

- LEGEND:**
- E.F.D. EXIST FLOOR DRAIN
  - F.D. APPROXIMATE LOCATION OF NEW FLOOR DRAIN
  - ▨ CONCRETE REPAIR AREA. REF SHT S2.1
  - ▧ OVERHEAD CONCRETE REPAIR AREA (UNDERSIDE OF 1ST ELEVATED LEVEL) REF SHT S2.1
  - ~ CRACK CHASE REPAIR. REF SHT S2.1
  - ⊙ REPAIR AT BASE OF COLUMN. REF SHT S2.1
  - Ⓜ TRAFFIC MEMBRANE EXTENTS REF SHT. S2.2
  - APPROXIMATE EXTENTS OF EXISTING DRAIN LINE (UNDERSIDE OF 1ST ELEVATED LEVEL)
  - - - - - PROPOSED EXTENTS OF NEW DRAIN LINE (UNDERSIDE OF 1ST ELEVATED LEVEL)

**1ST ELEVATED LEVEL**  
3/16"=1'-0"

PROJECT NORTH

**GENERAL NOTES**

1. CLOSE COORDINATION WITH THE CITY OF AUBURN, FIRE DEPARTMENT, DISPATCH CENTER AND THEIR REPRESENTATIVES IS REQUIRED BY THE CONTRACTOR. NOTIFY ALL PARTIES 48 HOURS IN ADVANCE IF THERE IS TO BE ANY DISRUPTIONS TO THEIR SERVICE.
2. THE CITY OF AUBURN RESERVES THE RIGHT TO IMMEDIATELY STOP OR LIMIT CONSTRUCTION ACTIVITIES TO ENSURE THE CONTINUOUS OPERATIONS OF THE FIRE DEPARTMENT AND/OR 911 DISPATCH CENTER.
3. THE NOTES ON THESE DRAWINGS ARE NOT INTENDED TO REPLACE SPECIFICATIONS. SEE SPECIFICATIONS FOR REQUIREMENTS IN ADDITION TO GENERAL NOTES. INCONSISTENCIES BETWEEN THESE DRAWINGS AND THE SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER PRIOR TO PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.
4. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH JOB SPECIFICATIONS.
5. ALL DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.
6. THE REPAIRS TO THIS STRUCTURE HAVE BEEN DESIGNED TO RE-ESTABLISH THE STRUCTURAL INTEGRITY OF THE STRUCTURE AFTER THE REPAIRS ARE COMPLETE. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE PROCEDURES AND SEQUENCE TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING THE RESTORATION. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIEDOWNS. SUCH MATERIAL SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT.
7. CONTRACTOR IS RESPONSIBLE FOR PROVIDING DUST PROTECTION AND PROPER VENTILATION WITHIN AND AROUND THE WORK AREA AT ALL TIMES. PROTECTION AND VENTILATION SHALL CONFORM TO ALL LOCAL, STATE AND FEDERAL REQUIREMENTS.
8. SECTIONS AND DETAILS SHOWN ON ANY STRUCTURAL DRAWINGS SHALL BE CONSIDERED TYPICAL FOR SIMILAR CONDITIONS AS DETERMINED BY THE ENGINEER.
9. ALL APPLICABLE FEDERAL, STATE, AND MUNICIPAL REGULATIONS SHALL BE FOLLOWED, INCLUDING THE FEDERAL DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ACT.
10. EXTENTS OF TRAFFIC MEMBRANE INCLUDES ALL FIVE BAYS INCLUDING THE STORAGE ROOM/WORK AREA. COORDINATE TEMPORARY RELOCATION OF SHELVES AND EQUIPMENT WITH THE FIRE DEPARTMENT. MEMBRANE SHALL BE INSTALLED IN MULTIPLE PHASES COORDINATED WITH FIRE DEPARTMENT.

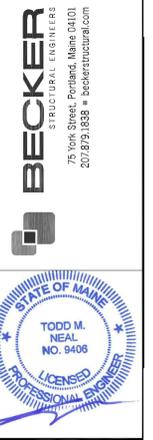
**CONCRETE NOTES**

1. CONCRETE WORK SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318 - 11)," AND "SPECIFICATIONS FOR STRUCTURAL CONCRETE (ACI 301-10)."
2. GENERAL CONTRACTOR, CONSTRUCTION MANAGER OR OWNER'S CLERK OF THE WORKS SHALL HAVE AVAILABLE ON SITE AT ALL TIMES A COPY OF ACI "FIELD REFERENCE MANUAL SP-15(05)".
3. CONCRETE SHALL NOT BE PLACED IN WATER OR ON FROZEN GROUND.
4. REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 60 DEFORMED BARS AND SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH ACI 315, LATEST EDITION.
5. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185 AND BE PROVIDED IN FLAT SHEETS.
6. MINIMUM CONCRETE PROTECTIVE COVERING FOR REINFORCEMENT, UNLESS NOTED OTHERWISE, SHALL BE AS FOLLOWS:  
 A) SURFACES NOT IN CONTACT WITH EARTH OR EXPOSED TO WEATHER 1.0"  
 WALLS, SLABS, JOISTS #11 BARS AND SMALLER  
 BEAMS, GIRDERS, AND COLUMNS; ALL REINFORCEMENT 1.5"
7. WELDING OF REINFORCEMENT IS NOT PERMITTED.

