

COUNTY OF SACRAMENTO

Site Improvement & Permits Section

ELECTRONIC IMPROVEMENT PLAN SUBMITTAL CHECKLIST

The following items shall be provided at the time of improvement plan submittal.

- PDF of Project Information Form
- PDF of Signed Statement of Applicants Responsibility
- PDF of Signed Statement of Mutual Commitment
- Approved Drainage Study or Department of Water Resources Parallel Review Program Agreement, including the Drainage Study Scoping Agreement and complete drainage study (if a drainage study is required by DWR)
- A check for \$1,400 payable to “Sacramento County” to open billing account
- PDF of improvement plans (22” x 34” or 24” x 36” sheets)
- PDF of the completed Department of Water Resources Plan Submittal Take-In Checklist
- PDF of Sanitary Sewer Submittal Approval Letter (Contact developmentservices@sacsewer.com)
- PDF Water Supply Submittal Approval Letter (ZONE 40 ONLY – Contact John Kern 874-5159)
- PDF of easements and proof of ownership
- PDF Completed Water Service Request & Cross-Connection Questionnaire form (ZONE 40 ONLY)
- PDF of Landscape Plans per Section 8-6 (A) of the Improvement Standards (a letter and diagram prepared and stamped by a licensed landscape architect may be submitted in lieu of landscape plans) (ZONE 40 ONLY)
- PDF copy of Mitigation Monitoring & Reporting Program (MMRP) fee payment (Contact Eric Stackhouse at (916) 874-8117)
- PDF copy of Final Conditions of Approval
- PDF copy of Utility Conflict letters
- PDF copy of retaining wall calculations with soils report, if retaining wall is greater than 2 feet high or any walls greater than six feet is proposed
- PDF copy of soils report if alternative road structural section is proposed

Note: It is the responsibility of the applicant to know if their project has an MMRP and if it is in Zone 40.
Revised 01/04/2024

PROJECT INFORMATION

COUNTY OF SACRAMENTO

PROJECT NAME:

PROJECT ADDRESS:

PARCEL NO:

DESCRIPTION OF PROJECT:

ENGINEER / CONSULTANT INFO

COMPANY NAME:

CONTACT PERSON:

ADDRESS:

CITY:

STATE:

ZIP CODE:

PHONE NO:

FAX NO:

EMAIL:

DEVELOPER / OWNER INFO

COMPANY NAME:

CONTACT PERSON:

ADDRESS:

CITY:

STATE:

ZIP CODE:

PHONE NO:

FAX NO:

EMAIL:

FOR COUNTY USE ONLY:

CUSTOMER IDENTIFICATION NO:

ORDER NO:

SUB ORDER NO:

BOND TYPE:

BOND AMOUNT:

BOND RELEASE 90%:

BOND RELEASE 10%:

FEE DISTRIBUTION:

SIPS:

PLANNING:

ENVIRONMENTAL:

STATEMENT OF APPLICANTS RESPONSIBILITY Improvement Plan

Dear Applicant:

Please read the following statement outlining your responsibilities regarding the checking and approval of your Improvement Plan. A Civil Engineer is required to prepare these plans and certify his work with his seal and signature.

California Government Code Section 66451.2 authorizes cities & counties to charge a fee for the actual cost of review. Sacramento County has implemented this fee in Section 22.20.016 of Sacramento County Code. In submitting your plan for review and signing this form, you are agreeing to take responsibility for the costs generated by the County related to plan review, material testing, and construction inspections. An initial deposit \$1,400.00 is to accompany this plan submittal. Upon receipt, a unique account will be established in your name. You will receive a statement on a monthly basis, and all charges must be paid in full prior to the County Engineer's approval of your plans. If you are the owner of the affected land please sign on the line below. If you are an authorized agent of the owner please sign below and present a copy of your power of attorney for this project. Failure to keep your account current may result in delays of plan approval and issuance of building permits.

I hereby confirm that I understand my financial responsibility for this plan. If I sell or option this property, I will disclose the terms of this statement, and if I fail to do so, I will be jointly responsible.

(Please Print)

Assessor's Parcel No.: _____

Property Address/Project Name: _____

Planning Control No. (if applicable): _____

Applicant's Name: _____

Title: _____

Company Name: _____

Mailing Address: _____

Telephone No.: _____

E-mail address: _____

Signed & Date: _____

Improvement Plan Processing Mutual Commitments

County Commitments

IMPROVEMENT PLAN REVIEWS

1. *Realistic and reasonable timelines will be developed and adhered to as follows:*
 - *1st plan review-20 working days for County to complete*
 - *2nd plan review-10 working days for County to complete*
 - *3rd plan review (if necessary) -10 working days for County to complete*
2. *A complete and comprehensive plan review will be performed with the first plan submittal.*
3. *Initial improvement plans reviews will be performed within 7 days of submittal in a coordinated effort during which improvement plan acceptance will be determined and will be contingent upon the completeness and quality of the submitted plan.*
4. *Incomplete plan submittals will not be accepted for review and plans will be returned to applicant engineers until submittals meet minimum established standards.*
5. *Improvement plans will be reviewed for consistency with most recent Board of Supervisor adopted Improvement Standards. Personal preferences will not be a basis for staff plan review.*
6. *Plans will be deemed incomplete when the following conditions are present:*
 - a. *plans are inconsistent with County Improvement Standards,*
 - b. *plans are inconsistent with County plan submittal checklists,*
 - c. *technical studies, as defined in each Departments submittal requirements, are not included with plan submittal, and*
 - d. *plans do not comply with Final Conditions of Approval.*
7. *Once accepted, County staff will review improvement plans utilizing Final Conditions of Approval. Plan review comments will be consistent with those conditions.*
8. *Improvement plan reviews are targeted to be completed within two review cycles. Prior to initiating the third review cycle, the project applicant has an option to request a meeting with the developer, engineer, and appropriate County staff to resolve issues with the plan. This meeting shall be requested and facilitated by the County Project Manager.*
9. *Plans resubmitted to the Land Division Site Improvement Review Section (LDSIRS) will be distributed upon day of receipt.*
10. *Plan check staff will be available by appointment during the hours of 1pm to 4:30 pm daily. Customers are encouraged to take advantage of appointment scheduling.*
11. *Plan check quality control measures will be instituted by County to insure consistency and accuracy of plan reviews including regular training of plan review staff, standard plan drafting standards and check lists made available to customers detailing plan submission requirements.*

