STORM WATER SEWER NO. 142

STORM SEWERS IN SYCAMORE VILLAGE

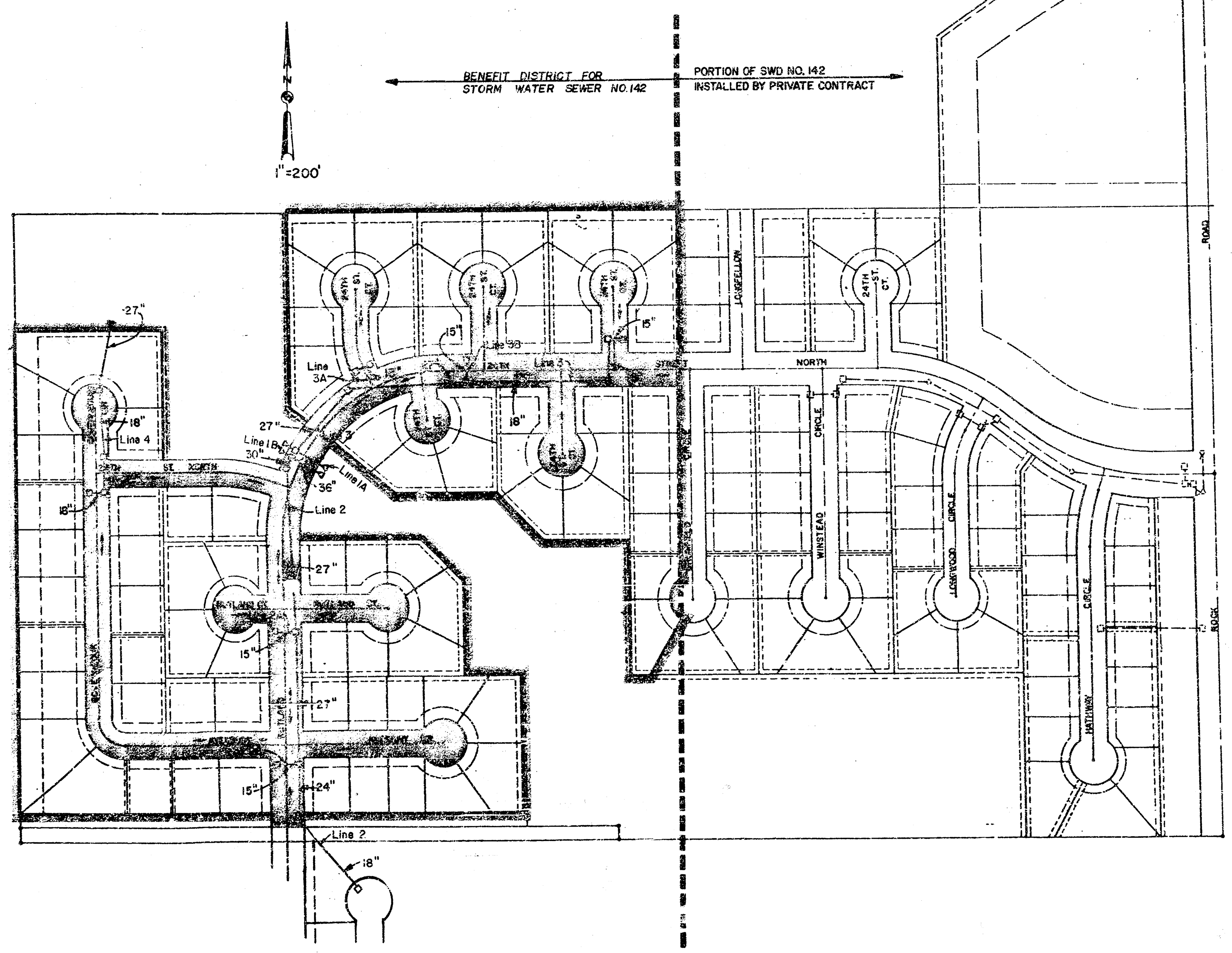
THIRD ADDITION

PROJECT NO.

468-76-245-80593-000-000-001

CITY OF WICHITA, KANSAS

R.W. LINN CITY ENGINEER



INDEX TO DRAWINGS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2-3	LINE 2
4-5	LINE 3,3A & 3B
6	LINE 4
7	LINE 1 & 2A, 2B
8	TYPE 1A INLET DETAIL

GENERAL NOTES

1.) CONTRACTOR SHALL COORDINATE WORK WITH PAVING AND SANITARY CONTRACTORS, AND CONTACT RELEVANT UTILITY COMPANIES AND OTHER AGENCIES INVOLVED WITH THIS PROJECT SITE DEVELOPMENT.

2.) FIELD ENGINEER SHALL TAKE TIES TO ALL IRONS AND THIMBLES IN THE PROJECT AREA BEFORE CONSTRUCTION BEGINS. FIELD ENGINEER SHALL REPLACE ALL SUCH IRONS AND THIMBLES DISTURBED DURING CONSTRUCTION.

3.) THE TOPS OF INLETS AND MANHOLES AS NOTED ON THE PLANS MAY VARY SO AS TO MEET PROPOSED TOP OF CURB DEVATIONS OR PAVEMENT ELEVATIONS. THE FIELD ENGINEER SHALL LOCATE INLETS AND MANHOLES WITH REFERENCE TO PROPOSED PAVING PLANS OF THE PERTINENT STREETS.

4.) ALL METAL PIPES SHALL BE HELICALLY CORRUGATED PIPE FULLY COATED BOTH INSIDE AND OUTSIDE. THE COATING MAY BE BITUMINOUS OR POLYMERIC AS SPECIFIED IN AASHTO DESIGNATION: M246 - 78, TYPE B. ALL SUCH COATED CORRUGATED PIPE SHALL BE SMOOTH FLOW PIPES FOR SIZES 24" DIAMETER OR LARGER. ALL CONNECTIONS FOR THESE FULLY COATED OR FULLY PAVED AND FULL ASPHALT COATED PIPES SHALL BE FAIRLY WATERTIGHT CONSTRUCTED USING HUGGER TYPE COUPLER OR EQUAL.

