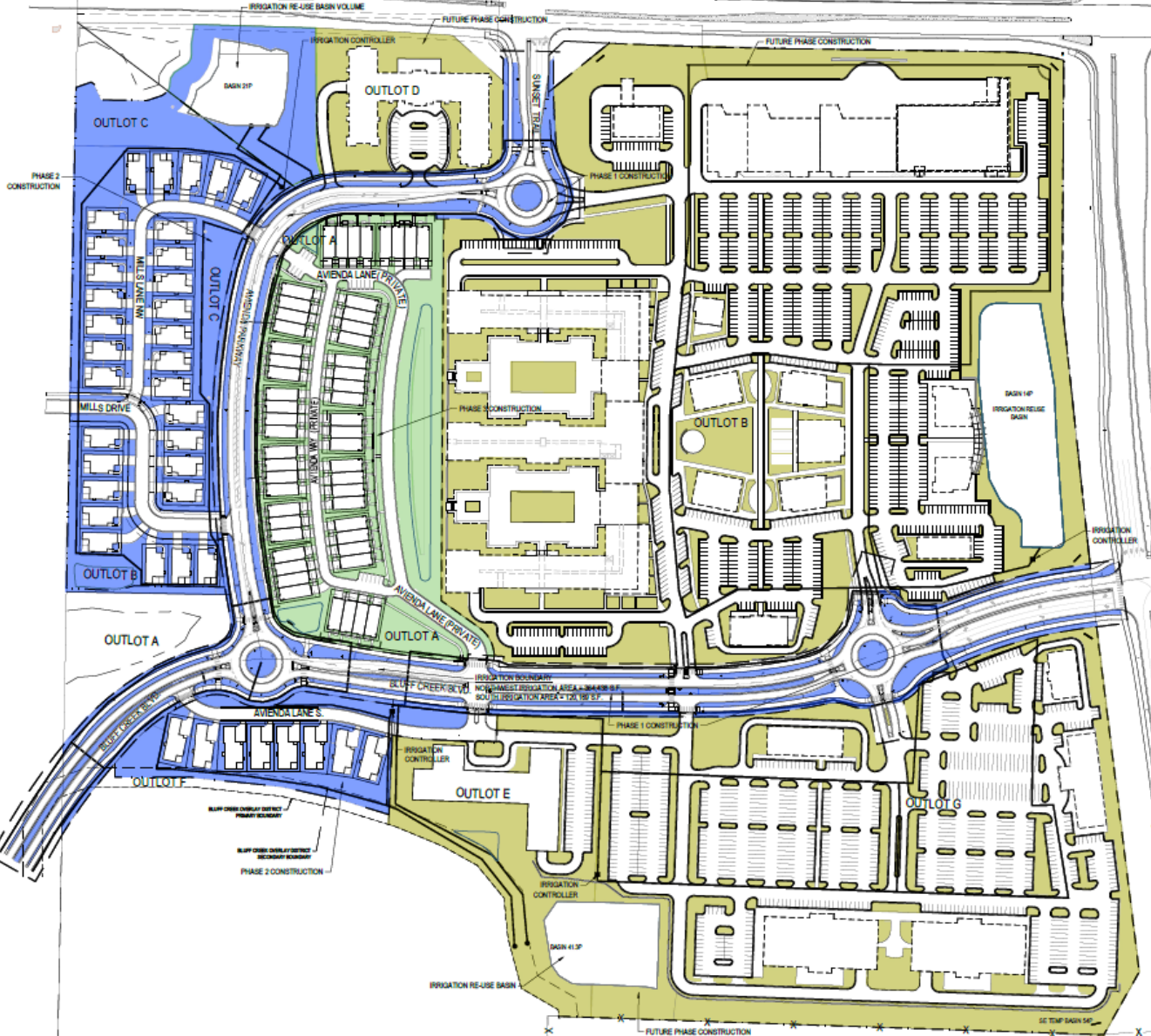





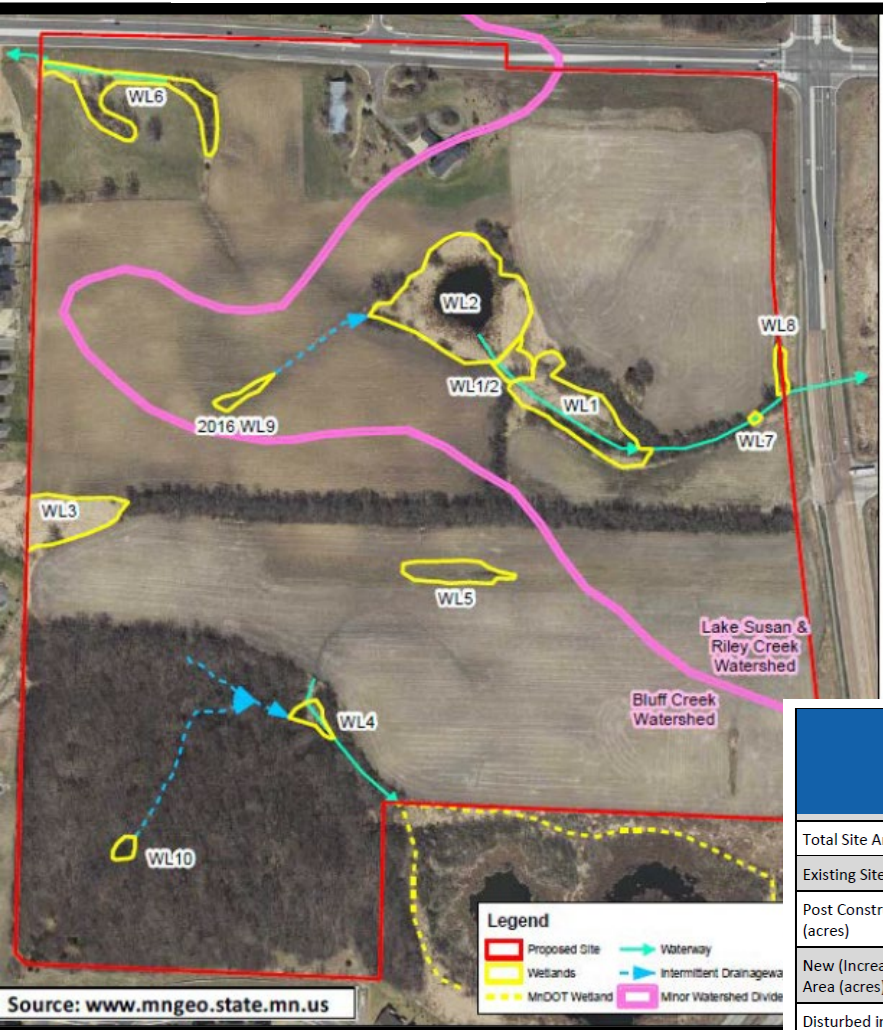
Permit 2024-078: Avienda Regional Stormwater Plan



