PROJECT	DESIGNATION	DESCRIPTION
0600196	0600196	ROAD
CONTRACT		
R-32103		

INDIANA
DEPARTMENT OF TRANSPORTATION

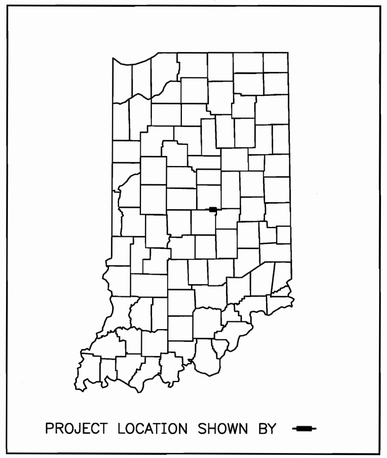
ROAD PLANS

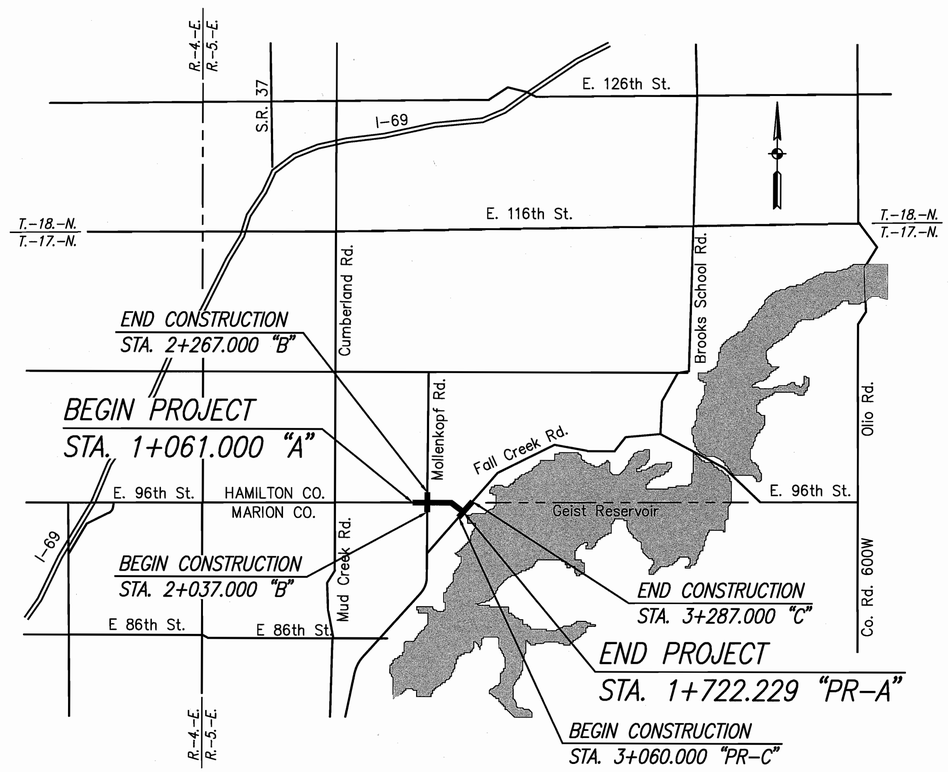
PROJECT No. 0600196

East 96th Street from just West of Mollenkopf Road to Fall Creek Road. Section 8 and 9 of Township 17 North Range 5 East of Hamilton County, and Section 16 and 17 of Township 17 North Range 5 East of Marion County
Lat. 39°55'38" North Long. 85°58'42" West

GROSS LENGTH = 0.666 km
NET LENGTH = 0.666 km
MAX. GRADE = -3.02 %

TRAFFIC DATA	96TH STREET	MOLLENKOPF ROAD	FALL CREEK ROAD
A.A.D.T. (2009)	19,539 V.P.D.	4,326 V.P.D.	15,783 V.P.D.
A.A.D.T. (2029)	42,814 V.P.D.	5,279 V.P.D.	23,454 V.P.D.
D.H.V. (2029)	4282 V.P.H.	528 V.P.H.	2,346 V.P.H.
Directional Distribution	50%	50%	50%
Trucks	3.0% D.H.V.	2.5% D.H.V.	2.0% D.H.V.
	3.0% A.A.D.T.	2.5% A.A.D.T.	2.0% A.A.D.T.
DESIGN DATA			
Design Speed	60 kph (40 mph)	60 kph (40 mph)	60 kph (40 mph)
Project Design Criteria	3R (Non-Freeway)	3R (Non-Freeway)	3R (Non-Freeway)
INDOT Functional Classification	Major Collector	Local Road	Major Collector
Local Functional Classification	Primary Arterial	Collector	Primary Arterial
Rural/Urban	Urban (Suburban)	Urban (Suburban)	Urban (Suburban)
Terrain	Level	Level	Level
Access Control	None	None	None





BOARD OF COMMISSIONERS
HAMILTON COUNTY

APPROVED
Steven A. Holt — Date: 4-13-09
Steven A. Holt

Steven C. Dillinger
Steven C. Dillinger

Christine Altman
Christine Altman

ATTEST
Dawn Coverdale — Date: 4-13-09
Dawn Coverdale, County Auditor

[INDIANA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS DATED 2008 TO BE USED WITH THESE PLANS]

UNITED Consulting
1625 N. Post Road
Indianapolis, IN 46219
Phone 317-895-2585
Fax 317-895-2596
www.ucindy.com

PLANS PREPARED BY: UNITED CONSULTING (317) 895-2585 PHONE NUMBER
CERTIFIED BY: Christopher R. Pope 04/13/2009 DATE
APPROVED FOR LETTING: CHIEF, DIVISION OF DESIGN DATE

