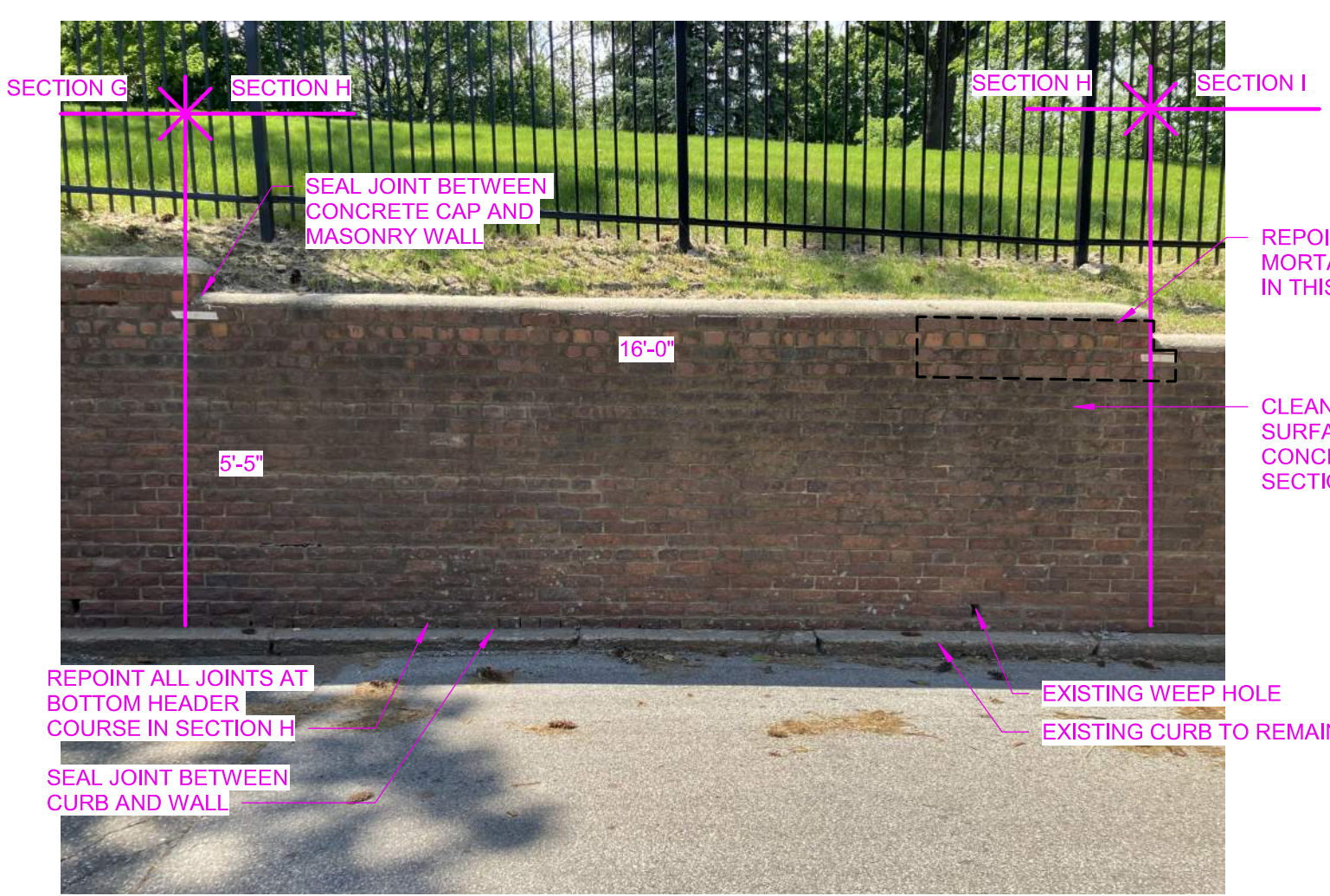
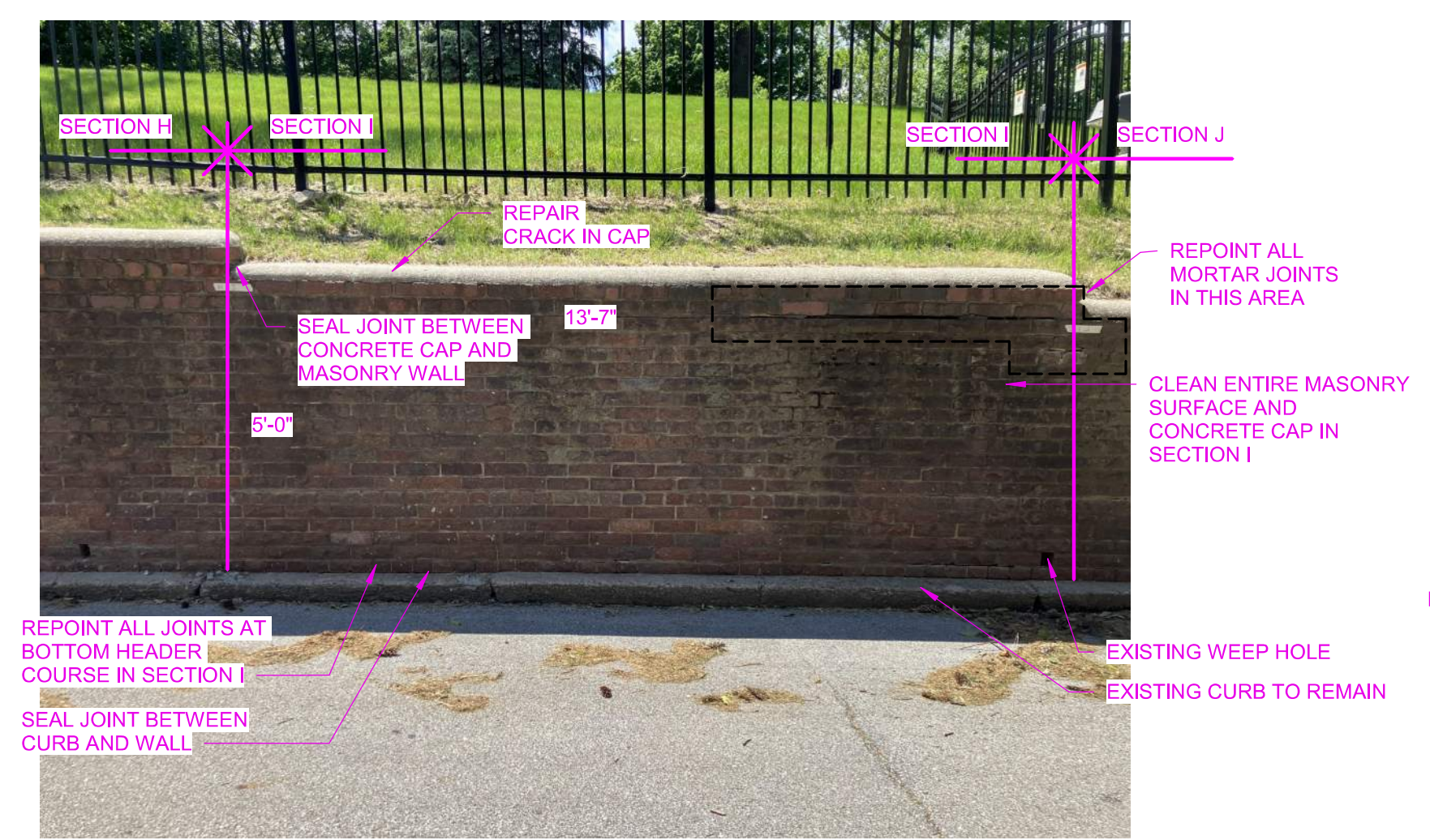


|              |            |
|--------------|------------|
| PROJECT      | 2142202241 |
| ISSUE DATE   | 7/9/2024   |
| CONSTRUCTION |            |
| FIELD BOOK   |            |

