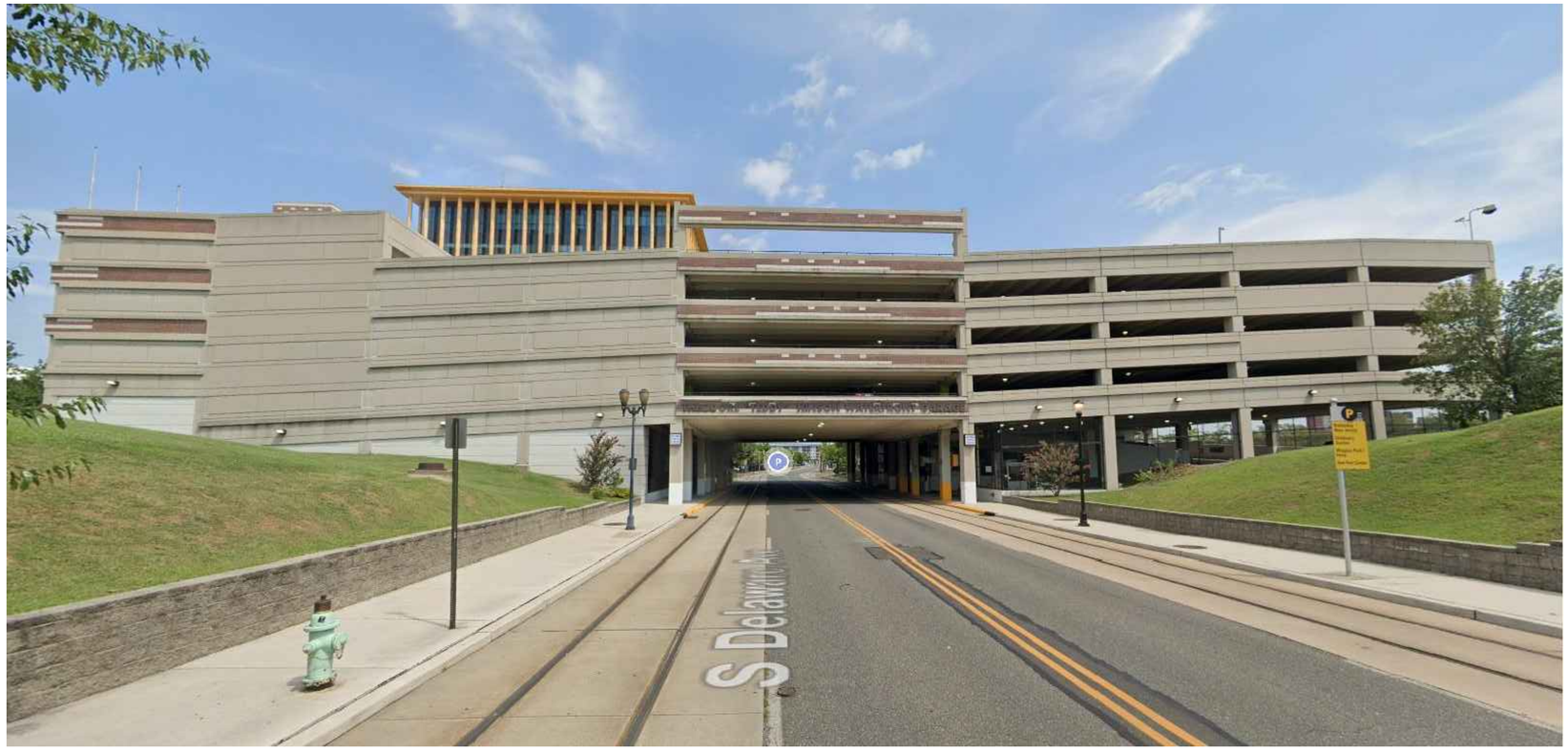
HINSON GARAGE 2022 RESTORATION
Camden, NJ



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Location Map

DRAWING INDEX

ISSUE FOR BID
APR 22, 2022

GENERAL NOTES

A. GENERAL CONDITIONS

1. IT IS THE INTENT OF THE PLANS TO ADEQUATELY DESCRIBE AND INDICATE AREAS THAT REQUIRE RESTORATION WORK. IN THE EVENT IT BECOMES NECESSARY TO ALTER THE PLANS FOR THE BEST INTEREST OF THE PROJECT DUE TO CIRCUMSTANCES NOT KNOWN AT THE TIME OF SURVEY, WORK QUANTITIES MAY BE ADJUSTED IN ACCORDANCE WITH THE ENGINEER AND OWNER'S APPROVAL.
2. CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS PRIOR TO COMMENCING WORK AND SHALL REPORT IN WRITING TO THE ENGINEER ALL DISCREPANCIES WITH RESPECT TO DRAWINGS & SPECIFICATIONS.
3. CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF ALL BRACING, SHEETING, AND SHORING AS REQUIRED. PROVIDE TEMPORARY SUPPORT WHERE REPAIR WORK WILL DEGRADE THE INTEGRITY OF THE STRUCTURE INCLUDING CONNECTIONS. SHORING SHALL BE DESIGNED, PREPARED, SIGNED, AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NEW JERSEY, HIRED BY THE CONTRACTOR. SHORING ENGINEER SHALL FIELD VERIFY ALL DIMENSIONS, CONNECTION TYPES, ETC. AS NEEDED TO DETERMINE ALL APPLICABLE LOADING AND LOAD PATHS.
4. CONTRACTOR IS REQUIRED TO INSTALL A TEMPORARY DUST ENCLOSURE AT EACH AREA OF WORK TO PREVENT DUST & ODOR MIGRATION. FOR BIDDING PURPOSES, ASSUME A CONTINUOUS PLASTIC SEAL AT THE PERIMETER OF EACH WORK AREA. ALL DUST/DEBRIS FROM THE WORK SHALL BE CLEANED/REMOVED PRIOR TO REMOVING TEMPORARY ENCLOSURE.
5. CONDUCT A PRECONSTRUCTION MEETING PRIOR TO COMMENCING WORK, HOLD PREINSTALLATION MEETINGS PRIOR TO EACH PHASE OF THE PROJECT, AND HOLD REGULAR COORDINATION MEETINGS.
6. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY CONDITION WHICH MAY ENDANGER THE STABILITY AND INTEGRITY OF, CAUSE DISTRESS TO, OR COMPROMISE THE DURABILITY OF THE STRUCTURE.
7. CONTRACTOR SHALL REFER TO THE SPECIFICATIONS FOR INFORMATION NOT COVERED BY THE DRAWINGS. IN CASE OF CONFLICT BETWEEN DRAWINGS AND SPECIFICATIONS, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN.
8. ALL WORK MUST BE PERFORMED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS, AND CONDITIONS OF APPROVAL, AND ALL APPLICABLE REQUIREMENTS, RULES, REGULATIONS, STATUTORY REQUIREMENTS, CODES, LAWS, AND STANDARDS OF ALL AUTHORITIES HAVING JURISDICTION OVER THIS PROJECT.
9. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION AND SITE SAFETY.
10. THE FOLLOWING CODES AND STANDARDS APPLY TO THE DESIGN AND CONSTRUCTION OF THIS PROJECT:
    a. "INTERNATIONAL BUILDING CODE" NJ EDITION (IBC 2018) – INTERNATIONAL CODE COUNCIL
    b. "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" (ASCE 7–16) – AMERICAN SOCIETY OF CIVIL ENGINEERS
    c. "BUILDING CODE REQUIREMENTS FOR STUCTURAL CONCRETE" (ACI 318–14) – AMERICAN CONCRETE INSTITUTE
    d. "MANUAL OF STEEL CONSTRUCTION" (14TH EDITION) – AMERICAN INSTITUTE OF STEEL CONSTRUCTION
    e. "ACI MANUAL OF CONCRETE PRACTICE" (2016; PART 1 THROUGH PART 5) – AMERICAN CONCRETE INSTITUTE
    f. "ACI CONCRETE REPAIR MANUAL" LATEST EDITION – AMERICAN CONCRETE INSTITUTE
    g. "CODE REQUIREMENTS FOR ASSESSMENT, REPAIR AND REHABILITATION OF EXISTING CONCRETE STRUCTURES" (ACI 562–16) – AMERICAN CONCRETE INSTITUTE
    h. "CRSI HANDBOOK" (2008) – CONCRETE REINFORCING STEEL INSTITUTE
    i. "STRUCTURAL WELDING CODE" (LATEST EDITION) – AMERICAN WELDING SOCIETY
11. IF THE BID SCHEDULE INCLUDES COLD WEATHER MONTHS, INCLUDE COLD WEATHER PROVISIONS AS REQUIRED TO COMPLETE THE WORK.

B. PHASING OF WORK & WORK RESTRICTIONS

1. BIDDERS SHALL INCLUDE A PRELIMINARY SITE UTILIZATION/PHASING PLAN WITH THEIR BIDS.
2. THE SUCCESSFUL CONTRACTOR SHALL SUBMIT COMPOSITE SITE UTILIZATION/PHASING PLANS FOR APPROVAL PRIOR TO MOBILIZATION. THE CONTRACTOR SHALL COORDINATE CLOSELY WITH THE ENGINEER AND THE OWNER WHILE DEVELOPING, MAINTAINING, AND REVISING THE PLANS AS NECESSARY. THE GARAGE WILL BE PARTIALLY OCCUPIED BY VEHICLES AND PEDESTRIANS DURING CONSTRUCTION. THE COMPOSITE PLANS SHALL SHOW TEMPORARY FACILITIES, TEMPORARY UTILITY AND CONNECTIONS, STAGING AND STORAGE AREAS, DELIVERIES, SITE ACCESS, TEMPORARY VEHICLE AND PEDESTRIAN CIRCULATION, CONSTRUCTION PHASING, SHORING, TEMPORARY FENCING, BARRICADES, SIGNAGE, FLAGMEN, ETC.
3. THE INTENT OF THE CONTRACTOR'S PHASING PLAN SHOULD BE TO DIVIDE THE WORK INTO THE LEAST NUMBER OF PHASES WHILE MAINTAINING VEHICLE ACCESSIBILITY TO ALL AREAS THAT ARE NOT BEING WORKED ON. RAMPS ARE ASSUMED TO BE ABLE TO BE SPLIT INTO TWO PHASES.
4. ALL WORK CAN BE COMPLETED EITHER DURING THE DAY OR AT NIGHT, UNLESS NOTED OTHERWISE BY THE OWNER OR GARAGE OPERATOR OR BASED ON THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION. COMPLY WITH WORK HOUR RESTRICTIONS AND NOISE ORDINANCE OF THE AUTHORITY HAVING JURISDICTION.
5. ONE ELEVATOR MUST REMAIN IN SERVICE AND BE ACCESSIBLE AT ALL TIMES, UNLESS AN ALTERNATE ACCESSIBILITY PLAN IS SUBMITTED TO AND APPROVED BY THE AUTHORITY HAVING JURISDICTION.
6. STAIR TOWERS MUST REMAIN IN SERVICE AND BE ACCESSIBLE AT ALL TIMES, UNLESS AN ALTERNATE MEANS OF EGRESS PLAN IS SUBMITTED TO AND APPROVED BY THE AUTHORITY HAVING JURISDICTION.
7. THE CONTRACTORS MAY TAKE A MAXIMUM OF 50 PARKING SPACES OUT OF SERVICE AT ANY TIME, WITH THE EXCEPTION OF EVENTS.
8. COMPLY WITH LIMITATIONS ON USE OF PUBLIC STREETS AND WITH OTHER REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION.
9. THE CONTRACTOR SHOULD COORDINATE THE SHUTDOWN OF AREAS FOR THE APPLICATION OF WATERPROOFING MATERIALS WITH THE EXTENDED WEATHER FORECAST TO AVOID WEATHER–RELATED DELAYS.
10. PARKING AND PEDESTRIAN ACCESS AT THE LEVEL BELOW DEMOLITION WORK AND/OR STRUCTURAL REPAIRS SHALL BE TAKEN OUT OF SERVICE UNTIL REPAIRS ARE COMPLETE. PARKING AND PEDESTRIAN ACCESS AT THE LEVEL BELOW WATERPROOFING WORK SHALL BE TAKEN OUT OF SERVICE UNTIL WORK IS COMPLETE, UNLESS CONTRACTOR TAKES APPROPRIATE ACTIONS TO PROTECT PEDESTRIANS AND VEHICLES FROM HARM/DAMAGE. THE APPROPRIATE ACTION PLAN SHALL BE SUBMITTED FOR ENGINEER'S APPROVAL.
11. REFER TO SPECIFICATION SECTION 011000 SUMMARY FOR ADDITIONAL REQUIREMENTS AND RESTRICTIONS.

C. MEASUREMENT AND RECORD DRAWINGS

1. DO NOT SCALE DRAWINGS. VERIFY ALL DRAWING DIMENSIONS IN THE FIELD.
2. CONTRACTOR SHALL MEASURE TO THE NEAREST INCH AND RECORD THE REPAIR AREAS AND QUANTITIES PERFORMED.
3. ELECTRONIC COPIES OF THE DRAWINGS SHOWING THE ACTUAL SHAPE, LOCATION, AND SIZE OF THE REPAIRS AND A REPAIR TABULATION SPREADSHEET SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER AT THE END OF EACH PHASE OF THE PROJECT AND WITH EACH PAYMENT APPLICATION.
4. AT THE PROJECT CONCLUSION, SUBMIT ONE SET OF REPRODUCIBLE RECORD DRAWINGS IN A NEAT AND ORDERLY FASHION TO THE OWNER & ENGINEER SHOWING ALL REPAIRS PERFORMED. PROVIDE ONE HARD COPY AND AN ELECTRONIC COPY IN CAD OR PDF FORMAT.