5.) ALL CONCRETE SHALL BE "6-SACK CONCRETE" UNLESS OTHERWISE NOTED.

6.) EARTHWORK FOR CHANNELS DOWNSTREAM FROM END SECTIONS, SHOWN ON SHEET #6 SHALL BE PAID FOR IN THE ITEM CLEARING RIGHT OF WAY WHICH MAY INCLUDE REMOVAL OF SMALL BUSHES AND HEDGE.

7.) THE RIPRAP FOR THIS PROJECT SHALL BE TYPE 3. THE TYPE 3 RIPRAP SHALL BE 18" RIPRAP ON 6" SAND AND GRAVEL BEDDING. THE ROCK FOR RIPRAP AND GRAVEL PROTECTION SHALL BE HARD, DENSE, DURABLE, AND SHALL BE REASONABLY WELL GRADED. THE SIZE RANGE OF ROCK USED SHALL BE A MAXIMUM OF ONE CUBIC FOOT AND A MINIMUM OF 1½ INCH. THE 6 INCH SAND AND GRAVEL BEDDING FOR RIPRAP SHALL BE A CONTINUOUS LAYER OF SAND AND GRAVEL OR SAND AND CRUSHED ROCK, REASONABLY WELL GRADED TO A MAXIMUM OF 1½ INCHES IN SIZE.

8.) CONTRACTOR SHALL AVOID UNCOVERING EXISTING WATERLINES UNLESS ABSOLUTELY NECESSARY. UNCOVERING SHALL BE DONE ONLY IN THE PRESENCE OF A WATER DEPT. ENGINEER.

