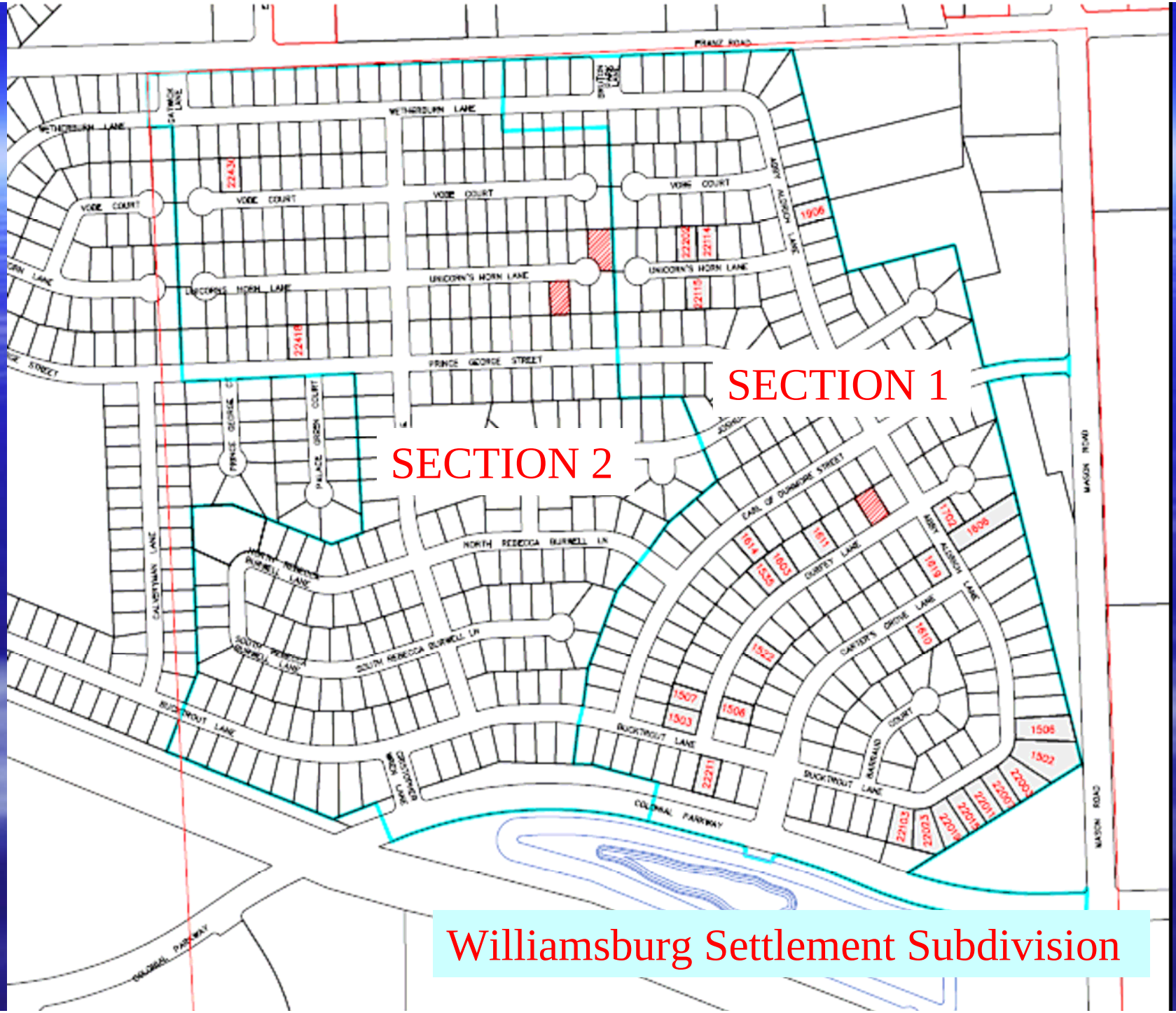
HC MUD 61
Williamsburg Settlement Subdivision
Flooding Investigation

Drainage Improvements
Alternatives Study

September 8, 2009


SECTION 1
SECTION 2
Williamsburg Settlement Subdivision
WETHERBURN LANE
VOSE COURT
UNICORN'S HORN LANE
PRINCE GEORGE STREET
PRINCE GEORGE COURT
PALACE GREEN COURT
NORTH REBECCA BURNELL LN
SOUTH REBECCA BURNELL LN
BUCKTROUT LANE
COLONIAL PARKWAY
CARL OF DUNMORE STREET
DURFEY LANE
CARTER'S GROVE LANE
MARY ALDRICH LANE
MASON ROAD
FRANZ ROAD
CALVERTHAN LANE
GROSVENOR MEWS LANE
1906
1702
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22015
22011
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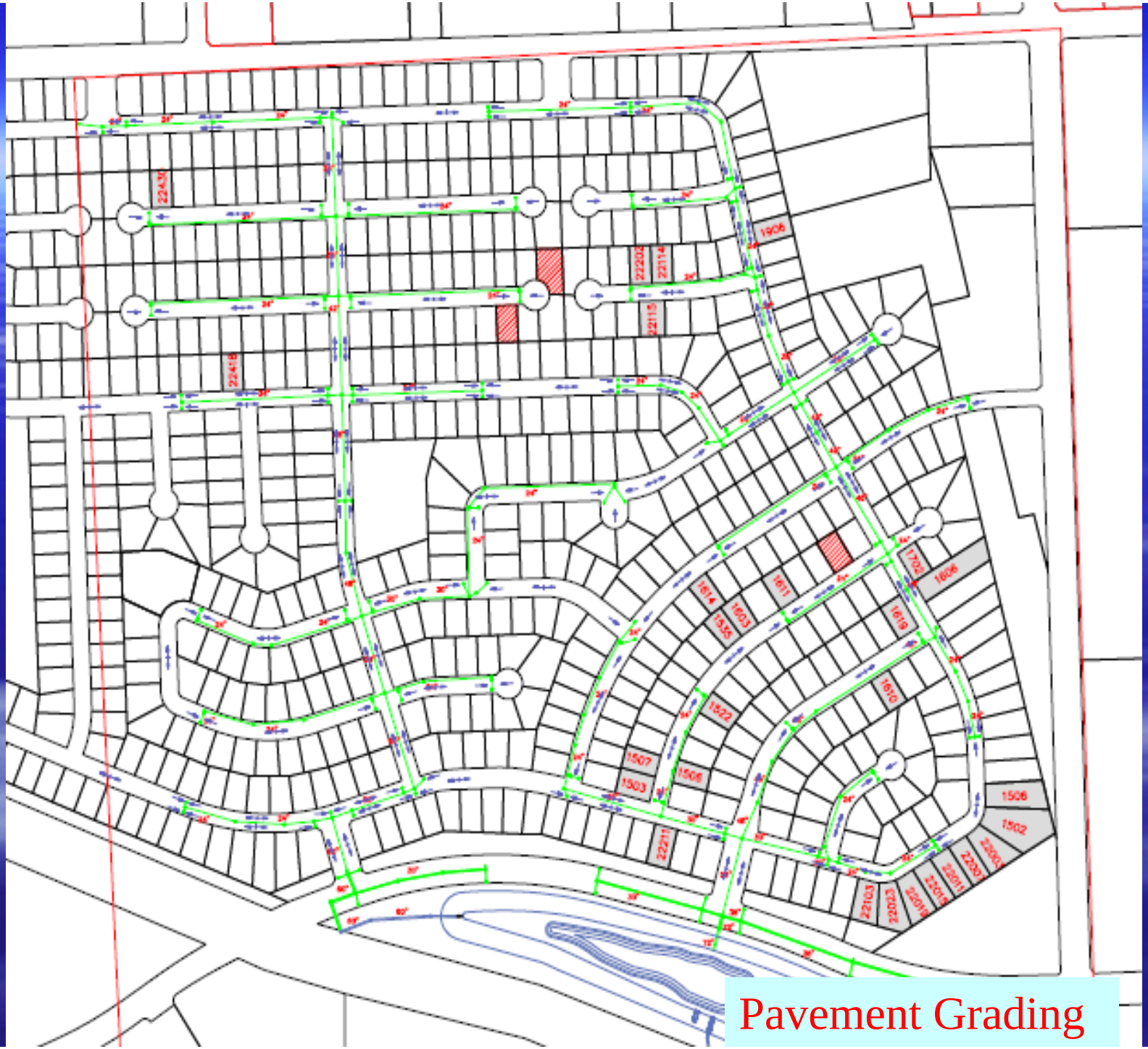
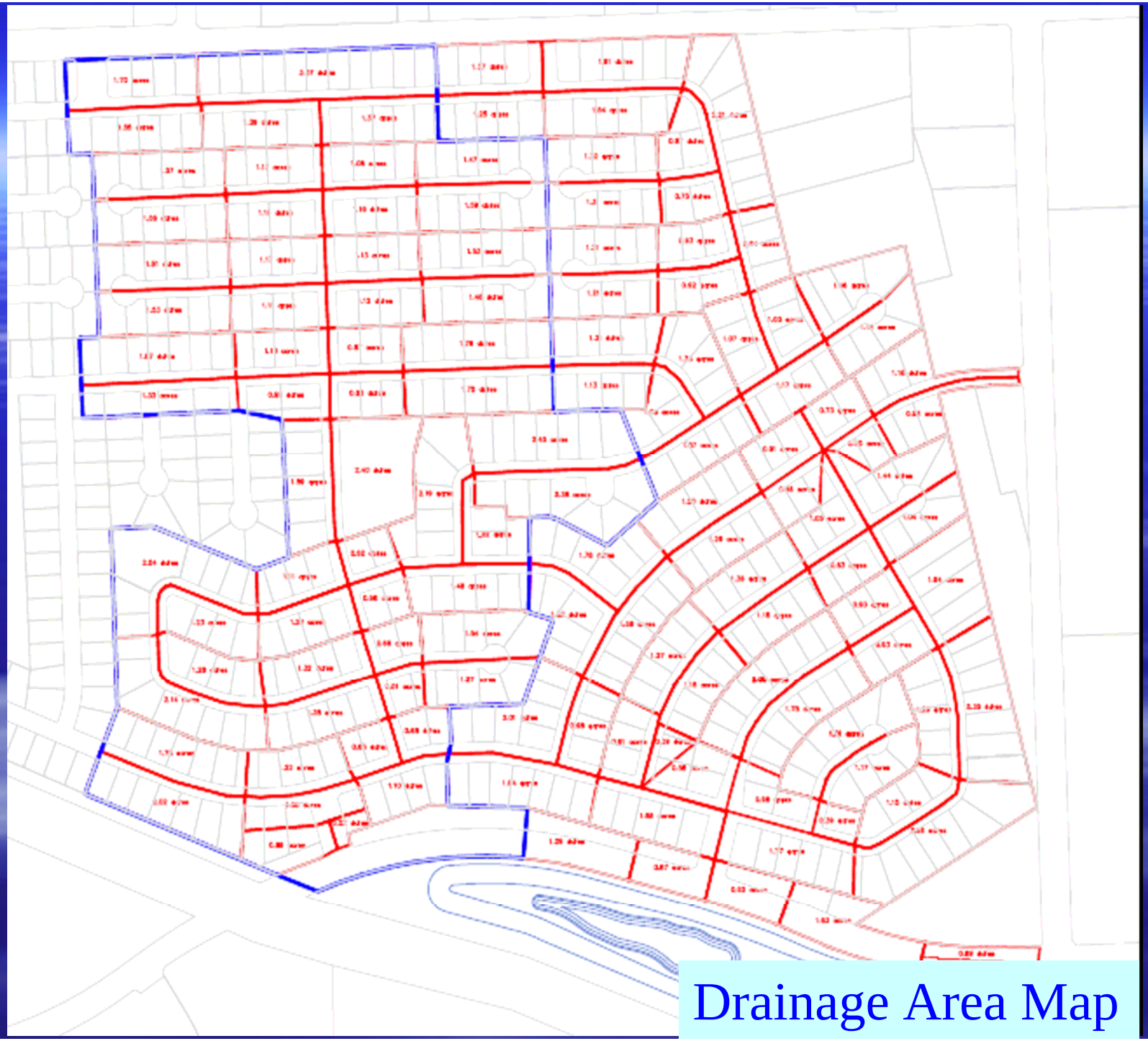
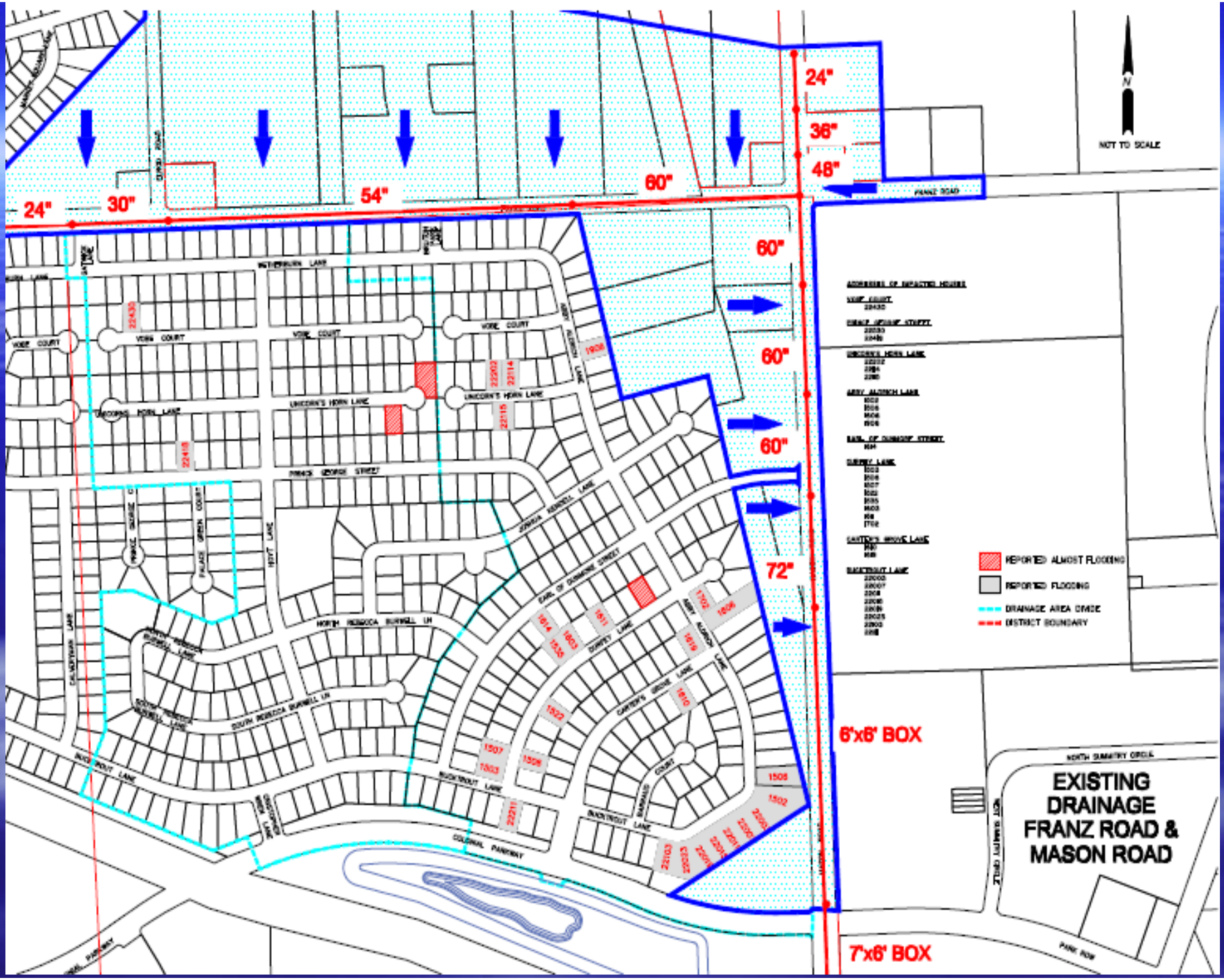


Pavement Grading



Drainage Area Map


24"
30"
54"
60"
24"
36"
48"
60"
60"
60"
72"
6'x6' BOX
7'x6' BOX
NOT TO SCALE
FRANZ ROAD
EXISTING DRAINAGE FRANZ ROAD & MASON ROAD
REPORTED ALMOST FLOODING
REPORTED FLOODING
DRAINAGE AREA DIVIDE
DISTRICT BOUNDARY
YORK COURT
UNICORN'S HORN LANE
PRINCE GEORGE STREET
NORTH REBECCA BURNELL LN
SOUTH REBECCA BURNELL LN
BUCKTROUT LANE
COLONIAL PARKWAY
NORTH SUMMITRY CIRCLE