D. GENERAL PREPARATION FOR CONCRETE REPAIRS

1. THE DRAWINGS INDICATE THE AREAS THAT HAVE BEEN DETERMINED TO REQUIRE REPAIR PER FIELD SURVEYS. CONTRACTOR SHALL SOUND SURFACES WITH HAMMER, ROD, CHAIN, OR APPROPRIATE TOOLS TO DETECT DELAMINATIONS AND SPALLS. ALL SUPPORTED STRUCTURAL ELEMENTS WITHIN THE GARAGE SHALL BE SOUNDED. THE LIMITS OF THE DELAMINATIONS SHALL BE MARKED FOR DEMOLITION. PRIOR TO REMOVAL, LIMITS OF REPAIR AREA SHALL BE REVIEWED BY ENGINEER IN THE FIELD. REPAIR QUANTITIES THAT DEVIATE FROM THAT SHOWN ON PLAN SHALL BE REPORTED IN WRITING TO THE ENGINEER AND OWNER FOR APPROVAL.
2. SAWCUT PERIMETER OF REPAIR AREA TO AVOID FEATHERED EDGES. REMOVE SPALLED AND UNSOUND CONCRETE WITHIN MARKINGS. EXTEND REPAIR AREAS WITH THE APPROVAL OF ENGINEER AND OWNER IF ADDITIONAL UNSOUND CONCRETE IS ENCOUNTERED. THE REPAIR EDGE SHALL BE EXTENDED A MINIMUM OF THREE INCHES BEYOND THE EXTENT OF CORRODED REINFORCING STEEL.
3. ALL REINFORCING IN GOOD CONDITION (SECTION LOSS LESS THAN 20%) WITHIN THE REPAIR AREA SHALL BE UNDERCUT, SANDBLASTED CLEAN, AND TREATED WITH CORROSION INHIBITING COATING MATERIALS PER SPECIFICATIONS. ALL REINFORCING WITH SECTION LOSS GREATER THAN 20% WITHIN THE REPAIR AREA SHALL BE REPLACED WITH EQUAL REINFORCEMENT; DEVELOP TENSILE STRENGTH OF REPLACEMENT REINFORCEMENT BY SPLICING TO REINFORCING IN "GOOD CONDITION" OR BY DOWELING INTO SOUND CONCRETE AT PERIMETER OF REPAIR AREA USING ADHESIVE EPOXY ANCHORING SYSTEM.
4. WATERBLAST OR SANDBLAST CAVITY SURFACES TO REMOVE ALL DEBRIS AND CONTAMINANTS. AIRBLAST AS THE FINAL STEP TO REMOVE REMAINING DEBRIS.

E. CONCRETE REMOVAL

1. CHIPPING HAMMERS SHALL BE SIZED SO THAT UNSOUND CONCRETE CAN BE REMOVED IN AN EFFICIENT MANNER WITHOUT DAMAGING ADJACENT SOUND CONCRETE. DO NOT CUT INTO OR DAMAGE REINFORCING AND OTHER EMBEDDED ITEMS SUCH AS CONDUITS.
2. CHIPPING SHALL CONTINUE UNTIL ALL UNSOUND CONCRETE HAS BEEN REMOVED PER REPAIR DETAIL SHEET NOTES.

F. CONCRETE (FOR REPAIRS GREATER THAN 3 INCHES THICK)

1. CONCRETE SHALL MEET THE FOLLOWING CRITERIA:
   STRENGTH: 5000 PSI (MIN.)
   MAXIMUM W/C RATIO OF 0.4
   PORTLAND CEMENT CONCRETE (REGULAR OR HI–EARLY), TYPE I OR III
   AGGREGATE TO CONFORM TO ASTM C33
   AGGREGATE: #8, ⅜ INCH
   SUPERPLASTICIZED
   AIR ENTRAINED: 6½±1½%
   SLUMP: 4±1 INCH (BEFORE ADDING SUPERPLASTICIZER)
   SYNTHETIC FIBER: 1.5 LB./C.Y. OF CONCRETE, MINIMUM
   3 GAL. OF CALCUIM NITRITE CORROSION INHIBITOR PER CU. YD. OF CONC.
2. CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGN FOR ENGINEER'S APPROVAL. ADMIXTURES SHALL NOT BE CHANGED FROM THE APPROVED CONCRETE MIX DESIGN WITHOUT THE ENGINEER'S APPROVAL.
3. CONFORM TO THE REQUIREMENTS OF ACI 301 AND ACI 318, LATEST EDITION.
4. THE FIELD QUALITY CONTROL TESTING SHALL BE PERFORMED BY AN INDEPENDENT TESTING AGENCY HIRED BY OWNER:
   AIR ENTRAINMENT AND SLUMP TESTS FOR EVERY BATCH.
   COMPRESSION STRENGTH TESTS ON EVERY 50 C.Y. POUR AND IN ACCORDANCE WITH ACI 318, LATEST EDITION.
5. APPLY ACCEPTABLE BONDING AGENT PRODUCTS PER SPECIFICATION SECTION 033000. DO NOT ALLOW TO DRY BEFORE PLACING CONCRETE.
6. CONCRETE SHALL BE CONSOLIDATED AND CURED PER SPECIFICATIONS. IF CURING COMPOUND IS USED, IT SHALL BE REMOVED BY WATER–BLASTING OR SHOT–BLASTING PRIOR TO THE APPLICATION OF SURFACE WATERPROOFING MEASURES.
7. FOR CONCRETE REPAIRS LESS THAN OR EQUAL TO 3 INCHES THICK, USE CEMENTITIOUS PATCHING MATERIAL PER SPECIFICATION SECTION 039300.

G. REINFORCEMENT

1. ALL NEW REINFORCEMENT SHALL COMPLY WITH ASTM A615 GR. 60.
2. WELDED WIRE FABRIC SHALL BE PER ASTM A185 OR A497. USE MATS ONLY, ROLL STOCK IS NOT PERMITTED.
3. ALL REINFORCING SHALL HAVE THE MINIMUM COVER PER ACI 318, LATEST EDITION.
4. ALL EXISTING EXPOSED STEEL SHALL BE COATED WITH STEEL CORROSION INHIBITING TREATMENT IN ACCORDANCE WITH SPECIFICATION SECTION 039300.

H. EMBEDDED GALVANIC ANODES

1. REFER TO CONCRETE REPAIR DETAILS SUCH AS TYPE PFR FOR LOCATIONS WHERE ANODES ARE REQUIRED. REFER TO SPECIFICATION SECTION 039300 FOR ADDITIONAL REQUIREMENTS.
2. CONTRACTOR SHALL ONLY ORDER 10% OF REQUIRED ANODES AT BEGINNING OF PROJECT ONCE SUBMITTAL HAS BEEN APPROVED BY ENGINEER. ENGINEER WILL GIVE DIRECTION FOR THE CONTRACTOR TO ORDER ADDITIONAL ANODES AFTER THEIR USE AND NECESSITY HAS BEEN IDENTIFIED DURING THE EARLY STAGES OF THE REPAIR WORK. CONTRACTOR TO INFORM ENGINEER IF LONG LEAD TIME IS EXPECTED ON THE ANODE ORDERS.

I. EPOXY INJECTION

1. REFER TO SPECIFICATION SECTION 039300 AND EPOXY INJECTION REPAIR DETAIL 9/R2.1 FOR ADDITIONAL REQUIREMENTS.
2. USE APPROPRIATE METHODS AND PLACEMENT OF INJECTION PORTS TO ASSURE COMPLETE COVERAGE OF CRACKS. REVIEW PREPARED CRACK & REPAIR PROCEDURES ON–SITE W/ ENGINEER & OWNER'S INSPECTION AGENCY PRIOR TO INJECTION OF 1ST CRACK.
3. CRACK REPAIR MATERIALS:
   a. TYPE EI – CRACKS BETWEEN 1/32" & ¼": PRESSURE INJECT CRACKS W/ A HIGH–STRENGTH, VERY–LOW–VISCOSITY STRUCTURAL EPOXY (SIKADUR 35 HI–MOD LV, SIKADUR 52 OR EQUAL). SEAL CRACKS PRIOR TO INJECTION W/ SIKADUR 31 HI–MOD GEL OR EQUAL.
   b. TYPE EIH – HAIRLINE CRACKS < 1/32" THAT REMAIN AFTER INJECTION OF MAJOR CRACKS: PRESSURE INJECT CRACKS W/ A HIGH–STRENGTH, SUPER LOW–VISCOSITY STRUCTURAL EPOXY (SIKADUR 55 SLV OR EQUAL). SEAL CRACKS PRIOR TO INJECTION W/ SIKADUR 31 HI–MOD GEL OR EQUAL.

J. PENETRATING SEALER AND/OR CORROSION–INHIBITING TREATMENT

1. REFER TO SPECIFICATION SECTION 079020 FOR ACCEPTABLE PENETRATING SEALERS AND SECTION 039300 FOR ACCEPTABLE PENETRATING CORROSION–INHIBITING TREATMENTS WITH OR WITHOUT INTEGRAL SEALERS.
2. PROVIDE SURFACE PREPARATION OF THE FLOOR SLABS BY METHODS WHICH CAN BE PERFORMED WITHOUT DAMAGING EXISTING CONCRETE SURFACES AND IN ACCORDANCE WITH SPECIFICATIONS AND MANUFACTURER REQUIREMENTS.
3. APPLY PRODUCTS IN ACCORDANCE WITH SPECIFICATION AND MANUFACTURER REQUIREMENTS. THE FLOOR COVERAGE RATE SPECIFIED IS MINIMUM REQUIREMENT AND SHALL BE SATISFIED ON A BAY–BY–BAY BASIS. THE APPLICATION SHALL BE INSPECTED BY MANUFACTURER'S REPRESENTATIVE AND ANY ASSOCIATED COSTS SHALL BE INCLUDED WITHIN THE BID.

K. SEALANT

1. REFER TO SPECIFICATION SECTIONS 079020 FOR ACCEPTABLE JOINT SEALANTS.
2. REMOVE AND PROPERLY DISPOSE OF EXISTING SEALANT AND APPLY NEW SEALANT TO MATCH EXISTING COLOR. SAMPLES SHALL BE PROVIDED FOR ENGINEER'S & OWNER'S REVIEW AND APPROVAL.
3. JOINT EDGES SHALL BE WATER–BLASTED, SANDBLASTED OR OTHERWISE CLEANED AND PREPARED PRIOR TO THE SEALANT APPLICATION.
4. PRIMER SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS PRIOR TO APPLICATION OF NEW SEALANT.

L. EXPANSION JOINT SYSTEMS

1. REFER TO SPECIFICATION SECTION 079020 FOR ACCEPTABLE EXPANSION JOINT SYSTEM AND INSTALLATION PROCEDURES.
2. JOINT EDGES AND BLOCKOUTS SHALL BE SANDBLASTED OR PREPARED ACCORDING TO THE MANUFACTURER'S REQUIREMENTS PRIOR TO THE EXPANSION JOINT APPLICATION.

M. PAINTING

1. TRAFFIC MARKINGS (STRIPING AND TRAFFIC ARROWS)
   a. CONTRACTOR SHALL REPLACE ALL TRAFFIC MARKINGS (STRIPING AND TRAFFIC ARROWS) THAT ARE WITHIN THE REPAIR WORK. THE CONTRACTOR SHALL DOCUMENT THE EXISTING LAYOUT PRIOR TO CONSTRUCTION, AND AT THE COMPLETION OF REPAIRS PROVIDE THE TRAFFIC MARKINGS TO MATCH SIZE AND LOCATION. REMOVE EXISTING PAINT BY SHOT–BLASTING.
2. STEEL MEMBERS
   a. CONTRACTOR SHALL SANDBLAST CLEAN ALL STEEL MEMBERS AT REPAIR AREAS AND LOCATIONS INDICATED TO BE PAINTED AND/OR RECEIVE FIREPROOFING.
   b. ONCE STEEL REPAIR WORK IS COMPLETE, THE CONTRACTOR SHALL APPLY PAINT PER SPECIFICATION SECTION 099100.

N. MECHANICAL/ELECTRICAL/PLUMBING/FIRE PROTECTION SYSTEMS, EQUIPMENT & SERVICES (MEP&FP SERVICES)

1. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PROTECT ALL EXISTING MEP&FP SERVICES. CONTRACTOR SHALL REVIEW ALL REPAIR AREAS PRIOR TO COMMENCING EACH PHASE OF THE WORK AND NOTIFY ENGINEER IF REMOVAL, REPLACEMENT, OR RELOCATION OF MEP&FP SERVICES IS NECESSARY TO COMPLETE THE WORK. IF MEP&FP WORK IS NECESSARY, INCLUDE THE PROPOSED SCOPE AND ESTIMATED COST. APPROVED MEP&FP WORK SHALL BE PERFORMED BY THE CONTRACTOR OR ITS APPROVED SUBCONTRACTOR AND BILLED AGAINST THE MEP&FP SERVICES ALLOWANCE.
2. EMBEDDED CONDUITS WITHIN REPAIR AREA SHALL BE LOCATED, MARKED, AND DE–ENERGIZED PRIOR TO DEMOLITION.
3. SPECIAL CARE SHALL BE TAKEN TO PREVENT CLOGGING EXISTING DRAINS.
4. AFTER WORK IS COMPLETE, CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING ANY EXISTING DRAIN SYSTEMS THAT HAVE BEEN CLOGGED BY CONSTRUCTION ACTIVITIES.

O. EXAMINATION PRIOR TO CUTTING, DRILLING, AND CORING THROUGH STRUCTURE

A. DO NOT CUT, DRILL, OR CORE THROUGH ANY STRUCTURAL ELEMENT WITHOUT PRIOR WRITTEN APPROVAL FROM THE ENGINEER, U.N.O.
B. THE CONTRACTOR SHALL SCAN THE CONCRETE AT ALL LOCATIONS OF PROPOSED CUTS AND PENETRATIONS TO LOCATE AND MARK ALL EMBEDDED OBJECTS INCLUDING BUT NOT LIMITED TO REINFORCING, PRESTRESS OR POST–TENSION STRANDS, CONNECTIONS, ELECTRICAL CONDUIT, AND ANY OTHER HARDWARE/EQUIPMENT. SCANNING SHALL BE PERFORMED BY A CERTIFIED TECHNICIAN USING A PACHOMETER OR GROUND PENETRATING RADAR (GPR) TYPE SCANNER. CALIBRATE THE SCANNER AT THE BEGINNING OF EACH SHIFT AND WHEN CONDITIONS CHANGE. LOCATE AT LEAST THREE REINFORCING BARS USING THE SCANNER, AND HAMMER DRILL TEST HOLES TO DETERMINE DEPTH OF COVER. CALIBRATE SCANNER USING THE DEPTH OF COVER MEASUREMENTS.
C. ADJUST LOCATIONS OF CUTS AND PENETRATIONS AS REQUIRED TO AVOID EMBEDDED OBJECTS.
D. SUBMIT SCANNING REPORT(S), INCLUDING PHOTOGRAPHS AND SCALED DRAWINGS AND/OR SKETCHES, TO ENGINEER FOR APPROVAL. ALLOW SEVEN DAYS FOR ENGINEER TO REVIEW AND APPROVE OR COMMENT ON THE PROPOSED CUTS AND PENETRATIONS. ADJUST THE LOCATIONS AS DIRECTED BY THE ENGINEER.
E. USE HAMMER DRILLS WHEN POSSIBLE; DO NOT CORE DRILL UNLESS THE SCANNING OPERATION HAS CLEARLY SHOWN THAT THE AREA IS FREE OF EMBEDDED OBJECTS.
F. DO NOT CUT THROUGH OR DAMAGE THE EMBEDDED OBJECTS INCLUDING BUT NOT LIMITED TO REINFORCING, PRESTRESS OR POST–TENSION STRANDS, CONNECTIONS, ELECTRICAL CONDUIT, AND ANY OTHER HARDWARE/EQUIPMENT.

