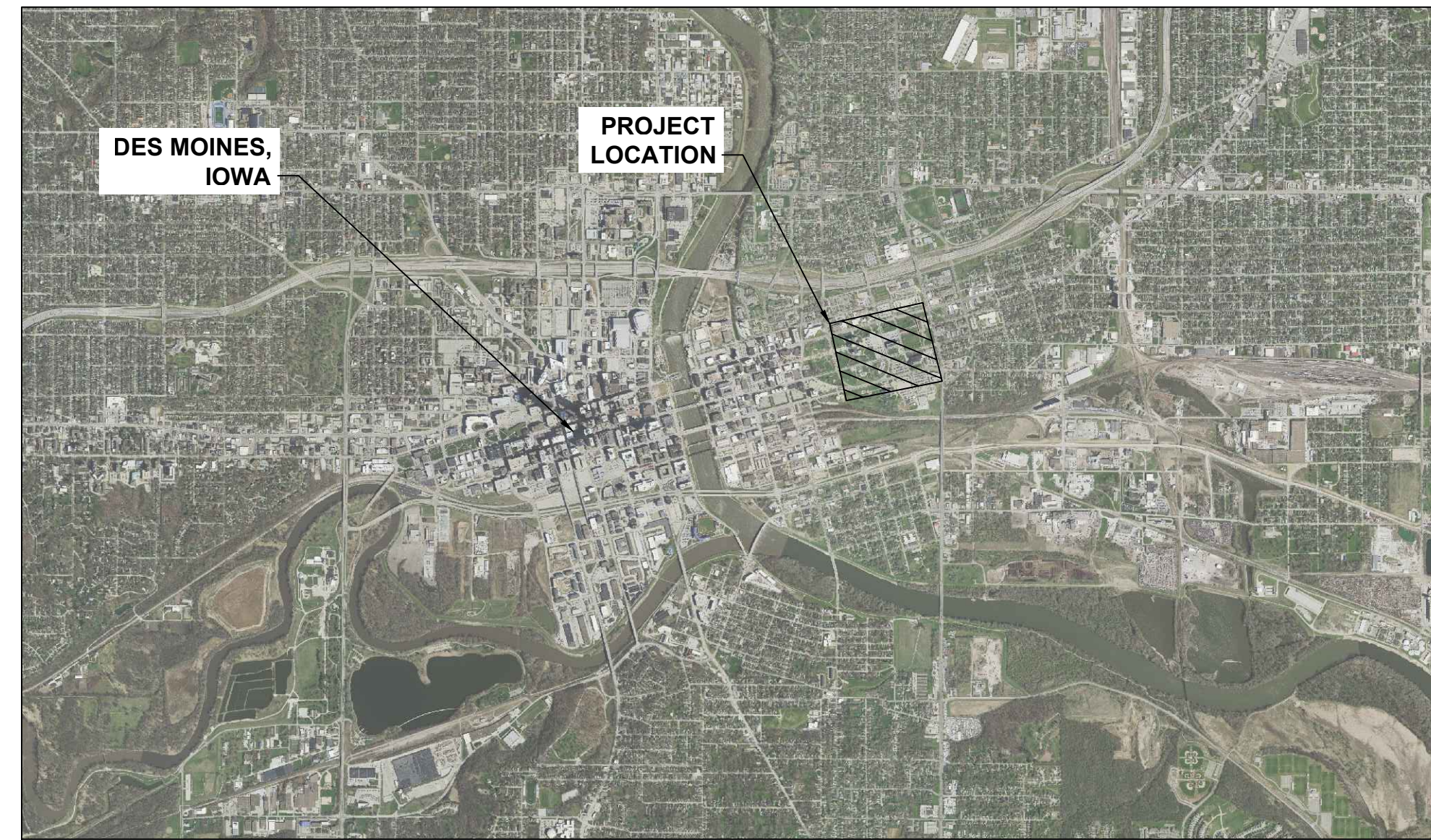


STATE CAPITOL COMPLEX TUNNEL IMPROVEMENTS DAS PROJECT NO: 9268.01

IOWA STATE CAPITOL COMPLEX
109 SE 13TH STREET
DES MOINES, IA 50319



VICINITY MAP
NTS



PROJECT MAP
NTS

GENERAL NOTES AND PROJECT REQUIREMENTS

- THE LOCATIONS OF UTILITY MAINS, STRUCTURES AND SERVICE CONNECTIONS PLOTTED ON THE DRAWINGS ARE APPROXIMATE ONLY AND WERE OBTAINED FROM RECORDS MADE AVAILABLE TO SHIVE-HATTERY, INC. THERE MAY BE OTHER EXISTING UTILITY MAINS, STRUCTURES AND SERVICE CONNECTIONS NOT KNOWN TO SHIVE-HATTERY, INC. AND NOT SHOWN ON THE DRAWINGS. THE VERIFICATION OF EXISTENCE OF AND THE DETERMINATION OF THE EXACT LOCATION OF UTILITY MAINS, STRUCTURES AND SERVICE CONNECTIONS SHALL BE THE RESPONSIBILITY OF THE CONSTRUCTION CONTRACTOR(S).
- EXCAVATION IS NOT ANTICIPATED WITH THE SCOPE OF WORK ON THIS PROJECT. HOWEVER, IF EXCAVATION IS COMPLETED THE CONTRACTOR IS RESPONSIBLE FOR IOWA CODE 480 REQUIREMENTS, UNDERGROUND FACILITIES INFORMATION, REQUIRES VERBAL NOTICE TO IOWA ONE-CALL BY CALLING 811 OR 1-800-292-8989 NOT LESS THAN 48 HOURS BEFORE EXCAVATING, EXCLUDING WEEKENDS AND HOLIDAYS. THE FACILITY WILL COMPLETE PRIVATE UTILITY LOCATES OF ALL FACILITY UTILITIES REQUIRED BY IOWA ONE-CALL. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE ALL LOCATES AND CONFIRM THEY ARE COMPLETED PRIOR TO THE START OF CONSTRUCTION. NOTIFY UTILITY COMPANIES WHOSE FACILITIES ARE SHOWN ON THE PLANS OR KNOWN TO BE WITHIN THE CONSTRUCTION LIMITS OF THE SCHEDULE PRIOR TO EACH STAGE OF CONSTRUCTION.
- UNLESS OTHERWISE SPECIFIED, ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MOST RECENT EDITION OF IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS).
- ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY/COUNTY/STATE REGULATIONS/CODES AND OSHA STANDARDS.
- THE MEANS OF THE WORK AND THE SAFETY OF THE CONTRACTOR'S EMPLOYEES ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
- NO WORK SHALL BE PERFORMED BEYOND THE PROJECT LIMITS WITHOUT PRIOR AUTHORIZATION FROM THE OWNER'S REPRESENTATIVE.
- PROTECT EXISTING UTILITIES DURING CONSTRUCTION. THIS INCLUDES TEMPORARY PROTECTION OF ALL UTILITIES WITHIN THE TUNNEL FROM WATER INFILTRATION AND SEEPAGE AND DAMAGE DUE TO IMPACTS FROM CONSTRUCTION WORK.
- MAINTAIN POSITIVE DRAINAGE IN THE TUNNELS THROUGHOUT THE PROJECT DURATION.
- SITE CLEAN-UP SHALL BE PERFORMED ON A DAILY BASIS. TUNNELS SHALL BE KEPT CLEAN AT ALL TIMES.
- ALL OPEN EXCAVATIONS SHALL BE PROTECTED.
- REPAIR OR REPLACE DAMAGED INFRASTRUCTURE (WALLS, PAVEMENT, UTILITIES, LIGHTING, ETC.) TO REMAIN AT NO ADDITIONAL EXPENSE TO THE STATE.
- ANY WORK REQUIRED TO COMPLETE THE SCOPE OF THIS PROJECT BUT NOT SPECIFICALLY CALLED OUT SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT. NO ADDITIONAL COMPENSATION TO BE ALLOWED FOR THE COMPLETION OF THIS WORK.
- STAGING LOCATIONS AND CONSTRUCTION ACCESS ROUTES FOR CONSTRUCTION EQUIPMENT AND MATERIALS SHALL BE COORDINATED WITH AND APPROVED BY THE FACILITY AND CONSTRUCTION MANAGER.
- CONTROL DUST SPREADING FROM ALL WORK AREAS.
- WORK WHICH DOES NOT CONFORM TO THE REQUIREMENTS OF THE CONTRACT WILL BE CONSIDERED UNACCEPTABLE. UNACCEPTABLE WORK, WHETHER THE RESULT OF POOR WORKMANSHIP, USE OF DEFECTIVE MATERIALS, DAMAGE THROUGH CARELESSNESS OR ANY OTHER CAUSE FOUND TO EXIST PRIOR TO THE FINAL ACCEPTANCE OF THE WORK SHALL BE REMOVED AND REPLACED IN AN ACCEPTABLE MANNER AS REQUIRED BY THE OWNER'S REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE. WORK DONE CONTRARY TO THE INSTRUCTIONS OF THE OWNER'S REPRESENTATIVE, WORK DONE BEYOND THE LINES SHOWN ON THE PLANS OR ANY EXTRA WORK DONE WITHOUT WRITTEN AUTHORIZATION WILL NOT BE PAID FOR.
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF WORK OF ALL SUBCONTRACTOR(S) INVOLVED ON THE PROJECT.
- CONSTRUCTION MANAGER TO HANDLE ALL REQUIRED TUNNEL SHUTDOWNS FOR PEDESTRIANS. COORDINATE SCHEDULING AND PHASING WITH CONSTRUCTION MANAGER AND OWNER. SIGNAGE, BARRICADES, AND OTHER PEDESTRIAN TRAFFIC CONTROL DEVICES IN THE TUNNEL SYSTEM WILL BE THE RESPONSIBILITY OF THE CONSTRUCTION MANAGER TO PROVIDE AND RELOCATE.
- CONTRACTOR SHALL REVIEW EXISTING SITE AND UTILITY LOCATIONS WITHIN THE TUNNELS AS EXISTING UTILITIES WILL NEED TO BE MAINTAINED AND PROTECTED AT ALL TIMES THROUGHOUT CONSTRUCTION. ACCESS TO WORK AREAS WILL BE LIMITED BY EXISTING UTILITIES AND EQUIPMENT IN THE TUNNELS. THE CONTRACTOR WILL NEED TO WORK AROUND EXISTING UTILITIES AND ADJUST CONSTRUCTION METHODS AS REQUIRED TO COMPLETE THE SPECIFIED SCOPE OF WORK.
- LIMITED POWER SOURCES ARE AVAILABLE THROUGHOUT THE TUNNEL SYSTEM AND CAN BE UTILIZED BY THE CONTRACTORS DURING CONSTRUCTION. CONTRACTORS SHALL REVIEW POWER SOURCE LOCATIONS AND POWER QUALITY DURING BIDDING AND ACCOUNT FOR ADDITIONAL TEMPORARY POWER SOURCES AS MAY BE REQUIRED BY CONSTRUCTION IN THEIR BIDS.
- CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL LOOSE CONCRETE MATERIAL FROM CEILING AND WALLS WITHIN THE TUNNEL SYSTEM. LOOSE MATERIAL IS DEFINED AS ANY CONCRETE MATERIAL WHICH CAN BE REMOVED WITH MINIMAL IMPACT FORCE OR PRYING UTILIZING A HAMMER, PRY BAR, OR OTHER MANUALLY OPERATED TOOL. CUTTING, DRILLING, OR OTHER MECHANICAL EQUIPMENT SHOULD NOT BE USED TO REMOVE LOOSE MATERIALS. ALL DEBRIS SHOULD BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
- UTILITIES, LIGHTING, FIRE ALARM SYSTEM DEVICES, AND EQUIPMENT IN THE TUNNELS SHALL BE PROTECTED FROM DAMAGE AND FALLING DEBRIS. COORDINATE TEMPORARY PROTECTION AND SHUT DOWN OF FIRE ALARM SYSTEM DEVICES WITH CONSTRUCTION MANAGER AS REQUIRED BY CONSTRUCTION MEANS AND METHODS.
- CONTRACTOR SHALL REMOVE ALL EXISTING WATER INFILTRATION DEFLECTORS AS REQUIRED FOR CONSTRUCTION ACCESS. COORDINATE WITH THE OWNER AND CONSTRUCTION MANAGER TO SALVAGE ANY MATERIALS REQUESTED TO BE SAVED AND DELIVER TO A LOCATION AT THE FACILITY MANAGEMENT CENTER ON THE CAPITOL COMPLEX. ALL MATERIALS NOT REQUESTED TO BE SALVAGED BY THE OWNER SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
- CONTRACTOR SHALL PROVIDE UNIT PRICING TO INSTALL NEW WATER INFILTRATION DEFLECTORS AT TEN (10) LOCATIONS REQUESTED BY THE CONSTRUCTION MANAGER. NEW DEFLECTORS SHALL BE 12" PVC PIPE CUT IN HALF EXTENDING THE FULL WIDTH OF THE TUNNEL. HALF PIPES SHALL BE INSTALLED WITH APPROXIMATELY 6" SPACING FROM LID WITH A SLANT TO THE SIDE OF THE TUNNEL WITH THE DRAINAGE TROUGH. PIPE HANGERS SHALL BE 1" WIDE STAINLESS STEEL STRAPS WITH THREE (3) PLACED AT EACH LOCATION AND ATTACHED TO LID WITH 1-1/4" LONG TAPCON SCREWS OR ENGINEER PRE-APPROVED EQUIVALENT HANGER SYSTEM. BIDDERS TO PROVIDE UNIT PRICING FOR MATERIAL AND INSTALLATION OF A NEW DEFLECTOR WHICH CAN BE ADDED OR SUBTRACTED FROM THE PROJECT BASED ON PROJECT REQUIREMENTS.
- A GEOTECHNICAL SUBSURFACE EXPLORATION REPORT WAS COMPLETED FOR THE PROJECT AND INCLUDED IN THE PROJECT MANUAL FOR REFERENCE BY THE CONTRACTOR. DUE TO THE SCOPE AND NATURE OF THIS PROJECT THE CONTRACTOR SHOULD ASSUME THERE WILL BE VARIATIONS IN SOIL AND MOISTURE CONDITIONS AT DIFFERENT LOCATIONS OF THE TUNNEL SYSTEM. THE CONTRACTOR SHOULD ACCOMMODATE THIS VARIATION IN SOIL AND MOISTURE CONDITIONS WITH THEIR PROPOSED MEANS AND METHODS AND ALTERNATIVE PRODUCTS SUITABLE FOR VARYING CONDITIONS.
- HAZARDOUS MATERIAL REVIEWS AND TESTING HAS BEEN COMPLETED FOR THE TUNNEL SYSTEM AND THESE REPORTS HAVE BEEN INCLUDED IN THE PROJECT MANUAL FOR REFERENCE BY THE CONTRACTORS. LEAD PAINT WAS IDENTIFIED IN AT LEAST ONE LOCATION THAT IS ANTICIPATED TO BE WITHIN THE AREA OF POTENTIAL DISTURBANCE BY THIS PROJECT. PRIOR TO CONSTRUCTION THE STATE WILL MITIGATE KNOWN LEAD PAINT AT LOCATIONS WHERE PENETRATIONS FOR THIS PROJECT ARE ANTICIPATED. IT IS THE CONTRACTORS RESPONSIBILITY TO REVIEW THESE REPORTS AND COORDINATE WITH THE CONSTRUCTION MANAGER TO CONFIRM POTENTIAL HAZARDOUS MATERIALS HAVE BEEN TESTED AND REMOVED PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL PROVIDE UNIT PRICING TO ADD OR REMOVE ALL WORK ASSOCIATED WITH A SINGLE JOINT REPAIR LOCATION. BASED ON FUNDING AVAILABILITY AND/OR EXISTING CONDITIONS THE OWNER MAY ADD OR DELETE JOINT REPAIR LOCATIONS WHICH WILL INCLUDE ALL PREPARATION, CURTAIN GROUTING, AND CRACK INJECTION AT A SINGLE JOINT LOCATION IN THE CAPITOL COMPLEX TUNNEL SYSTEM.

