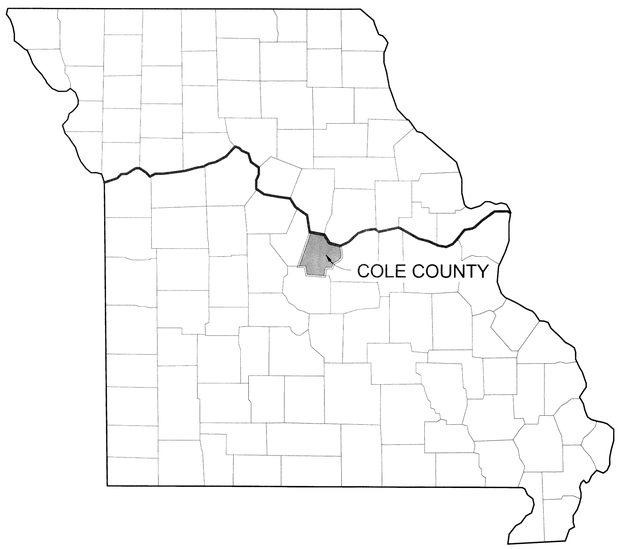
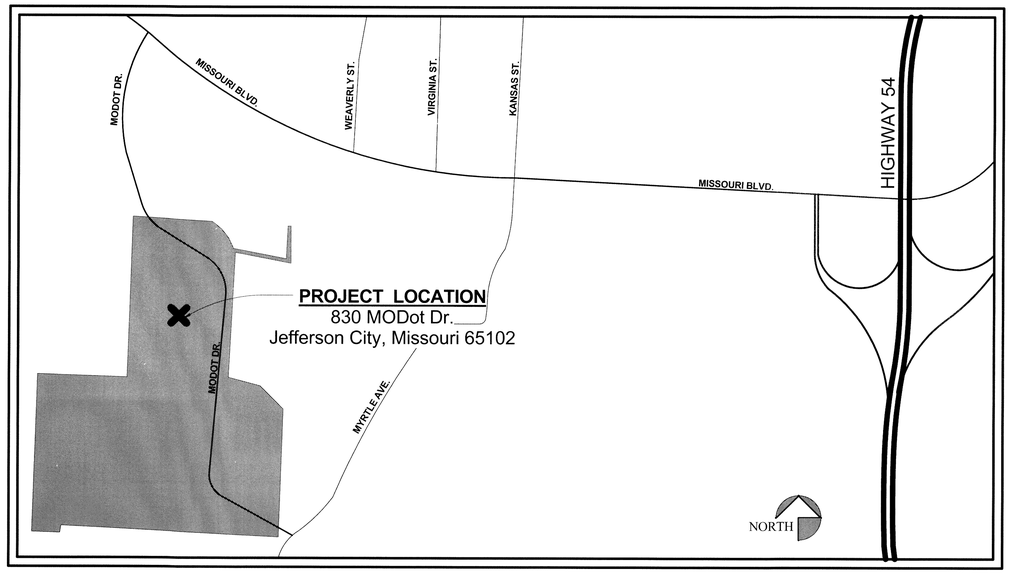
MISSOURI DEPARTMENT OF TRANSPORTATION
WAREHOUSE RENOVATION PHASE I

JEFFERSON CITY, COLE COUNTY, MISSOURI



KEY MAP

SHOWING LOCATION OF COUNTY



PROJECT LOCATION MAP

NOT TO SCALE

BEFORE YOU
DIG – DRILL – BLAST
Call 1-800-344-7483
(TOLL FREE)
MISSOURI ONE CALL SYSTEM, INC.

INDEX OF SHEETS

SHEET #	SHEET TITLE
GENERAL	
G001	COVER SHEET
G002	ABBREVIATION AND SYMBOLS
ARCHITECTURAL	
D1.1	DEMOLITION PLAN
A1.1	PLANS AND ELEVATIONS
A1.2	ENLARGED PLANS & DETAILS
A5.1	SECTIONS
A6.1	SCHEDULES
ADA-1	ADA FIGURES 1 - 11
ADA-2	ADA FIGURES 12 - 28
ADA-3	ADA FIGURES 29 - 48
STRUCTURAL	
S101	LOADING DOCK PLANS
S301	LOADING DOCK DETAILS
S401	OVERHEAD DOOR FRAME ELEVATION & DETAILS
MECHANICAL	
ME1	MECHANICAL AND ELECTRICAL PLANS

NO.	DATE	REVISIONS	BY	APP'D

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MISSOURI CERTIFICATE OF AUTHORITY: F00139850

Designed By: MMH
Drawn By: JMB
Checked By: MJR
Issue Date: 10-26-09

STATE OF MISSOURI
MICHAEL MELVIN HALL
NUMBER E-27044
REGISTERED PROFESSIONAL ENGINEER

SHAFER, KLINE, & WARREN, INC.
1400 Forum Boulevard, Suite 19A, Columbia, MO 65203-1997
573/442-4537 FAX: 620/365-6828
OFFICE LOCATIONS: Iola, KS; Chillicothe, MO; Columbia, MO; Houston, TX; Macon, MO; Kansas City, MO; North Kansas City, MO; Lenexa, KS; Tulsa, OK
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MISSOURI DEPARTMENT OF TRANSPORTATION
WAREHOUSE RENOVATION PHASE I
JEFFERSON CITY, COLE COUNTY, MISSOURI

COVER SHEET

800160-040

SHEET NO.
G001

P:\800160-040_Acad\Revit Models\Local Files\800160-040 MoDot Structural_jbasinger.rvt

ABBREVIATION LEGEND

ADNDM	ADDENDUM
ADD'N	ADDITION
ABC	AGGREGATE BASE COURSE
AFF	ABOVE FINISH FLOOR
AGG	AGGREGATE
AL	ALUMINUM
AB	ANCHOR BOLT
APPROX	APPROXIMATE
ARCH	ARCHITECT
ASP	ASPHALT
BLKG	BLOCKING
BSMT	BASEMENT
BM	BEAM
BRG	BEARING
BS	BOTH SIDES
BTWN	BETWEEN
BOT	BOTTOM
BLDG	BUILDING
CAB'T	CABINET
CIP	CAST IN PLACE
CB	CATCH BASIN
CLG	CEILING
CL	CENTERLINE
CHAN	CHANNEL
CLR	CLEAR
CLOS	CLOSET
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CJ	CONTROL JOINT/CONSTRUCTION JOINT
CONT	CONTINUOUS
CONTR	CONTRACTOR
COORD	COORDINATE
CORRG	CORRUGATED
CRNR	CORNER
CMU	CONCRETE MASONRY UNIT
CNTR	CENTER
DBA	DEFORMED BAR ANCHOR
DBL	DOUBLE
DWA	DEFORMED WIRE ANCHOR
DTL	DETAIL
DIAG	DIAGONAL
DIA	DIAMETER
DIM	DIMENSION
DWL	DOWEL
DN	DOWN
DS	DOWNSPOUT
DWG	DRAWING
EA	EACH
EF	EACH FACE
EW	EACH WAY
EWEF	EACY WAY EACH FACE
ELEC	ELECTRIC
EL	ELEVATION
ELEV	ELEVATOR
EMBED	EMBEDMENT
ENGR	ENGINEER
EOR	ENGINEER OF RECORD
EOS	EDGE OF STEEL
EQ	EQUAL
EQUIV	EQUIVALENT
EXP	EXPANSION
EJ	EXPANSION JOINT
EXIST	EXISTING
EXT	EXTERIOR
F'c=	28 DAY CONCRETE STRENGTH
FAB	FABRICATE
FOB	FACE OF BRICK
FOC	FACE OF CONCRETE
FS	FAR SIDE
FT	FEET/FOOT
FV	FIELD VERIFY
FIN	FINISH(ED)
FFL	FINISHED FLOOR
FL	FLASHING
FLR	FLOOR
FD	FLOOR DRAIN
FTG	FOOTING
FND	FOUNDATION
FR	FRAME
GA	GAUGE
GEN	GENERAL
GR	GRADE
GND	GROUND
GALV	GALVANIZE(D)
GYP	GYPSUM
GWB	GYPSUM WALL BOARD
H	HORIZONTAL REACTION
HR	HAND RAIL
HGR	HANGER
HD	HARDENED
HSA	HEAD STUD ANCHOR
HT	HEIGHT
HP	HIGH POINT
HM	HOLLOW METAL
HSS	HOLLOW STRUCTURAL STEEL
HORIZ	HORIZONTAL
IN	INCH/INCHES
ID	INSIDE DIAMETER
INSUL	INSULATION
INT	INTERIOR
JT	JOINT
JST	JOIST
K	KIPS (1000 LBS)
KP	KICK PLATE
KSF	KIPS PER SQUARE FOOT
KSI	KIPS PER SQUARE INCH
Ld	DEVELOPMENT LENGTH
LAM	LAMINATED
LBS	POUNDS
LDG	LANDING
LTH	LATH
LG	LENGTH
LOC	LOCATION
LLBB	LONG LEG BACK TO BACK
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LONG	LONGITUDINAL
LSH	LONG SIDE HORIZONTAL
LSLP	LONG-SLOTTED HOLE PARALLEL
LSLT	LONG-SLOTTED HOLE TRANSVERSE
LSV	LONG SIDE VERTICAL
LWC	LIGHT WEIGHT CONCRETE
LVR	LOUVER
MOM	MOMENT
MAS	MASONRY
MO	MASONRY OPENING
MAT'L	MATERIAL
MFR	MANUFACTURER
MAX	MAXIMUM
MECH	MECHANICAL
MTL	METAL
MEZZ	MEZZANINE
MIN	MINIMUM
MISC	MISCELLANEOUS
MLDG	MOLDING
MC	MOMENT CONNECTION
MULL	MULLION
NG	NATURAL GRADE
NS	NEAR SIDE
NOM	NOMINAL
NWC	NORMAL WEIGHT CONCRETE
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
NO./#	NUMBER
OC	ON CENTER
OPNG	OPENING
OPP	OPPOSITE
OPH	OPPOSITE HAND
OA	OVERALL
OD	OUTSIDE DIAMETER
OFS	OVERFLOW SCUPPER
OFD	OVERFLOW DRAIN
OHD	OVERHEAD DOOR
OSL	OUTSTANDING LEG
OVS	OVERSIZED HOLE
P	AXIAL LOAD
PR	PAIR
PNL	PANEL
PAR	PARALLEL
PJP	PARTIAL JOINT PENETRATION
PTN	PARTITION
PERP	PERPENDICULAR
PL	PLATE
PLYWD	PLYWOOD
PCF	POUNDS PER CUBIC FOOT
PLF	POUNDS PER LINEAR FOOT
PSI	POUNDS PER SQUARE INCH
PSF	POUNDS PER SQUARE FOOT
PT	POST-TENSION(ED)
PNT	POINT
PC	PRECAST
PCC	PRECAST CONCRETE
PRELIM	PRELIMINARY
PROP	PROPERTY
QTY	QUANTITY
R	RADIUS, REACTION
RAD	RADIUS
RB	RESILIENT BASE
REINF	REINFORCING
REQD	REQUIRED
REV	REVISION
RFG	ROOFING
RGH	ROUGH
RO	ROUGH OPENING
RM	ROOM
RND	ROUND
SCHED	SCHEDULE
SC	SEALED CONCRETE
SCS	SELF DRILLING SCREW
SCR	SCREW
SECT	SECTION
SEL	SELECT
SHG	SHEATHING
SHT	SHEET
SLBB	SHORT LEG BACK TO BACK
SSLP	SHORT-SLOTTED HOLE PARALLEL
SSLT	SHORT-SLOTTED HOLE TRANSVERSE
SDG	SIDING
SIM	SIMILAR
SLDG	SLIDING
SC	SLIP CRITICAL, SHEAR CONNECTION
SPA	SPACING
SPEC	SPECIFICATION
SQ	SQUARE
STD	STANDARD
STL	STEEL
STIF	STIFFENER
STIR	STIRUP
STRUC	STRUCTURE, STRUCTURAL
SPRT	SUPPORT
SYMM	SYMMETRICAL
SYS	SYSTEM
t	PLATE THICKNESS, TREAD
THD	THREADED
TOC	TOP OF CONCRETE
TOF	TOP OF FOOTING
TOM	TOP OF MASONRY
TOS	TOP OF STEEL, TOP OF SLAB
TOW	TOP OF WALL
T&B	TOP AND BOTTOM
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
VG	VERTICAL GRAIN
VEST	VESTIBULE
WT	WEIGHT
WWF	WELDED WIRE FABRIC
WF	WIDE FLANGE
W/	WITH
W/O	WITHOUT
WD	WOOD
WP	WORK POINT

SYMBOLS LEGEND

BRICK UNO
CMU
CONCRETE
EARTH
EXISTING BUILDING
GRAVEL
RIGID INSULATION
SAND, PLASTER, GROUT
STEEL

WELD SYMBOL

Name Elevation — ELEVATION DESIGNATION

SIM 1 A101 — WALL/BUILDING SECTION CALLOUT

SIM 1 A101 — DETAIL CALLOUT

1 S200 — EXTERIOR ELEVATION CALLOUT
VIEW NUMBER
SHEET NUMBER

1 S200 — INTERIOR ELEVATION CALLOUT
VIEW NUMBER
SHEET NUMBER

1 View Name
1/8" = 1'-0"
DETAIL VIEW NAME AND SCALE

WIDE FLANGE STEEL COLUMN

HSS STEEL COLUMN

BRACE — VERTICAL BRACING

BEAM MOMENT CONNECTION

N — NORTH ARROW

F11 — FOOTING MARK, SEE SCHEDULE

P10 — PEDESTAL MARK, SEE SCHEDULE

A — COLUMN CENTER LINE

WELDED WIRE FABRIC

WP — WORK POINT

A — KEYED NOTE

BOLTED JOIST SEAT

BEAM/TRUSS SPLICE

MATCHLINE

1 — KEYED NOTES

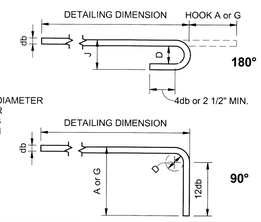
Wall Types

SEE WALL TYPES LEGEND — **New Frame Partition**

SEE WALL TYPES LEGEND — **New Frame Partition - Not Full Height**

Existing Wall: no work

HOOK DETAILS FOR ASTM STANDARD REBARS

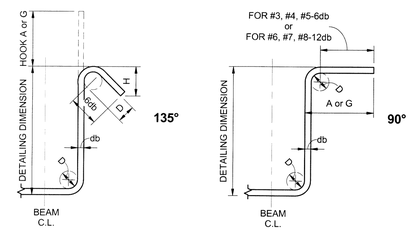


ALL GRADES OF STEEL

D = FINISHED INSIDE BEND DIAMETER
db = NOMINAL BAR DIAMETER
MIN. D = 6db FOR #3 THROUGH #8
MIN. D = 8 db FOR #9, #10 AND #11
MIN. D = 10db FOR #14 AND #18

RECOMMENDED END HOOKS, ALL GRADES OF STEEL

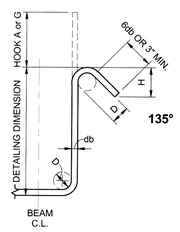
BAR SIZE	D	180° HOOKS		90° HOOKS
		A or G	J	A or G
#3	2 1/4"	5"	3"	3"
#4	3"	6"	4"	4"
#5	3 3/4"	7"	5"	5"
#6	4 1/2"	8"	6"	6"
#7	5 1/4"	10	7"	7"
#8	6"	11"	8"	8"
#9	9 1/2"	1'-3"	11 3/4"	11 3/4"
#10	10 3/4"	1'-5"	1'-1 1/4"	1'-1 1/4"
#11	12"	1'-7"	1'-2 3/4"	1'-2 3/4"
#14	18 1/4"	2'-3"	1'-9 3/4"	1'-9 3/4"
#18	24"	3'-0"	2'-4 1/2"	2'-4 1/2"



STIRRUP HOOKS (TIE BENDS SIMILAR)

BAR SIZE	D	90° HOOKS	135°	
		A or G	A or G	H*
#3	1 1/2"	4"	4"	2 1/2"
#4	2"	4 1/2"	4 1/2"	3"
#5	2 1/2"	6"	5 1/2"	3 3/4"
#6	4 1/2"	1'-0"	8"	4 1/2"
#7	5 1/4"	1'-2"	9"	5 1/4"
#8	6"	1'-4"	10 1/2"	6"

H* dimension is appoximate



SEISMIC STIRRUP / TIE

BAR SIZE	D	135° SEISMIC HOOK	
		A or G	H*
#3	1 1/2"	4 1/4"	3"
#4	2"	4 1/2"	3"
#5	2 1/2"	5 1/2"	3 3/4"
#6	4 1/2"	8"	4 1/2"
#7	5 1/4"	9"	5 1/4"
#8	6"	10 1/2"	6"

H* dimension is appoximate

NO.	DATE	REVISIONS	BY	APPD

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MISSOURI CERTIFICATE OF AUTHORITY: F00139850

Designed By: MMH
Drawn By: JJB
Checked By: MJR
Issue Date: 10-26-09

STATE OF MISSOURI MICHAEL MELVIN HALL NUMBER E-33044 REGISTERED PROFESSIONAL ENGINEER

SHAFER, KLINE, & WARREN, INC.
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OFFICE LOCATIONS:
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Columbia, MO
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Iola, KS
Kansas City, MO
Lenexa, KS
Macon, MO
North Kansas City, MO
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MISSOURI DEPARTMENT OF TRANSPORTATION
WAREHOUSE RENOVATION PHASE I
JEFFERSON CITY, COLE COUNTY, MISSOURI

