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MISSOURI DEPARTMENT OF TRANSPORTATION

EDGAR SPRINGS
Working Bays/Cold Storage Building
Central District
27800 County Road 6150, Edgar Springs, MO 65462
Phelps County

CODE REQUIREMENTS

BUILDING CODE - CURRENT IBC

PLUMBING CODE - CURRENT IBC

MECHANICAL CODE - CURRENT IBC

ELECTRICAL CODE - CURRENT N.E.C.

COVER SHEET

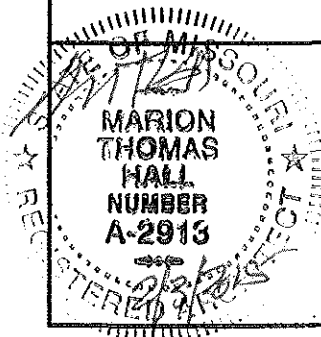
MISSOURI DEPARTMENT
OF TRANSPORTATION

DIVISION OF GENERAL SERVICES
FACILITIES MANAGEMENT

Edgar Springs Working Bays/Cold Storage Building
Central District - Phelps County
27800 County Road 6150

DESIGN BY: LARRY CAYLER
DATE: 1-23-15

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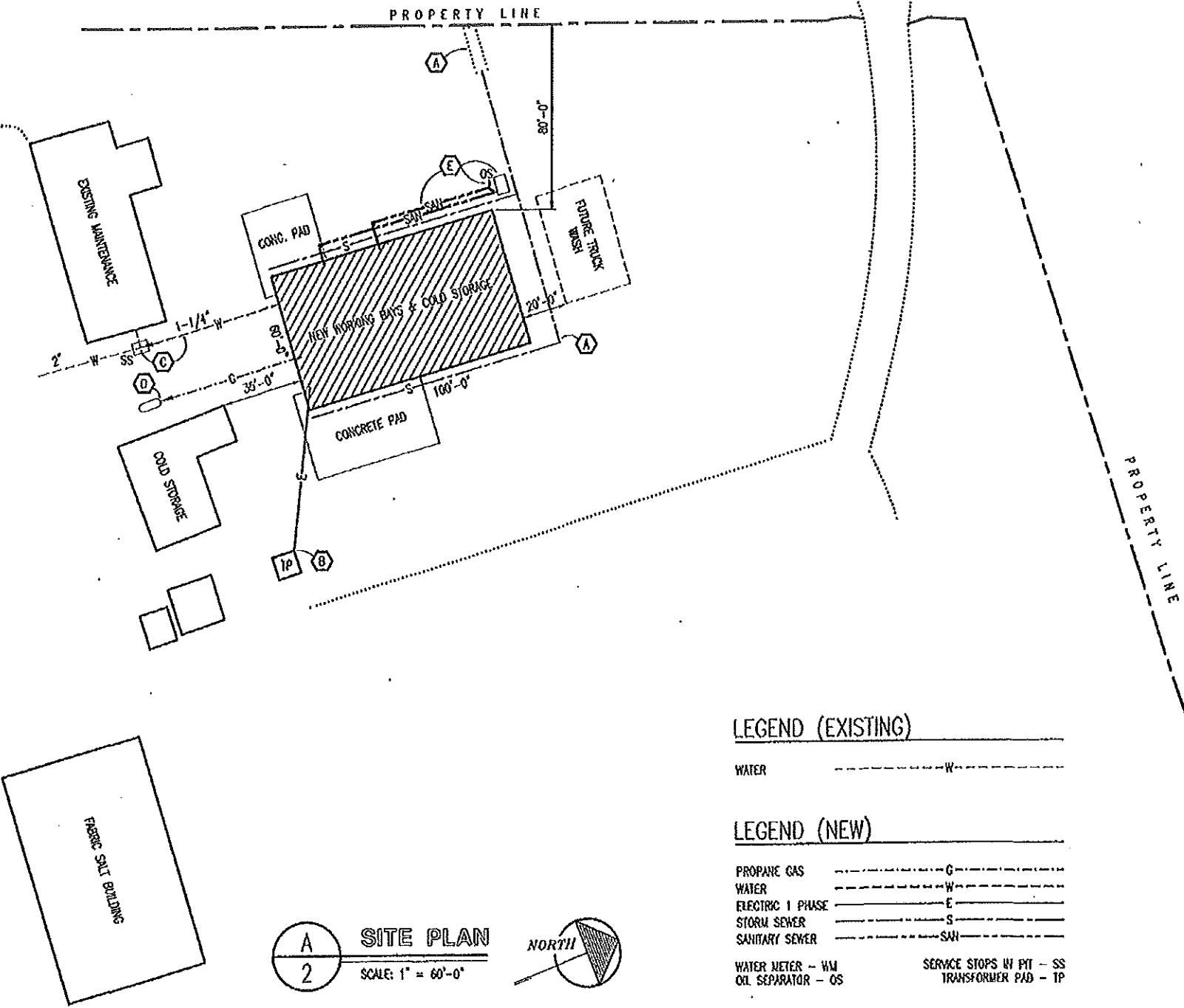


SITE NOTES

- A RUN STORM SEWER TO DAYLIGHT. CONTRACTOR TO PROVIDE 20'-0" LONG x 5'-0" x 12" DEEP RIP-RAP. SEE FLOOR PLAN FOR STORM SCHEDULE 35 PVC SIZE(S).
- B ELECTRICAL CONTRACTORS WORK TO BEGIN FROM AN EXISTING PAD MOUNTED TRANSFORMER. MAKE 1-PHASE CONNECTION FOR AN OPERABLE ELECTRICAL SERVICE APPROXIMATELY 60'± SOUTHEAST OF THE NEW BUILDING. PROVIDE SERVICE DISCONNECT ON THE NEW BUILDING WITH CONDUCTORS IN CONDUIT AS REQUIRED. TEMPORARY SERVICE CAN BE RAN FROM SAME TRANSFORMER PAD DURING CONSTRUCTION.
- C CONTRACTOR TO PROVIDE NEW CONCRETE PIT WITH CAST IRON LID AT END OF EXISTING 2" WATER SERVICE. PROVIDE CONNECTION WITH SERVICE STOP TO AN EXISTING 1" PEX SERVING THE EXISTING MAINTENANCE BUILDING. 2" SERVICE STOP AND CAP IN PIT FOR FUTURE TRUCK WASH AND SERVICE STOP FOR NEW 1-1/4" SCH. 80 PVC WATER SERVICE TO NEW BUILDING. COPPER BELOW THE CONCRETE PAD AS REQUIRED.
- D CONTRACTOR TO MAKE CONNECTION AS REQUIRED FOR AN OPERABLE GAS SERVICE FROM EXISTING 1000 GALLON PROPANE TANK. MAINTAIN GAS SERVICE CONNECTIONS TO OTHER BUILDING(S).
- E CONTRACTOR TO INSTALL 3" & 4" SANITARY SEWER LINES TO A NEW OIL SEPARATOR/HOLDING TANK. PROVIDE A CAPPED BYPASS 3" SCHEDULE 40 LINE FOR A FUTURE CONNECTION FOR FORCED MAIN SANITARY BY OTHERS. SEE PLUMBING PLAN.

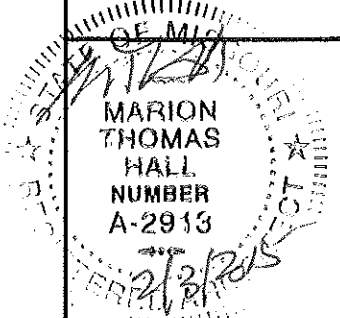
GRADING NOTES:

- CONTRACTOR WILL BE RESPONSIBLE FOR:
- EXCAVATION OF THE SUB GRADE.
 - EXCAVATING OF FOOTINGS.
 - ALL BACK FILL MATERIAL INSIDE AND OUTSIDE NEW BUILDING.
 - CRUSHED ROCK BASE UNDER BUILDING & APPROACH SLAB.
 - BACK FILL ALONG APPROACH SLAB A MINIMUM OF 6" BELOW TOP OF SLAB AND SIDEWALK.
 - FINISHED GRADE TO DRAIN AWAY FROM BUILDING.
 - PROVIDE TOP SOIL, FERTILIZE, SEED AND STRAW AT ALL THE LAWN AREAS DISTURBED DURING CONSTRUCTION.
 - PROVIDE FINISHED GRADE MATERIAL DISTURBED DURING CONSTRUCTION TO MATCH EXISTING.
 - VERIFY UTILITY LOCATIONS BEFORE CONSTRUCTION.
 - MOODOT TO HAVE THE FOUR CORNERS STAKED AND BUILDING FOOTPRINT & EXTERIOR APPROACH SLAB LEVELLED.
 - EXCAVATED SOIL NOT USED CAN BE PLACED ON SITE. AREA TO BE DESIGNATED BY OWNER.



- LEGEND (EXISTING)
- WATER -----W-----
- LEGEND (NEW)
- PROPANE GAS -----G-----
 - WATER -----W-----
 - ELECTRIC 1 PHASE -----E-----
 - STORM SEWER -----S-----
 - SANITARY SEWER -----SAH-----
 - WATER METER - WM
 - OIL SEPARATOR - OS
 - SERVICE STOPS IN PIT - SS
 - TRANSFORMER PAD - TP

A 2 SITE PLAN SCALE: 1" = 60'-0" NORTH

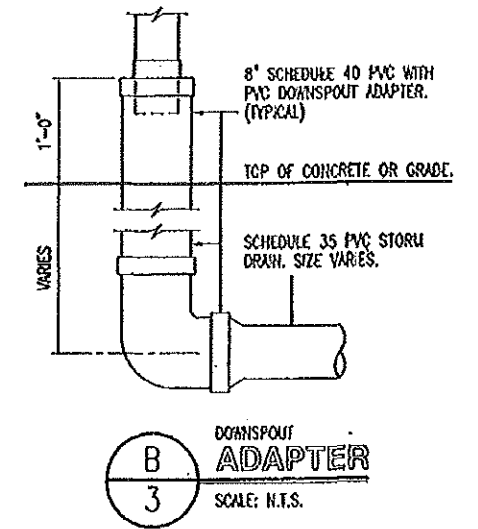
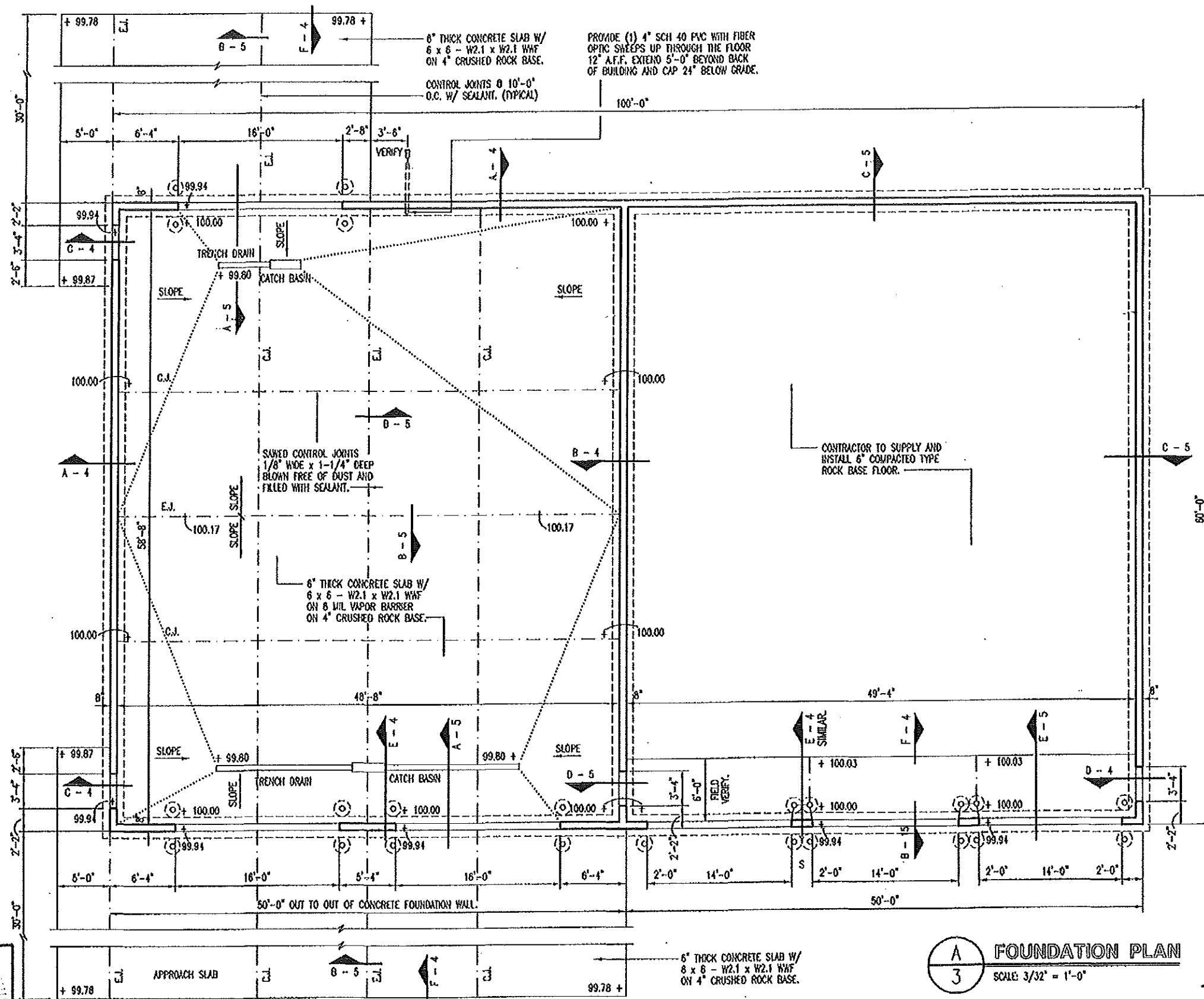


SITE PLAN

MISSOURI DEPARTMENT OF TRANSPORTATION DIVISION OF GENERAL SERVICES FACILITIES MANAGEMENT

Edgar Springs Working Bays/Cold Storage Building Central District - Phelps County 27800 County Road 6150

DESIGN BY: LARRY DAVEN DATE: 1-23-15 Sheet 2 of 19



A
3 FOUNDATION PLAN
SCALE: 3/32" = 1'-0"

