

DISCUSSION ITEM

Bldgs. 822 & 828 Foundation & Façade
Repairs Construction Documents from
Walker Consultants



BUILDING ENVELOPE
CONSULTING
FORENSIC RESTORATION
PARKING DESIGN
PLANNING

CONSTRUCTION DOCUMENTS – ISSUED FOR BIDDING

**PARKFAIXFAX CONDOMINIUM
BUILDINGS 822 AND 828
FOUNDATION AND FAÇADE REPAIRS**

3220 – 3226 Valley Drive (Building 822) and 3123 – 3129 Martha Curtis
Drive (Building 828)
ALEXANDRIA, VA 22302

September 3, 2025



WALKER
CONSULTANTS

The document outlines the construction bidding process and requirements for foundation façade repairs at the Parkfairfax Condominium, including project details, bidding instructions, and qualifications for bidders.

Project Overview and Identification

The document outlines the construction project for foundation and façade repairs at Parkfairfax Condominium buildings 822 and 828.

- Project Name: Parkfairfax Condominium Building 822 and 828 - Foundation and Façade Repairs.
- Location: 3220-3226 Valley Drive and 3123-3129 Martha Curtis Drive, Alexandria, VA 22302.
- Issued Date: September 3, 2025.
- Project Number: WC Project No. 22-001792.01.

Procurement and Contracting Information

This section details the procurement requirements and contracting agreements for the project.

- Includes sections for procurement requirements, contracting requirements, and general requirements.
- Key documents include the Invitation to Bid, Bid Forms, Agreement Form, Performance and Payment Bond, and General Conditions.
- Emphasizes the importance of using complete sets of bidding documents to avoid errors.

General Requirements for Bidding

The general requirements outline the expectations and procedures for bidders participating in the project.

- Bidders must demonstrate qualifications and provide evidence of financial stability and previous experience.
- Bids must be submitted by a specified due date to be considered.
- Bidders are required to examine the contract documents and site conditions thoroughly.

Examination and Resolution of Discrepancies

Bidders are encouraged to examine the contract documents and site conditions to avoid discrepancies.

- Bidders must identify any errors or discrepancies before submitting their bids.
- Questions regarding the contract documents must be submitted in writing to the Engineer/Architect.
- Any addenda issued during the pre-bid period must be acknowledged in the bid.

Bid Submission and Security Requirements

This section outlines the requirements for bid submission and the necessary security measures.

- Bids must be submitted in a sealed envelope with the project title and bidder's information.
- Each bid must include a Bid Bond to ensure execution of the agreement.
- Bidders must provide a list of subcontractors and their qualifications if required.

Contract Award and Execution Process

Details the process for awarding the contract and executing the agreement with the successful bidder.

- The owner reserves the right to reject any and all bids and negotiate terms with the successful bidder.
- The contract will be awarded based on the best interests of the project.
- Successful bidders must sign and deliver the agreement within 15 days of receiving the Notice of Award.

Bid Form and Pricing Structure

The bid form specifies the terms of the bid and the pricing structure for the project.

- Bidders must provide a lump sum contract price for the base scope of work.
- The bid form includes sections for alternate items and their pricing differentials.
- Bidders must include all required attachments with their bid submission.

Summary of Alternates and Changes

This section identifies potential changes in the work that may be considered for the contract.

- The owner reserves the right to accept any or all alternates listed.
- Bidders may propose alternate items for consideration, with a complete description and price differential.
- Changes to the work will be performed according to the specified conditions in the contract documents.

Contract Alternates and Costs

The document outlines the financial implications of selected alternates in the construction contract for Buildings 822 and 828.

- General conditions will be deducted if the contract is awarded for both buildings under one mobilization.
- Costs for installing sod instead of seed and straw are specified for both buildings.
- The amounts for each alternate must include all associated costs, with no extras permitted.

Work Breakdown for Buildings

The work breakdown details the tasks and costs associated with the foundation and facade repairs for Buildings 822 and 828.

- Table 1 lists the base scope of work for Building 822, including mobilization, sampling, and concrete repairs.
- Table 2 outlines the add-on scope of work for Building 828, including similar tasks as Building 822.
- Unit costs are provided for various tasks, ensuring consistency in pricing for additional quantities.

Unit Prices and Allowances

This section defines the unit prices and allowances applicable to the project, detailing how adjustments will be made.

- Unit prices include all necessary materials, delivery, installation, and overhead costs.
- Allowances are established for specific products and materials, deferring selection until later.
- Procedures for handling change orders related to allowances are specified.

General Conditions and Requirements

The general conditions outline the contractual obligations and requirements for the construction project.

- The agreement will be executed on AIA Document A101-2017.
- Liquidated damages and retainage for progress payments are specified.
- Performance and payment bonds must be executed on AIA Document A312-2010.

Project Description and Scope

The project involves foundation and facade repairs for the Parkfairfax Condominium buildings, built in the 1940s.

- The work includes intrusive sampling, excavation, helical pier installation, and masonry repairs.
- The project aims to stabilize the foundation and restore the facade of the buildings.
- The scope includes both interior and exterior repairs, ensuring comprehensive restoration.

Measurement and Payment Procedures

This section outlines the procedures for measuring work and processing payments throughout the project.

- Contractors are responsible for verifying measurements and reporting quantities to the engineer.
- Payment for unit price work will be based on the actual quantities completed.
- Adjustments to allowances will be made through change orders as necessary.

Schedule of Unit Prices

This section outlines the administrative and procedural requirements for unit prices related to the project.

- Refer to Section 004310 for the description, unit of measurement, and schedule for unit prices.

Alternates in Construction

This section specifies the requirements for handling alternates in the construction process.

- Defines "Alternate" as a proposed amount by bidders that may be added or deducted from the Base Bid.
- Coordination of related work is essential to ensure complete integration of accepted alternates.
- Notification of the status of each alternate must be distributed immediately after the contract award.
- A schedule of alternates is included at the end of this section.

Contract Modification Procedures

This section details the procedures for handling and processing modifications to the contract.

- Related requirements include allowances, unit prices, submittal procedures, and payment procedures.
- Minor changes in work can be authorized by the Engineer without affecting the contract sum or time.
- Proposal requests can be initiated by the owner or contractor for changes requiring adjustments to the contract.
- Change orders will be issued upon approval of work change proposals.

Payment Procedures Overview

This section outlines the administrative requirements for preparing and processing applications for payment.

- The Schedule of Values must be submitted to the Engineer at least seven days before the initial application for payment.
- Each application for payment must be consistent with previous applications and include amounts for change orders.
- Waivers of mechanic's lien must accompany each application for payment.
- Final payment applications require evidence of project closeout requirements and other supporting documentation.

Project Management and Coordination

This section includes provisions for coordinating construction operations on the project.

- Each contractor must participate in coordination requirements and responsibilities will be assigned.
- Coordination includes scheduling construction operations and preparing coordination drawings.
- Regular project meetings are required to discuss progress and address any issues.

Construction Progress Documentation

This section specifies the requirements for documenting the progress of construction.

- The Contractor's Construction Schedule must be submitted and updated regularly.
- Construction photographs must be taken periodically to document progress.
- Reports on construction schedule updates are required with applications for payment.

Photographic Documentation Requirements

This section outlines the requirements for photographic documentation throughout the project.

- Preconstruction, periodic, and final completion photographs must be taken and submitted.
- A key plan must accompany photographs to indicate locations and directions.
- Digital photographs must meet specific quality standards and be submitted in a timely manner.

Submittal Procedures Overview

This section details the requirements for submitting various documents and materials during the project.

- A submittal schedule must be created and coordinated with the construction schedule.
- Action and informational submittals must be clearly defined and submitted according to specified formats.
- Processing times for submittals are outlined, with specific timeframes for initial reviews and resubmittals.

Submittal Procedures and Requirements

This section outlines the procedures and requirements for submitting documents and materials for review during the construction process.

- Submittals must be transmitted to both the Engineer and their consultants, allowing 15 days for review.
- Resubmittals are required if initial submissions are not approved, with specific instructions for marking changes.
- Final submittals must be distributed to all relevant parties, including manufacturers and subcontractors.
- Retain copies of approved submittals on-site and use only those marked with the Engineer's approval.

Informational Submittals Overview

This section details the types of informational submittals required to demonstrate compliance with project specifications.

- Informational submittals must be submitted electronically as PDF files.
- Certificates and certifications must be signed by authorized individuals and may require notarization.
- Qualification data must demonstrate the capabilities and experience of firms or individuals involved in the project.
- Various test reports, including material and product test reports, must be prepared by qualified testing agencies.

Quality Control Requirements

This section specifies the administrative and procedural requirements for quality control services during construction.

- Quality control services do not relieve the Contractor of responsibility for compliance with contract requirements.
- Specific testing and inspection requirements are outlined in individual specification sections.
- The Contractor must provide a quality-control plan within 10 days of the Notice to Proceed.
- Special tests and inspections may be required by authorities having jurisdiction.

Warranty Requirements Overview

This section outlines the warranty obligations of the Contractor for the project.

- The Contractor must provide a five-year labor and material warranty for all work performed.
- Technical specifications will detail product and manufacturer warranty requirements for each material used.
- Copies of proposed warranties must be submitted for review and approval before the execution of the Agreement.

References and Definitions

This section provides definitions and references for terms used throughout the contract documents.

- Definitions clarify terms such as "approved," "directed," and "indicated" as they relate to the contract.
- Industry standards referenced in the contract documents have the same force as if included directly.
- Abbreviations and acronyms for industry organizations and federal agencies are provided for clarity.

Temporary Facilities and Controls Overview

This section details the requirements for temporary utilities, support facilities, and security measures during construction.

- Temporary facilities must be installed and removed at no additional cost to the Owner.

- The Contractor is responsible for providing temporary water and electric services without incurring charges.
- A site utilization plan must be submitted to show the layout of temporary facilities and utilities.
- Security measures, including fencing and signage, must be implemented to protect the construction site.

Water Management During Construction

This section outlines the procedures for managing water usage and moisture control during various construction activities.

- Indicate sequencing of work requiring water, such as plastering and terrazzo grinding.
- Describe plans for managing water from these operations to prevent damage.
- Procedures for verifying that wet construction has dried sufficiently before installing finish materials.
- Methods to avoid trapping water in finished work.

Exposed Construction Period Protection

This section details protective measures for materials during the exposed construction period before weather barriers are installed.

- Protect porous materials from water damage and prevent standing water.
- Ensure that porous and organic materials do not contact concrete for prolonged periods.
- Remove standing water from decks and keep deck openings covered.
- Maintain cleanliness in interior spaces to prevent water damage.

Partially Enclosed Construction Period Guidelines

This section specifies protective measures during the partially enclosed construction period after weather barriers are installed.

- Avoid loading or installing porous materials in partially enclosed buildings.
- Maintain cleanliness and remove waste containing organic matter.
- Discard or replace any water-damaged materials and do not install wet materials.
- Ensure wet materials have adequate drying time before enclosing them.

Controlled Construction Period Moisture Control

This section outlines moisture control measures after the building enclosure is completed but before HVAC systems are operational.

- Control humidity and moisture levels inside the building to prevent mold growth.
- Use HVAC systems to maintain specified temperature and humidity ranges.
- Measure moisture content of materials exposed to moisture and report findings.
- Replace materials that cannot be restored to acceptable moisture levels within 48 hours.

Temporary Facility Management and Removal

This section describes the management and removal of temporary facilities during the construction process.

- Enforce strict discipline in the use of temporary facilities to minimize waste.
- Maintain temporary facilities in good condition until removal.
- Do not transition to permanent facilities until Substantial Completion is achieved.
- Remove temporary facilities and restore any affected permanent construction upon completion.

Product Requirements and Selection Procedures

This section specifies the requirements for product selection and handling during the project.

- Define products as items incorporated into the work, including materials and equipment.
- Outline procedures for submitting requests for comparable products and substitutions.
- Emphasize the importance of compatibility and compliance with project requirements.
- Detail the process for product delivery, storage, and handling to prevent damage.

Execution Procedures for Construction

This section outlines the general procedures for executing construction work.

- Examine existing conditions and notify the Engineer of any discrepancies.
- Prepare and take field measurements to ensure proper fit and installation.
- Deliver and store materials according to manufacturer recommendations.
- Follow specific installation guidelines to ensure quality and compliance.

Closeout Procedures for Project Completion

This section details the administrative and procedural requirements for project closeout.

- Outline the steps for achieving Substantial Completion and final completion.

- Specify the necessary submittals, including warranties and final cleaning.
- Include procedures for submitting a list of incomplete items and obtaining necessary certificates.
- Emphasize the importance of maintaining project records and documentation throughout the closeout process.

Warranty Submittal Requirements

The section outlines the requirements for submitting warranties related to the construction project.

- Submit written warranties upon Engineer's request for specific work portions.
- Warranties should be submitted within 15 days of completing designated work that is occupied by the Owner.
- Organize warranty documents according to the Project Manual's table of contents.
- Provide warranties and bonds in a single electronic PDF file with bookmarks for navigation.
- Submit the electronic file via email to the Engineer.

Final Cleaning Procedures

This section details the procedures for final cleaning before project completion.

- Conduct cleaning operations in compliance with local laws and environmental regulations.
- Experienced workers or professional cleaners should perform the final cleaning.
- Complete cleaning operations before requesting inspection for Substantial Completion.
- Specific cleaning tasks include removing debris, cleaning surfaces, and ensuring sanitary conditions for plumbing fixtures.
- Ensure the project site is clean and ready for occupancy.

Repair of the Work Guidelines

The guidelines specify the requirements for repairing and restoring construction work.

- Complete all repairs before requesting inspection for Substantial Completion.
- Repair or replace defective construction, including glass and finishes.
- Touch up and restore marred surfaces, ensuring not to paint over required labels.
- Replace components that cannot be repaired and restore damaged facilities to specified conditions.

Project Record Documents Overview

This section describes the requirements for maintaining and submitting project record documents.

- Includes Record Drawings, Specifications, and Product Data.
- Submit annotated PDF electronic files for Record Drawings and Specifications.
- Maintain marked-up paper copies of Contract Drawings and Shop Drawings.
- Document changes and revisions during construction for accurate record-keeping.

Selective Demolition Procedures

The section outlines the procedures for selective demolition of building elements.

- Demolition includes removal of selected building portions and site elements.
- Define terms such as "remove," "remove and salvage," and "existing to remain."
- Demolished materials become the Contractor's property unless specified otherwise.
- Submit a schedule detailing the sequence of demolition activities and measures for dust and noise control.

Concrete Surface Preparation Definitions

This section provides definitions related to concrete surface preparation.

- Delaminations refer to internal cracks within concrete.
- Spalls are voids in concrete resulting from delamination.
- Unsound concrete exhibits signs of deterioration, such as honeycombing and scaling.
- Shotblasting is a method used for scarifying concrete surfaces.

Surface Preparation for Patching and Overlay

This section details the labor and materials needed for concrete surface preparation.

- Remove all delaminated and unsound concrete and prepare cavities for patching.
- Prepare existing sound concrete surfaces for bonded overlays.
- Follow ACI guidelines for concrete repair and surface preparation.

Cast-in-Place Concrete Requirements

This section outlines the requirements for cast-in-place concrete work.

- Submit product data and concrete mixture proportions to the Engineer.
- Ensure compliance with ACI standards and codes for concrete work.
- Engage qualified testing agencies for concrete testing and inspections.

- Follow specific guidelines for formwork, reinforcement, and concrete placement.

Evaluation and Acceptance of Concrete

This section describes the evaluation process for concrete strength and quality.

- Concrete compression tests will be evaluated according to ACI 301.
- Core tests may be required if initial tests are inadequate.
- Air content and parameters of the air-void system must meet specified requirements.

Concrete Testing Procedures and Requirements

This section outlines the procedures for testing concrete with a focus on Calcium Nitrite and its corresponding readings. Concrete testing involves mixing concrete with a specified amount of Calcium Nitrite.

- A pre-measured 0.5 gallons of water is used for mixing.
- The mixture is shaken for 2 to 5 minutes for thorough mixing.
- Extraction water is filtered and tested using a test strip.
- Expected readings for Calcium Nitrite are provided in a table, with specific amounts correlating to test strip results.

Verification Requirements for Calcium Nitrite Dispensing

This section details the verification requirements for dispensing Calcium Nitrite in concrete.

- An independent testing agency must take volume readings of the corrosion inhibitor tank before and after each pour.
- Volume used must be within $\pm 10\%$ of the specified amount.
- Results must be reported to the Engineer, corrosion inhibitor manufacturer, and concrete producer.

Concrete Mixture Proportions Submittal Form

This section provides a template for submitting concrete mixture proportions.

- The form includes general information about the project, contractor, and concrete supplier.
- It requires details on mixture characteristics, materials, and mix proportions.
- Specific gravities and ratios of materials must be documented.
- Admixture details and required attachments are also specified.

Prepackaged Repair Mortar Specifications

This section outlines the requirements for prepackaged repair mortar.

- The mortar must restore original surface conditions and integrity for various applications.
- Quality assurance includes compliance with ACI 301 and testing by an independent agency.
- Acceptable manufacturers and materials for horizontal and vertical applications are specified.
- Curing methods and installation procedures are detailed.

Unit Masonry Specifications

This section covers the requirements for unit masonry, including materials and installation.

- It includes specifications for hollow brick, mortar, grout, and masonry accessories.
- Quality assurance measures and pre-installation meetings are mandated.
- Action submittals for product data and mockups are required.
- Performance requirements for masonry strength and compliance with standards are outlined.

Unit Masonry Restoration and Cleaning

This section details the procedures for restoring and cleaning masonry.

- It includes repairing masonry, repointing mortar joints, and cleaning exposed surfaces.
- Action submittals for product data and mockups are required.
- Quality assurance includes testing and qualifications for restoration specialists.
- Cold and hot weather requirements for masonry work are specified.

Concrete Unit Masonry Specifications

This section outlines the specifications for concrete unit masonry.

- It includes requirements for concrete masonry units, mortar, grout, and reinforcing bars.
- Pre-installation meetings and action submittals for product data and shop drawings are required.
- Informational submittals for material certificates and mix designs are specified.
- Delivery, storage, and handling procedures for masonry units and materials are outlined.

Protection of Masonry During Construction

This section outlines the necessary precautions to protect masonry during and after construction.

- Cover tops of walls, projections, and sills with waterproof sheeting at the end of each workday.
- Do not apply uniform floor or roof loads for at least 12 hours and concentrated loads for at least three days after constructing masonry walls or columns.
- Prevent staining from grout, mortar, and soil on exposed masonry; remove any contact immediately.
- Follow cold-weather requirements, avoiding frozen materials and substrates, and comply with TMS 602/ACI 530.1/ASCE 6.
- For hot-weather construction, adhere to TMS 602/ACI 530.1/ASCE 6 guidelines.

Products and Manufacturers for Masonry

This section specifies the requirements for masonry products and their manufacturers.