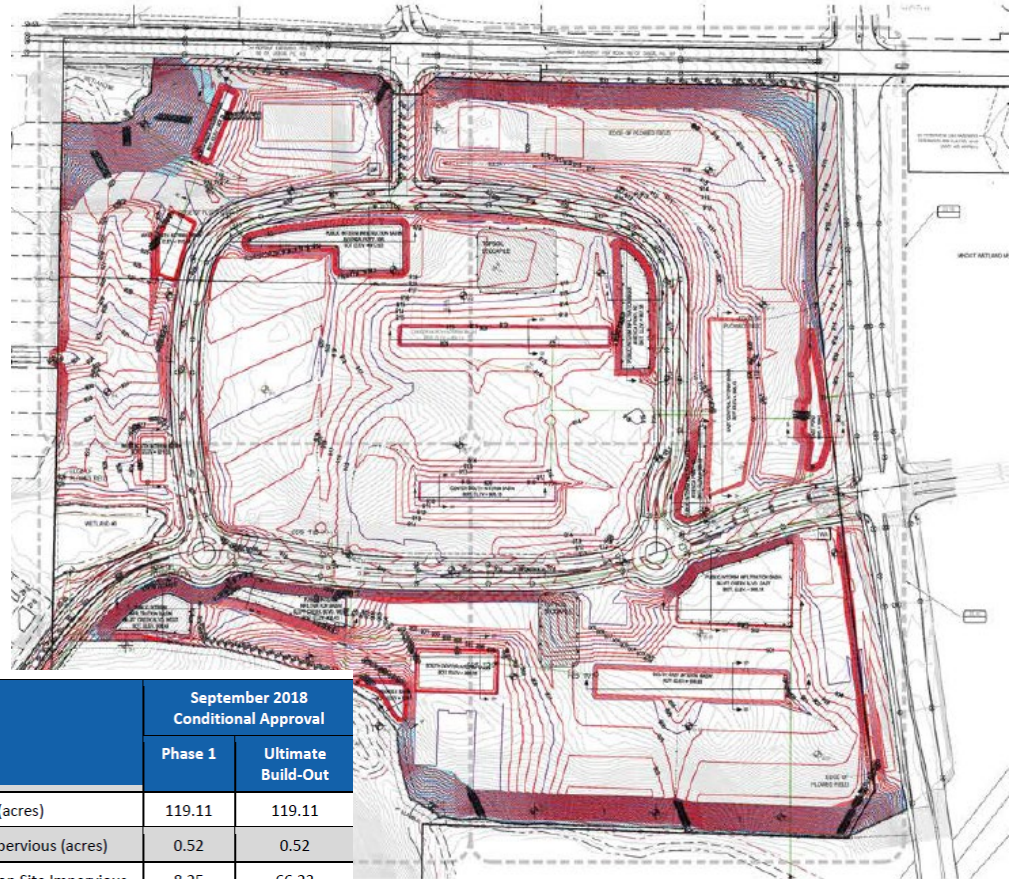
-  Phase 1 & 2
RPBCWD Issued
Permit 2018-016
-  Phase 3
RPBCWD
Conditionally
Approved Permit
2023-045
-  Phase 4
RPBCWD Permit
2024-078
Regional
Stormwater
Under Review

