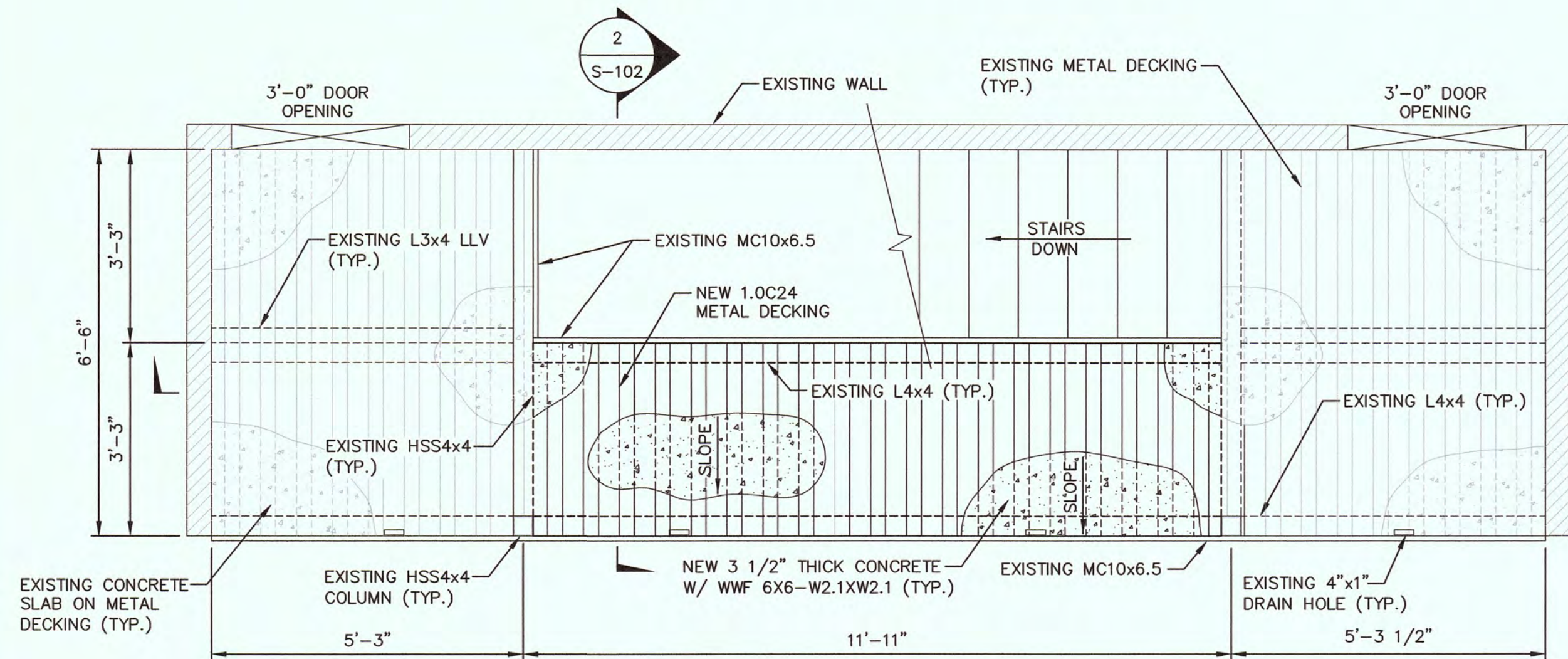


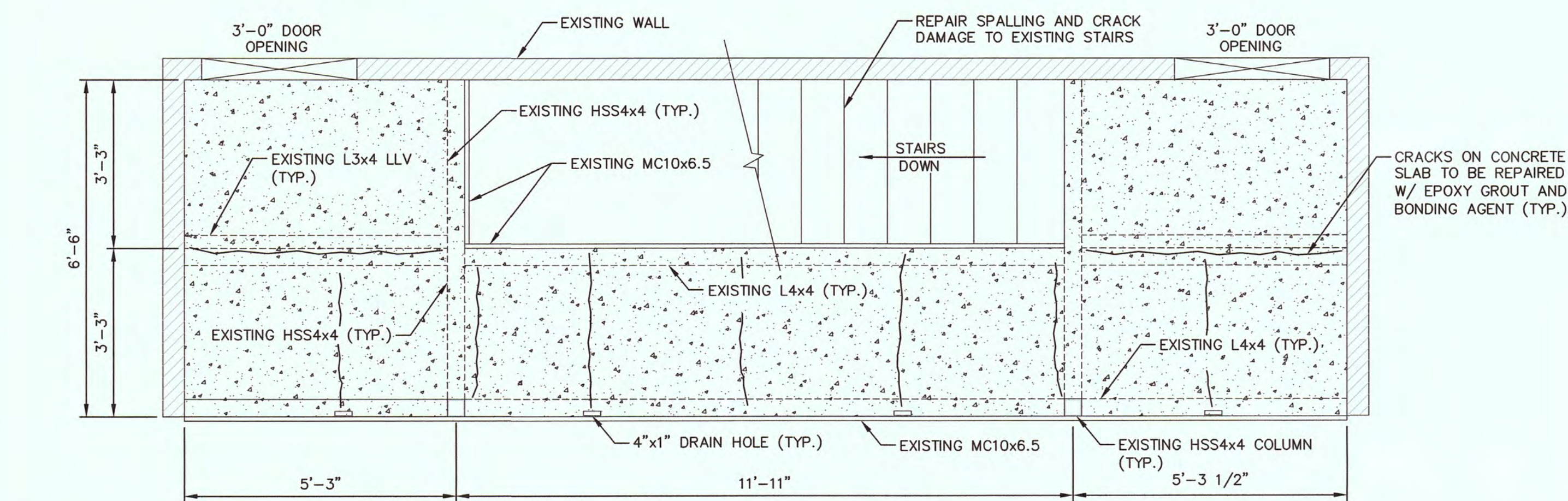
**TYPICAL BALCONY FRAMING PLAN**

SCALE: 1/2" = 1'-0"



**TYPICAL CONCRETE ON METAL DECKING REPLACEMENT PLAN**

SCALE: 1/2" = 1'-0"



**TYPICAL CONCRETE SLAB CRACKING FLOOR REPAIR PLAN**

SCALE: 1/2" = 1'-0"

**STRUCTURAL STEEL**

- STEEL DESIGN IS BASED ON THE AISC MANUAL OF STEEL CONSTRUCTION, ALLOWABLE STRESS DESIGN, NINTH EDITION.
- STEEL DESIGN IS BASED ON THE FOLLOWING MATERIAL STRENGTHS:
  - A. STEEL SHAPES AND PLATES:  $f_y = 36,000$  PSI
  - B. STEEL TUBING, SQUARE OR RECTANGULAR:  $f_y = 46,000$  PSI
  - C. STEEL TUBING, SQUARE OR RECTANGULAR:  $f_u = 58,000$  PSI
  - D. ANCHOR BOLTS:  $f_y = 36,000$  PSI &  $f_u = 58,000$  PSI
- UNLESS NOTED OTHERWISE, USE STANDARD FRAMED OR SEATED CONNECTIONS AS SHOWN IN THE AISC MANUAL OF STEEL CONSTRUCTION. ENSURE THE FABRICATOR DESIGNS ALL