Pabst Farms Development Inc.

Daniel E. Warren, P.E.
Development Manager

PABST FARMS

Waukesha County StormWater BMP Maintenance Workshop
March 9, 2010

Pabst Farms Joint Stormwater District

A Mixed Public/Private Utility District

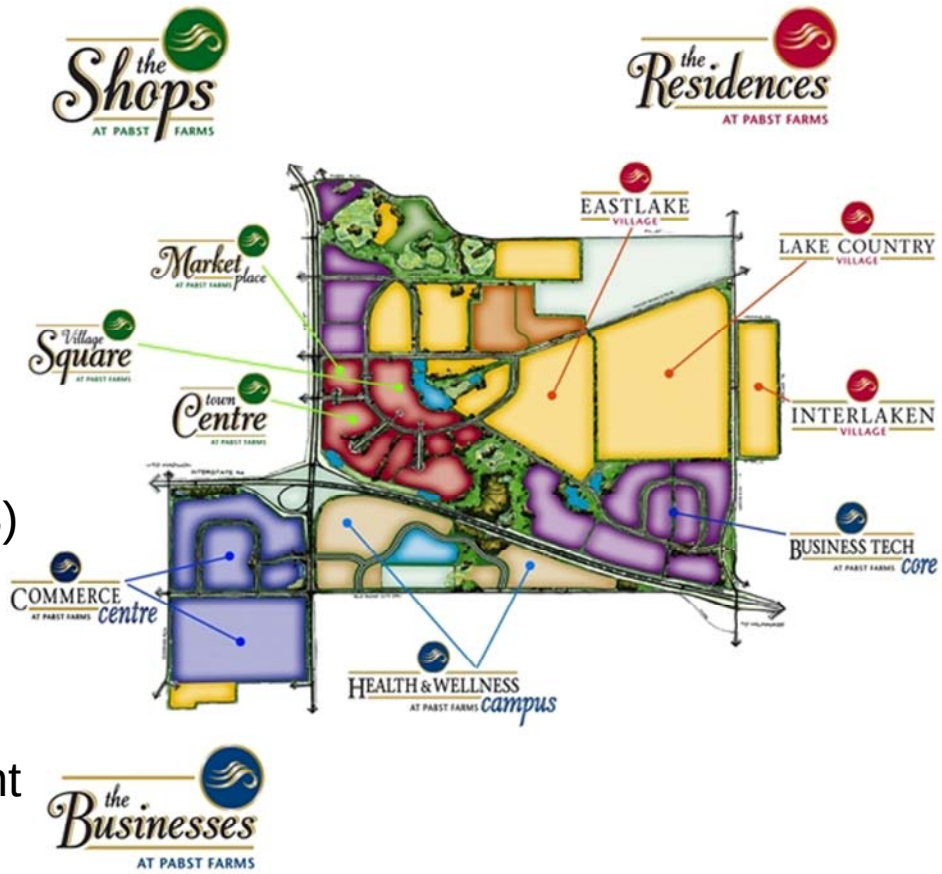
CASE STUDY

PABST FARMS

History & Background

Pabst Farms

- 1,500 acres (2.3 square miles)
- Planned mixed use development
- 1/4 Residential (single & multi)
- 1/4 Commercial / Retail
- 1/4 Light Industrial
- 1/4 Institutional / Civic
- Summit (1/3) & Oconomowoc (2/3)
- Subsurface geology
  - Soils
  - Ground Water
- $1.5 billion development increment



