

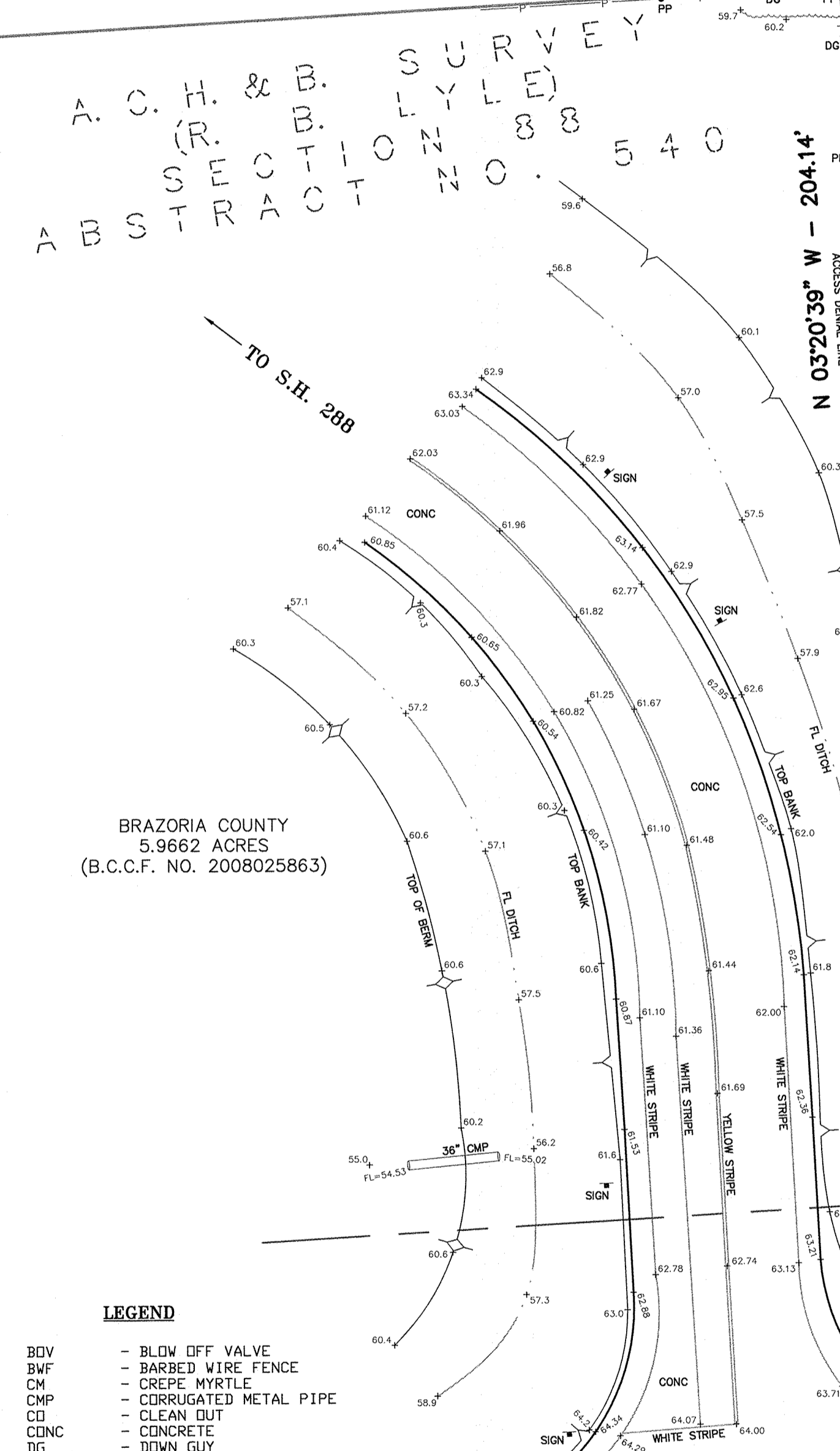
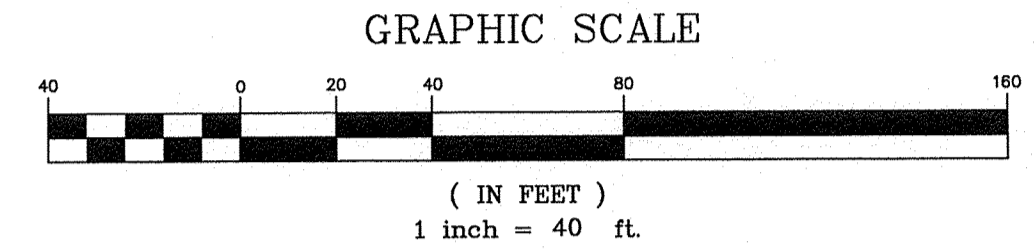
TEXAS STATE TITLE, LLC			
G.F. NO.: 1603922012		EFFECTIVE: JUNE 12, 2016	
		ISSUED: JUNE 24, 2016	
SCHEDULE 'B' ITEM NO.	RECORDING INFORMATION	DESCRIPTION	ENCUMBRANCE
10 G	B.C.C.F. NO. 2014031269	CENTERPOINT EASEMENT	NOT PLOTTABLE (BLANKET EASEMENT)
10 H	B.C.C.F. NO. 2008003419	EASEMENT AND MEMORANDUM OF AGREEMENT	NOT PLOTTABLE (AFFECTS TRACT)
10 J	B.C.C.F. NO. 2015028233	25' SANITARY SEWER EASEMENT	AS SHOWN (DOES NOT AFFECT)
10 L	B.C.C.F. NO. 2008013494	AFFIDAVIT TO THE PUBLIC REGARDING ON-SITE SEWAGE FACILITIES REQUIRING MAINTENANCE	NOT PLOTTABLE (AFFECTS TRACT)
10 N	VOL. 2, PG. 91; B.C.M.R.	ROADWAY EASEMENTS	AS SHOWN
10 O	VOL. 2, PG. 98; B.C.M.R.	ROADWAY EASEMENT AND ROAD & DRAINAGE EASEMENT	AS SHOWN
10 P	B.C.C.F. NO. 2009046013 B.C.C.F. NO. 2009046014	STRATEGIC PARTNERSHIP AGREEMENT	NOT PLOTTABLE (AFFECTS TRACT)
10 Q	B.C.C.F. NO. 2013017722	AMENDED AND RESTATED DEVELOPMENT AGREEMENT	NOT PLOTTABLE (AFFECTS TRACT)
10 R	B.C.C.F. NO. 2013023260	ASSIGNMENT AND ASSUMPTION OF DECLARANT'S RIGHTS AND OBLIGATIONS	NOT PLOTTABLE (AFFECTS TRACT)
10 S	B.C.C.F. NO. 2010011143	AGREEMENT FOR WATER SERVICE	NOT PLOTTABLE (AFFECTS TRACT)

SPONSEL INTERESTS, LTD.
(B.C.C.F. NO. 1995010457)

A.C.H. & B. SURVEY (HARRIS & BROOKE)
ABSTRACT NO. 415

LINE TABLE			
LINE	BEARING	DISTANCE	
L1	N 03°15'13" W	96.01'	
L2	N 02°59'18" W	45.79'	
L3	S 52°03'04" E	111.18'	
L4	S 51°43'05" E	25.17'	
L5	S 41°41'54" W	43.04'	
L6	N 03°18'05" W	65.64'	

CURVE TABLE				
CURVE	DELTA	RADIUS	LENGTH	CHORD
C1	75°14'44"	467.50'	64.15'	S 37°57'52" E - 64.10'
C2	15°04'45"	340.00'	89.48'	S 44°10'42" E - 89.22'



1.6598 ACRES
(72,301 SQ. FT.)

LOT 60
SECTION 88
ALLISON-RICHEY GULF COAST
HOME COMPANY SUBDIVISION
(VOL. 2, PG. 98; B.C.M.R.)

LOT 4
SECTION 87
ALLISON-RICHEY GULF COAST
HOME COMPANY SUBDIVISION
(VOL. 2, PG. 91; B.C.M.R.)

LOT 1
CVS-MANVEL SUBDIVISION
(DOCUMENT NO. 2015012743; B.C.M.R.)

CVS PHARMACY, INC.
(B.C.C.F. NO. 2016006757)

BENCHMARK: MONUMENT NAME 10 GPS MONU 1995 IS A BRASS CAP SET IN CONCRETE STAMPED 'CITY OF PEARLAND 10 GPS MONU, 1995' LOCATED ON THE SOUTH BOUND HIGHWAY 288 APPROXIMATELY 2,400 FEET SOUTH OF F.M. 518 AND 21 FEET WEST FROM THE WEST EDGE OF ASPHALT. ELEVATION=59.29' (NGVD 1929, 1987 ADJUSTMENT)

TBM A: BOX CUT ON H2-INLET LOCATED ON THE NORTH SIDE OF COUNTY ROAD 101 SOUTH OF THE SOUTHWEST CORNER OF THE PROPERTY, AS SHOWN. ELEVATION = 64.44'

TBM B: BOX CUT ON RCP LOCATED ON THE EAST SIDE OF COUNTY ROAD 94 NEAR THE EAST PORTION OF THE PROPERTY, AS SHOWN. ELEVATION = 61.48'

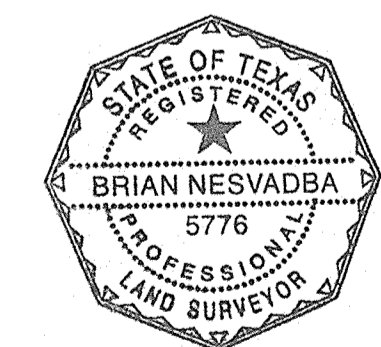
- NOTES:
- 1.) BEARINGS SHOWN HEREON ARE BASED ON TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD83) USING NGS CONTINUOUSLY OPERATING REFERENCE STATIONS.
 - 2.) THE SURVEYOR HAS NOT ABSTRACTED THIS PROPERTY. DEED INFORMATION SHOWN HEREON WAS RESEARCHED AND PROVIDED BY OTHERS.
 - 3.) THE CERTIFICATE SHOWN HEREON IS VALID ONLY IF THIS DOCUMENT CONTAINS AN ORIGINAL STAMPED OR IMPRESSION SEAL AND SIGNATURE OF THE SURVEYOR. SAID CERTIFICATION SHALL NOT APPLY TO ANY COPIES OR ALTERED ORIGINALS.
 - 4.) THIS SURVEY WAS PERFORMED IN CONNECTION WITH THE 'COMMITMENT FOR TITLE INSURANCE' ISSUED BY TEXAS STATE TITLE, LLC ON JUNE 24, 2016, EFFECTIVELY DATED JUNE 12, 2016, G.F. NO. 1603922012, AND IS RELIED UPON FOR PURPOSES THEREOF.
 - 5.) ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP FOR BRAZORIA COUNTY, TEXAS AND INCORPORATED AREAS, COMMUNITY PANEL NO. 48039-C-0020 H EFFECTIVELY DATED JUNE 5, 1989, THIS PROPERTY LIES IN ZONE "AE", SPECIAL FLOOD HAZARD AREAS INUNDATED BY THE 1% ANNUAL CHANCE FLOOD EVENT WITH BASE FLOOD ELEVATIONS DETERMINED.
 - 6.) A METES-AND-BOUNDS DESCRIPTION WAS COMPILED IN CONJUNCTION WITH THIS SURVEY.
 - 7.) THIS TRACT OF LAND WAS SURVEYED IN THE FIELD ON DECEMBER 7, 2016. ANY CHANGES MADE AFTER THIS DATE ARE NOT SHOWN HEREON.
 - 8.) ALL UNDERGROUND UTILITIES MAY NOT BE SHOWN HEREON. THE LOCATIONS OF UTILITIES SHOWN HEREON ARE SHOWN PER RECORD DRAWINGS AND ABOVE GROUND EVIDENCE. SIZES, DEPTHS, AND LOCATIONS MAY VARY. FOR THE LOCATION OF ANY ADDITIONAL UTILITIES THAT MAY EXIST, PLEASE CALL THE "TEXAS ONE CALL" LOCATING SERVICE.

- LEGEND
- BOV - BLOW OFF VALVE
 - BWF - BARBED WIRE FENCE
 - CM - CREPE MYRTLE
 - CMP - CORRUGATED METAL PIPE
 - CD - CLEAN OUT
 - CUNC - CONCRETE
 - DC - DOWN GUY
 - EB - ELECTRIC BOX
 - ELEC - ELECTRIC
 - B.C.C.F. - BRAZORIA COUNTY CLERK'S FILE
 - B.C.D.R. - BRAZORIA COUNTY DEED RECORDS
 - B.C.P.R. - BRAZORIA COUNTY PLAT RECORDS
 - FH - FIRE HYDRANT
 - FL - FLOW LINE
 - FND - FOUND
 - G - GUTTER
 - GI - GRATE INLET
 - GR - GUARD RAIL
 - HW - HEADWALL
 - IP - IRON PIPE
 - IR - IRON ROD
 - ICV - IRRIGATION CONTROL VALVE
 - LS - LIGHT STANDARD
 - MH - MANHOLE
 - P- - OVERHEAD POWER LINE
 - P.D.B. - POINT OF BEGINNING
 - P.D.C. - POINT OF COMMENCEMENT
 - PP - POWER POLE
 - PRV - PRESSURE RELEASE VALVE
 - RCP - REINFORCED CONCRETE PIPE
 - R.D.W. - RIGHT OF WAY
 - SAN - SANITARY
 - SD, FT. - SQUARE FEET
 - STM - STORM
 - TBM - TEMPORARY BENCHMARK
 - TC - TOP OF CURB
 - TGG - TOP OF GRATE
 - TDV - TOP OF VALVE
 - VRV - VACUUM RELEASE VALVE
 - W - WITH
 - WCR - WHEEL CHAIR RAMP
 - WM - WATER METER
 - WTR - WATER
 - WV - WATER VALVE
 - (NFV) - NOT FIELD VERIFIED

COUNTY ROAD NO. 101
(BAILEY ROAD)
(WIDTH VARIES)
(B.C.C.F. NO. 2008001144)
(B.C.C.F. NO. 2009052815)

A.C.H. & B. SURVEY (HARRIS & BROOKE)
ABSTRACT NO. 417

M.V. DONNELL SURVEY
ABSTRACT NO. 469



Brian Nesvada
Registered Professional Land Surveyor
State of Texas No. 5776

02-06-18 REVISED TO UPDATE BOUNDARY LINES FOR SUBJECT TRACT

TEXAS ENGINEERING AND MAPPING CO.
12718 CENTURY DRIVE
STAFFORD, TEXAS 77477
PHONE: 281.491.2555 FAX: 281.491.2555
www.team-civil.com
Surveying Firm No. 10119000 / Engineering Firm No. F-2906

LAND TITLE AND TOPOGRAPHIC SURVEY
OF
A 1.6598 ACRE (72,301 SQ. FT.) TRACT OF LAND
BEING IN THE A.C.H. & B. SURVEY (R. B. LYLE),
SECTION 88, ABSTRACT NO. 540, IN THE
A.C.H. & B. SURVEY (HARRIS & BROOKE), SECTION 87,
ABSTRACT NO. 415,
BRAZORIA COUNTY, TEXAS

CREW: RL	DRAWN BY: RCA	CALC. BY: BSN	CK-BY: BSN
DATE: 04-27-17	SCALE: 1"=40'	KEY MAP: 653 A	JOB NO.: 356-217

DRAWING INFO: Z:\proj\356-217\dwg\356-211_B1_166_Acre_R1.dwg JAN 18, 2018 10:31 AM

Ivy Kids Standard Materials, Equip. & Finishes

The following items shall be provided, unless disallowed by local codes, ordinances, protective covenants or development restrictions

SITE

1. Steel fence / gate Ameristar Montage Majestic 2" sq., 16 Ga. posts @ 8' O C. 5/8" sq. 18 Ga. picket, 2 rail panel, black finish. 6 feet high around "Perimeter" and 4 foot high in the "Interior" yard, with matching gates. Black

2. Trench drain at building edges (two sides) NDS Spee-D mini channel drain – black

EXTERIOR

1. Stone Veneer: See elevation

2. Roof: See roof plan

3. Stucco : 1" thick Traditional three step plastering. (NO EIFS on builing dacades) See elevation for paint color

4. Soffits: Stucco

5. Windows: See elevations, pre-finished anodized aluminum (All Tempered safety glass) Mahogany – Stained with sherwin william SW3130 Brazilnut on all interior surrounding trim .

6. Doors & Jambs: Anodized aluminum frame, with Narrow Stile Door, acceptable manufacturers: Kawneer, Vistawall, or approved equal

7. Glazing System: Refer to A-30 building elevations for additional information For all exterior windows and doors receiving glazing

8. Playground equipment Provide \$100,000.00 allowance for playground equipment

9. Gutters & Downspouts: **Gutters:** Pre-finished Aluminum (color to match building paint color) **Downspouts:** Pre-finished Aluminum (color to match building paint color)

10. Bollard: (see sheet A-90)

11. Not used

12. Flagpole: Ground Set anodized finish aluminum flagpole see site plan for quantity and height, black Complete with internal wench system, revolving truck assembly, door and keylock, counter weight, retainer rings and 6'x10' nylon flag. (Vendor: CVS wholesale flags pole: Z15320265)

13. Exterior and Interior signs: Contractor shall provide a Signage budget allowance of \$55,000. The Contractor shall provide (in the base bid) concrete pads and required power for the signages. note: include door sign of 'fire riser room' .

14. Landscaping: Contractor shall provide irrigation and landscaping as shown on drawings If material specified is to be substituted shop drawing & data must be submitted to owner

Scope of work for General Contractors includes providing top soil and grading to final elevations.

Provide \$35,000.00 allowance for irrigation.

INTERIOR

1. Carpet: patchcraft 10295 JOT/Color: Discovery

1a. Floor reducer: M.D. Building Products, 72"Lx 2"W w/ fluted silver carpet edging trim, item 6297 Model # 7820 (Lowe's)

2. Bulletin Boards: Quartet Cork board with alum. frame Discount School supply 1 800 627 2829 Wall pocket Chart 'School smart' Extra Wide Pocket Chart

3. Flooring: LVT – 20 mil, Trinity Lifestyles 20 Caceres Acadia See plan

4. Ceramic Tile: Entrance: Trinity Surface Arabonite / color: Amber

5. Wood Base: Mahogany – 1 x 6" Stained
6. Wood Chair Rail: Mahogany – 1 x 4" stain with sherwin williams SW3130 brazilnut

Provide 1/8" radius round edge top and bottom , typ. for all chair rails

7. Paint walls : RE: pacakge ' Ivy kids color and material brochure

Valspar Arizona Dust 2003-8a
Valspar Blue 4006-6b
Valspar Slumber 4007-9c

8. Finger guards PinchShield Door Finger guards www.pinchshield.com Office:405-521-9054 info@pinchshield.com

9. Mirror Bobrick B1658

Refer to color and material brocure for more information "Bianco Venato" Quartz for counter top and base cabinets in the lobby, including front reception desk, pass thru between kitchen and dining, plastic laminate 'Pionite Phantasy PH7001' for all other counter tops of the project, p. lam goes to return and splash.

10. Caseroods & Cubbies: Birch (stain grade) with clear varnish finish coats. provide corner/ edge protection on all exposed edge. for rooms 100 and 150. see interior elevations.

11. Cabinets: Carcase & Shelves: Birch plywood stain grade_ with clear varnish finish coats; exposed edges to have solid birch banding

Countertops & Splash: Bianco Venato quartz radius all exposed corners of countertops

Doors & Drawer Fronts: Birch plywood (stain grade) with clear varnish finish coats; exposed edges to have solid birch banding.

Hardware: 4" brushed stainless steel wire pulls, concealed hinges and cam locks.

12. Kitchen Cabinets: Carcase & Shelves: Birch plywood (stain grade) with interior surfaces finished with clear varnish coats, exterior surfaces to be plastic laminate (all exposed surfaces); exposed edges to have solid birch banding.

Doors & Drawer Fronts: Birch plywood clad with Plastic laminate, Plastic laminate, Wilsonart skyline walnut 7964, (all exposed surfaces) Hardware: 4" brushed stainless steel wire pulls and concealed hinges

12A. Cabinet in Utility rm 'Husky' steel tall garage cabinet G3602T-US/20628827-72"h x36"w x18"d

13. Front Desks: Carcase: Birch plywood (stain grade) with clear varnish finish coats; exposed edges to have solid birch banding. Ledge:

Countertops & Splash: Granite, bull-nosed edge

Drawer Fronts & splash: Birch plywood (stain grade) with clear varnish finish coats; exposed edge to have solid birch banding finish coats.

Tambour (front desk): Birch "tambour" (stain grade) with clear varnish Hardware: 4" brushed stainless steel wire pulls and concealed hinges

14. Wood Doors: Birch (paint grade) gloss finish; (hinges bonderized and painted to match jambs) stain with Sherwin Williams SW3130 Brazilnut

Door frames

15. Interior window frame Clear anodized Alum. frame 1/4" Tempered Glass glazing.

16. Ceiling: 24" x 24" x 3/4" Fissured Tegular edged lay-in tile with Donn "DX" metal grid system (white). Washable type tiles in all wet areas. gypsum wallboard ceilings (smooth finish-painted white) in all Attic areas and Stairs.

17. FRP: Fiber-Reinforced-Plastic (FRP) panels, white, with matching color vinyl trim (above base cabinet in infants rooms)

18. Closet Shelves: Vinyl coated wire (white) "Closet" Maid or similar. NSF approved rack in dry storage.

19. Blinds: Vinyl, Alabaster color, locally available (certified "Lead-Free")

20. Stainless Steel Work Table 30"x72", galvanized undershelf with legs Eagle model CBH3072SE-BS

21. Paper Towel Dispenser: Kimberly Clark # 74305, with smoked plastic cover.

22. Toilet Paper Holder: Bobrick #B-264 Classic Series Toilet Tissue Dispenser for Single Roll. Bright polished chrome-plated steel. Self-locking mechanism.

23. Fire Extinguishers: Typically, ten pound capacity Portable fire extinguishers: 2A10BC Class K-rated portable fire extinguisher in kitchen

24. Freezer Turbo Air, TSF-49SD
25. Refrigerator: QTY 4 Frigidaire 20 – cu ft Top- Freezer refrigerator (white)
26. Range: Vulcan, gas restaurant range, Model # 36LC.
27. Kitchen Refrigerator Avatco SS-2R-HC54 reach in

27A NSF Approved stainless steel wire shelving in kitchen pantry, allowanc \$3,500.00
28. All bathroom doors shall be provided with threshold that meet ADA standards
29. All girls' restrooms and food prep. area shall be provided with covered trash receptacles.
30. Weather proofing sealant shall be applied to expansion joints in parking lot and walkway,drive way
31. Contractor shall paint parking lanes and lane dividers at driveway
32. Contractor shall provide one commercial grade basketball hoop adjustable ht.
33. All thermostats will have locked guards to prevent tampering and unauthorized adjustments.
34. Provide FRP wainscoting at all corridors (lobby receive paint wall), see interior elevations

35. Security Camera Allowance \$7,000.00
36. Telephone System & Video Monitoring (Ivy Kids) \$30,000 allowance for tele system Panasonic 624 KXTA:
1 Basic Unit equipped 3 x 8
1 First expansion Board 3 x 8
1 Last expansion Board 0 x 8
1 6 Line digital Telephone c/w paging capability
20 Single Line Phone (mount in all rooms c/w paging capability)
20 Wall mount apparatus Cable and Installation

37. Paging System: Included in the Telephone System

38. Alarm System: (min. requirements design per code)
1 Fire Alarm security Control Panel with Dialer
15 Manual Pull Stations
30 Smoke Detectors
1 Wiring to Duct Detectors
2 Heat Detectors
8 Hornstrobes
15 Strobes
1 Design and Permit
17 Door Contacts
2 Key Pads
1 Siren
1 Dead Bolt at Entrance Door (Front entry, Hallway)
2 Front door release buttons, two total, one on each reception seat.
2 buzzers, one on each side out side of entry door
3 Motion Detectors
Door contact on every door
Cabling and installation

39. Mail box: Architecural Mail box Oasis post mounted locking mailbox, black with outgoing mail indicator, include architectural galvanized post and bracket.

40. fireman's lock box refer to fire marshal for requirement

41. Water play option Allowance 50,000.00

42. Washer - QTY 1 Roper 3.5 –cu ft High- Efficiency Top-Load washer (white)

43. Dryer - QTY 1 Roper 6.5 cu ft Electrical Dryer (white)
44. Microwave - QTY 4 Haier 0.9 cu ft 900-watt countertop microwave (black)

45. ADA note provide wall reinf. for railing, accessories attachment, do not install until inspector mark the location (height) on wall.

46. Out door drinking fountain provide freeze resistant type, HiLo type see plumbing

47. Mirror Bobrick B1658

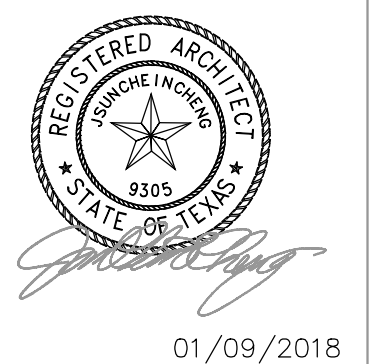
48. Overhead projector. screen and sounding sound Furnished by owner insatlated by contractor.

48. Overhead projector. screen and sounding sound Furnished by owner insatlated by contractor.

REVISIONS AND ISSUANCE

NO.	DATE	DESCRIPTION
1	08/13/2017	PRICING
2	08/30/2018	addendum 1

IVY KIDS EARLY LEARNING CENTER
4434 CR 94
Manvel, Tx 77578



DRAWING TITLE

MATERIAL, EQUIP. & FINISH

DRAWN BY CHECKED BY
JC

DATE JOB NO.
03/30/2017 gleannloch

DRAWING NO.

A-0.2

SECTION 08410 – ALUMINUM ENTRANCES, STOREFRONT & WINDOW FRAMING

Scope:

1. Provide aluminum entrances and glazing:
 - a. Front exterior entry doors and frames.
 - b. Vestibule entry doors and frames matching front exterior entrance doors.
 - c. Side corridor and entry doors and frames matching front exterior entrance doors.
 - d. Preformed flashings as indicated on the drawings.

Product:

1. Door Type:
 - a. See drawing
2. Glazing
 - a. see energy report
3. Hardware: hinges, concealed closers, stops, keyed cylinders, push/pull, panic hardware with pulls (all exterior doors) as per manufacturer's standard line. Satin chrome finish.
4. Sealant: For sealants required within fabricated storefront system, provide permanently elastic, non-shrinking, and non-migrating type recommended by sealant manufacturer for joint size and movement.

Installation:

1. Comply with Drawings and manufacturer's written instructions for installing aluminum framed storefront system, accessories, and other components.
2. Anchor securely in place, install plumb, level and in true alignment. Isolate dissimilar metals to prevent corrosion.
3. Coordinate with glass and glazing work, install hardware and adjust for smooth, proper operation.

**Section 092400
Portland Cement Plastering (Stucco)**

PART 1 – GENERAL

1.10 **SUMMARY**

general

A. Specification provides requirements for the applications of a Stucco System, including information pertaining to the design, materials and application of Stucco.

1.20 **ENVIRONMENTAL CONDITIONS**

A. Cold Weather Conditions:

1. Do not apply cement plaster when ambient temperature is less than 35°F (2°C).
2. Do not apply cement plaster to any frozen surfaces or surfaces containing frost. Protect plaster coats against freezing for a period of 24 hours after application.
3. Do not use frozen materials.
4. Tinting, heat and ventilation must be provided if cement plastering is done in a temperature below 35°F (2°C).

B. Warm Weather Conditions:

1. Protect the basecoats and finish coat of cement plaster from uneven and excessive evaporation in warm, windy weather. (Refer to section on curing in PART III)
2. Moist curing of cement based plaster is required.

PART 2 – PRODUCTS

2.10 **MOISTURE BARRIER**

A. Water-resistant paper – Federal Specification UU-B-790a, grade D30-minute or 60-minute.

2.15 **WINDOW HEAD, DOOR, LOUVER AND/OR OTHER PENETRATION-PLUS WALL OPENING PAN-TYPE FLASHING – 24-GAUGE GALVANIZED SHEET METAL, OR PVC PLASTIC**

2.20 **RUNNER- AND CROSS-FURRING CHANNELS**

Galvanized galvanized steel channels, 1 1/2 inch (38 mm) and 3/4 inch (19 mm) a minimum of 33,000 psi yield strength and a minimum of 0.0538-inch bare steel thickness, ASTM A526.