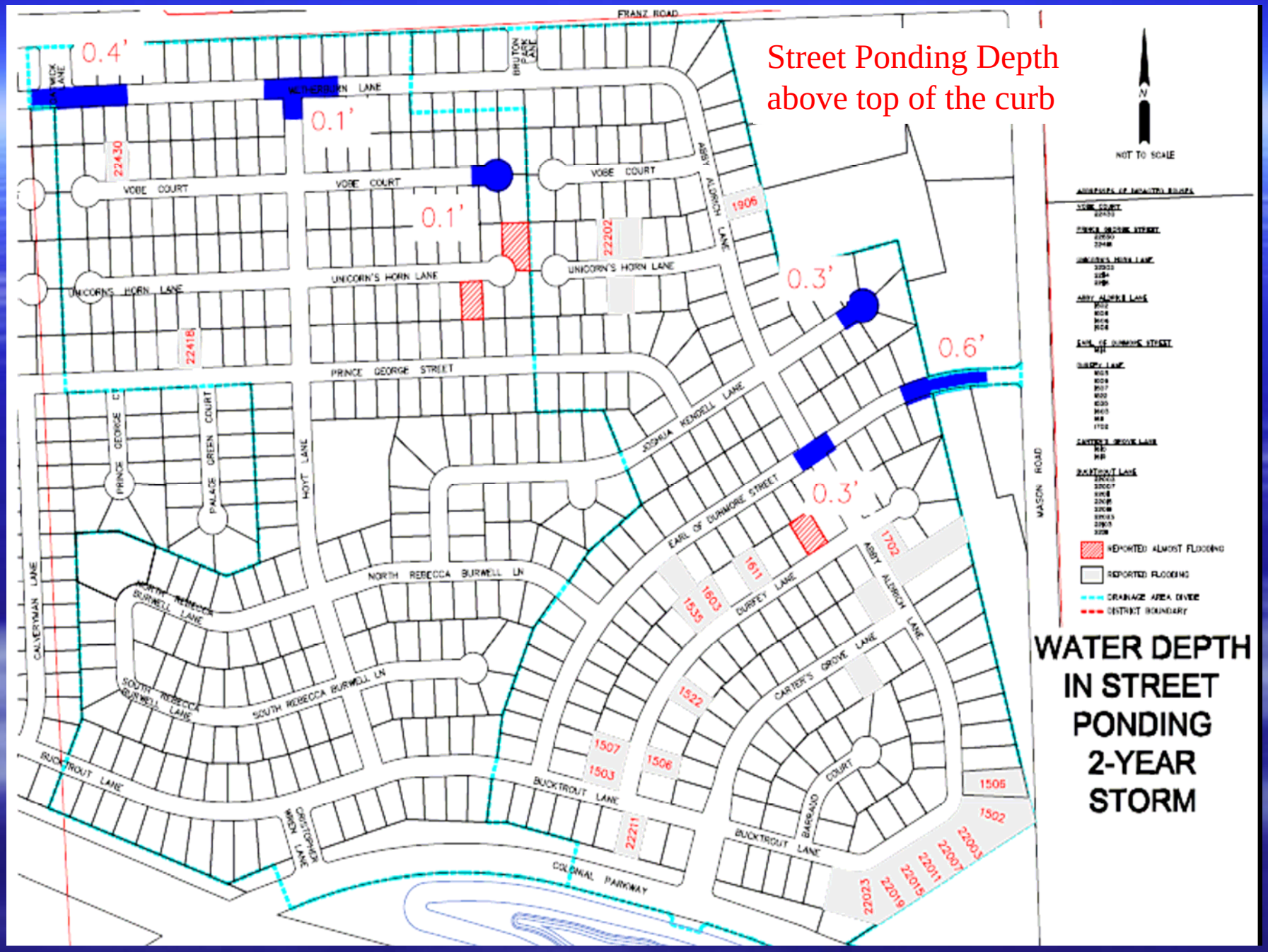
Mason Road / Earl of Dunmore Street Entrance

Storm Inlet at Mason Road South Corner

Storm Inlet at Mason Road North Corner

Franz Road / Bruton Park Lane Entrance

Street Ponding


Street Ponding Depth above top of the curb
WATER DEPTH IN STREET PONDING 2-YEAR STORM
NOT TO SCALE
REPORTED ALMOST FLOODING
REPORTED FLOODING
DRAINAGE AREA DIVIDE
DISTRICT BOUNDARY
FRANZ ROAD
WATERBURN LANE
VOBE COURT
UNICORN'S HORN LANE
PRINCE GEORGE STREET
PRINCE GEORGE CT
PALACE GREEN COURT
HOYT LANE
JOSHUA KENDELL LANE
EARL OF DUNMORE STREET
ABBY ALDRICH LANE
DURFEY LANE
CARTER'S GROVE LANE
BARRANO COURT
NORTH REBECCA BURWELL LN
SOUTH REBECCA BURWELL LN
NORTH REBECCA BURWELL LANE
SOUTH REBECCA BURWELL LANE
CALVERYMAN LANE
BUCKTROUT LANE
CHRISTOPHER WREN LANE
COLONIAL PARKWAY
MASON ROAD
0.4'
0.1'
0.1'
0.3'
0.6'
0.3'
22430
22202
22418
1906
1702
1611
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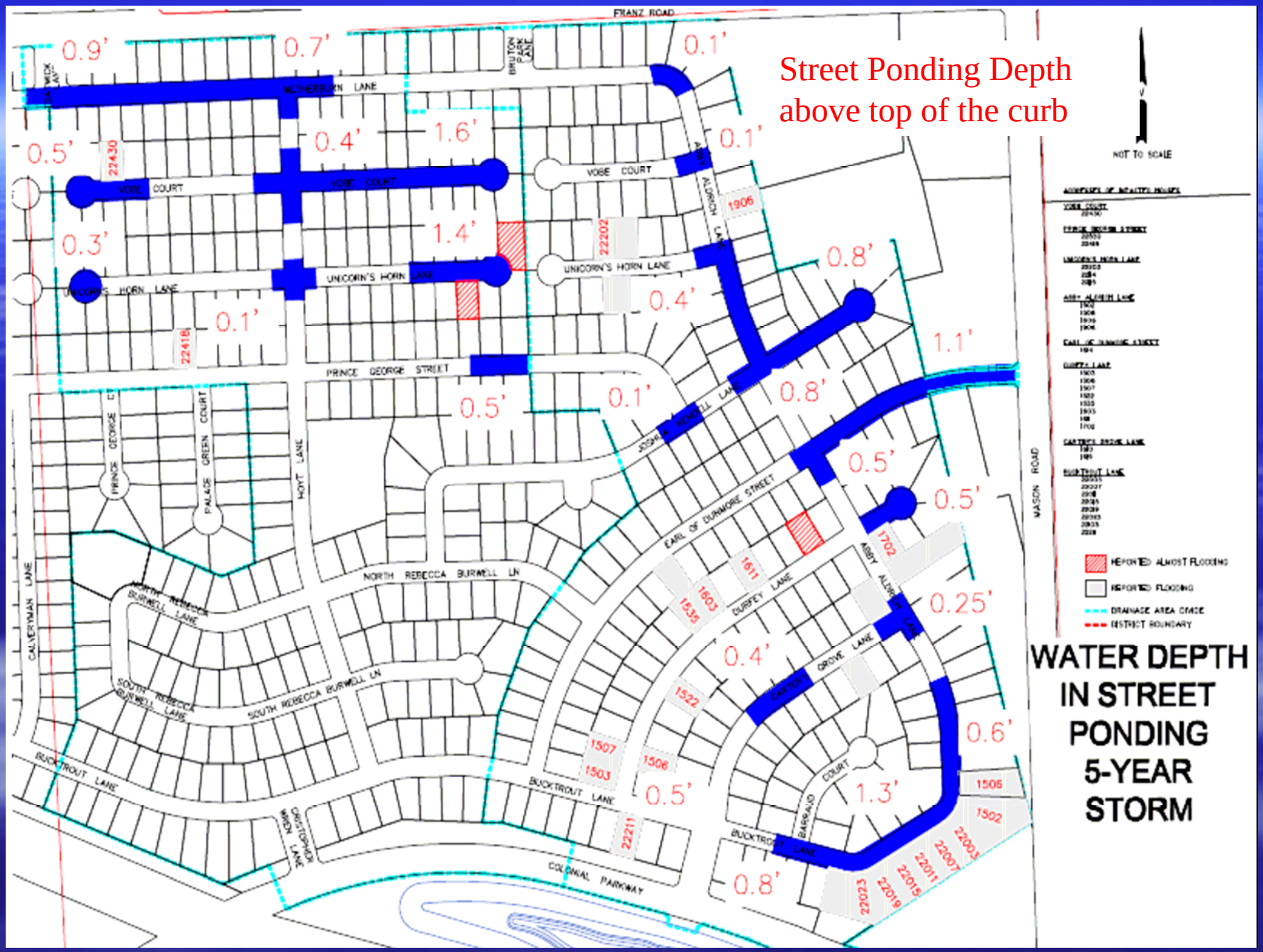
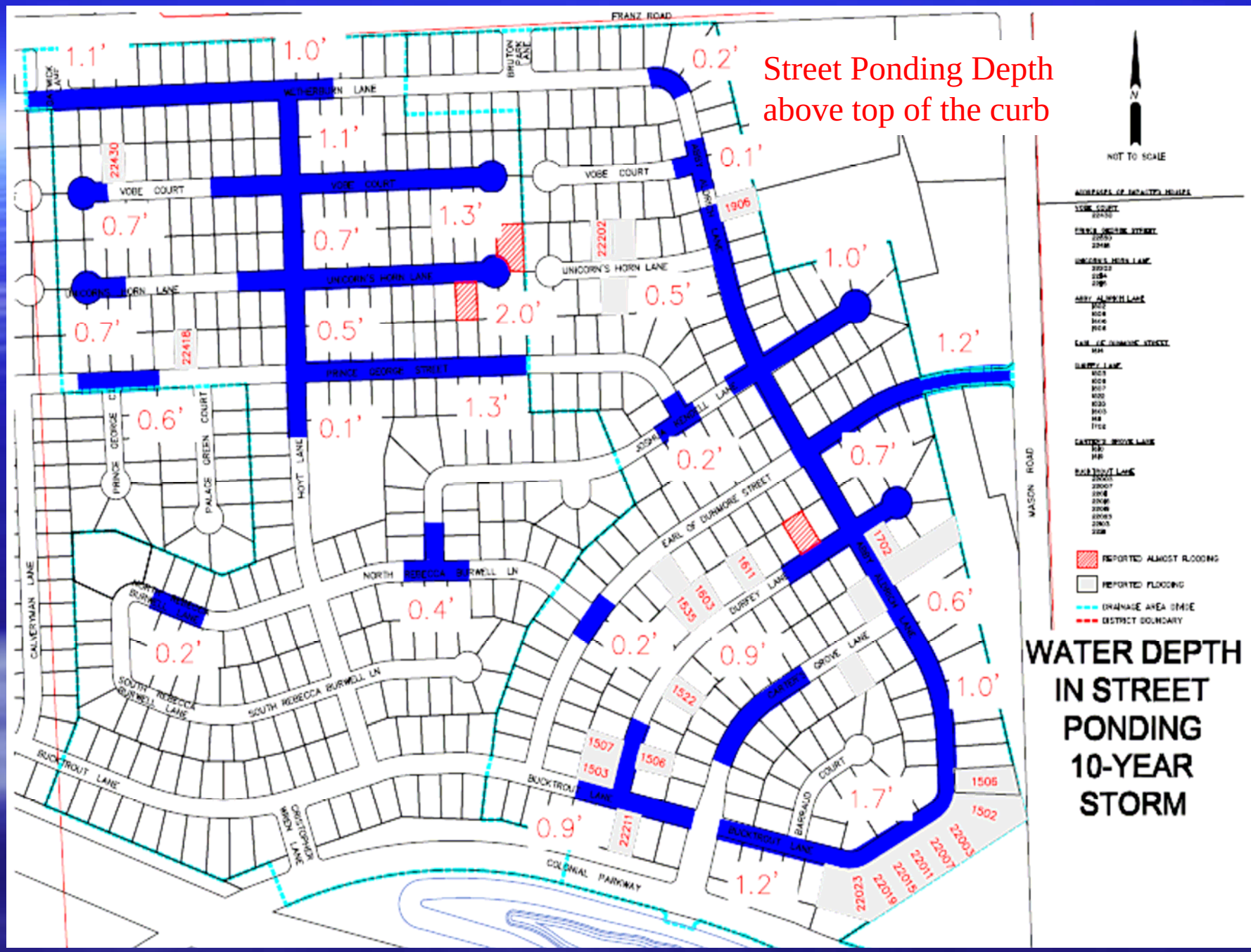
22015
22019
22023


Street Ponding Depth above top of the curb
WATER DEPTH IN STREET PONDING 5-YEAR STORM
NOT TO SCALE
FRANZ ROAD
WETHERBURN LANE
VOSE COURT
UNICORN'S HORN LANE
PRINCE GEORGE STREET
ABBY ALDRICH LANE
EARL OF DUNMORE STREET
NORTH REBECCA BURWELL LN
SOUTH REBECCA BURWELL LN
BUCKTROUT LANE
COLONIAL PARKWAY
WASON ROAD
CALVERYMAN LANE
HOYT LANE
PALACE GREEN COURT
PRINCE GEORGE CT
CARTER GROVE LANE
DURFEY LANE
BARRAND COURT
0.9'
0.7'
0.1'
0.5'
0.4'
1.6'
0.3'
1.4'
0.8'
1.1'
0.25'
0.6'
1.3'
REPORTED ALMOST FLOODING
REPORTED FLOODING
DRAINAGE AREA CENTER
DISTRICT BOUNDARY


Street Ponding Depth above top of the curb
WATER DEPTH IN STREET PONDING 10-YEAR STORM
NOT TO SCALE
N
REPORTED ALMOST FLOODING
REPORTED FLOODING
DRAINAGE AREA DIVIDE
DISTRICT BOUNDARY
FRANZ ROAD
MASON ROAD
COLONIAL PARKWAY
VOBE COURT
UNICORN'S HORN LANE
PRINCE GEORGE STREET
PRINCE GEORGE CT
PALACE GREEN COURT
HOYT LANE
NORTH REBECCA BURWELL LN
SOUTH REBECCA BURWELL LN
EARL OF DUNMORE STREET
DURFEY LANE
BUCKTROUT LANE
CALVERYMAN LANE
GRISTOWICH LANE
BARGALIO COURT
1.1'
1.0'
0.2'
0.1'
1.3'
0.7'
0.5'
2.0'
0.6'
0.4'
0.9'
1.7'
1.2'
22430
22418
22202
1906
1702
1611
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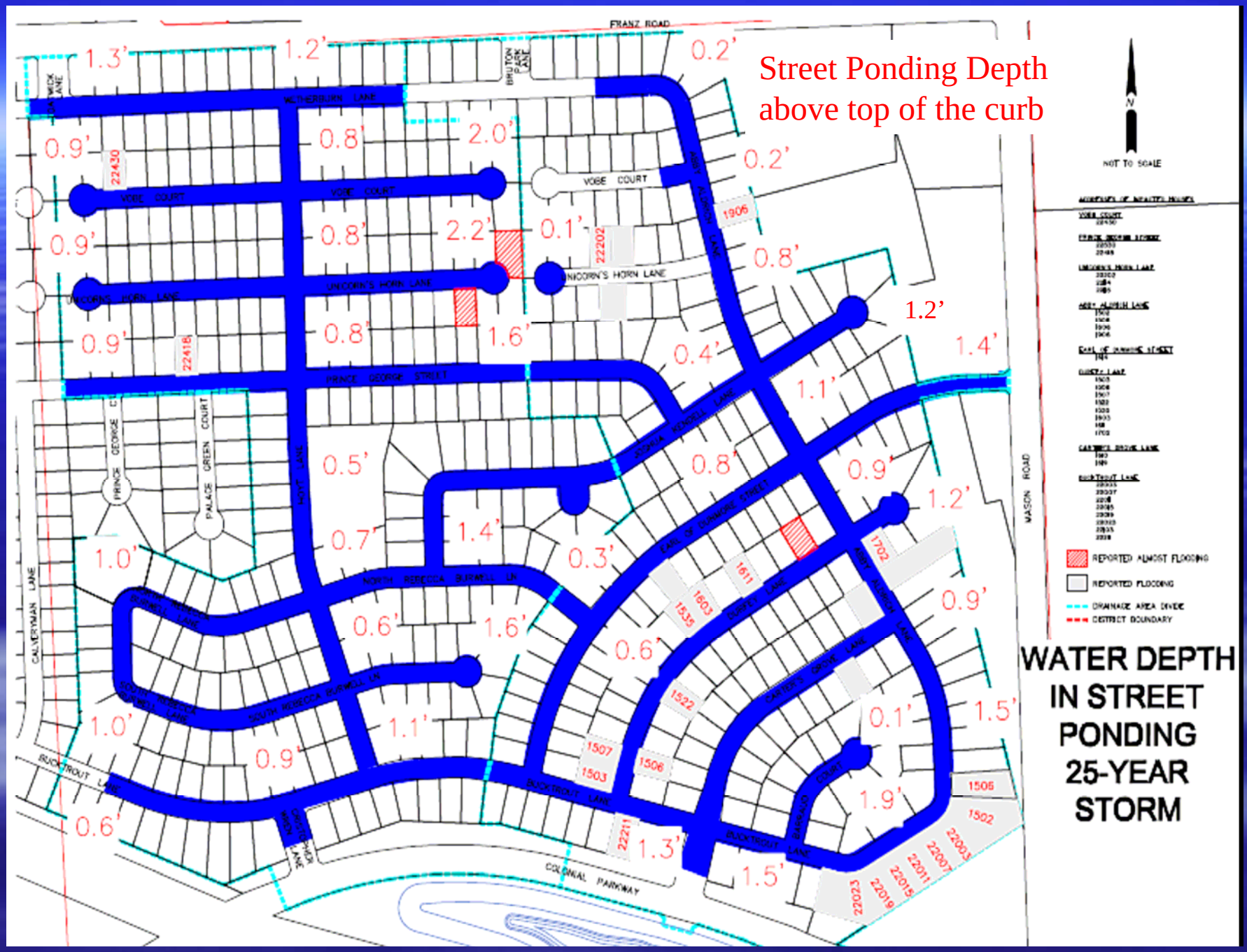
22019
22015
22011
22007
22003


