BFP-1	FEBCO	860	WYE STRAINER, BALL SHUTOFF REDUCED PRESSURE ASSEMBLY	_
WC-1	AMERICAN STD	2320.101	PROVIDE ALL ITEM NECESSARY FOR STANDARD INSTALLATION	-
FD-1	ZURN	Z453-5B	-	
L-1	KOHLER	K-2202-4	ADA, 4" CENTERS, COUNTER MOUNT K-8998, K-7404-5A, ADA TRIM	-
HB-1	WOODFORD	B67	FREEZEPROOF	-
HB—2	WOODFORD	76	MILD CLIMATE	
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FIXTURE	CONNECT	ION SCHE	DULE	
WASTE	VENT	COLD WATER	HOT WATER	NOTES
3"	2"	3/4"	_	
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3"	2"	1"	_	-
2"	1-1/2*	-		
-	-	3/4*		- - - -
3"	1-1/2"	1/2*	1/2"	
1 1/4"	1-1/4"	1/2"	_	-
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PLUMBING

DETAILS

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618 Road Avenue Grand Junction, CO 81501 office: 970.242.1058

www.thebiythegroup.co

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CODE STUDY AND CONTROL SEQUENCE:

NEC 2011, NFPA 70 THE 2011 NATIONAL ELECTRIC CODE IS ALSO NFPA 70. THIS SPACE IS A MINOR REPAIR GARAGE ACCORDING TO THE NEC. THIS MEANS THEY WILL NOT BE TRANSFERRING FUEL IN THE SPACE. THIS IS A KEY COMPONENT OF THIS CODE REVIEW. THE SPACE DOES NOT HAVE TO BE CLASSIFIED IF THE PROPER VENTILATION IS PROVIDED. THE "PROPER" VENTILATION ACCORDING TO THE NEC IS 1 CFM PER SQUARE FOOT OF SPACE TO KEEP IT UNCLASSIFIED.

THE INTERNATIONAL MECHANICAL CODE 2012 THE 2012 IMC WOULD CLASSIFY THIS SPACE AS A REPAIR GARAGE. 2012 CODE REQUIRES 0.75 CFM PER SQUARE FOOT OF EXHAUST FOR THE SPACE. THIS CAN BE CONTINUOUS EXHAUST OR IT CAN BE CONTROLLED BY A GAS DETECTION SYSTEM DETECTING CARBON MONOXIDE. WE WILL BE CONTROLLING THIS FROM A GAS DETECTION SYSTEM. HOWEVER, THE 0.75 CFM PER SQUARE FOOT WILL NOT BE USED, AS THE REQUIREMENT FROM THE NEC IS HIGHER AT 1 CFM PER SQUARE FOOT. THE IMC 2012 ALSO STATES REQUIREMENTS FOR NATURAL GAS. THE KEY ELEMENT IN THIS ITEM IS THAT IT IS IN A GASEOUS FORM AND THAT IT IS ODORIZED FROM THE NATURAL GAS UTILITY. THE REQUIREMENT IS TO ACTIVATE THE GAS DETECTION SYSTEM ON A DETECTION OF NATURAL GAS AT 25% OF THE LOWER EXPLOSION LIMIT. AN ALARM WILL ALSO ACTIVATE IF THE GAS DETECTION SYSTEM FAILS. THIS AIR FLOW VALUE IS 1 CUBIC FOOT OF AIR PER 12 CUBIC FEET OF SPACE OR 5 AIR CHANGES PER HOUR.

INTERNATIONAL BUILDING CODE, 2012 THE INTERNATIONAL BUILDING CODE, 2012 MIRRORS THE REQUIREMENTS OF THE INTERNATIONAL MECHANICAL CODE LISTED ABOVE.

INTERNATIONAL FIRE CODE, 2012 THE INTERNATIONAL FIRE CODE, 2012 MIRRORS THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE AND THE INTERNATIONAL MECHANICAL CODE, 2012. AGAIN, THE REQUIREMENTS FOR LIQUID NATURAL GAS DO NOT APPLY FOR NON ODORIZED GAS.

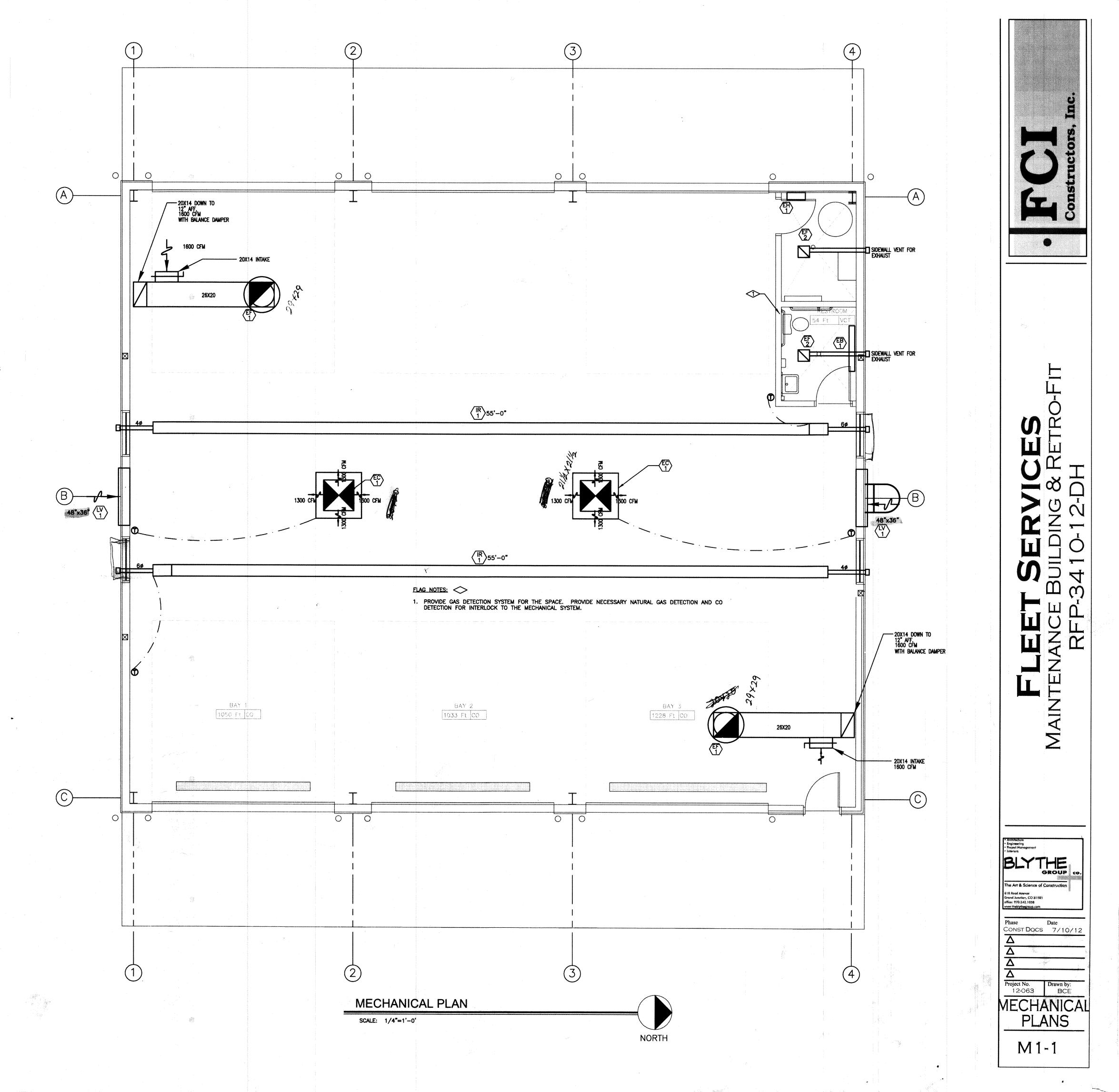
WITH THE ABOVE CODE INFORMATION, THE SEQUENCE OF OPERATION FOR THE MAINTENANCE BAYS WILL BE AS FOLLOWS: NORMAL OPERATION.

THE INFRARED HEATERS WILL PROVIDE THE HEATING FOR THE SPACE. EACH ONE WILL HAVE A THERMOSTAT ON THE WALL CONTROLLING AN AREA. THE SPACE TEMPERATURE WILL CONTROL TO ABOVE 60 DEGREES F. AND WILL SHUT OFF ABOVE 70 DEGREES F.

THE EVAPORATIVE COOLERS, EC-1 HAVE A MANUAL CONTROL PANEL ON THE WALL AS WELL AS A SPACE MOUNTED THERMOSTAT. IF THE OUTSIDE AIR TEMPERATURE IS ABOVE 75 DEGREES AND THE SPACE TEMPERATURE RISES ABOVE 75 DEGREES, THE EVAPORATIVE COOLER WILL BE ENABLED, FILLED WITH WATER AND MAINTAIN 75 DEGREES TEMPERATURE IN THE SPACE. ALL THE FUNCTIONS CAN ALSO BE CONTROLLED MANUALLY FROM THE WALL MOUNTED CONTROLS. IF THE OUTSIDE AIR IS BELOW 45 DEGREES F, THE EVAPORATIVE COOLING WILL DRAIN. THE SUPPLY FAN CAN ALSO BE TURNED ON AT ANY TIME MANUALLY IF VENTILATION IS NEEDED BY THE OCCUPANTS.

THE EXHAUST FANS FOR THE VEHICLE EXHAUST SYSTEM SHALL BE OFF. THIS INCLUDES EF-1, AND EF-2. ON DETECTION OF CARBON MONOXIDE, THE MOTORIZED DAMPERS ON THE LOUVERS WILL OPEN AND OPERATE WITH CO LEVELS ABOVE 10 PPM. IT WILL PROVIDE AIR 100% OUTSIDE AIR AND WILL REMAIN OPEN UNTIL THE CO LIMITS FALL BELOW 5 PPM. THE EXHAUST FANS EF-1, AND EF-2 WILL TURN ON. ON DETECTION OF NATURAL GAS

THE MOTORIZED DAMPERS ON THE LOUVERS WILL OPEN AND STAY OPEN WITH NATURAL GAS LEVELS ABOVE 25% LEL. THE GAS LINE TO THE REPAIR GARAGE AREA WILL BE TURNED OFF WITH A GAS SOLENOID VALVE TO CUT HEATING TO THE ENTIRE SPACE. IT WILL REMAIN IN THIS CONDITION UNTIL THE NATURAL GAS LIMITS FALL BELOW 5% LEL. THE EXHAUST FANS EF-1 WILL TURN ON PROVIDING 5 AIR CHANGES PER HOUR OF EXHAUST. THE GARAGE DOOR OPERATORS SHALL BE ACTIVATED TO OPEN 18" OFF THE FLOOR TO PROVIDE ADDITIONAL MAKE UP AIR TO THE SPACE FOR THE EXHAUST BALANCE.



MECHANICAL PROVISIONS

1. SCOPE OF WORK

- A. THE CONTRACTOR IS RESPONSIBLE FOR ALL WORK, MATERIALS, AND LABOR TO SATISFY A COMPLETE WORKING SYSTEM WHETHER SPECIFIED OR IMPLIED.
- ALL WORK IS TO BE PERFORMED IN STRICT COMPLIANCE WITH В. ALL LOCAL CODES AND ALL OTHER REGULATION GOVERNING WORK OF THIS NATURE.
- C. THE CONTRACTOR SHALL, BEFORE SUBMITTING ANY PROPOSAL, EXAMINE THE PROPOSED SITE AND SHALL DETERMINE FOR HIMSELF THE CONDITIONS THAT MAY EFFECT THE WORK. NO ALLOWANCE SHALL
- BE MADE IF THE CONTRACTOR FAILS TO MAKE SUCH EXAMINATIONS. D. ALL EQUIPMENT AND MATERIALS SHALL BE AS SPECIFIED OR
- "APPROVED EQUAL" BY THE ENGINEER OR ARCHITECT.

2. PERMITS

- A. THE CONTRACTOR SHALL SECURE ALL PERMITS OR APPLICATIONS AND PAY ANY AND ALL FEES.
- 3. SHOP DRAWINGS
- A. SUBMIT MATERIAL LIST AND SHOP DRAWINGS FOR MAJOR EQUIPMENT TO THE ACHITECT/ENGINEER FOR APPROVAL. THE CONTRACTOR SHALL SUBMIT FIVE SETS OF SHOP DRAWINGS AND THEY SHALL BE CLEARLY LABELED.
- 4. FLEXIBLE DUCT WORK
- A. FLEXIBLE TYPE DUCT SHALL BE OF TWO ELEMENT SPIRAL CONSTRUCTION COMPOSED OF A CORROSION RESISTANT METAL SUPPORTING SPIRAL AND COATED FABRIC WITH A MINERIAL BASE. FLEXIBLE DUCT CONNECTORS SHALL BE LISTED BY U.L., CLASS 1 DUCTS, AND SHALL HAVE A FLAME SPREAD RATING NOT EXCEEDING 25 AND A SMOKE DEVELOPED
- RATING NOT EXCEEDING 50. B. USE OF FLEXIBLE DUCTWORK SHALL BE LIMITED TO NO MORE THAN
- 6 LINEAR FEET PER RUN. C. CONTRACTOR SHALL BE CAREFUL SO AS NOT TO KINK OR COLLAPSE FLEXIBLE DUCT.

5. DUCTWORK

- A. THE DUCTWORK SHALL BE CONSTRUCTED IN ACCORDANCE
- WITH THE "SMACNA" APPLICABLE MANUALS. ALL DUCTWORK SHALL BE THE LOW VELOCITY TYPE, UNLESS SPECIFIED В. OTHERWISE. CONTRACTOR SHALL PROVIDE AND INSTALL APPROVED FIRE C.
- DAMPERS AND ACCESS PANELS IN ANY AND ALL DUCTWORK WHICH PENETRATES A HORIZONTAL OR VERTICAL FIRE PARTITION, OR AS OTHERWISE SHOWN ON DRAWINGS.
- ALL BRANCH DUCTS TO HAVE VOLUME DAMPERS, SMOOTH TURN RADIUS D. DUCTWORK OR TURNING VANES SHALL BE USED THROUGHOUT WHERE FLOW EXCEEDS 150 CFM.
- ALL DUCT JOINTS TO BE SEALED IN ACCORDANCE WITH "SMACNA" Ε. STANDARDS AND ACCEPTED GOOD PRACTICE.
- ALL DUCT DIMENSIONS SHOWN ARE NET INSIDE VALUES. DIMENSIONS MAY BE F.
- CHANGED SO LONG AS THE NET FREE FACE AREA IS MAINTAINED. G. ALL CONCEALED DUCTWORK SHALL BE INSULATED WITH 1-1/2"
- FIBERGLASS INSULATING BLANKET WITH ALUMINUM FOIL FACING.
- ALL SUPPLY AND RETURN DUCTWORK 15 FEET DOWNSTREAM OF THE HVAC H. UNIT SHALL BE INTERNALLY LINED WITH A 1/2" ACOUSTICAL DUCT LINER.

6. HVAC CONTROLS

- A. CONTRACTOR TO SUPPLY AND INSTALL ALL CONTROL WIRING AND THERMOSTATS AS REQUIRED.
- 7. ELECTRICAL
- CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR A. FOR A. | LOCATION OF WIRING FOR EACH HVAC UNIT.

8. PIPE SUPPORTS

ALL PIPE SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE IN A Α. NEAT AND WORKMANLIKE MANNER. THE USE OF WIRE OR METAL STRAP TO SUPPORT PIPES WILL NOT BE PERMITTED. SPACING OF PIPE SUPPORTS SHALL NOT EXCEED 8 FEET FOR ALL PIPING. PLASTIC PIPING TO BE SUPPORTED EVERY 4 FEET.

9. GAS PIPING

PIPING SHALL BE SCHEDULE 40 BLACK STEEL PIPE WITH MALLEABLE IRON Α. FITTINGS. WHERE GAS PIPE CONNECTS TO EQUIPMENT, IT SHALL BE PROVIDED WITH A DRIP LEG THE FULL SIZE OF THE RUNOUT, A 100% SHUT-OFF VALVE AND A UNION. GAS PIPING CONTAINING PRESSURE GREATER THAN 9" W.G. SHALL BE SCHEDULE 40 BLACK STEEL PIPE WITH WELDED JOINTS.

10. MISCELLANEOUS

- A. ALL EXTERIOR OPENINGS TO BE PROPERLY CAULKED AND SEALED WITH A SEALANT OF HIGH QUALITY AND LONG LIFE, TO PREVENT INFILTRATION OF OUTSIDE AIR INTO CONDITIONED SPACE. COORDINATE INSTALLATION OF ALL ROOF FLASHING AT ROOF PENETRATION.
- DO NOT SCALE THIS DRAWING FOR EXACT DIMENSIONS. VERIFY ALL FIGURES, CONDITIONS, AND DIMENSIONS AT THE JOB SITE.
- THE MECHANICAL PLANS ARE INTENDED TO BE DIAGRAMMATIC AND ARE BASED ON ONE MANUFACTURE'S EQUIPMENT. THEY ARE NOT INTENDED TO SHOW EVERY ITEM IN ITS EXACT LOCATION, THE EXACT DIMENSIONS, OR ALL THE DETAILS OF THE EQUIPMENT.
- THE CONTRACTOR SHALL VERIFY THE ACTUAL DIMENSIONS OF THE EQUIPMENT E. PROPOSED TO ENSURE THAT THE EQUIPMENT WILL FIT IN THE AVAILABLE SPACE.