Background

Pre-Project



September 2018 – Conditional Approval: 2018-016

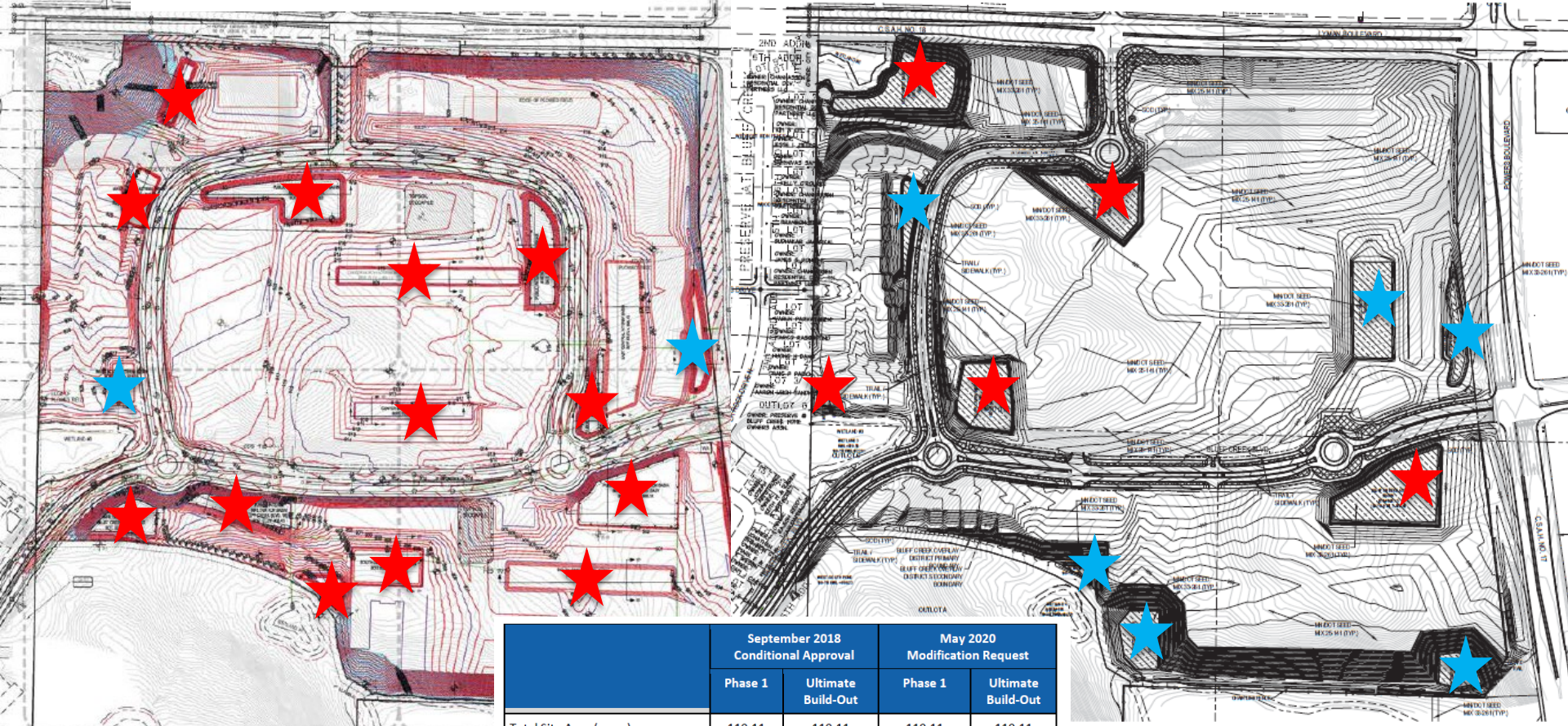





	September 2018 Conditional Approval	
	Phase 1	Ultimate Build-Out
Total Site Area (acres)	119.11	119.11
Existing Site Impervious (acres)	0.52	0.52
Post Construction Site Impervious (acres)	8.25	66.23
New (Increase) in Site Impervious Area (acres)	7.73	65.71
Disturbed impervious surface (acres)	0.52	0.52
Exempt Impervious Trail and sidewalk (acres) ¹	2.28	2.28
Total Disturbed Area (acres)	96.63	96.63

Background

September 2018 - Phase 1

June 2020 - Phase 1



-  Infiltration Basin
-  Wet Pond
-  Filtration basin

	September 2018 Conditional Approval		May 2020 Modification Request	
	Phase 1	Ultimate Build-Out	Phase 1	Ultimate Build-Out
Total Site Area (acres)	119.11	119.11	119.11	119.11
Existing Site Impervious (acres)	0.52	0.52	0.52	0.52
Post Construction Site Impervious (acres)	8.25	66.23	7.38	63.75
New (Increase) in Site Impervious Area (acres)	7.73	65.71	6.86	63.23
Disturbed impervious surface (acres)	0.52	0.52	0.52	0.52
Exempt Impervious Trail and sidewalk (acres) ¹	2.28	2.28	1.54	1.54
Total Disturbed Area (acres)	96.63	96.63	96.99	96.99

