ADDENDUM NO: 03

Date Issued: December 9, 2015

Re: **Red Rocks Community College**
Student Recreation Center
Construction Documents, Dated November 9, 2015
Architect's Project No. 15803.00

This Addendum is part of the construction Documents and contains additions, deletions, changes, and clarifications to ***Construction Documents dated November 9, 2015****. Items noted herein shall be included in the Work and all bids submitted. Bidders shall acknowledge receipt of this Addendum in their bid.*

SUBSTITUTION REQUESTS:

ADD. #3-1. Add the following as an approved manufacturer to Specification 08 4513 – Structured-Polycarbonate-Panel Assemblies
1. **08 4513_2.2_A1 – AIA Industries: AIA Eco-Wall 2560 50 mm – Color: Opal.**

ADD. #3-2. Add the following as an approved manufacturer to Specification 09 0500 – Floor Preparation:
1. **09 0500 Part 2_2.1_A4 – Concrete Waterproofing Products: Creteseal CS2000**

ADD. #3-3. Dynamic Sports Construction, Inc for Division 09 6566 – Not Approved.

ADD. #3-4. Aacer Flooring for Division 09 6566 – Not Approved.

ADD. #3-5. Dynamic Sports Construction, Inc for Division 09 6468 – Not Approved.

ADD. #3-6. Aacer Flooring for 09 6468 – Not Approved.

ADD. #3-7. Add the following as an approved manufacturer to Specification 11 6623 – Gymnasium Equipment:

1. **11 6623_2.2_B (Basketball Equipment): Jaypro Sports**
2. **11 6623_2.3_A (Volleyball Equipment): Jaypro Sports**
3. **11 6623_2.4_A (Badminton Equipment): Jaypro Sports**
4. **11 6623_2.5_A (Pull-up Bar): Jaypro Sports**
5. **11 6623_2.7_A (Safety Pads): Jaypro Sports**

ADD. #3-8. Add the following as an approved manufacturer to Specification 11 3100 – Residential Appliances.
1. **11 3100_2.3_A: Alliance Laundry Systems – Speed Queen.**

ADD. #3-9. Add the following as an approved manufacturer to Specification 28 3100 Fire Detection and Alarm.

1. **28 3100 Part 2 2.1 A – Fike Cybercat**

ADD. #3-10. Add the following as approved manufacturer's to Specifications:

1. **23 34 00 2.1 A. – Add Macro Air**
2. **23 81 26 2.1 A. – Add Daikin AC**
3. **23 73 13 2.1 A. – Add Alliance Air Products**
4. **23 82 00 2.1 A. – Add Sigma Products**

ADD. #3-11. The following light fixtures were proposed by MH Lighting, please see table below for acceptance.

A4	Pinnacle Lighting	EX4B-A-O-CL35320-CL35640-4-AC48***-277-1D-S	REJECTED
A4X	Pinnacle Lighting	EX4B-A-O-CL35320-CL35640-4-AC48***-277-1D/1B-S	REJECTED
A8	Pinnacle Lighting	EX4B-A-O-CL35320-CL35640-8AC48***-277-1D-S	REJECTED
A8X	Pinnacle Lighting	EX4B-A-O-CL35320-CL35640-8AC48***-277-1D/1B-S	REJECTED
A12	Pinnacle Lighting	EX4B-A-O-CL35320-CL35640-12AC48***-277-1D-S	REJECTED
A14	Pinnacle Lighting	EX4B-A-O-CL35320-CL35640-14AC48***-277-1D-S	REJECTED
A18	Pinnacle Lighting	EX4B-A-O-CL35320-CL35640-18AC48***-277-1D-S	REJECTED
A18X	Pinnacle Lighting	EX4B-A-O-CL35320-CL35640-18AC48***-277-1D/1B-S	REJECTED
B	Columbia	LLHV-4-35-V-W-ST-E-277-ELL14-CA	REJECTED
C	Columbia	LJT24-35MLG-FSA12125-EU	ACCEPTED
D	Conservation Technology, Inc.	RA4LNC-135K27D2 CTR4322LM-CLR	ACCEPTED
D1	Conservation Technology, Inc.	RA4LNC-135K27D2 CTR4327L-CLR-*	ACCEPTED
G	Columbia	LCR-4-35-ML-ESDU LCLWG4	ACCEPTED
GX	Columbia	LCR-4-35-ML-ESDU-ELL14 LCLWG4	ACCEPTED
H	LiteControl	G-D-LHEL-24-35K-25-CWM-D10-277	ACCEPTED
HX	LiteControl	G-D-LHEL-24-35K-25-CWM-D10-277EF	ACCEPTED
J	Tempo Industries	C6-S-0-0-12-10-12-UNV-E-5-S-35-S-LG	ACCEPTED
KX	Pinnacle Lighting	EX3B-A-0-CL35560-CL35560-4-WA277-1D/1B-W	ACCEPTED
L3	Pinnacle Lighting	EX3B-A-0-CL35560-CL35560-3-WA277-1D-W	ACCEPTED
L4	Pinnacle Lighting	EX3B-A-0-CL35560-CL35560-4-WA277-1D-W	ACCEPTED
L4X	Pinnacle Lighting	EX3B-A-0-CL35560-CL35560-4-WA277-1D/1B-W	ACCEPTED
M3-3	Tempo Industries	C6-R-0-0-12-72-12-UNV-ELV-5-D-35-SLG	REJECTED
M4-4	Tempo Industries	C6-R-0-0-12-72-12-UNV-ELV-5-D-35-SLG	REJECTED
N2	Pinnacle Lighting	E4A-35HO-2-FL-277-1D-W	ACCEPTED
N4	Pinnacle Lighting	E4A-35HO-4-FL-277-1D-W	ACCEPTED
N4X	Pinnacle Lighting	E4A-35HO-4-FL-277-1D/1B-W	ACCEPTED
P	Lumetta	P2448-*-*-LED3/LED REPLACEMENT LAMPS	REJECTED

Q	Eureka Lighting	4704-LED.10.30-277-DV-WH-WH-CHR	REJECTED
U	Vode Lighting	107-RR-01-**-**-CC-48-4R-AE-2-0-ZSO-35-2-0-AL-0	REJECTED
V	Elliptipar Inc.	S305-R01M-S-00-277M-0-30-*	ACCEPTED
V ALT	Tempo Industries	C6-R-0-0-12-37-12-277-E-10-S-30-SWH ALT	REJECTED
W	LBL Lighting	BA841OYSCLED830277 Denton 48 Bath OY SN LED830277	REJECTED
X	Dual Lite Emergency	LE*******	ACCEPTED
Y	Lumetta	P53414-*-*-LED-277	REJECTED
AAX	LEDS-C4	C4 05-9531-34-T2U	REJECTED
BB	Prescolite	LBSLEDA10L 30K 8 WH 277	ACCEPTED
DD	Prescolite	LD6LED4PW35K8 277 PW Z	REJECTED
DD1	Kurt Versen	L135-10-35-SS-PC(SILVER)-P5	REJECTED
GG	Bruck, A Ledrabrands Company	138531MC/3 138530 138536	REJECTED
HH	Insight Lighting	5SP-15-RGB-HSL-SMS-INT-2-*+ DMX	ACCEPTED
JJ	Bega Lighting	7321LED LED bollard with fully shielded light source	REJECTED
LL	Columbia	LCL2-30HL-EU	ACCEPTED
RP1	Vantage Controls	LCAP44H-2 LCAP-OPT-C-1 COMM PANEL 44 IN HYBRID MAINW/ 2 LVOS & POE NET SWITCH	ACCEPTED
RP1	Vantage Controls	LCAP44 COMM ENCLOSURE 44 IN W/DOOR	ACCEPTED
RP1	Watt Stopper	EM-24D2 DC Low Voltage Photocell	ACCEPTED
RP1	Watt Stopper	BZ-50 Power Pack, 120-277V, 50/60Hz,24VDC, 225mA	ACCEPTED
RP1	Vantage Controls	CIS10-DIN CONTACT INPUT STATION 10 - DIN	ACCEPTED
RP1	Watt Stopper	LS-E8 8inX8inX4in Enclosure for LCOLCD	ACCEPTED
DH-PC	Vantage Controls	EM-LIGHTSENSOR AMBIENT LIGHT LEVEL SENSOR FORENERGY MGMT DIMG SHADE CONT	ACCEPTED
DH-PC	Vantage Controls	LVOS-0-10-PWM-1 LV OUTPUT ST (0-10 & PWM) 120V-277V IN UL RATED ENCL	ACCEPTED
SW-4B	Vantage Controls	KS14TE-**YA FINISH=SPECIFY STANDARD FINISH KS - EASYTOUCH II WITH TRIM 1-G 4-BTN ENGRAVED	ACCEPTED

SW-5B	Vantage Controls	KS15TE-**YA FINISH=SPECIFY STANDARD FINISH KS - EASYTOUCH II WITH TRIM 1-G 5-BTN ENGRAVED	ACCEPTED
SW-KP	Vantage Controls	FP1DTE-**NP FINISH=SPECIFY STANDARD FINISH FP - EASYTOUCH II TRIMLINE IIPLA 1-G DECORA	ACCEPTED
SW-KP	Vantage Controls	EQ41TB-TI EQUINOX 4 LCD SINGLE WIDGET BLACK TITANIUM	ACCEPTED
SW-TS	Vantage Controls	EQ73TB-TI-II EQUINOX 73 II LCD TRIPLEWIDGET BLACK TITANIUM	REJECTED
SW-TS	Vantage Controls	EQ73ST-INSTALL EQUINOX 73 LCD STANDARD INSTALL	REJECTED
SW-TS	Vantage Controls	EQ-APP-X EQUINOX APP LICENSE UNLIMITED	REJECTED
MD-CC	Vantage Controls	DMX-DALI-GW MX DALI GATEWAY	REJECTED
MD-CC	Watt Stopper	LS-E8 8inX8inX4in Enclosure for LCOLCD	REJECTED
RC-D1	Watt Stopper	LMRC-211 Digital V.2 Sgle Relay Rm Controller, On/Off/ 0-10v dimm	ACCEPTED
OS-DC	Watt Stopper	LMDC-100 Digital Dual Tech CeilingMount Sensor	ACCEPTED
SW-DM	Watt Stopper	LMDM-101-* FINISH=SPECIFY STANDARD FINISH Digital Dimming Wall Switch,1 paddle, w/ I.R.,	ACCEPTED
MD-IR	Watt Stopper	LMRL-100 Isolated Relay Interface	ACCEPTED
RJ-25	Watt Stopper	LMRJ-P25 RJ45 Cables, 25 feet, plenumrated	ACCEPTED
OS-DW	Watt Stopper	DW-100-24-* FINISH=SPECIFY STANDARD FINISH Dual Tech. Wall Switch Occupancy Sensor, 24V,	ACCEPTED
OS-DC	Watt Stopper	DT-300 Dual Tech Occupancy Sensor 24VDC, center mount 360°	ACCEPTED
OS-PP	Watt Stopper	BZ-50 Power Pack, 120-277V, 50/60Hz,24VDC, 225mA	ACCEPTED
OS-HB	Hubbell Building Automation	WSPSM24V HBA WASP2 Fl. High Bay Sensor with Daylighting, Surface Mnt, 24VDC (Power Pack Required), Form C Relay	ACCEPTED
OS-HB	Hubbell Building Automation	WSPLENS360 HBA WASP2 Fl. High Bay Sensor Lens, 360 Degree Coverage Area, White	ACCEPTED
OS-HB	Hubbell Building Automation	UVPP Universal Voltage Power Pack, 100-277 VAC	ACCEPTED

EM-TD	Functional Devices, Inc	ESRN UL924 Enclosed Relay ESR + BAS input 10 Amp SPDT 120-277 Vac	ACCEPTED

BID QUESTIONS:

ADD. #3-12. Need manufacturer and model number for Toilet Room Accessories. marked "As Furnished by owner" in order to match with new TRA's. **RESPONSE: Manufacturer's for Owner Furnished Items has not been selected yet.**

ADD. #3-13. Where are the two existing ice hockey scoreboards currently located? When can they be removed? **RESPONSE: Language was removed in Addendum 02.**

ADD. #3-14. Are new scoreboards actual (OFOI) as indicated in the specification? Gym elevations do not indicate if this score board is to be a new (OFOI) or relocated boards from Ice arena **RESPONSE: Clarified in Addendum 02 – Contractor is responsible for furnishing and installing scoreboards.**

ADD. #3-15. Where in the existing building does the 2 ½" Domestic Water piping tie in at? **RMH RESPONSE: The tie-in is in the crawlspace. It is approximately 400 ft. from the drop at Key Note 3 on Sheet P-101.**

ADD. #3-16. Please clarify what the existing BAS is, and if the new controls are expected to tie into it. **RMH RESPONSE: The existing system is BACNet compatible Niagara compatible with a tridium platform. Yes, the new controls are expected to tie into the existing to give readout and alarm capabilities on the exiting front end display.**

ADD. #3-17. Please clarify the location of the building's global controller, as the controls may need to wire BACnet MS/TP to it. **RMH RESPONSE: From our understanding with the building operators there a multiple building controllers in the existing building. The main control is in the Boiler Room (Basement level), by main entry on south.**

ADD. #3-18. Note 1 on plan page MP-101 referenced a schematic drawing for the heating system. Where is this drawing? **RMH RESPONSE: Detail 1, Sheet M-504. Also see Detail 2, M-402.**

ADD. #3-19. Please provide a detail for the radiant heating pumps. **RMH RESPONSE: Detail 11 added to M-402 in Addendum 2.**

ADD. #3-20. The radiant heating pumps seem to be associated with a particular room ie. 165, 103, and 113.

RHP-1	RADIANT SLAB, 165	INLINE	2.0	5.0
RHP-2	RADIANT SLAB, 103	INLINE	1.0	2.5
RHP-2	RADIANT SLAB, 113	INLINE	1.5	4.0

These room numbers do not coincide with the cross hatched areas indicating in slab radiant heating as shown on MP-101. The rooms that are cross hatched are 100, 103, & 104.
Are the areas that are cross hatched on the plan correct or are rooms 103, 165, and 113 the correct location for in slab radiant heating? **RMH RESPONSE: The room numbers on the schedule have been updated in Addendum 2.**

ADD. #3-21. I see a number of VAV units indicated on the plan but there does not seem to be a schedule for them in the mechanical equipment schedules. Please provide a schedule for the VAV boxes. **RMH RESPONSE: Added to M-601, Addendum 2.**

ADD. #3-22. There is no reference in the specifications as to the form of contract. Can you please provide? **RESPONSE: Please see Addendum 02 for contract references.**

ADD. #3-23. Sheet S-100: Please see the foundation wall located close to Grid Line D, between Grid Lines 1 and 2. Please provide a top of foundation wall at this location. **STRUCTURAL RESPONSE: Top of grade beam on grid D between grids 1 and 2 is equal to top of adjacent slab on grade; 102'-0"**

ADD. #3-24. Sheet A-202: Detail 3: Please see the left side of the west elevation. WS_MAS_03 and WS_MAS_04 are both noted for the same wall. Please provide clarification. **RESPONSE: Please see Wall Section A3/A-313 for similar wall type. The difference in the two wall systems is the structure. There is CMU from Level 1 up to 10'-8" and Metal Stud Framing above the CMU at the Gymnasium.**

ADD. #3-25. Sheet A-202 No clear distinction between WS_MAS_01 and the gym masonry is discernable. Please provide clarification as to where each masonry wall occurs. Some elevations are not labeled. **RESPONSE: See attached A-202 for clarifications:**

1. **Sheet A-201: On Detail 1 added exterior wall system callouts where elevations where missing labels.**
2. **Sheet A-202: On Details 1, 2 & 3 added exterior wall system callouts where elevations were missing labels.**

ADD. #3-26. Sheet A600 - Finish Legend states that SS4 is not applicable (Not shown), but is shown to be used on A-406. Please advise. **RESPONSE: SS4 description as follows:**

1. **Finish Code: SS4**
2. **Item: Solid Surface**
3. **Manufacturer: Neolith**
4. **Series/Pattern: Fusion Collection**
5. **Number: Not Applicable**
6. **Color: Beton**

7. **Size:** **Not Applicable**
8. **Finish Remarks:** **Not Applicable**

ADD. #3-27. In the Specifications under Section 09 3013 Tiling, Letter B – Related Requirements, there is a mention of Specification Section 09 3023 "Glass Tiling", however, this Specification Section is not included in the Specification Manual Volume I. Will this Specification Section be issued in the future? **RESPONSE: Glass Tiling Specification not used. This text can be deleted in 09 3013.**

ADD. #3-28. In the Specifications under Specification Section 09 6723 – Resinous Flooring, 3.2 Letter E Number 1, The Integral Cove Base is listed as being 4" in height, however in the Drawings, Sheet A-600 Finish Legend and Notes, the Integral Cove Base is listed as 6" in height. Please clarify the correct height of the Integral Cove Base. **RESPONSE: Cove Base to be 6" in all locations.**

- **On B4/A-552, Revise Cove Base Height from 4" to 6".**
- **In Spec Section 09 6723_3.2_E1, Revise as follows: Integral Cove Base: 6 inches high.**

ADD. #3-29. Is a Waterproofing Membrane to be installed in both Level 1 and Level 2 Restrooms where the Poured Epoxy Floor is to be installed? Please advise. **RESPONSE: Yes, Waterproofing Membrane to be installed over entire substrate including integral cove bases.**

ADD. #3-30. Section 103413 - Defibrillator Cabinet is detailed in specifications, but not shown in drawings. Please specific locations or a quantity. **RESPONSE: Quantity = 1. Location = TBD. Please revise specifications as follows:**

1. **Revise 10 3413_2.2_A1 as follows: "Basis of Design: Subject to compliance with the requirements, provide JL 1415F12 Recessed AED Cabinet or similar product.**
2. **Revise 10 3413_2.2_D as follows: "Recessed Cabinet with 3/8" Flat Trim.**

ADD. #3-31. Section 102800- Vender- Recessed Napkin (TA-09): Please verify location or quantity. **RESPONSE: Provide (1) at Womens Locker Room #135 and (1) Women's Restroom #208. Location TBD.**

ADD. #3-32. Section 102800- Sanitary-Napkin Disposal (TA-10, TA-11): Please verify location or quantity. **RESPONSE: Provide the following:**

1. **Women's Room #208:**
   i **Qty. (1): 4721-15 partition mounted, serves 2 compartments.**
   ii **Qty. (1): 4722-15 surface mounted, serves an end compartment.**
2. **Women's Locker Room #135:**
   i **Qty. (1): 4721-15 partition mounted, serves 2 compartments.**
   ii **Qty. (2): 4722-15 surface mounted, serves an end compartment.**

ADD. #3-33. Are there drawings available for the existing building? There are references for communication backbone to tie in to existing building TR 1452 and existing drawings are needed to help determine cable lengths. **SMW RESPONSE: Reference existing as-built drawings for TR 1452.** T2.00, T2.01, T2.02 attached for Reference Only.

ADD. #3-34. Drawing sheet TT-300 shows (1) 24 Strand OM4 fiber and the project manual specify TE ND&I warranty.

1. Page 27 1323 -8 and 9 specify Systimax 12/12 SM/OM4 fiber, please clarify fiber type. **SMW RESPONSE: (1) 12-Strand SingleMode Fiber, (1) 24-Strand OM4 Fiber, and (1) 25-pair CAT Copper Cable needed for backbone.**
2. Is armored fiber required or will fiber inside innerduct be sufficient? **SMW RESPONSE: Fiber inside innerduct is sufficient**
3. Will TE fiber be an approved substitution to keep everything TE and ND&I? **SMW RESPONSE: Fiber should be Corning with no exceptions.**

ADD. #3-35. Regarding the existing CCTV system and to provide correct pricing for camera licenses:

1. Which version of video management software is currently running, Core, Standard, Enterprise? **RESPONSE: Enterprise (per RRCC).**
2. Is the software Avigilon Control Center 5 (ACC5) or ACC4? **RESPONSE: Unknown at this time.**

ADD. #3-36. Regarding all AMX AV equipment:

1. Will Crestron be an approved substitution? **RESPONSE: Crestron equivalent is acceptable to SMW though RRCC IT/AV will need to approve this to ensure compatibility and support for Crestron is in place for their tech support staff.**

ADD. #3-37. Static Dissipative flooring (Finish Code =SD) is shown on the finish schedule but not on the finish plans. Is this product required? Reference A-600 thru A-602. **RESPONSE: SD is not used on this project. This reference was deleted in Addendum 02.**

ADD. #3-38. What material is the climbing floor to be? Climbing Wall (Section 116733) references a "playground protective surfacing" section 321816 that is not in the specifications. Please clarify. **RESPONSE: Climbing Flooring is specified in 11 6733_2.3 Item D.**

ADD. #3-39. Is Koester/Ardex floor preparation at all slab/flooring locations or just at the synthetic and wood flooring areas? Per flooring subcontractors recommendation floating floors are at less risk and will maintain at 4.5lb/1000sf. Is this acceptable at those locations? **RESPONSE: 09 0500 Vapor Retarder/Protection required at Wood Athletic Flooring. Synthetic Athletic Flooring, Resilient Athletic Flooring, Resinous Flooring and Tile Carpeting require Moisture Testing prior to proceeding with installation.**

ADD. #3-40. On TT 300 Cable Riser Diagram. What is the distance from IT 133 to TR1452? **SMW RESPONSE: Please refer to as-built drawings. T2.00, T2.01, T2.02 attached for Reference Only**

- i Is there a floor layout to figure distance for backbone installation? **SMW RESPONSE: Please refer to as-built drawings. T2.00, T2.01, T2.02 attached for Reference Only.**

ADD. #3-41. Regarding analog equipment mentioned in Construction Documents 27 1119-10, how many VG224 switches will require the RJ21 Amphenol cables? **SMW RESPONSE: No VG224 switches needed in project.**

- i If more than (1), will you require a 24 port angle panel or a 48 port angled panel for these analog connections? **SMW RESPONSE: No VG224 switches needed in project.**

ADD. #3-42. What type of supports (cable loops, bridle rings, conduit or tied to "Red Iron") will be required for cabling in the GYM area for WAP locations? **SMW RESPONSE: Conduit to be tied to "Red Iron" for WAP cabling.**

ADD. #3-43. Regarding the MDF/IDF. Will these rooms require any backboard plywood? **SMW RESPONSE: Designated wall in Addendum 3 drawing TT-200 to be lined with fire rated plywood.**

- i How many walls will require backboard plywood? **SMW RESPONSE: One Designated wall in Addendum 3 drawing TT-200 to be lined with fire rated plywood.**

ADD. #3-44. Concerning manual and motor-operated window shades: Sheet EP-101 (Keynote 1) indicates electrical connections to motorized window shades at locations that sheet A-151 (Coded Note 2) specifies as dual manual roller shades. Please clarify where motorized and non-motorized window shades will be located. **RESPONSE: Has been coordinated with the architectural to match sheet A-151. Sheet EP-101 has been revised and provided in Addendum 3.**

ADD. #3-45. Backbone (riser) cabling – drawing TT-300

1. Please confirm the location of Existing TR 1452 referenced on Technology plans so distance can be figured. **SMW RESPONSE: Reference existing as-built drawings for TR 1452. T2.00, T2.01, T2.02 attached for Reference Only.**
   Please confirm that IT Room 203 is just being used as a pass thru and that all cables for the rec center terminate in IT 113? **SMW RESPONSE: IT Room 203 confirmed as pass thru.**

ADD. #3-46. TT-102 - Note 1 states " All TV Locations in fitness area shall receive a data drop for IPTV" There are only 2 triangles in this area, but there are approx.. 42 pieces of equipment. Does this area only require 2 data drops for IPTV where the triangle and note indicate or do

all the equipment shown need to have a data drop to them? (How many data drops in this area are needed for IPTV?) **SMW RESPONSE: All pieces of equipment to receive data drop.**

ADD. #3-47. On drawing TT-103/note #1 states to route all data in backfill to closest TR room 1664. Please confirm location of TR Room 1664 including estimated distance. **SMW RESPONSE: Please see As-built drawings. T2.00, T2.01, T2.02 attached for Reference Only.**

ADD. #3-48. There are a couple of places that reference Cat 6 and Cat 6A for various items, please confirm the following:

1. Voice, Data and IPTV are to be Cat 6 **SMW RESPONSE: All data to be CAT 6A.**
2. WAP's and CCTV are to be Cat 6A **SMW RESPONSE: All data to be CAT 6A**.
3. WAP's are to receive a dual Cat 6A (2 cables to each WAP) **SMW RESPONSE: Confirmed as shown on Addendum 3 drawing TT-000.**

ADD. #3-49. Drawing TT-200 Note 1 states - MDF shall tie in to existing 600pr copper running from the South

1. What are we connecting ? (Possibly the 50pr copper cable reference on TT-300?) **SMW RESPONSE: Connect to 25 pr copper referenced on Addendum 3 drawing TT-300.**
2. Where is the existing 600pr currently located? (Possibly in room TR 1452?) **SMW RESPONSE: 600pr does not need to be connected to room. Connect 25 pr as shown on Addendum 3 drawing TT-300.**

ADD. #3-50. Please provide clarification on wall type WS-MET2. Some details show the wall panels backed by masonry and other details show it backed by CMU. (For Example West Elevation between Grids 6 & 7) **RESPONSE: Please see attached sheets A-201 and A-202, elevations have been corrected.**

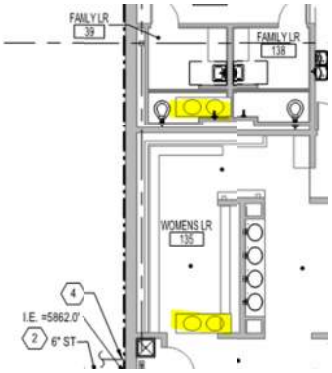
ADD. #3-51. Please confirm note 064023 on 9/A-405 is in fact "not used" or please advise what this material callout should be. **RESPONSE: Revise note to read, "06 4116 INT. ARCHITECTURAL WOODWORK PLASTIC LAMINATE (PL4) OV/ ¾" MDF ON ALL SURFACES. TYP."**

ADD. #3-52. Is a Signage Schedule available? **RESPONSE: Signage Schedule has been added to Sheet G-101, attached.**

ADD. #3-53. Will any alternative routing of the primary power be considered in lieu of running under the existing building in the crawlspace per E-003? **RMH RESPONSE: Yes, an alternate routing will be considered.**

Provide pricing for both options and advantages/disadvantages and we can review with the owner.

ADD. #3-54. There are several ghost/phantom plumbing fixtures that need to be cleaned up. In Womens LR #135 and Family LR 139. **RESPONSE: Floating double sinks at Women's LR #135 and Family LR # 139 can be deleted.**



ADD. #3-55. The fireplace system from Montigo has a graduated 10 year warranty only. See the attached. Will this be acceptable in lieu of the 30 year specified? **RESPONSE: 10 year warranty is acceptable.**

ADD. #3-56. The drawings show a small exterior vent opening detail. See the attached drawing that approximates the size of the exhaust fan that will be required for this fireplace system. Please confirm that this component is acceptable in this location. **RESPONSE: Please see revised Sheet A-554 included in Addendum 02. Exterior Vent revised from wall discharge to roof discharge.**

ADD. #3-57. The make-up air location and size indicated in the specifications does not identify the source for the air, whether from the exterior of the building or from the interior space. Please provide necessary details. **RESPONSE: Per 10 3116_1.3_C: The Flue and Air Intake Venting are part of a delegated design, and should be included during the Submittal Process.**

ADD. #3-58. There is a large control panel that comes with the fireplace via pre-wired cords. I have attached a drawing representing an approximate size and detail. The location of its' placement will need to be identified. It can be up to 100' away from the fireplace. **RESPONSE: Coordinate final location with Owner/Architect in Field.**

STRUCTURAL:

ADD. #3-59. Revised symbols:
1. S-001: Clarified number of bolts in drag connections.

ADD. #3-60. Revised foundations:
1. S-101: Clarified grade beam step location near grids 2-D.
2. S-101: Extended wider grade beam beyond column at grids 6-E, added note and dimension.

ADD. #3-61. Revised level 2 framing:
1. S-102: Added WF beam and revised framing near grid 3-B and 3C.
2. S-102: Provided top of steel elevation on grid 4.

ADD. #3-62. Revised level 3 framing:
1. S-103: Added detail 20/S-504 on grid 4.
2. S-103: Moved detail 16/S-506.
3. S-103: Clarified alignment note at gym.
4. S-103: Added RTU pad size verification note.
5. S-103: Added opening detail at RTU pad.

ADD. #3-63. Revised high roof framing plan:
1. S-104: Moved detail 16/S-506.
2. S-104: Added diagonal braces west end of grid 4.
3. S-104: Updated extend of roof overhang.

ADD. #3-64. Clarified entry framing:
1. 5/S-105: Added note for deck at top of CMU wall enclosure.

ADD. #3-65. Clarified entry framing:
1. 5/S-253: Replaced base detail with 14/S-507.

ADD. #3-66. Revised foundation details:
1. 18/S-301: Clarified base plate dimensions and added base plate types.
2. 17/S-300: Removed vertical rebar.

ADD. #3-67. Revised steel details:
1. 20/S-504: Added detail.

ADD. #3-68. Revised steel details:
1. 16/S-505: Clarified bolts and geometry.

ADD. #3-69. Revised steel details:
1. 15/S-506: Deleted detail.

2. 16/S-506: Revised/clarified framing.

ADD. #3-70. Revised steel details:
1. 3/S-507: Removed dimension.
2. 8/S-507: Added detail reference for bottom flange connection.
3. 13/S-507: Revised detail.
4. 14/S-507: Revised detail.
5. 17/S-507: Added weld.

ARCHITECTURE:

ADD. #3-71. Add requirements for using Owner's Project Web Site for Project Documentation:
1. Spec Section 01 3100: Revise 01 3100_1.8_A as follows: **"To expedite the electronic review process the contractor shall process all documents through a web-based software service. Use Owner's Project Web Site for purposes of hosting and managing project communication and documentation until Final Completion. Project Web site shall include the following functions:"** (Items 1-14 remain unchanged)

ADD. #3-72. Revise Exterior Aluminum Finishes from Three-Coat Fluoropolymer to Clear Anodized Finish:
1. Spec Section 07 6200 – Sheet Metal Flashing and Trim.
   - **i** Delete 07 6200_2.2_B_1a : Exposed Coil-Coated Finish
   - **ii** Add 07 6200_2.2_B1: **Clear Anodic Finish, Coil Coated: AAMA 611, AA-M12C22A41, Class I, 0.018 mm or thicker.**
2. Spec Section 07 4213.23 – Metal Composite Material Wall Panels
   - **i** Delete 07 4213.23_2.5_C.1: Two-Coat Fluoropolymer.
   - **ii** Add 07 4213.23_2.5_C.1: **Exposed Anodized Finish: Clear Anodic Finish: AAMA 611, AA-M12C22A41, Class I, 0.018 mm or thicker.**
3. Spec Section 08 4113 – Aluminum-Framed Entrances and Storefronts:
   - **i** Revise 08 4113_2.3_A4 as follows: **"Finish: Clear anodic finish"**
   - **ii** Revise 08 4113_2.4_D as follows: "**Finish: Clear anodic finish"**
   - **iii** Revise 08 4113_2.11_A as follows: "**Clear Anodic Finish: AAMA 611, AA-M12C22A41, Class I, 0.018 mm or thicker"**
4. Spec Section 08 4413 – Glazed Aluminum Curtain Walls:
   - **i** Revise 08 4413_2.3_A4 as follows: **"Finish: Clear anodic finish"**
   - **ii** Revise 08 4413_2.7_A as follows: "**Clear Anodic Finish: AAMA 611, AA-M12C22A41, Class I, 0.018 mm or thicker"**

ADD. #3-73. Add CPI Daylighting to approved manufactuer's for Structured-Polycarbonate-Panel Assemblies:
1. **08 4513_2.2_A1_e: CPI Daylighting: Quadwall System**

ADD. #3-74. LS-101.
1. On Applicable Codes & Standards, revise NFPA 72 and NFPA 13 to comply with 2010 editions.

ADD. #3-75. Clarify Motorized Roller Shades.
1. On 1/A-152, added note for Motorized Roller Shades and clarified locations per attached drawing.

ADD. #3-76. Add Jamb Flashing for all Polycarbonate Jamb Details, typical at all brick and cmu jambs:
1. On B2/A-501, add prefinished flashing and backer rod & sealant, per attached drawings.

ADD. #3-77. Clarified Gymnasium Parapet Walls on South and West Elevation:
1. A-103: Revised Detail Callouts for South and West Gymnasium Parapet per attached drawing.
2. A-530: Revised Parapet Detail A2/A-530 per attached drawing.
3. A-532: Added Parapet Detail C1/A-532 per attached drawing.

MECHANICAL:

ADD. #3-78. Revise specification Section 23 0593 TESTING, ADJUSTING, AND BALANCING FOR HVAC as follows:
1. Revise 23 0593_1.4_A Item 1, as follows: "Test and balance and sound and vibration testing firms for this project **include, but are not limited to the following:**

ELECTRICAL:

ADD. #3-79. New specification section 26 0800 Electrical Testing has been added.

ADD. #3-80. Sheet E002 – short circuit schedule values have been updated and also include the PMH-7 medium voltage switch.

ADD. #3-81. Sheet E004 – the background has been updated on the site lighting plan.

ADD. #3-82. Sheet EP-101 - has been updated to reflect the changes to the motorized shades.

ADD. #3-83. Sheet E603 – panel schedules have been updated.

TECHNOLOGY:

ADD. #3-84. Revise specification Section 27 0526 GROUND AND BONDING FOR COMMUNICATION SYSTEMS as follows.

1. Revise 27 0526_1.8_B Item 2, as follows: "**Telecommunications Contractors must be certified by Systimax Certified Design and Installation (ND&I) Contractor."**

ADD. #3-85. Revise specification Section 27 4100 AUDIOVISUAL GENERAL REQUIREMENTS as follows.

1. Revise 27 4100_1.13_A Item 2, as follows: **"Audiovisual Contractors for this project include, but are not limited to the following:"**

ADD. #3-86. **Revise to Amp Net Connect Brand and Corning:**

1. **Please Note: All Commscope Systimax and Uniprise Brands in specifications should be changed to the Amp Net Connect Brand.**
2. **Please Note: Fiber, Fiber optic patch panels, and connectors to be Corning manufacturer.**

ADD. #3-87. TT-000 – Updated all cabling to be CAT 6A

ADD. #3-88. TT-151 – Added EZ path Fire Rated Pathway to IDF

ADD. #3-89. TT-152 – Added EZ path Fire Rated Pathway to IDF

ADD. #3-90. TT-200 – Added fire rated plywood to designated wall and removed note referencing 600 pr

ADD. #3-91. TT-300 – Modified Backbone Cabling to IT 133

STRUCTURAL ATTACHMENTS:
SW-001, S-101, S-102, S-103, S-104, S-105, S-253, S-301, S-504, S-505, S-506 and S-507

ARCHITECTURAL ATTACHMENTS:
G-101, A-103, A-152, A-201, A-202, A-501, A-530, A-532, 08 4513 (page 4 only)

ELECTRICAL ATTACHMENTS:
E-002, E-004, E-603, EP-101, 26 0800

TECHNOLOGY ATTACHMENTS:
TT-000, TT-151, TT-152, TT-200, TT-300

EXISTING TECHNOLOGY DRAWINGS:
T2.00, T2.01, T2.02 attached for Reference Only.

END OF ADDENDUM NO. 03

SYMBOLS LEGEND

SYMBOL	DESCRIPTION
XXX'-XX"	ELEVATION CALLOUT
	STEP
	SLOPE
1	KEY NOTE
	SUBGRADE
	FORM SAVER
2	DRAWING REVISION NUMBER
	CURRENT REVISION CLOUD
	SERVICE LOAD PROVIDED FOR SPECIALTY DESIGNER
	WELDED-WIRE REINFORCEMENT
X / XX	SECTION OR DETAIL CUT
	SHEET NUMBER
X / XX	ELEVATION CUT
	SHEET NUMBER
X	NEW GRID LINES
X	EXISTING GRID LINES

SYMBOL	DESCRIPTION
XX Xk	MECH UNIT (XX.Xk = MECH UNIT OPERATING WEIGHT IN KIPS INCLUDING INERTIA BASE)
X"	EXTENT OF CONCRETE PAD
	PAD THICKNESS
	STRUCTURAL MAS WALL CONTROL JOINT
	CAST-IN-PLACE CONC
YW1	WALLS, Y = (**M**)AS, (1) TYPE
SOGXXA	SLAB TYPE
XXX'-XX"	SLAB THICKNESS
	TYPE
	T/SLAB
	PILASTER (IF PRESENT)
PX	**P**ILASTER ELEVATION
XX'-X"	**D**RILLED **P**IER DIAMETER IN INCHES
DPXXA-XX'	PENETRATION INTO BEDROCK IN FEET
XX'-X"	TYPE
	T/DRILLED PIER ELEVATION
CXX	**C**OLUMN SIZE OR MARK
STEEL BEAM	SHEAR STUD QUANTITY
XXk BEAM SIZE [XX] c=X" XXk	
(XXX'-XX")	
ULTIMATE BM REACTION USING LRFD LOAD COMBINATIONS (KIPS)	CAMBER (INCHES)
	EL OF T/STEEL
	MOMENT CONNECTION
	AXIAL DRAG CONNECTION, SEE 10/S-500 PROVIDE MAX BOLTS PER SCHEDULE 2
	DECK TYPE
2VLIX.XXA	ABOVE DECK CONCRETE THICKNESS
XXX'-XX"	TYPE
	DECK SPAN DIRECTION
	T/SLAB AT SLAB-ON-DECK

ABBREVIATIONS

/	Per	FND	Foundation	QTY	Quantity
@	At	FO	Face of		
AB	Anchor Bolt	FP	Full Penetration	R	Radius
ACI	American Concrete Institute	FS	Far Side	RAD	Radius
ADDNL	Additional	FT	Foot or Feet	RB	Precast Rectangular Beam
ALT	Alternate	FV	Field Verify	RE: or REF	Refer to (Reference)
APPROX	Approximate			REINF	Reinforce(ing)(d)(ment)
ARCH	Architect or Architectural	GA	Gage or Gauge	REQD	Required
		GALV	Galvanized	REQT(S)	Requirement(s)
B/ or BO	Bottom of	GR	Grade or Grind	RO	Rough Opening
BF	Braced Frame	GR BM	Grade Beam		
BL	Brick Ledge			S	South
BLDG	Building	HAS or HDAS	Headed Anchor Stud	S	Snow Load
BM	Beam			SC	Slip Critical
BOS	Bottom of Steel	HDAR	Headed Anchor Rod	SCHED	Schedule
BOT or B	Bottom	HDG	Hot Dipped Galvanized	SECT	Section
BRG	Bearing	HORIZ	Horizontal	SIM	Similar
BTWN	Between	HT	Height	SLH	Short Leg Horizontal
				SLV	Short Leg Vertical
CC	Center to Center	ID	Inside Diameter	SOG	Slab on Grade
CF	Cold Formed	IN	Inch	SP	Space(s)
CIP	Cast-In-Place	INT	Interior	SP @	Space at
CJ	Control Joint			SPECS	Specifications
CJP	Complete Joint Penetration	JST	Joist	SS	Stainless Steel
CL	Centerline	JT	Joint	STD	Standard
CLMS	Ceiling/Light/Mechanical/Superimposed Load	k	Kip	STIFF	Stiffener
				STL	Steel
CLR	Clear			STR	Structural
CMU	Concrete Masonry Unit	L	Length or Live Load	SW	Shearwall
COL	Column	LB(S)	Pound(s)		
CONC	Concrete	LCS	Compression Lap Splice	T	Top or Thermal Load
CONN	Connection	LDH	Hook Development Length	T&B	Top and Bottom
CONST	Construction	LG	Length	T/ or T.O.	Top of
CONT	Continue or Continuous	LL	Live Load	THK	Thick or Thickness
CONTR	Contractor	LLH	Long Leg Horizontal	TL	Total Load
COORD	Coordinate	LLV	Long Leg Vertical	TOC	Top of Concrete
CSJ	Construction Joint	LOC(S)	Location(s) or Locate	TOM	Top of Masonry
CTR(D)	Center(ed)	Lr	Roof Live Load	TOP	Topping
		LTE	Tension Embedment	TOS	Top of Steel
D or DL	Dead Load	LTS	Tension Lap Splice Length	TOW	Top of Wall
DAS	Deformed Anchor Stud			TRANS	Transverse
DFS	Deferred Submittal	MAS	Masonry	TYP	Typical
DIA or Ø	Diameter	MATL	Material		
DIAG	Diagonal	MAX	Maximum	ULT	Ultimate
DIM	Dimension	MCJ	Masonry Control Joint	UNO	Unless Noted Otherwise
DN	Down	MECH	Mechanical		
DP	Drilled Pier or Deep	MEP	Mech/Elect/Plumb	VERT	Vertical
DTL(S)	Detail(s)	MIN	Minimum	VIF	Verify in Field
DWG(S)	Drawing(s)	MISC	Miscellaneous		
DWL(S)	Dowels(s)	MLS	Masonry Lap Splice	W	Wind Load
		mm	Millimeter	W/	With
(E) or EXIST	Existing			W/O	Without
		N	North	WF	Wide Flange
E	Earthquake Load	N-S	North-South	WP	Working Point
EA	Each	NIC	Not in Contract	WT	Weight
EC	Epoxy Coated	NOM	Nominal	WWR	Welded Wire Reinforcement
EE	Each End	NS	Near Side		
EF	Each Face	NTS	Not To Scale		
EJ	Expansion Joint	NWC	Normal Weight Concrete		
EL	Elevation				
ELEV	Elevator	OC	On Center		
EN	Edge Nail	OH	Opposite Hand		
ENGR	Engineer	OPNG	Opening		
EOR	Engineer-of-Record	OPP	Opposite		
EQ	Equal	OVS	Oversized		
EQ SP	Equally Spaced				
EQUIP	Equipment	PAF	Power Actuated Fastener		
ES	Each Side	PCA	Portland Cement Association		
EW	Each Way				
EXP	Expansion	PERP	Perpendicular		
EXP ANCH	Expansion Anchor	PL	Plate (Steel)		
EXT	Exterior	PLF	Pounds Per Lineal Foot		
		PRELIM	Preliminary		
FIN	Finish(ed)	PSF	Pounds Per Square Foot		
FLG	Flange	PSI	Pounds Per Square Inch		
FLR	Floor	PT	Point or Post-Tension or Pretensioned		

DESIGN CRITERIA

1. CODES AND STANDARDS:

1A. GENERAL DESIGN
- INTERNATIONAL BUILDING CODE 2012

1B. LOADS
- ASCE/SEI 7-10 "MINIMUM DESIGN LOAD FOR BUILDINGS AND OTHER STRUCTURES"
- WHERE INDICATED ON DRAWINGS INDIVIDUAL UNFACTORED LOAD COMPONENTS (D, L, S, H, E, W) ARE AS DEFINED AND DETERMINED BY THE BUILDING CODES AND STANDARDS INDICATED. LOAD COMPONENTS SHALL BE COMBINED USING THE LOAD COMBINATIONS OF THE BUILDING CODE FOR SPECIALTY DESIGN BY OTHERS.

1A. CONCRETE
- ACI 301-10 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS"
- ACI 318-11 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE"

1B. MASONRY
- ACI 530-11/ASCE 5-11 "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES"
- ACI 530.1-11/ASCE 6-11 "SPECIFICATION FOR MASONRY STRUCTURES"

1C. STEEL
- ANSI/AISC 360-10 "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" LOAD AND RESISTANCE FACTOR DESIGN

2. SEISMIC LOADS
- SEISMIC DESIGN CATEGORY = B
- OCCUPANCY CATGORY = III
- EARTHQUAKE IMPORTANCE FACTOR, Ie = 1.25
- MAPPED SPECTRAL RESPONSE ACCELERATION, Ss = 19.5% g
- MAPPED SPECTRAL RESPONSE ACCELERATION, S1 = 6.10% g
- DESIGN SPECTRAL RESPONSE COEFFICIENT, SDs = 0.156
- DESIGN SPECTRAL RESPONSE COEFFICIENT, SD1 = 0.069
- SOIL SITE CLASS = C
- BASIC STRUCTURAL SYSTEM: BUILDING FRAME SYSTEM
- STRUCTURAL SEISMIC LATERAL SYSTEM: STRUCTURAL STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE WITH INTERMEDIATE REINFORCED MASONRY SHEAR WALLS.
- RESPONSE MODIFICATION FACTOR, R = 3
- SEISMIC RESPONSE COEFFICIENT, Cs = 0.065
- SYSTEM OVERSTRENGTH FACTOR, OMEGA = 3
- DESIGN BASE SHEAR EAST-WEST DIRECTION = 140 K (ULTIMATE)
- DESIGN BASE SHEAR NORTH-SOUTH DIRECTION = 140 K (ULTIMATE)
- SEISMIC ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE ANALYSIS

3. WIND LOADS
- OCCUPANCY CATGORY = III
- BASIC WIND SPEED = 135 MPH
- EXPOSURE CATEGORY = C
- INTERNAL PRESSURE COEFFICIENT, Gcpi = ± 0.18

4. DESIGN WIND PRESSURE FOR COMPONENTS AND CLADDING AND ELEMENTS DESIGNED BY THE CONTRACTOR
- PRESSURES LISTED BELOW ARE BASED ON A 10 SF EFFECTIVE WIND AREA. FINAL CALCULATIONS TO BE COMPLETED BY CONTRACTOR
- TYPICAL WALL AREA INWARD PRESSURE = 36 PSF
- TYPICAL WALL AREA OUTWARD PRESSURE = -39 PSF
- WALL CORNERS (OUTWARD) = -48 PSF
- TYPICAL ROOF AREA (OUTWARD) = -40 PSF
- ROOF SPECIAL ZONES (EAVES, RAKES, RIDGES AND CORNERS) (OUTWARD) = -100 PSF
- PARAPETS (INWARD) = 125 PSF

5. TYPICAL ALLOWABLE NET UPLIFT FOR JOIST DESIGN
- FIELD = 15 PSF
- END AND CORNER ZONES = 20 PSF

6. LATERAL LOAD RESISTING SYSTEM DESCRIPTION
- METAL DECK AND CONCRETE ON METAL DECK DIAPHRAGMS SPANNING TO BRACED FRAMES NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE. BRACED FRAMES TRANSITION TO INTERMEIDATE REINFORCED MASONRY SHEAR WALLS AT SELECT LOCATIONS.