Street Ponding Depth above top of the curb
WATER DEPTH IN STREET PONDING 25-YEAR STORM
NOT TO SCALE
REPORTED ALMOST FLOODING
REPORTED FLOODING
DRAINAGE AREA DIVIDE
DISTRICT BOUNDARY
FRANZ ROAD
WETHERBURN LANE
VOBE COURT
UNICORN'S HORN LANE
PRINCE GEORGE STREET
PRINCE GEORGE CT
PALACE GREEN COURT
HOYT LANE
ABBY ALDRICH LANE
JOSHUA KENDELL LANE
EARL OF DUNMORE STREET
NORTH REBECCA BURNELL LN
SOUTH REBECCA BURNELL LANE
CALVERYMAN LANE
BUCKTROUT LANE
COLONIAL PARKWAY
MASON ROAD
1.3'
1.2'
0.2'
0.9'
0.8'
2.0'
0.2'
0.9'
0.8'
2.2'
0.1'
0.8'
0.9'
0.8'
1.6'
0.4'
1.2'
1.4'
1.1'
0.5'
0.8'
0.9'
1.2'
1.0'
0.7'
1.4'
0.3'
0.6'
1.6'
0.6'
0.9'
1.0'
1.1'
0.9'
0.1'
1.5'
1.9'
0.6'
1.3'
1.5'
22430
22418
22202
1906
1702
1611
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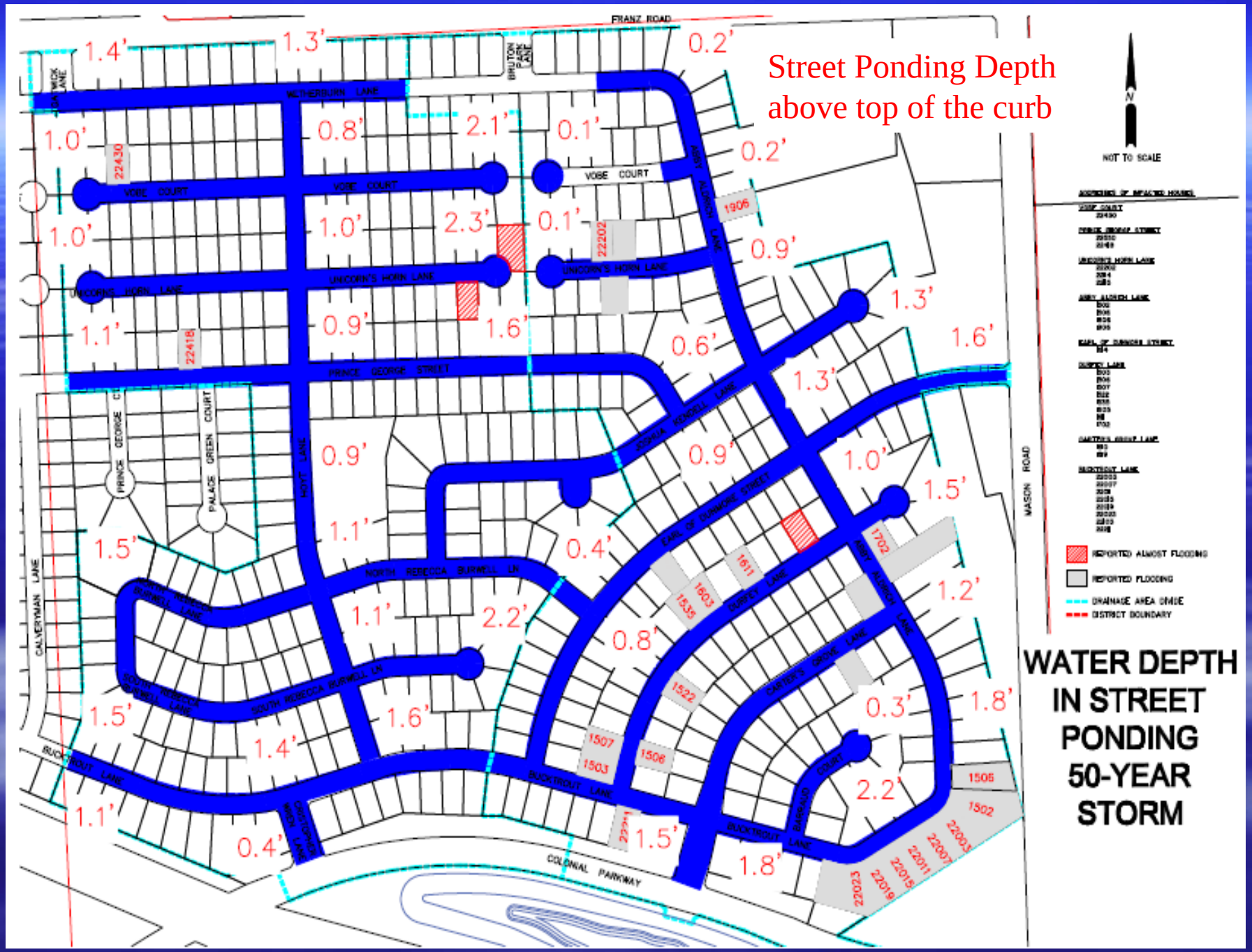
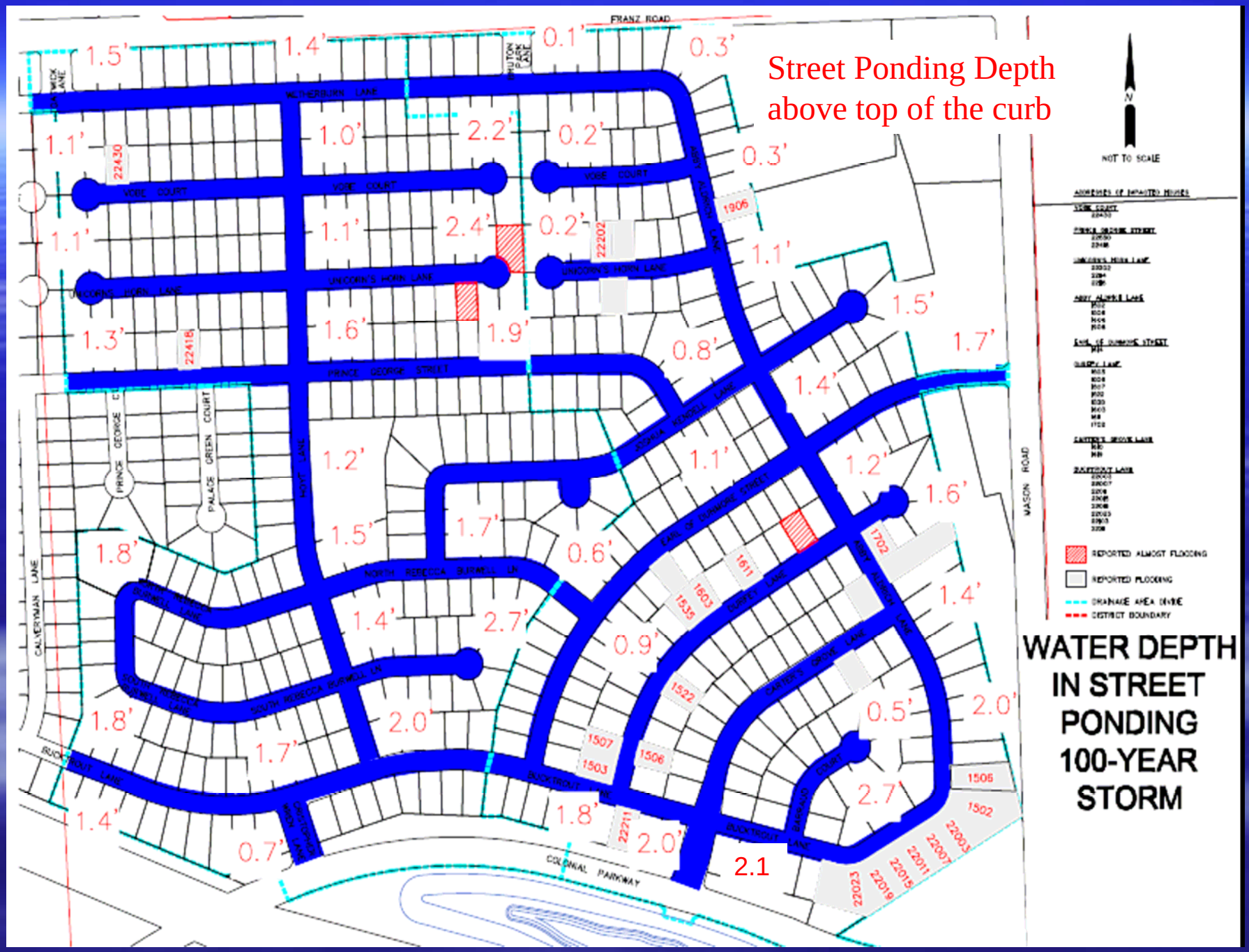
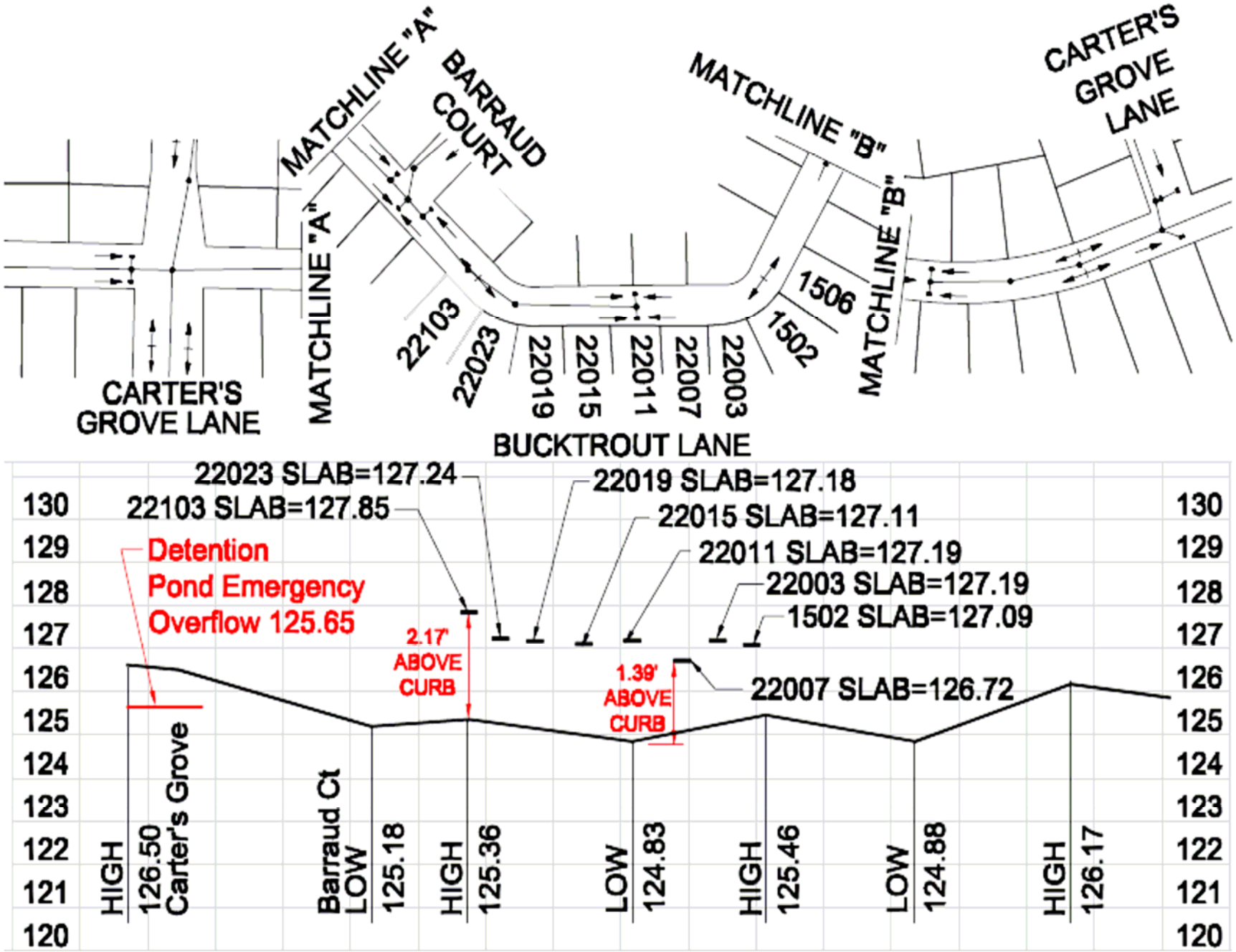
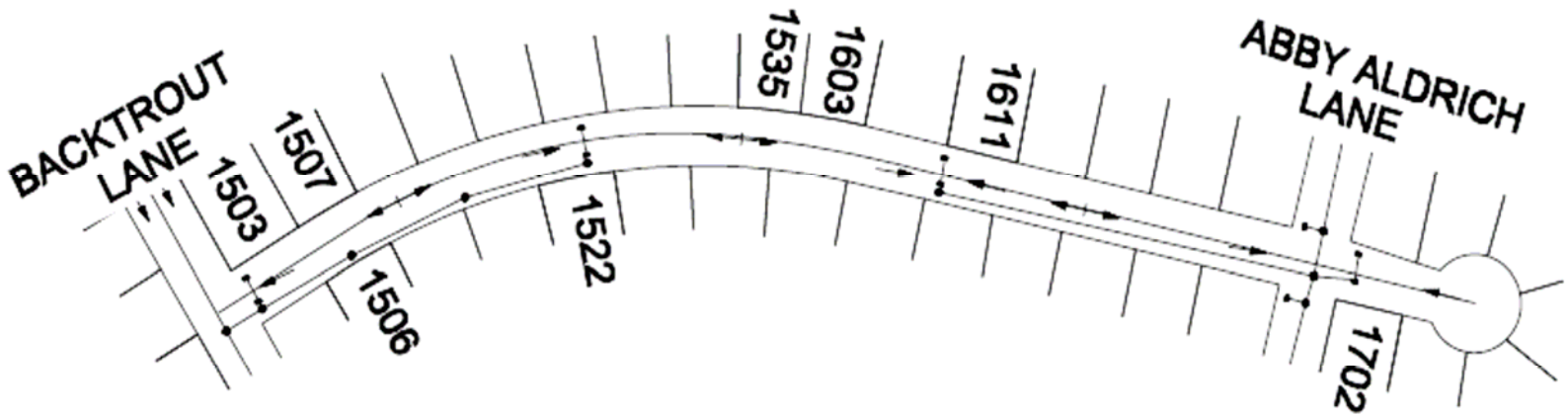
22003
22007
22011
22015
22019
22023

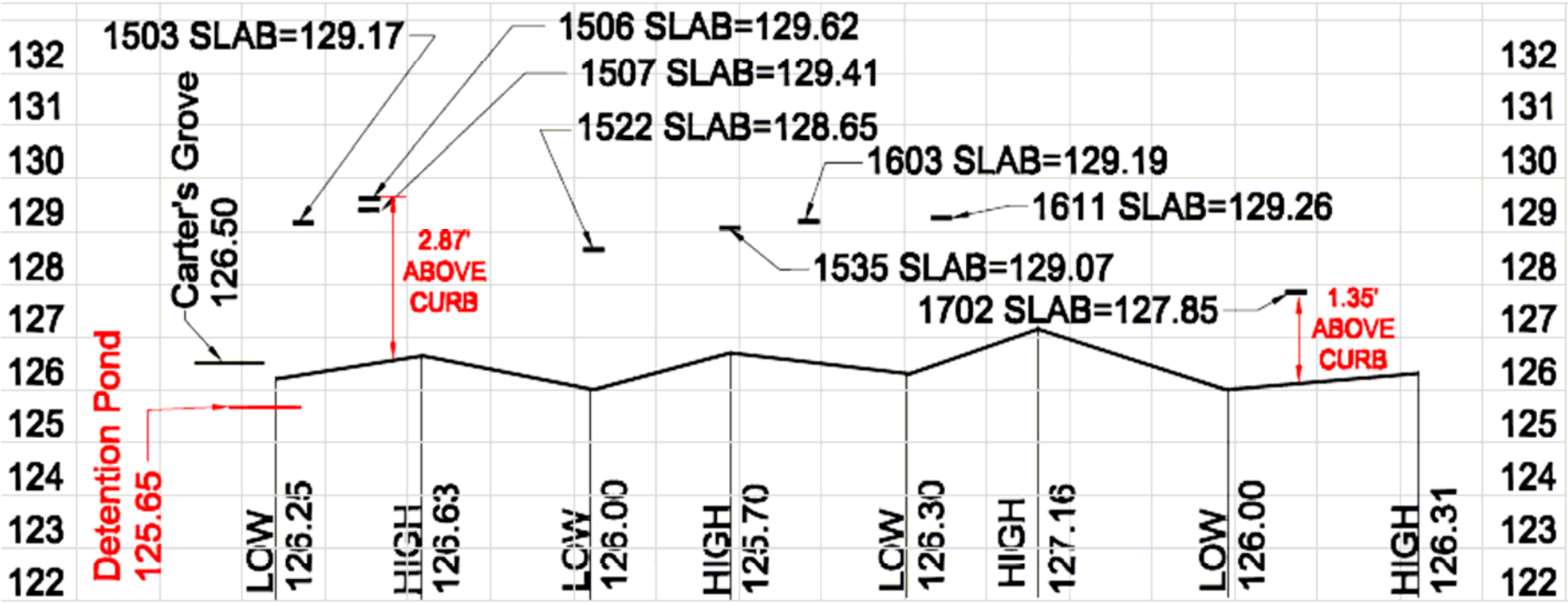

Street Ponding Depth above top of the curb
WATER DEPTH IN STREET PONDING 50-YEAR STORM
NOT TO SCALE
N
FRANZ ROAD
WETHERBURN LANE
VOSE COURT
UNICORN'S HORN LANE
PRINCE GEORGE STREET
PRINCE GEORGE COURT
PALACE GREEN COURT
HOYT LANE
NORTH REBECCA BURNELL LN
SOUTH REBECCA BURNELL LN
CALVERYMAN LANE
BUCKTROUT LANE
COLONIAL PARKWAY
EARL OF DUNMORE STREET
ABBY ALLOCH LANE
JOSHUA KENDELL LANE
DURFEY LANE
CARDON'S GROVE LANE
BARGAUD COURT
MASON ROAD
REPORTED ALMOST FLOODING
REPORTED FLOODING
DRAINAGE AREA DIVIDE
DISTRICT BOUNDARY


