

**SPECIAL NOTE:**  
 IF WORK IS DONE DURING THE WINTER OR BELOW ACCEPTABLE TEMPERATURE, PLACE 2" OF COLD MIX OVER CLASS 'A' CONCRETE, PLACE BLANKETS AS REQUIRED. REMOVE COLD MIX IN SPRING AND PLACE 2" OF No. 11 HMA FOR PERMANENT PATCH

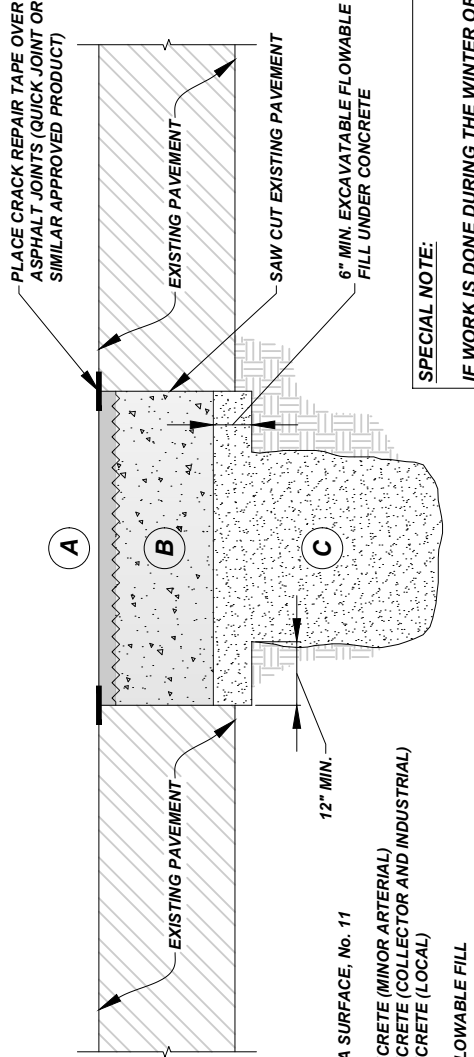
**NOTES:**

1. MATCH EXISTING PAVEMENT SLOPE(S)
2. SAW CUT EXISTING PAVEMENT PRIOR TO REMOVAL TO PROVIDE A CLEAN VERTICAL FACE. SAW CUT EDGE(S) AGAIN IF DAMAGED PRIOR TO PLACING PATCH. IF THE HMA SURFACE HAS BEEN DAMAGED BEYOND THE SAW CUT(S) AND/OR MATERIAL HAS BEEN LOST UNDER THE EXISTING PAVEMENT, INCREASE THE PATCH DIMENSIONS TO INCLUDE THESE AREAS
3. TRENCH SPOILS TO BE REMOVED FROM SITE BY THE CONTRACTOR
4. CONCRETE MUST COME FROM A PLANT OR BE MIXED BY MECHANICAL MIXER ON-SITE, NO HAND MIXING OF CONCRETE ALLOWED
5. CONCRETE SURFACE MUST BE ROUGH FOR PROPER ASPHALT ADHESION. SCORE THE CONCRETE SURFACE IN CRISS CROSS PATTERN
6. CONCRETE MUST BE CURED FOR 1 FULL DAY FOR HIGH EARLY MIX AND 3 DAYS FOR STANDARD MIX BEFORE PLACING HMA SURFACE TO PREVENT CRACKING
7. IF THE CONCRETE CRACKS BEFORE THE HMA SURFACE IS PLACED, FULL REMOVAL AND REPLACEMENT OF THE CONCRETE IS REQUIRED
8. COMPACT THE HMA SURFACE WITH A DOUBLE DRUM ROLLER UNLESS AN ALTERNATIVE METHOD HAS BEEN APPROVED BY THE ENGINEERING DEPARTMENT
9. RESTORE DAMAGED OR REMOVED PAVEMENT MARKINGS WITH LIKE MATERIAL. A CITY REPRESENTATIVE SHALL APPROVE MATERIAL AND METHOD OF INSTALLATION
10. STREET RESTRICTIONS OR CLOSURES MUST BE APPROVED BY THE CITY OF GOSHEN BOARD OF WORKS. CONTACT THE ENGINEERING DEPARTMENT AT (574) 534-2201 FOR THE REQUIREMENTS/PROCESS AND BOW MEETING DATES
11. WORK WITHIN THE CITY RIGHT OF WAY REQUIRES A PERMIT ISSUED BY THE ENGINEERING DEPARTMENT AT GOSHENINDIANA.ORG
12. A CITY REPRESENTATIVE MUST INSPECT THE BACKFILL PROCESS AND PLACEMENT OF THE PATCH, CALL THE ENGINEERING DEPARTMENT TO SCHEDULE THE INSPECTIONS
13. IF A CITY UTILITY WAS REPAIRED, AS PART OF THE WORK, A CITY REPRESENTATIVE MUST INSPECT THE REPAIR PRIOR TO BACKFILLING. IF AN INSPECTION WAS NOT PERFORMED, THE CONTRACTOR WILL BE REQUIRED TO EXPOSE THE REPAIR FOR INSPECTION

