

Mendota-Grassman Greenway Conceptual Design

Public Information Meeting #1 by City of Madison Engineering Division May 25, 2021

- \checkmark This meeting will be <u>recorded</u> and posted to the City's project page.
- ✓ All attendees should stay be <u>muted</u> to keep background noise to a minimum.
- ✓ You may use the <u>"raise hand" option at the bottom if you have something that required immediate clarification.</u>
- ✓ Use "<u>chat</u>" option if you are having technical issues and a staff person can try to assist.
- Please use the "<u>Q&A</u>" option at the bottom of the screen to type your question. Questions will be answered at the end of the presentation. Inappropriate questions may be dismissed.
- ✓ If you cannot ask via typing your question, use the "raise hand" option and you will be unmuted when it is your turn.



This meeting is being recorded. It is a public record subject to disclosure. By continuing to be in the meeting, you are consenting to being recorded and consenting to this record being released to public record requestors.



🔒 🥚 Recording	·□ 5·1·\$·1	You are viewing City of M	Madison's screen 💿 View Options 🛩	
-		Rowse You ACROBAT Q Tot me which you want to do.		A 944
	The Act contraction of a set	📰 🔄 🕾 Way Test 🛛 Ferred 🔹 💽	Normal 2 Normal Red Cool Neutral To and Date Form -	
	From Stream Falser B S R + C + A = E		Normal 2 Normal Ned Good Neutral Top long top Top long top <th></th>	
	Cabood & For A	Algonet & Nator &	ayos tes taxo	
	A16 * A 12064			
				City of Madison
	4. 1	K L M N C P	C R 5 T U V W X Y Z	10 00 00 0
	Sally	2019 May Jun Jul Aug Sep Oct Nov	v Des Jam Feb Mar Apr May Jun Jul Aug	and the second second
U 4	Sound Hathor Greenway, Matthews			
		🕊 Phone Call	🗖 Computer Audio	×
		Join A	udio by Computer	
A		0 🗭	• *	
				Leave Webiner
Join Audio		Q&A Cha	at Raise Hand	

Make sure to join audio

🔒 🥚 Recording	g 🕫 👾 🔹 You are viewing City of Madison's screen 💿 View Options 🗸					
	The Hore South Page Layed Normal Data Normal Data Normal Data Dat					
	Al5 - A E K L M N O P G R S T U V W X V Z 1 Sally	lison				
	😢 Phone Call 🔲 Computer Audio	×				
	Join Audio by Computer					
Ŷ	a 💬 👻	ave Webinar				
Join Audio	Q&A Chat Raise Hand					

Raise your hand to be unmuted **T** For comments or ask additional questions.

🔒 🥚 Recording	· ⊟ 5- 1° \$	You are viewing City of Madiso	on's screen 💿 View Options 🗸	т - а х
	and the second	Rober Vie ACRONAT Q Set we which you want to blue		A then
	- X & A & A & A & A & A & A & A & A & A &	= 📰 🔄 🕾 Way Tex Grand - 💽 🕎 Romal	12 Normal Bad Good Neutral - The Station - A	
	En Count a	■ ※ 転転 III Neepe & Center - \$ - % + % 点 Conditional Formation [Calculated Formation]	12 Normal Red Good Neutral Control Red Torrer Control Red Control Control Control Red Control Control Red Red Control Red Cont	and the second se
	Cubter o For o	Algonet & Nutter &	3944 DBS 10444	
	A16 * 1 A - A 12044			-
				City of Madiana
		K L M N O P G		City of Madison
	1 Sally	2029	2020	
	2 Sound Hatthey Grandware, Matthews	May Jun Jul Aug Sep Out Nov Dev	c Jan Feb Mar Apr May Jun Jul Aug	ka: 20 Bits.
		🕊 Phone Call	🖵 Computer Audio	×
				the second se
		loin Audio I	by Computer	
		Juin Audio I	by computer	
		and the second		
				24.
\mathbf{Q}		🗖 💬	*	Leave Webinar
Join Audio		Q&A Chat	Raise Hand	