**FLOOR DRAIN AND PLUMBING NOTES**

1. CONTRACTOR IS REQUIRED TO LOCATE THE LOCATIONS OF THE EXISTING POST TENSION BUNDLES AND REINFORCING PRIOR TO CORING OR SAWCUTTING THE CONCRETE DECK FOR THE INSTALLATION OF THE FLOOR DRAINS. IT IS A REQUIREMENT TO AVOID ALL POST TENSION BUNDLES AND REINFORCING.
2. THE 1ST ELEVATED LEVEL PLAN SHOWS APPROXIMATE FLOOR DRAIN LOCATIONS IN THE GENERAL AREAS OF REPORTED PONDING WATER. CONTRACTOR IS REQUIRED TO COORDINATE FINAL DRAIN LOCATIONS WITH THE FIRE DEPARTMENT AND AVOID OBSTACLES WITHIN THE DROP CEILING.
3. COORDINATE ANY POTENTIAL DISRUPTIONS TO THE DISPATCH CENTER AND ALL ACCESS TO THE UNDERSIDE OF THE DECK WITH THE DISPATCH SUPERVISOR 48 HOURS IN ADVANCE.
4. WATER TEST ALL FLOOR DRAINS WITH A HOSE FLOWING FULL (APPROXIMATELY 5 GALLONS PER MINUTE FLOW). REPORT SLOW DRAINING AND BLOCKED DRAINS TO THE CITY OF AUBURN. CLEAR ALL DRAINS AND LEADERS OF DEBRIS IDENTIFIED AS SLOW DRAINING OR BLOCKED.
5. PROVIDE CAST IRON DRAIN LINE AND SLOPE AT 1/4"/FT MINIMUM. PROVIDE CLEANOUTS AND MATCH DRAIN DIAMETER TO EXISTING LEADER. EXTEND NEW DRAIN LINES TO THE NEAREST LEADERS. PROVIDE ALL NECESSARY HANGERS, SUPPORTS AND CONNECTIONS TO THE EXISTING DRAIN LINES.
6. DEPRESS TOP OF DRAIN GRATE 1/4" BELOW DECK SURFACE. GRIND CONCRETE EDGE TO EASE THE DEPRESSED DRAIN TRANSITION.
7. EXTEND TRAFFIC MEMBRANE INTO THE DRAIN BODY.

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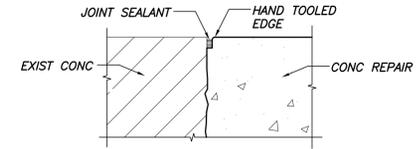
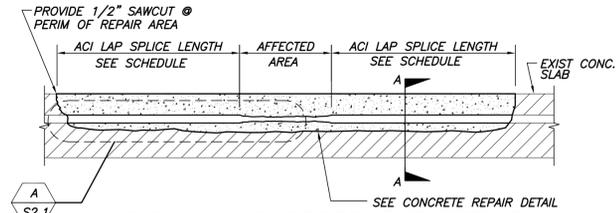
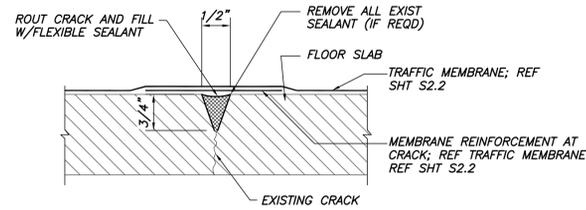
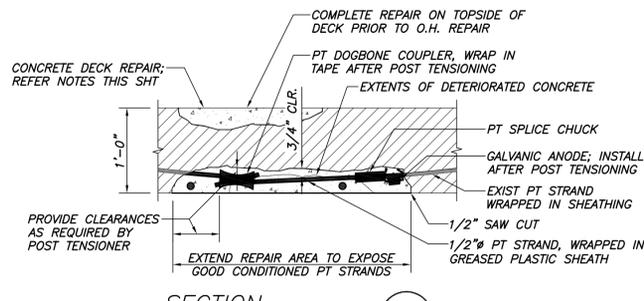