PROJECT FACILITATOR ROLE

1. *A Project Facilitator will be designated for every improvement plan*
 - *to serve as a single point of contact for the developer and engineers,*
 - *to monitor status of plan review,*
 - *to monitor improvement plan time commitments are met by County staff,*
 - *and to insure consistency of plan reviews resulting in improved coordination of all comments.*
2. *County management and Project Facilitator will be responsible for monitoring timelines and to facilitate resolution of plan review issues.*

GENERAL PROVISIONS

1. *Technical study requirements will be developed in conjunction with the development community. Study requirements will be adhered to by both County staff and project customers.*
2. *At a minimum, quarterly technical staff training plans will be implemented to insure staff is knowledgeable in their craft and has the resources and skills to perform plan review.*
3. *LDSIRS will create, publish and maintain a scoreboard of performance measures for plan check review for all departments.*
4. *County will establish knowledgeable and responsible points of contact and return calls timely.*
5. *Improvement Standards will be updated by County every other year, at a minimum, to capture the changes to standards required to more accurately reflect the design function and infrastructure requirements of County service providers, the Board of Supervisors and the community.*

Developers/Engineers/Customers Commitments

1. *Quality control will be performed by the engineering firm submitting the improvement plan.*
2. *Developers/Engineers understand that plans will be deemed incomplete when the following conditions are present:*
 - *plans are inconsistent with County Improvement Standards,*
 - *plans are inconsistent with County plan submittal checklists,*
 - *technical studies, as defined in each Departments submittal requirements, are not included with plan submittal, and*
 - *plans do not comply with Final Conditions of Approval.*
3. *Improvement plan reviews are targeted to be completed within two review cycles. Prior to initiating the third review cycle, the project applicant has an option to request a meeting with the developer, engineer, and appropriate County staff to resolve issues with the plan. This meeting shall be requested and facilitated by the County Project Manager.*
4. *Realistic and reasonable timelines will be developed and adhered to as follows:*
 - *Upon receiving notice of the County's 1st plan review comments the Developer shall resubmit to the County within 60 working days. If a complete re-submittal is not made within 60 working days the County's response time shall revert to 20 working days.*

- *If there is no submittal activity by the Developer on a project for a period of 120 working days, the County shall purge all improvement plan submittal documents from its files. Subsequent Improvement plan submittal for the project shall be treated as a completely new submittal and will require all documents associated with an initial Improvement Plan submittal.*
- 5. *Plans will not be resubmitted until the Developers/Engineers have responded to all comments provided by County on prior submittals. Written responses to each and every comment from the prior plan review will be provided with the next plan submittal.*
- 6. *Partial plan approvals will be requested only under the most extraordinary circumstances.*
- 7. *Developers/Engineers will verify all off-site conditions are met.*
- 8. *Developers/Engineers will establish knowledgeable and responsible points of contact and return calls timely from the County Project Facilitator.*
- 9. *Developers/Engineers will comply with appointment periods to allow plan check staff uninterrupted time to review improvement plans.*

Acknowledgement

I have read the above and agree to adhere to these commitments.

Applicant's Name (Please print)

Signature

Date

DEPARTMENT OF WATER RESOURCES
PARALLEL REVIEW
PROGRAM AGREEMENT

The Department of Water Resources (DWR) Parallel Review Program was created to benefit the development community in Sacramento County and allows applicants to submit complete drainage studies with improvement plans for concurrent review by staff.

PARALLEL REVIEW PROCESSING

Eligibility Criteria

Projects shall meet the following criteria to be eligible for parallel review:

- The project has a signed Level 4 Drainage Study Scoping Agreement.
- The Level 4 drainage study submittal is deemed complete and accepted for review, per the Drainage Study Scoping Agreement and the Site Improvement and Permitting Section (SIPS) Improvement Plan Processing Mutual Commitments document.
- The Project Applicant understands and agrees to all terms, conditions, and responsibilities of the Parallel Review Program, as outlined in the following sections, and has signed this acknowledgment form.

Application and Authorization

Projects that meet the eligibility criteria listed above may submit the Parallel Review Program Agreement to SIPS along with all applicable improvement plan submittal documents as determined by SIPS, including but not limited to the Drainage Study Scoping Agreement and the complete drainage study. During the improvement plan review process, upon approval of the drainage study, the improvement plans may be re-routed by SIPS to any departments that approved the improvement plans prior to drainage study approval.

Terms

1. Concurrent Site Improvement Plan Check During Drainage Study Review

Provided the project meets the eligibility criteria above, the project may submit for on-site and off-site improvement plan parallel review prior to the approval of the Level 4 Drainage Study.

If a project does not qualify for the parallel review process, DWR will notify the project team of the reason(s) for disqualification and provide guidance on what will be required for the project to meet the eligibility requirements.

2. Review Timelines

- I. **Improvement Plan Review:** The review will follow the timelines dictated by SIPS.
- II. **Drainage Study Review:** The review will follow the timelines agreed to in the Drainage Study Scoping Agreement.

3. Applicant Responsibilities

The applicant is responsible for ensuring that all submittals and resubmittals are of the highest quality and are well-coordinated between disciplines. Resubmittals shall thoroughly address all review comments and must include response letters or plan annotations clearly describing how the comment has been addressed.

The applicant understands that moving forward with this parallel review could present a risk since comments resulting from the review of the drainage study may impact the improvement plans, and additional plan check comments may arise after the drainage study is reviewed. Water Resources may not be able to provide a complete review of the improvement plans until the drainage study is approved if there are anticipated design changes related to the drainage study.

When FEMA submittals are necessary, the applicant understands that early coordination with FEMA is critical. FEMA related submittals are not part of the parallel review process and should be coordinated separately. The applicant is encouraged to start the FEMA submittal process well in advance of the improvement plan review process so that the FEMA process does not delay the approval of improvement plans.

4. Applicant Acknowledgement

I fully understand the potential delays and risks associated with the parallel review process and will comply with the stated terms and conditions of the Parallel Review Program.

Applicant Signature

Date

**DEPARTMENT OF WATER RESOURCES
PLAN SUBMITTAL TAKE-IN CHECKLIST**

This checklist was created to aid the Design Engineer in developing improvement/grading plans for submittal to the Sacramento County Department of Water Resources. Completing the checklist does not imply approval of the submitted plans. This checklist does not encompass all applicable standards but should be used as a starting point.

