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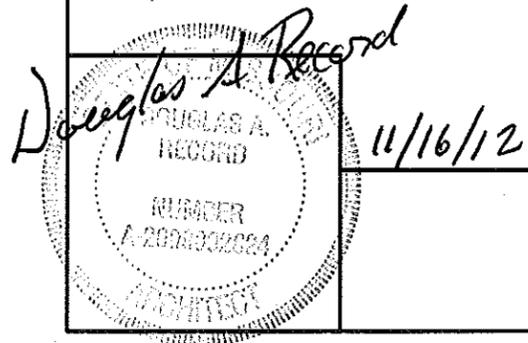
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MISSOURI DEPARTMENT
OF TRANSPORTATION

CONCRETE BLOCK TRUCK WASH
KANSAS CITY DISTRICT
BELTON, MISSOURI
Route 71, West Outer Road
Cass County

CODE REQUIREMENTS

- BUILDING CODE - CURRENT IBC
- PLUMBING CODE - CURRENT IBC
- MECHANICAL CODE - CURRENT IBC
- ELECTRICAL CODE - CURRENT N.E.C.

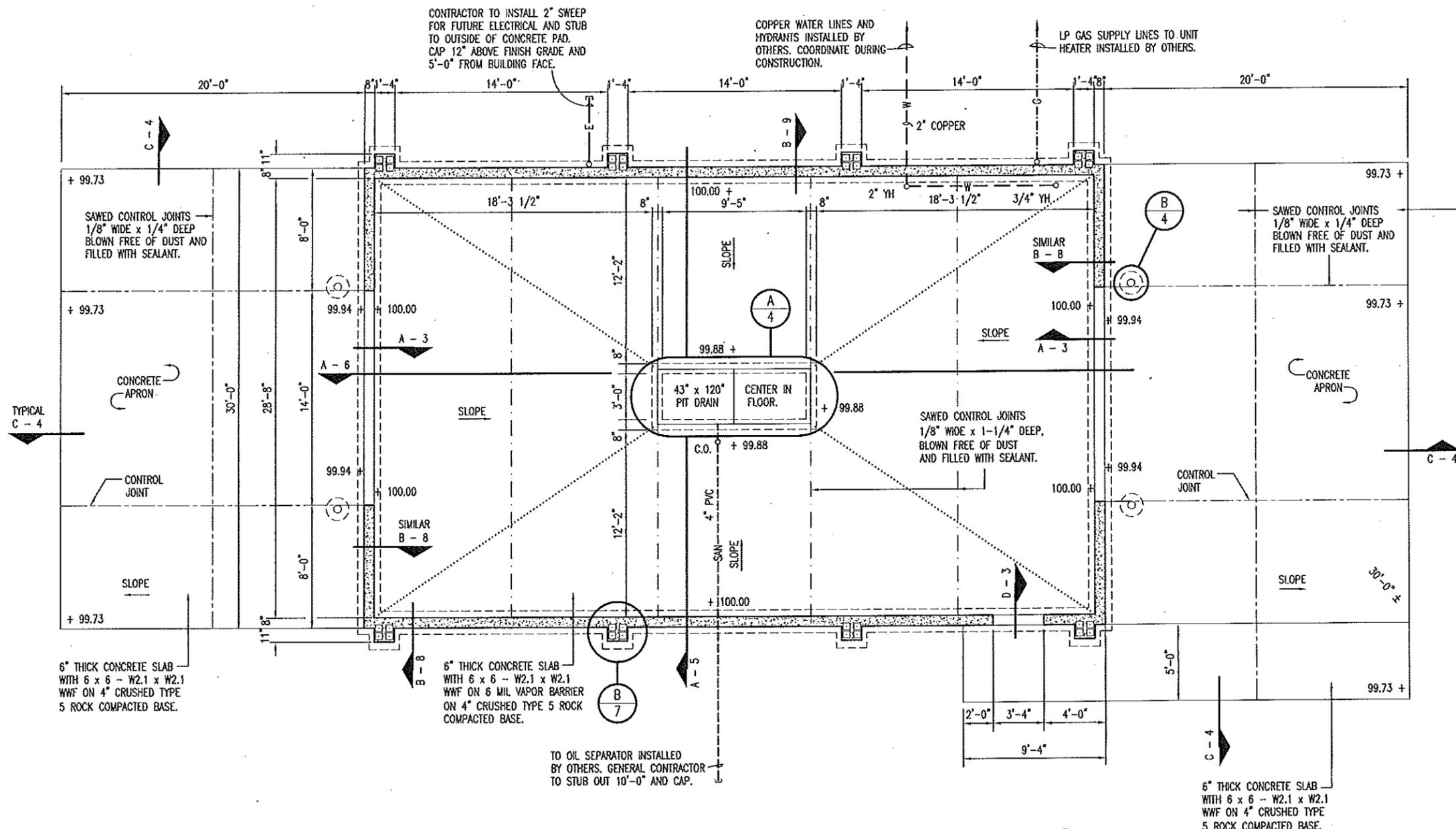


COVER SHEET

MISSOURI DEPARTMENT
OF TRANSPORTATION
DIVISION OF GENERAL SERVICES
FACILITIES MANAGEMENT

CONCRETE BLOCK TRUCK WASH
KANSAS CITY DISTRICT, BELTON, MISSOURI

DESIGN BY: LARRY CARVER
DRAWN BY: LARRY CARVER
DATE: 11-9-12
Sheet
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- NOTES:
- VERIFY ALL UTILITY LOCATIONS INTO BLDG.
 - PLUMBING COPPER RAN THROUGH CONCRETE SHALL BE IN (SCH 40) PVC SLEEVES.
 - BLOCK OUT AT ALL DOOR OPENINGS. (TYP.)
 - PLUMBING CONTRACTOR TO MAKE SANITARY SEWER CONNECTION AS SHOWN FOR AN OPERABLE SYSTEM.

A FOUNDATION / FLOOR PLAN
2 SCALE: 1/8" = 1'-0"
 NORTH

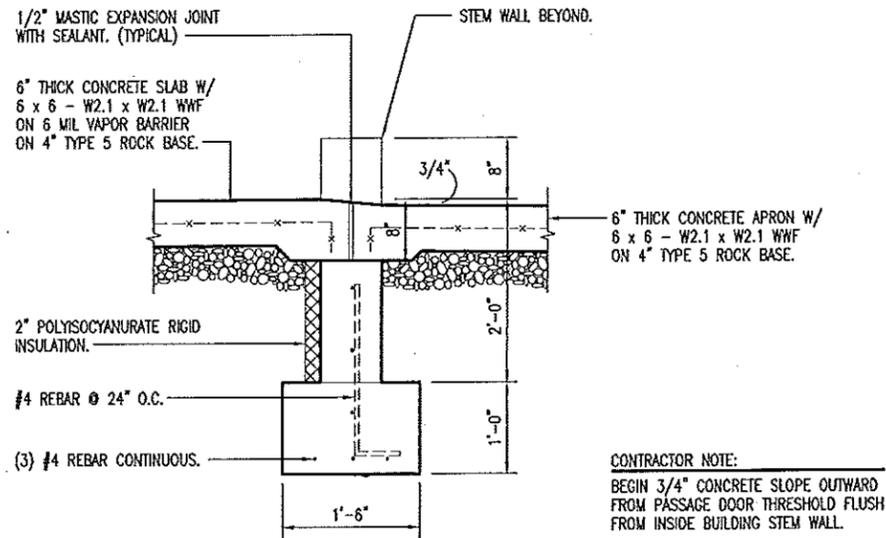
Douglas A. Record
 DOUGLAS A. RECORD
 NUMBER A-2009002624
 11/16/12

FOUNDATION / FLOOR PLAN

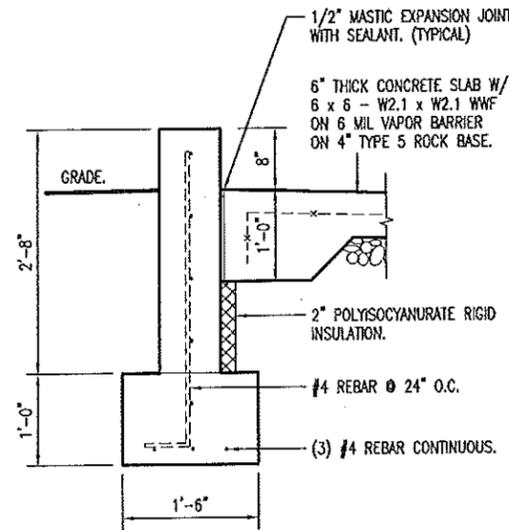
MISSOURI DEPARTMENT OF TRANSPORTATION
 DIVISION OF GENERAL SERVICES
 FACILITIES MANAGEMENT

CONCRETE BLOCK TRUCK WASH
 KANSAS CITY DISTRICT, BELTON, MISSOURI

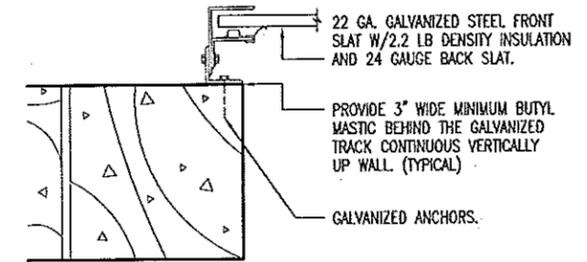
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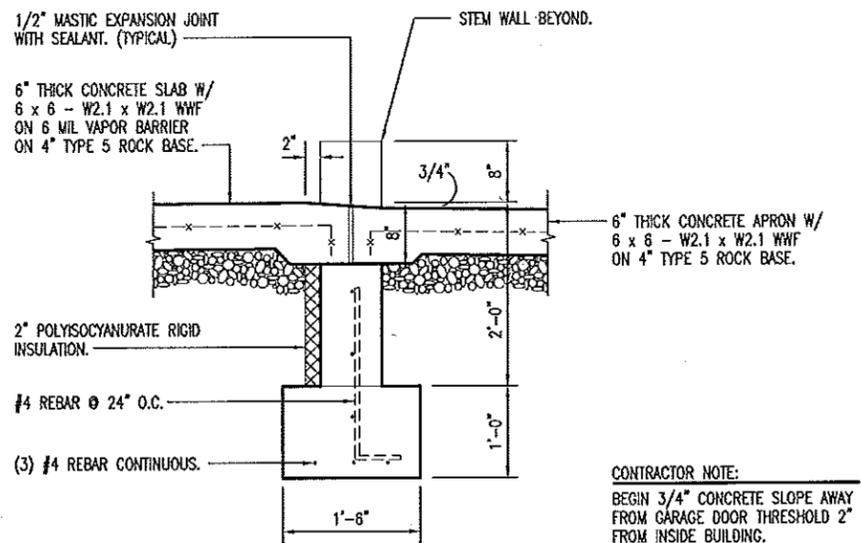
D
3
PASSAGE DOOR THRESHOLD
SCALE: 1/2" = 1'-0"



