HOLDERS OF PLANS AND SPECIFICATIONS:

Materials Research Laboratory Infill, MRL, Bldg. 615
Project No. FM150347S/981910
Addendum No. 1

April 15, 2015

Enclosed is ADDENDUM NO. 1 to the Construction Documents on the above-captioned project.

Bid date has been changed from Friday, April 17, 2015 to Tuesday, April 21, 2015 at 2:30 PM to be held at:

CONTRACTING SERVICES
Facilities Management, Bldg. 439,
Door #E, Reception Counter
University of California, Santa Barbara
Santa Barbara, CA 93106-1030.

Late arrivals shall be disqualified. Please allow time for unforeseen traffic delays, securing a parking permit and potential parking problems.

Greg Moore
Associate Director, Contracting Services
ADDENDUM No. 1

to the

CONSTRUCTION DOCUMENTS

April 15, 2015

GENERAL
The following changes, additions or deletions shall be made to the following document(s) as indicated; all other conditions shall remain the same.

I. ADVERTISEMENT
Item No.

1.1 CHANGE sentence beginning with “Bid Deadline” to read as follows:

“Bids will not be accepted after 2:30 PM on April 21, 2015.”

II. SUPPLEMENTARY INSTRUCTIONS TO BIDDERS
Item No.

2.1 CHANGE item 4. To read as follows:

“Bids will be received on or before the Bid Deadline: 2:30 PM, April 21, 2015, and only at:

Contracting Services
Facilities Management, Building 439
Door E, Reception Counter
University of California, Santa Barbara
Santa Barbara, California 93106-1030

III. SPECIFICATIONS
Item No.

3.1 ADD to Table of Contents, Division 9 – FINISHES, Section 09220 Portland Cement Plaster.

3.2 ADD to Table of Contents, Division 16 – ELECTRICAL, Section 16521 Exterior Lighting.

3.3 REPLACE in its entirety Section 02741 Asphalt Paving, Paragraph 2.5 A. with

“1. Dowels: Galvanized steel, diameter ¼ inch, minimum length 12 inches.”

3.4 ADD to Section 03300 CAST-IN-PLACE CONCRETE, PART 2 – PRODUCTS, 2.8 RELATED MATERIALS, paragraph to read as follows:

“C. Expanded Polystyrene Block: Expanded Polystyrene Block shall be Harbor Foam Geofoam as manufactured by Harbor Foam, or equal. The EPS block shall be EPS 19 through EPS 46,
which have a minimum compressive strength of 5.8 psi at 1% deformation and a minimum modulus of 580 psi per ASTM D6817.

3.5 CHANGE Section 08710 Door Hardware, Paragraph 3.7 B. Hardware Sets. Hardware Group 03 – Lab Exit Pair to read as follows:

“Hardware Group 03 - LAB EXIT PAIR

PR 4' 6" X 7' 0" X 1 3/4" X HMD X HMF X NONRTD
For use on door(s): 55B

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3.6 ADD SECTION 09220 - PORTLAND CEMENT PLASTER, 7 pages, attached.

3.7 ADD SECTION 16521- EXTERIOR LIGHTING, 4 pages, attached.

IV. DRAWINGS

Item No.

4.1 REVISE Sheet T1-1.3, Access Site Plan to show existing accessible parking spaces as shown on AD1-A1, attached.

4.2 REVISE Sheet T1-1.4, Access Floor Plan to show existing accessible parking spaces as shown on AD1-A1, attached.

4.3 REVISE Sheet AS-1.1, Site Demolition Plan to show existing accessible parking spaces as shown on AD1-A1, attached.
4.4 REVISE Sheet AS-2.1, Site Plan to show existing accessible parking spaces as shown on AD1-A1, attached.

4.5 ADD to Sheet AS-2.1, Keynote 111, "Relocate clean-out if in conflict with new wall in room 1055A."

4.6 ADD to sheet A2-1.1. Keynote 159 – “See keynote 236 on 2/A5-1.3.”

4.7 ADD to Sheet A2-1.0, “Existing storm drain clean-out in room 1055 is to be removed to wye-fitting and capped. New storm drain clean-out is to be provided and installed in road as shown on AD1-A2, attached.”

4.8 ADD to Sheet A2-1.1, Keynote 167 – “Relocate clean-out if in conflict with new wall in room 1055A.”

4.9 ADD to Sheet A2-1.1. “Existing storm drain clean-out in room 1055 is to be removed to wye-fitting and capped. New storm drain clean-out is to be provided and installed in road as shown on AD1-A2, attached.”

