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CITY OF ROLLINGWOOD

Infrastructure Improvements Plan

City Council| July 20, 2022

ROLLINGWOOD TEXAS

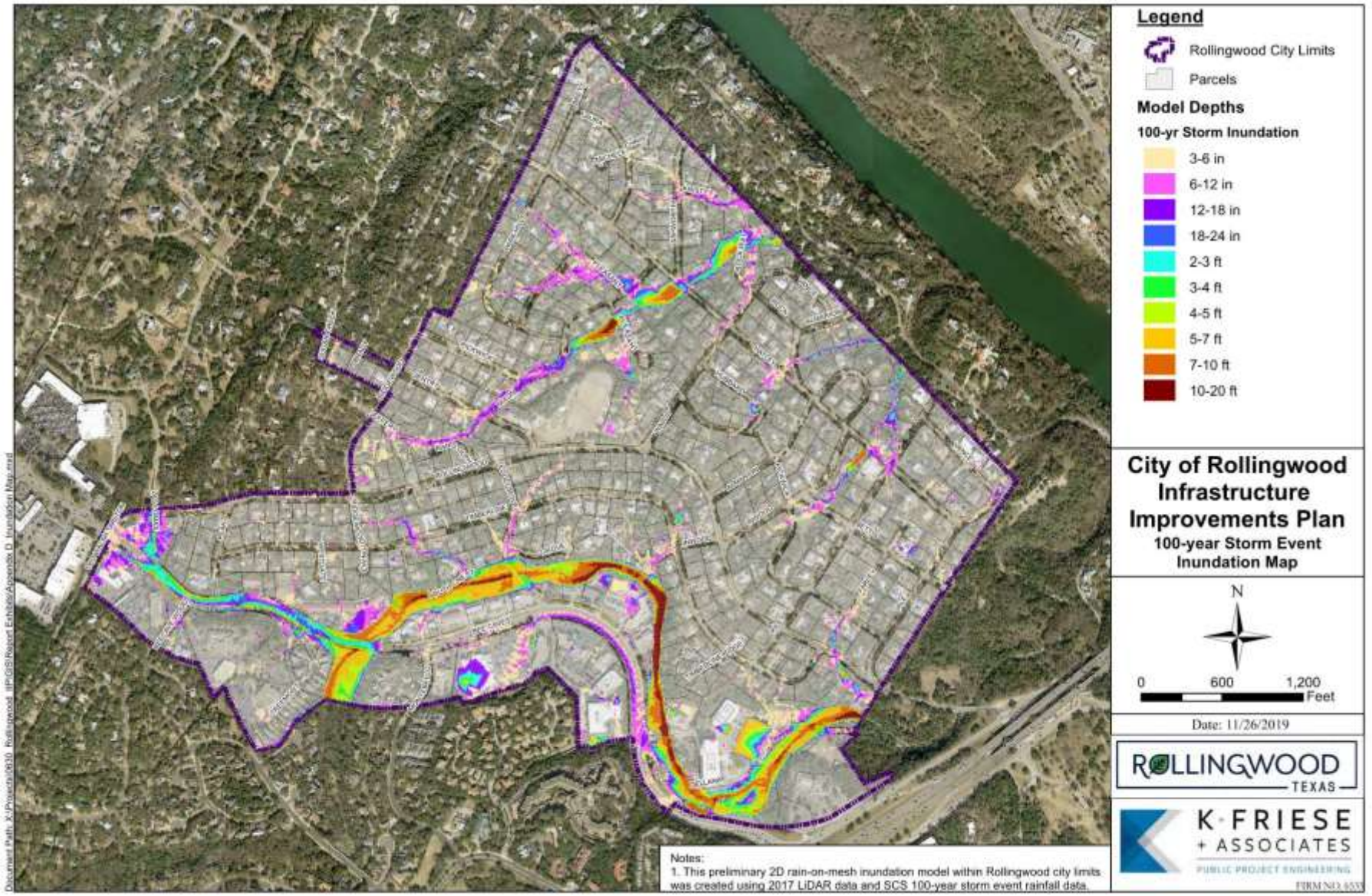
BACKGROUND 1

PROJECTS 2

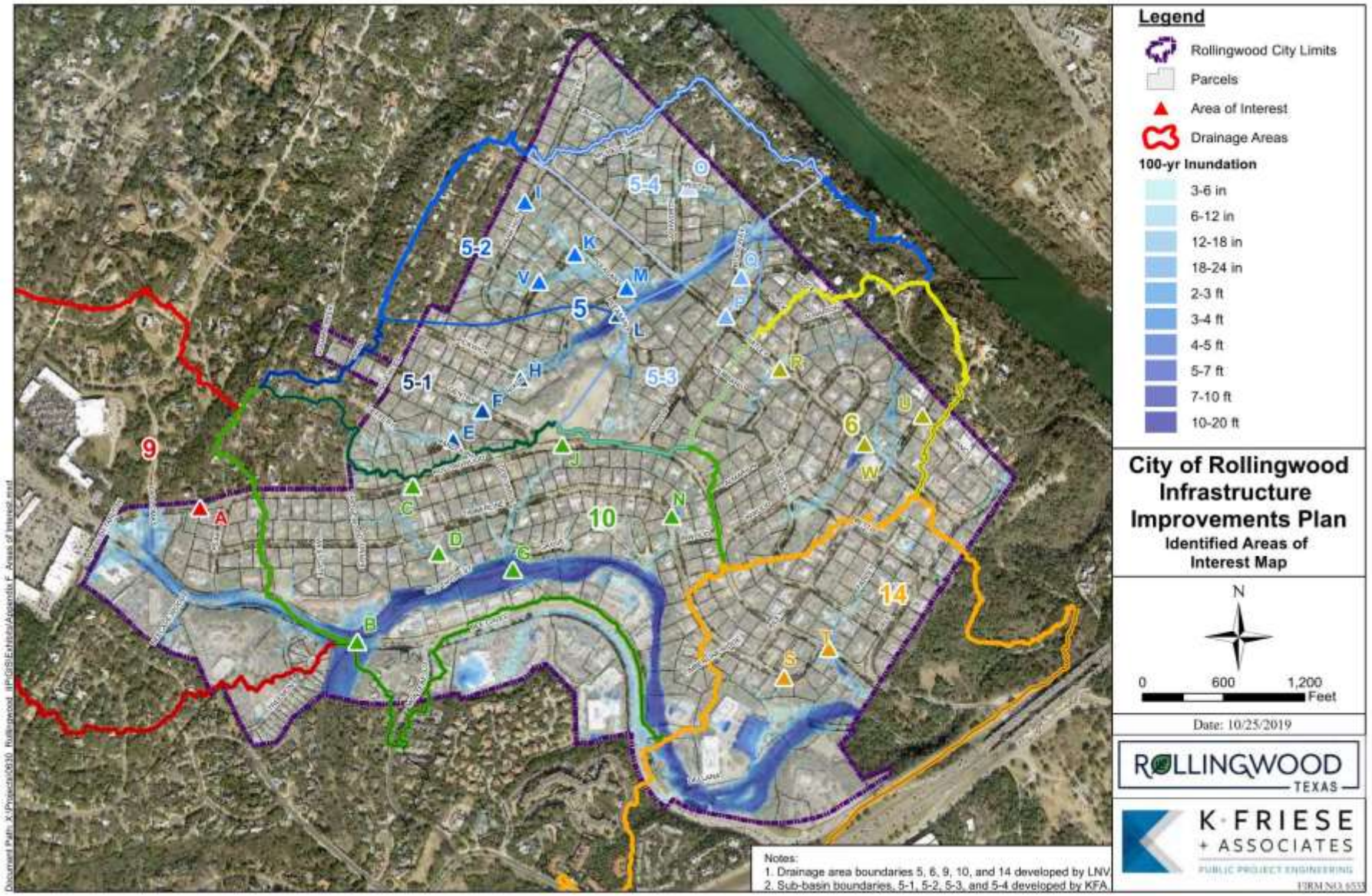
NEXT STEPS 3

CITY OF ROLLINGWOOD
Infrastructure Improvements Plan

Background


Legend
Rollingwood City Limits
Parcels
Model Depths
100-yr Storm Inundation
3-6 in
6-12 in
12-18 in
18-24 in
2-3 ft
3-4 ft
4-5 ft
5-7 ft
7-10 ft
10-20 ft
City of Rollingwood
Infrastructure
Improvements Plan
100-year Storm Event
Inundation Map
N
0
600
1,200
Feet
Date: 11/26/2019
ROLLINGWOOD
TEXAS
K·FRIESE
+ ASSOCIATES
PUBLIC PROJECT ENGINEERING
Notes:
1. This preliminary 2D rain-on-mesh inundation model within Rollingwood city limits was created using 2017 LiDAR data and SCS 100-year storm event rainfall data.

Areas of Interest



Project Summary Sheet

CITY OF ROLLINGWOOD
INFRASTRUCTURE IMPROVEMENTS PLAN
COST SUMMARY

ROLLINGWOOD TEXAS

Project ID: L
Project Name: Pleasant Cove Drainage Improvements
Drainage Basin: 5

Problem Description

Roadway flooding. Existing 60" RCP cross culvert at Pleasant Cove.

Proposed Improvements

