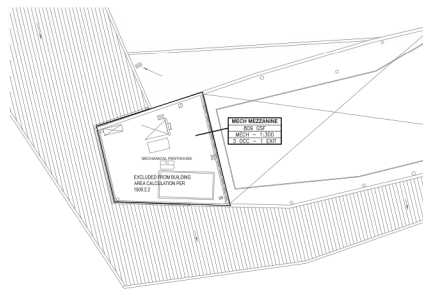


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2 MECHANICAL PENTHOUSE FIRE & LIFE SAFETY PLAN
1/16"=1'-0"



1 FIRST FLOOR CODE ANALYSIS PLAN
1/16"=1'-0"

CODE SUMMARY

GENERAL

Jurisdictional Authority City of Lead, South Dakota
Applicable Code 2009 International Building Code

BUILDING OCCUPANCY DATA

Occupancy Classification (Sections 303, 304, 305, 306, 309 & 311)

- A-3 Exhibition (Primary Use)
- B Business
- E Educational
- M Mercantile
- S-1 Moderate Hazard Storage

TYPE OF CONSTRUCTION

Construction Classification (Table 601) Type VB

BUILDING LIMITATIONS

Base Allowable Floor Area (Table 503)

- Occupancy Type 50 FT
- A-3 Exhibition 6,000 SF
- B Business 9,000 SF
- E Educational 9,500 SF
- M Mercantile 9,000 SF
- S-1 Storage 9,000 SF
- F-1 Mechanical 8,500 SF

Actual Building Area 8,379 SF
Fist Floor 809 SF (exempt from gross building area per 1509.2.2)
Frontage Increase due to 30' clear on all sides of building per 506.1 & 506.2
Allowable Area due to increase = 6000sf + (6000sf X .75) = 10,500 SF

Non-separated use per 508.3

Actual Building Height 1 Story

- Fire Resistive Building Elements
- Structural Frame 0 HR
 - Exterior Bearing Walls 0 HR
 - Interior Bearing Walls 0 HR
 - Exterior Non-Bearing Walls or Platforms 0 HR
 - Interior Non-Bearing Walls or Platforms 0 HR
 - Floor Construction 0 HR
 - Roof Construction 0 HR
 - Shaft Enclosures 0 HR

FIRE PROTECTION SYSTEMS

- Fire Suppression and Detection Systems
- Automatic Fire Sprinkler System Not Required per 903.2.1.3
 - Fire & Smoke Detection (NFPA 72) Required
 - Fire Extinguisher Type 2A Type 2 within 75 FT/1,500 SF
 - Standby Power Not Required
 - Class 1 Standpipes Not Required

MEANS OF EGRESS

- Egress Width Requirement
- Door Exit Width / Occupant (Table 1005.1) 0.2
 - Stair Exit Width / Occupant (Table 1005.1) 0.3
- see plan diagrams for individual exit requirements

ENERGY CONSERVATION COMPLIANCE

See ASHRAE Standard 90.1 Building Envelope - Climate Zone 6

PLUMBING SYSTEMS

Occupancy/Area	Plumbing Occupant Load	Plumbing Occupant Load	Water Closets		Lavatories		DF
			M	F	M	F	
A-3 3881 SF	30 net	150	0.5	1	0.3	0.3	26
B 1278 SF	100 gross	13	0.3	0.2	0.2	0.2	13
E 919 SF	20 net	46	0.5	0.5	0.5	0.5	46
M 1002 SF	30 gross	34	0.03	0.03	0.02	0.02	04
S-1 230 SF	300 gross	1	0.01	0.01	0.01	0.01	0

Total Number of Fixtures
Required 2 2 2 2
Provided 3 3 2 2

Total Number of Drinking Fountains
Required 1
Provided 2

Total Number of Service Sinks
Required 1
Provided 1 (FLOOR/MOP SINK)

NOTES

Provide Panic Hardware at all Main Exit Doors, Exit Doors from terrace shall be signed "Doors to Remain Unlocked During Business Hours" in lieu of panic hardware.

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Bid Package No. 2 8 August 2014

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1309

Sheet Title

**LIFE SAFETY AND
CODE ANALYSIS PLAN**

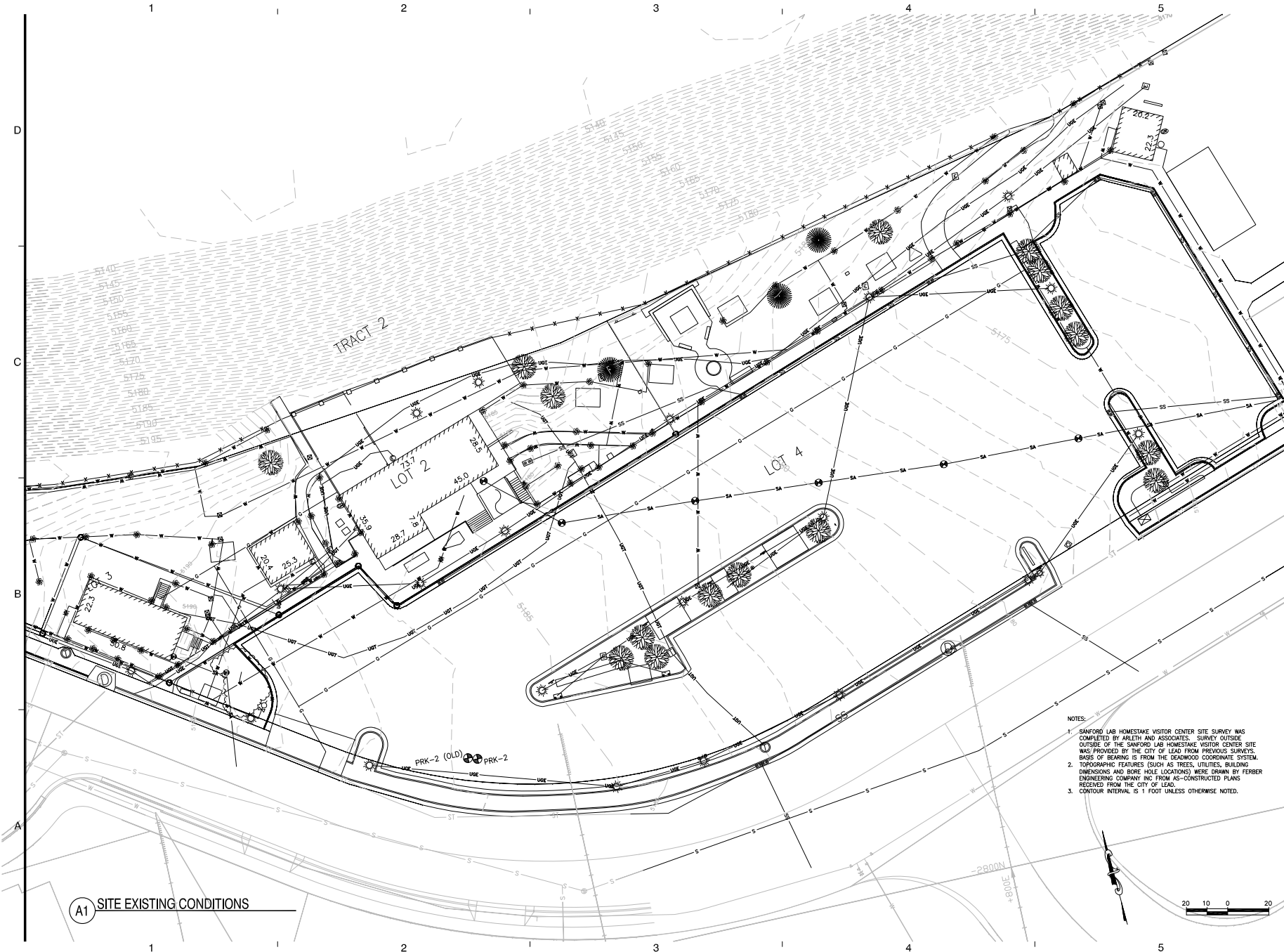
Sheet Number

A-0.2



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A1 SITE EXISTING CONDITIONS

- NOTES:
1. SANFORD LAB HOMESTAKE VISITOR CENTER SITE SURVEY WAS COMPLETED BY ARLETH AND ASSOCIATES. SURVEY OUTSIDE OUTSIDE OF THE SANFORD LAB HOMESTAKE VISITOR CENTER SITE WAS PROVIDED BY THE CITY OF LEAD FROM PREVIOUS SURVEYS. BASIS OF BEARING IS FROM THE DOWNSWOOD COORDINATE SYSTEM.
 2. TOPOGRAPHIC FEATURES (SUCH AS TREES, UTILITIES, BUILDING DIMENSIONS AND BORE HOLE LOCATIONS) WERE DRAWN BY FERBER ENGINEERING COMPANY INC FROM AS-CONSTRUCTED PLANS RECEIVED FROM THE CITY OF LEAD.
 3. CONTOUR INTERVAL IS 1 FOOT UNLESS OTHERWISE NOTED.

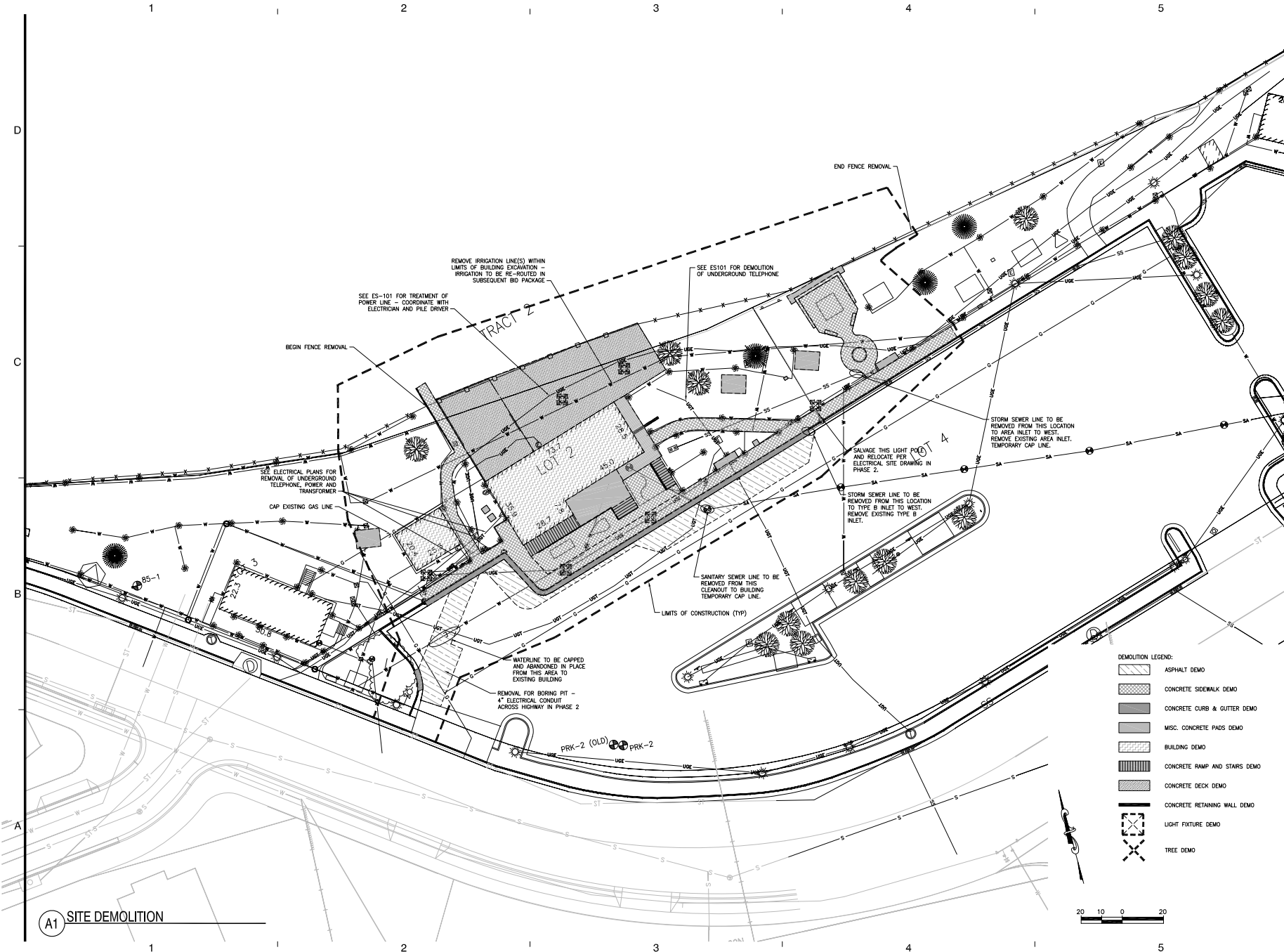
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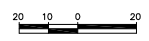
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1306

Sheet Title
**SITE EXISTING
CONDITIONS**

Sheet Number
C-101



- DEMOLITION LEGEND:
- ASPHALT DEMO
 - CONCRETE SIDEWALK DEMO
 - CONCRETE CURB & GUTTER DEMO
 - MISC. CONCRETE PADS DEMO
 - BUILDING DEMO
 - CONCRETE RAMP AND STAIRS DEMO
 - CONCRETE DECK DEMO
 - CONCRETE RETAINING WALL DEMO
 - LIGHT FIXTURE DEMO
 - TREE DEMO



A1 SITE DEMOLITION



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Sheet Title
SITE DEMOLITION

Sheet Number
C-102



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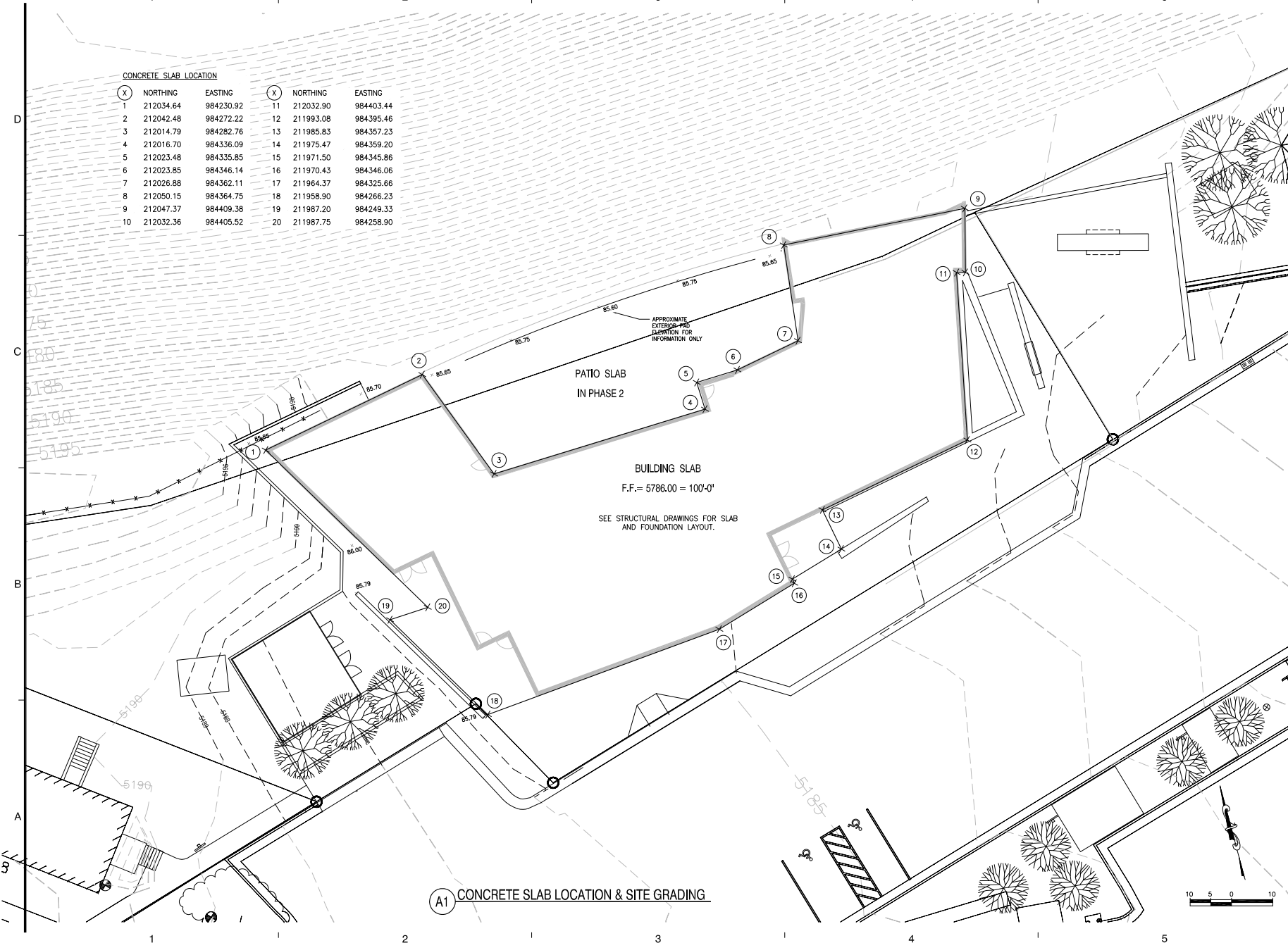
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Sheet Title
**CONCRETE
SLAB LOCATION
& SITE GRADING**

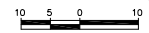
Sheet Number
C-103

CONCRETE SLAB LOCATION

(X)	NORTHING	EASTING	(X)	NORTHING	EASTING
1	212034.64	984230.92	11	212032.90	984403.44
2	212042.48	984272.22	12	211993.08	984395.46
3	212014.79	984282.76	13	211985.83	984357.23
4	212016.70	984336.09	14	211975.47	984359.20
5	212023.48	984335.85	15	211971.50	984345.86
6	212023.85	984346.14	16	211970.43	984346.06
7	212026.88	984362.11	17	211964.37	984325.66
8	212050.15	984364.75	18	211958.90	984266.23
9	212047.37	984409.38	19	211987.20	984249.33
10	212032.36	984405.52	20	211987.75	984258.90



A1 CONCRETE SLAB LOCATION & SITE GRADING





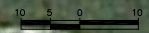
(A1) UNDERGROUND POWER CONDUIT

NOTES:

1. SEE ELECTRICAL DRAWINGS FOR CONTINUATION OF ELECTRICAL LINE.
2. CONTRACTOR WILL EXCAVATE AN EXISTING CONDUIT LOCATED JUST NW OF THE NEW CONDUIT SHOWN. IF THIS CONDUIT IS ACCEPTABLE TO BLACK HILLS POWER, BORING OF THIS CONDUIT WILL NOT BE NEEDED. ALSO REMOVAL AND REPLACEMENT OF THE PAVEMENT CAN BE REDUCED.

VISITOR CENTER PARKING LOT

4" CONDUIT BORED UNDER HIGHWAY FOR UNDERGROUND POWER SERVICE



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Sheet Title
**UNDERGROUND
POWER CONDUIT**

Sheet Number
C-104



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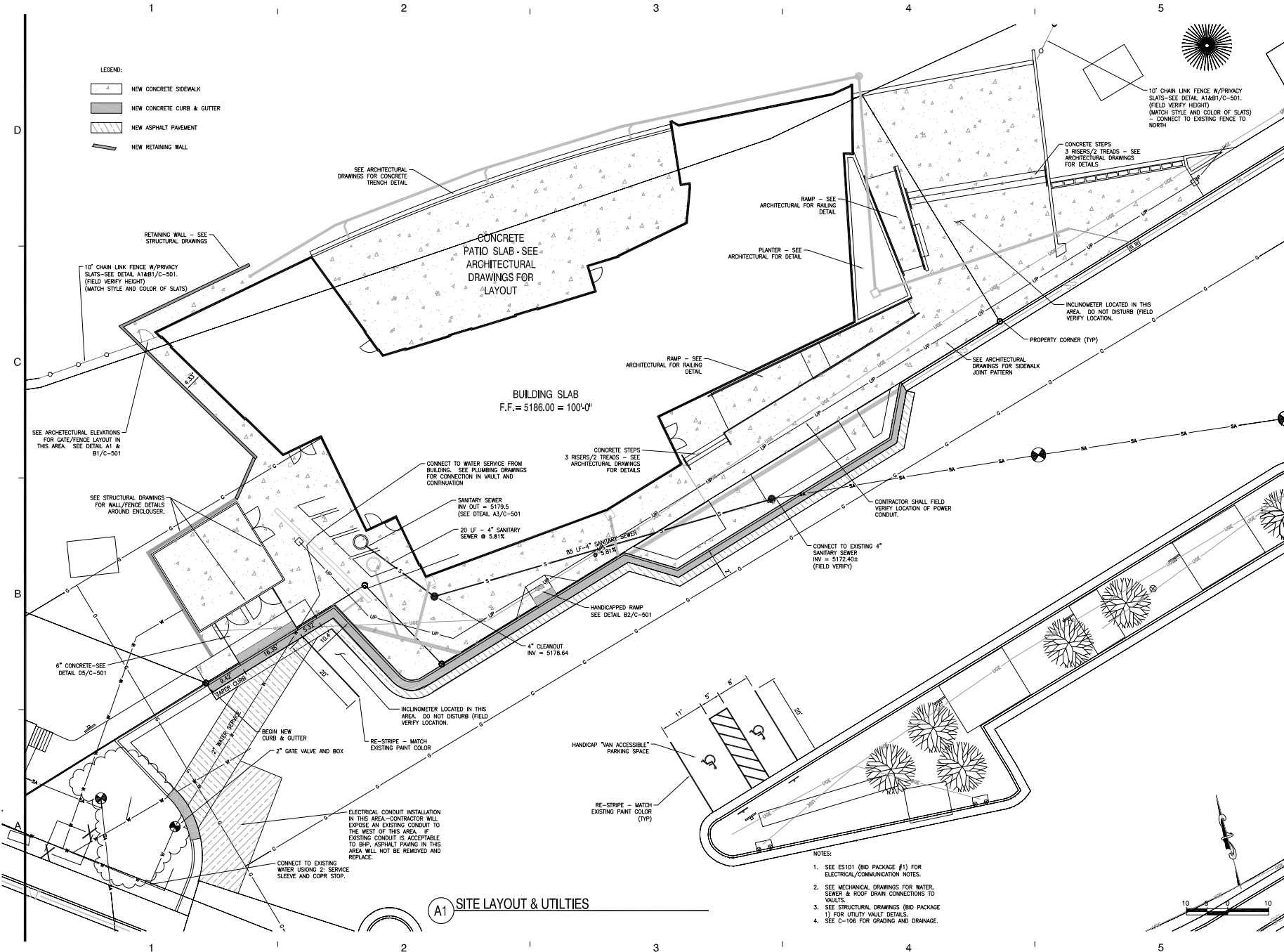
Revisions	Date

Scale
TSP Job Number
03130889

Sheet Title
SITE LAYOUT & UTILITIES

Sheet Number

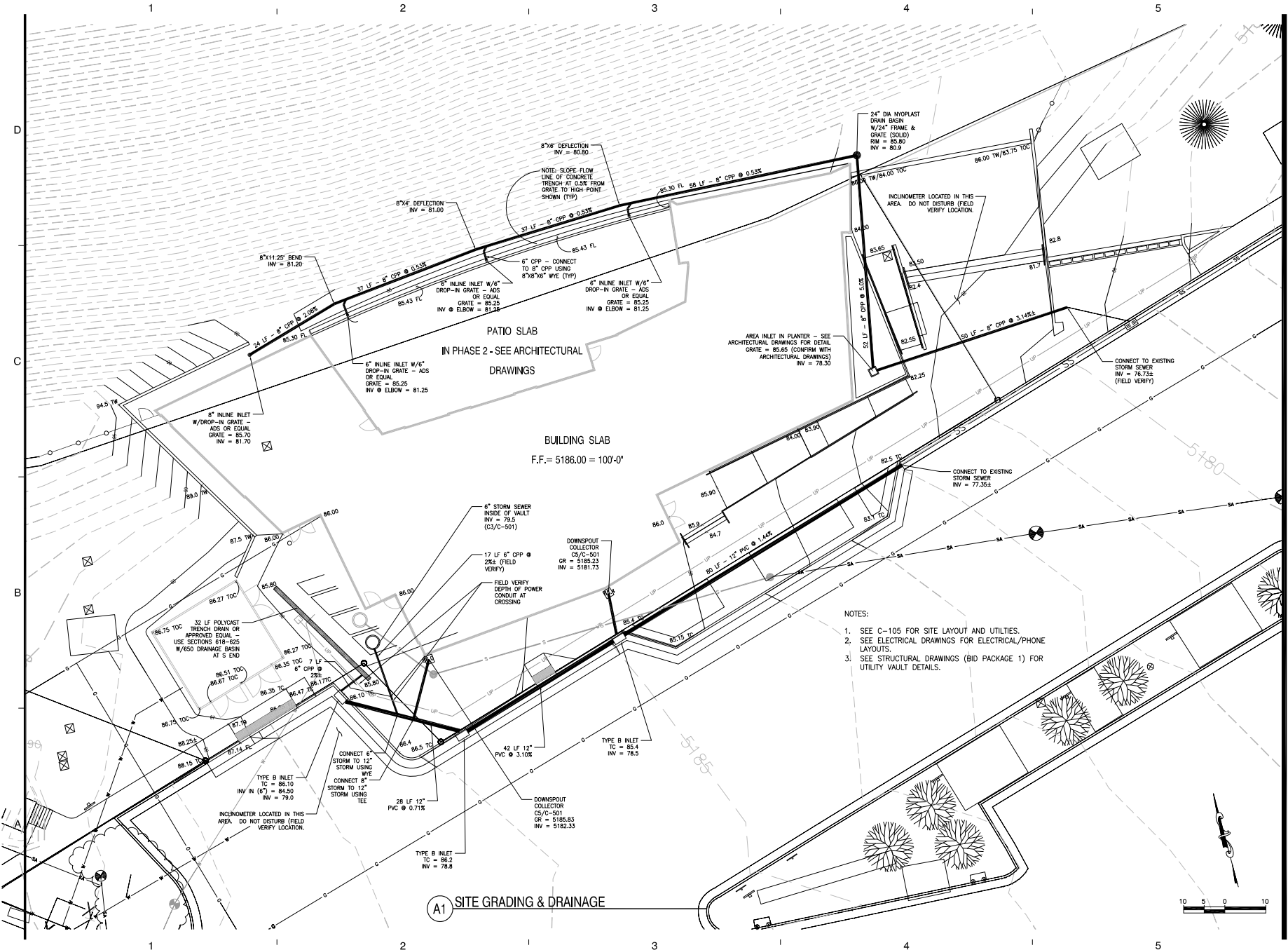
C-105



A1 SITE LAYOUT & UTILITIES

- NOTES:
- SEE ES101 (BID PACKAGE #1) FOR ELECTRICAL/COMMUNICATION NOTES.
 - SEE MECHANICAL DRAWINGS FOR WATER, SEWER & ROOF DRAIN CONNECTIONS TO VAULTS.
 - SEE STRUCTURAL DRAWINGS (BID PACKAGE 1) FOR UTILITY VALE DETAILS.
 - SEE C-106 FOR DRAWING AND DRAINAGE.





A1 SITE GRADING & DRAINAGE

- NOTES:
1. SEE C-105 FOR SITE LAYOUT AND UTILITIES.
 2. SEE ELECTRICAL DRAWINGS FOR ELECTRICAL/PHONE LAYOUTS.
 3. SEE STRUCTURAL DRAWINGS (BID PACKAGE 1) FOR UTILITY VAULT DETAILS.



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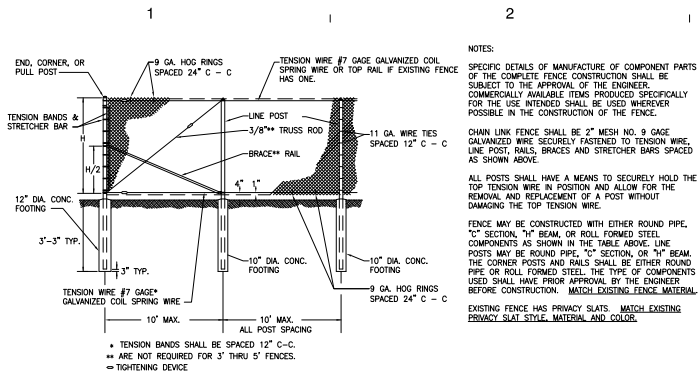
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BID PACKAGE 1	08.08.14
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TSP Job Number
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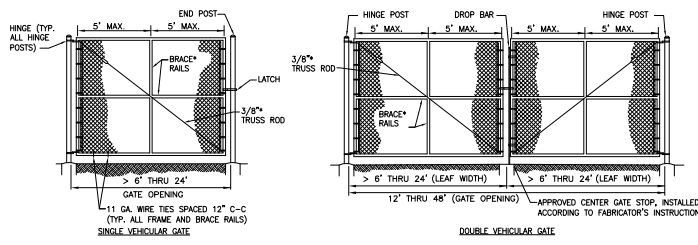
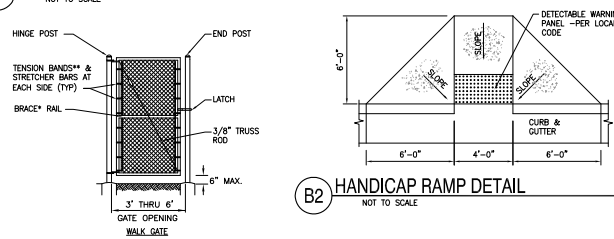
Sheet Title
SITE GRADING & DRAINAGE

Sheet Number
C-106



COMPONENT	END, CORNER, & PULL POST	LINE POST	TOP & BRACE RAIL
TYPE OF FABRICATION	ROUND PIPE NOMINAL	ROUND PIPE NOMINAL	ROUND PIPE NOMINAL
SIZE	3.00" O.D.	1.875" X 1.625"	1.625" O.D.
WEIGHT (LB/FT)	5.79 OR 4.64	3.65 OR 3.12	2.27 OR 1.84

B1 CHAINLINK FENCE DETAIL
NOT TO SCALE

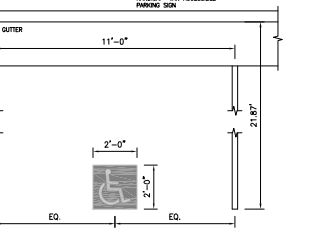
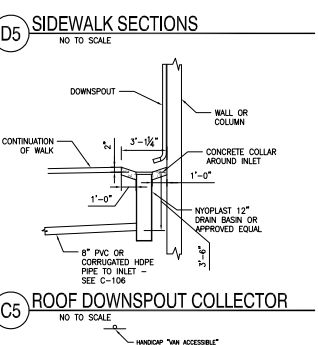
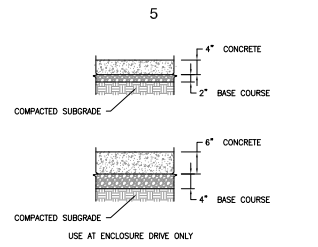
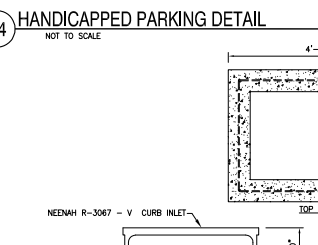
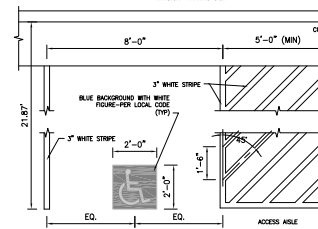
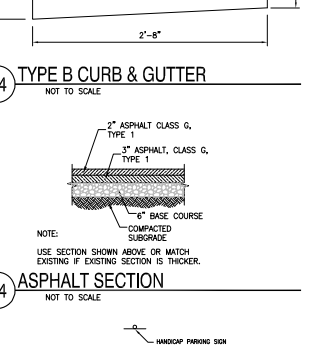
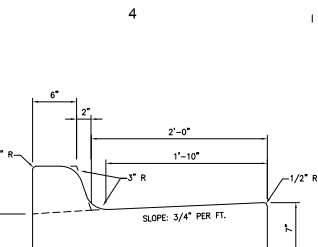
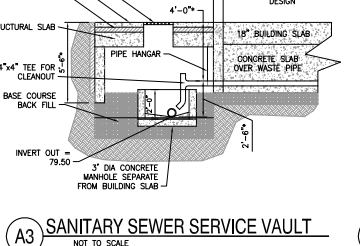
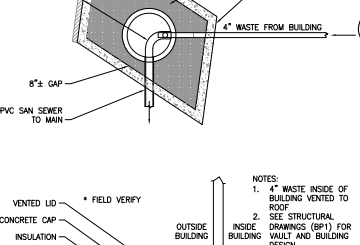
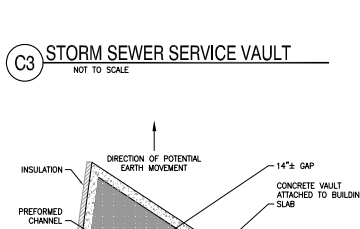
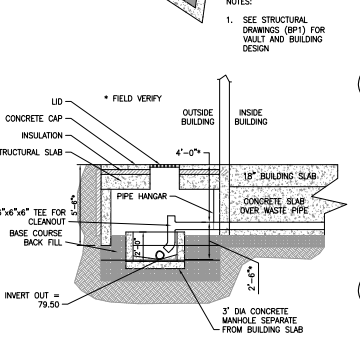
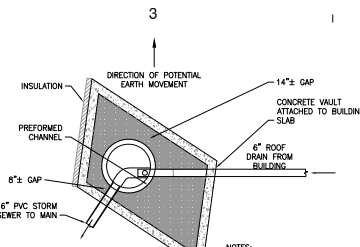


GATE OPENING	FRAME PIPE NOMINAL	BRACE RAIL PIPE NOMINAL
3" THRU 6"	1.50"	1.50"
>6" THRU 12"	1.90"	1.90"
>12" THRU 23"	1.90"	1.90"

GATE OPENING	HINGE POST	CONCRETE FOOTING
WIDTH	ROUND PIPE NOMINAL	DEPTH
3" THRU 6"	3.00"	36"
>6" THRU 12"	4.00"	42"
>12" THRU 18"	6.625"	48"
>18" THRU 23"	8.625"	48"

- * ARE NOT REQUIRED FOR GATES 3" THRU 5' HEIGHT OR 5' OR LESS IN WIDTH.
- ** TENSION BANDS SHALL BE SPACED 12" C-C.
- TIGHTENING DEVICE
- 1 LEAF WIDTH FOR DOUBLE VEHICULAR GATE
- 2 SHALL COINCIDE WITH FENCE HEIGHT

A1 CHAINLINK FENCE GATE DETAILS
SCALE 1" = 1'-0"



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Sheet Title
DETAILS

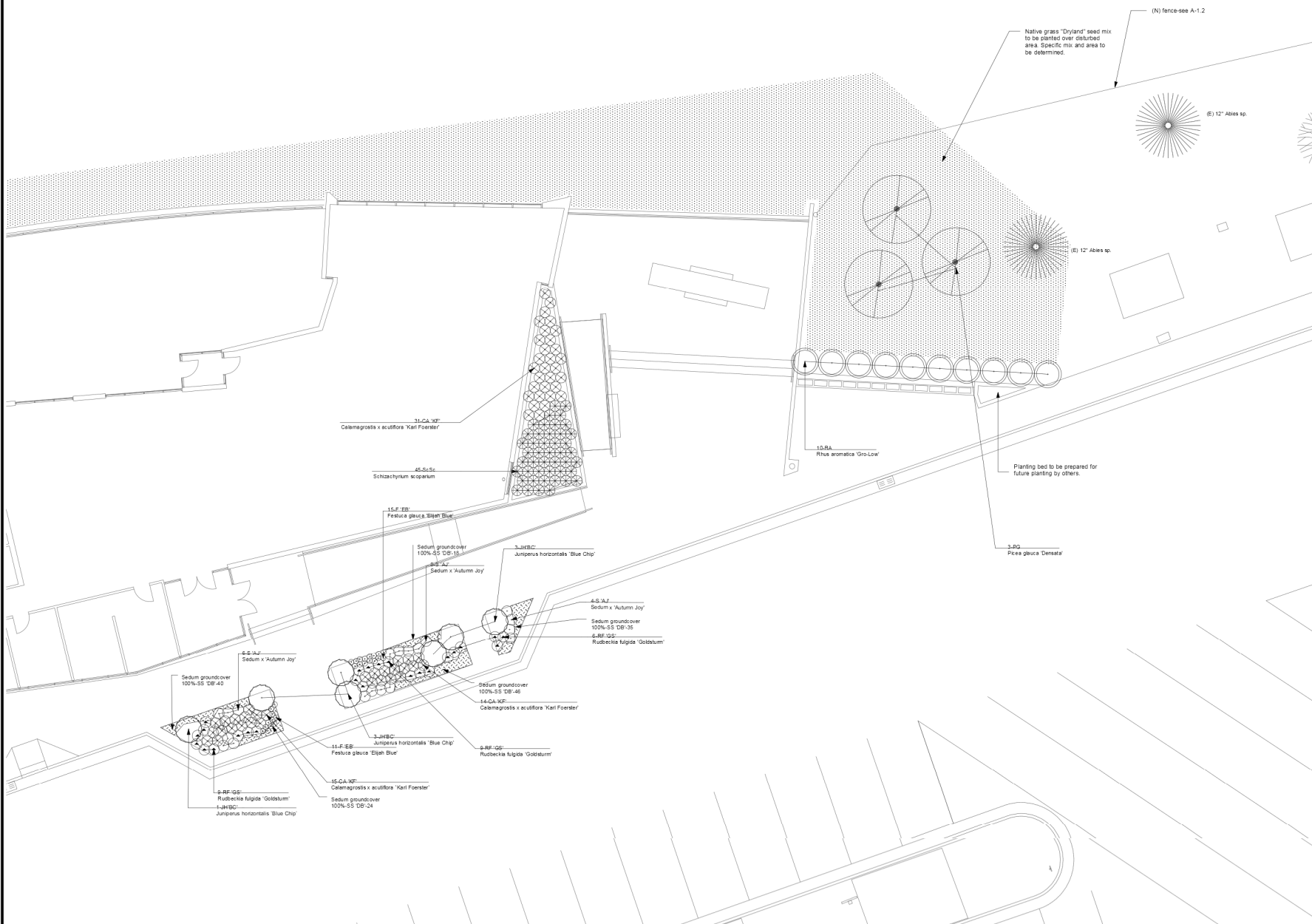
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1/8"=1'-0"
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11309

Sheet Title
**PLANTING PLAN-
AREA 1**

Sheet Number

L-1

ID	Qty	Latin Name	Common Name	Scheduled Size & Spacing	Remarks
CA KF	60	Calamagrostis x acutiflora 'Karl Foerster'	Foerster's Feather Reed Grass	1 cal. 2' o.c.	
CST	7	Cornus sericea 'Isanti'	Isanti Red-Osier Dogwood	3-5 cal. 8' o.c.	Alternate: 'Ivory Halo'
F EB	26	Festuca glauca 'Elijah Blue'	Elijah Blue Fescue	4' rot. 12' o.c.	Alternate: Schizachyrium scoparium 'Little Bluestem'
JHBC	10	Juniperus horizontalis 'Blue Chip'	Blue Chip Juniper	1-3 cal. 8' o.c.	Alternate: 'H' 'Plumosa Comis acta' 'Andorra Juniper' or 'Juniperus communis' 'Ami Oak' 'Blueberry Delic. H. Juniper' et
PG	3	Picea glauca 'Densata'	Black Hills Spruce	15 cal. 2' cal. 17'	
RA	10	Rhus aromatica 'Gro-Low'	Gro-Low Fragrant Sumac	1-3 cal. 6' o.c.	Alternate: Diervilla lonicera, Colonnaster or Berberis sr.
RF GS	24	Rudbeckia hirta 'Goldsturm'	Goldsturm Black Eyed Susan	4' rot. 1 cal. 2' o.c.	Alternate: R. F. 'Early Blue Gold', Hemerocallis 'Stella de Oro', or Gaillardia 'Arizona Sun'
S AJ	18	Sedum x Autumn Joy	Autumn Joy Stonecrop	4 rot. 1 cal. 2' o.c.	Alternate: Autumn Fire or Thanksgiving Blood
SBT	16	Spiraea betulifolia 'Tor'	Tor Birchleaf Spirea	1 cal. 9' o.c.	Alternates: 'Little Princess' & 'Gold Flame'
SeSe	45	Schizachyrium scoparium	Little Bluestem	4' rot. 1 cal. 2' o.c.	
SS DB	160	Sedum spuriatum 'Dragon's Blood'	Dragon's Blood Stonecrop	4' rot. 2' o.c.	Acceptable to combine w/ other set color (i.e. sedum cloud covers)
VL	8	Viburnum lentago	Nankeen Viburnum	15 cal. 16'	Alternate: Malva (Crabapple) species, Sorbus (Mountain Ash) species



PLANT LEGEND

- Calamagrostis x acutiflora 'Karl Foerster'
- Cornus sericea 'Isanti'
- Festuca glauca 'Elijah Blue'
- Juniperus horizontalis 'Blue Chip'
- Picea glauca 'Densata'
- Rhus aromatica 'Gro-Low'
- Rudbeckia hirta 'Goldsturm'
- Sedum x 'Autumn Joy'
- Sedum spuriatum 'Dragon's Blood'
- Spiraea betulifolia 'Tor'
- Schizachyrium scoparium
- Viburnum lentago

NOTES

REFER TO SOIL PREPARATION SPECIFICATIONS FOR INFORMATION REGARDING SITE AND SOIL PREPARATION (INCLUDING TOPSOIL, AMENDMENTS AND MULCH APPLICATION)

A PLANT LIST IS PROVIDED. IF PLANTS SPECIFIED CANNOT BE FOUND, CONTACT ARCHITECT OR OWNER'S REPRESENTATIVE FOR APPROVAL OF SUBSTITUTION. PLANT LAYOUT IS APPROXIMATE AND MAY NEED TO BE ADJUSTED IN FIELD AS REQUIRED. CONTRACTOR TO LAY OUT PLANTS FOR ARCHITECT'S OR OWNER'S REPRESENTATIVE'S APPROVAL BEFORE PLANTING.



