### Storm Water Management Practice Maintenance Agreement

Continental 665 Fund LLC, as "Owner" of the property described below, in accordance with Chapter 32 City of Waukesha Storm Water Management and Erosion Control, 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:** <u>Legal Description</u> 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:** <u>Maintenance Plan</u> – prescribes those activities that must be carried out to maintain compliance with this Agreement.

<u>Note</u>: After construction verification has been accepted by the City of Waukesha, for all planned storm water management practices, an <u>addendum(s)</u> to this agreement shall be recorded by the Owner showing design and construction details. The addendum(s) may contain several additional exhibits, including certification by Waukesha County of Storm Water Permit termination, as described below.

Name and Return Address

Land Resources Division 515 W. Moreland Blvd., Rm AC 260 Waukesha, WI 53188

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 until Storm Water and Erosion Control Permit termination by the City of Waukesha in accordance with Chapter 32 of the City Code of Ordinances.
- 2. After Storm Water and Erosion Control Permit termination under 1., the current Owner(s) shall be solely responsible for maintenance and repair of the storm water management practices and drainage easements in accordance with the maintenance plan contained in Exhibit C.
- 3. The Owner(s) shall, at their own cost, complete inspections of the storm water management practices at the time intervals listed in Exhibit C, and conduct the inspections by a qualified professional, file the reports with the City of Waukesha after each inspection and complete any maintenance or repair work recommended in the report. The Owner(s) shall be liable for the failure to undertake any maintenance or repairs. After the work is completed by the Contractor, the qualified professional shall verify that the work was properly completed and submit the follow-up report to the City within 30 days.
- 4. In addition, and independent of the requirements under paragraph 3 above, the City of Waukesha, 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 City of Waukesha may require work to be done which differs from the report described in paragraph 3 above, if the City of Waukesha reasonably concludes that such work is necessary and consistent with the intent of this agreement. Upon notification by the City of Waukesha of required maintenance or repairs, the Owner(s) shall complete the specified maintenance or repairs within a reasonable time frame determined by the City of Waukesha.
- 5. If the Owner(s) do not complete an inspection under 3. above or required maintenance or repairs under 4. above within the specified time period, the City of Waukesha 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 of Waukesha, no notice shall be required prior to the City of Waukesha performing emergency maintenance or repairs. The City of Waukesha 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.
- 6. 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 City of Waukesha shall have the sole authority to modify this agreement upon a 30-day notice to the current Owner(s)

d thisday of, 202	
er:	
ners Signature)	_
ners Typed Name)	_
A	Acknowledgements
State of Wisconsin: County of Waukesha	
Personally came before me thisday of known to be the person who executed the fores	, 202_, the above named Continetal 665 Fund LLC to me going instrument and acknowledged the same.
	[Name]
	Notary Public, Waukesha County, WI My commission expires:
	, <u> </u>
ſ	
This document was drafted by:	
Matthew Christel, P.E.	
7325 Janes Avenue, Woodridge, IL 60517	
[Name and address of drafter]	
	For Certification Stamp

#### Exhibit A – Legal Description

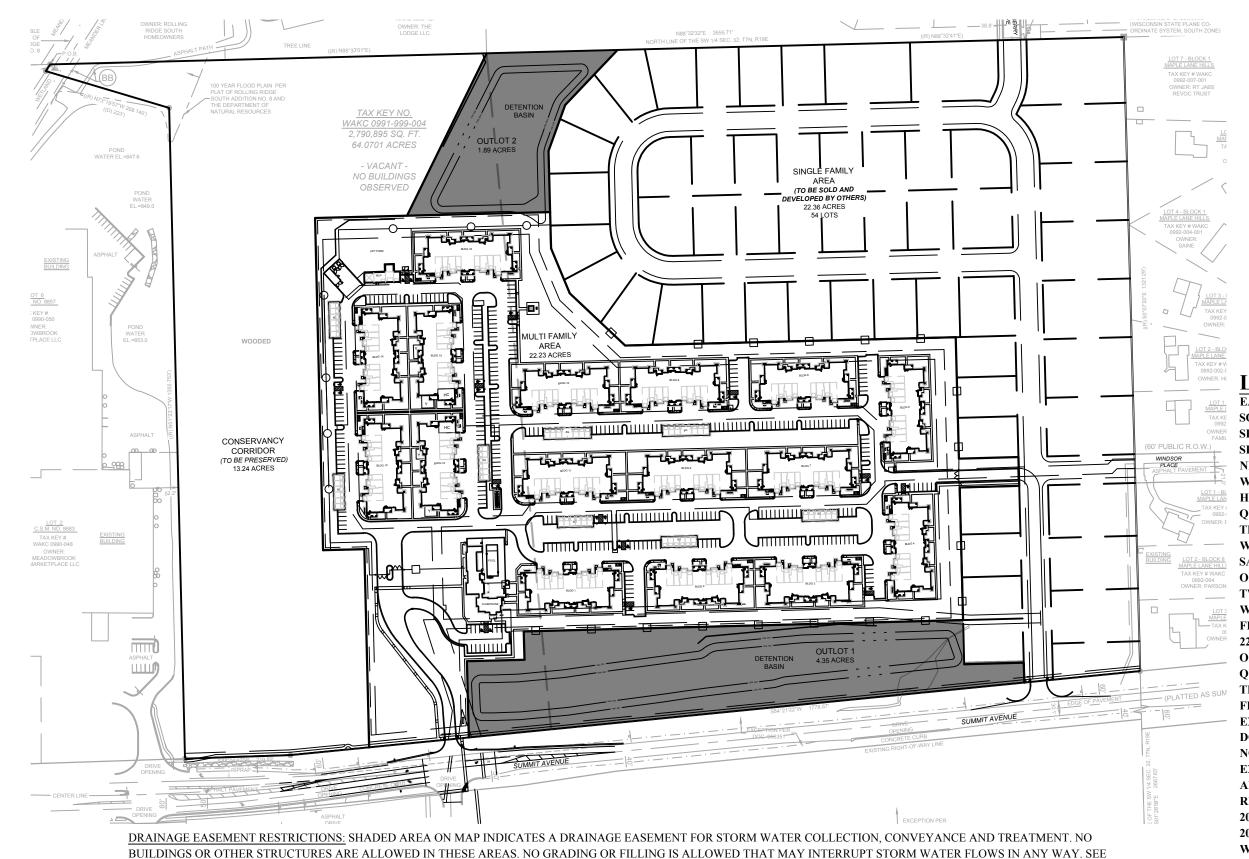
The following description and reduced copy map identifies the land parcel(s) affected by this Agreement. For a larger scale view of the referenced document, contact the Waukesha County Register of Deeds office.

