

City of Ann Arbor Snyder/Edgewood Avenues Stormwater Improvement Project



Public Meeting #3 Summary

May 1, 2019 – 7:00 pm to 9:00 pm

1. Participant List – Attachment #1

2. Welcome and Introductions

- a. Mike Nearing, Senior Project Manager, City of Ann Arbor - Engineering introduced the Project Team: Andy Kilpatrick, Project Lead, Northwest Consulting; Jay Zawacki, Hydraulic Modeling Lead, CDM Smith; Teresa Newman, Public Involvement Lead, Project Innovations; Andrea Wright, Project Management Analyst, City of Ann Arbor.

3. Recap of Project to Date

- a. 10/2018 – City launched the project to identify options to manage stormwater to reduce flooding – storage, conveyance, infiltration.
- b. 11/29/18 – Public Meeting held to introduce project objectives.
- c. 2/28/19 – Public Meeting held to review and rank 10 potential solutions.

4. Overview of Project Objectives

- a. Identify options to manage stormwater to reduce flooding – storage, conveyance, infiltration.
- b. Use stormwater model to analyze impacts on flows and water levels.
- c. Design target is to keep peak hydraulic grade line (HGL) one foot below ground level.
- d. Volume requirements vary by location. They are in the range of 110,000 – 160,000 cubic feet (ft³) of storage for the 10-year, 12-hour storm standard.
- e. CIP includes estimated construction budget of about \$1.5M.

5. Polling Results – 2/28/19

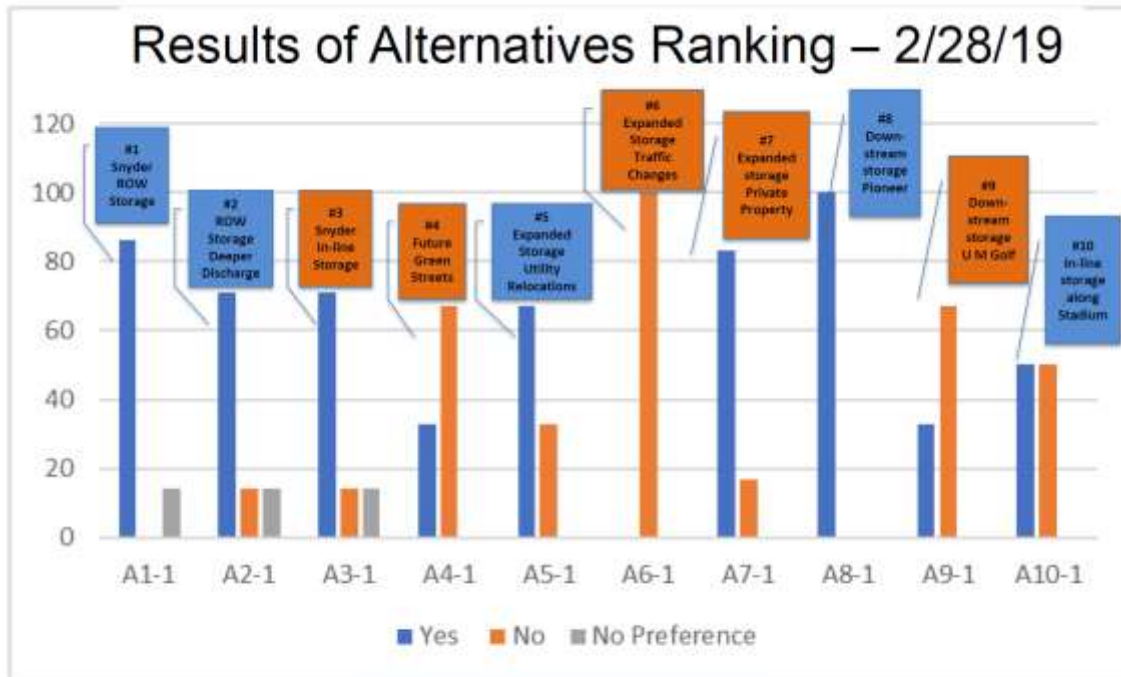
- a. Ten alternatives were presented at the Feb. 28, 2019 meeting and five of them are being considered in the four alternatives being presented today.

Alternative	Option Name	Description
1	Snyder Right-of-Way (ROW) storage	Under consideration – modified with deeper storage
2	ROW storage with deeper discharge	Under consideration – combined with #5 (Deeper Edgewood)
3	Snyder In-line Storage	Not pursued – too disruptive, lengthy pipe upsizing
4	Future Green Streets	Not pursued for this project, will incorporate where possible
5	Expanded storage – Utility Relocations	Under consideration – combined with #2 & 5 (Deeper Birk & Edgewood)
6	Expanded storage – Traffic Changes	Not pursued – open ponds and street closures
7	Expanded storage – Private Property Areas	Not pursued – not interested in acquiring private property
8	Downstream Storage - Pioneer	Under consideration – Pioneer Basin Alternative
9	Downstream Storage - UM Golf	Not pursued – expensive, impractical
10	In-Line Storage along W. Stadium	Under consideration – combined with Snyder storage

City of Ann Arbor Snyder/Edgewood Avenues Stormwater Improvement Project



Public Meeting #3 Summary
 May 1, 2019 – 7:00 pm to 9:00 pm



Solution under consideration

Not currently being pursued

6. Presentation of 4 Alternatives

a. Review of 4 Alternatives

Alternative	Description
Pioneer Basin	Previously Alt. #8. Improved Conveyance from Edgewood/Snyder.
Snyder ROW (Deeper Birk)	Modified Alt. #5. Expanded Franklin-Snyder storage w/utility relocate and deeper basin while accommodating large trees.
Snyder ROW (Deeper Edgewood)	Combined Alt. #2 & 5. Underground storage along Snyder spread across 4 basins.
Snyder + Stadium Storage	Modified Alt. #10. Underground storage along Snyder and W. Stadium Two phases of construction.

City of Ann Arbor Snyder/Edgewood Avenues Stormwater Improvement Project



Public Meeting #3 Summary

May 1, 2019 – 7:00 pm to 9:00 pm

- b. General Construction Impacts for all 4 Alternatives
 - i. It is expected that the affected streets will be reconstructed due to the amount of construction necessary to perform the needed construction
 - ii. On street parking will be prohibited
 - iii. Driveways will be temporarily inaccessible
 - iv. Sidewalks will be temporarily inaccessible
 - v. Private utility relocation
 - vi. Street trees will likely be affected
 - vii. Water shut off up to 8 hours during one day for water main relocation
- c. Details of 4 Alternatives Under Consideration
 - i. Pioneer Basin Alternative
 - 1. Previously Alternative #8.
 - 2. Improved conveyance out of Edgewood-Snyder.
 - 3. 122,000 CF of storage located under soccer field, west of existing stormwater infiltration basin.
 - 4. Ponding is addressed for 10-year storm at Edgewood.
 - 5. Overland flow down Snyder, west of Edgewood, is not addressed by this alternative. Repeated flooding hasn't occurred on Snyder.
 - 6. Construction Impacts include:
 - a. Snyder-Edgewood Intersection Area
 - i. 2-3 month construction period.
 - ii. 13 parcels within the construction limit.
 - iii. Edgewood would likely be closed from Stadium through Snyder intersection. Snyder closed from west of Edgewood through the same intersection.
 - iv. Large/deep sanitary and storm sewer construction.
 - b. Stadium Blvd
 - i. 0.5-1 month construction period.
 - ii. Large storm sewer construction.
 - iii. Reduced lanes.
 - c. Pioneer High School
 - i. 3-4 month construction period.
 - ii. Driveway closed during construction within it.
 - iii. Most of the work will be in grass areas and won't impact the Pioneer HS traffic. Some parking spaces in teacher's lot may need to be closed.