Kenneth J. Brayton

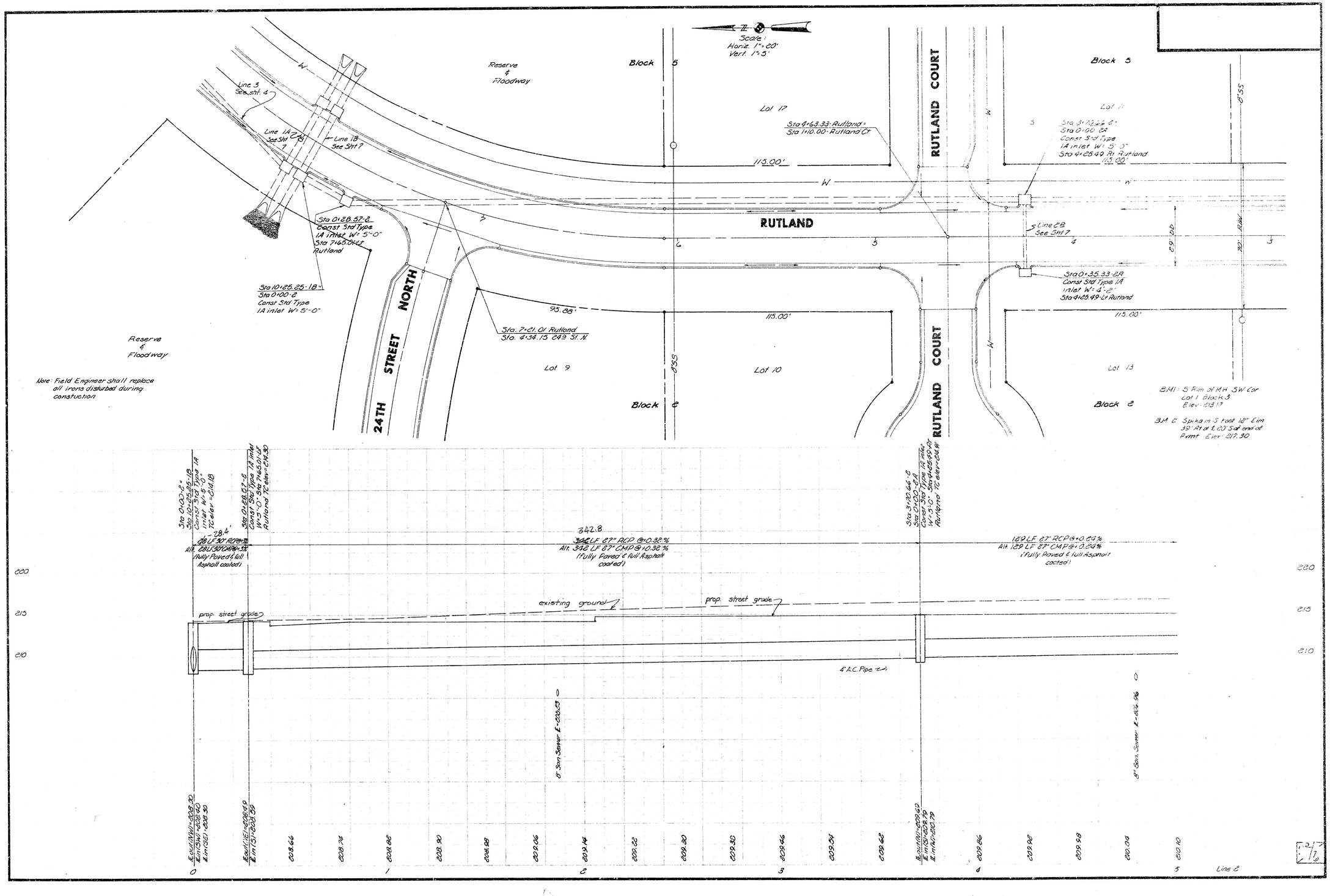
As Built 3/14/80

Van Doren - Hazard - Stallings

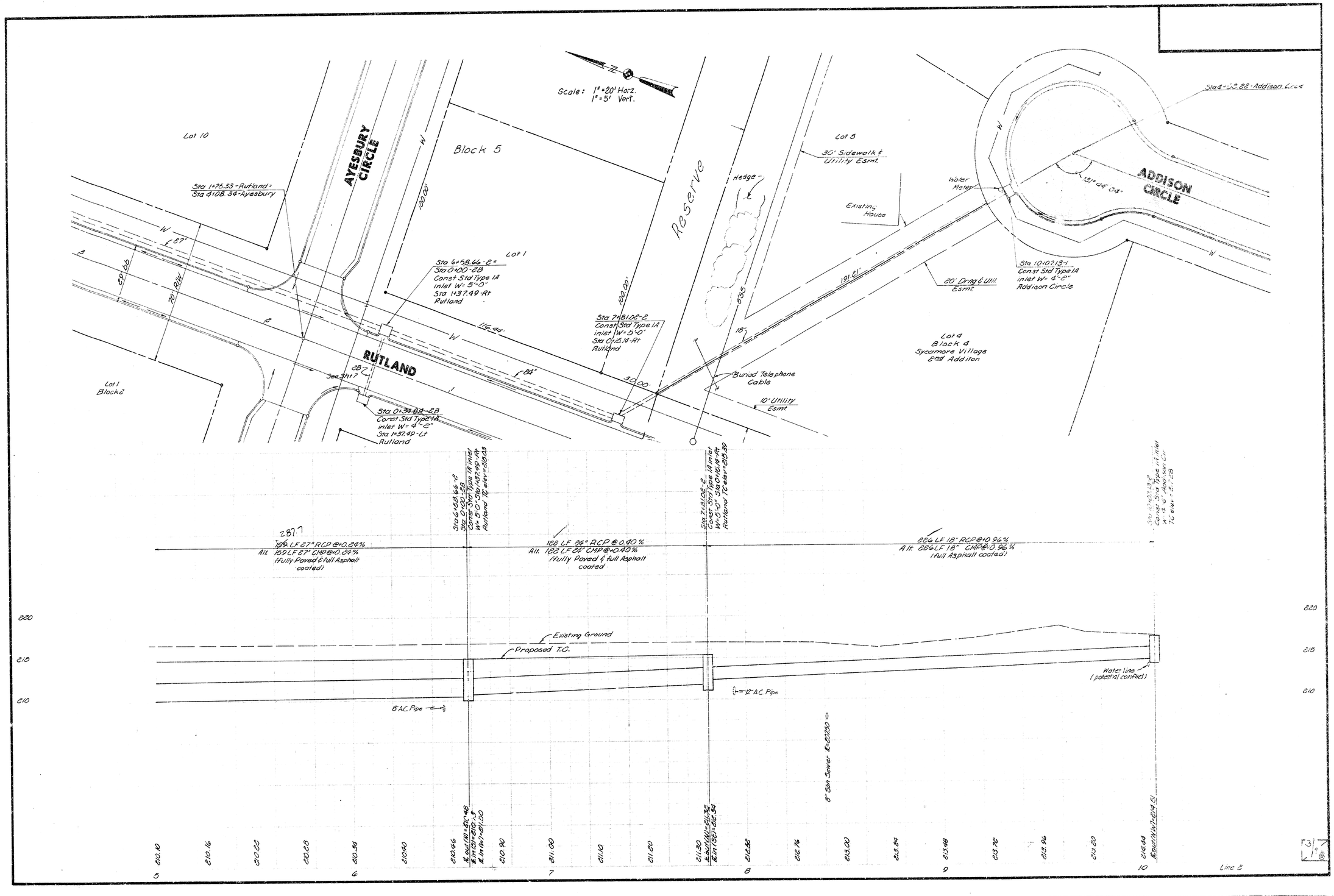
Architects • Engineers • Planners

Topeka Wichita Minneapolis

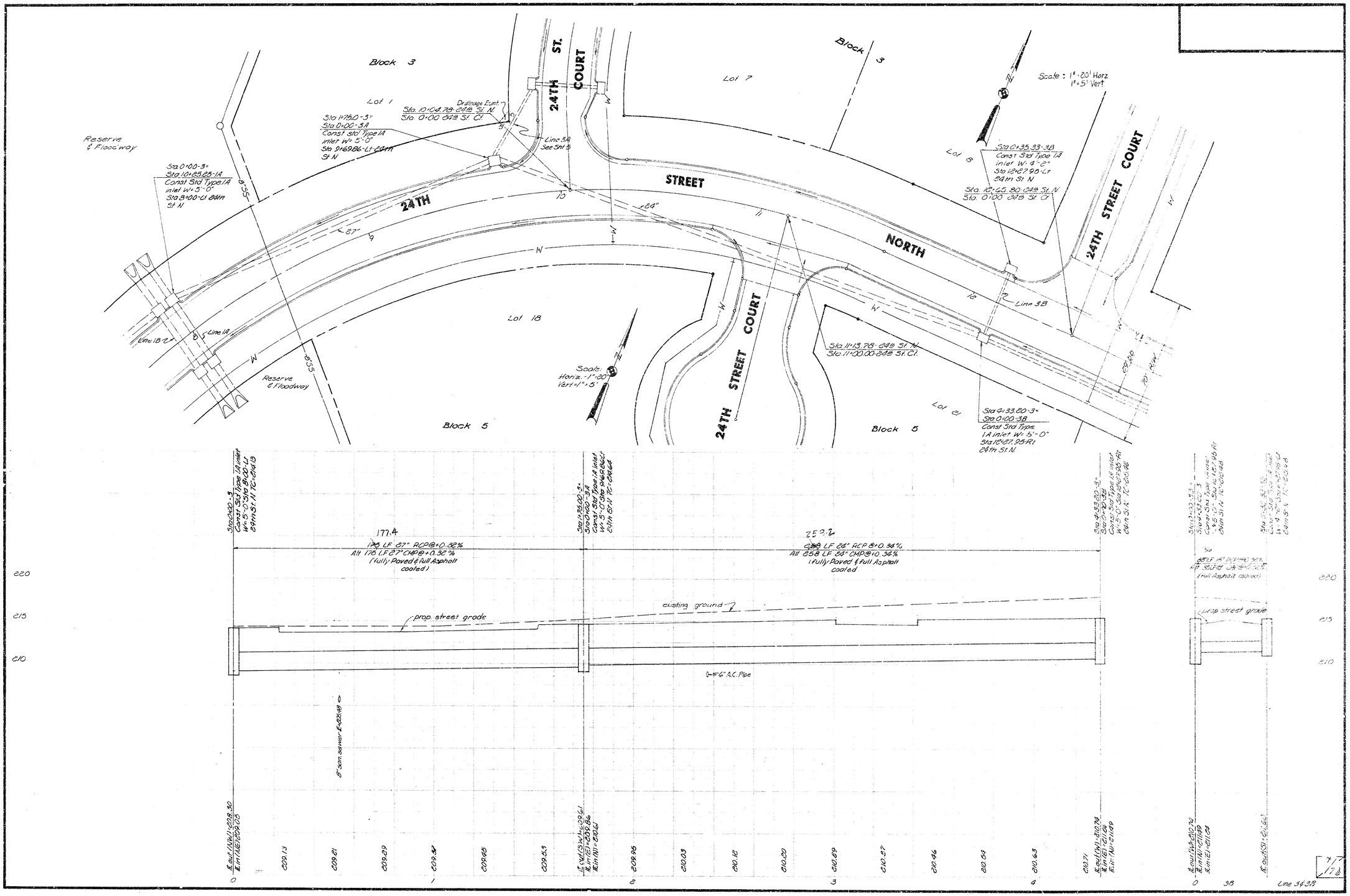
Sheet 1 of 7

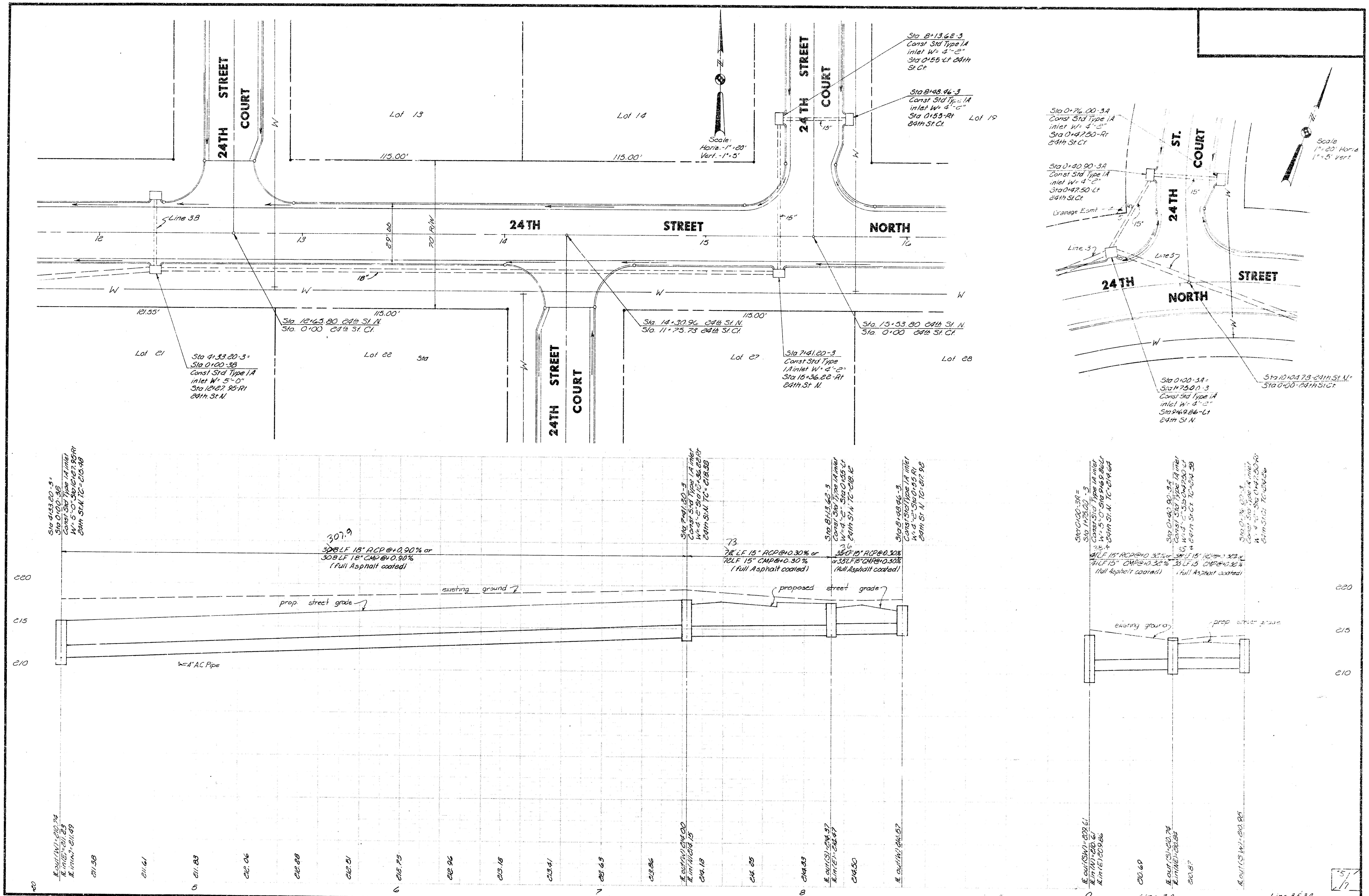


Scale:
Horiz. 1"=20'
Vert. 1"=5'
Reserve & Floodway
Block 5
Lot 17
Sta 4+63.33-Rutland=
Sta 1+10.00-Rutland Ct
RUTLAND COURT
Block 5
Lot 11
Sta 3+70.66-2
Sta 0+00-2A
Const Std Type
1A inlet W=5'-0"
Sta 4+25.49 Rt Rutland
115.00'
Line 3
See sht. 4
Line 1A
See Sht 7
Line 1B
See Sht 7
Sta 0+28.57-2
Const Std Type
1A inlet W=5'-0"
Sta 7+65.01-Lt
Rutland
RUTLAND
Line 2B
See Sht 7
Sta 0+35.33-2A
Const Std Type 1A
inlet W=4'-2"
Sta 4+25.49-Lt Rutland
Sta 10+25.25-1B=
Sta 0+00-2
Const Std Type
1A inlet W=5'-0"
24TH STREET NORTH
95.88'
Sta. 7+21.01 Rutland
Sta. 4+34.15 24th St. N.
115.00'
Reserve & Floodway
Note: Field Engineer shall replace all irons disturbed during constuction
Lot 9
Lot 10
Block 2
RUTLAND COURT
Lot 13
Block 2
BM1: S Rim of MH SW Cor
Lot 1 Block 5
Elev=213.17
BM 2 Spike in S Foot 12" Elm
39' Rt at ℄ 20' S of end of