Project Identifier: Springs at Meadowbrook Acres: 64

Date of Recording: TBD

Map Produced By: V3 Companies, 7325 Janes Avenue, Woodridge, IL 60517

Legal Description: EAST THREE-FOURTHS (E 3/4) OF SOUTHWEST ONE QUARTER (1/4) OF SECTION THIRTY-TWO (32) IN TOWNSHIP SEVEN (7) NORTH, RANGE NUMBER NINETEEN (19) EAST, ALSO THAT PART OF WEST HALF (W 1/2) OF THE WEST ONE HALF (W 1/2) OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION THIRTY-TWO (32); THENCE RUNNING WEST OF THE WEST QUARTER LINE OF SAID SECTION 207.5 FEET TO WEST BANK OF CERTAIN CREEK; THENCE SOUTH TWELVE DEGREES WEST ALONG THE WEST LINE OF SAID CREEK THIRTY (30) FEET; THENCE SOUTH 71 DEGREES EAST 223 FEET TO A POINT ON THE EAST LINE OF SAID WEST HALF OF SOUTHWEST QUARTER (SW 1/4) OF SECTION 32 AND THENCE NORTH ON SAID EAST LINE 97 FEET TO A PLACE OF BEGINNING, EXCEPTING THE LANDS CONVEYED IN DOCUMENTS RECORDED AS DOCUMENT NOS. 1464302, 956351 AND 2015309, EXCEPTING THEREFROM THAT PART ANNEXED TO THE CITY OF WAUKESHA RECORDED DECEMBER 29, 1994 IN REEL 2025, IMAGE 339 AS DOCUMENT NO. 2015312, IN THE CITY OF WAUKESHA, WAUKESHA COUNTY, STATE OF WISCONSIN.



### **LEGAL DESCRIPTION**

EAST THREE-FOURTHS (E 3/4) OF **SOUTHWEST ONE QUARTER (1/4) OF SECTION THIRTY-TWO (32) IN TOWNSHIP** SEVEN (7) NORTH, RANGE NUMBER NINETEEN (19) EAST, ALSO THAT PART OF WEST HALF (W 1/2) OF THE WEST ONE HALF (W 1/2) OF THE SOUTHWEST **QUARTER (SW 1/4) OF SECTION** THIRTY-TWO (32); THENCE RUNNING WEST OF THE WEST QUARTER LINE OF SAID SECTION 207.5 FEET TO WEST BANK OF CERTAIN CREEK; THENCE SOUTH TWELVE DEGREES WEST ALONG THE WEST LINE OF SAID CREEK THIRTY (30) FEET; THENCE SOUTH 71 DEGREES EAST 223 FEET TO A POINT ON THE EAST LINE OF SAID WEST HALF OF SOUTHWEST **QUARTER (SW 1/4) OF SECTION 32 AND** THENCE NORTH ON SAID EAST LINE 97 FEET TO A PLACE OF BEGINNING, EXCEPTING THE LANDS CONVEYED IN DOCUMENTS RECORDED AS DOCUMENT NOS. 1464302, 956351 AND 2015309, **EXCEPTING THEREFROM THAT PART** ANNEXED TO THE CITY OF WAUKESHA **RECORDED DECEMBER 29, 1994 IN REEL** 2025, IMAGE 339 AS DOCUMENT NO. 2015312, IN THE CITY OF WAUKESHA, WAUKESHA COUNTY, STATE OF WISCONSIN.