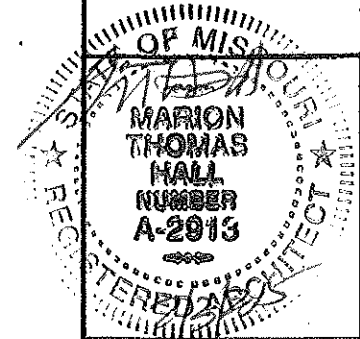


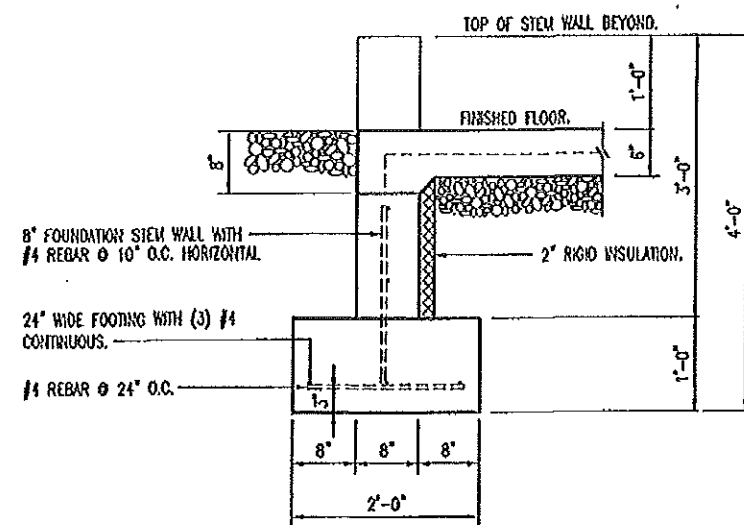
FOUNDATION PLAN

MISSOURI DEPARTMENT
OF TRANSPORTATION
DIVISION OF GENERAL SERVICES
FACILITIES MANAGEMENT

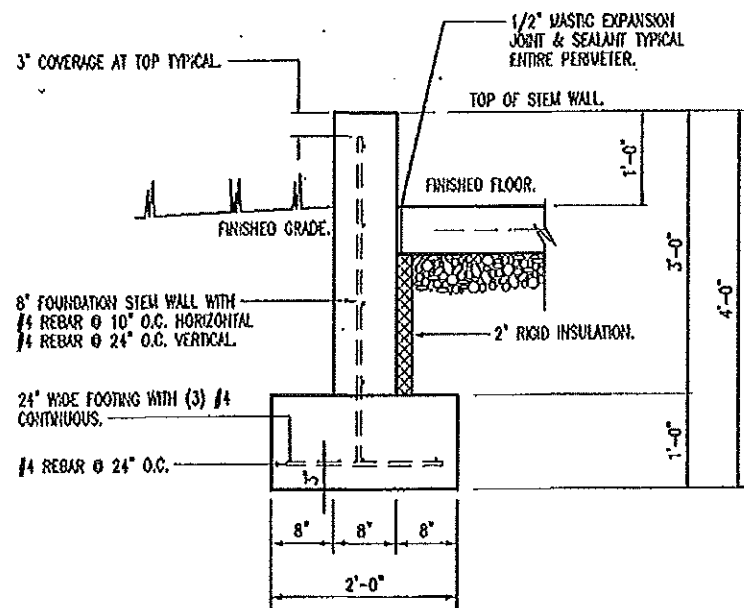
Edgar Springs Working Bays/Cold Storage Building
Central District - Phelps County
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DATE: 1-23-15
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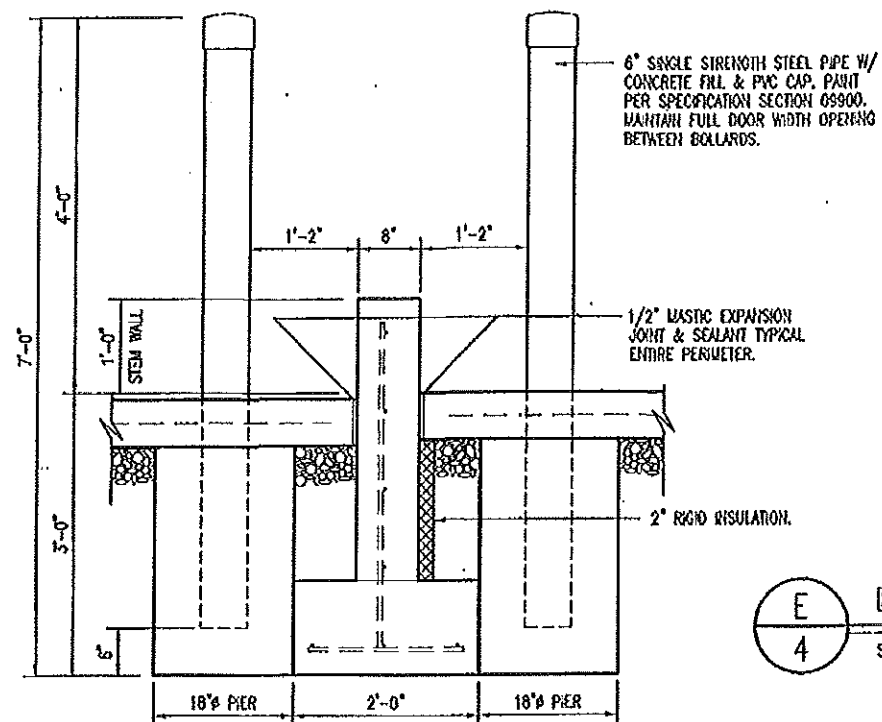




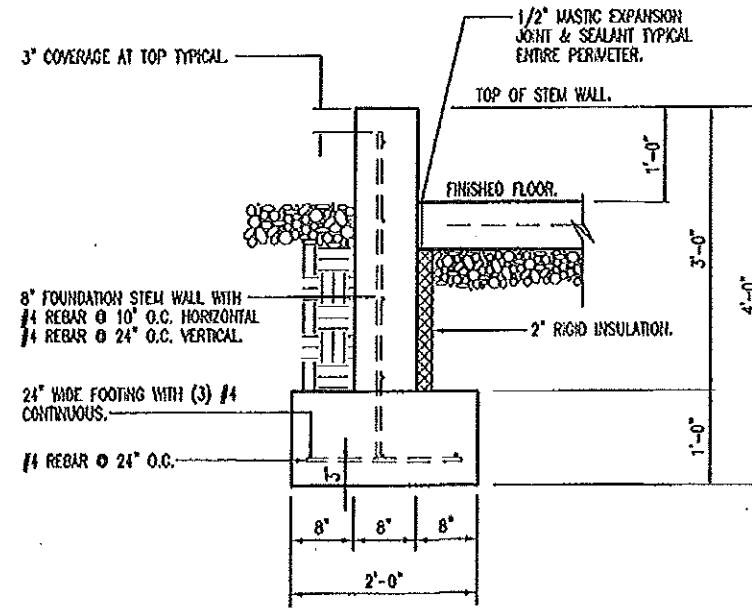
D
4
PASSAGE DOOR
EXTERIOR STEM WALL
SCALE: 1/2" = 1'-0"



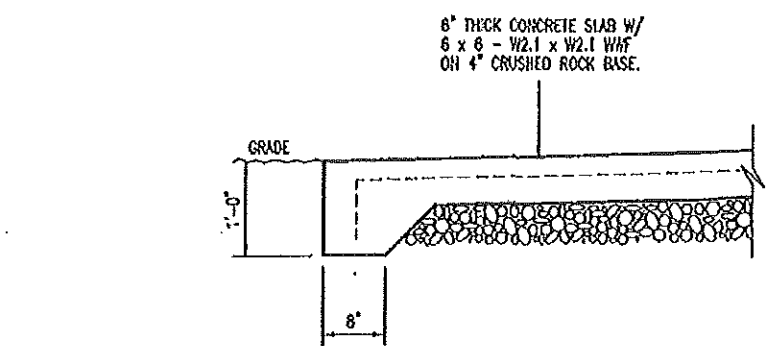
A
4
STEM WALL
SCALE: 1/2" = 1'-0"



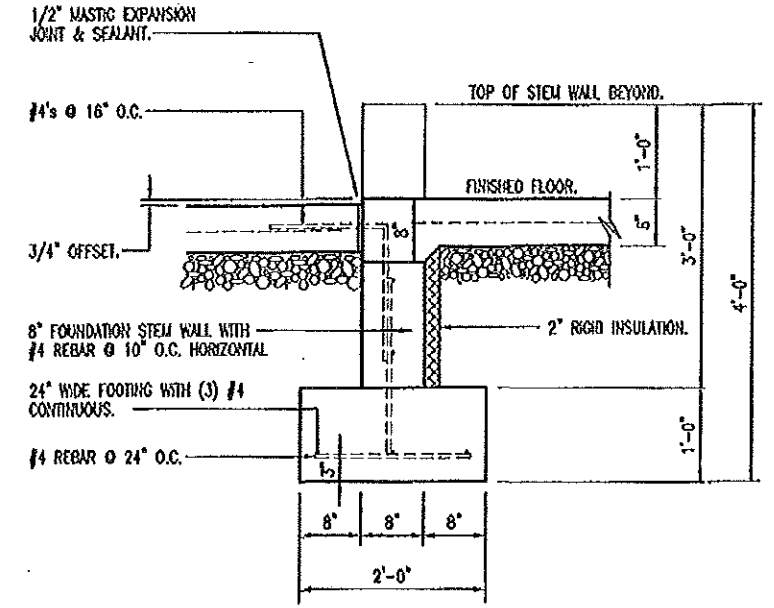
E
4
BOLLARD @ FOOTING DETAIL
SCALE: 1/2" = 1'-0"



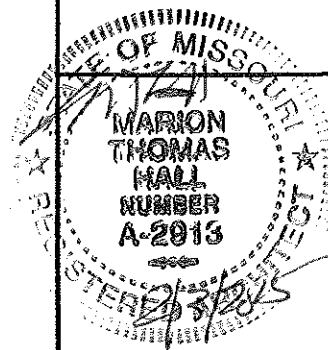
B
4
STEM WALL
SCALE: 1/2" = 1'-0"



F
4
SIDEWALK SECTION
SCALE: 1/2" = 1'-0"



C
4
EXTERIOR STEM WALL @ DOOR
SCALE: 1/2" = 1'-0"



FOUNDATION DETAILS

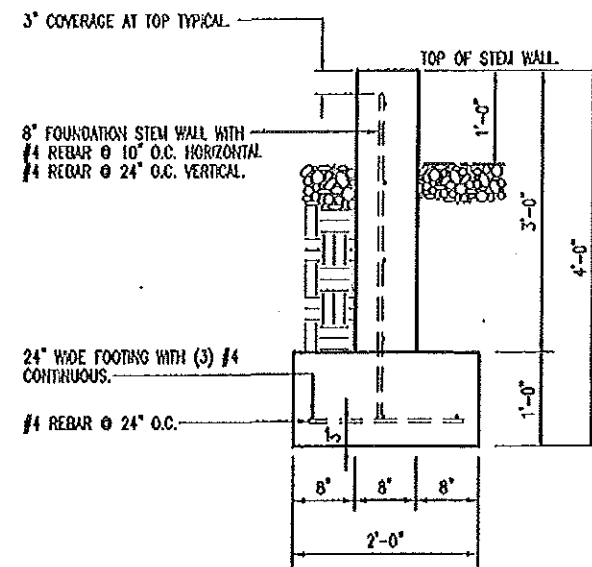
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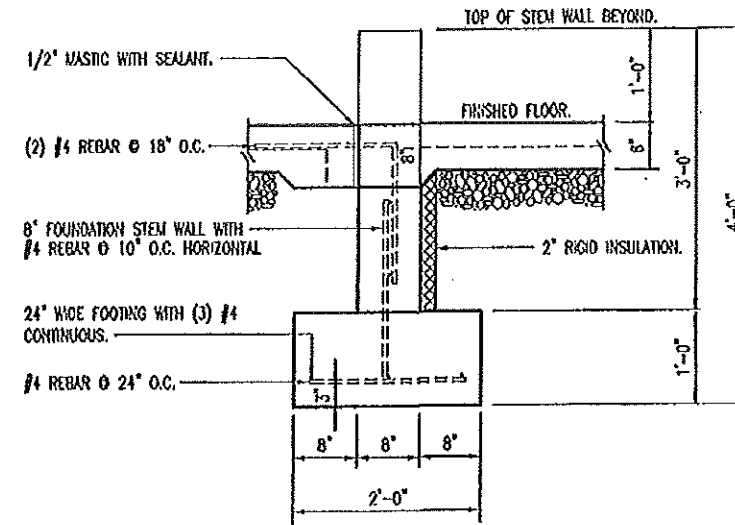
DESIGN BY: LARRY CARVER
DATE: 1-16-15
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CONCRETE NOTES

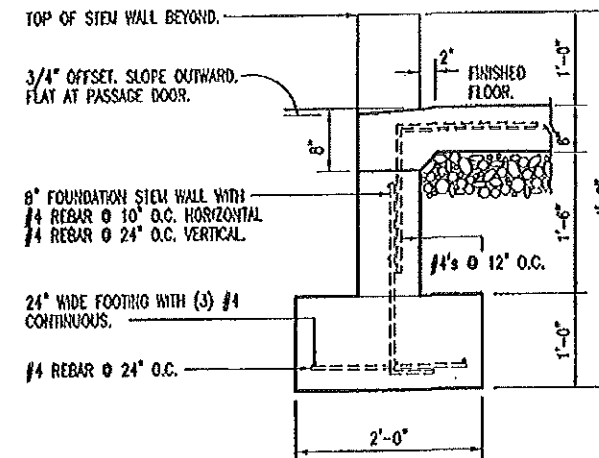
1. CONCRETE WORK SHALL BE EXECUTED IN STRICT COMPLIANCE WITH THE LATEST EDITION OF THE AMERICAN CONCRETE INSTITUTE (A.C.I.) MANUAL OF CONCRETE PRACTICE.
2. FOUNDATION DESIGN IS BASED UPON AN ASSUMED SOIL BEARING CAPACITY OF 2,000 PSF. IF WET OR UNUSUAL SOIL CONDITIONS ARE ENCOUNTERED, NOTIFY THE DESIGNER AND CONSTRUCTION INSPECTOR BEFORE PROCEEDING WITH THE WORK.
3. IF CONDITIONS REQUIRING ROCK EXCAVATION ARE ENCOUNTERED, NOTIFY THE DESIGNER AND CONSTRUCTION INSPECTOR BEFORE PROCEEDING WITH THE WORK.
4. ALL CONCRETE SHALL BE TYPE 1 CEMENT WITH A COMPRESSIVE STRENGTH OF 4,000 PSI @ 28 DAYS AND NOT TO EXCEED 4" SLUMP.
5. FOUNDATION PIERS AND FOOTINGS SHALL BEAR A MINIMUM OF 12 INCHES INTO UNDISTURBED SOIL AND 36 INCHES MINIMUM BELOW FINISH GRADE.
6. DEFORMED STEEL REINFORCING BARS SHALL BE: #4 AND LARGER ASTM A615 GRADE 60.
7. SEE SPECIFICATION SECTION 03300 CONCRETE FOR ADDITIONAL INFORMATION.
8. CONCRETE EXPOSED TO THE EXTERIOR SHALL RECEIVE AIR ENTRAINMENT 6% +/- 2%.
9. PROVIDE CORNER REINFORCING BARS WITH 12" MINIMUM LAP EQUAL IN SIZE AND GRADE TO CONNECTING BARS.
10. EXTERIOR CONCRETE FLATWORK SHALL HAVE A LIGHT BROOM FINISH.
11. COORDINATE WORK OF OTHER TRADES REQUIRED TO BE INSTALLED IN, UNDER, OR THROUGH CONCRETE PRIOR TO PLACEMENT OF CONCRETE. INSTALL ALL ANCHORAGES AND SLEEVES REQUIRED FOR THE INSTALLATION OF WORK BY OTHER TRADES.
12. ENTIRE PERIMETER OF BUILDING TO RECEIVE 2" POLYSOCYANURATE RIGID INSULATION BOARD.
13. SAWED CONTROL JOINTS SHALL BE CLEANED FREE OF ALL DEBRIS AND FILLED WITH SEALANT. SEE SECTION 07900.
14. ALL EXPOSED INTERIOR CONCRETE FLOORS SHALL RECEIVE A CURING/SEALING FINISH PER SPECIFICATION SECTION 03340.
15. COPPER PIPING RUN THROUGH CONCRETE WORK SHALL BE RUN THROUGH PVC SLEEVES.
16. PROVIDE PRE-CAST TRENCH DRAIN & CATCH BASIN AS SPECIFIED. INSTALL AS RECOMMENDED BY THE MANUFACTURER. ACTUAL CONSTRUCTION AND INSTALLATION MAY REQUIRE SOME FIELD MODIFICATIONS. ANY DEVIATION FROM THE DRAWINGS AND SPECIFICATIONS SHALL HAVE PRIOR APPROVAL FROM THE ARCHITECT OR BUILDING INSPECTOR.