**TYPICAL UTILITY POTHOLE ASPHALT PAVEMENT PATCH DETAIL**

NOT TO SCALE

<p>The City Of Goshen          Department of Public Works &amp; Safety          Office of Engineering          204 East Jefferson Street, Goshen, Indiana 46528          Phone: 574-534-2201 Fax: 574-535-8626</p>	<p>CITY OF GOSHEN, INDIANA          TYPICAL DETAIL</p>	<p>Project Number:          Designed By: J. Hoffman          Drafted By: J. Hoffman          Approved By: D. Sailor, P.E.          Date: 8/16/2023</p>
	<p>TYPICAL UTILITY POTHOLE          ASPHALT PAVEMENT PATCH DETAIL</p>	<p>Scale:          NOT TO SCALE</p>



- (A) 2" (220#(SYD) HMA SURFACE, No. 11
- (B) 9" CLASS 'A' CONCRETE (MINOR ARTERIAL)  
8" CLASS 'A' CONCRETE (COLLECTOR AND INDUSTRIAL)  
6" CLASS 'A' CONCRETE (LOCAL)
- (C) EXCAVATABLE FLOWABLE FILL

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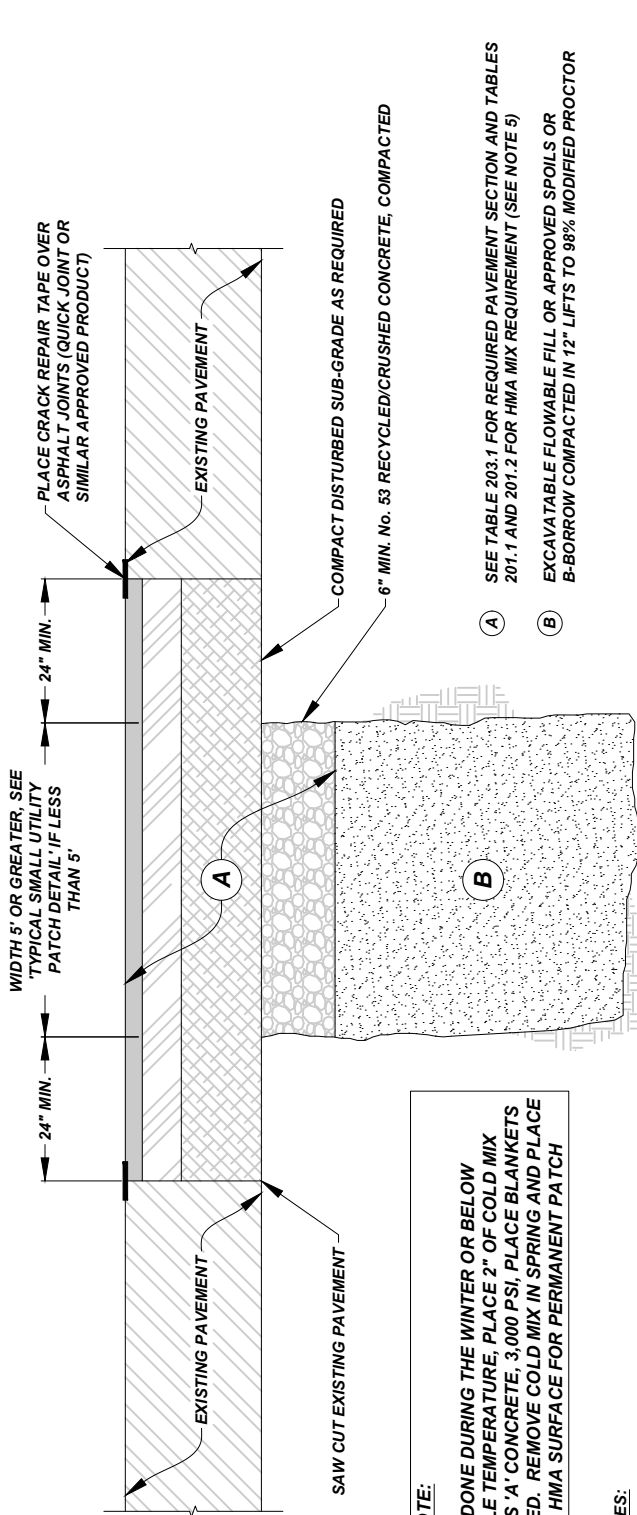
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8. COMPACT THE HMA SURFACE WITH A DOUBLE DRUM ROLLER UNLESS AN ALTERNATIVE METHOD HAS BEEN APPROVED BY THE ENGINEERING DEPARTMENT
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**TYPICAL SMALL ASPHALT PAVEMENT PATCH DETAIL**