Install new roadside channel upstream, approximately 400 feet in length. The channel grading will be to an approximate channel of 20 feet wide, 2 feet deep with a 4 ft bottom width, and 4:1 side slopes. Approximately 1 driveway reconstruction with a crossing culvert of 24" RCP of an estimated 24 feet. Raise the roadway profile, an estimated 175 feet.

CIP Ranking

7 out of 23

Project Costs

Engineering & Survey:	$ 67,000
Construction:	$ 368,000
Other:	$ 55,000
ROW/Easements:	UNK
Total:	**$ 490,000**
Conceptual Cost Range:	$250k - $500k
Estimated Construction Duration:	9 Months

Possible Impacts

It is possible that the velocities and peak flow in Town Lake tributary will increase downstream of the project due to these improvements. Further analysis to document impacts is necessary.

Assumptions

- It is assumed drainage easements and ROW can and will be obtained as necessary.
- It is assumed the proposed culverts will have sufficient capacity for the design storm event.
- During detailed project design, the design storm and tailwater will need additional consideration.

Project Map & Photo

Proposed road improvements in orange, channel improvements in yellow. Existing culverts in black. Existing 100-yr inundation shown.

Pleasant Cove culvert crossing, upstream. 09/11/2019

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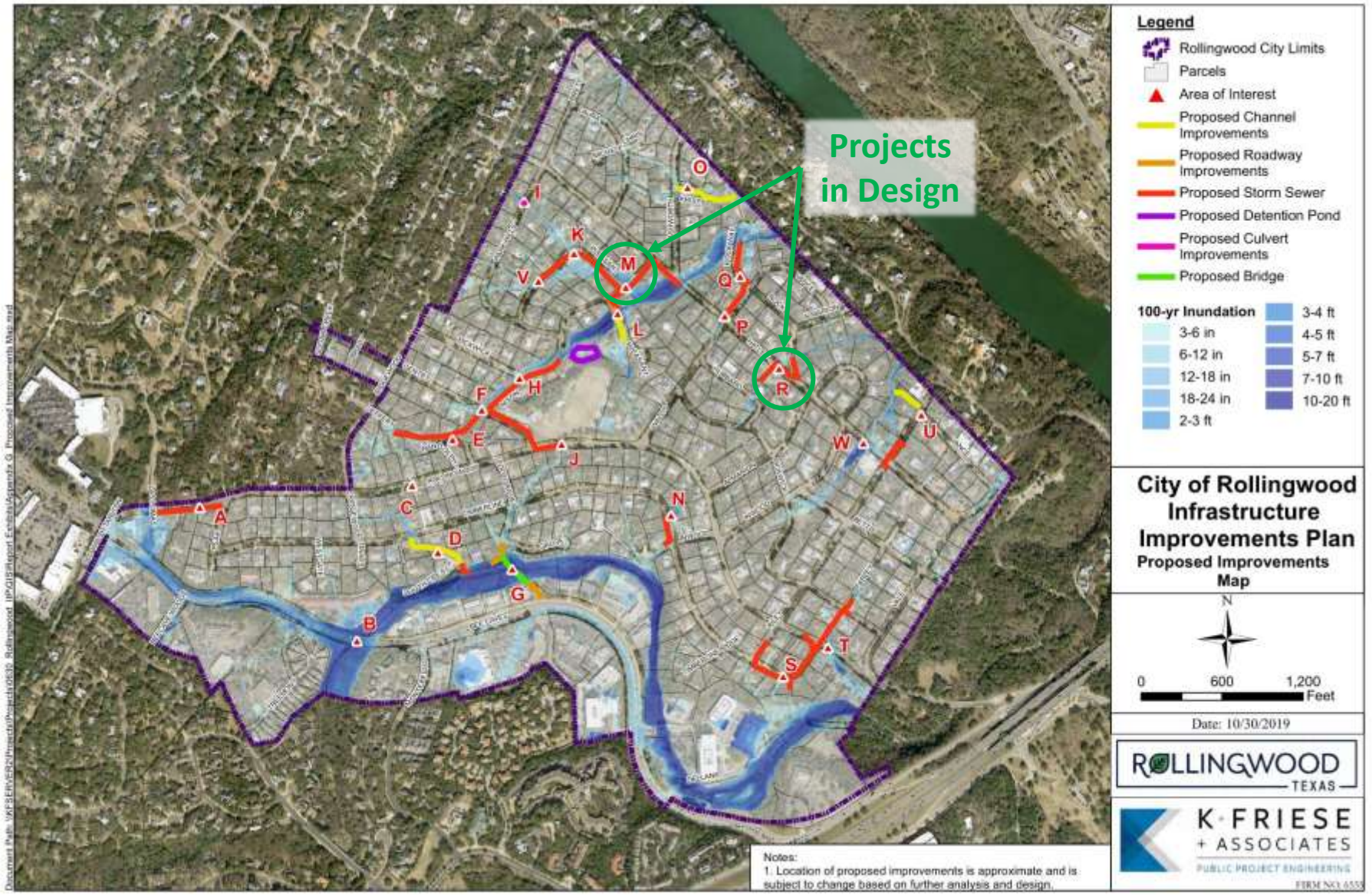
Project Ranking

