SECTION 092400 – PORTLAND CEMENT STUCCO @ LIGHTWELL

PART 1- GENERAL

1.01 SUMMARY

A. Section includes the removal and replacement of the exterior stucco wall systems at all elevations of the Lightwell.

B. Provide all labor, materials, equipment and all related items to furnish and install new exterior stucco system to an acceptable aesthetic and weather performance level as specified herein, as shown on the attached details and as required by the actual project conditions.

C. Extent of work area is as shown on attached sheets E-1 and P-1, and shall extend from the 3rd to the 6th floor levels in the Lightwell. Blending of the new stucco into the existing stucco above at the 6th floor is required as part of this Work.

D. Existing backup substrates to receive new exterior stucco system include poured in place concrete (PIP) structure, concrete masonry units (CMU), brick masonry, and steel stud/exterior sheathing at windows. Review and repair of these existing backup substrates, prior to the installation of the new water resistant barrier (WRB) and stucco, is included as part of this repair program/specification. The type and condition of the existing backup systems must be verified in the field. Modifications to the repair program may be required based on the condition of the backup materials.

E. Section includes removal and replacement of existing stucco system, including WRB's, sealant joints around windows and doors, flashings and trim accessories, and expansion/control joints materials. Exterior doors, windows and steel balcony grates are to be removed and stored for reinstallation after the WRB and new stucco systems are installed.

F. Work includes the preparation and application of an elastomeric coating onto all exterior surfaces of the new stucco material. The elastomeric coating shall be compatible with the new stucco, and with the new sealant material(s) installed at perimeter joint conditions.

G. All phases of the repair program must first be demonstrated in a trial repair area as described herein prior to full-scale implementation of the work.

H. Quality control field water testing shall be performed as specified herein.

1.02 REFERENCES

A. ASTM C 91 – Standard Specification for Masonry Cement

B. ASTM C 150 – Standard Specification for Portland Cement

C. ASTM C 847 – Standard Specification for Metal Lath

D. ASTM C 144/C897 – Aggregate for Job-Mixed Portland Cement-Based Plaster

E. ASTM C 926 – Application of Portland Cement-Based Plaster

F. ASTM C 1063 – Installation of Lathing and Furring to Receive Interior and Exterior Portland Cement-Based Plaster

G. ASTM C 1328 – Standard Specification for Plastic (Stucco) Cement

H. PCA (Portland Cement Association) – Plaster (Stucco) Manual

I. ICC-ES Acceptance Criteria for Weather-resistive Barriers (AC38)

J. Stucco Manufacturers Association (SMA) – Details and Technical Bulletins

K. AAMA 501.2 – Quality Assurance and Diagnostic Water Leakage Field Check of Installed Storefronts, Curtain Walls, and Sloped Glazing Systems

L. International Building Code – 2012 Edition

1.03 ASSEMBLY DESCRIPTION

A. Actual new Portland cement stucco system shall be comprised of a WRB, self-furring lath, casing and trim accessories, all required flashings and closures, control and expansion joints, scratch/brown coats, a finish coat, and

an elastomeric coating continuously applied over the finish coat. Minimum nominal thickness of new stucco to be 3/4 - 7/8 inch thick (or to match thickness of adjacent remaining stucco).

B. The stucco may be applied by hand tools or machine pumps but must have sufficient force to adhere to the lath.

C. Intent is to prevent water from entering the stucco system based on the installation of a sound new stucco system continuously covered with a new elastomeric coating. The WRB is included as part of the new stucco assembly to contain any minor water that may infiltrate the exterior barrier system created on the exterior-most surface of the new stucco. New flashings are to be incorporated at each floor line to collect and drain any minor water infiltration back to the exterior. All window and door openings are also required to be effectively flashed and sealed.

1.04 PERFORMANCE REQUIREMENTS

A. Water Infiltration

1. No water infiltration to the interior shall occur when tested per the AAMA 501.2 test standard. Water leakage is defined as the penetration of water, originating at the exterior, to any interior surface. The amount of water is immaterial, as is whether or not it is visible to building occupants, or if it would produce actual damage. This definition of water leakage governs over any other definition(s) that may appear in any documents referenced herein.
2. Water testing of fixed joints at flashings, control/expansion joints, and at window and door perimeters shall be tested at 1 minute per foot of joint length as noted in the test standard. Testing of the field of the stucco shall be performed at a water spray rate of 15 minutes for every 25 ft^2 of wall area. Testing shall be performed in two phases as described in items 1.06 and 3.10 of this specification.
3. Water test pressures shall be as required by the 501.2 test standard.

B. Water Resistant Barrier (WRB - Air & Water Barrier)

1. Provide fluid applied air and water barrier material that once cured forms a durable membrane to prevent air and water infiltration.
2. Cured membrane to pass ASTM E 331 water resistance test at a minimum of 6.24 psf differential air pressure, and AAMA 501.2 at a differential kinetic water spray pressure of 30 psi at the spray nozzle.
3. Air barrier assembly shall pass air leakage test requirements of ASTM E 2357 at a minimum of 1.57 psf.
4. Provide WRB membrane material with a minimum perm rating per ASTM E 96, Wet Cup, of 25 perms.

5. Comply with manufacturer's installation requirements regarding surface preparation of back-up substrates (concrete, CMU, brick masonry and glass mat sheathing), minimum/maximum application temperatures, sealing of openings and other penetrations, application means and methods and cure times.
6. Fluid applied material shall only be used if deemed appropriate for the intended use by the manufacturer.

C. Self-Furring Expanded Metal Lath

1. Provide dimpled self-furring steel lath conforming to the requirements of ASTM C 847 with a weight of 3.4 lbs/sq. yd.
2. Provide metal lath galvanized per the hot dipped method with a minimum coating thickness of G60 per ASTM A 653.
3. Lath installation shall comply with the recommendations of ASTM C 1063.

D. Metal Stucco System Accessories

The following accessory items may be required as part of the new stucco assemblies: weep screeds, casing and corner beads, control joints, two-piece expansion joints and metal flashings.

1. Provide manufacturers standard metal accessory shapes that have a minimum thickness of 26 gage, and that have dimensions and profiles as required to complete the new stucco system assembly as shown on the attached details.
2. Provide metal accessories galvanized per the hot dipped method with a minimum coating thickness of G60 per ASTM A 653.

E. Miscellaneous Stucco System Materials

1. Provide and utilize potable water that is free of foreign matter or substances that could damage or affect cure of stucco coats, or cause damage to lath, fasteners and/or other stucco system accessories.
2. Fasteners required for attaching metal lath and metal stucco accessories to substrates shall be corrosion resistant and comply with the requirements of ASTM C 954, ASTM C1002 and ASTM C 1063.

F. Exterior Sheathing

1. Provide minimum 5/8" thick glass mat sheathing that complies with all requirements of ASTM C 1177.
2. New sheathing shall be noncombustible as described and tested in accordance with ASTM E 136. Flame spread and smoke development ratings shall be 0/0 per testing in accordance with ASTM E 84.
3. Sheathing shall have a minimum weight of 2.5 lbs/sq. ft.

G. Stucco Materials for Scratch and Brown Coats

1. Provide Portland cement complying with ASTM C 150, Type I or II.
2. Masonry cement shall comply with ASTM C 91, Type N.

3. Plastic Cement shall comply with ASTM C 1328.
4. Lime shall comply with ASTM C 206, Type S, or ASTM C 207, Type S.
5. Provide sand that is sampled and tested per the requirements of ASTM C 144 and ASTM C 897. Sand for field mixes shall comply with ASTM C 926 and must be clean and free from deleterious amounts of loam, clay, silt soluble salts and organic material.
6. Utilize potable water that is clean and free from foreign material.

H. Stucco Scratch and Brown Coat Mixes

1. Ratios and mix designs shall comply with ASTM C 926 for applications indicated.
2. Portland Cement Mixes
   a. Scratch Coat: For cementitious material, mix 1 part Portland cement and 0 to ¾ parts lime. Use 2-1/2 to 4 parts aggregate per part of cementitious material.
   b. Brown Coat: For cementitious material, mix 1 part Portland cement and 0 to ¾ parts lime. Use 3 to 5 parts aggregate per part of cementitious material, but not less than volume of aggregate used in scratch coat.
3. Masonry Cement Mixes
   a. Scratch Coat: One part masonry cement and 2-1/2 to 4 parts aggregate.
   b. Brown Coat: One part masonry cement and 3 to 5 parts aggregate, but not less than volume of aggregate used in scratch coat.
4. Portland and Masonry Cement Mixes
   a. Scratch Coat: For cementitious material, mix 1 part Portland cement and 1 part masonry cement. Use 2-1/2 to 4 parts aggregate per part of cementitious material.
   b. Brown Coat: For cementitious material, mix 1 part Portland cement and 1 part masonry cement. Use 3 to 5 parts aggregate per part of cementitious material, but not less than aggregate used in scratch coat.

I. Job-Mixed Finish-Coat Mixes

1. Portland Cement Mix: For cementitious materials, mix 1 part Portland cement and ¾ to 1-1/2 parts lime. Use 1-1/2 to 3 parts aggregate per part of cementitious material.
2. Masonry Cement Mix: One part masonry cement and 1-1/2 to 3 parts aggregate.
3. Portland and Masonry Cement Mix: For cementitious materials, mix 1 part Portland cement and 1 masonry cement. Use 1-1/2 to 3 parts aggregate per part of cementitious material.

J. Sealants

1. All new sealants are to be silicone.
2. No adhesive or cohesive failures will be accepted.
3. Exposed sealant will not discolor, crack, bubble, sag or wrinkle.

4. Sealants, primers and/or cleaners shall be compatible with, and not stain adjacent materials.
5. Sealants to withstand movements up to the limits prescribed by manufacturers.
6. Sealants to only be used if deemed appropriate for the intended application by the manufacturer, and if the manufacturer's adhesion tests yield favorable results.

K. Silicone Elastomeric Coating

1. Provide one-component water-based silicone elastomeric coating for stucco exhibiting successful test results when tested per ASTM D 6904 for resistance to wind driven rain, and per ASTM C 1305 for bridging of cracks.
2. Elastomeric coating shall perform within an in-service temperature range between -40 and 180 degrees F.
3. Comply with manufacturer's installation requirements for surface preparation, minimum/maximum application temperatures, and application methods and cure times required to achieve minimum dry film thickness. Provide elastomeric coating that is vapor permeable with a minimum perm rating of 40.0.
4. Color shall be based on manufacturer's standard colors as selected by the Owner.

L. Building Expansion Joint Assemblies

1. Provide new elastomeric pleated-seal expansion joint assemblies, with back seal and fire barrier, to match shape and configuration of existing assemblies.
2. Elastomeric pleated material shall be santoprene with a minimum thickness of 1/8" and a Shore A durometer of 70. Maximum bellows depth shall be 5/8". Color shall be grey.
3. Surface mounted aluminum frame shall be alloy 6063-T6 per ASTM B 221. Aluminum to be Kynar painted in color to match the existing.
4. Back seal shall be constructed of 40 mil thick integral PVC.
5. Fire barrier shall meet or exceed fire rating of adjacent construction, and meet requirements of Underwriters Laboratories UL 2079.
6. Fasteners and other accessories shall be as required by the manufacturer's installation instructions to achieve a complete installation.

1.05 SUBMITTALS

A. Provide all product data sheets, evaluation reports, details, and warranty information that pertain to the materials required for this repair program.

B. Submit a list of all materials to be utilized in the repairs, called out by the manufacturer's name and product number. Submit written verification from

the material manufacturers stating that the proposed products are acceptable for the intended use, are compatible with the existing substrates, and will not stain existing substrates.

C. Provide technical and material safety data sheets for all different materials, including WRB, metal lath, stucco accessories, stucco cement and aggregate materials, sealants and elastomeric coating.

D. Cleaning and priming procedures required to achieve proper adhesion of new WRB material applied to the concrete structure, CMU, brick masonry and exterior sheathing materials must be field verified in the trial repair area, prior to full-scale implementation of the Work on the remainder of the lightwell area. Once acceptable results are achieved, submit manufacturers written summaries of field-testing results, with cleaning and priming requirements clearly stated.

E. Submit safety procedures required for contractor's personnel during the installation of the materials required for this repair.

F. Provide a detailed list of all quality control procedures to be utilized in the field to ensure the quality of repair work. Submit field logs as requested. Logs to include date, type of quality control, and findings/results/modifications.

G. Submit color chart and cured samples for all proposed stucco and sealant products, and for the elastomeric coating. Colors will be selected by the Owner from manufacturer's standard colors.

H. Submit samples of the finish stucco coat of an adequate size as required to represent color the texture to be utilized on the project and produced using the same techniques and tools required to complete the project. No sample shall be less than 12" by 12".