A. Steel accessories per ASTM C 811

B. PVC plastic accessories per ASTM D1784 & C1063

C. Aluminum accessories from extruded alloy 6063 T5

STUCCO MATERIALS

A. Factory proportioned Portland cement based exterior stucco for use in scratch and brown coat stucco applications. Comply with the following:

1. Base Coat – Scratch and Brown Coat Stucco
2. Performance and Physical Properties at 73 degrees F (23 degrees C) and 50 percent relative humidity:
 - a. Base Coat Stucco Scratch and Brown Coat (No. 1139-80)
 1. Compressive Strength, ASTM C109: 900 psi (6.2 MPa) @ 7 days 1200 psi (8.3 MPa) @ 28 days
 2. Compliance, ASTM C 926
 - b. Base Coat Stucco with Water-Stop (No. 1139-80)
 1. Compressive Strength, ASTM C109: 900 psi (6.2 MPa) @ 7 days 1,200 psi (8.3 MPa) @ 28 days
 2. Wind Driven Rain, ASTM E514: 0.002 lb (0.9 g) per hour
 3. Compliance, ASTM C926

FINISH COAT MATERIALS

A. Factory proportioned stucco finish coat and texture coat. Comply with the following:

1. Finish Coat Stucco
2. Performance and Physical Properties at 73 degrees F (23 degrees C) and 50 percent relative humidity:
 - a. Compressive Strength, ASTM C109: 900 psi (6.2 MPa) @ 7 days 1200 psi (8.3 MPa) @ 28 days

Suspended ceiling/ceilings – 1 1/2-inch (38 mm) main runner, 3/4-inch (19 mm) cross furring.

2.25 **FURRING "HAT" CHANNELS**

Furring channel, galvanized 7/8-inch (22 mm), 20-gauge.

2.30 **MECHANICAL FASTENERS**

A. Non-corroding fasteners, depending on the type framing or substrate:

1. Wood Framing – minimum 11 gauge, 7/16 inch (11 mm) diameter head galvanized roofing nails with minimum 1/4 inch (19 mm) penetration into studs or minimum #8 Type 5 code head fully threaded corrosion resistant screws with minimum 3/4 inch (19 mm) penetration into studs. (Nails: FS FF-A-105; Screws: ASTM C646)
2. Steel Framing – minimum #8 Type 5 or #10 code head fully threaded corrosion resistant screws with minimum 3/8 inch (9 mm) penetration into studs. (Screws: ASTM C646)
3. Concrete or Masonry – minimum #8 code head fully threaded corrosion resistant screws for masonry with minimum 1 inch (25 mm) penetration into substrate. (Screws: ASTM C646)
4. Wood framing with EPS board over OSB board or plywood sheathing. W/6 lath shall be fastened with corrosion resistant nails or 1" wide crown staples which penetrate at least 1" into the studs.

B. Tie Wire – #8 gauge galvanized and annealed low-carbon steel in compliance with ASTM A614 with Class 1 coating. (FS QQ-8-461g, AS)

2.40 **LATH**

A. Self-furring diamond-mesh metal lath galvanized, 2.5 to 3.5 lb per sq. yd. Shall comply with ASTM A87.

2.50 **TRIM ACCESSORIES**

- Trim Accessories shall be fabricated from galvanized steel, zinc (alloy), PVC or anodized aluminum.
- Depth (the protrusion) of accessories depends on the required thickness of cement plaster finish, unless the finish coat.
- Accessories of PVC plastic or zinc (alloy) are recommended if corrosion is a concern because of environmental conditions.

b. Compliance, ASTM C926 (Type F Plaster)

EXECUTION

3.10 **EXAMINATION**

A. Prior to starting lathing or plastering work, carefully inspect installed work of other trades to verify that work is complete to the point where work of this section may properly commence.

B. Notify the architect or proper authorities in writing of conditions detrimental to the proper and timely completion of the lathing and/or plastering work.

C. Do not begin installation until all unsatisfactory conditions are resolved.

D. A pre-construction meeting is recommended with the architect and/or owner, primary contractor and representative responsible for the windows, framing, flashing, roofing, scabbing, masonry and any other building components interfacing with the stucco.

PERFORMANCE

A. The work shall be performed by a skilled and trained work crew.

B. Install specified products and/or systems in accordance with reference standards, manufacturer's recommendations, unless indicated otherwise in project documents.

C. Lathing shall be installed prior to start of lathing or may be required to be integrated at the time of lathing.

INSTALLATION OF STUCCO TRIM ACCESSORIES

A. Verify that substrate and work by other trades are complete to the point at which installation of trim accessories may properly commence.

B. Attachments shall be firm enough to hold trim accessories in place without misalignment during plastering.

- Flanges or attachment points of trim accessories shall be secured to substrate in accordance with requirements of manufacturers of approval fasteners. Space per manufacturer's directions.

C. Zinc alloy or PVC is recommended if trim accessories are exposed to a high-salt environment.

D. Install individual trim-accessory sections to each other at end joints for accurate alignment.

E. Install trim accessories in a manner that ensures a true, level and plumb stucco surface, and moisture resistant.

SECTION 08800 – GLASS AND GLAZING

Scope:

1. Provide glass and glazing for all applications, including sidelights, glazed openings in walls and mirrors.
2. Glass Schedule:
 - a. At interior partitions: 1/4 inch thick tempered glass.

Products:

1. Glazing sheets:
 - a. Heat treated glass products. ASTM C1048: Tempered glass
 - b. Mirrors, silvering, copper coating, protective organic coating
2. Glazing materials:
 - a. Acrylic glazing sealant, Tremco Mono.
 - b. Preformed glazing tape, Tremco Polyshim Tape.
 - c. Setting blocks, shims and spacers.

Installation

1. Comply with FGMA Glazing Manual and manufacturer's instructions and recommendations.
2. Set mirrors directly to wall adhere to wall with adhesive – Mirror mastic or approved equal or as required for use by child care licensing.

SUBSTANTIAL COMPLETION

Scope:

- Preparation the following:
 - Punch list
 - Warranties
 - Certifications
 - Occupancy permit
 - Start-up and testing of building systems
 - Changeover of locks
- Prerequisites to final acceptance
 - Final payment request with supporting affidavits
 - Completed punch list & instruction of Franchisee's personnel
- Record document submittals.
 - Provide a copy of "As-Built" drawings and a diskett each to Franchisor and Franchisee.
- GC shall repair, patch and touch-up marred surfaces to match adjacent finishes.
- GC shall clean the entire construction as a brand new facility.
 - At completion of construction GC, Franchisor and Franchisee shall conduct a final walk through before acceptance.
 - GC shall provide no less than a one (1) year warranty on all labor and materials used in constructing the **Ivy Kids Early Learning Center Franchise**.

F. Install the trim accessories in accordance with the required thickness of stucco basecoat and finish coat requirement.

G. Install the longest possible lengths of trim accessories. A minimum continuous section (length) of 7 ft. (2 m) is recommended.

TRIM ACCESSORY JOINTS

A. The water-resistant barrier must continue to be unbroken behind trim accessory joints in vertical or horizontal direction.

B. Locate trim accessory joints strategically at points where building movement is anticipated.

1. Wall penetrations
2. Structural plate lines
3. Junctions of dissimilar substrates
4. Existing construction joints in structure
5. Columns
6. Cantilevered areas

C. Joints are recommended in stucco assemblies with lath reinforcement but have limited use in direct-applied stucco over concrete or concrete masonry surface.

D. It is recommended that trim accessory joints be weather-sealed by embedment in caulking at intersections when placed end-to-end and at the terminations.

E. It is recommended to install vertical joints continuously and abut them to horizontal joints (be sure that water-resistant barrier runs continuously behind joints).

F. Install longest possible lengths. No termination of a section within 24 inches (600 mm) of an intersection with the exception of pre-manufactured trim accessory joint intersections.

G. Trim accessory joints shall be installed on framed, sheathed construction so as to create stucco panel of 150 to 180 sq. ft. (14 m² to 17 m²) in as square a configuration as possible.

H. Trim accessory joints shall be installed with concrete or concrete masonry construction so as to create a stucco assembly (with lath reinforcement) of 200 to 250 sq. ft. (18 m² to 23 m²).

I. Installing control joints over continuous lath is an approved method.

J. Sheathed framed construction with vertical trim accessory joints that require the lath to be terminated (cut) and installed on top of the flanges shall be placed at framing member locations. Lath shall be attached with appropriate fasteners through the trim accessory flange, sheathing and into the framing member.

**JM
Johns Manville**

Cool Roof Rating Systems Set Standards for Reflectivity and Emissivity

Title 24 / ENERGY STAR / LEED
How the Energy and Environmental Standards Compare
Below are key points to help distinguish the unique requirements of each of these programs. For the roofing industry in particular, all of these rating systems have one thing in common: they all set standards for cool roof reflectivity and/or emissivity. Some standards are voluntary, while others are mandatory.

- Title 24 is mandatory in California.
- LEED (Leadership in Energy and Environmental Design) is highly encouraged among a growing list of city, state and federal agencies.
- ENERGY STAR is generally voluntary. However, meeting the ENERGY STAR standards for roofing reflectivity can help earn points in the LEED rating system.

Program	Requirement	Initial Reflectivity	3-Yr. Agpd Reflectivity	Emissivity SRI***
Title 24 (CA)	Mandatory	N/A	0.55	0.75 94=>
ENERGY STAR	Voluntary**	0.65	0.50	N/A** N/A
LEED	Voluntary*	N/A	N/A	N/A 78=>

Note: Cool Roof Rating Council (CRRCC) lists product emissivity information according to ASTM C 1371. LEED accepts products tested for emissivity according to ASTM E 1980. Results may vary between test methods.

** Although voluntary, some local and state authorities are requiring designers to adhere to these guidelines for specific building types (i.e., government or state-funded projects).*

*** ENERGY STAR emissivity levels are not required at this time; however, manufacturers are required to test and report emissivity levels following appropriate test procedures.*

**** SRI is determined by using the reflectivity values, emissivity values and the steady state temperature equations defined in ASTM E 1980-01.*

Johns Manville's Product Offering for Cool Roofs
Reduce Energy Costs and Mitigate the "Heat Island" Effect of Development

Recommended roof systems include:

PVC
Johns Manville offers white JM PVC with DuPont™ Evaloxy™ KEE (Ketone Ethylene Ester) membranes including JM PVC-50, JM PVC-60, JM PVC-80 as well as JM PVC-50 Heecee Backed, JM PVC-60 Heecee Backed and JM PVC-80 Heecee Backed single ply systems, either mechanically attached or fully adhered.

TPO
Johns Manville markets white JM TPO single ply systems either mechanically attached or fully adhered.

Bituminous Built-Up Roofing (BUR) and SBS
CR cap sheets have white minerals and are factory-coated with one coat of TopGuard® Base and one coat of TopGuard® 5000 to meet cool roof standards.

As another option for bituminous systems, several non-CR BUR and SBS cap sheets may be coated with TopGuard Base and TopGuard 4000 or TopGuard 5000.

Product	Reflectivity** (ASTM C 1549)	Emissivity** (ASTM C 1371)	SRI* (ASTM 1980-01)
JM PVC	0.86	0.88	108
JM TPO	0.77	0.87	101
GlasKap CR	0.76	0.85	93
TopGuard® 4000	0.83	0.88	102
TopGuard 5000	0.83	0.88	102
SBS CR Membranes	0.76	0.85	92

* LEED's Solar Reflective Index.
** Test Methods used by CRRCC.

REVISIONS AND ISSUANCE

NO.	DATE	DESCRIPTION
1	07/20/2018	PRONG
2	08/30/2018	ADDENDUM 1

IVY KIDS EARLY LEARNING CENTER
300 N. COIT ROAD
Mckinney Texas 75035

Developer
K&R Frisco Ivy LLC
jay@southerngraceclothing.com

Civil Engineer
Structural Engineer
Mission Engineering, Inc.
10370 Richmond Ave.
Houston Tx, 77072
713 981 0018

MEP
CT Keng
832 452 5370

J C CHENG ARCHITECT
TX Reg. Arch No. 09305
jc@jccarch.com

DRAWN BY	CHECKED BY
DATE	JOB NO.
05052018	mckinney-1

DRAWING TITLE

SPECIFICATIONS

DRAWING NO.

A-0.2B



REVISIONS AND ISSUANCE		
NO.	DATE	DESCRIPTION
1	08/13/2017	PRICING
2	08/30/2018	ADDENDUM 1

PLEASE SEE SHEET A-2.4 FOR NSF INFORMATION OF THE PROPOSED KITCHEN EQUIPMENT

Partial Finish Schedule for health related items , (see A-01 for a complete schedule)

	Floor	Base/Trim	Wall	Ceiling	Remarks
01 ENTRY	FRP	FRP	FRP	FRP	floor and ctp to be selected
02 OFFICE	FRP	FRP	FRP	FRP	NDT USED
03 OFFICE	FRP	FRP	FRP	FRP	8'-6"
04 DIRECTORS OFFICE	FRP	FRP	FRP	FRP	8'-6"
04A SICK ROOM	FRP	FRP	FRP	FRP	8'-6"
05 KITCHEN	FRP	FRP	FRP	FRP	VINYL FACED CLG TILE
06 RESTROOM	FRP	FRP	FRP	FRP	8'-6" FRP UP TO 4' HT.
07 PANTRY	FRP	FRP	FRP	FRP	8'-6"
08 LUNCH ROOM	FRP	FRP	FRP	FRP	8'-6" FRP UP TO 4' HT.
09 STORAGE	FRP	FRP	FRP	FRP	8'-6" FRP UP TO 4' HT.
10 UTILITY	FRP	FRP	FRP	FRP	8'-6" FRP UP TO 4' HT.
11 RESTROOM	FRP	FRP	FRP	FRP	8'-6" FRP UP TO 4' HT.
12 STORAGE	FRP	FRP	FRP	FRP	8'-6"

COLOR OF ALL FRP AND CEILING ARE WHITE
 ALL FLOOR, WALL, BASE AND WALL FINISH IN KITCHEN(05), PANTRY(07), LUNCH (08), STORAGE (09), UTILITY (10) RESTROOM(11) SHALL BE LIGHT BEIGE AND HAVE LRV OF 40 OR GREATER.

HEALTH NOTE:
 ALL NSF CERTIFICATION ARE SHOWN ON A2.4

- PROVIDE FRP AND WAINSCOTING AT CORRIDORS
- ALL INTERIOR WALL EXTEND TO BOTTOM OF TRUSS
- INSULATION ON ALL EXTERIOR WALL

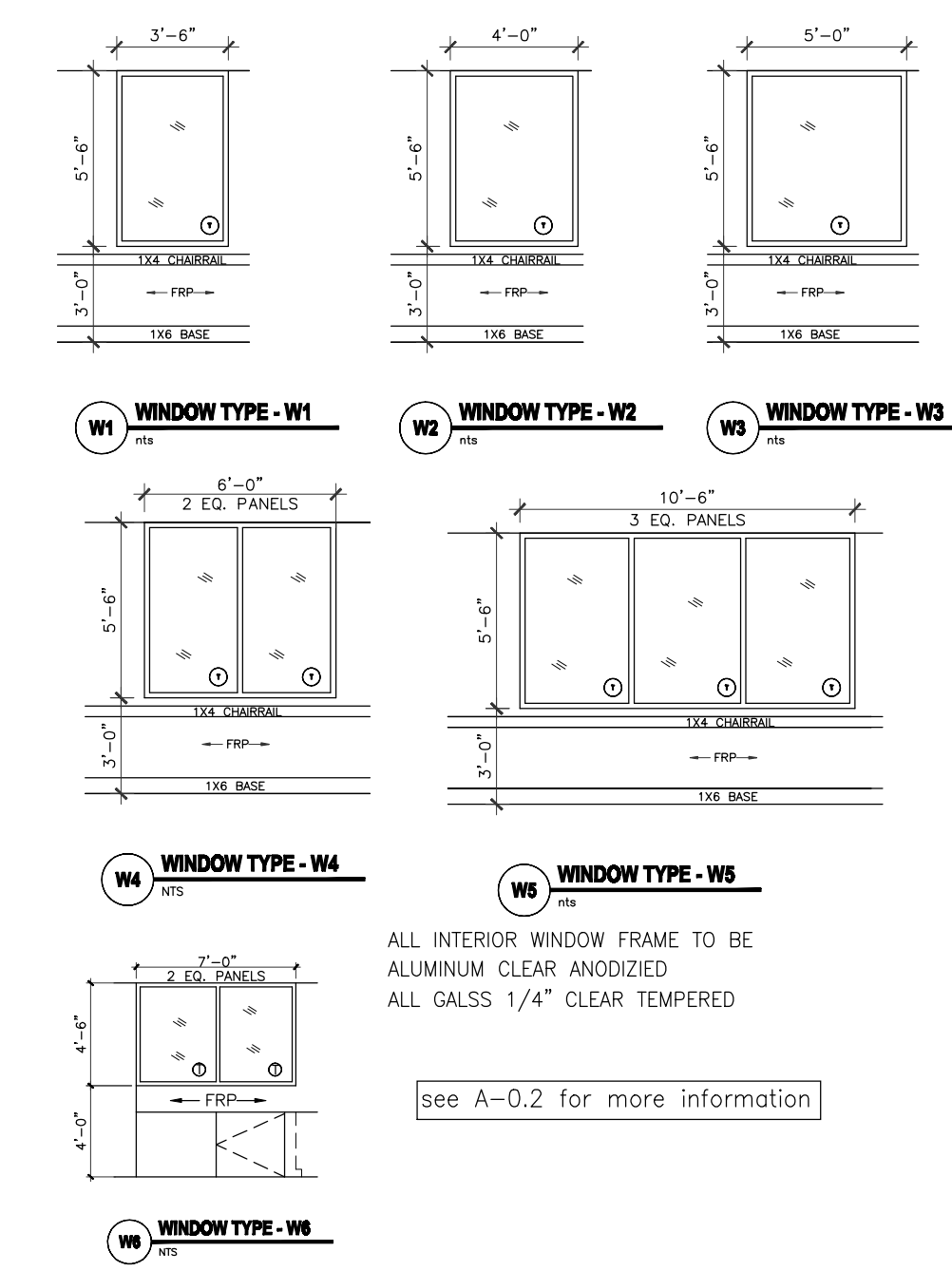
GC NOTES:
 ALL ADA RAILING, REST ROOM ACCESSORIES, SHALL BE INSTALLED AFTER ADA INSPECTOR MARKED THE REQUIRED HEIGHT AT SITE.

NOTE:
 MOISTURE RESISTANT PLYWOOD SUBSTRATE SHALL BE USED AT ALL AREA RECEIVE PLUMBING FIXTURE. PRESS WOOD IS ALLOWED ONLY AT DRY AREA.

LEGEND

- ROOM NAME
- VCT → FLOOR FINISH
- ◇ → MILLWORK CUBBIE, SEE SHEET 6.8
- Ⓛ → DOOR NUMBER, SEE SHEET A0.1
- → 2x6 WOOD STUD
- → EGRESS PATH PLAN
- MIRROR NOT SHOWN ON PLAN, SEE ENLARGED ELEVATIONS
- TB → TACK BOARD, BY CLARIDGE, 24"X18"X1/4", TOTAL OF 13. ALUM. FRAME WITH LIGHT COLOR CORK.

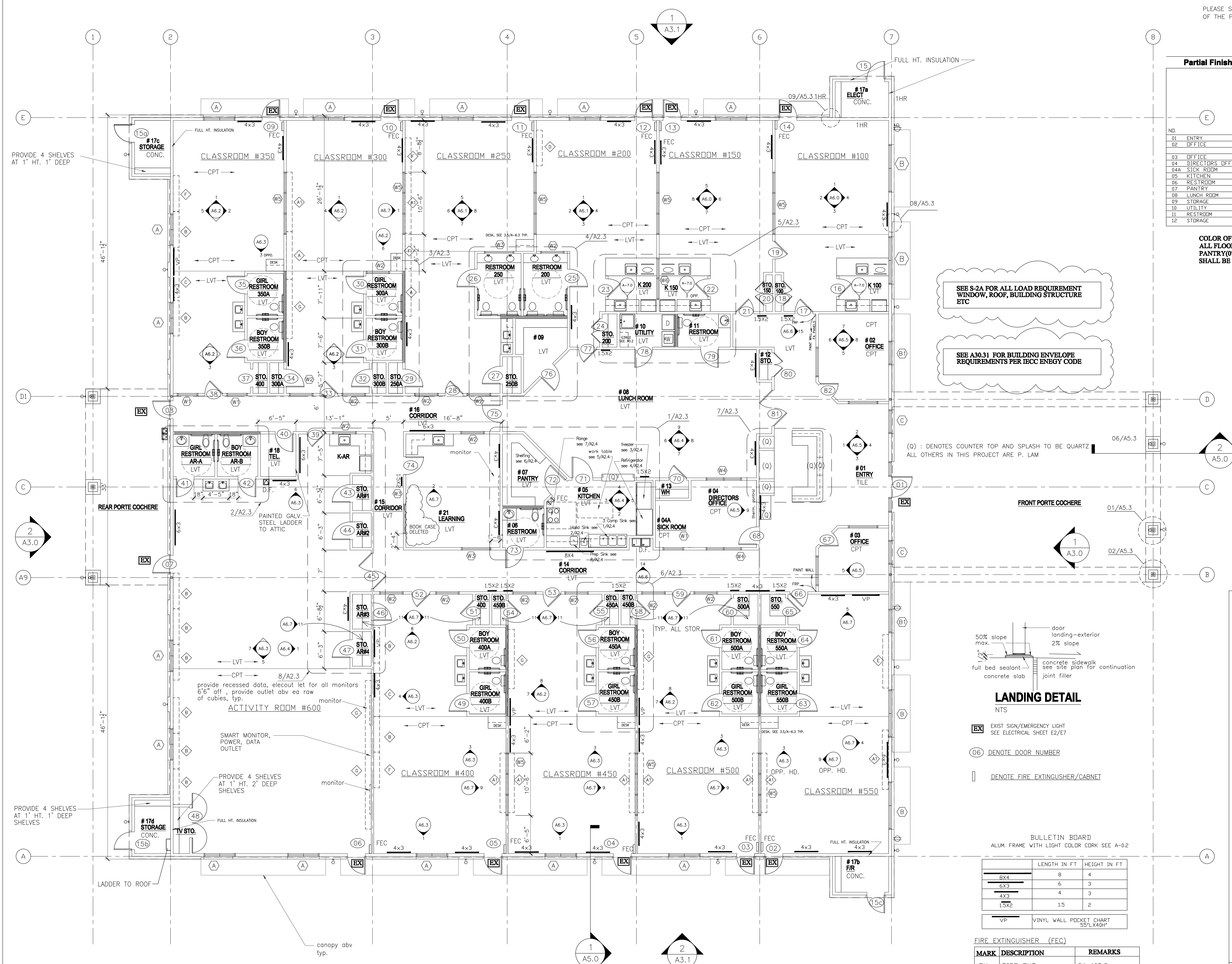
INTERIOR WINDOW SCHEDULE



EXTERIOR WINDOW SCHEDULE

DARK BRONZE ANODIZED ALUMINUM WINDOW FIXED WITH GLAZED-IN INSULATING UNITS, SEE PLAN AND ELEVATION FOR SIZE STAINED CLEAR PINE INTERIOR SURROUNDING.

see A-3.0 for more information



NOTES:

- BUILDING IS FULLY SPRINKLERED.
- ALL INTERIOR WALL 2X4 STUDS U.N.O. ALL EXTERIOR WALL 2x6 STUDS
- 2X6 FOR PLUMBING WALL.
- ALL BATHROOMS TO BE SLOPED TO FLOOR DRAIN. (SEE P-1)
- VISUAL ALARM SHALL BE PROVIDED WITH AUDIBLE ALARM IN ALL RESTROOMS, CLASSROOMS, ACTIVITY ROOM, LOBBIES, AND HALLWAYS.
- THE FRONT DOOR HAS AN ELECTRONIC DOOR LATCH, COMPLETE W/ "BIOMETRIC BASED SAFEPASS DOOR CONTROLLER". THE ELECTRONIC DOOR LATCH SHOULD BE ABLE TO BE OPERATED BY A BUZZER BUTTON FROM INSIDE THE BLDG. FROM RECEPTION DESK, AND W/ A KEY IN THE FRONT
- ALL LOCKS KEYS TO HAVE THE SAME MASTER KEY
- TACK BOARDS PROVIDED BY GC.
- PLACE THERMOSTAD SENSOR NEAR 6 FT AFF.
- TO AVOID CONFLICT, COORDINATION WITH MILLWORK, FURNITURE, WIDOWS, DOORS AND ALL OTHER EQUIPMENT, DEVICES MUST BE DONE PRIOR TO LOCATE THE WALL SWITCH AND/OR OUTLETS. GC IS RESPONSIBLE TO FIX THE FILED CONFLICT SHOULD IT OCCURS.