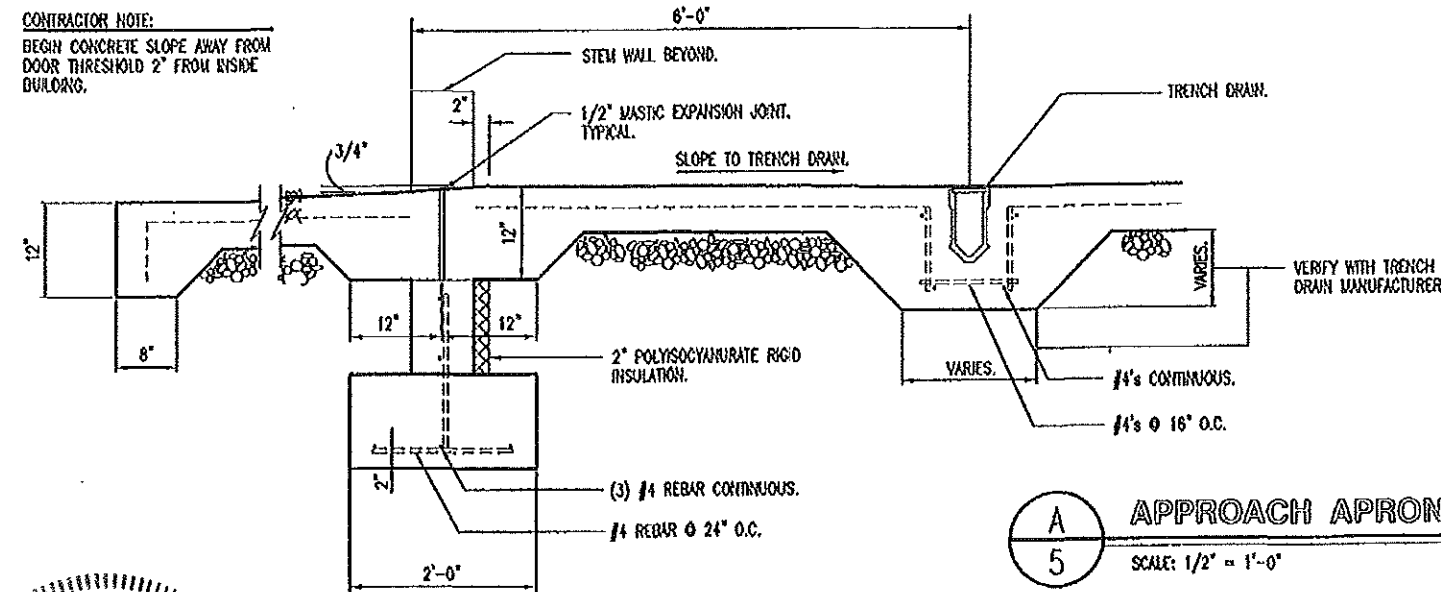
C
5
STEM WALL
SCALE: 1/2" = 1'-0"



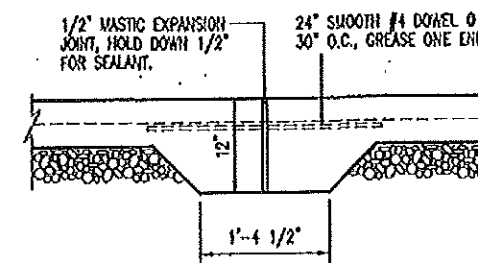
D
5
EXTERIOR STEM WALL
SCALE: 1/2" = 1'-0"



E
5
EXTERIOR STEM WALL
SCALE: 1/2" = 1'-0"



A
5
APPROACH APRON
SCALE: 1/2" = 1'-0"



B
5
EXPANSION JOINT
SCALE: 1/2" = 1'-0"

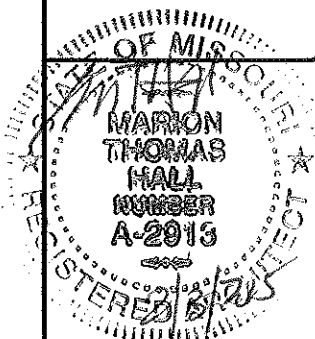
CONTRACTOR NOTE:
BEGIN CONCRETE SLOPE AWAY FROM
DOOR THRESHOLD 2' FROM INSIDE
BUILDING.

FOUNDATION DETAILS

MISSOURI DEPARTMENT
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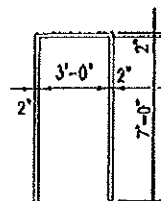
DOOR SCHEDULE

NO.	SIZE	SWING	DR. TYPE	FRM. TYPE	DETAIL	DEPTH	HQ/AR. GRP.
1	3'-0" x 7'-0" x 1-3/4"	LHR	A	I	C-11	6-1/2"	1
2	16'-0" x 14'-0" x 2"	-	B	-	A & B-11	-	-
3	16'-0" x 14'-0" x 2"	-	B	-	A & B-11	-	-
4	3'-0" x 7'-0" x 1-3/4"	RHR	A	I	D-11	6-1/2"	2
5	14'-0" x 14'-0" x 2"	-	C	-	G & H-11	-	-
6	14'-0" x 14'-0" x 2"	-	C	-	G & H-11	-	-
7	14'-0" x 14'-0" x 2"	-	C	-	G & H-11	-	-
8	3'-0" x 7'-0" x 1-3/4"	RHR	A	I	E-11	6-1/2"	3
9	3'-0" x 7'-0" x 1-3/4"	RHR	A	I	C-11	6-1/2"	1
10	16'-0" x 14'-0" x 2"	-	B	-	A & B-11	-	-

3'-0" x 7'-0" x 1-3/4"
INSULATED HOLLOW METAL
DOOR 11/11" x 11" x 3/4"
INSUL. TEMPERED GLASS.
REINFORCED FOR CLOSER.

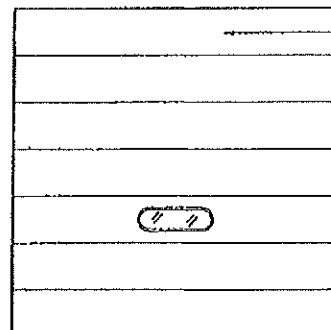


TYPE A



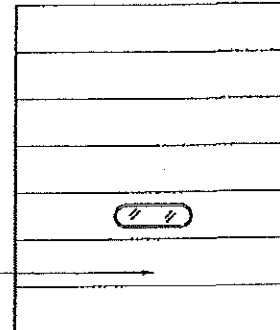
TYPE I

16 GA. WELDED
H.V. FRAME
PAINTED.



TYPE B

16'-0" x 14'-0" x 2"
2" THICK, R-17.5, INSULATED
PREFINISHED .016" METAL
GARAGE DOOR WITH ONE
INSULATED GLASS VIEW
WINDOW. 26 GA. STEEL
BACK COVER, WHITE BAKED
ON POLYESTER TOP COAT
PAINT ON BOTH SIDES.
(TYPICAL)



TYPE C

14'-0" x 14'-0" x 2"
2" THICK, R-17.5, INSULATED
PREFINISHED .016" METAL
GARAGE DOOR WITH ONE
INSULATED GLASS VIEW
WINDOW. 26 GA. STEEL
BACK COVER, WHITE BAKED
ON POLYESTER TOP COAT
PAINT ON BOTH SIDES.
(TYPICAL)

FINISH SCHEDULE

NO.	ROOM	FLOOR	WALLS	BASE	CEILING			
		CURE AND SEALER ON CONCRETE.	6" COMPACTED TYPE 5 ROCK.	26 GA. INTERIOR PANELS	26 GA. INTERIOR PANELS SOUTH WALL.	NONE	26 GA. CEILING PANELS.	NONE
101	WORKING BAYS	•	•	•	•	•	•	•
102	COLD STORAGE	•	•	•	•	•	•	•

WINDOW SCHEDULE



SEE DETAIL F-11.



6'-0" x 3'-0"
ALUMINUM DOUBLE
HORIZONTAL SLIDER
WITH SECURITY SCREEN.

SILL HEIGHT:
48" A.F.F.

HVAC SCHEDULE

SYM.	UNIT	MANUFACTURER	BTU OUTPUT	FUEL	VOLTAGE	REMARKS
A	36" x 36" SHUTTER MOUNT EXHAUST FAN WITH WEATHERHOOD	DAYTON 1HL86 & 1WBW2 OR EQUAL 6.4 AMPS	6,480 CFM	ELECTRIC	115	COMMERCIAL TYPE BELT DRIVE WALL EXHAUST FAN INCLUDING OSHA GUARD AND SHUTTER.
B	MOTORIZED DAMPER WITH WEATHERHOOD	DAYTON MODEL 3C728 & 1WBW1 OR EQUAL .37 AMPS	---	ELECTRIC	115	30" MEDIUM GRADE, MOTORIZED, GALVANIZED STEEL DAMPER WITH 1HP MOTOR. WIRE TO OPEN WHEN EXHAUST FAN IS TURNED ON.
C	GAS FIRED UNIT HEATER	REZKOR MODEL UDAP 225 OR EQUAL	186,750	PROPANE	115	SINGLE BURNER COMBUSTION, DIRECT SPARK IGNITION, 100% LOCK-OUT & CL-1 STANDARD HEATING ONLY THERMOSTAT.
D	CARBON MONOXIDE EXHAUST SYSTEM	CAR-MON MODELS SERIES BA AND CWH-9 OR EQUAL	---	ELECTRIC	115	INCLUDE HOSE, BALANCER, DUCTING, EXTERIOR WALL HOOD AND FLANGE MOUNTED EXHAUST FAN, 3/4 HP MOTOR, 13.8 AMP.

GENERAL NOTES:

CONTRACTOR TO FURNISH ALL NECESSARY FLASHING AND TRIM TO
PROVIDE A NEAT, WEATHERPROOF FIT AT ALL DOORS, COLUMNS
AND ANY LOCATION WHERE THE METAL PANELS MAY BE CUT.

26 GAUGE PREFINISHED
ROOF PANELS ON POLYFOIL
SINGLE BUBBLE REFLECTIVE
INSULATION.

DIAGONAL CROSS BRACING
FOR WALL @ 10'-0" O.C.

R-30 BATT INSULATION

26 GAUGE PREFINISHED
CEILING PANEL WITH
CLOSURE TRIM AT ALL
CORNERS. (TYPICAL)

26 GAUGE PREFINISHED
INTERIOR LINER PANELS.

R-21 BATT INSULATION
WITH 6 MIL VAPOR
BARRIER.

2 x 6 STUD WALL
WITH STUDS @ 16"
O.C.

2 x 4 GIRTS @ 2'-4"
O.C. HORIZONTALLY.

INTERIOR METAL LINER PANEL
ON 1/2" BC PLYWOOD, THIS
WALL ONLY.

1/2" EXPANSION ANCHORS
@ WITH 3" EMBEDMENT @
32" O.C.

CLOSURE TRIM BOTH SIDES
WITH RAT GUARD INSIDE
THIS WALL. (TYPICAL)

FINISHED FLOOR

2" RIGID INSULATION.

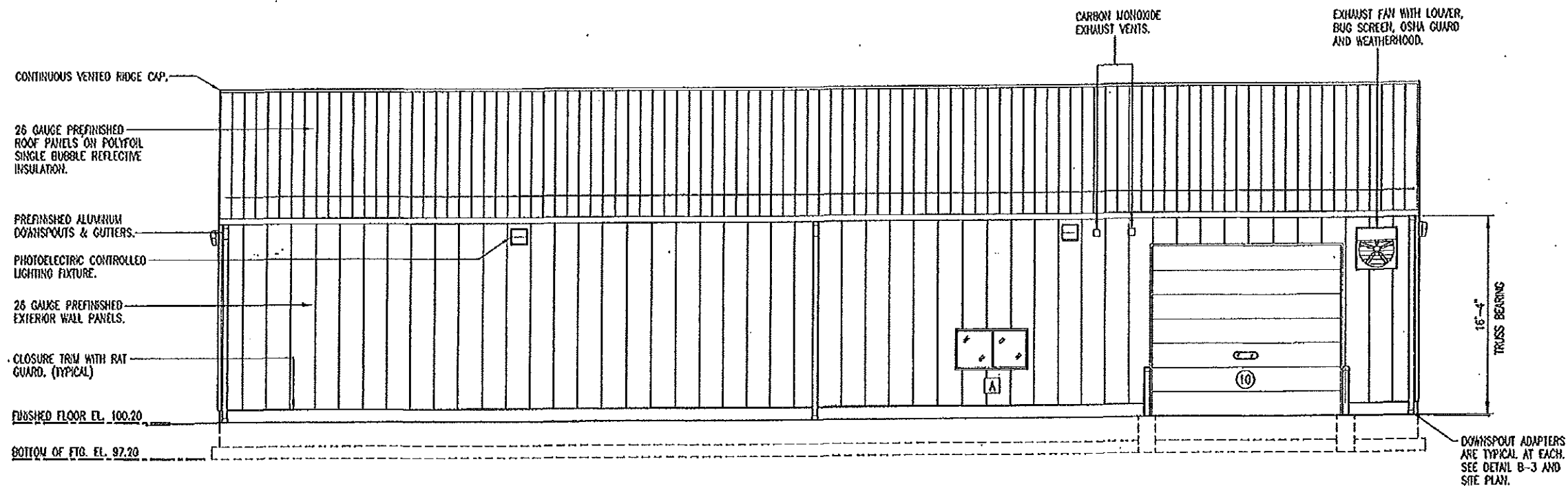
A
7
MID-WALL SECTION
SCALE: 1/4" = 1'-0"

SCHEDULES

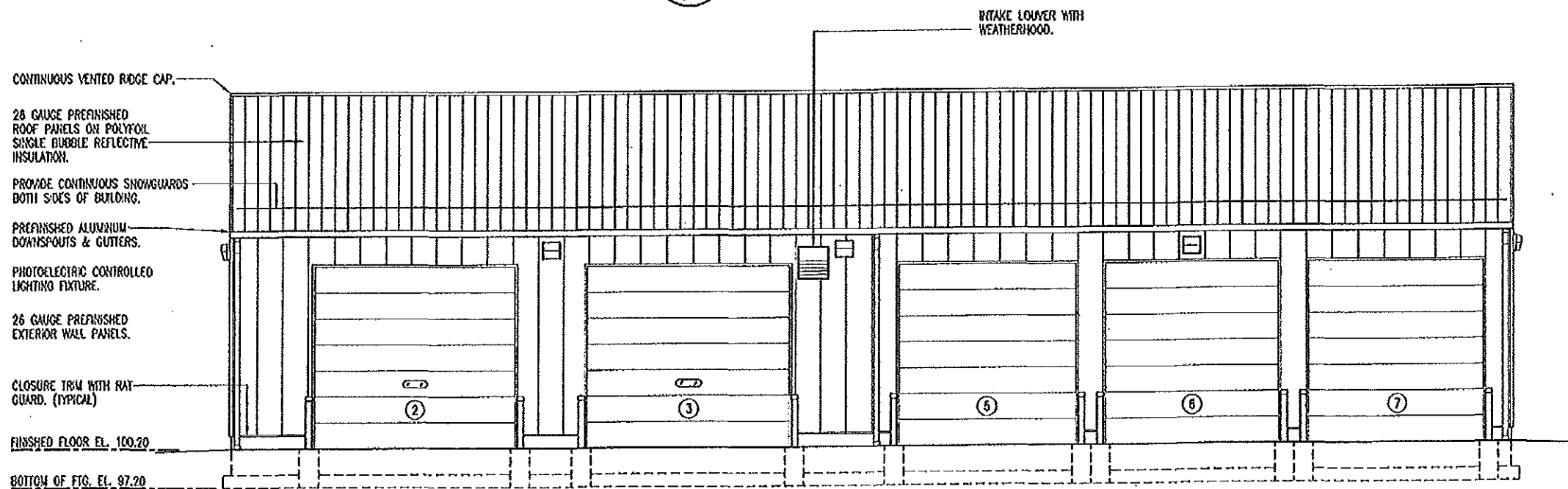
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B
8
WEST ELEVATION
SCALE: 3/32" = 1'-0"



A
8
EAST ELEVATION
SCALE: 3/32" = 1'-0"