PABST FARMS

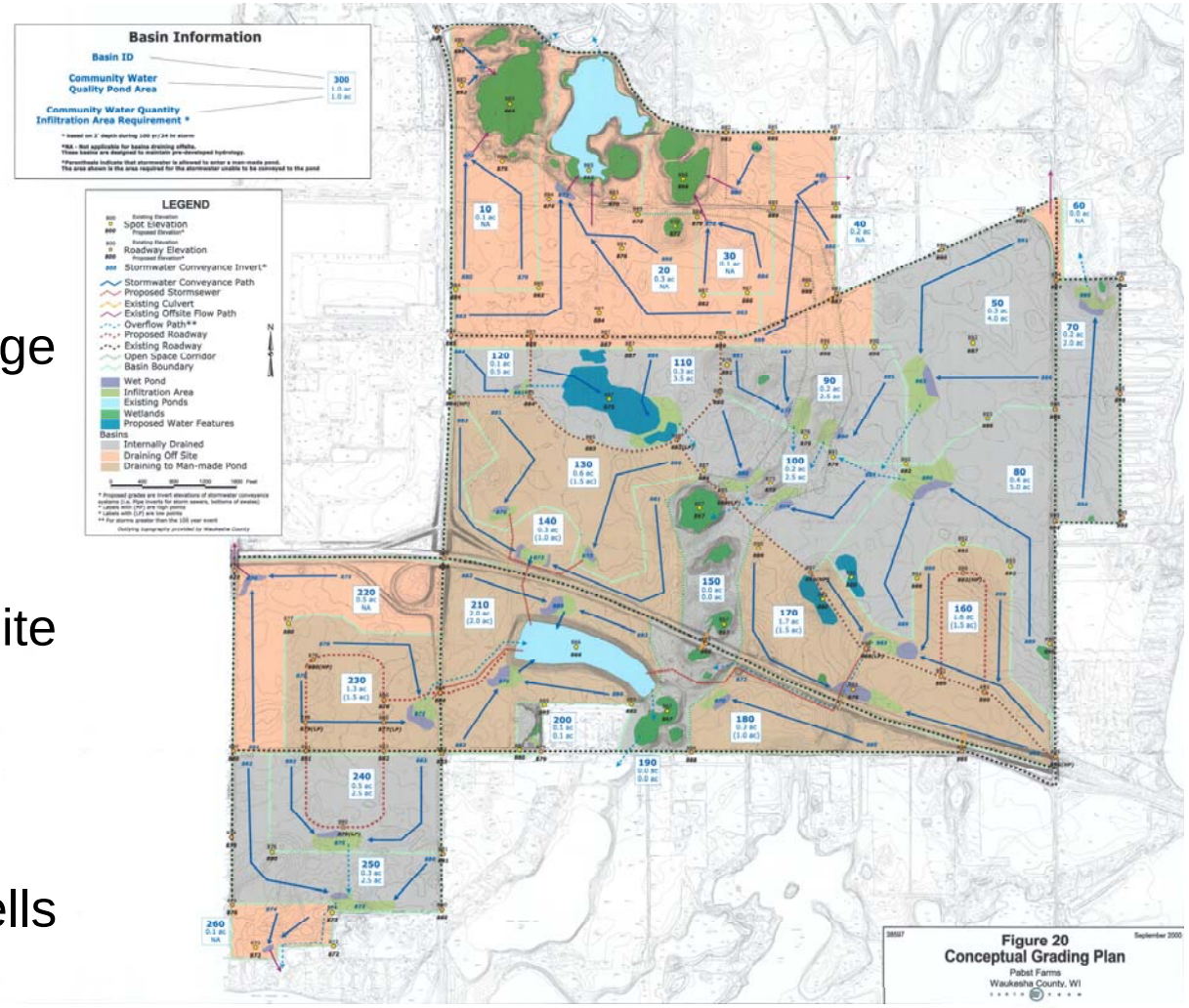
Stormwater Time Line

- Earthtech 2000 concept plan
- Created technical advisory group (TAG)
  - City, Town, DNR, SEWRPC, Pabst Farms Development, Waukesha County
- Create PFJSD 2003
- Initial regional stormwater facility 2003

PABST FARMS

Stormwater Plan

- 370 acre – feet of storage
- Ground water recharge
- Public & private stormwater facilities
- 80% of 100-yr event <u>volume</u> remains on site
- Native prairie plant vegetation
- Phase out 10 high capacity irrigation wells in shallow aquifer



PABST FARMS

Stormwater Plan

- Fundamental BMP
  - Water quality pond
  - Infiltration areas for groundwater recharge
  - Native prairie vegetation
- ALT BMP
  - Bio swales
  - Storm septors
  - Biofiltration