Approved For	
Issued For	FOR BID
Date	05/26/15
Rev. No	

CENTRAL FIRE HEADQUARTERS  
 AUBURN, MAINE  
 ELEVATED SLAB REPAIRS  
 PLAN

Designed	JMM	Scale	AS NOTED
Drawn	JMM	Date	3/27/15
Checked	TMN	Becker Job Number	3457

S1.0



**OVERHEAD REPAIR NOTES**

- PREPARATION:**
1. COMPLETELY SEAL LOCKER ROOM FROM OFFICES AND 911 CONTROL ROOM PRIOR TO STARTING ANY DEMOLITION.
  2. PROVIDE NEGATIVE AIR FLOW FROM WORK AREA TO EXTERIOR TO CONTROL DUST.
  3. SAWCUT PERIMETER OF DAMAGED AREA TO A DEPTH OF 1 1/2". DO NOT CUT REINFORCEMENT. REMOVE, BY HAND, A SECTION TO DETERMINE DEPTH OF REINFORCEMENT IF REQUIRED.
  4. REMOVE DETERIORATED AND SOUND CONCRETE AS NECESSARY W/15LB(MAX) CHIPPING HAMMER. EXCAVATE 3/4" AROUND ALL REINFORCEMENT.
  5. STEEL REINFORCEMENT SHOULD BE THOROUGHLY PREPARED BY MECHANICAL CLEANING TO REMOVE ALL TRACES OF RUST. THE STEEL SHOULD BE HIGH-PRESSURE WASHED WITH CLEAN WATER AFTER MECHANICAL CLEANING.
  6. REMOVE LOOSE, DETERIORATED, AND BOND INHIBITING MATERIALS FROM SURFACE. PREPARATION WORK SHALL BE DONE BY HIGH PRESSURE WATER BLAST, SHOT BLAST, OR OTHER APPROPRIATE MECHANICAL MEANS TO OBTAIN AN EXPOSED AGGREGATE SURFACE WITH A MINIMUM SURFACE PROFILE OF +/- 1/8".
  7. SATURATE SURFACE WITH CLEAN WATER. SUBSTRATE SHOULD BE SATURATE SURFACE DRY (SSD) WITH NO STANDING WATER DURING APPLICATION.

- INSPECTION:**
1. INSPECT ALL CONCRETE SURFACES PRIOR TO APPLICATION OF PRIMERS/ADHESIVES TO INSURE PROPER PREPARATION AND SURFACE DRYING.
  2. CONFORM TO ALL THE MANUFACTURERS PREPARATION INSTRUCTIONS.
  3. ESTIMATE SECTION LOSS OF DETERIORATED REINFORCEMENT. IF SECTION LOSS EXCEEDS 25%, NOTIFY ENGINEER PRIOR TO PROCEEDING WITH PATCH. SEE TYPICAL DETAIL THIS DWG.

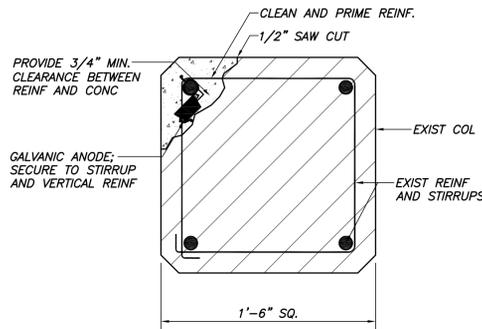
- PT STRESSING NOTES**
1. BUNDLES CONSISTS OF 3 STRANDS. PT BUNDLE SPACING VARIES 15 TO 24" O.C.
  2. REMOVE CONCRETE AS NECESSARY TO EXPOSE GOOD CONDITIONED POST TENSION STRANDS.
  3. POST TENSION BUNDLES TO 74 KIPS.
  4. PROVIDE MINIMUM CLEARANCES BETWEEN DOGBONE COUPLER/SPLICE CHUCK AND EXIST CONCRETE AS REQUIRED BY POST TENSIONER.
  5. CLEAN AND PREPARE ALL EXPOSED REBAR AND COAT.
  6. USE GRINDER TO CUT ALL PT STRANDS. DO NOT USE A TORCH.
  7. COAT ENDS OF CUT PT STRANDS.

- REPAIR (REPAIR AREA <2 SF):**
1. ALL REINFORCEMENT SHALL BE PRIMED OR EPOXY COATED WITH A PRODUCT COMPATIBLE WITH THE CONCRETE PATCH MATERIAL.
  2. APPLY PRIMER TO CONCRETE SUBSTRATE COMPATIBLE WITH REPAIR MATERIAL.
  3. INSTALL REPAIR MATERIAL AS PER MANUFACTURER'S RECOMMENDATION. DO NOT EXCEED THE MAXIMUM LIFT THICKNESS SPECIFIED BY MANUFACTURER.
  4. CURING SHALL BE AS SPECIFIED BY MANUFACTURER AND AS PER ACI.