ABBREVIATION AND SYMBOLS

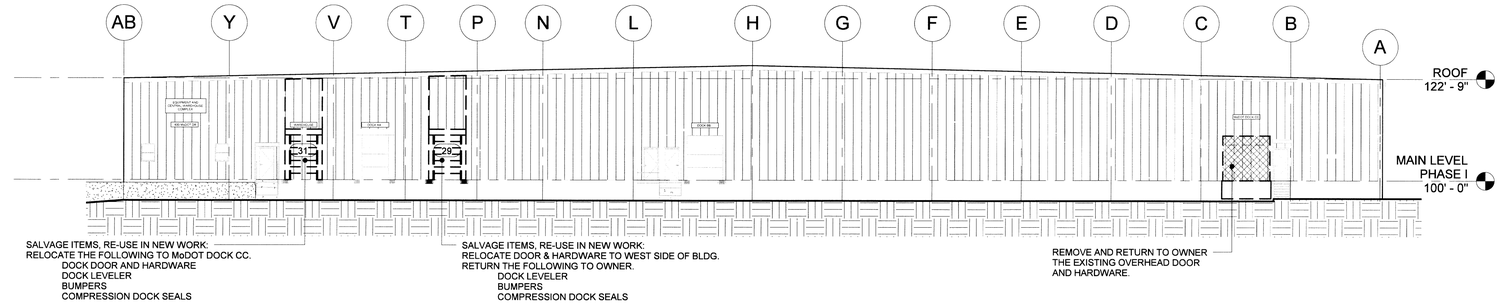
800160-040

SHEET NO.
G002

P:\800160-040_Acad\Revit Models\Local Files\800160-040 MoDot Structural_jbasinger.rvt

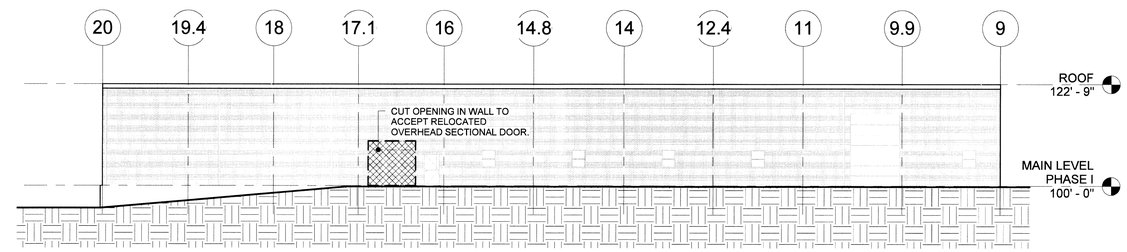
GENERAL DEMOLITION NOTES

1. DASHED LINES ON DEMOLITION PLAN INDICATE EXISTING MATERIALS TO BE REMOVED, UNLESS NOTED OTHERWISE. ANY DAMAGE RESULTING FROM CONSTRUCTION WILL BE REPAIRED TO ITS ORIGINAL STATE.
2. RIMILLER ARCHITECTS LLC ASSUMES NO RESPONSIBILITY FOR THE DETECTION OR REMOVAL OF ANY HAZARDOUS MATERIAL, INCLUDING BUT NOT LIMITED TO ASBESTOS, IN ANY FORM. PARTIES RESPONSIBLE FOR DEMOLITION SHALL NOTIFY OWNER IMMEDIATELY OF ANY SUSPECTED MATERIALS (REFER TO ARTICLE 10 OF AIA DOCUMENT A201 - CURRENT ADDITION). SEE PROJECT MANUAL.
3. ALL DEMOLITION EXPOSING THE INTERIOR OF THE BUILDING TO THE OUTSIDE ELEMENTS, SHALL BE PROPERLY CONCEALED AND PROTECTED TO PREVENT ANY DAMAGE FROM VANDALISM OR WEATHER DURING CONSTRUCTION.
4. ITEMS NOTED TO BE DEMOLISHED SHALL BE REMOVED AND DISPOSED OF IN A SAFE AND LAWFUL MANNER. SEE PROJECT MANUAL.
5. CONTRACTOR SHALL REMOVE AND STORE ALL ITEMS AS DIRECTED BY OWNER'S REPRESENTATIVE. CONTRACTOR SHALL DOCUMENT CONDITION OF ITEMS TO BE RELOCATED IN PROJECT. SEE PROJECT MANUAL.
6. ALL FURNISHINGS, AS WELL AS MISC. ITEMS, ATTACHED TO WALLS, FLOORS, AND CEILINGS SHALL BE RELOCATED OR REMOVED AND STORED AND PROTECTED BY THE OWNER. CONSULT AND COORDINATE WITH OWNER AND PROJECT MANUAL FOR ITEMS TO BE REMOVED OR RELOCATED.
7. WHERE ENTIRE WALLS ARE BEING DEMOLISHED, REWORK MECHANICAL LINES, PLUMBING LINES AND ELECTRICAL WIRES AS DIRECTED BY THE MEP DEMOLITION DRAWINGS.
8. THESE DEMOLITION DRAWINGS DO NOT PURPORT TO SHOW ALL LOCATIONS WHERE EXISTING CEILING SYSTEMS (GYP. BOARD AND CEILING TILE/GRID) WILL REQUIRE REMOVAL TO PERFORM ABOVE CEILING MECHANICAL, ELECTRICAL AND PLUMBING DEMOLITION ABOVE SPACES NOT OTHERWISE SCHEDULED FOR RENOVATION. THE EXTENT OF CEILING SYSTEM REMOVAL AND REPLACEMENT MATERIALS ARE TO BE NEW AND MATCHING IN APPEARANCE AND FINISH TO THE EXISTING. WHERE SEVERAL MATERIALS OF DIFFERENT FINISH EXIST IN ASSOCIATION, REPLACEMENT MATERIALS ARE TO MATCH THE NEWIST FINISH.
9. SHOULD CONTRACTOR DISCOVER EXISTING CONDITIONS AT VARIANCE WITH INFORMATION SHOWN ON DEMOLITION PLANS, IT IS THE INTENT OF THESE DRAWINGS TO HAVE THE CONFLICTING ITEMS REMOVED TO THE EXTENT REQUIRED TO FACILITATE NEW CONSTRUCTION.
10. EXISTING SURFACES TO RECEIVE NEW FINISHES SHALL BE PATCHED AND CLEANED AS REQUIRED TO RECEIVE NEW SURFACE TREATMENT.
11. AT WALLS SCHEDULED FOR DEMOLITION, REMOVE ALL MECHANICAL, PLUMBING, AND ELECTRICAL LINES LOCATED WITHIN THE WALL AND CAP OR AS OTHERWISE INDICATED ON THE MEP DRAWINGS. INVENTORY AND DELIVER TO OWNER ALL GAS OUTLETS, CALL DEVICES, FIRE ALARM DEVICES, LIFE SAFETY AUDIO/VISUAL EQUIPMENT, FIRE EXTINGUISHERS, EXIT SIGNAGE, THERMOSTATS AND ELECTRICAL/TELEPHONE OUTLETS REMOVED DURING DEMOLITION.
12. SALVAGE EXISTING PLUMBING FIXTURES AS DIRECTED BY OWNER.
13. ALL EQUIPMENT TO BE RELOCATED SHALL BE STORED AND PROTECTED FROM DAMAGE DURING CONSTRUCTION. EXISTING EQUIPMENT TO BE RELOCATED MAY REQUIRE TEMPORARY UTILITY CONNECTIONS; PROVIDE AS REQUIRED. ANY ITEMS DAMAGED BY CONTRACTOR OR SUB-CONTRACTOR (WHETHER SCHEDULED FOR RELOCATION OR NOT) CAUSED BY DEMOLITION OR NEW CONSTRUCTION OPERATIONS SHALL BE REPAIRED TO ITS ORIGINAL STATE. ALL COST ASSOCIATED WITH THE REPAIR SHALL BE BORNE BY THE CONTRACTOR. EXISTING MILLWORK, MISC. METALS, FIRE DETECTION, FIRE NOTIFICATION AND EXTINGUISHING EQUIPMENT, LIGHTING AND EMERGENCY EXIT FIXTURES AND PLUMBING FIXTURES SCHEDULED FOR REMOVAL BUT NOT REINSTALLATION/RELOCATION ARE TO BE DELIVERED TO THE OWNER. IF THE OWNER DOES NOT ACCEPT THE ITEMS, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DISPOSE OF THE ITEMS IN A LAWFUL MANNER. SEE PROJECT MANUAL.
14. CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF ALL SUPPORTS, ACCESSORIES, AND CONVEYANCES RELATED TO THE EQUIPMENT AND FIXTURES SHOWN TO BE REMOVED ON THE CONSTRUCTION DOCUMENTS.
15. REMOVE ALL DOORS, FRAMES AND HARDWARE IN PARTITIONS SHOWN TO BE DEMOLISHED. THESE ITEMS SHALL BE MADE AVAILABLE TO THE OWNER. ITEMS WHICH THE OWNER DOES NOT WISH TO KEEP SHALL BECOME THE PROPERTY OF THE CONTRACTOR. IF THE CONTRACTOR DOES NOT KEEP THE ITEMS, THE CONTRACTOR IS RESPONSIBLE FOR DISPOSING THE ITEMS IN A LAWFUL MANNER. SEE PROJECT MANUAL. SEE PROJECT MANUAL.
16. LEVEL FLOOR SLABS WHERE SLAB DEPRESSIONS HAVE BEEN LEFT BY THE REMOVAL OF EQUIPMENT.
17. PATCH AND SEAL ALL PENETRATIONS THROUGH RATED WALLS AND FLOORS (1HR., 2HR., SMOKE, ETC.) RESULTING FROM DEMOLITION WORK.
18. ALL FIREPROOFING SHALL BE PATCHED AND REPAIRED AT ALL COLUMNS AND BEAMS (IF EXISTING) WITHIN THE SCOPE OF WORK REQUIRED TO MEET LOCAL, STATE AND NATIONAL REQUIREMENTS.
19. REMOVE ALL EXPANSION JOINT COVERS, COVER PLATES AND OTHER ITEMS TO BE REPLACED IN SUBSEQUENT WORK.



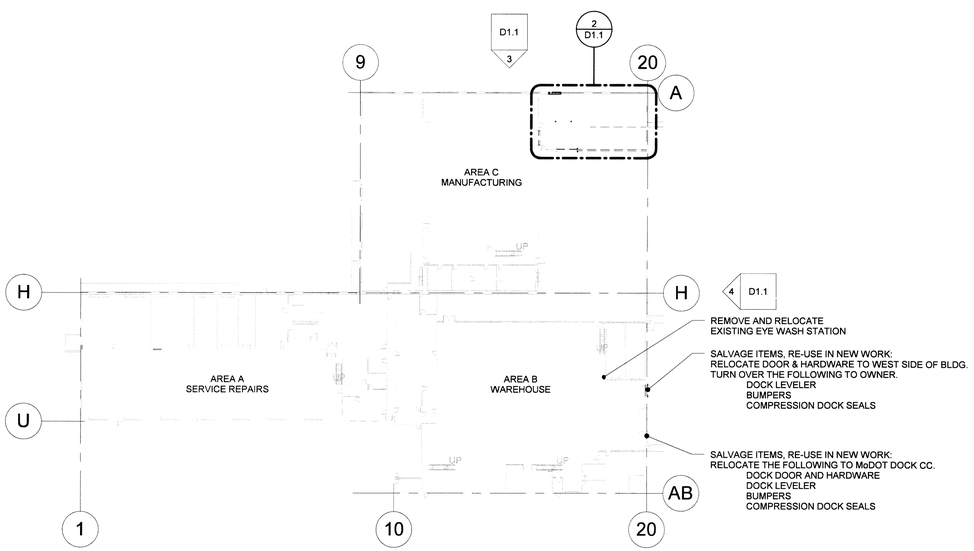
4 DEMOLITION ELEVATION - NORTH

1/16" = 1'-0"



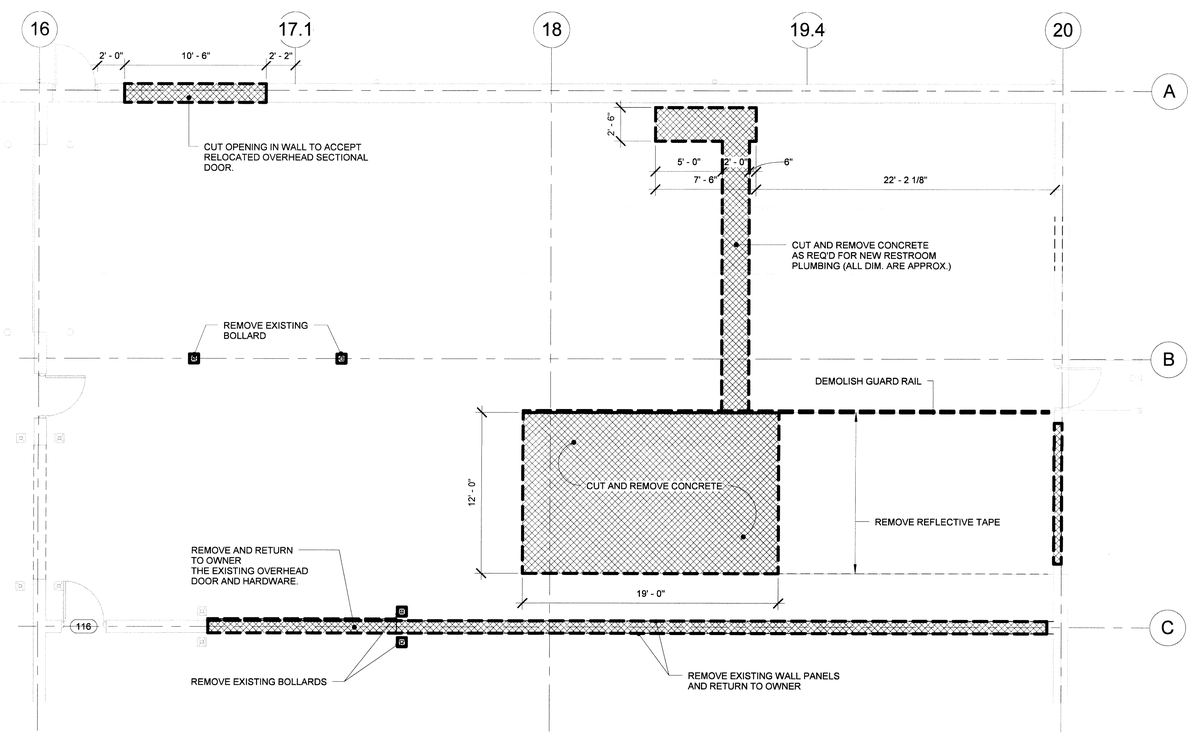
3 DEMOLITION ELEVATION - WEST

1/16" = 1'-0"



1 DEMOLITION PLAN - MAIN LEVEL

1" = 50'-0"



2 ENLARGED DEMOLITION PLAN - MAIN LEVEL

3/16" = 1'-0"

MISSOURI DEPARTMENT OF TRANSPORTATION: WAREHOUSE RENOVATION PHASE I

Jefferson City, Missouri

Revision Schedule	
Revision Number	Revision Date

project building company

ISSUE DATE: 10/26/09

PROJECT NUMBER: 09-031

RIMILLER ARCHITECTS

STATE OF MISSOURI
MATTHEW JAMES RIMILLER
NUMBER A-2007019928
ARCHITECT
10/26/09

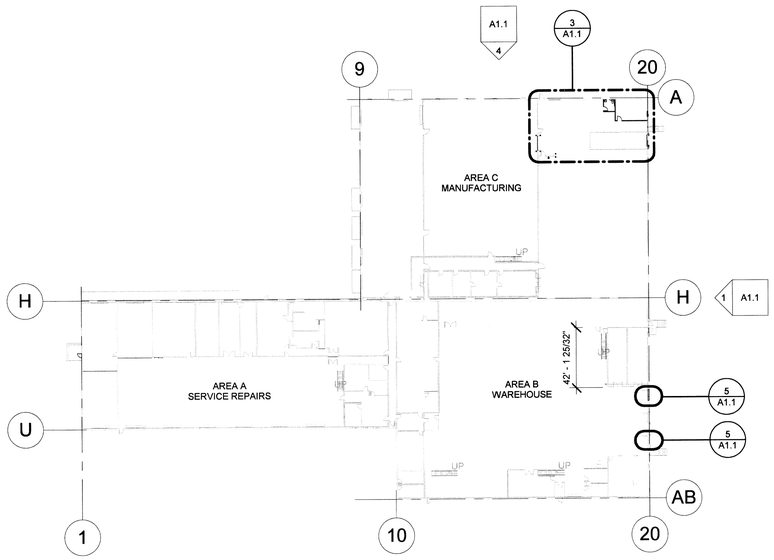
Rimiller Architects LLC
Missouri Certificate of Authority # A-2007030504
Matthew James Rimiller - Architect
MO # A-2007019928