Sheet List Table	
Sheet Number	Sheet Title
C000	COVER SHEET
C100	OVERALL PLAN
C101	TUNNEL PLAN AND PROFILE
C102	TUNNEL PLAN AND PROFILE
C103	TUNNEL PLAN AND PROFILE
C104	TUNNEL PLAN AND PROFILE
C501	CONSTRUCTION DETAILS
C502	PHOTOS
C503	PHOTOS
C504	PHOTOS

CONTACT INFORMATION

ENGINEER

SHIVE-HATTERY, INC.
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CMARVIN@SHIVE-HATTERY.COM
4125 WESTOWN PKWY, SUITE 100
WEST DES MOINES, IA 50266
515-223-8104

OWNER

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF BUSINESS AND PROPERTY SERVICES
ATTN: JENNIFER KLEENE
JENNIFER.KLEENE@IOWA.GOV
109 SE 13TH STREET
DES MOINES, IA 50319
515-822-8197

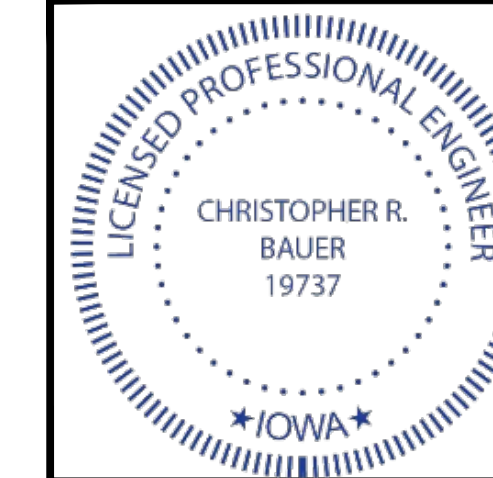
CONSTRUCTION MANAGER

DCI GROUP
ATTN: TRAVIS HOYLE
TRAVISH@DCIGROUP-US.COM
220 SE 6TH STREET - SUITE 200
DES MOINES, IA 50309
641-485-7057

SITE ADDRESS

IOWA STATE CAPITOL COMPLEX
109 SE 13TH STREET
DES MOINES, IA 50319

CIVIL ENGINEER



I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT DESCRIBED BELOW WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

Signature: *Christopher R. Bauer* Date: 9-22-2023

Printed or typed name: CHRISTOPHER R. BAUER
License Number: 19737
My License Renewal Date is: DECEMBER 31, 2023