P. MASONRY REPOINTING

1. THE ASSUMED MASONRY SIZE FOR REPAIR TYPE M1 & M2 SHALL BE 8"X8"X16" NOMINAL WITH 3/8" MORTAR JOINTS. FIELD VERIFY AND MATCH THE TYPE, SIZE AND FINISH OF THE EXISTING MASONRY.
2. REFER TO SPECIFICATION SECTION 040120.63 FOR MASONRY REPAIR/REPLACEMENT REQUIREMENTS.
3. REFER TO SPECIFICATION SECTION 040420.64 AND THE FOLLOWING FOR MASONRY REPOINTING REQUIREMENTS:
   a. CLEAN OUT OLD MORTAR. RAKE OUT DAMAGED, POWDERY, OR DISINTEGRATING MORTAR WITH A COLD CHISEL OR SCREWDRIVER. BRUSH OUT ANY BRICK DUST.
   b. USE A SPONGE, BRUSH, OR RAG TO MOISTEN THE REPAIR AREA WITH WATER.
   c. USE MORTAR AND A GROUT BAG AND APPLY FRESH MORTAR INTO THE JOINTS. GO BACK OVER THE JOINTS WITH A POINTING TROWEL AND TRIM OFF THE EXCESS. BE CAREFUL TO AVOID SMUDGING AND STAINING MORTAR ON TO THE FACE OF THE BRICKS.
   d. AS THE MORTAR STARTS TO SET, SHAPE THE MORTAR JOINTS TO MATCH THE LOOK OF THE ORIGINAL, USING AN APPROPRIATE SHAPED TOOL. WHEN THE MORTAR IS ALMOST SET, USE A BRUSH AND LIGHTLY BRUSH OFF ANY EXCESS STILL ON THE MASONRYWORK.
   e. DO NOT CHIP, CUT, OR REMOVE THE MASONRY'S SKIN WHICH WILL ACCELERATE DECAY.
   f. REPOINT ONLY WHEN TEMPERATURES REMAIN BETWEEN 40 AND 90 DEGREES FAHRENHEIT.
   g. PROVIDE MOCKUP SAMPLE OF REPOINTING IN FIELD FOR REVIEW AND APPROVAL PRIOR TO COMMENCEMENT OF WORK.

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PROFESSIONAL SEAL

CONSULTANT

PROJECT NO.
NBR22110.00

PROJECT

HINSON GARAGE 2022 RESTORATION

Camden, NJ

SUBMISSIONS / REVISIONS

ISSUE FOR BID
04/22/2022

NO.	DESCRIPTION	DATE

NORTH

DRAWN: BJ
REVIEWED: JCR
DATE: 04/22/2022

SHEET TITLE:
GENERAL NOTES

SHEET NO.
R0.1

SCOPE OF WORK AND BIDDING QUANTITIES

THE FOLLOWING INFORMATION SHALL BE USED BY THE BIDDER FOR ASSISTANCE IN PREPARING THE BID. THE ITEMS NOTED AS UNIT PRICE WORK SHALL BE BID IN ACCORDANCE WITH THE QUANTITIES SHOWN FOR THE BASE BID. THE CONTRACT PRICE WILL BE ADJUSTED TO REFLECT THE ACTUAL QUANTITY OF WORK PERFORMED. THE UNIT PRICES WILL BE USED TO INCREASE OR DECREASE THE CONTRACT SUM.

THE REPAIR AREAS INDICATED ON THE DRAWINGS ARE A GENERAL INDICATION OF WHERE THE ENGINEER'S SURVEYS HAVE NOTED POSSIBLE REPAIR LOCATIONS. THE CONTRACTOR SHALL NOT MAKE ANY ASSUMPTIONS OF REPAIR LOCATIONS, SIZES, OR OVERALL QUANTITIES BASED UPON THE INFORMATION ON PLANS. THE PROCEDURE FOR DETERMINING THE REPAIR LOCATIONS ARE EXPLAINED IN THE GENERAL NOTES AND SPECIFICATIONS. ALL WORK SHALL BE PERFORMED BASED ON THE GENERAL CONDITIONS SET FORTH IN THE PROJECT SPECIFICATIONS.

* THE CONTINGENT REPAIR QUANTITIES ARE INCLUDED IN THE TOTAL BASE BID QUANTITY. THE EXACT LOCATION AND QUANTITIES OF REPAIRS SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. CONTRACTOR SHALL ONLY ORDER 10% OF REQUIRED MATERIALS AT BEGINNING OF PROJECT ONCE SUBMITTAL HAS BEEN APPROVED BY ENGINEER. CONTRACTOR SHALL ORDER ADDITIONAL MATERIALS AFTER THEIR USE AND NECESSITY HAS BEEN IDENTIFIED DURING THE EARLY STAGES OF THE REPAIR WORK. CONTRACTOR TO INFORM THE ENGINEER/OWNER IF A LONG LEAD TIME IS EXPECTED ON THE MATERIAL ORDERS.

REPAIR ITEMS		UNIT OF MEASURE	BASE BID QUANTITIES	REPAIR REFERENCE	UNIT PRICE NUMBER
COR	CONCRETE OVERLAY REPAIR	SF	72	1/R2.1	1
PFR	PARTIAL DEPTH FLOOR REPAIR	SF	62	2/R2.1	2
FFR	FULL DEPTH FLOOR REPAIR	SF	2	3/R2.1	3
CRB	CURB REPAIR	SF	1	4/R2.1	4
OSR	OVERHEAD SURFACE REPAIR	SF	114	5/R2.1	5
OBR1	OVERHEAD BEAM REPAIR (TYPE 1)	SF	38	6/R2.1	6A
OBR2	OVERHEAD BEAM REPAIR (TYPE 2)	SF	0	6/R2.1	6B
VR	VERTICAL REPAIR	SF	24	7/R2.1	7
HR	HAUNCH REPAIR	EA	3	8/R2.1	8
HRG	HAUNCH REPAIR AT GIRDER	EA	1	8/R2.1	9
EI	EPOXY INJECTION	LF	211	9/R2.1	10A
EIH	EPOXY INJECTION - HAIRLINE CRACKS	LF	0	9/R2.1	10B
TTS	TEE-TO-TEE SEALANT REPLACEMENT	LF	9719	1/R2.2	11
FCS	STATIC FLOOR CRACK REPAIR	SF	292	2/R2.2	12
TTC1	TEE-TO-TEE CONNECTION REPAIR (PRETOPPED TEE)	EA	54	3/R2.2	13A
TTC2	TEE-TO-TEE CONNECTION REPAIR (PRETOPPED TEE)	EA	0	3/R2.2	13B
TTC3	TEE-TO-TEE CONNECTION REPAIR (PRETOPPED TEE)	EA	0	3/R2.2	13C
TTC4	TEE-TO-TEE CONNECTION REPAIR (PRETOPPED TEE)	EA	0	3/R2.2	13D
SR	SEALANT REPLACEMENT	LF	5197	4/R2.2	14
VSR	VERTICAL SEALANT REPLACEMENT	LF	434	4/R2.2	15
EJ	EXPANSION JOINT REPLACEMENT	LF	6	5/R2.2	16
EJN	EXPANSION JOINT NOSING REPAIR	LF	18	5/R2.2	17
PEJ	PRE-MOLD EXPANSION JOINT REPLACEMENT	LF	25	6/R2.2	18
BCR	BARRIER CABLE REPAIR	LF	240	7/R2.2	19
RPH	REPAINTING HANDRAIL	LS	1	NOTE M/R0.1	20
M1	MASONRY REPOINTING	LF	6	NOTE P/R0.1	21
M2	MASONRY REPAIR	SF	0	NOTE P/R0.1	22
GA	GALVANIC ANODES	EA	20	NOTE H/R0.1	23
LSW	LUMP SUM WORK ITEMS	LS	1	R0.2 NOTES	24

LUMP SUM WORK ITEMS:

1. GENERAL CONDITIONS (REFER TO PROJECT SPECIFICATIONS)
2. PLUMBING SYSTEM CLEAN-UP PER GENERAL NOTE N/R0.1
3. APPLICATION OF TRAFFIC MARKINGS (STRIPING AND TRAFFIC ARROWS) WITHIN REPAIR AREAS.
4. REPLACE MISSING FIRE EXTINGUISHER AT ELEVEN (11) LOCATIONS.
5. REPLACE 6 LF OF CORRODED CONDUIT TO MATCH EXISTING. SEE LOCATION ON THIRD TIER PLAN.
6. REPLACE STAIR NOSING TO MATCH EXISTING AT TWO (2) LOCATIONS. SEE LOCATION ON FIFTH TIER PLAN.
7. ALL OTHER MISCELLANEOUS ITEMS SPECIFIED IN PROJECT SPECIFICATIONS, GENERAL NOTES SHEET R0.1, AND ALL REPAIR DETAILS.

LEGEND

FLOOR REPAIR

REPAIR TYPE OF REFERENCE (XX-X) (#) # OF LOCATIONS PER REFERENCE — QUANTITY

OVERHEAD / SOFFIT REPAIR

REPAIR TYPE OF REFERENCE XX - X (#) # OF LOCATIONS PER REFERENCE — QUANTITY

VERTICAL REPAIR

REPAIR TYPE OF REFERENCE XX - X (#) # OF LOCATIONS PER REFERENCE — QUANTITY

- PARTIAL DEPTH FLOOR REPAIR OR CURB REPAIR
- OVERHEAD SURFACE REPAIR OR OVERHEAD BEAM REPAIR
- FULL DEPTH FLOOR REPAIR
- CONCRETE OVERLAY REPAIR
- STATIC FLOOR CRACK REPAIR OR EPOXY INJECTION
- TEE-TO-TEE SEALANT REPLACEMENT OR SEALANT REPLACEMENT

REPAIR AREAS ON PLAN ARE DEPICTED ON THE FOLLOWING SURFACES:

PLAN ABOVE — OVERHEAD / SOFFIT

PLAN — FLOOR

FLOOR REPAIR

PFR	PARTIAL DEPTH FLOOR REPAIR
FFR	FULL DEPTH FLOOR REPAIR
TTS	TEE-TO-TEE SEALANT REPLACEMENT
SR	SEALANT REPLACEMENT
FCS	STATIC FLOOR CRACK REPAIR
EJ	EXPANSION JOINT REPLACEMENT
EJN	EXPANSION JOINT NOSING REPAIR
EI	EPOXY INJECTION
COR	CONCRETE OVERLAY REPAIR
TTC1	TEE-TO-TEE CONNECTION REPAIR
CRB	CURB REPAIR
PEJ	PRE-MOLD EXPANSION JOINT REPAIR

OVERHEAD / SOFFIT REPAIR

OBR	OVERHEAD BEAM REPAIR
OSR	OVERHEAD SURFACE REPAIR
EI	EPOXY INJECTION

VERTICAL REPAIR

VR	VERTICAL REPAIR
HR	HAUNCH REPAIR
VSR	VERTICAL SEALANT REPLACEMENT
EI	EPOXY INJECTION
BCR	BARRIER CABLE REPAIR
RPH	REPAINTING HANDRAIL
M1	MASONRY REPOINTING
M2	MASONRY REPAIR

ABBREVIATIONS:

A.B.	ANCHOR BOLTS
A.F.F.	ABOVE FINISHED FLOOR
ALT.	ALTERNATE
ARCH.	ARCHITECT
BET.	BETWEEN
BIT.	BITUMINOUS
BOTT.	BOTTOM
BRG.	BEARING
C.I.P.	CAST-IN-PLACE
C.J.	CONTROL JOINT/ CONSTRUCTION JOINT
CL./CLR.	CLEAR
C.M.	CONSTRUCTION MANAGER
C.M.U.	CONCRETE MASONRY UNIT
COL.	COLUMN
CONC.	CONCRETE
CONN.	CONNECTION
CONT.	CONTINUOUS
CONTR.	CONTRACTOR
D.B.A.	DEFORMED BAR ANCHOR
DET.	DETAIL
DIA.	DIAMETER
DIM.	DIMENSION
DN.	DOWN
DWG(S).	DRAWING(S)
(E)	EXISTING
EA.	EACH
E.B.F.	ELEVATION BOTTOM OF FOOTING
E.B.P.	ELEVATION BOTTOM OF PIER
E.F.	EACH FACE
E.F.G.	ELEVATION FINISHED GRADE
E.J.	EXPANSION JOINT
EL./ELEV.	ELEVATION
ELEC.	ELECTRICAL
E.T.B.	ELEVATION TOP OF BEAM
E.T.C.	ELEVATION TOP OF PILE OR DRILLED PIER CAP
E.T.F.	ELEVATION TOP OF FOOTING
E.T.L.	ELEVATION TOP OF LEDGE
E.T.P.	ELEVATION TOP OF PIER
E.T.P/C.	ELEVATION TOP OF PRECAST
E.T.S.	ELEVATION TOP OF SLAB
E.T.W.	ELEVATION TOP OF WALL
E.W.	EACH WAY
E.W.E.F.	EACH WAY, EACH FACE
E.W.P.	ELEVATION WORKING POINT
EXT.	EXTERIOR
F.D.	FLOOR DRAIN
F.E.	FIRE EXTINGUISHER
F.F.	FAR FACE
FDN.	FOUNDATION
FIN.	FINISH
FL./FLR.	FLOOR
FTG.	FOOTING
GA.	GAUGE
GALV.	GALVANIZED
G.B.	GRADE BEAM
G.C.	GENERAL CONTRACTOR
GR.	GRADE
G.W.B.	GYPSUM WALL BOARD
GPR	GROUND PENETRATION RADAR
H.A.S.	HEADED ANCHOR STUDS
H.M.	HOLLOW METAL
HOR.	HORIZONTAL
HT.	HEIGHT
H.V.A.C.	HEATING, VENTILATION & AIR CONDITIONING
I.D.	INSIDE DIAMETER
INFO.	INFORMATION
INSUL.	INSULATION
INT.	INTERIOR
INV.	INVERT
JT.	JOINT
LBS.	POUNDS
LIN.	LINEAL
MAX.	MAXIMUM
MECH.	MECHANICAL
MFR.	MANUFACTURER
MIN.	MINIMUM
MISC.	MISCELLANEOUS
MSB	MEDIUM SAND BLAST
MTL.	METAL
(N)	NEW
N.F.	NEAR FACE
N.I.C.	NOT IN CONTRACT
N.S.N.S.	NON-SHRINK, NON-STAIN
N.T.S.	NOT TO SCALE
O.C., O/C	ON CENTERS
O.D.	OUTSIDE DIAMETER
O.H.	OPPOSITE HAND
P/C	PRECAST CONCRETE
PSI	POUNDS PER SQUARE INCH
PSF	POUNDS PER SQUARE FOOT
P/T	POST-TENSIONED
R.D.	ROOF DRAIN
REINF.	REINFORCEMENT/REINFORCING
REQ'D	REQUIRED
RM.	ROOM
R.O.	ROUGH OPENING
SCHED.	SCHEDULE
SECT.	SECTION
SHT.	SHEET
SIM.	SIMILAR
S.O.G.	SLAB-ON-GRADE
SPECS.	SPECIFICATIONS
SQ.	SQUARE
STD.	STANDARD
STL.	STEEL
T & B	TOP AND BOTTOM
T.B.D.	TO BE DETERMINED
TYP.	TYPICAL
U.N.	UNLESS NOTED
VERT.	VERTICAL
V.I.F.	VERIFY IN FIELD
W/	WITH
W/O	WITHOUT
W.P.	WORKING POINT
WT.	WEIGHT
WWF	WELDED WIRE FABRIC
WWR	WELDED WIRE REINFORCEMENT