- Obtain exposed masonry units from a single source to ensure uniform texture and color.
- Mortar ingredients must also come from a single manufacturer for quality consistency.
- Concrete masonry units (CMUs) must comply with ASTM C 90 and have a minimum compressive strength of 2800 psi.
- Masonry lintels can be prefabricated or built-in-place, matching adjacent CMUs in color and texture.

Performance Requirements for Unit Masonry

This section details the performance standards for unit masonry.

- Unit masonry must develop specified net-area compressive strengths at 28 days.
- Strength is determined by testing masonry prisms according to ASTM C 1314.

General Standards for Unit Masonry

This section emphasizes compliance with masonry standards.

- Follow TMS 602/ACI 530.1/ASCE 6 standards unless modified by contract documents.

Specifications for Concrete Masonry Units

This section outlines the specifications for concrete masonry units.

- CMUs must be normal weight, with dimensions 3/8 inch less than nominal.
- Exposed faces should match the architect's sample in color and texture.

****Requirements for Masonry Lintels**

PARKFAIRFAX BUILDING 822 & 828 FOUNDATION AND FACADE REPAIRS

3220 - 3226 VALLEY DRIVE (BUILDING 822)
3123 - 3131 MARTHA CURTIS DRIVE (BUILDING 828)
ALEXANDRIA, VIRGINIA 22302

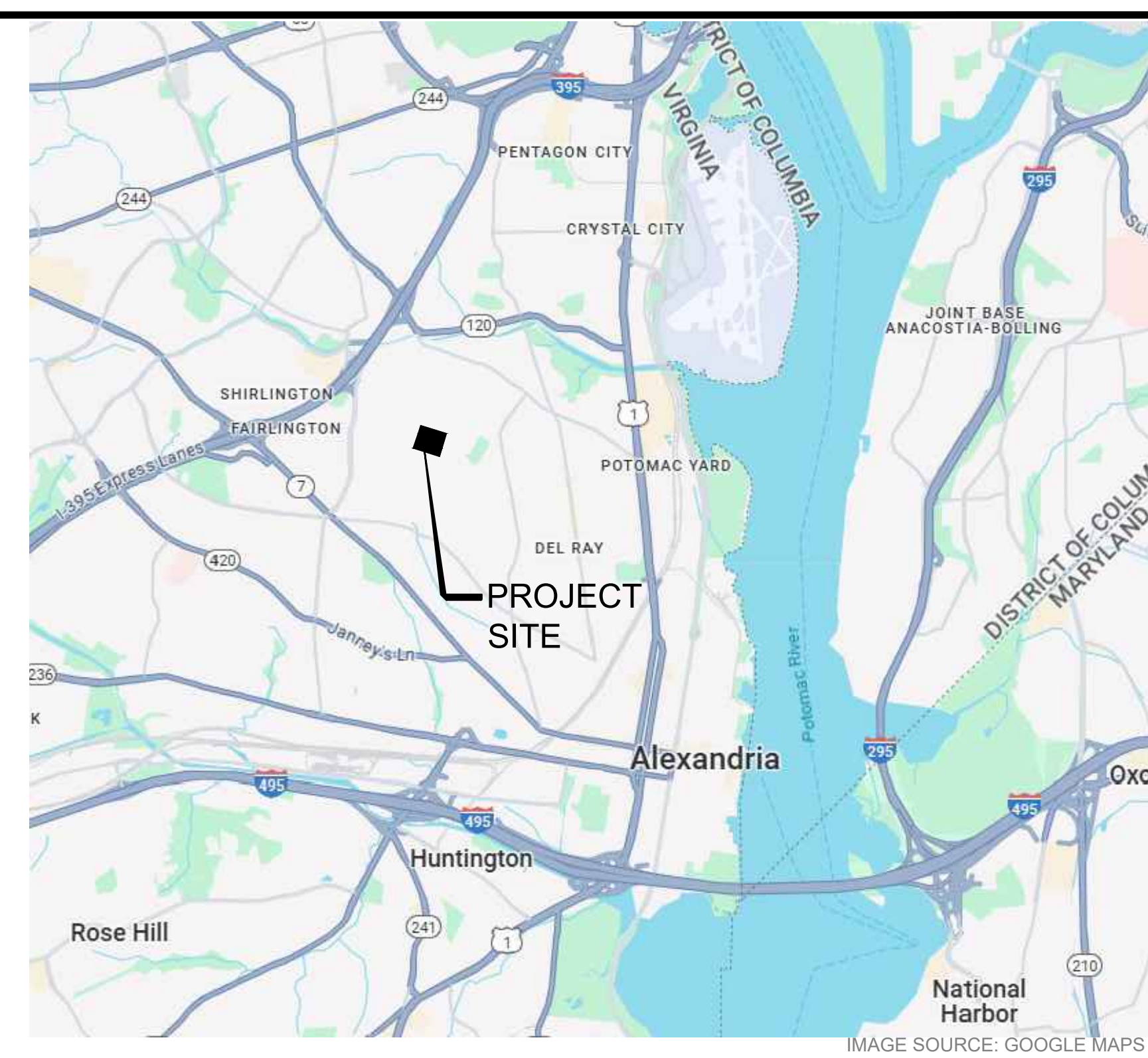


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WALKER CONSULTANTS
PROJECT NO. 22-001792.01

