

Town of Apple Valley

ENGINEERING DEPARTMENT

Notes for Street Improvement Plans

Α.	CONSTRUCTION NOTES	(EXAMPLES):	:

1.	Construct A.C. Pavement over Crushed Aggregate Base.	
2.	Construct 8" curb and gutter per County of San Bernardino STD No. 115.	
3.	Construct Type sidewalk per County of San Bernardino STD. No.109.	
4.	Construct cross gutter per County of San Bernardino STD. No.119.	
5.	Construct residential driveway per SPPWC STD Plan 110-2.	
6.	Construct commercial driveway per County of San Bernardino STD. No.129B.	
7.	Construct sidewalk ramp per County of San Bernardino STD. No.110.	
8.	Construct asphalt dike per County of San Bernardino STD. No.117.	
9. I	nstall street light per the Town of Apple Valley Standards.	
10. Install Class Bike lanes with signs.		

B. **GENERAL NOTES:**

PERMITS:

- 1. CONTRACTOR SHALL OBTAIN A PERMIT FROM THE ENGINEERING DEPARTMENT PRIOR TO PERFORMING ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY.
- 2. WORK IN THE PUBLIC RIGHT-OF-WAY, ONCE BEGUN, SHALL BE PROSECUTED TO COMPLETION WITHOUT DELAY SO AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND THE TRAVELING PUBLIC. FAILURE TO COMPLY WITH THIS REQUIREMENT IS A VIOLATION OF THE COUNTY CODE AND HIGHWAY PERMIT CODE.
- 3. ENGINEERING DEPARTMENT APPROVAL DOES NOT INCLUDE WATER OR SEWER SYSTEM APPROVAL OR ESTIMATE OF QUANTITIES.

SPECIFICATIONS:

- 1. ALL WORK, LABOR & MATERIALS SHALL BE IN CONFORMANCE WITH THE STANDARDS AND CODES REQUIRED BY THE TOWN OF APPLE VALLEY; THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION "GREENBOOK" (LATEST EDITION); SAN BERNARDINO COUNTY TRANSPORTATION (ROAD) DEPARTMENT STANDARD PLANS; THESE PLANS AND SPECIFICATIONS; AND ALL SAFETY REGULATIONS, CODES, AND REQUIREMENTS PERTINENT TO THE PROJECT CONSTRUCTION. CONTRACTOR SHALL HAVE A COPY OF ALL REFERENCE STANDARDS AT THE JOB SITE AT ALL TIMES.
- 2. COMPACTION TESTS OF EMBANKMENT CONSTRUCTION, TRENCH BACKFILL, NATIVE AND AGGREGATE BASE MATERIALS FOR SUBGRADES, AND ASPHALT PAVEMENT SURFACES SHALL BE

Last updated: 03/16/2022 Page 1 of 4

PERFORMED AT NO COST TO THE TOWN OF APPLE VALLEY. A WRITTEN REPORT WITH THE RESULTS OF COMPACTIONS TEST SHALL BE SUBMITTED TO THE ENGINEERING DEPARTMENT FOR REVIEW PRIOR TO PLACEMENT OF SUBSEQUENT MATERIALS AND/OR SURFACING.

- 3. SUBGRADE MATERIAL UNDER PAVED AREAS SHALL BE SCARIFIED DOWN 12 INCHES BELOW FINISH SUBGRADE, MOISTENED AND CONDITIONED TO OPTIMUM MOISTURE CONTENT, AND RECOMPACTED TO 95% RELATIVE COMPACTION.
- 4. ALL STREET STATIONING REFERS TO THE CENTERLINE OF THE ROADWAY, AND CURB DATA REFERS TO THE FACE OF THE CURB UNLESS OTHERWISE NOTED.
- 5. ALL CONSTRUCTION STAKING SHALL BE DONE BY THE CONTRACTOR'S LICENSED LAND SURVEYOR AND CERTIFIED IN WRITING AS TO LINE AND GRADE PER APPROVED PLANS AND SUBMITTED TO THE ENGINEER. ADEQUATE STAKES SHALL BE SET TO ENABLE THE CONTRACTOR TO CONSTRUCT THE WORK TO THE PLAN GRADES AND FOR VERIFICATION BY THE TOWN INSPECTOR.
- 6. ALL CURB GRADE LINES SHALL BE STAKED AT 25 FOOT INTERVALS AND FORMS SHALL BE VERIFIED BY THE ENGINEER PRIOR TO PLACING CONCRETE. CURB AND GUTTER, CROSS GUTTERS AND SPANDRELS SHALL BE CONSTRUCTED SO THAT NO PONDING OCCURS. SECTIONS HAVING GRADIENTS OF 0.50% OR LESS SHALL BE WATER TESTED IN THE PRESENCE OF THE INSPECTOR IMMEDIATELY PRIOR TO ACCEPTANCE. SECTIONS HAVING WATER PONDING SHALL BE SAWCUT AND REMOVED AS DIRECTED AND REPLACED TO ELIMINATE PONDING.