- REPAIR (REPAIR AREA >2 SF):**
1. ALL REINFORCEMENT SHALL BE PRIMED OR EPOXY COATED WITH A PRODUCT COMPATIBLE WITH THE CONCRETE PATCH MATERIAL.
  2. APPLY PRIMER TO CONCRETE SUBSTRATE COMPATIBLE WITH REPAIR MATERIAL.
  3. FORMWORK MUST BE CONSTRUCTED/INSTALLED TO A STRENGTH SUFFICIENT TO HANDLE INDUCED PRESSURE BY HYDROMATIC PRESSURE AND THE ADDITIONAL PUMP PRESSURE REQUIRED TO CONSOLIDATE REPAIR MATERIAL.
  4. FORM SHALL BE VENTED.
  5. FORMS SHALL BE CONSTRUCTED TO FIT TIGHTLY AGAINST EXISTING CONCRETE SURFACES.
  6. MATERIAL: PROVIDE PRE-PACKAGED REPAIR MATERIALS WHICH ARE DESIGNED FOR PUMPING AND INCORPORATE SHRINKAGE COMPENSATING ADMIXTURES.
  7. ARRANGE PORTS BASED ON SIZE OF PUMP AND MATERIAL MANUFACTURERS RECOMMENDATIONS.
  8. PLACEMENT: START PUMPING FROM THE LOWEST POINT, FILLING IN A MANNER THAT PREVENTS AND ENTRAPMENT.
  9. PRESSURE GAGE SHALL BE ATTACHED TO THE PUMP LINE NEAR THE EXIT PORT TO MONITOR CAVITY PRESSURE. CAVITY PRESSURE SHALL NOT EXCEED FORM DESIGN PRESSURE.
  10. FORMWORK SHALL REMAIN IN PLACE UNTIL MATERIAL ACHIEVES MINIMUM STRENGTH OF  $f_c=4,000$  PSI.

**TYP. CRACK/C.J. REPAIR DETAIL**

- PREPARATION:**
1. CENTER ROUTED GROOVE ON CRACK.
  2. REMOVE ALL LOOSE AND DETERIORATED MATERIAL.
  3. ALL JOINT-WALL SURFACES MUST BE CLEAN, SOUND, AND FROST FREE. JOINT WALLS MUST BE FREE OF OILS, GREASE, CURING COMPOUND RESIDUES AND ANY OTHER FOREIGN MATTER THAT MIGHT PREVENT BOND. THIS SHOULD BE ACCOMPLISHED BY BLAST CLEANING OR EQUIVALENT MECHANICAL MEANS.
  4. CONFORM TO ALL MANUFACTURERS PREPARATION REQUIREMENTS.
  5. JOINT PREPARATION SHALL BE CONFIRMED BY SEALANT INSTALLER. INSTALLATION OF SEALANT SHALL IMPLY PROPER JOINT PREPARATION.
- CRACK SEALANT INSTALLATION:**
1. INSTALLATION SHALL CONFORM TO MANUFACTURERS REQUIREMENTS.
  2. INSTALL SEALANT EVENLY AND RECESS 1/16" BELOW SURFACE. DO NOT OVERFILL JOINT.
  3. PROVIDE REINFORCEMENT OVER CRACK AS REQUIRED BY THE TRAFFIC MEMBRANE MANUFACTURER.



**BASE OF COLUMN REPAIR**

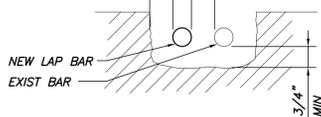
**TYPICAL REINFORCEMENT REPAIR**

- PREPARATION:**
1. SEE TYPICAL CONCRETE REPAIR FOR REMOVAL/REPLACEMENT OF CONCRETE.

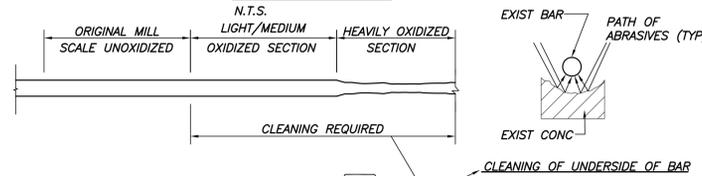
- INSPECTION:**
1. IF REINFORCEMENT HAS LOST MORE THAN 25% OF ITS CROSS SECTIONAL AREA, NOTIFY STRUCTURAL ENGINEER PRIOR TO PROCEEDING WITH PATCH.