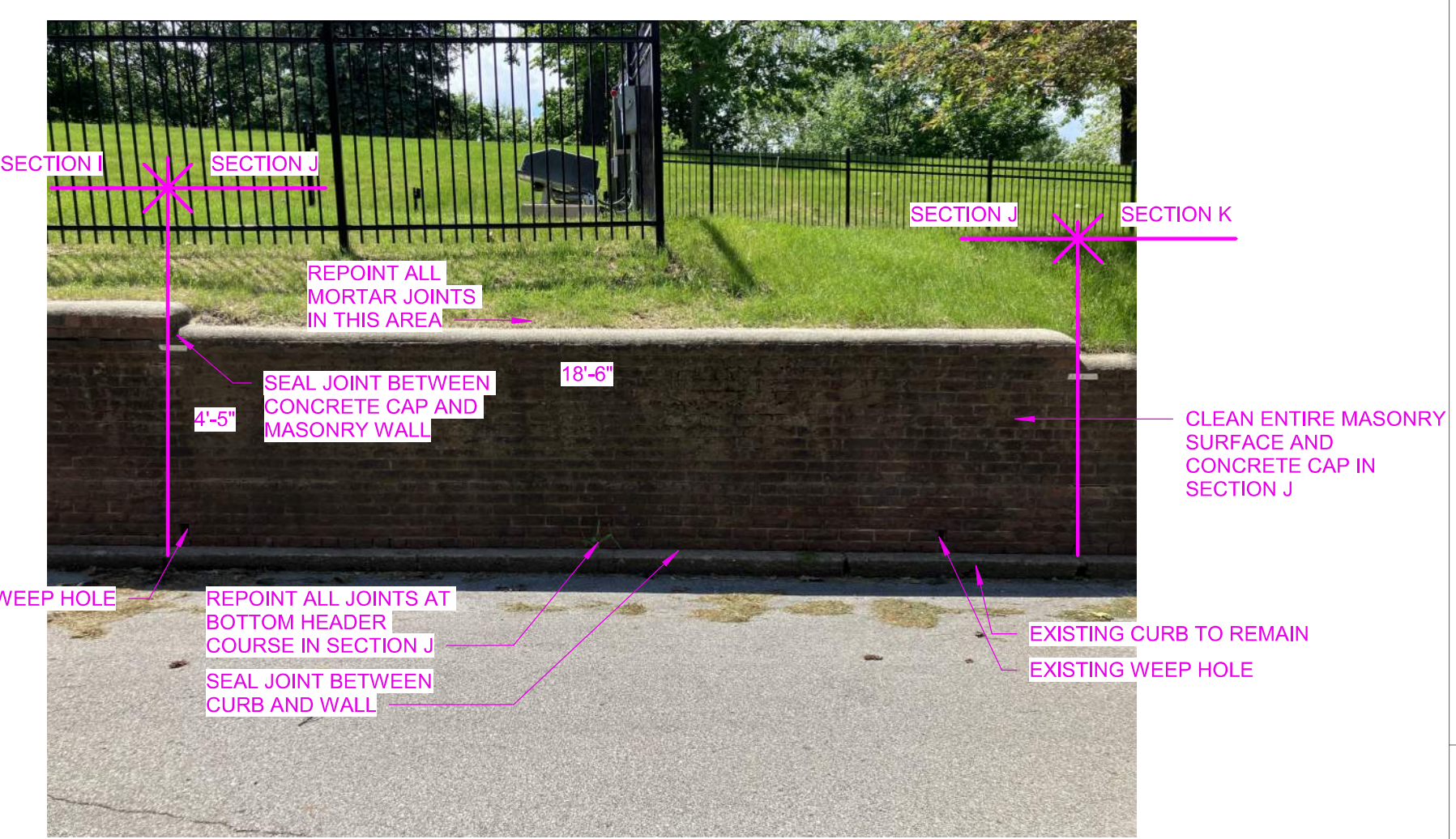
**PHOTOGRAPHS OF REMAINING RETAINING WALL**



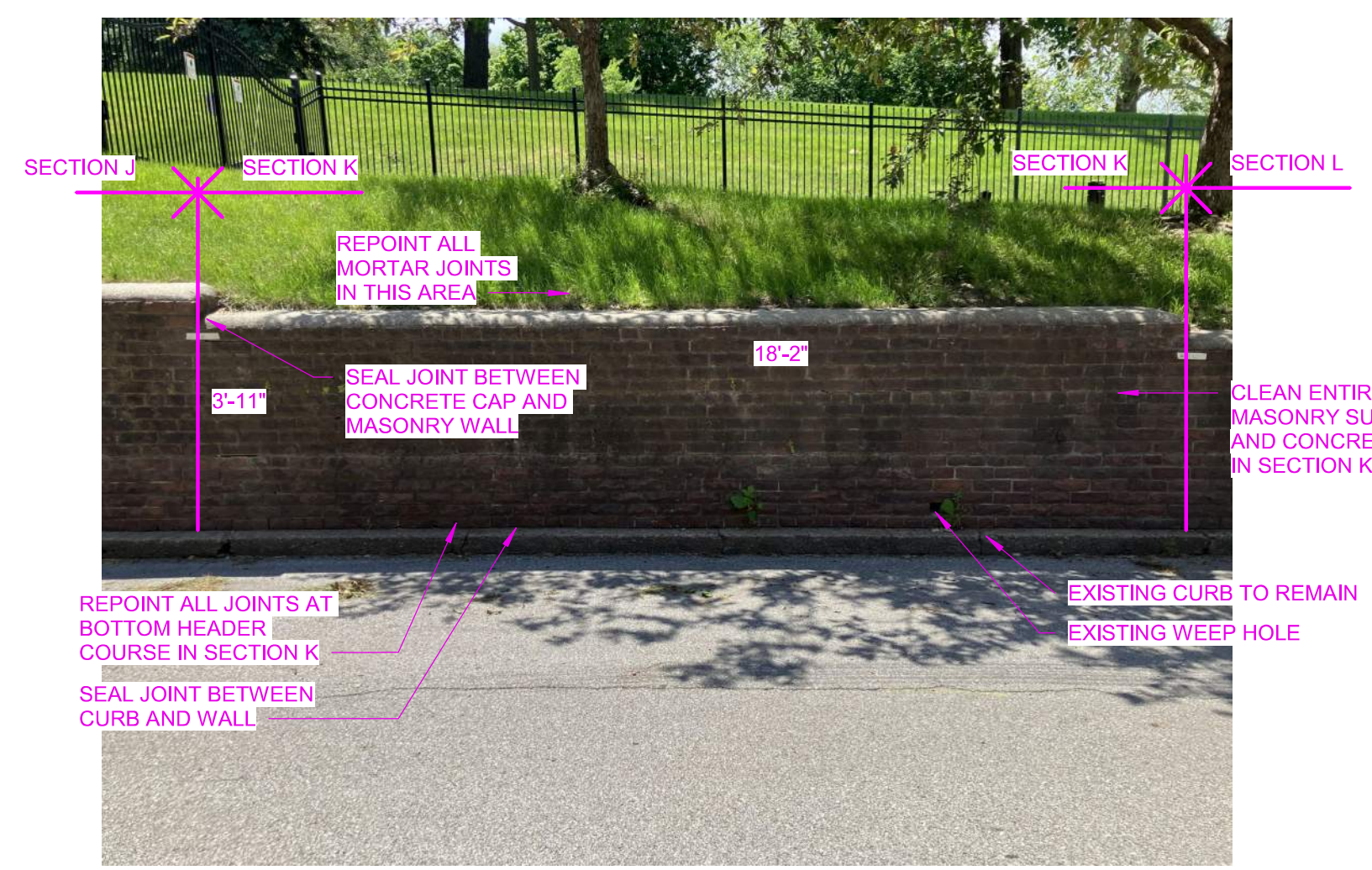
**A2 SECTION H** NOT TO SCALE SECTION H - 88 SQ. FT.



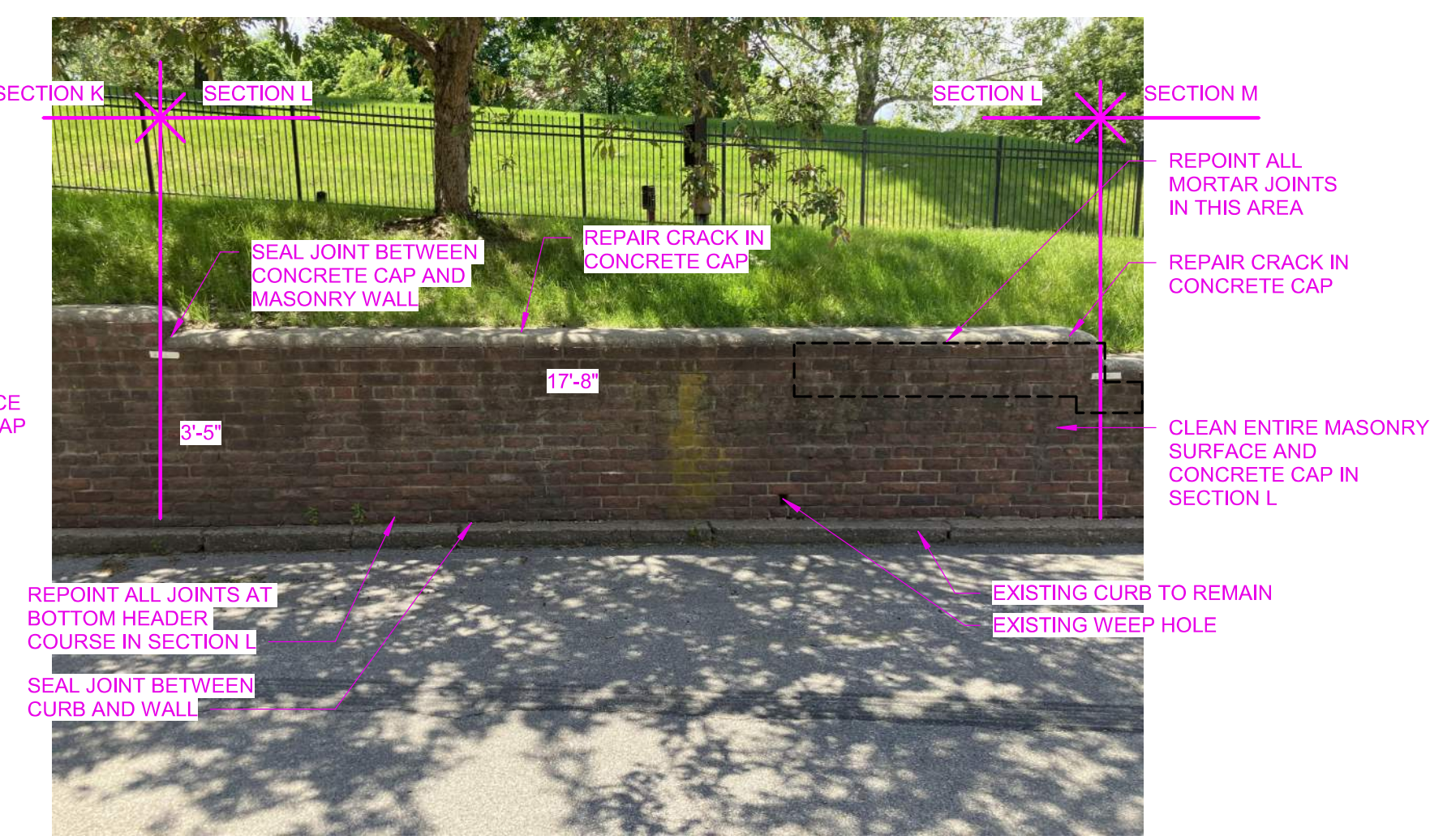
**C2 SECTION I** NOT TO SCALE SECTION I - 68 SQ. FT.



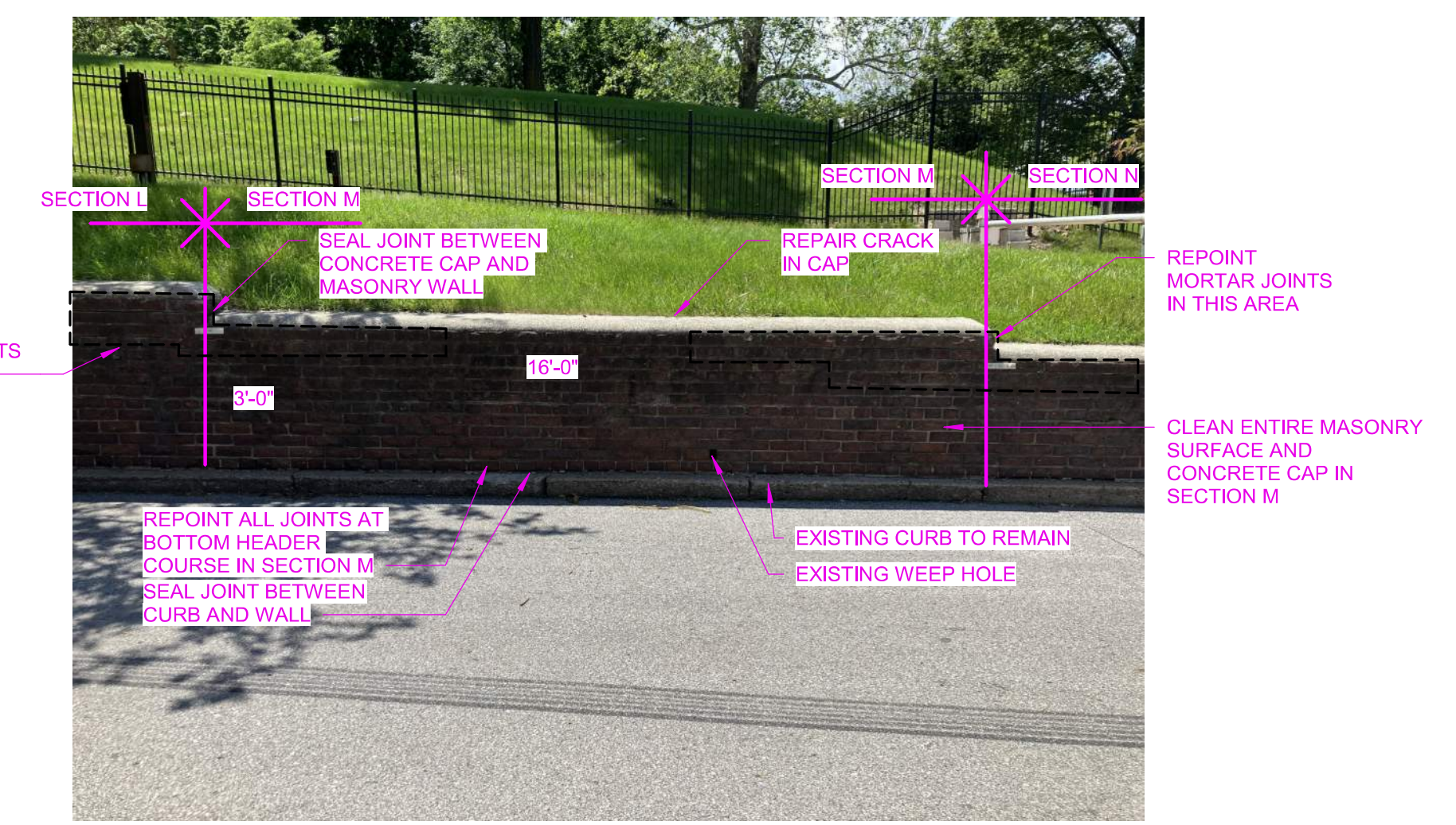
**E2 SECTION J** NOT TO SCALE SECTION J - 82 SQ. FT.