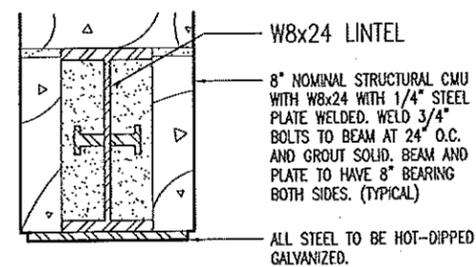
E
3
STEM WALL
SCALE: 1/2" = 1'-0"



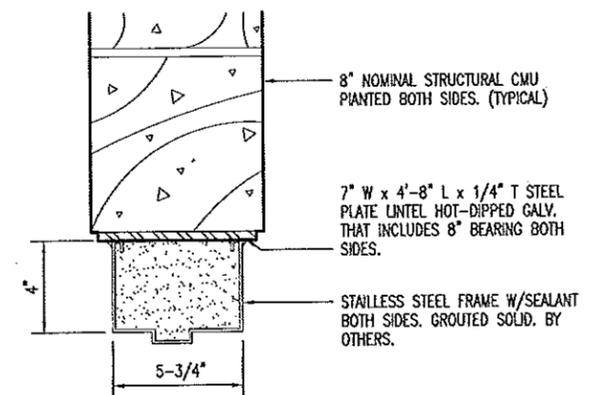
F
3
COILING GARAGE DOOR JAMB
SCALE: 1-1/2" = 1'-0"



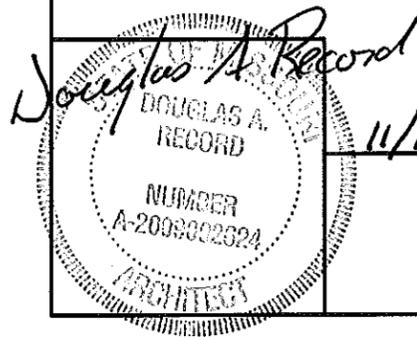
A
3
GARAGE DOOR THRESHOLD
SCALE: 1/2" = 1'-0"



B
3
GARAGE DOOR HEAD
SCALE: 1-1/2" = 1'-0"



C
3
STAINLESS STEEL DOOR HEAD/JAMB @ 2"
SCALE: 1-1/2" = 1'-0"

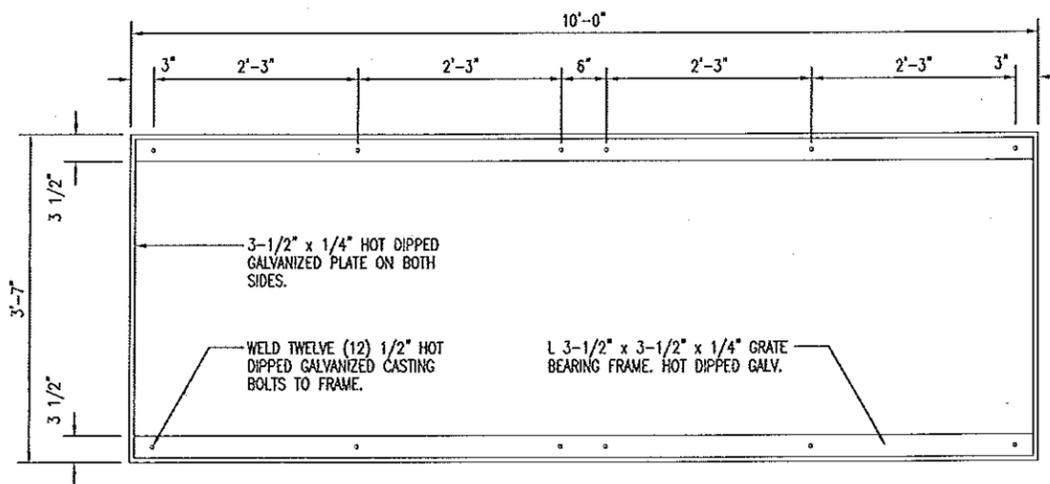


FOUNDATION DETAILS

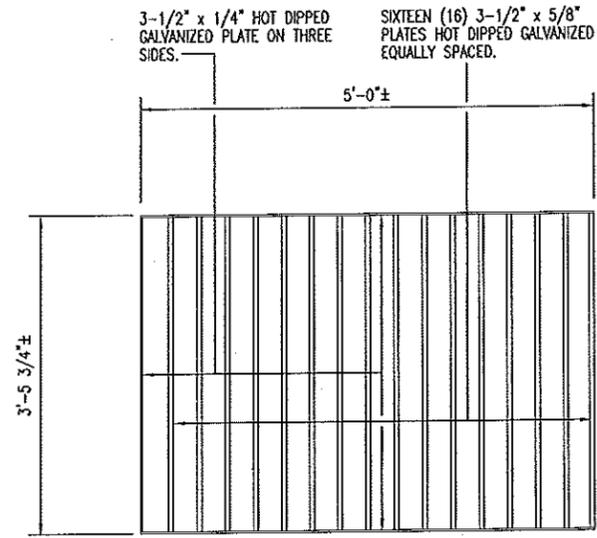
MISSOURI DEPARTMENT OF TRANSPORTATION
DIVISION OF GENERAL SERVICES FACILITIES MANAGEMENT

CONCRETE BLOCK TRUCK WASH
KANSAS CITY DISTRICT, BELTON, MISSOURI

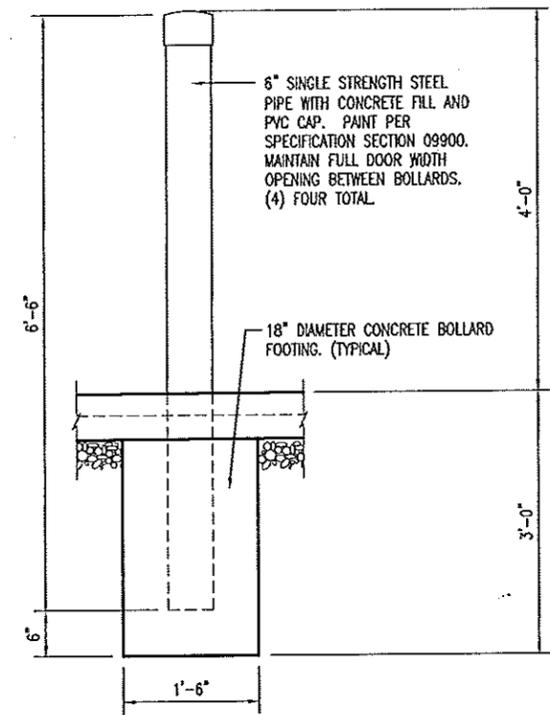
DESIGN BY: LARRY CARVER
DRAWN BY: LARRY CARVER
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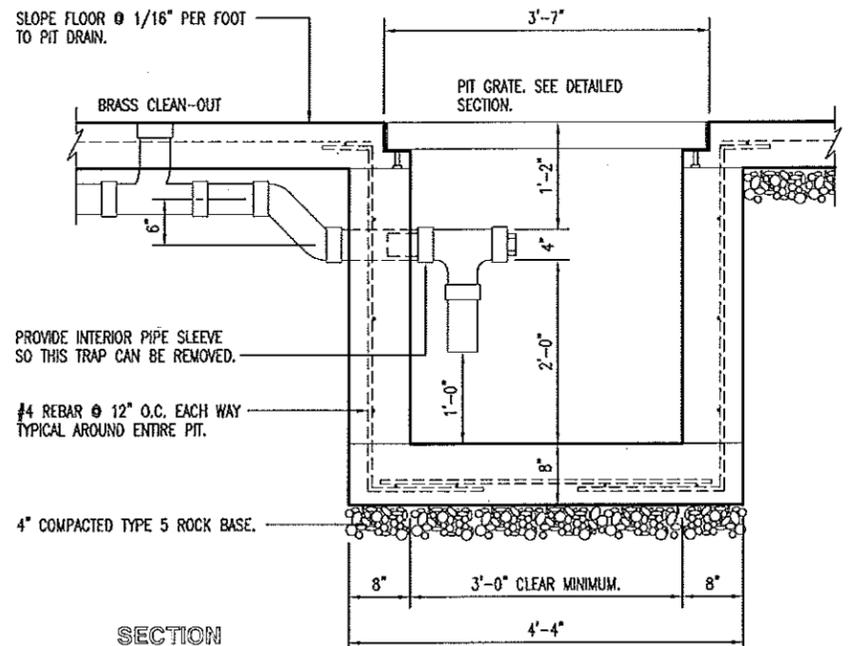
BEARING FRAME PLAN



PROVIDE TWO (2) GRATE PLAN

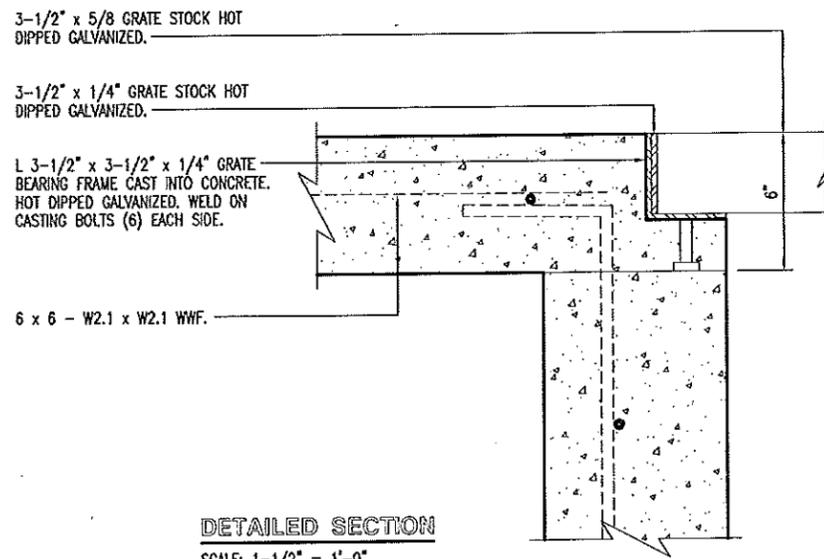


BOLLARD @ PIER DETAIL
SCALE: 1/2" = 1'-0"

