GEWALT HAMILTON
ASSOCIATES, INC.
Consulting Engineers & Surveyors
850 Forest Edge Drive Vernon Hills, IL 60061 Tel: 847.478.9700 Fax: 847.478.9701

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 101 |
| STA 101+99 TO STA 103+50 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

GRAPHIC SCALE
(IN FEET)
H 1"= 10 ft V 1"= 5ft.

N

103+50

CUT: 207.60 FILL: 9.61

103+00

CUT: 224.57 FILL: 4.99

102+50

CUT: 225.70 FILL: 3.82

102+00

CUT: 210.73 FILL: 0.00

101+99

CUT: 210.25 FILL: 0.00

EXISTING 16" WATERMAIN (TYP)

EXISTING 6" GAS MAIN (TYP)

EXISTING 24" DUCTILE IRON WATERMAIN (TYP)

30' (TYP)

24" CLDP

ROW

℄ OF CONSTRUCTION

SOUTH

NORTH

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV.-5 PRE-FINAL SUB | 02-20-09 | | |
| REV.-2 PLANS STAGED | 06-02-06 | | |
| REV.-1 DOT COMMENTS | 02-02-06 | PS&E SUBMITTAL | 04-10-08 |

**WASHINGTON STREET**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

83845-1223-ROS-138C.dwg

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850 Forest Edge Drive Vernon Hills, IL 60061 Tel 847.478.9700 Fax 847.478.9701

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 102 |
| STA 103+92 TO STA 105+02 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

GRAPHIC SCALE
( IN FEET )
H: 1"= 10 ft. V: 1"= 5ft.

N

105+02
CUT: 172.79 FILL: 10.04
105+00
CUT: 173.47 FILL: 9.98
104+50
CUT: 171.14 FILL: 19.87
104+00
CUT: 194.36 FILL: 4.76
103+95
CUT: 196.07 FILL: 4.42

ROW
SOUTH
NORTH
℄ OF CONSTRUCTION
30' (TYP)
EXISTING 16" WATER MAIN (TYP)
EXISTING 8" GAS MAIN (TYP)
EXISTING 24" SLCC-LAWA WATERMAIN (TYP)

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV.-5 PRE-FINAL SUB | 02-20-09 | | |
| REV.-2 PLANS STAGED | 06-02-06 | | |
| REV.-1 IDOT COMMENTS | 02-03-06 | PS&E SUBMITTAL | 04-10-09 |

**WASHINGTON STREET**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

2381221-WAS-102.dwg

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| F.A.U. R.T.C. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 103 |
| STA 105+50 TO STA 106+83.84 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

GRAPHIC SCALE
( IN FEET )
H. 1" = 10 ft. V. 1" = 5 ft.

N

106+78
CUT: 130.05 FILL: 27.78
ROW
737.2
736.86
SOUTH
NORTH
OF CONSTRUCTION

106+50
CUT: 133.92 FILL: 23.00
ROW
737.4
736.99
SOUTH
NORTH
OF CONSTRUCTION

106+03
CUT: 151.48 FILL: 17.69
ROW
737.6
737.16
SOUTH
NORTH
OF CONSTRUCTION

106+00
CUT: 151.82 FILL: 17.71
ROW
737.6
737.18
SOUTH
NORTH
OF CONSTRUCTION

105+50
CUT: 144.18 FILL: 25.04
ROW
738.0
737.43
30' (TYP)
EXISTING 16" VILLAGE WATERMAIN (TYP)
EXISTING 8" GAS MAIN (TYP)
EXISTING 24" CLC-MAIN WATERMAIN (TYP)
SOUTH
NORTH
OF CONSTRUCTION

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV-5 PRE-FINAL SUB | 02-02-09 | | |
| REV-2 PLANS STAGED | 06-02-06 | | |
| REV-1 IDOT COMMENTS | 02-02-06 | PS&E SUBMITTAL | 04-10-09 |

**WASHINGTON STREET**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

300 STD - MAIN - 12DEC - PNG

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850 Forest Edge Drive Vernon Hills, IL 60061 Tel 847.478.9700 Fax 847.478.9701

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 104 |
| STA 107+00 TO STA 108+50 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

GRAPHIC SCALE
10 0 5 10
(IN FEET)
H. 1" = 10 Ft. V. 1" = 5 Ft.

N

108+50 | 108+28 | 108+00 | 107+50 | 107+00

SOUTH

CUT: 156.09 FILL: 21.64 | CUT: 154.76 FILL: 15.83 | CUT: 147.97 FILL: 33.59 | CUT: 132.53 FILL: 62.35 | CUT: 131.36 FILL: 38.81

ROW | PROP ROW

737.92 | 737.64 | 737.39 | 737.14 | 736.98

740 735 730

EXISTING 12" STORM SEWER | EXISTING 15" STORM SEWER | EXISTING 18" STORM SEWER | EXISTING 24" CLC-IAMA WATERMAIN (TYP)

UNITS OF EX. WETLAND #3 | WETLAND #5 TO BE MITIGATED | EX. LIMIT OF WETLAND #5 | EXISTING 6" GAS MAIN (TYP)

30" (TYP)

NORTH

OF CONSTRUCTION

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV.-5 PRE-FINAL SUB | 02-22-09 | | |
| REV.-2 PLANS STAGED | 06-02-06 | | |
| REV.-1 IDOT COMMENTS | 02-03-06 | PS&E SUBMITTAL | 04-10-09 |

**WASHINGTON STREET**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

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| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 105 |
| | STA 109+00 TO STA 110+50 | | | |
| | CONTRACT NO. 83845 | ILLINOIS | | |

GRAPHIC SCALE
1" = 10 ft. V: 1" = 5 ft.

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

**WASHINGTON STREET**

| REVISION | DATE | P.E. OR S.E. INITIAL |
|---|---|---|
| REV. 3 PRE-FINAL SUB | 02-20-08 | |
| REV. 2 DOT COMMENTS | 08-30-06 | |
| REV. 1 DOT COMMENTS | 04-10-06 | |

109+00

SOUTH — NORTH

CUT: 161.61 FILL: 17.57 ROW — ROW

109+50

CUT: 163.53 FILL: 17.10 ROW — ROW

110+00

CUT: 163.50 FILL: 13.21 ROW — ROW

110+50

CUT: 163.90 FILL: 7.08 ROW — ROW


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| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 106 |
| STA 111+00 TO STA 112+50 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

GRAPHIC SCALE
0 5 10
(IN FEET)
H. 1" = 10 ft V. 1" = 5 ft

N

112+50

CUT: 167.45 FILL: 5.29

748.00
748.00
747.41
747.41
747.41
747.41
750.0
749.41

112+00

CUT: 164.62 FILL: 4.12

748.00
747.78
747.78
747.78
747.78
748.31

111+50

CUT: 161.49 FILL: 4.08

745.00
744.71
744.71
744.71
744.71
746.11

111+00

CUT: 159.14 FILL: 6.53

743.00
744.46
744.46
744.46
744.46
745.0

30" (TYP)

EXISTING 16" VILLAGE WATERMAIN (TYP)
EXISTING 6" GAS MAIN (TYP)
EXISTING 24" SAC-ZAWA WATERMAIN (TYP)

SOUTH
NORTH
ROW
℄ OF CONSTRUCTION

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV-5 PRE-FINAL SUB | 02-20-09 | | |
| REV-4 PLANS STAGED | 08-05-08 | | |
| REV-3 IDOT COMMENTS | 08-05-08 | PS&E SUBMITTAL | 04-10-08 |

**WASHINGTON STREET**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

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| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 107 |
| STA 113+00 TO STA 114+50 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

GRAPHIC SCALE
(IN FEET)
H: 1"= 10 ft V: 1"= 5 ft

115+00 | 114+50 | 114+00 | 113+50 | 113+00

CUT: 164.84 FILL: 1.63 | CUT: 179.18 FILL: 2.92 | CUT: 173.39 FILL: 3.53 | CUT: 168.09 FILL: 4.56 | CUT: 167.24 FILL: 4.11

ROW | SOUTH | OF CONSTRUCTION | NORTH

EXISTING 16" VILLAGE WATERMAIN (TYP)
EXISTING 6" GAS MAIN (TYP)
EXISTING 24" CLC - IAWA WATERMAIN (TYP)
30" (TYP)

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV-5 PRE-FINAL SUB | 02-20-09 | | |
| REV-2 PLANS STAGED | 08-05-08 | | |
| REV-1 DOT COMMENTS | 02-05-08 | PS&E SUBMITTAL | 04-10-09 |

**WASHINGTON STREET**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

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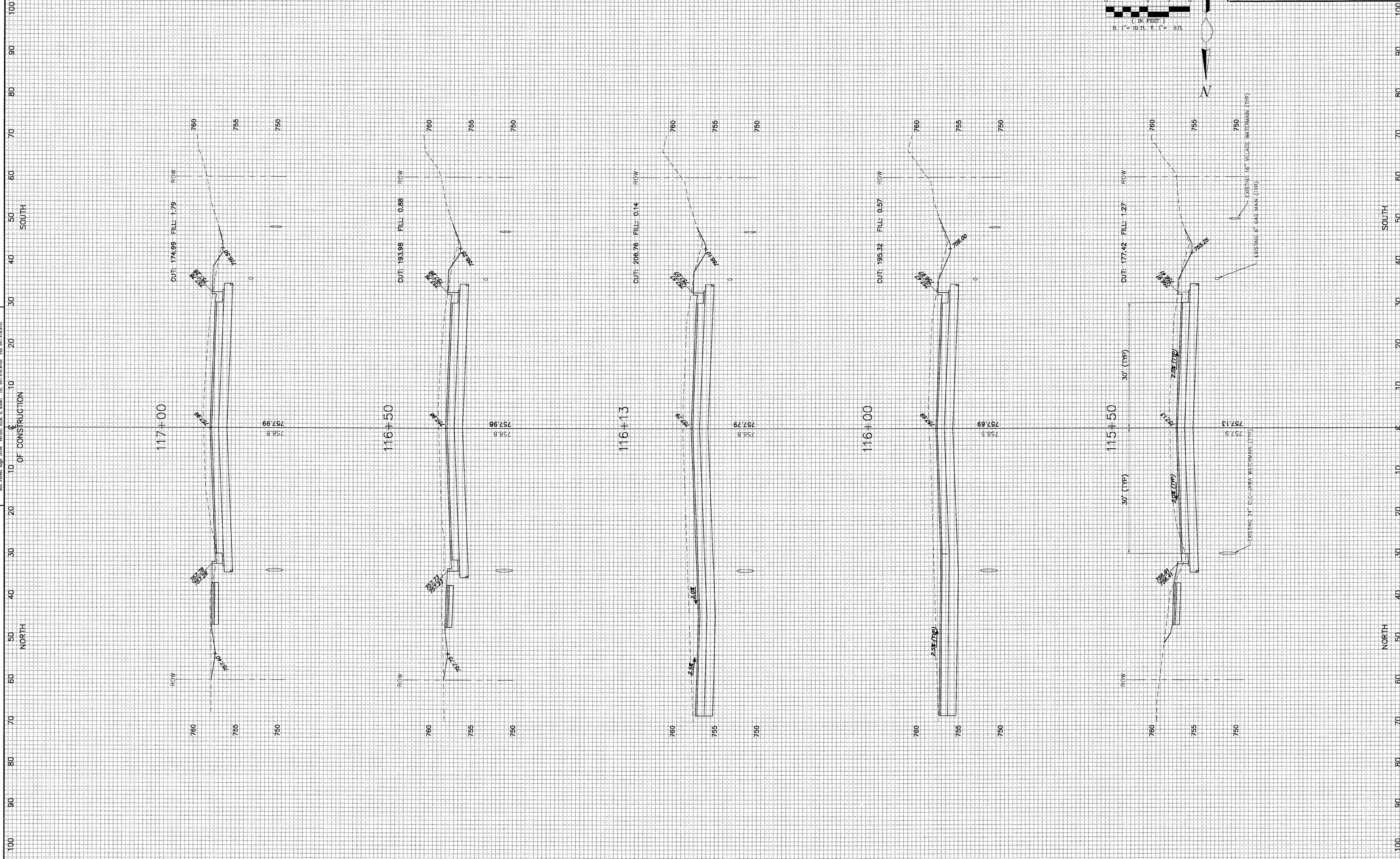
| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET. NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 108 |

**STA 115+50 TO STA 117+00**

CONTRACT NO. 83845 | ILLINOIS

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| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV.-5 PRE-FINAL SUB | 02-20-09 | | |
| REV.-2 PLANS STAGED | 06-02-06 | | |
| REV.-1 IDOT COMMENTS | 02-03-06 | PS&E SUBMITTAL | 04-10-09 |

**WASHINGTON STREET**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

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| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 109 |

STA 117+50 TO STA 119+50

CONTRACT NO. 83845 | ILLINOIS

GRAPHIC SCALE
(IN FEET)
H: 1"= 10 ft. V: 1"= 5ft.

N

119+50 — SOUTH — 119+00 — 118+50 — 118+00 — 117+50 — SOUTH

OF CONSTRUCTION

PROP ROW — ROW

CUT: 224.76 FILL: 9.85 — CUT: 206.59 FILL: 9.40 — CUT: 199.23 FILL: 6.10 — CUT: 189.14 FILL: 2.21 — CUT: 176.77 FILL: 1.03

41' — 38' — 35' — 32' — 30' (TYP)

EXISTING 16" VILLAGE WATERMAIN (TYP)

EXISTING 6" GAS MAIN (TYP)

EXISTING 24" CSC- AWA WATERMAIN (TYP)

NORTH

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV.-5 PRE-FINAL SUB | 02-20-09 | | |
| REV.-2 PLANS STAGED | 06-02-06 | | |
| REV.-1 IDOT COMMENTS | 02-03-06 | PS&E SUBMITTAL | 04-10-09 |

**WASHINGTON STREET**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

3061.2 - WAS - SSEC.dwg

GEWALT HAMILTON
ASSOCIATES, INC.
CONSULTING ENGINEERS & SURVEYORS
850 Pasquinelli Drive Westmont, Illinois 60559 (630) 971-1700 Fax (630) 971-1701

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 110 |
| STA 120+00 TO STA 121+84.80 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

GRAPHIC SCALE
10 0 5 10
( IN FEET )
H. 1" = 10 Ft. V. 1" = 5 Ft.

N

121+84.80
WASHINGTON ST - CL
CL - CL GEMETERY RD
CUT: 189.93 FILL: 3.20
752.04
EXISTING 15" STORM SEWER
42
OF CONSTRUCTION
SOUTH
NORTH

121+50
CUT: 175.77 FILL: 4.25
752.9
752.5
82'
42
42

121+00
CUT: 180.01 FILL: 22.90
753.8
753.18
47'
42
42

120+50
CUT: 210.56 FILL: 4.82
754.6
753.85
42'
41
41

120+20
754.25
753.25
41

120+00
CUT: 224.07 FILL: 5.86
755.4
754.62
42'
30" (TYP)
41
EXISTING 8" GAS MAIN (TYP)
EXISTING 16" WILLOW WATERMAIN (TYP)
EXISTING 24" CUCP JAWA WATERMAIN (TYP)

PROP ROW
ROW

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV.-5 PRE-FINAL SUB | 02-20-09 | | |
| REV.-3 PLANS STAGE | 09-01-06 | | |
| REV.-1 IDOT COMMENTS | 02-03-06 | PS&E SUBMITTAL | 04-10-09 |

**WASHINGTON STREET**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

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| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 111 |
| STA 122+00 TO STA 124+00 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

GRAPHIC SCALE
( IN FEET )
H. 1" = 10 Ft. V. 1" = 5 ft.

N

124+00 | 123+50 | 123+00 | 122+50 | 122+00

SOUTH

NORTH

PROP ROW

ROW

CUT: 163.46 FILL: 9.07

CUT: 154.13 FILL: 11.84

CUT: 145.86 FILL: 18.06

CUT: 136.46 FILL: 20.23

CUT: 177.83 FILL: 2.37

30' (TYP)

61'

42' 50'

EXISTING 18" VILLAGE WATERMAIN (TYP)

EXISTING 8" GAS MAIN (TYP)

EXISTING 24" CI/DI JAWA WATERMAIN (TYP)

EXISTING 15" STORM SEWER

| REVISION | DATE |
|---|---|
| REV-5 PRE-FINAL SUB | 02-20-09 |
| REV-4 PLANS STAGE | 09-07-06 |
| REV-3 IDOT COMMENTS | 02-01-06 |

| REVISION | DATE |
|---|---|
| PS&E SUBMITTAL | 04-10-09 |

**WASHINGTON STREET**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

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| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 112 |
| STA 124+50 TO STA 126+50 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

GRAPHIC SCALE
10 0 5 10
( IN FEET )
H: 1"= 10 ft. V: 1"= 5 ft.

N

126+50 — CUT: 157.86 FILL: 0.04 — 30' (TYP) — EXISTING 18" STORM SEWER
126+00 — CUT: 140.62 FILL: 3.90 — 30' (TYP)
125+50 — CUT: 139.10 FILL: 0.68 — 33'
125+00 — CUT: 145.58 FILL: 1.98 — 36'
124+50 — CUT: 157.82 FILL: 11.60 (TYP) — 39' — EXISTING 6" GAS MAIN (TYP) — EXISTING 24" CIC-JAWA WATERMAIN (TYP)

SOUTH — OF CONSTRUCTION — NORTH

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV-5 PRE-FINAL SUB | 02-20-08 | | |
| REV-2 PLANS STAGED | 08-04-08 | | |
| REV-1 DOT COMMENTS | 02-02-09 | PS&E SUBMITTAL | 04-10-09 |

**WASHINGTON STREET**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

IDOT 2312-MSG-1000.dwg

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| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 113 |
| STA 127+00 TO STA 129+00 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

GRAPHIC SCALE
10 0 5 10
( IN FEET )
H. 1" = 10 ft. V. 1" = 5 ft.

N




| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV.-5 PRE-FINAL SUB | 92-20-09 | | |
| REV.-4 PLANS STAGED | 09-03-08 | | |
| REV.-3 IDOT COMMENTS | 09-03-08 | PS&E SUBMITTAL | 04-10-09 |

**WASHINGTON STREET**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

2007123-WASH-PROF.dwg

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| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 114 |
| STA 129+50 TO STA 131+11 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

GRAPHIC SCALE
(IN FEET)
H. 1" = 10 ft. V. 1" = 5 ft.

N

SOUTH

131+11 | 131+00 | 130+50 | 130+00 | 129+50

CUT: 168.29 FILL: 9.19
CUT: 157.69 FILL: 13.52
CUT: 125.59 FILL: 33.65
CUT: 115.79 FILL: 44.41
CUT: 111.05 FILL: 50.90

PROP ROW
ROW
PROP ESMT
30' (TYP)
2.0% (TYP)
EXISTING 8" GAS MAIN (TYP)
EX. LIMIT OF WETLAND #7
WETLAND #7 TO BE MITIGATED
EXISTING 24" C.O.-JAWA WATERMAIN (TYP)

NORTH

OF CONSTRUCTION

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV.-5 PRE-FINAL SUB | 02-20-09 | | |
| REV.-2 PLANS STAGED | 06-02-06 | | |
| REV.-1 IDOT COMMENTS | 03-03-06 | PS&E SUBMITTAL | 04-10-09 |

**WASHINGTON STREET**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

2007_213-WASH-PSE2.dwg

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 115 |
| | STA 131+50 TO STA 133+00 | | | |
| | CONTRACT NO. 83845 | ILLINOIS | | |

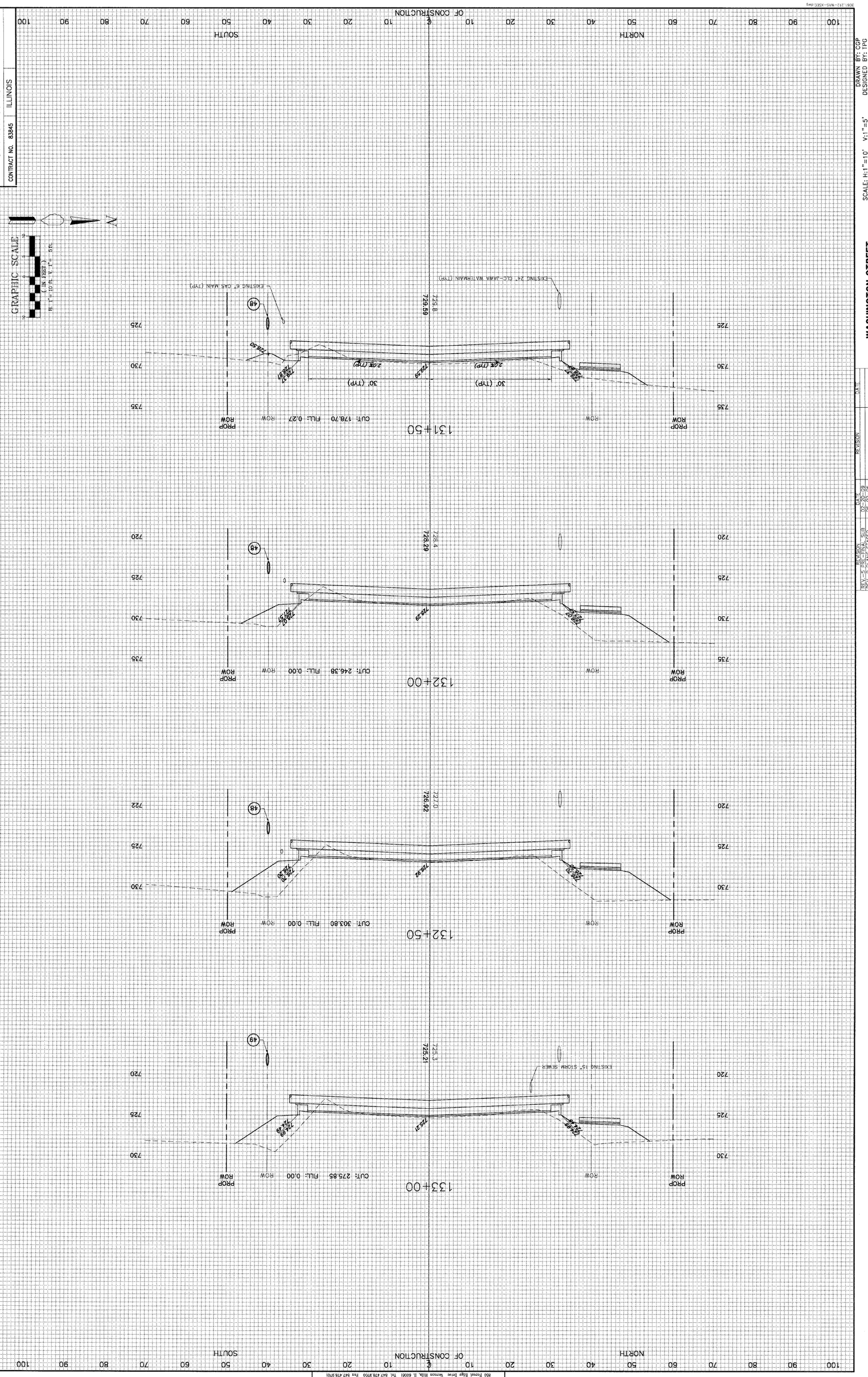
GRAPHIC SCALE
1" = 10' (HORIZ.)
1" = 10' (VERT.)

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CSP
DESIGNED BY: HRC
CHECKED BY: BLS

**WASHINGTON STREET**

| REVISIONS | DATE |
|---|---|
| REV-5 PE-PHA SUB | 07-29-09 |
| REV-4 PASS STAGE | 06-01-06 |
| REV-3 100% SUBMITTAL | 05-05-06 |
| PE&C SUBMITTAL | 04-10-09 |





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GEWALT HAMILTON ASSOCIATES, INC.
CONSULTING ENGINEERS & SURVEYORS
850 Forest Edge Drive Vernon Hills, IL 60061 Tel: 847.478.9700 Fax: 847.478.9701

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 116 |
| STA 133+50 TO STA 135+50 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

GRAPHIC SCALE
( IN FEET )
H 1"= 10 ft V 1"= 5ft

N

SOUTH

PROP ROW

ROW

0

50

48

49

CUT: 246.45 FILL: 0.00

30' (TYP)

2.0% (TYP)

EXISTING 6" GAS MAIN (TYP)

EXISTING 15" STORM SEWER (TYP)

EXISTING 24" CCC+ARK WATERMAIN (TYP)

CUT: 197.93 FILL: 0.00

CUT: 172.12 FILL: 1.34

CUT: xxxxx FILL: xxxxx

OF CONSTRUCTION

℄

133+50

134+00

134+50

134+88

135+00

135+14

NORTH

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV-5 PRE-FINAL SUB | 03-30-09 | | |
| REV-4 PLANS SUBMIT | 08-02-06 | | |
| REV-3 IDOT COMMENTS | 02-03-06 | PS&E SUBMITTAL | 04-10-09 |

**WASHINGTON STREET**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

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| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 117 |
| STA 136+00 TO STA 138+00 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |


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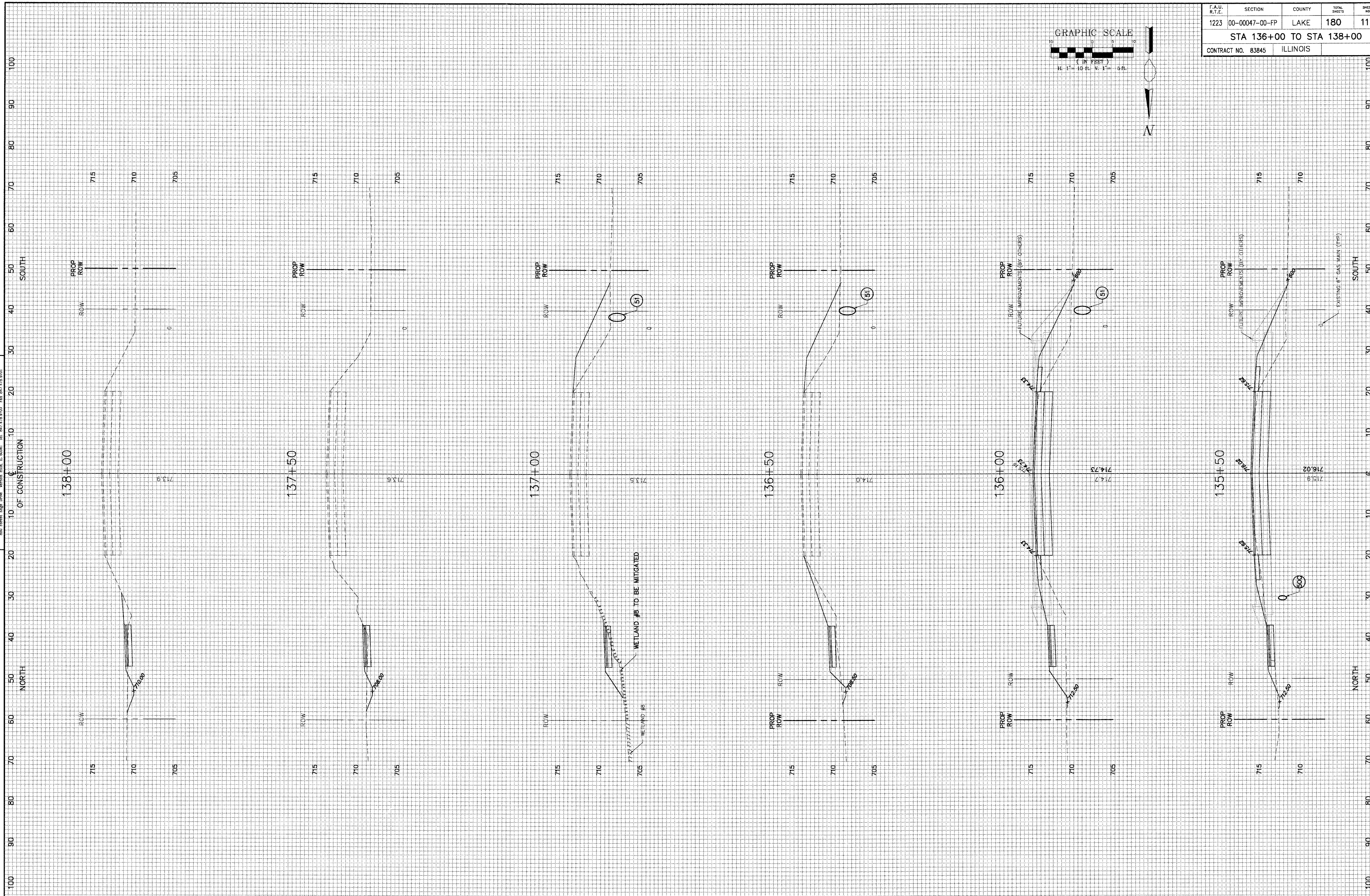


| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV.-5 PRE-FINAL SUB | 02-20-09 | | |
| REV.-2 PLANS STAGED | 06-02-06 | | |
| REV.-1 IDOT COMMENTS | 02-03-06 | PS&E SUBMITTAL | 04-10-09 |

**WASHINGTON STREET**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

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GEWALT HAMILTON
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850 Forest Ridge Drive Vernon Hills, IL 60061 Tel. 847.478.9700 Fax. 847.478.9701

GRAPHIC SCALE
30 0 15 30 60
( IN FEET )
H: 1"= 10 Ft. V: 1"= 5 Ft.

N

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 118 |
| STA 138+50 TO STA 140+50 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

SOUTH

141+00 | 140+50 | 140+00 | 139+50 | 139+00 | 138+50

720 / 715 / 710

ROW

PROP ROW

EXISTING 6" GAS MAIN (TYP.)

EXISTING 24" CLE-FORA WATERMAIN (TYP.)

719.3 | 718.9 | 718.0 | 716.9 | 715.7 | 714.7

NORTH

OF CONSTRUCTION

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV.-5 PRE-FINAL SUB | 02-20-09 | | |
| REV.-2 PLANS STAGED | 08-07-08 | | |
| REV.-1 IDOT COMMENTS | 02-03-05 | FS&E SUBMITTAL | 04-10-09 |

**WASHINGTON STREET**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

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GEWALT HAMILTON
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850 Forest Edge Drive Vernon Hills, IL 60061 Tel. 847.478.9700 Fax. 847.478.9701

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 119 |
| STA 141+00 TO STA 141+50 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

GRAPHIC SCALE
(IN FEET)
H 1"=10 ft. V 1"= 5 ft.

N

SOUTH
OF CONSTRUCTION
℄
NORTH

725
720
715
719.5
141+50
ROW

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV-5 PRE-FINAL SUB | 02-25-09 | | |
| REV-4 PLANS STAGED | 06-02-08 | | |
| REV-3 IDOT COMMENTS | 02-03-06 | FS&E SUBMITTAL | 04-10-09 |

WASHINGTON STREET

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

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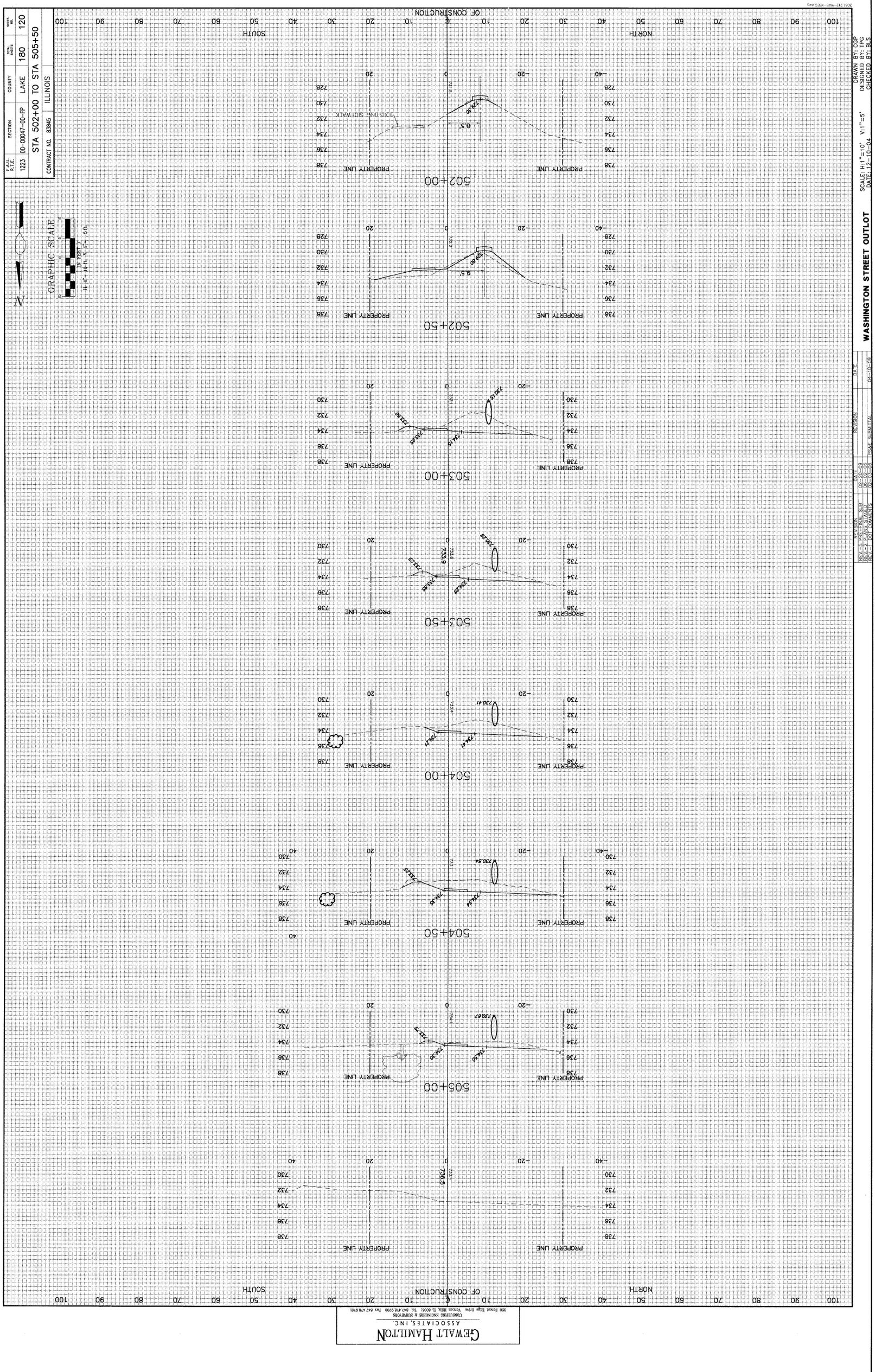


| F.A.U. S.T.U. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 120 |

STA 502+00 TO STA 505+50

CONTRACT NO. 83845 ILLINOIS

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

**WASHINGTON STREET OUTLOT**

| REVISION | DATE |
|---|---|
| REV. 3 PRE-FINAL S/B | 02-09-09 |
| REV. 2 PRE-FINAL S/B | 02-04-09 |
| REV. 1 POST SAWING | 04-10-09 |

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GEWALT HAMILTON
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950 Rivers Edge Drive Wauconda, IL 60084 Tel 847 478 9700 Fax 847 478 9701

GEWALT HAMILTON ASSOCIATES, INC.
CONSULTING ENGINEERS & SURVEYORS
625 Forest Edge Drive Vernon Hills, IL 60061 Tel: 847.478.9700 Fax: 847.478.9701

| F.A.U. R.T.C. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 121 |
| STA 198+00 TO STA 200+00 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

GRAPHIC SCALE
10 0 5 10
( IN FEET )
H. 1" = 10 ft. V. 1" = 5 ft.