1 FLOOR PLAN
 1/8" = 1'-0"

IVY KIDS EARLY LEARNING CENTER
4434 CR 94
Manvel, Tx 77578



DRAWING TITLE
FLOOR PLAN

DRAWN BY
 JC

CHECKED BY
 JC

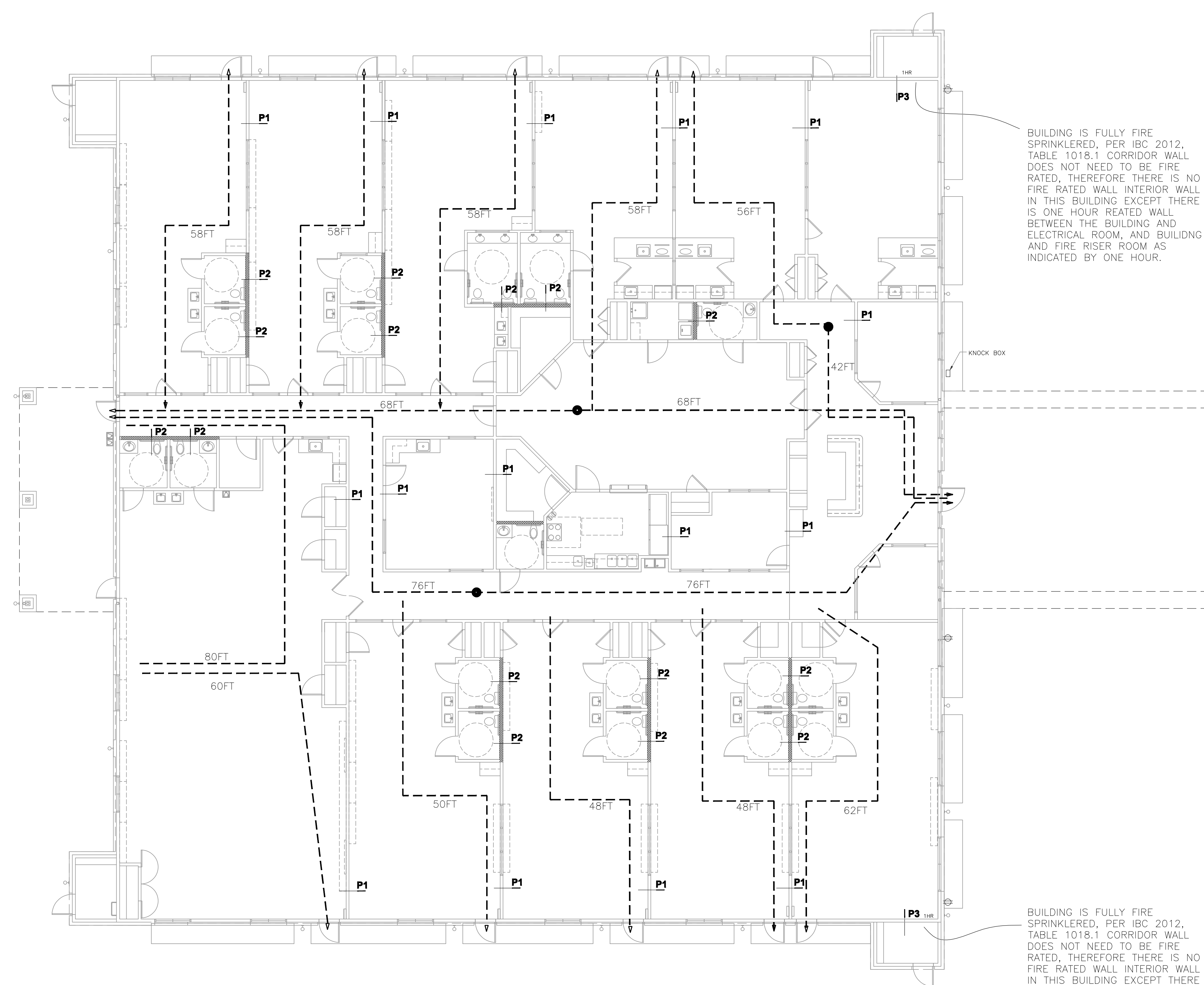
DATE
 03/30/2017

JOB NO.
 gleannloch

DRAWING NO.
A-2.0

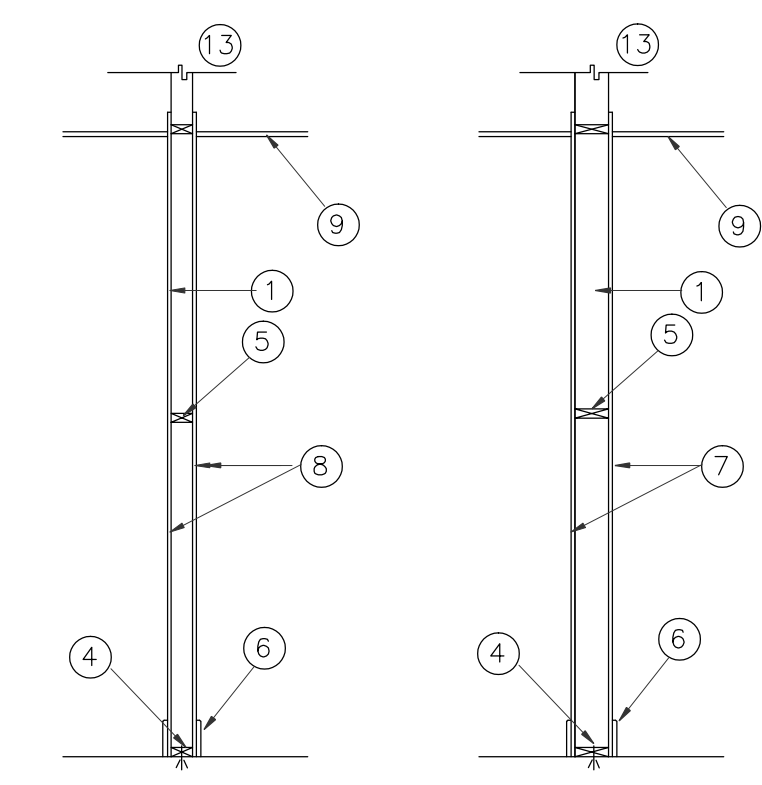
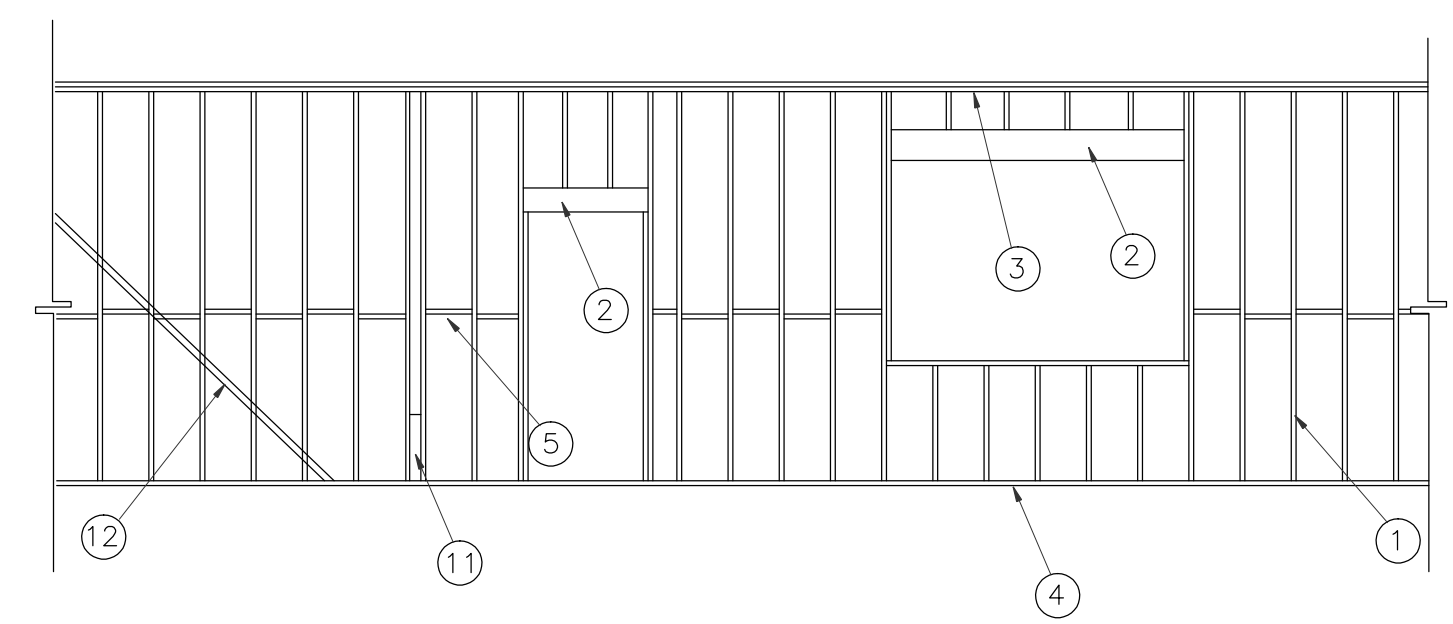
REVISIONS AND ISSUANCE		
NO.	DATE	DESCRIPTION
1	08/13/2017	PRICING
1	08/30/2018	addendum

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BUILDING IS FULLY FIRE SPRINKLERED, PER IBC 2012, TABLE 1018.1 CORRIDOR WALL DOES NOT NEED TO BE FIRE RATED, THEREFORE THERE IS NO FIRE RATED WALL INTERIOR WALL IN THIS BUILDING EXCEPT THERE IS ONE HOUR REATED WALL BETWEEN THE BUILDING AND ELECTRICAL ROOM, AND BUILDING AND FIRE RISER ROOM AS INDICATED BY ONE HOUR.

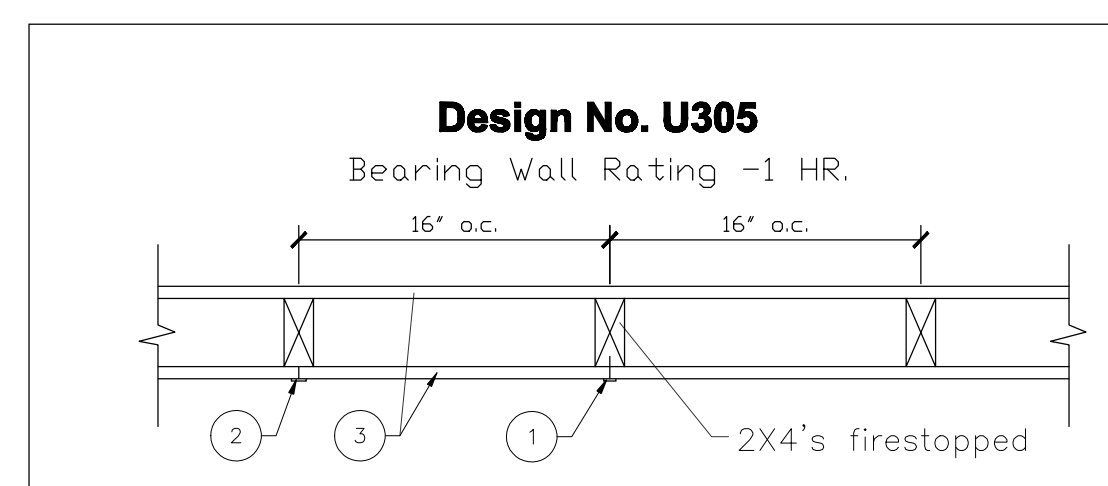
BUILDING IS FULLY FIRE SPRINKLERED, PER IBC 2012, TABLE 1018.1 CORRIDOR WALL DOES NOT NEED TO BE FIRE RATED, THEREFORE THERE IS NO FIRE RATED WALL INTERIOR WALL IN THIS BUILDING EXCEPT THERE IS ONE HOUR REATED WALL BETWEEN THE BUILDING AND ELECTRICAL ROOM, AND BUILDING AND FIRE RISER ROOM AS INDICATED BY ONE HOUR.



PARTITION P1
 2X4 WOOD STUDS
 TYP. INTERIOR PARTITION
 NON RATED

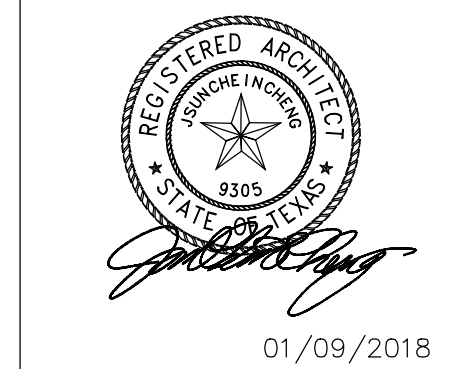
PARTITION P2
 2X6 WOOD STUDS
 TYP. PLUMBING (TOILET) PARTITION
 NON RATED

- ① WOOD STUD SEE NOTE ON S-2A FOR SIZE AND SPACING
- ② HEADR, SEE S2A FOR HEADER AND BEAM SCHEDULE
- ③ DOUBLE TOP PLATE, ATTACH TO BOTTOM OF TRUSS, SEE S6 FOR STRAPING DETAIL, SEE FRAMING NOTES ON S2A
- ④ BOTTOM PLATE, FASTEN TO CONCRETE SLAB, SEE S6 FOR STRAPING AND ANCHORING DETAIL SEE FRAMING NOTES ON S2A
- ⑤ FIRE STOP
- ⑥ SCHEDULED BASE
- ⑦ 5/8 GYP. BOARD, USE GREEN BOARD AT PARTITION RECEIVING PLUMBING WORK
- ⑧ 5/8" GYP BOARD
- ⑨ SCHEDULED CEILING
- ⑩ INSIDE CORNER OF COLUMN
- ⑪ LET-IN DIAGONAL BRACING
- ⑫ ATTACH TO BOTTOM OF TRUSS WHEN PERPENDICULAR TO TRUSS.
- ⑬ WHEN PARALLEL TO TRUSS, PROVIDE WOOD STUDS TO CONNECT TO BOTTOM OF TRUSS, MIN. OF THREE TRUSSES, ATTACH PARTITION TO WOOD STUDS.



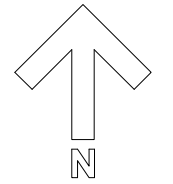
1. Nailheads - Exposed or covered with joint compound.
2. Joints - Exposed or covered with fiber tape and joint compound except where required for specific edge configuration. For tapered, rounded-edge wallboard, joints covers with joint compound or fiber tape and joint compound. As an alternate, non 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard. Joints reinforced.
3. Wallboard, Gypsum - 5/8 in. thick wallboard paper or vinyl surfaced, with square or tapered edges, applied either horizontally or vertically. Wallboard nailed 7 in. oc with 6d cement-coated nails 1 7/8 in. long, 0.0915 in. shank diam and 1/4 in. diam heads. When used in widths of other than 48 in., wallboard is to be installed horizontally.
4. Steel Corner Fasteners - (Optional) - For use at wall corners. Channel shaped, 2 in. long by 1 in. high on the back side with two 1/8 in. wide cleats protruding into the 5/8 in. wide channel, fabricated from 24 gauge galv steel. Fasteners applied only to the end or cut edge (not along tapered edges of the wallboard, no greater than 2 in. from corner of wallboard, max. spacing 16 in. OC. Nailed to adjacent stud through tab using one No. 6d cement-coated nail per fastener. Corners of wall board shall be nailed to top and bottom plate using No. 6d cement-coated nails.

PARTITION P3
 ONE HOUR



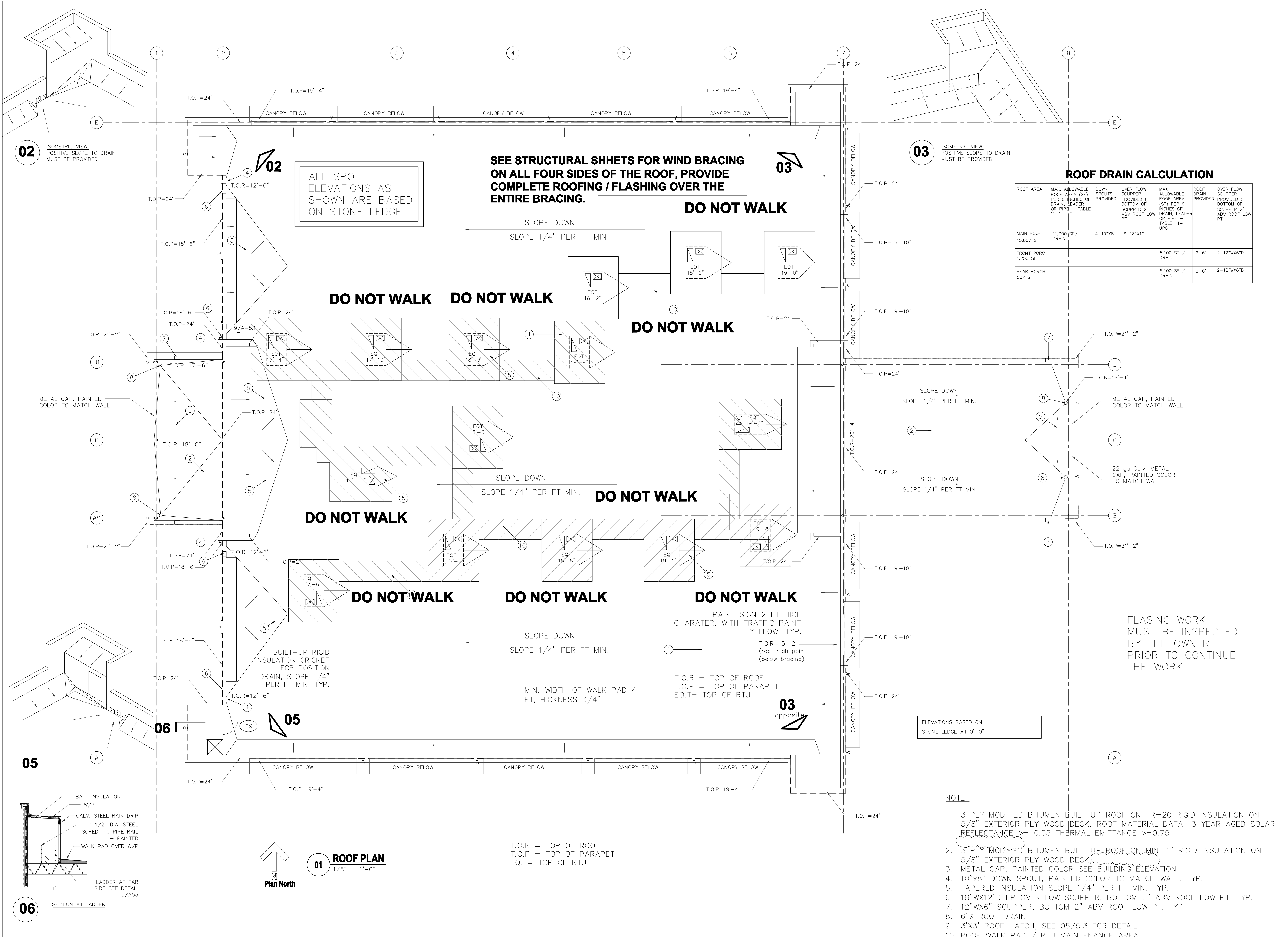
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FLOOR PLAN TRAVEL DIST. PARTITIONS	
DRAWN BY	CHECKED BY
DATE	JOB NO.
DRAWING NO.	
A-2.0 F	

1 FLOOR PLAN TRAVEL DISTANCE
 1/8" = 1'-0"



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NO.	DATE	DESCRIPTION
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ROOF DRAIN CALCULATION

ROOF AREA	MAX. ALLOWABLE ROOF AREA (SF) PER 8 INCHES OF DRAIN LEADER OR PIPE - TABLE 11-1 UPC	DOWN SPOUTS PROVIDED	OVER FLOW SCUPPER PROVIDED (BOTTOM OF SCUPPER 2\"/>			
MAIN ROOF 15,867 SF	11,000 SF / DRAIN	4-10"x8"	6-18"x12"			
FRONT PORCH 1,256 SF				5,100 SF / DRAIN	2-6"	2-12"Wx6"D
REAR PORCH 507 SF				5,100 SF / DRAIN	2-6"	2-12"Wx6"D

FLASING WORK MUST BE INSPECTED BY THE OWNER PRIOR TO CONTINUE THE WORK.

- NOTE:**
- 3 PLY MODIFIED BITUMEN BUILT UP ROOF ON R=20 RIGID INSULATION ON 5/8" EXTERIOR PLY WOOD DECK. ROOF MATERIAL DATA: 3 YEAR AGED SOLAR REFLECTANCE >= 0.55 THERMAL EMITTANCE >=0.75
 - 3 PLY MODIFIED BITUMEN BUILT UP ROOF ON MIN. 1" RIGID INSULATION ON 5/8" EXTERIOR PLY WOOD DECK.
 - METAL CAP, PAINTED COLOR SEE BUILDING ELEVATION
 - 10"x8" DOWN SPOUT, PAINTED COLOR TO MATCH WALL. TYP.
 - TAPERED INSULATION SLOPE 1/4" PER FT MIN. TYP.
 - 18"WX12"DEEP OVERFLOW SCUPPER, BOTTOM 2" ABV ROOF LOW PT. TYP.
 - 12"WX6" SCUPPER, BOTTOM 2" ABV ROOF LOW PT. TYP.
 - 6"Ø ROOF DRAIN
 - 3'X3' ROOF HATCH, SEE 05/5.3 FOR DETAIL
 - ROOF WALK PAD / RTU MAINTENANCE AREA



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ROOF PLAN

DRAWN BY
JC

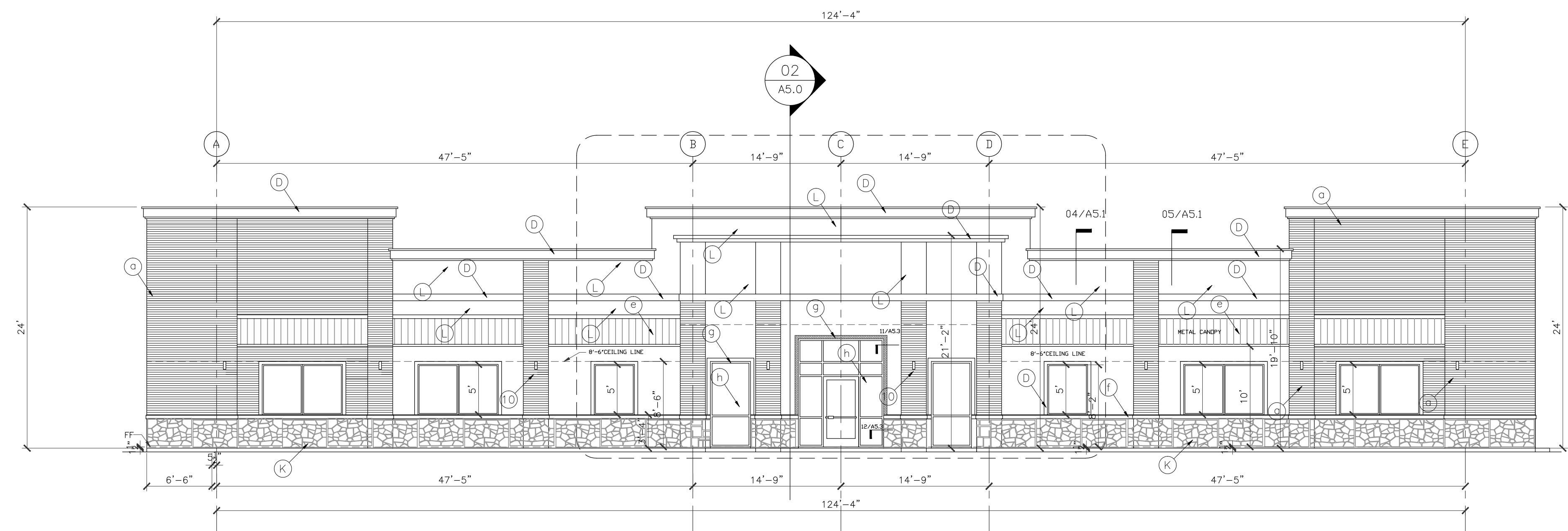
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DATE
03/30/2017

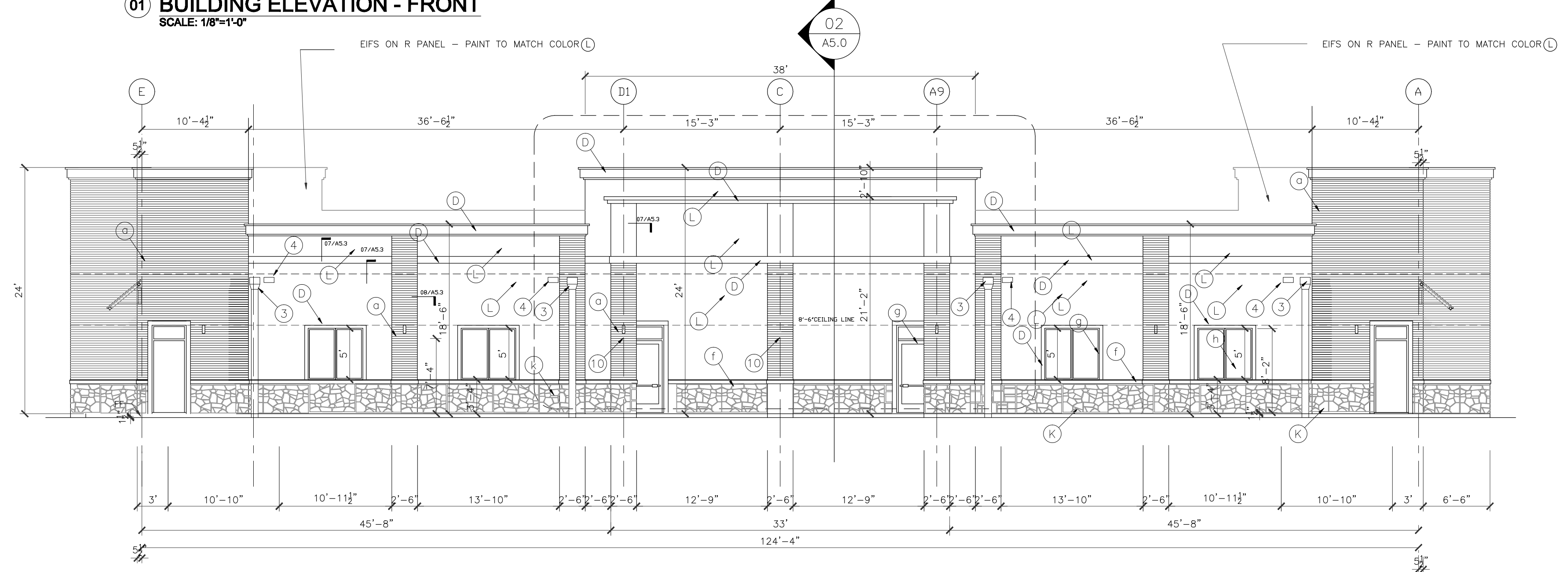
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REVISIONS AND ISSUANCE		
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01 BUILDING ELEVATION - FRONT
SCALE: 1/8"=1'-0"



02 BUILDING ELEVATION
SCALE: 1/8"=1'-0"

ELEVATIONS BASED ON STONE LEDGE = 0'-0"

ALL EXTERIOR ALUM. FRAMES TO BE DARK BRONZE ANODIZED.
ALL INTERIOR ALUM. FRAMES TO BE CLEAR ANODIZED.

ALL STUCCO TO BE TRADITIONAL 3 STEPS
PLASTERING WORK IN THIS PROJECT

- EXTERIOR FINISH SCHEDULE**
- ① BRICK BY ACME Elgin plant' Gray Wolf' blade cut texture, ELP372,809660
 - Ⓛ STUCCO Paint PPG Color 314-1 MILK PAINT
 - ⓓ STUCCO Paint PPG Color 314-4 SPICED VINEGAR
 - ⓑ Down Spout - galv. paint to match wall
 - ⓔ STANDING SEAM METAL ROOF CANOPY, by 'BERRIDGE - 'Champagne'
 - ⓕ Limestone cap - cream color
 - ⓖ Dark Bronze Anodized frame
 - ⓗ tinted glass - insulating unit
 - Ⓚ Stone-Bisque veneer stone - ashlar pattern

- ① 1" STUCCO W 1/2" DEEP REVEAL, TYP.
- ② GALVANIZED METAL FLASHING, PAINTED
- ③ 10"X8" GALV. METAL DOWNSPOUT, CONNECTED TO UNDERGROUND STORM DRAIN SYSTEM, CIVIL DRAWING.
- ④ 16"Wx12"H OVERFLOW SCUPPER
- ⑤ NOT USED
- ⑥ CROWN MOLDING,
- ⑦ GALVANIZED METAL CAP, PAINTED COLOR TO MATCH MOLDING
- ⑧ EXPOSED STEEL STRUCTURE, PAINTED COLOR TO MATCH STANDING SEAM METAL ROOF WALL SCOUNCE, TYP.