7. GRAVITY LOADS

7A. SEE LOAD MAP SHEET S-005 FOR SUPERIMPOSED DEAD LOAD AND LIVE LOADS USED IN DESIGN

7B. DRIFTING, SLIDING AND UNBALANCED SNOW
- GROUND SNOW LOAD = 30.0 PSF
- SNOW EXPOSURE FACTOR, Ce = 1.00
- SNOW LOAD IMPORTANCE FACTOR, Is = 1.1
- THERMAL FACTOR, Ct = 1.00
- FLAT ROOF SNOW LOAD, Pf = 23.1 PSF

8. FIRE RESISTANCE, CONDITIONS OF RESTRAINT:

8A. FOR DETERMINING FIRE-RESISTANCE RATINGS PER IBC SECTION 703, ALL STEEL FLOOR AND ROOF CONSTRUCTION SUPPORTING CONCRETE SLABS IS ASSUMED TO BE RESTRAINED. ALL OTHER STEEL FRAMING IS ASSUMED TO BE UNRESTRAINED.

DEFERRED SUBMITTALS

1. GENERAL:

1A. THE FOLLOWING PORTIONS OF THE STRUCTURAL DESIGN WILL NOT BE SUBMITTED AT THE TIME OF PERMIT APPLICATION. WHEN RECEIVED AND REVIEWED, THESE DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE BUILDING OFFICIAL BY THE CONTRACTOR:
- METAL STAIRS
- CURTAIN WALL AND GLAZING SYSTEMS
- ARCHITECTURAL/METAL CLADDING PANELS
- LIGHT GAGE METAL STUDS
- SKYLIGHT SYSTEMS
- METAL RAILINGS
- ANCHORAGE, BRACING AND ATTACHMENT OF REQUIRED ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, FIRE SPRINKLER, AND OTHER EQUIPMENT AND SYSTEMS.
- CLIMBING WALL STRUCTURE AND CLADDING

1B. CONNECTION OF DEFERRED SUBMITTAL ITEMS TO PRIMARY STRUCTURE BY DEFERRED SUBMITTAL SUPPLIER. DEFERRED SUBMITTAL SUPPLIER TO PROVIDE CONNECTIONS AND FRAMING ARRANGEMENT TO AVOID LOADING WHICH EXCEEDS THE CAPACITY OF THE ELEMENT BEING ATTACHED TO. REFERENCE LOAD MAPS FOR MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SPRINKLER LOAD ALLOWANCES.

1C. ALL DEFERRED SUBMITTALS TO BE ATTACHED TO PRIMARY STRUCTURE WITH A PINNED CONNECTION. MOMENT CONNECTIONS TO PRIMARY STRUCTURE NOT PERMITTED UNLESS NOTED ON DRAWINGS OR APPROVED BY ENGINEER IN WRITING PRIOR TO SUBMITTAL OF DRAWINGS OR CALCULATIONS.

1D. LOADING AND LOCATION FOR ATTACHMENT OF DEFERRED SUBMITTAL ITEMS ARE NOTED ON DRAWINGS AND ARE NOT TO BE RE-LOCATED OR INCREASED WITHOUT WRITTEN APPROVAL.

1E. GC / METAL STUD FRAMING DESIGNER / CLADDING DESIGNER COORDINATION:
- METAL STUD FRAMING AND FRAMING ATTACHMENT IS DESIGNED FOR THE TRIBUTARY WIND AND GRAVITY LOAD OF THE STUD SPACING. CLADDING SUPPLIER TO DESIGN CLADDING TO ATTACH AT EACH STUD. CLADDING ATTACHMENT SPACING WHICH EXCEEDS THE STUD SPACING IS NOT ACCEPTABLE WITHOUT APPROVAL FROM THE METAL STUD SUPPLIER/DESIGNER AND THE PROJECT EOR.
- IF THE CLADDING SUPPLIER DOES NOT WANT OR CANNOT ATTACH TO EACH STUD THE LOADS FROM THE CLADDING SUPPLIER MUST BE PROVIDED TO THE METAL STUD FRAMING SUPPLIER. THE METAL STUD FRAMING SUPPLIER WILL NEED TO INCORPORATE THESE LOADS INTO THE METAL STUD FRAMING DESIGN.
- GC TO COORDINATE BETWEEN METAL STUD FRAMING SUPPLIER AND CLADDING SUPPLIER AS REQUIRED.

1F. WALLS, GRADE BEAMS AND THE UNDERSIDE OF CONCRETE ON METAL DECK SHALL BE CONSIDERED CRACKED FOR THE PURPOSE OF DESIGNING ANCHORS FOR ATTACHMENT OF DEFERRED SUBMITTAL ITEMS.

1G. SUBMIT STAMPED STRUCTURAL CALCULATIONS FOR ALL DEFERRED SUBMITTAL ITEMS PRIOR TO OR CONCURRENTLY WITH DRAWINGS OR PRODUCT DATA. INCLUDE ANALYSIS OF ATTACHMENT TO PRIMARY STRUCTURE. INCLUDE CURRENT ICC REPORT WITH ALL PROPRIETARY STRUCTURAL ELEMENTS AND ANCHORS/FASTENERS.

1H. POWER ACTUATED FASTENERS (PAF) SHALL NOT BE USED TO RESIST GRAVITY TENSION LOADS. POWER ACTUATED FASTENERS SHALL NOT BE USED TO RESIST GRAVITY LOADS WHICH INCLUDE BRICK VENEER.

1I. REFERENCE COLD-FORMED STEEL FRAMING NOTES FOR ADDITIONAL DEFERRED SUBMITTAL DESIGN CRITERIA.

GENERAL NOTES

1. GENERAL:

1A. ENGINEER: REFERENCES ON THE STRUCTURAL DRAWINGS TO 'ENGINEER' MEAN THE STRUCTURAL ENGINEER OF RECORD. OTHER ENTITIES ARE SPECIFICALLY NOTED AS "CONTRACTOR'S ENGINEER", "MECHANICAL ENGINEER", ETC.

1B. THESE NOTES SUPPLEMENT THE SPECIFICATIONS, WHICH SHALL BE REFERENCED FOR ADDITIONAL REQUIREMENTS.

1C. UNDERGROUND UTILITIES: LOCATE EXISTING UTILITIES AND NOTIFY ARCHITECT OF EXISTING UTILITIES OR SUBGRADE CONDITIONS WHICH INTERFERE WITH WORK.

1D. STRUCTURAL ELEMENTS ARE CENTERED ON GRID LINES AND GRID LINE INTERSECTIONS UNLESS DIMENSIONED OTHERWISE.

2. EXISTING STRUCTURES:

2A. CONTRACT DOCUMENTS HAVE BEEN PREPARED USING AVAILABLE DRAWINGS AND SITE OBSERVATION AS PERMITTED BY ACCESS RESTRICTIONS DURING DESIGN.

2B. DURING CONSTRUCTION, THE CONTRACTOR MAY ENCOUNTER EXISTING CONDITIONS WHICH ARE NOT NOW KNOWN OR ARE AT VARIANCE WITH PROJECT DOCUMENTATION. CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ALL CONDITIONS NOT PER THE CONTRACT DOCUMENTS. EXAMPLES INCLUDE:
- SIZES OR DIMENSIONS OTHER THAN THOSE SHOWN
- DAMAGE OR DETERIORATION TO MATERIALS AND COMPONENTS
- CONDITIONS OF INSTABILITY OR LACK OF SUPPORT
- ITEMS NOTED AS EXISTING ON THE DRAWINGS BUT NOT FOUND IN THE FIELD

2C. PREPARE DIMENSIONAL DRAWINGS OF ALL DISCOVERED ITEMS.

2D. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING STRUCTURAL CONDITIONS PRIOR TO SUBMITTING SHOP DRAWINGS.

2E. CONTRACTOR SHALL MAKE ALLOWANCE FOR THE RESOLUTION OF SUCH DISCOVERIES IN THE CONSTRUCTION SCHEDULE.

2F. SUBMIT A DIMENSIONED DRAWING OF ALL NEW OPENINGS THROUGH EXISTING STRUCTURE AND SECURE APPROVAL PRIOR TO CUTTING. DRAWING SHALL SHOW VERTICAL & HORIZONTAL LOCATION AND SIZE OF PROPOSED OPENING.

3. USE OF DRAWINGS:

3A. DO NOT SCALE DRAWINGS.

3B. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL NOTES AND SPECIFICATIONS, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN. DETAILS ON DRAWINGS TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. DETAILS NOTED TYPICAL APPLY TO ALL SIMILAR CONDITIONS. WHERE NO SPECIFIC DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ELSEWHERE ON THE PROJECT.

4. TEMPORARY CONDITIONS:

4A. THE STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION. THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING ALL TEMPORARY BRACING AND/OR SUPPORT THAT MAY BE REQUIRED AS THE RESULT OF THE CONTRACTOR'S CONSTRUCTION METHODS AND/OR SEQUENCES. REFER TO "LATERAL LOAD RESISTING SYSTEM DESCRIPTION" IN DESIGN CRITERIA FOR ADDITIONAL INFORMATION.

4B. CONTRACTOR'S CONSTRUCTION AND/OR ERECTION SEQUENCES SHALL RECOGNIZE AND CONSIDER THE EFFECTS OF THERMAL MOVEMENTS OF STRUCTURAL ELEMENTS DURING THE CONSTRUCTION PERIOD.

4C. FOUNDATION WALLS SHALL NOT BE BACKFILLED UNTIL THE SLABS-ON-GRADE AND UPPER SLABS ARE IN-PLACE AND REACH FULL STRENGTH UNLESS ADEQUATE BRACING IS PROVIDED. USE ONLY HAND OPERATED TOOLS FOR COMPACTION ADJACENT TO FOUNDATION WALLS AND GRADE BEAMS. GRADE BEAMS SHALL BE BACKFILLED EVENLY ON BOTH SIDES.

5. SUBMITTALS AND SUBSTITUTIONS:

5A. SUBMITTALS: REFER TO SPECIFICATIONS FOR DETAILED REQUIREMENTS.
- IF THE CONTRACTOR REQUESTS A CHANGE FROM THE STRUCTURAL DRAWINGS, IT SHALL BE APPROVED BY THE ARCHITECT AND DESIGNED BY MARTIN/MARTIN, INC. PRIOR TO SUBMITTING SHOP DRAWINGS. VARIATION SHALL BE INDICATED ON THE SHOP DRAWINGS. CONTRACTOR SHALL COMPENSATE MARTIN/MARTIN, INC. FOR MAKING THE CHANGE.
- CONSTRUCTION DOCUMENTS SHALL NOT BE REPRODUCED FOR USE IN SUBMITTALS
- ALL SHOP DRAWINGS SHALL REFERENCE THE STRUCTURAL DRAWING NUMBER AND DETAIL USED TO PREPARE THE SUBMITTAL
- SUBMIT A STATEMENT OF RESPONSIBILITY FOR CONSTRUCTION OF THE LATERAL LOAD RESISTING SYSTEM IDENTIFIED IN THE DESIGN CRITERIA IN ACCORDANCE WITH IBC SECTION 1706

5B. SUBSTITUTIONS: ARCHITECTS APPROVAL SHALL BE SECURED FOR ALL SUBSTITUTIONS

5C. NONCONFORMANCE: NOTIFY ARCHITECT OF CONDITIONS NOT CONSTRUCTED PER THE CONTRACT DOCUMENTS PRIOR TO PROCEEDING WITH CORRECTIVE WORK. SUBMIT PROPOSED REPAIR TO THE ARCHITECT FOR ACCEPTANCE. CONTRACTOR SHALL COMPENSATE MARTIN/MARTIN, INC. FOR DESIGNING THE REPAIR.

6. OSHA STANDARDS:

6A. THE STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION. NOTHING SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE CONSTRUED AS ELIMINATING THE NEED FOR THE CONTRACTOR TO COMPLY WITH ALL OSHA REQUIREMENTS.

6B. THE CONTRACTOR SHALL ADD ALL NECESSARY BOLTS, ANCHOR BOLTS, PLATES, STIFFENER PLATES, STABILIZER PLATES, BRIDGING, BRACING, BEARING SEATS, COLUMN SPLICES, ETC., AS WELL AS CLOSURES FOR OPENINGS. IN ADDITION, FIELD WELD ANYTHING THAT MAY BE CONSIDERED A TRIP HAZARD, SUCH AS SHEAR STUDS, AFTER PROTECTIVE DECKING IS INSTALLED.

6C. WASHERS OR RINGS MAY BE WELDED TO COLUMNS TO PROVIDE FOR SAFETY CABLES. DO NOT PLACE HOLES IN COLUMNS WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER. ADJUST LOCATIONS OR ADD COLUMN SPLICES AS NECESSARY TO COMPLY WITH OSHA REQUIREMENTS. SUBMIT PROPOSED LOCATIONS.

6D. ALL METAL JOISTS REQUIRED BY OSHA TO BE BOLTED SHALL HAVE ERECTION BOLTS INSTALLED REGARDLESS OF FINAL CONNECTION SHOWN ON THE STRUCTURAL DRAWINGS.

6E. WHERE THE STRUCTURAL DRAWINGS APPEAR TO CONFLICT WITH OSHA REQUIREMENTS, THE STRUCTURAL DRAWINGS REPRESENT FINAL CONDITIONS ONLY. THE CONTRACTOR SHALL ADD ALL ERECTION FRAMING NECESSARY TO COMPLY WITH OSHA.

7. CONSTRUCTION ENGINEERING:

7A. THE STRUCTURE DEFINED ON THE CONTRACT DOCUMENTS HAS BEEN DESIGNED ONLY FOR LOADS ANTICIPATED ON THE STRUCTURE DURING ITS SERVICE LIFE. PROVIDE ALL REQUIRED ENGINEERING AND OTHER MEASURES TO ACHIEVE THE MEANS, METHODS, AND SEQUENCES OF WORK. SUCH ENGINEERING MAY INCLUDE, BUT IS NOT LIMITED TO:
- LAYOUT
- DESIGN FOR FORMWORK, SHORING, AND RESHORING
- DESIGN OF CONCRETE MIXES
- ERECTION PROCEDURES WHICH ADDRESS STABILITY OF THE FRAME DURING CONSTRUCTION
- WELD PROCEDURES
- DESIGN OF TEMPORARY BRACING OF WALLS FOR WIND, SEISMIC, OR SOIL LOADS
- SURVEYING TO VERIFY CONSTRUCTION TOLERANCES
- EVALUATION OF TEMPORARY CONSTRUCTION LOADS ON STRUCTURE DUE TO EQUIPMENT AND MATERIALS
- STRUCTURAL ENGINEERING TO RESIST ANY OTHER LOADS NOT IDENTIFIED ON DESIGN DRAWINGS

8. COORDINATION:

8A. STRUCTURAL DRAWINGS ARE NOT STAND-ALONE DOCUMENTS AND ARE INTENDED TO BE USED IN CONJUNCTION WITH CIVIL, ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND DRAWINGS FROM OTHER DISCIPLINES. THE CONTRACTOR SHALL COORDINATE ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS INTO SHOP DRAWINGS AND WORK.

8B. COORDINATE DIMENSIONS OF ALL OPENINGS, BLOCKOUTS, DEPRESSIONS, ETC., WITH ARCHITECTURAL DRAWINGS, DRAWINGS FROM OTHER DISCIPLINES, AND FIELD CONDITIONS PRIOR TO SHOP DRAWING SUBMITTAL.

8C. SEE ARCHITECTURAL PLANS FOR INTERIOR PARTITIONS. PARTITION FRAMING SHALL BE CONNECTED TO THE PRIMARY STRUCTURE IN SUCH A WAY SO AS TO ALLOW FOR VERTICAL LIVE LOAD DEFLECTIONS OF SPAN/360 OF THE FLOOR FRAMING. DO NOT MAKE RIGID VERTICAL AND HORIZONTAL CONNECTIONS TO THE PRIMARY STRUCTURE IN THE PLANE OF THE PARTITION. ALLOW 2" VERTICAL MOVEMENT OF PARTITIONS BEARING ON SLAB ON GRADE.

FOUNDATION NOTES

1. DESIGN CRITERIA:

1A. THE GEOTECHNICAL REPORT PREPARED BY GROUND ENGINEERING, NUMBER 15-3572, DATED JULY 8, 2015, PROVIDED CRITERIA FOR THE FOUNDATION DESIGN FOR THE PROJECT.

2. DRILLED PIERS:

2A. PIER CAPACITY CRITERIA:
- MAXIMUM END BEARING PRESSURE = 40,000 PSF
- MAXIMUM SIDE SHEAR FOR LENGTH OF PENETRATION INTO BEDROCK FOR GRAVITY LOADS = 3,000 PSF
- MAXIMUM SIDE SHEAR FOR LENGTH OF PENETRATION INTO BEDROCK FOR UPLIFT LOADS = 3,000 PSF
- MINIMUM DEAD LOAD END BEARING PRESSURE MAINTAINED = 5,000 PSF
- WHERE MINIMUM DEAD LOAD PRESSURES WERE NOT OBTAINED, PIER LENGTHS WERE EXTENDED BEYOND THE MINIMUM PENETRATION AND LENGTH USING SIDE SHEAR TO COMPENSATE FOR THE DEAD LOAD DEFICIT.
- FROST DEPTH = 36 INCHES

3. FOUNDATION WALLS:

3A. EQUIVALENT FLUID PRESSURES USED FOR WALL DESIGN:
- "ACTIVE" CONDITION = 50 PCF
- "AT REST" CONDITION = 71 PCF
- "PASSIVE" CONDITION = 285 PCF

3B. WALL DESIGN BASED ON ON-SITE CLAY BACKFILL ADJACENT TO FOUNDATION WALLS. SEE GEOTECHNICAL REPORT FOR REQUIREMENTS.

4. VOID FORM:

4A. ALL GRADE BEAMS, TIE BEAMS AND PIER CAPS SHALL BE CONSTRUCTED OVER A 4 INCH HIGH VOID.

STRUCTURAL DRAWING LIST

SHEET NUMBER	SHEET TITLE
S-001	NOTES
S-002	NOTES
S-003	QUALITY ASSURANCE
S-005	LOAD MAPS
S-100	DRILLED PIER PLAN
S-101	FOUNDATION PLAN
S-102	LEVEL 2 FRAMING PLAN
S-103	ROOF FRAMING PLAN
S-104	HIGH ROOF FRAMING PLAN
S-105	SOUTH ENTRY PLAN
S-250	WALL ELEVATIONS
S-251	WALL ELEVATIONS
S-252	ELEVATOR ELEVATIONS
S-253	BRACE ELEVATIONS
S-300	TYP CONCRETE DETAILS
S-301	FOUNDATION DETAILS
S-302	FOUNDATION DETAILS
S-303	FOUNDATION DETAILS
S-400	TYP MASONRY DETAILS
S-500	TYP STL BM CONNS - LRFD
S-501	TYP STL BM CONNS - LRFD
S-502	STEEL DETAILS
S-503	STEEL DETAILS
S-504	STEEL DETAILS
S-505	STEEL DETAILS
S-506	STEEL DETAILS
S-507	STEEL DETAILS
S-508	STEEL DETAILS

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Issue/Revisions	Date	No.
Addendum #2	12-4-2015	1
Addendum #3	12-9-2015	2

Project Information

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13300 W. 6th Avenue
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Sheet Information

Sheet Title:
NOTES

100% CONSTRUCTION DOCUMENTS
Nov 9, 2015

Sheet Number:
S-001

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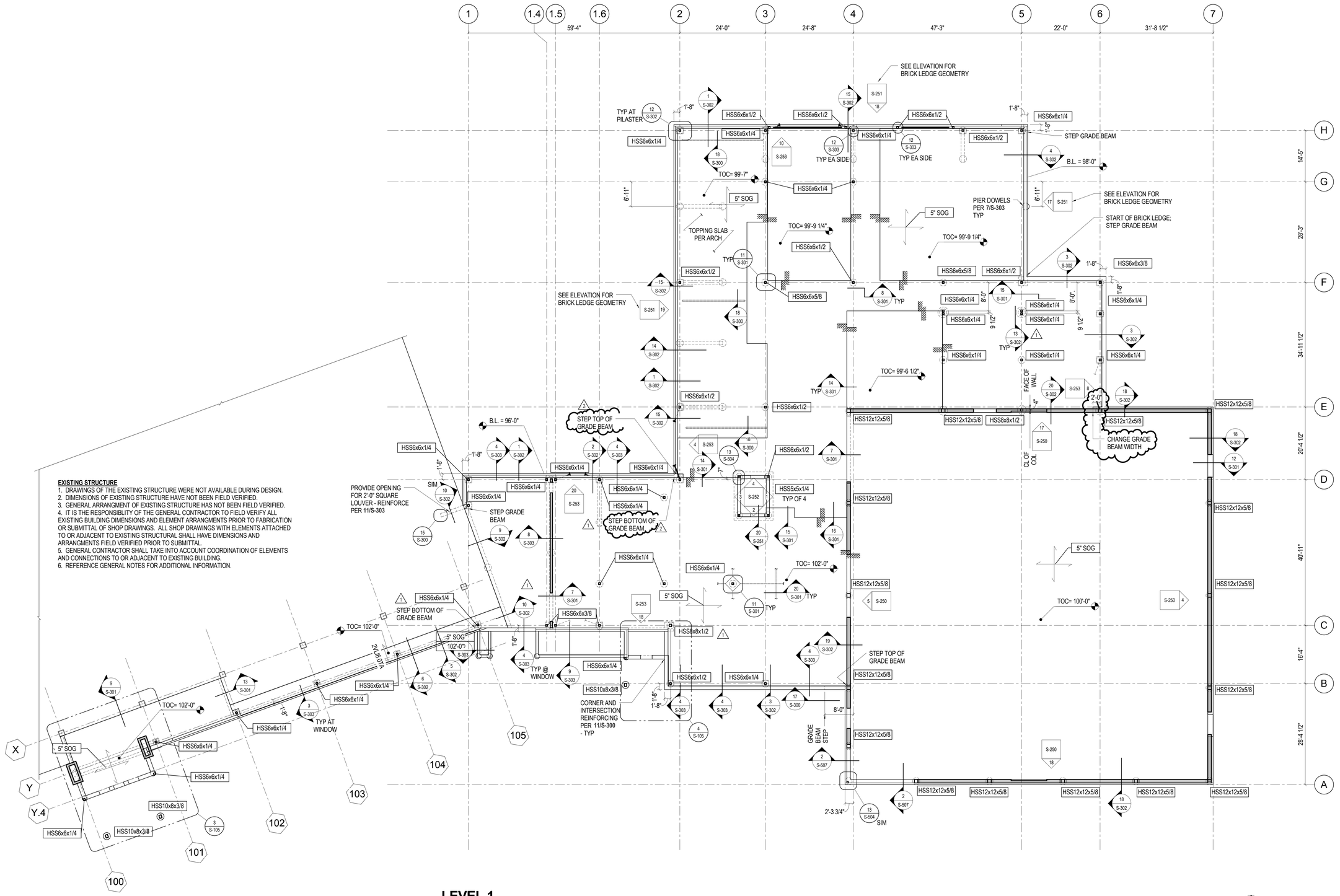

EXISTING STRUCTURE

1. DRAWINGS OF THE EXISTING STRUCTURE WERE NOT AVAILABLE DURING DESIGN.
2. DIMENSIONS OF EXISTING STRUCTURE HAVE NOT BEEN FIELD VERIFIED.
3. GENERAL ARRANGMENT OF EXISTING STRUCTURE HAS NOT BEEN FIELD VERIFIED.
4. IT IS THE RESPONSIBLITY OF THE GENERAL CONTRACTOR TO FIELD VERIFY ALL EXISTING BUILDING DIMENSIONS AND ELEMENT ARRANGMENTS PRIOR TO FABRICATION OR SUBMITTAL OF SHOP DRAWINGS. ALL SHOP DRAWINGS WITH ELEMENTS ATTACHED TO OR ADJACENT TO EXISTING STRUCTURAL SHALL HAVE DIMENSIONS AND ARRANGMENTS FIELD VERIFIED PRIOR TO SUBMITTAL.
5. GENERAL CONTRACTOR SHALL TAKE INTO ACCOUNT COORDINATION OF ELEMENTS AND CONNECTIONS TO OR ADJACENT TO EXISTING BUILDING.
6. REFERENCE GENERAL NOTES FOR ADDITIONAL INFORMATION.

LEVEL 1

3/32" = 1'-0"

NORTH

FOUNDATION NOTES

1. SEE S0 SERIES SHEETS FOR GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.

2. SEE S3 SERIES SHEETS FOR TYPICAL CONCRETE DETAILS.

3. GRADE BEAMS
   A. SEE DETAILS FOR TYPICAL GRADE BEAM REINFORCING,
   B. SEE 16/S-300 FOR MAXIMUM GRADE BEAM POUR LENGTHS AND CONSTRUCTION JOINT LOCATIONS.

4. SLABS-ON-GRADE
   A. SLABS-ON-GRADE SHALL BE 5 INCH THICK NORMAL WEIGHT CONCRETE ON 6 INCH DRAINAGE COURSE ON PROPERLY COMPACTED STRUCTURAL FILL. RE: SPECIFICATIONS FOR REQUIREMENTS. ⚠1
   B. REINFORCE SLABS-ON-GRADE WITH #4 @18 O.C EACH WAY, CENTERED IN SLAB.
   C. ELEVATION TOP OF SLABS-ON-GRADE SHALL BE NOTED ON PLAN THUS: TOC = XX'-XX"
   D. RE: ARCH DRAWINGS FOR SLAB SLOPES AND DEPRESSIONS NOT SHOWN ON STRUCTURAL DRAWINGS.
   E. SEE ARCHITECTURAL DRAWINGS FOR VAPOR RETARDER LOCATIONS. CONTRACTOR SHALL INSTALL VAPOR RETARDER PER RECOMMENDATIONS OF PCA AND ACI 302.1R-04.
   F. VERIFY ALL FLOOR SLAB RECESS DEPTHS WITH FLOOR SUPPLIER/MANUFACTURER PRIOR TO CONSTRUCTION.
   G. REINFORCE SLAB ON GRADE OPENINGS PER 10/S-301.

5. COLUMNS/PILASTERS
   A. ALL COLUMNS AND PILASTERS ARE CENTERED ON THE INTERSECTION OF GRID LINES UNLESS DIMENSIONED OTHERWISE.
   B. REFERENCE 18/S-301 FOR TYPICAL BASE PLATES. REFERENCE DETAILS FOR ADDITIONAL BASE PLATE INFORMATION.

6. MASONRY
   A. REINFORCE 12 INCH C.M.U. WALLS WITH #5 AT 16 INCHES O.C. CENTER IN WALL UNLESS NOTED OTHERWISE. PROVIDE VERTICAL REINFORCING FOR THE FULL WALL HEIGHT AT EACH SIDE OF ALL WALL OPENINGS AND EACH SIDE OF CONTROL JOINTS. PROVIDE BOND BEAMS WITH (2) #6 AT 8'-0" OC VERTICALLY.
   B. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS OF ALL MASONRY WALLS.

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Issue/Revisions	Date	No.
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Addendum #3	12-9-2015	2

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Sheet Information

Sheet Title:
FOUNDATION PLAN

100% CONSTRUCTION DOCUMENTS
Nov 9, 2015

Sheet Number:
S-101

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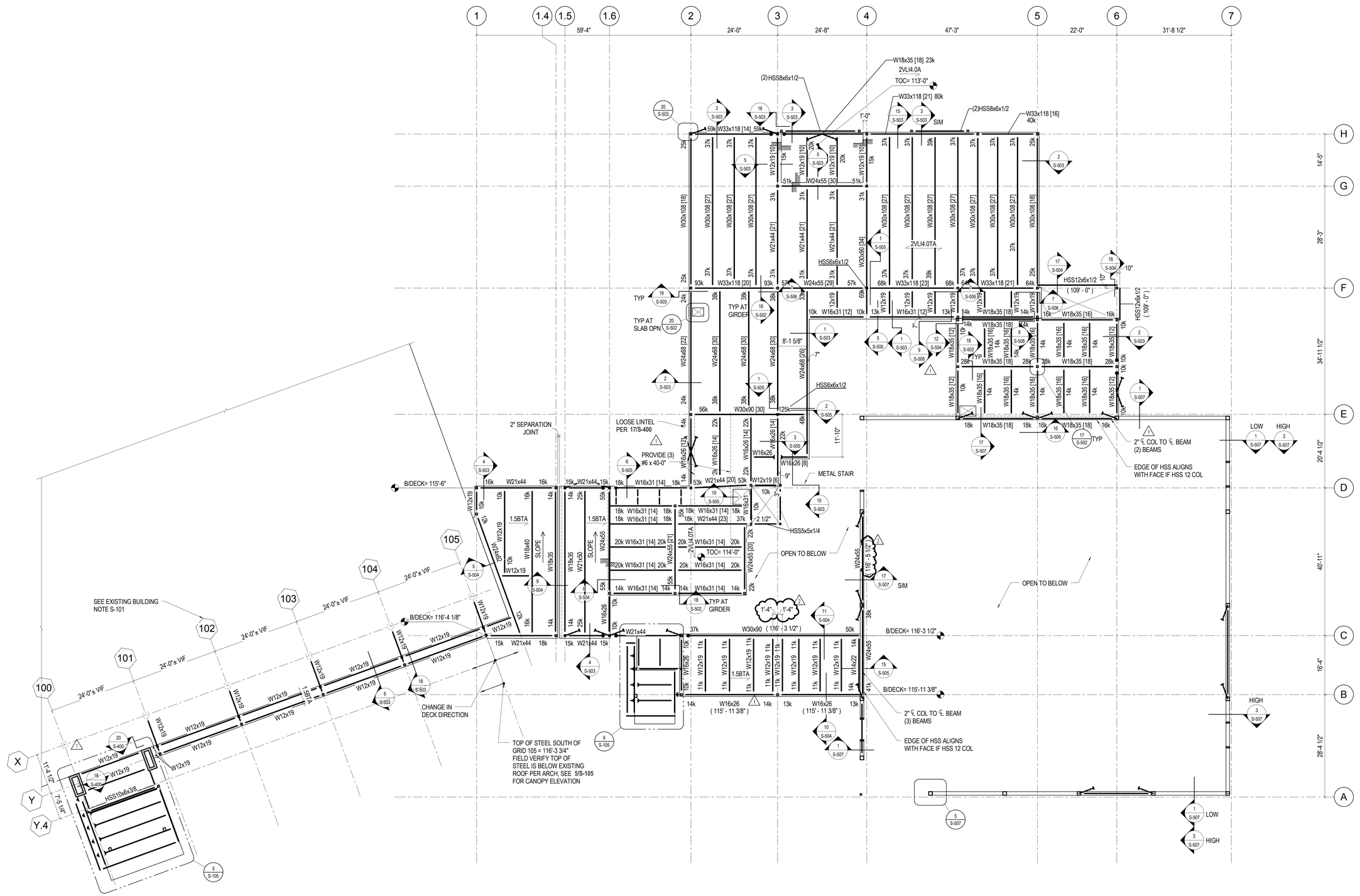

LEVEL 2

3/32" = 1'-0"

STEEL FRAMING NOTES:

1. SEE S0 SERIES SHEETS FOR GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.
2. SEE S5 SERIES SHEETS FOR STEEL DETAILS
3. SEE S500 TO S501 FOR TYPICAL STEEL CONNECTION DETAILS AND SCHEDULE
4. SEE S502 FOR TYPICAL METAL DECK DETAILS AND SCHEDULE
5. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SLAB SLOPES, DEPRESSIONS, FILL, PADS AND CURBS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
6. SPACE BEAMS EQUALLY BETWEEN GRID LINES UNLESS DIMENSIONED OTHERWISE.
7. SEE ARCHITECTURAL DRAWINGS FOR EDGE OF SLAB DIMENSIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS - TYPICAL
8. TOP OF BEAM ELEVATION = BOTTOM OF METAL DECK UNLESS NOTED OTHERWISE ON PLAN.
9. REFERENCE12/S-502 FOR COMPOSITE BEAM STUD LAYOUT REQUIREMENTS.
10. REFERENCE10/S-502 FOR METAL DECK SLAB SCHEDULE.
11. REFERENCE 17/S-503 FOR RESTRICTIONS AND REINFORCING FOR CONDUIT IN SLAB ON METAL DECK. SUBMIT PROPOSED LAYOUT FOR REVIEW PRIOR TO CONSTRUCTION. ⚠1
12. END REACTION OF W12 AND W14 BEAMS WITHOUT A REACTION NOTED IS 10 KIPS.

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Issue/Revisions	Date	No.
Addendum #2	12-4-2015	1
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Sheet Information

Sheet Title:
LEVEL 2 FRAMING PLAN

100% CONSTRUCTION DOCUMENTS
Nov 9, 2015

Sheet Number:
S-102

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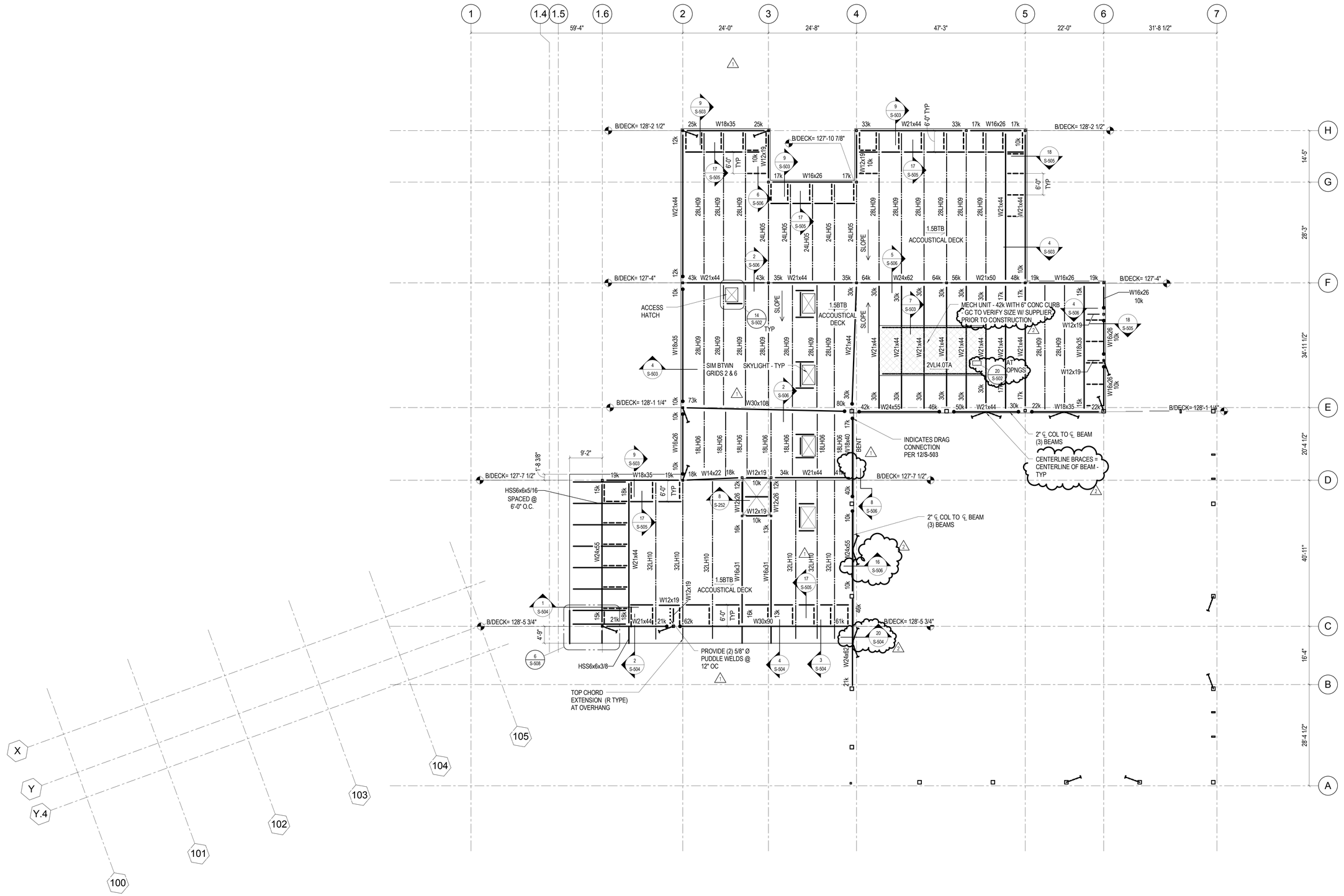

LEVEL 3

3/32" = 1'-0"

NORTH

STEEL FRAMING NOTES:

1. SEE S0 SERIES SHEETS FOR GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.
2. SEE S5 SERIES SHEETS FOR STEEL DETAILS
3. SEE S500 TO S501 FOR TYPICAL STEEL CONNECTION DETAILS AND SCHEDULE
4. SEE S502 FOR TYPICAL METAL DECK DETAILS AND SCHEDULE
5. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SLAB SLOPES, DEPRESSIONS, FILL, PADS AND CURBS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
6. SPACE BEAMS EQUALLY BETWEEN GRID LINES UNLESS DIMENSIONED OTHERWISE.
7. SEE ARCHITECTURAL DRAWINGS FOR EDGE OF SLAB DIMENSIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS - TYPICAL
8. 10. REFERENCE 10/S-502 FOR METAL DECK SLAB SCHEDULE.

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Issue/Revisions	Date	No.
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Addendum #3	12-9-2015	2

Project Information

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Sheet Information

Sheet Title:
ROOF FRAMING PLAN

100% CONSTRUCTION DOCUMENTS
Nov 9, 2015

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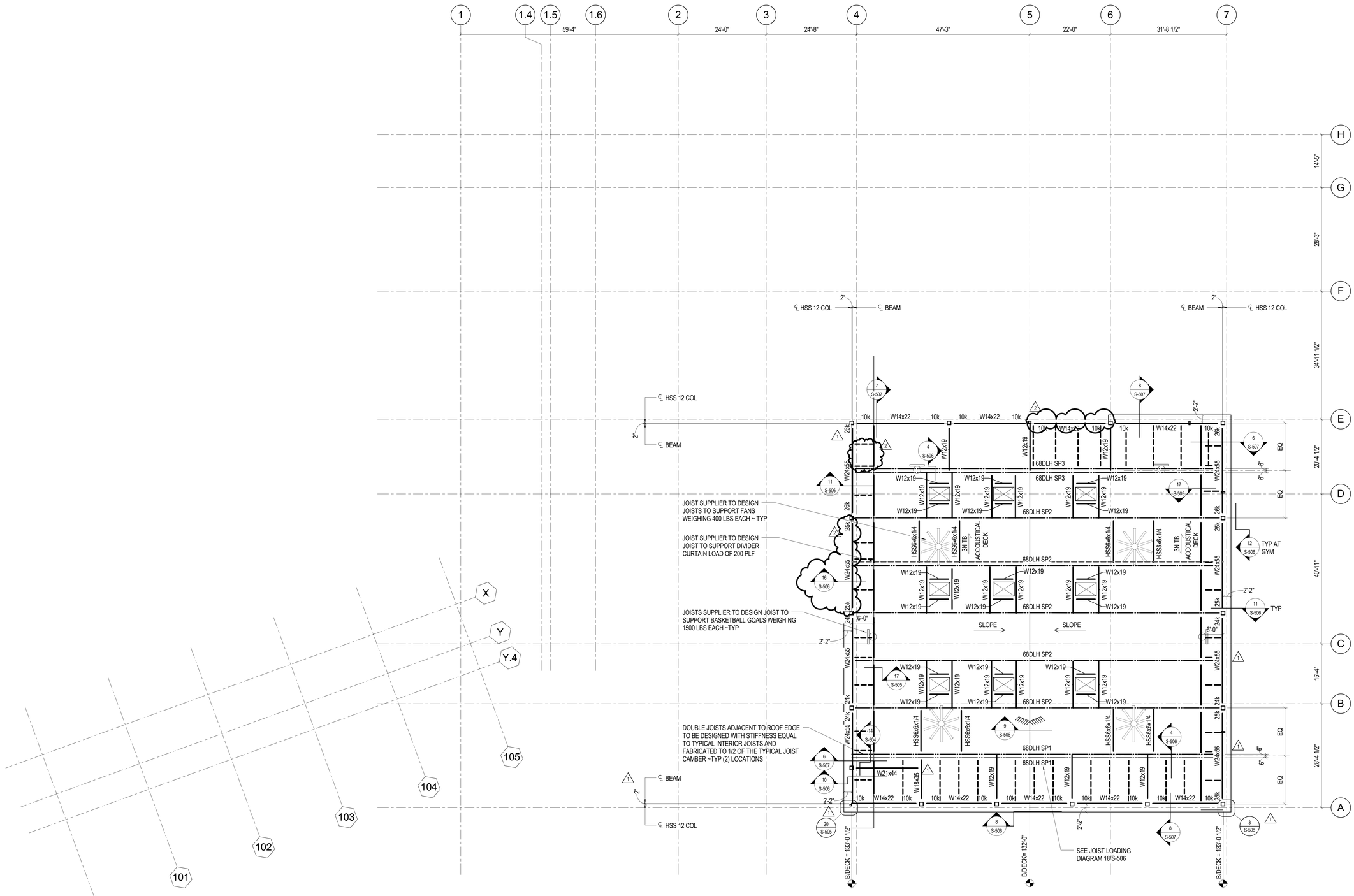

HIGH ROOF

3/32" = 1'-0"

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PROJECT MANAGER: LP

DESIGNERS: LP GS
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Addendum #2	12-4-2015	1
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Project Information

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Sheet Information

Sheet Title:
HIGH ROOF FRAMING PLAN

100% CONSTRUCTION DOCUMENTS
Nov 9, 2015

Sheet Number:

S-104

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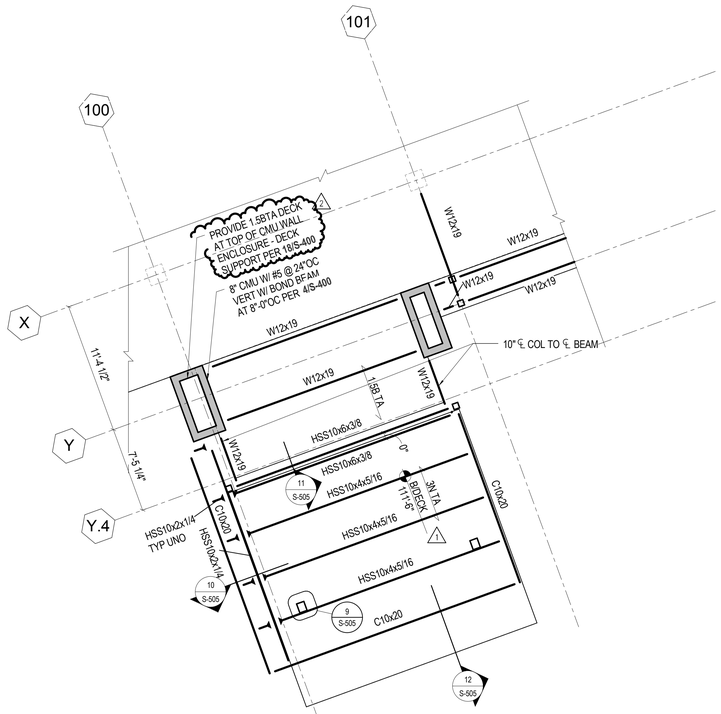
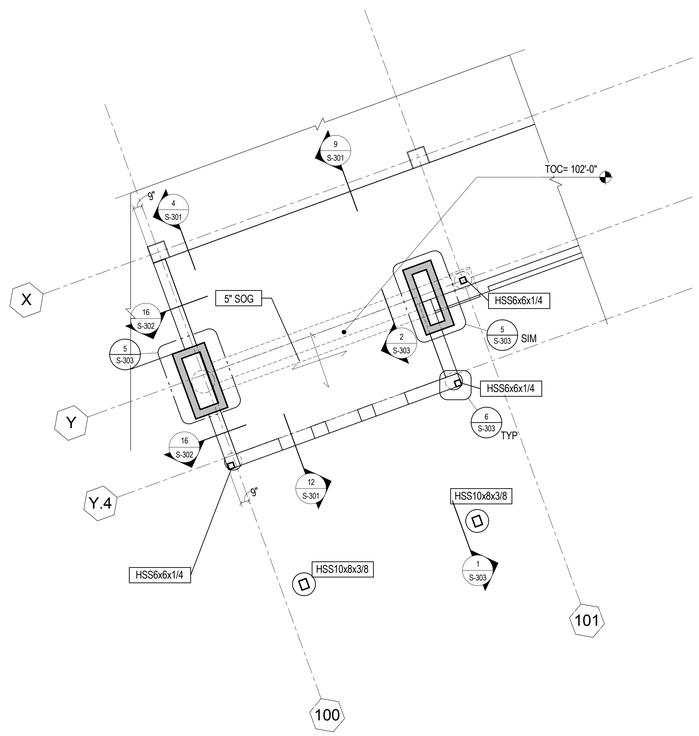
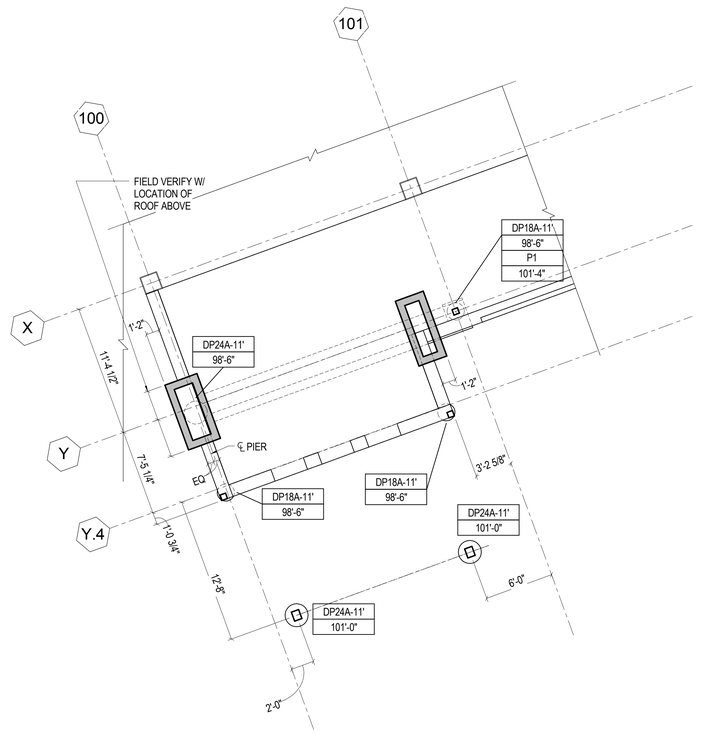


NOTE: FABRICATION AND ERECTION OF EXPOSED STRUCTURAL STEEL FULL HEIGHT OF THIS AREA TO INCLUDE THE FOLLOWING:
1. CONTINUOUS WELDS
2. WELDS GROUND SMOOTH
3. REMOVAL OF ALL BURRS AND SLAG
4. FIT-UP TO INCLUDE ALIGNMENT WITH ADJACENT MEMBERS WHEN APPLICABLE.
5. BOLTS HEADS INSTALLED ON A CONSISTENT SIDE OF CONNECTION WHEN EXPOSED.