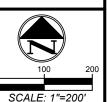


SPRINGS AT MEADOWBROOK

EXHIBIT C FOR SPECIFIC MAINTENANCE REQUIREMENTS FOR STORM WATER MANAGEMENT PRACTICES WITHIN THIS AREA

WAUKESHA WISCONSIN

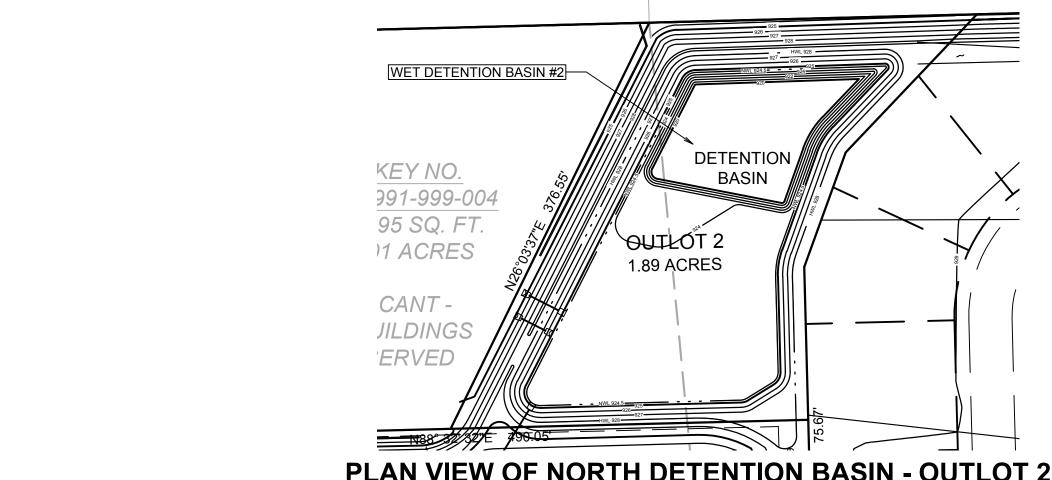
EXHIBIT A - LEGAL DESCRIPTION



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

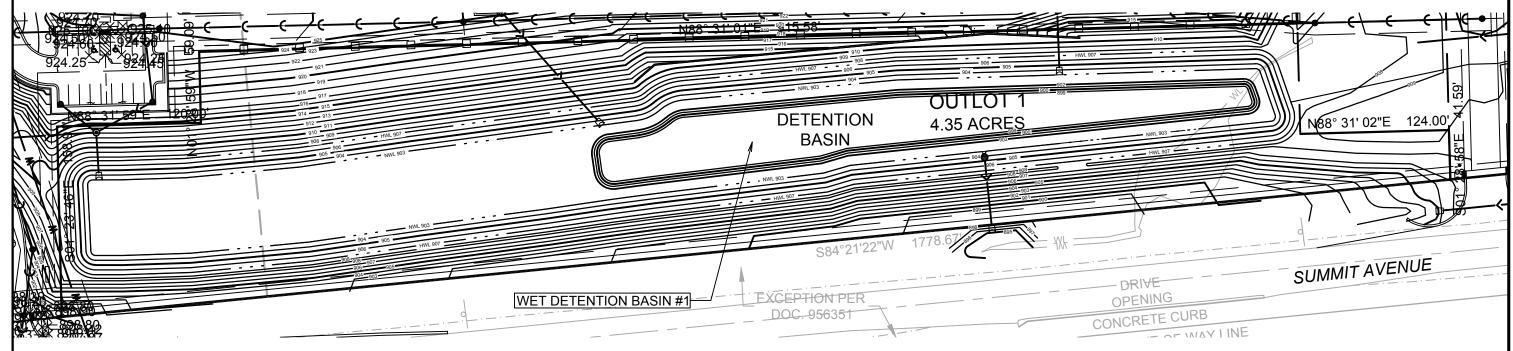
The storm water management practices covered by this Agreement are depicted in the reduced copy of a portion of the construction plans. The practices include two wet detention basins and all associated pipes, earthen berms, rock chutes and other components of these practices. All of the noted storm water management practices are located within a drainage easement in Outlot 1 and Outlot 2 of the subdivision plat, as noted in Exhibit A.

Subdivision Name: Springs at Meadowbrook
 Storm water Practices: Location of Practices: Owners of Outlot 1: Owners of Outlot 2: Continental 665 Fund LLC
 Continental 665 Fund LLC



**PLAN VIEW OF NORTH DETENTION BASIN - OUTLOT 2** 

NOTE: SEE CSM BY PINNACLE ENGINEERING GROUP FOR ADDITIONAL SURVEY AND EASEMENT INFORMATION.



**PLAN VIEW OF SOUTH DETENTION BASIN - OUTLOT 1** 

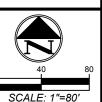


WAUKESHA

SPRINGS AT MEADOWBROOK

WISCONSIN

**EXHIBIT B - LOCATION MAP** 



#### 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 Owner(s) to enforcement of the provisions listed on page 1 of this Agreement by the City of Waukesha.

