

City of Kyle Stormwater Structural Controls Maintenance Plan

______, as "Owner" of the property described below, in accordance with Chapter 50, Section 50-412 City of Kyle Code of Ordinances, agrees to install and maintain stormwater management practice(s) on the subject property in accordance with approved plans. The owner further agrees to the terms stated in this document to ensure that the stormwater management practice(s) continues serving the intended functions in perpetuity. This Plan includes the following exhibits:

Exhibit A: Legal Description of the real estate for which this Plan applies ("Property").

Exhibit B: Location Map(s) – shows an accurate location of each stormwater management practice affected by this Plan.

Exhibit C: Maintenance Plan – prescribes those activities that must be carried out to maintain compliance with this Plan.

Exhibit D: Design Summary – contains a summary of key engineering calculations and other data used to design the stormwater management practice.

Exhibit E: As-built Survey – shows detailed "as-built" including but not limited to cross-section and plan view of the stormwater management practice.

Exhibit F: Engineering/Construction Verification – provides verification from the project engineer that the design and construction of the stormwater BMP's comply with all applicable technical standards and City of Kyle ordinance requirements.

Hays CAD Quick Ref ID

Through this Plan, the Owner hereby subjects the Property to the following covenants, conditions and restrictions:

- 1. The Owner shall be responsible for the routine and extraordinary maintenance and repair of the stormwater management practice(s) and drainage easements identified in Exhibit B in accordance with the maintenance plan contained in Exhibit C.
- 2. Upon written notification by the City of Kyle ("City") the Titleholder(s) shall, at their own cost and within a reasonable time period determined by the City, have an inspection of the stormwater management practice conducted by a qualified professional, file a report with the City and complete any maintenance or repair work recommended in the report. The Titleholder(s) shall be liable for the failure to undertake any maintenance or repairs.
- 3. In addition, and independent of the requirements under paragraph 2 above, the City is authorized to access the property as necessary to conduct inspections of the stormwater management practices or drainage easements to ascertain compliance with the intent of this Plan and the activities prescribed in Exhibit C. The City may require work to be done which differs from the report described in paragraph 2 above, if the City reasonably concludes that such work is necessary and consistent with the intent of this Plan. Upon notification by the City of required maintenance or repairs, the Titleholder(s) shall complete the specified maintenance or repairs within a reasonable time frame determined by the City.
- 4. If the Titleholder(s) do not complete an inspection under 2. above or required maintenance or repairs under 3. above within the specified time period, the City is authorized, but not required, to perform the specified inspections, maintenance or repairs. In the case of an emergency situation, as determined by the City, no notice shall be required prior to the City performing emergency maintenance or repairs. The City

may levy the costs and expenses of such inspections, maintenance or repair related actions as a special charge against the Property and collected as such in accordance with the procedures under Chapter 50-417 City of Kyle Code of Ordinances.

- 5. This Plan shall run with the Property and be binding upon all heirs, successors and assigns. After the Owner records the addendum noted above, the City shall have the sole authority to modify this Plan upon a 30-day notice to the current Titleholder(s).
- 6. All the requirements of Chapter 50, City of Kyle Code of Ordinances, Stormwater Regulations, are incorporated by reference into this Plan.

Dated this	day of	, 20	
Owner:			
Owners Signatur	re		
Owners Typed N	Jame		
		Acknowledgements	
State of Texas County of			
whose name is	subscribed to the foregoi	, on this day personally appearedor through identity card or ing instrument and acknowledged to me ressed. Given under my hand and seal of	that he executed the same for the
		Notary Public's Sig	gnature
This document v	was drafted by:		
Signature			
Name and addre	ess of drafter, print or ty	 pe	

Exhibit A Legal Description

The following description and reduced copy map identifies the land parcel(s) affected by this Plan.