1630 WEST McCARTY STREET
JEFFERSON CITY, MISSOURI 65109

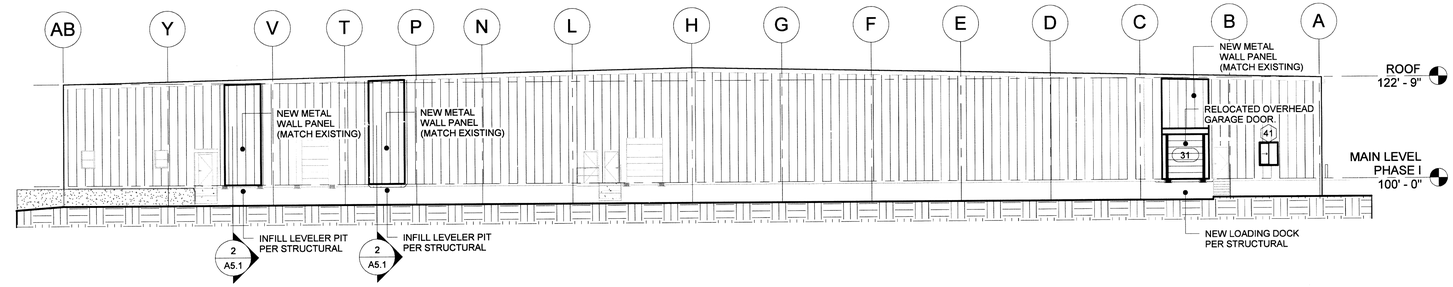
T (573) 761-5600
F (573) 761-5605

D1.1

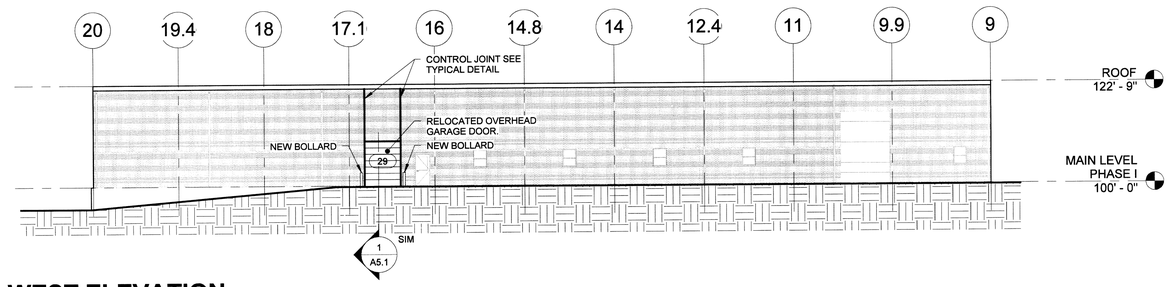
DEMOLITION PLAN



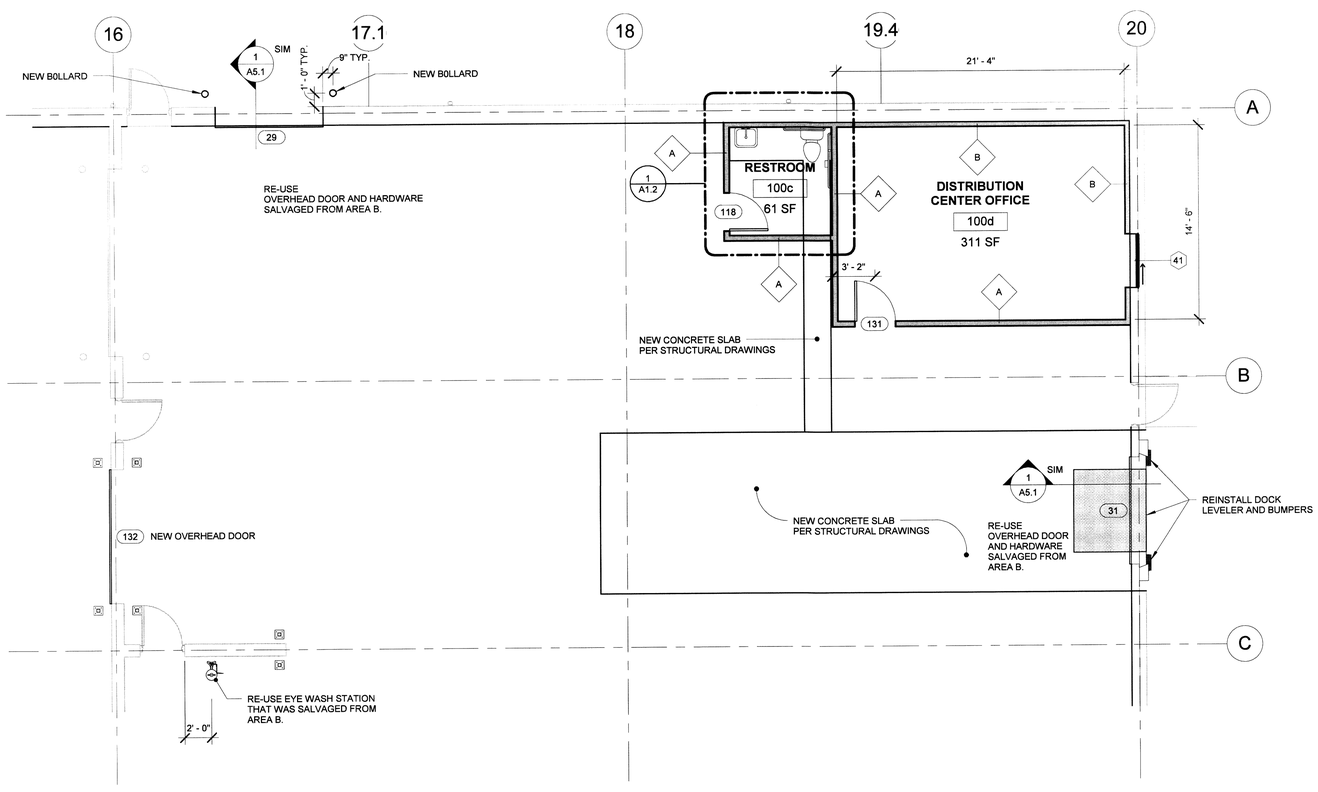
2 MAIN LEVEL PHASE I
1" = 50'-0"



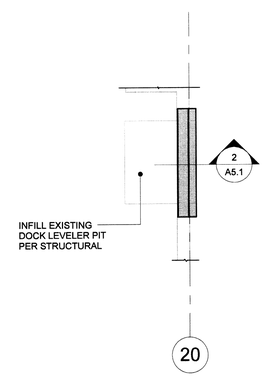
1 NORTH ELEVATION
1/16" = 1'-0"



4 WEST ELEVATION
1/16" = 1'-0"



3 ENLARGED PLAN - MAIN LEVEL
3/16" = 1'-0"



5 ENLARGED DOCK INFILL
3/16" = 1'-0"

MISSOURI DEPARTMENT OF TRANSPORTATION: WAREHOUSE RENOVATION PHASE I

Jefferson City, Missouri

Revision Schedule	
Revision Number	Revision Date

ISSUE DATE: 10/26/09

PROJECT NUMBER: 09-031

STATE OF MISSOURI
MATTHEW JAMES RIMILLER
NUMBER A-2007019928
ARCHITECT
10/26/09

RIMILLER ARCHITECTS

Rimiller Architects LLC
Missouri Certificate of Authority # A-2007030604
Matthew James Rimiller - Architect
MO # A-2007019928

1630 WEST McCARTY STREET
JEFFERSON CITY, MISSOURI 65109

T. (573) 761-5600
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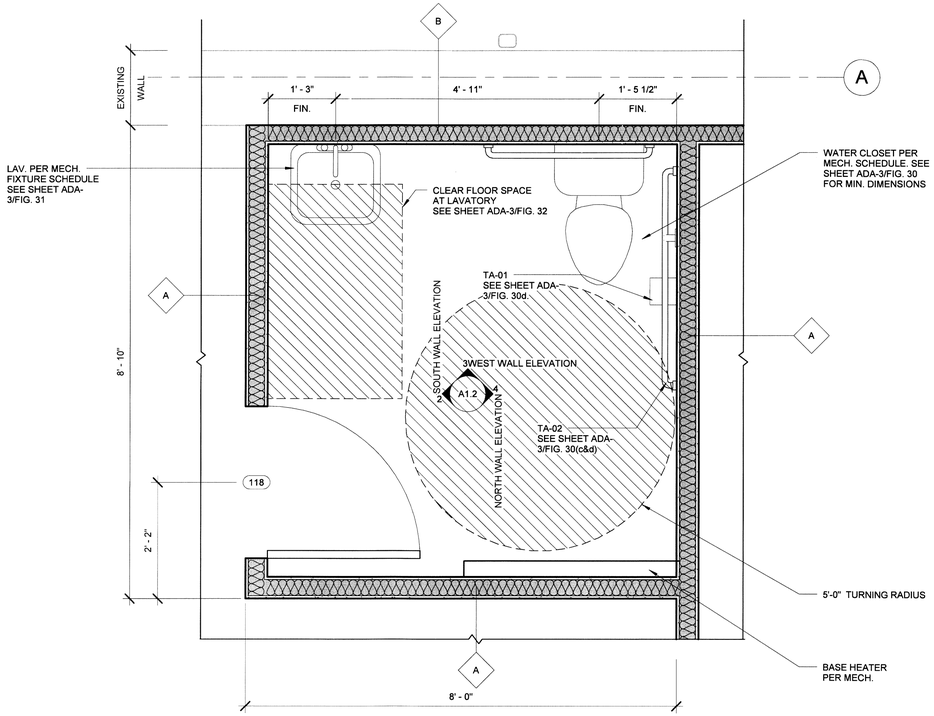
A1.1

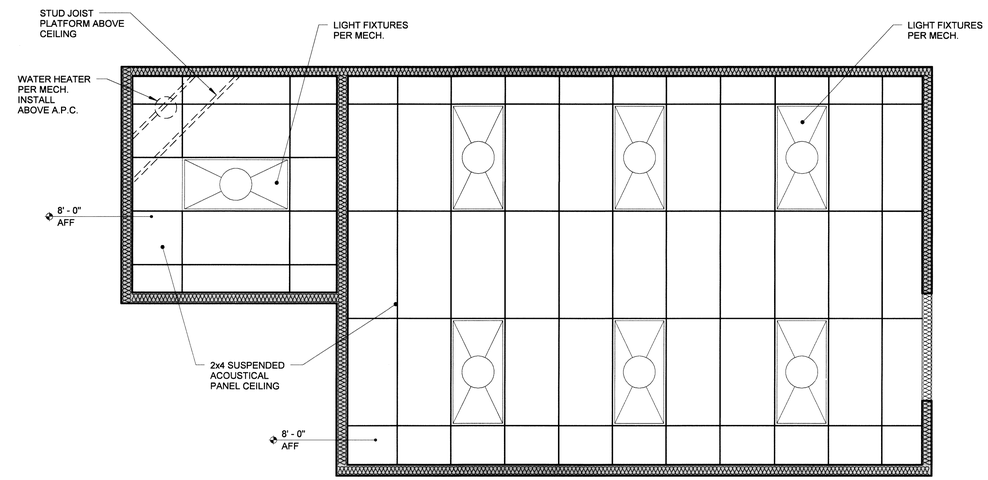
PLANS AND ELEVATIONS



NOTE:

1. SOAP DISPENSER PROVIDED BY OWNER. SEE SHEET ADA-1/FIG. 5 & 6. FOR REACH RANGES.

1 NEW RESTROOM PLAN
3/4" = 1'-0"

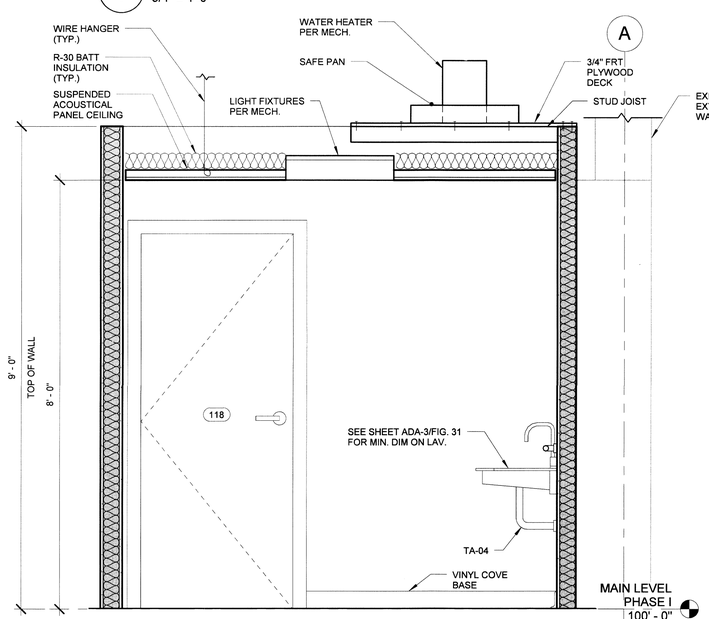


Toilet Accessory Legend	
TA-01	Surface Mounted Multi-Roll Toilet Tissue Dispenser
TA-02	Grab Bars - Surface Mounted
TA-03	Mirror
TA-04	Under Lavatory Guard

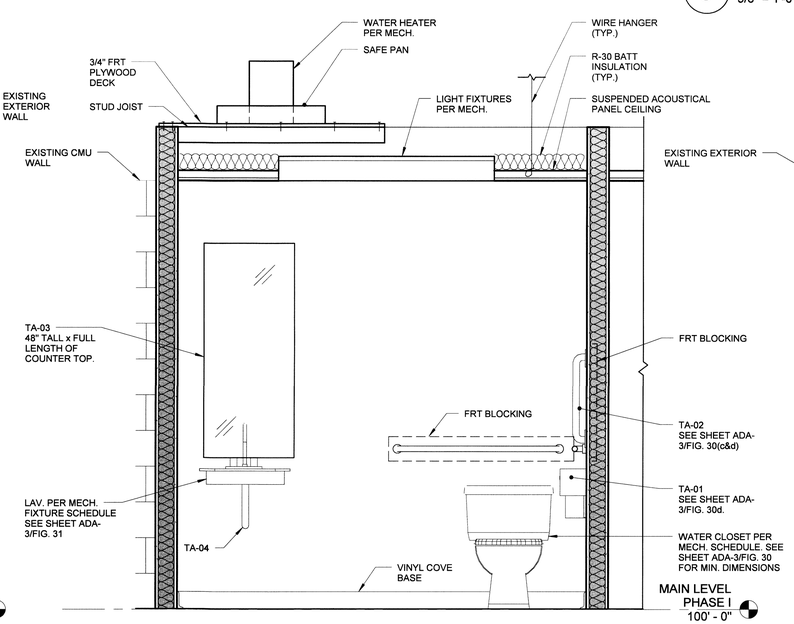
GENERAL NOTE

1. UTILIZE JS-3 BETWEEN PLUMBING FIXTURES AND ADJOINING WALLS AND FLOORS.

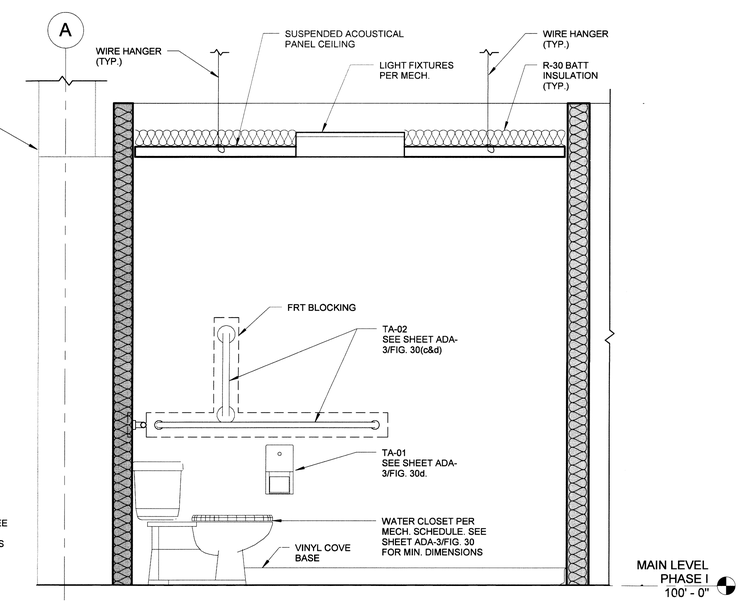
5 REFLECTED CEILING PLAN
3/8" = 1'-0"



2 SOUTH WALL ELEVATION
3/4" = 1'-0"



3 WEST WALL ELEVATION
3/4" = 1'-0"



4 NORTH WALL ELEVATION
3/4" = 1'-0"

MISSOURI DEPARTMENT OF TRANSPORTATION: WAREHOUSE RENOVATION PHASE I

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Rimiller Architects LLC
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1630 WEST McCARTY STREET
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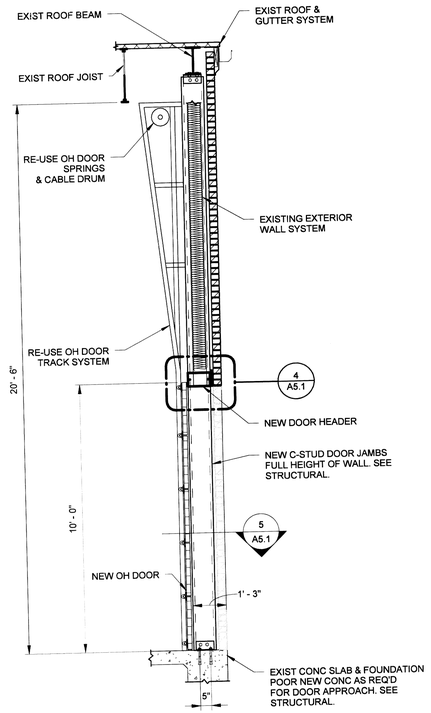
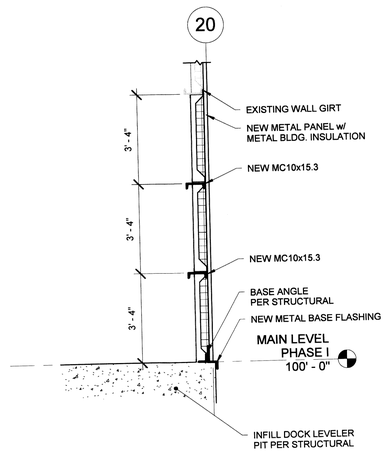
A1.2

