

**(Sample) Storm Water Management
Practice Maintenance Agreement / W.
NO Land Division**

(Document Number)

[Owners Name], as “Owner” of the property described below, in accordance with Chapter 17.05 Eau Claire County Code of Ordinances [or other applicable code], agrees to install and maintain storm water management practice(s) on the subject property in accordance with approved plans and Storm Water Permit conditions. The owner further agrees to the terms stated in this document to ensure that the storm water management practice(s) continues serving the intended functions in perpetuity. This Agreement includes the following exhibits:

Exhibit A: Legal Description of the real estate for which this Agreement applies (“Property”).

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

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

Exhibit D: Design Summary – contains a summary of key engineering calculations and other data used to design the wet detention basin.

Exhibit E: As-built Survey – shows detailed “as-built” cross-section and plan view of the wet detention basin.

Exhibit F: Engineering/Construction Verification – provides verification from the project engineer that the design and construction of the stormwater BMP’s complies with all applicable technical standards and Eau Claire County ordinance requirements.

Name and Return Address

Parcel Identification Number(s) – (PIN)

Through this Agreement, 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 storm water 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 [Municipality Name] or their designee, the Titleholder(s) shall, at their own cost and within a reasonable time period determined by the [Municipality Name], have an inspection of the storm water management practice conducted by a qualified professional, file a report with the [Municipality Name] 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 [Municipality Name], or its designee, is authorized to access the property as necessary to conduct inspections of the storm water management practices or drainage easements to ascertain compliance with the intent of this Agreement and the activities prescribed in Exhibit C. The [Municipality Name] may require work to be done which differs from the report described in paragraph 2 above, if the [Municipality Name] reasonably concludes that such work is necessary and consistent with the intent of this agreement. Upon notification by the [Municipality Name] of required maintenance or repairs, the Titleholder(s) shall complete the specified maintenance or repairs within a reasonable time frame determined by the [Municipality Name].
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 [Municipality Name] is authorized, but not required, to perform the specified inspections, maintenance or repairs. In the case of an emergency situation, as determined by the [Municipality Name], no notice shall be required prior to the [Municipality Name] performing emergency maintenance or repairs. The [Municipality Name] 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 s. 66.0627 Wis. Stats. or subch. VII of ch. 66 Wis. Stats.
5. This Agreement shall run with the Property and be binding upon all heirs, successors and assigns. After the Owner records the addendum noted above, the [Municipality Name] shall have the sole authority to modify this agreement upon a 30-day notice to the current Titleholder(s).
6. All the requirements of Ch. 17.05.130, Maintenance of Storm Water BMP’s, are incorporated by reference into this agreement.

Dated this ____ day of _____, 20__.

Owner:

[Owners Signature]

[Owners Typed Name]

Acknowledgements

State of Wisconsin:
County of Eau Claire

Personally came before me this ____ day of _____, 20__, the above named [Owners name] to me known to be the person who executed the foregoing instrument and acknowledged the same.

[Name]

Notary Public, Eau Claire County, WI

My commission expires: _____

This document was drafted by:

Approved for recording: _____

[Initials of Municipal staff]

[Name and address of drafter Please print or type]

(Sample)

Exhibit A – Legal Description

The following description and reduced copy map identifies the land parcel(s) affected by this Agreement. For a larger scale view of the referenced document, contact the Eau Claire County Register of Deeds office.

Date of Recording: [date.]

Map Produced By: [designer's name.]

Legal Description: [enter legal description as described on the property title here.]

Examples (Can remove this box)

1. Subdivision: Lots 1 through 22 of "Sample" Subdivision, located in all that part of the S.W. Quarter (SW ¼) of Section 4, Township 26N, Range 9W (Town of Washington) Eau Claire County, Wisconsin.
2. CSM: Vol _____ Pg. _____ Town of _____
3. Metes and Bounds: S.W. of S.W. Sec. 15. 27-7 Sevmour Eau Claire WI.

Survey map of property showing legal boundaries.



Drainage Easement Restrictions: Shaded area on map indicates a drainage easement for storm water collection, conveyance and treatment. No buildings or other structures are allowed in these areas. No grading or filling is allowed that may interrupt storm water flows in any way. See Exhibit C for specific maintenance requirements for storm water management practices within this area. See Exhibit B for details on location.