4.10 ADD to sheet A2-1.1, “FLOOR PLAN ELEVATION REFERENCES, as shown on AD1-A3, attached.”

4.11 ADD to Sheet A2-1.1, “12” long handrail extension to match existing to bottom of stair #2 handrail next to grid line 14 as shown on AD1-A5. Paint to match existing and paint existing handrail to termination on floor above.”

4.12 ADD to Sheet A2-1.2. general note “6. All suspended light fixtures exposed to view to be provided with stainless steel aircraft cable sway braces at 45 degrees from horizontal with attachment to structure above similar to 16/AD-4.1 to prevent sway in any direction.”

4.13 DELETE Sheet A2-1.2. Keynote 500, see 15/AD-4.1

4.14 ADD to sheet A2-1.2. 2nd Legend material item “see 17/AD-4.1.”

4.15 ADD to Sheet A3-1.3. Keynote 216, “See 3/AD-2.2”.

4.16 ADD to Sheet A5-1.3, sheet A5-1.3 with elevation 1 as shown on AD1-A4, attached.

4.17 ADD to Sheet A5-1.3, sheet A5-1.3 with elevation 2 as shown on AD1-A5, attached.

4.18 REPLACE Sheet A7-1.3, detail 2, with AD1-A6, attached.

4.19 ADD Sheet A7-1.3, detail 12 as shown on AD1-A7, attached.

4.20 REPLACE Sheet A8-1.2. RBT 1 with VCT 3. REPLACE RBT 2 with VCT 4.

4.21 ADD Sheet A8-1.3, sign type “d” to Signage Schedule as shown on AD1-A8, attached.

4.22 ADD to Sheet A8-1.3, sign type “d” to Signage Plan as shown on AD1-A9, attached.
4.23 ADD to Sheet A8-1.3, sign types “a”, “b” and “c” as shown on AD1-A10, attached.

4.24 REVISE Sheet A8-1.3, detail 3 sign-type “c” dimensions from 2” x 6” to 3” x 6”. ADD “Verify in field existing sign dimensions and match dimensions of new signs to existing”.

4.25 ADD to Sheet A8-1.5. Door 55B, “Panic hardware”.

4.26 REPLACE Sheet AD-2.1, detail 14, with revised detail as shown on AD1-A11, attached.

4.27 REPLACE Sheet AD-2.1, detail 15, with revised detail as shown on AD1-A12, attached.

4.28 REPLACE sheet AD-2.2, detail 1,1 with revised detail as shown on AD1-A13, attached.

4.29 REPLACE Sheet AD-2.2, detail 12, with revised detail as shown on AD1-A14, attached.

4.30 ADD to Sheet AD-2.2, detail 3 as shown on AD1-A15, attached.

4.31 ADD to Sheet AD-4.1, detail 17 as shown on AD1-A16, attached.

4.32 REVISE Sheet P-3.0 to read: “Existing storm drain clean-out in room 1055 to be removed and replaced with a wye-fitting and capped. New storm drain clean-out is to be provided and installed in road as shown on AD1-A2 and AD1-P1, attached.”

4.33 MODIFY Sheet P-3.0 to read: “For the Storm drain pipe in room 1055 running West-East install a wye-fitting on the East end in lieu of 45 degree fitting, as shown on AD1-P1, attached.”

4.34 MODIFY Sheet P-3.0 to read: “New storm drain in pebble bed at base of stair No. 8 to have dome-type cover Zurn Model Z348, no-hub outlet and galvanized cast iron, as shown on AD1-P1, attached.”

4.35 MODIFY Sheet P-3.0 to read: New storm drains in landscaped areas at edge of parking lot to have dome-type covers, Zurn Model Z348, no-hub outlet and galvanized cast iron in lieu of 6” grates, typical at two (2) locations, as shown on AD1-P1, attached.

4.36 ADD to Sheet P-4.0, keynote 7, “to FC-1 in center of room 1055A.”

4.37 DELETE Sheet P-4.0, existing floor clean-out FC-1 and keynote 7 in room 1055.

4.38 DELETE Sheet E-1.0, keynote 1 from fixture types C and E identifications.

4.39 CHANGE Sheet E-1.0, quantity of fixture type C from 5 to 2.

4.40 REPLACE Sheet E-1.0, Fixture type C with surface-mount compact fluorescent fixture by Cooper Industries, or equal, per attached cut sheet.