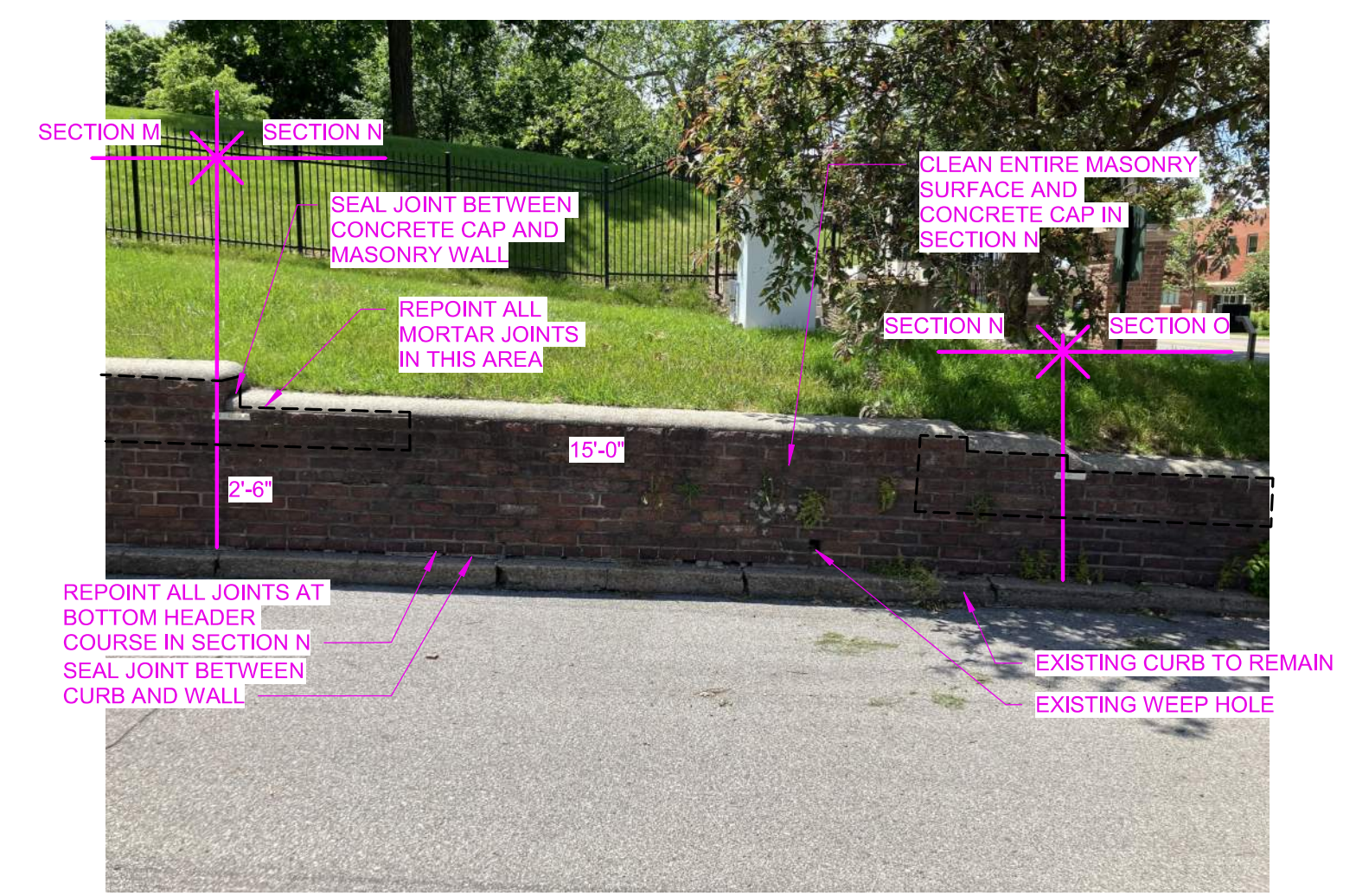
**A3 SECTION K** NOT TO SCALE SECTION K - 71 SQ. FT.



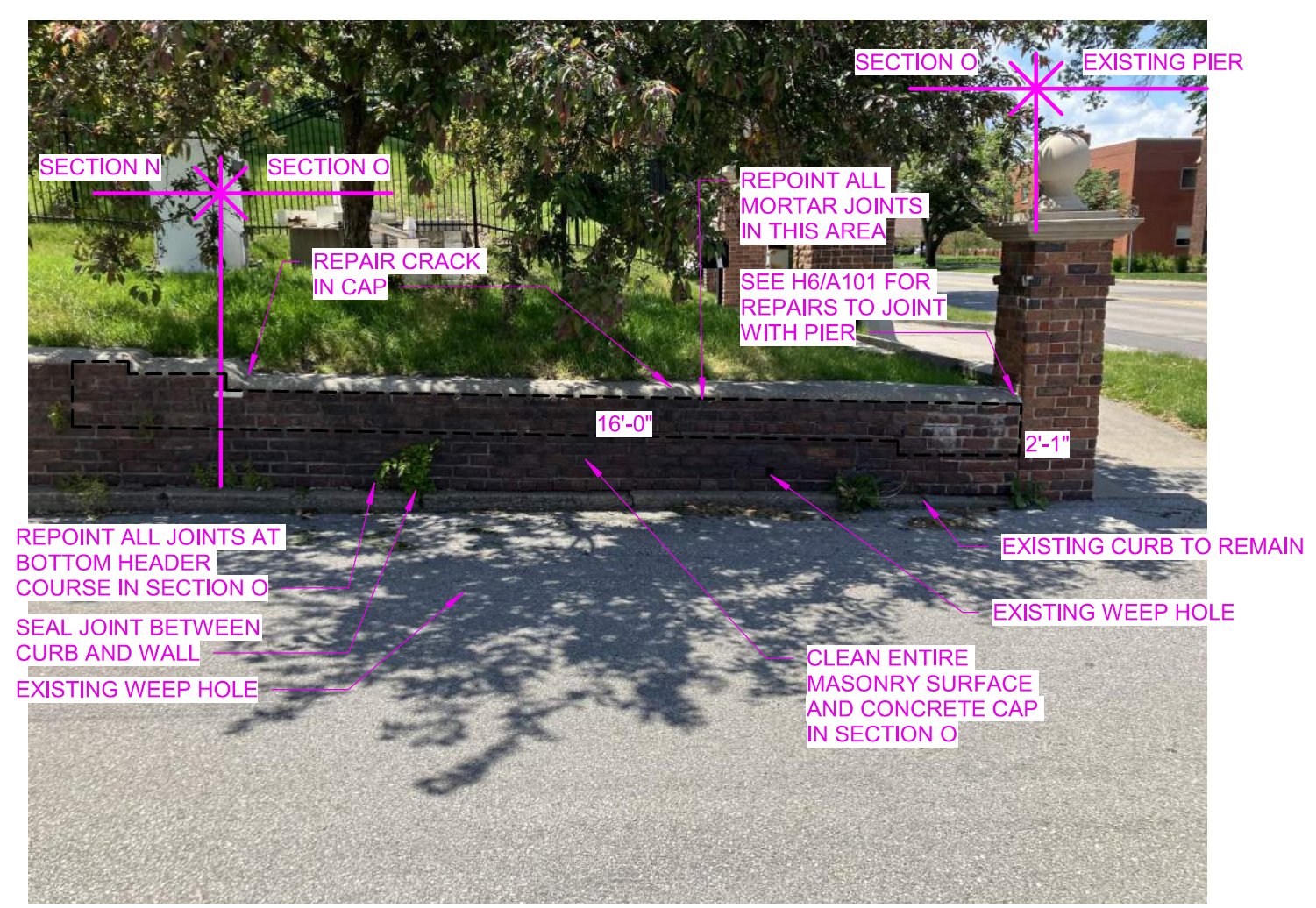
**B3 SECTION L** NOT TO SCALE SECTION L - 61 SQ. FT.



**E3 SECTION M** NOT TO SCALE SECTION M - 48 SQ. FT.



**A4 SECTION N** NOT TO SCALE SECTION N - 38 SQ. FT.



**B4 SECTION O** NOT TO SCALE SECTION O - 34 SQ. FT.

- GENERAL NOTES**
- ENTIRE RETAINING WALL TO BE CLEANED.
  - REMOVE ALL VEGETATION FROM WALL AND CURB INCLUDING REMNANTS OF VINE.
  - BED JOINTS ARE SET PARALLEL TO THE SLOPE AND CURVATURE OF THE ROAD.
  - EVERY 5TH COURSE OF BRICK IS A HEADER COURSE.
  - AREA OF RETAINING WALL APPROXIMATELY 1,475 SQ. FT. CONFIRM DIMENSIONS AND AREAS, NOTIFY ARCHITECT OF DISCREPANCIES.
  - LENGTH OF RETAINING IS APPROXIMATELY 284 LINEAL FEET.
  - IN ADDITION TO THE AREAS INDICATED TO HAVE ALL THE MORTAR JOINTS REPOINTED, INCLUDE ALLOWANCE TO REPOINT 1000 LINEAL FEET OF JOINT.
  - SALVAGE BRICK OF THE REMOVED PORTION OF THE RETAINING WALL TO REPAIR DAMAGED BRICK IN THE REMAINING RETAINING WALL. INCLUDE SALVAGING 150 BRICKS TO BE TURNED OVER TO THE OWNER. SALVAGED BRICKS TO BE IN GOOD CONDITION AND HAVE THE MORTAR REMOVED.