Table 1: Project Ranking and Cost Summary

Project ID	Project Name	Cost	Rank*
B	Bee Caves Road Drainage Improvements	UNK	1
G	Edgegrove Drainage Improvements	$ 2,631,000	2
M	Nixon/Pleasant Roadway Drainage Improvements	$ 5,283,000	3
K	Pleasant Drive Drainage Improvements	included in M	4
D	Timberline-South Crest Drainage Improvements	$ 558,000	5
W	Hatley Drive Drainage Improvements	$ 654,000	6
L	Pleasant Cove Drainage Improvements	$ 490,000	7
H	City Hall Property Drainage Improvements	$ 475,000	8
J	Underground Infiltration Basin Drainage Improvements	$ 883,000	9
T	East Rollingwood Drive Drainage Improvements	$ 2,122,000	10
N	Timberline Drive Drainage Improvements	$ 380,000	11
Q	Rock Way Cove Drainage Improvements	$ 816,000	12
S	East Timberline Drive Drainage Improvements	included in T	13
R	Hatley Drive Drainage Improvements	$ 400,000	14
F	Nixon/Gentry Drainage Improvements	$ 2,024,000	15
V	Pleasant Drive Drainage Improvements	included in M	16
O	Kristy Drive Drainage Improvments	$ 217,000	17
E	Randolph Place Drainage Improvements	included in F	18
I	Park Hills Drainage Improvements	$ 238,000	19
A	Rollingwood Drive West Drainage Improvements	$ 589,000	20
P	Wallis and Hatley Drainage Improvements	included in Q	21
U	Riley Rd and Vance Ln Drainage Improvements	$ 141,000	22
C	Rollingwood Drive South Drainage Improvements	UNK	23
	SUM	**$ 17,901,000**	

* Rank is based on velocities and flooding depths at structures from the inundation model.

Progress to Date



Next Steps

- City to Identify Projects
- KFA to Review Project Readiness
  - Review Design Solution Concept
  - Project Assumptions
  - Project Costs

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CITY OF ROLLINGWOOD

Infrastructure Improvements Plan

City Council| July 20, 2022

ROLLINGWOOD TEXAS

Project ID A

CITY OF ROLLINGWOOD
INFRASTRUCTURE IMPROVEMENTS PLAN
COST SUMMARY

ROLLINGWOOD TEXAS

Project ID: A
Project Name: Rollingwood Drive West Drainage Improvements
Drainage Basin: 9

Problem Description

Property flooding between Las Lomas Dr and S. Peak Rd on Rollingwood Dr.

Proposed Improvements

Install 24" RCP underground storm sewer system of approximately 500 feet in length with approximately 5 inlets, 5 driveway reconstructions, and curb construction along entire length. Connect to Eanes Creek tributary crossing at Las Lomas Drive.

CIP Ranking

20 out of 23

Project Costs

Engineering & Survey:	$ 86,000
Construction:	$ 472,000
Other:	$ 31,000
ROW/Easements:	UNK
Total:	**$ 589,000**
Conceptual Cost Range:	$500k - $750k
Estimated Construction Duration:	6 Months

Possible Impacts

It is possible that the velocities and peak flow in Eanes Creek will increase downstream of the project due to these improvements. Further analysis to document impacts is necessary. The downstream system will need to be surveyed and analyzed for potential impacts.

Assumptions

- It is assumed drainage easements and ROW can and will be obtained as necessary.
- It is assumed the proposed culverts will have sufficient capacity for the design storm event.
- During detailed project design, the design storm and tailwater will need additional consideration.

Project Map & Photo

Proposed storm sewer in red. Existing culverts in black. Existing 100-yr inundation shown.

Rollingwood Drive looking northwest.

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Project ID B

CITY OF ROLLINGWOOD
INFRASTRUCTURE IMPROVEMENTS PLAN
COST SUMMARY

ROLLINGWOOD TEXAS

Project ID: B
Project Name: Bee Caves Road Drainage Improvements
Drainage Basin: 10

Problem Description

Roadway flooding at Bee Caves Road. Existing 2-42" CMPs.

Proposed Improvements

Further discussion is needed to determine the desired outcome of a project along Bee Caves Road. Potential project complications include but are not limited to: TxDOT coordination, raising the roadway profile, multiple sources of flooding (Eanes Creek and the Tributary that runs along Bee Caves), the length of flooding along Bee Caves and potential utility conflicts. Due to the number of unknowns, a cost estimate was not generated but it is expected to be within the tens of millions of dollars. The cost incurred by the City would be subject to negotiations with TxDOT and is unknown.

CIP Ranking

1 out of 23

Project Costs

Engineering & Survey:	$	-
Construction:	$	-
Other:	$	-
ROW/Easements:		UNK
Total:		**UNK**
Conceptual Cost Range:		N/A
Estimated Construction Duration:		N/A

Possible Impacts

N/A

Assumptions

N/A

Project Map & Photo

Bee Caves Road, existing culverts in black.
Existing 100-yr inundation shown.

Bee Caves Road, downstream. 9/11/2019

Project ID C

CITY OF ROLLINGWOOD
INFRASTRUCTURE IMPROVEMENTS PLAN
COST SUMMARY

ROLLINGWOOD TEXAS

Project ID: C
Project Name: Rollingwood Drive South Drainage Improvements
Drainage Basin: 10

Problem Description

Property flooding along Rollingwood Drive.

Proposed Improvements

This AOI was studied using modeling and field observations, and existing infrastructure appears sufficient for this location. A CIP project is not recommended at this AOI at this time.

CIP Ranking

23 out of **23**

Project Costs

Engineering & Survey:	$	-
Construction:	$	-
Other:	$	-
ROW/Easements:		UNK
Total:		**UNK**
Conceptual Cost Range:		N/A
Estimated Construction Duration:		N/A

Possible Impacts

N/A

Assumptions

N/A

Project Map & Photo

Rollingwood Drive.
Existing 100-yr inundation shown.

Rollingwood Drive, looking east. 09/11/2019

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Project ID D

CITY OF ROLLINGWOOD
INFRASTRUCTURE IMPROVEMENTS PLAN
COST SUMMARY

ROLLINGWOOD TEXAS

Project ID: D
Project Name: Timberline-South Crest Drainage Improvements
Drainage Basin: 10

Problem Description

Property flooding between Timberline Drive and South Crest Drive. Roadway flooding on Timberline Drive.

Proposed Improvements

Regrade and improve the channel between 4907 and 4905 South Crest Drive to 4908 Timberline Drive, approximately 475 feet. At the end of the channel, build a drop inlet leading to approximately 140 feet of 48" underground storm sewer.

CIP Ranking

5 out of **23**

Project Costs

Engineering & Survey:	$ 80,000
Construction:	$ 438,000
Other:	$ 40,000
ROW/Easements:	UNK
Total:	**$ 558,000**
Conceptual Cost Range:	$500k - $750k
Estimated Construction Duration:	6 Months

Possible Impacts

It is possible that the velocities and peak flow in Eanes Creek will increase downstream of the project due to these improvements. Further analysis to document impacts is necessary.

Assumptions

- It is assumed drainage easements and ROW can and will be obtained as necessary.
- Cost included estimate completed by Peabody General Contractors and provided to KFA by the City for waterline improvements along South Crest Drive.
- It is assumed the proposed culverts will have sufficient capacity for the design storm event.
- During detailed project design, the design storm and tailwater will need additional consideration.

Project Map & Photo

Channel improvements in yellow, proposed storm sewer in red. Existing channel in black. Existing 100-yr inundation shown.