Street Ponding Depth above top of the curb
WATER DEPTH IN STREET PONDING 100-YEAR STORM
NOT TO SCALE
N
FRANZ ROAD
WETHERBURN LANE
VOBE COURT
UNICORN'S HORN LANE
PRINCE GEORGE STREET
PALACE GREEN COURT
NORTH REBECCA BURNELL LN
SOUTH REBECCA BURNELL LN
BUCKTROUT LANE
COLONIAL PARKWAY
CALVERYMAN LANE
WASON ROAD
EARL OF DUNMORE STREET
GURREY LANE
CARTER'S GROVE LANE
ABBY ALDRICH LANE
JOSHUA KENDALL LANE
REPORTED ALMOST FLOODING
REPORTED FLOODING
DRAINAGE AREA DIVIDE
DISTRICT BOUNDARY
2.1


MATCHLINE "A"
BARRAUD COURT
MATCHLINE "B"
CARTER'S GROVE LANE
MATCHLINE "A"
MATCHLINE "B"
1506
1502
22103
22023
22019
22015
22011
22007
22003
CARTER'S GROVE LANE
BUCKTROUT LANE
22023 SLAB=127.24
22019 SLAB=127.18
22103 SLAB=127.85
22015 SLAB=127.11
22011 SLAB=127.19
22003 SLAB=127.19
1502 SLAB=127.09
Detention Pond Emergency Overflow 125.65
2.17' ABOVE CURB
1.39' ABOVE CURB
22007 SLAB=126.72
130
129
128
127
126
125
124
123
122
121
120
HIGH 126.50 Carter's Grove
Barraud Ct LOW 125.18
HIGH 125.36
LOW 124.83
HIGH 125.46
LOW 124.88
HIGH 126.17


BACKTROUT LANE
1503
1507
1506
1522
1535
1603
1611
ABBY ALDRICH LANE
1702

DURFEY LANE


1503 SLAB=129.17
1506 SLAB=129.62
1507 SLAB=129.41
1522 SLAB=128.65
1603 SLAB=129.19
1611 SLAB=129.26
1535 SLAB=129.07
1702 SLAB=127.85
2.87' ABOVE CURB
1.35' ABOVE CURB
Carter's Grove 126.50
Detention Pond 125.65
LOW 126.25
HIGH 126.63
LOW 126.00
HIGH 125.70
LOW 126.30
HIGH 127.16
LOW 126.00
HIGH 126.31
132
131
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125
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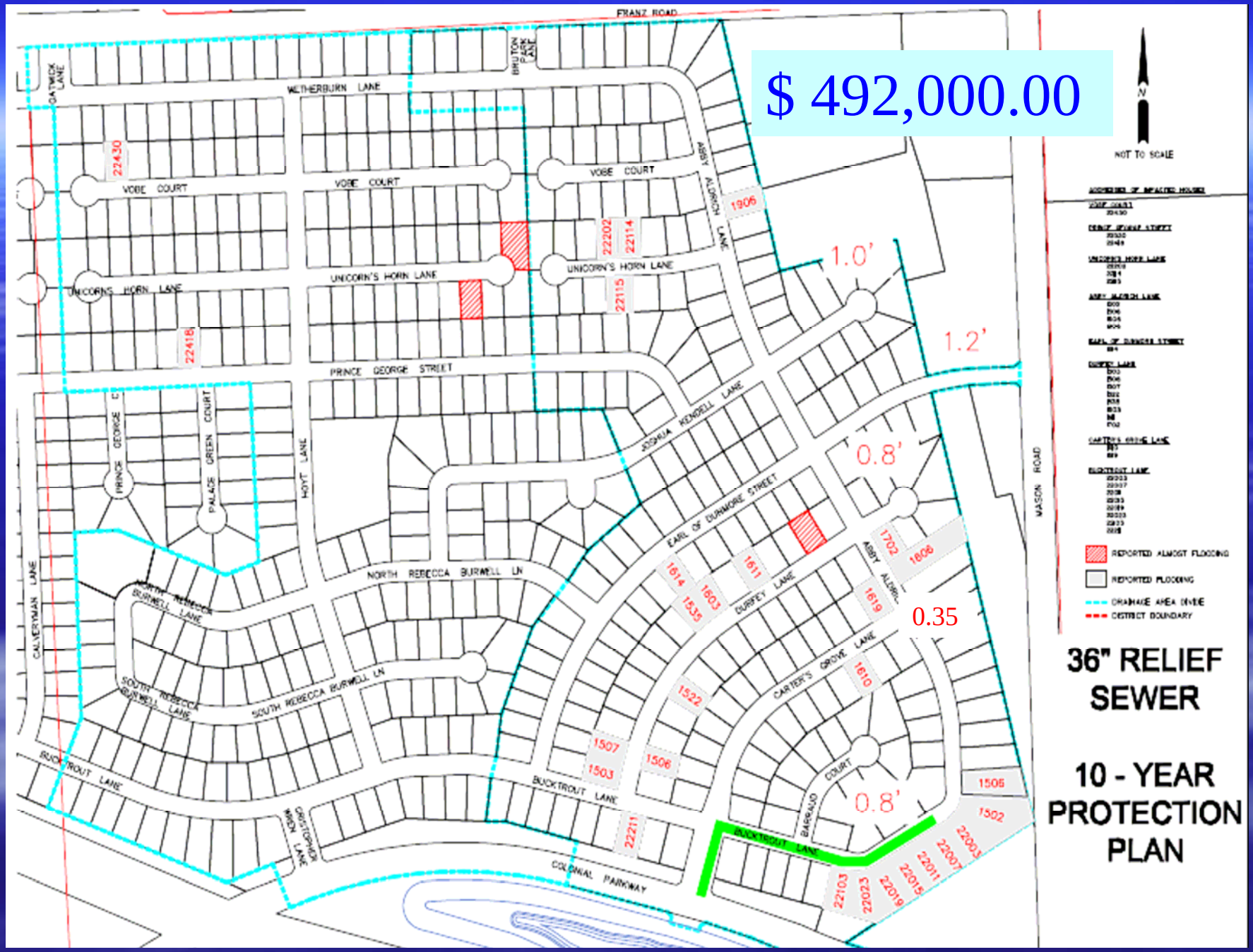
123
122

Proposed Improvements
Section 1


$ 492,000.00
FRANZ ROAD
WETHERBURN LANE
VOBE COURT
UNICORNS HORN LANE
PRINCE GEORGE STREET
PRINCE GEORGE CT
PALACE GREEN COURT
HOYT LANE
CALVERYMAN LANE
NORTH REBECCA BURWELL LN
SOUTH REBECCA BURWELL LN
BUCKTROUT LANE
CRISTOPHER WREN LANE
COLONIAL PARKWAY
JOSHUA KENDELL LANE
EARL OF DUNMORE STREET
DURFEY LANE
CARTER'S GROVE LANE
BARBADO COURT
ABBY ALDRICH LANE
BRUTON PARK LANE
MASON ROAD
1.0'
1.2'
0.8'
0.35
0.8'
22430
22418
22202
22114
22115
1906
1702
1808
1614
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1522
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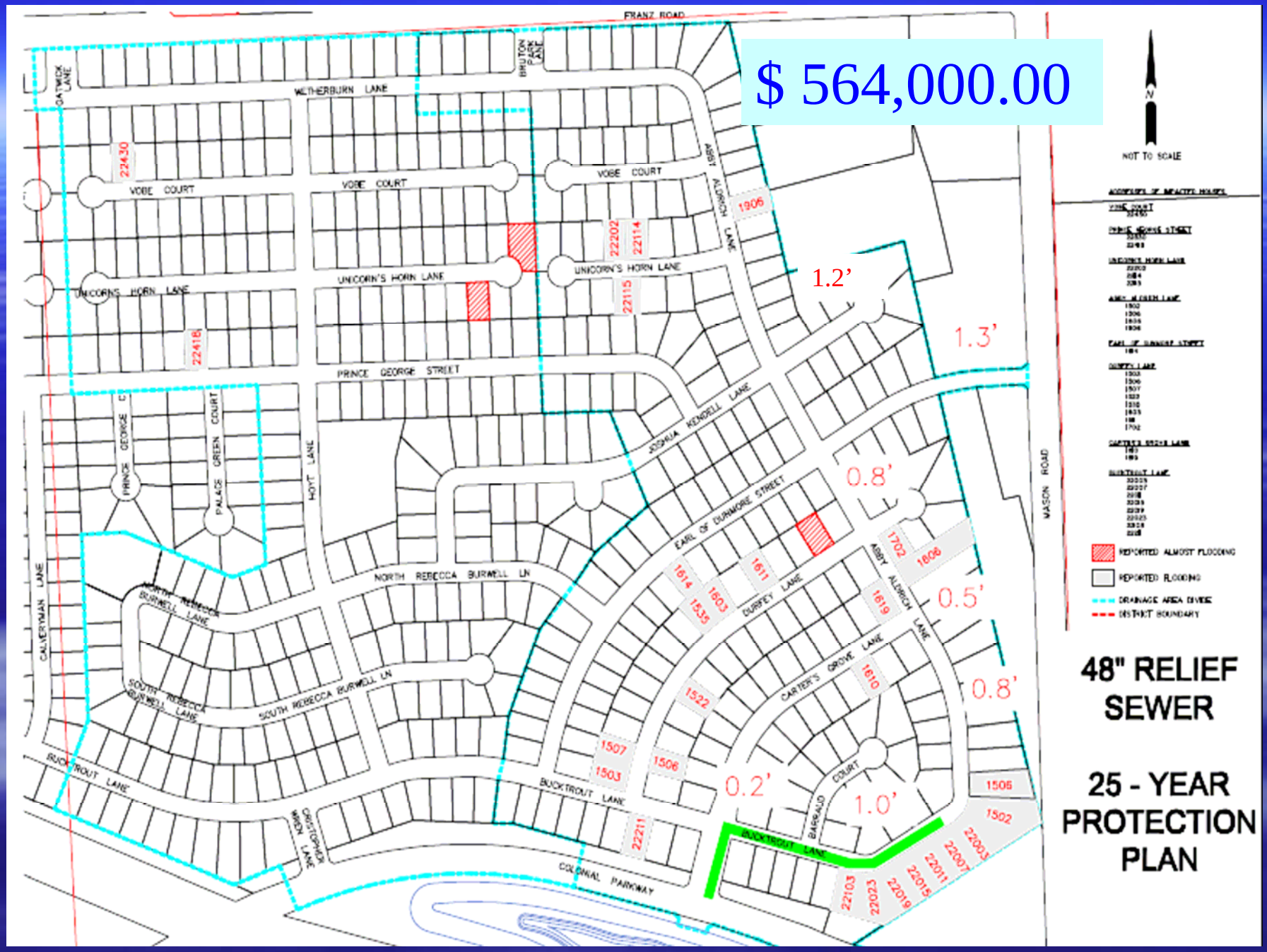
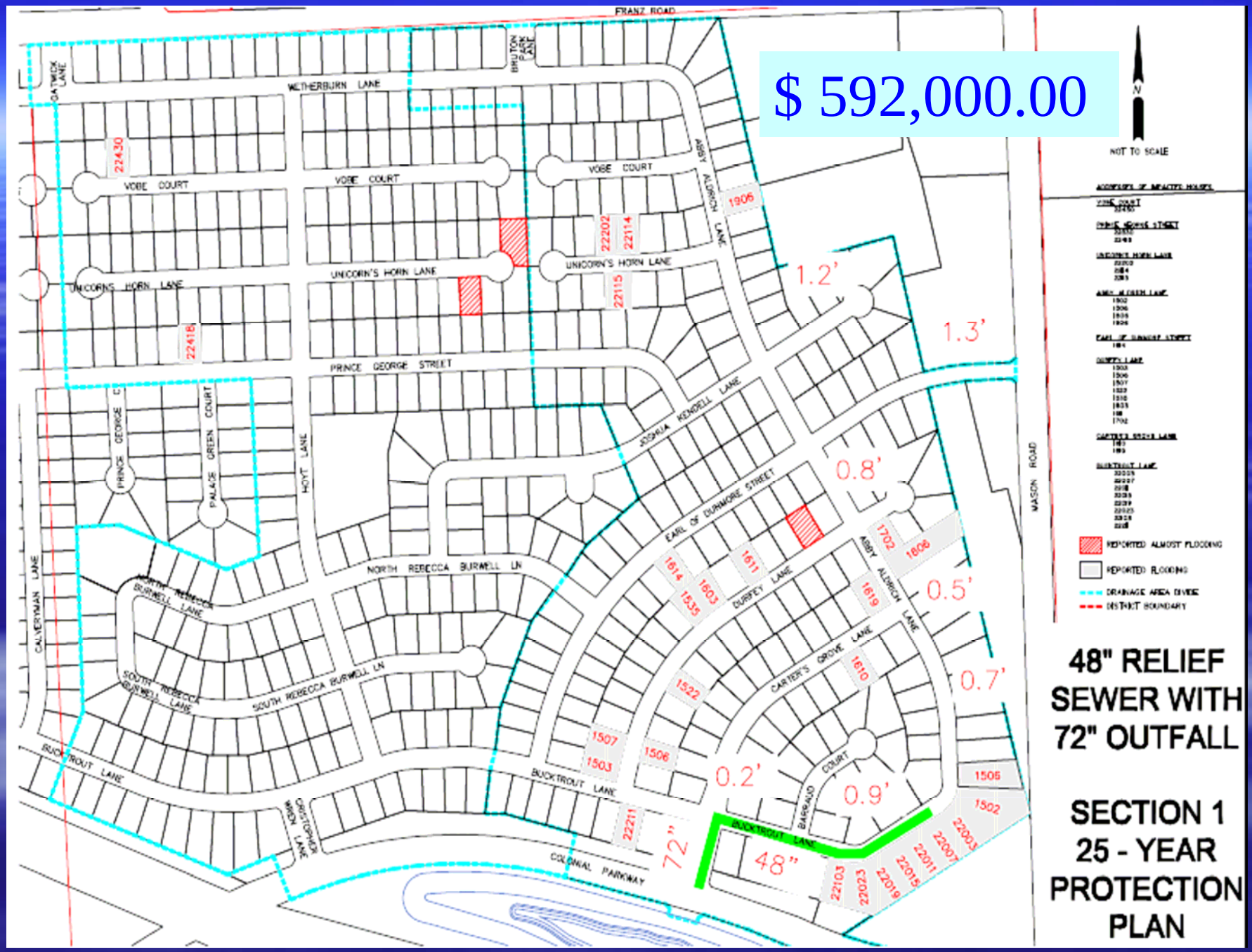
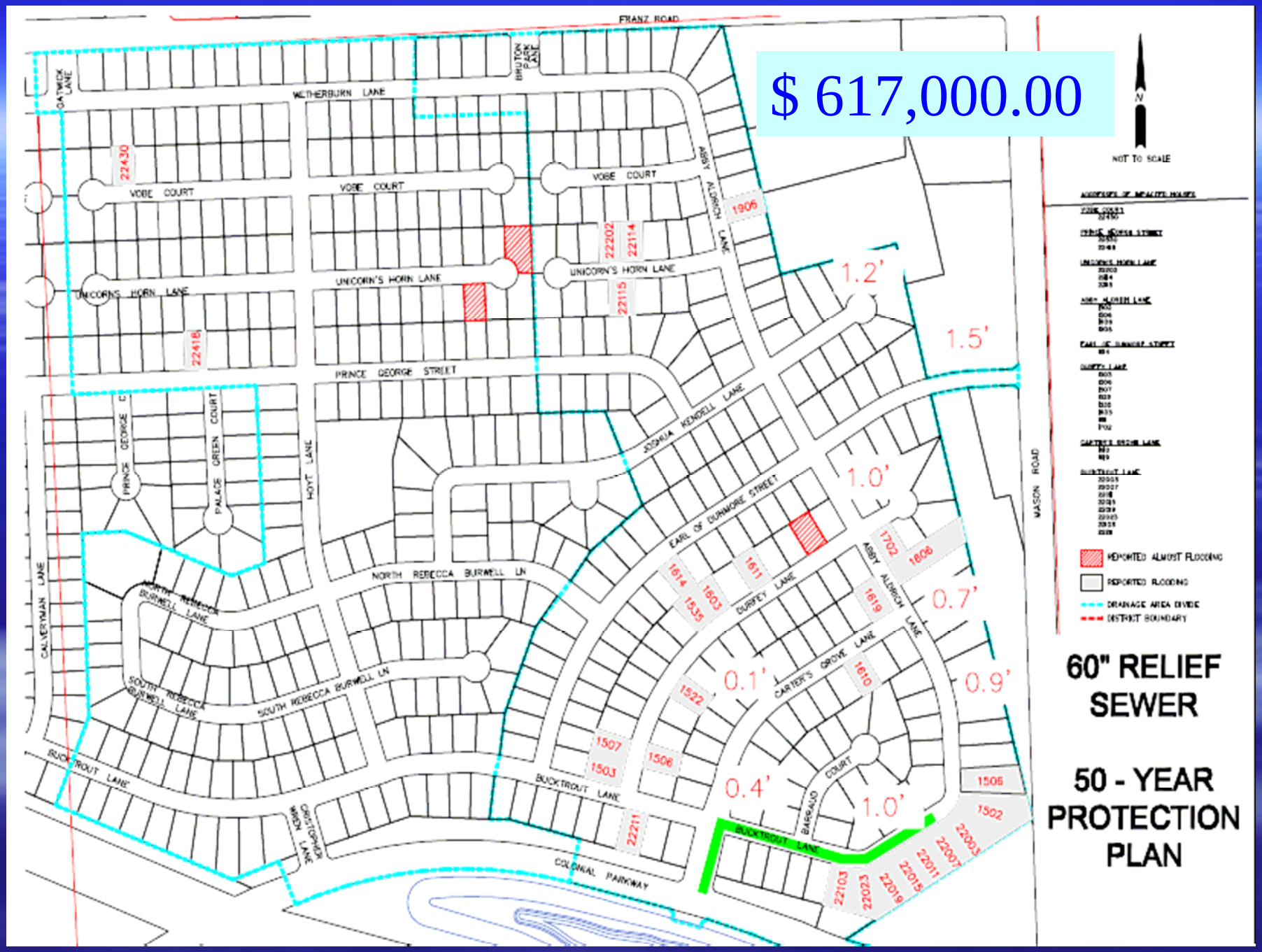
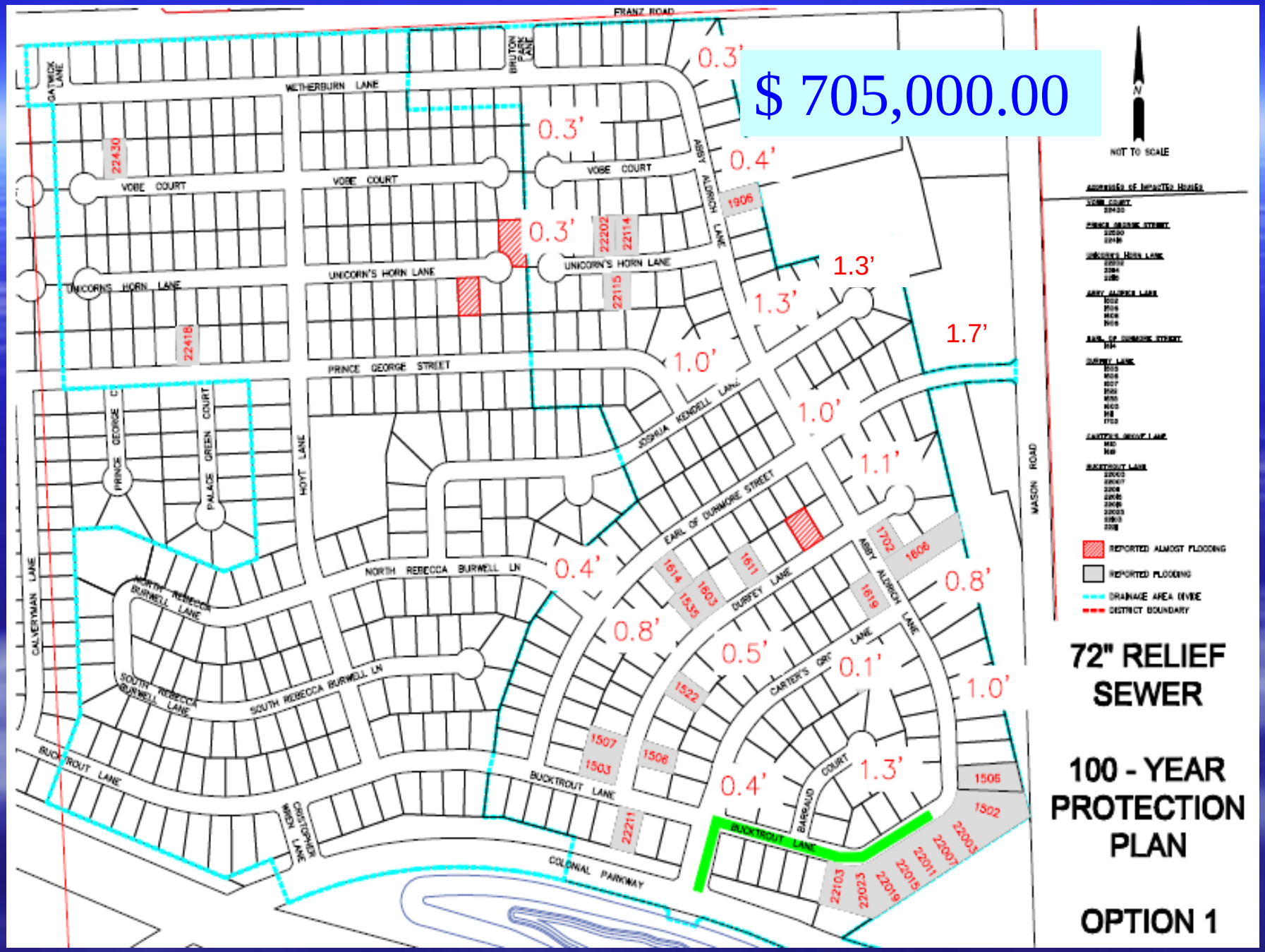
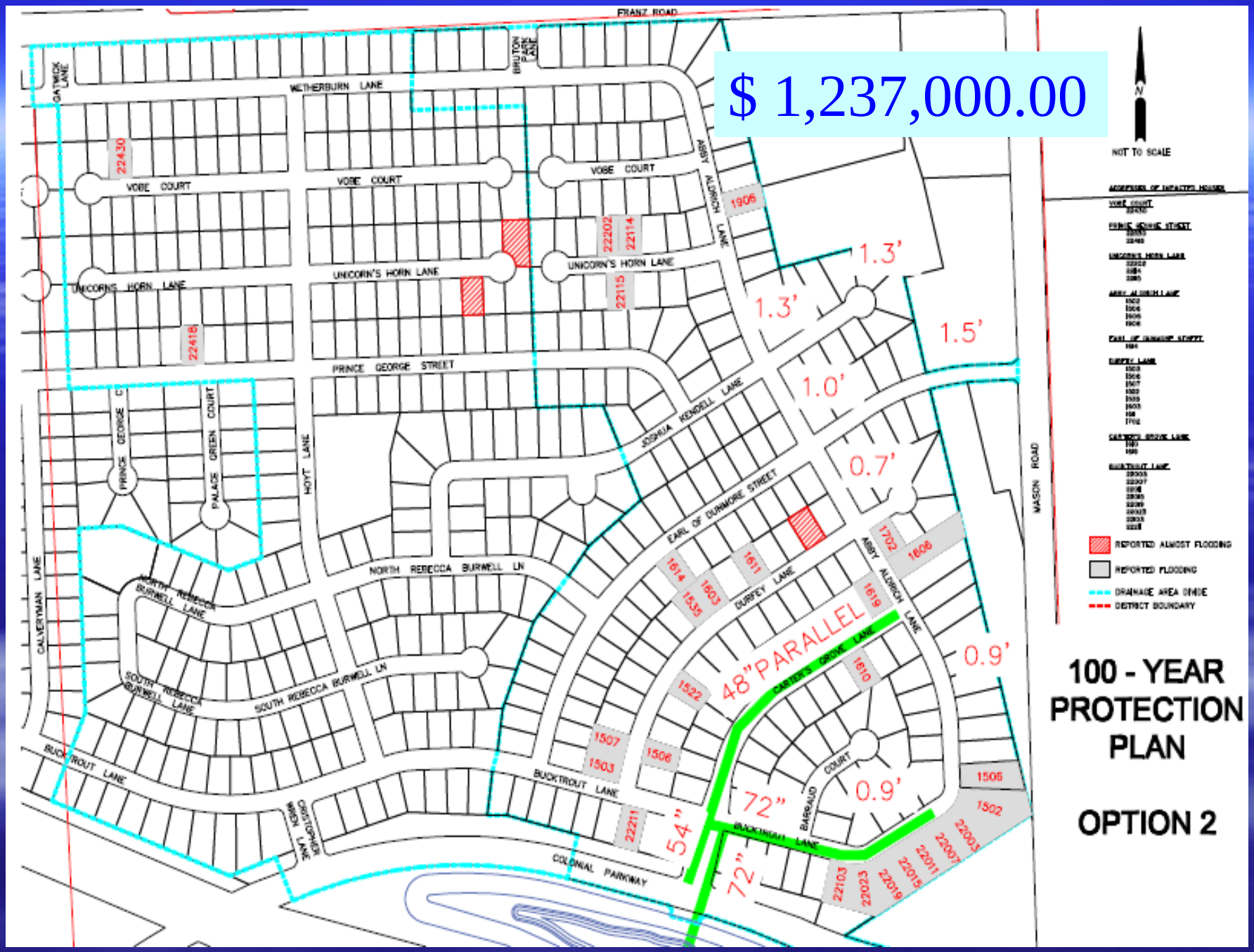
1505
1502
22211
22003
22007
22011
22015
22019
22023
22103
NOT TO SCALE
REPORTED ALMOST FLOODING
REPORTED FLOODING
DRAINAGE AREA DIVIDE
DISTRICT BOUNDARY
36" RELIEF SEWER
10 - YEAR PROTECTION PLAN