#### System Description:

The site is split between two wet bottom detention basins. The northernmost detention basin is designed to slope from south to north with the wet bottom portion of the pond situated at the north end. The wet bottom portion of the pond is designed to trap at least 80% of sediment in runoff and provide less than pre-development peak flows to the downstream areas. To do this, the pond size, water level and outlet structures must be maintained as specified in this Agreement.

The basin receives runoff from approximately 17.13 acres of upstream tributary area. During high rainfall or snow melt events, the water level will temporarily rise and slowly drain down to the elevation of the outlet pipe. Water level of the pond is controlled by two outlet pipes. One 18" pipe with invert elevation at NWL and a second 12" pipe with invert elevation 6" above NWL.

The southernmost basin is designed to slope from west to east with the wet bottom portion of the pond situated at the east end. The wet bottom portion of the pond is designed to trap at least 80% of sediment in runoff and provide less than pre-development peak flows to the downstream areas. To do this, the pond size, water level and outlet structures must be maintained as specified in this Agreement.

The basin receives runoff from approximately 30.69 acres of upstream tributary area. During high rainfall or snow melt events, the water level will temporarily rise and slowly drain down to the elevation of the outlet pipe. Water level of the pond is controlled by two outlet pipes. One 30" pipe with invert elevation at NWL and a second 12" pipe with invert elevation 18" above NWL.

"As-built" construction drawings of both basins, showing actual dimensions, elevations, outlet structures, etc. will be recorded as an addendum(s) to this agreement within 60 days after Waukesha County 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. Any blockage must be removed immediately.
- 2. 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.
- 3. 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.
- 4. Invasive plant and animal species shall be managed in compliance with Wisconsin Administrative Code Chapter NR 40. This may require eradication of invasive species in some cases.
- 5. If the permanent pool falls below the safety shelf, a review shall be performed to determine whether the cause is liner leakage or an insufficient water budget. If the cause is leakage, the liner shall be repaired. Leakage due to muskrat burrows may require removal of the animals, repair of the liner with clay, and

- embedding wire mesh in the liner to deter further burrowing. If the permanent pool cannot be sustained at the design elevation, benching of the safety shelf may be necessary.
- 6. 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.
- 7. If mosquitoes become a nuisance, the use of mosquito larvicide containing naturally-occurring Bti soil bacteria is recommended.
- 8. When sediment in the forebays or the basin has accumulated to an elevation of three feet below the outlet elevation, it must be removed. 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.
- 9. No grading or filling of the basin or berm other than for sediment removal is allowed, unless otherwise approved by the City of Waukesha.
- 10. Periodic mowing of the grass swales will encourage vigorous grass cover and allow better inspections for erosion. Waiting until after August 1 will avoid disturbing nesting wildlife. Mowing around the basin may attract nuisance populations of geese to the property and is not necessary or recommended.
- 11. Any other repair or maintenance needed to ensure the continued function of the storm water practices or as ordered by the City of Waukesha under the provisions listed on page 1 of this Agreement.
- 12. Aerators/Fountains If an aerator or fountain is desired for visual and other aesthetic effects (aerators designed to mix the contents of the pond are prohibited) they must meet all of the items below:
  - i. Use an aerator/fountain that does not have a depth of influence that extends into the sediment storage depth (i.e. more than three feet below the normal water surface).
  - ii. If the water surface drops due to drought or leakage, the aerator / fountain may not be operated until the water rises enough for the depth of influence to be above the sediment storage layer. Therefore, if the depth of influence of the aerator / fountain is two feet, the water surface must be within one foot or less of the lowest pond outlet.
  - iii. Provide an automatic shut-off of the aerator/fountain as the pond starts to rise during a storm event. The aerator/fountain must remain off while the pond depth returns to the permanent pool elevation and, further, shall remain off for an additional 48 hours, as required for the design micron particle size to settle to below the draw depth of the pump.
  - iv. Configure the pump intake to draw water primarily from a horizontal plane so as to minimize the creation of a circulatory pattern from bottom to top throughout the pond.
- 13. Wildlife Deterrence Install vegetation (like cattails) and riprap around the perimeter of the ponds so as to minimize the likelihood of wildlife water landings and shoreline presence.

# Addendum 1 Storm Water Management Practice Maintenance Agreement

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 and Outlot 2 of the Springs at Meadowbrook development, described as being all that part of the East Three-Fourths (E ¾) of Southwest Quarter (SW 1/4) of Section 32, Township 7N, Range 19E Waukesha County Wisconsin. This document shall serve as an addendum to document #1, herein referred to as the "Maintenance Agreement". This addendum includes all of the following exhibits:

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

**Exhibit E:** <u>As-built Survey</u> – 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 Waukesha County ordinance requirements.