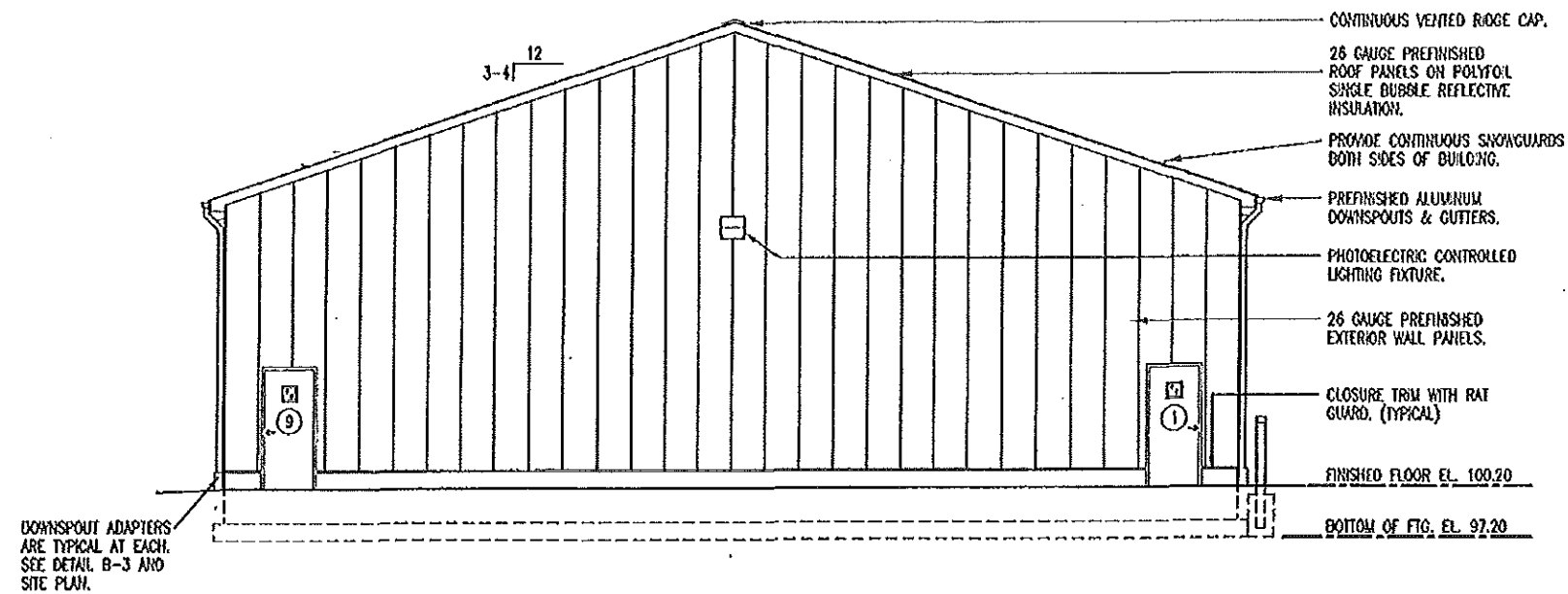
EAST & WEST ELEVATIONS

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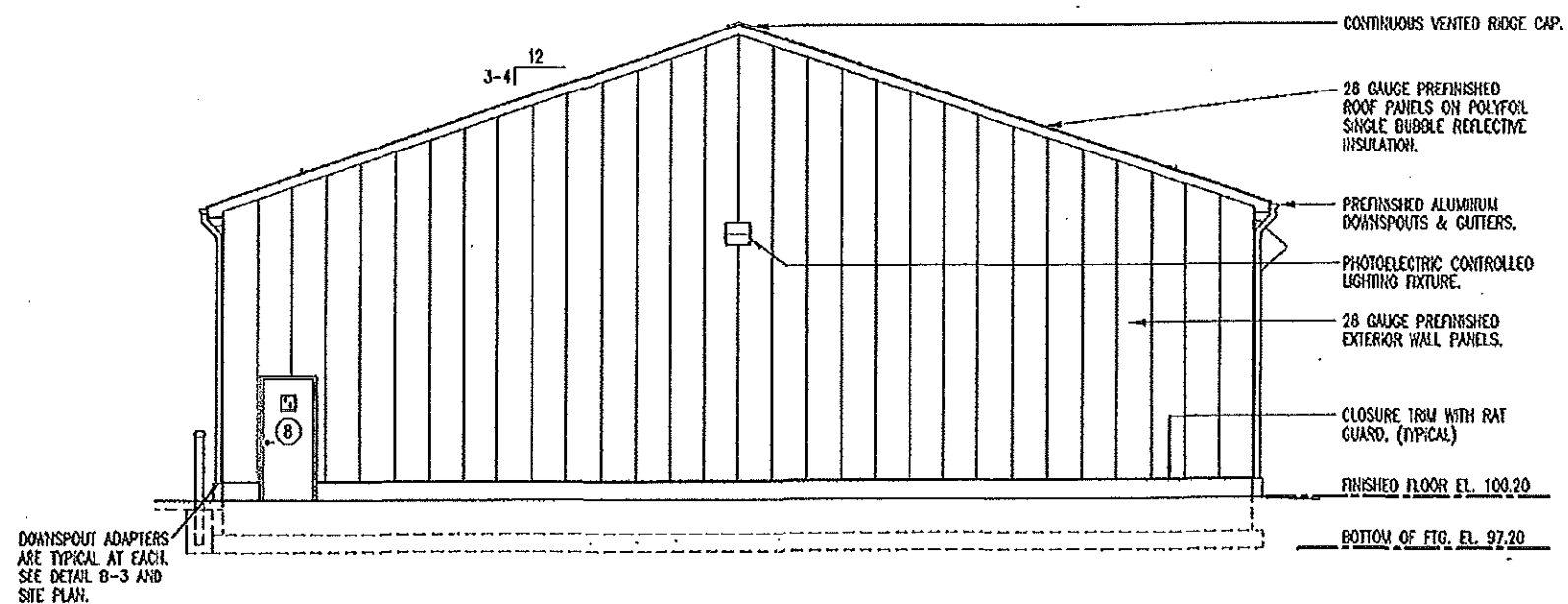
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DATE: 1-16-15
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B SOUTH ELEVATION
SCALE: 3/32" = 1'-0"



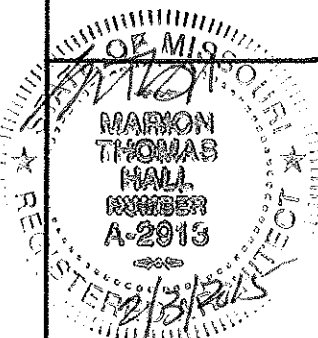
A NORTH ELEVATION
SCALE: 3/32" = 1'-0"

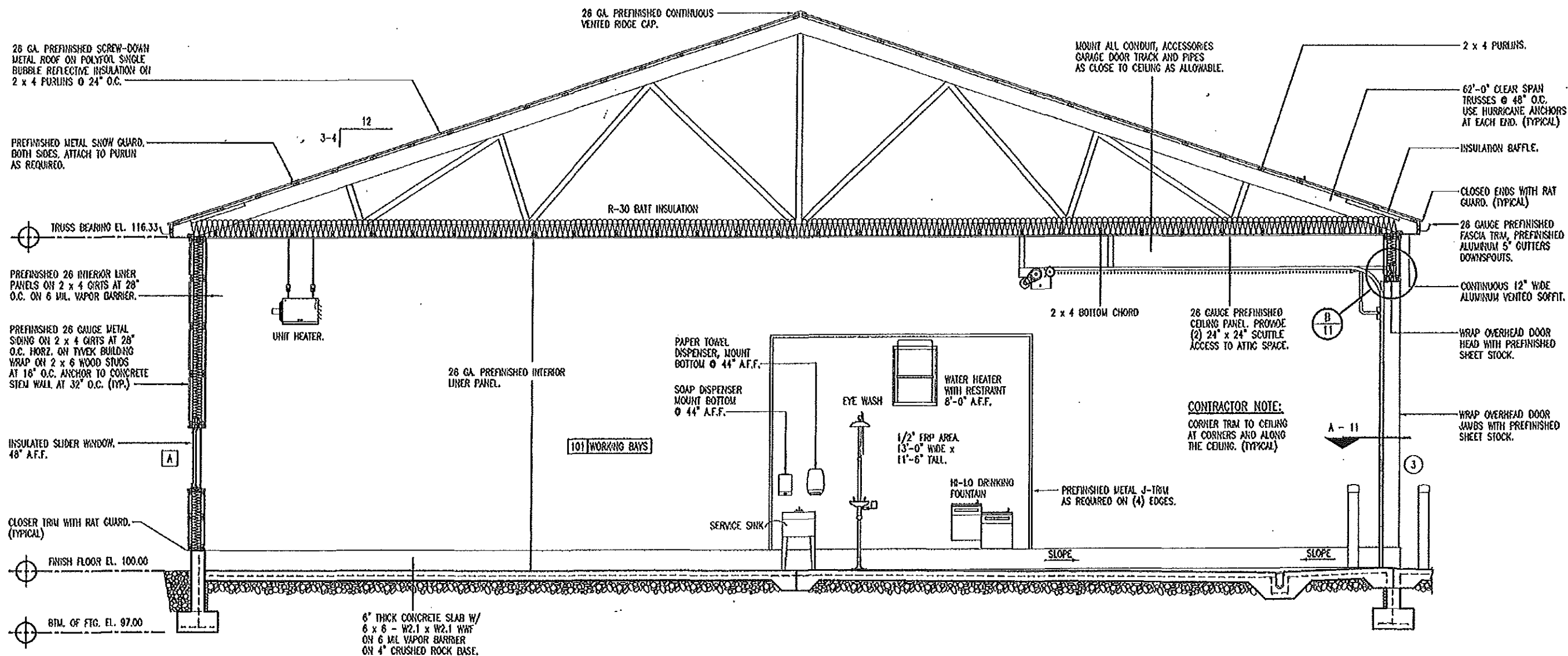
NORTH & SOUTH ELEVATIONS

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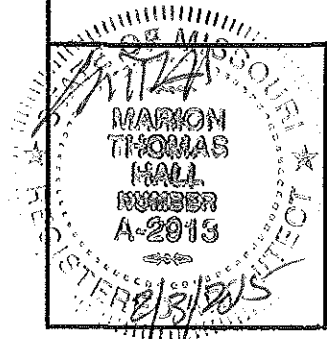
A
10
BUILDING SECTION
 SCALE: 3/16" = 1'-0"

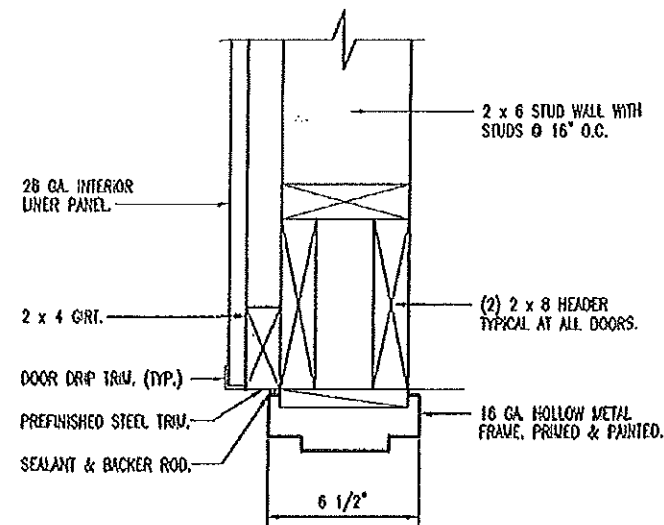
BUILDING SECTION

**MISSOURI DEPARTMENT
OF TRANSPORTATION**
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FACILITIES MANAGEMENT

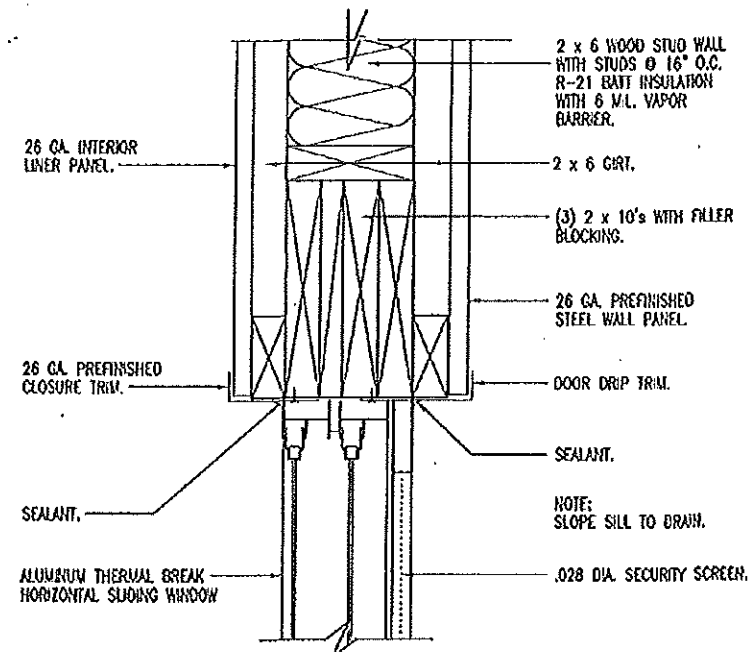
Edgar Springs Working Bays/Cold Storage Building
 Central District - Phelps County
 27800 County Road 6150

DESIGN BY: LARRY CUBER
DATE: 1-23-13
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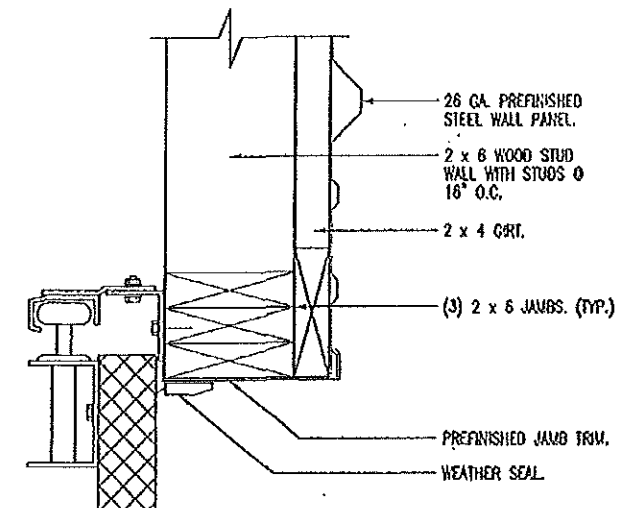




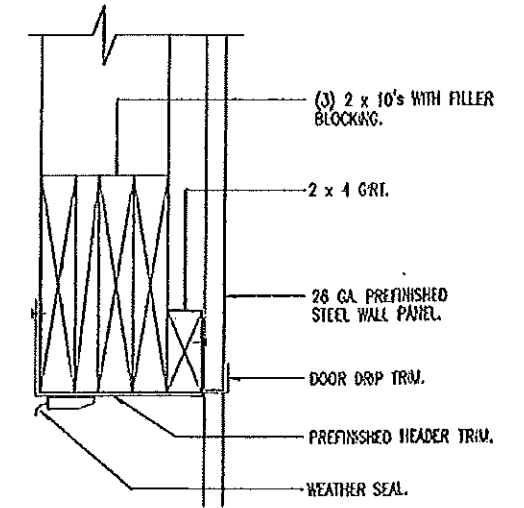
E DOOR HEADER/JAMB
SCALE: 1/2" = 1'-0"



