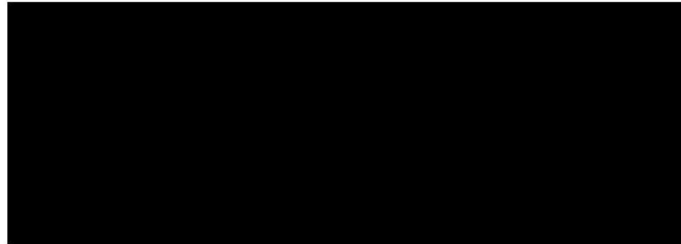


Water Quality Management Plan

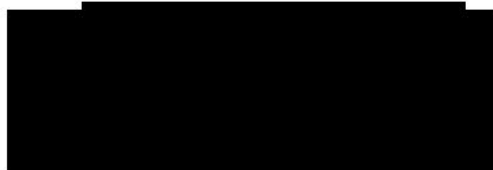
(Non-Priority Single-Family Residential Projects)

For:

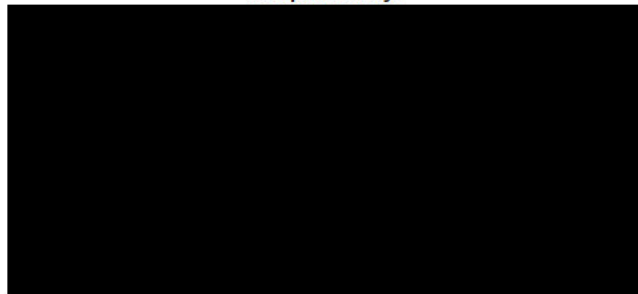


THE COUNTY OF SAN BERNARDINO AREAWIDE STORMWATER PROGRAM
NPDES NO. CAS618036, ORDER NO. R8-2010-0036

Prepared for:



Prepared by:



Submittal Date: MAY 13, 2022


Revision No. / Date: SEPT. 15, 2022

Approval Date: _____

Project Owner's Certification

This NON-PRIORITY WATER QUALITY MANAGEMENT PLAN (WQMP) has been prepared for [REDACTED]. The WQMP is intended to comply with the requirements of the CITY OF RANCHO CUCAMONGA and the NPDES Areawide Stormwater Program requiring the preparation of a WQMP. The undersigned, while it owns the subject property, is responsible for the implementation of the provisions of this plan and will ensure that this plan is amended as appropriate to reflect up-to-date conditions on the site consistent with San Bernardino County's Municipal Storm Water Management Program and the intent of the NPDES Permit for San Bernardino County and the incorporated cities of San Bernardino County within the Santa Ana Region. Once the undersigned transfers its interest in the property, its successors in interest and the city/county shall be notified of the transfer. The new owner will be informed of its responsibility under this WQMP. A copy of the approved WQMP shall be available on the subject site in perpetuity.

"I certify under a penalty of law that the provisions (implementation, operation, maintenance, and funding) of the WQMP have been accepted and that the plan will be transferred to future successors."

Project Data			
Permit/Application Number(s):	DRC 2020-00082	Grading Permit Number(s):	PGR 2022-00011
Tract/Parcel Map Number(s):	LOT 14 OF TRACT NO. 6988, BK. 89, PGS. 53-54	Building Permit Number(s):	BPG 2022-00010
CUP, SUP, and/or APN (Specify Lot Numbers if Portions of Tract):			APN 1061-711-11
Owner's Signature			
Owner Name	[REDACTED]		
Title	[REDACTED]		
Company			
Address	[REDACTED]		
Email			
Telephone #			
Signature		Date	SEPTEMBER 15, 2022

Section 1 Discretionary Permit(s)