CHRISTOPHER R. POPE REGISTERED No. 19700026 STATE OF INDIANA PROFESSIONAL ENGINEER

CONTRACT	PROJECT
R-32103	0600196

DESIGNATION 0600196
SHEETS 1 of 68

UTILITIES

GAS: VECTREN ENERGY
16000 ALLISONVILLE ROAD
NOBLESVILLE, INDIANA 46060

CITIZENS GAS
RICHARD MILLER
2150 DR. MARTIN LUTHER KING JR. ST.
INDIANAPOLIS, INDIANA 46202
PHONE: 317-927-4684

ELECTRIC: INDIANAPOLIS POWER AND LIGHT CO.
RHONDA WILLIAMS
1230 W. MORRIS ST.
INDIANAPOLIS, IN 46221
PHONE: 317-261-5203

DUKE ENERGY
JIM SHIELDS
1619 W. DEFFENBAUGH ST.
KOKOMO, IN 46902
PHONE; 812-375-2071

TELEPHONE: AT&T
ROBERT REYNOLDS
5858 N. COLLEGE AVE.
INDIANAPOLIS, INDIANA 46220
PHONE: 317-252-4148

WATER: VEOLIA WATER INDIANAPOLIS, LLC
CHRIS BRUMFIELD
1220 WATERWAY BLVD.
INDIANAPOLIS, IN 46202
PHONE: 317-263-6382

CABLE TV: COMCAST CABLEVISION
JIM PATON
5330 E. 65TH STREET
INDIANAPOLIS, IN 46220
PHONE: 317-275-6356

REVISIONS

SHEET NO.	DATE	REVISION

R/W INDEX

SHEET NO.	REVISION

GENERAL NOTES

**	All Earth Shoulders, Median Areas, Cut and Fill slopes shall be plain or mulched seeded except where Sodding is specified.
**	The final Cross Sections of the grading contract shall be the original cross sections of the paving contract. However, partial or complete cross sections shall be taken if necessary to determine the actual excavation quantities.
**	The paper relocation is to be cross sectioned by the Engineer before construction.

** REPRESENTS GENERAL NOTES REQUIRED

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	INFORMATION SHEET
3-4	TYPICAL CROSS SECTIONS
5-13	MAINTENANCE OF TRAFFIC
14-17	PLAN & PROFILE
18-25	CONSTRUCTION DETAILS
26	ROUNDABOUT GEOMETRICS
27	ROUNDABOUT SPOT ELEVATION DETAILS
28	MOLLENKOPF SPOT ELEVATION DETAILS
29	RETAINING WALL LAYOUT
30	RETAINING WALL DETAILS
31	SIGNAL DETAILS
32	LIGHTING DETAILS
33-34	SIGNING AND PAVEMENT MARKING DETAILS
35	SHEET SIGN AND POST SUMMARY TABLE
36	APPROACH TABLE
37-40	UNDERDRAIN TABLE
41	MISCELLANEOUS TABLES
42-43	STRUCTURE DATA TABLES
44	PIPE MATERIAL TABLE
45-68	CROSS SECTIONS

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www.ucindy.com

JEROMY A. RICHARDSON REGISTERED No. 10300110 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Jeromy A. Richardson 4-13-09
DESIGN ENGINEER DATE

DESIGNED: HEK DRAWN: JNII
CHECKED: JAR CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

INDEX & GENERAL NOTES

HORIZONTAL SCALE	BRIDGE FILE
AS SHOWN	
VERTICAL SCALE	DESIGNATION
AS SHOWN	0600196
SURVEY BOOK	SHEETS
	2 of 68
CONTRACT	PROJECT
R-32103	0600196

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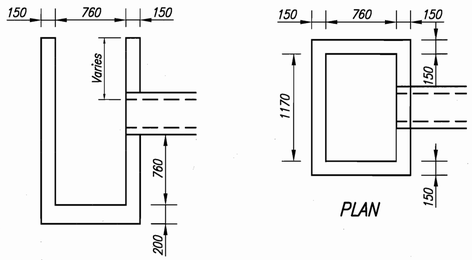

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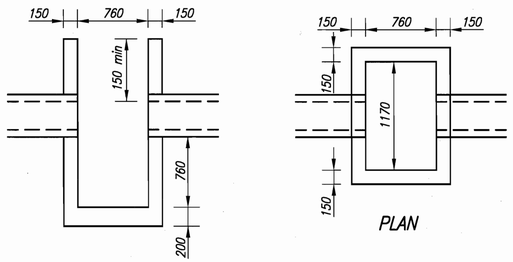

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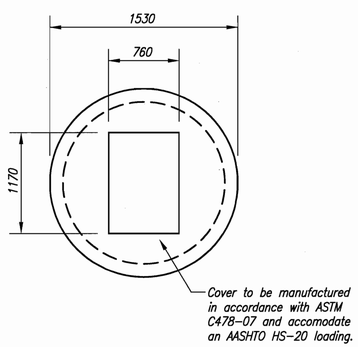

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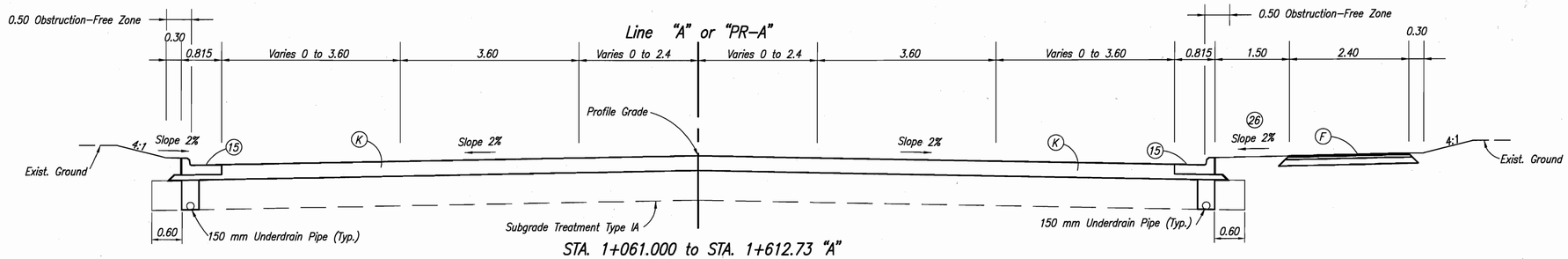
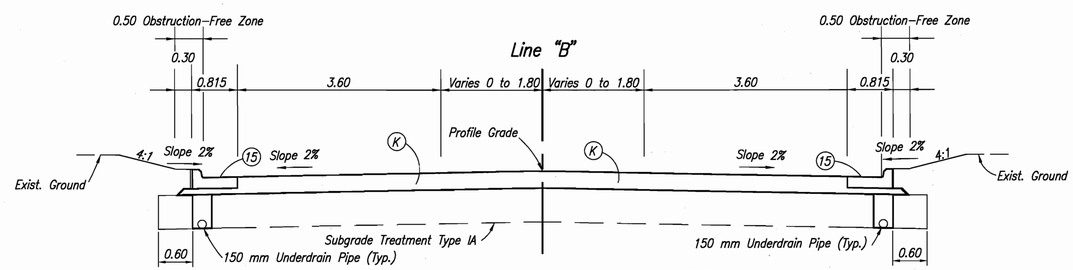
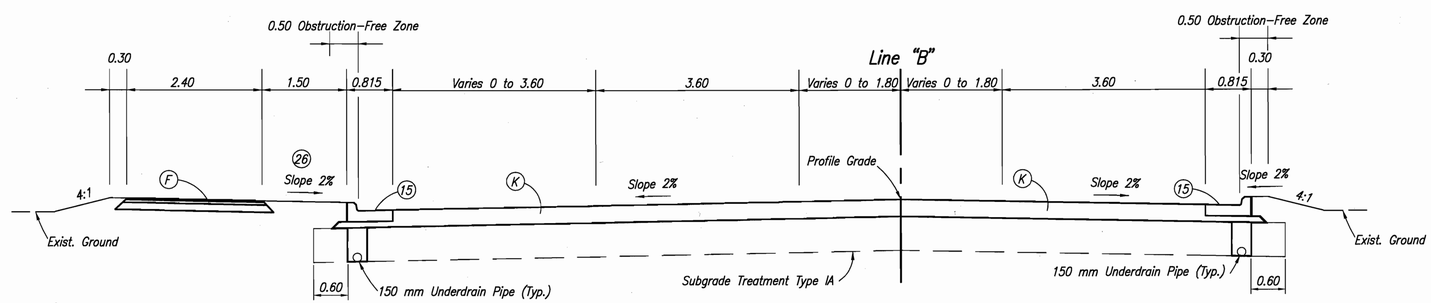