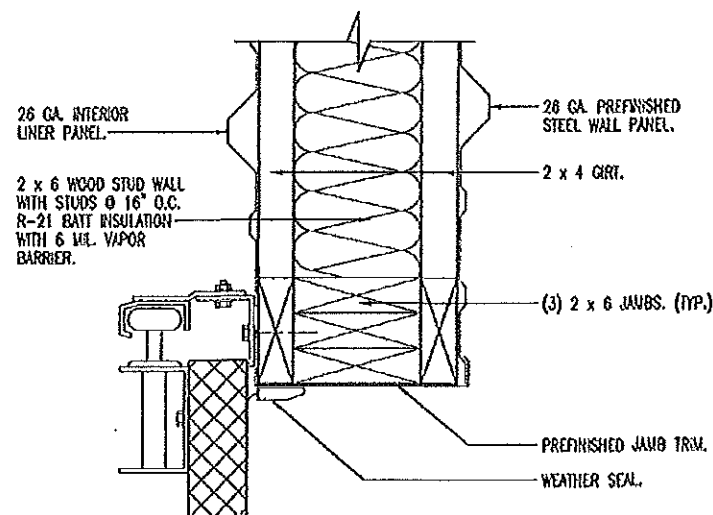
F JAMB & SILL SIMILAR WINDOW HEAD
SCALE: 1-1/2" = 1'-0"



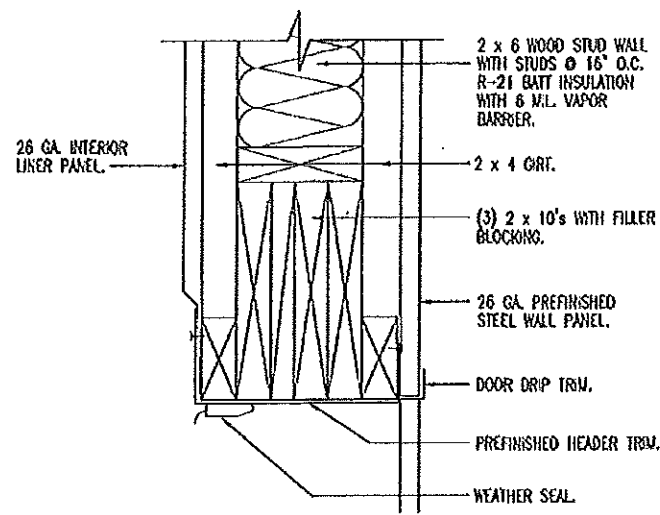
G GARAGE DOOR JAMB
SCALE: 1-1/2" = 1'-0"



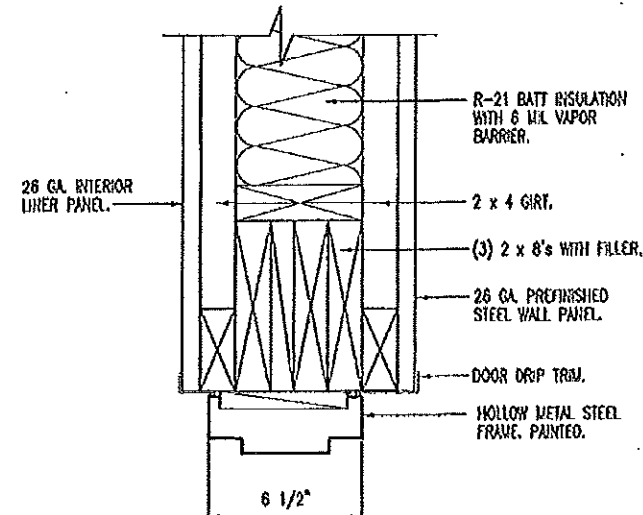
H GARAGE DOOR HEAD
SCALE: 1-1/2" = 1'-0"



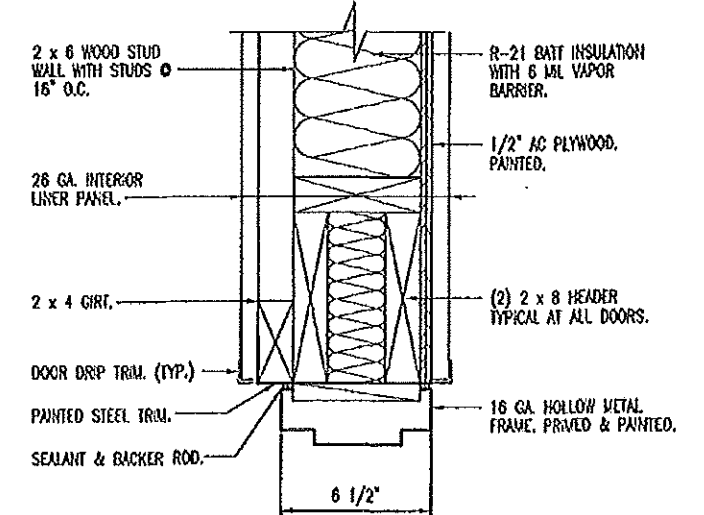
A GARAGE DOOR JAMB
SCALE: 1-1/2" = 1'-0"



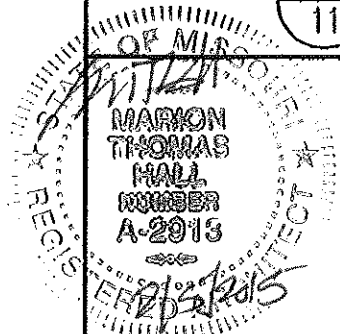
B GARAGE DOOR HEAD
SCALE: 1-1/2" = 1'-0"



C DOOR HEADER/JAMB
SCALE: 1-1/2" = 1'-0"



D DOOR HEADER/JAMB
SCALE: 1-1/2" = 1'-0"

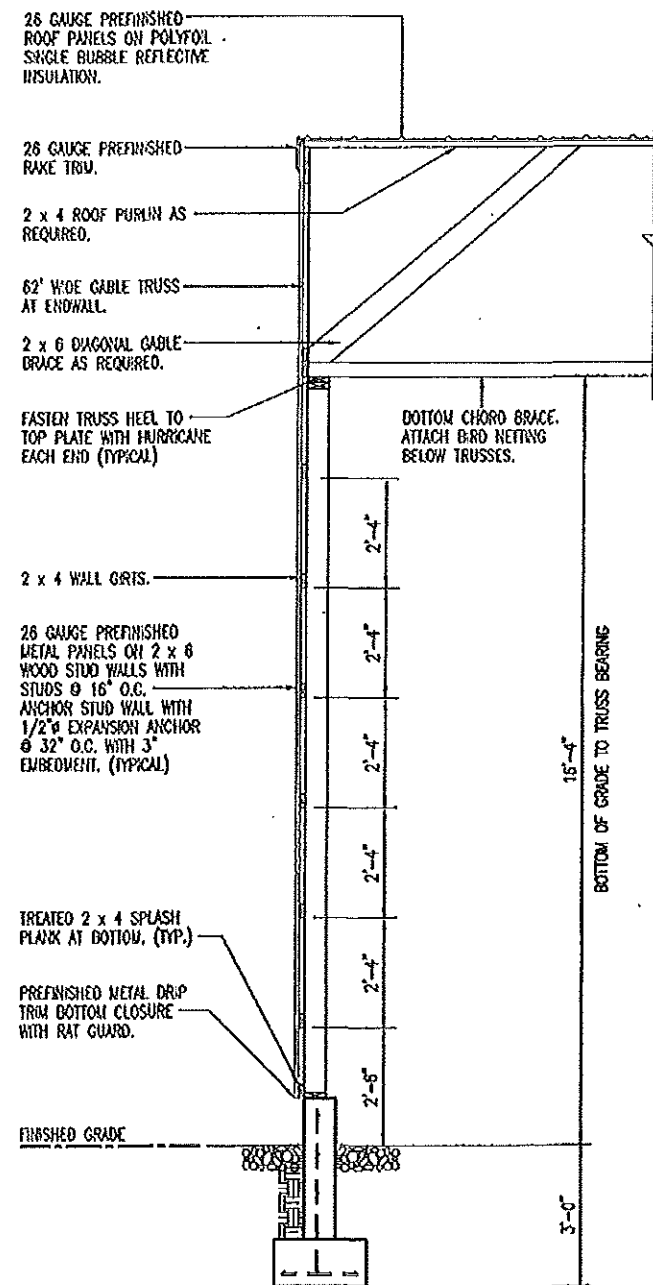


HEAD & JAMB DETAILS

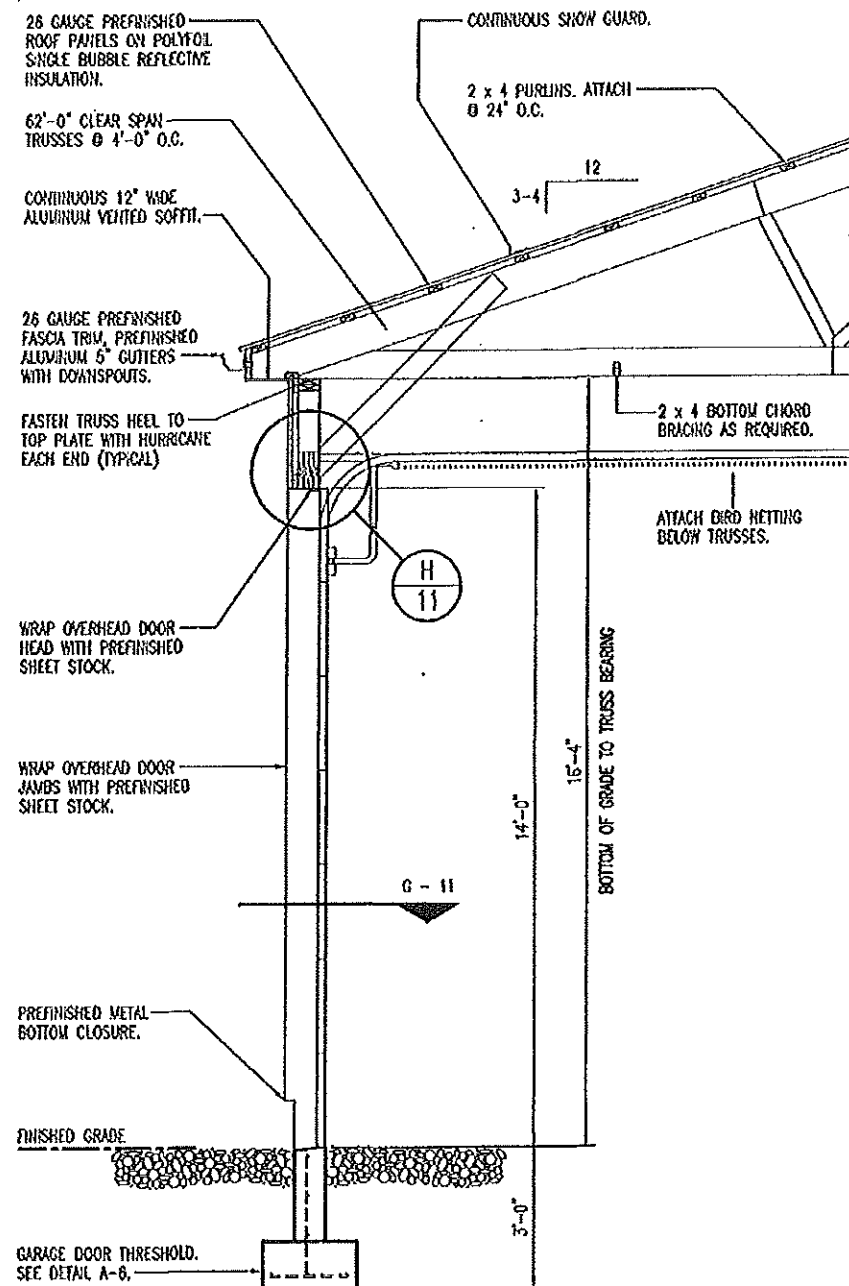
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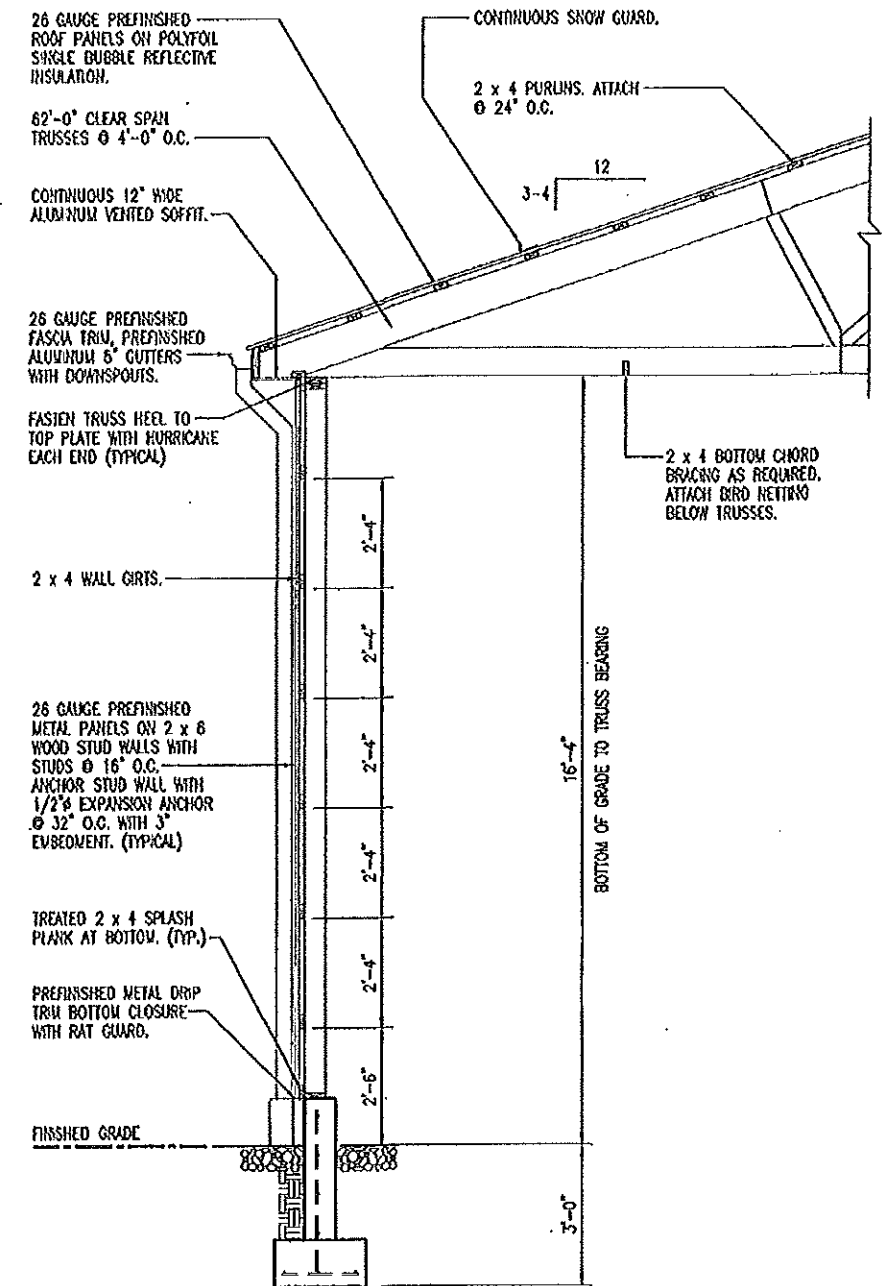
DESIGN BY: LARRY CAYNER
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A
12 **ENDWALL SECTION**
SCALE: 1/4" = 1'-0"



B
12 **OVERHEAD DOOR SECTION**
SCALE: 1/4" = 1'-0"



C
12 **SIDEWALL SECTION**
SCALE: 1/4" = 1'-0"