PABST FARMS

Pabst Farms Joint SD Structure

- Commission
  - Intermunicipal agreement
  - 2 town, 2 city, 1 developer
  - 4:1 majority vote
- Approval authority
  - Technical standards
- Enforcement authority
  - Maintenance
  - Funding (tax levy)
- Other regulations
  - DNR
  - City
  - Town
  - County

PABST FARMS

Facility Construction & Ownership

- Public
  - Multiple contributors
  - Land & BMP
  - Maintenance
- Private
  - Single contributors
  - Land & BMP
  - Maintenance

PABST FARMS

Maintenance

- Public
  - Approved plan
  - Self performed
  - Funded by tax levy
- Private
  - Approved plan
  - Annual report to PFJSD
  - Funded privately

Pabst Farms Joint Stormwater District
Facility Maintenance Summary

	Inspection after 0.5" or greater storm		Quarterly			Annual Inspection (Spring)				During growing season	Every third year	Every 10 years (approx)	
	Debris cleanup	Erosion repair and sediment removal	Sweep parking lots	Clean catchbasins	Pump out oil/water separators	General Inspection	Confirm functionality of infiltration system	Clean accumulated sediment	Check wet pool sediment level	inspect vegetation in grass swales	Exotic and noxious weed management	Remove sediment from WQ ponds	NOTES
Public Facilities - District Responsibility													
Village Center	x	x	NA	NA	NA	x	x	x	x	x	x	x	
Commerce Center	x	x	NA	NA	NA	x	x	x	x	x	x	x	
Eastlake Village	x	x	NA	NA	NA	x	x	x	x	x	x	x	
Lake Country Village	x	x	NA	NA	NA	x	x	x	x	x	x	x	
Interlaken Village	x	x	NA	NA	NA	x	x	x	x	x	x	x	
Private Facilities - Private Responsibility - District Oversight													
Ace Precision	x	x	NA	NA	NA	x	x	x	NA	x	x	x	
Harley Davidson	x	x	NA	NA	NA	x	x	x	NA	x	x	NA	
Pabst Farms Distribution Cen	x	x	x	x	x	x	x	x	x	NA	x	NA	
Summit School	x	x	NA	x	NA	x	x	x	x	x	x	x	1
YMCA	x	x	NA	NA	NA	x	x	x	NA	x	x	NA	1

1 See detailed plan for complete schedule

PABST FARMS

District Cost Recovery

- Annual stormwater levy - $15,000
- Area, impervious surface, private, fixed charge, % tributary to public facility
- Single family home - $43/year
- Roundy's Distribution Center - $70/year (100% private)
- M&I Bank - $74/year (100% public)
- Market Place - $492/year (110,000 retail, 100% public)
- Ace Precision - $100/year (70,000 industrial, 35% public, 65% private)
- Aurora Hospital - $435/year (55 acres, 35% public, 65% private)

PABST FARMS

Tax Levy Matrix

Pabst Farms Joint Storm Water Utility District
User Charges 2009 Property Tax Bill

			var - rounding
Enter total administrative cost for the year:	$	9,000.00	$1.20
Enter total non-administrative cost for the year:	$	6,000.00	($0.04)
			$1.16
Total number of parcels in district:		260	
Customer service charge for each parcel	$	34.62	
Total amount of combined runoff area in District		5,873,281.45	SF = 134.83 acres
User charge rate per square foot of runoff area	$	0.0010216	