I. Retain approved samples at the construction site throughout the application process.

1.06 TRIAL REPAIR AREA

A. Prior to full-scale implementation of the repair program, the Contractor shall demonstrate all phases of the Work in a trial area. The location of the trial area is shown on attached sheets E-1 and P-1. All aspects of the repair work shall be demonstrated in the trial area, including removal of the existing

stucco and accessory materials, removal (and replacement) of existing doors, windows and metal grate balconies, preparation of existing concrete, CMU, brick masonry and exterior sheathing to receive new WRB, installation of the new WRB material, flashing of all window/door openings, installation of all components of the new stucco system, application of new sealant at perimeter joint conditions, and installation of the new elastomeric coating.

B. Provide a minimum two-week advance notice to the Owner and their representatives prior to commencing remedial Work in the trial area. Trial area work will be subject to observation by the Owner and/or their representatives throughout the remedial process.

C. In conjunction with the WRB and sealant manufacturers' field representatives, perform field adhesion pull testing for the WRB and all different sealants and substrates prior to beginning actual trial area repair work. Verify means and methods required for cleaning, priming and installation of new sealants. Employ methods/procedures in the trial area as determined based on this initial adhesion testing. Once successful results are achieved in the trial area, the Contractor shall submit written recommendations from the WRB and sealant manufacturers confirming the requirements for cleaning, priming and application of the new WRB and sealant materials.

D. Confer with the field representative of the elastomeric coating to confirm stucco cleaning requirements and application requirements for their product. Employ the same methods in the trial areas as intended for the general repairs. Perform tests as recommended by the coating manufacturer to confirm compatibility with the new stucco substrate and sealants. Perform tests as recommended by the elastomeric coating manufacturer to confirm proper installation and adhesion of the new elastomeric material. Once successful results are achieved in the trial area, the Contractor shall submit written recommendations from the elastomeric coating manufacturer confirming compatibility, and outlining proper surface preparation/application of the elastomeric material.

E. All different conditions remediated in the trial area should be documented relative to the details shown in this repair specification. The Owner and/or their representatives will review any deviations between the actual as-built conditions and that detailed herein. Revisions and/or adjustments will be made to the repair program as necessary.

F. All repairs will be subject to review by the Owner and/or their representatives for aesthetic acceptability. All repairs found to be unacceptable shall be reworked as required until acceptable installations are achieved at no additional cost to the Owner.

G. The Contractor shall perform field water testing of the entire trial repair area under the direction of the Owner and/or their representatives. The testing shall be conducted in substantial conformance with AAMA test standard 501.2, except as modified and described herein. The Contractor shall provide the scaffolding, hoses, pumps and workmen required to conduct the

testing. No water leakage shall occur, with the definition of water leakage as defined in section 1.04.A of this specification.

Testing of the new repairs shall be performed in two phases. The first phase of testing should be performed once all the lath and accessories have been installed and sealed, but prior to the stucco being installed. This testing will verify the effectiveness of the seals at the penetrations through the WRB. The test area should be approximately 5' x 5'. Covering of areas adjacent to the test area will be required to eliminate the potential for extraneous water leakage into the building through any incomplete areas. The second phase of the testing will be water testing of the entire trial area once all required repairs are fully complete.

For all test phases, the nozzle and pressure requirements from the 501.2 test standard should be utilized. However, for testing of the field of the stucco areas, the water spray should be systematically applied to the wall area for a minimum of 15 minutes for each 25 square foot of area (5' x 5' area). For testing of the new sealant at perimeter joints, flashings and control joints, the AAMA 501.2 test duration of spraying each fixed joint for one minute per each foot of joint length should be followed.

If leaks occur, rework repairs, and re-test until successful results are achieved. All revisions to the repair program are subject to review and acceptance by the Owner and/or their representatives. Any revisions required based on the results in the trial area will be incorporated into the full-scale repair program.

1.07 QUALITY ASSURANCE

A. Stucco contractor to be a company specializing in performing the Work of this Section with a minimum of 10 years' experience.

B. All component materials shall be SMA approved and shall be distributed by authorized dealers.

1.08 DELIVERY, STORAGE, AND HANDLING

A. Deliver all materials to the construction site in their original, unopened packaging with labels intact. Any bent or otherwise damaged materials shall be replaced.

B Inspect the materials upon delivery to assure that specified products have been received. Report defects or discrepancies to the responsible party according to the construction documents; do not use reported material for application.

C. Store all products per manufacturers' recommendations. Store materials in a cool, dry location, away from direct contact with the ground and/or concrete, out of direct sunlight, and protected from weather and other damage.

D. The Owner will provide a limited on site storage area. Store materials only in areas designated by the Owner.

E. Use sealants, cleaning agents, primers and elastomeric coatings only within shelf life established by the manufacturers.

1.09 PROJECT CONDITIONS

A. Follow product manufacturer's recommendations for environmental conditions and surface preparation.

B. Before, during and following the application of the Portland cement stucco system, sealant and elastomeric coatings the ambient and surface temperatures must remain above 40 degrees F for a minimum period of 24 hours. Protect stucco from uneven and excessive evaporation, especially during hot, dry and/or windy weather.

C. Prior to installation, inspect the wall for surface contamination or other defects that may adversely affect the performance of the materials, and shall be free of residual moisture. Do not apply the Portland cement stucco to substrates whose temperature are less than 40 degrees F or contain frost or ice.

D. Protect applied material from deleterious effects of inclement weather until cured or dry.

1.10 SCHEDULING, SEQUENCING AND COORDINATION

A. All scheduling and sequencing must be approved and coordinated with the Owner and/or their representative. The schedule will be based on weekly projections of the work, but will be modified as needed on a daily basis to maintain the efficient use of the facility. Comply with the Owner's requirements regarding movement of personnel and materials through and around the facility to minimize disruption of daily building operations.

B. Attend weekly coordination meetings and all other meetings (in-person or virtual) deemed necessary by the Owner or their representatives.

C. Provide sufficient manpower and proper supervision to allow for stucco installation that is uniform and consistent, that complies with all installation and material requirements in the documents referenced herein.

D. Provide protection for people and property from injury and/or damage during execution of the work. Protection to be in accordance with applicable building codes.

1.11. WARRANTY

A. Provide written warranty agreeing to repair or replace defective materials and workmanship during warranty period. Defective materials and workmanship include, but are not limited to:

1. Abnormal deterioration, aging or weathering.
2. Water leakage as defined herein.
3. Sealant loss of adhesion, loss of cohesion, cracking, discoloration, bubbling, sagging or wrinkling.
4. Failure of sealant to cure.
5. Staining of a substrate by sealants, cleaners, primers or elastomeric coating.
6. Failure of elastomeric coating to repel water in an acceptable manner to prevent water from entering the stucco, and possibly leaking to the interior of the building.

B. Warranty does not include damage caused by vandalism, or natural conditions exceeding the performance requirements. Warranty and its enforcement shall not deprive Owner of other action, right or remedy.

C. General labor and material warranty for entire new stucco system shall be 5 years from date of acceptance of installed Work. System warranty includes materials and labor.

D. Sealants shall carry a minimum 20-year project specific weatherization performance warranty.

E. Elastomeric coating for the stucco shall carry a minimum 10-year material replacement warranty.

PART 2 – PRODUCTS

2.01 WATER RESISTANT BARRIER (WRB)

A. Basis of Design. Provide ProSoCo "R Guard – Spray Wrap MVP" for air and water infiltration protection at concrete structure, backup CMU, masonry and exterior sheathing assemblies. Provide manufacturer's accessory products, as required, to seal penetrations and joints, flash window and door openings, allow for movements at control and expansion joints, and transition areas at flashings and other openings.

B. Additional comparable WRB manufacturers/products may be submitted for review and approval, subject to the performance requirements denoted in item 1.04.B of this specification.

2.02 SELF-FURRING EXPANDED METAL LATH

A. Basis of Design. Provide ClarkDietrich "Dimple Self Furring Lath" for lath backer at all different back-up substrates, including concrete structure, CMU, masonry and exterior sheathing assemblies.

B. Additional comparable self-furring lath materials may be submitted for review and approval, subject to the performance requirements denoted in 1.04.C of this specification.

2.03 STUCCO ACCESSORIES

A. Basis of Design. Provide the following ClarkDietrich stucco accessories as shown on drawings and/or as needed to provide a complete new stucco wall assembly:

1. FHA-7 Weep Screed
2. #1A Expanded Corner Bead
3. #66X Casing Bead
4. #15 Control Joint
5. #40 Expansion Joint
6. Flashing

B. Additional comparable accessory materials may be submitted for review and approval, subject to the performance requirements denoted in item 1.04.D of this specification.

2.04 FASTENERS

A. Basis of Design. Contractor to procure and select fasteners for each of the different backup materials (concrete structure, CMU, masonry and sheathing/studs) that comply with the performance requirements denoted in item 1.04.E of this specification.

2.05 EXTERIOR SHEATHING

A. Basis of Design. Provide Georgia-Pacific "DensGlass Sheathing" for replacement of exterior sheathing at all metal stud back-up walls.

B. Additional comparable exterior sheathing products accessory materials may be submitted for review and approval, subject to the performance requirements denoted in item 1.04.F of this specification.

2.06 STUCCO SCRATCH AND BROWN COATS

A. Basis of Design. Provide Spec Mix "Fiber Base Coat Preblended Stucco" for stucco scratch and brown coats.

B. Additional comparable scratch and brown coat mixes may be submitted for review and approval, subject to the performance requirements denoted in items 1.04.G and H of this specification.

2.07 STUCCO FINISH COAT

A. Basis of Design. Provide Sakrete stucco "Surface Bonding Cement" for stucco finish coat.

B. Additional comparable finish coat mixes may be submitted for review and approval, subject to the performance requirements denoted in item 1.04.I of this specification.

2.08 SEALANTS

A. Basis of Design. Provide Dowsil "790 Silicone Building Sealant" for resealing all joints as shown on the details including but not limited to joints at window and door perimeters, at flashing at floor lines, and at control joints within the new stucco system.

B. Additional comparable silicone sealant materials may be submitted for review and approval, subject to the performance requirements denoted in item 1.04.J of this specification.

2.09 SILICONE ELASTOMERIC COATING

A. Basis of Design. Provide Dow Corning "AllGuard Silicone Elastomeric Coating" for coating all new stucco areas.

B. Additional comparable elastomeric coatings may be submitted for review and approval, subject to the performance requirements denoted in item 1.04.K of this specification.

2.10 BUILDING EXPANSION JOINT ASSEMBLY

A. Basis of Design. Basis of Design. Provide Inprocorp "Jointmaster 620 Series" expansion joint assemblies for all different expansion joint configurations on the building.

B. Additional comparable expansion joint assemblies may be submitted for review and approval, subject to the performance requirements denoted in item1.04. L of this specification.

PART 3 - EXECUTION

3.01 GENERAL COMMENTS

A. Provide labor, material, equipment and supervision necessary to complete the Work of this Section.

B. The Contractor is responsible for verifying all existing project conditions, including dimensions, quantities, and compatibilities of materials.

C. Examine all existing substrates, adjoining construction, and the conditions under which the Work is to be installed. Do not proceed with the Work until all conditions detrimental to the proper and timely completion have been corrected.

D. Protect all Work and materials, both new and existing, from damage. Report any damage to the building and/or repairs to the Owner. All damage caused by the Contractor shall be repaired at no cost, and to the Owners satisfaction.

E. Report to the Owner and/or their representatives all items found during the Work that could adversely affect the performance of the new exterior stucco wall system and the adjacent materials.

F. Provide equipment necessary to complete all Work. This includes, but is not limited to, ladders, scaffolds, drill motors, hand tools, safety equipment and all other related items. All equipment and its use must be in compliance with all local, state and federal codes and guidelines.

G. The Contractor shall notify the Owner and/or their representatives of their electrical requirements a minimum of three weeks prior to the start of the Work. The Owner will supply the agreed to number of electrical outlets.

3.02 PREPARATION OF WALLS TO RECEIVE NEW STUCCO SYSTEM

A. Remove all existing sealants, stucco and stucco accessories. Remove these materials from the project site and discard using means, methods and locations that comply with all local code and environmental requirements.

B. Carefully remove all existing windows, doors and metal balcony grating, and protect and store these materials off site. Reinstall these items as part of the new stucco wall installation.

C. At concrete and masonry areas, remove existing WRB by power washing, bead blasting or other appropriate methods. Once removed, inspect concrete, CMU's, brick masonry and mortar joints for holes and or cracks. Repair all deficiencies as required to receive new WRB material.

D. At stud/exterior sheathing areas, remove and discard existing exterior sheathing that is coated with WRB. Inspect remaining studs for damage due to corrosion or other means. Replace all studs that are found to be unacceptably damaged. Once all damaged is repaired, install new exterior glass mat sheathing.

E. All existing back-up walls must be sound, secure and suitable for receiving new WRB and stucco materials.

3.03 WATER RESISTANT BARRIER INSTALLATION

A. Inspect and prepare back-up walls as required by the WRB manufacturer. Seal joints, cracks, holes, transitions and penetrations in the back-up materials using products that are recommended by the manufacturer of the WRB system.

B. Flash window and door openings using products recommended by the WRB manufacturer. Install all flashings and/or closure materials as shown on details which must be installed prior to the WRB. Install all flashing so that water does not accumulate but is easily drained back to the exterior. Seal all fastener penetrations and provide end dams where required.