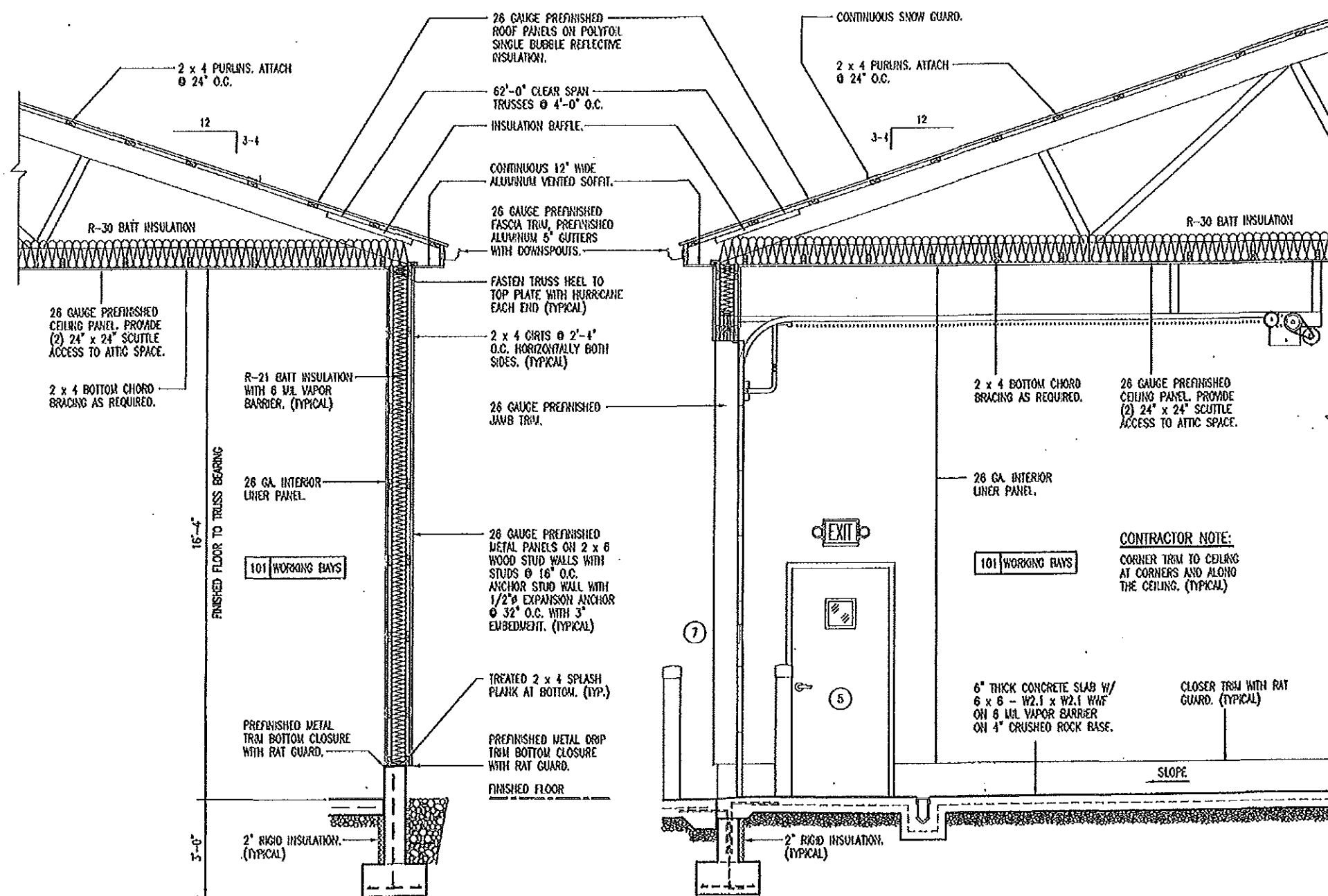
WALL SECTIONS

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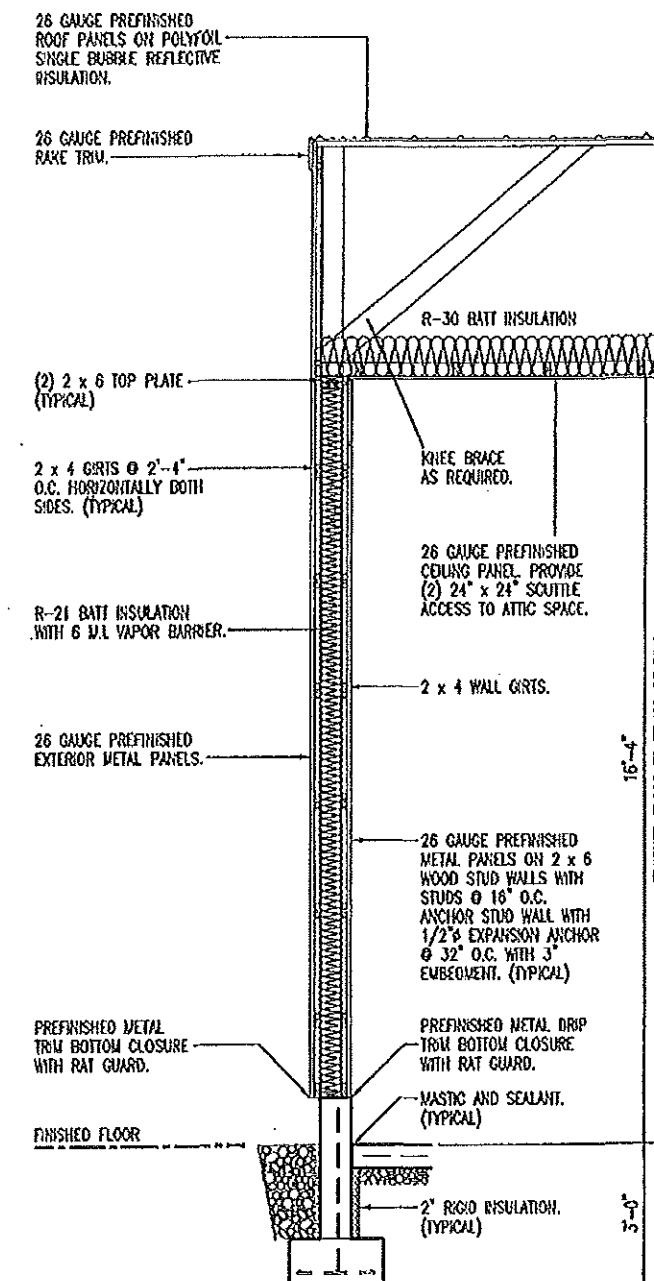




A
13
SIDEWALL SECTION
SCALE: 1/4" = 1'-0"

B
13
OVERHEAD DOOR SECTION
SCALE: 1/4" = 1'-0"

C
13
ENDWALL SECTION
SCALE: 1/4" = 1'-0"

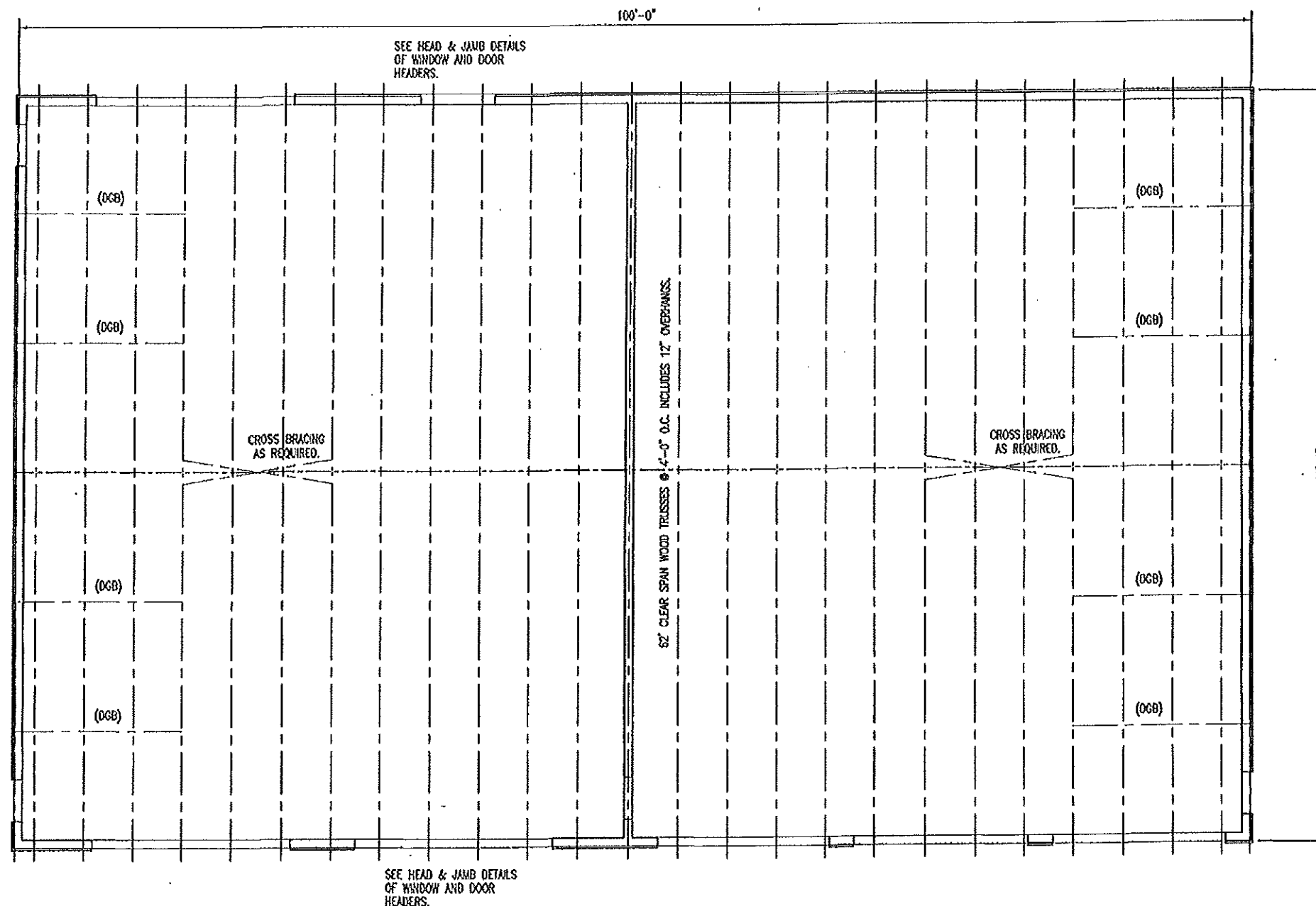


WALL SECTIONS

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ROOF FRAMING NOTES

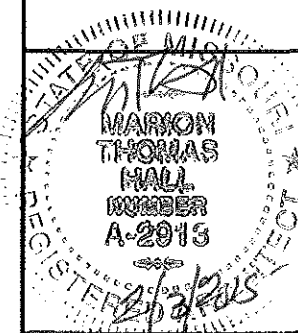
DESIGN LOADING FOR ROOF TRUSSES SHALL MEET THE FOLLOWING CRITERIA:

ROOF LIVE LOAD	25 PSF
ROOF DEAD LOAD	4 PSF
BOTTOM CORD DEAD LOAD	5 PSF
EARTHQUAKE	ZONE 1, LATEST EDITION IBC
WIND	90 MPH, EXPOSURE D
DEFLECTION	L/360
SPACING	48" O.C. MAXIMUM

TRUSS DESIGN SUBMITTALS SHALL BE SEALED AND SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF MISSOURI.

ROOF TRUSSES AND RAFTERS SHALL BE ANCHORED TO THE TOP PLATE OF LOAD BEARING WALLS WITH SEISMIC AND HURRICANE ANCHORS EQUAL TO SIMPSON STRONG-TIE LUS24Z ANCHORS.

A
14
ROOF FRAMING PLAN
SCALE: 3/32" = 1'-0"



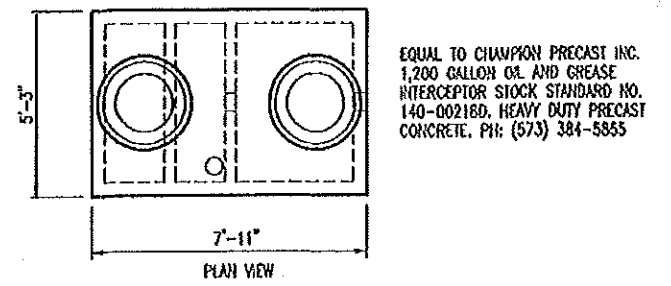
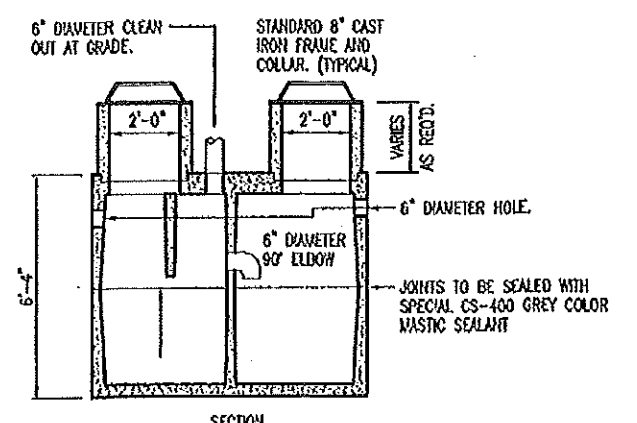
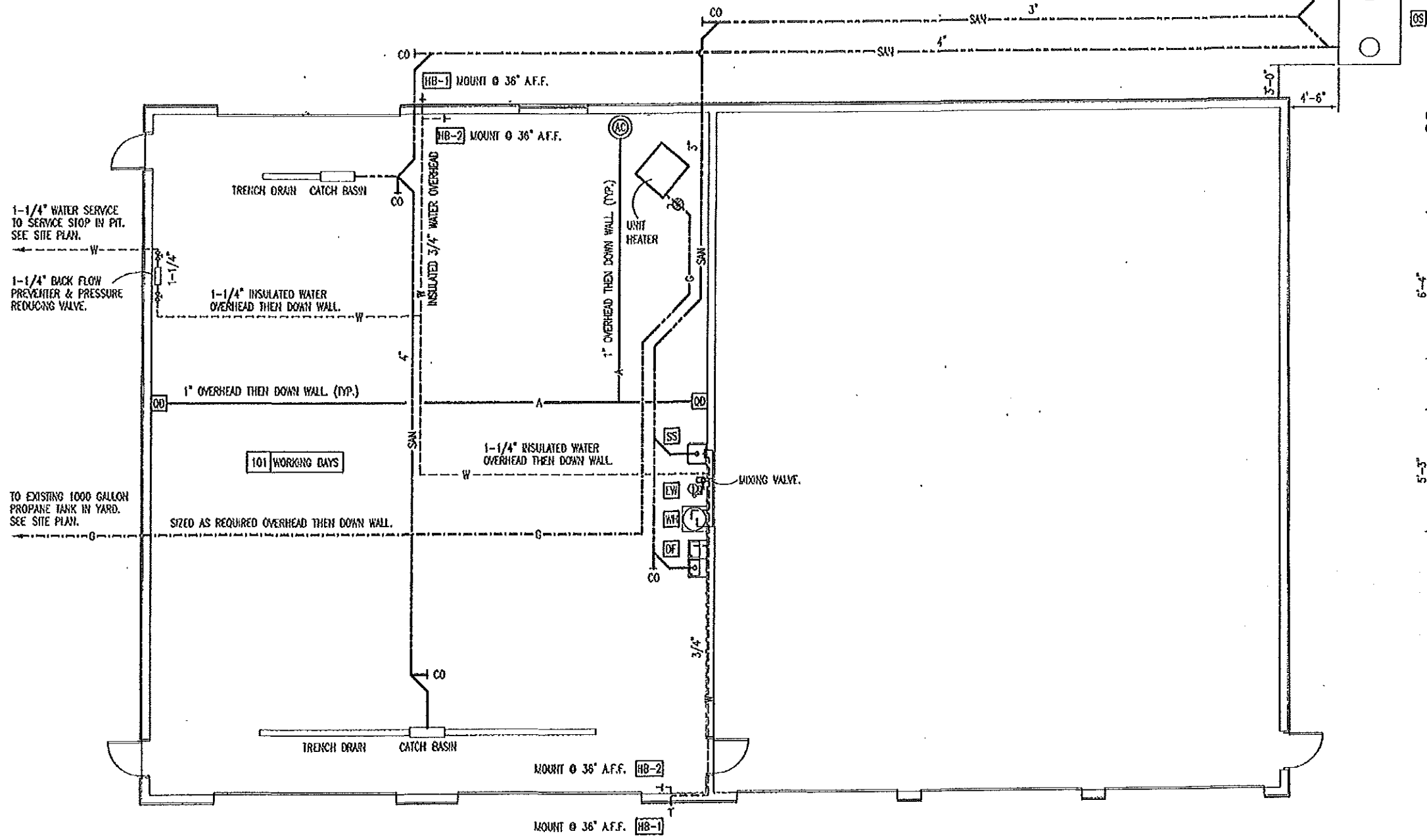
ROOF FRAMING PLAN

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CONTRACTOR TO INSTALL 3" & 4" SANITARY SEWER LINES TO A NEW OIL SEPARATOR/HOLDING TANK. PROVIDE A CAPPED BYPASS 3" SCHEDULE 40 LINE FOR A FUTURE CONNECTION FOR FORCED MAIN SANITARY BY OTHERS.

