

IMPROVEMENT PLAN CONSTRUCTION NOTES

(PUBLIC ROADS)

GENERAL PART 1 OF 2

1. All improvements, including all material and workmanship, shall be designed and constructed in accordance with and as otherwise required or allowed by applicable law and regulation and by the plans, specifications, drawings, and requirements stated herein (collectively, the County's "Road Construction Standards"), including other specified plans and specifications incorporated herein by reference, in the following descending order of precedence to apply where a stricter standard is provided or the preceding standard is silent or does not adequately cover:
 - a. These Road Construction Standards;
 - b. Caltrans Standard Plans (except centerline and edge line striping shall be 4") (most recent edition);
 - c. Caltrans Standard Specifications (except Specification Section 39) (most recent edition);
 - d. Caltrans Standard Specifications, Specification Section 39 (2006 ed.);
 - e. ADA Standards (2010);
 - f. California Manual on Uniform Traffic Control Devices (CA MUTCD; latest revision);
 - g. Sonoma County Bike and Pedestrian Plan;
 - h. Applicable County's Special Provisions, incorporated herein;
 - i. Applicable municipal standards incorporated herein.

Notwithstanding, County may require additional work or facilities in order for the improvements to reasonably provide for the intended function or for public safety. Additionally, based on field conditions or for other good cause, County may specify different or additional requirements as needed to cover extenuating or other circumstances not covered by these Standards.

2. All covered projects and activities shall comply with the standards, specs, and conditions stated herein, unless as otherwise shown in approved plans attached to applicable permit or as reviewed and approved in writing by the Department of Transportation and Public Works.
3. For any work to be performed on the County right-of-way, the Contractor shall obtain an encroachment permit from Permit Sonoma (PRMD), 2550 Ventura Avenue, Santa Rosa, before start of work.
4. The Contractor shall notify PRMD's construction inspector before starting work. See "Inspections" below for notifications and approvals. Final inspection may not be requested until the grading inspector receives, reviews and approves both the engineer's final letter and the final geotechnical report. This approval must be obtained prior to scheduling a final inspection.
5. The Contractor shall be responsible for notifying Underground Service Alert (USA). Call toll-free (800) 642-2444 or 811 at least two working days prior to excavation. The Contractor shall uncover existing buried utilities with utility owner to verify locations and elevations of utilities. Buried utilities include but are not limited to water, sewer, electrical, gas, and telephone. All utilities conflicting with the proposed construction shall be relocated prior to start of construction.
6. All underground improvements shall be installed and approved prior to road paving and placement of curb, gutter, and sidewalks.

COUNTY OF SONOMA DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS		
STANDARD NOTES (1 OF 8)		
DATE: JULY 2018	REVISED: JUNE 2020	
APPROVED BY: JH	SCALE: NONE	DRAWING NO. 199A

IMPROVEMENT PLAN CONSTRUCTION NOTES

(PUBLIC ROADS)

GENERAL PART 2 OF 2

7. Restoration of existing surfacing due to construction of trenches shall be governed by County Standard 219 and the conditions in the approved road encroachment permit or as shown on the approved plans.
8. Any grading outside of the roadway improvements may require a grading permit from PRMD.
9. The Contractor shall obtain a trench permit from the California DIR Division of Occupational Safety (Cal/OSHA) prior to the excavation of any trench five feet or greater in depth.
10. The County may require additional work or facilities in the course of the construction of the project in order for the improvements to reasonably provide for the intended function or for public safety.

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STANDARD NOTES (2 OF 8)		
DATE: JULY 2018	REVISED: JUNE 2020	
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GRADING

