

## ***Bituminous pavement T-patch***

### **1. GENERAL**

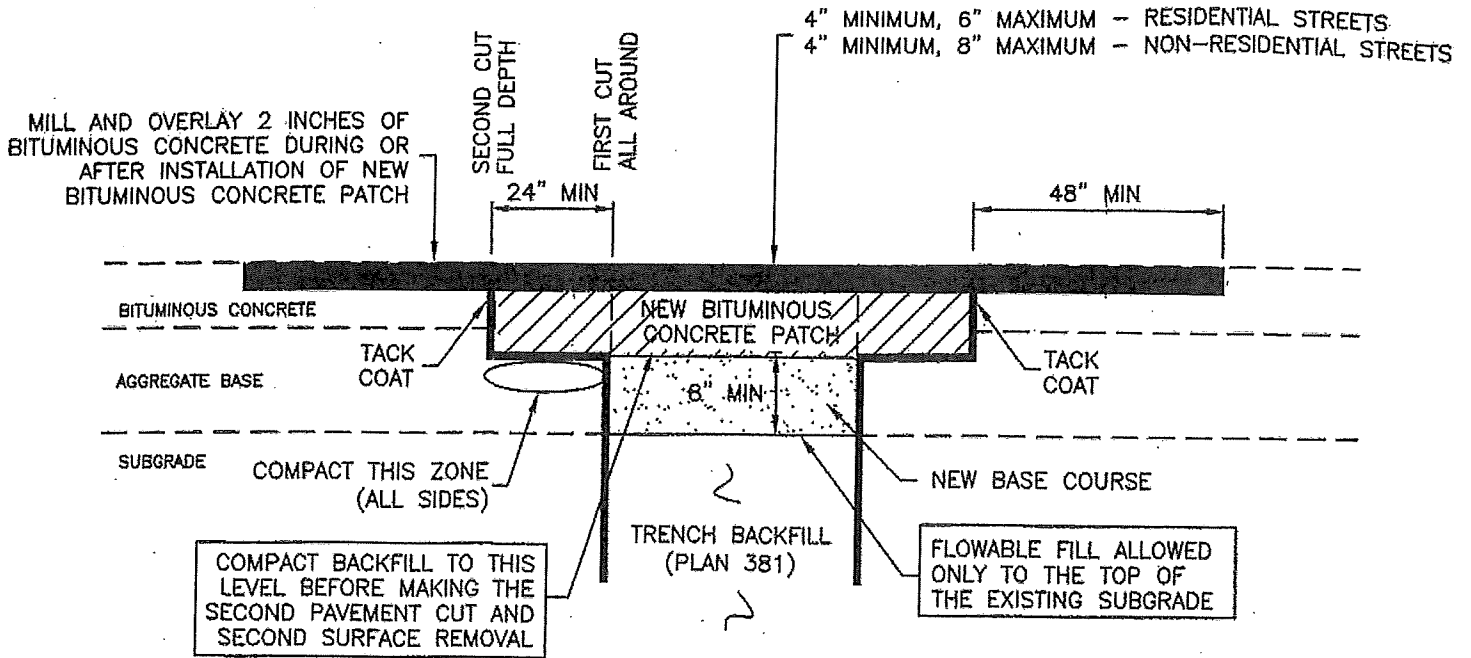
- A. Vertical cuts in bituminous pavement may be done by saw or pavement zipping. If cuts greater than 6 inches are necessary to prevent pavement "break off" consult ENGINEER for directions on handling additional costs.
- B. Repair a T-patch restoration if any of the following conditions occur prior to final payment or at the end of the one year correction period.
  - 1) Pavement surface distortion exceeds 1/4-inch deviation in 10 feet. Repair option - plane off surface distortions. coat planed surface with a cationic or anionic mulson that complies with APWA Section 32 12 03..
  - 2) Separation appears at a connection to an existing pavement or any Street Fixture. Repair option - blow separation clean and apply joint sealant, Plan 265.
  - 3) Cracks at least 1-foot long and 1/4-inch wide occur more often than 1 in 10 square feet. Repair option - blow clean and apply crack seal, Plan 265.
  - 4) Pavement raveling is greater than 1 square foot per 100 square feet. Repair option - Mill and inlay, APWA Sections 32 01 16.71 and 32 12 05.