4.41 REPLACE Sheet E-3.0, Fixture type C with surface-mount compact fluorescent fixture by Cooper Industries, or equal, per attached cut sheet.

4.42 REVISE Sheet E-3.0, fixture type F from F/29 to F/44.
SECTION 09220 - PORTLAND CEMENT PLASTER

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following:
   1. Exterior portland cement plasterwork (stucco) on metal lath plaster bases to match existing texture and color.

B. Related Sections include the following:
   1. Division 5 Section "Cold-Formed Metal Framing" for structural, load-bearing (transverse and axial) steel studs and joists that support lath and portland cement plaster.
   2. Division 6 Section "Sheathing" for sheathing, and water-resistant barriers included in portland cement plaster assemblies.
   3. Division 7 Section "Building Insulation" for thermal insulations and vapor retarders included in portland cement plaster assemblies.
   4. Division 7 Section "Joint Sealants" for acoustical sealants and sealants installed with exterior portland cement plaster (stucco).

1.3 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Shop Drawings: Show locations and installation of control joints including plans, details of components, and attachments to other work, including the transition to existing portland cement plaster work/building component(s).

C. Samples: For each type of factory-prepared finish coat indicated.

1.4 QUALITY ASSURANCE

A. Mockups: Before plastering, install mockups of at least 10 sq. ft. in surface area to demonstrate aesthetic effects and set quality standards for materials and execution.
   1. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.
   2. Obtain University's Representative approval before start of plaster work.
1.5 DELIVERY, STORAGE, AND HANDLING

A. Store materials inside under cover and keep them dry and protected against damage from weather, direct sunlight, surface contamination, corrosion, construction traffic, and other causes.

1.6 PROJECT CONDITIONS

A. Comply with ASTM C 926 requirements.

B. Exterior Plasterwork:

1. Apply and cure plaster to prevent plaster drying out during curing period. Use procedures required by climatic conditions, including moist curing, providing coverings, and providing barriers to deflect sunlight and wind.

2. Apply plaster when ambient temperature is greater than 40 deg F.

3. Protect plaster coats from freezing for not less than 48 hours after set of plaster coat has occurred.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the manufacturers specified.

2.2 METAL LATH


1. Manufacturers:

a. Alabama Metal Industries Corporation (AMICO).

b. California Expanded Metal Products Company (CEMCO).

c. Western Metal Lath & Steel Framing Systems.

d. Or equal.


a. Weight: 3.4 lb/sq. yd.

3. Flat Rib Lath: Rib depth of not more than 1/8 inch.
a. Weight: 3.4 lb/sq. yd.

B. Paper Backing: FS UU-B-790, Type I Grade D, Style 2 vapor-permeable paper.

1. Provide paper-backed lath unless otherwise indicated.

2.3 ACCESSORIES

A. General: Comply with ASTM C 1063 and coordinate depth of trim and accessories with thicknesses and number of plaster coats required.

B. Zinc and Zinc-Coated (Galvanized) Accessories:

1. Manufacturers:

   a. Alabama Metal Industries Corporation (AMICO).
   b. California Expanded Metal Products Company (CEMCO).
   c. Western Metal Lath & Steel Framing Systems.
   d. Or equal.


   a. Small nose cornerbead with expanded flanges; use unless otherwise indicated.
   b. Small nose cornerbead with expanded flanges reinforced by perforated stiffening rib; use on columns.

6. Casing Beads: Fabricated from zinc-coated (galvanized) steel; square-edged style; with expanded flanges.

7. Control Joints: Fabricated from zinc-coated (galvanized) steel; one-piece-type, folded pair of unperforated screeds in M-shaped configuration; with perforated flanges and removable protective tape on plaster face of control joint.

2.4 MISCELLANEOUS MATERIALS

A. Water for Mixing: Potable and free of substances capable of affecting plaster set or of damaging plaster, lath, or accessories.

B. Fiber for Base Coat: Alkaline-resistant glass or polypropylene fibers, 1/2 inch long, free of contaminants, manufactured for use in portland cement plaster.

C. Steel Drill Screws: For metal-to-metal fastening, ASTM C 1002 or ASTM C 954, as required by thickness of metal being fastened; with pan head that is suitable for application; in lengths
required to achieve penetration through joined materials of not fewer than three exposed threads.