City of Ann Arbor Snyder/Edgewood Avenues Stormwater Improvement Project



Public Meeting #3 Summary

May 1, 2019 – 7:00 pm to 9:00 pm

- iv. Timing related to High School operations and Football parking will need to be studied further.
- ii. Snyder ROW Storage (Deeper Birk)
 - 1. Modified Alternative #5.
 - 2. Expanded storage at Franklin-Snyder with utility relocation and deeper basin while accommodating large trees.
 - 3. Edgewood-Snyder storage with DTE – Michcon gas main relocation.
 - 4. Analysis shows about 159,600 cubic feet of storage is needed.
 - 5. Less than 0.5 foot ponding at lowest portion of Edgewood-Snyder Intersection.
 - 6. No overland flow.
 - 7. Construction Impacts include:
 - a. Franklin/Snyder from Birk to 7th (3 months)
 - i. 15 parcels within construction limits.
 - ii. Franklin closed from Birk to 7th. Snyder closed from Birk to 7th.
 - iii. Maintaining access to properties will be challenging, must be studied in more detail.
 - iv. Deep basin construction.
 - v. Deep sanitary sewer construction.
 - b. Snyder/Edgewood Intersection (2 months)
 - i. 7 parcels within construction limits.
 - ii. Edgewood closed at the Snyder intersection. Snyder closed from west of Edgewood through the same intersection to east of the Church.
 - iii. Deep basin construction.
 - iv. Deep sanitary sewer construction.
 - c. Franklin from 7th to Hutchins (2-3 months)
 - i. 11 parcels within construction limits.
 - ii. Franklin closed from 7th through the Hutchins intersection.
 - iii. Deep basin construction.
- iii. Snyder ROW Storage (Deeper Edgewood)
 - 1. Combined Alternatives #2 & #5
 - 2. Underground storage along Snyder Avenue
 - 3. 156,900 CF of storage required and will be spread across 4 basins

City of Ann Arbor Snyder/Edgewood Avenues Stormwater Improvement Project



Public Meeting #3 Summary

May 1, 2019 – 7:00 pm to 9:00 pm

4. Deeper Edgewood-Snyder basins provide additional volume and have dedicated 12" discharge pipes.
5. Peak water level kept below Snyder Avenue w/ 1 foot freeboard.
6. Construction impacts include:
 - a. Franklin/Snyder from Birk to 7th (3 months)
 - i. 15 parcels within construction limits.
 - ii. Franklin closed from Birk to 7th. Snyder closed from Birk to 7th.
 - iii. Deep basin construction.
 - iv. Deep sanitary sewer construction.
 - b. Snyder/Edgewood from intersection to Stadium (2-3 months)
 - i. 13 parcels within construction limits.
 - ii. Edgewood closed at Snyder intersection. Snyder closed from west of Edgewood through the same intersection.
 - iii. Large/deep storm sewer construction.
 - iv. Smaller/deep sewer to be bored from Snyder to Pioneer High School.
 - v. Deep sanitary sewer construction.
 - vi. Deep basin construction.
 - c. Stadium Blvd (0.5-1 month)
 - i. Sewer boring under Stadium – no impacts to traffic.
 - ii. Possible night work.
 - d. Pioneer High School (1-1.5 months)
 - i. Driveway closed during construction within it.
 - ii. Most of the work will be in grass areas and won't impact the PHS traffic. Some parking spaces in teacher's lot may need to be closed.
 - iii. Timing related to High School operations and Football parking will need to be studied further.
- iv. Snyder + Stadium Storage
 1. Modified Alternative #10.
 2. Underground storage along Snyder Avenue and W. Stadium Blvd.
 3. 111,300 CF of storage required and will be spread across 4 basins.
 4. Peak water level at Edgewood-Snyder 1 foot below ground.

City of Ann Arbor Snyder/Edgewood Avenues Stormwater Improvement Project



Public Meeting #3 Summary

May 1, 2019 – 7:00 pm to 9:00 pm

5. Phase 1: Franklin/Snyder and Snyder/Edgewood basins and sewers.
 - a. Phase 1 reduces flooding in Snyder/Edgewood, but not to 10-year storm level.
6. Phase 2: Stadium and Pioneer High School storm sewers.
 - a. Phase 2 will be constructed during the W. Stadium Blvd. reconstruction.
 - b. W. Stadium Blvd. reconstruction is not currently funded or scheduled.
7. Construction impacts include:
 - a. Franklin/Snyder from Birk to 7th (3 months)
 - i. 15 parcels within construction limits.
 - ii. Deep basin construction.
 - iii. Deep sanitary sewer construction.
 - b. Snyder/Edgewood from Intersection to Stadium (3 months)
 - i. 13 parcels within construction limits.
 - ii. Edgewood closed from Stadium through the Snyder intersection. Snyder closed from west of Edgewood through the same intersection.
 - iii. Large/deep storm sewer construction.
 - iv. Deep sanitary sewer construction.
 - v. Deep basin construction.
 - c. W. Stadium Blvd and Pioneer High School (constructed during W. Stadium Reconstruction)
 - i. Deep, sewer reconstruction.
 - ii. Constructed during W. Stadium Blvd. reconstruction – lane closures and potential detours.

City of Ann Arbor Snyder/Edgewood Avenues Stormwater Improvement Project



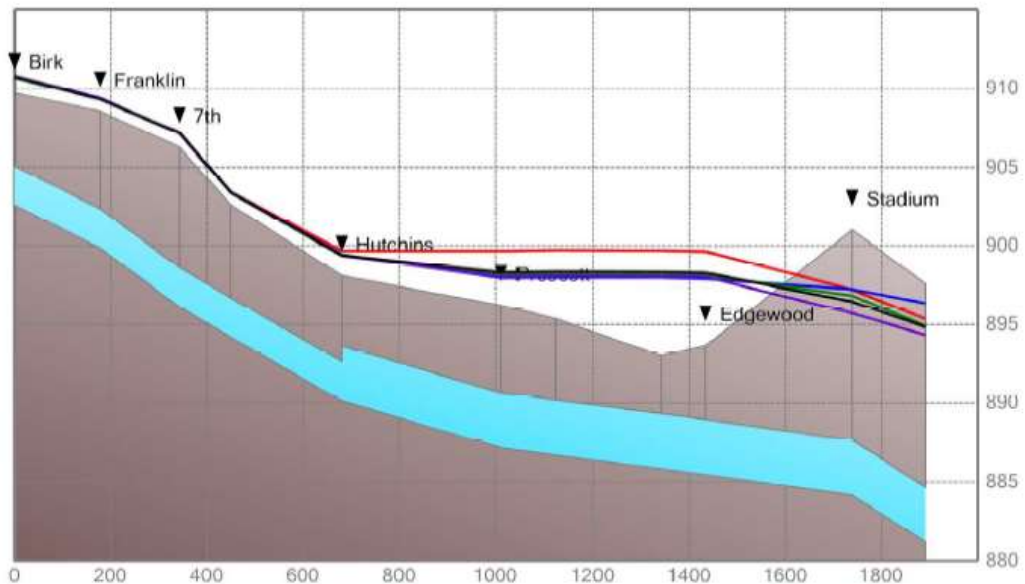
Public Meeting #3 Summary May 1, 2019 – 7:00 pm to 9:00 pm

7. 100-year Storm Analysis

- a. The four alternatives were modeled for a 100-year storm and none of them made a significant difference in flooding impacts for this type of event.

Profile View (100-Year Storm)

Existing Pioneer Storage Snyder ROW Storage (Deeper Birk) Peak values
Snyder ROW Storage (Deeper Edgewood Option) Snyder and Stadium



City of Ann Arbor Snyder/Edgewood Avenues Stormwater Improvement Project



**Public Meeting #3 Summary
May 1, 2019 – 7:00 pm to 9:00 pm**

8. Summary of 4 Alternatives

Alternative	Description	Cost Projection	Flooding Addressed Yes / No	Construction Timing
Pioneer Basin	Improved conveyance out of Edgewood-Snyder	\$ 2.9M	YES	Edgewood – 2-3 months Stadium – 0.5 -1 months Pioneer – 3-4 months
Snyder ROW Storage - Deeper BIRK	Expanded storage at Franklin-Snyder with utility relocation and deeper basin	\$ 4.85M	NO	Franklin/Snyder – Birk to 7 th –3 months Snyder/Edgewood – 2 months Franklin – 7 th to Hutchins – 2-3 months
Snyder ROW Storage – Deeper EDGEWOOD	Underground storage along Snyder Avenue; deeper storage spread across 4 basins	\$ 4.5M	YES	Franklin/Snyder – Birk to 7 th – 3 months Snyder/Edgewood Intersection to Stadium – 2-3 months Stadium – 0.5-1 months Pioneer High School – 1-1.5 months
Snyder + Stadium Storage	Underground storage along Snyder Ave. and W. Stadium Blvd.	\$ 5.3M	PH. 1 – NO PH. 2 - YES	Construction in 2 Phases Franklin/Snyder – Birk to 7 th – 3 months Snyder/Edgewood Intersection to Stadium – 3 months Stadium Blvd and Pioneer HS occur during W. Stadium reconstruction.