11. TESTING AND BALANCING

A. THE HVAC SYSTEM SHALL BE TESTED AND AND BALANCED BY AN INDEPENDENT AGENCY, UNDER THE SUPER-VISION OF A LICENSED PROFESSIONAL ENGINEER. A SEALED TYPE WRITTEN REPORT SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER FOR REVIEW AND APPROVAL.

12. GUARANTEE

- MATERIALS, EQUIPMENT AND INSTALLATION SHALL BE GUARANTEED FOR A A. | PERIOD OF ONE(1) YEAR FROM DATE OF ACCEPTANCE. DEFECTS WHICH APPEAR DURING THAT PERIOD SHALL BE CORRECTED AT THIS CONTRACTOR'S
- EXPENSE. FOR THE SAME PERIOD, THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE **B**. FOR ANY DAMAGE TO PREMISES CAUSED BY DEFECTS IN WORKMANSHIP OR IN THE WORK OR EQUIPMENT FURNISHED AND/OR INSTALLED BY HIM.

AVALIBLE

							11/
EQUIPMENT	SERVICE	INPUT	OUTPUT	FUEL	IGNITION	TUBE	E
. NO.		(MBH)	(MBH)	TYPE	TYPE	DIAMETER	AMPS
IR-1	BAY HEATING	175	140	NG	ELEC	4"	2.25
NOTES:		-					

PROVIDE WITH SPARK IGNITION CONTROL, PROGRAMMABLE THERMOSTAT, BURNER, CONTROLS, PREWIRED CONTROL HOUSING, COMBUSTION AND AIR PROVING SWITCHES, LENGTH SHALL BE 55 FEET.

					F	AN	S(CHEDUL	E	EF
EQUIPMENT	SERVICE	LOCATION	CFM	STATIC			MOTOR		MANUFACTURER & MODEL	OPTIONS-ACCESSORIES
NO.	:			PRESS. (IN. W.G.)	WATTS	HP	RPM	VOLTPHCY.		
EF-1	SERVICE BAY	ROOF	3200	0.75"	-	3/4	1055	208/3/60	GREENHECK GB-180	NOTE 1
EF-2	RESTROOM	CEILING	75	.5"	80	-	950	120/1/60	GREENHECK SP-B110	NOTE 2

				E	LECT	RIC	UNIT HEATE	er schedule
EQUIPMENT	SERVICE	CFM	INPUT		ELECTRIC		MANUFACTURER & MODEL	OPTIONS-ACCESSORIES
NO.			(MBH)	KW	VPHCY.	MCA		
EH-1	ON WALL OR SEMI-RECESSED IN WALL	245	6.8	2.0	208-1-60	-	BERKO FRA 4020	208 OR 240 1 PHASE, UP TO 4.8 KW. 21"X14"X6" UNIT OR WALL MOUNTED THERMOSTAT. PROVIDE CIRCUIT BREAKER.

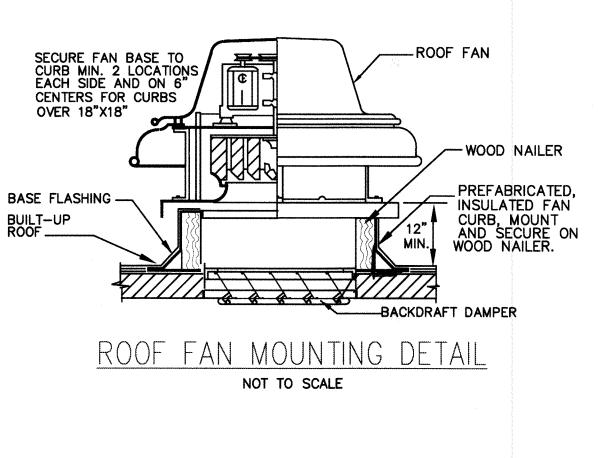
TAG	MANUFACTURER MODEL NUMBER	CFM @ .2" ESP	VOLT/ PHASE	AMPS	SPEED	NOTES	
C-1	BREEZAIR EXT 265	4600	120/1	992	2 SPEED	1, 206 LBS	

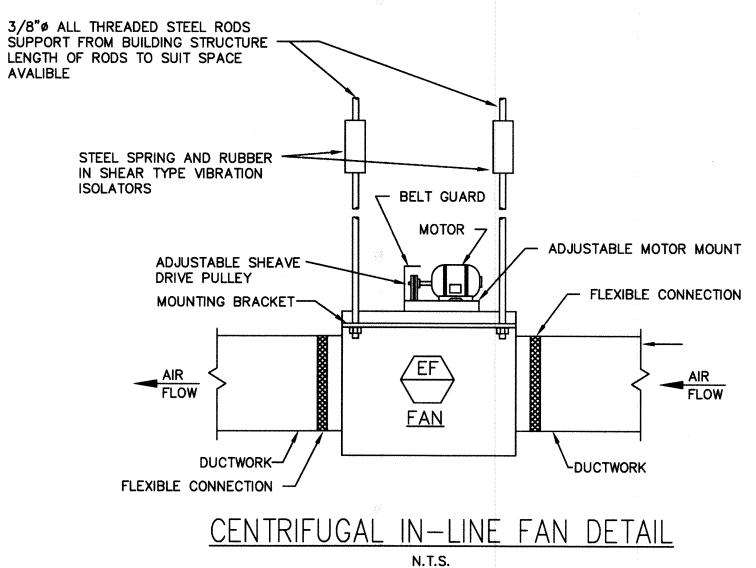
COVER AND DELIVER TO OWNER.

			LOU	JVER	&	VENT	SCHEDULE	
Equipment No.	SERVICE	WIDTH	HEIGHT	THICKNESS OF WALL	MATERIAL	SCREEN	MANUFACTURER & MODEL	OPTIONS-ACCESSORIES
LV-1	INTAKE	AS SHOWN	AS SHOWN	8 "	STEEL	3/4"	RUSKIN, #L811	PRIME COAT FINISH
NOTES:								

PROVIDE WITH MOTORIZED DAMPERS INTERLOCKED WITH THE GAS DETECTION SYSTEM.

			EL	ECTRIC	BASEBOA	RD HEATER SCH	IEDULE	E
TAG	AREA		EL	ECTRICAL	DATA			
	SERVED	FEET	WATTS	AMPS	VOLTAGE	MANUFACTURER	MODEL OR SERIES	NOTES
EB1	TOILET ROOM	5	250/FT	15	120/1/60	BERKO	RKOC WALL MOUNTED	1. PROVIDE UNIT MOUNTED THERMOSTAT





RADIANT HEATER SCHEDULE

ELECTRIC MANUFACTURER & MODEL VOLT.-PH.-CY. 120-1-60 ROBERTS GORDON BH-175 55 FEET

FLEET SERVICES	MAINTENANCE BUILDING & RETRO-FIT	RFP-3410-12-DH
The Art & Science of Co 618 Rood Avenue Grand Juncton, CO 81501 effice: 970 242.1058 www.thebiythegroup.com Phase I CONST DOCS A A A	Date 7/10 Drawn by BCE	

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POLISHED ALUMINUM REFLECTOR AND HANGERS, SEE NOTES

OPTIONS-ACCESSORIES

					F	AN	
EQUIPMENT	SERVICE	LOCATION	CFM	STATIC)
NO.				PRESS. (IN. W.G.)	WATTS	HP	f
EF-4	SHOP	ROOF	2500	0.5	-	1/2	9
NOTEC							
<u>NOTES:</u> 1.	PROVIDE WITH ROOF CUR	B, BACKDRAFT DAMPER, DI	SCONNECT S	WITCH.			

-ROOF FAN SECURE FAN BASE TO CURB MIN. 2 LOCATIONS EACH SIDE AND ON 6" CENTERS FOR CURBS OVER 18"X18" - WOOD NAILER - PREFABRICATED, INSULATED FAN BASE FLASHING -CURB, MOUNT AND SECURE ON WOOD NAILER. BUILT-UP ROOF -----A & & & & /////// -BACKDRAFT DAMPER ROOF FAN MOUNTING DETAIL NOT TO SCALE

SCHEDULE

SC	CHEDU	LE						
MOTOR		MANUFACTURER & MODEL	OPTIONS-ACCESSORIES					
RPM	VOLTPHCY.							
927	120-1-60	COOK, #ACE-B 180		SEE NOTE	1			

FLAG NOTES: 🔿

- 1. PROVIDE AND INSTALL FOUR (4) 48X36 MOTORIZED DAMPERS ON THE EXISTING LOUVERS TO BE CONNECTED TO THE NEW GAS DETECTION SYSTEM AND MECHANICAL EQUIPMENT.
- 2. PROVIDE GAS DETECTION SYSTEM FOR THE SPACE. PROVIDE NECESSARY NATURAL GAS DETECTION AND CO2 DETECTION FOR INTERLOCK TO THE MECHANICAL SYSTEM.
- 3. PROVIDE A NEW 2500 CFM EXHAUST FAN MOUNTED AT THE PEAK OF THE SPACE FOR CONNECTION TO THE GAS DETECTION SYSTEM. ANOTHER OPTION FOR PROVIDING THE ADDITIONAL EXHAUST NEEDED WOULD BE TO BALANCE THE EXISTING EXHAUST FANS UP TO 6,250 CFM EACH.

4. PROVIDE A 3" GAS SOLENOID VALVE FOR CONTROL OF HEATING ON DETECTION OF CNG IN THE SPACE. SEE CONTROL SEQUENCE.

CODE STUDY AND CONTROL SEQUENCE:

NEC 2011, NFPA 70 THE 2011 NATIONAL ELECTRIC CODE IS ALSO NFPA 70. THIS SPACE IS A MINOR REPAIR GARAGE ACCORDING TO THE NEC. THIS MEANS THEY WILL NOT BE TRANSFERRING FUEL IN THE SPACE. THIS IS A KEY COMPONENT OF THIS CODE REVIEW. THE SPACE DOES NOT HAVE TO BE CLASSIFIED IF THE PROPER NET THE "PROPER" VENTILATION ACCORDING TO THE NEC IS 1 CFM PER SQUARE VENTILATION IS PROVIDED. THE "PROPER" VENTILATION ACCORDING TO THE NEC IS 1 CFM PER SQUARE FOOT OF SPACE TO KEEP IT UNCLASSIFIED.

THE INTERNATIONAL MECHANICAL CODE 2012 THE 2012 IMC WOULD CLASSIFY THIS SPACE AS A REPAIR GARAGE. 2012 CODE REQUIRES 0.75 CFM PER SQUARE FOOT OF EXHAUST FOR THE SPACE. THIS CAN BE CONTINUOUS EXHAUST OR IT CAN BE CONTROLLED BY A GAS DETECTION SYSTEM DETECTING CARBON MONOXIDE. WE WILL BE CONTROLLING THIS FROM A GAS DETECTION SYSTEM. HOWEVER, THE 0.75 CFM PER SQUARE FOOT WILL NOT BE USED, AS THE REQUIREMENT FROM THE NEC IS HIGHER AT 1 CFM PER SQUARE FOOT. THE IMC 2012 ALSO STATES REQUIREMENTS FOR NATURAL GAS. THE KEY ELEMENT IN THIS ITEM IS THAT IT IS IN A GASEOUS FORM AND THAT IT IS ODORIZED FROM THE NATURAL GAS UTILITY. THE REQUIREMENT IS TO ACTIVATE THE GAS DETECTION SYSTEM ON A DETECTION OF NATURAL GAS AT 25% OF THE LOWER EXPLOSION LIMIT. AN ALARM WILL ALSO ACTIVATE IF THE GAS DETECTION SYSTEM FAILS. THIS AIR FLOW VALUE IS 1 CUBIC FOOT OF AIR PER 12 CUBIC FEET OF SPACE OR 5 AIR CHANGES PER HOUR.

INTERNATIONAL BUILDING CODE, 2012 THE INTERNATIONAL BUILDING CODE, 2012 MIRRORS THE REQUIREMENTS OF THE INTERNATIONAL MECHANICAL CODE LISTED ABOVE.

INTERNATIONAL FIRE CODE, 2012 THE INTERNATIONAL FIRE CODE, 2012 MIRRORS THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE AND THE INTERNATIONAL MECHANICAL CODE, 2012. AGAIN, THE REQUIREMENTS FOR LIQUID NATURAL GAS DO NOT APPLY FOR NON ODORIZED GAS.

WITH THE ABOVE CODE INFORMATION, THE SEQUENCE OF OPERATION FOR THE MAINTENANCE BAYS WILL BE AS FOLLOWS: NORMAL OPERATION.

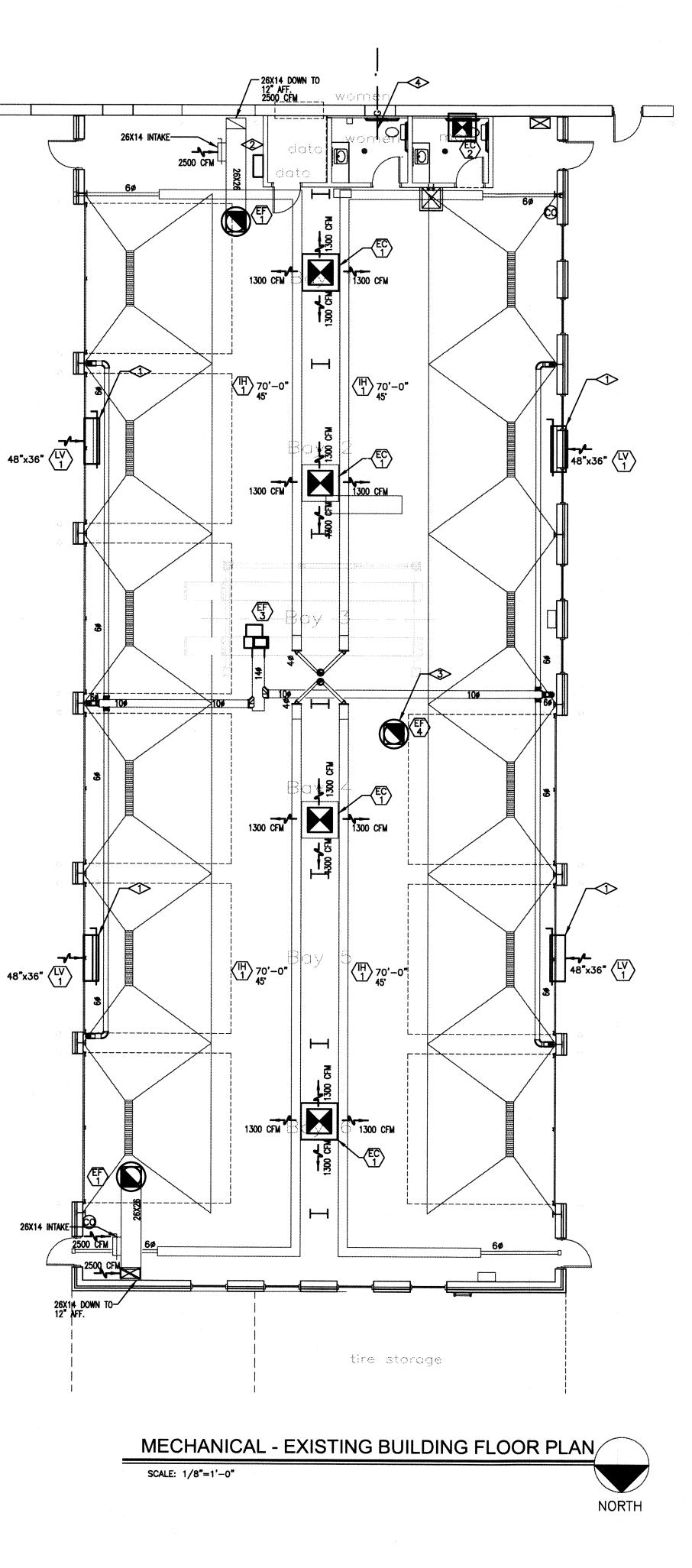
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THE EVAPORATIVE COOLERS, EC-1 HAVE A MANUAL CONTROL PANEL ON THE WALL AS WELL AS A SPACE MOUNTED THERMOSTAT. IF THE OUTSIDE AIR TEMPERATURE IS ABOVE 75 DEGREES AND THE SPACE TEMPERATURE RISES ABOVE 75 DEGREES, THE EVAPORATIVE COOLER WILL BE ENABLED, FILLED WITH WATER AND MAINTAIN 75 DEGREES TEMPERATURE IN THE SPACE. ALL THE FUNCTIONS CAN ALSO BE CONTROLLED MANUALLY FROM THE WALL MOUNTED CONTROLS. IF THE OUTSIDE AIR IS BELOW 45 DEGREES F, THE EVAPORATIVE COOLING WILL DRAIN. THE SUPPLY FAN CAN ALSO BE TURNED ON AT ANY TIME MANUALLY IF VENTILATION IS NEEDED BY THE OCCURANTS VENTILATION IS NEEDED BY THE OCCUPANTS.