PRECAUTIONS AND RESPONSIBILITIES:

- 1. NO CONSTRUCTION SHALL COMMENCE PRIOR TO 7:00 A.M. EACH WORKING DAY. WORK ON HOLIDAYS AND WEEKENDS IN NOT ALLOWED IN THE RIGHT-OF-WAY WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE ENGINEERING DEPARTMENT.
- 2. APPROVAL OF THE PLANS BY THE TOWN OR ITS AGENTS DOES NOT RELIEVE THE DEVELOPER OR ENGINEER OF RECORD FROM RESPONSIBILITY FOR THE CORRECTION OF ERRORS AND/OR OMISSIONS DISCOVERED DURING CONSTRUCTION. PLAN REVISIONS SHALL BE PROMPTLY SUBMITTED TO THE ENGINEERING DEPARTMENT FOR REVIEW.
- 3. AS-BUILT CHANGES OR REVISIONS TO THE PLANS SHALL BE SUBMITTED TO THE ENGINEERING DEPARTMENT FOR REVIEW PRIOR TO FINAL APPROVAL OF THE PROJECT. FINAL AS-BUILT RECORD DRAWINGS SHALL BE PREPARED AND SIGNED BY THE ENGINEER OF RECORD.
- 4. NO WORK SHALL BE DONE ON ADJACENT PROPERTIES OR ADJACENT OWNERS IMPROVEMENTS WITHOUT OBTAINING WRITTEN PERMISSION FROM THE OWNER OF THE PROPERTY AND SUBMITTING A COPY THEREOF TO THE TOWN ENGINEER.
- 5. ALL UNDERGROUND UTILITY OR TRAFFIC SIGNAL WORK SHALL BE COMPLETE PRIOR TO ANY SURFACE WORK IN THE RIGHT-OF-WAY.
- 6. ANY LOT CORNER, BENCHMARK, MONUMENT, OR TIE DESTROYED, DISPLACED OR MODIFIED SHALL BE RESTORED IN ACCORDANCE WITH STATE REGULATIONS AND AS DIRECTED BY THE TOWN SURVEYOR.
- 7. THE PROJECT SITE SHALL BE MAINTAINED IN A "WET-DOWN" CONDITION TO THE DEGREE NECESSARY TO PREVENT EXCESSIVE OR FUGITIVE DUST LEAVING THE SITE.
- 8. ALL EXISTING DRAINAGE COURSES ON THE PROJECT MUST CONTINUE TO FUNCTION DURING STORM CONDITIONS IN ACCORDANCE WITH APPROVED BEST MANAGEMENT PRACTICES AND SWPPP DOCUMENTS, AND THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ADJACENT PROPERTIES FROM DAMAGE FROM STORM WATER RUNOFF RESULTING FROM WORK IN CONNECTION WITH THIS CONSTRUCTION.

UTILITIES:

- THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES, CONDUITS, OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS.
- 2. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES, CONDUITS, AND STRUCTURES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.

Last updated: 03/16/2022 Page 2 of 4

- 3. CONTRACTOR IS RESPONSIBLE FOR CONTACTING UNDERGROUND SERVICE ALERT (USA) AT 811 OR 1-800-227-2600 IN ACCORDANCE WITH THE ONE CALL LAW PRIOR TO START OF ANY EXCAVATION.
- 4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BE FAMILIAR WITH THE JOB SITE AND THE LOCATION OF ALL UNDERGROUND FACILITIES SHOWN OR NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND ASSUMES ALL LIABILITY FOR ANY DAMAGE DONE TO EXISTING UTILITIES THAT ARE SHOWN OR NOT SHOWN ON THESE PLANS.
- 5. THE LOCATIONS AND ELEVATION OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES PRIOR TO ANY GRADING OR CONSTRUCTION NEAR THOSE FACILITIES.