Background

June 2020 - Phase 1

May 2022- Phase 1 & 2



- ★ Infiltration Basin
- ★ Reuse Controller
- ★ Wet Pond
- ★ Filtration basin

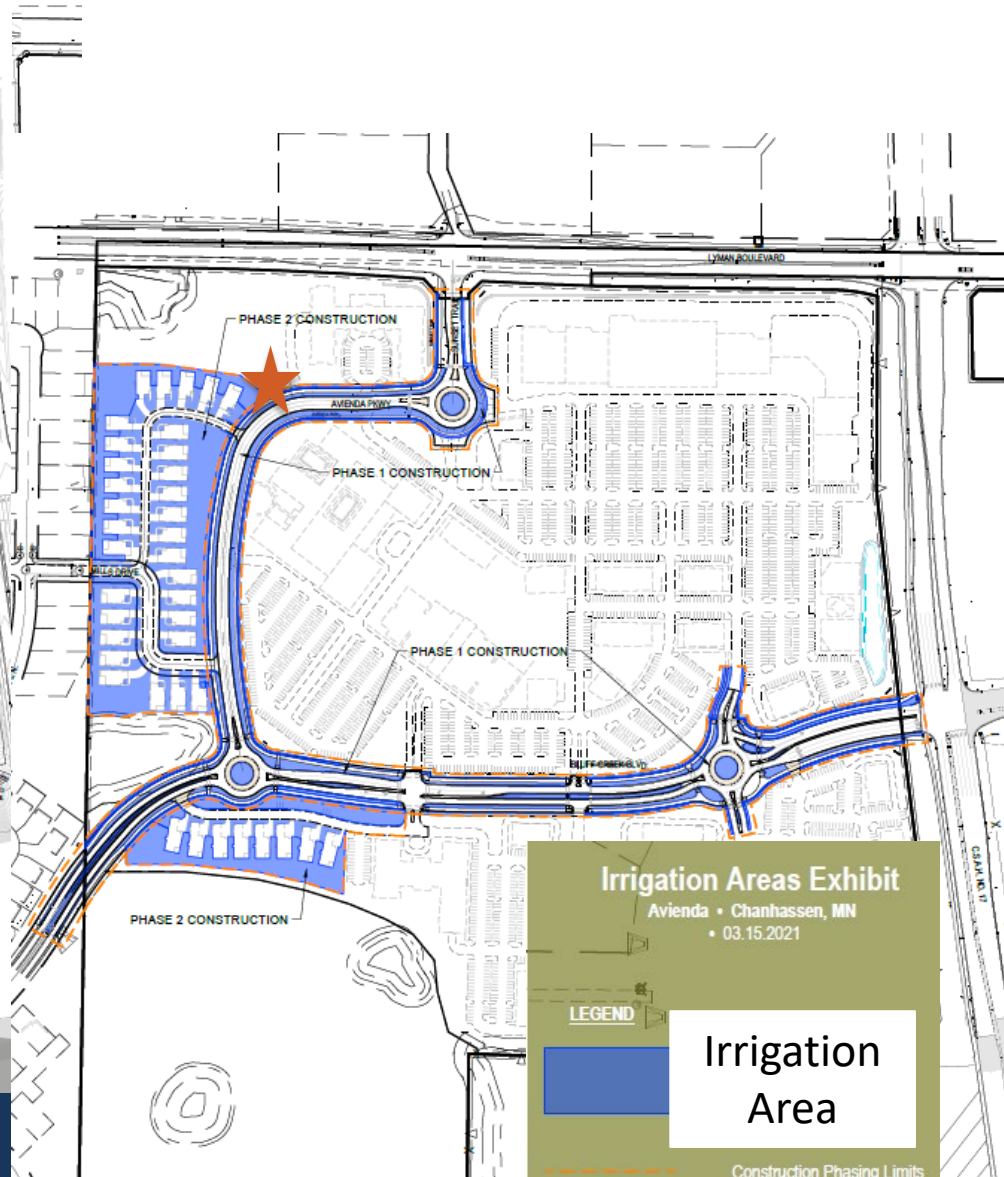
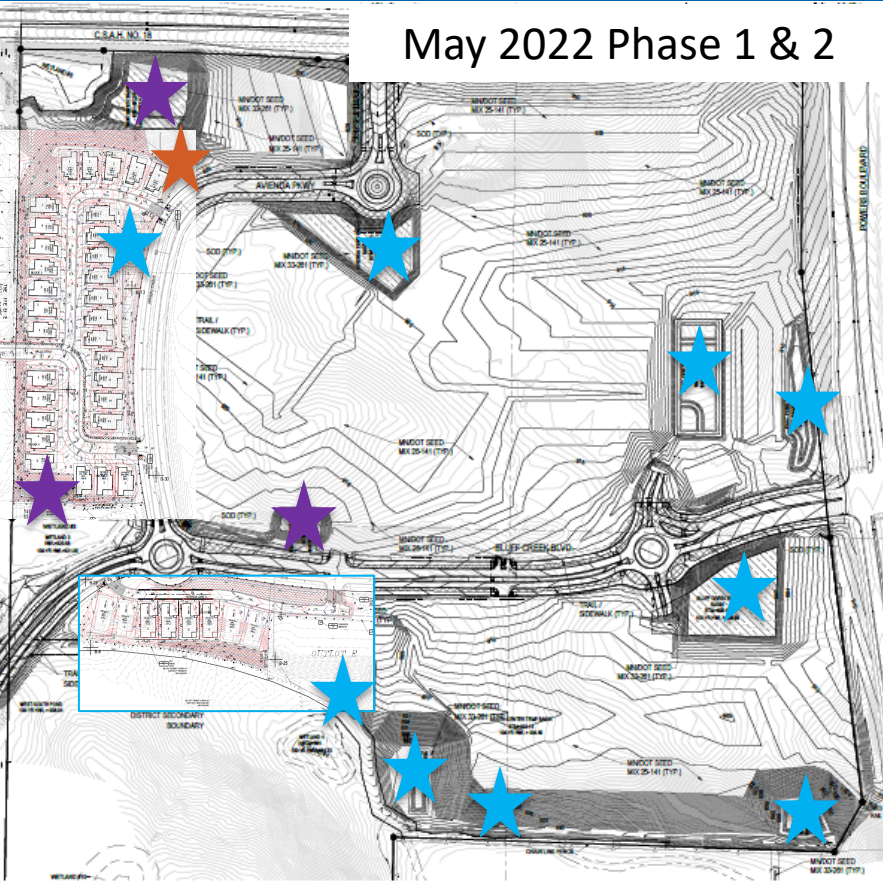
Design
Infiltration Rate
= 0.06 in/hr