Pvmt Elev=217.30
Sta 0+00-2=
Sta 10+25.25-1B
Const Std Type 1A
inlet W=5'-0"
TC elev=214.18
Sta 0+28.57-2
Const Std Type 1A inlet
W=5'-0" Sta 7+65.01-Lt
Rutland TC elev=214.30
Sta 3+70.66-2
Sta 0+00-2A
Const Std Type 1A inlet
W=5'-0" Sta 4+25.49-Rt
Rutland TC elev=214.91
28.4'
28 LF 30" RCP @+3%
Alt. 28 LF 30" CMP @+3%
(Fully Paved & full Asphalt coated)
342.8
342 LF 27" RCP @+0.32%
Alt. 342 LF 27" CMP @+0.32%
(Fully Paved & full Asphalt coated)
129 LF 27" RCP @+0.24%
Alt. 129 LF 27" CMP @+0.24%
(Fully Paved & full Asphalt coated)
220
215
210
prop. street grade
existing ground
prop. street grade
4" A.C. Pipe
8" San Sewer ℄=205.23
8" San. Sewer ℄=206.96
℄ out (NW)=208.30
℄ in (SW)=208.40
℄ in (SE)=208.30
℄ out (NE)=208.49
℄ in (S)=208.59
℄ out (NW)=209.69
℄ in (S)=209.79
℄ in (W)=210.79
203.66
208.74
208.82
208.90
208.98
209.06
209.14
209.22
209.30
209.38
209.46
209.54
209.62
209.86
209.92
209.98
210.04
210.10
0
1
2
3
4
5
Line 2



Scale: 1" = 20' Horz.
1" = 5' Vert.
Lot 10
AYESBURY CIRCLE
Block 5
Reserve
Lot 5
30' Sidewalk & Utility Esmt.
Hedge
Existing House
Water Meter
ADDISON CIRCLE
Sta 4+52.22 - Addison Circle