South Crest Drive during rain event, looking north. 06/06/2019

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Project ID E

CITY OF ROLLINGWOOD
INFRASTRUCTURE IMPROVEMENTS PLAN
COST SUMMARY

ROLLINGWOOD TEXAS

Project ID: E
Project Name: Randolph Place Drainage Improvements
Drainage Basin: 5

Problem Description

Roadway flooding and property flooding along Randolph Place.

Proposed Improvements

Install approximately 272 feet of 24" RCP, 846 feet of 36" RCP, 125 feet of 5' x 3' RCB, and 626 feet of 6' x 3' RCB. Begin at Gentry Drive and discharge to channel near City Hall. It will include an estimated 20 curb inlets, 1 area inlet, and approximately 12 driveway reconstructions. This includes the improvements at AOI F. In accordance with downstream impacts the imporvements along AOI M should be completed first.

CIP Ranking

18 out of **23**

Project Costs

See Cost on AOI F

Possible Impacts

It is possible that the velocities and peak flow in Town Lake tributary will increase downstream of the project due to these improvements. Further analysis to document impacts is necessary

Assumptions

- It is assumed drainage easements and ROW can and will be obtained as necessary.
- It is assumed the proposed storm drain will have sufficient capacity for the design storm event.
- During detailed project design, the design storm and tailwater will need additional consideration.

Project Map & Photo

Proposed storm sewer in red.
Existing 100-yr inundation shown.

3 Randolph Place looking west.

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Project ID F

CITY OF ROLLINGWOOD
INFRASTRUCTURE IMPROVEMENTS PLAN
COST SUMMARY

ROLLINGWOOD TEXAS

Project ID: F
Project Name: Nixon/Gentry Drainage Improvements
Drainage Basin: 5

Problem Description

Roadway flooding and property flooding along Gentry Drive and Nixon Drive.

Proposed Improvements

Install approximately 272 feet of 24" RCP, 846 feet of 36" RCP, 125 feet of 5' x 3' RCB, and 626 feet of 6' x 3' RCB. Begin at Gentry Drive and discharge to channel near City Hall. It will include an estimated 20 curb inlets, 1 area inlet, and approximately 12 driveway reconstructions. This includes the improvements at AOI E. To mitigate downstream impacts, the improvements along AOI M should be completed first.

CIP Ranking

15 out of 23

Project Costs**

**AOI E included

Engineering & Survey:	$ 300,000
Construction:	$ 1,648,000
Other:	$ 76,000
ROW/Easements:	UNK
Total:	**$ 2,024,000**
Conceptual Cost Range:	> $2M
Estimated Construction Duration:	15 Months

Possible Impacts

It is possible that the velocities and peak flow in Town Lake tributary will increase downstream of the project due to these improvements. Further analysis to document impacts is necessary

Assumptions

- It is assumed drainage easements and ROW can and will be obtained as necessary.
- It is assumed the proposed strom drain will have sufficient capacity for the design storm event.
- During detailed project design, the design storm and tailwater will need additional consideration.

Project Map & Photo

Proposed storm sewer in red.
Existing 100-yr inundation shown.

Nixon and Gentry intersection looking north, 09/11/2019

Project ID G

CITY OF ROLLINGWOOD
INFRASTRUCTURE IMPROVEMENTS PLAN
COST SUMMARY

ROLLINGWOOD TEXAS

Project ID: G
Project Name: Edgegrove Drive Drainage Improvements
Drainage Basin: 10

Problem Description

Roadway flooding at Edgegrove Drive. Existing 2 - 32" RCP and 1 - 24" RCP.

Proposed Improvements

Bridge crossing approximately 300 feet in length and an estimated 46 feet in width (2 lanes, 2 shoulders/bike lanes, and sidewalk). Improve and regrade the channel 50 feet downstream and upstream of the crossing. Raise and rebuild the road about 350 feet in total length. The roadway improvements are along Edgegrove Drive and South Crest Drive. It is recommended this AOI should be coordinated with the proposed retail study along Eanes Creek.

CIP Ranking

2 out of **23**

Project Costs

Engineering & Survey:	$ 394,000
Construction:	$ 2,167,000
Other:	$ 70,000
ROW/Easements:	UNK
Total:	**$ 2,631,000**
Conceptual Cost Range:	> $2M
Estimated Construction Duration:	12 Months

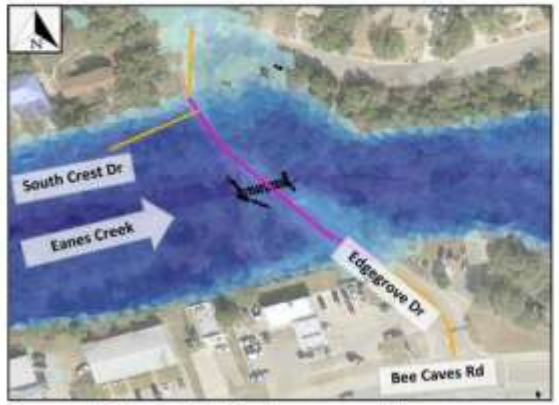
Possible Impacts

It is possible that the velocities and peak flow in Eanes Creek will increase downstream of the project due to these improvements. The bridge should be designed to ensure no upstream impacts. Further analysis to document impacts is necessary.

Assumptions

- It is assumed drainage easements and ROW can and will be obtained as necessary.
- Flooding on Edgegrove Dr is controlled by Eanes Creek.
- It is assumed the proposed bridge will have sufficient capacity for the design storm event.
- During detailed project design, the design storm and detailed hydraulic will need additional consideration and analysis.

Project Map & Photo



Proposed bridge in pink. Road improvements in orange.
Existing culvert in black. Existing 100-yr inundation shown.

Edgegrove Drive, looking northeast. 09/11/2019

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Project ID H

CITY OF ROLLINGWOOD
INFRASTRUCTURE IMPROVEMENTS PLAN
COST SUMMARY

ROLLINGWOOD TEXAS

Project ID: H
Project Name: City Hall Drainage Improvements
Drainage Basin: 5

Problem Description

Property flooding at City Hall and roadway flooding along Nixon Drive.

Proposed Improvements

Regrade Rollingwood City Hall property. Design and create a detention pond of approximately 0.20 acres at the existing community playground. This would include connecting to the improvements at AOI E and F. The detention pond may provide benefit for smaller storm events, however preliminary modeling shows that the area is too small to provide detention in the 100-year event. Further analysis is necessary to determine the potential benefits from a detention pond at this location.

CIP Ranking

8 out of **23**

Project Costs

Engineering & Survey:	$ 64,000
Construction:	$ 350,000
Other:	$ 61,000
ROW/Easements:	UNK
Total:	**$ 475,000**
Conceptual Cost Range:	$250k - $500k
Estimated Construction Duration:	12 Months

Possible Impacts

It is possible that the velocities and peak flow in Town Lake tributary will increase downstream of the project due to these improvements. Further analysis to document impacts is necessary.

Assumptions

- It is assumed drainage easements and ROW can and will be obtained as necessary.
- It is assumed the proposed strom drain will have sufficient capacity for the design storm event.
- During detailed project design, the design storm and tailwater will need additional consideration.

Project Map & Photo

Proposed storm sewer (AOI F) and pond area in purple.
Existing 100-yr inundation shown.