- REPAIR:**
1. LAP BARS AS NOTED ABOVE.
  2. SEE TYPICAL CONCRETE REPAIR.

- PRICING**
1. PROVIDE COST PER UNIT FOR THE FOLLOWING:

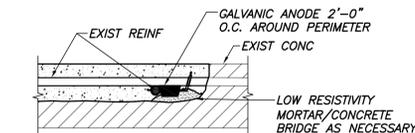


**SECTION A-A**



**DETAIL**

BAR SIZE	LAP LENGTH
#3	30"
#4	36"
#5	48"
#6	56"
#7	81"



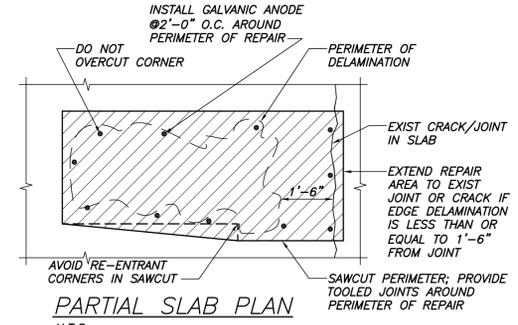
**GALVANIC ANODE DETAIL**

**GALVANIC ANODE NOTES**

1. **PRODUCT:**  
EMBEDDED GALVANIC ANODES SHALL CONSIST OF A MINIMUM OF 100 GRAMS OF ZINC IN COMPLIANCE WITH ASTM B6 SPECIAL HIGH GRADE CAST AROUND A PAIR OF STEEL TIE WIRES IN COMPLIANCE WITH BRIGHT ANNEALED ASTM A82 AND ENCASED IN A HIGHLY ALKALINE CEMENTITIOUS SHELL WITH A PH OF 14 OR GREATER. THE CEMENTITIOUS SHELL SHALL CONTAIN NO ADDED SULFATE NOR SHALL IT CONTAIN CHLORIDE, BROMIDE OR OTHER CONSTITUENTS THAT ARE CORROSIVE TO REINFORCING STEEL. ANODE UNITS SHALL BE SUPPLIED WITH INTEGRAL UNSPLICED WIRES WITH LOOP TIES FOR DIRECTLY TYING TO THE REINFORCING STEEL.
2. **GALVANIC ANODE INSTALLATION:**  
A. INSTALL ANODES AND REPAIR MATERIAL IMMEDIATELY FOLLOWING PREPARATION AND CLEANING OF THE STEEL REINFORCEMENT.  
B. GALVANIC ANODES SHALL BE INSTALLED ALONG THE PERIMETER OF THE REPAIR OR INTERFACE AT A SPACING AS SPECIFIED ON THE DRAWINGS. ANODE SPACING WILL VARY WITH CHANGES IN THE REINFORCING STEEL DENSITY, THE LEVEL OF CHLORIDE IN THE STRUCTURE AND THE CORROSIVITY OF THE LOCAL ENVIRONMENT, ETC.  
C. PROVIDE SUFFICIENT CLEARANCE BETWEEN ANODES AND SUBSTRATE TO ALLOW REPAIR MATERIAL TO ENCASE ANODE.  
D. SECURE THE GALVANIC ANODES AS CLOSE AS POSSIBLE TO THE PATCH EDGE USING THE ANODE TIE WIRES. THE TIE WIRES SHALL BE WRAPPED AROUND THE CLEANED REINFORCING STEEL AND TWISTED TIGHT TO ALLOW LITTLE OR NO FREE MOVEMENT.
3. **ELECTRICAL CONTINUITY:**  
A. CONFIRM ELECTRICAL CONNECTION BETWEEN ANODE TIE WIRE AND REINFORCING STEEL BY MEASURING DC RESISTANCE (OHM,Ω) OR POTENTIAL (MV) WITH A MULTI-METER.  
B. ELECTRICAL CONNECTION IS ACCEPTABLE IF THE DC RESISTANCE MEASURED WITH MULTI-METER IS LESS THAN 1 Ω OR THE DC POTENTIAL IS LESS THAN 1 MV.  
C. CONFIRM ELECTRICAL CONTINUITY OF THE EXPOSED REINFORCING STEEL WITHIN THE REPAIR AREA. IF NECESSARY, ELECTRICAL CONTINUITY SHALL BE ESTABLISHED WITH STEEL TIE WIRE.  
D. ELECTRICAL CONTINUITY BETWEEN TEST AREAS IS ACCEPTABLE IF THE DC RESISTANCE MEASURED WITH MULTI-METER IS LESS THAN 1 Ω OR THE POTENTIAL IS LESS THAN 1 MV.
4. CONFORM TO ALL MANUFACTURERS RECOMMENDATIONS FOR PREPARATION INSTALLATION AND TESTING.