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HINSON GARAGE 2022 RESTORATION

Camden, NJ

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ISSUE FOR BID
04/22/2022

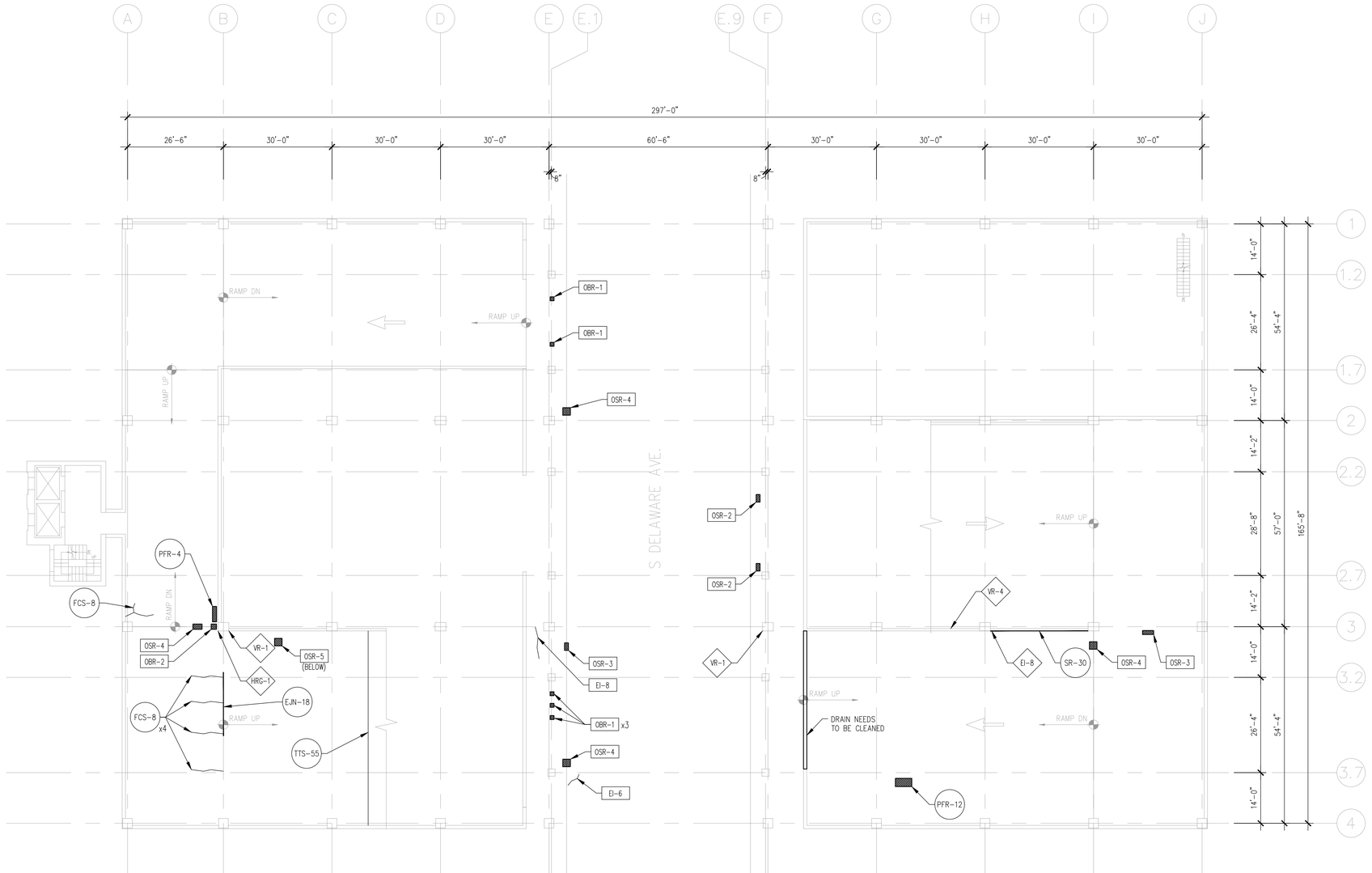
NO.	DESCRIPTION	DATE

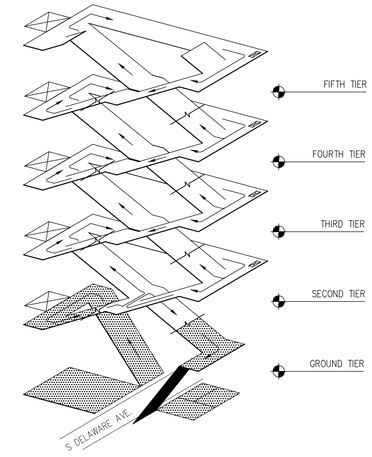
NORTH

DRAWN: BJ
REVIEWED: JCR
DATE: 04/22/2022

SHEET TITLE:
SCOPE OF WORK

SHEET NO.
R0.2





ISOMETRIC

1 / R1.1 GROUND TIER RESTORATION PLAN

SCALE : 1/16" = 1' -0"

LEGEND

FLOOR REPAIR

REPAIR TYPE OF REFERENCE — XX-X (#) — # OF LOCATIONS PER REFERENCE; QUANTITY

OVERHEAD / SOFFIT REPAIR

REPAIR TYPE OF REFERENCE — XX - X (#) — # OF LOCATIONS PER REFERENCE; QUANTITY

VERTICAL REPAIR

REPAIR TYPE OF REFERENCE — XX - X (#) — # OF LOCATIONS PER REFERENCE; QUANTITY

- PARTIAL DEPTH FLOOR REPAIR OR CURB REPAIR
- OVERHEAD SURFACE REPAIR OR OVERHEAD BEAM REPAIR
- FULL DEPTH FLOOR REPAIR
- CONCRETE OVERLAY REPAIR
- STATIC FLOOR CRACK REPAIR OR EPOXY INJECTION
- TEE-TO-TEE SEALANT REPLACEMENT OR SEALANT REPLACEMENT

REPAIR AREAS ON PLAN ARE DEPICTED ON THE FOLLOWING SURFACES:

PLAN ABOVE — OVERHEAD / SOFFIT

PLAN — FLOOR

FLOOR REPAIR

PFR	PARTIAL DEPTH FLOOR REPAIR
FFR	FULL DEPTH FLOOR REPAIR
TTS	TEE-TO-TEE SEALANT REPLACEMENT
SR	SEALANT REPLACEMENT
FCS	STATIC FLOOR CRACK REPAIR
EJ	EXPANSION JOINT REPLACEMENT
EJN	EXPANSION JOINT NOSING REPAIR
EI	EPOXY INJECTION
COR	CONCRETE OVERLAY REPAIR
TTC1	TEE-TO-TEE CONNECTION REPAIR
CRB	CURB REPAIR
PEJ	PRE-MOLD EXPANSION JOINT REPAIR

OVERHEAD / SOFFIT REPAIR

OBR	OVERHEAD BEAM REPAIR
OSR	OVERHEAD SURFACE REPAIR
EI	EPOXY INJECTION

VERTICAL REPAIR

VR	VERTICAL REPAIR
HR	HAUNCH REPAIR
VSR	VERTICAL SEALANT REPLACEMENT
EI	EPOXY INJECTION
BCR	BARRIER CABLE REPAIR
RPH	REPAINTING HANDRAIL
M1	MASONRY REPOINTING
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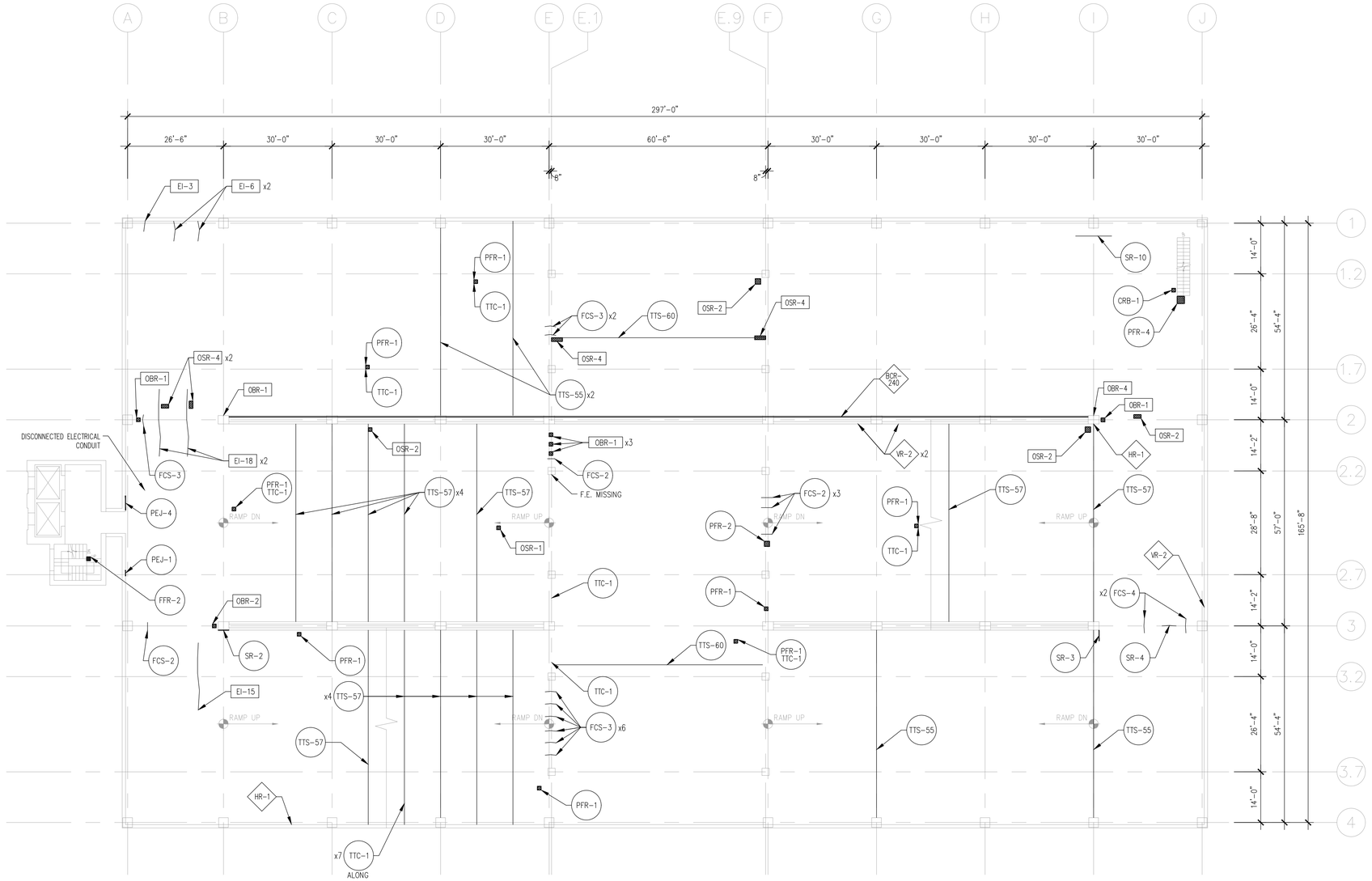
NORTH

DRAWN: BJ
REVIEWED: JCR
DATE: 04/22/2022

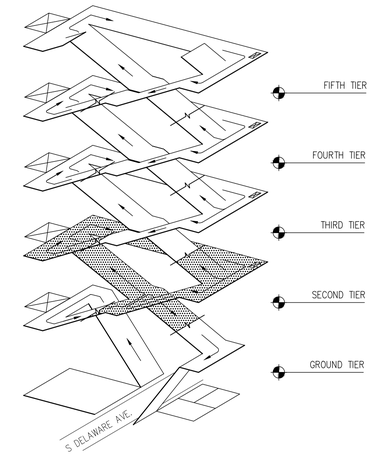
SHEET TITLE:
GROUND TIER RESTORATION PLAN

SHEET NO.
R1.1



1 R1.2 SECOND TIER RESTORATION PLAN

SCALE : 1/16" = 1' -0"



ISOMETRIC

LEGEND

FLOOR REPAIR

REPAIR TYPE OF REFERENCE — XX-X (#) — # OF LOCATIONS PER REFERENCE / QUANTITY

OVERHEAD / SOFFIT REPAIR

REPAIR TYPE OF REFERENCE — XX - X (#) — # OF LOCATIONS PER REFERENCE / QUANTITY

VERTICAL REPAIR

REPAIR TYPE OF REFERENCE — XX - X (#) — # OF LOCATIONS PER REFERENCE / QUANTITY

- PARTIAL DEPTH FLOOR REPAIR OR CURB REPAIR
- OVERHEAD SURFACE REPAIR OR OVERHEAD BEAM REPAIR
- FULL DEPTH FLOOR REPAIR
- CONCRETE OVERLAY REPAIR
- STATIC FLOOR CRACK REPAIR OR EPOXY INJECTION
- TEE-TO-TEE SEALANT REPLACEMENT OR SEALANT REPLACEMENT