Date of Recording:	
Map Produced By:	_
Legal Description:	
	,
Survey map of property sh	owing legal boundaries.
Note: If using attachments, label attachment(s) as Exhibit A - N	Legal Description
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Exhibit B Location Map Stormwater Management Practices Covered by this Plan

The stormwater management practices covered by this Plan are depicted in the reduced copy of a portion of the construction plans, as shown below. All of the noted stormwater management practices are located within the recorded and final plats noted in Exhibit A. Please highlight area on map indicating stormwater infrastructure, including but not limited to: ponds, practices, collection, conveyance and treatment. No buildings or other structures are allowed in these areas.

Note: If using attachments, label attachment(s) as Exhibit B Location Map Stormwater Management Practices Stormwater Practices (list all): Location of Practices (metes and bounds): Figure 1 Plan View of Stormwater Practices Drainage Easement Restrictions: No grading of filling is allowed that may interrupt stormwater flows in any

way. See Exhibit C for specific maintenance requirements for stormwater management practices within this

area.

Exhibit C Stormwater Management Practice Maintenance Plan

This exhibit explains the basic function of each of the stormwater practices listed in Exhibit B and prescribes the minimum maintenance requirements to remain compliant with this Plan. The maintenance activities listed below are aimed to ensure these practices continue serving their intended functions in perpetuity. The list of activities is not all inclusive, but rather indicates the minimum type of maintenance that can be expected for this particular site. Access to the stormwater practices for maintenance vehicles is shown in Exhibit B. Any failure of a stormwater practice that is caused by a lack of maintenance will subject the Titleholder(s) to enforcement of the provisions listed on page 1 of this Plan by the City.

Note: If additional stormwater management practices are included with project, duplication of this form should be used.

System Description:
Minimum Maintenance Requirements: To ensure the proper long-term function of the stormwater management practices described above, the following activities must be completed:

The purpose of this section is to record verified "as-built" construction details and supporting design data documentation for the stormwater management practice(s) located on the project described as:

This section includes all of the following exhibits:

Exhibit H: Design Summary – contains a summary of key engineering calculations and other data used to design each of the stormwater management practice(s).

Exhibit I: As-built Survey – shows detailed "as-built" cross-section and plan view of each of the stormwater management practice(s).

Exhibit J: Engineering/Construction Verification – provides verification from the project engineer that the design and construction of the wet detention basin comply with all applicable technical standards and the City of Kyle ("City") ordinance requirements.

Dated thisday of	, 20	·			
Owners Signature	_				
Owners Name (Print or Typed)					
A	cknowledgements				
State of Texas					
County of Hays					
Personally came before me this		day of _		, 20	
the above named		known	to be	the perso	n who
executed the foregoing instrument and a	cknowledged the same.				
	Name				
	Notary Public,			County	, Texas
	My commission expi	res:			
This document was drafted by:					
[Name and address of drafter, print or type]					

Exhibit D Design Summaries for Each Stormwater Management Practice

Project:		Project Size in Acres:
Number of Runoff Discharge Point	s:	
Watershed (ultimate discharge & v	water surfac	ce elevation):
Watershed Area (including off-site	runoff trave	eling through project area):
Watershed Data Summary: The following and runoff volumes required to des	•	e summarizes the watershed data used to determine peak flows ormwater management practice.
Is there any off-site flow?		No

C Bata Elements	Watersh	ned A	Watershed B (off-site)		
Summary Data Elements	Pre-Develop	Post-Develop	Pre-Develop	Post-Develop	
Watershed Areas (in acres) (see attached map)					
Percent Impervious Area (% of each) (see attached map)					
Runoff Curve Numbers					
Conveyance Systems Types					
Time of Concentration (<i>TC</i>) (see attached map & worksheets)					
25% of 2-yr. 24-hr. post-dev runoff volume (if applicable for wet pond)					
25-yr./24 hour Basin Peak Flow					
25-yr./24 hour Outfall Peak Flow					
100-yr./24 hour Peak Flow					

Exhibit D (continued)

Design Summary: The following table summarizes the data used to design the stormwater management practice.