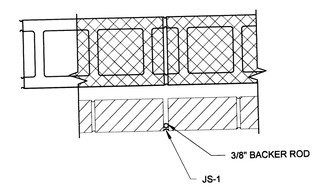
ENLARGED PLANS & DETAILS



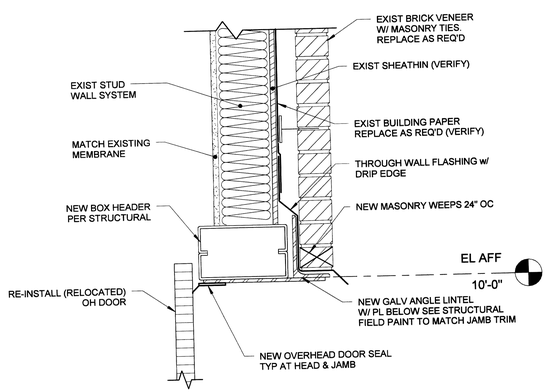
1 **RELOCATED OVERHEAD DOOR SECTION**
3/8" = 1'-0"



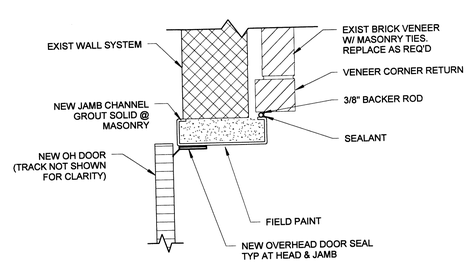
2 **ENLARGED DOCK INFILL**
3/8" = 1'-0"



3 **CONTROL JOINT DETAIL @ VENEER**
1 1/2" = 1'-0"



4 **OH DOOR HEAD DETAIL**
1 1/2" = 1'-0"



5 **OH DOOR JAMB DETAIL**
1 1/2" = 1'-0"

MISSOURI DEPARTMENT OF TRANSPORTATION: WAREHOUSE RENOVATION PHASE I

Jefferson City, Missouri

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RIMILLER ARCHITECTS
limited liability company
1530 WEST McCARTY STREET
JEFFERSON CITY, MISSOURI 65109
T. (573) 761-5600
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Missouri Certificate of Authority # A-2007030604
Matthew James Rimiller - Architect
MO # A-2007019928

A5.1

SECTIONS

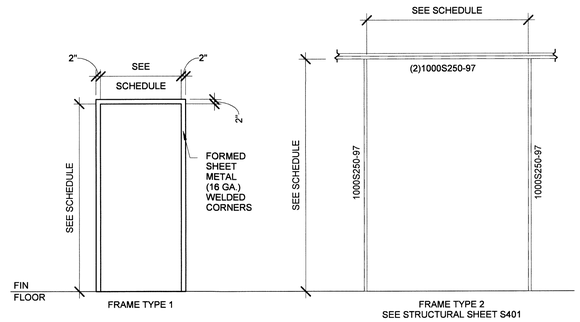
Door Schedule Phase I													
Door Number	Door Type	Width	Height	Thickness	Label	*Hardware Set	Door Remarks	Frame Type	Frame Label	Frame Material	Frame Remarks	Head Detail	Jamb Detail
29		8' - 0"	10' - 0"	0' - 1 1/2"	-	EXISTING	RELOCATE	2	-	1000S250-97		4/A5.1	5/A5.1
31		8' - 0"	10' - 0"	0' - 1 1/2"	-	EXISTING	RELOCATE	2	-	1000S250-97		5/A6.1	6/A6.1
118	A	2' - 10"	7' - 0"	0' - 1 3/4"	-	#1	-	1	-	HM		3/A6.1	4/A6.1
131	B	3' - 0"	7' - 0"	0' - 1 3/4"	-	#1	-	1	-	HM		3/A6.1	4/A6.1
132	C	10' - 0"	8' - 0"	0' - 1 1/2"	-	MANUFACTURE SET	-	EXISTING	-	EXISTING	FIELD VERIFY OPENING SIZE		

* SEE PROJECT MANUAL

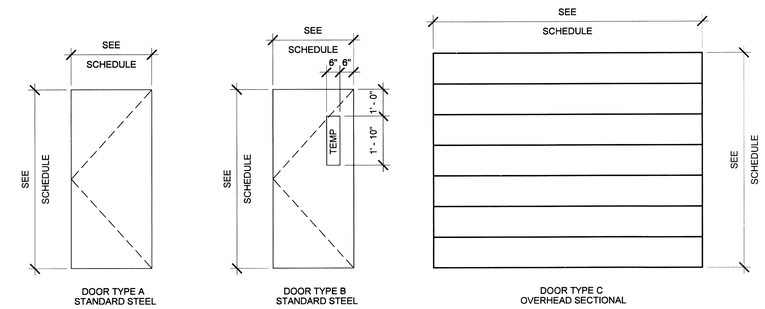
Window Schedule Phase I				
Mark	Type	Rough Width	Rough Height	Head Height
41	Aluminum Sliding	4' - 0"	5' - 0"	8' - 0"

Room Schedule Phase I						
Number	Name	Floor Finish	Base Finish	Wall Finish	Ceiling Finish	Notes
100c	RESTROOM	E	V	P	APC	Phase I
100d	DISTRIBUTION CENTER OFFICE	E	V	P	APC	Phase I

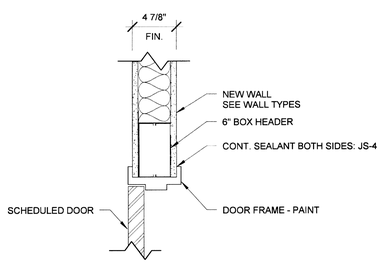
Finish Schedule Key	
APC	Acoustical Panel Ceiling
E	Existing
P	Paint
V	Vinyl Cove 4"



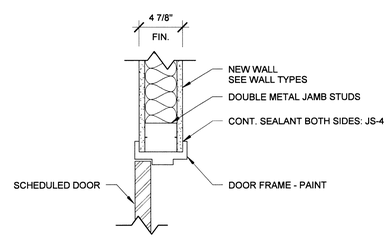
1 FRAME TYPES
3/8" = 1'-0"



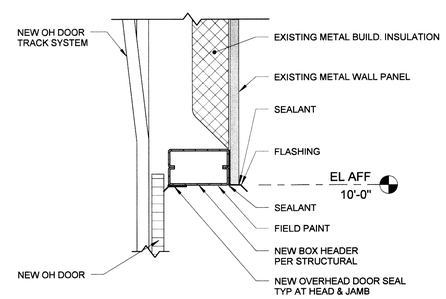
2 DOOR TYPES
3/8" = 1'-0"



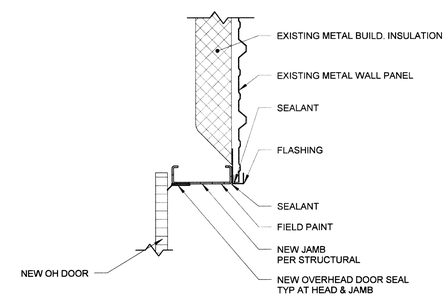
3 DETAIL @ INTERIOR HEADER
1 1/2" = 1'-0"



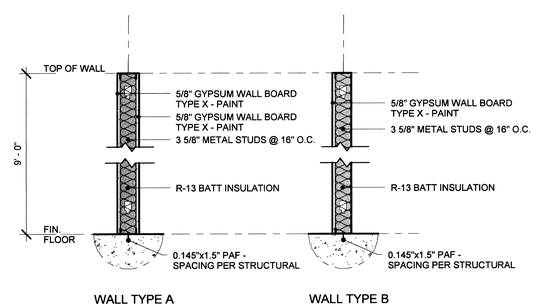
4 DETAIL @ INTERIOR JAMB
1 1/2" = 1'-0"



5 DOOR HEADER DETAIL
1" = 1'-0"



6 DOOR JAMP DETAIL
1" = 1'-0"



WALL TYPES
3/4" = 1'-0"

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RIMILLER

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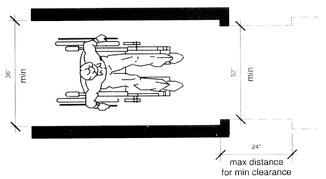
SCHEDULES

Figure 1
Minimum Clear Width for Single Wheelchair



The minimum clear passage for a single wheelchair shall be 36" min. along an accessible route, but may be redced to 32" minimum at a point for a maximum depth of 24", such as at a doorway.

Figure 2
Minimum Clear Width for Two Wheelchairs

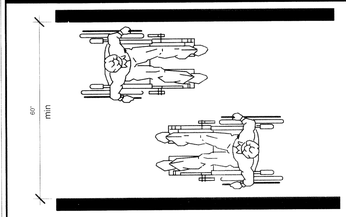
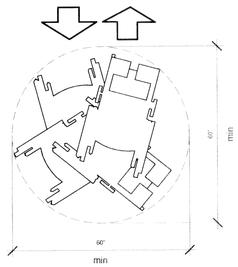
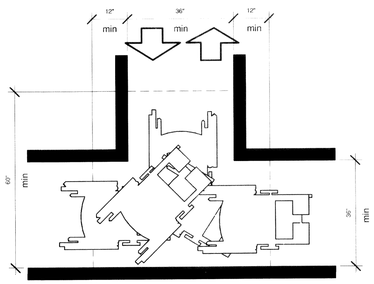


Figure 3
Wheelchair Turning Space

(a) 60-in Diameter Space



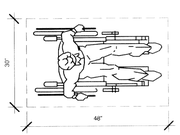
(b) T-Shaped Space for 180 Degree Turns



The T-shape space is 36 inches wide at the top and stem within a 60 inch by 60 inch square.

Figure 4
Clear Floor or Ground Space for Wheelchairs

(a) Clear Floor Space



Clear floor space shown to be 30 by 48 inches minimum.

(b) Forward Approach

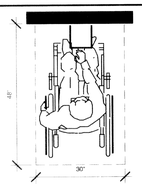
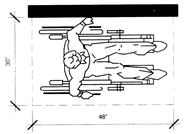
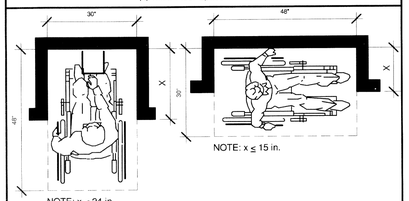


Figure 4 Continued
Clear Floor or Ground Space for Wheelchairs

(c) Parallel Approach

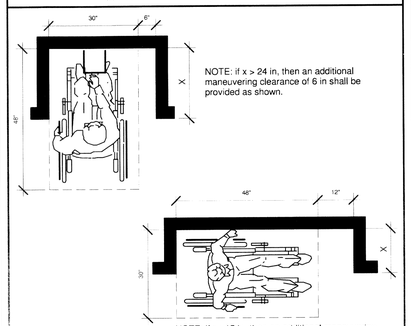


(d) Clear Floor Space in Alcoves



For a front approach, where the depth of the alcove is equal to or less than 24 inches, the required clear floor space is 30 inches by 48 inches.
For a side approach, where the depth of the alcove is equal to or less than 15 inches, the required clear floor space is 30 inches by 48 inches.

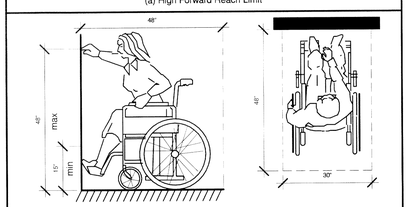
(e) Additional Maneuvering Clearance for Alcoves



For a front approach, if the depth of the alcove is greater than 24 inches, then in addition to the 30 inch width, a maneuvering clearance of 6 inches in width is required.
For a side approach, where the depth of the alcove is greater than 15 inches, then in addition to the 48 inch length, an additional maneuvering clearance of 12 inches in length is required.

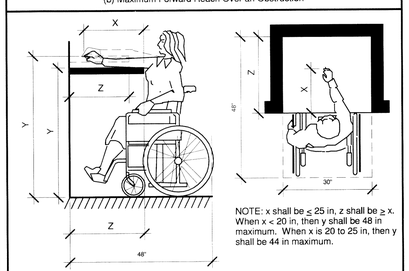
Figure 5
Forward Reach

(a) High Forward Reach Limit



Forward reach range shown in profile and plan view to be 48 inches maximum and 15 inches minimum.

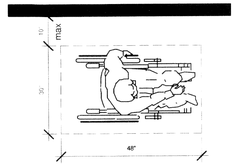
(b) Maximum Forward Reach Over an Obstruction



The maximum level forward reach over an obstruction with knee space below is 25 inches. When the obstruction is less than 20 inches deep, the maximum high forward reach is 48 inches. When the obstruction projects 20 to 25 inches, the maximum high forward reach is 44 inches. (4.2.5, 4.25.3).

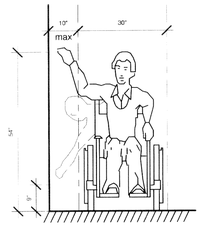
Figure 6
Side Reach

(a) Clear Floor Space - Parallel Approach



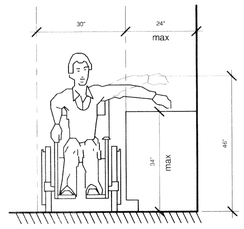
The 30 by 48 inch clear floor space is located a maximum 10 inches from the wall.

(b) High and Low - Side Reach Limits



The 30 by 48 inch wheelchair clear floor space is located a maximum 10 inches from the wall.

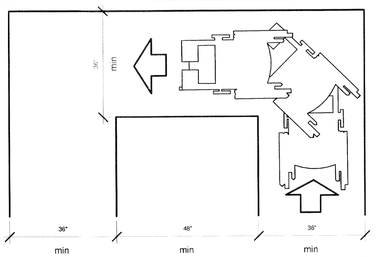
(c) Maximum Side Reach over Obstruction



If the depth of the obstruction is 24 inches and the maximum height of the obstruction is 34 inches, the maximum high side reach over the obstruction is 46 inches.

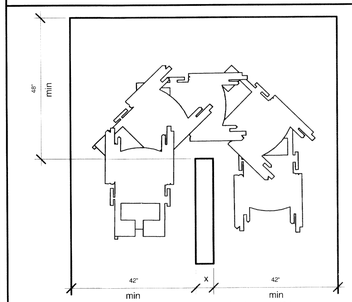
Figure 7
Accessible Route

(a) Accessible Route - 90 Degree Turn



A 90 degree turn can be made from a 36 inch wide passage into another 36 inch passage if the depth of each leg is a minimum of 48 inches on the inside dimensions of the turn.

(b) Accessible Route - Turns Around an Obstruction

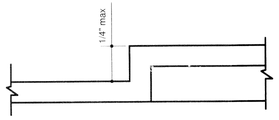


NOTE: Dimensions shown apply when x < 48 in.

A U-turn around an obstruction less than 48 inches wide may be made if the passage width is a minimum of 42 inches and the base of the U-turn space is a minimum of 48 inches wide.

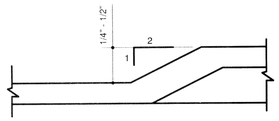
Figure 7 Continued
Accessible Route

(c) Accessible Route - Changes in Level



Cross section drawing showing a maximum 1/4 inch vertical change in level.

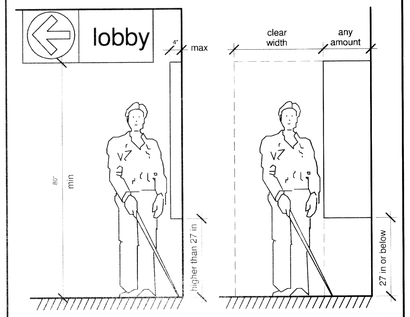
(d) Accessible Route - Changes in Level



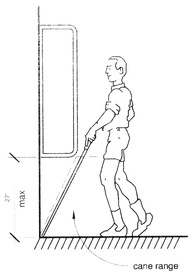
Cross section drawing showing a change in level 1/4 to 1/2 inch high with a 1:2 slope.

Figure 8
Protruding Objects

(a) Protruding Objects - Walking Parallel to a Wall



(b) Protruding Objects - Walking Perpendicular to a Wall



(c) Protruding Objects - Free-Standing Overhanging Objects

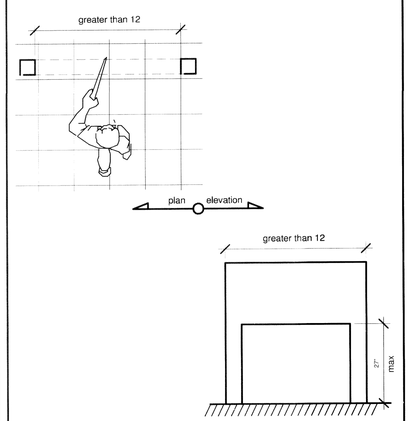
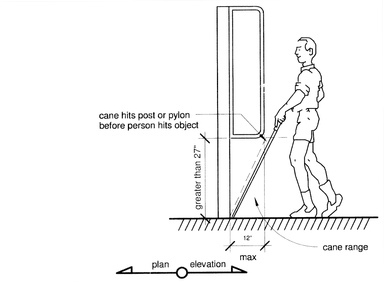
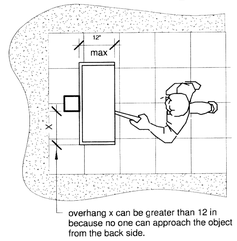


Figure 8 Continued
Protruding Objects

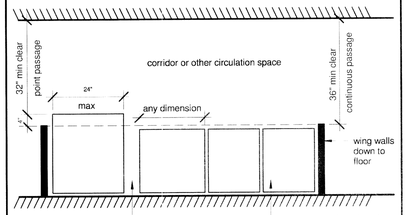
(d) Protruding Objects - Objects Mounted on Posts or Pylons





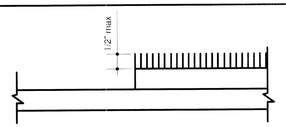
The diagram illustrates an area where an overhang can be greater than 12 inches because the object cannot be approached in the direction of the overhang.