200+00
CUT: 0.0 FILL: 0.0
PROPOSED 2" N.G. GASMAIN BY OTHERS
752.04
752.3
199+50
CUT: 0.0 FILL: 0.0
EX. ROW
751.08
750.28
199+00
CUT: 293.5 FILL: 0.0
ROW
750.28
749.49
198+50
CUT: 293.0 FILL: 0.0
ROW
12" TYP
22' TYP
749.49
749.5
198+00
CUT: 0.0 FILL: 0.0
EXISTING STORM
EXISTING 16" WATERMAIN
750.0
EXISTING GAS MAIN

EAST
WEST
OF CONSTRUCTION

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV-5 PRE-FINAL SUB | 02-20-09 | | |
| REV-3 PLANS STAGED | 06-02-08 | | |
| REV-1 DOT COMMENTS | 02-03-06 | PS&C SUBMITTAL | 04-10-09 |

**CEMETERY ROAD**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

2903_121_200+_SSEC.dwg

GEWALT HAMILTON ASSOCIATES, INC.
CONSULTING ENGINEERS & SURVEYORS
965 Pond Ridge Drive Round Lake, IL 60073 Tel. 847.478.9700 Fax 847.478.9701

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 122 |
| STA 200+50 TO STA 202+00 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

GRAPHIC SCALE
(IN FEET)
H. 1"=10 ft V. 1"= 5ft

EAST

202+00
CUT: 109.5 FILL: 0.0
ROW
PROPOSED BIKE PATH WITH 2' CLEARANCE
4.5" @ 4.0%
PROP ESMT
PROP ROW
3:1
752.28
752.5
752.24
751.74
752.18
751.68
755
750
40
20
0
-20
-40
-60

201+92
CUT: 135.0 FILL: 0.0
ROW
PROP ESMT
PROP ROW
3:1
752.45
752.18
751.95
751.68
755
750
40
20
0
-20
-40
-60

201+50
CUT: 196.0 FILL: 0.0
ROW
12' TYP
24' TYP
2.0% TYP
PROP ROW
3:1
752.8
751.40
751.10
755
750
40
20
0
-20
-40
-60

201+00
CUT: 176.5 FILL: 0.0
ROW
K25
PROP ROW
3:1
752.5
751.83
751.53
752.38
750.38
750.08
755
750
40
20
0
-20
-40
-60

200+50
CUT: 0.0 FILL: 0.0
ROW
4.0%
PROPOSED 24" R.C.P. CASMAIN 35' OTHERS
EXISTING 24" WATERMAIN
EXISTING 36" WATERMAIN
EX. ROW
PROP ROW
752.5
751.10
750.85
750.55
755
750
40
20
0
-20
-40
-60

WEST

OF CONSTRUCTION

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV.-3 PRE-FINAL SUB | 02-20-09 | | |
| REV.-2 PLANS STAGED | 08-02-06 | | |
| REV.-1 IDOT COMMENTS | 02-03-06 | PS&E SUBMITTAL | 04-10-09 |

**CEMETERY ROAD**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

USER: ctrapp DGN: TSEC-PROF.dgn

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850 Forest Edge Drive Vernon Hills, IL 60061 Tel. 847.478.9700 Fax 847.478.9701

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 123 |
| STA 202+50 TO STA 204+00 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

GRAPHIC SCALE
10 0 5 10
( IN FEET )
H. 1" = 10 ft. V. 1" = 5 ft.

EAST
WEST
℄ OF CONSTRUCTION

204+00: CUT: 84.0 FILL: 6.0; PROP ROW; ROW; 5'; 3:1; 747.70; 747.6; 747.56; 747.16; 747.25
203+50: CUT: 81.0 FILL: 3.0; PROP ESMT; PROP ROW; ROW; 5'; 3:1; 749.60; 748.2; 748.28; 748.08; 748.50
PROP ESMT END STA 203+75
203+25: CUT: 58.5 FILL: 3.0; PROP ESMT; PROP ROW; ROW; 3:1; 750.55; 749.85; 750.51; 750.01; 749.00
203+00: CUT: 42.0 FILL: 6.5; PROP ESMT; PROP ROW; ROW; 3:1; 751.38; 750.5; 751.34; 750.84; 751.10
202+50: CUT: 53.5 FILL: 3.5; PROPOSED 24" N.S. CASMAN BY OTHERS; EXISTING 24" WATERMAIN; EXISTING 24" WATERMAIN; 12" TYP; 24" TYP; 24" DR 26 TYP; 3:1; 752.31; 752.6; 752.27; 751.91; 751.60

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV.-5 PRE-FINAL SUB | 02-20-09 | | |
| REV.-2 PLANS STAGED | 06-02-06 | | |
| REV.-1 IDOT COMMENTS | 02-03-06 | PS&E SUBMITTAL | 04-10-09 |

**CEMETERY ROAD**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

DGN: 83-2004-00FP.dwg

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| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 124 |
| STA 204+50 TO STA 206+00 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

GRAPHIC SCALE
( IN FEET )
H. 1" = 10 ft. V. 1" = 5 ft.

206+00
CUT: 99.5 FILL: 0.0
205+96
CUT: 90.0 FILL: 0.0
205+50
CUT: 99.0 FILL: 7.5
205+00
CUT: 85.5 FILL: 4.0
204+50
CUT: 83.0 FILL: 2.5

PROPOSED 2" N.S. OASMAIN BY OTHERS
EXISTING 16" WATERMAIN
EXISTING 24" WATERMAIN
PROP ROW
ROW
5'
12' TYP
24' TYP
OF CONSTRUCTION
EAST
WEST

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV-5 PRE-FINAL SUB | 02-20-09 | | |
| REV-4 PLANS STAGE2 | 06-02-06 | | |
| REV-3 IDOT COMMENTS | 02-03-06 | PS&E SUBMITTAL | 04-10-09 |

**CEMETERY ROAD**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

3089-212-ROW-XSEC.dwg

GEWALT HAMILTON
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| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 125 |
| STA 206+23 TO STA 207+00 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

GRAPHIC SCALE
10 0 5 10 20
( IN FEET )
H. 1"= 10ft V. 1"= 5ft

207+00 | 206+88 | 206+74 | 206+50 | 206+23

CUT: 86.0 FILL: 0.0 | CUT: 96.0 FILL: 0.0 | CUT: 90.0 FILL: 0.0 | CUT: 92.0 FILL: 6.5 | CUT: 94.5 FILL: 0.0

PROPOSED 2" N.S. CASAIN 91' OTHERS

EXISTING 36" WATERMAIN

CENTER OF WETLAND #4 TO BE MITIGATED

WETLAND #4 TO BE MITIGATED

22' TYP | 23' | 24' TYP | 12' TYP

EAST | WEST

OF CONSTRUCTION

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV-5 PRE-FINAL SUB | 02-20-09 | | |
| REV-4 PLANS STAGED | 06-02-06 | | |
| REV-3 IDOT COMMENTS | 02-03-06 | PS&E SUBMITTAL | 04-10-09 |

**CEMETERY ROAD**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

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| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 126 |
| STA 207+50 TO STA 209+50 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

N

GRAPHIC SCALE
10 5 0 5 10
( IN FEET )
H. 1"= 10 ft. V. 1"= 5 ft.

209+50
CUT: 93.5 FILL: 1.5
15'
737.76
737.89 737.40
737.40
737.60
ROW

209+00
CUT: 95.0 FILL: 5.5
16'
737.34
737.46 736.96
737.00
737.20
ROW

208+50
CUT: 107.5 FILL: 3.0
17'
737.41
737.51 737.01
736.80
736.70
ROW

208+00
CUT: 85.0 FILL: 3.0
19'
737.90
737.46 737.46
736.75
737.00
ROW
PROP. ROW END STA. 208+25
PROP ROW

207+50
CUT: 83.5 FILL: 5.0
12' TYP
20'
738.45
738.49 737.99
736.65
737.50
2.0% TYP
PROPOSED 2" W.S. CASMAN BY OTHERS
EXISTING 16" WATERMAIN
PROP ROW
ROW

EAST
WEST
℄ OF CONSTRUCTION

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV-5 PRE-FINAL SUB | 02-20-09 | | |
| REV-4 PLANS STAGED | 08-02-06 | | |
| REV-1 IDOT COMMENTS | 02-03-06 | PS&E SUBMITTAL | 04-10-09 |

**CEMETERY ROAD**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

800-312-7706 - 1-800-892-8808

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895 Forest Edge Drive Vernon Hills, IL 60061 Tel. 847-478-9700 Fax 847-478-9701

| F.A.U. R.T.C. | SECTION | COUNTY | TOTAL SHEETS | SHEET. NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 127 |
| STA 209+67 TO STA 210+50 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

N

GRAPHIC SCALE
10 0 5 10
(IN FEET)
H: 1"= 10 ft V: 1"= 5 ft




| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV.-5 PRE-FINAL SUB | 02-20-09 | | |
| REV.-2 PLANS STAGED | 06-02-06 | | |
| REV.-1 IDOT COMMENTS | 02-01-06 | PS&C SUBMITTAL | 04-10-09 |

**CEMETERY ROAD**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

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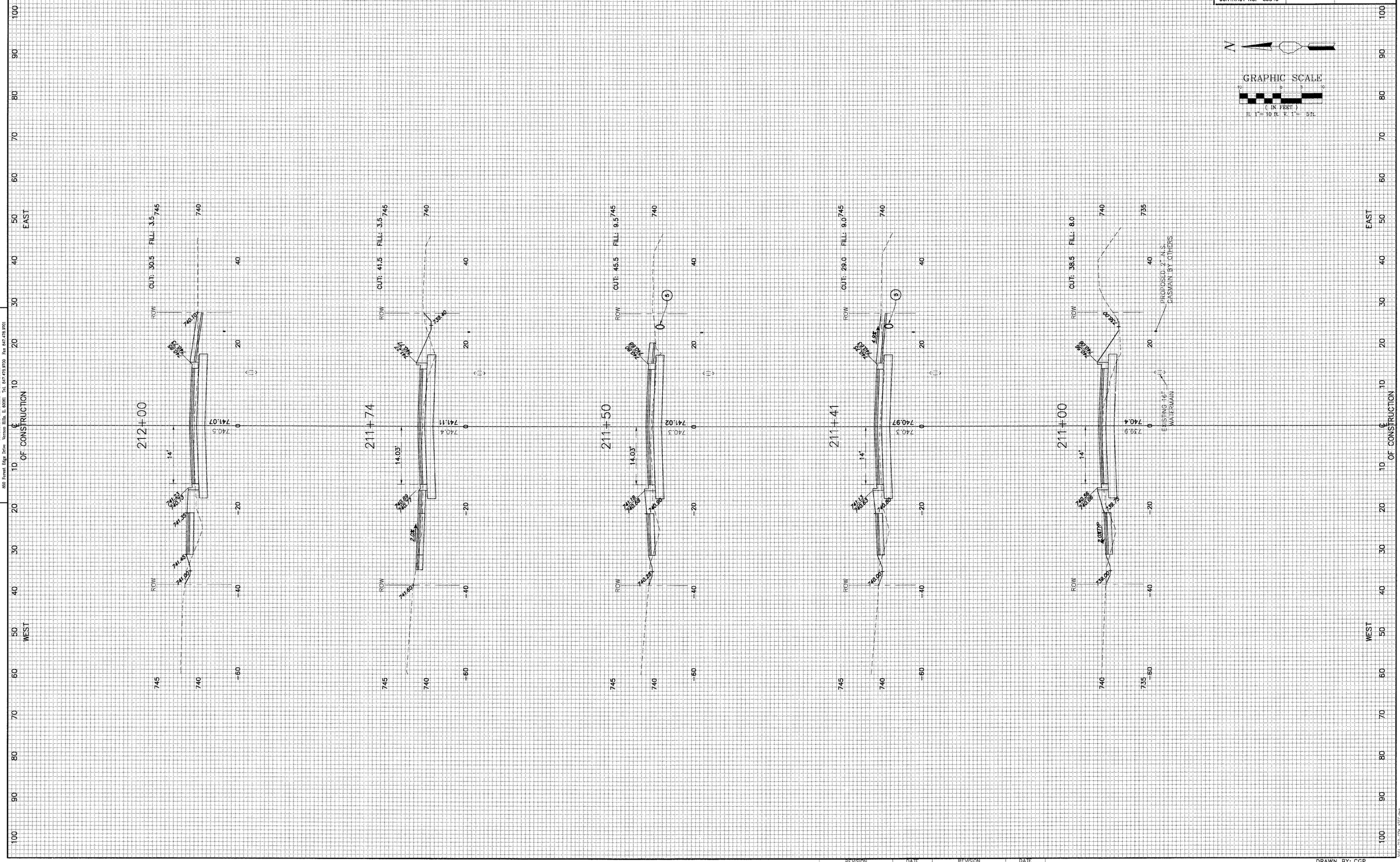
| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 128 |
| STA 211+00 TO STA 212+00 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

N

GRAPHIC SCALE
10 0 5 10
( IN FEET )
H. 1" = 10 ft. V. 1" = 5 ft.




| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV-5 PRE-FINAL SUB | 02-20-09 | | |
| REV-2 PLANS STAGED | 08-02-06 | | |
| REV-1 IDOT COMMENTS | 02-03-06 | PS&E SUBMITTAL | 04-10-09 |

**CEMETERY ROAD**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

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| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 129 |
| STA 212+03 TO STA 213+50 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |




| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV-5 PRE-FINAL SUB | 02-20-09 | | |
| REV-2 PLANS STAGED | 06-04-08 | | |
| REV-1 IDOT COMMENTS | 09-03-08 | PS&E SUBMITTAL | 04-10-09 |

**CEMETERY ROAD**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

3301-212+03-213+50.dwg

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| F.A.U. R.T.C. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 130 |
| STA 214+00 TO STA 215+12 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

GRAPHIC SCALE
(IN FEET)
H. 1" = 10 ft. V. 1" = 5 ft.

215+12
CUT: 77.0 FILL: 0.0
ROW
737.04
737.4
737.20
736.95
736.80
736.30
736.80
736.30
14'
0
737.4
737.20
736.95
736.80
736.30
736.80
736.30
ROW

215+00
CUT: 75.0 FILL: 4.0
ROW
737.10
737.5
737.25
736.95
736.80
736.25
736.80
736.25
14'
0
737.5
737.25
736.95
736.80
736.25
736.80
736.25
ROW

214+67
CUT: 85.0 FILL: 0.0
ROW
737.32
737.9
737.49
737.03
736.95
736.05
736.80
736.30
14.03'
0
737.9
737.49
737.03
736.95
736.05
736.80
736.30
ROW

214+50
CUT: 90.0 FILL: 3.0
ROW
737.49
738.0
737.65
737.10
737.00
736.40
737.00
736.40
14'
0
738.0
737.65
737.10
737.00
736.40
737.00
736.40
ROW

214+00
CUT: 77.5 FILL: 2.5
ROW
738.15
738.6
737.91
737.61
737.30
736.80
737.30
736.80
14'
0
738.6
737.91
737.61
737.30
736.80
737.30
736.80
ROW
PROPOSED 2" N.S. GASMAIN BY OTHERS
EXISTING 16" WATERMAIN

10' OF CONSTRUCTION
EAST
WEST

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV-5 PRE-FINAL SUB | 03-20-09 | | |
| REV-4 PLANS STAGED | 08-02-06 | | |
| REV-3 IDOT COMMENTS | 02-03-06 | PS&E SUBMITTAL | 04-10-09 |

**CEMETERY ROAD**

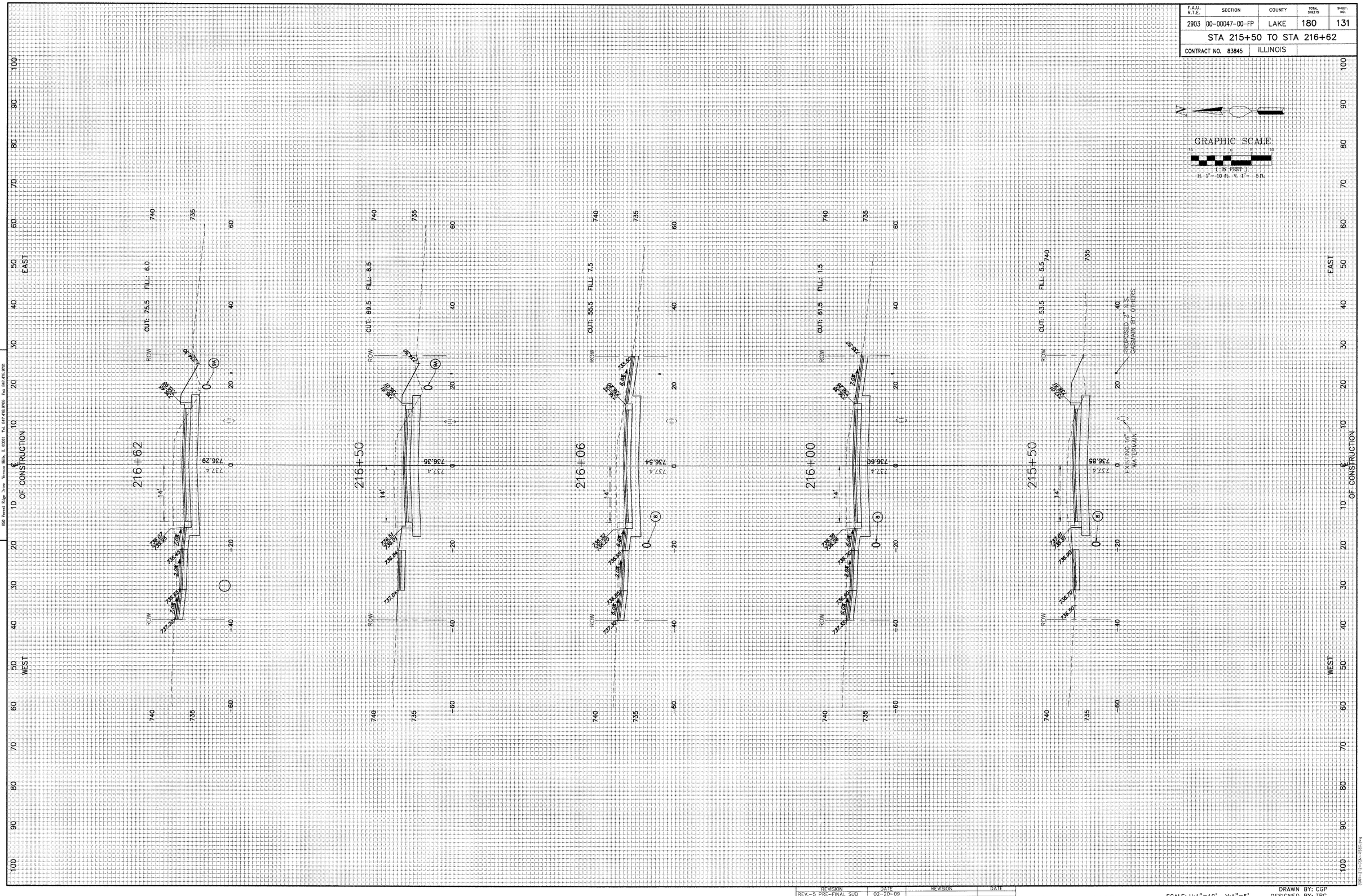
SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

S00-10-CUD-ASE.dwg

GEWALT HAMILTON ASSOCIATES, INC.
CONSULTING ENGINEERS & SURVEYORS
1804 Russell Ridge Drive Johnsburg, Illinois 60050 Tel: 815.678.7701 Fax: 815.678.7701

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 131 |
| STA 215+50 TO STA 216+62 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |




N

GRAPHIC SCALE
(IN FEET)
H: 1" = 10 ft. V: 1" = 5 ft.

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV-5 PRE-FINAL SUB | 02-20-09 | | |
| REV-2 PLANS STAGED | 06-02-08 | | |
| REV-1 DOT COMMENTS | 02-02-06 | PS&E SUBMITTAL | 04-10-09 |

**CEMETERY ROAD**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

2903-12-CEM-REV5

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 132 |
| | STA 216+96 TO STA 218+16 | | | |
| | CONTRACT NO. 83845 | ILLINOIS | | |

GRAPHIC SCALE
1" = 10 ft.
(IN FEET)
H: 1"=10 ft. V: 1"=5 ft.

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-09

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

CEMETERY ROAD

| REVISION | DATE |
|---|---|
| REV. 5 PRE-FINAL SUB | 04-10-09 |
| REV. 4 FINAL SUBMITTAL | 03-26-09 |
| REV. 3 PRE-FINAL SUB | 02-26-09 |
| REV. 2 PRE-FINAL SUB | 02-20-09 |
| REV. 1 PRE-FINAL SUB | 02-06-09 |

PLOT SUBMITTAL 04-10-09

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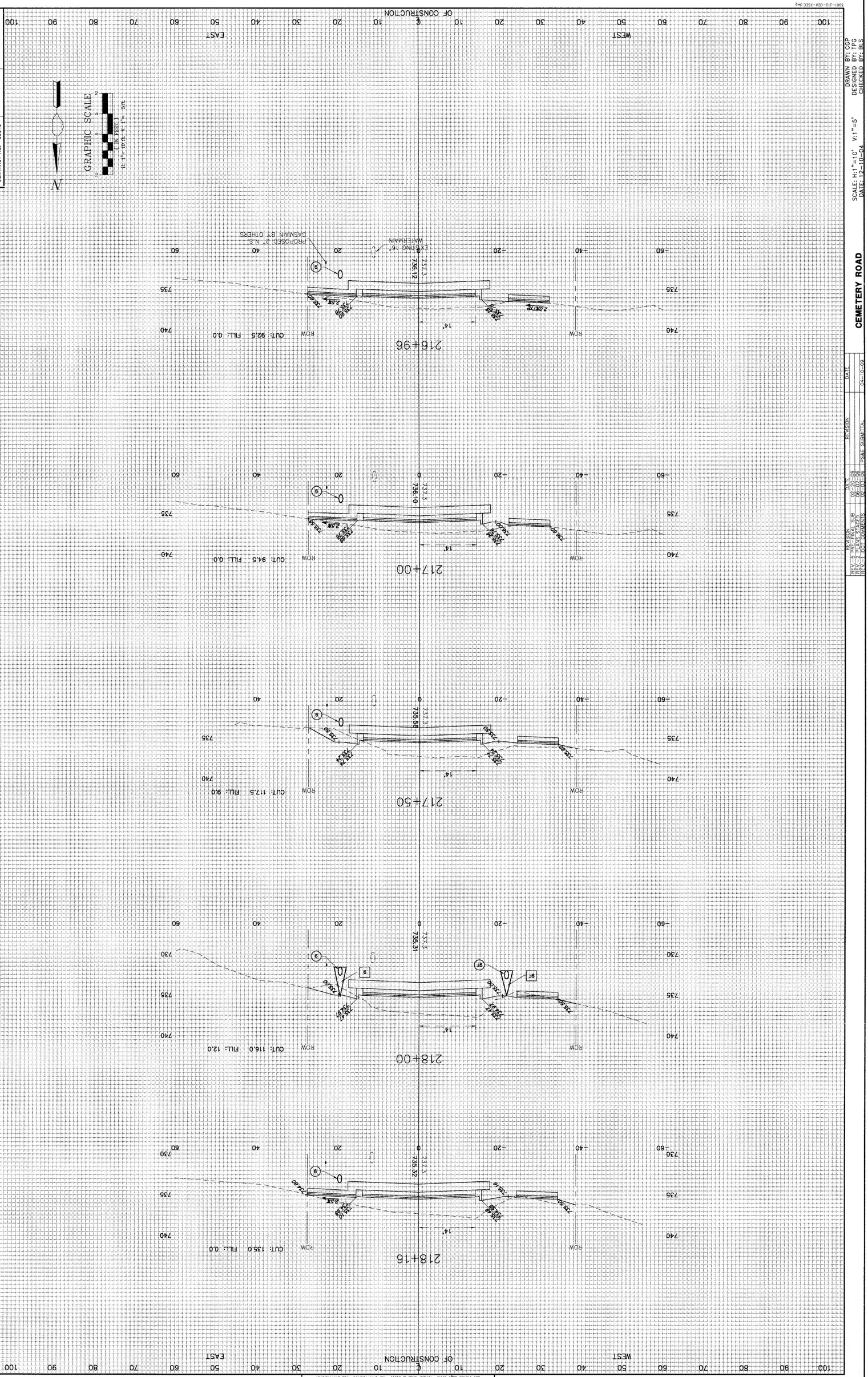



GEWALT HAMILTON ASSOCIATES, INC.
CONSULTING ENGINEERS & SURVEYORS
850 Forest Edge Drive Vernon Hills, IL 60061 Tel 847 478 9700 Fax 847 478 9701

GEWALT HAMILTON
ASSOCIATES, INC.
CONSULTING ENGINEERS & SURVEYORS
850 Forest Edge Drive Vernon Hills, IL 60061 Tel 847.478.9700 Fax 847.478.9701

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 133 |
| STA 218+50 TO STA 220+00 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

GRAPHIC SCALE
10 0 5 10
( IN FEET )
H. 1" = 10 ft. V. 1" = 5 ft.




| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV_5 PRE-FINAL SUB | 02-20-09 | | |
| REV-4 PLANS STAGE2 | 06-02-08 | | |
| REV-1 DOT COMMENTS | 02-01-06 | PS&E SUBMITTAL | 04-10-09 |

**CEMETERY ROAD**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

83811-0123-XSEC.dwg

GEWALT HAMILTON
ASSOCIATES, INC.
CONSULTING ENGINEERS & SURVEYORS
1816 Roswell Village Drive Volo, IL 60073 Ph. 847.478.9700 Fax 847.478.9701

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 134 |
| STA 220+04 TO STA 221+00 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

N

GRAPHIC SCALE
10 0 5 10
( IN FEET )
H 1" = 10 ft V 1" = 5 ft

EAST

OF CONSTRUCTION

WEST

221+00 — CUT: 89.0 FILL: 3.0 — ROW — 739.58 — 739.23 — 739.40 — 739.80

220+84 — CUT: 98.0 FILL: 0.0 — ROW — 738.80 — 739.61 — 739.11 — 739.40 — 739.82

220+50 — CUT: 115.5 FILL: 0.0 — ROW — 739.19 — 738.80 — 739.73 — 739.40

220+14 — CUT: 131.5 FILL: 0.0 — ROW — 738.36 — 738.04 — 739.40

220+04 — CUT: 132.5 FILL: 0.0 — ROW — PROPOSED 2" N.S. GASMAIN BY OTHERS — EXISTING 6" WATERMAIN — 738.82 — 738.98 — 739.08 — 739.00

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV.-5 PRE-FINAL SUB | 02-20-09 | | |
| REV.-2 PLANS STAGED | 08-02-08 | | |
| REV.-1 IDOT COMMENTS | 02-04-08 | PS&E SUBMITTAL | 04-10-09 |

**CEMETERY ROAD**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

USER: ZZZ-ZZZ - ACCESS.dwg

GEWALT HAMILTON
ASSOCIATES, INC.
CONSULTING ENGINEERS & SURVEYORS
850 Forest Edge Drive Vernon Hills, IL 60061 Tel 847.478.9700 Fax 847.478.9701

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 135 |
| STA 221+35 TO STA 222+50 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

N

GRAPHIC SCALE
10 0 10
( IN FEET )
H: 1"= 10 ft. V: 1"= 5 ft.

222+50
CUT: 95.5 FILL: 3.0
222+00
CUT: 67.5 FILL: 4.5
221+75
CUT: 69.0 FILL: 1.0
221+50
CUT: 72.5 FILL: 4.5
221+35
CUT: 78.0 FILL: 0.5
PROPOSED 12" W.S.
EXISTING 16" WATERMAIN
CASMAIN BY OTHERS

EAST
WEST
OF CONSTRUCTION
ROW
℄

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV.-5 PRE-FINAL SUB | 02-20-09 | | |
| REV.-4 PLANS STAGED | 06-02-08 | | |
| REV.-3 IDOT COMMENTS | 02-04-08 | PS&E SUBMITTAL | 04-10-09 |

**CEMETERY ROAD**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

SMH 272 EDA ASEC.dwg

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 136 |
| | STA 222+84 TO STA 224+00 | | | |
| | CONTRACT NO. 83845 | ILLINOIS | | |

GRAPHIC SCALE
1" = 1'-3" (1IN. EQUALS 1.3')

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

CEMETERY ROAD

| REVISION | DATE |
|---|---|
| REV. 1 ADD SIGNATURE | 04-10-06 |
| REV. 2 ADD COMMENTS | 05-26-06 |
| REV. 3 ADD COMMENTS | 06-26-06 |
| REV. 4 ADD COMMENTS | 08-30-06 |

222+84

223+00

223+35

223+50

224+00

EXISTING 18" WATERMAIN

PROPOSED 12" S.S. CASMAN BY OTHERS

CUT: 93.0 FILL: 2.5

CUT: 105.5 FILL: 2.0

CUT: 83.0 FILL: 1.5

CUT: 90.0 FILL: 3.0

CUT: 55.5 FILL: 7.0

OF CONSTRUCTION

EAST

WEST


GEWALT HAMILTON ASSOCIATES INC.
CONSULTING ENGINEERS & SURVEYORS
850 Forest Edge Drive Vernon Hills, IL 60061 Tel 847 478 9700 Fax 847 478 9701

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 137 |
| STA 224+50 TO STA 225+55 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |


GEWALT HAMILTON ASSOCIATES, INC.
CONSULTING ENGINEERS & SURVEYORS
850 Forest Edge Drive Vernon Hills, IL 60061 Tel: 847.478.9700 Fax: 847.478.9701


N

GRAPHIC SCALE
10 0 5 10
( IN FEET )
H: 1"= 10 ft. V: 1"= 5 ft.

225+55

CUT: 118.5 FILL: 0.0
ROW
736.00
88.00
88.00
736.70
738.1
736.70
738.69
738.69
737.70
737.70
2' SEPERATION (TYP)
14
13

225+50

CUT: 116.5 FILL: 0.0
ROW
736.00
88.00
88.00
736.75
738.1
736.75
738.41
738.41
737.80
737.80
14
13

225+00

CUT: 89.0 FILL: 4.0
ROW
736.00
88.00
88.00
737.50
738.3
737.50
738.18
738.18
737.70
737.70
2.00%
2.00%
14
13

224+50

CUT: 66.0 FILL: 5.5
ROW
736.00
88.00
88.00
738.64
738.7
738.64
738.42
738.42
738.05
738.05
2.00%
2.00%
14
12
PROPOSED 2" N.S. CASMAIN BY OTHERS
EXISTING 16" WATERMAIN

EAST
WEST
℄ OF CONSTRUCTION

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV-5 PRE-FINAL SUB | 02-20-09 | | |
| REV-4 PLANS STAGE | 08-02-06 | | |
| REV-3 DOT COMMENTS | 02-03-06 | PS&E SUBMITTAL | 04-10-09 |

**CEMETERY ROAD**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

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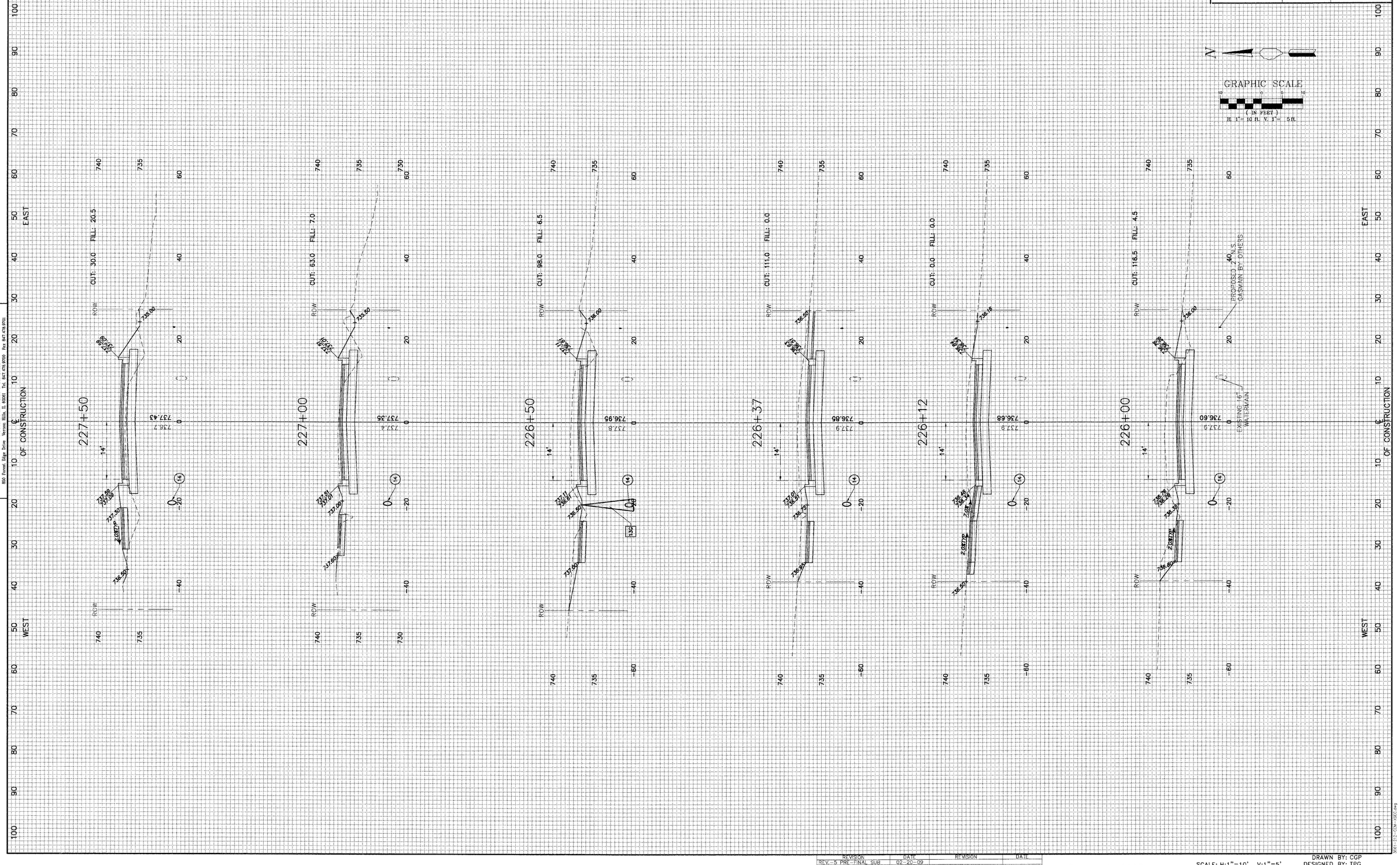
GEWALT HAMILTON
ASSOCIATES, INC.
CONSULTING ENGINEERS & SURVEYORS
850 Forest Edge Drive Vernon Hills, IL 60061 Tel. 847.478.9700 Fax 847.478.9701

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 138 |
| STA 226+00 TO STA 227+50 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

N

GRAPHIC SCALE
10 0 5 10
( IN FEET )
H. 1"= 10 ft. V. 1"= 5 ft.




| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV-5 PRE-FINAL SUB | 02-20-09 | | |
| REV-4 PLANS STAGE | 08-02-06 | | |
| REV-1 DOT COMMENTS | 02-01-06 | PS&E SUBMITTAL | 04-10-09 |

**CEMETERY ROAD**

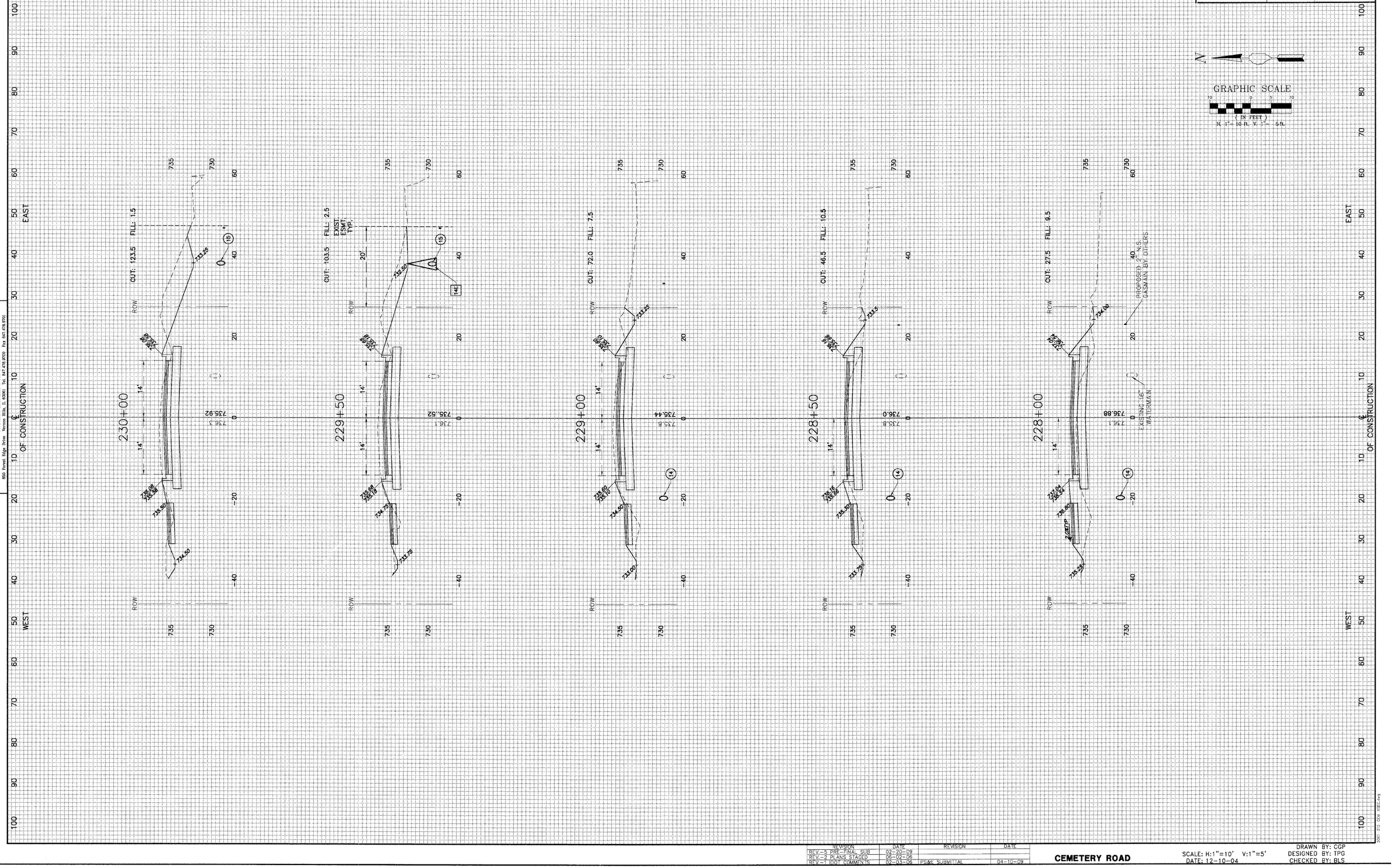
SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

GEWALT HAMILTON ASSOCIATES, INC.
CONSULTING ENGINEERS & SURVEYORS
850 Forest Edge Drive Vernon Hills, IL 60061 Tel. 847.478.9700 Fax 847.478.9701

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 139 |
| STA 228+00 TO STA 230+00 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

GRAPHIC SCALE
10 0 5 10
( IN FEET )
H. 1" = 10 ft. V. 1" = 5 ft.




| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV-5 PRE-FINAL SUB | 02-20-09 | | |
| REV-4 PLANS STAGED | 06-02-06 | | |
| REV-3 IDOT COMMENTS | 02-03-06 | PS&E SUBMITTAL | 04-10-09 |

**CEMETERY ROAD**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

2903_222_CEM_XSEC.dwg

GEWALT HAMILTON ASSOCIATES, INC.
CONSULTING ENGINEERS & SURVEYORS
850 Forest Edge Drive Vernon Hills, IL 60061 Tel: 847.478.9700 Fax: 847.478.9701

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 140 |
| STA 230+50 TO STA 232+28 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

GRAPHIC SCALE
0 5 10 20
( IN FEET )
H. 1" = 10 ft. V. 1" = 5 ft.