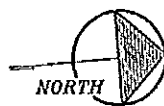


1,200 GALLON OIL SEPARATOR
 B 15
 SCALE: 3/16" = 1'-0"

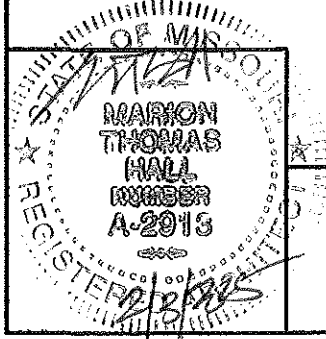
LEGEND

HOT WATER	— H —
WATER	- - - W - - -
SANITARY SEWER	- - - SAN - - -
COMPRESSED AIR	— A —
GAS	- - - G - - -
CLEANOUT	C.O. —
GAS VALVE	⊗

PLUMBING PLAN
 A 15
 SCALE: 3/32" = 1'-0"



SEE SHEET 17 FOR PLUMBING SCHEDULE & NOTES.

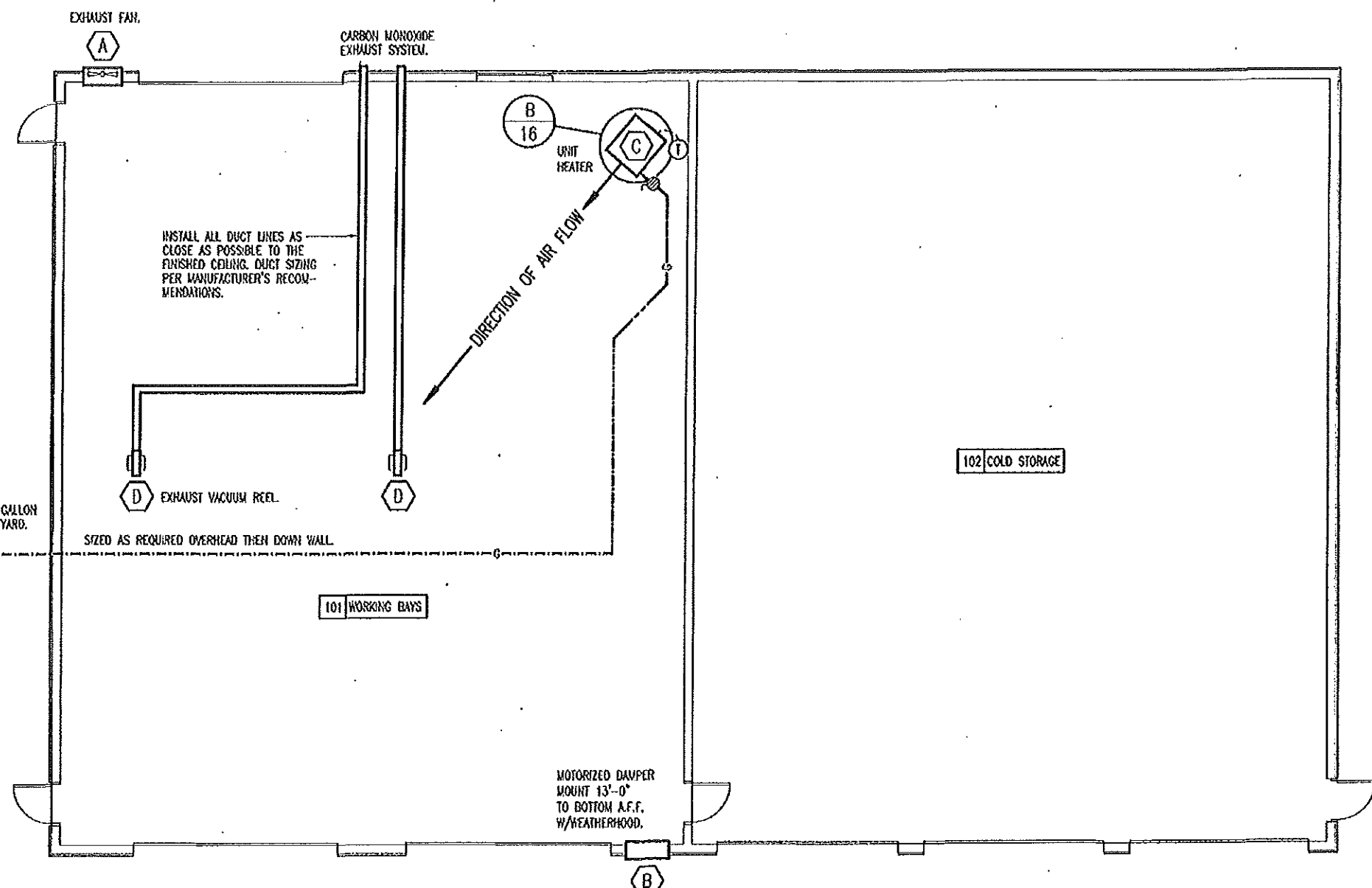


PLUMBING PLAN

MISSOURI DEPARTMENT
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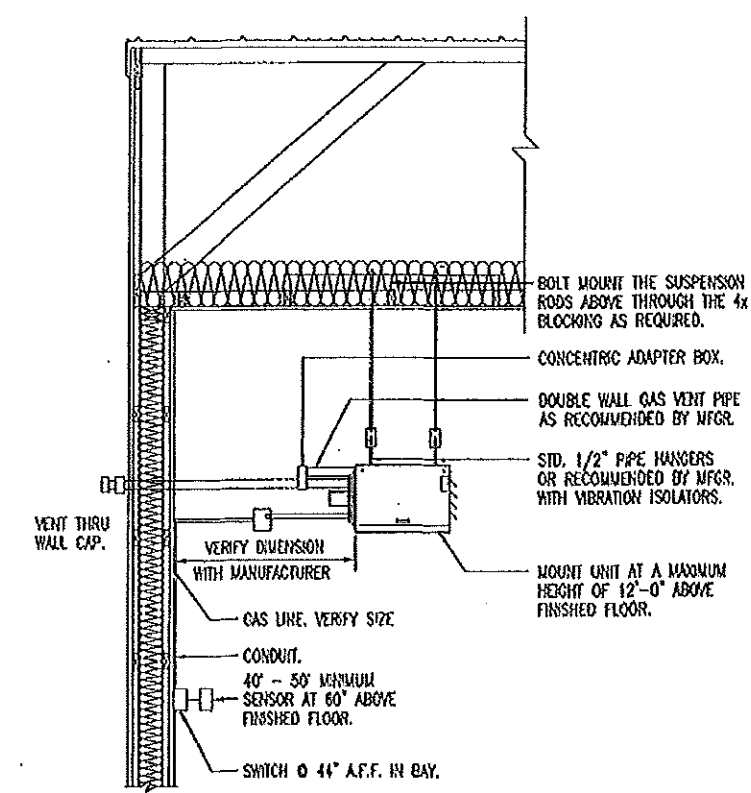
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SEE SHEET 17 FOR THE MECHANICAL NOTES.

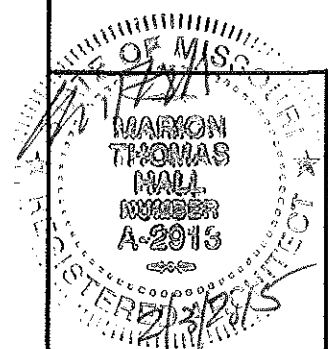
SEE SHEET 7 FOR HVAC FIXTURE SCHEDULE.



A
16
MECHANICAL PLAN
SCALE: 3/32" = 1'-0"



B
16
UNIT HEATER INSTALLATION
NOT TO SCALE



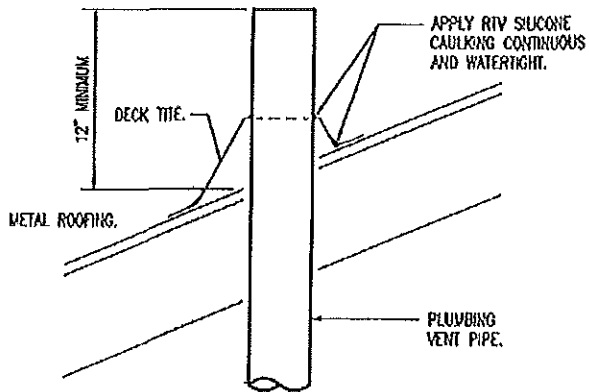
MECHANICAL PLAN

MISSOURI DEPARTMENT
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DIVISION OF GENERAL SERVICES
FACILITIES MANAGEMENT

Edgar Springs Working Bays/Cold Storage Building
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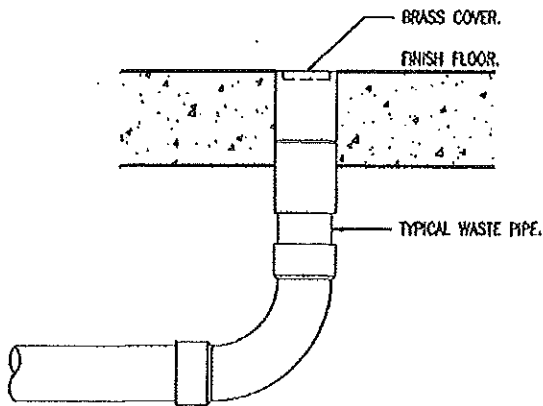
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PLUMBING SCHEDULE						
SYM.	FIXTURE	PIPE CONNECTION				REMARKS
		CW	HW	S&W	VENT	
SS	SERVICE SINK	1/2"	1/2"	1-1/2"	1-1/2"	EQUAL TO MUSTEE #18F, 20" x 24" FIBERGLASS, CRUSHED STONE AND RESIN BLEND SERVICE SINK WITH FAUCET #93.600, CHROME FINISH, 4: CENTER, SWING SPOUT AND AERATOR END.
EW	EMERGENCY EYE WASH	1-1/4"	3/4"			EQUAL TO BRADLEY "MODEL S19-310" DRENCH SHOWER/EYE WASH UNIT SAFETY YELLOW. S19-2100 THERMOSTATIC MIXING VALVE.
WH	WATER HEATER	3/4"	3/4"			A.O. SMITH MODEL NUMBER ECS-30 (2) 4500 WATT, 240 VOLT ELEMENTS, 30 GALLON ELECTRIC WITH PRESSURE RELIEF VALVE OR EQUAL MOUNT ON MEZZANINE WITH DRAIN PAN.
HB-1	HOSE BIBB	3/4"				EXTERIOR - EQUAL TO WOODFORD MODEL 67 FREEZELESS WALL HYDRANT WITH 3/4" H.P.T. OUTLET, INTEGRAL VACUUM BREAKER-BACK FLOW PREVENTER. (N.I.C.)
HB-2	HOSE BIBB	3/4"				INTERIOR - EQUAL TO WOODFORD MODEL 26 WALL FAUCET WITH 3/4" H.P.T. OUTLET, INTEGRAL VACUUM BREAKER-BACKFLOW PREVENTER.
CO	CLEAN OUT					BRASS WITH ADAPTER AND CAP EQUAL TO PIPE SIZE SHOWN.
WH	WATER HEATER	3/4"	3/4"			A.O. SMITH MODEL NUMBER ECS-30 4500 WATT, 240 VOLT ELEMENTS, 30 GALLON ELECTRIC WITH PRESSURE RELIEF VALVE OR EQUAL ON WATTS WALL MOUNT RESTRAINT SYSTEM WM-26.
TD	TRENCH DRAIN			4"		EQUAL TO ACO K100 CHANNEL SLOPE TRENCH DRAIN SYSTEM WITH TYPE 461Q DUCTILE QUICKLOC CAST IRON GRATE.
CB	CATCH BASIN			4"		EQUAL TO ACO K900 CATCH BASIN, WITH PLASTIC TRASH BUCKET WITH TYPE 461Q DUCTILE QUICKLOC CAST IRON GRATE FOR LID.
QD	QUICK DISCONNECT					VERIFY SIZE WITH MODOT MECHANIC. MOUNT AT 48" A.F.F. ATTACH RIGIDLY TO CURTS.
AC	AIR COMPRESSOR					EQUAL TO INGERSOLL-RAND MODEL #2475N7.5, 7.5 HP, 80 GALLON VERTICAL, 24.0 (ACFM) CAPACITY. PROVIDE RUBBERIZED WASHERS AT EACH FLOOR MOUNT TO ACT AS A SHOCK ABSORBER. SIZE MOUNT AS REQUIRED. PROVIDE LINE FILTERS AS REQUIRED.
DF	DRINKING FOUNTAIN	3/8"		1-1/4"		ELKAY, TWO STATION WALL MOUNT BARRIER-FREE MODEL VRCGRN18C OR EQUAL.
OS	OIL SEPARATOR			4"		EQUAL TO CHAMPION PRECAST INC. 1,200 GALLON OIL & GREASE INTERCEPTOR STOCK STANDARD NO. 140-002180. HEAVY DUTY PRECAST CONCRETE, STANDARD 8" CAST IRON FRAME, LID AND COLLAR. PH: (573)384-5855.



VENT THROUGH ROOF DETAIL

SCALE: NONE



FLOOR CLEANOUT DETAIL

SCALE: NONE

MECHANICAL NOTES

1. DRAWINGS AND DIAGRAMS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS.
2. MECHANICAL WORK SHALL BE INSTALLED IN STRICT COMPLIANCE WITH THE LATEST EDITION OF THE IBC MECHANICAL CODE.
3. PROVIDE EQUIPMENT AND APPURTENANCES NOT NECESSARILY SHOWN OR SPECIFIED BUT NEEDED FOR COMPLETE AND PROPER INSTALLATION.
4. ALL EQUIPMENT AND MATERIALS, IN PARTICULAR VALVES, FILTERS, MOTORS, AND CONTROLS SHALL BE ARRANGED TO PROVIDE PROPER CLEARANCE FOR SERVICE, MAINTENANCE AND INSPECTION.
5. MECHANICAL SUBCONTRACTOR SHALL FULLY COORDINATE ALL WORK WITH PLUMBING AND ELECTRICAL WORKERS PRIOR TO COMMENCING OF THE MECHANICAL INSTALLATION.
6. PROVIDE BLOCKING TO HVAC DEVICES AS REQUIRED FOR A SECURE APPLICATION.