$ 564,000.00
FRANZ ROAD
WETHERBURN LANE
VOBE COURT
UNICORNS HORN LANE
PRINCE GEORGE STREET
PALACE GREEN COURT
HOYT LANE
JOSHUA KENDELL LANE
EARL OF DUNMORE STREET
DURFEY LANE
CARTER'S GROVE LANE
ABBY ALDRICH LANE
NORTH REBECCA BURWELL LN
SOUTH REBECCA BURWELL LN
BUCKTROUT LANE
COLONIAL PARKWAY
MASON ROAD
CALVERTMAN LANE
1.2'
1.3'
0.8'
0.5'
0.8'
0.2'
1.0'
NOT TO SCALE
REPORTED ALMOST FLOODING
REPORTED FLOODING
DRAINAGE AREA DIVIDE
DISTRICT BOUNDARY
48" RELIEF SEWER
25 - YEAR PROTECTION PLAN


$ 592,000.00
FRANZ ROAD
WETHERBURN LANE
GATWICK LANE
BRUTON PARK LANE
VOBE COURT
UNICORNS HORN LANE
UNICORN'S HORN LANE
PRINCE GEORGE STREET
PRINCE GEORGE CT
PALACE GREEN COURT
HOYT LANE
ABBY ALDRICH LANE
JOSHUA KENDELL LANE
EARL OF DUNMORE STREET
DURFEY LANE
CARTER'S GROVE LANE
NORTH REBECCA BURWELL LN
NORTH REBECCA BURWELL LANE
SOUTH REBECCA BURWELL LN
SOUTH REBECCA BURWELL LANE
CALVERYMAN LANE
BUCKTROUT LANE
CHRISTOPHER WREN LANE
COLONIAL PARKWAY
BARRAUD COURT
MASON ROAD
22430
22418
22202
22114
22115
1906
1702
1806
1814
1603
1535
1611
1619
1522
1610
1507
1503
1506
22211
1505
1502
22003
22007
22011
22015
22019
22023
22103
1.2'
1.3'
0.8'
0.5'
0.7'
0.2'
0.9'
72"
48"
NOT TO SCALE
REPORTED ALMOST FLOODING
REPORTED FLOODING
DRAINAGE AREA DIVIDE
DISTRICT BOUNDARY
48" RELIEF SEWER WITH 72" OUTFALL
SECTION 1
25 - YEAR PROTECTION PLAN


$ 617,000.00
FRANZ ROAD
WETHERBURN LANE
VOBE COURT
UNICORN'S HORN LANE
PRINCE GEORGE STREET
ABBY ALDRICH LANE
JOSHUA KENDELL LANE
EARL OF DUNMORE STREET
DURFEY LANE
CARTER'S GROVE LANE
BARBADO COURT
NORTH REBECCA BURWELL LN
SOUTH REBECCA BURWELL LN
BUCKTROUT LANE
COLONIAL PARKWAY
HOYT LANE
PALACE GREEN COURT
CALVERTMAN LANE
CHRISTOPHER WREN LANE
MASON ROAD
NOT TO SCALE
REPORTED ALMOST FLOODING
REPORTED FLOODING
DRAINAGE AREA DIVIDE
DISTRICT BOUNDARY
60" RELIEF SEWER
50 - YEAR PROTECTION PLAN