C. Install fluid applied WRB material using techniques recommended by the manufacturer. Comply with all manufacturer requirements, including application temperature and cure times, application and final cured thicknesses, overlaps at flashings and closures, etc.

D. Overlap WRB over flashings in a shingle-like fashion. Reverse shingling is not allowed.

E. Completed WRB installation must provide a continuous backup system to resist air and water infiltration into the finished building.

3.04 METAL LATH, ACCESORY AND FLASHING INSTALLATION

A. Install lath per the manufacturer's requirements, the requirements of ASTM C 1063, or as required herein.

B. Attach lath as required by code, but not less than 7" on center along framing supports. At steel studs, provide minimum of (3) full thread engagement into studs. All fasteners to be corrosion resistant.

C. Seal all lath fastener penetrations through WRB using materials recommended by the WRB manufacturer. Fastener sealing will likely require a combination of sealants installed over the fastener heads followed by an additional coating of fluid applied WRB material. Effective sealing of all fastener penetrations is critical to preventing water infiltration into the building.

D. Lath shall lap the flanges of accessories by more than 50%.

E. Provide consistent lath material on the entire project; do not mix lath products.

F. Casing beads, flashings and control/expansion joints shall be installed at the locations shown on drawings, but not less than at the spacing requirements listed in the code and industry standards referenced herein.

G. All fastener penetrations through WRB for attachment of flashing, casing beads, control and expansion joints, and any other metal accessories shall be effectively sealed using material recommended by the WRB manufacturer. Effective sealing of fastener penetrations will be critical to preventing water infiltration into the building.

H. Splice joints in flashings and other accessory materials must be effectively sealed to resist water infiltration. Sealant used at splice joints shall be silicone so it is compatible with elastomeric coating material.

3.05 STUCCO SCRATCH AND BROWN COAT INSTALLATION

A. Apply stucco per requirements of ASTM C 926 using hand troweling or machine spraying.

B. Scratch coat to be applied to a nominal thickness of 3/8", followed by the brown coat nominal thickness of 3/8". Allow scratch coat to cure 48 hours, or until sufficiently rigid to accept the brown coat. Nominal thickness of entire base coat to be ¾".

C. Scratch coat shall substantially cover the lath and be applied with sufficient pressure to encase the lath in cement. Score or scratch only in a horizontal pattern.

D. Apply brown coat to fill and complete base coat assembly. Rod installation to a flat plane. Do not apply to frozen or soft scratch coat.

E. Provide sufficient moisture by fog or moist curing to permit proper hydration of the cementitious materials in both the scratch and brown coats. Refer to SMA curing guidelines applicable to the specific climate and project conditions.

3.06 STUCCO FINISH COAT INSTALLATION

A. Mix and apply finish coat per manufacturer's product data and installation instructions.

B. Confirm that basecoat is properly cured and free from contaminates prior to installing finish coat.

C. Avoid application to excessively hot walls. Confirm temperature requirements per SMA guidelines for the actual project and climatic conditions.

D. Verify and match the color and texture of the approved mock-up. Avoid visual imperfections, as well as scaffold lines and cold joints.

E. Provide fog coat or other moisture methods to insure color blend, and effective cure without surface cracking.

F. Do not deviate more than +/-1/4" in 10' from a true plane in finished plaster surfaces, as measured by a 10' straightedge placed on the surface.

G. Thickness of finish coat shall be 1/8", with overall thickness of new stucco wall assembly to be 7/8" (¾" scratch/brown and 1/8" finish coat).

3.07 SEALANT INSTALLATION

A. Clean and prime (if required by field adhesion testing) all substrates where new sealant(s) must adhere. Substrate surfaces must be clean, dry and dust free prior to application of new sealants.

B. Install bond breaker and/or backer rod to provide properly configured new joints, and to prevent 3-sided adhesion.

C. Tool all sealants after application to achieve proper wetting of substrates and thus acceptable adhesion. Water, soap or other materials should not be utilized during this initial tooling operation.

3.08 BUILDING EXPANSION JOINT

A. Review and prepare stucco materials at expansion joints (EJ) to receive new expansion joint assemblies.

B. Install new EJ materials per manufacturer recommendations to allow for differential movement.

C. Fastener penetrations, splice joints and termination conditions of shall be installed and sealed to provide long term protection against air and water infiltration.

3.09 ELASTOMERIC COATING APPLICATION

A. Ensure that stucco is fully cured prior to application of elastomeric coating material.

B. Stucco must be clean, dry and free from dust or other debris prior to application.

C. Follow all manufacturer requirements regarding application methods, minimum thicknesses (wet and dry), and cure times.

D. Apply elastomeric so that it adheres to the new sealants at perimeter conditions and provides a monolithic coating to resist water infiltration.

3.10 FIELD QUALITY CONTROL

A. In addition to the trail repair area, the Contractor shall provide personnel and equipment to perform water tests at three different areas of the lightwell. Each test area shall be a minimum of 15 feet wide and one floor high, with the locations selected by the Owner and/or their representatives. Each test area shall be tested in two phases similar to the trial repair area. The test requirements are the same as the testing for the trial repair area (see section 1.06.H). The tests shall be performed at the 25, 50 and 75% completion points of the Work.

   The Contractor is responsible for performing three successful water tests as noted above, plus any retests required because of failures. The Contractor is also responsible for all fees and expenses incurred by the Owner and/or their representatives while observing the rework and retesting of any areas that fail the initial quality control water tests.

B. Verify that new seals have properly cured and have proper adhesion to adjacent substrates using methods recommended by the sealant manufacturer, or using destructive test procedures as outlined in ASTM test standard C 1521. Perform number of tests as required by the sealant manufacturer, but not less than two pull tests per week for each different sealant in contact with each different substrate. Promptly replace any sealant that fails to cure or has unacceptable adhesion. Record the results of all adhesion tests, including the reason(s) for any failures and the means/methods/materials used to repair the failures. Submit a copy of the field-testing log to the Owner and/or their representatives for information and record. Note that all repair methods and materials must comply with all requirements of this specification.

C. Provide checks of the new elastomeric coating to confirm proper cure and proper adhesion to adjacent substrates using methods recommended by the elastomeric manufacturer. Perform number of tests as required by the elastomeric manufacturer, but not less than two tests per week. Promptly

replace any coatings that fail to cure or has unacceptable adhesion. Record test results as noted in item B above.

3.11 PROTECTION

A. Protect applied material from inclement weather until dry and prevent it from freezing for a minimum of 24-hours after set and/or until dry. Refer to manufacturer's product data sheets for additional requirements.

B. Protect persons within and around the work areas from injury, and from exposure to materials (hazardous and/or non-hazardous) that could cause distress. Install temporary barriers and overhead protection as arranged with the Owner to provide the required protections, and to restrict access to Work in progress. Remove and discard temporary protections once Work is complete.

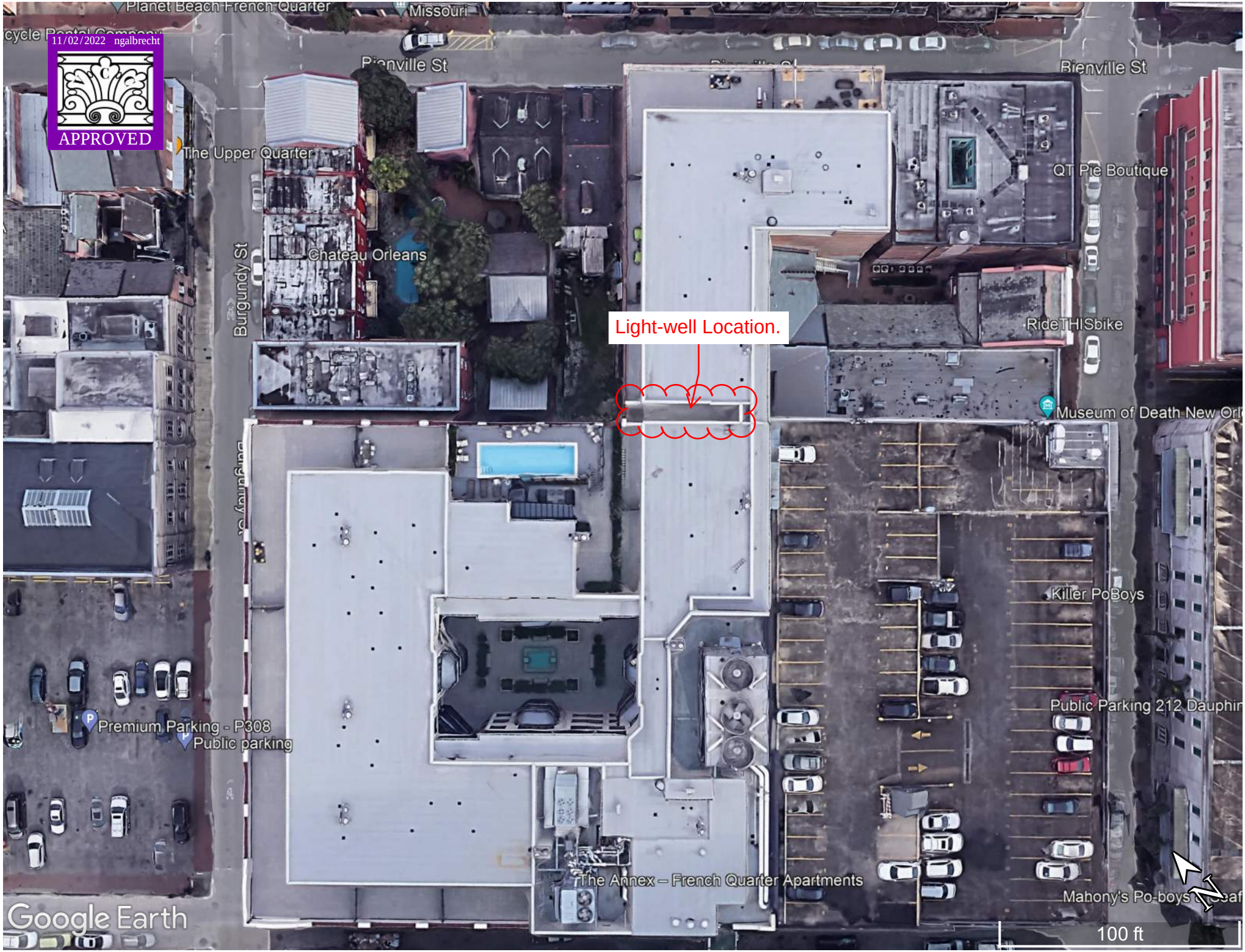
C. Protect surfaces near the Work of this section from damage, disfiguration, and overspray. Mask off all dissimilar materials. Remove all excess new sealant, stucco materials and/or elastomeric coating from building surfaces. Carefully remove all temporary protection once Work is complete.

D. Remove construction debris from the site at the end of each day. Properly dispose of all debris. Leave work areas in a neat and clean condition at the end of each day.

E. Protect all materials at the building that are not part of the current Work from damage by personnel, equipment or materials. The Contractor shall be responsible for all damage caused by his personnel and/or equipment.