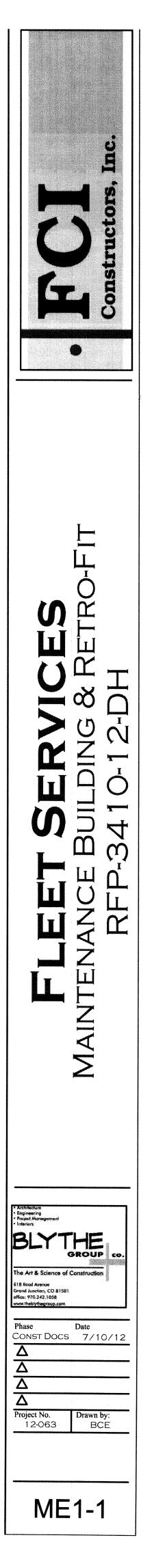
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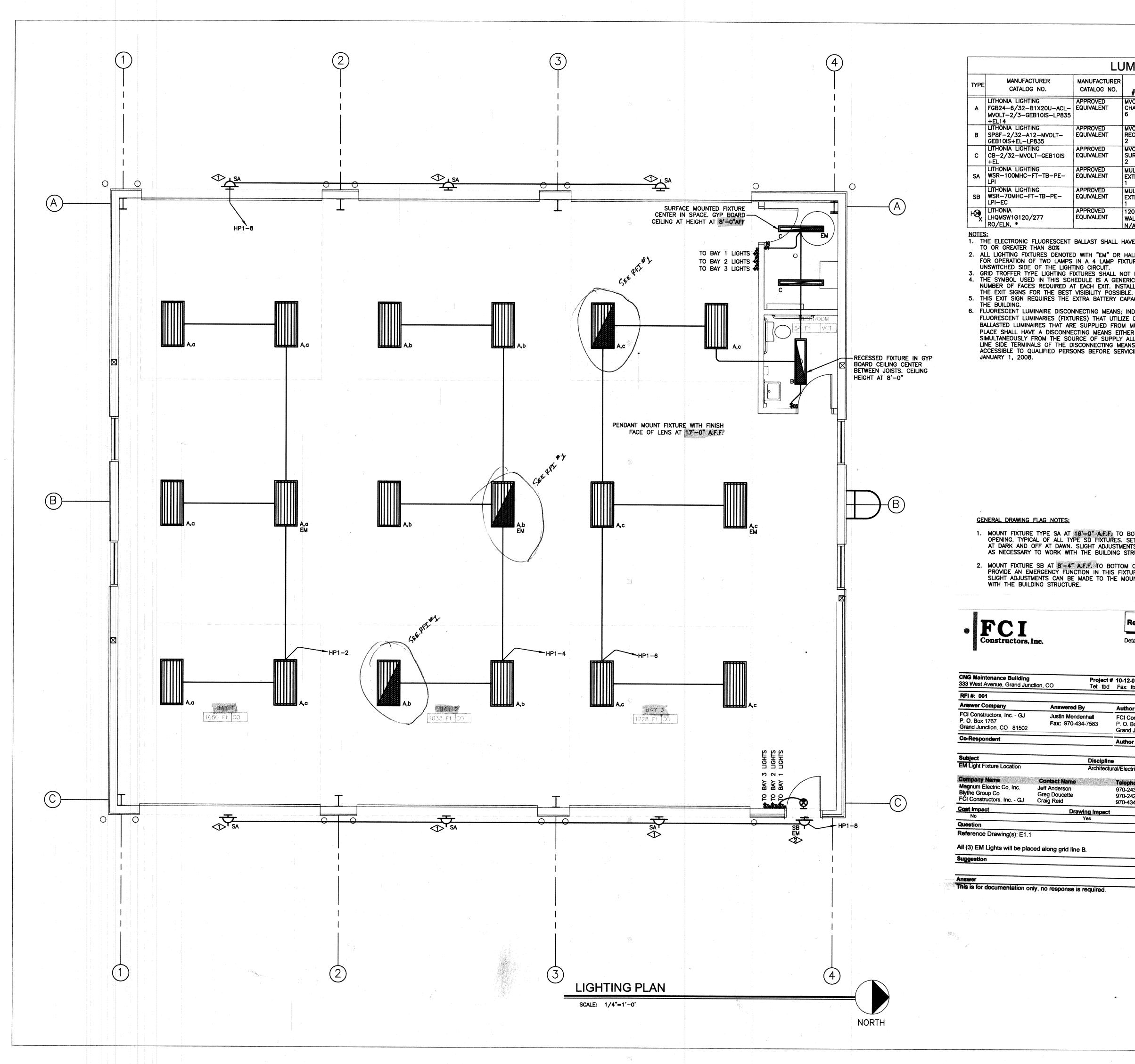
ON DETECTION OF NATURAL GAS

THE MOTORIZED DAMPERS WILL OPEN AND STAY OPEN WITH NATURAL GAS LEVELS ABOVE 25% LEL. THE GAS LINE TO THE REPAIR GARAGE AREA WILL BE TURNED OFF WITH A GAS SOLENOID VALVE TO CUT HEATING TO THE ENTIRE SPACE. IT WILL REMAIN ON UNTIL THE NATURAL GAS LIMITS FALL BELOW 5% LEL. THE EXHAUST FANS EF-1, EF-2 AND EF-4 WILL TURN ON PROVIDING 5 AIR CHANGES PER HOUR OF EXHAUST. THE GARAGE DOOR OPERATORS SHALL BE ACTIVATED TO OPEN 18" OFF THE FLOOR TO PROVIDE ADDITIONAL MAKE UP AIR TO THE SPACE FOR THE EXHAUST BALANCE.



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	LL	JMINAIRE	SCHEDULE	
ER	MANUFACTURER CATALOG NO.	VOLTAGE MOUNTING # OF LAMPS	BALLAST LAMP TYPE LAMP CAT. #	DESCRIPTION
0U-ACL- IS-LP835	APPROVED EQUIVALENT	MVOLT AT 277 CHAIN HUNG 6	ELECTRONIC +EL14 FLUORESCENT F32T8/LP835	2'x4' FLUORESCENT HIGH BAY FIXTURE, SPECULAR ALUMINUM REFLECTOR, CLEAR ACRYLIC LENS, (2) BALLAST DUAL LEVEL SWITCHING, EM BALLAST IN FIXTURES SHOWN ON PLANS
IVOLT-	APPROVED EQUIVALENT	MVOLTAT 277 RECESS GYP CLG 2	ELECTRONIC +EL FLUORESCENT F32T8/LP835	12"Wx4'L SPECIFICATION PREMIUM STATIC TROFFER RECESSED IN GYP-BOARD CEILING, STEEL HOUSING, ACRYLIC LENS
EB10IS	APPROVED EQUIVALENT	MVOLT AT 277 SURFACE CLG 2	ELECTRONIC +EL FLUORESCENT F32T8/LP835	7"Wx48"L SURFACE MOUNTED CORRIDOR WRAP AROUND FIXTURE, STEEL HOUSING, WHITE ENAMEL FINISH, ACRYLIC WRAPAROUND LENS
B-PE-	APPROVED EQUIVALENT	MULTI TAP (277) EXTERIOR WALL 1	ELECTRONIC METAL HALIDE 100MHC	18"Lx7.25"Hx9"D DECORATIVE HALF ROUND WALL MOUNTED FIXTURE, FORWARD THROW, DARK BRONZE FINISH, PHOTO CELL
I-PE-	APPROVED EQUIVALENT	MULTI TAP (277) EXTERIOR WALL 1	ELECTRONIC METAL HALIDE 70MHC	18"Lx7.25"Hx9"D DECORATIVE HALF ROUND WALL MOUNTED FIXTURE, FORWARD THROW, DARK BRONZE FINISH, PHOTO CELL, EMERGENCY LIGHT
	APPROVED EQUIVALENT	120/277 WALL/CEILING N/A	NONE REQUIRED LED WITH UNIT	12-1/4"Wx7-1/2"Hx2"D, WHITE POLYCARBONATE, HOUSING WITH GREEN LETTERING, NICAD BATTERY WITH IND REMOTE HEAD.

1. THE ELECTRONIC FLUORESCENT BALLAST SHALL HAVE A TOTAL HARMONIC DISTORTION OF PLUS/MINUS 20% AND A BALLAST FACTOR EQUAL 2. ALL LIGHTING FIXTURES DENOTED WITH "EM" OR HALF SHADED SHALL BE PROVIDED WITH AN ENGINEER APPROVED EMERGENCY BALLAST FOR OPERATION OF TWO LAMPS IN A 4 LAMP FIXTURE AND 1 LAMP IN A 2 OR 3 LAMP FIXTURE. BALLAST SHALL BE CONNECT TO THE UNSWITCHED SIDE OF THE LIGHTING CIRCUIT.

GRID TROFFER TYPE LIGHTING FIXTURES SHALL NOT BE SUPPORTED FROM THE T-BAR CEILING GRID.
 THE SYMBOL USED IN THIS SCHEDULE IS A GENERIC SYMBOL TO INDICATE AN EXIT LIGHT FIXTURE. REFER TO THE PLANS FOR THE NUMBER OF FACES REQUIRED AT EACH EXIT. FIELD ADJUST THE LOCATION OF

5. THIS EXIT SIGN REQUIRES THE EXTRA BATTERY CAPACITY TO OPERATE THE REMOTELY LOCATED EMERGENCY HEAD FOR EGRESS AWAY FROM 6. FLUORESCENT LUMINAIRE DISCONNECTING MEANS; INDOOR LOCATIONS, OTHER THAN DWELLINGS AND ASSOCIATED ACCESSORY STRUCTURES, FLUORESCENT LUMINARIES (FIXTURES) THAT UTILIZE DOUBLE-ENDED LAMPS AND CONTAIN BALLAST(S) THAT CAN BE SERVICED IN PLACE OR

BALLASTED LUMINAIRES THAT ARE SUPPLIED FROM MULTI-WIRE BRANCH CIRCUITS AND CONTAIN BALLAST(S) THAT CAN BE SERVICED IN PLACE SHALL HAVE A DISCONNECTING MEANS EITHER INTERNAL OR EXTERNAL TO EACH LUMINAIRE (FIXTURE), TO DISCONNECT SIMULTANEOUSLY FROM THE SOURCE OF SUPPLY ALL CONDUCTORS OF THE BALLAST, INCLUDING THE GROUNDED CONDUCTOR IF ANY. THE LINE SIDE TERMINALS OF THE DISCONNECTING MEANS SHALL BE GUARDED. THE DISCONNECTING MEANS SHALL BE LOCATED SO AS TO BE ACCESSIBLE TO QUALIFIED PERSONS BEFORE SERVICING OR MAINTAINING THE BALLAST. THIS REQUIREMENT SHALL BECOME EFFECTIVE

1. MOUNT FIXTURE TYPE SA AT 16'-O" A.F.F. TO BOTTOM OF FIXTURE, CENTERED OVER OVER OPENING. TYPICAL OF ALL TYPE SD FIXTURES. SET THE PHOTOCELL TO TURN THE LIGHTS ON AT DARK AND OFF AT DAWN. SLIGHT ADJUSTMENTS CAN BE MADE TO THE MOUNTING HEIGHT AS NECESSARY TO WORK WITH THE BUILDING STRUCTURE.

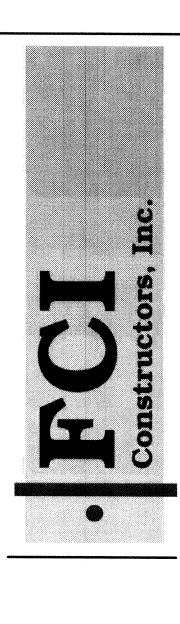
2. MOUNT FIXTURE SB AT 8'-4" A.F.F. TO BOTTOM OF FIXTURE CENTERED OVER MAN DOOR. PROVIDE AN EMERGENCY FUNCTION IN THIS FIXTURE FOR EGRESS AWAY FROM THE BUILDING. SLIGHT ADJUSTMENTS CAN BE MADE TO THE MOUNTING HEIGHT AS NECESSARY TO WORK WITH THE BUILDING STRUCTURE.

Request for Information 001

Detailed, RFIs Grouped by RFI Number with Cost

Date Answered: 7/24/2012

0	Project # Tel: tbd	10-12-016 Fax: tbd		FCI Constructors, Inc G.
				Date Created: 7/24/2012
Answered By		Author Company		Authored By
Justin Mendenh Fax: 970-434-7		FCI Constructors, Inc P. O. Box 1767 Grand Junction, CO		Justin Mendenhall
		Author RFI Number		
	Discipline		Catago	
		al/Electrical	Catego Clarifica	- 7
ntact Name		Telephone Number	Fax Nu	
Anderson		970-243-6655	970-243	
j Doucette		970-242-1058	970-243	
g Reid		970-434-9093	970-434	
	g Impact		Schedu	le impact
Ye	s			No
			1	Date Required: 7/31/2012



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MAIN

Archilecture
Engineering
Project Management
Interiors

618 Rood Avenue Grand Junction, CO 81501 effice: 970.242.1058 www.theblythegroup.com

Phase

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Project No.

12-063

E1-1

BLYTHE GROUP CO.

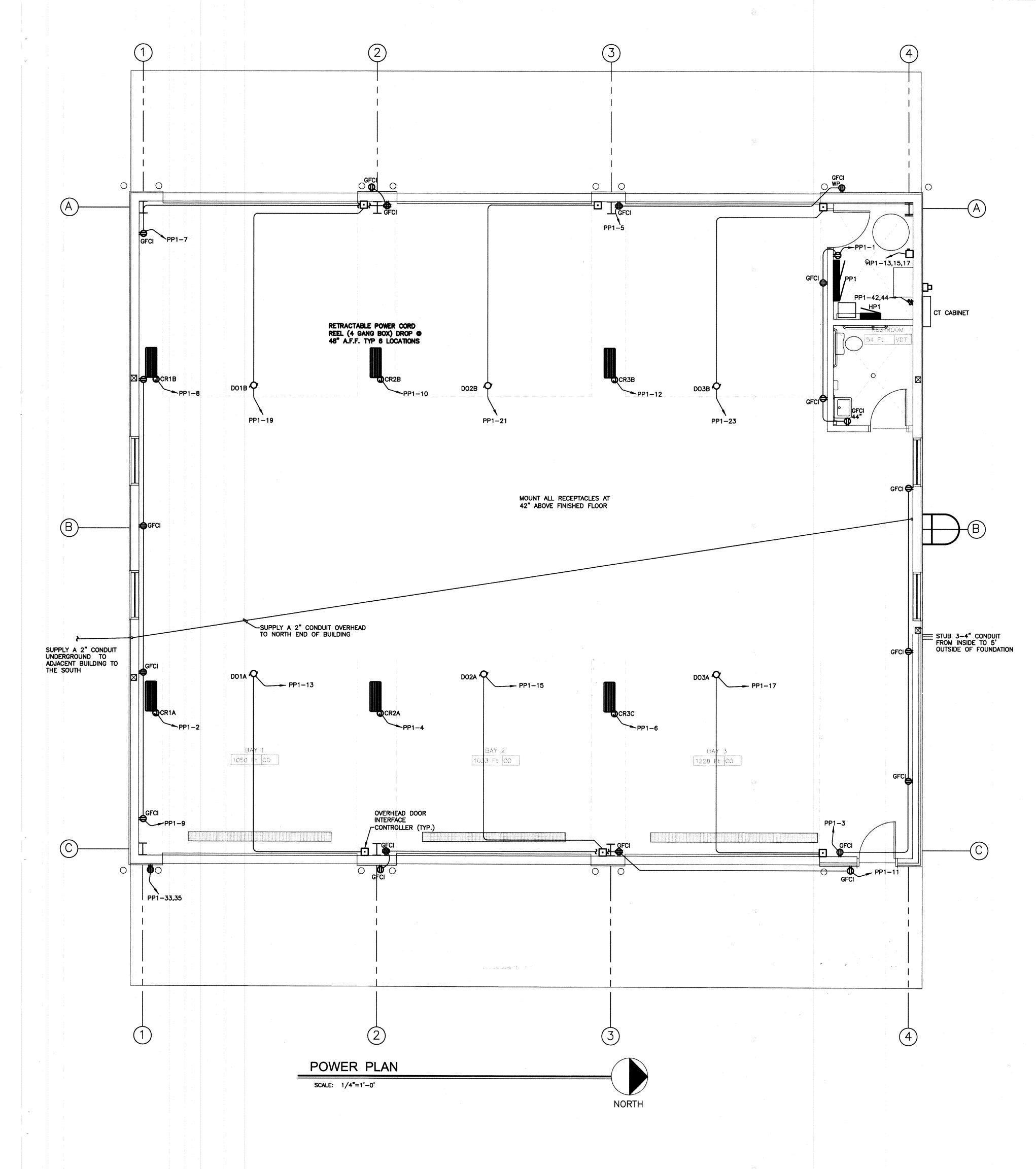
The Art & Science of Construction

Date CONST DOCS 7/10/12

Drawn by: BCE

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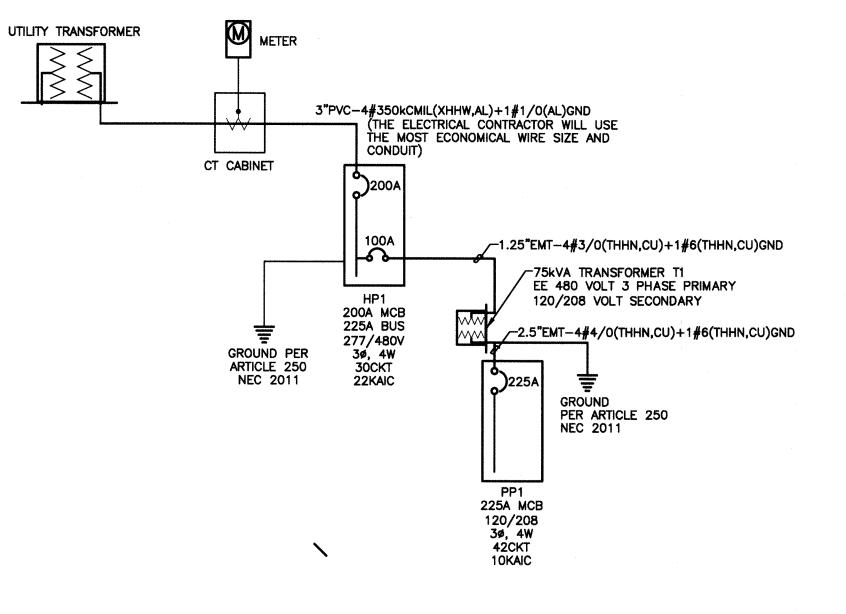
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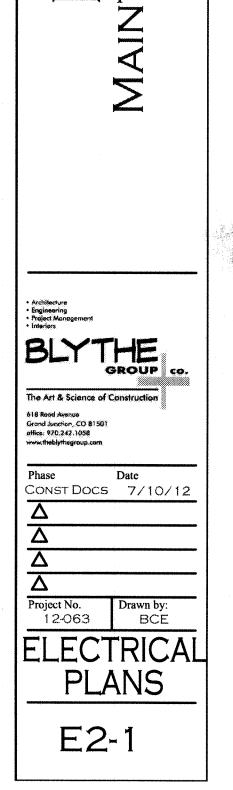
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WHEN THERE IS A DETECTION OF NATURAL GAS

THE MOTORIZED DAMPERS ON THE LOUVERS WILL OPEN AND STAY OPEN WITH NATURAL GAS LEVELS ABOVE 25% LEL. THE GAS LINE TO THE REPAIR GARAGE AREA WILL BE TURNED OFF WITH A GAS SOLENOID VALVE TO CUT HEATING TO THE ENTIRE SPACE. IT WILL REMAIN IN THIS CONDITION UNTIL THE NATURAL GAS LIMITS FALL BELOW 5% LEL. THE EXHAUST FANS EF-1 WILL TURN ON PROVIDING 5 AIR CHANGES PER HOUR OF EXHAUST. THE GARAGE DOOR OPERATORS SHALL BE ACTIVATED TO OPEN 18" OFF THE FLOOR TO PROVIDE ADDITIONAL MAKE UP AIR TO THE SPACE FOR THE EXHAUST BALANCE.