(Sample)

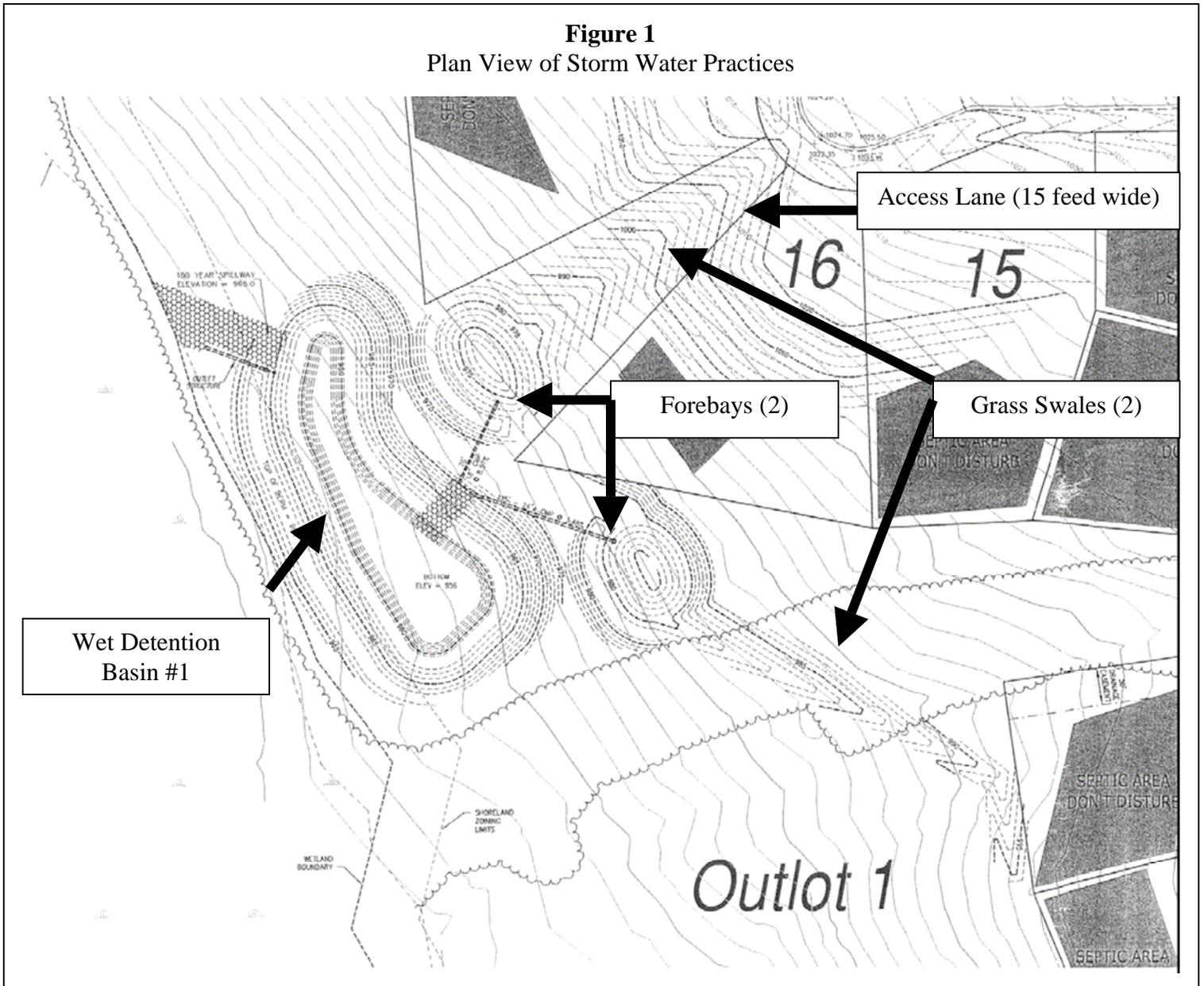
Exhibit B - Location Map Storm Water Management Practices Covered by this Agreement

[An example location map and the minimum elements that must accompany the map are shown below. This exhibit must be customized for each site. Map scale must be sufficiently large enough to show necessary details.]