F. Secure materials, tools, ladders, staging and other equipment against tampering when not in use.

END OF SECTION 092400


11/02/2022 ngalbrecht
APPROVED
Planet Beach French Quarter
Missouri
Bienville St
Bienville St
The Upper Quarter
QT Pie Boutique
Chateau Orleans
Burgundy St
Light-well Location.
RideTHISbike
Museum of Death New Orl
Killer PoBoys
Public Parking 212 Dauphin
Premium Parking - P308
Public parking
The Annex – French Quarter Apartments
Mahony's Po-boys
Google Earth
100 ft

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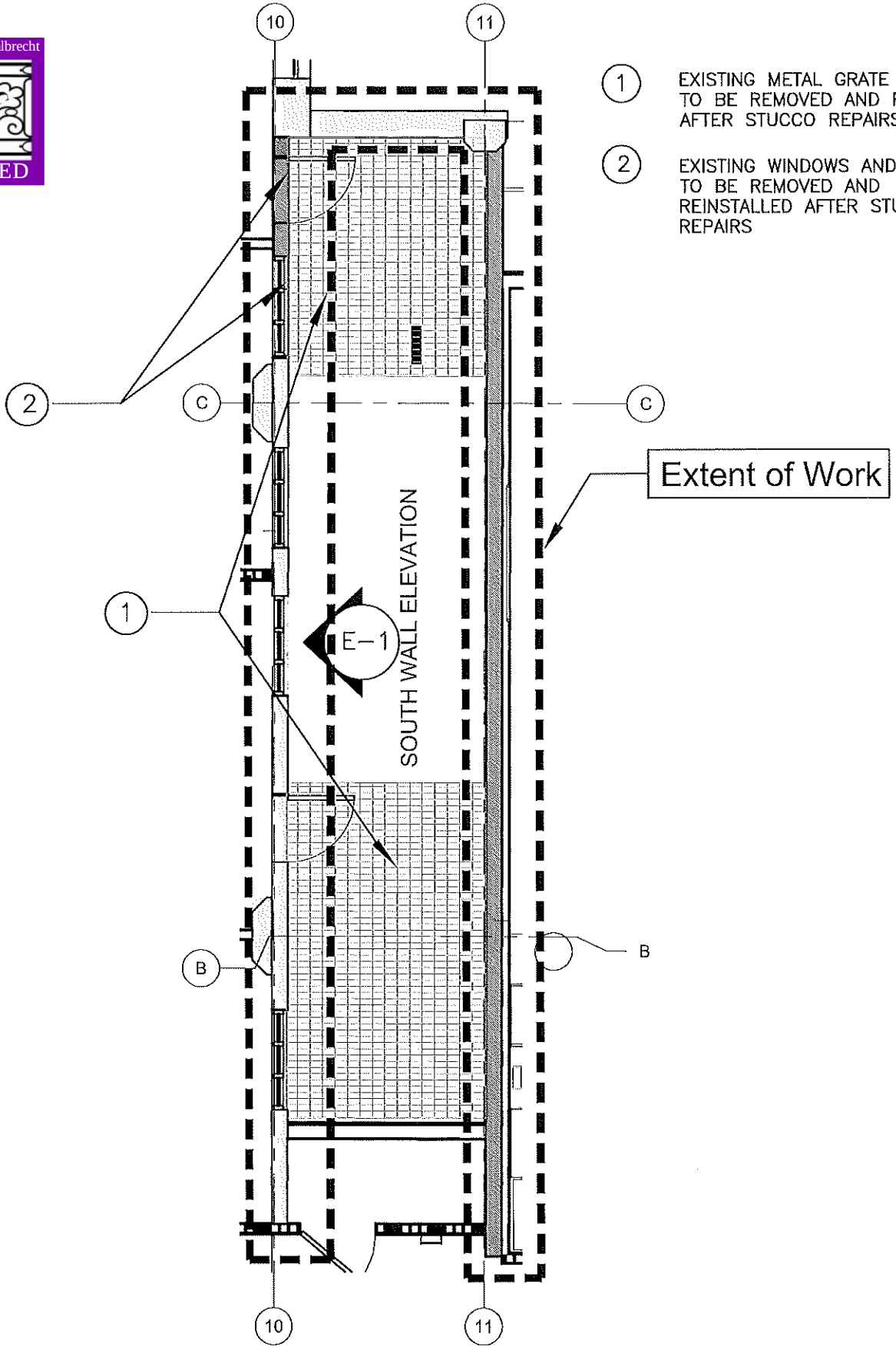
APPROVED



1 EXISTING METAL GRATE BALCONIES TO BE REMOVED AND REINSTALLED AFTER STUCCO REPAIRS

2 EXISTING WINDOWS AND DOORS TO BE REMOVED AND REINSTALLED AFTER STUCCO REPAIRS

LIGHTWELL PLAN

PORTLAND CEMENT STUCCO @ LIGHTWELL	939 IBERVILLE FRENCH QUARTER APARTMENTS	P-1 N.T.S.

PORTLAND CEMENT STUCCO @ LIGHTWELL

939 IBERVILLE
FRENCH QUARTER
APARTMENTS

E-1
SOUTH ELEVATIONS
AT LIGHT WELL

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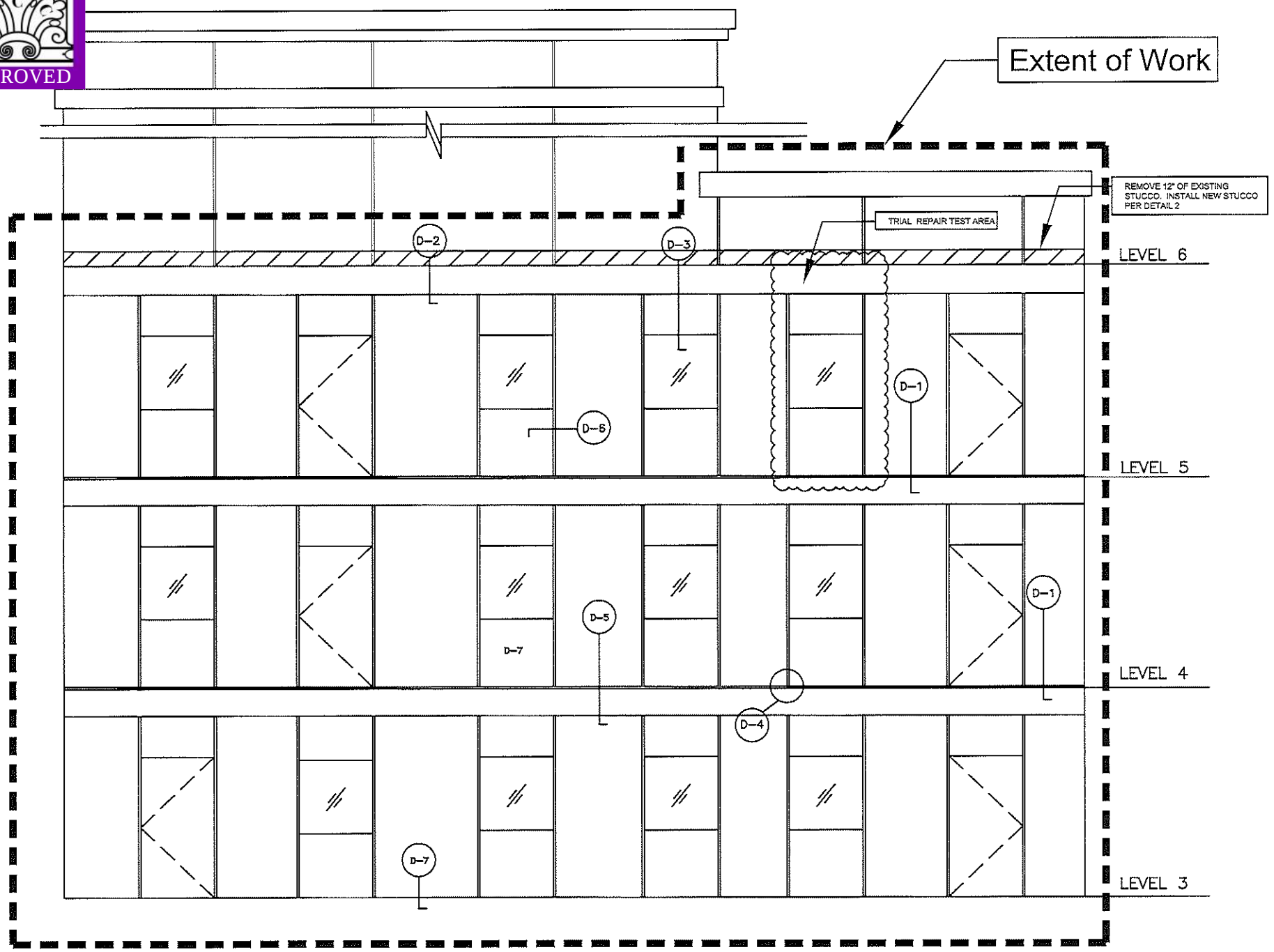
APPROVED

NOT TO SCALE (N.T.S.)



SEE SHEET P-1 FOR EXTENT OF WORK
ON NORTH AND EAST WALLS

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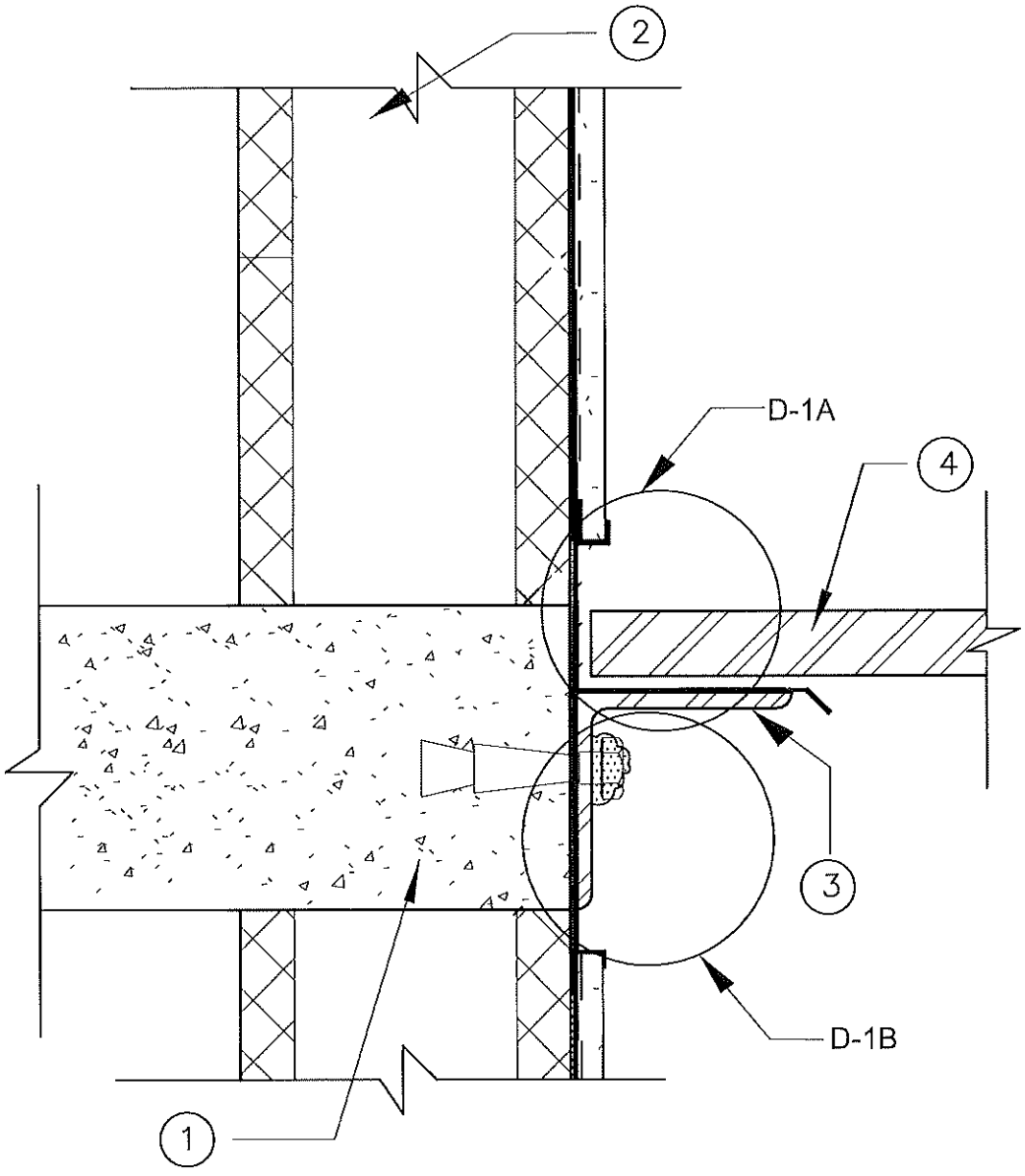
APPROVED

1. EXISTING CONCRETE SLAB
2. EXISTING CMU
3. EXISTING GALVANIZED BALCONY SUPPORT ANGLE
4. EXISTING GALVANIZED BALCONY GRATE