STA. 1+061.000 to STA. 1+612.73 "A"
STA. 1+612.730 to STA. 1+655.740 "PR-A"



STA. 2+037.000 to STA. 2+140.400 "B"



STA. 2+159.600 to STA. 2+267.000 "B"

LEGEND

(F) HMA Multi-Use Path
- 90 kg/m² HMA Surface, Type A on
- 150 kg/m² HMA Intermediate, Type A on
- 100 mm of Compacted Aggregate, No. 53, Base

(K) Full Depth QC/QA HMA Pavement
- 90 kg/m² QC/QA-HMA, 2, 70, Surface, 9.5 mm on
- 150 kg/m² QC/QA-HMA, 2, 70, Intermediate, 19.0 mm on
- 240 kg/m² QC/QA-HMA, 2, 64, Base, 25.0 mm on
- 165 kg/m² QC/QA-HMA, 5, 76, Intermediate, OG 19.0 mm on
- 180 kg/m² QC/QA-HMA, 2, 64, Base, 19.0 mm on
- Subgrade Treatment, Type IA

(M) Surface Milling, Asphalt

(R) QC/QA HMA Overlay
- 90 kg/m² QC/QA-HMA, 2, 70, Surface, 9.5 mm

(W) Widening with HMA, Type C
- 90 kg/m² HMA Surface, Type C on
- 150 kg/m² Intermediate, Type C on
- 600 kg/m² Base, Type C on
- Subgrade Treatment, Type IA

(13) Curb, Concrete

(14) Curb, Concrete, B

(15) Curb and Gutter, C, Concrete

(26) Sodding

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RECOMMENDED FOR APPROVAL Jeromy A. Richardson 4-13-09
DESIGN ENGINEER DATE

DESIGNED: HEK DRAWN: JNII
CHECKED: JAR CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

TYPICAL CROSS SECTIONS

HORIZONTAL SCALE	BRIDGE FILE
AS SHOWN	
VERTICAL SCALE	DESIGNATION
AS SHOWN	0600196
SURVEY BOOK	SHEETS
	3 of 68
CONTRACT	PROJECT
R-32103	0600196

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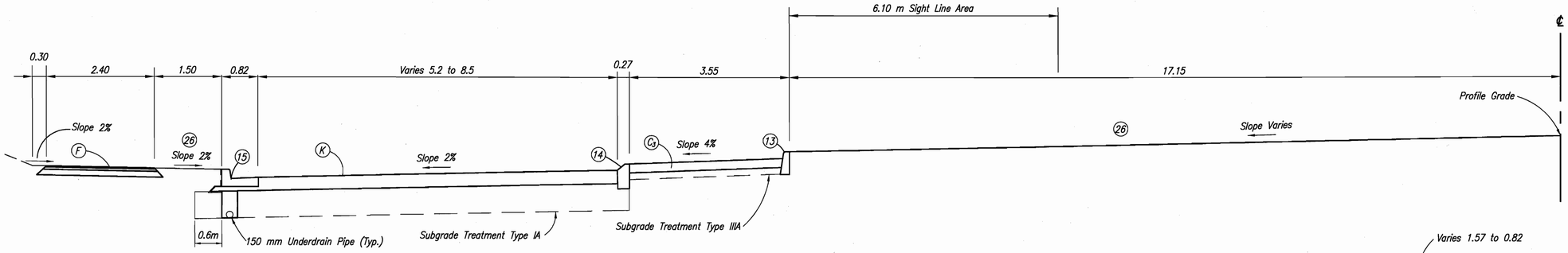
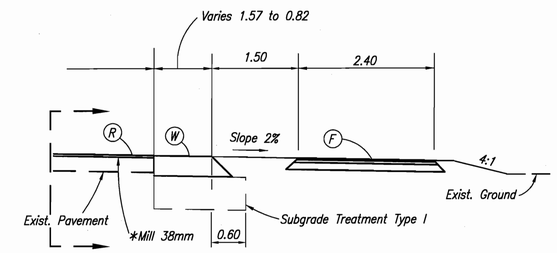
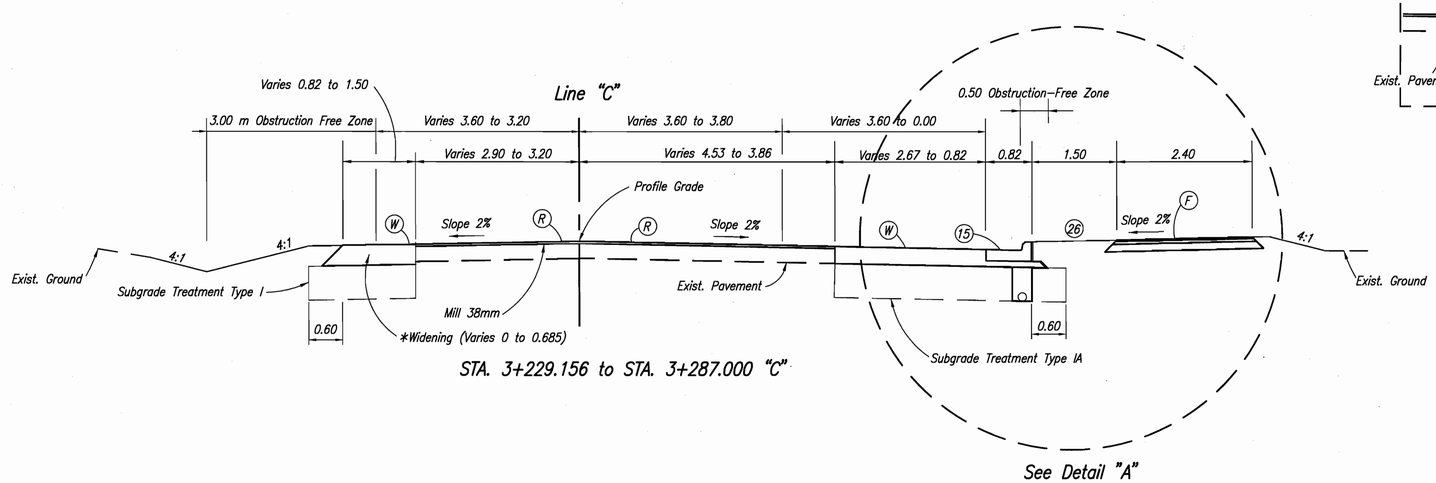


