



PRELIMINARY HYDROLOGY REPORT

GUIDANCE DOCUMENT – ENGINEERING DEPARTMENT

1. INTRODUCTION

- Please include the: who, what, where, why, and when questions that include, but are not limited to; address and contact information of the developer/owner/engineer, size of the project lot, scope of development, and discuss what the development entails and what overall development is planned including the address and major streets of the development.
- Address the purpose and scope of the project.
- Include a statement if the site is a “Priority Project” and will require a fully executed WQMP during the plan check process.
- Include a statement of potential compliance regarding the NPDES General Permit.

2. SITE DISCUSSION

- Include what onsite and offsite master plan of drainage lines and watershed information related to this project.
- Include any properties of the site and types of studies performed (slope, roughness, disturbance, classifications, percolation etc).
- Identify the project development location and if it is a single development or if the development is part of a larger development (i.e. phased projects).
- Include an aerial of the site identifying where the development is located while labeling streets and surrounding developments.
- Describe the sites layout, including percentages, of pervious and impervious material.

3. RAINFALL DATA

- Discuss and identify where the onsite and offsite data used in the report was obtained.
- Please model the 100-year 1-hour storm, providing hydrographs.

4. ON-SITE RUNOFF

- Include separate sub-watersheds with pre and post development flow data.
- Include a 10-year 24-hour storm and the 100-year 1-hour storm data results. The study and analysis must show that the development does not increase the runoff for the 10-year 24-hour storm and the 100-year 1-hour storm.
- Include a discussion of the pre and post “Q” for the development while summarizing the improvements and impacts of the development.
- Include a table that summarizes the pre and post “Q” results for the 10-year 24-hour storm and the 100-year 1-hour storm.
- Include a site plan reflecting the matrix for the various on-site DMAs (drainage management areas), pre-development flows, and post-development flows. The site plan

shall summarize the flow paths across the site verifying the data submitted correlates with the site plan and drainage paths.

5. OFF-SITE RUNOFF

- Include a map and discussion of the water flows around the proposed development including, but not limited to, any/all “Q”s for the master plan of drainage lines and surrounding watersheds related to this project.

6. STORMWATER TREATMENT

- Include a discussion on the implementation of temporary BMP's.
- Include discussion of what post-construction BMPs should be implemented for the development and how the BMP is mitigating flow for the 85th percentile 24 hour storm and the pre-project flow for the 10-year 24-hour storm.
- Include a statement as to who will maintain the temporary and post-construction BMP's.
- Include a simple sizing calculation displaying adequate BMP capacity and on-site space to implement the improvements.
- Include a statement that a percolation test may be performed to verify infiltration rates and provide final size for the BMPs.
- Include discussion on the Operations and Maintenance Manual provided within the WQMP Final Report which states that one will be completed and included in the WQMP Report within the final plan check process.

7. CONCLUSION

- Summarize the entire project and all aforementioned information while stating assumptions for the project moving forward into plan check.

8. APPENDIX

- RATIONAL METHOD DATA – Pre and post storm development.
- PRELIMINARY PRIORITY PROJECT CHECKLIST – Shown on page 3
- HAND CALCULATIONS – Rough BMP calculations.
- SITE PLAN WITH DRAINAGE ARROWS AND FACILITIES– Site plan with drainage arrows for the pre and post conditions of the site and the BMP facilities location.
- SITE PLAN SUB WATERSHEDS – show the sub watersheds of the site and how the water flows around the site and into the City's MS4 Permit.
- STORMDRAIN MASTERPLAN – Include reference to the City of Victorville's Master Plan of Document found on the County of San Bernardino website.
- CITY WATERSHED – show the City watershed with the site included and how the water travels around the site. Include how the water travels with pre and post development.
- TRACT MAP/PARCEL MAP
- APN MAP

PRELIMINARY PRIORITY PROJECT CHECKLIST

Part 1 - Project Type	YES	NO
1. 10 or more unit homes, including single and multiple family homes, condominiums, apartments, etc.		
2. An Industrial or commercial development with 100,000+ SF of impervious surface		
3. An automotive service facility - (5,000 SF or more)		
4. A retail gasoline outlet - (5,000 SF or more)		
5. A restaurant (5,000 SF or more)		
6. A parking lot with either 5,000 SF of impervious surface or with 25 or more parking spaces		
7. A single family hillside dwelling (one acre or more surface area)		
8. Redevelopment projects		
9. Project location in, adjacent to or discharging directly to an ESA AND creates 2,500 SF or more of impervious surface area.		

If any of the boxes in Part 1 is checked "yes", this project will require a WQMP along with a Maintenance Agreement and Transfer

Part 2 - Project Specific Concerns/Characters	YES	NO
1. A single family hillside dwelling (less than one acre) - WQMP required		
2. An automotive service facility (less than 5,000 SF or more) - WQMP required		
3. a retail gasoline outlet (less than 5,000 SF or more) - WQMP required		
4. A restaurant (less than 5,000 SF or more) WQMP required		
5. Vehicle or equipment fueling areas (retail or private)		
6. Commercial or Industrial waste handling or storage		
7. Outdoor handling or storage of hazardous waste materials		
8. Outdoor manufacturing areas		
9. Outdoor food handling or processing		
10. Outdoor animal care, confinement or slaughter		
11. Outdoor horticulture activities		

If any of the boxes in Part 2 is checked "yes", this project will require a WQMP along with a Maintenance Agreement and Transfer