PANEL SCHEDU	LE – HP1	TYPE: VOLTAGE: ENCLOSUR	PANELB 277/48 E: NEMA1	OARD IO	MAIN	SIZE: BRKR: NTING:	225 : 200 FLUS	н	PHASES: 3 WIRES: 4 SC RATING: 22000	NEUTRAL BUS: YES GROUND BUS: YES
LOAD TYPE	LOAD DESCRIPTIO	N		AMPS POLES	CKT# LOAD	ø	CKT# LOAD	AMPS POLES	LOAD TYPE	LOAD DESCRIPTION
MOTOR	OVERHEAD DOOR	OPERATOR DO	2C	20A 1P	1 1176	A	2 1044	20A 1P	LIGHTING	BAY 1
MOTOR	OVERHEAD DOOR	OPERATOR DO	28	20A 1P	3 1176	В	4 1044	20A 1P	LIGHTING	BAY 2
MOTOR	OVERHEAD DOOR	OPERATOR DO	2A	20A 1P	5 1176	С	6 1218	20A 1P		BAY 3
MOTOR	OVERHEAD DOOR	OPERATOR DO	1A	20A 1P	7 1176	A	8 1500	20A 1P	LIGHTING	EXTERIOR BUILDING
MOTOR	OVERHEAD DOOR	OPERATOR DO	2A	20A 1P	9 1176	В	10 1500	20A 1P	LIGHTING	PARKING LOT LIGHTS
MOTOR	OVERHEAD DOOR	OPERATOR DO	3A	20A 1P	11 1176	С	12 1500	20A 1P	LIGHTING	PARKING LOT LIGHTS
MOTOR					13 5820	A	14 0		SPACE	
MOTOR	COMPRESSOR			30A 3P	15 5820	В	16 1200	20A 1P	SPARE	UNALLOCATED FUTURE
MOTOR					17 5820	C	18 1200	20A 1P	SPARE	UNALLOCATED FUTURE
SPACE					19 0	A	20 1200	20A 1P	SPARE	UNALLOCATED FUTURE
SPACE	anata anto anto			 	21 0	В	22 1200	20A 1P	SPARE	UNALLOCATED FUTURE
SPACE					23 0	C	24 1200	20A 1P	SPARE	UNALLOCATED FUTURE
SUBFEED					25 19508	A	26 0		SPACE	
SUBFEED	PANEL PP1			100A 3P	27 18196	B	28 0		SPACE	
SUBFEED	mute van dan. ann van				29 16996	C	30 0		SPACE	
LOADS BY TYPE:					LOADS B	Y PHA	SE:			
LOAD TYPE	CONNECTED LOAD (VA)	DEMAND FACTOR	DEMAND LOAD (VA)		PHASE			CONNECTED LOAD (VA)	CONNECTED LOAD (AMPS)	BALANCE (PERCENT)
LIGHTING KITCHEN PROCESS RECEPTACLES	7806.00 0.00 0.00 10000.00	1.25 1.00 1.00	9757.50 0.00 0.00		A B C	~		27234.00 26834.00 23358.00	98.32 96.87 84.32	AB: 98.5 BC: 87 CA: 85.8
RECEPTACLES RECEPTACLES MECH HEATING MECH COOLING	7720.00 3600.00 0.00	1.00 0.50 1.00	10000.00 3860.00 3600.00		TOTAL	AVERA	NGE	77426.00	93.17	90.4
MECH COOLING MECH YEAR ROUND APPLIANCE MISCELLANEOUS MOTOR SPARE LARGEST MOTOR ¹	0.00 0.00 0.00 35100.00 13200.00 ABOVE	1.00 1.00 1.00 1.00 1.00 1.00 0.25	0.00 0.00 0.00 52650.00 13200.00 4365.00		NOTES: 1. THE	E LARG	EST CON	NECTED MO	TOR LOAD IS INCLUDED	IN MECHANICAL, PROCESS, OR MOTOR LOADS





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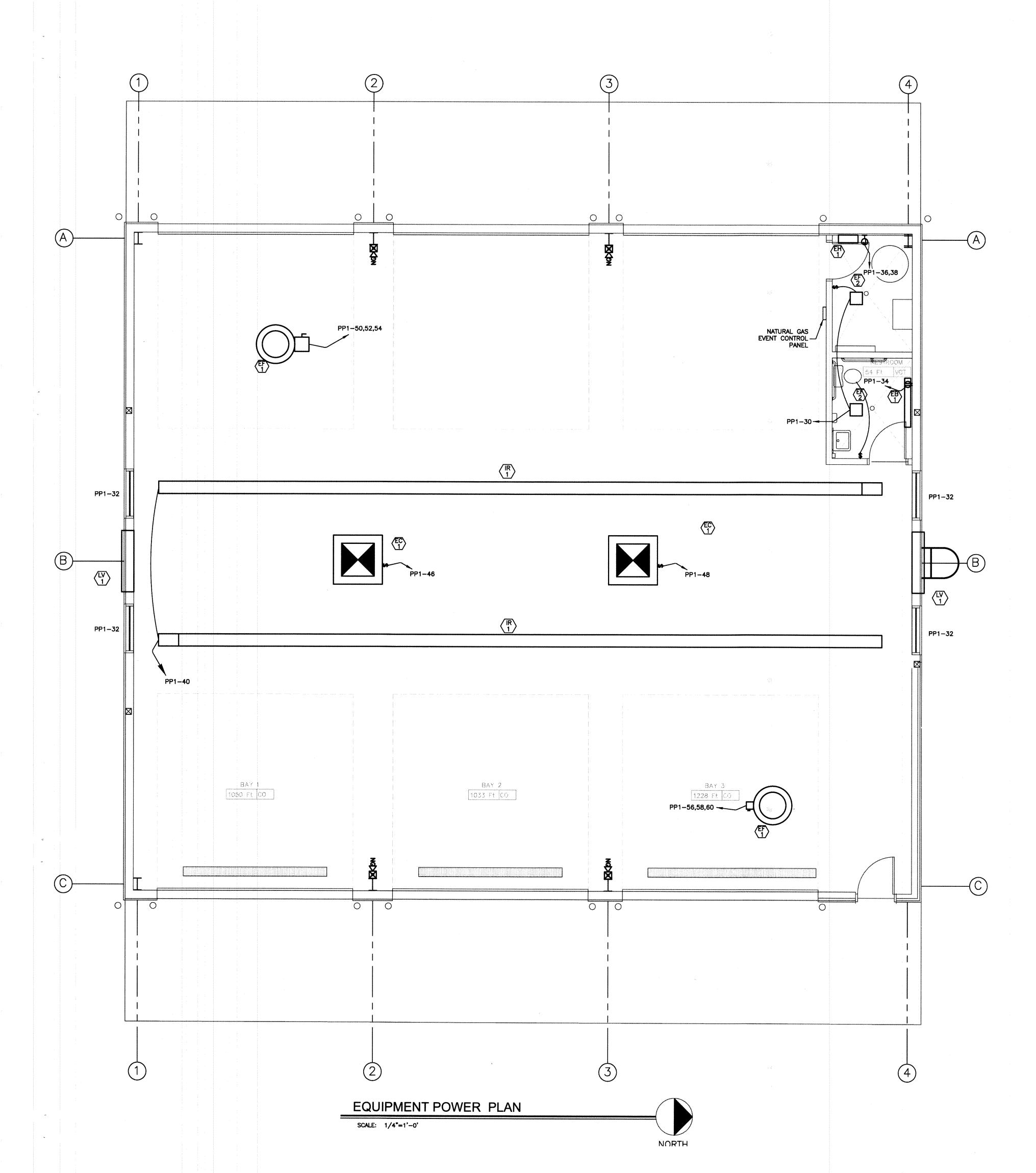
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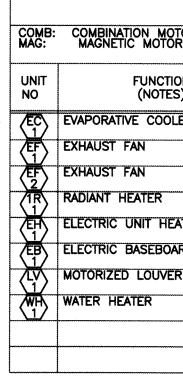
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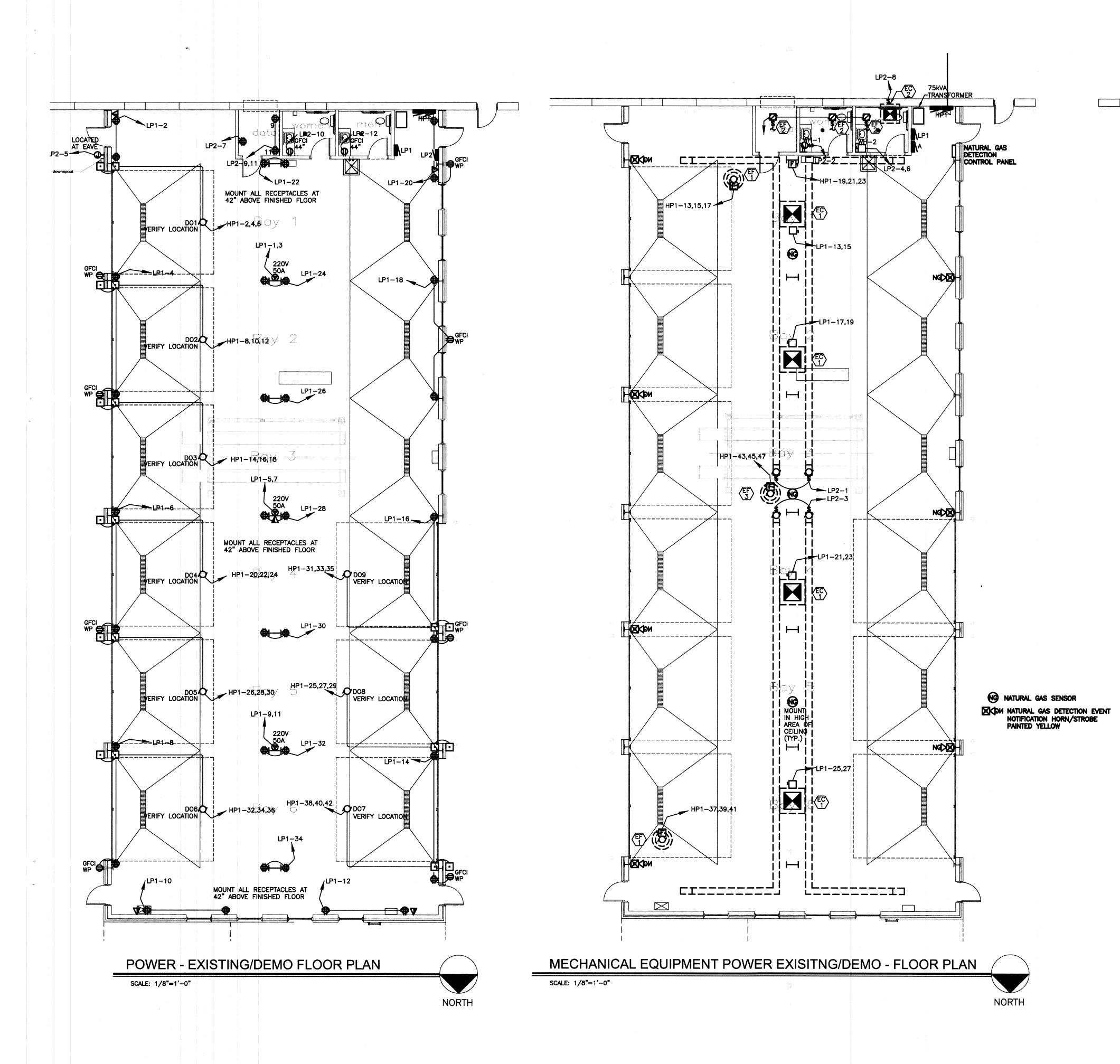
PANEL SCHEDU	LE – PP1 type: panele Voltage: 120/20 Enclosure: nema1	08	MAIN	SIZE: N BRKR INTING:	225 : 225 FLUSI	Н	PHASES: 3 WIRES: 4 SC RATING: 10000	NEUTRAL BUS: YES GROUND BUS: YES
LOAD TYPE	LOAD DESCRIPTION	AMPS POLES	CKT# LOAD	ø	CKT# LOAD	AMPS POLES	LOAD TYPE	LOAD DESCRIPTION
RECEPTACLE	MECHANICAL, RESTROOM, BAY 3 SW WALL	20A 1P	1 720	A	2 1176	20A 1P	MOTOR	BAY 1 EAST CORD REEL CR1B
RECEPTACLE	BAY 3 SOUTH WALL	20A	3	В	4	20A	MOTOR	BAY 2 EAST CORD REEL CR2B
RECEPTACLE	BAY 2 & 3 EAST WALL	1P 20A	720 5	С	1176 6	1P 20A	MOTOR	BAY 3 EAST CORD REEL CR3B
RECEPTACLE	BAY 1 & 2 EAST WALL	1P 20A	720 7	A	1176 8	1P 20A	MOTOR	BAY 1 WEST CORD REEL CR1A
RECEPTACLE	BAY 1 NORTH WALL	1P 20A	720 9	В	1176	1P 20A	MOTOR	BAY 2 WEST CORD REEL CR1B
RECEPTACLE	BAY 2 & 3 WEST WALL & EXTERIOR	1P 20A	720	С	1176	1P 20A	MOTOR	BAY 3 WEST CORD REEL CR1C
SPARE	UNALLOCATED FUTURE	1P 20A	720	A	1176	1P 50A	RECEPTACLE	WELDER
SPARE	UNALLOCATED FUTURE	1P 20A	1200	B	4000	2P	RECEPTACLE	
SPARE		1P	1200	c	4000			
		20A 1P	1200		1200	20A 1P	RECEPTACLE	
SPARE	UNALLOCATED FUTURE	20A 1P	19 1200	A	20 1200	20A 1P	RECEPTACLE	DATA COM
SPARE	UNALLOCATED FUTURE	20A 1P	21 1200	B	22 0		SPACE	
SPARE	UNALLOCATED FUTURE	20A 1P	23 1200	C	24 0		SPACE	
MOTOR			25 1176	A	26 0		SPACE	
MOTOR	AUTO LIFT	20A 3P	27 1176	В	28 0	 	SPACE	
MOTOR			29 1176	С	30 600	15A 1P	MOTOR	RESTROOM EXHAUST FANS
MECH HEATING	INSTA HOT	20A 2P	31 1500	A	32 600	15A 1P	MOTOR	MOTORIZED LOUVERS
MECH HEATING			33 1500	В	34 1200	20A 1P	MECH HEATING	BASEBOARD HEATER
RECEPTACLE	TRUCK OUTLET	50A	35	С	36	15A	MECH HEATING	ELECTRIC UNIT HEATER
RECEPTACLE		2P	1500 37	A	1000 38	2P	MECH HEATING	
MECH HEATING	HEAT TAPE	20A	1500 39	В	1000 40	15A	MECH HEATING	RADIANT HEATER
PROCESS	COMPRESSOR CONTROLS	1P 20A	41	С	400 42	1P 20A	MECH HEATING	WATER HEATER
SPACE		1P 	1200 43	A	1500 44	2P	MECH HEATING	
SPACE			0 45	В	1500 46	20A	MOTOR	 EVAPORATIVE COOLER
SPACE			0 47	c	1788 48	1P 20A	MOTOR	EVAPORATIVE COOLER
SPACE			0		1788	1P		·
			49 0	A	50 420		MOTOR	
SPACE			51 0	В	52 420	15A 3P	MOTOR	EXHAUST FAN
SPACE			53 0	C	54 420		MOTOR	
SPACE			55 0	A	56 420		MOTOR	
SPACE			57 0	В	58 420	15A 3P	MOTOR	EXHAUST FAN
SPACE			59 0	С	60 420		MOTOR	
LOADS BY TYPE:			LOADS I	BY PHA	1		.I	1
LOAD TYPE	CONNECTED DEMAND DEMAND LOAD (VA) FACTOR LOAD (VA))	PHAS	E		CONNECTED	CONNECTED	BALANCE (PERCENT)
LIGHTING KITCHEN	0.00 1.25 0.00 0.00 0.00 0.00		AB			19508.00 18196.00	***	A-B: 93.3 B-C: 93.4
PROCESS	1200.00 1.00 1200.00 10000.00 1.00 10000.00		Č			16996.00	141.63	<u>C-A: 87.1</u>
RECEPTACLES MECH HEATING MECH COOLING MECH YEAR ROUND APPLIANCE MISCELLANEOUS	7720.00 0.50 3860.00 10700.00 1.00 10700.00 0.00 1.00 0.00 0.00 1.00 0.00 0.00 1.00 0.00 0.00 1.00 0.00 0.00 1.00 0.00 0.00 1.00 0.00 0.00 1.00 0.00		NOTES:			54700.00	151.94 TOR LOAD IS INCLUDED	91.3 IN MECHANICAL, PROCESS, OR MOTOR LO
NOTOR SPARE LARGEST MOTOR ¹ TOTAL	17880.00 1.00 26820.00 7200.00 1.00 7200.00 ABOVE 0.25 882.00 54700.00 51722.00			*				