Tax key numbers valid January 1, 2009		Parcel commonly known as:	Customer Service Charge	Total Parcel Acreage (acres)	Total Parcel Acreage (square feet)	Amount of Impervious Area (sf)	Percent Impervious Area	Amount of Pervious Area (subtraction) (sf)	Percent Pervious Area	Combined Runoff Coefficient	Runoff Area (sf)	Percent Tributary to Public Facilities	Adjusted Runoff Area (sf)	User Charge	East Lake Outlot Alloc	Total Storm Water Charge	Percent of Total Budget	Notes
COMMERCE CENTER																		
OCOC0635999015	OCOC	Stuybridge	$34.62	5.7190	249,119.64	97,138.80	0.39	151,980.84	0.61	0.43	107,479.94	1.00	107,479.94	$109.80	$0.00	$144.42	0.96%	
OCOC0635999016	OCOC	Vacant Restaurant	$34.62	1.3330	58,065.48	-	-	58,065.48	1.00	0.10	5,806.55	1.00	5,806.55	$5.93	$0.00	$40.55	0.27%	
OCOC0635999017	OCOC	Vacant Office	$34.62	2.4880	108,377.28	-	-	108,377.28	1.00	0.10	10,837.73	1.00	10,837.73	$11.07	$0.00	$45.69	0.30%	
OCOC0635999022	OCOC	Pond	$34.62	3.4560	150,543.36	-	-	150,543.36	1.00	0.10	15,054.34	1.00	15,054.34	$15.38	$0.00	$50.00	0.33%	
OCOC0635999023	OCOC	Monument OL2	$34.62	0.1930	8,407.08	337.50	0.04	8,069.58	0.96	0.13	1,127.58	1.00	1,127.58	$1.15	$0.00	$35.77	0.24%	
OCOC0635999024	OCOC	Monument OL3	$34.62	0.1640	7,143.84	-	-	7,143.84	1.00	0.10	714.38	1.00	714.38	$0.73	$0.00	$35.35	0.24%	
OCOC0635999003	OCOC	Commerce Center	$34.62	33.8581	1,474,858.84		-	1,474,858.84	1.00	0.10	147,485.88	0.35	51,620.06	$52.73	$0.00	$87.35	0.58%	
OCOC0635999006	OCOC	Ace Precision	$34.62	8.7200	379,843.20	171,926.00	0.45	207,917.20	0.55	0.48	184,121.42	0.35	64,442.50	$65.83	$0.00	$100.45	0.67%	
OCOC0635999008	OCOC	Commerce Center	$34.62	21.8356	951,158.74		-	951,158.74	1.00	0.10	95,115.87	0.35	33,290.56	$34.01	$0.00	$68.63	0.46%	
OCOC0635999010	OCOC	Harley	$34.62	5.6841	247,599.40	132,891.00	0.54	114,708.40	0.46	0.56	137,717.29	0.35	48,201.05	$49.24	$0.00	$83.86	0.56%	
OCOC0635999019	OCOC	Multiuse Building	$34.62	12.9710	565,016.76	385,070.00	0.68	179,946.76	0.32	0.68	383,811.18	0.35	134,333.91	$137.23	$0.00	$171.85	1.15%	
OCOC0635999020	OCOC	Liftstation	$34.62	0.1270	5,532.12	3,800.00	0.69	1,732.12	0.31	0.68	3,783.21	0.35	1,324.12	$1.35	$0.00	$35.97	0.24%	
OCOC0635999021	OCOC	Monument	$34.62	0.1310	5,706.36	375.00	0.07	5,331.36	0.93	0.16	889.39	0.35	311.29	$0.32	$0.00	$34.94	0.23%	
OCOC0635999013	OCOC	Commerce Center	$34.62	5.7950	252,430.20	-	-	252,430.20	1.00	0.10	25,243.02	0.35	8,835.06	$9.03	$0.00	$43.65	0.29%	
OCOC0635999014	OCOC	Sentry Equipment	$34.62	4.9900	217,364.40		-	217,364.40	1.00	0.10	21,736.44	0.35	7,607.75	$7.77	$0.00	$42.39	0.28%	
								-										