232+28
CUT: 4.5 FILL: 17.0
232+00
CUT: 27.0 FILL: 37.5
231+50
CUT: 32.5 FILL: 17.0
231+00
CUT: 88.5 FILL: 6.5
230+50
CUT: 121.0 FILL: 2.0
EXIST. ESMT. TYP.
PROPOSED 2" I.N.S. EASMAIN BY OTHERS
EXISTING 16" WATERMAIN

EAST
WEST
℄ OF CONSTRUCTION
ROW

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV-5 PRE-FINAL SUB | 02-20-09 | | |
| REV-4 PLANS STAGED | 06-02-06 | | |
| REV-3 IDOT COMMENTS | 02-01-06 | PS&E SUBMITTAL | 04-10-09 |

**CEMETERY ROAD**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

2007-12-CEM-XSEC.dwg

GEWALT HAMILTON ASSOCIATES, INC.
CONSULTING ENGINEERS & SURVEYORS
850 Forest Edge Drive Vernon Hills, IL 60061 Ph: 847.478.9700 Fx: 847.478.9701

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 141 |
| STA 232+50 TO STA 234+50 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

GRAPHIC SCALE
( IN FEET )
H. 1" = 10 ft. V. 1" = 5 ft.

234+50 | 234+00 | 233+50 | 233+00 | 232+50

EAST

WEST

OF CONSTRUCTION

ROW

CUT: 200.0 FILL: 0.0

CUT: 262.5 FILL: 0.0

CUT: 248.0 FILL: 0.0

CUT: 164.0 FILL: 0.0

CUT: 58.0 FILL: 6.5

EXIST. ESMT. TYP.

PROPOSED 12" I.S. CASING BY OTHERS

EXISTING 16" WATERMAIN

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV.-5 PRE-FINAL SUB | 02-20-09 | | |
| REV.-2 PLANS STAGED | 08-02-06 | | |
| REV.-1 IDOT COMMENTS | 02-03-06 | PS&E SUBMITTAL | 04-10-09 |

**CEMETERY ROAD**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

SDI - 23 - CDA - ACC.dwg

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 142 |
| STA 235+00 TO STA 236+50 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |


GEWALT HAMILTON ASSOCIATES, INC.
CONSULTING ENGINEERS & SURVEYORS
850 Forest Edge Drive Vernon Hills, IL 60061 Tel 847.478.9700 Fax 847.478.9701


GRAPHIC SCALE
10 0 10 20
( IN FEET )
H. 1" = 10 ft. V. 1" = 5 ft.

EAST

WEST

236+50 | 236+00 | 235+50 | 235+39 | 235+00

CUT: 156.0 FILL: 0.0 | CUT: 150.5 FILL: 0.0 | CUT: 122.0 FILL: 0.0 | CUT: 109.0 FILL: 0.0 | CUT: 139.5 FILL: 0.5

733.99 | 734.49 | 734.99 | 735.09 | 734.69

ORCHARD VALLEY DRIVE

EXIST. ESMT. TYP.

PROPOSED 24" R.C.P. STORM SEWER BY OTHERS

EXISTING 16" WATERMAIN

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV.-5 PRE-FINAL SUB | 02-20-09 | | |
| REV.-2 PLANS STAGED | 06-02-06 | | |
| REV.-1 IDOT COMMENTS | 02-02-06 | PS&E SUBMITTAL | 04-10-09 |

**CEMETERY ROAD**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

GEWALT HAMILTON ASSOCIATES, INC.
CONSULTING ENGINEERS & SURVEYORS
865 Rowell Ridge Drive, Suite 200, Wauconda, Illinois 60084 Tel: 847.478.9700 Fax: 847.478.9701

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 143 |
| STA 237+00 TO STA 239+00 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

GRAPHIC SCALE
(IN FEET)
H. 1" = 10 ft. V. 1" = 5 ft.

239+00 | 238+66 | 238+50 | 238+00 | 237+50 | 237+00

EAST / WEST

CUT: 78.5 FILL: 122.5 | CUT: 0.0 FILL: 0.0 | CUT: 95.0 FILL: 22.5 | CUT: 106.5 FILL: 2.5 | CUT: 39.0 FILL: 6.5 | CUT: 141.5 FILL: 0.5

ROW | 20' | 14' | OF CONSTRUCTION | ℄

EXIST. ESMT. TYP.

PROPOSED W.S. BY OTHERS

EXISTING 12" WATERMAIN

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV-5 PRE-FINAL SUB | 02-20-09 | | |
| REV-4 PLANS STAGED | 08-02-06 | | |
| REV-3 IDOT COMMENTS | 02-03-06 | PS&E SUBMITTAL | 04-10-09 |

**CEMETERY ROAD**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

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GEWALT HAMILTON ASSOCIATES, INC.
CONSULTING ENGINEERS & SURVEYORS
850 Forest Edge Drive Vernon Hills, IL 60061 Tel. 847.478.9700 Fax 847.478.9701

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 144 |
| STA 239+13 TO STA 240+84 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

GRAPHIC SCALE
10 0 5 10
( IN FEET )
H: 1"= 10 ft V: 1"= 5 ft




| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV.-3 IDOT COMMENTS | 11-02-06 | | |
| REV.-2 PLANS STAGD | 06-02-06 | | |
| REV.-1 IDOT COMMENTS | 02-03-06 | PS&E SUBMITTAL | 04-10-09 |

**CEMETERY ROAD**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

GEWALT HAMILTON ASSOCIATES, INC.
CONSULTING ENGINEERS & SURVEYORS
850 Forest Edge Drive Vernon Hills, IL 60061 Tel. 847.478.9700 Fax 847.478.9701

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET. NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 145 |
| STA 241+00 TO STA 243+00 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

N

GRAPHIC SCALE
10 0 5 10
( IN FEET )
H. 1" = 10 Ft. V. 1" = 5 Ft.

243+00 | 242+50 | 242+00 | 241+50 | 241+00

EAST

WEST

CUT: 37.0 FILL: 11.0
CUT: 53.0 FILL: 9.5
CUT: 83.0 FILL: 3.0
CUT: 82.5 FILL: 1.5
CUT: 110.5 FILL: 0.0

20' ROW

14'

2% 2%

4:1 4:1

730.38 729.7
730.78 730.5
731.18 731.4
731.59 732.1
731.99 732.9

728.20 728.50 730.00 730.70 730.00 730.50 731.00 731.40 731.00 731.60 731.65 732.05

EXISTING 12" WATERMAIN

PROPOSED 12" WATERMAIN BY OTHERS

OF CONSTRUCTION

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV-5 PRE-FINAL SUB | 02-20-09 | | |
| REV-4 PLANS STAGED | 06-02-06 | | |
| REV-3 IDOT COMMENTS | 02-03-06 | P.S.&E. SUBMITTAL | 04-10-09 |

**CEMETERY ROAD**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

3001-12-CEM-ASEC.dwg

GEWALT HAMILTON
ASSOCIATES, INC.
CONSULTING ENGINEERS & SURVEYORS
850 Forest Edge Drive Vernon Hills, IL 60061 Ph. 847.478.9700 Fx. 847.478.9701

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 146 |
| STA 243+50 TO STA 245+50 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

N

GRAPHIC SCALE
10 0 5 10
( IN FEET )
H. 1" = 10 ft. V. 1" = 5 ft.

245+50 | 245+00 | 244+50 | 244+00 | 243+50

EAST

WEST

℄ OF CONSTRUCTION

CUT: 52.0 FILL: 26.0 | CUT: 83.0 FILL: 26.5 | CUT: 52.5 FILL: 18.5 | CUT: 55.5 FILL: 16.5 | CUT: 29.0 FILL: 28.0

ROW

PROP. ESMT.

EXIST. ESMT. TYP.

PROPOSED 12" S.S. CASING BY OTHERS

EXISTING 12" WATERMAIN

EX. LIMIT OF WETLAND #2

WETLAND #2 TO BE MITIGATED

22' | 20.42' | 18.8' | 17.2' | 15.6'

26.59'

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV.-5 PRE-FINAL SUB | 02-20-09 | | |
| REV.-4 PLANS STAGED | 06-02-06 | | |
| REV.-3 IDOT COMMENTS | 02-03-06 | PS&E SUBMITTAL | 04-10-09 |

**CEMETERY ROAD**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

SCP-20-CGP-XSEC.dwg

GEWALT HAMILTON
ASSOCIATES, INC.
CONSULTING ENGINEERS & SURVEYORS
1905 Forest Edge Drive Vernon Hills, IL 60061 Tel 847 478 9700 Fax 847 478 9701

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 147 |
| STA 246+00 TO STA 248+00 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

GRAPHIC SCALE
10 0 5 10
( IN FEET )
H. 1" = 10 Ft. V. 1" = 5 Ft.

248+00
247+50
247+00
246+50
246+00

EAST
WEST
℄ OF CONSTRUCTION
ROW
PROP. ESMT.
EXIST. ESMT. TYP.
PROPOSED 24" R.C.S.
CASMAN-BY OTHERS
EXISTING 12" WATERMAIN

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV.-5 PRE-FINAL SUB | 02-20-09 | | |
| REV.-2 PLANS SEALED | 02-02-09 | | |
| REV.-1 IDOT COMMENTS | 02-02-09 | PS&E SUBMITTAL | 04-10-09 |

**CEMETERY ROAD**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

GEWALT HAMILTON
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850 Forest Edge Drive Vernon Hills, IL 60061 Tel 847.478.9700 Fax 847.478.9701

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 148 |
| STA 248+50 TO STA 250+00 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

GRAPHIC SCALE
10 0 5 10
( IN FEET )
H. 1" = 10 ft. V. 1" = 5 ft.

250+00
CUT: 76.0 FILL: 1.5
249+50
CUT: 59.0 FILL: 3.0
249+00
CUT: 49.0 FILL: 5.0
248+74
CUT: 67.5 FILL: 1.0
248+50
CUT: 54.0 FILL: 4.0
EAST
WEST
OF CONSTRUCTION
ROW
C/S LINE
PROPOSED 27" RCP CASMANTEY CULVERT
EXISTING 12" WATERMAIN

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV.-5 PRE-FINAL SUB | 02-22-09 | | |
| REV.-2 PLANS STAGED | 06-02-06 | | |
| REV.-1 IDOT COMMENTS | 02-03-06 | PS&E SUBMITTAL | 04-10-09 |

**CEMETERY ROAD**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

2903-21-CGP-ASSEC.dwg

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 149 |
| STA 250+50 TO STA 251+93.03 | | | | |
| CONTRACT NO. 83845 | | ILLINOIS | | |

GRAPHIC SCALE
(IN FEET)
H. 1"= 10'/L V. 1"= 10'/L

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

**CEMETERY ROAD**

| REVISIONS | DATE |
|---|---|
| REV-1 PRE-FINAL SUB | 02-20-09 |
| REV-2 PRE-FINAL SUB | 03-02-09 |
| REV-3 PS&E SUBMITTAL | 04-10-09 |

PROPOSED 2" ASPH. OVERLAY BY OTHERS

PROPOSED CASTING

EAST — WEST

OF CONSTRUCTION

730.78 — 250+50 O/S LINE — CUT: 55.5 FILL: 1.5

730.64 — 250+67 O/S LINE — CUT: 69.0 FILL: 4.5

730.39 — 251+00 O/S LINE — CUT: 124.5 FILL: 0.0

729.88 — 251+50 O/S LINE — CUT: 0.0 FILL: 0.0

730.0 — 251+93.03 — CUT: 0.0 FILL: 0.0

ROW — PROP. ESMT.


GEWALT HAMILTON
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| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 150 |
| STA 250+50 TO STA 251+93.03 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

GRAPHIC SCALE
10 5 0 5 10
( IN FEET )
H. 1" = 10 ft V. 1" = 5ft

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV.-5 PRE-FINAL SUB | 02-20-09 | | |
| REV.-2 PLANS STAGED | 06-02-06 | | |
| REV.-1 IDOT COMMENTS | 02-03-06 | PS&E SUBMITTAL | 04-10-09 |

**CEMETERY ROAD**

SCALE: H:1"=10' V:1"=5'
DATE: 12-10-04

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

sht-250+00-252+00.dgn

GEWALT HAMILTON ASSOCIATES, INC.
CONSULTING ENGINEERS & SURVEYORS
895 Forest Edge Drive Vernon Hills, IL 60061 TEL 847.478.9700 FAX 847.478.9701

GRAPHIC SCALE
( IN FEET )
H. 1" = 10 ft. V. 1" = 5 ft.

N

| F.A.U. R.T.C. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 151 |
| STA 311+50 TO STA 313+50 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

313+50 — 313+00 — 312+50 — 312+00 — 311+50

ROW — RIGHT — LEFT — ℄ OF CONSTRUCTION

EXISTING 16" WATERMAIN (TYP)
EXISTING GAS (TYP)
EXISTING 12" WATERMAIN
EXISTING 12" SANITARY (TYP)
EXISTING 36" STORM (TYP)
EXISTING 8" WATERMAIN (TYP)

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV.-5 PRE-FINAL SUB | 02-20-09 | | |
| REV.-2 PLANS STAGED | 06-02-06 | | |
| REV.-1 IDOT COMMENTS | 02-03-06 | PS&E SUBMITTAL | 04-10-09 |

**TRI-STATE PARKWAY**

SCALE: H:1"=10' V:1"=5'
DATE: 1-27-05

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

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GEWALT HAMILTON ASSOCIATES, INC.
CONSULTING ENGINEERS & SURVEYORS
850 Forest Edge Drive Vernon Hills, IL 60061 Tel. 847.478.9700 Fax. 847.478.9701

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 152 |
| STA 314+00 TO STA 315+50 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

GRAPHIC SCALE
10 0 5 10
( IN FEET )
H. 1"= 10 ft. V. 1"= 5ft.

315+50 | 315+00 | 314+68 | 314+50 | 314+00

731.6 | 731.6 | 731.6 | 731.4 | 730.7

EXISTING 12" SANITARY (TYP.)
EXISTING GAS (TYP.)
EXISTING 16" WATERMAIN (TYP.)
EXISTING 12" SANITARY (TYP.)
EXISTING 36" STORM (TYP.)
2.0%
2.0%
ROW
RIGHT
LEFT
℄ OF CONSTRUCTION

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV-5 PRE-FINAL SUB | 02-20-09 | | |
| REV-4 PLANS STAGED | 08-02-08 | | |
| REV-3 IDOT COMMENTS | 02-01-08 | PS&E SUBMITTAL | 04-10-09 |

TRI-STATE PARKWAY

SCALE: H:1"=10' V:1"=5'
DATE: 1-27-05

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

2903_152-180-XSEC.dwg

GEWALT HAMILTON
ASSOCIATES, INC.
CONSULTING ENGINEERS & SURVEYORS
800 Forest Edge Drive, Vernon Hills, Illinois 60061 Tel. 847.478.9700 Fax 847.478.9701

GRAPHIC SCALE
( IN FEET )
H. 1" = 10 ft. V. 1" = 5 ft.

N

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 153 |
| STA 316+00 TO STA 318+00 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

318+00 | 317+50 | 317+00 | 316+50 | 316+00

℄ OF CONSTRUCTION

RIGHT

LEFT

ROW

730.0 | 730.2 | 730.5 | 730.8 | 731.1

EXISTING 20' GAS

EXISTING 16" WATERMAIN (TYP)

EXISTING 15" STORM (TYP)

EXISTING 12" SANITARY (TYP)

EXISTING GAS

EXISTING UNDER GROUND ELECTRIC (TYP)

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV-5 PRE-FINAL SUB | 02-20-09 | | |
| REV-2 PLANS STAGED | 02-02-06 | | |
| REV-1 IDOT COMMENTS | 02-03-06 | PS&E SUBMITTAL | 04-10-09 |

TRI-STATE PARKWAY

SCALE: H:1"=10' V:1"=5'
DATE: 1-27-05

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

GEWALT HAMILTON ASSOCIATES, INC.
CONSULTING ENGINEERS & SURVEYORS
860 Forest Edge Drive Vernon Hills, IL 60061 TEL 847.478.9700 FAX 847.478.9701

| F.A.U. R.T.C. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 154 |
| STA 315+50 TO STA 320+50 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

GRAPHIC SCALE
( IN FEET )
H. 1"= 10 FT. V. 1"= 5 FT.

320+50 | 320+00 | 319+50 | 319+00 | 318+50

RIGHT — LEFT — ℄ OF CONSTRUCTION

ROW — 735 — 730 — 725

EXISTING 18" STORM (TYP.)
EXISTING 16" WATERMAIN (TYP.)
EXISTING 8" SANITARY (TYP.)

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV-5 PRE-FINAL SUB | 02-20-09 | | |
| REV-2 PLANS STAGED | 06-02-06 | | |
| REV-1 IDOT COMMENTS | 02-03-06 | PS&E SUBMITTAL | 04-10-09 |

TRI-STATE PARKWAY

SCALE: H:1"=10' V:1"=5'
DATE: 1-27-05

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

300_PLT_ROC.dwg

GEWALT HAMILTON ASSOCIATES, INC.
CONSULTING ENGINEERS & SURVEYORS
850 Forest Edge Drive Vernon Hills, IL 60061 Tel. 847.478.9700 Fax 847.478.9701

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2903 | 00-00047-00-FP | LAKE | 180 | 155 |
| STA 321+00 TO STA 323+00 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

GRAPHIC SCALE
10 0 5 10
( IN FEET )
H 1" = 10 ft. V 1" = 5 ft.

323+00 322+50 322+00 321+50 321+00

RIGHT OF CONSTRUCTION

LEFT OF CONSTRUCTION

ROW

733.0 732.7 732.3 732.0 731.7

EXISTING 5'-5" SIDEWALK (TYP.)

EXISTING 18" STORM (TYP.)

EXISTING 16" WATERMAIN (TYP.)

EXISTING 8" SANITARY (TYP.)

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV.-5 PRE-FINAL SUB | 02-20-09 | | |
| REV.-2 PLANS STAGED | 06-02-06 | | |
| REV.-1 IDOT COMMENTS | 02-03-06 | PS&E SUBMITTAL | 04-10-09 |

**TRI-STATE PARKWAY**

SCALE: H:1"=10' V:1"=5'
DATE: 1-27-05

DRAWN BY: CGP
DESIGNED BY: TPG
CHECKED BY: BLS

S001-PH-Plan-SHEET.dwg

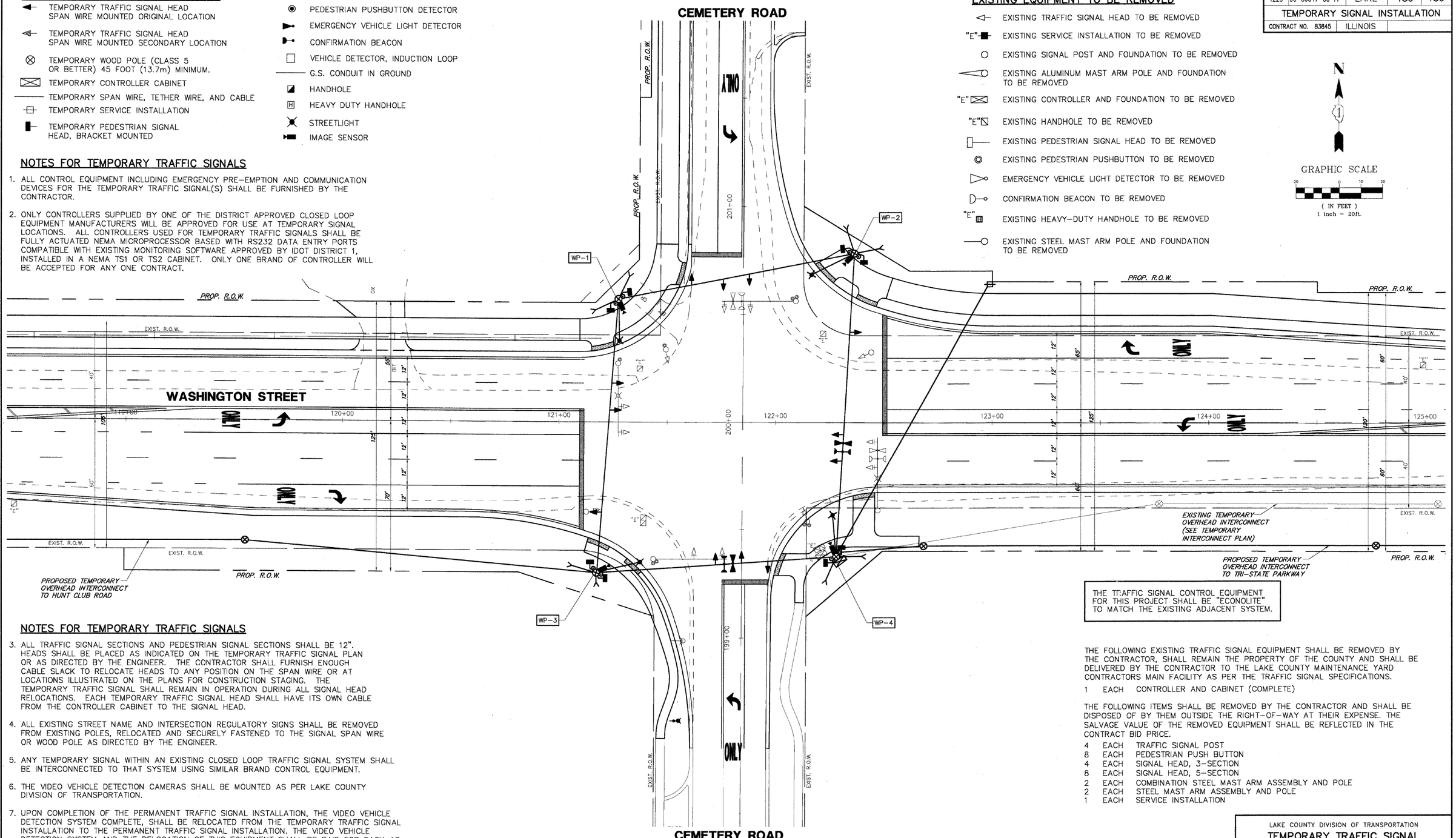
| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET. NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 156 |
| TEMPORARY SIGNAL INSTALLATION | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

## TEMPORARY TRAFFIC SIGNAL LEGEND

- TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION
- TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED SECONDARY LOCATION
- TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM.
- TEMPORARY CONTROLLER CABINET
- TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
- TEMPORARY SERVICE INSTALLATION
- TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
- PEDESTRIAN PUSHBUTTON DETECTOR
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- VEHICLE DETECTOR, INDUCTION LOOP
- G.S. CONDUIT IN GROUND
- HANDHOLE
- HEAVY DUTY HANDHOLE
- STREETLIGHT
- IMAGE SENSOR

## NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.




## EXISTING EQUIPMENT TO BE REMOVED

- EXISTING TRAFFIC SIGNAL HEAD TO BE REMOVED
- "E" EXISTING SERVICE INSTALLATION TO BE REMOVED
- EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- "E" EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
- "E" EXISTING HANDHOLE TO BE REMOVED
- EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- EXISTING PEDESTRIAN PUSHBUTTON TO BE REMOVED
- EXISTING EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED
- CONFIRMATION BEACON TO BE REMOVED
- "E" EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
- EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED

N

GRAPHIC SCALE

20 0 10 20

( IN FEET )
1 inch = 20ft.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE COUNTY AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE LAKE COUNTY MAINTENANCE YARD CONTRACTORS MAIN FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

1 EACH CONTROLLER AND CABINET (COMPLETE)

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

4 EACH TRAFFIC SIGNAL POST
8 EACH PEDESTRIAN PUSH BUTTON
4 EACH SIGNAL HEAD, 3-SECTION
8 EACH SIGNAL HEAD, 5-SECTION
2 EACH COMBINATION STEEL MAST ARM ASSEMBLY AND POLE
2 EACH STEEL MAST ARM ASSEMBLY AND POLE
1 EACH SERVICE INSTALLATION

## NOTES FOR TEMPORARY TRAFFIC SIGNALS

3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12". HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE VIDEO VEHICLE DETECTION CAMERAS SHALL BE MOUNTED AS PER LAKE COUNTY DIVISION OF TRANSPORTATION.
7. UPON COMPLETION OF THE PERMANENT TRAFFIC SIGNAL INSTALLATION, THE VIDEO VEHICLE DETECTION SYSTEM COMPLETE, SHALL BE RELOCATED FROM THE TEMPORARY TRAFFIC SIGNAL INSTALLATION TO THE PERMANENT TRAFFIC SIGNAL INSTALLATION. THE VIDEO VEHICLE DETECTION SYSTEM AND THE RELOCATION OF THIS EQUIPMENT SHALL BE PAID FOR EACH AS "VIDEO VEHICLE DETECTION SYSTEM".
8. THE CONTRACTOR SHALL RELOCATE THE TEMPORARY SIGNAL HEADS THROUGHOUT CONSTRUCTION TO LINE UP APPROXIMATELY WITH THE CORRESPONDING LANES FOR EACH STAGE OF CONSTRUCTION.
9. THE DETECTION ZONES SHALL BE DETERMINED AND LAID OUT BY LAKE COUNTY DIVISION OF TRANSPORTATION PERSONNEL.

| STRUCTURE | STATION | OFFSET | UTILITY CONFLICTS |
|---|---|---|---|
| WP-1 | 121+27 | 57' L | NONE |
| WP-2 | 122+36 | 78' L | NONE |
| WP-3 | 121+17 | 70' R | NONE |
| WP-4 | 122+28 | 62' R | NONE |


PLANS PREPARED BY:
GEWALT HAMILTON ASSOCIATES, INC.
Consulting Engineers & Surveyors
650 Forest Edge Drive
Vernon Hills, IL 60061
(847) 478-9700
(847) 478-9701 Fax


| REVISIONS | |
|---|---|
| NAME | DATE |
| PER IDOT/LCDOT REVIEW | 02-15-05 |
| PER LCDOT REVIEW | 09-01-05 |
| R-2 PLANS STAGED | 06-02-06 |
| REV.-5 PRE-FINAL SUB | 02-20-09 |
| PS&E SUBMITTAL | 04-10-09 |

LAKE COUNTY DIVISION OF TRANSPORTATION

# TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

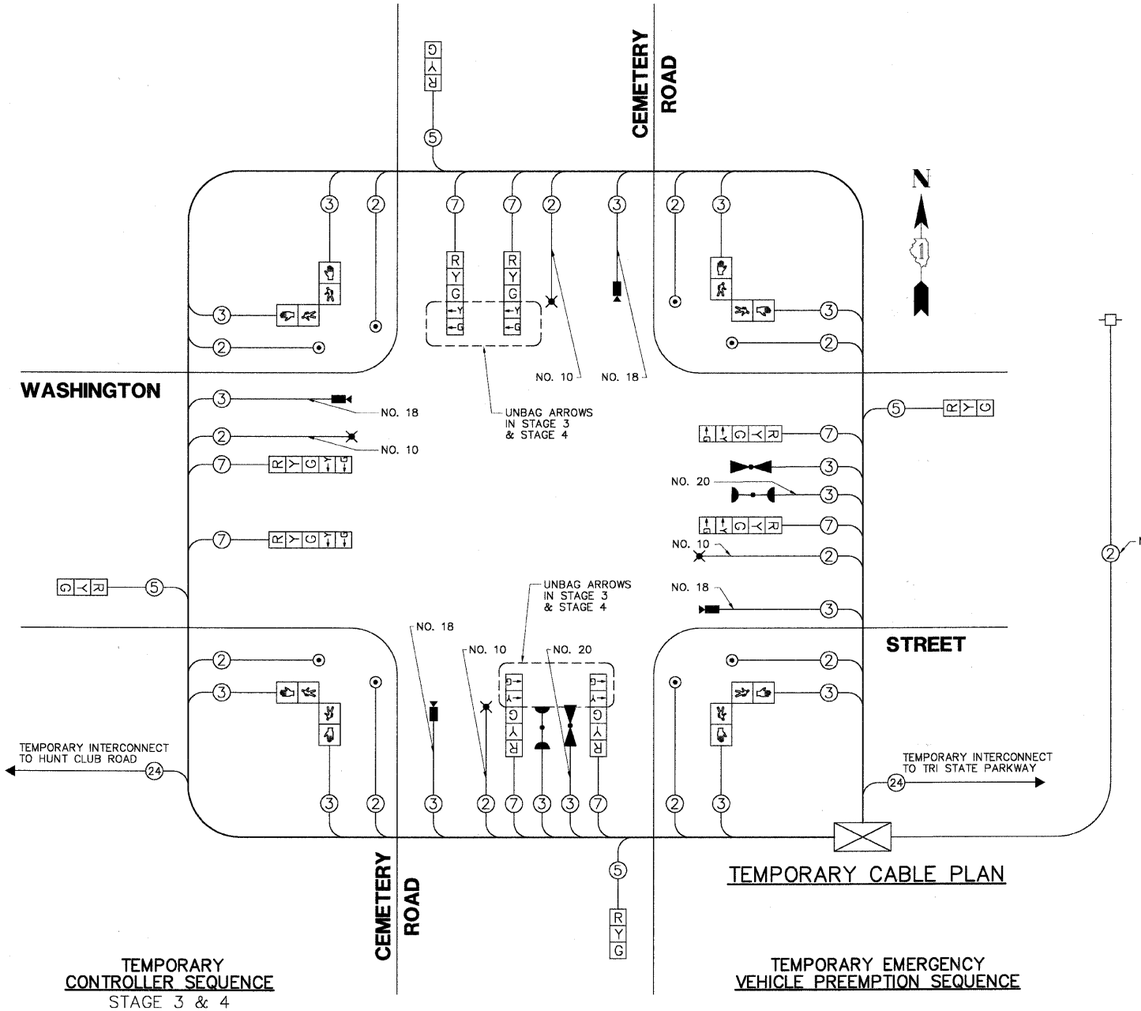
## WASHINGTON STREET AT CEMETERY ROAD

SCALE: 1"=20'
DATE: 11-15-04

DRAWN BY: CGP
DESIGNED BY: JRD
CHECKED BY: BLS

3081-223-TRT.dwg

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 157 |
| TEMPORARY CABLE PLAN | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

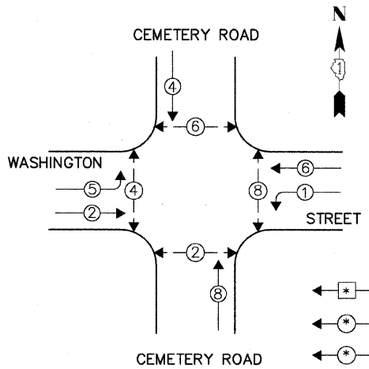



TEMPORARY CABLE PLAN

## TEMPORARY CABLE PLAN LEGEND

- TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300mm)
- TEMPORARY CONTROLLER CABINET
- TEMPORARY SERVICE INSTALLATION
- (5) INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- VEHICLE DETECTOR, INDUCTION LOOP
- PEDESTRIAN PUSHBUTTON
- 12" (300mm) PEDESTRIAN SIGNAL SECTION
- IMAGE SENSOR
- LUMINAIRE
- 12 MM MULTI-MODE
- 12 SM SINGLE MODE

## TEMPORARY CONTROLLER SEQUENCE
STAGE 1 & 2



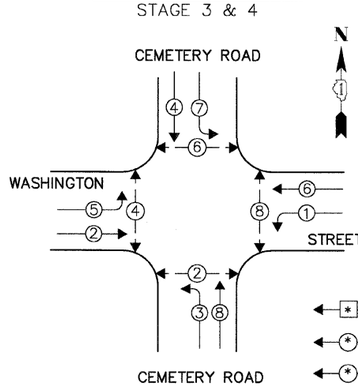

## TEMPORARY PHASE DESIGNATION DIAGRAM

| L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS | | | | | TOTAL WATTAGE |
|---|---|---|---|---|---|
| TYPE | NO LAMPS | WATTAGE INCAND. | WATTAGE L.E.D. | % OPERATION | |
| SIGNAL (RED) | 12 | 135 | | 0.50 | 810.0 |
| SIGNAL (YELLOW) | 12 | 135 | | 0.25 | 405.0 |
| SIGNAL (GREEN) | 12 | 135 | | 0.25 | 405.0 |
| ARROW | 16 | 135 | | 0.10 | 216.0 |
| PED. SIGNAL | 8 | 90 | | 1.00 | 720.0 |
| CONTROLLER | 1 | 100 | | 1.00 | 100.0 |
| | | | | TOTAL = | 2656.0 |

ENERGY COSTS – BILLED TO: VILLAGE OF GURNEE
(ADDRESS) 325 N. O'PLAINE RD

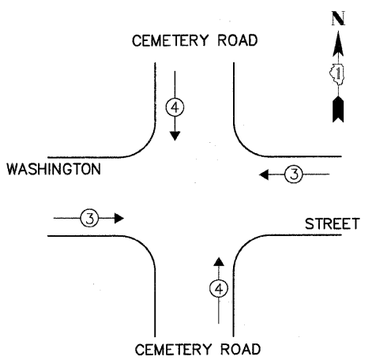
ENERGY SUPPLY – CONTACT: MS. TERRI BLECK
PHONE: 847-816-5234
COMPANY: ComEd

## TEMPORARY CONTROLLER SEQUENCE
STAGE 3 & 4




## TEMPORARY PHASE DESIGNATION DIAGRAM

## TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE




| TEMPORARY EMERGENCY VEHICLE PREEMPTORS | | |
|---|---|---|
| EMERGENCY VEHICLE PREEMPTOR | 3 | 4 |
| MOVEMENT | ⟵ | ⟵ |


PLANS PREPARED BY:
GEWALT HAMILTON ASSOCIATES, INC.
Consulting Engineers & Surveyors
850 Forest Edge Drive
Vernon Hills, IL 60061
(847) 478-9700
(847) 478-9701 Fax


| REVISIONS | |
|---|---|
| NAME | DATE |
| PER IDOT/LCDOT REVIEW | 02-15-05 |
| PER LCDOT REVIEW | 09-01-05 |
| R-2 PLANS STAGED | 06-02-06 |
| REV.-5 PRE-FINAL SUB | 02-20-09 |
| PS&E SUBMITTAL | 04-10-09 |