CONNECTIONS NOT SHOWN ON THE DRAWINGS. PROVIDE CONNECTIONS THAT DEVELOP AT LEAST ONE-HALF OF THE TOTAL UNIFORM LOAD CAPACITY OF THE MEMBER. DESIGN CONNECTIONS AS BEARING-TYPE CONNECTIONS WITH THREADS IN THE SHEAR PLANE, UNLESS NOTED OTHERWISE. ENSURE THE LENGTH OF FRAMED CONNECTIONS IS NOT LESS THAN ONE-HALF THE "T" DISTANCE OF THE MEMBERS WEB.
- USE MINIMUM 3/4" DIAMETER A 325 OR A 490 HIGH STRENGTH BOLTS FOR ALL BOLTED CONNECTIONS. USE A MINIMUM OF TWO BOLTS FOR ALL BOLTED BRACING CONNECTIONS.
- USE E70 ELECTRODES FOR WELDED CONNECTIONS. USE MINIMUM WELD SIZE OF 3/16", UNLESS NOTED OTHERWISE. ALL WELDING SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF AWS D1.1.
- USE 3/8" MINIMUM GUSSET PLATES, UNLESS NOTED OTHERWISE ON DRAWINGS.
- CUT NO OPENINGS IN STRUCTURAL MEMBERS UNLESS SHOWN ON THE DRAWINGS.
- PRIME AND PAINT STEEL IN ACCORDANCE WITH OWNER'S REQUIREMENTS.