Project Information:

Project Name:
Project Site Address:
Project Parcel Number(s):
Project Site Acreage:
Type of Project (Single-family residential, multi-family, commercial, road):
Type of Submittal (Grading, Rough Grading, Improvement Plans):
Planning Control Number:
Contact Name:
Engineering Firm:
Contact Email:
Contact Phone:

Applicable Standards and Resource Links

- **Hydrology Standards:**
<https://waterresources.saccounty.gov/Pages/DrainageManualVolume2.aspx>
- **Drainage Study Submittal Requirements:**
<https://waterresources.saccounty.gov/Documents/Reports/FINAL%20Drainage%20Study%20Requirements.pdf>
- **Improvement Standards** (Sections 9 and 11 are referenced in this checklist):
<https://engineering.saccounty.gov/Pages/ImprovementStandards.aspx>
- **Floodplain Management Ordinance:**
<http://www.waterresources.saccounty.net/Pages/CodesOrdinances.aspx>
- **Standard Construction Specifications:**
<http://www.saccountyspecs.saccounty.net/Pages/default.aspx>
- **Stormwater Quality Design Manual:**
<https://www.beriverfriendly.net/stormwater-quality-design-manual/>
- **Additional Stormwater Quality Resources:**
<http://www.waterresources.saccounty.net/stormwater/Pages/newdevelopment.aspx>

Type of Submittal	Applicable Checklist Sections
All Submittals	2
Rough Grading	2, 3
Grading	2, 4
Improvement Plans	1, 2, 4, 5

Section 1: Drainage Study

NOTE: See the Drainage Study Submittal Requirements document for information regarding drainage study content.

Drainage studies are typically required when private or public storm drain systems are proposed; the project encroaches in a floodplain, watercourses are modified, stormwater quality measures are required, there are potential impacts due to the project, or other similar drainage conditions are present.

Level 4 Drainage Study Status	Mark Status	Comments
Not Required (briefly explain)	<input type="checkbox"/>	
Submitted with plans (including the parallel review agreement)	<input type="checkbox"/>	
In review (provide submittal date and include the parallel review agreement)	<input type="checkbox"/>	
Previously approved (provide approval date)	<input type="checkbox"/>	

Section 2: All Plan Submittals

All plan submittals including rough grading plans, grading plans, and improvement plans require the following:

Erosion and Sediment Control

NOTE: Section 11 of the Sacramento County Improvement Standards contains standard details for various erosion and sediment control measures. If reference is made to these drawings, it is not necessary to replicate the drawings on the erosion and sediment control plans.

- An Erosion & Sediment Control Plan is included in the plan set as a separate sheet(s), and all specified best management practices (BMPs) are presented in accordance with the latest edition of Section 11 of the Improvement Standards.
- The following notes are added to the Erosion and Sediment Control Plan.
 1. All erosion and sediment control measures shall be constructed and maintained in accordance with the current edition of the County of Sacramento Improvement Standards.
 2. Erosion control BMPs shall be installed and maintained during the wet season (October 1 through April 30). Sediment control BMPs shall be installed and maintained year-round.
 3. All drainage inlets immediately downstream of the work areas and within the work areas shall be protected with sediment control year-round. Sediment control protection shall be removed from the drainage inlets upon the County's acceptance of public improvements.
 4. All stabilized construction access locations shall be constructed per Standard drawing 11-1 where construction traffic enters or leaves paved

areas. The stabilized access shall be maintained year-round until the completion of construction.

5. All areas disturbed during construction by grading, trenching, or other activities, shall be protected from erosion during the wet season (October 1 through April 30). Hydroseed, if utilized, must be placed by September 15. Hydroseed placed during the wet season shall use a secondary erosion protection method.
6. Sensitive areas and areas where existing vegetation is being preserved shall be protected with construction fencing. Sediment control BMPs shall be installed where active construction areas drain into sensitive or preserved vegetation areas.
7. Sediment control BMPs shall be placed along the project perimeter where drainage leaves the project. Sediment control BMPs shall be maintained year-round until the construction is complete or the drainage pattern has been changed and no longer leaves the site.
8. Erosion and sediment control measures for the project should always be in substantial compliance with the stormwater pollution prevention plan (SWPPP) prepared for the project in accordance with the State of California General Construction Permit. This permit requires that the SWPPP be kept up to date to reflect the changing site conditions and that the SWPPP be always available on-site for review by state inspectors.
9. Effective erosion control BMPs shall be in place before any storm events.

- Disturbed areas and all retained existing vegetation are delineated.
- The numerical value of acreage disturbed during construction.
 - Project disturbs less than one acre. OR
 - If 1.0 acre or more is disturbed, a Waste Discharge Identification (WDID) number and blank information block to be filled out at the pre-construction meeting containing the name and telephone number of the qualified person responsible for implementing the SWPPP are included.
- A statement of quantities of material excavated and/or filled, imported or exported, and if excavation or fill is temporary or permanent.
- Existing and proposed topography (contours and spot elevations) are shown onsite and a minimum distance of 50 feet offsite.
- On-site drainage patterns, surface drainage discharge points, and details of surface discharge points are shown.
- Off-site drainage patterns and details clearly indicate where runoff enters and/or where it is routed around the site. The shed area of any offsite watershed conveyed through the project or routed around the project is stated. Details (dimensioned cross sections and flowlines, etc. of temporary channels, etc.) included on the plans.
- All structural and non-structural BMPs shown (non-structural BMPs are those statements governing the scheduling and location of structural BMPs).
- A BMP installation schedule for various phases of the project. All proposed BMPs are listed in this schedule.