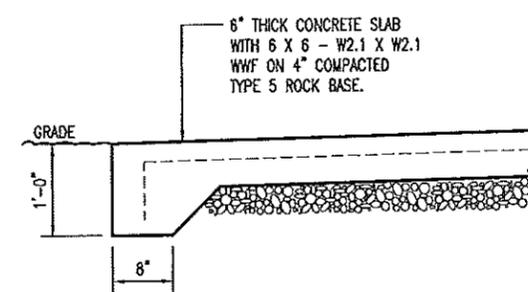


SECTION

A PIT DRAIN
SCALE: 1/2" = 1'-0"



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



C SLAB SECTION
SCALE: 1/2" = 1'-0"

Doyle as A Record
DOUGLAS A. RECORD
NUMBER A-2009002624
11/16/12

FOUNDATION DETAILS

MISSOURI DEPARTMENT OF TRANSPORTATION
DIVISION OF GENERAL SERVICES
FACILITIES MANAGEMENT

CONCRETE BLOCK TRUCK WASH
KANSAS CITY DISTRICT, BELTON, MISSOURI

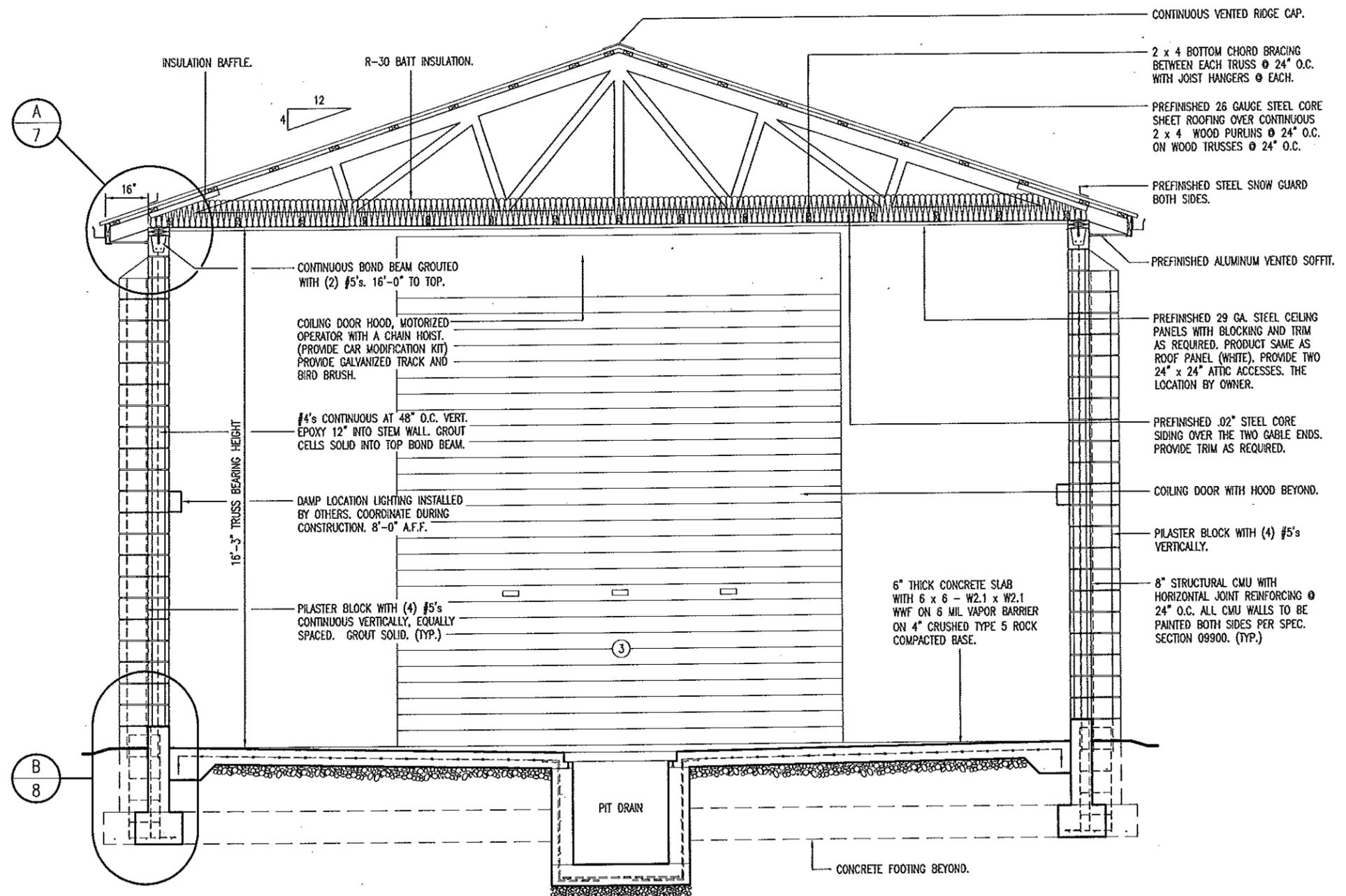
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DRAWN BY: LARRY CARYER
DATE: 11-2-12
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ENGINEERING DESIGN AND SHOP DRAWINGS:

1. PROFESSIONAL ENGINEER: ALL TRUSS DESIGNS SHALL BEAR THE NAME, SEAL, AND REGISTRATION NUMBER OF A LICENSED PROFESSIONAL ENGINEER.
2. TRUSS DESIGNS SHALL CONTAIN THE FOLLOWING DATA:
 - A. LOADING (UNIFORM)
 1. TOP CHORD
 - LIVE LOAD 20 PSF
 - DEAD LOAD 10 PSF
 - SNOW DRIFT - PER 2003 IBC
 2. BOTTOM CHORD
 - DEAD LOAD 5 PSF
 - TOTAL LOAD 35 PSF
 - B. METAL CONNECTORS - NOTE GAUGE SIZES OF CONNECTORS, NAME OF MANUFACTURER, AND CAPACITY OF EACH CONNECTION.
 - C. LUMBER SPECIFICATIONS
 - D. PITCH, SPAN, AND SPACING OF TRUSSES
 - E. DESIGN LOADINGS AND ALLOWABLE UNIT STRESS INCREASE, IF ANY
 - F. FORCE ANALYSIS OF BAR FORCES IN EACH MEMBER
 - G. SIZE AND LOCATION OF ALL CONNECTOR PLATES
 - H. TRUSS SUPPORTS @ TOP PLATES & BOTTOM CHORD BRACING JOIST HANGERS.
 - I. CAMBER, IF ANY
 - J. PERMANENT BRACING
 - K. HANDLING AND ERECTION INSTRUCTIONS
 - L. SPECIFY TRUSS TIES FOR SECURE APPLICATION TO SUBSTRATE DUE TO UPLIFT.
3. FIVE COPIES OF EACH TRUSS DESIGN AND/OR SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW PRIOR TO THE FABRICATION OF ANY COMPONENTS.
4. STRUCTURAL ENGINEERS REVIEW OF DRAWINGS PREPARED BY THE CONTRACTORS, SUPPLIERS, ETC., ARE ONLY FOR CONFORMANCE WITH DESIGN CONCEPT. CONSTRUCTION SHALL NOT START WITHOUT SAID REVIEW.

DESIGN CRITERIA:

1. BUILDING CODE: CURRENT IBC
2. SEISMIC AV = 0.125; AA = 0.13
3. BASIC WIND SPEED 90 MPH, EXPOSURE C
4. PITCH 4:12



A
5 BUILDING SECTION
SCALE: 1/4" = 1'-0"

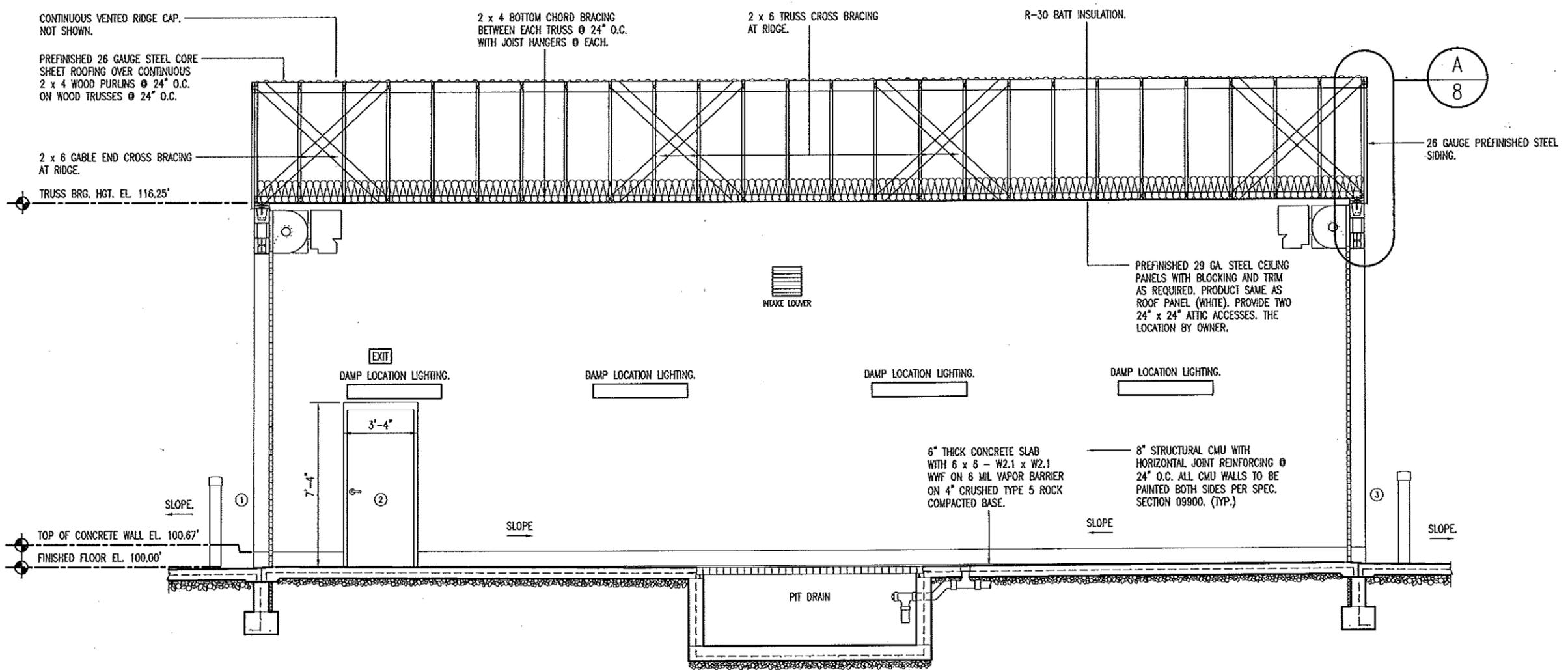
Record
DOUGLAS A. RECORD
11/16/12
NUMBER
A-2008032624
ARCHITECT

