#### **ADDENDUM 1 (PENDING DSA APPROVAL)**

### HAMMEL, GREEN AND ABRAHAMSON, INC., ARCHITECTS & ENGINEERS

1918 Main Street, Third Floor Santa Monica, CA 90405

PROJECT: Santa Ana College

Science Center

OWNER: RSCCD DSA File No.: 30-C2

2323 N. Broadway, Suite 112 **DSA Applications No.:** 04-115788 Santa Ana, CA 92706 **HGA Commission No.:** 3584-001-00

**DATE:** 8/23/2017

#### **CONSTRUCTION MANAGER:**

**BERNARDS** 

3633 E. Inland Empire Blvd., Suite 800

Ontario, CA 91764

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The additions, revisions, omissions, corrections and clarifications contained herein shall be made to drawings and specifications for the project and shall be included in scope of work and bids to be submitted. Additionally, reference documents, such as as-built documentation of existing buildings, are provided to further quantify the scope of work. References made below to specifications, drawings, and other documents shall be used as a general guide only. Bidders and Contractors shall determine for themselves the work affected by Addendum items.

**RFP** 

None

**SPECIFICATIONS** 

None

#### **DRAWINGS**

#### **ARCHITECTURAL:**

Item AD-1-1: G003

• Added Detail 7 regarding submittal requirements.

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#### Item AD-1-2: A205

- North canopy reduced by 5'-0" at Detail 1.
- Gutter removed from roof at north canopy at Detail 1.
- Notes revised at Detail 2.

#### Item AD-1-3: A301

- North canopy reduced by 5'-0".
- Bracing clarified for pendant fixture outside of Science Learning center.
- Associated fire sprinklers, lighting fixture shifted south as a result.

#### Item AD-1-4: A400

- Butt joints and glass type updated at storefront SF1 and Curtainwall CW1 at Details 1 and 2.
- Extended metal panel above entry canopy at Detail 1.

#### Item AD-1-5: A403

Material tag revised.

#### Item AD-1-6: A421

- North canopy reduced by 5'-0" at Details 1, 2, and 3.
- Gutter removed from roof at north canopy at Details 1, 2, and 3.
- Framing at canopy revised to match structural drawings at Details 1, 2, and 3.

#### Item AD-1-7: A422

- North canopy reduced by 5'-0" at Details 1, 2, and 3.
- Gutter removed from roof at north canopy at Details 1, 2, and 3.
- Framing at canopy revised to match structural drawings at Details 1 and 2.

#### Item AD-1-8: A430

- Removed rigid insulation from parapet wall at Detail 2.
- Framing at canopy revised to match structural drawings at Details 4.

#### Item AD-1-9: A431

- North canopy reduced by 5'-0" at Details 1.
- Gutter removed from roof at north canopy at Details 1.
- Framing at canopy revised to match structural drawings at Details 1.

#### Item AD-1-10: A432

- North canopy reduced by 5'-0" at Details 5, 8, and 9.
- Gutter removed from roof at north canopy at Details 5.
- Framing at canopy revised to match structural drawings at Details 5, 6C, 7, 8, and 9.

#### Item AD-1-11: A433

- Gutter removed from roof at north canopy at Details 1.
- Framing at canopy revised to match structural drawings at Details 1 and 4.

#### Item AD-1-12: A440

- New detail 6 added to clarify the horizontal drift joint at curtainwall type CW1.
- Changed to butt joint at Detail 4.

#### Item AD-1-13: A445

- North canopy reduced by 5'-0" at Details 1, 2, and 3.
- Framing at canopy revised to match structural drawings at Details 1, 2, and 3.
- Added detail 4, Enlarged Canopy Roof Plan- Alternate #1

#### Item AD-1-14: A451

- Columns furred out to edge of storefront at Detail 2 and 4.
- Butt joint locations updated at Detail 2 and 4.

#### Item AD-1-15: A481

• Added material ID tag <TPO-1> to single ply membrane.

#### Item AD-1-16: A491

- Location of butt joints and glass type at storefront changed at Detail 4 and 5.
- Location of butt joints at curtainwall changed at Detail 1.

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Addendum 1

- Added detail reference 6/A440 at drift joint location at Detail 1, 2, 3, and 10.
- Clarified condition at canopy at Detail 1.
- Note added for all glass located on first floor and below to be laminated glass.

#### STRUCTURAL:

#### Item AD-1-17: S2.02

• Extent of the entry canopy shortened by 5'-0"

#### Item AD-1-18: S2.06

- Extent of the entry canopy shortened by 5'-0"
- A few member sizes were updated based on the revised calculations.
- Angle on top of WF beam has been removed.

#### Item AD-1-19: \$7.01

Angles on top of WF beams were removed in details 4, 5, and 6

#### Item AD-1-20: S8.13

• Detail 2 has been updated based on the revised canopy extent. Additional clarifications provided.

#### Item AD-1-21: \$8.14

• Detail 2 has been updated based on the revised canopy extent. Additional clarifications provided.

#### Item AD-1-22: S8.21

Detail 11 has been updated based on the revised canopy extent and revised calculations.

#### **PLUMBING:**

#### Item AD-1-23: P0.02

• Revised fixture schedule to reflect RD-2

#### Item AD-1-24: P2.00

- North canopy reduced by 5'-0"
- Revised storm drain pipe layout

#### Item AD-1-25: P2.01

- North canopy reduced by 5'-0"
- Revised storm drain pipe layout
- Added storm and overflow drains in south side of building

#### Item AD-1-26: P2.02

- Reflected RD-2 in north and south canopy areas.
- Reflected storm and overflow drains in south side of building

#### Item AD-1-27: P4.13

Updated storm drain riser diagrams per changes.

#### FIRE PROTECTION:

#### Item AD-1-28: FP-201

- North canopy reduced by 5'-0"
- Fire Sprinkler locations shifted south and pipes are reduced in length.

#### Item AD-1-29: FP-301

- North canopy reduced by 5'-0"
- Fire Sprinkler locations shifted south and pipes are reduced in length.

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#### **DRAWINGS - AS-BUILT**

#### <u>None</u>

#### RESPONSES TO PRE-BID CLARIFICATION ("PBC")

#### <u>None</u>

#### **ATTACHMENTS:**

Item AD-1-1: G003 (1 sheet)
Item AD-1-2: A205 (1 sheet)
Item AD-1-3: A301 (1 sheet)
Item AD-1-4: A400 (1 sheet)
Item AD-1-5: A403 (1 sheet)
Item AD-1-6: A421 (1 sheet)
Item AD-1-7: A422 (1 sheet)
Item AD-1-8: A430 (1 sheet)
Item AD-1-9: A431 (1 sheet)
Item AD-1-10: A432 (1 sheet)
Item AD-1-11: A433 (1 sheet)
Item AD-1-12: A440 (1 sheet)
Item AD-1-13: A445 (1 sheet)
Item AD-1-14: A451 (1 sheet)
Item AD-1-15: A481 (1 sheet)
Item AD-1-16: A491 (1 sheet)
Item AD-1-17: S2.02 (1 sheet)
Item AD-1-18: S2.06 (1 sheet)
Item AD-1-19: S7.01 (1 sheet)
Item AD-1-20: S8.13 (1 sheet)
Item AD-1-21: S8.14 (1 sheet)
Item AD-1-22: S8.21 (1 sheet)
Item AD-1-23: P0.02 (1 sheet)
Item AD-1-24: P2.00 (1 sheet)
Item AD-1-25: P2.01 (1 sheet)
Item AD-1-26: P2.02 (1 sheet)
Item AD-1-27: P4.13 (1 sheet)
Item AD-1-28: FP-201 (1 sheet)
Item AD-1-29: FP-301 (1 sheet)

#### END OF ADDENDUM 1

Santa Ana College – Santa Ana, CA Science Center DSA: A4-115788

LABORATORY CONSULTANT RESEARCH FACILITIES DESIGN 3965 FIFTH AVE. #400 SAN DIEGO, CA 92103

### **SCIENCE CENTER** SANTA ANA COLLEGE

1530 W. 17TH ST.

LICENSED CHROTHIEDONTERIODERDESIGNAMSJUNDERE SHATILA ONS ON THE STATE OF CA

NAME: JAMES G. MATSON DATE: MAY 16, 2017 REGISTRATION NUMBER: C13036

N. PROVIDE DUST CONTROL BETWEEN CONSTRUCTION AREAS AND OCCUPIED AREAS AT ALL TIMES AS SPECIFIED.

CREATING EXCESSIVE NOISE OR NEAR SENSITIVE AREAS WITH THE OWNER.

A. THESE GENERAL NOTES APPLY TO THE CONSTRUCTION DOCUMENTS AND SHALL

GOVERN UNLESS NOTED OTHERWISE BY GENERAL NOTES OR KEYNOTES ON

B. ATTACHMENTS OF EQUIPMENT WEIGHING LESS THAN 400# AND SUPPORTED

MOVEABLE EQUIPMENT AND EQUIPMENT WEIGHING LESS THAN 20# THAT IS

DIRECTLY ON THE FLOOR OR ROOF STRUCTURE, FURNITURE OR TEMPORARY OR

SUPPORTED BY VIBRATION ISOLATION DEVICES SUPPORTED FROM THE ROOF. WALL

OR FLOOR NEED NOT BE DETAILED ON THE PLANS. (CBC TITLE 24 PART 2 SECTION

1630A.1). HOWEVER, SUCH EQUIPMENT MUST BE SUPPORTED AND ANCHORED TO

RESIST THE FORCES PRESCRIBED BY SECTION 163A.2 AND ANCHORAGE SHALL BE

REVIEWS/INSPECTIONS. THE INSPECTOR OF RECORD SHALL ASSURE THAT THE

C. ENERGY COMPLIANCE: THE FOLLOWING SECTIONS OF THE 2013 CALIFORNIA

PRODUCTS, DEVICES IS LIMITED TO DEVICES CERTIFIED BY THE

LIMITED TO ONLY THOSE THAT HAVE BEEN CERTIFIED BY THE

D. THE AUTOMATIC FIRE SPRINKLER SYSTEM SHALL CONFORM TO THE

TESTED IN THE PRESENCE OF THE ENFORCING AGENCY.

HORIZONTALLY A MINIMUM OF 24 INCHES PER CBC 709.

OF INSULATING MATERIAL, TITLE 20, CHAPTER 4, ARTICLE 3. ALL

ENERGY CODE CCR TITLE 24, PART 6 SHALL BE FOLLOWED FOR THIS

APPROVED BY THE STRUCTURAL ENGINEER OF RECORD AND DSA AS PART OF FIELD

1. DEVICES (SECTION 100(H)): THE USE OF MANUFACTURED EQUIPMENT,

MANUFACTURER TO MEET OR EXCEED THE MINIMUM SPECIFICATIONS OR

2. CONSTRUCTION (SECTION 100.1): COMPLY WITH THE DEFINITIONS AND

3. INSULATION (SECTION 110.8): THE USE OF INSULATING MATERIALS IS

MANUFACTURER TO COMPLY WITH THE CALIFORNIA QUALITY STANDARDS

INSULATING MATERIALS SHALL COMPLY WITH THE FLAME SPREAD RATING

AND SMOKE DENSITY LIMITATIONS OF THE CBC. INSTALLATION AND R-

VALUES FOR INSULATING MATERIALS SHALL BE IN COMPLIANCE WITH

REQUIREMENTS OF THE 2013 EDITION OF NFPA STANDARD #13. INSTALLATION OF

BY DSA. AT VARIOUS STAGES AND UPON COMPLETION THE SYSTEM SHALL BE

E. ALL EQUIPMENT SHALL BE LISTED. LABELED OR CERTIFIED BY A NATIONALLY

F. OUTLET BOXES IN FIRE RATED WALLS AND PARTITIONS SHALL BE SEPARATED

G. COMMUNICATIONS SYSTEMS EMERGENCY POWER SUPPLY SYSTEMS, BULK

PERFORMANCE CATEGORY (NPC) 2 STANDARDS AS DEFINED BY THE CBC.

I. UPON COMPLETION OF THE INSTALLATION OF THE FIRE ALARM SYSTEM A

THE STATE FIRE MARSHALL STANDARDS PROTECTION DETAILS OF THRU-

COMPLY WITH CBC, SECTION 714. PROTECTION DETAILS OF MEMBRANE

MEDICAL GAS SYSTEMS, FIRE ALARM SYSTEMS EMERGENCY LIGHTING EQUIPMENT

H. THE FIRE ALARM SYSTEM SHALL CONFORM TO ARTICLE 760 OF THE CALIFORNIA

SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF

J. PENETRATIONS OF PIPES, CONDUITS, ETC. IN RATED ASSEMBLIES SHALL BE FIRE-

STOPPED. FIRE-STOPPING SHALL BE AN APPROVED MATERIAL AS PRESCRIBED BY

PENETRATIONS THROUGH FIRE RATED PARTITIONS SHALL BE UL/WH LISTED AND

PENETRATIONS THROUGH FIRE PARTITIONS SHALL COMPLY WITH CBC SECTION

K. COORDINATE ALL PROJECT PHASING WITH OWNER OR AS SPECIFIED AND/OR

L. PROVIDE A SAFE MEANS OF EGRESS THROUGH AND/OR AROUND THE BUILDING

AND SITE PER APPLICABLE CODES AT ALL TIMES DURING THE CONSTRUCTION PROCESS. MINIMIZE DISRUPTION TO ADJACENT AREAS/FLOORS AS MUCH AS

M. MINIMIZE NOISE TO A LEVEL ACCEPTABLE TO THE OWNER. SCHEDULE TASKS

AND SIGNS IN THE MEANS OF EGRESS SHALL BE ANCHORED TO NONSTRUCTURAL

THE FIRE SPRINKLER SYSTEM SHALL NOT BE STARTED UNTIL COMPLETE PLANS AND

SPECIFICATIONS (INCLUDING WATER SUPPLY INFORMATION) HAVE BEEN APPROVED

EFFICIENCIES ADOPTED BY THE CALIFORNIA ENERGY COMMISSION.

SPECIFIC SHEETS.

CONSTRUCTION.

ABOVE REQUIREMENTS ARE ENFORCED.

RULES OF CONSTRUCTION.

SECTION 110.8.

RECOGNIZED TESTING LABORATORY.

ELECTRIC CODE.

THE ENFORCING AGENCY.

SHOWN ON THE DRAWINGS

POSSIBLE.

O. NOTIFY ARCHITECT PROMPTLY IF INFORMATION SHOWN IN ONE CONSTRUCTION DOCUMENT CONFLICTS WITH INFORMATION SHOWN ON ANOTHER

P. NOTIFY ARCHITECT PROMPTLY IF CONSTRUCTION DOCUMENTS ARE INCONSISTENT WITH THE CURRENT APPLICABLE CODES AND REGULATIONS.

Q. NOTIFY ARCHITECT PROMPTLY IF ANY EXISTING CONDITIONS CONFLICT WITH THE CONSTRUCTION DOCUMENTS.

R. STRUCTURAL STEEL MEMBER PROFILES AS INDICATED ON ARCHITECTURAL DRAWINGS MAY VARY FROM ACTUAL PROFILES AND SIZES INDICATED ON THE STRUCTURAL DRAWINGS WHICH SHALL GOVERN.

S. COORDINATE EXACT LOCATIONS OF LIGHT FIXTURES SPEAKERS, SMOKE DETECTORS, EXIT LIGHTS, ACCESS PANELS, SPRINKLER HEADS, HVAC DUCTS DIFFUSERS, REGISTERS, AND OTHER SUCH CEILING ITEMS WITH MECHANICAL ELECTRICAL AND OTHER TRADES. NOTIFY ARCHITECT PROMPTLY IF ANY LOCATIONS CONFLICT WITH ARCHITECTURAL REFLECTED CEILING PLANS.

T. REFER TO ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR FLOOR, WALL, AND CEILING OPENINGS. ALL OPENINGS SHALL BE CUT AND PATCHED AS REQUIRED BY EACH DISCIPLINE OR TRADE REQUIRING THE OPENING UNLESS NOTED OTHERWISE IN THE CONSTRUCTION DOCUMENTS.

PATCHING IS TO BE IN CONFORMANCE WITH APPLICABLE CODES. U. WOOD BLOCKING WITHIN THE WALL SYSTEM SHALL BE FIRE RETARDANT

V. THE MINIMUM ROOF COVERING CLASSIFICATION SHALL BE CLASSIFICATION TYPE C TO COMPLY WITH CBC SECTION 1505.1 FOR A TYPE IIB BUILDING.

W. CONTRACTOR IS RESPONSIBLE FOR ANY COSTS ASSOCIATED WITH SUBMITTING SUBSTITUTIONS OR DEVIATING FROM BASIS OF DESIGN MANUFACTURER.

STANTEC CONSULTING INC 14130 RIVERSIDE DR. # 201 SHERMAN OAKS, CA 91423

150 PAULARINO AVE. #A120

KPFF CONSULTING ENGINEERS 700 SOUTH FLOWER ST. #2100

**IRVINE**, CA 92614 949-756-0150

619-297-0159

RANCHO SANTIAGO COMMUNITY COLLEGE



COLLEGE I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT IJAAMA AULUYLY

NO DESCRIPTION DATE 8/23/17 Addendum 1

ISSUANCE HISTORY - THIS SHEET

REVIEW BY: Approver HGA NO: 3584-001-00

**GENERAL NOTES** 

**ALTERNATES** 

JULY 06, 2017

SHALL BE SENT IN ORIGINAL SOURCE FORMAT WITH ALL TEXT INTACT. NO SCANNED/COPIED/FAXED PDF FILES WILL BE ACCEPTED.

ELECTRONIC PDF FILE FORMAT IN ADDITION TO HARD COPIES. ALL PDF FILES

A. DESIGN BUILDER SHALL PROVIDE ALL PROJECT SUBMITTALS IN

B. ALL SUBMITTALS SHALL BE PREPARED WITH ELECTRONIC CAD OR BIM (AS REOUIRED BY BIM STANDARDS) SOFTWARE - NO HAND-DRAWN SHOP DRAWINGS WILL BE ACCEPTED. ALL SHOP DRAWINGS SHALL BE PROVIDED IN ELECTRONIC FORMAT IN ADDITION TO HARD COPIES.

C. CONTRACTOR TO PROVIDE FULL SUBMITTAL SCHEDULE WITHIN 30 DAYS OF NTP, COMPLETE WITH TIMELINE OF ALL SUBMITTALS TO BE ISSUED. D. ALL SUBMITTAL NUMBERS SHALL BE CLEARLY IDENTIFIED ON THE FIRST PAGE/SHEET OF EVERY SUBMITTAL. SUBMITTAL NUMBERING FORMAT SHALL FOLLOW THE GUIDELINES BELOW.

SUBMITTAL NUMBER FORMAT EXAMPLE

3. SEQUENCE OF RE-SUBMITTAL —

<XXXX-XX-XX .. SPECIFICATION SECTION NUMBER — 2. SEQUENCE OF SUBMITTAL NUMBER ————

L. SPECIFICATION SECTION NUMBER HIS CARACTER DENOTES THE CSI SPECIFICATION NUMBER (AS DICTATED BY THE PROJECT MANUAL AND THE MATERIAL I.D. LIST) THAT CORRESPONDS WITH THE CONTENT OF THE SUBMITTAL.

2. SEQUENCE OF SUBMITTAL NUMBER THIS CARACTER DENOTES THE NUMBER OF SUBMITTLAS ISSUED FOR THE SPECIFICATION SECTION INDICATED, TRACKED SEQUENTIALLY (FIRST SUBMITTAL DESIGNATED WITH '01', SECOND SUBMITTAL '2', ETC.).

3. SEQUENCE OF RESUBMITTAL THIS CARACTER DENOTES THE NUMBER OF RE-SUBMISSIONS FOR THE SUBMITTAL BASED ON A 'REVISE AND RESUBMIT' REVIEW OF THE PREVIOUS SUBMITTAL (FIRST RE-SUBMISSION DESIGNATED WITH '01', SECOND RE-SUBMISSION '2', ETC.) THIS CARACTER IS NOT REQUIRED FOR THE FIRST SUBMISSION OF A SUBMITTAL.

ONCE A SUBMITTAL IS ISSUED, THE NUMBER FOR CHARATERS 1 AND 2 (AS DEFINED ABOVE) SHALL BE MAINTAINED FOR ALL RESUBMISSIONS, REGARDLESS OF THE NUMBER OF RESUBMISSIONS.

SUBMITTAL REQUIREMENTS

REFER TO SPECIFICATIONS FOR ALTERNATES

ALTERNATES

PROVIDE AN APPROVED AUTOMATIC FIRE SPRINKLER SYSTEM IN ACCORDANCE

CFC 901.2. SYSTEM SHALL BE SUBMITTED TO DSA PRIOR TO INSTALLATION. CFC 901.2, 507 THE FIRE SPRINKLER SYSTEM SHALL BE MONITORED BY AN APPROVED CENTRAL

THE AUTOMATIC FIRE SPRINKLER SYSTEM SHALL CONFORM TO THE INSTALLATION OF THE FIRE SPRINKLER SYSTEM SHALL NOT BE STARTED UNTIL COMPLETE PLANS AND SPECIFICATIONS (INCLUDING WATER SUPPLY INFORMATION) HAVE BEEN APPROVED BY DSA AT VARIOUS STAGES AND UPON COMPLETION, THE SYSTEM SHALL BE TESTED IN THE PRESENCE OF THE DSA

THE FIRE ALARM SYSTEM SHALL CONFORM TO ARTICLE 760 OF THE CALIFORNIA ELECTRICAL CODE. 2013 EDITION AND NFPA72-2013 EDITION.

PROVIDE AN APPROVED MANUAL/AUTOMATIC FIRE ALARM SYSTEM. PLANS FOR THE FIRE ALARM SYSTEM SHALL BE SUBMITTED TO DSA. CFC 907 PROVIDE FIRE EXTINGUISHERS. TO BE SHOWN ON FLOOR PLAN PER CFC 904.1 CONTRACTOR TO INSTALL FIRE EXTINGUISHERS AS REQUIRED BY DSA. EXTINGUISHERS IN RECESSED CABINETS SHALL BE J.L. INDUSTRIES AMBASSADOR SERIES NO. 2012-F-17 OR EQUAL. THE REMAINDER SHALL BE INSTALLED ON HOOKS. A 20' WIDE UNOBSTRUCTED FIRE LANE WITHIN 150' OF ALL PORTIONS OF EXTERIOR

WALLS AS NOTED ON PLANS SHALL BE MAINTAINED AT ALL TIMES AND RED CURBS WITH FIRE LANE IDENTIFICATION SHALL BE PROVIDED PER ORANGE COUNTY FIRE AUTHORITY AND DSA REQUIREMENTS. CFC 503.2.1 FIRE APPARATUS ACCESS ROADS SHALL BE DESIGNED AND MAINTAINED TO

CFC 503.2.3 AND 503.1.1.

SECTION 807.

ALL FIRE EXTINGUISHERS SHOWN ON THE FLOOR PLANS (DESIGNATED WITH MATERIAL IDENTIFICATION TAG <FEC-3> OR <FEC-6>) SHALL REQUIRE A FIRE EXTINGUISHER AS WELL (<FE-4> OR <FE-5>), UNLESS OTHERWISE NOTED. EMERGENCY VEHICLE ACCESS ROADS AND ON-SITE FIRE HYDRANTS SHALL BE IN SERVICE AND OPERABLE PRIOR TO LOADING THE SITE WITH COMBUSTIBLE

FIRE SAFETY DURING DEMOLITION AND CONSTRUCTION SHALL COMPLY WITH CFC INHIBIT THE USE OF REQUIRED EXITS AT ANY TIME. CONTRACTOR SHALL MAINTAIN

CHAPTER 14. CONTRACTOR OPERATIONS SHALL NOT BLOCK, HINDER, IMPEDE OR OTHERWISE UNOBSTRUCTED ACCESS TO FIRE EXTINGUISHERS, FIRE HYDRANTS, TEMPORARY FIRE PROTECTION FACILITIES, STAIRWAYS AND OTHER ACCESS ROUTES FOR FIRE-FIGHTING EQUIPMENT AND/OR PERSONNEL.

WITH NFPA 13, 2013 EDITION. PLANS FOR THE INSTALLATION OF THE SPRINKLER SYSTEM SHALL BE SUBMITTED FOR APPROVAL TO DSA PRIOR TO INSTALLATION

PLANS SHOWING UNDERGROUND PIPING TO ON-SITE HYDRANTS AND SPRINKLER STATION, REMOTE STATION OR PROPRIETARY SUPERVISING STATION WHEN THE NUMBER OF SPRINKLERS ARE 100 OR MORE IN ALL OCCUPANCIES NOT NORMALLY OCCUPIED 24 HOURS A DAY OR PROVIDED WITH A 24-HOUR GUARD SERVICE. CFC

REQUIREMENTS OF THE 2013 CFC SECTION 901.2 EDITION AND NFPA STANDARD #13.

INSPECTOR OF RECORD.

SUPPORT THE IMPOSED LOAD OF 70,000 LBS AND SHALL BE PROVIDED WITH AN ALL-WEATHER SURFACE. SUCH ROADS SHALL BE INSTALLED PRIOR TO CONSTRUCTION.

THE USE OF CONBUSTIBLE DECORATIVE MATERIALS SHALL COMPLY WITH CFC

CONSTRUCTION SAFETY NOTES

**CHAPTER 33** 

SAFEGUARDS DURING CONSTRUCTION

**3301.1 Scope.** The provisions of this chapter shall govern

safety during construction and the protection of adjacent pub-

3301.2 Storage and placement. Construction equipment and

materials shall be stored and placed so as not to endanger the

public, the workers or adjoining property for the duration of

**CONSTRUCTION SAFEGUARDS** 

3302.1 Alterations, repairs and additions. Required exits,

tary safeguards shall be maintained at all times during altera-

3302.2 Manner of removal. Waste materials shall be

removed in a manner which prevents injury or damage to per-

3302.3 Fire safety during construction. Fire safety during

construction shall comply with the applicable requirements of

this code and the applicable provisions of Chapter 33 of the

SECTION 3303

3303.1 Construction documents. Construction documents

and a schedule for demolition shall be submitted where

required, no work shall be done until such construction docu-

ments or schedule, or both, are approved.

is in place as required by this chapter.

been provided and approved.

jurisdiction having authority.