**TYPICAL TOOLED JOINT DETAIL**

N.T.S.



**PARTIAL SLAB PLAN**

N.T.S.

**SLAB REPAIR NOTES**

- GENERAL:**
1. ALL SLAB REPAIRS ARE ASSUMED TO BE TO 3" DEEP.
  2. DUST AND MOISTURE PROTECTION SHALL BE PROVIDED AT AND BELOW THE LEVELS OF REPAIR.
  3. AT CIP TOPPING REMOVING TOPPING COMPLETELY DOWN TO PC SUBSTRATE.
- CONCRETE REMOVAL:**
1. REFERENCES: ICRI 03730, 03732, ACI 546R-04.
  2. AT EACH REPAIR AREA, REMOVE SMALL AREA OF CONCRETE TO CONFIRM DEPTH OF REINFORCEMENT PRIOR TO CUTTING.
  3. SAW CUT PERIMETER OF REPAIR AREA TO A DEPTH OF 1/2". REFERENCE PARTIAL SLAB PLAN THIS SHEET FOR ADDITIONAL INFORMATION. NOTE THAT PERIMETER MAY NEED TO BE EXTENDED TO CREATE A RECTANGULAR AREA.
  4. REMOVE ALL DETERIORATED, DELAMINATED AND UNSOUND CONCRETE. CONCRETE SHALL BE REMOVED BY A METHOD THAT LIMITS THE DAMAGE TO SURROUNDING SOUND CONCRETE AND WITH MINIMAL DAMAGE TO EXISTING CAST-IN PLACE SLAB. REMOVAL METHOD SHALL BE SUBMITTED FOR REVIEW.
  5. CONTINUOUS MATERIAL REMOVAL SHALL CONTINUE UNTIL AGGREGATE PARTICLES ARE BEING BROKEN RATHER THAN BEING REMOVED FROM THE CEMENT MATRIX.
  6. USE OF MECHANICAL IMPACT CHIPPING HAMMERS SHALL BE LIMITED TO 30lb WITH A 15lb RECOMMENDED. ALL NECESSARY PRECAUTIONS MUST BE TAKEN TO AVOID MICRO CRACKING (BRUISING) OF THE PRECAST/PRESTRESSED UNITS.
  7. ALL MATERIAL SHALL BE RECOMMENDED FOR USE IN GARAGE IN EXPOSURE ZONE III PER ACI 362.1 LATEST EDITION.
  8. DEMOLITION MAY BE STOPPED, POSTPONED OR RESCHEDULED AT THE DISCRETION OF THE CITY OF AUBURN BASED ON ACTIVITY IN CALL CENTER AND/OR FIRE DEPARTMENT.

- PREPARATION:**
1. ALL EXPOSED REINFORCEMENT SHALL BE PRIMED OR EPOXY COATED WITH A PRODUCT COMPATIBLE WITH THE CONCRETE REPAIR MATERIAL. PRIOR TO PROCEEDING WITH REPAIR, INSPECT ALL CONCRETE SURFACES. INSTALLATION OF REPAIR MATERIAL INDICATES ACCEPTANCE OF ALL SUBSTRATE CONDITIONS.
  3. INSTALL GALVANIC ANODE AT LOCATIONS SHOWN ON DRAWINGS. ATTACH ANODE TO CLEAN REINFORCING STEEL. REFERENCE NOTES THIS SHEET FOR ADDITIONAL INFORMATION.
  4. APPLY POLYMER ADHESIVE/BONDING AGENT TO ALL CONCRETE SURFACES.
  5. REPAIR MATERIAL FOR SMALL PLACEMENTS (PLACEMENT LESS THAN 1 YARD) SHALL BE A ONE-COMPONENT, EARLY STRENGTH GAINING, CEMENTITIOUS REPAIR MATERIAL WITH THE FOLLOWING PROPERTIES (REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION):  
COMPRESSIVE STRENGTH: = 5,000 PSI (MIN)  
ADMIXTURES:  
SHRINKAGE REDUCER = AS PER MANUFACTURER  
CORROSION INHIBITOR = AS PER MANUFACTURER



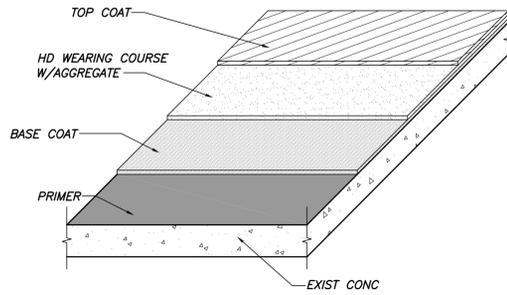
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CENTRAL FIRE HEADQUARTERS  
AUBURN, MAINE  
ELEVATED SLAB REPAIRS  
SECTIONS, DETAILS AND NOTES

Designed  
JMM AS NOTED  
Scale  
Drawn  
JMM 3/27/15  
Date  
Checked  
TMN Beaker Job Number  
3457

S2.1

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TYPICAL MEMBRANE DETAIL

N.T.S.