PAGES, SHEETS OR DIVISIONS COVERED BY THIS SEAL:
ALL SHEETS

STATE CAPITOL COMPLEX
TUNNEL IMPROVEMENTS

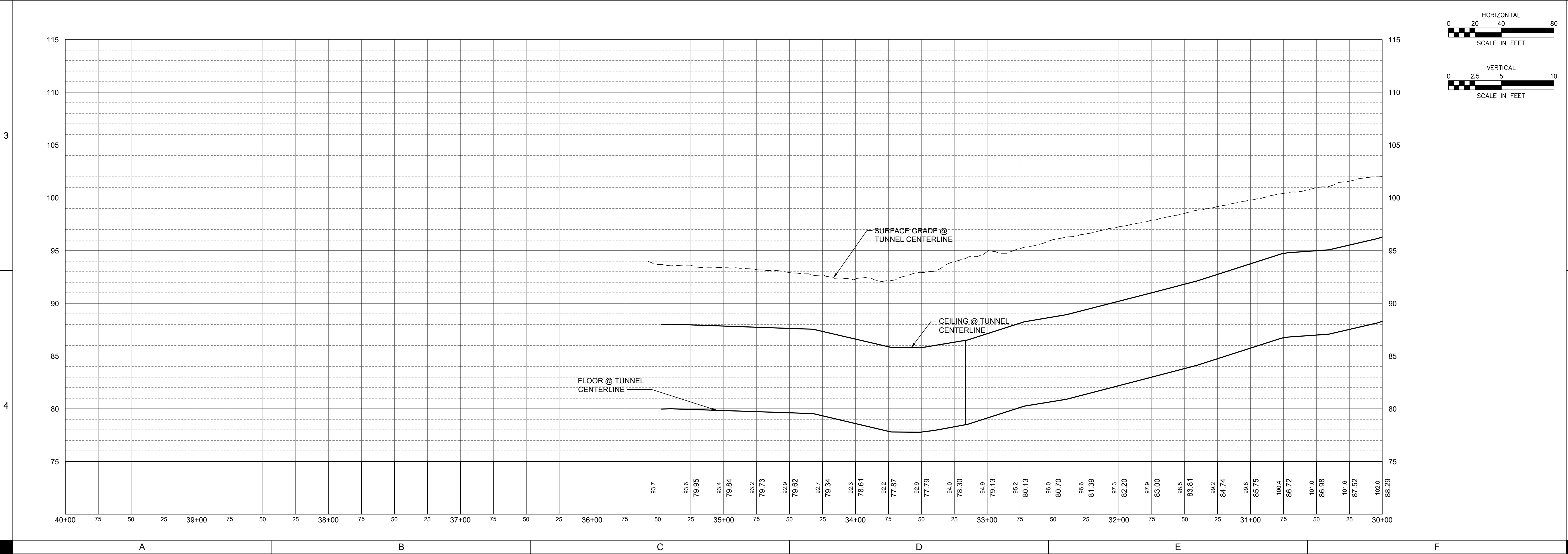
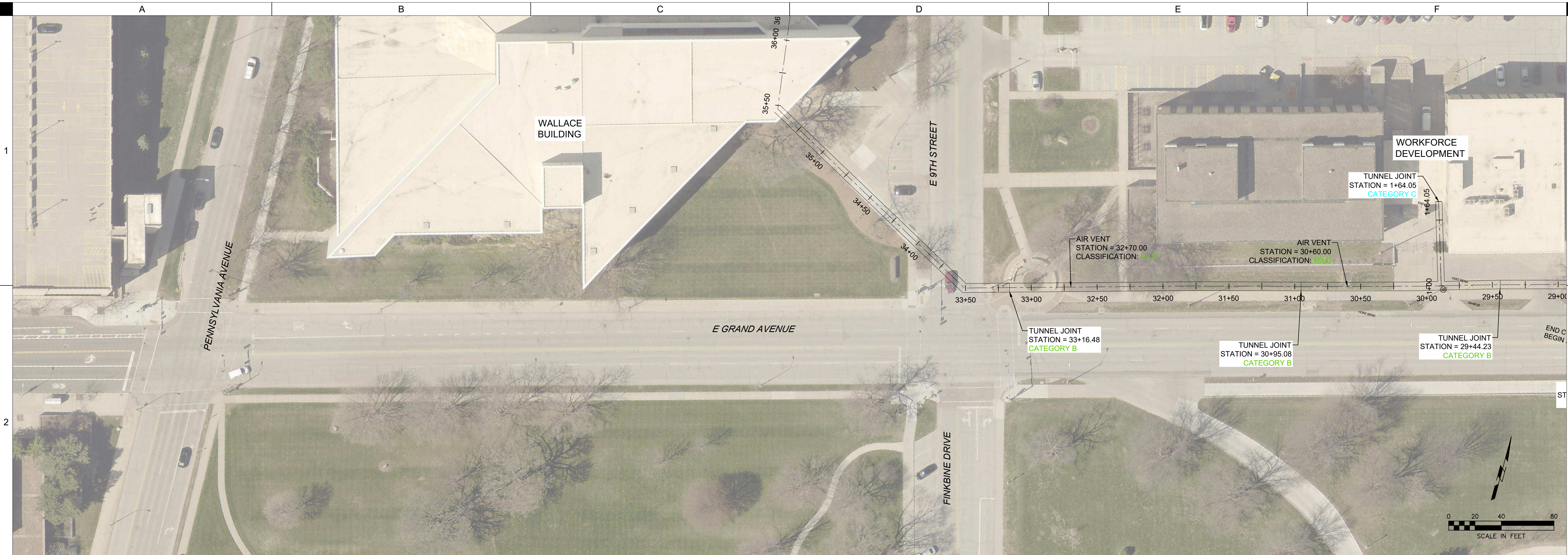
SHIVE-HATTERY
ARCHITECTURE + ENGINEERING

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES
9268.01
109 SE 13TH STREET, DES MOINES, IA, 50319

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PROJECT NUMBER	2142201940
FIELD BOOK	

COVER SHEET

C000



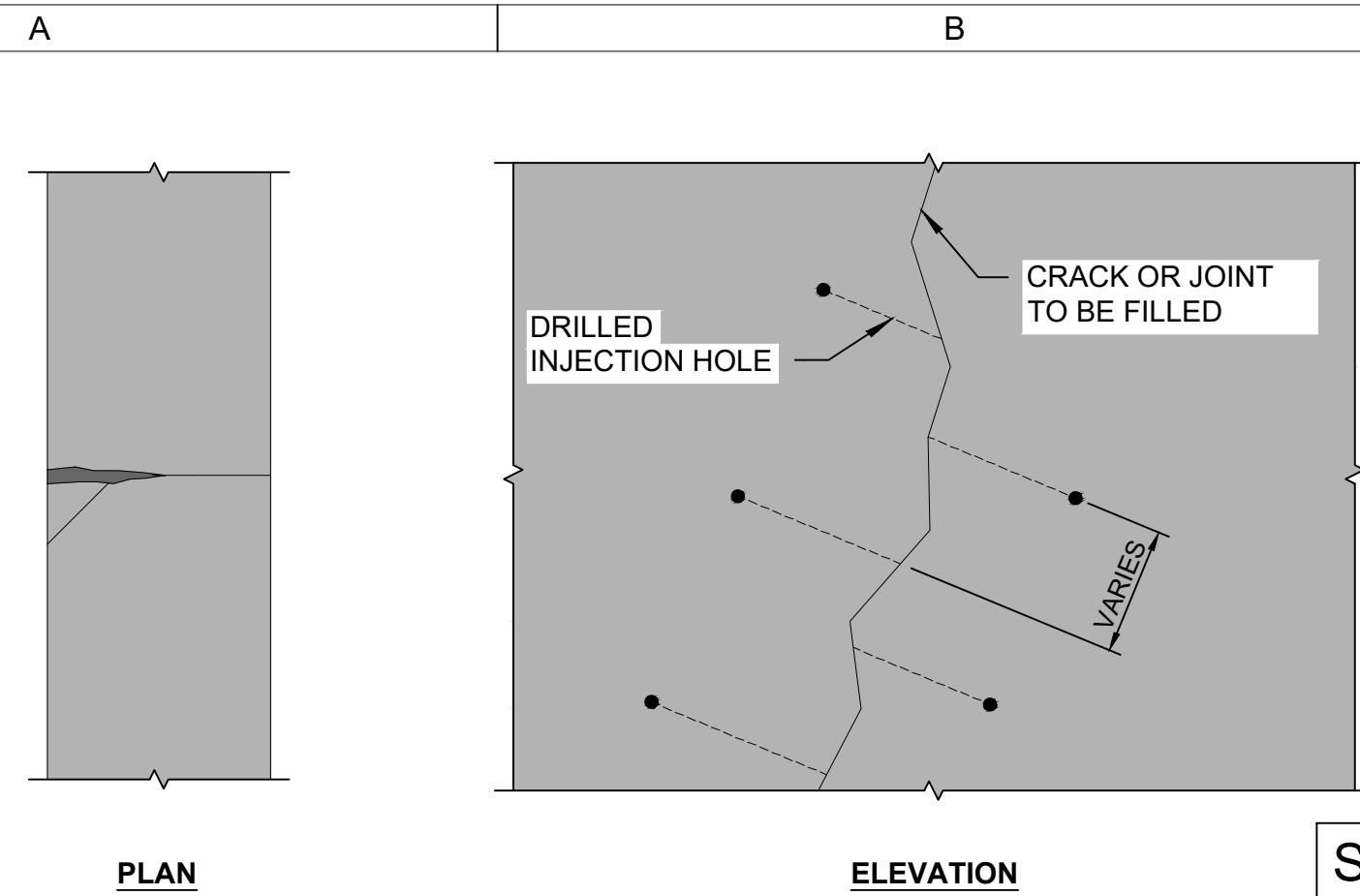
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STATE CAPITOL COMPLEX
TUNNEL IMPROVEMENTS

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES
 9268.01
 109 SE 13TH STREET, DES MOINES, IA, 50319

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FIELD BOOK	...

TUNNEL PLAN
AND PROFILE

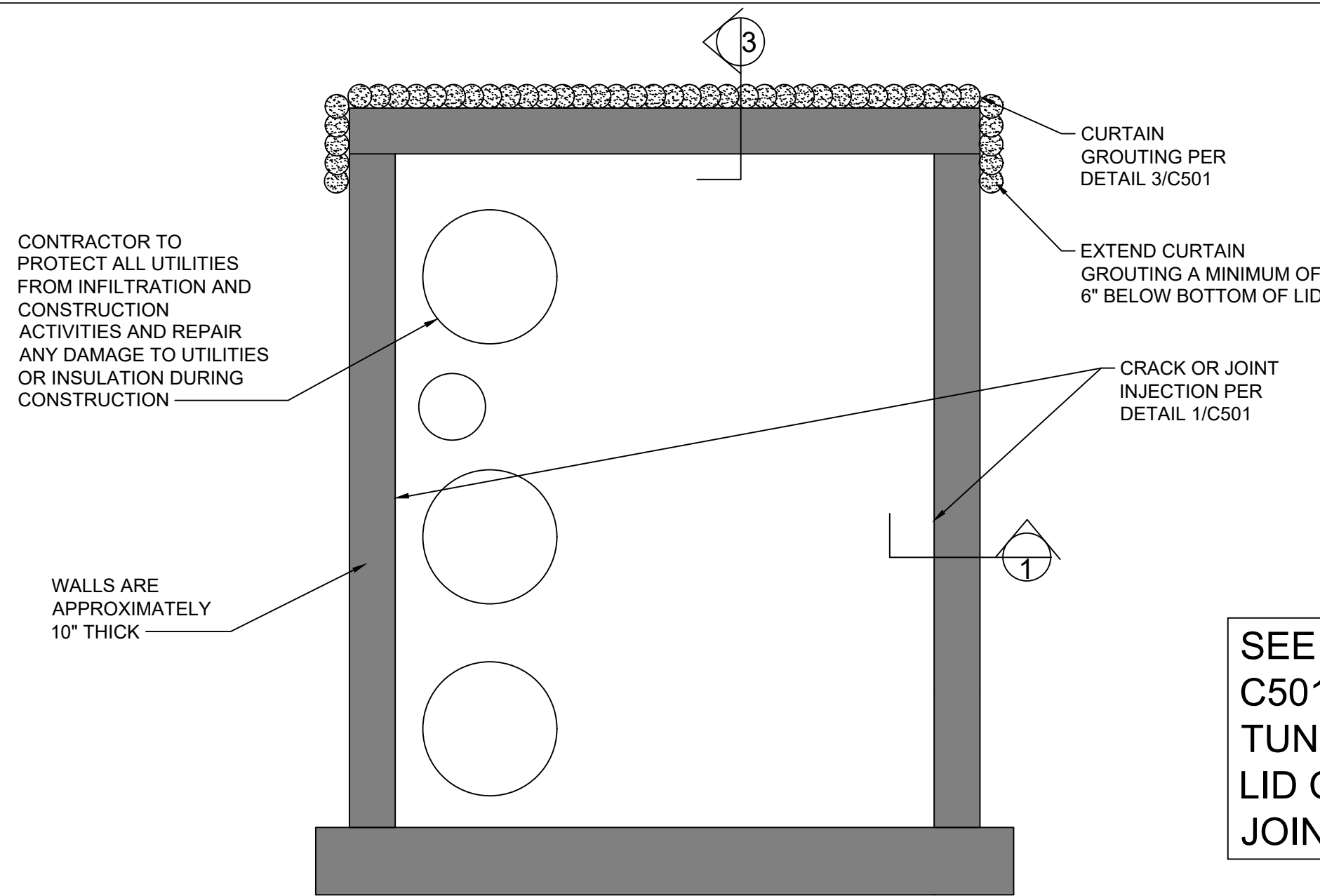


NOTES

- INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS. DETAILS PROVIDED ARE CONCEPTUAL ONLY. REFER TO TECHNICAL SPECIFICATIONS FOR ADDITIONAL INFORMATION.