D. Fasteners for Attaching Metal Lath to Substrates: Complying with ASTM C 1063.

2.5 PLASTER MATERIALS

A. Portland Cement: ASTM C 150, Type I II.
   1. Color for Finish Coats: To match existing.

B. Plastic Cement: ASTM C 1328.

C. Lime: ASTM C 206, Type S; or ASTM C 207, Type S.

D. Sand Aggregate: ASTM C 897.

E. Acrylic-Based Finish Coatings: Factory-mixed acrylic-emulsion coating systems, formulated with colorfast mineral pigments and fine aggregates; for use over portland cement plaster base coats. Include manufacturer's recommended primers and sealing topcoats for acrylic-based finishes.
   1. Products:
      a. Parex, Inc.
      b. Senergy, Inc.
      c. Stuc-O-Flex International, Inc.
      d. Or equal.
   2. Color: To match existing.

2.6 PLASTER MIXES

A. General: Comply with ASTM C 926 for applications indicated.
   1. Fiber Content: Add fiber to base-coat mixes after ingredients have mixed at least two minutes. Comply with fiber manufacturer's written instructions for fiber quantities in mixes, but do not exceed 1 lb of fiber/cu. ft. of cementitious materials. Reduce aggregate quantities accordingly to maintain workability.

B. Base-Coat Mixes for Use over Metal Lath: Scratch and brown coats for three-coat plasterwork as follows:
   1. Portland Cement Mixes:
a. Scratch Coat: For cementitious material, mix 1 part portland cement and 0 to 3/4 parts lime. Use 2-1/2 to 4 parts aggregate per part of cementitious material (sum of separate volumes of each component material).

b. Brown Coat: For cementitious material, mix 1 part portland cement and 0 to 3/4 parts lime. Use 3 to 5 parts aggregate per part of cementitious material (sum of separate volumes of each component material).

2. Plastic Cement Mixes:

a. Scratch Coat: 1 part plastic cement and 2-1/2 to 4 parts aggregate.

b. Brown Coat: 1 part plastic cement and 3 to 5 parts aggregate.

3. Portland and Plastic Cement Mixes:

a. Scratch Coat: For cementitious material, mix 1 part plastic cement and 1 part portland cement. Use 2-1/2 to 4 parts aggregate per part of cementitious material (sum of separate volumes of each component material).

b. Brown Coat: For cementitious material, mix 1 part plastic cement and 1 part portland cement. Use 3 to 5 parts aggregate per part of cementitious material (sum of separate volumes of each component material).

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas and substrates, with Installer present, and including welded hollow-metal frames, cast-in anchors, and structural framing, for compliance with requirements and other conditions affecting performance.

1. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Protect adjacent work from soiling, spattering, moisture deterioration, and other harmful effects caused by plastering.

B. Coordination with Sprayed Fire-Resistive Materials:

1. Before sprayed fire-resistive materials are applied, attach offset anchor plates or ceiling runners (tracks) to surfaces indicated to receive sprayed fire-resistive materials. Where offset anchor plates are required, provide continuous plates fastened to building structure not more than 24 inches o.c.

2. After sprayed fire-resistive materials are applied, remove them only to extent necessary for installation of plaster assemblies and without reducing the fire-resistive material thickness to less than that required to obtain fire-resistance rating indicated. Protect remaining fire-resistive materials from damage.
3.3 INSTALLING METAL LATH

A. Expanded-Metal Lath: Install according to ASTM C 1063.

3.4 INSTALLING ACCESSORIES

A. Install according to ASTM C 1063 and at locations indicated on Drawings.

B. Reinforcement for External Corners:
   1. Install lath-type external-corner reinforcement at exterior locations.
   2. Install corner bead at interior locations.

C. Control Joints: Install control joints at locations indicated on Drawings where shown and in specific locations approved by Architect for visual effect as follows:
   1. As required to delineate plasterwork into areas (panels) of the following maximum sizes:
      a. Vertical Surfaces: 144 sq. ft.
      b. Horizontal and other Nonvertical Surfaces: 100 sq. ft.
   2. At distances between control joints of not greater than 18 feet o.c.
   3. As required to delineate plasterwork into areas (panels) with length-to-width ratios of not greater than 2-1/2:1.
   4. Where control joints occur in surface of construction directly behind plaster.
   5. Where plasterwork areas change dimensions, to delineate rectangular-shaped areas (panels) and to relieve the stress that occurs at the corner formed by the dimension change.