1. The Contractor shall enlist the services of a registered geotechnical engineer to monitor the placement of embankments. The geotechnical engineer shall submit a final soils report to the County, which certifies that the embankments were placed in accordance with the project plans (and amendments thereto, if any), specifications, and sound geotechnical practice. The report shall address in particular the suitability of the native soil encountered at the toe and base of all fills. Further, the report shall contain analysis of the soils encountered and a compilation of compaction tests performed. The Report shall be subject to the approval of the County.
2. The subgrade, the Class II Aggregate Base, and the asphalt concrete shall have a relative compaction of at least 95%.
3. If construction is performed earlier than May 1st or later than October 1st in any given year, an approved erosion control plan designed by a civil engineer or other approved, competent individual is required.
4. Perform grading in accordance with Sonoma County Code, Chapter 11 and 11A, applicable Sonoma County regulations [and to the recommendations of the geotechnical engineering report, prepared by _____, dated _____. Also provide geotech contact info. Bracketed info required if project has a geotech report.]
5. Existing drainage courses receiving waters from this site and located throughout this site shall remain open and clear of debris to properly convey storm water. In any event, the owner and/or contractor shall be held liable for any damage due to obstructing natural drainage patterns.
6. Retaining walls are not approved under this permit. Retaining walls require a separate building permit, unless exempted.
7. The contractor shall immediately notify the design engineer upon discovering significant discrepancies, errors or omissions in the plans. Prior to proceeding, the owner shall have the plans revised to clarify identified discrepancies, errors or omissions. The revised plans shall be subject to review by the Chief Building Official.
8. In the event cultural resources (i.e., historical, archaeological, and paleontological resources, and human remains) are discovered during grading or other construction activities, work shall be halted within a 100 foot radius of the find. The Northwest Information Center shall be notified at (707) 664-0880. A qualified archeologist shall be consulted for an on-site evaluation. Additional mitigation may be required by the County per the archeologist's recommendations. If human burials or human remains are encountered, the contractor shall also notify the County Coroner at (707) 565-5070.
9. Should grading operations encounter hazardous materials, or what appear to be hazardous materials, stop work in the affected area immediately and contact 911 or the appropriate agency for further instruction.
10. The grading permit and an approved copy of the grading plans shall be maintained on the project site throughout the duration of construction activities.
11. Drainage facilities and grading shall be inspected before receiving final approval. The contractor shall consult the required inspections notes for coordination of inspection requests.

COUNTY OF SONOMA DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS	
STANDARD NOTES (3 OF 8)	
DATE: JULY 2018	REVISED: JUNE 2020
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STORM DRAINS

1. All storm drain manholes shall be a minimum of 48" in diameter. Unless otherwise noted, manhole frame and cover shall be D&L No. A-1024 or SBF No. 1900CPH (24" clear opening, heavy duty, non-rocking) as manufactured by D&L Foundry, South Bay Foundry or approved equal. Raised letter on top of the cover shall read "STORM DRAIN." Pipes shall be flush with inside of manhole.
2. Trench and backfill construction for storm drain pipe shall be in accordance with CalTrans' Standard Plans Drawing A62-D for concrete culverts and A62-F for metal and plastic culverts.
3. Vertical control of pipe laying may be by either (a) "Batter boards", string line and grade rod, or (b) by Laser Beam. For storm drain pipes (other than CIPP) which have slopes flatter than 0.0030 ft./ft., the soil cement bedding described in Section 19-3.0250 CalTrans Standard Specifications shall be used.
4. Off-Site Drainage improvements shall be completed prior to November 1.
5. The contractor shall place an approved storm drain label on all surface storm drain structures placed or modified within the public right-of-way. The Permit Sonoma (PRMD) construction inspector will provide approved labels. If the structure is already labeled, it will be up to the PRMD construction inspector's discretion whether or not the label should be replaced.
6. Cast in place pipe (CIPP) shall be completed by August 30th to allow curing time.

MISCELLANEOUS

1. Liquid anti-stripping agent (LAS) shall be added to the asphalt binder at a rate of 0.5% by weight of asphalt binder. The LAS shall be AD-here LOF 65-00 or equivalent, and shall be stored, measured, and blended with the asphalt binder in accordance with the anti-stripping agent manufacturer's recommended practice. The LAS can be added at the asphalt plant or at the refinery. When added at the asphalt plant, the equipment shall indicate and record the amount of LAS added. If added at the refinery, the shipping ticket from the refinery shall certify the type and amount of LAS added.
2. The contractor shall stamp the letter "S" on the face of the curb directly above sewer laterals, and "W" on the face of the curb directly above water service laterals, and "B" on the face of the curb directly above blow-off or air relief valves.
3. Sidewalk warps shall be constructed to provide a clear 4-foot walkway around surface obstructions.
4. Placement of mailboxes must be coordinated with and approved by the local branch of the United States Post Office.
5. Testing for relative densities shall be in accordance with Caltrans' test method No. 216, Part II or ASTM 1557. The use of sand cone methods -- such as ASTM 1556 or Caltrans' 216, Part I -- shall not be allowed.