(e) Protruding Objects - Protection Around Wall Mounted Objects and Measurements of Clear Widths



The minimum clear width for continuous passage is 36 inches. Thirty two (32) inches is the minimum clear width for a maximum distance of 24 inches. The maximum distance an object can protrude beyond a wing wall is 4 inches.

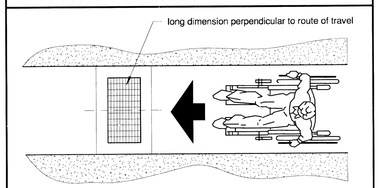
(f) Carpet Pile Thickness



(g) Gratings

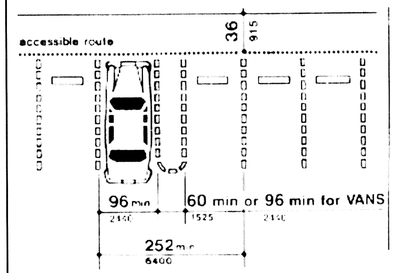
Gratings shown with one dimension 1/2 inch maximum measured parallel to the predominant direction of travel.

(h) Gratings Orientation



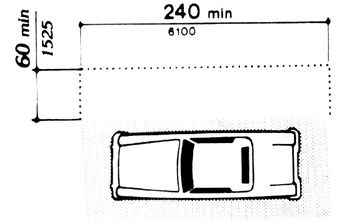
Gratings shown with long dimension perpendicular to route of travel.

Figure 9
Dimensions of Parking Spaces



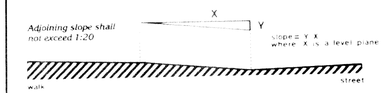
The access aisle shall be a min. of 60" wide for cars or a min. of 96" wide for vans. The accessible route connected to the access asile at the front of the parking spaces shall be a min. of 36".

Figure 10
Access Aisle at Passenger Loading Zones



An access aisle is required at a passenger loading zone which is 240 inches min., measured parallel to the vehicle pull-up area, and 60 inches min., measured perpendicular to the vehicle area. This aisle must be clear of obstructions and at the same level as the vehicle area.

Figure 11
Measurement of Curb Ramp Slopes



The ramp slope is a ratio equal to the vertical rise (y) divided by the horizontal run (x). It is equal to the tangent of the angle that the plane of the ramp surface makes with a horizontal (level) plane. For a curb ramp, the adjoining slope at walk or street shall not exceed 1:20.

MISSOURI DEPARTMENT OF TRANSPORTATION: WAREHOUSE RENOVATION PHASE I

RIMILLER ARCHITECTS

ISSUE DATE: 10/26/09

PROJECT NUMBER: 09-031

STATE OF MISSOURI
MATTHEW JAMES RIMILLER
NUMBER A-2007019928
ARCHITECT
10/26/09

1630 WEST McCARTY STREET
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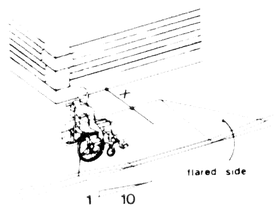
ADA-1

ADA FIGURES 1 - 11

Figure 12
Sides of Curb Ramps

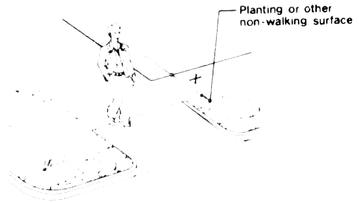
(a) Flared Sides



Note: If X is less than 48 inches, then the slope of the flared side shall not exceed 1:12

This figure shows a typical curb ramp, cut into a walkway perpendicular to the curb face, with flared sides having a maximum slope of 1:10. The landing at the top, measured from the top of the ramp to the edge of the walkway or closest obstruction is denoted as "x". If x, the landing depth at the top of a curb ramp, is less than 48 inches, then the slope of the flared side shall not exceed 1:12.

(b) Returned Curb



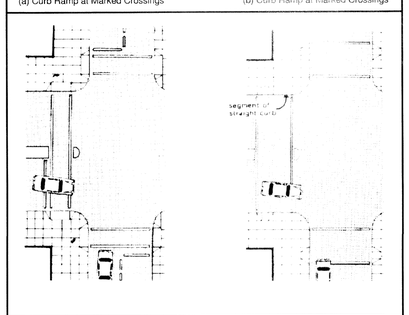
Where the curb ramp is completely contained within a planting strip or other non-walking surface, so that pedestrians would not normally cross the sides, the curb ramp sides can have steep sides including vertical returned curbs.

Figure 13
Built-Up Curb Ramp

A built-up curb ramp extends outward from the curb and slopes to the ground surface. The sides must also be tapered from the ramp surface to the ground, with a maximum slope of 1:10, so that there are no drop-offs along the edges.

Figure 15
Curb Ramp at Marked Crossings

(a) Curb Ramp at Marked Crossings (b) Curb Ramp at Marked Crossings



(c) Curb Ramp at Marked Crossings (d) Curb Ramp at Marked Crossings

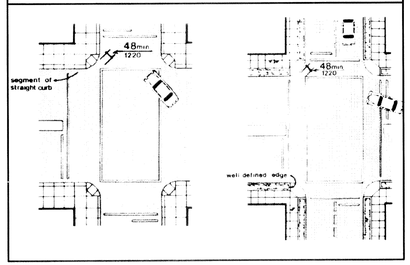
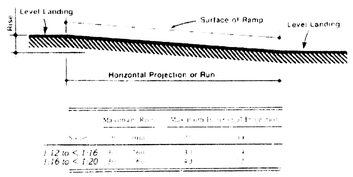


Figure 16
Components of a Single Ramp Run and Sample Ramp Dimensions



If the slope of a ramp is between 1:12 and 1:16, the maximum rise shall be 30 inches (760 mm) and the maximum horizontal run shall be 30 feet (9 m). If the slope of the ramp is between 1:16 and 1:20, the maximum rise shall be 30 inches (760 mm) and the maximum horizontal run shall be 40 feet (12 m).

Figure 17
Examples of Edge Protection and Handrail Extensions

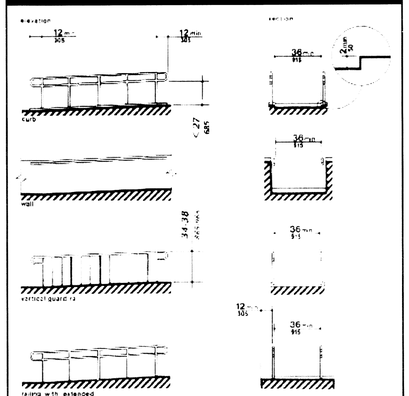


Figure 18
Usable Tread Width and Examples of Acceptable Nosings

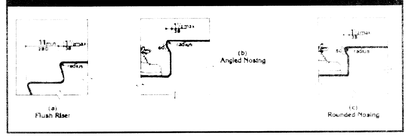
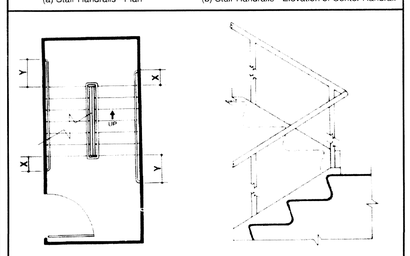


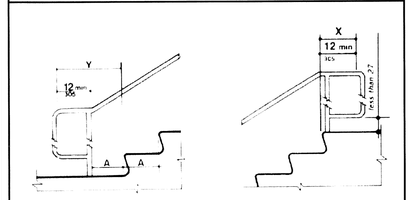
Figure 19
Stair Handrails

(a) Stair Handrails - Plan (b) Stair Handrails - Elevation of Center Handrail



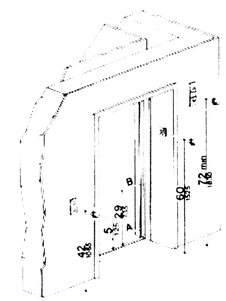
NOTE:
X is the 12 in minimum handrail extension required at each top riser.
Y is the minimum handrail extension of 12 in plus the width of one tread that is required at each bottom riser.

(c) Stair Handrails - Extension at Bottom of Run (d) Stair Handrails - Extension at Top of Run



NOTE:
X is the 12 in minimum handrail extension required at each top riser.
Y is the minimum handrail extension of 12 in plus the width of one tread that is required at each bottom riser.

Figure 20
Hoistway and Elevator Entrances



NOTE:
The automatic door reopening device is activated if an object passes through either line A or line B. Line A and line B represent the vertical locations of the door reopening device not requiring contact.

Figure 21
Graph of Timing Equation

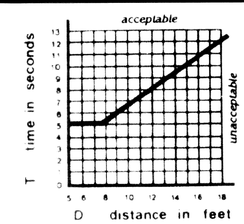


Figure 22
Minimum Dimensions of Elevator Cars

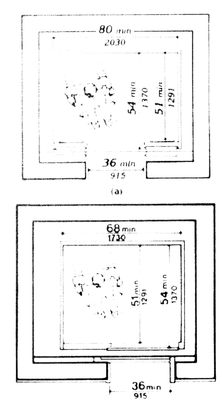
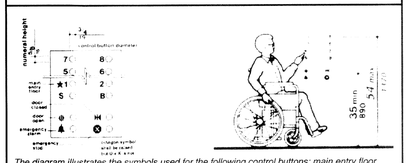


Diagram (a) illustrates an elevator with a door providing a 36 inch (915 mm) minimum clear width, in the middle of the elevator. The width of the elevator car is a minimum of 80 inches (2030 mm). The depth of the elevator car measured from the back wall to the elevator door is a minimum of 54 inches (1370 mm). The depth of the elevator car measured from the back wall to the control panel is a minimum of 51 inches (1291 mm).
Diagram (b) illustrates an elevator with door providing a minimum 36 inch (915 mm) clear width, located to one side of the elevator. The width of the elevator car is a minimum of 68 inches (1730 mm). The depth of the elevator car measured from the back wall to the elevator door is a minimum of 54 inches (1370 mm). The depth of the elevator car measured from the back wall to the control panel is a minimum of 51 inches (1291).

Figure 23
Car Controls

(a) Panel Detail (b) Car Control Height



The diagram illustrates the symbols used for the following control buttons: main entry floor, door closed, door open, emergency alarm, and emergency stop. The diagram further states that the octagon symbol for the emergency stop shall be raised but the X (inside the octagon) is not.

Figure 23 Continued
Car Controls

(c) Alternate Locations of Panel with Center Door Opening (d) Alternate Locations of Panel with Side Opening Door

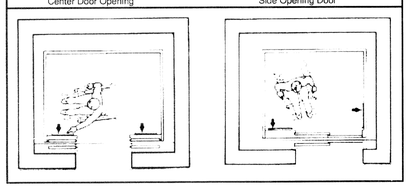
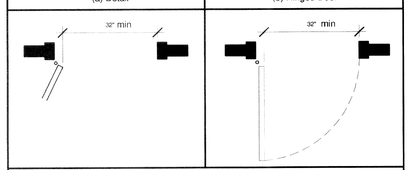


Figure 24
Clear Doorway and Depth Detail

(a) Detail (b) Hinged Door



(c) Sliding Door (d) Folding Door

(e) Clear Doorway Width and Depth - Maximum Doorway Depth

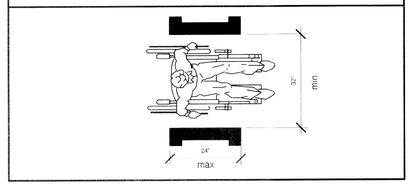


Figure 25
Maneuvering Clearances at Doors

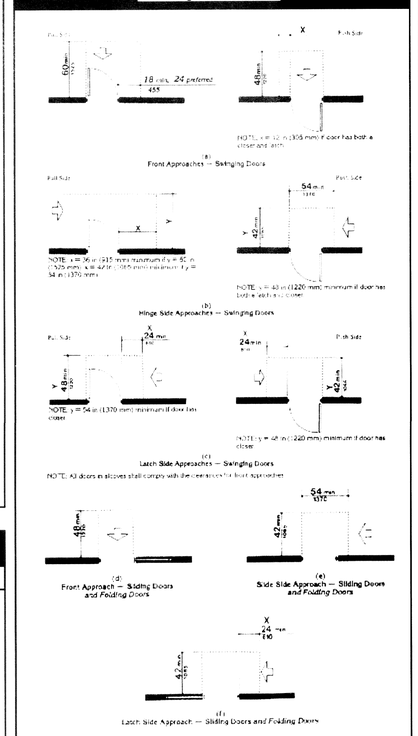


Figure 25 Continued
Maneuvering Clearances at Doors

NOTE: All doors in alcoves shall comply with the clearances for front approaches.
Diagram (a) Front Approaches -- Swinging Doors. Front approaches to pull side of swinging doors shall have maneuvering space that extends 18 in (455 mm) minimum beyond the latch side of the door and 60 in (1525 mm) minimum perpendicular to the doorway.
Front approaches to push side of swinging doors, equipped with both closer and latch, shall have maneuvering space that extends 12 in (305 mm) minimum beyond the latch side of the door and 48 in (1220 mm) minimum perpendicular to the doorway.
Front approaches to push side of swinging doors, not equipped with latch and closer, shall have maneuvering space that is the same width as door opening and extends 48 in (1220 mm) minimum perpendicular to the doorway.
Diagram (b) Hinge Side Approaches. Hinge-side approaches to pull side of swinging doors shall have maneuvering space that extends 36 in (915 mm) minimum beyond the latch side of the door if 60 in (1525 mm) minimum is provided perpendicular to the doorway or maneuvering space that extends 42 in (1065 mm) minimum beyond the latch side of the door shall be provided if 54 in (1370 mm) minimum is provided perpendicular to the doorway.
Hinge-side approaches to push side of swinging doors, not equipped with both latch and closer, shall have a maneuvering space of 54 in (1370 mm) minimum, parallel to the doorway and 42 in (1065 mm) minimum, perpendicular to the doorway.
Hinge side approaches to push side of swinging doors, equipped with both latch and closer, shall have maneuvering space of 54 in (1370 mm) minimum, parallel to the doorway, 48 in (1220 mm) minimum perpendicular to the doorway.
Diagram (c) Latch Side Approaches -- Swinging Doors. Latch-side approaches to pull side of swinging doors, with closers, shall have maneuvering space that extends 24 in (610 mm) minimum beyond the latch side of the door and 54 in (1370 mm) minimum perpendicular to the doorway.
Latch-side approaches to pull side of swinging doors, not equipped with closers, shall have maneuvering space that extends 24 in (610 mm) minimum beyond the latch side of the door and 48 in (1220 mm) minimum perpendicular to the doorway.
Latch-side approaches to push side of swinging doors, with closers, shall have maneuvering space that extends 24 in (610 mm) minimum parallel to the doorway beyond the latch side of the door and 48 in (1220 mm), minimum perpendicular to the doorway.
Latch-side approaches to push side of swinging doors, not equipped with closers, shall have maneuvering space that extends 24 in (610 mm) minimum parallel to the doorway beyond the latch side of the door and 42 in (1065 mm) minimum perpendicular to the doorway.
Diagram (d) Front Approach -- Sliding Doors and Folding Doors. Front approaches to sliding doors and folding doors shall have maneuvering space that is the same width as the door opening and shall extend 48 in (1220 mm) minimum perpendicular to the doorway.
Diagram (e). Slide-side approaches to sliding doors and folding doors shall have a maneuvering space of 54 in (1370 mm) minimum, parallel to the doorway, and 42 in (1065 mm) minimum, perpendicular to the doorway.
Diagram (f) Latch Side Approach -- Sliding Doors and Folding Doors. Latch-side approaches to sliding doors and folding doors shall have a maneuvering space that extends 24 in (610 mm) minimum beyond the latch side of the door and extends 42 in (1065 mm) minimum perpendicular to the doorway
Depending on the direction of approach, diagrams (a) through (f) illustrate minimum maneuvering space depths and latch side clearances for both push and pull sides of swinging, sliding and folding doors. (4.13.6).