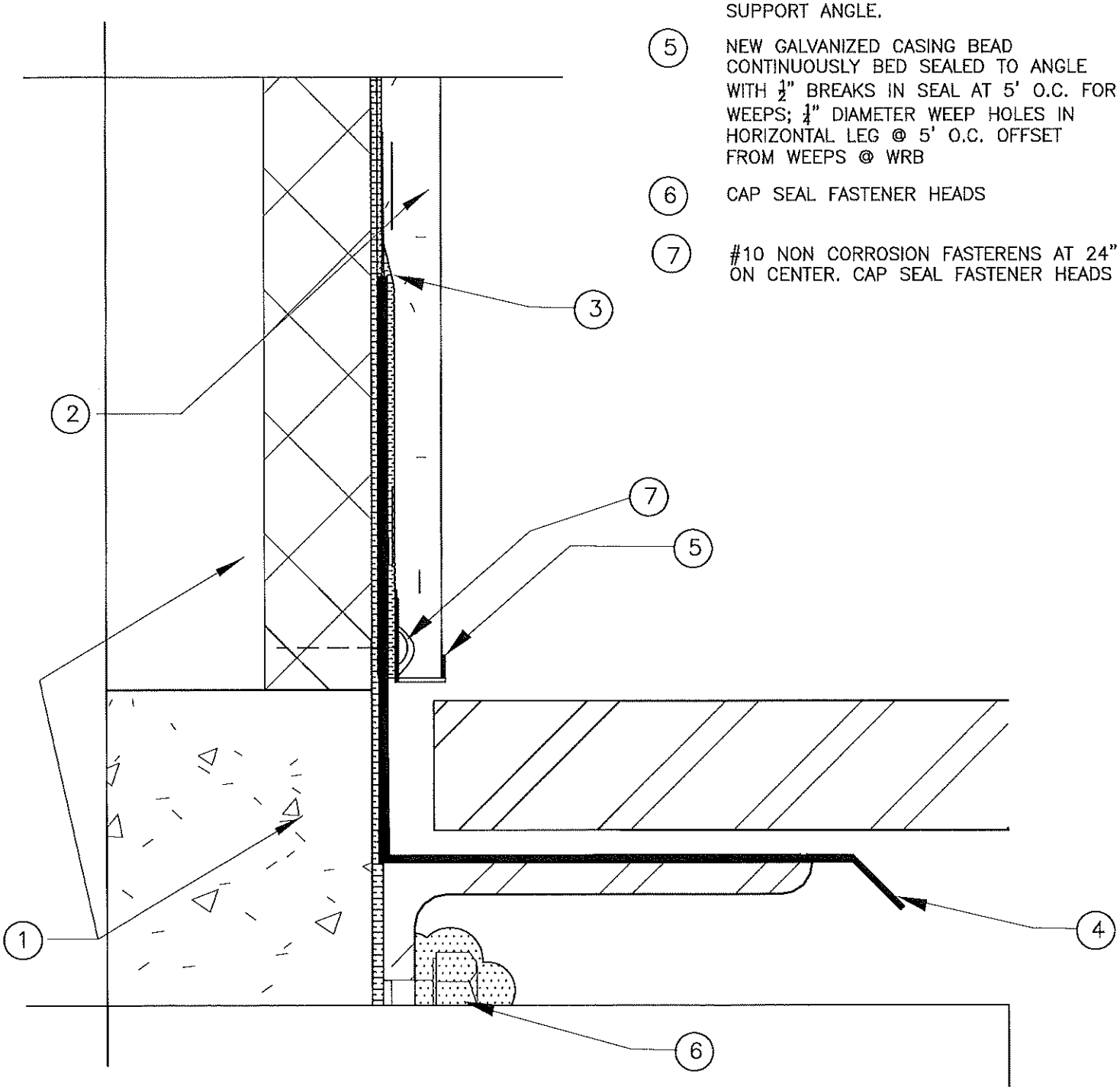


PORTLAND CEMENT STUCCO @ LIGHTWELL	939 IBERVILLE FRENCH QUARTER APARTMENTS	D-1 N.T.S.

11/02/2022 ngalbrecht

APPROVED

1. EXISTING SLAB AND CMU
2. NEW STUCCO OVER GALVANIZED METAL LATH; ALL LATH FASTENER PENETRATIONS THROUGH WRB TO BE FULLY SEALED
3. WRB BEHIND AND SHINGLED OVER METAL FLASHING
4. NEW GALVANIZED METAL FLASHING WITH DRIP EDGE. FULLY BED SEALED TO SUPPORT ANGLE.
5. NEW GALVANIZED CASING BEAD CONTINUOUSLY BED SEALED TO ANGLE WITH $\frac{1}{2}$" BREAKS IN SEAL AT 5' O.C. FOR WEEPS; $\frac{1}{4}$" DIAMETER WEEP HOLES IN HORIZONTAL LEG @ 5' O.C. OFFSET FROM WEEPS @ WRB
6. CAP SEAL FASTENER HEADS
7. #10 NON CORROSION FASTERENS AT 24" ON CENTER. CAP SEAL FASTENER HEADS

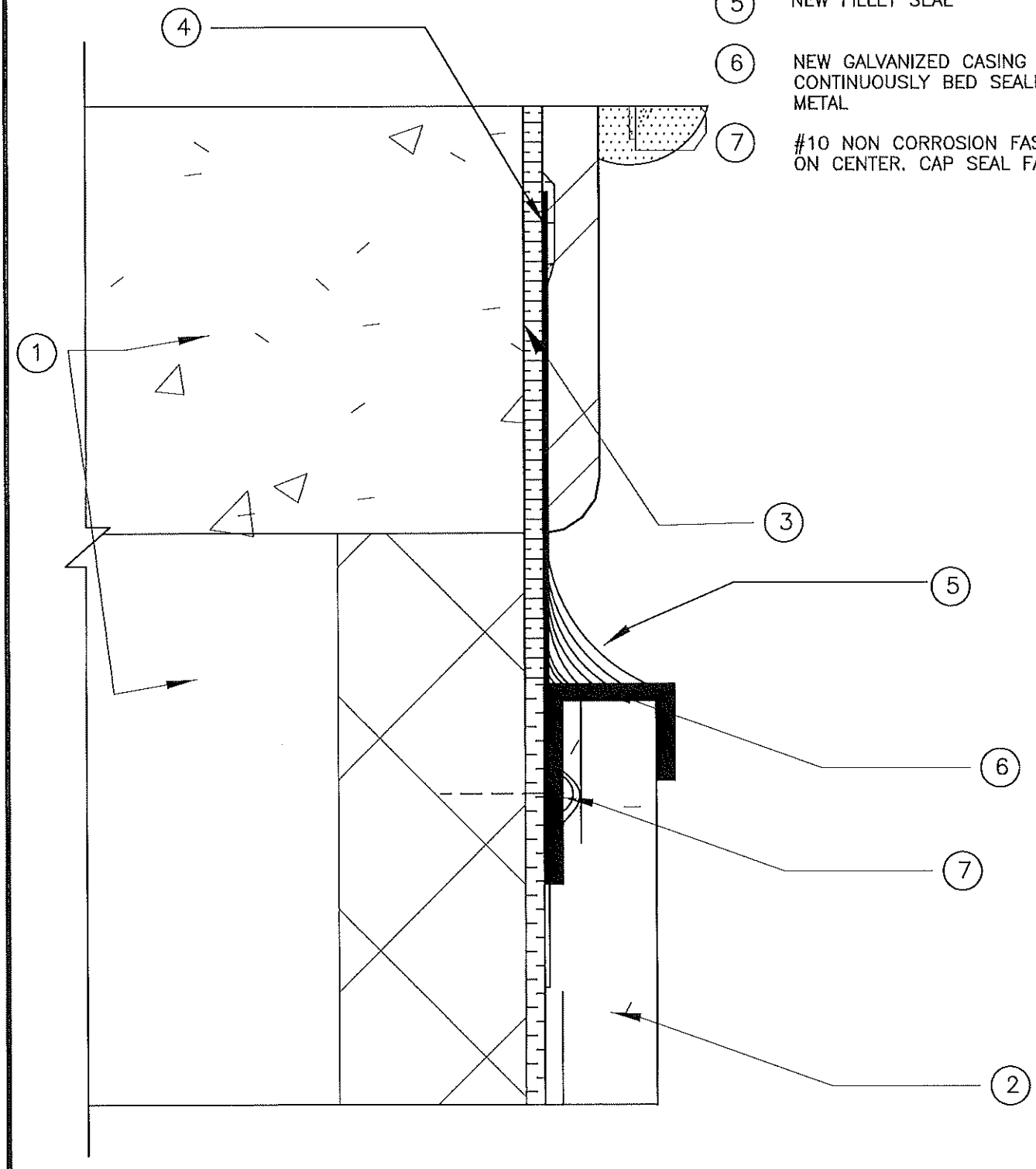


PORTLAND CEMENT STUCCO @ LIGHTWELL	939 IBERVILLE FRENCH QUARTER APARTMENTS	D-1A N.T.S.

11/02/2022 ngalbrecht

APPROVED

1. EXISTING SLAB AND CMU BLOCK
2. NEW STUCCO OVER GALVANIZED METAL LATH; ALL LATH FASTENER PENETRATIONS THROUGH WRB TO BE FULLY SEALED
3. WRB BEHIND AND SHINGLED OVER METAL FLASHING
4. NEW GALVANIZED CLOSURE METAL
5. NEW FILLET SEAL
6. NEW GALVANIZED CASING BEAD CONTINUOUSLY BED SEALED TO CLOSURE METAL
7. #10 NON CORROSION FASTERENS AT 24" ON CENTER. CAP SEAL FASTENER HEADS

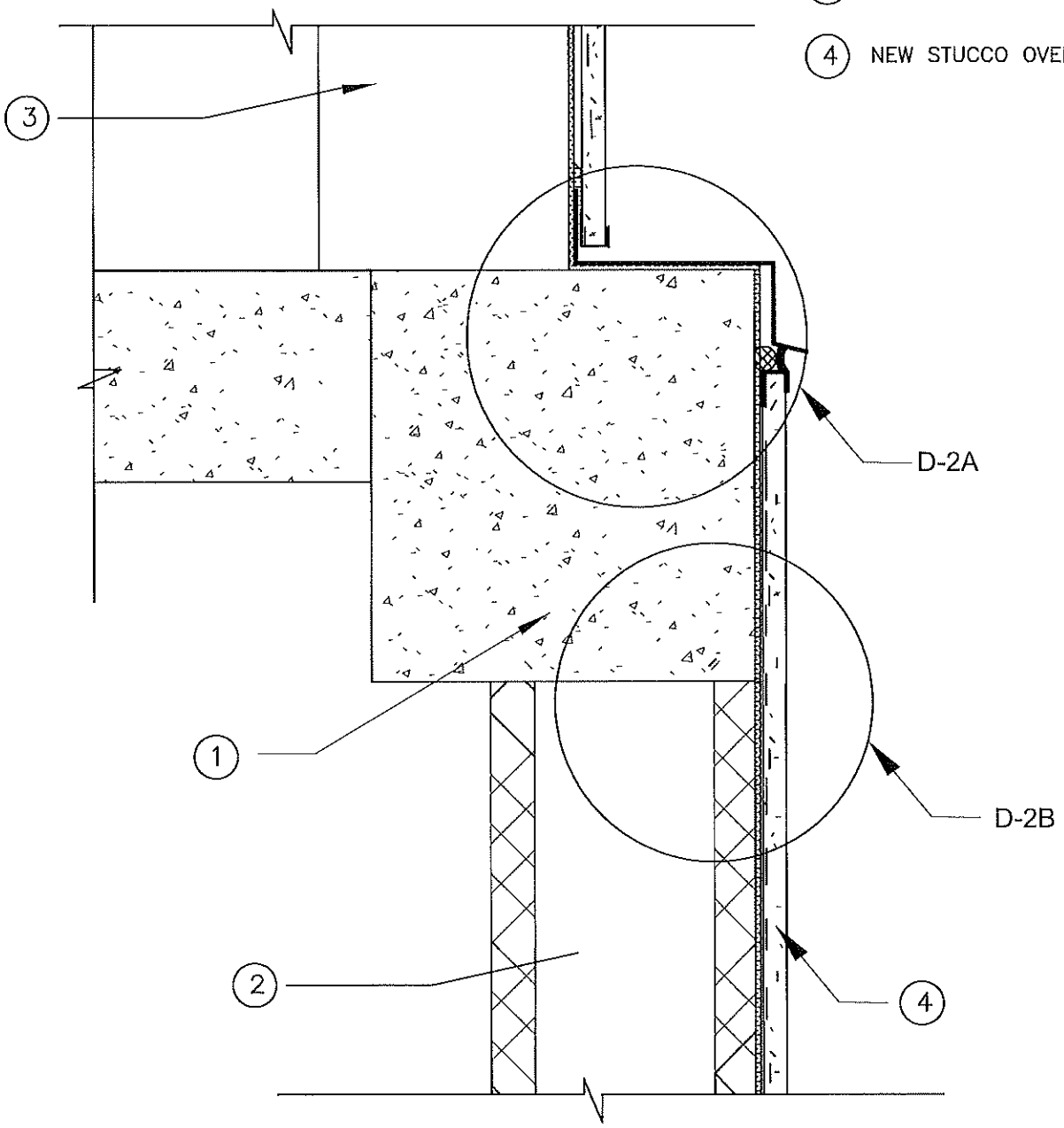


PORTLAND CEMENT STUCCO @ LIGHTWELL	939 IBERVILLE FRENCH QUARTER APARTMENTS	D-1B N.T.S.