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LOCATION MAP



SITE PLAN



ISSUED FOR BIDDING
09/03/2025

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|--|--|--|--|--|--|
| DESIGN CRITERIA | | 7. THE WORK REQUIRES THE CONTRACTOR TO IMPLEMENT REPAIRS ACCORDING TO THE FOLLOWING CATEGORIES OF REQUIREMENTS: | | 6. COMPLY WITH COLD-WEATHER AND HOT WEATHER CONSTRUCTION REQUIREMENTS IN ACI 530.1/ASCE/TMS602. FOR SUMMARY OF REQUIREMENTS, REFER TO BRICK MASONRY ASSOCIATION (BIA) TECHNICAL NOTES 1, ON BRICK CONSTRUCTION, TABLE 1 "REQUIREMENTS FOR MASONRY CONSTRUCTION IN HOT AND COLD WEATHER". | |
| BUILDING CODE | | A. PRESCRIPTIVE BASED REQUIREMENTS: ALL WORK WHERE APPLICABLE SHALL MEET THE REPAIR REQUIREMENTS WHERE SPECIFICALLY DEFINED AND PRESCRIBED BY THE DETAILS, NOTES, REFERENCES, ETC. FURNISHED IN THE REPAIR DETAILS AND SCOPE OF ORIGINAL DESIGN DOCUMENTS. | | CONSTRUCTION TOLERANCES | |
| INTERNATIONAL BUILDING CODE 2021 (IBC) LOCAL CODE AMENDMENTS (CITY OF ALEXANDRIA, VIRGINIA) | | B. PERFORMANCE BASED REQUIREMENTS: ALL WORK WHERE APPLICABLE SHALL BE CONVEYED THROUGH SHOP DRAWINGS OR OTHER MEANS AS REQUIRED TO MEET THE DESIGN INTENT. ELEMENTS OF THE WORK WILL REQUIRE INTRUSIVE SAMPLING AND FIELD OBSERVATION/FIELD VERIFICATION BY THE CONTRACTOR TO LOCATE AND CONFIRM CONDITIONS EXIST AND ARE LOCATED AS REQUIRED SUCH THAT IMPLEMENTATION OF THE REPAIR DETAILS AND SCOPE OF WORK SHALL BE CONSISTENT WITH THE DESIGN INTENT. | | A. MAXIMUM VARIATION FROM PLUMB IN VERTICAL LINES AND SURFACES OF COLUMNS, WALLS AND ARRISES: A.A. 1/4 IN. IN 10 FT. A.B. 3/8 IN. IN A STORY HEIGHT NOT TO EXCEED 20 FT. A.C. 1/2 IN. IN 40 FT. OR MORE. | |
| DEAD LOADS | | C. MEANS AND METHODS BASED REQUIREMENTS: ALL WORK WHERE APPLICABLE SHALL BE OUTLINED, PROPOSED, AND COMMUNICATED IN WRITING BY THE GENERAL CONTRACTOR TO ADDRESS AND COMMUNICATE THE GENERAL CONTRACTOR'S PROCESS AND SEQUENCING OF THE WORK CRITICAL TO THE IMPLEMENTATION OF THE CORRECTIVE WORK. | | B. MAXIMUM VARIATION FROM PLUMB FOR EXTERNAL CORNERS, EXPANSION JOINTS AND OTHER CONSPICUOUS LINES: A.A. 1/4 IN. IN ANY STORY OR 20 FT. MAXIMUM. A.B. 1/2 IN. IN 40 FT. OR MORE. | |
| FIRST FLOOR AND FINISHES 80 PSF SECOND/THIRD FLOOR FINISHES 80 PSF ROOF/TI/TTIC FRAMING 30 PSF EXTERIOR WALL (2-WYTHE) AND FINISHES 84 PSF (ABOVE THE FIRST FLOOR LEVEL) EXTERIOR WALL (3-WYTHE) 126 PSF (BELOW THE FIRST FLOOR LEVEL) FOUNDATION WALL 150 PSF CONCRETE STEPS (ENTRANCE LANDINGS) 150 PSF BRICK MASONRY (ENTRANCE LANDINGS) 42 PSF CONCRETE MASONRY UNITS (ENTRANCE LANDINGS) 91 PSF FOOTING 300 PLF | | 8. FOR INCONSISTENCIES BETWEEN GENERAL AND TECHNICAL NOTES AND STRUCTURAL DRAWINGS, THE STRICTER REQUIREMENT SHALL APPLY. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER PRIOR TO PERFORMING THE WORK. | | A. MAXIMUM VARIATION FROM PLUMB FOR EXPOSED LINTELS, SILLS, PARAPETS, HORIZONTAL GROOVES AND OTHER CONSPICUOUS LINES: A.A. 1/4 IN. IN ANY BAY OR 20 FT. A.B. 1/2 IN. IN 40 FT. OR MORE. | |
| LIVE LOADS | | 9. PROVIDE ALL LABOR, MATERIAL, EQUIPMENT AND MISCELLANEOUS ITEMS INCLUDING BUT NOT LIMITED TO CLIPS, INSERTS, TIES, ANCHOR STRAPS, HANGERS, BOLTS, AND OTHER FASTENERS REQUIRED TO COMPLETE THE WORK. | | B. MAXIMUM VARIATION FROM PLAN LOCATION OF RELATED PORTIONS OF COLUMNS, WALLS AND PARTITIONS: A.A. 1/2 IN. IN ANY BAY OR 20 FT. A.B. 3/4 IN. IN 40 FT. OR MORE. | |
| MINIMUM LOADS: ROOF 30 PSF | | 10. THESE DOCUMENTS ARE NOT FINAL, VALID AND READY FOR USE UNLESS SEALED, SIGNED AND DATED. | | B. MAXIMUM VARIATION IN CROSS-SECTIONAL DIMENSIONS OF COLUMNS AND THICKNESS OF WALLS FROM DIMENSIONS SHOWN ON DRAWINGS: A.A. MINUS 1/4 IN. A.B. PLUS 1/2 IN. | |
| RESIDENTIAL: MULTIFAMILY DWELLINGS PRIVATE ROOMS 40 PSF STOOPS WHEN SERVING PRIVATE ROOMS(1.5X 40) 60 PSF | | FOUNDATIONS | | CONCRETE | |
| SNOW LOAD | | 1. ASSUMED SOIL BEARING VALUE OF 1,500 PSF TO BE VERIFIED BY GEOTECHNICAL ENGINEER OR QUALIFIED SOILS TECHNICIAN. REFER TO THE GEOTECHNICAL REPORT FOR EARTHWORK PROCEDURES, COMPACTION, AND ADDITIONAL INFORMATION. | | 1. ALL CONCRETE CONSTRUCTION INCLUDING DETAILING, FABRICATION, PLACEMENT OF REINFORCING, MIXING, HANDLING, PLACING, FINISHING, AND CURING SHALL CONFORM TO ACI "STRUCTURAL CONCRETE FOR BUILDINGS" (ACI 301), ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" (ACI-315), AND "ACI BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI-318). | |
| Pg (GROUND SNOW LOAD) = 25 PSF Is = 1.0 Ce = 1.0 Ct = 1.0 Pf (FLAT-ROOF SNOW LOAD) = 20 PSF | | 2. ALL FOOTINGS SHALL PROJECT AT LEAST 1'-0" INTO UNDISTURBED NATURAL SOIL OR COMPACTED CONTROLLED FILL HAVING A BEARING VALUE AT LEAST EQUAL TO THAT SPECIFIED ABOVE. | | 2. ALL CONCRETE SHALL CONFORM TO ASTM C94. MINIMUM COMPRESSIVE STRENGTH AND MAXIMUM WATER/CEMENT RATIO SHALL BE AS FOLLOWS: | |
| SCOPE OF WORK | | 3. BOTTOMS OF ALL EXTERIOR FOOTINGS SHALL BE AT LEAST 2'-6" BELOW FINISHED GRADE OR AS REQUIRED BY LOCAL CODE REQUIREMENTS. FOOTING ELEVATIONS INDICATED ON DRAWINGS HAVE BEEN ESTABLISHED FROM AVAILABLE INFORMATION PROVIDED BY OTHERS AND MAY NOT SATISFY CRITERIA ESTABLISHED ABOVE. FOOTING ELEVATIONS SHALL BE LOWERED AS SITE CONDITIONS WARRANT FOR POOR SOIL CONDITIONS OR AS REQUIRED TO FACILITATE SITE UTILITIES OR EXISTING CONDITIONS. | | CONCRETE PROPERTIES | |
| PROJECT CONSISTS OF PROVIDING ALL MATERIALS, LABOR, EQUIPMENT, SUPERVISION, AND SERVICES TO PERFORM HELICAL PIER INSTALLATION, FOUNDATION REPAIRS, FOUNDATION/STORM DRAINAGE, AND FACADE REPAIRS. | | 4. UNLESS OTHERWISE SHOWN ON THE DRAWINGS, WALL FOOTINGS SHALL BE 12" DEEP AND PROJECT 6" BEYOND EACH FACE OF WALL. WALL FOOTINGS SUPPORTING MASONRY WALLS ARE TO BE REINFORCED WITH #5 LONGITUDINAL CONTINUOUS BOTTOM BARS. | | STRUCTURE TYPE FC: 28 DAY MINIMUM COMPRESSIVE STRENGTH (PSI) WATER/CEMENT RATIO (AIR ENTRAINMENT) AIR CONTENT (PERCENT) WATER/CEMENT RATIO (NON-AIR ENTRAINMENT) | |
| HANDRAILS / GUARDRAILS | | 5. ALL DISTURBED EARTH UNDER FOOTINGS SHALL BE REPLACED WITH LEAN CONCRETE. | | EXTERIOR SLAB ON GRADE, PADS, AND FRONT ENTRANCE STAIRS AND LANDINGS 4,500 0.45 6% ± 1% - | |
| 1. HANDRAILS AND GUARDRAILS SHALL NOT HAVE OPENINGS THAT ALLOW PASSAGE OF 4-INCH SPHERE FROM THE WALKING SURFACE TO THE REQUIRED HEIGHT. | | 6. ALL BEARING STRATA SHALL BE ADEQUATELY DRAINED BEFORE FOUNDATION CONCRETE IS PLACED. | | 3. CONTRACTOR SHALL PROVIDE CONCRETE MIX DESIGN DATA CONFORMING TO CHAPTER 5 OF ACI 318 FOR EACH TYPE AND STRENGTH OF CONCRETE SPECIFIED. MIX DESIGN DATA SHALL INCLUDE CONCRETE STRENGTH, SLUMP, AIR ENTRAINMENT, PROPOSED AGGREGATES, ADMIXTURES, POZZOLANS AND LABORATORY TEST DATA. | |
| 2. HANDRAILS AND GUARDRAILS SHALL BE DESIGNED TO RESIST A LOAD OF 50 POUNDS PER LINEAR FOOT APPLIED IN ANY DIRECTION AT THE TOP AND TO TRANSFER THIS LOAD THROUGH THE SUPPORTS TO THE STRUCTURE. | | 7. NO EXCAVATION SHALL BE CLOSER THAN AT A SLOPE OF 2:1 (2 HORIZONTAL TO ONE VERTICAL) TO AN EXISTING FOOTING OR STRUCTURE U.O.N. | | 4. MATERIALS USED IN CONCRETE MIXES SHALL CONFORM TO THE FOLLOWING STANDARDS: <ul style="list-style-type: none">PORTLAND CEMENT CONFORMING TO ASTM C150FLY ASH CLASS C & F CONFORMING TO ASTM C618. FLY ASH SHALL BE LIMITED TO A MAXIMUM OF 20% OF TOTAL CEMENTITIOUS MATERIALS BY WEIGHT AND SHALL NOT BE USED IN COLD WEATHER AND EXTERIOR APPLICATIONS.GROUND GRANULATED BLAST-FURNACE SLAG GRADE 100 & 120 CONFORMING TO ASTM C989. SLAG SHALL BE LIMITED TO A MAXIMUM OF 50% OF TOTAL CEMENTITIOUS MATERIALS BY WEIGHT IN TYPICAL APPLICATIONS AND 25% IN COLD WEATHER AND EXTERIOR APPLICATIONS.AIR-ENTRAINED ADMIXTURES CONFORMING TO ASTM C260ADDITIONAL ADMIXTURES SHALL CONFORM TO ASTM C494 AND ASTM C1017 | |
| 3. HANDRAILS AND GUARDRAILS SHALL BE ABLE TO RESIST A SINGLE CONCENTRATED LOAD OF 200 POUNDS APPLIED IN ANY DIRECTION AT ANY POINT ALONG THE TOP AND HAVE ATTACHMENT DEVICES AND SUPPORTING STRUCTURE TO TRANSFER THIS LOADING TO APPROPRIATE STRUCTURAL ELEMENTS OF THE BUILDING (THIS LOAD NEED NOT ACT CONCURRENTLY WITH THE LOADS SPECIFIED ABOVE). | | 8. DO NOT PLACE CONCRETE OVER FROZEN SOIL. | | 5. CONCRETE AGGREGATES SHALL CONFORM TO THE FOLLOWING: <ul style="list-style-type: none">AGGREGATES SHALL CONFORM TO ASTM C33MAXIMUM AGGREGATE SIZE FOR CONCRETE 1 IN. | |
| 4. INTERMEDIATE RAILS, BALUSTERS, AND PANEL FILLERS SHALL BE DESIGNED TO WITHSTAND A HORIZONTALLY APPLIED NORMAL LOAD OF 50 POUNDS. | | 9. CENTERLINE OF FOOTING SHALL MATCH CENTERLINE OF COLUMN, PEDESTAL AND/OR PIER UNLESS SHOWN OTHERWISE. | | 6. PROPORTION AND DESIGN MIXES TO RESULT IN CONCRETE SLUMP OF 5 IN. ± 1 IN. AT THE POINT OF PLACEMENT. CONCRETE CONTAINING HIGH-RANGE WATER REDUCERS (HRWR) SHALL HAVE A SLUMP OF 4 IN. TO 8 IN. | |
| 5. HANDRAILS AND GUARDRAILS ARE TO BE DESIGNED BY A LICENSED PROFESSIONAL ENGINEER REGISTERED IN THE COMMONWEALTH OF VIRGINIA. SUBMIT SIGNED AND SEALED DRAWINGS AND CALCULATIONS REGARDING THE PROPOSED GUARDRAIL ASSEMBLY TO THE ENGINEER OF RECORD (WALKER CONSULTANTS) FOR REVIEW. SUBMITTED CALCULATIONS ARE TO INCLUDE THE HANDRAIL/GUARDRAIL CONNECTIONS TO THE STRUCTURE. | | BRICK MASONRY REPAIR | | 7. OWNER (AT THEIR EXPENSE) SHALL RETAIN THE SERVICES OF A QUALIFIED TESTING AGENCY TO PROVIDE TESTING OF CONCRETE TO INCLUDE COMPRESSIVE STRENGTH, TEMPERATURE, SLUMP AND AIR ENTRAINMENT. SAMPLES FOR STRENGTH TESTS OF EACH CLASS OF CONCRETE PLACED EACH DAY SHALL BE TAKEN NOT LESS THAN ONCE A DAY, NOR LESS THAN ONCE FOR EACH 150 CUBIC YARDS OF CONCRETE, NOR LESS THAN ONCE FOR EACH 5000 SQ. FT. OF SURFACE AREA OF SLABS OR WALLS. EACH SAMPLE SHALL INCLUDE THE FOLLOWING: <ul style="list-style-type: none">(2) 7 DAY LAB CURED CYLINDER BREAKS(2) 28 DAY LAB CURED CYLINDER BREAKS(2) 56 DAY LAB CURED CYLINDER BREAK (HELD IN RESERVE)CONTRACTOR (AT THEIR EXPENSE) SHALL OBTAIN ADDITIONAL FIELD CURED CYLINDERS AS NECESSARY TO MEET FORMWORK AND SHORING REMOVAL REQUIREMENTS. | |
| EXISTING CONDITIONS | | 1. PROVIDE FACE BRICK, INCLUDING SPECIALLY MOLDED, GROUND, CUT, OR SAWED SHAPES WHERE REQUIRED TO COMPLETE MASONRY RESTORATION WORK. PROVIDE UNITS WITH PHYSICAL PROPERTIES, COLORS, COLOR VARIATION WITHIN UNITS, SURFACE TEXTURE, SIZE AND SHAPE TO MATCH EXISTING BRICKWORK. | | 8. ALL STRUCTURAL MEMBERS SHALL BE POURED TO THEIR FULL DEPTHS IN ONE OPERATION. CONTRACTOR SHALL PROVIDE ENGINEER WITH THEIR PROPOSED LOCATIONS OF CONSTRUCTION JOINTS FOR ENGINEER'S REVIEW AND ACCEPTANCE. | |
| 1. THE DRAWINGS MAY REFLECT INFORMATION PROVIDED BY OTHERS AND/OR EXISTING CONDITIONS THAT HAVE BEEN SURVEYED AND/OR DOCUMENTED TO THE GREATEST POSSIBLE EXTENT BUT NOT VERIFIED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FULLY COORDINATE THE WORK, INCLUDING, BUT NOT NECESSARILY LIMITED TO, THE VERIFICATION OF ALL EXISTING CONDITIONS (C.F.V.) SHOWN IN THE DRAWINGS, COORDINATION OF ALL NECESSARY BUILDING TRADES, ETC. ANY CONDITIONS THAT ARE MIS-REPRESENTED IN THESE DOCUMENTS, OR ANY CONDITIONS THAT ARE NOT SHOWN BUT WARRANT THE ATTENTION OF THE ENGINEER, SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PERFORMING THE WORK. | | A. BRICK UNITS SHALL BE TYPE SW AND PHYSICAL PROPERTIES PER ASTM C67: TO MATCH THOSE OF EXISTING BRICK. | | REINFORCEMENT STEEL | |
| 2. MEANS AND METHODS OF CONSTRUCTION AND TEMPORARY SHORING AND BRACING OF THE EXISTING STRUCTURE(S) ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE ENGINEER MAY INCLUDE PHASING, SEQUENCING, SHORING REQUIREMENTS, ETC. IN THE CONSTRUCTION DOCUMENTS TO ALERT, ASSIST, OR OTHERWISE DICTATE PROCEDURAL REQUIREMENTS THAT MAY BE NECESSARY TO PROPERLY IMPLEMENT THE STRUCTURAL PORTION OF THE WORK OR THAT MAY BE REQUIRED TO ENSURE BUILDING STABILITY; HOWEVER, THE CONTRACTOR SHALL PROPERLY COORDINATE THESE REQUIREMENTS AND SHALL REMAIN COMPLETELY AND SOLELY RESPONSIBLE FOR ERECTING THE BUILDING STRUCTURE IN A SAFE AND TIMELY MANNER AS WELL AS ESTABLISHING MEANS AND METHODS TO PERFORM THEIR WORK. | | B. FOR EXISTING BRICKWORK THAT EXHIBITS A RANGE OF COLORS OR COLOR VARIATION WITHIN UNITS, PROVIDE BRICK THAT PROPORTIONALLY MATCHES THAT RANGE AND VARIATION RATHER THAN BRICK THAT MATCHES AN INDIVIDUAL COLOR WITHIN THAT RANGE. | | 1. CONCRETE REINFORCING SHALL CONFORM TO THE FOLLOWING DESIGNATIONS: <ul style="list-style-type: none">DEFORMED BARS ASTM A615, GRADE 60WELDED WIRE MESH ASTM A1064 | |
| 3. UNLESS OTHERWISE INDICATED, IT HAS BEEN ASSUMED THAT THE EXISTING STRUCTURE(S) ARE IN SERVICEABLE CONDITION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY AND ALL AREAS OF STRUCTURAL DISTRESS (INCLUDING, BUT NOT LIMITED TO, CRACKS, SPALLING, ETC.) NOT INDICATED IN THE STRUCTURAL DRAWINGS. THE CONTRACTOR SHALL NOT PROCEED WITH WORK IN SUCH AREAS WITHOUT WRITTEN DIRECTION FROM THE ENGINEER. | | C. SUBMIT RESULTS FROM TESTING IN ACCORDANCE TO ASTM C67 FOR COMPRESSIVE STRENGTH, 24 HOUR ABSORPTION OF WATER, AIR CONTENT, TEMPERATURE, SATURATION COEFFICIENT AND INITIAL RATE OF ABSORPTION. | | 2. FABRICATE AND PROVIDE STANDARD SUPPORTING ACCESSORIES IN ACCORDANCE WITH THE ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES, ACI 315. | |
| GENERAL | | D. PREPARE MOCKUPS OF SAMPLE BRICK FOR OWNER APPROVAL PRIOR TO REPAIR WORK. | | 3. UNLESS NOTED OTHERWISE, REINFORCING SHALL BE CONTINUOUS WITH CLASS B LAP SPLICES, HOOKS SHALL BE STANDARD HOOKS, AND WALL INTERSECTIONS SHALL HAVE CORNER/LAP BARS. LAP WELD WIRE MESH SUCH THAT THE OVERLAP OF THE OUTERMOST CROSS-WIRES OF EACH ADJOINING SHEET IS NOT LESS THAN THE SPACING OF THE CROSS-WIRES PLUS 2 IN., UNO. REFER TO TYPICAL DETAILS FOR ADDITIONAL DETAILING REQUIREMENTS. | |
| 1. ALL WORK PERFORMED SHALL COMPLY WITH CURRENT ADOPTED BUILDING CODE, FIRE CODES AND APPLICABLE STATE LAWS AND ORDINANCES AS ADOPTED BY LOCAL AUTHORITIES HAVING JURISDICTION AT THE TIME OF PERMIT ISSUANCE. | | 2. MORTAR SHALL CONFORM TO ASTM C270 TYPE N PCL. ADMIXTURES ARE NOT PERMITTED UNLESS NOTED OTHERWISE. DO NOT USE CALCIUM CHLORIDE. | | 4. CONCRETE PROTECTION FOR REINFORCEMENT: <ul style="list-style-type: none">CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3 IN.CONCRETE EXPOSED TO EARTH 2 IN.6" AND LARGER 1-1/2 IN.5" AND SMALLER 1-1/2 IN.SLABS ON GRADE TOP THIRD OF THICKNESS | |
| 2. THE EXISTING STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AFTER THE WORK IS COMPLETE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCES TO ENSURE STABILITY AND SAFETY DURING CONSTRUCTION. THIS INCLUDES BUT IS NOT LIMITED TO, THE ADDITION OF SHEETING, SHORING, TEMPORARY BRACING, GUYS, AND TIE-DOWNS. THE CONTRACTOR SHALL PROVIDE SHORING AND BRACING NECESSARY TO PROTECT EXISTING AND ADJACENT STRUCTURES. | | A. PORTLAND CEMENT: ASTM C150 TYPE I OR TYPE II. | | SLABS ON GRADE | |
| 3. STRUCTURAL DOCUMENTS SHALL BE USED WITH OTHER CONSTRUCTION DOCUMENTS, INCLUDING BUT NOT LIMITED, TO ARCHITECTURAL, M/E/P, AND SITE DOCUMENTS. COORDINATE WITH THESE DOCUMENTS, ALL FLOOR AND ROOF OPENINGS, DEPRESSIONS, DIMENSIONS, AND SLOPES, ETC. ANY DISCREPANCY REGARDING THE STRUCTURAL REQUIREMENTS OF THE WORK SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER PRIOR TO PERFORMING THE WORK. | | B. HYDRATED LIME: ASTM C207, TYPE S. | | EXCEPT WHERE OTHERWISE NOTED, SLAB ON GRADES SHALL HAVE THE FOLLOWING PROPERTIES: <ul style="list-style-type: none">THICKNESS 4 IN.REINFORCING 6X6 W1.4xw1.4 (TOP THIRD OF THICKNESS) ALT: #4@12" O.C. EACH WAYBASE COURSE SUBGRADE 4 IN. WASHED GRAVEL | |
| 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LIMITING CONSTRUCTION LOADS SUCH THAT THESE LOADS DO NOT EXCEED THE DESIGN LIVE LOADS NOTED ABOVE. THE CONTRACTOR SHALL PROVIDE TEMPORARY SHORING AS REQUIRED DURING CONSTRUCTION TO SUPPORT CONSTRUCTION LOADS UNTIL SUCH TIME THAT THE STRUCTURE IS ABLE TO SUPPORT THE DESIGN LIVE LOADS NOTED. | | C. MORTAR SAND: ASTM C144 (UNLESS NOTED OTHERWISE) - MATCH SIZE, TEXTURE AND GRADATION OF EXISTING MORTAR SAND. | | | |
| 5. SECTIONS AND DETAILS SHOWN ON THE STRUCTURAL DOCUMENTS SHALL BE CONSIDERED TYPICAL FOR SIMILAR CONDITIONS THAT DO NOT HAVE A SPECIFIC SECTION INDICATED. | | D. PREPARE MOCKUPS OF SAMPLE MORTARS FOR OWNER APPROVAL PRIOR TO REPAIR WORK. | | | |
| 6. TYPICAL DETAILS APPLY AT ALL APPROPRIATE LOCATIONS AND ARE NOT GENERALLY CUT ON PLANS. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL TYPICAL DETAIL APPLICATIONS. | | E. MASONRY CEMENT AND AIR ENTRAINMENT ADMIXTURES ARE NOT PERMITTED. | | | |
| | | 3. POINTING MORTAR FOR BRICK SHALL BE LIME BASED TYPE N PROPORTIONED IN ACCORDANCE WITH BIA M1-88 (BRICK INDUSTRY ASSOCIATION) | | | |
| | | 4. BRICK REPLACEMENT | | | |
| | | A. CLEAN BRICKS SURROUNDING REMOVAL AREAS BY REMOVING MORTAR, DUST AND LOOSE PARTICLES. | | | |
| | | B. ALL EXISTING MORTAR SURROUNDING BRICK TO BE REPLACED IS TO BE COMPLETELY REMOVED. DEBRIS, DUST, AND LOOSE PARTICLES TO BE REMOVED FROM REPLACEMENT AREA. NO PARTICLES OR DEBRIS TO BE LEFT IN CAVITY WALLS OR COLLAR JOINTS. | | | |
| | | C. BRICK SURFACES ADJACENT TO REPLACEMENT AREA TO BE DAMPENED PRIOR TO INSTALLATION OF NEW UNITS. | | | |
| | | D. INSTALL REPLACEMENT BRICK INTO BONDING AND COURSING PATTERN OF EXISTING BRICK. ALL REPLACEMENT BRICK SHALL BE "TOOTHED" INTO EXISTING BRICK UNLESS NOTED OTHERWISE. | | | |
| | | E. MAINTAIN JOINT WIDTH FOR REPLACEMENT UNITS TO MATCH EXISTING JOINTS. | | | |
| | | F. LAY BRICK WITH COMPLETELY FILLED BED, HEAD AND COLLAR JOINTS. | | | |
| | | G. TOOL EXPOSED MORTAR JOINTS ONCE NEWLY PLACED MORTAR IS "THUMBPRINT" HARD TO MATCH JOINTS OF SURROUNDING EXISTING BRICKWORK AND REMOVE EXCESS MORTAR FROM EDGE OF JOINT BY BRUSHING. | | | |
| | | H. TEST BRICK INITIAL RATE OF ABSORPTION (IRA) IN ACCORDANCE WITH BIA TECHNICAL NOTES 7B. BRICK WITH AN IRA OF 30 GRAMS/MIN/30 SQ IN. OR GREATER SHALL BE PREHYDRATED IN ACCORDANCE WITH BIA TECH NOTE - "UNITS SHOULD HAVE A SATURATED INTERIOR, BUT BE SURFACE DRY AT THE TIME OF LAYING" | | | |
| | | 5. REPOINTING MASONRY | | | |
| | | A. RAKE OUT AND REPOINT ALL DEFICIENT MORTAR JOINTS (IE. CRACKED, SPALLED, LOOSE, WASHED-OUT, SOFT, ETC.) TO A MAXIMUM DEPTH OF 2-1/2 TIMES JOINT WIDTH BUT NOT LESS THAN 3/4 INCH OR NOT MORE THAN 1-1/4 INCH. | | | |
| | | B. REMOVE MORTAR FROM MASONRY SURFACES WITHIN RAKED-OUT JOINTS INCLUDING ALL FINIS, CURVED PROFILES, ETC. AND RINSE MASONRY-JOINT SURFACES WITH WATER TO REMOVE DUST AND MORTAR PARTICLES. | | | |
| | | C. APPLY POINTING MORTAR IN LAYERS NOT GREATER THAN 1/4 INCH AND FULLY COMPACT EACH LAYER THOROUGHLY. ALLOW MORTAR TO BECOME THUMBPRINT HARD BEFORE APPLYING NEXT LAYER. | | | |
| | | D. TOOL JOINTS TO MATCH ORIGINAL APPEARANCE OF EXISTING/ADJACENT BRICKWORK AND REMOVE EXCESS MORTAR FROM EDGE OF JOINT BY BRUSHING. | | | |
| | | E. CURE MORTAR BY MAINTAINING A THOROUGHLY DAMP CONDITION FOR AT LEAST 72 HOURS. | | | |
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8.

FOR INCONSISTENCIES BETWEEN GENERAL AND TECHNICAL NOTES AND STRUCTURAL DRAWINGS, THE STRICTER REQUIREMENT SHALL APPLY. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER PRIOR TO PERFORMING THE WORK.

9.

PROVIDE ALL LABOR, MATERIAL, EQUIPMENT AND MISCELLANEOUS ITEMS INCLUDING BUT NOT LIMITED TO CLIPS, INSERTS, TIES, ANCHOR STRAPS, HANGERS, BOLTS, AND OTHER FASTENERS REQUIRED TO COMPLETE THE WORK.

10.

THESE DOCUMENTS ARE NOT FINAL, VALID AND READY FOR USE UNLESS SEALED, SIGNED AND DATED.

FOUNDATIONS

1.

ASSUMED SOIL BEARING VALUE OF 1,500 PSF TO BE VERIFIED BY GEOTECHNICAL ENGINEER OR QUALIFIED SOILS TECHNICIAN. REFER TO THE GEOTECHNICAL REPORT FOR EARTHWORK PROCEDURES, COMPACTION, AND ADDITIONAL INFORMATION.

2.

ALL FOOTINGS SHALL PROJECT AT LEAST 1'-0" INTO UNDISTURBED NATURAL SOIL OR COMPACTED CONTROLLED FILL HAVING A BEARING VALUE AT LEAST EQUAL TO THAT SPECIFIED ABOVE.

3.

BOTTOMS OF ALL EXTERIOR FOOTINGS SHALL BE AT LEAST 2'-6" BELOW FINISHED GRADE OR AS REQUIRED BY LOCAL CODE REQUIREMENTS. FOOTING ELEVATIONS INDICATED ON DRAWINGS HAVE BEEN ESTABLISHED FROM AVAILABLE INFORMATION PROVIDED BY OTHERS AND MAY NOT SATISFY STATE CRITERIA ESTABLISHED ABOVE. FOOTING ELEVATIONS SHALL BE LOWERED AS SITE CONDITIONS WARRANT FOR POOR SOIL CONDITIONS OR AS REQUIRED TO FACILITATE SITE UTILITIES OR EXISTING CONDITIONS.

4.

UNLESS OTHERWISE SHOWN ON THE DRAWINGS, WALL FOOTINGS SHALL BE 12" DEEP AND PROJECT 6" BEYOND EACH FACE OF WALL. WALL FOOTINGS SUPPORTING MASONRY WALLS ARE TO BE REINFORCED WITH #5S LONGITUDINAL CONTINUOUS BOTTOM BARS.

5.

ALL DISTURBED EARTH UNDER FOOTINGS SHALL BE REPLACED WITH LEAN CONCRETE.

6.

ALL BEARING STRATA SHALL BE ADEQUATELY DRAINED BEFORE FOUNDATION CONCRETE IS PLACED.

7.

NO EXCAVATION SHALL BE CLOSER THAN AT A SLOPE OF 2:1 (2 HORIZONTAL TO ONE VERTICAL) TO AN EXISTING FOOTING OR STRUCTURE U.O.N.

8.

DO NOT PLACE CONCRETE OVER FROZEN SOIL.

9.

CENTERLINE OF FOOTING SHALL MATCH CENTERLINE OF COLUMN, PEDESTAL AND/OR PIER UNLESS SHOWN OTHERWISE.

BRICK MASONRY REPAIR

1.

PROVIDE FACE BRICK, INCLUDING SPECIALLY MOLDED, GROUND, CUT, OR SAWED SHAPES WHERE REQUIRED TO COMPLETE MASONRY RESTORATION WORK. PROVIDE UNITS WITH PHYSICAL PROPERTIES, COLORS, COLOR VARIATION WITHIN UNITS, SURFACE TEXTURE, SIZE AND SHAPE TO MATCH EXISTING BRICKWORK.