Proposed area for detention. 09/11/2019

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Project ID I

CITY OF ROLLINGWOOD
INFRASTRUCTURE IMPROVEMENTS PLAN
COST SUMMARY

ROLLINGWOOD TEXAS

Project ID: K
Project Name: Pleasant Drive Drainage Improvments
Drainage Basin: 5

Problem Description

Roadway and property flooding along Pleasant Drive.

Proposed Improvements

Install approximately 248 feet of 36" RCP, 358 feet of 5' x 3' RCB, 303 feet of 6' x 3' RCB and 1382 feet of 8' x 4' RCB. Begin at Pleasant Drive and proposed detention pond (AOI H) and outfall at Town Lake tributary downstream of Hatley Drive. It will include an estimated 27 curb inlets, 1 area inlet, 675 feet of 12" tall curb, and approximately 16 driveway reconstructions. This includes the improvements at AOI V and AOI M.

CIP Ranking

4 out of 23

Project Costs

See Cost on AOI M

Possible Impacts

It is possible that the velocities and peak flow in Town Lake tributary will increase downstream of the project due to these improvements. Further analysis to document impacts is necessary

Assumptions

- It is assumed drainage easements and ROW can and will be obtained as necessary.
- It is assumed the proposed storm drain will have sufficient capacity for the design storm event.
- During detailed project design, the design storm and tailwater will need additional consideration.

Project Map & Photo

Proposed storm sewer in red. Proposed 12" curb in blue.
Existing 100-yr inundation shown.

Pleasant Drive, looking northeast/upstream.06/06/2019

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PUBLIC PROJECT ENGINEERING

Project ID J

CITY OF ROLLINGWOOD
INFRASTRUCTURE IMPROVEMENTS PLAN
COST SUMMARY

ROLLINGWOOD TEXAS

Project ID: J
Project Name: Underground Infiltration Basin Drainage Improvements
Drainage Basin: 10

Problem Description

Rollingwood Drive ponding across from the underground infiltration basin pond. The existing inlet and pipe are clogged with debris, and sediment, creating maintenance and ponding challenges.

Proposed Improvements

Abandon the underground vault and tie the existing lateral pipe, assuming a 24" RCP, into the proposed drainage system on Gentry Drive. Approximately 675 feet of proposed 24" RCP will be needed for the connection, approximately 10 inlets, and an estimated 2 driveway reconstructions.

CIP Ranking

9 out of **23**

Project Costs

Engineering & Survey:	$ 127,000
Construction:	$ 695,000
Other:	$ 61,000
ROW/Easements:	UNK
Total:	**$ 883,000**
Conceptual Cost Range:	$750k - $1M
Estimated Construction Duration:	12 Months

Possible Impacts

It is possible that the velocities and peak flow in Eanes Creek will increase downstream of the project due to these improvements. Further analysis to document impacts is necessary.

Assumptions

- It is assumed drainage easements and ROW can and will be obtained as necessary.
- It is assumed the proposed storm drain will have sufficient capacity for the design storm event.
- During detailed project design, the design storm and pond area will need additional consideration.
- The recommendation to abandon the underground basin was generated in coordination with City staff & City engineer.

Project Map & Photo

Rollingwood Drive, proposed storm sewer in red.
Existing 100-yr inundation shown.

Pond inlet during rain event. 06/06/2019

Project ID K

CITY OF ROLLINGWOOD
INFRASTRUCTURE IMPROVEMENTS PLAN
COST SUMMARY

ROLLINGWOOD TEXAS

Project ID: K
Project Name: Pleasant Drive Drainage Improvments
Drainage Basin: 5

Problem Description

Roadway and property flooding along Pleasant Drive.

Proposed Improvements

Install approximately 248 feet of 36" RCP, 358 feet of 5' x 3' RCB, 303 feet of 6' x 3' RCB and 1382 feet of 8' x 4' RCB. Begin at Pleasant Drive and proposed detention pond (AOI H) and outfall at Town Lake tributary downstream of Hatley Drive. It will include an estimated 27 curb inlets, 1 area inlet, 675 feet of 12" tall curb, and approximately 16 driveway reconstructions. This includes the improvements at AOI V and AOI M.

CIP Ranking

4 out of 23

Project Costs

See Cost on AOI M

Possible Impacts

It is possible that the velocities and peak flow in Town Lake tributary will increase downstream of the project due to these improvements. Further analysis to document impacts is necessary

Assumptions

- It is assumed drainage easements and ROW can and will be obtained as necessary.
- It is assumed the proposed storm drain will have sufficient capacity for the design storm event.
- During detailed project design, the design storm and tailwater will need additional consideration.

Project Map & Photo

Proposed storm sewer in red. Proposed 12" curb in blue.
Existing 100-yr inundation shown.

Pleasant Drive, looking northeast/upstream.06/06/2019

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PUBLIC PROJECT ENGINEERING

Project ID L

CITY OF ROLLINGWOOD
INFRASTRUCTURE IMPROVEMENTS PLAN
COST SUMMARY

ROLLINGWOOD TEXAS

Project ID: L
Project Name: Pleasant Cove Drainage Improvements
Drainage Basin: 5

Problem Description

Roadway flooding. Existing 60" RCP cross culvert at Pleasant Cove.

Proposed Improvements

Install new roadside channel upstream, approximately 400 feet in length. The channel grading will be to an approximate channel of 20 feet wide, 2 feet deep with a 4 ft bottom width, and 4:1 side slopes. Approximately 1 driveway reconstruction with a crossing culvert of 24" RCP of an estimated 24 feet. Raise the roadway profile, an estimated 175 feet.

CIP Ranking

7 out of 23

Project Costs

Engineering & Survey:	$ 67,000
Construction:	$ 368,000
Other:	$ 55,000
ROW/Easements:	UNK
Total:	**$ 490,000**
Conceptual Cost Range:	$250k - $500k
Estimated Construction Duration:	9 Months

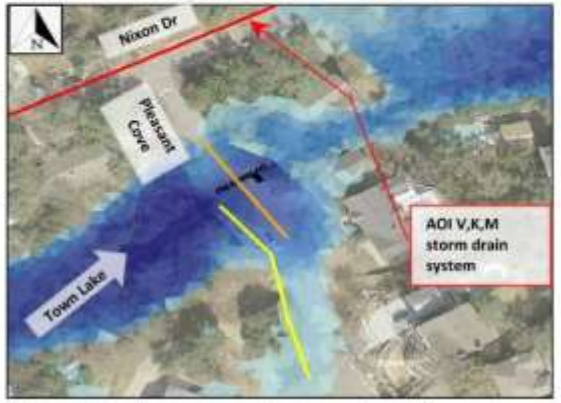
Possible Impacts

It is possible that the velocities and peak flow in Town Lake tributary will increase downstream of the project due to these improvements. Further analysis to document impacts is necessary.

Assumptions

- It is assumed drainage easements and ROW can and will be obtained as necessary.
- It is assumed the proposed culverts will have sufficient capacity for the design storm event.
- During detailed project design, the design storm and tailwater will need additional consideration.

Project Map & Photo



Proposed road improvements in orange, channel improvements in yellow. Existing culverts in black. Existing 100-yr inundation shown.