ENERGY INFORMATION OF THE BUILDING ENVELOPE , ROOF , WALL AND MAXIMUM GLAZING FACTOR PER ENERGY CODE IECC 2012

	R VALUE	U VALUE	SHGC
ROOF	24		
WALL	19		
WINDOW		.65	.60
DOOR		.65	.70

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DRAWING TITLE
EXTERIOR ELEVATIONS

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03/30/2017

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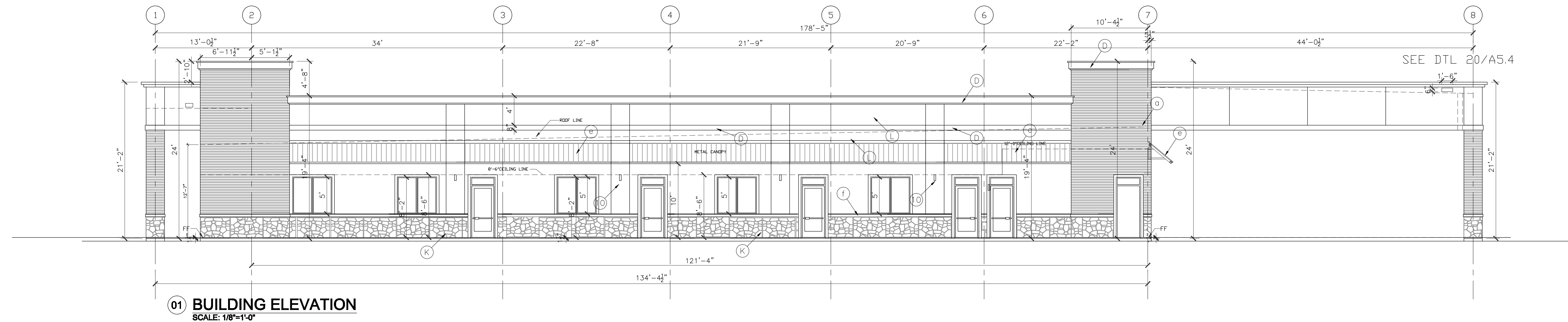
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gleannloch

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A-3.0

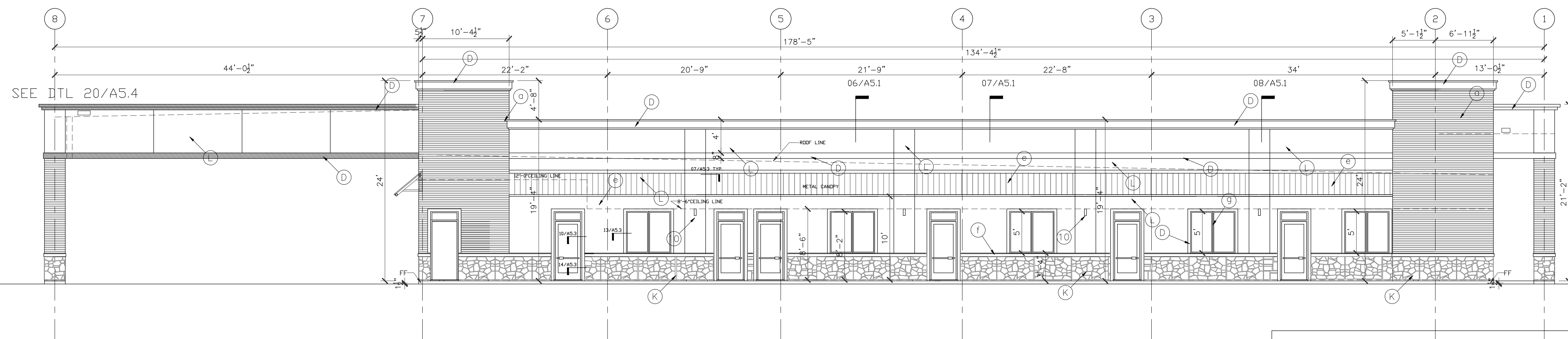
REVISIONS AND ISSUANCE

NO.	DATE	DESCRIPTION
1	08/13/2017	PRICING
2	08/30/2018	ADDENDUM

ELEVATIONS BASED ON STONE LEDGE = 0'-0"



01 BUILDING ELEVATION
SCALE: 1/8"=1'-0"



02 BUILDING ELEVATION
SCALE: 1/8"=1'-0"

EXTERIOR FINISH SCHEDULE

- (a) BRICK BY ACME Elgin plant' Gray Wolf' blade cut texture, ELP372,809660
- (L) STUCCO Paint PPG Color 314-1 MILK PAINT
- (D) STUCCO Paint PPG Color 314-4 SPICED VINEGAR
- (b) Down Spout - galv. paint to match wall
- (e) STANDING SEAM METAL ROOF CANOPY, by 'BERRIDGE - 'Champagne'
- (f) Limestone cap - cream color
- (g) Dark Bronze Anodized frame
- (h) tinted glass - insulating unit
- (K) Stone-Bisque veneer stone - ashlar pattern

ENERGY INFORMATION OF THE BUILDING ENVELOPE, ROOF, WALL AND MAXIMUM GLAZING FACTOR PER ENERGY CODE IECC 2012

	R VALUE	U VALUE	SHGC
ROOF	24		
WALL	19		
WINDOW		.65	.60
DOOR		.65	.70

- 1 1" STUCCO W 1/2" DEEP REVEAL, TYP.
- 2 GALVANIZED METAL FLASHING, PAINTED
- 3 10"X8" GALV. METAL DOWNSPOUT, CONNECTED TO UNDERGROUND STORM DRAIN SYSTEM, CIVIL DRAWING.
- 4 16"Wx12"H OVERFLOW SCUPPER
- 5 NOT USED
- 6 CROWN MOLDING,
- 7 GALVANIZED METAL CAP, PAINTED COLOR TO MATCH MOLDING
- 8 EXPOSED STEEL STRUCTURE, PAINTED COLOR TO MATCH STANDING SEAM METAL ROOF
- 9 WALL SCONCE, TYP.

IVY KIDS EARLY LEARNING CENTER
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08/30/2018 01/09/2018

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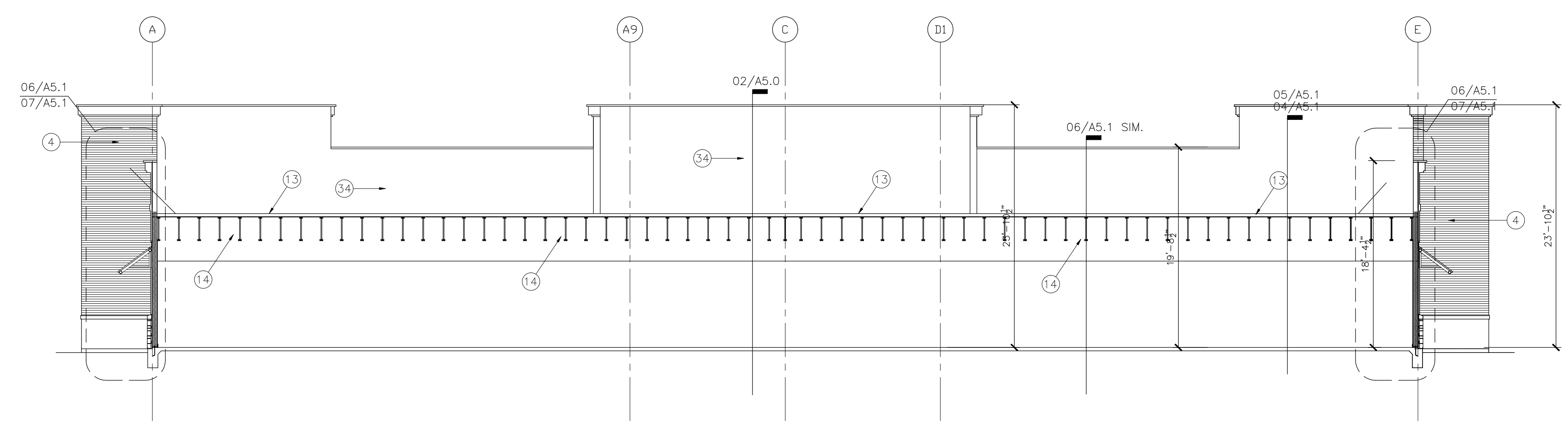
EXTERIOR ELEVATIONS

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JC

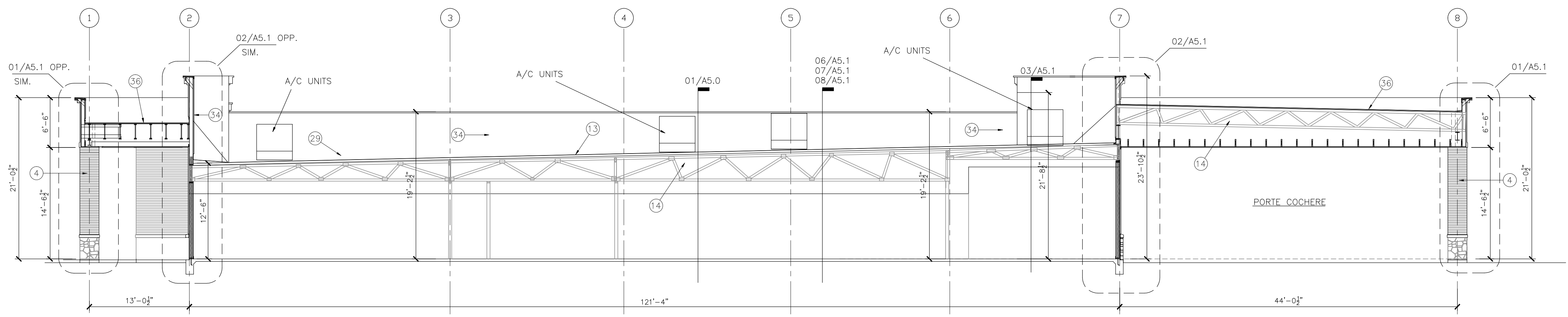
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03/30/2017 gleannloch

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REVISIONS AND ISSUANCE		
NO.	DATE	DESCRIPTION
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2	08/30/2019	ADDENDUM



01 BUILDING SECTION
SCALE: 1/8"=1'-0"



02 BUILDING SECTION
SCALE: 1/8"=1'-0"

1. 1" STUCCO ON STEEL WIRE MESH, PAINTED
2. STUCCO BAND
3. STANDING SEAM METAL ROOF, by "BERRIDGE"
4. BRICK
5. LIMESTONE CAP
6. GALVANIZED METAL FLASHING
7. 10"X8" GALV. METAL DOWNSPOUT, CONNECTED TO UNDERGROUND STORM DRAIN SYSTEM, SEE CIVIL DRAWING.
8. 12"Wx8"H OVERFLOW SCUPPER
9. 10"Wx8"H ROOF SCUPPER WITH DRAIN BOX
10. CROWN MOLDING, PAINTED, SEE DETAIL FOR SIZE
11. GALVANIZED METAL CAP, PAINTED COLOR TO MATCH MOLDING
12. EXPOSED STEEL STRUCTURE, PAINTED COLOR TO MATCH STANDING SEAM METAL ROOF
13. 3 PLY MODIFIED BITUMEN BUILT UP ROOF ON 1" RIGID INSULATION ON 5/8" EXTERIOR PLY WOOD DECK
14. ROOF TRUSS, SEE STRUCTURAL
15. S. 1/2" R-19 BATT INSULATION AT ALL EXTERIOR WALLS
16. 2X6 WOOD STUDS @ 16" O.C. SEE STRUCTURAL
17. BRICK TIES, 22 GA, @ 16" O.C. HORIZONTAL & 32" O.C. VERTICAL
18. WEEP HOLES @ 24" O.C.
19. PLASTIC FLASHING (THRU-WALL TYPE)
20. 1/2"X1/2" LG. A.B. @ 36" O.C.
21. 5/8" GYPSUM BOARD, PAINTED. (USE WATER RESISTANT GYP. BOARD AT PLUMBING WALLS)
22. SCHEDULED DOOR
23. SCHEDULED WINDOW
24. SCHEDULED BASE
25. HOLLOW METAL FRAME / DOOR
26. STEEL LINTEL, PAINTED COLOR TO MATCH WALL, SIZE SEE STRUCTURAL
27. SEALANT AND BACKER ROD
29. ROOF HATCH, SEE PLAN FOR LOCATION, SEE SOFFIT.
30. SOFFIT.
33. CONTINUOUS SOFFIT VENT
34. "R" METAL PANEL SIDING, PREFINISHED
35. 1/2" EXTERIOR PLYWOOD OR O.S.B. SHEATHING COVERED "TYVEK" STUCCO WARP
36. 3 PLY MODIFIED BITUMEN BUILT UP ROOF ON 1" RIGID INSULATION ON 5/8" EXTERIOR PLY WOOD DECK
37. STEEL BEAM, SEE STRUCTURAL
38. 2x TREATED WOOD BLOCK CONTINUOUS
39. STONE
40. WOOD STAINED

GENERAL NOTES

1. ALL INSULATION MATERIAL SHALL HAVE A FLAME SPREAD RATING OF NOT MORE THAN 25 AND SHALL HAVE A SMOKE DEVELOPED RATING OF NOT MORE THAN 450.

IVY KIDS EARLY LEARNING CENTER
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DRAWING TITLE

BUILDING SECTIONS

DRAWN BY: JC CHECKED BY: JC

DATE: 03/30/2017 JOB NO.: gleannloch

DRAWING NO. **A-5.0**

REVISIONS AND ISSUANCE		
NO.	DATE	DESCRIPTION
1	08/13/2017	PRICING
2	08/30/2018	ADDENDUM 1

IVY KIDS EARLY LEARNING CENTER
 4434 CR 94
 Manvel, Tx 77578



01/09/2018

DRAWING TITLE

DETAILS

DRAWN BY: JC
CHECKED BY: JC

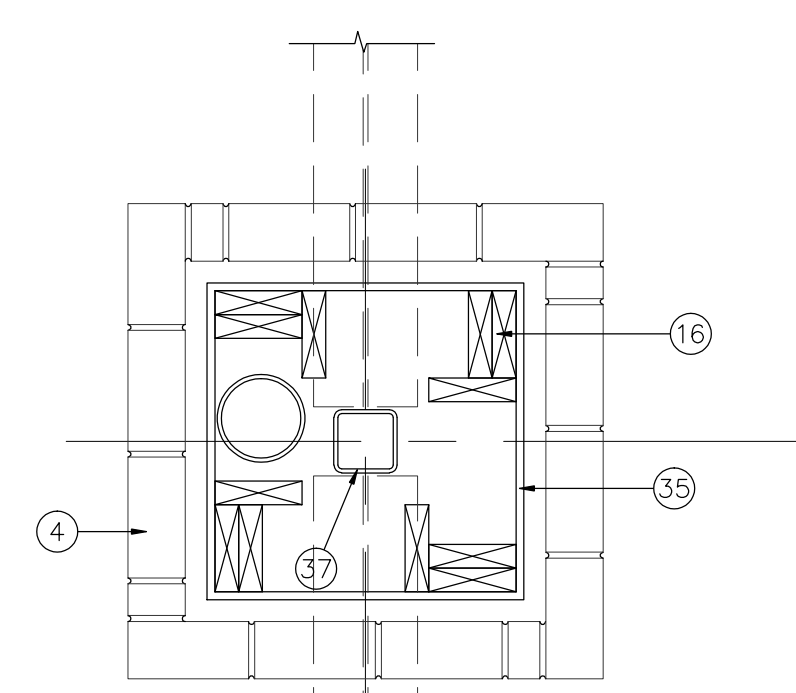
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JOB NO.: gleannloch

DRAWING NO.

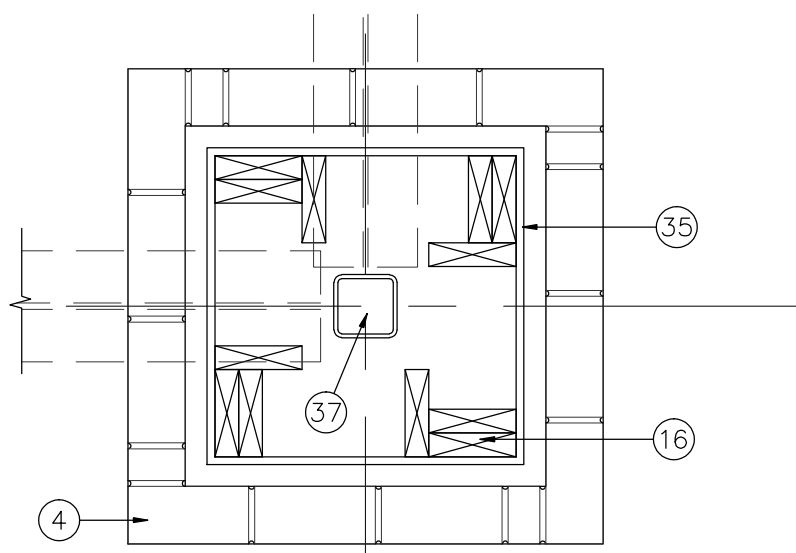
A-5.3

- FLOOR LINE
- STEEL ROD RING 3/4" DIAMETER MINIMUM. PLUG WELD TO RAILS. GRIND WELDS FLUSH.
- MINIMUM CLEARANCE TO PERPENDICULAR OBSTRUCTION = 15".
- BRACKET 3" X 1/4" STEEL PLATE OF SUFFICIENT LENGTH TO PROVIDE 7" STANDOFF FROM CENTERLINE OF RINGS. BEND TO FORM A 2" ANGLE. WELD TO RAIL AND BOLT TO STRUCTURE.
- STEEL BAR RAIL 3/8" X 2". PUNCH FOR RINGS. RAIL, 1 PIECE UNLESS OVER 16 FEET LONG.
- EQUAL RING SPACING, 1'-0" MAXIMUM.

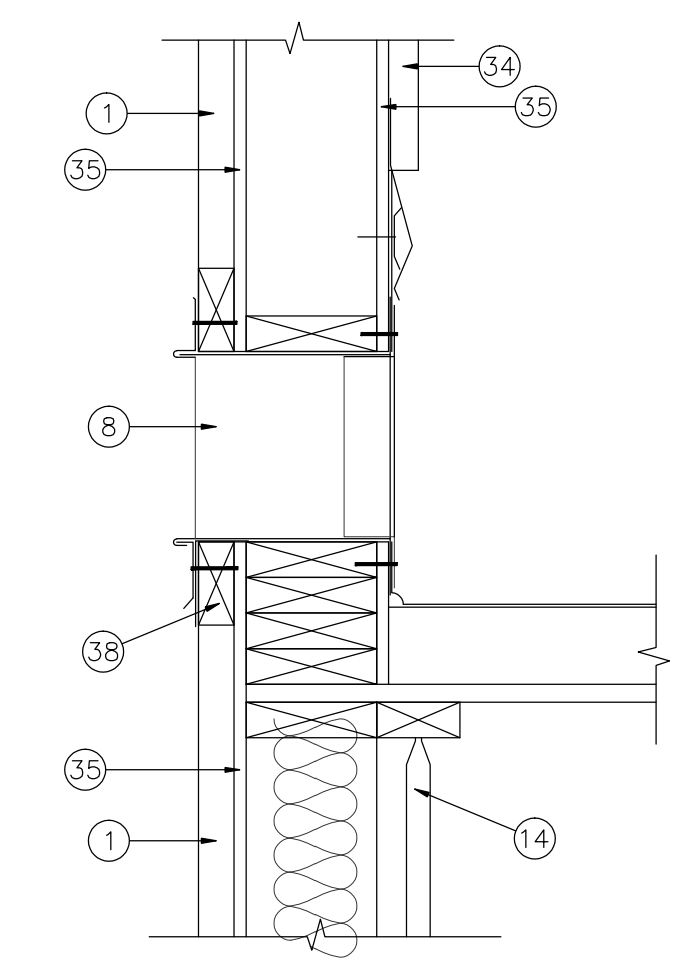
- 1" STUCCO ON STEEL WIRE MESH. PAINTED
- STUCCO BAND
- STANDING SEAM METAL ROOF, by "BERRIDGE"
- BRICK
- LMESTONE CAP
- GALVANIZED METAL FLASHING
- 10"x8" GALV. METAL DOWNSPOUT, CONNECTED TO UNDERGROUND STORM DRAIN SYSTEM. SEE CIVIL DRAWING.
- 12"x8"x4" OVERFLOW SCUPPER
- 10"x8"x4" ROOF SCUPPER WITH DRAIN BOX
- CROWN MOLDING, PAINTED, SEE DETAIL FOR SIZE
- GALVANIZED METAL CAP, PAINTED COLOR TO MATCH MOLDING
- EXPOSED STEEL STRUCTURE, PAINTED COLOR TO MATCH STANDING SEAM METAL ROOF
- 3 PLY MODIFIED BITUMEN BUILT UP ROOF ON R=24 RIGID INSULATION ON 5/8" EXTERIOR PLY WOOD DECK
- ROOF TRUSS, SEE STRUCTURAL
- 5 1/2" R-19 BATT INSULATION AT ALL EXTERIOR WALLS
- 2x6 WOOD STUDS @ 16" O.C. SEE STRUCTURAL
- BRICK TIES, 22 GA, @ 16" O.C. HORIZONTAL & 32" O.C. VERTICAL
- WEEP HOLES @ 24" O.C.
- PLASTIC FLASHING (THRU-WALL TYPE)
- 1/2"x12" LG A.B. @ 36" O.C.
- 5/8" GYPSUM BOARD, PAINTED. (USE WATER RESISTANT GYP. BOARD AT PLUMBING WALLS)
- SCHEDULED DOOR
- SCHEDULED WINDOW
- SCHEDULED BASE
- HOLLOW METAL FRAME / DOOR
- STEEL LINTEL, PAINTED COLOR TO MATCH WALL, SIZE SEE STRUCTURAL
- SEALANT AND BACKER ROD
- ROOF HATCH, SEE PLAN FOR LOCATION, SEE CONTINUOUS CAULK
- SOFFIT
- CONTINUOUS SOFFIT VENT
- 7" METAL PANEL SIDING, PREFINISHED
- 1/2" EXTERIOR PLYWOOD OR O.S.B. SHEATHING COVERED "TYVEK" STUCCO WARP
- 3 PLY MODIFIED BITUMEN BUILT UP ROOF ON 1" RIGID INSULATION ON 5/8" EXTERIOR PLY WOOD DECK
- STEEL BEAM, SEE STRUCTURAL
- 2x TREATED WOOD BLOCK CONTINUOUS
- STONE
- WOOD STAINED



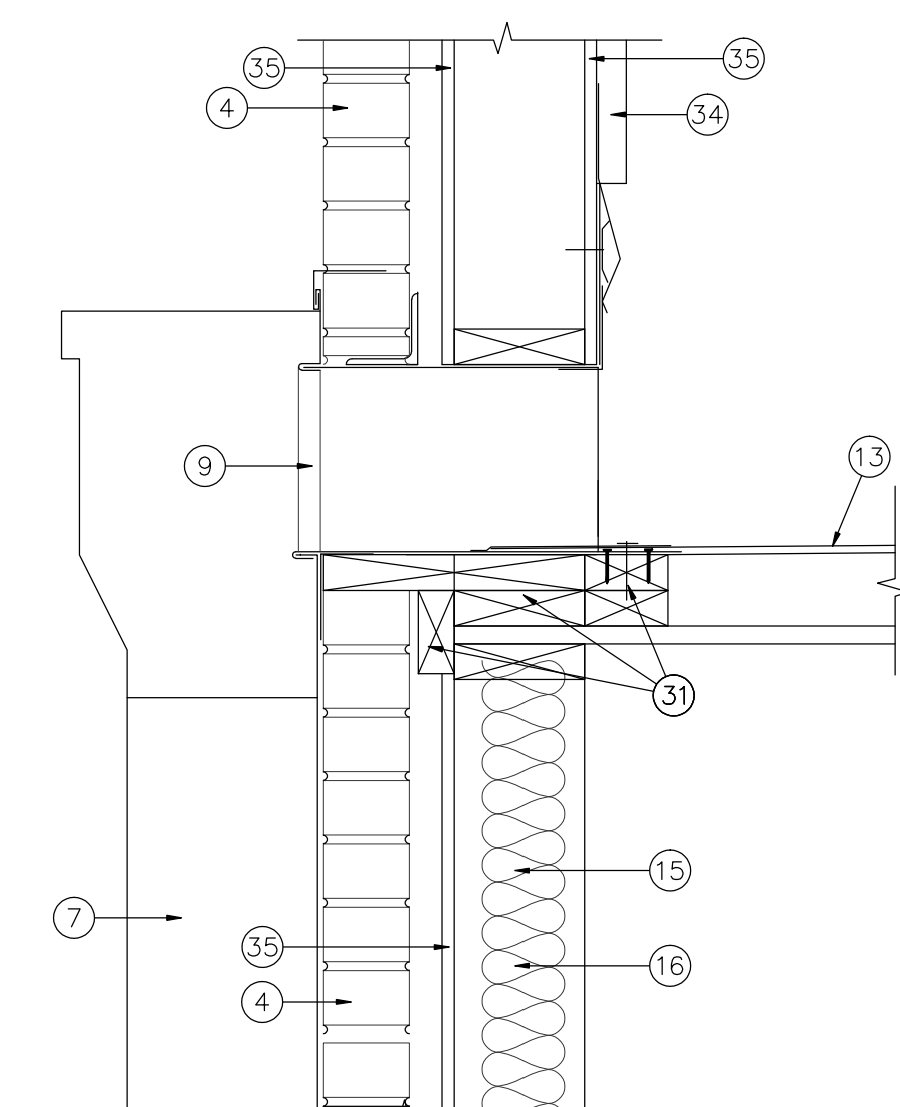
01 COLUMN PLAN
SCALE: 1"=1'-0"



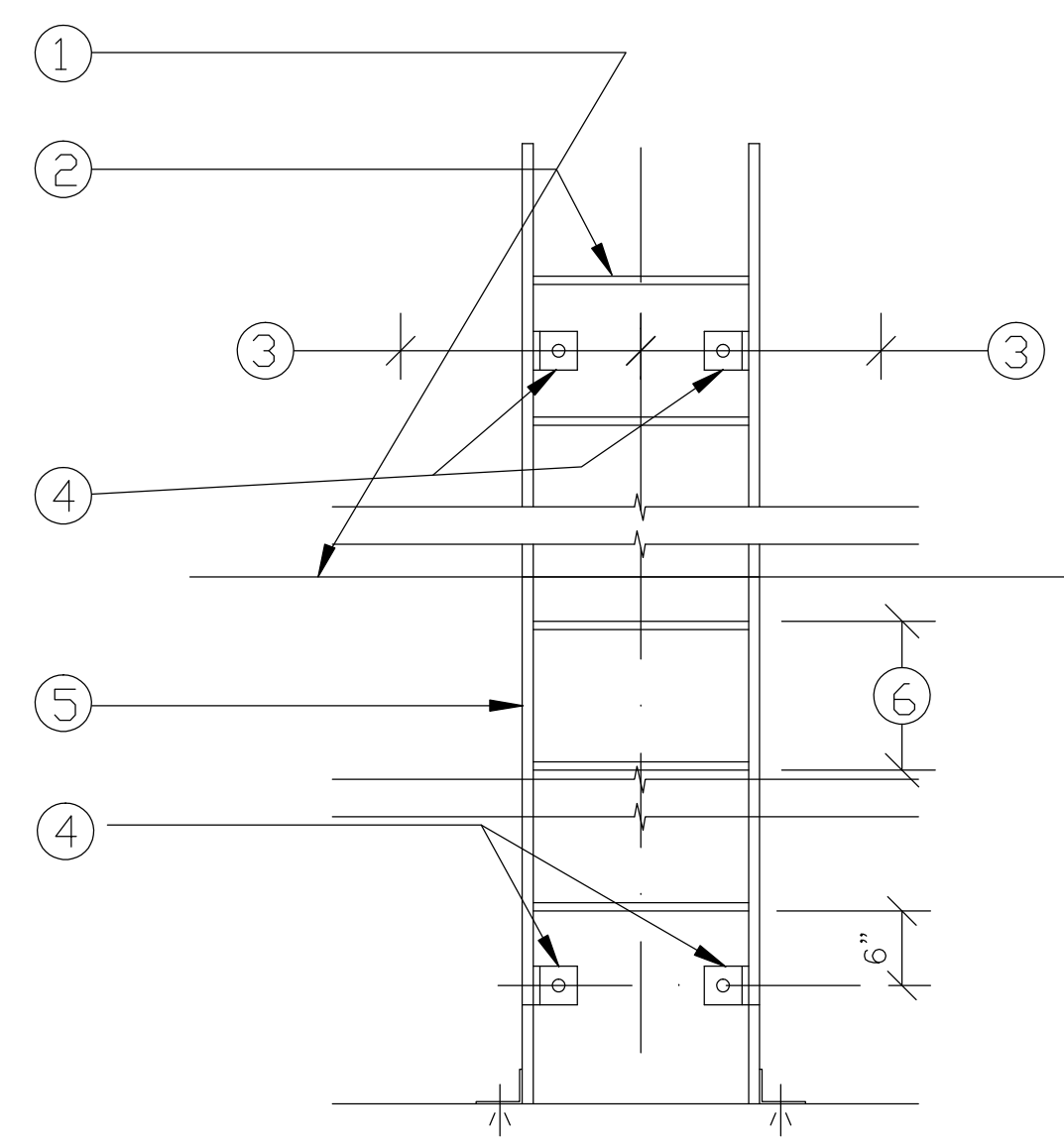
02 COLUMN PLAN
SCALE: 1"=1'-0"