Design	Design Data				
Site assessment data (see attached maps)					
Contributing drainage area to detention pond					
Distance to nearest private well (including off-site wells)					
Distance to municipal well (including off-site wells)					
Well head protection area involved?					
Any buried or overhead utilities in the area?					
Distance(s) to nearest major drainage way or receiving stream from the					
proposed outfall conveyance system/discharge					
Any downstream roads or other structures? (describe)					
Floodplain or wetlands?					
Names of surrounding developments, properties or landmarks					
Ground cover					
Existing land uses					
Topographic features, steepness of slopes					
Existing drainage facilities					
Flood Hazard Zones					
General basin design data (see attached detail	ed drawings)				
Pond surface area					
Design permanent pond surface elevation if applicable (wet pond)					
Top of berm elevation					
Top of berm width					
Length/width (dimensions/ratio)					
Safety shelf design (length, grade, max. depth) if applicable					
Ave. water depth (minus safety shelf/sediment) if applicable					
Sediment forebay size & depth if applicable					
Sediment storage depth & design maintenance if applicable					
Safety fence if applicable					
Freeboard available at design event					
Spillway elevation					
If discharging to existing channel or culvert, verify receiving structure has					
sufficient capacity to accommodate the post-development flow					

Design Basin Inflow, Outflow & Storage Data (see attached hydrographs and detail drawings)					
Inflow Peak Volume	Maximum Outflow Rate	Max. Water Elevation	Storage Volume At Max. Elev. (above perm.	Outflow Control Structures*	
2-yr./3 hr. (volume) (if applicable for wet pond)					
cfs (Post 2-yr./24 hr. peak)					
cfs (Post 25-yr./24 hr. peak)					
cfs (Post 100-yr./24 hr. peak)					

Exhibit D (continued)

Watershed Map: The watershed map shown below was used to determine the post-development data contained

in this exhibit. The post-developed watershed areas are the same as the pre-development watershed areas for this project.				
Watershed Map				
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Exhibit E

As-built Survey for Each Stormwater Management Practice & Outlet Structure Detail

The stormwater management practice constructed within the recorded and final plats is depicted below in reduced copies of the as-built plans.

Note: Show plan view of Best Management Practices with cross-section location clearly labeled and cross referenced. On cross-section and plan view, clearly label all key components and elevation of the BMP. Also show outlet details. Map scale must be sufficiently large enough to show necessary details. If using attachments, label attachment(s) Exhibit I As-built Survey for Each Stormwater Management Practice & Outlet Structure Detail					

Exhibit F Engineering/Construction Verification

DATE:	
TO:	Stormwater Management Plan Administrator City of Kyle Engineering Department
FROM	:
RE:	Engineering/Construction Verification for the following project:
Projec	t Name:
	t Address:
	water Management Practice(s):

For the above-referenced project and stormwater management practices, this correspondence shall serve as verification that:

- 1) all site inspections outlined in approved inspection plans have been successfully completed; and
- 2) the stormwater management practice design data presented in Exhibit D, and the "as-built" construction documentation presented in Exhibit E comply with all applicable state and local technical standards.

Must choose one of the following two statements:

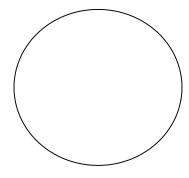
[] Any variations from the originally approved construction plans are noted in Exhibit E. These variations are considered to be within the tolerances of standard construction techniques and do not affect the original design as presented in Exhibit D in any way.

<u>Or</u>

[] Any design or construction changes from the originally approved construction plans are documented in Exhibits D and E and have been approved by the City.

"This Design and Analysis of the storm drainage layout, in accordance with the proposed land use, shows that all of the storm drainage system is in compliance with the City of Kyle's rules, ordinances, state and federal regulations.

This Design and Analysis is based on calculated information and any changes to the estimated stormwater runoff or proposed storm drainage layout, configuration, or sizing will have an effect on the design of the stormwater collection system. This document has been prepared by me, or under my direct supervision, as a duly licensed engineer of the State of Texas."



(Signed P.E. stamp must be included)