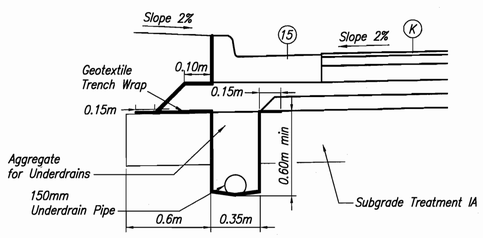
ROUNDABOUT TYPICAL



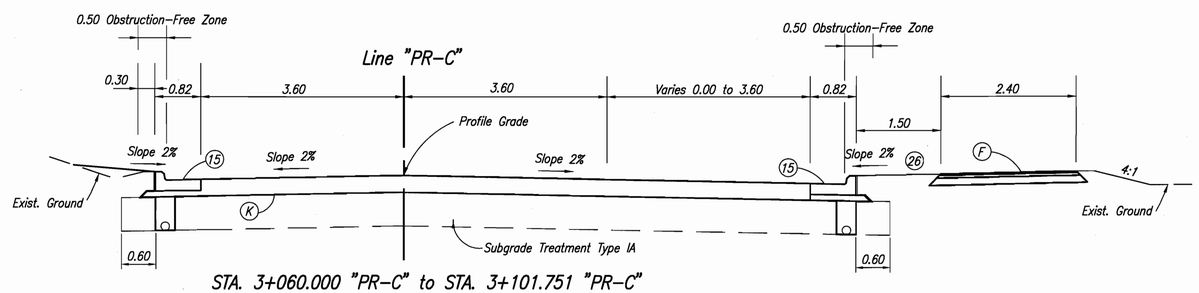
STA. 3+264.000 to STA. 3+287.000 "C"
Detail "A"



STA. 3+229.156 to STA. 3+287.000 "C"



UNDERDRAIN DETAIL
Scale: None



STA. 3+060.000 "PR-C" to STA. 3+101.751 "PR-C"
STA. 3+217.859 "PR-C" to STA. 3+229.156 "C"

LEGEND

(F) HMA Multi-Use Path
- 90 kg/m² HMA Surface, Type A on
- 150 kg/m² HMA Intermediate, Type A on
- 100 mm of Compacted Aggregate, No. 53, Base

(K) Full Depth QC/QA HMA Pavement
- 90 kg/m² QC/QA-HMA, 2, 70, Surface, 9.5 mm on
- 150 kg/m² QC/QA-HMA, 2, 70, Intermediate, 19.0 mm on
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- 165 kg/m² QC/QA-HMA, 5, 76, Intermediate, OG 19.0 mm on
- 180 kg/m² QC/QA-HMA, 2, 64, Base, 19.0 mm on
- Subgrade Treatment, Type IA

(M) Surface Milling, Asphalt

(R) QC/QA HMA Overlay
- 90 kg/m² QC/QA-HMA, 2, 70, Surface, 9.5 mm

(W) Widening with HMA, Type C
- 90 kg/m² HMA Surface, Type C on
- 150 kg/m² Intermediate, Type C on
- 600 kg/m² Base, Type C on
- Subgrade Treatment, Type IA

(13) Curb, Concrete

(14) Curb, Concrete, B

(15) Curb and Gutter, C, Concrete

(26) Sodding

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RECOMMENDED FOR APPROVAL Jeromy A. Richardson 4-13-09
DESIGN ENGINEER DATE

DESIGNED: HEK DRAWN: JNII
CHECKED: JAR CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

TYPICAL CROSS SECTIONS

HORIZONTAL SCALE	BRIDGE FILE
AS SHOWN	
VERTICAL SCALE	DESIGNATION
AS SHOWN	0600196
SURVEY BOOK	SHEETS
	4 of 68
CONTRACT	PROJECT
R-32103	0600196

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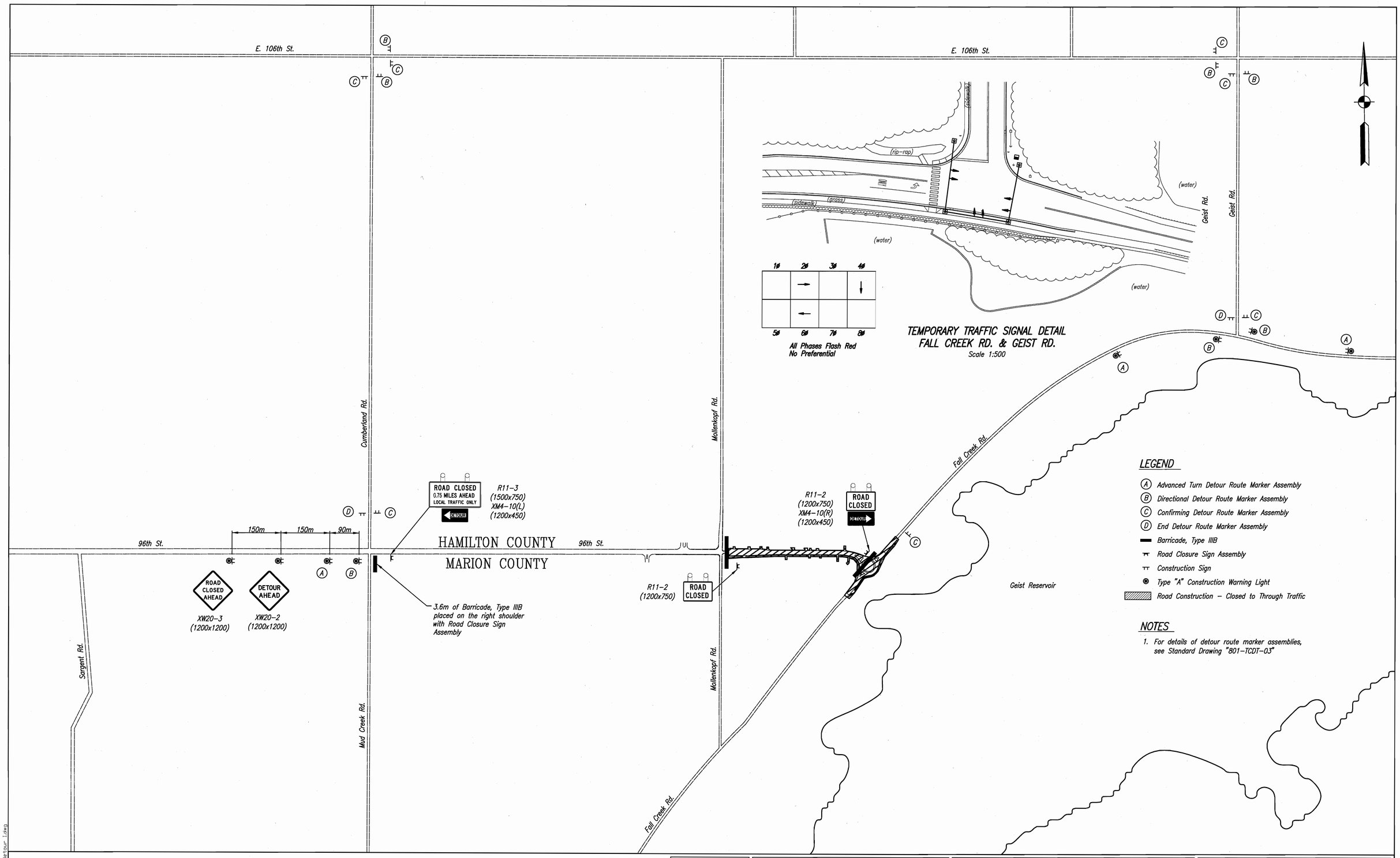