SEE JOINTS TO REPAIR LIST ON C501 FOR STATIONS TO RECEIVE TUNNEL JOINT REPAIRS INCLUDING LID CURTAIN GROUTING AND WALL JOINT REPAIRS

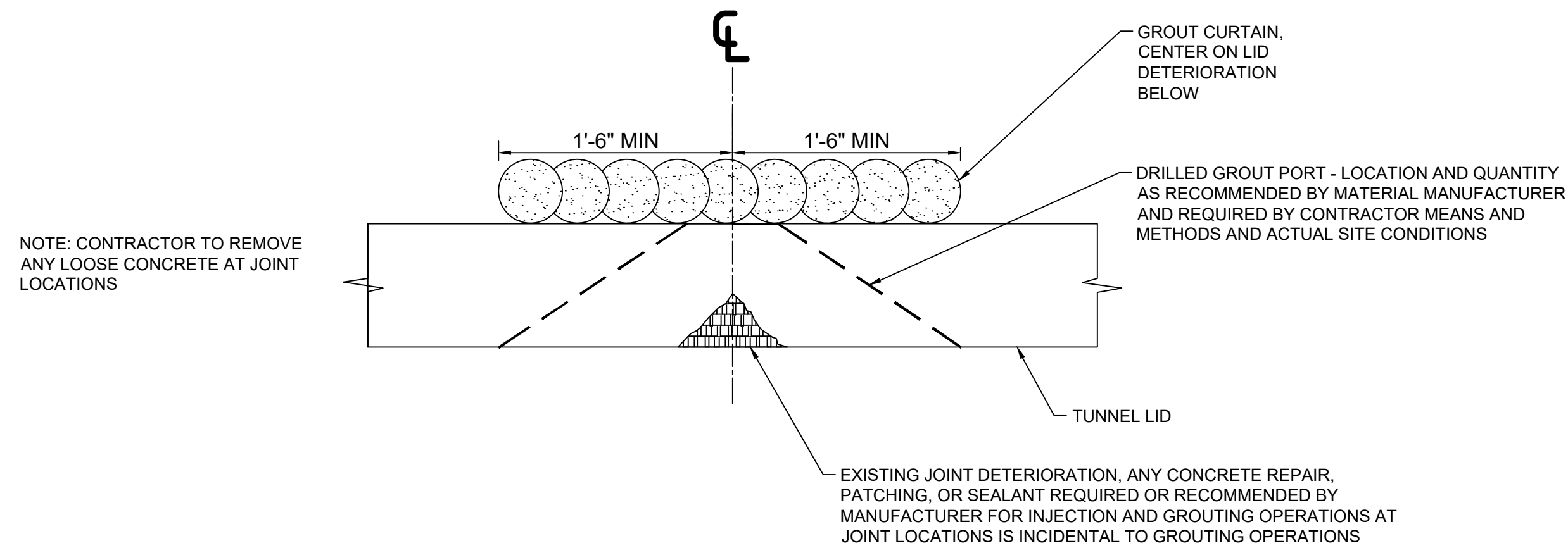
1 WALL JOINT REPAIR DETAIL
NTS



TUNNEL DIMENSIONS VARY SLIGHTLY THROUGHOUT BUT GENERALLY HAVE INSIDE DIMENSIONS OF 9'-6" TALL AND 8'-0" WIDE

SEE JOINTS TO REPAIR LIST ON C501 FOR STATIONS TO RECEIVE TUNNEL JOINT REPAIRS INCLUDING LID CURTAIN GROUTING AND WALL JOINT REPAIRS

2 TYPICAL TUNNEL JOINT REPAIR SECTION
SCALE: 1" = 2'



NOTE: CONTRACTOR TO REMOVE ANY LOOSE CONCRETE AT JOINT LOCATIONS

EXISTING JOINT DETERIORATION, ANY CONCRETE REPAIR, PATCHING, OR SEALANT REQUIRED OR RECOMMENDED BY MANUFACTURER FOR INJECTION AND GROUTING OPERATIONS AT JOINT LOCATIONS IS INCIDENTAL TO GROUTING OPERATIONS

3 CURTAIN GROUT DETAIL
SCALE: 1" = 8"

NOTE: REFER TO TYPICAL JOINT AND TUNNEL CONDITION PHOTOS ON SHEET C502 THROUGH C504 FOR REFERENCE OF EXISTING CONDITIONS

JOINTS TO REPAIR LIST

TUNNEL	STATION	CURTAIN GROUTING	CRACK INJECTION
MAIN	0+58	34.5 SF	20 LF
MAIN	1+07	34.5 SF	20 LF
MAIN	1+57	34.5 SF	20 LF
MAIN	2+07	34.5 SF	20 LF
MAIN	2+57	34.5 SF	20 LF
MAIN	3+07	34.5 SF	20 LF
MAIN	3+57	34.5 SF	20 LF
MAIN	4+09	34.5 SF	20 LF
MAIN	4+58	34.5 SF	20 LF
MAIN	5+09	34.5 SF	20 LF
MAIN	5+58	34.5 SF	20 LF
MAIN	6+08	34.5 SF	20 LF
MAIN	6+59	34.5 SF	20 LF
MAIN	7+08	34.5 SF	20 LF
MAIN	7+59	34.5 SF	20 LF
MAIN	8+09	34.5 SF	20 LF
MAIN	8+41	34.5 SF	20 LF
MAIN	8+59	34.5 SF	20 LF
MAIN	9+09	34.5 SF	20 LF
MAIN	9+59	34.5 SF	20 LF
MAIN	10+09	34.5 SF	20 LF
MAIN	10+58	34.5 SF	20 LF
MAIN	11+08	34.5 SF	20 LF
MAIN	11+58	34.5 SF	20 LF
MAIN	12+08	34.5 SF	20 LF
MAIN	12+46	34.5 SF	20 LF
MAIN	12+66	34.5 SF	20 LF
MAIN	13+09	34.5 SF	20 LF
MAIN	13+59	34.5 SF	20 LF
MAIN	14+09	34.5 SF	20 LF
MAIN	14+39	34.5 SF	20 LF
MAIN	15+09	34.5 SF	20 LF
MAIN	15+59	34.5 SF	20 LF
MAIN	16+09	34.5 SF	20 LF
MAIN	16+58	34.5 SF	20 LF
MAIN	17+08	34.5 SF	20 LF
MAIN	17+57	34.5 SF	20 LF
MAIN	18+06	34.5 SF	20 LF
MAIN	18+58	34.5 SF	20 LF
MAIN	19+08	34.5 SF	20 LF
MAIN	19+58	34.5 SF	20 LF
MAIN	20+07	34.5 SF	20 LF
MAIN	20+57	34.5 SF	20 LF
MAIN	21+07	34.5 SF	20 LF
MAIN	21+57	34.5 SF	20 LF
MAIN	22+07	34.5 SF	20 LF
MAIN	22+57	34.5 SF	20 LF
MAIN	22+84	34.5 SF	20 LF
MAIN	23+08	34.5 SF	20 LF
MAIN	23+58	34.5 SF	20 LF
MAIN	24+08	34.5 SF	20 LF
MAIN	24+59	34.5 SF	20 LF
MAIN	25+09	34.5 SF	20 LF
MAIN	25+59	34.5 SF	20 LF
MAIN	26+09	34.5 SF	20 LF
MAIN	26+59	34.5 SF	20 LF
MAIN	27+37	34.5 SF	20 LF
MAIN	28+74	34.5 SF	20 LF
MAIN	29+44	34.5 SF	20 LF
ESTIMATED TOTAL QUANTITIES		2,001 SF	1,160 LF

QUANTITIES NOTE: APPROXIMATE QUANTITIES SHOWN ARE PROVIDED FOR REFERENCE ONLY AND CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND QUANTITIES SHOWN ON PLANS AND ACCOMMODATE FOR ADDITIONAL MATERIALS THAT MAY BE REQUIRED TO MEET MINIMUM SPECIFIED COVERAGE AND INJECTION LIMITS. PAYMENT FOR ADDITIONAL QUANTITIES OF MATERIAL WILL NOT BE COMPENSATED AS ADDITIONAL WORK EVEN IF A DISCREPANCY IS SHOWN IN THE PROVIDED QUANTITIES.