TYPICAL TRAFFIC MEMBRANE AT EXPOSED CONCRETE

NOTES:

1. BASIS OF DESIGN PRODUCT: NEOGARD AUTO-GARD E  
A. REFERENCE SPECIFICATIONS FOR ADDITIONAL APPROVED TRAFFIC MEMBRANES
2. PRIMER: THOROUGHLY MIX AND APPLY PRIMER AT RATE OF 300 SF/GAL.
3. BASE COAT: THOROUGHLY MIX FC7500/FC7960 BASE COAT MATERIAL AND APPLY AT RATE OF 80 SF/GAL (MIN. 20 MILS DRY).
4. HEAVY DUTY WEAR COAT: THOROUGHLY MIX 70714/70715 SERIES EPOXY WEAR COAT AND APPLY AT RATE OF 100 SF/GAL (MIN. 16 MILS DRY) AND IMMEDIATELY BROADCAST AGGREGATE EVENLY INTO WET COATING AT A RATE OF 15 TO 20LBS/100SF. WHEN CURED REMOVE EXCESS.
5. TOP COAT: THOROUGHLY MIX FC7540/FC7964 TOP COAT AND APPLY AT A RATE OF 100 SF/GAL (MIN. 14 MILS DRY). SYSTEM COATING THICKNESS OF 50 DRY MILS MINIMUM EXCLUSIVE OF PRIMER AND AGGREGATE.
6. EXTEND MEMBRANE VERTICALLY 4 INCHES MINIMUM ABOVE DECK SURFACE, INCLUDING COLUMNS AND PERIMETER WALLS. PROVIDE SAW CUT MEMBRANE TERMINATION JOINT.
7. AFTER COMPLETION OF APPLICATION, DO NOT ALLOW TRAFFIC ON COATED SURFACES FOR A PERIOD OF AT LEAST 48 HOURS AT 75°F. AND 50% R.H., OR UNTIL COMPLETELY CURED.

TRAFFIC MEMBRANE NOTES

JOB CONDITIONS:

1. DO NOT PROCEED WITH APPLICATION OF MATERIALS WHEN DECK TEMPERATURE IS LESS THAN 40 DEGREES F.
2. DO NOT APPLY MATERIALS UNLESS SURFACE TO RECEIVE COATING IS CLEAN AND DRY.

WARRANTY:

1. SUBMIT SAMPLE WARRANTY THAT STATES THAT THE MATERIAL AND LABOR/WORKMANSHIP INVOLVED IN THIS APPLICATION WILL BE WARRANTED FOR 5 YEARS FROM THE DATE OF SUBSTANTIAL COMPLETION BY THE INSTALLER AND NEOGARD. WARRANTY REQUIRED PRIOR TO FINAL PAYMENT.

CODES AND QUALITY CONTROL:

1. COMPLY WITH PROVISIONS OF THE FOLLOWING EXCEPT AS OTHERWISE INDICATED:
  - A. ICRI GUIDELINES NO. 03732 "SELECTING AND SPECIFYING CONCRETE SURFACE PREPARATION FOR SEALERS, COATINGS AND POLYMER OVERLAYS"
  - B. CODE OF FEDERAL REGULATIONS, PART 1926 PER OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), DEPARTMENT OF LABOR (LATEST EDITION).
  - C. NEOGARD CONSTRUCTION PRODUCTS, "RECOAT GUIDELINES STANDARD AND FAST CURE COATING SYSTEMS."
  - D. REQUIREMENT OF REGULATORY AGENCIES: MATERIALS USED IN THE VEHICULAR TRAFFIC COATING SYSTEM SHALL MEET EXISTING FEDERAL, STATE, AND LOCAL VOC REGULATIONS.

SYSTEM DESCRIPTION:

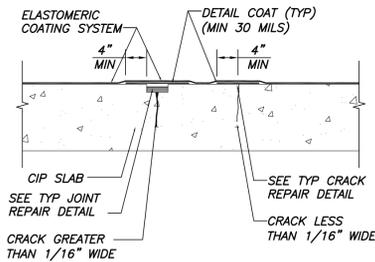
1. AUTO-GARD E SHALL BE A COMPLETE SYSTEM OF COMPATIBLE MATERIALS SUPPLIED BY NEOGARD TO CREATE A SEAMLESS WATERPROOF MEMBRANE.