**Exhibit G:** Storm Water Management & Erosion Control Permit

Termination – provides certification by the City of Waukesha that the

Storm Water and Erosion Control Permit for the above noted site has
been terminated

Parcel Identification Number(s) – (PIN)
to me
he same.

Name and Return Address

For Certification Stamp

Land Resources Division

260 Waukesha, WI 53188

515 W. Moreland Blvd., Rm AC

# Exhibit D Design Summaries for Wet Detention Basin #1

Project Identifier: Springs at Meadowbrook
Number of Runoff Discharge Points: 3
Watershed (Including off-site runoff traveling through project area): 96.65 ac (32.61 ac off-site)

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

	Subwater	shed A (No	orth)	Subwatershed B (Southeast)			
Summary Data			levelop	Duo dovolon	Post-o	Post-develop	
Elements	Pre-develop	Restricted	Unrestricted	Pre-develop	Restricted	Unrestricted	
Watershed Areas	28.91 acres	17.13 ac	12.26 ac	28.10 acres	30.69 ac	0.75 ac	
Average Watershed Slopes (%)	2-8%	2-8%	2-8%	2-8%	2-8%	2-8%	
Land Uses	18.54 ac. woodland 0.00 ac. grassland 10.37 ac. cropland	7.27 ac perv. 9.15 ac. imperv. 0.71 ac. det.	12.26 ac perv. 0.00 ac. imperv. 0.00 ac. det.	3.97 ac. woodland 0.00 ac. grassland 24.13 ac. cropland	11.28 ac perv. 18.27 ac. imperv. 1.14 ac. det.	0.73 ac perv. 0.02 ac. imperv. 0.00 ac. det.	
Runoff Curve Numbers	RCN = 77	RCN = 89	RCN = 79	RCN = 80	RCN = 90	RCN = 75	
Conveyance Systems Types	Grass waterway	Grass swale & storm sewer	Grass Swale	Grass waterway	Grass swale & storm sewer	Grass Swale	
Time of Concentration (Tc)	0.21 hrs.	0.47 hrs.	0.12 hrs.	0.38 hrs.	0.28 hrs.	0.03 hrs.	
1-year/24 hour Peak Flow	26.78 cfs	5.84 cfs	16.77 cfs	23.88 cfs	11.83 cfs	1.00 cfs	
2-yr./24 hour Peak Flow	35.08 cfs	7.31 cfs	21.39 cfs	30.44 cfs	14.44 cfs	1.31 cfs	
10-yr./24 hour Peak Flow	69.49 cfs	12.03 cfs	40.04 cfs	57.05 cfs	29.57 cfs	2.56 cfs	
100-yr./24 hour Peak Flow	151.56 cfs	19.01 cfs	83.34 cfs	119.02 cfs	58.44 cfs	5.54 cfs	

	Subwatershed C (Southwest)			Subwatershed D (Off Site)		
Summary Data	Duo dovolos	Post-o	levelop	Due develor	Post-develop	
Elements	Pre-develop	Restricted	Unrestricted	Pre-develop	Restricted	Unrestricted
Watershed Areas	7.06 acres	0.00 ac	3.25 ac	28.10 acres	0.00 ac	28.10 ac
Average Watershed Slopes (%)	2-8%	N/A	2-8%	2-8%	N/A	2-8%
Land Uses	7.06 ac. woodland 0.00 ac. grassland 0.00 ac. cropland	N/A	3.17 ac perv. 0.08 ac. imperv. 0.00 ac. det.	1 ac residential (~20% imperv) x 6 0.5 ac residential (~20% imperv) x 26.5	N/A	1 ac residential (~20% imperv) x 6 0.5 ac residential (~20% imperv) x 26.5
Runoff Curve Numbers	RCN = 71	N/A	RCN = 75	RCN = 84	N/A	RCN = 84
Conveyance Systems Types	Grass waterway	N/A	Grass Swale	Grass waterway	N/A	Grass waterway
Time of Concentration (Tc)	0.29 hrs.	N/A	0.16 hrs.	0.37 hrs.	N/A	0.37 hrs.
1-year/24 hour Peak Flow	3.13 cfs	N/A	00.00 cfs	36.65 cfs	N/A	36.65 cfs
2-yr./24 hour Peak Flow	4.52 cfs	N/A	00.00 cfs	42.25 cfs	N/A	42.25 cfs
10-yr./24 hour Peak Flow	10.66 cfs	N/A	00.00 cfs	78.59 cfs	N/A	78.59 cfs
100-yr./24 hour Peak Flow	26.60 cfs	N/A	00.00 cfs	153.64 cfs	N/A	153.64 cfs

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

Design Element	Design Data
Site assessment data: (see attached maps)	
Contributing drainage area to basin (subwatershed B)	30.69 acres
Distance to nearest private well (including off-site wells)	> 100 feet
Distance to municipal well (including off-site wells)	> 1200 feet
Wellhead protection area involved?	No
Ground slope at site of proposed basin	average 5%
Any buried or overhead utilities in the area?	Yes (in Summit)
Proposed outfall conveyance system/discharge (w/ distances)	Discharge directly into Summit Ave
r roposed outrait conveyance system/discharge (w/ distances)	drainage ditch
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	4 (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)	Lean clay & bedrock
Distance from pond bottom to bedrock	~ 5 feet