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1 STA: 0+58 TUNNEL LID



4 STA: 2+07 TUNNEL LID



7 STA: 3+57 TUNNEL LID



10 STA: 5+09 TUNNEL LID



2 STA: 1+07 TUNNEL LID



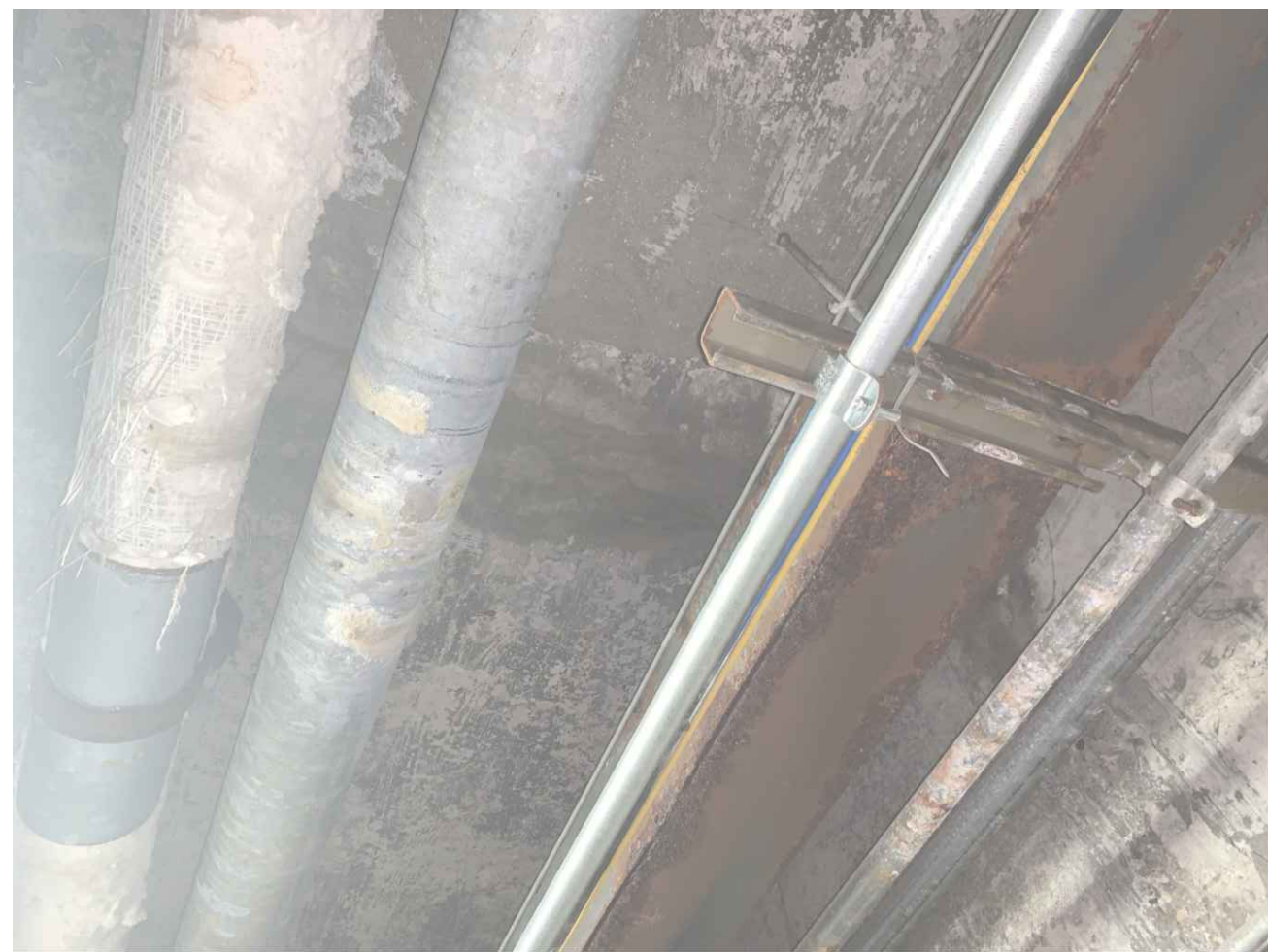
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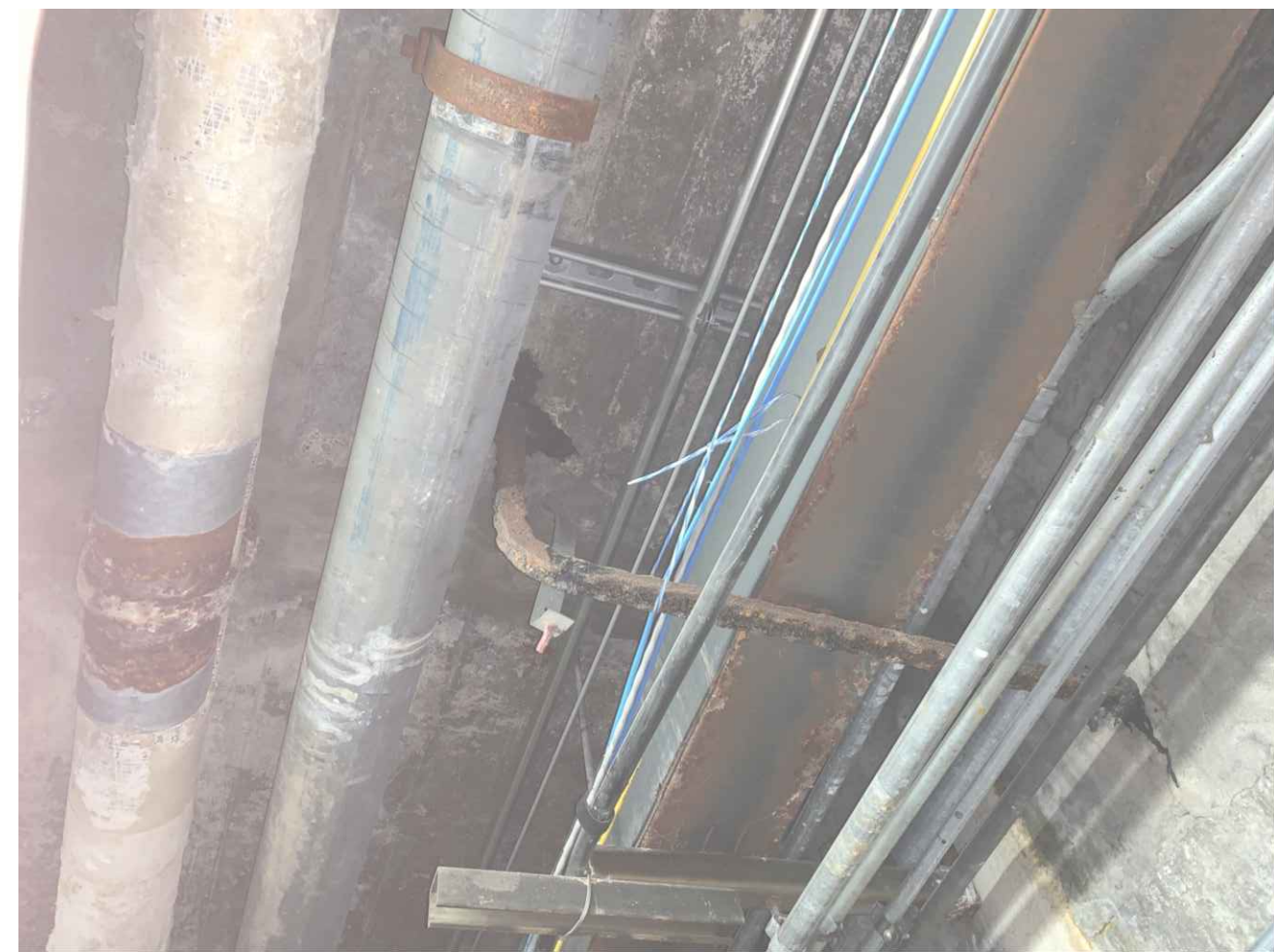
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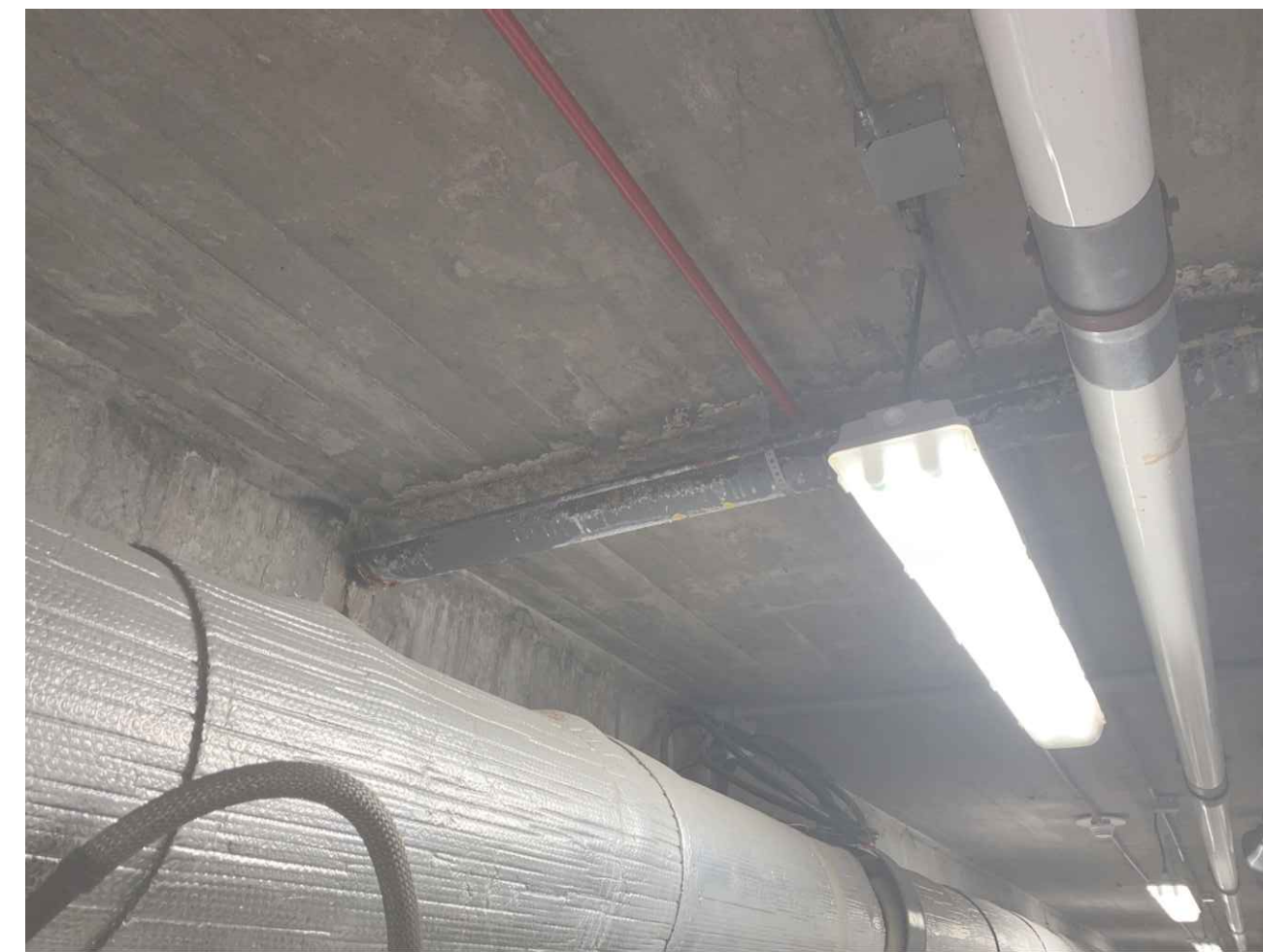
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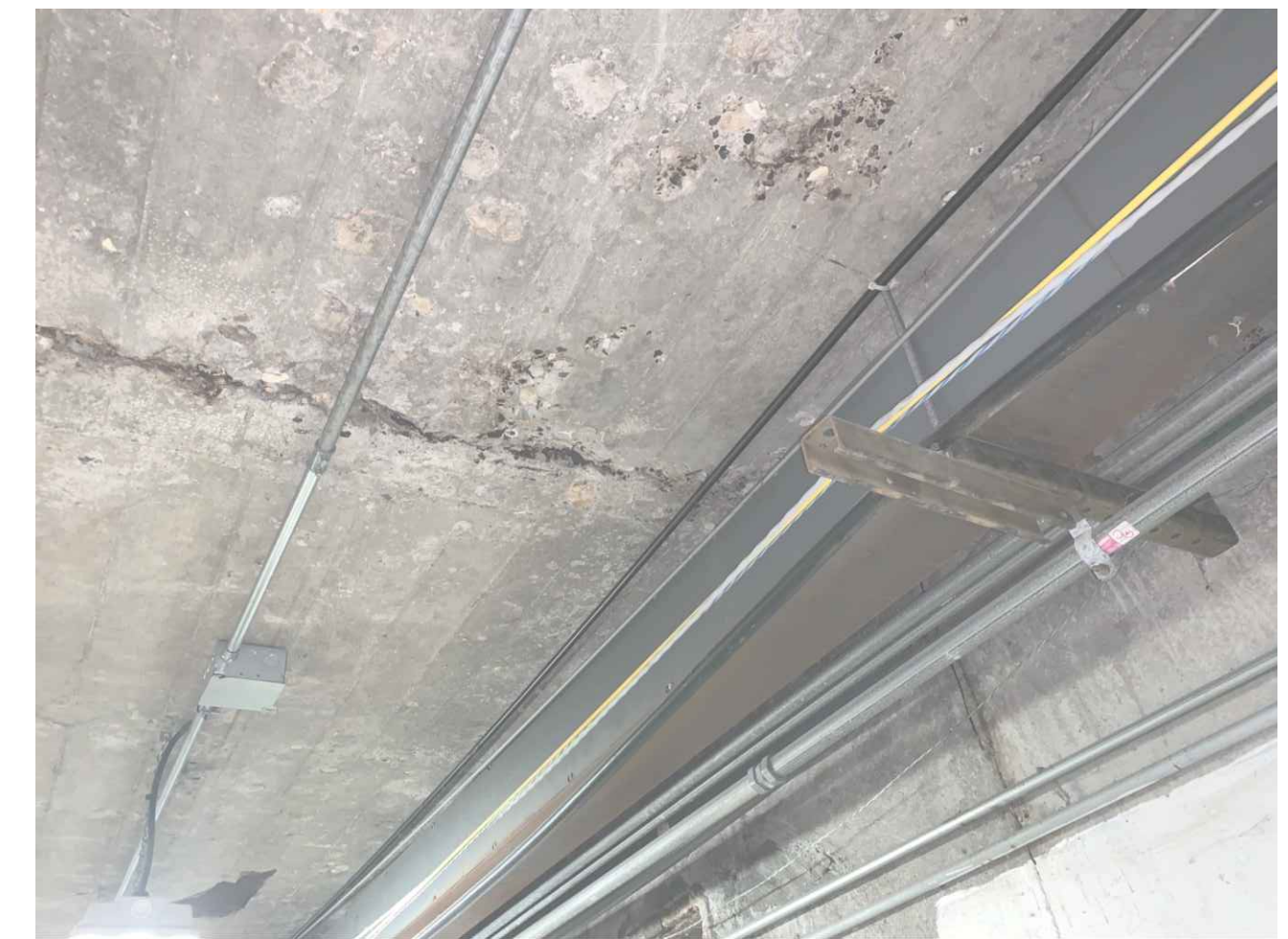
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6 STA: 3+07 TUNNEL LID