11/02/2022 ngalbrecht

APPROVED

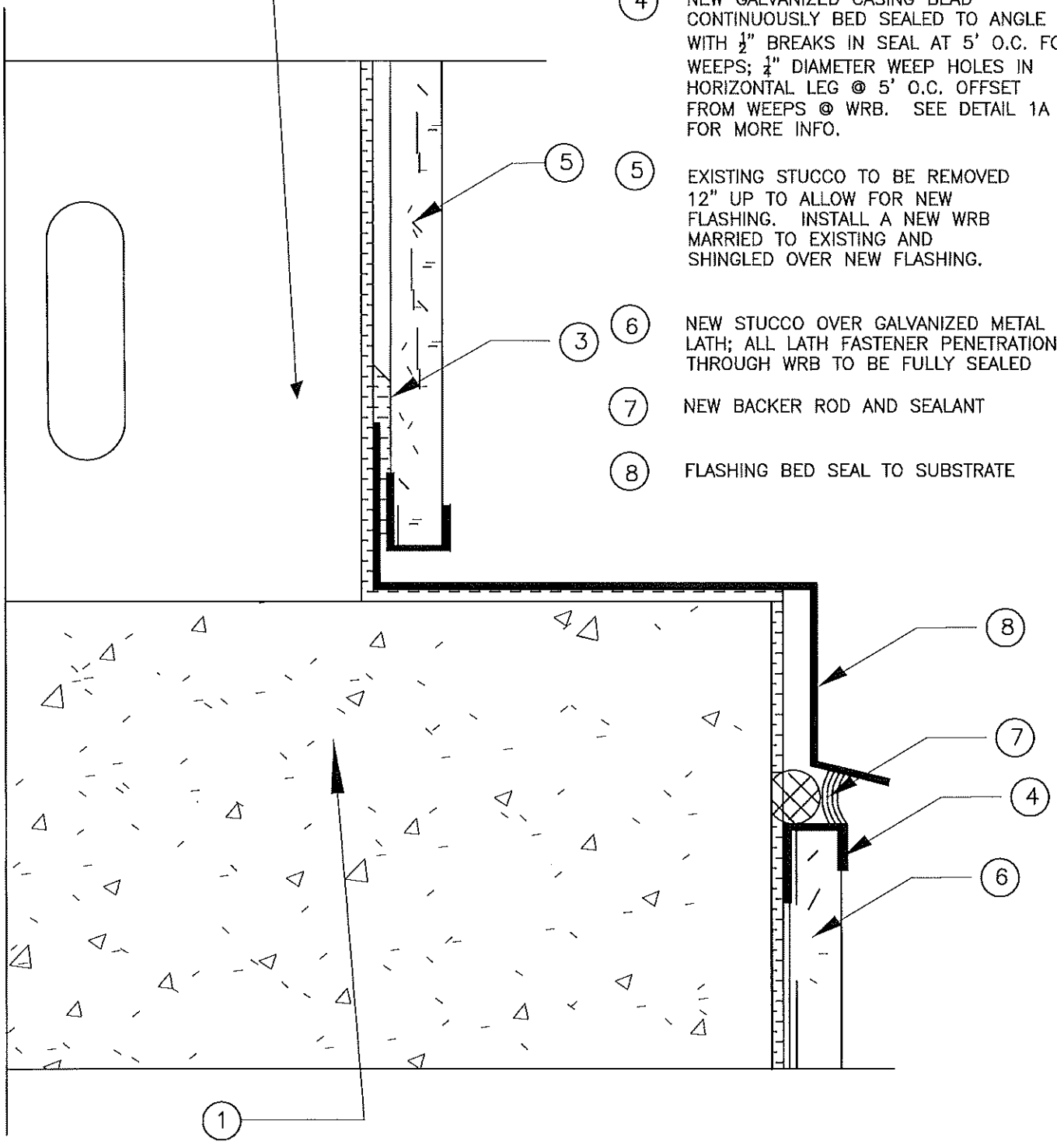
1. EXISTING CONCRETE SLAB
2. EXISTING CMU
3. EXISTING STEEL STUD WALL ASSEMBLY
4. NEW STUCCO OVER METAL LATH



PORTLAND CEMENT STUCCO @ LIGHTWELL	939 IBERVILLE FRENCH QUARTER APARTMENTS	D-2 N.T.S.

11/02/2022 ngalbrecht

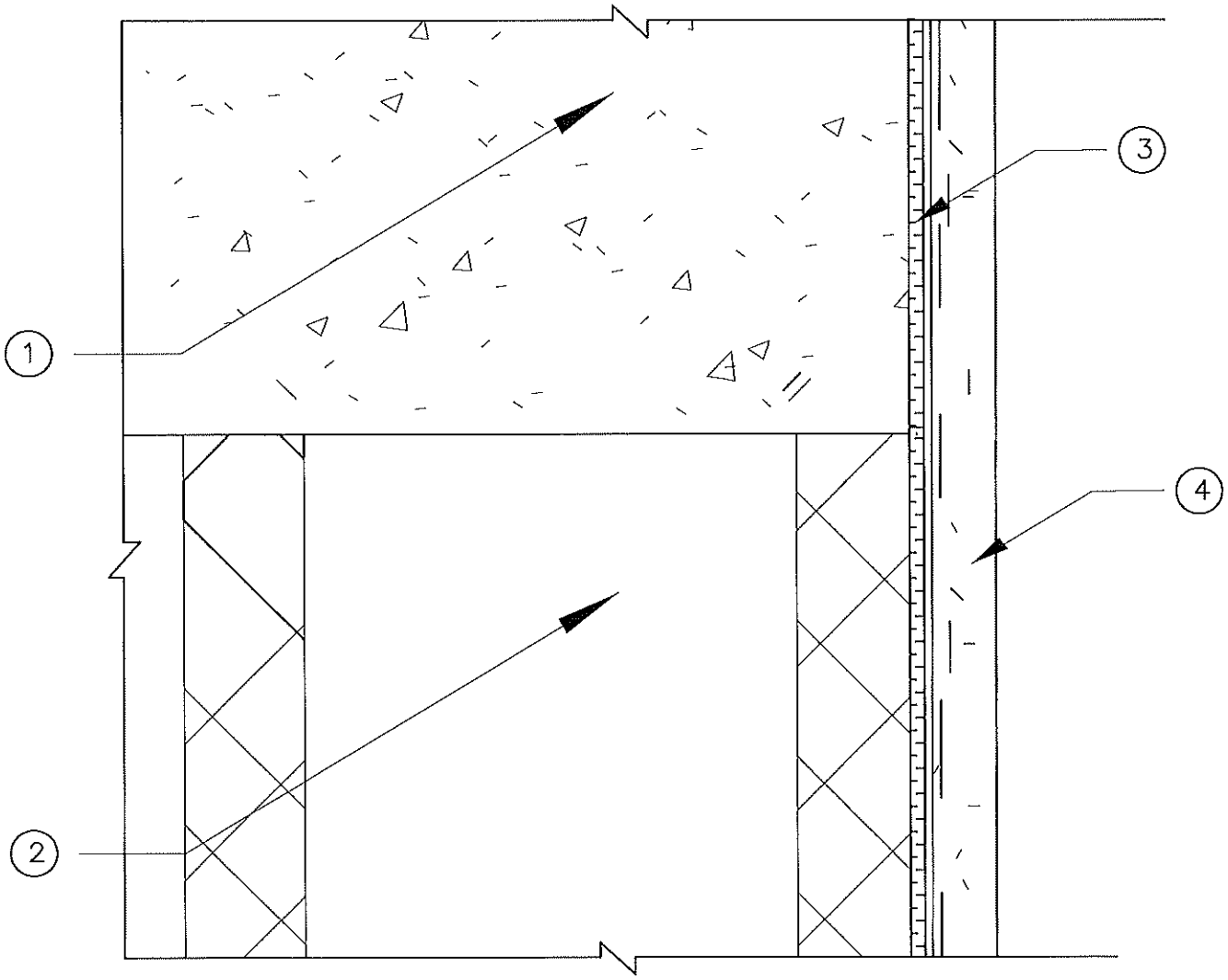
APPROVED



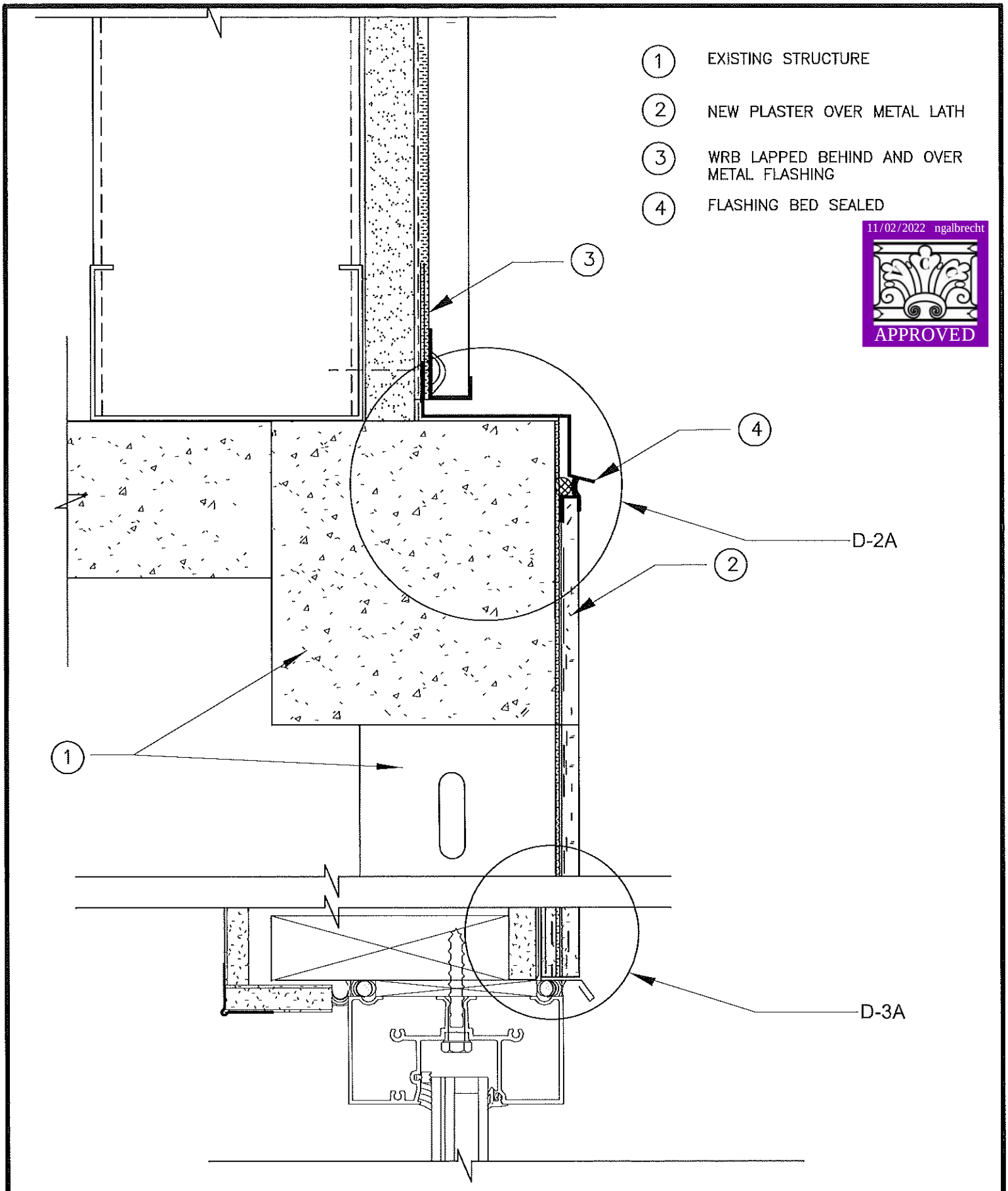
1. EXISTING SLAB
2. EXISTING STEEL STUD
3. WRB LAPPED BEHIND AND OVER METAL FLASHING
4. NEW GALVANIZED CASING BEAD CONTINUOUSLY BED SEALED TO ANGLE WITH $\frac{1}{2}$" BREAKS IN SEAL AT 5' O.C. FOR WEEPS; $\frac{1}{4}$" DIAMETER WEEP HOLES IN HORIZONTAL LEG @ 5' O.C. OFFSET FROM WEEPS @ WRB. SEE DETAIL 1A FOR MORE INFO.
5. EXISTING STUCCO TO BE REMOVED 12" UP TO ALLOW FOR NEW FLASHING. INSTALL A NEW WRB MARRIED TO EXISTING AND SHINGLED OVER NEW FLASHING.
6. NEW STUCCO OVER GALVANIZED METAL LATH; ALL LATH FASTENER PENETRATIONS THROUGH WRB TO BE FULLY SEALED
7. NEW BACKER ROD AND SEALANT
8. FLASHING BED SEAL TO SUBSTRATE

PORTLAND CEMENT STUCCO @ LIGHTWELL	939 IBERVILLE FRENCH QUARTER APARTMENTS	D-2A N.T.S.