**STEEL DECKING**

- DECK DESIGN IS BASED ON THE STEEL DECK INSTITUTE DESIGN MANUAL FOR COMPOSITE DECKS, FORM DECKS AND ROOF DECKS.
- PROVIDE GALVANIZED FORM DECK WITH THE FOLLOWING MINIMUM PROPERTIES: 1" DEEP, 24 GAGE, 0.098 in.3/ft. SECTION MODULUS, 0.057 in.4/ft. MOMENT OF INERTIA, AND 60 KSI YIELD STRESS.
- DECK SPECIFIED HAS BEEN DETERMINED ON BASIS OF SINGLE SPAN CONDITION.
- ALL STEEL DECK SHALL BE FABRICATED FROM STEEL CONFORMING TO THE LATEST EDITION OF THE "SPECIFICATIONS FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS" BY THE AMERICAN IRON AND STEEL INSTITUTE.
- THE FIRST SHEET OF STEEL DECK ADJACENT TO, AND PARALLEL TO, WALLS, PERIMETER MEMBERS, OR MEMBERS IDENTIFIED AS CHORD, COLLECTOR, STRUT, OR DRAG MEMBERS (ON ONE OR BOTH SIDES AS APPLICABLE) SHALL BE FULL PANEL WIDTH SHEETS.
- ALL STEEL DECK SHALL BE FASTENED TO A CONTINUOUS DECK ANGLE, AROUND ENTIRE DECK PERIMETER.
- ANCHOR METAL DECK TO EVERY STRUCTURAL STEEL SUPPORT BY WELDING, WELD BOTTOM OF RIBS TO STRUCTURAL STEEL SUPPORTS AT MAXIMUM SPACING OF 12" O.C. WITH A MINIMUM 5/8" DIAMETER PUDDLE WELD OR ELONGATED WELDS WITH AN EQUAL PERIMETER.

**GENERAL NOTES**

- REVIEW AND VERIFY ALL AS-BUILT CONDITIONS, ACTUAL EQUIPMENT DIMENSIONS USING CERTIFIED VENDOR DRAWINGS, ETC. WHICH AFFECT NEW CONSTRUCTION PRIOR TO CONSTRUCTION.
- ALL ELEVATIONS NOTED ON STRUCTURAL DRAWINGS ARE BASED ON AN ASSUMED TOP OF FINISHED FLOOR ELEVATION OF 0'-0".
- INDUSTRY STANDARDS GOVERNING THIS WORK ARE OF THE LATEST ISSUE AT DATE OF THIS DRAWING RELEASE.
- ENSURE STORAGE, HANDLING, PREPARATION, INSTALLATION, ETC. OF ALL MATERIALS IS IN ACCORDANCE WITH MANUFACTURER'S/VENDOR'S PRINTED RECOMMENDATIONS AND INSTRUCTIONS, UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- CONTRACTOR TO PROVIDE ADEQUATE BRACING FOR STRUCTURES SO THAT THEY WILL BE STABLE DURING ALL STAGES OF CONSTRUCTION. THE STRUCTURES AND FOUNDATIONS ARE DESIGNED FOR A COMPLETED CONDITION ONLY AND, THEREFORE, REQUIRE ADDITIONAL SUPPORT TO MAINTAIN STABILITY BEFORE COMPLETION.
- DESIGN WAS DONE IN ACCORDANCE WITH THE 2015 INTERNATIONAL BUILDING CODE:
- DESIGN LOADS ARE AS FOLLOWS:
  - A) DEAD LOAD = SELF WEIGHT
  - B) LIVE LOAD = 100 PSF
  - C) WIND SPEED = 115 MPH
  - D) SEISMIC  $V = C_s W$ 
    - $S_{DS} = 0.494$  g
    - $S_{D1} = 0.278$  g
    - $R = 2.5$
    - $I = 1.0$
- CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND CONDITIONS RELATING TO EXISTING CONSTRUCTION OR UTILITIES.