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JEROMY A. RICHARDSON REGISTERED No. 10300110 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Jeromy A. Richardson 4-13-09
DESIGN ENGINEER DATE

DESIGNED: WRC DRAWN: JNII
CHECKED: JAR CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC DETOUR ROUTE – PHASE I

HORIZONTAL SCALE	BRIDGE FILE
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VERTICAL SCALE	DESIGNATION
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SURVEY BOOK	SHEETS
	5 of 68
CONTRACT	PROJECT
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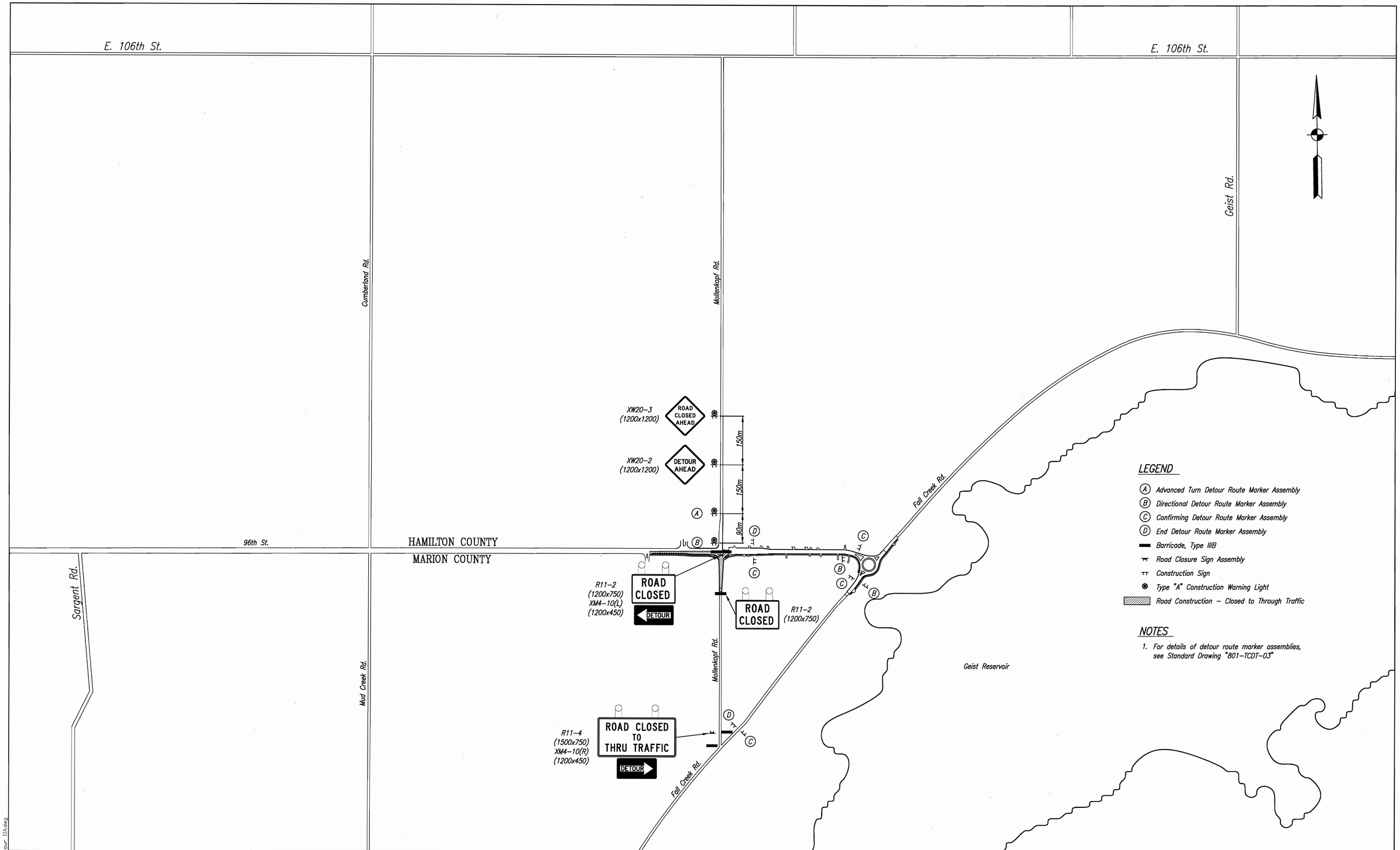

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JEROME A. RICHARDSON REGISTERED No. 10300110 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Jerome A. Richardson 4-13-09
DESIGN ENGINEER DATE