COUNTY OF SONOMA DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS	
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STANDARD NOTES (4 OF 8)

DATE: JULY 2018	REVISED: JUNE 2020
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INSPECTIONS

Approval of all work shall be necessary at the completion of each of the following stages of work and such approval must be obtained before subsequent stages of work may be commenced. Additionally, the Inspector shall be notified at least one working day in advance before any of the following stages of work are commenced. Only that work that is done in the presence of the Inspector, or lacking such presence, at the Inspector's option, done with his/her knowledge, will be approved. Call the automated inspection request system phone number 707-565-3551 and use the codes provided on the handout you received with your permit(s) to select an inspection. Larger projects require a pre-construction meeting on site, and smaller projects by phone. The automated inspection request for a pre-construction meeting is choice "200". **This request must be made five (5) days in advance of work and an inspector will call back to make arrangements.**

1. Earthwork:
 - Construction of embankments, excavations.
 - Excavation for storm drains and culverts.
 - Preparation of subgrade
 - Back-filling of structures and pipes and public utilities.

2. Concrete work:
 - Construction of forms, for all concrete structures, including curbs, gutters, and sidewalks.
 - Placing of concrete in structures, including curbs, gutters, and sidewalks.

3. Drainage facilities:
 - Placing of storm drains and culvert pipes.
 - Construction of roadside ditches and other drainage ways

4. Roadway construction:
 - For public roadway and/or sidewalk construction, contact the Department of Transportation and Public Works' Soils Lab for inspection requirements at 707-565-2585. A minimum two (2) working days notice is required, but more is preferred.**
 - Placing and compacting of base material. If more than one course or type of base or sub-base is to be used, approval shall be necessary for each course and/or type.
 - Placing of pavement or surfacing.

5. Final clean-up.
 - Final inspection may not be requested until the construction inspector receives, reviews and approves both the engineer's final letter and the final geotechnical report. This approval must be obtained prior to scheduling a final inspection.

COUNTY OF SONOMA DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS		
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EROSION PREVENTION AND SEDIMENT CONTROL PART 1 OF 3

1. Perform erosion prevention and sediment control in accordance with chapter 11 and 11a of the Sonoma County Code (SCC).
2. The approved plans shall conform to Permit Sonoma's (PRMD) erosion prevention and sediment control Best Management Practices (BMPs) guide as posted on the PRMD website.
3. The property owner is responsible for preventing storm water pollution generated from the construction site year round. Work sites with inadequate erosion prevention and/or sediment control may be subject to a stop work order and/or additional inspection fees to verify compliance with SCC.
4. If discrepancies occur between these notes, material referenced on the approved plans or manufacturer's recommendations, then the most protective shall apply.
5. At all times the property owner is responsible for obtaining and complying with the State of California National Pollutant Discharge Elimination System (NPDES) general permit for storm water discharges associated with construction and land disturbing activities such as clearing, grading, excavation, stockpiling, and reconstruction of existing facilities involving removal and replacement.
6. The property owner must implement an effective combination of erosion prevention and sediment control on all disturbed areas during the rainy season (October 15 - April 15). Grading and drainage improvement shall be permitted during the rainy season only when on-site soil conditions permit the work to be performed in compliance with SCC.
7. During the rainy season, storm water BMPs referenced or detailed in PRMD's BMP guide shall be implemented and functional on the site at all times and the area of erodible land exposed at any one time during the work shall not exceed one acre or 20 percent of the permitted work area, whichever is greater, and the time of exposure shall be minimized to the maximum extent practicable.
8. During the non-rainy season, on any day when the National Weather Service forecast is a chance of rain of 30 percent or greater within the next 24 hours, storm water BMPs referenced or detailed in PRMD's BMP guide shall be implemented and functional on the site to prevent soil and other pollutant discharges. At all other times, BMPs should be stored on site in preparation for installation prior to rain events.
9. Erosion prevention and sediment control BMPs shall be inspected by the property owner before forecasted storm events and after storm events to ensure BMPs are functioning properly. Erosion prevention and sediment control BMPs that have failed or are no longer effective shall be promptly replaced. Erosion prevention and sediment control BMPs shall be maintained until disturbed areas are stabilized.