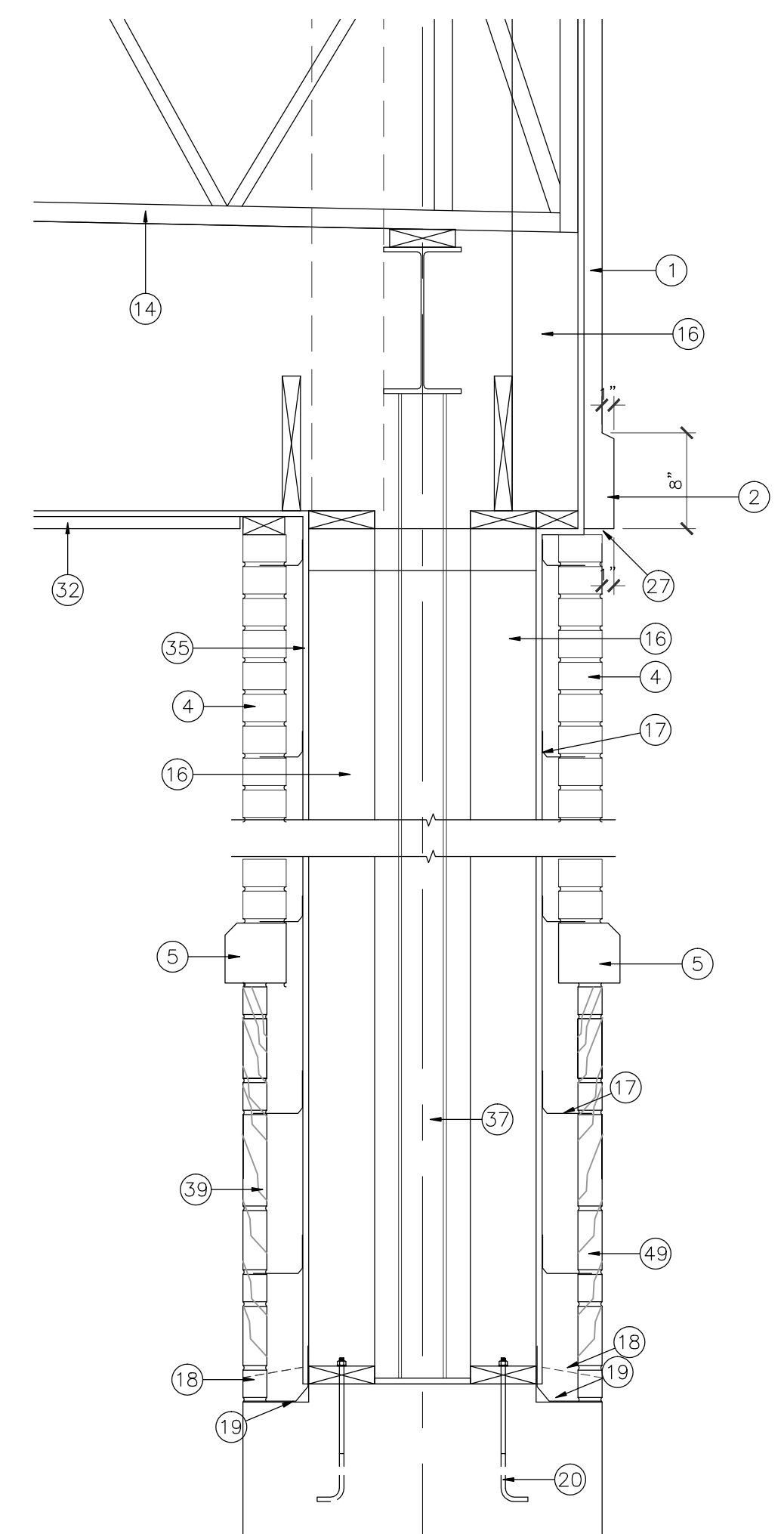
03 DETAIL
SCALE: 1 1/2"=1'-0"



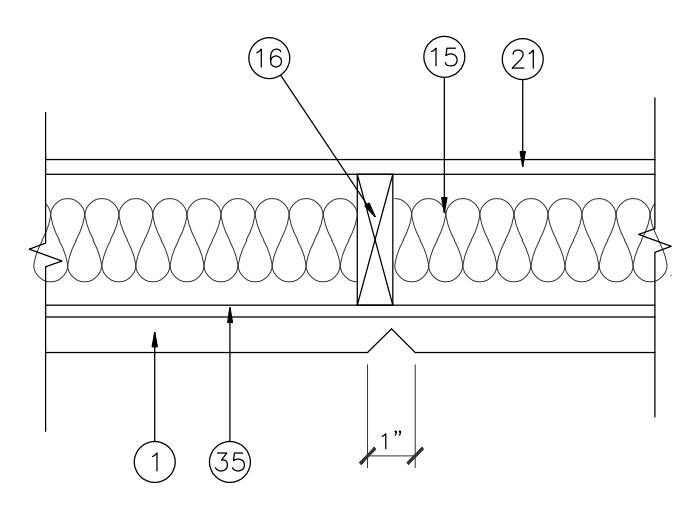
04 DETAIL
SCALE: 1 1/2"=1'-0"



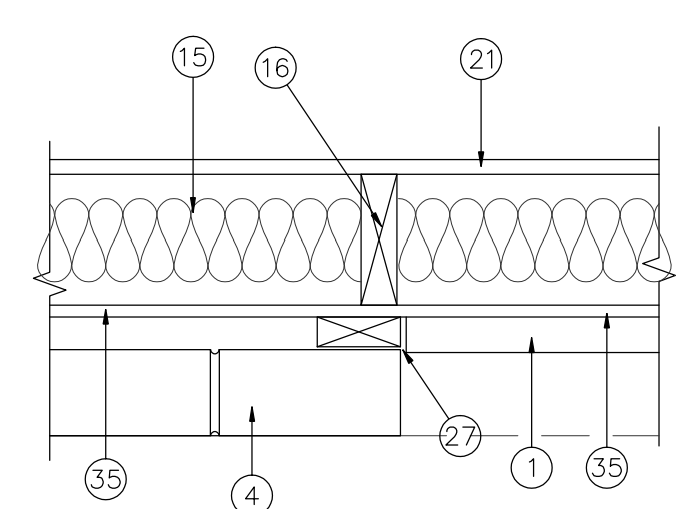
05 ROOF LADDER DETAIL
SCALE: 1"=1'-0"



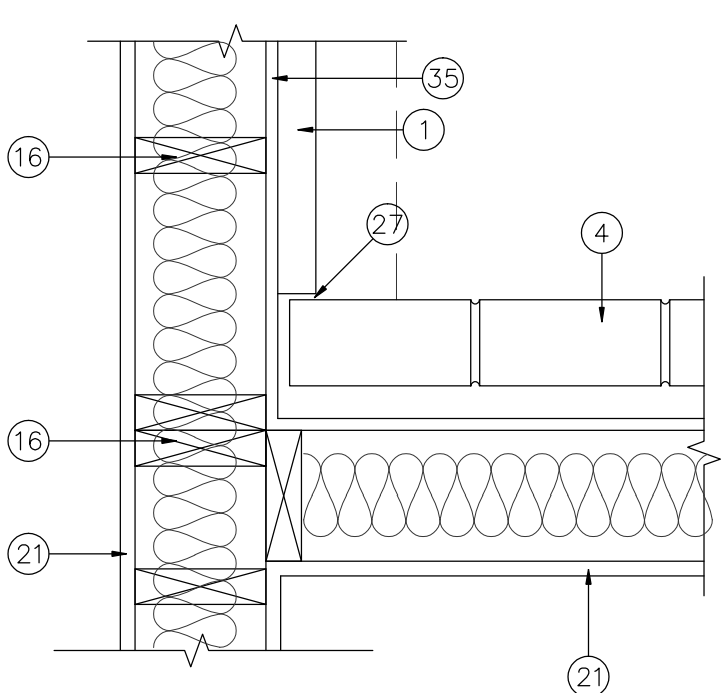
06 COLUMN SECTION
SCALE: 1"=1'-0"



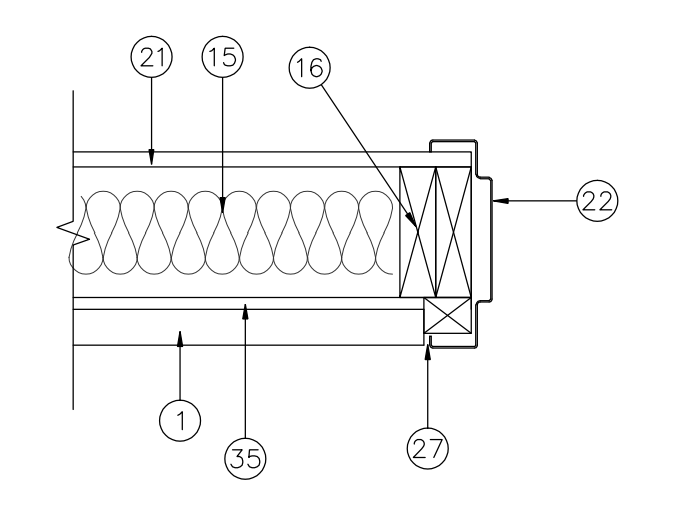
07 DETAIL
SCALE: 1 1/2"=1'-0"



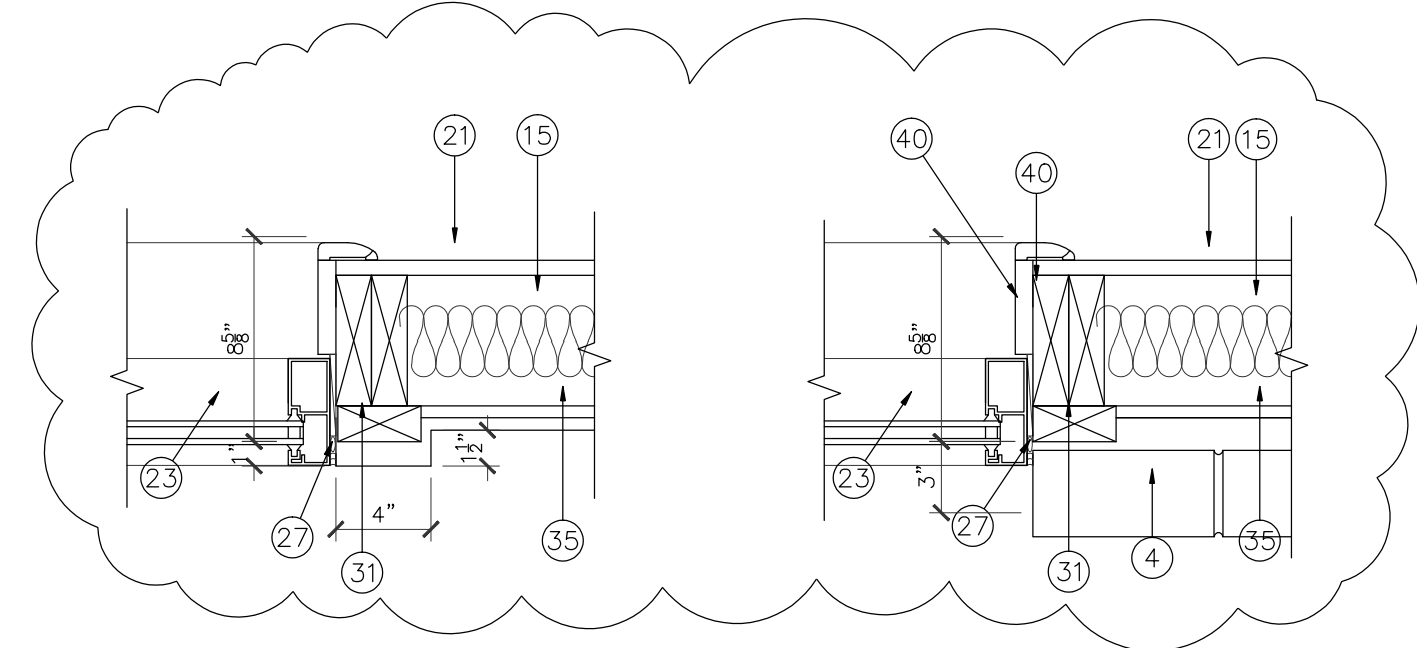
08 DETAIL
SCALE: 1 1/2"=1'-0"



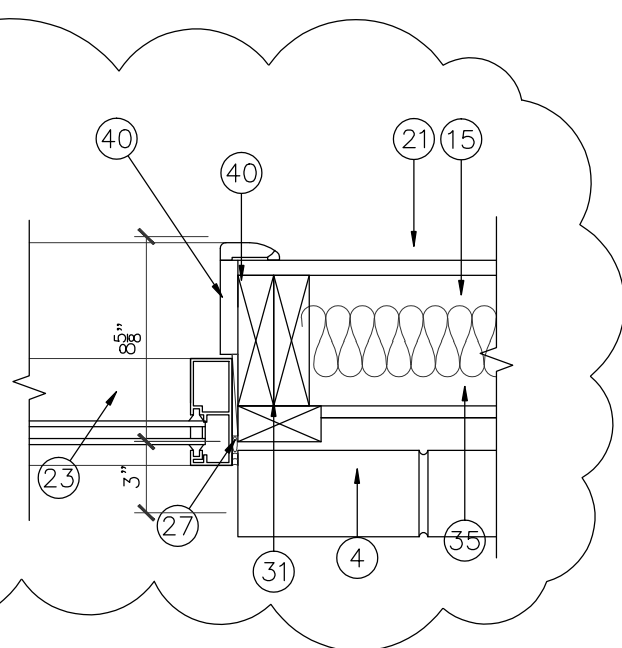
09 DETAIL
SCALE: 1 1/2"=1'-0"



10 DETAIL
SCALE: 1 1/2"=1'-0"

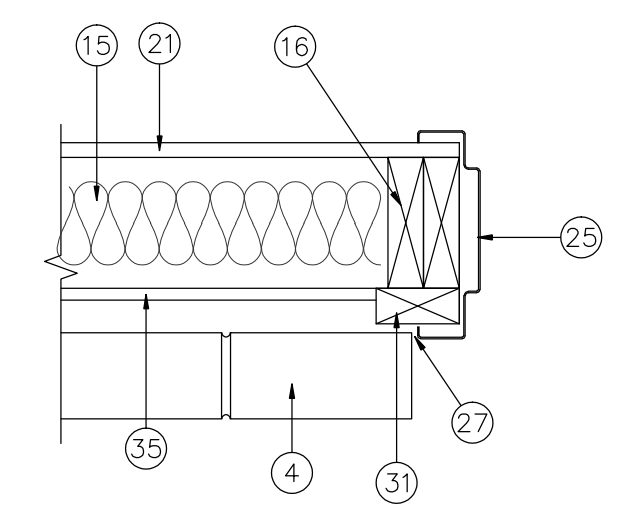


11 DETAIL
SCALE: 1 1/2"=1'-0"



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

13 DETAIL
SCALE: 1 1/2"=1'-0"



14 DETAIL
SCALE: 1 1/2"=1'-0"

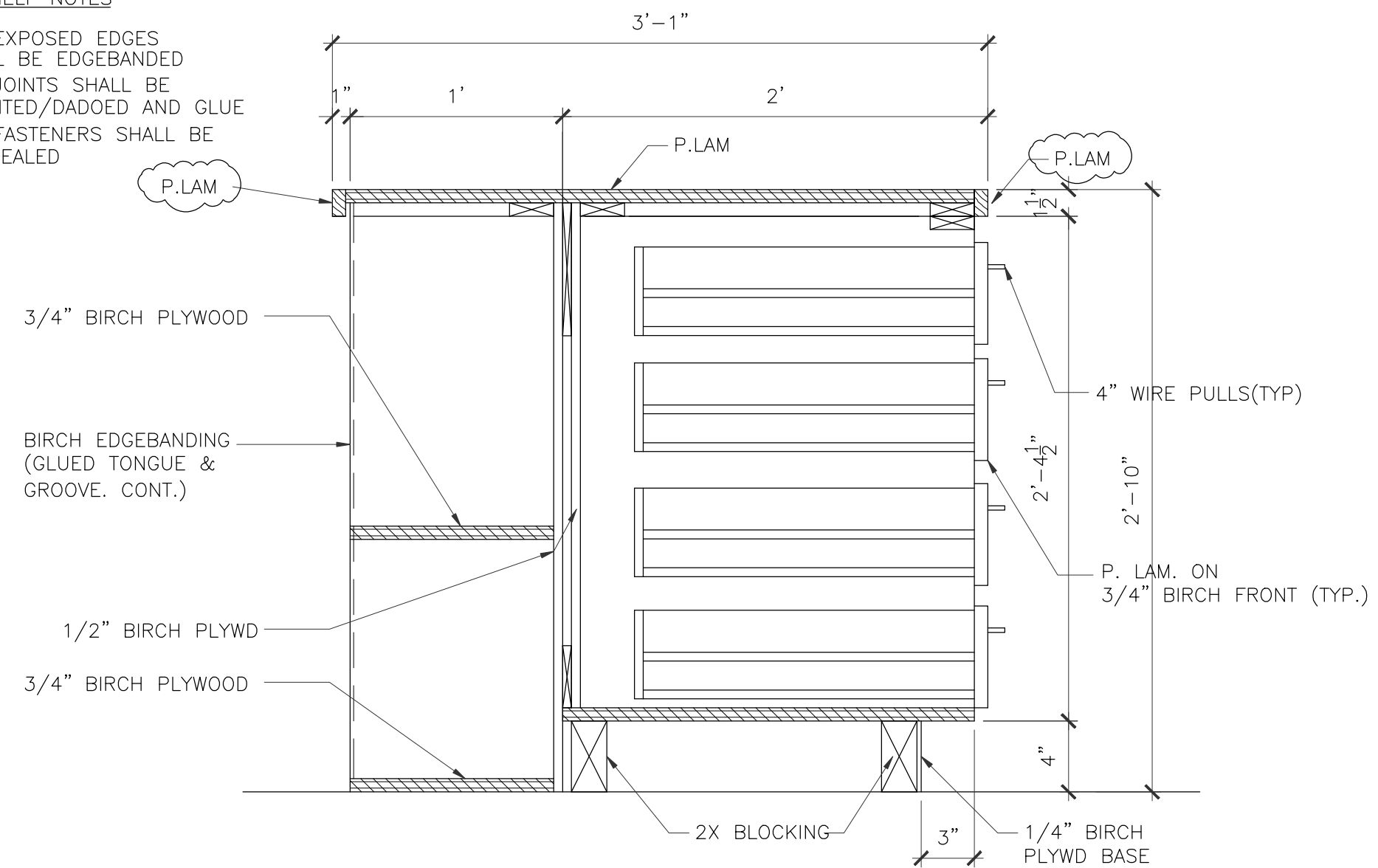
15 INTERIOR DOOR JAMB- DETAIL
SCALE: 1 1/2"=1'-0"

16 INTERIOR DOOR HEADER- DETAIL
SCALE: 1 1/2"=1'-0"

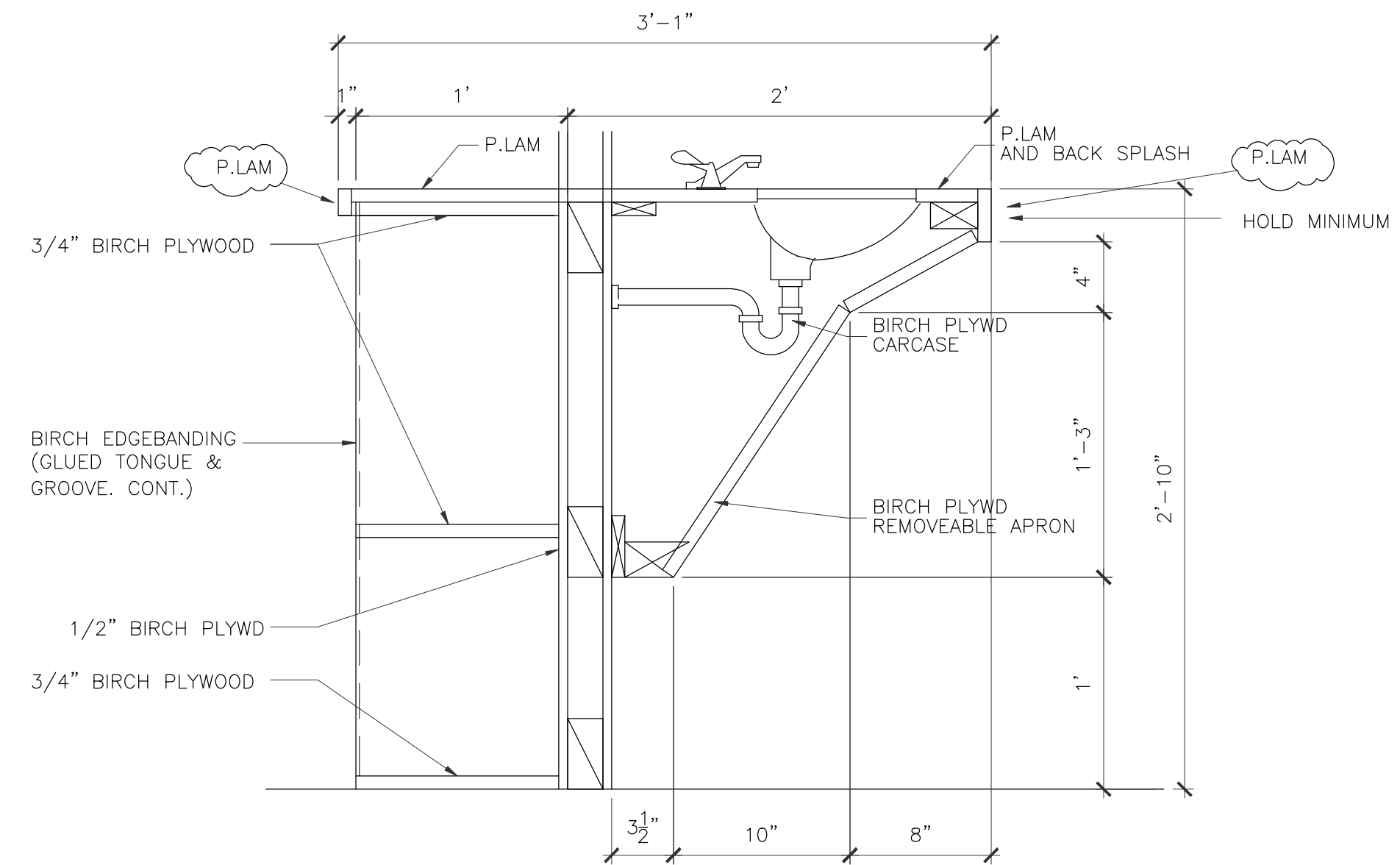
REVISIONS AND ISSUANCE		
NO.	DATE	DESCRIPTION
1	08/13/2017	PRICING
2	08/30/2018	ADDENDUM

TOY SHELF NOTES

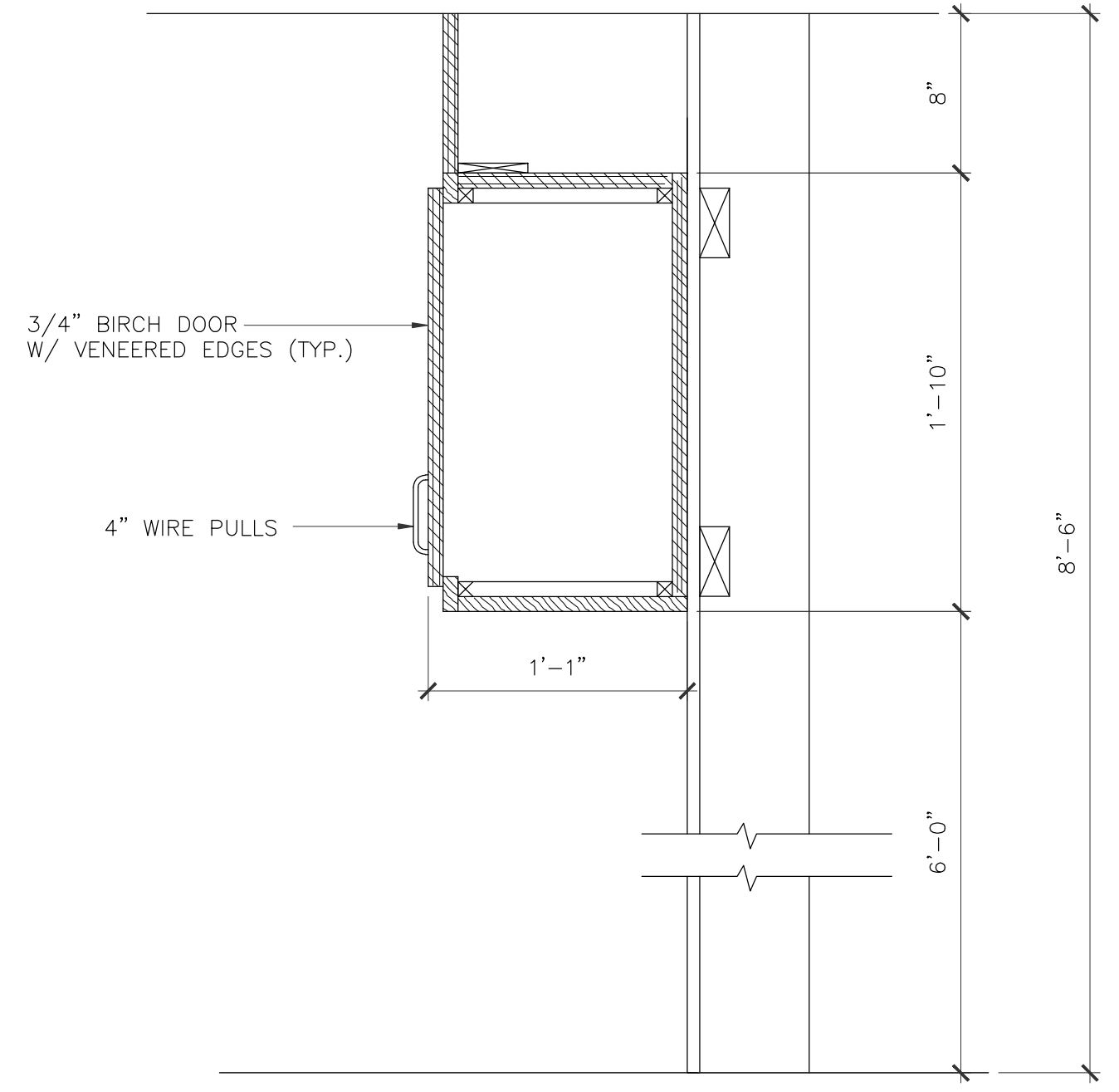
1. ALL EXPOSED EDGES SHALL BE EDGEBANDED
2. ALL JOINTS SHALL BE RABBETED/DADOED AND GLUE
3. ALL FASTENERS SHALL BE CONCEALED



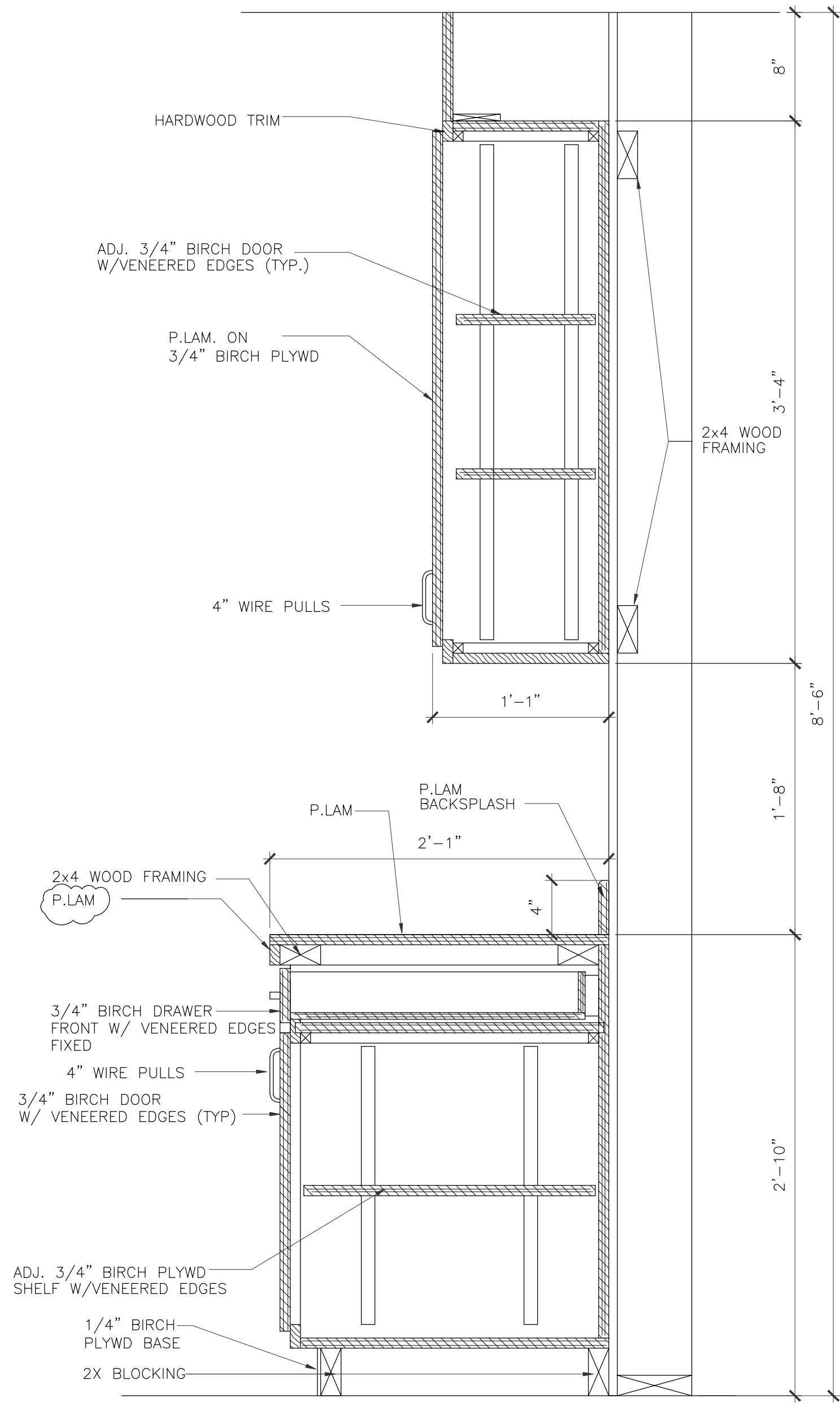
1 MILLWORK SECTION CLASSROOM #100, #150, #200
 SCALE: 1 1/2"=1'-0"
 CLASSROOM #100, #150, #200