Measured
Infiltration Rate
= 0.00-0.02 in/hr

Background – Phase 1 Complete & Phase 2 Nearing Completion

May 2022 Phase 1 & 2



- ★ Reuse Controller
- ★ Wet Pond
- ★ Filtration basin

Irrigation Areas Exhibit
Avienda • Chanhassen, MN
• 03.15.2021

LEGEND

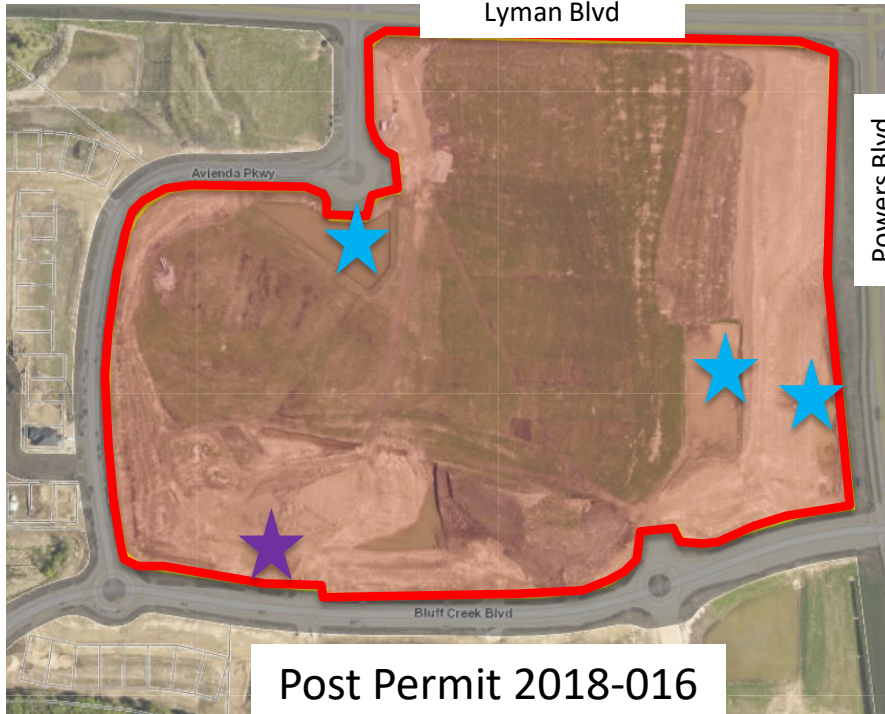
Irrigation Area

Construction Phasing Limits

Background – Phase 3: RPBCWD Permit 2023-045 Conditionally Approved

Lyman Blvd

Powers Blvd

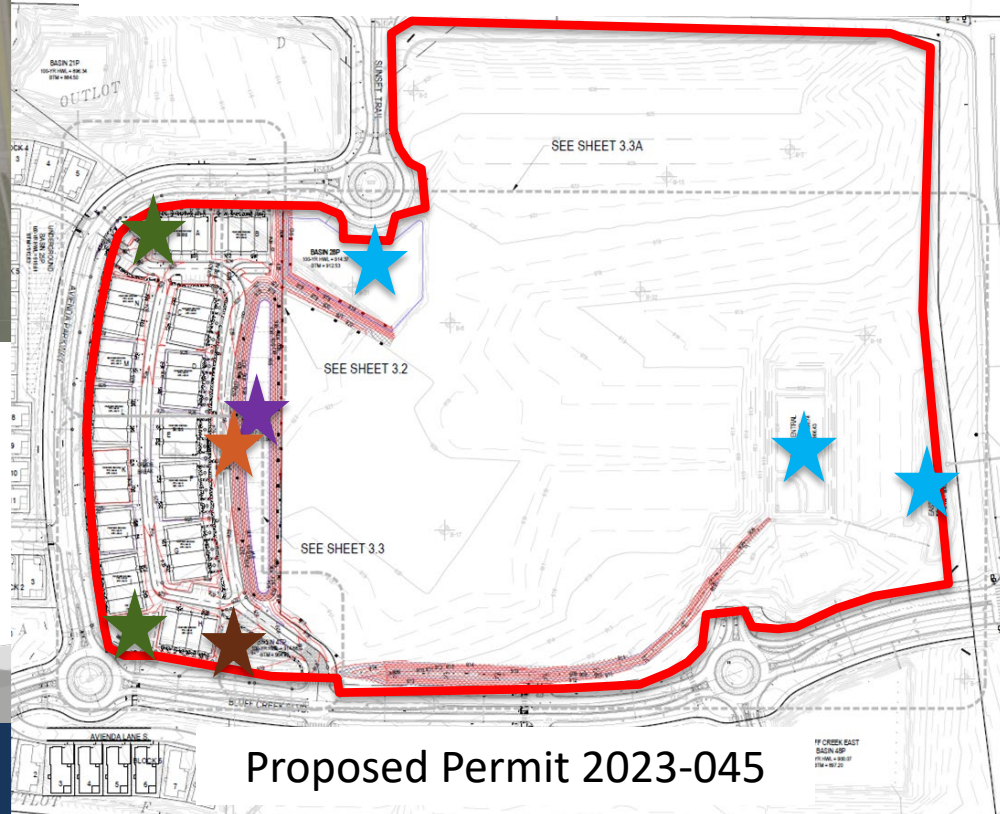


Post Permit 2018-016

Project site information