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EROSION PREVENTION AND SEDIMENT CONTROL PART 2 OF 3

10. The limits of grading shall be defined and marked on site to prevent damage to surrounding trees and other vegetation. Preservation of existing vegetation shall occur to the maximum extent practicable. Any existing vegetation within the limits of grading that is to remain undisturbed by the work shall be identified and protected from damage by marking, fencing, or other measures.
11. Changes to the erosion prevention and sediment control plan may be made to respond to field conditions if the alternative BMPs are equivalent or more protective than the BMPs shown on the approved plans. Alternative BMPs are subject to review and approval by PRMD staff.
12. Discharges of potential pollutants from construction sites shall be prevented using source controls to the maximum extent practicable. Potential pollutants include but are not limited to: sediment, trash, nutrients, pathogens, petroleum hydrocarbons, metals, concrete, cement, asphalt, lime, paint, stains, glues, wood products, pesticides, herbicides, chemicals, hazardous waste, sanitary waste, vehicle or equipment wash water, and chlorinated water.
13. Entrance(s) to the construction site shall be maintained in a condition that will prevent tracking or flowing of potential pollutants offsite. Potential pollutants deposited on paved areas within the county right-of-way, such as roadways and sidewalks, shall be properly disposed of at the end of each working day or more frequently as necessary. The contractor shall be responsible for cleaning construction vehicles leaving the site on a daily basis to prevent dust, silt, and dirt from being released or tracked offsite. All sediment deposited on paved roadways shall be removed at the end of each working day or more often, as necessary.
14. All disturbed areas shall be protected by using erosion prevention BMPs to the maximum extent practicable, such as establishing vegetation coverage, hydroseeding, straw mulch, geotextiles, plastic covers, blankets, or mats. Temporary revegetation shall be installed as soon as practical after vegetation removal, but in all cases prior to October 1. Permanent revegetation or landscaping shall be installed prior to final inspection.
15. Whenever it is not possible to use erosion prevention BMPs on exposed slopes, sediment control BMPs such as fiber rolls and silt fences shall be installed to prevent sediment migration. Fiber rolls and silt fences shall be trenched and keyed into the soil and installed on contour. Silt fences shall be installed approximately 2 to 5 feet from toe of slope.

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EROSION PREVENTION AND SEDIMENT CONTROL PART 3 OF 3

16. Hydroseeding shall be conducted in a three step process. First, evenly apply seed mix and fertilizer to the exposed slope. Second, evenly apply mulch over the seed and fertilizer. Third, stabilize the mulch in place. An equivalent single step process, with seed, fertilizer, water, and bonded fibers is acceptable.

Applications shall be broadcast mechanically or manually at the rates provided. Seed mix and fertilizer shall be worked into the soil by rolling or tamping. Stabilization of mulch shall be done hydraulically by applying an emulsion or mechanically by crimping or punching the mulch into the soil. Equivalent methods and materials may be used only if they adequately promote vegetation growth and protect exposed slopes.

For the material and application rate formula submit a request a minimum of two (2) weeks in advance by email to the DTPW Land Development Section at TPW-LandDev-Referral@sonoma-county.org.

17. Dust control shall be provided by contractor during all phases of construction.
18. Storm drain inlets shall be protected from potential pollutants until drainage conveyance systems are functional and construction is complete.
19. Energy dissipaters shall be installed at storm drain outlets which may convey erosive storm water flow.
20. Soil, material stockpiles, and fertilizing material shall be properly protected with plastic covers or equivalent BMPs to minimize sediment and pollutant transport from the construction site.
21. Solid waste, such as trash, discarded building materials and debris, shall be placed in designated collection areas or containers. The construction site shall be cleared of solid waste daily or as necessary. Regular removal and proper disposal shall be coordinated by the contractor.
22. A concrete washout area shall be designated to clean concrete trucks and tools. At no time shall concrete products and waste be allowed to enter county waterways such as creeks or storm drains. No washout of concrete, mortar mixers, or trucks shall be allowed on soil. Concrete waste shall be properly disposed.
23. Proper application, cleaning, and storage of potentially hazardous materials, such as paints and chemicals, shall be conducted to prevent the discharge of pollutants.
24. Temporary restrooms and sanitary facilities shall be located and maintained during construction activities to prevent the discharge of pollutants.
25. Appropriate vehicle storage, fueling, maintenance, and cleaning areas shall be designated and maintained to prevent discharge of pollutants.

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