2013 CALIFORNIA BUILDING COD

required by the building official. Where such information is

**3303.2 Pedestrian protection.** The work of demolishing any

building shall not be commenced until pedestrian protection

3303.3 Means of egress. A horizontal exit shall not be

destroyed unless and until a substitute means of egress has

3303.4 Vacant lot. Where a structure has been demolished or

removed, the vacant lot shall be filled and maintained to the

existing grade or in accordance with the ordinances of the

4. Joists resting on the stringers shall be not less than 2

spaced not more than 2 feet (610 mm) on center.

5. The deck shall be planks not less than 2 inches (51

inch (18.3 mm) thick nailed to the joists.

by 102 mm); 4 feet (1219 mm) in length.

3306.8 Repair, maintenance and removal. Pedestrian pro-

tection required by this chapter shall be maintained in place

and kept in good order for the entire length of time pedestri-

dition as it was before such work was commenced.

resist wind pressure as specified in Chapter 16.

owner's agent, upon the completion of the construction activ-

3306.9 Adjacent to excavations. Every excavation on a site

located 5 feet (1524 mm) or less from the street lot line shall

be enclosed with a barrier not less than 6 feet (1829 mm) in

height. Where located more than 5 feet (1524 mm) from the

street lot line, a barrier shall be erected where required by the

building official. Barriers shall be of adequate strength to

SECTION 3307

PROTECTION OF ADJOINING PROPERTY

3307.1 Protection required. Adjoining public and private

emodeling and demolition work. Protection shall be pro-

vided for footings, foundations, party walls, chimneys, sky-

ights and roofs. Provisions shall be made to control water

runoff and erosion during construction or demolition activi-

ties. The person making or causing an excavation to be made

shall provide written notice to the owners of adjoining build-

ings advising them that the excavation is to be made and that

the adjoining buildings should be protected. Said notification

shall be delivered not less than 10 days prior to the scheduled

**SECTION 3308** 

PUBLIC PROPERTY

3308.1 Storage and handling of materials. The temporary

use of streets or public property for the storage or handling of

materials or of equipment required for construction or demolition, and the protection provided to the public shall comply

with the provisions of the applicable governing authority and

TEMPORARY USE OF STREETS, ALLEYS AND

starting date of the excavation.

2013 CALIFORNIA BUILDING CODE

this chapter.

property shall be protected from damage during construction.

side edge of the deck.

mm) thick or wood structural panels with an exterior

6. Each post shall be knee braced to joists and stringers

7. A curb which is not less than 2-inch by 4-inch (51

exposure durability classification not less than <sup>23</sup>/<sub>32</sub>

by members not less than 2-inch by 4-inch (51 mm

mm by 102 mm) shall be set on edge along the out-

ans are subject to being endangered. The owner or the [F] 3309.1 Where required. All structures under construc-

ity, shall immediately remove walkways, debris and other than one approved portable fire extinguisher in accordance

obstructions and leave such public property in as good a conwith Section 906 and sized for not less than ordinary hazard

inches by 8 inches (51 mm by 203 mm) and shall be

sons, adjoining properties and public rights-of-way.

1. Where such required elements or devices are being

altered or repaired, adequate substitute provisions

required when the existing building is not occupied.

tions, repairs or additions to any building or structure.

lic and private properties.

the construction project

shall be made.

3303.5 Water accumulation. Provision shall be made to pre-

vent the accumulation of water or damage to any foundations

3303.6 Utility connections. Service utility connections shall

be discontinued and capped in accordance with the approved

rules and the requirements of the applicable governing

3303.7 Fire safety during demolition. Fire safety during

this code and the applicable provisions of Chapter 56 of the

SITE WORK

and structures shall be constructed or protected so as not to

endanger life or property. Stumps and roots shall be removed

from the soil to a depth of not less than 12 inches (305 mm)

below the surface of the ground in the area to be occupied by

the building. Wood forms which have been used in placing

concrete, if within the ground or between foundation sills and

wood shall be removed from direct contact with the ground

3304.1.1 Slope limits. Slopes for permanent fill shall be

not steeper than one unit vertical in two units horizontal

(50-percent slope). Cut slopes for permanent excavations

shall be not steeper than one unit vertical in two units hor-

izontal (50-percent slope). Deviation from the foregoing

limitations for cut slopes shall be permitted only upon the

presentation of a soil investigation report acceptable to the

3304.1.2 Surcharge. No fill or other surcharge loads shall

be placed adjacent to any building or structure unless such

building or structure is capable of withstanding the addi-

tional loads caused by the fill or surcharge. Existing foot-

ings or foundations which can be affected by any

excavation shall be underpinned adequately or otherwise

protected against settlement and shall be protected against

3304.1.4 Fill supporting foundations. Fill to be used to

support the foundations of any building or structure shall

comply with Section 1804.5. Special inspections of com-

3304.1.5 [HCD] Storm water drainage and retention dur-

ing construction. Projects which disturb less than one

acre of soil and are not part of a larger common plan of

catch basins or manholes, nor shall such material or equip-

ment be located within 20 feet (6096 mm) of a street inter-

3308.2 Utility fixtures. Building materials, fences, sheds or

connection, utility pole, manhole, fire alarm box or catch

basin, or so as to interfere with the passage of water in the

gutter. Protection against damage shall be provided to such

SECTION 3309

FIRE EXTINGUISHERS

tion, alteration or demolition shall be provided with no fewer

1. At each stairway on all floor levels where combustible

3. Additional portable fire extinguishers shall be provided

[F] 3309.2 Fire hazards. The provisions of this code and the

against all fire hazards attendant upon construction opera-

SECTION 3310

**MEANS OF EGRESS** 

3310.1 Stairways required. Where a building has been con-

structed to a building height of 50 feet (15 240 mm) or four

stories, or where an existing building exceeding 50 feet (15

240 mm) in building height is altered, no fewer than one tem-

porary lighted stairway shall be provided unless one or more

of the permanent stairways are erected as the construction

**3310.2 Maintenance of means of egress.** Required means of

demolition, remodeling or alterations and additions to any

Exception: Existing means of egress need not be main-

tained where approved temporary means of egress systems

**SECTION 3311** 

STANDPIPES

and facilities are provided.

3308.1.1 Obstructions. Construction materials and equip-

ment shall not be placed or stored so as to obstruct access standpipes by Section 905.3.1, no fewer than one standpipe

to fire hydrants, standpipes, fire or police alarm boxes, shall be provided for use during construction. Such stand-

egress shall be maintained at all times during construction,

California Fire Code shall be strictly observed to safeguard

where special hazards exist, such as the storage and use

materials have accumulated.

2. In every storage and construction shed.

of flammable and combustible liquids.

utility fixtures during the progress of the work, but sight of

any obstruction of any kind shall not be placed so as to obstruct free approach to any fire hydrant, fire department

section, or placed so as to obstruct normal observations of

traffic signals or to hinder the use of public transit loading

development which in total disturbs one acre or more,

SAFEGUARDS DURING CONSTRUCTION

pacted fill shall be in accordance with Section 1704.7.

3304.1.3 Footings on adjacent slopes. For footings on

adjacent slopes, see Chapter 18.

the ground, shall be removed before a building is occupied or

demolition shall comply with the applicable requirements of

on the premises or the adjoining property.

California Fire Code.

2. Maintenance of such elements and devices is not used for any purpose. Before completion, loose or casual

under the building.

building official.

SAFEGUARDS DURING CONSTRUCTION

Code (CALGreen), Chapter 4, Division 4.1.

shall manage storm water drainage during contsruction in

SECTION 3305

SANITARY

vided during construction, remodeling or demolition activi-

SECTION 3306

PROTECTION OF PEDESTRIANS

3306.1 Protection required. Pedestrians shall be protected

during construction, remodeling and demolition activities as

required by this chapter and Table 3306.1. Signs shall be pro-

3306.2 Walkways. A walkway shall be provided for pedes-

unless the applicable governing authority authorizes the side-

walk to be fenced or closed. Walkways shall be of sufficient

width to accommodate the pedestrian traffic, but in no case

shall they be less than 4 feet (1219 mm) in width. Walkways

shall be provided with a durable walking surface. Walkways

shall be accessible in accordance with Chapter 11A or 11B as

applicable, and shall be designed to support all imposed loads

and in no case shall the design live load be less than 150

3306.3 Directional barricades. Pedestrian traffic shall be

protected by a directional barricade where the walkway

extends into the street. The directional barricade shall be of

sufficient size and construction to direct vehicular traffic

3306.4 Construction railings. Construction railings shall be

not less than 42 inches (1067 mm) in height and shall be suf-

**3306.5 Barriers.** Barriers shall be not less than 8 feet (2438

mm) in height and shall be placed on the side of the walkway

nearest the construction. Barriers shall extend the entire

length of the construction site. Openings in such barriers shall

3306.6 Barrier design. Barriers shall be designed to resist

loads required in Chapter 16 unless constructed as follows:

Less than 5 fee

SAFEGUARDS DURING CONSTRUCTION

pipes shall be installed when the progress of construction is

not more than 40 feet (12 192 mm) in height above the lowes

level of fire department vehicle access. Such standpipe sha

be provided with fire department hose connections at access:

ble locations adjacent to usable stairs. Such standpipes shall

be extended as construction progresses to within one floor of

the highest point of construction having secured decking or

[F] 3311.2 Buildings being demolished. Where a building is

being demolished and a standpipe exists within such a buil-

ing, such standpipe shall be maintained in an operable cond

tion so as to be available for use by the fire department. Such

standpipe shall be demolished with the building but shall not

[F] 3311.3 Detailed requirements. Standpipes shall be

Exception: Standpipes shall be either temporary or per-

manent in nature, and with or without a water supply, pro

vided that such standpipes conform to the requirements of

SECTION 3312

**AUTOMATIC SPRINKLER SYSTEM** 

[F] 3312.1 Completion before occupancy. In building

where an automatic sprinkler system is required by this code

it shall be unlawful to occupy any portion of a building or

structure until the automatic sprinkler system installation ha

been tested and approved, except as provided in Section

[F] 3312.2 Operation of valves. Operation of sprinkler con-

trol valves shall be permitted only by properly authorized

personnel and shall be accompanied by notification of duly

designated parties. When the sprinkler protection is being

regularly turned off and on to facilitate connection of newl

completed segments, the sprinkler control valves shall be

**SECTION 3313** 

WATER SUPPLY FOR FIRE PROTECTION

[F] 3313.1 Where required. An approved water supply for

fire protection, either temporary or permanent, shall be made

available as soon as combustible material arrives on the site.

tection is in service.

checked at the end of each work period to ascertain that pro-

installed in accordance with the provisions of Chapter 9.

Section 905 as to capacity, outlets and materials.

be demolished more than one floor below the floor being

ficient to direct pedestrians around construction areas.

be protected by doors which are normally kept closed.

pounds per square foot (psf) (7.2 kN/m<sup>2</sup>).

away from the pedestrian path.

8 feet or less

For SI: 1 foot = 304.8 mm.

trian travel in front of every construction and demolition site

ties in accordance with the California Plumbing Code.

vided to direct pedestrian traffic.

3305.1 Facilities required. Sanitary facilities shall be pro-

accordance with the California Green Building Standards

1. Barriers shall be provided with 2-inch by 4-inch (51

inch (19.1 mm) thick or wood structural panels not less

3. Wood structural use panels shall be bonded with an

4. Wood structural use panels  $\frac{1}{4}$  inch (6.4 mm) or  $\frac{5}{16}$  inch

5. Wood structural use panels <sup>3</sup>/<sub>8</sub> inch (9.5 mm) or <sup>1</sup>/<sub>2</sub> inch

(12.7 mm) in thickness shall have study spaced not

inch by 4-inch (51 mm by 102 mm) stiffener is placed

horizontally at midheight where the stud spacing is

6. Wood structural use panels <sup>5</sup>/<sub>8</sub> inch (15.9 mm) or

3306.7 Covered walkways. Covered walkways shall have a

clear height of not less than 8 feet (2438 mm) as measured

from the floor surface to the canopy overhead. Adequate

lighting shall be provided at all times. Covered walkways

shall be designed to support all imposed loads. In no case

shall the design live load be less than 150 psf (7.2 kN/m<sup>2</sup>) for

Exception: Roofs and supporting structures of covered

walkways for new, light-frame construction not exceeding

for a live load of 75 psf (3.6kN/m<sup>2</sup>) or the loads imposed

on them, whichever is greater. In lieu of such designs, the

roof and supporting structure of a covered walkway are

1. Footings shall be continuous 2-inch by 6-inch (51

2. Posts not less than 4 inches by 6 inches (102 mm by

152 mm) shall be provided on both sides of the roof

and spaced not more than 12 feet (3658 mm) on cen-

3. Stringers not less than 4 inches by 12 inches (102

mm by 305 mm) shall be placed on edge upon the

Construction railings

TYPE OF PROTECTION REQUIRED

2013 CALIFORNIA BUILDING CODE

permitted to be constructed as follows:

mm by 152 mm) members.

TABLE 3306.1 PROTECTION OF PEDESTRIANS

DISTANCE FROM CONSTRUCTION TO LOT LINE

5 feet or more, but not more than one-fourth the height of construction

5 feet or more, but exceeding one-half the height of construction

feet or more, but between one-fourth and one-half the height of construction Barrie

two stories above grade plane are permitted to be designe

more than 4 feet (1219 mm) on center provided a 2

more than 2 feet (610 mm) on center (o.c.).

greater than 2 feet (610 mm) on center.

thicker shall not span over 8 feet (2438 mm).

(23.8 mm) in thickness shall have studs spaced not

adhesive identical to that for exterior wood structural

2. The barrier material shall be boards not less than <sup>3</sup>/<sub>4</sub>-

mm by 102 mm) top and bottom plates.

than  $\frac{1}{4}$ -inch (6.4 mm) thick.

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LBS. LEVER OPERATED. PUSH TYPE MECHANISMS ARE ACCEPTABLE. SELF CLOSING

THE GRAB BAR

VALVES ARE ALLOWED IF THE FAUCET REMAINS OPEN FOR AT LEAST 10 SECONDS.

ALL WORK SHALL CONFORM TO TITLE 24, 2013 EDITION OF CALIFORNIA CODE OF

SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR A CONSTRUCTION CHANGE

BY SECTION 4-338, PART 1, TITLE 24, CCR. DURING CONSTRUCTION, THE ARCHITECT

'DSA CERTIFIED' PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND

APPROVED BY THE DIVISION OF THE STATE ARCHITECT SHALL PROVIDE FULL-TIME

A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT

FOR WALKWAYS SERVING THE ACCESSIBLE PATH OF TRAVEL. THE MAXIMUM CROSS

SLOPE (MEASURED PERPENDICULAR TO THE PRIMARY PATH OF TRAVEL) SHALL NOT

ALL DIRECTIONS). ENSURE MIN. 1% SLOPE TO ALLOW FOR PROPER DRAINAGE.

4. ALL BUILDING ENTRANCES ARE ACCESSIBLE AND USABLE BY PERSONS WITH

EACH CHANGE OF DIRECTION AND AT THE BOTTOM OF EACH RAMP.

ABOVE FLOOR AT LAVATORIES AND COUNTERTOPS.

TOILET SEAT TO THE CENTERLINE OF THE DISPENSER.

WIDE BY 18" DEEP.

SHALL BE NO MORE THAN 5 LBS.

LEVER OF THE BAR. CFC 907.5.2.2

AFF, MEASURED TO THE BOTTOM OF THE OUTLET.

AND 11B-602.

SLOTS, ETC.) SHALL BE WITHIN 48" OF FLOOR (40" IN RESTROOMS).

2. LEVEL LANDINGS ARE REQUIRED AT TOP AND BOTTOM OF RAMPS (1.9% MAX SLOPE IN

3. A 60"-LONG INTERMEDIATE LANDING (AT LEAST AS WIDE AS THE RAMP) IS REQUIRED

AT INTERVALS OF 30 INCH VERTICAL CHANGE AND A 72"-LONG LANDING IS REQUIRED AT

DISABILITIES SHALL BE IDENTIFIED WITH AT LEAST ONE STANDARD SIGN DISPLAYING THE

INTERNATIONAL SYMBOL OF ACCESSIBILITY AND WITH ADDITIONAL DIRECTIONAL SIGNS,

AS REQUIRED, TO BE VISIBLE TO PERSONS ALONG APPROACHING PEDESTRIAN WAYS.

5. THE BOTTOM REFLECTIVE EDGE OF THE MIRROR SHALL BE LOCATED 40" MAXIMUM

6. TOILET TISSUE DISPENSERS SHALL BE MOUNTED WITHIN 7-9" OF THE FRONT EDGE OF

7. OPERATING PARTS OF DISPENSING AND DISPOSAL FIXTURES (TOWELS, WASTE, COIN

8. THE ALCOVE IN WHICH A WATER FOUNTAIN IS LOCATED SHALL NOT BE LESS THAN 32"

9. DRINKING FOUNTAINS SHALL CONFORM TO REQUIREMENTS OF CBC SECTION 11B-211

10. WHERE SINKS ARE PROVIDED, AT LEAST 5%, BUT NO FEWER THAN 1, OF EACH TYPE

PROVIDED IN EACH ACCESSIBLE ROOM OR SPACE SHALL BE ACCESSIBLE.

11. CENTER OF SWITCH, INTENDED TO BE USED BY ROOM OCCUPANTS FOR THE

CONTROL OF LIGHTING. RECEPTACLE OUTLETS. APPLIANCES OF HVAC EQUIPMENT

SHALL BE LOCATED NO LESS THAN 36" NO MORE THAN 48" INCHES ABOVE THE FLOOR.

12. CONTROLS FOR FLUSH VALVES SHALL BE MOUNTED ON THE WIDE SIDE OF TOILET

13. 15, 20 AND 30 AMP RECEPTACLE OUTLETS SHALL BE INSTALLED NOT LESS THAN 17"

14. THE CENTER OF FIRE ALARM INITIATING DEVICES (MANUAL PULL BOXES) SHALL BE

LOCATED 48" ABOVE THE FINISH FLOOR AS MEASURED TO THE ACTIVATING HANDLE OR

AREA AND LOCATED 44" MAX, ABOVE FLOOR. THE FORCE TO ACTIVATE CONTROLS

(OWNER) SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTION FOR THE

DOCUMENT (CCD) APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED

SHALL CONFER WITH THE OWNER AND PROJECT INSPECTOR TO DETERMINE IF THE CCD

CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED

IN SECTION 4-342, CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE (PART 1

GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS, AND

ENVIRONMENTAL HEALTH CONSIDERATION SHALL COMPLY WITH ALL LOCAL ORDINANCES.

REGULATIONS (CCR). SEE TITLE SHEET FOR LIST OF APPLICABLE CODES.

FOLLOWING DSA APPROVAL, CHANGES TO THE APPROVED DRAWINGS AND

IS TO BE CATEGORIZED AS "A" OR "B".

PROJECT.

16. HOT WATER AND DRAIN PIPES ACCESSIBLE UNDER LAVATORIES SHALL BE INSULATED OR OTHERWISE COVERED. THERE SHALL BE NO SHARP OR ABRASIVE

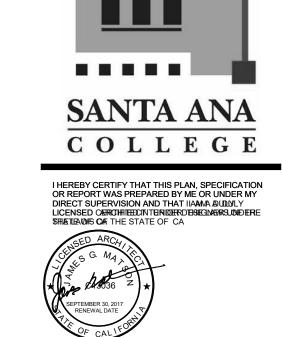
OBJECTS OR SURFACES UNDER LAVATORIES.

17. GRAB BAR INSTALLATION MUST ALLOW A MINIMUM 1 1/2" CLEAR SPACE ADJACENT TO

15. FAUCET CONTROLS AND OPENING MECHANISMS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE NON-COMBUSTIBLE ASSEMBLY OR AS SPECIFIED. WRIST. THE FORCE REQUIRED TO ACTIVATE THE CONTROLS SHALL BE NO MORE THAN 5

**GENERAL NOTES** 

TREATED. ALL EXTERIOR WOOD BLOCKING SHALL BE MOISTURE TREATED. WOOD MAY NOT BE USED IN AN EXPOSED LOCATION UNLESS IT IS A FINISH MATERIAL IN A



NAME: JAMES G. MATSON DATE: MAY 16, 2017

REGISTRATION NUMBER: C13036

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DISTRICT

IRVINE, CA 92614 949-756-0150

NO DESCRIPTION DATE

1 Addendum 1 8/23/17

ISSUANCE HISTORY - THIS SHEET

DRAWN BY: MS REVIEW BY: Approver

HGA NO: 3584-001

ENLARGED ROOF PLAN

DATE: JULY 06, 2017

A205

NOTE: SEE ROOF PLAN FOR UPPER LEVEL SOUTH BOX PLAN

2 ENLARGED SOUTH BOX PLAN - LOWER LEVEL

1/4" = 1'-0"

SLOPE 1/8" PER FOOT, TYP SLOPE

SLOPE

SLOPE

- STAINLESS STEEL

GUTTER, TYP

3" DIA ROOF DRAIN LEADER, TYP. SEE

PLUMBING DRAWINGS

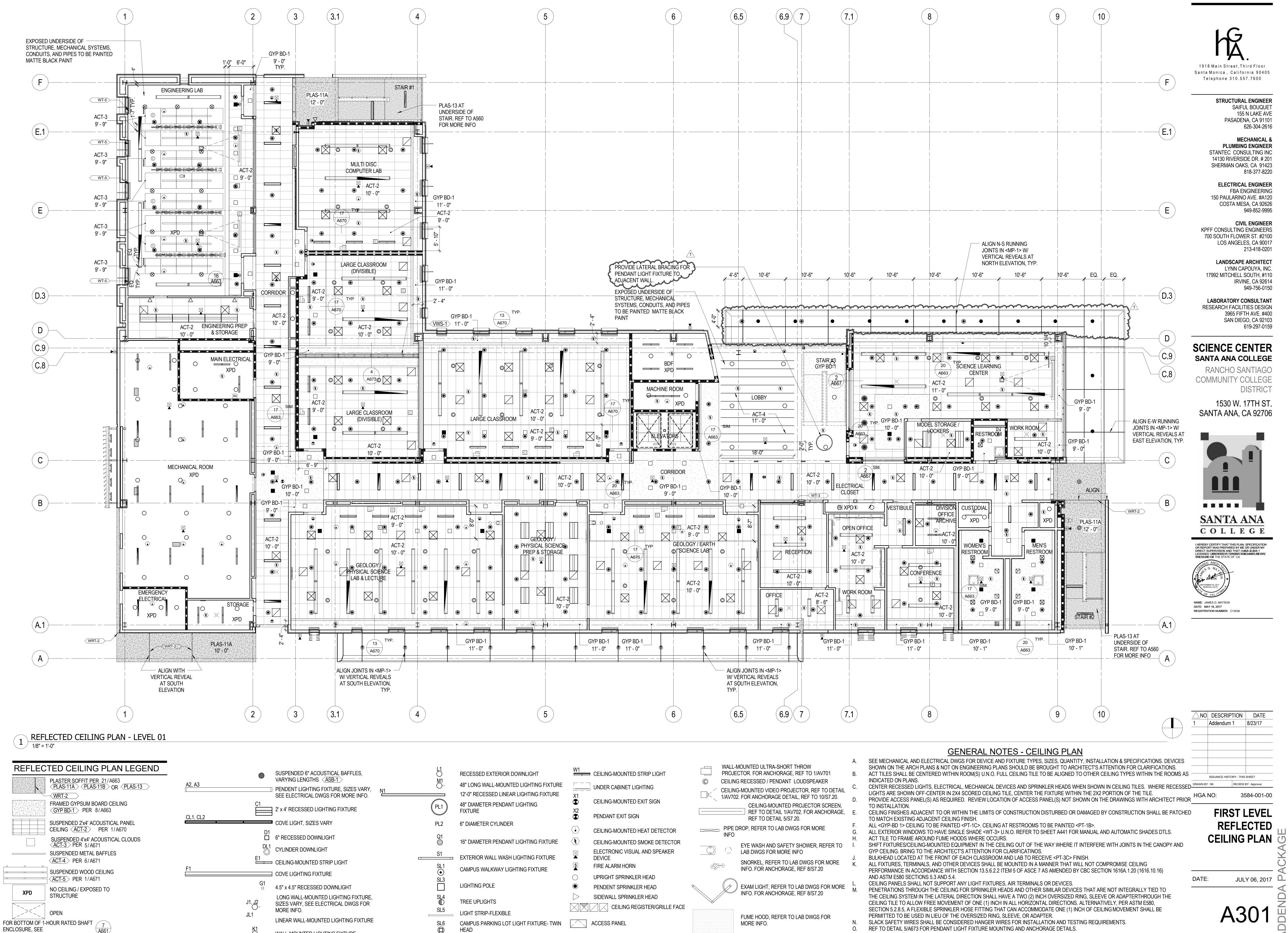
— COMPOSITE METAL PANEL,

TYP <MP-1>

SLOPE

ENLARGED CANOPY ROOF PLAN

2'-6"