BUILDING SECTION

MISSOURI DEPARTMENT
OF TRANSPORTATION
DIVISION OF GENERAL SERVICES
FACILITIES MANAGEMENT

CONCRETE BLOCK TRUCK WASH
KANSAS CITY DISTRICT, BELTON, MISSOURI

DESIGN BY: LARRY CARVER
DRAWN BY: LARRY CARVER
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A BUILDING SECTION
6 SCALE: 3/16" = 1'-0"

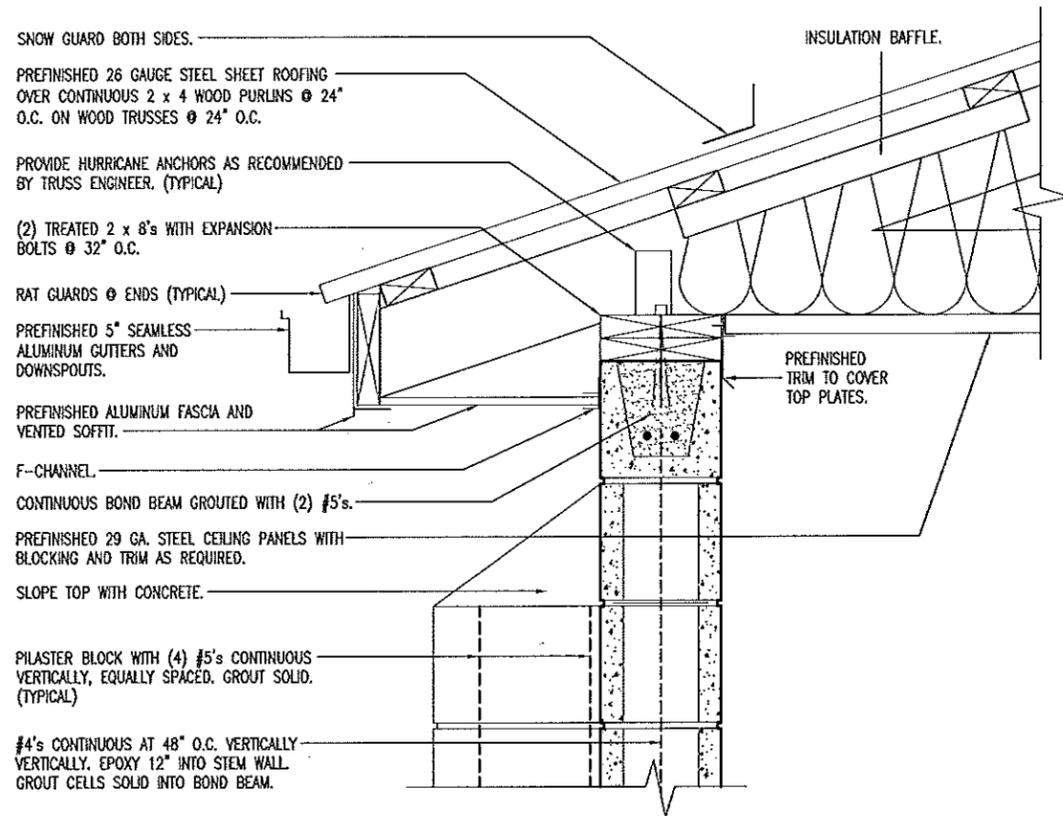
Record
 MISSOURI ARCHITECTS & ENGINEERS
 DOUGLAS A. RECORD
 NUMBER A-2009002624
 ARCHITECT
 11/16/12

BUILDING SECTION

MISSOURI DEPARTMENT OF TRANSPORTATION
 DIVISION OF GENERAL SERVICES
 FACILITIES MANAGEMENT

CONCRETE BLOCK TRUCK WASH
 KANSAS CITY DISTRICT, BELTON, MISSOURI

DESIGN BY: LARRY CARVER
 DRAWN BY: LARRY CARVER
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SNOW GUARD BOTH SIDES.

PREFINISHED 26 GAUGE STEEL SHEET ROOFING OVER CONTINUOUS 2 x 4 WOOD PURLINS @ 24" O.C. ON WOOD TRUSSES @ 24" O.C.

PROVIDE HURRICANE ANCHORS AS RECOMMENDED BY TRUSS ENGINEER. (TYPICAL)

(2) TREATED 2 x 8's WITH EXPANSION BOLTS @ 32" O.C.

RAT GUARDS @ ENDS (TYPICAL)

PREFINISHED 5" SEAMLESS ALUMINUM GUTTERS AND DOWNSPOUTS.

PREFINISHED ALUMINUM FASCIA AND VENTED SOFFIT.

F-CHANNEL.

CONTINUOUS BOND BEAM GROUTED WITH (2) #5's.

PREFINISHED 29 GA. STEEL CEILING PANELS WITH BLOCKING AND TRIM AS REQUIRED.

SLOPE TOP WITH CONCRETE.

PILASTER BLOCK WITH (4) #5's CONTINUOUS VERTICALLY, EQUALLY SPACED. GROUT SOLID. (TYPICAL)

#4's CONTINUOUS AT 48" O.C. VERTICALLY. EPOXY 12" INTO STEM WALL. GROUT CELLS SOLID INTO BOND BEAM.

INSULATION BAFFLE.

PREFINISHED TRIM TO COVER TOP PLATES.

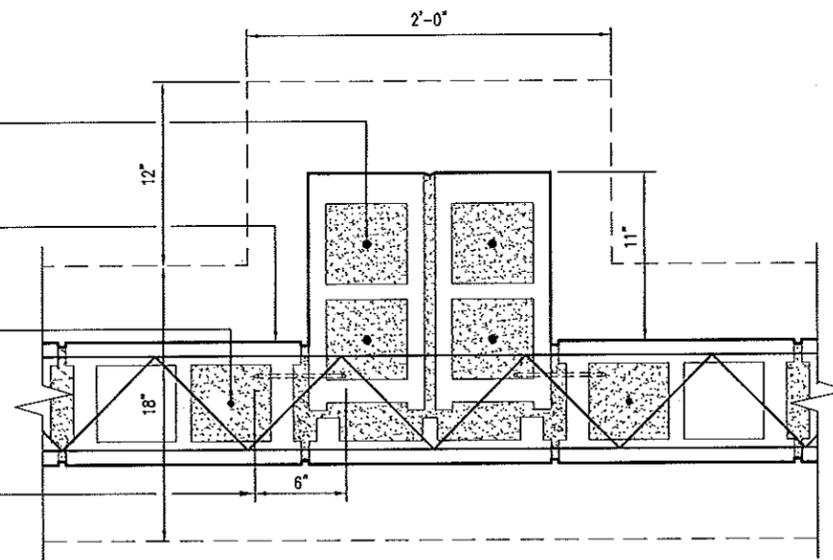
A WALL SECTION
7
SCALE: 1" = 1'-0"

PILASTER BLOCK WITH (4) #5's CONTINUOUS VERTICALLY. EPOXY 12" INTO EXISTING CONCRETE STEM WALL. GROUT CELLS SOLID. (TYPICAL)

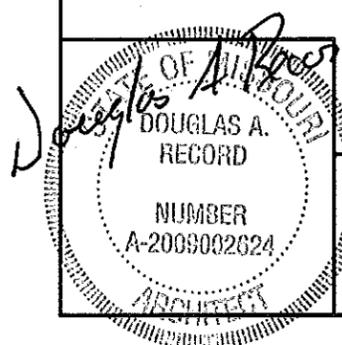
8" STRUCTURAL CMU WITH HORIZONTAL JOINT REINFG. AT 24" O.C. CMU WALL TO BE PAINTED ON ALL SIDES.

#4's CONTINUOUS AT 48" O.C. VERTICALLY. EPOXY 12" INTO WALL. GROUT CELLS SOLID INTO BOND BEAM.

(2) #4's HORSESHOE SHAPED WITH (2) 12" LEGS TURNED DOWN PLACED EVERY THIRD COURSE VERTICALLY. (TYPICAL)



B PILASTER DETAIL
7
SCALE: 1" = 1'-0"