9 STA: 4+58 TUNNEL LID



12 STA: 6+08 TUNNEL LID

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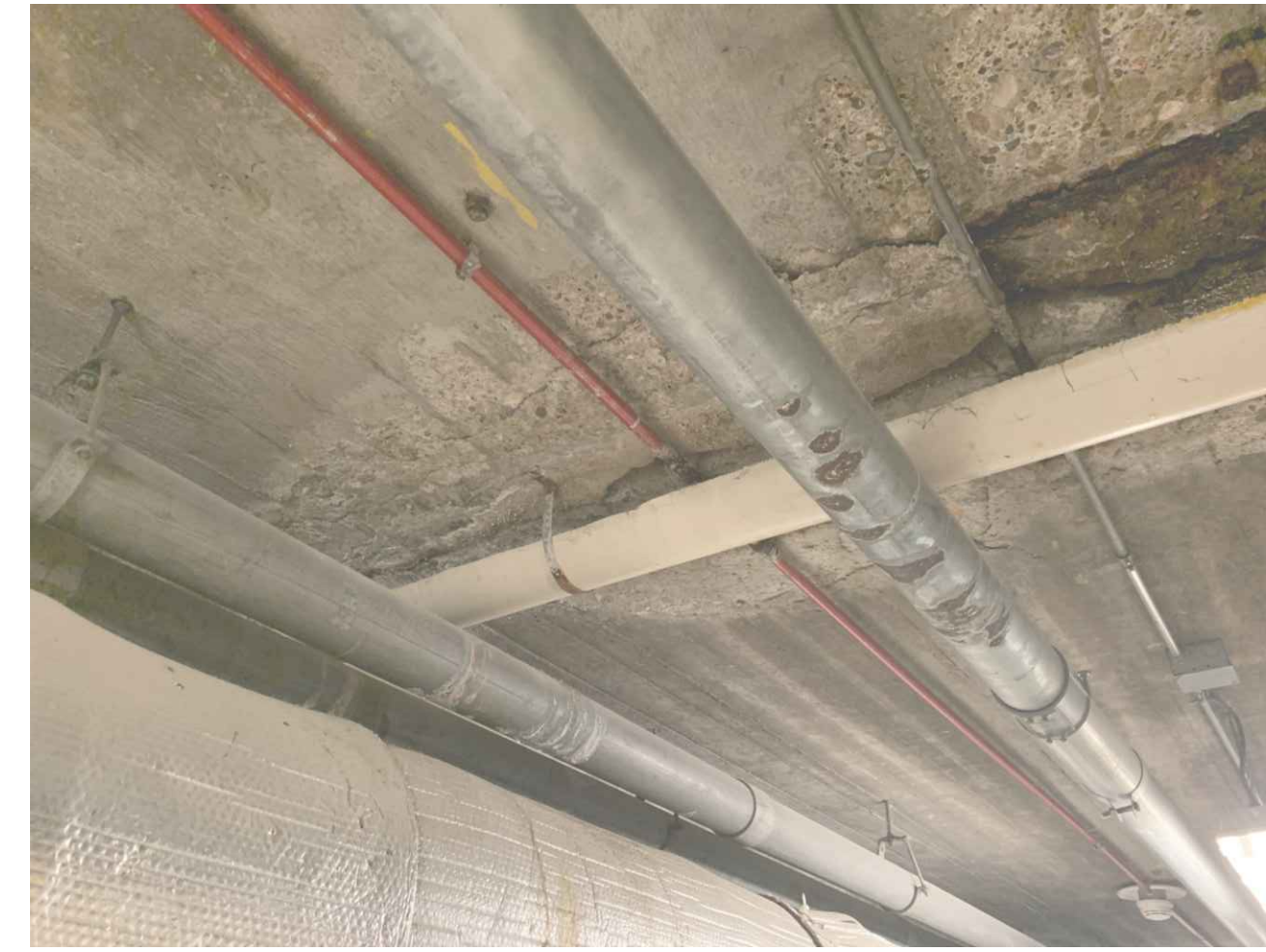
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4 STA: 8+09 TUNNEL LID