Use chat if you have technical issues or a question for the panelists

🔒 🥚 Recording	日.5·11-4		You	are viewing	City of Madis	on's screen 💿	View Options	~			T - 0	67	20
	The Hore least Papilay	est Perman Dia Ro	wa Wea ACROBAT C	fail the shid you work to a							A 944		
		· [1] · [4] x' = = []]		Seneral	🛐 📝 Norm	2 Normal Bad	Good	Neutral	1 2 2 1	T Σ Autolum * E Ne * Creat Creat *	2		
	Press Streement Painter B S R -	$\square \cdot \mid \bigcirc \cdot \underline{\wedge} \cdot \underline{\wedge} \cdot = = =$	🖅 📰 🔙 Marga & Canton 🔸	5 - % + 12 23	Conditional Format as Calcon	ation Check Column Dapa	anatory - Enflowed.He	to Hypertica	meet Selete Fore	net R Deven			
	Cubret is	tes 💊	Alignment is	Number 4	macrit. me.	29/m			CHRI	0.000	4		
	A16	12964											
											Citrus	Madiana	
	2 A I		K L M	N O	> 0		U V	w	x	v z	City of	Madison	
	Sally			2019					3600				
	2 Sound Hutboy Generative	Received and	May Jun Jul	Aug Sep	Out Nov Dr	c Jan Feb	Mar Apr	May		Jul Aug	ka 24 Mar		
	A SAME COMPANY	Caller March	4.5 1.6	10 T	41 MA 42		10	ANG A	×				1
			🙂 Phone	Call			🖵 Comp	outer Audi	0				×
					Join Audio	by Computer							
					Carta v createrset								
A				Q	\$	*							
Join Audio					Chat	Raise Hand						Leave Webin	
Join Andro				Q&A	Chat	haise hand							

Use Q/A if you have questions. We will answer after the presentation

🔒 🥚 Recording	H 5- 2 Ta Hore well Populared Remain Sets Rower Vice ACREAR ♡ Information	*
	Column Column Column Normal Normal <th></th>	
	City of A 8 K L M N O P Q R S T U V W X Y Z 1 Sally	Madison
	Computer Audio	×
	Join Audio by Computer	
Join Audio	Q&A Chat Raise Hand	Leave Webinar

To leave the meeting click here

Presentation Agenda

- Project Background
- Project Scope
 - City Flood Reduction Targets
 - Flood Reduction Targets & This Project Scope
- Existing 100-yr (1% AEP) Flood Conditions
- Preliminary Design
 - Project Segments
 - Segment Components
 - Tree Preservation
- Preliminary Design Performance
- Additional Design Details





Stricker's/Mendota Watershed

Began – February 2019 PIM#3 – May 20, 2021

Engineering	Robert F. Phillips, P.E., City Engineer
Home Bike Road Construction City Facilities Sewer/Storm Resources	
r of Madison / Engineering / Projects / Strickers/Mendola Watershed Study	
trickers/Mendota Watershed Study	
Image Stateline Image Image	Restantian Contractly Section 21 Restantian Contractly Section 22 Project Status: In Design Project Contact: Laren Steign dot 246-404 bitegg@ctythmation.com
or more information please see the <u>Flash Poorting Story Mary</u> . Woth Please see the story map using Firefuc or coget Chrome browsens. Story may are not visuales with Internet Explore:	IE Active Project List Subscribe to Email List: Subscribe to Sinciens/Mendal Watershed Study

CITY OF MADISON





Stricker's/Mendota Watershed

1,452 acres total





Stricker's/Mendota Watershed

1,452 acres total

Mendota-Grassman Greenway Watershed

430 acres







Presentation Agenda

- Project Background
- Project Scope
 - City Flood Reduction Targets
 - Flood Reduction Targets & This Project Scope
- Existing 100-yr (1% AEP) Flood Conditions
- Preliminary Design
 - Project Segments
 - Segment Components
 - Tree Preservation
- Preliminary Design Performance
- Additional Design Details







Project Scope

Existing 100-yr Inundation Map (1% Annual Chance Event)