Pleasant Cove culvert crossing, upstream. 09/11/2019

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Project ID M

CITY OF ROLLINGWOOD
INFRASTRUCTURE IMPROVEMENTS PLAN
COST SUMMARY

ROLLINGWOOD TEXAS

Project ID: M
Project Name: Nixon/Pleasant Drainage Improvements
Drainage Basin: 5

Problem Description

Roadway flooding on Nixon Drive. Property flooding between Pleasant Drive and Hatley Drive.

Proposed Improvements

Install approximately 248 feet of 36" RCP, 358 feet of 5' x 3' RCB, 303 feet of 6' x 3' RCB and 1382 feet of 8' x 4' RCB. Begin at Pleasant Drive and proposed detention pond (AOI H) and outfall at Town Lake tributary downstream of Hatley Drive. It will include an estimated 27 curb inlets, 1 area inlet, 675 feet of 12" tall curb, and approximately 16 driveway reconstructions. This includes the improvements to AOI V and AOI K.

CIP Ranking

3 out of 23

Project Costs**

**AOI V and AOI K included

Engineering & Survey:	$ 804,000
Construction:	$ 4,419,000
Other:	$ 60,000
ROW/Easements:	UNK
Total:	**$ 5,283,000**
Conceptual Cost Range:	> $2M
Estimated Construction Duration:	12 Months

Possible Impacts

It is possible that the velocities and peak flow in Town Lake tributary will increase downstream of the project due to these improvements. Further analysis to document impacts is necessary

Assumptions

- It is assumed drainage easements and ROW can and will be obtained as necessary.
- It is assumed the proposed storm drain will have sufficient capacity for the design storm event.
- During detailed project design, the design storm and tailwater will need additional consideration.

Project Map & Photo

Proposed storm sewer in red. Proposed 12" curb in blue. Existing culvert in black. Existing 100-yr inundation shown.

Nixon Drive during rain event, looking west. 06/06/2019

Project ID N

CITY OF ROLLINGWOOD
INFRASTRUCTURE IMPROVEMENTS PLAN
COST SUMMARY

ROLLINGWOOD TEXAS

Project ID: N
Project Name: Timberline Drive Drainage Improvements
Drainage Basin: 10

Problem Description

Roadway and property flooding along Timberline Drive and Inwood Drive.

Proposed Improvements

Install approximately 250 feet of 36" RCP underground storm sewer. Begin at a drop inlet in the ravine on 4803 Timberline Drive property and connect to existing storm sewer network on Inwood Drive. It will include clearing and regrading the ravine for approximately 10 feet, addition of approximately 2 inlets, and approximately 3 driveway reconstructions. The existing network outfalls into Eanes Creek south of Inwood Drive.

CIP Ranking

11 out of **23**

Project Costs

Engineering & Survey:	$ 54,000
Construction:	$ 295,000
Other:	$ 31,000
ROW/Easements:	UNK
Total:	**$ 380,000**
Conceptual Cost Range:	$250k - $500k
Estimated Construction Duration:	6 Months

Possible Impacts

It is possible that the velocities and peak flow in Eanes Creek will increase downstream of the project due to these improvements. Further analysis to document impacts is necessary. The downstream system will need to be surveyed and analyzed for potential impacts.

Assumptions

- It is assumed drainage easements and ROW can and will be obtained as necessary.
- It is assumed the proposed storm drain will have sufficient capacity for the design storm event.
- During detailed project design, the design storm and tailwater will need additional consideration.

Project Map & Photo

Proposed storm sewer in red to existing inlets in black.
Existing 100-yr inundation shown.

Ravine at 4803 Timberline Drive. 09/11/2019

K·FRIESE + ASSOCIATES
PUBLIC PROJECT ENGINEERING

Project ID O

CITY OF ROLLINGWOOD
INFRASTRUCTURE IMPROVEMENTS PLAN
COST SUMMARY

ROLLINGWOOD TEXAS

Project ID: O
Project Name: Kristy Drive Drainage Improvments
Drainage Basin: 5

Problem Description

Roadway and property flooding along Kristy Drive.

Proposed Improvements

Approximately 475 feet of channel improvements along Kristy Drive.

CIP Ranking

17 out of **23**

Project Costs

Engineering & Survey:	$ 29,000
Construction:	$ 157,000
Other:	$ 31,000
ROW/Easements:	UNK
Total:	**$ 217,000**
Conceptual Cost Range:	$200k - $250k
Estimated Construction Duration:	6 Months

Possible Impacts

It is possible that the velocities and peak flow in the Town Lake tributary will increase downstream of the project due to these improvements. Further analysis to document impacts is necessary. The downstream impacts to adjacent properties will need to be reviewed in addition to the tributary impacts. Channel grading will impact multiple roadside trees.

Assumptions

- It is assumed drainage easements and ROW can and will be obtained as necessary.
- It is assumed the channel will have sufficient capacity for the design storm event.

Project Map & Photo

Channel improvements in yellow.
Existing 100-yr inundation shown.

Kristy Drive, looking northwest.

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PUBLIC PROJECT ENGINEERING

Project ID P

CITY OF ROLLINGWOOD
INFRASTRUCTURE IMPROVEMENTS PLAN
COST SUMMARY

ROLLINGWOOD TEXAS

Project ID: P
Project Name: Wallis and Hatley Drainage Improvements
Drainage Basin: 5

Problem Description

Property flooding along Wallis Drive and roadway flooding at intersection of Wallis Drive and Hatley Drive.

Proposed Improvements

Install approximately 630 feet of 36" RCP underground storm sewer. Begin at the intersection of Hatley Drive and Wallis Drive and connect to the Town Lake tributary crossing on Rock Way Cove . It will include approximately 10 inlets and approximately 8 driveway reconstructions. This system includes the improvements at AOI Q.

CIP Ranking

21 out of 23

Project Costs

See Cost on AOI Q

Possible Impacts

It is possible that the velocities and peak flow in Town Lake tributary will increase downstream of the project due to these improvements. Further analysis to document impacts is necessary. The downstream system will need to be surveyed and analyzed for potential impacts.

Assumptions

- It is assumed drainage easements and ROW can and will be obtained as necessary.
- It is assumed the proposed culverts will have sufficient capacity for the design storm event.
- During detailed project design, the design storm and tailwater will need additional consideration.

Project Map & Photo

Proposed storm sewer in red, existing in black.
Existing culverts in black. Existing 100-yr inundation shown.

200 Wallis Drive, during rain event. 06/06/2019

Project ID Q

CITY OF ROLLINGWOOD
INFRASTRUCTURE IMPROVEMENTS PLAN
COST SUMMARY

ROLLINGWOOD TEXAS

Project ID: Q
Project Name: Rock Way Cove Drainage Improvements
Drainage Basin: 5

Problem Description

Property flooding along Rock Way Cove and roadway flooding at intersection of Rock Way Cove and Wallis Drive.

Proposed Improvements

Install approximately 630 feet of 36" RCP underground storm sewer. Begin at the intersection of Hatley Drive and Wallis Drive and connect to the Town Lake tributary crossing on Rock Way Cove . It will include approximately 10 inlets and approximately 2 driveway reconstructions. This system includes the improvements at AOI P.

CIP Ranking

12 out of **23**

Project Costs

**AOI P included

Engineering & Survey:	$ 115,000
Construction:	$ 631,000
Other:	$ 70,000
ROW/Easements:	UNK
Total:	**$ 816,000**
Conceptual Cost Range:	$750k - $1M
Estimated Construction Duration:	12 Months

Possible Impacts

It is possible that the velocities and peak flow in Town Lake tributary will increase downstream of the project due to these improvements. Further analysis to document impacts is necessary. The downstream system will need to be surveyed and analyzed for potential impacts.

