

County of Hamilton

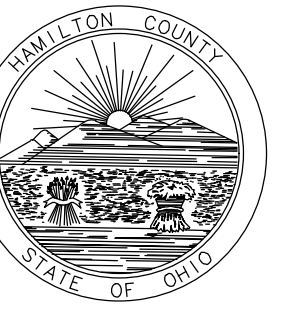
1916 Central Parkway Garage

Concrete and Waterproofing Repairs

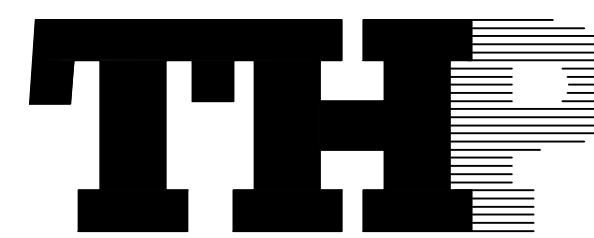


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Prepared by:



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DRAWING INDEX:

- 001 Title Sheet, Drawing Index and General Notes
- 101 Supported Level Plan - Slab Repairs
- 102 Supported Level Plan - Soffit Repairs
- 201 Concrete and Miscellaneous Repair Details
- 202 Sealant and Traffic Membrane Details

GENERAL NOTES:

CODES AND DOCUMENTS

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY WITH ALL APPLICABLE CITY, COUNTY, STATE AND FEDERAL LAWS INCLUDING THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ADOPTED PURSUANT THERETO.
2. ALL WORK SHALL CONFORM TO THE CURRENT OHIO BUILDING CODE AND ALL LOCAL REQUIREMENTS.
3. A SEPARATE BOUND PROJECT MANUAL DATED JUNE 2018 EXISTS AND IS PART OF THE CONTRACT DOCUMENTS. GENERAL CONDITIONS, TECHNICAL INFORMATION, AND REQUIREMENTS ARE INCLUDED IN THE PROJECT MANUAL. CLEARLY ORGANIZED AND DESCRIBED IN SECTIONS CONSISTENT WITH NORMALLY ACCEPTED CONSTRUCTION SPECIFICATION INSTITUTE FORMATS. THE CONTRACTOR IS RESPONSIBLE FOR ALL REQUIREMENTS LISTED IN THE PROJECT MANUAL, BUT NOT NECESSARILY SHOWN IN THE DRAWINGS.
4. ALL DETAILS, SECTIONS AND NOTES ON THE DRAWINGS ARE INTENDED TO BE TYPICAL FOR SIMILAR SITUATIONS ELSEWHERE, UNLESS OTHERWISE NOTED.
5. ALL DIMENSIONS SHOWN ARE APPROXIMATE AND ARE TO BE FIELD VERIFIED BY THE CONTRACTOR.

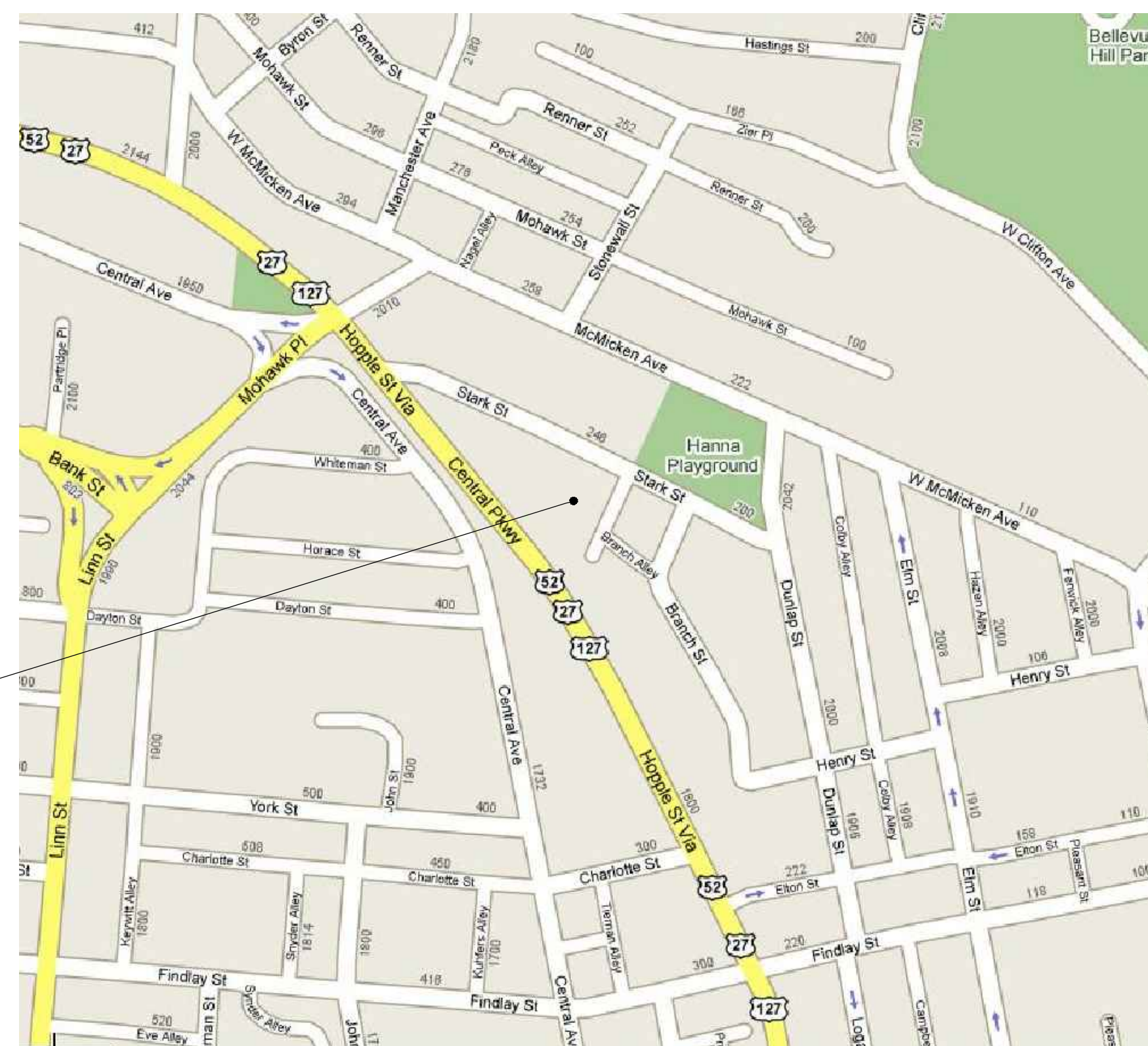
COORDINATION AND CONSTRUCTION

1. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT FOR SUCCESSFUL COMPLETION OF THIS PROJECT.
2. CONTRACTOR SHALL APPLY, SECURE, AND PAY FOR ALL REQUIRED LOCAL PERMITS, FEES, LICENSES, AND APPROVAL FOR COMPLETION OF THE WORK.
3. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND DIMENSIONS AT THE SITE PRIOR TO SUBMITTING SHOP DRAWINGS AND FABRICATING ANY WORK. IMMEDIATELY REPORT ANY DISCREPANCIES TO THE ENGINEER.
4. NEW CONSTRUCTION WORK SHALL ALIGN WITH AND MATCH EXISTING CONSTRUCTION EXCEPT WHERE OTHERWISE DIMENSIONED OR DETAILED.
5. ANY ADJACENT, EXISTING FINISHES AND/OR EQUIPMENT DAMAGED DURING DEMOLITION OR CONSTRUCTION WORK SHALL BE REPAIRED OR REPLACED AT CONTRACTOR'S EXPENSE.
6. CONTRACTOR WILL COORDINATE ALL CONSTRUCTION ACTIVITIES, SCHEDULE, AND PHASING WITH THE OWNER AND THE ENGINEER.
7. CONTRACTOR SHALL DISPOSE OF ALL DEBRIS OFF SITE IN A LAWFUL MANNER. MATERIALS THAT CAN BE RECYCLED SHALL BE AT A LOCAL RECYCLING PLANT.

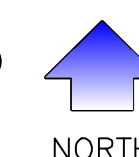
SAFETY

1. PROJECT SAFETY IS CONTRACTOR'S RESPONSIBILITY. CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE EMPLOYEES, GENERAL PUBLIC, WORKMEN AND STRUCTURE DURING CONSTRUCTION.
2. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
3. ENGINEER'S REVIEW OF CONSTRUCTION PROGRESS IS FOR CONTRACTOR'S PERFORMANCE TO ACHIEVE THE COMPLETED DESIGN, AND IS NOT INTENDED TO INCLUDE REVIEW OF ADEQUACY OF CONTRACTOR'S SAFETY MEASURES IN, ON, OR NEAR THE CONSTRUCTION SITE.