PAVEMENTS:

- 1. ALL EXISTING OR NEW IMPROVEMENTS, INCLUDING CURB, GUTTERS, SIDEWALKS, AND ASPHALT CONCRETE OR PCC PAVING, WHICH ARE BEING JOINED OR MATCHED IN CONNECTION WITH THE PROJECT SHALL BE JOINED OR MATCHED IN CLEAN STRAIGHT LINES IN A MANNER SATISFACTORY TO THE TOWN ENGINEER, INCLUDING NECESSARY SAWCUTTING, COLD MILLING, REMOVAL, REPLACEMENT AND CAPPING.
- 2. THE GRADE OF PAVING ASPHALT SHALL BE PG 64-16 AND THE AGGREGATE SHALL BE TYPE C-2 OR AS DETERMINED BY THE TOWN ENGINEER.
- 3. THE MAXIMUM SINGLE LIFT OF HMA PAVING ASPHALT SHALL BE 2 INCHES UNLESS OTHERWISE APPROVED BY THE TOWN ENGINEER.
- 4. MANHOLES AND VALVE BOX FRAMES SHALL BE ADJUSTED TO FINISHED GRADE AFTER COMPLETION OF THE PAVEMENT CONSTRUCTION IN ACCORDANCE WITH THE STANDARDS OF THE FACILITY OWNER.

TEMPORARY TRAFFIC CONTROL:

- 1. ALL TRAFFIC CONTROL DEVICES, INCLUDING SIGNS, DELINEATORS, AND BARRICADES, AND THE PLACEMENT AND MAINTENANCE THEREOF SHALL CONFORM TO THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD) LATEST EDITION.
- 2. CONTRACTOR SHALL NOTIFY THE TOWN OF APPLE VALLEY ENGINEERING DEPARTMENT AT (760) 240-7520 AT LEAST TWO WORKING DAYS PRIOR TO START OF CONSTRUCTION.
- 3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR PERFORMING WORK WITHIN THE PUBLIC RIGHT-OF-WAY TO PLACE AND MAINTAIN THE TRAFFIC CONTROL DEVICES AS SHOWN HEREIN, AS WELL AS ANY SUCH ADDITIONAL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED BY THE TOWN ENGINEER.
- 4. THE TOWN OF APPLE VALLEY ENGINEERING DEPARTMENT RESERVES THE RIGHT TO OBSERVE THESE TRAFFIC CONTROL PLANS IN USE AND TO DIRECT ANY NECESSARY CHANGES AS FIELD CONDITIONS WARRANT.
- 5. ALL DELINEATORS AND SIGNS SHALL BE RETRO-REFLECTIVE FOR USE AT NIGHT.
- 6. ALL TRAFFIC CONTROL DEVICES SHALL BE SUFFICIENTLY SECURED, DOUBLE BASED, OR WEIGHTED WITH SANDBAGS TO PREVENT DISPLACEMENT BY HIGH WINDS.
- 7. ALL TRAFFIC LANES SHALL HAVE A MINIMUM OF 5 FEET OF CLEARANCE FROM OPEN EXCAVATIONS AND A MINIMUM OF 2 FEET FROM VERTICAL OBSTRUCTIONS. CONTRACTOR SHALL INSTALL "OPEN TRENCH" C27(CA) SIGNS WHENEVER AN OPEN EXCAVATION AREA EXISTS ADJACENT TO THE TRAVELED WAY.
- 8. ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN THEIR PROPER POSITIONS AT ALL TIMES DURING WORKING HOURS AND SHALL BE REPAIRED, REPLACED, OR CLEANED AS NECESSARY TO PRESERVE THEIR APPEARANCE AND CONTINUITY.
- CONTRACTOR SHALL PROVIDE ADDITIONAL FLAGGERS AS DEEMED NECESSARY BY THE TOWN OF APPLE VALLEY ENGINEERING DEPARTMENT.
- 10. ALL ADVANCED WARNING SIGNS SHALL BE EQUIPPED WITH FLAGS DURING DAYLIGHT HOURS AND WITH WARNING LIGHTS AT NIGHT.