South of CTH DR, west of STH 67								-										
								-										
OCOC0662988001	OCOC	Roundy's DC	$34.62	92.7600	4,040,625.60	2,434,351.00	0.60	1,606,274.60	0.40	0.61	2,473,260.91	-	-	$0.00	$0.00	$34.62	0.23%	
SUMT0662986	SUMT	Roundy's DC	$34.62	19.8780	865,885.68	-	-	865,885.68	1.00	0.10	86,588.57	-	-	$0.00	$0.00	$34.62	0.23%	
SUMT0662986001	SUMT	Residential	$34.62	16.3530	712,336.68		-	712,336.68	1.00	0.10	71,233.67	1.00	71,233.67	$72.77	$0.00	$107.39	0.72%	
SUMT0662987	SUMT	Vacant Sliver	$34.62	1.2120	52,794.72		-	52,794.72	1.00	0.10	5,279.47	1.00	5,279.47	$5.39	$0.00	$40.01	0.27%	
North of CTH DR, south of ISH 94, east of STH 67																		
SUMT0636989	SUMT	Aurora	$34.62	53.9346	2,349,391.18	1,042,370.00	0.44	1,307,021.18	0.56	0.48	1,120,953.62	0.35	392,333.77	$400.80	$0.00	$435.42	2.90%	
SUMT0636990	SUMT	Lot #2, CSM 10452	$34.62	11.1271	484,696.48		-	484,696.48	1.00	0.10	48,469.65	0.35	16,964.38	$17.33	$0.00	$51.95	0.35%	
SUMT0636991	SUMT	Lot #3, CSM 10452	$34.62	4.1667	181,501.45		-	181,501.45	1.00	0.10	18,150.15	0.35	6,352.55	$6.49	$0.00	$41.11	0.27%	
SUMT0636992001	SUMT	Outlot 1, CSM 10452	$34.62	79.0288	3,442,494.53		-	3,442,494.53	1.00	0.10	344,249.45	0.35	120,487.31	$123.09	$0.00	$157.71	1.05%	
SUMT0636992002	SUMT	Indian Burial Mound	$34.62	0.5000	21,780.00		-	21,780.00	1.00	0.10	2,178.00	0.35	762.30	$0.78	$0.00	$35.40	0.24%	
Village Center; North of ISH 94, east of STH 67, south of CTH B																		
OCOC0633999008	OCOC	Market Place	$34.62	12.5300	545,806.80	462,591.00	0.85	83,215.80	0.15	0.82	447,783.03	1.00	447,783.03	$457.44	$0.00	$492.06	3.28%	
OCOC0633999009	OCOC	Village Center	$34.62	1.2600	54,885.60	-	-	54,885.60	1.00	0.10	5,488.56	1.00	5,488.56	$5.61	$0.00	$40.23	0.27%	
OCOC0633999010	OCOC	Vision Outlot	$34.62	0.4950	21,562.20	-	-	21,562.20	1.00	0.10	2,156.22	1.00	2,156.22	$2.20	$0.00	$36.82	0.25%	
OCOC0633999002	OCOC	Village Center	$34.62	66.9990	2,918,476.44		-	2,918,476.44	1.00	0.10	291,847.64	1.00	291,847.64	$298.14	$0.00	$332.76	2.22%	
OCOC0633999012	OCOC	M&I Bank	$34.62	1.1030	48,046.68	39,461.00	0.82	8,585.68	0.18	0.80	38,346.52	1.00	38,346.52	$39.17	$0.00	$73.79	0.49%	
OCOC0633999016	OCOC	Village Center Office	$34.62	28.3700	1,235,797.20	-	-	1,235,797.20	1.00	0.10	123,579.72	1.00	123,579.72	$126.25	$0.00	$160.87	1.07%	
OCOC0630997	OCOC	NE Village Square Condo	$34.62	10.0450	437,560.20	-	-	437,560.20	1.00	0.10	43,756.02	1.00	43,756.02	$44.70	$0.00	$79.32	0.53%	
OCOC0633999017	OCOC	Village Crossing Pond	$34.62	16.9800	739,648.80	-	-	739,648.80	1.00	0.10	73,964.88	1.00	73,964.88	$75.56	$0.00	$110.18	0.73%	