Form 1-1 Project Information					
Project Name		[REDACTED]			
Project Owner Contact Name:		[REDACTED]			
Mailing Address:	[REDACTED]	E mail Address:	[REDACTED]	Telephone:	[REDACTED]
Permit/Application Number(s):	DRC 2020-00082	Tract/Parcel Map Number(s):	LOT 14 OF TRACT NO. 6988, BK. 89, PGS. 53-54		
Additional Information/ Comments:	Number of Drainage Areas (DA) = 1 Number of Drainage Management Areas (DMA) = 1 Total Property Area = 20,000 square-feet Existing Impervious Area = 4,510 square-feet Existing Pervious Area = 15,490 square-feet Proposed Impervious Area = 9,465 square-feet Proposed Pervious Area = 10,535 square-feet **ADDITION OR REPLACEMENT OF IMPERVIOUS SURFACE < 5,000 SQUARE FEET**				
Description of Project:	This project is considered a re-development project for a Single Family Residential property located at [REDACTED], APN 1061-711-11. The existing site includes a residential home, concrete driveway, block walls, wood deck and landscaped areas. The proposed site will include an addition to the residential home, an ADU buliding and gameroom along the northerly property line, concrete expansion along the east side of the house, a wood deck, concrete stairs, yard drains, underground storm drain lines, curb drains and updated landscaping. The proposed condition has an increase of impervious surface area of less than 5,000 square-feet making this project a Non-Priority / Non-Category Project.				
Provide summary of Conceptual WQMP conditions (if previously submitted and approved). Attach complete copy.	No Conceptual WQMP prepared for this re-development.				

Section 2 Project Description

2.1 Project Information

This section of the WQMP should provide the information listed below. The information provided for Conceptual/ Preliminary WQMP should give sufficient detail to identify the major proposed site design and LID BMPs and other anticipated water quality features that impact site planning. Final Project WQMP must specifically identify all BMP incorporated into the final site design and provide other detailed information as described herein.

The purpose of this information is to help determine the applicable development category, pollutants of concern, watershed description, and long-term maintenance responsibilities for the project, and any applicable water quality credits. This information will be used in conjunction with the information in Section 3, Site Description, to establish the performance criteria and to select the LID BMP or other BMP for the project or other alternative programs that the project will participate in, which are described in Section 4.

Form 2.1-1 Description of Proposed Project

¹ Development Category (Select all that apply):

<input type="checkbox"/> Significant re development involving the addition or replacement of 5,000 ft ² or more of impervious surface on an already developed site	<input type="checkbox"/> New development involving the creation of 10,000 ft ² or more of impervious surface collectively over entire site	<input type="checkbox"/> Automotive repair shops with standard industrial classification (SIC) codes 5013, 5014, 5541, 7532 7534, 7536 7539	<input type="checkbox"/> Restaurants (with SIC code 5812) where the land area of development is 5,000 ft ² or more
<input type="checkbox"/> Hillside developments of 5,000 ft ² or more which are located on areas with known erosive soil conditions or where the natural slope is 25 percent or more	<input type="checkbox"/> Developments of 2,500 ft ² of impervious surface or more adjacent to (within 200 ft) or discharging directly into environmentally sensitive areas or waterbodies listed on the CWA Section 303(d) list of impaired waters.	<input type="checkbox"/> Parking lots of 5,000 ft ² or more exposed to storm water	<input type="checkbox"/> Retail gasoline outlets that are either 5,000 ft ² or more, or have a projected average daily traffic of 100 or more vehicles per day

Non Priority / Non Category Project May require source control LID BMPs and other LIP requirements. Please consult with local jurisdiction on specific requirements.

² Project Area (ft ²):	20,000	³ Number of Dwelling Units:	1	⁴ SIC Code:	1521
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⁵ Is Project going to be phased? Yes No If yes, ensure that the WQMP evaluates each phase as a distinct DA, requiring LID BMPs to address runoff at time of completion.