Assumptions

- It is assumed drainage easements and ROW can and will be obtained as necessary.
- It is assumed the proposed culverts will have sufficient capacity for the design storm event.
- During detailed project design, the design storm and tailwater will need additional consideration.

Project Map & Photo

Proposed storm sewer in red, existing in black.
Existing culverts in black. Existing 100-yr inundation shown.

Outfall at Town Lake tributary. 09/11/2019

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Project ID R

CITY OF ROLLINGWOOD
INFRASTRUCTURE IMPROVEMENTS PLAN
COST SUMMARY

ROLLINGWOOD TEXAS

Project ID: R
Project Name: Hatley Drive Drainage Improvements
Drainage Basin: 6

Problem Description

Roadway flooding at Hatley Drive and Almarion Way. Property flooding along Hubbard Circle and Hatley Drive.

Proposed Improvements

Install underground storm sewer of approximately 415 feet of 36" RCP. Start at Hately Drive property and outfall at the beginning of the Town Lake tributary channel on Almarion Way. It will include clearing and regrading downstream channel about 150 feet in length, 4 curb inlets, 1 area inlet, and 1 driveway reconstruction.

CIP Ranking

14 out of **23**

Project Costs

Engineering & Survey:	$ 57,000
Construction:	$ 312,000
Other:	$ 31,000
ROW/Easements:	UNK
Total:	**$ 400,000**
Conceptual Cost Range:	$250k - $500k
Estimated Construction Duration:	6 Months

Possible Impacts

It is possible that the velocities and peak flow in Town Lake tributary will increase downstream of the project due to these improvements. Further analysis to document impacts is necessary.

Assumptions

- It is assumed drainage easements and ROW can and will be obtained as necessary.
- It is assumed the proposed storm drain will have sufficient capacity for the design storm event.
- During detailed project design, the design storm and tailwater will need additional consideration.

Project Map & Photo

Proposed storm sewer in red.
Existing 100-yr inundation shown.

Almarion Way, looking northwest. 09/11/2019

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Project ID S

CITY OF ROLLINGWOOD
INFRASTRUCTURE IMPROVEMENTS PLAN
COST SUMMARY

ROLLINGWOOD TEXAS

Project ID: S
Project Name: East Timberline Drive Drainage Improvements
Drainage Basin: 14

Problem Description

Roadway flooding on Rollingwood Drive and Timberline Drive. Property flooding along Rollingwood Drive and Riley Drive.

Proposed Improvements

Install approximately 700 feet of 36" RCP underground storm sewer, 520 feet of 5' x 3' RCB, and 350 feet of 7' x 4' RCB. Begin at Farley Trial and outfall at Eanes Creek tributary downstream of Timberline Drive. It will include an estimated 22 inlets and approximately 15 driveway reconstructions. This includes the improvements at AOI T.

CIP Ranking

14 out of **23**

Project Costs

See Cost on AOI T

Possible Impacts

It is possible that the velocities and peak flow in Eanes Creek will increase downstream of the project due to these improvements. Further analysis to document impacts is necessary. The downstream channel will need to be surveyed and analyzed for potential impacts.

Assumptions

- It is assumed drainage easements and ROW can and will be obtained as necessary.
- It is assumed the proposed storm drain will have sufficient capacity for the design storm event.
- During detailed project design, the design storm and tailwater will need additional consideration.

Project Map & Photo

Proposed storm sewer in red.
Existing 100-yr inundation shown.

Timberline Drive looking northeast. 09/11/2019

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PUBLIC PROJECT ENGINEERING

Project ID T

CITY OF ROLLINGWOOD
INFRASTRUCTURE IMPROVEMENTS PLAN
COST SUMMARY

ROLLINGWOOD TEXAS

Project ID: T
Project Name: East Rollingwood Drive Drainage Improvements
Drainage Basin: 14

Problem Description

Roadway flooding on Rollingwood Drive and Pickwick Lane. Property flooding along Farley Trail and Rollingwood Drive.

Proposed Improvements

Install approximately 700 feet of 36" RCP underground storm sewer, 520 feet of 5' x 3' RCB, and 350 feet of 7' x 4' RCB. Begin at Farley Trail and outfall at Eanes Creek tributary downstream of Timberline Drive. It will include an estimated 22 inlets and approximately 15 driveway reconstructions. This includes the improvements at AOI S.

CIP Ranking

14 out of **23**

Project Costs**

**AOI S included

Engineering & Survey:	$ 313,000
Construction:	$ 1,718,000
Other:	$ 91,000
ROW/Easements:	UNK
Total:	**$ 2,122,000**
Conceptual Cost Range:	> $2M
Estimated Construction Duration:	18 Months

Possible Impacts

It is possible that the velocities and peak flow in Eanes Creek will increase downstream of the project due to these improvements. Further analysis to document impacts is necessary. The downstream system will need to be surveyed and analyzed for potential impacts.

Assumptions

- It is assumed drainage easements and ROW can and will be obtained as necessary.
- It is assumed the proposed storm drain will have sufficient capacity for the design storm event.
- During detailed project design, the design storm and tailwater will need additional consideration.

Project Map & Photo

Proposed storm sewer in red, existing in black.
Existing culverts in black. Existing 100-yr inundation shown.

Half buried culvert at Rollingwood Drive. 09/11/2019

Project ID U

CITY OF ROLLINGWOOD
INFRASTRUCTURE IMPROVEMENTS PLAN
COST SUMMARY

ROLLINGWOOD TEXAS

Project ID: U
Project Name: Riley Rd and Vance Ln Drainage Improvements
Drainage Basin: 6

Problem Description

Property flooding at intersection of Riley Rd and Vance Ln.

Proposed Improvements

An approximate 3 foot curb cut at intersection of Vance Ln and Riley Rd and approximately 230 feet of channel improvements.

CIP Ranking

22 out of **23**

Project Costs

Engineering & Survey:	$ 17,000
Construction:	$ 94,000
Other:	$ 30,000
ROW/Easements:	UNK
Total:	**$ 141,000**
Conceptual Cost Range:	$100k - $150k
Estimated Construction Duration:	4 Months

Possible Impacts

It is possible that the velocities and peak flow in Town Lake tributary will increase downstream of the project due to these improvements. Further analysis to document impacts is necessary. The downstream system will need to be surveyed and analyzed for potential impacts.

Assumptions

- It is assumed drainage easements and ROW can and will be obtained as necessary.
- It is assumed the channel will have sufficient capacity for the design storm event.

Project Map & Photo

Channel improvments shown in yellow.
Existing 100-yr inundation shown.

Riley Road off of Vance Lane, looking north.

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Project ID V

CITY OF ROLLINGWOOD
INFRASTRUCTURE IMPROVEMENTS PLAN
COST SUMMARY

ROLLINGWOOD TEXAS

Project ID: V
Project Name: Pleasant Drive Drainage Improvements
Drainage Basin: 5

Problem Description

Roadway flooding and property flooding on Pleasant Drive.