A.

BRICK UNITS SHALL BE TYPE SW AND PHYSICAL PROPERTIES PER ASTM C67: TO MATCH THOSE OF EXISTING BRICK.

B.

FOR EXISTING BRICKWORK THAT EXHIBITS A RANGE OF COLORS OR COLOR VARIATION WITHIN UNITS, PROVIDE BRICK THAT PROPORTIONALLY MATCHES THAT RANGE AND VARIATION RATHER THAN BRICK THAT MATCHES AN INDIVIDUAL COLOR WITHIN THAT RANGE.

C.

SUBMIT RESULTS FROM TESTING IN ACCORDANCE TO ASTM C67 FOR COMPRESSIVE STRENGTH, 24-HOUR COLD-WATER ABSORPTION, 5-HOUR SOIL ABSORPTION, SATURATION COEFFICIENT AND INITIAL RATE OF ABSORPTION.

D.

PREPARE MOCKUPS OF SAMPLE BRICK FOR OWNER APPROVAL PRIOR TO REPAIR WORK.

2.

MORTAR SHALL CONFORM TO ASTM C270 TYPE N PCL. ADMIXTURES ARE NOT PERMITTED UNLESS NOTED OTHERWISE. DO NOT USE CALCIUM CHLORIDE.

A.

PORTLAND CEMENT: ASTM C150 TYPE I OR TYPE II.

B.

HYDRATED LIME: ASTM C207, TYPE S.

C.

MORTAR SAND: ASTM C144 (UNLESS NOTED OTHERWISE) - MATCH SIZE, TEXTURE AND GRADATION OF EXISTING MORTAR SAND.

D.

PREPARE MOCKUPS OF SAMPLE MORTARS FOR OWNER APPROVAL PRIOR TO REPAIR WORK.

E.

MASONRY CEMENT AND AIR ENTRAINMENT ADMIXTURES ARE NOT PERMITTED.

3.

POINTING MORTAR FOR BRICK SHALL BE LIME BASED TYPE N PROPORTIONED IN ACCORDANCE WITH BIA M1-88 (BRICK INDUSTRY ASSOCIATION)

4.

BRICK REPLACEMENT

A.

CLEAN BRICKS SURROUNDING REMOVAL AREAS BY REMOVING MORTAR, DUST AND LOOSE PARTICLES.

B.

ALL EXISTING MORTAR SURROUNDING BRICK TO BE REPLACED IS TO BE COMPLETELY REMOVED. DEBRIS, DUST, AND LOOSE PARTICLES TO BE REMOVED FROM REPLACEMENT AREA. NO PARTICLES OR DEBRIS TO BE LEFT IN CAVITY WALLS OR COLLAR JOINTS.

C.

BRICK SURFACES ADJACENT TO REPLACEMENT AREA TO BE DAMPENED PRIOR TO INSTALLATION OF NEW UNITS.

D.

INSTALL REPLACEMENT BRICK INTO BONDING AND COURSING PATTERN OF EXISTING BRICK. ALL REPLACEMENT BRICK SHALL BE "TOOTHED" INTO EXISTING BRICK UNLESS NOTED OTHERWISE.

E.

MAINTAIN JOINT WIDTH FOR REPLACEMENT UNITS TO MATCH EXISTING JOINTS.

F.

LAY BRICK WITH COMPLETELY FILLED BED, HEAD AND COLLAR JOINTS.

G.

TOOL EXPOSED MORTAR JOINTS ONCE NEWLY PLACED MORTAR IS "THUMBPRINT" HARD TO MATCH JOINTS OF SURROUNDING EXISTING BRICKWORK AND REMOVE EXCESS MORTAR FROM EDGE OF JOINT BY BRUSHING.

H.

TEST BRICK INITIAL RATE OF ABSORPTION (IRA) IN ACCORDANCE WITH BIA TECHNICAL NOTES 7B. BRICK WITH AN IRA OF 30 GRAMS/MIN/30 SQ IN. OR GREATER SHALL BE PREHYDRATED IN ACCORDANCE WITH BIA TECH NOTE - "UNITS SHOULD HAVE A SATURATED INTERIOR, BUT BE SURFACE DRY AT THE TIME OF LAYING"

5.

REPOINTING MASONRY

A.

RAKE OUT AND REPOINT ALL DEFICIENT MORTAR JOINTS (IE. CRACKED, SPALLED, LOOSE, WASHED-OUT, SOFT, ETC.) TO A MAXIMUM DEPTH OF 2-1/2 TIMES JOINT WIDTH BUT NOT LESS THAN 3/4 INCH OR NOT MORE THAN 1-1/4 INCH.

B.

REMOVE MORTAR FROM MASONRY SURFACES WITHIN RAKED-OUT JOINTS INCLUDING ALL FINIS, CURVED PROFILES, ETC. AND RINSE MASONRY-JOINT SURFACES WITH WATER TO REMOVE DUST AND MORTAR PARTICLES.

C.

APPLY POINTING MORTAR IN LAYERS NOT GREATER THAN 1/4 INCH AND FULLY COMPACT EACH LAYER THOROUGHLY. ALLOW MORTAR TO BECOME THUMBPRINT HARD BEFORE APPLYING NEXT LAYER.

D.

TOOL JOINTS TO MATCH ORIGINAL APPEARANCE OF EXISTING/ADJACENT BRICKWORK AND REMOVE EXCESS MORTAR FROM EDGE OF JOINT BY BRUSHING.

E.

CURE MORTAR BY MAINTAINING A THOROUGHLY DAMP CONDITION FOR AT LEAST 72 HOURS.

 CONCRETE MASONRY 1. CONCRETE MASONRY CONSTRUCTION SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES", ACI 530, AND "SPECIFICATIONS FOR MASONRY STRUCTURES", ACI 530.1. 2. MINIMUM NET AREA COMPRESSIVE STRENGTH OF MASONRY UNIT SHALL BE: A. AS NOTED: 2800 PSI (MINIMUM COMPRESSIVE STRENGTH OF CONCRETE MASONRY, F'M SHALL BE 2000 PSI) 3. CONCRETE MASONRY SHALL BE NORMAL WEIGHT CONFORMING TO ASTM C90. 4. METAL REINFORCEMENT AND ACCESSORIES SHALL CONFORM TO THE FOLLOWING STANDARDS: A. DEFORMED BARS B. DEFORMED BARS (WELDABLE) C. DEFORMED BARS (EPOXY COATED) D. DEFORMED BARS (ZINC-COATED) E. JOINT REINFORCEMENT F. DEFORMED WIRE G. WIRE FABRIC H. ANCHORS, TIES AND ACCESSORIES I. STRUCTURAL STEEL J. PLAIN STEEL WIRE K. COLD-ROLLED CARBON STEEL SHEET L. STAINLESS STEEL ASTM A615, GRADE 60 ASTM A706 ASTM A775 ASTM A767 ASTM A951 ASTM A496 ASTM A185 ASTM A36 ASTM A82 ASTM A366 ASTM A167, TYPE 304 |

5.

GROUT SHALL CONFORM TO ASTM C476, AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI. TESTING SHALL CONFORM TO ASTM C1019. PROVIDE FINE AND COARSE GROUTS APPROPRIATE FOR SIZE OF VOID BEING FILLED. GROUT SHALL HAVE A MINIMUM SLUMP OF 8 INCHES PROVIDED BY SUFFICIENT WATER CONTENT. WATER-REDUCING ADMIXTURES ARE NOT PERMITTED.

6.

MORTAR SHALL CONFORM TO ASTM C270, TYPE M OR S, PCL OR MORTAR CEMENT. MASONRY CEMENT IS NOT PERMITTED FOR CONCRETE MASONRY UNITS (CMU). MORTAR USED BELOW GRADE SHALL BE TYPE 'M'.

7.

CONCRETE MASONRY SHALL BE LAID IN RUNNING BOND WITH 100% SOLID "FULL" MORTAR JOINTS (INCLUDING CROSS WEBS). STACK BOND IS NOT PERMITTED.

8.

REINFORCED CELLS, AND NON-REINFORCED CELLS SPECIFIED TO BE GROUTED SHALL BE FILLED SOLID WITH GROUT. STOP POURS 1-1/2 INCHES BELOW THE BED JOINT TO FORM A KEY AT POUR JOINTS. CELLS TO RECEIVE REINFORCING SHALL BE CLEAN OF MORTAR DROPPINGS.

9.

REFER TO TYPICAL DETAILS FOR REINFORCING MINIMUM LAP SPLICE LENGTHS. LAP DEFORMED BARS 50 DIA., UNO.

10.

HORIZONTAL LADDER-TYPE REINFORCEMENT SHALL BE FABRICATED FROM GALVANIZED COLD-DRAWN STEEL WIRE CONFORMING TO ASTM A82 WITH 3/16" DIA SIDE RODS AND 9 GA. CROSS RODS. PROVIDE AS FOLLOWS:

A.

TYPICAL

B.

AT BELOW GRADE WALLS

C.

METAL ACCESSORIES IN INTERIOR WALLS:

D.

ALL SHEET METAL ANCHORS AND TIES:

E.

ANCHORS, WALL TIES AND METAL ACCESSORIES:

16 INCHES ON CENTER, UNO

8 INCHES ON CENTER

PROVIDE CONTINUITY AT INTERSECTIONS AND CORNERS USING PREFABRICATED T-SHAPED AND L-SHAPED UNITS. LAP JOINT REINFORCING A MINIMUM OF 6 INCHES.

12.

TIES, ANCHORS, METAL ACCESSORIES AND JOINT REINFORCEMENT SHALL BE PROTECTED FROM CORROSION AS FOLLOWS:

A.

JOINT REINFORCEMENT:

B.

METAL ACCESSORIES IN EXTERIOR WALLS:

C.

METAL ACCESSORIES IN INTERIOR WALLS:

D.

ALL SHEET METAL ANCHORS AND TIES:

E.

ANCHORS, WALL TIES AND METAL ACCESSORIES:

16 INCHES ON CENTER, UNO

8 INCHES ON CENTER

TYPE 304 STAINLESS STEEL COMPLYING WITH ASTM A167

13.

SIDES, TOPS AND BASES OF ALL LOAD BEARING AND NON-LOAD BEARING CMU WALLS SHALL BE ANCHORED TO STRUCTURE. REFER TO TYPICAL DETAILS AND SECTIONS FOR ADDITIONAL INFORMATION.

14.

PROVIDE MINIMUM VERTICAL WALL REINFORCING AS NOTED ON DRAWINGS.

HELICAL PIERS

1.

HELICAL PIERS AND COMPONENTS SHALL BE MANUFACTURED AND/ OR APPROVED BY A.B. CHANCE CO., A SUBSIDIARY OF HUBBELL POWER SYSTEM (OR APPROVED EQUIVALENT).

2.

THE HELICAL LEAD SECTIONS AND EXTENSIONS SHALL BE HIGH STRENGTH, LOW-ALLOY SOLID STEEL, ROUND CORNERED SQUARE

A.

SS175: 1-3/4" SOLID STEEL SHAFT (10,000 FT.LB TORQUE RATING)

3.

HELIX BEARING PLATES SHALL BE HOT-ROLLED STEEL CONFORMING TO A656 OR A1018 WITH A MINIMUM YIELD STRENGTH OF 80 KSI.

4.

HELICAL PIERS SHALL BE EMBEDDED INTO THE SUB-GRADE USING THE APPROPRIATE LOAD TRANSFER DEVICE COMPLYING WITH PRODUCT SERIES/SHAFT SIZE WITH A WORKING LOAD RATING/CAPACITY EXCEEDING SPECIFIED DESIGN LOADS NOTED IN PIER SCHEDULE:

A.

SS175: HELICAL PIER C-150-0401

5.

ALL ACCESSORIES INCLUDING COUPLING BOLTS, LIFTING BOLTS, CROSS BOLTS SHALL CONFORM TO THE ULTIMATE LOADS SPECIFIED IN THE PIER SCHEDULE.

6.

ALL MATERIAL SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 AFTER FABRICATION.

7.

INSTALLATION EQUIPMENT SHALL BE CAPABLE OF DEVELOPING THE MINIMUM TORQUE REQUIRED TO INSTALL THE HELICAL PIERS TO THE DEPTH REQUIRED TO PROVIDE THE DESIGN LOAD CAPACITY. TORQUE MEASURING EQUIPMENT SHALL HAVE A CALIBRATION CERTIFICATE (NOT LESS THAN 6 MONTHS OLD) AND SHALL BE FURNISHED TO THE ENGINEER PRIOR TO THE START OF WORK.

8.

INSTALLATION TORQUE SHALL BE MONITORED AND DOCUMENTED BY CONTRACTOR THROUGHOUT THE INSTALLATION PROCESS. CONTRACTOR SHALL SUBMIT PIER LOGS INCLUDING DATE AND TIME OF INSTALLATION, LOCATION AND REFERENCE NUMBER OF HELICAL PIER, DESCRIPTION OF LEAD SECTION AND EXTENSION, OVERALL DEPTH OF INSTALLATION AS REFERENCED FROM BOTTOM OF FOOTING, TORQUE READINGS AT EACH EXTENSION AND TERMINATION TORQUE.

9.

HELICAL PIERS SHALL BE INSTALLED TO THE MINIMUM DEPTH AND TORQUE SHOWN ON THE HELICAL PIER SCHEDULE. IF MINIMUM DEPTH IS ACHIEVED AND TORQUE IS NOT AT MINIMUM AS SHOWN ON HELICAL PIER SCHEDULE, CONTINUE TO INSTALL PIER (I.E. GO BEYOND MINIMUM DEPTH) UNTIL MINIMUM TORQUE IS ACHIEVED.

10.

HELICAL PIER PILE CAPS SHALL BE INSTALLED AS SHOWN ON THE DETAILS.

11.

MINIMUM HORIZONTAL SPACING BETWEEN ADJACENT HELICAL PIERS IS 5 TIMES THE LARGEST HELIX OR 3'-0", WHICHEVER IS GREATER, UNLESS OTHERWISE NOTED ON DRAWINGS.

12.

ALL HELICAL PIERS SHALL BE INSTALLED WITH ANCHOR SHAFTS DIRECTLY VERTICAL (0 DEGREE ANGLE). CONTRACTOR MUST MAINTAIN SHAFT ORIENTATION THROUGHOUT THE INSTALLATION PROCESS. CONTRACTOR SHALL INSTALL PILE CAP AFTER PIER INSTALLATION. CONTRACTOR SHALL NOT REPOSITION SHAFT TO CORRECT MISALIGNMENT. NOTIFY ENGINEER AS SOON AS POSSIBLE WHERE VARIATIONS EXIST.

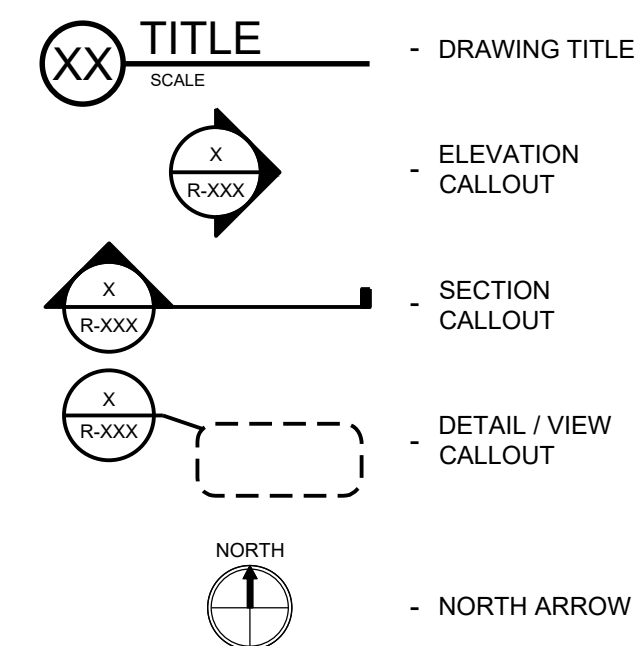
STRUCTURAL STEEL

1. STRUCTURAL STEEL FABRICATION, ERECTION AND CONNECTION DESIGN SHALL CONFORM TO :
 - AISC'S "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS"
 - MANUAL OF STEEL CONSTRUCTION (FOURTEENTH EDITION, 2011)
2. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING DESIGNATION:
 - ANGLES AND PLATES ASTM A36
 - COLD-FORMED HOLLOW STRUCTURAL SECTIONS ASTM A500, GRADE B
3. BOLTED CONNECTIONS SHALL CONFORM TO THE RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS' (RCS) "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS". BOLTS SHALL CONFORM TO THE FOLLOWING DESIGNATIONS:
 - HIGH STRENGTH BOLTS ASTM A325
4. WELDING, WELDING ELECTRODES, AND FLUXES SHALL CONFORM TO AWS D1.1 "STRUCTURAL WELDING CODE-STEEL". WELDS SHALL BE INSTALLED BY WELDERS QUALIFIED IN ACCORDANCE WITH AWS PROCEDURES FOR WELDER QUALIFICATION.
 - ELECTRODES SHALL HAVE A MINIMUM TENSILE STRENGTH OF 70 KSI (E70XX).
5. BOLTED CONNECTIONS SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING GUIDELINES:
 - EXCEPT AS NOTED, BOLTS SHALL BE BEARING TYPE AND INSTALLED SNUG TIGHT.
6. STEEL SHALL BE FINISHED/PROTECTED AS FOLLOWS, UNO:
 - HOT DIPPED GALVANIZED IN ACCORDANCE TO ASTM A123 EXTERIOR STEEL EXPOSED TO WEATHER

ABBREVIATIONS

| | | |
|-----------|---|------------------------------------|
| CJ | = | Construction Joints/Control Joints |
| CONC. | = | Concrete |
| CONT. | = | Continuous |
| C.F.V. | = | Contractor Field Verify |
| DS | = | Downspout |
| EA | = | Each |
| E. | = | Expansion Joint |
| EXIST. | = | Existing |
| IN | = | Inches |
| LF | = | Linear Foot |
| LS | = | Lump Sum |
| MAX. | = | Maximum |
| MIN. | = | Minimum |
| N/A | = | Not Applicable |
| O.C | = | On Center |
| P | = | Precast |
| REINF | = | Reinforcement |
| REQ'D | = | Required |
| SF | = | Square Foot |
| SIM | = | Similar |
| SOG | = | Slab on Grade |
| SPEC | = | Specification |
| TYP. | = | Typical |
| UN or UNO | = | Unless Noted Otherwise |
| WI | = | Work Item |
| WWR | = | Welded Wire Reinforcement |
| W/ | = | With |

SYMBOLS LEGEND



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OWNER'S AND/OR SUB'S LOGO

PARKFAIRFAX CONDOMINIUM
BUILDING 822/828
FOUNDATION AND FACADE REPAIRS
ALEXANDRIA VIRGINIA

[illegible]

PROJECT NO: 22-001792.01

DRAWN BY: SM

CHECKED BY: JWW II

SHEET TITLE:
GENERAL NOTES
AND INFORMATION

R-002



NOTES:

- DESIGN ASSUMPTIONS:**

1. THE FOLLOWING LISTS ITEMS TO BE FIELD VERIFIED OR ASSUMPTIONS MADE FOR THE DESIGN THE CONTRACTOR IS TO FIELD VERIFY THE FOLLOWING PRIOR TO THE START OF THE WORK AND NOTIFY ENGINEER OF DIFFERING FIELD CONDITIONS IF ASSUMPTIONS DIFFER THAN THOSE LISTED:
- THE EXTERIOR WALL AT THE 1ST FLOOR RAIL ABOVE IS 2 3/4 WYTHES (8" THICK) OF BRICK MASONRY.
 - THE FOUNDATION WALL BELOW THE 1ST FLOOR IS EITHER 3 WYTHES (12" THICK) OF BRICK MASONRY OR A 12" CONCRETE WALL.
 - ALL LEVELS ARE ASSUMED TO BE COMPOSED OF 6" NWC SLABS
 - THE ELEVATIONS FOR THE TOP OF THE FOOTINGS
 - THE FOOTING FOR THE EXTERIOR WALLS IS 12" TALL X 24" WIDE
 - THE FOOTING FOR THE EXTERIOR WALLS HAVE TWO (2) #5 BARS
 - ITEMS AND DIMENSIONS SHOWN/ LISTED ON 1/R-100.
2. ENGINEER RESERVES THE RIGHT TO ADJUST DESIGN BASED ON THE FINDINGS OF THE EXISTING CONDITIONS PRIOR TO THE START OF THE WORK.