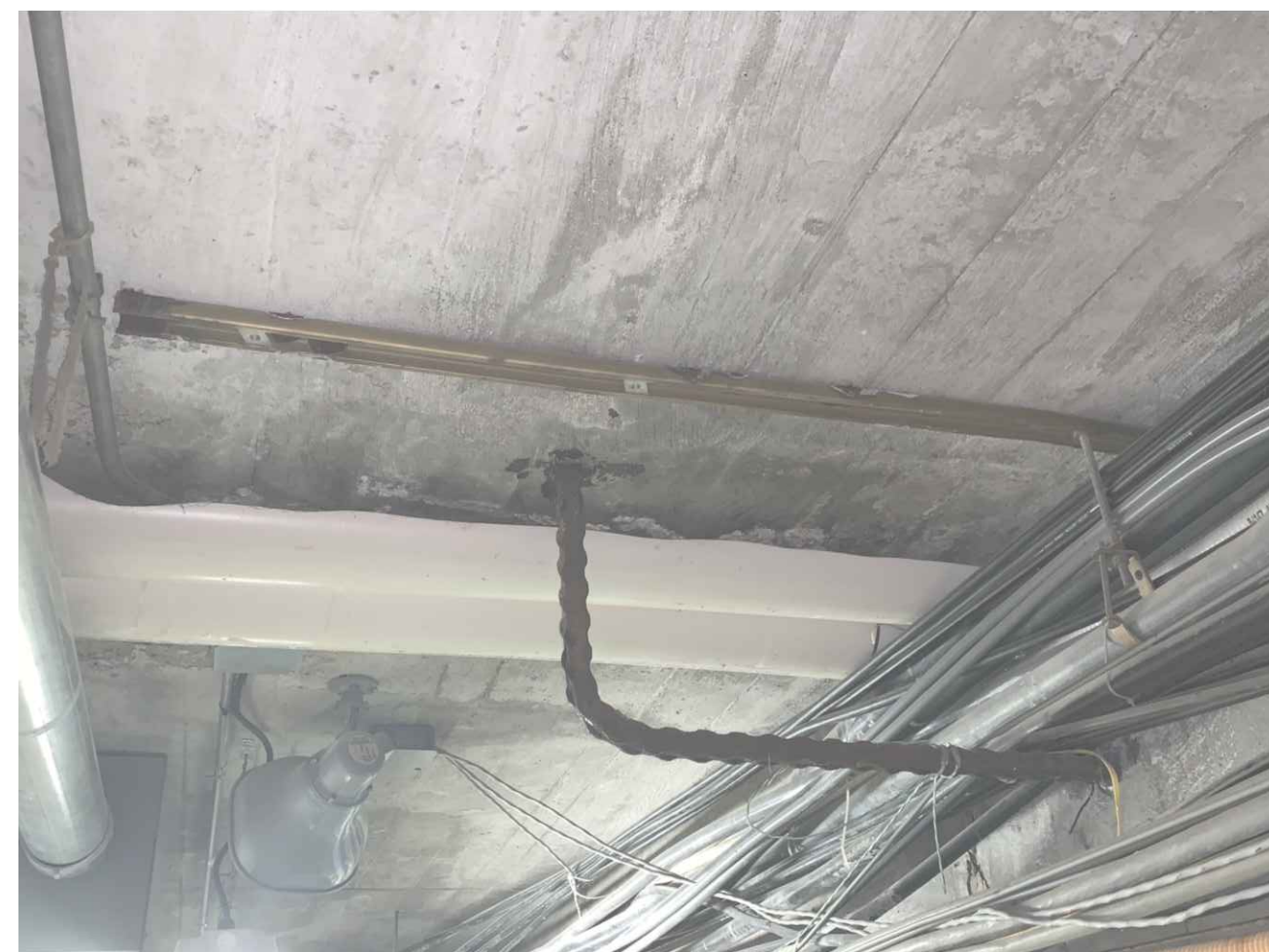
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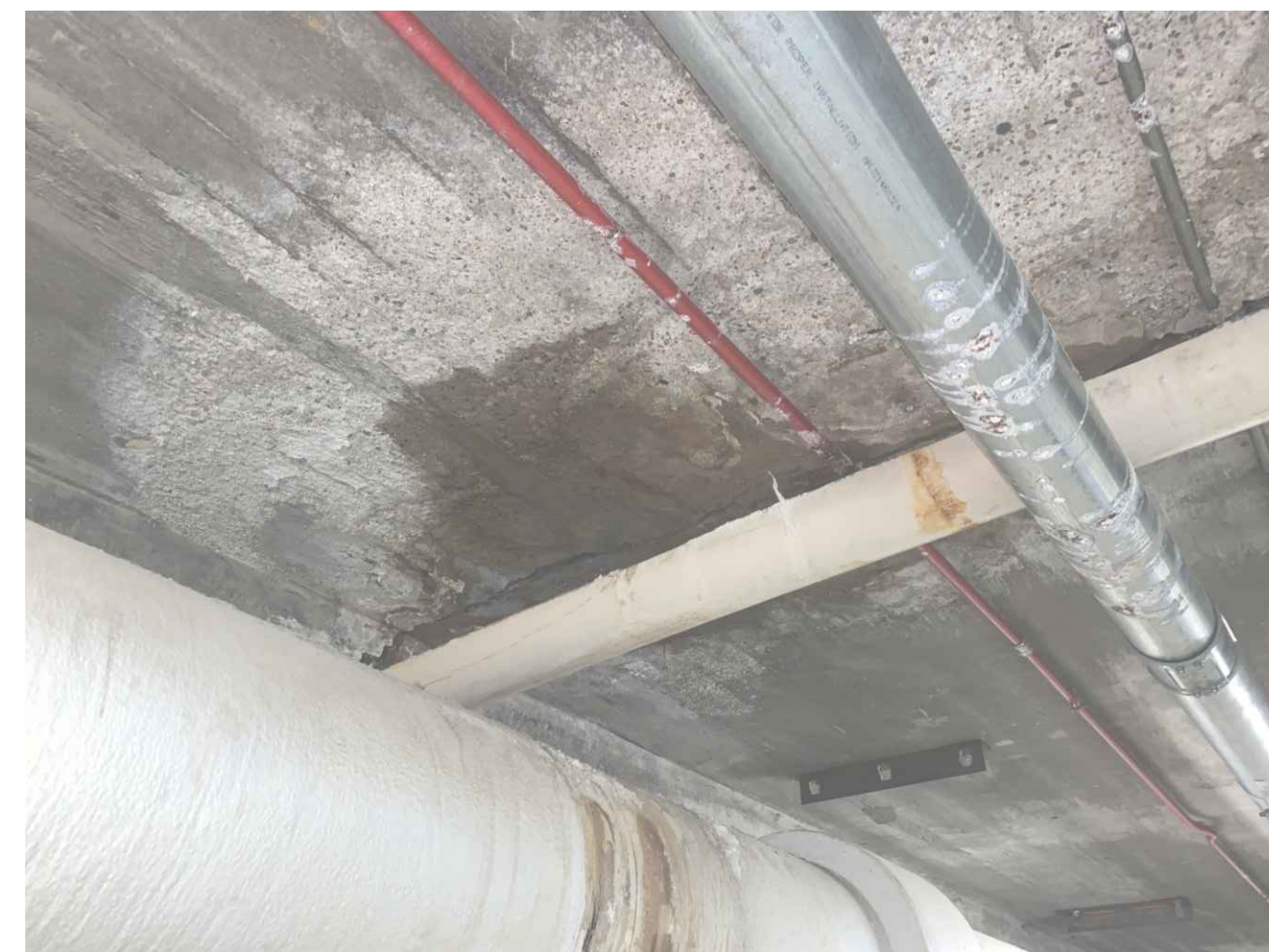
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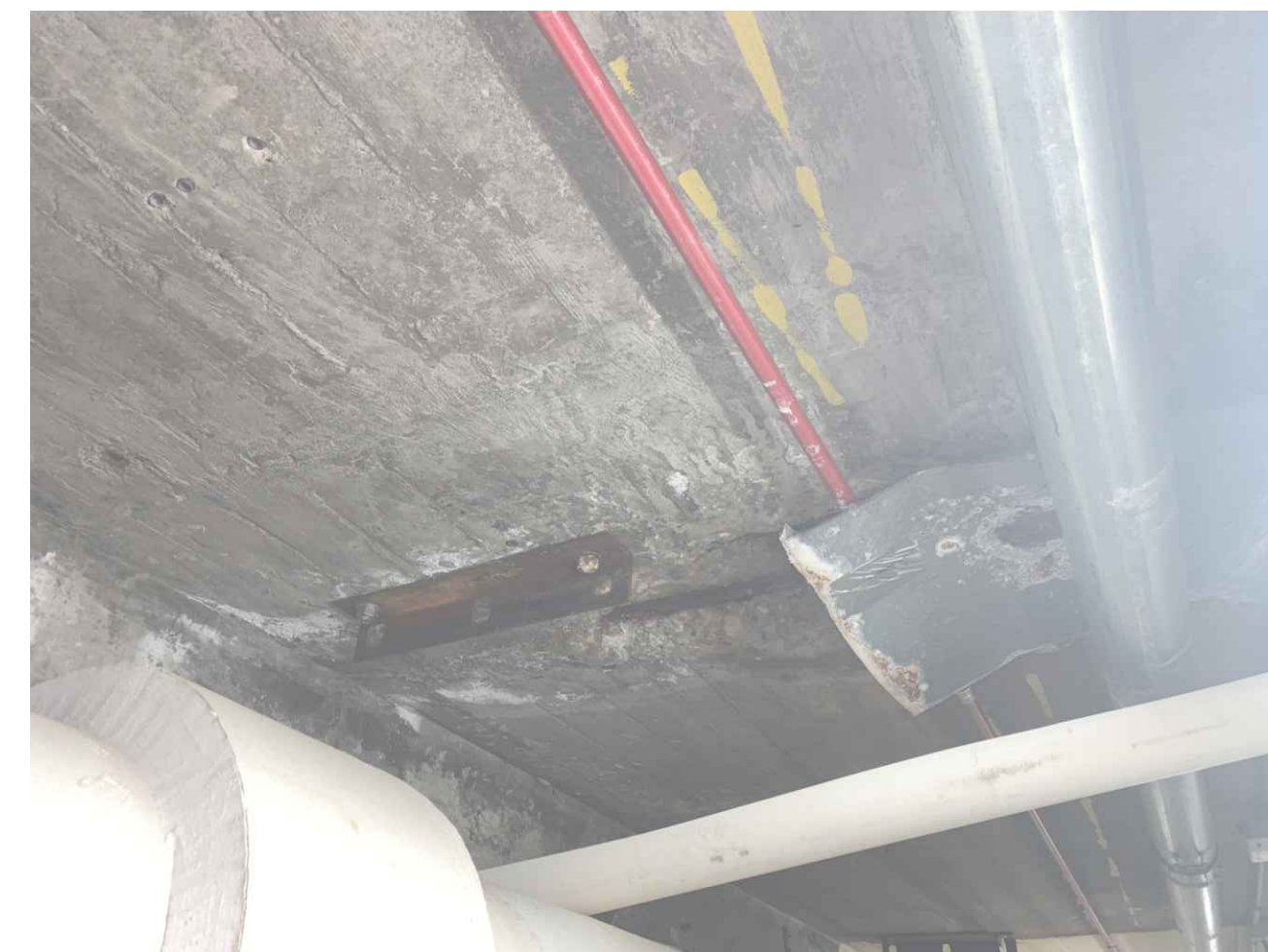
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5 STA: 8+59 TUNNEL LID