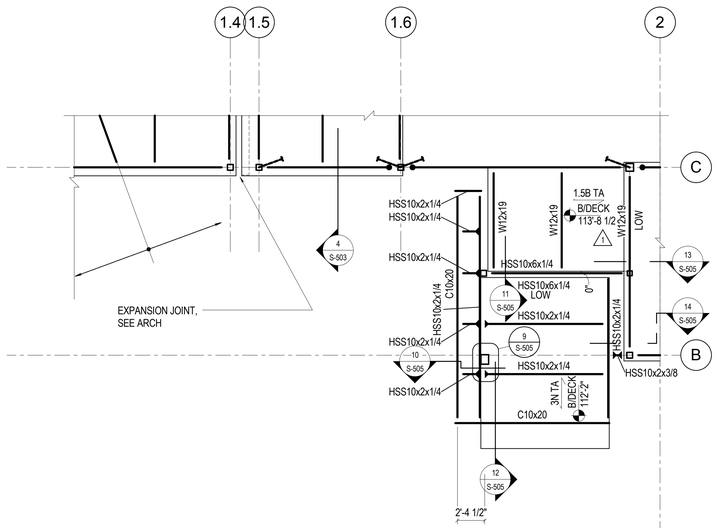
5 3/16" = 1'-0" LEVEL 2 SOUTH ENTRY



3 3/16" = 1'-0" LEVEL 1 SOUTH ENTRY

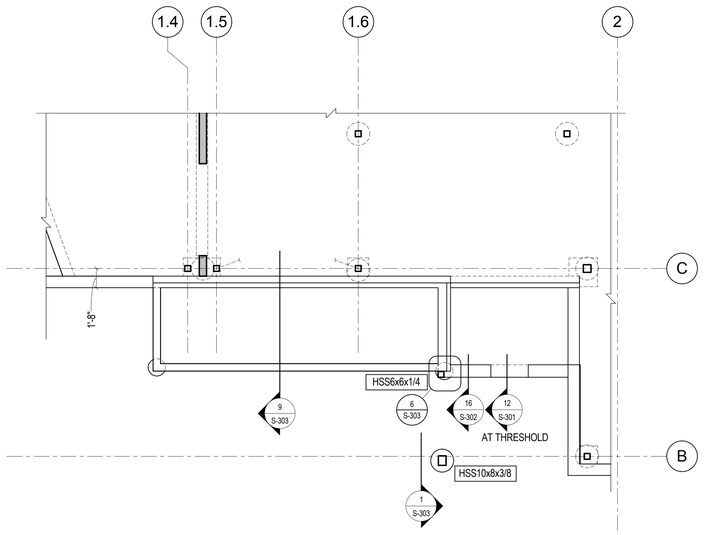


1 3/16" = 1'-0" DRILLED PIER PLAN SOUTH ENTRY

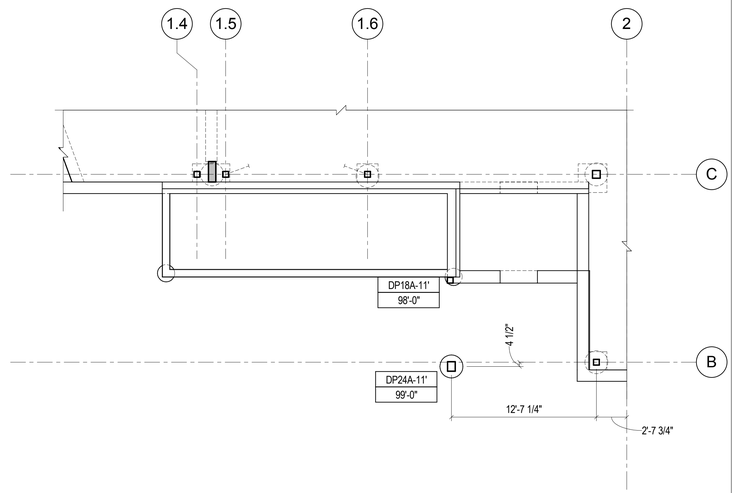


NOTE: FABRICATION AND ERECTION OF EXPOSED STRUCTURAL STEEL FULL HEIGHT OF THIS AREA TO INCLUDE THE FOLLOWING:
1. CONTINUOUS WELDS
2. WELDS GROUND SMOOTH
3. REMOVAL OF ALL BURRS AND SLAG
4. FIT-UP TO INCLUDE ALIGNMENT WITH ADJACENT MEMBERS WHEN APPLICABLE.
5. BOLTS HEADS INSTALLED ON A CONSISTENT SIDE OF CONNECTION WHEN EXPOSED.

6 3/16" = 1'-0" LEVEL 2 EAST ENTRY



4 3/16" = 1'-0" LEVEL 1 EAST ENTRY



2 3/16" = 1'-0" DRILLED PIER PLAN EAST ENTRY

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Issue/Revisions	Date	No.
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Project Information

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Sheet Information

Sheet Title:
SOUTH ENTRY PLAN

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Nov 9, 2015

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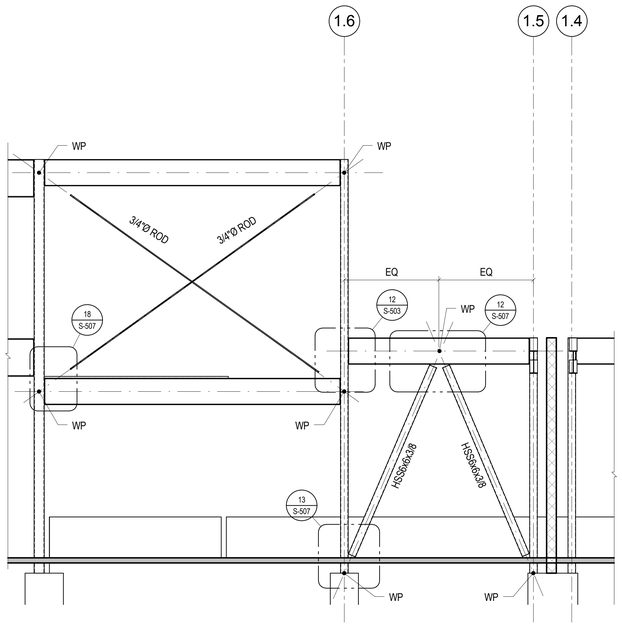
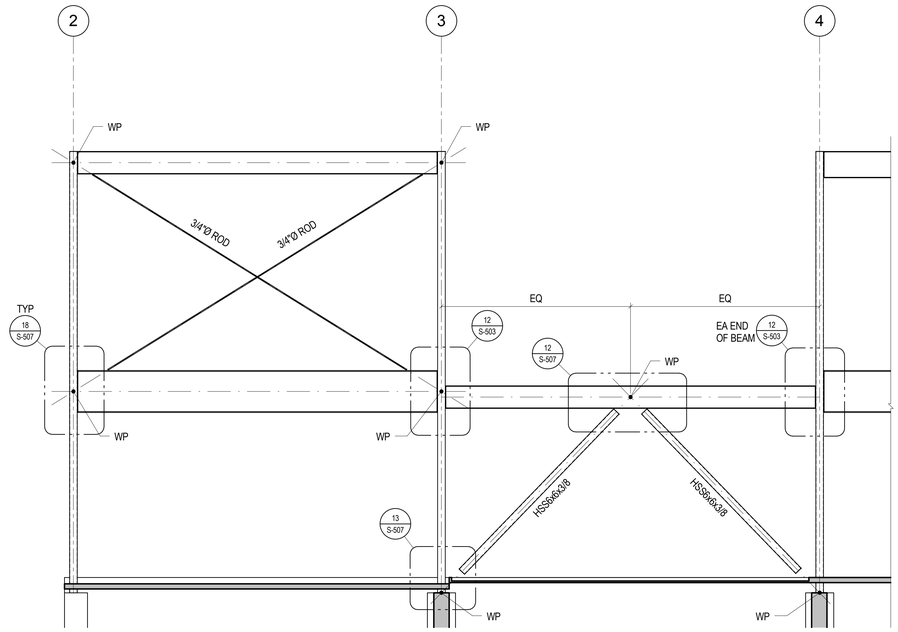
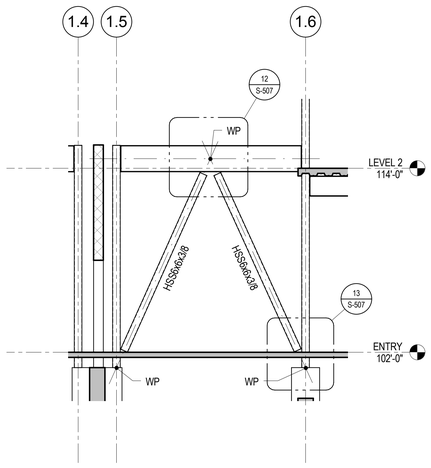


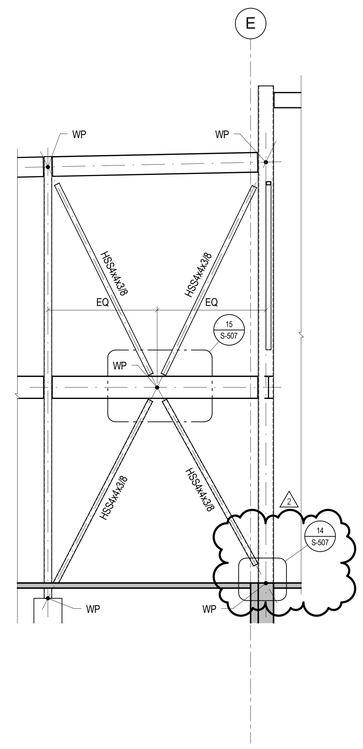
18 1/4" = 1'-0" BRACE ON GRID C



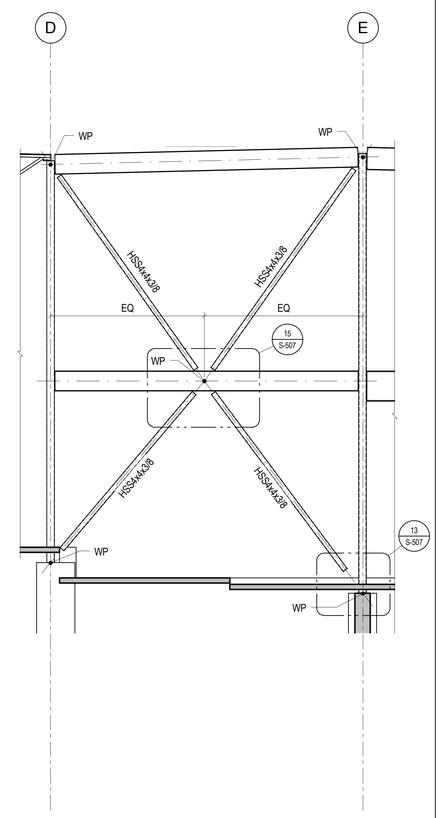
10 1/4" = 1'-0" BRACE ON GRID H



20 1/4" = 1'-0" BRACE ON GRID D



8 1/4" = 1'-0" BRACE ON GRID 6



4 1/4" = 1'-0" BRACE ON GRID 2

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Issue/Revisions	Date	No.
Addendum #3	12-9-2015	2

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Sheet Information

Sheet Title:
BRACE
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CONSTRUCTION
DOCUMENTS
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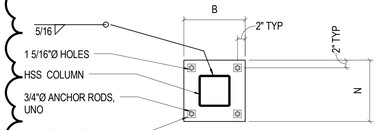
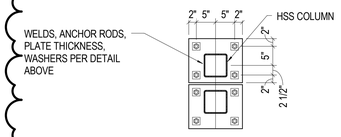
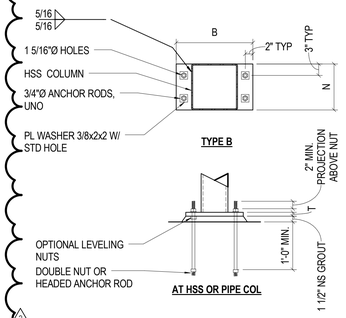
BASE PLATE SCHEDULE					
COL SIZE	PLATE THICKNESS T (IN)	PLATE WIDTH B (IN)	PLATE LENGTH N (IN)	TYPE	COMMENTS
HSS6x6	1"	14"	14"	TYPE A	TYP. U.N.O.
HSS8x8	1 1/2"	16"	8"	TYPE B	TYP. U.N.O.
HSS12x12	1 1/4"	20"	12"	TYPE B	TYP. U.N.O.



TYPE A



TYPE A
DOUBLE COLUMN

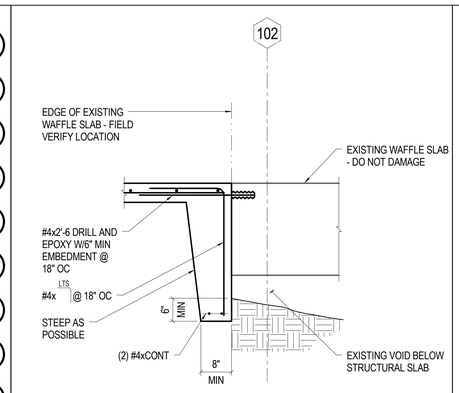


TYPE B

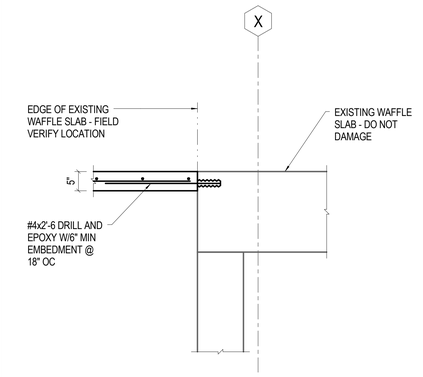
AT HSS OR PIPE COL

NOTES:
1. SEE PLAN FOR COLUMN SIZES
2. PLATE SIZE MAY BE INCREASED TO PROVIDE BOLT CLEARANCE

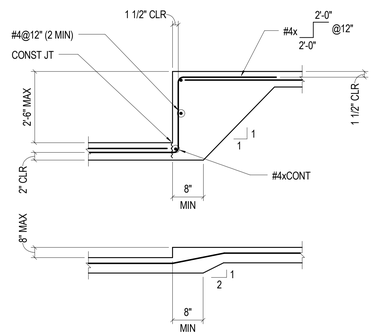
18 NO SCALE TYP COL BASE PLATE - GRAVITY



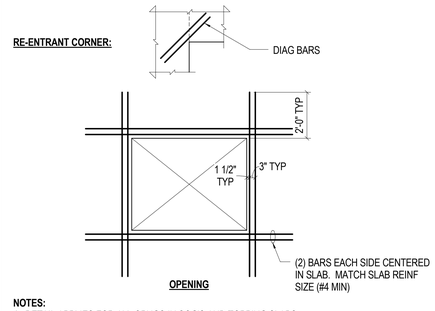
13 3/4" = 1'-0" SLAB ON GRADE AT EDGE OF EXISTING



9 3/4" = 1'-0" SLAB ON GRADE AT EXISTING



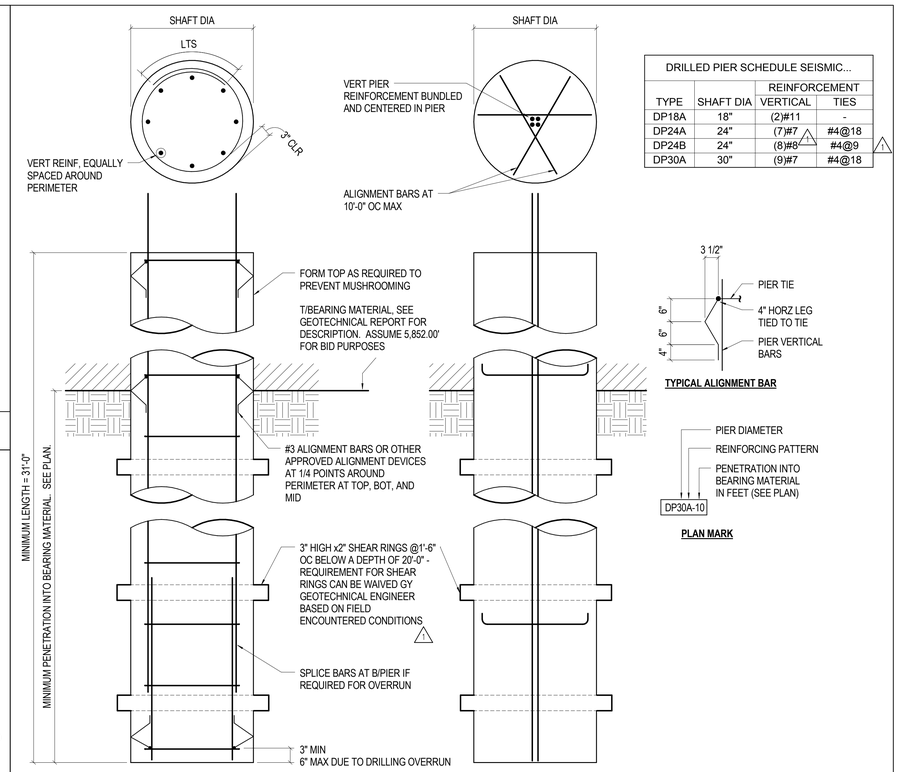
14 NO SCALE TYP SOG STEP



OPENING

NOTES:
1. DETAIL APPLIES FOR ALL OPNGS IN SOG'S AND TOPPING SLABS
2. REINF NOT REQUIRED AT OPNGS SMALLER THAN 10"x10"
3. SEE OTHER DTLS FOR REINF AT OPNGS IN CONC WALLS, CONC STR SLABS, AND METAL DECK SLABS

10 NO SCALE TYP TRIM REINF

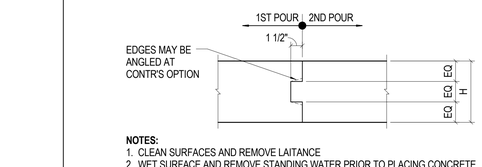


DRILLED PIER SCHEDULE SEISMIC...			
		REINFORCEMENT	
TYPE	SHAFT DIA	VERTICAL	TIES
DP18A	18"	(2)#11	-
DP24A	24"	(7)#7	#4@18
DP24B	24"	(8)#8	#4@9
DP30A	30"	(9)#7	#4@18

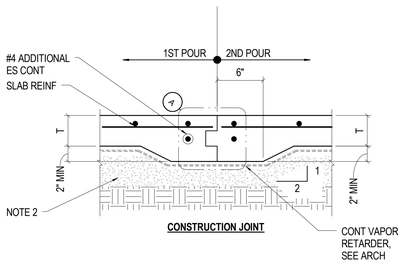
TYPICAL ALIGNMENT BAR

PLAN MARK
PIER DIAMETER
REINFORCING PATTERN
PENETRATION INTO BEARING MATERIAL IN FEET (SEE PLAN)

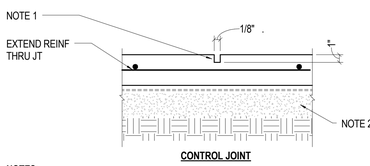
6 NO SCALE TYP DRILLED PIER SCHEDULE



NOTES:
1. CLEAN SURFACES AND REMOVE LAITANCE
2. WET SURFACE AND REMOVE STANDING WATER PRIOR TO PLACING CONCRETE



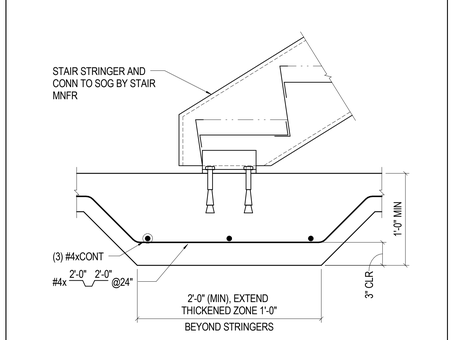
CONSTRUCTION JOINT



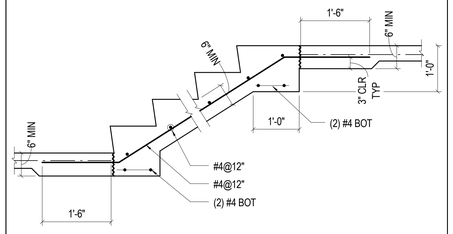
CONTROL JOINT

NOTES:
1. PROVIDE TOOLED JT OR SAW CUT AS SOON AS THE CONC HAS HARDENED SUFFICIENTLY TO PERMIT CUTTING WITHOUT CHIPPING, SPALLING, OR TEARING (BUT NOT MORE THAN 12 HOURS AFTER CASTING)
2. 6" MIN FREE DRAINING GRAVEL PER EARTHWORK SPEC

20 NO SCALE TYP SOG JOINTS

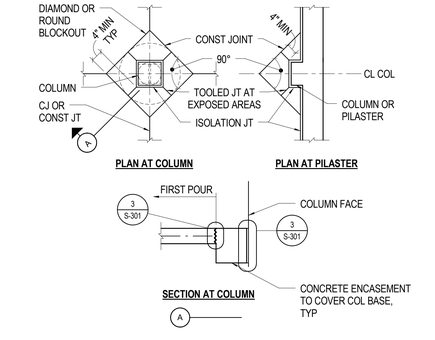


15 NO SCALE TYP SOG BELOW METAL STAIR

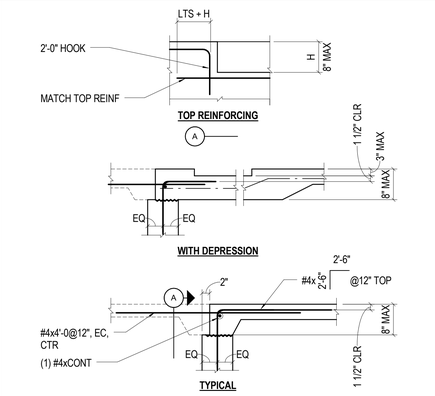


NOTES:
1. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION
2. REBAR IN STAIRS EXPOSED TO WEATHER SHALL BE EPOXY COATED
3. SPLICE #4 BARS 2'-4" AS NEEDED

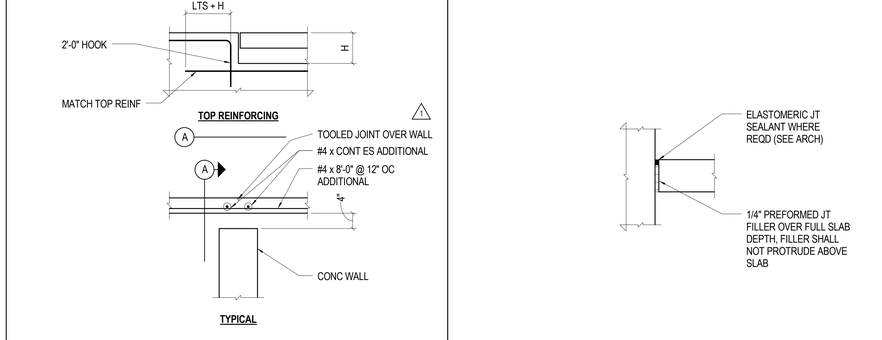
16 NO SCALE TYP SOG STAIR



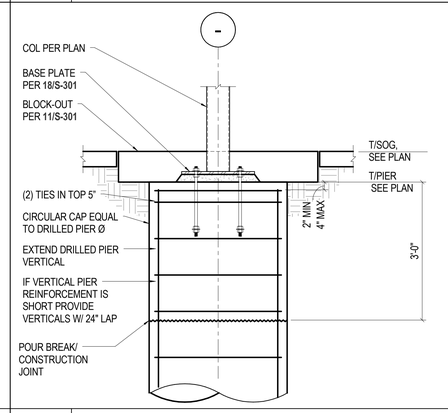
11 NO SCALE TYP SOG BLOCKOUT AT COLUMN/PILASTER



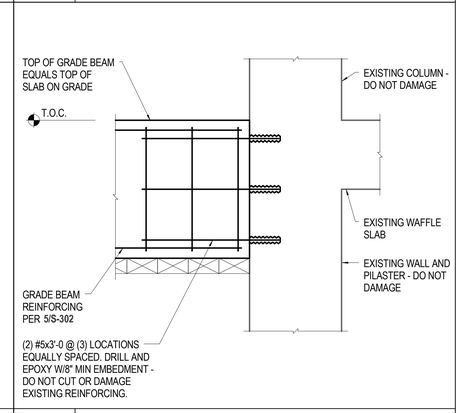
12 NO SCALE TYP SOG EXT THRESHOLD



7 NO SCALE TYP SOG INT THRESHOLD



8 NO SCALE PIER CAP AT GRAVITY COLUMN



4 3/4" = 1'-0" GRADE BEAM AT EXISTING

3 1 1/2" = 1'-0" TYP SOG ISOLATION JOINT

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Consultant

Issue/Revisions	Date	No.
Addendum #2	12-4-2015	1
Addendum #3	12-9-2015	2

Project Information

RRCC REC CENTER
RED ROCKS COMMUNITY COLLEGE
13300 W. 6th Avenue
Lakewood, Colorado 80228

Sheet Information

Sheet Title:
FOUNDATION DETAILS

100% CONSTRUCTION DOCUMENTS
Nov 9, 2015

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S-301

MM Project: 15.0256.S.01

DESIGNERS: LP, GS
DATE PRINTED: 12/9/2015 9:29:21 AM
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EOR: GS
PROJECT MANAGER: LP

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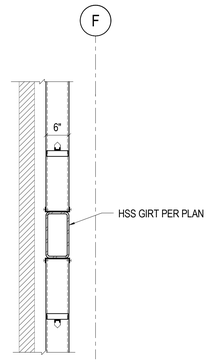
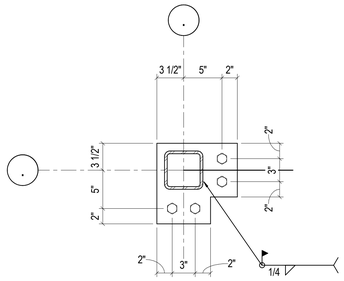
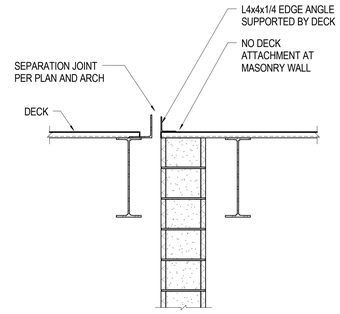


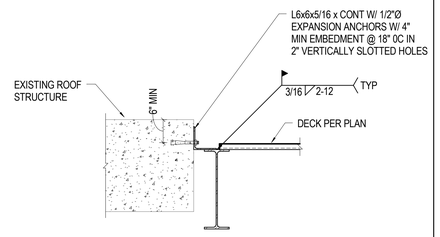
17 3/4" = 1'-0" WIND GIRT AT STAIR



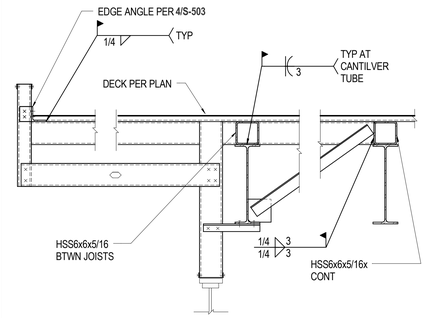
13 1 1/2" = 1'-0" BASE PL AT ELEVATOR



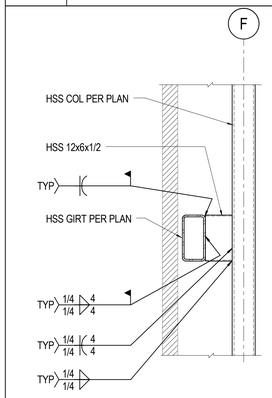
9 3/4" = 1'-0" ROOF AT SEPARATION JOINT



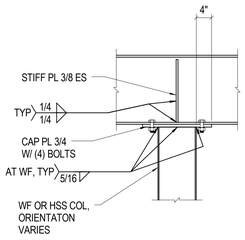
5 3/4" = 1'-0" ROOF AT EXISTING BUILDING



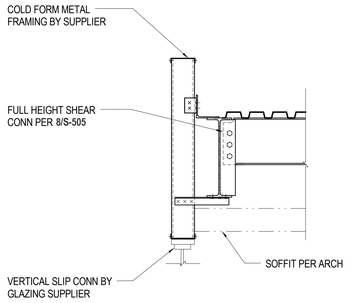
1 3/4" = 1'-0" ROOF OVERHANG - 1



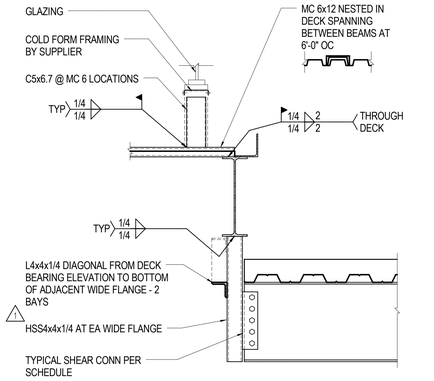
18 3/4" = 1'-0" WIND GIRT AT STAIR AT COLUMN



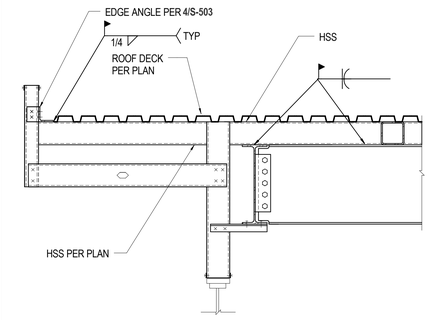
14 3/4" = 1'-0" TYP BM OVER COLUMN



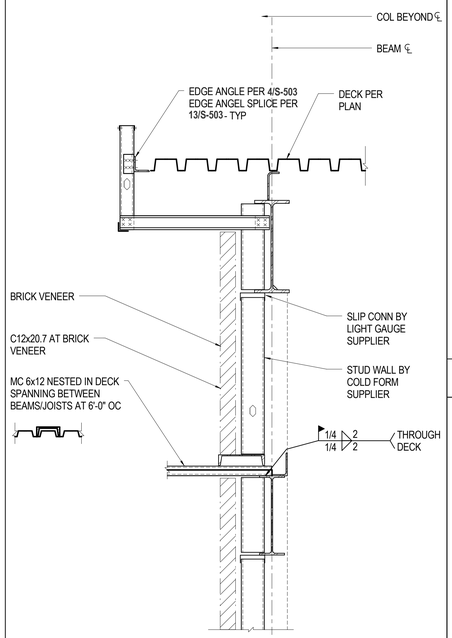
10 3/4" = 1'-0" LOW ROOF AT GLAZING



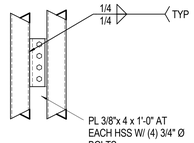
6 3/4" = 1'-0" ROOF / FLOOR TRANSITION



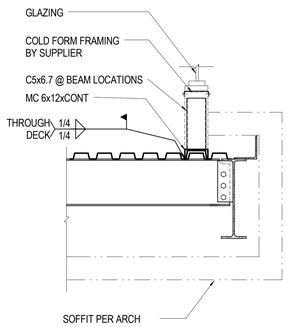
2 3/4" = 1'-0" ROOF OVERHANG - 2



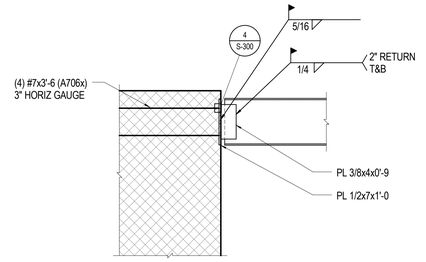
20 3/4" = 1'-0" BRICK AT HIGH ROOF / GYM ROOF



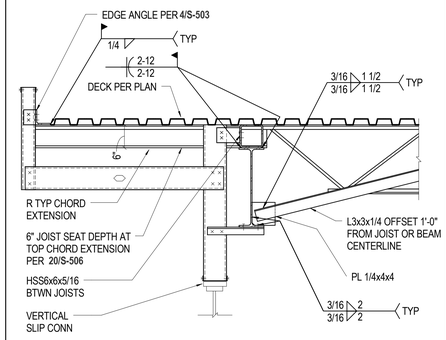
15 3/4" = 1'-0" DRAG CONN AT JOINT



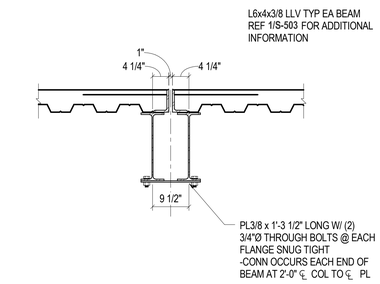
11 3/4" = 1'-0" INTERIOR EDGE OF LOW ROOF



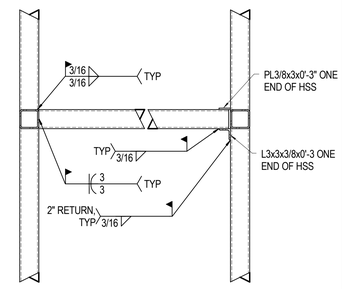
7 3/4" = 1'-0" EMBED PL AT END OF MAS WALL



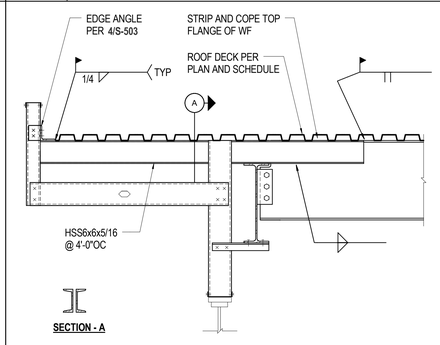
3 3/4" = 1'-0" ROOF OVERHANG - 3



12 3/4" = 1'-0" FLOOR JOINT



8 3/4" = 1'-0" ELEVATOR RAIL BRACE



4 3/4" = 1'-0" ROOF OVERHANG - 4

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Addendum #2	12-4-2015	1
Addendum #3	12-9-2015	2

Project Information

RRCC REC CENTER
RED ROCKS COMMUNITY COLLEGE
13300 W. 6th Avenue
Lakewood, Colorado 80228

Sheet Information

Sheet Title:
STEEL DETAILS

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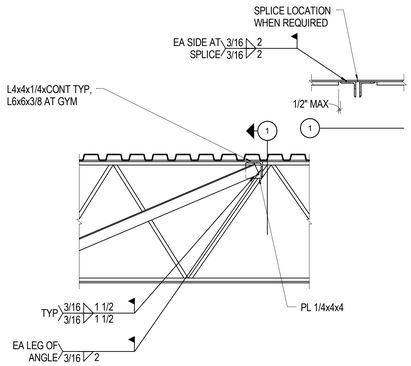
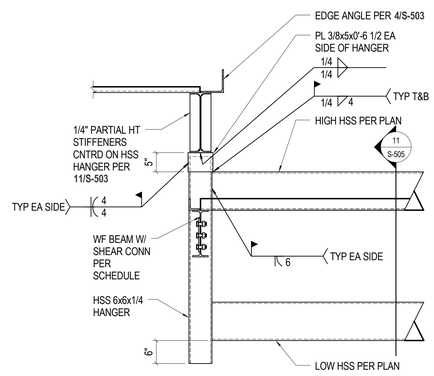
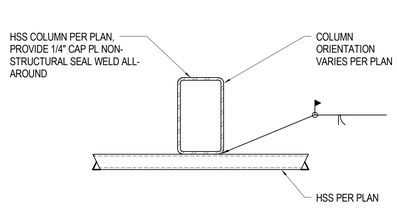


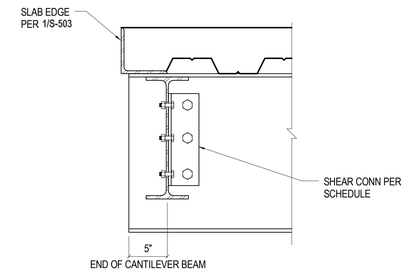
17 3/4" = 1'-0" KICKER TERMINATION



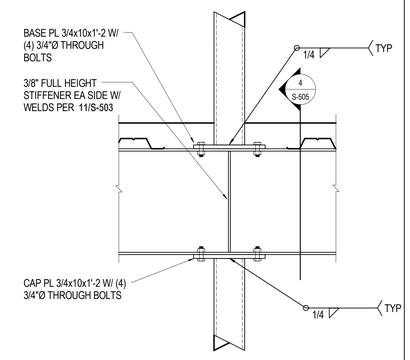
13 3/4" = 1'-0" HANGER AT CANOPY



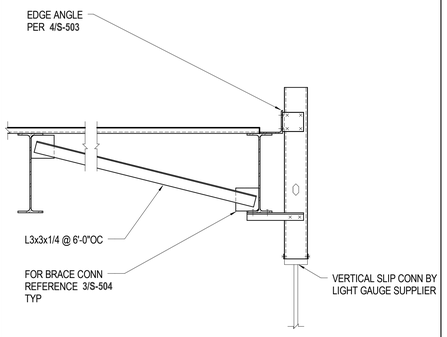
9 1 1/2" = 1'-0" HSS SUPPORT AT COLUMN



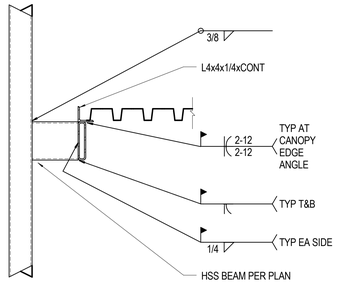
5 1 1/2" = 1'-0" BEAM CONN AT END OF CANTILEVER



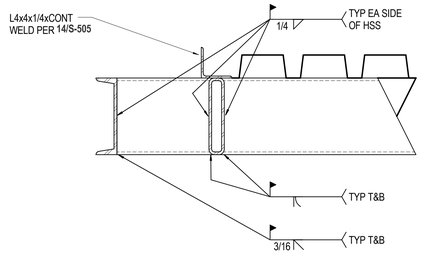
1 1" = 1'-0" HSS COL CONN TO WF



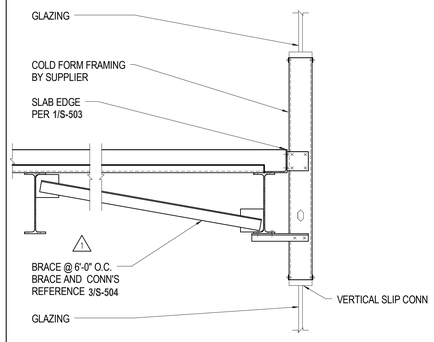
18 3/4" = 1'-0" WALL BRACE AT CONT WINDOW



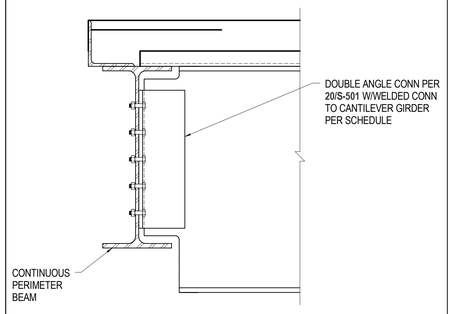
14 3/4" = 1'-0" CANTILEVER CANOPY SUPPORT



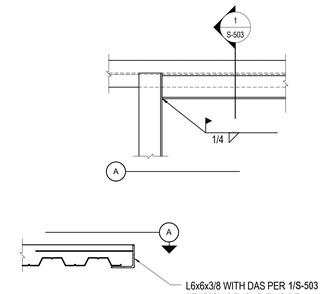
10 1 1/2" = 1'-0" TYP HSS CANTILEVER EDGE



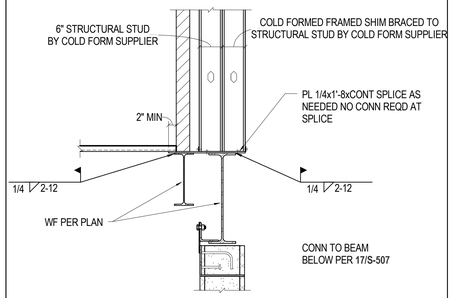
6 3/4" = 1'-0" WALL AT RIBBON WINDOW



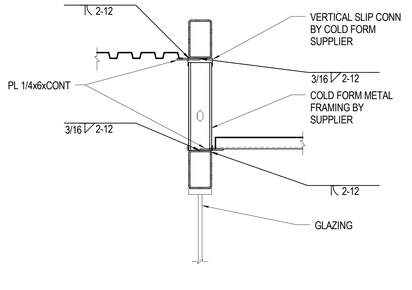
2 1 1/2" = 1'-0" WF CANTILEVER CONN TO WF GIRDER



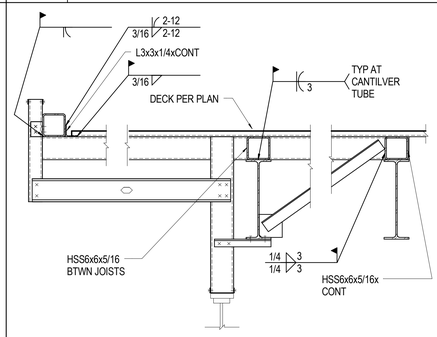
19 3/4" = 1'-0" OPENING AT MECHANICAL



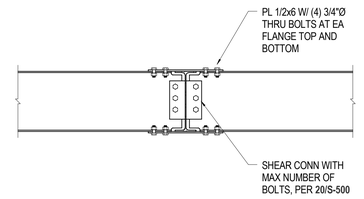
15 3/4" = 1'-0" WALL AT LOW ROOF GRID 4



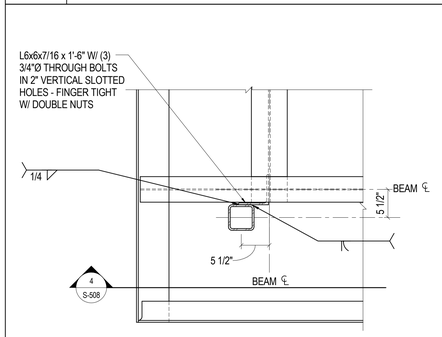
11 3/4" = 1'-0" SECTION AT ENTRY



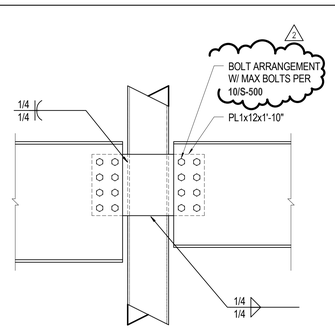
7 3/4" = 1'-0" ROOF OVERHANG - 5



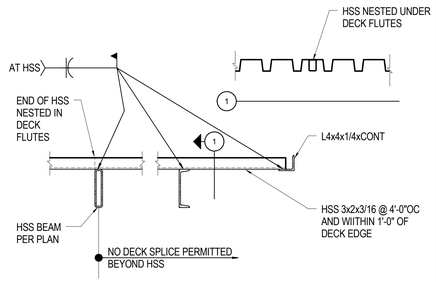
3 3/4" = 1'-0" MOMENT CONNECTION AT METAL STAIR SUPPORT



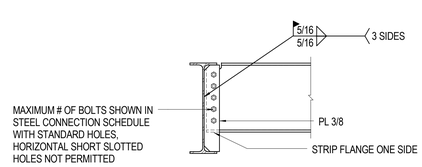
20 1" = 1'-0" SLIP CONN AT CORNER COL



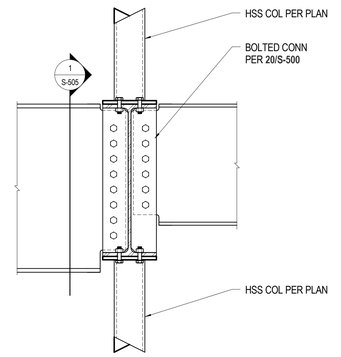
16 1" = 1'-0" WF BM CONN TO HSS COL



12 3/4" = 1'-0" SECTION AT CANOPY FRONT EDGE



8 NO SCALE TYPICAL FULL HEIGHT SHEAR CONNECTION



4 1" = 1'-0" WF TO FULL AT STIFFENER PL

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Issue/Revisions	Date	No.
Addendum #2	12-4-2015	1
Addendum #3	12-9-2015	2

Project Information

RRCC REC CENTER
RED ROCKS COMMUNITY COLLEGE
13300 W. 6th Avenue
Lakewood, Colorado 80228

Sheet Information

Sheet Title:
STEEL DETAILS

100% CONSTRUCTION DOCUMENTS
Nov 9, 2015

Sheet Number:
S-505

MM Project: 15.0256.S.01

DESIGNERS: LP, GS
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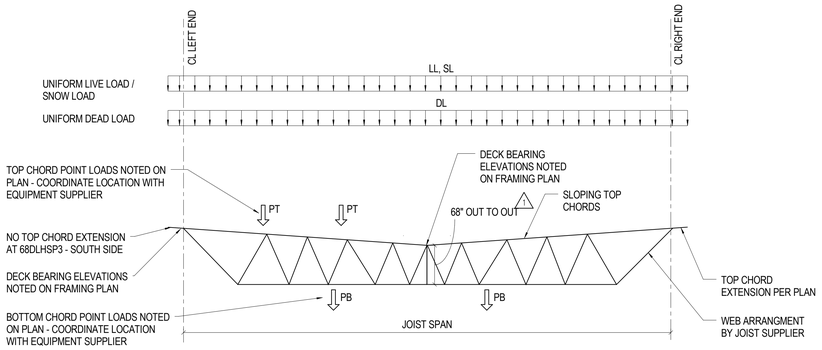
MM JOB #: 15.0256.S.01
PRINCIPAL: TL
EOR: GS
PROJECT MANAGER: LP

12/9/2015 9:29:26 AM

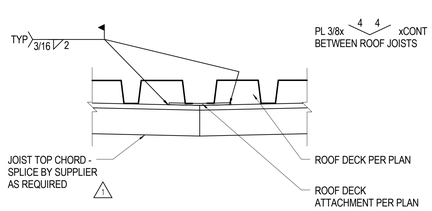


INVERTED TOP CHORD DOUBLE PITCH

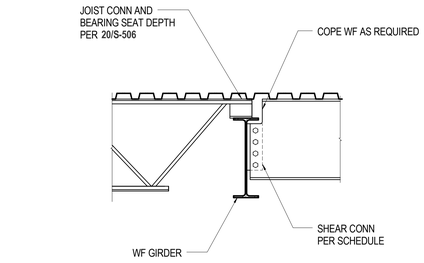
NOTES:
1. APPROXIMATE LOCATION OF EQUIPMENT NOTED ON PLAN. CONTRACTOR SHALL VERIFY WEIGHT AND LOCATION WITH EQUIPMENT FURNISHED. INCLUDE THIS INFORMATION IN SHOP DRAWING SUBMITTAL
2. DISTRIBUTED LOADS ARE IN LB/FT² AND SHALL BE MULTIPLIED BY JOIST SPACING FOR JOIST DESIGN
3. JOIST MANUFACTURER SHALL DESIGN TO LOAD COMBINATION PER APPLICABLE BUILDING CODE
4. DISTRIBUTED LOADS ARE ON JOIST TOP CHORD, UNO.
5. ALL LOADS SPECIFIED ARE SERVICE LEVEL.
6. DESIGN INVERTED TOP CHORD DOUBLE PITCH JOISTS FOR THE EFFECTS OF PONDING PER ASCE 7-10 SECTION 8.4, ANALYSIS SHALL INCLUDE THE SECOND ORDER EFFECTS OF JOIST DEFLECTION

SPECIAL JOIST LOADING PATTERN SCHEDULE						
PLAN MARK	DL (PSF)	LL (PSF)	SL (PSF)	PT	PB	REMARKS
68DLHSP1	25	20	30	RE:PLAN	RE:PLAN	--
68DLHSP2	25	20	30	RE:PLAN	RE:PLAN	--
68DLHSP3	25	20	30	RE:PLAN	RE:PLAN	--
--	--	--	--	--	--	--

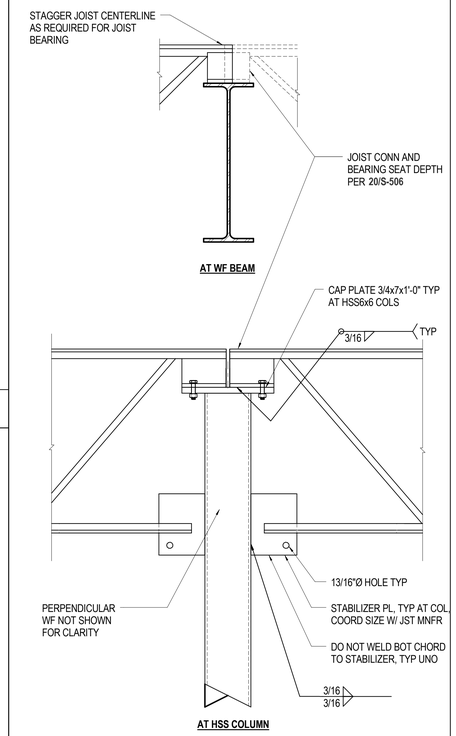
18 1/4" = 1'-0" SPECIAL JOIST LOADS



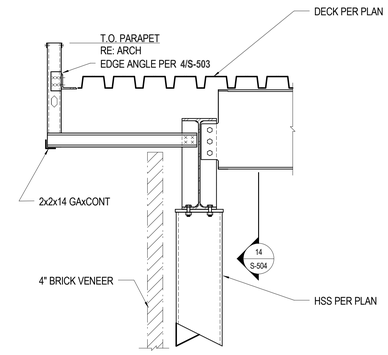
9 1 1/2" = 1'-0" ROOF DECK AT VALLEY



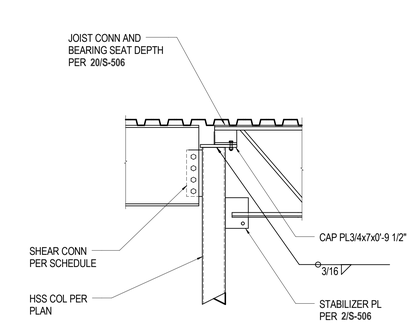
5 3/4" = 1'-0" JOIST BEARING AT COPED BEAM



2 1 1/2" = 1'-0" TYP JOIST BEARING

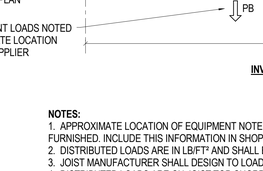


10 3/4" = 1'-0" WF OVER COL AT GYM



6 3/4" = 1'-0" JOIST/BEAM AT COL

JOIST 1-SIDE

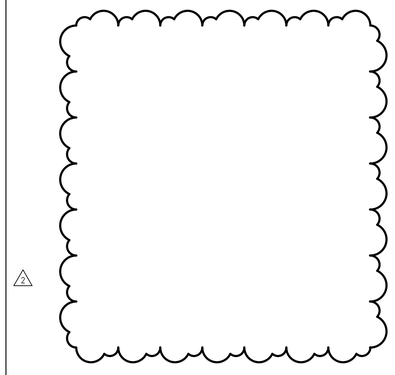


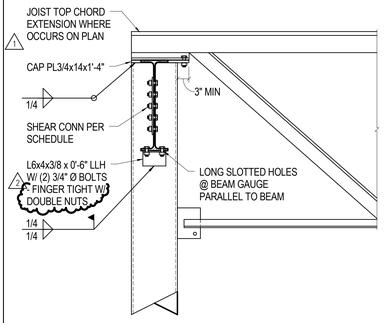
JOIST 2-SIDES

TYP JOIST BEARING AND WELD SCHEDULE					
JOIST SERIES	SEAT DEPTH	MIN BEARING	TYP WELD d	TYP WELD l	COMMENT
LH	5"	4"	3/16	2"	--
LH	6"	4"	3/16	2"	AT TOP CHORD EXTENSION
DLH	7.5"	4"	3/16	2"	--

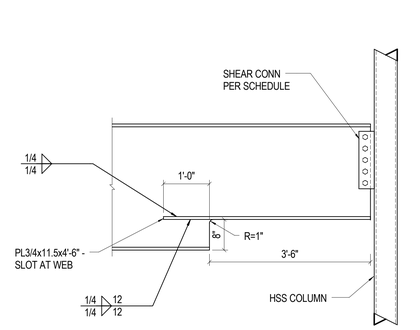
NOTE:
STEEL FABRICATOR TO VERIFY BEARING SEAT DEPTH WITH JOIST SUPPLIER PRIOR TO DETAILING OR FABRICATION. ADJUST SUPPORT ELEVATIONS AS REQUIRED TO MAINTAIN DECK BEARING ELEVATION NOTED ON PLAN.