WALL-MOUNTED LIGHTING FIXTURE

(E.1) (C.8)(C.9)(D2 A422 MP-2A \_\_\_\_ PARAPET EQUIPMENT TOP OF PARAPET EXTENSION TYP. SCREEN BEYOND \_\_\_\_\_\_TOP\_OF\_SCREEN TOP OF LOWER SCREEN TOP OF LOWER PARAPET PLAS-14A PLAS-14A PLAS-14B PLAS-14A TOP OF ROOF 45' - 4" 10'-6" (PLAS-14A) AT SHADOW BOX BEYOND. SEE PLAS-13
UNDER STAIR 3/A400 FOR MORE INFORMATION TYP. PLAS-14A PLAS-14B PLAS-14A PLAS-14A E.J - TYP. RAIL-4 TYP. (PLAS-14A) (RAIL-4 TYP. TYP. PLAS-14A PLAS-14B PLAS-14A PLAS-14A SF3 SEE - / A403 PLAS-13
UNDER STAIR
UNDER O' - 0" FOR MORE INFO OF WALL BEYOND MP-1B PLAS-14B PLAS-14A ALIGN JOINTS IN BEYOND SEE 3A/A400 <MP-1> W/ VERTICAL PLASTER REVEALS AND BUTT JOINTS AT STOREFRONT BELOW FOR MORE INFORMATION

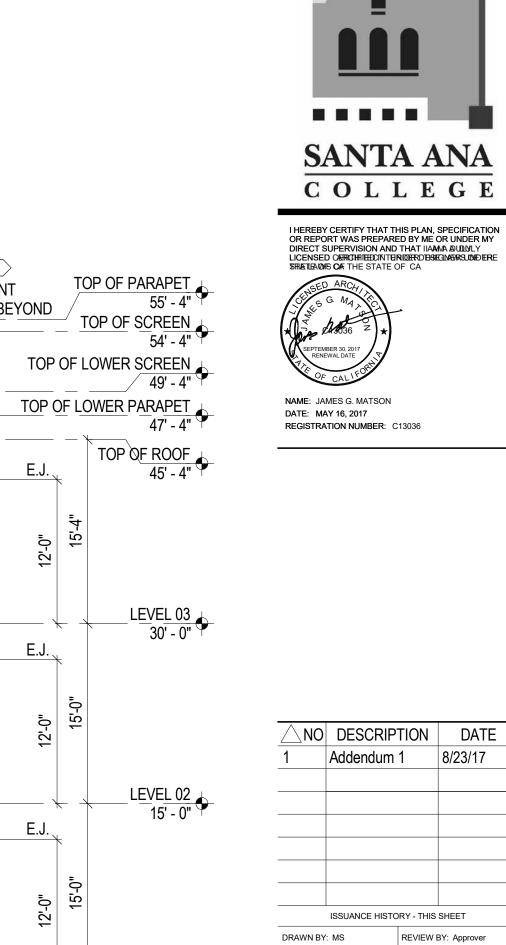
<MP-1C> OUSIDE FACE OF BOX +SEE DETAILS FOR LENGTH AND SEALED JOINT LOCATION SEE DETAILS AND STRUCTURAL FOR FRAMING DETAILS INSIDE FACE OF BOX SEE DETAILS FOR LENGTH AND SEALED JOINT LOCATION NORTH/SOUTH BOX <MP-1C> ROOF OF CANOPY SEE DETAILS FOR LENGTH AND SEALED JOINT LOCATION SEE DETAILS FOR LENGTH SEE DETAILS AND STRUCTURAL FOR FRAMING DETAILS UNDERSIDE OF CANOPY -SEE DETAILS FOR LENGTH AND SEALED JOINT LOCATION A CANOPY

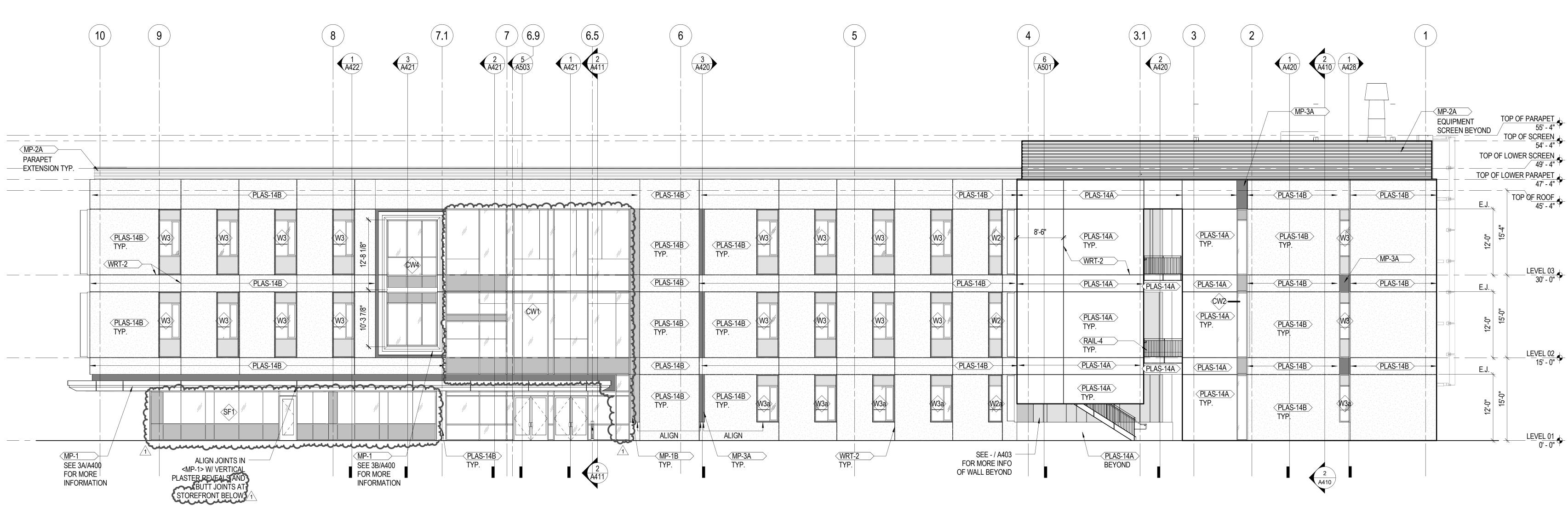
3 MP-1 MATERIALITY FOR CANOPY AND BOX NTS

NORTH ELEVATION

1/8" = 1'-0"

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





**EXTERIOR ELEVATIONS** 

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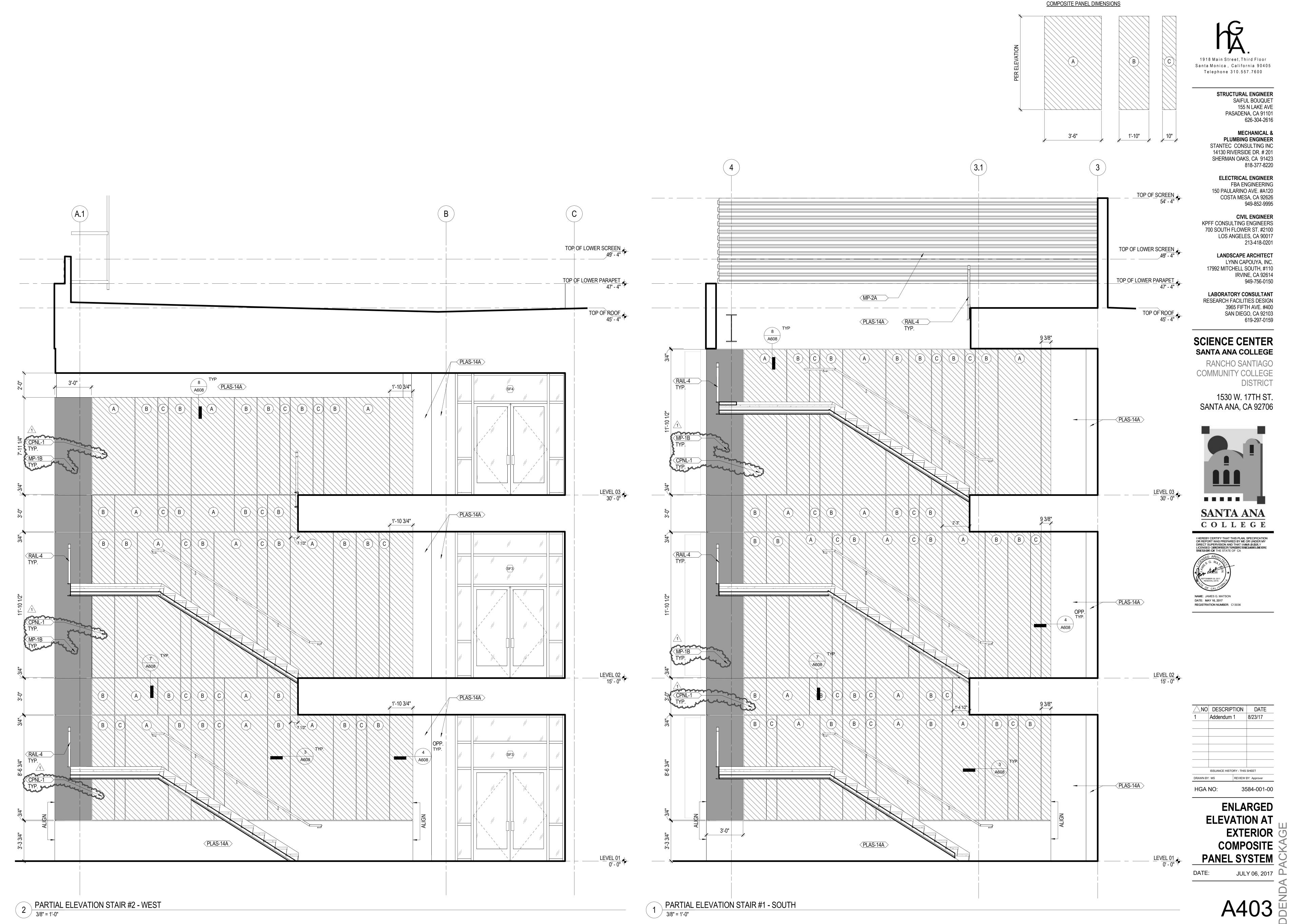
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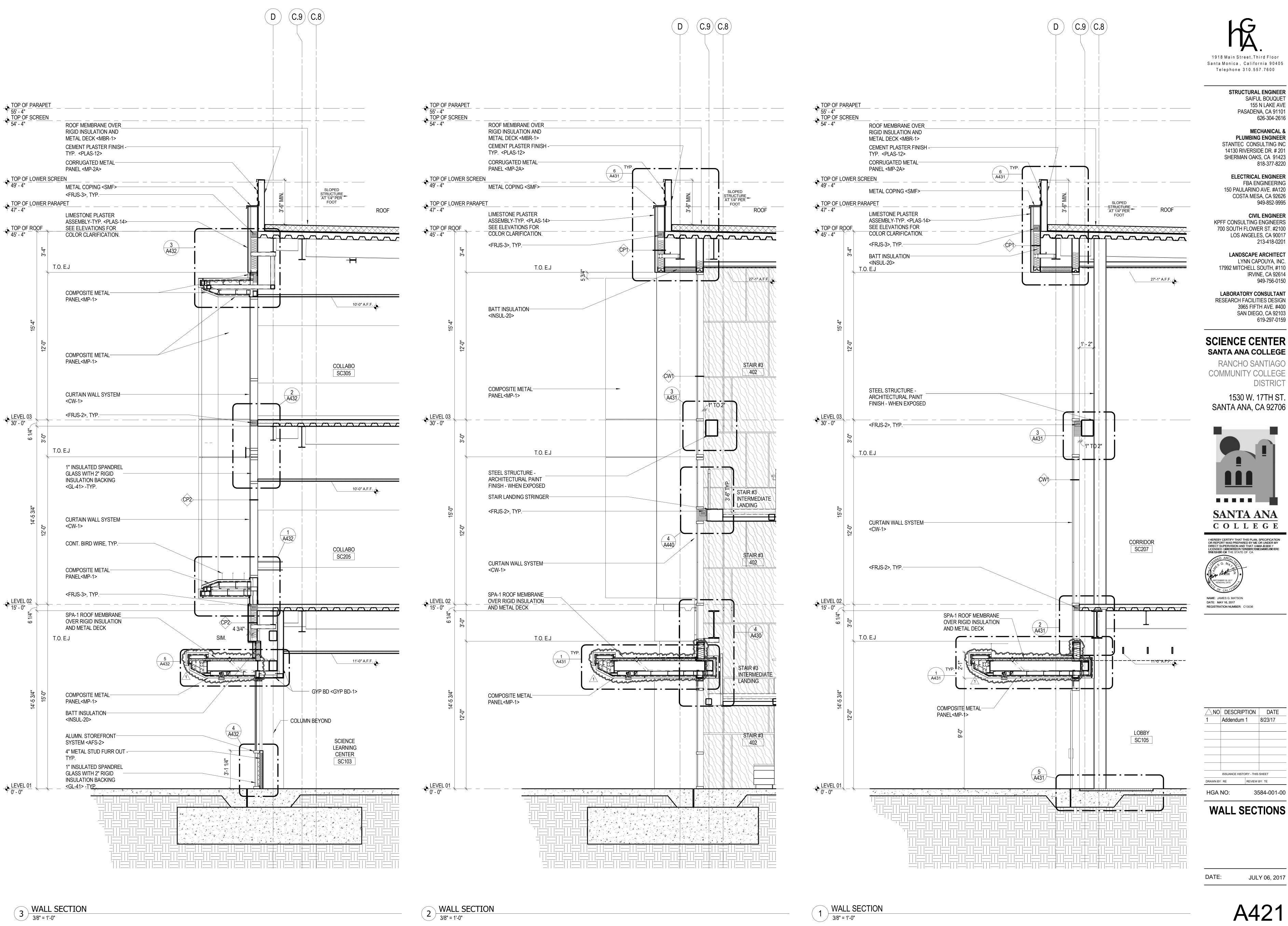
619-297-0159

DISTRICT

(NORTH & EAST)

JULY 06, 2017





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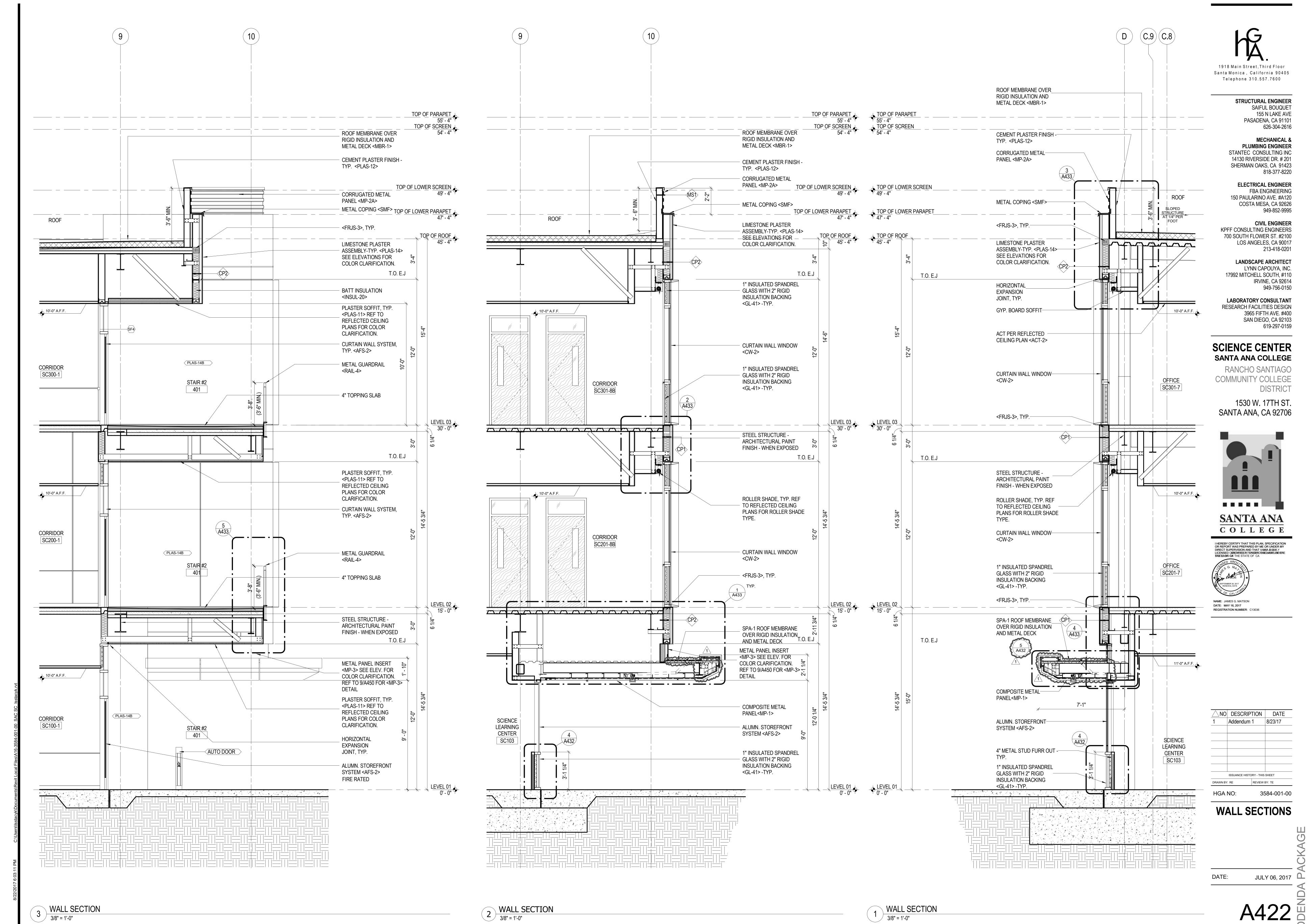


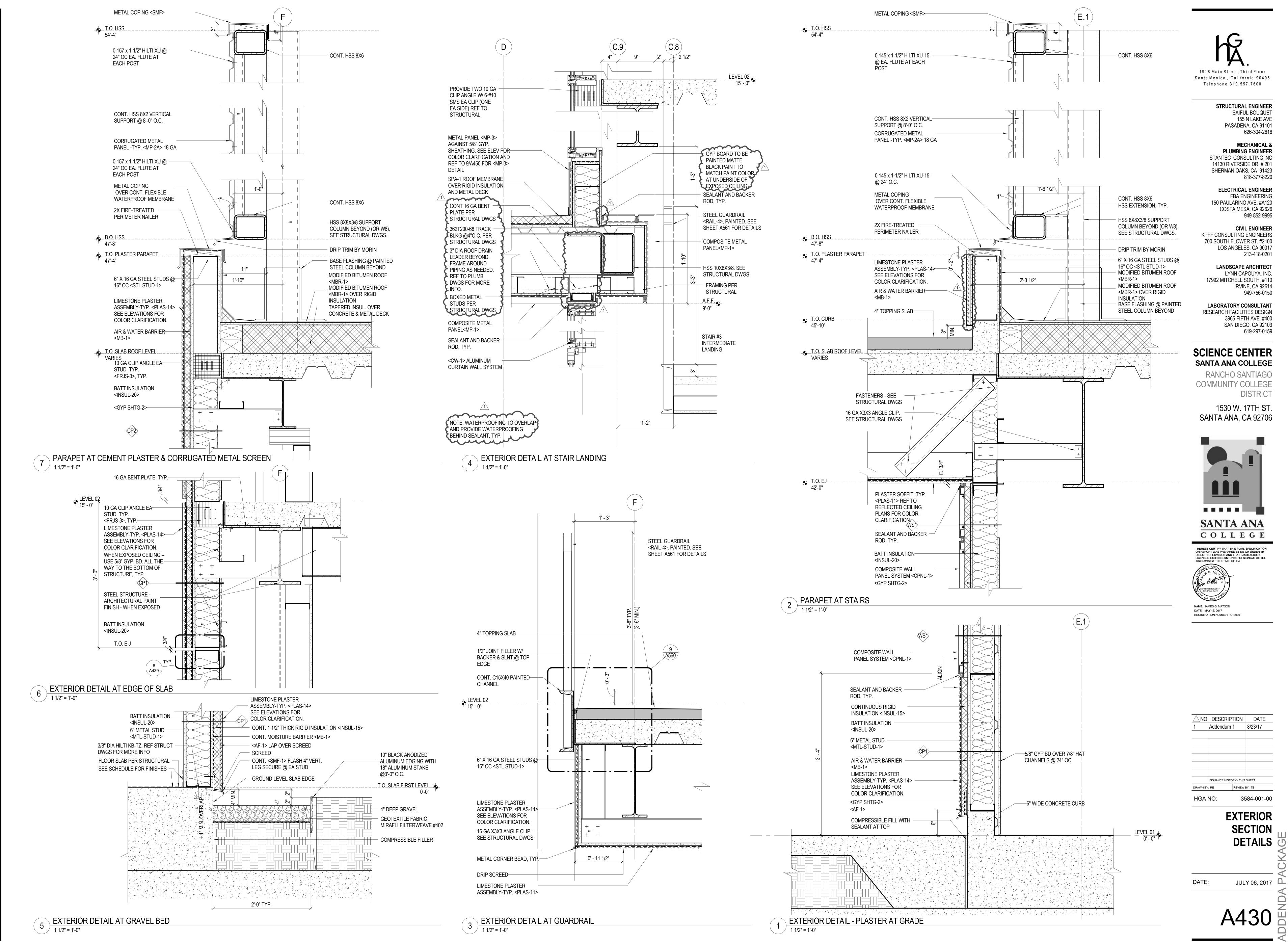
SANTA ANA COLLEGE

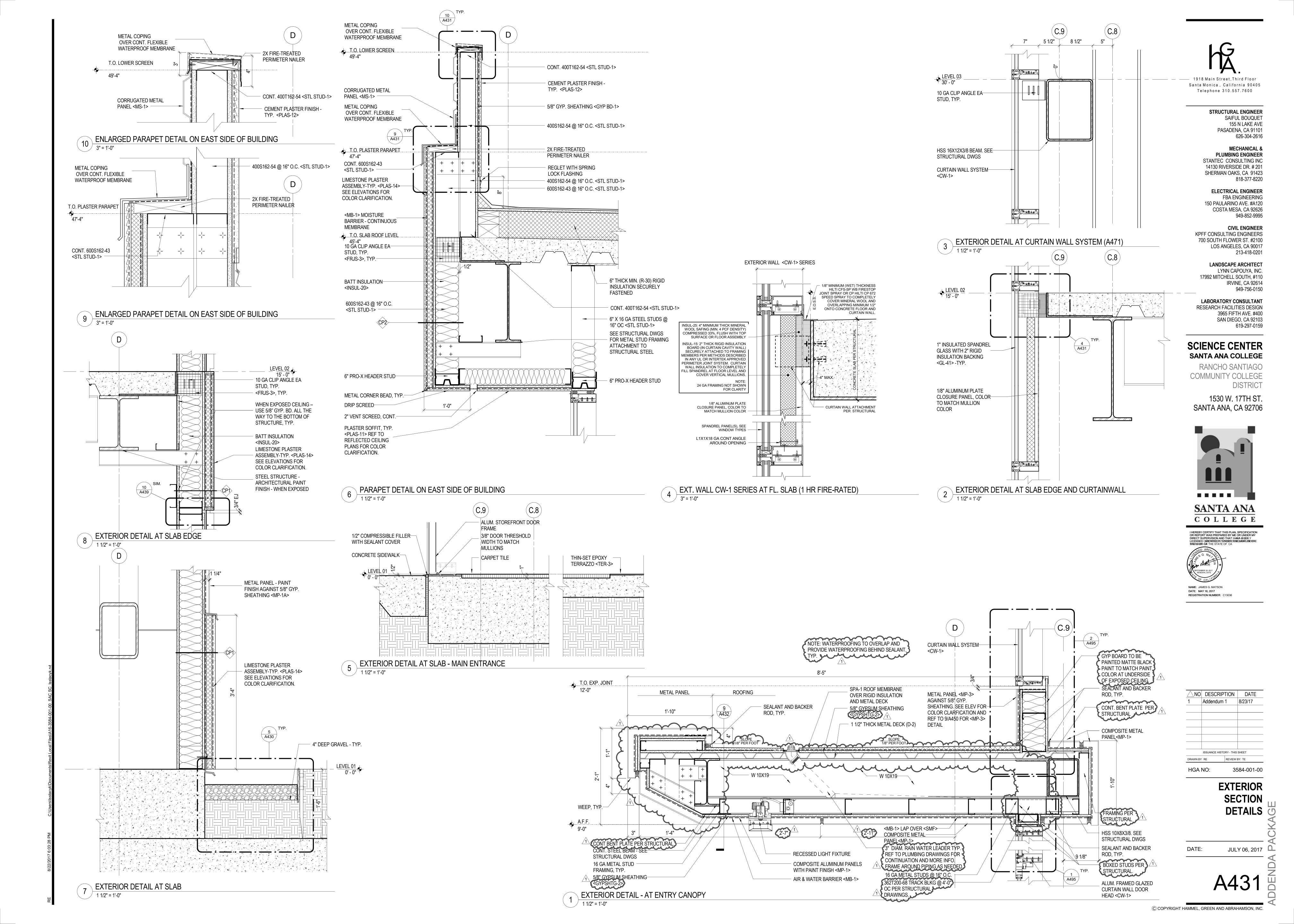
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT IIAAMA AUDULLY LICENSED CHRICHHIEDINTERIOERDESEGMENS UNDERE STRETLEADINS OF THE STATE OF CA