$ 705,000.00
FRANZ ROAD
WETHERBURN LANE
VOBE COURT
UNICORN'S HORN LANE
PRINCE GEORGE STREET
JOSHUA KENDELL LANE
EARL OF DUNMORE STREET
NORTH REBECCA BURWELL LN
SOUTH REBECCA BURWELL LN
BUCKTROUT LANE
COLONIAL PARKWAY
ABBY ALDRICH LANE
MASON ROAD
HOYT LANE
CALVERYMAN LANE
PALACE GREEN COURT
CARTER'S GRV LANE
NOT TO SCALE
REPORTED ALMOST FLOODING
REPORTED FLOODING
DRAINAGE AREA DIVIDE
DISTRICT BOUNDARY
72" RELIEF SEWER
100 - YEAR PROTECTION PLAN
OPTION 1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FRANZ ROAD
WETHERBURN LANE
GATWICK LANE
BRUTON PARK LANE
VOSE COURT
UNICORN'S HORN LANE
PRINCE GEORGE STREET
PRINCE GEORGE CT
PALACE GREEN COURT
HOYT LANE
JOSHUA KENDELL LANE
EARL OF DUNMORE STREET
ABBY ALDRICH LANE
DURFEY LANE
NORTH REBECCA BURWELL LN
NORTH REBECCA BURWELL LANE
SOUTH REBECCA BURWELL LN
SOUTH REBECCA BURWELL LANE
CALVERYMAN LANE
BUCKTROUT LANE
CARTER'S GROVE LANE
BARGAUD COURT
BUCKINGHAM LANE
COLONIAL PARKWAY
MASON ROAD
48"PARALLEL
72"
54"
1.3'
1.5'
1.0'
0.7'
0.9'
22430
22418
22202
22214
22115
1906
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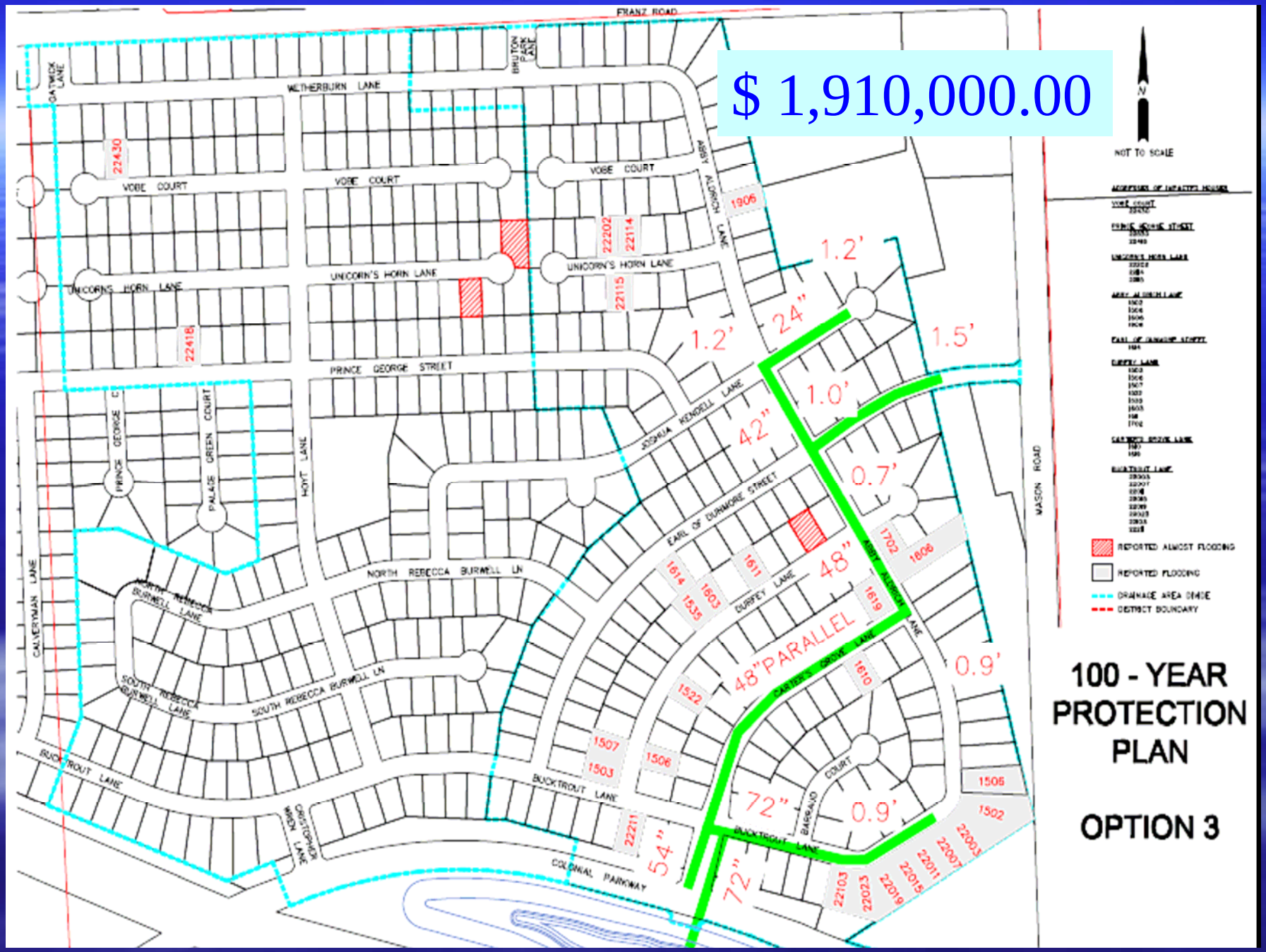
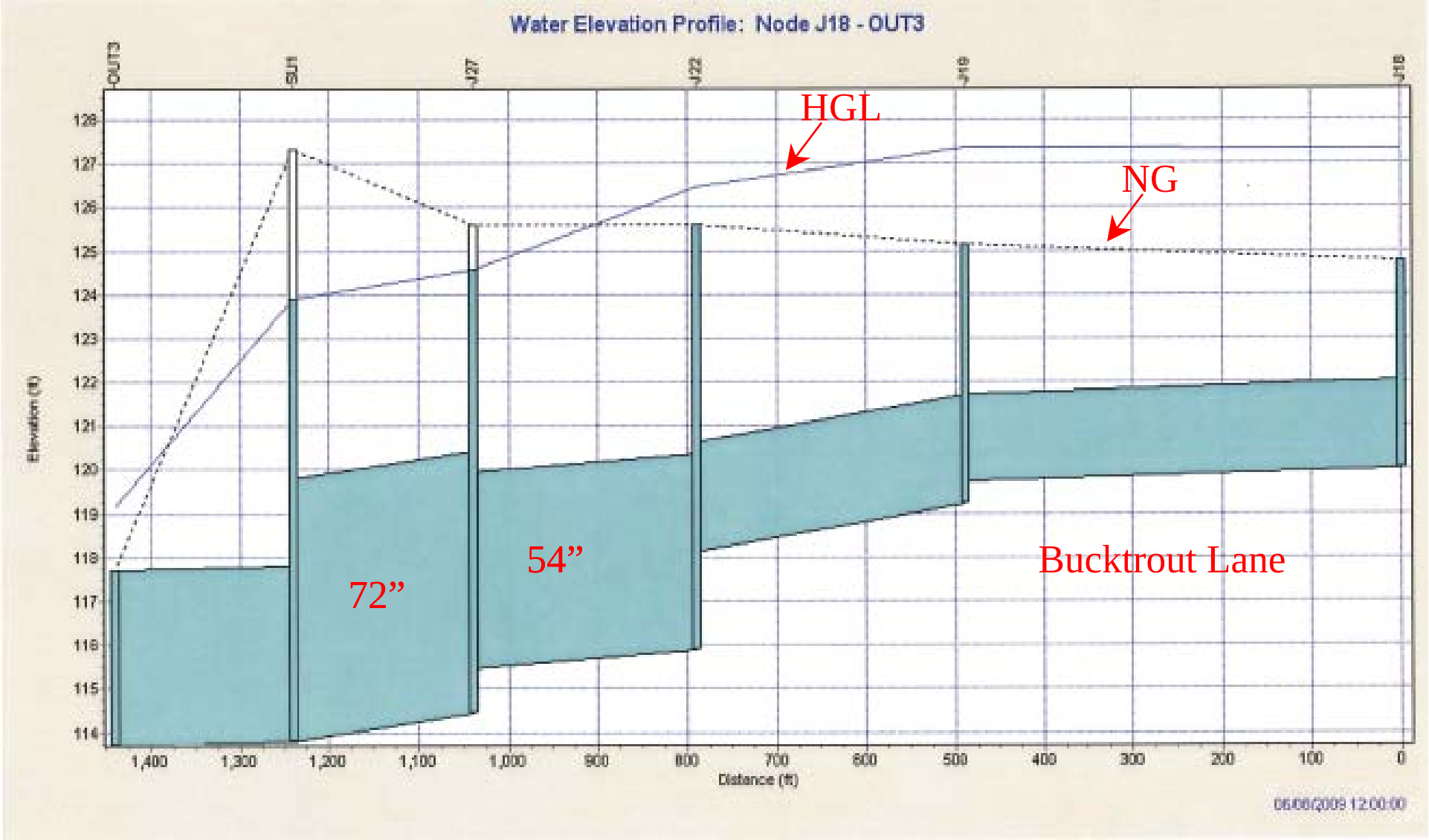
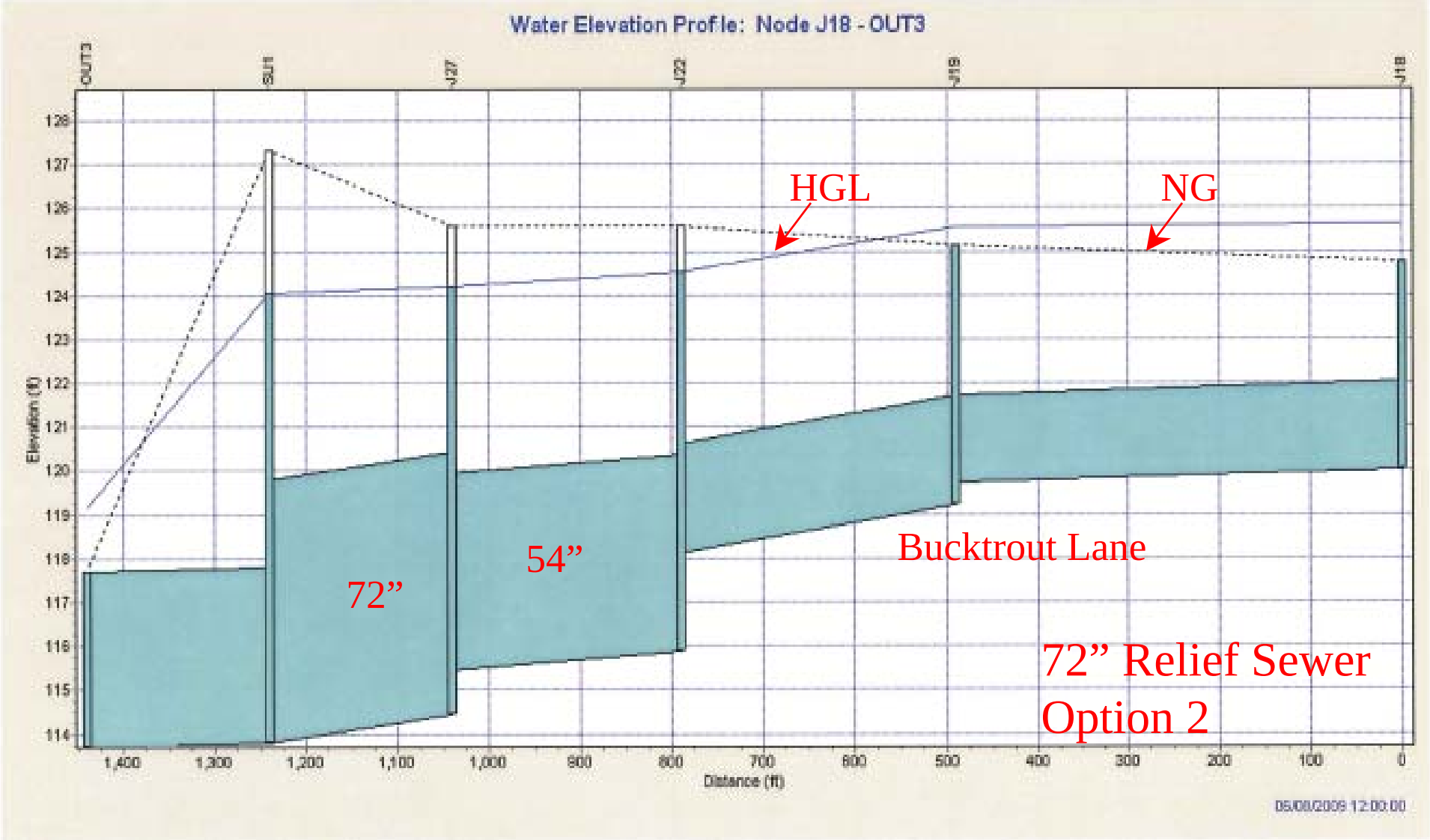
22211
1502
22003
22007
22011
22015
22019
22023
22103
NOT TO SCALE
REPORTED ALMOST FLOODING
REPORTED FLOODING
DRAINAGE AREA DIVIDE
DISTRICT BOUNDARY
100 - YEAR PROTECTION PLAN
OPTION 2


$ 1,910,000.00
FRANZ ROAD
WETHERBURN LANE
VOBE COURT
UNICORN'S HORN LANE
PRINCE GEORGE STREET
ABBY ALDRICH LANE
JOSHUA KENDELL LANE
EARL OF DUNMORE STREET
DURFEY LANE
CARTER'S GROVE LANE
BARGAND COURT
NORTH REBECCA BURWELL LN
SOUTH REBECCA BURWELL LN
BUCKTROUT LANE
COLONIAL PARKWAY
MASON ROAD
CALVERYMAN LANE
HOYT LANE
PALACE GREEN COURT
NOT TO SCALE
REPORTED ALMOST FLOODING
REPORTED FLOODING
DRAINAGE AREA DIVIDE
DISTRICT BOUNDARY
100 - YEAR PROTECTION PLAN
OPTION 3

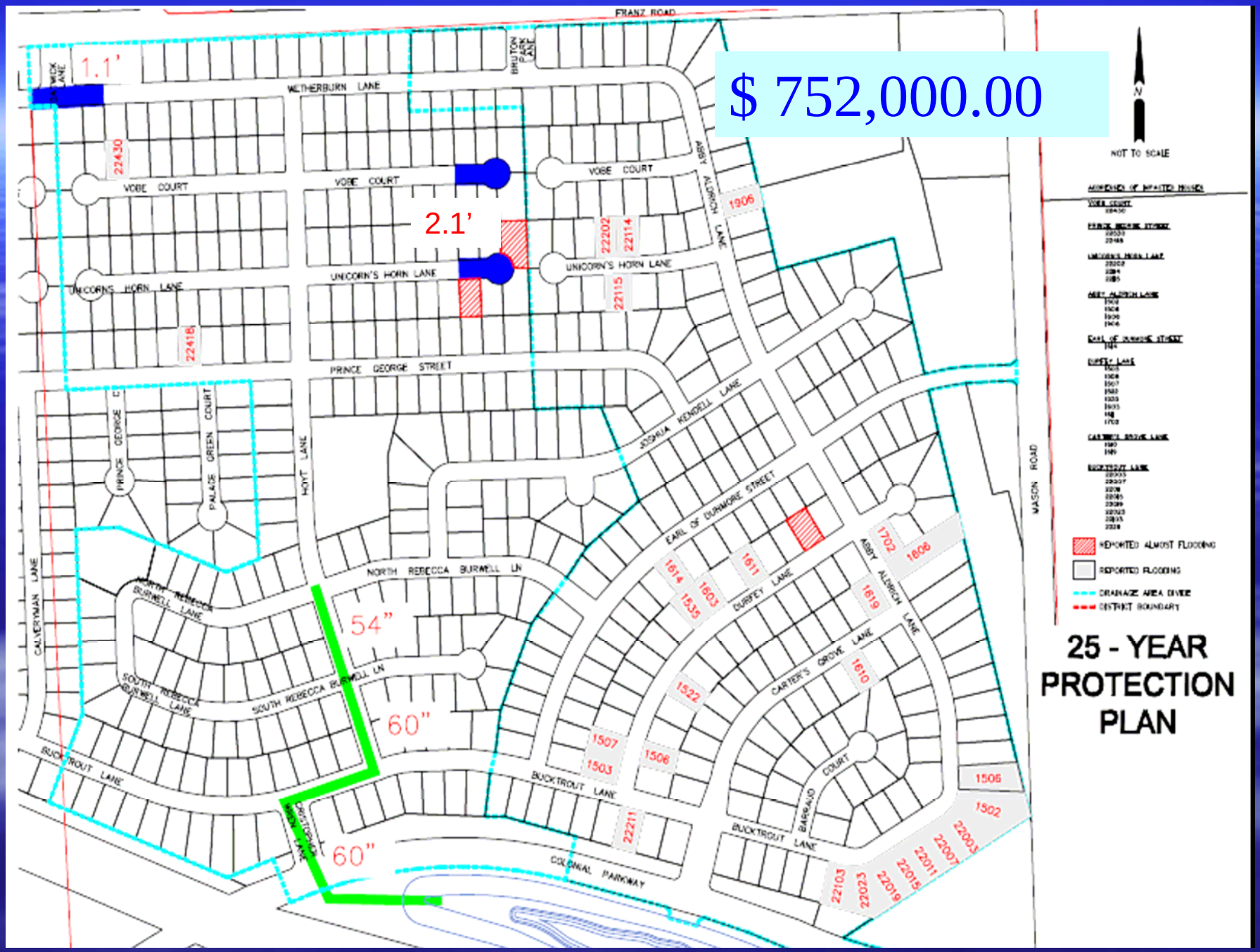
Existing Conditions -100 Year Storm Event

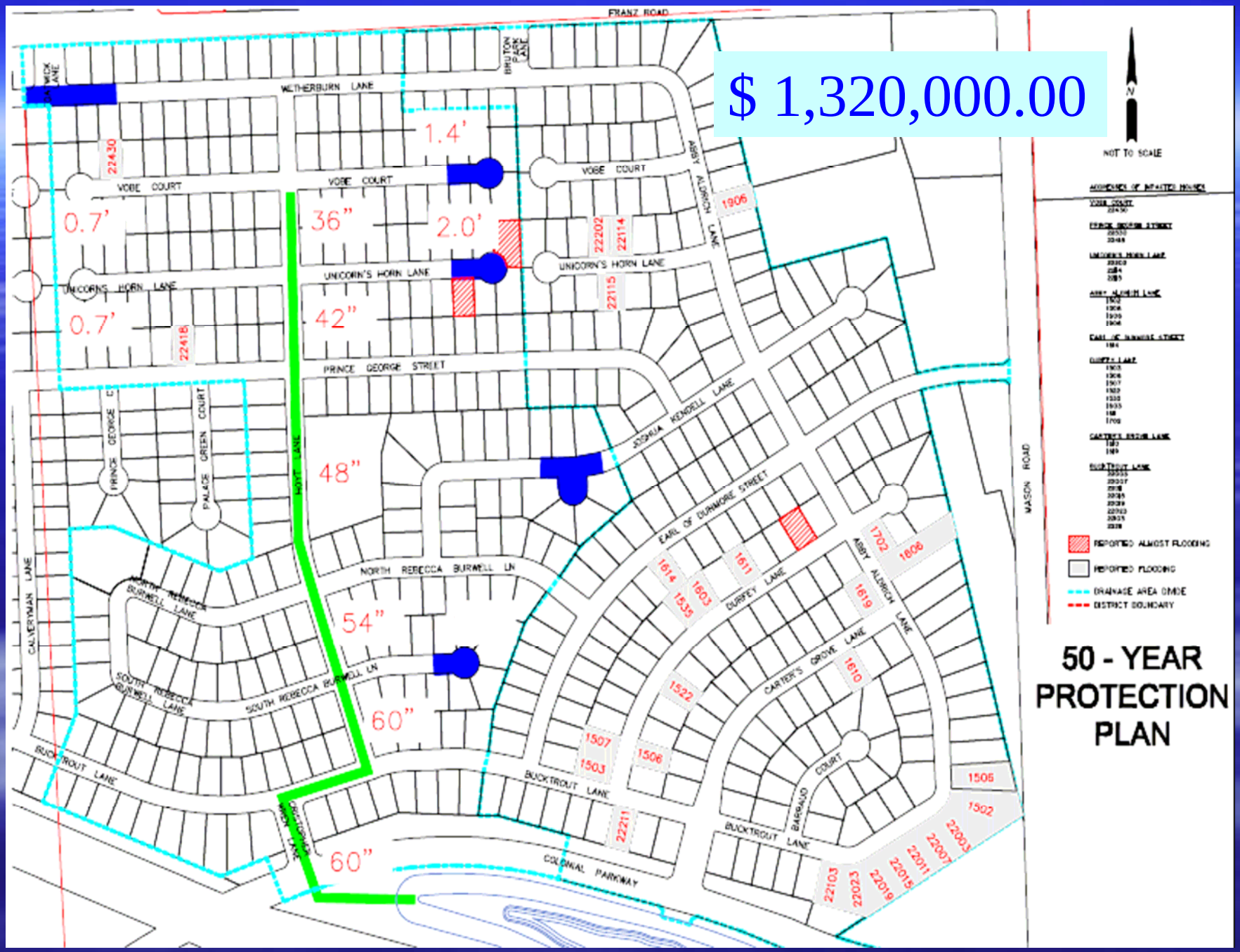


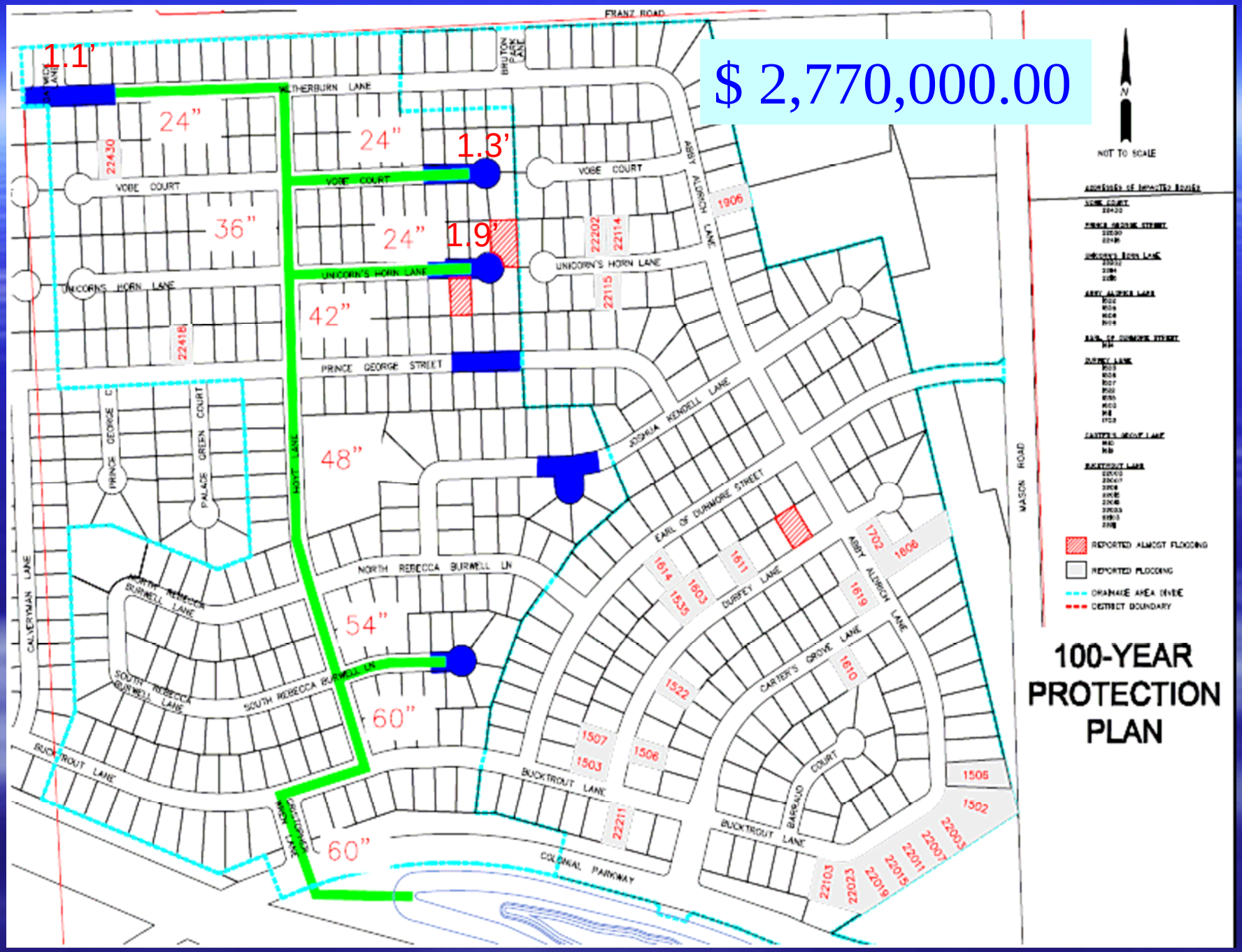
Proposed Conditions -100 Year Storm Event