Example:

BMP INSTALLATION SCHEDULE																
PHASE OF CONSTRUCTION	EROSION & SEDIMENT CONTROL MEASURES															
	WET SEASON					WET AND DRY SEASON										
	HYDROSEEDING	STRAW MULCHES & TACKIFIER	SOIL BINDERS	PRESERVATION OF EXISTING VEGETATION	BLANKETS, MATS, & GEOTEXTILES	FIBER ROLLS	DUST CONTROL	OUTLET PROTECTION	SILT FENCING	SAND/GRAVEL BAG BARRIERS	STORM DRAIN INLET PROTECTION	SEDIMENT TRAP	DEWATERING	STABILIZED CONSTRUCTION ENTRANCE	MATERIAL WASTE DISPOSAL LOCATION	CONCRETE WASHOUT
PRE-GRADING				X		X	X			X	X	X		X	X	
CUT & FILL ACTIVITIES	X	X	X		X	X	X			X	X	X		X	X	
UNDERGROUND WORK						X	X			X	X	X		X	X	X
STORM DRAIN IMPROVEMENTS						X	X	X		X	X	X		X	X	X
CURB & GUTTER							X			X	X	X		X	X	X
STREET IMPROVEMENTS							X			X	X			X	X	X
PAVE OUT							X			X	X	X		X	X	X
POST GRADING	X		X			X	X			X	X	X		X	X	X

- A proposed maintenance schedule of all erosion and sediment control BMPs to be used during various phases of construction.
- Measures of dust control to be taken during construction activity.
- Location and detail reference for stabilized construction access.
- Location(s) and detail reference for concrete washouts.
- Locations for equipment/material storage area, debris/solid waste stockpiles, spoils storage and vehicle/equipment maintenance, fueling and washing areas.
- Structural BMPs at:
 - project boundary
 - limits of disturbed areas
 - site perimeter (show section at perimeter of existing and proposed conditions)
 - overland flow locations such as ditches, creeks, and swales
 - tops and toes of slopes and stockpiles
 - perimeter of equipment/material storage areas, waste stockpiles, spoils storage areas, vehicle/equipment maintenance, fueling and washing areas.
- Measures (e.g., sediment basin, sediment trap, etc.) taken during the **rough grading or grading process** to intercept and detain sediment laden run-off to allow the sediment to settle in accordance with Section 11. The sediment basin is sized to capture 100% of the two-year, three-day storm event from the onsite and/or offsite shed area.

Included in the design are dewatering procedures demonstrating (graphically or verbally) how the stormwater run-off shall be evacuated from sediment traps and sediment basins (or any excavated low areas), the point of discharge to the public storm drain system, the method of secondary filtration proposed to treat discharge that appears to have high concentrations of suspended particles, and verbiage stating that alternative effective measures shall be implemented if the proposed method fails.
- Method for post-grading stabilization of all disturbed soil.
- A statement that straw mulch, soil binder, or erosion control blankets/mats shall be used in conjunction with hydroseeding during the wet season for the temporary protection of disturbed soil (hydroseeding may be used alone only

if there is sufficient time to ensure adequate vegetation establishment before the start of the rainy season).

If inlets are present:

- Drainage inlet protection in accordance with Section 11-14 has been provided. All inlets within the curb and gutter are shown as protected with an Inlet Sediment Control Barrier (DWG 11-7 in Improvement Standards).
- Concrete stamps or exposed plaques for a permanent storm drain message "No Dumping- Flows to Creek" or other approved message consistent with Section 9-14G of the Sacramento County Improvement Standards is specified.

If colloidal soils are anticipated:

- A temporary treatment basin and treatment system designed to treat and evacuate 50% of the two-year, three-day storm event within one week, along with all supporting calculations, is included in the plans. The treatment system may be shown as a contingency.

If a creek is present:

- Special BMPs implemented during creek improvements in order to prevent erosion during construction.
- Method to re-stabilize creek after completion of improvements.
- A buffer adjacent to the creek a minimum of 20 feet wide disallowing stockpiling or staging.

Stormwater Pollution Prevention Plan (SWPPP) (when required)

- If 1.0 acre or more is disturbed, a SWPPP is required, and the WDID number is provided on the plans.

Section 3: Rough Grading Plans

NOTE: To obtain permission to rough grade the site concurrently with the improvement plan review, applicants may request from SIPS a **Rough Grading Permit (also Mass Grading, Advance Grading, etc.)**. The submittal for a rough grading permit shall include the improvement plan cover sheet with the title changed from "Project X Improvement Plans" to "Project X Rough Grading Plan", and the erosion and sediment control plan sheet(s). Rough grading plans shall not include any drainage structures.

- Rough Grading Plan Note-** The following note has been added on the cover sheet of the rough grading plans:
"The Department of Water Resources considers these plans limited to rough grading activities only. As such, the review has been limited to checking for floodplain impacts and erosion and sediment control best management practices only. The Department of Water Resources will review the grading in detail as part of the improvement plan review. As such, it is understood that all grading activities by the developer and their agents are considered at-risk."

Section 4: Grading Plans

- A copy of the applicable permits from the U.S. Army Corps of Engineers, State Fish and Game, and State Water Quality Control Board is attached.
 - No permits from any state or federal agencies were required for this project.
- All conditions of approval relating to drainage development in accordance with the approved Planning Application Control No. _____ have been addressed.
- Grading plan has been prepared in accordance with Section 10 of the Sacramento County Improvement Standards.
- Minimum pad elevations have been clearly indicated.
- Overland release path and flowline elevations are clearly indicated on grading plan and include high point and low point elevations along the path.
- A detail of the overland release discharge point is provided along with any permanent release paths in accordance with Section 9 of the latest Sacramento County Improvement Standards.
- Where the overland release path leaves the ROW, include a concrete stamp that states: "EMERGENCY DRAINAGE RELEASE PATH – DO NOT BLOCK"
- Existing and proposed topography (contours and spot elevations) shown for onsite and a minimum distance of 50 feet offsite.

Section 5: Improvement Plans

General

- A copy of the applicable permits from the U.S. Army Corps of Engineers, State Fish and Game, and State Water Quality Control Board is attached.
 - No permits from any state or federal agencies were required for this project.
- All conditions of approval relating to drainage development in accordance with the approved Planning Application Control No. _____ have been addressed.

Notes Section

- The following notes have been added to the Drainage Notes Section
 1. All construction and materials for drainage shall be in accordance with the latest edition of the county of Sacramento Improvement Standards and Standard Construction Specifications. Where discrepancies exist, appropriate notes shall be added to the plans, taking precedence over the Standard Construction Specifications.
 2. The minimum cover requirements during construction for temporary construction vehicle loading shall be 4 feet for metal and plastic pipe and 3 feet for reinforced concrete pipe.