Sta 1+75.33 - Rutland = Sta 4+08.34 - Ayesbury
Lot 1
Sta 6+58.66 - 2 = Sta 0+00 - 2B Const Std Type 1A inlet W = 5'-0" Sta 1+37.49 - Rt Rutland
Sta 7+81.02 - 2 Const Std Type 1A inlet W = 5'-0" Sta 0+15.14 - Rt Rutland
Sta 10+07.13 - 1 Const Std Type 1A inlet W = 4'-2" Addison Circle
20' Drng & Util. Esmt.
Lot 4 Block 4 Sycamore Village 2nd Addition
Buried Telephone Cable
10' Utility Esmt.
RUTLAND
Lot 1 Block 2
Sta 0+34.84 - 2B Const Std Type 1A inlet W = 4'-2" Sta 1+37.49 - Lt Rutland
Sta 6+58.66 - 2 Sta 0+00 - 2B Const Std Type 1A inlet W = 5'-0" Sta 1+37.49 - Rt Rutland TC elev = 215.03
Sta 7+81.02 - 2 Const Std Type 1A inlet W = 5'-0" Sta 0+15.14 - Rt Rutland TC elev = 215.39
Sta 10+07.13 - 1 Const Std Type 1A inlet W = 4'-2" Addison Circle TC elev = 217.28
287.7
159 LF 27" RCP @ +0.24%
Alt. 159 LF 27" CMP @ +0.24%
(fully Paved & full Asphalt coated)
122 LF 24" RCP @ 0.40%
Alt. 122 LF 24" CMP @ +0.40%
(fully Paved & full Asphalt coated
226 LF 18" RCP @ +0.96%
Alt. 226 LF 18" CMP @ +0.96%
(full Asphalt coated)
Existing Ground
Proposed T.C.
8" A.C. Pipe
12" A.C. Pipe
Water line (potential conflict)
8" San Sewer
Line 2