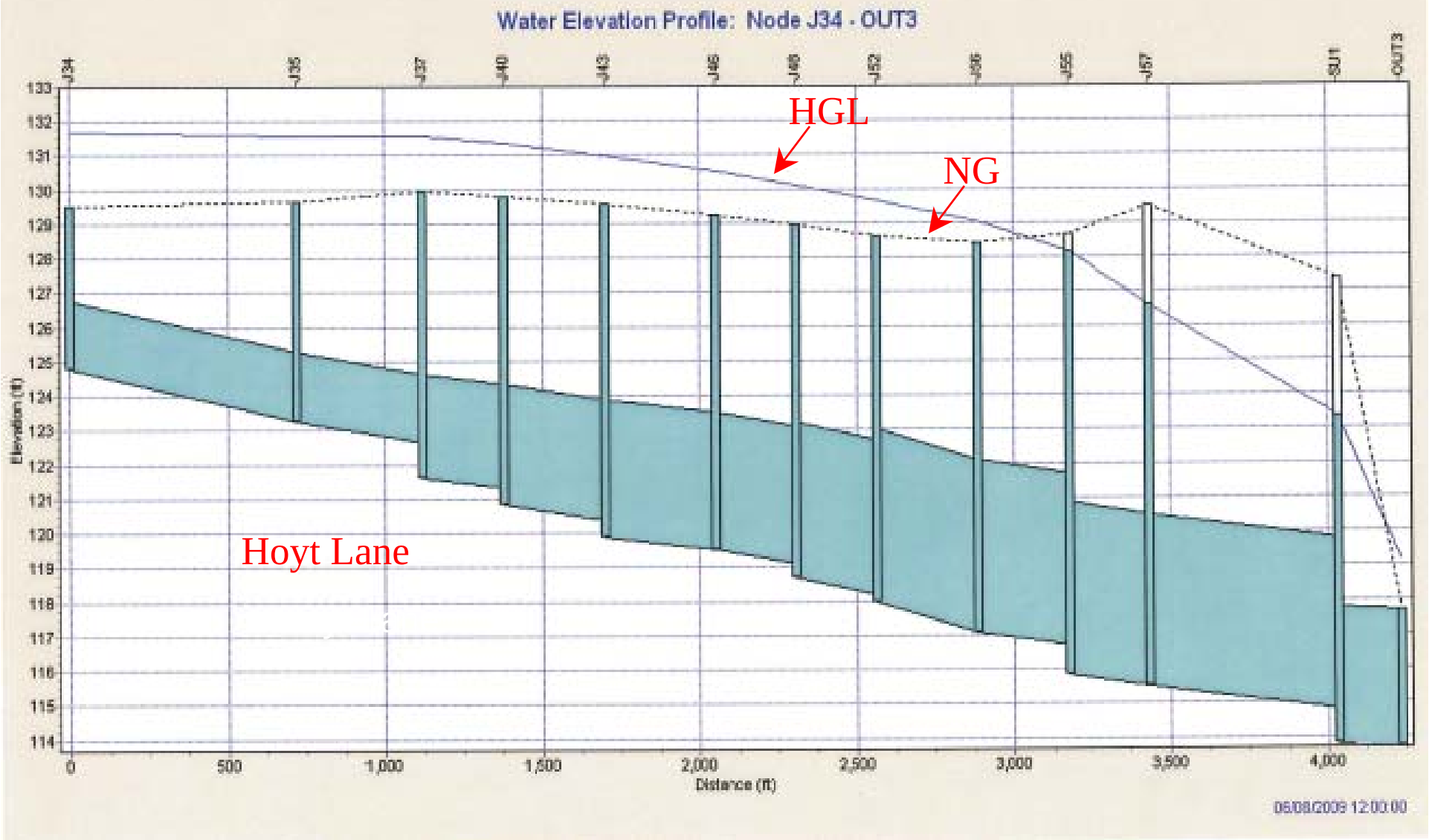
Proposed Improvements
Section 2


$ 752,000.00
1.1'
2.1'
54"
60"
60"
FRANZ ROAD
WETHERBURN LANE
VOBE COURT
UNICORN'S HORN LANE
PRINCE GEORGE STREET
PRINCE GEORGE CT
PALACE GREEN COURT
HOYT LANE
CALVERYMAN LANE
NORTH REBECCA BURWELL LN
SOUTH REBECCA BURWELL LN
BUCKTROUT LANE
COLONIAL PARKWAY
ABBY ALDRICH LANE
JOSHUA KENDELL LANE
EARL OF DUNMORE STREET
DURFEY LANE
CARTER'S GROVE LANE
BARRAND COURT
MASON ROAD
NOT TO SCALE
REPORTED ALMOST FLOODING
REPORTED FLOODING
DRAINAGE AREA DIVIDE
DISTRICT BOUNDARY
25 - YEAR PROTECTION PLAN

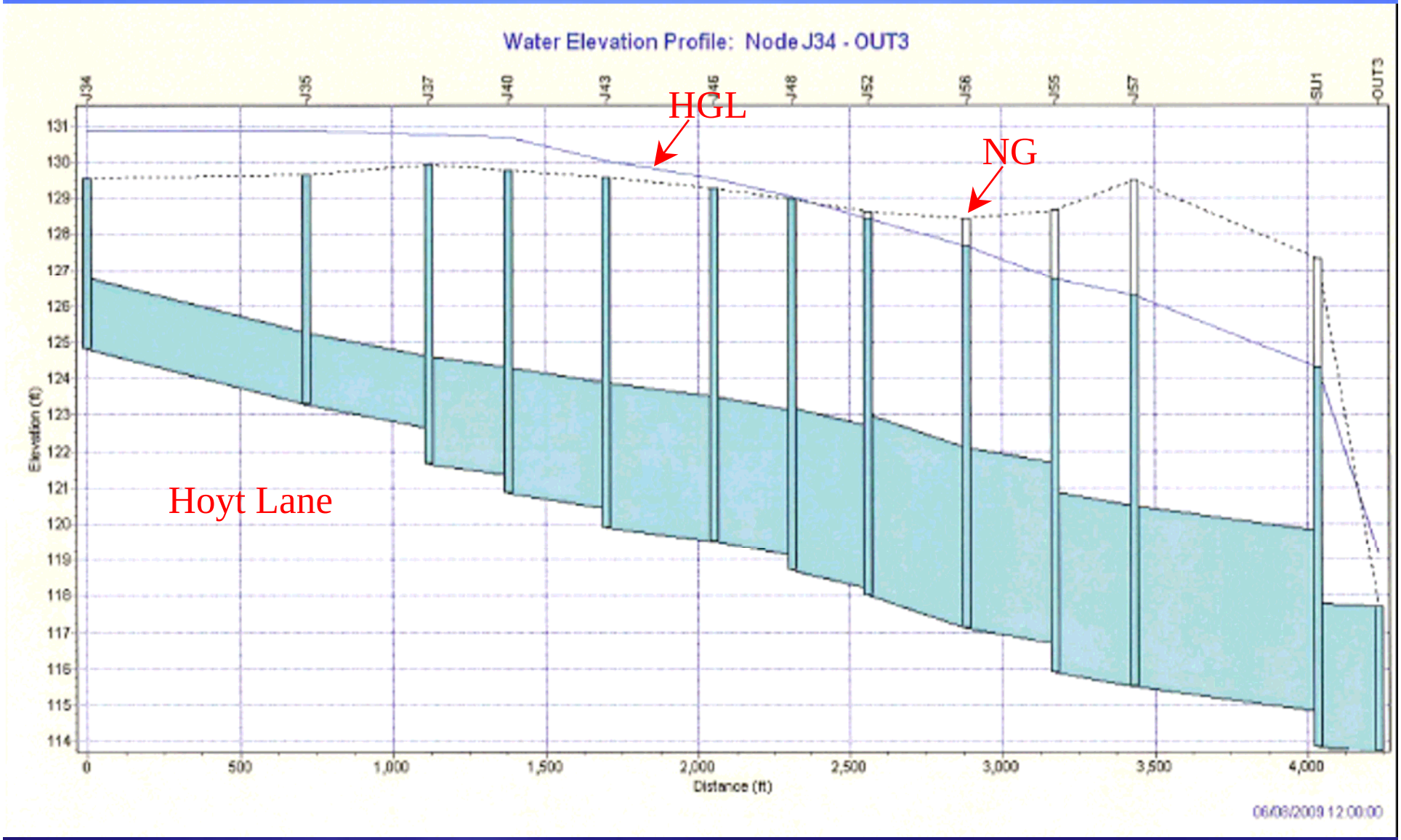

$ 1,320,000.00
FRANZ ROAD
WETHERBURN LANE
VOBE COURT
UNICORN'S HORN LANE
PRINCE GEORGE STREET
PALACE GREEN COURT
HOTT LANE
ABBY ALDRICH LANE
JOSHUA KENDELL LANE
EARL OF DUNMORE STREET
NORTH REBECCA BURWELL LN
SOUTH REBECCA BURWELL LN
CARTER'S GROVE LANE
BUCKTROUT LANE
COLONIAL PARKWAY
MASON ROAD
CALVERYMAN LANE
0.7'
0.7'
1.4'
36"
2.0'
42"
48"
54"
60"
60"
NOT TO SCALE
REPORTED ALMOST FLOODING
REPORTED FLOODING
DRAINAGE AREA DIVIDE
DISTRICT BOUNDARY
50 - YEAR PROTECTION PLAN

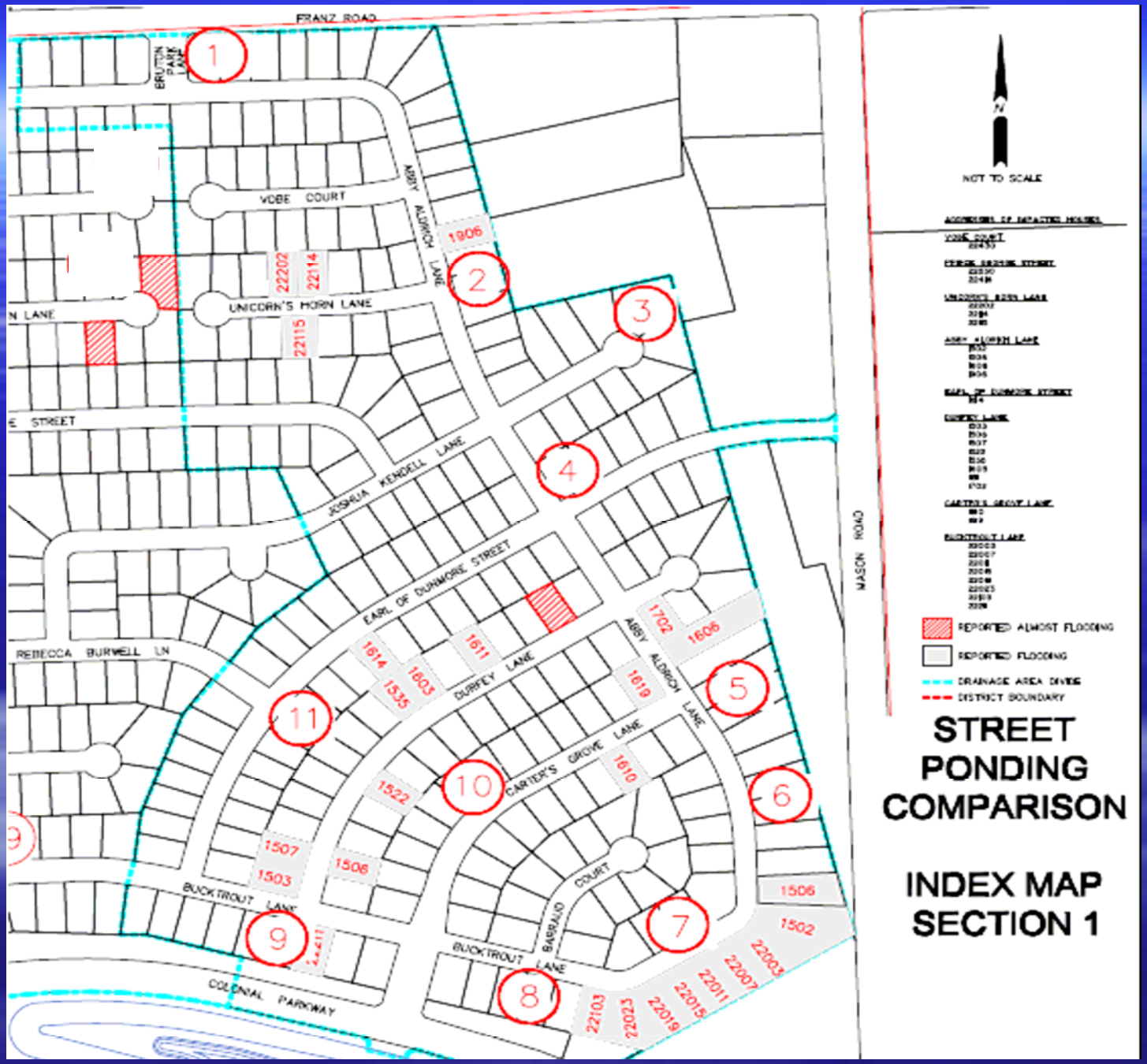

$ 2,770,000.00
1.1'
1.3'
1.9'
24"
24"
36"
24"
42"
48"
54"
60"
60"
FRANZ ROAD
WETHERBURN LANE
BRUTON PARK LANE
VOBE COURT
UNICORNS HORN LANE
PRINCE GEORGE STREET
ABBY ALDRICH LANE
JOSHUA KENDELL LANE
EARL OF DUNMORE STREET
DURFEY LANE
CARTER'S GROVE LANE
BUCKTROUT LANE
BUCKTROUT COURT
BAGGALIO COURT
COLONIAL PARKWAY
NORTH REBECCA BURWELL LN
SOUTH REBECCA BURWELL LN
NORTH REBECCA BURWELL LANE
SOUTH REBECCA BURWELL LANE
PRINCE GEORGE C
PALACE GREEN COURT
HOYT LANE
CALVERYMAN LANE
MASON ROAD
NOT TO SCALE
REPORTED ALMOST FLOODING
REPORTED FLOODING
DRAINAGE AREA DIVIDE
DISTRICT BOUNDARY
100-YEAR PROTECTION PLAN