The storm water management practices covered by this Agreement are depicted in the reduced copy of a portion of the construction plans, as shown below. All of the noted storm water management practices are located within Outlot 1 as noted in Exhibit A.

Storm water Practices: [brief list]

Location of Practices: [enter a metes and bounds description of the Outlot area. The figure below must illustrate this description.]



3-08Sample – LCD

(Sample)

Exhibit C

Storm Water Practice Maintenance Plan

This exhibit explains the basic function of each of the storm water practices listed in Exhibit B and prescribes the minimum maintenance requirements to remain compliant with this Agreement. 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 storm water 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 Agreement by the [Municipality Name]

[Sample maintenance language is listed below. This exhibit must be customized for each site. The minimum elements of this exhibit include: a description of the drainage area and the installed storm water management system & best management practices, a list of BMP maintenance requirements and a reference to future as-built drawings and design summaries to be recorded as an addendum(s) to this agreement.]

System Description:

The wet detention basin is designed to trap 80% of sediment in runoff and maintain pre-development downstream peak flows. The basin has two forebays (smaller ponds) located at the low end of two grass swales. In addition to runoff conveyance, the grass swales also allow infiltration and filtering of pollutants, especially from smaller storms. The forebays are each 4 feet deep. They are connected to the main pool by 18 and 24-inch metal pipes that outlet onto a rock chute. The forebays will trap coarse sediments in runoff, such as road sands, thus reducing maintenance of the main basin. The main pool will trap the finer suspended sediment. To do this, the pond size, water level and outlet structures must be maintained as specified in this Agreement (see Figures 1, 2 and 3).

The main basin receives runoff from a 67.1 acre drainage area (41.2 acres within the subdivision and 25.9 acres off-site drainage coming from the east). During high rainfall or snow melt events, the water level will temporarily rise and slowly drain down to the elevation of the control structure. The water level is controlled by a 12-inch concrete pipe extending through the berm in the northwest corner of the basin (see Figures 1 and 3). On the face of the 12-inch pipe, there is metal plate with a 3-inch drilled hole (orifice) with stone in front of it. This orifice controls the water level and causes the pond to temporarily rise during runoff events. Washed stone (1-2" diameter) is placed in front of the orifice to prevent clogging. High flows may enter the grated concrete riser or flow over the rock lined emergency spillway. "As-built" construction drawings of the basin, showing actual dimensions, elevations, outlet structures, etc. will be recorded as an addendum(s) to this agreement within 60 days after [Municipality Name] accepts verification of construction from the project engineer.

Minimum Maintenance Requirements:

To ensure the proper long-term function of the storm water management practices described above, the following activities must be completed:

1. All outlet pipes must be checked monthly to ensure there is no blockage from floating debris or ice, especially the washed stone in front of the 3-inch orifice and the trash rack on the riser in the main basin. Any blockage must be removed immediately. The washed stone must be replaced when it becomes clogged.
2. Grass swales shall be preserved to allow free flowing of surface runoff in accordance with approved grading plans. No buildings or other structures are allowed in these areas. No grading or filling is allowed that may interrupt flows in any way.
3. Grass swales, inlets and outlets must be checked after heavy rains (minimum of annually) for signs of erosion. Any eroding areas must be repaired immediately to prevent premature sediment build-up in the downstream forebays or basin. Erosion matting is recommended for repairing grassed areas.
4. NO trees are to be planted or allowed to grow on the earthen berms. Tree root systems can reduce soil compaction and cause berm failure. The berms must be inspected annually and any woody vegetation removed.
5. If floating algae or weed growth becomes a nuisance (decay odors, etc.), it must be removed from the basin or the forebay and deposited where it cannot drain back into the basin. Removal of the vegetation from the water reduces regrowth the following season (by harvesting the nutrients). Wetland vegetation must be maintained along the waters edge for safety and pollutant removal purposes.