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Sheet Title
**PLANTING PLAN-AREA 2
& PLANT SCHEDULE**

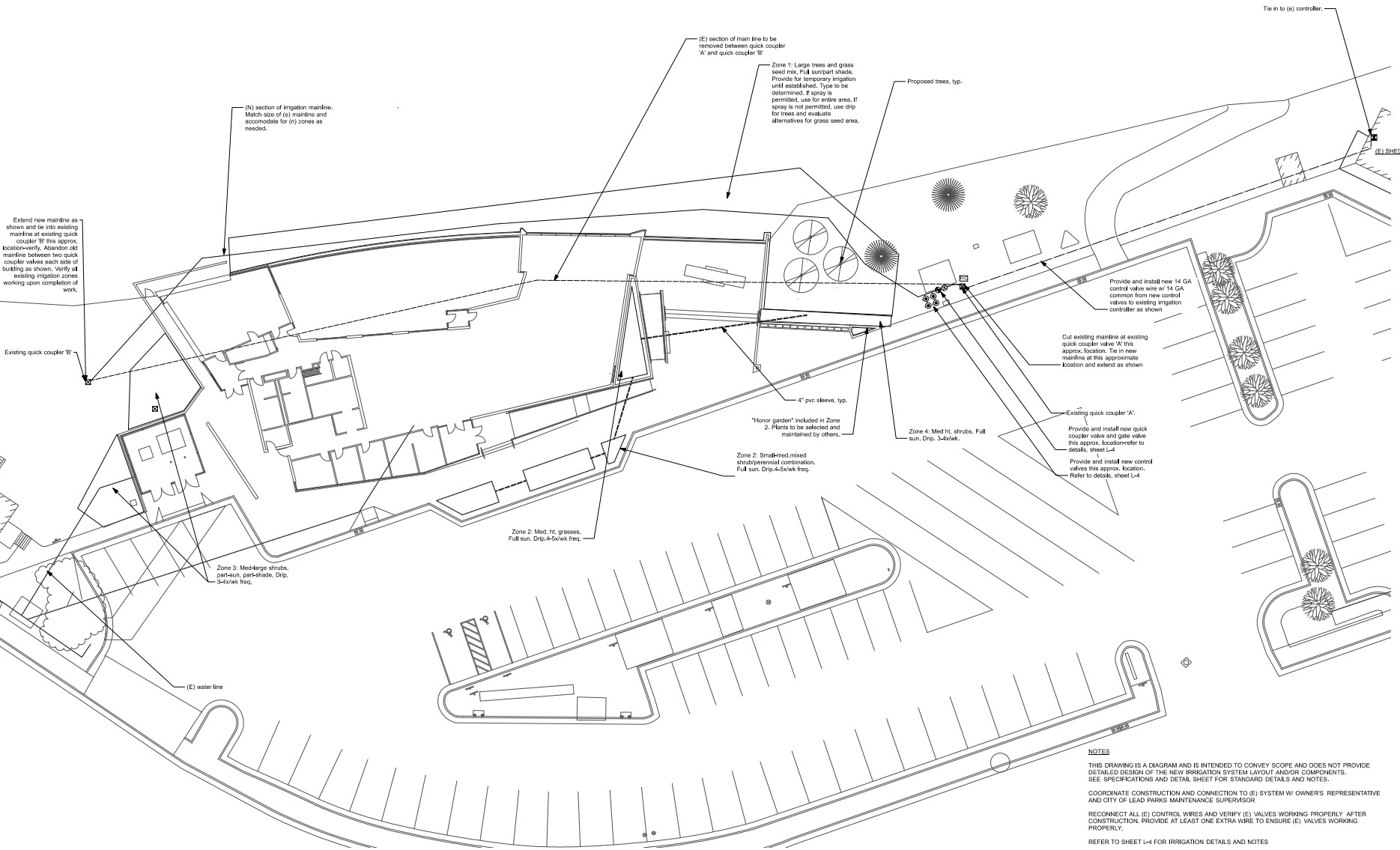
Sheet Number
L-2



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DKa

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NOTES

THIS DRAWING IS A DIAGRAM AND IS INTENDED TO CONVEY SCOPE AND DOES NOT PROVIDE DETAILED DESIGN OF THE NEW IRRIGATION SYSTEM LAYOUT AND/OR COMPONENTS. SEE SPECIFICATIONS AND DETAIL SHEET FOR STANDARD DETAILS AND NOTES.

COORDINATE CONSTRUCTION AND CONNECTION TO (E) SYSTEM W/ OWNERS REPRESENTATIVE AND CITY OF LEAD PARKS MAINTENANCE SUPERVISOR

RECONNECT ALL (E) CONTROL WIRES AND VERIFY (E) VALVES WORKING PROPERLY AFTER CONSTRUCTION. PROVIDE AT LEAST ONE EXTRA WIRE TO ENSURE (E) VALVES WORKING PROPERLY.

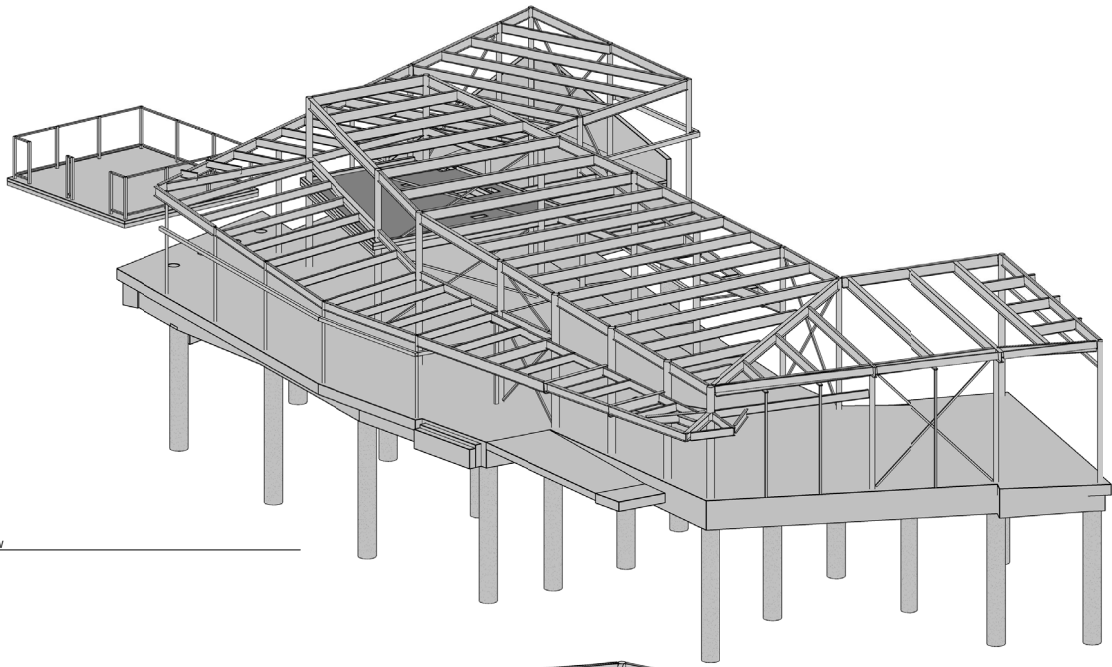
REFER TO SHEET L-4 FOR IRRIGATION DETAILS AND NOTES

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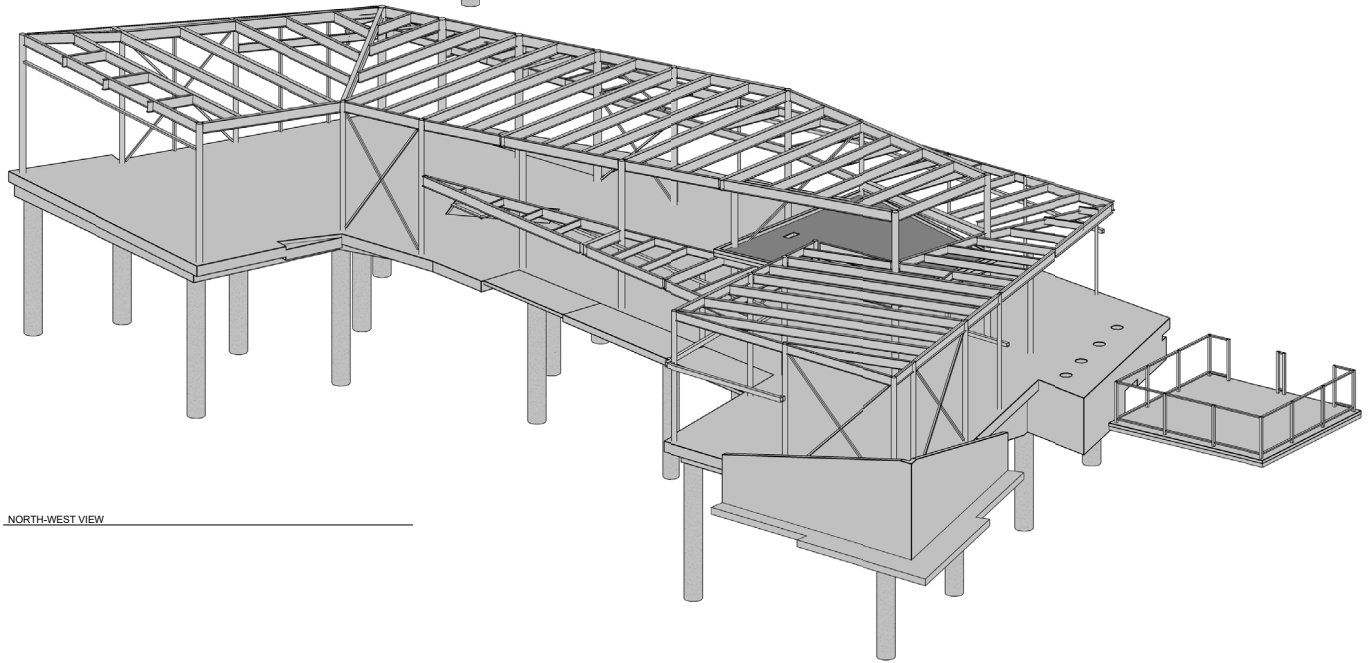
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Scale
1/16"=1'-0"
DKa Job Number
1309
Sheet Title
IRRIGATION DIAGRAM

Sheet Number
L-3



SOUTH-EAST VIEW



NORTH-WEST VIEW



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Scale

Job Number
2014-119

Sheet Title

**3-DIMENSIONAL
VIEWS**

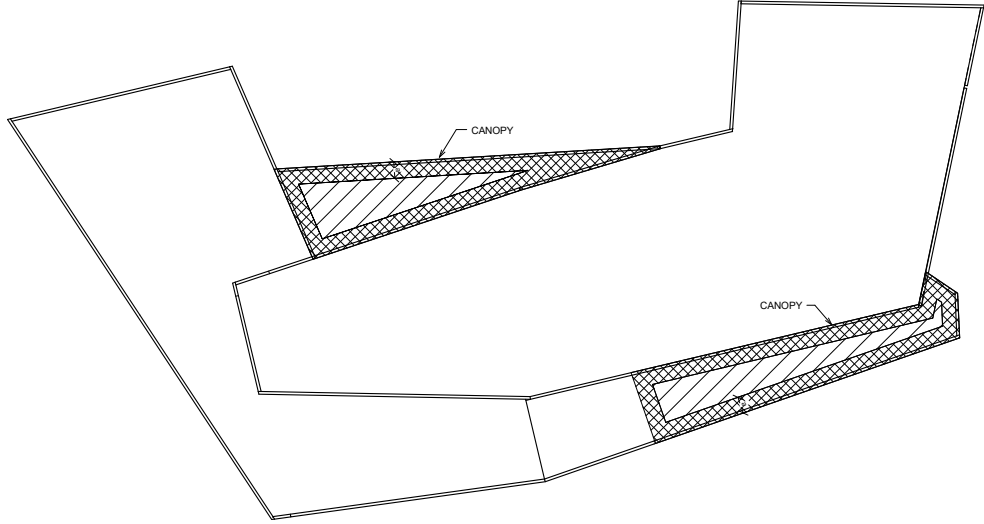
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

S-0.2



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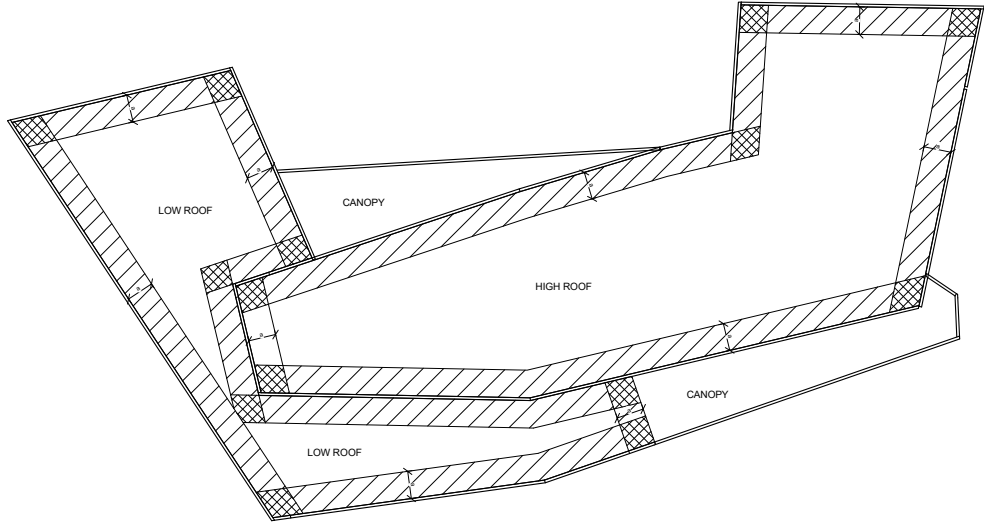
 3202 West Main Street
Suite C
Rapid City, South Dakota 57702
605.343.9600
Albertson Engineering Inc.






CANOPY / OVERHANG		
HATCH	WIDTH (ft)	WIND PRESSURE (PSF)
	3'-0"	25
	REMAINDER	25

NOTE:
WIND UPLIFT PRESSURES SHOWN ARE GROSS
PRESSURES FOR DESIGN OF COMPONENTS AND
CLADDING

WIND UPLIFT - CANOPY / OVERHANG
NTS



UPPER ROOF & LOW ROOF (EXCLUDING CANOPIES)				
PRESSURE (PSF)				
HATCH	WIDTH (ft)	EFFECTIVE WIND AREA (SQUARE FEET)		
		0 - 20'	20' - 50'	50' - 100'
	REMAINDER	19	10	17
	5'-0"	32	28	21
	5'-0"	48	40	21

NOTE:
WIND UPLIFT PRESSURES SHOWN ARE GROSS PRESSURES FOR DESIGN OF
COMPONENTS AND CLADDING

WIND UPLIFT - HIGH & LOW ROOFS
NTS

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Scale

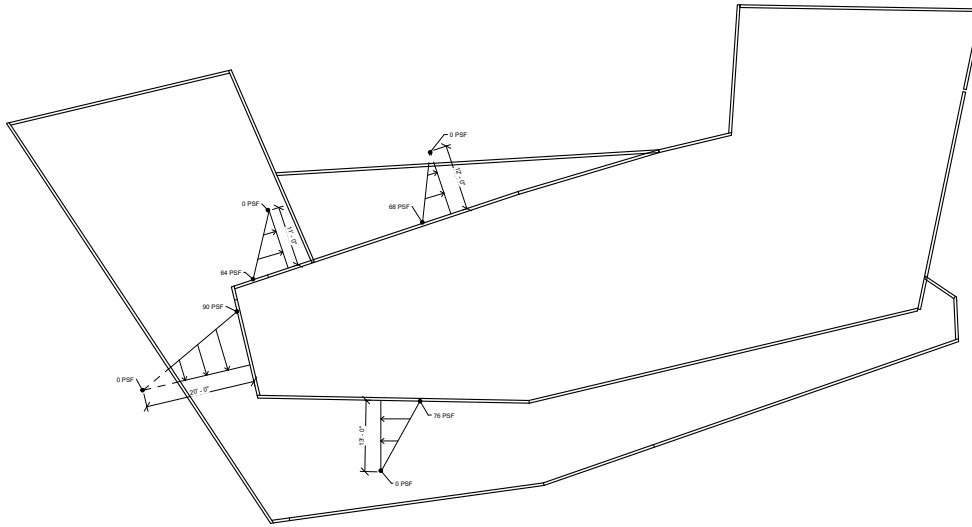
Job Number
2014-119

Sheet Title
WIND UPLIFT PLAN

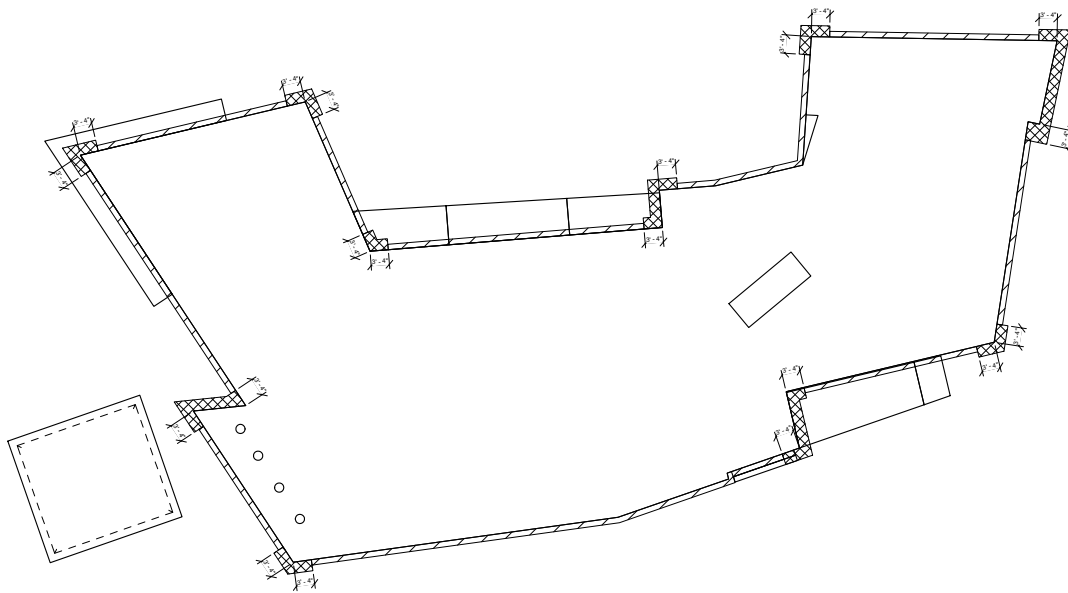
Sheet Number

S-0.3

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SNOW DRIFT PLAN
NTS



RIGID INSULATION PLAN
3/32" = 1'-0"

RIGID INSULATION PLAN NOTES

- ALL HORIZONTAL INSULATION SHALL BE 2" TYPE IV.
- ALL VERTICAL INSULATION SHALL BE 2" TYPE X, EXCEPTION: TOP 4" CAN BE LIMITED TO 1" TYPE X.
- SEE SHEET S-1.2 AND CORRESPONDING SECTIONS FOR ADDITIONAL INSULATION REQUIREMENTS BELOW EXTERIOR CONCRETE TOPPING. USE 1" MIN. TYPE IV INSULATION BELOW CONCRETE TOPPING.

RIGID INSULATION LEGEND	
HATCH	WIDTH (in)
	2'-0"
	1'-0"

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Sheet Title

**SNOW DRIFT & RIGID
INSULATION PLAN**

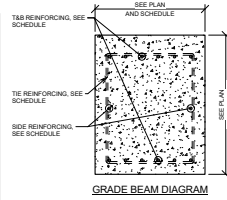
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S-0.4

GRADE BEAM SCHEDULE			
MARK	SIZE	REINFORCING	
		HORIZONTAL	TIE (T)
GB-1	3'2" D x 2'4" W	#6 @ 12" C.C. T&B #5 @ 18" C.C. MAX EA. SIDE	#4 @ 12" C.C.
GB-2	3'2" D x 2'4" W	#6 @ 12" C.C. T&B #5 @ 18" C.C. MAX EA. SIDE	#4 @ 12" C.C.
GB-3	3'2" D x 4'8" W	#6 @ 12" C.C. T&B #5 @ 18" C.C. MAX EA. SIDE	#4 @ 12" C.C.
GB-4	3'4" D x 2'4" W	#6 @ 12" C.C. T&B #5 @ 18" C.C. MAX EA. SIDE	#4 @ 12" C.C.
GB-5	3'0" D x 2'4" W	#6 @ 12" C.C. T&B #5 @ 18" C.C. MAX EA. SIDE	#4 @ 12" C.C.

ADDITIONAL REMARKS:

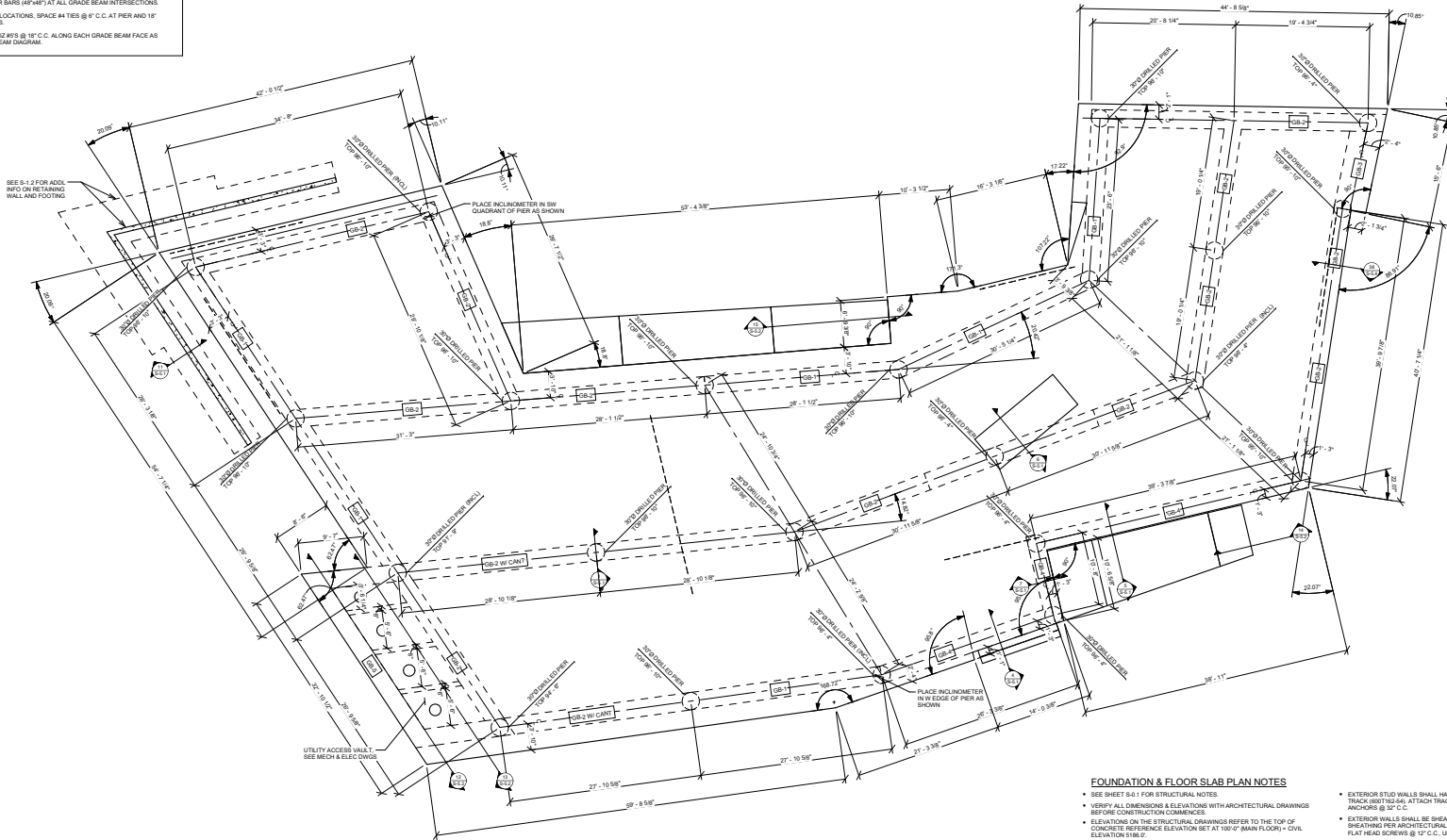
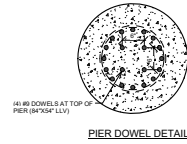
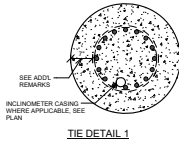
- DEPTHS SHOWN FOR GRADE BEAMS ARE A MINIMUM. DEEPEN AS REQUIRED AT WALL T. CASE EXIST. AND EXTERIOR AREAS.
- PROVIDE #4 CORNER BARS (W/4") AT ALL GRADE BEAM INTERSECTIONS.
- T AT DRILLED PIER LOCATIONS. SPACE #4 TIES @ 4" C.C. AT PIER AND 18" BEYOND PIER EDGES.
- PROVIDE CONT. HORIZ #5 @ 18" C.C. ALONG EACH GRADE BEAM FACE AS SHOWN IN GRADE BEAM DIAGRAM.



CONCRETE DRILLED PIER SCHEDULE			
SIZE (DIA)	REINFORCEMENT		REMARKS
	VERT. REIN.	TIE SIZE & SPACING	
30"	(10) #9	#4 @ 18" C.C.	TI. DETAIL 1

ADDITIONAL REMARKS:

- PROVIDE TIES @ 3" C.C. WITHIN TOP 18" OF CONCRETE PIERS.
- INCL. DENOTES INCLINOMETER TO BE INSTALLED IN DRILLED PIER.
- CONTRACTOR TO INSTALL (6) TOTAL INCLINOMETERS FURNISHED BY OWNER. COORDINATE WITH OWNER FOR INCLINOMETER SPECIFICATIONS.
- CONTRACTOR MAY SPIN TIES INTO (2) PILES. FIRST FOUR SHALL END AT BOTTOM OF PIER (12" GRADE BEAM DOWELS).
- WHEN REBAR CAGE DIAMETER ≠ REQ'D FOR PIERS WITH INCLINOMETERS, MAINTAIN MIN. 5" CLEARANCE.



FOUNDATION & FLOOR SLAB PLAN NOTES

- SEE SHEET S-0.1 FOR STRUCTURAL NOTES.
- VERIFY ALL DIMENSIONS & ELEVATIONS WITH ARCHITECTURAL DRAWINGS BEFORE CONSTRUCTION COMMENCES.
- ELEVATIONS ON THE STRUCTURAL DRAWINGS REFER TO THE TOP OF CONCRETE REFERENCE ELEVATION SET AT 100'0" MAIN FLOOR + CIVIL ELEVATION 5186.7.
- SLAB ON GRADE CONTROL JOINTS SHALL BE TOOKED OR SAWCUT. THE JOINT PATTERN SHALL BE APPROXIMATELY SQUARE AND LIMITED TO AN AREA NOT TO EXCEED 25 S.F. JOINTS SHALL BE CUT WITHIN 6 HRS OF POURING THE SLAB.
- SEE ARCHITECTURAL DRAWINGS FOR ALL VERTICAL RIGID INSULATION REQUIREMENTS.
- AT 90° CORNERS, 3" LOCATIONS SHOWN IN PLAN, THE CURB FOR THE WALL WILL BE LESS THAN 6" WIDE. SPACE METAL TRACK FASTENERS EVENLY ON EITHER SIDE FROM CENTER OF BASE PLATE, IN DIRECTION OF WALL.
- SEE MECHANICAL AND ARCHITECTURAL DRAWINGS FOR FLOOR DRAIN LOCATIONS.
- EXTERIOR STUD WALLS SHALL HAVE CONTINUOUS 16 GAUGE METAL BOTTOM TRACK (80710) AND ATTACH TRACK WITH 1/4" x 4" x 4" EMBED W/1/4" x 2" x 3/8" ANCHORS @ 32" C.C.
- EXTERIOR WALLS SHALL BE BRIDGED WITH 1/4" x 4" x 4" SPAN RATED BRIDGING FOR ARCHITECTURAL DRAWINGS. ATTACH WITH #6 SELF TAPPING FLAT HEAD SCREWS @ 12" C.C. LONG.
- [] INDICATES LATERAL BRACED FRAME. SEE LATERAL BRACE ELEVATIONS AND DETAILS ON SHEETS S-3.1 & S-3.2.
- MAINTAIN MIN 4" COVER FROM EDGE OF UTILITY PIPING TO TOP OR BOTTOM OF MET. SLAB. THICKER SLABS ARE REQUIRED TO MAINTAIN MINIMUM CLEARANCE. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR LOCATIONS, SIZES AND DEPTHS OF ALL EMBEDDED ITEMS.
- SEE GEOTECHNICAL REPORT FOR DRILLED PIER INSTALLATION REQUIREMENTS.
- DRILLING OPERATIONS WILL INCLUDE SIGNIFICANT PORTIONS THROUGH ROCKY MATERIAL AND PENETRATION INTO SOIL RESIDUE.
- STL CASING SHALL BE REMOVED IN ALL PIERS. SIZE OF DRILLED HOLE SHALL BE 3" - 3/4" IN DIAMETER.

GRADE BEAM AND DRILLED PIER FOUNDATION PLAN
1/8" = 1'-0"



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GRADE BEAM AND
DRILLED PIER
FOUNDATION PLAN

Sheet Number

S-1.1

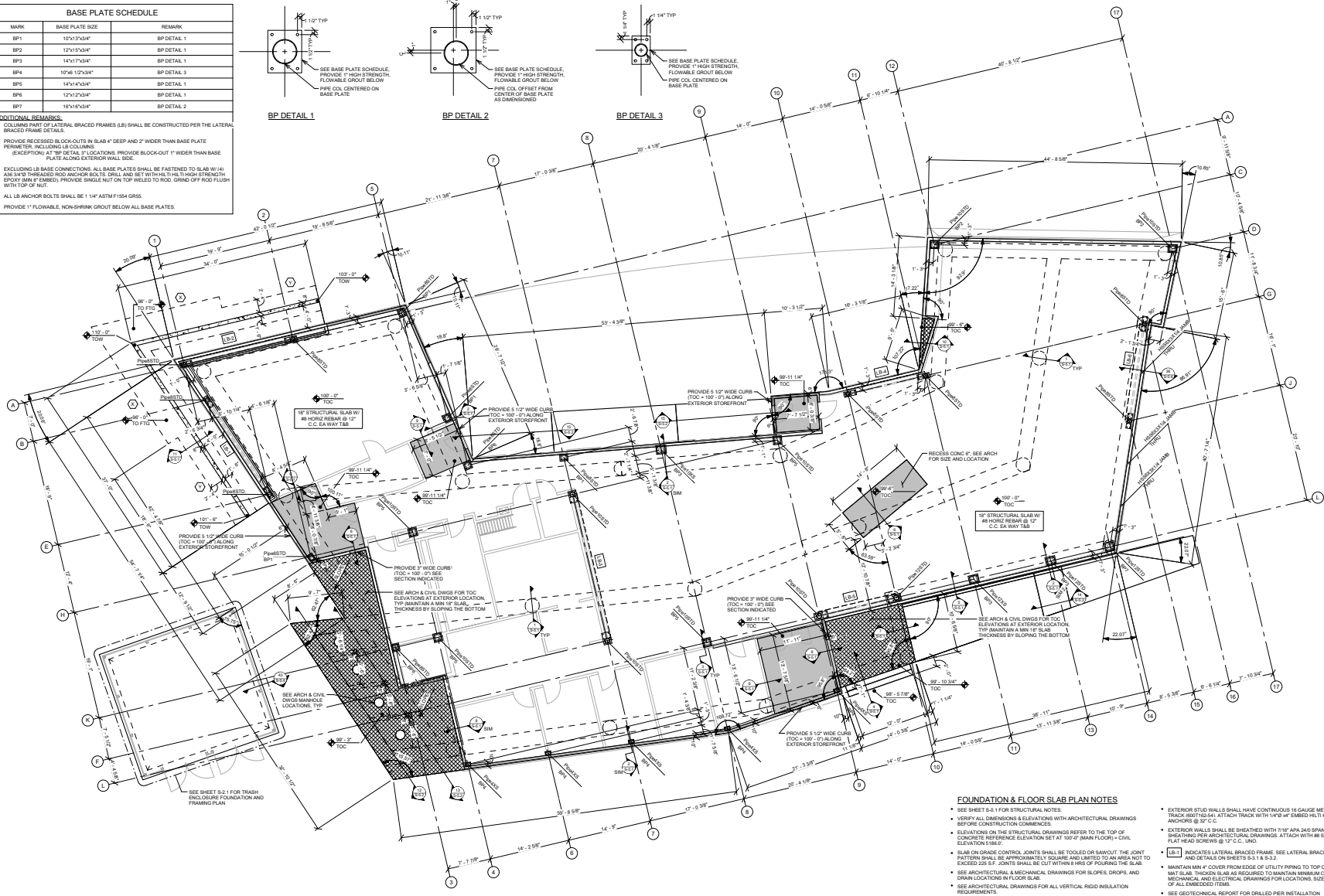
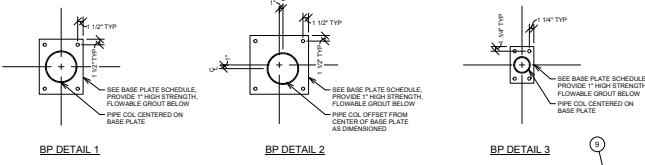
BID PACKAGE 2 (8.8.2014)



BASE PLATE SCHEDULE		
MARK	BASE PLATE SIZE	REMARK
BP1	10"X15"X3/4"	BP DETAIL 1
BP2	12"X15"X3/4"	BP DETAIL 1
BP3	14"X17"X3/4"	BP DETAIL 1
BP4	16"X12"X3/4"	BP DETAIL 3
BP5	14"X14"X3/4"	BP DETAIL 1
BP6	12"X12"X3/4"	BP DETAIL 1
BP7	16"X18"X3/4"	BP DETAIL 2

ADDITIONAL DEMANDS:

- COLUMNS PART OF LATERAL BRACED FRAMES (LB) SHALL BE CONSTRUCTED PER THE LATERAL BRACED FRAME DETAILS.
- PROVIDE RECESSED BLOCKOUTS IN SLAB 4" DEEP AND 2" WIDER THAN BASE PLATE PERIMETER, INCLUDING LB COLUMNS. (EXCEPTION: AT 180 DEGREE LOCATIONS, PROVIDE BLOCKOUT 1" WIDER THAN BASE PLATE ALONG EXTERIOR WALL SIDE.)
- EXCLUDING LB BRACE CONNECTIONS, ALL BASE PLATES SHALL BE FASTENED TO SLAB W/ 4# A308 3/4" THREADED ROD ANCHOR BOLTS. DRILL AND SET WITH 1/4" HILTI HIGH STRENGTH GROUT (8M" EMBED). PROVIDE SINGLE NUT ON TOP WELDED TO ROD. GRIND OFF ROD FLUSH WITH TOP OF NUT.
- ALL LB ANCHOR BOLTS SHALL BE 1 1/4" ASTM F1554 GR55.
- PROVIDE 1" FLOWABLE NON-SHRINK GROUT BELOW ALL BASE PLATES.



FOOTING SCHEDULE			
Mark	Type	Reinforcement	Remarks
X	6'-0" x 1'-0" x CONT	(8) #6 LONG WAY & #6 @ 12" C.C. SHORT WAY	BOTTOM
Y	4'-0" x 1'-0" x CONT	(8) #6 LONG WAY & #6 @ 16" C.C. SHORT WAY	BOTTOM

MAT SLAB FOUNDATION PLAN
1/8" = 1'-0"

FOUNDATION & FLOOR SLAB PLAN NOTES

- SEE SHEET S-1.1 FOR STRUCTURAL NOTES.
- VERIFY ALL DIMENSIONS & ELEVATIONS WITH ARCHITECTURAL DRAWINGS BEFORE CONSTRUCTION COMMENCES.
- ELEVATIONS ON THE STRUCTURAL DRAWINGS REFER TO THE TOP OF CONCRETE REFERENCE ELEVATION SET AT 100'-0" (MAIN FLOOR) - CIVIL ELEVATION 118'-0".
- SLAB ON GRADE CONTROL JOINTS SHALL BE TOOLED OR SAWCUT THE JOINT PATTERN SHALL BE APPROXIMATELY SQUARE AND LIMITED TO AN AREA NOT TO EXCEED 225 S.F. JOINTS SHALL BE CUT WITHIN 8 HRS OF POURING THE SLAB.
- SEE ARCHITECTURAL & MECHANICAL DRAWINGS FOR SLOPES, DROPS, AND DRAIN LOCATIONS IN FLOOR SLAB.
- SEE ARCHITECTURAL DRAWINGS FOR ALL VERTICAL RIGID INSULATION REQUIREMENTS.
- AT 180 DEGREE LOCATIONS SHOWN IN PLAN, THE CURB FOR THE WALL WILL BE LESS THAN 1/2" WIDE. SPACE REIN. TRACK EXTENDING 8" AWAY ON EITHER SIDE FROM CENTER OF BASE PLATE IN DIRECTION OF WALL.
- SEE MECHANICAL AND ARCHITECTURAL DRAWINGS FOR FLOOR DRAIN LOCATIONS.
- EXTERIOR STUO WALLS SHALL HAVE CONTINUOUS 16 GAUGE METAL BOTTOM TRACK (807132-04) ATTACH TRACK WITH 1/4"x3/4" EMBED HELIX KH-8Z SCREW ANCHORS @ 30" C.C.
- EXTERIOR WALLS SHALL BE SHEATHED WITH 7/16" APA 240 SPAN RATED BRACING PER ARCHITECTURAL DRAWINGS. ATTACH WITH #8 SELF TAPPING FLAT HEAD SCREWS @ 12" C.C. LING.
- [181] INDICATES LATERAL BRACED FRAME. SEE LATERAL BRACE ELEVATIONS AND DETAILS ON SHEETS S-1.1 & S-1.2.
- MAINTAIN MIN 4" COVER FROM EDGE OF UTILITY PIPING TO TOP OR BOTTOM OF MAT SLAB. THICKEN SLAB AS REQUIRED TO MAINTAIN MINIMUM CLEARANCE. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR LOCATIONS, SIZES AND DEPTHS OF ALL EMBEDDED ITEMS.
- SEE GEOTECHNICAL REPORT FOR DRILLED PIER INSTALLATION REQUIREMENTS.
- DEBILING OPERATIONS WILL INCLUDE SIGNIFICANT PORTIONS THROUGH ROCKY MATERIAL AND PENETRATION INTO SOLID BEDROCK.
- STU. CAPPING SHALL BE REMOVED IN ALL PIERS. SIZE OF DRILLED HOLE SHALL BE 30"-36" IN DIAMETER.