LAKE COUNTY DIVISION OF TRANSPORTATION

# TEMPORARY CABLE PLAN AND TEMPORARY PHASE DESIGNATION DIAGRAM

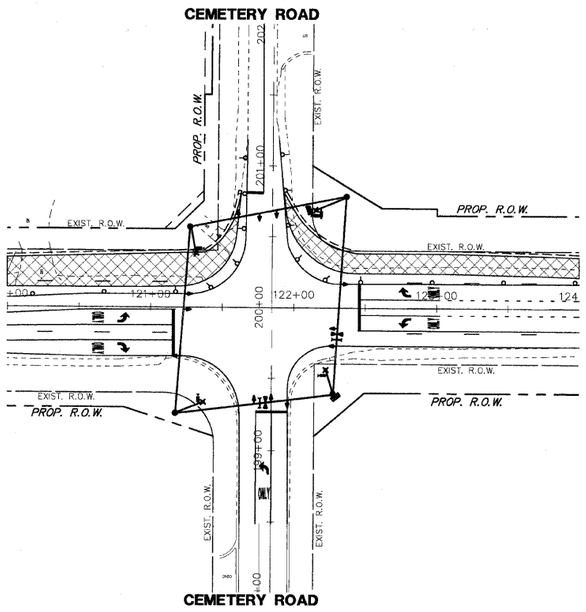
WASHINGTON STREET AT CEMETERY ROAD

SCALE: NONE
DATE: 10-28-04

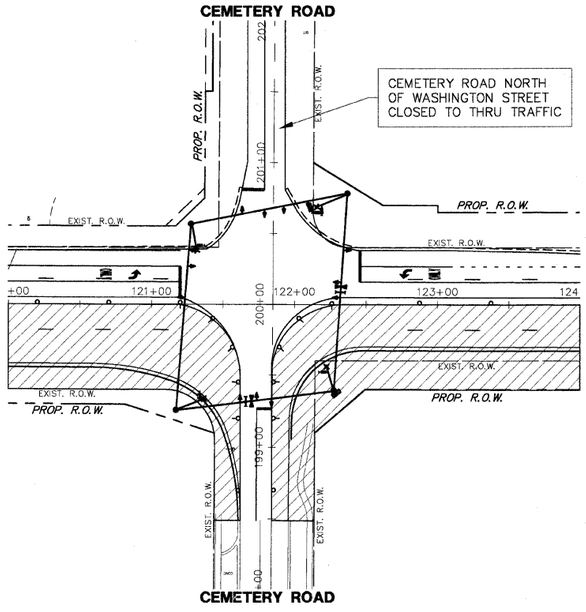
DRAWN BY: CGP
DESIGNED BY: JRD
CHECKED BY: BLS

3001-212-TEMP.dwg

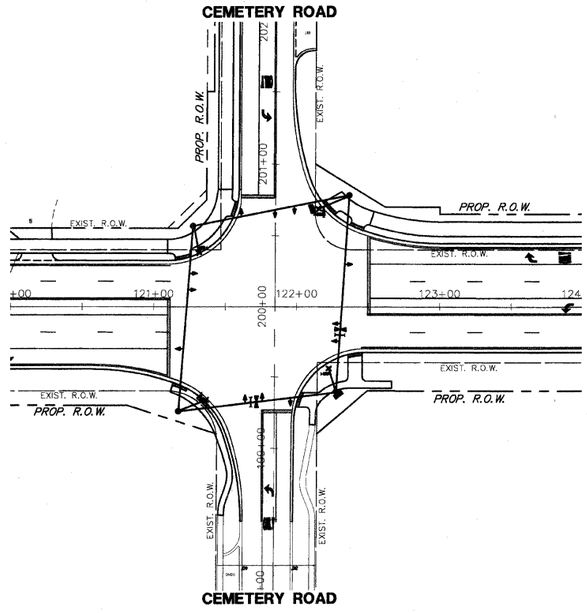
| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 158 |
| TEMPORARY TRAFFIC SIGNAL STAGING | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |



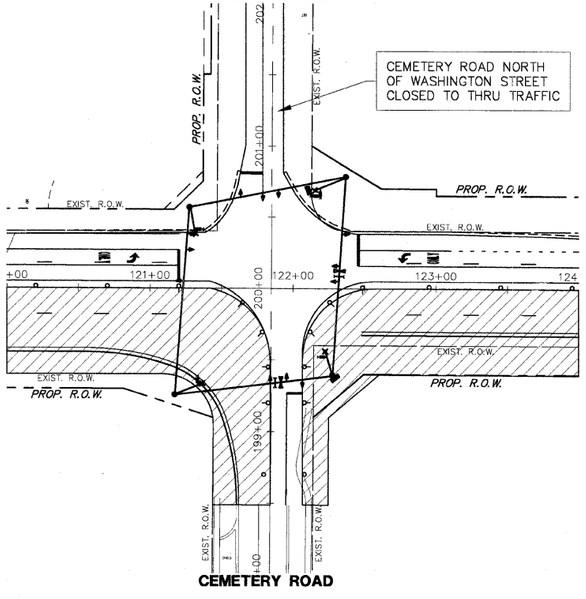

STAGE 1



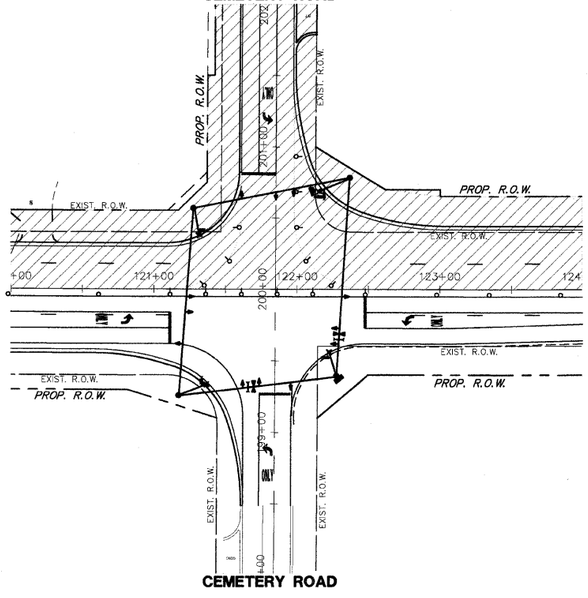

STAGE 2B




STAGE 4




STAGE 2A




STAGE 3

N

GRAPHIC SCALE

50 0 25 50

( IN FEET )
1 inch = 50ft.

LEGEND

| | | | |
|---|---|---|---|
| | TEMPORARY PAVEMENT | ○ | TYPE II BARRICADES WITH STEADY BURN LIGHT (SHRP BARRICADES USED FOR LANE TAPERS) |
| | WORK AREA | | |
| | SIGN | ○ | TYPE II BARRICADES WITH FLASHING LIGHTS |
| | ARROW BOARD | | |
| | VERTICAL BOARD | | TYPE III BARRICADE |

NOTE:

TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE DETAILS SHOWN IN THE PLANS AND THE APPLICABLE PORTIONS OF LAKE COUNTY STANDARDS LC7003 AND LC7004.


PLANS PREPARED BY:

GEWALT HAMILTON ASSOCIATES, INC.

Consulting Engineers & Surveyors
850 Forest Edge Drive
Vernon Hills, IL 60061
(847) 478-9700
(847) 478-9701 Fax


| REVISIONS | |
|---|---|
| NAME | DATE |
| PER IDOT/LCDOT REVIEW | 02-15-05 |
| PER LCDOT REVIEW | 09-01-05 |
| R-2 PLANS STAGED | 06-02-06 |
| R-3 PER LCDOT REVIEW | 11-20-06 |
| REV.-5 PRE-FINAL SUB | 02-20-09 |

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| | | PS&E SUBMITTAL | 4-10-09 |

LAKE COUNTY DIVISION OF TRANSPORTATION

# TEMPORARY TRAFFIC SIGNAL STAGING

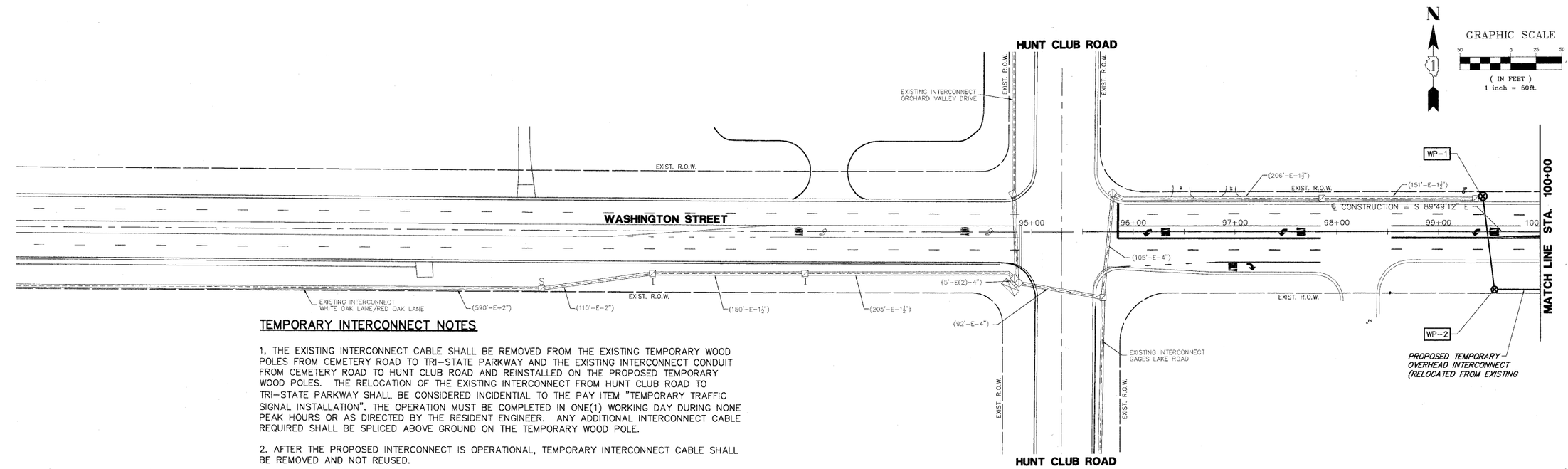
## WASHINGTON STREET AT CEMETERY ROAD

SCALE: 1"=50'
DATE: 11-15-04

DRAWN BY: CGP
DESIGNED BY: JRD
CHECKED BY: BLS

3681-212-TM1.dwg

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET. NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 159 |
| TEMPORARY INTERCONNECT PLAN | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |



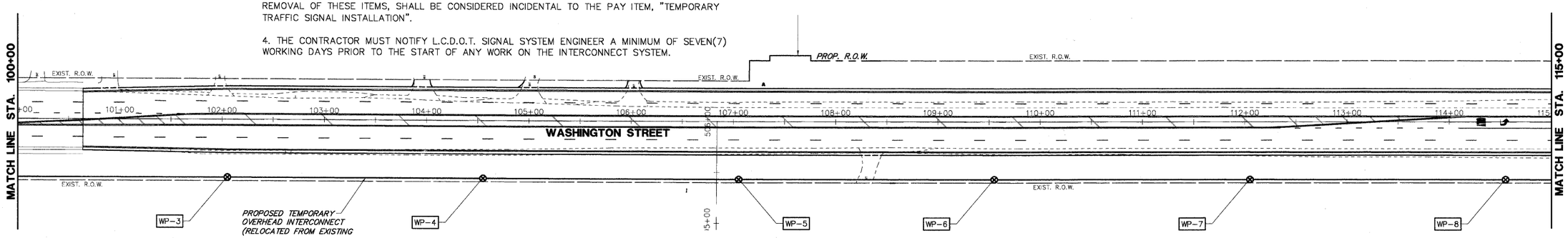

## TEMPORARY INTERCONNECT NOTES

1, THE EXISTING INTERCONNECT CABLE SHALL BE REMOVED FROM THE EXISTING TEMPORARY WOOD POLES FROM CEMETERY ROAD TO TRI-STATE PARKWAY AND THE EXISTING INTERCONNECT CONDUIT FROM CEMETERY ROAD TO HUNT CLUB ROAD AND REINSTALLED ON THE PROPOSED TEMPORARY WOOD POLES. THE RELOCATION OF THE EXISTING INTERCONNECT FROM HUNT CLUB ROAD TO TRI-STATE PARKWAY SHALL BE CONSIDERED INCIDENTIAL TO THE PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION". THE OPERATION MUST BE COMPLETED IN ONE(1) WORKING DAY DURING NONE PEAK HOURS OR AS DIRECTED BY THE RESIDENT ENGINEER. ANY ADDITIONAL INTERCONNECT CABLE REQUIRED SHALL BE SPLICED ABOVE GROUND ON THE TEMPORARY WOOD POLE.

2. AFTER THE PROPOSED INTERCONNECT IS OPERATIONAL, TEMPORARY INTERCONNECT CABLE SHALL BE REMOVED AND NOT REUSED.

3. THE 2" G.S. CONDUIT USED FOR THE TEMPORARY INTERCONNECT SHALL BE REMOVED TO BELOW GROUND LEVEL AND CAPPED AT THE TIME THE TEMPORARY TRAFFIC SIGNAL IS REMOVED. ALL CONDUIT, ADDITIONAL CABLE, AS WELL AS ALL WORK ASSOCIATED WITH THE INSTALLATION AND REMOVAL OF THESE ITEMS, SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM, "TEMPORARY TRAFFIC SIGNAL INSTALLATION".

4. THE CONTRACTOR MUST NOTIFY L.C.D.O.T. SIGNAL SYSTEM ENGINEER A MINIMUM OF SEVEN(7) WORKING DAYS PRIOR TO THE START OF ANY WORK ON THE INTERCONNECT SYSTEM.




## INTERCONNECT PLAN LEGEND

| | PROPOSED | EXISTING |
|---|---|---|
| CONTROLLER | ■ | ⊠ |
| HANDHOLE | ◪ | ◪ |
| DOUBLE HANDHOLE | ◪◪ | ◪◪ |
| HEAVY-DUTY HANDHOLE | H | H |
| G.S. CONDUIT IN TRENCH (T) OR PUSHED (P) | ------- | ======= |
| DETECTOR LOOP | □ | ⬚ |
| UNIT DUCT | U.D. | |
| SYSTEM | S | |
| INTERSECTION | IP | I |
| TEMPORARY WOOD POLE | ⊗ | |

| STRUCTURE | STATION | OFFSET | UTILITY CONFLICTS |
|---|---|---|---|
| WP-1 | 99+94 | 35' L | 24" WATERMAIN-CLC J.A.W.A. |
| WP-2 | 99+55 | 57' R | 12" WATERMAIN-VILLAGE OF GURNEE |
| WP-3 | 102+05 | 57' R | 16" WATERMAIN-VILLAGE OF GURNEE & UNDERGROUND COM ED LINE |
| WP-4 | 104+55 | 57' R | 16" WATERMAIN-VILLAGE OF GURNEE & AERIAL COM ED LINE |
| WP-5 | 107+05 | 57' R | 16" WATERMAIN-VILLAGE OF GURNEE & AERIAL COM ED LINE |
| WP-6 | 109+55 | 57' R | 16" WATERMAIN-VILLAGE OF GURNEE, AERIAL & UNDERGROUND COM ED LINE, SBC, COMCAST |
| WP-7 | 112+05 | 57' R | 16" WATERMAIN-VILLAGE OF GURNEE, AERIAL & UNDERGROUND COM ED LINE, SBC, COMCAST |
| WP-8 | 114+55 | 57' R | 16" WATERMAIN VILLAGE OF GURNEE, AERIAL & UNDERGROUND COM ED LINE, SBC, COMCAST |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| REVISIONS | |
|---|---|
| NAME | DATE |
| PER IDOT/LCDOT REVIEW | 02-15-05 |
| PER LCDOT REVIEW | 09-01-05 |
| R-2 PLANS STAGED | 06-02-06 |
| REV.-5 PRE-FINAL SUB | 02-20-09 |
| PS&E SUBMITTAL | 04-10-09 |

LAKE COUNTY DIVISION OF TRANSPORTATION

# TEMPORARY INTERCONNECT PLAN SHEET 1 OF 2

WASHINGTON STREET
STA 85+00 TO 115+00

SCALE: 1"=50'
DATE: 11-02-04

DRAWN BY: CGP
DESIGNED BY: JRD
CHECKED BY: BLS

S:\01-Projects\83845.dwg

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET. NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 160 |
| TEMPORARY INTERCONNECT PLAN | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

## TEMPORARY INTERCONNECT NOTES

1, THE EXISTING INTERCONNECT CABLE SHALL BE REMOVED FROM THE EXISTING TEMPORARY WOOD POLES FROM CEMETERY ROAD TO TRI-STATE PARKWAY AND THE EXISTING INTERCONNECT CONDUIT FROM CEMETERY ROAD TO HUNT CLUB ROAD AND REINSTALLED ON THE PROPOSED TEMPORARY WOOD POLES. THE RELOCATION OF THE EXISTING INTERCONNECT FROM HUNT CLUB ROAD TO TRI-STATE PARKWAY SHALL BE CONSIDERED INCIDENTIAL TO THE PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION". THE OPERATION MUST BE COMPLETED IN ONE(1) WORKING DAY DURING NONE PEAK HOURS OR AS DIRECTED BY THE RESIDENT ENGINEER. ANY ADDITIONAL INTERCONNECT CABLE REQUIRED SHALL BE SPLICED ABOVE GROUND ON THE TEMPORARY WOOD POLE.

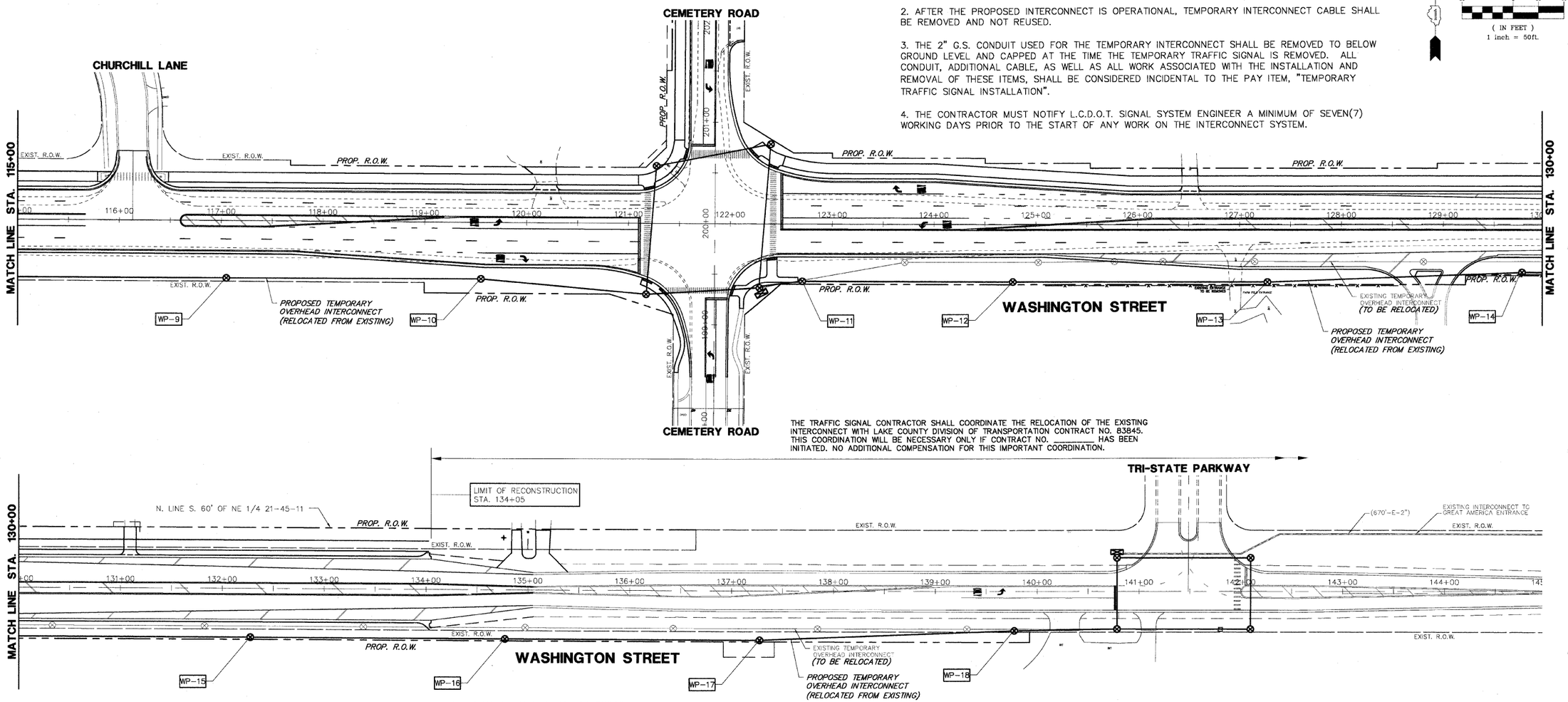
2. AFTER THE PROPOSED INTERCONNECT IS OPERATIONAL, TEMPORARY INTERCONNECT CABLE SHALL BE REMOVED AND NOT REUSED.

3. THE 2" G.S. CONDUIT USED FOR THE TEMPORARY INTERCONNECT SHALL BE REMOVED TO BELOW GROUND LEVEL AND CAPPED AT THE TIME THE TEMPORARY TRAFFIC SIGNAL IS REMOVED. ALL CONDUIT, ADDITIONAL CABLE, AS WELL AS ALL WORK ASSOCIATED WITH THE INSTALLATION AND REMOVAL OF THESE ITEMS, SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM, "TEMPORARY TRAFFIC SIGNAL INSTALLATION".

4. THE CONTRACTOR MUST NOTIFY L.C.D.O.T. SIGNAL SYSTEM ENGINEER A MINIMUM OF SEVEN(7) WORKING DAYS PRIOR TO THE START OF ANY WORK ON THE INTERCONNECT SYSTEM.

N

GRAPHIC SCALE
50 0 25 50
( IN FEET )
1 inch = 50ft.




THE TRAFFIC SIGNAL CONTRACTOR SHALL COORDINATE THE RELOCATION OF THE EXISTING INTERCONNECT WITH LAKE COUNTY DIVISION OF TRANSPORTATION CONTRACT NO. 83845. THIS COORDINATION WILL BE NECESSARY ONLY IF CONTRACT NO. _____ HAS BEEN INITIATED. NO ADDITIONAL COMPENSATION FOR THIS IMPORTANT COORDINATION.

## INTERCONNECT PLAN LEGEND

| | PROPOSED | EXISTING |
|---|---|---|
| CONTROLLER | ▬ | ⊠ |
| HANDHOLE | ◪ | ◪ |
| DOUBLE HANDHOLE | ◪◪ | ◪◪ |
| HEAVY-DUTY HANDHOLE | H | H |
| G.S. CONDUIT IN TRENCH (T) OR PUSHED (P) | ------- | ======= |
| DETECTOR LOOP | □ | ⬚ |
| UNIT DUCT | U.D. | |
| SYSTEM | S | |
| INTERSECTION | IP | I |
| TEMPORARY WOOD POLE | ⊗ | |

| STRUCTURE | STATION | OFFSET | UTILITY CONFLICTS |
|---|---|---|---|
| WP-9 | 117+05 | 57 R | AERIAL & UNDERGROUND COMED |
| WP-10 | 119+55 | 57' R | 16"-WATERMAIN, VILLAGE OF GURNEE & SBC |
| WP-11 | 122+71 | 57' R | NONE |
| WP-12 | 124+78 | 57' R | NONE |
| WP-13 | 127+28 | 57' R | NONE |
| WP-14 | 129+78 | 47' R | NONE |
| WP-15 | 132+28 | 47' R | NONE |
| WP-16 | 134+78 | 47' R | NONE |
| WP-17 | 137+28 | 47' R | NONE |
| WP-18 | 139+78 | 37' R | 6" GAS MAIN, PEOPLE'S ENERGY |


PLANS PREPARED BY:
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| REVISIONS | |
|---|---|
| NAME | DATE |
| PER IDOT/LCDOT REVIEW | 02-15-05 |
| PER LCDOT REVIEW | 09-01-05 |
| R-2 PLANS STAGED | 06-02-06 |
| REV.-S PRE-FINAL SUB | 02-20-09 |
| PS&E SUBMITTAL | 04-10-09 |

LAKE COUNTY DIVISION OF TRANSPORTATION

# TEMPORARY INTERCONNECT PLAN SHEET 2 OF 2

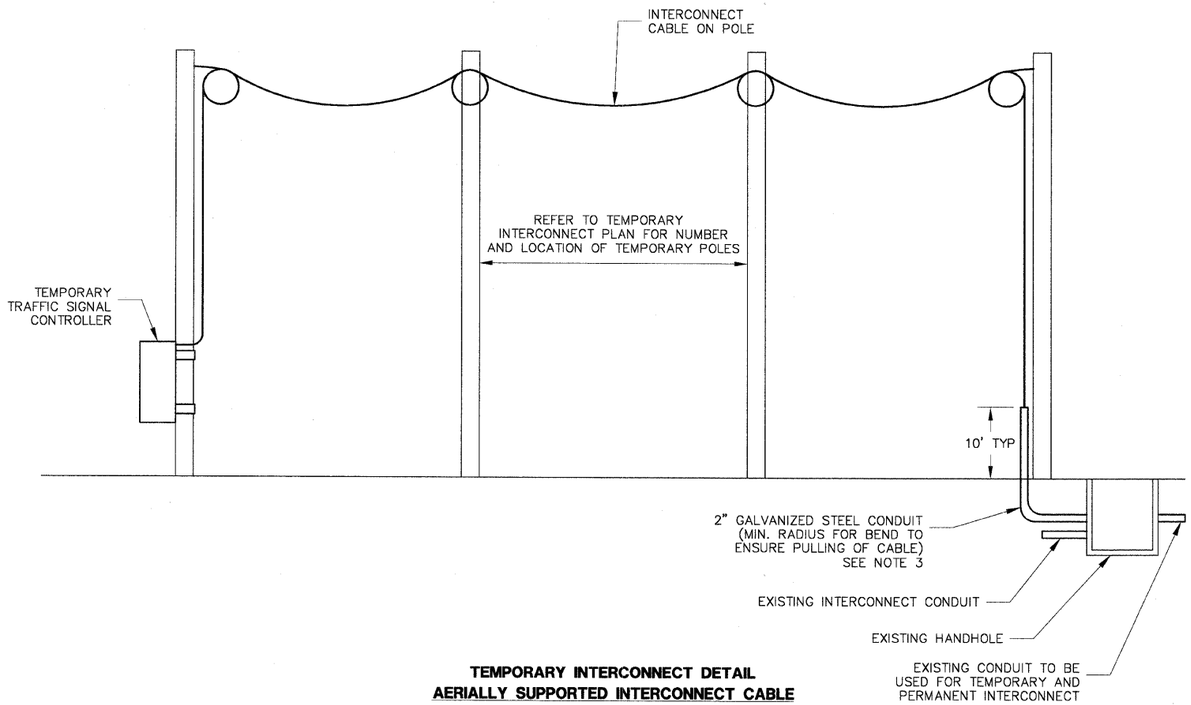
WASHINGTON STREET
STA 115+00 TO 145+00

SCALE: 1"=50'
DATE: 10-25-04

DRAWN BY: CGP
DESIGNED BY: JRD
CHECKED BY: BLS

3001-212-TN1.dwg

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 161 |
| TEMPORARY INTERCONNECT SCHEMATIC | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |




**TEMPORARY INTERCONNECT DETAIL**
**AERIALLY SUPPORTED INTERCONNECT CABLE**

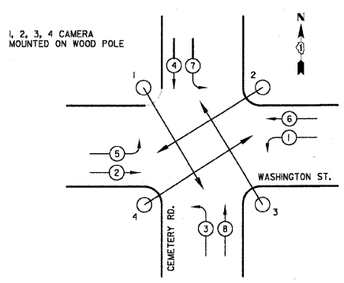
## TEMPORARY INTERCONNECT NOTES

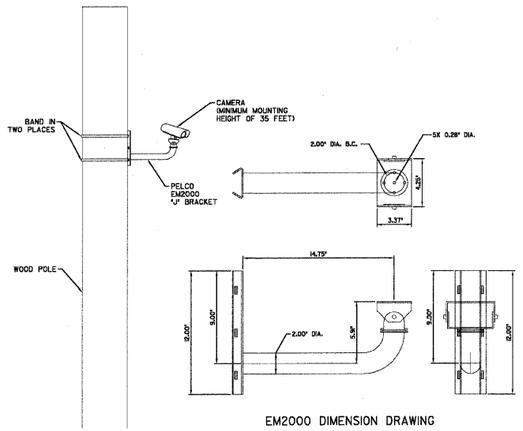
1, THE EXISTING INTERCONNECT CABLE SHALL BE REMOVED FROM THE EXISTING TEMPORARY WOOD POLES FROM CEMETERY ROAD TO TRI-STATE PARKWAY AND THE EXISTING INTERCONNECT CONDUIT FROM CEMETERY ROAD TO HUNT CLUB ROAD AND REINSTALLED ON THE PROPOSED TEMPORARY WOOD POLES. THE RELOCATION OF THE EXISTING INTERCONNECT FROM HUNT CLUB ROAD TO TRI-STATE PARKWAY SHALL BE CONSIDERED INCIDENTIAL TO THE PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION". THE OPERATION MUST BE COMPLETED IN ONE(1) WORKING DAY DURING NONE PEAK HOURS OR AS DIRECTED BY THE RESIDENT ENGINEER. ANY ADDITIONAL INTERCONNECT CABLE REQUIRED SHALL BE SPLICED ABOVE GROUND ON THE TEMPORARY WOOD POLE.

2. AFTER THE PROPOSED INTERCONNECT IS OPERATIONAL, TEMPORARY INTERCONNECT CABLE SHALL BE REMOVED AND NOT REUSED.

3. THE 2" G.S. CONDUIT USED FOR THE TEMPORARY INTERCONNECT SHALL BE REMOVED TO BELOW GROUND LEVEL AND CAPPED AT THE TIME THE TEMPORARY TRAFFIC SIGNAL IS REMOVED. ALL CONDUIT, ADDITIONAL CABLE, AS WELL AS ALL WORK ASSOCIATED WITH THE INSTALLATION AND REMOVAL OF THESE ITEMS, SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM, "TEMPORARY TRAFFIC SIGNAL INSTALLATION".

4. THE CONTRACTOR MUST NOTIFY L.C.D.O.T. SIGNAL SYSTEM ENGINEER A MINIMUM OF SEVEN(7) WORKING DAYS PRIOR TO THE START OF ANY WORK ON THE INTERCONNECT SYSTEM.

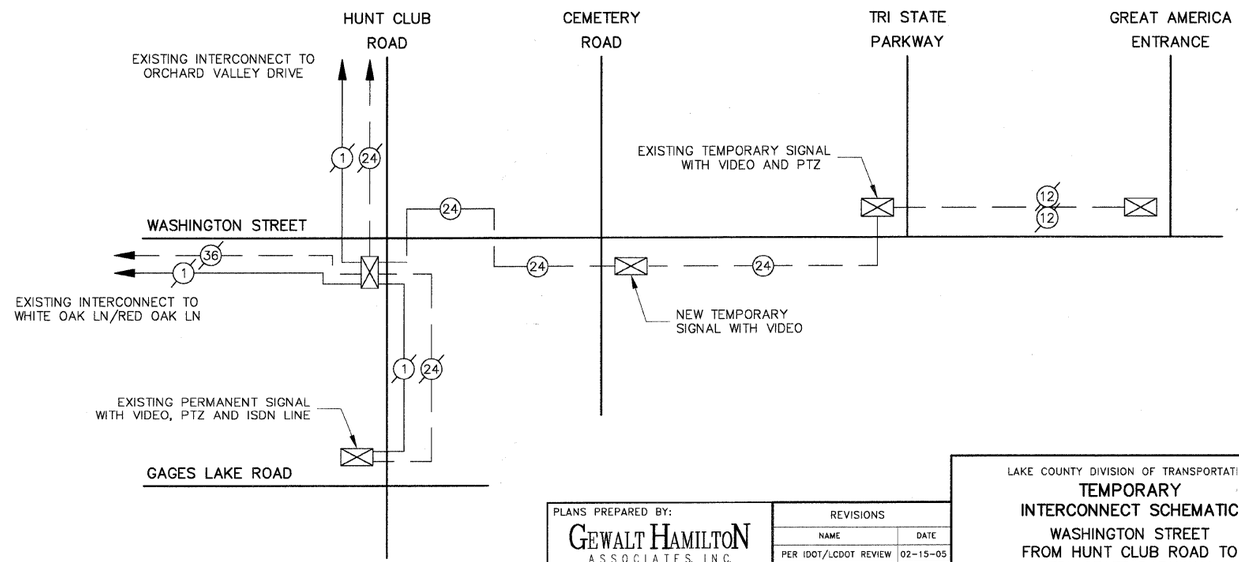



TEMPORARY CAMERA MOUNTING DETAILS
(NOT TO SCALE)

## INTERCONNECT SCHEMATIC LEGEND

| | |
|---|---|
| EXISTING INTERSECTION CONTROLLER | EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F |
| PROPOSED INTERSECTION CONTROLLER | PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F |
| EXISTING MASTER CONTROLLER | EXISTING INTERCONNECT CABLE – NO. 62.5/125 12F FIBER OPTIC CABLE |
| PROPOSED MASTER CONTROLLER | PROPOSED FIBER OPTIC CABLE IN CONDUIT, 62.5/125 12F FIBER OPTIC CABLE |
| MASTER MASTER CONTROLLER | EXISTING INTERCONNECT CABLE – NO. 18 3 PAIR TWISTED, SHIELDED |
| EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS | PROPOSED INTERCONNECT CABLE – NO. 18 3 PAIR TWISTED, SHIELDED |
| PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS | EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED |
| EXISTING INTERSECTION LOOP DETECTORS PROPOSED SAMPLING (SYSTEM) DETECTORS | PROPOSED LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED |
| EXISTING SAMPLING (SYSTEM) DETECTORS | EXISTING ELECTRIC CABLE, 1/C (AS SPECIFIED) |
| PROPOSED SAMPLING (SYSTEM) DETECTORS | PROPOSED ELECTRIC CABLE, 1/C (AS SPECIFIED) |
| EXISTING SAMPLING (SYSTEM) DETECTORS. PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS | EXISTING INTERCONNECT CABLE – NO. 62.5/125, 36F FIBER OPTIC CABLE |
| EXISTING SAMPLING (SYSTEM) DETECTORS PROPOSED SAMPLING (SYSTEM) DETECTORS | PROPOSED FIBER OPTIC CABLE IN CONDUIT – NO. 62.5/125, MM12F SM24F |
| EXISTING PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS | PROPOSED INTERCONNECT CABLE – NO. 62.5/125, MM12F SM12F |
| PROPOSED PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS | EXISTING INTERCONNECT CABLE – NO. 62.5/125, MM12F SM12F |
| EXISTING SAMPLING (SYSTEM) PREFORMED DETECTORS | EXISTING TELEPHONE CONNECTION |
| PROPOSED SAMPLING (SYSTEM) PREFORMED DETECTORS | PROPOSED TELEPHONE CONNECTION |
| | EXISTING ISDN TELEPHONE CONNECTION |
| | PROPOSED ISDN TELEPHONE CONNECTION |





PLANS PREPARED BY:
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| REVISIONS | |
|---|---|
| NAME | DATE |
| PER IDOT/LCDOT REVIEW | 02-15-05 |
| PER LCDOT REVIEW | 09-01-05 |
| R-2 PLANS STAGED | 06-02-06 |
| REV.-5 PRE-FINAL SUB | 02-20-09 |
| PS&E SUBMITTAL | 04-10-09 |

LAKE COUNTY DIVISION OF TRANSPORTATION
**TEMPORARY INTERCONNECT SCHEMATIC**
WASHINGTON STREET
FROM HUNT CLUB ROAD TO
TRI-STATE PARKWAY

SCALE: NONE
DATE: 10-25-04

DRAWN BY: CGP
DESIGNED BY: JRD
CHECKED BY: BLS

5001-212-TS01.dwg

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 162 |
| TRAFFIC SIGNAL INSTALLATION PLAN | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

## TRAFFIC SIGNAL LEGEND

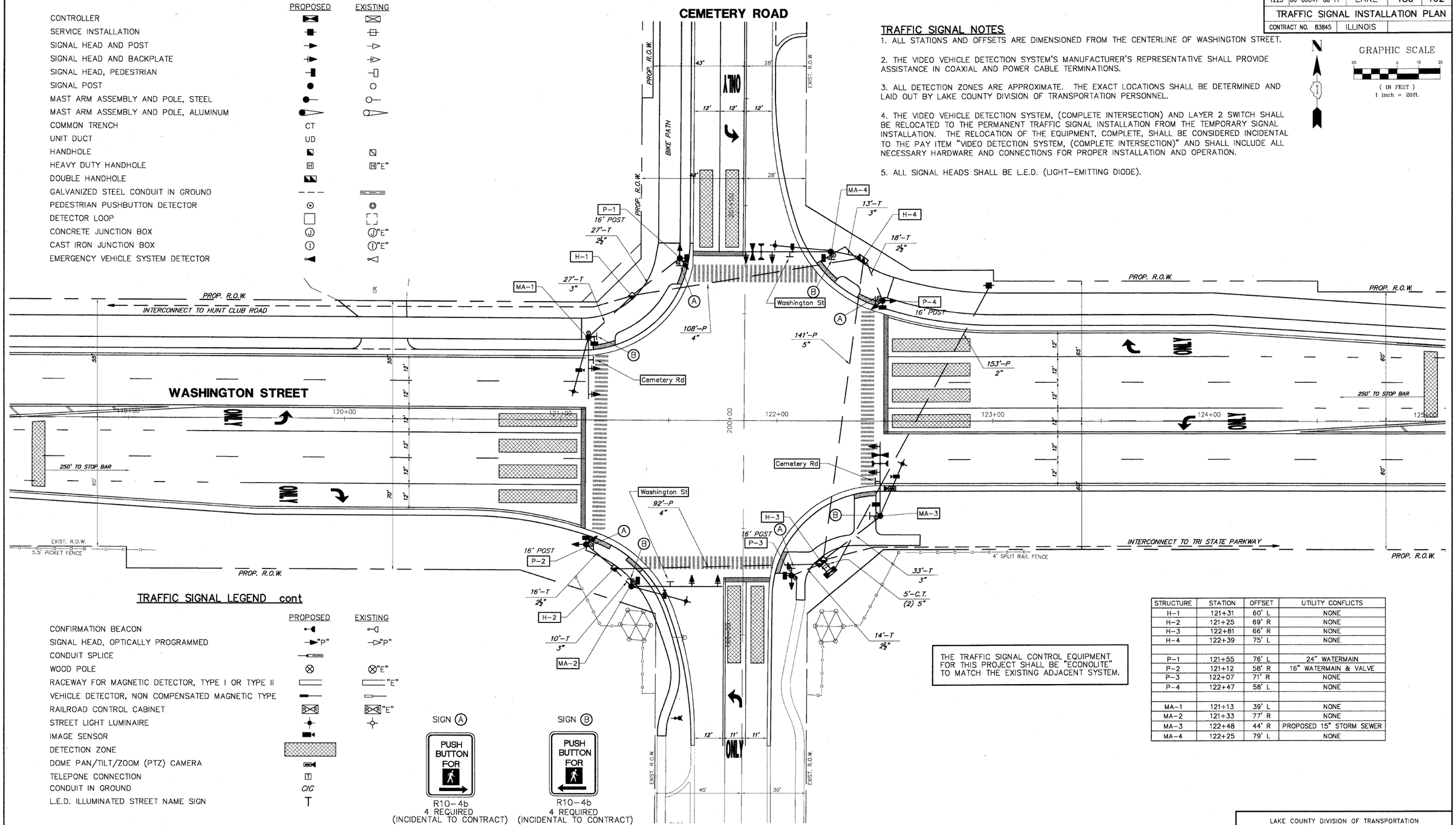
| | PROPOSED | EXISTING |
|---|---|---|
| CONTROLLER | ▬ | ▭ |
| SERVICE INSTALLATION | ■ | ⊟ |
| SIGNAL HEAD AND POST | → | ▷ |
| SIGNAL HEAD AND BACKPLATE | ⇉ | ⇉ |
| SIGNAL HEAD, PEDESTRIAN | ▮→ | ▯→ |
| SIGNAL POST | ● | ○ |
| MAST ARM ASSEMBLY AND POLE, STEEL | ●— | ○— |
| MAST ARM ASSEMBLY AND POLE, ALUMINUM | ●▰ | ○▰ |
| COMMON TRENCH | CT | |
| UNIT DUCT | UD | |
| HANDHOLE | ◥ | ◹ |
| HEAVY DUTY HANDHOLE | H | H"E" |
| DOUBLE HANDHOLE | ◥◤ | |
| GALVANIZED STEEL CONDUIT IN GROUND | — — — | ═══ |
| PEDESTRIAN PUSHBUTTON DETECTOR | ⊙ | ◎ |
| DETECTOR LOOP | □ | ⌈⌉ |
| CONCRETE JUNCTION BOX | J | J"E" |
| CAST IRON JUNCTION BOX | I | I"E" |
| EMERGENCY VEHICLE SYSTEM DETECTOR | ◀ | ◹ |

## TRAFFIC SIGNAL NOTES

1. ALL STATIONS AND OFFSETS ARE DIMENSIONED FROM THE CENTERLINE OF WASHINGTON STREET.
2. THE VIDEO VEHICLE DETECTION SYSTEM'S MANUFACTURER'S REPRESENTATIVE SHALL PROVIDE ASSISTANCE IN COAXIAL AND POWER CABLE TERMINATIONS.
3. ALL DETECTION ZONES ARE APPROXIMATE. THE EXACT LOCATIONS SHALL BE DETERMINED AND LAID OUT BY LAKE COUNTY DIVISION OF TRANSPORTATION PERSONNEL.
4. THE VIDEO VEHICLE DETECTION SYSTEM, (COMPLETE INTERSECTION) AND LAYER 2 SWITCH SHALL BE RELOCATED TO THE PERMANENT TRAFFIC SIGNAL INSTALLATION FROM THE TEMPORARY SIGNAL INSTALLATION. THE RELOCATION OF THE EQUIPMENT, COMPLETE, SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM "VIDEO DETECTION SYSTEM, (COMPLETE INTERSECTION)" AND SHALL INCLUDE ALL NECESSARY HARDWARE AND CONNECTIONS FOR PROPER INSTALLATION AND OPERATION.
5. ALL SIGNAL HEADS SHALL BE L.E.D. (LIGHT-EMITTING DIODE).