Distance from pond bottom to seasonal water table	Auger refusal at about 8'; no water table found
General basin design data (see attached detailed drawings):	
Permanent pool surface area	1.01 acres
Design permanent pool water surface elevation	elev. 903.0
Top of berm elevation (after settling) and width	elev. 907.0 / 20 feet wide
Length/width (dimensions/ratio)	990 ft. (L) x 95 ft. (W) = 10.4:1
Safety shelf design (length, grade, max. depth)	8 ft. @ 0% slope
Ave. water depth (minus safety shelf/sediment)	4 ft. (in center)
Sediment forebay size & depth	0.57 acres/4 feet
Sediment storage depth & design maintenance	4 ft. depth for forebay & pool 15 year maintenance schedule

Design Basin Inflow, Outflow & Storage Data							
	(see attached hydrog	graphs and detail	drawings)				
Inflow Peak/Volume	Maximum Outflow Rate	Max. Water Elevation	Storage Volume at Max. Elev. (above perm. pool)	Outflow Control Structures*			
55.76 cfs (Post 1-yr./24 hr. peak)	11.83 cfs	904.51 ft.	1.30 acre feet	#1 and #2			
65.89 cfs (Post 2-yr./24 hr. peak)	14.44 cfs	904.76 ft.	1.35 acre feet	#1 and #2			
103.94 cfs (Post 10-yr./24 hr. peak)	29.57 cfs	905.54 ft.	1.50 acre feet	#1 and #2			
184.88 cfs (Post 100-yr./24 hr. peak)	58.44 cfs	906.99 ft.	1.78 acre feet	#2 and #3			

<sup>\*</sup> #1 = 30 inch RCP – flow line elev. @ 903.00

## **Practice Design Summary**. The following table summarizes the data used to design wet detention basin #2 (north).

Design Element	Design Data
Site assessment data: (see attached maps)	
Contributing drainage area to basin (subwatershed B)	17.13 acres
Distance to nearest private well (including off-site wells)	> 100 feet
Distance to municipal well (including off-site wells)	> 1200 feet
Wellhead protection area involved?	No
Ground slope at site of proposed basin	average 5%
Any buried or overhead utilities in the area?	No
Proposed outfall conveyance system/discharge (w/ distances)	Discharge directly to environmental
	corridor
Any downstream roads or other structures? (describe)	No
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?	No (see map)
Average soil texture at pond bottom elevation (USDA)	Silty clay & bedrock
Distance from pond bottom to bedrock	0 feet

<sup>#2 = 24</sup> inch RCP – flow line elev. @ 904.50

<sup>#3 = 20</sup> foot wide earthen/grass emergency spillway – flow line elev. @ 907.0 (1.0 ft. max. depth)

Distance from pond bottom to seasonal water table  Auger refusal at about 4 water table found	
General basin design data (see attached detailed drawings):	
Permanent pool surface area	0.71 acres
Design permanent pool water surface elevation	elev. 924.5
Top of berm elevation (after settling) and width	elev. 928.0 / 20 feet wide
Length/width (dimensions/ratio)	350 ft. (L) x 165 ft. (W) = 2.1:1
Safety shelf design (length, grade, max. depth)	50 ft. @ 1% slope
Ave. water depth (minus safety shelf/sediment)	4.5 ft. (in center)
Sediment forebay size & depth	0.71 acres/4 feet
Sediment storage depth & design maintenance	4 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*		
22.48 cfs (Post 1-yr./24 hr. peak)	5.84 cfs	925.51 ft.	1.03 acre feet	#1 and #2		
26.85 cfs (Post 2-yr./24 hr. peak)	7.31 cfs	925.67 ft.	1.05 acre feet	#1 and #2		
43.05 cfs (Post 10-yr./24 hr. peak)	12.03 cfs	926.31 ft.	1.11 acre feet	#1 and #2		
78.08 cfs (Post 100-yr./24 hr. peak)	19.01 cfs	927.67 ft.	1.23 acre feet	#2 and #3		

<sup>\*</sup> #1 = 18 inch RCP – flow line elev. @ 924.50

<sup>#2 = 12</sup> inch RCP – flow line elev. @ 925.00 #3 = 20 foot wide earthen/grass emergency spillway – flow line elev. @ 928.0 (1.0 ft. max. depth)

### Exhibit D (continued)

<u>Watershed Map</u>. 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.