6. When sediment in the forebays or the basin has accumulated to an elevation of three feet below the outlet elevation, it must be removed (see Exhibit D). All removed sediment must be placed in an appropriate upland disposal site and stabilized (grass cover) to prevent sediment from washing back into the basin. The forebays will likely need sediment removal first. Failure to remove sediment from the forebays will cause resuspension of previously trapped sediments and increase downstream deposition.
7. No grading or filling of the basin or berm other than for sediment removal is allowed, unless otherwise approved by the **[Municipality Name]**.
8. Periodic mowing of the grass swales will encourage rigorous grass cover and allow better inspections for erosion. Waiting until after August 1 will avoid disturbing nesting wildlife. Mowing around the basin or the forebays may attract nuisance populations of geese to the property and is not necessary or recommended.
9. Any other repair or maintenance needed to ensure the continued function of the storm water practices or as ordered by the **[Municipality Name]** under the provisions listed on page 1 of this Agreement.

[Note: Other examples of maintenance plans for infiltration practices are available from Eau Claire County.]

Addendum 1 (Sample)
Storm Water Management Practice
Maintenance Agreement w/ No Land Division

Document Number _____

The purpose of this addendum is to record verified “as-built” construction details, supporting design data and permit termination documentation for the storm water management practice(s) located on Outlot 1 of the “Sample” Project, described as being all that part of the Southwest Quarter (SW ¼) of Section 4, Township 26N, Range 9W (Town of Washington) Eau Claire County, Wisconsin. This document shall serve as an addendum to document # _____, herein referred to as the “Maintenance Agreement”. This addendum includes all of the following exhibits:

Exhibit D: Design Summary – contains a summary of key engineering calculations and other data used to design the wet detention basin.

Exhibit E: As-built Survey – shows detailed “as-built” cross-section and plan view of the wet detention basin.

Exhibit F: Engineering/Construction Verification – provides verification from the project engineer that the design and construction of the wet detention basin complies with all applicable technical standards and Eau Claire County ordinance requirements.

Name and Return Address

Dated this ____ day of _____, 20__.

Parcel Identification Number(s) – (PIN)

Owner:

[Owners Signature – per the Maintenance Agreement]

[Owners Typed Name]

Acknowledgements

State of Wisconsin
County of Eau Claire

Personally came before me this ____ day of _____, 20__, the above named _____ [Owners name] to me known to be the person who executed the foregoing instrument and acknowledged the same.

[Name]

Notary Public, Eau Claire County, WI
My commission expires: _____

This document was drafted by:

[Name and address of drafter]

Approved for recording: _____
[Initials of Municipal staff]

(Sample)
Exhibit D

Design Summaries for Wet Detention Basin #1

Project Identifier: “Sample” Project **Project Size:** 40 Acres

Number of Runoff Discharge Points: 1 **Watershed (ultimate discharge):** Lowes Creek

Watershed Area (including off-site runoff traveling through project area): 67 acres (26 acres off-site)

Watershed Data Summary. The following table summarizes the watershed data used to determine peak flows and runoff volumes required to design wet detention basin #1.

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

Summary Data Elements	Subwatershed A		Subwatershed B (off-site)	
	Pre-Develop	Post-develop	Pre-Develop	Post-develop
Watershed Areas (in acres) <i>(see attached map)</i>	41 acres	41 acres	26	26
Average Watershed Slopes (%)	2-8%	2-8%	3-6%	3-6%
Land Uses (% of each) <i>(see attached map)</i>	75 ac. cropland 15 ac. brush 10 ac. woodland	110 ac 1/2 ac. lots 5 ac. brush 5 ac. woodland	50% cropland 50% 1 acre lots	50% cropland 50% 1 acre lots
Runoff Curve Numbers	68 x 75 ac. = 5100 30 x 25 ac. = 750 Ned 5850/100 ac. RCN = 59	70 x 110 ac. = 7700 10 x 10 ac. = 100 Ned 7800/120 ac. RCN = 65	RCN = 68 (state standard)	RCN = 70
Conveyance Systems Types	Grass Waterway	50% grass swale 50% storm sewer	100% bare channel	100% grass swale
Summary of Average Conveyance System Data	8' bottom/4:1 ss 2' dpety/3% grade	2' depth swaly/3% 40" r/c sewer/2% (see calcs.)	15' (w) top 1' (d) parabolic 2% grade	2' deep standard road ditch 2% grade
Time of Concentration (TC) <i>(see attached map & worksheets)</i>	1.1 hrs.	.97 hrs.	.74 hrs.	.65 hrs.
25% of 2-yr. 24-hr. post-dev runoff volume	N/A	2.29 ac. ft.	N/A	.19 ac. ft
1-year/24 hour Runoff Volume	N/A	(.2" x 60 ac.) 1.0 ac. ft.	N/A	(.34 x 10 ac.) .28 ac. ft.
2-yr./24 hour Peak Flow <i>(see attached hydrographs)</i>	11.2 cfs	14.3 cfs	5.1 cfs	3.2 cfs
10-yr./24 hour Peak Flow	21 cfs	32 cfs	18.4 cfs	18.4 cfs
25-yr./24 hour Peak Flow	38 cfs	73 cfs	29 cfs	11.3 cfs
100-yr./24 hour Peak Flow	78 cfs	91 cfs	53 cfs	21 cfs