A B C D E F

1

REPOINT ALL DETERIORATED MORTAR JOINTS



REMOVE ALL MORTAR IN JOINT BETWEEN PIER AND WALL, INSTALL NEW BACKER ROD AND SEALANT, TYPICAL FOR 4 LOCATIONS

REPOINT ALL DETERIORATED MORTAR JOINTS

A2 PIER IN SECTION C  
NOT TO SCALE



REPAIR CRACK IN CONCRETE CAP

POINT JOINT BETWEEN BRICK AND CONCRETE CAP

REPOINT JOINT

C2 CONCRETE CAP IN SECTION L  
NOT TO SCALE

2

3

REPOINT JOINTS IN THIS AREA



EXISTING CONCRETE CAP

BRICK RETURNS ON THE EDGE

EXISTING CONCRETE CAP

SEALANT AND BACKER ROD IN JOINT BETWEEN CAP AND BRICK

ENTIRE MASONRY SURFACE TO BE CLEANED

A4 CAP AT J/K  
NOT TO SCALE

REPAIR CRACK IN CONCRETE CAP



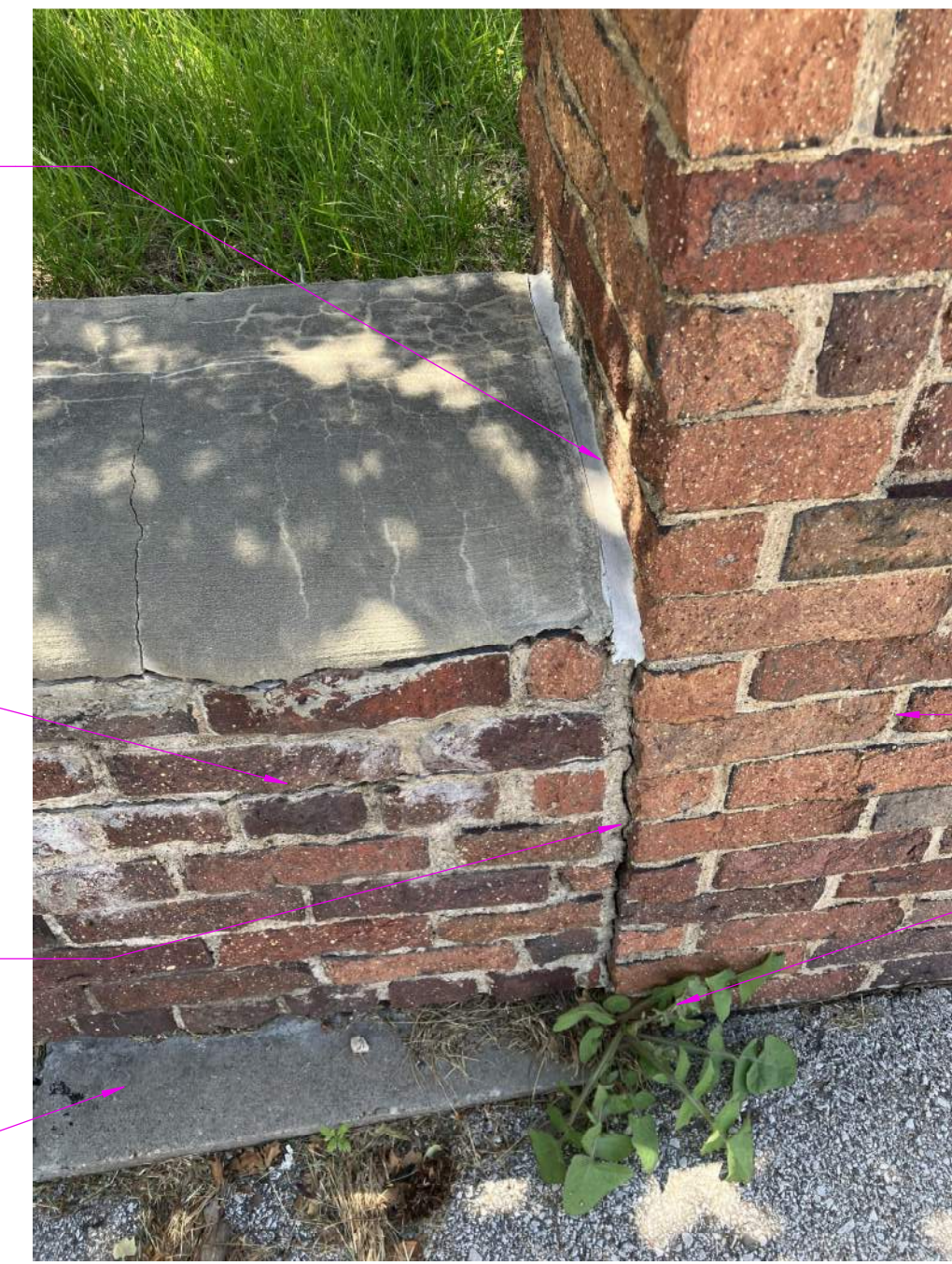
C4 CAP AT L/M  
NOT TO SCALE

REMOVE SEALANT AND PREPARE JOINT FOR NEW SEALANT, INSTALL NEW BACKER ROD AND SEALANT

SEE G6/A100 FOR EXTENTS OF REPOINTING

REMOVE MORTAR PREPARE JOINT FOR NEW SEALANT, INSTALL NEW BACKER ROD AND SEALANT

EXISTING CONCRETE CURB



EXISTING MASONRY PIER, NO WORK ON PIER

REMOVE ALL VEGETATION IN WALL AND CURB

EXISTING ASPHALT STREET PAVEMENT

E4 NORTH END OF EAST WALL  
NOT TO SCALE

4

TERRACE ROAD RETAINING WALL REPAIRS

SHIVEHATTERY ARCHITECTURE + ENGINEERING

4125 WESTOWN PARKWAY, SUITE 100  
WEST DES MOINES, IOWA 50266  
515.223.8104 | SHIVEHATTERY.COM

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES  
2300 GRAND AVE, DES MOINES, IA 50312

|                |              |
|----------------|--------------|
| DRAWN BY       | PJP          |
| APPROVED BY    | PJP          |
| ISSUED FOR     | CONSTRUCTION |
| ISSUE DATE     | 7/9/2024     |
| PROJECT NUMBER | 2142202241   |
| FIELD BOOK     |              |

PHOTOGRAPHS OF DETAILS



DESIGN INFORMATION

- 1. CODES:
A. INTERNATIONAL BUILDING CODE (IBC) 2021
B. AMERICAN CONCRETE INSTITUTE - BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318)
C. AMERICAN CONCRETE INSTITUTE - BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (ACI 530)
D. AMERICAN SOCIETY OF CIVIL ENGINEERS AND STRUCTURAL ENGINEERING INSTITUTE (ASCE/SEI 7) - MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
2. DESIGN LOADS PER THE 2021 IBC (RISK CATEGORY II)
A. DEAD LOADS
STRUCTURE SELF WEIGHT AS SHOWN
B. LATERAL EARTH PRESSURES
ACTIVE PRESSURE 85 PCF X DEPTH
AT-REST PRESSURE 90 PCF X DEPTH
PASSIVE PRESSURE 250 PCF X DEPTH
3. SOILS INFORMATION BASED ON GEOTECHNICAL REPORT PREPARED BY ALLENDER BUTZKE ENGINEERS INC., REPORT NO. PN 241167, DATED APRIL 30, 2024.
NET ALLOWABLE SOIL BEARING PRESSURES:
CONTINUOUS WALL FOOTINGS 2500 PSF

SUBMITTALS

- 1. CONTRACTOR SHALL SUBMIT FOR REVIEW AND APPROVAL THE FOLLOWING SUBMITTALS FOR EACH MATERIAL INDICATED BELOW.
2. CONCRETE REINFORCING
A. SUBMIT CONCRETE REINFORCEMENT SHOP DRAWINGS IN ACCORDANCE WITH ACI 315 FOR APPROVAL.
a. DETAIL BARS IN ACCORDANCE WITH "ACI DETAILING MANUAL," PUBLICATION SP-66 AND THE LATEST EDITION OF ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".
3. CAST-IN-PLACE CONCRETE
A. SUBMIT CONCRETE MIX DESIGNS FOR EACH APPLICATION LOCATION INDICATED IN THE DRAWINGS.
B. SUBMIT SHOP DRAWING OF EMBEDDED STEEL ELEMENTS AND CONNECTIONS.

GENERAL NOTES

- 1. THE GENERAL STRUCTURAL NOTES ARE INTENDED TO SUPPLEMENT THE DRAWINGS AND SPECIFICATIONS. SHOULD CONFLICTS EXIST BETWEEN THESE DRAWINGS AND THE SPECIFICATIONS NOTIFY THE ENGINEER OF ANY SUCH CONFLICTS.
2. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ALL PROJECT DRAWINGS AND SPECIFICATIONS. REFER TO ALL DRAWINGS FOR THE COORDINATION OF THE WORK IN THIS PROJECT.
3. THE INTENT OF THESE PLANS AND NOTES IS TO PRESENT THE PROJECT REQUIREMENTS. MAJOR DETAILS HAVE BEEN SHOWN ON THE DRAWINGS. HOWEVER, CERTAIN MINOR DETAILS MUST BE WORKED OUT IN THE FIELD OR SHOP DRAWING PROCESS BY THE CONTRACTOR.
4. UNLESS NOTED OTHERWISE, DETAILS SHOWN ON DRAWINGS ARE TO BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS.
5. THE STRUCTURE IS DESIGNED TO BE STABLE AND SELF-SUPPORTING AFTER THE BUILDING IS FULLY ERECTED AND ALL CONNECTIONS ARE COMPLETED. UNLESS NOTED OTHERWISE, THE DRAWINGS DO NOT INDICATE THE MEANS AND METHODS OF CONSTRUCTION. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ERECTION PROCEDURE AND SEQUENCING TO ENSURE THE SAFETY OF THE BUILDING AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES THE ADDITION TEMPORARY BRACING, GUYS AND TIE-DOWNS NECESSARY FOR THE ERECTION PROCESS.
6. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW THE APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.
7. CONTRACTOR'S CONSTRUCTION AND ERECTION SEQUENCE SHALL CONSIDER THE EFFECTS OF THERMAL MOVEMENTS OF THE STRUCTURAL ELEMENTS DURING THE CONSTRUCTION PERIOD.
8. EXISTING CONDITIONS:
A. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS RELATING TO EXISTING CONSTRUCTION AND EXISTING SERVICES ON SITE. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LOCATIONS OF EXISTING COLUMNS, WALLS, OPENINGS, ETC. WITH THE ARCHITECTURAL DRAWINGS PRIOR TO PROCEEDING WITH THE WORK. ANY DISCREPANCIES WITH THE CONTRACT DOCUMENTS SHALL BE REPORTED TO THE ARCHITECT AND ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.
B. DURING CONSTRUCTION THE CONTRACTOR MAY ENCOUNTER EXISTING CONDITIONS WHICH ARE NOT KNOWN OR ARE IN VARIANCE WITH PROJECT DOCUMENTATION (DISCOVERY). SUCH CONDITIONS MAY INTERFERE WITH THE NEW CONSTRUCTION OR REQUIRE PROTECTION AND/OR SUPPORT OF EXISTING WORK DURING CONSTRUCTION. IT MAY ALSO CONSIST OF DAMAGED OR DETERIORATION OF STRUCTURAL MATERIALS OR COMPONENTS WHICH COULD JEOPARDIZE THE STRUCTURAL INTEGRITY OF THE BUILDING(S). THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ALL DISCOVERIES WHICH MAY INTERFERE WITH THE PROPER EXECUTION OF THE WORK OR JEOPARDIZE THE STRUCTURAL INTEGRITY OF THE BUILDING(S) PRIOR TO PROCEEDING WITH THE WORK RELATED TO SUCH DISCOVERIES.
C. DURING THE CONSTRUCTION PROCESS, IT SHALL BE SOLELY THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE INTEGRITY OF THE EXISTING STRUCTURE AND TO PROTECT IT FROM DAMAGE ANY PORTIONS THAT ARE TO REMAIN.
D. CONTRACTOR SHALL INVESTIGATE THE SITE DURING EARTHWORK OPERATIONS FOR FILL MATERIAL OR BURIED STRUCTURES. IMMEDIATELY, NOTIFY THE ENGINEER IF ANY SUCH MATERIALS OR STRUCTURES ARE DISCOVERED.
9. STRUCTURAL COORDINATION
A. MECHANICAL, ELECTRICAL OR PLUMBING LOADS, OPENINGS AND SUPPORT FRAMING ARE SHOWN FOR BIDDING PURPOSES ONLY. CONTRACTOR SHALL OBTAIN APPROVAL OF THE MECHANICAL, ELECTRICAL OR PLUMBING CONTRACTOR BEFORE PROCEEDING WITH SUCH PORTION OF THE WORK.
B. THE CONTRACTOR SHALL VERIFY THE SIZE AND LOCATION OF ALL OPENINGS, HOLES AND SLEEVES THROUGH FOUNDATIONS AND OTHER STRUCTURAL ELEMENTS WITH THE MECHANICAL, ELECTRICAL AND PLUMBING CONTRACTORS. NO OPENINGS SHALL PASS THROUGH STRUCTURAL MEMBERS UNLESS SHOWN ON THE DRAWINGS OR APPROVED BY THE ENGINEER.
C. EXCESS COST DUE TO VARIATION IN THE STRUCTURE TO ACCOMMODATE A SUBSTITUTION OR ALTERNATE MANUFACTURER(S) FROM THE LISTED BASIS OF DESIGN SHALL BE BORNE BY THE CONTRACTOR.
10. BEFORE SUBMITTING A BID, EACH BIDDER SHALL VISIT THE SITE AND BECOME FULLY ACQUAINTED WITH THE EXISTING CONDITIONS, CONSTRUCTION REQUIREMENTS, RESTRICTIONS, QUANTITIES AND EQUIPMENT NECESSARY TO COMPLETE THE WORK. THE BID SHALL INCLUDE ALL ITEMS REQUIRED TO COMPLETE THE WORK WITHIN THE EXISTING CONDITIONS. DISRUPTION OF THE OWNERS NORMAL ACTIVITIES AROUND THE CONSTRUCTION SITE SHALL BE KEPT TO A MINIMUM.
11. THE COST OF ADDITIONAL DESIGN WORK DUE TO ERRORS AND OMISSIONS BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE BORNE BY THE RESPONSIBLE CONTRACTOR.
12. ANY ENGINEERING DESIGN PROVIDED BY OTHER AND SUBMITTED FOR REVIEW OR RECORD SHALL BEAR THE STAMP AND SIGNATURE OF A PROFESSIONAL STRUCTURAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT EXISTS.
13. CONTRACTOR SHALL COORDINATE WORK SCHEDULES WITH THE OWNER TO ESTABLISH CONSTRUCTION SEQUENCING AROUND ANY OCCUPIED AREAS. CONTRACTOR SHALL NOT PROCEED TO OCCUPIED AREAS UNTIL AUTHORIZED BY THE OWNER.
14. ALL ELEMENTS AND SURFACES DAMAGED BY DEMOLITION, BUT NOT SCHEDULED FOR REMOVAL SHALL BE REPAIRED AND REFINISHED TO MATCH THE ADJACENT SURFACES AT NO ADDITIONAL COST TO THE OWNER.
15. CONTRACTOR SHALL REMOVE ALL DEBRIS AND WASTE MATERIALS RESULTING FROM CONSTRUCTION FROM THE SITE, UNLESS NOTED OTHERWISE.
16. CONTRACTOR SHALL MINIMIZE CREATION OF DUST, DIRT AND WINDBORNE DEBRIS FROM BLOWING ACROSS THE SITE AND ONTO ADJACENT SITES.
17. CONTRACTOR SHALL COVER ANY EXTERIOR OPENING WITH TEMPORARY CLOSURES WHEN NOT WORKING ON SITE TO PROTECT THE INTERIOR SPACES FROM WEATHER, INSECTS, RODENTS AND INTRUDERS.