REPAIR AREAS ON PLAN ARE DEPICTED ON THE FOLLOWING SURFACES:

PLAN ABOVE — OVERHEAD / SOFFIT

PLAN — FLOOR

FLOOR REPAIR

PFR	PARTIAL DEPTH FLOOR REPAIR
FFR	FULL DEPTH FLOOR REPAIR
TTS	TEE-TO-TEE SEALANT REPLACEMENT
SR	SEALANT REPLACEMENT
FCS	STATIC FLOOR CRACK REPAIR
EJ	EXPANSION JOINT REPLACEMENT
EJN	EXPANSION JOINT NOSING REPAIR
EI	EPOXY INJECTION
COR	CONCRETE OVERLAY REPAIR
TTC1	TEE-TO-TEE CONNECTION REPAIR
CRB	CURB REPAIR
PEJ	PRE-MOLD EXPANSION JOINT REPAIR

OVERHEAD / SOFFIT REPAIR

OBR	OVERHEAD BEAM REPAIR
OSR	OVERHEAD SURFACE REPAIR
EI	EPOXY INJECTION

VERTICAL REPAIR

VR	VERTICAL REPAIR
HR	HAUNCH REPAIR
VSR	VERTICAL SEALANT REPLACEMENT
EI	EPOXY INJECTION
BCR	BARRIER CABLE REPAIR
RPH	REPAINTING HANDRAIL
M1	MASONRY REPOINTING
M2	MASONRY REPAIR

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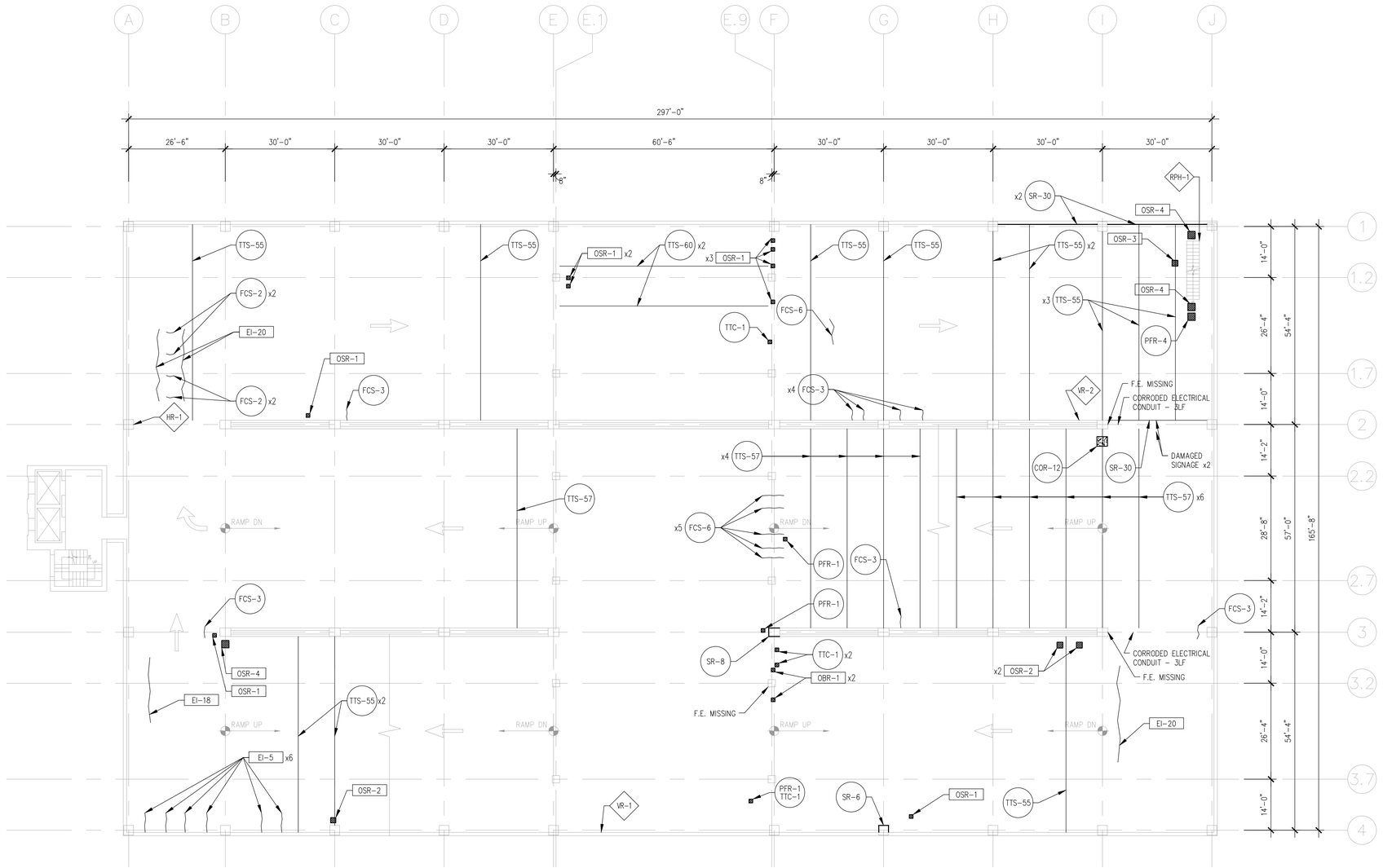
DATE: 04/22/2022

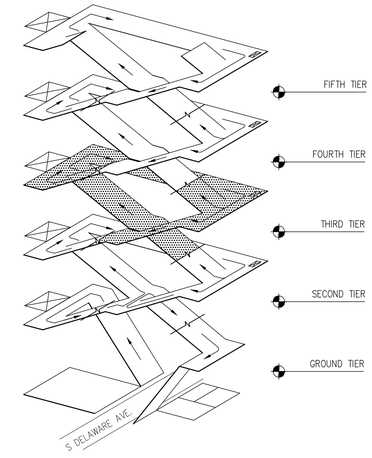
SHEET TITLE:

SECOND TIER
RESTORATION PLAN

SHEET NO.

R1.2





ISOMETRIC

1 / R1.3 THIRD TIER RESTORATION PLAN

SCALE : 1/16" = 1' -0"

LEGEND

FLOOR REPAIR

REPAIR TYPE OF REFERENCE — XX-X (#) — # OF LOCATIONS PER REFERENCE / QUANTITY

OVERHEAD / SOFFIT REPAIR

REPAIR TYPE OF REFERENCE — XX - X (#) — # OF LOCATIONS PER REFERENCE / QUANTITY

VERTICAL REPAIR

REPAIR TYPE OF REFERENCE — XX - X (#) — # OF LOCATIONS PER REFERENCE / QUANTITY

- PARTIAL DEPTH FLOOR REPAIR OR CURB REPAIR
- OVERHEAD SURFACE REPAIR OR OVERHEAD BEAM REPAIR
- FULL DEPTH FLOOR REPAIR
- CONCRETE OVERLAY REPAIR
- STATIC FLOOR CRACK REPAIR OR EPOXY INJECTION
- TEE-TO-TEE SEALANT REPLACEMENT OR SEALANT REPLACEMENT

REPAIR AREAS ON PLAN ARE DEPICTED ON THE FOLLOWING SURFACES:

PLAN ABOVE — OVERHEAD / SOFFIT

PLAN — FLOOR

FLOOR REPAIR

PFR	PARTIAL DEPTH FLOOR REPAIR
FFR	FULL DEPTH FLOOR REPAIR
TTS	TEE-TO-TEE SEALANT REPLACEMENT
SR	SEALANT REPLACEMENT
FCS	STATIC FLOOR CRACK REPAIR
EJ	EXPANSION JOINT REPLACEMENT
EJN	EXPANSION JOINT NOSING REPAIR
EI	EPOXY INJECTION
COR	CONCRETE OVERLAY REPAIR
TTC1	TEE-TO-TEE CONNECTION REPAIR
CRB	CURB REPAIR
PEJ	PRE-MOLD EXPANSION JOINT REPAIR

OVERHEAD / SOFFIT REPAIR

OBR	OVERHEAD BEAM REPAIR
OSR	OVERHEAD SURFACE REPAIR
EI	EPOXY INJECTION

VERTICAL REPAIR

VR	VERTICAL REPAIR
HR	HAUNCH REPAIR
VSR	VERTICAL SEALANT REPLACEMENT
EI	EPOXY INJECTION
BCR	BARRIER CABLE REPAIR
RPH	REPAINTING HANDRAIL
M1	MASONRY REPOINTING
M2	MASONRY REPAIR

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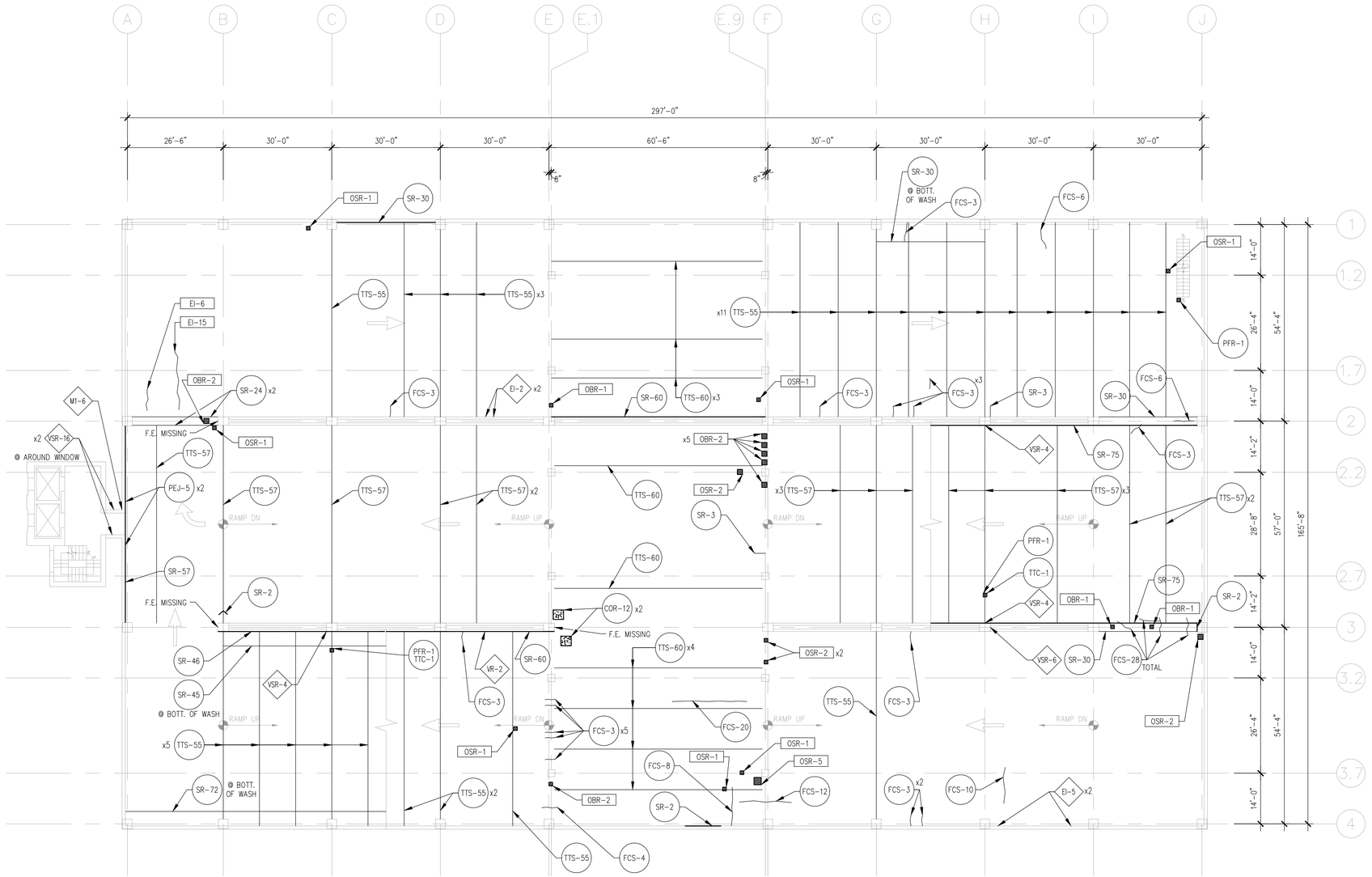
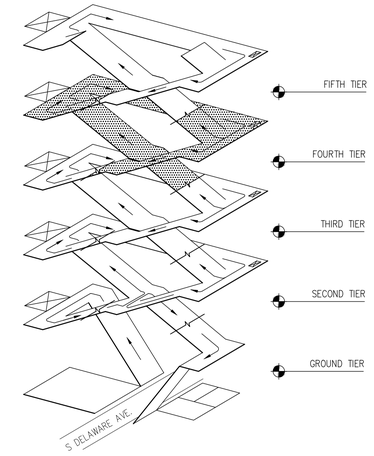
SHEET TITLE:

THIRD TIER
RESTORATION PLAN

SHEET NO.