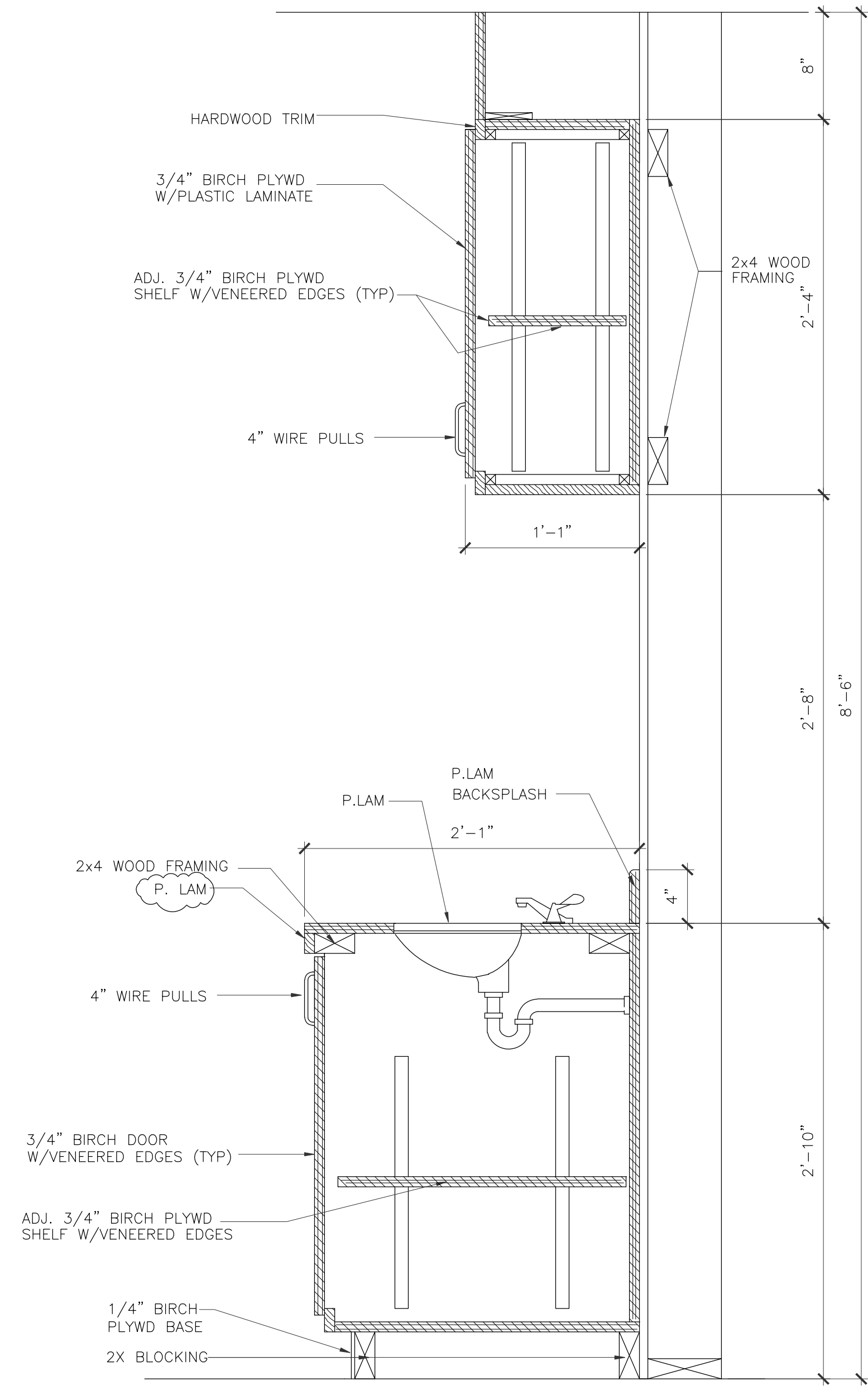
2 MILLWORK SECTION
 SCALE: 1 1/2"=1'-0"
 CLASSROOM #100, #150, #200
 NOTE: THESE DIMENSIONS MUST BE MAINTAINED TO MEET ADA REQUIREMENTS



5 MILLWORK SECTION
 SCALE: 1 1/2"=1'-0"
 CLASSROOM #100, #150, #200



3 MILLWORK SECTION
 SCALE: 1 1/2"=1'-0"
 CLASSROOM #100, #150, #200



4 MILLWORK SECTION
 SCALE: 1 1/2"=1'-0"
 CLASSROOM #100, #150, #200

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DRAWING TITLE	
MILLWORK SECTIONS	
DRAWN BY	CHECKED BY
DATE	JOB NO.
DRAWING NO.	

A-8.0

A. U. I. I. S
(HARRIS
ABSTRA

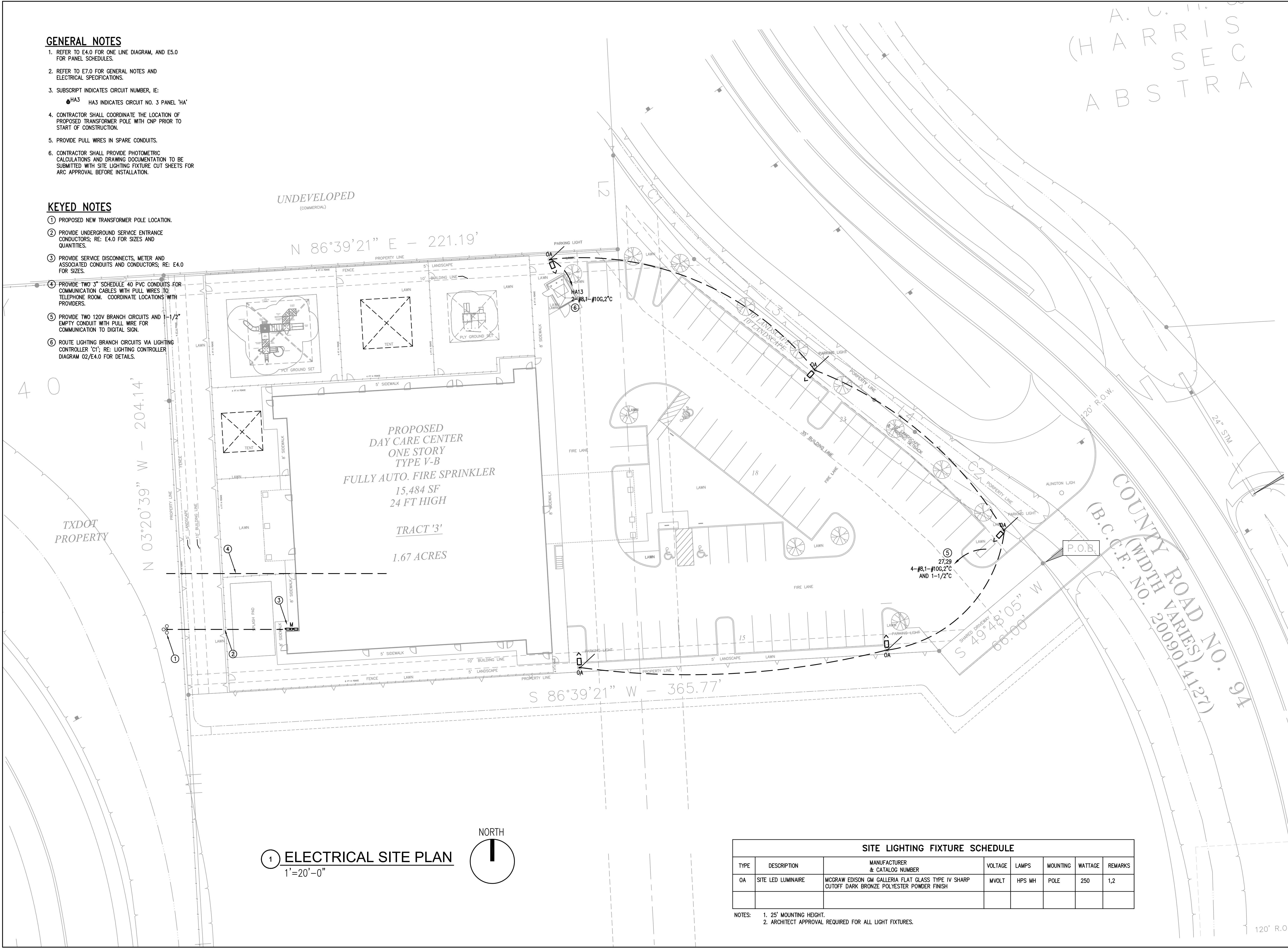
REVISIONS AND ISSUANCE		
NO.	DATE	DESCRIPTION
08/13/2018	PRICING	
08/31/2018	PERMIT	

GENERAL NOTES

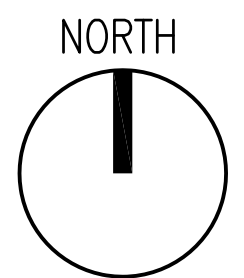
- REFER TO E4.0 FOR ONE LINE DIAGRAM, AND E5.0 FOR PANEL SCHEDULES.
- REFER TO E7.0 FOR GENERAL NOTES AND ELECTRICAL SPECIFICATIONS.
- SUBSCRIPT INDICATES CIRCUIT NUMBER, IE:
 ●HA3 HA3 INDICATES CIRCUIT NO. 3 PANEL 'HA'
- CONTRACTOR SHALL COORDINATE THE LOCATION OF PROPOSED TRANSFORMER POLE WITH CNP PRIOR TO START OF CONSTRUCTION.
- PROVIDE PULL WIRES IN SPARE CONDUITS.
- CONTRACTOR SHALL PROVIDE PHOTOMETRIC CALCULATIONS AND DRAWING DOCUMENTATION TO BE SUBMITTED WITH SITE LIGHTING FIXTURE CUT SHEETS FOR ARC APPROVAL BEFORE INSTALLATION.

KEYED NOTES

- PROPOSED NEW TRANSFORMER POLE LOCATION.
- PROVIDE UNDERGROUND SERVICE ENTRANCE CONDUCTORS; RE: E4.0 FOR SIZES AND QUANTITIES.
- PROVIDE SERVICE DISCONNECTS, METER AND ASSOCIATED CONDUITS AND CONDUCTORS; RE: E4.0 FOR SIZES.
- PROVIDE TWO 3" SCHEDULE 40 PVC CONDUITS FOR COMMUNICATION CABLES WITH PULL WIRES TO TELEPHONE ROOM. COORDINATE LOCATIONS WITH PROVIDERS.
- PROVIDE TWO 120V BRANCH CIRCUITS AND 1-1/2" EMPTY CONDUIT WITH PULL WIRE FOR COMMUNICATION TO DIGITAL SIGN.
- ROUTE LIGHTING BRANCH CIRCUITS VIA LIGHTING CONTROLLER 'CI'; RE: LIGHTING CONTROLLER DIAGRAM 02/E4.0 FOR DETAILS.



1 ELECTRICAL SITE PLAN
1"=20'-0"

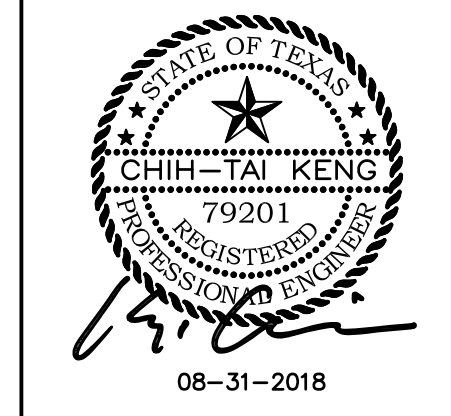


SITE LIGHTING FIXTURE SCHEDULE							
TYPE	DESCRIPTION	MANUFACTURER & CATALOG NUMBER	VOLTAGE	LAMPS	MOUNTING	WATTAGE	REMARKS
OA	SITE LED LUMINAIRE	MCGRAW EDISON GM GALLERIA FLAT GLASS TYPE IV SHARP CUTOFF DARK BRONZE POLYESTER POWDER FINISH	MVOLT	HPS MH	POLE	250	1,2

- NOTES:
 1. 25' MOUNTING HEIGHT.
 2. ARCHITECT APPROVAL REQUIRED FOR ALL LIGHT FIXTURES.

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 TBPE Firm #12672



DRAWING TITLE	
ELECTRICAL SITE PLAN	
DRAWN BY FK	CHECKED BY CK
DATE 05/10/2018	JOB NO. SEDONA LAKES
DRAWING NO. E1.0	

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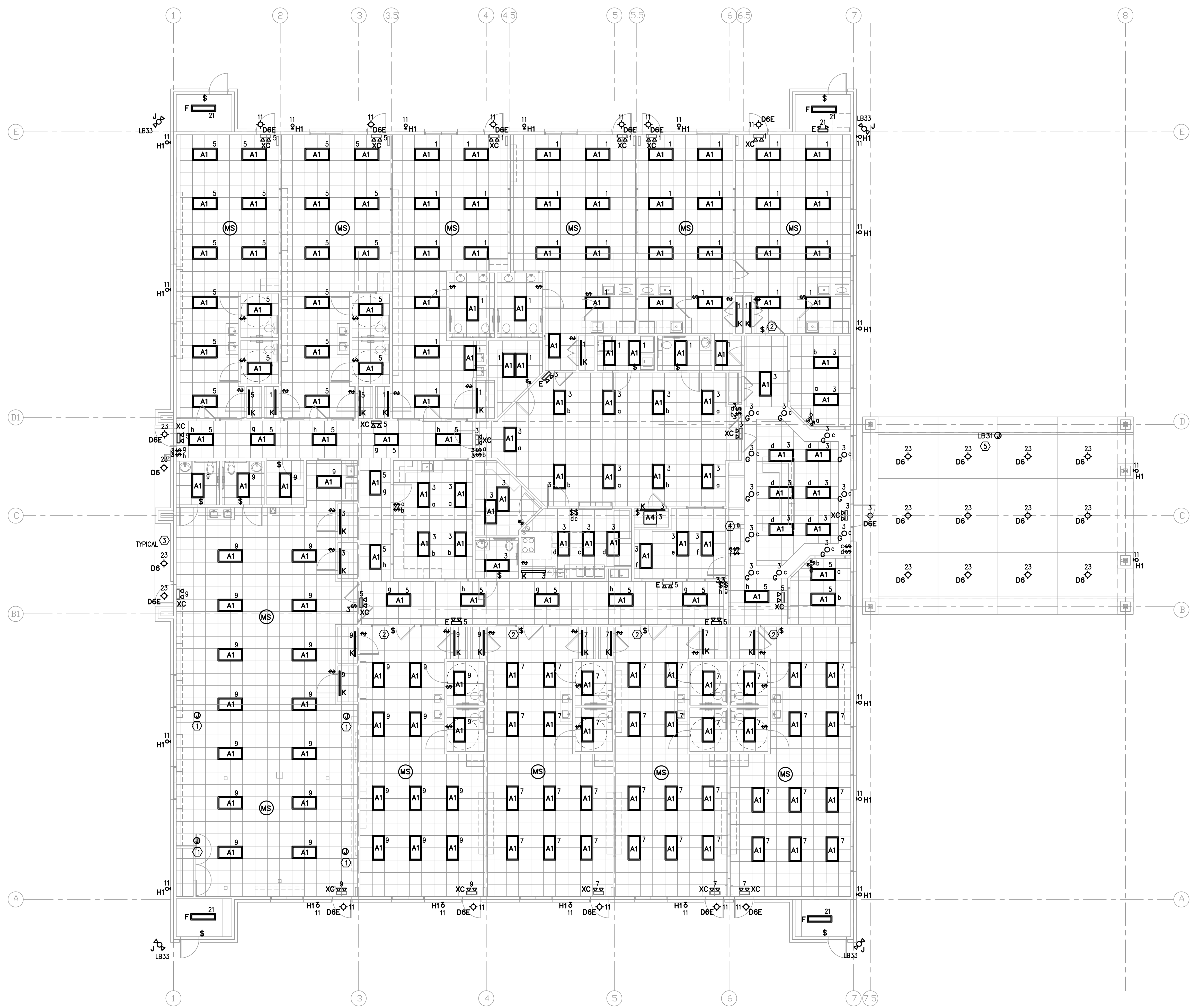
NO.	DATE	DESCRIPTION
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08/31/2018		PERMIT
07/28/18		CITY COMMENTS

GENERAL NOTES

- LIGHTING FIXTURE SUBSCRIPTS INDICATE FIXTURE TYPE, CONTROLLING SWITCH AND CIRCUIT NUMBER, IE:
 A_3^5
 A INDICATES FIXTURE TYPE.
 3 INDICATES CIRCUIT NO. 3, PANEL HA
 LB3 INDICATES CIRCUIT NO. 3, PANEL LB
 5 INDICATES CONTROLLING SWITCH
- REFER TO E5.0 FOR PANEL SCHEDULES. REFER TO E7.0 FOR LIGHT FIXTURE SCHEDULE.
- PROVIDE UNSWITCHED HOT LEG TO EMERGENCY BATTERY BACKUP SYSTEM.
- (MS) MOTION SENSOR FOR LOCAL ROOM. PASSIVE INFRARED AREA SENSOR; WATTSTOPPER C1-200 WITH 30 MINUTE TIME DELAY.
- MORE EXIT SIGNS AND EMERGENCY LIGHTING MAY BE REQUIRED AT FINALS.

KEYED NOTES

- LOCATION OF SURROUND SOUND SPEAKERS; COORDINATE EXACT LOCATION WITH OWNER PRIOR TO INSTALLATION.
- SWITCH SHALL BE KEYED LOW VOLTAGE, MOMENTARY CONTACT SWITCH (WATTSTOPPER LVS-1K OR PRIOR APPROVED EQUAL). SWITCH SHALL OPERATE AS MANUAL OVERRIDE TO CONNECTED OCCUPANCY SENSOR.
- ROUTE BRANCH CIRCUIT VIA LIGHTING CONTROLLER 'C1'. RE: LIGHTING CONTROLLER DIAGRAM E4.0.
- LIGHTING CONTROLLER OVERRIDE SWITCH.
- LOCATION OF SIGNAGE; COORDINATE EXACT LOCATION WITH OWNER PRIOR TO INSTALLATION.



1 LIGHTING PLAN
 1/8" = 1'-0"

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DRAWING TITLE
ELECTRICAL LIGHTING PLAN

DRAWN BY FK	CHECKED BY CK
DATE 05/10/2018	JOB NO. SEDONA LAKES
DRAWING NO. E-2.0	

REVISIONS AND ISSUANCE		
NO.	DATE	DESCRIPTION
08/13/2018		PRICING
08/31/2018		PERMIT

GENERAL NOTES

- REFER TO E4.0 FOR ONE LINE DIAGRAM AND E5.0 FOR PANEL SCHEDULES. REFER TO E7.0 FOR SPECIFICATIONS, NOTES, LIGHTING SCHEDULE, AND SYMBOLS.
- SUBSCRIPT INDICATES CIRCUIT NUMBER, IE:
 ●A3 A3 INDICATES CIRCUIT NO. 3 PANEL 'LA'
 B3 INDICATES CIRCUIT NO. 3 PANEL 'LB'
 HA3 INDICATES CIRCUIT NO. 3 PANEL 'HA'
- COORDINATE THE INSTALLATION OF THE ELECTRICAL POWER TO THE KITCHEN EQUIPMENT WITH THE ACTUAL EQUIPMENT BEING INSTALLED. PROVIDE CIRCUIT BREAKERS, BRANCH CIRCUIT CONDUCTORS, J-BOXES, RECEPTACLES AND DISCONNECT SWITCHES AS REQUIRED BY THE EQUIPMENT INSTALLATION REQUIREMENTS AND THE NEC.
- PROVIDE GFCI TYPE RECEPTACLES OR CIRCUIT BREAKERS FOR ALL 120V RECEPTACLES IN THE KITCHEN PER THE NEC. COORDINATE RECEPTACLE MOUNTING HEIGHT WITH THE EQUIPMENT BEING INSTALLED.
- PROVIDE LISTED TAMPER-RESISTANT RECEPTACLES PER NEC 406.12(C).
- COORDINATE THE INSTALLATION OF ELECTRICAL RECEPTACLES WITH MILLWORK LOCATION, ARCHITECTURAL INTERIOR ELEVATIONS, ADA REQUIREMENTS, AND SURROUNDING FIELD CONDITIONS.
- ALL RESTROOM EXHAUST FANS SHALL BE INDEPENDENTLY SWITCHED FROM THE RESTROOM LIGHTING.

KEYED NOTES

- RECEPTACLE FOR POWER CONNECTION TO CEILING-MOUNTED PROJECTOR. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO INSTALLATION.
- J-BOX FOR POWER CONNECTION TO THEATER SCREEN. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO INSTALLATION.
- DATA CONNECTION TO CEILING-MOUNTED PROJECTOR. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO INSTALLATION.
- PROVIDE NEMA 14-30R AND CIRCUIT OF 3#10, 1#10G, 3/4" C TO CIRCUIT NOTED FOR CONNECTION TO DRYER.
- ROUTE 1" C WITH PULLSTRING TO ELEC ROOM.
- ROUTE 2-2" C UNDER SLAB TO DESK LOCATION.
- PROVIDE NEMA 14-50R AND CIRCUIT OF #8, #10G, 1" C TO CIRCUIT NOTED FOR CONNECTION TO OVEN/RANGE.
- J-BOX FOR POWER CONNECTION TO FRONT DOOR LOCK, DOOR STRIKE, AND FINGER PRINT DEVICE. COORDINATE EXACT EQUIPMENT REQUIREMENTS WITH OWNER PRIOR TO PURCHASE AND INSTALLATION.
- ROUTE 2-3" C WITH PULLSTRING TO PROPERTY LINE FOR TELEPHONE/CATV UTILITY SERVICE. COORDINATE EXACT ROUTING AND DEMARK POINT WITH SERVICE PROVIDERS.
- POWER FOR FUTURE SITE WATER SYSTEM. COORDINATE EXACT ROUTING AND DEMARK POINT WITH SERVICE PROVIDERS.
- OWNER TO PROVIDE FINAL FURNITURE LAYOUT AND CONFIRM ALL FLOOR OUTLET LOCATIONS PRIOR TO ROUGH-IN.

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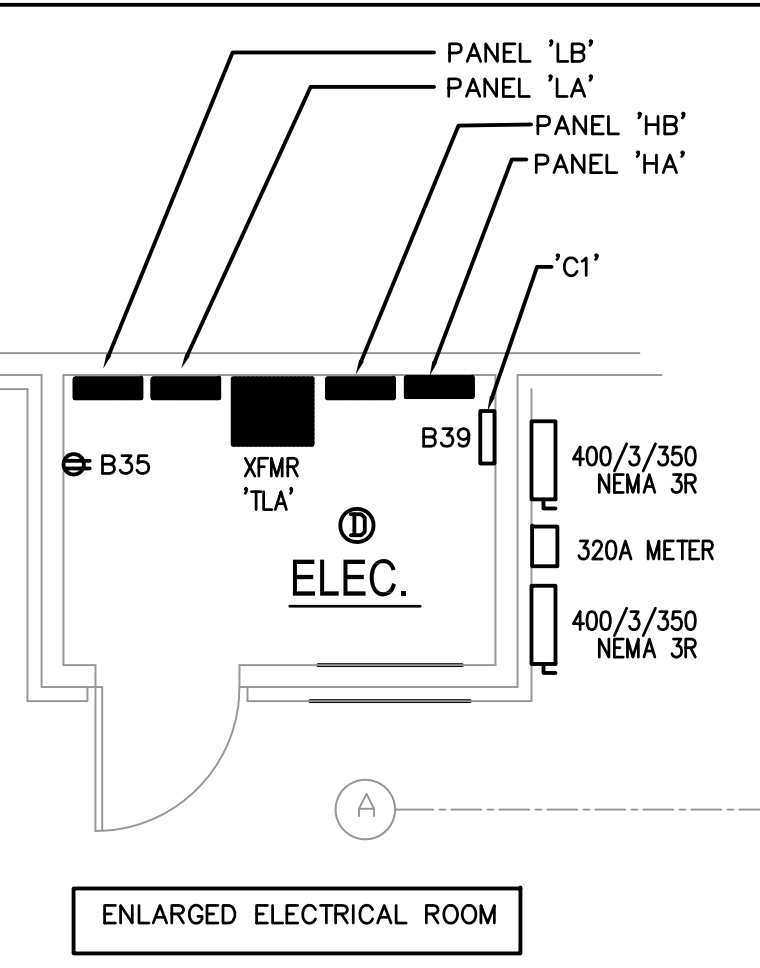
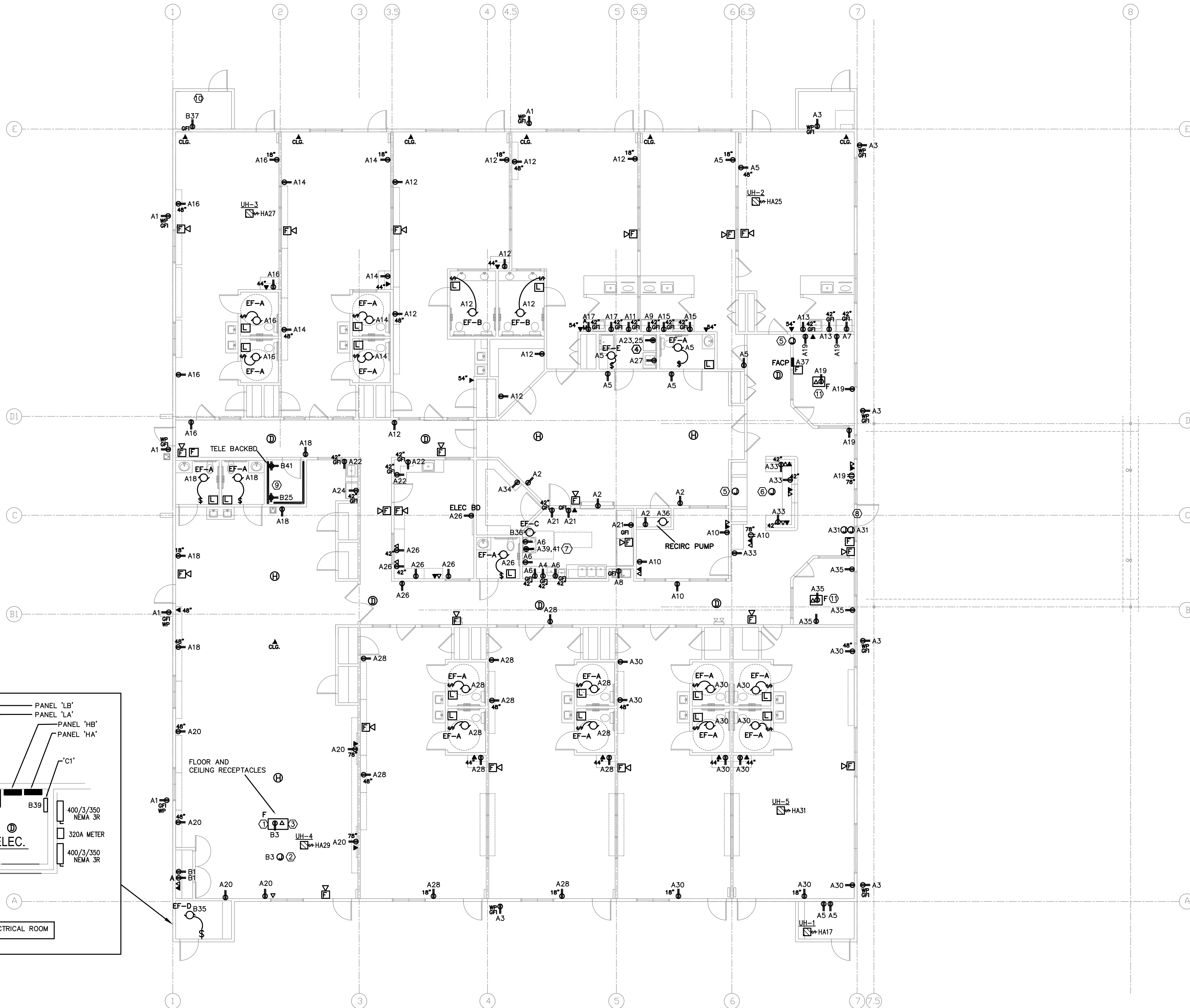