Proposed Improvements

Install approximately 248 feet of 36" RCP, 358 feet of 5' x 3' RCB, 303 feet of 6' x 3' RCB and 1382 feet of 8' x 4' RCB. Begin at Pleasant Drive and proposed detention pond (AOI H) and outfall at Town Lake tributary downstream of Hatley Drive. It will include an estimated 27 curb inlets, 1 area inlet, 675 feet of 12" tall curb, and approximately 16 driveway reconstructions. This includes the improvements at AOI K and AOI M.

CIP Ranking

16 out of **23**

Project Costs

See Cost on AOI M

Possible Impacts

It is possible that the velocities and peak flow in Town Lake tributary will increase downstream of the project due to these improvements. Further analysis to document impacts is necessary.

Assumptions

- It is assumed drainage easements and ROW can and will be obtained as necessary.
- It is assumed the proposed storm drain will have sufficient capacity for the design storm event.
- During detailed project design, the design storm and tailwater will need additional consideration.

Project Map & Photo

Proposed storm sewer in red. Proposed 12" curb in blue.
Existing 100-yr inundation shown.

Pleasant Drive, looking northeast. 09/11/2019.

Project ID W

CITY OF ROLLINGWOOD
INFRASTRUCTURE IMPROVEMENTS PLAN
COST SUMMARY

ROLLINGWOOD TEXAS

Project ID: W
Project Name: Hatley Drive Drainage Improvements
Drainage Basin: 6

Problem Description

Roadway flooding across Hatley Drive and at intersection with Riley Road. Property flooding and along Hatley Dr.

Proposed Improvements

Install approximately 390 feet of 36" RCP underground storm sewer. Begin at intersection of Hatley Drive and Riley Road and outfall at channel on Riley Road to Town Lake. It will include approximately 8 inlets, and approximately 2 driveway reconstructions. Keep existing 36" RCP crossing at Hatley Drive.

CIP Ranking

6 out of **23**

Project Costs

Engineering & Survey:	$ 90,000
Construction:	$ 494,000
Other:	$ 70,000
ROW/Easements:	UNK
Total:	**$ 654,000**
Conceptual Cost Range:	$500k - $750k
Estimated Construction Duration:	12 Months

Possible Impacts

It is possible that the velocities and peak flow in Town Lake Tributary will increase downstream of the project due to these improvements. Further analysis to document impacts is necessary.

Assumptions

- It is assumed drainage easements and ROW can and will be obtained as necessary.
- It is assumed the proposed storm drain will have sufficient capacity for the design storm event.
- During detailed project design, the design storm and tailwater will need additional consideration.

Project Map & Photo

Proposed storm sewer in red. Existing culvert in black.
Existing 100-yr inundation shown.

Crossing of Town Lake tributary at Hatley Drive. 09/09/2019

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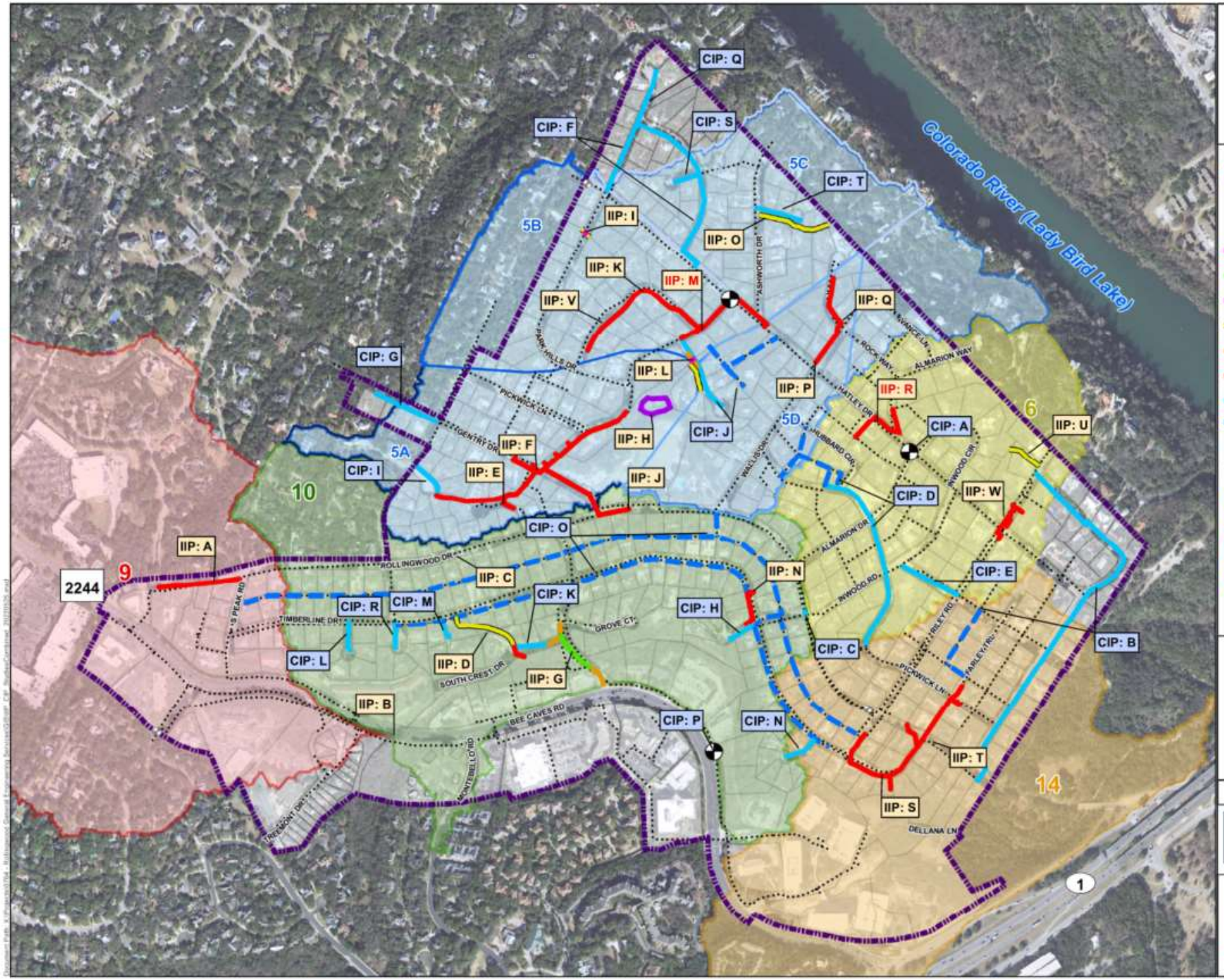
PUBLIC PROJECT ENGINEERING



City of Rollingwood
Travis County, Texas

Infrastructure Improvements Plan and Capital Improvements Plan Projects

- Rollingwood City Limits
- Parcel Boundary
- Proposed PRV Improvement
- Proposed Culvert Improvement
- Proposed Bridge
- Proposed Detention Pond
- Proposed Channel Improvement
- Proposed Roadway Improvement
- Proposed Storm Sewer
- Proposed Waterline Improvement
- Proposed Waterline Abandonment
- Design in Progress

Drainage Areas

- Area 5 (Sub-Basins)
- Area 6
- Area 9
- Area 10
- Area 14

Data Sources: KFA (2019, 2020, 2022), LNV (2019)
Aerial Source: Stratmap (2021)

N

0 600 1,200 Feet

Date: 5/25/2022

ROLLINGWOOD TEXAS

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