FOUNDATIONS

- 1. ALL EXCAVATIONS SHALL BE PROPERLY AND SAFELY BACKFILLED. DO NOT PLACE BACKFILL BEHIND BASEMENT WALLS OR RETAINING WALLS UNTIL CONCRETE HAS ATTAINED THE SPECIFIED COMPRESSIVE STRENGTH. BASEMENT WALLS SHALL NOT BE BACKFILLED UNTIL SUPPORTING FLOOR IS COMPLETED AND ATTAINED FULL STRENGTH. CONTRACTOR SHALL PROTECT ALL BELOW GRADE WALLS FROM LATERAL EARTH PRESSURES UNTIL SUPPORTING FLOOR STRUCTURE IS COMPLETED. CONTRACTOR PROVIDE FOR DESIGN, PERMITS AND INSTALLATION OF LATERAL SHORING TO BRACE WALLS IN LIEU OF WAITING FOR FLOOR SLAB COMPLETION.
2. FOOTING SHALL BE CENTERED UNDER WALLS AND COLUMNS UNLESS NOTED OTHERWISE.
3. CONTRACTOR SHALL ACCOUNT FOR PUMPING OF WATER FROM THE EXCAVATION DUE TO SURFACE WATER, GROUND WATER AND SEEPAGE.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF ALL SHEETING, SHORING AND CRIBBING REQUIRED TO SAFELY RETAIN THE EARTH BANK AROUND THE EXCAVATIONS.
5. ALL FOOTINGS SHALL BE PLACED ONTO FIRM UNDISTURBED SOIL OR ACCEPTABLE COMPACTED BACKFILL AS OUTLINED IN THE SOIL REPORT AND PROJECT SPECIFICATIONS.
6. FOOTING ELEVATIONS SHOWN DESIGNATE THE MINIMUM DEPTH OF THE FOOTING WHERE THE ALLOWABLE SOIL BEARING IS EXPECTED. LOCALIZED AREAS OF UNACCEPTABLE SOILS OR POOR COMPACTION MAY BE DISCOVERED DURING THE EXCAVATION PROCESS REQUIRING OVEREXCAVATION AND BACKFILL WITH ACCEPTABLE FILL. FOOTING EXCAVATIONS SHALL BE LOWERED TO REACH SOIL MEETS THE DESIGN BEARING PRESSURE AND APPROVED BY THE GEOTECHNICAL SPECIAL INSPECTION AGENCY.
7. ACCEPTABLE BACKFILL MATERIAL SHALL BE PLACED IN LIFTS NOT TO EXCEED EIGHT (8) INCHES IN LOOSE THICKNESS.
8. FOR FOOTING AND FOUNDATIONS, THE SUBGRADE OR FILL MATERIAL SHALL BE COMPACTED AND VERIFIED TO MEET 98% STANDARD PROCTOR MAXIMUM DRY DENSITY ACCORDANCE WITH ASTM D698. FOR RELATIVELY COHESIONLESS GRANULAR FILL WHICH HAS A PERCENT PASSING THE #200 SIEVE LESS THAN 10 PERCENT AND HAS ONLY A SLIGHT SENSITIVITY TO MOISTURE CHANGES, COMPACTION SHALL BE 75 PERCENT RELATIVE DENSITY IN ACCORDANCE WITH ASTM D4253 AND D4254. IF COMPACTION DOES NOT COMPLY, CONTRACTOR SHALL RECOMPACT AREA AND UNTIL TEST RESULTS ARE PASSING. AN AREA EXHIBITING WEAKNESS SUCH AS RUTTING OR PUMPING SHALL BE REMOVED AND REPLACED WITH COMPACTED GRANULAR FILL.
9. FOOTING EXCAVATIONS SHALL BE INSPECTED AND APPROVED BY THE GEOTECHNICAL SPECIAL INSPECTION AGENCY BEFORE CONCRETE IS PLACED. CONTRACTOR SHALL NOTIFY INSPECTION AGENCY WHEN EXCAVATION IS READY FOR TESTING. INSPECTION AGENCY SHALL PROVIDE A WRITTEN REPORT OF TEST RESULTS AND COMPLIANCE TO THE OWNER.
10. ACCEPTABLE SOIL SHALL BE DEFINED AS MEETING ASTM D2487 SOIL CLASSIFICATION GROUPS GW, GP, GM, SW, SP, SM OR A COMBINATION OF THESE TYPES.
11. UNACCEPTABLE SOILS SHALL BE DEFINED AS MEETING ASTM D2487 SOIL CLASSIFICATION GROUPS GC, SC, ML, MH, CL, CH, OL, OH, PT OR A COMBINATION OF THESE TYPES. GROUPS CL AND ML MAY BE ACCEPTABLE IF THE LIQUID LIMIT IS LESS THAN 45 AND THE PLASTICITY INDEX IS LESS THAN 20.
12. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY MEASURES TO PREVENT ANY FROST OR ICE FROM PENETRATING ANY FOOTING OR SLAB SUBGRADES BEFORE AND AFTER PLACING THE CONCRETE AND UNTIL SUCH SUBGRADE IS FULLY PROTECTED BY THE PERMANENT BUILDING ENCLOSURE AND THE SPACE IS CONDITIONED TO REMAIN ABOVE FREEZING.
13. CONCRETE FOOTINGS AND SLABS SHALL NOT BE PLACED ON OR AGAINST SUBGRADES CONTAINING FROST, SNOW OR ICE. FROZEN SUBGRADES SHALL BE COMPLETELY THAWED AND RECONDITIONED BEFORE CONCRETE MAY BE PLACED.
14. REPEATED HEAVY CONSTRUCTION TRAFFIC OVER EXPOSED SUBGRADE WILL CAUSE RUTTING AND PUMPING WHEN SOIL IS ABOVE THE OPTIMUM MOISTURE CONTENT. AVOID EXCESS CONSTRUCTION ACTIVITY ON WET SOILS. IF SUBGRADE IS ABOVE THE OPTIMUM MOISTURE CONTENT DURING CONSTRUCTION, THEN DRYING OF THE SOIL SHALL BE CONDUCTED BY DISKING, SCARIFICATION, AND AERATION.
15. SOILS WITH A MOISTURE CONTENT ABOVE THE OPTIMUM LEVEL SHALL BE REMOVED AND REPLACED WITH COMPACTED GRANULAR FILL.
16. CONTRACTOR SHALL NOTIFY THE ARCHITECT AND ENGINEER OF ANY UNUSUAL SOIL CONDITIONS THAT ARE IN VARIANCE WITH THE SOIL REPORT.
17. CONTRACTOR SHALL NOTIFY THE ARCHITECT AND ENGINEER IMMEDIATELY IF THE EXISTING FOUNDATIONS VARY FROM THAT SHOWN ON THE DRAWINGS.
18. CONTRACTOR SHALL VERIFY OPENINGS AND SLEEVES THROUGH FOUNDATION WALLS WITH THE ARCHITECTURAL, MECHANICAL AND ELECTRICAL REQUIREMENTS. CHANGES IN SIZE, LOCATION AND NUMBER SHALL NOT BE PERMITTED WITHOUT WRITTEN APPROVAL BY THE ENGINEER.

CAST-IN-PLACE CONCRETE

- 1. ALL CONCRETE SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE AMERICAN CONCRETE INSTITUTES PUBLICATIONS: ACI 301, ACI 305.1, ACI 306.1, ACI 315, AND ACI 318 UNLESS NOTED OTHERWISE.
2. CONCRETE COMPRESSIVE STRENGTH (28 DAY)(F'c)
FOOTINGS 4000 PSI
FOUNDATION WALL 4000 PSI
WALL CAP 4000 PSI
3. CONCRETE REINFORCEMENT STANDARDS:
DEFORMED BARS ASTM A615 Fy = 60 KSI
EPOXY COATED REINFORCING ASTM A775 Fy = 60 KSI
4. ALL CONCRETE SHALL BE STONE AGGREGATE UNLESS NOTED OTHERWISE. SUBMIT MIX DESIGN AND DOCUMENTATION FOR APPROVAL PER ACI 318.
5. REINFORCEMENT PROTECTION
A. CONCRETE PLACED AGAINST EARTH - 3"
B. CONCRETE PLACED IN FORMS BUT EXPOSED TO WEATHER OR EARTH:
a. BARS #5 AND SMALLER - 1 1/2"
b. BARS LARGER THAN #5 - 2"
C. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
a. SLABS, WALLS, AND JOISTS - 3/4"
b. BEAMS, COLUMNS - 1 1/2"
6. WHERE REQUIRED, DOWELS SHALL MATCH THE SIZE, NUMBER AND SPACING OF THE MAIN REINFORCING UNLESS NOTED OTHERWISE.
7. ALL SPLICES, STANDARD HOOKS, AND DEVELOPMENT LENGTHS TO BE PER THE REFERENCED EDITION OF ACI 318. MAKE BARS CONTINUOUS AROUND CORNERS. ALL SPLICES SHALL BE BY CONTACT LAP.
8. ALL SPLICES SHALL BE A CLASS "B" TENSION SPLICE AS DEFINED IN ACI 318. PROVIDE LAP SPLICES LENGTHS AS FOLLOWS:

Table with 3 columns: BAR SIZE, TYPICAL, TOP BARS. Rows include #3, #4, #5, #6, #7, #8, #9, #10, #11 with corresponding dimensions.