N

GRAPHIC SCALE
20 0 10 20
( IN FEET )
1 inch = 20ft.




## TRAFFIC SIGNAL LEGEND cont

| | PROPOSED | EXISTING |
|---|---|---|
| CONFIRMATION BEACON | ●◁ | ●◁ |
| SIGNAL HEAD, OPTICALLY PROGRAMMED | →"P" | →"P" |
| CONDUIT SPLICE | —▸— | |
| WOOD POLE | ⊗ | ⊗"E" |
| RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II | ▭ | ▭ "E" |
| VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE | ▬ | ▭ |
| RAILROAD CONTROL CABINET | ▣ | ▣ "E" |
| STREET LIGHT LUMINAIRE | ✦ | ✧ |
| IMAGE SENSOR | ■ | |
| DETECTION ZONE | ▨ | |
| DOME PAN/TILT/ZOOM (PTZ) CAMERA | ▣ | |
| TELEPONE CONNECTION | T | |
| CONDUIT IN GROUND | *C/G* | |
| L.E.D. ILLUMINATED STREET NAME SIGN | T | |

SIGN (A)




R10-4b
4 REQUIRED
(INCIDENTAL TO CONTRACT)

SIGN (B)




R10-4b
4 REQUIRED
(INCIDENTAL TO CONTRACT)

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

| STRUCTURE | STATION | OFFSET | UTILITY CONFLICTS |
|---|---|---|---|
| H-1 | 121+31 | 60' L | NONE |
| H-2 | 121+25 | 69' R | NONE |
| H-3 | 122+81 | 66' R | NONE |
| H-4 | 122+39 | 75' L | NONE |
| | | | |
| P-1 | 121+55 | 76' L | 24" WATERMAIN |
| P-2 | 121+12 | 58' R | 16" WATERMAIN & VALVE |
| P-3 | 122+07 | 71' R | NONE |
| P-4 | 122+47 | 58' L | NONE |
| | | | |
| MA-1 | 121+13 | 39' L | NONE |
| MA-2 | 121+33 | 77' R | NONE |
| MA-3 | 122+48 | 44' R | PROPOSED 15" STORM SEWER |
| MA-4 | 122+25 | 79' L | NONE |

| SCHEDULE OF COMBINATION MAST ARM ASSEMBLY AND POLES | |
|---|---|
| MA-1 | 30' MAST ARM – 20' LUMINAIRE ARM – 45' AUTOSCOPE MOUNTING HEIGHT |
| MA-2 | 42' MAST ARM – 20' LUMINAIRE ARM – 45' AUTOSCOPE MOUNTING HEIGHT |
| MA-3 | 34' MAST ARM – 20' LUMINAIRE ARM – 45' AUTOSCOPE MOUNTING HEIGHT |
| MA-4 | 40' MAST ARM – 20' LUMINAIRE ARM – 45' AUTOSCOPE MOUNTING HEIGHT |


PLANS PREPARED BY:
GEWALT HAMILTON ASSOCIATES, INC.
Consulting Engineers & Surveyors
850 Forest Edge Drive
Vernon Hills, IL 60061
(847) 478-9700
(847) 478-9701 Fax


| REVISIONS | |
|---|---|
| NAME | DATE |
| PER IDOT/LCDOT REVIEW | 02-15-05 |
| PER LCDOT REVIEW | 09-01-05 |
| R-2 PLANS STAGED | 06-02-06 |
| REV.-5 PRE-FINAL SUB | 02-20-09 |
| PS&E SUBMITTAL | 04-10-09 |

LAKE COUNTY DIVISION OF TRANSPORTATION

**TRAFFIC SIGNAL INSTALLATION PLAN**

WASHINGTON STREET AT CEMETERY ROAD

SCALE: 1"=20'
DATE: 11-15-04

DRAWN BY: CGP
DESIGNED BY: JRD
CHECKED BY: BLS

3001-212-TSI.dwg

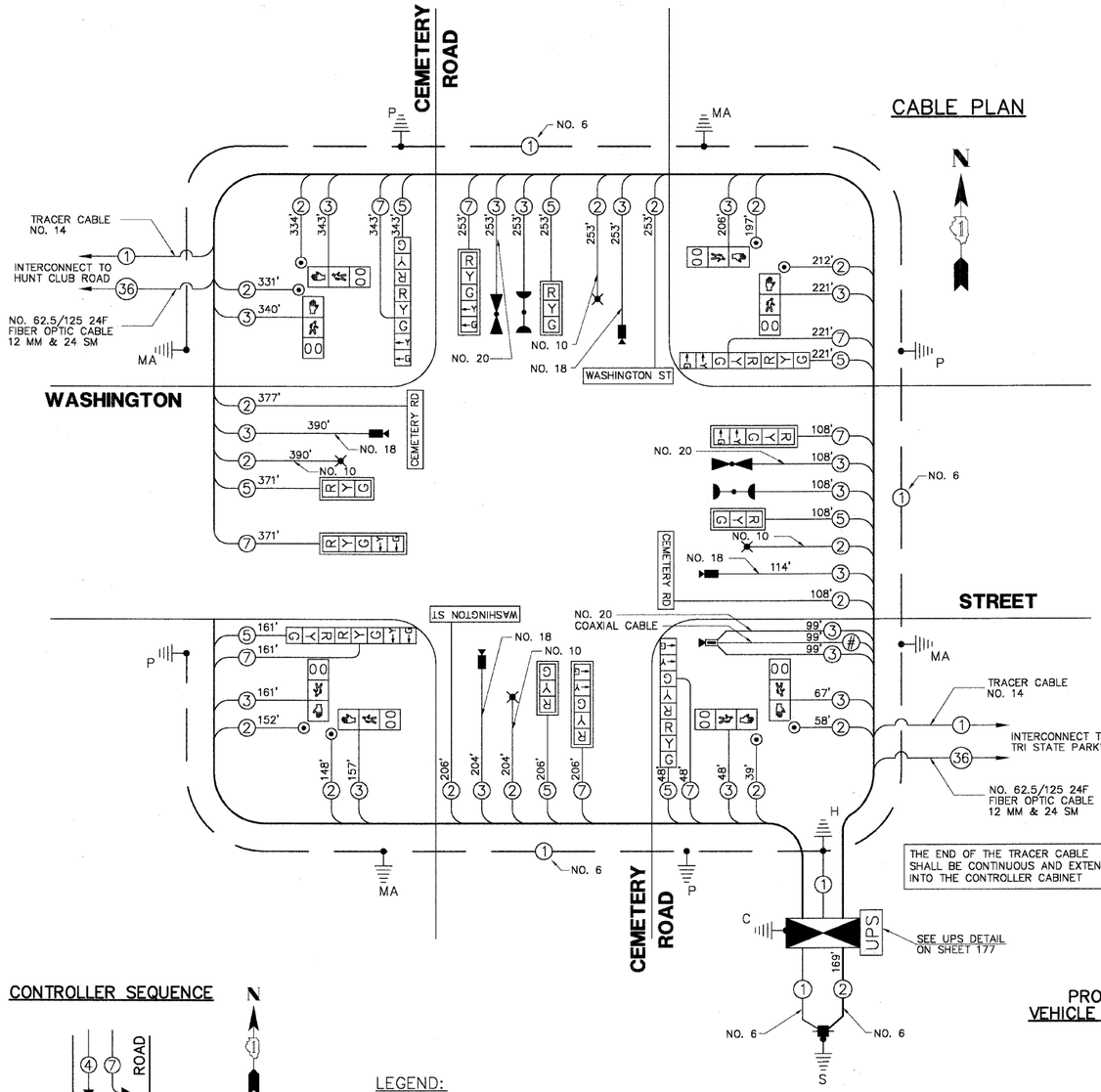
| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET. NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 163 |
| CABLE PLAN, PHASE DESIGNATION DIAGRAM | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

## SCHEDULE OF QUANTITIES

WASHINGTON STREET AT CEMETERY ROAD

| QUANT. | UNIT | ITEM |
|---|---|---|
| 36 | SQ.FT. | L.E.D. INTERNALLY ILLUMINATED STREET NAME SIGN |
| 75 | FOOT | CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL |
| 83 | FOOT | CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL |
| 10 | FOOT | CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL |
| 153 | FOOT | CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL |
| 200 | FOOT | CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL |
| 141 | FOOT | CONDUIT PUSHED, 5" DIA., GALVANIZED STEEL |
| 2 | EACH | HANDHOLE |
| 2 | EACH | DOUBLE HANDHOLE |
| 700 | FOOT | ELECTRIC CABLE IN CONDUIT, GROUNDING, NO.6 1C |
| 2415 | FOOT | ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 2C |
| 1904 | FOOT | ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 3C |
| 1717 | FOOT | ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 5C |
| 1717 | FOOT | ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 7C |
| 169 | FOOT | ELECTRIC CABLE IN CONDUIT, SERVICE NO.6 2C |
| 450 | FOOT | ELECTRIC CABLE IN CONDUIT NO.20 3/C, TWISTED, SHIELDED |
| 961 | FOOT | ELECTRIC CABLE IN CONDUIT, COMMUNICATION, NO. 16 6 PAIR |
| 4 | EACH | TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT. (SPECIAL) |
| 1 | EACH | STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 30 FT. (SPECIAL) |
| 1 | EACH | STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 34 FT. (SPECIAL) |
| 1 | EACH | STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 40 FT. (SPECIAL) |
| 1 | EACH | STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 42 FT. (SPECIAL) |
| 12 | FOOT | CONCRETE FOUNDATION, TYPE A |
| 4 | FOOT | CONCRETE FOUNDATION, TYPE C |
| 27 | FOOT | CONCRETE FOUNDATION, TYPE E, 30-INCH DIAMETER |
| 26 | FOOT | CONCRETE FOUNDATION, TYPE E, 36-INCH DIAMETER |
| 4 | EACH | SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED |
| 4 | EACH | SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED |
| 4 | EACH | SIGNAL HEAD, L.E.D., 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED |
| 8 | EACH | PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER |
| 8 | EACH | TRAFFIC SIGNAL BACKPLATE |
| 2 | EACH | LIGHT DETECTOR |
| 1 | EACH | LIGHT DETECTOR AMPLIFIER |
| 1 | EACH | FULL-ACTIVATED CONTROLLER AND TYPE IV CABINET, SPECIAL |
| 1 | EACH | UNINTERRUPTIBLE POWER SUPPLY (UPS) |
| 8 | EACH | PEDESTRIAN PUSH-BUTTON |
| 1 | EACH | TRANSCEIVER-FIBER OPTIC |
| 1 | EACH | SERVICE INSTALLATION, POLE MOUNT |
| 173 | FOOT | TRENCH AND BACKFILL FOR ELECTRICAL WORK |
| 1 | EACH | VIDEO DETECTION SYSTEM, (COMPLETE INTERSECTION) |
| 1 | EACH | REMOTE-CONTROLLED VIDEO SYSTEM |
| 1 | EACH | TEMPORARY TRAFFIC SIGNAL INSTALLATION |
| 1 | EACH | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT |
| 6 | EACH | REMOVE EXISTING HANDHOLE |
| 9 | EACH | REMOVE EXISTING CONCRETE FOUNDATION |
| 1 | EACH | LAYER II (DATA LINK) SWITCH |
| 961 | FOOT | ELECTRICAL CABLE IN CONDUIT, 600V (EPR-TYPE RHW) 2-1/C NO. 10 |
| 4 | EACH | LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 250 WATT |
| 1 | EACH | TEMPORARY TRAFFIC SIGNAL TIMINGS |

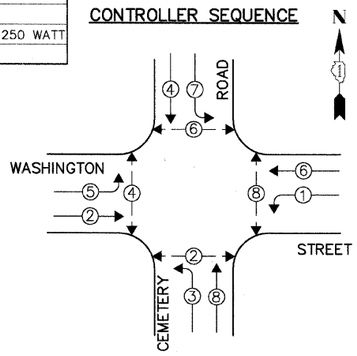
## CABLE PLAN




## CABLE PLAN LEGEND

| EXISTING | PROPOSED | |
|---|---|---|
| G | G | 8" TRAFFIC SIGNAL SECTION |
| R | R | 12" TRAFFIC SIGNAL SECTION |
| W | W | 12" PEDESTRIAN SIGNAL SECTION |
| | | 12" PEDESTRIAN SIGNAL SECTION |
| | | CONTROLLER CABINET |
| | | SERVICE INSTALLATION |
| | | VEHICLE DETECTOR, INDUCTION LOOP |
| | | MAGNETIC DETECTOR |
| | | EMERGENCY VEHICLE LIGHT DETECTOR |
| | | CONFIRMATION BEACON |
| | | PUSH BUTTON DETECTOR |
| ② | ② | DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
| "P" | "P" | SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD |
| H/C | H/C | GROUND ROD AT HANDHOLE, DOUBLE HANDHOLE OR CONTROLER |
| P | P | GROUND ROD AT POST OR MAST ARM POLE |
| S | S | GROUND ROD AT ELECTRIC SERVICE INSTALLATION |
| ① | ① | GROUND CABLE IN CONDUIT, NO.6 SOLID COPPER (GREEN) |
| 36 | 36 | FIBER OPTIC CABLE NO. 62.5/125 MM12F & SM24F |
| "E"(#) | (#) | BELDEN 8281 COAXIAL CABLE |
| T | T | TELEPHONE |
| | | PROPOSED IMAGE SENSOR |
| | | PROPOSED STREET LIGHTING LUMINAIRE |
| | | PROPOSED DOME PAN/TILT/ZOOM (PTZ) CAMERA |
| 1st AV | 1st AV | PROPOSED L.E.D. ILLUMINATED STREET NAME SIGN |

## CONTROLLER SEQUENCE

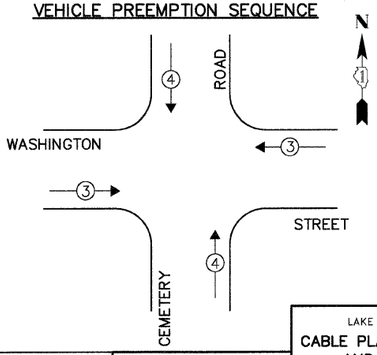



LEGEND:

- SINGLE ENTRY PHASE
- DUAL ENTRY PHASE
- PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE
- OL OVERLAP

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

## PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE




| PROPOSED EMERGENCY VEHICLE PREEMPTORS | | |
|---|---|---|
| EMERGENCY VEHICLE PREEMPTOR | 3 | 4 |
| MOVEMENT | ⇄ | ⇅ |

L.C.D.O.T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

| TYPE | NO LAMPS | WATTAGE INCAND. | WATTAGE L.E.D. | % OPERATION | TOTAL WATTAGE |
|---|---|---|---|---|---|
| SIGNAL (RED) | 16 | | 10 | 0.50 | 80.00 |
| SIGNAL (YELLOW) | 16 | | 19 | 0.25 | 76.00 |
| SIGNAL (GREEN) | 16 | | 11 | 0.25 | 44.00 |
| ARROW | 16 | | 9 | 0.10 | 14.00 |
| PED.SIGNAL | 8 | | 9 | 1.00 | 72.00 |
| CONTROLLER | 1 | | 100 | 1.00 | 100.00 |
| BATTERY BACKUP | 1 | | 25 | 1.00 | 25.00 |
| VIDEO SYSTEMS | 1 | | 150 | 1.00 | 150.00 |
| ILLUM. ST NAME SIGN | 4 | | 64 | 0.50 | 128.00 |
| LUMINAIRE | 4 | 250 | | 0.50 | 500.00 |
| FLASHER | | | | | |
| | | | TOTAL = | | 1189.00 |

ENERGY COSTS - BILLED TO: VILLAGE OF GURNEE
(ADDRESS) 325 N. O'PLAINE RD

ENERGY SUPPLY - CONTACT: MS. TERRI BLECK
PHONE: 847-816-5234
COMPANY: ComEd

| FOUNDATION (DEPTH) | (FT.) | CABLE SLACK | (FT.) | VERTICAL | (FT.) |
|---|---|---|---|---|---|
| TYPE E - M.ARM POLE | | HANDHOLE | 6.5 | ALL FOUNDATIONS | 3.5 |
| 30" (16'-30') | 10' | DOUBLE HANDHOLE | 13 | MAST ARM (L) POLE | 20'+L-2= |
| 30" (30'-40') | 13.5 | SIGNAL POST | 2 | BRACKET MOUNTED | 1.3 |
| 36" (40'-48') | 13 | CONTROLLER CAB. | 1 | PED. PUSHBATTON | 4 |
| 36" (50'-55') | 15 | FIBER OPTIC | 13 | ELECTRIC SERVICE | 13.5 |
| | | ELECTRIC SERVICE | 1 | SERVICE TO GROUND | 13.5 |
| | | GROUND CABLE | 1 | POST MOUNTED | |

## PHASE DESIGNATION DIAGRAM

PLANS PREPARED BY:
GEWALT HAMILTON ASSOCIATES, INC.
Consulting Engineers & Surveyors
850 Forest Edge Drive
Vernon Hills, IL 60061
(847) 478-9700
(847) 478-9701 Fax

| REVISIONS | |
|---|---|
| NAME | DATE |
| PER IDOT/LCDOT REVIEW | 02-15-05 |
| PER LCDOT REVIEW | 09-01-05 |
| R-2 PLANS STAGED | 06-02-06 |
| REV.-S PRE-FINAL SUB | 02-20-09 |
| PS&E SUBMITTAL | 04-10-09 |

LAKE COUNTY DIVISION OF TRANSPORTATION

**CABLE PLAN, PHASE DESIGNATION DIAGRAM AND SCHEDULE OF QUANTITIES**

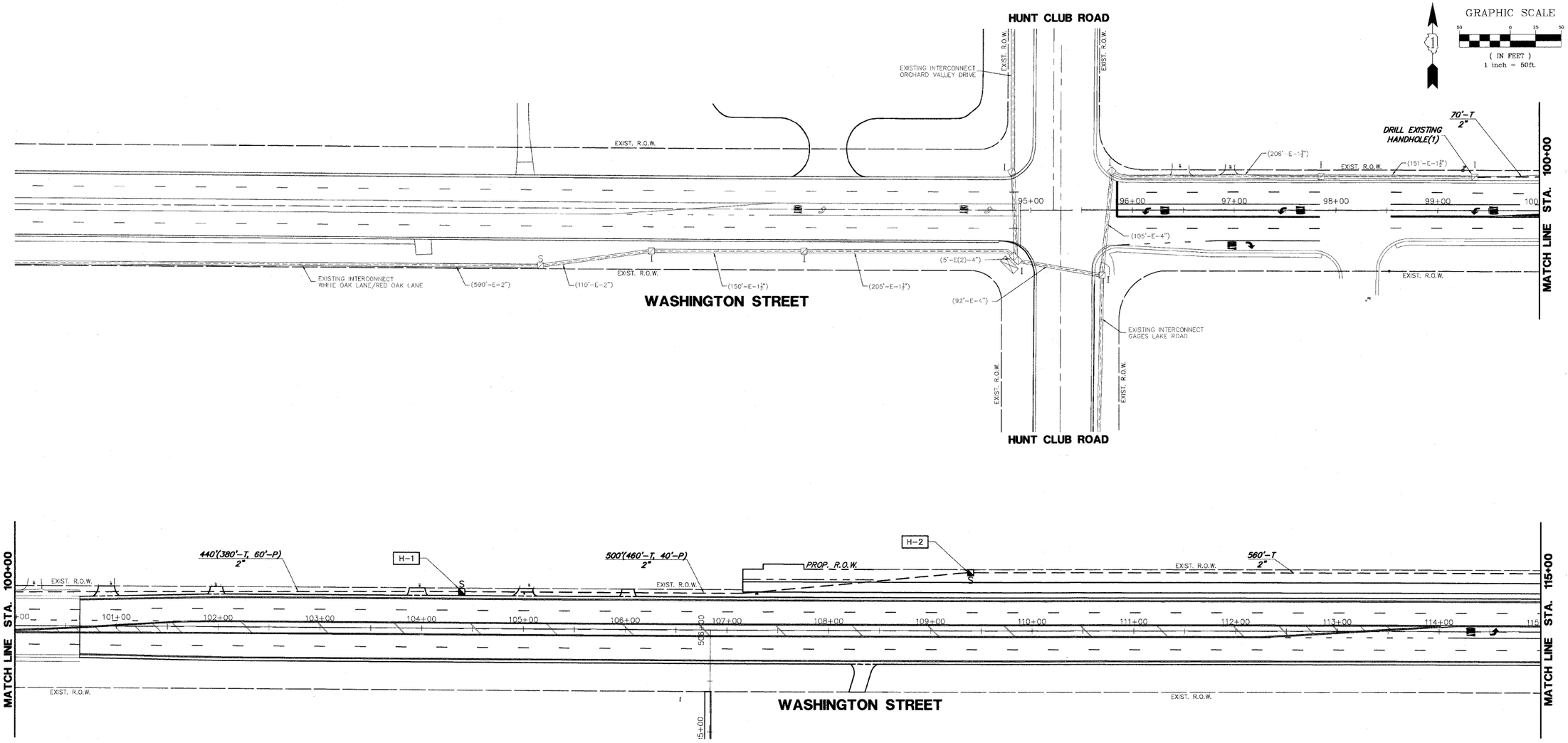
WASHINGTON STREET AT CEMETERY ROAD

SCALE: NONE
DATE: 11-15-04

DRAWN BY: CGP
DESIGNED BY: JRD
CHECKED BY: BLS

3001-212-7701.dwg

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 164 |
| WASHINGTON STREET INTERCONNECT PLAN | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |




## INTERCONNECT PLAN LEGEND

| | PROPOSED | EXISTING |
|---|---|---|
| CONTROLLER | ■ | ⊠ |
| HANDHOLE | ◪ | ◪ |
| DOUBLE HANDHOLE | ◪ | ◪ |
| HEAVY-DUTY HANDHOLE | H | H |
| G.S. CONDUIT IN TRENCH (T) OR PUSHED (P) | ------- | ═══ |
| DETECTOR LOOP | □ | ⬚ |
| UNIT DUCT | U.D. | |
| SYSTEM | S | |
| INTERSECTION | IP | I |

| STRUCTURE | STATION | OFFSET | UTILITY CONFLICTS |
|---|---|---|---|
| H-1 | 104+39 | 37' L | PROPOSED STORM SEWER, PIPE #31C |
| H-2 | 109+39 | 57' L | EXISTING COMED, SBC & COMCAST, NORTH OF R.O.W. |


PLANS PREPARED BY:
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Consulting Engineers & Surveyors
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(847) 478-9700
(847) 478-9701 Fax


| REVISIONS | |
|---|---|
| NAME | DATE |
| PER IDOT/LCDOT REVIEW | 02-15-05 |
| PER LCDOT REVIEW | 09-01-05 |
| R-2 PLANS STAGED | 06-02-06 |
| REV.-5 PRE-FINAL SUB | 02-20-09 |
| PS&E SUBMITTAL | 04-10-09 |

LAKE COUNTY DIVISION OF TRANSPORTATION

# INTERCONNECT PLAN SHEET 1 OF 2

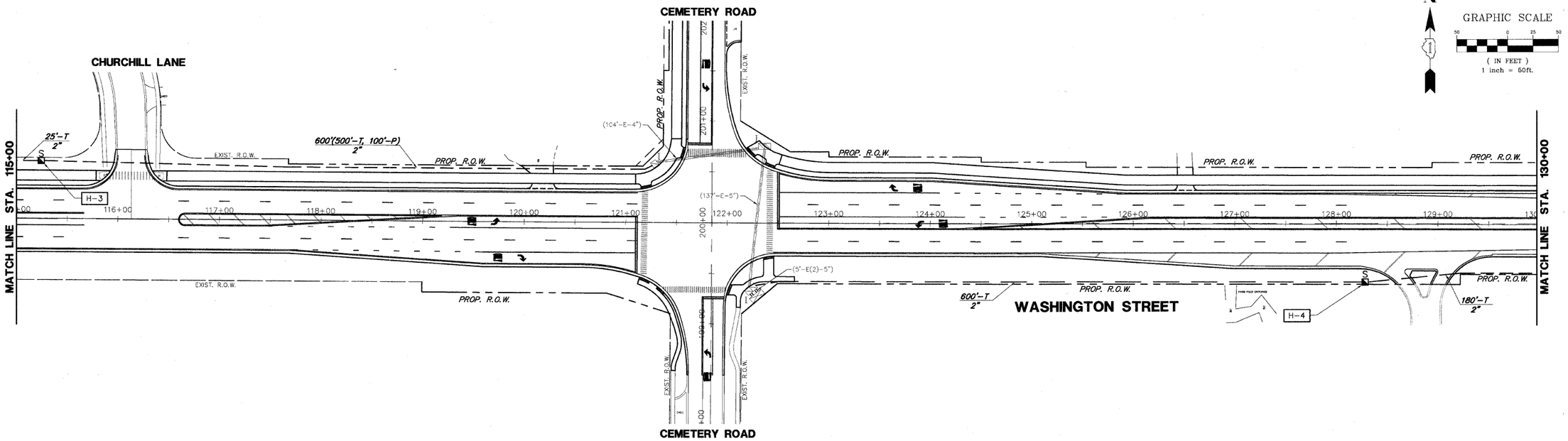
WASHINGTON STREET
STA 85+00 TO 115+00

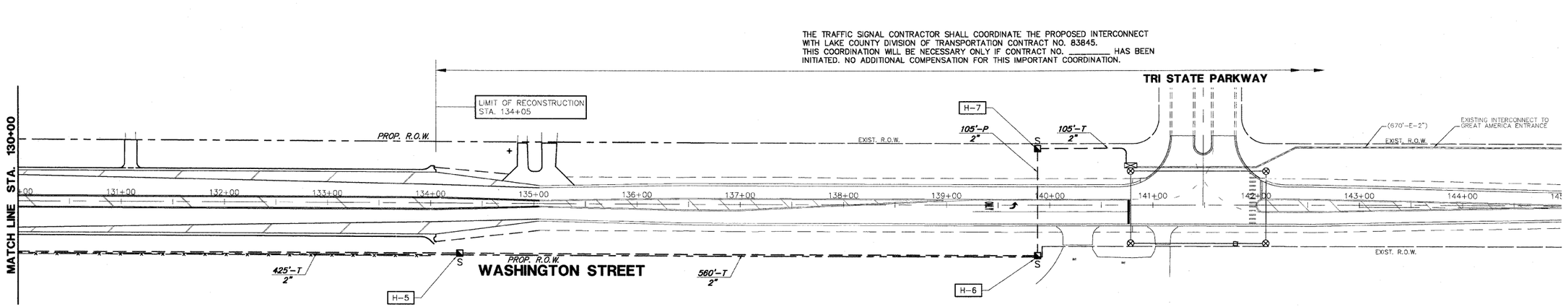
SCALE: 1"=50'
DATE: 11-02-04

DRAWN BY: CGP
DESIGNED BY: JRD
CHECKED BY: BLS

3001-212-1001.dwg

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 165 |
| WASHINGTON STREET INTERCONNECT PLAN | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |




N

GRAPHIC SCALE

50 0 25 50

( IN FEET )
1 inch = 50ft.

## INTERCONNECT PLAN LEGEND

| | PROPOSED | EXISTING |
|---|---|---|
| CONTROLLER | ▬ | ▭ |
| HANDHOLE | ◪ | ◪ |
| DOUBLE HANDHOLE | ◪◪ | ◪◪ |
| HEAVY-DUTY HANDHOLE | H | H |
| G.S. CONDUIT IN TRENCH (T) OR PUSHED (P) | ------- | ═══ |
| DETECTOR LOOP | □ | □ |
| UNIT DUCT | U.D. | |
| SYSTEM | S | |
| INTERSECTION | IP | I |

| STRUCTURE | STATION | OFFSET | UTILITY CONFLICTS |
|---|---|---|---|
| H-3 | 115+24 | 57' L | NONE |
| H-4 | 128+28 | 57' R | NONE |
| H-5 | 134+28 | 47' R | NONE |
| H-6 | 139+88 | 47' R | NONE |
| H-7 | 139+88 | 47' L | 24" WATERMAIN, VILLAGE OF GURNEE |


PLANS PREPARED BY:
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| REVISIONS | |
|---|---|
| NAME | DATE |
| PER IDOT/LCDOT REVIEW | 02-15-05 |
| PER LCDOT REVIEW | 09-01-05 |
| R-2 PLANS STAGED | 06-02-06 |
| REV.-5 PRE-FINAL SUB | 02-20-09 |
| PS&E SUBMITTAL | 04-10-09 |

LAKE COUNTY DIVISION OF TRANSPORTATION

# INTERCONNECT PLAN SHEET 2 OF 2

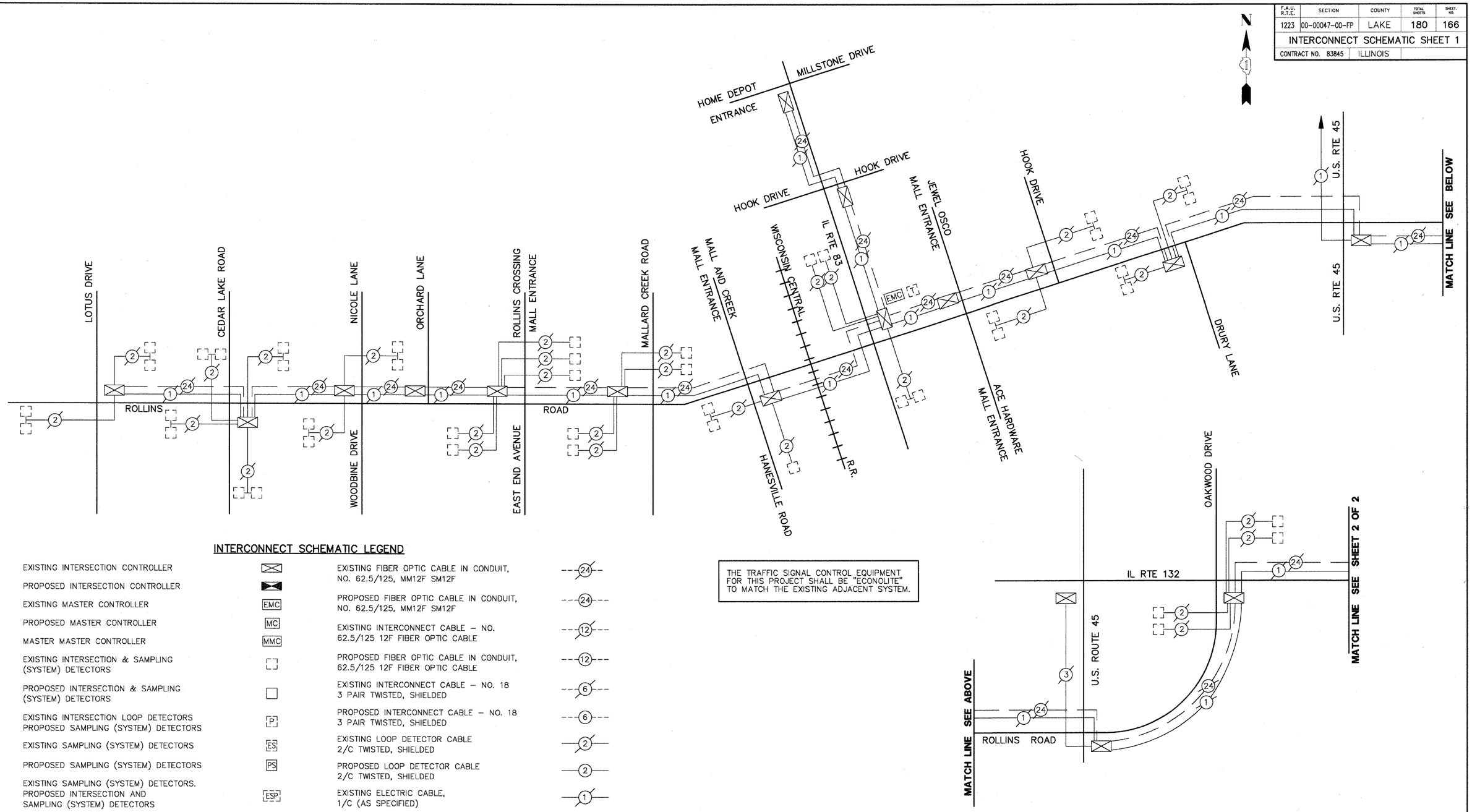
## WASHINGTON STREET STA 115+00 TO 145+00

SCALE: 1"=50'
DATE: 10-25-04

DRAWN BY: CGP
DESIGNED BY: JRD
CHECKED BY: BLS

S:\05-Proj\83-845.dwg

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 166 |
| INTERCONNECT SCHEMATIC SHEET 1 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |




## INTERCONNECT SCHEMATIC LEGEND

| | | | |
|---|---|---|---|
| EXISTING INTERSECTION CONTROLLER | ⊠ | EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F | ---(24)--- |
| PROPOSED INTERSECTION CONTROLLER | ⊠ | PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F | ---(24)--- |
| EXISTING MASTER CONTROLLER | EMC | EXISTING INTERCONNECT CABLE – NO. 62.5/125 12F FIBER OPTIC CABLE | ---(12)--- |
| PROPOSED MASTER CONTROLLER | MC | PROPOSED FIBER OPTIC CABLE IN CONDUIT, 62.5/125 12F FIBER OPTIC CABLE | ---(12)--- |
| MASTER MASTER CONTROLLER | MMC | EXISTING INTERCONNECT CABLE – NO. 18 3 PAIR TWISTED, SHIELDED | ---(6)--- |
| EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS | [ ] | PROPOSED INTERCONNECT CABLE – NO. 18 3 PAIR TWISTED, SHIELDED | ---(6)--- |
| PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS | □ | EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED | —(2)— |
| EXISTING INTERSECTION LOOP DETECTORS PROPOSED SAMPLING (SYSTEM) DETECTORS | [P] | PROPOSED LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED | —(2)— |
| EXISTING SAMPLING (SYSTEM) DETECTORS | [ES] | EXISTING ELECTRIC CABLE, 1/C (AS SPECIFIED) | —(1)— |
| PROPOSED SAMPLING (SYSTEM) DETECTORS | [PS] | PROPOSED ELECTRIC CABLE, 1/C (AS SPECIFIED) | —(1)— |
| EXISTING SAMPLING (SYSTEM) DETECTORS. PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS | [ESP] | EXISTING INTERCONNECT CABLE – NO. 62.5/125, 36F FIBER OPTIC CABLE | ---(36)--- |
| EXISTING SAMPLING (SYSTEM) DETECTORS PROPOSED SAMPLING (SYSTEM) DETECTORS | [ESPS] | PROPOSED FIBER OPTIC CABLE IN CONDUIT – NO. 62.5/125, MM12F SM24F | ---(36)--- |
| EXISTING PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS | [PD] | EXISTING TELEPHONE CONNECTION | [T] |
| PROPOSED PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS | [PD] | PROPOSED TELEPHONE CONNECTION | [T] |
| EXISTING SAMPLING (SYSTEM) PREFORMED DETECTORS | [ESPD] | EXISTING ISDN TELEPHONE CONNECTION | [I] |
| PROPOSED SAMPLING (SYSTEM) PREFORMED DETECTORS | [PSPD] | PROPOSED ISDN TELEPHONE CONNECTION | [I] |

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.