⁶ Does Project include roads? Yes No If yes, ensure that applicable requirements for transportation projects are addressed (see Appendix A of TGD for WQMP)

2.2 Property Ownership/Management

Describe the ownership/management of all portions of the project and site. State whether any infrastructure will transfer to public agencies (City, County, Caltrans, etc.) after project completion. State if a homeowners or property owners association will be formed and be responsible for the long-term maintenance of project stormwater facilities. Describe any lot-level stormwater features that will be the responsibility of individual property owners.

Form 2.2-1 Property Ownership/Management

Describe property ownership/management responsible for long term maintenance of WQMP stormwater facilities:

Property Owner:
[REDACTED]

Property Address:
[REDACTED]

Owner Mailing Address:
[REDACTED]

Owner Telephone Number:
[REDACTED]

Owner E-Mail Address:
[REDACTED]

2.3 Potential Stormwater Pollutants

Determine and describe expected stormwater pollutants of concern based on land uses and site activities (refer to Table 3-3 in the TGD for WQMP).

Form 2.3-1 Pollutants of Concern			
Pollutant	Please check: E=Expected, N=Not Expected		Additional Information and Comments
	E <input checked="" type="checkbox"/>	N <input type="checkbox"/>	
Pathogens (Bacterial / Virus)	E <input checked="" type="checkbox"/>	N <input type="checkbox"/>	Runoff pollutant from pavement and landscape areas, including wild birds and animals together with garbage.
Nutrients – Phosphorous / Nitrogen	E <input checked="" type="checkbox"/>	N <input type="checkbox"/>	Runoff pollutant from overuse of fertilizer and loose sediment.
Noxious Aquatic Plants	E <input checked="" type="checkbox"/>	N <input type="checkbox"/>	Runoff pollutant from landscaping.
Sediment	E <input checked="" type="checkbox"/>	N <input type="checkbox"/>	Runoff pollutant from pavement, landscaping, graded slopes and rooftops.
Metals	E <input type="checkbox"/>	N <input checked="" type="checkbox"/>	Not expected from amount of vehicular traffic for residence.
Oil and Grease	E <input type="checkbox"/>	N <input checked="" type="checkbox"/>	Not expected from amount of vehicular traffic for residence.
Trash/Debris	E <input checked="" type="checkbox"/>	N <input type="checkbox"/>	Runoff pollutant from poorly maintained trash containers.
Pesticides / Herbicides	E <input checked="" type="checkbox"/>	N <input type="checkbox"/>	Runoff pollutant from landscaping.
Organic Compounds	E <input checked="" type="checkbox"/>	N <input type="checkbox"/>	Runoff pollutant from overuse of fertilizer.

Section 3 Site and Watershed Description

Describe the project site conditions that will facilitate the selection of BMP through an analysis of the physical conditions and limitations of the site and its receiving waters. Identify distinct drainage areas (DA) that collect flow from a portion of the site and describe how runoff from each DA (and sub-watershed DMAs) is conveyed to the site outlet(s). Refer to Section 3.2 in the TGD for WQMP. The form below is provided as an example. Then complete Forms 3.2 and 3.3 for each DA on the project site. If the project has more than one drainage area for stormwater management, then complete additional versions of these forms for each DA / outlet.