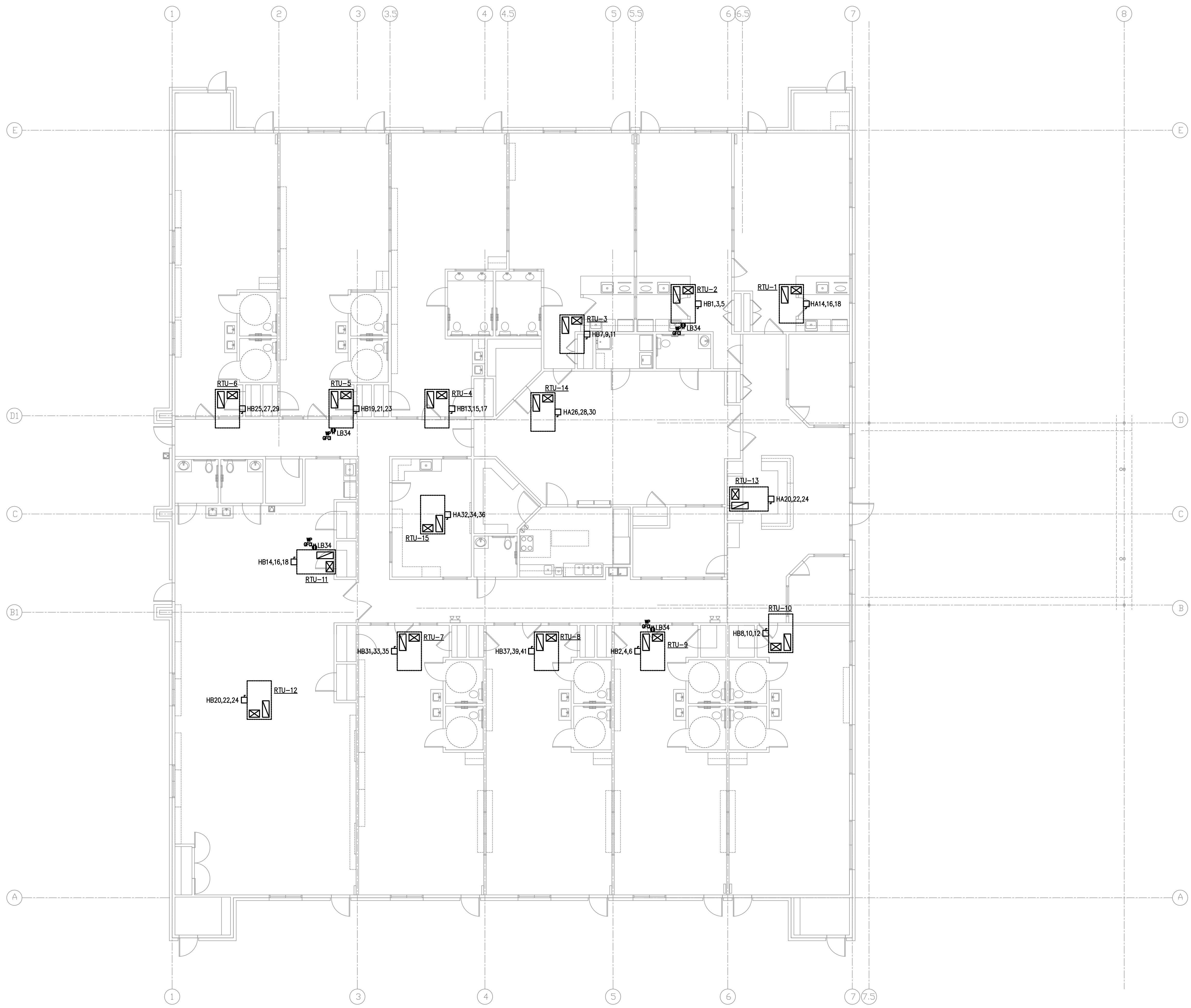
THESE DOCUMENTS ARE FOR INTERIM REVIEW AND NOT FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
RESPONSIBLE ENGINEER:
CHIH-TAI KENG
79201
08-13-2018

DRAWING TITLE
ELECTRICAL POWER PLAN

DRAWN BY FK	CHECKED BY CK
DATE 05/10/2018	JOB NO. SEDONA LAKES
DRAWING NO. E-3.0	

1 POWER PLAN
1/8" = 1'-0"





GENERAL NOTES

- REFER TO E4.0 FOR ONE LINE DIAGRAM AND E5.0 FOR PANEL SCHEDULES. REFER TO E7.0 FOR SPECIFICATIONS, NOTES, LIGHTING SCHEDULE, AND SYMBOLS.
- SUBSCRIPT INDICATES CIRCUIT NUMBER, IE:
 ● HA3 HA3 INDICATES CIRCUIT NO. 3 PANEL HA
 ● HB3 HB3 INDICATES CIRCUIT NO. 3 PANEL HB
 ● LB3 LB3 INDICATES CIRCUIT NO. 3 PANEL LB
- PROVIDE 30/3/NF NEMA 3R SAFETY SWITCHES ON 3-TON, 4-TON, & 5-TON RTU'S.

REVISIONS AND ISSUANCE		
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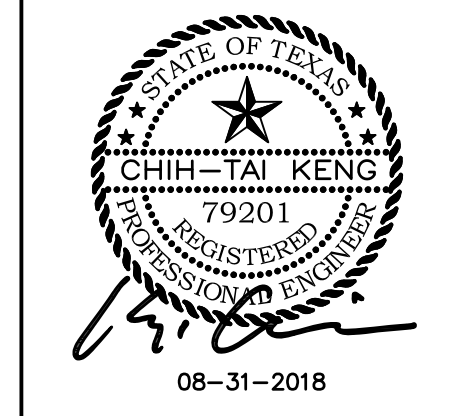
1 HVAC POWER PLAN
 1/8" = 1'-0"

DRAWING TITLE	
HVAC POWER PLAN	
DRAWN BY	CHECKED BY
FK	CK
DATE	JOB NO.
05/10/2018	SEDONA LAKES
DRAWING NO.	E-3.1

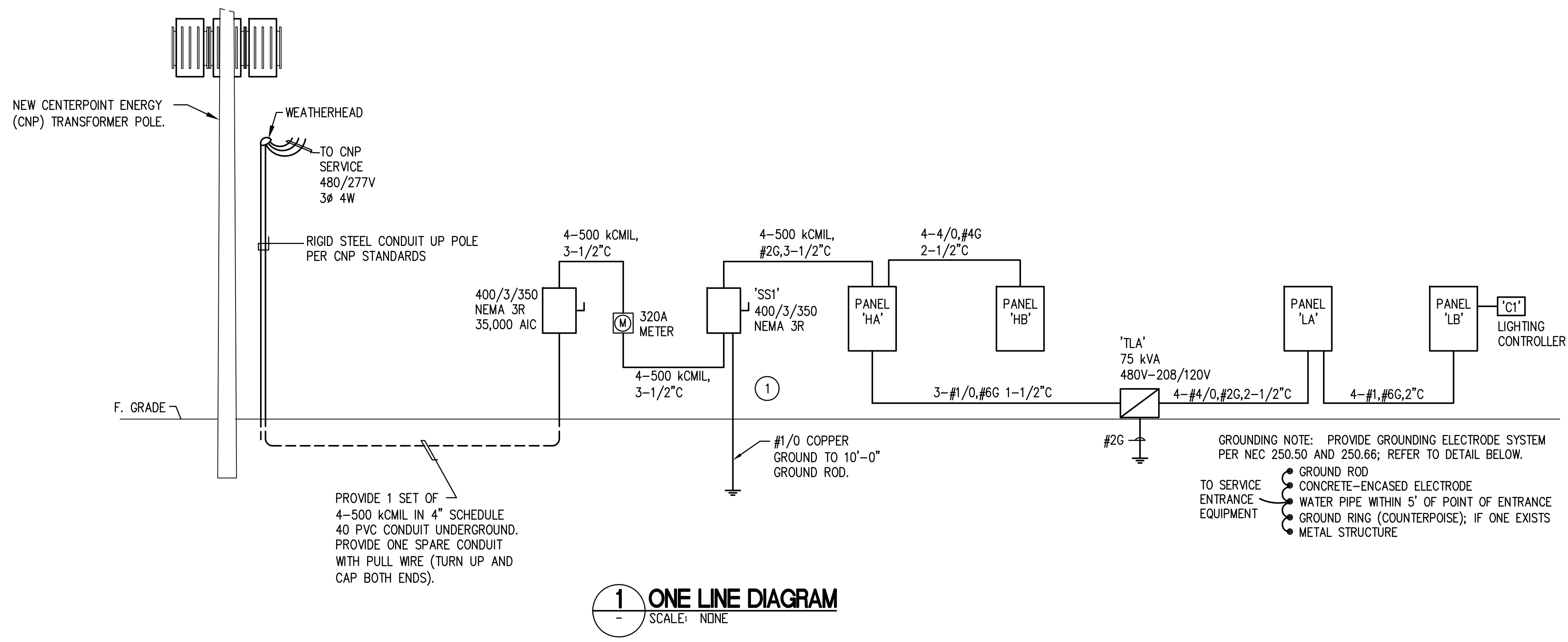
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08/31/2018		PERMIT

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DRAWING TITLE	
ELECTRICAL ONE LINE	
DRAWN BY FK	CHECKED BY CK
DATE 05/10/2018	JOB NO. SEDONA LAKES
DRAWING NO. E-4.0	



GENERAL NOTES

- SHORT CIRCUIT CALCULATIONS USE THE POINT-TO-POINT METHOD. THE AVAILABLE SYMMETRICAL FAULT CURRENT IS CALCULATED BASED ON A 500 KVA TRANSFORMER BANK.

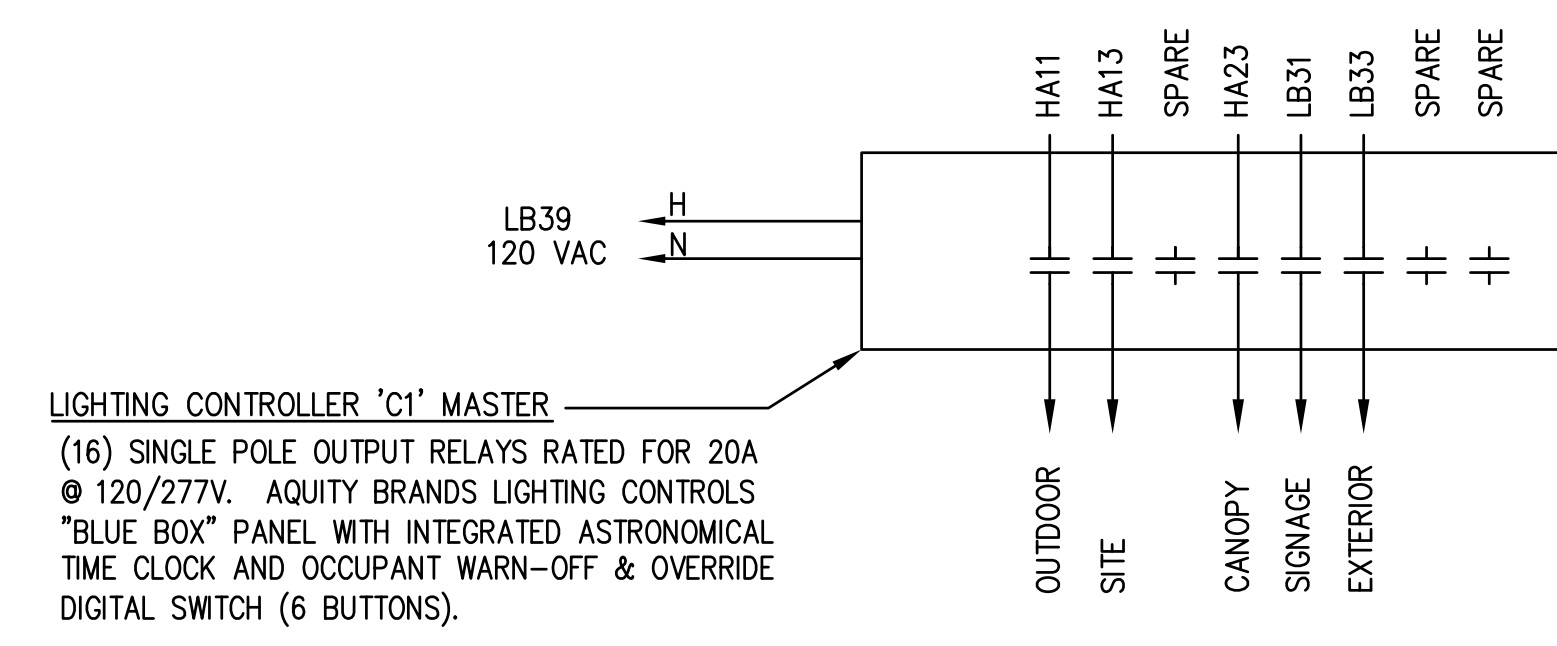
XX,XXX AIC	AVAILABLE SYMMETRICAL FAULT CURRENT
YY,YYY AIC	EQUIPMENT RATING
- PANELBOARDS MAY BE SERIES RATED IF LABELED PER THE NEC.
- PROVIDE FULL SIZE NEUTRALS FOR SERVICE ENTRANCE AND FEEDER CONDUCTORS.
- SERVICE VOLTAGE IS 480/277V 3Ø 4W.
- CONDUCTORS TO BE COPPER WITH 75 DEGREE C INSULATION (IE, THW, THWN OR THHW).
- CONDUITS TO BE PVC SCHEDULE 40 UNDERGROUND AND EMT ABOVE GRADE. SIZES AS SHOWN ON THE ONE LINE DIAGRAM AND PER THE NEC.
- PROVIDE 4" MINIMUM CLEARANCE TO THE RIGHT OF THE DISCONNECT TO ALLOW ADEQUATE CLEARANCE FOR LOCKING.
- PROVIDE ELECTRICAL SERVICE INCLUDING SAFETY SWITCHES AND METER.
- PROVIDE PANELBOARDS AND ASSOCIATED FEEDERS.

KEYED NOTES

- ① PROVIDE A PERMANENTLY AFFIXED LABEL ON SS1 THAT SHOWS THE CALCULATED AVAILABLE FAULT CURRENT OF 24,026 AMPS AND A DATE OF 06 SEPTEMBER 2016. THE LABEL SHALL BE 2"x3" IN SIZE AND SHALL BE BLUE LETTERING ON A CONTRASTING BACKGROUND.

BUILDING LOAD ANALYSIS				06/28/18
PROJECT NAME:		YOUNG RANCH IVY KIDS, 10715 GLEANNLOCH, SPRING, TX 77379		
AREA (SQ. FEET)		14,200	SQ. FT.	
LOAD DESCRIPTION	CONNECTED LOAD (kVA)	DEMAND FACTOR	DEMAND LOAD (kVA)	
LIGHTING (volamps per sq. Ft.)	3.0 VA	42.6	1.25	53.3
SITE LIGHTING		2.0	1.25	2.5
GENERAL RECEPTACLES	117 @ 180 VA	21.1	NEC	15.5
HVAC		139.5	1.00	139.5
HEATING (LESS THAN CONCURRENT COOLING)		0.0	1.00	0.0
WATER HEATER (GAS)		0.0	1.00	0.0
UNIT HEATERS		23.0	1.00	23.0
EXHAUST FANS		1.8	1.00	1.8
LAUNDRY		7.3	1.00	7.3
REFRIGERATORS		4.2	1.00	4.2
FREEZERS		2.4	1.00	2.4
ELECTRIC RANGE		8.0	0.80	6.4
WATER FOUNTAIN		1.4	1.00	1.4
PROJECTOR		1.0	1.00	1.0
LARGEST MOTOR * 25%				1.5
TOTAL kVA				259.8
TOTAL AMPS @ 480V, 3P, 4W				313
SERVICE SIZE @ 480V, 3P, 4W (AMPS)				350
SPARE CAPACITY (AMPS)				37

NOTES:
 (1) DIVERSIFIED PER NEC ARTICLE 220-44
 (2) DIVERSIFIED PER NEC ARTICLE 220-55



(16) SINGLE POLE OUTPUT RELAYS RATED FOR 20A @ 120/277V. AQUITY BRANDS LIGHTING CONTROLS "BLUE BOX" PANEL WITH INTEGRATED ASTRONOMICAL TIME CLOCK AND OCCUPANT WARN-OFF & OVERRIDE DIGITAL SWITCH (6 BUTTONS).

NO.	DATE	DESCRIPTION
	08/13/2018	PRICING
	08/31/2018	PERMIT

IVY KIDS EARLY LEARNING CENTER
 4434 CR 94
 Manvel, Tx 77578

MEP Consultants
 BLK Engineering & Consulting Co.
 3423 Spring Arbor Ln.
 Sugar Land, TX 77479
 (1) 832 563 3127
 TBPE Firm #12672



DRAWING TITLE

**ELECTRICAL
PANEL
SCHEDULES**

DRAWN BY: FK
CHECKED BY: CK

DATE: 05/10/2018
JOB NO.: SEDONA LAKES

DRAWING NO.: **E-5.0**

NOTE	PANEL: HA		VOLTAGE: 277/480		3 PH 4 W		AIC: 25,000		REMARKS:		NOTE	
	C**	WIRE*	LOAD DESCRIPTION	kVA	BKR	CKT	CKT	BKR	kVA	LOAD DESCRIPTION		WIRE*
	#10		LTG - CLASSROOM	3.10	20/1	1	2	125/3	14.00	XFMR 'TLA'		
	#10		LTG - LUNCHROOM	4.00	20/1	3	4	X	15.00	"		3
	#10		LTG - CORRIDOR, CLASSROOM	3.00	20/1	5	6	X	18.00	"		
	#10		LTG - CLASSROOM	3.30	20/1	7	8	225/3	35.00	PANEL 'HB'		3
	#10		LTG - ACTIVITY ROOM	2.60	20/1	9	10	X	35.00	"		
	#10		LTG - OUTDOOR	0.80	20/1	11	12	X	35.00	"		
2	#8		LTG - PARKING LOT	1.66	20/1	13	14	15/3	2.70	RTU-1		1
			SPARE		20/1	15	16	X	2.70	"		
			UH-1	3.00	20/1	17	18	X	2.70	"		
			SPARE		20/1	19	20	20/3	3.13	RTU-13		1
	#10		LTG - ELEC, MECH	0.20	20/1	21	22	X	3.13	"		
	#10		LTG - CANOPY	0.50	20/1	23	24	X	3.13	"		
			UH-2	5.00	20/1	25	26	20/3	3.37	RTU-14		1
			UH-3	5.00	20/1	27	28	X	3.37	"		
			UH-4	5.00	20/1	29	30	X	3.37	"		
			UH-5	5.00	20/1	31	32	20/3	3.13	RTU-15		1
			SPARE		20/1	33	34	X	3.13	"		
			SPARE		20/1	35	36	X	3.13	"		
			SPARE		20/1	37	38	20/3		SPARE		
			SPARE		20/1	39	40	X		"		
			SPARE		20/1	41	42	X		"		

* ALL WIRING IS 2#12, 1#12G IN 3/4" C UNLESS OTHERWISE NOTED

NOTES: 1. COORDINATE CIRCUIT BREAKER AND FEEDER SIZES WITH EQUIPMENT INSTALLED.
2. ROUTE VIA LIGHTING CONTROLLER. 3. REFER TO ONE LINE DIAGRAM FOR FEEDER SIZE.

231.2	kVA CONNECTED
230.9	kVA DEMAND
277.9	AMPS DEMAND @ 480V

NOTE	PANEL: HB		VOLTAGE: 277/480		3 PH 4 W		AIC: 25,000		REMARKS:		NOTE	
	C**	WIRE*	LOAD DESCRIPTION	kVA	BKR	CKT	CKT	BKR	kVA	LOAD DESCRIPTION		WIRE*
1			RTU-2	2.70	15/3	1	2	20/3	3.13	RTU-9		1
			"	2.70	X	3	4	X	3.13	"		
			"	2.70	X	5	6	X	3.13	"		
1			RTU-3	2.70	15/3	7	8	20/3	3.37	RTU-10		1
			"	2.70	X	9	10	X	3.37	"		
			"	2.70	X	11	12	X	3.37	"		
1			RTU-4	3.13	20/3	13	14	20/3	3.37	RTU-11		1
			"	3.13	X	15	16	X	3.37	"		
			"	3.13	X	17	18	X	3.37	"		
1			RTU-5	3.13	20/3	19	20	20/3	3.37	RTU-12		1
			"	3.13	X	21	22	X	3.37	"		
			"	3.13	X	23	24	X	3.37	"		
1			RTU-6	3.13	20/3	25	26	20/3		SPARE		
			"	3.13	X	27	28	X		"		
			"	3.13	X	29	30	X		"		
1			RTU-7	3.13	20/3	31	32			SPACE		
			"	3.13	X	33	34			SPACE		
			"	3.13	X	35	36			SPACE		
1			RTU-8	3.13	20/3	37	38			SPACE		
			"	3.13	X	39	40			SPACE		
			"	3.13	X	41	42			SPACE		

* ALL WIRING IS 2#12, 1#12G IN 3/4" C UNLESS OTHERWISE NOTED

NOTES: 1. COORDINATE CIRCUIT BREAKER AND FEEDER SIZES WITH EQUIPMENT INSTALLED.

102.9	kVA CONNECTED
102.9	kVA DEMAND
123.8	AMPS DEMAND @ 480V

NOTE	PANEL: LA		VOLTAGE: 120/208		3 PH 4 W		AIC: 10,000		REMARKS:		NOTE	
	C**	WIRE*	LOAD DESCRIPTION	kVA	BKR	CKT	CKT	BKR	kVA	LOAD DESCRIPTION		WIRE*
			RECPT - OUTSIDE	0.90	20/1	1	2	20/1	0.50	RECPT - LUNCHROOM		
			RECPT - OUTSIDE	1.10	20/1	3	4	20/1	0.20	RECPT - KITCHEN		
			RECPT	1.26	20/1	5	6	20/1	0.50	RECPT - KITCHEN		
			REFRIGERATOR	1.40	20/1	7	8	20/1	1.40	WATER FOUNTAIN		
			FREEZER	1.20	20/1	9	10	20/1	0.70	RECPT - OFFICE		
			FREEZER	1.20	20/1	11	12	20/1	1.30	RECPT - CLASSROOM		
			RECPT - KITCHEN	0.40	20/1	13	14	20/1	0.70	RECPT - CLASSROOM		
			RECPT - KITCHEN	0.40	20/1	15	16	20/1	0.90	RECPT - CLASSROOM		
			RECPT - KITCHEN	0.40	20/1	17	18	20/1	0.90	RECPT - ACTIVITY		
			RECPT - OFFICE	1.40	20/1	19	20	20/1	1.30	RECPT - ACTIVITY		
			RECPT - KITCHEN	0.50	20/1	21	22	20/1	0.70	RECPT - KITCHEN		
	#10		DRYER	2.50	30/2	23	24	20/1	1.40	REFRIGERATOR		
			"	2.50	X	25	26	20/1	1.00	RECPT - LEARNING		
			WASHER	0.20	20/1	27	28	20/1	1.70	RECPT - CLASSROOM		
			SPARE		20/1	29	30	20/1	1.50	RECPT - CLASSROOM		
			FRONT DOOR LOCK	1.00	20/1	31	32	20/1	0.60	LTG - OUTDOOR		
			RECPT - FRONT	1.10	20/1	33	34	20/1	1.40	REFRIGERATOR		
			RECPT - OFFICE	1.10	20/1	35	36	20/1	0.50	WATER HEATER		
			FACP	0.50	20/1	37	38	100/3	3.00	PANEL LB		2
	#8		ELECTRIC RANGE	4.00	50/2	39	40	X	5.00	"		
			"	4.00	X	41	42	X	4.00	"		

* ALL WIRING IS 2#12, 1#12G IN 3/4" C UNLESS OTHERWISE NOTED

NOTES: 1. PROVIDE GFCI TYPE CIRCUIT BREAKER OR RECEPTACLE. 2. REFER TO ONE LINE DIAGRAM FOR FEEDER SIZES.
3. COORDINATE SIZE OF CIRCUIT BREAKER AND FEEDER WITH THE ACTUAL EQUIPMENT INSTALLED.

56.3	kVA CONNECTED
51.2	kVA DEMAND
142.2	AMPS DEMAND @ 208V

NOTE	PANEL: LB		VOLTAGE: 120/208		3 PH 4 W		AIC: 10,000		REMARKS:		NOTE	
	C**	WIRE*	LOAD DESCRIPTION	kVA	BKR	CKT	CKT	BKR	kVA	LOAD DESCRIPTION		WIRE*
			THEATRE CONTROLS	0.40	20/1	1	2	20/1		SPARE		
			PROJECTOR	0.50	20/1	3	4	20/1		SPARE		
			SPARE		20/1	5	6	20/1		SPARE		
			SPARE		20/1	7	8			SPACE		
			SPARE		20/1	9	10			SPACE		
			SPARE		20/1	11	12			SPACE		
			SPARE		20/1	13	14			SPACE		
			SPARE		20/1	15	16			SPACE		
			SPARE		20/1	17	18			SPACE		
			SPARE		20/1	19	20			SPACE		
			SPARE		20/1	21	22			SPACE		
			SPARE		20/1	23	24			SPACE		
			SPARE		20/1	25	26			SPACE		
	#8		DIGITAL SIGN	2.00	30/1	27	28			SPACE		
	#8		CONTROLS DIGITAL SIGN	0.50	20/1	29	30			SPACE		
1			SIGNAGE	1.00	20/1	31	32			SPACE		
1			LIGHTS - EXTERIOR	0.16	20/1	33	34	20/1	1.08	RECPT - ROOF SERVICE	#10	
			RECPT - ELEC	0.18	20/1	35	36	20/1	1.18	EF-C	#10	
			SIGN FOUNTAIN	0.50	20/1	37	38	20/1		SPARE		
			LIGHTING CONTACTOR	0.50	20/1	39	40	20/1		SPARE		
			RECPT - TELECOM	0.40	20/1	41	42	20/1		SPARE		

* ALL WIRING IS 2#12, 1#12G IN 3/4" C UNLESS OTHERWISE NOTED

NOTES: 1. ROUTE VIA LIGHTING CONTROLLER.