R1.3





ISOMETRIC

1 / R1.4 FOURTH TIER RESTORATION PLAN

SCALE : 1/16" = 1' -0"

LEGEND

FLOOR REPAIR

REPAIR TYPE OF REFERENCE — XX-X (#) — # OF LOCATIONS PER REFERENCE; QUANTITY

OVERHEAD / SOFFIT REPAIR

REPAIR TYPE OF REFERENCE — XX - X (#) — # OF LOCATIONS PER REFERENCE; QUANTITY

VERTICAL REPAIR

REPAIR TYPE OF REFERENCE — XX - X (#) — # OF LOCATIONS PER REFERENCE; QUANTITY

- PARTIAL DEPTH FLOOR REPAIR OR CURB REPAIR
- OVERHEAD SURFACE REPAIR OR OVERHEAD BEAM REPAIR
- FULL DEPTH FLOOR REPAIR
- CONCRETE OVERLAY REPAIR
- STATIC FLOOR CRACK REPAIR OR EPOXY INJECTION
- TEE-TO-TEE SEALANT REPLACEMENT OR SEALANT REPLACEMENT

REPAIR AREAS ON PLAN ARE DEPICTED ON THE FOLLOWING SURFACES:

PLAN ABOVE — OVERHEAD / SOFFIT; PLAN — FLOOR

FLOOR REPAIR

PFR	PARTIAL DEPTH FLOOR REPAIR
FFR	FULL DEPTH FLOOR REPAIR
TTS	TEE-TO-TEE SEALANT REPLACEMENT
SR	SEALANT REPLACEMENT
FCS	STATIC FLOOR CRACK REPAIR
EJ	EXPANSION JOINT REPLACEMENT
EJN	EXPANSION JOINT NOSING REPAIR
EI	EPOXY INJECTION
COR	CONCRETE OVERLAY REPAIR
TTC1	TEE-TO-TEE CONNECTION REPAIR
CRB	CURB REPAIR
PEJ	PRE-MOLD EXPANSION JOINT REPAIR

OVERHEAD / SOFFIT REPAIR

OBR	OVERHEAD BEAM REPAIR
OSR	OVERHEAD SURFACE REPAIR
EI	EPOXY INJECTION

VERTICAL REPAIR

VR	VERTICAL REPAIR
HR	HAUNCH REPAIR
VSR	VERTICAL SEALANT REPLACEMENT
EI	EPOXY INJECTION
BCR	BARRIER CABLE REPAIR
RPH	REPAINTING HANDRAIL
M1	MASONRY REPOINTING
M2	MASONRY REPAIR

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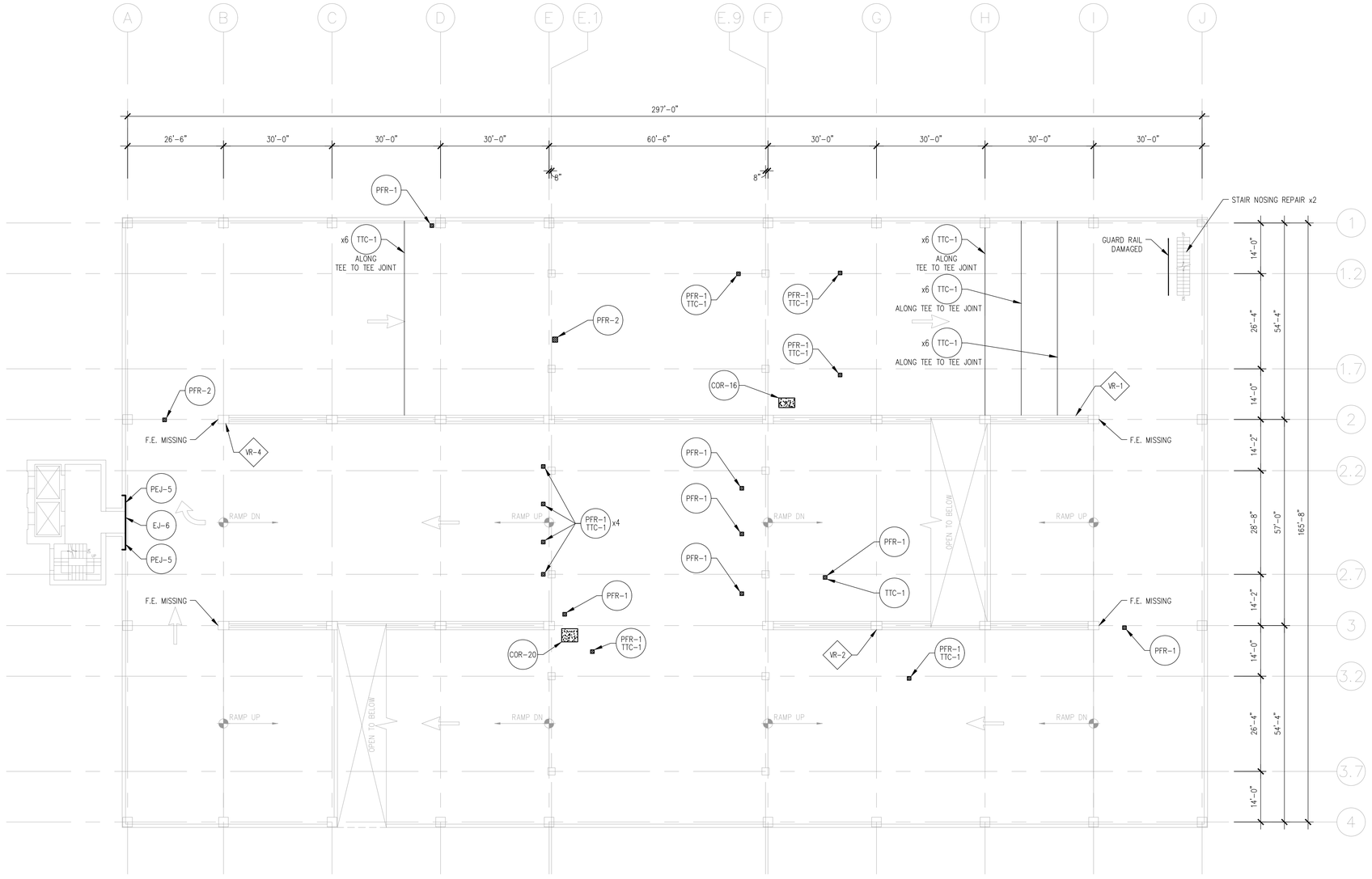
REVIEWED: JCR
DATE: 04/22/2022

SHEET TITLE:

FOURTH TIER
RESTORATION PLAN

SHEET NO.

R1.4

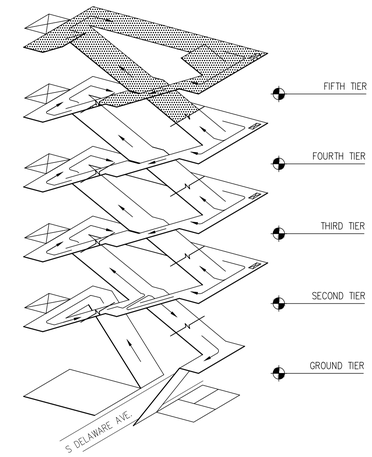


NOTE:
1. REPLACE ALL VERTICAL JOINT SEALANT AT COLUMNS: VSR-10 AT 40 COLUMNS (VSR-400).
2. REPLACE ALL COVE SEALANT (SR-4,374).
3. REPLACE ALL TEE TO TEE JOINT SEALANT (TTS-4,632)

1 / R1.5

FIFTH (TOP) TIER RESTORATION PLAN

SCALE : 1/16" = 1' -0"



ISOMETRIC

LEGEND

FLOOR REPAIR

REPAIR TYPE OF REFERENCE — XX-X — (#) # OF LOCATIONS PER REFERENCE — QUANTITY

OVERHEAD / SOFFIT REPAIR

REPAIR TYPE OF REFERENCE — XX - X — (#) # OF LOCATIONS PER REFERENCE — QUANTITY

VERTICAL REPAIR

REPAIR TYPE OF REFERENCE — XX - X — (#) # OF LOCATIONS PER REFERENCE — QUANTITY

- PARTIAL DEPTH FLOOR REPAIR OR CURB REPAIR
- OVERHEAD SURFACE REPAIR OR OVERHEAD BEAM REPAIR
- FULL DEPTH FLOOR REPAIR
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- STATIC FLOOR CRACK REPAIR OR EPOXY INJECTION
- TEE-TO-TEE SEALANT REPLACEMENT OR SEALANT REPLACEMENT

REPAIR AREAS ON PLAN ARE DEPICTED ON THE FOLLOWING SURFACES:

PLAN ABOVE — OVERHEAD / SOFFIT — PLAN — FLOOR

FLOOR REPAIR

PFR	PARTIAL DEPTH FLOOR REPAIR
FFR	FULL DEPTH FLOOR REPAIR
TTS	TEE-TO-TEE SEALANT REPLACEMENT
SR	SEALANT REPLACEMENT
FCS	STATIC FLOOR CRACK REPAIR
EJ	EXPANSION JOINT REPLACEMENT
EJN	EXPANSION JOINT NOSING REPAIR
EI	EPOXY INJECTION
COR	CONCRETE OVERLAY REPAIR
TTC1	TEE-TO-TEE CONNECTION REPAIR
CRB	CURB REPAIR
PEJ	PRE-MOLD EXPANSION JOINT REPAIR

OVERHEAD / SOFFIT REPAIR

OBR	OVERHEAD BEAM REPAIR
OSR	OVERHEAD SURFACE REPAIR
EI	EPOXY INJECTION

VERTICAL REPAIR

VR	VERTICAL REPAIR
HR	HAUNCH REPAIR
VSR	VERTICAL SEALANT REPLACEMENT
EI	EPOXY INJECTION
BCR	BARRIER CABLE REPAIR
RPH	REPAINTING HANDRAIL
M1	MASONRY REPOINTING
M2	MASONRY REPAIR

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04/22/2022

NO.	DESCRIPTION	DATE

NORTH

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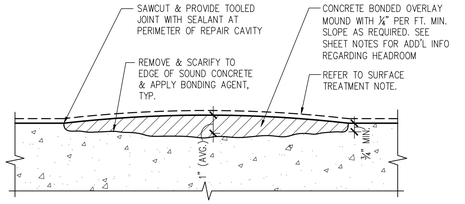
DATE: 04/22/2022

SHEET TITLE:

FIFTH TIER
RESTORATION PLAN

SHEET NO.

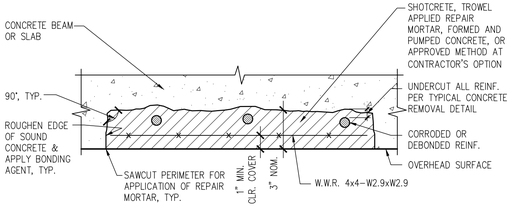
R1.5



REPAIR PROCEDURES:
1. SEE REPAIR DETAIL GENERAL NOTES FOR TYPICAL CONCRETE REPAIR PROCEDURES.
2. REMOVE DELAMINATED CONCRETE TO SOUND CONCRETE AS REQUIRED.
3. APPLY APPROVED CONCRETE OVERLAY MATERIALS OVER PREPARED SURFACE IN ACCORDANCE WITH MANUFACTURER REQUIREMENTS AND RECOMMENDED PROCEDURES.
4. SURFACE TREATMENT NOTE: PENETRATING SEALER, PENETRATING CORROSION INHIBITING TREATMENT, TRAFFIC DECK COATING, AND/OR OTHER SURFACE TREATMENT AS INDICATED ON THE DRAWINGS. IF SURFACE TREATMENT IS NOT INDICATED, APPLY PENETRATING SEALER TO THE REPAIR AND EXTEND 6" MIN. BEYOND PERIMETER OF REPAIR. THE PENETRATING SEALER SHALL BE INCLUDED IN THE UNIT COST OF THE CONCRETE REPAIR; ALL OTHER SURFACE TREATMENTS SHALL BE EXCLUDED FROM THE UNIT COST.

1 R2.1 REPAIR TYPE COR CONCRETE OVERLAY REPAIR

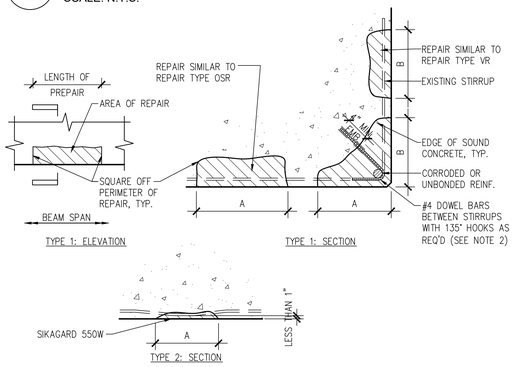
SCALE: N.T.S.



REPAIR PROCEDURES:
1. SEE REPAIR DETAIL GENERAL NOTES FOR TYPICAL CONCRETE REPAIR PROCEDURES.
2. APPLY REPAIR MORTAR APPROVED BY THE ENGINEER AS INDICATED IN THE SHADED AREA BY FORMED AND PUMPED CONCRETE, OR OTHER APPROVED METHOD AT CONTRACTOR'S OPTION. SEE SPECS FOR ADD'L INFO.

2 R2.1 REPAIR TYPE PFR PARTIAL-DEPTH FLOOR REPAIR DETAIL

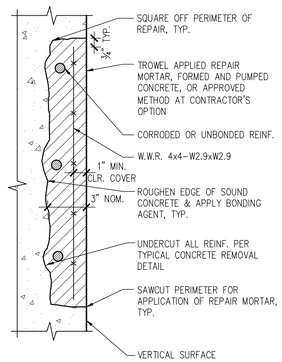
SCALE: N.T.S.



REPAIR PROCEDURES:
1. SEE REPAIR DETAIL GENERAL NOTES FOR TYPICAL CONCRETE REPAIR PROCEDURES.
2. FOR CAVITIES DEEPER THAN 6", PROVIDE #4 ADHESIVE DOWEL BARS WITH 135° HOOKS IN BETWEEN STIRRUPS AT A MAXIMUM SPACING OF 6" O.C.
3. UNIT OF REPAIR = Σ (A + B) x LENGTH OF REPAIR = SF.
4. FOR BIDDING PURPOSES, ASSUME REPAIR DEPTH = 3" NOMINAL.
5. FOR BIDDING PURPOSES, TYPE 2 SHALL BE CONSIDERED AS TYPE 1.

3 R2.1 REPAIR TYPE FFR FULL-DEPTH FLOOR REPAIR DETAIL

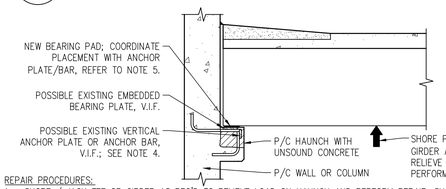
SCALE: N.T.S.



REPAIR PROCEDURE:
1. SEE REPAIR DETAIL GENERAL NOTES FOR TYPICAL CONCRETE REPAIR PROCEDURES.

4 R2.1 REPAIR TYPE CRB CURB REPAIR

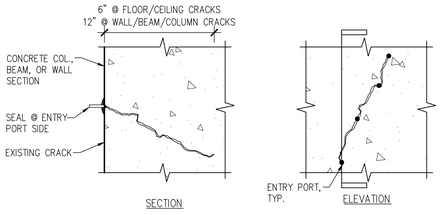
SCALE: N.T.S.