DOUBLE ANGLE CONNECTION SCHEDULE				
BEAM	3/4"x3 A325N BOLTS	CONNECTION ANGLE LENGTH	THICKNESS	ALTERNATE WELD TO BM SIZE (SPOW WELD ONLY)
WB	2	6 1/2"	5/16"	5/16" FILLET
W12 & 14	3	8 1/2"	5/16"	5/16" FILLET
W16	4	11 1/2"	5/16"	5/16" FILLET
W18	5	14 1/2"	5/16"	5/16" FILLET
W21	6	17 1/2"	5/16"	5/16" FILLET
W24	7	20 1/2"	5/16"	5/16" FILLET
W27	8	23 1/2"	5/16"	5/16" FILLET
W30	9	26 1/2"	5/16"	5/16" FILLET

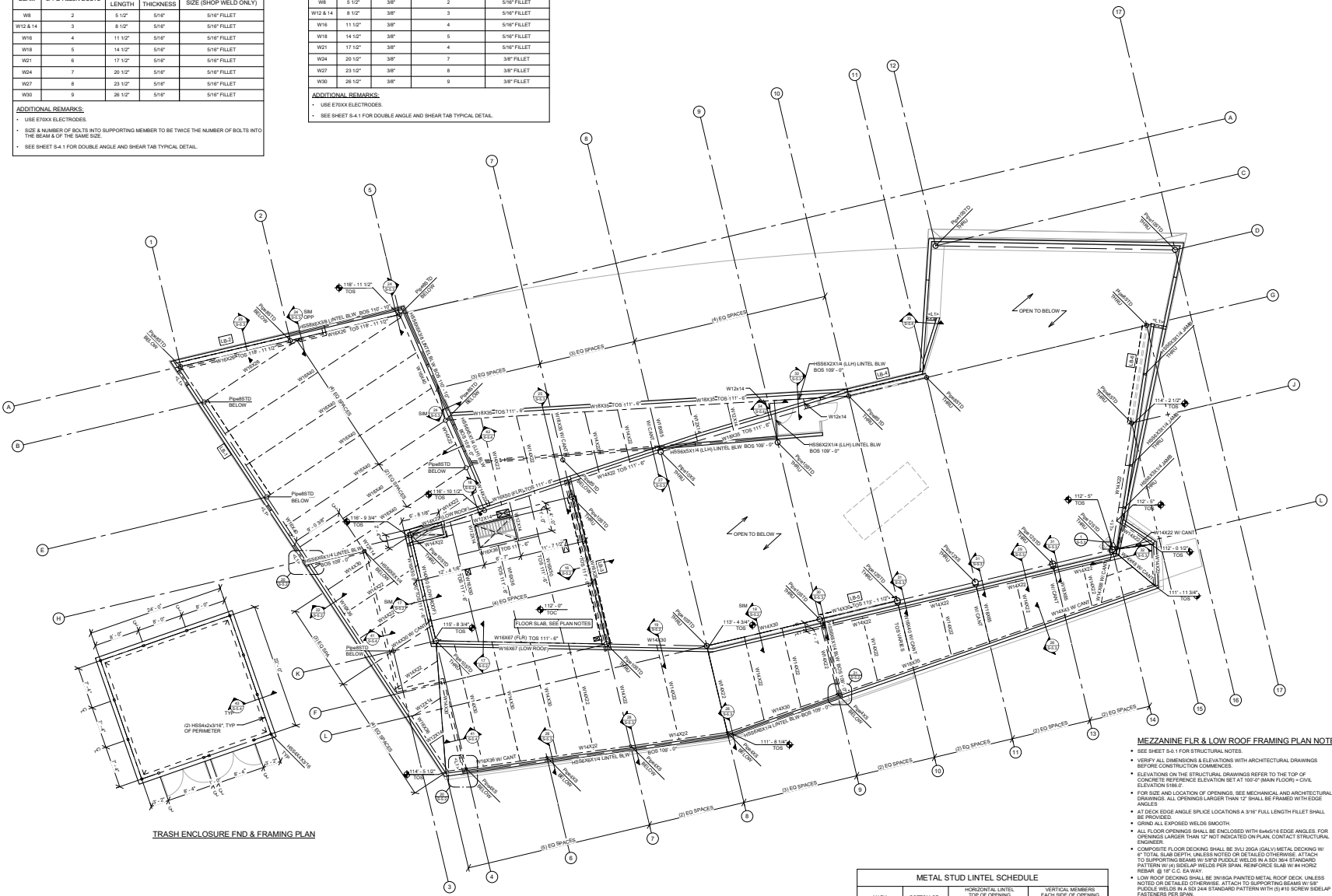
ADDITIONAL REMARKS:

- USE D70X ELECTRODES
- SIZE & NUMBER OF BOLTS INTO SUPPORTING MEMBER TO BE TWICE THE NUMBER OF BOLTS INTO THE BEAM & OF THE SAME SIZE
- SEE SHEET S-4.1 FOR DOUBLE ANGLE AND SHEAR TAB TYPICAL DETAIL.

SHEAR TAB CONNECTION SCHEDULE				
BEAM	HEIGHT	THICKNESS	3/4"x3 A325N BOLTS	WELD SIZE TO COL.
WB	5 1/2"	3/8"	2	5/16" FILLET
W12 & 14	8 1/2"	3/8"	3	5/16" FILLET
W16	11 1/2"	3/8"	4	5/16" FILLET
W18	14 1/2"	3/8"	5	5/16" FILLET
W21	17 1/2"	3/8"	6	5/16" FILLET
W24	20 1/2"	3/8"	7	5/16" FILLET
W27	23 1/2"	3/8"	8	5/16" FILLET
W30	26 1/2"	3/8"	9	5/16" FILLET

ADDITIONAL REMARKS:

- USE D70X ELECTRODES
- SEE SHEET S-4.1 FOR DOUBLE ANGLE AND SHEAR TAB TYPICAL DETAIL.



TRASH ENCLOSURE FND & FRAMING PLAN

MEZZANINE FLR & LOW ROOF FRAMING PLAN NOTES

- SEE SHEET S-4.1 FOR STRUCTURAL NOTES.
- VERIFY ALL DIMENSIONS & ELEVATIONS WITH ARCHITECTURAL DRAWINGS BEFORE CONSTRUCTION COMMENCES.
- ELEVATIONS ON THE STRUCTURAL DRAWINGS REFER TO THE TOP OF CONCRETE REFERENCE ELEVATION SET AT 100.00' (MAIN FLOOR) - CIVIL ELEVATION SHEET.
- FOR SIZE AND LOCATION OF OPENINGS, SEE MECHANICAL AND ARCHITECTURAL DRAWINGS. ALL OPENINGS LARGER THAN 12" SHALL BE FRAMED WITH EDGE ANGLES.
- AT BECK EDGE ANGLE SPICE LOCATIONS A 3/16" FULL LENGTH FILLET SHALL BE PROVIDED.
- GRIND ALL EXPOSED WELDS SMOOTH.
- ALL FLOOR OPENINGS SHALL BE ENCLOSED WITH 6x4x1/8" EDGE ANGLES, FOR OPENINGS LARGER THAN 12" NOT INDICATED ON PLAN, CONTACT STRUCTURAL ENGINEER.
- COMPOSITE FLOOR DECKING SHALL BE 301.20GA (GALV) METAL DECKING W/ 4" TOTAL SLAB DEPTH, UNLESS NOTED OR DETAILED OTHERWISE. ATTACH TO SUPPORTING BEAM W/ 2x4x1/2" WELDS PER SPAN. REINFORCE SLAB W/ HORIZ. #3 BARS W/ 18" O.C. WELDS PER SPAN.
- LOW ROOF DECKING SHALL BE 301.20GA (GALV) METAL ROOF DECK, UNLESS NOTED OR DETAILED OTHERWISE. ATTACH TO SUPPORTING BEAMS W/ 2x4x1/2" WELDS PER SPAN. REINFORCE PATTERN WITH #3 BARS W/ 18" O.C. WELDS PER SPAN.
- ALL BEAM-TO-BEAM CONNECTIONS SHALL BE DOUBLE ANGLE CONNECTIONS AND ALL BEAM-TO-COLUMN CONNECTIONS SHALL BE SHEAR TAB CONNECTIONS UNLESS NOTED OTHERWISE.
- INDICATES MOMENT CONNECTION
- [LB] --- INDICATES LATERAL BRACED FRAME. SEE LATERAL BRACE ELEVATIONS AND DETAILS ON SHEETS S-3.1 & S-3.2.

METAL STUD LINTEL SCHEDULE				
MARK	BOTTOM OF OPENING TRACK	HORIZONTAL LINTEL		VERTICAL MEMBER
		TOP OF OPENING STUDS	TRACKS	EACH SIDE OF OPENING TRIMMERS
-L-1-	(1) 600T120-54	(2) 600S162-48	(2) 600T125-54	(2) 600S162-48 (2) 600T162-48

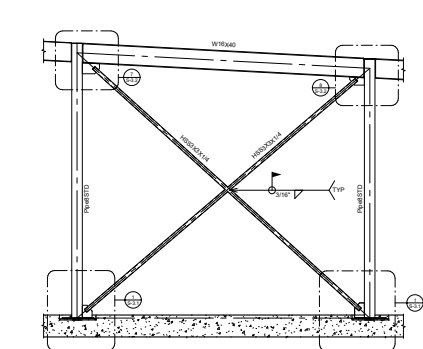
MEZZANINE FLR & LOW ROOF FRAMING PLAN
1/8" = 1'-0"



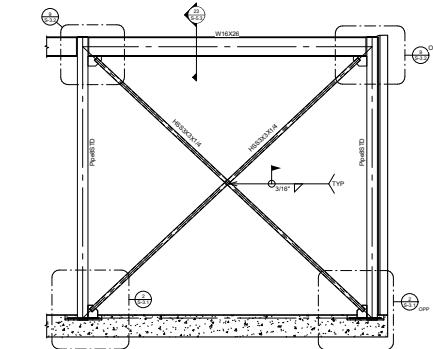
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1521 NW Kearney St
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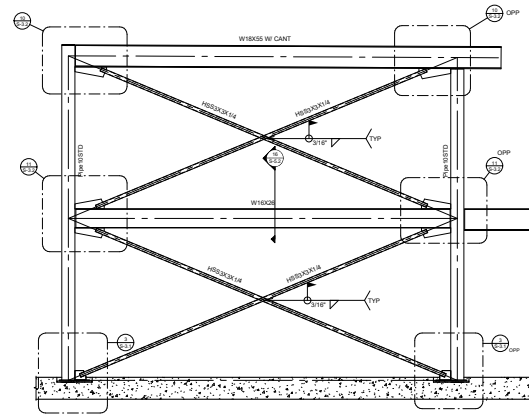
3202 West Main Street
Suite C
Rapid City, South Dakota 57702
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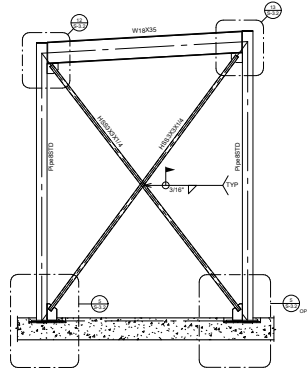
LATERAL BRACE FRAMING ELEVATION (LB-1)
1/4" = 1'-0"



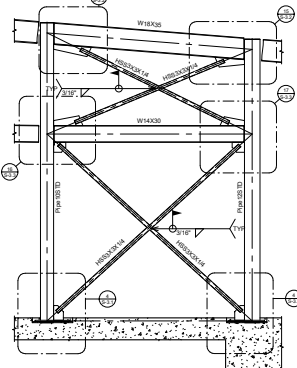
LATERAL BRACE FRAMING ELEVATION (LB-2)
1/4" = 1'-0"



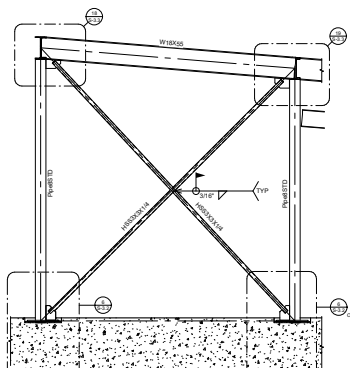
LATERAL BRACE FRAMING ELEVATION (LB-3)
1/4" = 1'-0"



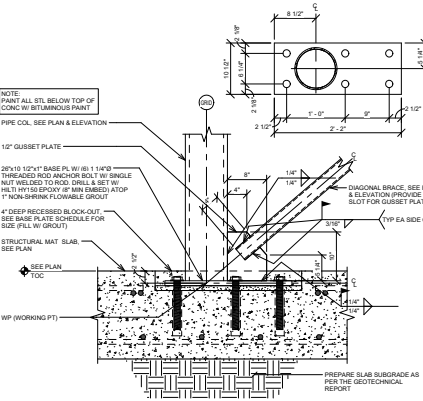
LATERAL BRACE FRAMING ELEVATION (LB-4)
1/4" = 1'-0"



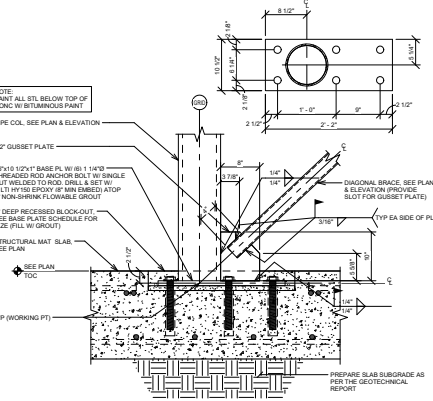
LATERAL BRACE FRAMING ELEVATION (LB-5)
1/4" = 1'-0"



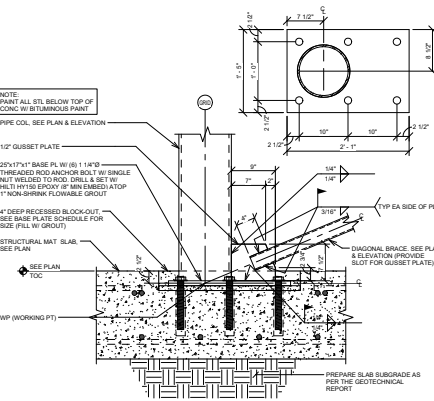
LATERAL BRACE FRAMING ELEVATION (LB-6)
1/4" = 1'-0"



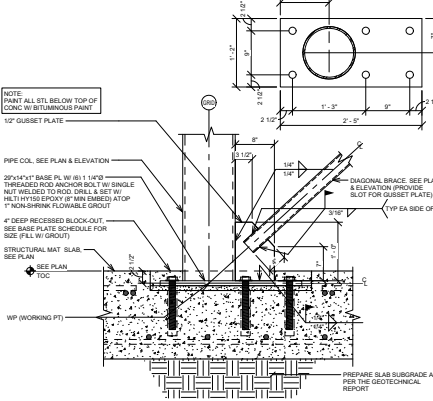
LATERAL BRACE DETAIL 1
1" = 1'-0"



LATERAL BRACE DETAIL 2
1" = 1'-0"



LATERAL BRACE DETAIL 3
1" = 1'-0"



LATERAL BRACE DETAIL 4
1" = 1'-0"

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Sheet Title
LATERAL BRACE ELEVATIONS AND DETAILS

Sheet Number

S-3.1

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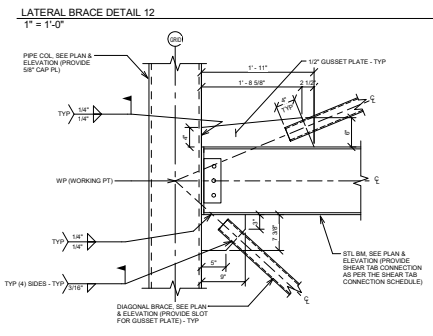
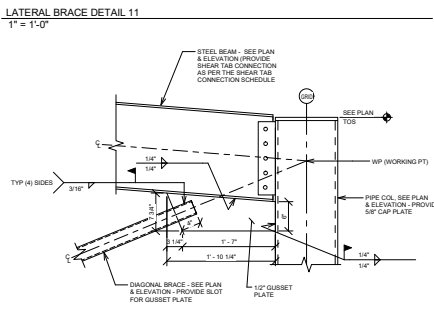
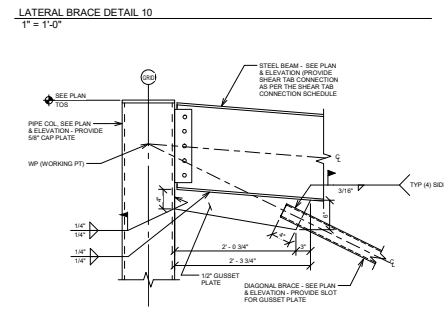
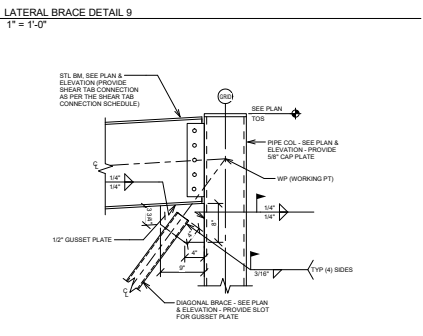
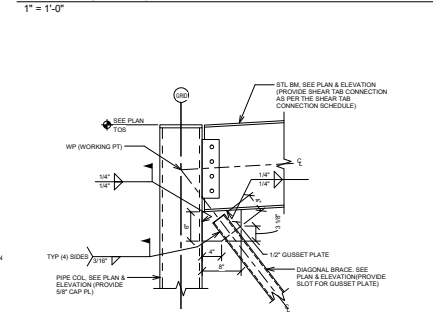
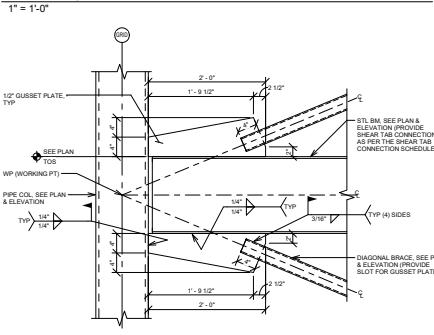
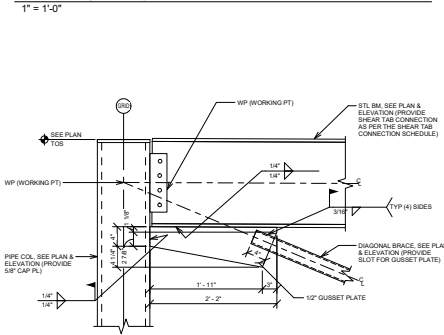
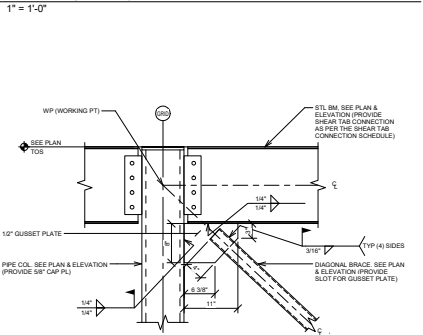
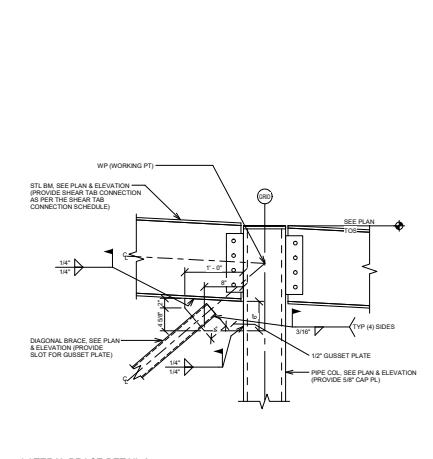
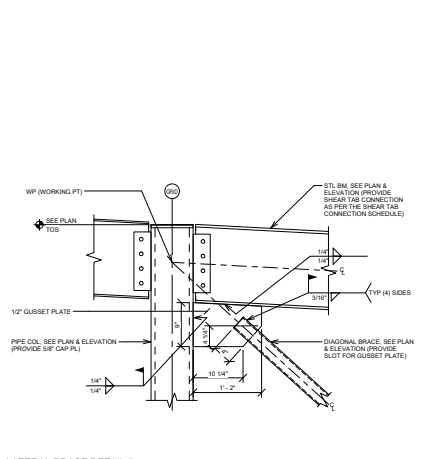
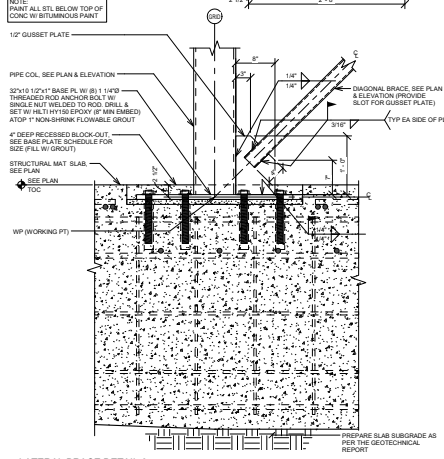
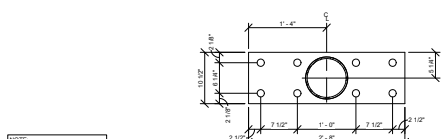
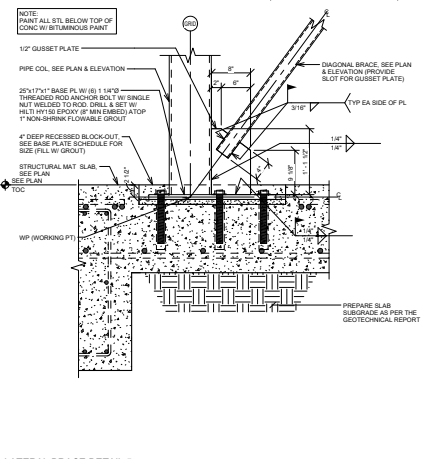
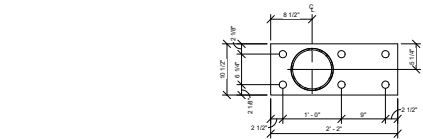
Scale
Job Number
2014-119

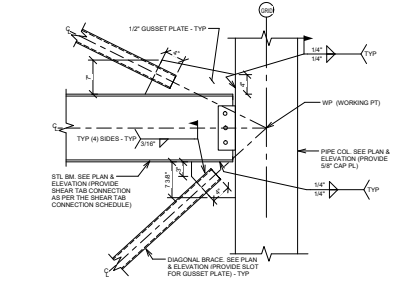
Sheet Title
LATERAL BRACE DETAILS

Sheet Number

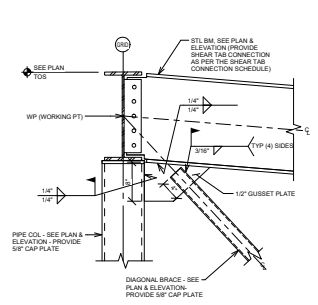
S-3.2

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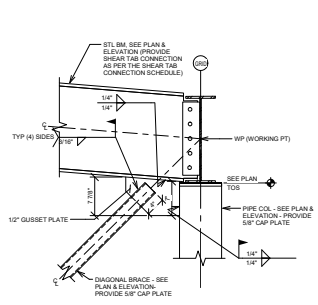




LATERAL BRACE DETAIL 17
1" = 1'-0"



LATERAL BRACE DETAIL 18
1" = 1'-0"



LATERAL BRACE DETAIL 19
1" = 1'-0"

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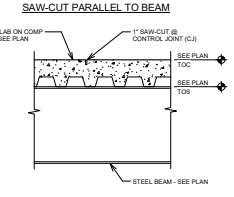
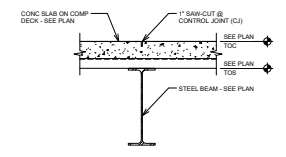
Scale
Job Number
2014-119

Sheet Title
**LATERAL BRACE
DETAILS**

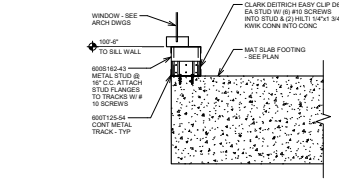
Sheet Number

S-3.3

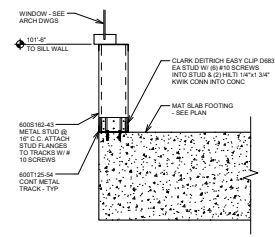
BID PACKAGE 2 (8.8.2014)



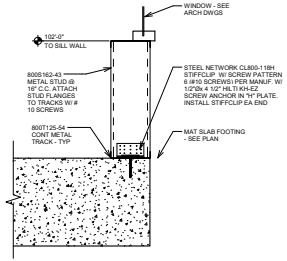
SAW-CUT PERPENDICULAR TO BEAM



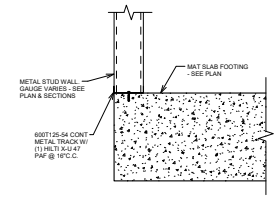
TYP 6\"/>



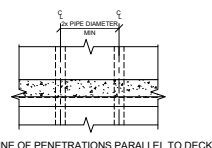
TYP 18\"/>



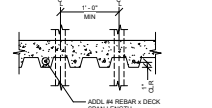
TYP 2-0\"/>



TYP METAL STUD TRACK TO SLAB DETAIL
1" = 1'-0"

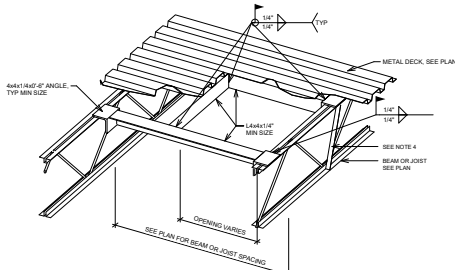


NOTE:
PENETRATIONS SHALL BE SLEEVED. ACTUAL CUT THROUGH COMPOSITE DECKING SHALL NOT BE MADE UNTIL SLAB HAS ATTAINED 25% ITS STRENGTH.



LINE OF PENETRATIONS PERP TO DECK

TYP ELEVATED DECK PENETRATION
1" = 1'-0"



TYP OPENING IN METAL DECK
3/4" = 1'-0"

TYP OPENING IN METAL DECK
3/4" = 1'-0"

NOTE:
ATTACHMENT SHALL BE WITH #12 TEX SCREWS AT SUPPORTS AND #10 TEX SCREWS AT SIDE LAPS. HELIX PIPES FOR INCLINED PILING SYSTEM MAY BE USED IN LIEU OF #10 TEX SCREWS.

ATTACH DECK TO SUPPORT AT ALL FLUTES ON END LAPS

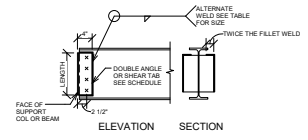
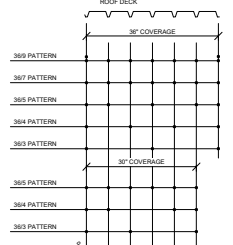
1 1/2" WIDE RIB 3/4" WIDE PAINTED STEEL DECK

SUPPORTS

ATTACH DECK AT REOD PATTERN AT ALL PERIMETER & INTERIOR SUPPORTS

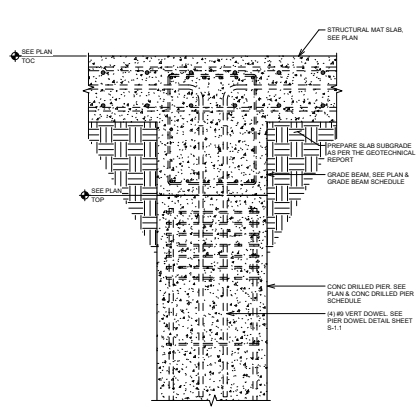
SIDE LAP SCREWS PER DECK SPAN AT REOD PATTERN

TYP ROOF DECK ATTACHMENT PATTERNS
3/4" = 1'-0"

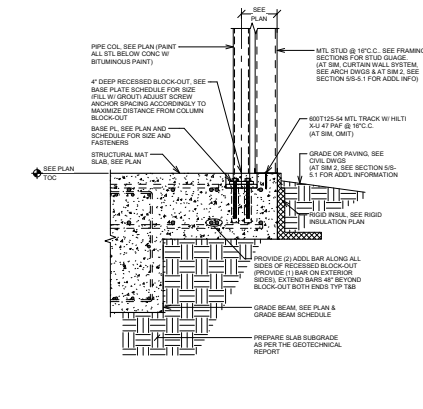


TYP DBL ANGLE & SHEAR TAB CONNECTION DETAIL
3/4" = 1'-0"

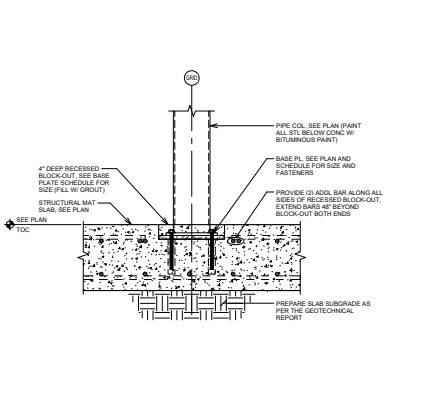
NOTE: SEE SHEET S1-2 FOR DOUBLE ANGLE AND SHEAR TAB SCHEDULES



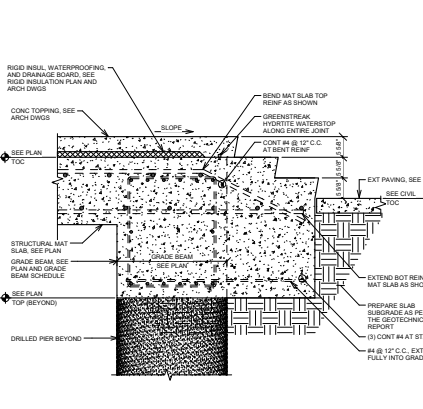
SECTION 1
3/4" = 1'-0"



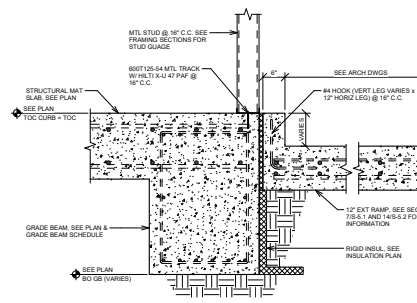
SECTION 2
3/4" = 1'-0"



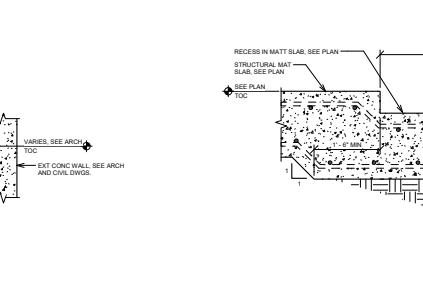
SECTION 3
3/4" = 1'-0"



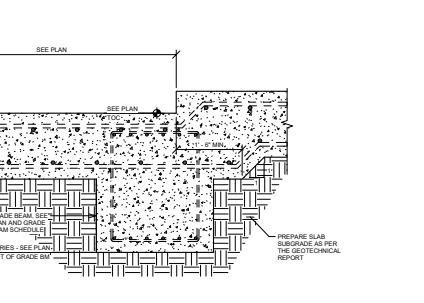
SECTION 4
3/4" = 1'-0"



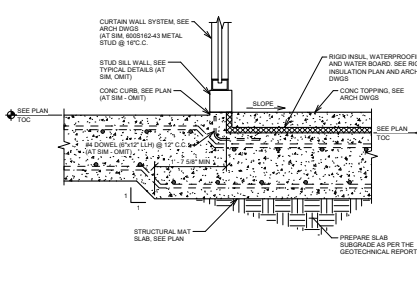
SECTION 5
3/4" = 1'-0"



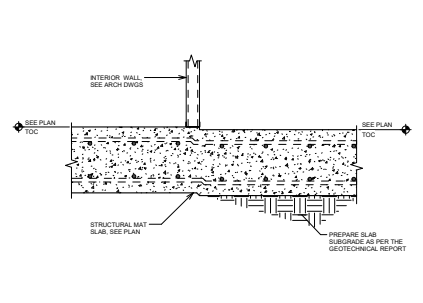
SECTION 6
3/4" = 1'-0"



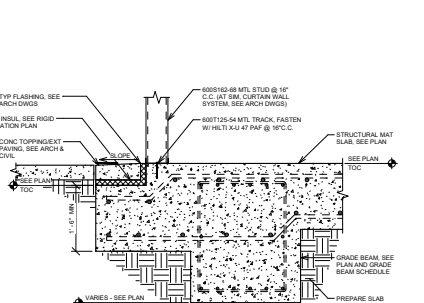
SECTION 7
3/4" = 1'-0"



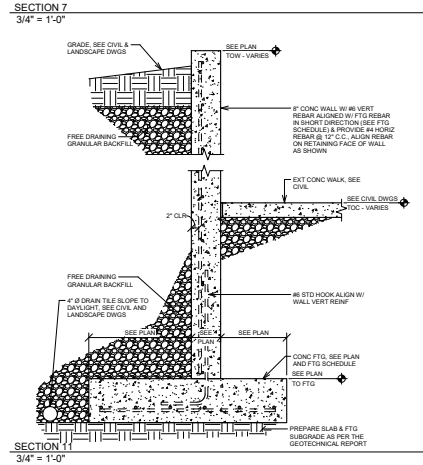
SECTION 8
3/4" = 1'-0"



SECTION 9
3/4" = 1'-0"



SECTION 10
3/4" = 1'-0"



SECTION 11
3/4" = 1'-0"

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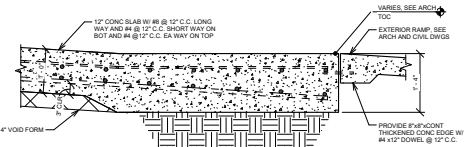
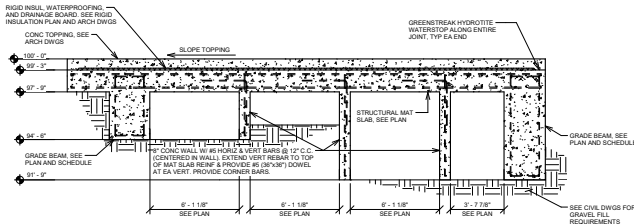
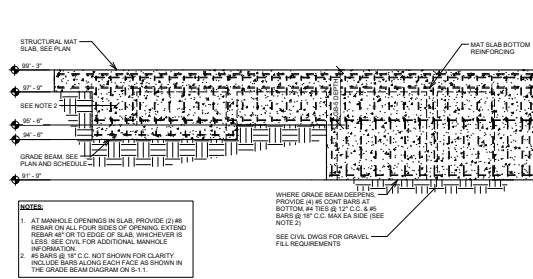
Job Number
2014-119

Sheet Title
SECTIONS

Sheet Number

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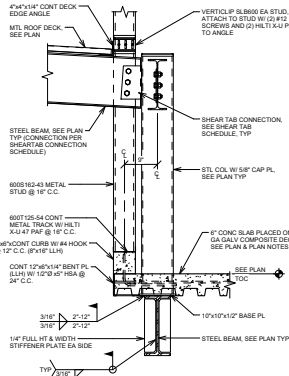
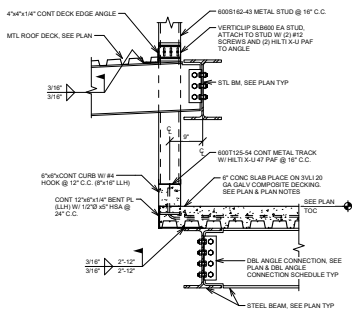
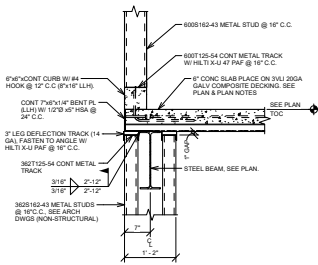
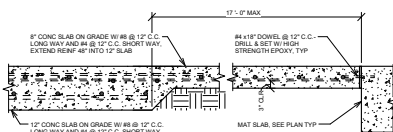
BID PACKAGE 2 (8.8.2014)



SECTION 12
1/4" = 1'-0"

SECTION 13
1/4" = 1'-0"

SECTION 14
3/4" = 1'-0"

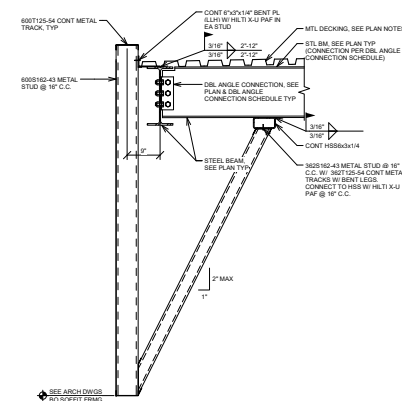
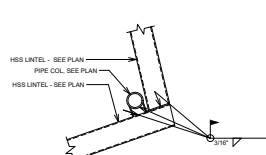
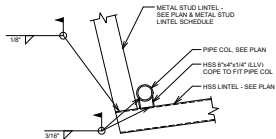
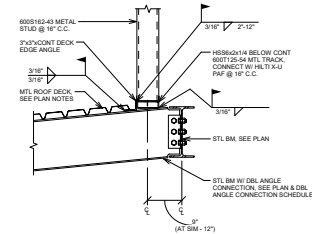


SECTION 15
3/4" = 1'-0"

SECTION 16
3/4" = 1'-0"

SECTION 17
3/4" = 1'-0"

SECTION 18
3/4" = 1'-0"



SECTION 19
3/4" = 1'-0"

SECTION 20
3/4" = 1'-0"

SECTION 21
3/4" = 1'-0"

SECTION 22
3/4" = 1'-0"



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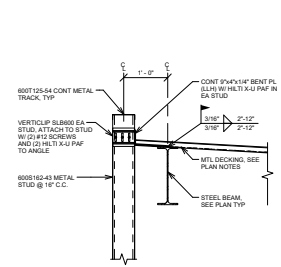
Job Number
2014-119

Sheet Title
SECTIONS

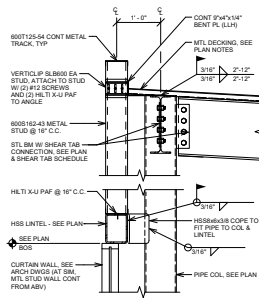
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S-5.3

BID PACKAGE 2 (8.8.2014)

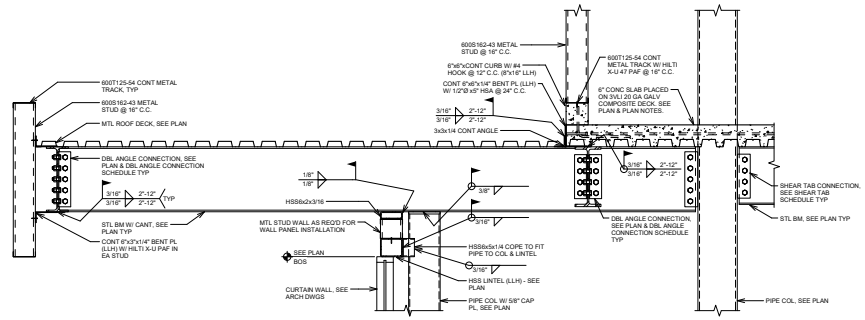
SECTION 23
3/4" = 1'-0"



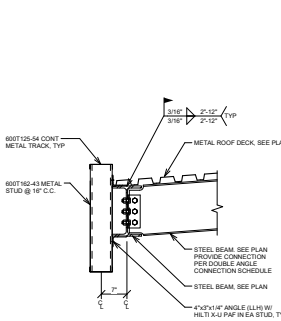
SECTION 24
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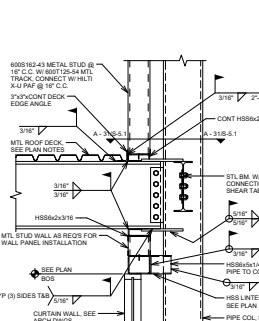
SECTION 25
3/4" = 1'-0"



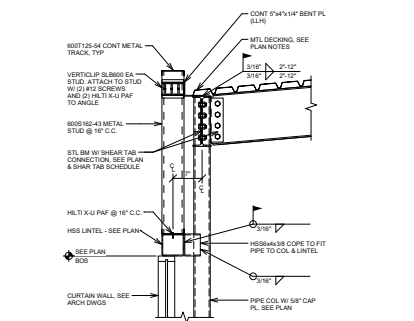
SECTION 26
3/4" = 1'-0"



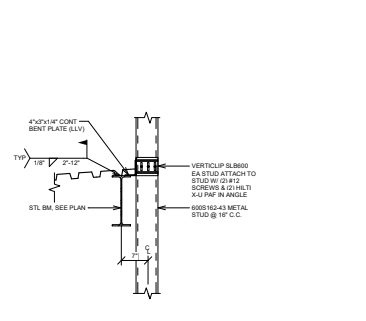
SECTION 27
3/4" = 1'-0"



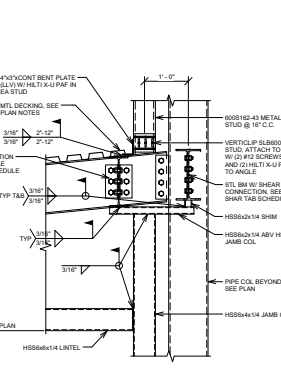
SECTION 28
3/4" = 1'-0"



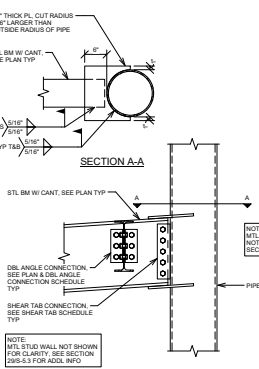
SECTION 29
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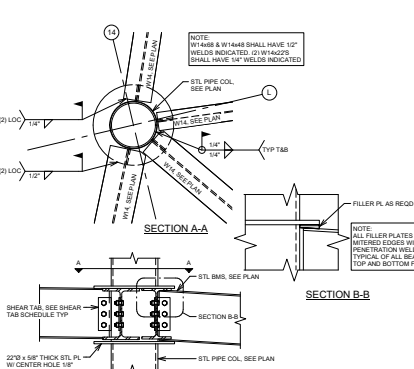
SECTION 30
3/4" = 1'-0"



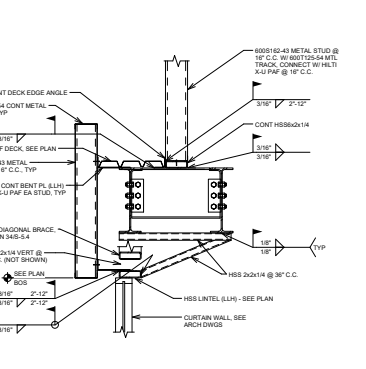
SECTION 31
3/4" = 1'-0"



SECTION 32
3/4" = 1'-0"

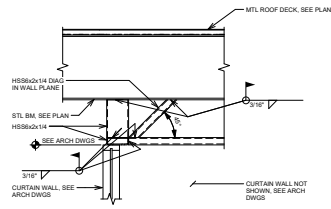


SECTION 33
3/4" = 1'-0"

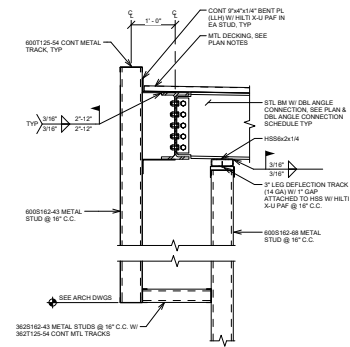




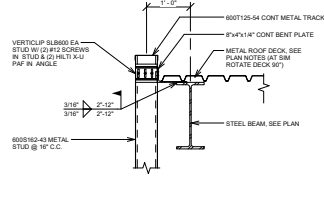
SECTION 34
3/4" = 1'-0"