20 1 1/2" = 1'-0" TYP JOIST BEARING ON STEEL

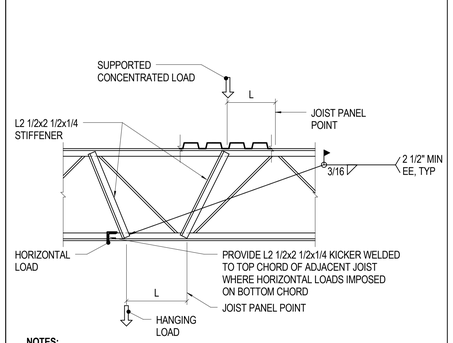




11 3/4" = 1'-0" JOIST CONN TO GIRDER

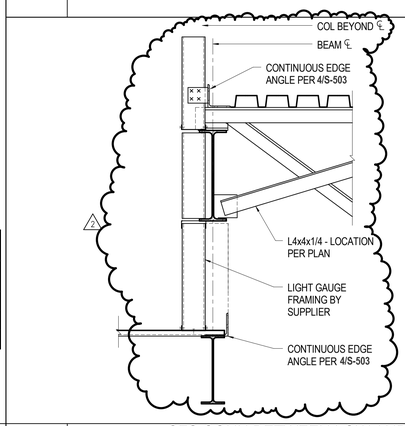


7 3/4" = 1'-0" NOTCHED BEAM

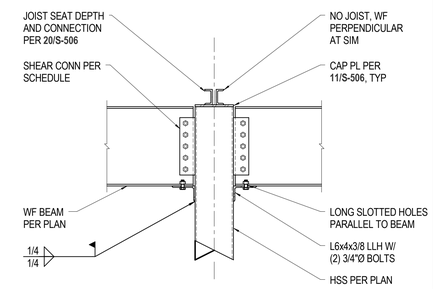


NOTES:
1. STIFFENER REQUIRED FOR ALL CONCENTRATED LOADS WHERE L EXCEEDS 3"

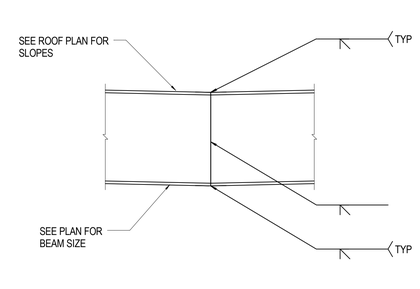
3 3/4" = 1'-0" TYP JOIST CHORD SUPPORT



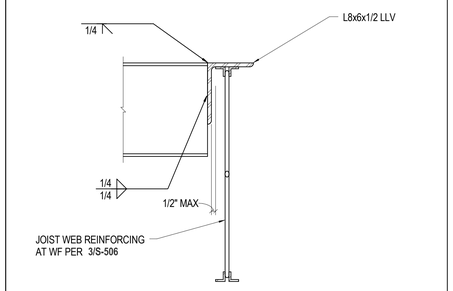
16 3/4" = 1'-0" CFS CONN BETWEEN LOW AND HIGH ROOF



12 3/4" = 1'-0" WF BEAM AT GYM



8 1 1/2" = 1'-0" KINKED BEAM



4 1 1/2" = 1'-0" WF TO JOIST CONN

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Consultant

Issue/Revisions	Date	No.
Addendum #2	12-4-2015	1
Addendum #3	12-9-2015	2

Project Information

RRCC REC CENTER
RED ROCKS COMMUNITY COLLEGE
13300 W. 6th Avenue
Lakewood, Colorado 80228

Sheet Information

Sheet Title:
STEEL DETAILS

100% CONSTRUCTION DOCUMENTS
Nov 9, 2015
Sheet Number:

S-506

MM Project: 15.0256.S.01

DESIGNERS: LP, GS
DATE PRINTED: 12/9/2015 9:29:29 AM
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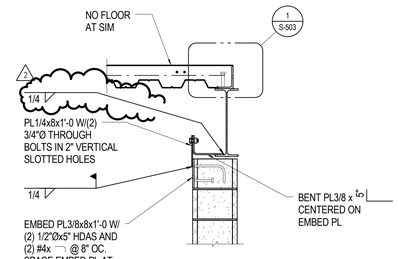
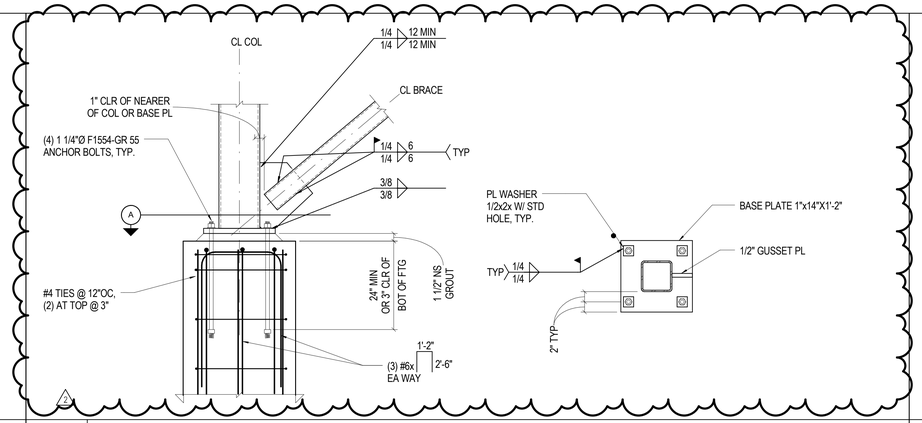
MM JOB #: 15.0256.S.01
PRINCIPAL: TL
EOR: GS
PROJECT MANAGER: LP

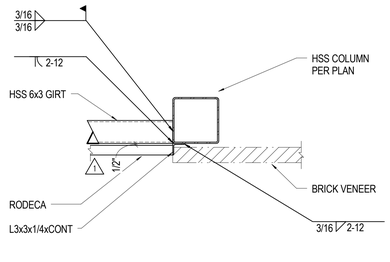
12/9/2015 9:29:29 AM



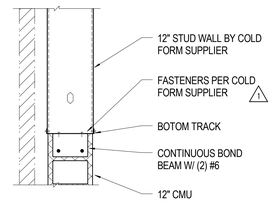
17 3/4" = 1'-0" WEIGHT ROOM FLOOR FRAMING



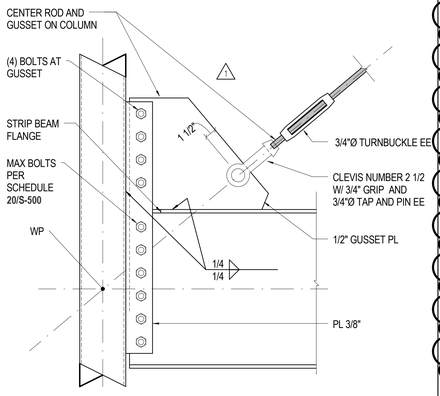
13 1" = 1'-0" BRACED FRAME BASE



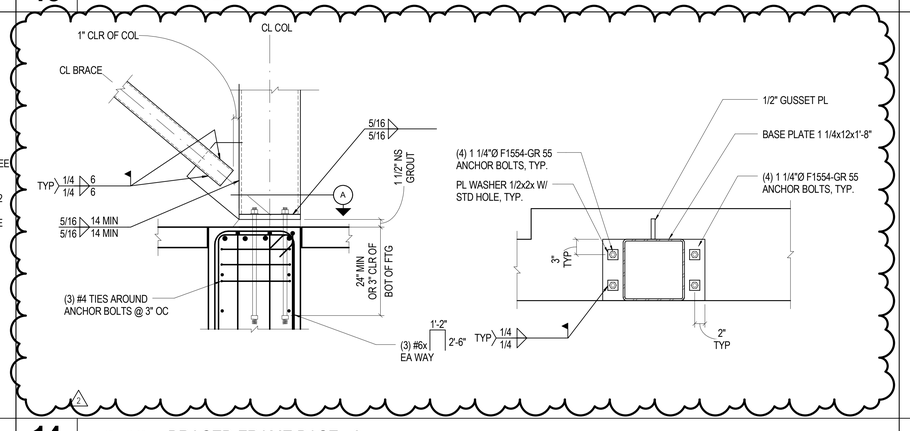
5 3/4" = 1'-0" RODECA GIRTS AT COLUMN



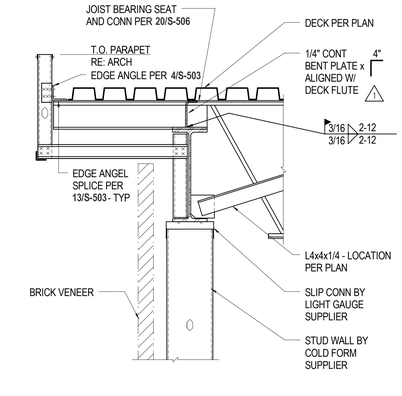
1 3/4" = 1'-0" CMU TO COLD FORMED FRAMING



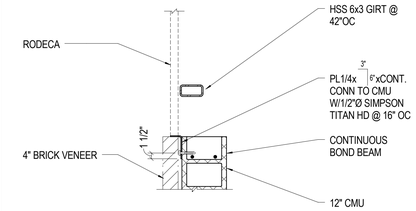
18 1 1/2" = 1'-0" TYP ROD-TO-GUSSET CONN



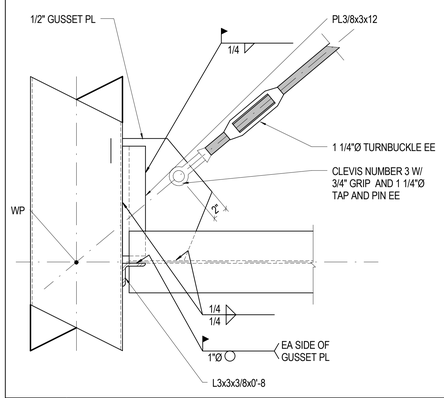
14 1" = 1'-0" BRACED FRAME BASE - 2



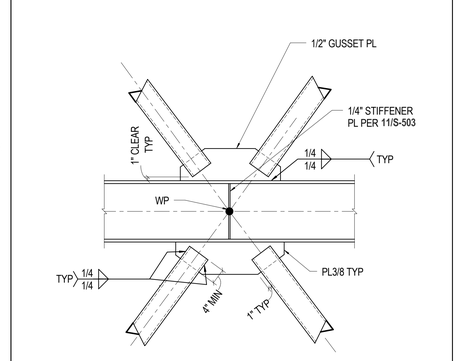
6 3/4" = 1'-0" GYM WALL AT PARAPET



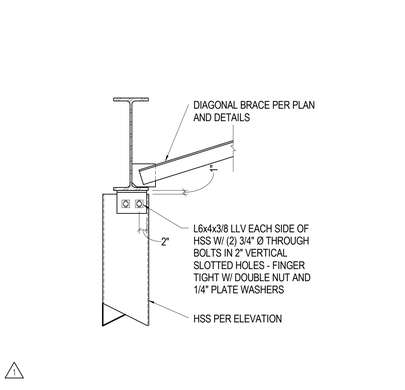
2 3/4" = 1'-0" RODECA AT CMU



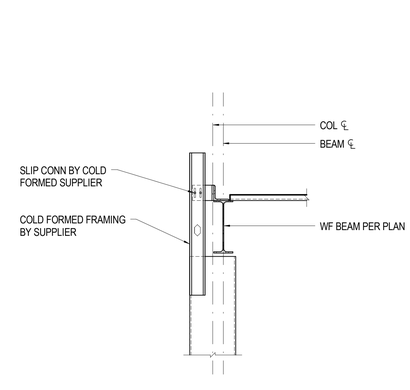
19 1 1/2" = 1'-0" LARGE ROD-TO-GUSSET CONN



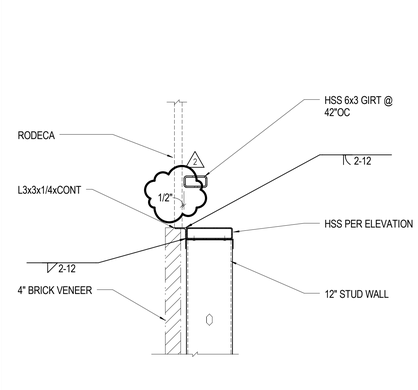
15 3/4" = 1'-0" BRACED FRAME CONNECTION - HSS/HSS



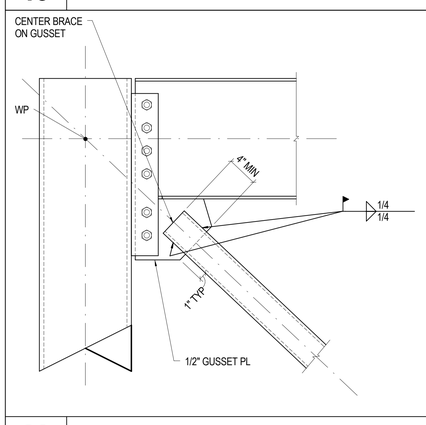
9 3/4" = 1'-0" SLIP CONNECTION AT WIND COLUMN



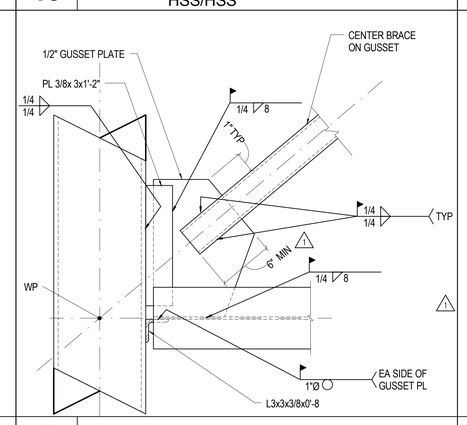
7 3/4" = 1'-0" GYM ROOF SECTION



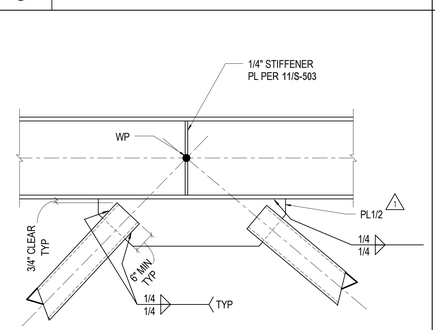
3 3/4" = 1'-0" RODECA AT COLD FORMED FRAMING



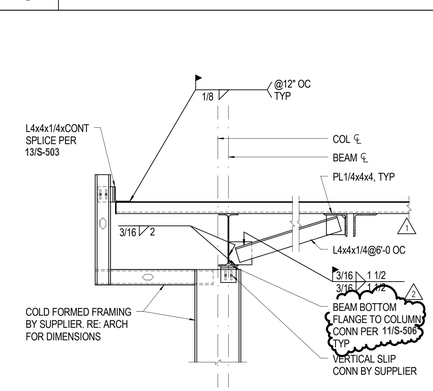
20 1 1/2" = 1'-0" TYP BRACE-TO-GUSSET CONN - TOP



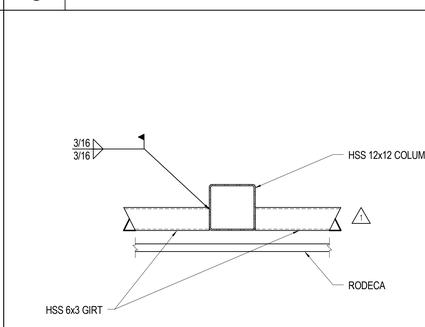
16 1 1/2" = 1'-0" TYP BRACE-TO-GUSSET CONN



12 1" = 1'-0" BRACED FRAME CONNECTION - HSS/HSS2



8 3/4" = 1'-0" GYM ROOF SECTION 2



4 3/4" = 1'-0" RODECA GIRTS AT STEEL COLUMNS

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Sheet Information

Sheet Title:
STEEL DETAILS

100% CONSTRUCTION DOCUMENTS
Nov 9, 2015

Sheet Number:
S-507

MM Project: 15.0256.S.01

MM JOB #: 15.0256.S.01
PRINCIPAL: TL
EDR: GS
PROJECT MANAGER: LP

DESIGNERS: LP GS
DATE PRINTED: 12/9/2015 9:29:32 AM
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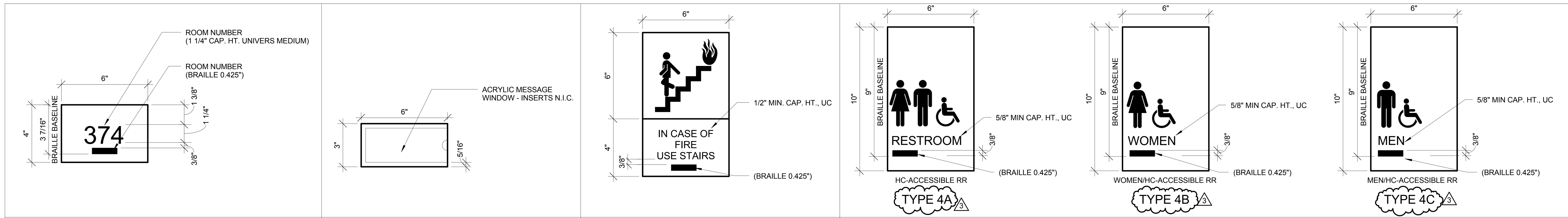
12/9/2015 9:29:32 AM



ABBREVIATIONS
CAP. HT. = CAPITAL HEIGHT
U&LC = UPPER & LOWER CASE
UC = UPPER CASE

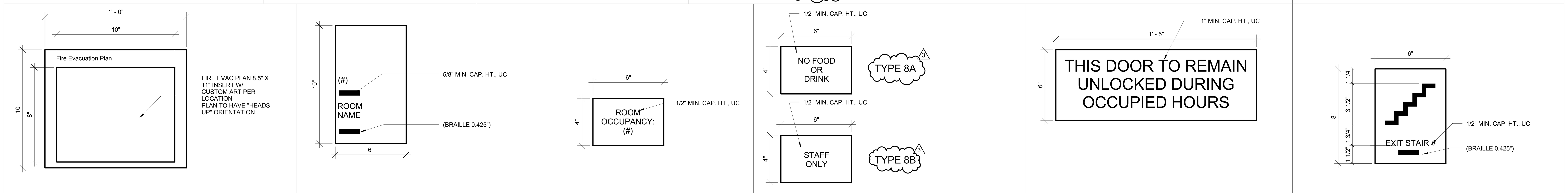
GENERAL NOTES
ALL PANELS TO HAVE SQUARE CORNERS
FONT TO BE SELECTED IN SUBMITTAL
ALL SIGNS TO BE 1/4" THICK PHOTOPOLYMER
PAINTED FIRST SURFACE
TACTILE COPY, SYMBOLS AND ANY OTHER
GRAPHICS (EXCEPT FOR BRAILLE) TIPPED WHITE
BRAILLE COLOR TO BE SELECTED IN SUBMITTAL

TYPE 1
ROOM NUMBER

TYPE 2
ROOM NAME, OCCUPANT NAME
INSERT HOLDER W/ CLEAR ACRYLIC WINDOW
LOCATED (1) PER OFFICE

TYPE 3
IN CASE OF FIRE -
POST AT EA. ELEV. ENTRANCE
LOCATED (1) PER ELEV ENTRANCE

TEXT VARIES BY LOCATION
ROOMS TO INCLUDE: REFER TO SIGN SCHEDULE



TYPE 5
EVACUATION PLAN -
PROVIDE (4) SIGNS
LOCATION TO BE DETERMINED

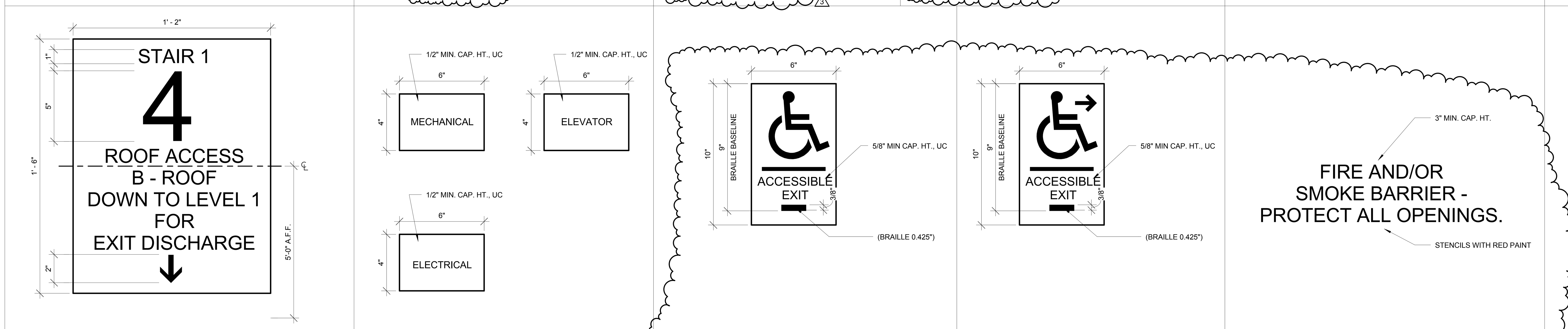
TYPE 6
ROOM IDENTIFICATION
TEXT TO VARY
PROVIDE AT: REFER TO SIGN SCHEDULE

TYPE 7
ROOM OCCUPANCY
TO BE PROVIDED AT ALL GROUP A OCCUPANCIES WITH OL>50
PROVIDE AT: REFER TO SIGN SCHEDULE

TYPE 8
MISCELLANEOUS MESSAGE
TEXT TO VARY BY LOCATION
PROVIDE AT: REFER TO SIGN SCHEDULE

TYPE 9
DOOR TO REMAIN OPEN
PROVIDE AT MAIN ENTRANCE & EAST ENTRY

TYPE 10
STAIR EXIT
PROVIDE (1) AT ALL STAIR ENTRANCES



TYPE 11
STAIR LANDING SIGNS
PROVIDE AT ALL INTERMEDIATE STAIR LANDINGS IN ALL EXIT STAIR ENCLOSURES.
MESSAGE TO VARY BY LOCATION

TYPE 12
BUILDING SYSTEM ROOMS

TYPE 13
ACCESSIBLE EXIT SIGNAGE
PROVIDE 7 SIGNS TO BE PROVIDED AT ACCESSIBLE EXITS

TYPE 14
DIRECTIONAL ACCESSIBLE EXIT SIGNAGE
PROVIDE 1 SIGN AT DOOR 180A AT NW CORNER OF GYM

TYPE 15
PROVIDE AT ALL FIRE WALLS, FIRE BARRIERS, FIRE PARTITIONS, SMOKE BARRIERS AND SMOKE PARTITIONS ABOVE CEILING.
LOCATE WITHIN 15 FEET OF ENDS OF WALL, AND AT 30 FEET MAX SPACING.

SIGN SCHEDULE

LEVEL #	Level	Number	Name	SIGN TYPE	SIGN MESSAGE
0	ENTRY	100	ENTRY LOBBY	NONE	
0	ENTRY	101	VESTIBULE	9, 13	
0	ENTRY	102	GROUP RM	6	GROUP ROOM
0	ENTRY	103	TRIP PLANNING	6	TRIP PLANNING
0	ENTRY	104	FREE ZONE LOUNGE	6, 13	FREE ZONE LOUNGE
0	ENTRY	105	ACCESS CONTROL	NONE	
0	ENTRY	106	WORK ROOM	1, 2, 8	WORK ROOM
0	ENTRY	107	OFFICE MGR	1, 2	
0	ENTRY	108	PROGRAM STAFF	1, 2	
0	ENTRY	109	DIRECTOR	1, 2	
0	ENTRY	110	SMALL MTG ROOM	6	SMALL MEETING ROOM
0	ENTRY	111	TOILET	4A	RESTROOM
0	ENTRY	112	TOILET	4A	RESTROOM
0	ENTRY	113	JAN	1, 12	CUSTODIAL
0	ENTRY	114	STORAGE	1, 12	STORAGE
0	ENTRY	115	LARGE MEETING ROOM	6	LARGE MEETING ROOM
0	ENTRY	120	EAST HALL	1, 5, 12	EAST HALL
0	ENTRY	121	EAST ENTRY	9, 13	
0	ENTRY	122	EAST ENTRY LOUNGE	NONE	

SIGN SCHEDULE

LEVEL #	Level	Number	Name	SIGN TYPE	SIGN MESSAGE
1	LEVEL 1		ELEV	3	
1	LEVEL 1	130	RECREATION LOUNGE	6	RECREATION LOUNGE
1	LEVEL 1	131	CLIMBING/BOULDERING	6, 8A	CLIMBING & BOULDERING
1	LEVEL 1	132	VENDING	1, 3, 12	VENDING
1	LEVEL 1	133	IT	1, 12	IT
1	LEVEL 1	134	ELEC	1, 12	ELEC
1	LEVEL 1	135	WOMENS LR	4B	WOMEN'S LOCKER ROOM
1	LEVEL 1	136	JAN	1, 12	CUSTODIAL
1	LEVEL 1	137	LOCKERS	6	DAY LOCKERS
1	LEVEL 1	138	FAMILY LR	4A	FAMILY LOCKER ROOM
1	LEVEL 1	139	FAMILY LR	4A	FAMILY LOCKER ROOM
1	LEVEL 1	140	MENS LR	4C	MEN'S LOCKER ROOM
1	LEVEL 1	141	JAN	1, 12	CUSTODIAL
1	LEVEL 1	150	HALLWAY	5	
1	LEVEL 1	151	SMALL FITNESS STUDIO	6, 8B	SMALL FITNESS STUDIO
1	LEVEL 1	152	STUDIO STOR	1, 12	FITNESS STORAGE
1	LEVEL 1	153	MEDIUM GROUP FITNESS	6	MEDIUM GROUP FITNESS
1	LEVEL 1	160	TRASH/STORAGE	1, 12, 8B	MAINTENANCE STORAGE
1	LEVEL 1	161	RISER RM	1, 12	RISER ROOM
1	LEVEL 1	162	MECHANICAL	1, 12	MECHANICAL
1	LEVEL 1	163	LAUNDRY	1, 12	LAUNDRY
1	LEVEL 1	164	GYM STORAGE	1, 12	GYMNASIUM STORAGE
1	LEVEL 1	165	BREAK	1, 12, 8B	BREAK ROOM
1	LEVEL 1	166	CLIMBING STOR	1, 12	CLIMBING STORAGE
1	LEVEL 1	180	GYMNASIUM	6, 7, 8A, 13, 14	GYMNASIUM
1	LEVEL 1	S-2	STAIR 2	10, 11, 13	

SIGN SCHEDULE

LEVEL #	Level	Number	Name	SIGN TYPE	SIGN MESSAGE
2	LEVEL 2		ELEV	3, 5	
2	LEVEL 2	200	CORRIDOR	NONE	
2	LEVEL 2	201	CARDIO	NONE	
2	LEVEL 2	202	CARDIO / STRETCH	6	CARDIO AREA
2	LEVEL 2	203	IT	1, 12	IT
2	LEVEL 2	204	ELEC	1, 12	IT
2	LEVEL 2	205	CARDIO COORD	1, 2	
2	LEVEL 2	206	JAN	1, 12	CUSTODIAL
2	LEVEL 2	207	MENS	4C	MEN
2	LEVEL 2	208	WOMEN	4B	WOMEN
2	LEVEL 2	209	EQUIP STORAGE	1, 12	EQUIPMENT STORAGE
2	LEVEL 2	210	CORRIDOR	5	
2	LEVEL 2	211	FUNCTIONAL TRAINING	6	FUNCTIONAL TRAINING
2	LEVEL 2	212	SELECTORIZED CIRCUIT	6	SELECTORIZED CIRCUIT
2	LEVEL 2	213	STRETCHING	NONE	
2	LEVEL 2	214	OUTDOOR FITNESS DECK	NONE	
2	LEVEL 2	215	CARDIO EQUIPMENT	6	CARDIO EQUIPMENT
2	LEVEL 2	220	FREE WEIGHTS	6	FREE WEIGHTS
2	LEVEL 2	S-2	STAIR 2	10, 11	

SIGN SCHEDULE

LEVEL #	Level	Number	Name	SIGN TYPE	SIGN MESSAGE
E	LEVEL 1	1571	MULTIPURPOSE CONF ROOM B	6	MULTIPURPOSE CONF ROOM B
E	LEVEL 1	1572	MULTIPURPOSE CONF ROOM A	6	MULTIPURPOSE CONF ROOM A
E	LEVEL 1	1573	CATERING	1, 12	CATERING
E	LEVEL 1	1574	FURN STORAGE	1, 12	FURNITURE STORAGE
E	LEVEL 1	1576	MEETING ROOM	6	MEETING ROOM
E	LEVEL 1	1582	STORAGE	1, 12	STORAGE

NOTE:
1. SIGN MESSAGE TO BE CONFIRMED WITH OWNER.

DAVIS PARTNERSHIP ARCHITECTS
Denver
2301 Blake Street, Suite 100
Denver, CO 80205
303.861.8555

Consultant

Issue/Revisions	Date	No.
ADDENDUM 02	12.04.2015	2
ADDENDUM 03	12.09.2015	3

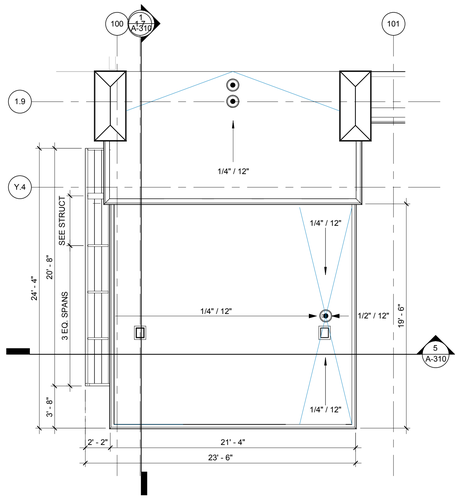
Project Information

RED ROCKS COMMUNITY COLLEGE
STUDENT RECREATION CENTER
13300 W. 6th Avenue
Lakewood, Colorado 80228

Sheet Information
Sheet Title:
INTERIOR SIGNAGE

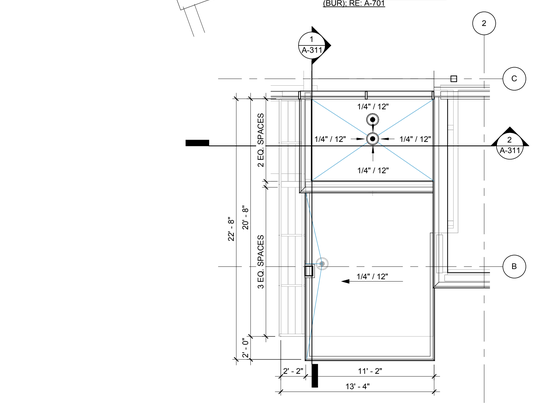
Nov 9, 2015
CONSTRUCTION DOCUMENTS
Sheet Number:
G-101

DPA Project: 15803.00

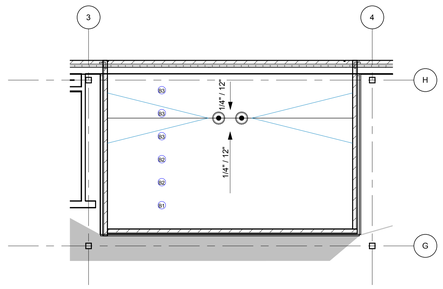


4 EAST ENTRY CANOPY - SLOPE PLAN
3/16" = 1'-0"

1 ROOF PLAN
3/32" = 1'-0"



3 MAIN ENTRY CANOPY - SLOPE PLAN
3/16" = 1'-0"



2 OUTDOOR FITNESS DECK - SLOPE PLAN
3/16" = 1'-0"

SKYLIGHTS:

SK-1: 46-1/4" X 69-1/2" I.D. SELF-FLASHING CLEAR SKYLIGHT WITH INSULATED 12" CURB, RE: SPEC 08 6200

SK-2: 46-1/4" X 69-1/2" I.D. SELF-FLASHING TRANSLUCENT SKYLIGHT WITH INSULATED 12" CURB, RE: SPEC 08 6200

SV-3: 48" X 72" I.D. SELF-FLASHING CLEAR SMOKE VENT WITH INSULATED 12" CURB, RE: SPEC 07 7200

SV-4: 48" X 72" I.D. SELF-FLASHING TRANSLUCENT SMOKE VENT WITH INSULATED 12" CURB, RE: SPEC 07 7200

DAVIS PARTNERSHIP ARCHITECTS
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Consultant

Issue/Revisions	Date	No.
ADDENDUM 02	12.04.2015	2
ADDENDUM 03	12.09.2015	3

Project Information

RED ROCKS COMMUNITY COLLEGE
STUDENT RECREATION CENTER
13300 W. 6th Avenue
Lakewood, Colorado 80228

Sheet Information

Sheet Title:

ROOF PLAN

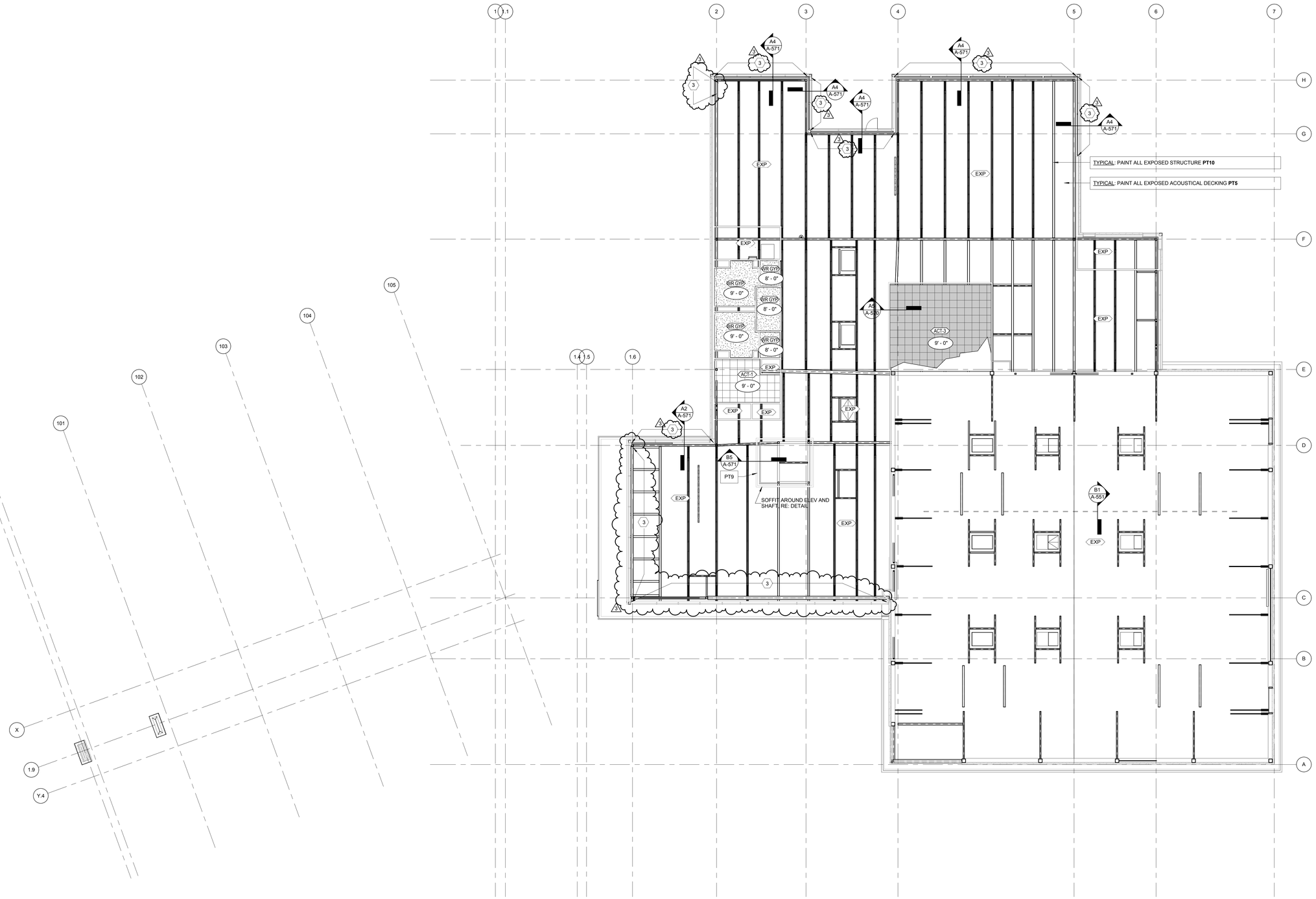
Nov 9, 2015 CONSTRUCTION DOCUMENTS

Sheet Number:

A-103

DPA Project: 15803.00

12/8/2015 3:56:47 PM



1 **REFLECTED CEILING PLAN - LEVEL 2**
3/32" = 1'-0"

CODED NOTES

1. 12 2413 - SINGLE MANUAL ROLLER SHADE RECESSED INTO FASCIA.
2. 12 2413 - DUAL MANUAL ROLLER SHADES RECESSED INTO FASCIA; (1) SHEER & (1) BLACK-OUT.
3. 12 2413 - SINGLE MOTORIZED ROLLER SHADE RECESSED INTO FASCIA.