3.5 PLASTER APPLICATION

A. General: Comply with ASTM C 926.
   1. Do not deviate more than plus or minus 1/4 inch in 10 feet from a true plane in finished plaster surfaces, as measured by a 10-foot straightedge placed on surface.
   2. Finish plaster flush with metal frames and other built-in metal items or accessories that act as a plaster ground, unless otherwise indicated. Where casing bead does not terminate plaster at metal frame, cut base coat free from metal frame before plaster sets and groove finish coat at junctures with metal.
   3. Provide plaster surfaces that are ready to receive field-applied finishes indicated.

B. Bonding Compound: Apply on unit masonry and concrete plaster bases.

C. Plaster Finish Coats: Apply to provide sand float finish to match Architect's sample.
D. Acrylic-Based Finish Coatings: Apply coating system, including primers, finish coats, and sealing topcoats, according to manufacturer's written instructions.

3.6 CUTTING AND PATCHING

A. Cut, patch, replace, and repair plaster as necessary to accommodate other work and to restore cracks, dents, and imperfections. Repair or replace work to eliminate blisters, buckles, crazing and check cracking, dry outs, efflorescence, sweat outs, and similar defects and where bond to substrate has failed.

3.7 CLEANING AND PROTECTION

A. Remove temporary protection and enclosure of other work. Promptly remove plaster from doorframes, windows, and other surfaces not indicated to be plastered. Repair floors, walls, and other surfaces stained, marred, or otherwise damaged during plastering.

END OF SECTION 09220
SECTION 16521 - EXTERIOR LIGHTING

PART 1 - GENERAL

1.1 SUMMARY
A. Section Includes:
   1. Exterior luminaires with lamps and ballasts.

1.2 ACTION SUBMITTALS
A. Product Data: For each luminaire, and support component, arranged in order of lighting unit designation. Include data on features, accessories, and finishes.
B. Shop Drawings: Anchor-bolt templates keyed to specific poles and certified by manufacturer.

1.3 QUALITY ASSURANCE
A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
C. Comply with NFPA 70.

PART 2 - PRODUCTS

2.1 MANUFACTURERS
A. Products: Subject to compliance with requirements, provide product indicated on Drawings.

2.2 GENERAL REQUIREMENTS FOR LUMINAIRES
A. Luminaires shall comply with UL 1598 and be listed and labeled for installation in wet locations by an NRTL acceptable to authorities having jurisdiction.
1. LER Tests Incandescent Fixtures: Where LER is specified, test according to NEMA LE 5A.
2. LER Tests HID Fixtures: Where LER is specified, test according to NEMA LE 5B.

B. Lateral Light Distribution Patterns: Comply with IESNA RP-8 for parameters of lateral light distribution patterns indicated for luminaires.

C. Metal Parts: Free of burrs and sharp corners and edges.

D. Sheet Metal Components: Corrosion-resistant aluminum unless otherwise indicated. Form and support to prevent warping and sagging.

E. Housings: Rigidly formed, weather- and light-tight enclosures that will not warp, sag, or deform in use. Provide filter/breather for enclosed luminaires.

F. Doors, Frames, and Other Internal Access: Smooth operating, free of light leakage under operating conditions, and designed to permit relamping without use of tools. Designed to prevent doors, frames, lenses, diffusers, and other components from falling accidentally during relamping and when secured in operating position. Doors shall be removable for cleaning or replacing lenses. Designed to disconnect ballast when door opens.

G. Exposed Hardware Material: Stainless steel.

H. Plastic Parts: High resistance to yellowing and other changes due to aging, exposure to heat, and UV radiation.

I. Light Shields: Metal baffles, factory installed and field adjustable, arranged to block light distribution to indicated portion of normally illuminated area or field.

J. Reflecting surfaces shall have minimum reflectance as follows unless otherwise indicated:
   1. White Surfaces: 85 percent.
   2. Specular Surfaces: 83 percent.
   3. Diffusing Specular Surfaces: 75 percent.

K. Lenses and Refractors Gaskets: Use heat- and aging-resistant resilient gaskets to seal and cushion lenses and refractors in luminaire doors.

L. Luminaire Finish: Manufacturer's standard paint applied to factory-assembled and -tested luminaire before shipping. Where indicated, match finish process and color of pole or support materials.