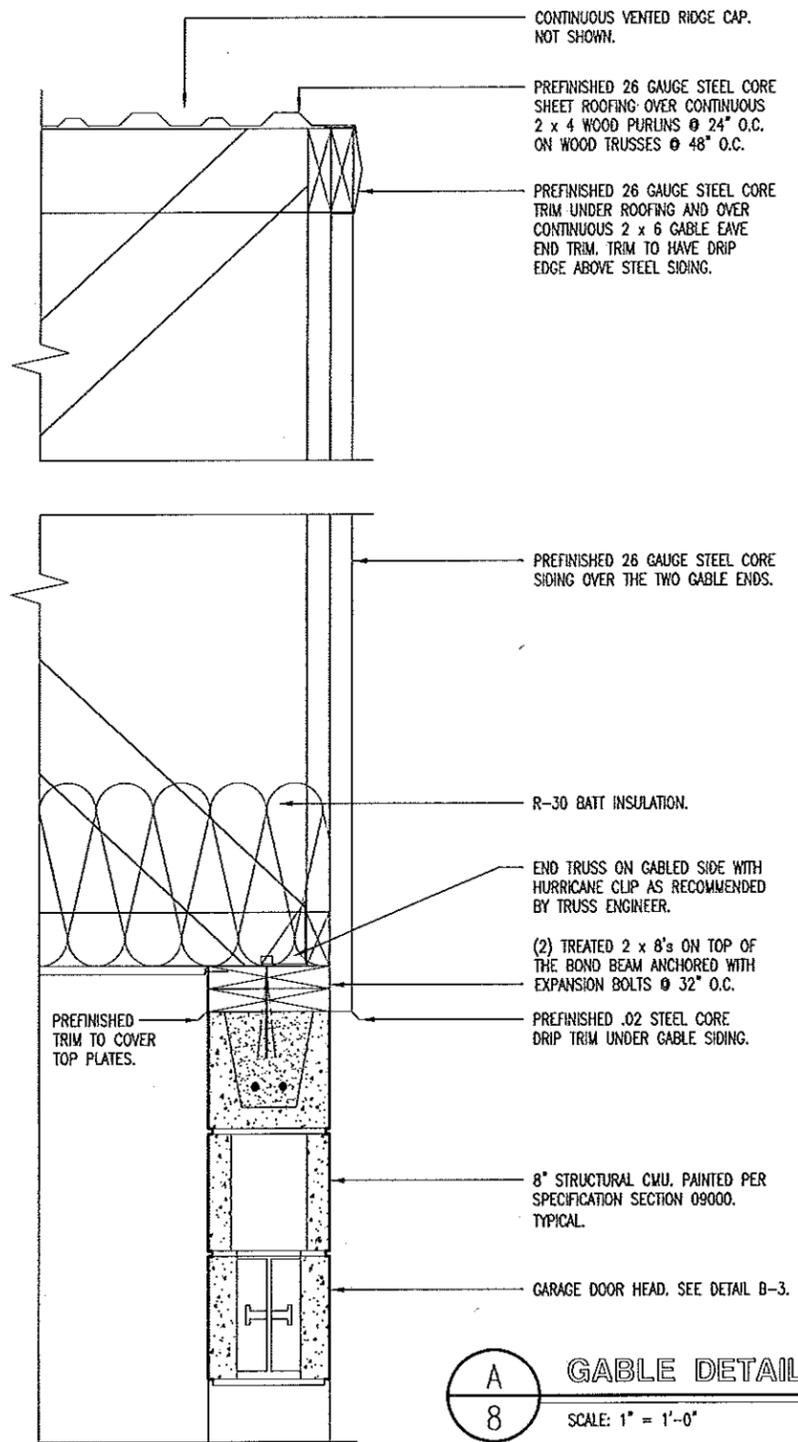
11/16/12

DETAILS

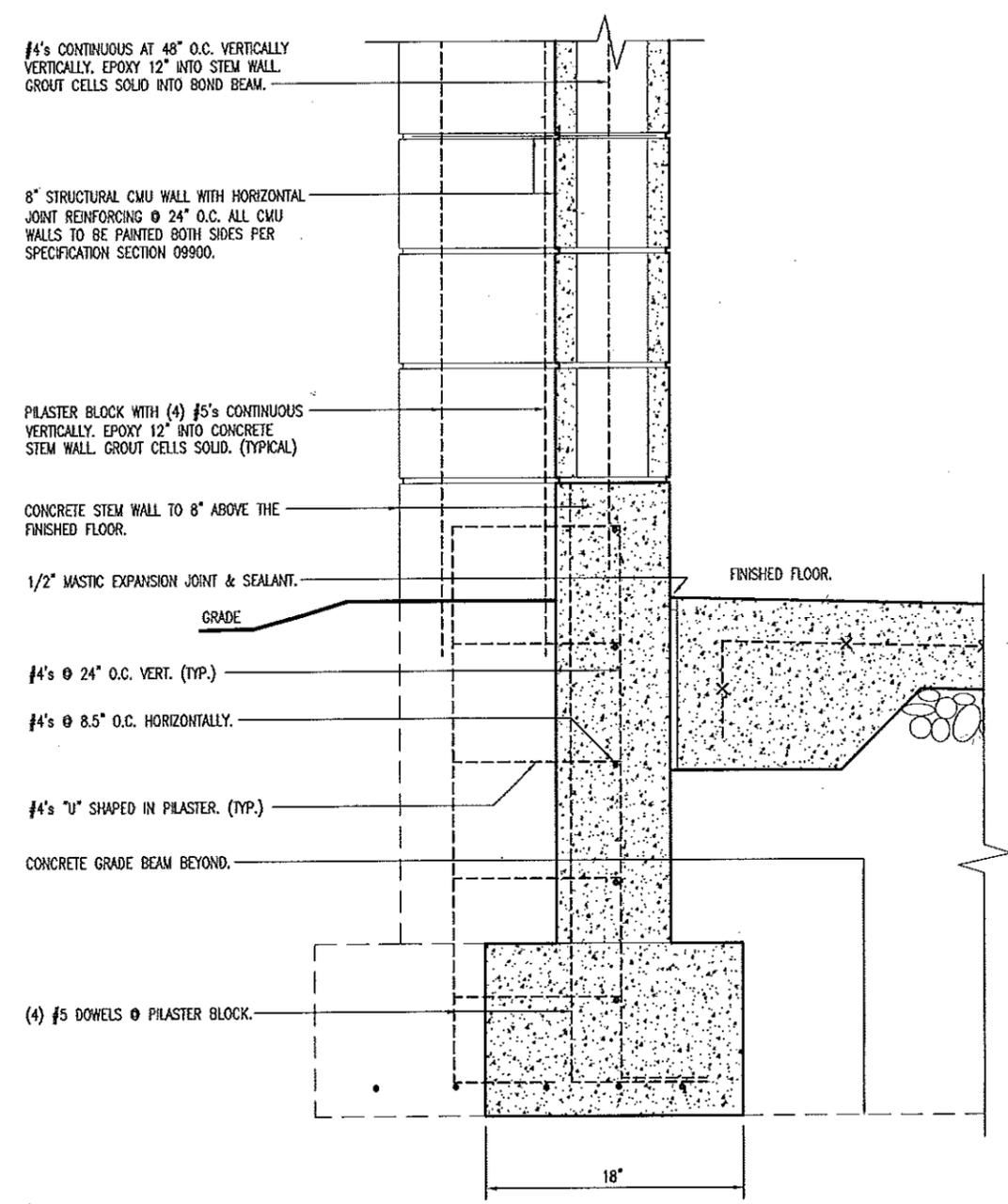
MISSOURI DEPARTMENT OF TRANSPORTATION
DIVISION OF GENERAL SERVICES
FACILITIES MANAGEMENT

CONCRETE BLOCK TRUCK WASH
KANSAS CITY DISTRICT, BELTON, MISSOURI

DESIGN BY: LARRY CARVER
DRAWN BY: LARRY CARVER
DATE: 11-2-12
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A
8
GABLE DETAIL
SCALE: 1" = 1'-0"



B
8
WALL SECTION
SCALE: 1" = 1'-0"

Douglas A. Record
 MISSOURI ARCHITECTS RECORD
 DOUGLAS A. RECORD
 NUMBER A-2009002624
 ARCHITECT
 11/16/12

DETAILS

MISSOURI DEPARTMENT
 OF TRANSPORTATION
 DIVISION OF GENERAL SERVICES
 FACILITIES MANAGEMENT

CONCRETE BLOCK TRUCK WASH
 KANSAS CITY DISTRICT, BELTON, MISSOURI

DESIGN BY: LARRY CARVER
 DRAWN BY: LARRY CARVER
 DATE: 11-2-12
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PREFINISHED STEEL SNOW GUARD BOTH SIDES.

CONTINUOUS VENTED RIDGE CAP.

PREFINISHED 26 GAUGE STEEL SHEET ROOFING OVER CONTINUOUS 2 x 4 WOOD PURLINS @ 24" O.C. ON WOOD TRUSSES @ 48" O.C. (TYPICAL)

CLOSED ENDS AT ROOF EDGE. RAT-GUARD. (TYPICAL)

TRUSS BEARING HEIGHT EL. 116.25'

8" STRUCTURAL CMU W/HORIZONTAL JOINT REINFORCING AT 24" O.C. CMU WALL TO BE PAINTED ON ALL SIDES.

PREFINISHED 5" SEAMLESS ALUMINUM GUTTERS AND DOWNSPOUTS. SPLASHBLOCKS BELOW EACH. (TYP.)

EXPANSION JOINT WITH BACKER ROD AND SEALANT. EXPANSION JOINT (E.J.) VERTICALLY FLANKING 8" FROM OPENINGS. (TYPICAL)

PILASTER BLOCK WITH (4) #5's CONTINUOUS VERTICALLY, EQUALLY SPACED. GROUT SOLID. (TYPICAL)

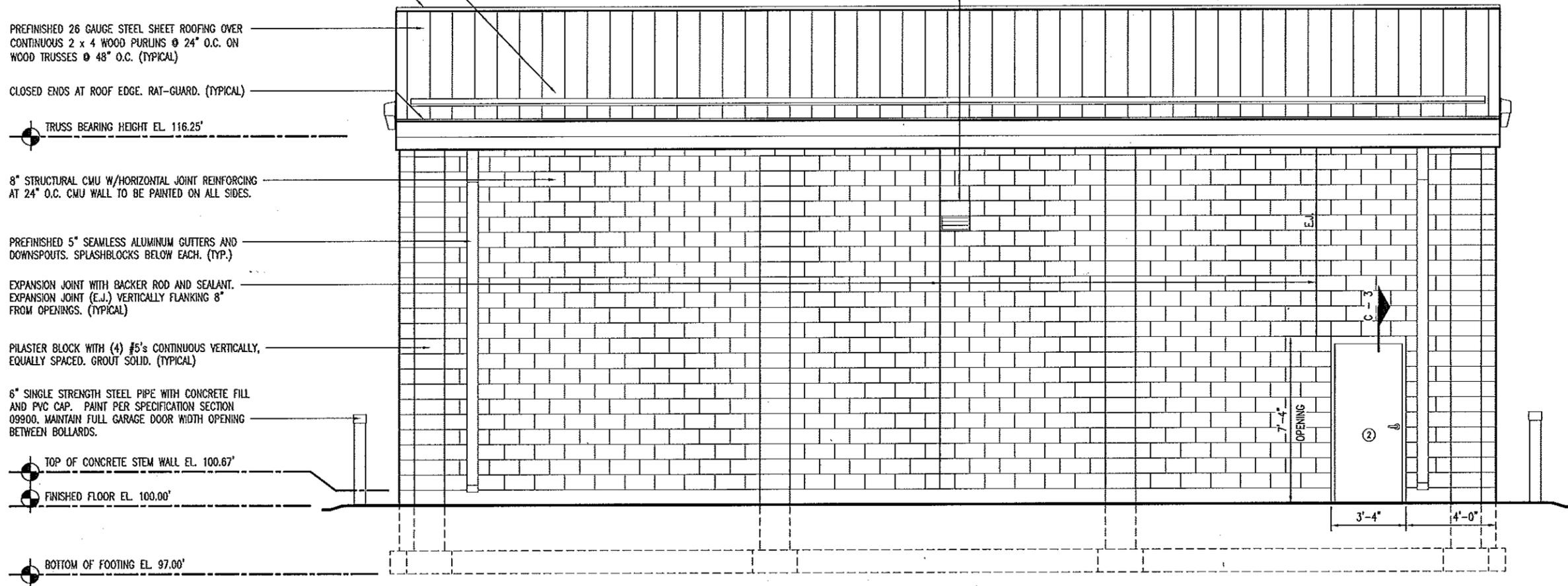
6" SINGLE STRENGTH STEEL PIPE WITH CONCRETE FILL AND PVC CAP. PAINT PER SPECIFICATION SECTION 09900. MAINTAIN FULL GARAGE DOOR WIDTH OPENING BETWEEN BOLLARDS.