RCP LEGEND

NOTE: REFER TO FINISH LEGEND FOR ADDITIONAL INFO

EXP	EXPOSED TO STRUCTURE. PAINTED.
GYP	CEILING ASSEMBLY: 09 2900 - 5/8" GYPSUM BOARD ON METAL STUD FRAMING; PAINTED
GYP-WR	CEILING ASSEMBLY: 09 2900 - 5/8" WATER RESISTANT GYPSUM BOARD ON METAL STUD FRAMING; EPOXY PAINTED
ACT-1	CEILING ASSEMBLY: 2'X2' ACOUSTICAL CEILING TILE
ACT-2	CEILING ASSEMBLY: 09 5113 - ACOUSTIC CEILING TILE
ACT-3	CEILING ASSEMBLY: 09 5113 - ACOUSTIC CEILING TILE
AWC-1	CEILING ASSEMBLY: 09 5114 - ACOUSTICAL WOOD CEILING

DAVIS PARTNERSHIP ARCHITECTS
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Consultant

Issue/Revisions | **Date** | **No.**

ADDENDUM 03 | 12.09.2015 | 3

Project Information

RED ROCKS COMMUNITY COLLEGE
STUDENT RECREATION CENTER
13300 W. 6th Avenue
Lakewood, Colorado 80228

Sheet Information

Sheet Title:

REFLECTED CEILING PLAN - LEVEL TWO

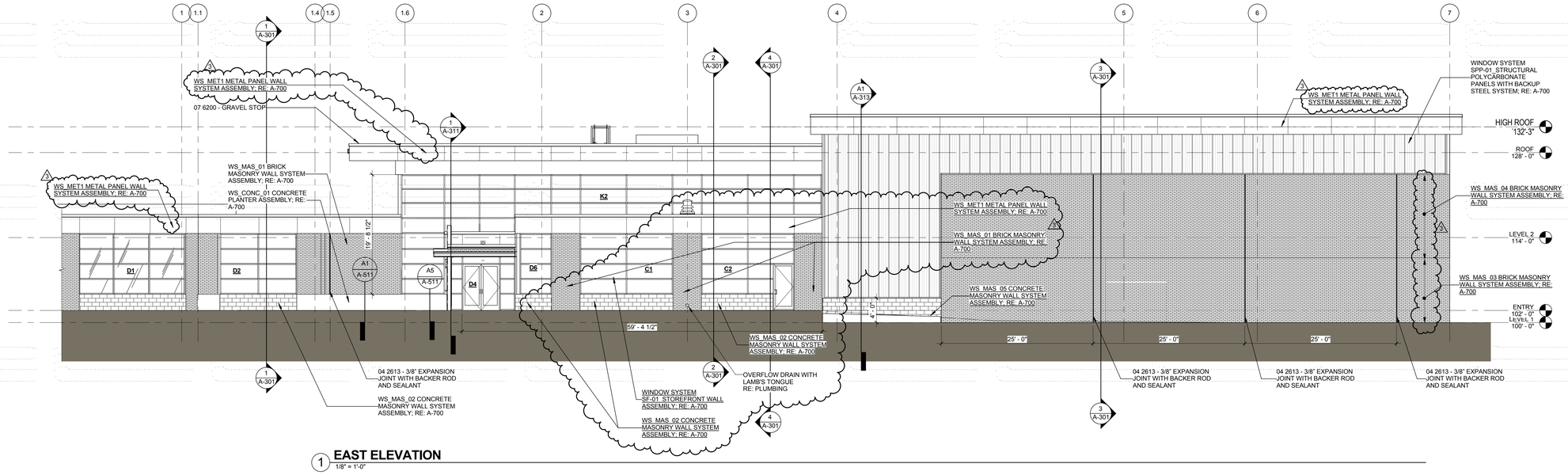
Nov 9, 2015 | CONSTRUCTION DOCUMENTS

Sheet Number:

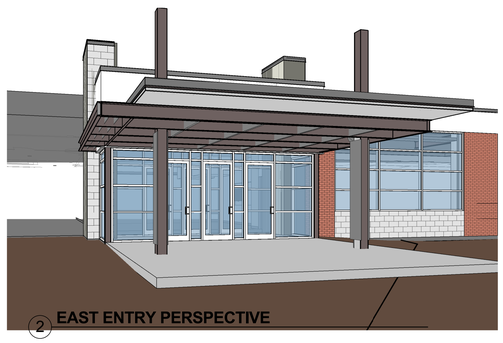
A-152

DPA Project: 15803.00

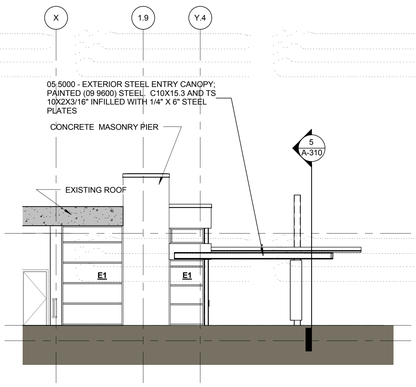
12/9/2015 11:45:42 AM



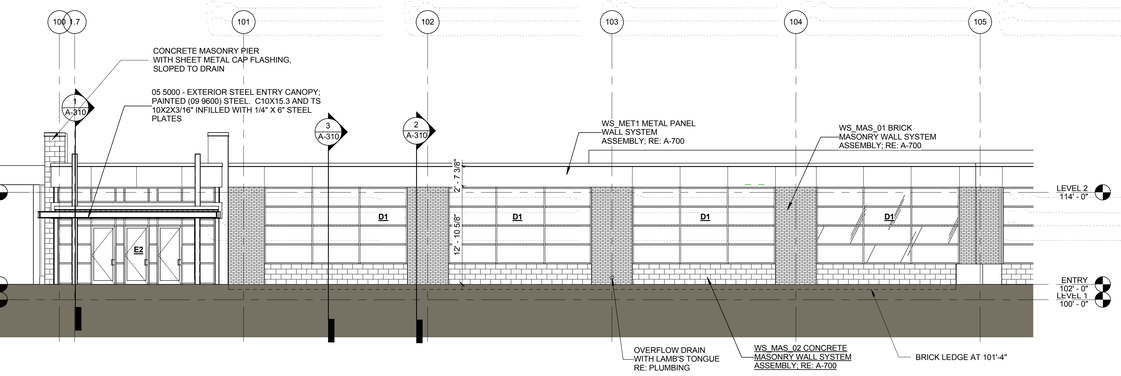
1 EAST ELEVATION
1/8" = 1'-0"



2 EAST ENTRY PERSPECTIVE



3 EAST ENTRY SOUTH ELEV
1/8" = 1'-0"



4 EAST ENTRY ELEVATION
1/8" = 1'-0"

5 MAIN ENTRY PERSPECTIVE

ELEVATION GENERAL NOTES:

1. REFER TO SHEETS A-725 AND A-726 FOR WINDOW ELEVATIONS, STOREFRONT, CURTAINWALL SYSTEMS, AND GLAZING TYPES

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Issue/Revisions	Date	No.
ADDENDUM 03	12.09.2015	3

Project Information

RED ROCKS COMMUNITY COLLEGE
STUDENT RECREATION CENTER
13300 W. 6th Avenue
Lakewood, Colorado 80228

Sheet Information

Sheet Title:

EXTERIOR ELEVATIONS

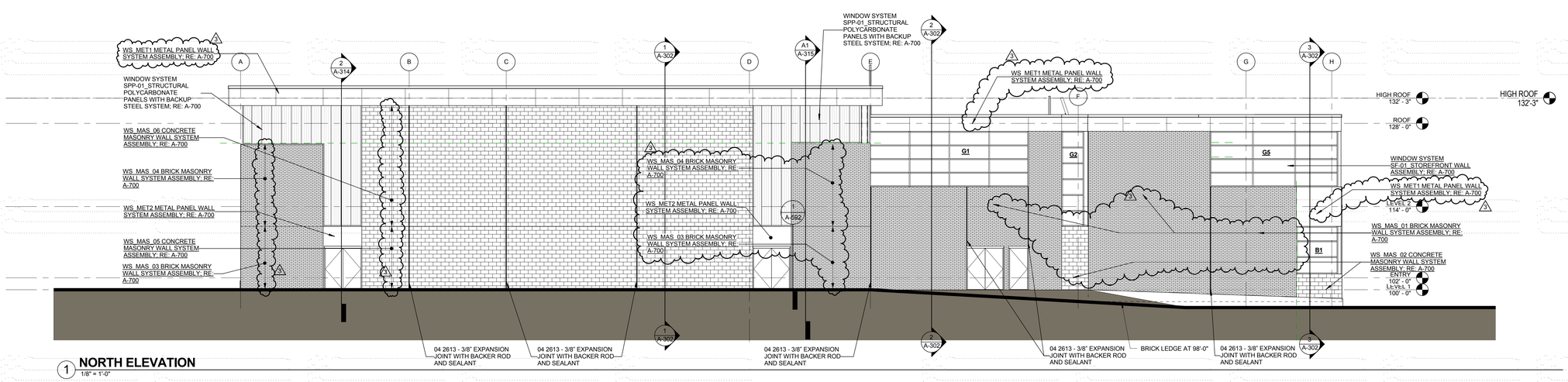
Nov 9, 2015 CONSTRUCTION DOCUMENTS

Sheet Number:

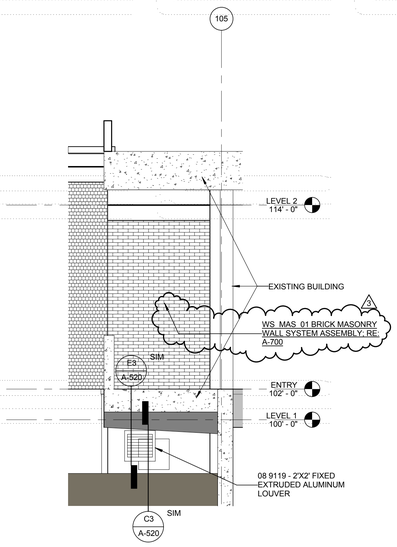
A-201

DPA Project: 15803.00

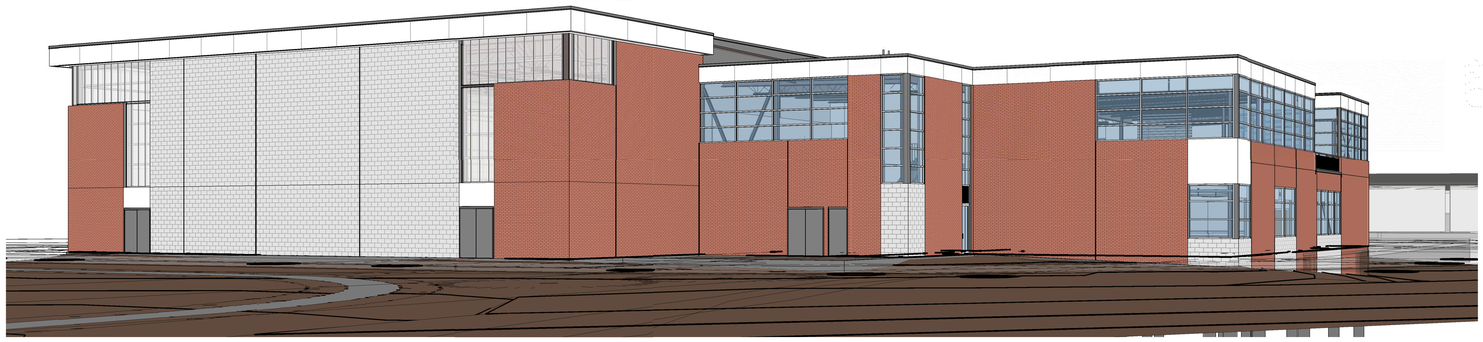
12/8/2015 8:11:26 AM



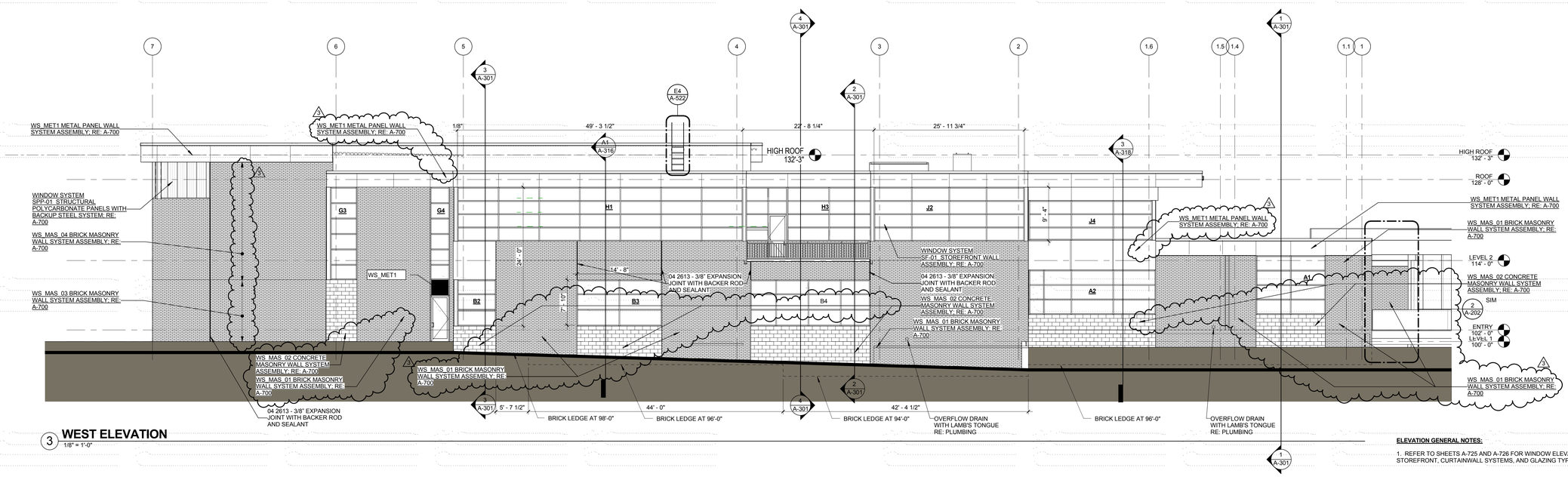
1 NORTH ELEVATION
1/8" = 1'-0"



2 SOUTHWEST ELEVATION
1/4" = 1'-0"



4 PERSPECTIVE FROM NORTHWEST



3 WEST ELEVATION
1/8" = 1'-0"

ELEVATION GENERAL NOTES:

1. REFER TO SHEETS A-725 AND A-726 FOR WINDOW ELEVATIONS, STOREFRONT, CURTAINWALL SYSTEMS, AND GLAZING TYPES

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Consultant

Issue/Revisions	Date	No.
ADDENDUM 03	12.09.2015	3

Project Information

RED ROCKS COMMUNITY COLLEGE
STUDENT RECREATION CENTER
13300 W. 6th Avenue
Lakewood, Colorado 80228

Sheet Information

Sheet Title:

EXTERIOR ELEVATIONS

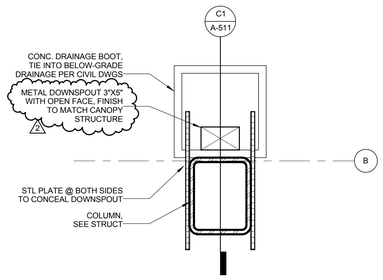
Nov 9, 2015 CONSTRUCTION DOCUMENTS

Sheet Number:

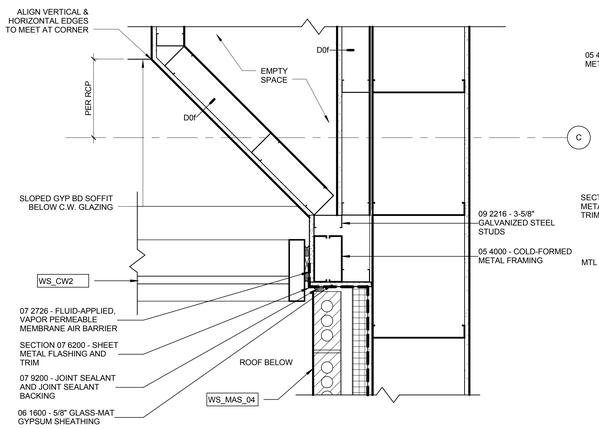
A-202

DPA Project: 15803.00

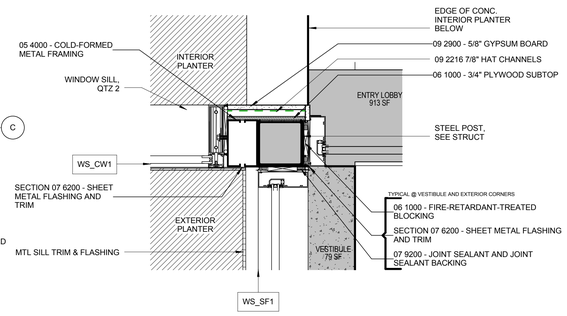
12/8/2015 9:01:07 AM



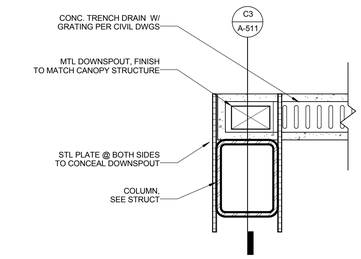
D1 DETAIL - DOWNSPOUT @ MAIN ENTRY
1 1/2" = 1'-0"



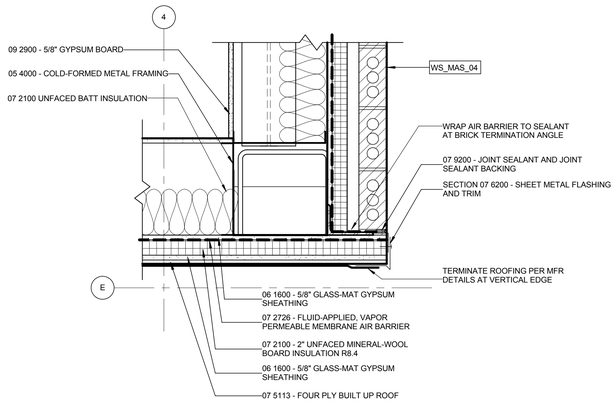
D2 DETAIL - C.W TO MASONRY @ CORNER
1 1/2" = 1'-0"



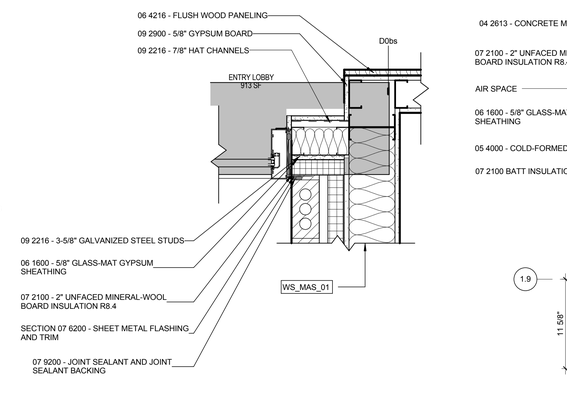
D3 DETAIL - 3 WAY GLAZING INTERSECTION
1 1/2" = 1'-0"



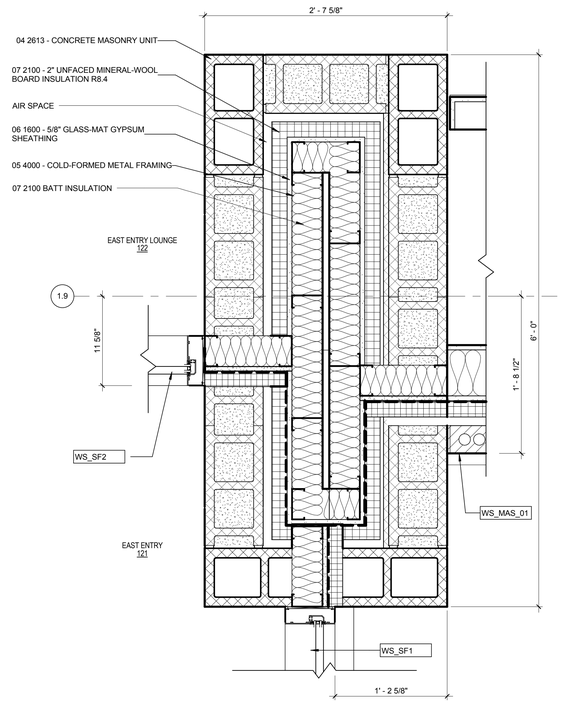
C1 DETAIL - DOWNSPOUT @ EAST ENTRY
1 1/2" = 1'-0"



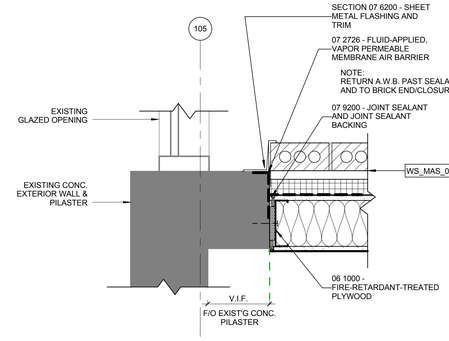
C2 DETAIL - BRICK VENEER TO VERTICAL ROOFING
1 1/2" = 1'-0"



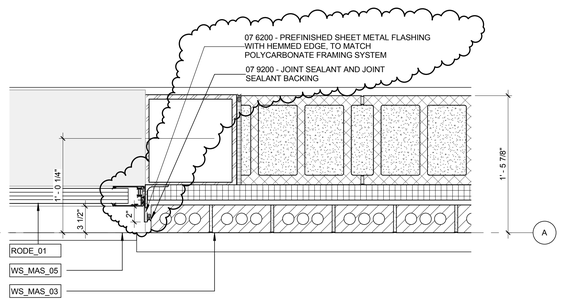
C3 DETAIL - INTERIOR S.F. JAMB @ MAIN ENTRY
1 1/2" = 1'-0"



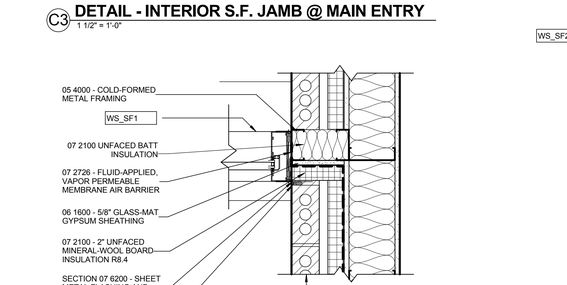
B4 PLAN DETAIL - EAST ENTRY PIER
1 1/2" = 1'-0"



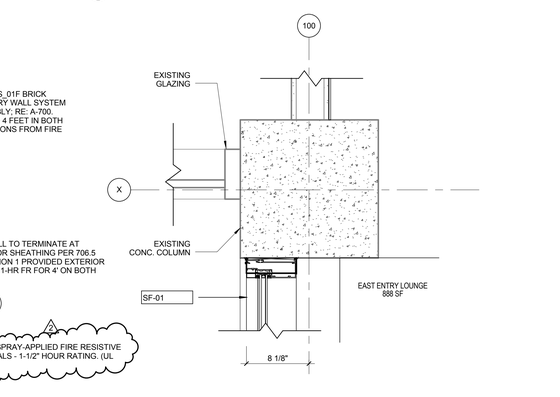
B1 DETAIL - EXTERIOR WALL TO EXIST'G BUILDING
1 1/2" = 1'-0"



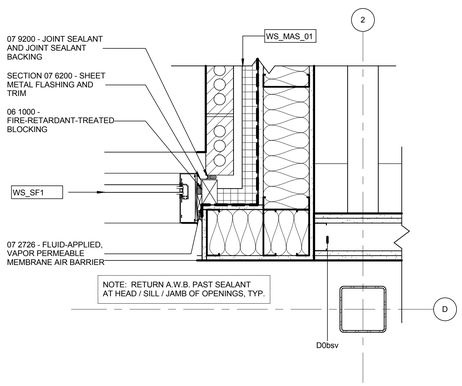
B2 STRUCTURED POLYCARBONATE JAMB DETAIL
1 1/2" = 1'-0"



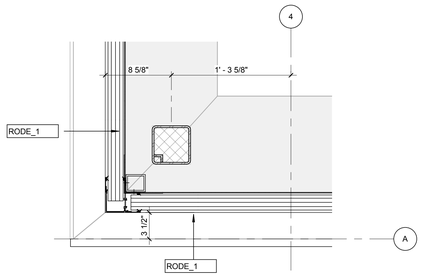
B3 DETAIL - EXTERIOR S.F. JAMB @ MAIN ENTRY
1 1/2" = 1'-0"



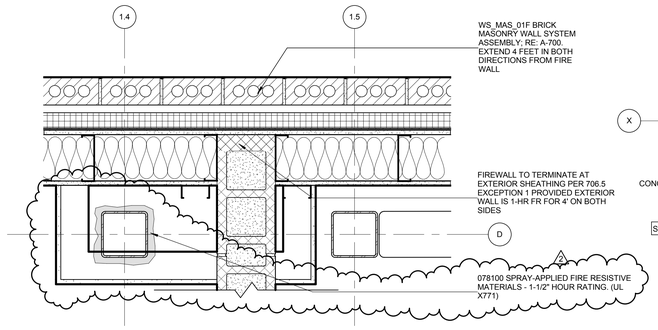
B4 PLAN DETAIL - EAST ENTRY PIER
1 1/2" = 1'-0"



A1 DETAIL - BRICK VENEER TO STOREFRONT
1 1/2" = 1'-0"



A2 STRUCTURED POLYCARBONATE CORNER DETAIL
1 1/2" = 1'-0"



A3 TERMINATION AT FIRE WALL
1 1/2" = 1'-0"

A4 PLAN DETAIL
1 1/2" = 1'-0"

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Consultant

Issue/Revisions

	Date	No.
ADDENDUM 02	12.04.2015	2

Project Information

RED ROCKS COMMUNITY COLLEGE
STUDENT RECREATION CENTER
13300 W. 6th Avenue
Lakewood, Colorado 80228

Sheet Information

Sheet Title:

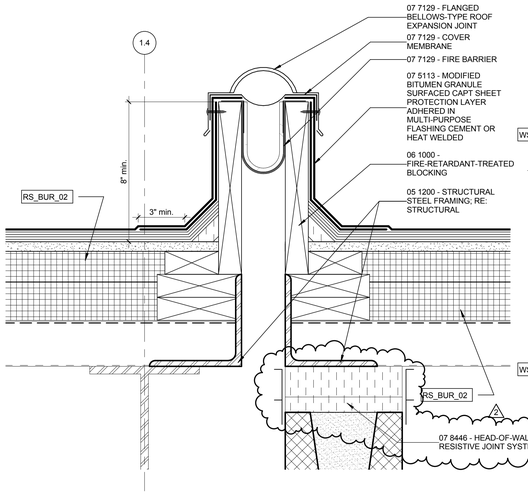
EXTERIOR DETAILS - PLAN

CONSTRUCTION DOCUMENTS
Nov 9, 2015
Sheet Number:

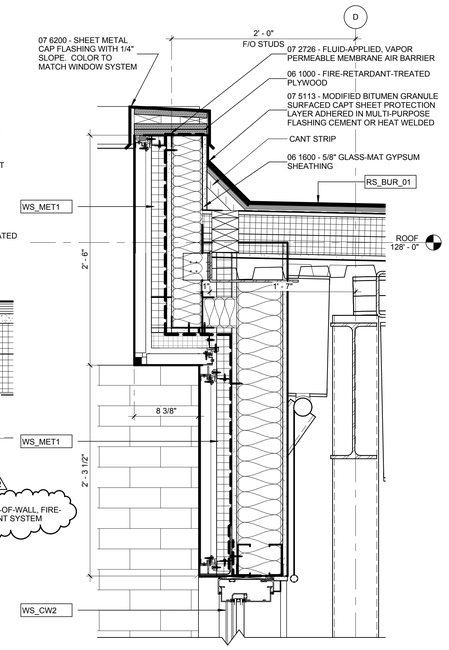
A-501

DPA Project: 15803.00

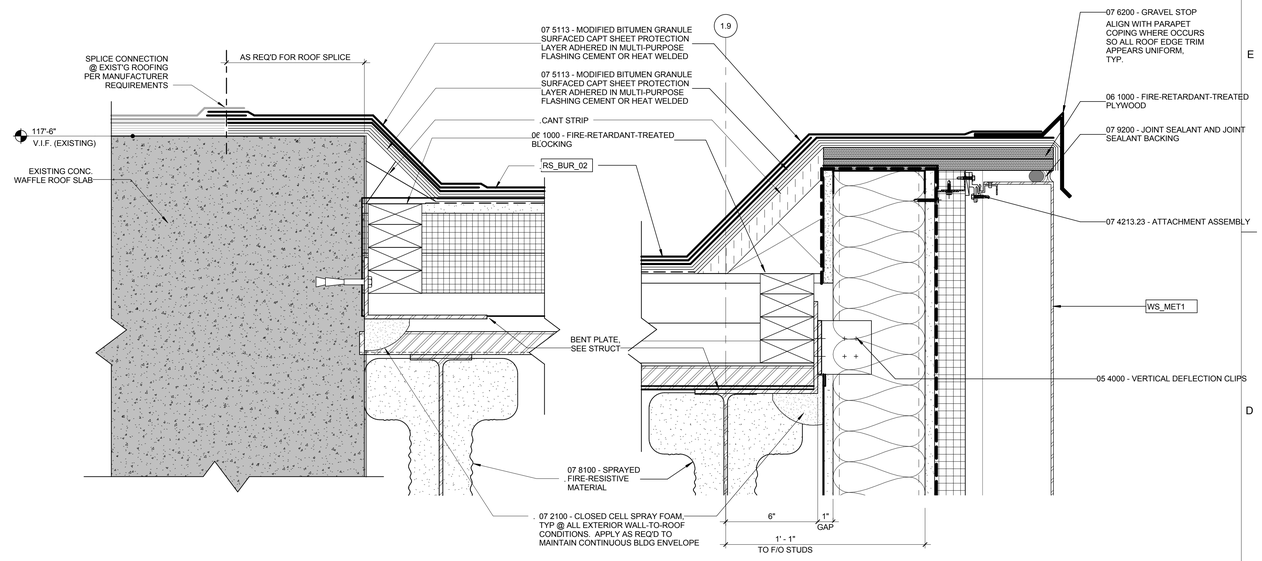
12/8/2015 12:06:07 PM



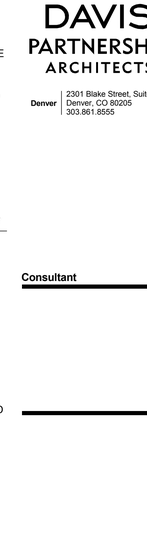
E1 ROOF EXPANSION JOINT AT FIREWALL
3" = 1'-0"



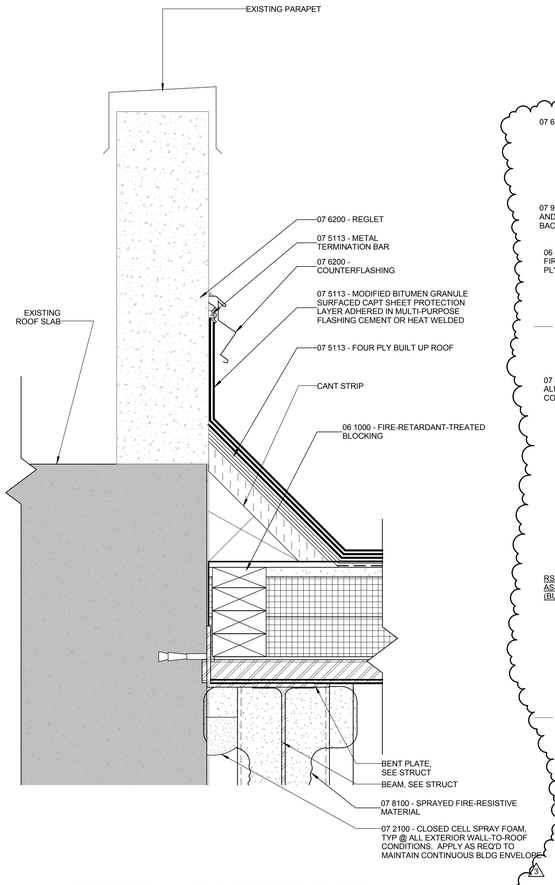
E2 ROOF DETAIL @ CARDIO/STRETCH
1 1/2" = 1'-0"



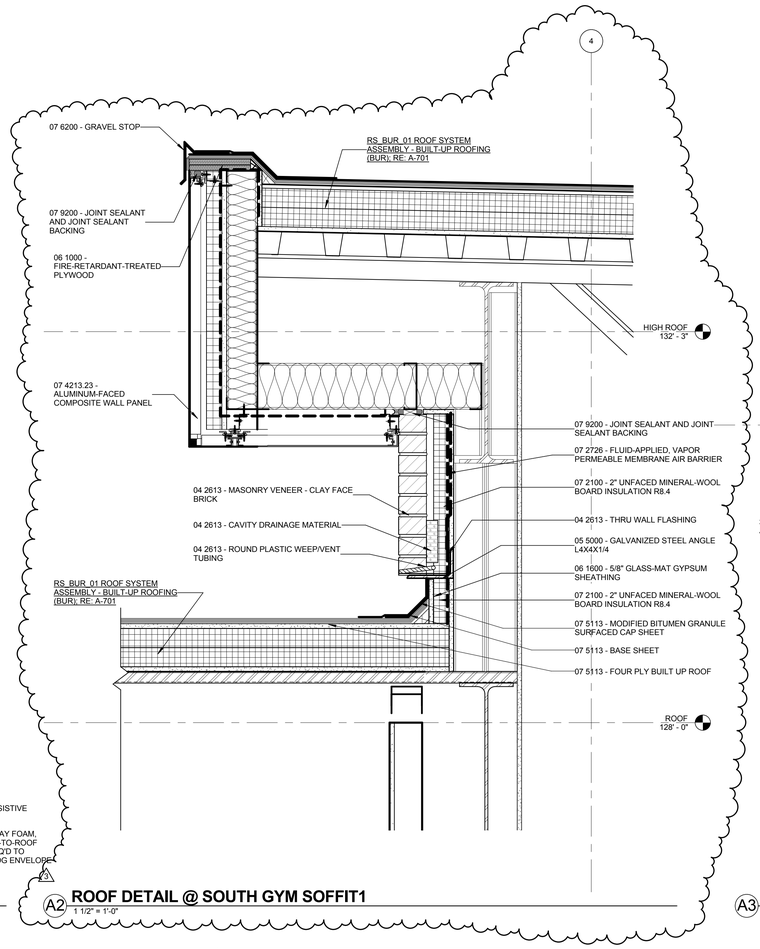
E3 ROOF DETAIL @ TIE-IN TO EXISTING GRAVEL STOP
3" = 1'-0"



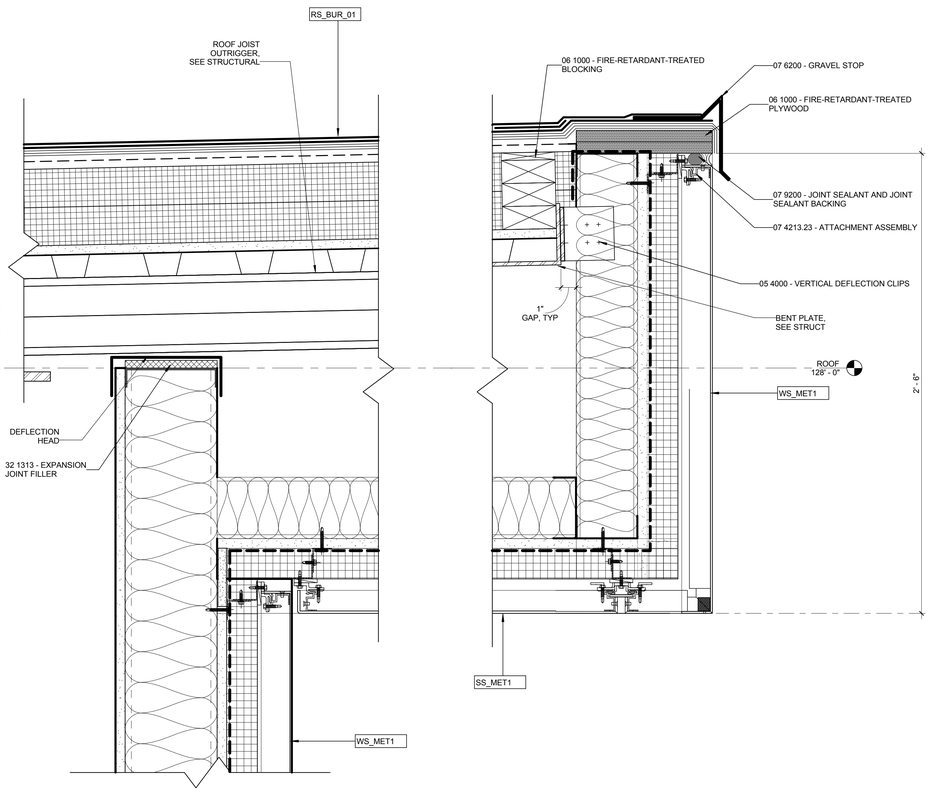
E4 ROOF DETAIL @ TYPICAL COPING
3" = 1'-0"



A1 ROOF DETAIL - @ EXISTING PARAPET
3" = 1'-0"



A2 ROOF DETAIL @ SOUTH GYM SOFFIT1
1 1/2" = 1'-0"



A3 ROOF DETAIL @ FREE ZONE ROOF OVERHANG
3" = 1'-0"

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Issue/Revisions	Date	No.
ADDENDUM 02	12.04.2015	2
ADDENDUM 03	12.09.2015	3

Project Information

RED ROCKS COMMUNITY COLLEGE
STUDENT RECREATION CENTER
13300 W. 6th Avenue
Lakewood, Colorado 80228

Sheet Information

Sheet Title:

EXTERIOR DETAILS - SECTION, PARAPET

Nov 9, 2015 CONSTRUCTION DOCUMENTS

Sheet Number:

A-530

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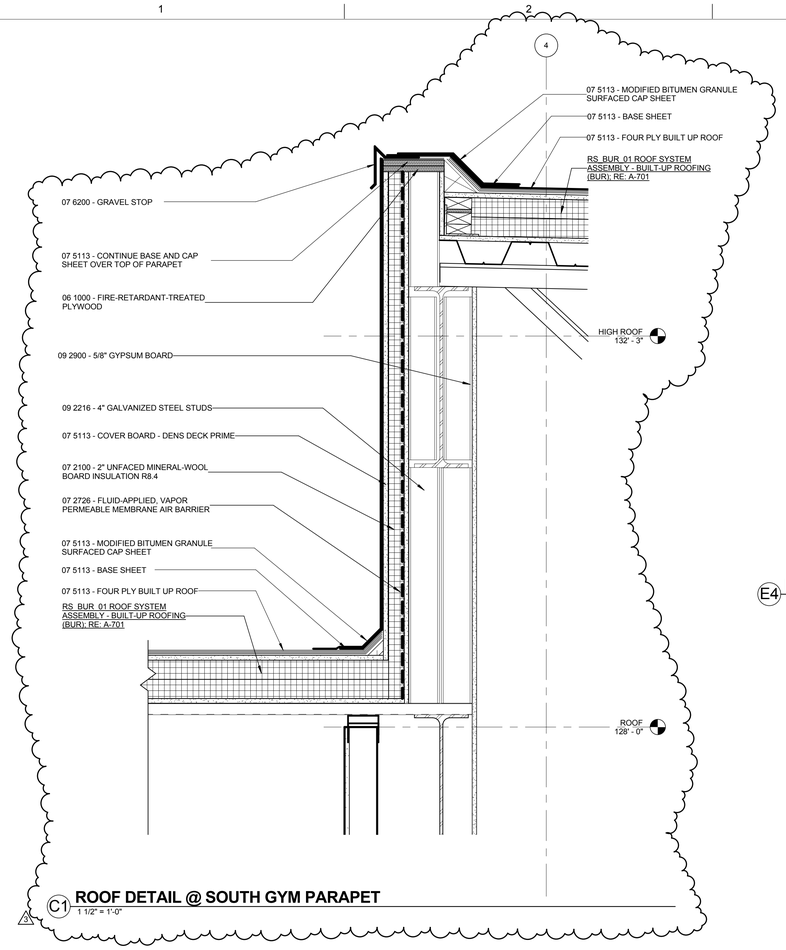
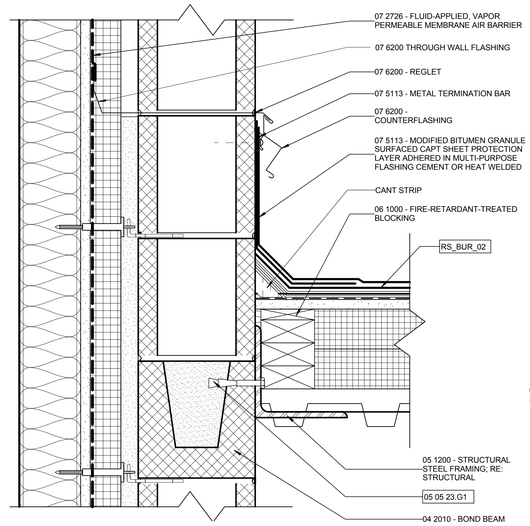
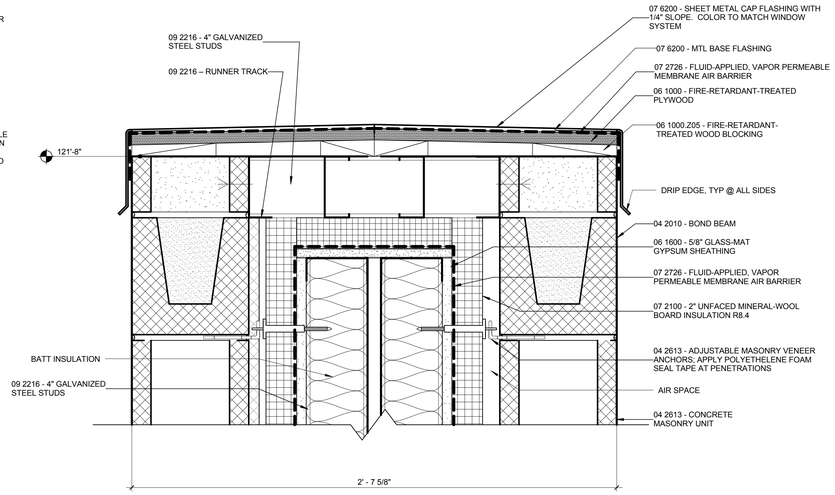


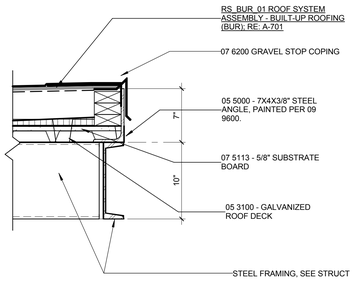
C1 **ROOF DETAIL @ SOUTH GYM PARAPET**
1 1/2" = 1'-0"



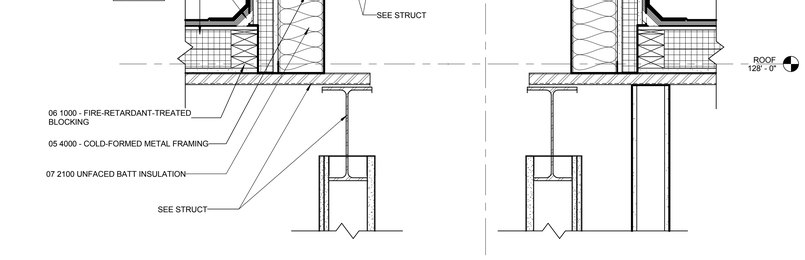
E4 **ROOF DETAIL @ EAST ENTRY PIER REGLET**
3" = 1'-0"



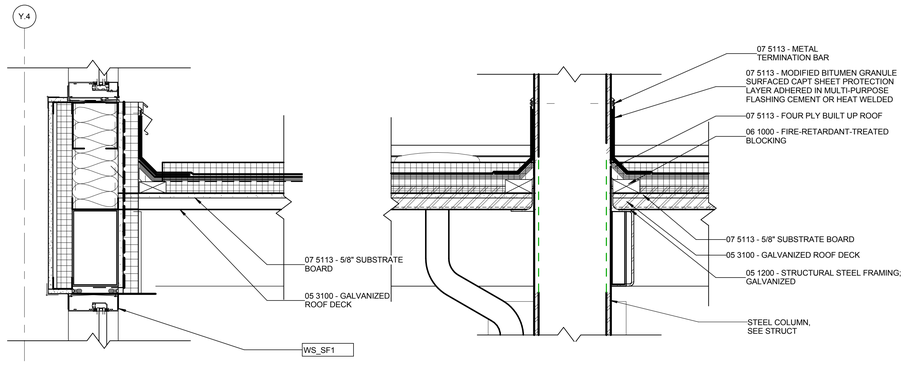
E5 **ROOF DETAIL @ EAST ENTRY PIER CAP**
3" = 1'-0"



B1 **SECTION THRU EAST ENTRY CANOPY - Callout 2**
1 1/2" = 1'-0"

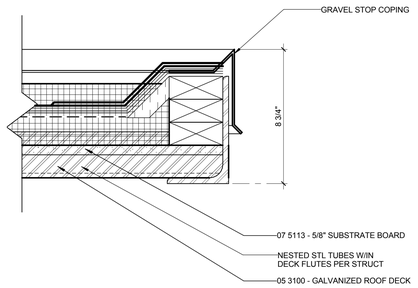


B5 **DETAIL - ELEVATOR OVER RUN**
1 1/2" = 1'-0"

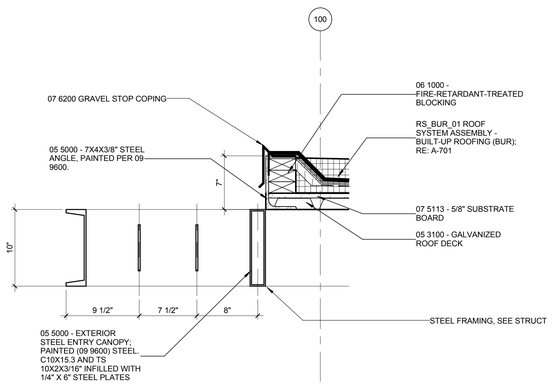


A1 **WALL SECTION THRU EAST ENTRY - Callout 1**
1 1/2" = 1'-0"

A2 **WALL SECTION THRU EAST ENTRY - Callout 2**
1 1/2" = 1'-0"



A3 **WALL SECTION THRU EAST ENTRY - Callout 3**
3" = 1'-0"



A4 **SECTION THRU EAST ENTRY CANOPY - Callout 1**
1 1/2" = 1'-0"

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Issue/Revisions	Date	No.
ADDENDUM 03	12.09.2015	3

Project Information

RED ROCKS COMMUNITY COLLEGE
STUDENT RECREATION CENTER
13300 W. 6th Avenue
Lakewood, Colorado 80228

Sheet Information

Sheet Title:

EXTERIOR DETAILS - SECTION, PARAPET

CONSTRUCTION DOCUMENTS
Nov 9, 2015

Sheet Number:

A-532

DPA Project: 15803.00

12/8/2015 3:02:04 PM

2.2 STRUCTURED-POLYCARBONATE-PANEL ASSEMBLIES

A. Structured-Polycarbonate-Panel Assemblies: Translucent assemblies that are supported by aluminum framing and glazed with structured-polycarbonate panels.

1. Basis-of-Design Product: Subject to compliance with requirements, **provide Rodeca 50 mm Translucent Panel, or equal product by one of the following:**

a. Rodeca Transulcent Building Elements: 50mm Translucent Panel Product
b. EXTECH/Exterior Technologies, Inc: Interconnecting Polycarbonate Wall System - 40 mm. Model 3440. (Addendum 02)
c. Gallina USA, LLC / Crystal Structures: Arco Plus 547 40 mm (Addendum 02)
d. AIA Industries: AIA Eco-Wall 2560 50 mm - Color: Opal. (Addendum 03)
e. **CPI Daylighting: Quadwall System (Addendum 03)**

2.3 STRUCTURED-POLYCARBONATE PANELS

A. Structured-Polycarbonate Panels: Translucent, extruded-polycarbonate sheet with multiwall cellular cross section that provides isolated airspaces and that is coextruded with a UV-protective layer.

B. Panel Thickness: Nominal 50 mm.

C. UV Resistance: On outer surface.

D. Color: Translucent Ice White.

E. Panel Performance:

1. Plastic Self-Ignition Temperature: 650 deg F or more according to ASTM D 1929.
2. Smoke-Developed Index: 450 or less according to ASTM E 84, or 75 or less according to ASTM D 2843.
3. Combustibility Classification: Class CC1 based on testing according to ASTM D 635 (Addendum 02).
4. Interior Finish Classification: Class A based on testing according to ASTM E 84.
5. Color Change: Not more than 3.0 units Delta E, when measured according to ASTM D 2244, after outdoor weathering compliant with procedures in ASTM D 1435.

a. Outdoor Weathering Conditions: 60 months in Arizona or 120 months in a moderate North American climate.