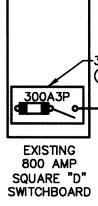


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MECH	HANI	CAL	E	QUIF	PMEN	IT S	SCH	IED	ULE		
OTOR STARTER OR STARTER		NF P/	3: N 1: F	ONE RE PLUG-IN	QUIRED UNIT	CONT MAN: W/U:	T: CO MA SI	NTRACI NUAL JPPLIEC	TOR MOTOR S WITH U	TARTER NIT:	
FION ES)	LOAD	VOLTS	ø	FULL LOAD AMPS	BRAN CONDUIT SIZE	CH CIR NO. conductor	CUIT WIRE SIZE	GRND WIRE SIZE	BRKR SIZE	START	DISC FUSE
DLER		120	1	14.9	3/4"	2	10	10	20	\$	
		208	3	3.5	3/4"	3	12	12	15	MAG	30 10
		120	1	0.67	3/4"	2	12	12	15	\$	
		120	1	2.25	3/4"	2	12	12	15	\$	
EATER	2kW	208	1	9.6	3/4"	2	12	12	15	W/U	30 15
DARD HEATER		120	1	15.0	3/4"	2	12	12	20	\$	******
ER		120	1	1.0	3/4"	2	12	12	15	\$	
	3kW	208	1	14.4	3/4"	2	12	12	20	₩/ U	30 20

FLEET SERVICES	MAINTENANCE BUILDING & RETRO-FI	RFP-3410-12-DH
Architecture Ergingeering Project Management Interiors BLYT Construction, CO 81501 effice: 970.242.1058 Arrows theblythegroup.com Phase CONST DOCS A A A Project No. 12-063 MECI ELEC F E2-	Date 7/1 Drawn B(PL/	8 0/12 by: CE







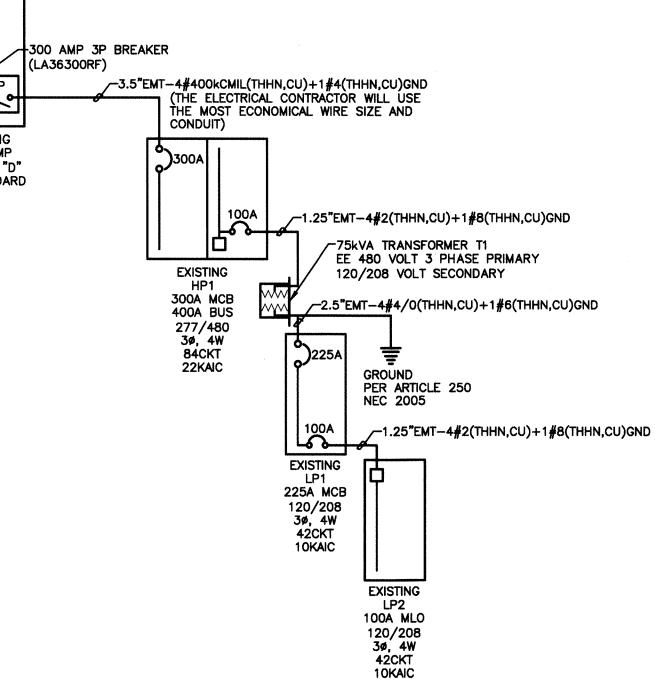
DURING NORMAL OPERATION.

THE EVAPORATIVE COOLERS, EC-1 HAVE A MANUAL CONTROL PANEL ON THE WALL AS WELL AS A SPACE MOUNTED THERMOSTAT. IF THE OUTSIDE AIR TEMPERATURE IS ABOVE 75 DEGREES AND THE SPACE TEMPERATURE RISES ABOVE 75 DEGREES, THE EVAPORATIVE COOLER WILL BE ENABLED, FILLED WITH WATER AND MAINTAIN 75 DEGREES TEMPERATURE IN THE SPACE. ALL THE FUNCTIONS CAN ALSO BE CONTROLLED MANUALLY FROM THE WALL MOUNTED CONTROLS. IF THE OUTSIDE AIR IS BELOW 45 DEGREES F, THE EVAPORATIVE COOLING WILL DRAIN. THE SUPPLY FAN CAN ALSO BE TURNED ON AT ANY TIME MANUALLY IF VENTILATION IS NEEDED BY THE OCCUPANTS.

THE EXHAUST FANS FOR THE VEHICLE EXHAUST SYSTEM SHALL BE OFF. THIS INCLUDES EF-1, AND EF-2. ON DETECTION OF CARBON MONOXIDE, THE MOTORIZED DAMPERS ON THE LOUVERS WILL OPEN AND OPERATE WITH CO LEVELS ABOVE 10 PPM. IT WILL PROVIDE AIR 100% OUTSIDE AIR AND WILL REMAIN OPEN UNTIL THE CO LIMITS FALL BELOW 5 PPM. THE EXHAUST FANS EF-1, AND EF-2 WILL TURN ON.

THE MOTORIZED DAMPERS ON THE LOUVERS WILL OPEN AND STAY OPEN WITH NATURAL GAS LEVELS ABOVE 25% LEL. THE GAS LINE TO THE REPAIR GARAGE AREA WILL BE TURNED OFF WITH A GAS SOLENOID VALVE TO CUT HEATING TO THE ENTIRE SPACE. IT WILL REMAIN IN THIS CONDITION UNTIL THE NATURAL GAS LIMITS FALL BELOW 5% LEL. THE EXHAUST FANS EF-1 WILL TURN ON PROVIDING 5 AIR CHANGES PER HOUR OF EXHAUST. THE GARAGE DOOR OPERATORS SHALL BE ACTIVATED TO OPEN 18" OFF THE FLOOR TO PROVIDE ADDITIONAL MAKE UP AIR TO THE SPACE FOR THE EXHAUST BALANCE.

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



THE SEQUENCE OF OPERATION FOR THE MAINTENANCE BAYS WILL BE AS FOLLOWS:

THE INFRARED HEATERS WILL PROVIDE THE HEATING FOR THE SPACE. EACH ONE WILL HAVE A THERMOSTAT ON THE WALL CONTROLLING AN AREA. THE SPACE TEMPERATURE WILL CONTROL TO ABOVE 60 DEGREES F. AND WILL SHUT OFF ABOVE 70 DEGREES F.

WHEN THERE IS A DETECTION OF NATURAL GAS

SCOPE OF WORK FOR THE EXISTING FLEET SERVICES BUILDING: BASICALLY THE BUIDLING WILL NOT NEED ADDITIONAL ELECTRICAL WORK TO BE UPGRADED TO SERVICE NATURAL GAS VEHICLES. THE BIGGEST PART OF THE UPGRADE WILL BE THE INSTALLATION OF A NATURAL GAS DETECTION SYSTEM AND THE INTERFACE NEEDED WITH THE MECHANICAL EQUIPMENT FOR OPERATION.

BUILDING POWER - EXISTING/DEMO FLOOR PLAN



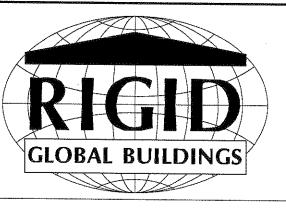
FLEET SERVICES MAINTENANCE BUILDING & RETRO-FIT RFP-3410-12-DH
Archillecture Frigineering Project Management Interiors BLYTHE GROUP co. the Art & Science of Construction 18 Road Avenue condituction CO 81501 file. 970.242.1058 www.fineblythegroup.com Phase Date CONST DOCS 7/10/12 A A A Project No. 12-063 Drawn by: BCE

GENERAL NOTES 1.1 Fabrication shall be in accordance with R.G.B. standard practices in compliance with the applicable sections, relating to design requirements and allowable stresses of the latest edition of the "AMS Structural Welding Code Di.1 and D1.3", R.G.B. manufacturing pracedures are certified by: Reference Certification numbers R.G.B. #456 Houston 1.2 MATERIALS ASTM DESIGNATION MIN. MELD STRENGTH Hot Rolled Steel Shapes (W, S, C & L) Steel Pipes $\begin{array}{l} Fy = 50 \ \text{KS}; \\ Fy = 42 \ \text{KS}; \\ Fy = 66 \ \text{KS}; \\ Fy = 55 \ \text{KS}; \\ Fy = 50, \ 56 \ \text{KS}; \\ Fy = 36 \ \text{KS}; \\ \end{array}$ A572 A500 Structural Tubina A500 Structural Steel Web Plate Structural Steel Flange Plates/Bars Cold Formed Light Gage Roof and Wall Sheets A572/A1011 A529/A572 A653/A1D11 A792/A653 A475 ~ TYPE 1 Coble Brace Rod Brace A36 MIN. TENSILE STRENGTH Machine Bolts & Nuts High Strength Bolts (1"¢ and less) High Strength Bolts (>1"¢ to 1 1/2"¢) Anchor Bolts (if supplied) A307 Fu = 60 KSI Fu = 120 KSI Fu = 105 KSI A307 A325-TYPE 1 A325-TYPE 1 A36/A307/F1554 Fu = 60 KS 1.3 PRIMER <u>PRIMER</u> Shop primer paint is a rust inhibitive primer which meets the end performance of Federal Specification SSPC No. 15 and is R.C.B. Red Oxide color. This paint is not intended for long term exposure to the elements. R.G.B. is not responsible for any deterioration of the shop primer paint as a result of improper handling and/or jobsite storage. R.G.B. sholl not be responsible for any field applied paint and/or cootings. (Section 8.5 AISC Code of Standard Practice, specified in contract documents 1.4 GALVANIZED OR SPECIAL COATINGS: See Contract Documents 1.5 ALL BOLTS ARE 1/2"# x 0'-1" A307 EXCEPT : a) Eave strut connection $-1/2^{''} 6 \times 0^{'-1} 1/4^{''} A307$ b) Endwail rafter splice $-5/8^{''} 8 \times 0^{'-1} 3/4^{''} A325-N$ c) Endwall column to rafter connection $-1/2^{''} 8 \times 0^{'-1} 1/4^{''} A325-N$ d) Main frame connections - SEE CROSS SECTION NOTE: Washers are not supplied unless noted otherwise on drawing 1.6 A325 BOLT TIGHTENING REQUIREMENTS All high strength bolts are A325-N unless specifically noted otherwise. Structural bolts shall be tightened by the turn-of-the-nut method in accordance with the 3th Edition AISC "Specification For Structural Joints" using ASTM A325 or A490 Bolts, when specifically required. A325-N bolts are supplied without washer unless otherwise noted on the drawings. All bolted connections unless noted are, designed as bearing type connections with bolt threads not excluded from the shear plane. 1.7 CLOSURE STRIPS ARE FURNISHED FOR APPLICATION: INSIDE— Under roof panels at eave OUTSIDE — Between endwall panels and rake trim Under continuous ridge vent skirts 1.8 ERECTION NOTE: ERCC IRON NOTE: All bracing, stropping, & bridging shown and provided by R.G.B. for this building is required and shall be installed by the erector as a permanent part of the structure. If additional bracing is required for stability during erection, it shall be the erector's responsibility to determine the amount of such bracing and to procure and install as needed. 1.9 ERECTION AND UNLOADING NOT BY R.G.B. 1.10 <u>SHORIAGES</u> Any claims or shortages by buyer must be made to R.G.B. within five (5) working days after delivery, or such claims will be considered to have been walved by the customer and disallowed. 1.11 <u>CORRECTIONS OF ERRORS AND REPAIRS (MBMA 6.10)</u> Claims for correction of alleged misfits will be disallowed unless R.G.B. shall have received prior notice thereof and allowed reasonable inspection of such misfits. The correction of minor misfits by the use of drift plans to draw the components into line, moderate amounts of reaming, chipping and cutting, and the replacement of minor shortages of material are a normal part of erection and are not subject to daim. No part of the Building may be returned for cileged misfits without the prior approval of R.G.B. BUYER/END USE CUSTOMER RESPONSIBILITIES It is the responsibility of the BUYER/END USE CUSTOMER to obtain appropriate approvals and secure necessary permits from City, County, State, or Federal Agencies as required, and to advise/release R.G.B. to fabricate upon receiving such. 2,1 upon receiving such. Rigid Globai Buildings (hereafter referred to as R.G.B.) standard specifications apply unless stipulated otherwise in the Contract Documents. R.G.B. design, fabrication, quality criteria, standards, practice, methods and tolerances shall gavern the work with any other interpretations to the contrary natwithstanding. It is understoad by both Parties that the BUYER/ZND USE CUSTOMER is responsible for clarification of inclusions or exclusions from the architectural plans and/or specifications. In case of discrepancies between R.G.B. structural steel plans and plans for other trades, R.G.B. plans shall govern. (Section. 3 AISC Code of Standard Practices, 9th Edition) 2.2 2.3 Approval of R.G.B. drawings and calculations indicates that R.G.B. has correctly interpreted and applied the Contract Documents. This approvel constitutes the controtor/owners acceptance of the R.G.B. design concepts, assumptions, and leading. (Section 4 AISC Code and MBMA 3.3.3) 2.4 Once the BUYER/END USE CUSTOMER has signed R.G.B. Approval Package and the project is released for fabrication, changes shall be billed to the BUYER/ END USE CUSTOMER including material, engineering and other costs. An additional fee may be charged if the project must be moved from the fabrication and shipping schedule. 2,5

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DRAWING PACKAGE

SALES NO.	40901 JOB NO. 96730 BLDG. A (Main)					
CUSTOMER	FCI Constructors,Inc					
END USER	City of Grand Junction					
END USE	Fleet Services					
STREET	971 Coffman Rd, Bldg B					
<u>CITY,ST,ZIP</u>	Grand Junction, CO 81527					
COUNTY	Mesa					

THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE FOLLOWING AS INDICATED:

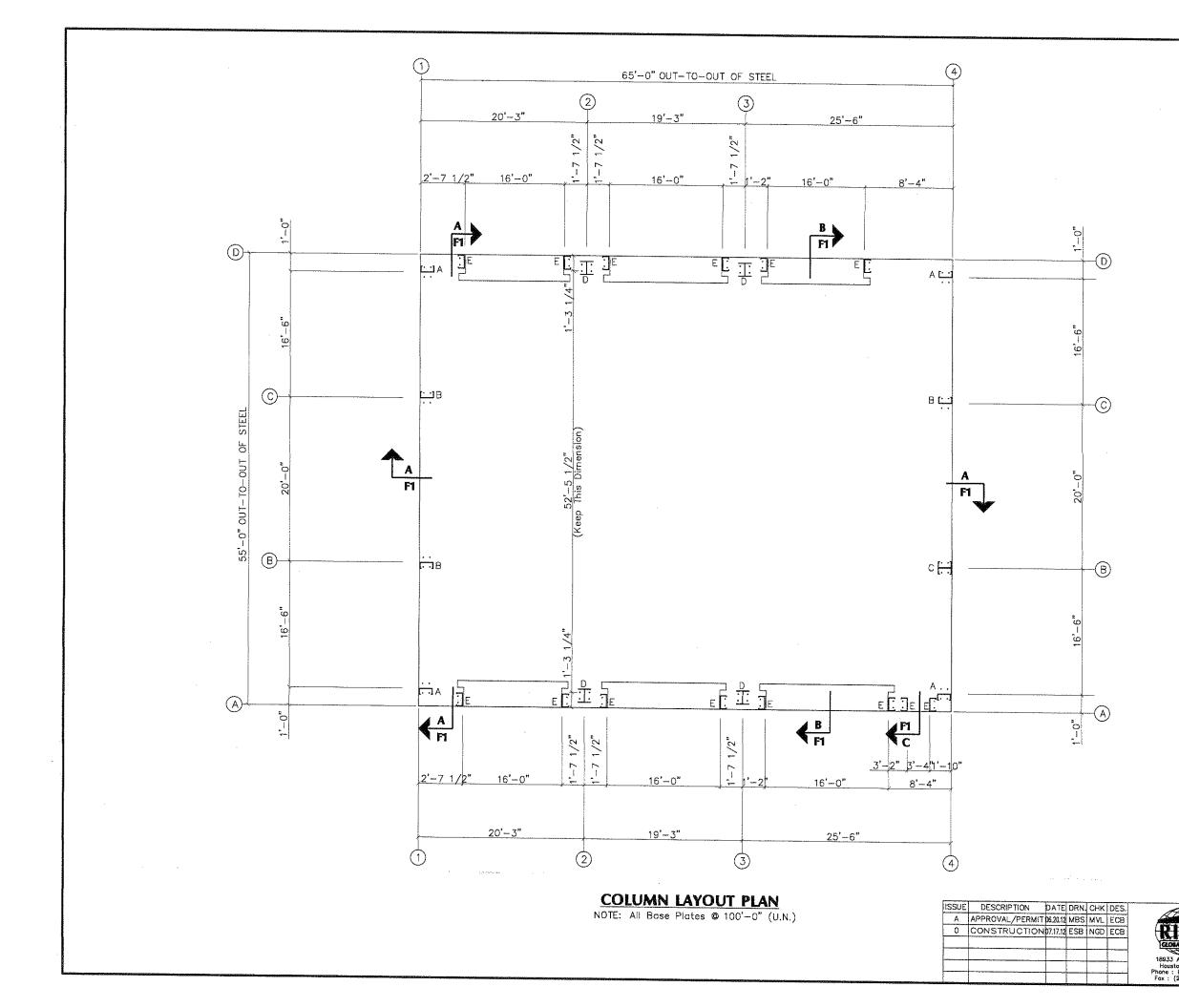
09 ed 11 building structure only by RGB 10 10 10 10 10 10 10 10 10 10	Bay Spacing (ft) <u>COVERING AND TRIM</u> Roof Panels & Trim	:55 :65):20 :1.0:12 :1.0:12 :1 at 20.25 1 at 19.25 1 at 25.50
nph) 8/-0.18 +0.55/-0.55 0.00 0	Length (ft) Eave Ht. at BSW (ft Eave Ht. at FSW (ft Roof Slope at BSW Roof Slope at FSW Bay Spacing (ft) <u>COVERING AND TRIM</u> Roof Panels & Trim	:65):20):20 :1.0:12 :1.0:12 :1.0:12 :1 at 20.25 1 at 19.25 1 at 25.50
nph) 8/-0.18 +0.55/-0.55 0.00 0	Eave Ht. at BSW (ft Eave Ht. at FSW (ft Roof Slope at BSW Roaf Slope at FSW Bay Spacing (ft) <u>COVERING AND TRIM</u> Roof Panels & Trim):20):20 :1.0:12 :1.0:12 : 1 at 20,25 1 at 19,25 1 at 25,50
nph) 8/-0.18 +0.55/-0.55 0.00 0	Eave Ht. at FSW (ft Roof Slope at BSW Roof Slope at FSW Bay Spacing (ft) <u>COVERING AND TRIM</u> Roof Panels & Trim):20 :1.0:12 :1.0:12 : 1 at 20.25 1 at 19.25 1 at 25.50
) 8/-0.18 +0.55/-0.55 0.00 0 0	Roof Slope at BSW Roaf Slope at FSW Bay Spacing (ft) <u>COVERING AND TRIM</u> Roof Panels & Trim	:1.0:12 :1.0:12 : 1 at 20.25 1 at 19.25 1 at 25.50
) 8/-0.18 +0.55/-0.55 0.00 0 0	Roaf Slope at FSW Bay Spacing (ft) <u>COVERING AND TRIM</u> Roof Panels & Trim:	:1.0:12 : 1 at 20.25 1 at 19.25 1 at 25.50
8/-0.18 +0.55/-0.55 0.00 0 0	Bay Spacing (ft) <u>COVERING AND TRIM</u> Roof Panels & Trim:	: 1 at 20.25 1 at 19.25 1 at 25.50
0	COVERING AND TRIM Roof Panels & Trim	1 at 19.25 1 at 25.50
0	Roof Panels & Trim	
0	Roof Panels & Trim	IS:
0	Roof Panels & Trim	1
0		-
0	Panel Type	: 26 Ga. 'PBR'
	Panel Color	:Burnished Slate
00	Trim Colors	
JQ	Eave Trim	: LightStone
	Eave Gutter	: LightStane
	Gable Trim	: LightStone
	Wall Panel & Trims	- 19.000000
)	Panel Type	: 26 Ga. 'PBR'
)	×1	
	Panel Colar	: LightStone
1		
Normal		: LightStone
	Opening Trims	: LightStone
= 0.330 :S1 = 0.072	Downspouts	: LightStone
= 0.338 :Sd1 = 0.115	Base Trim	: LightStone
	Mas. Flash	N/A
l Systems Not Specifically lled For Seismic Resistance	Special Requirements	
		WALL LINER PANEL
	SOLAR WHITE	-
Frames = 0.1127		
Vind Bents = 0.1127		
	= 0.338 :Sd1 = 0.115 I Systems Not Specifically Illed For Seismic Resistance I Frames ed Frames I Frames = 3.00 Wind Bents = 3.00 (-Bracing = 3.00	NormalCorner Trims Opening Trims= 0.330:S1 = 0.072Downspouts= 0.338:Sd1 = 0.115Base TrimI Systems Not Specifically illed For Seismic ResistanceSpecial RequirementsI Frames1. 26GA. 'PBM' SOLAR WHITEI Frames3.00Wind Bents = 3.00 (-Bracing = 0.1127 Wind Bents = 0.1127

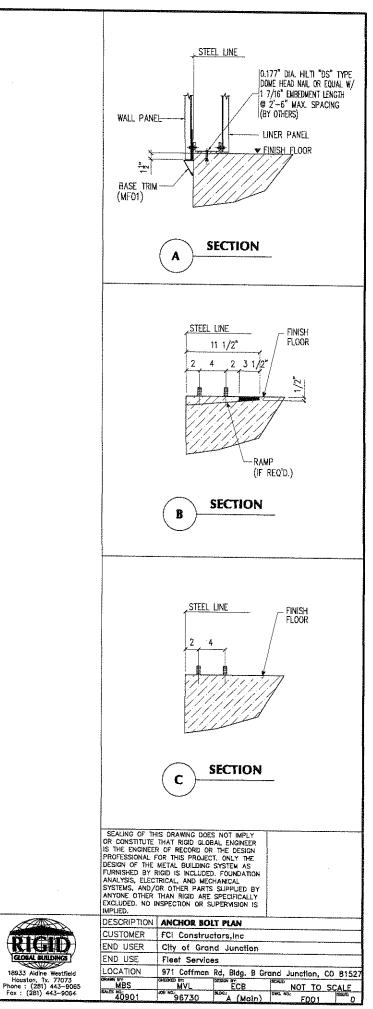
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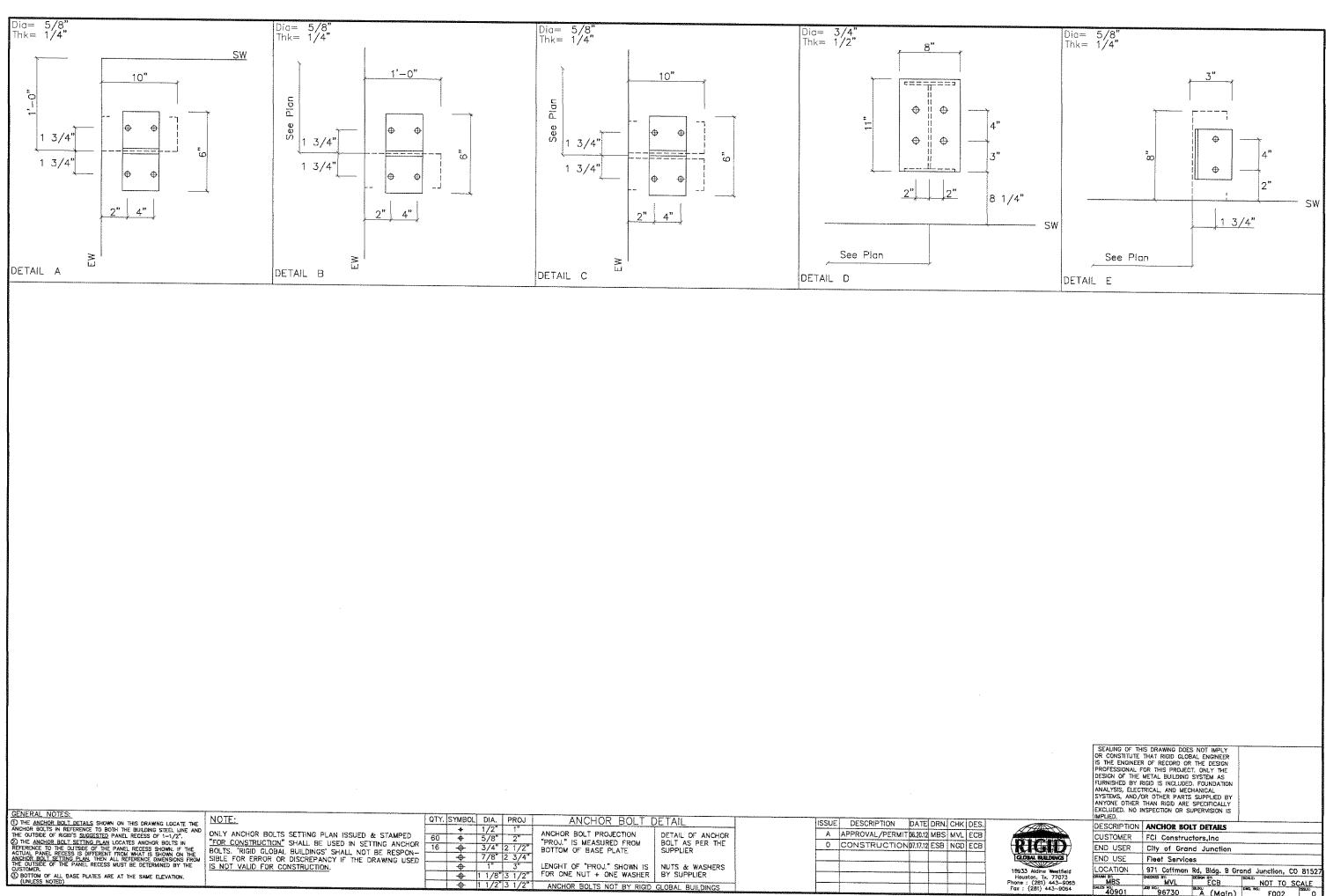
- 2.6 The BUYER/END USE CUSTOMER is responsible for overall project coordination. All interface, compatibility, and design considerations concerning any materials not furnished by R.G.B. and R.G.B. steel system are to be considered and coordinated by the BUYER/END USE CUSTOMER. Specific design articria concerning this interface between materials must be furnished before release for fabrication or R.G.B. assumptions will govern (Section 4 and Commentary, AISC Code of Standard Practice, 9th Edition)
- 2.7 It is the responsibility of the BUYER/END USE CUSTOMER to insure that R.G.B. plans comply with the applicable requirements of any governing building authorities. The supplying of secied engineering data and drawings for the metal building system does not imply or constitute an agreement that R.G.B. or its design engineers are acting as the engineer of record or design professional for a construction project. These drawings for the statistical or the structure components furnished by R.G.B.
- 2.8 The BUYER/END USE CUSTOMER is responsible for setting of anchor bolts and erection of steel in accordance with R.G.B. "For Construction" drawings only. Temporary supports such as guys, braces, falsework, cribbing or other elements required for the erection operation shall be determined furnished and installed by the erector. No items should be purchased from a preliminary set of drawings, including anchor bolts. Use only final "FOR CONSTRUCTION DRAWINGS" for this use. (Section 7 AISC Code of Standard Practice, 9th Editor.)
- 2.9 Rigid Global Buildings is responsible for the design of the anchor bolt to permit the transfer of forces between the base plote and the anchor bolt in shear, bearing and tension, but is not responsible for the transfer of anchor bolt forces to the concrete or the adequacy of the anchor bolt in relation to the concrete. Unless otherwise provided in the Order Documents, R.G.B. does not design and is not responsible for the design, material and construction of the foundation or foundation embedments. The END USE CUSTOMER should assure himself that adequate provisions are made in the foundation design for clocks imposed by column reactions of the building, other imposed loads, and bearing capacity of the soil and other conditions of the building site. It is recommended that the anchorage and foundation of the design do the design of a Registered Professional Engineer expressional Enginee Building Systems Manual) of such structures. (Section A10 1996 MBMA Low Rise Building Systems Manual)
- 2.10 Normal erection operations include the corrections of minor misfits by moderate amounts of rearning, chipping, welding or cutting, and the drowing of elements into line through the use of drift pins. Errors which cannot be corrected by the foregoing means or which require major changes in member configuration are to be reported immediately to R.G.B. by the BUYER/CHD USE CUSTOMER, to enable whoever is responsible either to correct the error or to approve the most efficient and economic method of correction to be used by others. (Section 7 AISC Code of Standard Practice, 9th Edition)
- 2.11 Neither the fabricator nor the BUYER/END USE CLISTOMER will cut, drill or otherwise alter his work, or the work of other trades, to accommodate other trades, unless such work is clearly specified in the contract documents. Whenever such work is epclited, the BUYER/END USE CLISTOMER is responsible for furnishing complete information as to materials, size, location and number of alterations prior to preparation of shop drawings. (Section 7 AISC Code of Standard Practice, 9th Edition)
- 2.12 <u>WARNING</u> In no case should Galvalume steel panels be used in conjunction with lead or capper. Both lead and capper have harmful corrosive effects on the Galvalume alloy cacting when they are in contact with Galvalume steel panels. Even run-off from capper flashing, wiring, or tubing onto Galvalume should be avoided.
- 2.13 <u>SAFETY COMMITMENT</u> Rigid Global Buildings has a commitment to manufacture quality building components that can be sofiely erected. However, the sofety commitment and job site practices of the erector are beyond the control of R.G.B. It is strongly recommended that safe working conditions and accident prevention practices be the top priority of any job site. Local, State, and Federal safety and health standards should always be followed to help insure workers safety. Make certain all employees know the safest and most productive way of erecting a building. Emergency procedures should be known to all employees. Daily meetings highlighting safety procedures are also recommended. The use of hard hats, rubber sole shoes for roof work, proper equipment for handling material, and safety nets where applicable, are recommended.
- 2.14 Roof drainage systems (gutter, downspouts, etc.) must be free of any obstruction to ensure smooth operation at any given time.
- 2.15 It is recommended by Factory Mutual (Reference: B2.44) that roofs be cleared of snow when half of the maximum snow depth is reached. The maximum snow depth can be estimated based on the design snow load and the density of snow and/or ice buildup. See Chart below.