(Sample)

Exhibit D (continued)

Practice Design Summary. The following table summarizes the data used to design wet detention basin #1.

Design Element	Design Data
Site assessment data: (see attached maps)	
Contributing drainage area to basin (subwatershed A & B)	70 acres
Distance to nearest private well (including off-site wells)	> 100 feet
Distance to municipal well (including off-site wells)	> 1200 feet
Well head protection area involved?	No
Ground slope at site of proposed basin	Average 3%
Any buried or overhead utilities in the area?	No
Proposed outfall conveyance system/discharge (w/distances)	35 ft. to CTH "U: Road ditch 1000 ft. to wetland
Any downstream roads or other structures? (describe)	Yes 36" cmp road culvert
Floodplain, shoreland or wetlands?	No
Soil investigation data (see attached map & soil logs):	
Number of soil investigations completed	3 (in basin area)
Do elevations of test holes extend 3 ft. below proposed bottom?	Yes (see map)
Average soil texture at pond bottom elevation (USDA)	Clay loam
Distance from pond bottom to bedrock	> 5 feet
Distance from pond bottom to seasonal water table	Pond bottom 2 ft. below mottling No water observed in test holes
General basin design data (see attached detailed drawings):	
Permanent pool surface area	1.5 acres
Design permanent pool water surface elevation	Elev. 900.0
Top of berm elevation (after settling) and width	Elev. 905.0 / 10 feet wide
Length/width (dimensions/ratio)	445 ft. (L) x 145 ft. (W) = 3:1
Safety shelf design (length, grade, max. depth)	10 ft. @ 10% slope/1.5' deepest
Ave. water depth (minus safety shelf/sediment)	5 ft. (in center)
Sediment forebay size & depth	.16 acres (13% pool size)/5 feet
Sediment storage depth & design maintenance	2 ft. depth for forebay & pool 15 year maintenance schedule

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. Pool)	Outflow Control Structures*
1-yr./24 hr. (volume)	7 cfs (34 hr. drawdown)	901.3 ft.	2 acre feet	#1
24.3 cfs (Post 2-yr./24 hr. peak)	11 cfs	902.0 ft.	3.1 acre feet	#1 and #2
72 cfs (Post 10-yr./24 hr. peak)	35 cfs	903.0 ft.	4.5 acre feet	#3
88 cfs (Post 25-yr./24 hr. peak)	66 cfs	903.5 ft.	5.1 acre feet	#3 and #4
171 cfs (Post 100-yr./24 hr. peak)	143 cfs	904.0 ft.	6.0 acre feet	#3 and #4

- * #1 = 6 inch orifice in water level control weir plate – flow line elev. @900.0 (1.3 ft. max. head)
- #2 = 2 foot wide rectangular weir – flow line elev. @ 901.3 (.7 ft. hydraulic head)
- #3 = 30 inch diameter smooth wall pvc pipe – flow line elev. @ 900.0 (3.0 ft. max. hydraulic head)
- #4 = 30 foot wide earthen/grass emergency spillway – flow line elev. @ 903.0 (1.0 ft. Max. depth)