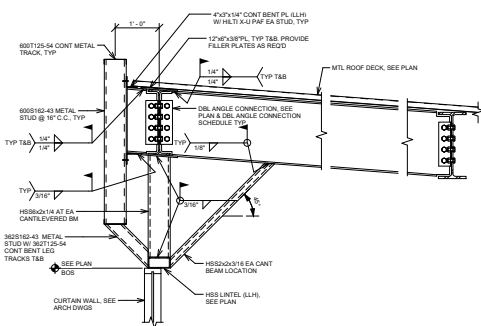
SECTION 35
3/4" = 1'-0"



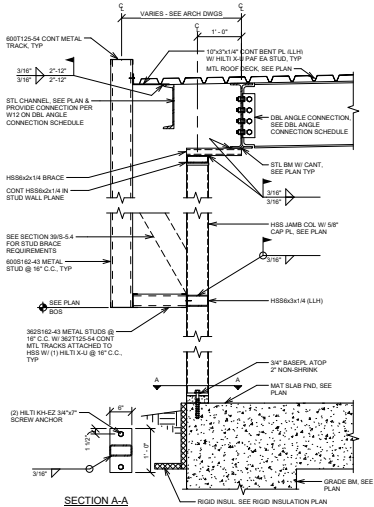
SECTION 36
3/4" = 1'-0"



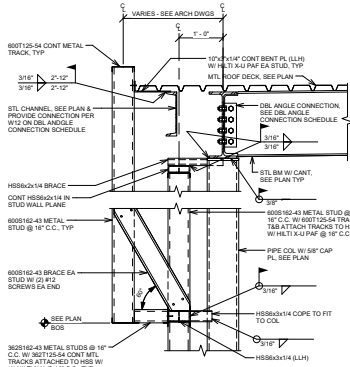
SECTION 37
3/4" = 1'-0"



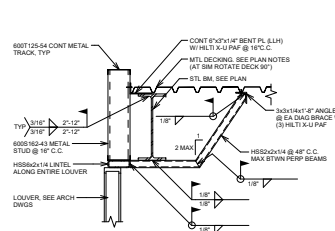
SECTION 38
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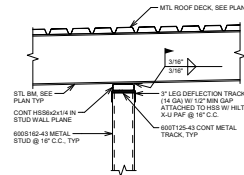
SECTION 39
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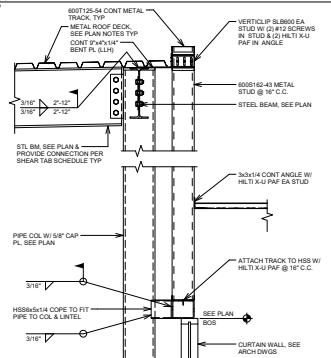
SECTION 40
3/4" = 1'-0"



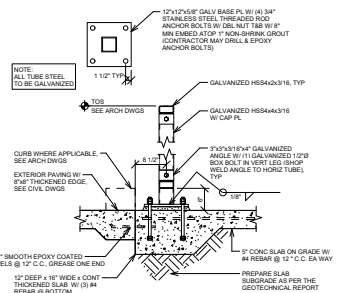
SECTION 41
3/4" = 1'-0"



SECTION 42
3/4" = 1'-0"



SECTION 43
3/4" = 1'-0"



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Sheet Title

SECTIONS

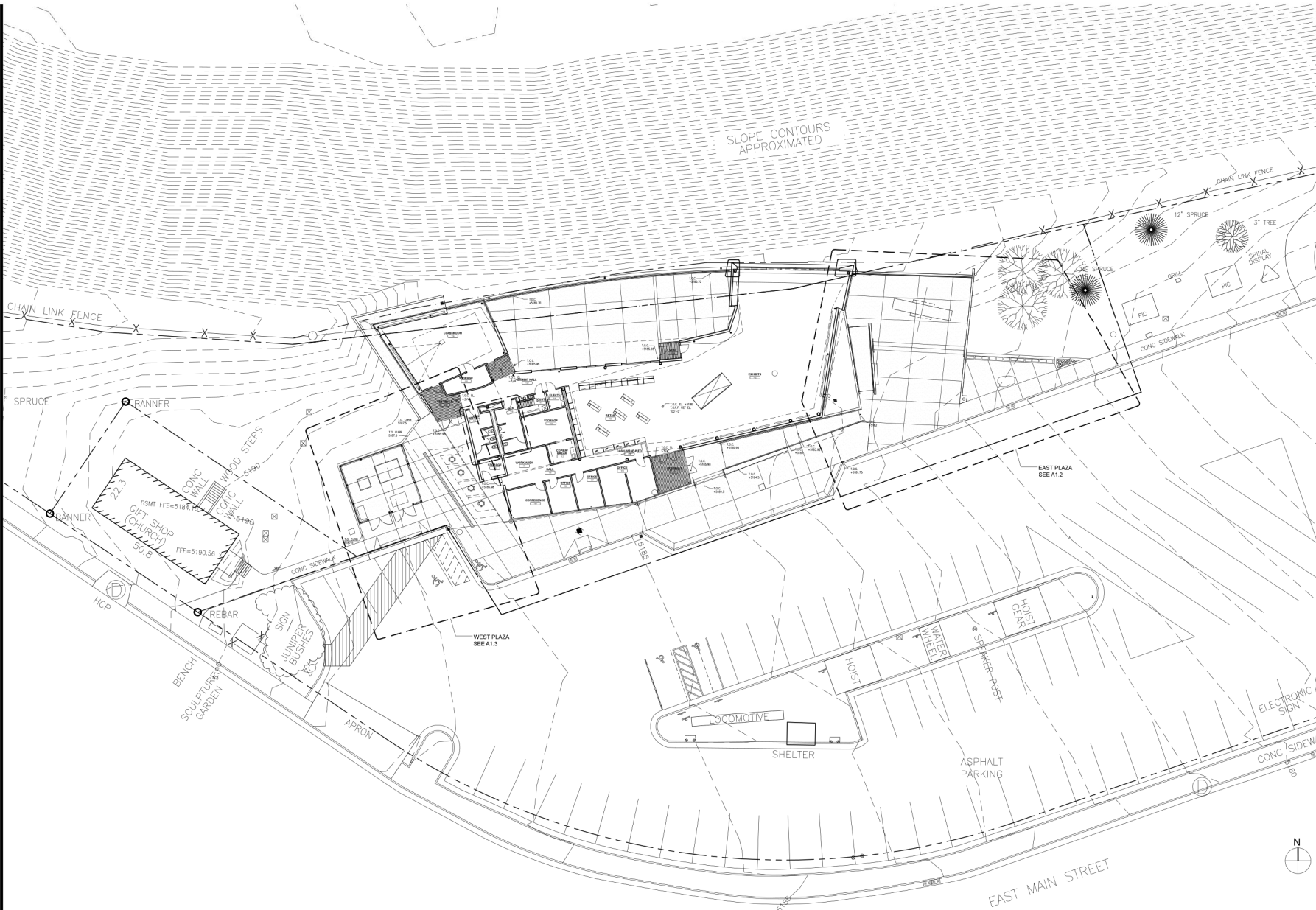
Sheet Number

S-5.4

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SITE PLAN NOTES:
1. SEE LANDSCAPE DRAWINGS FOR NEW PLANTING & IRRIGATION.
2. SEE CIVIL DRAWINGS FOR GRADING AND DRAINAGE AND SITE UTILITIES.

Printing Date
Bid Package No. 2 8 August 2014

Revisions Date

Scale
1/16"=1'-0"
DKa Job Number
1309

Sheet Title
**ARCHITECTURAL
SITE PLAN**

Sheet Number

A-1.1

Architect:

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Printing Date
Bid Package No. 2 8 August 2014

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Scale
3/16" = 1'-0"
DKa Job Number
1309

Sheet Title
**WEST PLAZA
SITE PLAN**

Sheet Number

A-1.3



NOTES:
1. SEE LANDSCAPE DRAWINGS FOR NEW PLANTING & IRRIGATION.
2. SEE CIVIL DRAWINGS FOR GRADES & DRAINAGE.

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FOR EAST PLAZA
PLAN SEE A1.2

FOR WEST PLAZA
PLAN SEE A1.3

GENERAL NOTES:

1. TOP OF CONCRETE ELEVATIONS SHOWN ARE FOR REFERENCE ONLY. COORDINATE WITH CIVIL AS REQUIRED TO MAINTAIN ADEQUATE DRAINAGE & ADA ACCESS, WITH CONSIDERATION TO FUTURE SETTLEMENT.
2. SEE A-5.1 FOR TYPICAL PARTITION TYPES.
3. SEE A-5.0 FOR TYPICAL MOUNTING HEIGHTS.
4. SEE A-5.0 FOR DOOR AND FINISH SCHEDULES.
5. SEE A-5.3 FOR FLOOR FINISH TRANSITION DETAILS.

Printing Date
Bid Package No. 2 8 August 2014

Revisions Date

Scale
1/8"=1'-0"
DKa Job Number
1309

Sheet Title
FLOOR PLAN

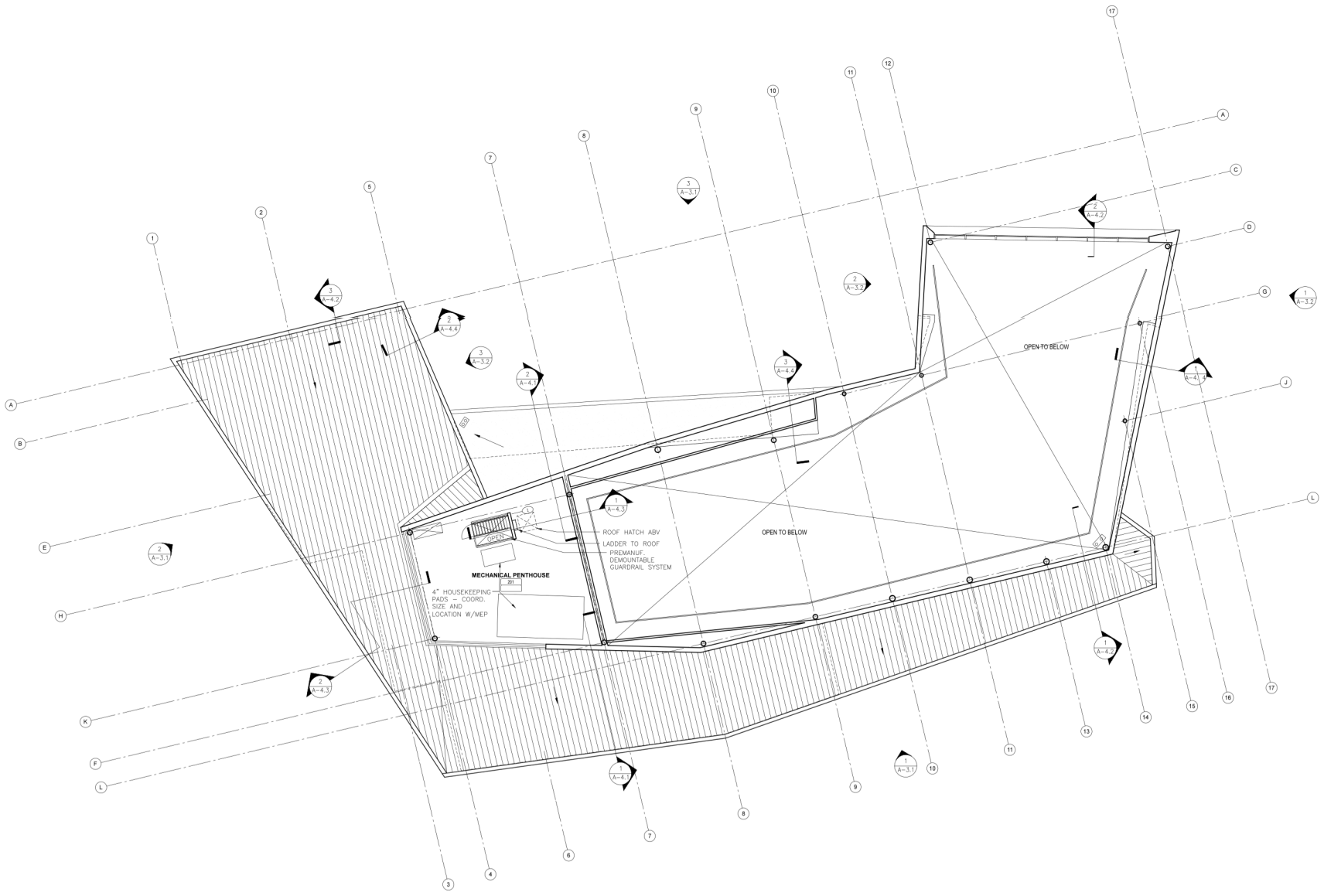
Sheet Number

A-2.1

Architect:



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Bid Package No. 2	8 August 201

Revisions	Date

Scale
1/8"=1'-0"
DKa Job Number
1309

Sheet Title
PENTHOUSE PLAN

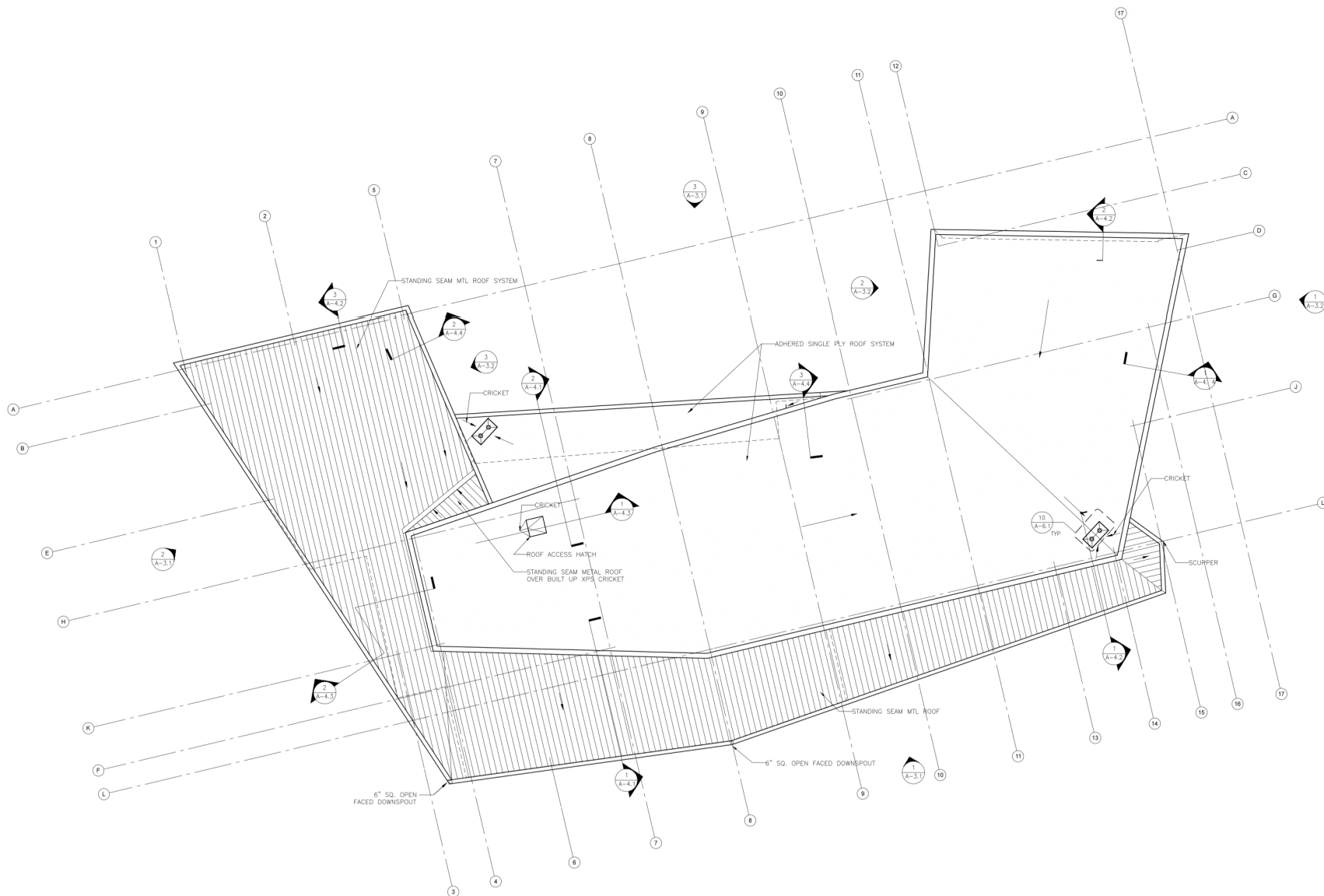
Sheet Number

A-2.2

Architect:

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Printing Date
Bid Package No. 2 8 August 2014

Revisions	Date

Scale
1/8"=1'-0"
DKa Job Number
1309

Sheet Title
ROOF PLAN

Sheet Number

A-2.3

Architect:

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Architecture LLC**
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Printing Date
Bid Package No. 2 8 August 2014

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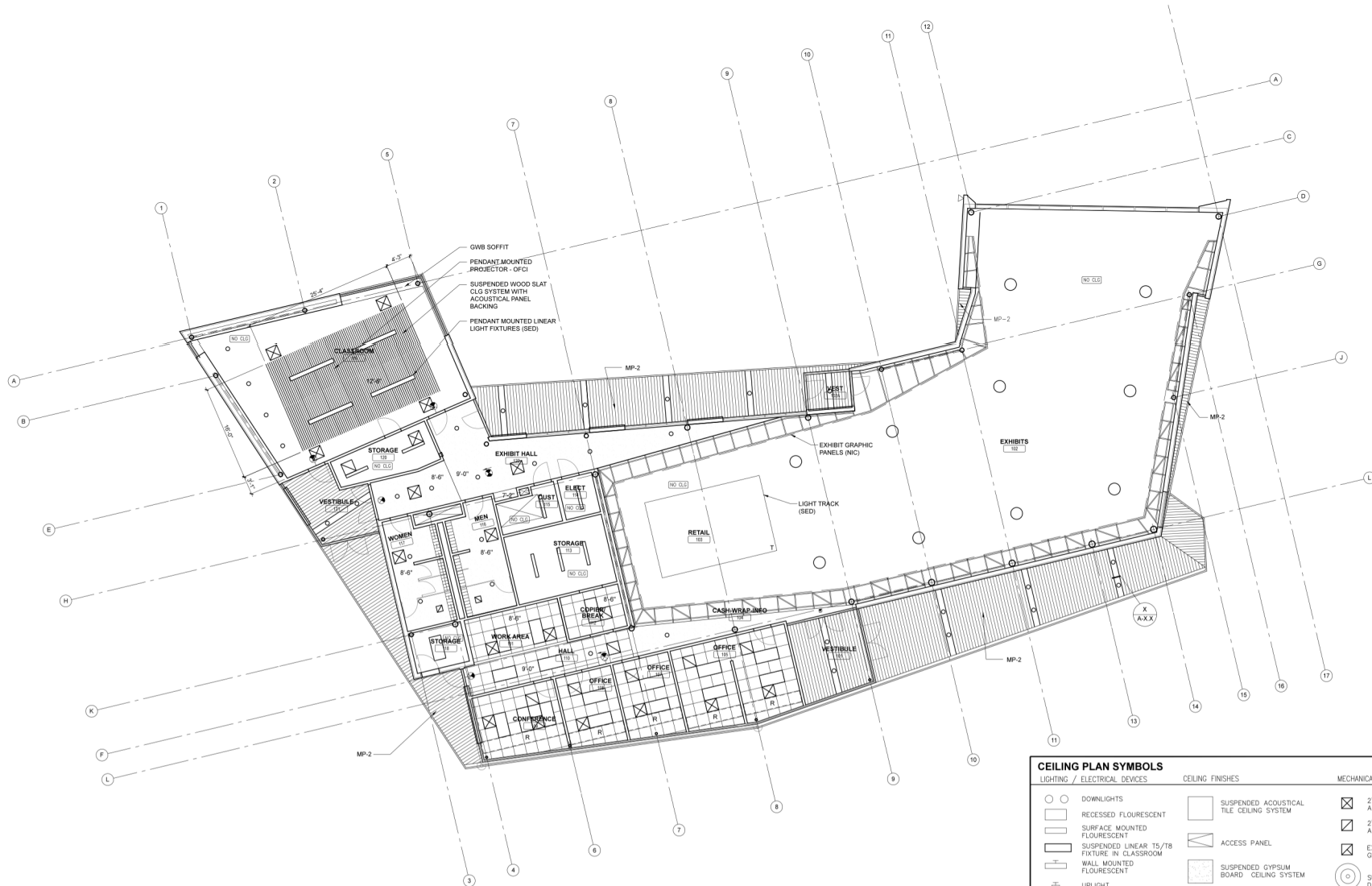
Scale
1/8"=1'-0"
DKa Job Number
1309

Sheet Title

**REFLECTED CEILING
PLAN**

Sheet Number

A-2.4



CEILING PLAN SYMBOLS

LIGHTING / ELECTRICAL DEVICES	CEILING FINISHES	MECHANICAL DEVICES
○ DOWNLIGHTS	▭ SUSPENDED ACOUSTICAL TILE CEILING SYSTEM	⊠ 2' x 2' SUPPLY AIR GRILL
◻ RECESSED FLOURESCENT	▭ SURFACE MOUNTED FLOURESCENT	⊠ 2' x 2' RETURN AIR GRILL
▭ SURFACE MOUNTED FLOURESCENT	▭ SUSPENDED LINEAR T5/T8 FIXTURE IN CLASSROOM	⊠ EXHAUST GRILL
▭ WALL MOUNTED FLOURESCENT	▭ WALL MOUNTED FLOURESCENT	⊙ SUPPLY AIR DIFFUSER
⊠ UPLIGHT	▭ SUSPENDED GYPSUM BOARD CEILING SYSTEM	• SPRINKLER HEAD
⊠ WALL MOUNTED EXIT LIGHT	▭ EXPOSED STRUCTURE	▭ RADIANT PANEL
⊠ CEILING MOUNTED EXIT LIGHT	▭ CEILING HEIGHT	
⊠ WALL MOUNTED SMOKE DETECTOR	▭ 8'-0" CEILING HEIGHT	
▭ CEILING MOUNTED SMOKE DETECTOR	▭ MDF GRILL W/FELT COVERED ACOUSTIC PANEL	
▭ CABLE TRAY		
▭ TRACK LIGHT		
▭ SECURITY CAMERA		

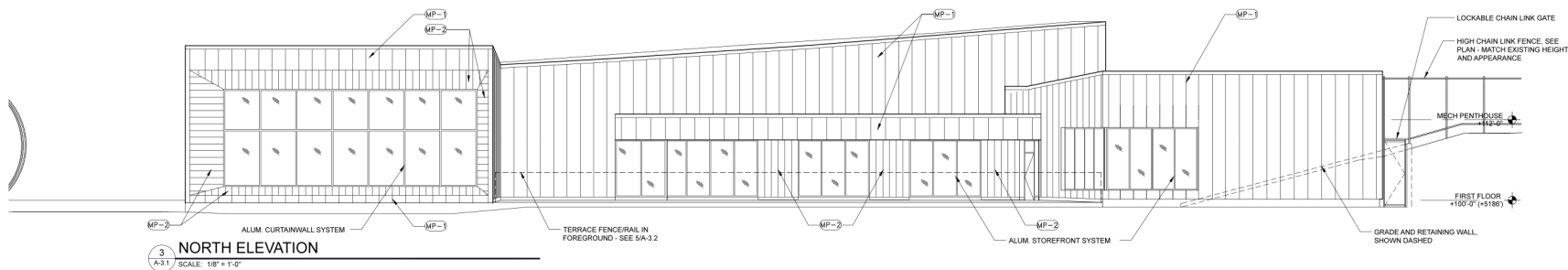
CEILING PLAN NOTES

- ALL CEILING HEIGHTS ARE 9'-0" AFF UNLESS OTHERWISE NOTED.
- SEE FINISH SCHEDULE FOR SURFACES TO RECEIVE PAINT
- SEE SHEET A6.3 FOR TYPICAL CEILING DETAILS

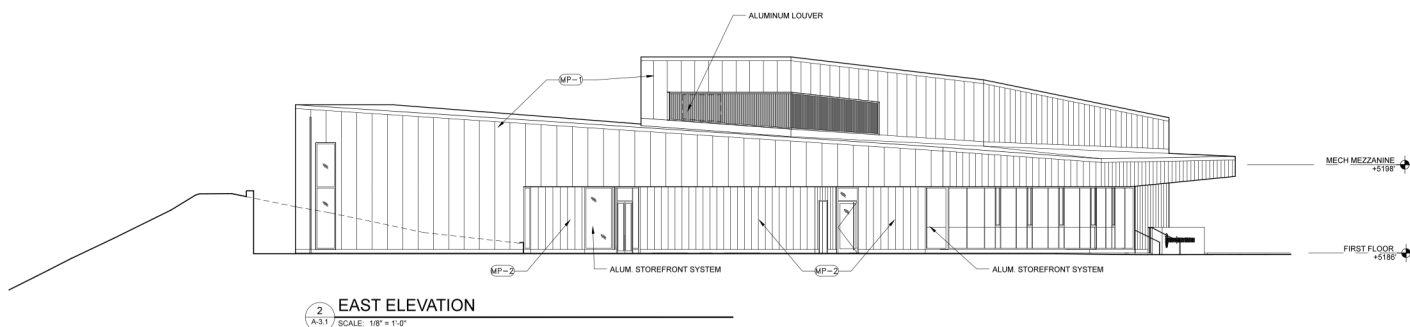
Architect:

DKa

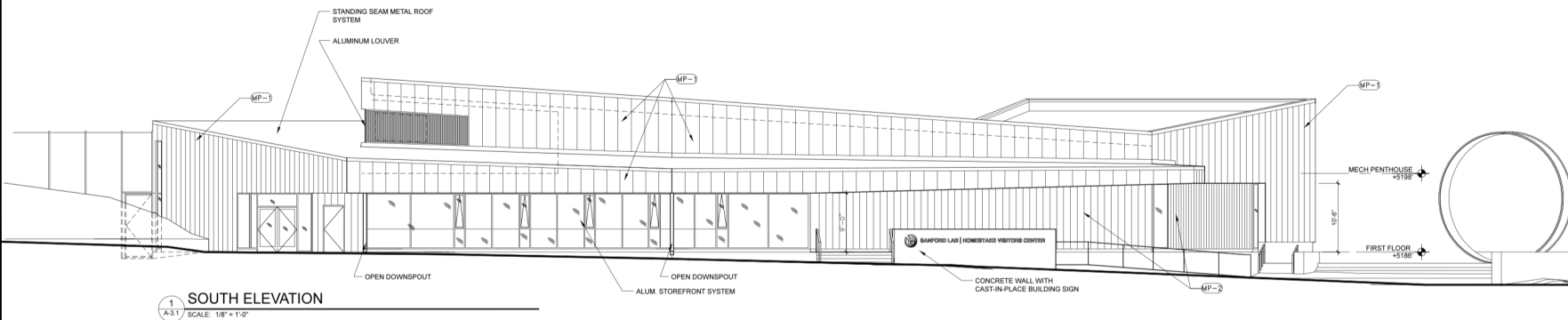
**Dangermond Keane
Architecture LLC**
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Portland OR 97209
(503) 724-2961



3 NORTH ELEVATION
A-3.1 SCALE: 1/8" = 1'-0"



2 EAST ELEVATION
A-3.1 SCALE: 1/8" = 1'-0"



1 SOUTH ELEVATION
A-3.1 SCALE: 1/8" = 1'-0"

NOTES:
1. SEE SPECS FOR METAL PANEL TYPES AS INDICATED BY (MP-1), (MP-2) AND (MP-3)

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Bid Package No. 2	8 August 2014
Revisions	Date

Scale
1/8" = 1'-0"
DKa Job Number
1309

Sheet Title
**EXTERIOR
ELEVATIONS**

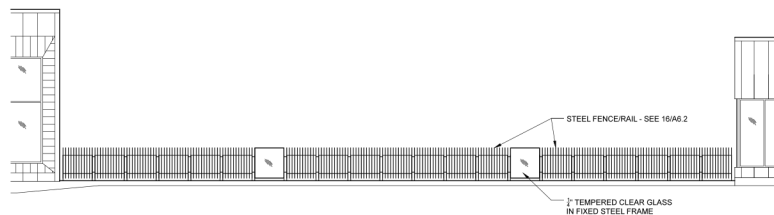
Sheet Number

A-3.1

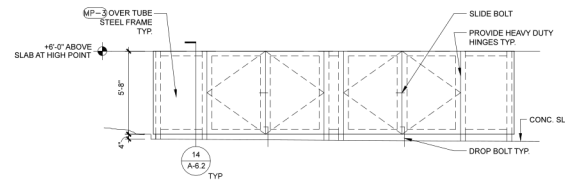
Architect:

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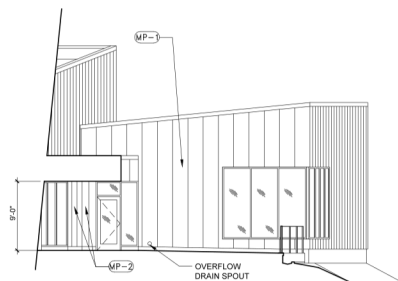
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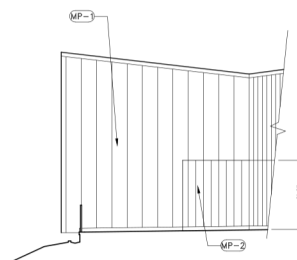
5 PARTIAL NORTH ELEVATION SHOWING RAIL
SCALE: 1/8" = 1'-0"



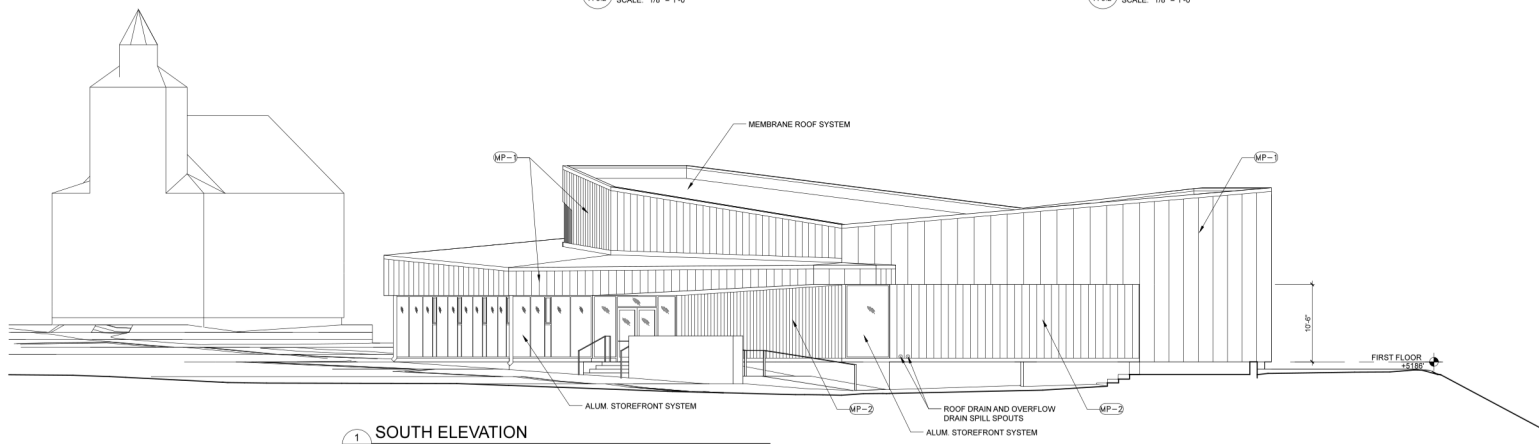
4 EQUIPMENT ENCLOSURE SOUTH ELEVATION
SCALE: 1/4" = 1'-0"
(OTHER ELEVATIONS SIMILAR)



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



2 PARTIAL EAST ELEVATION
SCALE: 1/8" = 1'-0"



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

NOTES:
1. SEE SPECS FOR METAL PANEL TYPES AS INDICATED BY (MP-1), (MP-2) AND (MP-3)

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Bid Package No. 2 8 August 2014

Revisions Date

Scale
1/8" = 1'-0"

DKa Job Number
1309

Sheet Title

**EXTERIOR
ELEVATIONS**

Sheet Number

A-3.2

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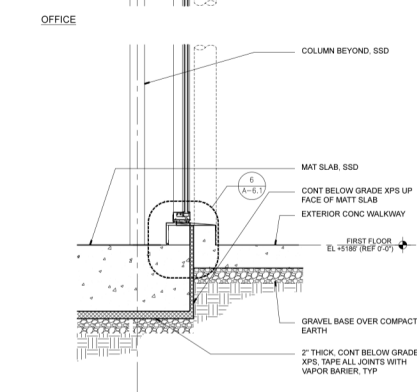
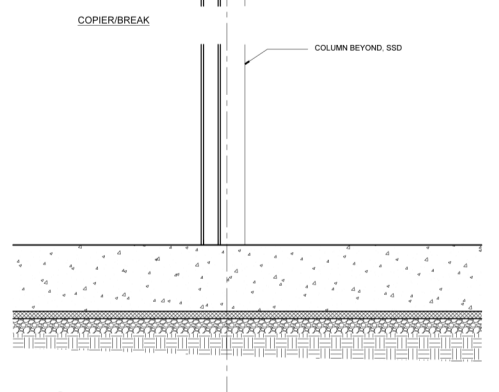
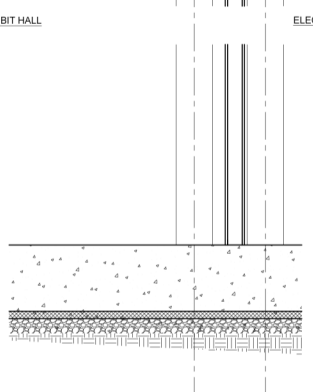
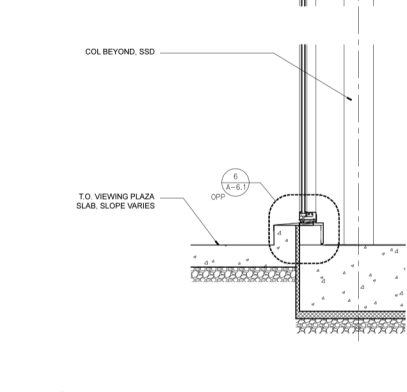
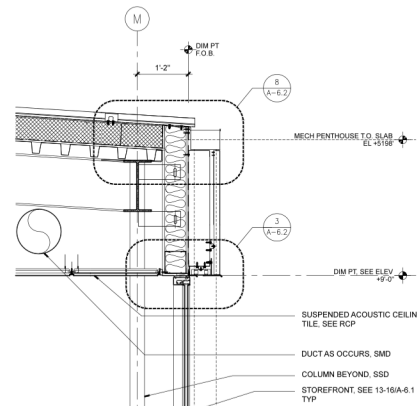
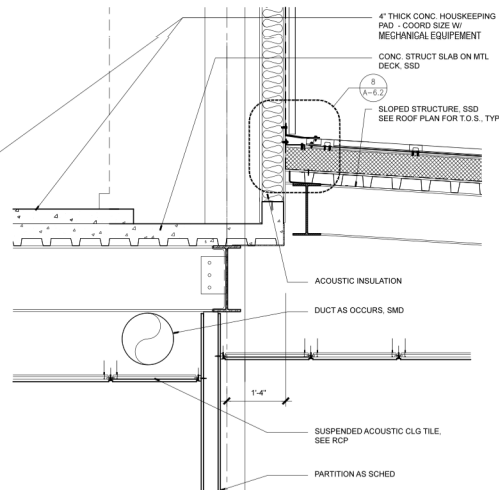
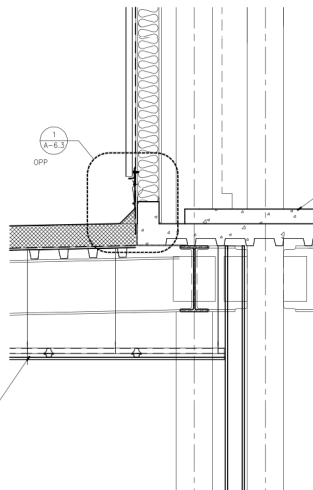
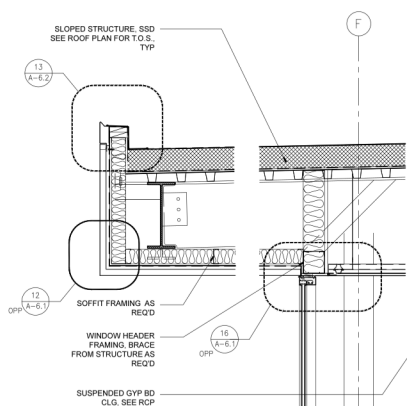
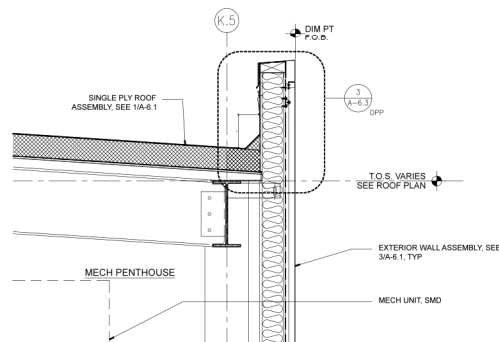
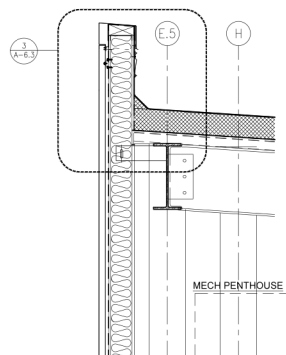
Scale
3/4" = 1'-0"

DKa Job Number
1309

Sheet Title
WALL SECTIONS

Sheet Number

A-4.1



2 SECTION
A4.1 3/4" = 1'-0"

1 SECTION
A4.1 3/4" = 1'-0"

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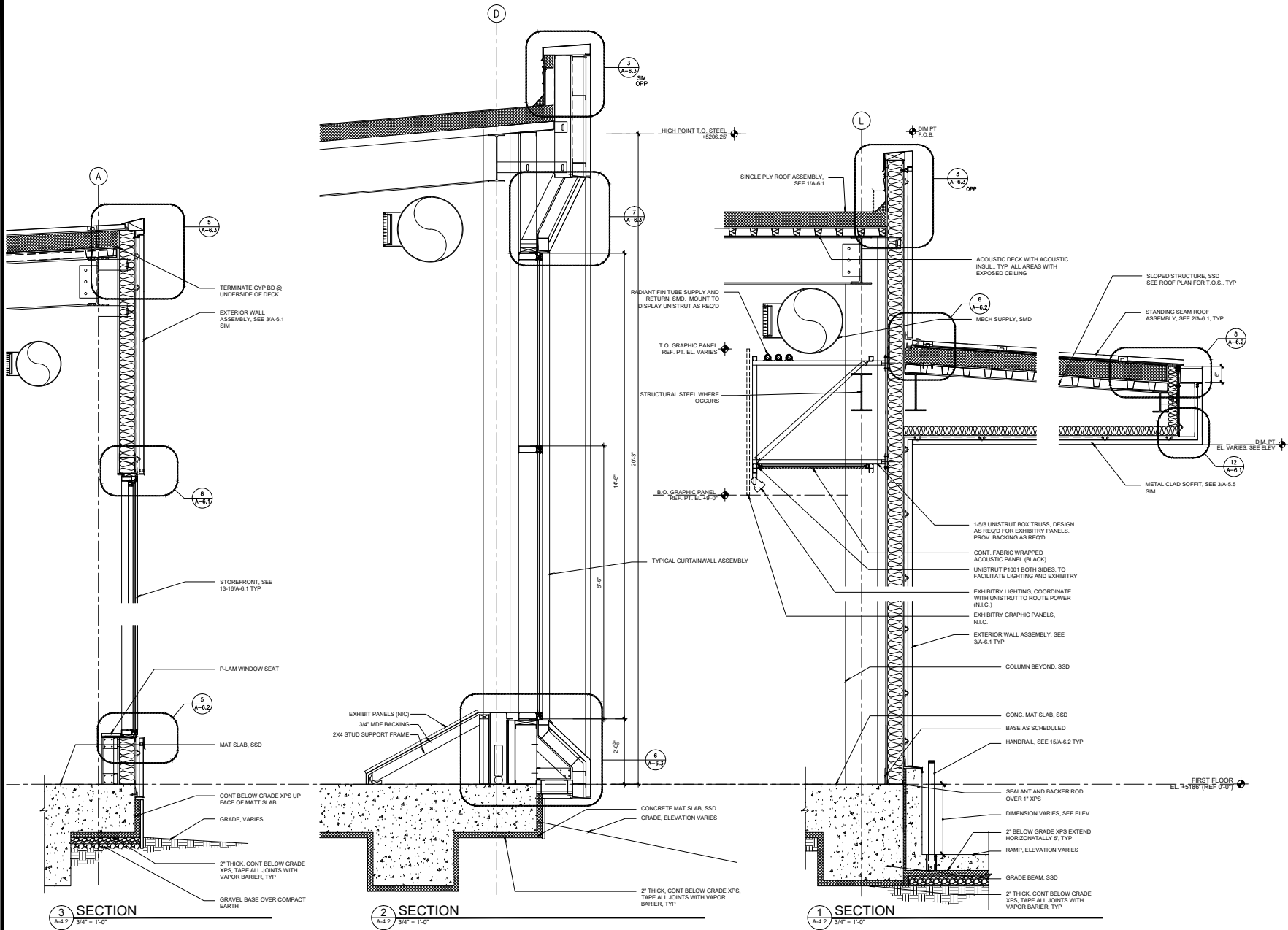
Revisions Date