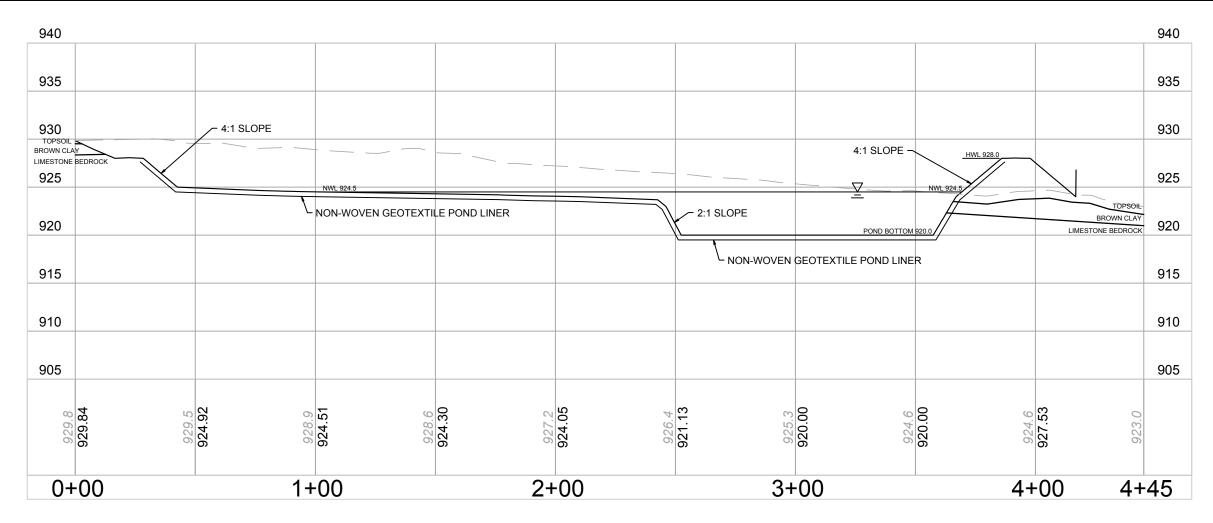
#### (Sample)

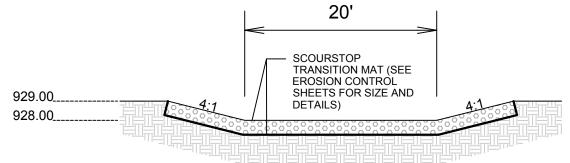
### Exhibit E As-built Survey for Wet Detention Basin #1

The wet detention basin depicted in Figure 1 is a reduced copy of the as-built plan.

Subdivision Name: Springs at Meadowbrook
Storm water Practices: Wet Detention Basin
Location of Practices: All of Outlot 1 and Outlot 2
Owners of Outlot 1: Continental 665 Fund LLC
Owners of Outlot 2: Continental 665 Fund LLC

# **Exhibit E South & North Pond Cross Sections**





	North Area Pre-Development vs Post-Development Rate Summary Table						
	Pre-Development	Post-Development	Post-Development	Post-Development	Post-Development	HWL	
		Unrestricted	Restricted (Allowable)	Restricted (Actual)	Total		
1 YR, 24 HR (cfs)	26.78	16.77	10.01	5.84	22.61	925.51	
2 YR, 24 HR (cfs)	35.08	21.39	13.69	7.31	28.70	925.67	
10 YR, 24 HR (cfs)	69.49	40.04	29.45	12.03	52.07	926.31	
100 YR, 24 HR (cfs)	151.56	83.34	68.22	19.01	102.35	927.67	