Form 3-1 Site Location and Hydrologic Features			
Site coordinates take GPS measurement at approximate center of site	Latitude 34.1539	Longitude 117.6291	Thomas Bros Map: 2008 VERSION, PAGE 572
¹ San Bernardino County climatic region: <input checked="" type="checkbox"/> Valley <input type="checkbox"/> Mountain			
² Does the site have more than one drainage area (DA): Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If no, proceed to Form 3-2. If yes, then use this form to show a conceptual schematic describing DMAs and hydrologic feature connecting DMAs to the site outlet(s). An example is provided below that can be modified for proposed project or a drawing clearly showing DMA and flow routing may be attached			
<pre> graph LR DA1[DA1 DMA A] --> Outlet1[SHEET FLOW OUTLET AT SOUTHERLY DRIVEWAY] DA2[DA2 DMA B] --> Yards[YARD DRAINS / UDG SD] Yards --> Outlet2[CURB DRAIN OUTLET] </pre>			
Conveyance	Briefly describe on site drainage features to convey runoff that is not retained within a DMA		
DA1 DMA A	DA1 DMA A includes the southerly portion of the residential house and the area east of the house. Stormwater runoff drains through roof drains south and east, runoff will sheet flow southerly and outlet through the driveway and into Orchard Street.		
DA2 DMA B	DA1 DMA A includes the northerly portion of the residential house and the all the area north of the property. Storwater runoff will flow southerly to the proposed landscaped area north of the residential building expansion. Yard drains will collect stormwater in the landscaped areas and convey stormwater west and then south along the west side of the house. Stormwater will be outleted through a proposed curb drain outlet and into Orchard Street.		

Form 3-2 Existing Hydrologic Characteristics for Drainage Area 1 & 2				
For Drainage Area sub watershed DMA, provide the following characteristics	DA1 DMA A & DA2 DMA B			
1 DMA drainage area (ft ²)	20,000			
2 Existing site impervious area (ft ²)	4,510			
3 Antecedent moisture condition For desert areas, use http://www.sbcounty.gov/dpw/floodcontrol/pdf/20100412_map.pdf	2			
4 Hydrologic soil group Refer to Watershed Mapping Tool – http://sbcounty.permitrack.com/WAP	A			
5 Longest flowpath length (ft)	214			
6 Longest flowpath slope (ft/ft)	0.083			
7 Current land cover type(s) Select from Fig C-3 of Hydrology Manual	DEVELOPED			
8 Pre developed pervious area condition: Based on the extent of wet season vegetated cover good >75%; Fair 50-75%; Poor <50% Attach photos of site to support rating	FAIR			

Form 3-3 Watershed Description for Drainage Area 1 & 2	
<p>Receiving waters Refer to Watershed Mapping Tool - http://sbcounty.permitrack.com/WAP See 'Drainage Facilities' link at this website</p>	<p>Demens Creek Channel Cucamonga Channel Mill Creek Chino Creek Santa Ana River (Reach 3) Santa Ana River (Reach 2) Santa Ana River (Reach 1) Pacific Ocean</p>
<p>Applicable TMDLs Refer to Local Implementation Plan</p>	<p>Cucamonga Creek: High Coliform Count Mill Creek: Pathogens Santa Ana River (Reach 3): Pathogens, Nitrates, and Bacteria</p>
<p>303(d) listed impairments Refer to Local Implementation Plan and Watershed Mapping Tool – http://sbcounty.permitrack.com/WAP and State Water Resources Control Board website – http://www.waterboards.ca.gov/santaana/water_issues/programs/tmdl/index.shtml</p>	<p>Cucamonga Creek: Cadmium, Coliform Bact., Copper, Lead, Zinc Mill Creek: Nutrients, Pathogens, Total Suspended Solids Chino Creek: Nutrients, Pathogens Santa Ana River (Reach 3): Copper, Lead, Pathogens Santa Ana River (Reach 2): Indicator Bacteria</p>
<p>Environmentally Sensitive Areas (ESA) Refer to Watershed Mapping Tool – http://sbcounty.permitrack.com/WAP</p>	<p>None</p>
<p>Unlined Downstream Water Bodies Refer to Watershed Mapping Tool – http://sbcounty.permitrack.com/WAP</p>	<p>Santa Ana River (Reach 3)</p>
<p>Hydrologic Conditions of Concern</p>	<p><input type="checkbox"/> Yes Complete Hydrologic Conditions of Concern (HCOC) Assessment. Include Forms 4.2-2 through Form 4.2-5 and Hydromodification BMP Form 4.3-10 in submittal <input checked="" type="checkbox"/> No</p>
<p>Watershed-based BMP included in a RWQCB approved WAP</p>	<p><input type="checkbox"/> Yes Attach verification of regional BMP evaluation criteria in WAP</p> <ul style="list-style-type: none"> • More Effective than On-site LID • Remaining Capacity for Project DCV • Upstream of any Water of the US • Operational at Project Completion • Long-Term Maintenance Plan <p><input checked="" type="checkbox"/> No</p>

