GENERAL NOTES

1. SEE DETAIL 201 FOR TRENCHING FOR SANITARY SEWERS AND STORM DRAINS.

2. 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.

3. CONTROLLED DENSITY FILL (2-SACK SLURRY) MAY BE USED IN LIEU OF SPECIFIED BEDDING AND BACKFILL. CONTROLLED DENSITY FILL MUST BE USED SHOWN ON THE PLANS AND WHEREVER ADEQUATE COMPACTION CANNOT BE ACHIEVED BY MECHANICAL MEANS.

4. EXCEPT FOR CONTROLLED DENSITY FILL (2-SACK SLURRY) AND 3/4" CRUSHED ROCK, BACKFILL MUST BE COMPACTED TO AT LEAST 95% R.C. (ASTM D1557) IN PAVEMENT AREAS. AT A MINIMUM, ONE COMPACTION TEST SHALL BE PERFORMED FOR EVERY 300 L.F. OF TRENCH, AT VARIABLE DEPTHS. A MINIMUM OF TWO TESTS SHALL BE PERFORMED IN TOTAL. THE CONTRACTOR SHALL SUBMIT WRITTEN RESULTS OF THE TESTS TO THE CITY. TESTS MUST BE APPROVED BEFORE PAVING.

5. WHERE EXISTING PAVEMENT IS AC ON CONCRETE, THE CITY WILL PROVIDE PROJECT-SPECIFIC PAVEMENT RESTORATION REQUIREMENTS.

KEYNOTES

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

2. MINIMUM TRENCH WIDTH: 12", OR GREATER IF REQUIRED BY UTILITY OWNER. AT LEAST 6" CLEARANCE BETWEEN THE UTILITY AND TRENCH WALL IS REQUIRED. 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 CA.-OSHA REQUIREMENTS.

3. PIPE BEDDING AND INITIAL BACKFILL: AS REQUIRED BY UTILITY OWNER. AT LEAST 4" OF BEDDING AND 6" OF SHADING ARE REQUIRED.

4. INSULATED 12 AWG TRACER WIRE, PROVIDE ON ALL GAS MAINS, COMMUNICATION CONDUITS, AND NON-METALLIC WATER PIPES WITHIN THE RIGHT-OF-WAY. TAPE TO TOP OF PIPE. EXTEND THE SURFACE AT VALVE BOXES, RISERS, ETC.; SO LOCATOR EQUIPMENT CAN BE CONNECTED.

5. WARNING TAPE: POLYETHYLENE TAPE, 3.5-MIL (MIN), 3" WIDE (MIN), APPROPRIATE COLOR AND WORDING, SET 6" TO 12" ABOVE UTILITY.

6. FINAL BACKFILL:

   6.1. IN PAVEMENT AREAS: CALTRANS CLASS 2 AGGREGATE BASE, COMPACTED IN MAX. 8" LIFTS TO MIN. 95% R.C.; OR CONTROLLED DENSITY FILM (2-SACK SLURRY)

   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 5" 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 4" FOR OTHER STREET CLASSIFICATIONS. FINAL LIFT MUST BE AT LEAST 1 1/2" THICK, 1/2" GRADATION, AND NOT CONTAIN ANY RECLAIMED ASPHALT PAVEMENT (R.A.P.). OTHER COURSE(S) MUST BE 3/4" GRADATION IF LIFT THICKNESS IS 2 1/2" OR GREATER.

9. CONCRETE STREET TRENCH PATCH: PLACE 4X18" DOWELS IN EPOXY-FILLED 3/4"X6" HOLES TO 18" O.C. CONCRETE PATCH PAVING SHALL MATCH EXISTING PAVEMENT THICKNESS & REINFORCING SIZE/SPACING, AND SHALL BE AT LEAST 6"-THICK.