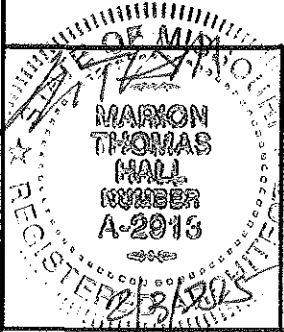
PLUMBING NOTES

1. DRAWINGS AND DIAGRAMS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS.
2. PLUMBING SHALL BE INSTALLED IN STRICT COMPLIANCE WITH THE LATEST EDITION OF THE INTERNATIONAL PLUMBING CODE.
3. PLUMBING SHALL BE LOCATED AND PLACED UNDER THE SLAB PRIOR TO POURING OF CONCRETE. PIPING SHALL BE RUN IN SAND FILLED TRENCH UNDER THE BASE ROCK AND SLEEVED WITH PVC WHENEVER RUN THROUGH CONCRETE.
4. PROVIDE PLUMBING EQUIPMENT AND ACCESSORIES REQUIRED FOR COMPLETE AND OPERATIONAL PLUMBING SYSTEMS AS REQUIRED BY MANUFACTURER'S INSTRUCTIONS AND DIRECTIONS FOR SYSTEMS SPECIFIED.
5. PLUMBING VENTS ARE NOT SHOWN ON THE PLANS. ALL FIXTURES SHALL BE PROPERLY VENTED AS PER IBC PLUMBING CODE.
6. ROOF VENTS SHALL BE COMBINED WHEREVER IN COMPLIANCE WITH THE NATIONAL PLUMBING CODE TO MINIMIZE ROOF PENETRATIONS.
7. PROVIDE SHUT OFF VALVES AT EACH FIXTURE.
8. PROVIDE SHOCK ABSORBERS AS REQUIRED AT EACH FAUCET.
9. SEE MECHANICAL PLAN FOR GAS PIPING AND MECHANICAL REQUIREMENTS.
10. EXTERIOR BELOW-GROUND WATER DISTRIBUTION PIPING SHALL RUN A MINIMUM OF 36 INCHES BELOW FINISH GRADE.

A
17

PLUMBING & MECHANICAL NOTES

SCALE: NONE

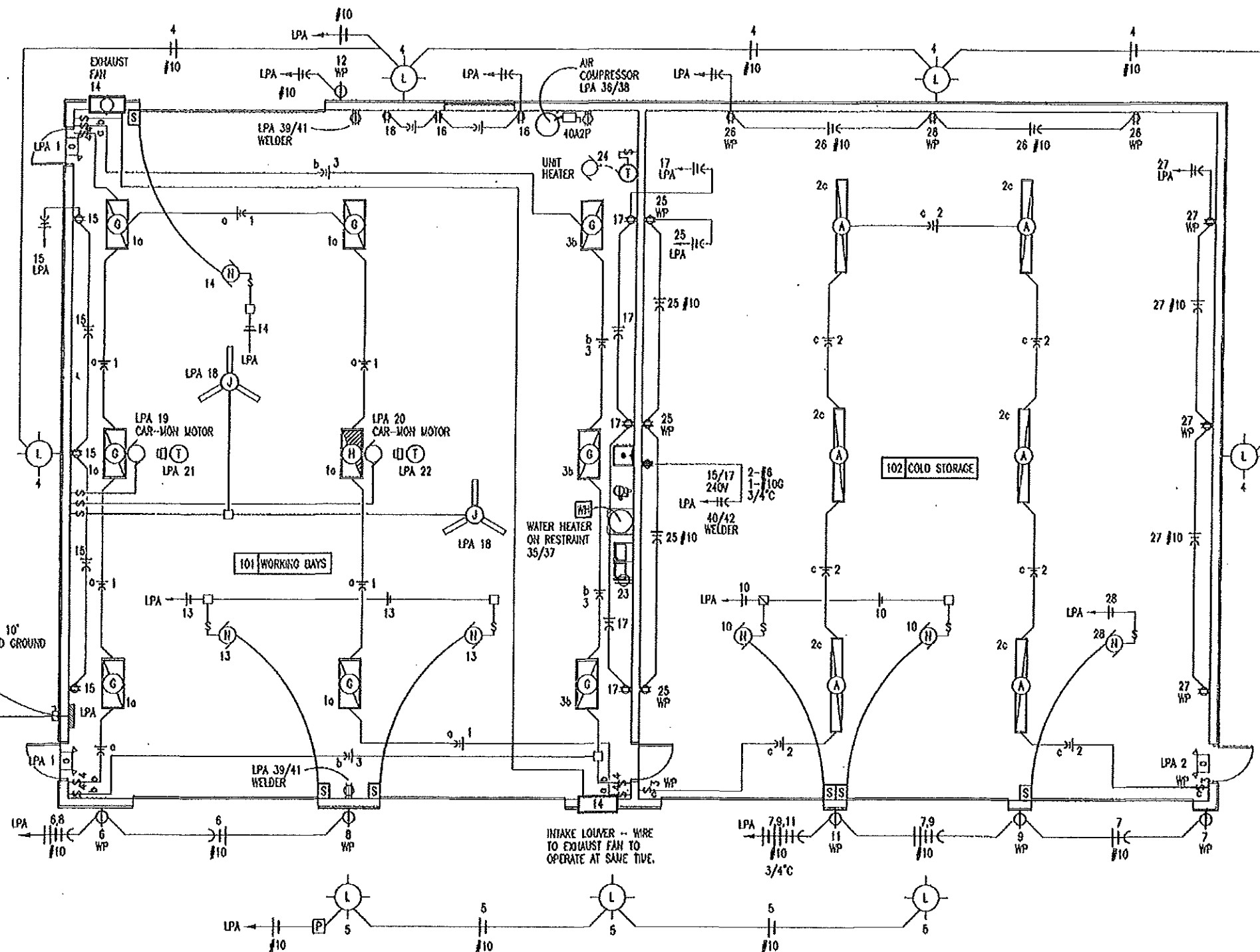


Plumbing & Mechanical Notes

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LEGEND

- \$ WP SINGLE POLE OR 3-WAY SWITCH, MOUNT IN FS BOX WITH HUBBELL HBL7420 COVER.
- Φ WP DUPLEX RECEPTACLE MOUNTED IN FS BOX WITH HUBBELL HBL5221 COVER.
- Φ WP SINGLE RECEPTACLE MOUNTED IN FS BOX WITH HUBBELL HBL7423 COVER.
- \$ SINGLE POLE SWITCH, FLUSH MOUNTED IN FINISHED AREAS @ 48" A.F.F.
- \$ 3-WAY SWITCH, SURFACE MOUNTED IN UNFINISHED AREAS @ 48" A.F.F.
- \$ 4-WAY SWITCH, SURFACE MOUNTED IN FINISHED AREAS @ 48" A.F.F.
- Φ DUPLEX RECEPTACLE FLUSH MOUNTED IN FINISHED AREAS @ 18" A.F.F. TO BOTTOM OF OUTLET.
- Φ DUPLEX RECEPTACLE SURFACE MOUNTED IN UNFINISHED AREAS @ 42" A.F.F.
- Φ WELDER RECEPTACLE SURFACE MOUNTED 42" A.F.F., MOUNT IN 4" SQUARE BOX WITH RAISED COVER.
- NO FUSED DISCONNECT SWITCH.
- Φ GFI DUPLEX RECEPTACLE WITH GROUND FAULT INTERRUPTER. PROVIDE SEPARATE GROUND PER CIRCUIT. TYPICAL.
- JUNCTION BOX, SIZE FOR WIRE, FILL ACCORDING TO ARTICLE 314-16 OF THE N.E.C.
- #12 COPPER NEUTRAL CONDUCTOR UNLESS NOTED.
- #12 COPPER PHASE CONDUCTORS UNLESS NOTED.
- 1/2" EMT UNLESS NOTED.
- #12 COPPER GROUNDING CONDUCTOR UNLESS NOTED.

SEE ELECTRICAL SCHEDULE
& NOTES SHEET 19.

A
18 ELECTRICAL PLAN
SCALE: 3/32" = 1'-0"



ELECTRICAL PLAN

MISSOURI DEPARTMENT
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ELECTRIC SCHEDULE				
MANUF.	MODEL	LAMPS TYPE	W	REMARKS
WILLIAMS A	81-8-451TSH-WG-EB2- UNV	8 FLUORESCENT	54	98" LONG SURFACE MOUNT FLUORESCENT LIGHT FIXTURE, W/ PAINTED STEEL HOUSNG, ELECTRONIC BALLAST, & WIRE GUARD.
WILLIAMS B	GL-4-454TSH-HUB3/4" EB4-120	4 FLUORESCENT	54	14" x 48" LOW PROFILE FIXTURE, W/ WHITE ALUMINUM HOUSNG, HIGH SPECULAR ALUMINUM REFLECTOR & ELECTRONIC BALLAST.
WILLIAMS B	GL-4-454TSH-HUB3/4" EM700-EB4-120	4 FLUORESCENT	54	14" x 48" FIXTURE, W/ WHITE ALUMINUM HOUSNG, HIGH SPECULAR ALUMINUM REFLECTOR ELECTRONIC BALLAST & EMERGENCY BATTERY.
ATLAS L	WLM3LED	1 LED	43	EXTERIOR, SURFACE MOUNT LIGHT FIXTURE, WITH ALUMINUM HOUSNG, GLARE FREE LENS.
DAYTON U	4C853			SINGLE-SPEED, THREE-BLADE, HEAVY DUTY COMMERCIAL CEILING FAN.
	OVERHEAD DOOR OPERATOR			115V, 1-PH, TROLLEY TYPE. SEE SPECIFICATION SECTION 08720.
LITHONIA O	LHQM P W3 R N			QUANTUM THERMOPLASTIC EXIT/UNIT COMBO (2) LED 5.4 KRYPTON LAMPS.
TORK P	2001			120V PHOTO ELECTRIC CONTROL OF EXTERIOR LIGHTS.
S	OVERHEAD DOOR CONTROL			THREE BUTTON OVERHEAD DOOR CONTROL AS SUPPLIED BY OVERHEAD DOOR MANUF. SEE SPECIFICATION SECTION 08720.
REELCRAFT I	L 4050 163 I			CEILING MOUNTED SPRING RETRACTABLE, ELECT. CORD REEL WITH INCANDESCENT LAMP & THREE PRONG OUTLET PLUG.

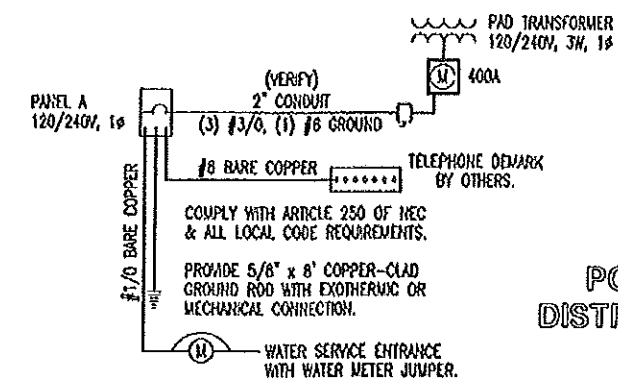
ELECTRICAL FIXTURES AND EQUIPMENT ARE SCHEDULED BY MANUFACTURER AND MODEL NUMBER
FOR DESIGN INTENT ONLY, APPROVED EQUALS MAY BE SUBSTITUTED.

SERVICE PANEL LPA									
MAIN BUS: 400A MLO VOLTS: 240/120, 1PH, 3-WIRE BUS MATERIAL: COPPER MOUNTING: SURFACE			SQUARE "D" NOOD OR EQUAL W/ NEUTRAL BUS & GROUNDING BUS CIRCUIT BREAKERS BOLT-IN 10000 AIC			CONNECTED LOAD A PHASE 30621 VA B PHASE 28120 VA TOTAL 58741 VA 147 A			
CIR	SERVICE	VA	BKR		BKR	VA	SERVICE		CIR
1	LIGHTS - 101 WORKING BAYS	1307	20A1P	A	30A1P	2592	LIGHTS - 102 COLD STORAGE		2
3	LIGHTS - 101 WORKING BAYS	648	20A1P	B	20A1P	129	EXTERIOR LIGHTING		4
5	EXTERIOR LIGHTING	129	20A1P	A	20A1P	1000	EXTERIOR RECEPTACLE	⊗	6
7	EXTERIOR RECEPTACLE	⊗ 1000	20A1P	B	20A1P	1000	EXTERIOR RECEPTACLE	⊗	8
9	EXTERIOR RECEPTACLE	⊗ 1000	20A1P	A	30A1P	2162	GARAGE DOOR OPENERS		10
11	EXTERIOR RECEPTACLE	⊗ 1000	20A1P	B	20A1P	1000	EXTERIOR RECEPTACLE	⊗	12
13	GARAGE DOOR OPENERS	2162	30A1P	A	20A1P	813	EXHAUST FAN & LOUVER		14
15	RECEPTACLES	⊗ 540	20A1P	B	20A1P	540	RECEPTACLES	⊗	16
17	RECEPTACLES	⊗ 540	20A1P	A	20A1P	156	CEILING FANS		18
19	CARBON MONOXIDE	1553	20A1P	B	20A1P	1553	CARBON MONOXIDE		20
21	CORD REEL	⊗ 540	20A1P	A	20A1P	540	CORD REEL	⊗	22
23	DRINKING FOUNTAIN	480	20A1P	B	20A1P	456	UNIT HEATER		24
25	RECEPTACLES - 102	⊗ 540	20A1P	A	20A1P	540	RECEPTACLES - 102	⊗	26
27	RECEPTACLES - 102	⊗ 540	20A1P	B	20A1P	1081	GARAGE DOOR OPENER		28
29				A					30
31				B					32
33				A					34
35	WATER HEATER	3000	30A2P	B	50A2P	4600	AIR COMPRESSOR		36
37		3000		A		4600			38
39	WELDER	4500	50A2P	B	50A2P	4500	WELDER		40
41		4500		A		4500			42

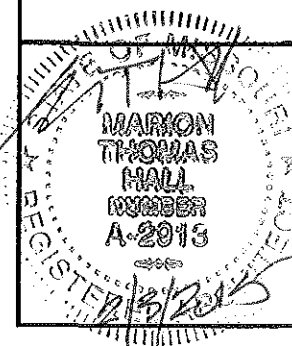
⊗ CIRCUIT BREAKER SHALL BE GFI RATED

ELECTRICAL NOTES

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- ELECTRICAL WORK SHALL BE INSTALLED IN STRICT COMPLIANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE (N.E.C.).
- PROVIDE ELECTRICAL EQUIPMENT AND ACCESSORIES REQUIRED FOR A COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM AS REQUIRED BY MANUFACTURER'S INSTRUCTIONS AND DIRECTIONS FOR SYSTEMS SPECIFIED.
- SWITCHES AND RECEPTACLES SHALL BE EQUAL TO THE AMPERE RATING SHOWN IN THE PANEL SCHEDULE. RECEPTACLES SHALL BE GROUND-FAULT INTERRUPTION TYPE WHERE SHOWN OR AS REQUIRED BY CODE.
- SEE HVAC SCHEDULE FOR EQUIPMENT TO BE HARD WIRED, PROVIDE SERVICE DISCONNECT AT EACH.
- ALL RECEPTACLES IN GARAGE AREA TO BE MOUNTED AT 48" A.F.F.
- COORDINATE WORK WITH OTHER TRADES PRIOR TO COMMENCING WITH ELECTRICAL WORK.
- CONDUCTOR AND BREAKER SIZE MAY VARY PER MANUFACTURER ON THE EQUIPMENT SPECIFIED. ELECTRIC CONTRACTOR TO VERIFY SIZES WITH EXACT EQUIPMENT ORDERED PRIOR TO PURCHASING ELECTRICAL SUPPLIES.
- FIXTURE LOCATIONS ARE APPROXIMATE, EXACT LOCATIONS TO BE DETERMINED AFTER COLLABORATION WITH THE OWNER AND OTHER TRADES.
- CONTRACTOR SHALL PROVIDE SERVICE DISCONNECTS AS REQUIRED AT EXTERIOR OF BUILDING.
- PROVIDE BLOCKING FOR ELECTRICAL DEVICES AS REQUIRED FOR A SECURE APPLICATION.
- PROVIDE CONDUCTORS AND CONDUIT TO TRANSFORMER PAD SOUTHEAST OF NEW BUILDING AS REQUIRED FOR A FUNCTIONAL SERVICE.



POWER DISTRIBUTION



ELECTRICAL PANEL

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