PROJECT LOCATION



VICINITY MAP



ISSUES

FOR BID

REVISIONS

1

5/31/2018

DRAWN BY:

G.J. Schmitz

ENGINEER:

S.E. Harden

CHECKED BY:

S.E. Harden

County of
Hamilton
State of Ohio

1916 Central
Parkway Garage

Concrete and
Waterproofing Repairs

ITB No. 041-18

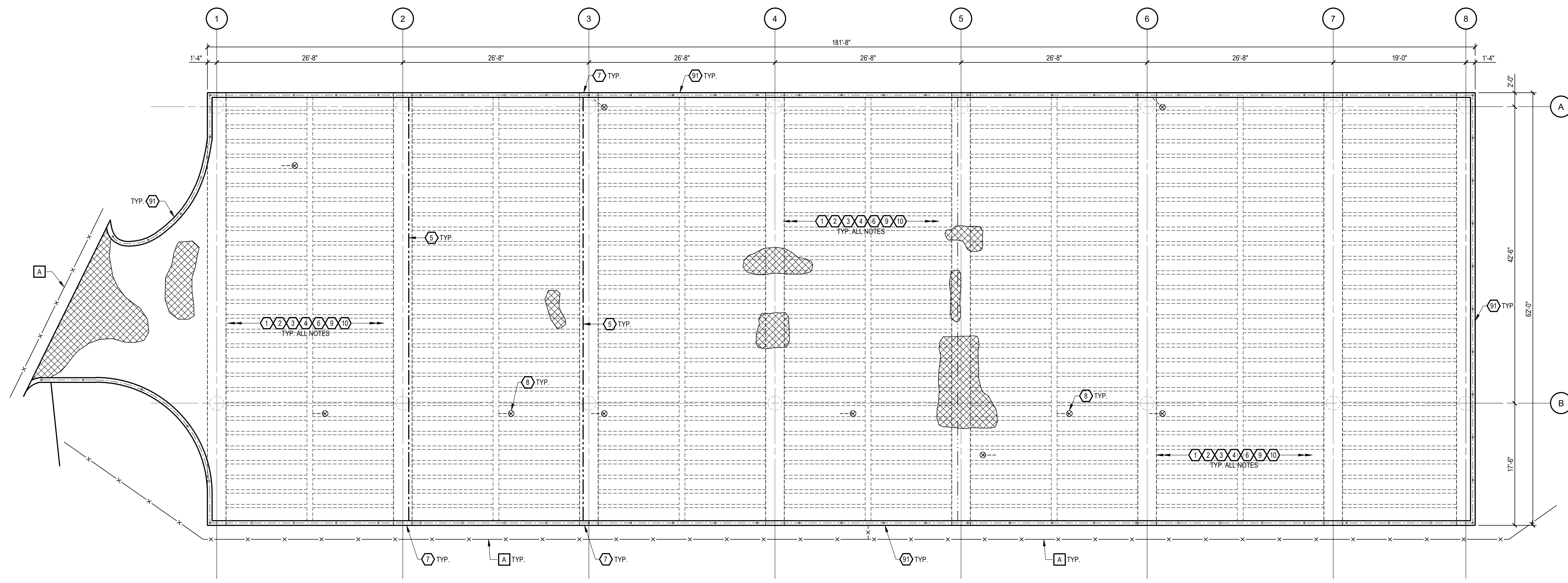
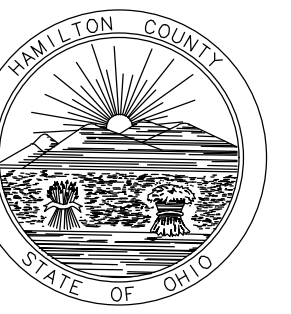
DRAWING TITLE
TITLE SHEET,
DRAWING INDEX AND
GENERAL NOTES

JOB NUMBER DATE

18265.00 June 2018

DRAWING NUMBER

001



1
 101
 1/8" = 1'-0"
SUPPORTED LEVEL PLAN
 NORTH

GENERAL NOTES: □

- A** PROVIDE AND MAINTAIN BARRICADES FOR PROJECT DURATION. REFER TO SPECIFICATION SECTION 015600.
- B** CONTRACTOR SHALL MAINTAIN HALF OF THE SURFACE LOT PARKING UNDER THE GARAGE FOR PATRON USE. THE ENTIRE SUPPORTED FLOOR WILL BE AVAILABLE FOR CONTRACTOR WORK EFFORTS.

REPAIR NOTES: ⬡

1. THE CONTRACTOR SHALL CHAIN DRAG AND HAMMER SOUND SURVEY THE ENTIRE SUPPORTED LEVEL CONCRETE SLAB SURFACE. LOCATE AND MARK ALL DELAMINATED, SPALLED, OR OTHERWISE DETERIORATED CONCRETE. VERIFY LOCATIONS WITH ENGINEER PRIOR TO BEGINNING REPAIRS. REFER TO DETAIL 1/201 AND 9/201.
2. EXISTING VEHICULAR TRAFFIC MEMBRANE TO BE RECOATED. CONTRACTOR TO REVIEW ALL EXISTING MEMBRANE, AS NECESSARY, REMOVE ANY LOOSE, DEBONDED MEMBRANE PRIOR TO BEGINNING MEMBRANE INSTALLATION.
3. PREPARE SURFACES AND INSTALL VEHICULAR TRAFFIC MEMBRANE SYSTEM WITH EPOXY WEAR COURSE. REFER TO DETAILS ON DRAWING 202 AND SPECIFICATION SECTION 071800.
4. PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL RECORD THE EXISTING STRIPING LAYOUT. AT THE COMPLETION OF VEHICULAR TRAFFIC MEMBRANE INSTALLATION, PREPARE SURFACES AND INSTALL NEW STRIPING TO MATCH ORIGINAL CONFIGURATION. REFER TO SPECIFICATION SECTION 321723.
5. REMOVE ALL COMPONENTS OF THE EXISTING EXPANSION JOINT. PREPARE THE BLOCKOUT AND INSTALL CONCRETE PATCH MATERIAL. AFTER ADEQUATE CURE, PREPARE JOINT OPENING AND INSTALL COMPRESSIBLE FOAM EXPANSION JOINT. REFER TO DETAIL 4/202.
6. PRIOR TO MEMBRANE INSTALLATION, PREPARE SURFACES AND INSTALL COVE SEALANT AT PERIMETER OF ALL PARKING BUMPERS. TERMINATE NEW MEMBRANE ON COVE SEALANT. REFER TO DETAIL 1/202 AND SIMILAR DETAIL 7/202.
7. REMOVE AND REPLACE VERTICAL ISOLATION JOINT SEALANT IN CONCRETE PERIMETER WALL. REFER TO DETAIL 2/202.
8. EXISTING FLOOR DRAIN. CLEAN/REMOVE DEBRIS FROM DRAINS. MAINTAIN CLEAR OF DEBRIS AT ALL TIMES DURING PROJECT.
9. CONTRACTOR SHALL VISUALLY SURVEY ENTIRE DECK SURFACE FOR CRACKS. CONFIRM QUANTITY AND LOCATIONS WITH OWNER AND REPAIR. REFER TO DETAIL 3/202.
10. CONTRACTOR SHALL VISUALLY SURVEY ENTIRE DECK SURFACE FOR FAILED SEALANT(CONSTRUCTION, COVE, CRACK). CONFIRM QUANTITY AND LOCATIONS WITH OWNER AND REPAIR PER DETAILS ON DRAWING 202.
91. AS PART OF ADD ALTERNATE NO. 1: PREPARE ALL SURFACES OF THE PERIMETER WALL AND BEAM, AND INSTALL HIGH PERFORMANCE COATINGS. REFER TO SPECIFICATION SECTION 012300 AND 099100.

LEGEND:

- CONCRETE BEAM OR JOIST BELOW
- EXPANSION JOINT
- CONSTRUCTION JOINT
- ⊗ APPROXIMATE LOCATION OF KNOWN CONCRETE SLAB DETERIORATION
- CONSTRUCTION BARRICADE
- EXISTING TRAFFIC MEMBRANE TO BE RECOATED
- EXISTING STEEL RAILING
- APPROXIMATE LOCATION OF EXISTING FLOOR DRAIN AND PIPING

ISSUES	
REVISIONS	
1	5/31/2018 FOR BID

DRAWN BY: G.J. Schmitz
 ENGINEER: S.E. Harden
 CHECKED BY: S.E. Harden

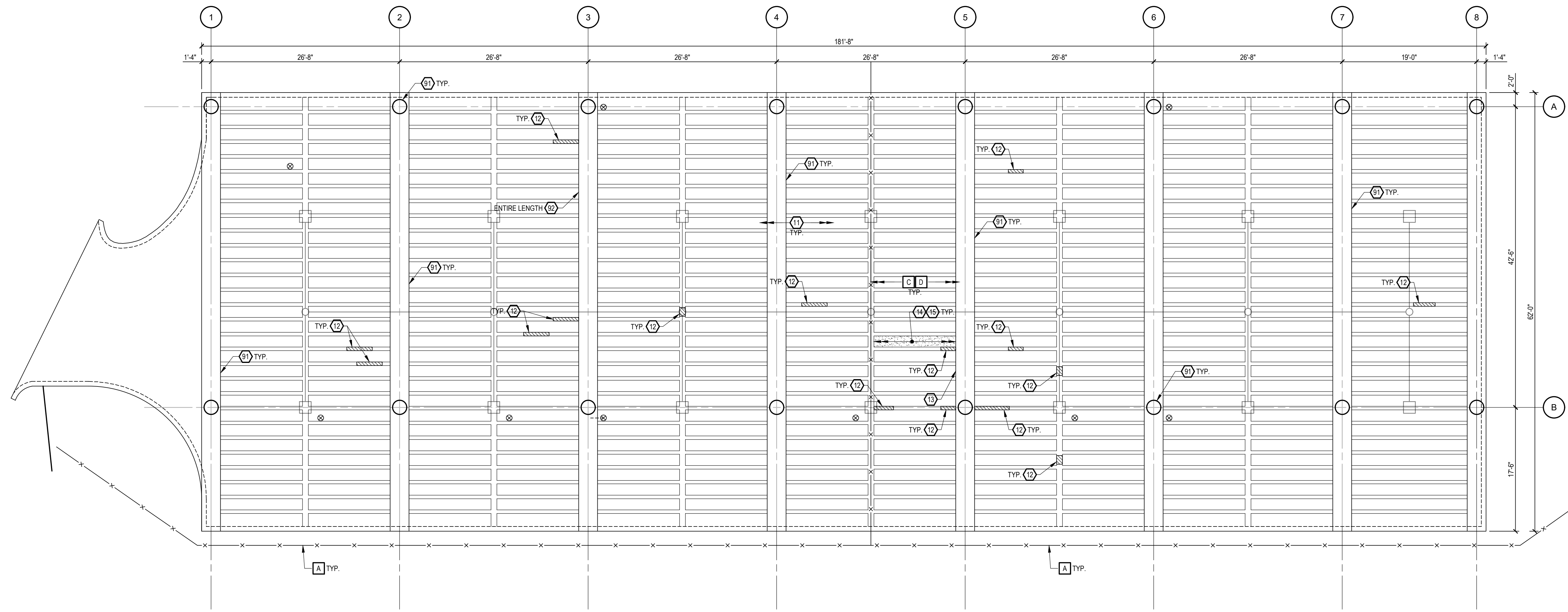
County of Hamilton
 State of Ohio
 1916 Central Parkway Garage
 Concrete and Waterproofing Repairs