M. Factory-Applied Finish for Steel Luminaires: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
1. Surface Preparation: Clean surfaces to comply with SSPC-SP 1, "Solvent Cleaning," to remove dirt, oil, grease, and other contaminants that could impair paint bond. Grind welds and polish surfaces to a smooth, even finish. Remove mill scale and rust, if present, from uncoated steel, complying with SSPC-SP 5/NACE No. 1, "White Metal Blast Cleaning," or SSPC-SP 8, "Pickling."

2. Exterior Surfaces: Manufacturer's standard finish consisting of one or more coats of primer and two finish coats of high-gloss, high-build polyurethane enamel.
   
a. Color: As selected from manufacturer's standard catalog of colors.

N. Factory-Applied Finish for Aluminum Luminares: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.

1. Finish designations prefixed by AA comply with the system established by the Aluminum Association for designating aluminum finishes.
2. Natural Satin Finish: Provide fine, directional, medium satin polish (AA-M32); buff complying with AA-M20; and seal aluminum surfaces with clear, hard-coat wax.
3. Class I, Clear Anodic Finish: AA-M32C22A41 (Mechanical Finish: medium satin; Chemical Finish: etched, medium matte; Anodic Coating: Architectural Class I, clear coating 0.018 mm or thicker) complying with AAMA 611.
4. Class I, Color Anodic Finish: AA-M32C22A42/A44 (Mechanical Finish: medium satin; Chemical Finish: etched, medium matte; Anodic Coating: Architectural Class I, integrally colored or electrolytically deposited color coating 0.018 mm or thicker) complying with AAMA 611.

Factory-Applied Labels: Comply with UL 1598. Include recommended lamps and ballasts. Labels shall be located where they will be readily visible to service personnel, but not seen from normal viewing angles when lamps are in place.

1. Label shall include the following lamp and ballast characteristics:
   
a. "USES ONLY" and include specific lamp type.
b. Lamp tube configuration (twin, quad, triple), base type, and nominal wattage for compact fluorescent luminaires.
c. Start type (preheat, rapid start, instant start) compact fluorescent luminaires.
d. CCT and CRI for all luminaires.

2.3 FLUORESCENT BALLASTS AND LAMPS

A. Ballasts for Low-Temperature Environments:

1. Temperatures 0 Deg F (Minus 17 Deg C) and Higher: Electronic type rated for 0 deg F (minus 17 deg C) starting and operating temperature with indicated lamp types.
2. Temperatures Minus 20 Deg F (Minus 29 Deg C) and Higher: Electromagnetic type designed for use with indicated lamp types.

B. Ballast Characteristics:

1. Power Factor: 90 percent, minimum.
2. Sound Rating: Class A.
3. Total Harmonic Distortion Rating: Less than 10 percent.
6. Transient-Voltage Protection: Comply with IEEE C62.41.1 and IEEE C62.41.2, Category A or better.

C. Low-Temperature Lamp Capability: Rated for reliable starting and operation with ballast provided at temperatures 0 deg F (minus 18 deg C) and higher.

PART 3 - EXECUTION

3.1 LUMINAIRE INSTALLATION

A. Install lamps in each luminaire.

B. Fasten luminaire to indicated structural supports.

1. Use fastening methods and materials selected to resist seismic forces defined for the application and approved by manufacturer.

C. Adjust luminaires that require field adjustment or aiming.

3.2 CORROSION PREVENTION

A. Aluminum: Do not use in contact with earth or concrete. When in direct contact with a dissimilar metal, protect aluminum by insulating fittings or treatment.

B. Steel Conduits: Comply with Section 16130 "Electrical Boxes." In concrete foundations, wrap conduit with 0.010-inch- (0.254-mm-) thick, pipe-wrapping plastic tape applied with a 50 percent overlap.

END OF SECTION 16521
ADDED EXISTING PARKING SPACE AND ELECTRICAL GEAR, **CLARIFICATION ONLY.**
DELETED EXISTING STORM DRAIN CLEAN-OUT, ADDED NEW STORM DRAIN CLEAN-OUT, SHOWING STORM DRAIN PIPING AS NEW
ADDED ELEVATION OF FREE-STANDING WALL
SEE SHEET A5-1.1 FOR KEYNOTES

UCSB

FREE-STANDING WALL ELEVATION

REFERENCE SHEET NO: A2-1.1, A5-1.3
SCALE: 1/2" = 1'-0"