DESIGNED: WRC DRAWN: JNII
CHECKED: JAR CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC DETOUR ROUTE – PHASE IIA

HORIZONTAL SCALE	BRIDGE FILE
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VERTICAL SCALE	DESIGNATION
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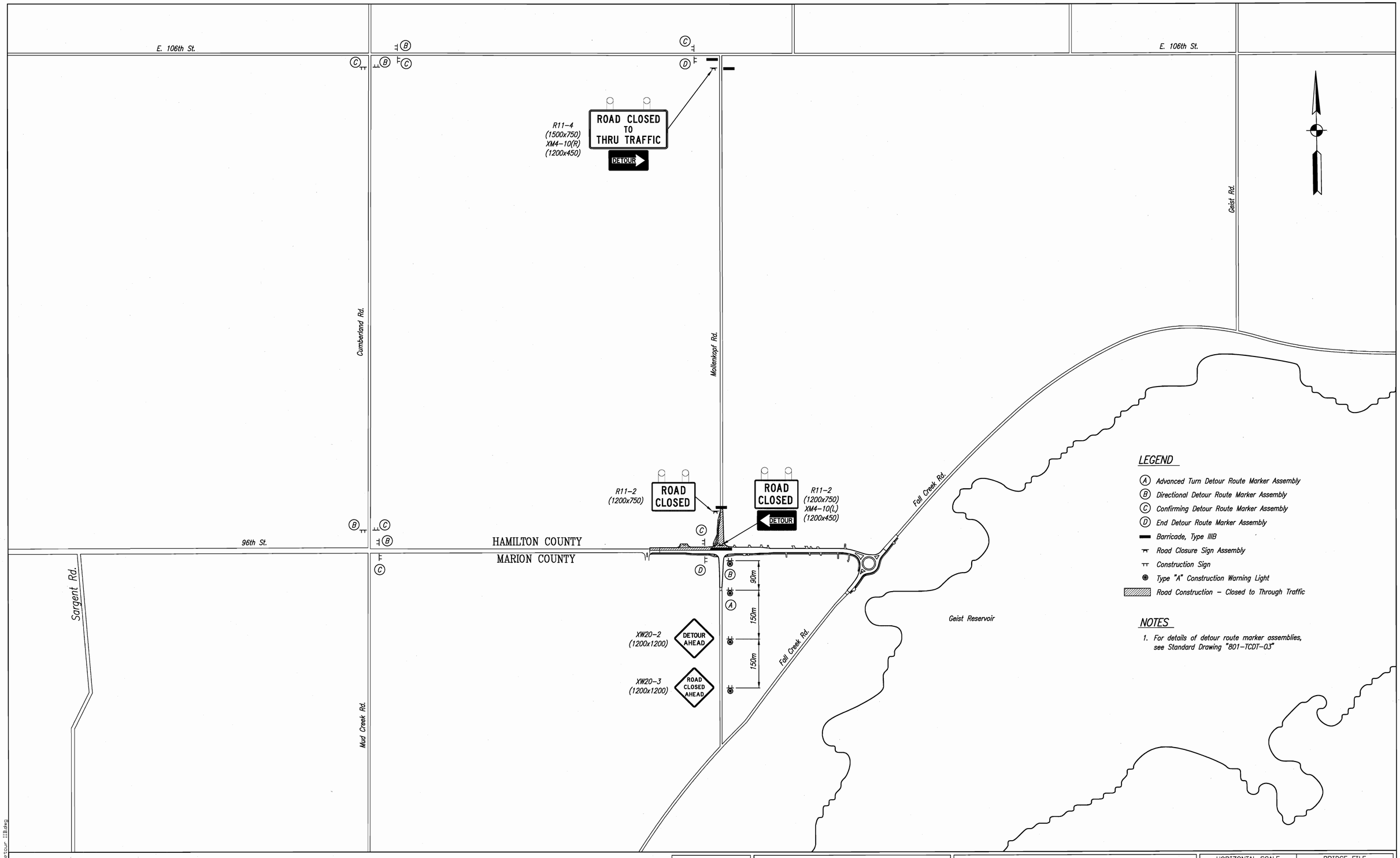
SURVEY BOOK	SHEETS
	6 of 68
CONTRACT	PROJECT
R-32103	0600196



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JEROMY A. RICHARDSON
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No. 10300110
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Jeromy A. Richardson 4-13-09
DESIGN ENGINEER DATE

DESIGNED: WRC DRAWN: JNII
CHECKED: JAR CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC DETOUR ROUTE – PHASE IIB

HORIZONTAL SCALE	BRIDGE FILE
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SURVEY BOOK	SHEETS
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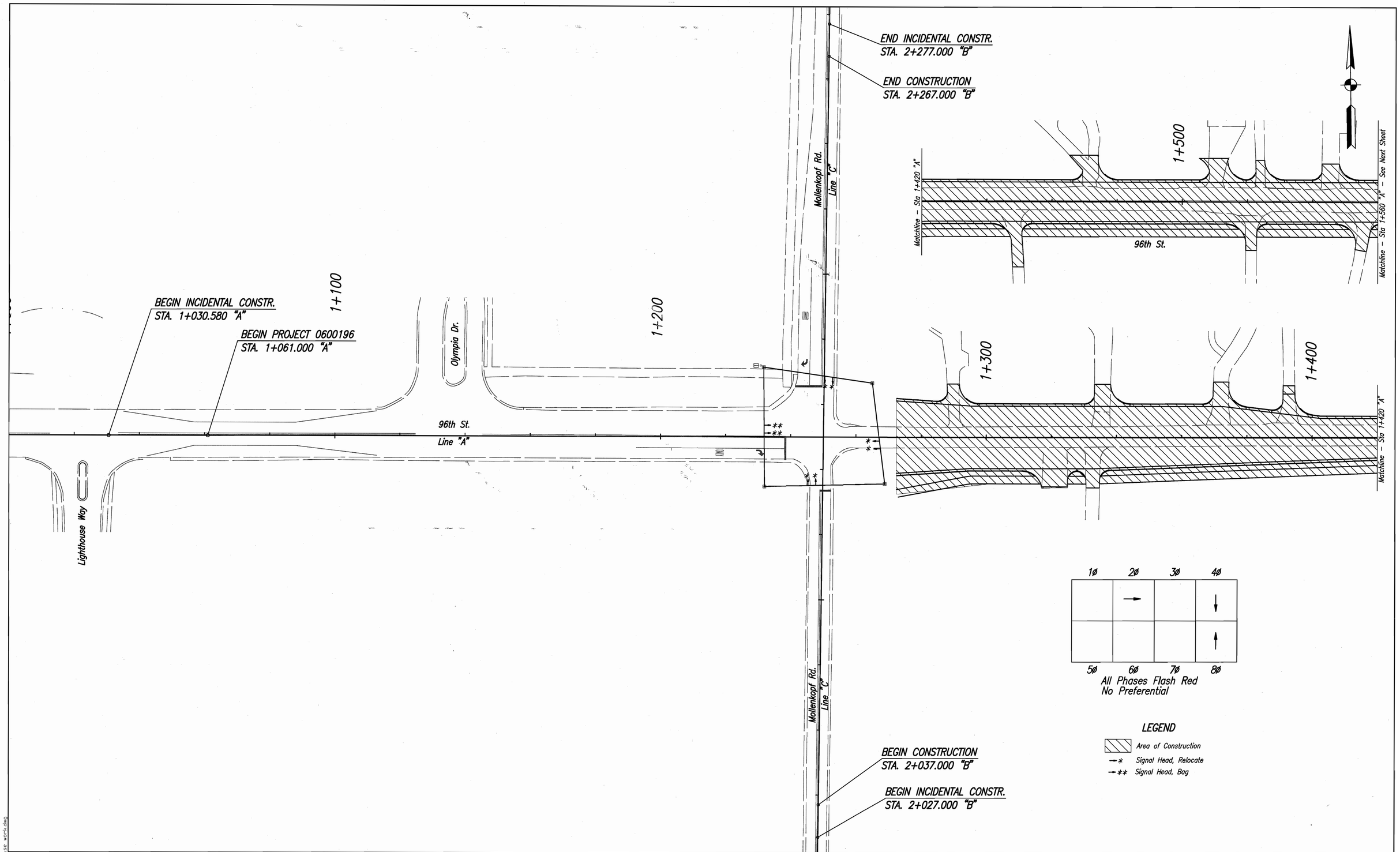
CONTRACT	PROJECT
R-32103	0600196