Section 4 Best Management Practices (BMP)

4.1 Source Control BMP

4.1.1 Pollution Prevention

Non-structural and structural source control BMP are required to be incorporated into all new development and significant redevelopment projects. Form 4.1-1 and 4.1-2 are used to describe specific source control BMPs used in the WQMP or to explain why a certain BMP is not applicable. Table 7-3 of the TGD for WQMP provides a list of applicable source control BMP for projects with specific types of potential pollutant sources or activities. The source control BMP in this table must be implemented for projects with these specific types of potential pollutant sources or activities.

The preparers of this WQMP have reviewed the source control BMP requirements for new development and significant redevelopment projects. The preparers have also reviewed the specific BMP required for project as specified in Forms 4.1-1 and 4.1-2. All applicable non-structural and structural source control BMP shall be implemented in the project.

Form 4.1-1 Non-Structural Source Control BMPs				
Identifier	Name	Check One		Describe BMP Implementation OR, if not applicable, state reason
		Included	Not Applicable	
N1	Education of Property Owners, Tenants and Occupants on Stormwater BMPs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Property owner provide, specification manuals, BMP sheets and fliers to any contractors hired to monitor, inspect and maintain yard drain, drain lines and curb outlet.
N2	Activity Restrictions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not required for Non-Priority Project.
N3	Landscape Management BMPs	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not required for Non-Priority Project.
N4	BMP Maintenance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not required for Non-Priority Project.
N5	Title 22 CCR Compliance (How development will comply)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not required for Non-Priority Project.
N6	Local Water Quality Ordinances	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Property owner will comply with City of Rancho Cucamonga Water Ordinances.
N7	Spill Contingency Plan	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not required for Non-Priority Project.

Form 4.1-1 Non-Structural Source Control BMPs

N8	Underground Storage Tank Compliance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not required for Non-Priority Project.
N9	Hazardous Materials Disclosure Compliance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Hazardous Materials is not anticipated for this site. Any hazardous material will be stored in water tight containers and covered or secondary containment will be provided. Use of alternative nonhazardous materials will be used in place of hazardous materials when practicable.
N10	Uniform Fire Code Implementation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	All fire code requirements regarding products storage and safety from Article 80 of the Uniform Fire Code shall be implemented by the property owner.
N11	Litter/Debris Control Program	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Litter and debris will be deposited in appropriate covered receptacles. Any accumulated trash or debris on-site will be removed and disposed of properly.
N12	Employee Training	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not required for Non-Priority Project.
N13	Housekeeping of Loading Docks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not required for Non-Priority Project.
N14	Catch Basin Inspection Program	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not required for Non-Priority Project.
N15	Vacuum Sweeping of Private Streets and Parking Lots	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not required for Non-Priority Project.
N16	Other Non structural Measures for Public Agency Projects	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not required for Non-Priority Project.
N17	Comply with all other applicable NPDES permits	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not required for Non-Priority Project.