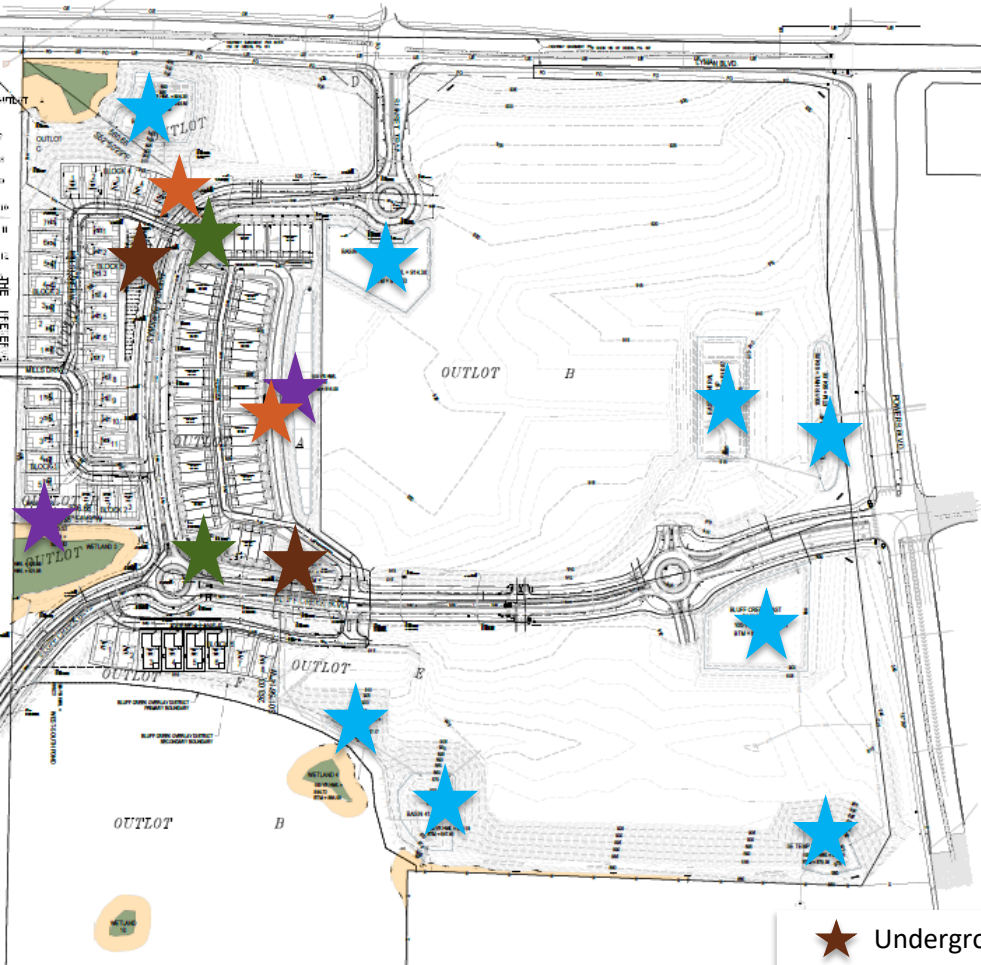
Site Information	Project Area
Total Site Area (acres)	43.37
Existing Site Impervious Area (acres)	0.46
Post Construction Site Impervious (acres)	4.19
New (increase) in Site Impervious Area (acres)	4.06
Percent increase in Impervious Surface	>100%
Disturbed Site Impervious Area (acres)	0.46
Percent Disturbance of Existing Impervious Surface	100%
Regulated impervious area (acres)	4.19
Total Disturbed Area (acres)	8.35

-  Underground BMP
-  Tree Trench
-  Reuse Controller
-  Wet Pond
-  Biofiltration Basin