OCOC0630998002	OCOC	Village Crossing Condo	$34.62	0.2015	8,777.34	1,845.75	0.21	6,931.59	0.79	0.28	2,446.62	1.00	2,446.62	$2.50	$0.00	$37.12	0.25%	
OCOC0630998003	OCOC	Village Crossing Condo	$34.62	0.2015	8,777.34	1,845.75	0.21	6,931.59	0.79	0.28	2,446.62	1.00	2,446.62	$2.50	$0.00	$37.12	0.25%	
OCOC0630998004	OCOC	Village Crossing Condo	$34.62	0.2015	8,777.34	1,845.75	0.21	6,931.59	0.79	0.28	2,446.62	1.00	2,446.62	$2.50	$0.00	$37.12	0.25%	
OCOC0630998005	OCOC	Village Crossing Condo	$34.62	0.2015	8,777.34	1,845.75	0.21	6,931.59	0.79	0.28	2,446.62	1.00	2,446.62	$2.50	$0.00	$37.12	0.25%	
OCOC0630998006	OCOC	Village Crossing Condo	$34.62	0.2015	8,777.34	1,845.75	0.21	6,931.59	0.79	0.28	2,446.62	1.00	2,446.62	$2.50	$0.00	$37.12	0.25%	
OCOC0630998007	OCOC	Village Crossing Condo	$34.62	0.2015	8,777.34	1,845.75	0.21	6,931.59	0.79	0.28	2,446.62	1.00	2,446.62	$2.50	$0.00	$37.12	0.25%	
OCOC0630998008	OCOC	Village Crossing Condo	$34.62	0.2015	8,777.34	1,845.75	0.21	6,931.59	0.79	0.28	2,446.62	1.00	2,446.62	$2.50	$0.00	$37.12	0.25%	
OCOC0630998009	OCOC	Village Crossing Condo	$34.62	0.2015	8,777.34	1,845.75	0.21	6,931.59	0.79	0.28	2,446.62	1.00	2,446.62	$2.50	$0.00	$37.12	0.25%	
OCOC0630998010	OCOC	Village Crossing Condo	$34.62	0.2015	8,777.34	1,845.75	0.21	6,931.59	0.79	0.28	2,446.62	1.00	2,446.62	$2.50	$0.00	$37.12	0.25%	
OCOC0630998011	OCOC	Village Crossing Condo	$34.62	0.2015	8,777.34	1,845.75	0.21	6,931.59	0.79	0.28	2,446.62	1.00	2,446.62	$2.50	$0.00	$37.12	0.25%	
OCOC0630998012	OCOC	Village Crossing Condo	$34.62	0.2015	8,777.34	1,845.75	0.21	6,931.59	0.79	0.28	2,446.62	1.00	2,446.62	$2.50	$0.00	$37.12	0.25%	
OCOC0630998013	OCOC	Village Crossing Condo	$34.62	0.2015	8,777.34	1,845.75	0.21	6,931.59	0.79	0.28	2,446.62	1.00	2,446.62	$2.50	$0.00	$37.12	0.25%	
OCOC0630998014	OCOC	Village Crossing Condo	$34.62	0.2015	8,777.34	1,845.75	0.21	6,931.59	0.79	0.28	2,446.62	1.00	2,446.62	$2.50	$0.00	$37.12	0.25%	
OCOC0630998015	OCOC	Village Crossing Condo	$34.62	0.2015	8,777.34	1,845.75	0.21	6,931.59	0.79	0.28	2,446.62	1.00	2,446.62	$2.50	$0.00	$37.12	0.25%	
OCOC0630998016	OCOC	Village Crossing Condo	$34.62	0.2015	8,777.34	1,845.75	0.21	6,931.59	0.79	0.28	2,446.62	1.00	2,446.62	$2.50	$0.00	$37.12	0.25%	

PABST FARMS

Challenges & Successes

- (-) Governance challenge
  - 2 communities & developer
  - 4:1 majority vote
- (-) Local ordinance & regulatory differences

- (+) Overall plan and governance over two municipalities
- (+) Groundwater recharge
- (+) Simple BMP
- (+) Ability to fund and/or enforce maintenance (sustainability)

PABST FARMS

Q & A

PABST FARMS