ITB No. 041-18
 DRAWING TITLE: SUPPORTED LEVEL PLAN - SLAB REPAIRS
 JOB NUMBER: 18265.00 DATE: June 2018
 DRAWING NUMBER



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1
102
SOFFIT REPAIRS
SUPPORTED LEVEL SOFFIT PLAN
 1/8" = 1'-0"
B
 NORTH

GENERAL NOTES:

- A** PROVIDE AND MAINTAIN BARRICADES FOR PROJECT DURATION. REFER TO SPECIFICATION SECTION 015600.
- B** CONTRACTOR SHALL MAINTAIN HALF OF THE SURFACE LOT PARKING UNDER THE GARAGE FOR PATRON USE. THE ENTIRE SUPPORTED FLOOR WILL BE AVAILABLE FOR CONTRACTOR WORK EFFORTS.
- C** CONTRACTOR SHALL TEMPORARILY SUPPORT LIGHT HOUSINGS, ELECTRICAL CONDUIT, AND PLUMBING ACCESSORIES AS NECESSARY TO FACILITATE THE REPAIRS. DO NOT DAMAGE. RESET ALL TEMPORARILY REMOVED EQUIPMENT/CONDUIT TO MATCH ORIGINAL CONFIGURATION AT THE COMPLETION OF REPAIRS.
- D** FOR ALL JOIST REPAIRS WITHIN 3'-0" FROM FACE OF BEAM, PROVIDE SHORE POST WITH MINIMUM 5,000 LBS AXIAL LOAD CAPACITY. INSTALL SHORE POST PRIOR TO BEGINNING REPAIRS - IMMEDIATELY ADJACENT TO REPAIR AREA (ON SOUND JOIST CONCRETE). SECURE POST TO PREVENT KICKOUT. PROVIDE (2) 12"x12"x1/2" WOOD BEARING PLATES. SHORING IS INCIDENTAL TO THE WORK.

REPAIR NOTES:

- 11. THE CONTRACTOR SHALL VISUALLY SURVEY THE ENTIRE GARAGE SOFFIT TO LOCATE DETERIORATED CONDITIONS. MARK AREAS FOR REPAIR AND REVIEW WITH THE ENGINEER PRIOR TO BEGINNING REPAIRS. REFER TO DETAILS ON SHEET 201.
- 12. APPROXIMATE LOCATION OF DELAMINATED, SPALLED, OR OTHERWISE DETERIORATED CONCRETE JOIST. REFER TO DETAIL 2/201 AND 3/201 FOR PROCEDURES.
- 13. APPROXIMATE LOCATION OF DELAMINATED, SPALLED, OR OTHERWISE DETERIORATED CONCRETE BEAM. REFER TO DETAIL 4/201 FOR REPAIR PROCEDURES.
- 14. AT AREAS OF SLAB SOFFIT DETERIORATION THROUGHOUT THE GARAGE (GENERALLY ASSOCIATED WITH SHALLOW MESH REINFORCING), PERFORM SOFFIT SPALL KNOCKDOWN REPAIRS ON A TIME-AND-MATERIAL BASIS TO BE PAID FROM THE CASH ALLOWANCE.
- 92. **AS PART OF ADD ALTERNATE NO. 2:** KNOWN LOCATION OF DETERIORATED CONCRETE BEAM. PROVIDE SHORES FOR THE ENTIRE WIDTH OF THE GARAGE TO SUPPORT THE SLAB TO THE SOUTH ALONG COLUMN LINE 3. REFER TO DETAIL 8/201. REMOVE ALL REMNANTS OF EXISTING STEEL BEARING PLATE AND DETERIORATED CONCRETE. PREPARE SURFACES AND PATCH CONCRETE. AFTER ADEQUATE CURE, INSTALL CONTINUOUS MASTICORD BEARING PADS FOR THE LENGTH OF THE BEAM. REFER TO DETAIL 6/201.

LEGEND:

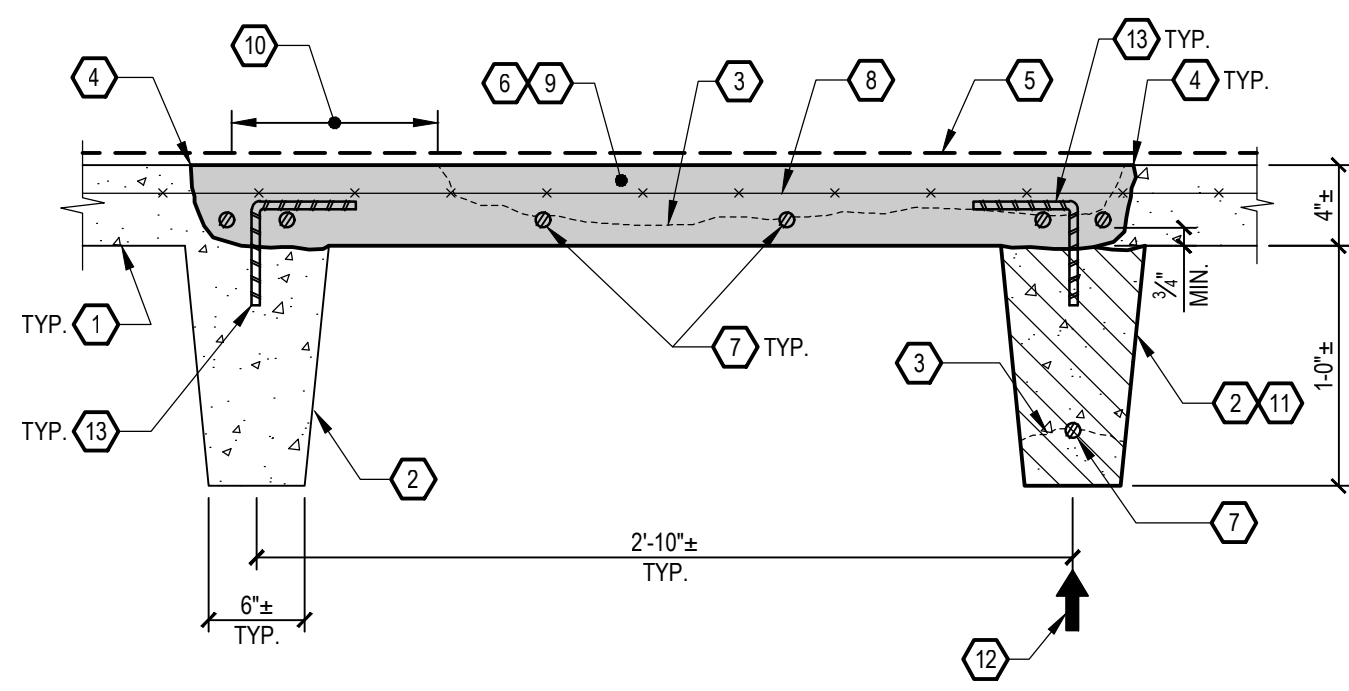
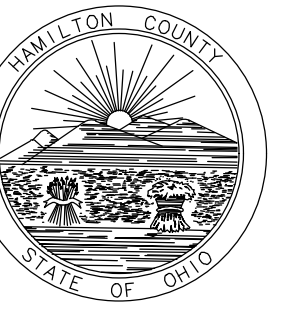
- APPROXIMATE LOCATION OF DETERIORATED JOIST
- APPROXIMATE LOCATION OF DETERIORATED SLAB SOFFIT
- APPROXIMATE LOCATION OF EXISTING LIGHTING AND ASSOCIATED CONDUIT
- APPROXIMATE LOCATION OF EXISTING FLOOR DRAIN AND PIPING
- CONSTRUCTION BARRICADE
- FACE OF CONCRETE WALL ABOVE

NO.	DATE	REVISIONS
1	5/31/2018	FOR BID

DRAWN BY: **G.J. Schmitz**
 ENGINEER: **S.E. Harden**
 CHECKED BY: **S.E. Harden**

County of Hamilton
 State of Ohio
 1916 Central Parkway Garage
 Concrete and Waterproofing Repairs

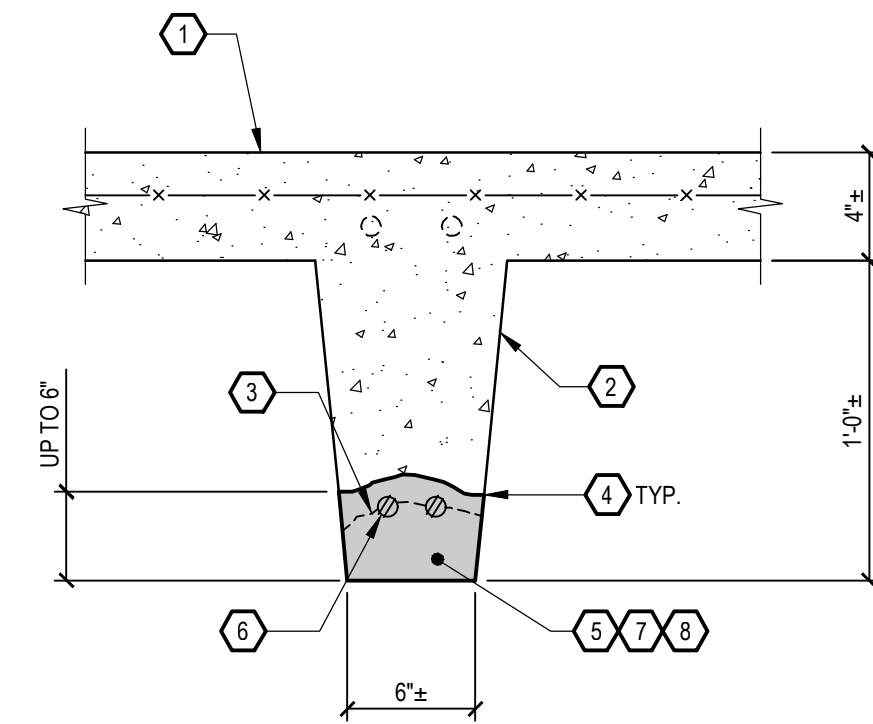
ITB No. 041-18
 DRAWING TITLE: **SUPPORTED LEVEL PLAN - SOFFIT REPAIRS**
 JOB NUMBER: **18265.00** DATE: **June 2018**
 DRAWING NUMBER



