Standard Form No. 5 Drainage and Stormwater Treatment Scope Approval Form

Prior to starting a development plan and before the first drainage submittal, a Drainage and Stormwater Treatment Scope Approval Form must be submitted for review and signed by the City Engineer. A signed form shall also be included in every drainage submittal as Attachment A. This Scope Approval Form is for City requirements only. Values may be approximate. The City encourages supporting calculations and figures to be attached.

Project Information	
Project name:	Lot 1 Indian Meadows (Name subject to change)
Project location:	Lot 1 Indian Meadows
Developer name/contact info:	GRAY STONE, LLC
Drainage engineer name/contact info:	Joe Wiedemeier, PE FPSE
Application Type:	Development Plan
Proposed Land Use:	Hotel - Commercial

Project Site Parameters	
Total parcel area (acres):	3.875
Disturbed area (acres):	3.5
Existing impervious area (acres, if applicable):	0.25
Proposed new impervious area (acres):	2.5
Proposed total impervious area (acres):	2.5
Proposed number of project outfalls:	3
Number of additional parking spaces:	160+-
Description and site percentage of existing cover/land use(s):	Vacant except for paved access roads Sparse vegetation and bare ground Wetlands located along the east property line
Description and site percentage of proposed cover/land use(s):	Commercial Development (2) new hotels and all associated infrastructure
Expected maximum proposed conveyance gradient (%):	5%
Description of size (acres) and cover/land use(s) of offsite areas draining to the site	Minimal off site areas draining to the site.

Type of Study Required:

☐ Drainage Letter
☐ Conceptual Drainage Study
☒ Final Drainage Study
☒ Stormwater Quality Plan

Hydrologic Evaluation:

☒ Rational Method ☐ CUHP/SWMM ☐ HEC-HMS ☐ Other_____

Project Drainage	
Number of subbasins to be evaluated:	3 main basins, multiple sub basins
Presence of pass through flow (circle):	YES (NO)
Description of proposed stormwater conveyance on site:	See drainage exhibit, DR1. Sheet flow, curb/gutter combo (rollback curbs), inlets, swales, WQ features
Project includes roadway conveyance as part of design evaluation (circle):	(YES) NO
Description of conveyance of site runoff downstream of site, identify any infrastructure noted in Stormwater Master Plan noted as lacking capacity for minor or major storm event:	Runoff from DB1 basin will outfall along the east property line and in the form of concentrated flow at the NE property corner.
Detention expected onsite (circle):	YES (NO) Per hydraulic study of Walton Creek/Yampa
Presence of Floodway or Floodplain on site (circle):	(YES) NO Floodplains associated with the site
Anticipated modification of Floodway or Floodplain proposed (circle):	(YES) NO Floodplain development proposed
Describe culvert or storm sewer conveyance evaluative method:	mannings for partial flow, inlet and outlet control for full flow conditions

Permanent Stormwater Treatment Facility Design Standard (check all that apply with only one standard per tributary basin):

☒ WQCV Standard ☒ TSS Standard ☐ Infiltration Standard
☐ Constrained Redevelopment WQCV Standard
☐ Constrained Redevelopment TSS Standard
☐ Constrained Redevelopment Infiltration Standard
☐ Does not Require Permanent Stormwater Treatment (attach Exclusion Tracking Form)

Project Permanent Stormwater Treatment	
Justification of choice of proposed design standard, including how the site meets the constrained redevelopment standard, infiltration test results, etc.:	Possibly both WQCV and TSS standards for a treatment train configuration. Otherwise one of the two will be used. Perhaps one large sand filter to treat all runoff.
Concept-level permanent stormwater treatment facility design details (type, location of facilities, proprietary structure selection, treatment train concept, etc.):	Combination of water quality swales, rain gardens, and sand filtration. Facilities will be combined into the parking lot design and primarily along the east property line and NE property corner (sand filter location). Water quality swale along the East edge of parkign lot.
Proposed LID measures to reduce runoff volume:	Possible rain gardens designed into the landscape islands in the parking lot.
Will treatment evaluation include off-site, pass through flow (circle):	YES (NO)

Approvals

Joe Wiedemeier, PE FPSE 10-13-2021 515-451-5377

Prepared By: Date Phone number
(Insert drainage engineer name & firm)

Approved By:

APPROVED
to be generally in
accordance with
CITY ENGINEERING
STANDARDS
12/17/2021

Printed Name:
City Engineer

Date