Figure 26
Two Hinged Doors In Series

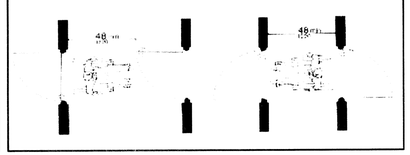
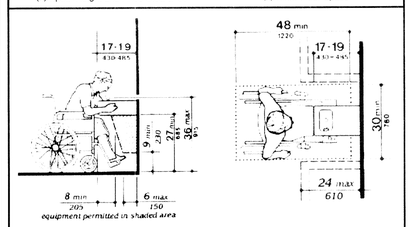


Figure 27
Drinking Fountains and Water Coolers

(a) Spout Height and Knee Clearance (b) Clear Floor Space



In addition to clearances discussed in the text, the following knee clearance is required underneath the fountain: 27 inches (685 mm) minimum from the floor to the underside of the fountain which extends 8 inches (205 mm) minimum measured from the front edge underneath the fountain back towards the wall; if a minimum 9 inches (230 mm) of toe clearance is provided, a maximum of 6 inches (150 mm) of the 48 inches (1220 mm) of clear floor space required at the fixture may extend into the toe space. (4.15.2, 4.15.5)

(c) Free-Standing Fountain or Cooler (d) Built-In Fountain or Cooler

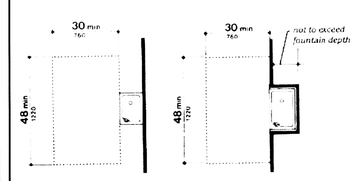
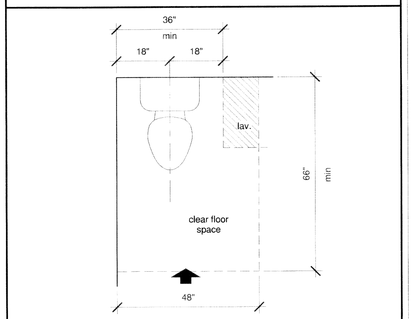
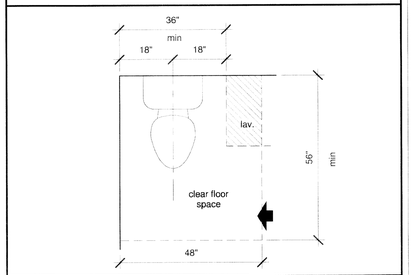


Figure 28
Clear Floor Space at Water Closets

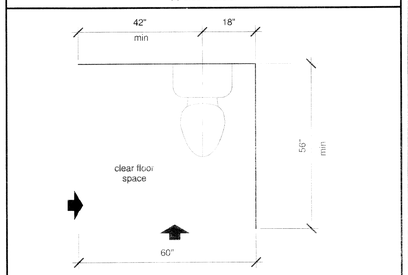
(a) Front Transfer



(b) Diagonal Transfer



(c) Side Transfer



For a front transfer to the water closet, the minimum clear floor space at the water closet is a minimum 48 inches (1220 mm) in width by a minimum of 66 inches (1675 mm) in length. For a diagonal transfer to the water closet, the minimum clear floor space is a minimum of 48 inches (1220 mm) in width by a minimum of 56 inches (1420 mm) in length. For a side transfer to the water closet, the minimum clear floor space is a minimum of 60 inches (1525 mm) in width by a minimum of 56 inches (1420 mm) in length. (4.16.2, A4.22.3)

MISSOURI DEPARTMENT OF TRANSPORTATION: WAREHOUSE RENOVATION PHASE I

ISSUE DATE: 10/26/09

PROJECT NUMBER: 09-031

STATE OF MISSOURI
MATTHEW JAMES RIMILLER
NUMBER A-2007019928
ARCHITECT
10/26/09

RIMILLER ARCHITECTS

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ADA-2

ADA FIGURES 12 - 28

Figure 29
Grab Bars at Water Closets

(a) Back Wall (b) Side Wall

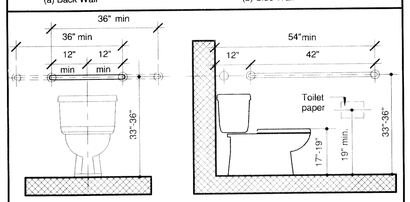
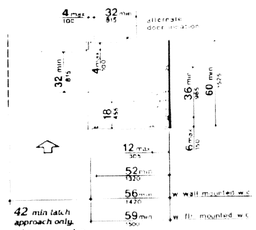


Fig. 29(a) Back Wall. A 36 inch (915 mm) minimum length grab bar is required behind the water closet mounted at a height between 33 and 36 inches (840-915 mm). The grab bar must extend a minimum of 12 inches (305) beyond the center of the water closet toward the side wall and a minimum of 24 inches (610 mm) toward the open side for either a left or right side approach.

A 42 inch (1065 mm) minimum length grab bar is required to the side of the water closet spaced 12 inches (305 mm) maximum from the back wall and extending a minimum of 54 inches (1370 mm) from the back wall at a height between 33 and 36 inches (840-915 mm). The toilet paper dispenser shall be mounted at a minimum height of 19 inches (485 mm). (4.16.3, 4.16.4, 4.16.6)

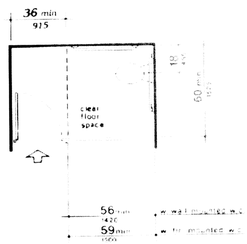
Figure 30
Toilet Stalls

(a) Standard Stall



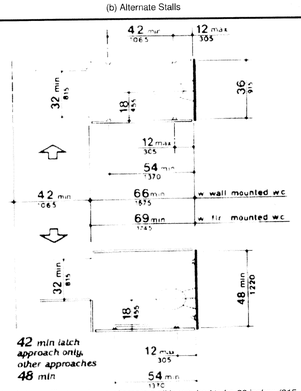
The location of the door is illustrated to be in front of the clear space (next to the water closet), with a maximum stile width of 4 inches (100 mm). An alternate door location is illustrated to be on the side of the toilet stall with a maximum stile width of 4 inches (100 mm). The minimum width of the standard stall shall be 60 inches (1525 mm). The centerline of the water closet shall be 18 inches (455 mm) from the side wall.

(a1) Standard Stall (end of row)



If a standard stall is provided at the end of a row of stalls, the door (if located on the side of the stall) may swing into to the stall, if the length of the stall is extended at least a minimum of 36 inches (915 mm) beyond the required minimum length.

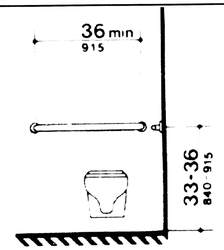
(b) Alternate Stalls



Two alternate stalls are illustrated; one alternate stall is required to be 36 inches (915 mm) in width. The other alternate stall is required to be a minimum of 48 inches (1220 mm) in width. If a wall mounted water closet is used, the depth of the stall is required to be a minimum of 66 inches (1675 mm). If a floor mounted water closet is used, the depth of the stall is required to be a minimum of 69 inches (1745 mm). The 36 inch wide stall shall have parallel grab bars on the side walls. The 48 inch minimum stall shall have a grab bar behind the water closet and one on the side wall next to the water closet. In each alternate, the centerline of the water closet is 18 inches (455 mm) from a side wall.

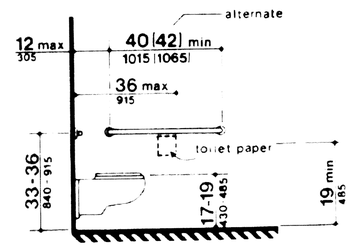
Figure 30 Continued
Toilet Stalls

(c) Rear Wall of Standard Stall



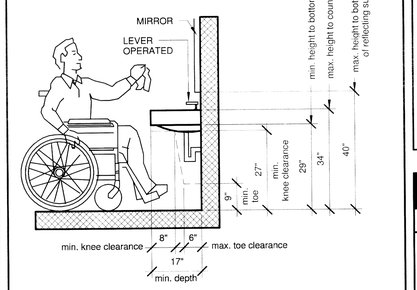
The grab bar on the back wall shall be 36 inches minimum in length, extending from the wall toward the open side of the water closet, 33-36 inches above the finish floor.

(d) Side Wall of Standard Stall



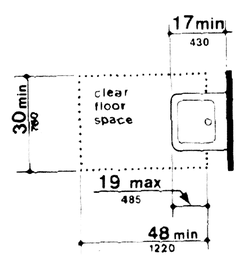
The side grab bar shall be 40-42 inches in length, beginning 12 inches maximum from the rear wall, 33-36 inches above the finish floor.

Figure 31
Lavatory Clearances



In addition to clearances discussed in the text, the following knee clearance is required underneath the lavatory: 27 inches minimum from the floor to the underside of the lavatory which extends 8 inches minimum measured from the front edge underneath the lavatory back towards the wall; if a minimum 9 inches of toe clearance is provided, a maximum of 6 inches of the 48 inches of clear floor space required at the fixture may extend into the toe space. (4.19.2, 4.19.6)

Figure 32
Clear Floor Space at Lavatories



The minimum depth of the lavatory is 17 inches (430 mm). (4.19.3, 4.24.5)

Figure 33
Clear Floor Space at Bathtubs

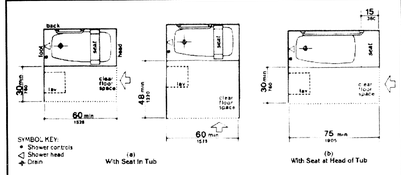


Fig. 33(a) With Seat in Tub. If the approach is parallel to the bathtub, a 30 inch (760 mm) minimum width by 60 inch (1525 mm) minimum length clear space is required alongside the bathtub. If the approach is perpendicular to the bathtub, a 48 inch (1220 mm) minimum width by 60 inch (1525 mm) minimum length clear space is required.

Fig. 33(b) With Seat at Head of Tub. If the approach is parallel to the bathtub, a 30 inch (760 mm) minimum width by 75 inch (1905 mm) minimum length clear space is required alongside the bathtub. The seat width must be 15 inches (380 mm) and must extend the full width of the bathtub.

Figure 34
Grab Bars at Bathtubs

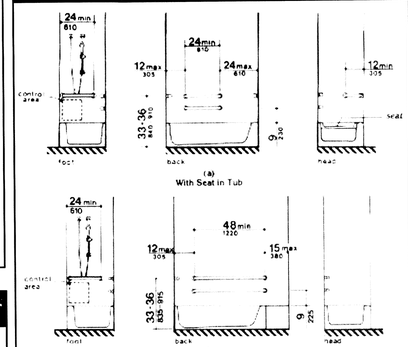
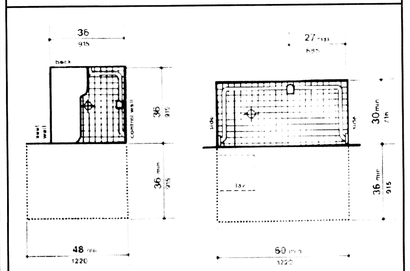


Fig. 34(a) With Seat in Tub. At the foot of the tub, the grab bar shall be 24 inches (610 mm) minimum in length measured from the outer edge of the tub. On the back wall, two grab bars are required. The grab bars mounted on the back (long) wall shall be a minimum 24 inches (610 mm) in length located 12 inches (305 mm) maximum from the foot of the tub and 24 inches (610 mm) maximum from the head of the tub. One grab bar shall be located 9 inches (230 mm) above the rim of the tub. The others shall be 33 to 36 inches (840 mm to 910 mm) above the bathroom floor. At the head of the tub, the grab bar shall be a minimum of 12 inches (305 mm) in length measured from the outer edge of the tub.

Fig. 34(b) With Seat at Head of Tub. At the foot of the tub, the grab bar shall be a minimum of 24 inches (610 mm) in length measured from the outer edge of the tub. On the back wall, two grab bars are required. The grab bars mounted on the back wall shall be a minimum of 48 inches (1220 mm) in length located a maximum of 12 inches (305 mm) from the foot of the tub and a maximum of 15 inches (380 mm) from the head of the tub. Heights of grab bars are as described above.

Figure 35
Shower Size and Clearances

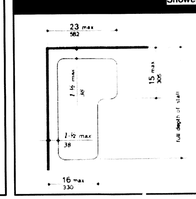
(a) 36"x36" Stall (b) 30"x60" Stall



The clear floor space shall be a minimum of 48 inches (1220 mm)in length by a minimum of 36 inches (915 mm) in width and allow for a parallel approach. The clear floor space shall extend 1 foot beyond the shower wall on which the seat is mounted.

The clear floor space alongside the shower shall be a minimum of 60 inches (1220 mm) in length by a minimum of 36 inches (915 mm) in width.

Figure 36
Shower Seat Design



The diagram illustrates an L-shaped shower seat extending the full depth of the stall. The seat shall be located 1-1/2 inches (38 mm) maximum from the wall. The front of the seat (nearest to the opening) shall extend a maximum 16 inches (330 mm) from the wall. The back of the seat (against the back wall) shall extend a maximum of 23 inches (582 mm) from the side wall and shall be a maximum of 15 inches (305 mm) deep.

Figure 37
Grab Bars at Shower Stalls

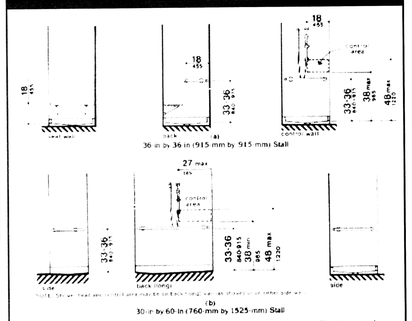
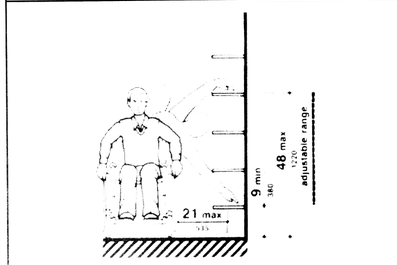


Fig. 37(a) 36 inches by 36 inches (915 mm by 915 mm) Stall. The diagram illustrates an L-shaped grab bar that is located along the full depth of the control wall (opposite the seat) and hallway along the back wall. The grab bar shall be mounted between 33 to 36 inches (840-915 mm) above the shower floor. The bottom of the control area shall be a maximum of 38 inches (965 mm) high and the top of the control area shall be a maximum of 48 inches (1220 mm) high. The controls and spray unit shall be within 18 inches (455 mm) of the front of the shower.

Fig. 37(b) 30 inches by 60 inches (760 mm by 1525 mm) Stall. The diagram illustrates a U-shaped grab bar that wraps around the stall. The grab bar shall be between 33 to 36 inches (840-915 mm) high. The controls are placed in an area between 38 inches and 48 inches (965 mm and 1220 mm) above the floor. If the controls are located on the back (long) wall they shall be located 27 inches (685 mm) from the side wall. The shower head and control area may be located on either side wall.

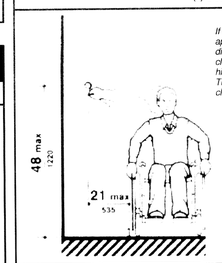
Figure 38
Storage Shelves and Closets

(a) Storage Shelves



If the clear floor space allows a parallel approach by a person in a wheelchair and the distance between the wheelchair and the shelf exceeds 10 inches, the maximum high side reach shall be 48 inches (1220 mm) above the floor and the low side reach shall be a minimum of 9 inches (230 mm) above the floor. The shelves can be adjustable. The maximum distance from the user to the shelf shall be 21 inches (535 mm).

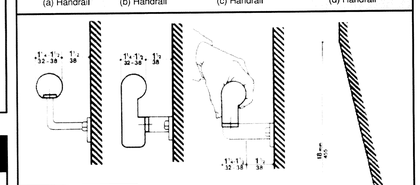
(b) Closets



If the clear floor space allows a parallel approach by a person in a wheelchair and the distance between the wheelchair and the clothes rod exceeds 10 inches, the maximum high side reach shall be 48 inches (1220 mm). The maximum distance from the user to the clothes rod shall be 21 inches (535 mm).

Figure 39
Size and Spacing of Handrails and Grab Bars

(a) Handrail (b) Handrail (c) Handrail (d) Handrail



(e) Grab Bar

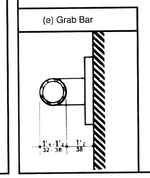


Figure 43
International Symbols

(a) International Symbol of Accessibility - Proportions (b) International Symbol of Accessibility - Display Conditions

The diagram illustrates the International Symbol of Accessibility on a grid background.

The symbol contrast shall be light on dark, or dark on light.

(c) International TYY Symbol (d) International Symbol of Access for Hearing Loss

Fig. 43
International Symbols

Figure 44
Mounting Heights and Clearances for Telephones

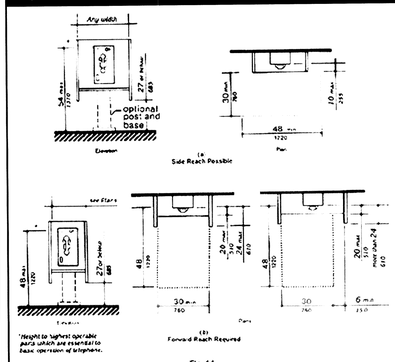


Fig. 44
Mounting Heights and Clearances for Telephones

Fig. 44(a) Side Reach Possible. If a parallel approach is provided at a telephone in an enclosure, the wing walls and shelf may extend beyond the face of the telephone a maximum of 10 inches (255 mm).

Fig. 44(b) Forward Reach Required. If a front approach is provided at a telephone with an enclosure, the shelf can extend beyond the face of the telephone a maximum of 20 inches (510 mm). A wing wall may extend beyond the face of the telephone a maximum of 24 inches (610 mm). If the wing wall extends more than 24 inches (610 mm) beyond the face of the telephone, an additional 6 inches (150 mm) in width of clear floor space shall be provided.

Figure 45
Minimum Clearance for Seating and Tables

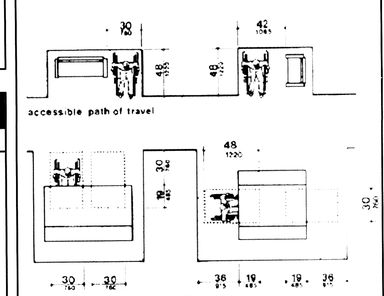


Fig. 45
Minimum Clearances for Seating and Tables

Figure 46
Space Requirements for Wheelchair Seating Spaces in Series

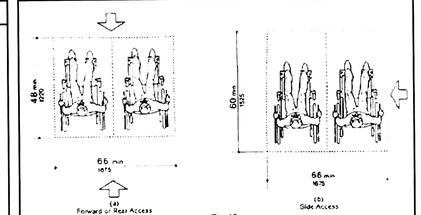


Fig. 46
Space Requirements for Wheelchair Seating Spaces In Series

Fig. 46(a) Forward or Rear Access. If seating space for two wheelchair users is accessed from the front or rear, the minimum space required is 48 inches (1220 mm) deep by 66 inches (1675 mm) wide.
Fig. 46(b) Side Access. If seating space for two wheelchair users is accessed from the side, the minimum space required is 60 inches (1525 mm) deep by 66 inches (1675 mm) wide.