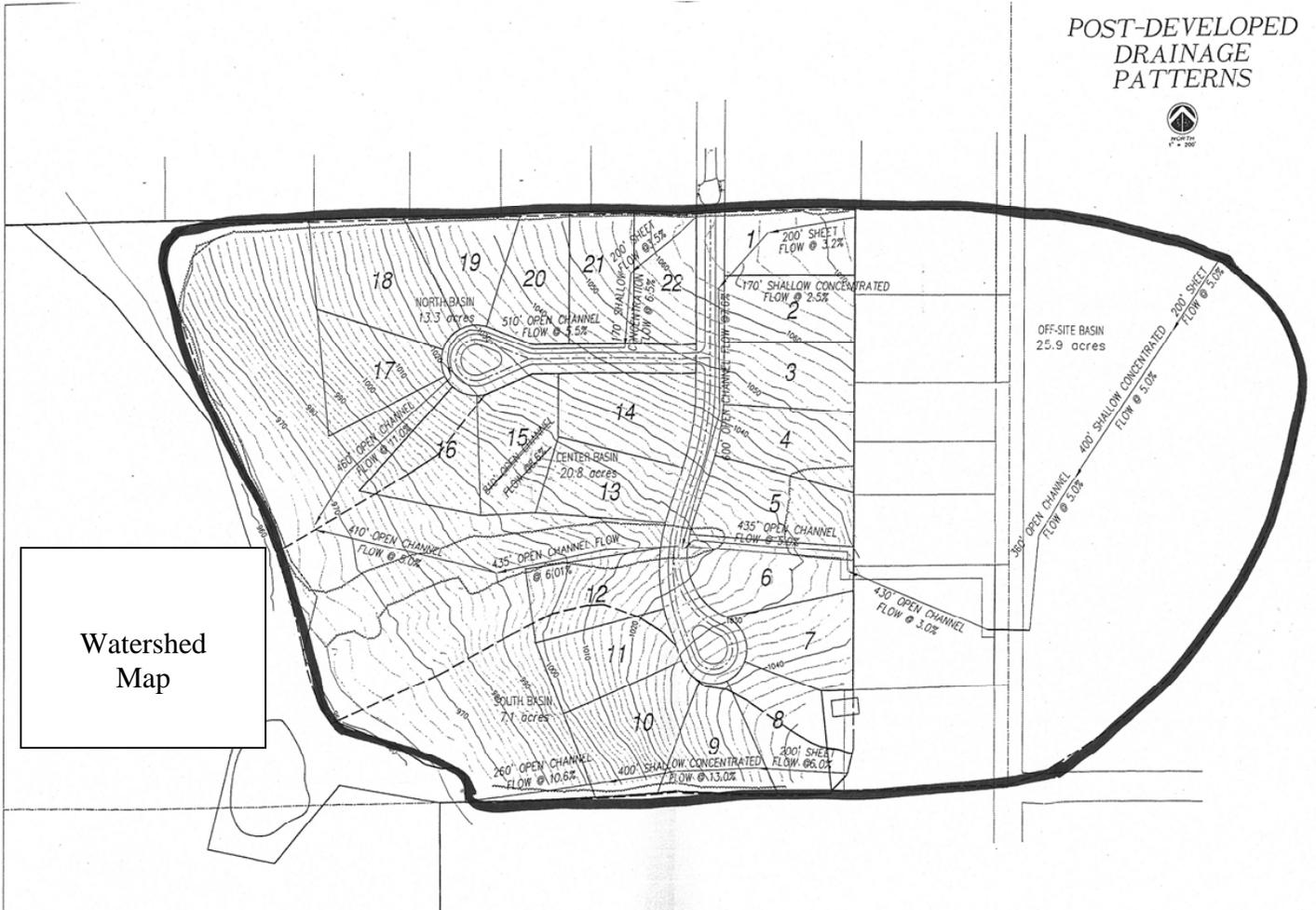
3-08Sample – LCD

(sample)

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.

[Map scale must be sufficiently large enough to show necessary detail, but page size should not exceed 11" x 17".]