**CONCRETE**

- CONCRETE DESIGN IS BASED ON THE FOLLOWING STANDARDS:
  - A. BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318 AND ITS SUPPLEMENTS).
  - B. CONCRETE DESIGN IS BASED ON THE FOLLOWING MATERIAL STRENGTHS:
    - A. CONCRETE (AT 28 DAYS):  $f_c = 4,000$  psi
    - B. REINFORCING STEEL:  $f_y = 60,000$  psi (ASTM A615 GRADE 60)
    - C. SMOOTH DOWELS:  $f_y = 36,000$  psi (ASTM A36)
    - $f_u = 58,000$  psi
- PROVIDE CONCRETE PROTECTION FOR REINFORCEMENT AS FOLLOWS: CONCRETE COVER UNLESS NOTED OTHERWISE
  - A. CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"
  - B. EXPOSED TO EARTH OR WEATHER, WHERE FORMS ARE USED:
    - NO. 6 BAR AND LARGER: 2"
    - NO. 5 BAR AND SMALLER: 1 1/2"
  - C. NOT EXPOSED TO WEATHER NOR IN CONTACT WITH GROUND:
    - SLABS, WALLS AND JOISTS: 1"
    - BEAMS, GIRDERS AND COLUMNS: 1 1/2"
- MAINTAIN FULL THICKNESS FOR DEPRESSED OR SLOPED SLABS UNLESS NOTED OTHERWISE.
- PROVIDE CLASS B TENSION LAP SPLICES PER ACI 318, FOR CONCRETE STRENGTH AND BAR LOCATIONS NOTED, UNLESS NOTED OTHERWISE OR APPROVED BY ENGINEER.
- START SAWING SLAB ON GRADE CONTROL JOINTS AS SOON AS CONCRETE HAS HARDENED SUFFICIENTLY TO PREVENT RAVELING OR DISLODGING OF AGGREGATES. UNLESS RAVELING OR DISLODGING OCCURS, COMPLETE SAWING OF JOINTS WITHIN THE MAXIMUM ELAPSED TIME LIMIT NOTED BELOW, BUT PREFERABLY LESS. THE SPECIFIED TIME FOR ANY ONE LOCATION STARTS WHEN FINISHING OPERATIONS ARE COMPLETE FOR THAT LOCATION. THE SPECIFIED TEMPERATURE IS THE MAXIMUM AIR TEMPERATURE IN DEGREES FAHRENHEIT THAT OCCURS WITHIN THE SPECIFIED TIME LIMIT. THE ELAPSED TIME MAY NEED TO BE SHORTENED EVEN MORE IF DRY AND/OR WINDY CONDITIONS ARE PRESENT.