- 1 EXISTING CAST-IN-PLACE CONCRETE SLAB.
- 2 EXISTING CONCRETE JOIST.
- 3 EXISTING DELAMINATION PLANE.
- 4 PROVIDE 1/2" SAWCUT AROUND PERIMETER OF REPAIR AREA.
- 5 EDGE OF REMOVAL SHOULD BE AT A 3:1 SLOPE AS SHOWN.
- 6 REMOVE ALL SOUND AND UNSOUND CONCRETE WITHIN SHADED AREA. EXCAVATE 3/4" AROUND EXPOSED REINFORCING. REFER TO SPECIFICATION SECTION 030100.
- 7 EXISTING REINFORCING. PREPARE EXPOSED STEEL AND EPOXY COAT THE ENTIRE BAR (INCLUDING UNDERSIDE). REFER TO SPECIFICATION SECTION 030100.
- 8 REMOVE EXISTING MESH REINFORCEMENT WITHIN EXCAVATION. MAINTAIN 6"± AT PATCH PERIMETER TO PROVIDE LAP FOR NEW MESH. PROVIDE 4X4 - W2.1XW2.1 MESH REINFORCEMENT. REFER TO SPECIFICATION SECTION 055000.
- 9 PREPARE EXCAVATION, FORM, AND PROVIDE PATCH MATERIAL. REFER TO SPECIFICATION SECTION 030100.
- 10 IF DELAMINATION TERMINATES OUTSIDE OF A JOIST, REPAIR AREA WILL BE EXTENDED TO MIDPOINT OF THE ADJACENT JOIST AS SHOWN. EXTENT OF REPAIR AREA TO BE DETERMINED IN THE FIELD IN CONJUNCTION WITH THE OWNER.
- 11 POSSIBLE COMPLETE REMOVAL AND REPLACEMENT OF DETERIORATED JOIST. FORM AND POUR WITH SLAB REPAIR ABOVE. PROVIDE 2" DEEP NOTCH IN BEAM (SIZE OF JOIST). REFER TO DETAIL 3/201.
- 12 PRIOR TO BEGINNING CHIPPING EFFORTS FOR FULL DEPTH FLOOR REPAIRS OR FULL JOIST REPLACEMENT, CONTRACTOR SHALL INSTALL SHORINGS. COORDINATE EXACT LOCATION WITH ENGINEER.
- 13 #4 HOOK 4" DRILL AND EPOXY 4" INTO JOIST AT APPROXIMATELY 1'-6" O.C. REFER TO SPECIFICATION 030100.
- 14 EXISTING URETHANE TRAFFIC BEARING MEMBRANE. REMOVE AS NECESSARY TO COMPLETE CONCRETE REPAIR WORK. ENSURE PATCH MATERIAL IS FINISHED FLUSH WITH TOP OF CONCRETE SLAB - NOT EXISTING MEMBRANE. REFER TO PLANS AND DETAILS FOR NEW MEMBRANE INSTALLATION.

1
 201
FULL DEPTH CONCRETE FLOOR REPAIRS
DETAIL
 NO SCALE

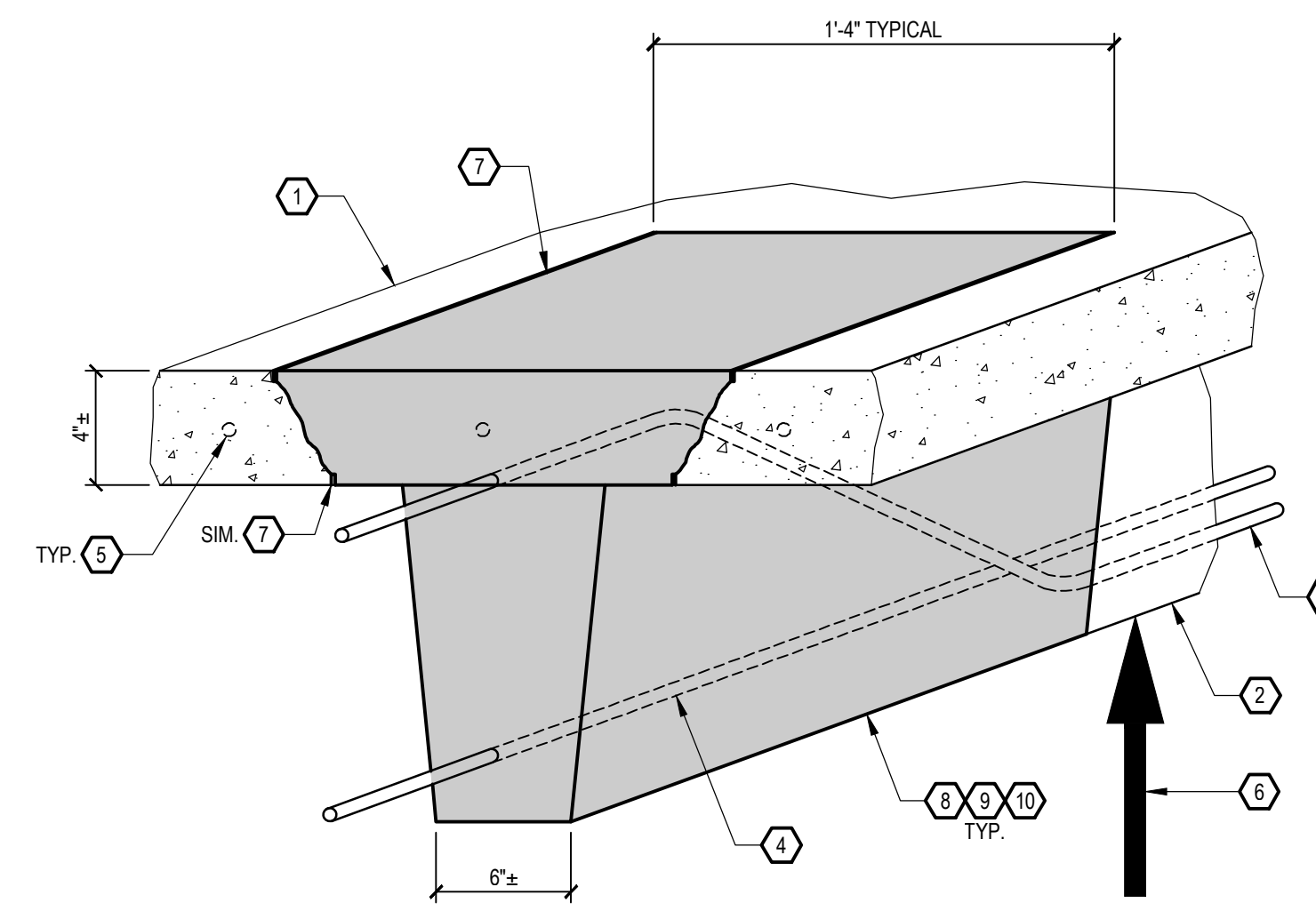
PAY UNIT PER SQ. FT. FOR FULL DEPTH REPAIRS
 PAY UNIT PER LIN. FT. FOR JOIST REPLACEMENT PER DETAIL 3/201



- 1 EXISTING CONCRETE SLAB.
- 2 EXISTING CONCRETE JOIST.
- 3 EXISTING DELAMINATION PLANE.
- 4 1/2" SAWCUT AROUND PERIMETER OF REPAIR AREA.
- 5 REMOVE ALL SOUND AND UNSOUND CONCRETE IN SHADED AREA. REFER TO SPECIFICATION SECTION 030100.
- 6 EXCAVATE 1/2" AROUND ALL REINFORCING. PREPARE EXPOSED STEEL AND COAT WITH EPOXY. REFER TO SPECIFICATION SECTION 030100.
- 7 PREPARE CAVITY AND PROVIDE NEW CONCRETE PATCH MATERIAL. REFER TO SPECIFICATION SECTION 030100.
- 8 FORM CHAMFER AT CORNER OF JOIST TO MATCH EXISTING.

2
 201
TYPICAL JOIST BOTTOM REPAIR
DETAIL
 NO SCALE

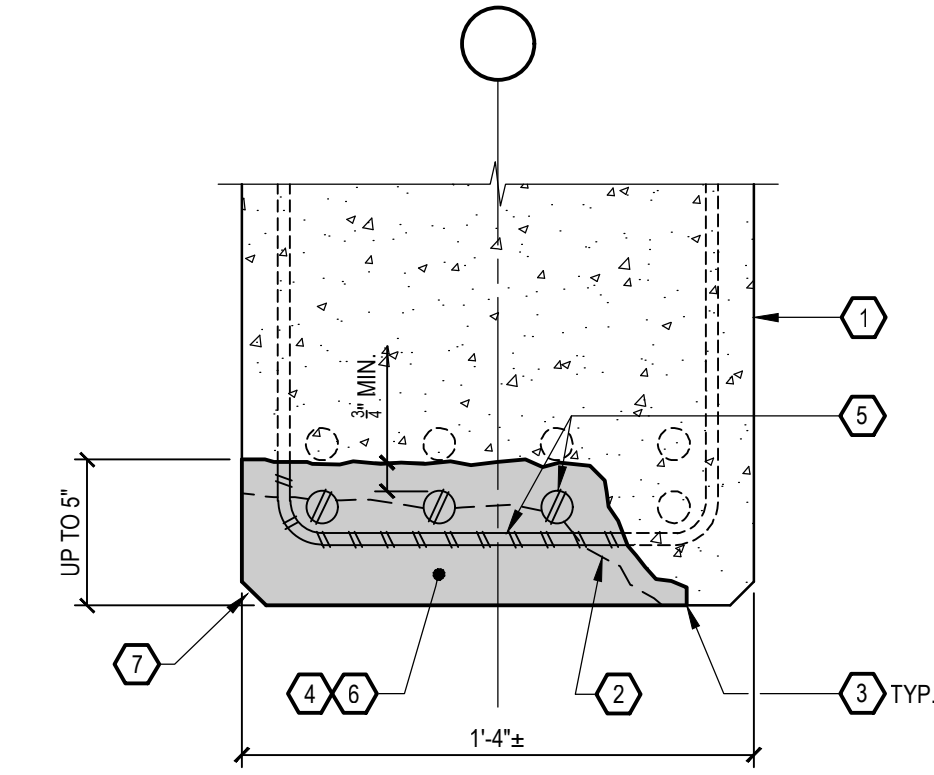
PAY UNIT PER LIN. FT.