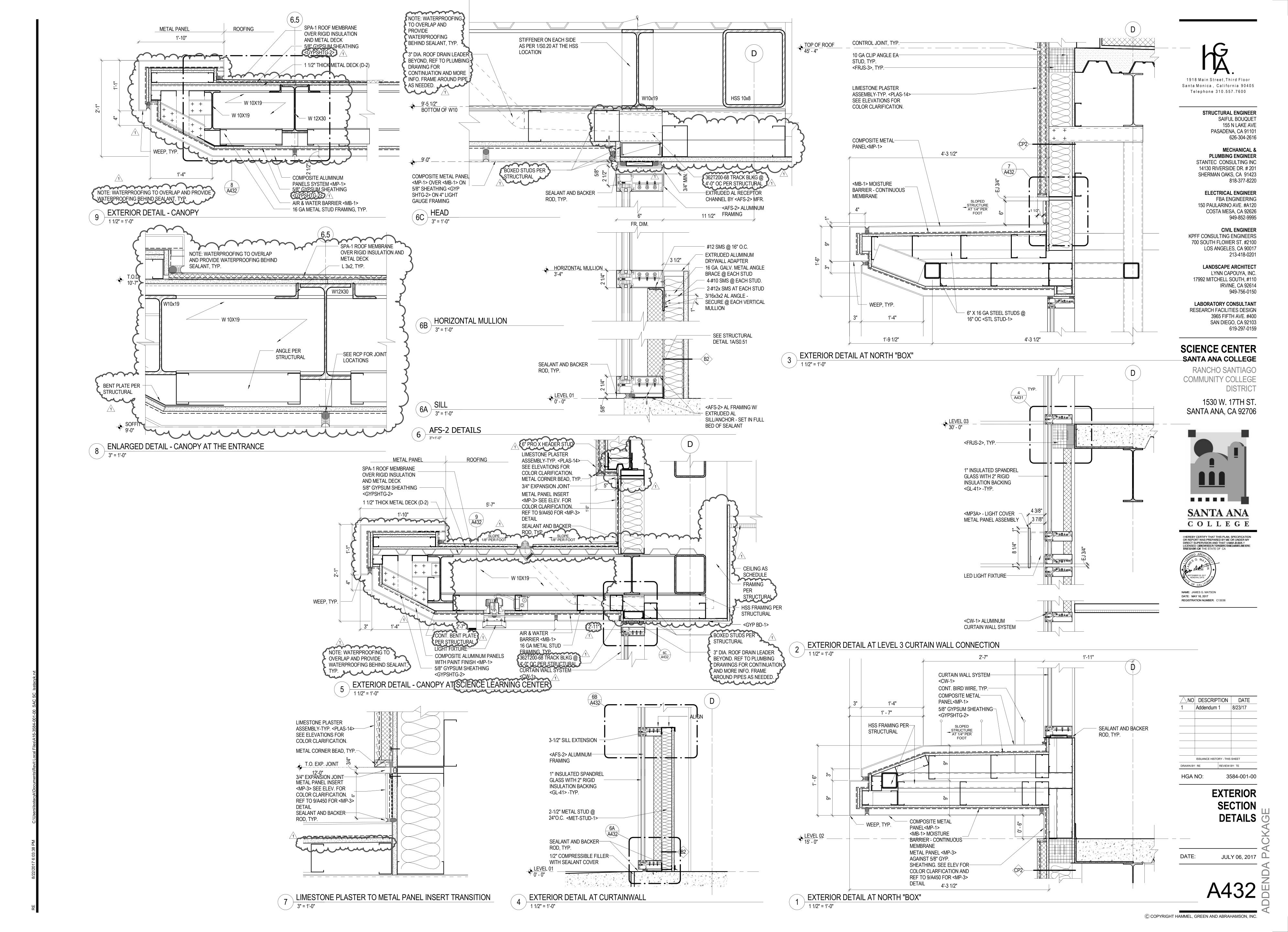
NO DESCRIPTION DATE Addendum 1 8/23/17 ISSUANCE HISTORY - THIS SHEET

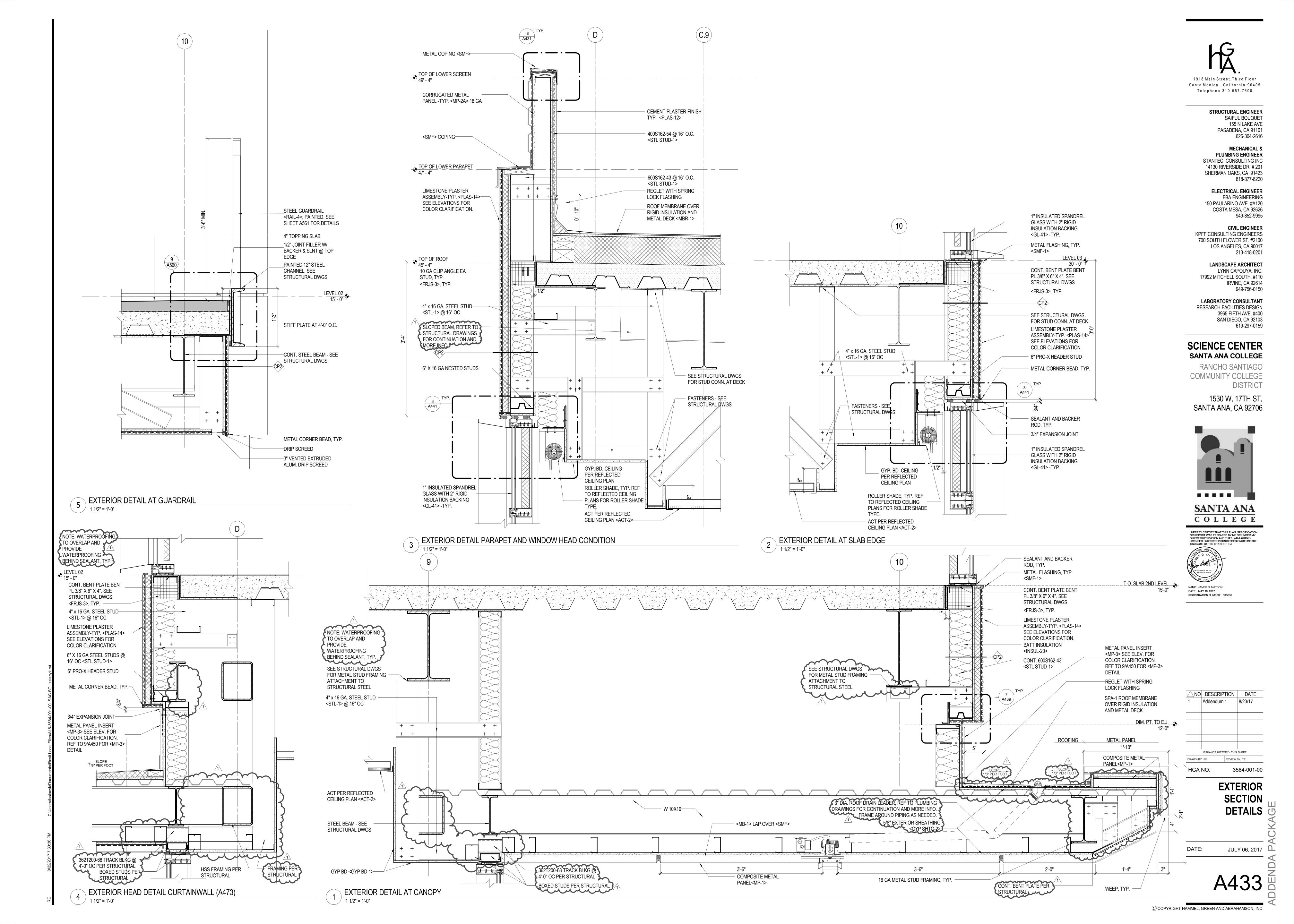
WALL SECTIONS

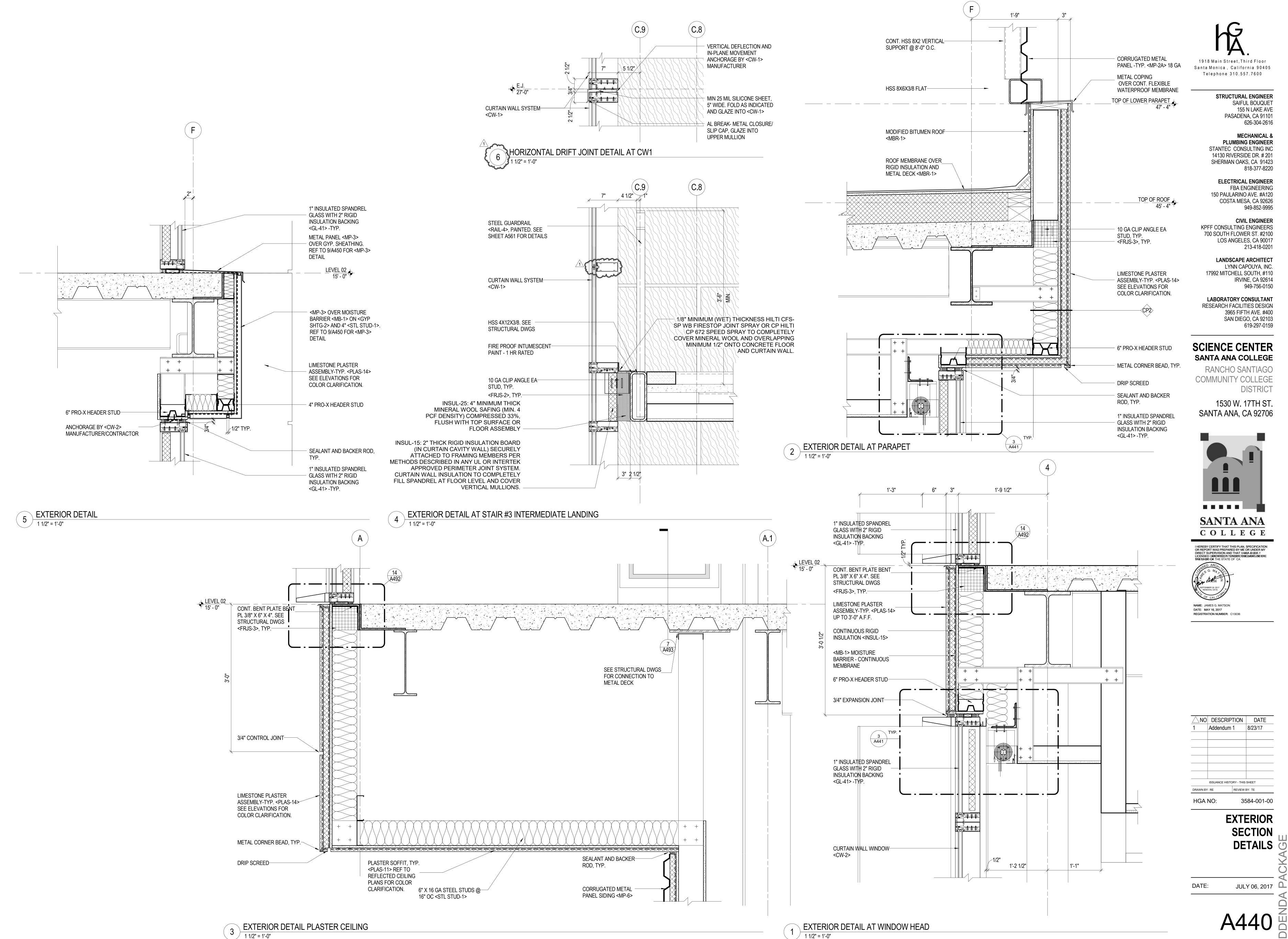


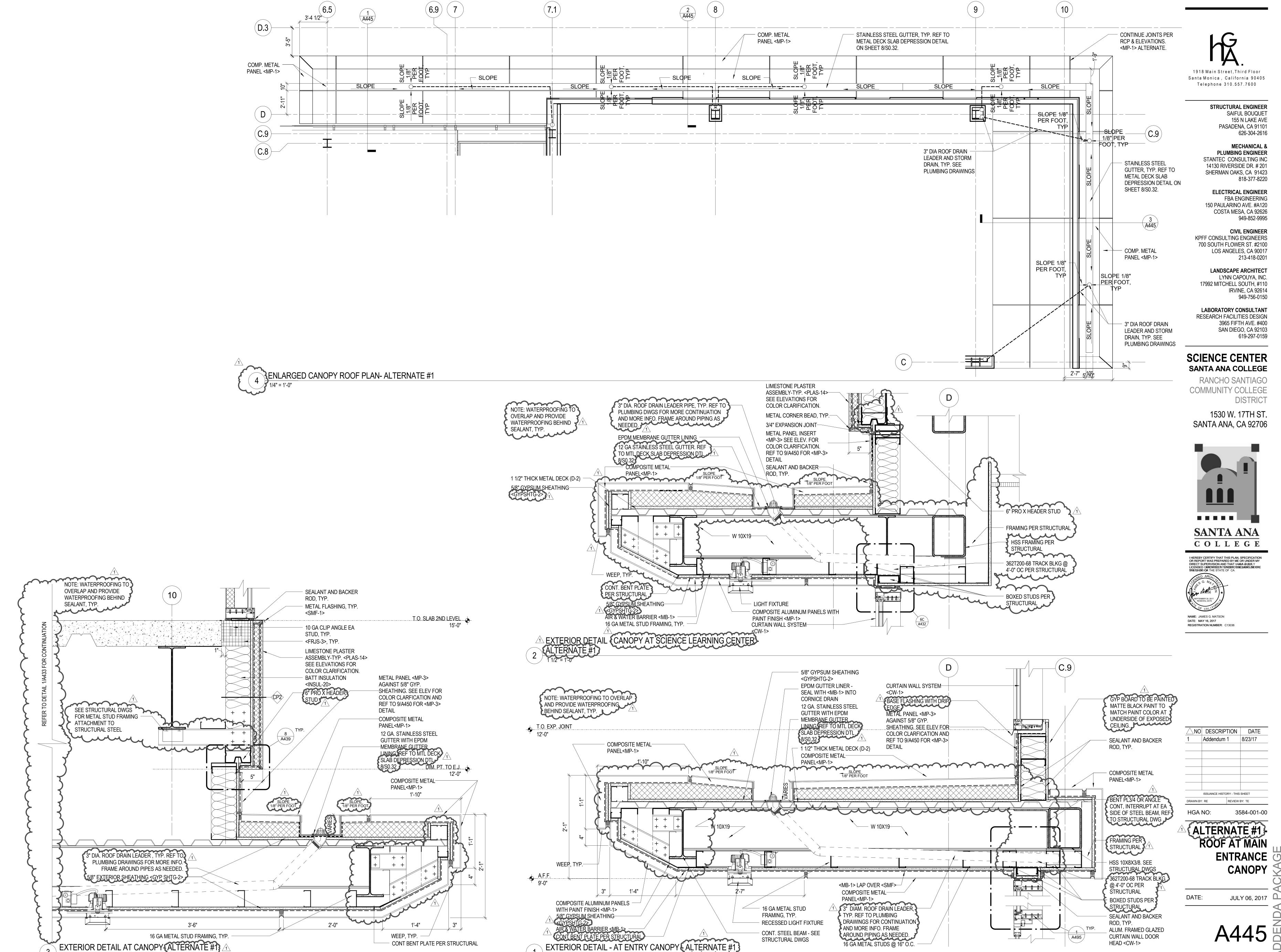




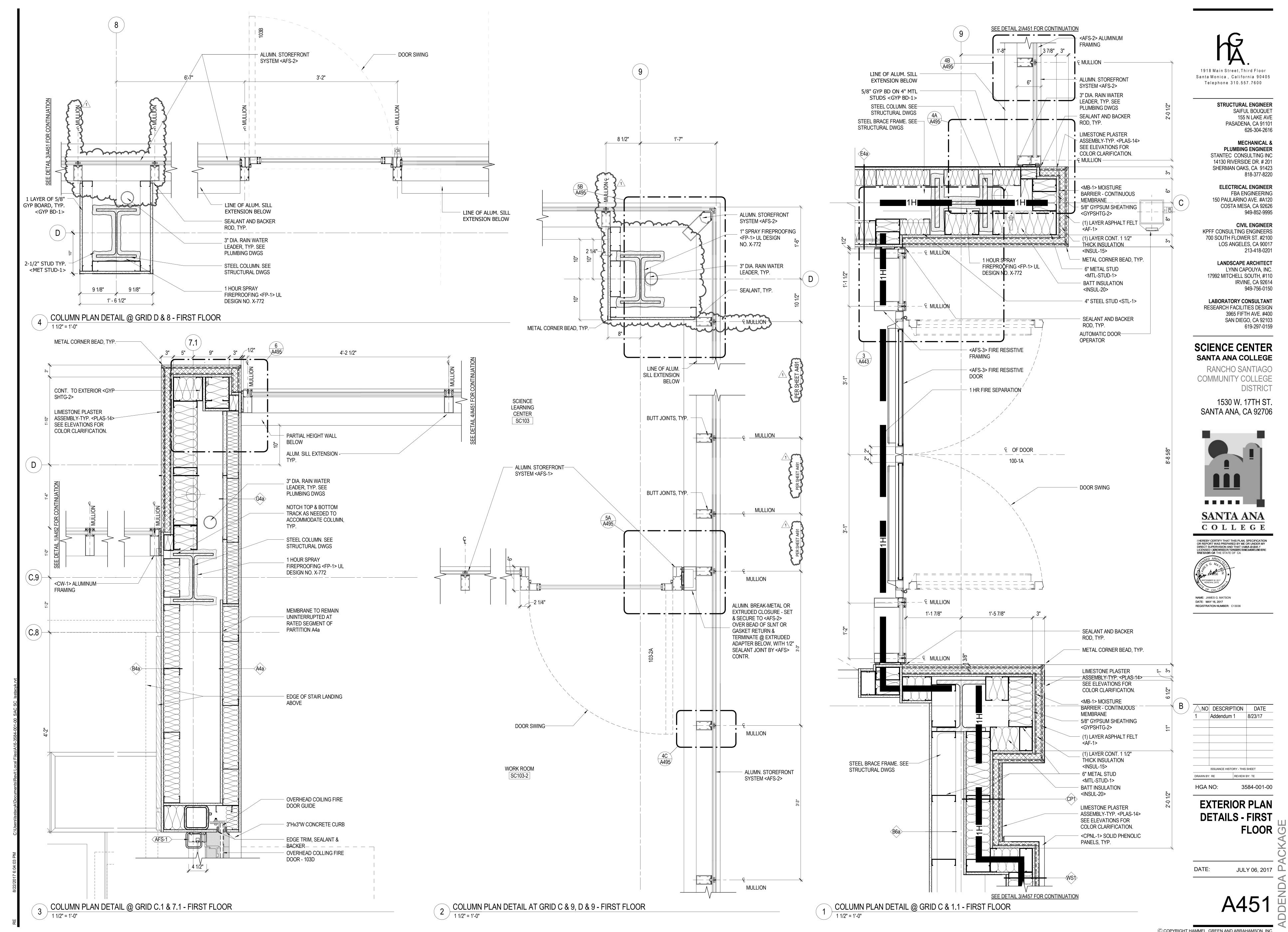






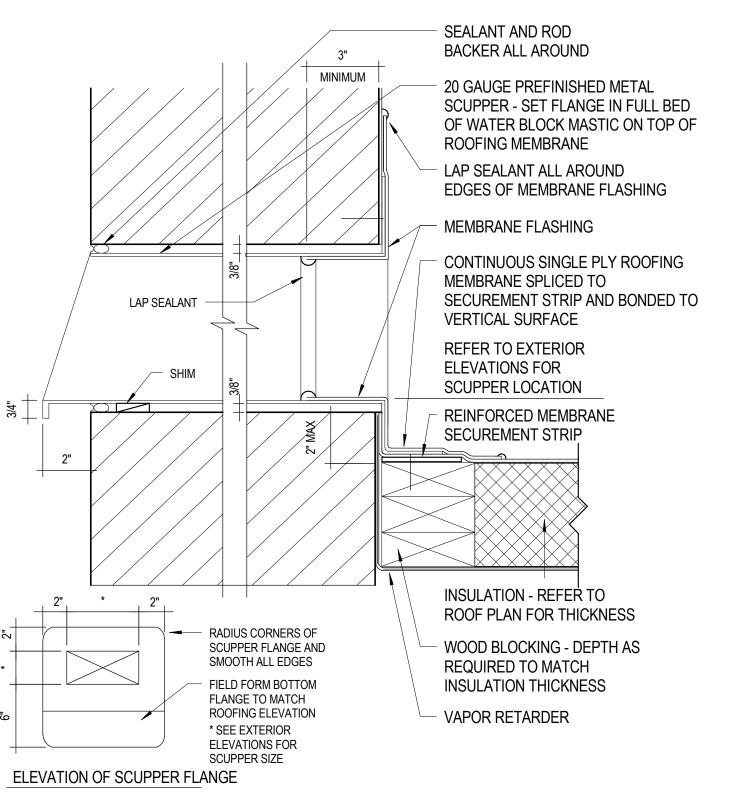


1 1/2" = 1'-0"



BALLAST WHERE REQD BY ROOF TYPE CONTINUOUS SINGLE PLY ROOFING MEMBRANE SPLICED TO SECUREMENT STRIP AND BONDED TO VERTICAL SURFACE REINFORCED MEMBRANE SECUREMENT STRIP INSULATION - REFER TO ROOF PLAN FOR THICKNESS ANCHORS AND ANCHORAGE PLATES AT 1'-0" OC MAXIMUM VAPOR RETARDER - EXTEND 4" ABOVE INSULATION PROVIDE WOOD BLOCKING ANCHORED TO DECK FOR ANCHORAGE OF ROOFING MEMBRANE WHEN THE TOP OF THE INSULATION AT THE POINT OF ANCHORAGE IS CONTINUOUS ROOFING MEMBRANE MORE THAN 6" ABOVE THE ROOF DECK BALLAST WHERE REQD BY ROOF TYPE - MEMBRANE FLASHING SPLICED TO ROOFING MEMBRANE AND BONDED TO VERTICAL SURFACE - LAP SEALANT SINGLE PLY ROOFING MEMBRANE EXTEND UP VERTICAL SURFACE PER REQUIREMENTS OF MANUFACTURER ANCHORS AND ANCHORING PLATES AT 1'-0" OC MAXIMUM INSULATION - REFER TO ROOF PLAN FOR THICKNESS PROVIDE WOOD BLOCKING ANCHORED TO DECK FOR ANCHORAGE OF ROOFING MEMBRANE WHEN THE TOP OF THE INSULATION AT THE POINT OF ANCHORAGE IS MORE THAN 6" ABOVE THE ROOF DECK VAPOR RETARDER - EXTEND 4" FLASHED ROOFING MEMBRANE (CONTRACTOR'S OPTION)

ABOVE INSULATION NOTE: THESE DETAILS ILLUSTRATE GENERAL INFORMATION ONLY REGARDING ROOFING MEMBRANE INSTALLATION. REFER TO THE MANUFACTURER'S DETAILS AND INSTALLATION INSTRUCTIONS FOR SPECIFIC AND COMPLETE INFORMATION BASE SECUREMENT AT WALL SUPPORTED DECK-SPA SERIES — ADHERED, FIRE RESISTIVE, \( \lambda TPO-1 \rightarrow \text{SINGLE PLY MEMBRANE} \) - ADHERED INSULATION SYSTEM (1/2" SPR SERIES RECOVERY BOARD AND MULTIPLE **RECOVERY** LAYERS OF RIGID INSULATION) BOARD BARRIER SHEATHING (WHERE **S**INGLE APPLICABLE) <u>**P**</u>LY TOP OF ADHERED VAPOR RETARDER (WHERE DECK APPLICABLE, SHOWN DASHED) CONCRÉTE OR METAL ROOF DECK - REFER TO STRUCTURAL INSULATION VAPOR ROOF DECK TYPE TAPER RETARDER TYPE BARRIER NOTES TYPE SYSTEM GRANU- 1/2"<GYP POLYISO NO NONE METAL NONE 1,2 LAR | SHTG-2> | W/FACER | IMPORTANT!: VERIFY SYSTEMS, PRODUCTS, AND EXECUTION IN SPECIFICATIONS. NOTES: 1. FOLLOW ALL MFR'S REQUIREMENTS FOR MATERIALS AND INSTALLATION TO MAINTAIN WARRANTY. 2. INSTALL VAPOR CONTROL DIRECTLY OVER CONC DECK AND/OR BARRIER SHTG FASTENED TO DECK. 3. SEE ROOF PLANS FOR INSUL THICKNESS AND SLOPE AT TAPERED INSUL LOCATIONS. 4 SEE SPECIFICATION AND ROOF PLAN FOR AVERAGE INSULATION R VALUES AND THICKNESS, IF NOT INDICATED ON ROOF PLAN. NOTE TO DETAILER: MANUFACTURER'S WARRANTY WILL WARY BASED ON SYSTEM AND PRODUCT SELECTION. REVIEW ROOF SPECIFIC MANUFACTURER'S REQUIREMENTS FOR LENGHTH OF WARRANTY. ALSO SOME MANUFACTURERS HAVE ADDITIONAL TYPE SYSTEMS INCLUDING MECHANICALLY FASTENED, PLUS A NUMBER OF INSULATION COVER BOARDS, FINISH COATING SYMBOL PRODUCTS REVIEW SPECIFIC PROJECT REQUIREMENT W/ SYSTEM SUPPLIER FOR MOST APPROPRIATE ASSEMBLY. ROOF TYPES - SPA SERIES 2 ROOF 1Y 1 1/2" = 1'-0" SEALANT AND ROD BACKER ALL AROUND MINIMUM 20 GAUGE PREFINISHED METAL SCUPPER - SET FLANGE IN FULL BED OF WATER BLOCK MASTIC ON TOP OF ROOFING MEMBRANE LAP SEALANT ALL AROUND EDGES OF MEMBRANE FLASHING MEMBRANE FLASHING - CONTINUOUS SINGLE PLY ROOFING MEMBRANE SPLICED TO SECUREMENT STRIP AND BONDED TO LAP SEALANT VERTICAL SURFACE REFER TO EXTERIOR



SCUPPER-WALL AND ROOF SUPPORTED- SPA SERIES

3" = 1'-0"

1918 Main Street, Third Floor Santa Monica, California 90405 Telephone 310.557.7600

STRUCTURAL ENGINEER
SAIFUL BOUQUET
155 N LAKE AVE
PASADENA, CA 91101
626-304-2616

MECHANICAL & PLUMBING ENGINEER
STANTEC CONSULTING INC 14130 RIVERSIDE DR. # 201 SHERMAN OAKS, CA 91423 818-377-8220

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FBA ENGINEERING
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213-418-0201