NOT TO SCALE

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	<p>TYPICAL SMALL ASPHALT PAVEMENT PATCH DETAIL</p>	
		<p>RD-602</p>



**SPECIAL NOTE:**  
 IF WORK IS DONE DURING THE WINTER OR BELOW ACCEPTABLE TEMPERATURE, PLACE 2" OF COLD MIX OVER CLASS 'A' CONCRETE. 3,000 PSI, PLACE BLANKETS AS REQUIRED. REMOVE COLD MIX IN SPRING AND PLACE 2" OF No. 11 HMA SURFACE FOR PERMANENT PATCH

- (A) SEE TABLE 203.1 FOR REQUIRED PAVEMENT SECTION AND TABLES 201.1 AND 201.2 FOR HMA MIX REQUIREMENT (SEE NOTE 5)
- (B) EXCAVATABLE FLOWABLE FILL OR APPROVED SPOILS OR B-BORROW COMPACTED IN 12" LIFTS TO 98% MODIFIED PROCTOR

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3. TRENCH SPOILS TO BE REMOVED FROM SITE IF UNSUITABLE FOR BACKFILL. A CITY REPRESENTATIVE SHALL DETERMINE IF SPOILS ARE SUITABLE FOR BACKFILL
4. PATCH MAY BE MODIFIED TO CONTAIN ONLY HMA BASE AND HMA SURFACE. REMOVAL OF THE HMA BINDER LAYER MAY BE ELIMINATED WITH APPROVAL FROM THE CITY OF GOSHEN ENGINEERING DEPARTMENT. HMA BASE LIFTS MAY NOT EXCEED 4"
5. COMPACT THE HMA BASE, HMA BINDER AND HMA SURFACE WITH A DOUBLE DRUM ROLLER UNLESS AN ALTERNATIVE METHOD HAS BEEN APPROVED BY THE ENGINEERING DEPARTMENT
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**TYPICAL LARGE ASPHALT PAVEMENT PATCH DETAIL**

NOT TO SCALE

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	<p>TYPICAL LARGE ASPHALT PAVEMENT PATCH DETAIL</p>		<p>Designed By: J. Hoffman          Approved By: D. Sailor, P.E.          Drafted By: J. Hoffman          Date: 8/16/2023          Scale: NOT TO SCALE</p>

TABLE 203.1 - MINIMUM EXPECTABLE PAVEMENT SECTION						
STREET CLASS	COMPACTED SUB-BASE (No. 53)	AGGREGATE DRAINAGE LAYER (No. 8)	HOT MIX ASPHALT (HMA)			CONCRETE (PCC)
			BASE (No. 5)	BINDER (No. 8)	SURFACE (No. 11)	
MINOR ARTERIAL	6"	6"	6"	2.5"	1.5"	-
COLLECTOR & INDUSTRIAL	6"	6"	4"	2.5"	1.5"	-
LOCAL	6"	6"	3"	2.5"	1.5"	-
MINOR ARTERIAL	6"	6"	-	-	-	9"
COLLECTOR & INDUSTRIAL	6"	6"	-	-	-	8"
LOCAL	6"	4" - 6"	-	-	-	6"

TABLE 201.2 - AGGREGATE GRADATION FOR HMA MIXES					
SIEVE SIZE	BASE MIXTURES No. 5 (3"-4" LIFT)	BINDER MIXTURES No. 8 (2.5" LIFT)	SURFACE MIXTURES No. 11 (1.5" LIFT)		
1.5 in (37.5 mm)	100				
1 in (25.0 mm)	90 - 99	100			
3/4 in (19.0 mm)	<90	90 - 99	100		
1/2 in (12.5 mm)		<90		100	
3/8 in (9.5 mm)				90 - 99	
No. 4				<90	
No. 8	23 (±6)	29 (±6)		57 (±6)	
No. 16					
No. 30					
No. 50					
No. 100					
No. 200	1 - 7	2 - 8		2 - 6	
PERCENT OF BITUMINOUS	4.5 (±0.5)	4.8 (±0.5)		6.1 (±0.5)	
PERCENT OF MOISTURE, MAX	0.3	0.3		0.3	

TABLE 201.1 - MINIMUM PERCENT OF CRUSHED PARTICLES			
COURSE	HMA MIX DESIGNATION		
	LV	MV	HV
BASE	70	40	70
BINDER	55	70	70
SURFACE	100	100	100

LV (LOW VOLUME) - LOCAL STREETS AND CUL-DE-SAC  
 MV (MEDIUM VOLUME) - COLLECTOR AND INDUSTRIAL  
 HV (HIGH VOLUME) - ARTERIAL

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**CITY OF GOSHEN, INDIANA**  
**TYPICAL DETAIL**  
 TYPICAL PAVEMENT SECTIONS AND HMA/PCC  
 MATERIAL REQUIREMENTS