1. EXISTING SLAB
2. EXISTING CMU
3. WRB BEHIND AND SHINGLED OVER METAL FLASHING
4. NEW STUCCO OVER GALVANIZED METAL LATH; ALL LATH FASTENER PENETRATIONS THROUGH WRB TO BE FULLY SEALED

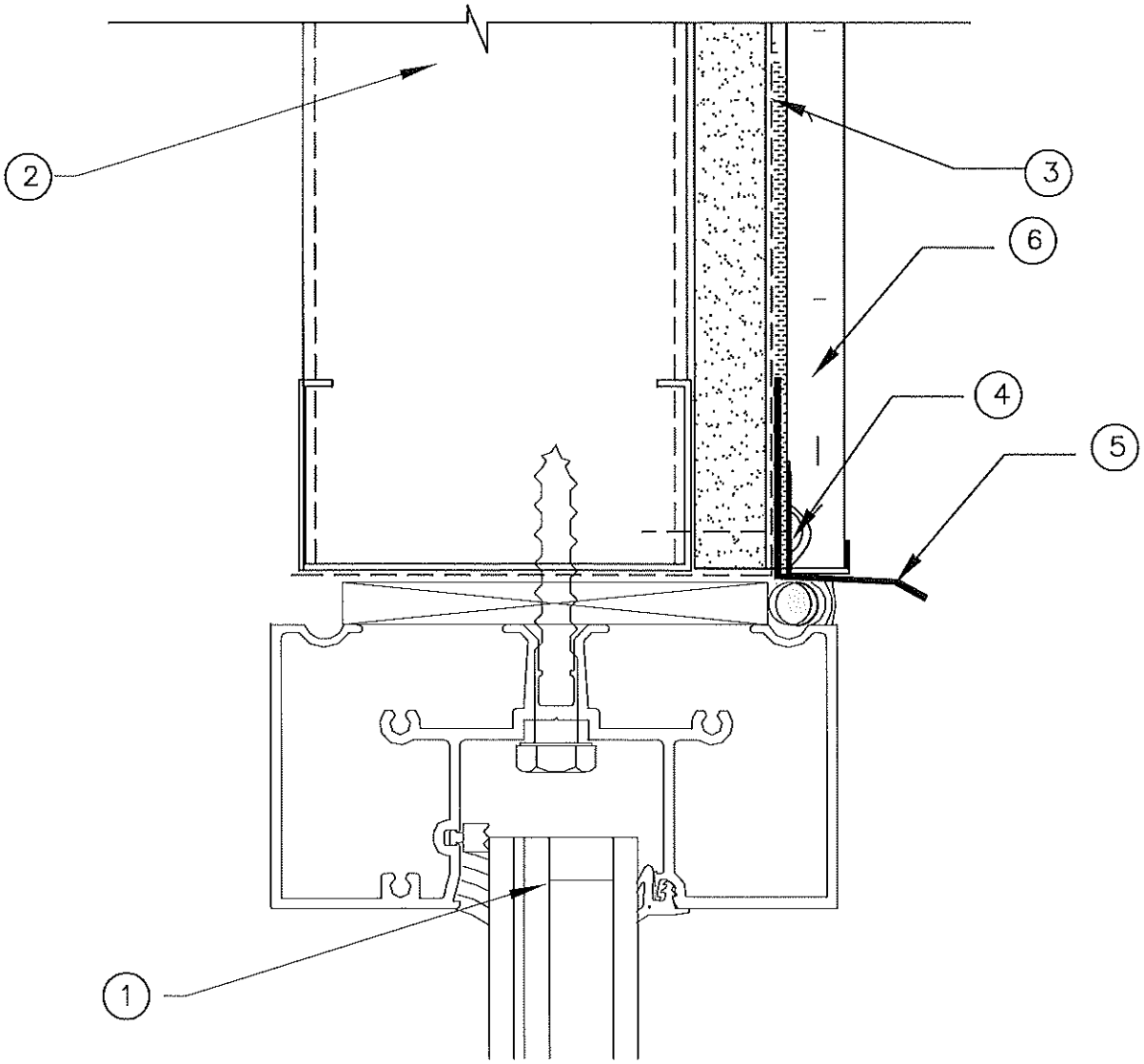


PORTLAND CEMENT STUCCO @ LIGHTWELL	939 IBERVILLE FRENCH QUARTER APARTMENTS	D-2B N.T.S.



PORTLAND CEMENT STUCCO @ LIGHTWELL	939 IBERVILLE FRENCH QUARTER APARTMENTS	D-3 N.T.S.

1. EXISTING WINDOW HEAD
2. EXISTING STEEL STUD ASSEMBLY
3. WRB BEHIND AND SHINGLED OVER METAL FLASHING
4. NEW GALVANIZED CASING BEAD CONTINUOUSLY BED SEALED TO ANGLE WITH ½" BREAKS IN SEAL AT 5' O.C. FOR WEEPS; ¼" DIAMETER WEEP HOLES IN HORIZONTAL LEG @ 5' O.C. OFFSET FROM WEEPS @ WRB. SEE SHEET D-1A FOR MORE INFO.
5. METAL FLASHING
6. NEW STUCCO OVER GALVANIZED METAL LATH; ALL LATH FASTENER PENETRATIONS THROUGH WRB TO BE FULLY SEALED



PORTLAND CEMENT STUCCO @ LIGHTWELL	939 IBERVILLE FRENCH QUARTER APARTMENTS	D-3A N.T.S.

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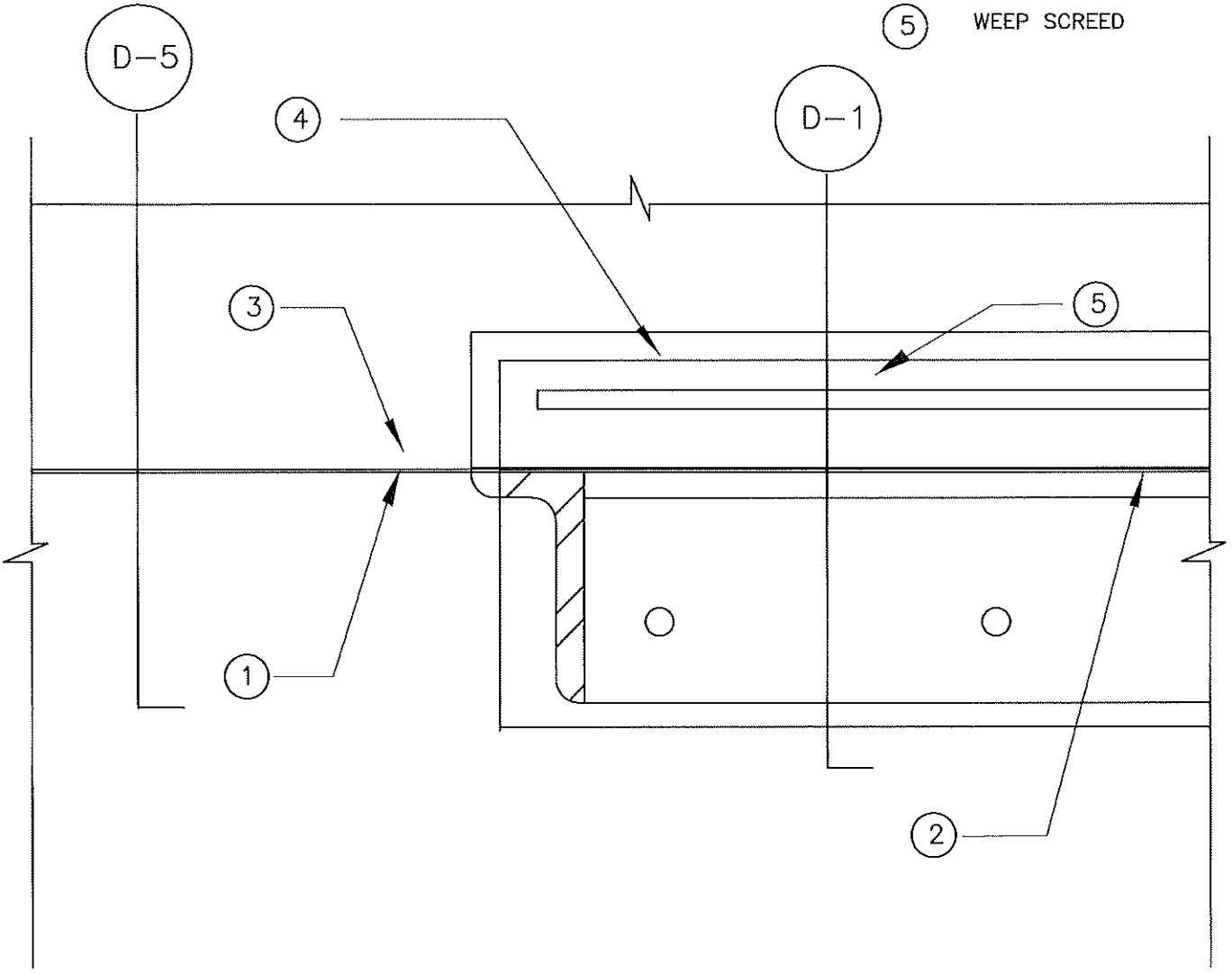
APPROVED

1. STUCCO EXPANSION JOINT
2. METAL FLASHING
3. PENETRATIONS SEALED AT WRB
4. FLASHING BED SEALED
5. WEEP SCREED

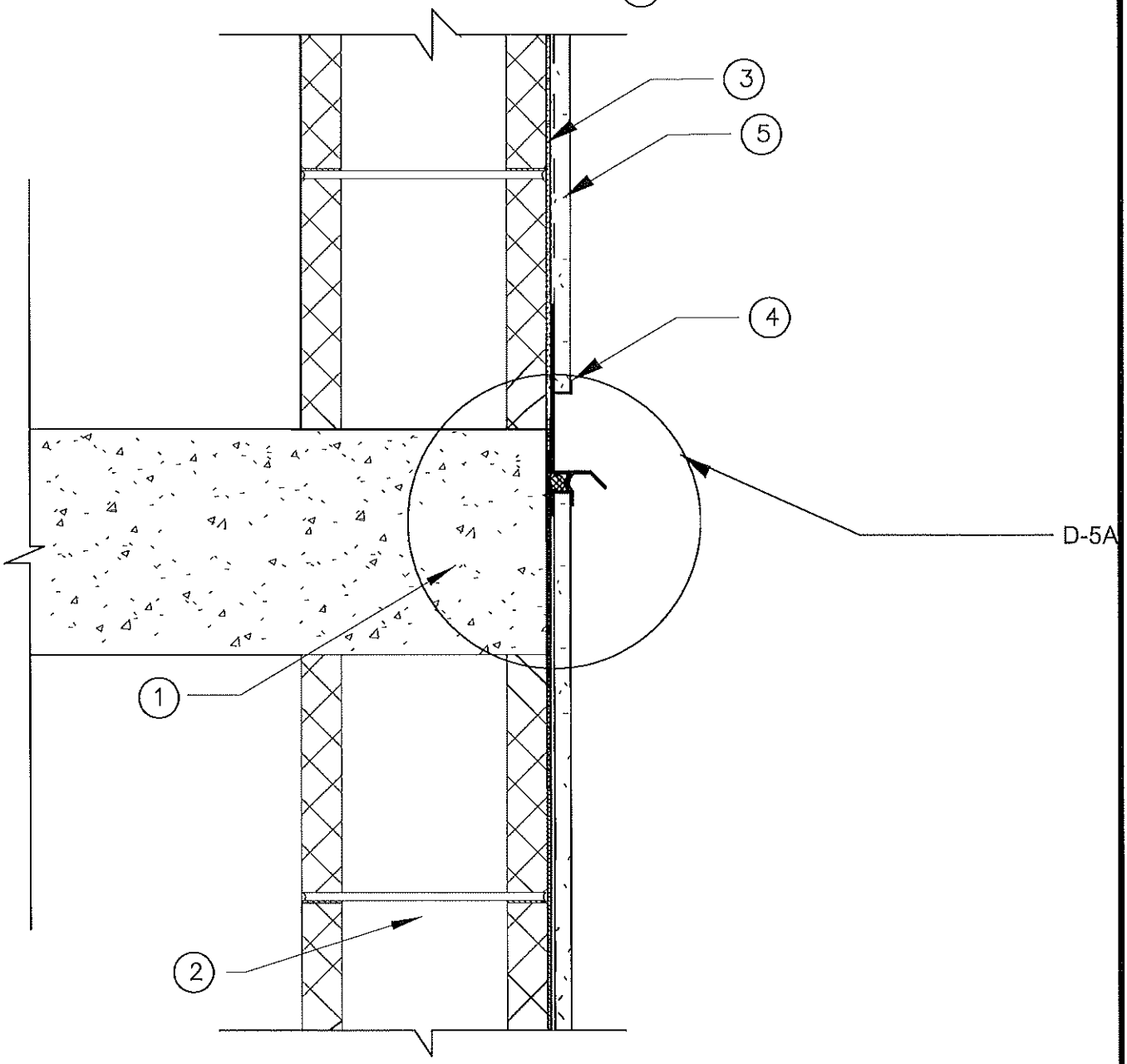


PORTLAND CEMENT STUCCO @ LIGHTWELL	939 IBERVILLE FRENCH QUARTER APARTMENTS	D-4 N.T.S.