Scale
3/4" = 1'-0"
DKa Job Number
1309

Sheet Title
WALL SECTIONS

Sheet Number

A-4.2



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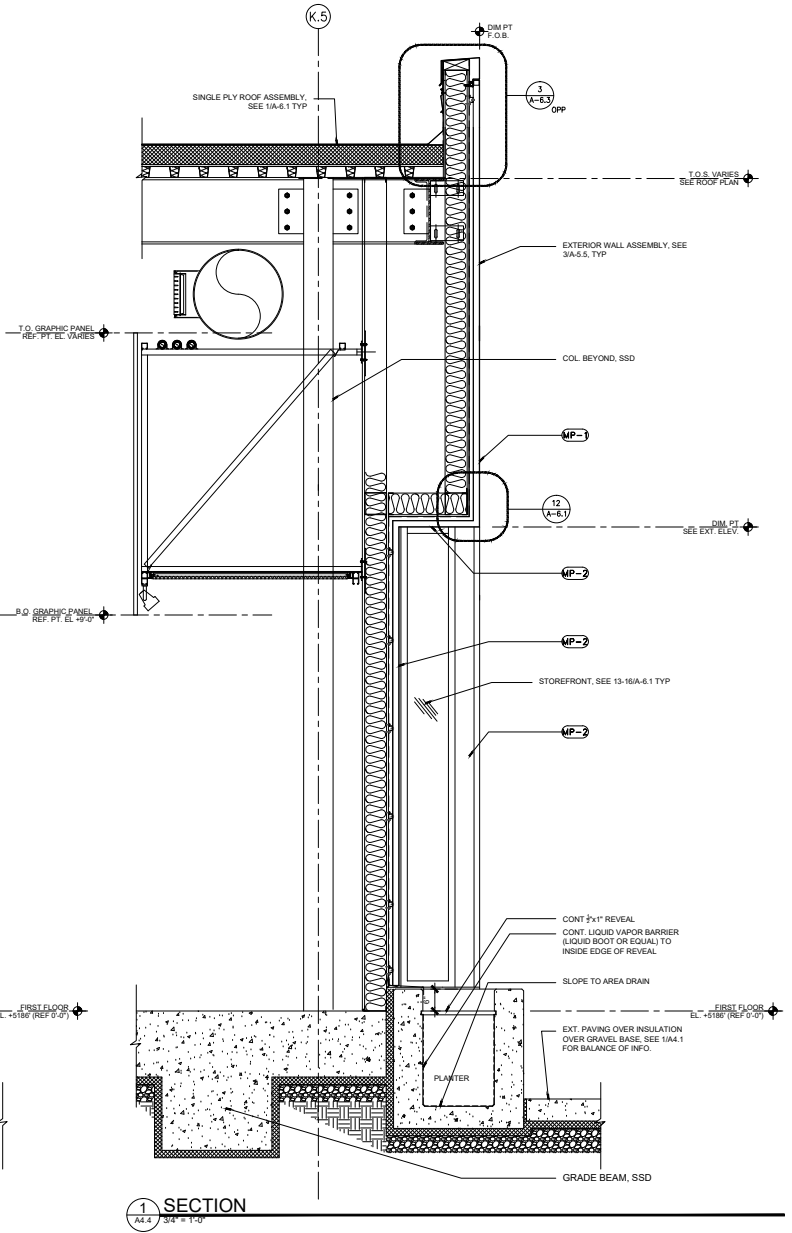
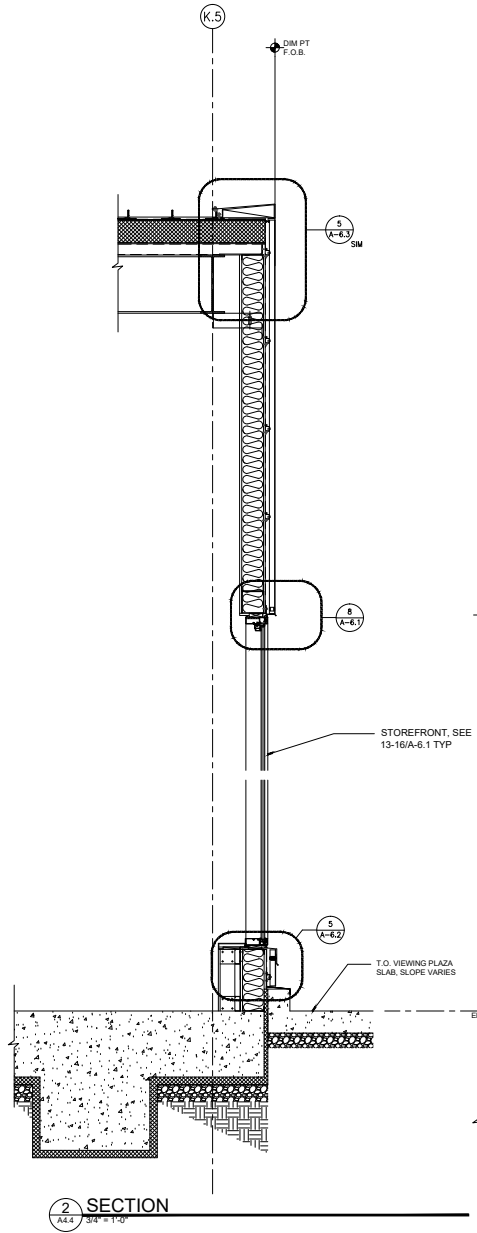
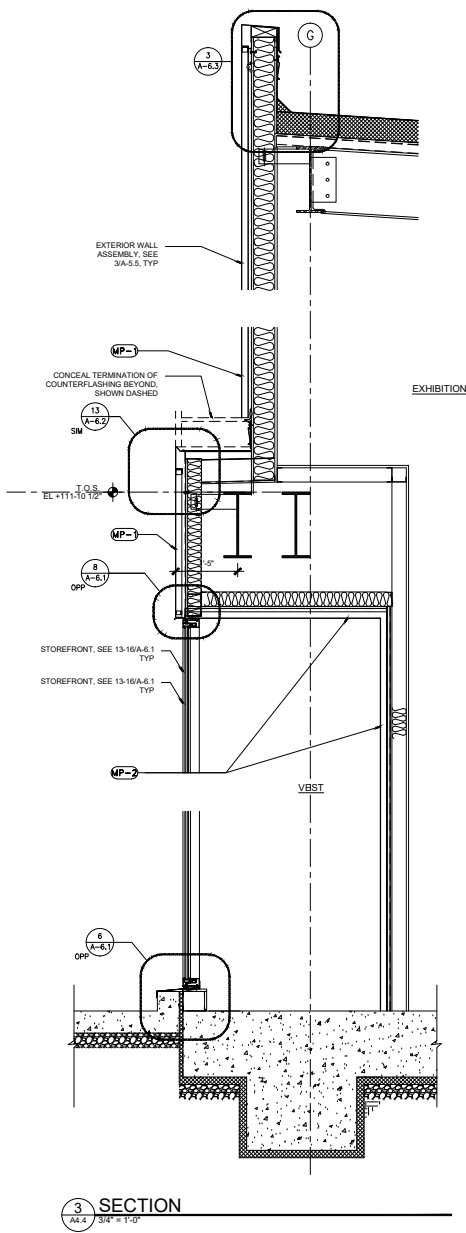
Revisions Date

Scale
3/4" = 1'-0"
DKa Job Number
1309

Sheet Title
WALL SECTIONS

Sheet Number

A-4.4



FINISH SCHEDULE

FLOOR NAME	FLOOR MATERIAL	FINISH	BASE MATERIAL	FINISH	CEILING MATERIAL	FINISH	WALL MATERIAL	FINISH	WINDOW COVERINGS	NO / EQ
101 Vestibule	Floor Mat	SS	Wood	PT-6	MP-2	Paint	GWB LV4	PT2	Ceiling Match Soffit Material and Finish	
102A Vestibule	Floor Mat	SS	Wood	PT-6	MP-2	Paint	GWB LV4	PT2	Ceiling Match Soffit Material and Finish	
102 Exhibit	Elastomeric	ELF-1	Wood	PT-6	Exposed Structure	PT3	GWB LV4	PT2		
103 Retail	Concrete	Ground, Stained, Sealed	Wood	PT-6	Exposed Structure	PT3	GWB LV4	PT2		
104 Cash-Wrap-Info	Carpet	Tie	Resilient	Integral	GWB	PT3	GWB LV4	PT2		
105 Office	Carpet	Tie	Resilient	Integral	Susp Acoustical Tile	Integral	GWB LV4	PT1	Roller Shades Wood Base @ Wido	
106 Not Used										
107 Office	Carpet	Tie	Resilient	Integral	Susp Acoustical Tile	Integral	GWB LV4	PT1	Roller Shades Wood Base @ Wido	
108 Conference	Carpet	Tie	Resilient	Integral	Susp Acoustical Tile	Integral	GWB LV4	PT1	Roller Shades Wood Base @ Wido	
110 Hall	Carpet	Tie	Resilient	Integral	Susp Acoustical Tile	Integral	GWB LV4	PT2	Roller Shades Wood Base @ Wido	
111 Work Area	Carpet	Tie	Resilient	Integral	Susp Acoustical Tile	Integral	GWB LV4	PT2		
112 Copper / Break	Concrete	Sealed	Resilient	Integral	Susp Acoustical Tile	Integral	GWB LV4	PT1		
113 Storage	Concrete	Sealed	Resilient	Integral	Exposed	PT3	GWB LV1	PT1		
114 Electrical	Concrete	Sealed	Resilient	Integral	Exposed	PT3	GWB LV1	PT1		
115 Custodian	Concrete	Sealed	Resilient	Integral	Exposed	PT3	GWB LV1	PT1		
116 Men	Ceramic Tile	Thin Set	Ceramic Tile	Thin Set	GWB	PT3	GWB LV1	PT1	Ceramic Tile Wainscot / GWB Wall LV4	Thin Soff PT1
117 Woman	Ceramic Tile	Thin Set	Ceramic Tile	Thin Set	GWB	PT3	GWB LV1	PT1	Ceramic Tile Wainscot / GWB Wall LV4	Thin Soff PT1
118 Storage	Concrete	Sealed	Resilient	Integral	Exposed	PT3	GWB LV1	PT1		
119 Classroom	Carpet	Tie	Wood	PT-6	W/ Stat Cloud/Exposed	PT3	GWB LV4	PT1	Roller Shades LWC-1	
120 Storage	Carpet	Tie	Resilient	Integral	Exposed	PT3	GWB LV4	PT1		
121 Vestibule	Floor Mat	SS	Wood	PT-6	MP-2	PT3	GWB LV4	PT2	Ceiling Match Soffit Material and Finish	
122 Exhibit Hall	Concrete	Ground, Stained, Sealed	Wood	PT-6	GWB	PT3	GWB LV4	PT2		
201 Mechanical Penthouse	Concrete	Sealed	Resilient	Integral	Exposed	Paint	GWB LV1	PT1		

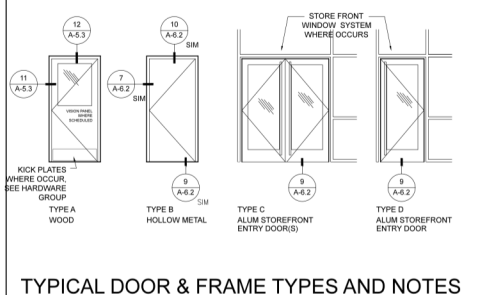
COLOR SCHEDULE

TAG	COLOR	APPLICATION
PT-1	BM White Dove OC-17	Walls Where Scheduled; Steel Columns and Bracing
PT-2	BM Super White	Walls Where Scheduled; Steel Columns and Bracing; Linistut
PT-3	BM HC-171 Wickham Gray	Paintable Ceilings, Roof Structures, Exposed Ductwork, Conduits, Etc
PT-4	BM 2171-10 Navajo Red	Accent Wall "A" (North) Conference Room, Offices
PT-5	BM HC-152 Whipple Blue	Accent Wall "B" (West) Classroom
PT-6	BM AC-27 Galveston Gray	Painted Wood Base
CT-1	Da-Tile Natural Hues Starlight QH58 4x8 Tile	Ceramic Tile Floors and Wainscots
	Mapel Grout Waterfall 98	Grout at Ceramic Tile

DOOR AND HARDWARE SCHEDULE

DOOR NO.	OPENING SIZE	DOOR TYPE	MATL	FIN	GL	FRAME TYPE	MATL	FIN	HARDWARE GROUP (SEE SPEC)	REMARKS
101A	6-Dx7-0	C	AL	ANO	CTIG	AL	AL	ANO	01	PAIR DOORS, STOREFRONT
101B	6-Dx7-0	C	AL	ANO	CTIG	AL	AL	ANO	02	PAIR DOORS, NO LOCK, STOREFRONT
102A.1	3-Dx7-0	D	AL	ANO	CTIG	AL	AL	ANO	03	STOREFRONT, NO LOCK
102A.2	3-Dx7-0	D	AL	ANO	CTIG	AL	AL	ANO	04	STOREFRONT, SIGNED
105	3-Dx7-0	A	WD	P	-	-	AL	ANO	05	
107	3-Dx7-0	A	WD	P	-	-	AL	ANO	05	
108	3-Dx7-0	A	WD	P	-	-	AL	ANO	05	
109	3-Dx7-0	A	WD	P	-	-	AL	ANO	06	
110	3-Dx7-0	D	AL	ANO	CTIG	AL	AL	ANO	07	STOREFRONT
114	3-Dx7-0	A	WD	P	-	-	AL	ANO	08	
115	3-Dx7-0	A	WD	P	-	-	AL	ANO	08	
116	3-Dx7-0	A	WD	P	-	-	AL	ANO	09	
117	3-Dx7-0	A	WD	P	-	-	AL	ANO	09	
118	3-Dx7-0	B	HM	P1	-	HM	P1	10		
119A	3-Dx7-0	A	WD	P	CTIG	AL	AL	ANO	11	VISION PANEL
119B	3-Dx7-0	A	WD	P	CTIG	AL	AL	ANO	11	VISION PANEL
120	3-Dx7-0	A	WD	P	CTIG	AL	AL	ANO	12	VISION PANEL
121A	6-Dx7-0	C	AL	ANO	CTIG	AL	AL	ANO	02	PAIR DOORS, NO LOCK, STOREFRONT
121B	6-Dx7-0	C	AL	ANO	CTIG	AL	AL	ANO	01	PAIR DOORS, STOREFRONT
122	3-Dx7-0	D	AL	ANO	CTIG	AL	AL	ANO	04	STOREFRONT, SIGNED

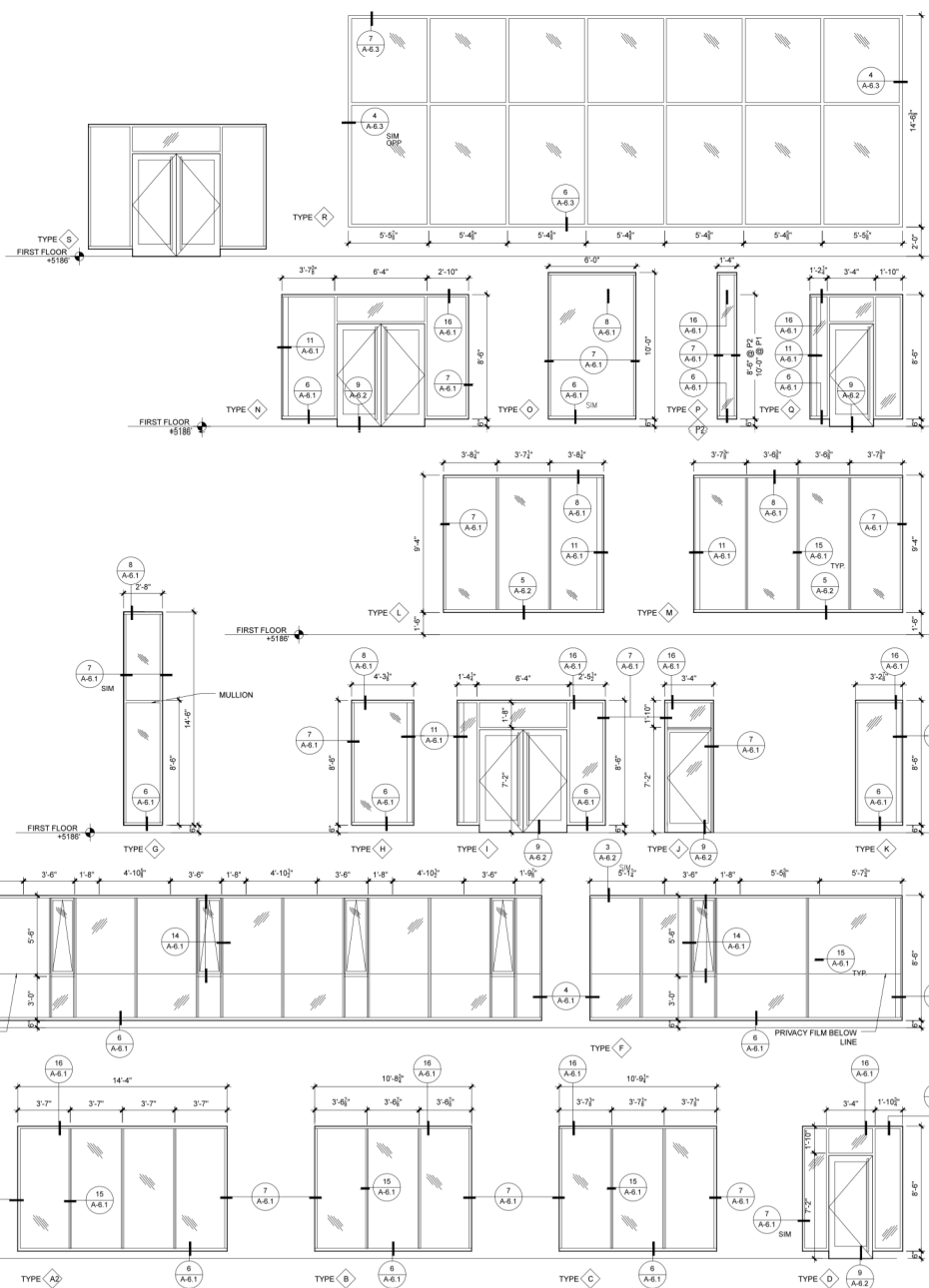
DOOR & FRAME FINISH LEGEND
 P- PAINTED
 ANO- ANODIZED
 SIGNED- PROVIDE SIGN INDICATING THIS DOOR TO REMAIN UNLOCKED DURING BUSINESS HOURS
 SEE 11AS.1 FOR MOUNTING HEIGHTS



EXTERIOR WINDOW SCHEDULE

1 A5.0 SCALE: 1/4" = 1'-0"

NOTES:
 1. SEE SPEC'S FOR GLAZING TYPES
 CTG = CLEAR TEMPERED GLASS
 CTIG = CLEAR TEMPERED INSULATED GLASS
 CIG = CLEAR INSULATED GLASS
 2. ALL GLASS IS CTIG UNLESS NOTED OTHERWISE



Sanford Lab/
Homestake
Research Center

Architect:

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Scale AS NOTED
DKa Job Number 1309
Sheet Title

DOOR, WINDOW, AND FINISH SCHEDULES

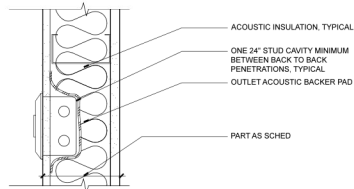
Sheet Number

A-5.0

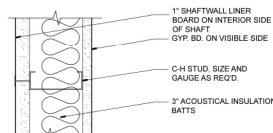
Architect:

DKa

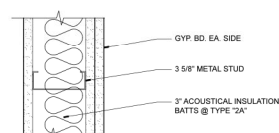
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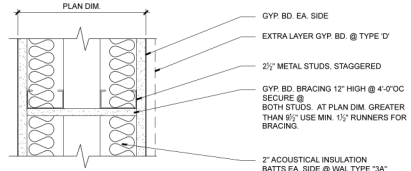
16 ACOUSTIC TREATMENT @ ELECTRICAL OUTLET
A-5.1 3" x 1'-0"



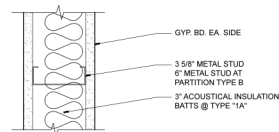
4 WALL TYPE "4"
A-5.1 3" x 1'-0"
UL DESIGN NO. U415 - W/INSUL. 1 HR. FIRE-RATING



2 WALL TYPE "2"
A-5.1 3" x 1'-0"



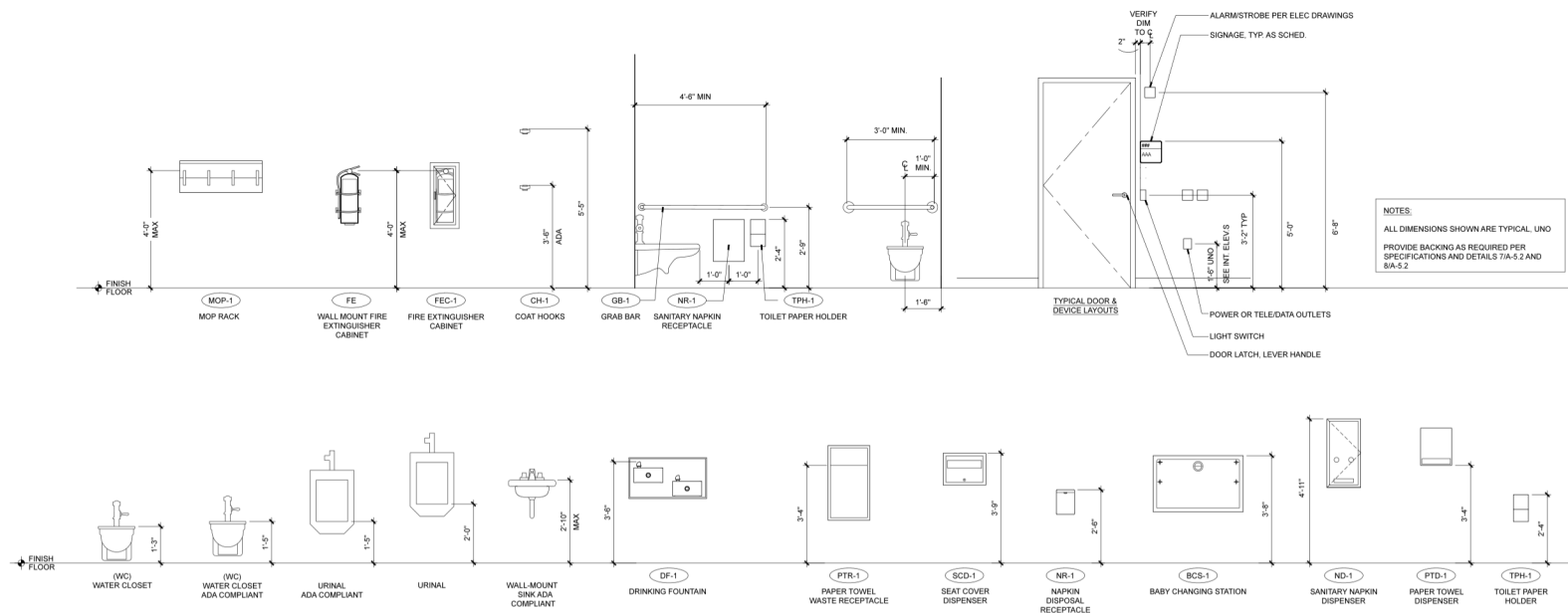
3 WALL TYPE "3"
A-5.1 3" x 1'-0"



1 WALL TYPE "1"
A-5.1 3" x 1'-0"

- PARTITION TYPES GENERAL NOTES**
- BOTH SIDES GYP BOARD FULL HEIGHT U.N.O.
 - AT PARTITION TYPE 'C', ONE SIDE GYP BOARD FULL HEIGHT ONE SIDE 6\"/>
 - AT PARTITION TYPE 'D', BOTH SIDES GYP BOARD 6\"/>
 - CEILING
 - SEE A-5.2 FOR TYPICAL PARTITION DETAILS
 - ALL STUDS 20 GA MIN. INCREASE GAUGE AS REQ'D WHERE SPAN EXCEEDS SSMA STANDARDS FOR L120.
 - PROVIDE ACOUSTICAL INSULATION AT TYPE 'A' PARTITIONS.
 - PROVIDE ACOUSTIC PENETRATION PROTECTION PER 16A-5.1

2 INTERIOR WALL TYPES SCHEDULE
A-5.1 3" x 1'-0"



1 STANDARD MOUNTING HEIGHTS
A-5.1 1/2" x 1'-0"

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Scale
AS NOTED
DKa Job Number
1309

Sheet Title
**WALL TYPES &
MOUNTING HEIGHTS**

Sheet Number

A-5.1

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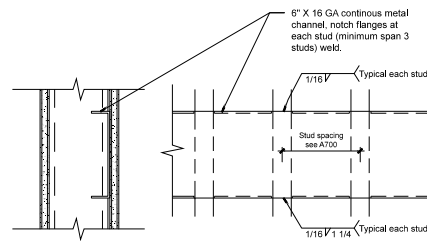
Scale
AS NOTED
DKa Job Number
1309

Sheet Title

**TYPICAL INTERIOR
DETAILS**

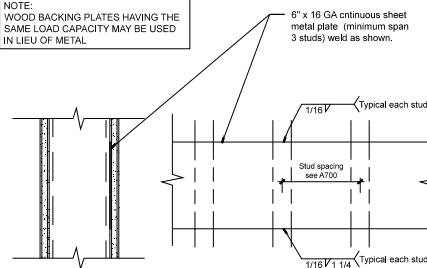
Sheet Number

A-5.2

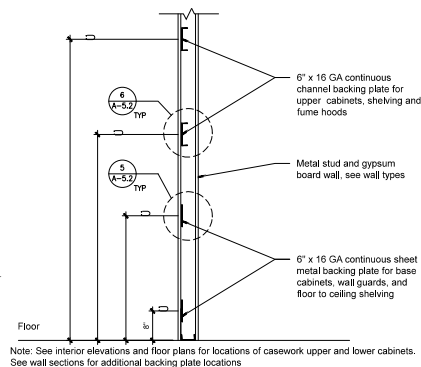


6 TYPICAL BACKING PLATES
SCALE: 3" = 1'-0"

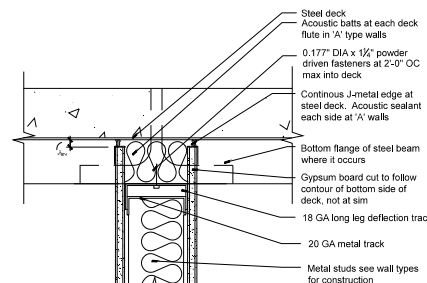
NOTE:
WOOD BACKING PLATES HAVING THE
SAME LOAD CAPACITY MAY BE USED
IN LIEU OF METAL.



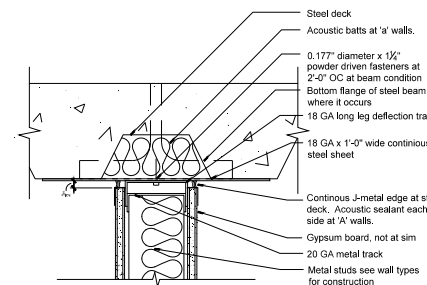
5 TYPICAL BACKING PLATES
SCALE: 3" = 1'-0"



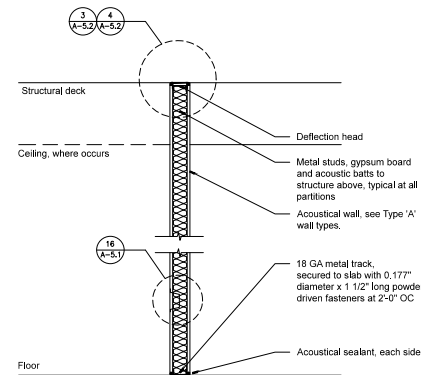
2 TYPICAL BACKING PLATES
SCALE: 3" = 1'-0"



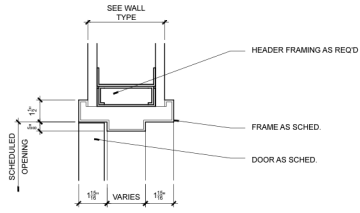
4 TYPICAL DEFLECTION HEAD PERPENDICULAR TO FLUTES
SCALE: 3" = 1'-0"



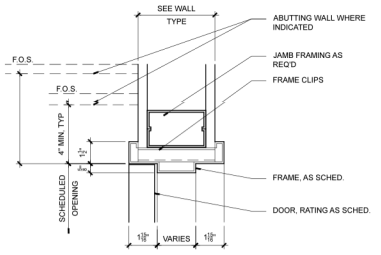
3 TYPICAL DEFLECTION HEAD PARALLEL TO FLUTES
SCALE: 3" = 1'-0"



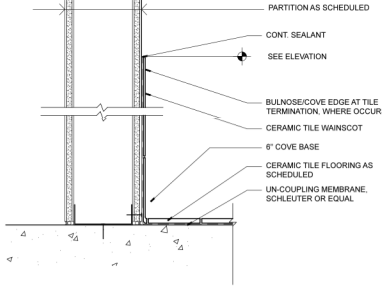
1 TYPICAL PARTITION
SCALE: 3" = 1'-0"



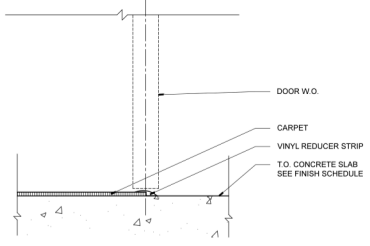
12 TYPICAL DOOR HEAD
SCALE: 3" = 1'-0"



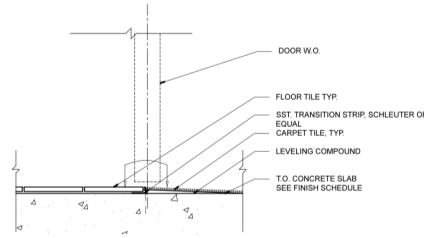
11 TYPICAL DOOR JAMB
SCALE: 3" = 1'-0"



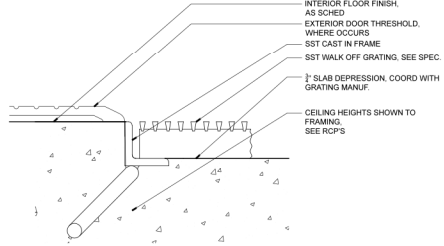
7 TILE FLOOR/TILE WALL
SCALE: 3" = 1'-0"



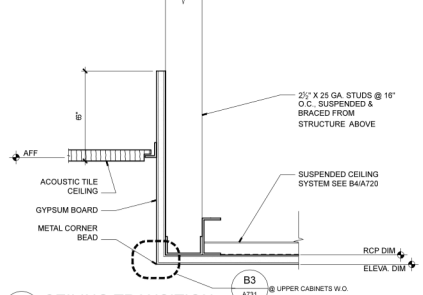
6 FLOOR TRANSITION: CARPET TO CONCRETE
SCALE: 3" = 1'-0"



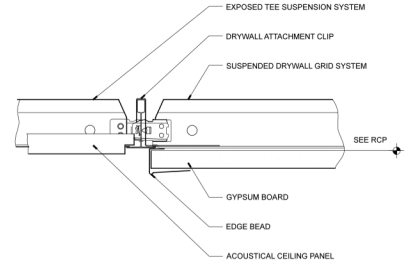
5 FLOOR TRANSITION: CARPET TO TILE
SCALE: 3" = 1'-0"



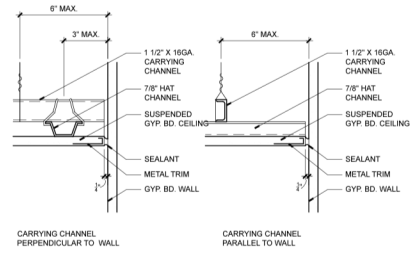
4 FLOOR TRANSITION: WALK OFF GRATING
SCALE: 1:1



3 CEILING TRANSITION
SCALE: 3" = 1'-0"



2 CEILING TRANSITION: GYP BD TO ACOUSTIC
SCALE: 6" = 1'-0"



1 GYP BD CEILING
SCALE: 6" = 1'-0"

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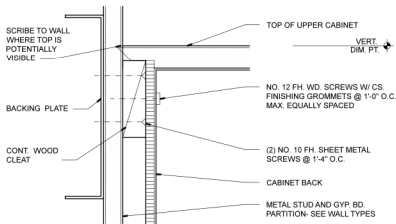
Scale
AS NOTED
DKa Job Number
1309
Sheet Title
INTERIOR DETAILS

Sheet Number

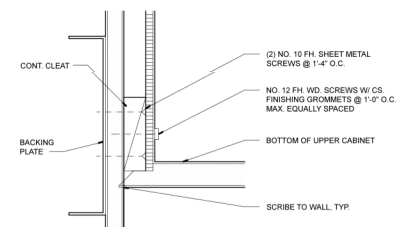
Architect

DKa

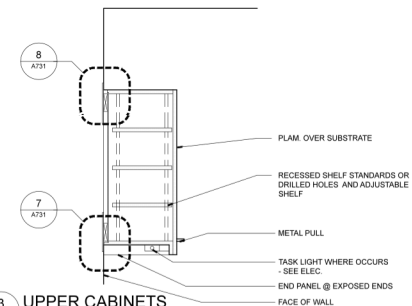
**Dangermond Keane
Architecture LLC**
1921 NW Kearney St
Portland OR 97209
(503) 724-2961



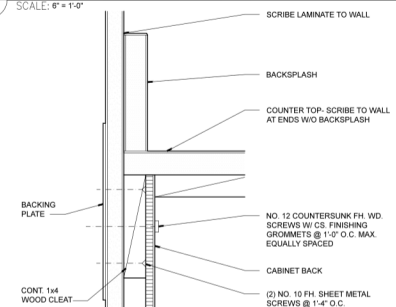
8 UPPER CABINET
SCALE: 6" = 1'-0"



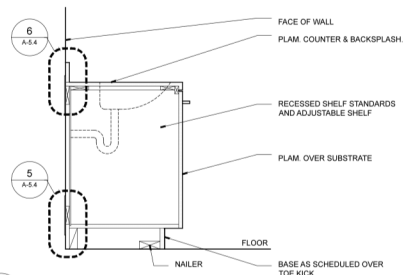
7 UPPER CABINET
SCALE: 6" = 1'-0"



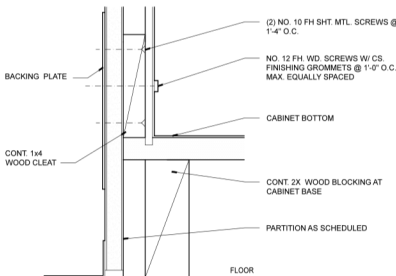
3 UPPER CABINETS
SCALE: 1" = 1'-0"



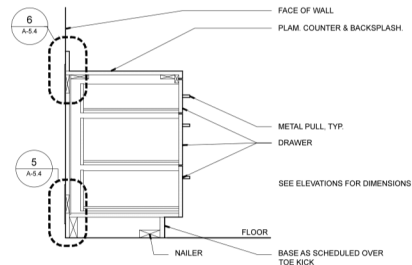
6 BASE AT CABINET - BACKSPLASH
SCALE: 6" = 1'-0"



2 BASE CABINET @ SINK
SCALE: 1" = 1'-0"



5 BASE AT CABINET
SCALE: 6" = 1'-0"



1 BASE CABINET AT DRAWERS
SCALE: 1" = 1'-0"

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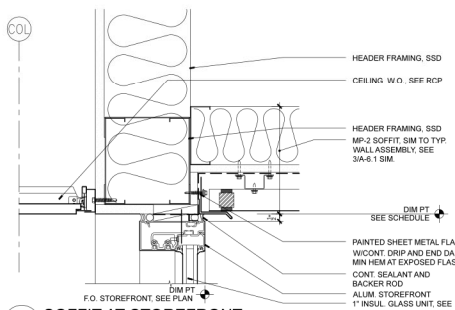
Revisions Date

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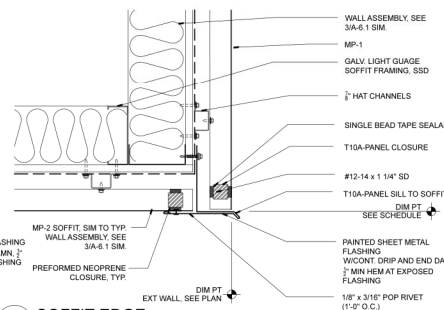
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**INTERIOR
DETAILS**

Sheet Number

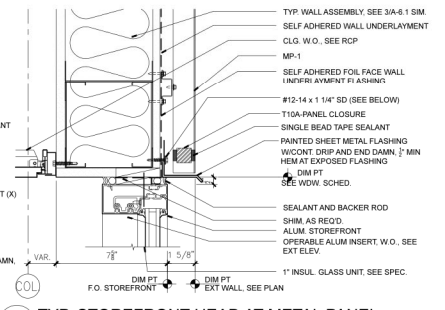
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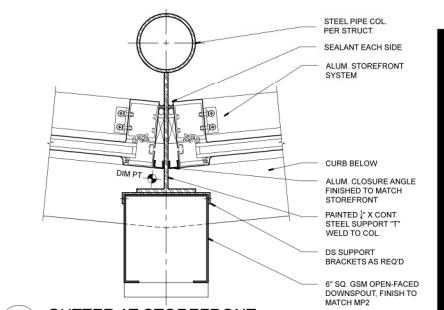
16 SOFFIT AT STOREFRONT
A-6.1 SCALE: 3" = 1'-0"



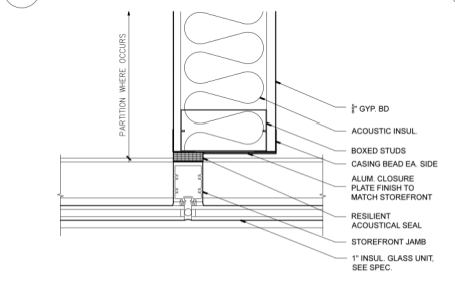
12 SOFFIT EDGE
A-6.1 SCALE: 3" = 1'-0"



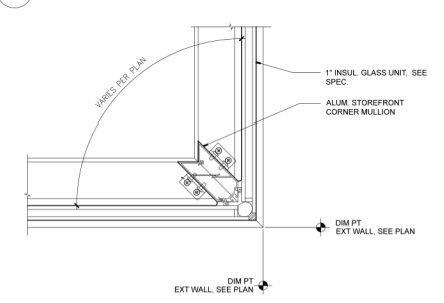
8 TYP. STOREFRONT HEAD AT METAL PANEL
A-6.1 SCALE: 3" = 1'-0"



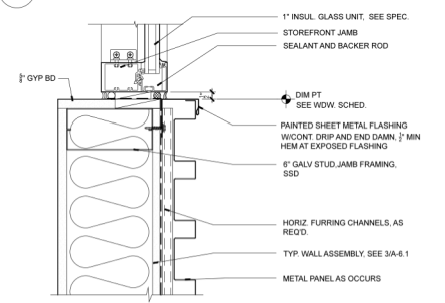
4 GUTTER AT STOREFRONT
A-6.1 SCALE: 3" = 1'-0"



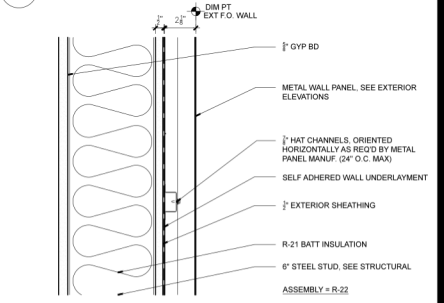
15 TYPICAL INTERMEDIATE STOREFRONT
A-6.1 SCALE: 3" = 1'-0"



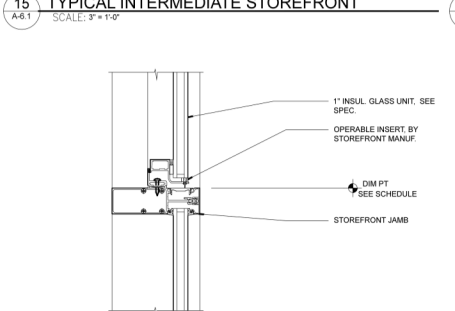
11 TYPICAL OUTER CORNER @ STOREFRONT
A-6.1 SCALE: 3" = 1'-0"



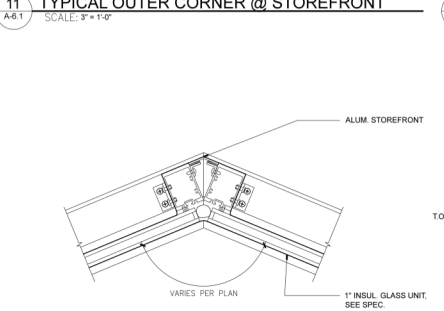
7 TYP. STOREFRONT JAMB AT METAL PANEL
A-6.1 SCALE: 3" = 1'-0"