9. Question/Answer:

- a. Q: Pioneer Basin Alternative states that there is no overland flow down Snyder but we have a video showing flooding down Snyder. A: To clarify, there hasn't been repeated street flooding on Snyder.
- b. Q: Where has significant flooding occurred in the past? A: Large rain events have caused flooding at the Snyder-Edgewood Intersection.
- c. Q: Is something definitely going to be constructed? A: Yes, but because of the higher cost projections, the project may need to be pushed back to 2021-2022 (or perhaps, further) as the budget is further scrutinized.
- d. Q: Has the Pioneer Basin Alternative been discussed with the Ann Arbor Public Schools? A: Not yet, but in the past, the AAPS has been open to coordinating on construction projects.

City of Ann Arbor Snyder/Edgewood Avenues Stormwater Improvement Project



Public Meeting #3 Summary

May 1, 2019 – 7:00 pm to 9:00 pm

10. Polling of Alternatives

- a. Participants used a polling device to cast a “yes”, “no”, or “no preference” choice for each alternative.
- b. Participants were asked to choose viability criteria for each alternative.
- c. Polling was anonymous.

11. Polling Results

- a. Question #1 – Do you support the Pioneer Basin alternative to resolve the stormwater issues?
 - i. Yes = 4
 - ii. No = 0
- b. Question #2 – Why is the Pioneer Basin alternative the preferred alternative?
 - i. Cost effectiveness = 4
 - ii. Level of impact = 3
 - iii. Time to resolution = 2
 - iv. Amount of stormwater captured = 4
 - v. Other = 0
- c. Question #3 – Do you support the Snyder ROW (Deeper Birk) alternative to resolve the stormwater issues?
 - i. Yes = 0
 - ii. No = 4
- d. Question #4 – Why isn't the Snyder ROW (Deeper Birk) alternative preferred?
 - i. Cost effectiveness = 2
 - ii. Level of impact = 1
 - iii. Time to resolution = 0
 - iv. Amount of stormwater captured = 1
 - v. Other = 0
- e. Question #5 – Do you support the Snyder ROW (Deeper Edgewood) alternative?
 - i. Yes = 1
 - ii. No = 3
- f. Question #6 – Why isn't the Snyder ROW (Deeper Edgewood) alternative preferred?
 - i. Cost effectiveness = 2
 - ii. Level of impact = 2
 - iii. Time to resolution = 1
 - iv. Amount of stormwater captured = 0
 - v. Other = 0

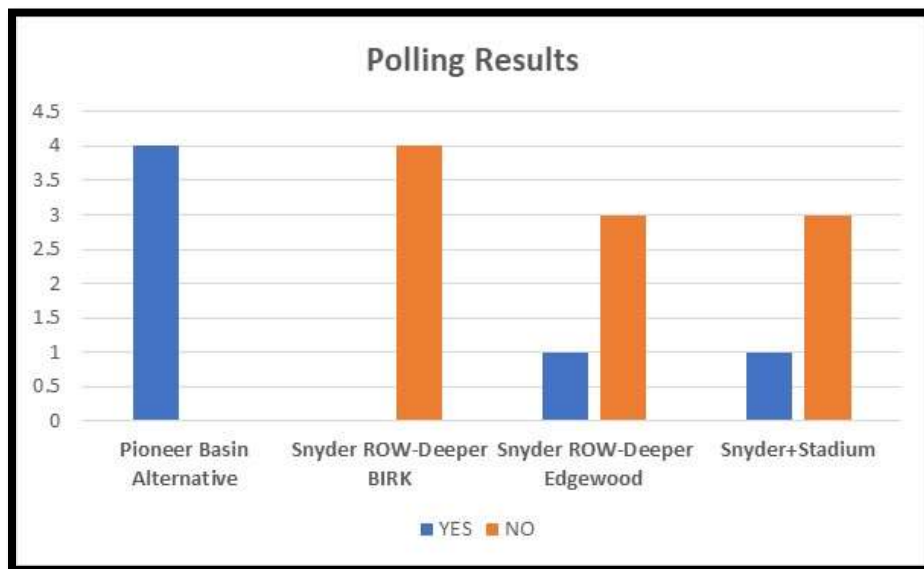
City of Ann Arbor Snyder/Edgewood Avenues Stormwater Improvement Project



Public Meeting #3 Summary

May 1, 2019 – 7:00 pm to 9:00 pm

- g. Question #7 – Do you support the Snyder + Stadium alternative?
 - i. Yes = 1
 - ii. No = 3
- h. Question #8 – Why **isn't** the Snyder + Stadium alternative preferred?
 - i. Cost effectiveness = 2
 - ii. Level of impact = 1
 - iii. Time to resolution = 2
 - iv. Amount of stormwater captured = 0
 - v. Other = This would be a last resort alternative, like it because it is combined with another project to avoid further disruption.



12. Next Steps

- Late May 2019
 - Select Preferred Alternative
- Early June 2019
 - Basis of Design Report
- Late June 2019
 - 30% Design Model Analysis
 - Public Meeting #4 (anticipated)
- July 2019
 - 30% Plan Submittal
- August 2019
 - Finalize 30% Plan

City of Ann Arbor Snyder/Edgewood Avenues Stormwater Improvement Project



**Public Meeting #3 Summary
May 1, 2019 – 7:00 pm to 9:00 pm**

ATTACHMENT #1 – Participant List

Snyder/Edgewood Avenues Area Stormwater Improvement Project

Public Meeting #3 – Pioneer High School Cafeteria Annex

May 1, 2019

NAME	ADDRESS	AFFILIATION OR ORGANIZATION
Jack Eaton		Council Member
David Ferguson	1301 Prescott	Resident
Diane Ferguson	1301 Prescott	Resident
L. Hanselman	1211 Birk Ave.	
Andrew Kilpatrick		Northwest Consultants
K. Woch Naheedy	500 Snyder Ave.	
Michael Nearing		City of Ann Arbor
Elizabeth Nelson	1319 Ardmoor Ave.	Council Member
Teresa Newman		Project Innovations
Andrea Wright		City of Ann Arbor
Jay Zawacki		CDM Smith

City of Ann Arbor Snyder/Edgewood Avenues Stormwater Improvement Project



Public Meeting #3 Summary
May 1, 2019 – 7:00 pm to 9:00 pm

ATTACHMENT #2 – Presentation



Agenda



**Welcome and Introductions
(5 min.)**



**Presentation
(45 min.)**

Recap of 2/28 meeting
Review 4 alternatives



**Discussion
(30 min.)**

Discussion, question/answer
Compile feedback
Ranking of alternatives



**Next Steps
(10 min.)**

Outline next steps



City of Ann Arbor Snyder/Edgewood Avenues Stormwater Improvement Project



Public Meeting #3 Summary

May 1, 2019 – 7:00 pm to 9:00 pm

Recap

- 10/2018 – City launched the project to identify options to manage stormwater to reduce flooding – storage, conveyance, infiltration.
- 11/29/18 – Public Meeting held to introduce project objectives.
- 2/28/19 – Public Meeting held to review and rank 10 potential solutions.



Overview of Project Objectives

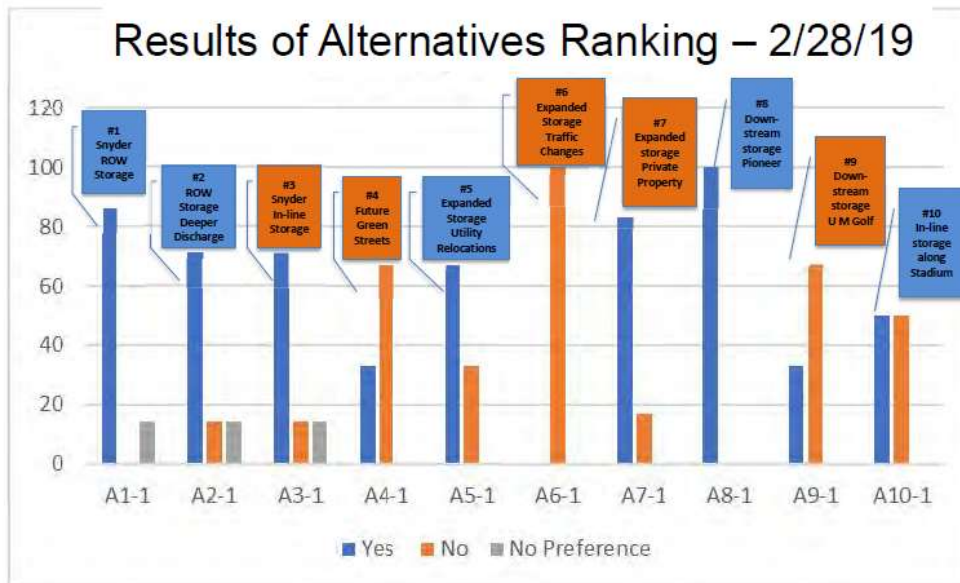
- Identify options to manage stormwater to reduce flooding – storage, conveyance, infiltration.
- Use stormwater model to analyze impacts on flows and water levels.
- Design target is to keep peak hydraulic grade line (HGL) one foot below ground level.
- Volume requirements vary by location, but are in the range of 110,000 – 160,000 cubic feet (ft³) of storage for the 10-year, 12-hour storm standard.
- CIP includes estimated construction budget of about \$1.5M.