Form 4.1-2 Structural Source Control BMPs

Identifier	Name	Check One		Describe BMP Implementation OR, if not applicable, state reason
		Included	Not Applicable	
S1	Provide storm drain system stencilling and signage (CASQA New Development BMP Handbook SD 13)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not required for Non-Priority Project.
S2	Design and construct outdoor material storage areas to reduce pollution introduction (CASQA New Development BMP Handbook SD 34)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No outdoor storage areas proposed.
S3	Design and construct trash and waste storage areas to reduce pollution introduction (CASQA New Development BMP Handbook SD 32)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No trash enclosures proposed for this project.
S4	Use efficient irrigation systems & landscape design, water conservation, smart controllers, and source control (State wide Model Landscape Ordinance; CASQA New Development BMP Handbook SD 12)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Irrigation systems will be designed to supply the correct amount of water for the landscape to flourish and not overwater. Timed irrigation systems will be used. Rain sensors for automatic shut off of sprinklers when it is raining will be used. Shut-off valves triggered by a pressure drop to control water loss in the event of a broken sprinkler head or broken line will be used. Irrigation lines should be inspected by checking for saturated soil and reduced pressure on the line.
S5	Finish grade of landscaped areas at a minimum of 1 2 inches below top of curb, sidewalk, or pavement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Landscaped areas adjacent to curbs and sidewalks will be installed at a minimum of 1-inch below the finished hardscape surface. Inspection will occur before rainy season (October 1st) and after any rain event greater than 0.5 inches.
S6	Protect slopes and channels and provide energy dissipation (CASQA New Development BMP Handbook SD 10)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No graded slopes for this project.
S7	Covered dock areas (CASQA New Development BMP Handbook SD 31)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No dock areas for this project.
S8	Covered maintenance bays with spill containment plans (CASQA New Development BMP Handbook SD 31)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No maintenance bays for this project.
S9	Vehicle wash areas with spill containment plans (CASQA New Development BMP Handbook SD 33)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No wash area for this project.

Form 4.1-2 Structural Source Control BMPs

S10	Covered outdoor processing areas (CASQA New Development BMP Handbook SD 36)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No outdoor processing for this project.
S11	Equipment wash areas with spill containment plans (CASQA New Development BMP Handbook SD 33)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No wash area for this project.
S12	Fueling areas (CASQA New Development BMP Handbook SD 30)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No fueling area for this project.
S13	Hillside landscaping (CASQA New Development BMP Handbook SD 10)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No hillside grading for this project.
S14	Wash water control for food preparation areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not required for Non-Priority Project.
S15	Community car wash racks (CASQA New Development BMP Handbook SD 33)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No wash racks for this project.

4.1.2 Preventative LID Site Design Practices

Site design practices associated with new LID requirements in the MS4 Permit should be considered in the earliest phases of a project. Preventative site design practices can result in smaller DCV for LID BMP and hydromodification control BMP by reducing runoff generation. Describe site design and drainage plan including:

- A narrative of site design practices utilized or rationale for not using practices
- A narrative of how site plan incorporates preventive site design practices
- Include an attached Site Plan layout which shows how preventative site design practices are included in WQMP

Refer to Section 5.2 of the TGD for WQMP for more details.

Form 4.1-3 Preventative LID Site Design Practices Checklist	
Site Design Practices If yes, explain how preventative site design practice is addressed in project site plan. If no, other LID BMPs must be selected to meet targets	
Minimize impervious areas: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Explanation: 53% of the proposed development will have pervious area.
Maximize natural infiltration capacity: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Explanation: Planter areas will be depressed 2 inches below finished surface and intercept runoff from impervious area for infiltration.
Preserve existing drainage patterns and time of concentration: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Explanation: Existing drainage pattern will not be altered. (North to South).
Disconnect impervious areas: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Explanation: Roof downspouts of existing buildings are designed to drain directly to pervious area adjacent to buildings.
Protect existing vegetation and sensitive areas: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Explanation: No sensitive areas present on existing property.
Re vegetate disturbed areas: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Explanation: All pervious areas disturbed will be landscaped.
Minimize unnecessary compaction in stormwater retention/infiltration basin/trench areas: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Explanation: No proposed retention for this project.
Utilize vegetated drainage swales in place of underground piping or imperviously lined swales: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Explanation: Vegetated grade line will convey stormwater around building.
Stake off areas that will be used for landscaping to minimize compaction during construction: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Explanation: No proposed retention for this project.