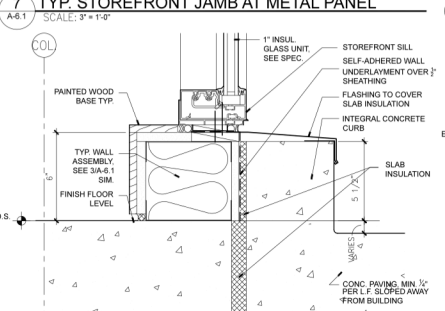
3 TYPICAL WALL ASSEMBLY - METAL PANEL
A-6.1 SCALE: 3" = 1'-0"



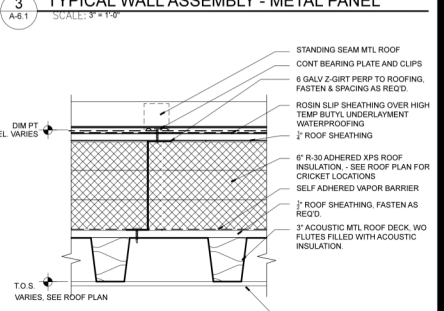
14 TYP. HEAD/SILL/JAMB @ STOREFRONT OP. INSERT
A-6.1 SCALE: 3" = 1'-0"



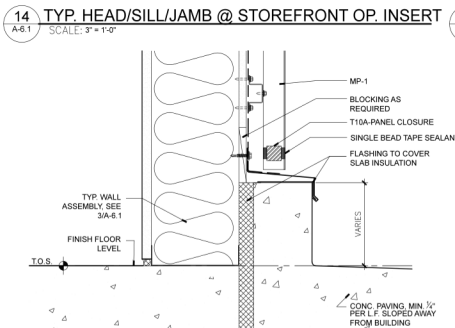
10 TYPICAL INNER CORNER @ STOREFRONT
A-6.1 SCALE: 3" = 1'-0"



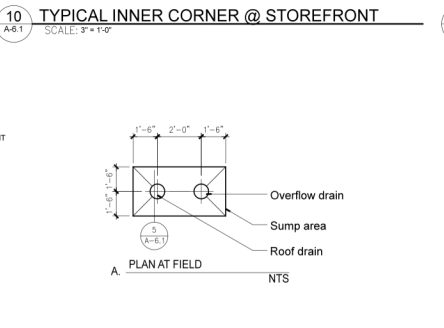
6 TYPICAL STOREFRONT SILL
A-6.1 SCALE: 3" = 1'-0"



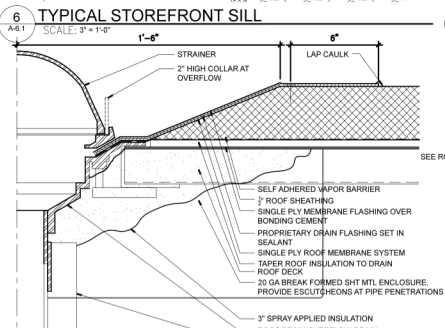
2 TYPICAL STANDING SEAM ROOF ASSEMBLY
A-6.1 SCALE: 3" = 1'-0"



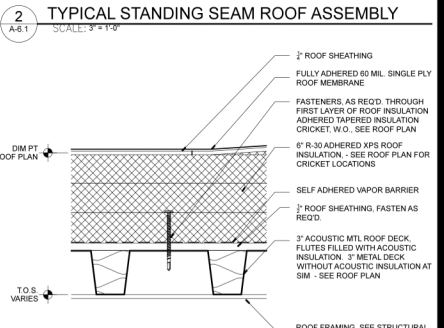
13 TYPICAL BASE OF EXTERIOR WALL
A-6.1 SCALE: 3" = 1'-0"



9 PLAN - DRAIN AND OVERFLOW DRAIN
A-6.1 SCALE: 3" = 1'-0"



5 DRAIN AND OVERFLOW DRAIN
A-6.1 SCALE: 3" = 1'-0"



1 TYPICAL SINGLE PLY ROOF ASSEMBLY
A-6.1 SCALE: 3" = 1'-0"

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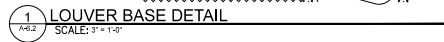
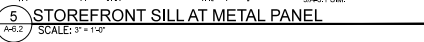
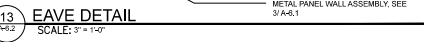
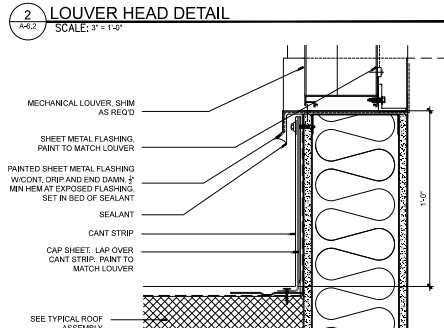
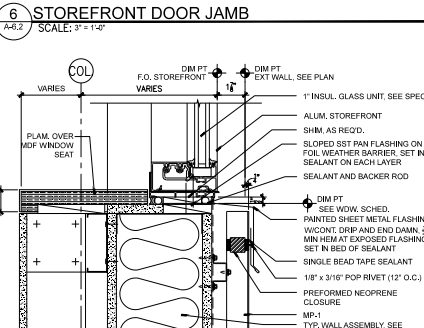
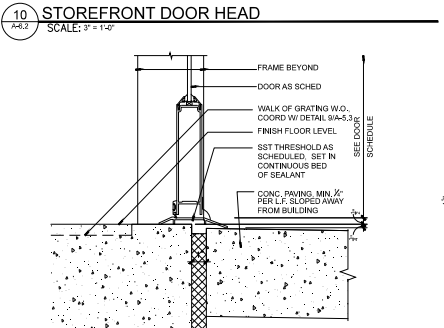
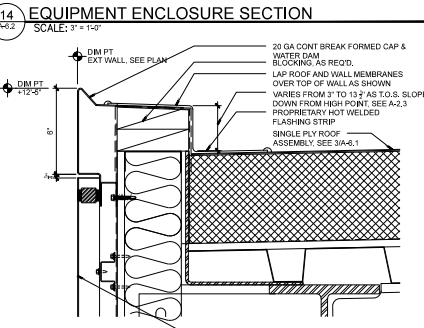
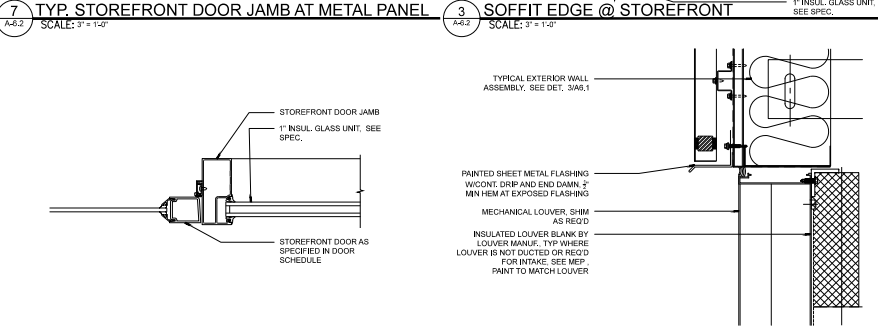
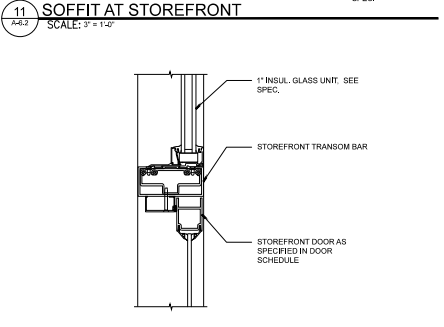
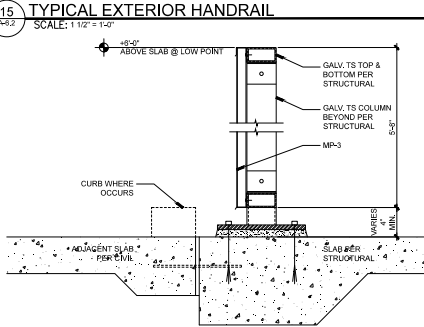
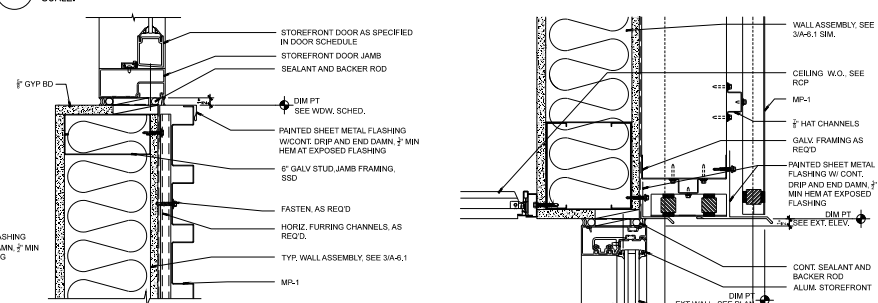
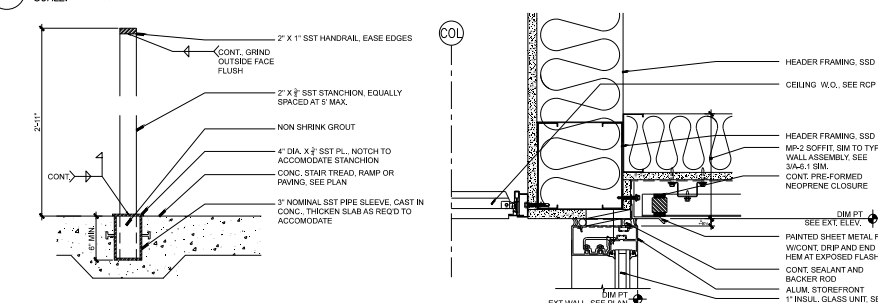
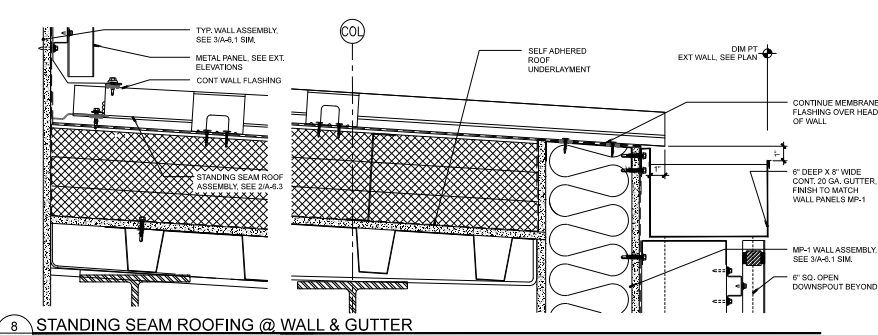
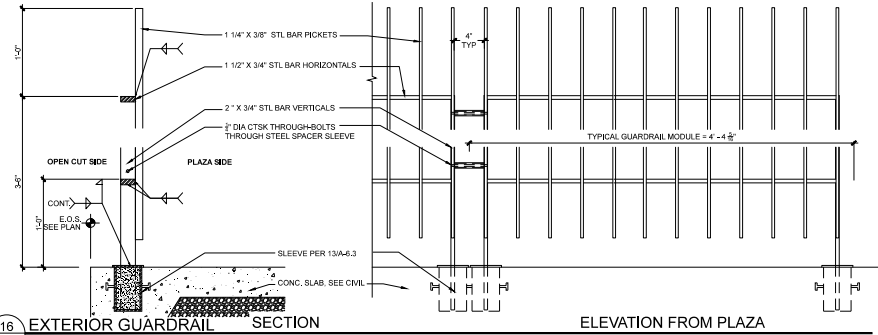
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A-6.1

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 DKa Job Number 1309
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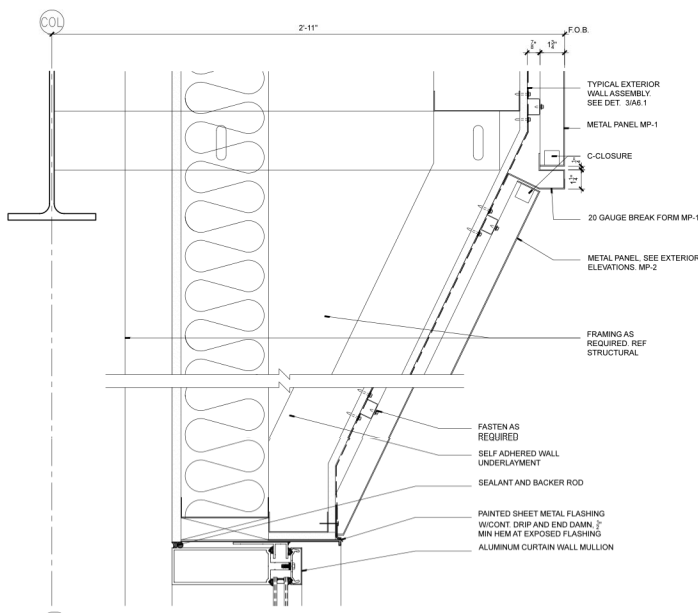
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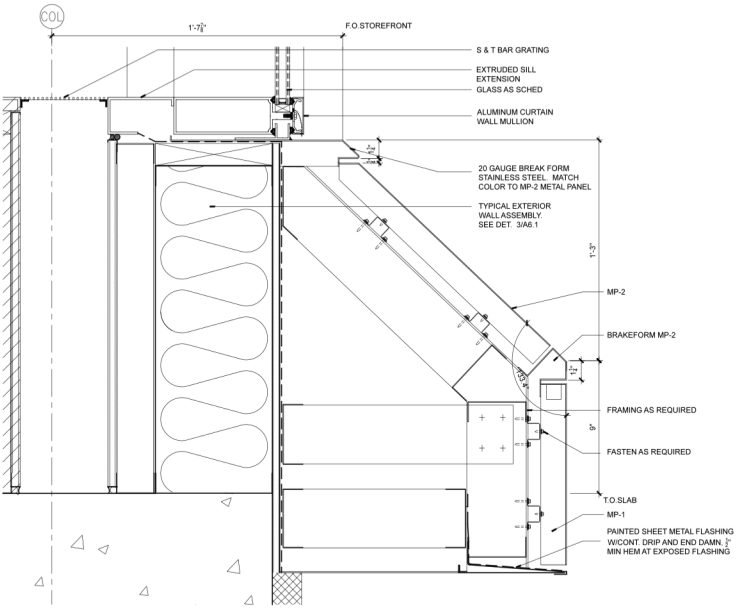
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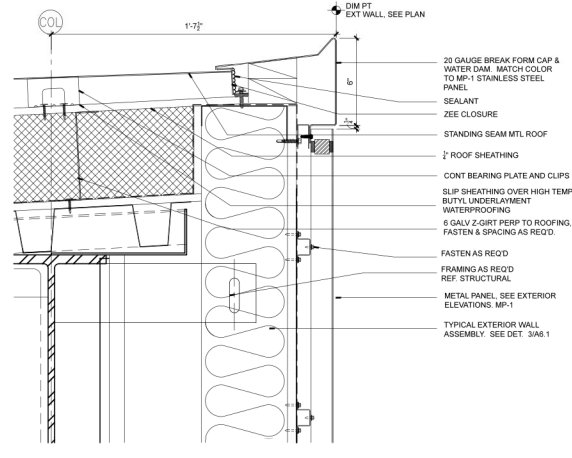
**Dangermond Keane
Architecture LLC**
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Portland OR 97209
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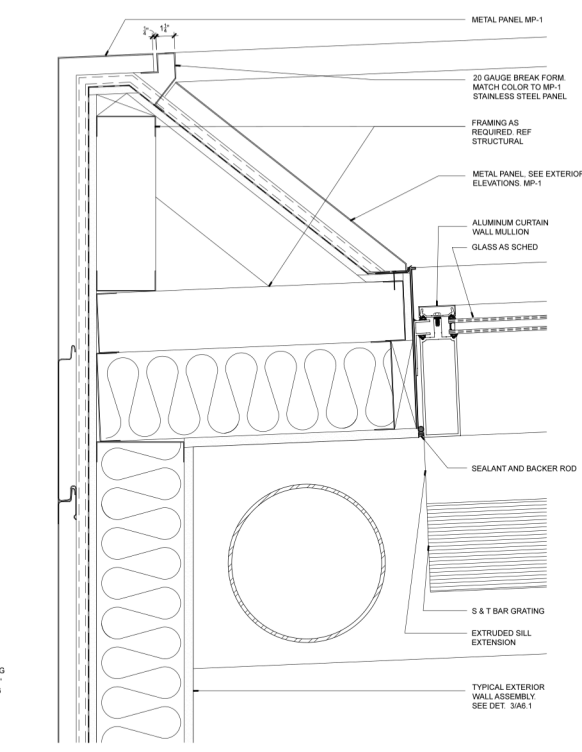
7 WINDOW HEAD DETAIL
A6.3 SCALE: 3" = 1'-0"



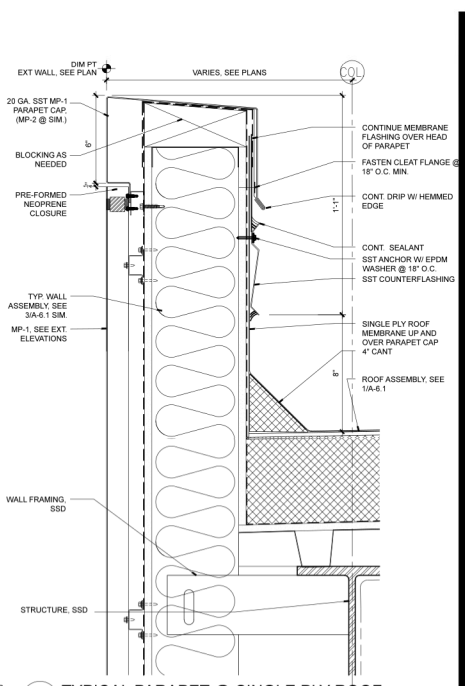
6 SILL DETAIL
A6.3 SCALE: 3" = 1'-0"



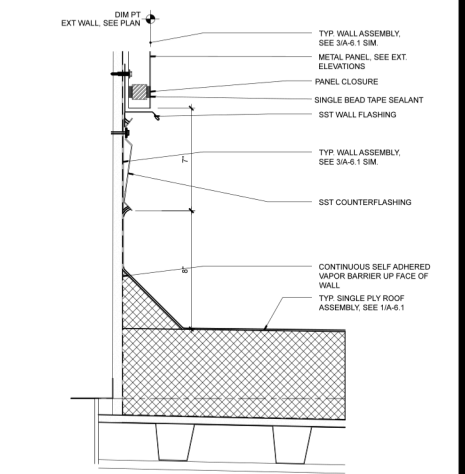
5 ROOF RIDGE
A6.3 SCALE: 3" = 1'-0"



4 WINDOW JAMB DETAIL
A6.3 SCALE: 3" = 1'-0"



3 TYPICAL PARAPET @ SINGLE PLY ROOF
A6.3 SCALE: 3" = 1'-0"



1 METAL PANEL TO SINGLE PLY ROOF
A6.3 SCALE: 3" = 1'-0"

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Sheet Title
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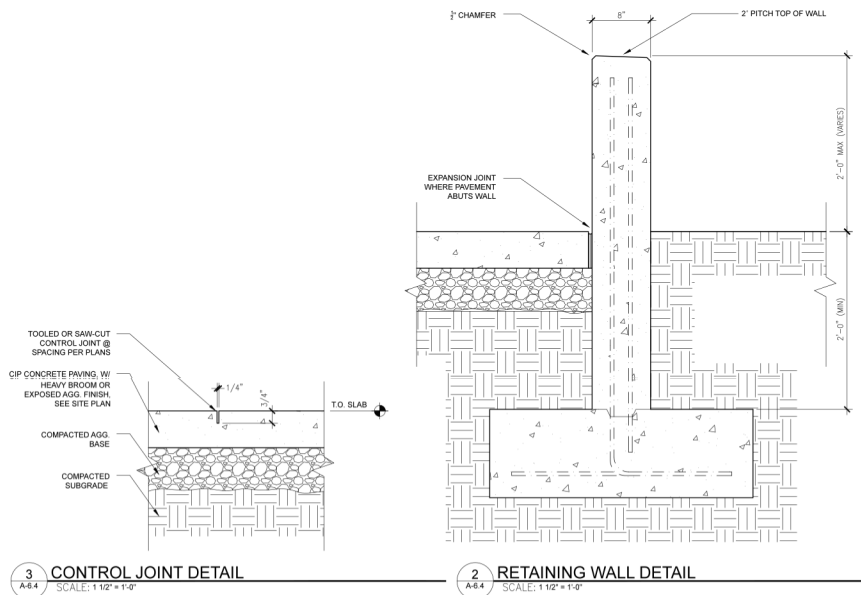
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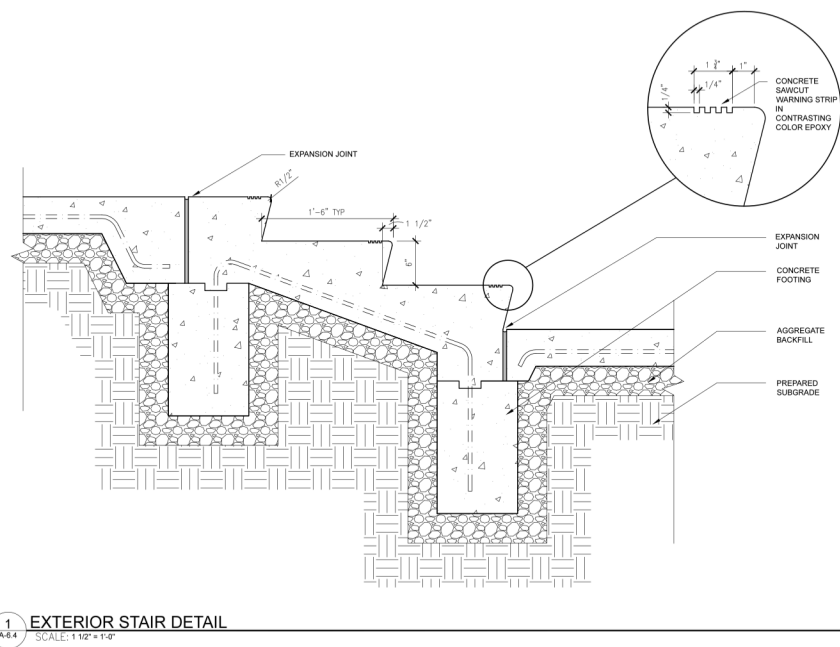
DKa

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3 CONTROL JOINT DETAIL
SCALE: 1/12" = 1'-0"

2 RETAINING WALL DETAIL
SCALE: 1/12" = 1'-0"



1 EXTERIOR STAIR DETAIL
SCALE: 1/12" = 1'-0"

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**EXTERIOR
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A-6.4

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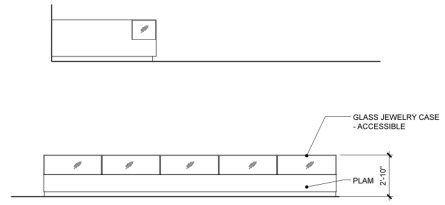
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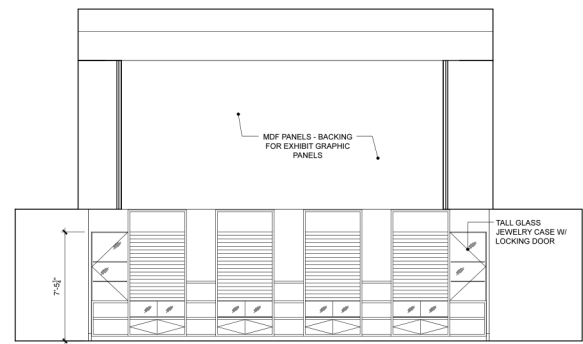
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**ENLARGED PLANS /
INTERIOR
ELEVATIONS**

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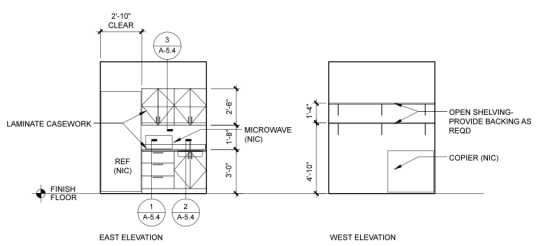
A-7.1



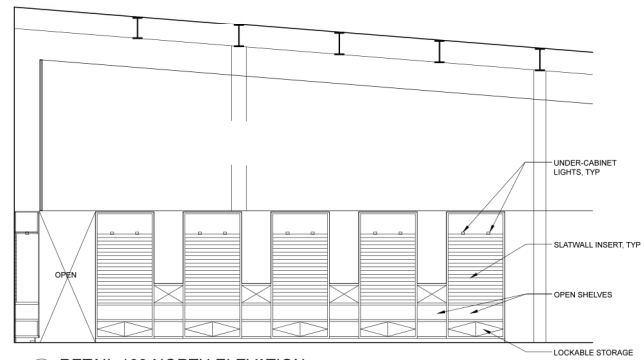
10 RETAIL 103 CASEWORK ELEVATIONS
A-7.1 SCALE: 1/4" = 1'-0"



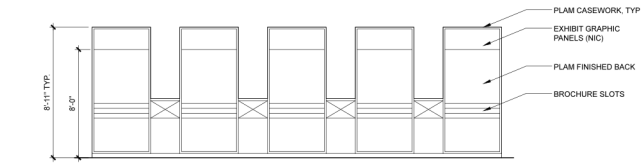
8 RETAIL 103 WEST ELEVATION
A-7.1 SCALE: 1/4" = 1'-0"



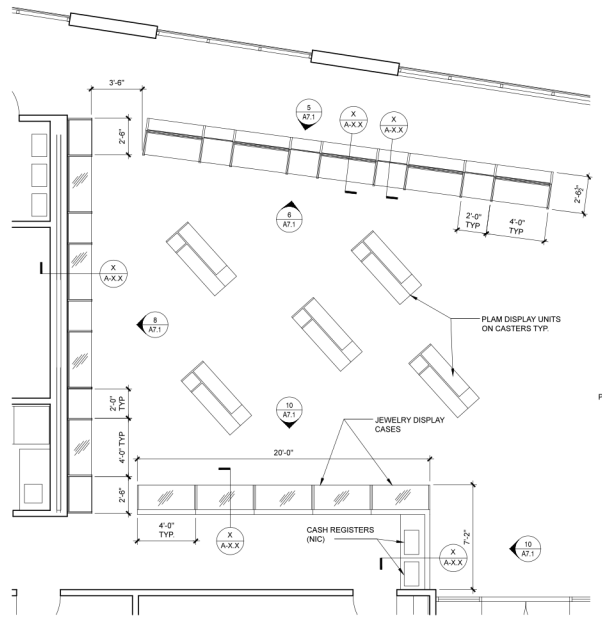
7 BREAK ROOM ELEVATIONS
A-7.1 SCALE: 1/4" = 1'-0"



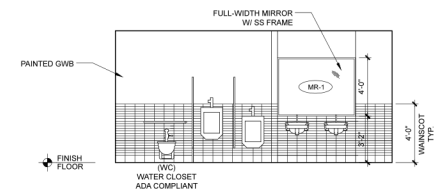
6 RETAIL 103 NORTH ELEVATION
A-7.1 SCALE: 1/4" = 1'-0"



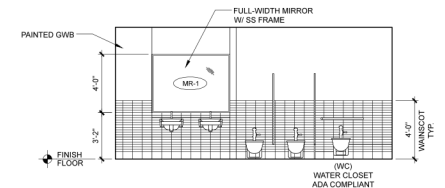
5 EXHIBIT HALL 122 SOUTH ELEVATION
A-7.1 SCALE: 1/4" = 1'-0"



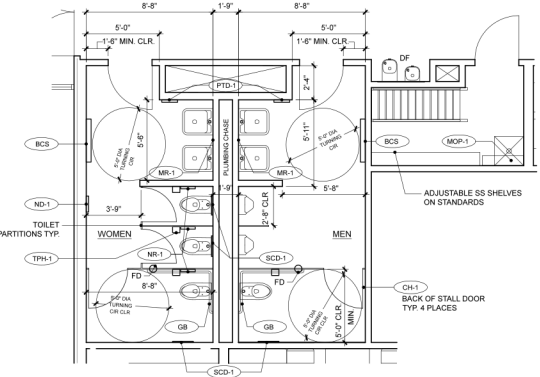
4 ENLARGED RETAIL AREA PLAN
A-7.1 SCALE: 1/4" = 1'-0"



3 MEN'S TOILET ROOM ELEVATION
A-7.1 SCALE: 1/4" = 1'-0"



2 WOMEN'S TOILET ROOM ELEVATION
A-7.1 SCALE: 1/4" = 1'-0"



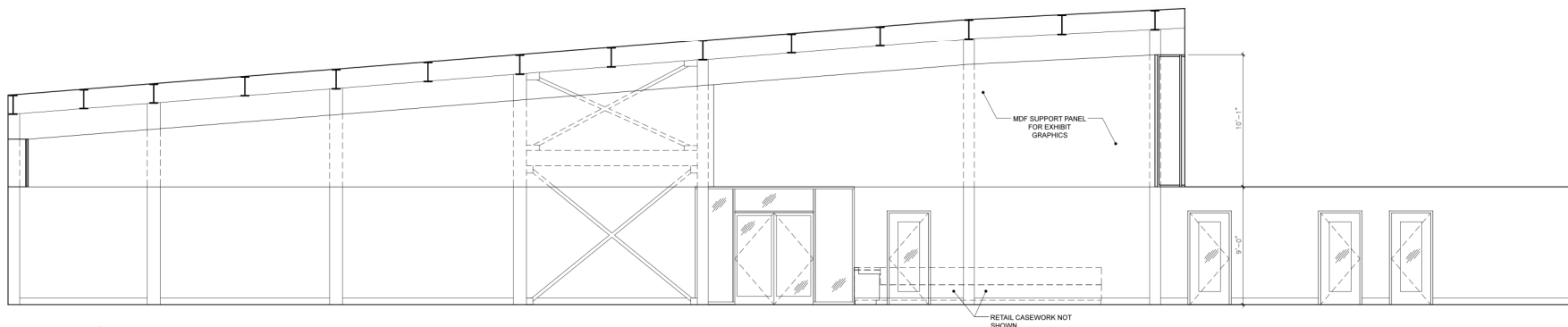
1 ENLARGED TOILET ROOM PLAN
A-7.1 SCALE: 1/4" = 1'-0"

NOTES:
SEE IAS 1 FOR MOUNTING HEIGHTS
SEE SPECS FOR TOILET ACCESSORIES

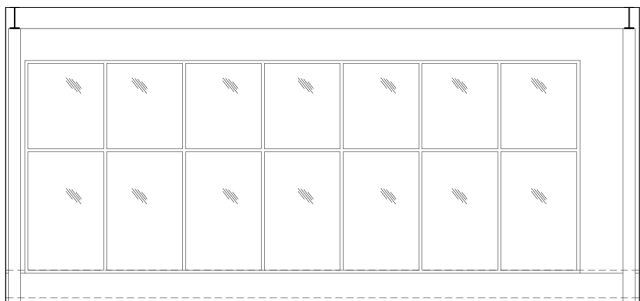
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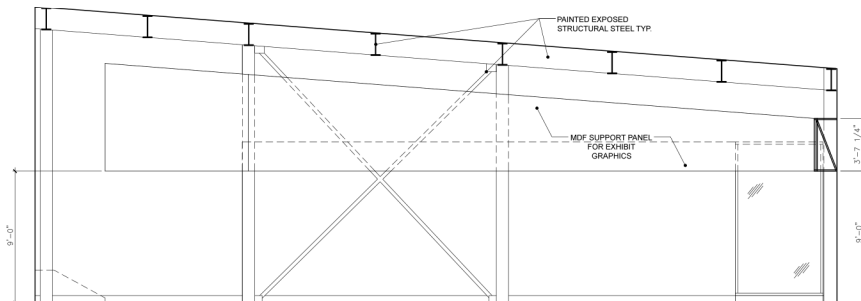
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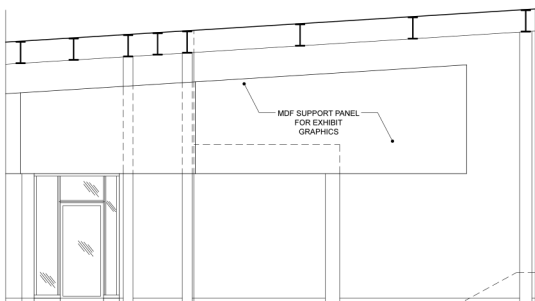
5 EXHIBITS 102 SOUTH ELEVATION
A-7.2 SCALE: 1/4" = 1'-0"



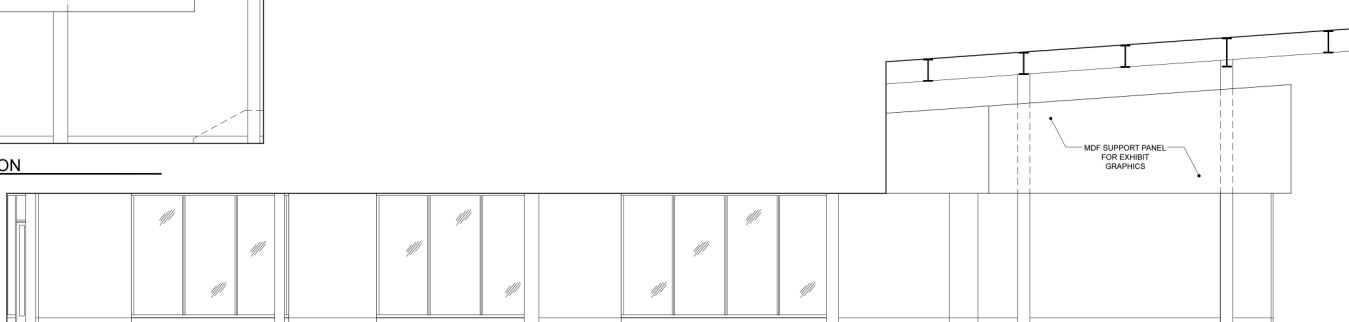
4 EXHIBITS 102 NORTH ELEVATION
A-7.2 SCALE: 1/4" = 1'-0"



3 EXHIBITS 102 EAST ELEVATION
A-7.2 SCALE: 1/4" = 1'-0"



2 EXHIBITS 102 WEST ELEVATION
A-7.2 SCALE: 1/4" = 1'-0"



1 EXHIBITS 102 NORTH ELEVATION
A-7.2 SCALE: 1/4" = 1'-0"

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**ENLARGED PLANS /
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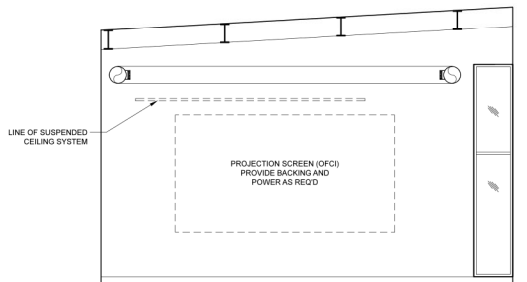
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A-7.2

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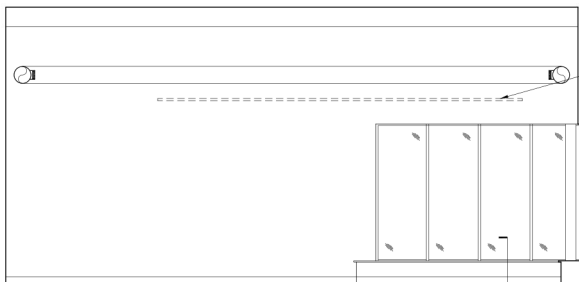
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10 CLASSROOM WEST ELEVATION

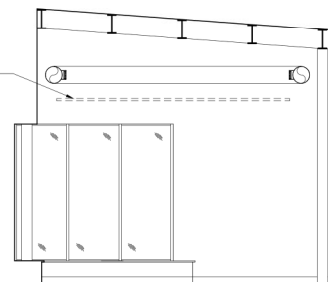
A-7.3 SCALE: 1/4" = 1'-0"



8 CLASSROOM NORTH ELEVATION

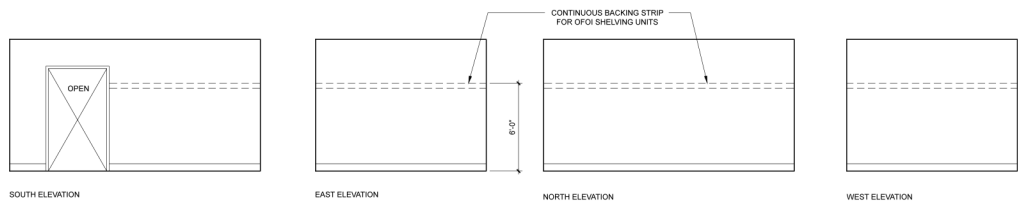
A-7.3 SCALE: 1/4" = 1'-0"

5
A-8.2



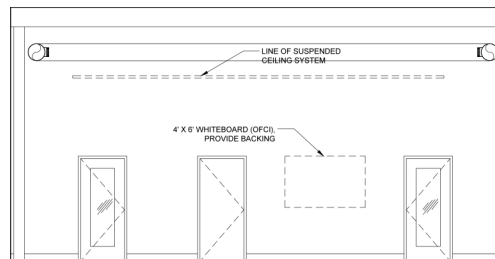
4 CLASSROOM EAST ELEVATION

A-7.3 SCALE: 1/4" = 1'-0"



9 STORAGE ROOM ELEVATIONS

A-7.3 SCALE: 1/4" = 1'-0"



3 CLASSROOM SOUTH ELEVATION

A-7.3 SCALE: 1/4" = 1'-0"

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**ENLARGED PLANS /
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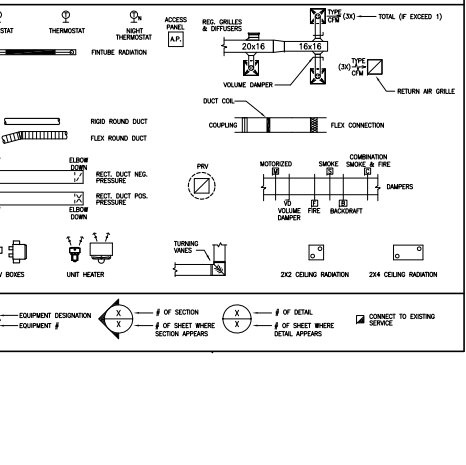
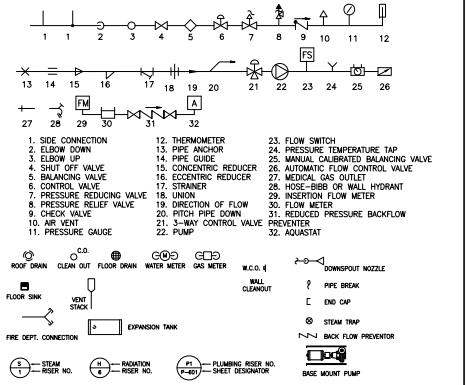
A-7.3

MECHANICAL ABBREVIATION LEGEND

Table with 3 columns: A, F, O. Lists abbreviations for mechanical components like ANCHOR BOLT, AIR CONDITIONER, AREA DRAIN, etc.

MECHANICAL SYMBOL LEGEND

Table with 2 columns: Symbol, Description. Lists symbols for SOL OR WATER ABOVE GROUND, SOL OR WATER BELOW GROUND, VENT PIPING, etc.



SHEET GENERAL NOTES

- 1. ALL SERVICES, EQUIPMENT, ETC. SHOWN ON PLANS ARE NEW AND SHALL BE FURNISHED UNDER THIS CONTRACTOR UNLESS OTHERWISE INDICATED.
2. IN GENERAL, ALL PIPING AND DUCTWORK SHALL BE RUN CONCEALED IN SUSPENDED CEILING SPACES AND IN SHIFTS PROVIDED UNLESS NOTED OR OTHERWISE INDICATED.

FIRE SPRINKLER NOTES

- 1. FIRE STOPPING & SEALING: ALL PIPE AND DUCT WHICH PENETRATE RATED WALLS AND OR CEILING ASSEMBLIES SHALL BE PROPERLY FIRE STOPPED AND SEALED AS REQUIRED BY THE LOCAL BUILDING CODE AUTHORITIES.
2. ENTIRE REMODEL AREA SHALL INCLUDE REWORKING THE EXISTING FIRE SPRINKLER SYSTEM, NEPA 13 OR 13R AS REQUIRED BY LOCAL BUILDING CODE AND FIRE MARSHALL AUTHORITY.

MECHANICAL SHEET INDEX

Table with 2 columns: Symbol, Description. Lists symbols for M-001 SYMBOLS, ABBREVIATIONS, GENERAL NOTES, PL101 UNDERFLOOR PLUMBING PLAN, etc.