Proposed Permit 2023-045

Phase 4: RPBCWD Permit 2024-078 Regional Stormwater Management Plan Under Review

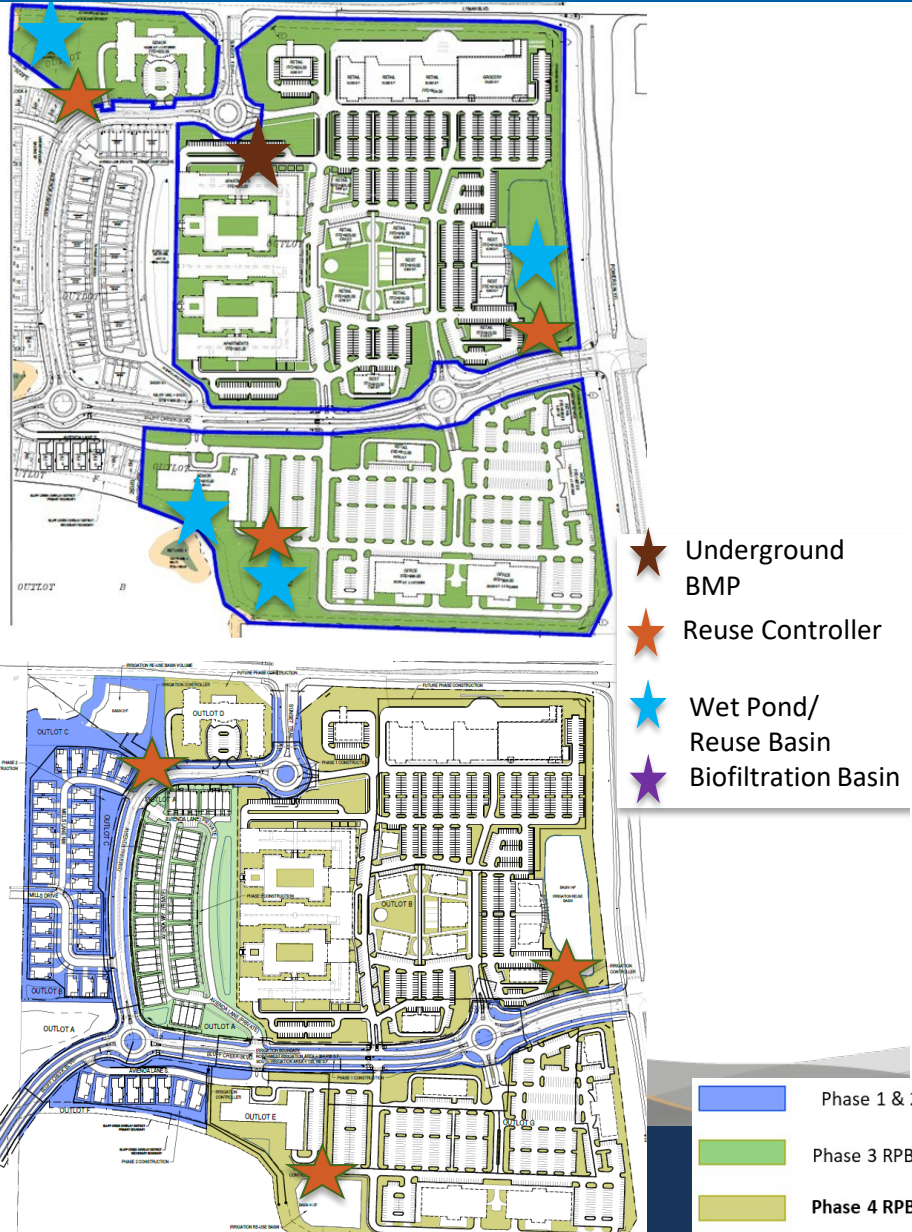


Post-Conditionally Approved
Permit 2023-045

- ★ Underground BMP
- ★ Reuse Controller
- ★ Tree Trench
- ★ Wet Pond
- ★ Biofiltration Basin



Phase 4: RPBCWD Permit 2024-078 Regional Stormwater Management Plan



Regional SW Management (Rule J, subsection 4.0)

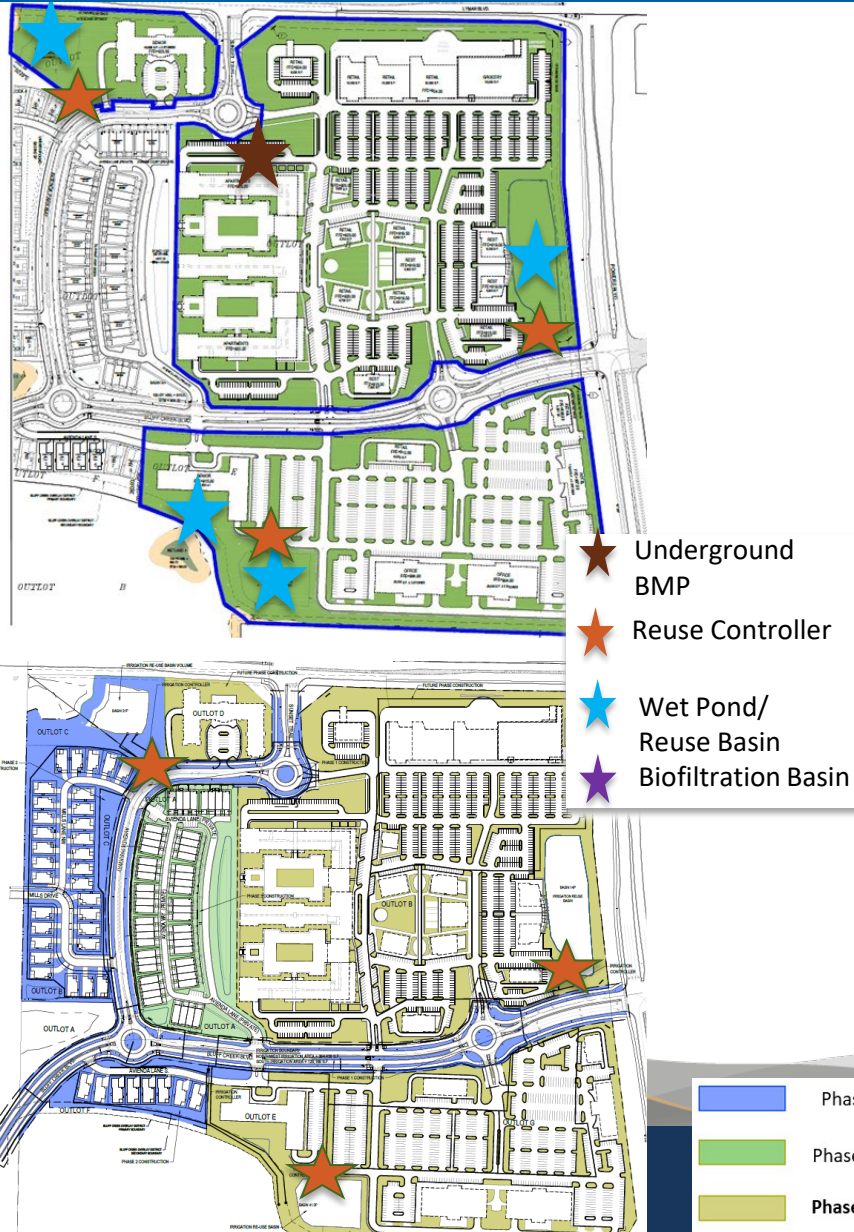
- Allows an applicant to comply with the criteria in subsection 3.1 (rate, volume and water quality controls) for all parcels within a catchment area or areas through a regional or subwatershed plan.
- A regional plan must provide stormwater management that meets or exceeds the criteria in subsection 3.1.
- Provide an annual accounting of treatment capacity created and used by land-disturbing activities
- Regional SW facility in place of onsite SW management is not reasonably likely to cause adverse impact

Regional Stormwater facilities

- 2 rainwater harvest and reuse systems
- Connect to existing rainwater harvest and reuse system
- Enlarge 2 existing wet ponds
- Replace 1 wet pond with underground system
- Install 797 trees
- 1 manufactured treatment device (MTD)