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JEROMY A. RICHARDSON
REGISTERED
No. 10300110
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Jeromy A. Richardson 4-13-09 DESIGN ENGINEER DATE		INDIANA DEPARTMENT OF TRANSPORTATION
DESIGNED: HEK	DRAWN: JNII	MAINTENANCE OF TRAFFIC PHASE I
CHECKED: JAR	CHECKED: JAR	

HORIZONTAL SCALE	BRIDGE FILE
1:500	
VERTICAL SCALE	DESIGNATION
NONE	0600196
SURVEY BOOK	SHEETS
	8 of 68
CONTRACT	PROJECT
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ADVANCED WARNING SIGN DETAILS FOR LANE SHIFT

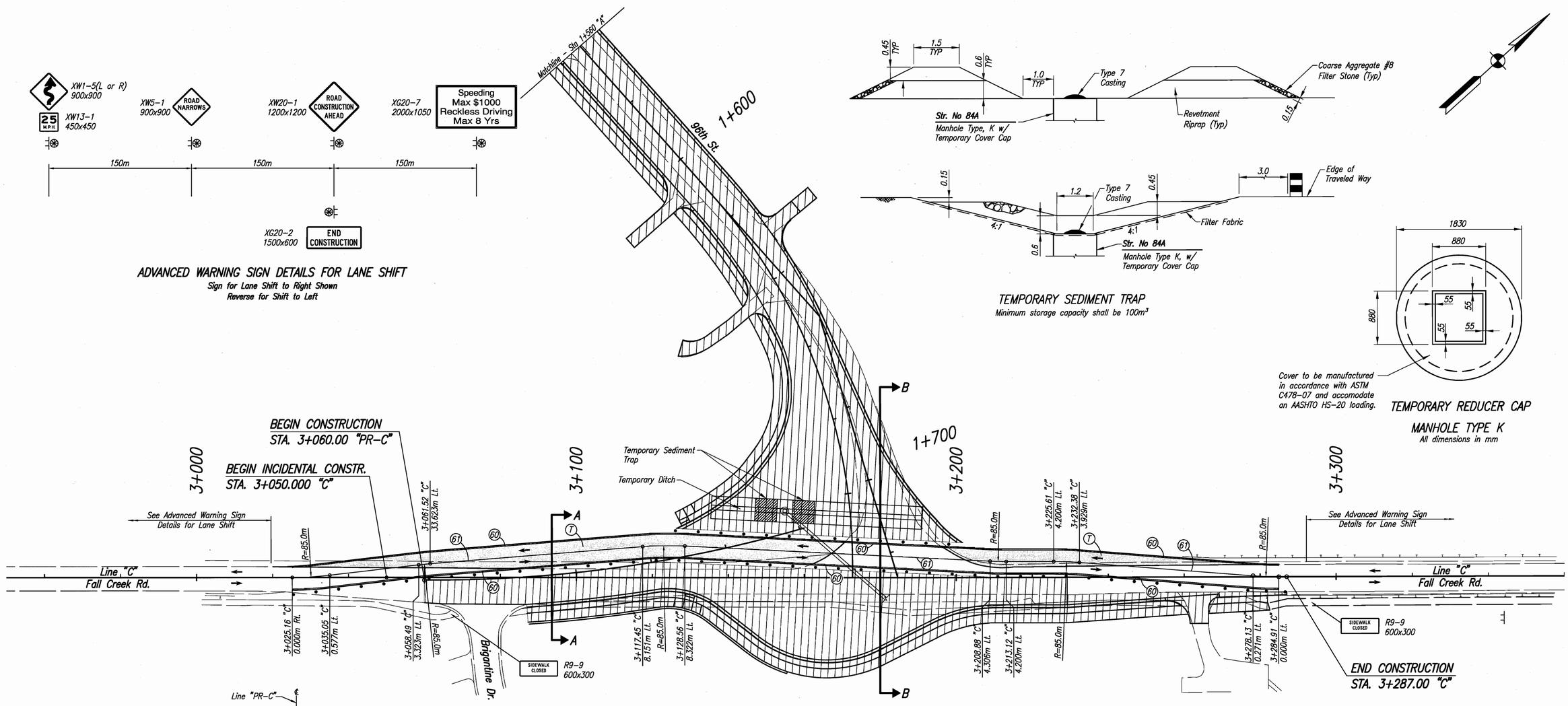
Sign for Lane Shift to Right Shown
Reverse for Shift to Left