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SYMBOLS, ABBREVIATIONS, GENERAL NOTES

Sheet Number

M-001



A1 HVAC PLAN
SCALE: 1/8"=1'-0"



SHEET KEYNOTES



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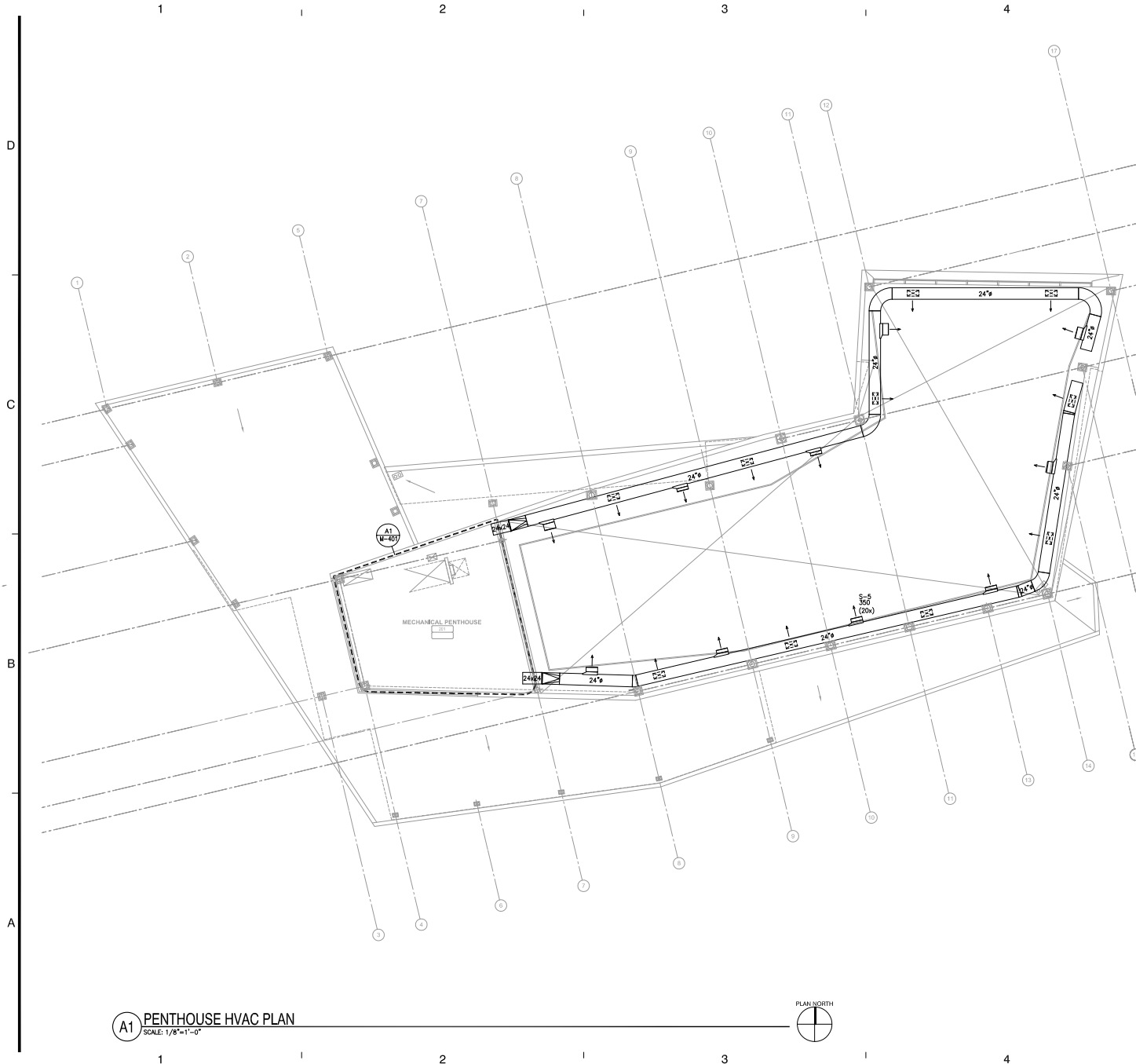
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SMF

HVAC PLAN

Sheet Number

MH101



A1 PENTHOUSE HVAC PLAN
SCALE: 1/8"=1'-0"



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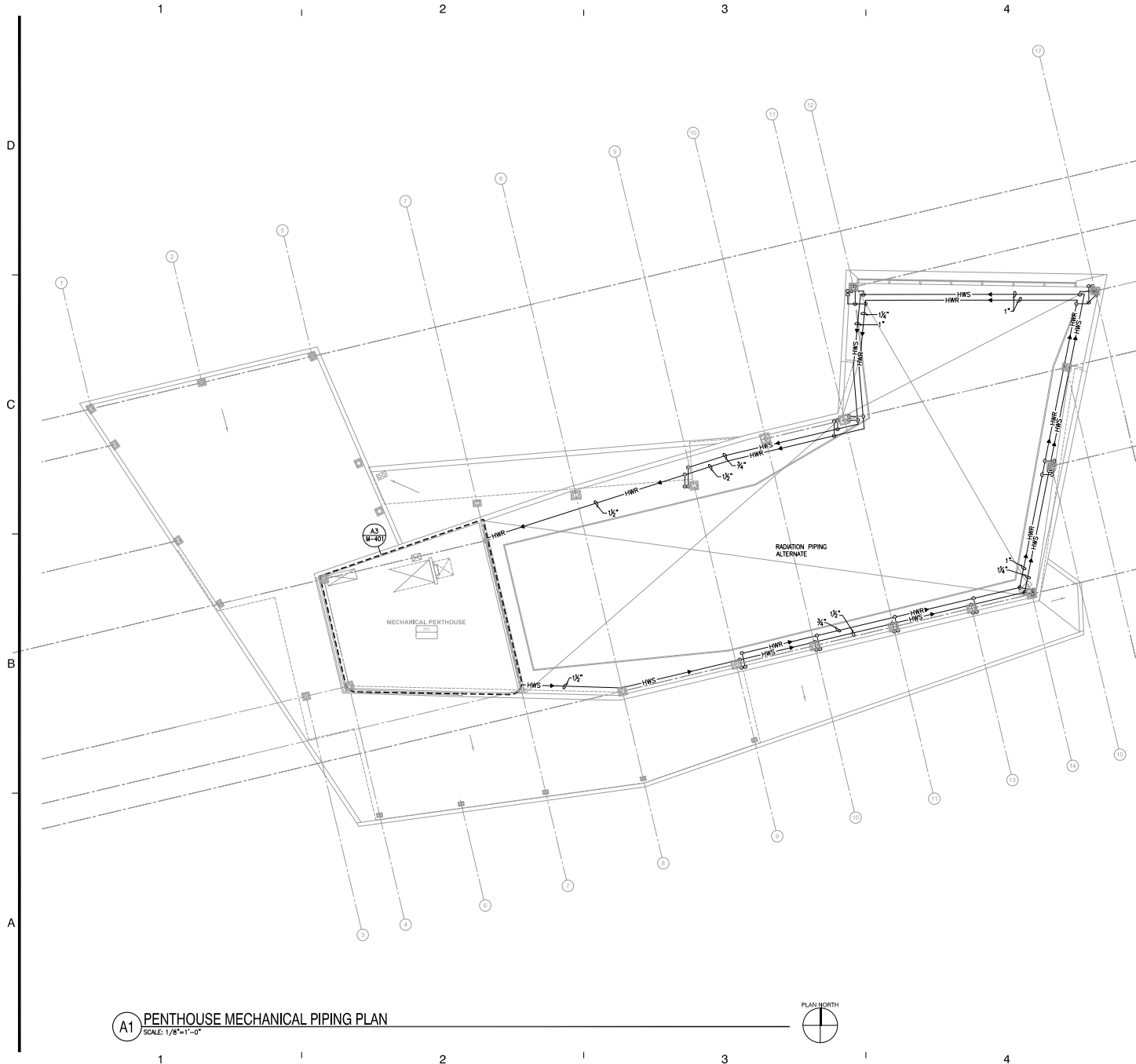
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Sheet Title
**PENTHOUSE
HVAC PLAN**

Sheet Number

MH102



A1 PENTHOUSE MECHANICAL PIPING PLAN
SCALE: 1/8"=1'-0"



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PENTHOUSE MECHANICAL
PIPING PLAN

Sheet Number

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**MECHANICAL LARGE
SCALE PLANS**

Sheet Number

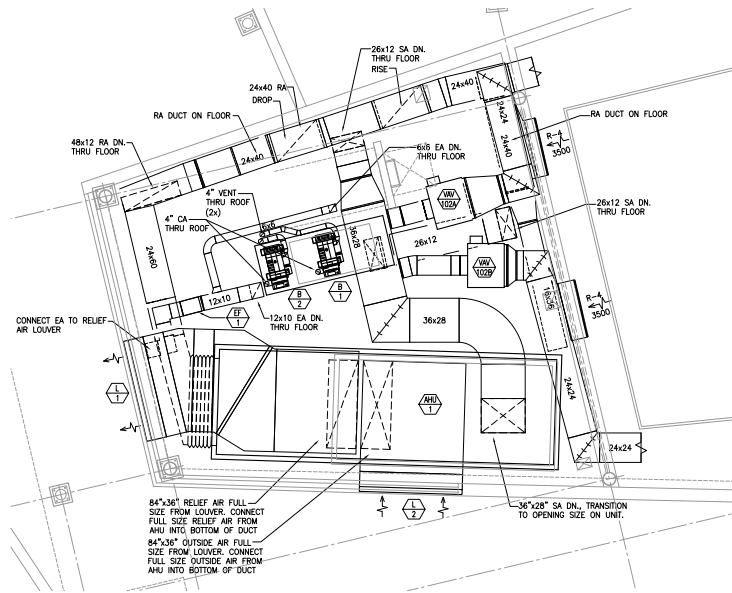
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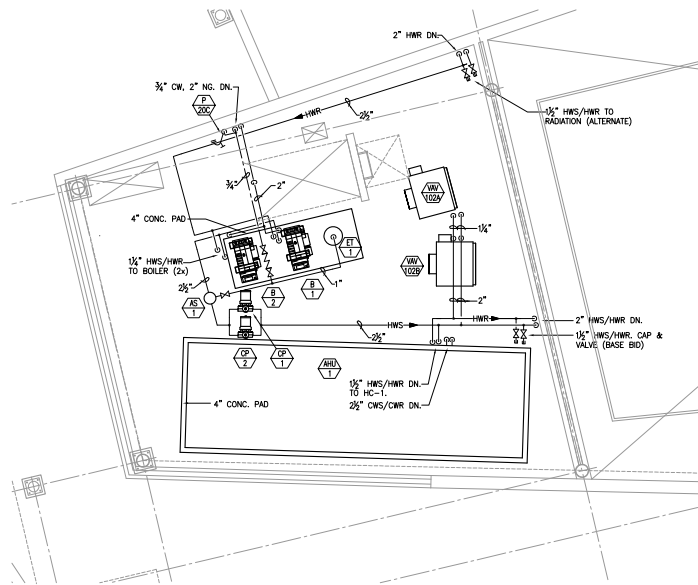
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A



A1 MECHANICAL PENTHOUSE HVAC PLAN
SCALE: 1/8"=1'-0"



A3 MECHANICAL PENTHOUSE PIPING PLAN
SCALE: 1/8"=1'-0"



1

2

3

4

5



A1 UNDERFLOOR PLUMBING PLAN
SCALE: 1/8"=1'-0"

- SHEET KEYNOTES**
1. 2" W. UP TO LAYS.
 2. 4" W. UP TO WATER CLOSET/2" W. TO URINAL.
 3. 4" W. UP TO WATER CLOSETS.
 4. 2" W. UP TO DRINKING FOUNTAIN.
 5. 3" W. UP TO MOP SINK.
 6. 4" W. UP TO FCO.
 7. 4" W., 4' BELOW GRADE
 8. 2" W. UP TO FLOOR DRAIN. SMITH 2" 2010A W/P-TRAP.
 9. 1 1/2" V. UP.
 10. SEE SITE UTILITY PLAN FOR CONT.
 11. 2 1/2" CWS, 2 1/2" CWR & 2" CW PERMA-PIPE PREFAB INSULATED PIPE, TERMO-GARD, WITH HEAT TRACE. INSTALL 2' BELOW GRADE, ELBOW UP INTO BUILDING 2" AFF.
 12. 2" W. UP TO SINK.
 13. 2" UNDERGROUND GAS, POLYETHYLENE-SLEEVED FLEXIBLE GAS PIPING, TRACE PIPE OR EQUAL.
 14. 4" W. UP.



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**UNDERFLOOR
PLUMBING PLAN**

Sheet Number

PL001



SHEET KEYNOTES



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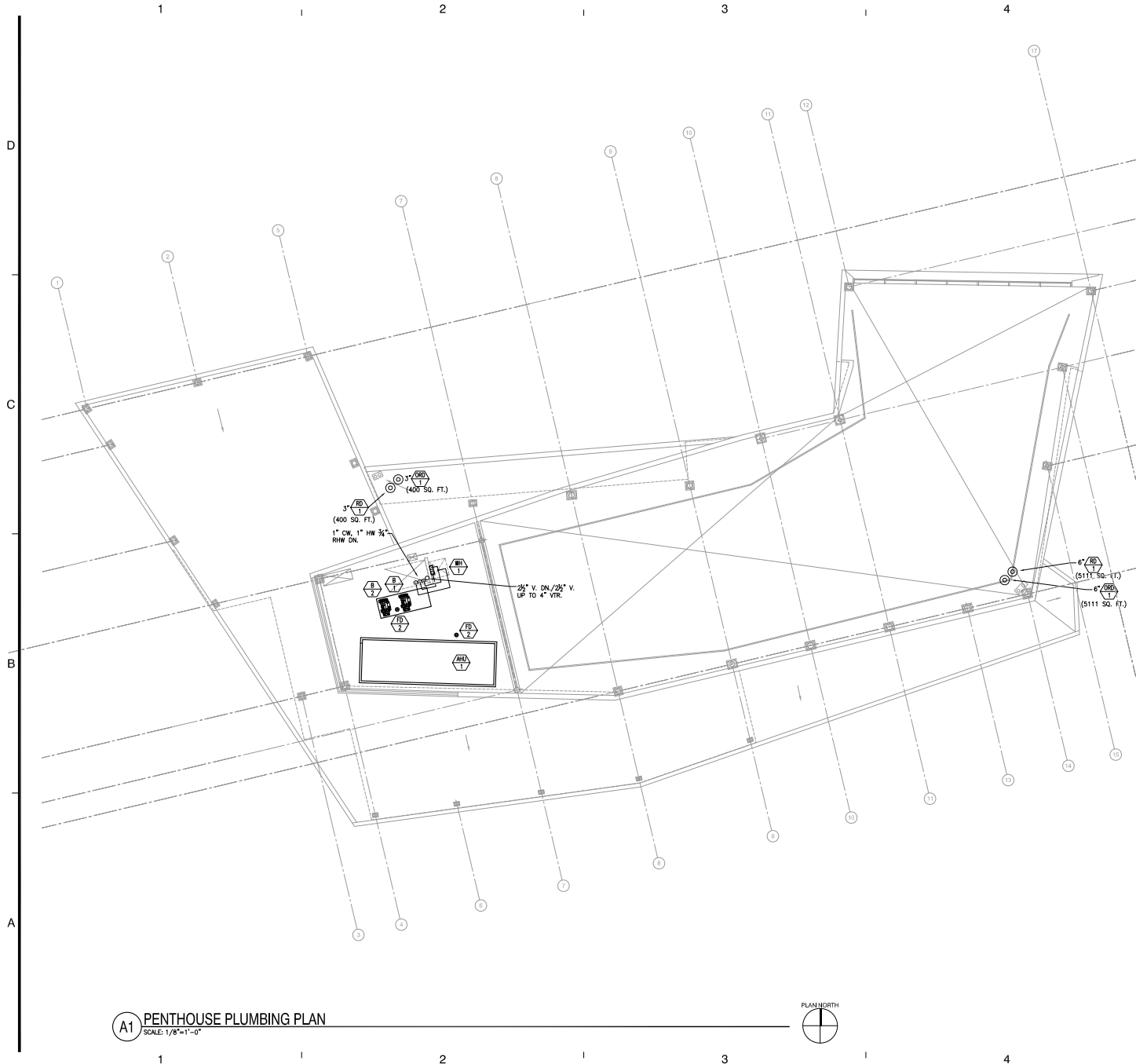
PLUMBING PLAN

Sheet Number

PL101

A1 PLUMBING PLAN
SCALE: 1/8"=1'-0"





A1 PENTHOUSE PLUMBING PLAN
SCALE: 1/8"=1'-0"



SHEET GENERAL NOTES

- A. xxx
- B. xxx
- C. xxx

SHEET KEYNOTES

1.



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**PENTHOUSE
PLUMBING PLAN**

Sheet Number

PL102



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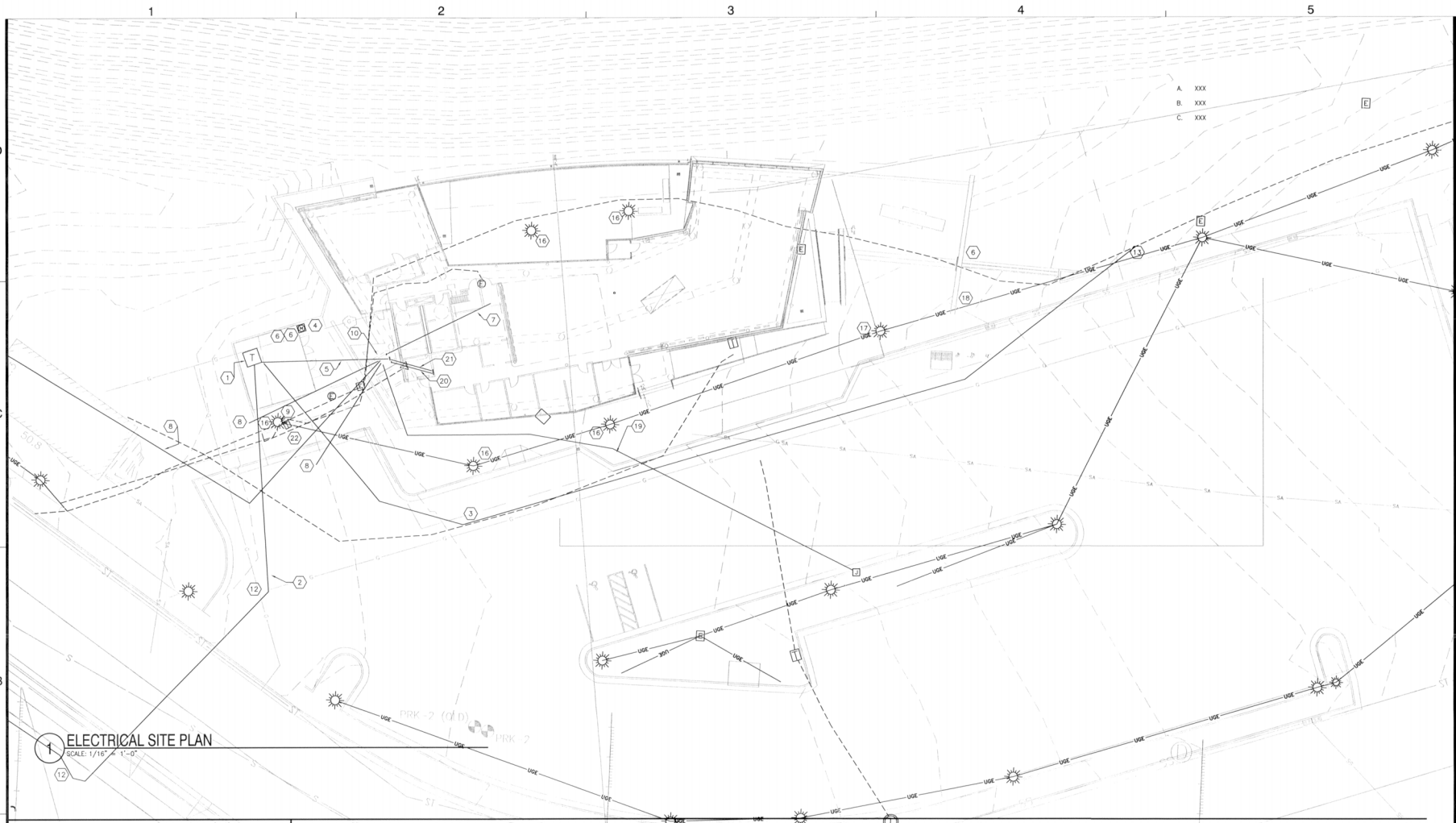


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Sheet Title
**ELECTRICAL SITE PLAN
AND DETAILS**

Sheet Number
ES101



ELECTRICAL SITE PLAN
SCALE: 1/16" = 1'-0"

SHEET GENERAL NOTES

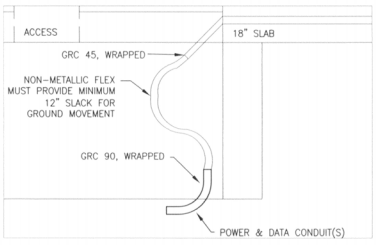
SHEET KEYNOTES

- A. ELECTRICAL ITEMS SHOWN DASHED LINE WITH "USE" ON THIS PLAN INDICATE EXISTING EQUIPMENT TO BE REMOVED AND/OR RELOCATED BY DIVISION 28 WITHIN CONSTRUCTION AREA (ALONG WITH ALL ASSOCIATED UNUSED CONDUIT AND WIRE). EXISTING USE CONDUCTORS ARE SHOWN OUTSIDE THE CONSTRUCTION AREA FOR IC REFERENCE AND ARE NOT NECESSARILY CORRECT. ELECTRICAL ITEMS IN BOLD TYPE ARE NEW ITEMS.
- B. ANY DEMOLITION REQUIRED ON THIS PLAN IS BASED ON INFORMATION SHOWN ON OWNER'S EXISTING PLANS AND AN ON-SITE REVIEW OF THE FACILITY. QUANTITIES, TYPES, AND LOCATIONS OF ITEMS SHOWN ARE BELIEVED TO BE ACCURATE. HOWEVER, DIVISION 28 CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND/OR RELOCATING ELECTRICAL EQUIPMENT AS REQUIRED TO ACCOMMODATE REMODELING.
- C. ALL EXISTING UTILITIES ARE TO BE DISCONNECTED FROM BUILDINGS TO BE DEMOLISHED AND SERVICE CABLES ARE TO BE PROTECTED AT A LOCATION WHERE THEY CAN BE SUBSEQUENTLY RECONNECTED TO THE NEW BUILDING.
- D. POWER WILL BE UPGRADED FROM 120/240 TO 120/208 3-PHASE. NEW BHP PRIMARY WILL NEED TO BE EXTENDED FROM A NEW BHP PRIMARY CABINET ON THE SW SIDE OF HWY 85 THROUGH TRENCHES AND A BORE UNDER THE ROAD TO A NEW TRANSFORMER LOCATION. THE EXISTING TRANSFORMER IS FEEDING AT LEAST ONE LOAD OUTSIDE OF THE CONSTRUCTION AREA THAT WILL NEED TO BE MAINTAINED UNTIL THE NEW 3-PHASE TRANSFORMER CAN BE ENERGIZED.
- E. BHP PRIMARY SINGLE PHASE POWER IS CURRENTLY FEEDING OUT OF THE EXISTING VISITOR CENTER TRANSFORMER EAST THROUGH THE CONSTRUCTION AREA TO ANOTHER SINGLE PHASE TRANSFORMER PROVIDING POWER TO THE CITY PARK AND GARAGE. THIS PRIMARY CABLE WILL NEED TO BE INTERCEPTED AND REROUTED THROUGH A 3" CONDUIT ALONG THE SOUTH EDGE OF THE CONSTRUCTION AREA. ANY OUTGAGE WILL NEED TO BE COORDINATED WITH BHP, THE OWNER AND THE CITY OF LEAD.

- 1. BHP TRANSFORMER. COORDINATE ALL SERVICE REQUIREMENTS WITH BHP. PROVIDE TRANSFORMER PAD PER BHP REQUIREMENTS. TRANSFORMER LOCATION MAY VARY SLIGHTLY BASED ON ACTUAL LANDSCAPE DESIGN. EC TO CONFIRM FINAL LOCATIONS MEETS BHP REQUIREMENTS FOR SERVICE CLEARANCE AND ACCESS. COORDINATE WITH BHP AND ENGINEER.
- 2. PROVIDE (1) 4 INCH CONDUIT OUT OF TRANSFORMER PAD TO THE CORNER OF JULIUS STREET AND MAIN STREET. COORDINATE EXACT LOCATION WITH BHP.
- 3. PROVIDE (1) 3 INCH CONDUIT OUT OF TRANSFORMER PAD TO SPLICE LOCATION TO FEED EXISTING CITY PARK TRANSFORMER. COORDINATE WITH BHP.
- 4. PROVIDE CONDUIT AND METER SOCKET PER BHP REQUIREMENTS.
- 5. PROVIDE THREE 3 INCH CONDUITS FROM SECONDARY OF TRANSFORMER TO MDP. ROUTE CONDUIT VIA VAULT. SEE DETAIL A5/ES101.
- 6. PROVIDE 1" CONDUIT FROM MDP THROUGH VAULT TO THIS LOCATION. CONDUIT WILL PROVIDE POWER FROM MDP TO SITE LOADS. COORDINATE EXACT LOCATION WITH FINAL EQUIPMENT. SEE DETAIL A5/ES101.
- 7. PROVIDE (4) 2" CONDUIT FROM ELECTRICAL ROOM TO VAULT FOR COMMUNICATION CABLES. RACKWAYS TO BE EXTENDED OUT OF VAULT. SEE DETAIL A5/ES101. COORDINATE WITH COMMUNICATIONS COMPANIES FOR THREE (3) CONDUITS. COORDINATE WITH OWNER FOR FOURTH CONDUIT WHICH IS INTENDED FOR FUTURE FIBER CONNECTION TO LAB.
- 8. EXTEND ONE 2" CONDUIT (NOTE 7) FROM VAULT TO THIS LOCATION FOR COMMUNICATIONS CABLES. COORDINATE EXACT LOCATION WITH UTILITY.

- 9. EXISTING PEDESTAL WILL BE RELOCATED BY UTILITY. COORDINATE EXACT LOCATION WITH UTILITY.
- 10. ELECTRICAL VAULT SEE DETAIL A5/ES101. VAULT IS PROVIDED TO PREVENT POSSIBLE BUILDING MOVEMENT FROM DAMAGING WIRING.
- 11. LIQUID TIGHT 18" FREE-LENGTH.
- 12. APPROXIMATE PIT LOCATION FOR BOREHOLE UNDER ROAD. VISITOR CENTER PARKING LOT TO BE DEMOLISHED IN THIS AREA FOR OTHER WORK. COORDINATE WITH GC, CITY AND DOT.
- 13. APPROXIMATE SPLICE LOCATION FOR SINGLE PHASE PRIMARY POWER. EC TO PROVIDE EXCAVATION, CONDUIT, SAND BEDDING AND BACKFILL. COORDINATE WITH BHP.
- 14. BHP JUNCTION BOX LOCATION. COORDINATE WITH BHP.
- 15. EXISTING SINGLE PHASE BHP PRIMARY TO BE BYPASSED AND ABANDONED IN PLACE. SEE KEYED NOTE 13 THIS PAGE. THIS WORK MUST BE COMPLETED BEFORE PIER HOLES ARE DRILLED. COORDINATE WITH BHP, GC AND CITY.
- 16. ALL SMALL EXISTING LAMP POSTS TO BE CAREFULLY REMOVED AND RETURNED TO CITY OF LEAD.
- 17. ONE TALL PARKING LOT LIGHT FIXTURE TO BE CAREFULLY REMOVED AND RELOCATED.
- 18. RELOCATE FIXTURE FROM NOTE 17 TO THIS LOCATION. MATCH SPACING FROM SIDEWALK. REROUTE CONDUIT TO NEW LOCATION AND REPLACE CONDUCTORS TO RECONNECT LIGHT AS IT WAS BEFORE MOVE.

- 19. INTERCEPT EXISTING COMMUNICATION SERVICE CONDUIT. REROUTE TO ELECTRICAL VAULT. EXTEND CONDUIT IF POSSIBLE. INSTALL HANDHOLE BOX IF CONDUIT CANNOT BE EXTENDED OTHERWISE.
- 20. THREE 1" CONDUIT FEEDING SITE POWER/LIGHT CIRCUITS OUT TO LOCATIONS MARKED BY NOTE 6. CONFIRM LOCATION WITH ENGINEER.
- 21. PROVIDE THREE 3 INCH CONDUITS AND ONE 1-1/2 INCH CONDUIT FROM MAIN PANEL RECESS MOUNTED IN STORAGE 118 THROUGH SLAB TO VAULT. THREE 2" CONDUITS CONTINUE TO TRANSFORMER VIA VAULT. 1-1/2 INCH CONDUIT TO ROUTE 3/0 SYSTEM GROUNDING CONDUCTOR TO VAULT FOR GROUND ROD CONNECTION.
- 22. EXISTING BHP SINGLE PHASE TRANSFORMER LOCATION.



A5 ELECTRICAL VAULT
SCALE: 5



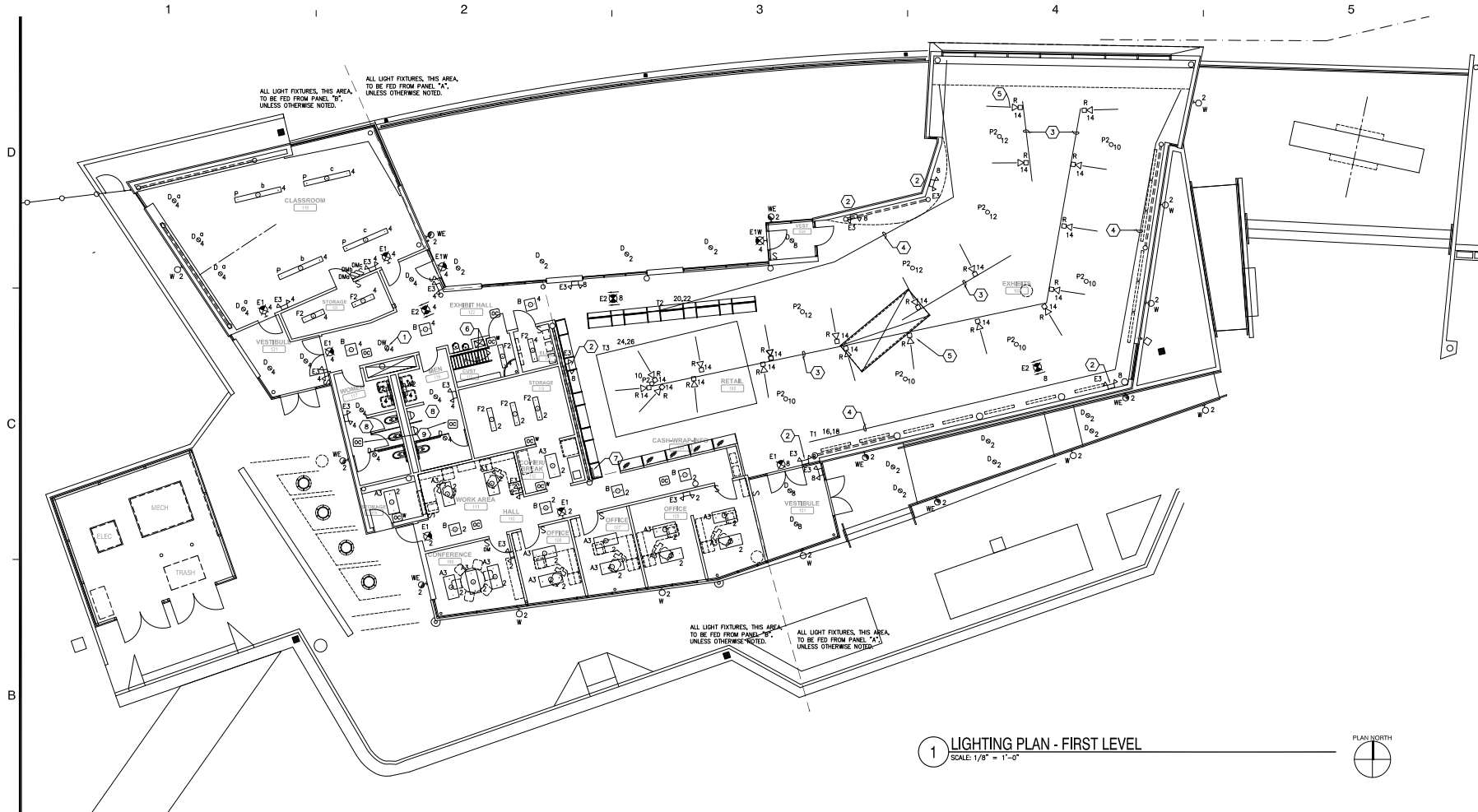
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LIGHTING PLAN - FIRST LEVEL

Sheet Number
EL101



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



SHEET GENERAL NOTES

- A. REFER TO ARCHITECTURAL ELEVATIONS FOR EXTERIOR LIGHT FIXTURE MOUNTING HEIGHTS.
- B. EMERGENCY AND EXIT LIGHTS TO BE WIRED TO UNSWITCHED HOT FOR THE CIRCUIT INDICATED.
- C. EC TO COORDINATE LIGHT FIXTURE PLACEMENT WITH ARCHITECTURAL CEILING PLANS AND OTHER TRADES. EC TO CONFIRM CEILING TYPE, RECESS SPACE, MOUNTING HARDWARE FOR ALL LIGHTS PRIOR TO ORDERING FIXTURES.
- D. EC TO COORDINATE MOUNTING HEIGHTS OF ALL PENDANT FIXTURES WITH ARCHITECT PRIOR TO INSTALLATION.
- E. MULTIWIRE CIRCUITS ARE NOT ALLOWED UNLESS SPECIFICALLY INDICATED ON PLAN.
- F. OUTSIDE LIGHT CIRCUIT TO HAVE (4) #19 PROVIDING SWITCHED AND UNSWITCHED HOT. ROUTE TO LIGHTING CONTRACTOR #1 IN MECH 201.

SHEET KEYNOTES

1. LIGHT FOR CHAMBER OF COMMERCE BROCHURE RACK.
 2. MOUNT EMERGENCY LIGHTS AT 10.5 FT. COORDINATE SO FIXTURE WILL NOT BE READILY VISIBLE BUT WILL ILLUMINATE WITHOUT OBSTRUCTION.
 3. PROVIDE UN-STRUT AT 14"-0" A.F.F. FOR MOUNTING OF FLOOD LIGHTS. LIGHTS TO HANG DOWN FROM STREET.
 4. MOUNT TRACK FOR TRACK LIGHTS ON THE BOTTOM OF SOFFIT. REFER TO ARCHITECTURAL DETAIL 1 ON SHEET A-4.2 FOR TYPICAL INSTALLATION.
 5. MOUNT FLOOD LIGHT ON UNSTRUT ASSEMBLY. LOCATE AS PER DRAWING AND TILT FIXTURE DOWN AT 20 DEGREES (FINAL LOCATION SHALL BE COORDINATED WITH ENGINEER). LIGHT METER SHALL BE USED TO ENSURE UNIFORM ILLUMINATION ALONG THE LENGTH OF DISPLAY PANELS MEASURED AT 2' ABOVE BOTTOM EDGE. (TYPICAL OF ALL TYPE R LIGHTS)
 6. PROVIDE LIGHT SWITCH AT BOTTOM OF STAIRS AND CONNECT TO LIGHTS ABOVE IN MECHANICAL ROOM.
 7. PROVIDE FLUSH MOUNTED LIGHTING CONTROL, LUTRON "DRAFK EYE" OR EQUAL FOR DIMMING CONTROL OF LIGHT FIXTURES IN EXHIBIT 102 ZONES SHALL BE AS FOLLOWS:
 - a - LED TYPE "0" FIXTURES (0-10V DIMMING)
 - b - LED TYPE "20" FIXTURES (0-10V DIMMING)
 - c - LED TYPE "7" FIXTURES (0-10V DIMMING)
 - d - LED TYPE "11" FIXTURES (ELV DIMMING)
 - e - LED TYPE "11" FIXTURES (ELV DIMMING)
 - f - LED TYPE "12" FIXTURES (ELV DIMMING)
 - g - LED TYPE "12" FIXTURES (ELV DIMMING)
 - h - LED TYPE "13" FIXTURES (ELV DIMMING)
 - i - LED TYPE "13" FIXTURES (ELV DIMMING)
 8. LIGHT CIRCUITS IN THESE AREAS TO HAVE CONTROL CONTACT WIRED IN PARALLEL TO CONTROL EXHAUST FAN. A POWER PACK WITH HVAC CONTACT, A RELAY WIRED TO SWITCHED HOT OF LIGHT CIRCUIT OR A DPSP SWITCH MAY BE USED. EC TO ROUTE CIRCUIT TO NEAREST BAG PANEL.
 9. DC IN BATHROOMS SHALL USE POWER PACK WITH HVAC RELAY. HEADS SHALL BE DUAL TECHNOLOGY.
- PROVIDE ALL NECESSARY COMPONENTS FOR A COMPLETE OPERATIONAL SYSTEM.

1 2 3 4 5



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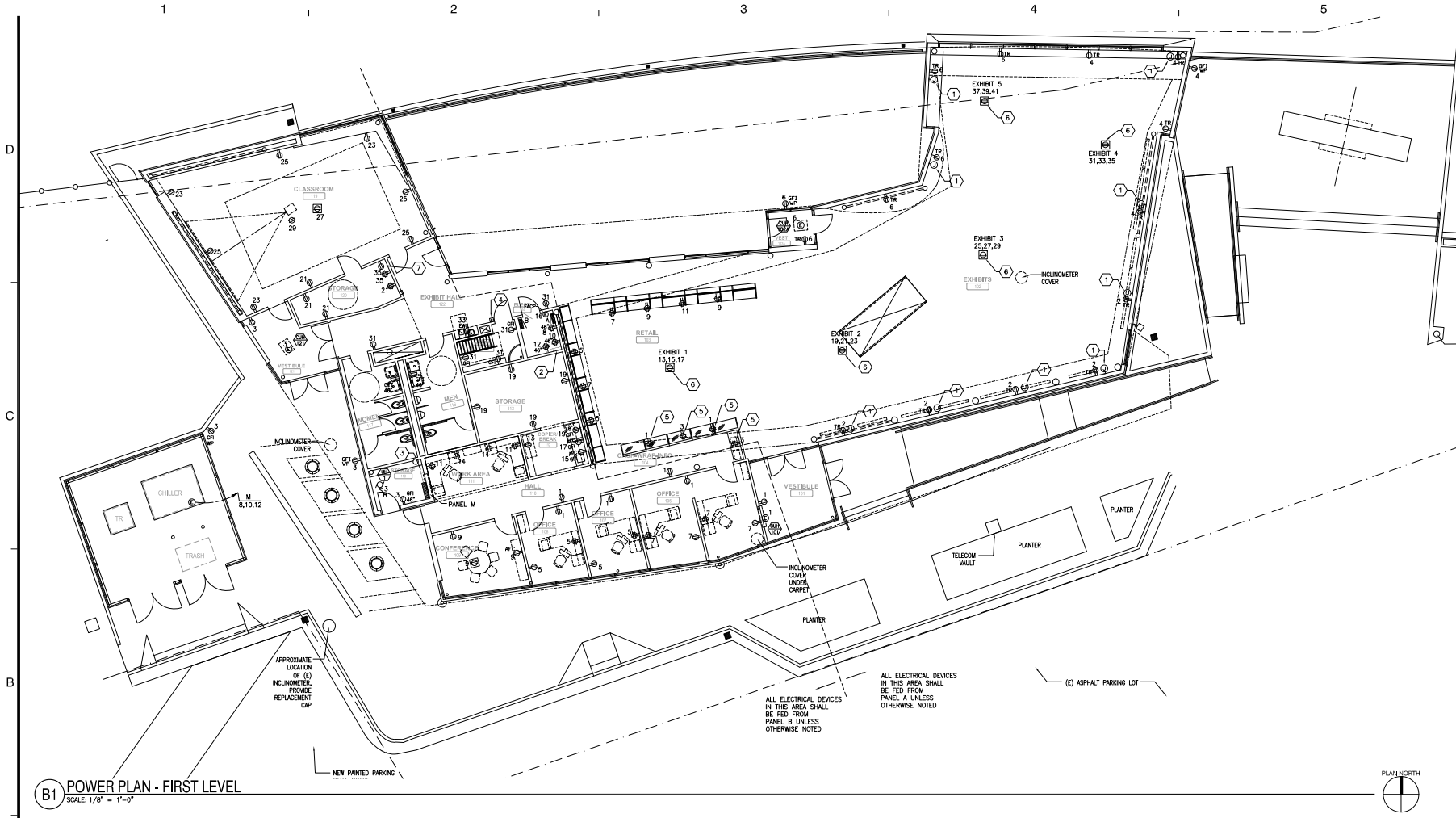
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Sheet Title

POWER PLAN - FIRST LEVEL

Sheet Number

EP101



B1 POWER PLAN - FIRST LEVEL
SCALE: 1/8" = 1'-0"

SHEET GENERAL NOTES

- A. ALL CIRCUITS SHALL BE SIZED PER DC DEVICE AND CIRCUIT SCHEDULE ON SHEET E-601.
- B. EMERGENCY AND EXIT LIGHTS TO BE POWERED FROM UNSWITCHED HOT FOR CIRCUITS INDICATED.
- C. VERIFY ALL MOUNTING HEIGHTS AND LOCATIONS OF WALL MOUNTED DEVICES WITH ARCHITECTURAL ELEVATIONS.
- D. CONTRACTOR TO COORDINATE RECEPTACLE DEVICES NEXT TO TELECOMMUNICATION DEVICES. REFER TO SYSTEMS DRAWINGS SUCH THAT THE DEVICES ARE MOUNTED ADJACENT TO EACH OTHER.
- E. REFER TO ME DRAWINGS FOR ELECTRICAL CONNECTIONS AND WORK RELATED TO MECHANICAL EQUIPMENT.
- F. EC TO CONFIRM ALL OUTLET AND FLOOR BOX LOCATIONS IN EXHIBIT AREA WITH ARCHITECT/EXHIBIT DESIGNER.