- 1 EXISTING CONCRETE SLAB.
- 2 EXISTING CONCRETE JOIST.
- 3 EXISTING JOIST/SLAB REINFORCEMENT - TRUSS BAR. DO NOT DAMAGE. SANDBLAST PREPARE EXPOSED STEEL WITHIN REPAIR AREA AND COAT BAR WITH EPOXY. REFER TO SPECIFICATION SECTION 030100.
- 4 EXISTING JOIST REINFORCEMENT. DO NOT DAMAGE. SANDBLAST PREPARE EXPOSED STEEL WITHIN REPAIR AREA AND COAT BAR WITH EPOXY. REFER TO SPECIFICATION SECTION 030100.
- 5 EXISTING SLAB REINFORCEMENT. DO NOT DAMAGE. IF EXPOSED IN REPAIR AREA, SANDBLAST PREPARE AND COAT WITH ZINC-RICH EPOXY. REFER TO SPECIFICATION SECTION 030100.
- 6 WHEN REPAIR AREA IS WITHIN 3'-0" OF BEAM FACE, PROVIDE SHORE POST PRIOR TO BEGINNING JOIST REPAIRS. REMOVE SHORE POST AFTER PATCH MATERIAL CURE.
- 7 SAWCUT 1/2" VERTICAL EDGE AT PERIMETER OF REPAIR AREA. REFER TO SPECIFICATION SECTION 030100.
- 8 REMOVE ALL SOUND AND UNSOUND CONCRETE IN SHADED AREA. REFER TO SPECIFICATION SECTION 030100.
- 9 PREPARE CAVITY, FORM JOIST AND PLACE NEW CONCRETE PATCH MATERIAL. REFER TO SPECIFICATION SECTION 030100.
- 10 FORM CHAMFER AT CORNER OF JOIST TO MATCH EXISTING.

3
 201
JOIST REPLACEMENT
DETAIL
 NO SCALE

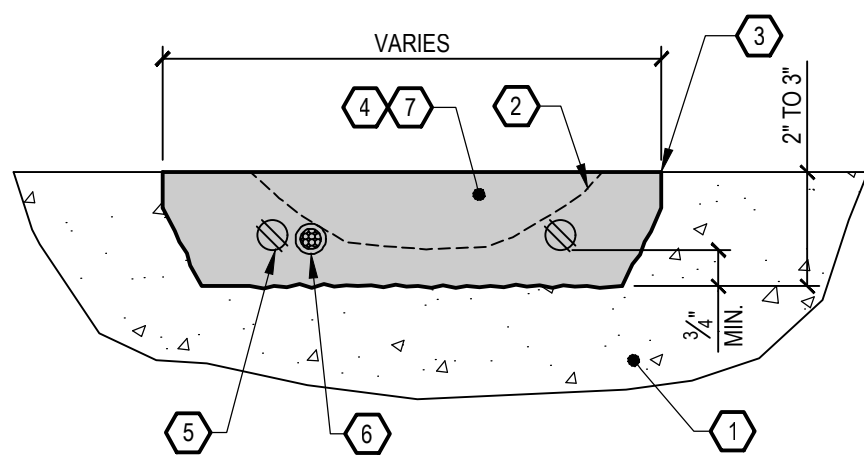
PAY UNIT PER LIN. FT.



- 1 EXISTING CONCRETE BEAM.
- 2 EXISTING DELAMINATION PLANE.
- 3 PROVIDE 1/2" SAWCUT AROUND PERIMETER OF REPAIR AREA.
- 4 REMOVE ALL SOUND AND UNSOUND CONCRETE WITHIN SHADED AREA. REFER TO SPECIFICATION SECTION 030100.
- 5 EXCAVATE 1/2" AROUND ALL REINFORCING. PREPARE EXPOSED STEEL AND COAT WITH EPOXY. REFER TO SPECIFICATION SECTION 030100.
- 6 PREPARE CAVITY SURFACES AND INSTALL PATCH MATERIAL. REFER TO SPECIFICATION SECTION 030100.
- 7 FORM CHAMFER AT CORNER OF BEAM TO MATCH EXISTING.

4
 201
TYPICAL BEAM BOTTOM REPAIR
DETAIL
 NO SCALE

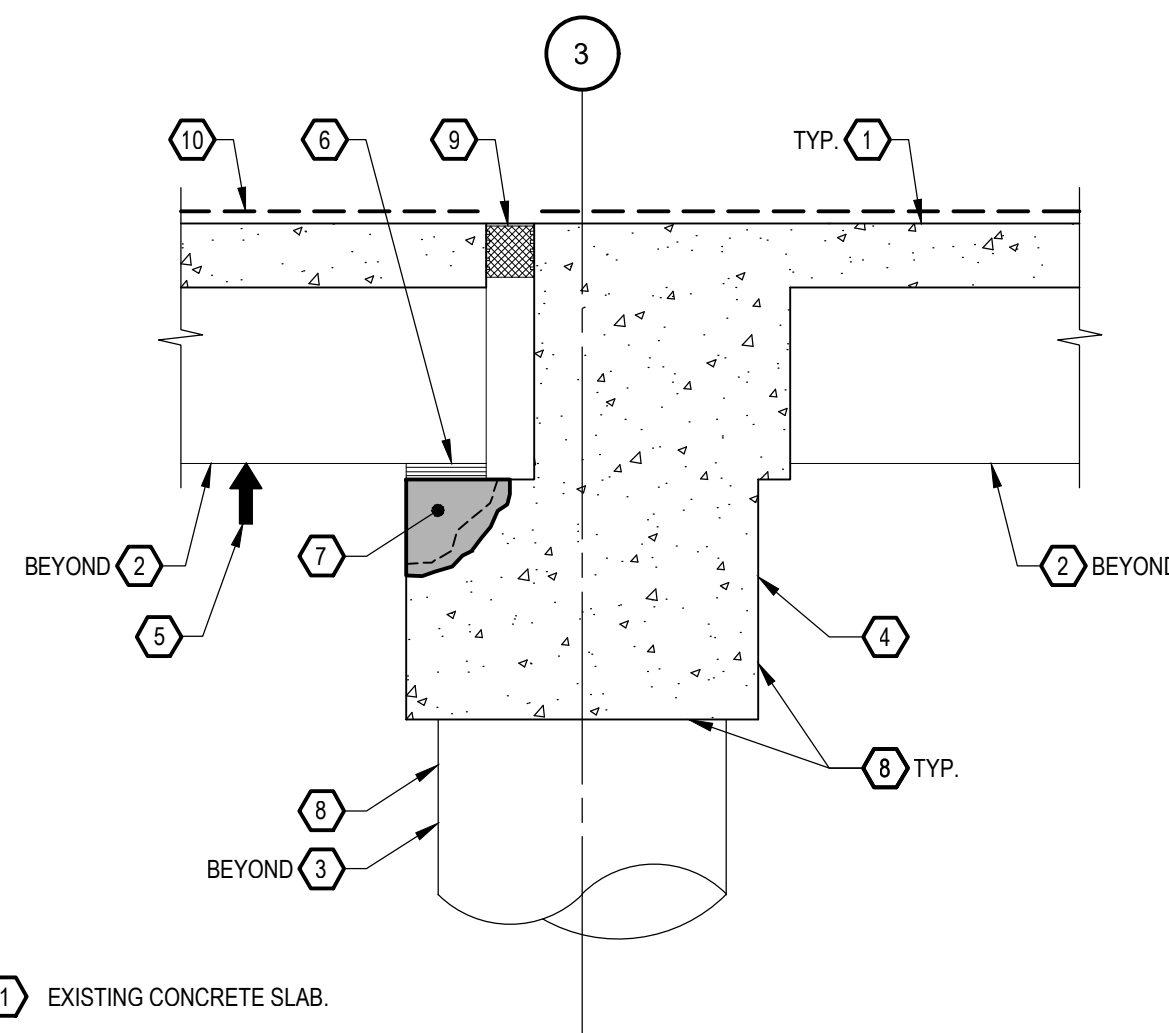
PAY UNIT PER SQ. FT.



- 1 EXISTING CONCRETE SLAB.
- 2 EXISTING DELAMINATION PLANE.
- 3 PROVIDE 3/4" DEEP SAWCUT AROUND PERIMETER OF REPAIR AREA.
- 4 REMOVE ALL SOUND AND UNSOUND CONCRETE IN SHADED AREA. REFER TO SPECIFICATION SECTION 030100.
- 5 EXISTING REINFORCING. SPACING VARIES. EXCAVATE 3/4" AROUND ALL REINFORCING. PREPARE AND EPOXY COAT EXPOSED REINFORCING. REFER TO SPECIFICATION SECTION 030100.
- 6 PREPARE CAVITY AND PROVIDE NEW CONCRETE PATCH MATERIAL. REFER TO SPECIFICATION SECTION 030100.

5
 201
TYPICAL SHALLOW CONCRETE FLOOR REPAIR
DETAIL
 NO SCALE

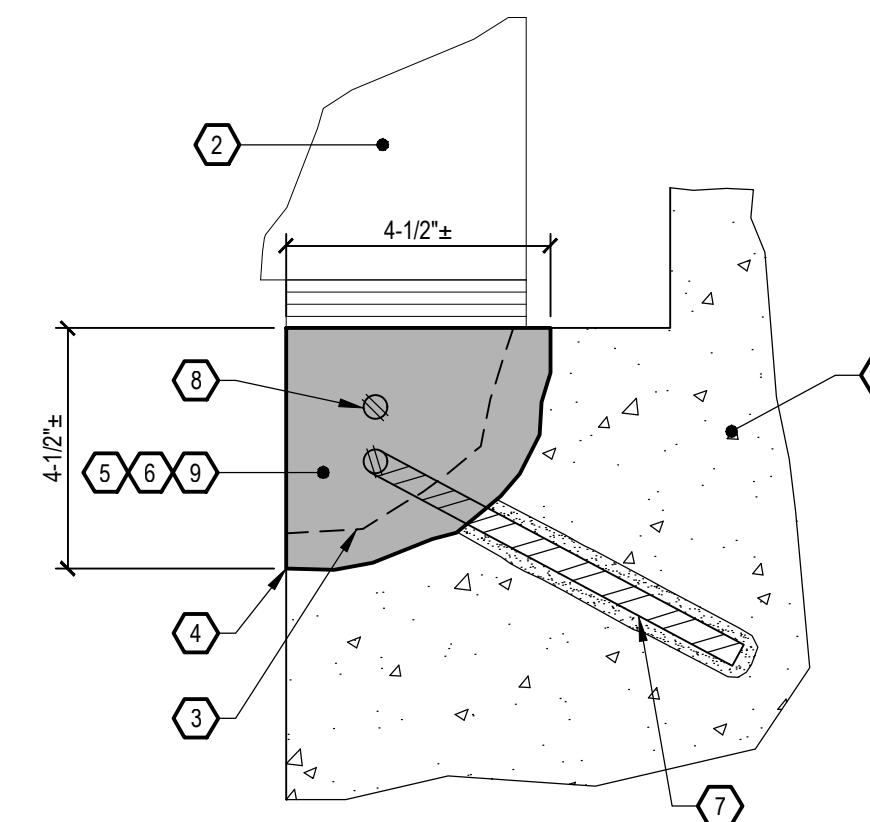
PAY UNIT PER SQ. FT.