REPAIR PROCEDURES:
1. SHORE / JACK TEE OR GIRDER AS REQ'D TO RELIEVE LOAD ON HAUNCH AND PERFORM REPAIR. SHORE ALL LEVELS TO SLAB ON GRADE AS REQ'D TO ENSURE INTERMEDIATE LEVELS ARE NOT OVERSTRESSED. SHORE / JACK MEMBER PER GENERAL NOTE A.3 ON SHEET R0.1.
2. SEE REPAIR DETAIL GENERAL NOTES FOR TYPICAL CONCRETE REPAIR PROCEDURES.
3. NOTIFY ENGINEER TO REVIEW REINFORCEMENT CONDITION AFTER DEMOLITION. INSTALL NEW REINFORCING PER ENGINEER'S DIRECTION AT UNIT PRICING.
4. IF A VERTICAL ANCHORAGE PLATE EXISTS, PERFORM SURFACE PREPARATION AS INDICATED ON R0.1. THEN WELD WIRE TO THE PLATE TO PROVIDE POSITIVE ANCHORAGE OF THE NEW REPAIR MORTAR. BEND W4.0 WIRE IN SINUSOIDAL SHAPE W/ ¾" AMPLITUDE & 4" WAVELENGTH. CUT WIRES TO 1" LESS THAN THE PLATE WIDTH & TACK WELD TO THE HAUNCH PLATE @ 3" O.C. APPLY BONDING/ANTI-CORROSION AGENT TO THE PLATE & WIRE TO ASSURE THE REPAIR MATERIAL BONDS TO THE PLATE.
5. ADHERE NEW RANDOM ORIENTED FIBER BEARING PAD TO BOTTOM OF TEE STEM OR GIRDER USING STRUCTURAL ADHESIVE (½"x6"x6" FOR REPAIR TYPE HR); (½"xW–3"xD–2" FOR REPAIR TYPE HRG, WHERE W IS THE WIDTH OF THE HAUNCH AND D IS THE DEPTH OF THE HAUNCH IN INCHES). APPLY PRESSURE DURING ADHESION PROCESS TO ASSURE FULL CONTACT BETWEEN BEARING PAD AND CONCRETE. THE BEARING PAD SHALL BE POSITIONED SO IT DOES NOT PROJECT BEYOND THE INTERIOR FACE OF THE TRANSVERSE ANCHOR PLATE OR BAR WITHIN THE HAUNCH OR CORBEL.
6. PROVIDE 1½" CONC. COVER ON EMBEDDED REBAR & PLATES.
7. REPAIR UNSOUND CONCRETE SIMILAR TO REPAIR TYPE OBR OR VR PER ENGINEER'S DIRECTION (ASSUME OBR–4 FOR BIDDING PURPOSES). ASSURE THAT NEW REPAIR PROVIDES FULL BEARING BETWEEN BEARING PAD AND CONCRETE SURFACES.
8. REMOVE SHORING AFTER MATERIAL REACHES DESIGN STRENGTH.
9. REPAIR UNIT IS PER HAUNCH.
   A. REPAIR TYPE HR: PRECAST CONCRETE DOUBLE TEE HAUNCH
   B. REPAIR TYPE HRG: PRECAST CONCRETE GIRDER HAUNCH
10. SUPERFICIAL CONCRETE REPAIRS THAT DO NOT REQUIRE SHORING AND BEARING PAD REPLACEMENT SHALL BE BILLED AS REPAIR TYPE VR OR OBR AS APPROPRIATE.

5 R2.1 REPAIR TYPE OSR OVERHEAD SURFACE REPAIR DETAIL

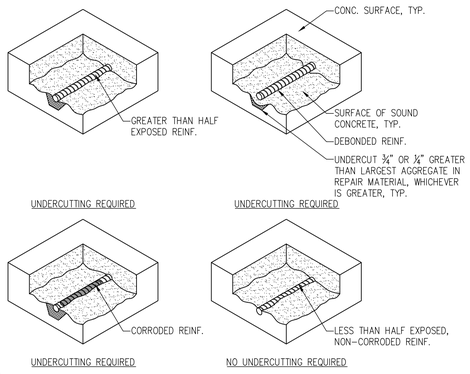
SCALE: N.T.S.



REPAIR PROCEDURES:
1. REFER TO EPOXY INJECTION GENERAL NOTES ON R0.1 & SPECIFICATION SECTION 039300 FOR ADDITIONAL REQUIREMENTS.
2. CLEAN THE SURFACE AREA ABOUT ½" (MIN.) WIDE ON EACH SIDE OF THE CRACK USING WIRE BRUSHING AND HIGH–PRESSURE WATER, "OIL FREE" COMPRESSED AIR TO REMOVE CONTAMINANTS, OIL, GREASE, DIRT, OR FINE PARTICLES OF CONCRETE.
3. INSTALL ENTRY PORTS (SURFACE–MOUNTED OR SOCKET MOUNTED) AT PROPER SPACING. USE SOCKET MOUNTED PORTS WHEN CRACKS ARE BLOCKED. ENTRY PORTS CAN BE CONNECTED BY A MANIFOLD SYSTEM WHEN SIMULTANEOUS INJECTION OF MULTIPLE PORT LOCATIONS IS ADVANTAGEOUS.
4. INSTALL THE CAP SEAL TO KEEP THE EPOXY FROM LEAKING OUT. INSTALL THE CAP SEAL ON BOTH SIDES OF THE CRACKED ELEMENT, WHEN CRACKS PENETRATE COMPLETELY THROUGH SECTION. CAP SEALS COULD BE INSTALLED USING EPOXIES, POLYESTERS, AND SILICONE CAULK. IF HIGH INJECTION PRESSURE IS NEEDED, CRACKS SHOULD BE CUT OUT TO A DEPTH OF ½" AND WIDTH OF ¾" IN A V–SHAPE, FILLED WITH AN EPOXY AND STRUCK OFF FLUSH WITH THE SURFACE.
5. START WITH PROPER BATCHING AND MIXING OF EPOXY COMPONENTS IN STRICT ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS.
6. INJECT THE EPOXY WITH PROPER PRESSURE. INJECT VERTICAL CRACKS FROM BOTTOM UP UNTIL THE EPOXY LEVEL REACHES THE ENTRY PORT ABOVE. WHEN INJECTION INTO A PORT IS COMPLETE, CAP IT IMMEDIATELY.
7. UPON COMPLETION OF THE INJECTION PROCESS, REMOVE PORTS AND CAP SEAL BY GRINDING OR OTHER MEANS, AS APPROPRIATE.

6 R2.1 REPAIR TYPE OBR1 AND OBR2 OVERHEAD BEAM REPAIR

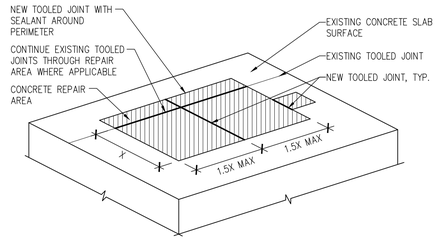
SCALE: N.T.S.



NOTES:
1. SEE REPAIR DETAIL GENERAL NOTES FOR ADDITIONAL INFORMATION.
2. UNDERCUTTING REQUIRED AT ALL VERTICAL AND OVERHEAD SURFACES.
3. ANY REINFORCEMENT WITH SECTION LOSS GREATER THAN 20% SHALL BE REPLACED.
4. ALL REBAR SHALL BE SANDBLASTED CLEAN AND TREATED WITH CORROSION INHIBITING COATING MATERIALS PER SPECIFICATIONS.

7 R2.1 REPAIR TYPE VR VERTICAL REPAIR

SCALE: N.T.S.



NOTES:
1. IF NO EXISTING TOOLED JOINT IS PRESENT, DIMENSION 'X' SHALL REFER TO THE FULL WIDTH OF THE REPAIR.
2. PROVIDE TOOLED JOINTS SUCH THAT DIMENSION 'X' IS NO GREATER THAN 6 FEET AT ANY REPAIR LOCATION. REFER TO REPAIR TYPE FCS / SR FOR TOOLED JOINT DIMENSIONS AND ADDITIONAL INFORMATION.

8 R2.1 REPAIR TYPE HR AND HRG HAUNCH REPAIR DETAIL

SCALE: N.T.S.

REPAIR DETAIL GENERAL NOTES:
1. REFER TO SHEET R0.1 FOR GENERAL NOTES.
2. REFER TO RESTORATION PLANS FOR APPROXIMATE SIZE AND LOCATIONS OF REPAIR AREAS.
3. DETAILS SHOWN ARE FOR ILLUSTRATIVE PURPOSES ONLY. EXACT CONDITIONS VARY (i.e. DIMENSIONS, REBAR, ANODES, ETC.).
4. TYPICAL CONCRETE REPAIR PROCEDURES ARE AS FOLLOWS, U.N.O.:
   A. THE DRAWINGS INDICATE THE AREAS THAT HAVE BEEN DETERMINED TO REQUIRE REPAIR PER ENGINEER'S FIELD SURVEY. CONTRACTOR SHALL SOUND SURFACES WITH HAMMER, ROD, CHAIN, OR APPROPRIATE TOOL TO DETECT DELAMINATION EXTENTS. SEE "GENERAL SURFACE PREPARATION" ON SHEET R0.1.
   B. SAWCUT ½" MAX. PERIMETER OF REPAIR AREAS TO AVOID CUTTING REINFORCEMENT.
   C. REMOVE DELAMINATED CONCRETE TO SOUND CONCRETE. IF REINFORCEMENT IS GREATER THAN HALF EXPOSED, DEBONDED FROM CONCRETE, OR CORRODED, UNDERCUT REINFORCEMENT ¾" OR ¼" LARGER THAN THE LARGEST AGGREGATE IN REPAIR MATERIAL WHICHEVER IS GREATER, U.N.O. SEE TYPICAL CONCRETE REMOVAL DETAIL FOR CLARIFICATION. UNDERCUT REINFORCEMENT AT ALL VERTICAL AND OVERHEAD REPAIRS.
   D. CARE SHALL BE TAKEN NOT TO BREAK NON–CORRODED REINFORCEMENT BOND TO SURROUNDING CONCRETE. IF BOND IS BROKEN, UNDERCUTTING OF THE REINFORCEMENT IS REQUIRED.
   E. PROVIDE RIGHT ANGLE CUTS / SQUARE OFF ENDS ALONG PERIMETER OF REPAIR AREAS.
   F. CLEAN SURFACE FREE OF DUST, LAITANCE, AND OTHER INHIBITING MATERIALS AS INDICATED UNDER "GENERAL SURFACE PREPARATION" ON SHEET R0.1.
   G. DAMAGED REINFORCEMENT WITH SECTION LOSS LESS THAN 20% SHALL BE PREPARED AS INDICATED UNDER "GENERAL SURFACE PREPARATION" ON SHEET R0.1.
   H. DAMAGED REINFORCEMENT WITH SECTION LOSS GREATER THAN 20% SHALL BE SUPPLEMENTED AND DEVELOPED INTO EXISTING REINFORCEMENT. ADDITIONAL REINFORCEMENT SHALL BE SUPPLIED AT UNIT COST, U.N.O.
   I. ALL EXISTING EXPOSED STEEL SHALL BE COATED WITH STEEL CORROSION INHIBITING TREATMENT IN ACCORDANCE WITH SPECIFICATION SECTION 039300.
   J. PREPARE CONCRETE SUBSTRATE, INCLUDING APPLYING APPLICABLE BONDING AGENT TO THE SCARIFIED PATCHING SURFACE, TO RECEIVE NEW REPAIR MORTAR.
   K. PROVIDE 1½" CONC. COVER U.N.O.; IF REQUIRED COVER IS NOT ACHIEVABLE, MOUND CONCRETE TO PROVIDE THE MINIMUM COVER REQUIRED OVER MAJORITY OF REINFORCEMENT WHILE MAINTAINING REQUIRED HEADROOM. IF HEADROOM CANNOT BE ACHIEVED, CONSULT ENGINEER.
   L. PREPARE, PLACE, FINISH, & CURE REPAIR MORTAR PER MANUFACTURER'S REQUIREMENTS & SPECIFICATION SECTION 039300. CONCRETE PER SPECIFICATION SECTION 033000 MAY BE USED AT CONTRACTOR'S OPTION FOR DEPTH GREATER THAN 3", U.N.O. PLACE TOOLED JOINTS AND SEALANT PER "TYPICAL CONTROL JOINT DETAIL".
   M. RE–PAINT PARKING STALLS & TRAFFIC MARKINGS AS REQUIRED TO MATCH EXISTING CONDITIONS.

9 R2.1 REPAIR TYPE EI, EIH EPOXY INJECTION REPAIR

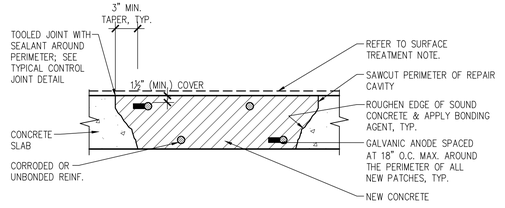
SCALE: N.T.S.

10 R2.1 TYPICAL CONCRETE REMOVAL DETAIL

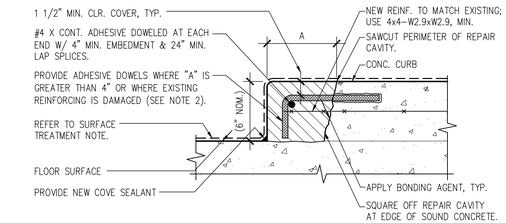
SCALE: N.T.S.

11 R2.1 TYPICAL CONTROL JOINT DETAIL

SCALE: N.T.S.



REPAIR PROCEDURES:
1. SEE REPAIR DETAIL GENERAL NOTES FOR TYPICAL CONCRETE REPAIR PROCEDURES.
2. INSTALL GALVANIC ANODES AT THE PERIMETER OF ALL REPAIR PATCHES PER MANUFACTURER'S RECOMMENDATIONS. VERIFY CONTINUITY & PROVIDE APPROPRIATE COVER FOR GALVANIC ANODES. ANODES ARE NOT INCLUDED IN THE UNIT PRICE.
3. SURFACE TREATMENT NOTE: PENETRATING SEALER, PENETRATING CORROSION INHIBITING TREATMENT, TRAFFIC DECK COATING, AND/OR OTHER SURFACE TREATMENT AS INDICATED ON THE DRAWINGS. IF SURFACE TREATMENT IS NOT INDICATED, APPLY PENETRATING SEALER TO THE REPAIR AND EXTEND 6" MIN. BEYOND PERIMETER OF REPAIR. THE PENETRATING SEALER SHALL BE INCLUDED IN THE UNIT COST OF THE CONCRETE REPAIR; ALL OTHER SURFACE TREATMENTS SHALL BE EXCLUDED FROM THE UNIT COST.
4. INCLUDE COST OF SEALANT AT CAVITY PERIMETER/CONTROL JOINTS AND SURFACE TREATMENT (SEE NOTE 3) IN THE UNIT COST. SEE TYPICAL CONTROL JOINT DETAIL FOR JOINT SPACING.