PREPARATION:

1. CLEANING: SURFACES CONTAMINATED WITH OIL OR GREASE SHALL BE VIGOROUSLY SCRUBBED WITH A POWER BROOM AND A STRONG NON-SUDSING DETERGENT. THOROUGHLY WASH, CLEAN, AND DRY. AREAS WHERE OIL OR OTHER CONTAMINANTS PENETRATE DEEP INTO THE CONCRETE MAY REQUIRE REMOVAL BY MECHANICAL MEANS.
2. SHOT BLASTING: REQUIRED SURFACE PREPARATION METHOD FOR REMEDIAL CONSTRUCTION, IS ALSO THE PREFERRED METHOD FOR NEW CONSTRUCTION. MECHANICALLY PREPARE SURFACE BY SHOT BLASTING TO INDUSTRY STANDARD SURFACE TEXTURE (ICRI'S CSP3-4).
3. CRACKS AND COLD JOINTS: VISIBLE HAIRLINE CRACKS (UP TO 1/8") IN CONCRETE AND COLD JOINTS SHALL BE CLEANED, PRIMED AS REQUIRED AND TREATED WITH FC7500/FC7960 POLYURETHANE COATING A MINIMUM DISTANCE OF 2" ON EACH SIDE OF CRACK TO YIELD A TOTAL THICKNESS OF 30 DRY MILS. LARGE MOVING CRACKS SHALL BE ROUTED AND SEALED WITH 70991 SEALANT OR FC7500/FC7960 POLYURETHANE COATING MATERIAL. NON MOVING CRACKS TO BE FILLED WITH 70718/70719 FLEXIBLE EPOXY. WHERE SEALANT IS USED IT SHALL BE APPLIED TO INSIDE AREA OF CRACK ONLY, NOT APPLIED TO DECK SURFACE. DETAIL SEALED CRACKS WITH FC7500/FC7960 POLYURETHANE COATING A DISTANCE OF 2" ON EACH SIDE OF CRACK TO YIELD A TOTAL THICKNESS OF 30 DRY MILS.
4. CONTROL JOINTS: SEAL SECONDARY CONTROL JOINTS WITH 70718/70719 FLEXIBLE EPOXY. DETAIL SEALED JOINTS WITH FC7500/FC7960 POLYURETHANE COATING A DISTANCE OF 2" ON EACH SIDE OF CRACK TO YIELD A TOTAL THICKNESS OF 30 DRY MILS.
5. FLASHING TAPE: INSTALL 86218 FLASHING TAPE WHERE REQUIRED BY MANUFACTURER PRIOR TO THE APPLICATION OF COATING.
6. SURFACE CONDITIONS: SURFACE SHALL BE CLEAN AND DRY PRIOR TO COATING.

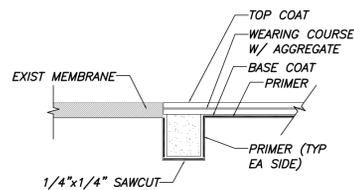
APPLICATION:

1. PRIMER: APPLY PRIMER AT A MINIMUM RATE OF 300 SF/GAL TO ALL CONCRETE AND EXISTING MEMBRANE SURFACES. WITHIN 24 HOURS OF APPLICATION OF PRIMER BASE COAT OR WEARING COURSE MUST BE APPLIED. IF BASE COAT CANNOT BE APPLIED WITHIN 24 HOURS, RE-PRIME.
2. REFERENCE DETAILS FOR APPLICATION RATES AND MIL THICKNESS OF BASE COAT AND WEARING COURSES.
3. BASE COAT: EXTEND BASE COAT OVER CRACKS AND JOINTS WHICH HAVE RECEIVED DETAIL TREATMENT.
4. WEARING COURSE: APPLY WEARING COURSE AND IMMEDIATELY BROADCAST SELECTED AGGREGATE, EVENLY DISTRIBUTED INTO WET COATING. FOR HEAVY DUTY APPLICATIONS REPEAT THIS STEP.



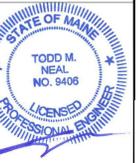
TYP. MEMBRANE JOINT/CRACK DETAIL

N.T.S.



MEMBRANE TERMINATION DETAIL

N.T.S.



Approved	
Issued For	FOR BID
Date	05/26/15
Rev. No	

CENTRAL FIRE HEADQUARTERS  
AUBURN, MAINE  
ELEVATED SLAB REPAIRS  
MEMBRANE DETAILS AND NOTES

Designed	JMM	Scale	AS NOTED
Drawn	JMM	Date	3/27/15
Checked	TMN	Becker Job Number	3457

S2.2

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