City of Ann Arbor Snyder/Edgewood Avenues Stormwater Improvement Project



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May 1, 2019 – 7:00 pm to 9:00 pm



Solution under consideration
Not currently being pursued

Review of 10 Alternatives Summary

Alternative	Option Name	Description
1	Snyder Right-of-Way (ROW) storage	Under consideration – modified with deeper storage
2	ROW storage with deeper discharge	Under consideration – combined with #5 (Deeper Edgewood)
3	Snyder In-line Storage	Not pursued – too disruptive, lengthy pipe upsizing
4	Future Green Streets	Not pursued for this project, will incorporate where possible
5	Expanded storage – Utility Relocations	Under consideration – combined with #2 & 5 (Deeper Birk & Edgewood)
6	Expanded storage – Traffic Changes	Not pursued – open ponds and street closures
7	Expanded storage – Private Property Areas	Not pursued – not interested in acquiring private property
8	Downstream Storage - Pioneer	Under consideration – Pioneer Basin Alternative
9	Downstream Storage - UM Golf	Not pursued – expensive, impractical
10	In-Line Storage along W. Stadium	Under consideration – combined with Snyder storage



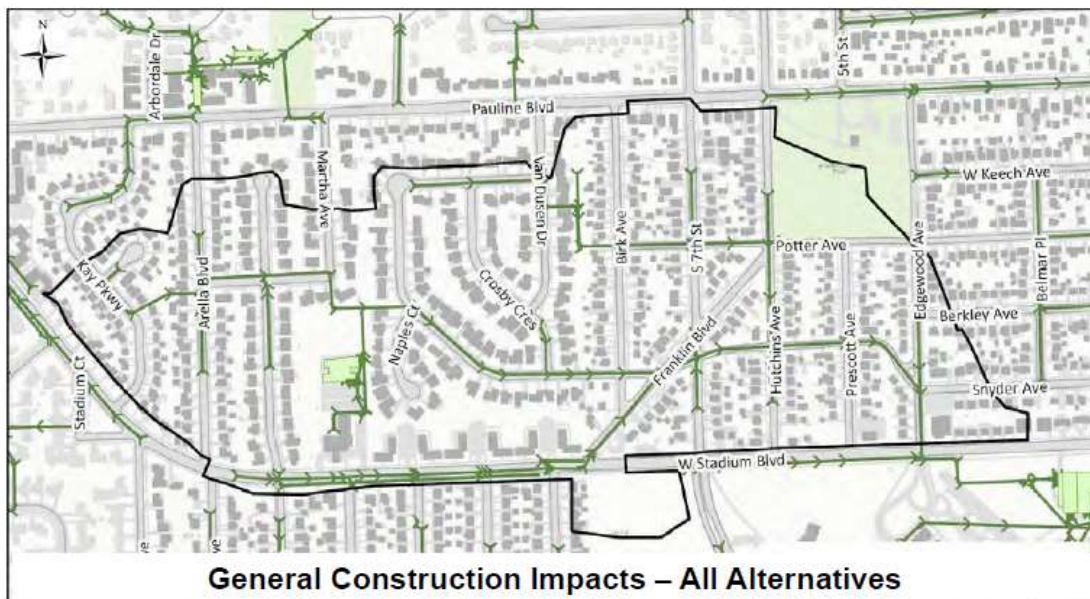
City of Ann Arbor Snyder/Edgewood Avenues Stormwater Improvement Project



Public Meeting #3 Summary
 May 1, 2019 – 7:00 pm to 9:00 pm

4 Revised Alternatives

Alternative	Description
Pioneer Basin	Previously Alt. #8. Improved Conveyance from Edgewood/Snyder.
Snyder ROW (Deeper Birk)	Modified Alt. #5. Expanded Franklin-Snyder storage w/utility relocate and deeper basin while accommodating large trees.
Snyder ROW (Deeper Edgewood)	Combined Alt. #2 & 5. Underground storage along Snyder spread across 4 basins.
Snyder + Stadium Storage	Modified Alt. #10. Underground storage along Snyder and W. Stadium Two phases of construction.



- Streets will be reconstructed
- Driveways temporarily inaccessible
- Private utility relocation
- Water shut off up to 8 hrs. for water main relocation
- On street parking will be prohibited
- Sidewalks temporarily inaccessible
- Street trees will likely be affected

City of Ann Arbor Snyder/Edgewood Avenues Stormwater Improvement Project



Public Meeting #3 Summary
 May 1, 2019 – 7:00 pm to 9:00 pm

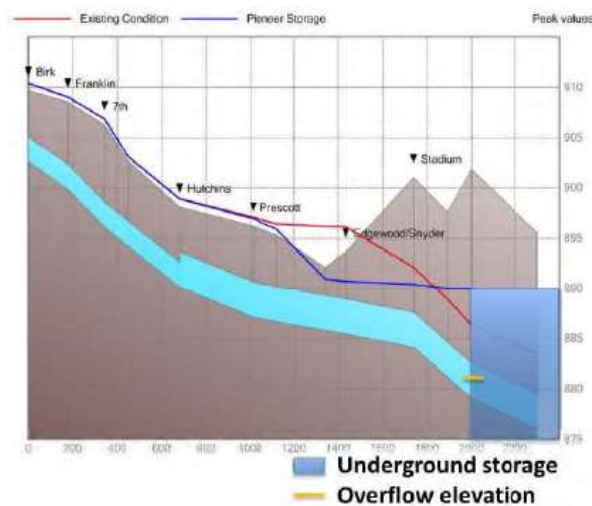
Pioneer Basin Alternative

- Previously Alternative #8
- Improved conveyance out of Edgewood-Snyder
- 122,000 CF of storage located under soccer field, west of existing stormwater infiltration basin



Pioneer Basin Alternative Profile View:

- Overland flow down Snyder Ave (west of Edgewood) is not addressed by storage south of Stadium
- Ponding is addressed for 10 year storm at Edgewood



City of Ann Arbor Snyder/Edgewood Avenues Stormwater Improvement Project

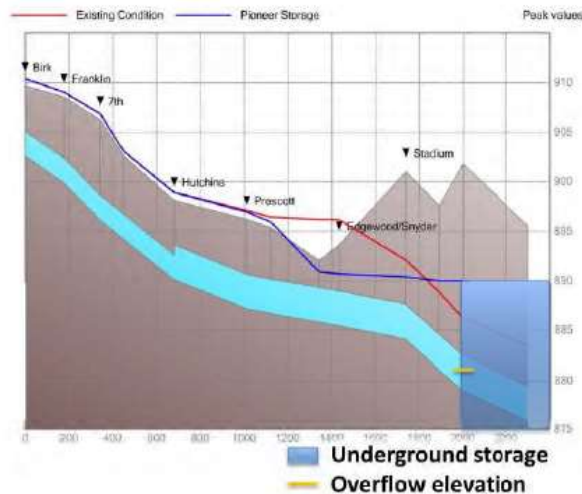


Public Meeting #3 Summary
May 1, 2019 – 7:00 pm to 9:00 pm

Pioneer Basin Alternative Impacts:

Snyder/Edgewood from intersection to Stadium (2-3 months)

- 13 parcels within construction limits.
- Edgewood closed from Stadium through Snyder intersection. Snyder closed from west of Edgewood through the same intersection.
- Large/deep sanitary and storm sewer construction.



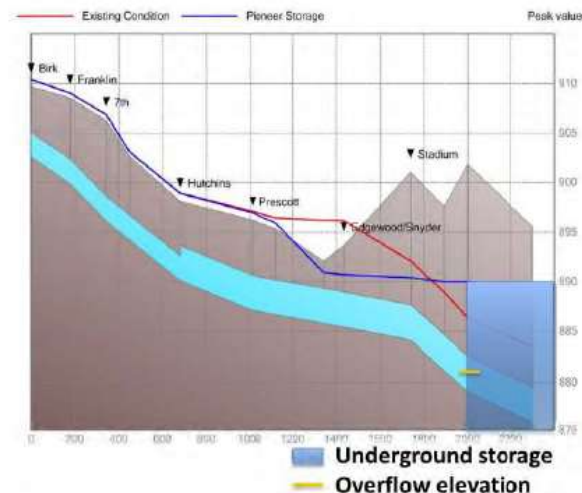
Pioneer Basin Alternative Impacts:

Stadium Blvd (0.5-1 month)

- Large storm sewer construction.
- Reduced lanes.