TOP OF CONCRETE STEM WALL EL. 100.67'

FINISHED FLOOR EL. 100.00'

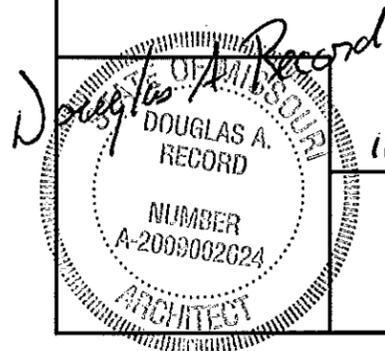
BOTTOM OF FOOTING EL. 97.00'

PROVIDE AND INSTALL 16" MOTORIZED DAMPER WITH WEATHERHOOD WITHIN 16" x 16" x 8" STAINLESS STEEL WALLSLEEVE THAT HAS MITERED INSIDE CORNERS. (VERIFY WALL SLEEVE SIZE.)



A EAST ELEVATION
9 SCALE: 3/16" = 1'-0"

WEST ELEVATION SIMILAR & TO HAVE CENTERED:
PROVIDE AND INSTALL 16" DIAMETER CORROSION RESISTANT SHUTTER FAN WITHIN 16" x 16" x 8" STAINLESS STEEL WALL SLEEVE THAT HAS MITERED INSIDE CORNERS. (VERIFY WALL SLEEVE SIZE.)



EAST ELEVATION

MISSOURI DEPARTMENT OF TRANSPORTATION
DIVISION OF GENERAL SERVICES
FACILITIES MANAGEMENT

CONCRETE BLOCK TRUCK WASH
KANSAS CITY DISTRICT, BELTON, MISSOURI

DESIGN BY: LARRY CARVER
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Sheet 9 of 15

WALL PACK LIGHTING INSTALLED BY OTHERS.

CONTINUOUS VENTED RIDGE CAP.

PREFINISHED 26 GAUGE STEEL CORE SIDING OVER THE TWO GABLE ENDS.

PREFINISHED .26 GAUGE STEEL CORE SHEET ROOFING OVER CONTINUOUS 2 x 4 WOOD PURLINS @ 24" O.C. ON WOOD TRUSSES @ 48" O.C.

PREFINISHED STEEL SNOW GUARD BOTH SIDES.

PREFINISHED 5" SEAMLESS ALUMINUM GUTTERS AND DOWNSPOUTS.

TRUSS BEARING HEIGHT EL. 116.25'

EXPANSION JOINT (E.J.) VERTICALLY FLANKING 8" FROM OPENINGS. (TYPICAL)

TOP OF CONCRETE STEM WALL EL. 100.67'

FINISHED FLOOR EL. 100.00'

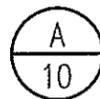
BOTTOM OF FOOTING EL. 97.00'

PILASTER BLOCK BEYOND BOTH SIDES.

8" STRUCTURAL CMU WITH HORIZONTAL JOINT REINFORCING @ 24" O.C. ALL CMU WALLS TO BE PAINTED BOTH SIDES PER SPEC. SECTION 09900. (TYP.)

6" SINGLE STRENGTH PIPE WITH CONCRETE FILL AND PVC CAP.

8" CONCRETE STEM WALL (TYP.)



NORTH ELEVATION

SOUTH ELEVATION SIMILAR.

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

NORTH ELEVATION

MISSOURI DEPARTMENT OF TRANSPORTATION
DIVISION OF GENERAL SERVICES
FACILITIES MANAGEMENT

CONCRETE BLOCK TRUCK WASH
KANSAS CITY DISTRICT, BELTON, MISSOURI

DESIGN BY: LARRY CARYER

DRAWN BY: LARRY CARYER

DATE: 11-2-12

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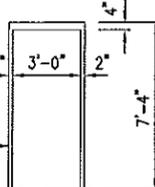
Douglas A. Record
MISSOURI
DOUGLAS A. RECORD
NUMBER
A-2009002624
ARCHITECT
11/16/12

DOOR SCHEDULE							
NO.	SIZE	SWING	DR. TYPE	FRM. TYPE	DETAIL	FRM. DEPTH	HWDR. GRP.
1	14'-0" x 14'-0" x 2"	---	B	---	---	---	---
2	3'-0" x 7'-0" x 1-3/4"	LHR	A	I	C-3	5-3/4"	1
3	14'-0" x 14'-0" x 2"	---	B	---	---	---	---



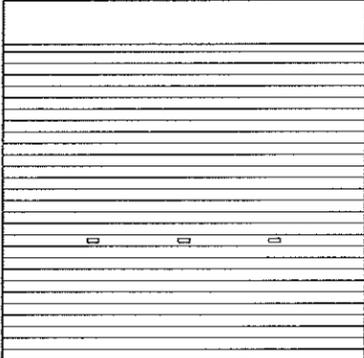
EXTERIOR INSULATED STAINLESS STEEL DOOR. INCLUDE REINFORCEMENT FOR DOOR CLOSER AND TOP FILLER CHANNEL.

(A)



16 GA. WELDED H.M. STAINLESS STEEL FRAME.

(I)

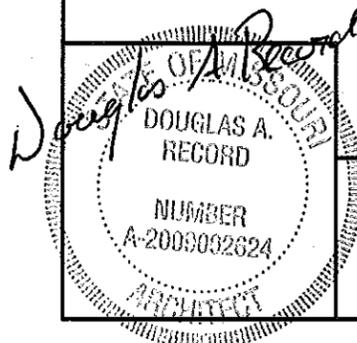


COILING DOOR HOOD, MOTORIZED OPERATOR WITH A CHAIN HOIST. (PROVIDE CAR MODIFICATION KIT) PROVIDE GALVANIZED TRACK AND BIRD BRUSH.

14'-0" x 14'-0" x 2" PREFINISHED INSULATED COILING GARAGE DOOR WITH (3) VIEW WINDOWS WHITE BAKED ON POLYESTER TOP COAT PAINT BOTH SIDES. (TYPICAL)

(B)

HVAC SCHEDULE						
SYM.	UNIT	MANUFACTURER	BTU OUTPUT	FUEL	VOLTAGE	REMARKS
(A)	GAS FIRED UNIT HEATER	REZNOR MODEL UDAS 100 OR EQUAL	105,000	LP GAS	115	409 STAINLESS STEEL HEAT EXCHANGERS, TOTALLY ENCLOSED FAN MOTOR, HORIZONTAL COMBUSTION AIR/VENT KIT INCLUDING CONCENTRIC ADAPTER.
(B)	16" DIA. CORROSION RESISTANT SHUTTER FAN	DAYTON 1BLJ1 OSHA GUARD OR EQUAL	2,005 CFM	ELECTRIC	115	FIBERGLASS SHUTTER & BLADES. 2.1 AMPS. PROVIDE 16" x 16" x 9-1/4" STAINLESS STEEL WALL SLEEVE THAT HAS MITERED INSIDE CORNERS. (VERIFY WALL SLEEVE SIZE)
(C)	MOTORIZED DAMPER WITH WEATHERHOOD	DAYTON MODEL 4C560 OR EQUAL 60 HERTZ	---	ELECTRIC	115	16" CENTER-PVOTING, MOTORIZED, GALV. STEEL DAMPER, WIRE TO OPEN WHEN THE EXHAUST FAN IS TURNED ON. HOOD EQUAL TO NATIONAL FAN CO. Ph: 1-877-389-3131 16" GALVANIZED WEATHER HOOD, MODEL# NFC-GH-XF16. PROVIDE 16" x 16" x 9-1/4" STAINLESS STEEL WALL SLEEVE THAT HAS MITERED INSIDE CORNERS. (VERIFY WALL SLEEVE SIZE)
(T)	THERMOSTAT	AS REQUIRED.	---	---	---	AS RECOMMENDED BY THE GAS FIRED UNIT HEATER MANUFACTURER.



11/16/12

SCHEDULES

MISSOURI DEPARTMENT OF TRANSPORTATION
DIVISION OF GENERAL SERVICES
FACILITIES MANAGEMENT

CONCRETE BLOCK TRUCK WASH
KANSAS CITY DISTRICT, BELTON, MISSOURI

DESIGN BY: LARRY CARYER
DRAWN BY: LARRY CARYER
DATE: 11-2-12
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GENERAL 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 FIELD INSPECTOR BEFORE PROCEEDING WITH THE WORK.
4. ALL CONCRETE SHALL BE TYPE I CEMENT WITH A COMPRESSIVE STRENGTH OF 4,000 PSI @ 28 DAYS WITH 4" SLUMP.
5. CONCRETE EXPOSED TO THE EXTERIOR SHALL RECEIVE AIR ENTRAINMENT OF 6% ± 2%.
6. FOUNDATION WALLS AND FOOTINGS SHALL BEAR A MINIMUM OF 12" INTO UNDISTURBED SOIL AND 36" MINIMUM BELOW FINISH GRADE.
7. DEFORMED STEEL REINFORCING BARS SHALL BE #5 AND LARGER, ASTM A615 GRADE 60.
8. PROVIDE CORNER REINFORCING BARS WITH 12" MINIMUM LAP EQUAL IN SIZE AND GRADE TO CONNECTING BARS.
9. INTERIOR AND EXTERIOR CONCRETE FLATWORK SHALL HAVE A LIGHT BROOM FINISH.
10. 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.
11. SAWED CONTROL JOINTS SHALL BE CLEANED FREE OF ALL DEBRIS AND FILLED WITH DOW CORNING 888 SILICONE JOINT SEALANT OR AN APPROVED EQUAL. SAWCUT WITHIN 24 HOURS.
12. SEE SPECIFICATION SECTION 03300 CONCRETE FOR ADDITIONAL INFORMATION.

