

CONTRA COSTA COUNTY
GENERAL NOTES FOR IMPROVEMENT PLANS
(Use only those applicable; and/or add as necessary.)

Use 3.2mm (1/8-inch) lettering of appropriate weight to assure legibility even after reduction or other means of reproduction of the drawings.

1. **Field Conflicts:** These plans show existing features including but not limited to trees, utilities, and structures that may be affected by the construction or placement of the proposed engineered improvements. The contractor will immediately notify the engineer if there are any existing features, whether shown or not shown on these plans, that could in any way be in potential conflict with the design of these plans. All work within the vicinity of a potential conflict shall cease until an adequate and appropriate solution is determined by the engineer and approved by the Public Works Department.
2. Should it appear that the work to be done, or any matter relative thereto, is not sufficiently detailed or explained on these plans, the contractor shall contact _____ (name of project engineer), for such further explanations as may be necessary.
3. **Basis of elevation datum:** (if County benchmark, give number, location and elevation).
4. All street improvements shall be constructed in accordance with the provisions of Title 9 of the current County Ordinance Code, County Standard Specifications and Standard Plans. All pedestrian improvements shall conform with the requirements of Title 24 of the California Code of Regulations and the Americans with Disabilities Act. The improvements are subject to the inspection and approval of the Public Works Department. Contact the Public Works Design / Construction Division at 313-2320, at least 48 hours prior to the start of any work, to arrange for inspection. **Any work performed without providing this advanced notice will be rejected and the developer/contractor may be required to remove the improvements and may be subject to payment of fines as determined by the Public Works Director.**
5. **Quality Control Plan:** The Contractor shall be responsible for controlling the quality of material entering the work and the work performed, and shall perform testing to ensure control. Prior to start of work the Contractor shall submit a Quality Control Plan that must describe the methods and frequency of testing, implementation of corrective actions as necessary, and reporting of test results, specific to each material to be used.
6. **Plan revisions:** All revisions to this plan must be reviewed by the Public Works Department prior to construction and shall be accurately shown on revised plans, stamped and distributed by the Engineering Services Division, prior to acceptance of the work as complete.
7. **Excavation:** The contractor shall notify Underground Service Alert at **811** or **(800) 227-2600** two (2) working days prior to any excavation. The USA authorization number shall be kept at the job site.
8. All utility distribution services shall be placed underground.
9. **Utility clearance:** Prior to placing curb, sidewalk, asphalt concrete, subbase or base material, all underground utilities within the right of way shall be installed, backfill completed and the Public Works Department's Construction Division notified, by each of the utility companies having facilities within the work area, that the utility installation has satisfactorily passed acceptance tests.
10. All manholes or inlets over 4 feet in depth shall be provided with ladder steps. Ladder steps shall be integrally cast into the walls of the manhole or inlet whether precast or field cast in accordance with County specifications. Ladder steps shall be steel reinforced copolymer polypropylene plastic or equivalent.
11. **Pavement widening:** When widening the pavement on an existing road, the existing pavement shall be cut to a neat line and removed to an existing adequate structural section. An exploratory trench, or potholing, may be required to determine the limits of pavement removal.

12. **Retaining walls:** Retaining walls within public road rights of way will be inspected by the Public Works Department.

A building permit will be required for retaining walls, outside public road rights of way, that are 4 feet or higher, or that are 3 feet or higher with surcharge. Prior to acceptance of the improvements as complete, verification that the Building Inspection Department has signed off on the permit shall be provided to the construction inspector.

Retaining walls under 4 feet high (3 feet high with surcharge) shown on the improvement plan to be outside of public road right of way, will be inspected by _____ (name of engineering firm). A letter stating that all walls were constructed in accordance with the structural and/or geotechnical engineers' recommendations must be submitted to the Public Works Department, prior to acceptance of improvements as complete.