- 1 EXISTING CONCRETE SLAB.
- 2 EXISTING CONCRETE JOIST.
- 3 EXISTING CONCRETE COLUMN.
- 4 EXISTING CONCRETE BEAM.
- 5 PROVIDE SLAB SHORING FOR THE FULL WIDTH OF THE DECK TO SUPPORT THE CONCRETE DECK TO SOUTH OF LINE 3. SHORING SHALL BE IN PLACE PRIOR TO BEGINNING BEAM WORK.
- 6 COMPLETELY REMOVE ALL REMNANTS OF THE EXISTING BEARING PLATE FOR THE FULL LENGTH OF THE BEAM. AFTER CONCRETE PATCH CURE, PROVIDE MASTICORD BEARING PAD (CONTINUOUS). REFER TO SPECIFICATION SECTION 030100.
- 7 ASSUME CONCRETE REPAIR FOR FULL LENGTH OF BEAM HAUNCH/BEARING. REFER TO DETAIL 7/201 FOR REPAIR PROCEDURES. REFER ALSO TO SPECIFICATION SECTION 030100.
- 8 AS PART OF ADD ALTERNATE NO. 1, PREPARE SURFACES AND INSTALL HIGH PERFORMANCE COATING. REFER TO PLAN ON 101 AND SPECIFICATION SECTION 012300.
- 9 EXPANSION JOINT TO BE REMOVE AND REPLACED. REFER TO PLAN ON 101.
- 10 EXISTING MEMBRANE TO BE RECOATED. REFER TO PLAN ON 101 FOR ADDITIONAL INFORMATION.

6
 201
BEAM REPAIR AT COLUMN LINE 3
DETAIL
 NO SCALE

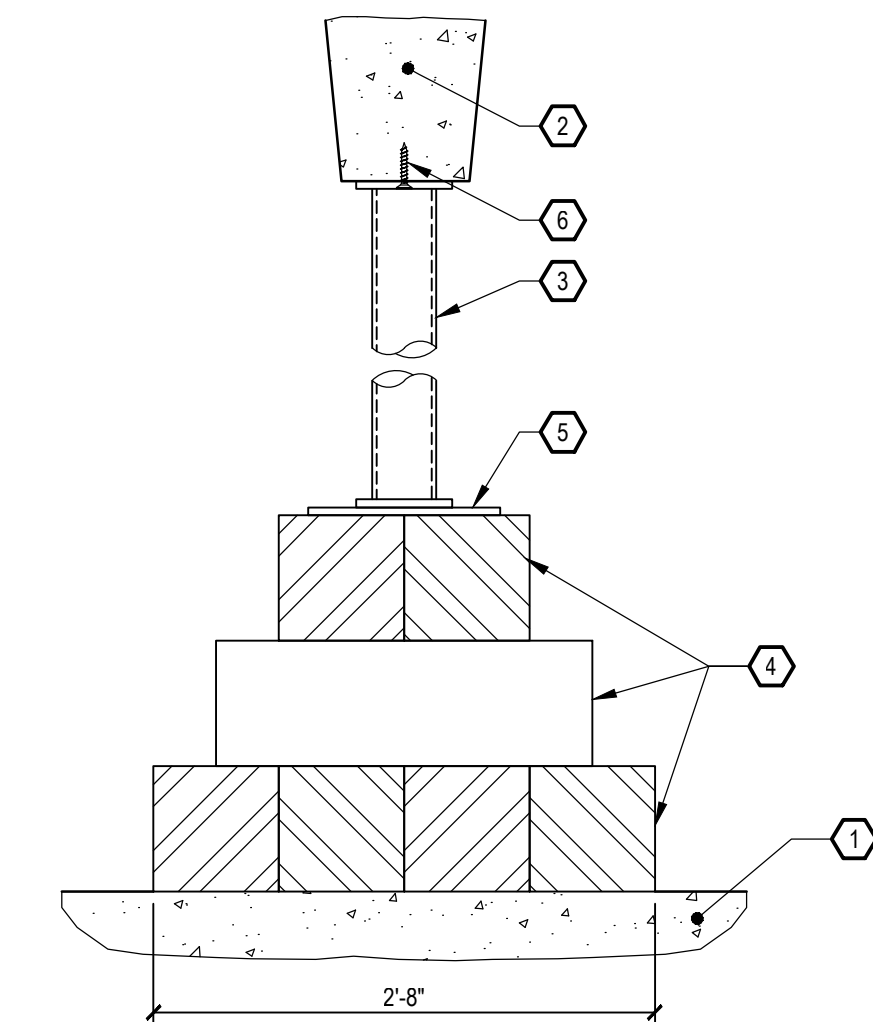
ALTERNATE NO. 2



- 1 EXISTING CONCRETE BEAM.
- 2 EXISTING CONCRETE JOIST, BEYOND.
- 3 EXISTING DELAMINATION PLANE.
- 4 PROVIDE 3/4" DEEP SAWCUT AROUND PERIMETER OF REPAIR AREA.
- 5 REMOVE ALL SOUND AND UNSOUND CONCRETE IN SHADED AREA. REFER TO SPECIFICATION SECTION 030100.
- 6 IF ENCOUNTERED, EXCAVATE 3/4" AROUND ALL REINFORCING. PREPARE AND EPOXY COAT EXPOSED REINFORCING. REFER TO SPECIFICATION SECTION 030100.
- 7 DRILL AND EPOXY #4 HOOK BAR 4" INTO BEAM AT APPROXIMATELY 8" O.C. PROVIDE 1/2" MINIMUM COVER. REFER TO SPECIFICATION 030100.
- 8 PROVIDE #4 BAR, CONTINUOUS FOR LENGTH OF PATCH. REFER TO SPECIFICATION SECTION 030100.
- 9 PREPARE CAVITY AND PROVIDE NEW CONCRETE PATCH MATERIAL. REFER TO SPECIFICATION SECTION 030100.

7
 201
TYPICAL CORNER BEAM REPAIR
DETAIL
 NO SCALE

ALTERNATE NO. 2



- 1 EXISTING LEVEL 1 ASPHALT SLAB-ON-GRADE.
- 2 EXISTING CONCRETE JOIST.
- 3 5K STEEL PIPE SHORE.
- 4 8x8 TIMBER CRIBBING. INSTALL (3) LAYERS ON LEVEL 1 S.O.G. (4 TIMBERS x 32" LONG, 3 TIMBERS x 24" LONG AND 2 TIMBERS x 16" LONG), IN ALTERNATING DIRECTIONS. BAND EACH LAYER TOGETHER WITH STEEL STRAPS. CENTER POST SHORE BASE PLATE ON CRIBBING.
- 5 12"x12" x 1/2" THICK PLYWOOD CENTERED ON CRIBBING.
- 6 INSTALL SHORE AS REQUIRED TO SECURE THE CONCRETE SLAB ABOVE. SECURE TOP SHORE PLATE TO BOTTOM OF JOIST USING TAPCONS. REMOVE THE DETERIORATED STEEL BEARING PLATE AND PERFORM ANY NECESSARY CONCRETE BEAM REPAIRS. REFER TO DETAIL 6/201.

8
 201
TYPICAL JOIST SHORE
DETAIL
 NO SCALE

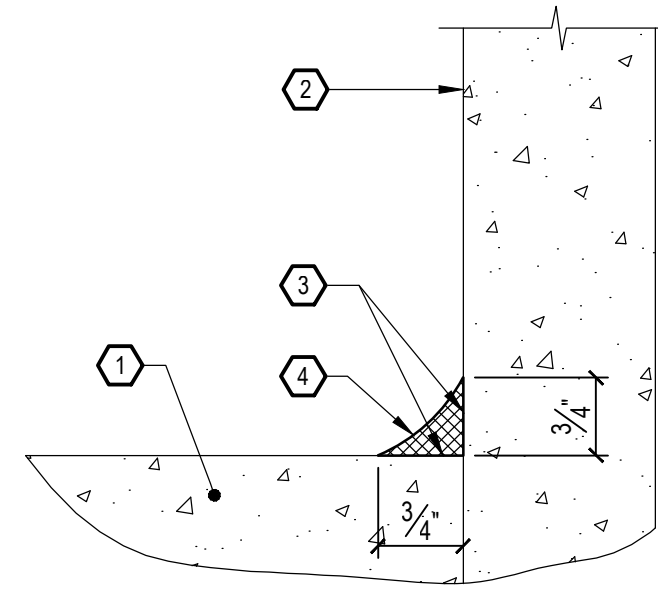
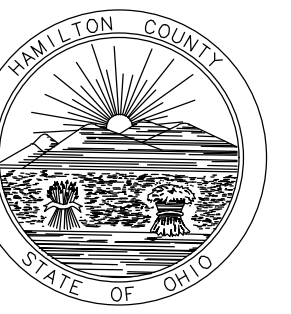
ALTERNATE NO. 2

REVISIONS FOR BID

DRAWN BY: G.J. Schmitz
 ENGINEER: S.E. Harden
 CHECKED BY: S.E. Harden

County of Hamilton
 State of Ohio
 1916 Central Parkway Garage
 Concrete and Waterproofing Repairs