Block 3
Lot 1
Lot 7
Block 3
Lot 8
Lot 18
Lot 21
Block 5
Block 5
24TH ST.
COURT
24TH
STREET
NORTH
24TH STREET COURT
24TH STREET COURT
Reserve
℄ Floodway
Reserve
℄ Floodway
Drainage Esmt.
Sta. 0+04.78-24th St. N.
Sta. 0+00 24th St. Ct.
Sta 1+78.0-3*
Sta 0+00-3A
Const std Type 1A
inlet W= 5'-0"
Sta 0+69.86-Lt-24th
St N
Sta 0+00-3*
Sta 10+85.85-1A
Const Std Type 1A
inlet W= 5'-0"
Sta 8+00-Lt 24th
St N
Line 3A
See Sht 3
Sta 0+35.33-3B
Const Std Type 1A
inlet W= 4'-2"
Sta 12+27.95-Lt
24th St N
Sta. 12+65.80-24th St. N
Sta. 0+00 24th St. Ct.
Line 3B
Sta 11+13.78-24th St. N
Sta 11+00.00-24th St. Ct.
Sta 4+33.20-3*
Sta 0+00-3B
Const Std Type
1A inlet W= 5'-0"
Sta 12+27.95-Rt
24th St. N.
Scale: 1"=20' Horz
1"=5' Vert
Scale:
Horiz.-1"=20'
Vert-1"=5'
Line 1A
Line 1B
Line 1B ℄
Line 3A
Line 3B
177.4
176 LF 27" RCP @+0.32%
Alt 176 LF 27" CMP @+0.32%
(fully Paved & full Asphalt coated)
258 LF 24" RCP @+0.34%
Alt 258 LF 24" CMP @+0.34%
(fully Paved & full Asphalt coated
Sta 0+00-3*
Const Std Type 1A inlet
W= 5'-0"
Sta 8+00-Lt 24th St N
Sta 1+78.0-3*
Const Std Type 1A inlet
W= 5'-0" Sta 9+69.86-Lt
24th St N
Sta 4+33.20-3*
Sta 0+00-3B
Const Std Type 1A inlet
W= 5'-0" Sta 12+27.95-Rt
24th St N
Sta 0+00-3
Const Std Type 1A inlet
W= 5'-0" Sta 8+00-Lt
24th St N
Sta 1+78.0-3*
Const Std Type 1A inlet
W= 5'-0" Sta 9+69.86-Lt
24th St N
Sta 4+33.20-3*
Sta 0+00-3B
Const Std Type 1A inlet
W= 5'-0" Sta 12+27.95-Rt
24th St N
prop. street grade
existing ground
6-F6" A.C. Pipe
8" San. Sewer-F=0.8%
prop. street grade
existing ground
Lt. out (NW) = 208.30
Rt. in (NE) = 209.05
Lt. out (SW) = 209.61
Rt. in (SE) = 209.86
Rt. in (W) = 210.62
Lt. out (NW) = 210.74
Rt. in (E) = 211.08
Rt. in (W) = 211.09
Lt. out (SW) = 210.61
Rt. in (E) = 211.09
Rt. in (W) = 211.04
Lt. out (SW) = 210.60
209.13
209.21
209.29
209.37
209.45
209.53
209.96
210.03
210.12
210.20
210.89
210.97
210.46
210.54
210.63
210.71
220
215
210
0
1
2
3
4
0
3B
Line 3&3B
7
173



24TH STREET COURT
24TH STREET NORTH
24TH ST. COURT
Lot 13
Lot 14
Lot 19
Lot 21
Lot 22
Lot 27
Lot 28
115.00'
121.55'
29'66
70' R/W
18"
15"
Line 3B
Line 3
Scale: Horiz.-1"=20' Vert.-1"=5'
Sta 8+13.62-3 Const Std Type IA inlet W= 4'-2" Sta 0+55-Lt 24th St.Ct.
Sta 8+48.96-3 Const Std Type IA inlet W= 4'-2" Sta 0+55-Rt 24th St.Ct.
Sta. 12+65.80 24th St. N. Sta. 0+00 24th St. Ct.
Sta. 14+30.96 24th St. N. Sta. 11+75.73 24th St.Ct.
Sta. 15+53.80 24th St. N. Sta. 0+00 24th St. Ct.
Sta 4+33.20-3= Sta 0+00-3B Const Std Type IA inlet W= 5'-0" Sta 12+27.95-Rt 24th St.N.
Sta 7+41.20-3 Const Std Type IA inlet W= 4'-2" Sta 15+36.22-Rt 24th St N.
Sta 0+76.00-3A Const Std Type IA inlet W= 4'-2" Sta 0+47.50-Rt 24th St.Ct.
Sta 0+40.90-3A Const Std Type IA inlet W= 4'-2" Sta 0+47.50-Lt 24th St.Ct.
Drainage Esmt
Scale 1"=20' Horiz 1"=5' Vert.
Sta 0+00-3A= Sta 1+75.00-3 Const Std Type IA inlet W= 4'-2" Sta 9+69.86-Lt 24th St N.
Sta 10+04.78-24th St N= Sta 0+00-24th St Ct.
Sta 4+33.20-3= Sta 0+00-3B Const Std Type IA inlet W= 5'-0" Sta 12+27.95 Rt 24th St.N. TC=215.98
Sta 7+41.20-3 Const Std Type IA inlet W=4'-2" Sta 15+36.22 Rt 24th St.N. TC=218.38
Sta 8+13.62-3 Const Std Type IA inlet W=4'-2" Sta 0+55-Lt 24th St N TC=218.12
Sta 8+48.96-3 Const Std Type IA inlet W=4'-2" Sta 0+55 Rt 24th St N TC=217.98
307.9
308 LF 18" RCP @+0.90% or 308 LF 18" CMP @+0.90% (full Asphalt coated)
73
72 LF 15" RCP @+0.30% or 72 LF 15" CMP @+0.30% (full Asphalt coated)
36
35 LF 15" RCP @0.30% or 35 LF 15" CMP @+0.30% (full Asphalt coated)
existing ground
prop. street grade
proposed street grade
4" A.C Pipe
220
215
210
Sta 0+00-3A= Sta 1+75.00-3 Const Std Type IA inlet W= 5'-0" Sta 9+69.86 Lt 24th St.N. TC=214.64
Sta 0+40.90-3A Const Std Type IA inlet W=4'-2" Sta 0+47.50-Lt 24th St.Ct. TC=214.38
38.4
41 LF 15" RCP @+0.32% or 41 LF 15" CMP @+0.32% (full Asphalt coated)
35.2
35 LF 15" CMP @+0.32% (full Asphalt coated)
existing ground
prop. street grade
℄ out (W)=210.74 ℄ in (E)=211.23 ℄ in (N)=211.49
211.38
211.61
211.83
212.06
212.28
212.51
212.73
212.96
213.18
213.41
213.63
213.86
℄ out (W) 214.00 ℄ in (N) 214.15
214.18
214.25
214.33
℄ out (S) 214.37 ℄ in (E) 214.47
214.50
℄ out (W) 214.57
℄ out (SW)=209.61 ℄ in (N)=210.61 ℄ in (E) 209.86
210.69
℄ out (S)=210.74 ℄ in (NE)=210.84
210.87
℄ out (SW)=210.95
5
6
7
8
0
Line 3A
Line 3 & 3A
5/7

Scale: 1"=20' Horz.
1"=5' Vert.