Pioneer High School (3-4 months)

- Driveway closed during construction within it.
- Most of the work will be in grass areas and won't impact the Pioneer HS traffic. Some parking spaces in teacher's lot may be closed.
- Timing related to High School operations and Football parking will need to be studied further.



City of Ann Arbor Snyder/Edgewood Avenues Stormwater Improvement Project



Public Meeting #3 Summary
 May 1, 2019 – 7:00 pm to 9:00 pm

Snyder ROW Storage (Deeper Birk) Alternative

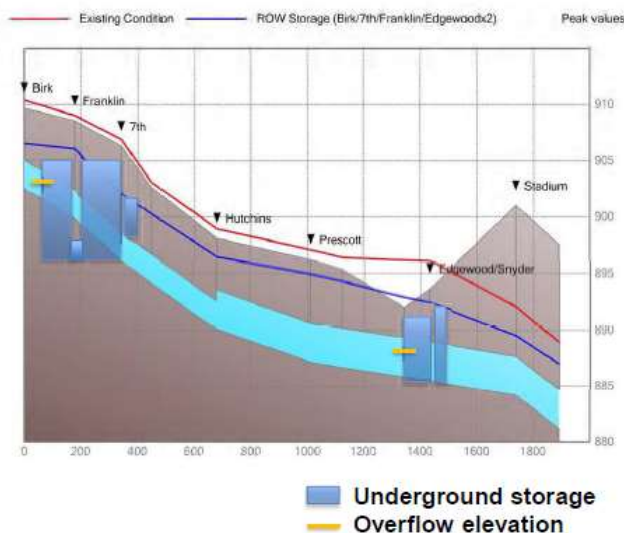
- Modified Alternative #5
- Expanded storage at Franklin-Snyder with utility relocation and deeper basin while accommodating large trees
- Edgewood-Snyder storage with gas line relocation



Snyder ROW Storage (Deeper Birk) Profile View:

- <0.5 ft ponding at Edgewood-Snyder Intersection
- No overland flow

Intersection	Basin Vol (CF)
Birk	59,500
7 th	42,600
Franklin	14,000
Edgewood	13,300
Edgewood E	30,200
Total	159,600



City of Ann Arbor Snyder/Edgewood Avenues Stormwater Improvement Project

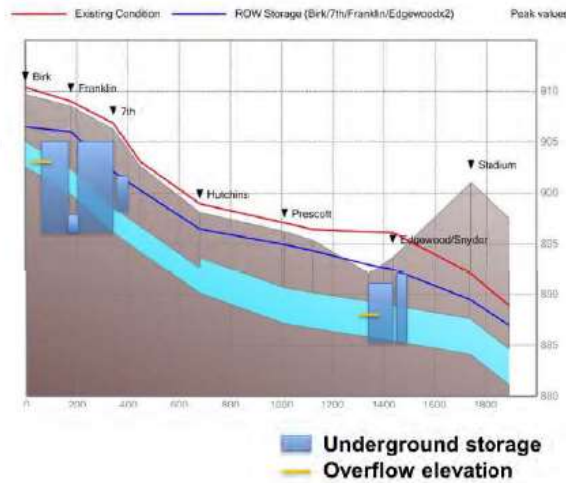


Public Meeting #3 Summary May 1, 2019 – 7:00 pm to 9:00 pm

Snyder ROW Storage (Deeper Birk) Impacts:

Franklin/Snyder from Birk to 7th (3 months)

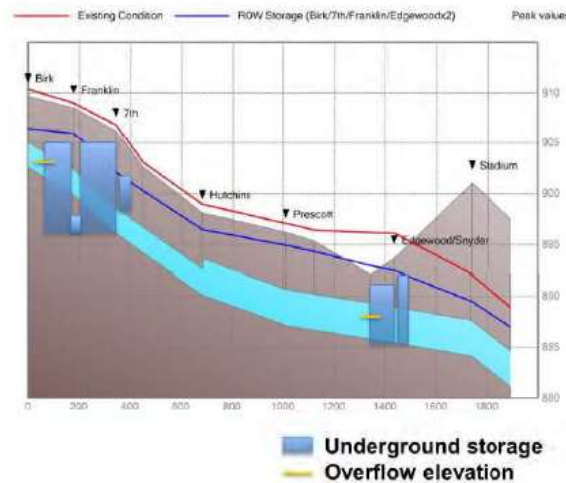
- 15 parcels within construction limits.
- Franklin closed from Birk to 7th. Snyder closed from Birk to 7th.
- Maintaining access to properties will be challenging, must be studied in more detail.
- Deep basin construction.
- Deep sanitary sewer construction.



Snyder ROW Storage (Deeper Birk) Impacts:

Snyder/Edgewood Intersection (2 months)

- 7 parcels within construction limits.
- Edgewood closed at the Snyder intersection. Snyder closed from west of Edgewood through the same intersection to east of the Church.
- Deep basin construction.
- Deep sanitary sewer construction.



City of Ann Arbor Snyder/Edgewood Avenues Stormwater Improvement Project



Public Meeting #3 Summary

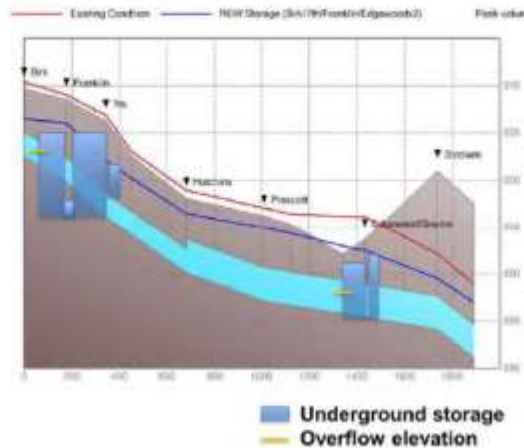
May 1, 2019 – 7:00 pm to 9:00 pm

Snyder ROW Storage (Deeper Birk) Impacts:

Franklin from 7th to Hutchins

(2-3 months)

- 11 parcels within construction limits.
- Franklin closed from 7th through the Hutchins intersection.
- Deep basin construction.



Snyder ROW Storage (Deeper Edgewood) Alternative

- Combined Alternatives #2 & #5
- Underground storage along Snyder Avenue
- 156,900 CF of storage spread across 4 basins
 - deeper Edgewood-Snyder basins provide additional volume and have dedicated 12" discharge pipes



City of Ann Arbor Snyder/Edgewood Avenues Stormwater Improvement Project

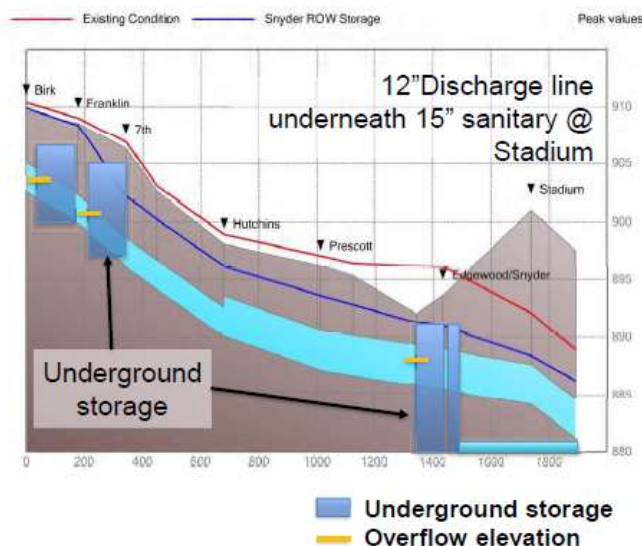


Public Meeting #3 Summary
 May 1, 2019 – 7:00 pm to 9:00 pm

Snyder ROW Storage (Deeper Edgewood) Profile View :

- Peak water level kept below Snyder Avenue with 1 foot freeboard

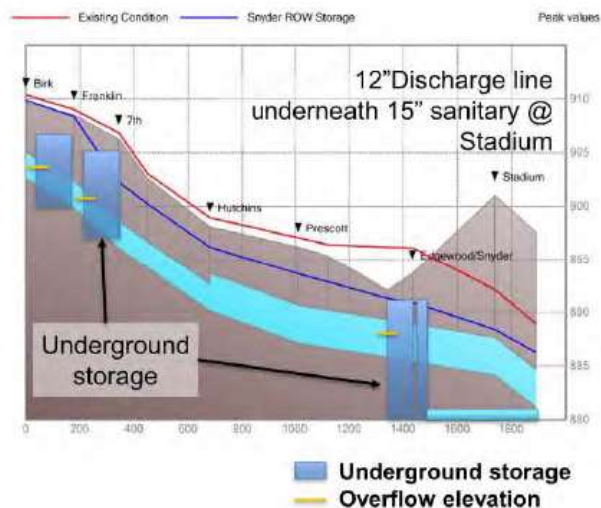
Intersection	Basin Vol (CF)
Birk	53,300
7th	42,700
Edgewood	27,900
Edgewood E	33,000
Total	156,900



Snyder ROW Storage (Deeper Edgewood) Construction Impacts:

Franklin/Snyder from Birk to 7th (3 months)

- 15 parcels within construction limits.
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- Deep basin construction.
- Deep sanitary sewer construction.