ROOF SNOW LOAD (IN PSF)	EQUIVALENT SNOW HEIGHT AT ROOF (IN INCHES)	RECOMMENDED SNOW HEIGHT WHEN SNOW REMOVAL SHOULD START (IN INCHES)		
20	16.60	8.30		
25	17.25	8.62		
30	17.90	8,95		
35	18.55	9.28		
40	19.20	9.60		
45	19.85	9.92		
50	20.50	10.25		
55	21.15	10.58		
60	21.80	10.90		
65	22.45	11.22		
70	23.10	11.55		
75	23.75	11.88		
BO	24.40	12.20		
NOTE: For Snow/Ice Remo Section A8.4, Page	oval Procedure, Refer to Metal Buildi XI-A8-2.	ng System Manual 2002 Edition,		

SEALING OF THIS DEAWING DOES: NOT IMPLY OR CONSTITUTE THAT READ GLOBAL ENGINEER IS THE ENGINEER OF RECORD OR THE DESIGN PROFESSIONAL FOR THIS PROJECT, ONLY THE DESIGN OF THE METAL BUILDING SYSTEM AS FURNISHED BY RIGID IS INCLUDED. FOUNDATION ANALYSIS, ELECTRICAL, AND MECHANICAL SYSTEMS, AND/OR OTHER PARTS SUPPLIED BY ANYONE OTHER THAN RIGID ARE SPECIFICALLY EXCLUDED, NO INSPECTION OR SUPPERVISION IS IMPLIED.	
FCI Constructors, Inc	
SALES NO.: 40901 JOB NO.: 96730 BLDC.A	(Moin) DWG. NO.: CI OF I ISSUE



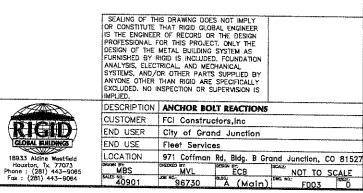




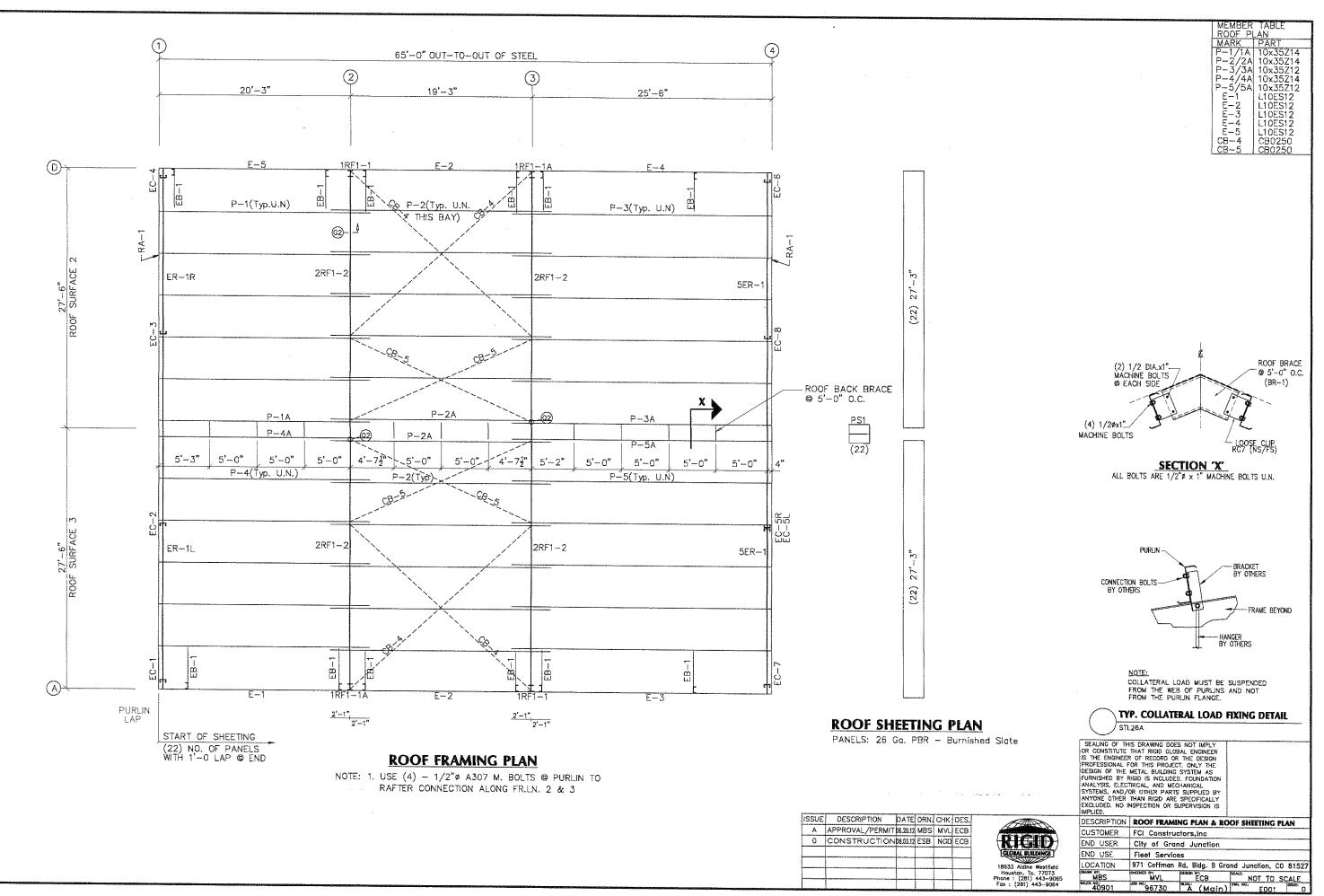
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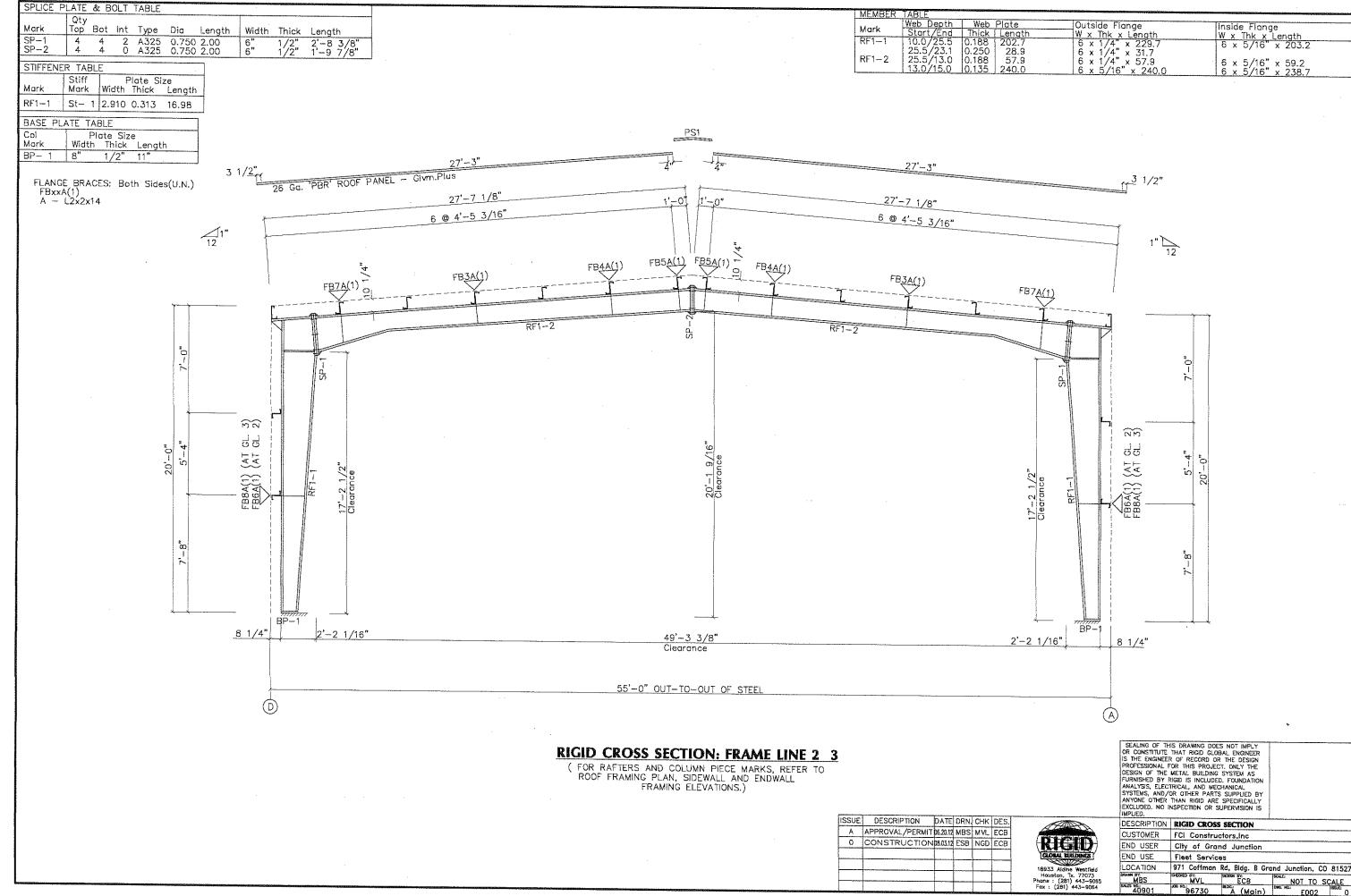
	ANYONE OTHER THAN RIGID ARE SPECIFICALLY EXCLUDED. NO INSPECTION OR SUPERVISION IS IMPLIED.					
	DESCRIPTION	DESCRIPTION ANCHOR BOLT DETAILS				
	CUSTOMER	FCI Constructors.inc				
	END USER	City of Grand Junction				
	END USE	Fleet Services				
	LOCATION	971 Coffman Rd, Bidg. B Grand Junction, CO 81527				
	MBS					
-	40901	96730 A (Mgin) F002 0				

FRAME LINES: 2 3	
	RIGID FRAME: BASIC COLUMN REACTIONS (k) Frame ColumnDeadCollateral-
COLUMN LINE	Line Line Horiz Vert 2* D 0.8 2.4 0.8 1.9 5.4 12.3 8.1 18.5 -5.1 -8.6 -0.1 -5.2
	Frame CalumnWind_12Wind_R2LnWind1LnWind2Seismic_LSeismic_R-
	Line Line Horiz Vert 2* D -4.8 -5.1 0.2 -1.7 -1.6 -12.1 -1.3 -8.6 -0.6 -0.4 0.6 0.4 0.6 0.4 0.6 -0.4 0.6 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4
	Frame CalumnLnSeisLWND1_L2ELWND1_R2ELWND2_L2ELWND2_R2EFlUNB_SL Line Line Horiz Vert Horiz Vert Horiz Vert Horiz Vert Horiz Vert Horiz Vert
	2* A 0.0 -1.7 0.2 -0.2 0.1 -1.3 0.2 -0.2 0.1 -1.3 -6.3 9.8
	Frame CalumnF1UNB_SL_R Line Line Horiz Vert 2* D 6.3 9.8
<u>H</u>	2* A ~6.2 17.5 2* Frame lines: 2 3
v v	
RIGID FRAME: MAXIMUM REACTIONS, ANCHOR BOLTS, & BASE PLATES	Rofter Rofter Brace Frm Col Dead Collat Live Snaw Wind Wind R mawind law and State S
Column Reactions (k) Frm Col Lood Hmax V Lood Hmin V AncBolt Base Plate (in) Grout	Line Line Vert Vert Vert Vert Vert Horz Vert Horz Vert Horz Vert Horz Horz I 1 D 0.3 0.2 1.4 2.2 -1.4 -0.8 1.6 -3.1 0.0 1.0 -1.2 1.3
2* D 1 07 007 0 10 H Vmin Qty Dio Width Length Thick (in)	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
2* A 3 4.6 7.2 1 -9.7 22.7 4 0.750 8.000 11.00 0.500 0.0	Frm Col LnWind1 LnWind2Seis_LSeis_R E1UNB_SL_1 E1UNB_SL_R E1PAT_SL_3 Line Line Vert Vert Horz Vert Horz Vert Horz Vert Horz Vert Horz Vert 1 D -1.0 -0.6 0.6 -0.7 0.0 0.8 0.0 2.2 0.0 0.6 0.0 1.2
1 -9.7 22.7 5 1.1 -12.0 2* Frome lines: 2 3	1 C -2.9 -1.7 0.0 0.7 0.6 -0.8 0.0 7.4 0.0 2.4 0.0 1.6 1 B -2.9 -1.7 0.0 0.0 0.0 0.0 0.0 2.4 0.0 1.6 1 B -2.9 -1.7 0.0 0.0 0.0 0.0 2.4 0.0 7.4 0.0 -0.2
NOTES FOR REACTIONS	Frm Col E1PAT_SL_4 E1PAT_SL_5 E1PAT_SL_6 -LWIND1_L -LWIND1_R -LWIND2_L LWIND2_R
 All loading conditions are examined and only maximum/minimum H or V and the cooresponding H or V are reported. 	Line Horz Vert Horz Vert 1 D 0.0 0.0 0.0 1.0 0.0 -0.2 0.0 -0.4 0.0 0.0 0.0 0.0 -0.4 0.0 0.0 1 C 0.0 -0.2 0.0 3.4 0.0 1.5 0.0 -0.3 0.0 0.1 0.0 -0.3 0.0 0.1
 Pasitive reactions are as shown in the sketch. Foundation loads are in apposite directions. 	$ \begin{bmatrix} 1 & B & 0.0 & 1.6 & 0.0 & 1.5 & 0.0 & 3.4 & 0.0 & 0.1 & 0.0 & -0.3 & 0.0 & 0.1 & 0.0 & -0.3 \\ 1 & A & 0.0 & 1.2 & 0.0 & -0.2 & 0.0 & 1.0 & 0.0 & 0.0 & 0.0 & -0.4 & 0.0 & 0.0 & 0.0 & -0.4 \\ \end{bmatrix} $
3. Bracing reactions are in the plane of the brace with the H pointing away from the braced bay. The vertical reaction is downward.	Rafter Rafter Brace Brace Frm Coi Deod Callat Live Snow Wind_L Wind_RWind_LWind_R Wind_P Wind_S Line Line Vert Vert Vert Vert Vert Horz Vert Horz Vert Horz Horz Horz Vert Horz Vert Horz Vert Horz Vert Horz Vert Horz
4. Building reactions are based on the following building data.	4 A 0.4 0.3 1.8 2.7 -1.6 -0.9 1.9 -3.8 0.0 1.2 -1.2 1.3 4 B 1.0 0.8 5.3 7.9 -4.6 -2.9 0.0 -2.5 1.9 -5.0 -2.5 2.8
Width (ft) : 55 Length (ft) : 65 Eave Height (ft) : 20 / 20	
Roof Slope (risé/12) : 1.0:12 / 1.0:12 Design Cade : HBC Og Enclosure : Clased	Frm Col LnWind1 LnWind2Seis_iSeis_R E2UNB_SL_L E2UNB_SL_R E2PAT_SL_3 Line Vert Vert Horz Vert Horz Vert Horz Vert Horz Vert Horz Vert 4 A -1,3 -0,7 0.8 -0.9 0.0 0.9 0.0 2.8 0.0 0.7 0.0 1.6
Dead Load (psf) : 2.270 Collateral Load (psf) : 3 Wind Speed (mph) : 90 mph	$ \left[\begin{array}{cccccccccccccccccccccccccccccccccccc$
Wind Importance Factor : 1.00 Wind Exposure : C Live Load (pst) : 20.00	Frm Col E2PAT_SL_4 E2PAT_SL_5 E2PAT_SL_6 -LWND1_LLWND1_RLWND2_LLWND2_R-
Frame Live Load (psf) : 20 Ground Snow Load (psf) : 30.000 Road Snow Load (psf) : 30	4 A 0.0 0.1 0.0 1.3 0.0 -0.2 0.0 -0.6 0.0 0.0 0.0 -0.6 0.0 0.0 4 B 0.0 -0.3 0.0 4.2 0.0 1.9 0.0 -0.4 0.0 0.1 0.0 -0.4 0.0 0.1
Snow Exposure 1,000 Snow Importance Factor 1,000 Thermal Factor 1,000	4 D 0.0 1.6 0.0 -0.2 0.0 1.3 0.0 0.0 0.0 -0.6 0.0 0.0 0.0 0.0 -0.5
Seismic Importance Factor : 1.00 Spectral Response Accel. : Ss=0.330 :S1=0.072	ENDWALL COLUMN: MAXIMUM REACTIONS, ANCHOR BOLTS, & BASE PLATES
Spectral Response Coeff. : Sds=0.338 :Sd1=0.115 Seismic Coeff. (Fa*Ss) : 0.507 :Fo=1.536 Seismic Design Category : C	Frm Col Load Himax V Load Himin V Anc. Bolt Base_Plate (in) Grout Line Line ID H Vmox ID H Vmin Qty Dia Width Length Thick (in)
5. Loading canditions are: 1 DL+CL+SL+Slide	1 D 6 1.3 -3.0 7 -1.2 -0.8 4 0.625 6.000 6.000 0.250 0.0 8 1.0 2.9 6 1.3 -3.0
2 0.60DL+WL1 3 0.60DL+WR1 4 0.60DL+WR1+LWIND1_L2E	1 C 9 2.8 -3.7 7 -2.5 -2.5 4 0.625 6.000 6.000 0.250 0.0 10 0.0 8.7 9 2.8 -3.7
5 0.60DL+LnWndi+LWNDIR2E 6 0.60DL+WD2+WS 7 0.60DL+WP+LnWndi	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
8 DL+CL+0.75SL+0.75WR2+0.75WS+0.75Slide 9 0 60D1 + MR2+WS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
10 DL+CL+E1UNB_SL_1 11 DL+CL+E1UNB_SL_R 12 DL+CL+E2UNB_SL_1 13 DL+CL+E2UNB_SL_1	4 B 9 2.8 -4.4 7 -2.5 -3.1 4 0.625 6.000 6.000 0.250 0.0 12 0.0 11.0 9 2.8 -4.4
13 DL+CL+E2UNB_SL_R	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
BUILDING BRACING REACTIONS	4 D 9 1.3 -1.5 7 -1.2 -1.0 4 0.625 6.000 6.000 0.250 0.0 13 0.0 3:4 -9 1.3 -1.5
± Reactions (k.) Panel —	
Loc Line Line Horz Vert Horz Vert (Ib/ft)	
F_SW A Wind Bent in Wall R_EW 4 A,B 1.9 2.1 0.8 0.9 B_SW D Wind Bent in Wall	
WIND BENT REACTIONS	
± Reactions — Wall — Coi Wind(k) Seismic(k) Loc Line Line Horz Vert Horz Vert	ISSUE DESCRIPTION DATE DRN CHK DES.
F_SW A 2 1.9 3.6 0.9 1.7 F_SW A 3 1.9 3.6 0.9 1.7	A APPROVAL/PERMIT 06.20.12 MBS MVL ECB
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 CONSTRUCTION07.17.12 ESB NGD ECB
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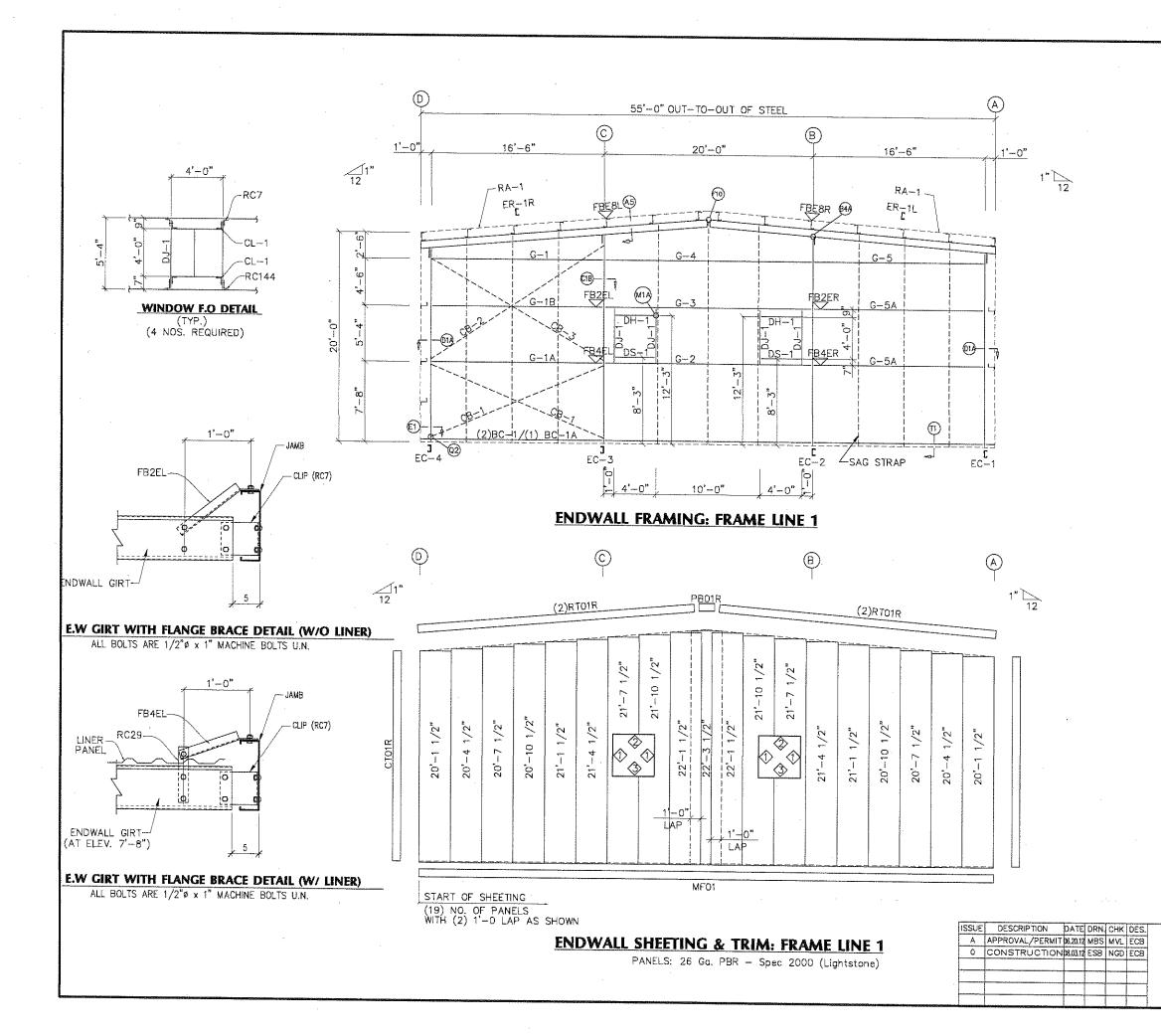