Flood Mitigation Targets for Stricker's/Mendota Watershed

- 10% Chance Event (4.09" rain/24 hours)
 - No surcharging of storm sewer onto roadway (storm sewer pipes are sized to carry storm)
- 4% Chance Event (5.01" rain/24 hours)
 - 0.2' at Centerline of Road (roads passable for emergency vehicles)
- 1% Chance Event (6.66" rain/24 hours)
 - No structure (home/building) flooding
 - No greenway crossing overflow (stormwater does not come out of greenway and flow over the road)
- 0.2% Chance Event (8.81" rain/24 hours)
 - Safe conveyance of overflow



Flood Mitigation Targets for Stricker's/Mendota Watershed

- 10% Chance Event (4.09" rain/24 hours)
 - No surcharging of storm sewer onto roadway (storm sewer pipes are sized to carry storm)
- 4% Chance Event (5.01" rain/24 hours)
 - 0.2' at Centerline of Road (roads passable for emergency vehicles)
- ▶ 1% Chance Event (6.66" rain/24 hours) ← ______ +6" freeboard
 - No structure (home/building) flooding
 - No greenway crossing overflow (stormwater does not come out of greenway and flow over the road)
- 0.2% Chance Event (8.81" rain/24 hours)
 - Safe conveyance of overflow



Flood Mitigation Targets for Stricker's/Mendota Watershed



▶ 1% Chance Event (6.66" rain/24 hours) ←

+6" freeboard

- No structure (home/building) flooding
- No greenway crossing overflow (stormwater does not come out of greenway and flow over the road)
- 0.2% Chance Event (8.81" rain/24 hours)
 - Safe conveyance of overflow



Existing Conditions 100-yr Inundation & Scope of this Project





Existing Conditions 100-yr Inundation & Scope of this Project



Existing Conditions 100-yr Inundation & Scope of this Project



Presentation Agenda

- Project Background
- Project Scope
 - City Flood Reduction Targets
 - Flood Reduction Targets & This Project Scope
- Existing 100-yr (1% AEP) Flood Conditions
- Preliminary Design
 - Project Segments
 - Segment Components
 - Tree Preservation
- Preliminary Design Performance
- Additional Design Details



Targeted Flood Reduction





Targeted Flood Reduction





Targeted Flood Reduction





Presentation Agenda

- Project Background
- Project Scope
 - City Flood Reduction Targets
 - Flood Reduction Targets & This Project Scope
- Existing 100-yr (1% AEP) Flood Conditions
- Preliminary Design
 - Project Segments
 - Segment Components
 - Tree Preservation
- Preliminary Design Performance
- Additional Design Details



Project Segments – Pipe Work





Project Segments – Channel Work





Project Segments – Channel Work



Evaluated three alternatives consisting of different widths and side-slopes with intent to minimize impacts to desirable trees

Recommendation is to implement alternative #3 Alternative 1 *Wtd. Ave. Width* = 62 *ft* Alternative 2 *Wtd. Ave. Width* = 45 ft Alternative 3 *Wtd. Ave. Width* = 39 ft



CITY OF MADISON



Channel Work – Typical Section



LOOKING DOWNSTREAM



Method



Tree Inventory Completed Feb 2020

Survey of Inventoried Trees completed in Late Spring 2021

Rating	Health	Structure	Form	% Rating
Excellent	High vigor and nearly perfect health with little or no twig dieback, discoloration, or defoliation.	Nearly ideal and free of defects.	Nearly ideal for the species. Generally symmetric. Consistent with the intended use.	81% to 100%
Good	Vigor is normal for the species. No significant damage due to disease or pests. Any twig dieback, defoliation, or discoloration is minor.	Well-developed structure. Defects are minor and can be corrected.	Minor asymmetries/deviations from species norm. Mostly consistent with the intended use. Function and aesthetics are not compromised.	61% to 80%
Fair	Reduced vigor. Damage due to insects or diseases may be significant and associated with defoliation but is not likely to be fatal. Twig dieback, defoliation, discoloration and/or dead branches may comprise up to 50% of the crown	A single defect of a significant nature or multiple moderate defects. Defects are not possible to correct or would require multiple treatments over several years.	Major asymmetries/ deviations from species norm and/or intended use. Function and/or aesthetics are compromised.	41% to 60%
Poor	Unhealthy and declining in appearance. Poor vigor. Low foliage density and poor foliage color are present. Potentially fatal pest infestation. Extensive twig and/or branch dieback.	A single serious defect or multiple significant defects. Recent change in tree orientation. Observed structural problems cannot be corrected. Failure may occur at any time.	Largely asymmetric/abnormal. Detracts from intended use and/or aesthetics to a significant degree.	21% to 40%
Very poor	Poor vigor. Appears to be dying and in last stages of life. Little live foliage.	Single or multiple severe defects. Failure is probable or imminent.	Visually unappealing. Provides little or no function in the landscape.	6% to 20%
Dead				0% to 5%