STANDARD WET-CUT SAW:  
MAX. ELAPSED HOURS - FOR TROWELLED OR POWER FLOATED

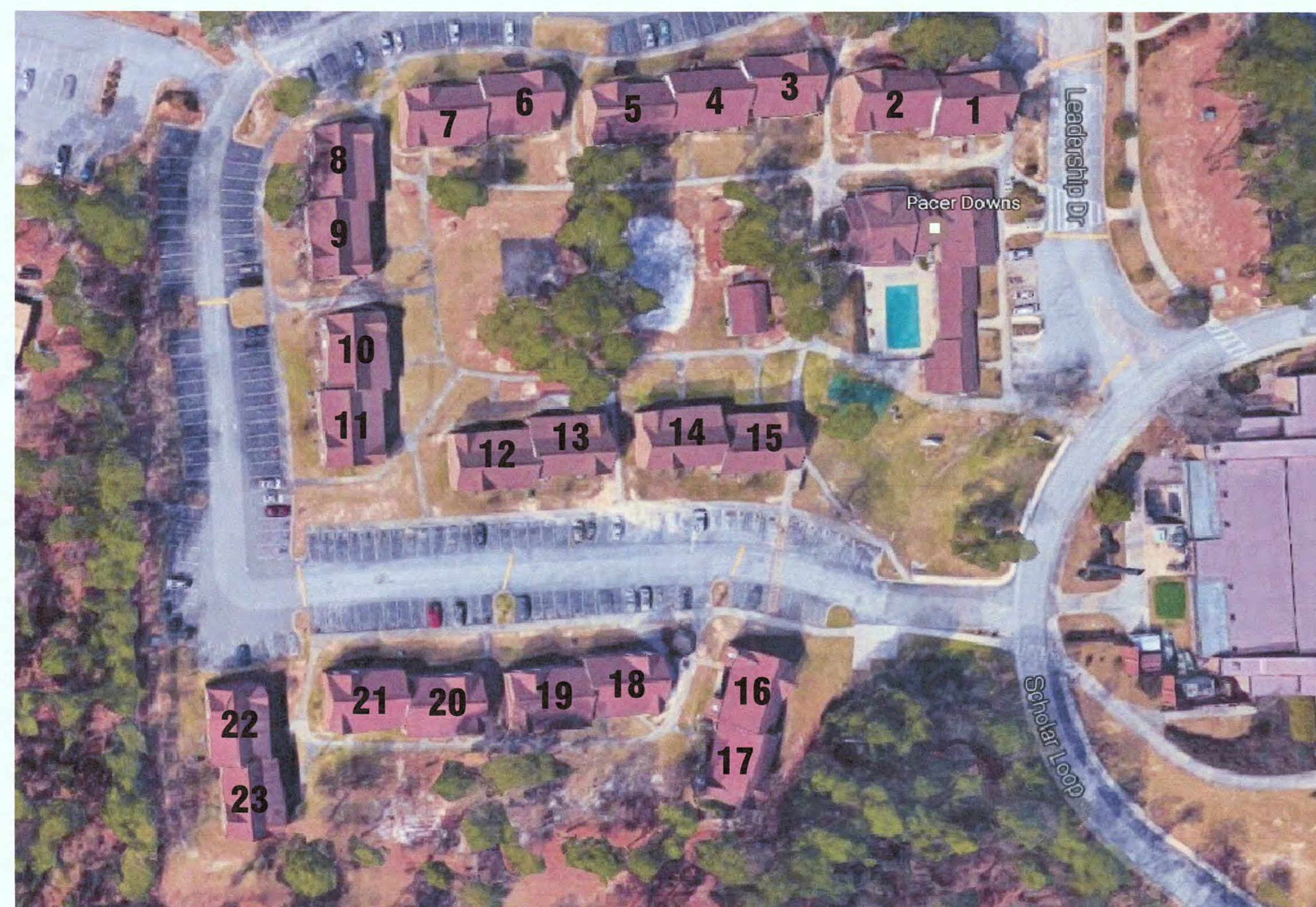
MAX. F	FINISH (EXCEPT AS NOTED)*
90 AND ABOVE	4
80 - 89	4
70 - 79	6
60 - 69	8
50 - 59	10
40 - 49	12

