GENERAL NOTES

1. BEDDING AND BACKFILL MATERIALS MUST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER. NATIVE SOIL MAY BE USED FOR BEDDING AND BACKFILL ONLY IF APPROVED BY THE CITY ENGINEER.

2. EXCEPT FOR CONTROLLED DENSITY FILL (2=SACK SLURRY) AND ¾" CRUSHED ROCK, BACKFILL MUST BE COMPACTED TO AT LEAST 95% R.C. (ASTM D1557) IN PAVEMENT AREAS. A MINIMUM OF TWO COMPACTION TESTS SHALL BE PERFORMED IN TOTAL, AT VARIABLE DEPTHS. THE CONTRACTOR SHALL SUBMIT WRITTEN RESULTS OF THE TESTS TO THE CITY. TESTS MUST BE APPROVED BEFORE PAVING.

KEYNOTES

1. SAWCUT PAVEMENT FULL-DEPTH ON A TRUE LINE AT THE PLANNED EDGE OF TRENCH WALL.

2. MINIMUM EXCAVATION WIDTH x LENGTH: 18" x 48". AT LEAST 6" CLEARANCE BETWEEN THE PIPE AND TRENCH SIDE WALL, AND 12" CLEARANCE BETWEEN CUT PIPE END AND TRENCH END WALL. ACTUAL TRENCH WIDTH REQUIRED TO PERFORM THE WORK WILL DEPEND ON METHOD OF COMPACTION AND TRENCH SHORING/PROTECTION USED BY CONTRACTOR. TRENCH WALLS MAY HAVE VERTICAL SIDES UP TO A MAXIMUM DEPTH OF 5 FEET BELOW GRADE. APPROVED SHORING OR TRENCH BOXES MUST BE UTILIZED FOR TRENCHES OF GREATER DEPTH PER CAL-OSE4A REQUIREMENTS.

3. SAW CUT AND REMOVE DAMAGED SECTION OF PIPE, AND REPLACE WITH NEW PIPE OF SAME MATERIAL.

4. BLACK PLASTICIZED PVC COUPLER WITH 300 SERIES STAINLESS STEEL CLAMPS AND STAINLESS STEEL SHEAR RING. COUPLER MUST BE DESIGNED FOR THE SPECIFIC PIPE MATERIAL AND DIAMETER. PRODUCT: FERNCO (R) OR APPROVED EQUAL.

5. PIPE BEDDING AND INITIAL BACKFILL: CONTROLLED DENSITY FILL (2=SACK SLURRY).

6. FINAL BACKFILL:
   6.1. IN PAVEMENT AREAS: CALTRANS CLASS 2 AGGREGATE BASE, COMPACTED IN MAX. 8" LIFTS TO MIN. 95% R.C.
   6.2. IN LANDSCAPE AREAS: NATIVE SOIL COMPACTED IN MAX 8" LIFTS TO MIN. 85% R.C.

7. AFTER TRENCHING AND BACKFILLING IS COMPLETE, SAWCUT A SECOND TIME THE FULL DEPTH OF THE PAVEMENT, AT LEAST 6" OUTSIDE THE TRENCH WALL (T-PATCH), OR TO NEAREST JOINT IF LESS THAN 3' AWAY FROM ORIGINAL SAWCUT, OR AS DIRECTED BY THE CITY ENGINEER; THEN REMOVE PAVEMENT.

8. HMA (TYPE A) TRENCH PATCH: HMA PATCH PAVING SHALL MATCH EXISTING PAVEMENT THICKNESS AND BE AT LEAST 3" FOR LOW-VOLUME RESIDENTIAL STREETS AND ON-STREET PARKING AND 4" FOR ALL OTHER STREET CLASSIFICATIONS. FINAL Lift MUST BE AT LEAST 3½" THICK, ½" GRADATION, AND NOT CONTAIN ANY RECLAIMED ASPHALT PAVEMENT (R.A.P.). OTHER COURSE(S) MUST BE ¾" GRADATION IF LIFT THICKNESS IS 2½" OR GREATER.

9. CONCRETE STREET TRENCH PATCH: PLACE ¾×18" DOWELS IN EPOXY-FILLED ¾×6" HOLES @ 18" O.C. CONCRETE PATCH PAVING SHALL MATCH EXISTING PAVEMENT THICKNESS & REINFORCING SIZE/SPACING, AND SHALL BE AT LEAST 6"-THICK.