[illegible]

SHEET TITLE:
BUILDING 828
FIRST FLOOR/
SITE PLAN

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N.T.S.

1. REFER TO DESIGN ASSUMPTION NOTES LISTED ON DRAWING SHEET R-101 REGARDING ITEMS THAT ARE TO BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO PERFORMING THE WORK.
2. CONTRACTOR TO FIELD VERIFY DIMENSIONS SHOWN ON PLAN PRIOR TO THE INSTALLATION OF THE HELICAL PIERS. SUBMIT DIMENSIONS SURVEYED TO ENGINEER FOR REVIEW PRIOR TO PERFORMING THE WORK.
3. FOR BOTH SPOCS: BASE AND ADD-ON, THE CONTRACTOR IS TO DETERMINE THE LOCATION OF THE PRIVATE UTILITY LINES BELOW THE FIRST FLOOR SLAB (STORM, SEWAGE, GAS, ETC.) PRIOR TO THE DEMOLITION OF THE FIRST FLOOR SLAB AREAS. THE CONTRACTOR IS TO ALSO ARRANGE FOR A PRIVATE UTILITY LOCATION TO DETERMINE ALL BELOW GRADE UTILITIES PRIOR PERFORMING THE WORK. NOTIFY OWNER AND ENGINEER IMMEDIATELY DURING THE WORK IF ANY PUBLIC OR PRIVATE UTILITIES ARE DAMAGED OR IMPACTED IN ANY WAY.
4. REMOVE EXISTING "MASONRY" AND CONCRETE FLOORS ARE REMOVE TO PERFORM THE FOUNDATION WORK, PROVIDE TEMPORARY ACCESS (RAMP, STAIRS, ETC.) TO THE ENTRANCE OF THE UNITS IMPACTED BY THE WORK. REFER TO GENERAL NOTES AND LOADS ON SHEET R-001 FOR REQUIREMENTS OF TEMPORARY ACCESS.
5. WHERE REQUIRED TO PERFORM FOUNDATION REPAIR WORK, REMOVE EXISTING RETAINING WALLS AND PROVIDE STABILIZATION AND DRAINAGE PROVISIONS TO PREVENT UNDERMINING OF ADJACENT SITE TO BUILDING 828. SUBMIT PROVISIONS TO OWNER AND ENGINEER FOR REVIEW PRIOR TO PERFORMING THE WORK. ONCE FOUNDATION REPAIR WORK IS COMPLETE, INSTALL NEW WOOD RETAINING WALLS TO MATCH EXISTING (AS REQUIRED).
6. REMOVE AND DISPOSE OF EXISTING GUARDRAIL. INSTALL NEW GUARDRAIL, ONCE ALL WORK IS COMPLETE.
7. INSTALL SHORING REQUIRED TO SUPPORT 1ST FLOOR SLAB WHERE REMOVED TO PERFORM WORK. SHORING TO BE DESIGNED BY A LICENSED PROFESSIONAL ENGINEER AND REVIEWED IN THE COUNTY OF CLATSOP, WA OR THE STATE OF OREGON. SUBMIT SIGNED AND SEALED DRAWINGS AND CALCULATIONS TO ENGINEER FOR REVIEW PRIOR TO PERFORMING THE WORK. DESIGN ASSUMPTIONS:
8. ALL GENERAL AND TECHNICAL NOTES AS WELL AS THE SPECIFICATIONS FOR BUILDING 828 ARE INCLUDED AS PART OF THE FOUNDATION AND FACADE REPAIRS TO BUILDING 828.

1. THE FOLLOWING LISTS ITEMS TO BE FIELD VERIFIED OR ASSUMPTIONS MADE FOR THE DESIGN THE CONTRACTOR IS TO FIELD VERIFY THE FOLLOWING PRIOR TO THE START OF THE WORK AND NOTIFY ENGINEER OF DIFFERING FIELD CONDITIONS IF ASSUMPTIONS DIFFER THAN THOSE LISTED:

- THE EXTERIOR WALL AT THE 1ST FLOOR AND ABOVE IS 2 WYTHES (8" THICK) OF BRICK MASONRY.
- THE FOUNDATION WALL BELOW THE 1ST FLOOR IS EITHER 3 WYTHES (12" THICK) OF BRICK MASONRY OR A 12" CONCRETE WALL
- ALL LEVELS ARE ASSUMED TO BE COMPOSED OF 6" NWC SLABS
- THE ELEVATIONS FOR THE TOP OF THE FOOTINGS
- THE FOOTING FOR THE EXTERIOR WALLS IS 12" TALL X 24" WIDE
- THE FOOTING FOR THE EXTERIOR WALLS HAVE TWO (2) #5 BARS
- ITEMS AND DIMENSIONS SHOWN/ LISTED ON 1/R-101.

2. ENGINEER RESERVES THE RIGHT TO ADJUST DESIGN BASED ON THE FINDINGS OF THE EXISTING CONDITIONS PRIOR TO THE START OF THE WORK.

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1

BUILDING 822

HELICAL PILE PLAN

N.T.S.

NOTES:

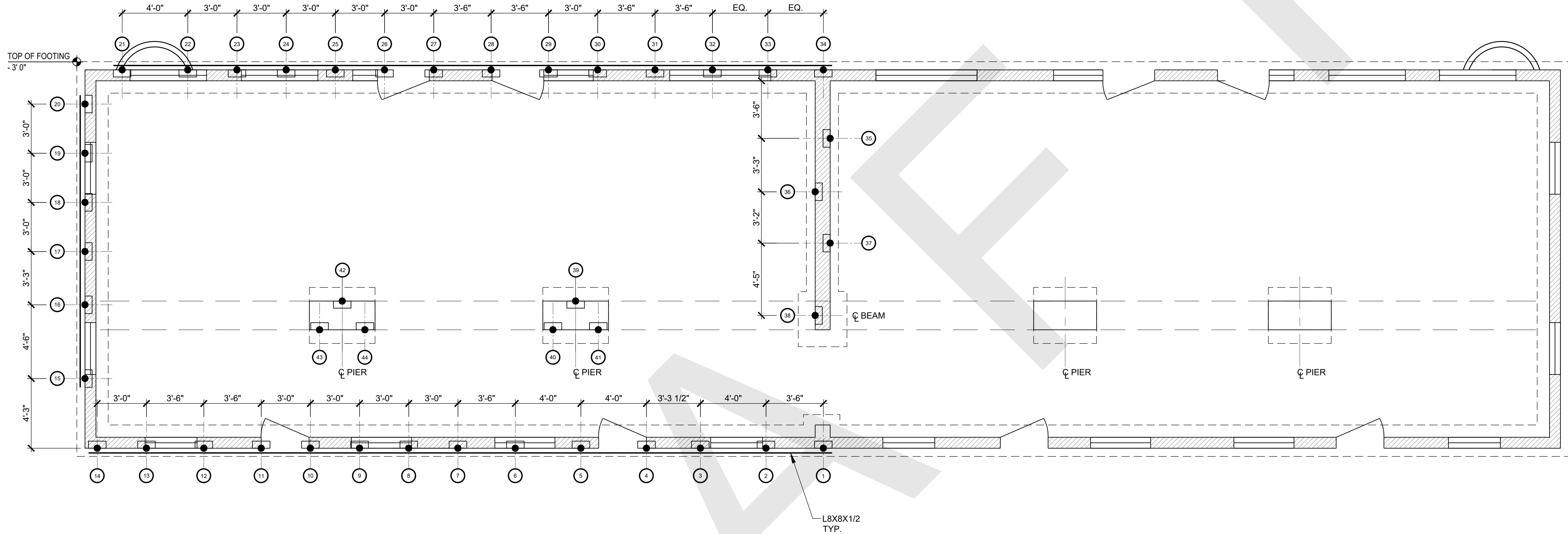
- PRIOR TO ANY DEMOLITION/INSTALLATION OF HELICAL PIERS, SURVEY AND DOCUMENT EXISTING CONDITIONS AND SUBMIT ALL SURVEY RESULTS TO ENGINEER FOR REVIEW (REFER TO 1/R-100). INCLUDE ANY FIELD DOCUMENTED AS-BUILT INFORMATION WHERE CONDITIONS VARY FROM THAT SHOWN.
- CENTER-TO-CENTER PIER SPACING AND LOCATIONS ARE SHOWN ABOVE. NOTIFY ENGINEER OF ANY/ALL DISCREPANCIES AND CONFLICTS PRIOR TO ANY DEMOLITION/INSTALLATION OF HELICAL PIERS.
- STEEL ANGLES TO TERMINATE AT CENTERLINE OF HELICAL PILES

SYMBOL LEGEND:

- xx

 DENOTES HELICAL PIER NUMBER
- DENOTES PROPOSED HELICAL PIER LAYOUT

| HELICAL PIER SCHEDULE | | | | | | |
|-----------------------|------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| PIER DESIGNATION | SHAFT TYPE | DIAMETER HELIX "A" (IN.) | DIAMETER HELIX "B" (IN.) | DIAMETER HELIX "C" (IN.) | MINIMUM PIER DEPTH (FT.) | LOAD RATING (KIPS) SERVICE/ULTIMATE |
| SS175 | | 8 | 10 | 12 | 36 | 27/(54) |
| TEST PIT | SS175 | 8 | 10 | 12 | 36 | 27/(54) |



PARKFAIRFAX CONDOMINIUM

BUILDING 822/828

FOUNDATION AND FACADE REPAIRS

ALEXANDRIA

VIRGINIA

OWNER'S AND/OR SUBS LOGO



PROJECT NO: 22-001792.01

DRAWN BY: SM

CHECKED BY: JWW III

SHEET TITLE:

BUILDING 822
HELICAL PILE PLAN

R-102

09/03/2025

ISSUE:

DATE

MARK

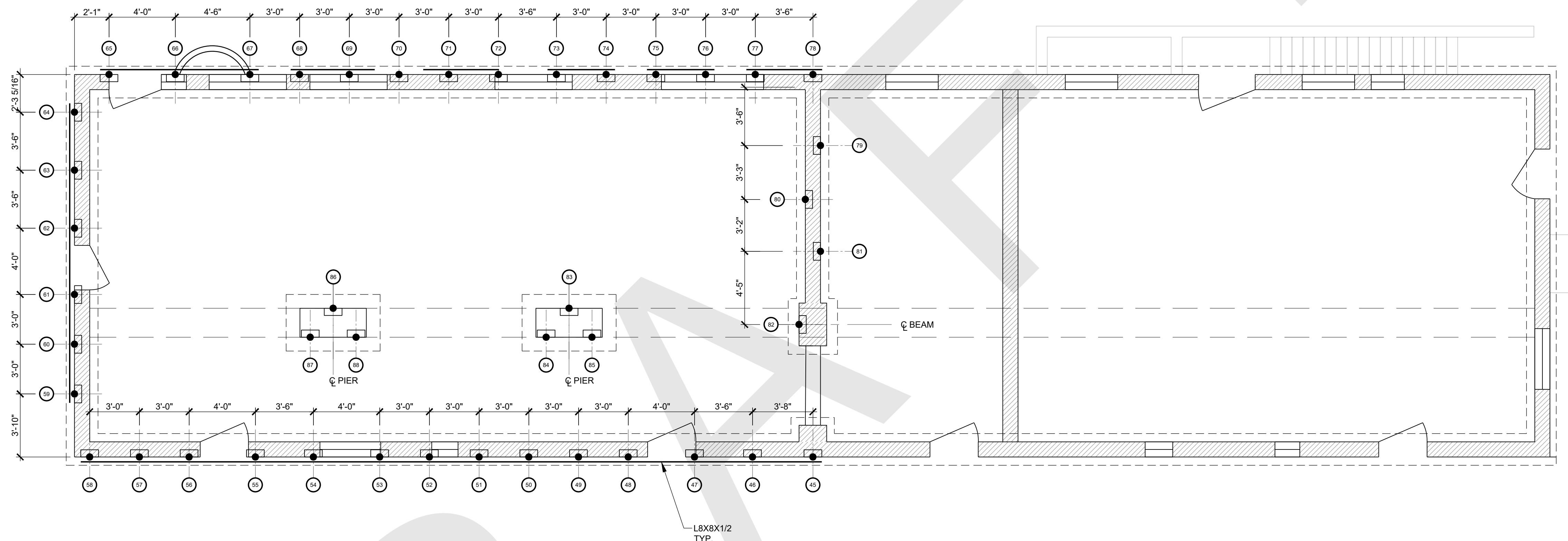
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PARKFAIRFAX CONDOMINIUM
BUILDING 822/828
FOUNDATION AND FACADE REPAIRS
ALEXANDRIA VIRGINIA

[illegible]

| | |
|-----------------------------------|--------------|
| PROJECT NO: | 22-001792.01 |
| DRAWN BY: | SM |
| CHECKED BY: | JWW III |
| SHEET TITLE: | |
| BUILDING 828 HELICAL PILE PLAN | |

R-103





1


N.T.S.

NOTES:

1. PRIOR TO ANY DEMOLITION/INSTALLATION OF HELICAL PIERS, SURVEY AND DOCUMENT EXISTING CONDITIONS AND SUBMIT ALL SURVEY RESULTS TO ENGINEER FOR REVIEW (REFER TO 1/R-101). INCLUDE ANY FIELD DOCUMENTED AS-BUILT INFORMATION WHERE CONDITIONS VARY FROM THAT SHOWN.
2. CENTER-TO-CENTER PIER SPACING AND LOCATIONS ARE SHOWN ABOVE. NOTIFY ENGINEER OF ANY/ALL DISCREPANCIES AND CONFLICTS PRIOR TO ANY DEMOLITION/INSTALLATION OF HELICAL PIERS.
3. STEEL ANGLES TO TERMINATE AT CENTERLINE OF HELICAL PILES

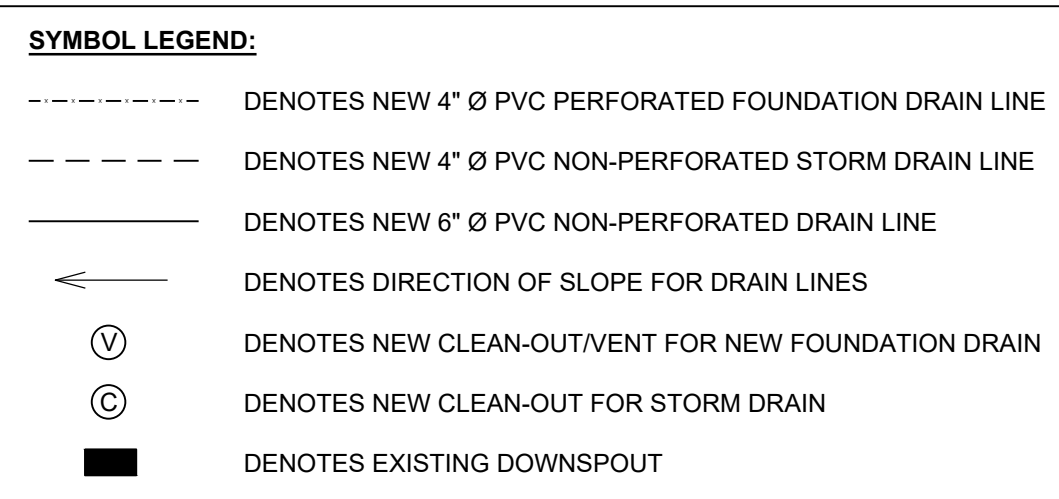
SYMBOL LEGEND:

-  DENOTES HELICAL PIER NUMBER
 DENOTES PROPOSED HELICAL PIER LAYOUT

| HELICAL PIER SCHEDULE | | | | | | |
|---|------------|-----------------------------|-----------------------------|----------------------------|-----------------------------|--|
| PIER DESIGNATION | SHAFT TYPE | DIAMETER HELIX "A" (IN.) | DIAMETER HELIX "B" (IN.) | DIAMETER HELIX "C" (IN) | MINIMUM PIER DEPTH (FT.) | LOAD RATING (KIPS) SERVICE/ULTIMATE |
|  | SS175 | 8 | 10 | 12 | 35 | 27/(54) |
| TEST PIT | SS175 | 8 | 10 | 12 | 35 | 27/(54) |



1. ALL NEW SECTIONS OF THE FOUNDATION DRAINS AND STORM DRAINS TO SLOPE 1/8" (MIN.) VERTICAL PER 1'-0" HORIZONTAL RUN OF PIPE TOWARD DISCHARGE POINT. NOTIFY ENGINEER WHERE NOT POSSIBLE OR WHERE CONFLICTS EXIST PRIOR TO PERFORMING THE WORK.
2. CONTRACTOR TO VERIFY EXISTING DRAIN LINES AT BUILDING 822 IS FUNCTIONAL PRIOR TO PERFORMING THE WORK. RETAIN THE SERVICES OF A QUALIFIED PLUMBER TO CAMERA LINE DRAIN LINE TO DETERMINE LOCATION OF OUTFALL OF DRAIN AND IF EXISTING DRAIN LINE IS DAMAGED/BROKEN, NOTIFY ENGINEER. WHEN CAMERA LINE SURVEY IS TO BE PERFORMED.
3. NEW VAPOR BARRIER REQUIREMENTS:
 - SHALL BE POLYETHYLENE SHEET NOT LESS THAN 10 MILS THICK
 - CLEAR/REMOVE CRAWLSPACE DEBRIS AND LEVEL CRAWLSPACE SURFACE
 - OVERLAP AND ATTACH SEAMS WITH MANUFACTURERS RECOMMENDED ADHESIVE OR PRESSURE-SENSITIVE JOINT TAPE
 - LAP SHEET EDGES AT JOINTS OF WALLS/FOUNDATION 6 INCHES AND TERMINATE WITH CONTINUOUS SEALANT JOINT
 - MECHANICALLY FASTEN (WITH STAKES) AT BUILDING CORNERS AND ONE FASTENER FOR EVERY 100 SQUARE FEET. TAPE OVER/CAP PENETRATION OF EACH FASTENER



OWNER'S AND/OR SUB'S LOGO

PARKFAIRFAX CONDOMINIUM
BUILDING 822/828
FOUNDATION AND FACADE REPAIRS
ALEXANDRIA VIRGINIA

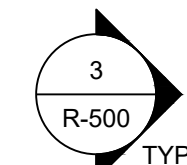
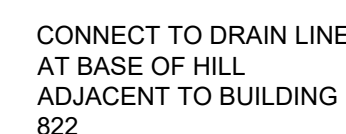
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| PROJECT NO: | 22-001792.01 |
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DRAWN BY: SM

CHECKED BY: JWW II

SHEET TITLE:
FOUNDATION AND
STORM DRAIN PLAN

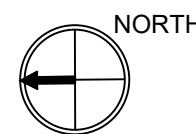


BUILDING 828
FOUNDATION DRAIN








N.T.S.