Figure 47
Size of Bench

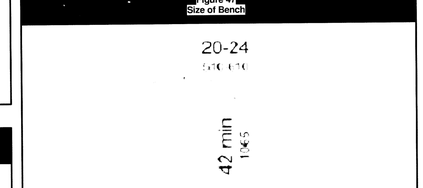


Fig. 47
Size of Bench

Figure 47 - Bench size shown in plan view to be 20 inches minimum to 24 inches maximum wide and 42 inches long minimum.

Figure 48
Bench Back Support

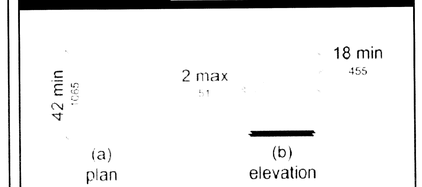


Fig. 48
Bench Back Support

Figure 48(a) shows bench back support in plan view 42 inches in length minimum; figure (b) side elevation of back support extending 2 inches maximum above the top of the seat to a point 18 inches minimum above the seat.

MISSOURI DEPARTMENT OF TRANSPORTATION: WAREHOUSE RENOVATION PHASE I

RIMILLER ARCHITECTS
landau building company
1630 WEST McCARTY STREET
JEFFERSON CITY, MISSOURI 65109
T. (573) 761-5600
F. (573) 761-5605

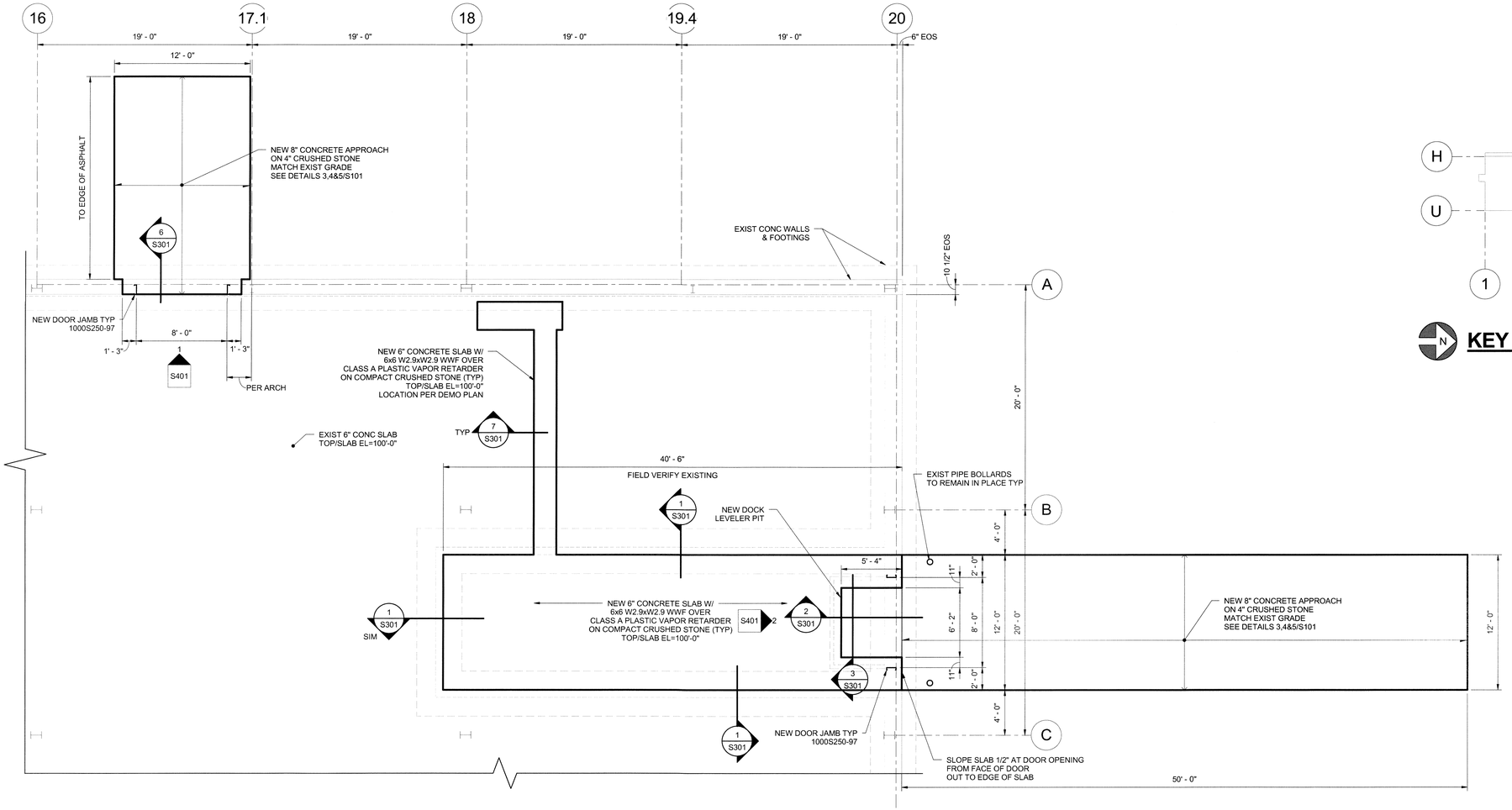
ISSUE DATE: 10/26/09

PROJECT NUMBER: 09-031

STATE OF MISSOURI
MATTHEW JAMES RIMILLER
NUMBER A-2007019928
ARCHITECT
10/26/09

ADA-3

ADA FIGURES 29 - 48

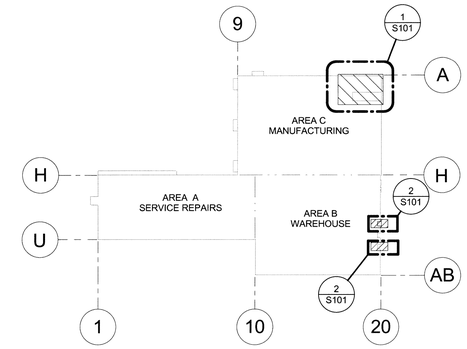


1 LOADING DOCK PLAN - NEW CONSTRUCTION

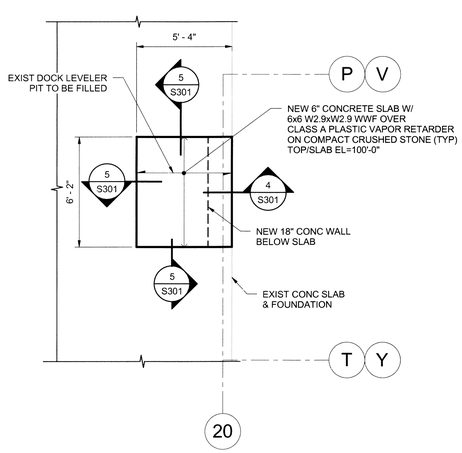
3/16" = 1'-0"

(PHASE I)

PLAN NOTE:
1. TOP OF SLAB ELEVATION = 100'-0" U.N.O.



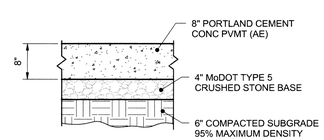
KEY PLAN OF EXISTING BUILDING



2 LOADING DOCK PLAN - NEW CONSTRUCTION

1/4" = 1'-0"

(PHASE I)



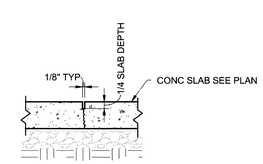
GENERAL NOTES

CONCRETE PAVEMENT:
1.DOCK AREAS, MCIB MIX. WA610-1-4-0.410

A. COMPRESSIVE STRENGTH:	4500 PSI AT 28 DAYS.
B. MAXIMUM SLUMP:	4 INCHES.
C. AIR ENTRAINMENT	5-7 DAYS.
D. METHOD OF CURING	7 DAY DAMP CURE, OR W.R. MEADOWS CO "TYPE WP-40" WHITE PIGMENTED RESIN BASED SPRAY ON CURING COMPOUND MEETING ASTM C-309, TYPE II, CLASS B.
E. FINISH:	SCREED.
F. CONTROL JOINTS:	1/8" SAW CUT, 1/4 SLAB THICKNESS 11' TO 15' MAX ON CENTER EACH WAY.
G. JOINT SEALER:	SILICONE JOINT SEALANT, DOW CORNING 888

3 CONCRETE PAVEMENT DETAIL

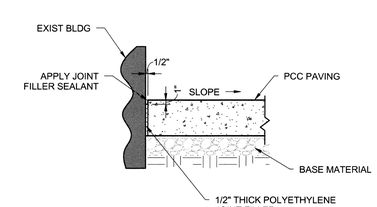
3/4" = 1'-0"



NOTES:
1. APPLY JOINT FILLER SEALANT TO ALL SAW CUTS.

4 PAVEMENT CONTROL JOINT

3/4" = 1'-0"



NOTES:
1. ALL PREFORMED JOINT MATERIAL SHALL BE INSTALLED PERPENDICULAR TO THE PAVEMENT SURFACE AND CARE SHALL BE EXERCISED THROUGHOUT THE CONSTRUCTION OF THE PAVEMENT TO ENSURE THAT SUCH JOINT MATERIAL REMAINS IN PROPER POSITION UPON COMPLETION OF PAVING OPERATION.

5 PAVEMENT ISOLATION JOINT

3/4" = 1'-0"

NO.	DATE	REVISIONS	BY	APP'D

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MISSOURI CERTIFICATE OF AUTHORITY: F00139850

Designed By: MMH
Drawn By: JJB
Checked By: MJR
Issue Date: 10-26-09

STATE OF MISSOURI
MICHAEL MELVIN HALL
NUMBER E-30044
REGISTERED PROFESSIONAL ENGINEER

SHAFER, KLINE, & WARREN, INC.
1400 Forum Boulevard, Suite 19A, Columbia, MO 65203-1997
573/442-4537 FAX: 620/365-6828
OFFICE LOCATIONS:
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MISSOURI DEPARTMENT OF TRANSPORTATION
WAREHOUSE RENOVATION PHASE I
JEFFERSON CITY, COLE COUNTY, MISSOURI

LOADING DOCK PLANS

800160-040

SHEET NO.
S101

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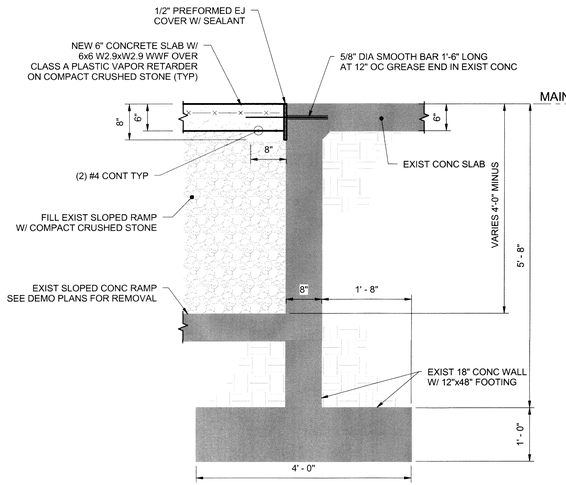
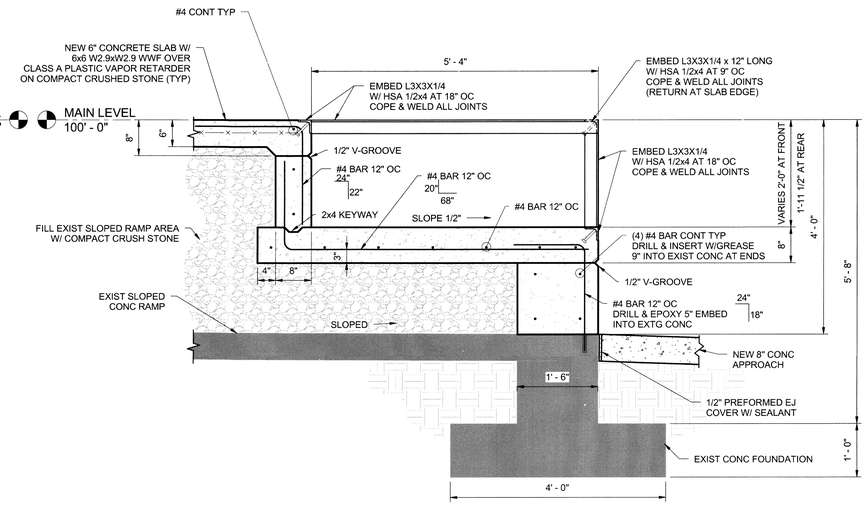
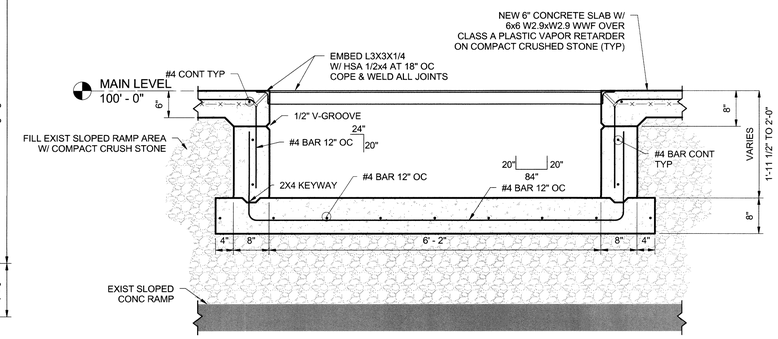


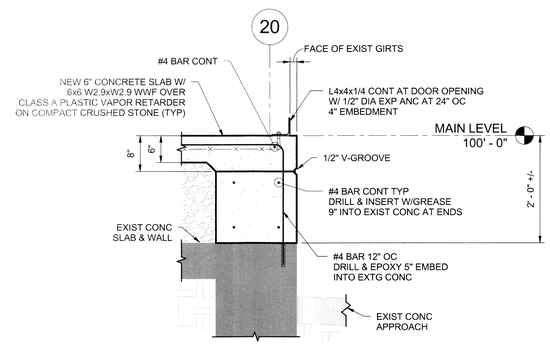
1 SECTION
3/4" = 1'-0"



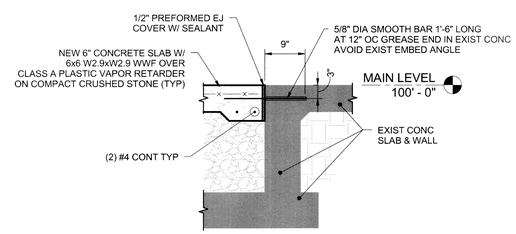
2 DOCK LEVELER PIT SECTION
3/4" = 1'-0"



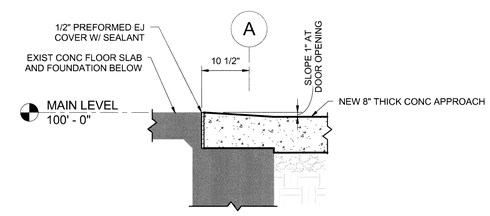
3 DOCK LEVELER PIT SECTION
3/4" = 1'-0"



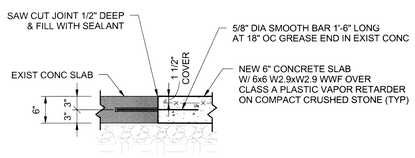
4 SECTION AT EXISTING DOCK LEVELER PIT
3/4" = 1'-0"



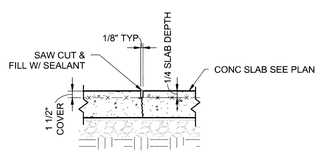
5 SECTION AT EXISTING DOCK LEVELER PIT
3/4" = 1'-0"



6 SECTION AT OH DOOR APPROACH
3/4" = 1'-0"

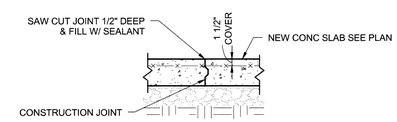


7 CONSTRUCTION JOINT DETAIL
3/4" = 1'-0"



NOTE: CONTRACTION JOINTS TO BE LOCATED AT 11' TO 15' ON CENTER MAX.