**CONCRETE CONT'D**

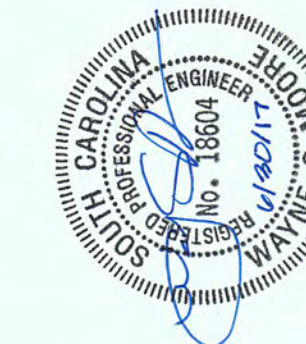
- "SOFF-CUT" OR OTHER SIMILAR DRY-CUT SAW APPROVED BY ENGINEER  
MAX. ELAPSED HOURS - FOR TROWELLED OR POWER FLOATED
- | MAX. F       | FINISH (EXCEPT AS NOTED)* |
|--------------|---------------------------|
| 85 AND ABOVE | 1                         |
| 60 - 84      | 1                         |
| 50 - 59      | 2                         |
| 40 - 49      | 4                         |
- \* FOR FINISHES WITHOUT TROWELING OR POWER FLOATING, INCREASE MAXIMUM TIME NOTED BY ADDING ONE HOUR IN HOT WEATHER AND UP TO THREE HOURS IN COLD WEATHER.
- PROVIDE CONSTRUCTION, ISOLATION, AND CONTROL JOINTS AS INDICATED ON THE DRAWINGS, JOINTS IN SLABS ON GRADE 20 FEET, WITH AN ASPECT RATIO LESS THAN 2:1.
  - CONFORM TO ACI 318 FOR THE DESIGN AND PLACEMENT OF CONCRETE, REINFORCING, AND RELATED ITEMS.
  - WHERE NOTED ON DRAWINGS FOR SLABS ON GRADE, USE EPOXY JOINT SEALANT IN CONTROL JOINTS AND IN CONSTRUCTION JOINTS THAT ARE REQUIRED TO HAVE SEALANT AND USE ELASTOMERIC JOINT SEALANT IN ISOLATION JOINTS. COMMENCE SEALING JOINTS WHEN ALL CONSTRUCTION IS NEARING COMPLETION.
  - ELASTOMERIC JOINT SEALANT SHALL MEET FEDERAL SPECIFICATION TT-S-00230, TYPE 1, CLASS A, ONE PART, COLD APPLIED, POURABLE POLYURETHANE BASE. MATCH COLOR OF EPOXY JOINT SEALANT.
  - FOR CONCRETE EXPANSION JOINTS USE "FIBRE EXPANSION JOINT" FOR JOINT FILLER BY W.R. MEADOWS SEAL TIGHT OR EQUAL.
  - LIQUID CURING AND SEALING COMPOUND SHALL MEET FEDERAL SPECIFICATION TT-C-800A (JUNE 20, 1974), STYRENE ACRYLATE OR METHACRYLATE TYPE, 29% MINIMUM SOLIDS CONTENT, CLEAR, NON-YELLOWING, STYRENE BUTADIENE NOT ALLOWED AS PART OF BLEND.
  - UNLESS SPECIFICALLY APPROVED BY ENGINEER IN WRITING, DO NOT USE CALCIUM CHLORIDE.
  - CONFORM TO ACI 302.1R, 304R, 308, 309R AND 347R FOR CONCRETE, FORM WORK, CURING, AND RELATED ITEMS. CONFORM TO CRSI MANUAL OF STANDARD PRACTICE AND CRSI PLACING REINFORCING BARS FOR PLACING REINFORCING.
  - PROVIDE THE FOLLOWING STANDARD FINISHES FOR CONCRETE WORK:
    - A. SURFACES NOT EXPOSED TO VIEW AFTER CONSTRUCTION: POINT ALL CAVITIES AND HONEYCOMBING. EXTERIOR FLOOR SLABS: FLOAT, AND SCORE WITH BROOM.
    - B. DO NOT ADD WATER OR PLAIN CEMENT TO ANY SLAB SURFACE DURING FINISHING OPERATIONS.
    - C. PERFORM NO FINISHING OPERATION WHILE WATER IS PRESENT ON SLAB SURFACE.
    - D. IF SLAB SURFACE IS FIRM ENOUGH FOR FLOATING, BUT BLEED WATER IS STILL PRESENT, THE WATER MAY BE REMOVED BY ONE OF THE FOLLOWING METHODS:
      - A. FANS OR BLOWER HEATERS.
      - B. IF CONCRETE SURFACE IS STIFF ENOUGH TO NOT BE DAMAGED, A RUBBER HOSE MAY BE DRAGGED SLOWLY OVER THE SURFACE ONE TIME.
  - CURE CONCRETE FOR A MINIMUM OF SEVEN DAYS. FOR SLABS, CURING METHODS OTHER THAN BY LIQUID CURING COMPOUND MUST BE APPROVED BY ENGINEER. CURE BY USING ONE OF THE FOLLOWING MATERIALS AND METHODS:
    - A. CONTINUOUSLY SPRINKLE OR POND WITH WATER.
    - B. WET SURFACE AND COVER WITH PREWETTED WHITE BURLAP - POLYETHYLENE SHEET CONFORMING TO ASTM C 171. SEAL LAPS AND EDGES. LAP 6 INCHES MINIMUM.
    - C. SPRAY SURFACE WITH LIQUID CURING COMPOUND AT A COVERAGE RATE OF 300 AND 400 SQUARE FEET PER GALLON FOR ROUGHENED SURFACES AND OTHER SURFACES, RESPECTIVELY. ENSURE COMPOUND IS COMPATIBLE WITH CONCRETE.
  - PROVIDE NON-SLIP BROOM FINISH TO NEW CONCRETE.
  - APPLY SEAL KRETE CLEAR-SEAL OR APPROVED EQUAL TO NEW AND EXISTING CONCRETE. SLOPE COATING TO PROVIDE POSITIVE DRAINAGE.

**CONCRETE REPAIR/GROUTING**

- THE DAMAGED EXISTING CONCRETE SHALL BE CLEANED PRIOR TO THE APPLICATION OF EPOXY GROUTING AND/OR STRUCTURAL STEEL.
- ALL EXPOSED REINFORCING STEEL SHALL BE CAREFULLY CLEANED OF RUST AND OTHER DEBRIS PRIOR TO THE APPLICATION OF EPOXY GROUTING.
- ANY AREA OF STRUCTURAL CONCRETE SHOWING SIGNS OF CRACKING OR SPALLING SHALL BE CAREFULLY REMOVED, PROPERLY CLEANED AND REPAIRED WITH EPOXY GROUTING.
- EPOXY GROUT TO BE USED SHALL BE GILL INDUSTRIES, INC. PRODUCTS OR EQUIVALENT. SEE TECHNICAL DATA SHEETS FOR FURTHER INFORMATION.
- EPOXY GROUT AND/OR PROTECTIVE COATING PRODUCTS MAY BE SUBSTITUTED WITH EQUIVALENT PRODUCTS UPON APPROVAL BY ENGINEER/OR OWNER.