Type 3 Rip Rap See Note

Reserve ℄ Floodway

14'

Sta 6+25.38-℄
Sta 0+00-6A
Const Std Type 1A inlet W= 4'-2"

Sta 7+64.38-℄
Const Std Type 1A inlet W= 4'-2" Sta 6+01.18 Rt-Governeour Circle

Sta 3+60.02-℄
Const Std Type 1A inlet W= 4'-2" Sta 3+28.50 Rt-Governeour

24TH ST. N.

Line 4

20' Drainage Esmt.

167°12'14"

GOVERNEOUR CIRCLE

35' R to ℄

40' R

Sta 0+09.09-6A
Const Std Type 1A inlet W= 4'-2"

Sta 8+78.86-℄
Const Std Type 1A inlet W= 4'-2" Sta 5+25.50 Lt-Governeour

Sta 5+63.38-Governeour
Sta 0+00-24th St. N.

Sta 7+02.38-Governeour Cir
Center of Cul-de-Sac

Lot 14 | Lot 15 | Lot 7 | Lot 13 | Lot 11 | Lot 10 | Lot 12

Type 3 Rip Rap End Section

RCP or CMP

Note: Type 3 Rip Rap. 12" Rip Rap on a 6" sand & gravel bedding. Size range for 12" Rip Rap shall be a max. of 1 cubic ft and a min of 1½". The 6" bedding shall be of sand and gravel or sand and crushed rock reasonably well graded to a max. size of 1½".

Sta 1+88.89-℄ Install 6"x2nd Section

Sta 6+25.38-℄ =
Sta 0+00-6A
Const Std Type 1A inlet
W= 4'-2"
TC elev=210.12

Sta 7+64.38-℄
Const Std Type 1A inlet W=4'-2" Sta 6+01.18 Rt-Governeour Circle
Tc elev=211.14

Sta 8+78.86-℄
Const Std Type 1A inlet W=4'-2" Sta 5+25.50 Lt-Governeour
TC elev=210.48

Sta 8+78.86-℄
Const Std Type 1A inlet W=4'-2" Sta 5+25.50 Lt-Governeour
TC elev=210.48

Sta 0+00.44 = Sta 6+25.38-℄
Const Std Type 1A inlet W=4'-2" TC=210.12

Sta 0+39.09-6A
Const Std Type 1A inlet W=4'-2" TC=210.12

184 LF of Channel

136
130 LF 27" RCP @+0.6% or
130 LF 27" CMP @+0.6%
(Fully Paved & Full Asphalt coated)