PLANS PREPARED BY:
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| REVISIONS | |
|---|---|
| NAME | DATE |
| PER IDOT/LCDOT REVIEW | 02-15-05 |
| PER LCDOT REVIEW | 09-01-05 |
| R-2 PLANS STAGED | 06-02-06 |
| REV.-5 PRE-FINAL SUB | 02-20-09 |
| PS&E SUBMITTAL | 04-10-09 |

LAKE COUNTY DIVISION OF TRANSPORTATION

# INTERCONNECT SCHEMATIC

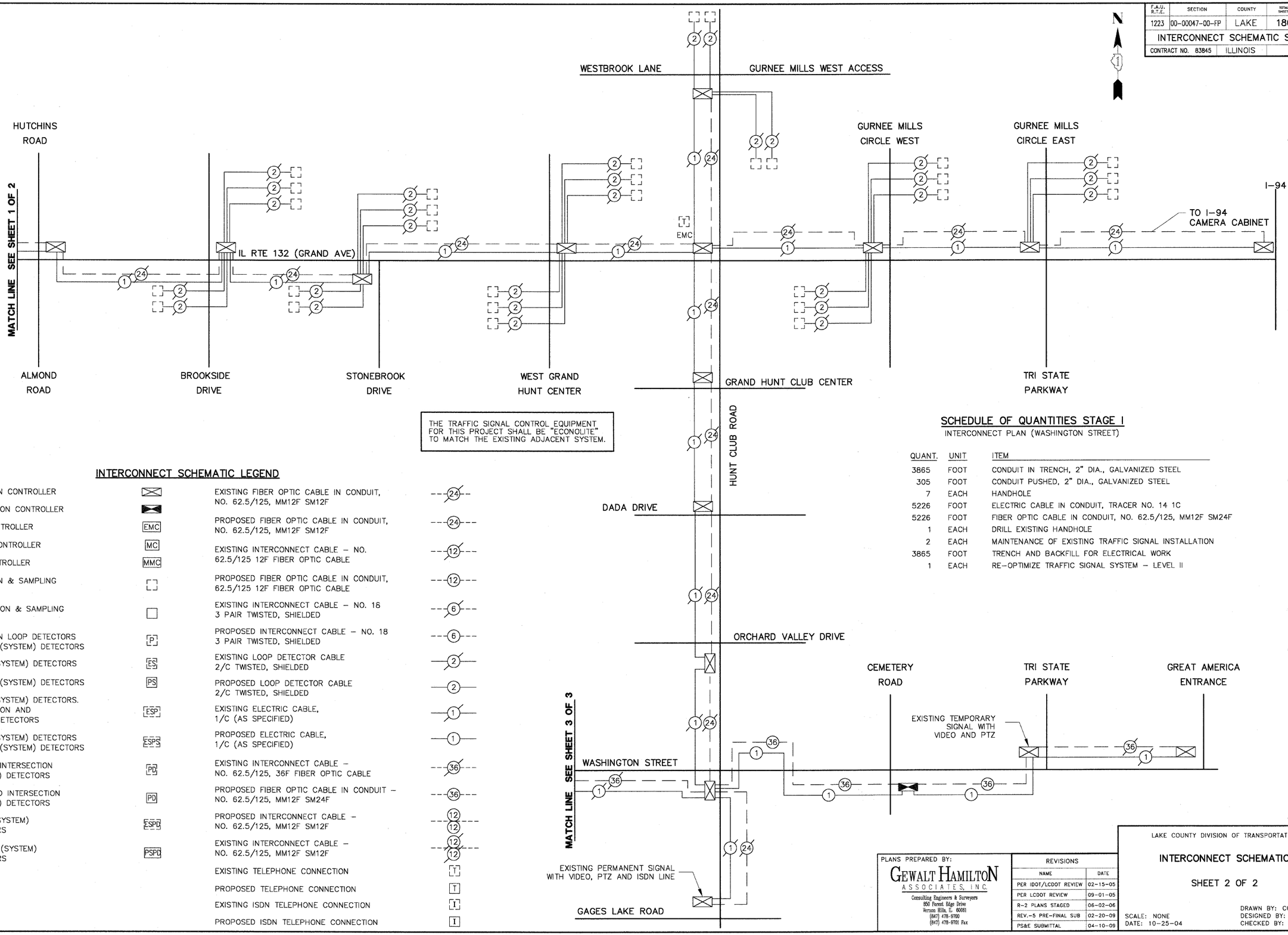
SHEET 1 OF 2

SCALE: NONE
DATE: 10-25-04

DRAWN BY: CGP
DESIGNED BY: JRD
CHECKED BY: BLS

3001-12-TR1.dwg

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 167 |
| INTERCONNECT SCHEMATIC SHEET 2 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |




THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

## INTERCONNECT SCHEMATIC LEGEND

| | | | |
|---|---|---|---|
| EXISTING INTERSECTION CONTROLLER | ⊠ | EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F | -24- |
| PROPOSED INTERSECTION CONTROLLER | ⊠ | PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F | -24- |
| EXISTING MASTER CONTROLLER | EMC | EXISTING INTERCONNECT CABLE – NO. 62.5/125 12F FIBER OPTIC CABLE | -12- |
| PROPOSED MASTER CONTROLLER | MC | PROPOSED FIBER OPTIC CABLE IN CONDUIT, 62.5/125 12F FIBER OPTIC CABLE | -12- |
| MASTER MASTER CONTROLLER | MMC | EXISTING INTERCONNECT CABLE – NO. 18 3 PAIR TWISTED, SHIELDED | -6- |
| EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS | [ ] | PROPOSED INTERCONNECT CABLE – NO. 18 3 PAIR TWISTED, SHIELDED | -6- |
| PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS | □ | EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED | -2- |
| EXISTING INTERSECTION LOOP DETECTORS PROPOSED SAMPLING (SYSTEM) DETECTORS | P | PROPOSED LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED | -2- |
| EXISTING SAMPLING (SYSTEM) DETECTORS | ES | EXISTING ELECTRIC CABLE, 1/C (AS SPECIFIED) | -1- |
| PROPOSED SAMPLING (SYSTEM) DETECTORS | PS | PROPOSED ELECTRIC CABLE, 1/C (AS SPECIFIED) | -1- |
| EXISTING SAMPLING (SYSTEM) DETECTORS. PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS | ESP | EXISTING INTERCONNECT CABLE – NO. 62.5/125, 36F FIBER OPTIC CABLE | -36- |
| EXISTING SAMPLING (SYSTEM) DETECTORS PROPOSED SAMPLING (SYSTEM) DETECTORS | ESPS | PROPOSED FIBER OPTIC CABLE IN CONDUIT – NO. 62.5/125, MM12F SM24F | -36- |
| EXISTING PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS | PD | PROPOSED INTERCONNECT CABLE – NO. 62.5/125, MM12F SM12F | -12- -12- |
| PROPOSED PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS | PD | EXISTING INTERCONNECT CABLE – NO. 62.5/125, MM12F SM12F | -12- -12- |
| EXISTING SAMPLING (SYSTEM) PREFORMED DETECTORS | ESPD | EXISTING TELEPHONE CONNECTION | T |
| PROPOSED SAMPLING (SYSTEM) PREFORMED DETECTORS | PSPD | PROPOSED TELEPHONE CONNECTION | T |
| | | EXISTING ISDN TELEPHONE CONNECTION | I |
| | | PROPOSED ISDN TELEPHONE CONNECTION | I |

## SCHEDULE OF QUANTITIES STAGE I

INTERCONNECT PLAN (WASHINGTON STREET)

| QUANT. | UNIT | ITEM |
|---|---|---|
| 3865 | FOOT | CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL |
| 305 | FOOT | CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL |
| 7 | EACH | HANDHOLE |
| 5226 | FOOT | ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1C |
| 5226 | FOOT | FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F |
| 1 | EACH | DRILL EXISTING HANDHOLE |
| 2 | EACH | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION |
| 3865 | FOOT | TRENCH AND BACKFILL FOR ELECTRICAL WORK |
| 1 | EACH | RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM – LEVEL II |


PLANS PREPARED BY:
GEWALT HAMILTON ASSOCIATES, INC.
Consulting Engineers & Surveyors
850 Forest Edge Drive
Vernon Hills, IL 60061
(847) 478-9700
(847) 478-9701 Fax


| REVISIONS | |
|---|---|
| NAME | DATE |
| PER IDOT/LCDOT REVIEW | 02-15-05 |
| PER LCDOT REVIEW | 09-01-05 |
| R-2 PLANS STAGED | 06-02-06 |
| REV.-5 PRE-FINAL SUB | 02-20-09 |
| PS&E SUBMITTAL | 04-10-09 |

LAKE COUNTY DIVISION OF TRANSPORTATION

INTERCONNECT SCHEMATIC

SHEET 2 OF 2

SCALE: NONE
DATE: 10-25-04

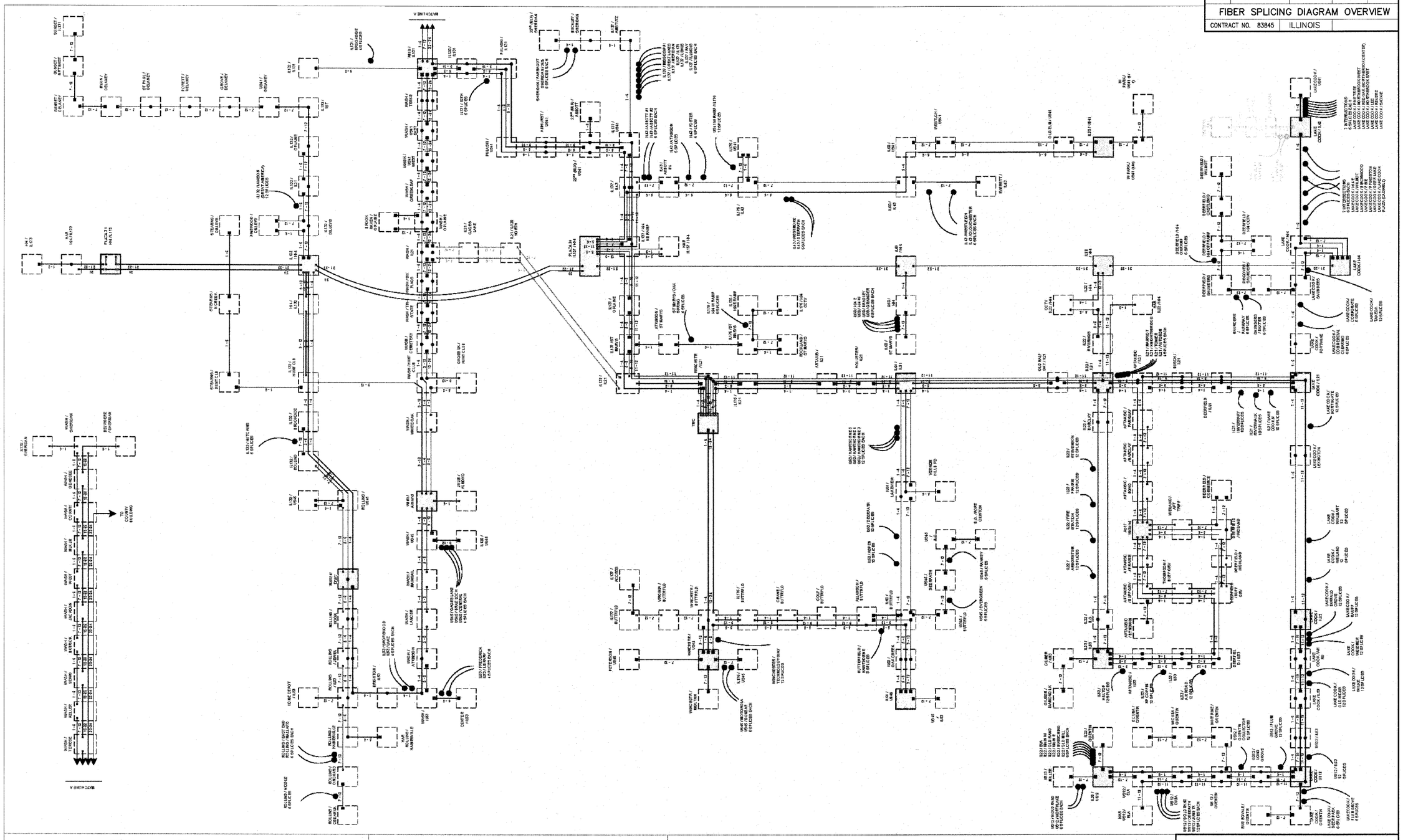
DRAWN BY: CGP
DESIGNED BY: JRD
CHECKED BY: BLS

5061-122-TSI.dwg

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 168 |

# FIBER SPLICING DIAGRAM OVERVIEW

CONTRACT NO. 83845 | ILLINOIS




Delcan
TRANSPORTATION • INFORMATION TECHNOLOGY • WATER

CLIENT:
LakeCounty
Division of Transportation

PLANS PREPARED BY:
GEWALT HAMILTON ASSOCIATES, INC.
Consulting Engineers & Surveyors
850 Forest Edge Drive
Vernon Hills, IL 60061
(847) 478-9700
(847) 478-9701 Fax

| REVISIONS | |
|---|---|
| NAME | DATE |
| PER IDOT/LCDOT REVIEW | 02-15-05 |
| PER LCDOT REVIEW | 09-01-05 |
| R-2 PLANS STAGED | 06-02-06 |
| REV.-5 PRE-FINAL SUB | 02-20-09 |
| PS&E SUBMITTAL | 04-10-09 |

LAKE COUNTY DIVISION OF TRANSPORTATION

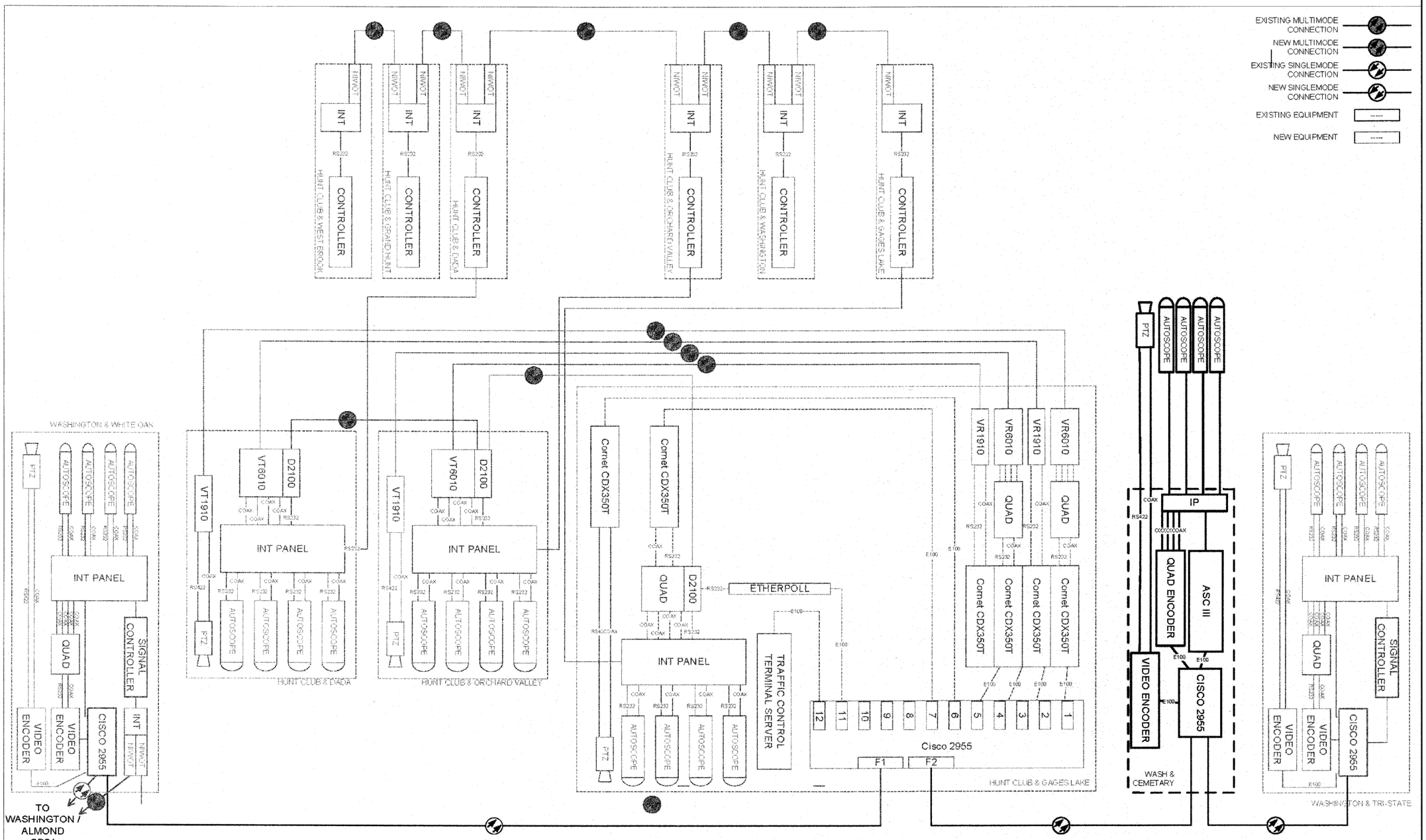
## FIBERSPLICING DIAGRAM OVERVIEW

SCALE: NONE
DATE: 10-25-04

DRAWN BY: CGP
DESIGNED BY: JRD
CHECKED BY: BLS

0001-2123-1101.dwg

| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET. NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 169 |
| CABINET DETAIL 22 | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

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CLIENT:
LakeCounty
Division of Transportation

| NO. | DATE |
|---|---|
| V2.1 | 4/0 |
| V4.0 | 1/0 |
| V4.3 | 4/0 |
| V4.4 | 8/0 |
| V4.5 | 2/0 |
| FILE NAME | |


PLANS PREPARED BY:
GEWALT HAMILTON ASSOCIATES, INC.
Consulting Engineers & Surveyors
850 Forest Edge Drive
Vernon Hills, IL 60061
(847) 478-9700
(847) 478-9701 Fax


| REVISIONS | |
|---|---|
| NAME | DATE |
| PER IDOT/LCDOT REVIEW | 02-15-05 |
| PER LCDOT REVIEW | 09-01-05 |
| R-2 PLANS STAGED | 06-02-06 |
| REV.-5 PRE-FINAL SUB | 02-20-09 |
| PS&E SUBMITTAL | 04-10-09 |

LAKE COUNTY DIVISION OF TRANSPORTATION

# CABINET DETAIL 22
## GAGES LAKE & HUNT CLUB

SCALE: NONE
DATE: 10-25-04

DRAWN BY: CGP
DESIGNED BY: JRD
CHECKED BY: BLS


S:\Projects\2004\04-0252-FA\Cabinet Details\Cabinet Detail 22.dwg

| F.A.U. ROUTE | SEC | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| | | LAKE | 180 | 170 |
| VIDEO DETECTION DETAILS | | | | |
| CONTRACT NO. 83845 | | ILLINOIS | | |

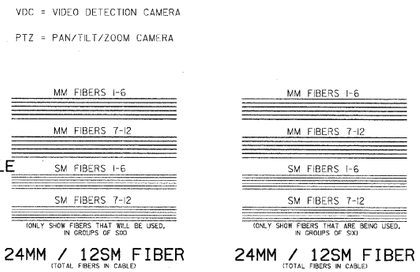
# VIDEO SYSTEM SCHEMATIC LEGEND

| | PROPOSED | EXISTING |
|---|---|---|
| CABINET | | |
| VIDEO EQUIPMENT | 3 VDC<br>1 PTZ<br>1 LAYER 2 SWITCH | 3 VDC<br>1 PTZ<br>1 LAYER 2 SWITCH |

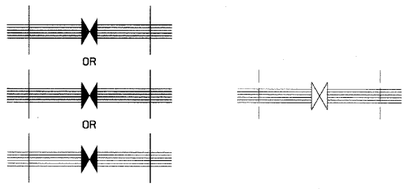
VDC = VIDEO DETECTION CAMERA

PTZ = PAN/TILT/ZOOM CAMERA

FIBER OPTIC CABLE

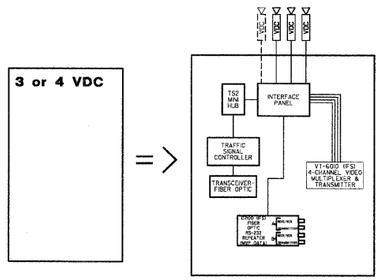


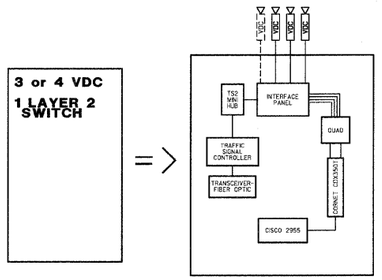

FIBER OPTIC FUSION SPLICE

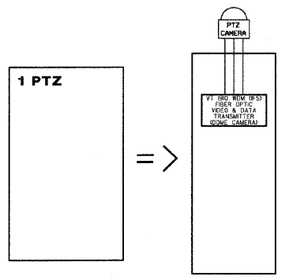


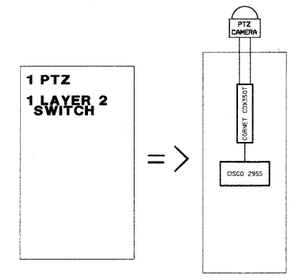

FIBER OPTIC TERMINATION

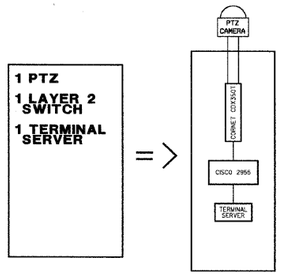
## CABINET CONFIGURATIONS

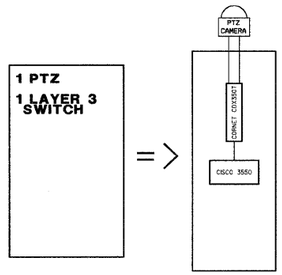


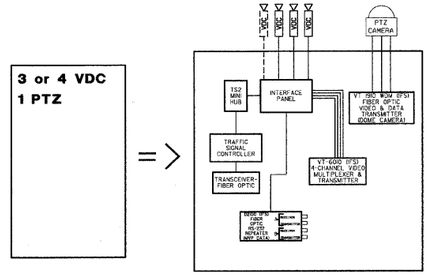



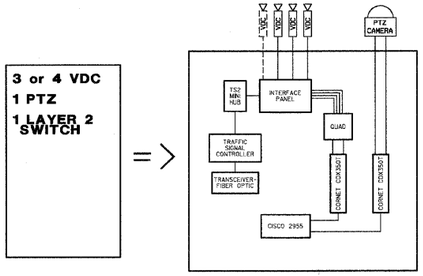



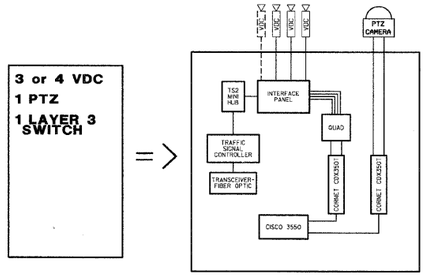



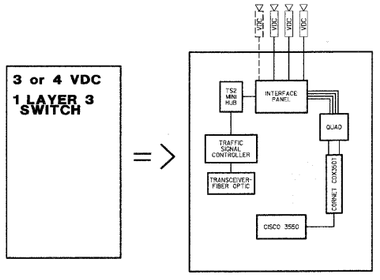



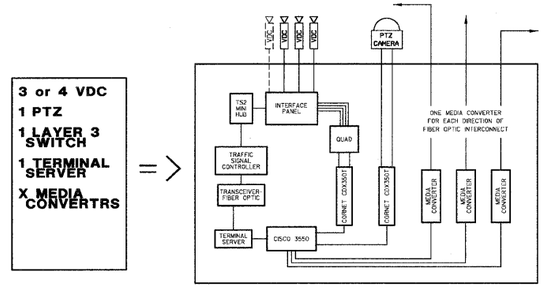



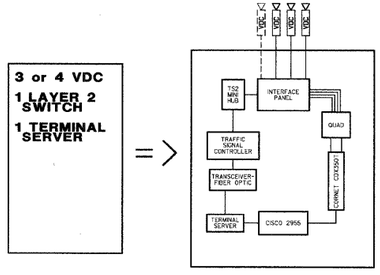



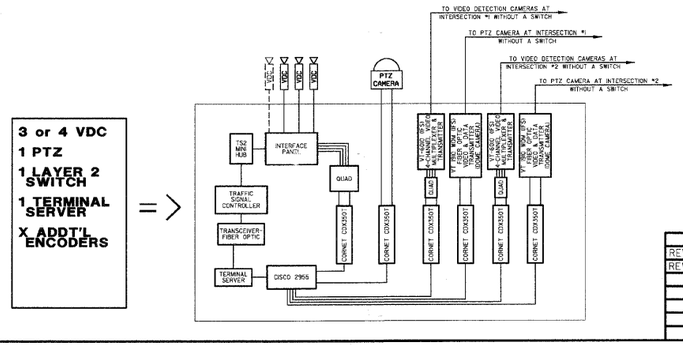




| REVISIONS | |
|---|---|
| REV.-2 PLANS STAGED | 06-02-06 |
| REV.-5 PRE-FINAL SUB | 02-20-09 |
| PS&E SUBMITTAL | 04-10-09 |
| | |
| | |
| | |
| | |

LakeCounty
Division of Transportation

STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: N.T.S. DESIGNED BY: JPS

DATE: 05/20/05 CHECKED BY: ANK

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 541 | 00-00047-00-FP | LAKE | 180 | 171 |
| STA. | | TO STA. | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

## LOOP DETECTOR NOTES

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.

2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.

3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.

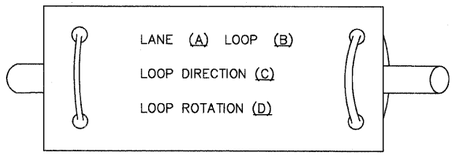
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.

6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.

7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

### LOOP LEAD-IN CABLE TAG

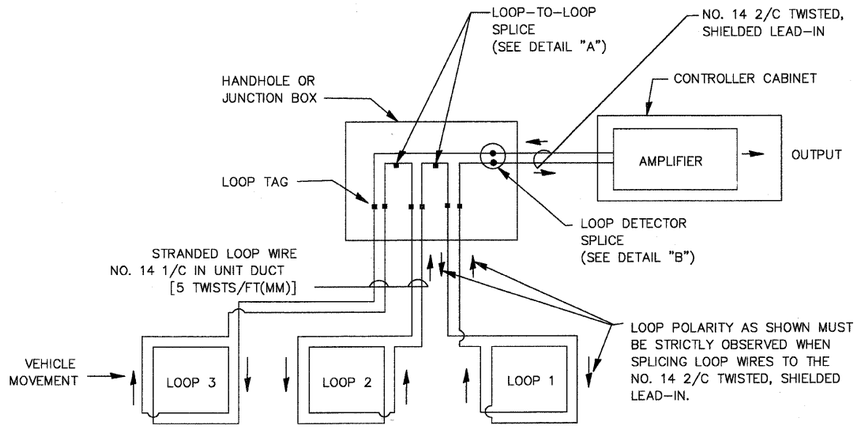



A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.

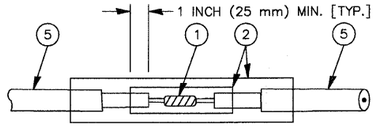
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

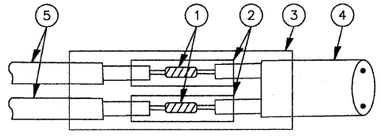



### DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.




DETAIL "A"
LOOP-TO-LOOP SPLICE




DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

### LOOP DETECTOR SPLICE

(1) WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.

(2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.

(3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.

(4) NO. 14 2/C TWISTED, SHIELDED CABLE.

(5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

| REVISIONS | |
|---|---|
| NAME | DATE |
| R-2 PLANS STAGED | 06/02/06 |
| REV.-5 PRE-FINAL SUB | 02/20/09 |
| PS&E SUBMITTAL | 04-10-09 |

ILLINOIS DEPARTMENT OF TRANSPORTATION

# DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: VERT. NONE
HORIZ.
DATE 1-01-02

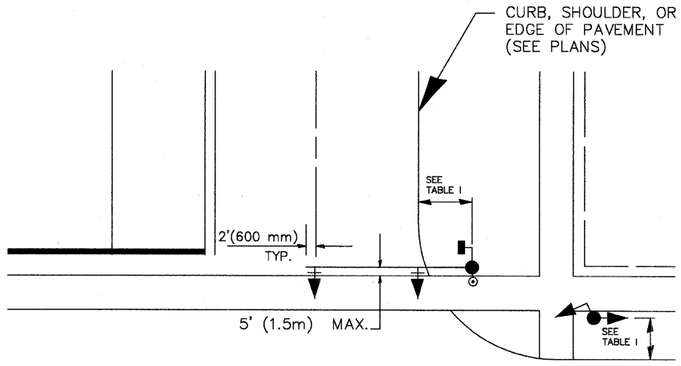
DRAWN BY: RWP
DESIGNED BY: DAD
CHECKED BY: DAZ
SHEET 1 OF 4

305-212-1811 elan

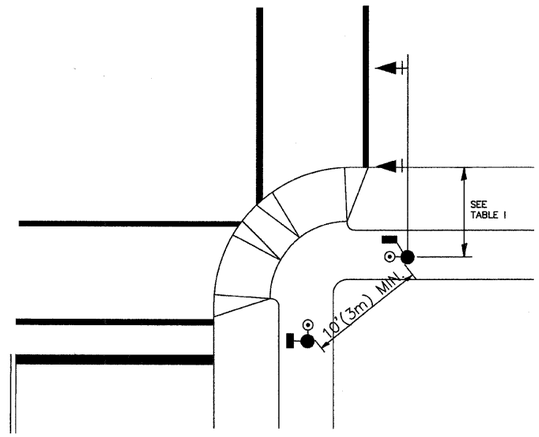
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 541 | 00-00047-00-FP | LAKE | 180 | 172 |
| STA. | TO STA. | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

## TRAFFIC SIGNAL MAST ARM AND POST

MAST ARM MOUNTED SIGNAL IN PROPOSED & FUTURE SIDEWALK AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNAL AND PUSHBUTTON DETECTOR




## PEDESTRIAN SIGNAL PUSHBUTTON




RECOMMENDED PUSHBUTTON LOCATIONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHALL BE IN ACCORDANCE WITH THE CURRENT MUTCD (SEE NOTE 1). TO MEET MUTCD REQUIREMENTS, PEDESTRIAN SIGNAL PUSHBUTTONS MAY HAVE TO BE MOUNTED ON A SEPARATE POST.

## NOTES:

1. AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS WITH PEDESTRIAN ACTUATION. EACH PUSHBUTTON SHALL ACTIVATE BOTH THE WALK INTERVAL AND THE ACCESSIBLE PEDESTRIAN SIGNALS.

   AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS, PUSHBUTTONS SHOULD CLEARLY INDICATE WHICH CROSSWALK SIGNAL IS ACTUATED BY EACH PUSHBUTTON. PUSHBUTTONS AND TACTILE ARROWS SHOULD HAVE HIGH VISUAL CONTRAST (SEE THE DEPARTMENT OF JUSTICE'S AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN, 1991). TACTILE ARROWS SHOULD POINT IN THE SAME DIRECTION AS THE ASSOCIATED CROSSWALK. AT CORNERS OF SIGNALIZED LOCATIONS WITH ACCESSIBLE PEDESTRIAN SIGNALS WHERE PEDESTRIAN PUSHBUTTONS ARE PROVIDED, THE PUSHBUTTONS SHOULD BE SEPARATED BY THE DISTANCE OF AT LEAST 10 FT (3m). THIS ENABLES PEDESTRIANS WHO HAVE VISUAL DISABILITIES TO DISTINGUISH AND LOCATE THE APPROPRIATE PUSHBUTTON.

   PUSHBUTTONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHOULD BE LOCATED AS FOLLOWS:

   A: ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR, AND WHERE THERE IS AN ALL WEATHER SURFACE, WHEELCHAIR ACCESSIBLE ROUTE TO THE RAMP.

   B: WITHIN 5 FT (1.5m) OF THE CROSSWALK EXTENDED.

   C: WITHIN 10 FT (3m) OF THE EDGE OF CURB, SHOULDER, OR PAVEMENT.

   D: PARALLEL TO THE CROSSWALK TO BE USED (SEE MUTCD FIGURE 4E-2).