11/02/2022 ngalbrecht

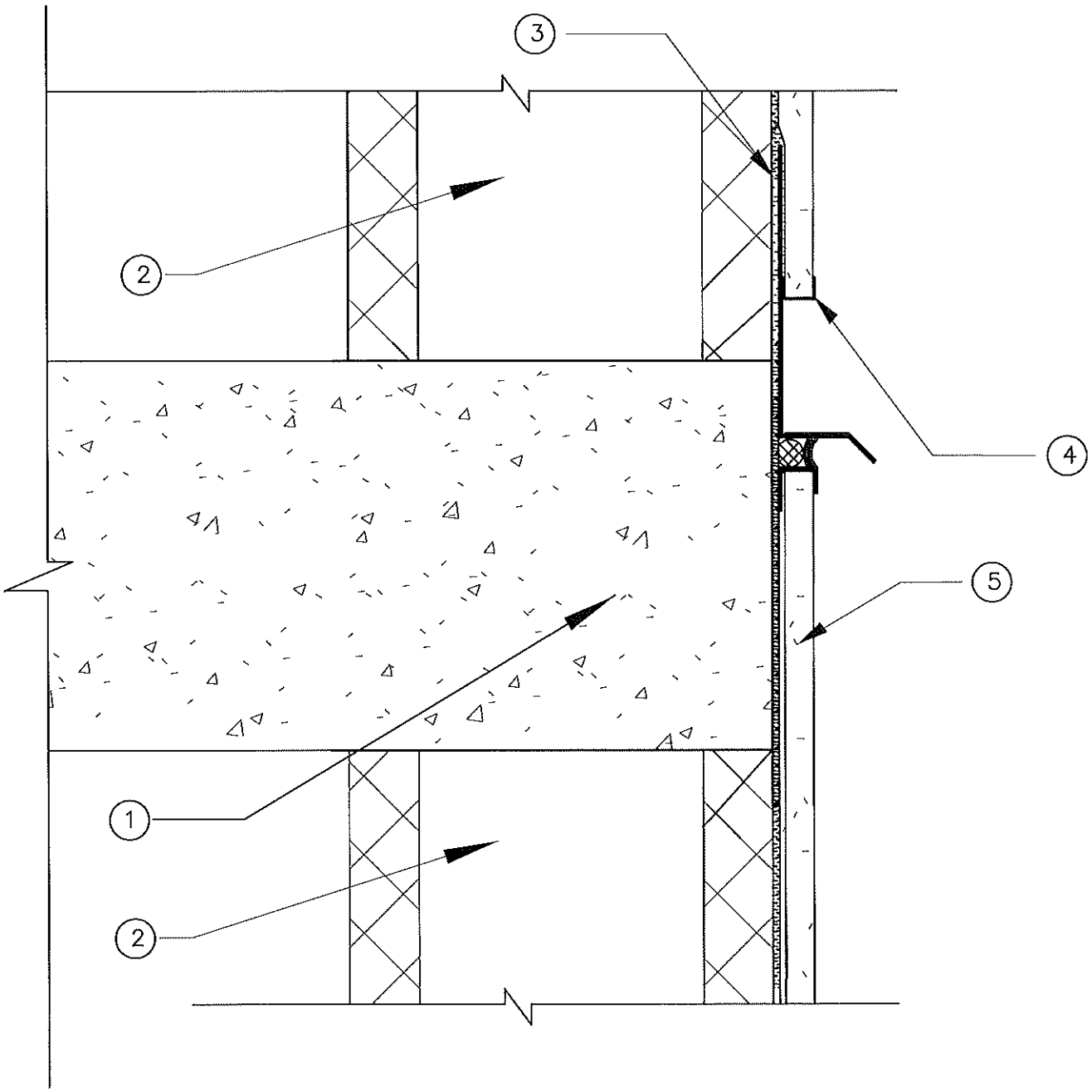
APPROVED

1. EXISTING SLAB
2. EXISTING CMU
3. WRB LAPPED BEHIND AND OVER METAL FLASHING
4. NEW GALVANIZED CASING BEAD CONTINUOUSLY BED SEALED TO ANGLE WITH ½" BREAKS IN SEAL AT 5' O.C. FOR WEEPS; ¼" DIAMETER WEEP HOLES IN HORIZONTAL LEG @ 5' O.C. OFFSET FROM WEEPS @ WRB
5. NEW STUCCO OVER METAL LATHE



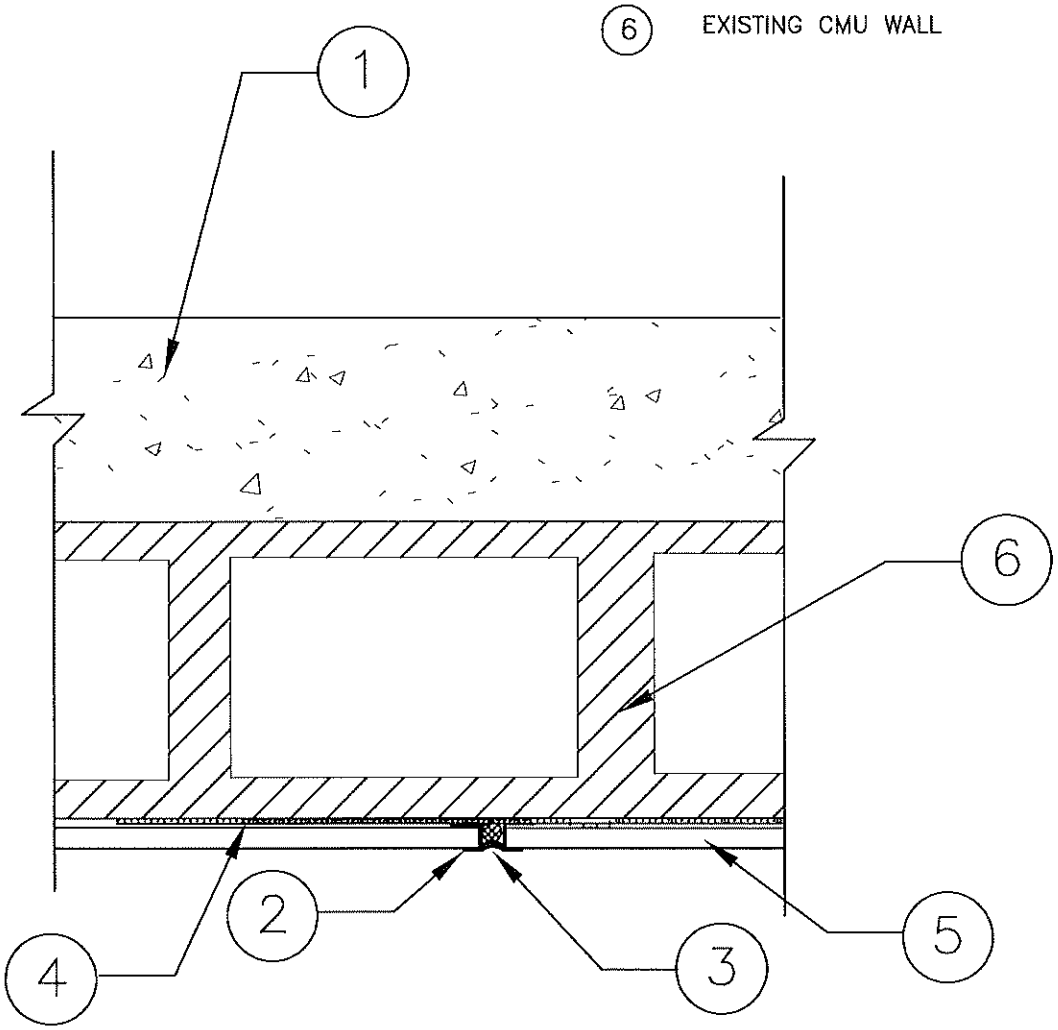
PORTLAND CEMENT STUCCO @ LIGHTWELL	939 IBERVILLE FRENCH QUARTER APARTMENTS	D-5 N.T.S.

1. EXISTING SLAB
2. EXISTING CMU
3. WRB LAPPED BEHIND AND OVER METAL FLASHING
4. NEW GALVANIZED CASING BEAD CONTINUOUSLY BED SEALED TO ANGLE WITH ½" BREAKS IN SEAL AT 5' O.C. FOR WEEPS; ¼" DIAMETER WEEP HOLES IN HORIZONTAL LEG @ 5' O.C. OFFSET FROM WEEPS @ WRB
5. NEW STUCCO OVER METAL LATHE



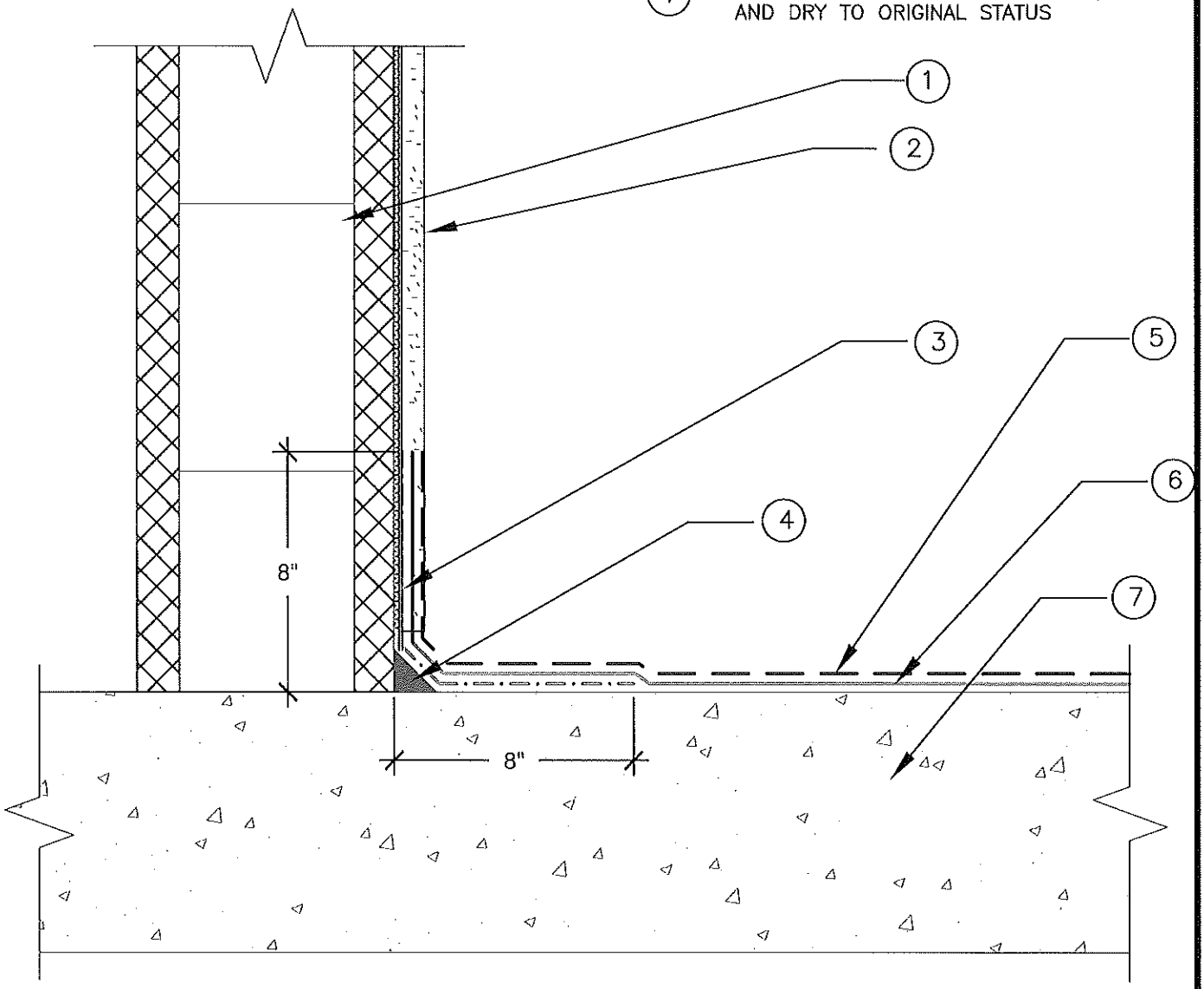
PORTLAND CEMENT STUCCO @ LIGHTWELL	939 IBERVILLE FRENCH QUARTER APARTMENTS	D-5A N.T.S.

1. EXISTING SLAB BELOW
2. CASING BEAD SEE PREVIOUS DETAILS FOR MORE INFO.
3. SEALANT JOINT. SEE DETAIL 5 FOR MORE INFO
4. WRB. SEE DETAIL 5 FOR MORE INFO.
5. NEW STUCCO OVER METAL LATHE. SEE PREVIOUS DETAILS FOR MORE INFO.
6. EXISTING CMU WALL



PORTLAND CEMENT STUCCO @ LIGHTWELL	939 IBERVILLE FRENCH QUARTER APARTMENTS	D-6 N.T.S.

1. SUBSTRATE PER PREVIOUS DETAILS
2. STUCCO FINISH PER SPECS. SEE PREVIOUS DETAILS FOR WRB AND SHINGLE OVER TRAFFIC COATING
3. DETAIL BASE COAT 8"X8" METAL. METAL FLASHING CAN BE UTILIZED ON A BED OF COMPATIBLE SEALANT
4. CANT BEAD AS REQUIRED
5. TRAFFIC COATING
6. BASE COAT OR PRIMER
7. EXISTING CONCRETE SLAB. CLEAN, DAMP AND DRY TO ORIGINAL STATUS



PORTLAND CEMENT STUCCO @ LIGHTWELL	939 IBERVILLE FRENCH QUARTER APARTMENTS	D-7 N.T.S.