139 LF
139 LF 18" RCP @+1.0% or
139 LF 18" CMP @+1.0%
(Full Asphalt coated)

75 LF
74 LF 18" RCP @+1.0%
or 74 LF 18" CMP @+1.0%
(Full Asphalt coated)

35 LF 18" RCP @+1.0%
35 LF 18" CMP @+1.0%
(Full Asphalt coated)

45 LF 18" RCP @+0.40% or 41 LF 18" CMP @+0.40% (Full Asphalt coated)

Proposed Street Grade

Existing Ground

4' Bottom Channel @+0.20% w/4:1 Side Slope

8" AC Pipe

8" AC Pipe

8" San. Sewer @-0.20% ℄

Equ (W) = 224.10
E in (W) = 223.90
E in (E) = 223.80

Equ (W) = 224.90
E in (W) = 224.70
E in (E) = 224.60

Equ (W) = 227.25
E in (W) = 227.05
E in (E) = 226.95

Equ (E) = 228.30

Equ (W) = 229.10
E in (W) = 228.90
E in (E) = 228.80

Equ (W) = 229.60
E in (W) = 229.40
E in (E) = 229.30

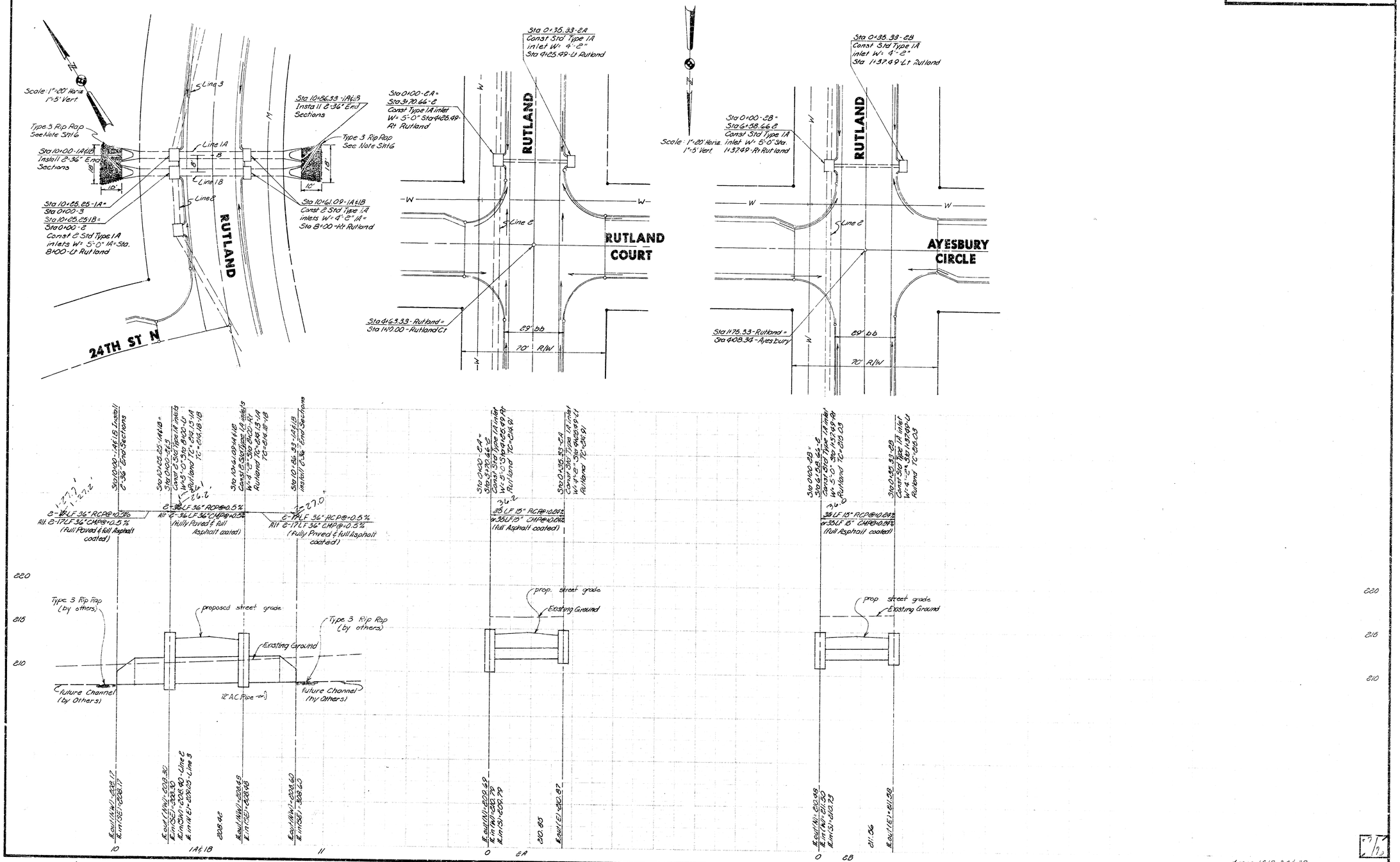
Equ (E) = 230.69

220
215
210
205
200

223.23 | 223.98 | 224.03 | 224.08 | 224.13 | 224.18 | 224.23 | 224.28 | 224.33 | 224.38 | 224.50 | 224.65 | 224.80 | 224.95 | 225.10 | 225.60 | 225.80 | 226.04 | 226.34 | 226.59 | 226.84 | 227.10 | 227.60 | 228.30 | 228.80 | 229.10 | 229.60 | 229.80

3 | 4 | 5 | 6 | 7 | 8 | Line 4 & 4A

6
7



Scale: 1"=20' Horiz. 1"=5' Vert.
Type 3 Rip Rap See Note Sht 6
Sta 10+00-1A&1B Install 2-36" End Sections
Sta 10+25.25-1A= Sta 0+00-3
Sta 10+25.25-1B= Sta 0+00-2
Const 2 Std Type 1A inlets W= 5'-0" 1A= Sta. 8+00-Lt Rutland
Line 3
Line 1A
Line 1B
Line 2
RUTLAND
24TH ST N
Sta 10+86.33-1A&1B Install 2-36" End Sections
Type 3 Rip Rap See Note Sht 6
Sta 10+61.09-1A&1B Const 2 Std Type 1A inlets W= 4'-2" 1A= Sta 8+00-Rt Rutland
Sta 0+00-2A= Sta 3+70.66-2 Const Type 1A inlet W= 5'-0" Sta 4+25.49-Rt Rutland
Sta 0+35.33-2A Const Std Type 1A inlet W= 4'-2" Sta 4+25.49-Lt Rutland
RUTLAND
RUTLAND COURT
Sta 4+63.33-Rutland= Sta 1+10.00-Rutland Ct
29' bb
70' R/W
Scale: 1"=20' Horiz. 1"=5' Vert.
Sta 0+00-2B= Sta 6+58.66-2 Const Std Type 1A inlet W= 5'-0" Sta. 1+37.49-Rt Rutland
Sta 0+35.33-2B Const Std Type 1A inlet W= 4'-2" Sta 1+37.49-Lt Rutland
AYESBURY CIRCLE
Sta 1+75.33-Rutland= Sta 4+08.34-Ayesbury
Sta 10+00-1A&1B Install 2-36" End Sections
Sta 10+25.25-1A&1B= Sta 0+00-2&3 Const 2 Std Type 1A inlets W=5'-0" Sta 8+00-Lt Rutland TC=214.13-1A TC=214.18-1B
Sta 10+61.09-1A&1B Const 2 Std Type 1A inlets W=4'-2" Sta 8+00-Rt Rutland TC=214.13-1A TC=214.18-1B
Sta 10+86.33-1A&1B Install 2-36" End Sections
Sta 0+00-2A= Sta 3+70.66-2 Const Std Type 1A inlet W=5'-0" Sta 4+25.49-Rt Rutland TC=214.91
Sta 0+35.33-2A Const Std Type 1A inlet W=4'-2" Sta 4+25.49-Lt Rutland TC=214.91
Sta 0+00-2B= Sta 6+58.66-2 Const Std Type 1A inlet W=5'-0" Sta 1+37.49-Rt Rutland TC=215.03
Sta 0+35.33-2B Const Std Type 1A inlet W=4'-2" Sta 1+37.49-Lt Rutland TC=215.03
2-17LF 36" RCP@+0.5% Alt 2-17LF 36" CMP@+0.5% (Full Paved & full Asphalt coated)
2-36LF 36" RCP@+0.5% Alt 2-36LF 36" CMP@+0.5% (Fully Paved & full Asphalt coated)
2-17LF 36" RCP@+0.5% Alt 2-17LF 36" CMP@+0.5% (Fully Paved & full Asphalt coated)
35LF 15" RCP@+0.24% or 35LF 15" CMP@+0.24% (Full Asphalt coated)
35LF 15" RCP@+0.24% or 35LF 15" CMP@+0.24% (Full Asphalt coated)
220
215
210
Type 3 Rip Rap (by others)
proposed street grade
Existing Ground
Type 3 Rip Rap (by others)
future Channel (by Others)
12" A.C. Pipe
future Channel (by Others)
prop. street grade
Existing Ground
prop. street grade
Existing Ground
10
1A&1B
11
0
2A
0
2B
Lines 1A,1B, 2A & 2B