### NORTH WET DETENTION BASIN OVERFLOW WEIR DETAIL



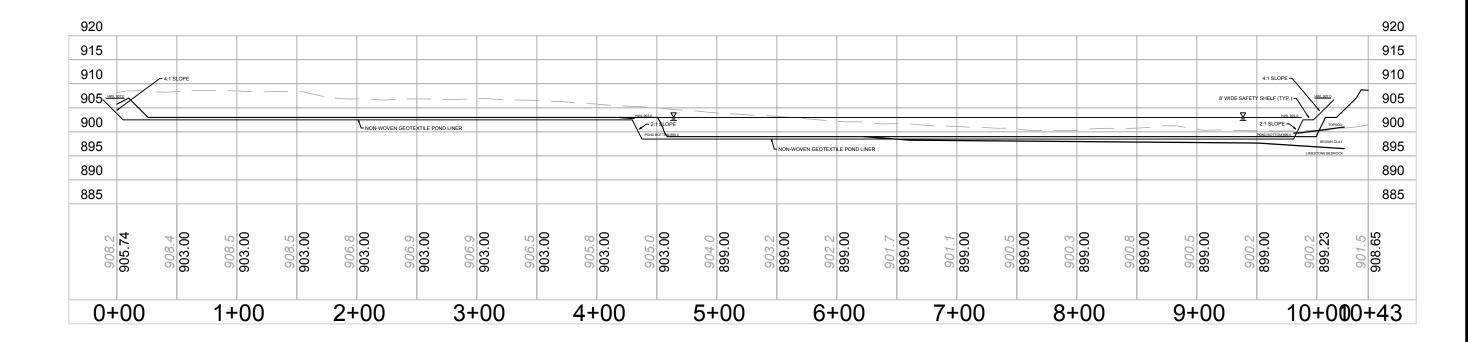
SPRINGS AT MEADOWBROOK

WAUKESHA WISCONSIN

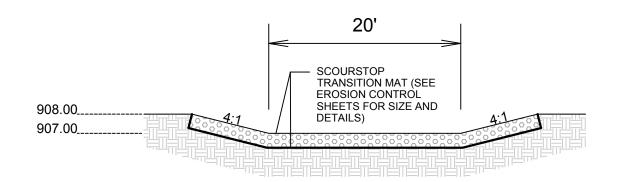
EXHIBIT E - NORTH POND CROSS SECTION



DATE: 09-14-22



WISCONSIN



Southeast Area Pre-Development vs Post-Development Rate Summary Table							
	Pre-Development	Post-Development	Post-Development	Post-Development	Post-Development	<b>□\</b> Λ/I	
		Unrestricted	Restricted (Allowable)	Restricted (Actual)	Total	HWL	
1 YR, 24 HR (cfs)	23.88	1.00	22.88	11.83	12.83	904.51	
2 YR, 24 HR (cfs)	30.44	1.31	29.13	14.44	15.75	904.76	
10 YR, 24 HR (cfs)	57.05	2.56	54.49	29.57	32.13	905.54	
100 YR, 24 HR (cfs)	119.02	5.54	113.48	58.44	63.98	906.99	

### SOUTH WET DETENTION BASIN OVERFLOW WEIR DETAIL



SPRINGS AT MEADOWBROOK

EXHIBIT E - SOUTH POND CROSS SECTION



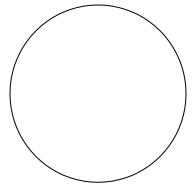
DATE: 09-14-22

# **Exhibit "F" Engineering/Construction Verification**

DATE:	09/14/2022
TO:	City of Waukesha
FROM:	Matt Christel/V3 Companies [Project Engineer's Name/Company]
RE:	Engineering/Construction Verification for the following project:
	Project Name: Springs at Meadowbrook
	Section 32, City of Waukesha
	Storm Water Permit #
	Storm Water Management Practices: North & South wet bottom detention basins

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 "asbuilt" construction documentation presented in Exhibit E comply with all applicable state and local technical standards, in accordance with the City of Waukesha Storm Water Management and Erosion Control Ordinance.

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



(Signed P.E. stamp must be included)

# **Exhibit G Storm Water Management and Erosion Control Permit Termination**

Project Identifier: Springs at Meadowbrook

Location: EAST THREE-FOURTHS (E 3/4) OF SOUTHWEST ONE QUARTER (1/4) OF SECTION THIRTY-TWO (32) IN TOWNSHIP SEVEN (7) NORTH, RANGE NUMBER NINETEEN (19) EAST, ALSO THAT PART OF WEST HALF (W 1/2) OF THE WEST ONE HALF (W 1/2) OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION THIRTY-TWO (32); THENCE RUNNING WEST OF THE WEST QUARTER LINE OF SAID SECTION 207.5 FEET TO WEST BANK OF CERTAIN CREEK; THENCE SOUTH TWELVE DEGREES WEST ALONG THE WEST LINE OF SAID CREEK THIRTY (30) FEET; THENCE SOUTH 71 DEGREES EAST 223 FEET TO A POINT ON THE EAST LINE OF SAID WEST HALF OF SOUTHWEST QUARTER (SW 1/4) OF SECTION 32 AND THENCE NORTH ON SAID EAST LINE 97 FEET TO A PLACE OF BEGINNING, EXCEPTING THE LANDS CONVEYED IN DOCUMENTS RECORDED AS DOCUMENT NOS. 1464302, 956351 AND 2015309, EXCEPTING THEREFROM THAT PART ANNEXED TO THE CITY OF WAUKESHA RECORDED DECEMBER 29, 1994 IN REEL 2025, IMAGE 339 AS DOCUMENT NO. 2015312, IN THE CITY OF WAUKESHA, WAUKESHA COUNTY, STATE OF WISCONSIN.

Storm Water Permit Holder's Name:

Storm Water Permit Holder's Name	
Storm Water Permit #:	

Chapter 32 – City of Waukesha Storm Water Management and Erosion Control requires that all newly constructed storm water management practices be maintained by the Storm Water and Erosion Control Permit Holder until permit termination, after which maintenance responsibilities shall be transferred to the responsible party identified on the subdivision plat and referenced in this Maintenance Agreement.

Upon execution below, this exhibit shall serve to certify that the Storm Water Permit Holder has satisfied all requirements of the Storm Water Management and Erosion Control Ordinance and that the City of Waukesha has terminated the Storm Water Management and Erosion Control Permit for the property covered by this Maintenance Agreement.

Dated thisday of, 202		
City of Waukesha representative:		
(Signatura)		
(Signature)		
David Buechl, P.E., P.L.S.		
(Typed Name and Title)		
Ac	cknowledgements	
State of Wisconsin County of Waukesha		
Personally came before me thisday of known to be the person who executed the forego		to me
	[Name] Notary Public, Waukesha County, WI My commission expires:	<del>.</del>