UCSB MATERIALS RESEARCH LABORATORY INFILL
BUILDING 615 UNIVERSITY OF CALIFORNIA, SANTA BARBARA

UCSB PROJECT NO. FM150347S
PROJECT NO. 13629
DATE: 04/08/2015
SHEET NO. AD1 - A4
NEW GUARDRAIL PROHIBITING ACCESS UNDER STAIR

GYPSUM BOARD ON FURRING CHANNEL AT BASE OF (E) COLUMN WHERE PEDESTAL WAS REMOVED

HANDRAIL EXTENSION, WELD TO (E) HANDRAIL AND SET IN EPOXY IN CONCRETE SLAB CORE PER AD1-A7

ADDED WEST ELEVATION OF VESTIBULE, ADDED KEYNOTES 235, 236 AND 237
SEE SHEET A5-1.1 FOR KEYNOTES NOT SHOWN HERE
REPLACED DETAIL 2/A7-1.3

MODIFIED GUARDRAIL

(U) GUARDRAIL TO REMAIN
CUT STEEL AND REMOVE (U) GUARDRAIL
GRIND SMOOTH ALL CUTS AND PAINT TO MATCH EXISTING TO LANDING ABOVE

- (E) 3/8" X 1-1/2" PLATE STEEL GUARDRAIL FRAME
- (E) 1/2" X 2" PLATE STEEL CAP
- (E) 1-1/2" S.S. HANDRAIL
- (E) 1/4" X 3/4" STL. FLAT BAR

- REMOVE (E) 1-1/2" S.S. HANDRAIL
- EXTEND 1-1/2" S.S. HANDRAIL PER PLAN

- (N) CONCRETE LANDING
- (E) CONC. STAIR
### SIGNAGE SCHEDULE

**FOR SIGN LOCATIONS, SEE THIS SHEET SIGNS TO MATCH EXISTING**

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<tr>
<th>SIGN LOCATION ROOM NO.</th>
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**NOTE:** SIGN TYPE "d" TO BE BRUSHED ALUMINUM WITH BLACK CHARACTERS

**REVISED SIGNAGE SCHEDULE**

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**UCSB MATERIALS RESEARCH LABORATORY INFILL**

**BUILDING 615 UNIVERSITY OF CALIFORNIA, SANTA BARBARA**

**DATE:** 04/08/2015

**REFERENCE SHEET NO.:** A7-1.3

**PROJECT NO.:** 13629

**SHEET NO.:** AD1 - A8
H.M. DOOR AND FRAME

5/8" TYPE 'X' GYP WALL BD

SEALANT AND BACKER ROD

METAL PANEL WALL SYSTEM WITH MANUFACTURER'S TRIM

WEATHER-RESISTANT SHEATHING PAPER

5/8" TYPE 'X' EXT GYP SHEATHING

H.M. DOOR JAMB

3" = 1'-0"

REPLACED DETAIL 15/AD-2.1

UcSB MATERIAls RESEARCH LABORATORY INFILL
BUILDING 615 UNIVERSITY OF CALIFORNIA, SANTA BARBARA
STOREFRONT JAMB

REPLACED DETAIL 12/AD-2.2

FURRED PEDESTAL BELOW, PAINT

EXISTING STUCCO, PAINT

(E) STEEL COLUMN

5/8" TYPE 'X' GYP BD

EXISTING STEEL STUD FRAMING

CENTER-GLAZED ALUMINUM STOREFRONT SYSTEM

1 1/2" = 1'-0"

UCSB MATERIALS RESEARCH LABORATORY INFILL
BUILDING 615 UNIVERSITY OF CALIFORNIA, SANTA BARBARA

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F: 858.233.0516
www.RNTarchitects.com
ADDED DETAIL 3/AD-2.2

SHEATHING
FLEXIBLE FLASHING BEHIND WEATHER-RESISTANT BUILDING PAPER
METAL PANEL WALL SYSTEM WITH MANUFACTURER'S TRIM
ALIGN BRAKE METAL TO MATCH LOUVER FINISH
1/2" SEALANT AND BACKER ROD
ANGLE CLIP FASTENED WITH #10 SMS @ 16" O.C.
INSECT SCREEN
METAL LOUVER
METAL FLASHING SET IN SEALANT, MATCH LOUVER FINISH
FLEXIBLE FLASHING LAPPED OVER WEATHER-RESISTANT BUILDING PAPER
GYP WALLBOARD

LOUVER HEAD/SILL 1 1/2" = 1'-0"