REPAIR PROCEDURES:
1. SEE REPAIR DETAIL GENERAL NOTES FOR TYPICAL CONCRETE REPAIR PROCEDURES.
2. PROVIDE #4 ADHESIVE DOWEL BAR WITH 90° HOOK & 4" MIN. EMBEDMENT @ 12" O.C. MAX.
3. SURFACE TREATMENT NOTE: PENETRATING SEALER, PENETRATING CORROSION INHIBITING TREATMENT, TRAFFIC DECK COATING, AND/OR OTHER SURFACE TREATMENT AS INDICATED ON THE DRAWINGS. IF SURFACE TREATMENT IS NOT INDICATED, APPLY PENETRATING SEALER TO THE REPAIR AND EXTEND 6" MIN. BEYOND PERIMETER OF REPAIR. THE PENETRATING SEALER SHALL BE INCLUDED IN THE UNIT COST OF THE CONCRETE REPAIR; ALL OTHER SURFACE TREATMENTS SHALL BE EXCLUDED FROM THE UNIT COST.
4. PAINT 6" WIDE LINE STRIPE @ EDGE OF CURB TO MATCH EXISTING; COLOR: SAFETY YELLOW.
5. UNIT OF REPAIR AREA = (A) x LENGTH OF REPAIR = SF.

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PROFESSIONAL SEAL

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PROJECT

HINSON GARAGE 2022 RESTORATION

Camden, NJ

SUBMISSIONS / REVISIONS

ISSUE FOR BID
04/22/2022

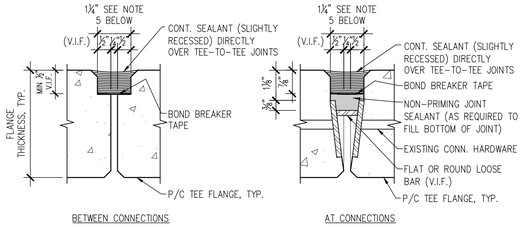
NO.	DESCRIPTION	DATE

NORTH

DRAWN: BJ
REVIEWED: JCR
DATE: 04/22/2022

SHEET TITLE:
REPAIR DETAILS

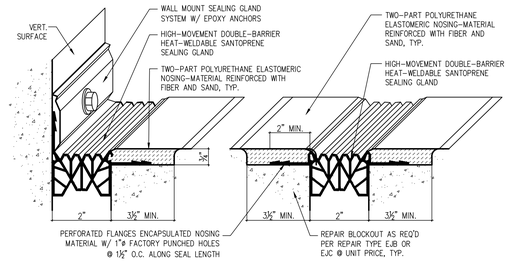
SHEET NO.
R2.1



REPAIR PROCEDURES:
1. REMOVE EXISTING SEALANT ALONG THE ENTIRE LENGTH OF DOUBLE TEE, U.N.O.
2. INSPECT TEE-TO-TEE CONNECTIONS AND REPORT DETERIORATION AND/OR FAILURES TO ENGINEER. CONNECTION FAILURES THAT ARE NOT OBVIOUS DURING A VISUAL INSPECTION, BECOME MORE APPARENT IF DIFFERENTIAL DEFLECTION OCCURS WHEN A VEHICLE PASSES OVER THE JOINT. REPAIR CONNECTIONS PER ENGINEER'S DIRECTION USING REPAIR TYPE TTC. DO NOT REPLACE JOINT SEALANT UNTIL CONNECTION REPAIRS ARE COMPLETE.
3. REMOVE DUST, FOREIGN PARTICLES, AND BOND INHIBITING MATERIALS FROM SURFACE BY BLAST-CLEANING.
4. PROVIDE BOND BREAKING TAPE AT BOTTOM OF JOINTS. APPLY PRIME COAT TO SURFACE AND SEAL WITH AN APPROVED POLYURETHANE SEALANT IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS AND PROCEDURES. DO NOT OVERFILL JOINT.
5. SEALANT MUST BE APPLIED EVENLY AND RECESSED SLIGHTLY (1/16") BELOW SURFACE.
6. JOINTS BETWEEN TEE COMPONENTS MAY VARY IN THE FIELD. FIELD VERIFY ACTUAL CONDITIONS.

1 R2.2 REPAIR TYPE TTS TEE-TO-TEE JOINT SEALANT REPLACEMENT

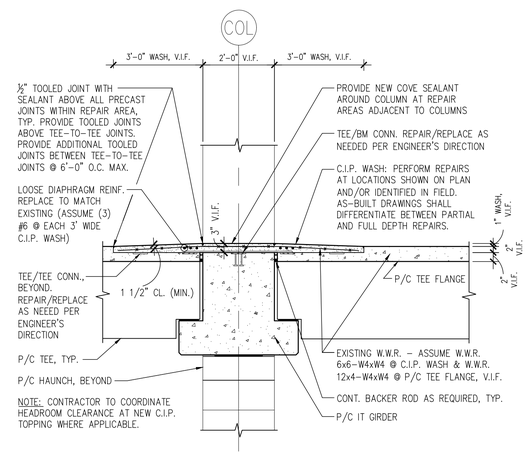
SCALE: N.T.S.



REPAIR PROCEDURES:
1. EXPANSION JOINT MANUFACTURER TO SIZE SEALING GLAND FOR FIELD MEASURED GAP AND TO ACCOUNT FOR ALL APPLICABLE MOVEMENT AFTER INSTALLATION.
2. THE CONTRACTOR MUST COORDINATE ACTUAL SIZE OF BLOCKOUTS REQUIRED BY EXPANSION JOINT MATERIAL.
3. VERIFY THE FOLLOWING INFORMATION WITH THE MANUFACTURER'S TECHNICAL REPRESENTATIVE AND SUBMIT THE SHOP DRAWINGS PRIOR TO ORDERING MATERIAL: JOINT SELECTED, FIELD MEASUREMENT, DATE TAKEN, OUTDOOR TEMPERATURE, & STRUCTURE TEMPERATURE (TOP & BOTTOM).
4. REMOVE EXISTING JOINT & PREP JOINT SUBSTRATE AS REQUIRED PER MANUFACTURER'S REQUIREMENTS.
5. PROVIDE SPLICES PER TYPICAL EXPANSION JOINT SPLICE DETAIL & MANUFACTURER'S REQUIREMENTS, AS REQ'D. SEE TYPICAL EXPANSION JOINT SPLICE DETAIL FOR ADDITIONAL INFORMATION.
6. THE EXPANSION JOINT SYSTEM MUST BE ADA ACCESSIBLE.
7. USE WALL EXPANSION JOINT WHERE APPLICABLE.
8. REPAIR TYPE EJ SHALL CONSIST OF REMOVING AND REPLACING THE ENTIRE EXPANSION JOINT SYSTEM.
9. REPAIR TYPE EJN SHALL CONSIST OF REMOVING AND REPLACING THE ELASTOMERIC NOSING MATERIAL ON ONE SIDE OF THE JOINT. THE NEW NOSING MATERIAL SHALL BE INSTALLED PER THE MANUFACTURER'S WRITTEN INSTRUCTIONS. ASSUME A = 4" & B = 2" (UNIT OF REPAIR = LF). A TWO-PART POLYURETHANE ELASTOMERIC NOSING-MATERIAL REINFORCED WITH FIBER AND SAND SHOULD BE USED.

5 R2.2 REPAIR TYPE EJ & EJN EXPANSION JOINT REPLACEMENT & NOSING REPAIR

SCALE: N.T.S.



8 R2.2 TYPICAL C.I.P. WASH DETAIL (FOR REFERENCE ONLY)

SCALE: N.T.S.

TYPE FCS: STATIC CRACK
(TYP. CONDITION, U.N.O.)

REPAIR PROCEDURES:
1. ROUT AT CENTER OF CRACK OR TOOLED JOINT TO FORM A GROOVE AND GRIND ANY UNEVEN SURFACES OR REMOVE SEALANT FROM EXISTING JOINT.
2. REMOVE DUST, FOREIGN PARTICLES, AND ANY BOND INHIBITING MATERIAL FROM SURFACE BY AIR OR SAND BLASTING AS REQUIRED.
3. SEALANT MUST BE APPLIED EVENLY AND RECESSED ⅛" BELOW SURFACE. INSTALL SEALANT FLUSH WITH SURFACE FOR AREAS TO RECEIVE TRAFFIC DECK MEMBRANE. DO NOT OVERFILL JOINT.
4. SEE SPECIFICATION SECTION 079020 FOR ADDITIONAL REQUIREMENTS.

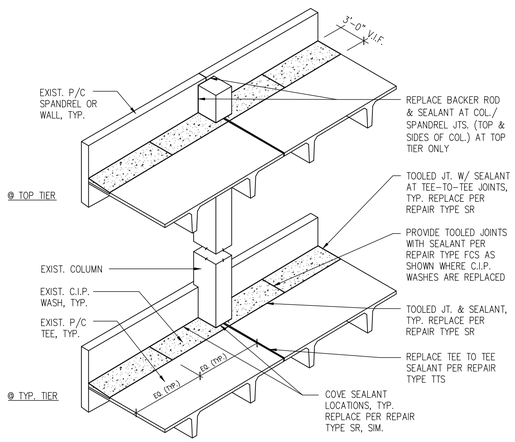
2 R2.2 REPAIR TYPE FCS FLOOR CRACK REPAIR

SCALE: N.T.S.

NOTES:
1. SEE DETAIL 5/R2.2 FOR REPAIR PROCEDURES, TYP.

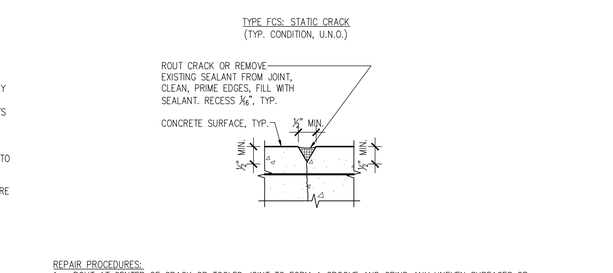
6 R2.2 REPAIR TYPE PEJ PRE-MOLD EXPANSION JOINT REPLACEMENT

SCALE: N.T.S.



9 R2.2 TYPICAL JOINT SEALANT @ P/C TEE SYSTEM (FOR REFERENCE ONLY)

SCALE: N.T.S.



REPAIR PROCEDURES:
1. REPAIR TYPE TTC1&2: EMB. HARDWARE TO REPLACED AT ONE SIDE ONLY.
   A. REMOVE DELAMINATED CONCRETE AROUND THE TEE-TO-TEE CONNECTION PER CONC. REPAIR SHEET NOTES ON SHEET R2.1.
   B. REMOVE & REPLACE EXIST. EMBEDDED PLATE ASSEMBLY. REPAIR SHADED REPAIR AREA PER REPAIR TYPE PFR. FOR BIDDING PURPOSES ASSUME 4 SF OF CONCRETE REPAIR FOR REPAIR TYPES TTC1 & TTC2.
   C. REPLACE DAMAGED REINFORCING PER GENERAL NOTE D.3/R0.1. NEW REINFORCING SHALL MATCH THE EXISTING SIZE AND SPACING. FOR BIDDING ASSUME WWR 4X4 – W4.0 X W4.0 & #4 X CONT. RUNNING PARALLEL TO TEE TO-TEE-JOINT.
   D. VERIFY THAT LOOSE SMOOTH BAR IS POSITIONED ⅜" MIN. TO ¾" MAX. DOWN FROM TOP OF CONNECTOR.
   E. LOOSE BAR MUST BE INSTALLED REASONABLY FLAT AND PLACED WITH SETTING TOOL.
   F. REWELD CONNECTION AS SHOWN AT EACH SIDE OF PLATE. DO NOT OVERWELD.
2. REPAIR TYPE TTC3: REWELDING OF LOOSE BAR ONLY.
3. REPAIR TYPE TTC4: REPAIR FULL-DEPTH HALO CRACK ADJACENT TO CONNECTION PER REPAIR TYPE EI. ASSUME 2 LF X 5" NOM. DEPTH.

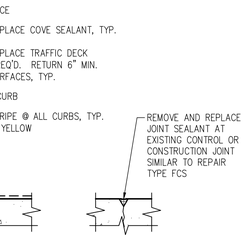
3 R2.2 REPAIR TYPE TTC1-4 TEE TO TEE CONNECTION REPAIR

SCALE: N.T.S.

NOTES:
1. FOR BIDDING PURPOSES, ASSUME REPLACEMENT OF 12 LF OF BARRIER CABLE. SPLICE CABLE TO THE EXISTING CABLE AND REPLACE THE END HARDWARE IN KIND. THE END HARDWARE SHALL BE HOT DIPPED GALVANIZED.

7 R2.2 REPAIR TYPE BCR BARRIER CABLE REPAIR

SCALE: N.T.S.



REPAIR PROCEDURES:
1. SEE REPAIR PROCEDURES ON REPAIR TYPE FCS FOR ADDITIONAL INFO.
2. UNIT PRICE INCLUDES PER LF OF SEALANT REPLACEMENT. TRAFFIC DECK MEMBRANE AND LINE STRIPING ARE NOT INCLUDED.
3. REPAIR TYPE SR APPLIES TO HORIZONTAL FLOOR JOINTS INCLUDING CONTROL, CONSTRUCTION, AND COVE JOINTS; JOINT SIZE IS PER REPAIR TYPE FCS.
4. REPAIR TYPE VSR APPLIES TO VERTICAL JOINTS. USE NON-SAG SEALANT AND BACKER RODS AT VERTICAL JOINTS. JOINT SEALANT PROFILE SHALL BE 1" WIDE X 1/2" MINIMUM THICKNESS; FIELD VERIFY ACTUAL WIDTH AND ADJUST THICKNESS BASED ON MANUFACTURER'S WRITTEN REQUIREMENTS.

4 R2.2 REPAIR TYPE SR & VSR SEALANT REPLACEMENT (HORIZONTAL & VERTICAL)

SCALE: N.T.S.

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PROFESSIONAL SEAL

CONSULTANT

PROJECT NO.
NBR22110.00

PROJECT

HINSON GARAGE 2022 RESTORATION

Camden, NJ

SUBMISSIONS / REVISIONS

ISSUE FOR BID
04/22/2022

NO.	DESCRIPTION	DATE

DRAWN: BJ
REVIEWED: JCR
DATE: 04/22/2022

SHEET TITLE:
REPAIR DETAILS

SHEET NO.
R2.2