Standard Removals: Invasive, aggressive, or problematic tree species that outcompete native plant species, harm wildlife, spread disease, create hazards for people or property, exacerbate erosion or conveyance issues or otherwise compromise the ecological health of a site.

DNR NR 40 Invasive Regulated (restricted or prohibited) trees and shrubs list and other aggressive or potentially problematic species.

Site Dependent: Tree species may be kept based on a review of tree diameter, health, adjacent trees, safety, access or mowing needs.

Generally healthy trees (60% quality rating or above for species other than red oak, river birch, shagbark hickory, and white oak) of a larger diameter for their species and the site.

Keep Whenever Possible: Healthy, desirable native tree species that support native wildlife and are well-suited for land used for stormwater management.

Generally healthy trees (60% or above for species other than red oak, river birch, shagbark hickory, and white oak).

Note that shrubs were not surveyed, but will be removed per the same methodology as trees. Neighbors should assume that the majority of shrubs will be removed within the project as the City finds most shrubs in wooded greenways to be invasive. CITY OF MADISON





Standard Removals: *Invasive, aggressive, or problematic tree species*

Site Dependent: *Tree species may be kept based on a review of tree diameter, health, adjacent trees, safety, access or mowing needs.*





Standard Removals: *Invasive, aggressive, or problematic tree species*

Site Dependent: *Tree species may be kept based on a review of tree diameter, health, adjacent trees, safety, access or mowing needs.*





Standard Removals: *Invasive, aggressive, or problematic tree species*

Site Dependent: *Tree species may be kept based on a review of tree diameter, health, adjacent trees, safety, access or mowing needs.*





Standard Removals: *Invasive, aggressive, or problematic tree species*

Site Dependent: *Tree species may be kept based on a review of tree diameter, health, adjacent trees, safety, access or mowing needs.*



Presentation Agenda

- Project Background
- Project Scope
 - City Flood Reduction Targets
 - Flood Reduction Targets & This Project Scope
- Existing 100-yr (1% AEP) Flood Conditions
- Preliminary Design
 - Project Segments
 - Segment Components
 - Tree Preservation
- Preliminary Design Performance
- Additional Design Details



Existing Conditions 100-yr Inundation

Existing 100-yr Flood Conditions



CITY OF MADISON

Current Design 100-yr Inundation



CITY OF MADISON

Current Design 100-yr Inundation



Presentation Agenda

- Project Background
- Project Scope
 - City Flood Reduction Targets
 - Flood Reduction Targets & This Project Scope
- Existing 100-yr (1% AEP) Flood Conditions
- Preliminary Design
 - Project Segments
 - Segment Components
 - Tree Preservation
- Preliminary Design Performance
- Additional Design Details



Additional Design Details

University Avenue

Old Middleton

- Maintenance Access Path
 - Parallel to Greenway

Lake Mendota

Mendota Drive

1.1.4

Sanitary Sewer Access Structure Path(s)

CITY OF MADISO

• Perpendicular to Greenway

More details to be provided at PIM #2



Contact Information & Resources

- Engineering
 - Project Manager, Jojo O'Brien, (608) 266-9721, jobrien@cityofmadison.com
- Project Website:

cityofmadison.com/engineering/projects/mendota-grassman-greenway-flood-mitigation-and-restoration-design

- Sign-up for project email updates on the website
- Updates on work progress will be posted to the project website
- Facebook City of Madison Engineering
- > Twitter @MadisonEngr
- Engineering Podcast: Everyday Engineering on iTunes, GooglePlay