LAP SPLICE LENGTHS GIVEN. ASSUME CLEAR SPACING BETWEEN BARS OF 2 BAR DIAMETERS, AND A MINIMUM CLEAR COVER OF 1 BAR DIAMETER. TOP BARS ARE DEFINED AS HORIZONTAL BARS WITH MORE THAN 12" ON FRESH CONCRETE BENEATH THE BARS.

- 9. WALLS AND GRADE BEAMS SHALL NOT HAVE JOINTS IN A HORIZONTAL PLANE, UNLESS APPROVED BY THE ENGINEER.
10. CONSTRUCTION JOINTS IN STRUCTURAL CONCRETE WORK MUST BE MADE AT CENTER OF SPAN OR AT CENTER OF SUPPORT WITH VERTICAL BULKHEADS AND HORIZONTAL KEYS, UNLESS OTHERWISE SHOWN.
11. THERE SHALL BE NO ADDITIONAL OPENINGS LARGER THAN 10" IN CONCRETE WALLS AND SLABS NOT SHOWN. REFER TO CONCRETE OPENING DETAIL FOR ADDITIONAL REINFORCEMENT AROUND OPENINGS.
12. REINFORCING STEEL SHALL BE SECURELY FASTENED INTO FORMS PRIOR TO POURING CONCRETE. WET SETTING OF REINFORCING STEEL WILL NOT BE ACCEPTED PER ACI.
13. CONCRETE MIX - FOOTINGS
COARSE AGGREGATE 100% PASSING 1" SIEVE
FINE AGGREGATE 100% PASSING 3/8" SIEVE
WATER/CEMENT RATIO 0.45
SLUMP 4" +/- 1"
AIR CONTENT 6% +/- 1.5%
14. CONCRETE MIX - FOUNDATION WALL
COARSE AGGREGATE 100% PASSING 1" SIEVE
FINE AGGREGATE 100% PASSING 3/8" SIEVE
WATER/CEMENT RATIO 0.45
SLUMP (NO WATER REDUCER) 4" +/- 1"
SLUMP (WITH WATER REDUCER) 4" TO 8"
AIR CONTENT 6% +/- 1.5%
15. CONCRETE MIX - WALL CAP
COARSE AGGREGATE 100% PASSING 1/2" SIEVE
FINE AGGREGATE 100% PASSING NO.8 SIEVE
WATER/CEMENT RATIO 0.5
SLUMP (WITH WATER REDUCER) 5" TO 8"
AIR CONTENT 6% +/- 1.5%

SHIVEHATTERY ARCHITECTURE+ENGINEERING

4125 WESTTOWN PARKWAY, SUITE 100 WEST DES MOINES, IOWA 50266 516.223.8104 | SHIVEHATTERY.COM

TERRACE ROAD RETAINING WALL REPAIRS

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES 2300 GRAND AVE., DES MOINES, IA 50312

Table with 2 columns: FIELD BOOK, PROJECT NUMBER. Values include 2142202241.

STRUCTURAL GENERAL INFORMATION

S000



STATEMENT OF SPECIAL INSPECTIONS

THIS STATEMENT OF SPECIAL INSPECTIONS IS SUBMITTED AS A CONDITION FOR PERMIT ISSUANCE IN ACCORDANCE WITH THE SPECIAL INSPECTION AND STRUCTURAL TESTING REQUIREMENTS OF THE BUILDING CODE. IT INCLUDES A SCHEDULE OF SPECIAL INSPECTION SERVICES APPLICABLE TO THE STRUCTURAL COMPONENTS OF THIS PROJECT. IF APPLICABLE, IT INCLUDES REQUIREMENTS FOR SEISMIC RESISTANCE AND/OR REQUIREMENTS FOR WIND RESISTANCE. THIS STATEMENT OF SPECIAL INSPECTIONS ENCOMPASSES THE FOLLOWING DISCIPLINES:

- [X] STRUCTURAL [ ] MECHANICAL / ELECTRICAL / PLUMBING [ ] ARCHITECTURAL [ ] OTHER

THE SPECIAL INSPECTION COORDINATOR SHALL KEEP RECORDS OF ALL INSPECTIONS AND SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL AND THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. DISCOVERED DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF SUCH DISCREPANCIES ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. THE SPECIAL INSPECTION PROGRAM DOES NOT RELIEVE THE CONTRACTOR OF HIS OR HER RESPONSIBILITIES.

INTERIM REPORTS SHALL BE SUBMITTED TO THE BUILDING OFFICIAL AND THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. A FINAL REPORT OF SPECIAL INSPECTIONS DOCUMENTING COMPLETION OF ALL REQUIRED SPECIAL INSPECTIONS, TESTING AND CORRECTIONS OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED PRIOR TO ISSUANCE OF A CERTIFICATE OF USE AND OCCUPANCY. JOB SITE SAFETY AND MEANS AND METHODS OF CONSTRUCTION ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.

QUALIFICATIONS OF INSPECTORS AND TESTING TECHNICIANS

THE QUALIFICATIONS OF ALL PERSONNEL PERFORMING SPECIAL INSPECTION AND TESTING ACTIVITIES ARE SUBJECT TO THE APPROVAL OF THE BUILDING OFFICIAL. THE CREDENTIALS OF ALL INSPECTORS AND TESTING TECHNICIANS SHALL BE PROVIDED IF REQUESTED.

KEY FOR MINIMUM QUALIFICATIONS OF INSPECTION AGENTS:

WHEN THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE DEEMS IT APPROPRIATE THAT THE INDIVIDUAL PERFORMING A STIPULATED TEST OR INSPECTION HAVE A SPECIFIC CERTIFICATION OR LICENSE AS INDICATED BELOW, SUCH DESIGNATIONS SHALL APPEAR BELOW THE AGENT ON THE SCHEDULE.

- PE/SE STRUCTURAL ENGINEER - A LICENSED SE OR PE SPECIALIZING IN THE DESIGN OF BUILDING STRUCTURE
PE/GE GEOTECHNICAL ENGINEER - A LICENSED PE SPECIALIZING IN SOIL MECHANICS AND FOUNDATIONS
EIT ENGINEER-IN-TRAINING - A GRADUATE ENGINEER WHO HAS PASSED THE FUNDAMENTS OF ENGINEERING EXAMINATION

AMERICAN CONCRETE INSTITUTE (ACI) CERTIFICATION

- ACI-CFTT CONCRETE FIELD TESTING TECHNICIAN - GRADE 1
ACI-CCI CONCRETE CONSTRUCTION INSPECTOR
ACI-LTT LABORATORY TESTING TECHNICIAN - GRADE 1 & 2
ACI-STT STRENGTH TESTING TECHNICIAN

AMERICAN WELDING SOCIETY (AWS) CERTIFICATION

- AWS-CWI CERTIFIED WELDING INSPECTOR
AWS/AISC-SSI CERTIFIED STRUCTURAL STEEL INSPECTOR

AMERICAN SOCIETY OF NON-DESTRUCTIVE TESTING (ASNT) INSPECTION

- ASNT NON-DESTRUCTIVE TESTING TECHNICIAN - LEVEL II OR III

INTERNATIONAL CODE COUNCIL (ICC) CERTIFICATION

- ICC-SMSI STRUCTURAL MASONRY SPECIAL INSPECTOR
ICC-SFSI SPRAY-APPLIED FIREPROOFING SPECIAL INSPECTOR
ICC-RCSI REINFORCED CONCRETE SPECIAL INSPECTOR
ICC-SW/SI STRUCTURAL STEEL AND WELDING SPECIAL INSPECTOR
ICC-PCSI PRESTRESSED CONCRETE SPECIAL INSPECTOR

NATIONAL INSTITUTE OF CERTIFICATION IN ENGINEERING TECHNOLOGIES (NICET)

- NICET-CT CONCRETE TECHNICIAN - LEVELS I, II, III, & IV
NICET-ST SOILS TECHNICIAN - LEVELS I, II, III & IV
NICET-GET GEOTECHNICAL ENGINEERING TECHNICIAN - LEVEL I, II, III & IV

EXTERIOR DESIGN INSTITUTE (EDI) CERTIFICATION

- EDI-EIFS EIFS THIRD PARTY INSPECTOR

CONTRACTOR'S RESPONSIBILITY REGARDING INSPECTIONS

- 1. THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING A PRE-CONSTRUCTION MEETING (SCHEDULED AT LEAST 5 BUSINESS DAYS BEFORE START OF CONSTRUCTION). MEETING SHOULD INCLUDE ALL RESPONSIBLE PARTIES (A/E, S/E, FIELD INSPECTOR). MEETING IS FOR ENTIRE PROJECT, NOT PHASE OF WORK.
2. PRE-CONSTRUCTION MEETING IS TO BE CONDUCTED BY THE CONTRACTOR WITH MEETING MINUTES TO BE TAKEN AND DISTRIBUTED TO ALL MEMBERS ATTENDING. MEETING MINUTES TO INCLUDE A SIGN-IN SHEET FOR ALL PARTIES.
3. THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING INSPECTIONS AND TESTS. SUFFICIENT NOTICE AND LEAD TIME MUST BE ALLOWED FOR THE INSPECTION AND TESTING TO BE PERFORMED WITHOUT IMPENDING CONSTRUCTION OPERATIONS.
4. THE CONTRACTOR MUST COOPERATE WITH THE INSPECTIONS AND TESTING AGENCIES. SAFE ACCESS MUST BE PROVIDED TO ALL INSPECTION AND TEST TO BE PERFORMED. THIS MAY REQUIRE THE CONTRACTOR TO PROVIDE SCAFFOLDING, LADDERS OR LIFTS.
5. WHEN DEFICIENCIES ARE IDENTIFIED, THE CONTRACTOR MUST TAKE CORRECTIVE ACTIONS TO COMPLY WITH THE CONTRACT DOCUMENTS OR REMEDY THE DEFICIENCIES AS DIRECTED BY THE REGISTERED DESIGN PROFESSIONAL.
6. THE SPECIAL INSPECTION AND QUALITY ASSURANCE PROGRAM DOES NOT RELIEVE THE CONTRACTOR OF HIS OR HER RESPONSIBILITY TO PERFORM QUALITY CONTROL.
7. THE CONTRACTOR IS RESPONSIBLE FOR TESTING SERVICES THAT ARE REQUIRED FOR MATERIAL SUBMITTALS AND THAT NOT PART OF THE SPECIAL INSPECTIONS PROGRAM (E.G. AGGREGATE TESTS, CONCRETE MIX DESIGNS, TESTING OF CONTROLLED FILL, MATERIALS, ETC.).

Table with 4 columns: CONCRETE CONSTRUCTION, SERVICE, EXTENT, AGENT. Contains 10 rows of inspection details for concrete construction.