6. Impact Resistance: No failure at impact of 200 ft. x lbf according to freefalling-ball impact test using a 3-1/2-inch- diameter, 6.3-lb ball.
7. Haze Factor: Greater than 90 percent when tested according to ASTM D 1003.

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RMH Group project number 19231

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SERVICE LOAD ANALYSIS PER SQUARE FOOT

JOB NAME: RRCC REC CENTER
NAME: **MDP**
VOLTAGE: 120/208 V, 3PH, 4W
GROSS SQUARE FEET: 35818 SF
586 AMP REQUIRED CAPACITY = 402 kW @ 83% PF = 487 kVA & 13.6 VA/SF REQUIRED
800 AMP ACTUAL CAPACITY = 549 kW @ 83% PF = 665 kVA & 18.6 VA/SF ACTUAL

NEC DEMAND LOAD SUMMARY							VA/SF LOAD SUMMARY	
LOAD TYPE	kW	POWER FACT		CONNECTED kVA	DEMAND FACTOR		CALCULATED LOAD	CONNECTED LOAD	CALCULATED DEMAND LOAD
LIGHTING								0.8 VA/SF	0.9 VA/SF
INCANDESCENT	0.0	@ 100%	=	0.0	@ 125%	=	0.0 kVA		
INDUCTIVE LTG	25.7	@ 95%	=	27.0	@ 125%	=	33.8 kVA		
RECEPTACLES								0.9 VA/SF	0.6 VA/SF
FIRST 10 kVA	9.5	@ 95%	=	10.0	@ 100%	=	10.0 kVA		
REMAINDER	21.7	@ 95%	=	22.8	@ 50%	=	11.4 kVA		
MOTORS								9.6 VA/SF	11.1 VA/SF
LARGEST	173	@ 80%	=	217	@ 125%	=	271 kVA		
REMAINDER	101	@ 80%	=	127	@ 100%	=	127 kVA		
APPLIANCES	12.6	@ 80%	=	15.7	@ 100%	=	15.7 kVA	0.4 VA/SF	0.4 VA/SF
HEAT	4.4	@ 100%	=	4.4	@ 125%	=	5.5 kVA	0.1 VA/SF	0.2 VA/SF
COMPUTER	2.4	@ 95%	=	2.5	@ 100%	=	2.5 kVA	0.1 VA/SF	0.1 VA/SF
OTHER	8.9	@ 85%	=	10.5	@ 100%	=	10.5 kVA	0.3 VA/SF	0.3 VA/SF
NONCOINCIDENT	0.0	@ 95%	=	0.0	@ 0%	=	0.0 kVA	0.0 VA/SF	- VA/SF
PEAK LOAD	0.0	@ 90%	=	0.0	@ 125%	=	0.0 kVA	0.0 VA/SF	0.0 VA/SF
0 % SPARE	0.0	@ 90%	=	0.0	@ 100%	=	0.0 kVA	0.0 VA/SF	0.0 VA/SF
TOTAL	360 kW	83%		436 kVA			487 kVA	12.2 VA/SF	13.6 VA/SF

Version 0615

FEEDER SCHEDULE

Version 0615

KEY	CONDUIT & CONDUCTORS [SEE NOTE 1]	REMARKS
60A5	1-1/4" C - 5#4	NOTE 5
125A3G	1-1/2" C - 3#1/0, 1#6G	
125A4G	2" C - 4#1/0, 1#6G	
70A3GM	1-1/4" C - 3#4, 1#6G	NOTE 6
225A3G	2" C - 3#4/0, 1#4G	
225A4G	2-1/2" C - 4#4/0, 1#4G	
225A4BJ	2-1/2" C - 4#4/0, 1#2G	NOTE 2
400A4G	2 [2" C - 4#3/0, 1#3G]	
310A3GM	2-1/2" C - 3#350, 1#1G	NOTE 6
P800A4BJ	3 [3" C - 4#300, 1#2/0G]	NOTE 2, 7
4G	3/4" C - 1#4G	
6G	3/4" C - 1#6G	
3/0G	3/4" C - 1#3/0G	

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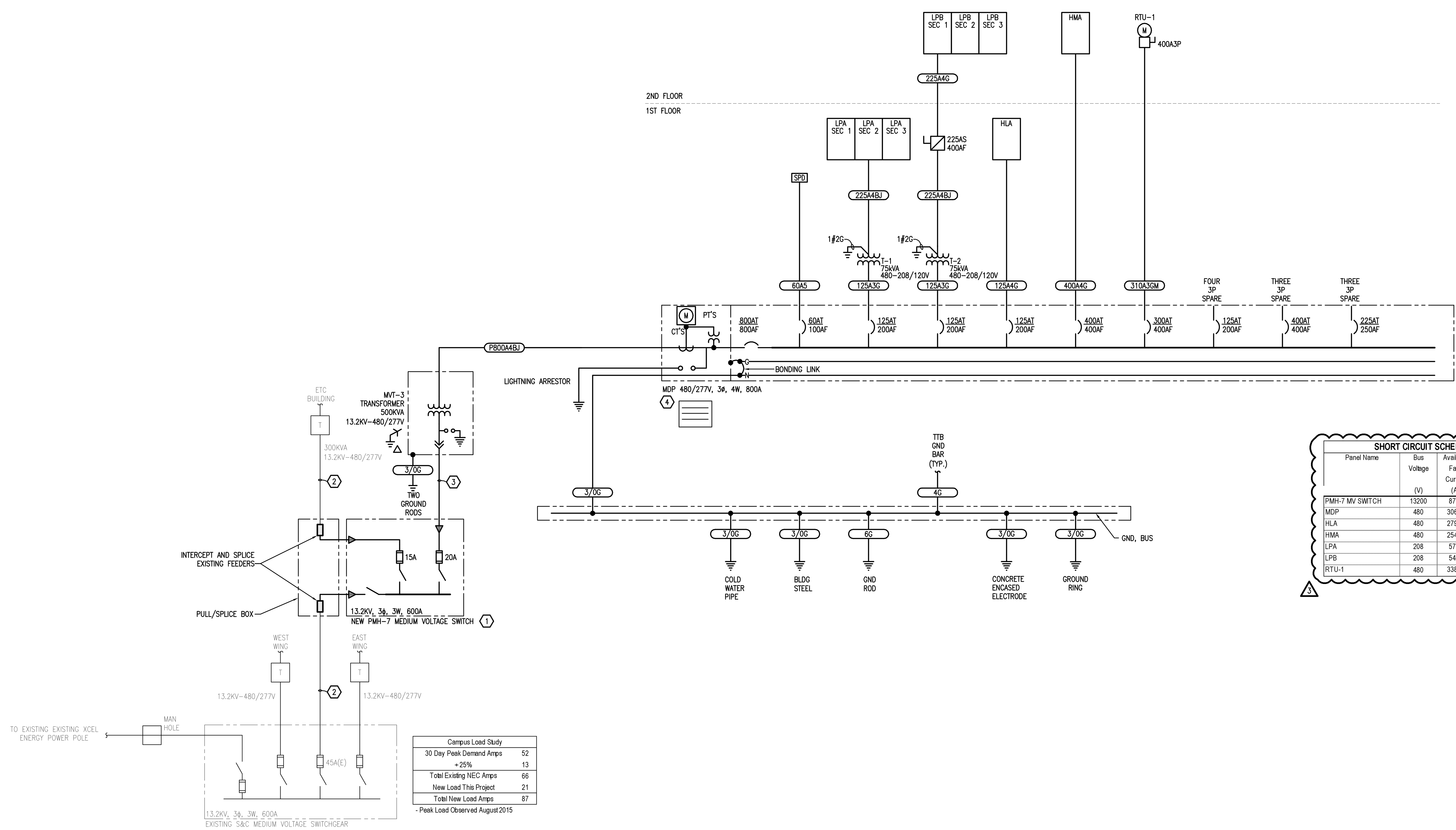
SCHEDULE NOTES:

1. THE NOMINAL CONDUCTOR AMPACITIES AND CONDUIT SIZES IN THIS FEEDER SCHEDULE ARE BASED ON COPPER CONDUCTORS, 60 DEGREE CENTIGRADE TERMINATIONS AND TYPE TW CONDUCTORS FOR SIZES #14 TO #1, AND 75 DEGREE CENTIGRADE TERMINATIONS AND TYPE THW CONDUCTORS FOR SIZES #1/0 AND LARGER. UNLESS NOTED OTHERWISE, CONDUIT IS SIZED BASED ON TYPE EMT CONDUIT; USE OF OTHER CONDUIT AND CONDUCTOR TYPES REQUIRES RE-EVALUATION OF CONDUCTOR AMPACITY AND CONDUIT SIZE EVALUATION AND RESIZING OF CONDUIT.
2. FEEDERS MARKED WITH A "BJ" HAVE AN EQUIPMENT BONDING JUMPER. PROVIDE PROPERLY SIZED TERMINATIONS.
3. THE NEUTRAL OF THE INDICATED FEEDER CONSISTS OF TWO CONDUCTORS IN EACH RACEWAY TERMINATED TO THE SAME LUG, AND IS 200% OF THE AMPACITY OF THE INDIVIDUAL PHASE CONDUCTORS. MAKE CAREFUL SELECTION OF LUG AMPACITY AND NEUTRAL BUS SIZE DUE TO HARMONIC CURRENTS CARRIED BY THE NEUTRAL. THE FEEDER SIZES ARE BASED ON 75 DEGREE CENTIGRADE TEMPERATURE RATINGS (TYPE THHN CONDUCTORS, AND TERMINATIONS).
4. FEEDERS MARKED WITH AN "IG" HAVE AN EQUIPMENT GROUNDING CONDUCTOR AND AN ISOLATED EQUIPMENT GROUNDING CONDUCTOR. PROVIDE PROPERLY SIZED TERMINATIONS.
5. FEEDERS MARKED WITH AN "A5" HAVE A FULL SIZE GROUND CONDUCTOR. PROVIDE PROPERLY SIZED TERMINATIONS.
6. FEEDER KEYS MARKED WITH A "GM" ARE FOR SINGLE MOTOR BRANCH CIRCUITS. FEEDERS SERVING MOTOR CIRCUITS EQUIPPED WITH ADJUSTABLE SPEED DRIVES SHALL BE PROVIDED WITH XHHW-2 OR XLPE SHIELDED CABLE ASSEMBLIES SUITABLE FOR VFD APPLICATIONS.
7. FEEDER KEYS MARKED WITH A "P" ARE SIZED BASED ON TYPE SCHEDULE 40 PVC CONDUIT. USE OF OTHER CONDUIT TYPES REQUIRES RESIZING OF CONDUIT.



Campus Load Study	
30 Day Peak Demand Amps	52
+25%	13
Total Existing NEC Amps	66
New Load This Project	21
Total New Load Amps	87

- Peak Load Observed August 2015

1 / E-002 **ELECTRICAL ONE-LINE DIAGRAM**
SCALE: NONE

SHORT CIRCUIT SCHEDULE			
Panel Name	Bus Voltage (V)	Available Fault Current (A)	Minimum Short Circuit Bracing Required (AIC)
PMH-7 MV SWITCH	13200	8753	10000
MDP	480	30620	50000
HLA	480	27913	35000
HMA	480	25435	35000
LPA	208	5737	10000
LPB	208	5424	10000
RTU-1	480	33828	50000

3

SHEET NOTES

1. LIGHT LINEWEIGHT INDICATES EXISTING. DARK LINEWEIGHT INDICATES NEW WORK.

KEY NOTES

1. INTERCEPT EXISTING UNDERGROUND FEEDER AND PROVIDE NEW S&C 15kV PMH-7 PAD-MOUNTED SWITCH, 600 AMP CONTINUOUS WITH 200 AMP FUSE COMPARTMENTS. CATALOG NUMBER 55132R4-C3E3E1G7 WITH KEY INTERLOCKS FOR FUSE COMPARTMENTS. FUSE STORAGE HOLDER IN COMPARTMENT 1 AND INNER BARRIER PANELS FOR DEADFRONT ENTRY. PROVIDE S&C SML-20 STYLE FUSES.
2. EXISTING FEEDERS ARE COPPER XLPE ESSEX 4/0 MV-90 CABLE.
3. NEW FEEDERS SHALL BE 3#2 15KV, MV-105 SHIELDED, 133% & 1#6 600V THWN GROUND IN 4" CONDUIT.
4. PROVIDE PLAQUE DENOTING LOCATION OF ALL SERVICES, FEEDERS, AND BRANCH CIRCUITS SUPPLYING THE BUILDING, PER NEC 225.37 AND 230.2(E).

Issue/Revisions	Date	No.
ADDENDUM 1	11/20/15	1
ADDENDUM 2	12/4/15	2
ADDENDUM 3	12/8/15	3

Project Information

STUDENT RECREATION CENTER
RED ROCKS COMMUNITY COLLEGE
13300 W. 6th Avenue
Lakewood, Colorado 80228

Sheet Information

Sheet Title:
ELECTRICAL ONE-LINE DIAGRAM

Nov. 9, 2015 CONSTRUCTION DOCUMENTS
Sheet Number:

E-002

DPA Project: 15803.00

1 ELECTRICAL LIGHTING SITE PLAN

SCALE: 1" = 40'-0"

SHEET NOTES

1 LOCATE EXISTING CIRCUITS AND MAINTAIN THEM DURING CONSTRUCTION. ALL SITE LIGHTING IS INTENDED TO BE ON DURING CONSTRUCTION.

KEY NOTES

1 REMOVE EXISTING BOLLARD AT THIS LOCATION AND REMOVE EXISTING ANCHOR BOLTS FROM CONCRETE BASE. DRILL HOLES FOR NEW BOLLARD ANCHOR BOLTS INTO EXISTING CONCRETE BASE AND EPOXY THEM INTO PLACE.

2 EXISTING LIGHT POLE TO REMAIN.

3 PROVIDE NEW CONCRETE BASE FOR BOLLARD AT THIS LOCATION.

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RMH Group project number 19231

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Issue/Revisions	Date	No.
ADDENDUM 1	11/20/15	1
ADDENDUM 2	12/4/15	2
ADDENDUM 3	12/9/15	3

Project Information

STUDENT RECREATION CENTER
RED ROCKS COMMUNITY COLLEGE
13300 W. 6th Avenue
Lakewood, Colorado 80228

Sheet Information

Sheet Title:
SITE LIGHTING PLAN

Nov. 9, 2015 CONSTRUCTION DOCUMENTS

Sheet Number:

E-004

DPA Project: 15803.00

12/9/2015 10:02:50 AM

PANEL: **LPA SEC 1** VOLTAGE: 120/208 V. 3 PH 4 W. 60 HZ TYPE: PANELBOARD MOUNTING: SEE PLAN
FED FROM: MDP PANEL COVER: (SEE SPECIFICATIONS)
225 AMP MAIN RATED AT 80% NEUTRAL BUS: YES
N/A AMP MAIN LUGS GROUND BUS: YES ISOLATED GND: NO
225 AMP BUS NOTE: 1. [ ]
(SEE SPECIFICATIONS) BUSING 2. [ ]
(SEE FAULT SCHEDULE) SYMMETRICAL RMS AMPS 3. [ ]
PANEL SHORT CIRCUIT RATING 4. [ ]

NOTE	DESCRIPTION	CCT VA	BREAKER AMP / P	CCT PH CCT	BREAKER AMP / P	CCT VA	DESCRIPTION	NOTE
	RECEPT FITNESS RM 151	900	20 / 1	1 A 2	20 / 1	1040	RECEPT/TV LOUNGE RM 130	
3	SPARE	0	20 / 1	3 B 4	20 / 1	500	RECEPT CLIMBING DESK	
	RECEPT MENS LR RM 140	540	20 / 1	5 C 6	20 / 1	265	BAF-1, BAF-2, BAF-3, BAF-4	
	HAIR DRYER MENS LR RM 140	1500	20 / 1	7 A 8	20 / 1	200	BAF-5, BAF-6, BAF-7	
	HAIR DRYER MENS LR RM 140	1500	20 / 1	9 B 10	20 / 1	200	BAF-8, BAF-9, BAF-10	
	RECEPT FAMILY LR RM138,139	360	20 / 1	11 C 12	20 / 1	1080	RECEPT FITNESS RM 153	
	DF-1	1500	20 / 1	13 A 14	20 / 1	1080	RECEPT RM 163,164,165, 166	
	HAIR DRYER WMNS LR RM 135	1500	20 / 1	15 B 16	20 / 1	180	BREAK AREA COUNTER TOP	
	HAIR DRYER WMNS LR RM 135	1500	20 / 1	17 C 18	20 / 1	540	BREAK AREA COUNTER TOP	
	RECEPT WMNS LR RM 135	540	20 / 1	19 A 20	20 / 1	932	GD-1	
	RECEPT ELEC RM 134	180	20 / 1	21 B 22	20 / 1	600	REFRIGERATOR	
	SPARE	0	20 / 1	23 C 24	20 / 1	1070	DRYER RM 163	
	SPARE	0	20 / 1	25 A 26	15 / --	580	WASHING MACHINE RM 163	
	EF-6	1127	20 / 1	27 B 28	-- / --	580	"	
	RHP-1	1127	20 / 1	29 C 30	-- / 3	580	"	
	RHP-2	1127	20 / 1	31 A 32	20 / 1	720	RECEPT RM 160, 161, 162	
	RHP-3	1127	20 / 1	33 B 34	20 / 1	311	B-1	
	RECEPT GYM	720	20 / 1	35 C 36	15 / 1	506	DHWCP-1	
	IRRIGATION CONTROLLER	500	20 / 1	37 A 38	20 / 1	276	DWH-1	
	ELEVATOR PIT GFI	180	20 / 1	39 B 40	20 / 1	500	VAV	
	ELEVATOR DAMPER	200	20 / 1	41 C 42	20 / 1	200	VAV	
		0		A		9096	LPA SEC 2, LPA SEC 3	
		0		B		12938	"	
		0		C		13346	"	

PANEL LOADING SUMMARY

LOAD TYPE	PH A	PH B	PH C	TOTAL	
INCANDESCENT	0.0	0.0	0.0	0.0	kVA
INDUCTIVE LTG	0.0	0.0	0.0	0.0	kVA
RECEPTACLES	5.4	2.7	7.2	15.3	kVA
MOTORS	7.6	8.2	6.1	21.9	kVA
APPLIANCES	4.0	6.1	4.5	14.6	kVA
HEAT	0.0	1.4	1.4	2.9	kVA
COMPUTER	0.5	1.5	0.0	2.0	kVA
OTHER	2.5	1.5	2.8	6.8	kVA
NONCOINCIDENT	0.0	0.0	0.0	0.0	kVA
PEAK LOAD	0.0	0.0	0.0	0.0	kVA
TOTAL	20.0	21.4	22.0	63.0	kVA

PHASE BALANCE	A-B	B-C	C-A	PF
(%)	93	97	91	86

MIN PANEL AMPACITY 173 AMPERES

NEC DEMAND LOAD SUMMARY

LOAD TYPE	kW	POWER FACT	kVA	DEMAND FACTOR	CALCULATED LOAD
INCANDESCENT	0.0	@ 100% =	0.0	@ 125% =	0.0 kVA
INDUCTIVE LTG	0.0	@ 95% =	0.0	@ 125% =	0.0 kVA
RECEPTACLES					
FIRST 10 kVA	9.5	@ 95% =	10.0	@ 100% =	10.0 kVA
REMAINDER	5.0	@ 95% =	5.3	@ 50% =	2.7 kVA
MOTORS					
LARGEST	2.1	@ 80% =	2.6	@ 125% =	3.2 kVA
REMAINDER	15.4	@ 80% =	19.3	@ 100% =	19.3 kVA
APPLIANCES	11.7	@ 80% =	14.6	@ 100% =	14.6 kVA
HEAT	2.9	@ 100% =	2.9	@ 125% =	3.6 kVA
COMPUTER	1.9	@ 95% =	2.0	@ 100% =	2.0 kVA
OTHER	5.8	@ 85% =	6.8	@ 100% =	6.8 kVA
NONCOINCIDEN	0.0	@ 95% =	0.0	@ 0% =	- kVA
PEAK LOAD	0.0	@ 90% =	0.0	@ 125% =	0.0 kVA
0 % SPARE	0.0	@ 90% =	0.0	@ 100% =	0.0 kVA
TOTAL	54.0 kW		63.0 kVA		62.2 kVA

Version 0615

PANEL: **LPA SEC 2** VOLTAGE: 120/208 V. 3 PH 4 W. 60 HZ TYPE: PANELBOARD MOUNTING: SEE PLAN
FED FROM: MDP PANEL COVER: (SEE SPECIFICATIONS)
N/A AMP MAIN RATED AT 80% NEUTRAL BUS: YES
MLO AMP MAIN LUGS GROUND BUS: YES ISOLATED GND: NO
225 AMP BUS NOTE: 1. [ ]
(SEE SPECIFICATIONS) BUSING 2. [ ]
(SEE FAULT SCHEDULE) SYMMETRICAL RMS AMPS 3. [ ]
PANEL SHORT CIRCUIT RATING 4. [ ]

NOTE	DESCRIPTION	CCT VA	BREAKER AMP / P	CCT PH CCT	BREAKER AMP / P	CCT VA	DESCRIPTION	NOTE
	RECEPT IT RM 133	360	20 / 1	43 A 44	20 / 1	1220	ACCESS CONTROL DESK	
	L6-30 RECEPT RM 133	180	20 / --	45 B 46	20 / 1	860	RECEPT PT OFFICE 107	
	"	180	-- / 2	47 C 48	20 / 1	720	WORK RM 106	
	L6-30 RECEPT RM 133	180	20 / --	49 A 50	20 / 1	860	DIRECTORS OFFICE 109	
	"	180	-- / 2	51 B 52	20 / 1	1040	RECEPT PT OFFICE 108	
	VENDING MACHINE	1200	20 / 1	53 C 54	20 / 1	1220	RECEPT RM 102,103	
	VENDING MACHINE	1200	20 / 1	55 A 56	15 / 1	240	MAIN ENTRY DOOR OPENER	
	SP-1	1127	20 / 1	57 B 58	20 / 1	200	FIRE DOOR ASSEMBLY	
	UH-2	1437	20 / 1	59 C 60	20 / 1	1080	RECEPT MEETING RM 110	
	UH-1	16	15 / 1	61 A 62	20 / 1	0	SPARE	3
	UH-3	1437	20 / 1	63 B 64	20 / 1	720	RECEPT RM 111,112,113,114	
	CUH-1	115	15 / 1	65 C 66	20 / 1	1080	RECEPT MEETING RM 115	
	BASKETBALL LIFT MOTOR	790	15 / --	67 A 68	15 / 1	506	EF-1	
	"	790	-- / 2	69 B 70	20 / 1	180	LOWER ROOFTOP RECEPT	
	BASKETBALL LIFT MOTOR	790	15 / --	71 C 72	20 / 1	200	FACP	
	"	790	-- / 2	73 A 74	15 / --	790	DIVIDER LIFT MOTOR	
	BASKETBALL LIFT MOTOR	790	15 / --	75 B 76	-- / 2	790	"	
	"	790	-- / 2	77 C 78	20 / --	500	SCOREBOARD	
	BASKETBALL LIFT MOTOR	790	15 / --	79 A 80	-- / 2	500	"	
	"	790	-- / 2	81 B 82	20 / --	500	SCOREBOARD	
	ELEVATOR PIT GFI	180	20 / 1	83 C 84	-- / 2	500	"	

PANEL LOADING SUMMARY

LOAD TYPE	PH A	PH B	PH C	TOTAL	
INCANDESCENT	0.0	0.0	0.0	0.0	kVA
INDUCTIVE LTG	0.0	0.0	0.0	0.0	kVA
RECEPTACLES	1.6	2.2	4.0	7.7	kVA
MOTORS	4.8	5.1	2.6	12.5	kVA
APPLIANCES	0.5	2.5	3.0	6.0	kVA
HEAT	0.0	1.4	1.4	2.9	kVA
COMPUTER	0.5	1.0	0.0	1.5	kVA
OTHER	1.7	0.7	2.4	4.8	kVA
NONCOINCIDENT	0.0	0.0	0.0	0.0	kVA
PEAK LOAD	0.0	0.0	0.0	0.0	kVA
TOTAL	9.1	12.9	13.4	35.0	kVA

PHASE BALANCE	A-B	B-C	C-A	PF
(%)	68	96	64	86

MIN PANEL AMPACITY 102 AMPERES

NEC DEMAND LOAD SUMMARY

LOAD TYPE	kW	POWER FACT	kVA	DEMAND FACTOR	CALCULATED LOAD
INCANDESCENT	0.0	@ 100% =	0.0	@ 125% =	0.0 kVA
INDUCTIVE LTG	0.0	@ 95% =	0.0	@ 125% =	0.0 kVA
RECEPTACLES					
FIRST 10 kVA	7.3	@ 95% =	7.7	@ 100% =	7.7 kVA
REMAINDER	0.0	@ 95% =	0.0	@ 50% =	- kVA
MOTORS					
LARGEST	2.0	@ 80% =	2.6	@ 125% =	3.2 kVA
REMAINDER	7.9	@ 80% =	9.9	@ 100% =	9.9 kVA
APPLIANCES	4.8	@ 80% =	6.0	@ 100% =	6.0 kVA
HEAT	2.9	@ 100% =	2.9	@ 125% =	3.6 kVA
COMPUTER	1.4	@ 95% =	1.5	@ 100% =	1.5 kVA
OTHER	4.1	@ 85% =	4.8	@ 100% =	4.8 kVA
NONCOINCIDEN	0.0	@ 95% =	0.0	@ 0% =	- kVA
PEAK LOAD	0.0	@ 90% =	0.0	@ 125% =	0.0 kVA
0 % SPARE	0.0	@ 90% =	0.0	@ 100% =	0.0 kVA
TOTAL	30.0 kW		35.0 kVA		36.7 kVA

Version 0615

PANEL: **LPA SEC 3** VOLTAGE: 120/208 V. 3 PH 4 W. 60 HZ TYPE: PANELBOARD MOUNTING: SEE PLAN
FED FROM: MDP PANEL COVER: (SEE SPECIFICATIONS)
N/A AMP MAIN RATED AT 80% NEUTRAL BUS: YES
MLO AMP MAIN LUGS GROUND BUS: YES ISOLATED GND: NO
225 AMP BUS NOTE: 1. [ ]
(SEE SPECIFICATIONS) BUSING 2. [ ]
(SEE FAULT SCHEDULE) SYMMETRICAL RMS AMPS 3. [ ]
PANEL SHORT CIRCUIT RATING 4. [ ]

NOTE	DESCRIPTION	CCT VA	BREAKER AMP / P	CCT PH CCT	BREAKER AMP / P	CCT VA	DESCRIPTION	NOTE
	SPARE	0	20 / 1	85 A 86	20 / 1	0	SPARE	
	CU-1	2500	40 / --	87 B 88	20 / 1	0	SPARE	
	"	2500	-- / 2	89 C 90	20 / 1	0	SPARE	
	SP-2	854	15 / --	91 A 92	20 / 1	0	SPARE	
	"	854	-- / --	93 B 94	20 / 1	0	SPARE	
	"	854	-- / 3	95 C 96	20 / 1	0	SPARE	
	SPARE	0	20 / 1	97 A 98	20 / 1	0	SPARE	
	SPARE	0	20 / 1	99 B 100	20 / 1	0	SPARE	
	SPARE	0	20 / 1	101 C 102	20 / 1	0	SPARE	
	SPARE	0	20 / 1	103 A 104	20 / 1	0	SPARE	
	SPARE	0	20 / 1	105 B 106	20 / 1	0	SPARE	
	SPARE	0	20 / 1	107 C 108	20 / 1	0	SPARE	
	SPARE	0	20 / 1	109 A 110	20 / 1	0	SPARE	
	SPARE	0	20 / 1	111 B 112	20 / 1	0	SPARE	
	SPARE	0	20 / 1	113 C 114	20 / 1	0	SPARE	
	SPARE	0	20 / 1	115 A 116	20 / 1	0	SPARE	
	SPARE	0	20 / 1	117 B 118	20 / 1	0	SPARE	
	SPARE	0	20 / 1	119 C 120	20 / 1	0	SPARE	
	SPARE	0	20 / 1	121 A 122	20 / 1	0	SPARE	
	SPARE	0	20 / 1	123 B 124	20 / 1	0	SPARE	
	SPARE	0	20 / 1	125 C 126	20 / 1	0	SPARE	

PANEL LOADING SUMMARY

LOAD TYPE	PH A	PH B	PH C	TOTAL	
INCANDESCENT	0.0	0.0	0.0	0.0	kVA
INDUCTIVE LTG	0.0	0.0	0.0	0.0	kVA
RECEPTACLES	0.0	0.0	0.0	0.0	kVA
MOTORS	0.9	0.9	0.9	2.6	kVA
APPLIANCES	0.0	2.5	2.5	5.0	kVA
HEAT	0.0	0.0	0.0	0.0	kVA
COMPUTER	0.0	0.0	0.0	0.0	kVA
OTHER	0.0	0.0	0.0	0.0	kVA
NONCOINCIDENT	0.0	0.0	0.0	0.0	kVA
PEAK LOAD	0.0	0.0	0.0	0.0	kVA
TOTAL	0.9	3.4	3.4	8.0	kVA

PHASE BALANCE	A-B	B-C	C-A	PF
(%)	3	100	3	75

MIN PANEL AMPACITY 23 AMPERES

NEC DEMAND LOAD SUMMARY

LOAD TYPE	kW	POWER FACT	kVA	DEMAND FACTOR	CALCULATED LOAD
INCANDESCENT	0.0	@ 100% =	0.0	@ 125% =	0.0 kVA
INDUCTIVE LTG	0.0	@ 95% =	0.0	@ 125% =	0.0 kVA
RECEPTACLES					
FIRST 10 kVA	0.0	@ 95% =	0.0	@ 100% =	0.0 kVA
REMAINDER	0.0	@ 95% =	0.0	@ 50% =	- kVA
MOTORS					
LARGEST	2.1	@ 80% =	2.6	@ 125% =	3.2 kVA
REMAINDER	0.0	@ 80% =	0.0	@ 100% =	0.0 kVA
APPLIANCES	4.0	@ 80% =	5.0	@ 100% =	5.0 kVA
HEAT	0.0	@ 100% =	0.0	@ 125% =	0.0 kVA
COMPUTER	0.0	@ 95% =	0.0	@ 100% =	0.0 kVA
OTHER	0.0	@ 85% =	0.0	@ 100% =	0.0 kVA
NONCOINCIDEN	0.0	@ 95% =	0.0	@ 0% =	- kVA
PEAK LOAD	0.0	@ 90% =	0.0	@ 125% =	0.0 kVA
0 % SPARE	0.0	@ 90% =	0.0	@ 100% =	0.0 kVA
TOTAL	6.0 kW		8.0 kVA		8.2 kVA

Version 0615

PANEL: **LPB SEC 1** VOLTAGE: 120/208 V. 3 PH 4 W. 60 HZ TYPE: PANELBOARD MOUNTING: SEE PLAN
FED FROM: MDP PANEL COVER: (SEE SPECIFICATIONS)
225 AMP MAIN RATED AT 80% NEUTRAL BUS: YES
N/A AMP MAIN LUGS GROUND BUS: YES ISOLATED GND: NO
225 AMP BUS NOTE: 1. [ ]
(SEE SPECIFICATIONS) BUSING 2. [ ]
(SEE FAULT SCHEDULE) SYMMETRICAL RMS AMPS 3. [ ]
PANEL SHORT CIRCUIT RATING 4. [ ]

NOTE	DESCRIPTION	CCT VA	BREAKER AMP / P	CCT PH CCT	BREAKER AMP / P	CCT VA	DESCRIPTION	NOTE
	FITNESS EQUIPMENT	360	20 / 1	1 A 2	15 / 1	506	EF-2	
	FITNESS EQUIPMENT	360	20 / 1	3 B 4	20 / 1	360	RECEPT IT RM 203	
	FITNESS EQUIPMENT	360	20 / 1	5 C 6	20 / 1	1260	RECEPT HALL,RM204,205,206	
	FITNESS EQUIPMENT	360	20 / 1	7 A 8	20 / 1	360	RECEPT RESTROOM 207,208	
	FITNESS EQUIPMENT	360	20 / 1	9 B 10	20 / 1	575	DF-2	
	FITNESS EQUIPMENT	360	20 / 1	11 C 12	20 / 1	1220	RECEPT TV,RM 209	
	FITNESS EQUIPMENT	360	20 / 1	13 A 14	20 / 1	180	RECEPT TRAINING RM 211	
	FITNESS EQUIPMENT	1000	20 / 1	15 B 16	20 / 1	180	RECEPT TRAINING RM 211	
	FITNESS EQUIPMENT	1000	20 / 1	17 C 18	20 / 1	180	RECEPT TRAINING RM 211	
	FITNESS EQUIPMENT	1000	20 / 1	19 A 20	20 / 1	180	RECEPT TRAINING RM 211	
	FITNESS EQUIPMENT	1000	20 / 1	21 B 22	20 / 1	180	RECEPT TRAINING RM 211	
	FITNESS EQUIPMENT	1000	20 / 1	23 C 24	20 / 1	180	RECEPT TRAINING RM 211	
	FITNESS EQUIPMENT	1000	20 / 1	25 A 26	20 / 1	180	RECEPT FITNESS DECK 214	
	FITNESS EQUIPMENT	1000	20 / 1	27 B 28	20 / 1	700	MOTORIZED SHADES RM 211	
	FITNESS EQUIPMENT	1000	20 / 1	29 C 30	20 / 1	700	MOTORIZED SHADES	
	FITNESS EQUIPMENT	1000	20 / 1	31 A 32	20 / 1	311	B-2	
	FITNESS EQUIPMENT	1000	20 / 1	33 B 34	20 / 1	180	RECEPT ROOFTOP	
	FITNESS EQUIPMENT	360	20 / 1	35 C 36	20 / 1	180	RECEPT STR & COND RM 215	
	FITNESS EQUIPMENT	360	20 / 1	37 A 38	20 / 1	200	GYM CONTROL DAMPER	
	SPARE	0	20 / 1	39 B 40	20 / 1	1127	EF-3	
	SPARE	0	20 / 1	41 C 42	20 / 1	0	SPARE	
		0		A		10070	LPB SEC 2, LPB SEC 3	
		0		B		10046	"	
		0		C		8880	"	

PANEL LOADING SUMMARY

LOAD TYPE	PH A	PH B	PH C	TOTAL	
INCANDESCENT	0.0	0.0	0.0	0.0	kVA
INDUCTIVE LTG	0.2	0.0	0.0	0.2	kVA
RECEPTACLES	5.8	5.2	6.5	17.5	kVA
MOTORS	9.5	11.2	9.0	29.7	kVA
APPLIANCES	0.0	0.6	0.5	1.1	kVA
HEAT	0.0	0.0	0.0	0.0	kVA
COMPUTER	0.5	0.0	0.0	0.5	kVA
OTHER	0.5	1.1	0.7	2.3	kVA
NONCOINCIDENT	0.0	0.0	0.0	0.0	kVA
PEAK LOAD	0.0	0.0	0.0	0.0	kVA
TOTAL	16.4	18.1	16.7	51.0	kVA

PHASE BALANCE	A-B	B-C	C-A	PF
(%)	90	92	98	86

MIN PANEL AMPACITY 133 AMPERES

NEC DEMAND LOAD SUMMARY

LOAD TYPE	kW	POWER FACT	kVA	DEMAND FACTOR	CALCULATED LOAD
INCANDESCENT	0.0	@ 100% =	0.0	@ 125% =	0.0 kVA
INDUCTIVE LTG	0.2	@ 95% =	0.2	@ 125% =	0.3 kVA
RECEPTACLES					
FIRST 10 kVA	9.5	@ 95% =	10.0	@ 100% =	10.0 kVA
REMAINDER	7.1	@ 95% =	7.5	@ 50% =	3.8 kVA
MOTORS					
LARGEST	0.9	@ 80% =	1.1	@ 125% =	1.4 kVA
REMAINDER	22.9	@ 80% =	28.6	@ 100% =	28.6 kVA
APPLIANCES	0.9	@ 80% =	1.1	@ 100% =	1.1 kVA
HEAT	0.0	@ 100% =	0.0	@ 125% =	0.0 kVA
COMPUTER	0.5	@ 95% =	0.5	@ 100% =	0.5 kVA
OTHER	2.0	@ 85% =	2.3	@ 100% =	2.3 kVA
NONCOINCIDEN	0.0	@ 95% =	0.0	@ 0% =	- kVA
PEAK LOAD	0.0	@ 90% =	0.0	@ 125% =	0.0 kVA
0 % SPARE	0.0	@ 90% =	0.0	@ 100% =	0.0 kVA
TOTAL	44.0 kW		51.0 kVA		48.0 kVA

Version 0615

PANEL: **LPB SEC 2** VOLTAGE: 120/208 V. 3 PH 4 W. 60 HZ TYPE: PANELBOARD MOUNTING: SEE PLAN
FED FROM: MDP PANEL COVER: (SEE SPECIFICATIONS)
N/A AMP MAIN RATED AT 80% NEUTRAL BUS: YES
MLO AMP MAIN LUGS GROUND BUS: YES ISOLATED GND: NO
225 AMP BUS NOTE: 1. [ ]
(SEE SPECIFICATIONS) BUSING 2. [ ]
(SEE FAULT SCHEDULE) SYMMETRICAL RMS AMPS 3. [ ]
PANEL SHORT CIRCUIT RATING 4. [ ]

NOTE	DESCRIPTION	CCT VA	BREAKER AMP / P	CCT PH CCT	BREAKER AMP / P	CCT VA	DESCRIPTION	NOTE
	FITNESS EQUIPMENT	1000	20 / 1	43 A 44	20 / 1	1000	FITNESS EQUIPMENT	
	FITNESS EQUIPMENT	1000	20 / 1	45 B 46	20 / 1	1000	FITNESS EQUIPMENT	
	FITNESS EQUIPMENT	1000	20 / 1	47 C 48	20 / 1	1000	FITNESS EQUIPMENT	
	FITNESS EQUIPMENT	1000	20 / 1	49 A 50	20 / 1	1000	FITNESS EQUIPMENT	
	FITNESS EQUIPMENT	1000	20 / 1	51 B 52	20 / 1	1000	FITNESS EQUIPMENT	
	FITNESS EQUIPMENT	1000	20 / 1	53 C 54	20 / 1	1000	FITNESS EQUIPMENT	
	FITNESS EQUIPMENT	360	20 / 1	55 A 56	20 / 1	1000	FITNESS EQUIPMENT	
	FITNESS EQUIPMENT	360	20 / 1	57 B 58	20 / 1	1000	FITNESS EQUIPMENT	
	FITNESS EQUIPMENT	360	20 / 1	59 C 60	20 / 1	1000	FITNESS EQUIPMENT	
	FITNESS EQUIPMENT	360	20 / 1	61 A 62	20 / 1	1000	FITNESS EQUIPMENT	
	FITNESS EQUIPMENT	360	20 / 1	63 B 64	20 / 1	1000	FITNESS EQUIPMENT	
	FITNESS EQUIPMENT	360	20 / 1	65 C 66	20 / 1	360	FITNESS EQUIPMENT	
	FITNESS EQUIPMENT	360	20 / 1	67 A 68	20 / 1	360	FITNESS EQUIPMENT	
	FITNESS EQUIPMENT	360	20 / 1	69 B 70	20 / 1	360	FITNESS EQUIPMENT	
	FITNESS EQUIPMENT	360	20 / 1	71 C 72	20 / 1	720	FITNESS EQUIPMENT	
	FITNESS EQUIPMENT	360	20 / 1	73 A 74	20 / 1	720	FITNESS EQUIPMENT	
	FITNESS EQUIPMENT	360	20 / 1	75 B 76	20 / 1	720	FITNESS EQUIPMENT	
	FITNESS EQUIPMENT	1000	20 / 1	77 C 78	20 / 1	720	FITNESS EQUIPMENT	
	VAV, BABEBOARD CONTROL	500	20 / 1	79 A 80	20 / 1	720	FITNESS EQUIPMENT	
	AP-1	46	15 / 1	81 B 82	20 / 1	1080	RECEPT RM 140	
	SPARE	0	20 / 1	83 C 84	20 / 1	0	SPARE	

PANEL LOADING SUMMARY

LOAD TYPE	PH A	PH B	PH C	TOTAL	
INCANDESCENT	0.0	0.0	0.0	0.0	kVA
INDUCTIVE LTG	0.2	0.0	0.0	0.2	kVA
RECEPTACLES	3.4	3.6	2.9	9.9	kVA
MOTORS	6.0	6.1	6.0	18.1	kVA
APPLIANCES	0.0	0.0	0.0	0.0	kVA
HEAT	0.0	0.0	0.0	0.0	kVA
COMPUTER	0.5	0.0	0.0	0.5	kVA
OTHER	0.0	0.4	0.0	0.4	kVA
NONCOINCIDENT	0.0	0.0	0.0	0.0	kVA
PEAK LOAD	0.0	0.0	0.0	0.0	kVA
TOTAL	10.1	10.1	8.9	29.0	kVA

PHASE BALANCE	A-B	B-C	C-A	PF
(%)	100	88	88	86

MIN PANEL AMPACITY 82 AMPERES

NEC DEMAND LOAD SUMMARY

LOAD TYPE	kW	POWER FACT	kVA	DEMAND FACTOR	CALCULATED LOAD
INCANDESCENT	0.0	@ 100% =	0.0	@ 125% =	0.0 kVA
INDUCTIVE LTG	0.2	@ 95% =	0.2	@ 125% =	0.3 kVA
RECEPTACLES					
FIRST 10 kVA	9.4	@ 95% =	9.9	@ 100% =	9.9 kVA
REMAINDER	0.0	@ 95% =	0.0	@ 50% =	- kVA
MOTORS					
LARGEST	0.8	@ 80% =	1.0	@ 125% =	1.3 kVA
REMAINDER	13.6	@ 80% =	17.0	@ 100% =	17.0 kVA
APPLIANCES	0.0	@ 80% =	0.0	@ 100% =	0.0 kVA
HEAT	0.0	@ 100% =	0.0	@ 125% =	0.0 kVA
COMPUTER	0.5	@ 95% =	0.5	@ 100% =	0.5 kVA
OTHER	0.3	@ 85% =	0.4	@ 100% =	0.4 kVA
NONCOINCIDEN	0.0	@ 95% =	0.0	@ 0% =	- kVA
PEAK LOAD	0.0	@ 90% =	0.0	@ 125% =	0.0 kVA
0 % SPARE	0.0	@ 90% =	0.0	@ 100% =	0.0 kVA
TOTAL	25.0 kW		29.0 kVA		29.4 kVA

Version 0615

PANEL: **LPB SEC 3** VOLTAGE: 120/208 V. 3 PH 4 W. 60 HZ TYPE: PANELBOARD MOUNTING: SEE PLAN
FED FROM: MDP PANEL COVER: (SEE SPECIFICATIONS)
N/A AMP MAIN RATED AT 80% NEUTRAL BUS: YES
MLO AMP MAIN LUGS GROUND BUS: YES ISOLATED GND: NO
225 AMP BUS NOTE: 1. [ ]
(SEE SPECIFICATIONS) BUSING 2. [ ]
(SEE FAULT SCHEDULE) SYMMETRICAL RMS AMPS 3. [ ]
PANEL SHORT CIRCUIT RATING 4. [ ]

NOTE	DESCRIPTION	CCT VA	BREAKER AMP / P	CCT PH CCT	BREAKER AMP / P	CCT VA	DESCRIPTION	NOTE
	RTU-1 RECEPT, LIGHTING	330	20 / 1	85 A 86	20 / 1	0	SPARE	
	RTU-1 CONTROLS	400	20 / 1	87 B 88	20 / 1	0	SPARE	
	SPARE	0	20 / 1	89 C 90	20 / 1	0	SPARE	
	SPARE	0	20 / 1	91 A 92	20 / 1	0	SPARE	
	SPARE	0	20 / 1	93 B 94	20 / 1	0	SPARE	
	SPARE	0	20 / 1	95 C 96	20 / 1	0	SPARE	
	SPARE	0	20 / 1	97 A 98	20 / 1	0	SPARE	
	SPARE	0	20 / 1	99 B 100	20 / 1	0	SPARE	
	SPARE	0	20 / 1	101 C 102	20 / 1	0	SPARE	
	SPARE	0	20 / 1	103 A 104	20 / 1	0	SPARE	
	SPARE	0	20 / 1	105 B 106	20 / 1	0	SPARE	
	SPARE	0	20 / 1	107 C 108	20 / 1	0	SPARE	
	SPARE	0	20 / 1	109 A 110	20 / 1	0	SPARE	
	SPARE	0	20 / 1	111 B 112	20 / 1	0	SPARE	
	SPARE	0	20 / 1	113 C 114	20 / 1	0	SPARE	
	SPARE	0	20 / 1	115 A 116	20 / 1	0	SPARE	
	SPARE	0	20 / 1	117 B 118	20 / 1	0	SPARE	
	SPARE	0	20 / 1	119 C 120	20 / 1	0	SPARE	
	SPARE	0	20 / 1	121 A 122	20 / 1	0	SPARE	
	SPARE	0	20 / 1	123 B 124	20 / 1	0	SPARE	
	SPARE	0	20 / 1	125 C 126	20 / 1	0	SPARE	

PANEL LOADING SUMMARY

LOAD TYPE	PH A	PH B	PH C	TOTAL	
INCANDESCENT	0.0	0.0	0.0	0.0	kVA
INDUCTIVE LTG	0.2	0.0	0.0	0.2	kVA
RECEPTACLES	0.2	0.0	0.0	0.2	kVA
MOTORS	0.0	0.0	0.0	0.0	kVA
APPLIANCES	0.0	0.0	0.0	0.0	kVA
HEAT	0.0	0.0	0.0	0.0	kVA
COMPUTER	0.0	0.0	0.0	0.0	kVA
OTHER	0.0	0.4	0.0	0.4	kVA
NONCOINCIDENT	0.0	0.0	0.0	0.0	kVA
PEAK LOAD	0.0	0.0	0.0	0.0	kVA
TOTAL	0.3	0.4	0.0	1.0	kVA