8.4	kVA CONNECTED
9.2	kVA DEMAND
25.5	AMPS DEMAND @ 208V

SPECIFICATIONS

I. SCOPE

- A. INSTALL ALL ELECTRICAL WORK COVERED BY THESE SPECIFICATIONS AND APPROVED DRAWINGS. PROVIDE ALL MATERIAL, LABOR, TRANSPORTATION, TOOLS, SUPERVISION, ETC., NECESSARY TO COMPLETE THE TOTAL ELECTRICAL JOB. ALL ITEMS NOT SPECIFICALLY MENTIONED HEREIN WHICH ARE OBVIOUSLY NECESSARY TO MAKE A COMPLETE WORKING INSTALLATION SHALL BE PROVIDED.
- B. ELECTRICAL COMPONENTS INCLUDING BUT NOT LIMITED TO CONDUCTOR SIZE, OVERCURRENT PROTECTIVE DEVICE AND DISCONNECT SWITCHES ARE BASED ON POWER REQUIREMENTS FOR EQUIPMENT SPECIFIED AS SHOWN ON THE CONTRACT DOCUMENTS. PRIOR TO INSTALLING WORK, CONTRACTOR SHALL COORDINATE ELECTRICAL REQUIREMENTS WITH EQUIPMENT OF ALL TRADES REQUIRING ELECTRICAL CONNECTIONS.
- C. FINAL CONNECTION TO EQUIPMENT SHALL BE PER MANUFACTURER'S APPROVED WIRING DIAGRAMS, DETAILS AND INSTRUCTIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE MATERIALS AND EQUIPMENT COMPATIBLE WITH ACTUAL EQUIPMENT SUPPLIED.
- D. VERIFY EXACT LOCATIONS OF EXISTING AND NEW UNDERGROUND UTILITIES, PIPING AND RACEWAY SYSTEMS PRIOR TO TRENCHING, PROVIDE NECESSARY TRENCHING, BACKFILL, EXCAVATION, SUPPORTS, SERVICES (CONDUIT AND/OR WIRE) PULLBOXES, TRANSFORMER PADS, SAWCUTTING AND PATCHING, CONCRETE/PAVING, ETC. AS REQUIRED, CONTRACTOR SHALL OBTAIN AND VERIFY EXACT UTILITY COMPANY DRAWINGS AND REQUIREMENTS.
- E. EXAMINATION OF BIDDING DOCUMENTS
 - 1. EACH BIDDER SHALL EXAMINE THE BIDDING DOCUMENTS CAREFULLY AND MAKE WRITTEN REQUEST TO THE ARCHITECT FOR INTERPRETATION OR CORRECTION OF ANY DISCREPANCIES, AMBIGUITY, INCONSISTENCY OR ERROR THEREIN. ANY INTERPRETATION OR CORRECTION WILL BE ISSUED BY THE ARCHITECT AS AN ADDENDUM. ONLY WRITTEN INTERPRETATION OR CORRECTIONS BY ADDENDUM SHALL BE BINDING. CONTRACTOR SHALL INCLUDE IN HIS BID, LABOR, MATERIALS AND METHODS OF CONSTRUCTION FOR COMPLETE INSTALLATION. AFTER AWARD OF CONTRACT, NO ALLOWANCE OR EXTRA COMPENSATION WILL BE MADE IN BEHALF OF THE CONTRACTOR DUE TO HIS FAILURE TO MAKE THE WRITTEN REQUEST AS DESCRIBED ABOVE.
 - 2. FAILURE TO REQUEST CLARIFICATION OF ANY INADEQUACY, OMISSION OR CONFLICT WILL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY. THE SIGNING OF THE CONTRACT WILL BE CONSIDERED IMPLICITLY DENOTING THAT THE CONTRACTOR HAS A THOROUGH COMPREHENSION OF THE FULL INTENT AND THE SCOPE OF WORKING DRAWINGS AND SPECIFICATIONS.

II. CODES AND FEES

- A. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT EDITION OF THE NATIONAL ELECTRICAL CODE, N.E.P.A. 70 AND ALL LOCAL AND STATE CODES AND REGULATIONS. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND INSPECTIONS REQUIRED BY THE BUILDING AND SAFETY CODES AND ORDINANCES, AND THE RULES AND REGULATIONS OF ANY LEGAL BODY HAVING JURISDICTION.

III. WORKMANSHIP

- A. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF ELECTRICAL EQUIPMENT. COORDINATE DEVICE LOCATIONS WITH DOOR SWINGS, CABINETS, COUNTERS, ETC., AS INDICATED ON THE ARCHITECTURAL DRAWINGS. DO NOT SCALE ELECTRICAL PLANS. OBTAIN DIMENSIONS FOR LAYOUT OF EQUIPMENT FROM ARCHITECTURAL PLANS UNLESS INDICATED ON ELECTRICAL PLANS.
- B. COORDINATE WITH ALL OTHER TRADES AND SUBCONTRACTORS PERFORMING WORK ON THIS PROJECT. MINOR OFFSETS IN LOCATIONS OF FIXTURES, DEVICES, ETC. SHALL BE MADE TO AVOID CONFLICTS WITH OTHER TRADES. SUCH MODIFICATIONS SHALL BE APPROVED BY THE ARCHITECT PRIOR TO THE WORK BEING PERFORMED.
- C. MOUNTING HEIGHTS, UNLESS OTHERWISE NOTED, ARE TO THE CENTER LINE OF THE EQUIPMENT AND/OR DEVICE EXCEPT THE MOUNTING HEIGHT OF SUSPENDED LIGHT FIXTURES WHICH IS TO THE BOTTOM OF FIXTURE.
- D. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING EQUIPMENT WHICH IS DAMAGED DUE TO INCORRECT FIELD WIRING PROVIDED UNDER THIS SECTION OR FACTORY WIRING IS EQUIPMENT PROVIDED UNDER THIS SECTION.

IV. SUBSTITUTIONS

- A. ALL COST INCURRED BY THE ACCEPTANCE OF SUBSTITUTIONS SHALL BE BORNE BY THE CONTRACTOR. PROOF FOR THE EQUALITY OF SUBSTITUTIONS SHALL BE BY THE CONTRACTOR.

V. U.L. LISTING

- A. ALL ELECTRICAL ITEMS COVERED BY THIS SPECIFICATION SHALL BE U.L. LABELED AND LISTED FOR THEIR SPECIFIC USE.

VI. ELECTRICAL SERVICE

- A. THE ELECTRICAL CONTRACTOR SHALL PAY ALL COSTS REQUIRED BY THE LOCAL UTILITY COMPANY PROVIDING SERVICES INDICATED. ELECTRICAL CONTRACTOR SHALL COORDINATE METERING, TRANSFORMER PAD, CONNECTION POINTS AND GROUNDING WITH UTILITY COMPANY.
- B. ALL SERVICE ENTRANCE EQUIPMENT INCLUDING BUT NOT LIMITED TO ANY MAIN DISCONNECT SWITCH, PANEL, OR SWITCHBOARD SHALL BE LISTED AND LABELED AS "SUITABLE FOR USE AS SERVICE ENTRANCE EQUIPMENT".

VII. WARRANTY

- A. WORK SHALL BE WARRANTED FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF ACCEPTANCE BY THE OWNER.

VIII. SPECIFICATIONS

A. GROUNDING

- 1. THE BUILDING ELECTRICAL SYSTEMS SHALL BE SOLIDLY GROUNDED. ALL NON-CURRENT CARRYING METAL PARTS OF THE ELECTRICAL SYSTEM, I.E., RACEWAYS, EQUIPMENT ENCLOSURES, FRAMES, JUNCTION AND OUTLET BOXES AND OTHER CONDUCTIVE ITEMS IN CLOSE PROXIMITY WITH ELECTRICAL CIRCUITS, SHALL BE GROUNDED TO PROVIDE A LOW IMPEDANCE PATH FOR POTENTIAL GROUND FAULTS.
- 2. EQUIPMENT GROUNDING CONDUCTORS SHALL BE INSTALLED IN ALL RACEWAYS AND CABLES.
- 3. THE NEUTRAL AND GROUND BUS SHALL BE BONDED TOGETHER AT ALL SERVICE EQUIPMENT.

B. RACEWAYS AND CONDUITS

- 1. CONDUITS INSTALLED IN DIRECT CONTACT WITH GRADE OR WITHIN CONCRETE SLABS SHALL BE SCHEDULE 40 PVC. CONDUITS CONCEALED WITHIN WALLS AND ABOVE CEILINGS, AND EXPOSED IN INDOOR AREAS SHALL BE ELECTRICAL METALLIC TUBING (E.M.T.). COUPLINGS SHALL BE STEEL SET SCREW TYPE FOR INDOOR LOCATIONS, AND COMPRESSION TYPE FOR OUTDOOR AND WET LOCATIONS. CONDUIT SHALL BE INTERMEDIATE OR GALVANIZED RIGID STEEL IN AREAS WHERE SUBJECT TO ABUSE.
- 2. CONDUITS SHALL BE RUN PARALLEL OR AT RIGHT ANGLES TO WALLS, CEILINGS, AND STRUCTURAL MEMBERS.
- 3. LIQUID TIGHT FLEXIBLE METAL OR NON-METALLIC CONDUIT SHALL BE USED FOR OUTDOOR EXPOSED CONNECTIONS TO GROUND OR ROOF-MOUNTED EQUIPMENT.
- 4. ALL RACEWAYS SHALL BE INSTALLED CONCEALED EXCEPT IN UNFINISHED SPACES OR WHERE INDICATED ON THE DRAWINGS.
- 5. FASTENERS AND SUPPORTS SHALL BE AS MANUFACTURED Y GEDNEY, EFCOR OR EQUAL. SUPPORTING DEVICES SHALL BE THOSE AS MANUFACTURED FOR A SPECIFIC PURPOSE. NAILS, WIRE OR PIPE STRAP SHALL NOT BE USED.
- 6. PROVIDE FLEXIBLE EXPANSION CONDUIT FITTINGS ON ALL CONDUIT CROSSING EXPANSION JOINTS. SEE ARCHITECTURAL PLANS FOR EXPANSION JOINT LOCATIONS.

C. CONDUCTORS

- 1. ALL BRANCH CIRCUIT CONDUCTORS SHALL BE COPPER, 90 DEG C THHN/THWN INSULATION.
- 2. UNLESS NOTED OTHERWISE, SERVICE AND FEEDER CONDUCTORS SHALL BE COPPER, THHN/THWN-2 INSULATION. WHERE APPROVED, ALUMINUM CONDUCTORS SHALL BE COMPACT, AA-8000 SERIES, XHHW-2, 90 DEG C.
- 3. WIRE NO. 8 AWG AND LARGER SHALL BE STRANDED, NO. 10 AND SMALLER SHALL BE SOLID.
- 4. ALL BRANCH CIRCUIT AND FEEDER CONDUCTORS, NO. 8 AWG AND SMALLER, SHALL BE COLOR CODED AS FOLLOWS (WHERE APPROVED BY THE AUTHORITY HAVING JURISDICTION):

120/208 VOLT SYSTEM	277/480 VOLT SYSTEM
PHASE A - BLACK	PHASE A - BROWN
PHASE B - RED	PHASE B - ORANGE
PHASE C - BLUE	PHASE C - YELLOW
NEUTRAL - WHITE	NEUTRAL - GREY
GROUND - GREEN	GROUND - GREEN
- 5. MC CABLE SHALL BE LIMITED TO BRANCH CIRCUITS CONCEALED IN WALLS AND ABOVE CEILINGS, AND MAY NOT BE RUN DIRECTLY INTO SURFACE MOUNTED EQUIPMENT. ALL CIRCUIT HOMERUNNS FROM THE PANELBOARD TO THE FIRST BRANCH CIRCUIT DEVICE SHALL BE ROUTED IN CONDUIT. MC CABLE SHALL NOT BE ALLOWED FOR WIRING TO MECHANICAL EQUIPMENT.
- 6. SIZES INDICATED ARE FOR INSTALLATION IN A MAXIMUM 30 DEGREE C AMBIENT.

D. OUTLET/JUNCTION BOXES

- 1. ALL OUTLET/JUNCTION BOXES SHALL BE GALVANIZED STEEL.
- 2. WALL AND CEILING OUTLET BOXES SHALL BE 4" SQUARE, WITH A DEPTH OF 2 1/2". CEILING BOXES SHALL BE 4" OCTAGONAL WHERE REQUIRED DUE TO NUMBER OF WIRES.
- 3. WHERE BOXES ARE INSTALLED BACK-TO-BACK IN WALLS AND LOCATED LESS THAN 24" APART, MOLDABLE PUTTY PADS SHALL BE INSTALLED TO MAINTAIN THE REQUIRED FIRE RATING.

E. PANELBOARDS

- 1. PANELBOARDS SHALL HAVE BOLT-IN CIRCUIT BREAKERS AND ALUMINUM BUSSING. WHERE APPLICABLE, LOAD CENTERS SHALL HAVE PLUG-IN BREAKERS AND ALUMINUM BUSSING.
- 2. OVERCURRENT PROTECTIVE DEVICES SHALL BE AUTOMATIC TRIP THERMAL MAGNETIC TPE WITH QUICK-MAKE QUICK-BREAK FIR BOTH MANUAL AND AUTOMATIC OPERATION. ALL MULTIPOLE BREAKERS SHALL BE COMMON TRIP; HANDLE TIES WILL NOT BE ACCEPTED.
- 3. SWITCHBOARDS, DISTRIBUTION BOARDS, PANELBOARDS, DISCONNECT SWITCHES AND MOTOR CONTROL CENTERS SHALL BE MANUFACTURED BY GENERAL ELECTRIC, SIEMENS, SQUARE 'D' OR EATON/CUTLER HAMMER. BOLT FREE STANDING EQUIPMENT TO 4" HIGH EQUIPMENT HOUSEKEEPING PADS. SWITCHBOARD SECTIONS SHALL BE FULLY BUSSED.
- 4. TYPEWRITTEN DIRECTORIES AND PANELBOARD DESIGNATION PLATES SHALL BE PROVIDED BY THE CONTRACTOR FOR ALL PANELBOARDS. PANELBOARD DESIGNATIONS SHALL BE PHENOLIC-ENGRAVED.
- 5. WIRE TERMINATION PROVISIONS FOR PANELBOARDS, CIRCUIT BREAKERS, SAFETY SWITCHES AND ALL OTHER ELECTRICAL APPARATUS SHALL BE LISTED AS SUITABLE FOR 75 DEGREE C. MINIMUM.

F. LIGHTING FIXTURES

- 1. UNLESS INDICATED ON DRAWINGS, BALLASTS PROVIDED WITH FIXTURES SHALL BE ETL-CBM APPROVED, HIGH POWER FACTOR, WITH U.L. LABEL. ALL BALLASTS FOR RAPID START LAMPS SHALL BE PREMIUM CLASS P.
- 2. FIXTURES RECESSED IN T-BAR CEILING SHALL BE SUPPORTED INDEPENDENTLY OF CEILING SYSTEM, WITH TWO (2) NUMBER TWELVE (12) HANGER WIRES UP TO STRUCTURE. SECURE HANGER WIRES TO CORNERS OF FIXTURE. CLIP FIXTURE TO GRID ON TWO SIDES WITH FACTORY FURNISHED CLIPS. FINAL CONNECTION TO FIXTURE SHALL BE MADE WITH A FLEXIBLE U.L. APPROVED ASSEMBLY.

A LICENSED FIRE ALARM CONTRACTOR SHALL SUBMIT THE FIRE ALARM SYSTEM DRAWINGS TO THE AHJ FOR APPROVAL PRIOR TO INSTALLATION. THE INSTALLATION MUST BE APPROVED BEFORE THE CERTIFICATE OF OCCUPANCY MAY BE ISSUED.

G. WIRING DEVICES

- 1. DUPLEX RECEPTACLES SHALL BE TAMPER RESISTANT TYPE RATED 20 AMP, PASS & SEYMOUR TR63 OR APPROVEDE EQUAL.
- 2. GFCI RECEPTACLES SHALL BE TAMPER RESISTANT TYPE RATED 20 AMP, PASS & SEYMOUR 2095-TR OR APPROVED EQUAL.
- 3. TOGGLE SWITCHES SHALL BE 20 AMP, HUBBELL CS1221 OR APPROVED EQUAL.
- 4. DIMMER SWITCHES SHALL BE SLIDER TYPE, LUTRON VARED SERIES.
- 5. DEVICE PLATES SHALL BE NYLON (UNLESS NOTED OTHERWISE).
- 6. COLOR OF DEVICES AND DEVISE PLATES SHALL BE AS DETERMINED BY ARCHITECT.

H. DRY TYPE TRANSFORMERS

- 1. TRANSFORMERS SHALL BE U.L. LISTED AND SHALL HAVE CLASS 155 OR HIGHER INSULATION SYSTEMS.
- 2. TRANSFORMERS SHALL BE MOUNTED WITH 5/8" THICK NEOPRENE PADS FOR VIBRATION ISOLATION.
- 3. 4" HIGH CONCRETE HOUSEKEEPING PADS SHALL BE INSTALLED FOR ALL FLOOR MOUNTED TRANSFORMERS.
- 4. ACCEPTABLE MANUFACTURERS: EATON/CUTLER HAMMER, G.E., SIEMENS OR SQUARE D.

I. DISCONNECT SWITCHES

- 1. SAFETY-TYPE DISCONNECT SWITCHES SHALL BE HEAVY DUTY WITH QUICK-MAKE, QUICK-BREAK MECHANISM WITH INTERLOCKING COVER WHICH NORMALLY CANNOT BE OPENED WHEN THE SWITCH IS IN THE "ON" POSITION. SWITCH SHALL HAVE PROVISIONS FOR PAD-LOCKING IN THE OPEN OR CLOSED POSITION.
 - 2. FUSIBLE DISCONNECT SWITCHES SHALL HAVE REJECTION-TYPE FUSEHOLDERS. FUSES SHALL BE NON-RENEWABLE, DUAL ELEMENT TIME-DELAY "RK1" OR "RK3", OR AS SPECIFIED OTHERWISE.
 - 3. ACCEPTABLE MANUFACTURERS: EATON/CUTLER HAMMER, G.E., SIEMENS OR SQUARE D.
- J. FIRE ALARM SYSTEM**
- 1. PROVIDE A COMPLETE, U.L. LISTED, ADDRESSABLE FIRE ALARM SYSTEM IN ACCORDANCE WITH THESE SPECIFICATIONS, AND ALL APPLICABLE CODES.
 - 2. CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT FOR A COMPLETE FIRE ALARM SYSTEM, INCLUDING THE FOLLOWING:
 - A) ENGINEERED DRAWINGS, CALCULATIONS, AND MATERIAL SUBMITTALS APPROVED BY AUTHORITY HAVING JURISDICTION.
 - B) COORDINATION OF WORK IN THIS SECTION WITH ALL TRADES.
 - C) COMPLETE MONITORING SERVICE CONNECTION TO TELEPHONE BACKBOARD.
 - D) INSPECTIONS AND TESTS.
 - E) ONE (1) YEAR WARRANTY

K. MISCELLANEOUS EQUIPMENT

- 1. TIME CLOCK SHALL BE ELECTRONIC TYPE WITH ASTRONOMICAL FUNCTIONS (TORK DZS 200BP OR APPROVED EQUAL).
- 2. PHOTOCELL SHALL HAVE RAINIGHT PHOTOELECTRIC SELF-CONTAINED CONTROL FOR SWITCHING. PHOTOCELL SHALL HAVE DIE-CAST HOUSING WITH ADJUSTABLE SENSOR. (ACCEPTABLE MANUFACTURERS: TORK 2100 SERIES OR APPROVED EQUAL).

L. PENETRATIONS

- 1. ALL PENETRATIONS THROUGH RATED WALLS, FLOORS AND/OR CEILINGS SHALL BE SEALED WITH THE APPROPRIATELY RATED FIRE-SEALING MATERIAL BY 3M COMPANY, THOMAS & BETTS, METACAULK, OR APPROVED EQUAL.

M. SUBMITTALS

- 1. PANELBOARDS, WIRING DEVICES, SWITCHES AND DISCONNECTS, LIGHTING FIXTURES, AND FUSE SUBMITTALS SHALL BE REQUIRED, AND ARE TO INCLUDE MANUFACTURER'S DATA, TEST REPORTS, PERFORMANCE DATA AND CERTIFICATIONS.

N. COMMUNICATIONS CONDUIT/BOXES

- 1. TWO (2) 4" SCHEDULE 40 PVC CONDUITS SHALL EXTEND FROM THE PUBLIC RIGHT-OF-WAY TO THE MAIN TELECOMMUNICATIONS ROOM OR ENTRANCE FACILITY.
- 2. THE NUMBER OF BENDS IN A CONDUIT SECTION RUN SHALL NOT EXCEED TWO (2) 90-DEGREE BENDS OR EQUIVALENT OF SWEEPS AND RADIUS BENDS.
- 3. IN AREAS WITH NON-ACCESSIBLE CEILINGS, TELEPHONE CONDUITS SHALL BE CONTINUOUS FROM THE OUTLET BOX TO THE TELEPHONE EQUIPMENT BACKBOARD AND TERMINATED WITH A NYLON GROMMET.
- 4. EACH HORIZONTAL HOME-RUN CONDUIT CAN SERVE FROM ONE (1) TO THREE (3) OUTLET BOXES. FOR ONE (1) OUTLET BOX, A 3/4" CONDUIT SHALL BE USED, MINIMUM. FOR TWO (2) OUTLET BOXES, A 1" CONDUIT SHALL BE USED, MINIMUM. FOR THREE (3) OUTLET BOXES, A 1-1/4" CONDUIT SHALL BE USED, MINIMUM.
- 5. THE DIMENSIONS OF THE OUTLET BOX SHALL BE 4" X 4" SQUARE WITH A MINIMUM DEPTH OF 2-1/8". BOXES SHALL BE EQUIPPED WITH SINGLE DEVICE ADAPTERS (OR TWO-DEVICE ADAPTERS WHERE NEEDED). WHERE INSTALLED IN PLASTER, GYPSUM BOARD, TILE, ETC., ADAPTERS SHALL BE RAISED TO COMPENSATE FOR THE THICKNESS OF THE WALL FINISH.

O. ELECTRICAL MATERIALS AND EQUIPMENT

- 1. NO ELECTRICAL MATERIALS, APPARATUS, DEVICES, APPLIANCES, FIXTURES, OR EQUIPMENT SHALL BE SOLD OR INSTALLED IN THE CITY UNLESS THEY ARE IN CONFORMANCE WITH THE PROVISIONS OF THIS CODE, THE LAWS OF THE STATE OF TEXAS, AND ANY APPLICABLE RULES AND REGULATIONS ISSUED UNDER THE AUTHORITY OF THE STATE STATUTES. THE MAKER'S NAME, TRADEMARK, OR OTHER IDENTIFICATION SYMBOL SHALL BE PLACED ON ALL ELECTRICAL MATERIALS, APPARATUS, DEVICES, APPLIANCES, FIXTURES, AND EQUIPMENT USED OR INSTALLED UNDER THE PROVISIONS OF THIS CODE. ALL ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE LISTED AND LABELED FOR THE INTENDED USE AND SHALL BE INCLUDED IN A LIST SUBMITTED BY AN APPROVED AGENCY.

LEGEND	
	FLOOD FIXTURE 2'X4' CLG FLUSH MTD<A'=TYPE A FIXTURE)
	FLUORESCENT FIXTURE 4' CEILING SURFACE OR RECESSED MOUNTED
	TRACK LIGHTS DN STANDARD TRACK (4' DR 8' IN LENGTH)
	WALL MOUNTED INCANDESCENT DR H.I.D. FIXTURE
	INCANDESCENT DR H.I.D. FIXTURE
	EXIT LT- CEILING DR WALL MTD W/ BATTERY PACK
	EMERGENCY LIGHT FIXTURE W/ BATTERY PACK
	SINGLE POLE SWITCH, 20A-120/277V (A=LTS TO BE CONTROLLED)
	SINGLE POLE SWITCH, 20A-120/277V (DIMMER-1 DR 2 KVA)
	3 WAY SWITCH , S4- 4 WAY, S2- 2 POLE
	KEY OPERATED SWITCH, Sp- PILOT, WP- WEATHERPROOF
	COMPUTER REC-ISOLATED GNDHUBBELL#LGS251 (DRANGE)
	DUPLEX RECEPTACLE, 20A 125V, 3 WIRE GND TYPE< F=FLOOR MTD)
	125/250 VOLT 10 (AMP AS NOTED)
	SINGLE RECEPTACLE 125 VOLT - 10 (AMPS AS NOTED)
	250 VOLT 30, SPECIAL POWER OUTLET (AMPS AS NOTED)
	FLUSH FLOOR TELE/DATA OUTLET
	FLUSH FLOOR DUPLEX RECEPTACLE OUTLET (WP-WEATHERPROOF)
	TELEPHONE OUTLET MTD @ 12" AFF'XF=FLOOR MTD)
	FIRE ALARM PULL STATION
	JUNCTION BOX (SURFACE MTD. AS DESCRIBED DN DWGS.)
	JUNCTION BOX (FLUSH WALL MTD. - AS DESCRIBED DN DWGS.)
	PRE-WIRED DEVICE
	WEATHERPROOF
	DISCONNECT SWITCH, NF=NON FUSED
	MAGNETIC MOTOR STARTER
	MANUAL MOTOR STARTER
	MOTOR OR FAN
	DUCT DETECTOR/SMOKE DETECTOR
	ELECTRICAL PANEL
	L1 or H1,3,5 HOMERUN TO PANEL(L1orL2,4=2W+GXH1,3,5=3W+G)
	CONDUIT IN OR UNDER FLOOR OR SLAB
	CONDUIT IN CEILING DR WALLS
	HATCH MARKS FOR NUMBER OF WIRES IN CONDUIT
	MANUAL PULL STATION @ 4'-6" AFF
	AUDIBLE/VISUAL ALARM HORN(75 CAND.) 80" AFF DR 6' BELOW CLG.
	FIRE ALARM VISUAL DEVICE WALL MTD 80" AFF DR 6' BELOW CLG.
	HEAT DETECTOR CLG MTD
	SMOKE DETECTOR CLG MTD
	CAMERA, DATA, PHONE BY OTHERS

LIGHTING FIXTURE SCHEDULE						
TYPE	MANUFACTURER	VOLTAGE	LAMPS	MOUNTING	REMARKS	IEC VA
A1	LITHONIA #ZBLT4-60L-ADSM-MVOLT-EZ1-LP835	MVOLT	LED, 3500K	RECESSED		53
A4	LITHONIA #ZBLT2-33L-ADSM-MVOLT-EZ1-LP835	MVOLT	LED, 3500K	RECESSED	1,4	30
C	LITHONIA #ZL2N-148-5000LM-MDD-MVOLT-80CRI-WH	MVOLT	LED, 3500K	SURFACE		72
D6	GOTHAM #EVO 40/15 6AR-WD-LSS	MVOLT	LED, 4000K	RECESSED		18.5
D6E	LITHONIA #WST LED P3-40K-VF-MVOLT-E20WC-DXXX	MVOLT	LED, 4000K	WALL		50
E	LITHONIA #ELMT-W-LP06VS-LTP	MVOLT	LED	WALL		14.2
F	LITHONIA #LBL4 48L MVOLT LP835	MVOLT	LED, 3500K	SURFACE		48
G	GOTHAM #EVO 35/15 6AR WD LD EZ1 MVOLT TRW	MVOLT	LED, 3500K	RECESSED		18.5
H1	LITHONIA #DSW2 LED 30C700 40K TFTM MVOLT BBW DXX	MVOLT	LED, 4000K	WALL		71
J	LITHONIA #OFLR 6LC 120 P WH		120	LED, 5000K	WALL	19.9
K	UNDERCOUNTER LIGHT	MVOLT	LED, 3500K	SURFACE		12
X	LITHONIA #LQM S W 3 R 120/277 ELN	MVOLT	LED	SURFACE		0.92
XC	LITHONIA #LQMH LED R HO	MVOLT	LED	SURFACE	EGRESS 1,2	4.3

- NOTES:
- 1. COORDINATE MOUNTING HEIGHT WITH ARCHITECT.
 - 2. PROVIDE UNSWITCHED BRANCH CIRCUIT TO BATTERY SYSTEM.
 - 3. FIXTURE MUST BE VAPOR TIGHT FOR EXTERIOR LOCATIONS.
 - 4. ARCHITECT APPROVAL REQUIRED FOR ALL LIGHT FIXTURES.

REVISIONS AND ISSUANCE

NO.	DATE	DESCRIPTION
08/13/2018		PRICING
08/31/2018		PERMIT

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08-31-2018

DRAWING TITLE

ELECTRICAL NOTES

DRAWN BY: FK
 CHECKED BY: CK

DATE: 05/10/2018
 JOB NO.: SEDONA LAKES

DRAWING NO.: **E-7.0**