Last updated: 03/16/2022 Page 3 of 4

- 11. ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE REMOVED FOLLOWING COMPLETION OF EACH CONSTRUCTION STAGE AND THE PERMANENT TRAFFIC CONTROL SHALL BE RESTORED BY THE CONTRACTOR UPON COMPLETION OF PROJECT.
- 12. CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES UNLESS MODIFIED AS SHOWN ON THIS PLAN. CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT AND MAINTAIN ACCESSIBILITY AS RELATED TO PEDESTRIAN ACCESS AT ALL TIMES PER THESES REQUIREMENTS. SIDEWALK CLOSURE/DETOUR SHALL COMPLY WITH THE LATEST EDITION OF THE CA MUTCD.
- 13. CONTRACTOR SHALL COVER OR REMOVE ALL CONFLICTING SIGNS.
- 14. CONTRACTOR SHALL NOTIFY ALL ADJACENT RESIDENTS AND BUSINESSES FIVE WORKING DAYS PRIOR TO CONSTRUCTION.
- 15. CONTRACTOR SHALL PROVIDE ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES. CONSTRUCTION OPERATIONS SHALL BE CONDUCTED IN A MANNER AS TO CAUSE LITTLE INCONVENIENCE AS POSSIBLE TO ABUTTING PROPERTY OWNERS/OPERATORS.

TRAFFIC CONTROL OPERATIONS ADJACENT TO SCHOOLS:

- CONTRACTOR SHALL COORDINATE ALL TRAFFIC CONTROL OPERATIONS WITH SCHOOL STAFF TO MINIMIZE IMPACT TO SCHOOL TRAFFIC AND PEDESTRIANS.
- CONTRACTOR SHALL SCHEDULE WORK TO AVOID PEAK SCHOOL TRAFFIC HOURS.

STRIPING AND SIGNAGE GENERAL NOTES:

- 1. ALL STRIPING, PAVEMENT MARKINGS, AND SIGNAGE SHALL BE IN CONFORMANCE WITH THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD) (LATEST EDITION).
- 2. ALL MATERIAL FOR STRIPING (LONG LINE) AND PAVEMENT MARKINGS (ARROWS AND LEGENDS) SHALL BE THERMOPLASTIC. APPLICATION SHALL BE BY EXTRUSION METHOD.
- 3. CONTRACTOR SHALL MAINTAIN THE EXISTING STRIPING LAYOUT OR PROVIDE TEMPORARY STRIPING AS REQUIRED TO MAINTAIN THE INTENDED FLOW OF TRAFFIC DURING EACH PHASE OF CONSTRUCTION. TEMPORARY STRIPING SHALL BE INSTALLED ON ANY NEW ASPHALT ROAD SECTION PRIOR TO OPENING TO TRAFFIC.
- 4. ALL CONFLICTING STRIPING AND PAVEMENT MARKINGS SHALL BE REMOVED BY THE CONTRACTOR. REMOVAL SHALL BE BY GRINDING, SANDBLASTING, OR AS DIRECTED BY THE TOWN ENGINEER. REMOVAL SHALL BE PERFORMED IN A MANOR TO PREVENT CONFUSION WITH NEW OR TEMPORARY STRIPING UNDER ALL LIGHTING AND WEATHER CONDITIONS.
- 5. IF EXISTING STRIPING AND PAVEMENT MARKINGS NOT SHOWN ON THE PLANS ARE REMOVED OR DAMAGED BY THE CONTRACTOR'S OPERATIONS, THEY SHALL BE REPLACED OR RESTORED IN KIND AS DIRECTED BY THE TOWN ENGINEER AT THE CONTRACTOR'S EXPENSE.
- 6. NO STRIPING OR PAVEMENT MARKINGS, TEMPORARY OR FINAL, SHALL BE PLACED WITHOUT PRIOR REVIEW AND APPROVAL OF THE LAYOUT BY THE TRAFFIC DIVISION OF THE ENGINEER DEPARTMENT. ANY STRIPING OR PAVEMENT MARKINGS PLACED WITHOUT THIS APPROVAL ARE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE. CONTRACTOR SHALL PROVIDE 48-HOUR ADVANCED NOTICE FOR REVIEW OF STRIPING LAYOUT.
- 7. ALL NEW ASPHALT ROAD SECTIONS SHALL BE ALLOWED TO CURE FOR A MINIMUM OF 7-DAYS PRIOR TO THE INSTALLATION OF FINAL THERMOPLASTIC STRIPING AND MARKINGS.
- 8. ALL SIGNS SHALL BE RETROREFLECTIVE (FHWA TYPE VII/1X) SHEETING.
- 9. ALL SIGNS SHALL BE MOUNTED ON METAL POSTS SIMILAR TO SBCRD STD 303(A) AND 303(B) OR APPROVED EQUAL WITH APPROVED ANCHORS.
- CONFLICTING SIGNS SHALL BE REMOVED OR RELOCATED AS SHOWN ON THIS PLAN. REMOVED SIGNS SHALL BE RETURNED TO THE TOWN OF APPLE VALLEY.

Last updated: 03/16/2022 Page 4 of 4