3. The contractor shall place the proper strength pipe if trench conditions encountered differ from the design trench.
4. Drainage in public right-of-way (ROW) and drainage easements shall conform to the following:
 - Drainage pipe material shall conform to section 36 and section 50 (excluding 50-20, which is not allowed) of the standard construction specifications.
 - Drainage manholes shall conform to section 39 of the standard construction specifications.
5. Testing of drainage systems
Drainage in public ROW and drainage easements shall conform to the following:
 - Drainage pipes, including drain inlet laterals, shall be tested in conformance with section 38-10 of the standard construction specifications.
 - Storm drain manholes shall be tested in conformance with Section 39-4.02 of the Standard Construction Specifications.
6. Resilient connectors, in conformance with Section 39-2.02 and STD DWG 9-7A of the Standard Construction Specifications, are required between pre-cast manhole and pipe and between pre-cast drop inlet and pipe. Water stops are required for pipe to cast-in-place manhole/drop inlet connections.
7. Erosion Control Structures (STD DWG 9-27) shall be Class B concrete, not grouted cobble.
8. All drainage inlets in public row and drainage easements shall have a permanent storm drain message "No Dumping – Flows to Creek" or other approved message consistent with 11-10A and 11-10B of the Sacramento County Improvement Standards.
9. All connections to drainage inlets shall be on the face or side allowing a minimum of 6 inches from corner. Connections to corners of drain inlets is not allowed.
10. Oblique connections to drainage inlets shall not exceed 20 degrees from perpendicular.
11. Polyvinyl Chloride (PVC) Pipe shall conform to the Construction Specifications, Section 50-26.
12. High-Density Polypropylene (HDPE) pipe shall not be used for public storm drains.

The following Water Flushing Notes have been added to the Drainage Notes Section:

Flushing of Newly Constructed Water Pipe Systems

Discharge of Potable Water into the Agency Storm Drain System (sand flush):

1. Residual Chlorine is field measured at <0.019 mg/L;
2. Turbidity must not exceed 100 NTU; or must be less than that which is measured in the receiving water + 20%;
3. pH is no less than 6.5 nor greater than 8.5.
4. If other pollutants are suspected of being present, testing and reporting to the Agency shall be conducted prior to discharge.

5. Must be hard piped direct to the storm drain catch basin/manhole or alternative method approved by the Agency.

Note:

- The County will require documentation of the aforementioned measurements for discharge volumes greater than 325,850 gallons.
- The Contractor shall be responsible for all sampling, testing, reporting and all associated costs.

Highly Chlorinated Water associated with disinfection has any of four (4) options:

1. Obtain a sanitary sewer permit. Effluent must be hard piped to a sanitary sewer discharge point.
2. Dechlorination and discharge to land with a Regional Water Board Discharge to Land permit (or waiver).
3. Dechlorination and discharge the Surface Waters with a Regional Water Board Limited Threat Discharge To Surface Water permit (or waiver).
4. Dechlorination and discharge to the MS4 with a Regional Water Board Limited Threat Discharge To Surface Water permit (or waiver) or Statewide Drinking Water System Discharge permit.

Easements

- Easement has been shown in accordance with Section 9 of the latest Sacramento County Improvement Standards.
- Easements meet minimum width of fifteen feet (15').
- Easement is not split by property line.

Plan and Profile Sheets:

- All manholes and junction structures have been sized in accordance with the Improvement Standards Section 9, note 7 on STD DTL 9-7A, and the types and sizes are clearly indicated.
- Details for custom manholes or junction structures are shown on the plans and were designed in accordance with Improvement Standards Section 9.
- There are no connections to the corner of any drainage inlet and all connections are less than 20 degrees from perpendicular. For all locations where severe angles exist, a detail is on the plans showing the connection angle and distance to the corner.
- The entire proposed public storm drain system is within the public right-of-way and/or County drainage easements.
- All plan and profile sheets include the following:
 - Flowline and Rim elevations of each manhole or junction structure.
 - Pipe sizes, material type, class, length and slope.
 - Manhole type, size, and standard detail are specified.
 - The hydraulic grade lines are shown at each of the manholes and junction structures.

- All flowlines for all cross culverts are shown in the plan view.
- Drainage inlet flowline and grate elevations, inlet type, and standard detail are specified.
- All structures have been shown in both plan and profile views.

Inlet/Outlet Structures:

- Details are shown for all debris and access racks (per County STD DTLs) for each inlet and outlet pipe that is 24-inch diameter or larger.
- Details for flared end sections or similar for inlet and outlet pipes less than 24-inch diameter are shown on the plans.

Private Drainage Systems:

- The private system is clearly labeled as such on the improvement plans.
- A County standard manhole is located within the ROW or drainage easement and at the connection from the private to the public storm drain systems to delineate the transition point between the private and public drainage systems. Label the transition node.
- For commercial or multi-family, a copy of the approved and executed private maintenance agreement describing who will do the maintenance and to what standard is attached.
- For residential, the maintenance of the private stormdrain facilities must be included in the CC&Rs for the new homes. A draft must be submitted prior to plan approval and recorded before building permit issuance.
- The following text has been added to the plans concerning the onsite private drainage maintenance:

"Owner, or owner's designate, at Owner's or owner's designee's sole cost and expense, shall maintain the private drainage pipeline in good working order and repair commensurate with the County's standards for similar drainage pipelines such that water flows freely through the system as and when weather events or other sources of surface water runoff occur. Owner shall at all times take all necessary action to keep the drainage pipeline free from debris, trash, foliage and any other obstruction which may disrupt, alter, impede or change the flow of water. Owner shall also perform any relocation of the drainage pipeline pursuant to the standard specifications of the County should relocation be necessary due to pipe failure or blockage. Owner shall hold County harmless of any claims associated with the failure of the private drainage system and shall assure the system is in good repair and serviceable at all times."

Drainage Channel & Detention Basin Sheets (when required):

- Any Creek/Channel Improvements conform to Section 9-20 C12 of the latest Improvement Standards and have included the following, at a minimum:
 - Typical sections and cross sections.
 - Profile of existing channel and top of bank profile.
 - Ten- and one-hundred-year water surface elevation.
 - Any road crossings with road profile indicating overland release.