### **2. PRODUCTS**

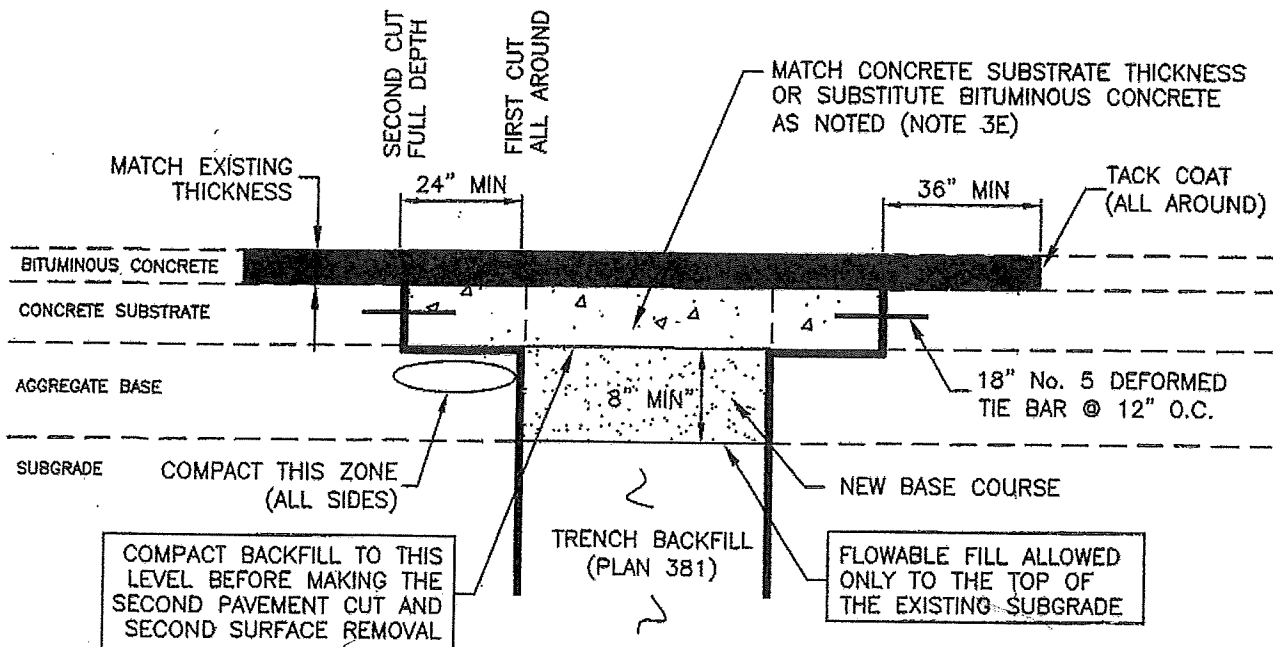
- A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
- B. Flowable Fill: Target is 60 psi in 28 days with 90 psi maximum in 28 days, APWA Section 31 05 15. It must flow easily requiring no vibration for consolidation.
- C. Reinforcement. No. 5, galvanized or epoxy coated, deformed, 60 ksi yield grade steel, ASTM A615.
- D. Concrete: Class 4000, APWA Section 03 30 04.
- E. Tack Coat: APWA Section 32 12 13.13.
- F. Bituminous Concrete. APWA Section 32 12 05.
  - 1) Warm Weather Patch: PG64-22-DM-1/2, unless indicated otherwise.
  - 2) Cold Weather Patch: Modified MC-250-FM-1 as indicated in APWA Section 33 05 25.

### **3. EXECUTION**

- A. Base Course Placement: APWA Section 32 05 10. Maximum lift thickness before compaction is 8-inches when using riding equipment or 6-inches when using hand held equipment. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
- B. Flowable Fill: Cure to initial set before placing aggregate base or bituminous pavement. Use in excavations that are too narrow to receive compaction equipment.
- C. Tack Coat. Clean all horizontal and vertical surfaces. Apply full coverage all surfaces.
- D. Pavement Placement: Follow APWA Section 32 12 16.13. Unless indicated otherwise, lift thickness is 3-inches minimum after compaction. Compact to 94 percent of ASTM D2041 (Rice density) plus or minus 2 percent.
- E. Bituminous Concrete Substitution: If bituminous concrete is substituted for Portland cement concrete substrate, omit rebar and provide 1.25 inches of bituminous concrete for each 1 inch of Portland cement concrete. Follow paragraph E requirements.
- F. Reinforcement. Required if thickness of existing Portland-cement concrete substrate is 6-inches or greater. Not required if 1) less than 6-inches thick, 2) if existing concrete is deteriorating, 3) if excavation is less than 3 feet square, or 4) if bituminous pavement is substituted for Portland-cement concrete substrate.
- G. Concrete Substrate. Cure to initial set before placing new bituminous concrete patch.



**BITUMINOUS CONCRETE RESTORATION**



**COMPOSITE RESTORATION**

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