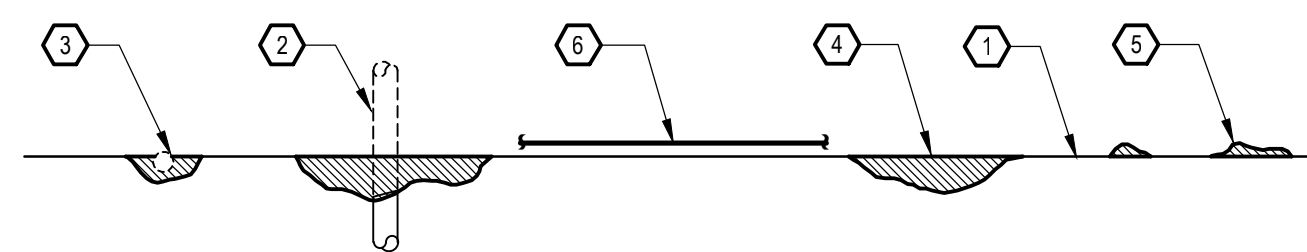
ITB No. 041-18
 DRAWING TITLE: CONCRETE AND MISCELLANEOUS REPAIR DETAILS
 JOB NUMBER: 18265.00
 DATE: June 2018
 DRAWING NUMBER: 201



- 1 EXISTING CONCRETE SLAB.
- 2 EXISTING WALL, CURB OR ANY OTHER VERTICAL PROJECTION.
- 3 PREPARE ALL SURFACES INTENDED FOR NEW SEALANT. REFER TO SPECIFICATION SECTION 079200.
- 4 COVE SEALANT. PROVIDE MINIMUM 3/4" THROAT. INSTALL PER DIMENSIONS UNLESS NOTED OTHERWISE. REFER TO SPECIFICATION SECTION 079200.

1
202
TYPICAL COVE SEALANT DETAIL
NO SCALE

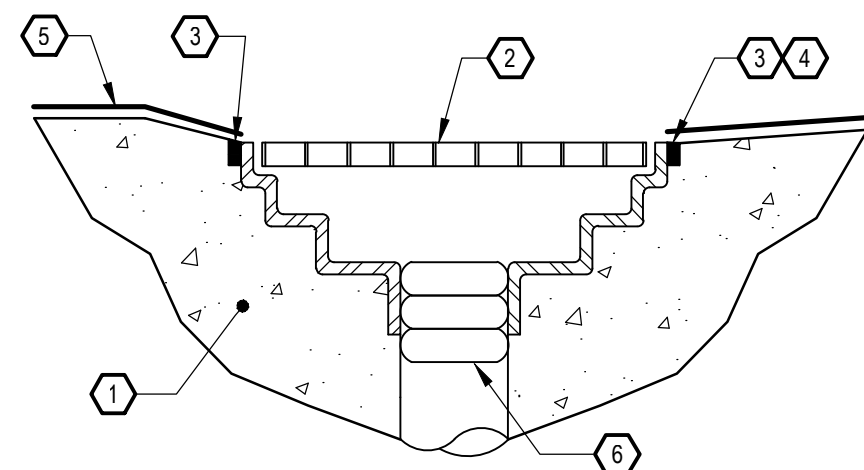
LUMP SUM AT PARKING BUMPERS
PAY UNIT PER LIN. FT. ELSEWHERE



EXPOSED METAL **SURFACE DEFECTS**

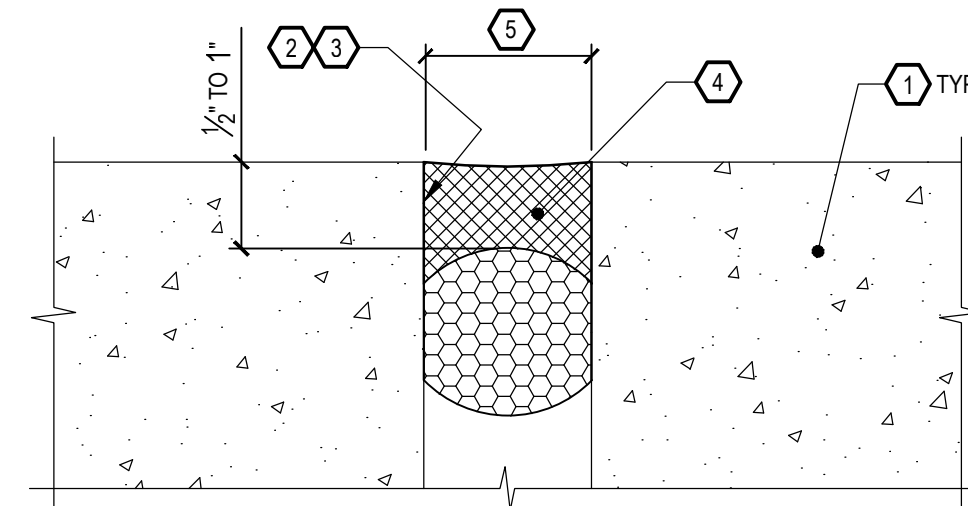
- 1 EXISTING CONCRETE SLAB.
- 2 CUT OFF NON-FUNCTIONAL METALS 3/2" BELOW CONCRETE SURFACE. PREPARE CONCRETE AND PATCH WITH EPOXY AND SAND MIXTURE. NO FLAME CUTTING PERMITTED. REFER TO SPECIFICATION SECTION 030100.
- 3 EXPOSED SLAB REINFORCEMENT AND OR WIRE MESH. CUT AND REMOVE SUFFICIENT AMOUNT OF REINFORCEMENT TO PROVIDE 1/2" COVER AT CUT ENDS. PREPARE AND PATCH WITH EPOXY AND SAND MIXTURE. CONSULT WITH ENGINEER PRIOR TO CUTTING REINFORCEMENT.
- 4 REPAIR MINOR EXISTING SURFACE DEFECTS CAUSED BY AGGREGATE POP-OUTS, SURFACE SCALING, AND FREEZE-THAW DAMAGE IN A MANNER ACCEPTABLE TO THE ENGINEER AND MEMBRANE MANUFACTURER. REFER TO SPECIFICATION SECTION 071800.
- 5 GRIND SMOOTH OR OTHERWISE REMOVE EXISTING EXCESS CONCRETE AND/OR MATERIAL DEPOSITED (LEFT ON SLAB) FROM CONSTRUCTION ACTIVITIES. WHERE THE EXISTING SLAB CONCRETE IS MOUNDED OR OTHERWISE PROTRUDES MORE THAN 1/2" ABOVE THE DECK, GRIND IT SMOOTH, OR GRIND A TRANSITION SLOPE OF 1:4 (MAXIMUM) WITH BLENDING RADII AT PERIMETER OF LARGE AREAS.
- 6 NEW TRAFFIC COATING SYSTEM. REFER TO SPECIFICATION SECTION 071800.

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202
SUPPLEMENTAL SURFACE PREPARATION DETAIL
NO SCALE



- 1 EXISTING CONCRETE SLAB.
- 2 DRAIN GRATING. PROTECT DURING THE WORK. WHERE GRATE IS INADVERTENTLY BLASTED BY SHOTBLAST AND SANDBLAST EQUIPMENT THEY SHALL BE RECOATED IN AN APPROVED MANNER.
- 3 GRIND DEEP GROOVE AT DRAIN PERIMETER FOR NEW SEALANT INSTALLATION.
- 4 PROVIDE NEW SEALANT. REFER TO SPECIFICATION SECTION 079200.
- 5 NEW TRAFFIC COATING SYSTEM. TERMINATE ON SEALANT JOINT. REFER TO SPECIFICATION SECTION 071800.
- 6 PROVIDE PLUMBERS PLUG IN DRAIN OPENING DURING TRAFFIC COATING SYSTEM PREPARATION AND INSTALLATION. REMOVE PLUG AT END OF EACH WORK DAY AND DURING INCLEMENT WEATHER.

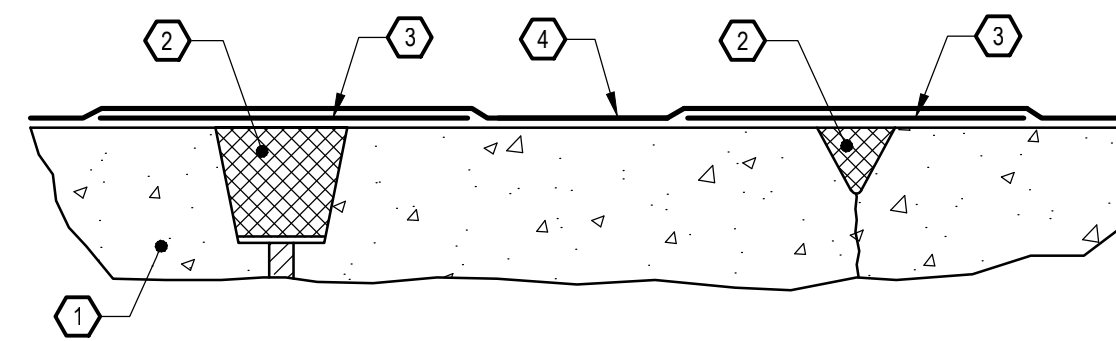
9
202
TYPICAL TRAFFIC COATING AT DRAIN DETAIL
NO SCALE



- 1 EXISTING CONCRETE WALL.
- 2 CUT OUT ANY EXISTING JOINT SEALANTS, THEN GRIND SURFACES TO REMOVE SEALANT RESIDUE. PROVIDE A MINIMUM WIDTH TO DEPTH RATIO OF 1.5:1. REFER TO SPECIFICATION SECTION 079200.
- 3 PREPARE ALL SURFACES INTENDED FOR NEW SEALANT. REFER TO SPECIFICATION SECTION 079200.
- 4 PRIME SUBSTRATE, INSTALL BACKER ROD AND PROVIDE NEW SEALANT. REFER TO SPECIFICATION SECTION 079200.
- 5 JOINT WIDTH VARIES, FIELD VERIFY.