- River station labels on the improvement plans for channels match those in the approved drainage study.
- Basin/Channel plans include details of outfall structure, inflow pipe, fencing, signage, sections at each pipe connection to the basin/channel, etc.
- Sheets for mechanical, structural, and electrical details (e.g., pump, automated trash rack) are included in the plans (when applicable).
- Permanent erosion control has been designed and detailed for each outlet pipe and culvert.
- Grading plan includes grades at the basin bottom, inlet and outlet inverts, 10- and 100-year water surface elevations, easements shown, a certification block for use by engineer or land surveyor, and calculations in accordance with the drainage master plan including:
 - Depth-volume rating curve for stormwater quality and/or
 - Depth-volume rating curve for flood control
 - Stormwater quality volume and/or
 - Flood control volume

Operation and Maintenance Manual for Basins and Channels

- Operation and Maintenance Manual for detention basin and channels is/are included in this submittal and includes the following items:
 - A vicinity map and narrative describing the location of the basin.
 - A shed map of the area served by the basin.
 - Landscaping / plantings / irrigation operation and maintenance plan
 - A narrative describing the operation of the basin (i.e., the basin provides flood detention and stormwater quality treatment, shed area served, peak flows, etc.).
 - Certified grading plan is included with approved grades at the basin bottom, inlet and outlet inverts, 10- and 100-year water surface elevations, easements shown, a certification block for use by engineer or land surveyor, and calculations in accordance with the drainage master plan including:
 - Depth-volume rating curve for stormwater quality and/or
 - Depth-volume rating curve for flood control
 - Stormwater quality volume and/or
 - Flood control volume
 - A map of the basin identifying any jurisdictional or open space areas, plantings to be protected, etc.
 - A signed narrative describing what maintenance activities are acceptable and any prohibitions against maintenance activities within the basin.
 - A copy of all Corps permits, Fish and Game permits, preserve maintenance agreements, etc. that may limit maintenance activities in or around the basin.

Post-Construction Stormwater Quality Requirement Applicability:

- The project is outside of the County MS4 permit area.

- The project is within the County MS4 permit area (see Table 3-2 Stormwater Quality Design Manual Applicable Requirements: Treatment, LID, Hydromod, Trash Capture, and Source Control)
 - Treatment Measures Required (see Table 3-2 Stormwater Quality Design Manual)
 - Provide shed map showing area draining to each Treatment measure including the proposed amount of pervious and impervious area.
 - Provide design calculations for each Treatment measure.
 - The improvement plans shall include all construction details for Treatment measures.
 - Execution of maintenance covenant is required for Treatment measures.
 - Source Control Measures Required (see Table 3-2 Stormwater Quality Design Manual)
 - The improvement plans shall include all construction details for source control measures.
 - Low Impact Development Measures Required (see Table 3-2 Stormwater Quality Design Manual)
 - Include LID Credit Worksheet (Excel file) for either residential or commercial development.
 - Provide shed map showing area draining to each LID measure including the proposed amount of pervious and impervious area.
 - Provide design calculations for each LID measure.
 - The improvement plans shall include all construction details for LID measures.
 - Execution of maintenance covenant is required for LID measures.
 - Hydromodification Mitigation Measures Required (see Table 3-2 Stormwater Quality Design Manual)
 - Provide exhibit showing location where site discharges to municipal storm drain system and/ or receiving waters.
 - Provide SAHM Project Report and WHM file (from SAHM tool), if demonstrating compliance with hydromodification flow duration criteria.
 - Provide erosion potential analysis or plan to implement instream measures to address hydromodification impacts, if applicable.
 - The improvement plans shall include all construction details for hydromodification controls.
 - Execution of maintenance covenant is required for hydromodification controls.
 - Full Trash Capture Measures Required (see Table 3-2 Stormwater Quality Design Manual)
 - Provide LID systems that comply with the State's requirements for Multi-Benefit Full Trash Capture systems.

- Provide non-LID devices from State approved list of devices that trap all particles that are 5 mm or greater.
- Execution of maintenance covenant is required for full trash capture devices.

Post-Construction Stormwater Quality Plan (PCSQP) (required if treatment, hydromodification, or LID are proposed)

The PCSQP is included with improvement plans and shows Post Construction Control Measures that meet the requirements of the local, state and federal requirements as listed on the "Control Measure Selection Matrix".

The PCSQP contains design detail and calculations to demonstrate the adequacy of the post construction control method, and includes the following items:

- Post Construction Grades
- Existing & proposed buildings and other structures
- Location of fences (gates) to ensure access for maintenance of the stormwater quality treatment device.
- Location of roof downspout (identify directly connected or disconnected)
- Pavement
- Landscaping
- Areas requiring source control measures (loading areas, fueling areas, etc.)
- Drainage systems
- Contributing shed delineation
- Post Construction Control Measures, including the following information where applicable:
 - Dimensions and setbacks from property lines and structures
 - Profile view, including typical cross-sections with dimensions.
 - Water surface elevations/freeboard
 - Inlets, outlet structures, and release points
 - Vegetation & growing medium specifications
 - Filter fabric specifications
 - Infiltration material specifications
 - Installation requirements
- Table of Post Construction Control Measures. This table shall list all Post Construction Control Measures, and for each show the type of control measure, impervious and pervious area of contributing sheds, and calculated flow (Stormwater quality, Nolte & 100-year flows if applicable).

The following is included on the PCSQP:

Post Construction Control Measure Compliance

I hereby certify that the Post Construction Control Measures were constructed as shown on the plans approved by the County of Sacramento.

Project Engineer:

R.C.E.:

Date



SACRAMENTO COUNTY WATER AGENCY
 WATER SERVICE REQUEST AND
 CROSS-CONNECTION CONTROL QUESTIONNAIRE

County of Sacramento
 Municipal Services Agency
 Department of Water Resources
 827 7th Street Room 301
 Sacramento, CA 95814

Phone (916) 874-6851
 Fax (916) 874-8693

CONDITION OF SERVICE:

That all water facilities; including record drawings, water line easements, materials, installation and construction is completed in a timely manner in accordance with the approved plans, Sacramento County Standards and requirements.

COMPANY/FACILITY _____

SERVICE ADDRESS _____

MAILING ADDRESS _____

TYPE OF BUSINESS _____

CONTACT _____ PHONE _____

	No. of Service Connections	Type of Protection*	Design Flow (GPM)
DOMESTIC			
FIRE			
IRRIGATION			

*Reduced pressure (RP), double check (DC), pressure vacuum breaker (PVB) or air gap (AG).

Is this a restricted or classified facility? Yes No

Will this site be a closed or limited access facility? Yes No

Number of buildings on this site _____

Building height _____ ft.