**AERIAL LAYOUT**  
NTS



**MOORE AND ASSOCIATES  
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PACER APARTMENT BALCONY REPAIRS  
AIKEN, SC 29801**

**TYPICAL FLOOR PLANS, CHART  
AND GENERAL NOTES**

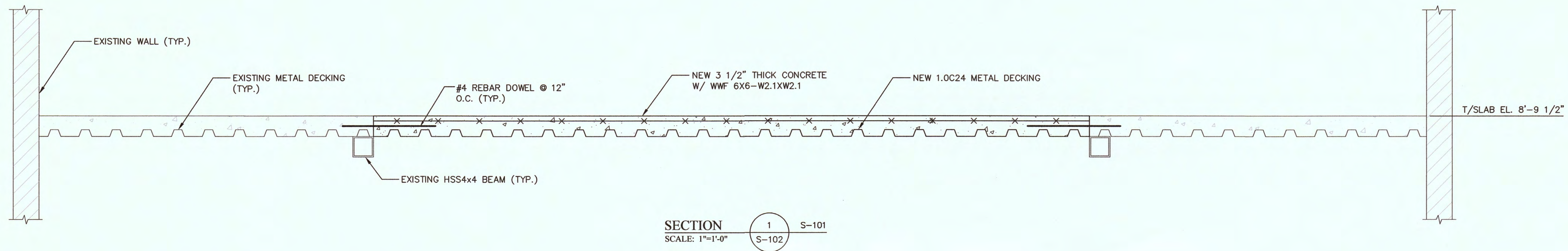
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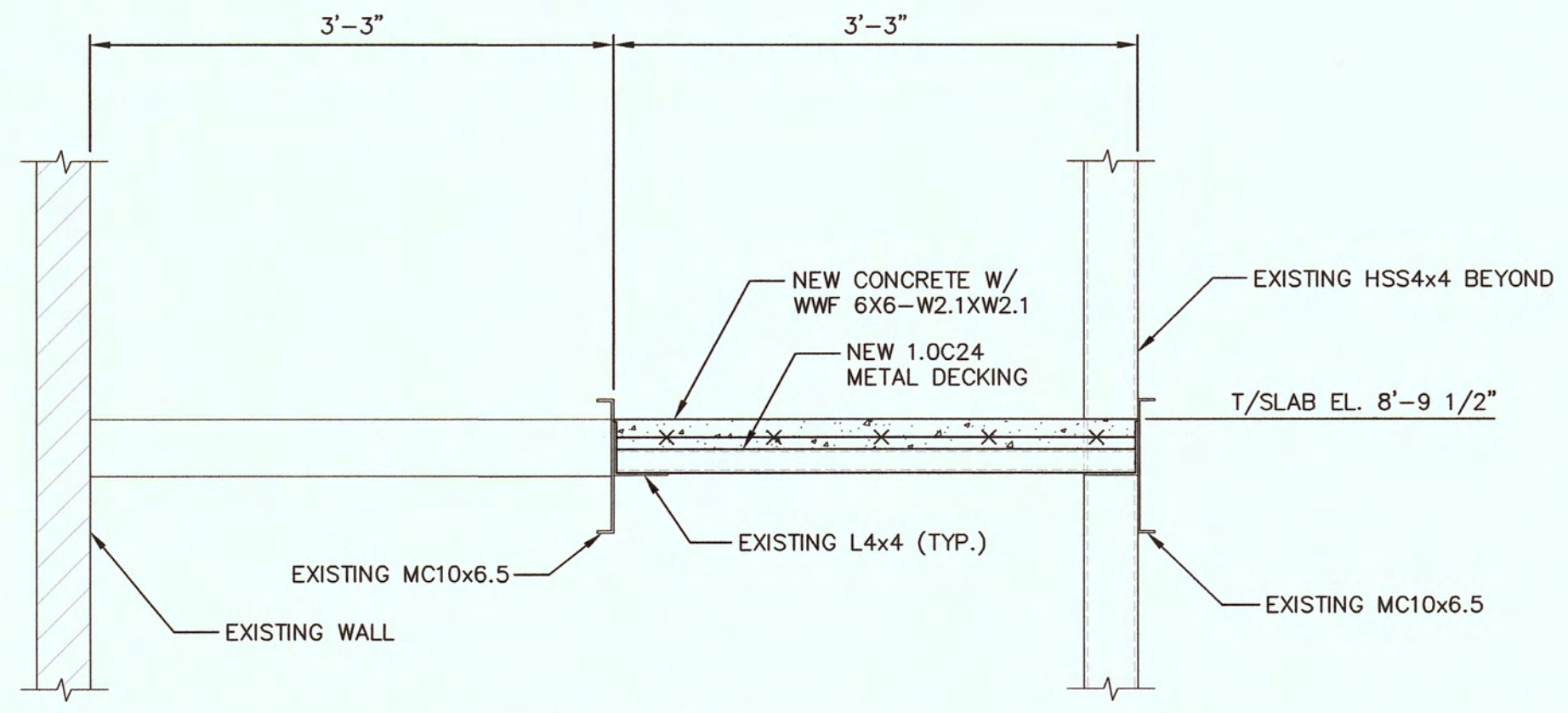
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**S-101**