PHASE BALANCE	A-B	B-C	C-A	PF
(%)	57	-71	-29	100

MIN PANEL AMPACITY 2 AMPERES

NEC DEMAND LOAD SUMMARY

LOAD TYPE	kW	POWER FACT	kVA	DEMAND FACTOR	CALCULATED LOAD
INCANDESCENT	0.0	@ 100% =	0.0	@ 125% =	0.0 kVA
INDUCTIVE LTG	0.2	@ 95% =	0.2	@ 125% =	0.3 kVA
RECEPTACLES					
FIRST 10 kVA	0.2	@ 95% =	0.2	@ 100% =	0.2 kVA
REMAINDER	0.0	@ 95% =	0.0	@ 50% =	- kVA
MOTORS					
LARGEST	0.0	@ 80% =	0.0	@ 125% =	0.0 kVA
REMAINDER	0.0	@ 80% =	0.0	@ 100% =	0.0 kVA
APPLIANCES	0.0	@ 80% =	0.0	@ 100% =	0.0 kVA
HEAT	0.0	@ 100% =	0.0	@ 125% =	0.0 kVA
COMPUTER	0.0	@ 95% =	0.0	@ 100% =	0.0 kVA
OTHER	0.3	@ 85% =	0.4	@ 100% =	0.4 kVA
NONCOINCIDEN	0.0	@ 95% =	0.0	@ 0% =	- kVA
PEAK LOAD	0.0	@ 90% =	0.0	@ 125% =	0.0 kVA
0 % SPARE	0.0	@ 90% =	0.0	@ 100% =	0.0 kVA
TOTAL	1.0 kW		1.0 kVA		0.9 kVA

Version 0615

PANEL: **LVD (E)** VOLTAGE: 120/208 V. 3 PH 4 W. 60 HZ TYPE: PANELBOARD MOUNTING: SEE PLAN
FED FROM: xxxx PANEL COVER: (SEE SPECIFICATIONS)
N/A AMP MAIN RATED AT 80% NEUTRAL BUS: YES
MLO AMP MAIN LUGS GROUND BUS: YES ISOLATED GND: NO
225 AMP BUS NOTE: 1. NEW LOAD ON EXISTING BREAKER
COPPER BUSING 2. [ ]
10000 SYMMETRICAL RMS AMPS 3. [ ]
PANEL SHORT CIRCUIT RATING 4. [ ]

NOTE	DESCRIPTION	CCT VA	BREAKER AMP / P	CCT PH CCT	BREAKER AMP / P	CCT VA	DESCRIPTION	NOTE
	RM 1015	540	20 / 1	1 A 2	20 / 1	720	RM 1019	
	RM 1015	360	20 / 1	3 B 4	20 / 1	540	RM 1017, RM 1019	
	RM 1015	720	20 / 1	5 C 6	20 / 1	360	RM 1017, RM 1019	
	RECEPT IN USE	540	20 / 1	7 A 8	20 / 1	900	RM 1008, RM 1013	
	RECEPT IN USE	720	20 / 1	9 B 10	20 / 1	720	RM 1026	
	RECEPT IN USE	360	20 / 1	11 C 12	20 / 1	180	RM 1013	
	RECEPT IN USE	900	20 / 1	13 A 14	20 / 1	180	FLOOR RECEPT RM 1131	
	RM 1016	540	20 / 1	15 B 16	20 / 1	1080	RM 1016, RM 1017	
	RM 1009, RM 1012	360	20 / 1	17 C 18	20 / 1	540	RM 1017	
	RECEPT IN USE	540	20 / 1	19 A 20	20 / 1	360	RECEPT IN USE	
	RM 1131 WIREMOLD	360	20 / 1	21 B 22	20 / 1	720	RECEPT IN USE	
	RM 1131 WIREMOLD	360	20 / 1	23 C 24	20 / 1	360	RM 1013	
	RECEPT IN USE	1080	20 / 1	25 A 26	20 / 1	720	RM 1013	
	RECEPT IN USE	540	20 / 1	27 B 28	20 / 1	180	RECEPT IN USE	
	RECEPT IN USE	180	20 / 1	29 C 30	20 / 1	1080	RECEPT IN USE	
	RM 1013 FLOOR RECEPT	180	20 / 1	31 A 32	20 / 1	540	RECEPT IN USE	
	RM 1016 FLOOR DED	180	20 / 1	33 B 34	20 / 1	900	RECEPT IN USE	
	RM 1016 FLOOR DED	180	20 / 1	35 C 36	20 / 1	900	RM 1012, RM 1009	
	RECEPT IN USE	540	20 / 1	37 A 38	20 / 1	360	RECEPT IN USE	
	RECEPT IN USE	720	20 / 1	39 B 40	20 / --	360	RM 1021	
	RECEPT IN USE	900	20 / 1	41 C 42	-- / 2	540	RM 1021	
	RM 1025	360	20 / 1	43 A 44	20 / 1	720	RECEPT IN USE	
	VAV	400	20 / 1	45 B 46	20 / 1	360	RECEPT IN USE	
1	E. ENTRY DOOR OPERATOR	240	20 / 1	47 C 48	20 / 1	540	RECEPT IN USE	
	RECEPT IN USE	720	20 / 1	49 A 50	20 / 1	1220	EAST ENTRY LOUNGE	1
	RECEPT IN USE	540	30 / 1	51 B 52	20 / 1	380	E ENTRY DOOR ASSEMBLY	1
	RECEPT IN USE	360	20 / 1	53 C 54	20 / 1	900	RECEPT IN USE	
	RM 1003	540	20 / 1	55 A 56	20 / 1	180	RECEPT IN USE	
	RM 1007	720	20 / 1	57 B 58	20 / 1	540	RECEPT IN USE	
	RECEPT IN USE	360	20 / 1	59 C 60	20 / 1	540	RECEPT IN USE	
	RECEPT IN USE	180	20 / 1	61 A 62	20 / 1	180	RECEPT IN USE	
	RM 1013 PROJECTORS	500	20 / 1	63 B 64	20 / 1	540	RECEPT IN USE	
	RM 1011, RM 1005	360	20 / 1	65 C 66	20 / 1	360	RECEPT IN USE	
	RM 1009 WIREMOLD	720	20 / 1	67 A 68	20 / 1	540	RM 1012 W WALL	
	RM 1009 WIREMOLD EAST	360	20 / 1	69 B 70	20 / 1	360	RECEPT IN USE	
	RM 1009 WIREMOLD EAST	720	20 / 1	71 C 72	20 / 1	720	RECEPT IN USE	
	RM 1009 WIREMOLD WEST	360	20 / 1	73 A 74	20 / 1	720	RM 1012 N WALL	
	RM 1016	180	20 / 1	75 B 76	20 / 1	540	RM 1012 N WALL	
	RM 1013 WIREMOLD	540	20 / --	77 C 78	20 / 1	360	RECEPT IN USE	
	RM 1013 WIREMOLD EAST	540	-- / 2	79 A 80	15 / --	240	RECEPT IN USE	
	RM 1013 WIREMOLD WEST	540	20 / --	81 B 82	-- / 2	240	RECEPT IN USE	
	RM 1013 WIREMOLD	540	-- / 2	83 C 84	20 / 1	720	RM 1016	

PANEL LOADING SUMMARY

LOAD TYPE	PH A	PH B	PH C	TOTAL	
INCANDESCENT	0.0	0.0	0.0	0.0	kVA
INDUCTIVE LTG	0.0	0.0	0.0	0.0	kVA
RECEPTACLES	14.8	13.0	14.0	41.9	kVA
MOTORS	0.0	0.0	0.2	0.2	kVA
APPLIANCES	0.0	0.0	0.0	0.0	kVA
HEAT	0.0	0.0	0.0	0.0	kVA
COMPUTER	0.0	0.0	0.0	0.0	kVA
OTHER	0.5	1.1	0.0	1.6	kVA
NONCOINCIDENT	0.0	0.0	0.0	0.0	kVA
PEAK LOAD	0.0	0.0	0.0	0.0	kVA
TOTAL	15.3	14.1	14.3	43.7	kVA

PHASE BALANCE	A-B	B-C	C-A	PF
(%)	92	99	93	93

MIN PANEL AMPACITY 77 AMPERES

NEC DEMAND LOAD SUMMARY

LOAD TYPE	kW	POWER FACT	kVA	DEMAND FACTOR	CALCULATED LOAD
INCANDESCENT	0.0	@ 100% =	0.0	@ 125% =	0.0 kVA
INDUCTIVE LTG	0.0	@ 95% =	0.0	@ 125% =	0.0 kVA
RECEPTACLES					
FIRST 10 kVA	9.5	@ 95% =	10.0	@ 100% =	10.0 kVA
REMAINDER	30.3	@ 95% =	31.9	@ 50% =	16.0 kVA
MOTORS					
LARGEST	0.2	@ 80% =	0.2	@ 125% =	0.3 kVA
REMAINDER	0.0	@ 80% =	0.0	100% =	0.0 kVA
APPLIANCES	0.0	@ 80% =	0.0	@ 100% =	0.0 kVA
HEAT	0.0	@ 100% =	0.0	@ 125% =	0.0 kVA
COMPUTER	0.0	@ 95% =	0.0	@ 100% =	0.0 kVA
OTHER	1.4	@ 85% =	1.6	@ 100% =	1.6 kVA
NONCOINCIDEN	0.0	@ 95% =	0.0	@ 0% =	- - kVA
PEAK LOAD	0.0	@ 90% =	0.0	@ 125% =	0.0 kVA
0 % SPARE	0.0	@ 90% =	0.0	@ 100% =	0.0 kVA
TOTAL	41.0 kW		44.0 kVA		27.9 kVA

Version 0615

PANEL: **L2D (E)** VOLTAGE: 120/208 V. 3 PH 4 W. 60 HZ TYPE: PANELBOARD MOUNTING: SEE PLAN
FED FROM: H2D PANEL COVER: (SEE SPECIFICATIONS)
225 AMP MAIN RATED AT 80% NEUTRAL BUS: YES
N/A AMP MAIN LUGS GROUND BUS: YES ISOLATED GND: NO
400 AMP BUS NOTE: 1. NEW CIRCUIT ON EXISTING BREAKER
COPPER BUSING 2. [ ]
10000 SYMMETRICAL RMS AMPS 3. [ ]
PANEL SHORT CIRCUIT RATING 4. [ ]

NOTE	DESCRIPTION	CCT VA	BREAKER AMP / P	CCT PH CCT	BREAKER AMP / P	CCT VA	DESCRIPTION	NOTE
	VENDING	700	20 / 1	1 A 2	20 / 1	1500	LIGHTING DISPLAY	
	VENDING	700	20 / 1	3 B 4	20 / 1	200	LIGHTING DISPLAY	
	VENDING	700	20 / 1	5 C 6	20 / 1	400	LIGHTING KIOSK	
	VENDING	700	20 / 1	7 A 8	20 / 1	0	SPARE	
	RECEPT 1571	720	20 / 1	9 B 10	20 / 1	360	RECEPT	
	RECEPT 1571	720	20 / 1	11 C 12	20 / 1	1080	RECEPT MEETING RM 148	1
	RECEPT	540	20 / 1	13 A 14	20 / 1	1440	CONF ROOM RECEPT	1
	RECEPT	720	20 / 1	15 B 16	20 / 1	540	RECEPT	
	DOOR/DAMP(DOOR 1561)	700	20 / 1	17 C 18	20 / 1	900	RECEPT	
	RECEPT	360	20 / 1	19 A 20	20 / 1	360	RECEPT COFFEE BAR	
	RECEPT	360	20 / 1	21 B 22	20 / 1	700	REFRIGERATOR	
	RECEPT	360	20 / 1	23 C 24	20 / 1	1200	DISPOSAL	
	RECEPT	900	20 / 1	25 A 26	15 / 1	700	DRYER FAN	
	RECEPT	900	20 / 1	27 B 28	20 / 1	1120	RECEPT	
	RECEPT HEALTH OFFICE	900	20 / 1	29 C 30	20 / 1	1080	RECEPT	
1	GARBAGE DISPOSAL	1000	20 / 1	31 A 32	20 / 1	360	RECEPT	
1	CONF ROOM PROJECTOR	360	20 / 1	33 B 34	15 / 1	700	DOOR	
1	REFRIGERATOR	600	20 / 1	35 C 36	15 / 1	700	DOOR	
1	COUNTER TOP RECEPT	540	20 / 1	37 A 38	20 / 1	720	RECEPT	
1	KITCHEN RECEPT	360	20 / 1	39 B 40	20 / 1	600	EWC	
1	CONF ROOM SLIDING WALL	400	15 / 1	41 C 42	20 / 1	720	RECEPT	
	RECEPT PROGRAM RM	540	15 / 1	43 A 44	15 / 1	360	RECEPT/TVSS	
	BOOKSTORE BACKROOM	360	20 / 1	45 B 46	20 / 1	360	RECEPT/TVSS	
	BOOKSTORE TRACK LTG	400	20 / 1	47 C 48	15 / 1	700	EF-1/TVSS	
	BOOKSTORE RECEPT	360	20 / 1	49 A 50	20 / 1	540	RECEPT LOWER LEVEL	
	BOOKSTORE RECEPT	540	20 / 1	51 B 52	30 / --	700	ICE CREAM MACHINE	
	BOOKSTORE RECEPT	360	20 / 1	53 C 54	-- / 2	700	"	
	FITNESS FLOOR BOX	360	20 / 1	55 A 56	20 / 1	700	VENDING - BOOKSTORE	
	FITNESS FLOOR BOX	360	20 / 1	57 B 58	20 / 1	360	WIREMOLD BOOKSTORE	
	FITNESS FLOOR BOX	360	20 / 1	59 C 60	20 / 1	540	RECEPT BOOKSTORE	
	SPARE	0	20 / 1	61 A 62	20 / 1	0	SPARE	
	REACH IN COOLER	500	20 / 1	63 B 64	20 / 1	0	SPARE	
	SPARE	0	20 / 1	65 C 66	20 / 1	720	FITNESS FLOOR BOX	
	BOOKSTORE CASH WRAP	360	20 / 1	67 A 68	30 / --	700	ICE CREAM RECEPT	
	BOOKSTORE CASH WRAP	360	20 / 1	69 B 70	-- / 2	700	"	
	BOOKSTORE CASH WRAP	360	20 / 1	71 C 72	20 / 1	500	BOOKSTORE COMPUTER	
	BOOKSTORE CASH WRAP	360	20 / 1	73 A 74	50 / --	4300	DISHWASHER	
	BOOKSTORE SHELF LTG	400	20 / 1	75 B 76	-- / 2	4300	"	
	BOOKSTORE STORAGE	540	20 / 1	77 C 78	50 / --	3750	COFFEE MAKER	
	BOOKSTORE LIFT	2100	40 / --	79 A 80	-- / 2	3750	"	
	"	2100	-- / --	81 B 82	30 / --	0	SPARE	
	"	2100	-- / 3	83 C 84	-- / 2	0	"	

PANEL LOADING SUMMARY

LOAD TYPE	PH A	PH B	PH C	TOTAL	
INCANDESCENT	1.5	0.6	0.8	2.9	kVA
INDUCTIVE LTG	0.0	0.0	0.0	0.0	kVA
RECEPTACLES	8.1	8.4	8.6	25.1	kVA
MOTORS	3.8	2.8	5.1	11.7	kVA
APPLIANCES	8.8	6.9	5.1	20.7	kVA
HEAT	0.0	0.0	0.0	0.0	kVA
COMPUTER	0.0	0.0	0.5	0.5	kVA
OTHER	2.1	0.7	1.4	4.2	kVA
NONCOINCIDENT	0.0	0.0	0.0	0.0	kVA
PEAK LOAD	0.0	0.0	0.0	0.0	kVA
TOTAL	24.3	19.4	21.5	65.1	kVA

PHASE BALANCE	A-B	B-C	C-A	PF
(%)	80	90	88	88

MIN PANEL AMPACITY 166 AMPERES

NEC DEMAND LOAD SUMMARY

LOAD TYPE	kW	POWER FACT	kVA	DEMAND FACTOR	CALCULATED LOAD
INCANDESCENT	2.9	@ 100% =	2.9	@ 125% =	3.6 kVA
INDUCTIVE LTG	0.0	@ 95% =	0.0	@ 125% =	0.0 kVA
RECEPTACLES					
FIRST 10 kVA	9.5	@ 95% =	10.0	@ 100% =	10.0 kVA
REMAINDER	14.3	@ 95% =	15.1	@ 50% =	7.6 kVA
MOTORS					
LARGEST	5.0	@ 80% =	6.3	@ 125% =	7.9 kVA
REMAINDER	4.3	@ 80% =	5.4	100% =	5.4 kVA
APPLIANCES	16.6	@ 80% =	20.7	@ 100% =	20.7 kVA
HEAT	0.0	@ 100% =	0.0	@ 125% =	0.0 kVA
COMPUTER	0.5	@ 95% =	0.5	@ 100% =	0.5 kVA
OTHER	3.6	@ 85% =	4.2	@ 100% =	4.2 kVA
NONCOINCIDEN	0.0	@ 95% =	0.0	@ 0% =	- - kVA
PEAK LOAD	0.0	@ 90% =	0.0	@ 125% =	0.0 kVA
0 % SPARE	0.0	@ 90% =	0.0	@ 100% =	0.0 kVA
TOTAL	57.0 kW		65.0 kVA		59.9 kVA

Version 0615

KEY PLAN

LPA SEC 1	LPA SEC 2	LPA SEC 3	LPB SEC 1
LPB SEC 2	LPB SEC 3	LVD(E)	L2D(E)

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Issue/Revisions	Date	No.
ADDENDUM 1	11/20/15	1
ADDENDUM 2	12/4/15	2
ADDENDUM 3	12/8/15	3

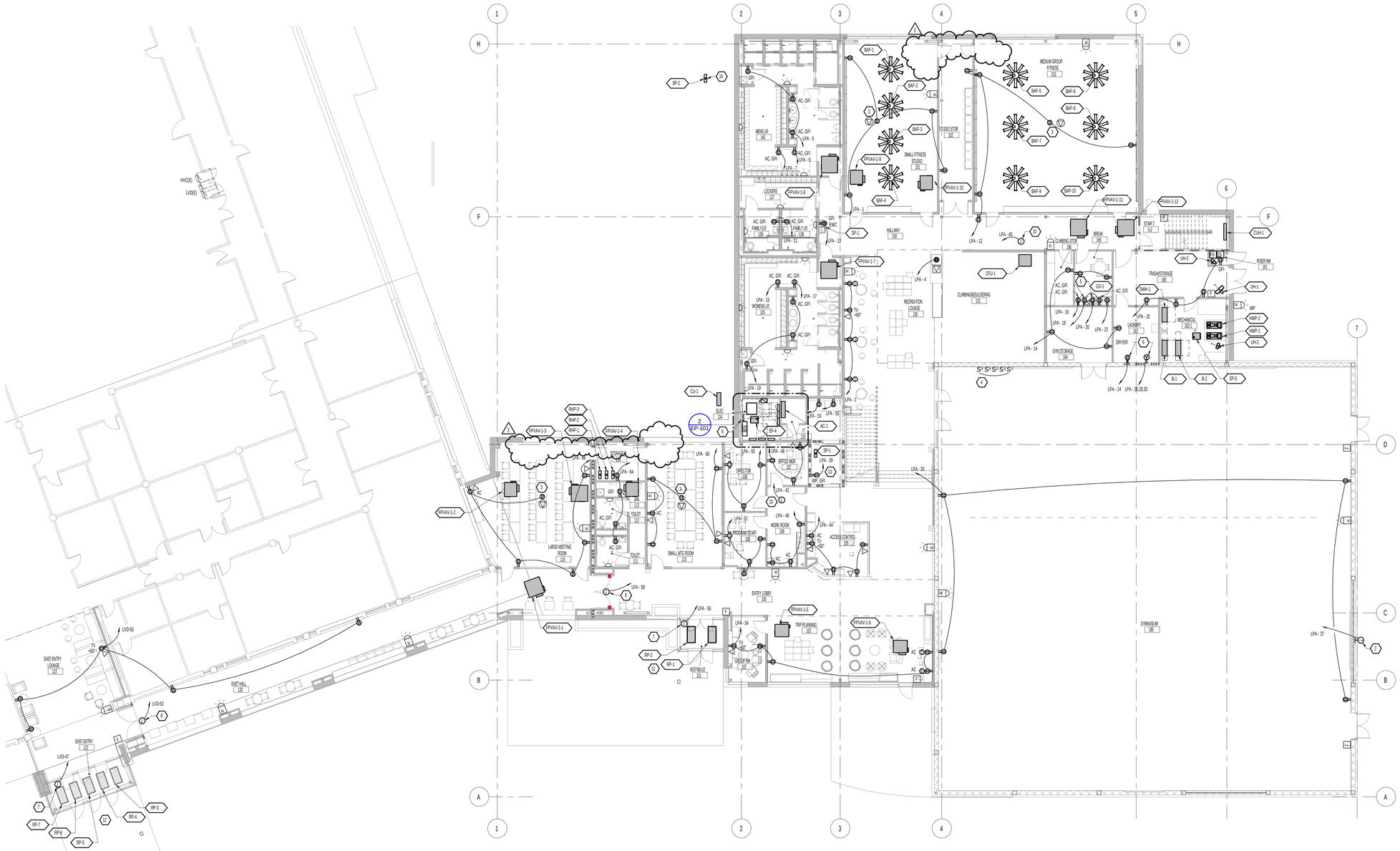
Project Information

STUDENT RECREATION CENTER
RED ROCKS COMMUNITY COLLEGE
13300 W. 6th Avenue
Lakewood, Colorado 80228

Sheet Information
Sheet Title:
ELECTRICAL SCHEDULES

Nov. 9, 2015 CONSTRUCTION DOCUMENTS
Sheet Number:
E-603

DPA Project: 15803.00



1 ELECTRICAL POWER 1ST FLOOR PLAN
SCALE: 3/32" = 1'-0"

2 ENLARGED ELECTRICAL AND IT ROOMS
SCALE: 1/4" = 1'-0"

SHEET NOTES

1. THIS DRAWING DEPICTS ANTICIPATED QUANTITIES AND LOCATIONS OF FIRE ALARM SYSTEM DEVICES FOR A FULLY DETECTED BUILDING AND IS NOT INTENDED TO ILLUSTRATE A COMPLETE, DESIGNED SYSTEM. FIRE ALARM SYSTEM CONTRACTOR SHALL FIELD INVESTIGATE, DESIGN, COORDINATE, PROGRAM, TEST, AND COMMISION THE NEW FIRE ALARM SYSTEM IN ACCORDANCE WITH ALL APPLICABLE CODES AND AHJ REGULATIONS. FIRE ALARM CONTACTOR IS RESPONSIBLE FOR ALL DEVICES DEEMED NECESSARY BY AUTHORITY HAVING JURISDICTION. COORDINATE FIRE ALARM SYSTEM MONITORING REQIREMENTS WITH OWNER.

KEY NOTES

1. NOT USED
2. CONNECTION TO IRRIGATION CONTROLLER. COORDINATE FINAL LOCATION AND REQUIREMENTS WITH IRRIGATION SYSTEM INSTALLER PRIOR TO ROUGH IN.
3. CEILING MOUNTED RECEPTACLE AND DATA OUTLET FOR CONNECTION TO PROJECTOR.
4. KEYED SWITCHES TO OPERATE BASKETBALL BACKBOARDS AND OVERHEAD DIVIDER CURTAIN. PROVIDE CONDUIT AND WIRING AS NECESSARY TO INTERLOCK WITH MOTORS ABOVE. SEE SHEET EP-102 FOR ADDITIONAL INFORMATION.
5. SWITCHED RECEPTACLE UNDER SINK FOR CONNECTION TO GARBAGE DISPOSAL.
6. PROVIDE 208V, 15A, 3P, 3W + G PLUG FOR CONNECTION TO WASHING MACHINE. COORDINATE PLUG CONFIGURATION WITH WASHING MACHINE.
7. CONNECTION TO ADA DOOR OPERATOR. COORDINATE CONNECTION AND CONTROLS WITH OPERATOR.
8. CONNECTION TO INTEGRATED METAL DOOR ASSEMBLY. COORDINATE REQUIREMENTS WITH DOOR INSTALL PRIOR TO ROUGH-IN.
9. K-BRACING AGAINST WALL. REFER TO STRUCTURAL DRAWINGS FOR MORE INFORMATION.
10. CONNECTION FOR 1ST LEVEL 120V MOTORIZED DAMPERS. CONNECT UP TO TEN MOTORIZED DAMPERS TO CIRCUIT INDICATED. REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATION.
11. PROVIDE DEDICATED 208V SINGLE PHASE 20 AMP CIRCUIT WITH L6-30 RECEPTACLE.
12. PROVIDE DISCONNECT FOR CONNECTION TO RADIANT PANELS. SEE MECHANICAL EQUIPMENT SCHEDULE FOR MORE INFORMATION.
13. PROVIDE 120V CIRCUIT FOR ELEVATOR PIT GFI AND LIGHTING. REFER TO ELEVATOR DETAIL FOR MORE INFORMATION.
14. PROVIDE 208V 3 PHASE CIRCUIT FOR SUMP PUMP. SUMP PUMP CONTROL PANEL TO BE LOCATED IN MEN'S LOCKER ROOM 140 MAINTENANCE CLOSET.

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RMH Group project number 19231

Consultant

Issue/Revisions	Date	No.
ADDENDUM 2	12/4/15	2
ADDENDUM 3	12/9/15	3

Project Information

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Sheet Information

Sheet Title:
ELECTRICAL POWER 1ST FLOOR PLAN

Nov. 9, 2015 CONSTRUCTION DOCUMENTS

Sheet Number:

EP-101

DPA Project: 15803.00

12/9/2015 9:51:29 AM

SECTION 26 0800 – ELECTRICAL TESTING

PART 1 - GENERAL

1.1 PROVISIONS

A. The drawings and general provisions of the contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this section.

1.2 TEST REPORT SUBMITTALS

A. Prior to Testing: The Testing Firm shall develop and provide a detailed "Testing Submittal" for review and approval by the engineer four weeks before any testing is required to be performed. The submittal shall include a complete resume and statement of qualifications from the testing firm detailing the following:

1. Company History
2. Equipment Calibration Program
3. List of Equipment to be tested
4. List of Functional Tests to be performed to verify proper operation of systems.
5. Specific Test Procedures to be utilized on this project, along with the applicable test values to determine pass or fail.
6. Sample test data recording forms that are applicable to this project.
7. NETA Certificate
8. Submit a sample coordination study from a similar project. Submit sub-consultant qualifications if fault analysis and coordination study is not directly performed by Testing Firm.
9. Submit a sample Arc Flash study from a similar project. Submit sub-consultant qualifications if Arc Flash study is not directly performed by Testing Firm.

B. Final Report:

1. Submit results of testing for each system to the Engineer when complete in accordance with Division 1 and Section 5.4 of NETA ATS-2009.
2. Submit final coordination study and summary of dialed in settings of overcurrent protective devices. Final report, coordination curves and device settings summary to reflect "as installed" conditions.
3. Submit Arc Flash Hazard study including flash hazard boundaries, incident energy and required PPE for all electrical equipment.

4. Include Final Report in Operation & Maintenance Manuals

5. Report shall conform to the requirements of NETA ATS-2009 Section 5.4

1.3 SCOPE/DIVISION OF RESPONSIBILITY

A. The Contractor shall perform routine insulation resistance, continuity, phase rotation, motor rotation, and bolt/lug torque tests for all distribution and utilization equipment prior to any tests performed by a separate testing contractor.

B. The Contractor shall test all lighting and utilization equipment, services, and all circuits for proper operating conditions prior to acceptance testing.

C. The Contractor shall perform visual and mechanical inspections, verifying that the equipment nameplate information meets the intent of the drawings and specifications.

D. The Contractor shall engage and pay for the services of a recognized corporately and financially independent Testing Firm for the purpose of performing inspections and tests as herein specified. The Testing Firm shall coordinate testing responsibilities and scheduling with equipment manufacturer's site test and startup field technicians where manufacturer's site presence is required in other specification sections.

E. The protective device coordination study shall be performed by the Testing Firm or their contracted agent. The studies shall include all portions of the electrical distribution system from the normal and alternate sources of power throughout the low-voltage (120/208V, three-phase, four-wire) distribution system. Normal system operating method, alternate operation, and operations which could result in maximum fault conditions shall be thoroughly covered in the study.

F. The Testing Firm shall be responsible for dialing in all final settings and adjustments on protective devices and transformer tap settings after review and acceptance of the coordination study by the Engineer.

G. An itemized description of equipment to be inspected and tested by the Testing Firm is as follows:

1. Main distribution switchgear, and emergency/standby switchgear.

2. Distribution switchboards rated 800A and larger.

3. Distribution panelboards rated 400A and larger.

4. Transformers (225 kVA and larger).

5. Cables and Wiring: Test all cables and wiring rated to carry 200 amps and above at 480 volts, and 400 amps and above at 208 volts.

6. Grounding system.

7. LV Circuit Breakers (applies to all power breakers and molded case breakers 225A and above)

8. Metering

1.4 TEST EQUIPMENT

A. Test equipment shall comply with Section 5.2 of NETA ATS-2009.

B. Test instrument calibration shall comply with Section 5.3 of NETA ATS-2009.

1.5 SAFETY AND PRECAUTIONS

A. Safety practices shall include, but are not limited to, the following requirements:

1. Section 5.1 of NETA ATS-2009.

2. Occupational Safety and Health Act.

3. Accident Prevention Manual for Industrial Operations, National Safety Council

4. Applicable state and local safety operating procedures

5. Owner's safety practices

6. National Fire Protection Association - NFPA 70E

7. American National Standards for Personnel Protection

8. ANSI/IEEE C2, National Electrical Safety Code

B. All pre-functional tests shall be performed with apparatus de-energized. Exceptions must be thoroughly reviewed to identify safety hazards and devise adequate safeguards.

C. The Testing Firm shall coordinate with the Contractor's safety representative on the project to supervise the testing operations with respect to safety.

1.6 QUALIFICATIONS OF TESTING FIRM

A. The Testing Firm shall be a corporately and financially independent testing organization which can function as an unbiased testing authority, professionally independent of the manufacturers, suppliers, and installers of equipment or systems evaluated by the Testing Firm.

B. The Testing Firm shall be regularly engaged in the testing of electrical equipment devices, installations, and systems.

C. The Testing organization shall use technicians who are regularly employed for testing services.

D. An organization having a “Full Membership” classification issued by the International Electrical Testing Association meets the above criteria.

E. The testing organization shall submit appropriate documentation to demonstrate that it satisfactorily complies with these requirements.

F. Testing personnel shall comply with the requirements of Section 3.2 of NETA ATS-2009.

1.7 APPLICABLE CODES, STANDARDS, AND REFERENCES

A. All inspections and tests shall be in accordance with the following codes and standards except as provided otherwise herein:

1. National Electrical Manufacturer's Association - NEMA

2. American Society for Testing and Materials - ASTM

3. Institute of Electrical and Electronic Engineers - IEEE

4. InterNational Electrical Testing Association - NETA Acceptance Testing Specifications - ATS-2009

5. American National Standards Institute - ANSI C2: National Electrical Safety Code

6. Codes and ordinances of the State, County, and City

7. Insulated Cable Engineers Association - ICEA

8. Association of Edison Illuminating Companies - AEIC

9. Occupational Safety and Health Administration - OSHA

10. National Fire Protection Association - NFPA

a. ANSI/NFPA 70: National Electrical Code
b. ANSI/NFPA 70B: Electrical Equipment Maintenance
c. NFPA 70E: Electrical Safety Requirements for Employee Workplaces
d. ANSI/NFPA 780: Lightning Protection Code
e. ANSI/NFPA 101: Life Safety Code

B. All inspections and tests shall utilize the following references:

1. Project design specifications

2. Project design drawings

3. Manufacturer's instruction manuals applicable to each particular apparatus

PART 2 – SHORT CIRCUIT AND PROJECTIVE DEVICE COORDINATION STUDY

2.1 SHORT-CIRCUIT STUDY

A. The study shall be in accordance with applicable ANSI and IEEE Standards and Section 6.1 of NETA ATS-2009 and be performed by the testing firm under the supervision of a professional electrical engineer. If possible, this study shall be performed on the latest version of SKM DAPPER software.

B. A short circuit study has been performed by the Engineer to determine the AIC ratings of equipment. A more detailed study shall be performed using ratings, data etc of as installed equipment for verification of the preliminary study and for use in the coordination and other studies.

2.4 ARC FLASH HAZARD ANALYSIS

A. Using the calculated available short circuit, determine the following:

1. Calculate the flash protection boundary.

2. Calculate the arc-flash incident energy.

3. Provide necessary flash protection boundary signage and warning labels for switchgear compartments to comply with NFPA 70E.

4. Determine the required personal protective equipment for personnel working on or near energized conductors or components.

5. Generate Work Permits per the requirements of NFPA 70E for use by the Owner’s facility maintenance personnel.

PART 3 - COMPONENT INSPECTION AND TEST PROCEDURES

3.1 ELECTRICAL TESTS

A. The recommended electrical equipment tests and procedures specified in NETA ATS 2009 shall be performed on electrical equipment within the scope of this project including any exceptions or modifications noted below.

1. Switchgear and Switchboard Assemblies: Per NETA ATS 2009 Section 7.1 2.

2. Transformers, Dry Type, Air Cooled, Low Voltage, Small (225KVA to 500KVA): Per NETA ATS 2009 Section 7.2.1.1

3. Transformers, Liquid Filled: Per NETA ATS 2009 Section 7.2.2

4. Cables, Low Voltage, 600V Maximum: Per NETA ATS 2009 Section 7.3.2

5. Cables, Medium and High Voltage: Per NETA ATS 2009 Section 7.3.3

END OF SECTION 26 08 00

DRAWING LIST:

Sheet Number	Sheet Name
TT-000	TELECOM SYMBOLS, NOTES AND ABBREVIATIONS
TT-101	TELECOM LEVEL 1 FLOOR PLAN
TT-102	TELECOM LEVEL 2 FLOOR PLAN
TT-103	TELECOM LEVEL 1 BACKFILL FLOOR PLAN
TT-151	TELECOM LEVEL 1 RCP
TT-152	TELECOM LEVEL 2 RCP
TT-200	TELECOM ENLARGED PLANS
TT-300	TELECOM RISERS DIAGRAM
TT-400	TELECOM DETAILS
TT-401	TELECOM DETAILS

ABBREVIATIONS:

AFF	-	ABOVE FINISHED FLOOR
AV	-	AUDIOVISUAL
C	-	CONDUIT
CAT-3	-	TIA/EIA CATEGORY 3 RATED
CAT-5E	-	TIA/EIA CATEGORY 5e RATED
CAT-6	-	TIA/EIA CATEGORY 6 RATED
CLG	-	CEILING
COAX	-	COAXIAL CABLE
CP	-	CONSOLIDATION POINT
F.O.	-	FIBER OPTIC
GND	-	GROUND
IC	-	INTERMEDIATE CROSS-CONNECT
I.D.	-	INSIDE DIAMETER
IDF	-	INTERMEDIATE DISTRIBUTION FRAME
J-BOX	-	JUNCTION BOX
LAN	-	LOCAL AREA NETWORK
MC	-	MAIN CROSS-CONNECT
MDF	-	MAIN DISTRIBUTION FRAME
MH	-	MANHOLE
MM	-	MULTIMODE
MTER	-	MAIN TELECOMMUNICATIONS EQUIPMENT ROOM
NIC	-	NOT IN CONTRACT
NTS	-	NOT TO SCALE
O.D.	-	OUTSIDE DIAMETER
OFE	-	OWNER FURNISHED EQUIPMENT
OSP	-	OUTSIDE PLANT
P.P.	-	PATCH PANEL
PR	-	PAIR
PB	-	PULLBOX
PBX	-	PRIVATE BRANCH EXCHANGE
RW	-	RACEWAY
SM	-	SINGLE MODE
ST	-	STRAND
STP	-	SHIELDED TWISTED PAIR
TEMP	-	TEMPORARY
TGB	-	TELECOMMUNICATIONS GROUND BAR
TR	-	TELECOMMUNICATIONS ROOM
TSER	-	TELECOMMUNICATIONS SERVICE ENTRANCE ROOM
TYP	-	TYPICAL
U.O.N.	-	UNLESS OTHERWISE NOTED
UPS	-	UNINTERRUPTIBLE POWER SUPPLY
UTP	-	UNSHIELDED TWISTED PAIR
VOIP	-	VOICE OVER INTERNET PROTOCOL
WAN	-	WIDE AREA NETWORK
WAP	-	WIRELESS ACCESS POINT
W.M.O.	-	WIRE MANAGEMENT
WP	-	WATERPROOF
WS	-	WORKSTATION
WW	-	WIREWAY

SYMBOLS

#	WALL MOUNTED SINGLE DATA OUTLET (#) CATEGORY 6A CABLES TO THE DESIGNATED TECHNOLOGY ROOM PROVIDE 4" BOX W/1-GANG OPENING AND 1" CONDUIT FROM THE OUTLET TO THE NEAREST CABLE TRAY OR TR.
W	WALL MOUNTED SINGLE VOICE OUTLET (1) CATEGORY 6A CABLES TO THE DESIGNATED TECHNOLOGY ROOM PROVIDE 4" BOX W/1-GANG OPENING AND 1" CONDUIT FROM THE OUTLET TO THE NEAREST CABLE TRAY OR TR.
CAM	POE SECURITY CAMERA OUTLET (1) CATEGORY 6A CABLES TO THE DESIGNATED TECHNOLOGY ROOM PROVIDE 1" CONDUIT FROM THE OUTLET TO THE NEAREST CABLE TRAY OR TR. REFER TO SECURITY DRAWINGS FOR MOUNTING HEIGHT AND EXACT LOCATION.
AV	WALL MOUNTED SINGLE DATA OUTLET (1) CATEGORY 6A CABLES TO THE DESIGNATED TECHNOLOGY ROOM PROVIDE 4" BOX W/1-GANG OPENING AND 1" CONDUIT FROM THE OUTLET TO THE NEAREST CABLE TRAY OR TR. COORDINATE EXACT LOCATON WITH AV (TA SERIES) DRAWINGS.
WAP	CEILING MOUNTED WAP DATA OUTLET (1) CATEGORY 6A CABLE TO THE DESIGNATED TECHNOLOGY ROOM PROVIDE SINGLE-GANG BACK BOX AND 1" CONDUIT FROM THE OUTLET TO THE NEAREST CABLE TRAY OR TR.
AV	CEILING MOUNTED AV DATA OUTLET (1) CATEGORY 6A CABLES TO THE DESIGNATED TECHNOLOGY ROOM PROVIDE SINGLE-GANG BACK BOX AND 1" CONDUIT FROM THE OUTLET TO THE NEAREST CABLE TRAY OR TR. COORDINATE EXACT LOCATON WITH AV (TA SERIES) DRAWINGS.
#	FLOOR MOUNTED SINGLE DATA OUTLET (#) CATEGORY 6A CABLE TO THE DESIGNATED TECHNOLOGY ROOM PROVIDE SINGLE-GANG FLOOR BOX AND 2" CONDUIT FROM THE OUTLET TO THE NEAREST CABLE TRAY OR TR.
1 / TXXX	DRAWING NUMBER/DETAIL CALLOUT

SYMBOLS

GENERAL NOTES

1. REFER TO SPECIFICATION SECTION 27 10 00 FOR INSTALLATION INSTRUCTIONS OF FLOORBOXES, JUNCTION BOXES, PLYWOOD, GROUNDING CONDUCTORS, BUSBARS, CONDUITS, ETC.

2. INSTALL FIRESTOP TO ALL SLAB AND WALL PENETRATIONS PROVIDED FOR THE INSTALLATION OF TELECOMMUNICATIONS CABLE AS REQUIRED TO MAINTAIN FIRE RATING OF SLAB OR WALL. REVIEW ARCHITECT'S PLANS FOR PARTITION TYPES.

CABLING NOTES

1. PROVIDE IDENTIFICATION LABELS FOR ALL TELECOMMUNICATIONS CABLES AT BOTH ENDS.

2. PROVIDE DESIGNATION LABELS FOR ALL TERMINATION BLOCKS, PATCH PANELS, AND WORKSTATION OUTLET FACEPLATES.

3. COORDINATE WALL BOX LOCATIONS AND DIMENSIONS WITH ARCHITECTURAL AND ELECTRICAL PLANS.

4. COORDINATE WITH ELECTRICAL DRAWINGS FOR LOCATION OF ALL TELECOMMUNICATIONS OUTLETS.

5. INSTALL CONDUIT AND LADDER RACK FOR TELECOMMUNICATIONS WIRING TO MAINTAIN A MINIMUM OF 5" SEPARATION FROM FLUORESCENT LIGHTING.

6. PROVIDE CABLE STRAPS NO GREATER THAN 5' APART TO SUPPORT CABLES WHERE NO CABLE TRAYS AND CONDUITS ARE PROVIDED.

7. INSTALL EACH CABLE SET INDICATED BY THE SYMBOLS LIST FROM THE OUTLET LOCATION BACK TO THE RESPECTIVE SERVING TELECOM ROOM.

8. IF CONFLICTS ARE FOUND BETWEEN THE TELECOMMUNICATIONS DRAWINGS AND ANY OTHER DRAWINGS ASSOCIATED WITH THE PROJECT, NOTIFY THE ARCHITECT AT ONCE AND HAVE LOCATION VERIFIED BEFORE OUTLETS ARE INSTALLED. ANY REASONABLE CHANGE IN LOCATION OF OUTLETS PRIOR TO ROUGHING SHALL NOT INVOLVE ADDITIONAL EXPENSE TO THE OWNER. THE TERM "REASONABLE" SHALL BE INTERPRETED AS MOVING OUTLET LOCATIONS A MAXIMUM OF 10' IN ANY DIRECTION FROM THE LOCATION INDICATED ON THE DRAWINGS.

PATHWAY NOTES

1. COORDINATE INSTALLATION OF CONDUITS AND CABLE TRAYS WITH OTHER COMPONENTS INSTALLED WITHIN CEILING. PREPARE SHOP DRAWINGS TO DEMONSTRATE AND ENSURE PROPER INSTALLATION OF ALL COMPONENTS.

2. MAINTAIN MINIMUM BEND RADIUS OF 10X O.D. FOR CONDUITS GREATER THAN 2" DIAMETER. MAINTAIN MINIMUM BEND RADIUS OF 6X O.D. FOR CONDUITS EQUAL TO OR LESS THAN 2" DIAMETER.

3. PROVIDE PULL BOXES (SIZE AS NOTED) AFTER EVERY 30m OF RUN OR AFTER EVERY 180-DEGREES OF BEND.

4. DO NOT INSTALL PULL BOXES IN LIEU OF A BEND.

5. REAM AND BUSH THE ENDS OF ALL CONDUITS.

6. PROVIDE AND LEAVE IN PLACE A PULL STRING IN EACH CONDUIT.

7. STUB UP CONDUIT SLEEVES THROUGH SLABS 3" ABOVE FINISHED FLOORS.

8. PROVIDE HANGERS, ANCHORS, MOUNTING HARDWARE, GROUND LUGS AND STRAPS AS REQUIRED TO ENSURE PROPER INSTALLATION OF PATHWAY COMPONENTS. INSTALL ALL COMPONENTS AS PER MANUFACTURERS RECOMMENDATIONS AND PER ALL APPLICABLE CODES.

9. GROUND ALL CONDUITS AND LADDER RACK AS PER MANUFACTURERS' RECOMMENDATIONS AND PER ALL APPLICABLE CODES.

10. PROVIDE AT ALL LADDER RACK AND CABLE TRAY LOCATIONS: RUNWAY DROPOFFS, SPLICE HARDWARE, GROUND STRAPS, THERMAL EXPANSION PLATES, TERMINATION KITS, END SUPPORT KITS AND CEILING SUPPORT HARDWARE.

11. PROVIDE FOR ALL BASKET TYPE CABLE TRAY LOCATIONS; CONNECTION HARDWARE, GROUND STRAPS, THERMAL EXPANSION PLATES, SUPPORT BRACKETS AND CEILING SUPPORT HARDWARE.

12. REFER TO DISTRIBUTION PLANS FOR REQUIREMENTS FOR JUNCTION BOX AND CONDUITS TO SUPPORT WORKSTATION OUTLETS.

13. WHERE CABLE IS RUN ABOVE NON-ACCESSIBLE (I.E. GYPSUM BOARD) CEILING CONSTRUCTION, CONDUIT AND PULLBOXES MUST BE INSTALLED TO PROPERLY ROUTE CABLE.

14. PROVIDE J-HOOKS AND CABLE STRAPS TO SUPPORT CABLE ABOVE ACCESSIBLE CEILING CONSTRUCTION, EXCEPT IN AREAS WHERE CABLE TRAY OR CONDUIT IS INDICATED.

IDENTIFICATION

1. CABLE ADMINISTRATION:

A. PROPERLY TAG ALL CABLES, RECEPTACLES, CONNECTION BLOCKS AND PATCH PANELS.

B. REPORT ANY CABLE THAT EXCEEDS 75m TO THE DESIGN TEAM, THE CABLE SHALL BE CLEARLY MARKED WITH RED TAPE AT BOTH ENDS OF EACH CABLE INDICATING THE EXACT CABLE LENGTH AND NOTED IN THE REQUIRED AS-BUILT LABEL REPORT.

C. PRIOR TO SYSTEM ACCEPTANCE, THE CONTRACTOR SHALL SUBMIT AN AS-BUILT LABEL REPORT PROVIDING THE ROOM NUMBERS AND CABLE LENGTHS FOR EACH OF THE INSTALLED CABLES.

2. LABEL REQUIREMENTS:

A. PROVIDE WHITE LABEL WITH TYPEWRITTEN LEGIBLE CHARACTERS. PRINTED WITH NON-SMEAR TYPE INK. HANDWRITTEN LABELS ARE NOT PERMITTED.

B. PROVIDE LABELS WITH A SELF ADHESIVE BACKING.

C. PROVIDE LABELS FOR CABLES WITH PROTECTIVE WRAP-AROUND PLASTIC TRANSPARENT COVER WHICH WILL SERVE TO PROTECT THE INK FROM SMEARING AND SECURE THE LABEL TO THE CABLE.