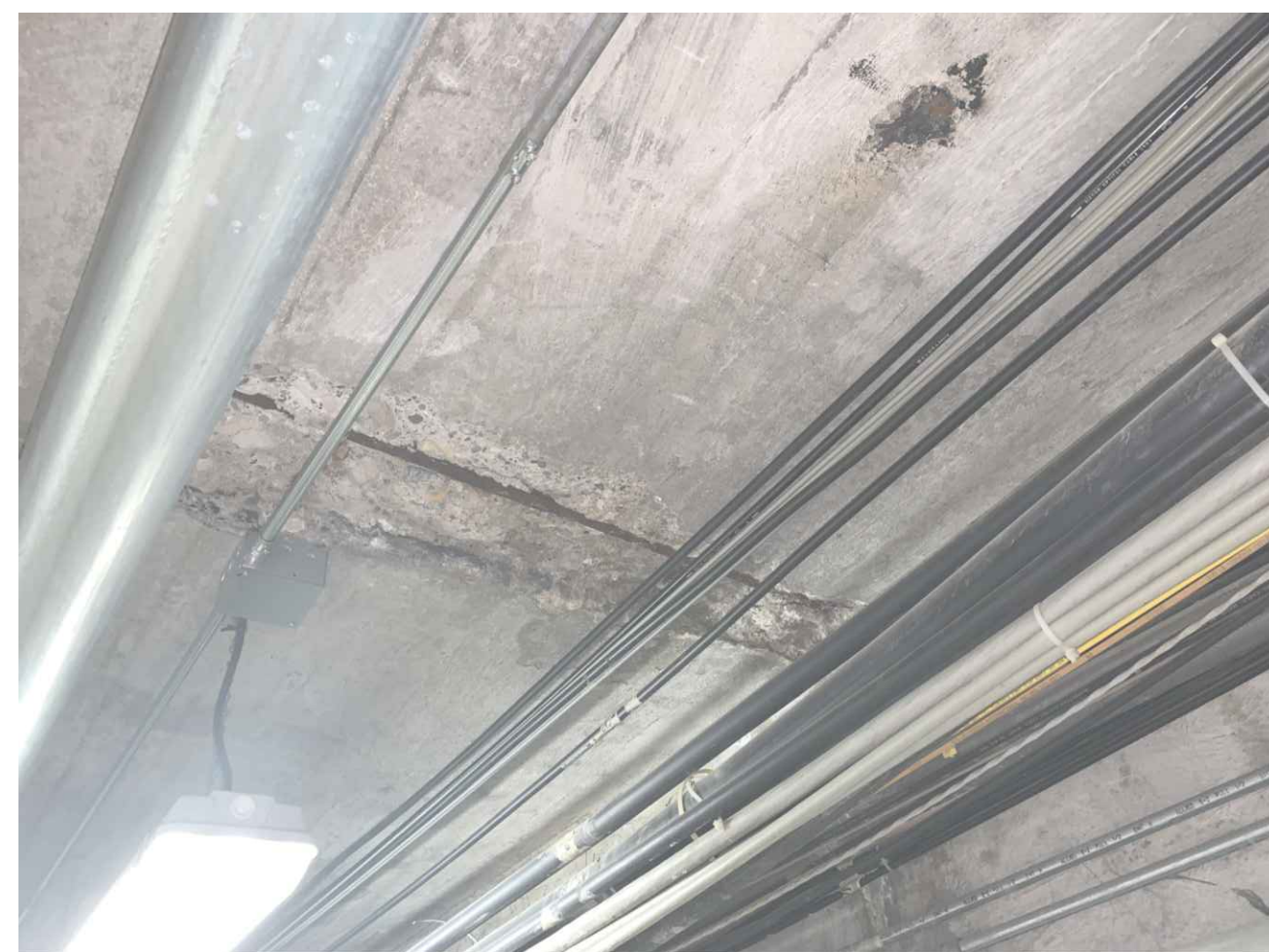
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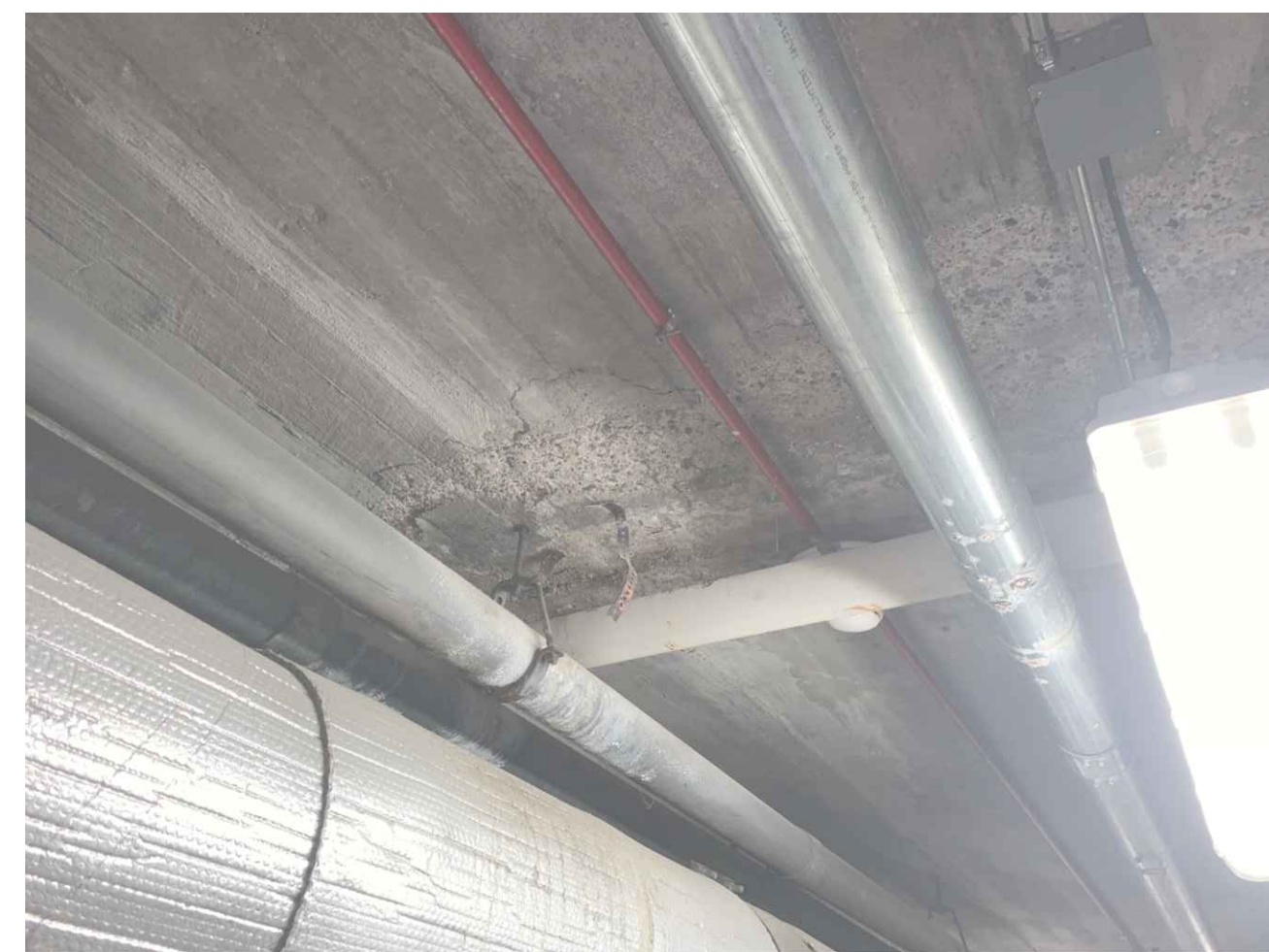
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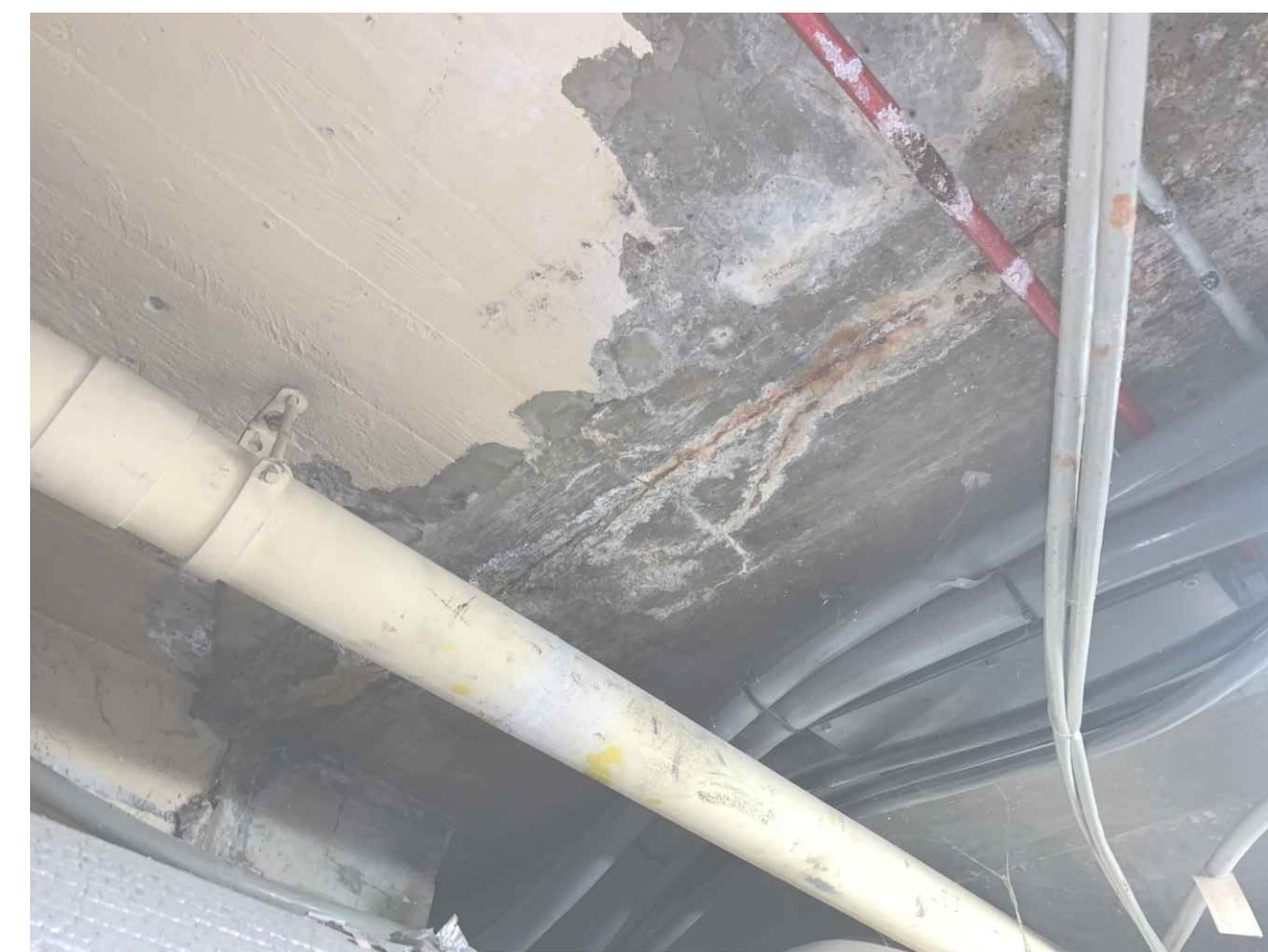
3 STA: 7+59 TUNNEL LID



6 STA: 9+09 TUNNEL LID



9 STA: 11+08 TUNNEL LID



12 STA: 12+46 TUNNEL LID

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