   E: NORMAL PEDESTRIAN PUSHBUTTON MOUNTING HEIGHT SHOULD BE 3.5 FT (1.05m) ABOVE ADJACENT SIDEWALK

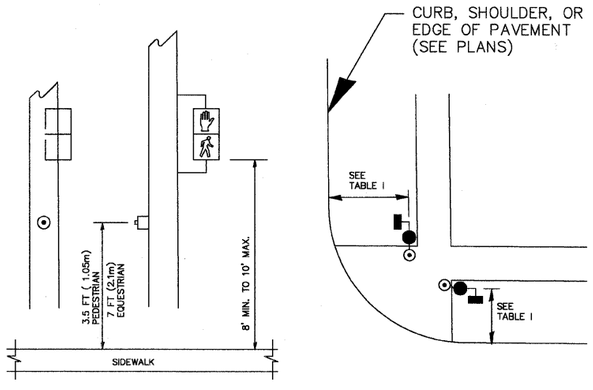
2. PEDESTRIAN SIGNAL FACES SHALL BE MOUNTED WITH THE BOTTOM OF THE HOUSING NOT LESS THAN 8 FT (2.4m) NOR MORE THAN 10 FT (3.0m) ABOVE THE SIDEWALK LEVEL AND SO THERE IS A PEDESTRIAN INDICATION IN THE LINE OF PEDESTRIANS' VISION WHICH PERTAINS TO THE CROSSWALK BEING USED.

3. THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, NOT MOUNTED OVER A ROADWAY, SHALL BE AT LEAST 10 FT (3.0m) BUT NOT MORE THAN 15 FT (4.5m) ABOVE THE SIDEWALK OR, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALKS EXIST.

4. THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, MOUNTED OVER A ROADWAY, SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001 AND 877006. (16 FT (5m) MIN., 18 FT (5.5m) MAX., FROM HIGHEST POINT OF PAVEMENT)

## PEDESTRIAN SIGNAL POST

PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON DETECTOR LOCATION




## TABLE I

| TRAFFIC SIGNAL EQUIPMENT | COMBINATION CONCRETE CURB AND GUTTER (MIN. DIST. FROM BACK OF CURB) | SHOULDER/NON-CURBED AREA (MIN. DIST. FROM EDGE OF PAVEMENT) |
|---|---|---|
| TRAFFIC SIGNAL MAST ARM POLE | 6 FT (1.8m) | SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m) |
| TRAFFIC SIGNAL POST | 4 FT (1.2m) | SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m) |
| PEDESTRIAN SIGNAL POST | 4 FT (1.2m) | SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m) |
| PEDESTRIAN PUSHBUTTON | SEE NOTE 1 | SEE NOTE 1 |

| REVISIONS | |
|---|---|
| NAME | DATE |
| R-2 PLANS STAGED | 06/02/06 |
| REV.-3 PRE-FINAL SUB | 02/20/09 |
| PS&E SUBMITTAL | 04-10-09 |

ILLINOIS DEPARTMENT OF TRANSPORTATION

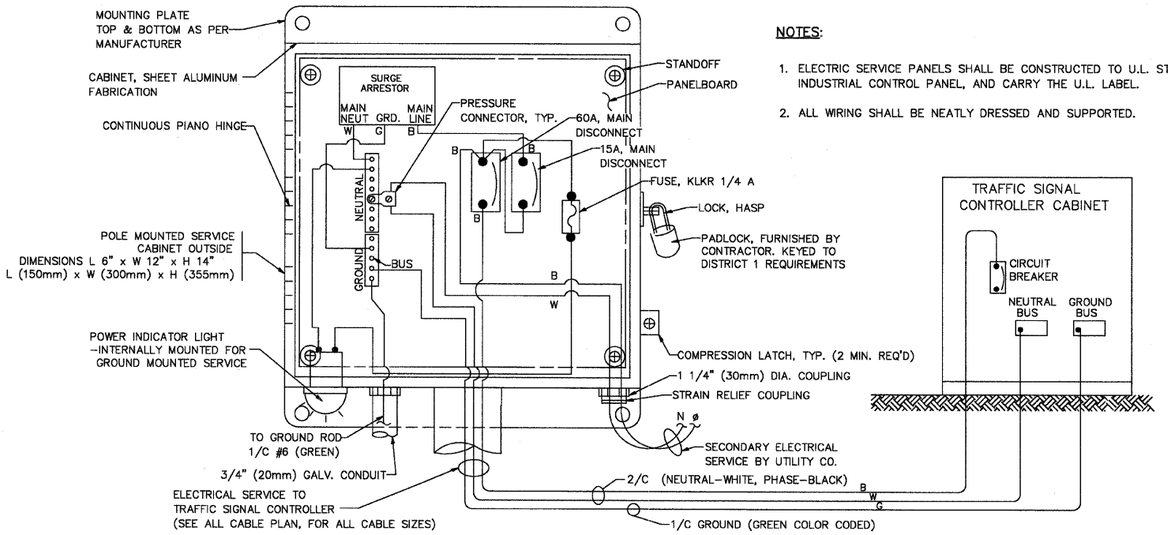
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: VERT. NONE
HORIZ.
DATE 1-01-02

DRAWN BY: RWP
DESIGNED BY: DAD
CHECKED BY: DAZ
SHEET 2 OF 4

3051-212-TR1.dwg

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 541 | 00-00047-00-FP | LAKE | 180 | 173 |
| STA. | TO STA. | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |



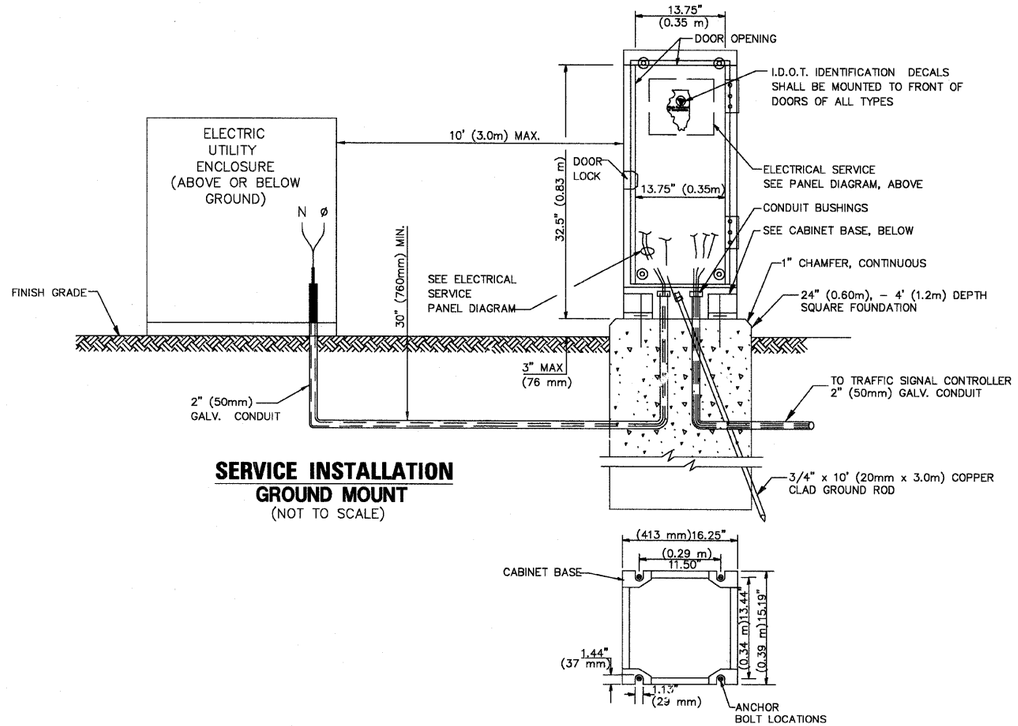

## ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)

## SERVICE INSTALLATION POLE MOUNT (SHOWN)

(NOT TO SCALE)

NOTES:

1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.



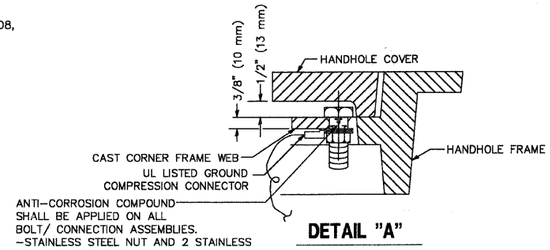

## SERVICE INSTALLATION GROUND MOUNT

(NOT TO SCALE)

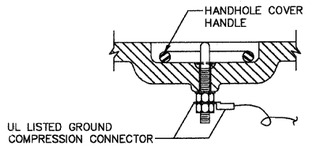



## CABINET - BASE BOLT PATTERN

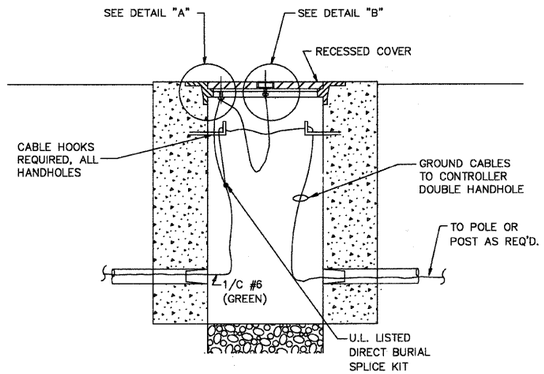
(NOT TO SCALE)




## DETAIL "A"

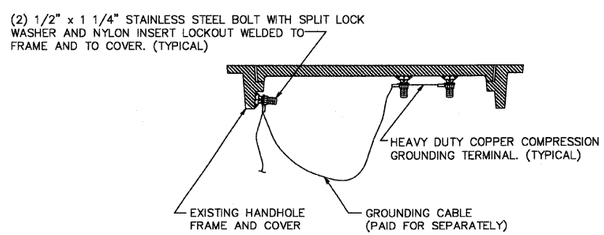



## DETAIL "B"




## HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)



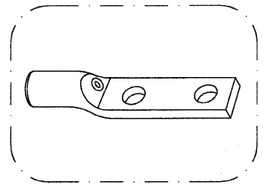

## EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

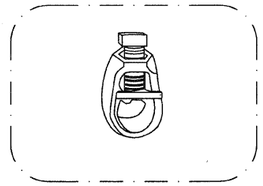
NOTES:

### GROUNDING SYSTEM

1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC,). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



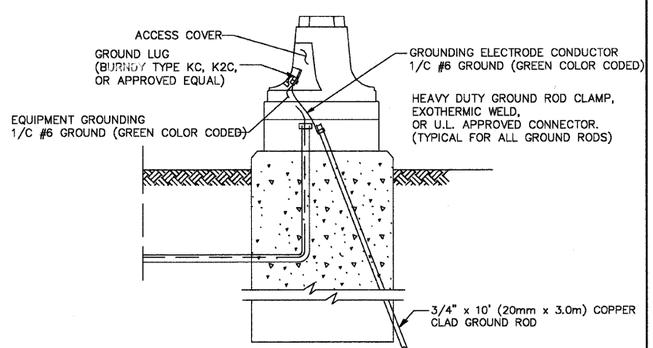
HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EUAL)

NOTES:

- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.




## MAST ARM POLE / POST-GROUNDING DETAIL

(NOT TO SCALE)

| REVISIONS | |
|---|---|
| NAME | DATE |
| R-2 PLANS STAGED | 06/02/06 |
| REV.-5 PRE-FINAL SUB | 02/20/09 |
| PS&E SUBMITTAL | 04-10-09 |

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE

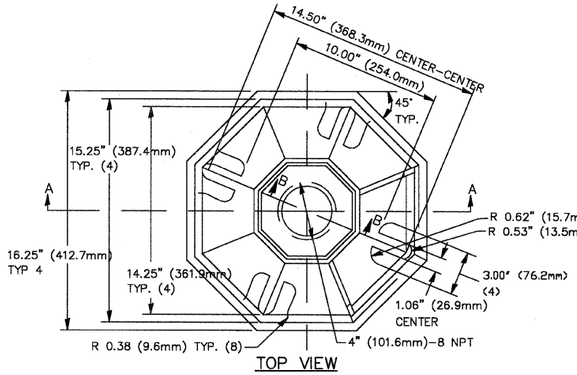
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: VERT. NONE, HORIZ.
DATE 1-01-02

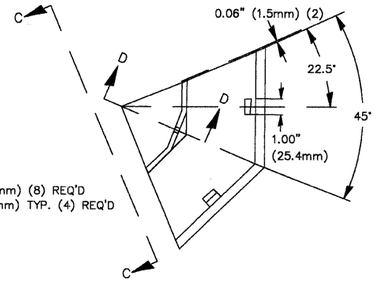
DRAWN BY: RWP
DESIGNED BY: DAD
CHECKED BY: DAZ
SHEET 3 OF 4

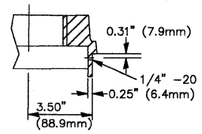
2001-312-TR1.dwg

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 541 | 00-00047-00-FP | LAKE | 180 | 174 |
| STA. | TO STA. | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

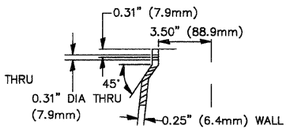



TOP VIEW

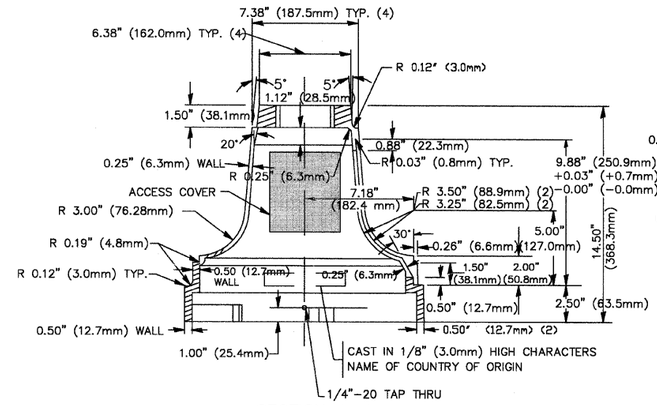


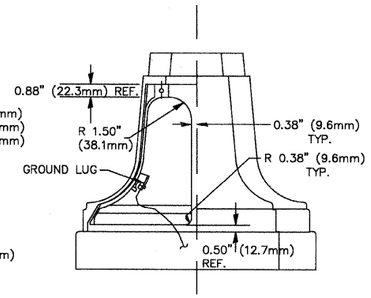

SECTION B-B



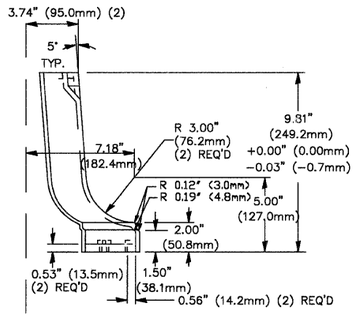

SECTION D-D



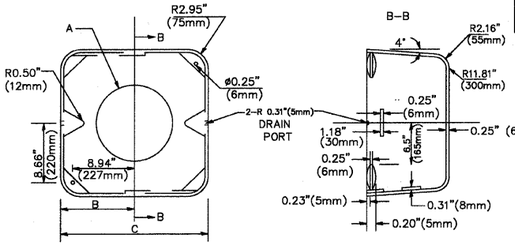

SECTION A-A




VIEW C-C




TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A

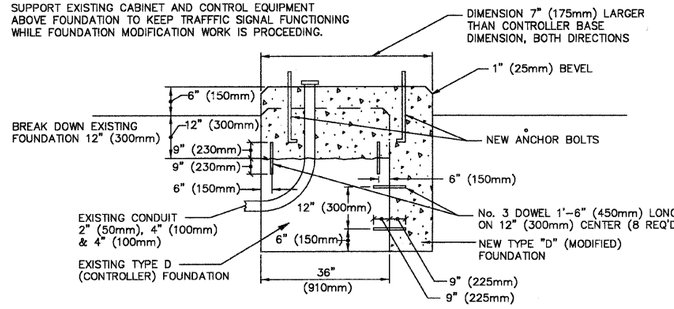



MATERIAL:
- ASTM A48 CLASS 30 GREY IRON
- ASTM A123 HOT DIPPED GALVANIZED

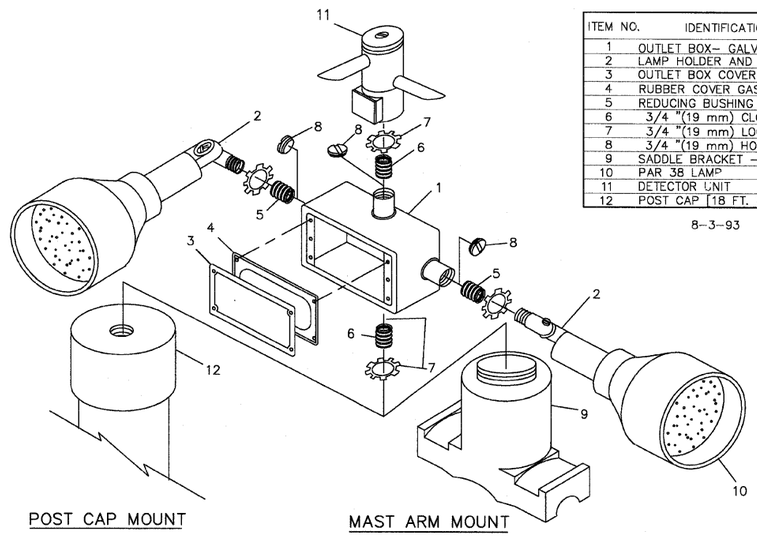
| TYPE | A | B | C | HEIGHT | WEIGHT |
|---|---|---|---|---|---|
| I | ø 10.125"(257mm) | 9.5"(241mm) | 19"(483mm) | 12" (300mm) | 24kg |
| II | ø 11.125"(283mm) | 10.75"(273mm) | 21.5"(546mm) | 12" (300mm) | 26kg |

SHROUD DETAIL

NOTE:
SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.




MODIFY EXISTING TYPE "D" FOUNDATION
(NOT TO SCALE)




POST CAP MOUNT

MAST ARM MOUNT

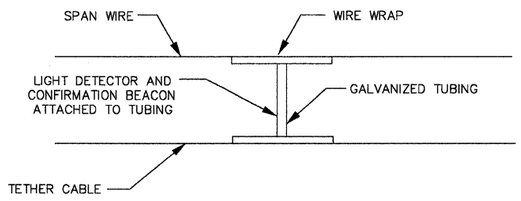
EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

| ITEM NO. | IDENTIFICATION |
|---|---|
| 1 | OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M) |
| 2 | LAMP HOLDER AND COVER |
| 3 | OUTLET BOX COVER |
| 4 | RUBBER COVER GASKET |
| 5 | REDUCING BUSHING |
| 6 | 3/4 "(19 mm) CLOSE NIPPLE |
| 7 | 3/4 "(19 mm) LOCKNUT |
| 8 | 3/4 "(19 mm) HOLE PLUG |
| 9 | SADDLE BRACKET - GALV. |
| 10 | PAR 38 LAMP |
| 11 | DETECTOR UNIT |
| 12 | POST CAP [18 FT. (5.4 m) POST MIN.] |

8-3-93

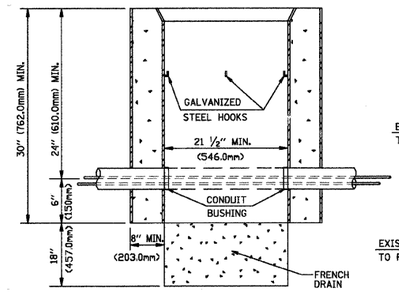
NOTES:

1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
   ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
   ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4 "(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.

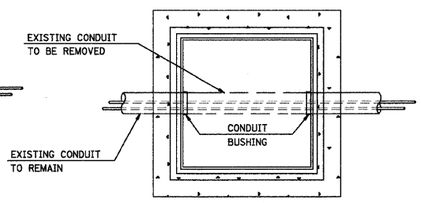



LIGHT DETECTOR AND CONFIRMATION BEACON MOUNTING FOR TEMPORARY TRAFFIC SIGNALS
(NOT TO SCALE)

NOTES:
1. REMOVAL OF EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHING SHALL BE INCIDENTAL TO THE HANDHOLE.




ELEVATION




PLAN

DETAIL
HANDHOLE TO INTERCEPT EXISTING CONDUIT
N.T.S.

| REVISIONS NAME | DATE |
|---|---|
| | |

ILLINOIS DEPARTMENT OF TRANSPORTATION

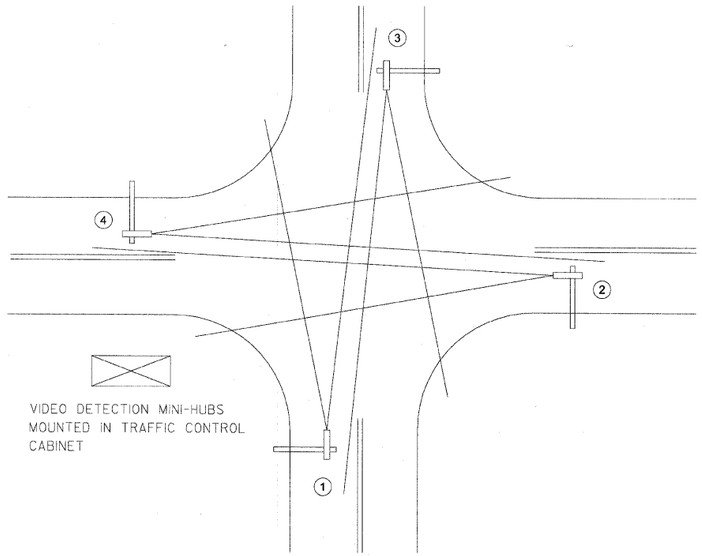
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: VERT. NONE HORIZ.
DATE 1-01-02

DRAWN BY: RWP
DESIGNED BY: DAD
CHECKED BY: DAZ
SHEET 4 OF 4

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV.-5 PRE-FINAL SUB | 02-20-09 | | |
| REV.-2 PLANS STAGED | 06-02-06 | | |
| REV.-1 IDOT COMMENTS | 02-03-06 | PS&E SUBMITTAL | 4-10-09 |

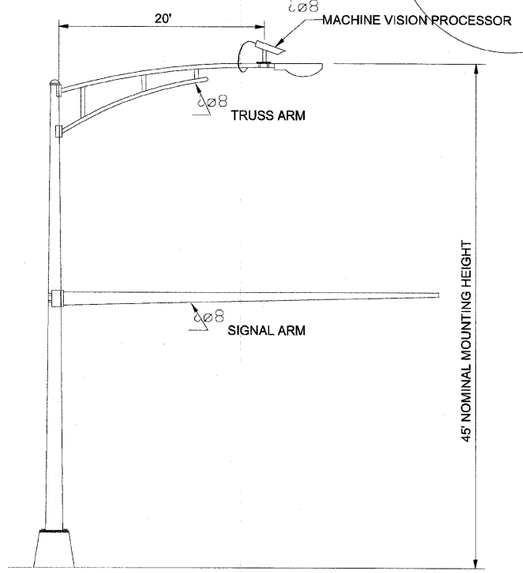
3061-312-TR1.dwg




## TYPICAL VIDEO VEHICLE DETECTION SYSTEM

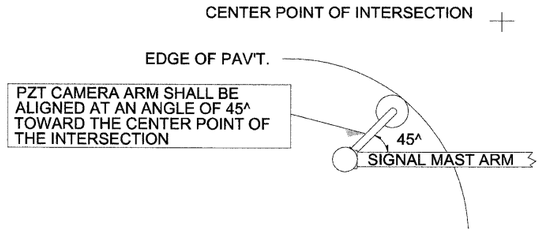
(NOT TO SCALE)

(4) MACHINE VISION PROCESSOR ASSEMBLIES AND BRACKETS ② ③ ④
POWER CABLE TO EACH MACHINE VISION PROCESSOR (24 VAC)



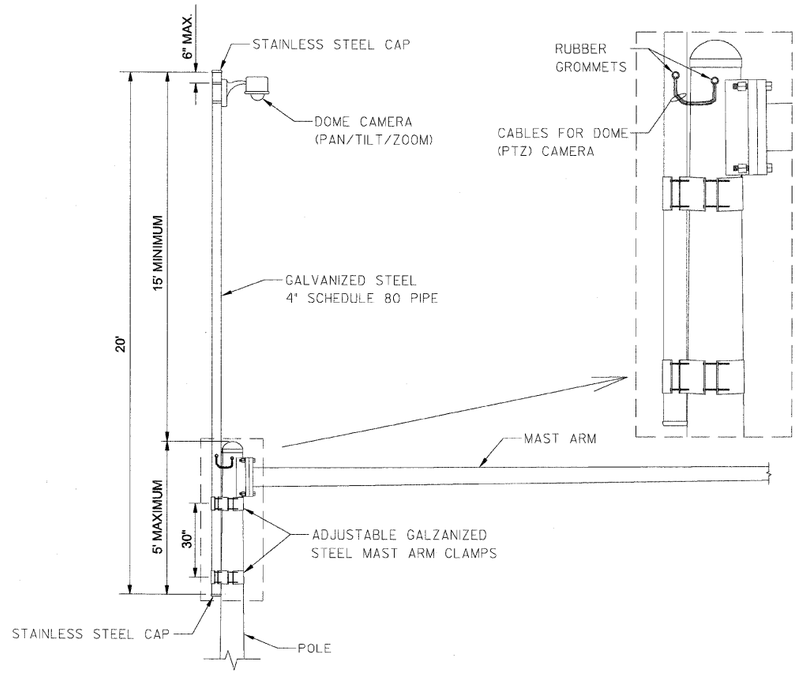

## COMBINATION MAST ARM ASSEMBLY AND POLE DIMENSIONS

(NOT TO SCALE)



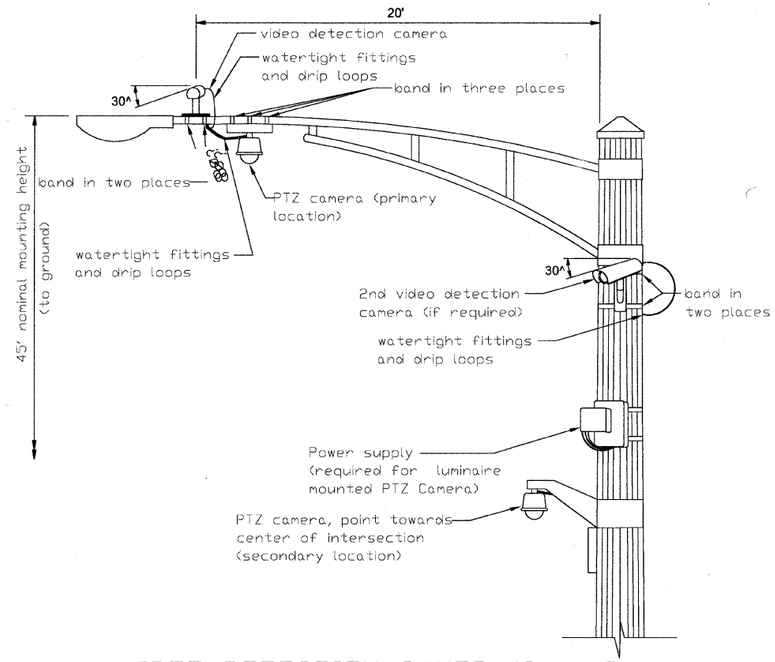

## IMAGE SENSOR MOUNTING DETAILS

(NO SCALE)




## CAMERA MOUNTING ASSEMBLY DETAIL

(NOT TO SCALE)




## VIDEO DETECTION CAMERA(S) AND DOME (PTZ) CAMERA MOUNTING DETAIL

(NOT TO SCALE)

NOTES FOR SINGLE, DUAL AND MULTIPLE MVP MOUNTING:
- MOUNT LUMINAIRE MOUNTING BRACKET AS HIGH AS POSSIBLE.
- AIM BRACKET TOWARD DIRECTION OF TRAFFIC TO BE DETECTED.
- MOUNT MACHINE VISION PROCESSOR AIMING DOWN AT 30 DEGREE ANGLE.

| REVISIONS | DATE |
|---|---|
| Mounting Details Revised | 5/1/08 |
| 2nd Camera Locat. added | 1/14/09 |

LakeCounty Division of Transportation

APPROVED BY: A. KHAWAJA
DATE: APRIL 1, 2007

VIDEO DETECTION DETAILS

LC6900

| REVISIONS / REMARKS | | | | | |
|---|---|---|---|---|---|
| NO. | DESCRIPTION | DATE | BY | SURVEYOR: | / |
| | | / / | | DSGNR/LIAISON: | |
| | | / / | | PLOTTED BY: | $USRN$ $$DAT$$$$ |

LakeCounty Division of Transportation

VIDEO DETECTION DETAILS

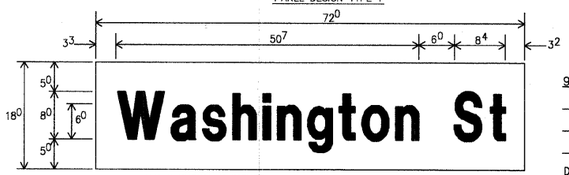
| ROUTE | SECTION | SECTION NUMBER | SHEET | SHEETS |
|---|---|---|---|---|
| CHXX | XXX | 00-00047-00-FP | 175 | 180 |

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV.-5 PRE-FINAL SUB | 02-20-09 | | |
| REV.-2 PLANS STAGED | 06-02-06 | | |
| REV.-1 IDOT COMMENTS | 02-03-06 | PS&E SUBMITTAL | 4-10-09 |

3001-212-TRI.dwg

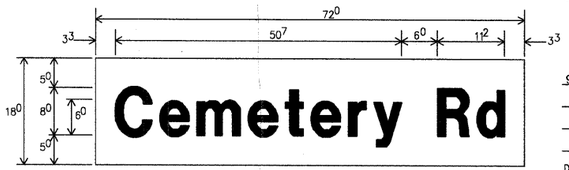
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 176 |
| STA. | | TO STA. | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |

PANEL DESIGN TYPE 1




ALL DIMENSIONS SHOWN IN INCHES

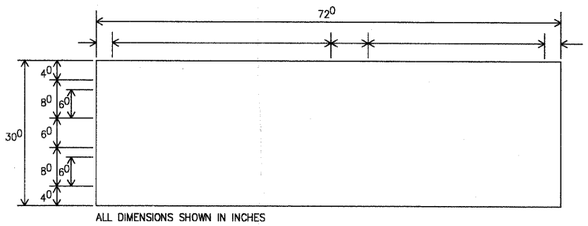
9.0 SQ. FT. EACH
— REQUIRED
____ SINGLE SIDED REQUIRED
X DOUBLE SIDED REQUIRED
DESIGN SERIES C
CLEARVIEW FONT




ALL DIMENSIONS SHOWN IN INCHES

9.0 SQ. FT. EACH
— REQUIRED
____ SINGLE SIDED REQUIRED
X DOUBLE SIDED REQUIRED
DESIGN SERIES D
CLEARVIEW FONT

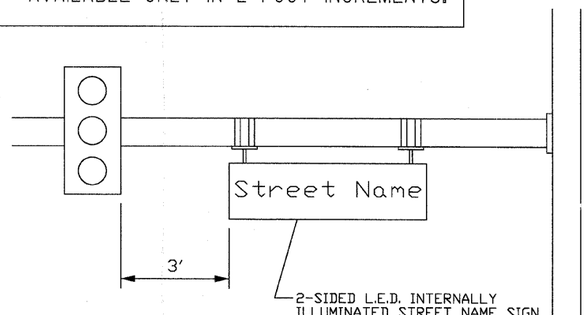
SIGN PANEL DESIGN TYPE 2



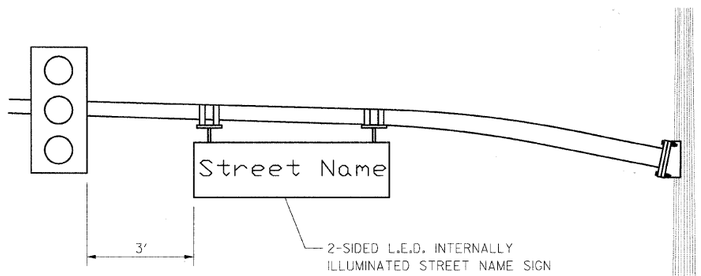

ALL DIMENSIONS SHOWN IN INCHES

12.0 SQ. FT. EACH
____ REQUIRED
____ SINGLE SIDED REQUIRED
____ DOUBLE SIDED REQUIRED
DESIGN SERIES ____
CLEARVIEW FONT

NOTE: L.E.D. ILLUMINATED STREET NAME SIGNS AVAILABLE ONLY IN 2 FOOT INCREMENTS.




REGULAR STEEL MAST ARM ASSEMBLY AND POLE




DECORATIVE STEEL MAST ARM ASSEMBLY AND POLE

| REVISIONS | |
|---|---|
| NAME | DATE |
| NEW TITLE BLOCK-JPS | 12/01/98 |

LakeCounty
Division of Transportation

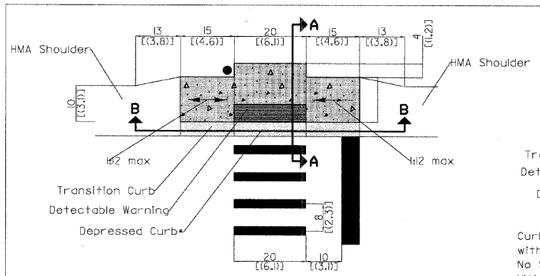
# MAST ARM MOUNTED STREET NAME SIGNS

SCALE: NONE SHEET 1 OF 1 DESIGNED BY: JPS
DATE: 02/06/97 CHECKED BY: ANK

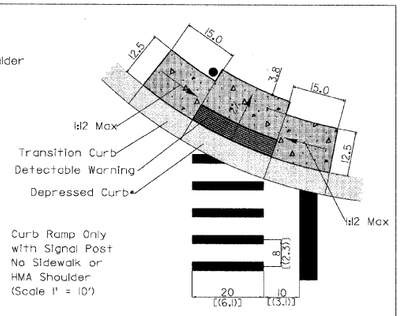
| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV.-5 PRE-FINAL SUB | 02-20-09 | | |
| REV.-2 PLANS STAGED | 06-02-06 | | |
| REV.-1 IDOT COMMENTS | 02-03-06 | PS&E SUBMITTAL | 4-10-09 |

3081-212-TRF.dwg

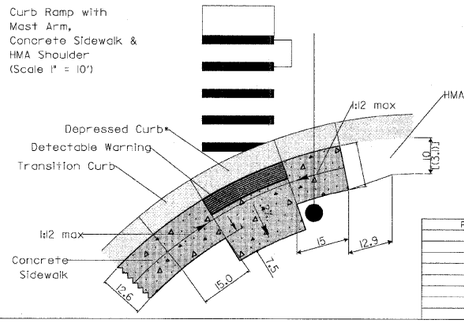
| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET. NO. |
|---|---|---|---|---|
| 1223 | 00-00047-00-FP | LAKE | 180 | 177 |
| DETAILS | | | | |
| CONTRACT NO. 83845 | ILLINOIS | | | |




Curb Ramp with Signal Post & Transitions to HMA Shoulders
(Scale 1" = 10')




Curb Ramp Only
with Signal Post
No Sidewalk or
HMA Shoulder
(Scale 1" = 10')




*GENERAL NOTES:

1. The gutter slope for the DEPRESSED CURB adjacent to the curb ramp is a maximum of 5% (standard curb and gutter is 6%). The back of curb rise is 4" (standard depressed curb is 6").
See Section A-A (Sheet 2) and IDOT standard 606001 for the different curb dimensions.
2. The Depressed Curb and the Transition Curb will be paid for as COMBINATION CONCRETE CURB AND GUTTER of the type adjacent to the curb ramp.
3. The concrete area consisting of the landing (2% slope) and the side ramps (behind the transition curb) along with the continuation of the 5' concrete between adjacent ramps (if any) will be measured in square feet and paid for as PORTLAND CEMENT CONCRETE SIDEWALK of the thickness specified.
4. The detectable warnings shall be installed inaccordance with Article 424.09 of the IDOT Standard Specifications and the LCDOT specification 42400800 DETECTABLE WARNINGS and shall be measured and paid for per square foot.
5. Since the width of the flag doesn't affect the construction of the ramp, both B-6.12 and B-6.24 Curb & Gutter are portrayed in this standard.

| REVISIONS | DATE |
|---|---|
| | |

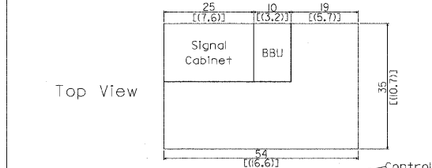
LakeCounty Division of Transportation

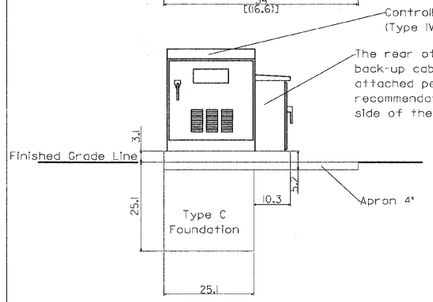
APPROVED BY: M. G. ZEMAITIS
DATE: APRIL 1, 2007

CURB RAMPS WITH TRAFFIC SIGNAL POSTS & MAST ARMS
(SHEET 1 OF 2)

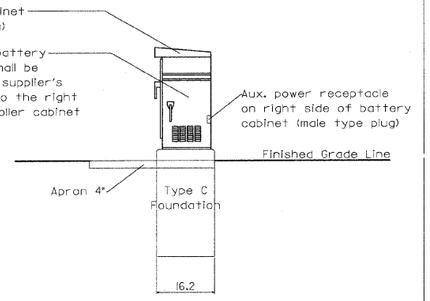
LC-4201

# UNINTERRUPTED POWER SUPPLY CABINET INSTALLATION




Type IV or V
Controller Cabinet
Front View




Type IV or V
Controller Cabinet
Right Side View

Note: The full depth (54") foundation is only required under the controller cabinet.