LANDSCAPE ARCHITECT
LYNN CAPOUYA, INC.
17992 MITCHELL SOUTH, #110

IRVINE, CA 92614

949-756-0150

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619-297-0159

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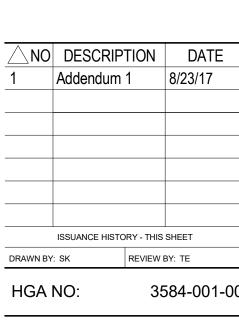
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1530 W. 17TH ST. SANTA ANA, CA 92706



I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT IIAMA AUDILLY LICENSED CARROTHIED THE DIRECT SHE SHATIFACING OR THE STATE OF CA

NAME: JAMES G. MATSON
DATE: MAY 16, 2017
REGISTRATION NUMBER: C13036



SINGLE PLY ROOF DETAILS -

DATE: JULY 06, 2017

A 4 0

A481

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619-297-0159

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NAME: JAMES G. MATSON DATE: MAY 16, 2017 REGISTRATION NUMBER: C13036

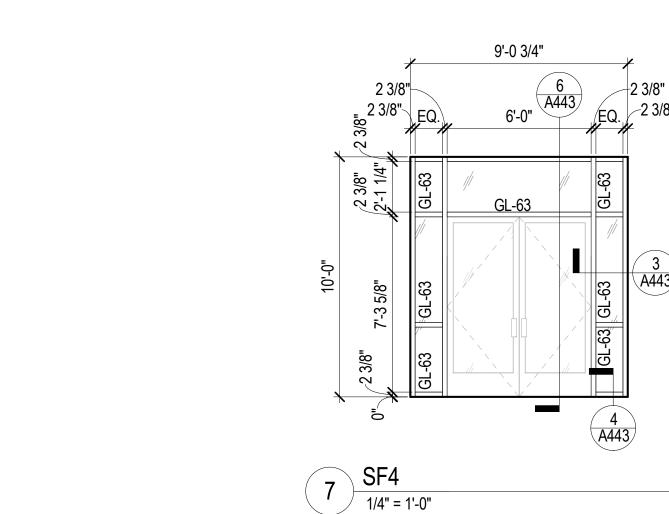
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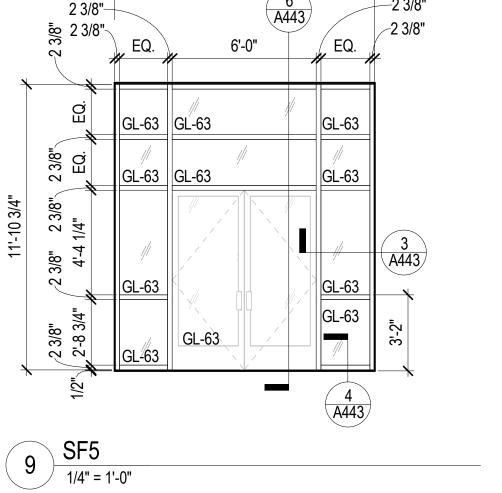
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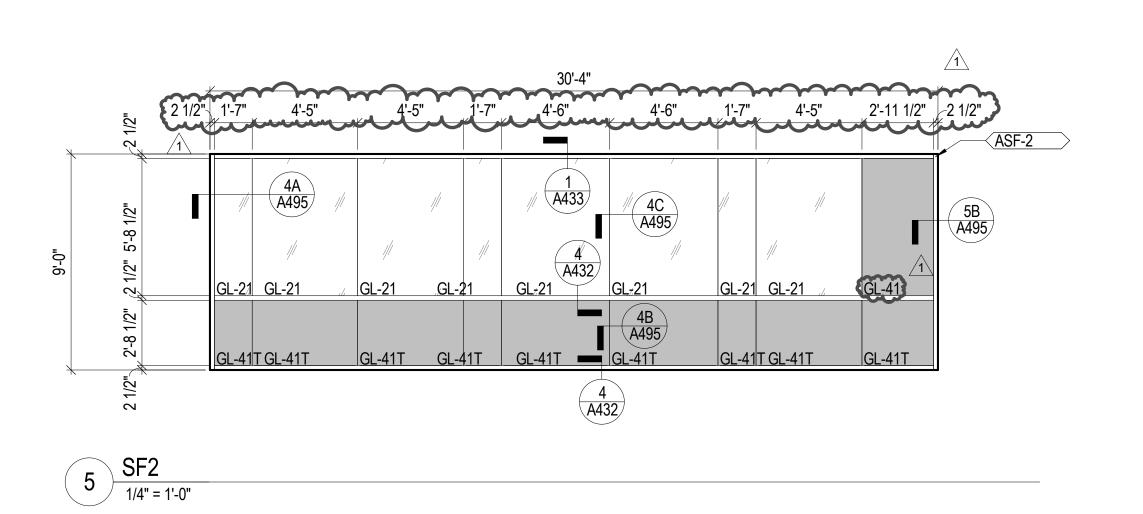
**WINDOW AND CURTAIN WALL** TYPES 🗓

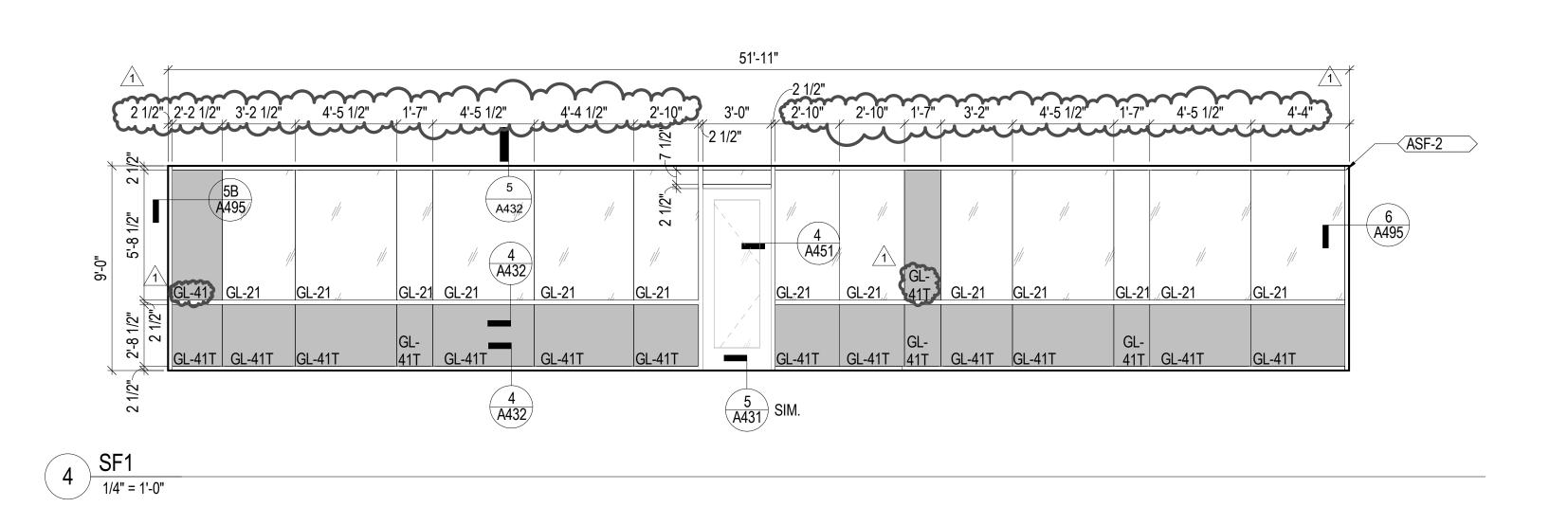
JULY 06, 2017 DATE:

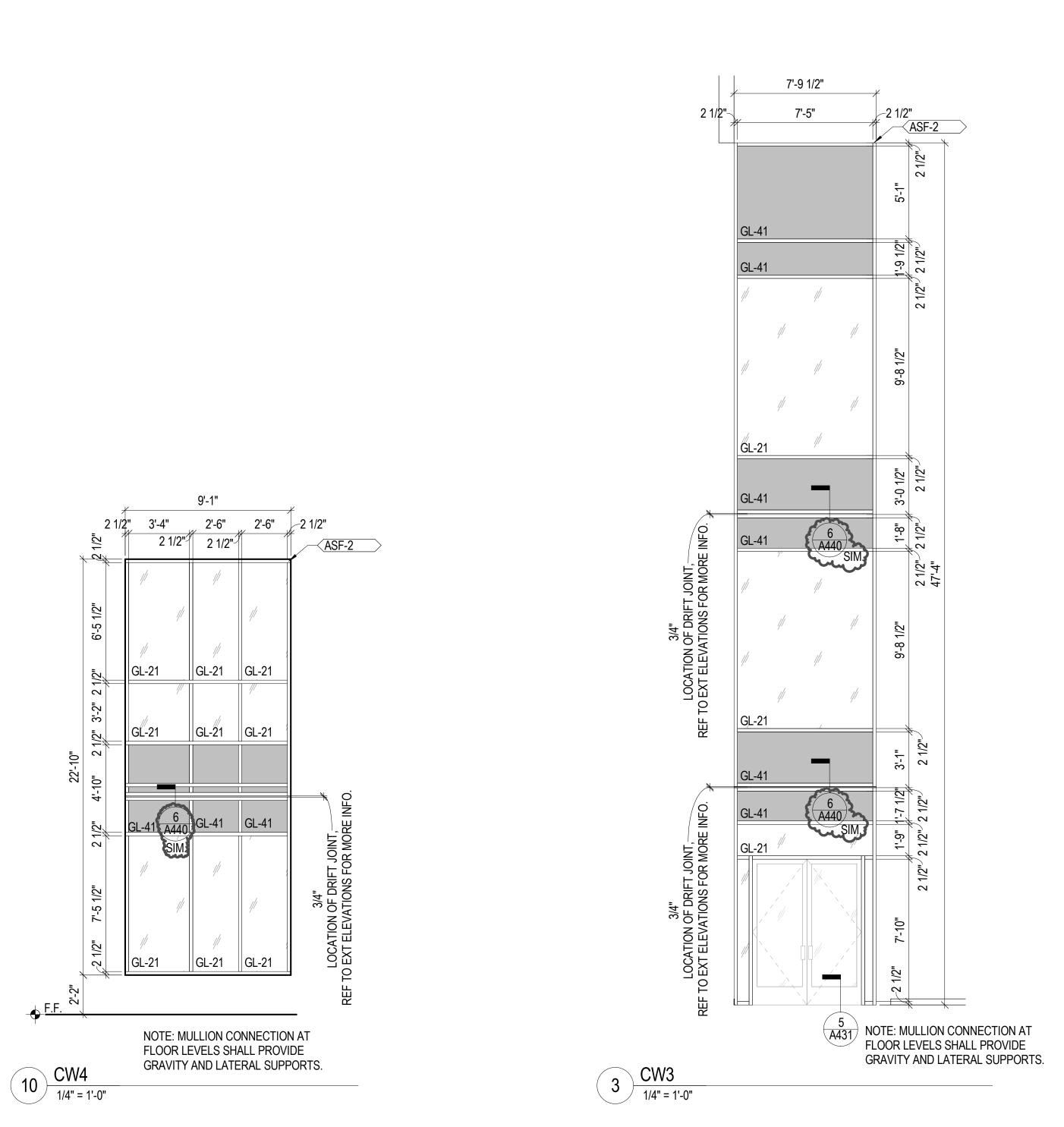
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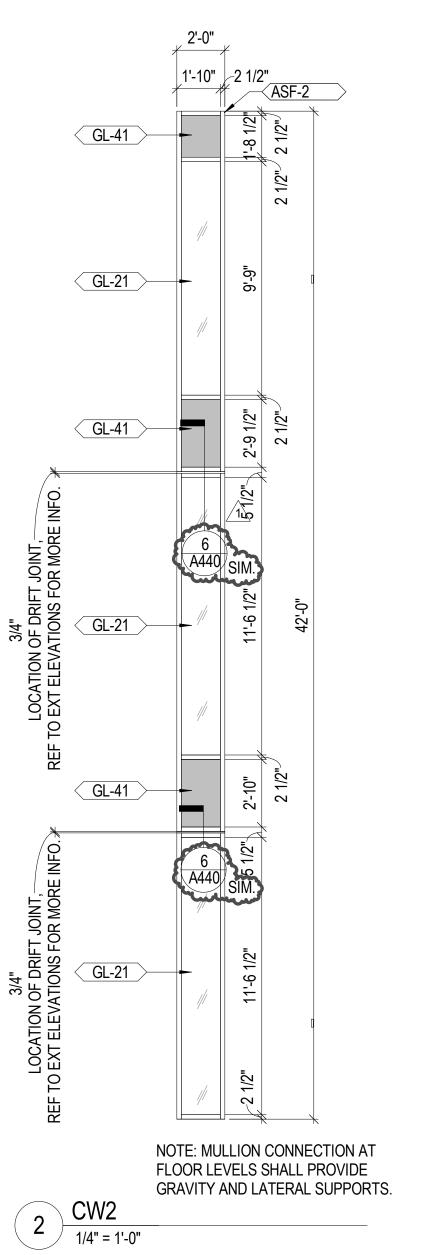


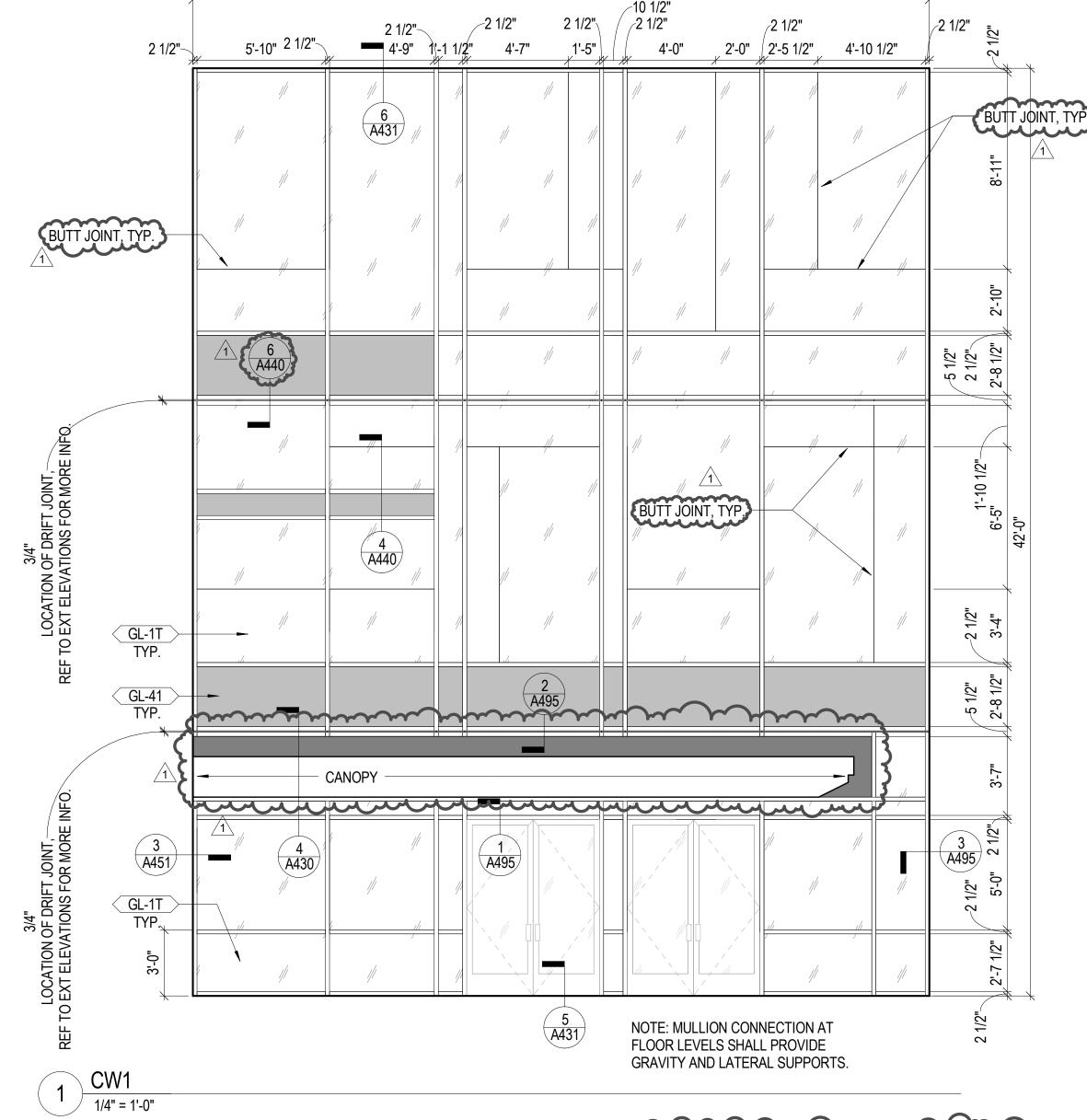






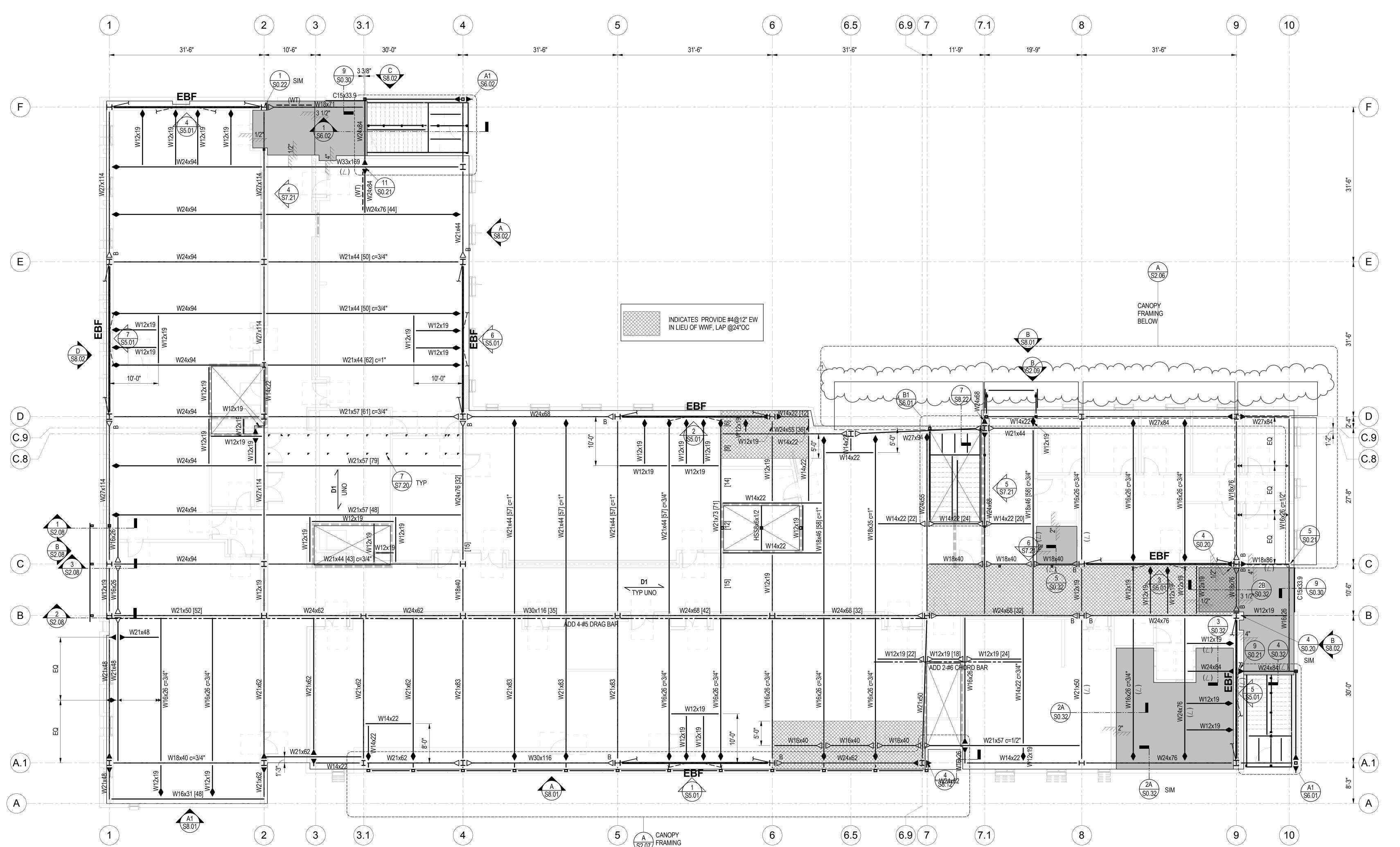






NOTE: ALL EXTERIOR GLASS WITHIN STOREFRONT, WINDOW, OR CURTAINWALL SYSTEMS TO BE LAMINATED GLASS IF LOCATED

SF3
1/4" = 1'-0"



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818-377-8220 **ELECTRICAL ENGINEER** FBA ENGINEERING 150 PAULARINO AVE. #A120 COSTA MESA, CA 92626

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1530 W. 17TH ST. SANTA ANA, CA 92706



REGISTRATION NUMBER: \$4093

### FLOOR/ ROOF FRAMING PLAN NOTES

1 LEVEL 02 FRAMING PLAN
1/8" = 1'-0"

- 1. FOR GENERAL NOTES AND TYPICAL DETAILS SEE S0.00X SERIES SHEETS.
- 2. VERIFY ALL DIMENSIONS PRIOR TO START OF WORK. SEE ARCHITECTURAL DRAWINGS FOR REMAINDER OF DIMENSIONS NOT SHOWN ON THIS PLAN.
- 3. SEE ARCHITECTURAL DRAWINGS FOR CONCRETE SLAB ELEVATIONS, DEPRESSIONS, SLOPES, OPENINGS, CURBS, DRAINS, TRENCHES, SLAB EDGE LOCATIONS, ETC., AND FOR WALL OVERALL DIMENSIONS, LOCATIONS OF OPENINGS, ETC., NOT INDICATED ON STRUCTURAL DRAWINGS.
- 4. ALL COLUMNS SHALL BE CENTERED ON GRIDLINES UNLESS NOTED OTHERWISE.
- 5. BEAMS ARE SPACED EQUALLY BETWEEN COLUMNS AND GIRDERS UNO.
- 6. TOP OF STRUCTURAL STEEL ELEVATION (TOS) SHALL BE FROM TOP OF SLAB DATUM ELEVATION MINUS TOTAL SLAB THICKNESS ("t") PER "TYPICAL METAL DECK CONSTRUCTION SCHEDULE", UNLESS NOTED OTHERWISE. SEE ARCHITECTURAL DRAWINGS A204 FOR THE TOP OF STRUCTURAL SLAB ELEVATION.
- 7. THE LENGTH AND WIDTH OF THE FLOOR, ROOF, AND WALL PENETRATIONS SHALL BE 6 INCHES LARGER THAN THE MECHANICAL DUCTS.
- 8. EBF AND DRAG BEAMS ARE PART OF SLRS.
- 9. UNLESS NOTED OTHERWISE PROVIDE 3/4" DIA HEADED SHEAR STUDS ICC-ESR-2856 @12" (MAX SPACING) FOR ALL BEAMS AND GIRDERS THAT SUPPORT STRUCTURAL CONCRETE.