Phase 4: RPBCWD Permit 2024-078

Regional Stormwater Management Plan



- Seeking approval of a regional stormwater management plan for 3 catchments prior to development
 - Simplify stormwater compliance for future development
 - Streamline future permitting process
- Planning for 37.25 acres regulated impervious
- Planning for 26.52 acres pervious
- Implementation timeline of regional stormwater BMPs proposed to occur when development happens
- Regional Stormwater facilities
 - 2 rainwater harvest and reuse systems
 - Connect to existing rainwater harvest and reuse system
 - Enlarge 2 existing wet ponds
 - Replace 1 wet pond with underground system
 - Install 797 trees
 - 1 manufactured treatment device (MTD)
 - Eliminate 3 existing wet pond
- Requesting variances
 - From compensatory storage within same floodplain (Rule B, subsection 3.2)
 - To allow abstraction to the maximum extent practicable on restricted site rather than full 1.1" from impervious surface

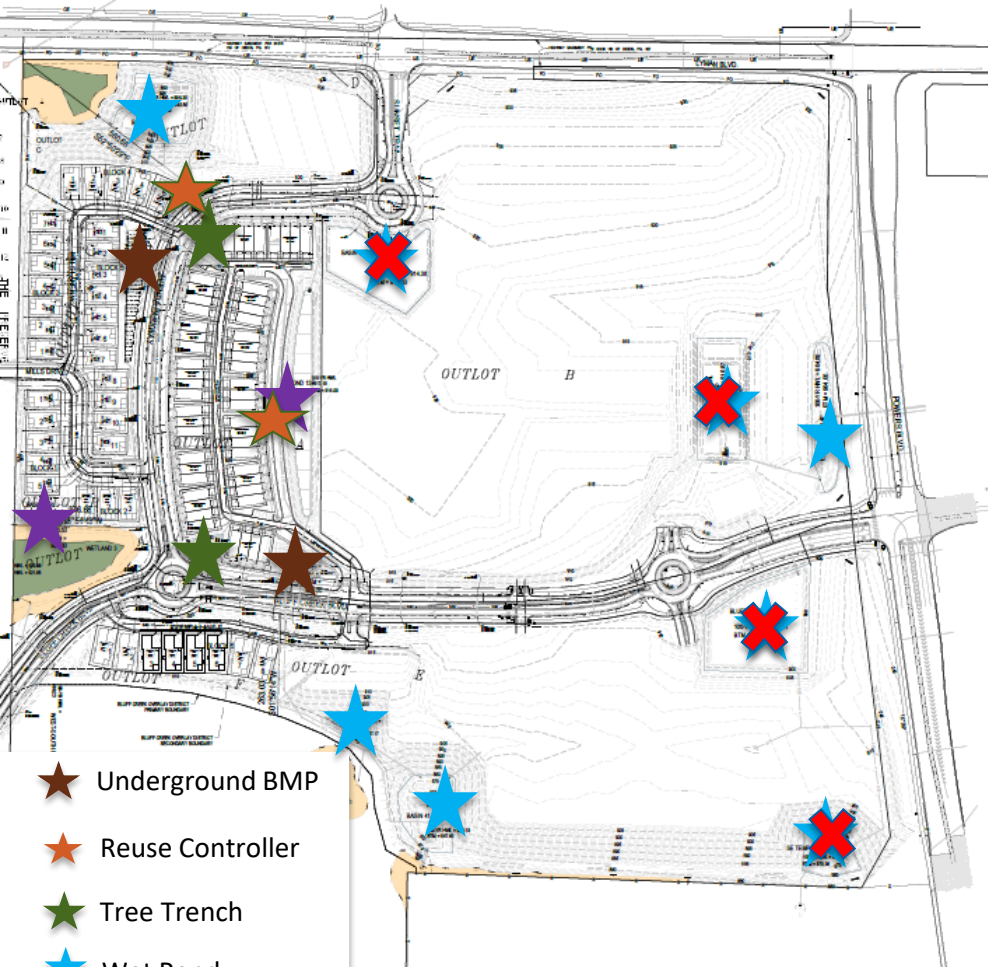
	Phase 1 & 2 RPBCWD Issued Permit 2018-016
	Phase 3 RPBCWD Conditionally Approved Permit 2023-045
	Phase 4 RPBCWD Permit 2024-078 Regional Stormwater Under Review

Floodplain Variance-compensatory storage at or below the same flood elevation and within the floodplain of the same waterbody

Net Increase in Floodplain Storage

Lake Susan - 8,436 CY

Bluff Creek - 1,891 CY



- ★ Underground BMP
- ★ Reuse Controller
- ★ Tree Trench
- ★ Wet Pond
- ★ Biofiltration Basin

Regional SW Variance – Allow Regional SW Management on Restricted Site

Required Abstraction Depth (inches)	Required Abstraction Volume (cubic feet)	Proposed Abstraction Depth (inches)	Proposed Abstraction Volume (cubic feet)	Shortfall
1.1	148,739	0.4	53,616	95,123 CY (64%)
0.55	74,370	0.4	53,616	20,754 CY (28%)

- Conceptually Planning for
 - 37.25 acres regulated impervious
 - 26.52 acres pervious
 - 23.7 acres of irrigation area (combined in 3 catchments)



- ★ Underground BMP
- ★ Reuse Controller
- ★ Wet Pond/Reuse Basin
- ★ Biofiltration Basin



Permit 2024-078 Regional Stormwater Management – Requested Action

- Extension of the permit review timeline by 60 days, as allowed under Minnesota Statutes section 15.99
- Extend deadline from December 30, 2024 to February 28, 2025
- Allowing time for RPBCWD to work with the applicant on revisions and review/process the revised submittal materials



RILEY
PURGATORY
BLUFF CREEK
WATERSHED DISTRICT