SHEET KEYNOTES

- 1. PROVIDE FLUSH MOUNTED JUNCTION BOX AND STUB UP 3/4" CONDUIT TO ACCESSIBLE CEILING FOR FUTURE CABLING. PROVIDE BLANK STAINLESS STEEL COVER PLATE.
- 2. PROVIDE TELECOMMUNICATIONS GROUNDING BUS BAR. REFER TO GROUNDING DETAIL ON SHEET E-601 AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- 3. PROVIDE INTERSYSTEM BONDING BUS BAR. REFER TO GROUNDING DETAIL ON SHEET E-601 AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- 4. PROVIDE FLUSH MOUNTED EMERGENCY BOILER SHUTDOWN PUSHBUTTON WITH COVER. INTERLOCK WITH BOILER CONTROLS. COORDINATE INSTALLATION REQUIREMENTS WITH DIVISION 22/23. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- 5. RECEPTACLES SHALL BE LOCATED IN KNEE-SPACE OF CASEWORK. FEED FROM WALL CONICAL CONDUITS WHEREVER POSSIBLE.
- 6. FLOOR BOX SHALL HOUSE POWER AND TECHNOLOGY DEVICES. REFER TO TECHNOLOGY DRAWING ET101 AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. CIRCUIT TO BE MULTI-WIRED WITH A SINGLE OVER-SIZED NEUTRAL. COORDINATE FLOOR BOX LOCATION WITH EXHIBIT DESIGNER.
- 7. RECEPTACLE TO BE ABOVE AUDIO EQUIPMENT SHELF (APPROXIMATELY 72" AFF). COORDINATE WITH OWNER'S AUDIO EQUIPMENT SUPPLIER.

ALL ELECTRICAL DEVICES IN THIS AREA SHALL BE FED FROM PANEL A UNLESS OTHERWISE NOTED

ALL ELECTRICAL DEVICES IN THIS AREA SHALL BE FED FROM PANEL B UNLESS OTHERWISE NOTED





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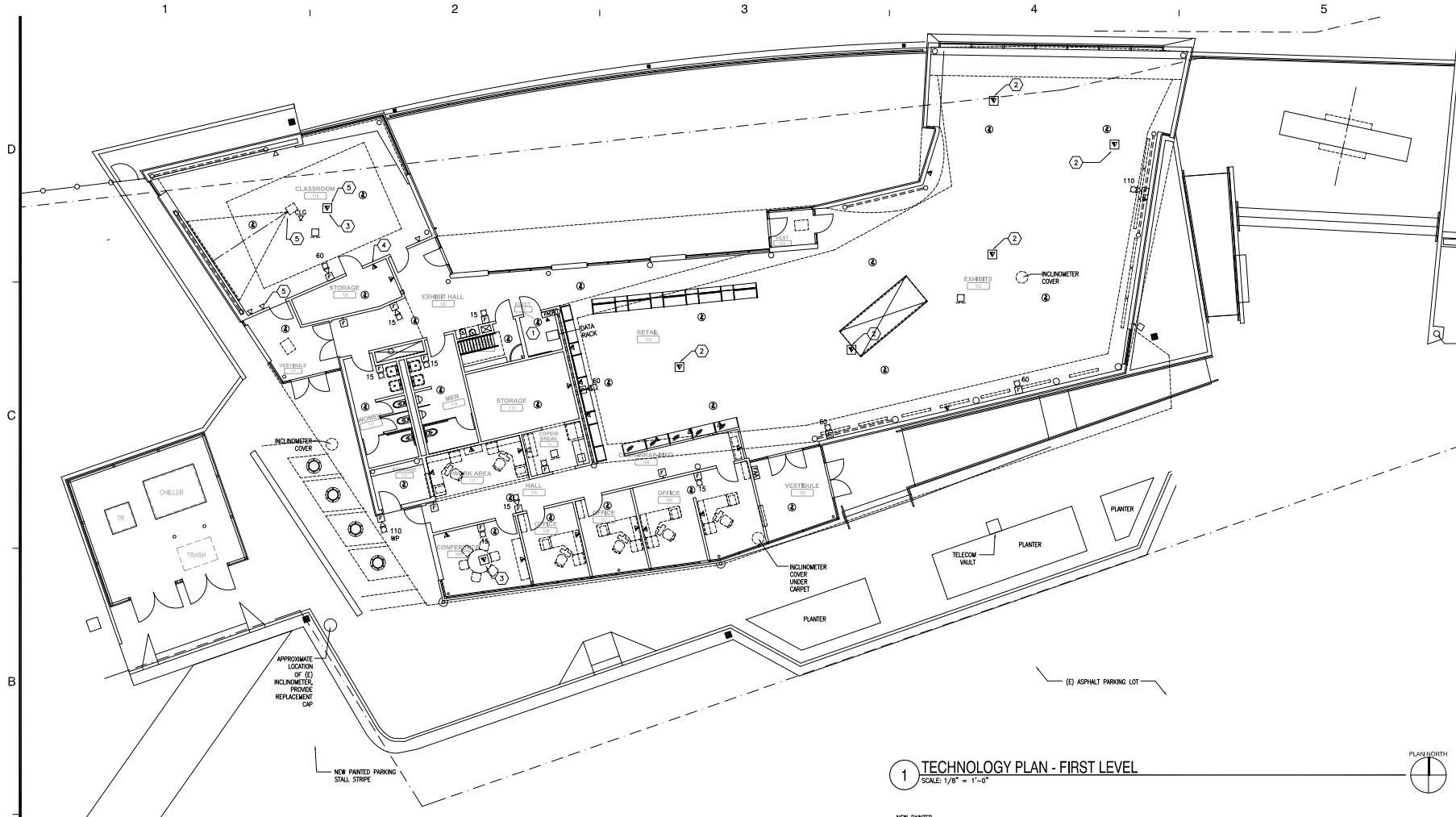
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**TECHNOLOGY PLAN -
FIRST LEVEL**

Sheet Number

ET101



1 TECHNOLOGY PLAN - FIRST LEVEL
SCALE: 1/8" = 1'-0"

SHEET GENERAL NOTES

- A. ALL CEILING MOUNTED DEVICES IN DROP CEILING TO BE CENTERED IN TILE.
- B. VERIFY ALL MOUNTING HEIGHTS AND LOCATIONS OF WALL OUTLETS WITH ARCHITECTURAL ELEVATIONS.
- C. CONTRACTOR SHALL COORDINATE RECEPTACLE DEVICES NEXT TO TELECOMMUNICATION DEVICES. REFER TO SYSTEMS DRAWINGS SUCH THAT THE DEVICES ARE MOUNTED ADJACENT TO EACH OTHER.
- D. ALL COMMUNICATIONS CABLING TO ROUTE TO ELECT ROOM 114.
- E. FOR ALL VOICE, DATA, AND COMBINATION VOICE/DATA OUTLETS SHOWN ON DRAWINGS PROVIDE A 4-11/16" SQUARE BY 2-1/8" DEEP JUNCTION BOX WITH SINGLE-GANG MUD RING AND ONE 1-INCH CONDUIT STUBBED ABOVE ACCESSIBLE CEILING WITH INSULATED BUSHINGS. VOICE, DATA, AND VOICE/DATA OUTLETS SHALL BE INSTALLED ADJACENT TO AND AT THE SAME ELEVATION AS RECEPTACLES (SHOWN ON DRAWING EP101). TYPICAL OF ALL VOICE, DATA, AND VOICE/DATA OUTLETS SHOWN ON DRAWINGS.
- F. CONTRACTOR SHALL COORDINATE LOCATIONS OF DEVICES WITH ARCHITECT PRIOR TO ROUGH-IN. EC TO CONFORM ALL OUTLET AND FLOOR BOX LOCATIONS IN EXHIBIT AREA WITH ARCHITECT/EXHIBIT DESIGNER.

SHEET KEYNOTES

- 1. TELECOM BOARD. 4' X 8' GRAY FIRE RESISTANT PAINT, SEE SPECIFICATIONS.
- 2. FLOOR BOXES SHALL HOUSE POWER AND TECHNOLOGY DEVICES. REFER TO DRAWING EP101 AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. STUB ONE 1-INCH CONDUIT FROM VOICE/DATA SIDE OF FLOOR BOX TO ELECTRICAL ROOM 114.
- 3. FLOOR BOXES SHALL HOUSE POWER AND TECHNOLOGY DEVICES. REFER TO DRAWING EP101 AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. PROVIDE A 1" CONDUIT UNDER FLOOR TO NEAREST WALL. ROUTE CONDUIT UP INSIDE OF WALL TO ABOVE ACCESSIBLE CEILING CAVITY FOR ROUTING OF COMMUNICATIONS CABLING.
- 4. THIS DATA JACK SHALL BE ABOVE AUDIO EQUIPMENT SHELF. THIS LOCATION SHALL ALSO BE THE TERMINATION END OF VIDEO (1-1/4") PATHWAYS INDICATED IN NOTE 5. EC SHALL ALSO PROVIDE AUDIO SPEAKER WIRE PATHWAYS TO FOUR SPEAKER LOCATIONS. COORDINATE WITH GC AND OWNER'S EQUIPMENT SUPPLIER.
- 5. 4' SQ BOX WITH 1-1/4" CONDUIT ROUTED FROM THESE LOCATIONS TO SHELF IN STORAGE 120 FOR VIDEO CABLE. 1-1/4" WIREWAY CAN USE KNOCK-OUTS WITH 6" GAP INSTEAD OF 90S. COORDINATE WITH OWNER'S VIDEO SUPPLIER.



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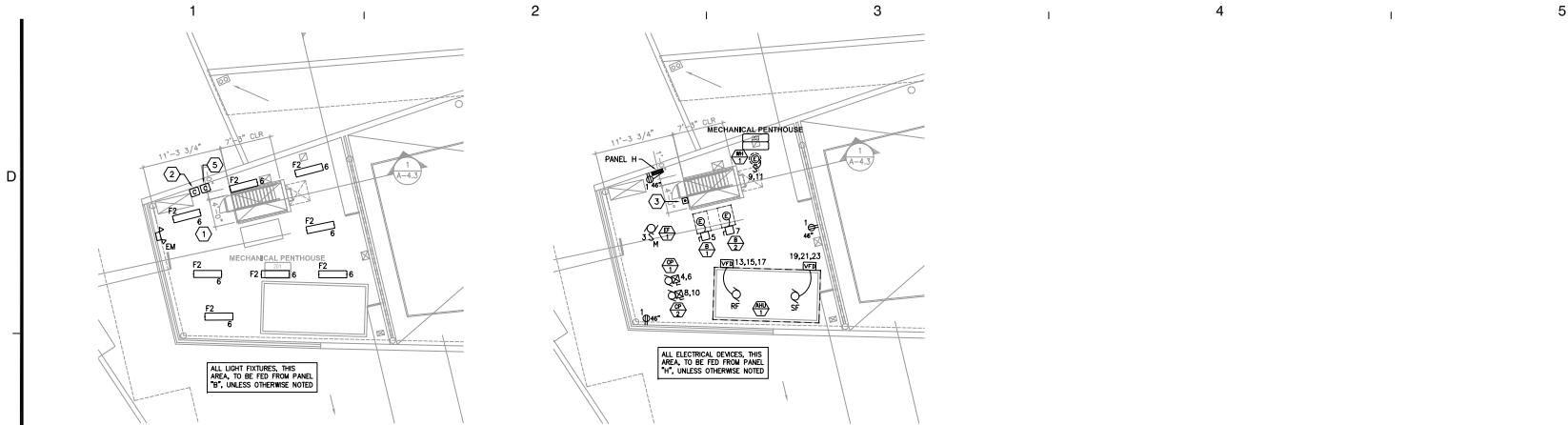
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**LIGHTING, POWER,
TECH - PENTHOUSE**

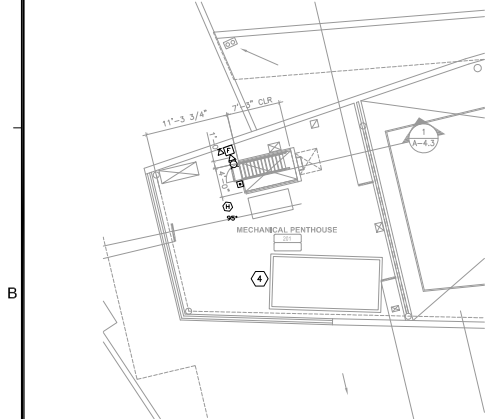
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E-102

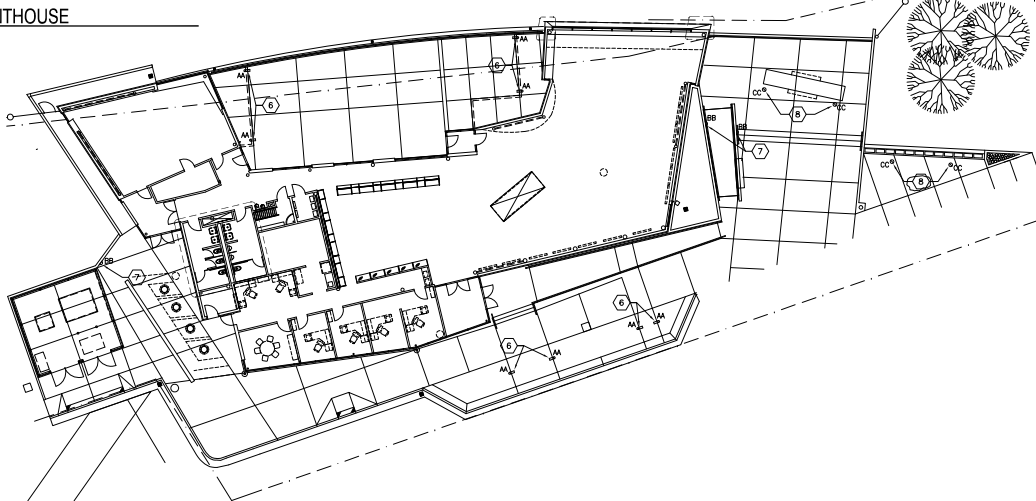


C1 LIGHTING PLAN - PENTHOUSE
SCALE: 1/8" = 1'-0"

C2 POWER PLAN - PENTHOUSE
SCALE: 1/8" = 1'-0"



B1 TECHNOLOGY PLAN - PENTHOUSE
SCALE: 1/8" = 1'-0"



B3 LANDSCAPE LIGHTING PLAN
SCALE: 1/16" = 1'-0"

SHEET GENERAL NOTES

SHEET KEYNOTES

A. REFER TO GENERAL NOTES ON SHEETS EL-101, EP-101 AND ET-101

1. SWITCH CONTROLLING LIGHTING IN PENTHOUSE LOCATED AT BOTTOM OF STAIR IN ROOM CUST. 115.
2. LIGHTING CONTRACTOR #1, PROVIDE A 2 POLE MECHANICALLY HELD CONTACTOR IN A NEMA 1 ENCLOSURE FOR CONTROL OF EXTERIOR WALL LIGHTING. CONTRACTOR SHALL HAVE HAND/OFF/AUTO CONTROL.
3. PROVIDE EMERGENCY BOILER SHUTDOWN PUSHBUTTON, INTERLOCK WITH BOILER CONTROLS TO SHUT DOWN BOTH BOILERS. COORDINATE INSTALLATION REQUIREMENTS WITH DIVISION 22/23. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. COORDINATE MOUNTING OF DEVICE WITH G.C. PRIOR TO ROUGH-IN.
4. AHU TO HAVE INTEGRAL DUCT DETECTOR(S). DW. 26 CONTRACTOR TO PROVIDE INTERFACE MODULE AND CONNECTION TO FIRE ALARM SYSTEM. COORDINATE WITH DW. 23 AND DW. 26 CONTRACTOR.
5. LIGHTING CONTRACTOR #2, PROVIDE A 2 POLE MECHANICALLY HELD CONTACTOR IN A NEMA 1 ENCLOSURE FOR CONTROL OF EXTERIOR ARCHITECTURAL LIGHTING. CONTRACTOR SHALL HAVE HAND/OFF/AUTO CONTROL.
6. LOW VOLTAGE BOLLARD LIGHT, PROVIDE TRANSFORMER AND LOW VOLTAGE WIRING PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE 120V CIRCUIT TO TRANSFORMER FROM PANEL H, CIRCUIT #12, IN PENTHOUSE. CONTROL VIA LIGHTING CONTRACTOR #2, SEE KEYNOTE #5 ON THIS SHEET.
7. RECESSED STEP LIGHT, PROVIDE TRANSFORMER AND LOW VOLTAGE WIRING PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE 120V CIRCUIT TO TRANSFORMER FROM PANEL H, CIRCUIT #12, IN PENTHOUSE. CONTROL VIA LIGHTING CONTRACTOR #2, SEE KEYNOTE #5 ON THIS SHEET.
8. RECESSED UP LIGHT, PROVIDE TRANSFORMER AND LOW VOLTAGE WIRING PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE 120V CIRCUIT TO TRANSFORMER FROM PANEL H, CIRCUIT #12, IN PENTHOUSE. CONTROL VIA LIGHTING CONTRACTOR #2, SEE KEYNOTE #5 ON THIS SHEET.

A

D

C

B

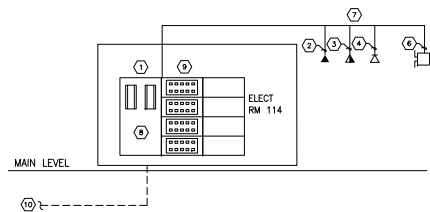
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DATA/VOICE/TV CABLING RISER DIAGRAM GENERAL NOTES

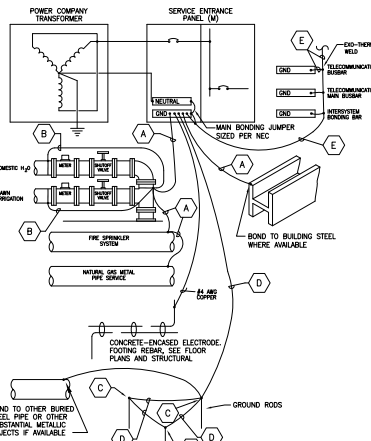
- A. PATCH PANELS ARE SHOWN FOR DESCRIPTIVE PURPOSES ONLY. CONTRACTOR TO VERIFY ACTUAL NUMBER OF PATCH PANELS REQUIRED.
- B. PROVIDE ACTIVATIONS FOR VIDEO, VOICE, AND DATA AS INDICATED ON FLOOR PLAN SHEETS.
- C. VERTICAL CABLE MANAGEMENT SHALL BE PROVIDED ALONG BOTH SIDES OF EACH DATA RACK.
- D. PROVIDE 19" BY 84" DATA RACKS, QUANTITIES AS REQUIRED; PROVIDE ONE 2-POST RACK FOR PATCH PANELS.
- E. THERE SHALL BE RACK SPACE LEFT OPEN FOR FUTURE EXPANSION AND ELECTRONICS.
- F. PROVIDE RACK MOUNTED MODULAR PATCH PANELS.
- G. PROVIDE HORIZONTAL CABLE MANAGEMENT, LOCATED BELOW EACH MODULAR PATCH PANEL AND BELOW EACH VIDEO DISTRIBUTION PANEL.
- H. PROVIDE SPACE FOR FUTURE RACK MOUNTED FIBER OPTIC ENCLOSURES AND ADAPTER PANELS. LOCATE AT TOP OF RACK. CONTRACTOR TO VERIFY FUTURE NUMBER AND CONFIGURATION WITH OWNER.
- I. TERMINATE VOICE AND DATA CABLING TO SEPARATE PATCH PANELS. GROUP LINK SYSTEMS. VOICE BACKBONE SHALL ALSO BE TERMINATED TO SEPARATE PATCH PANELS. PROVIDE PATCH CORDS AS REQUIRED. PROVIDE CROSS-CONNECTS FROM PATCH PANELS TO DEMARC BLOCK.
- J. ALL COMMUNICATION OUTLETS SHALL HAVE A 4-11/16 INCH SQUARE, 2-1/8 INCH DEEP BOX WITH A SINGLE GANG MOUNTING. PROVIDE A 1-1/4 INCH CONDUIT STUBBED UP TO AN ACCESSIBLE LOCATION ABOVE THE CEILING. PROVIDE INSULATED BUSHING ON CONDUIT ENDS. PROVIDE CABLING AS INDICATED. TYPICAL, UNLESS OTHERWISE NOTED.
- K. ALL HORIZONTAL CABLE, ASSOCIATED PATCH PANELS, CONNECTORS AND COVER PLATES BY EC. ALL CROSS CONNECTS BY OWNER OR OWNER'S SERVICE PROVIDER.

DATA/VOICE/TV CABLING RISER DIAGRAM KEYNOTES

1. TELECOM DEMARC BOARD MINIMUM 4'x8' PAINTED GRAY PRIOR TO INSTALL ON WALL. EC TO COORDINATE WITH OWNER AND SERVICE PROVIDERS TO INSURE SUFFICIENT SPACE AND NEAT LAYOUT. EC TO PROVIDE RECEPTACLES FOR ALL EQUIPMENT MOUNTED ON BOARD AS INDICATED ON FLOOR PLANS.
2. ONE 4-PR VOICE U.T.P. PLENUM RATED CABLE(S) (CATEGORY 5E). DENOTATION INDICATED NUMBER OF CABLES AND TERMINATED DEVICES. ONE CABLE IF NO DENOTATION. TYPICAL.
3. ONE 4-PR VOICE U.T.P. PLENUM RATED CABLE (CATEGORY 5E) AND TWO 4-PR DATA U.T.P. PLENUM RATED CABLE(S) (CATEGORY 5E). DENOTATION INDICATES NUMBER OF DATA CABLES AND TERMINATED DATA DEVICES. ONE VOICE AND TWO DATA CABLES IF NO DENOTATION. IF DENOTATION IS 0, THEN NO CABLING IS REQUIRED AND BLANK OFF BOX. TYPICAL.
4. ONE 4-PR DATA U.T.P. PLENUM RATED CABLE(S) (CATEGORY 5E). DENOTATION INDICATES NUMBER OF CABLES AND TERMINATED DATA DEVICES. TYPICAL.
5. EC TO PROVIDE PATCH PANELS SUFFICIENT FOR ALL CABLES ON PLAN WITH 15% ADDITIONAL SPACE FOR FUTURE. EC TO SEPARATE DATA AND PHONE INTO PANELS SPECIFIC TO DATA TYPE.
6. WIRELESS ACCESS POINT. PROVIDE ONE 4-PR DATA U.T.P. PLENUM RATED CABLE (CATEGORY 5E). TERMINATE TO OWNER FURNISHED ACCESS POINT.
7. TO VOICE, DATA, AND TELEVISION OUTLETS: REFER TO PLANS FOR QUANTITIES AND LOCATIONS.
8. TELEPHONE (VOICE) CROSS-CONNECTS. TERMINATE AND LABEL ALL CABLES. COORDINATE WITH OWNER. COORDINATE EXACT MOUNTING LOCATION AND CONNECTION POINTS WITH OWNER/OWNER'S SERVICE PROVIDER.
9. RACK MOUNTED DATA PATCH PANELS, VOICE PATCH PANELS, AND FIBER OPTIC CONNECTOR MOUNTING/JUNTS. PROVIDE QUANTITIES AS REQUIRED. COORDINATE TERMINATIONS, ETC WITH OWNER. CABLE TO WIRELESS ACCESS POINTS SHALL BE ON SEPARATE PATCH PANEL.
10. (4) 2" CONDUITS ROUTED THROUGH VAULT PER ES101 NOTE #7. (ISSUED IN FOOTING AND FOUNDATION PACKAGE).



A1 TECHNOLOGY RISER DIAGRAM
SCALE: NO SCALE



- KEYNOTES**
- A. GROUNDING ELECTRODE CONDUCTOR TO GROUNDING ELECTRODE, AS SHOWN SIZE PER NEC TABLE 250.66.
 - B. BOND WATER SYSTEMS AROUND ALL VALVES AND METERS PER NEC.
 - C. CONNECT GROUNDING ELECTRODE CONDUCTOR TO GROUND ROD WITH GROUND CONNECTOR.
 - D. #6 AWG BARE COPPER CONDUCTOR.
 - E. #3/0 AWG BARE COPPER CONDUCTOR.

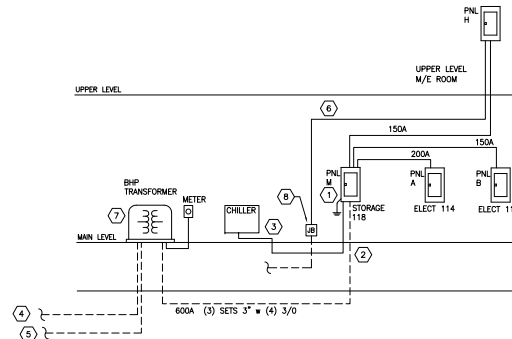
A3 GROUNDING DETAIL
SCALE: NO SCALE

MARK (AMPACITY)	SERVICE CONDUCTORS	CIRCUIT SCHEDULE	
		4-WIRE (W/NEUTRAL) PHASE/NEC	3-WIRE (W/NEUTRAL) PHASE/NEC
15	12-3#4"	12-12-3#4"	12-12-3#4"
20	12-3#4"	12-12-3#4"	12-12-3#4"
25	12-3#4"	12-12-3#4"	12-12-3#4"
30	12-3#4"	12-12-3#4"	12-12-3#4"
35	8-1"	8-12-1"	8-12-3#4"
40	8-1"	8-12-1"	8-12-3#4"
45	6-1 1/4"	6-12-1 1/4"	6-12-1"
50	6-1 1/4"	6-12-1 1/4"	6-12-1"
55	6-1 1/4"	6-12-1 1/4"	6-12-1"
60	6-1 1/4"	6-12-1 1/4"	6-12-1"
70	4-1 1/2"	4-8-1 1/2"	4-8-1 1/4"
80	3-1 1/2"	3-8-1 1/2"	3-8-1 1/2"
90	3-1 1/2"	3-8-1 1/2"	3-8-1 1/2"
100	2-1 1/2"	2-8-1 1/2"	2-8-1 1/2"
110	2-1 1/2"	2-8-1 1/2"	2-8-1 1/2"
125	1-2"	1-8-2"	1-8-1 1/2"
150	1-2"	1-8-2"	1-8-2"
175	2-2"	2-8-2"	2-8-2"
200	3-2 1/2"	3-8-2 1/2"	3-8-2"
225	4-2 1/2"	4-8-2 1/2"	4-8-2 1/2"

- MISCELLANEOUS NOTES:**
1. ALL CIRCUITS (BRANCH AND FEEDERS) SHALL BE SIZED PER THE OVERCURRENT DEVICE AND THIS CIRCUIT SCHEDULE UNLESS OTHERWISE NOTED. THE ABOVE CHART IS THE MINIMUM CONDUCTOR AND CONDUIT SIZE FOR THE OVERCURRENT DEVICE. CHART DOES NOT INCLUDE REQUIRED VOLTAGE DROP.
 2. CIRCUITS SHALL BE 4-WIRE (W/NEUTRAL) UNLESS DENOTED WITH "3W" (3 WIRE) OR "1C" (1 C RATED).
 3. ALL BRANCH CIRCUITS AND FEEDERS SHALL HAVE AN EQUIPMENT GROUNDING CONDUCTOR.
 4. ALL CONDUCTORS SHALL BE COPPER.
 5. THE NEUTRAL SHALL BE THE SAME SIZE AS THE PHASE CONDUCTORS UNLESS SHOWN, OR NOTED OTHERWISE.
 6. THE NUMBER OF PARALLEL SETS IS INDICATED IN PARENTHESES.
 7. SINGLE PHASE CIRCUITS SHALL BE SIZED PER THE OVERCURRENT DEVICE UNLESS OTHERWISE NOTED. SIZE THE CONDUCTORS AND CONDUIT PER THE 4-WIRE COLUMN OF THIS CHART BUT REDUCE THE AMOUNT OF PHASE CONDUCTORS AS REQUIRED.

POWER RISER DIAGRAM KEYNOTES

1. GROUND PER DETAIL AS THIS SHEET.
2. ALL CONDUITS LEAVING BUILDING ROUTE THROUGH VAULT. SEE ES101 (ISSUED IN FOOTING & FOUNDATION PACKAGE).
3. SEE SHEET ME601 FOR CHILLER CONDUCTOR SIZE AND DISCONNECTING MEANS.
4. 3-PHASE BHP PRIMARY ROUTED UNDER HWY 85 PER ES101 (ISSUED IN FOOTING & FOUNDATION PACKAGE).
5. 1-PHASE BHP PRIMARY ROUTED TO EXISTING PARK TRANSFORMER PER ES101 (ISSUED IN FOOTING & FOUNDATION PACKAGE).
6. PROVIDE TWO (2) 3/4" CONDUITS FROM PANEL M TO NEW JUNCTION BOX FOR EXTERIOR LIGHTING CIRCUITS.
7. BHP TRANSFORMER AND PAD FURNISHED AND INSTALLED UNDER FOOTING AND FOUNDATION PACKAGE.
8. PROVIDE NEW JUNCTION BOX, CONNECT TO EXISTING EXTERIOR LIGHTING CONDUIT LEAVING BUILDING.



A4 POWER RISER DIAGRAM
SCALE: NO SCALE



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Scale

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Sheet Title

**ELECTRICAL RISER
DIAGRAM AND DETAILS**

Sheet Number

E-601

PANEL TAG: A		VOLTAGE: 120/208 VAC, 3-PHASE, 4-WIRE		MINNS: LUG [X] C.B. [] AMPS: 200	
MOUNTING: SURFACE		FEED THRU LUG [X]		FEEDER:	
PANEL TYPE: LTG & APPLIANCE		MIN A.L.C.: 12,000 (A)			
CKT	ITEM OR AREA SERVED	0/C PROT	DIST KVA	0/C PROT	ITEM OR AREA SERVED
1	REC - 104	20/1	0.7 A	20/1	REC - 102
3	REC - 104	20/1	0.7 B	0.9	20/1 REC - 102, EXTERIOR
5	REC - 103	20/1	0.7 C	1.2	20/1 REC - 102, 102A, EXTERIOR
7	REC - 103	20/1	0.7 A	0.11	20/1 LTG - 101,102,102A
9	REC - 103	20/1	0.7 B	1.5	20/1 LTG - 102
11	REC - 103	20/1	0.7 C	1.0	20/1 LTG - 102
13		0.0	A	0.7	20/1 FLOOD LTG - 102
15	EXHIBIT 1	20/3	0.0 B	1.6	20/1 TRACK LTG - 102
17		0.0	C	1.6	20/1 TRACK LTG - 102
19		0.0	A	1.6	20/1 TRACK LTG - 102
21	EXHIBIT 2	20/3	0.0 B	1.6	20/1 TRACK LTG - 102
23		0.0	C	1.6	20/1 TRACK LTG - 102
25		0.0	A	1.6	20/1 TRACK LTG - 102
27	EXHIBIT 3	20/3	0.0 B	1.1	20/2 SPARE
29		0.0	C	1.1	20/2 SPARE
31		0.0	A	0.0	20/1 SPARE
33	EXHIBIT 4	20/3	0.0 B	0.0	20/1 SPARE
35		0.0	C	0.0	20/1 SPARE
37		0.0	A	0.0	SPACE
39	EXHIBIT 5	20/3	0.0 B	0.0	SPACE
41		0.0	C	0.0	SPACE
TOTAL CONNECTED LOAD (KVA)		22.4			
TOTAL DEMAND LOAD (KVA)		25.0			
FEEDER AMPERES DEMAND		69.3			

PANEL TAG: B		VOLTAGE: 120/208 VAC, 3-PHASE, 4-WIRE		MINNS: LUG [X] C.B. [] AMPS: 150	
MOUNTING: SURFACE		FEED THRU LUG []		FEEDER:	
PANEL TYPE: LTG & APPLIANCE		MIN A.L.C.: 10,000 (A)			
CKT	ITEM OR AREA SERVED	0/C PROT	DIST KVA	0/C PROT	ITEM OR AREA SERVED
1	REC - 101,105,107-8,110	20/1	1.1 A	1.0	20/1 LTG - 105, 107-113,118
3	REC - 116,117,118,121, EXT	20/1	1.3 B	0.9	20/1 LTG - 114-117,119-122
5	REC - 107,108	20/1	1.1 C	0.5	20/1 LTG - 201
7	REC - 109	20/1	1.1 A	0.4	20/1 REC - 114
9	REC - 109	20/1	0.4 B	0.4	20/1 REC - 114
11	REC - 111	20/1	0.7 C	0.4	20/1 REC - 114
13	REC - 112 COPPER	20/1	0.2 A	0.4	20/1 REC - 111
15	REC - 112	20/1	0.2 B	0.4	20/1 F.A.C.P.
17	REC - 112	20/1	0.2 C	0.0	20/1 SPARE
19	REC - 113	20/1	1.2 A	0.0	20/1 SPARE
21	REC - 119, 120	20/1	0.9 B	0.0	20/1 SPARE
23	REC - 119	20/1	0.5 C	0.0	20/1 SPARE
25	REC - 119	20/1	0.7 A	0.0	20/1 SPARE
27	REC - 119	20/1	0.2 B	0.0	SPACE
29	REC - 119 PROJECTOR	20/1	0.2 C	0.0	SPACE
31	REC - 115, 122	20/1	1.0 A	0.0	SPACE
33	EWG (GFI C/B)	20/1	1.0 B	0.0	SPACE
35	REC - 120	20/1	0.0 C	0.0	SPACE
37	SPACE	-	0.0 A	0.0	SPACE
39	SPACE	-	0.0 B	0.0	SPACE
41	SPACE	-	0.0 C	0.0	SPACE
TOTAL CONNECTED LOAD (KVA)		16.2			
TOTAL DEMAND LOAD (KVA)		15.7			
FEEDER AMPERES DEMAND		43.6			

PANEL TAG: H		VOLTAGE: 120/208 VAC, 3-PHASE, 4-WIRE		MINNS: LUG [X] C.B. [] AMPS: 150	
MOUNTING: SURFACE		FEED THRU LUG []		FEEDER:	
PANEL TYPE: LTG & APPLIANCE		MIN A.L.C.: 10,000 (A)			
CKT	ITEM OR AREA SERVED	0/C PROT	DIST KVA	0/C PROT	ITEM OR AREA SERVED
1	RECEPT - MECH 201	20/1	0.7 A	1.1	20/1 LTS - OUTSIDE W PACKS
3	EF - 1	15/1	0.7 B	0.7	15/2 CP - 1
5	BF - 1	15/1	0.2 C	0.7	
7	BF - 2	15/1	0.2 A	0.7	
9	WH - 1	20/2	1.5 B	0.7	15/2 CP - 2
11		20/2	1.5 C	1.0	20/1 LANDSCAPE LTS
13		1.8	A	0.0	20/1 SPARE
15	RF - 1	1.8	B	0.0	20/1 SPARE
17		1.8	C	0.0	20/1 SPARE
19		3.5	A	0.0	SPACE
21	AHU - 1	40/3	3.5 B	0.0	SPACE
23		3.5	C	0.0	SPACE
TOTAL CONNECTED LOAD (KVA)		25.6			
TOTAL DEMAND LOAD (KVA)		26.1			
FEEDER AMPERES DEMAND		72.6			

PANEL TAG: M		VOLTAGE: 120/208 VAC, 3-PHASE, 4-WIRE		MINNS: LUG [] C.B. [X] AMPS: 600	
MOUNTING: SURFACE		FEED THRU LUG []		FEEDER:	
PANEL TYPE: DISTRIBUTION		MIN A.L.C.: 15,000 (A)			
CKT	ITEM OR AREA SERVED	0/C PROT	DIST KVA	0/C PROT	ITEM OR AREA SERVED
1		0.0	A	0.0	
3	PANEL A	200/3	22.4 B	25.6	150/3 PANEL H
5		0.0	C	0.0	
7		0.0	A	17.4	
9	PANEL B	150/3	16.2 B	17.2	200/3 CHILLER
11		0.0	C	17.2	
13	SPARE	20/1	0.0 A	2.4	20/3 LTG - SITE
15	SPARE	20/14	0.0 B	0.5	20/1 SITE - POWER
17	SPARE	20/14	0.0 C	0.5	20/1 SITE POWER EAST
19	SPACE	-	0.0 A	0.0	SPACE
21	SPACE	-	0.0 B	0.0	SPACE
23	SPACE	-	0.0 C	0.0	SPACE
TOTAL CONNECTED LOAD (KVA)		121.5		* GFI CIRCUIT BREAKER	
TOTAL DEMAND LOAD (KVA)		117.7			
FEEDER AMPERES DEMAND		326.8			

LIGHT FIXTURE SCHEDULE									
FIX TYPE	MANUFACTURER	CATALOG NUMBERS	VOLTAGE	MOUNTING	BALLAST		LAMP DATA		REMARKS
					QTY	TYPE	No.	WATTS	
A2	CREE	CR24-40L-40K	120	RECESS/CEL/GRD	-	LED	-	40	2X4 LED TROFFER 4000 LUMENS;
A3	CREE	CR24-50L-40K	120	RECESS/CEL/GRD	-	LED	-	50	2X4 LED TROFFER 5000 LUMENS;
B	CREE	CR23-32L-40K	120	RECESS/CEL/GRD	-	LED	-	32	2X2 LED TROFFER 3200 LUMENS;
D	COOPER	LD44-18-0010TE-ENM418-840-4LMWU	120	RECESS/CEILING	-	LED	-	31.5	4" CAN WITH REFLECTOR
DW	COOPER	LD44-18-0010TE-ENM418-840-4LMW11 U	120	RECESS/CEILING	-	LED	-	31.5	4" CAN WITH REFLECTOR WALLWASH
E1	DUAL-LITE	SEDRBNE	120	UNIVERSAL	-	LED	-	3	SINGLE SIDED EXT LIGHT
E1W	DUAL-LITE	SEWLSRNE-HTR	120	UNIVERSAL	-	LED	-	3	SINGLE SIDED EXT LIGHT, WP
E2	DUAL-LITE	SEDRBNE	120	UNIVERSAL	-	LED	-	3	EMERGENCY SIGN, DOUBLE SIDED
E3	DUAL-LITE	EV 4 I	120	WALL	-	LED	-	4	LED BATTERY EMERGENCY LIGHT
F2	CREE	CS14-38L-40K-10V	120	UNIVERSAL	-	LED	-	3	14" LINEAR RECESSED/SURFACE
P	GE	EP147A30SVLR	120	PENDANT EDGE	-	LED	-	55	DIRECT/INDIRECT EDGE LIT 0-10V DIMMING
P2	HOLOPHANE	PH2 18L 3K AS P G W D	120	PENDANT	-	LED	-	190	LED HIGH BAY, 0-10V DIMMING, 18-6" A.F.F. OR AS HIGH AS POSSIBLE
R	COOPER	VFS-K-A20-5-LED-01-WST-BK-JB-BK	120	J-BOX ON STRUT	-	LED	-	35	LED WIDE SYMMETRIC RECTANGULAR FLOOD LIGHT, 14"-0" A.F.F.
T1	HALO	LE4 SERIES TWO CIRCUIT TRACK/ L1730 HEAD	120	TRACK	-	LED	-	12	PROVIDE 100'-0" OF TRACK W/20 HEADS, CREE LED LAMP LBP3040-500
T2	HALO	LE4 SERIES TWO CIRCUIT TRACK/ L1730 HEAD	120	TRACK	-	LED	-	12	PROVIDE 72'-0" OF TRACK W/15 HEADS, CREE LED LAMP LBP3040-500
T3	HALO	LE4 SERIES TWO CIRCUIT TRACK/ L1730 HEAD	120	TRACK	-	LED	-	12	PROVIDE 24'-0" x 14'-0" TRACK W/15 HEADS, CREE LED LAMP LBP3040-500
W	LITHONIA	WST LED 2 10A700/40K SR3 MWOLT	120	MWOLT	-	LED	-	47	LED WALL PACK
WE	LITHONIA	WST LED 2 10A700/40K SR3 MWOLT-ELW	120	MWOLT	-	LED	-	47	LED WALL PACK WITH EMERGENCY BATTERY
W2	PROGRESS LIGHTING	P7227-09EB	120	WALL	1	FLU	2	32	2" VANITY ABOVE MIRROR
AA	B-K LIGHTING	LT-L-18-LED-440-XXX-418	12	GROUND	-	LED	-	2.8	LANDSCAPE LIGHT, REMOTE DRIVER, COLOR TO BE SELECTED
BB	B-K LIGHTING	B-CD-SS-247-XXX-B	12	WALL	-	LED	-	7.5	RECESSED STEP LIGHT, REMOTE DRIVER, COLOR TO BE SELECTED
CC	B-K LIGHTING	B-GD-LED-422-WFL-AS-XXX	12	GROUND	-	LED	-	8.3	RECESSED LP LIGHT, REMOTE DRIVER, COLOR TO BE SELECTED
A3	COLUMBIA	4P524-3320-F5A12-EU	120	RECESS/CEL/GRD	1	FLU	3	32	2X4 3 LAMP FLUORESCENT TROFFER 8550 LUMENS
A2	COLUMBIA	CS4-232-EBRH 120	120	SURFACE	1	FLU	2	32	STRIP NOTE 1

NOTES:
 1. AS A DEDUCT ALTERNATE, USE LISTED ALTERNATE FIXTURES FOR THE DESIGNATED FIXTURE TYPES WHERE DIMMING IS NOT INDICATED.



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Scale

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Sheet Title

ELECTRICAL SCHEDULES

Sheet Number