8 TYP. CONTRACTION JOINT DETAIL
3/4" = 1'-0"



9 TYP. CONSTRUCTION JOINT DETAIL
3/4" = 1'-0"

NO.	DATE	REVISIONS	BY	APP'D

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Designed By: MMH
Drawn By: JJB
Checked By: MJR
Issue Date: 10-26-09

STATE OF MISSOURI MICHAEL MELVIN HALL NUMBER E-30044 REGISTERED PROFESSIONAL ENGINEER
10-26-09
E-30044

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573/442-4537 FAX: 620/365-6828
OFFICE LOCATIONS:
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MISSOURI DEPARTMENT OF TRANSPORTATION
WAREHOUSE RENOVATION PHASE I
JEFFERSON CITY, COLE COUNTY, MISSOURI

LOADING DOCK DETAILS

800160-040

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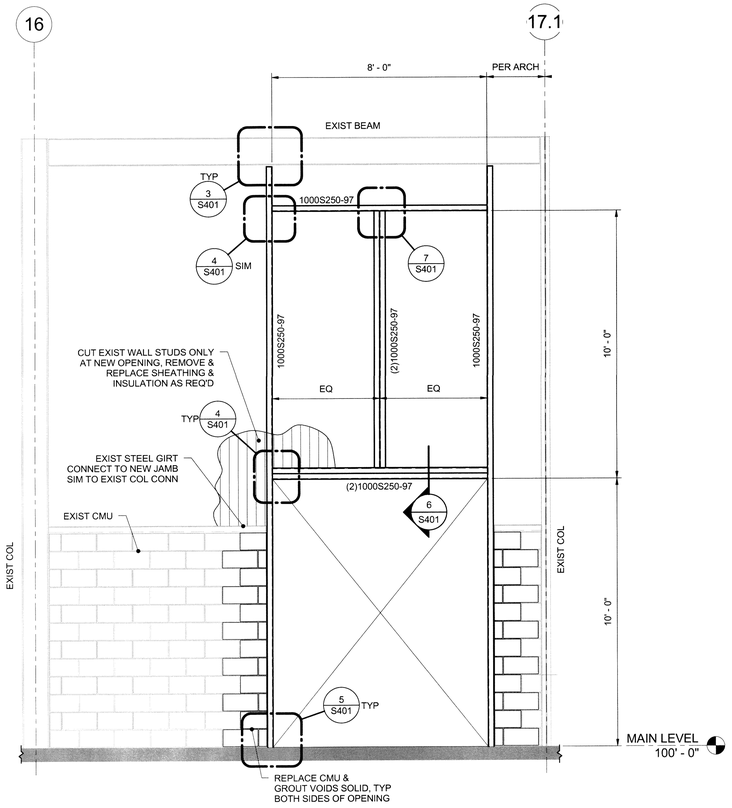
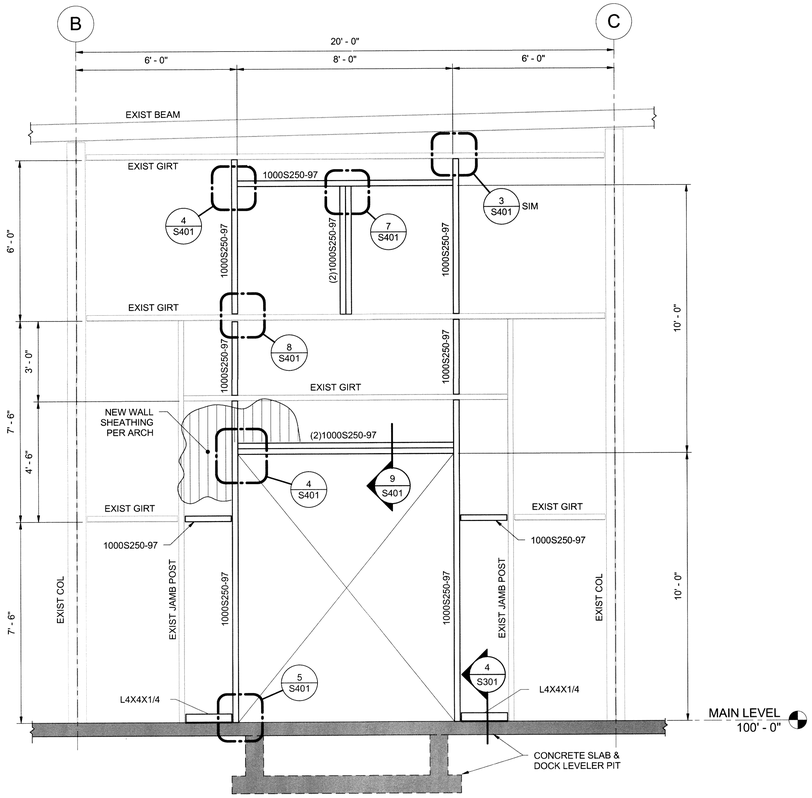
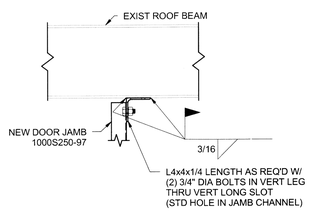


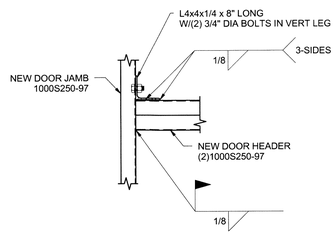
1 FRAMING ELEVATION AT NEW OH DOOR (GRID LINE-A)
3/8" = 1'-0"



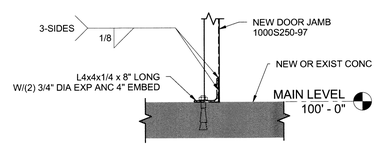
2 FRAMING ELEVATION AT NEW OH DOOR (GRID LINE-20)
3/8" = 1'-0"



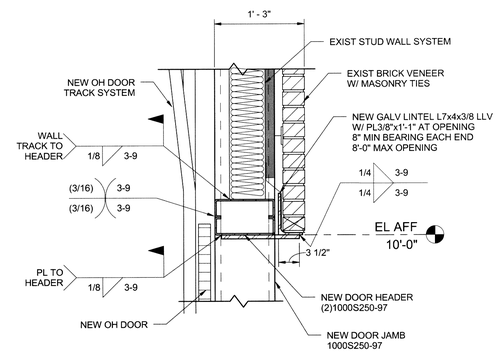
3 OH DOOR JAMB TOP CONNECTION
1" = 1'-0"



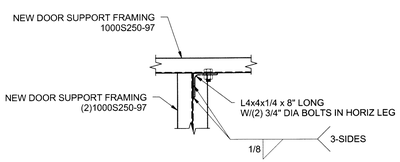
4 OH DOOR HEADER CONNECTION
1" = 1'-0"



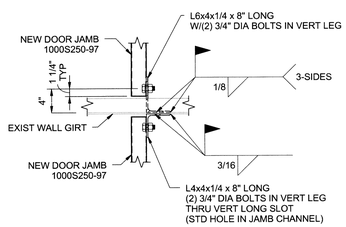
5 OH DOOR JAMB BASE CONNECTION
1" = 1'-0"



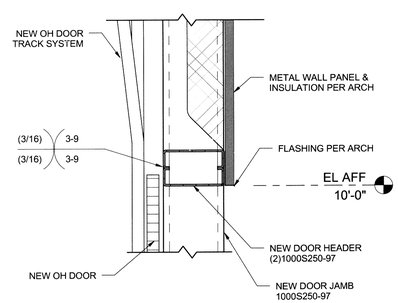
6 DOOR HEADER & LINTEL SECTION
1" = 1'-0"



7 OH DOOR SUPPORT FRAMING
1" = 1'-0"



8 OH DOOR JAMB CONNECTION DETAIL
1" = 1'-0"



9 DOOR HEADER SECTION
1" = 1'-0"

NO.	DATE	REVISIONS	BY	APP'D

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MISSOURI CERTIFICATE OF AUTHORITY: F00139550

Designed By: MMH
Drawn By: JJB
Checked By: MJR
Issue Date: 10-26-09

STATE OF MISSOURI
MICHAEL MELVIN HALL
NUMBER E-30044
REGISTERED PROFESSIONAL ENGINEER
10-26-09
MICHAEL M. HALL, P.E.
MO COA#

SHAFER, KLINE, & WARREN, INC.
1400 Forum Boulevard, Suite 19A, Columbia, MO 65203-1997
573/442-4537 FAX: 620/365-6828
OFFICE LOCATIONS:
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CIVIL ENGINEERS - ELECTRICAL ENGINEERS - MECHANICAL ENGINEERS - STRUCTURAL ENGINEERS - LANDSCAPE ARCHITECTS - LAND SURVEYORS - LAND PLANNERS

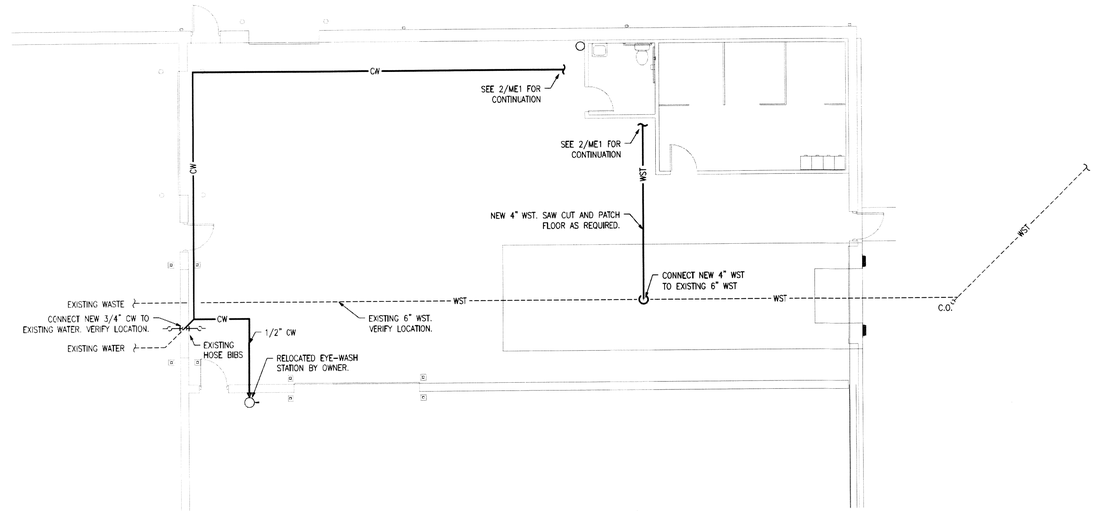
MISSOURI DEPARTMENT OF TRANSPORTATION
WAREHOUSE RENOVATION PHASE I
JEFFERSON CITY, COLE COUNTY, MISSOURI

OVERHEAD DOOR FRAME ELEVATION & DETAILS

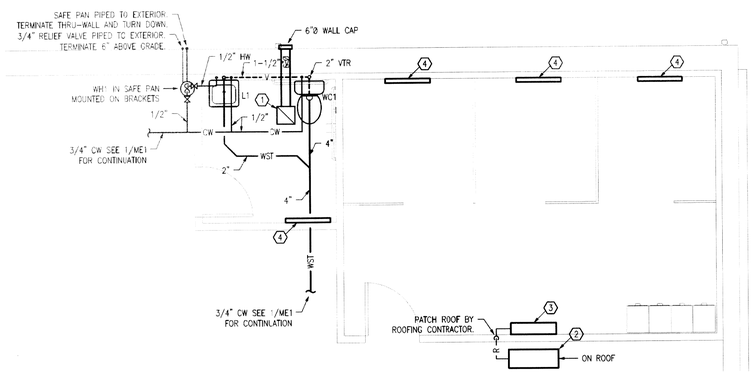
800160-040

SHEET NO.
S401

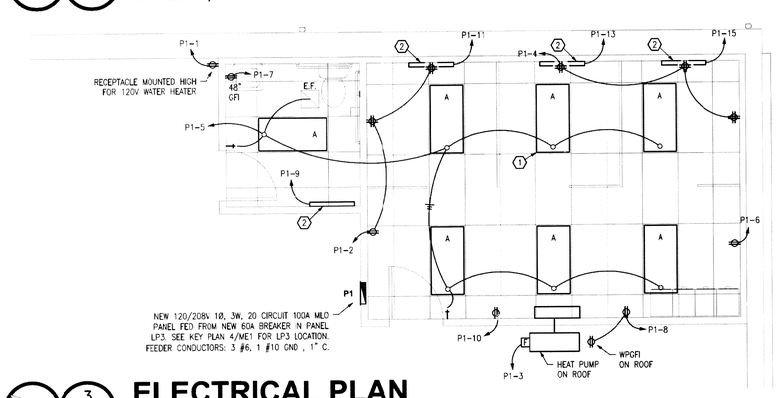
10/26/2009 10:27:39 AM
PLOT DATE & TIME:
P:\800160-040\ Acad\Revit Models\Local Files\800160-040 MoDot Structural_jbasinger.rvt



1 ME1 MECHANICAL PLAN
SCALE: 1/8" = 1'-0"



2 ME1 ENLARGED MECHANICAL PLAN
SCALE: 1/4" = 1'-0"



3 ME1 ELECTRICAL PLAN
SCALE: 1/4" = 1'-0"

PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE	MODEL NUMBER OR EQUAL BY KOHLER OR AMERICAN STANDARD.
WC1	WATER CLOSET	TOTO CST744SL, WHITE VITREOUS CHINA, 18" HEIGHT, ELONGATED BOWL, FLUSH TANK,
		SS114 WHITE SEAT, SUPPLY & STOP, MOUNT PER ADA.
L1	LAVATORY	TOTO LT307.4, WHITE VITREOUS CHINA, MOEN 8938 FAUCET, DEARBORN BRASS 760-1 GRID DRAIN,
		CONCEALED CHAIR CARRIER, INSULATE HW & WST WITH TRUEBRO INSULATION KIT, MOUNT PER ADA.
WH1	WATER HEATER	RUUD EGSP2, 2.5 GALLON ELECTRIC WATER HEATER, 120V, 1Ø, 1,440W. WITH WALL MOUNTING KIT

P1

VOLTS 120/208
PHASE 1
WIRE 3
AIC

MAIN CAPACITY 100A MLO
BUSS MATERIAL
MOUNTING
SQUARE D MODEL

A WATTS 3,990
B WATTS 3,030
TOTAL WATTS 7,020

CIRC	LOCATION / DESCRIPTION	BRKR	WATTS	Ø	WATTS	BRKR	LOCATION / DESCRIPTION	CIRC
1	WATER HEATER	20-1	1440	A	720	20-1	OFFICE RECEPTACLES	2
3	HEAT PUMP	20-1	590	B	1080	20-1	OFFICE RECEPTACLES	4
5	LIGHTS	20-1	470	A	180	20-1	OFFICE RECEPTACLES	6
7	BATHROOM GFI	20-1	180	B	180	20-1	OFFICE RECEPTACLES	8
9	BASEBOARD HEATER	20-1	500	A	180	20-1	OFFICE RECEPTACLES	10
11	BASEBOARD HEATER	20-1	500	B	0			12
13	BASEBOARD HEATER	20-1	500	A	0			14
15	BASEBOARD HEATER	20-1	500	B	0			16
17			0	A	0			18
19			0	B	0			20

MECHANICAL NOTES:

1. COORDINATE INSTALLATION WITH OWNER PRIOR TO ROUGH-IN.

KEYED NOTES:

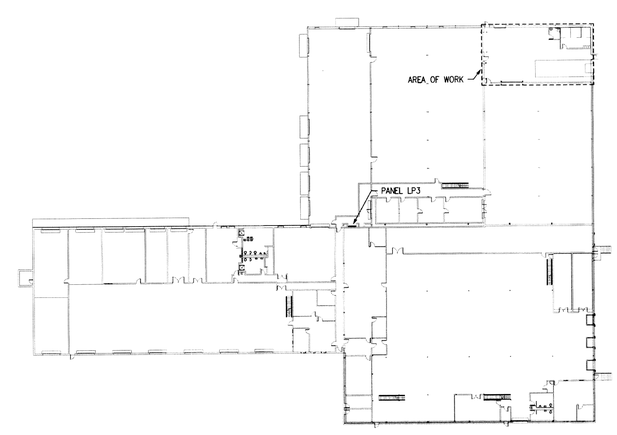
1. COOK GC-124 EXHAUST FAN. 77 CFM @ 1/4" S.P., 64 WATTS, 1.6 SONES. OR EQUAL BY PENN OR JENN-AIRE.
2. CARRIER 38GXQ-009-1-01 HEAT PUMP OUTDOOR UNIT. 8,600 BTU COOLING, 16 SEER, 10,800 BTU 2-STAGE HEATING, 7.7 HSPF. 120V, 590 WATTS, 20A MOCP. OR EQUAL BY MITSUBISHI OR LG.
3. CARRIER 40GXQ-009-1-01 290 CFM HEAT PUMP INDOOR UNIT. ELECTRICAL FROM OUTDOOR UNIT FROM INCLUDED CONNECTING CABLE. OR EQUAL BY MITSUBISHI OR LG.
4. 500W BASEBOARD HEAT BY ELECTRICAL CONTRACTOR.

ELECTRICAL NOTES:

1. COORDINATE INSTALLATION WITH OWNER'S EQUIPMENT PRIOR TO ROUGH-IN.

KEYED NOTES:

1. 2 LAMP FLLORESCENT TROFFER. WILLIAMS 50G-524-232 OR EQUAL BY COLUMBIA OR HUBBELL. TYPICAL FOR ALL 'A' FIXTURES.
2. 120V 500W BASEBOARD HEATER WITH INTEGRAL THERMOSTAT. QMARK QMKC-2512-6W OR EQUAL BY MARKEL OR BRASCH.



4 ME1 KEY PLAN
SCALE: 1" = 50'-0"

FREDDIE L. MALICOAT - ENGINEER
MO# E-16897
STATE OF MISSOURI
FREDDIE L. MALICOAT
NUMBER E-16897
REGISTERED PROFESSIONAL ENGINEER
10-26-09

MALICOAT - WINSLOW ENGINEERS, P.C.
MISSOURI STATE CERTIFICATE OF AUTHORITY #000421
5649 N. CLEARVIEW ROAD
COLUMBIA, MISSOURI 65202
TEL 573-875-1300
FAX 573-875-1305
FREDDIE MALICOAT, P.E.

MODOT: RENOVATION PHASE 1

JEFFERSON CITY, MO

CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-26-09

REVISIONS :

TITLE : MECHANICAL AND ELECTRICAL PLANS

SHEET : ME1 OF ME1

PROJECT : 09138