Number of floors _____

Gross floor square footage _____ sf.

CUSTOMER RESPONSIBILITY:

The backflow prevention assembly shall be tested by certified backflow prevention assembly tester at the time of installation and annually thereafter, or more often as the Health Officer may require.

A current list of approved backflow prevention assemblies and testers is available through the Sacramento County Environmental Health Division of the Environmental Management Department.

SITE IMPROVEMENT:

Civil Engineer _____ Phone _____

Mechanical Engineer _____ Phone _____

Landscape Architect _____ Phone _____

OFFICE USE:

General Contractor:

Water Facility Contractor:

Plumbing Contractor:

Irrigation Contractor:

Comments:

		Yes	No
1. Auxiliary Water Supply:			
	A. Water Well		
	B. Storage Tank		
	C. Other		
	Approved water system		
	Interconnected with public water system		
2. Hazardous materials on premises			
	Water connected		
3. Special uses/equipment requiring water at all times			
4. Heating/cooling system – water connected:			
	A. Air conditioners		
	B. Boilers		
	C. Chillers		
	D. Cold storage		
	E. Cooling towers		
	F. Heat exchangers		
	G. Hydronic heat		
	H. Refrigeration		
	I. Solar panels		
	J. Water cooled condensers		
	K. Water cooled equipment		
	L. Other		
5. Industrial fluids/pressure system – water connected:			
	A. Booster pumps		
	B. Circulating pumps		
	C. Hydraulic lines		
	D. Hydro-pneumatic systems		
	E. Priming lines		
	F. Steam lines		
	G. Other		
6. Chemical injection/feeder systems – water connected:			
	A. Corrosion/scale inhibitors		
	B. Algae/microorganism biocides		
	C. Soaps		
	D. Softeners		
	E. Other		
7. Irrigation systems:			
	A. Chemical/fertilizer injection		
	B. Booster pumps		
	C. Separate service connection		
	D. Other		

8. Laboratory facilities – with water connected equipment:	Yes	No

9. Kitchen facilities (commercial):		
A. Coffee urns		
B. Dishwasher		
C. Double boiler		
D. Garbage disposal		
E. Grease trap		
F. Pressure cooker		
G. Steam table		
H. Other		

10. Ornamental fountains/ponds: _____

11. Plating facilities: _____

12. Reclaimed water/solvents: _____

13. Sewage system:

A. Pumps		
B. Water operated sump ejectors		
C. Water connection for unclogging		
D. Trailer flushing facilities		
E. Holding tanks		
F. Flush valve toilets/urinals		

14. Swimming pool/spa:

A. Chemical additives		
B. Low-level inlet		

14. Tanks, vats or other vessels containing non-potable substances: _____

16. Fire protection system – connected to public water:

A. Class I-II special conditions:		
i. Hazardous substances on premises		
ii. Underground fire sprinkler pipe lines parallel to and within 10 ft horizontally of sewer pipe lines or other pipe lines carrying hazardous substances		
iii. Complex piping systems		
B. Unapproved auxiliary water supply available		
Connected to auxiliary water		
C. Elevated storage tanks/private reservoirs		
D. Hazardous substance(s) in fire system		
E. Interconnection with another public water service		

Comments:

Community Development
Department
Troy Givans, Director



Divisions
Administrative Services
Building Permits & Inspection
Code Enforcement
County Engineering
Construction Management and Inspection
Planning and Environmental Review

Sacramento County Improvement Plan Submittal Guideline

Introduction: This submittal guideline is provided for the convenience of our customers. Complete and accurate plan submittals help speed the plan review process. Attention to the completeness and accuracy of information at the beginning of the process generally leads to fewer re-submittals and request for revisions by County staff. Please use the guideline to ensure that your submittal includes all of the information necessary for a timely review of your plans. The guideline is provided as a tool and is not intended to be all-inclusive. Additional information may be required during the plan review process.

Applicant's responsibility: Applicants are responsible for submitting a complete package for review. *Incomplete Improvement Plan submittals will result in plans being rejected or returned to the applicant during the review process.*

Requirements: The following items must be completed before improvement plans can be submitted for processing.

- Final Conditions of Approval
- Approved Sanitary Sewer Study
- Approved Water Supply Study
- Approved Drainage Study or DWR Parallel Review Agreement

Applicable Codes: Project shall meet the requirements of the California State Laws, County's adopted Codes, Ordinances, Regulations and Standards:

County Codes
County Zoning Code
County Improvement Standards
County Construction Specification Standards

Submittal Package:

The following information shall be provided at the time you submit your civil improvement plans. Please submit the required number of copies of plans and related documents for routing to reviewing departments.

- PDF of Project Information Form
- Signed Statement of Applicants Responsibility
- Signed Statement of Mutual Commitment
- Approved Drainage Study or Department of Water Resources Parallel Review Program Agreement, including the Drainage Study Scoping Agreement and complete drainage study (if a drainage study is required by DWR)
- A check for \$1,400 payable to “Sacramento County” to open billing account
- PDF of improvement plans (22” x 34” or 24” x 36” sheets)
- PDF of the completed Department of Water Resources Plan Submittal Take-In Checklist
- PDF of Sanitary Sewer Submittal Approval Letter (Contact developmentservices@sacsewer.com)
- PDF Water Supply Submittal Approval Letter (ZONE 40 ONLY – Contact John Kern 874-5159)
- PDF of easements and proof of ownership
- PDF Completed Water Service Request & Cross-Connection Questionnaire form (ZONE 40 ONLY)
- PDF of Landscape Plans per Section 8-6 (A) of the Improvement Standards (a letter and diagram prepared and stamped by a licensed landscape architect may be submitted in lieu of landscape plans) (ZONE 40 ONLY)
- PDF copy of Mitigation Monitoring & Reporting Program (MMRP) fee payment (Contact Eric Stackhouse at (916) 874-8117)
- PDF copy of Final Conditions of Approval
- PDF copy of Utility Conflict letters
- PDF copy of retaining wall calculations with soils report, if retaining wall is greater than 2 feet high or any walls greater than six feet is proposed
- PDF copy of soils report if alternative road structural section is proposed

It is the responsibility of the applicant to know if their project has an MMRP and if it is in Zone 40.

Review Guidelines:

This list is not intended to be all-inclusive of every detail required on a set of improvement plans. It is provided to give an overview of basic plan contents needed for plan review.