City of Ann Arbor Snyder/Edgewood Avenues Stormwater Improvement Project

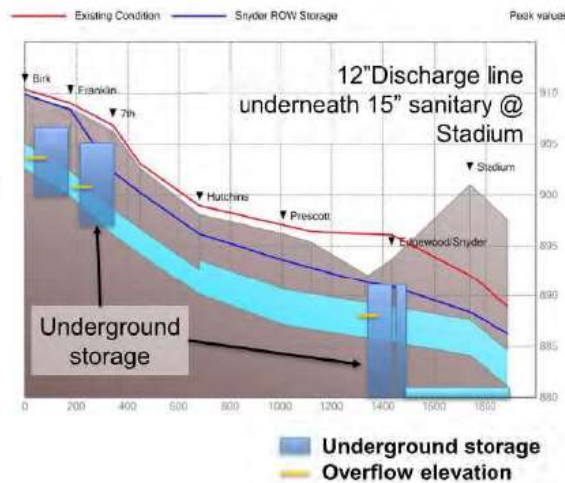


Public Meeting #3 Summary May 1, 2019 – 7:00 pm to 9:00 pm

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- Deep sanitary sewer construction.
- Deep basin construction.



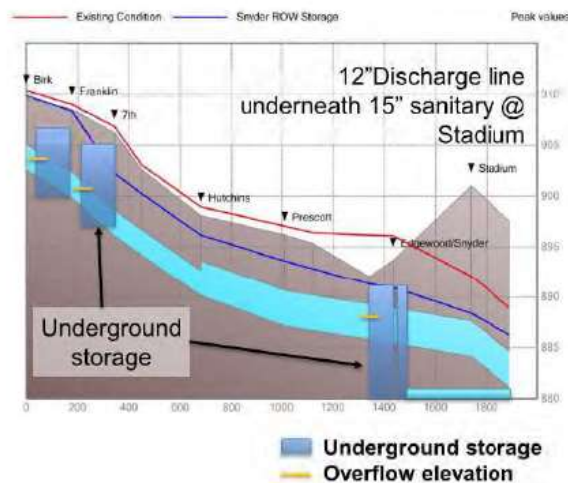
Snyder ROW Storage (Deeper Edgewood) Impacts:

Stadium Blvd (0.5-1 month)

- Sewer boring under Stadium – no impacts to traffic.
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Public Meeting #3 Summary
May 1, 2019 – 7:00 pm to 9:00 pm

Snyder + Stadium Storage Alternative

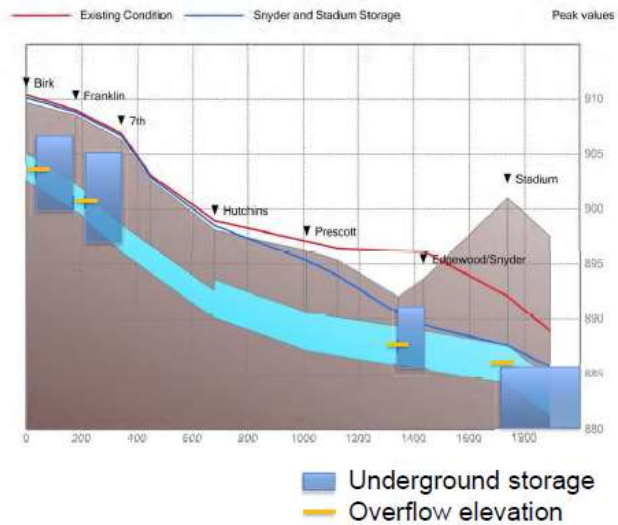
- Modified Alternative #10
- Underground storage along Snyder Avenue and W. Stadium Blvd
- 111,300 CF of storage spread across 4 basins



Snyder + Stadium Storage Alternative Profile View:

- Peak water level at Edgewood-Snyder 1 foot below ground

Intersection	Basin Vol (CF)
Birk	33,600
7 th	27,600
Edgewood	13,300
Stadium	36,800
Total	111,300



City of Ann Arbor Snyder/Edgewood Avenues Stormwater Improvement Project



Public Meeting #3 Summary
May 1, 2019 – 7:00 pm to 9:00 pm

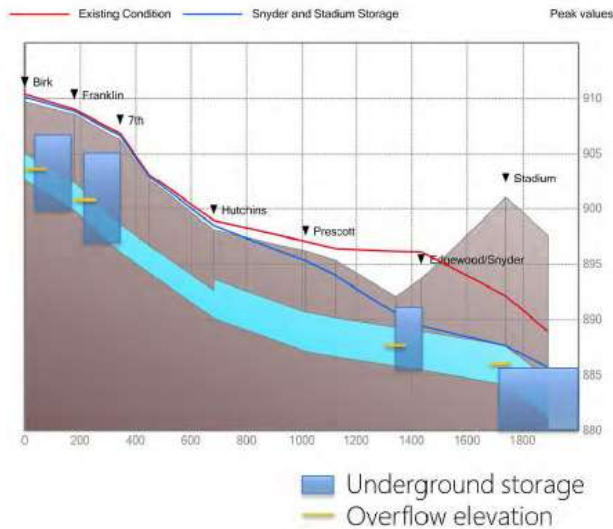
Snyder + Stadium Storage Alternative Non-Construction Impacts:

Phase 1: Franklin/Snyder and Snyder/Edgewood basins and sewers.

- Phase 1 reduces flooding in Snyder/Edgewood, but not to 10-year storm level.

Phase 2: Stadium and Pioneer High School storm sewers.

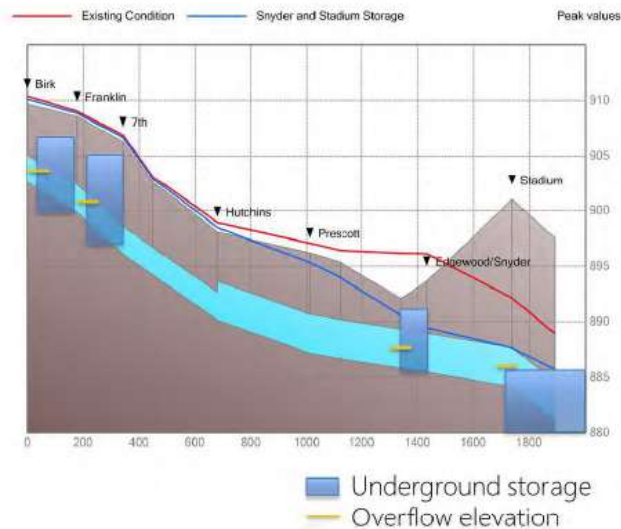
- Phase 2 will be constructed during the W. Stadium Blvd. reconstruction.
- W. Stadium Blvd. reconstruction is not currently funded or scheduled.



Snyder + Stadium Storage Alternative Construction Impacts:

Franklin/Snyder from Birk to 7th (3 months)

- 15 parcels within construction limits.
- Deep basin construction.
- Deep sanitary sewer construction.