NOTES:

1. ALL NEW SECTIONS OF THE FOUNDATION DRAINS AND STORM DRAINS TO SLOPE 1/8" (MIN.) VERTICAL PER 1'-0" HORIZONTAL. RUN OF PIPE TOWARD DISCHARGE POINT. NOTIFY ENGINEER WHERE NOT POSSIBLE OR WHERE CONFLICTS EXIST PRIOR TO PERFORMING THE WORK.
2. CONTRACTOR TO VERIFY EXISTING DRAIN LINES AT BUILDING 828 IS FUNCTIONAL PRIOR TO PERFORMING THE WORK. RETAIN THE SERVICES OF A QUALIFIED PLUMBER TO CAMERA LINE DRAIN LINE TO DETERMINE LOCATION OF OUTFALL OF DRAIN AND IF EXISTING DRAIN LINE IS DAMAGED/BROKEN, NOTIFY ENGINEER WHEN CAMERA LINE SURVEY IS TO BE PERFORMED. NEW VAPOR BARRIER REQUIREMENTS:
3.
 - a. SHALL BE POLYETHYLENE SHEET NOT LESS THAN 10 MILS THICK
 - b. CLEAR/REMOVE CRAWLSPACE DEBRIS AND LEVEL CRAWLSPACE SURFACE
 - c. OVERLAP AND ATTACH SEAMS WITH MANUFACTURERS RECOMMENDED ADHESIVE OR PRESSURE-SENSITIVE JOINT TAPE
 - d. LAP SHEET EDGES TO CORNER OF WALLS/FOUNDATION 6 INCHES AND TERMINATE WITH CONTINUOUS SEALANT JOINT
 - e. MECHANICALLY FASTEN (WITH STAKES) AT BUILDING CORNERS AND ONE FASTENER FOR EVERY 100 SQUARE FEET. TAPE OVER/CAP PENETRATION OF EACH FASTENER



SYMBOL LEGEND:

- | | |
|---|---|
|  | DENOTES NEW 4" Ø PVC PERFORATED FOUNDATION DRAIN LINE |
|  | DENOTES NEW 4" Ø PVC NON-PERFORATED STORM DRAIN LINE |
|  | DENOTES NEW 6" Ø PVC NON-PERFORATED DRAIN LINE |
|  | DENOTES DIRECTION OF SLOPE FOR DRAIN LINES |
|  | DENOTES NEW CLEAN-OUT/VENT FOR NEW FOUNDATION DRAIN |
|  | DENOTES NEW CLEAN-OUT FOR STORM DRAIN |
|  | DENOTES EXISTING DOWNSPOUT |



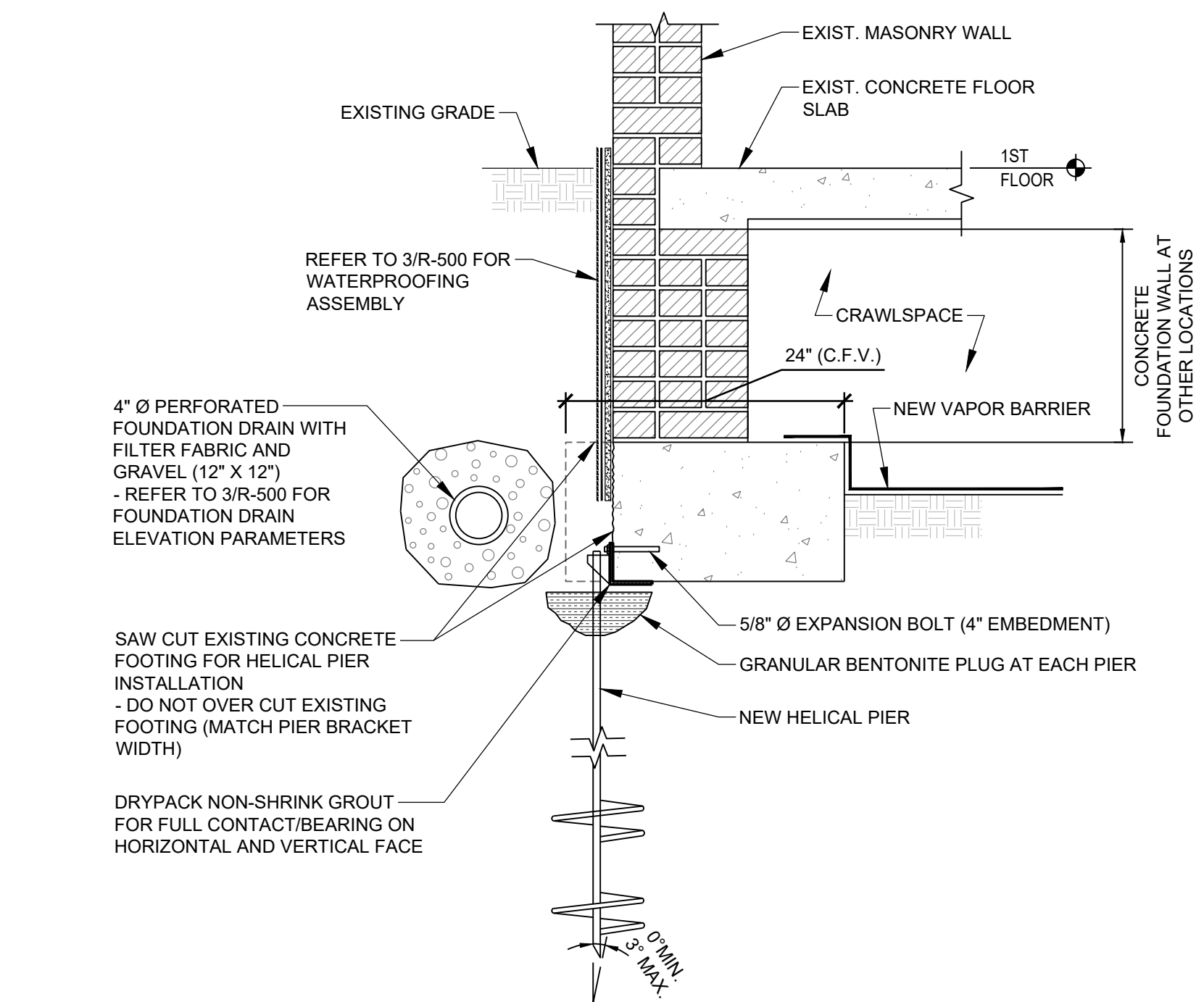
OWNER'S AND/OR SUB'S LOGO

PARKFAIRFAX CONDOMINIUM
BUILDING 822/828
FOUNDATION AND FACADE REPAIRS

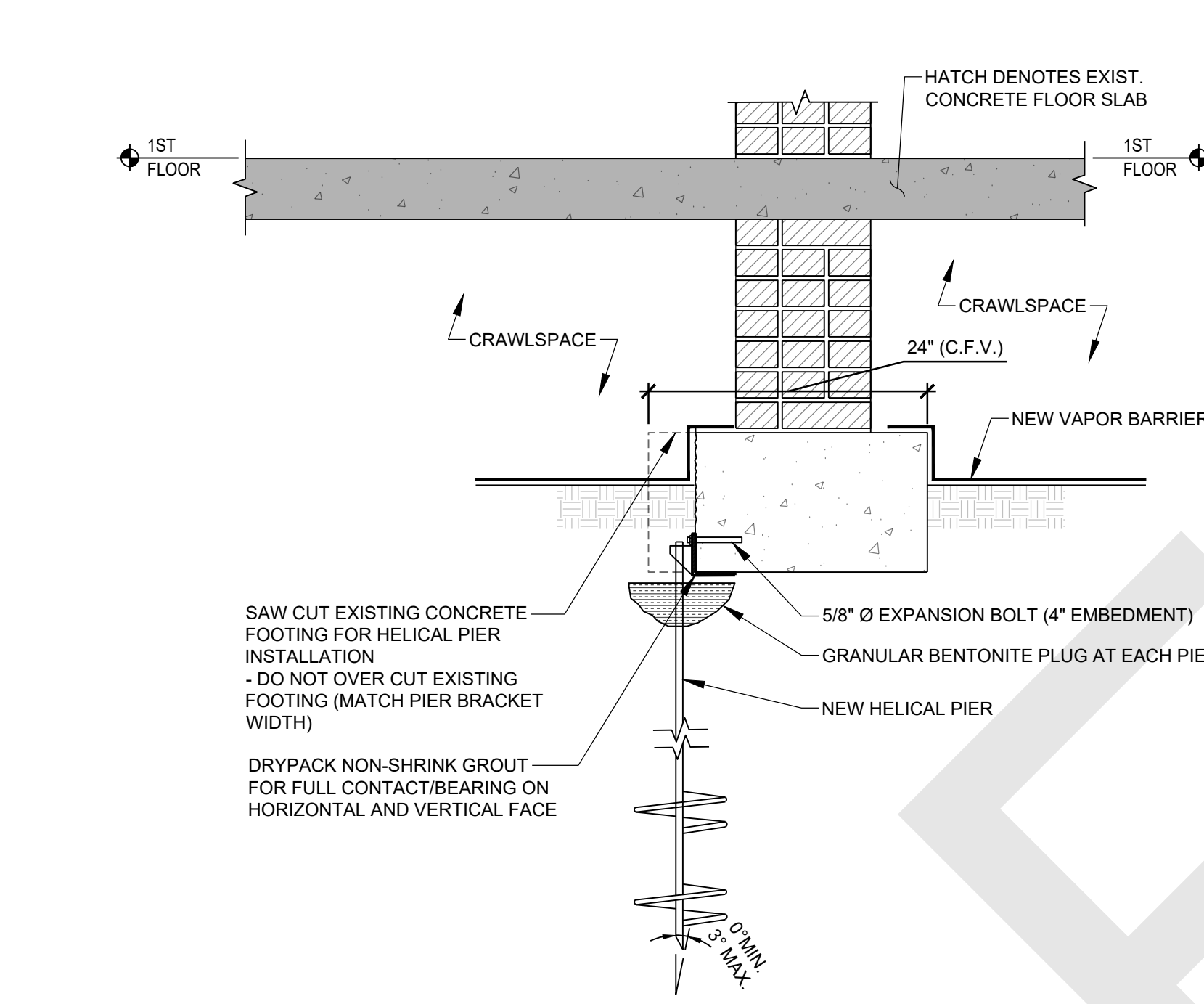
ALEXANDRIA VIRGINIA

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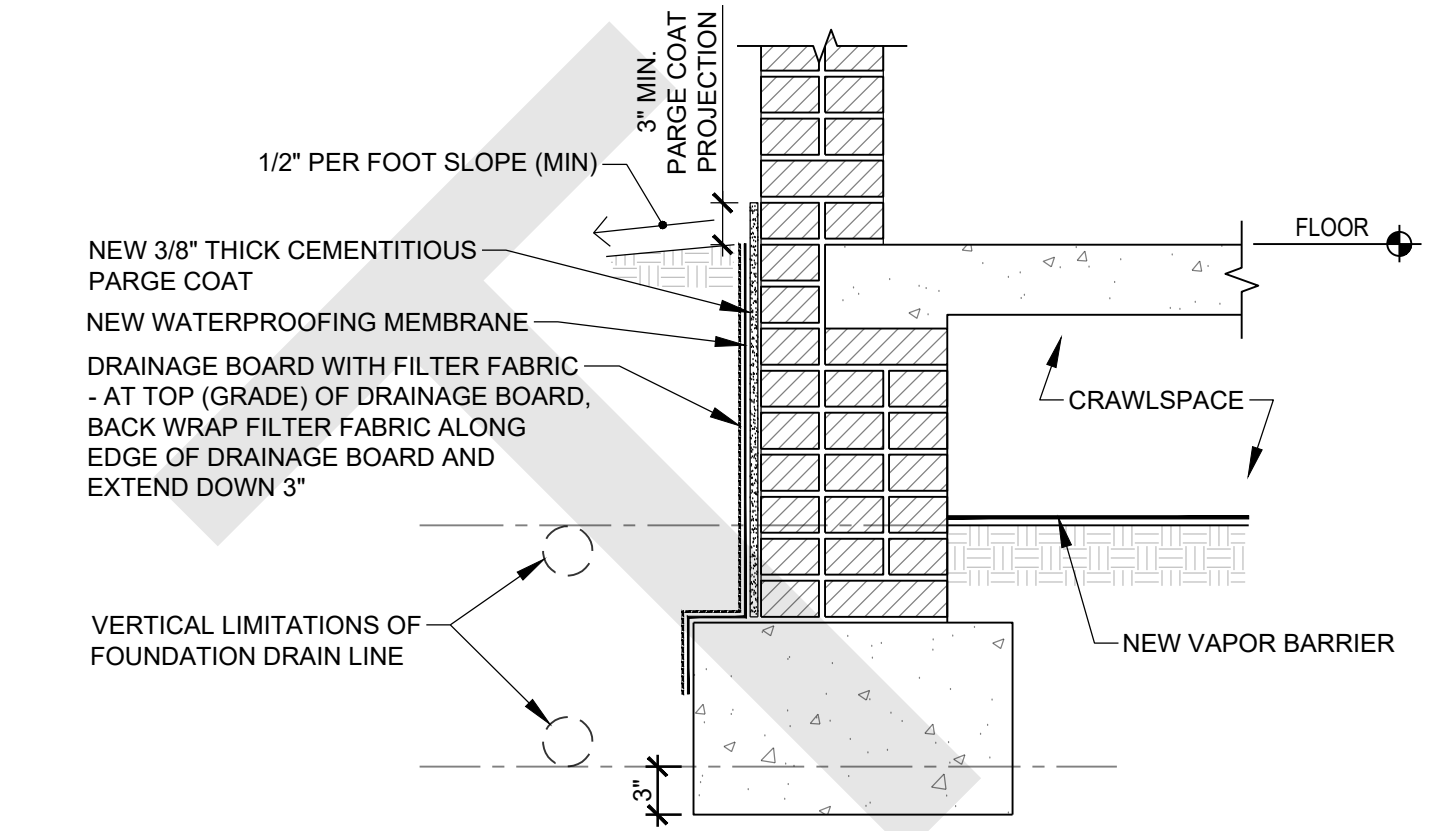
R-105