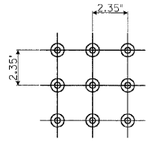
| REVISIONS | DATE |
|---|---|
| Reclassified Foundation from Mod. D to C - JPS | 08/28/07 |

LakeCounty Division of Transportation

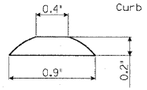
APPROVED BY: A. KHAWAJA
DATE: APRIL 4, 2007

TYPE C (SPECIAL) FOUNDATION FOR TRAFFIC SIGNAL CONTROLLER CABINET AND U.P.S. CABINET

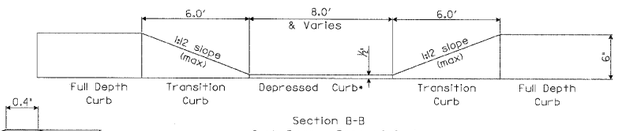
LC-8501




Detail
Detectable Warnings
Square Pattern
(Scale 1" = 6")

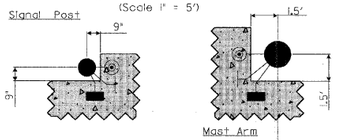



Detail
Truncated Dome
(Scale 1" = 1")

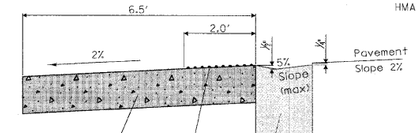


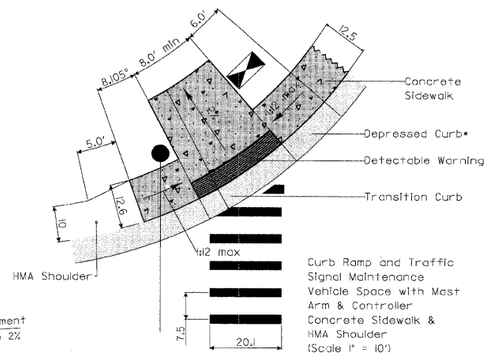

Section B-B
Curb Ramp - Face of Curb
(Scale 1" = 2.5' Horiz ; 1" = 1' Vert)

Location Details
Signal Post & Mast Arm
(Scale 1" = 5')




Section A-A
Curb Ramp with B-6.12 C&G
(Scale 1" = 2.5' Horiz ; 1" = 1' Vert)




Curb Ramp and Traffic Signal Maintenance Vehicle Space with Mast Arm & Controller Concrete Sidewalk & HMA Shoulder
(Scale 1" = 10')

| REVISIONS | DATE |
|---|---|
| | |

LakeCounty Division of Transportation

APPROVED BY: M. G. ZEMAITIS
DATE: APRIL 1, 2007

CURB RAMPS WITH TRAFFIC SIGNAL POSTS & MAST ARMS
(SHEET 2 OF 2)

LC-4201


PLANS PREPARED BY:
GEWALT HAMILTON ASSOCIATES, INC.
Consulting Engineers & Surveyors
850 Forest Edge Drive
Vernon Hills, IL 60061
(847) 478-9700
(847) 478-9701 Fax


| REVISIONS | |
|---|---|
| NAME | DATE |
| REV.-5 PRE-FINAL SUB | 02-20-09 |
| PS&E SUBMITTAL | 4-10-09 |

LAKE COUNTY DIVISION OF TRANSPORTATION

DETAILS

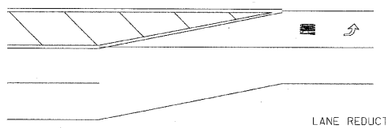
SCALE: NONE
DATE: 10-25-04

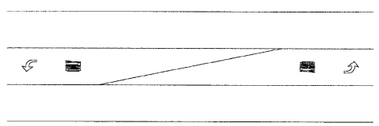
DRAWN BY: PJS
DESIGNED BY: JRD
CHECKED BY: BLS

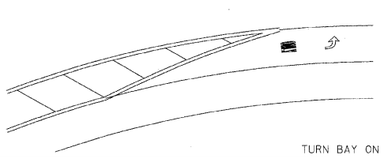
3051-201-HV.dwg

# TYPICAL PAVEMENT MARKINGS

## TYPICAL MINI-SKIP PAVEMENT MARKINGS

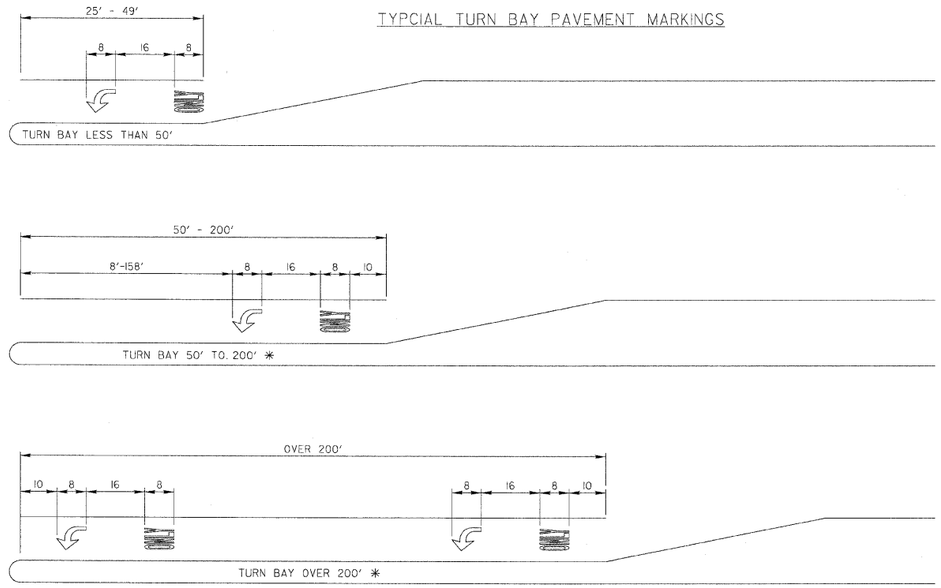



MINI-SKIPS ARE 2 FEET WHITE LINE WITH 6 FEET SPACING. THE MINI-SKIP IS THE SAME WIDTH AS THE PAVEMENT MARKING LINE, IT EXTENDS.

## TYPICAL TURN BAY PAVEMENT MARKINGS



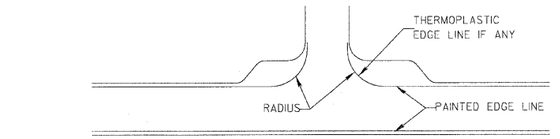

AREA = 15.6 SQ. FT.

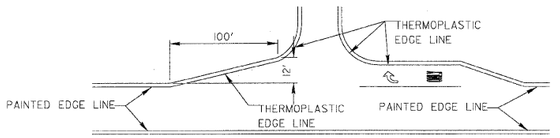
AREA = 20.8 SQ FT.

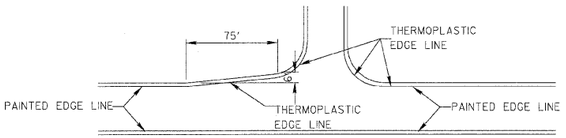
* AT INTERSECTIONS WITH VIDEO DETECTION, THE ARROW AND ONLY PAVEMENT MARKINGS SHALL BE A MINIMUM OF 30' BEHIND THE STOP BAR.

FULL SIZE LETTERS (8') AND ARROWS SHALL BE USED. TURN LANES IN EXCESS OF 400' IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW W/ 'ONLY' INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW W/ 'ONLY'.

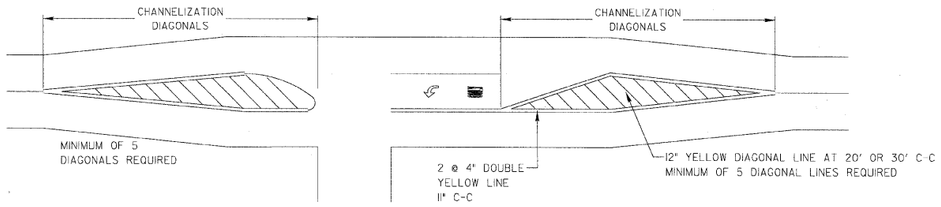
## EDGE LINE RADII AT SIDE STREETS




## TWO LANE ROAD

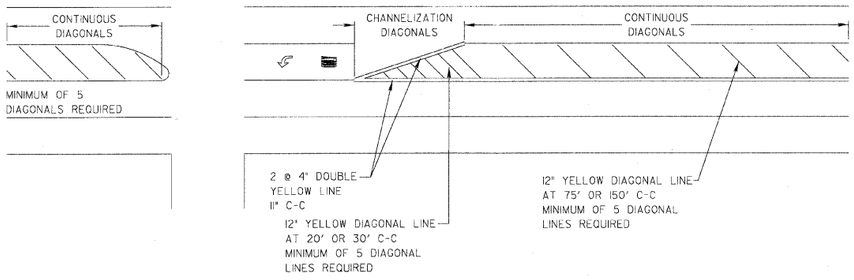



## TYPICAL DIAGONAL SPACING

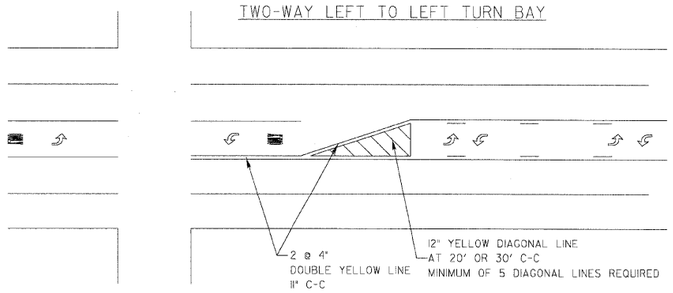
DIAGONAL SPACING

| SPEED LIMIT RANGE | CONTINUOUS | INTERSECTION CHANNELIZATION |
|---|---|---|
| 30-45 MPH | 75 FT. | 20 FT. |
| OVER 45 MPH | 150 FT. | 30 FT. |

## 3 TO 5 LANE ROAD




## TWO-WAY LEFT TO LEFT TURN BAY




DUAL LEFT TURN ARROWS

312 SQ. FT. MINIMUM
OF 2 SETS REQUIRED

A MINIMUM OF TWO PAIRS OF DUAL LEFT TURN ARROWS SHALL BE USED. THE DUAL LEFT TURN ARROWS SHALL BE WHITE IN COLOR. THE INTERVAL BETWEEN SETS OF DUAL LEFT TURN ARROWS SHOULD BE 200' AND 300'.

| REVISIONS | DATE |
|---|---|
| | |

LakeCounty Division of Transportation

APPROVED BY: A. KHAWAJA
DATE: APRIL 1, 2007

TYPICAL PAVEMENT MARKINGS FOR COUNTY HIGHWAYS

SHEET 1 OF 3

LC7800

| REVISIONS / REMARKS | | | | | |
|---|---|---|---|---|---|
| NO. | DESCRIPTION | DATE | BY | SURVEYOR: | ___/___ |
| --- | ---------- | --/--/-- | --- | DSGNR/LIAISON: | --- |
| --- | ---------- | --/--/-- | --- | PLOTTED BY: | $USRN$ $$DAT$$$$ |

LakeCounty Division of Transportation

LAKE COUNTY STANDARDS & DETAILS

| ROUTE | SECTION | SECTION NUMBER | SHEET | SHEETS |
|---|---|---|---|---|
| CHXX | XXX | 00-00047-00-FP | 178 | 180 |

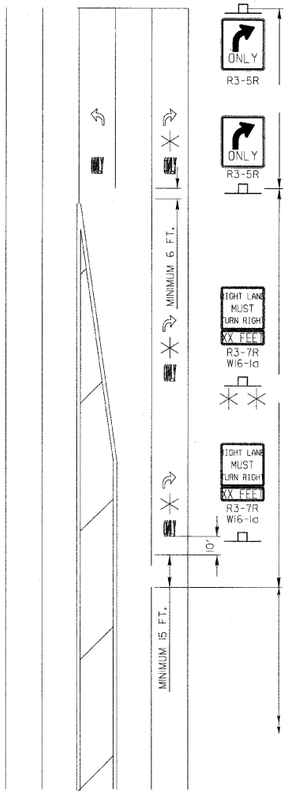
| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV.-5 PRE-FINAL SUB | 02-20-09 | | |
| REV.-2 PLANS STAGE | 06-02-06 | | |
| REV.-1 IDOT COMMENTS | 02-03-06 | PS&E SUBMITTAL | 4-10-09 |

CONTRACT NO. 83845

3351-212-TR1.dwg

# TYPICAL PAVEMENT MARKINGS AND RAISED PAVEMENT MARKERS

## THRU LANE TO TURN LANE CONVERSION




TURN BAY
6" WHITE LINE
(ADDITIONAL PAV'T MARKINGS AS SHOWN ON SHEET ONE OF THE L.C.D.O.T PAV'T MARKINGS DETAIL SHEETS)

TRANSITION ZONE
6" WHITE 3'/12' SKIP DASH LANE LINE

THRU LANE
4 " WHITE 10'/30' SKIP DASH LANE LINE

FOR POSTED SPEEDS 40 M.P.H. OR GREATER A SECOND R3-7/W16-1a SIGN INSTALLATION SHALL BE LOCATED HALFWAY BETWEEN THE BEGINNING OF THE TRANSITION ZONE AND THE BEGINNING OF THE TURN LANE

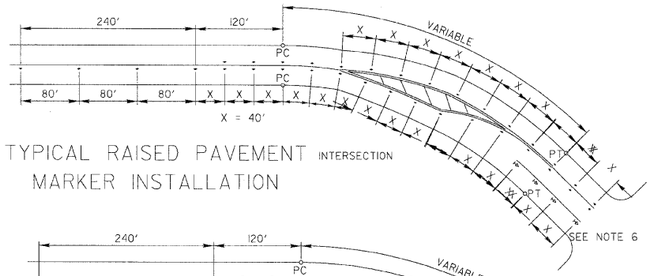
### MINIMUM TRANSITION ZONE LENGTH

| POSTED SPEED | LENGTH |
|---|---|
| 25 M.P.H. | 255 FT. |
| 30 M.P.H. | 330 FT. |
| 35 M.P.H. | 405 FT. |
| 40 M.P.H. | 480 FT. |
| 45 M.P.H. | 555 FT. |
| 50 M.P.H. | 630 FT. |
| 55 M.P.H. | 705 FT. |

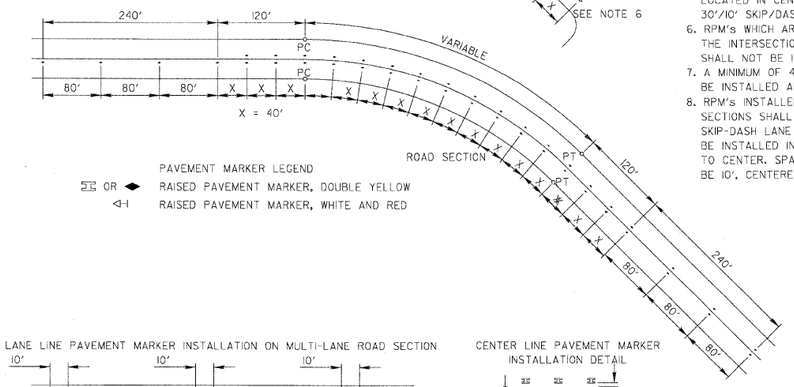
### ✳ LOCATION OF PAV'T MARKINGS

(MEASURED FROM BEGINNING OF TRANSITION ZONE)

| POSTED SPEED | LOCATION OF PAV'T MARKINGS |
|---|---|
| 25 M.P.H. | 10 FT., 260 FT. |
| 30 M.P.H. | 10 FT., 170 FT., 340 FT. |
| 35 M.P.H. | 10 FT., 210 FT., 410 FT. |
| 40 M.P.H. | 10 FT., 170FT., 330 FT., 490 FT. |
| 45 M.P.H. | 10 FT., 190 FT., 370 FT., 560 FT. |
| 50 M.P.H. | 10 FT., 170 FT., 330 FT., 490 FT., 640 FT |
| 55 M.P.H. | 10 FT., 180 FT., 350 FT., 520 FT., 710 FT. |



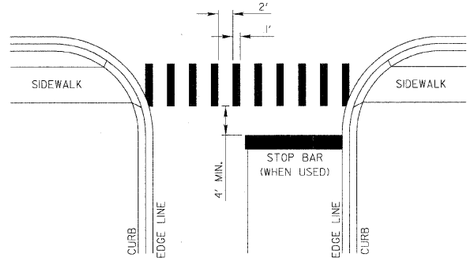

TYPICAL RAISED PAVEMENT MARKER INSTALLATION INTERSECTION




PAVEMENT MARKER LEGEND
- ▭ OR ◆ RAISED PAVEMENT MARKER, DOUBLE YELLOW
- ◁▮ RAISED PAVEMENT MARKER, WHITE AND RED

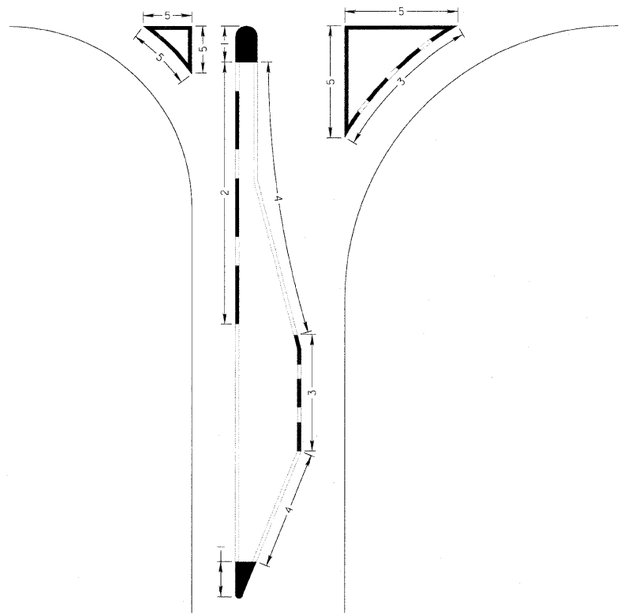
NOTES:
1. CENTERLINE RAISED PAVEMENT MARKERS (RPM's) SHALL BE PLACED ON ALL CURVES OVER 3 1/2 DEGREES ON ALL TWO AND THREE LANE HIGHWAYS, UNLESS DIRECTED OTHERWISE BY THE ENGINEER..
2. SPACING = 40' FOR CENTERLINE MARKERS.
3. ALL RPM's ON CENTERLINE ARE 2-WAY YELLOW. LANE LINE MARKERS ARE WHITE/RED.
4. MARKERS SHALL BE INSTALLED IN ACCORDANCE WITH F.H.W.A. MEMORANDUM HIO-21.
5. MARKERS SHALL BE FIELD ADJUSTED TO BE LOCATED IN CENTER OF THE 30' GAP OF A 30'/10' SKIP/DASH CENTERLINE.
6. RPM's WHICH ARE TO BE LOCATED WITHIN THE INTERSECTION OF A CROSS STREET, SHALL NOT BE INSTALLED.
7. A MINIMUM OF 4 WHITE/RED MARKERS SHALL BE INSTALLED ALONG THE TURN LANE LINE.
8. RPM's INSTALLED ON MULTI-LANE ROAD SECTIONS SHALL BE INSTALLED ON THE WHITE SKIP-DASH LANE LINE ONLY. THESE RPM's SHALL BE INSTALLED IN PAIRS AND SHALL BE 80' CENTER TO CENTER. SPACING WITHIN EACH PAIR SHALL BE 10', CENTERED WITHIN THE 30' SKIP.

## CROSSWALKS



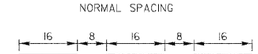

1. WIDTH OF THE CROSSWALK IS GENERALLY 6' EXCEPT AT SCHOOL CROSSINGS AND BICYCLE CROSSINGS, WHICH CAN BE 8' .
2. THE STOP BAR SHOULD BE INSTALLED A MINIMUM OF 4' IN ADVANCE OF THE CROSSWALK.

## CURB MARKING

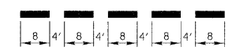



NOTES:
1. PAINT CURB AND NOSE SOLID FOR 10' OR RADIUS OF NOSE, WHICHEVER IS GREATER.
2. PAINT MINIMUM OF 3 STRIPES IN DIRECTION OF TRAFFIC.
3. REDUCED SPACING USED TO OBTAIN 3 STRIPE MINIMUM.
4. STRIPING RECOMMENDED ONLY WHERE OPERATIONAL PROBLEMS DICTATE.
5. PAINT SOLID WHERE A MINIMUM OF 3 STRIPES CANNOT BE PLACED.

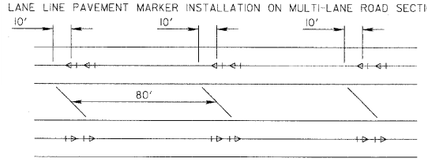
NORMAL SPACING



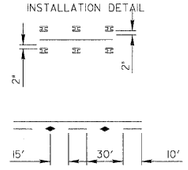

REDUCED SPACING




LANE LINE PAVEMENT MARKER INSTALLATION ON MULTI-LANE ROAD SECTION



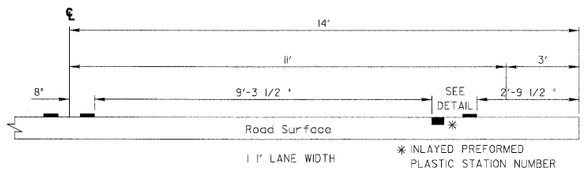

CENTER LINE PAVEMENT MARKER INSTALLATION DETAIL




| PAVEMENT MARKING GUIDELINES | | | | |
|---|---|---|---|---|
| TYPE OF MARKING | WIDTH OF LINE | PATTERN | COLOR | SPACING / REMARKS |
| CENTERLINE OF 2 LANE PAVEMENT | 4 IN. | SKIP-DASH | YELLOW | 10 FT. LINE WITH 30 FT. SPACE |
| NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS | 4 IN. 2 @ 4 IN. | SOLID SOLID | YELLOW YELLOW | 5 1/2 IN. C-C FROM SKIP-DASH CENTERLINE 11 IN. C-C (OMIT SKIP-DASH CENTERLINE BETWEEN) |
| CENTERLINE ON MULTI-LANE UNDIVIDED | 2 @ 4 IN. | SOLID | YELLOW | 11 IN. C-C |
| LANE LINES | 4 IN. | SKIP-DASH | WHITE | 10 FT. LINE WITH 30 FT. SPACE |
| DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS) | SAME AS LINE BEING EXTENDED | SKIP-DASH | SAME AS LINE BEING EXTENDED | 2 FT. LINE WITH 6 FT. SPACE |
| EDGE LINES | 5 IN. WHITE 4 IN. YELLOW | SOLID | WHITE - RIGHT YELLOW - LEFT | OUTLINE RAISED MEDIANS IN YELLOW |
| TURN LANE MARKINGS | 6 IN. LINE FULL SIZE LETTERS AND SYMBOLS (8 FT.) | SOLID | WHITE | TURN ARROW 15.6 SQ. FT. STRAIGHT ARROW 11.5 SQ. FT. ONLY 20.8 SQ. FT. COMB. ARROW 26.0 SQ. FT. |
| TWO WAY LEFT TURN MARKING | 2 @ 4 IN. EACH DIRECTION<br>8 FT. LEFT ARROW | SKIP-DASH AND SOLID<br>IN PAIRS | YELLOW<br>WHITE | 10 FT. LINE WITH 30 FT. SPACE FOR SKIP-DASH 5 1/2 IN. C-C BETWEEN SKIP-DASH LINE AND SOLID LINE<br>SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL |
| CROSSWALK | 12 IN. @ 90° | SOLID | WHITE | 12 IN. LONGITUDINAL BAR WITH 24 IN. SPACE 6 FT. TO 12 FT. WIDE SEE TYPICAL CROSSWALK MARKING DETAIL |
| STOP BARS | 24 IN. | SOLID | WHITE | PLACE 4 FT. IN ADVANCE OF AND PARALLEL TO CROSSWALK. IF PRESENT, OTHERWISE PLACE AT DESIRED STOPPING POINT. |
| PAINTED MEDIANS | 2 @ 4 IN. WITH 11 IN. DIAGONALS @ 45° NO DIAGONALS USED FOR 4 FT. WIDE MEDIAN | SOLID | YELLOW - 2-WAY TRAFFIC WHITE - 1-WAY TRAFFIC | 11 IN. C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING DETAIL MINIMUM OF 5 DIAGONALS |
| GORE MARKING AND CHANNELIZING LINES | 8 IN. WITH 12 IN. DIAGONALS @ 45° | SOLID | WHITE | DIAGONALS 15 FT. C-C (LESS THAN 30 M.P.H.) 20 FT. C-C (30 TO 45 M.P.H.) 30 FT. C-C (OVER 45 M.P.H.) MINIMUM OF 5 DIAGONALS |
| R.R. CROSSING | 24 IN. TRANSVERSE LINES RR IS 6 FT. LETTER 16 IN. LINE FOR "X" | SOLID | WHITE | SEE I.D.O.T. STD. 780001 SQ. FT. AREA OF: "R" - 35 SQ. FT. / "R" "X" - 54.0 SQ. FT. |
| SHOULDER DIAGONALS | 12 IN. @ 45° | SOLID | WHITE - RIGHT YELLOW - LEFT | 50 FT. C-C (LESS THAN 30 M.P.H.) 75 FT. C-C (30 TO 45 M.P.H.) 150 FT. C-C (OVER 45 M.P.H.) MINIMUM OF 5 DIAGONALS |

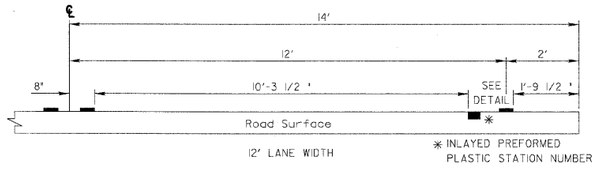
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO PART III "MARKINGS" IN THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES". THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AND I.D.O.T. HIGHWAY STANDARD 780001 EFFECTIVE JAN. 9, 1998.

## PAVEMENT CROSS SECTION SHOWING TYPICAL PAVEMENT MARKINGS ( 2-LANE ROADWAY )



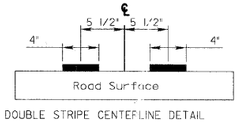

11' LANE WIDTH

✳ INLAYED PREFORMED PLASTIC STATION NUMBER

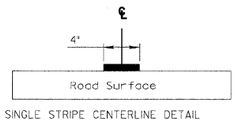



12' LANE WIDTH

✳ INLAYED PREFORMED PLASTIC STATION NUMBER

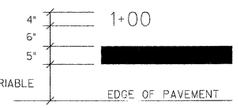



DOUBLE STRIPE CENTERLINE DETAIL




SINGLE STRIPE CENTERLINE DETAIL

STATIONING DETAIL




Note:
Centerline markings are 4" lines at 11" centers.

| REVISIONS | DATE |
|---|---|
| | |

LakeCounty Division of Transportation

APPROVED BY: A. KHAWAJA
DATE: APRIL 1, 2007

TYPICAL PAVEMENT MARKINGS FOR COUNTY HIGHWAYS
SHEET 2 OF 3

LC7800

| REVISIONS / REMARKS | | | | | |
|---|---|---|---|---|---|
| NO. | DESCRIPTION | DATE | BY | SURVEYOR: | ---/--- |
| --- | ---------- | --/--/-- | --- | DSGNR/LIAISON: | --- |
| --- | ---------- | --/--/-- | --- | PLOTTED BY: | $USRN$ $$DAT$$$$ |

LakeCounty Division of Transportation

LAKE COUNTY STANDARDS & DETAILS

| ROUTE | SECTION | SECTION NUMBER | SHEET | SHEETS |
|---|---|---|---|---|
| CHXX | XXX | 00-00047-00-FP | 179 | 180 |

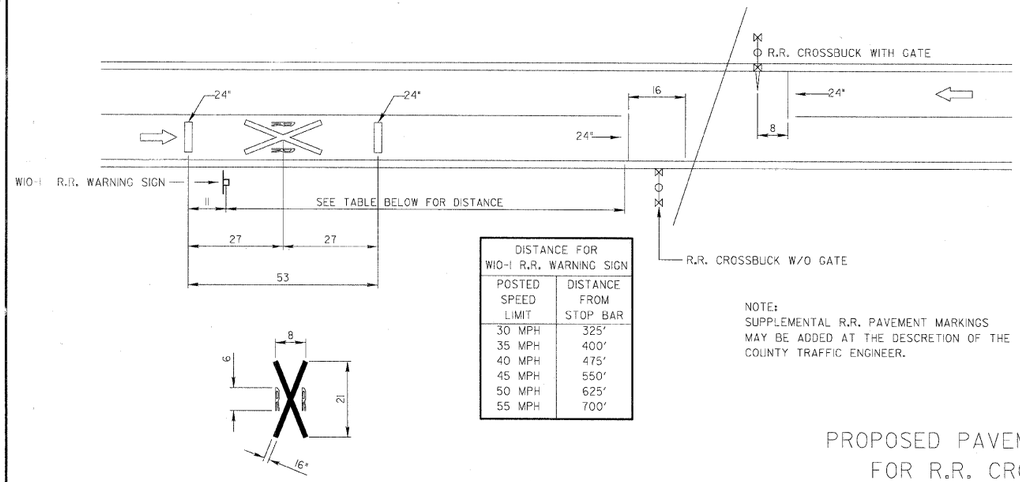
| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV.-5 PRE-FINAL SUB | 02-20-09 | | |
| REV.-2 PLANS STAGED | 06-02-06 | | |
| REV.-1 IDOT COMMENTS | 02-03-06 | PS&E SUBMITTAL | 4-10-09 |

CONTRACT NO. 83845

3081-717-TRT.dwg

# TYPICAL RAIL ROAD RELATED PAVEMENT MARKINGS

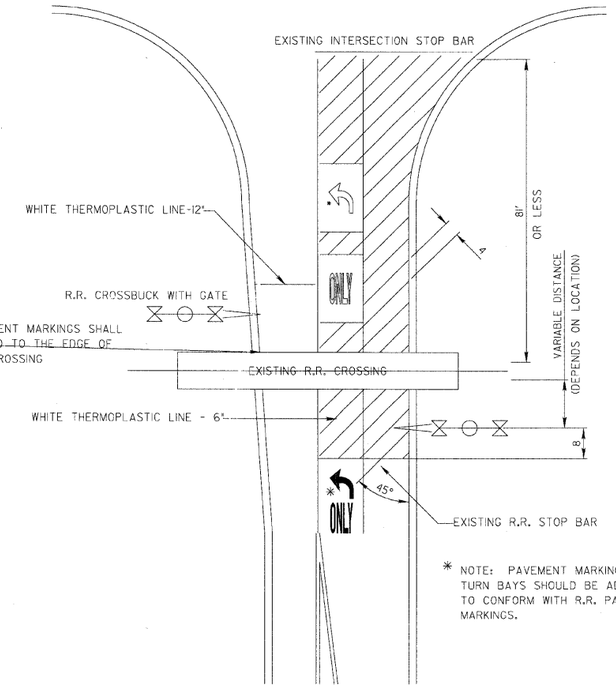
## TYPICAL PLACEMENT OF R.R. WARNING SIGNS AND PAVEMENT MARKINGS ON COUNTY HIGHWAYS




| DISTANCE FOR W10-1 R.R. WARNING SIGN | |
|---|---|
| POSTED SPEED LIMIT | DISTANCE FROM STOP BAR |
| 30 MPH | 325' |
| 35 MPH | 400' |
| 40 MPH | 475' |
| 45 MPH | 550' |
| 50 MPH | 625' |
| 55 MPH | 700' |

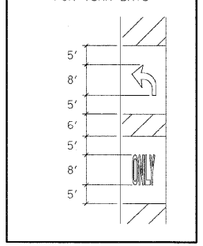
NOTE:
SUPPLEMENTAL R.R. PAVEMENT MARKINGS MAY BE ADDED AT THE DESCRETION OF THE COUNTY TRAFFIC ENGINEER.

## PROPOSED PAVEMENT MARKINGS FOR R.R. CROSSINGS AT SIGNALIZED INTERSECTIONS 81 FEET OR LESS

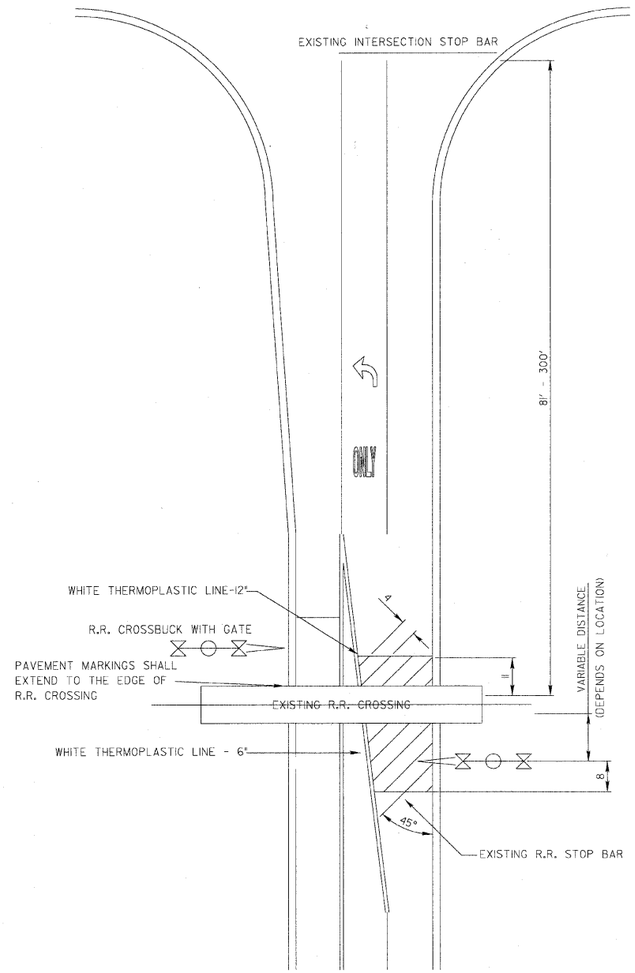



* NOTE: PAVEMENT MARKINGS FOR TURN BAYS SHOULD BE ADJUSTED TO CONFORM WITH R.R. PAVEMENT MARKINGS.

### TYPICAL DIAGONAL SPACING FOR TURN BAYS




## PROPOSED PAVEMENT MARKINGS FOR R.R. CROSSINGS AT SIGNALIZED INTERSECTIONS 81 FEET - 300 FEET




| REVISIONS | DATE |
|---|---|
| | |

LakeCounty Division of Transportation

APPROVED BY: A. KHAWAJA
DATE: APRIL 1, 2007

TYPICAL PAVEMENT MARKINGS FOR RAILROAD CROSSINGS ON COUNTY HIGHWAYS
SHEET 3 OF 3

LC0780

| REVISIONS / REMARKS | | | | | |
|---|---|---|---|---|---|
| NO. | DESCRIPTION | DATE | BY | SURVEYOR: | ---/--- |
| --- | ---------- | --/--/-- | --- | DSGNR/LIAISON: | |
| --- | ---------- | --/--/-- | --- | PLOTTED BY: | $USRN$ $$DAT$$$$ |

LakeCounty Division of Transportation

LAKE COUNTY STANDARDS & DETAILS

| ROUTE | SECTION | SECTION NUMBER | SHEET | SHEETS |
|---|---|---|---|---|
| CHXX | XXX | 00-00047-00-FP | 180 | 180 |

| REVISION | DATE | REVISION | DATE |
|---|---|---|---|
| REV.-5 PRE-FINAL SUB. | 02-20-09 | | |
| REV.-2 PLANS STAGED | 06-02-08 | | |
| REV.-1 IDOT COMMENTS | 02-03-08 | PS&E SUBMITTAL | 4-10-09 |

CONTRACT NO. 83845

3081-PW-TYP.dwg