PLUMBING NOTES:

1. PLUMBING SHALL BE INSTALLED IN STRICT COMPLIANCE WITH THE LATEST EDITION OF THE IRC PLUMBING CODE.
2. 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.
3. PROVIDE PLUMBING EQUIPMENT AND ACCESSORIES REQUIRED FOR COMPLETE AND OPERATIONAL PLUMBING SYSTEMS AS REQUIRED BY MANUFACTURER'S INSTRUCTIONS AND DIRECTIONS FOR SYSTEMS SPECIFIED.
4. 3/4" YARD HYDRANT: EQUAL TO WOODFORD MODEL Y2 FREEZELESS, BACKFLOW PROTECTED, AUTOMATIC DRAINING YARD HYDRANT. PROVIDE 36" BURY LENGTH.
5. 2" YARD HYDRANT: EQUAL TO #71 NATIONAL TYPE "A" COMPRESSION HYDRANT. ANTI-FREEZING AUTOMATIC DRAIN. ALL BRONZE WITH 2" VALVE OPENING & 10" WHEEL TOP. 36" BURY LENGTH.

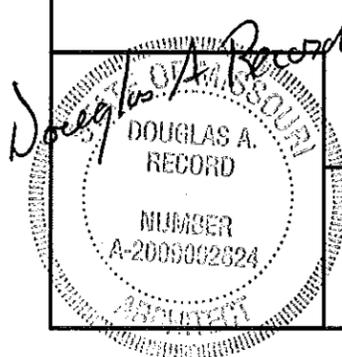
GRADING NOTES:

FILLING AND BACKFILLING: PLACE BACKFILL AND FILL MATERIALS IN LAYERS NOT MORE THAN 8" IN LOOSE DEPTH. BEFORE COMPACTION, MOISTEN OR AERATE EACH LAYER AS NECESSARY TO PROVIDE THE SPECIFIED MOISTURE CONTENT. COMPACT EACH LAYER TO REQUIRED PERCENTAGE OF MAXIMUM DENSITY FOR THE AREA.

WASTE EARTH MATERIAL: STORED ON SITE. LOCATION AS DIRECTED BY OWNER.

EXCAVATION: CONTRACTOR TO SLOPE GRADE AWAY FROM NEW TRUCK WASH AS REQUIRED WITH 6" TYPE 5 ROCK BASE INCLUDING ALL AREAS DISTURBED DURING CONSTRUCTION.

STAKING: STRUCTURE LOCATION STAKED AND LEVEDED BY MODOOT AT THE MAINTENANCE SITE.



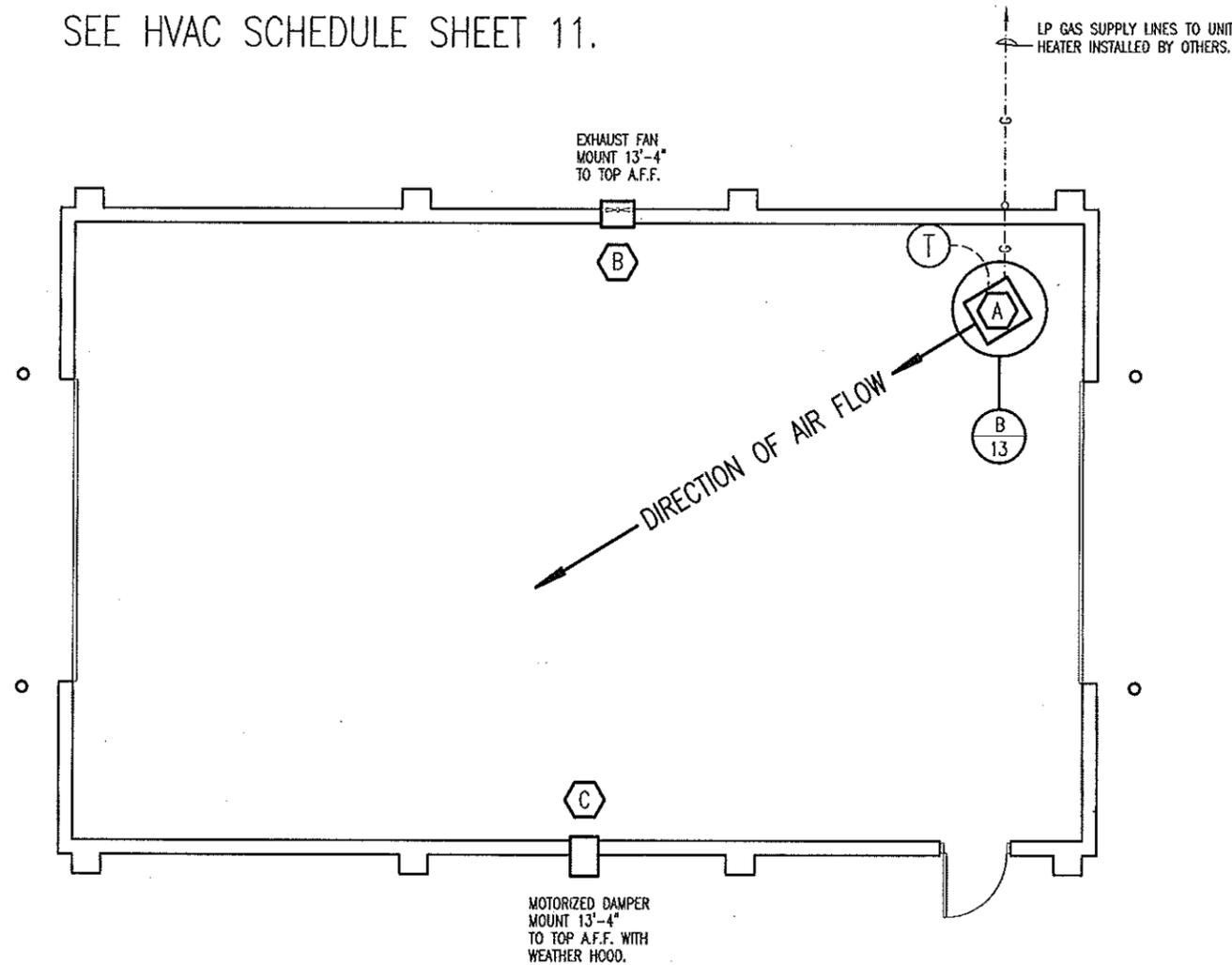
GENERAL NOTES

MISSOURI DEPARTMENT
OF TRANSPORTATION
DIVISION OF GENERAL SERVICES
FACILITIES MANAGEMENT

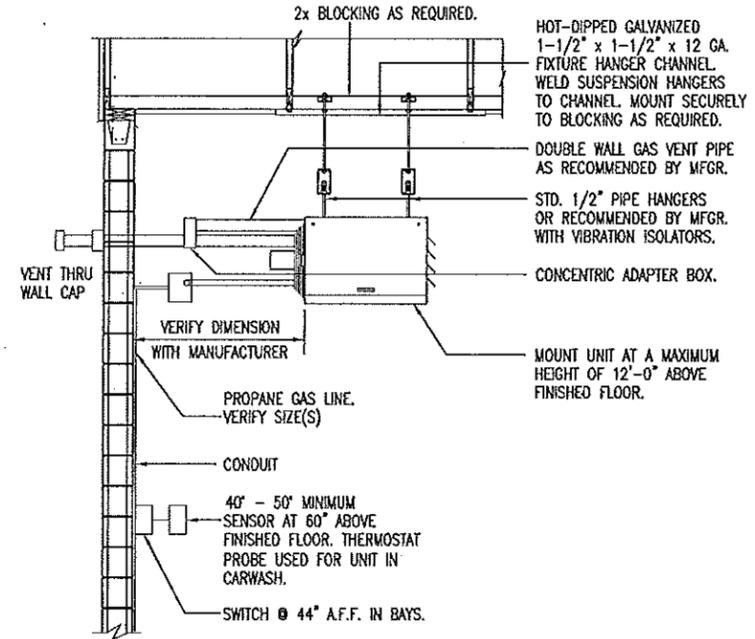
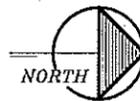
CONCRETE BLOCK TRUCK WASH
KANSAS CITY DISTRICT, BELTON, MISSOURI

DESIGN BY: LARRY CARYER
DRAWN BY: LARRY CARYER
DATE: 11-2-12
Sheet
12 of 15

SEE HVAC SCHEDULE SHEET 11.



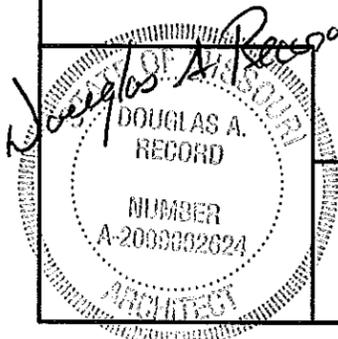
A
13
BY OTHERS
MECHANICAL PLAN
SCALE: 1/8" = 1'-0"



B
13
UNIT HEATER INSTALLATION
NOT TO SCALE

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.
7. CONTRACTOR WORK WILL BEGIN FROM EXISTING PROPANE TANK WITH GAS LINE TO UNIT HEATER. SIZE AS REQUIRED FOR A FUNCTIONAL SYSTEM.