FLOC	OR / ROOF FRAMING PLAN SYM	BOLS
PLAN SYMBOL	DESCRIPTION	DETAIL REFERENCE
EBF	INDICATES ECCENTRIC BRACE FRAME, SEE ELEVATION AND TYPICAL DETAILS ON S5.XX SERIES SHEETS	
<b>—</b>	INDICATES BEAM TO COLUMN MOMENT CONNECTION, FOR NON-FRAME CONNECTIONS.	<u>3</u> \$0.20
<b>→ </b> -	INDICATES BEAM TO BEAM MOMENT CONNECTION.	2 S0.21 & 8 S0.21
	INDICATES BEAM STIFFENER CONNECTION.	1E \$0.20
<b>─</b> <	INDICATES DRAG BEAM CONNECTION.	<u>4</u> \$0.20
D	INDICATES DIRECTION OF METAL DECKING AND SLAB CONSTRUCTION.	<u>3</u> <u>\$0.30</u>

PLAN SYMBOL	DESCRIPTION	DETAIL REFERENCE
Low High	INDICATES DIAGONAL ANGLE BRACE.	<u>1</u> \$0.21
<b>→</b>	INDICATES BEAM BROKEN-BACK CONNECTION	<u>4</u> <u>\$0.21</u>
[XX]	INDICATES STUDS ON BEAM	<u>1</u> \$0.30
(∠)	INDICATES LEDGER ANGLE ON BEAM	(7 (S0.30)
(WT)	INDICATES STRUCTURAL TEE ON BEAM.	6 \$0.30
	INDICATES MECHANICAL PAD	8 S0.30 OR S0.32
7777 <b>X</b>	INDICATES SLAB DEPRESSION, VERIFY W/ ARCH	

$\triangle$ NO	DESCRIP	TION	DATE
1	ADDENDU	M 1	8/23/17
	ISSUANCE HISTO	RY - THIS	SHEET
DRAWN BY:	Author	REVIEW I	BY: Approver

SECOND LEVEL FRAMING PLAN

JULY 06, 2017



STRUCTURAL ENGINEER

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155 N LAKE AVE PASADENA, CA 91101

MECHANICAL & PLUMBING ENGINEER

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**ELECTRICAL ENGINEER** FBA ENGINEERING

150 PAULARINO AVE. #A120 COSTA MESA, CA 92626

CIVIL ENGINEER
KPFF CONSULTING ENGINEERS

700 SOUTH FLOWER ST. #2100

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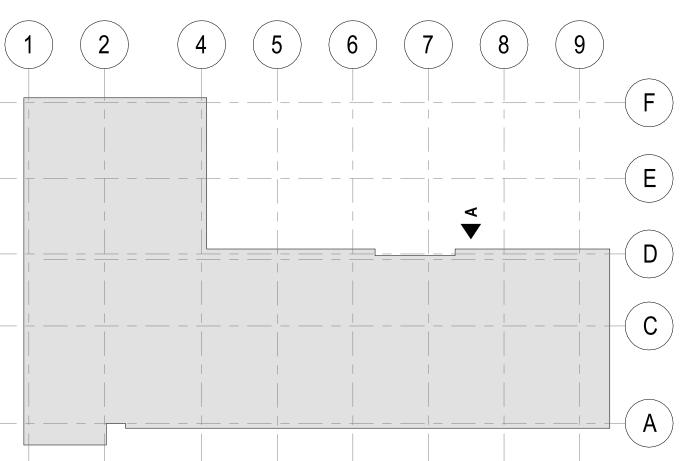
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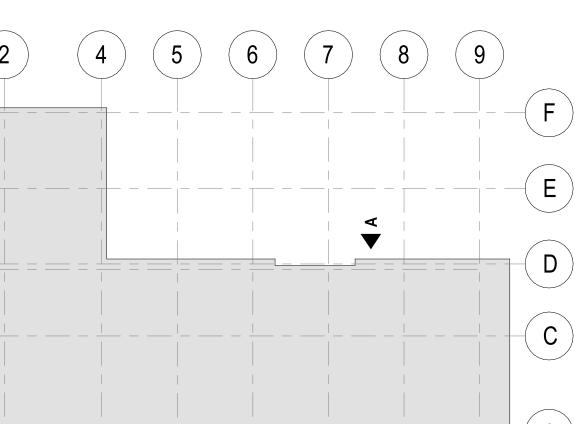
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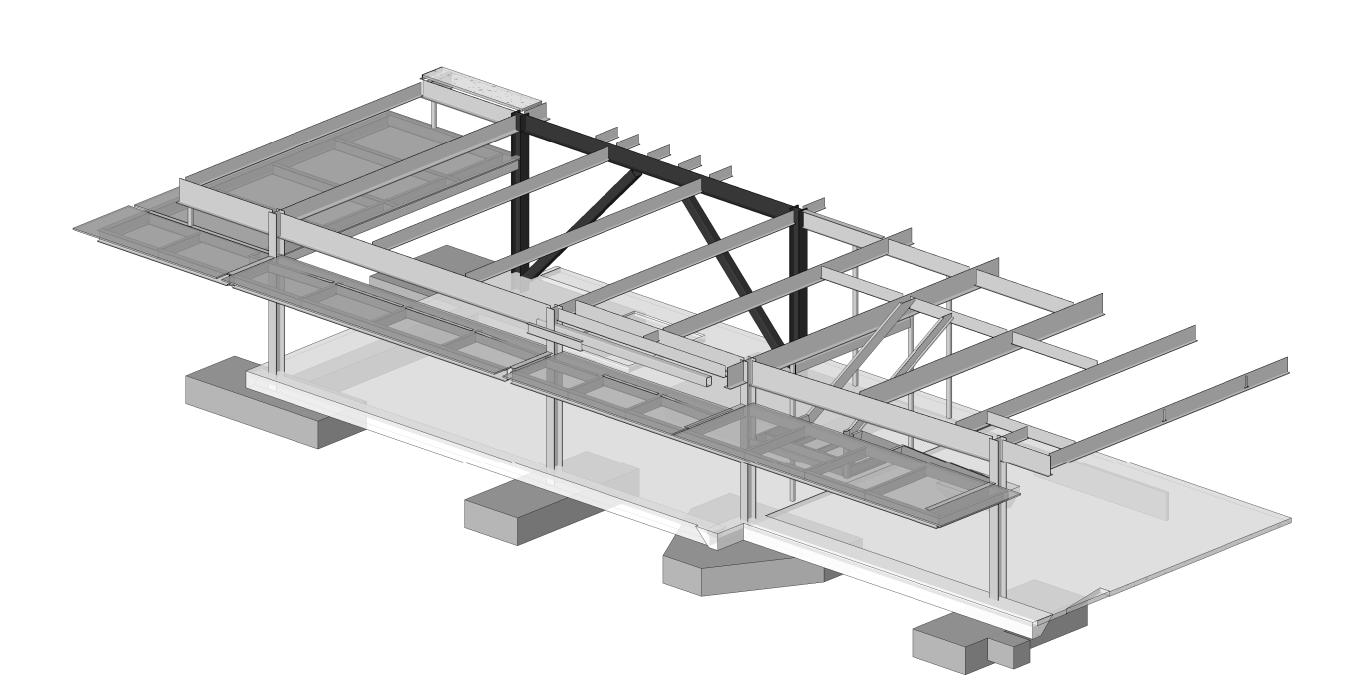
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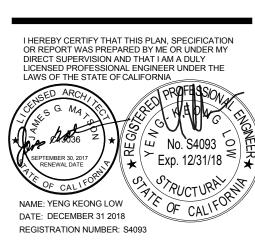
**KEY PLAN** 

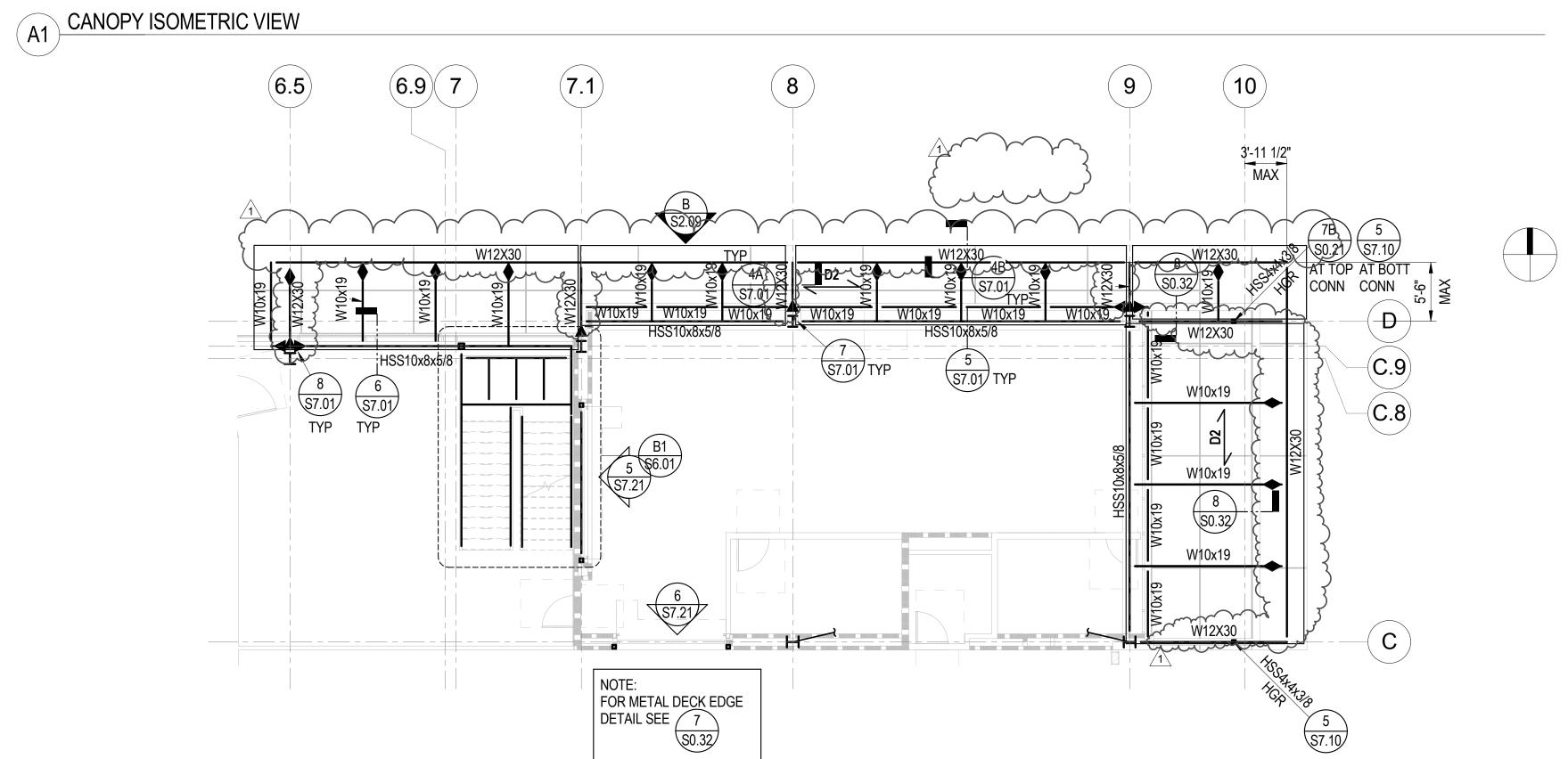


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SANTA ANA, CA 92706





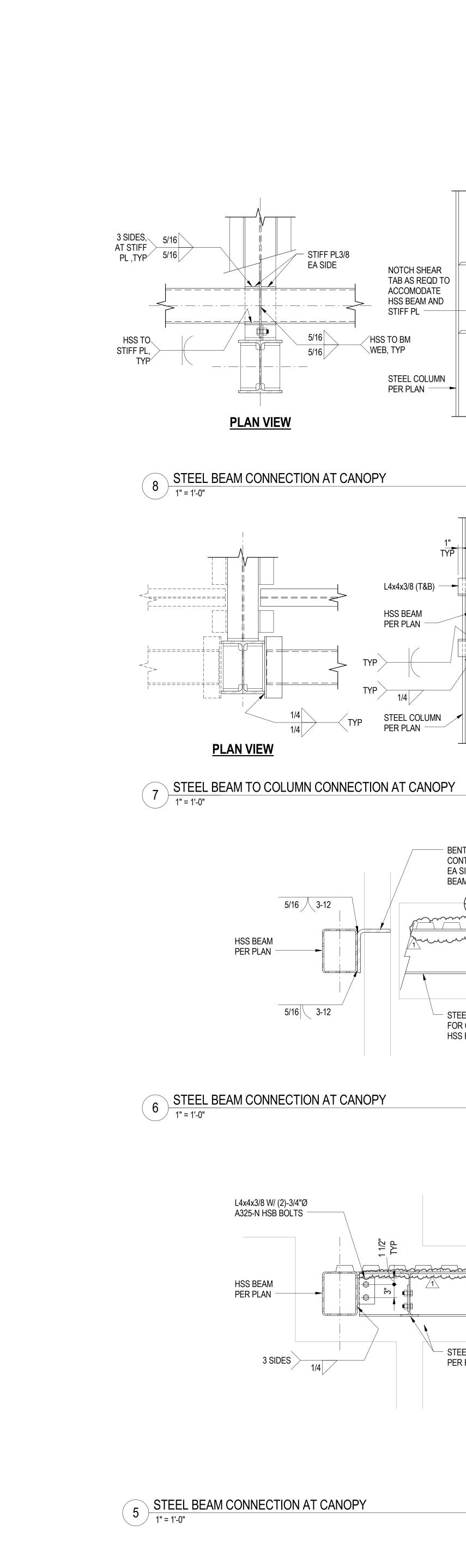


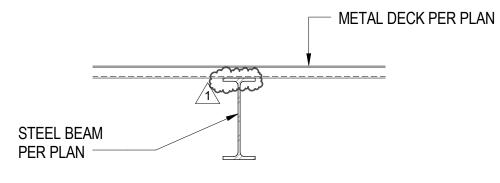
A CANOPY FRAMING PLAN
1/8" = 1'-0"

△NO DESCRIPTION DATE ADDENDUM 1 8/23/17 ISSUANCE HISTORY - THIS SHEET

**ENTRY CANOPY FRAMING PLAN** 

JULY 06, 2017





<u>DETAIL</u> B

<u>DETAIL</u> (A)

4 METAL DECK TO STEEL BEAM CONNECTION AT CANOPY

1" = 1'-0"

TOP OF STEEL

STEEL BEAM PER PLAN

(2)-1/2" DIA HILTI KB-TZ

3 DETAIL 1" = 1'-0"

INSTALLATION NUT, TYP

TOP OF CONC

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

EXP ANCHOR (ICC ERS-1917)
W/ 2" EFF EMBEDMENT

BEAM SAME AS TOP OF METAL DECK

HSS BEAM S7.01
PER PLAN

STIFF PL3/8 EA SIDE

CANTILEVER STEEL BEAM PER PLAN, FOR

CONNECTION TO COL, SEE 3A S0.20 SIM

STEEL BEAM S7.01

CANTILEVER STEEL
BEAM PER PLAN, FOR
CONNECTION TO
COL, SEE 3A
S0.20 SIM

BENT PL3/4 OR ANGLE CONT, INTERRUP AT

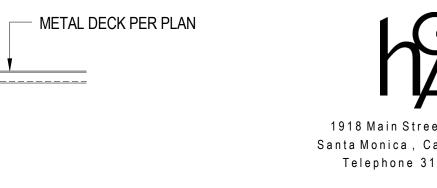
- STEEL BEAM PER PLAN, FOR CONNECTION TO

HSS BEAM, SEE 5 S7.01

— STEEL BEAM PER PLAN

EA SIDE OF STEEL

PER PLAN



- METAL DECK PER PLAN

LEDGER ANGLE OR

DETAIL 7 \$0.30

BENT PL, FOR BALANCE OF INFORMATION, SEE

- L6x4x3/8x0'-4" (LLV) EA SIDE

W/ 3/4" DIA A325-X BOLT IN 2" LONG VERT SLOTTED

HOLES



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PASADENA, CA 91101
626-304-2616

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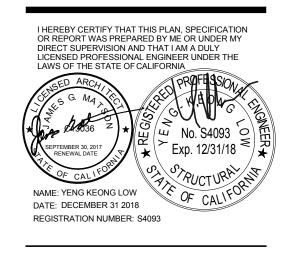
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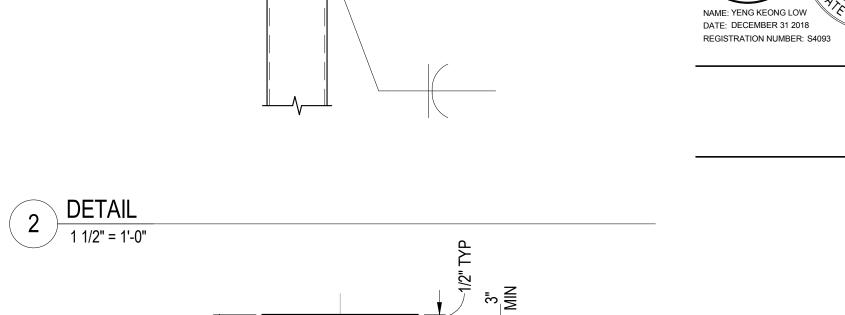
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COLLEGE





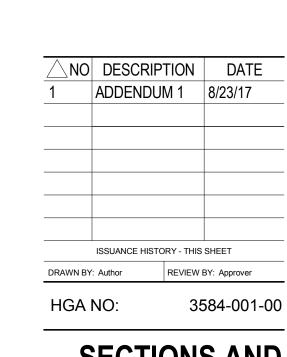
EDGE OF

HSS COL PER ELEVATION

— BASE PL3/8 W/ (2)1/2" DIA HILTI KB-TZ EXP ANCHOR (ICC ESR-1917) OVER 1" DRY PACK W/ 2" EFF EMBEDMENT

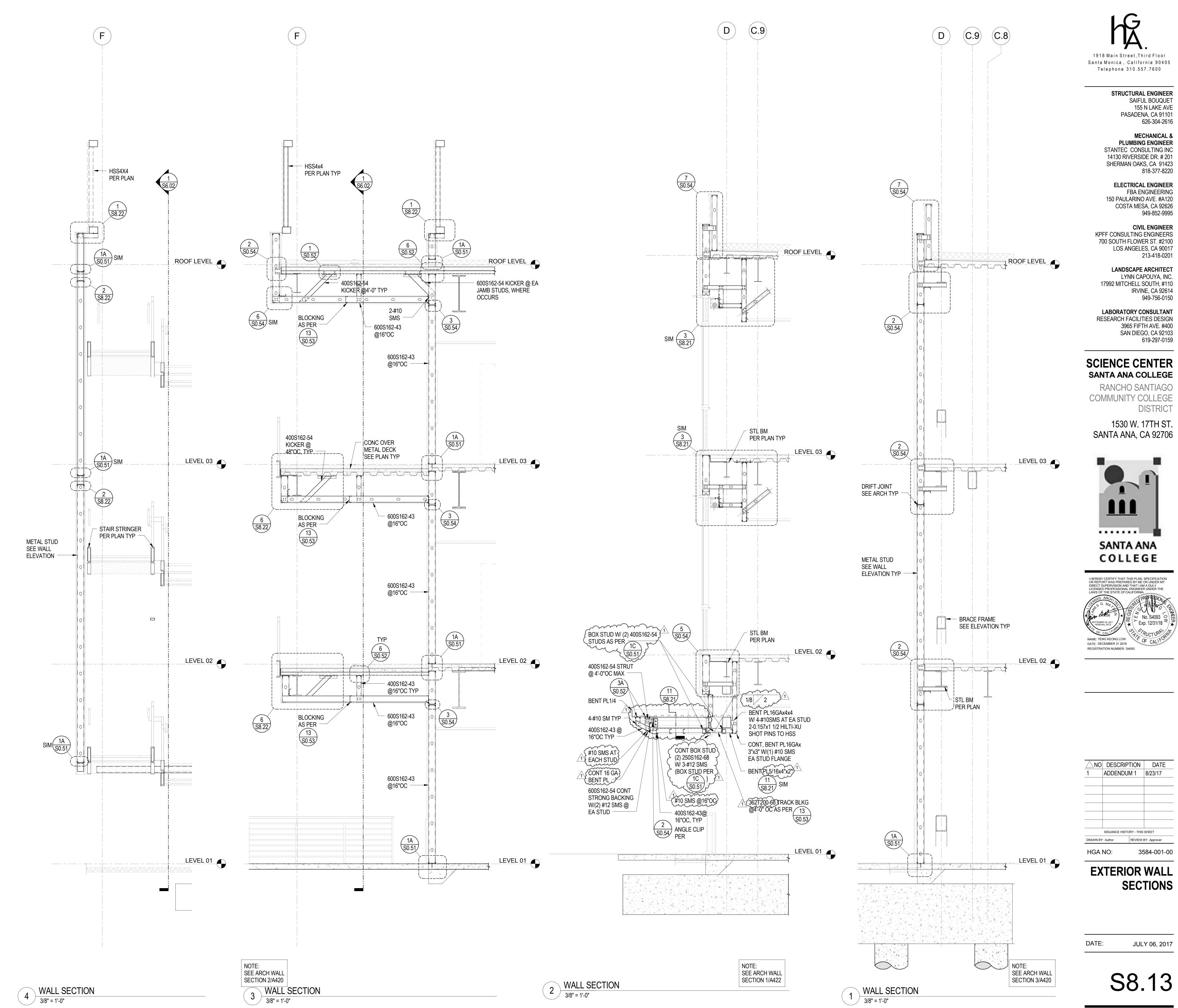
SOG

PLAN A-A



## **SECTIONS AND DETAILS**

JULY 06, 2017



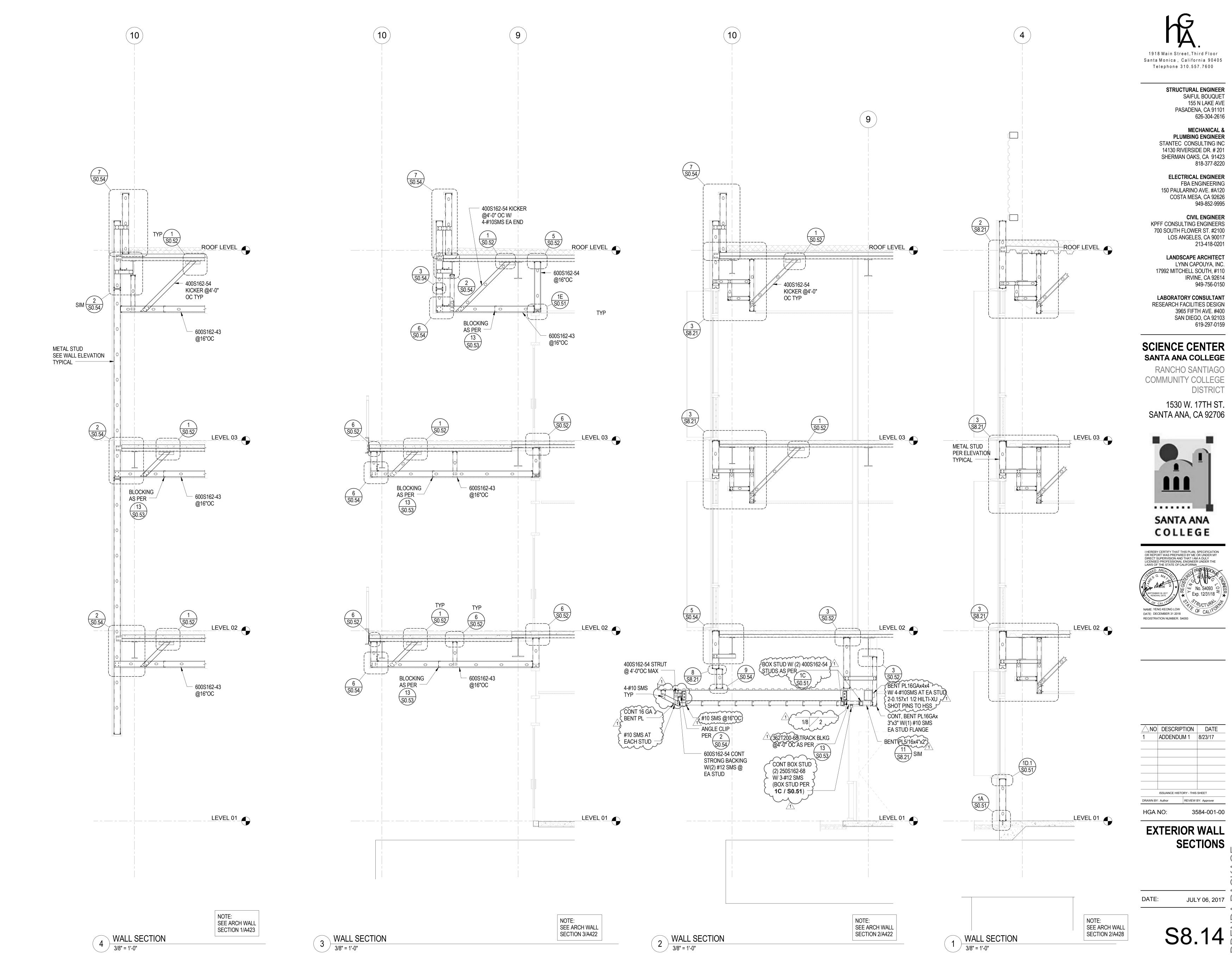
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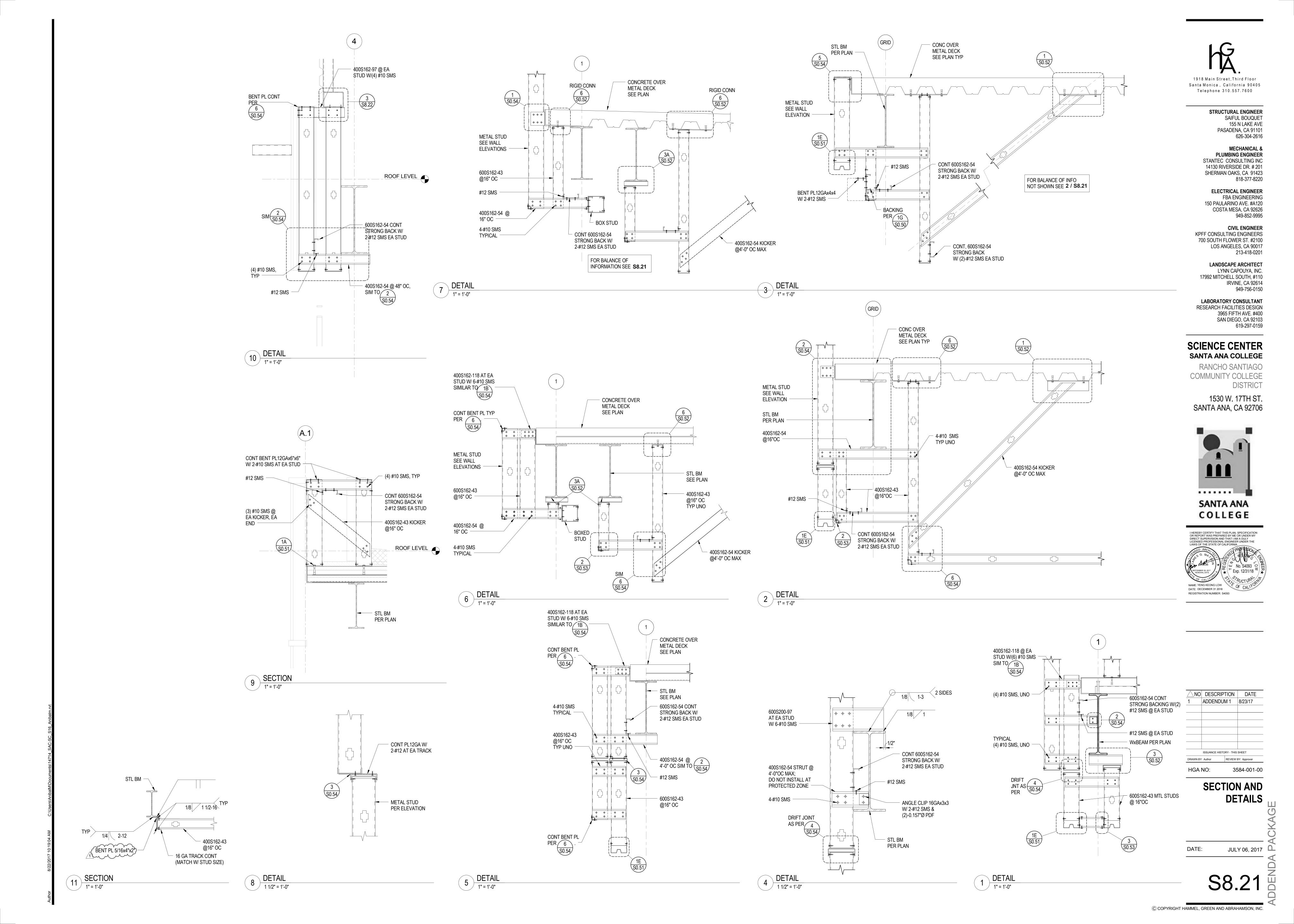
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**CIVIL ENGINEER** 

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S8.13 \( \frac{2}{3} \)





PLUMBING FIXTURE SCHEDULE NOTES: 1. COVER HOT WATER SUPPLY & TRAP WITH ONE—PIECE INSULATION. 2. PROVIDE TRAP PRIMERS WITH SOV FOR ALL FLOOR DRAINS & FLOOR SINKS IN BUILDING WITH ACCESS PANEL.
9. AT S-1, S-2, S-3 CONDITIONS, PROVIDE NOTCH IN COUNTERTOP OPENING TO ENSURE 3. SENSOR FAUCETS & FLUSHING DEVICES TO BE PROVIDED WITH TRANSFORMERS. . PROVIDE ANGLE STOPS TO EACH LAVATORY, SINK, LAB SINK, FUMEHOOD. 5. EACH URINAL GROUP SHALL BE PROVIDED WITH CLEANOUT.