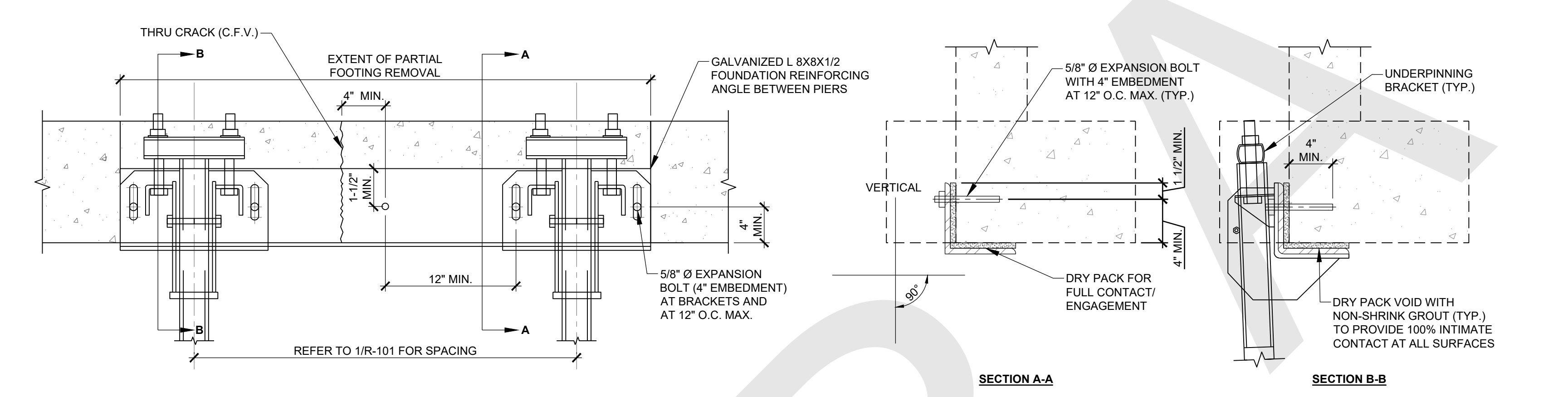
1 TYPICAL DETAIL - HELICAL PIER BRACKET AT EXTERIOR FOUNDATION WALL



2 TYPICAL DETAIL - HELICAL PIER BRACKET AT INTERIOR FOUNDATION WALL

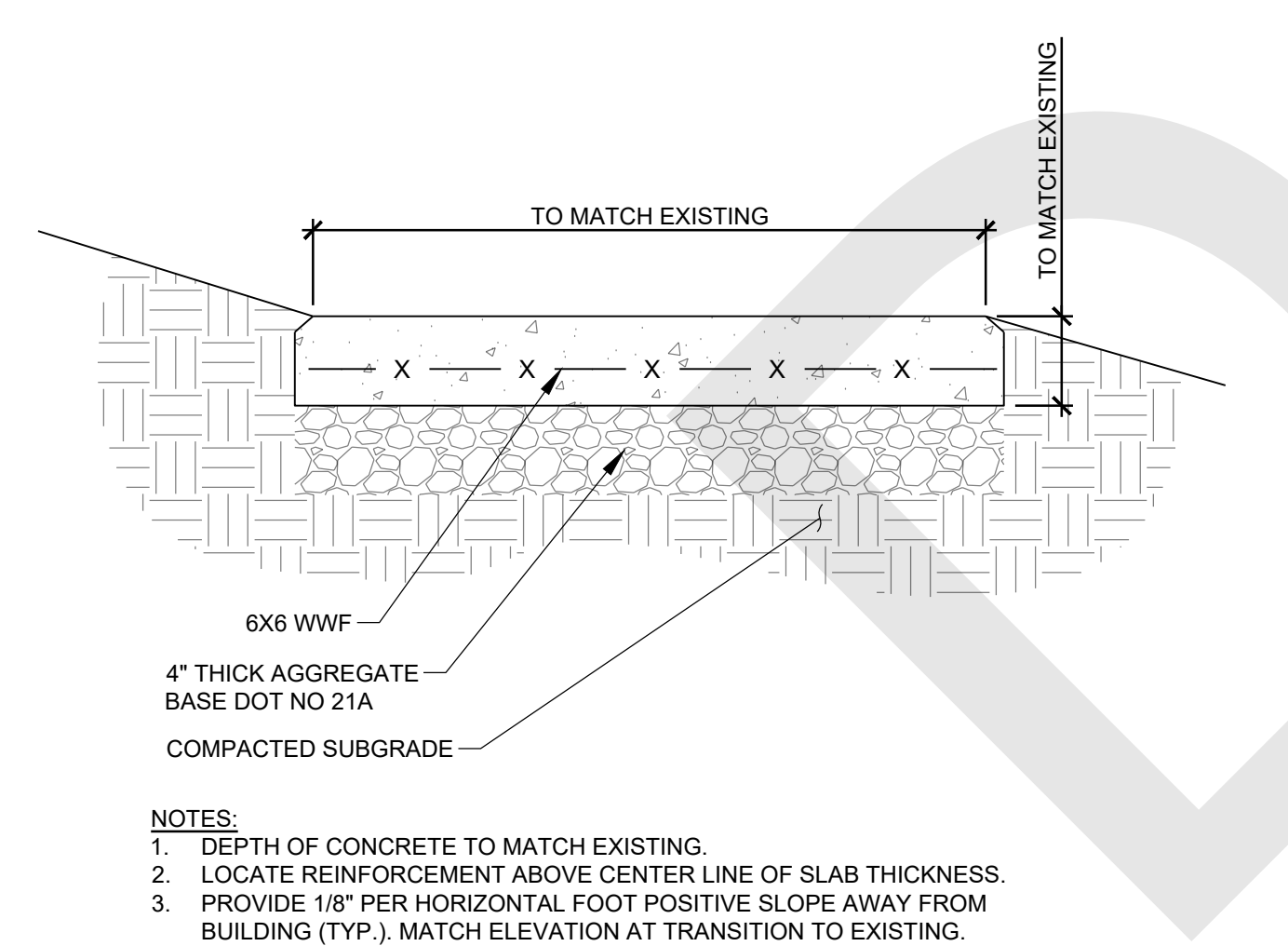


3 FOUNDATION WATERPROOFING AND DRAIN DETAIL



- NOTES:
1. MAINTAIN AT LEAST 4" EDGE DISTANCE BETWEEN ANCHOR AND FOUNDATION CRACK (TYP.).
 2. DRY PACK ALL VOIDS BETWEEN ANGLE AND FOOTING WITH NON-SHRINK GROUT.
 3. ALIGN BOLT LOCATIONS FOR ANGLE AND BRACKET. ANGLE TO BE IN INTIMATE CONTACT ALONG THE ENTIRE LENGTH.
 4. DRY PACK ALL VOIDS BETWEEN ANGLE AND BRACKET WITH NON-SHRINK GROUT.

4 HELICAL PIER "BRACKET" FOOTING REINFORCING AT CRACK LOCATIONS



- NOTES:
1. DEPTH OF CONCRETE TO MATCH EXISTING.
 2. LOCATE REINFORCEMENT ABOVE CENTER LINE OF SLAB THICKNESS.
 3. PROVIDE 1/8" PER HORIZONTAL FOOT POSITIVE SLOPE AWAY FROM BUILDING (TYP.). MATCH ELEVATION AT TRANSITION TO EXISTING.

6 TYPICAL SIDEWAL DETAIL

WALKER CONSULTANTS
2277 Research Blvd
Suite 275
Rockville, MD 20850
202.510.9366 Ph
www.walkerconsultants.com

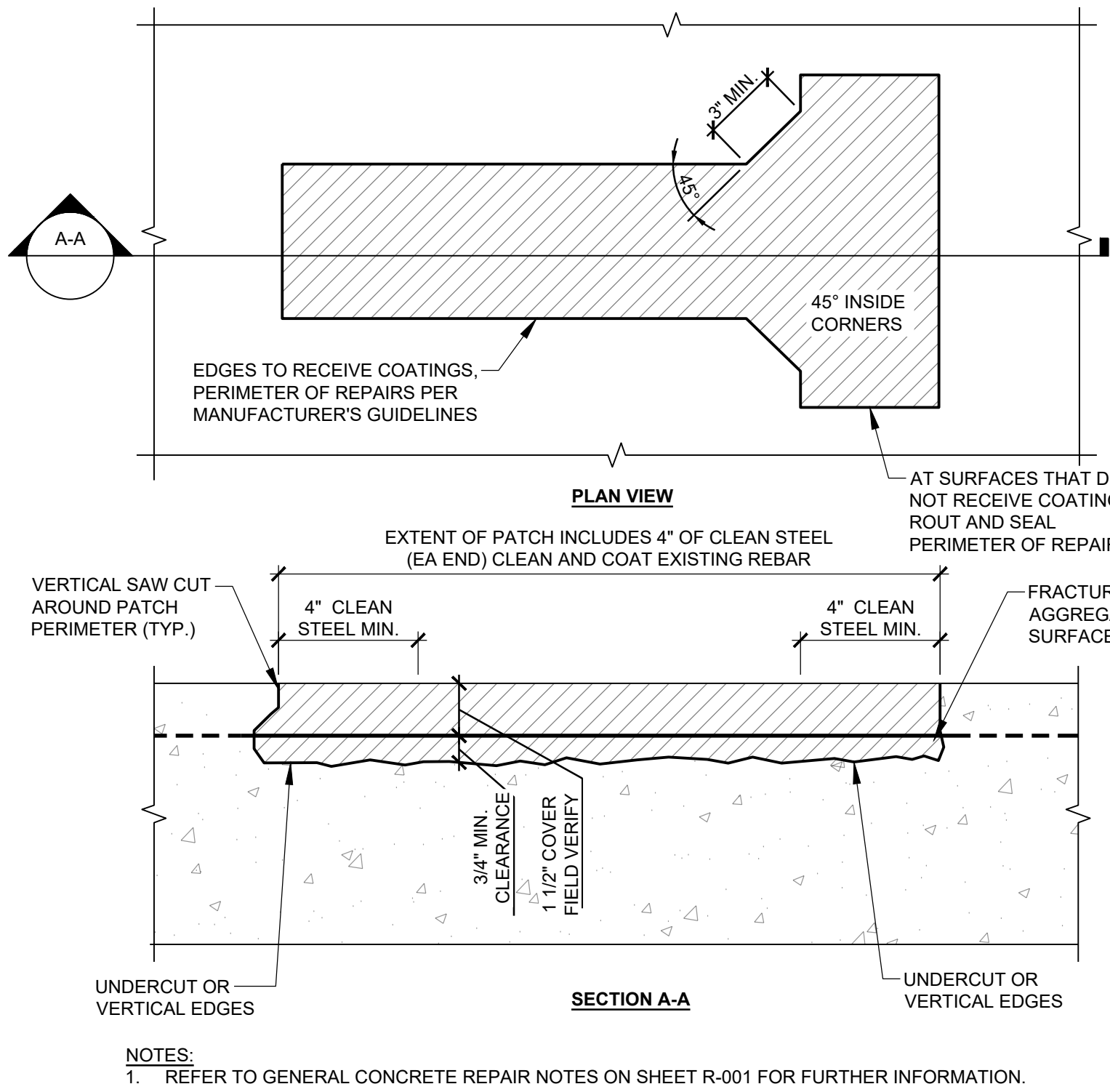
OWNER'S AND/OR SUBS LOGO

PARKFAIRFAX CONDOMINIUM
BUILDING 822/828
FOUNDATION AND FACADE REPAIRS
ALEXANDRIA VIRGINIA

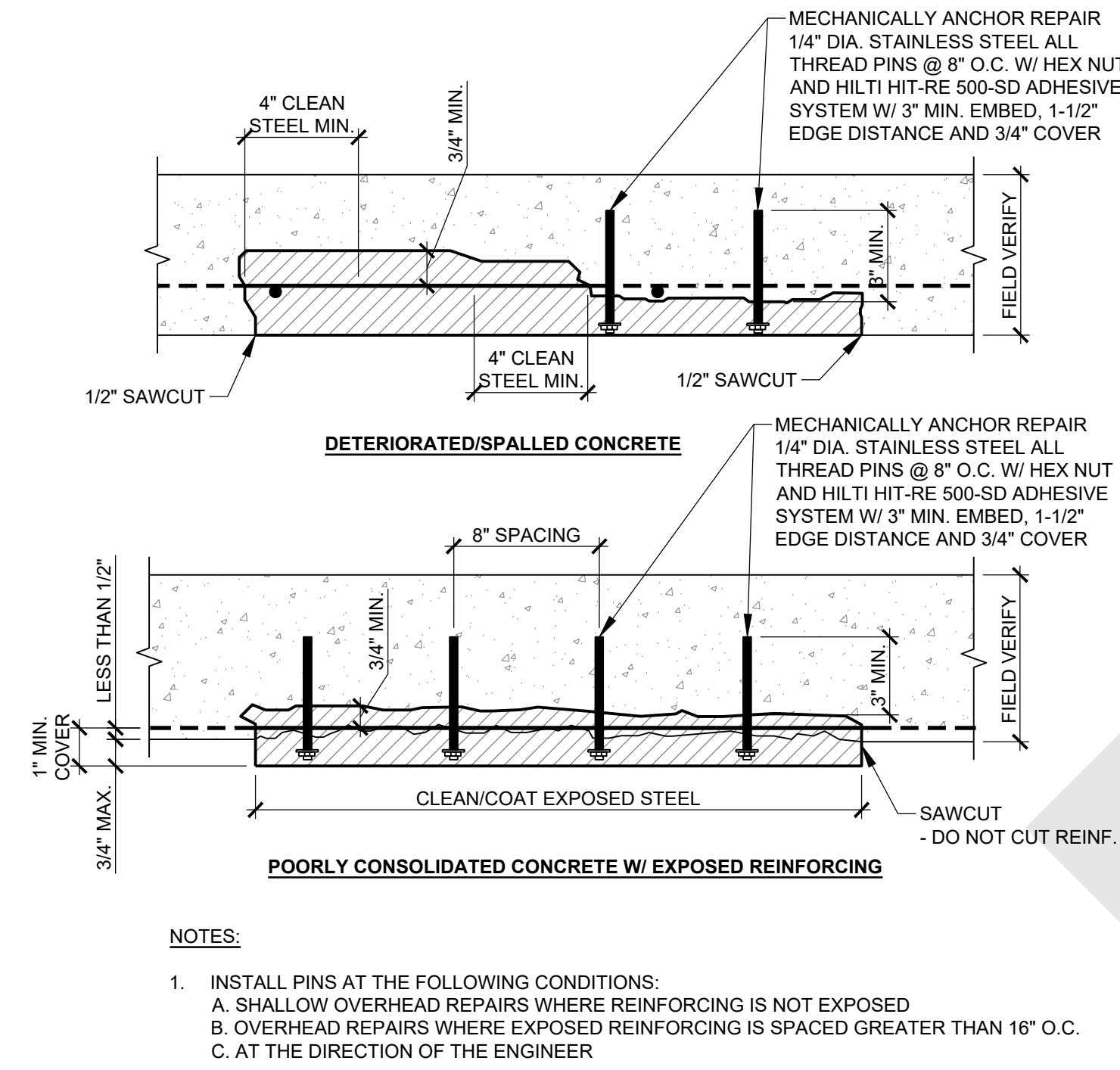
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| | 09/03/2025 | ISSUED FOR BIDDING | 09/03/2025 |