City of Ann Arbor Snyder/Edgewood Avenues Stormwater Improvement Project

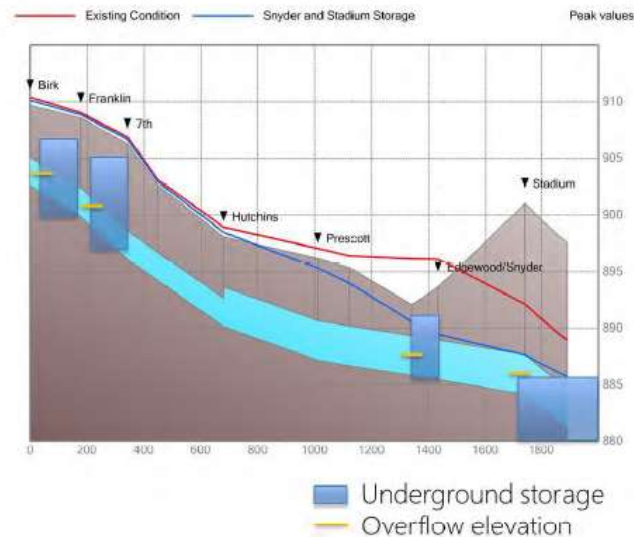


Public Meeting #3 Summary
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Snyder + Stadium Storage Alternative Impacts:

Snyder/Edgewood from Intersection to Stadium (3 months)

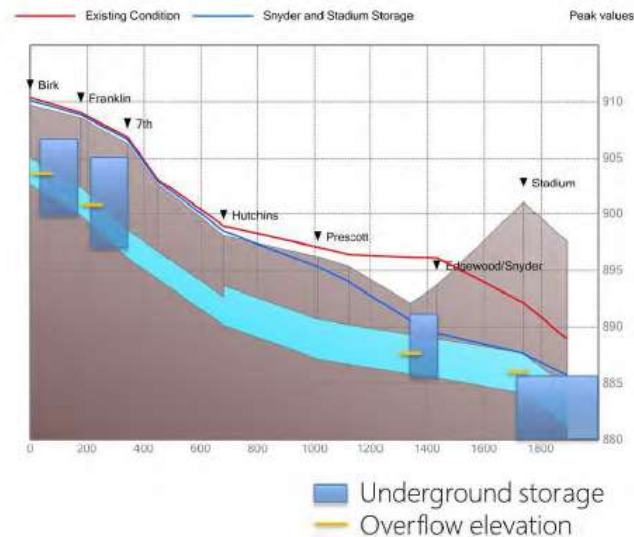
- 13 parcels within construction limits.
- Edgewood closed from Stadium through the Snyder intersection. Snyder closed from west of Edgewood through the same intersection.
- Large/deep storm sewer construction.
- Deep sanitary sewer construction.
- Deep basin construction.



Snyder + Stadium Storage Alternative Construction Impacts:

W. Stadium Blvd and Pioneer High School (constructed during W. Stadium Reconstruction)

- Deep, sewer reconstruction.
- Constructed during W. Stadium Blvd. reconstruction – lane closures and potential detours.



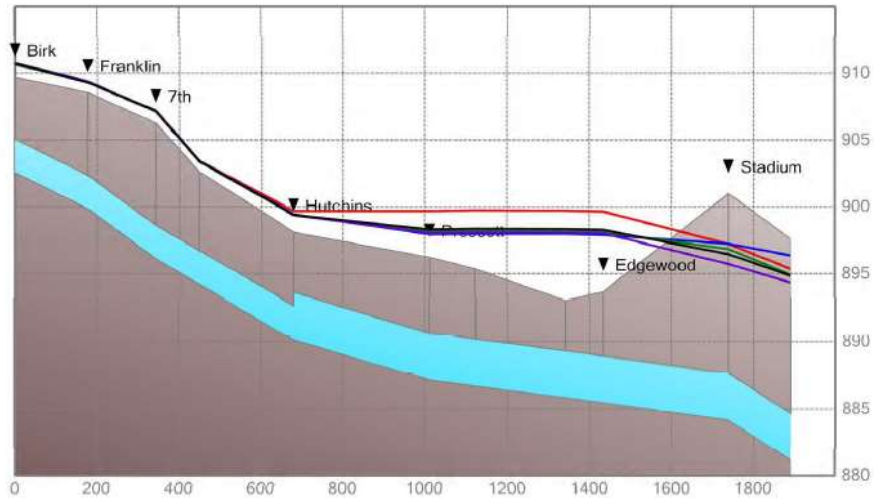
City of Ann Arbor Snyder/Edgewood Avenues Stormwater Improvement Project



Public Meeting #3 Summary
May 1, 2019 – 7:00 pm to 9:00 pm

Profile View (100-Year Storm)

— Existing
 — Pioneer Storage
 — Snyder ROW Storage (Deeper Birk) Peak values
— Snyder ROW Storage (Deeper Edgewood Option)
 — Snyder and Stadium



Alternative	Description	Cost Projection	Flooding Addressed Yes / No	Construction Timing
Pioneer Basin	Improved conveyance out of Edgewood-Snyder	\$ 2.9M	YES	Edgewood – 2-3 months Stadium – 0.5-1 months Pioneer – 3-4 months
Snyder ROW Storage - Deeper BIRK	Expanded storage at Franklin-Snyder with utility relocation and deeper basin	\$ 4.85M	NO	Franklin/Snyder – Birk to 7 th – 3 months Snyder/Edgewood – 2 months Franklin – 7 th to Hutchins – 2-3 months
Snyder ROW Storage – Deeper EDGEWOOD	Underground storage along Snyder Avenue; deeper storage spread across 4 basins	\$ 4.5M	YES	Franklin/Snyder – Birk to 7 th – 3 months Snyder/Edgewood Intersection to Stadium – 2-3 months Stadium – 0.5-1 months Pioneer High School – 1-1.5 months
Snyder + Stadium Storage	Underground storage along Snyder Ave. and W. Stadium Blvd.	\$ 5.3M	PH. 1 – NO PH. 2 - YES	Construction in 2 Phases Franklin/Snyder – Birk to 7 th – 3 months Snyder/Edgewood Intersection to Stadium – 3 months Stadium Blvd and Pioneer HS occur during W. Stadium reconstruction.



Questions and Discussion



Polling Alternatives

- Participants will use a polling device to cast a “yes” or “no”, choice for each alternative
- Participants will choose viability criteria for each alternative
- Polling is anonymous
- Compiled results will be shown after polling is completed
- Please wait until instructed to use polling device!



City of Ann Arbor Snyder/Edgewood Avenues Stormwater Improvement Project



Public Meeting #3 Summary
 May 1, 2019 – 7:00 pm to 9:00 pm

Polling Alternatives

1. Do you support this alternative to resolve the stormwater issues?

A – Yes

B – No

2. Choose any of the following to explain why you believe this a preferred alternative (Select all that apply):

A – Cost effectiveness

B – Level of impact to area

C – Time to resolution

D – Amount of stormwater captured

E – Other (please note on handout)

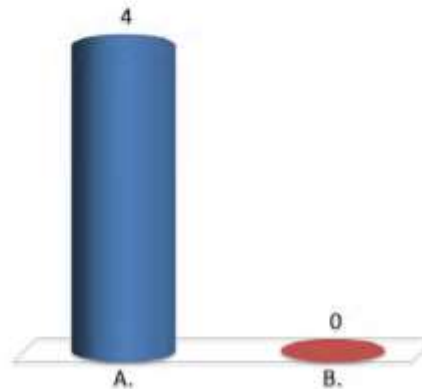


Pioneer Basin Alternative - Do you support this alternative to resolve the stormwater issues?

Alternative	Description	Cost Projection	Flooding Addressed Yes / No	Construction Timing
Pioneer Basin	Improved conveyance out of Edgewood-Snyder	\$ 2.9M	YES	Edgewood – 2-3 months Stadium – 0.5-1 months Pioneer – 3-4 months

A. Yes

B. No



City of Ann Arbor Snyder/Edgewood Avenues Stormwater Improvement Project

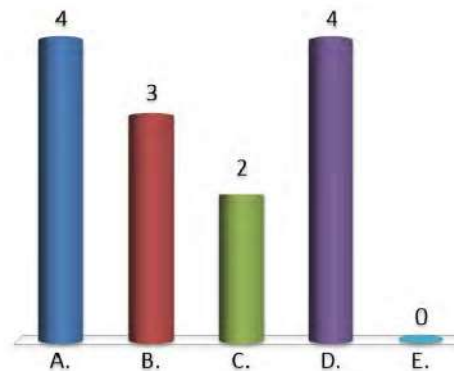


Public Meeting #3 Summary May 1, 2019 – 7:00 pm to 9:00 pm

Pioneer Basin Alternative - Choose any of the following to explain why you believe this is a preferred alternative? (Select all that apply)

Alternative	Description	Cost Projection	Flooding Addressed Yes / No	Construction Timing
Pioneer Basin	Improved conveyance out of Edgewood-Snyder	\$ 2.9M	YES	Edgewood – 2-3 months Stadium – 0.5-1 months Pioneer – 3-4 months

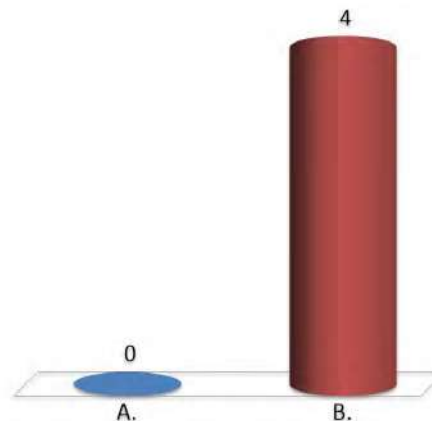
- A. Cost effectiveness
- B. Level of impact to area
- C. Time to resolution
- D. Amount of stormwater captured
- E. Other (please note on handout)



Snyder ROW Storage (Deeper BIRK) Alternative - Do you support this alternative to resolve the stormwater issues?