. ACCESS PANELS FOR SENSOR FAUCET TRANSFORMERS SHALL BE BELOW LAVATORY FIXTURE. 8. ACCESS PANELS FOR SENSOR FLUSH VALVE TRANSFORMERS SHALL BE ABOVE FIXTURE.

			F	PIPE	MA	TEF	RIA	LSC	CHE	DULE
PLUMBING SERVICE	MATERIAL	MATERIAL COPPER TYPE 'L', ASTM B88, B32 FITTINGS, ASME B16.18, B16.22, B16.24	COPPER TYPE "L" (SOLDERED)	COPPER TYPE 'K', ASTM B88, B32 FITTINGS, ASME B16.18, B16.22, B16.24	HUBLESS, CAST IRON SOIL PIPE CISPI HUBLESS COUPLINGS WITH NFS CERTIFICATION	HUBLESS, CAST IRON SOIL PIPE, ASTM C564 HEAVY DUTY, SHEILDED STAINLESS STEEL COUPLING	SCHEDULE 40 BLACK STEEL PIPE & FITTINGS, ASTM A 53	POLYETHYLENE PIPE AND FITTING WITH HEAT FUSION JOINT, SDR11 PE 2406	POLYPROPYLENE	REMARKS
PEOMIDING SERVICE	ABOVE GRADE	01	0		-02	1 1 2	O. T.			INLIMINING
SANITARY WASTE	BELOW GRADE					•				PROVIDE CORROSION PROTECTION PER ASTM A674 OR AWWA C105
SANITARY VENT,	ABOVE GRADE				•					
STORM DRAIN VENT	BELOW GRADE					•				PROVIDE CORROSION PROTECTION PER ASTM A674 OR AWWA C105
LABORATORY	ABOVE GRADE								•	PROVIDE PVDF FOR MECHANICAL PLENUM AREAS
WASTE & VENT	BELOW GRADE								•	PROVIDE PVDF FOR MECHANICAL PLENUM AREAS
STORM DRAIN	ABOVE GRADE				•					
STORM DIVARY	BELOW GRADE					•				PROVIDE CORROSION PROTECTION PER ASTM A674 OR AWWA C105
CONDENSATE & INDIRECT DRAIN	ABOVE GRADE		•							
DOMESTIC COLD &	ABOVE GRADE	•								
HOT, INDUSTRIAL - WATER	BELOW GRADE			•						PROVIDE CORROSION PROTECTION PER ASTM A674 OR AWWA C105
VACUUM SYSTEM	ABOVE GRADE			•						
COMPRESSED AIR	ABOVE GRADE			•						
NATURAL GAS	ABOVE GRADE						•			EXPOSED PIPING ABOVE GROUND TO BE PAINTED WITH RUSTPROOF COATING.
	BELOW GRADE							•		WITH ROHS COMPLIANT TRACKER WIRE.
PURE WATER SYSTEM	ABOVE GRADE								•	PROVIDE PVDF FOR MECHANICAL PLENUM AREAS

			All	R C	OMP	RES	SOF	₹&\	VAC	UUN	/I PU	IMP	SCH	HED	JLE	
SYMBOL	LOCATION	SERVICE	MANUFACTURER & MODEL NO.	STD AIR (SCFM)	AIR DISCHARGE	CAPACITY  VAC. INLET  (IN. Hg)	SYSTEM MAX. PRESS		HP	MOTOR CAP	ACITY (EACH)	HZ	OPER. WT.(LBS)	BAS INTERPHASE	ANCHORAGE DETAIL NUMBER	REMARKS
CA 1	LEVEL 1 PLUMBING ROOM	LAB COMPRESSED AIR	BEACON MEDAES LAS10H-240V-HCDY- SPL	` '	(PSI) 110	- (IIV. 119)	DROP 4 PSI	(GALLON)	10 x 6	460	3	60	5000	MONITOR MODULE	6 P5.05	OILESS SCROLL, AIR COOLED, COMPLETE WITH AIR DRYERS BOLT UNTO EQUIPMENT PAD INCLUDING 6TH PUMP FOR BACK-UP. WITH BACNET OUTPUT FOR BMS CONNECTION. PROVIDE INTAKE MANIFOLD TO ROOF INTAKE CONNECTION.
VP 1	LEVEL 1 PLUMBING ROOM	LAB VACUUM	BEACON MEDAES LVLS20T-200V-QC	248	-	20" Hg	4" Hg	200	20 x 3 (TRIPLEX)	460	3	60	7000	MONITOR MODULE	D5 01)	OILESS LIQUID RING BOLT UNIT TO EQUIPMENT PAD. WITH BACNET OUTPUT FOR BMS CONNECTION. PROVIDE EXHAUST MANIFOLD TO ROOF EXHAUST CONNECTION.

	1 EGINDING ROOM		2720201 2007 40						(TIMI EE/I)				MODOLL	ROOF EXHAUST CONNECTION.
							PU	JMP	SCH	HEDI	JLE			
			MANUEA OTUBED A	CAP	ACITY		М	OTOR CAPACI	Υ		OPER.	ANCHORAGE		
SYMBOL	LOCATION	SERVICE	MANUFACTURER &   MODEL NO.	FLOW (GPM)	TOTAL HEAD (FT)	HP	RPM	VOLTS	PH	HZ	WT.(LBS)	DETAIL NUMBER		REMARKS
CRP 1&2	LEVEL 1 PLUMBING ROOM	GWH-1 CIRCULATING PUMP DOMESTIC	ARMSTRONG E.2 SERIES	10	30	1/2	1725	120	1	60	80	-	WITH BACNET OUTPUT FOR	BMS CONNECTION.
CRP 3&4	LEVEL 1 PLUMBING ROOM	GWH-2 CIRCULATING PUMP INDUSTRIAL	ARMSTRONG E.2 SERIES	10	30	1/2	1750	120	1	60	80	-	WITH BACNET OUTPUT FOR	BMS CONNECTION.
CDP 1	AS INDICATED ON FLOOR PLANS	MECHANICAL CONDENSATE	LITTLE GIANT VCL-24ULS	3	9	1/5	1750	120	1	60	10	-	USE HARTELL A2X-1965, F	HARD WIRED & UL LISTED FOR PLENUM APPLICATION
BP 1	LEVEL 1 PLUMBING ROOM	PACKAGE BOOSTER PUMP SYSTEM	GRUNDFOS BOOSTERPAQ HYDRO MPCE CRE 15-3-WA	240	90	3 X 5	3450	460	3	60	1300			CTION PACKAGED TRIPLEX PUMP WITH HYDROPNEUMATIC TANK. PROVIDE VARIABLE LLER. WITH BACNET OUTPUT FOR BMS CONNECTION.

							TAN	K S(	CHE	DULE
	SYMBOL	LOCATION	SERVICE	MANUFACTURER & MODEL NO.	TYPE	TANK VOLUME (GAL.)	TANK SIZE (IN.)	OPER. WT.(LBS)	ANCHORAGE DETAIL NUMBER	REMARKS
ſ	ET 1	LEVEL 1 PLUMBING ROOM	GWH-1 EXPANSION TANK DOMESTIC	AMTROL ST-30V-C	PRE-CHARGED STEEL	14	24"HI x 15" DIA.	150	1 P5.04	ASME TANK
	ET 2	LEVEL 1 PLUMBING ROOM	GWH-2 EXPANSION TANK INDUSTRIAL	AMTROL ST-30V-C	PRE-CHARGED STEEL	14	24"HI x 15" DIA	150	2 P5.04	ASME TANK
	ST 1	LEVEL 1 PLUMBING ROOM	GWH-1 STORAGE TANK DOMESTIC	BRADFORD WHITE NH210NE5A	HORIZONTAL	210	75" LONG x 30" DIA.	2200	1 P5.04	ASME TANK, INSULATE TANK
	ST 2	LEVEL 1 PLUMBING ROOM	GWH-2 STORAGE TANK INDUSTRIAL	BRADFORD WHITE NH210NE5A	HORIZONTAL	210	75" LONG x 30" DIA.	2200	2 P5.04	ASME TANK, INSULATE TANK
	SB 1	OUTDOORS (UNDERGROUND)	CONCRETE SAMPLING BOX	JENSEN MODEL 200 OR EQUAL PRE-CAST CONCRETE		200	36" Diameter x H "h" as indicated on detail	-	_	SAMPLE BOX W/ PH PROBE & MONITOR/RECORDER (15 AMP CIRCUIT) AT PLUMBING ROOM

					GAS W	ATE	RH	EAT	ER	SCHEDULE
SYMBOL	LOCATION	SERVICE	MANUFACTURER & MODEL NO.	BTU INPUT	RECOVERY AT 100°F △	WATER	TEMP °F	OPER. WT.(LBS)	ANCHORAGE DETAIL NUMBER	REMARKS
GWH 1	LEVEL 1 PLUMBING ROOM	DOMESTIC HOT WATER	RAYPAK MVB 504A	500,000	509	40	140	600	1 P5.04	120 VOLTS, 1 PHASE LOW NOX WITH VERSA IC INTEGRATED CONTROLLER, WITH BACNET OUTPUT FOR BMS CONNECTION, WITH NEUTRALIZATION KIT.
GWH 2	LEVEL 1 PLUMBING ROOM	INDUSTRIAL HOT WATER	RAYPAK MVB 504A	500,000	509	40	140	600		120 VOLTS, 1 PHASE LOW NOX WITH VERSA IC INTEGRATED CONTROLLER, WITH BACNET OUTPUT FOR BMS CONNECTION, WITH NEUTRALIZATION KIT.

					THI	ERI	MOS	STATIC MIXING VALVE SCHEDULE
10	SYMBOL	LOCATION	SERVICE	MANUFACTURER & MODEL NO.	SIZE	RA GPM	NTING PSI DROP	REMARKS
	TMV 1	LEVEL 1 PLUMBING ROOM	DOMESTIC HOT WATER SYSTEM	BRADLEY S59-3080	2"	36	10	DIAL THERMOMETER & SHUT-OFF VALVE. OUTLET TEMPERATURE SET AT 120°F HIGH / LOW FLOW MIXING VALVE. AB 1953 COMPLIANT.
~	TMV 2	LEVEL 1 PLUMBING ROOM	INDUSTRIAL HOT WATER SYSTEM	BRADLEY S59-3200	2 1/2"	91	10	DIAL THERMOMETER & SHUT-OFF VALVE. OUTLET TEMPERATURE SET AT 120°F HIGH / LOW FLOW MIXING VALVE. AB 1953 COMPLIANT.
$\left\  \cdot \right\ $	$\frac{TMV}{3}$	LEVEL 1 PLUMBING ROOM	TEMPERED WATER SYSTEM	LAWLER #911	1 1/2"	35	10	DIAL THERMOMETER & SHUT-OFF VALVE. OUTLET TEMPERATURE SET AT 75°F WITH STAINLESS STEEL SURFACE MOUNTED CABINET C/W MOUNTING BRACKET.

				BAG	CKF	LO\	ΝP	REVENTER SCHEDULE
SYMBOL	LOCATION	SERVICE	MANUFACTURER & MODEL NO.	TYPE	SIZE	FLOW (GPM)	OPER. WT.(LBS)	REMARKS
RPBP 1	LEVEL 1 PLUMBING ROOM	MAIN WATER SERVICE	WILKINS MODEL 375	REDUCED PRESSURE TYPE	4"	240	200	RUN 3/4" FROM RELIEF VALVE TO FLOOR SINK. REFER TO CIVIL DRAWING FOR LOCATION.
RPBP 2	LEVEL 1 PLUMBING ROOM	INDUSTRIAL WATER SUPPLY	WILKINS MODEL 375	REDUCED PRESSURE TYPE	3"	120	170	RUN 3/4" FROM RELIEF VALVE TO FLOOR SINK
RPBP 3	GREENHOUSE	INDUSTRIAL WATER SUPPLY	WILKINS MODEL 375	reduced Pressure Type	1-1/2"	75	170	RPBP WITH BALL VALVE OPTION, RUN 3/4" FROM RELIEF VALVE TO FLOOR SINK

SYMBOL	LOCATION	SERVICE	MANUFACTURER & MODEL NO.	QUANTITY	DESCRIPTION	ANCHORAGE DETAIL NUMBER	REMARKS
				1	WATERWORKS ES-2 RO/DI SKID WITH 1,000 GPD LOW ENERGY RO, 15 GPM, 1-1/2" PP DISTRIBUTION, HIGH EFFICIENCY UV, 0.2 MICRON FINAL FILTRATION, 3 HP VERTICAL MULTISTAGE 316 SS DISTRIBUTION PUMP, SANITARY TRI-CLAMP CONNECTIONS FROM UV DOWNSTREAM.	8 P5.04	
(RO/DI)	LEVEL 1	LABORATORIES	WATERWORKS REFER TO P4.09 FOR	1	WATER WORKS 2900 DUPLEX, 15 CUBIC FT SOFTENER SYSTEM WITH ELECTRONIC CONTROLS, 2"IN/OUT, 105 GPM, 110V, 60HZ	4 P5.04	DI STORAGE TANK IS TO HAVE A SEPARATE VENT WITH FILTER. THE OVERFLOW LINE SHALL NOT BE USED FOR VENTING.
1/	PLUMBING ROOM	B BOWN ONLES	EQUIPMENT P&ID	2	WATER WORKS 3.6P-MBDI MIXED BED SERVICE DI TANKS.	8 P5.04	CONTROL PANEL WITH BACNET OUTPUT FOR BMS CONNECTION.
				1	WATER WORKS 1,000 GALLON PE CONE BOTTOM TANK WITH SEISMIC ZONE 4 RESTRAINT SYSTEM, NON-VENTED MANWAY, 0.2 MICRON HYDROPHOBIC VENT FILTER AND PROGRAMMABLE ULTRASONIC LEVEL CONTROL. 66" DIAMETER x 111" TALL.	9 P5.04	
DI 2	GREENHOUSE SC001	GREENHOUSE	WATERWORKS REFER TO P4.10 FOR EQUIPMENT P&ID	1	5 GPM DI SYSTEM WITH 3.6 CUBIC FT CARBON BED TANK, (2) 3.6 CUBIC FT MIXED BED TANKS, 1 MICRON MAKE-UP FILTER, 3.6 CUBIC FT POLISHING MIXED BED TANK, UV DISINFECTING EQUIPMENT, 0.20 MICRON FINAL FILTER, ROTOMETER, DISTRIBUTION 1/2 HP PUMP AND	10 P5.04	

		METER SCHEDULE					
	MARK	DESCRIPTION	READING	MANUFACTURER & MODEL NO.	CONNECTION SIZE	REMARKS	
-	WM 1	LAB BUILDING DOMESTIC WATER SUB-METER	GALLONS CUBIC FEET	INVENSYS METERING SYSYTEMS (SENSUS) MODEL 4" OMNI C2 COMPOUND METER CONFORMING TO AWWA C702 WITH A BRONZE CASE HOUSING	4" CLASS 150 FLANGES	METERS WITH BOTH A VISUAL REGISTER AND PULSE OUTPUT SENSOR FOR AUTOMATIC METER READING.     PROVIDE BACNET OUTPUT FOR BMS CONNECTION.     PROVIDE SHUT-OFF VALVE BEFORE & AFTER METER. PROVIDE NECESSARY CLEARANCES AND INSTALL PER	
	$\left\langle \begin{array}{c} WM \\ 2 \end{array} \right\rangle$	GREENHOUSE BUILDING DOMESTIC WATER SUB-METER	GALLONS CUBIC FEET	INVENSYS METERING SYSYTEMS (SENSUS) MODEL 1-1/2" OMNI C2 COMPOUND METER CONFORMING TO AWWA C702 WITH A BRONZE CASE HOUSING	1-1/2" CLASS 150 WITH UNIONS	MANUFACTURER'S RECOMMENDATIONS.	
	GM 1	LAB BUILDING SUB-METER	CUBIC FEET	ROTARY TYPE SUB METER DRESSER ROOTS SERIES B MODEL "5M175 METER" WITH PULSER, E METER BY ITRON SENTINEL R300 COMPLETE WITH KYZ PULSE INPUT & SERIAL OUTPUT	6" CLASS 150 WITH UNIONS		



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SAIFUL BOUQUET

PASADENA, CA 91101

155 N LAKE AVE

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818-377-8220 ELECTRICAL ENGINEER FBA ENGINEERING 150 PAULARINO AVE. #A120 COSTA MESA, CA 92626

SHERMAN OAKS, CA 91423

949-852-9995 **CIVIL ENGINEER** KPFF CONSULTING ENGINEERS

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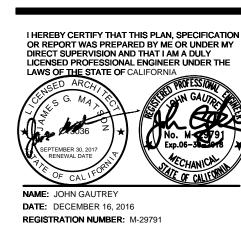
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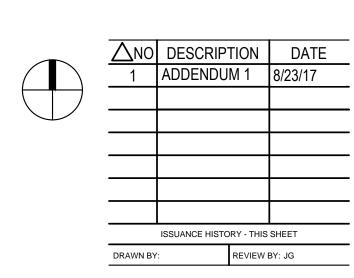
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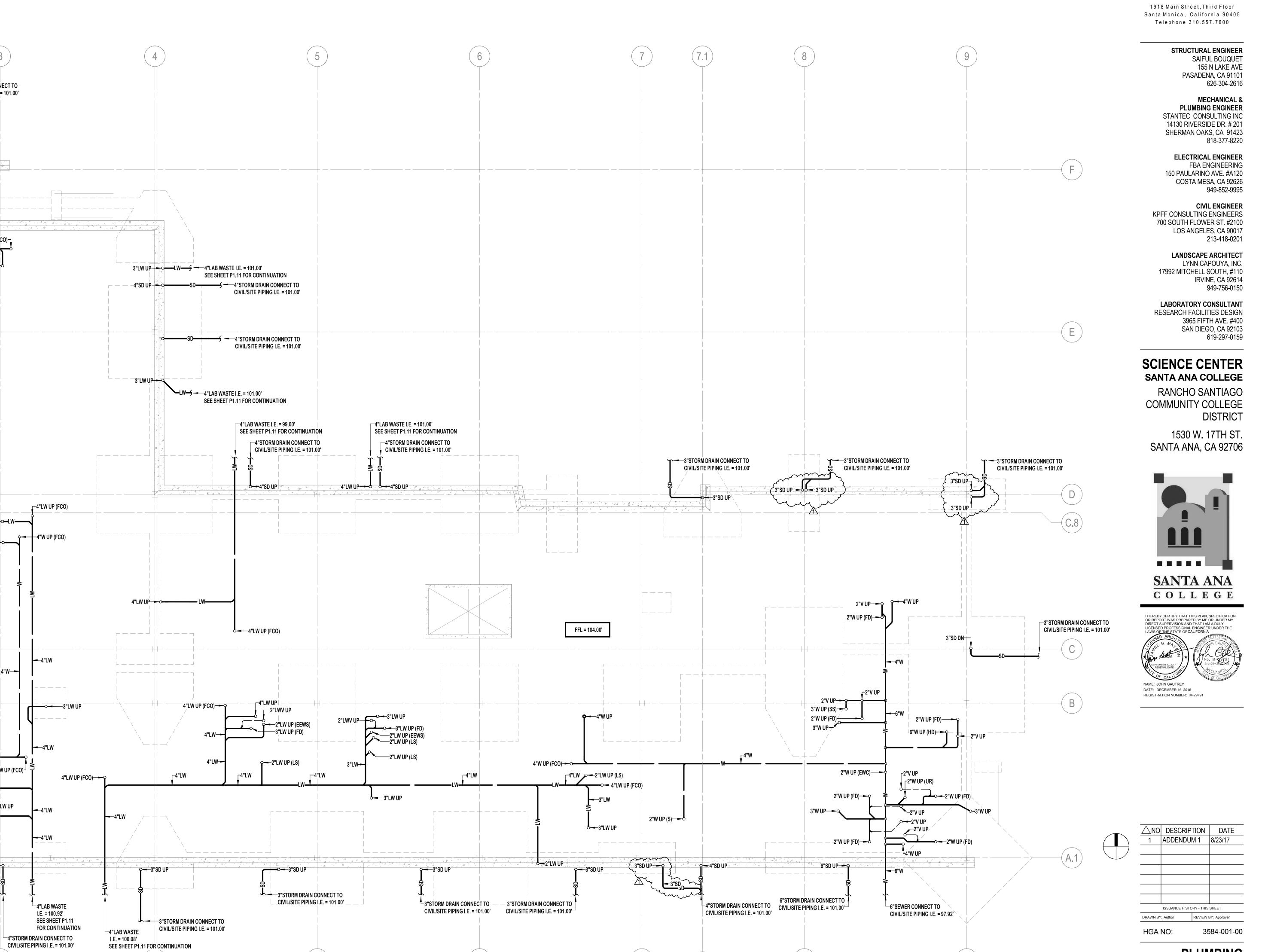
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PLUMBING SCHEDULES <sub>LLI</sub>



-3"STORM DRAIN CONNECT TO CIVIL/SITE PIPING I.E. = 101.00'

>----4"LW UP (FCO) 4"W UP (FCO)¬

4"W UP-

4"LW UP -- C---LW------

|4"W<del>--</del>

4"W UP (FCO)

⊢4"LW UP

└-4"LAB WASTE

I.E. = 100.92'

4"SD UP ⇒

4"W UP -----

4"V UP----

\$ -V- - + + - <

4"LW UP (FCO)-

2"V UP + - - - - -2"V UP - -

4"W UP (FS)

4"LAB WASTE VENT SEE SHEET

4"LAB WASTE I.E. = 98.96'

SEE SHEET P1.11 FOR CONTINUATION — — LW—

CIVIL/SITE PIPING I.E. = 98.96'

4"SEWER CONNECT TO

4"LAB WASTE I.E. = 99.00'

6"STORM DRAIN CONNECT TO

CIVIL/SITE PIPING I.E. = 101.00'

LINE SIZE SOV IN YARD BOX &

4" DOMESTIC WATER

4"LAB WASTE SEE SHEET

2"MEDIUM PRESSURE GAS

I.E. = 101.00'

CONNECT TO CIVIL/SITE PIPING - S-MG - 2"MG UP

CONNECT TO CIVIL/SITE PIPING

COVER MARKED 'WATER"-

SEE SHEET P1.11 FOR CONTINUATION -

4"SEWER CONNECT TO

4"W UP (FCO)¬

CIVIL/SITE PIPING I.E. = 101.00' - 5 - W - 4"W UP

P1.11 FOR CONTINUATION(TYP.2)

4"V UP\_\_\_\_\_\_ 3"LW UP

-4"W

2"LW UP (LS)

4"W UP (FCO) — 2"W UP (FD) \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ 2"V UP

└-4"W

6"SEWER CONNECT TO

CIVIL/SITE PIPING I.E. = 100.17'