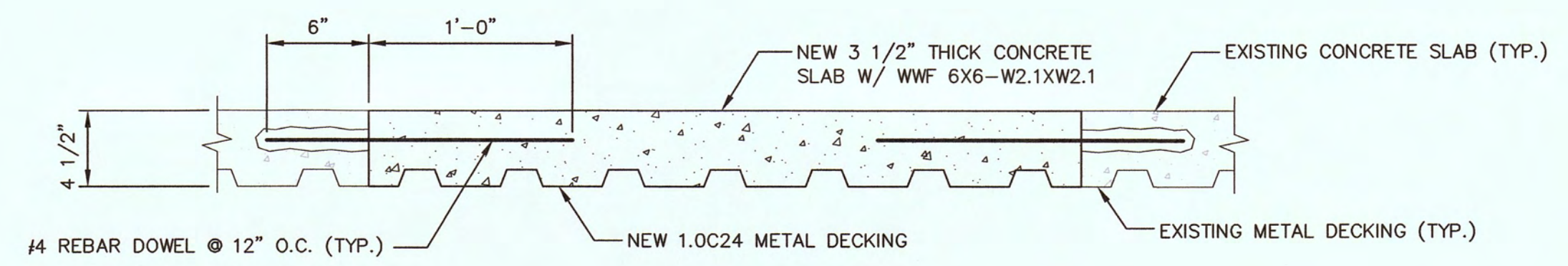




SECTION 1 S-101  
SCALE: 1"=1'-0"



SECTION 2 S-101  
SCALE: 1"=1'-0"



TYPICAL DOWEL DETAIL  
SCALE: 1 1/2"=1'-0"

DAMAGED BUILDING NO.	TYPICAL DAMAGE TYPE	REPAIR
ALL	CRACKS IN CONCRETE DECK	USE GILL 33-SUPERBOND FOR PATCHING CRACKS OR EQUIVALENT.
2-6 AND 8-23	DRAIN HOLE CLOGGED	REMOVE DEBRIS AND EXCESS TRASH FROM DRAIN TO ALLOW FLOW. ENLARGE HOLE AND/OR ADD SCUPPER OPENING IN BOTTOM OF HANDRAIL.
ALL	CORRODED METAL DECKING	CLEAN, PAINT AND PRIMER PER OWNER'S REQUIREMENTS. SEE STRUCTURAL STEEL NOTE 8.
1, 3, 5-9, 12, 13, 15, 16, 18, 21 AND 22	HOLE IN METAL DECKING	REMOVE CONCRETE ABOVE DAMAGED METAL DECKING SPAN AND DAMAGED METAL DECKING. REPLACE METAL DECKING WITH EQUIVALENT AND REPOUR NEW CONCRETE.
ALL	CORRODED C-SHAPE, ANGLES, BEAMS AND POST	CLEAN, PAINT AND PRIMER PER OWNER'S REQUIREMENTS.
2, 16, 19, 20, 22 AND 23	SPALLING OR CRACKS IN STEPS	SEE CONCRETE REPAIR NOTE 3 DRAWING S-101. USE GILL 33-SUPERBOND FOR PATCHING CRACKS OR EQUIVALENT.



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AIKEN, SC 29801**  
SECTIONS AND DETAILS

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**S-102**