Letters and Numerals: All letters and numerals shall be 0.10 inch minimum height.

Title block:

The title block shall be across the bottom or along the right edge of sheet with preferred one (1”) inch clear margin.

- Sheet title
- Sheet number
- Date
- Scale
- Project title
- Engineer’s name, signature and seal
- Engineer’s license expiration date

Cover Sheet:

- Approval and revision blocks
- Assessment district limits (if applicable)
- Assessor’s Parcel Number
- Adjacent Subdivision, including names, lot lines and lot numbers
- Benchmark Information
- California Coordinates
- County required notes
- Legends of symbols
- MMRP reference note (if applicable)
- North arrow and graphic drawing scale
- Project Boundary
- Property Lines
- Public easements
- Sheet index
- Vicinity or location map
- Water and Fire approval block

Detail and Note Sheet:

- Applicable County Notes
- Typical street sections – Structural pavement section (soils report required for alternative sections), cross slope, curb type and sidewalk width

Plan and Profile Sheets:

All existing and proposed information as well as facilities shall be shown. Where it exists, county stationing shall be used for public roads.

- Elevations of storm drainage, sanitary sewer, water and pertinent utilities including manhole flow line, top of structure rim and hydraulic grade line
- Existing and proposed gutter flow elevation at curb returns
- Right of way lines
- Boundaries of lots fronting on the street
- Easements
- Both on-site and off-site right of way and easement lines
- Street striping
- Medians
- Driveway type and width (on both sides of the street when within 40 feet of the median ending)
- Curb
- Sidewalks
- Handicap ramp
- Pavement Shoulders and pavement transition
- Elevation, location and size of all underground utilities, storm drainage and sanitary sewer lines (see attached CSD-1 Checklist)
- Limits of 100-year flood plains
- Structures
- Trees (6 inches and larger) and other foliage
- Traffic signals, conduits and loops
- Street lights, pull boxes, and conduits
- Drainage ditches
- Utility Poles
- Fire Hydrants
- Retaining Walls
- Existing contours and supporting spot elevations
- Any other features of the area which may affect the design requirement for the area.
- Profile of roadway centerline, edge of pavement, gutter flow line, drainage ditch
- Profile of storm drainage, sanitary water, water and other pertinent utilities
- Elevations of proposed public streets at 50 foot intervals and at grade breaks (25 foot intervals with vertical curve)
- Street grades
- Pipe size, material type, class, length and slope

On all subdivision plans, a separate plan is required for Water, Street Light, Grading and Erosion & Sediment Control.

Water Plan:

The following items are required and shall be shown on the Water Plan:

- North arrow and Scale: 1 inch = 100 feet
- Applicable Water Notes
- Water mains

- Location of valves, fire hydrants, air relief/vacuum valve assemblies, blow offs and all other appurtenances
- Raw water pipeline system (if applicable)
- Location of well and treatment plant sites
- Off-site and on-site water easement (if applicable)

Street Light Plan:

The following items are required on the Street Light Plan:

- Vicinity Map
- Utility Poles and Public utility easements
- Name of Adjacent subdivisions
- Intersection property lines of adjacent properties
- Legend of symbols
- North arrow and appropriate scale
- All existing street lights on both sides of any streets
- All new tree installation shall be more than 10 feet from street lights
- All trees within the vicinity of the conduit runs or proposed street lights

Grading Plan:

Fills and cuts at property lines shall not exceed 2 feet unless permitted by the project conditions of approval. The following items shall be included:

- Slope symbols for 3:1 slopes or steeper
- Ridge and/or valley delineation
- Typical lot grading details
- Proposed spot and/or pad elevations
- Flow directional arrows
- Perimeter elevations at property line
- Existing spot elevation and/or contour lines on-site and off-site around perimeter of development (Spot elevations and contour lines shall be extended for a minimum distance of 50 feet, 100 feet minimum on flat terrain)
- Existing trees (variety, size and elevation) where applicable, protected trees must be identified by the number assigned to them in the project arborist report, with trunk locations and drip-line protection areas as defined in the arborist report.
- Retaining wall details (symbols, construction details, limits, and bottom and top of wall elevations)
- Retaining walls within 8 feet of boundary, phase, right-of-way lines shall be concrete or masonry
- Retaining wall calculation and soils report are required if wall is greater than 2 feet in height. Wall Calculation and soils report are required for fences greater than 6 feet in height
- Back of walk or curb elevations

- Location and grate elevation of drainage inlets
- Typical sections at property lines
- Names of adjacent subdivisions and Assessor's Parcel Numbers of adjacent lots
- Signature block for pad elevations certification and geotechnical statement
- Location of spoiled disposal.
- Required Grading Notes
- Overland release paths, grades and details

Erosion and Sediment Control Plan:

Refer to DWR Plan Submittal Take-In Checklist.

Plan Check- Checklist

Cover Sheet

1. Label APN Number
2. Show Vicinity map
3. North Arrow (up or to the right)

Typical Section

1. Label 1-1/2% to 3% street cross-slope for new pavement section.
2. Verify structural section is labeled, and check proposed structural section
3. Dimension existing/proposed pavement width and right-of-way.
4. Label pavement conform per 4-32
5. Check required curbs and gutter (within bus turnout?)
6. Sidewalk width
7. Pavement width on nonstandard roadways (offset centerline etc)
8. If offset centerline, show monument centerline and construction centerline and dimension

Plan Profile

1. Verify cross-slopes (1.5% to 3.0%)
2. Cutline parallel to centerline/lanelines
3. Striping required? New intersection or adding new lane or longer than 1/4 mile
4. Street lights? (safety lights, also need one at Bus pad)
5. Pavement/sidewalk barricades.
6. Manhole locations. (at lanelines or center of lanes preferred)
7. Right-of-Way per standards or masterplan intersection.
8. Signal modification required or installation of loops (presence or advance detectors)?
9. Bus turnout?
10. Trench Restoration per Std. Drawing 4-64

11. Handicap Ramps (per Standards). Type?
12. Traffic Control Plan? Closing or trenching across major street
13. Striping replacement note. Is project removing lots of stripes?
14. Trench moratorium?
15. Trench Fees?
16. Striping Plan Required? New intersection with major street? Adding new lane? Adding a turn pocket?
17. Signal modification plan required?