2"V UP

└4"W

2"LW UP (LS) ----

6"W UP (FCO)¬

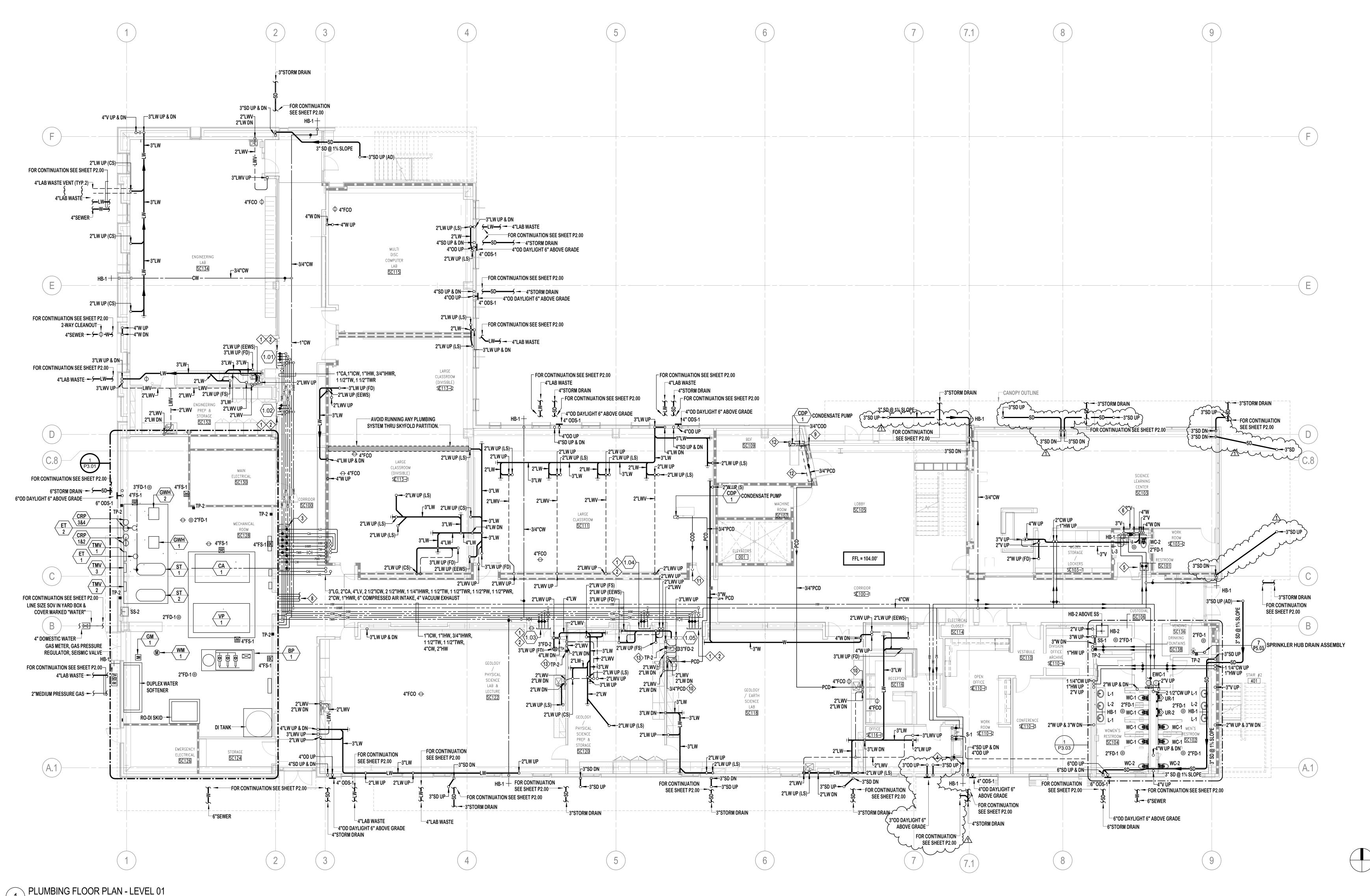
4"W UP (FS)

2"W UP (FD) -------

2"LW--

**PLUMBING** UNDERGROUND LEVEL PLAN

JULY 06, 2017



1/8" = 1'-0"

PLUMBING GENERAL NOTES

A. REFER TO SHEET P2.00 FOR BUILDING UTILITY POC'S

### **PLUMBING SHEET NOTES**

REFER TO KEYNOTE (X) ON PLAN

- LINE SIZE SHUT OFF VALVES ABOVE CEILING IN CORRIDORS & NOT IN ALCOVE. REFER TO LAB CONSULTANT DRAWING FOR POC NUMBER & POC CONNECTION SCHEDULE. WHERE SHOWN SMALLER ON LP1.01, PROVIDE REDUCERS DOWNSTREAM OF THE SHUT OFF VALVES AT THE POC.
- 2 IHWR/TWR POC COMPLETE WITH BALANCING VALVE ASSEMBLY. REFER TO

PLUMBING PIPES & EQUIPMENT IN THIS ROOM)

- DETAIL 7/P5.04. 3 PROVIDE LINE SIZE S.O.V. TO BRANCH OFF MAIN AT EACH FLOOR.
- 4 3/4"CW SERVING REFRIGERATOR IN RECESSED VALVE BOX. 5 LINE SIZE SOV ABOVE CEILING COMPLETE WITH ACCESS PANEL. 6 LINE SIZE SOV, TP-1 & WHA-1 COMPLETE WITH ACCESS PANEL.
- 8 CAP PW POC & PROVIDE ISOLATION SHUT-OFF VALVES ABOVE CEILING WITH NORMALLY OPEN BY-PASS VALVE. REFER TO DETAIL 1/P5.02 9 3/4" INSULATED CD OVERFLOW DAYLIGHTS TO PUBLIC AREA AT WALL WITH
- ESCUTCHEON PLATE.
- 10 3/4" INSULATED CD FROM CONDENSATE PUMP DISCHARGE TO
- LAVATORY/SINK VIA CD TAILPIECE.REFER TO DETAIL 4/P5.02. 11 3/4" INSULATED CD OVERFLOW DAYLIGHTS TO PUBLIC AREA AT CEILING WITH ESCUTCHEON PLATE.REFER TO DETAIL 4/P5.02. 12 PROVIDE & INSTALL ALL SOLDERED SHEET METAL AUXILIARY DRAIN PAN

WITH 3/4" BUSHING & DRAIN TO OUTSIDE OF ROOM (REQUIRED UNDER ALL

13 ELECTRONIC TRAP PRIMER (TP-2) TO CONNECT 1/2" WATER SUPPLY FROM NEAREST CW OR ICW LINE. PROVIDE SOV & ACCESS PANEL PER DETAIL 8/P5.02. TRAP PRIMER TO SERVE FLOOR DRAIN. FLOOR SINK OR EMERGENCY EYEWASH. COORDINATE ELECTRONIC TRAP PRIMER 120 VAC POWER SUPPLY WITH ELECTRICAL.

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213-418-0201 LANDSCAPE ARCHITECT LYNN CAPOUYA, INC 17992 MITCHELL SOUTH, #110 **IRVINE**, CA 92614

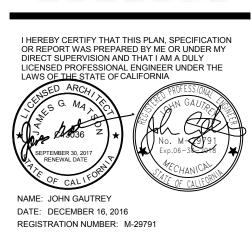
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949-756-0150

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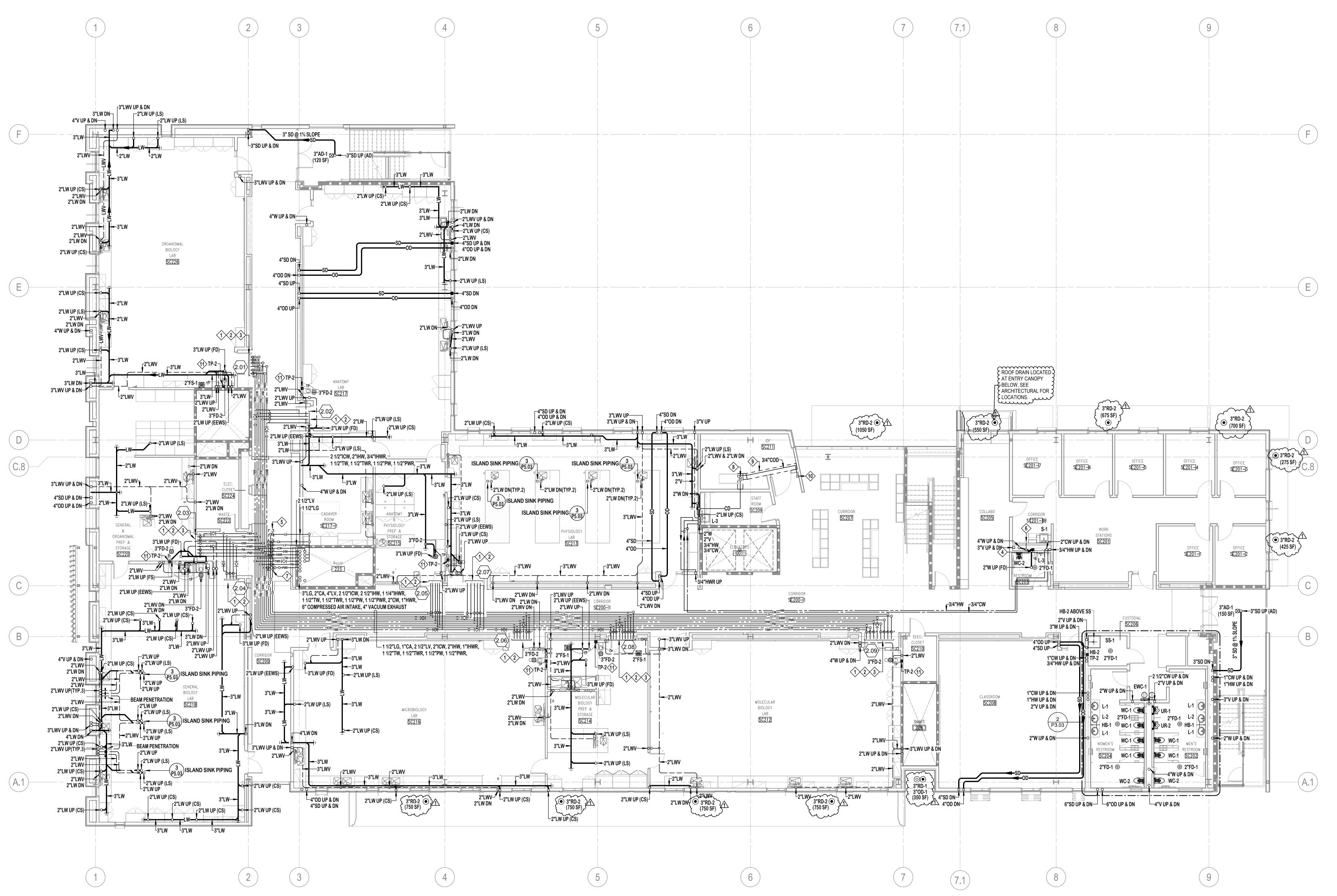


 $\triangle$ NO| DESCRIPTION |ADDENDUM 1 ISSUANCE HISTORY - THIS SHEET DRAWN BY: Author

HGA NO: 3584-001-00

PLUMBING FIRST LEVEL PLAN ..

JULY 06, 2017



PLUMBING FLOOR PLAN - LEVEL 02

1/8" = 1'-0"

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OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF CALIFORNIA NAME: JOHN GAUTREY DATE: DECEMBER 16, 2016

REGISTRATION NUMBER: M-29791

POWER SUPPLY WITH ELECTRICAL.

NEAREST CW OR ICW LINE. PROVIDE SOV & ACCESS PANEL PER DETAIL

EMERGENCY EYEWASH. COORDINATE ELECTRONIC TRAP PRIMER 120 VAC

8/P5.02. TRAP PRIMER TO SERVE FLOOR DRAIN, FLOOR SINK OR

**PLUMBING SHEET NOTES** 

REFER TO KEYNOTE (X) ON PLAN

ALCOVE. REFER TO LAB CONSULTANT DRAWING FOR POC NUMBER & POC CONNECTION SCHEDULE. WHERE SHOWN SMALLER ON LP1.01, PROVIDE REDUCERS DOWNSTREAM OF THE SHUT OFF VALVES AT THE POC.

- 2 IHWR/TWR POC COMPLETE WITH BALANCING VALVE ASSEMBLY. REFER TO
- DETAIL 7/P5.04. 3 PW POC ISOLATION SHUT-OFF VALVES ABOVE CEILING WITH NORMALLY
- CLOSED BY-PASS VALVE (TYPICAL) REFER TO DETAIL 1/P5.02
- 4 LINE SIZE SOV, TP-1 & WHA-1 COMPLETE WITH ACCESS PANEL.
- 5 PROVIDE LINE SIZE S.O.V. TO BRANCH OFF MAIN AT EACH FLOOR. 6 3/4"CW SERVING REFRIGERATOR IN RECESSED VALVE BOX.
- 7 GEORGE FISCHER "ROTAMETER" FLOW RATE INDICATOR # 198 806 235 (INSTALL IN VERTICAL POSITION). REFER TO DETAIL 6/P5.04
- 8 3/4" INSULATED CD COMPLETE WITH DEEP SEAL TRAP & DISCHARGE TO LAVATORY VIA CD TAILPIECE.REFER TO DETAILS 4 & 7/P5.02
- 9 PROVIDE & INSTALL ALL SOLDERED SHEET METAL AUXILIARY DRAIN PAN WITH 3/4" BUSHING & DRAIN TO OUTSIDE OF ROOM (REQUIRED UNDER ALL PLUMBING PIPES & EQUIPMENT IN THIS ROOM)
- 10 3/4" INSULATED CD OVERFLOW DAYLIGHTS TO PUBLIC AREA AT CEILING WITH ESCUTCHEON PLATE.REFER TO DETAIL 4/P5.02.

ADDENDUM 1 ISSUANCE HISTORY - THIS SHEET

DRAWN BY: Author REVIEW BY: Approver HGA NO: 3584-001-00

NO DESCRIPTION

**PLUMBING** SECOND LEVEL PLAN 😈

DATE: JULY 06, 2017

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CIVIL ENGINEER
KPFF CONSULTING ENGINEERS
700 SOUTH FLOWER ST. #2100

LOS ANGELES, CA 90017 213-418-0201 LANDSCAPE ARCHITECT

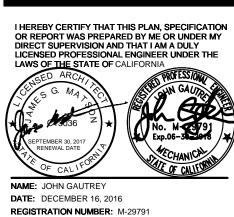
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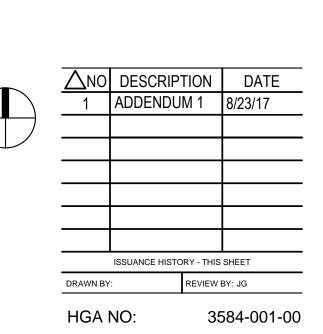
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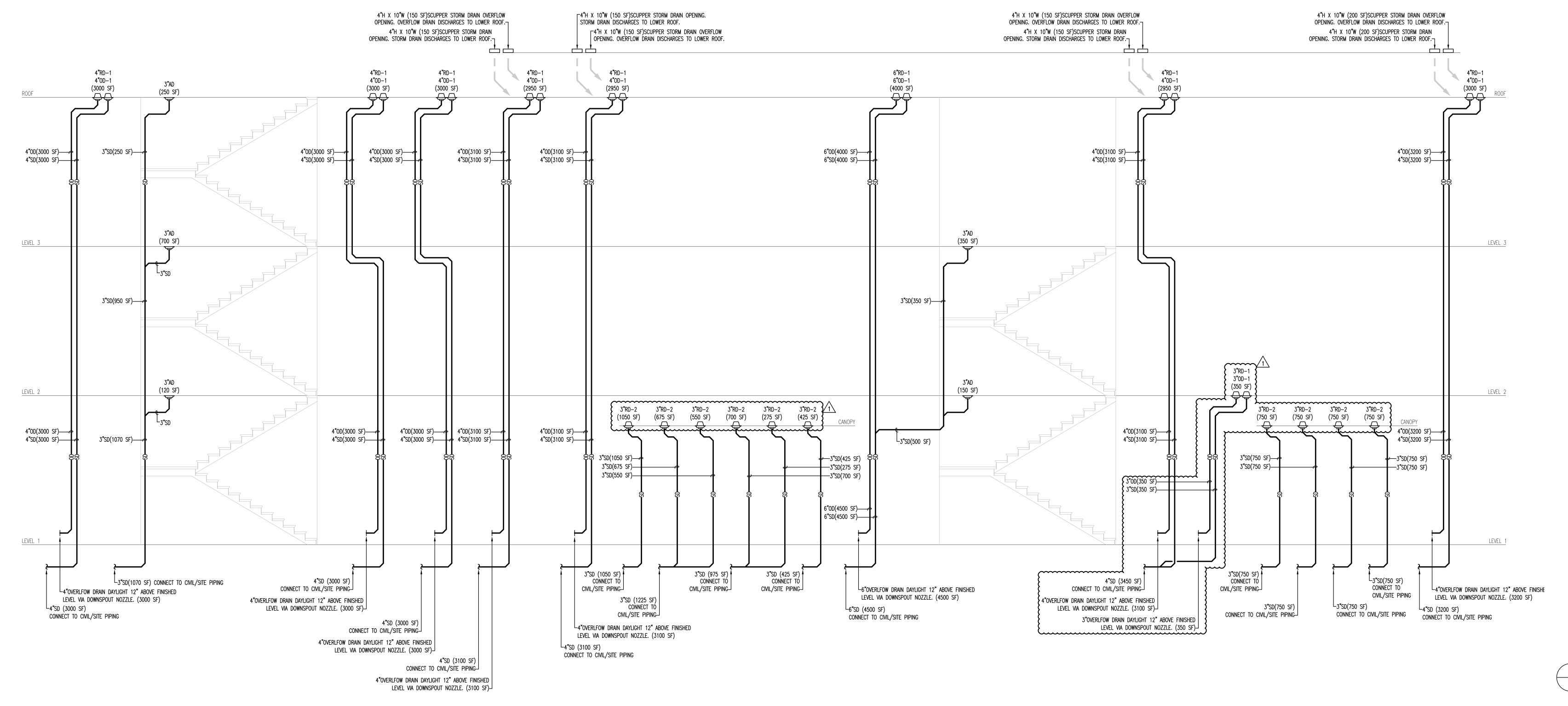


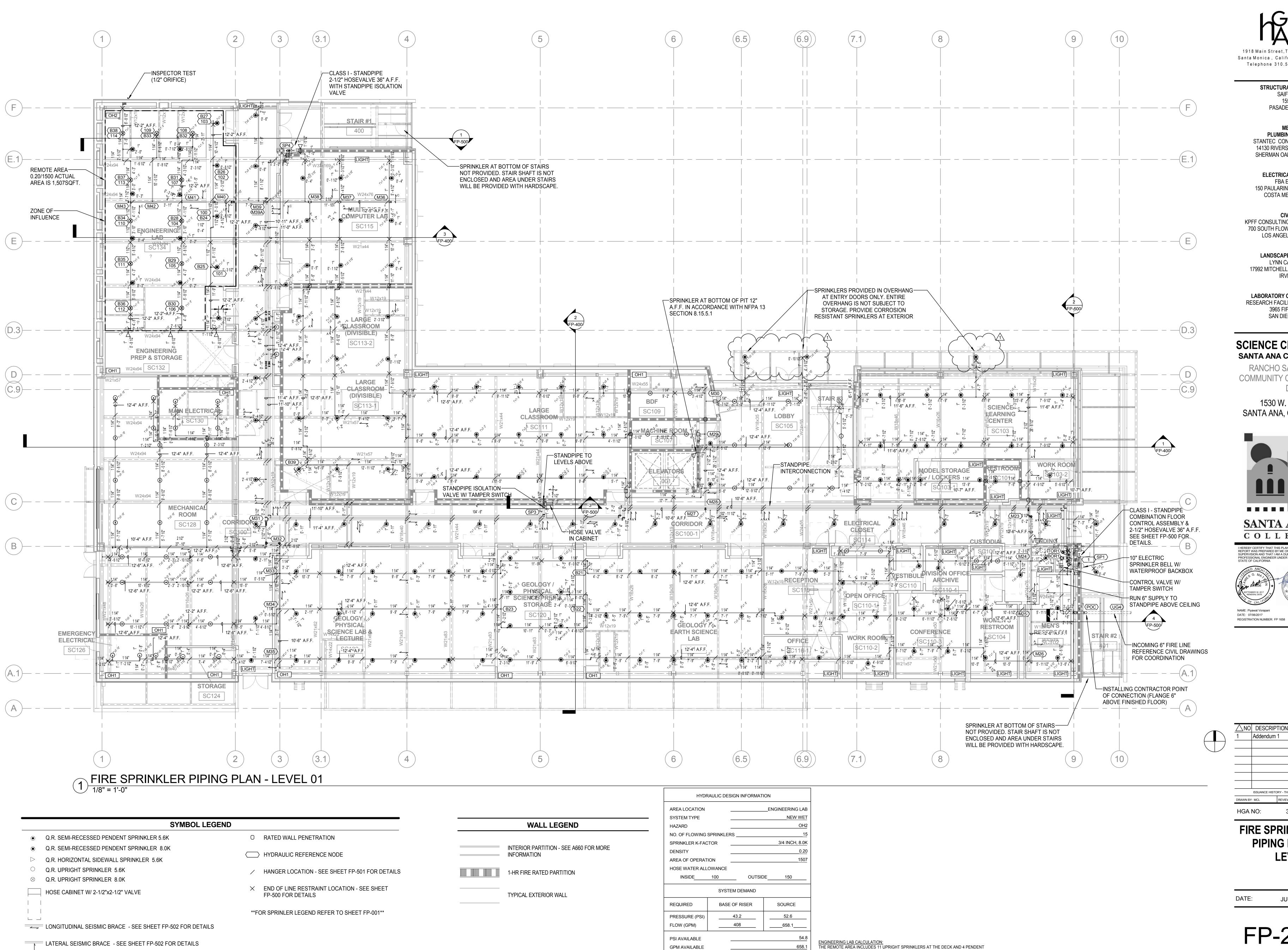


STORM DRAIN RISER DIAGRAM

DATE: J

P4.13





SAFETY FACTOR PSI

SAFETY FACTOR ABOVE IS IN ADDITION TO 10% MARGIN TAKEN FROM FLOW TEST.

SPRINKLER ALONG THE EAST SOFFIT. PENDENTS NEAR THE CENTER OF THE ROOM ARE

23.4.4.6.3.1. REFER TO SHEET FP-301 FOR CLARIFICATION OF SPRINKLER LAYOUT.

IN FLOATING CEILING PANELS AND NOT INCLUDED IN THE CALCULATION. THESE PENDENT SPRINKLER ARE NOT REQUIRED TO BE INCLUDED IN THE CALCULATION PER NFPA 13 -

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RANCHO SANTIAGO **COMMUNITY COLLEGE** DISTRICT

1530 W. 17TH ST. SANTA ANA, CA 92706



COLLEGE I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION O REPORT WAS PREPARED BY ME OR UNDER MY DIREC' SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF CALIFORNIA

NAME: Piyawat Vorapani DATE: 07/06/2017

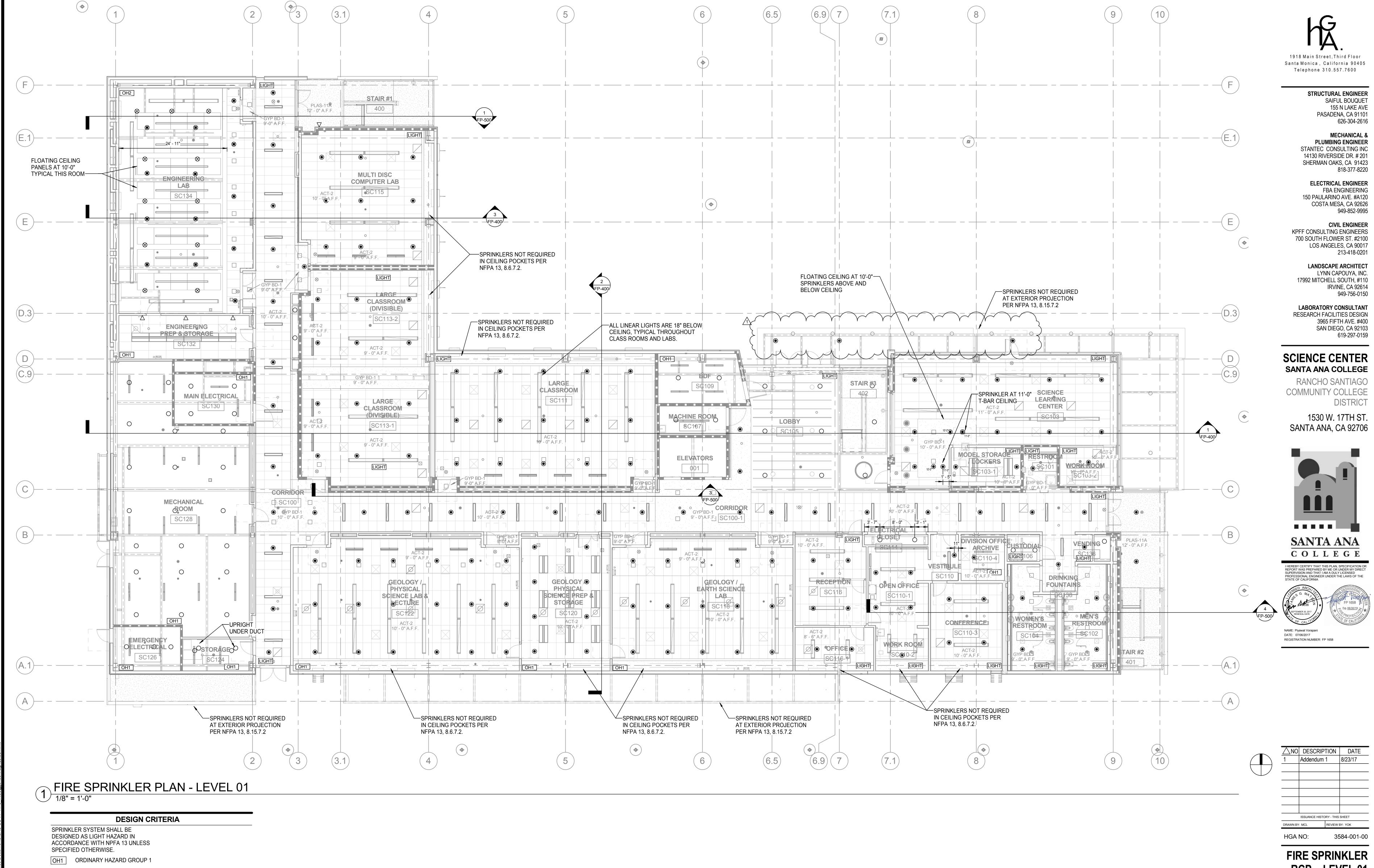
NO DESCRIPTION Addendum 1

ISSUANCE HISTORY - THIS SHEET

FIRE SPRINKLER PIPING PLAN -

LEVEL 01 😈

JULY 06, 2017



OH2 ORDINARY HAZARD GROUP 2

**GENERAL NOTES** 

1. SPRINKLER SHALL BE INSTALLED NO LESS THAN 4" FROM WALL.

2. MINIMUM DISTANCE BETWEEN SPRINKLERS ARE 6'-0".

RCP - LEVEL 01

DATE: JULY 06, 2017