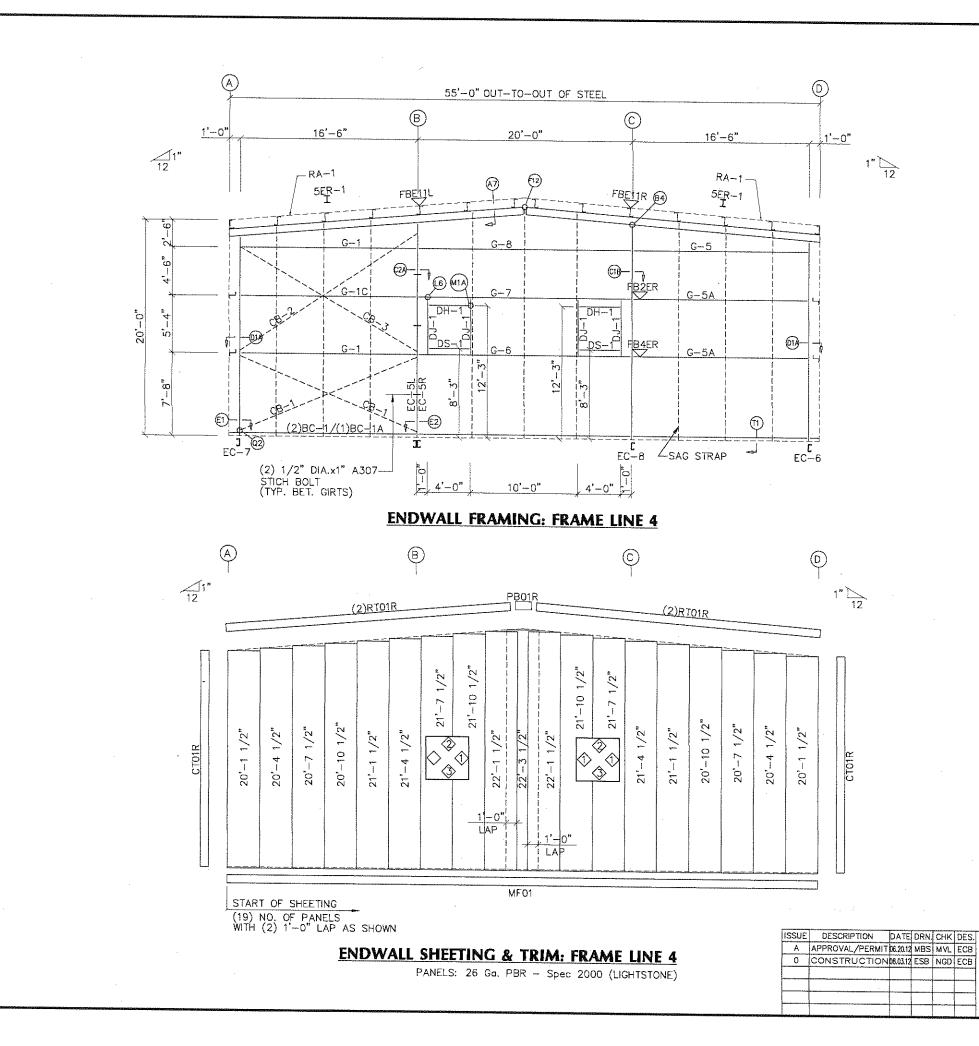
9	Outside Flange	Inside Flange
<u>gth</u>	<u>IW x Ihk x Length</u>	Inside Flange W x Thk x Lenath
.7	6 x 1/4" x 229.7 6 x 1/4" x 31.7	6 x 5/16" x 203.2
.9).0	6 x 1/4" x 57.9 6 x 5/16" x 240.0	6 x 5/16" x 59.2 6 x 5/16" x 238.7



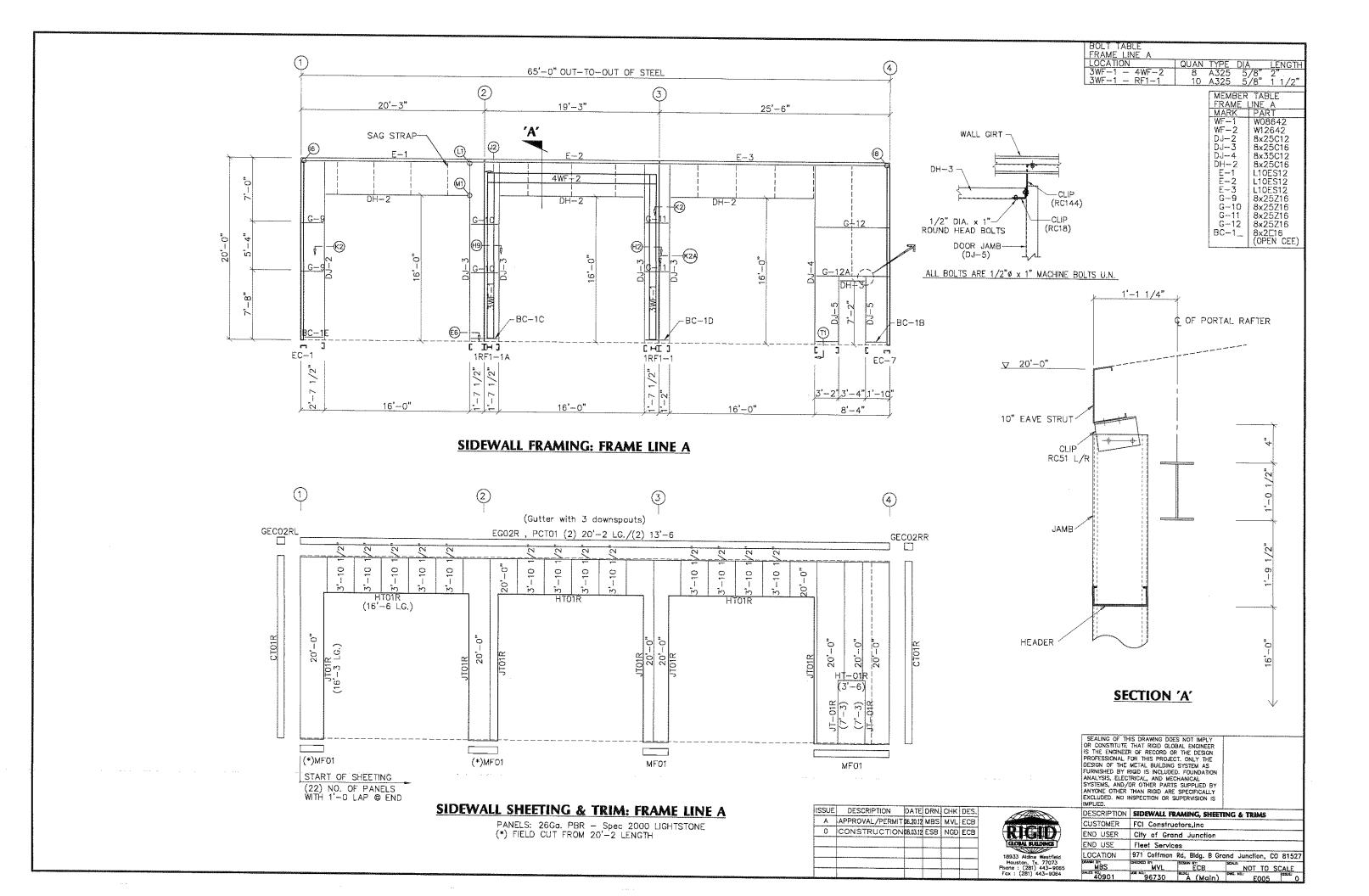
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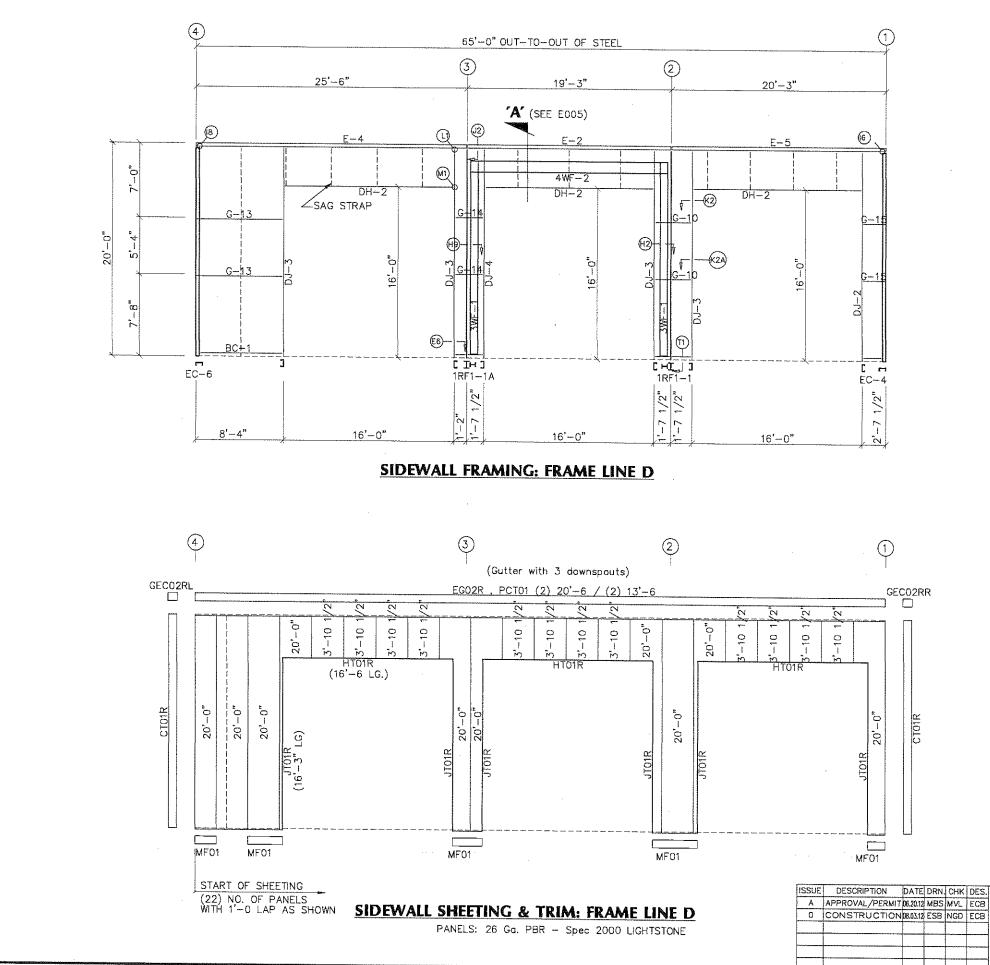
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				DS	-1 8	8x25C16 8x25Z16
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					MARK JT01R	LENGTH 4'3"
				2	HT01R	4'5" 4'3"
				3	ST01R	4'3"
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	IMPLIED. DESCRIPTION		FRAMINO		NC & THE	MC
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Aidine Westfield ton, Tx. 77073 (281) 443-9065	LOCATION MBS	OVECKED BY. MVL	nan Rd, Bli Desexien		SCALE:	
(281) 443-9064	40901	96730	5.00.	(Main)	DHC. NO.:	TO SCALE 003 0



	BOLT TAI	3 F			
	FRAME L	INE 4			
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			L EC	C−6 [10x3	
				C-5 10x7	
				R—1 W8x1 J—1 8x25	
				⊣–1 8x25	C16
				S-1 8x25 S-1 8x25	
				G-5 8x25	Z16
				G-6 8x25 G-7 8x35	
				G-7 8x35 G-8 8x25	
				C−1 8x2⊡	16
				3-1 (OPEN 3-1 CB02	CEE)
			CE	3-2 CB02	
				3-3 CB02	
			M	EMBER TABL	F
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	OR CONSTITUTE IS THE ENGINEE PROFESSIONAL F DESIGN OF THE FURNISHED BY F ANALYSIS, ELEC SYSTEMS, AND / ANYONE OTHER EXCLUDED. NO I IMPUED. DESCRIPTION CUSTOMER END USER END USE END USE LOCATION	THAT RIGD ELO. R OF RECORD OF OR THIS PROJECT RETAL BUILDING RETAL BUILDING RETAL BUILDING RETAL BUILDING RETAL BUILDING RETAL PARTS THAN RIGD ARE SPECTION OR S ENDWALL FR FCI Constru- City of Grau Fleet Servic 971 Coffman	BAL ENGINEER A THE DESIGN JT. ONLY THE SYSTEM AS SYSTEM AS SUPPLIED BY SUPPLIED BY SPECIFICALLY AMING, SHEET ctors,inc nd Junction es Rd, Bidg, B Gn	and Junction, C	
18933 Aidioe Westfield	OR CONSTITUTE IS THE ENGINEE PROFESSIONAL FURNISHED BY F ANALYSIS, ELEC SYSTEMS, AND / ANYONE OTHER EXCLUDED. NO 1 DESCRIPTION CUSTOMER END USER END USE END USE LOCATION	THAT RIGD ELO R OF RECORD OF THIS PROJEC METAL BUILDING RECAL BUILDING RECAL BUILDING RECAL AND MEC RECAL AND MEC RECA	BAL ENGINEER AT THE DESIGN CT. CNLY THE SYSTEM AS D. FOUNDATION HANICAL SUPPLIED BY SPECIFICALLY UPERVISION IS AMING, SHEET ctors, inc nd Junction BS Rd, Bidg, B Gr DOBON 87 ECB	and Junction, C	SCALE





BOLT TABLE FRAME LINE D LOCATION 3WF-1 - 4WF-2 3WF-1 - RF1-1	QUAN 8 10		LENGTH /8"2" /8"11/2"
		MEMBER FRAME MARK WF-1 DJ-2 DJ-2 DJ-3 DJ-4 DJ-5 DH-2 DH-2 DH-3 E-4 E-5 G-13 G-14 G-15 G-16 G-17 BC-1	

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	DESCRIPTION	SIDEWALL FR	AMING, SHEET	ING & TRIMS		
à,	CUSTOMER	FCI Construc	tors,inc			
H	END USER	d Junction				
r	END USE Fleet Services					
ad .	LOCATION	ind Junction, CO 81527				
5 065	MBS	MVL	ECB	NOT TO SCALE		
54	40901	96730	Å (Main)	E006 SSUE		