Alternative	Description	Cost Projection	Flooding Addressed Yes / No	Construction Timing
Snyder ROW Storage - Deeper BIRK	Expanded storage at Franklin-Snyder with utility relocation and deeper basin	\$ 4.85M	NO	Franklin/Snyder – Birk to 7 th – 3 months Snyder/Edgewood – 2 months Franklin – 7 th to Hutchins – 2-3 months

- A. Yes
- B. No



City of Ann Arbor Snyder/Edgewood Avenues Stormwater Improvement Project

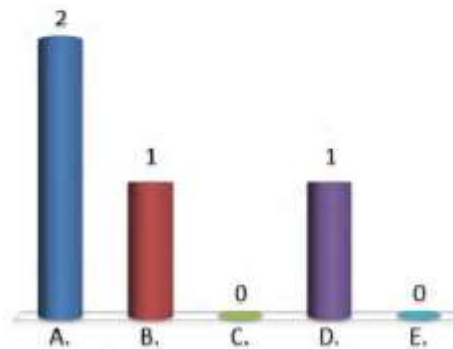


Public Meeting #3 Summary
 May 1, 2019 – 7:00 pm to 9:00 pm

Snyder ROW Storage (Deeper BIRK) Alternative – Choose any of the following to explain why you believe this is a preferred alternative (Select all that apply)

Alternative	Description	Cost Projection	Flooding Addressed Yes / No	Construction Timing
Snyder ROW Storage - Deeper BIRK	Expanded storage at Franklin-Snyder with utility relocation and deeper basin	\$ 4.85M	NO	Franklin/Snyder – Birk to 7 th – 3 months Snyder/Edgewood – 2 months Franklin – 7 th to Hutchins – 2-3 months

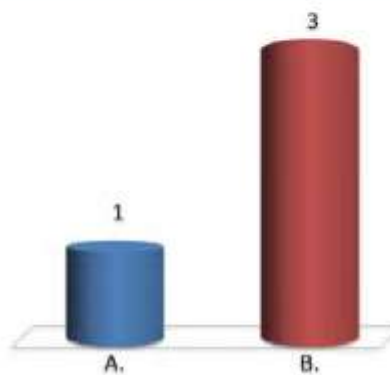
- A. Cost effectiveness
- B. Level of impact to area
- C. Time to resolution
- D. Amount of stormwater captured
- E. Other (please note on handout)



Snyder ROW Storage (Deeper EDGEWOOD) Alternative – Do you support this alternative to resolve the stormwater issues?

Alternative	Description	Cost Projection	Flooding Addressed?	Construction Timing
Snyder ROW Storage – Deeper EDGEWOOD	Underground storage along Snyder Avenue; deeper storage spread across 4 basins	\$ 4.5M	YES	Franklin/Snyder – Birk to 7 th – 3 months Snyder/Edgewood Intersection to Stadium – 2-3 months Stadium – 0.5-1 months Pioneer High School – 1-1.5 months

- A. Yes
- B. No



City of Ann Arbor Snyder/Edgewood Avenues Stormwater Improvement Project

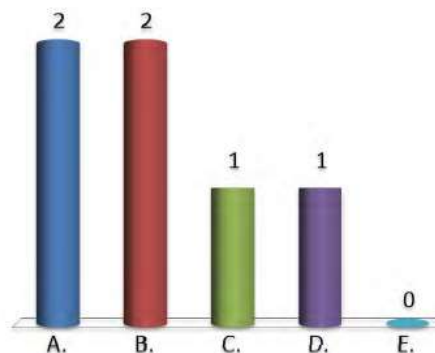


Public Meeting #3 Summary
 May 1, 2019 – 7:00 pm to 9:00 pm

Snyder ROW Storage (Deeper EDGEWOOD) Alternative –
 Choose any of the following to explain why you believe this is a preferred alternative? (Select all that apply)

Alternative	Description	Cost Projection	Flooding Addressed?	Construction Timing
Snyder ROW Storage – Deeper EDGEWOOD	Underground storage along Snyder Avenue; deeper storage spread across 4 basins	\$ 4.5M	YES	Franklin/Snyder – Birk to 7 th – 3 months Snyder/Edgewood Intersection to Stadium – 2-3 months Stadium – 0.5-1 months Pioneer High School – 1-1.5 months

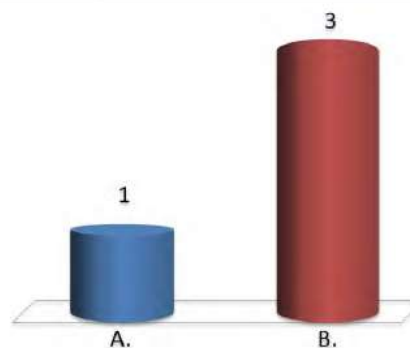
- A. Cost effectiveness
- B. Level of impact to area
- C. Time to resolution
- D. Amount of stormwater captured
- E. Other (please note on handout)



Snyder + Stadium Storage Alternative – Do you support this alternative to resolve the stormwater issues?

Alternative	Description	Cost Projection	Flooding Addressed Yes / No	Construction Timing
Snyder + Stadium Storage	Underground storage along Snyder Ave. and W. Stadium Blvd.	\$ 5.3M	PH. 1 – NO PH. 2 - YES	Construction in 2 Phases Franklin/Snyder – Birk to 7 th – 3 months Snyder/Edgewood Intersection to Stadium – 3 months Stadium Blvd and Pioneer HS occur during W. Stadium reconstruction.

- A. Yes
- B. No



City of Ann Arbor Snyder/Edgewood Avenues Stormwater Improvement Project

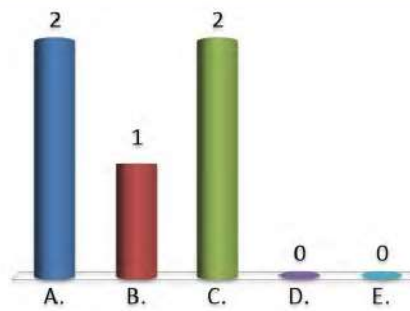


Public Meeting #3 Summary May 1, 2019 – 7:00 pm to 9:00 pm

Snyder + Stadium Storage Alternative – Choose any of the following to explain why you believe this is a preferred alternative? (Select all that apply)

Alternative	Description	Cost Projection	Flooding Addressed Yes / No	Construction Timing
Snyder + Stadium Storage	Underground storage along Snyder Ave. and W. Stadium Blvd.	\$ 5.3M	PH. 1 – NO PH. 2 - YES	Construction in 2 Phases Franklin/Snyder – Birk to 7 th – 3 months Snyder/Edgewood Intersection to Stadium – 3 months Stadium Blvd and Pioneer HS occur during W. Stadium reconstruction.

- A. Cost effectiveness
- B. Level of impact to area
- C. Time to resolution
- D. Amount of stormwater captured
- E. Other (please note on handout)



Next Steps

- Late May 2019
 - Select Preferred Alternative
- Early June 2019
 - Basis of Design Report
- Late June 2019
 - 30% Design Model Analysis
 - Public Meeting #4 (anticipated)
- July 2019
 - 30% Plan Submittal
- August 2019
 - Finalize 30% Plan



**City of Ann Arbor Snyder/Edgewood Avenues Stormwater
Improvement Project**

Public Meeting #3 Summary

May 1, 2019 – 7:00 pm to 9:00 pm



Thank you for participating!

- A summary of the meeting will be shared with all participants.
- Updates will be provided on the project web page - a2gov.org/sesip.