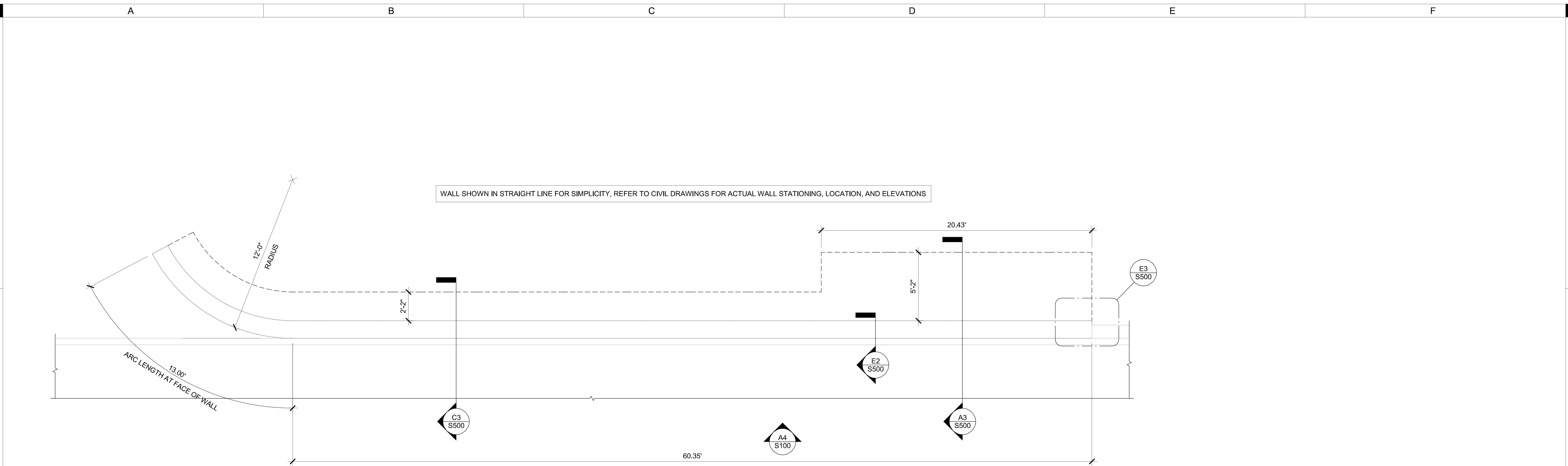
Table with 4 columns: SOILS, SERVICE, EXTENT, AGENT. Contains 5 rows of inspection details for soils.

Table with 4 columns: MASONRY CONSTRUCTION LEVEL B QUALITY ASSURANCE, SERVICE, EXTENT, AGENT. Contains 12 rows of inspection details for masonry construction.

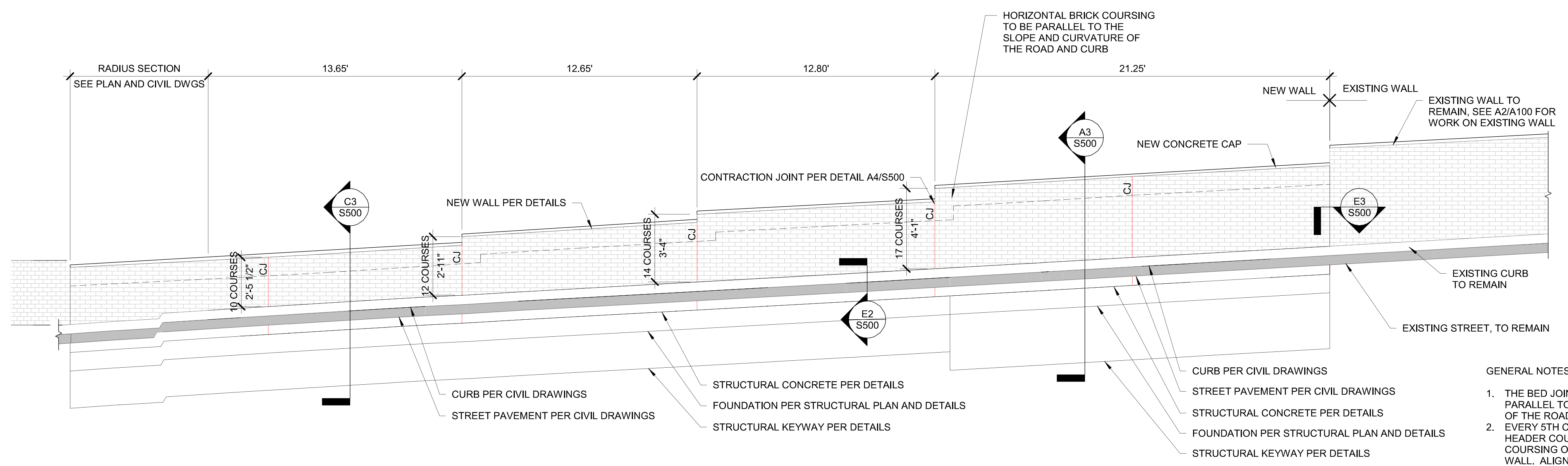
Table with 2 columns: DRAWN BY, APPROVED BY, ISSUED FOR, ISSUE DATE, PROJECT NUMBER, FIELD BOOK. Contains project metadata.



|                |              |
|----------------|--------------|
| DRAWN BY       | CRM          |
| APPROVED BY    | CRM          |
| ISSUED FOR     | CONSTRUCTION |
| ISSUE DATE     | 7/9/2024     |
| PROJECT NUMBER | 2142202241   |
| FIELD BOOK     |              |



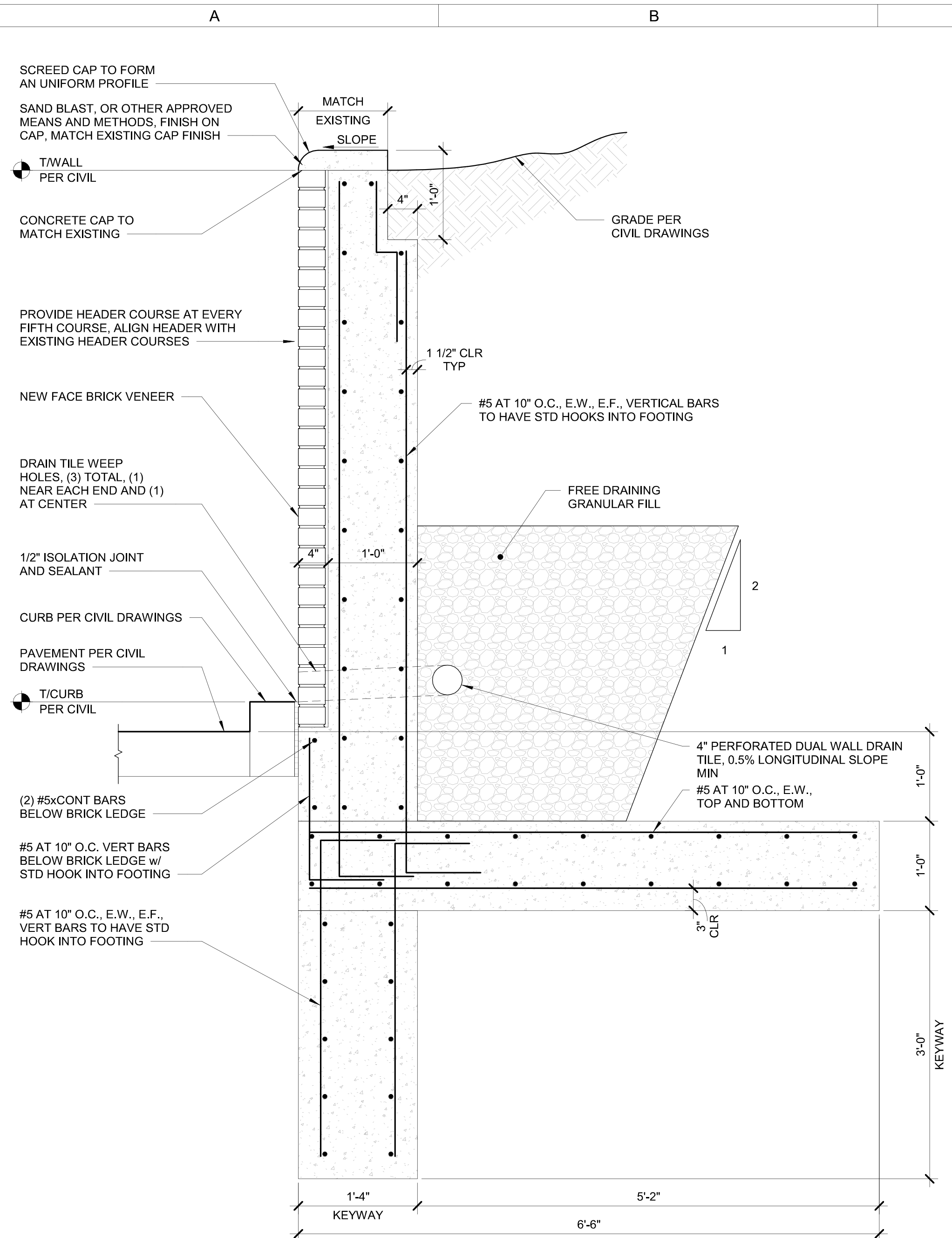
**(A2) FOUNDATION PLAN**  
1/4" = 1'-0" 0' 6'



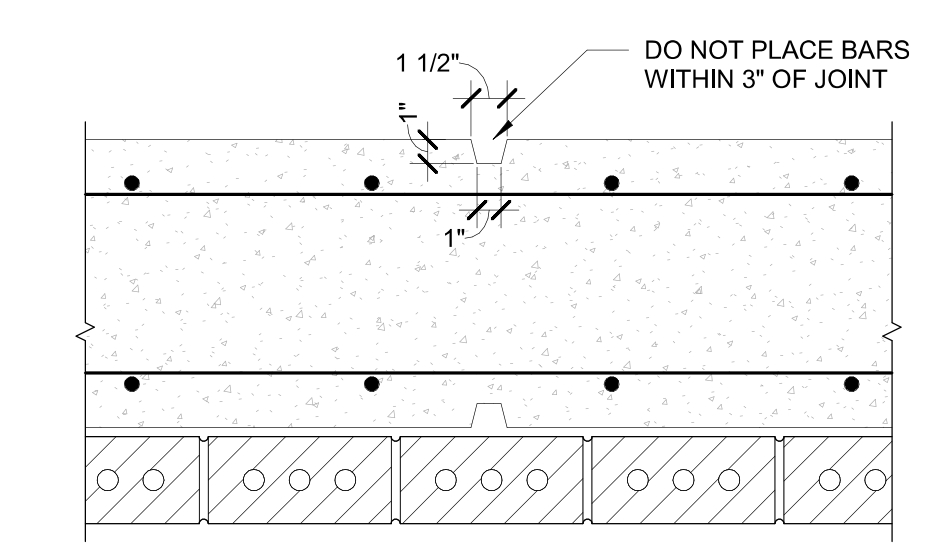
**(A4) RETAINING WALL ELEVATION**  
1/4" = 1'-0" 0' 6'

- GENERAL NOTES - NEW RETAINING WALL**
1. THE BED JOINTS OF THE BRICK TO BE SET PARALLEL TO THE CURVATURE AND SLOPE OF THE ROAD AND CURB.
  2. EVERY 5TH COURSE OF BRICK TO BE A HEADER COURSE TO MATCH THE EXISTING COURSING OF THE EXISTING RETAINING WALL. ALIGN HEADER COURSE IN NEW WALL WITH HEADER COURSE IN EXISTING WALL.