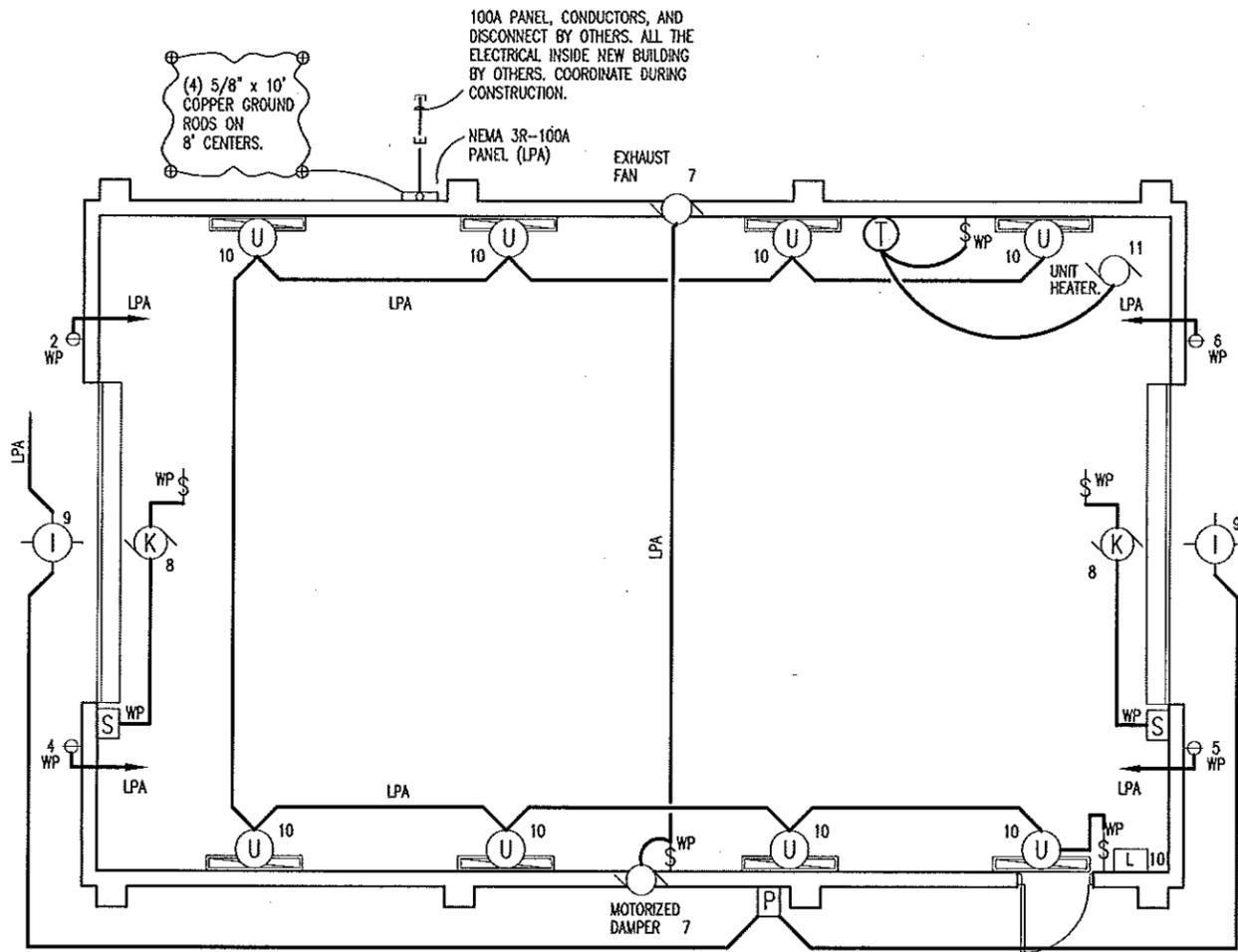
11/16/12

MECHANICAL PLAN

MISSOURI DEPARTMENT
OF TRANSPORTATION
DIVISION OF GENERAL SERVICES
FACILITIES MANAGEMENT

CONCRETE BLOCK TRUCK WASH
KANSAS CITY DISTRICT, BELTON, MISSOURI

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DATE: 11-9-12
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(4) 5/8" x 10' COPPER GROUND RODS ON 8' CENTERS.

100A PANEL, CONDUCTORS, AND DISCONNECT BY OTHERS. ALL THE ELECTRICAL INSIDE NEW BUILDING BY OTHERS. COORDINATE DURING CONSTRUCTION.

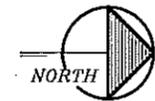
NEMA 3R-100A PANEL (LPA)

EXHAUST FAN 7

UNIT HEATER 11

MOTORIZED DAMPER 7

BY OTHERS.
A
 14
ELECTRICAL PLAN
 SCALE: 1/8" = 1'-0"



Doyle's Record
 MISSOURI
 DOUGLAS A. RECORD
 NUMBER
 A-2009002624
 APR 2012

11/16/12

ELECTRICAL PLAN

MISSOURI DEPARTMENT
 OF TRANSPORTATION
 DIVISION OF GENERAL SERVICES
 FACILITIES MANAGEMENT

CONCRETE BLOCK TRUCK WASH
 KANSAS CITY DISTRICT, BELTON, MISSOURI

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BY OTHERS.

SERVICE PANEL LPA								
VOLTS: 120/240, 1PH, 4-WIRE NEMA 3R, SQUARE D-NQ418L1, BOX-MH26WP, GROUND-PK27GTA								
CIR	SERVICE	VA	BKR	CIR	BKR	VA	SERVICE	CIR
1	100A SERVICE DISCONNECT	--	100A2P	A	20A1P	1000	EXTERIOR - RECEPTACLE	2
3				B	20A1P	1000	EXTERIOR - RECEPTACLE	4
5	EXTERIOR - RECEPTACLE	1000	20A1P	A	20A1P	1000	EXTERIOR - RECEPTACLE	6
7	EXHAUST FAN AND DAMPER	1221	20A1P	B	30A1P	2162	OHD OPENERS	8
9	EXTERIOR LIGHTS	434	20A1P	A	20A1P	1246	BAY LIGHTING	10
11	UNIT HEATER	276	20A1P	B			SPACE	12
13	SPACE			A			SPACE	14
15	SPACE			B			SPACE	16
17	SPACE			B			SPACE	18

⊗ CIRCUIT BREAKER SHALL BE GFI RATED

BY OTHERS.

ELECTRIC SCHEDULE						
MANUF.	MODEL	#	LAMP TYPES	W	MOUNT	REMARKS
LITHONIA Ⓢ	VRI-2-54T5HO_MVOLT GEB10PS90	2	FLUORESCENT	54	CLG	7-5/8" x 50" DAMP LOCATION, FIBERGLASS HOUSING, CLEAR HIGH-IMPACT ACRYLIC LENS AND COLD WEATHER ELECTRONIC BALLAST.
WILLIAMS Ⓢ	PGM-175H-128-2	1	METAL HALIDE	175	WALL	EXTERIOR, SURFACE MOUNT LIGHT FIXTURE, WITH ALUMINUM HOUSING, & IMPACT RESISTANT ONE-PIECE, WRAPAROUND LENS.
Ⓢ	OVERHEAD DOOR OPERATOR				WALL	115V, 1-PH, HOOD MOUNT TYPE COMMERCIAL IN CARWASH & TROLLEY TYPE IN MAINTENANCE. SEE SPECIFICATION SECTION 08720.
LITHONIA L	SERIES LQM LQM-SW-3R-120/277 ELN				CLG	QUANTUM SERIES EXIT LIGHT WITH WHITE THERMOPLASTIC HOUSING & UNIVERSAL MOUNT. INSTALL ABOVE LIGHT FIXTURE "U" AT DOOR 2.
Ⓢ	OVERHEAD DOOR CONTROL WATERPROOF				WALL	THREE BUTTON OVERHEAD DOOR CONTROL AS SUPPLIED BY OVERHEAD DOOR MANUF. SEE SPECIFICATION SECTION 08720.
TORK P	2001				WALL	120V PHOTO ELECTRIC CONTROL OF EXTERIOR LIGHTS.

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

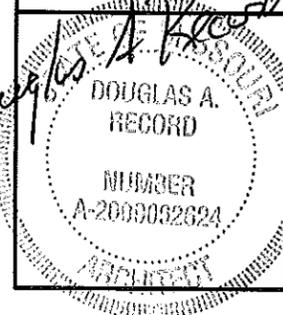
LEGEND

- Ⓢ WP SINGLE POLE SWITCH, MOUNT 48" A.F.F. IN FS BOX WITH HUBBELL HBL 7420 COVER.
- Ⓢ WP SINGLE RECEPTACLE MOUNTED IN FS BOX WITH HUBBELL HBL7423 COVER.

ELECTRICAL NOTES:

1. DRAWINGS AND DIAGRAMS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED. REFER TO ARCHITECTURAL DRAWINGS FOR THE DIMENSIONS.
2. ELECTRICAL WORK SHALL BE INSTALLED IN STRICT COMPLIANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (N.E.C.)
3. PROVIDE ELECTRICAL EQUIPMENT AND ACCESSORIES REQUIRED FOR A COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM REQUIRED BY MANUFACTURER'S INSTRUCTIONS AND DIRECTIONS FOR SYSTEMS SPECIFIED.
4. SWITCHES AND RECEPTACLES SHALL BE EQUAL TO THE AMPERE SHOWN IN THE PANEL SCHEDULE. RECEPTACLES SHALL BE GROUND FAULT INTERRUPTION WHERE SHOWN OR AS REQUIRED BY CODE.
5. SEE HVAC SCHEDULE FOR EQUIPMENT SYMBOLS AND EQUIPMENT TO BE HARD WIRED.
6. CONTRACTOR SHALL PROVIDE SERVICE DISCONNECTS AS REQUIRED ON EXTERIOR OF NEW BUILDING.
7. PROVIDE BLOCKING FOR ELECTRICAL DEVICES AS REQUIRED FOR A SECURE APPLICATION.
8. SEE SPECIFICATION SECTION 16100 - ELECTRICAL FOR ADDITIONAL REQUIREMENTS.
9. COORDINATE WORK WITH OTHER TRADES PRIOR TO COMMENCING WITH ELECTRICAL WORK.
10. CONDUCTOR AND BREAKER SIZE MAY VARY PER MANUFACTURER SHOWN ON THE EQUIPMENT SPECIFIED. ELECTRICAL CONTRACTOR TO VERIFY SIZES WITH EXACT EQUIPMENT ORDERED PRIOR TO PURCHASING ELECTRICAL SUPPLIES.
11. ALL EXPOSED CONDUIT, BOXES, CONNECTORS, ETC. IN THE WASH BAY TO BE IN SCHEDULE 40 PVC. CONTRACTOR TO VERIFY THE DIAMETERS OF CONDUIT AS REQUIRED.
12. GROUP CIRCUITS IN CONDUIT WHERE FEASIBLE AS REQUIRED.
13. PROVIDE CONDUIT, CONDUCTORS, BOXES, CONNECTORS, ETC. FROM EXISTING EXTERIOR POWER SOURCE (VERIFY) AS REQUIRED FOR A FUNCTIONAL SYSTEM.

ALL ELECTRICAL BY OTHERS UNLESS OTHERWISE NOTED. COORDINATE DURING CONSTRUCTION.



11/16/12

ELECTRICAL PANEL & SCHEDULE

MISSOURI DEPARTMENT
OF TRANSPORTATION
DIVISION OF GENERAL SERVICES
FACILITIES MANAGEMENT

CONCRETE BLOCK TRUCK WASH
KANSAS CITY DISTRICT, BELTON, MISSOURI

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DATE: 11-9-12
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