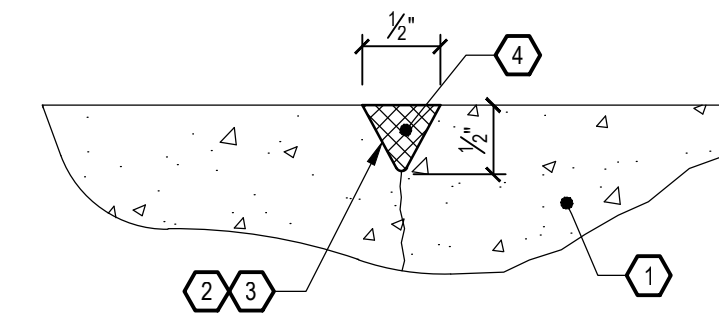
2
202
TYPICAL ISOLATION JOINT SEALANT PLAN DETAIL
NO SCALE

LUMP SUM AT WALL JOINTS
PAY UNIT PER LIN. FT. ELSEWHERE



- 1 EXISTING CONCRETE SLAB.
- 2 NEW SEALANT.
- 3 NEW 4" WIDE TRAFFIC COATING DETAIL COAT CENTERED OVER SEALANT.
- 4 NEW TRAFFIC COATING SYSTEM. EXTEND AT LEAST 4" UP VERTICAL SURFACES. REFER TO SPECIFICATION SECTION 071800.

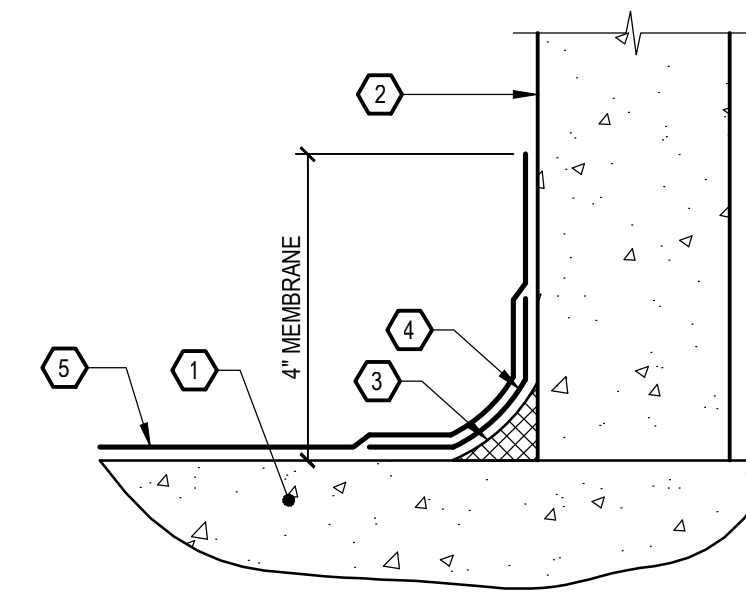
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202
TYPICAL TRAFFIC COATING OVER CJ's OR CRACKS DETAIL
NO SCALE



- 1 EXISTING CONCRETE SLAB.
- 2 ROUT CRACKS PER SPECIFICATION SECTION 079200 IN A "V" CONFIGURATION. MINIMUM OF 1/2" WIDE x 1/2" DEEP. OR WHEN THE 1/2" DIMENSION IS INSUFFICIENT, USE A MINIMUM WIDTH TO DEPTH RATIO OF 1.
- 3 PREPARE ALL SURFACES INTENDED FOR NEW SEALANT. REFER TO SPECIFICATION SECTION 079200.
- 4 PRIME SUBSTRATE AND PROVIDE NEW SEALANT. INSTALL SEALANT FLUSH WITH ADJOINING SURFACE BENEATH MEMBRANE, AND CONCAVE ELSEWHERE. REFER TO SPECIFICATION SECTION 079200.

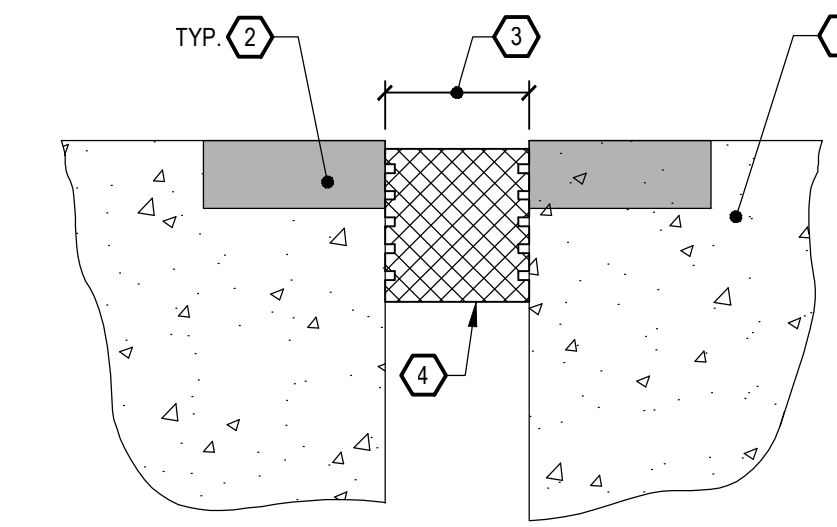
3
202
TYPICAL RANDOM CRACK DETAIL
NO SCALE

PAY UNIT PER LIN. FT.



- 1 EXISTING CONCRETE SLAB.
- 2 EXISTING CONCRETE WALL, CURB OR ANY OTHER VERTICAL PROJECTION.
- 3 NEW COVE SEALANT. REFER TO DETAIL 14.0 FOR ADDITIONAL INFORMATION.
- 4 NEW 4" WIDE DETAIL COAT CENTERED ON JOINT. REFER TO SPECIFICATION SECTION 071800.
- 5 NEW TRAFFIC COATING SYSTEM. TERMINATE ON VERTICAL SURFACES AS SHOWN. REFER TO SPECIFICATION SECTIONS 071800.

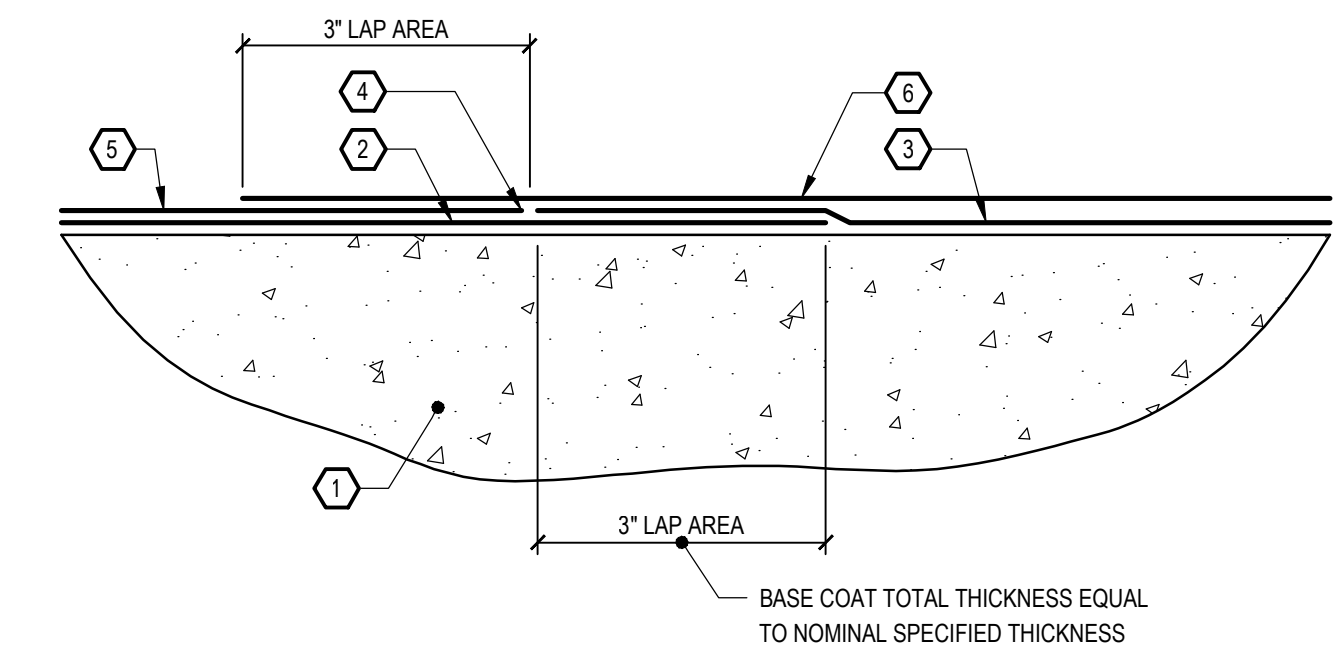
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202
TYPICAL TRAFFIC COATING AT VERTICAL SURFACE DETAIL
NO SCALE



- 1 EXISTING CONCRETE SLAB.
- 2 PREPARE BLOCKOUT SURFACES AND INSTALL NEAT EPOXY BONDING AGENT AND CEMENTITIOUS PATCH MATERIAL. REFER TO SPECIFICATION SECTION 030100.
- 3 FIELD VERIFY JOINT OPENING TO ACCOMMODATE NEW JOINT SYSTEM. REFER TO SPECIFICATION SECTION 079000.
- 4 NEW COMPRESSIBLE JOINT SEAL. REFER TO SPECIFICATION SECTION 079000.

4
202
NEW COMPRESSIBLE JOINT SYSTEM DETAIL
NO SCALE

LUMP SUM



- 1 EXISTING CONCRETE SLAB.
- 2 FIRST BASE COAT. MASK ALONG TERMINATION EDGE.
- 3 SECOND BASE COAT.
- 4 MASK TERMINATION EDGE FOR FIRST TOP COAT INSTALLATION.
- 5 FIRST TOP COAT.
- 6 SECOND GRIT COAT.

8
202
TYPICAL TRAFFIC COATING SYSTEM TIE-IN DETAIL
NO SCALE

NO.	DATE	REVISIONS
1	5/31/2018	FOR BID

DRAWN BY: G.J. Schmitz
ENGINEER: S.E. Harden
CHECKED BY: S.E. Harden

County of Hamilton
State of Ohio
1916 Central Parkway Garage
Concrete and Waterproofing Repairs

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