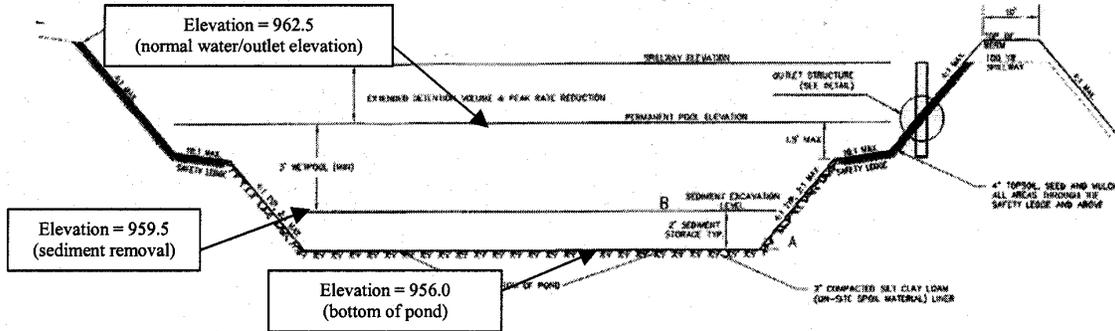


(Sample)
Exhibit E
As-built Survey for Wet Detention Basin #1

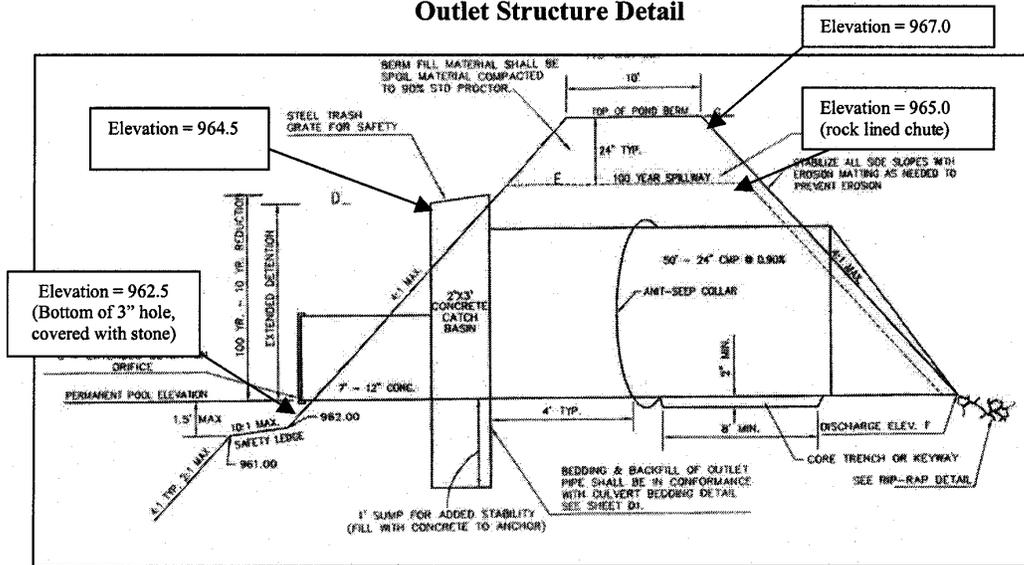
The wet detention basin constructed on Outlot #1 is depicted below in reduced copies of the as-built plans.

Cross-Section A – A'

[Note: Show plan view of BMP 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, but page size should not exceed 11" x 17".]



Outlet Structure Detail



3-08Sample – LCD

Exhibit "F"

Engineering/Construction Verification

DATE: _____

TO: Land Conservation Division
Eau Claire County Department of Planning and Development

FROM: _____ [Project Engineer's Name/Company]

RE: Engineering/Construction Verification for the following project:

Project Name: _____

Section _____, Town of _____

Storm Water Permit # _____

Storm Water Management Practices: _____

For the above-referenced project and storm water 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 storm water 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, in accordance with the Eau Claire County Storm Water Management and Erosion Control Ordinance.

[Must include one of the following two statements:]

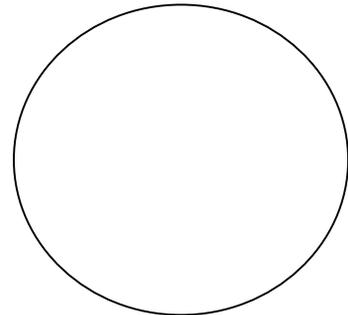
1. Any variations from the originally approved construction plans are noted in Exhibit E. These variations are considered to be within the tolerances of standard construction techniques and do not affect the original design as presented in Exhibit D in any way.

[Note: The County may request additional documentation to support this statement depending on the extent of deviations from the approved plans.]

Or

2. Any design or construction changes from the originally approved construction plans are documented in Exhibits D and E and have been approved by Eau Claire County.

[Note: If warm season and wetland planting verification is required, it may be included in this exhibit.]



(Signed P.E. stamp must be included)