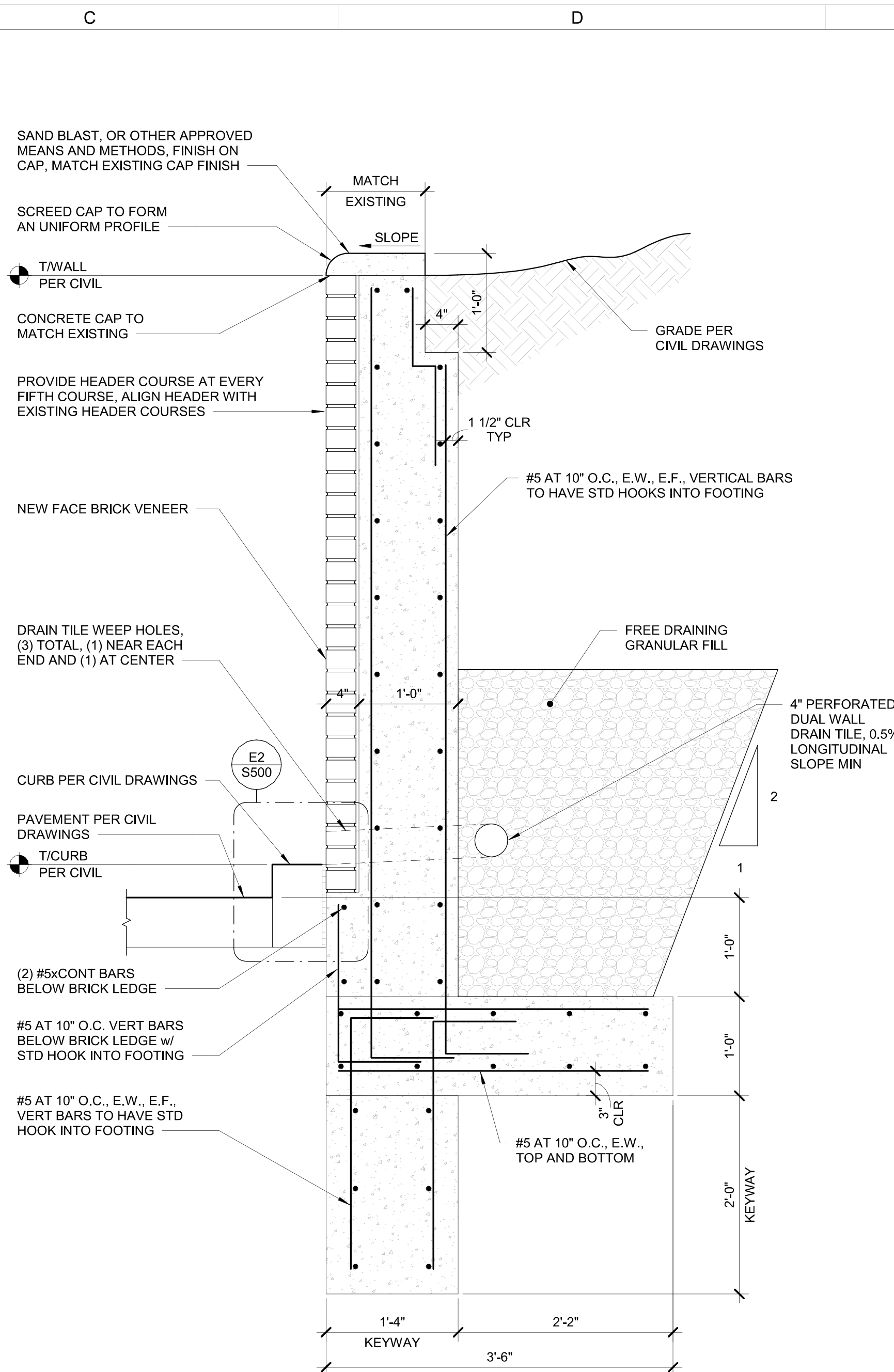


**A3** L-SHAPE RETAINING WALL (6.25' MAX)  
1" = 1'-0" 0 1'-6"

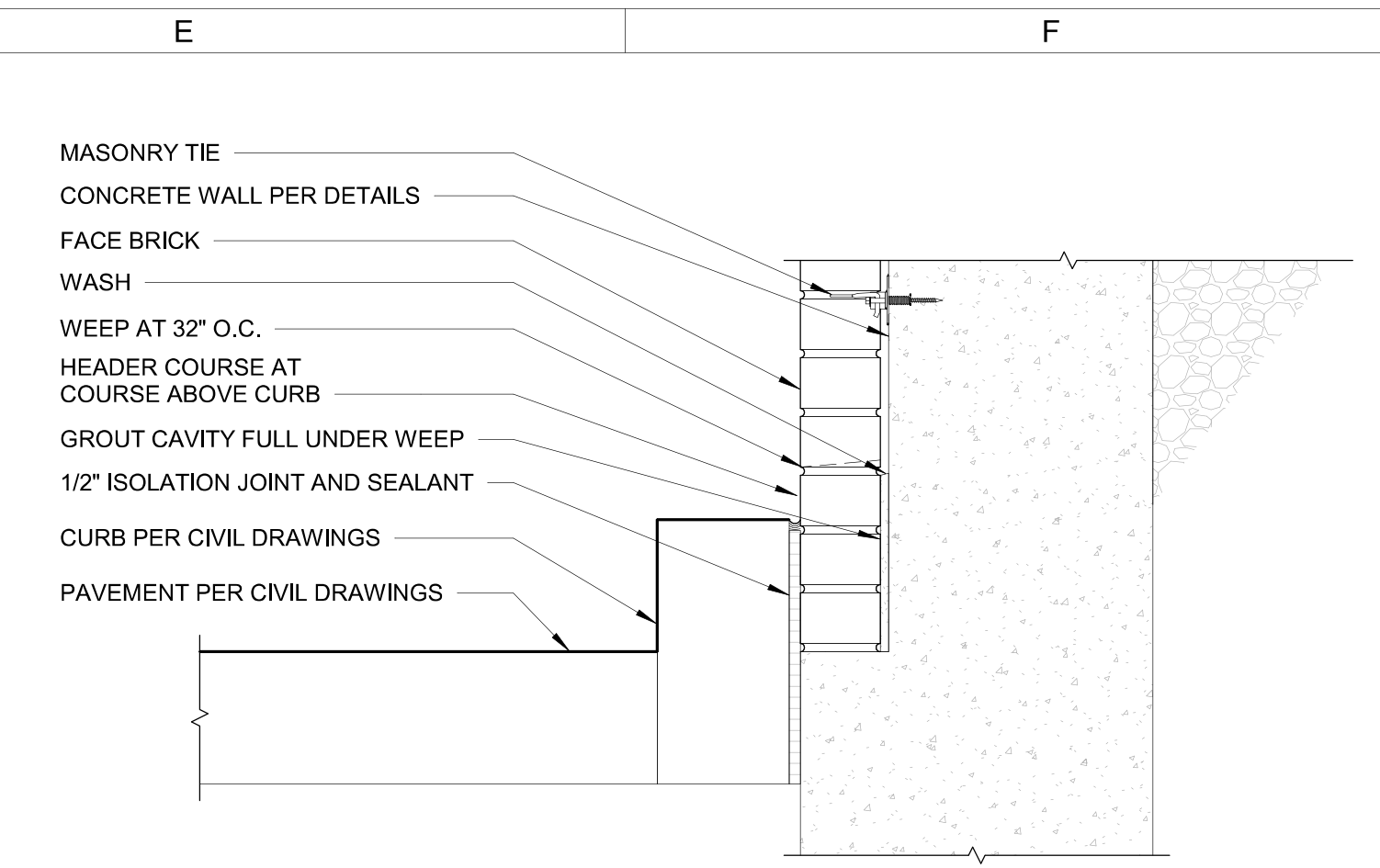


**NOTES:**  
1. PLACE AT MAXIMUM OF 20' SPACING.  
2. EXTEND FULL HEIGHT OF WALL.  
3. EXTEND HORIZONTAL REBAR THROUGH JOINT.

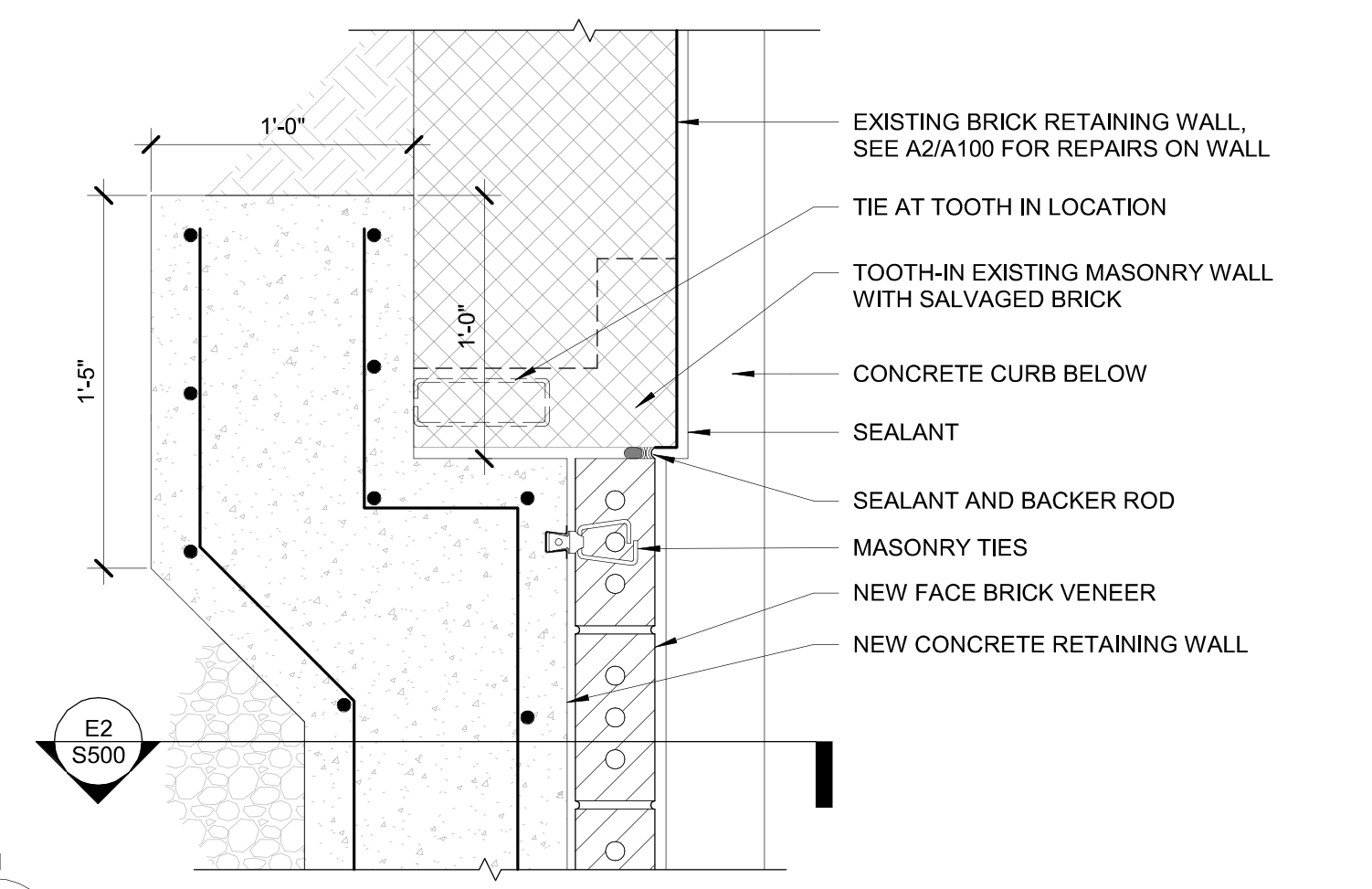
**A4** CONTRACTION JOINT DETAIL (CJ)  
1 1/2" = 1'-0" 0 1'



**C3** L-SHAPE RETAINING WALL (3.667' MAX)  
1" = 1'-0" 0 1'-6"



**E2** WALL BASE  
1 1/2" = 1'-0" 0 1'



**E3** PLAN DETAIL AT TRANSITION  
1 1/2" = 1'-0" 0 1'-6"

|                |              |
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