PROJECT NO: 22-001792.01
DRAWN BY: SM
CHECKED BY: JWW III
SHEET TITLE: GEOTECHNICAL REPAIRS

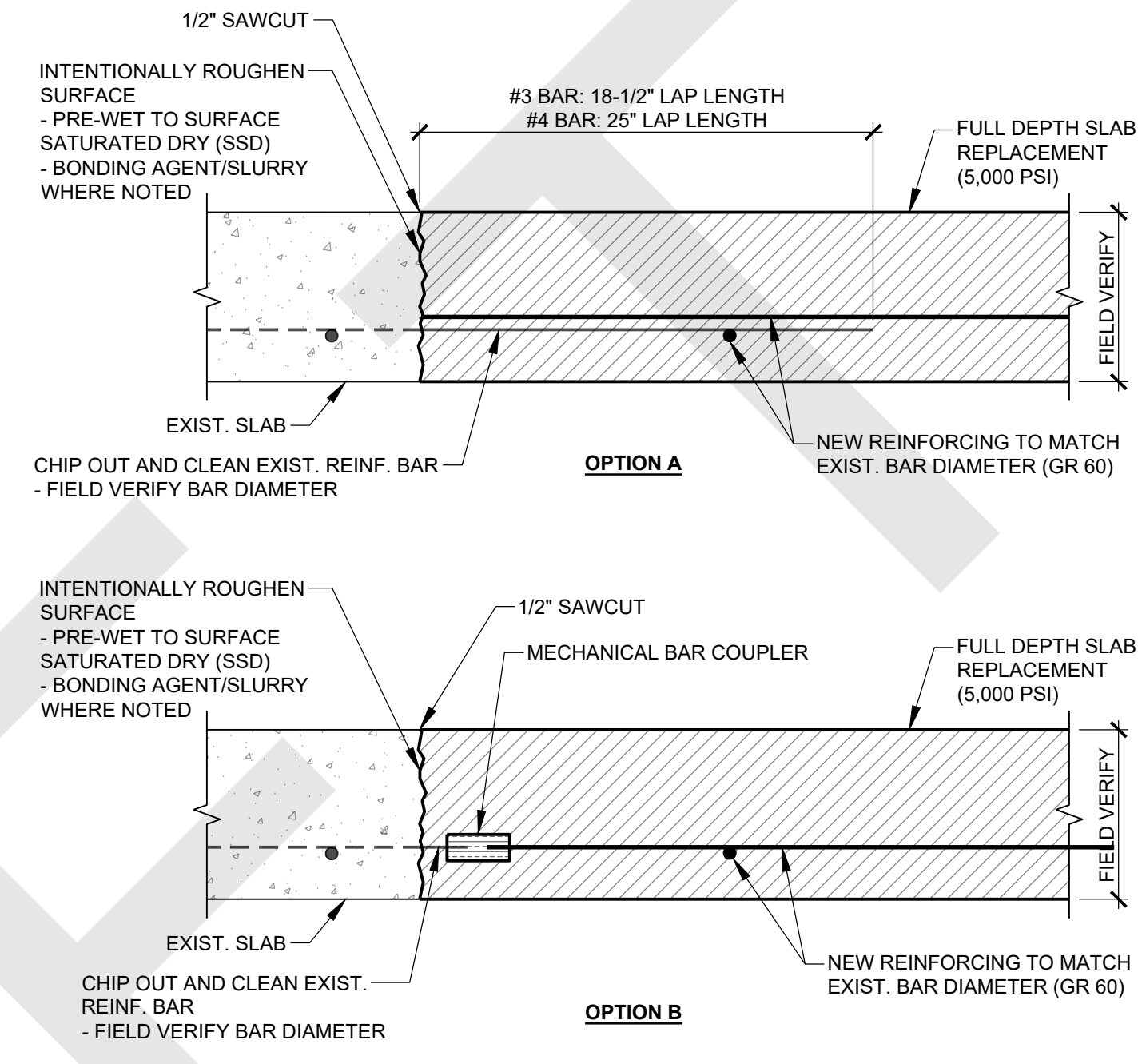
R-500



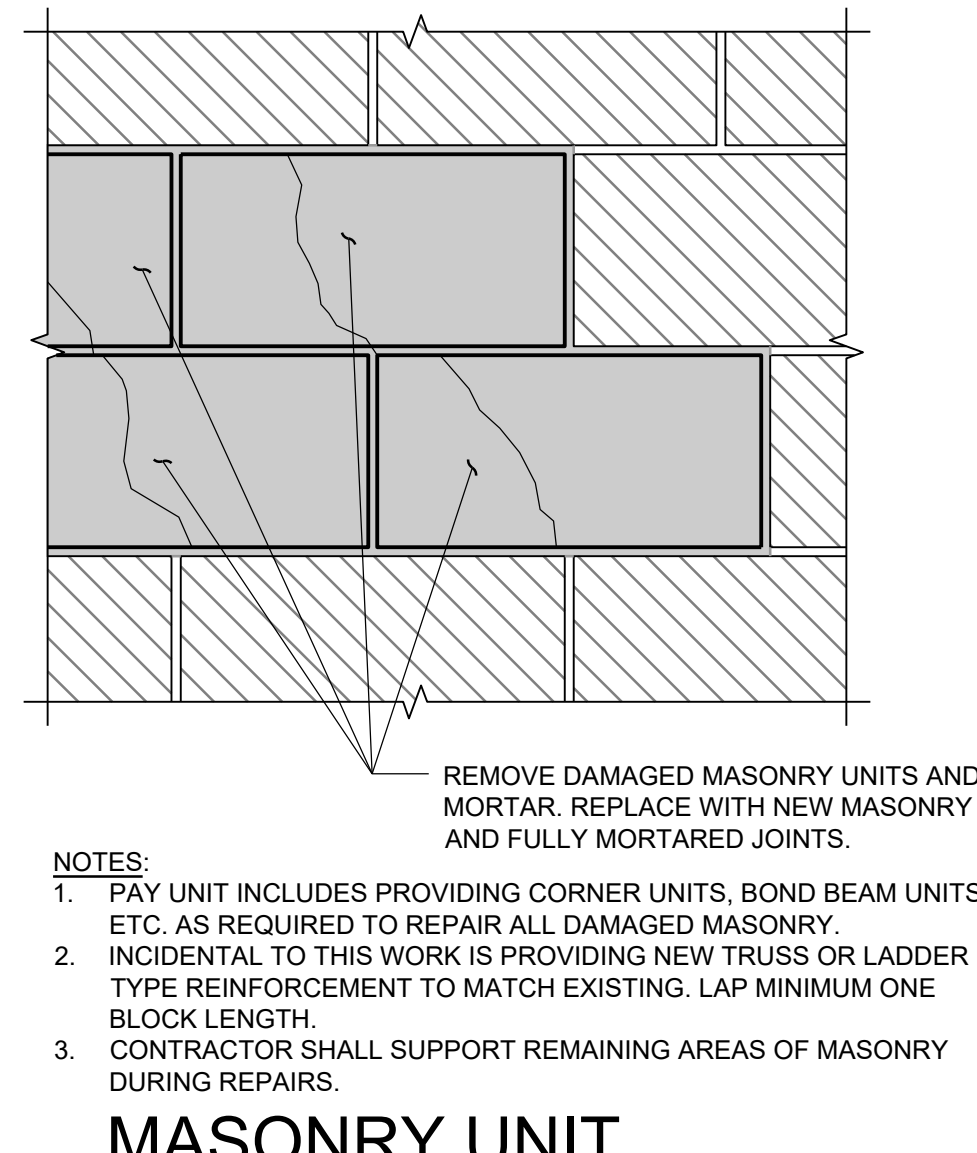
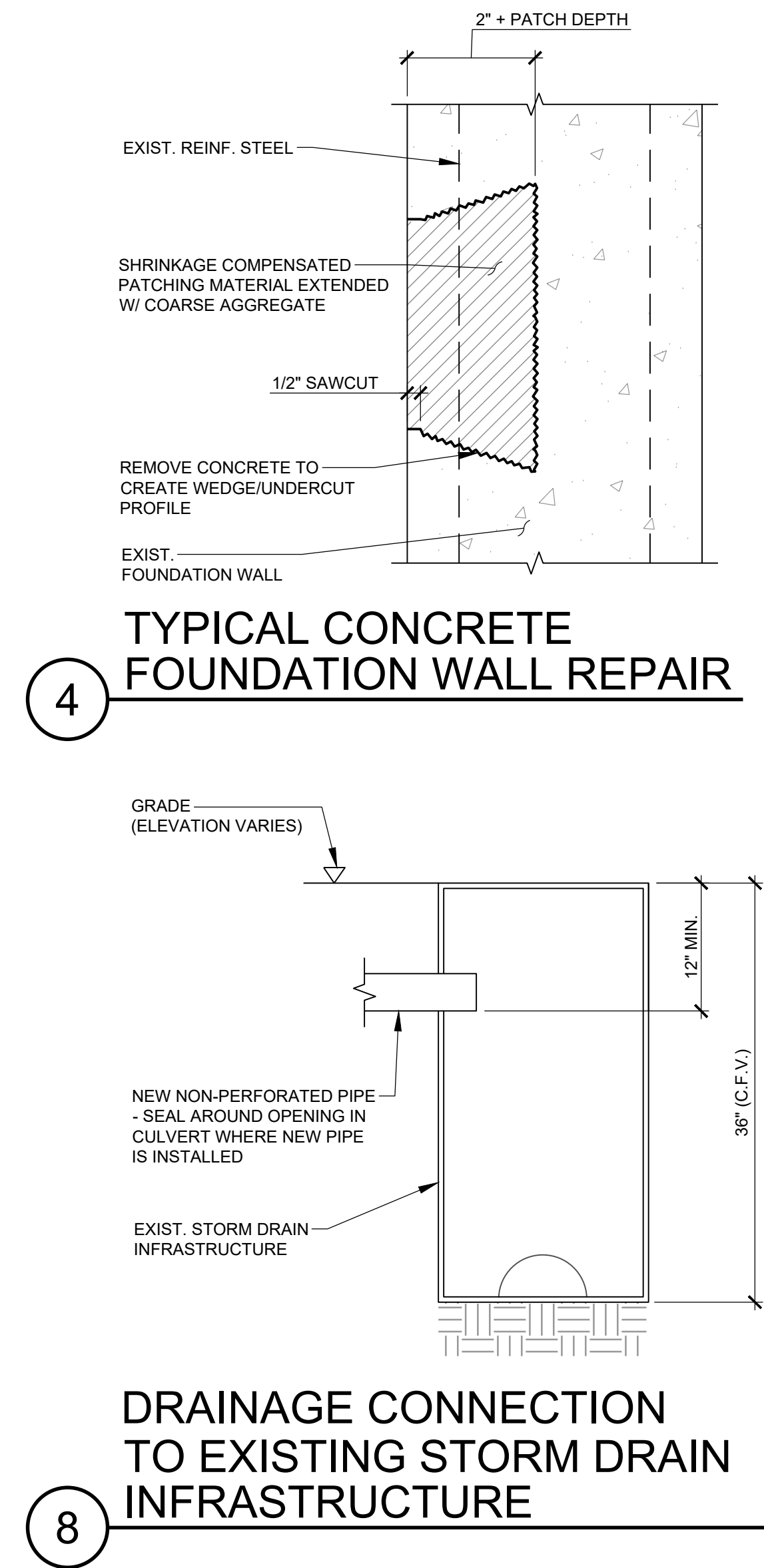
1 TYPICAL DETAIL CONCRETE HORIZONTAL REPAIRS



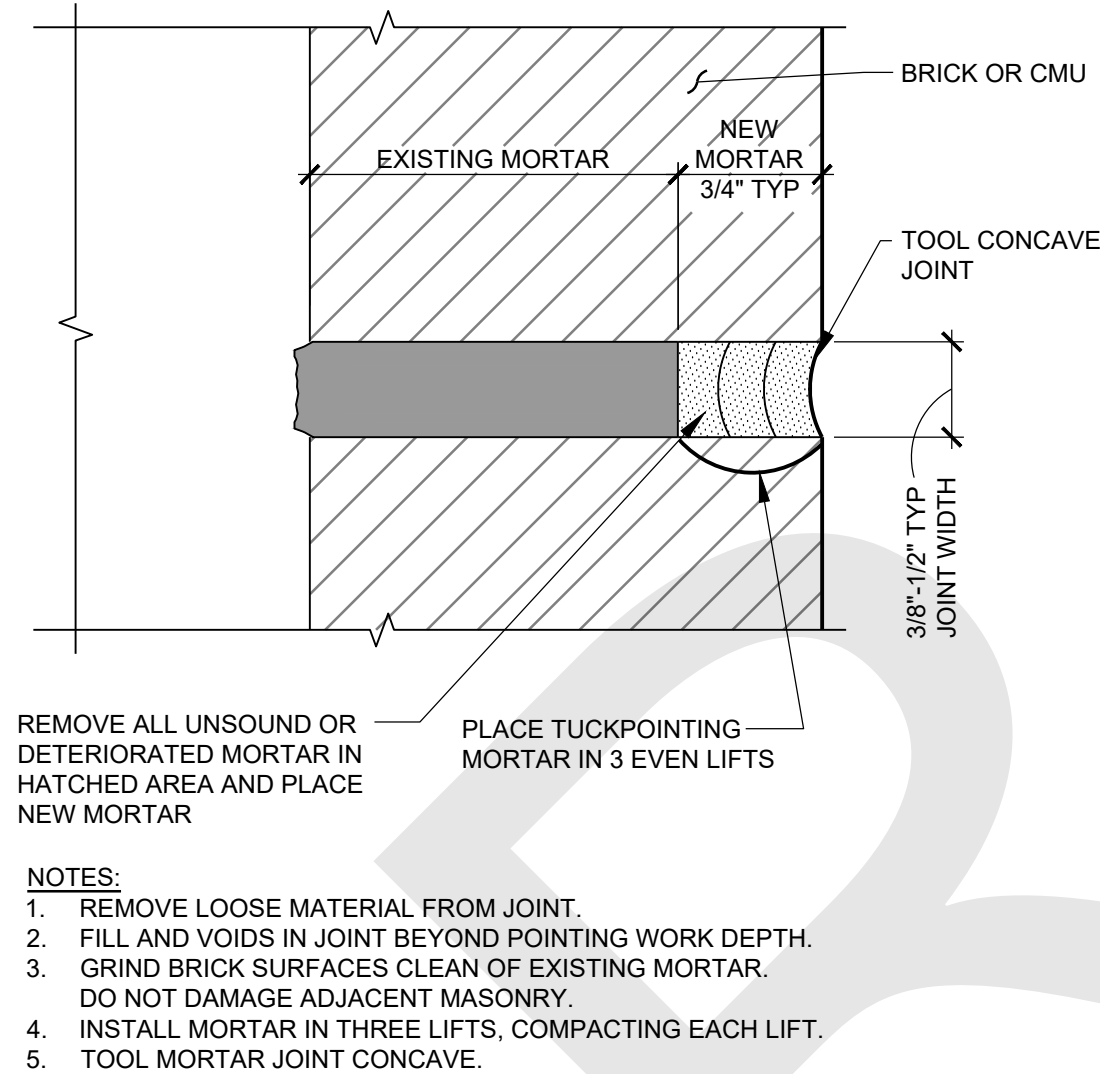
2 TYPICAL DETAIL OVERHEAD CONCRETE REPAIRS



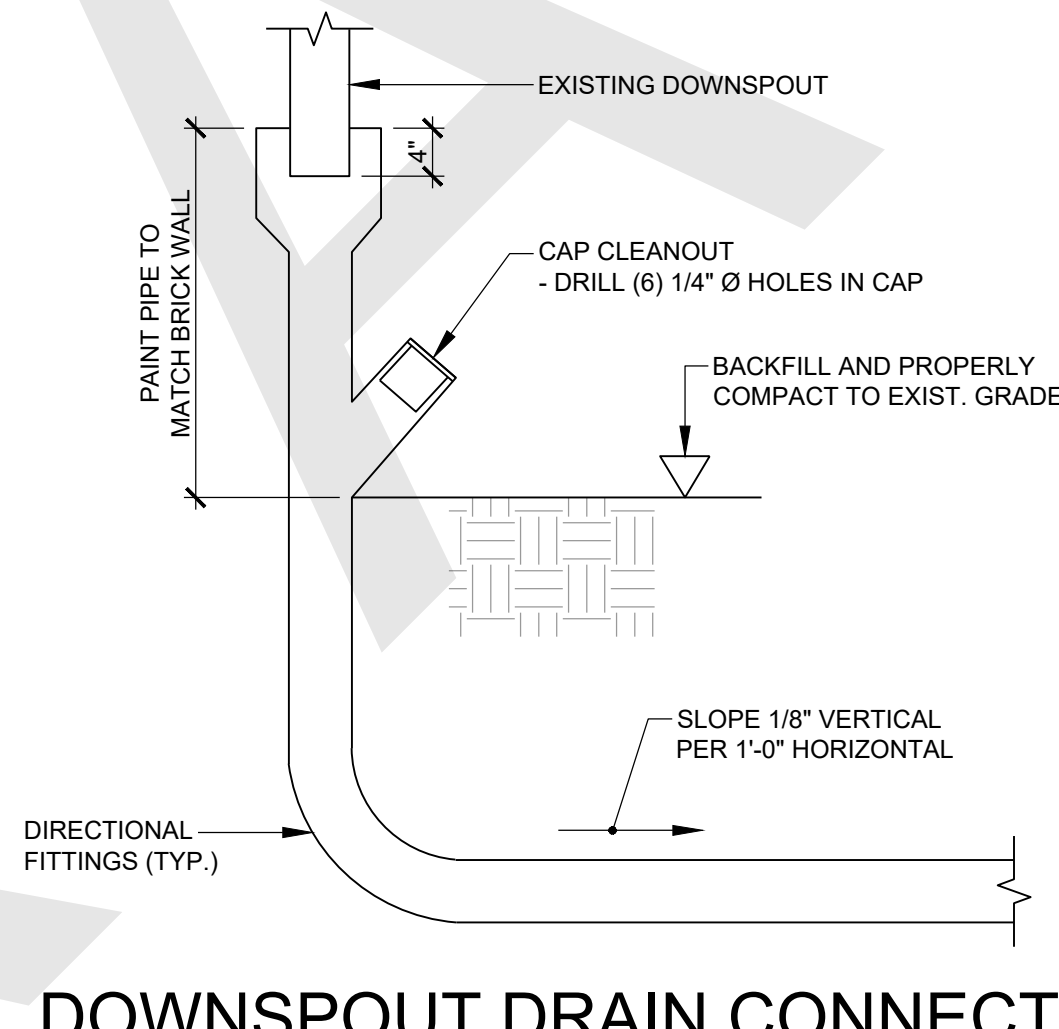
3 TYPICAL DETAIL FULL DEPTH SLAB REPAIRS



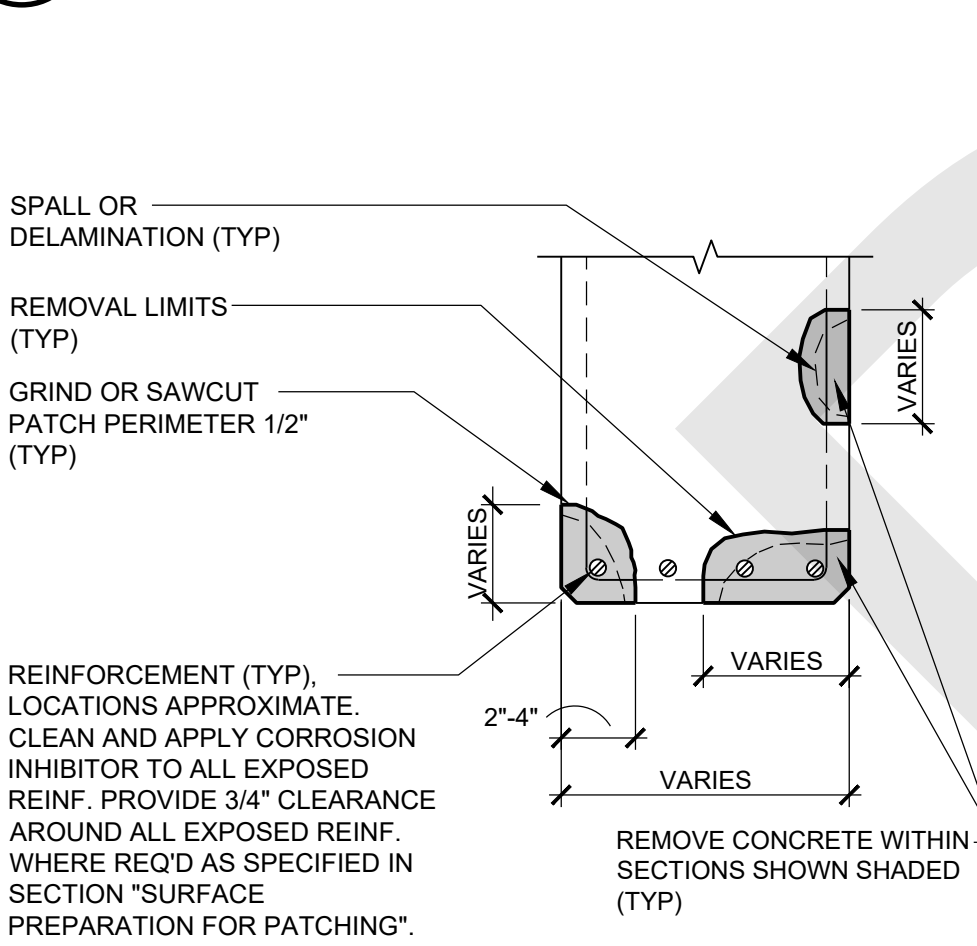
5 MASONRY UNIT REPAIR/REPLACEMENT



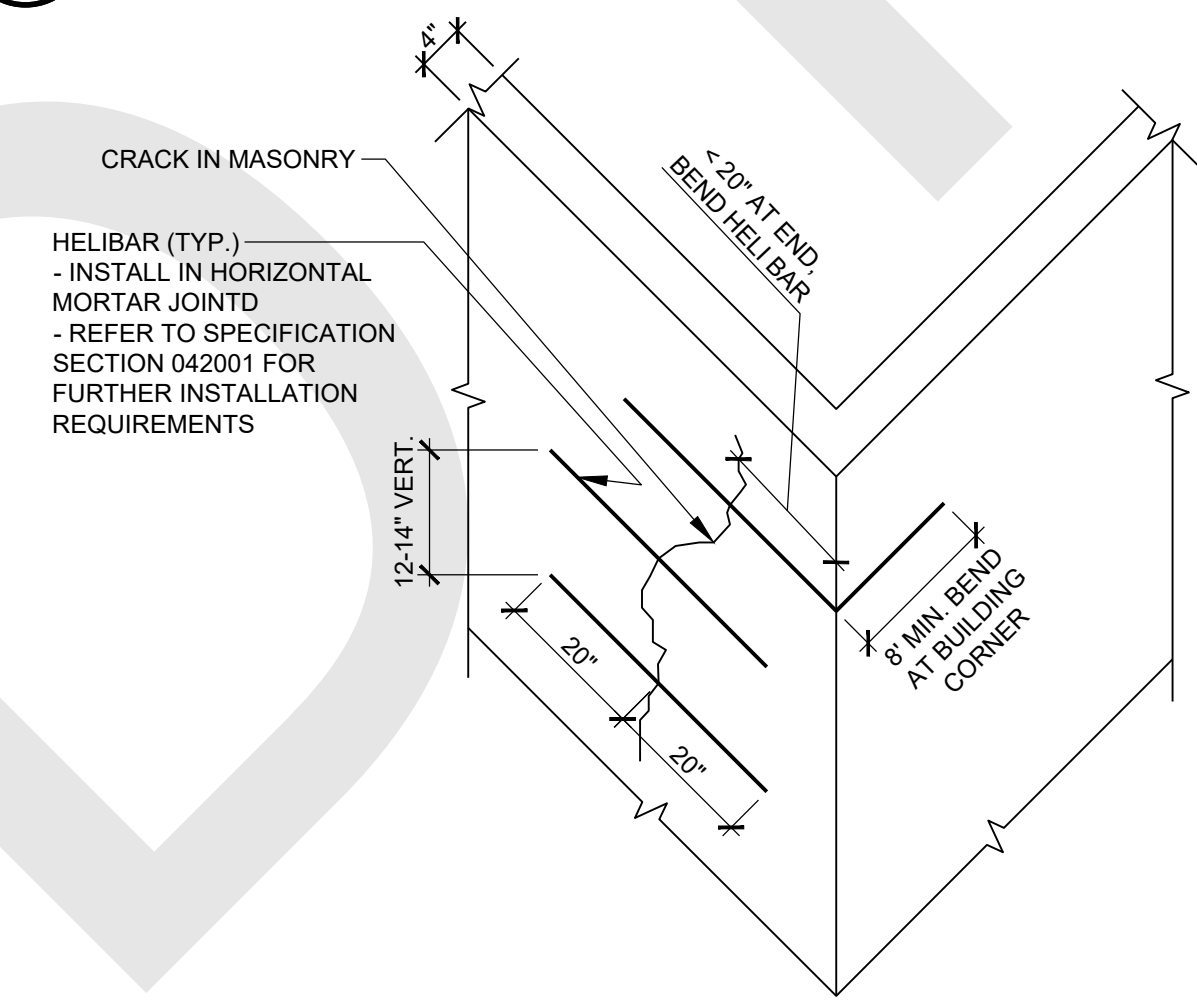
6 TUCKPOINTING



7 DOWNSPOUT DRAIN CONNECTION WITH VENT/CLEANOUT



9 BEAM REPAIR-PARTIAL DEPTH



10 CRACK STITCHING

| MARK | DATE | DESCRIPTION | ISSUE |
|------|------------|--------------------|-------|
| | 09/03/2025 | ISSUED FOR BIDDING | |

| | |
|--------------|-------------------------------|
| PROJECT NO: | 22-001792.01 |
| DRAWN BY: | SM |
| CHECKED BY: | JWW III |
| SHEET TITLE: | FOUNDATION AND FACADE REPAIRS |