Existing Conditions -100 Year Storm Event



Proposed Conditions -100 Year Storm Event



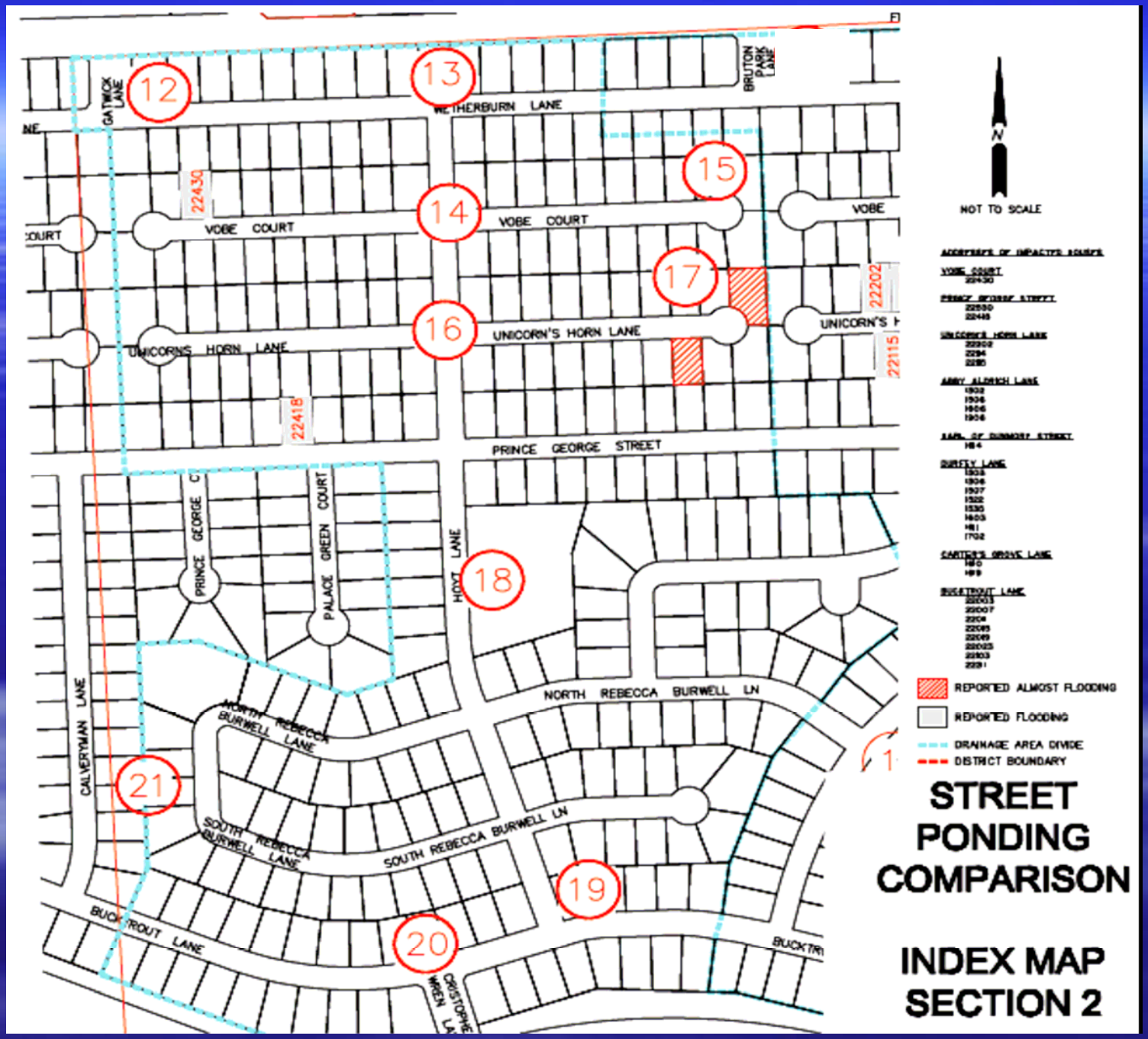

FRANZ ROAD
VOBE COURT
UNICORN'S HORN LANE
ABBY ALDRICH LANE
JOSHUA KENDELL LANE
EARL OF DUNMORE STREET
REBECCA BURWELL LN
DUFFEY LANE
CARTER'S GROVE LANE
BUCKTROUT LANE
BARBADO COURT
COLONIAL PARKWAY
MASON ROAD
NOT TO SCALE
REPORTED ALMOST FLOODING
REPORTED FLOODING
DRAINAGE AREA DIVIDE
DISTRICT BOUNDARY
STREET PONDING COMPARISON
INDEX MAP SECTION 1

Storm Event	Study Points										
	1	2	3	4	5	6	7	8	9	10	11
	Existing Conditions										
10 YR	0.00	0.50	1.00	0.70	0.60	1.00	1.70	1.20	0.90	0.90	0.20
25 YR	0.00	0.80	1.20	1.10	0.90	1.50	1.90	1.50	1.30	1.20	0.30
50 YR	0.00	0.90	1.30	1.30	1.20	1.80	2.20	1.80	1.50	1.30	0.40
100 YR	0.10	1.10	1.50	1.40	1.40	2.00	2.70	2.10	1.80	1.70	0.60
	Proposed Conditions (Section 1)										
10 YR (36" Relief Sewer)	0.00	0.50	1.00	0.65	0.35	0.60	0.80	0.10	0.00	0.00	0.20
25 YR (48" Relief Sewer)	0.00	0.70	1.20	0.90	0.50	0.80	1.00	0.20	0.00	0.00	0.30
25 YR (48" Relief Sewer w/ 72" outfall)	0.00	0.60	1.20	0.80	0.50	0.70	0.90	0.20	0.00	0.00	0.20
50 YR (60" Relief Sewer)	0.00	0.50	1.20	0.90	0.70	0.90	1.00	0.40	0.10	0.10	0.30
100 YR (72" Relief Sewer)	0.00	0.90	1.30	1.00	0.80	1.00	1.30	0.80	0.50	0.50	0.40
100 YR (72" Relief Sewer + Carter's Grove)	0.00	0.80	1.30	1.00	0.70	0.90	0.90	0.30	0.00	0.00	0.40
100 YR (72" Relief Sewer + Carter's Grove + Abby Aldrich)	0.00	0.75	1.20	0.90	0.60	0.90	0.90	0.30	0.00	0.00	0.35

Street Ponding Comparison Section 1

Storm Event	Study Points										
	1	2	3	4	5	6	7	8	9	10	11
48" Relief Sewer / Analysis											
25 YR (48" Relief Sewer)	0.00	0.70	1.20	0.90	0.50	0.80	1.00	0.20	0.00	0.00	0.30
50 YR (48" Relief Sewer)	0.00	0.80	1.30	1.00	0.70	1.00	1.40	0.80	0.60	0.50	0.35
100 YR (48" Relief Sewer)	0.00	0.90	1.40	1.30	0.90	1.30	1.80	1.20	0.90	0.90	0.45

Storm Event	Study Points										
	1	2	3	4	5	6	7	8	9	10	11
48" Relief Sewer / Analysis											
25 YR (48" Relief Sewer w/ 72" outfall)	0.00	0.60	1.20	0.80	0.50	0.70	0.90	0.20	0.00	0.00	0.20
50 YR (48" Relief Sewer w/ 72" Outfall)	0.00	0.80	1.20	0.90	0.65	1.00	1.30	0.70	0.40	0.30	0.30
100 YR (48" Relief Sewer w/ 72" Outfall)	0.00	0.90	1.35	1.20	0.90	1.20	1.70	1.00	0.80	0.80	0.40


12
13
14
15
16
17
18
19
20
21
GATWICK LANE
WETHERBURN LANE
BRUTON PARK LANE
VOBE COURT
UNICORN'S HORN LANE
PRINCE GEORGE STREET
PRINCE GEORGE C
PALACE GREEN COURT
HOYT LANE
CALVERYMAN LANE
NORTH REBECCA BURWELL LANE
SOUTH REBECCA BURWELL LN
BUCKTROUT LANE
CRISTOPHER GREEN LA
22430
22418
22202
22115
N
NOT TO SCALE
REPORTED ALMOST FLOODING
REPORTED FLOODING
DRAINAGE AREA DIVIDE
DISTRICT BOUNDARY
STREET PONDING COMPARISON
INDEX MAP SECTION 2

Storm Event	Study Points									
	12	13	14	15	16	17	18	19	20	21
Existing Conditions										
25 YR	1.30	1.20	0.80	2.00	0.80	2.20	0.50	1.10	0.90	1.00
50 YR	1.40	1.30	1.00	2.10	1.00	2.30	0.90	1.60	1.40	1.50
100 YR	1.50	1.40	1.10	2.20	1.10	2.40	1.20	2.00	1.70	1.80
Proposed Conditions (Section 2)										
25 YR	1.10	1.10	0.70	1.90	0.80	2.10	0.20	0.00	0.00	0.00
50 YR	1.10	1.00	0.60	1.40	0.60	2.00	0.00	0.00	0.00	0.20
100 YR	1.30	1.00	0.80	2.00	0.90	2.20	0.50	1.00	0.80	0.80

Street Ponding Comparison Section 2

Opinion of Improvements Cost

Section 1

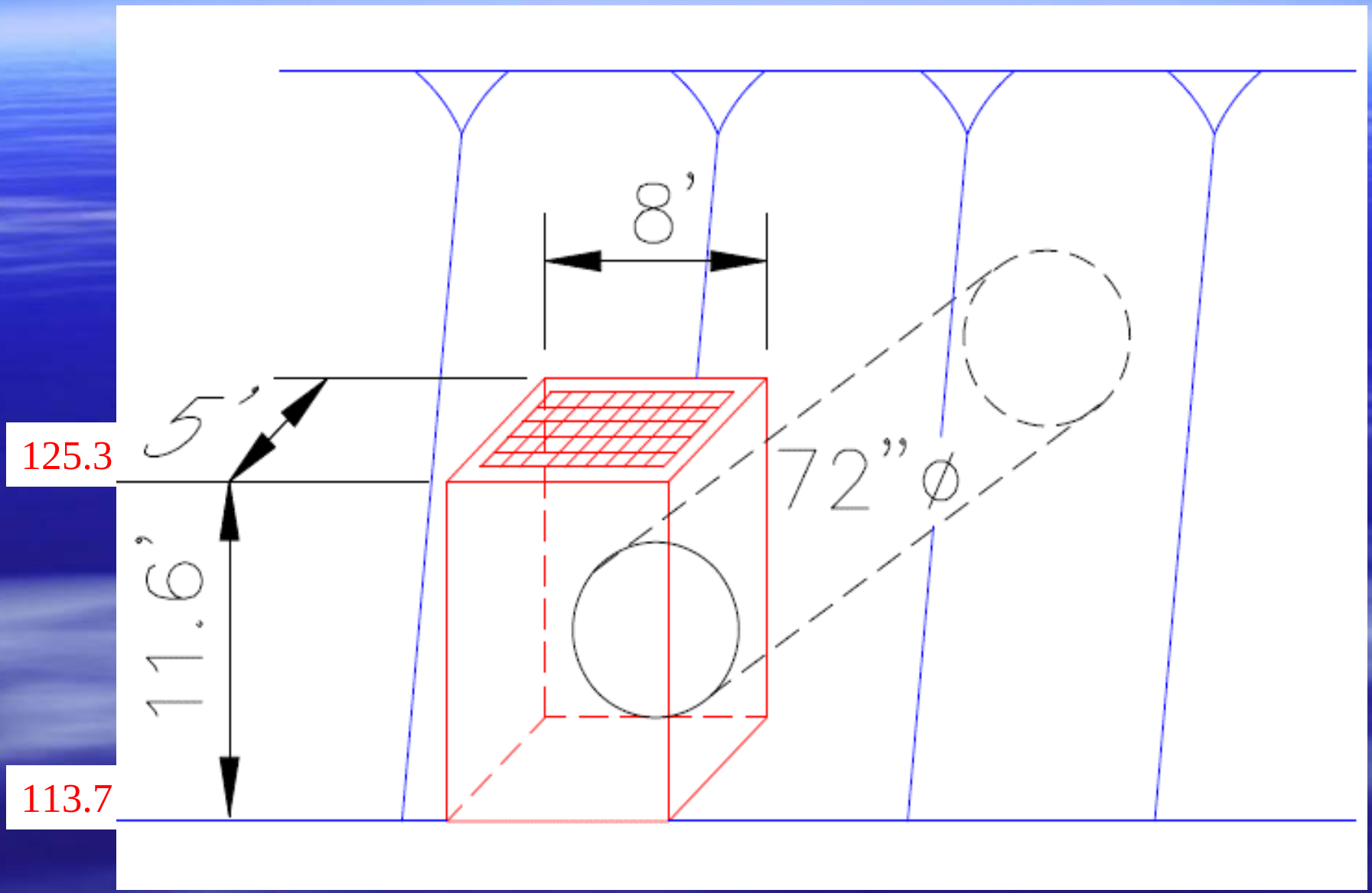
Item #	Item Description	Recommended Budget
1	Bucktrout Relief Sewer for 10-Year (36" Pipe)	**$492,000**
2	Bucktrout Relief Sewer for 25-Year (48" Pipe)	**$564,000**
2A	Bucktrout Relief Sewer 48" + 72" Outfall	**$592,000**
3	Bucktrout Relief Sewer for 50-Year (60" Pipe)	**$617,000**
4	Bucktrout Relief Sewer for 100-Year (72" Pipe)	**$705,000**
5	Bucktrout + Carter's Grove for 100-Year	**$1,237,000**
6	Bucktrout + Carter's Grove + Aldrich for 100-Year	**$1,910,000**
6A	Bucktrout/ Carter's Grove/ Aldrich (to Entrance Only)	**$1,545,000**

Section 2

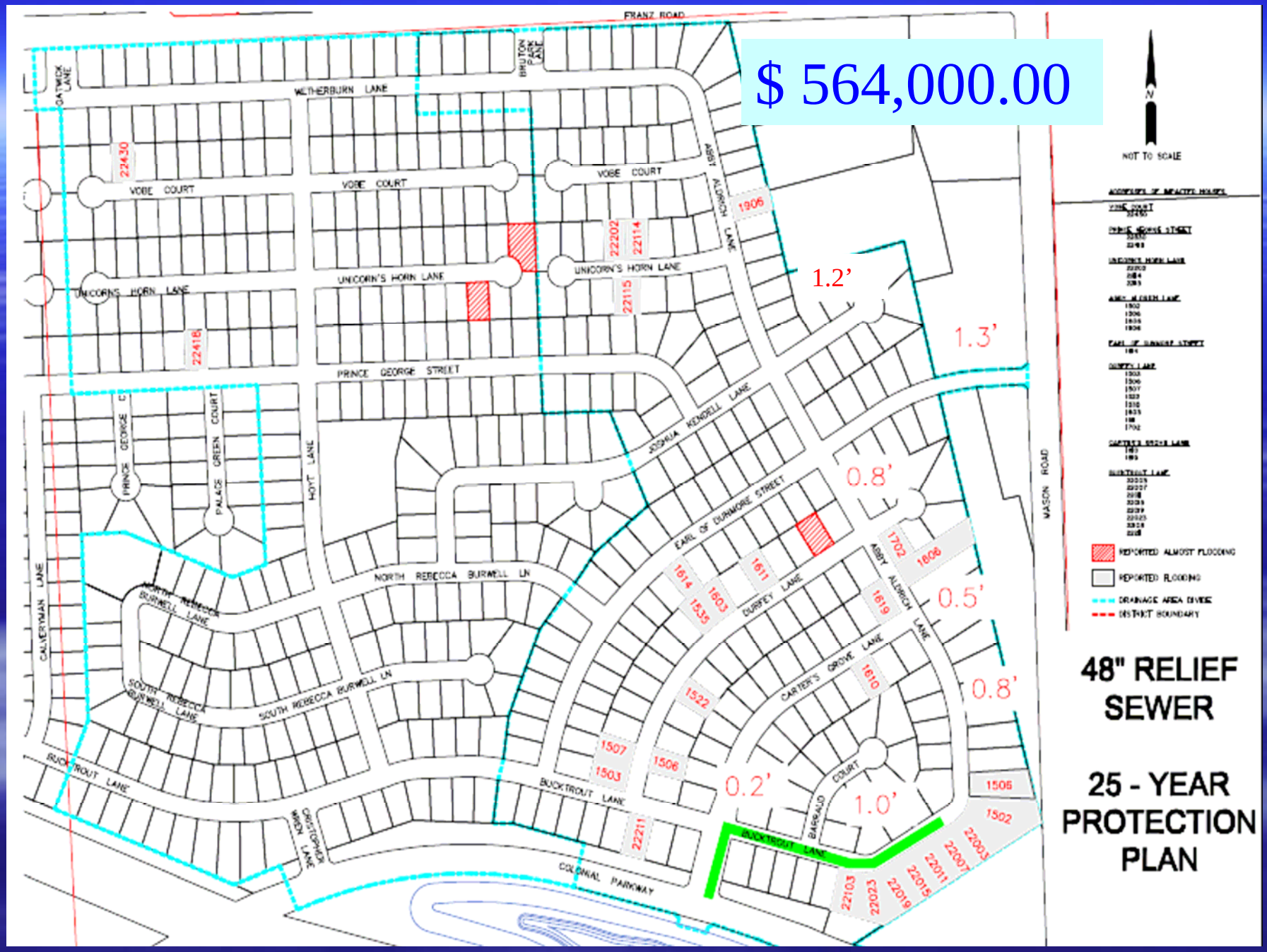
Item #	Item Description	Recommended Budget
1	Relief Sewer for 25-Year	**$752,000**
2	Relief Sewer for 50-Year	**$1,320,000**
3	Relief Sewer for 100-Year	**$2,770,000**

Detention Pond and Roadway Entrance

Item #	Item Description	Recommended Budget
1	Emergency Outfall Structure	**$105,000**
2	Mason Road Entrance Improvements	**$78,000**
3	Detention Pond Trash Rack Expansion	**$30,000**
4	Flap Gates at Detention Pond Outfalls	**$25,000**


8'
5'
125.3
72" Ø
11.6'
113.7

Board’s Recommended Alternative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FRANZ ROAD
WETHERBURN LANE
VOBE COURT
UNICORNS HORN LANE
PRINCE GEORGE STREET
PALACE GREEN COURT
HOYT LANE
JOSHUA KENDELL LANE
EARL OF DUNMORE STREET
DURFEY LANE
CARTER'S GROVE LANE
ABBY ALDRICH LANE
NORTH REBECCA BURWELL LN
SOUTH REBECCA BURWELL LN
BUCKTROUT LANE
COLONIAL PARKWAY
MASON ROAD
CALVERTMAN LANE
1.2'
1.3'
0.8'
0.5'
0.8'
0.2'
1.0'
NOT TO SCALE
REPORTED ALMOST FLOODING
REPORTED FLOODING
DRAINAGE AREA DIVIDE
DISTRICT BOUNDARY
48" RELIEF SEWER
25 - YEAR PROTECTION PLAN

Storm Event	Study Points										
	1	2	3	4	5	6	7	8	9	10	11
48" Relief Sewer / Analysis											
25 YR (48" Relief Sewer)	0.00	0.70	1.20	0.90	0.50	0.80	1.00	0.20	0.00	0.00	0.30
50 YR (48" Relief Sewer)	0.00	0.80	1.30	1.00	0.70	1.00	1.40	0.80	0.60	0.50	0.35
100 YR (48" Relief Sewer)	0.00	0.90	1.40	1.30	0.90	1.30	1.80	1.20	0.90	0.90	0.45

Thank You