13. Reproducible 610mm x 920mm (24" x 36") mylar "as built" record drawings are required for engineered structures within public rights of way or easements. Structures include: bridges, retaining walls, tie backs, subdrains, etc.
14. **Trees:** No trees shall be removed unless they are shown and noted to be removed on the improvement plans. If any trees are to be removed, the improvement plans must be reviewed and acknowledged by the Community Development Department. All trees conflicting with grading, utilities, or other improvements, or overhanging the sidewalk or pavement so as to form a nuisance or hazard, shall be trimmed, properly treated and sealed. A tree permit may be necessary and can be obtained from the Community Development Department.
15. **Grades less than 1 percent:** Water testing is required for all curb grades less than one percent.
16. All asphalt concrete paving of public roads is subject to air permeability tests. Based on these tests, additional pavement treatment may be necessary.
17. Existing curb and sidewalk within the project limits that are damaged or displaced, even though not proposed to be removed, shall be repaired or replaced, even if damage or displacement occurred prior to any work performed by the contractor.
18. **Erosion control:** If paving and storm drain improvements are not completed by October 1st, temporary silt and drainage control facilities shall be installed to control and contain erosion-caused silt deposits and to provide for the safe discharge of storm waters into existing storm water facilities. Design of these facilities must be approved by the Building Inspection Department.
19. **Pavement structural section:** The thickness of sub-base, base and surfacing will be determined by the County Public Works Department based on the traffic index and soils tests for "R" value.
21. **Pavement striping:** All traffic striping and markings shall be THERMOPLASTIC unless these plans designate the use of TRAFFIC PAINT.
22. All striping on major roads shall be cat tracked prior to final installation. Final installation of striping will be allowed only after approval of the striping layout by the construction inspector.
23. All subdivision streets that are stubbed out for future use shall have a sign posted at the end of the dead end street that reads: "THIS STREET PLANNED TO BE EXTENDED." The sign shall be reflectorized with black 2-inch capital series "E" letters on a white background, measuring 18 inches high by 36 inches wide. Install with W31 ("END") sign behind standard end of street barricade. See County Standard Plan CA 30.
24. The contractor shall comply with all rules, regulations and procedures of the National Pollutant Discharge Elimination System (NPDES) for municipal construction and industrial activities as promulgated by the California State Water Resource Control Board or any of its Regional Water Quality Control Boards.

25. All relative compaction tests of subgrade soils, aggregate subbase and base course materials will be subject to the following:
- Any scheduled relative compaction test that is not ready for testing within 15 minutes of arrival of the materials testing personnel will be rescheduled. *A fee will be charged for all re-scheduling.*
 - Should any relative compaction test fail and cannot be re-tested within a 15 minute time period from the time all in-place material has been tested for that day, a re-test will be required. *A fee will be charged for re-testing.*

Fees for rescheduling and retesting will be at current rate established by the County.

26. The contractor is responsible for preservation and/or perpetuation of all existing monuments (that control subdivisions, tracts, streets or highways, or provide survey control) which will be disturbed or removed due to contractor's work. The contractor shall provide a minimum of 10 working days notice, to project engineer/surveyor, prior to disturbance or removal of existing monuments. Project engineer/surveyor shall coordinate with the contractor to reset monuments or provide permanent witness monuments and file the required documentation with the county surveyor, per business and professions code section 8771.
27. Any material imported for the construction of embankments or as backfill for structures, culverts and other facilities shall meet the following requirements:

PH*	>5.5 (>7.3**)
Water Soluble Sulfate***	<0.2%
Resistivity (R)*	>3000 ohm/cm**

* Per California Test 532 & 643.

** For backfill around metal pipe/conduit.

*** Reported as SO₄

28. **Encroachment Permit:** The contractor is required to obtain an encroachment permit for all work within existing County road rights of way. Applications for encroachment permit, submitted more than 120 days past the Public Works "reviewed" date stamp, may require up to four weeks to process. For further permit information, contact the Application and Permit Center at (925) 674-7744.
29. The Contractor shall assume sole and complete responsibility for job site conditions during the course of construction of this project, including safety of all persons and property. This requirement will apply continuously and not be limited to normal working hours. The Contractor shall defend, indemnify and hold the County and the engineer harmless from any and all liability, real or alleged, in connection with the performance of work on this project.

EXAMPLE OF A PAVEMENT DESIGN CHART

ROAD NAME	Limits		Design Criteria		Pavement Section		
	From	To	TI	R	AC	AB	AS