D. PROVIDE LABELS FOR CABLES WIDE ENOUGH FOR 23 CHARACTERS IN A SINGLE ROW.

E. RISER AND TIE CABLES JACKETS SHALL BE LABELED WITHIN EACH TECHNOLOGY ROOM AND AT 15m INTERVALS OUTSIDE TECHNOLOGY ROOMS ABOVE CEILINGS.

DAVIS PARTNERSHIP ARCHITECTS

Denver | 2301 Blake Street, Suite 100 Denver, CO 80205 303.861.8555

Consultant

SM&W SHEN MILSOM WILKE

Issue/Revisions	Date	No.
ADDENDUM 02	12.04.2015	2
ADDENDUM 03	12.09.2015	3

Project Information

STUDENT RECREATION CENTER
RED ROCKS COMMUNITY COLLEGE
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Lakewood, Colorado 80228

Sheet Information

Sheet Title:
TELECOM SYMBOLS, NOTES AND ABBREVIATIONS

Nov. 9, 2015 CONSTRUCTION DOCUMENTS

Sheet Number:

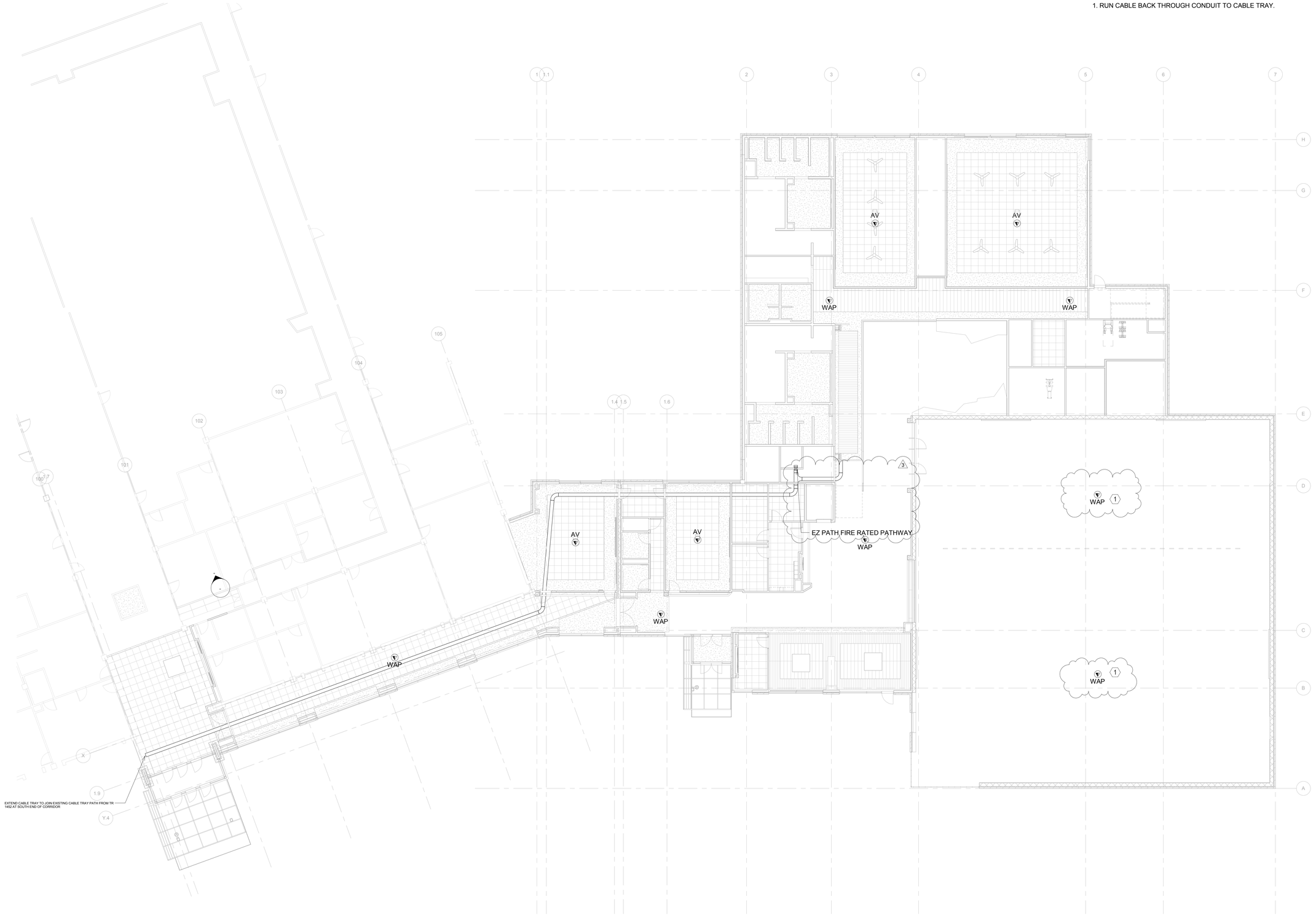
TT-000

DPA Project: 15803.00

12/9/2015 10:44:23 AM

TELECOM RCP KEYED NOTES:

1. RUN CABLE BACK THROUGH CONDUIT TO CABLE TRAY.



1 LEVEL 1 TELECOM RCP
3/32" = 1'-0"

12/9/2015 10:44:27 AM

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Issue/Revisions	Date	No.
ADDENDUM 03	12.09.2015	3

Project Information

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Sheet Information

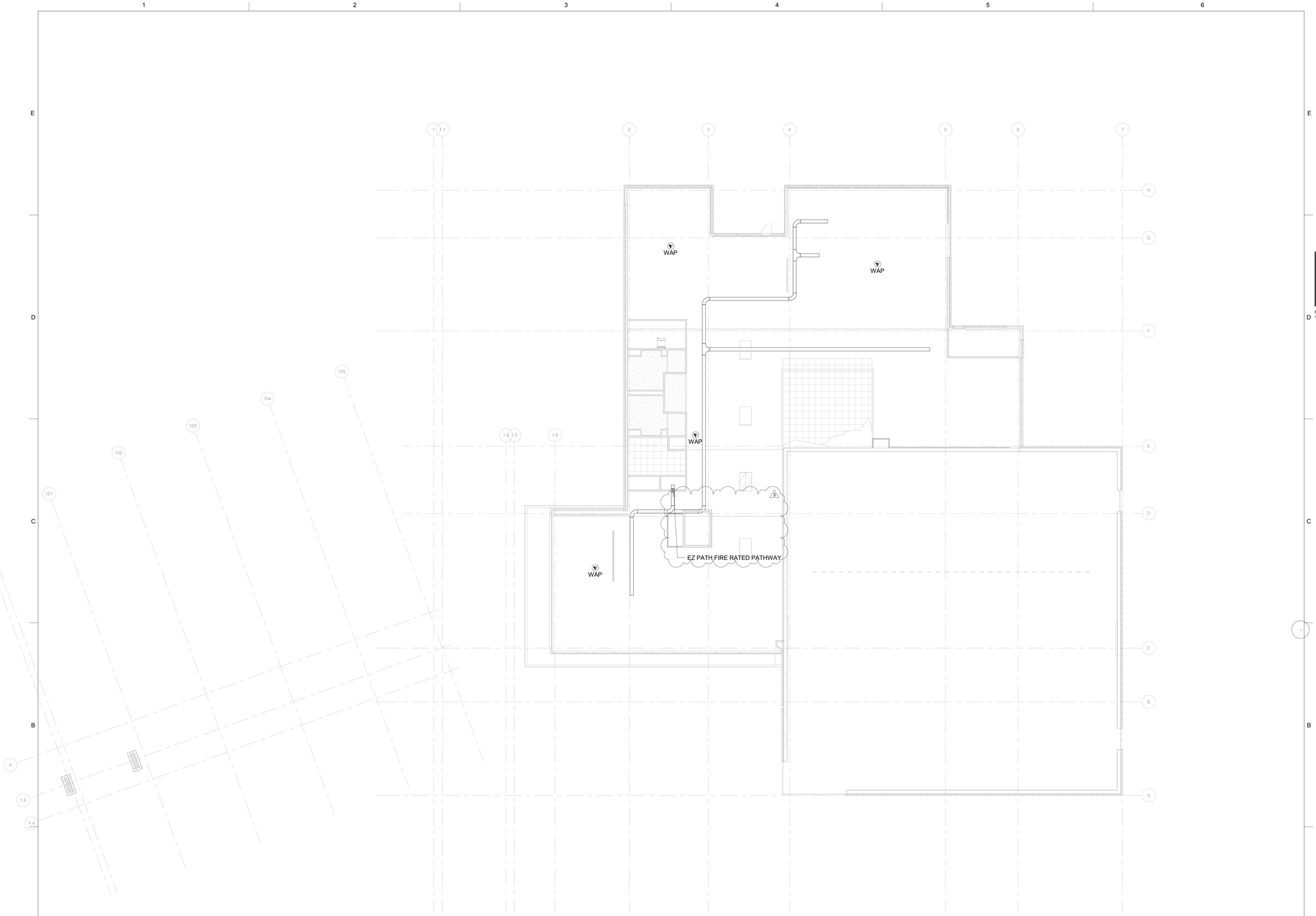
Sheet Title:
TELECOM LEVEL 1 RCP

CONSTRUCTION DOCUMENTS
Nov. 9, 2015

Sheet Number:

TT-151

DPA Project: 15803.00



1 LEVEL 2 TELECOM RCP
3/32" = 1'-0"

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Issue/Revisions	Date	No.
ADDENDUM 03	12.09.2015	3

Project Information

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Sheet Information

Sheet Title:
TELECOM LEVEL 2 RCP

Nov. 9, 2015 CONSTRUCTION DOCUMENTS

Sheet Number:

TT-152

DPA Project: 15803.00

12/9/2015 10:44:27 AM

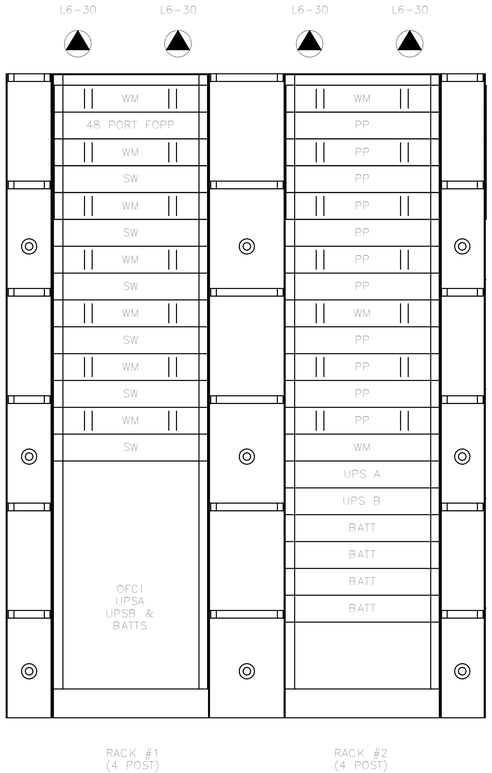
TELECOM ENLARGED PLAN GENERAL NOTES:

1. POWER TO THE EQUIPMENT IN THE MDF WILL REQUIRE TWO SEPERATE REDUNDANT POWER SOURCES

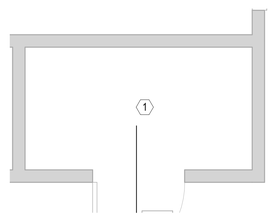
3

TELECOM ENLARGED KEYNOTES	
1	IDF ROOM SHALL BE USED AS PULL THRU LOCATION FOR CABLING FROM MDF BELOW TO DISTRIBUTE TO SECOND LEVEL

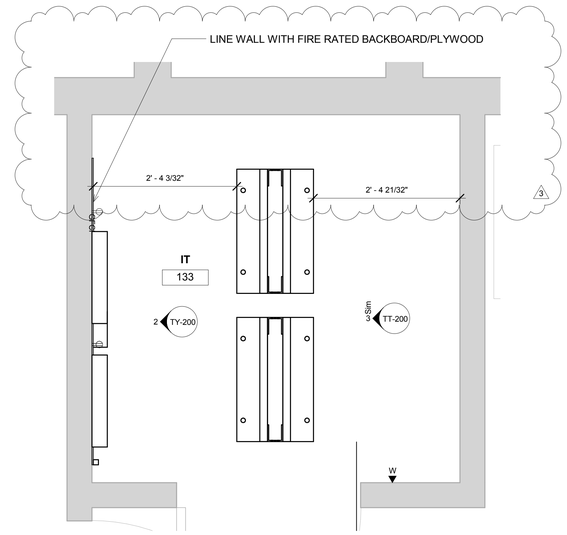
NOTE: FINAL EQUIPMENT LAYOUT SHOULD BE COORDINATED WITH OWNER



3 TELECOM RACK ELEVATION
1 1/2" = 1'-0"



2 ENLARGED TELECOM IDF ROOM PLAN
1/2" = 1'-0"



1 ENLARGED TELECOM MDF ROOM PLAN
1" = 1'-0"

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Issue/Revisions

Issue/Revisions	Date	No.
ADDENDUM 03	12.09.2015	3

Project Information

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Lakewood, Colorado 80228

Sheet Information

Sheet Title:
TELECOM
ENLARGED PLANS

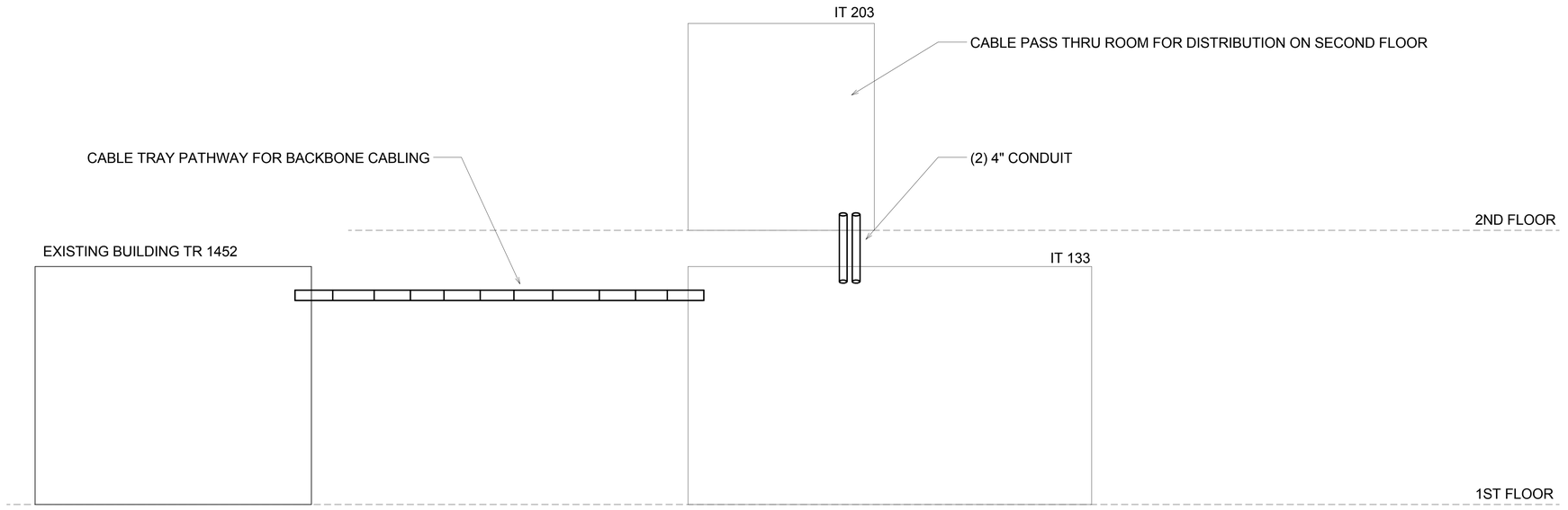
CONSTRUCTION DOCUMENTS
Nov. 9, 2015

Sheet Number:

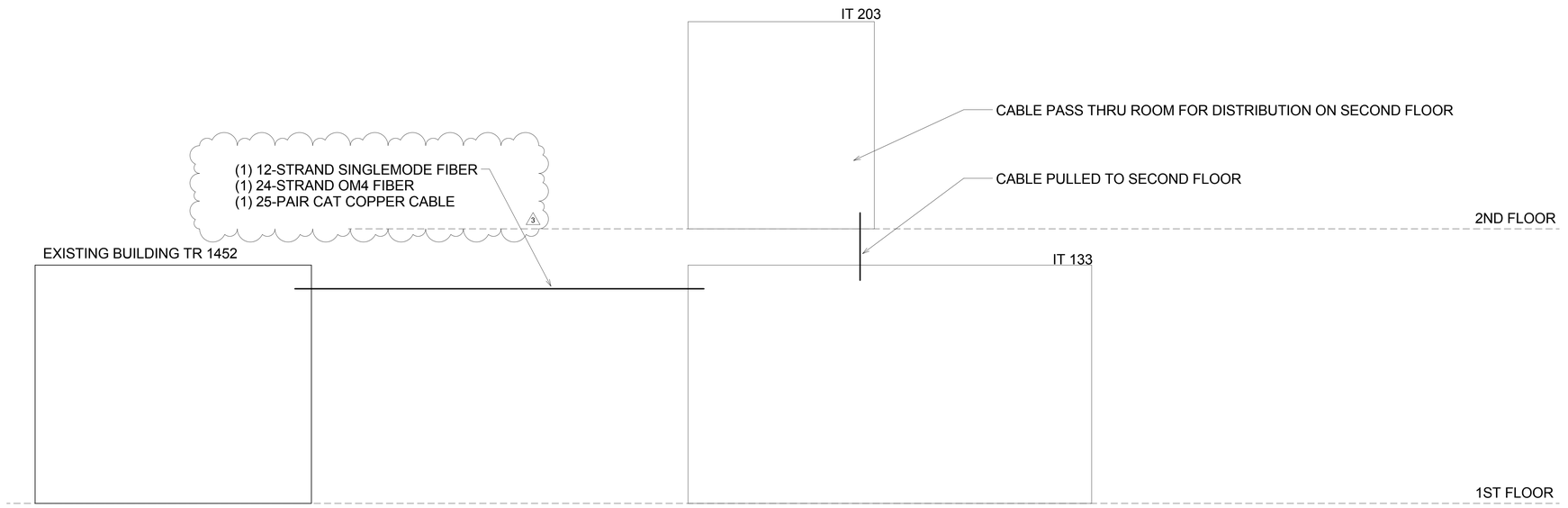
TT-200

DPA Project: 15803.00

12/9/2015 11:06:39 AM



CONDUIT RISER DIAGRAM



CABLE RISER DIAGRAM

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Issue/Revisions	Date	No.
ADDENDUM 03	12.09.2015	3

Project Information

STUDENT RECREATION CENTER
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Lakewood, Colorado 80228

Sheet Information

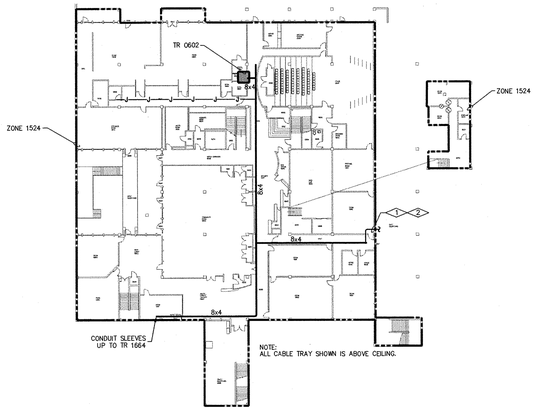
Sheet Title:
TELECOM RISERS DIAGRAM

CONSTRUCTION DOCUMENTS
Nov. 9, 2015
Sheet Number:

TT-300

DPA Project: 15803.00

12/9/2015 10:50:07 AM



BASEMENT AND SUB-BASEMENT LEVELS TECHNOLOGY ZONING AND MAJOR PATHWAY PLANS
SCALE: 1/32"=1'-0"

GENERAL NOTES:

1. WORK INCLUDED IN THE CONTRACT IS DENOTED IN BOLD. EXISTING CONDITIONS TO REMAIN ARE DENOTED LIGHTLY.
2. PROTECT STRUCTURE AND OWNER EQUIPMENT FROM DAMAGE. IMMEDIATELY REPLACE OR REPAIR, TO ORIGINAL CONDITION, DAMAGE CAUSED BY THE CONTRACTOR WHETHER EQUIPMENT APPEARS TO BE CURRENTLY IN USE OR NOT, UNLESS WRITTEN AUTHORIZATION FROM THE OWNER INDICATED OTHERWISE. PREPARE LISTING OF ALL EXISTING DAMAGED ITEMS AND SUBMIT TO OWNER PRIOR TO BEGINNING WORK.
3. INSTALL CONDUIT CONCEALED IN FINISHED AREAS UNLESS OTHERWISE NOTED. PAINT EXPOSED CONDUIT TO MATCH EXISTING FINISHES WITHIN THE SURROUNDING AREA.
4. DO NOT ROUTE CONDUIT WITHIN STRUCTURAL OR TOPPING SLABS OF FLOORS UNLESS SPECIFICALLY NOTED OTHERWISE AND WRITTEN APPROVAL IS OBTAINED FROM THE STRUCTURAL ENGINEER.
5. FIRE SEAL ALL FIRE RATED WALL AND FLOOR PENETRATIONS. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE RATED WALLS.
6. A DETAILED WRITTEN METHOD OF PROCEDURE IS REQUIRED WHEN A CONSTRUCTION ACTIVITY OR AN OUTAGE AFFECTS THE SAFETY OF OCCUPANTS, TELEPHONE/DATA/FIRE ALARM EQUIPMENT OR COMPONENTS OF ANY SYSTEM WHICH SUPPORTS THIS EQUIPMENT OR ESSENTIALLY AFFECTS THE BUILDING MANAGEMENT, OPERATIONS OR SECURITY. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
7. EXISTING INFORMATION SHOWN ON THE DRAWINGS HAS BEEN TAKEN FROM OWNER FURNISHED DRAWINGS AND/OR LIMITED FIELD OBSERVATIONS. CATOR, RUMA & ASSOCIATES IS NOT RESPONSIBLE FOR THE ACCURACY OF ANY INFORMATION OR THE ADEQUACY, SAFETY AND CONFORMANCE TO CURRENT PREVAILING CODES OF ANY WORK SHOWN AS EXISTING ON THESE DRAWINGS.

TECHNOLOGY PLAN NOTES:

1. USE EXISTING CONDUIT AND BACK BOXES AT ALL LOCATIONS UNLESS DEVICES LOCATION IS NEW.
2. PROVIDE 4" SQUARE OUTLET BOX AND SINGLE GANG MUD RING FOR ALL TELE/DATA OUTLETS. ROUTE 1" CONDUIT FROM EACH OUTLET TO ABOVE ACCESSIBLE CEILING UNLESS NOTED OTHERWISE. PROVIDE INSULATED THROAT CONNECTOR ON CONDUIT END. KEEP ALL EXPOSED CONDUITS TIGHT TO STRUCTURE.
3. PROVIDE AN 8' SERVICE LOOP AT STATION END OF ALL CABLE RUNS. PROVIDE 25' SERVICE LOOP AT ALL WIRELESS ACCESS POINT LOCATIONS. TERMINATE CABLE ON A SURFACE MOUNT OUTLET BOX.
4. HOMERUN ALL VOICE, AND DATA CABLES TO DESIGNATED CONTROL PANELS, PATCH PANELS, OR WALL FIELDS IN TELECOMMUNICATIONS ROOM LOCATED IN THE SAME ZONE. PROVIDE J-HOOK TYPE CABLE SUPPORTS IN OPEN OR ACCESSIBLE CEILING SPACE AS REQUIRED TO SUPPORT CABLES IN ROUT TO CABLE TRAY OR CONDUIT PATHWAY TO TELECOMMUNICATIONS ROOM. ROUTE CABLE SUPPORTS SUCH THAT CABLE VISIBILITY WILL BE MINIMIZED IN ANY OPEN CEILING AREAS.
5. COORDINATE AND VERIFY EXACT MOUNTING LOCATIONS OF WALL, CEILING, AND FLOOR DEVICES WITH ARCHITECTURAL ELEVATIONS, AND ANY FURNITURE OR SPECIALTY EQUIPMENT SUPPLIER DRAWINGS PRIOR TO ROUGH-IN.
6. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND NOTIFY ENGINEER OF ANY ADVERSE FIELD CONDITIONS PRIOR TO PERFORMING ANY WORK.

KEY NOTES:

<1> PROVIDE (2) 4" CONDUITS FROM IN CRAWLSPACE UNDER DATA CENTER UNDER PEDESTRIAN BRIDGE AND INTO CRAWLSPACE ON WEST END. STUB CONDUITS UP FROM WEST CRAWLSPACE TO ACCESSIBLE CEILING IN BASEMENT TO CABLE TRAY.

<2> PROVIDE (2) 4" FLEX CONDUITS ACROSS EXPANSION JOINTS.

REFER TO CABLING CONTRACTOR PROVIDED TELECOM CABLING DRAWINGS FOR TELECOM CABLING REQUIREMENTS AND LABELING

THESE RECORD DRAWINGS HAVE BEEN PREPARED BASED ON INFORMATION PROVIDED BY OTHERS. THE ENGINEER HAS NOT VERIFIED THE ACCURACY OF THIS INFORMATION AND SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH MAY BE INCORPORATED HEREIN AS A RESULT.

DRAWING TITLE
BASEMENT AND SUB-BASEMENT LEVELS
TECHNOLOGY ZONING AND MAJOR PATHWAY PLANS

TITLE
RED ROCKS COMMUNITY COLLEGE
DATA CENTER RELOCATE AND TELECOM UPGRADE

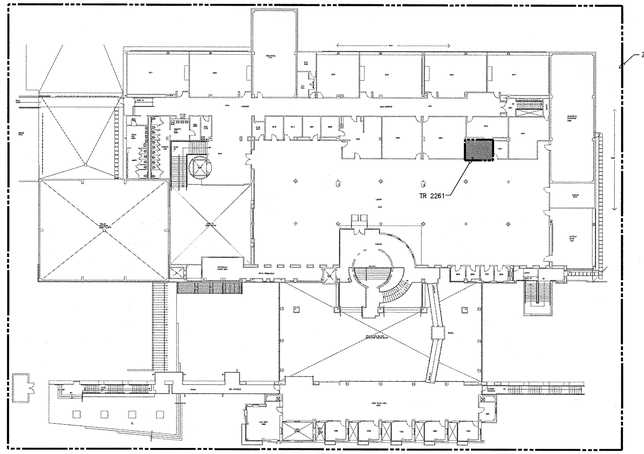
CATOR, RUMA & ASSOCIATES CO.
896 TABOR STREET, LAKEWOOD, COLORADO 80401 PHONE: (303) 232-6200 FAX: (303) 233-3701

REVISIONS:
RECORD DRAWINGS 01/06/14

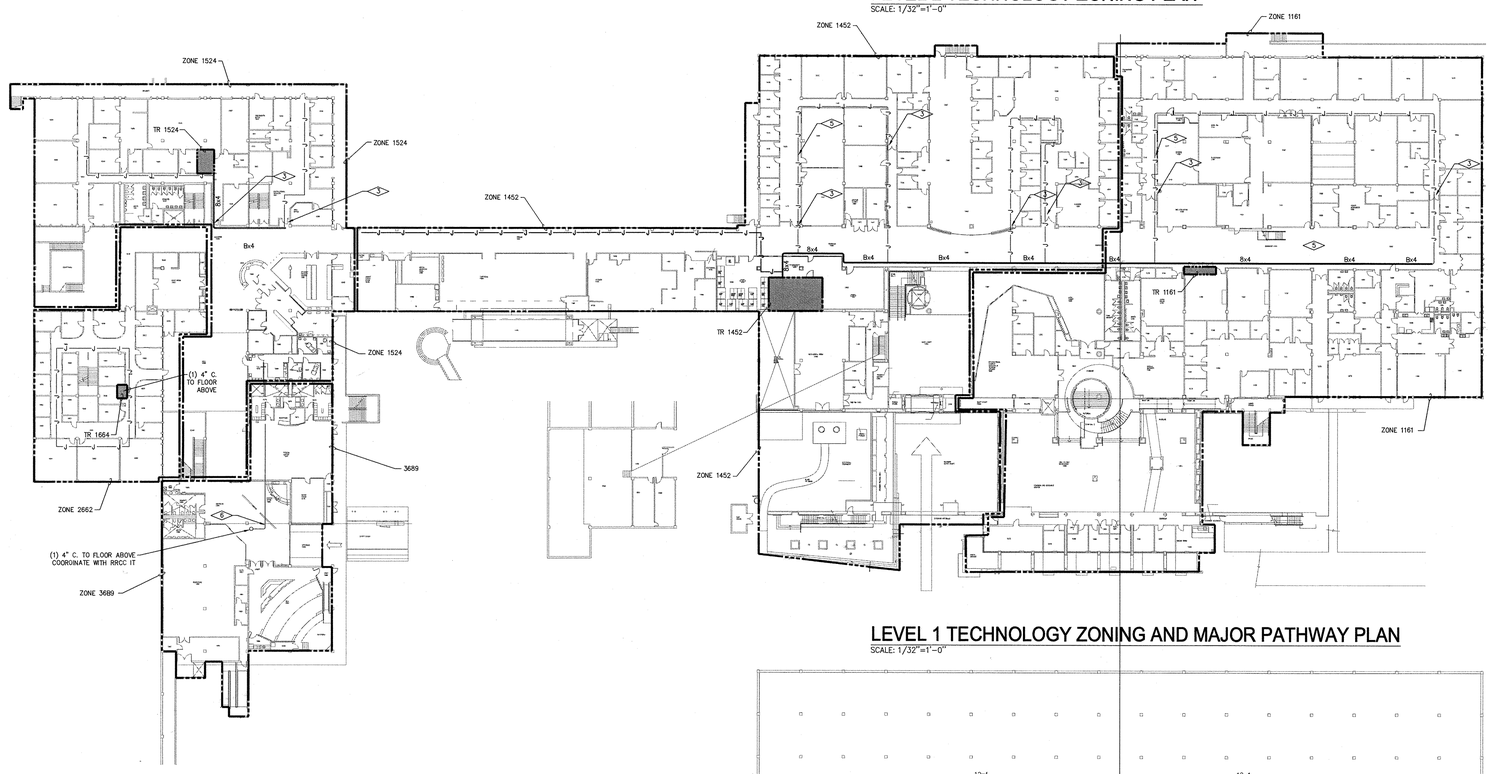
DATE: 11/28/12
DRAWN BY: JAI
CHECKED BY: MJM
JOB NO: 2012-120
FILE NAME: p-tech-zone.dwg

SHEET NO.
T2.00

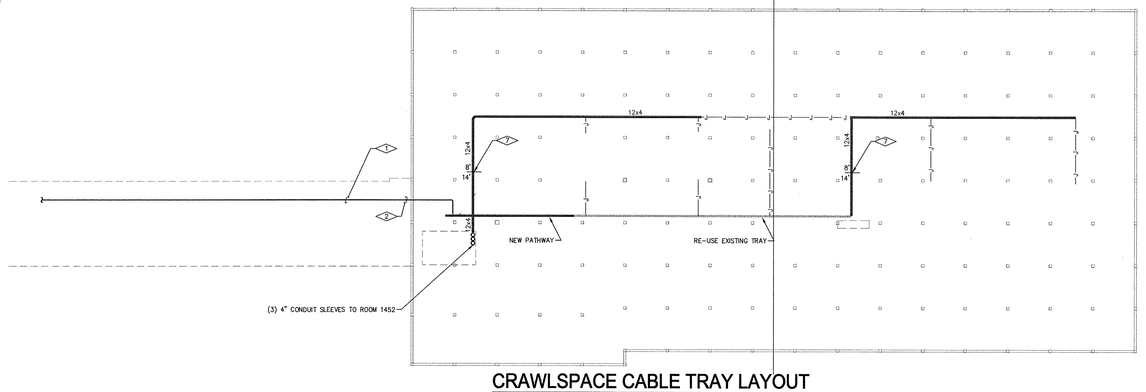
Cator, Ruma & Assoc. FILENAME:P:\RRCC\2012-120 RRCC IT UPGRADES AND DATA CENTER MOVE\CAD\RDS\ELEC\P-TECH-ZONE.DWG _ T2.00. PLOT: 01/06/2014 @ 11:50am REV: 01/06/2014 CAD jharper XREF: bg1.dwg xbg1-OVERALLFLOORPLANS.dwg tb.dwg xgrid-lines-OVERALLCEILINGPLANS.dwg wrmmanes.dwg xhealth_clinic_remodel.dwg



LEVEL 2 TECHNOLOGY ZONING PLAN
SCALE: 1/32"=1'-0"



LEVEL 1 TECHNOLOGY ZONING AND MAJOR PATHWAY PLAN
SCALE: 1/32"=1'-0"



CRAWLSPACE CABLE TRAY LAYOUT
SCALE: 1/32"=1'-0"

GENERAL NOTES:

1. WORK INCLUDED IN THE CONTRACT IS DENOTED IN BOLD. EXISTING CONDITIONS TO REMAIN ARE DENOTED LIGHTLY.
2. PROTECT STRUCTURE AND OWNER EQUIPMENT FROM DAMAGE. IMMEDIATELY REPLACE OR REPAIR, TO ORIGINAL CONDITION, DAMAGE CAUSED BY THE CONTRACTOR WHETHER EQUIPMENT APPEARS TO BE CURRENTLY IN USE OR NOT, UNLESS WRITTEN AUTHORIZATION FROM THE OWNER INDICATED OTHERWISE. PREPARE LISTING OF ALL EXISTING DAMAGED ITEMS AND SUBMIT TO OWNER PRIOR TO BEGINNING WORK.
3. INSTALL CONDUIT CONCEALED IN FINISHED AREAS UNLESS OTHERWISE NOTED. PAINT EXPOSED CONDUIT TO MATCH EXISTING FINISHES WITHIN THE SURROUNDING AREA.
4. DO NOT ROUTE CONDUIT WITHIN STRUCTURAL OR TOPPING SLABS OF FLOORS UNLESS SPECIFICALLY NOTED OTHERWISE AND WRITTEN APPROVAL IS OBTAINED FROM THE STRUCTURAL ENGINEER.
5. FIRE SEAL ALL FIRE RATED WALL AND FLOOR PENETRATIONS. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE RATED WALLS.
6. A DETAILED WRITTEN METHOD OF PROCEDURE IS REQUIRED WHEN A CONSTRUCTION ACTIVITY OR AN OUTAGE AFFECTS THE SAFETY OF OCCUPANTS, TELEPHONE/DATA/FIRE ALARM EQUIPMENT OR COMPONENTS OF ANY SYSTEM WHICH SUPPORTS THIS EQUIPMENT OR ESSENTIALLY AFFECTS THE BUILDING MANAGEMENT, OPERATIONS OR SECURITY. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
7. EXISTING INFORMATION SHOWN ON THE DRAWINGS HAS BEEN TAKEN FROM OWNER FURNISHED DRAWINGS AND/OR LIMITED FIELD OBSERVATIONS. CATOR, RUMA & ASSOCIATES IS NOT RESPONSIBLE FOR THE ACCURACY OF ANY INFORMATION OR THE ADEQUACY, SAFETY AND CONFORMANCE TO CURRENT PREVAILING CODES OF ANY WORK SHOWN AS EXISTING ON THESE DRAWINGS.

TECHNOLOGY PLAN NOTES:

1. USE EXISTING CONDUIT AND BACK BOXES AT ALL LOCATIONS UNLESS DEVICES LOCATION IS NEW.
2. PROVIDE 4" SQUARE OUTLET BOX AND SINGLE GANG MUD RING FOR ALL TELE/DATA OUTLETS. ROUTE 1" CONDUIT FROM EACH OUTLET TO ABOVE ACCESSIBLE CEILING UNLESS NOTED OTHERWISE. PROVIDE INSULATED THROAT CONNECTOR ON CONDUIT END. KEEP ALL EXPOSED CONDUITS TIGHT TO STRUCTURE.
3. PROVIDE AN 8' SERVICE LOOP AT STATION END OF ALL CABLE RUNS. PROVIDE 25' SERVICE LOOP AT ALL WIRELESS ACCESS POINT LOCATIONS. TERMINATE CABLE ON A SURFACE MOUNT OUTLET BOX.
4. HOMERUN ALL VOICE, AND DATA CABLES TO DESIGNATED CONTROL PANELS, PATCH PANELS, OR WALL FIELDS IN TELECOMMUNICATIONS ROOM LOCATED IN THE SAME ZONE. PROVIDE J-HOOK TYPE CABLE SUPPORTS IN OPEN OR ACCESSIBLE CEILING SPACE AS REQUIRED TO SUPPORT CABLES IN ROUT TO CABLE TRAY OR CONDUIT PATHWAY TO TELECOMMUNICATIONS ROOM. ROUTE CABLE SUPPORTS SUCH THAT CABLE VISIBILITY WILL BE MINIMIZED IN ANY OPEN CEILING AREAS.
5. COORDINATE AND VERIFY EXACT MOUNTING LOCATIONS OF WALL, CEILING, AND FLOOR DEVICES WITH ARCHITECTURAL ELEVATIONS, AND ANY FURNITURE OR SPECIALTY EQUIPMENT SUPPLIER DRAWINGS PRIOR TO ROUGH-IN.
6. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND NOTIFY ENGINEER OF ANY ADVERSE FIELD CONDITIONS PRIOR TO PERFORMING ANY WORK.

KEY NOTES:

1. PROVIDE (2) 4" CONDUITS IN CRAWLSPACE FROM DATA CENTER UNDER PEDESTRIAN BRIDGE AND INTO CRAWLSPACE ON WEST END. STUB CONDUITS UP FROM WEST CRAWLSPACE TO ACCESSIBLE CEILING IN BASEMENT TO CABLE TRAY.
2. PROVIDE (2) 4" FLEX CONDUITS ACROSS EXPANSION JOINTS.
3. PROVIDE EZ PATHS THROUGH RATED WALL. FIELD VERIFY EXACT LOCATIONS.
4. RE-USE EXISTING CONDUIT TO THE ENVIRONMENTAL TRAINING CENTER FOR FIBER BACKBONE. THE CONDUIT ROUTES UNDER THE PEDESTRIAN BRIDGE NORTH TO A MANHOLE AND FROM THE MANHOLE TO THE ETC. COORDINATE EXACT LOCATION OF CONDUIT AND MANHOLE WITH OWNER.
5. J-HOOKS RUNNING THROUGH THIS CORRIDOR SHALL BE INSTALLED INSIDE THE EXISTING SOFFIT ABOVE THE CEILING. THE SOFFIT CAN BE CUT AS NEEDED WITHOUT REPAIR TO INSTALL J-HOOKS.
6. REUSE EXISTING INNERDUCT FOR CABLES IN FITNESS CENTER.
7. TRANSITION CABLE TRAY ELEVATION FROM 14' DOWN TO 8'.

REFER TO CABLING CONTRACTOR PROVIDED TELECOM CABLING DRAWINGS FOR TELECOM CABLING REQUIREMENTS AND LABELING

THESE RECORD DRAWINGS HAVE BEEN PREPARED BASED ON INFORMATION PROVIDED BY OTHERS. THE ENGINEER HAS NOT VERIFIED THE ACCURACY OF THIS INFORMATION AND SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH MAY BE INCORPORATED HEREIN AS A RESULT.

DRAWING TITLE

LEVELS 1 AND 2 EAST TECHNOLOGY ZONING AND MAJOR PATHWAYS PLAN

TITLE

RED ROCKS COMMUNITY COLLEGE
DATA CENTER RELOCATE AND TELECOM UPGRADE

CATOR, RUMA & ASSOCIATES CO.
896 TABOR STREET, LAKEWOOD, COLORADO 80401 PHONE: (303) 232-6200 FAX: (303) 233-3701

REVISIONS:
RECORD DRAWINGS 01/06/14

DATE: 11/28/12
DRAWN BY: JAI
CHECKED BY: MJM
JOB NO: 2012-120
FILE NAME: p-tech-zone.dwg

SHEET NO.
T2.01

Cator, Ruma & Assoc. FILENAME:P:\RRCC\2012-120 RRCC IT UPGRADES AND DATA CENTER MOVE\CAD\RDS\LEC\P-TECH-ZONE.DWG _ 12.01. PLOT: 01/06/2014 @ 11:50am REV: 01/06/2014 CAD: jharper XREF: bg1.dwg xbg1-OVERALLFLOORPLANS.dwg tb.dwg xgrid-lines-OVERALLCEILINGPLANS.dwg xmmanes.dwg xhealth_clinic_remodel.dwg

KEY NOTES:

<1> PROVIDE (1) 4" CONDUIT WITH INNERDUCT TO CORRIDOR.

<2> PROVIDE (2) 4" CONDUITS WITH INNERDUCT IN ONE CONDUIT TO 1664.

<3> RE-USE EXISTING (2) 4" CONDUIT TO THE CONSTRUCTION TECH BUILDING.

GENERAL NOTES:

1. WORK INCLUDED IN THE CONTRACT IS DENOTED IN BOLD. EXISTING CONDITIONS TO REMAIN ARE DENOTED LIGHTLY.
2. PROTECT STRUCTURE AND OWNER EQUIPMENT FROM DAMAGE. IMMEDIATELY REPLACE OR REPAIR, TO ORIGINAL CONDITION, DAMAGE CAUSED BY THE CONTRACTOR WHETHER EQUIPMENT APPEARS TO BE CURRENTLY IN USE OR NOT, UNLESS WRITTEN AUTHORIZATION FROM THE OWNER INDICATED OTHERWISE. PREPARE LISTING OF ALL EXISTING DAMAGED ITEMS AND SUBMIT TO OWNER PRIOR TO BEGINNING WORK.
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TECHNOLOGY PLAN NOTES:

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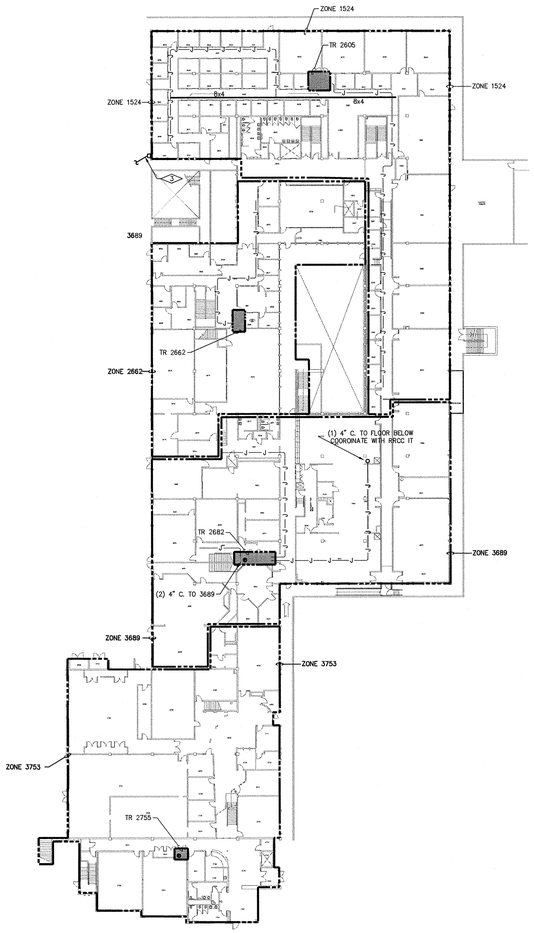
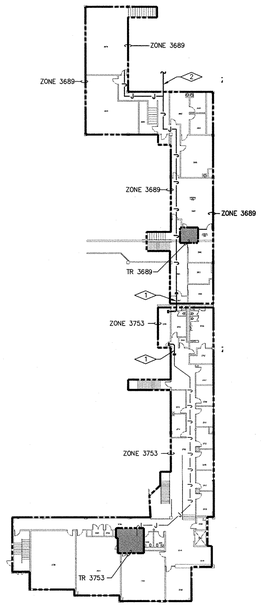
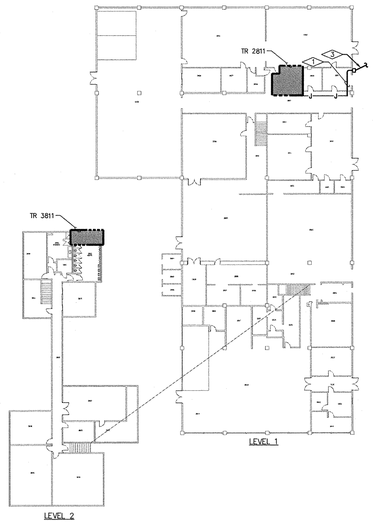
6. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND NOTIFY ENGINEER OF ANY ADVERSE FIELD CONDITIONS PRIOR TO PERFORMING ANY WORK.



LEVEL 2 TECHNOLOGY ZONING AND MAJOR PATHWAYS PLAN
SCALE: 1/32"=1'-0"



LEVEL 3 TECHNOLOGY ZONING AND MAJOR PATHWAYS PLAN
SCALE: 1/32"=1'-0"



CONSTRUCTION TECHNOLOGY BUILDING
TECHNOLOGY ZONING AND MAJOR PATHWAYS PLAN
SCALE: 1/32"=1'-0"

REFER TO CABLING CONTRACTOR PROVIDED TELECOM CABLING DRAWINGS FOR TELECOM CABLING REQUIREMENTS AND LABELING

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DRAWING TITLE
LEVELS 2 AND 3 WEST AND CONSTRUCTION TECH ZONING AND MAJOR PATHWAYS PLAN

TITLE
RED ROCKS COMMUNITY COLLEGE
DATA CENTER RELOCATE AND TELECOM UPGRADE

CATOR, RUMA & ASSOCIATES CO.
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REVISIONS:
RECORD DRAWINGS 01/06/14
1 ADDENDUM No.1 12/19/12

DATE: 11/28/12
DRAWN BY: JAI
CHECKED BY: MJM
JOB NO: 2012-120
FILE NAME: p-tech-zone.dwg

SHEET NO.
T2.02

Cator, Ruma & Assoc. FILENAME:P:\RRCC\2012-120 RRCC IT UPGRADES AND DATA CENTER MOVE\CAD\RDS\ELEC\P-TECH-ZONE.DWG _ 12.02. PLOT: 01/06/2014 @ 11:51am REV: 01/06/2014 CAD: jharper XREF: bg1.dwg xbg1-OVERALLFLOORPLANS.dwg tb.dwg xgrid-lines-OVERALLCEILINGPLANS.dwg xrmmones.dwg xhealth_clinic_remodel.dwg