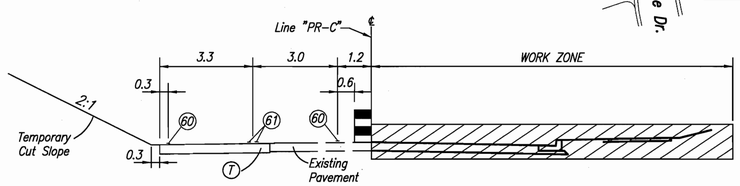
TEMPORARY SEDIMENT TRAP

Minimum storage capacity shall be 100m³

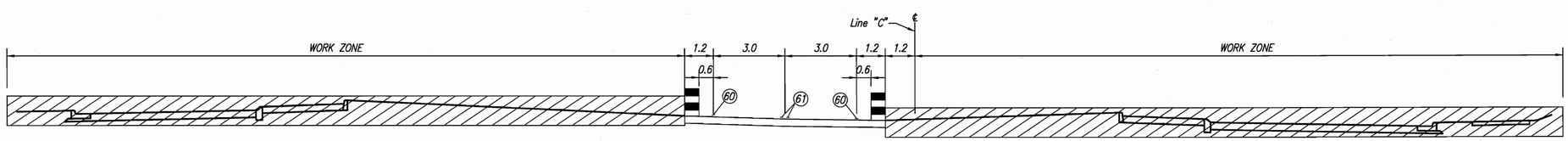
TEMPORARY REDUCER CAP

MANHOLE TYPE K
All dimensions in mm





SECTION A-A



SECTION B-B

NOTES

1. Installation of Str No 84A to Str No 102 shall be installed under flagging.
2. Temporary ditch and sediment traps shall be installed prior to excavation between Sta 1+480 "A" and Sta 1+700 "A"

LEGEND

Maintenance of Traffic Design Speed: 40 km/h

- Area of Construction
- Drum (Not a Pay Item)
- Construction Sign, Type "A"
- (60) Temporary Pavement Marking, 100mm, White
- (61) Temporary Pavement Marking, 100mm, Yellow
- Type III-B, Barricade
- (T) HMA for Temporary Pavement
  - 90 kg/m² HMA Surface, Type C
  - 150 kg/m² HMA Intermediate, Type C
  - 240 kg/m² HMA Base, Type C

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JEROMY A. RICHARDSON REGISTERED No. 10300110 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE 4-13-09

DESIGNED: HEK | DRAWN: JNII
CHECKED: JAR | CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC PHASE IA

HORIZONTAL SCALE	BRIDGE FILE
1:500	
VERTICAL SCALE	DESIGNATION
NONE	0600196
SURVEY BOOK	SHEETS
	9 of 68
CONTRACT	PROJECT
R-32103	0600196

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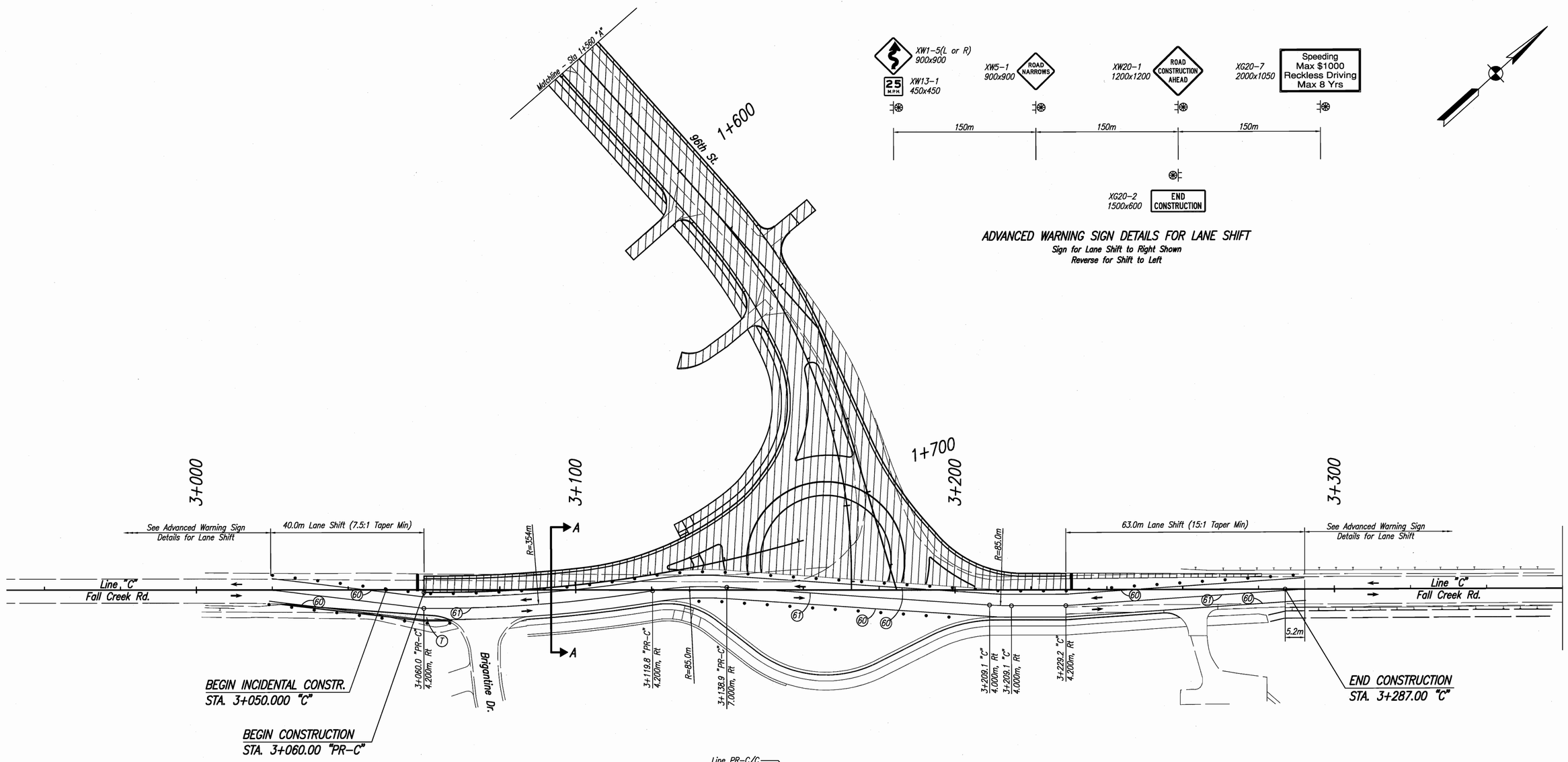

LEGEND

Maintenance of Traffic Design Speed: 40 km/h

- Area of Construction
- Drum (Not a Pay Item)
- Construction Sign, Type "A"
- (60) Temporary Pavement Marking, 100mm, White
- (61) Temporary Pavement Marking, 100mm, Yellow
- Type III-B, Barricade
- (T) HMA for Temporary Pavement
  - 90 kg/m² HMA Surface, Type C
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  - 240 kg/m² HMA Base, Type C

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INDIANA DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC PHASE IB

HORIZONTAL SCALE	BRIDGE FILE
1:500	
VERTICAL SCALE	DESIGNATION
NONE	0600196
SURVEY BOOK	SHEETS
	10 of 68
CONTRACT	PROJECT
R-32103	0600196

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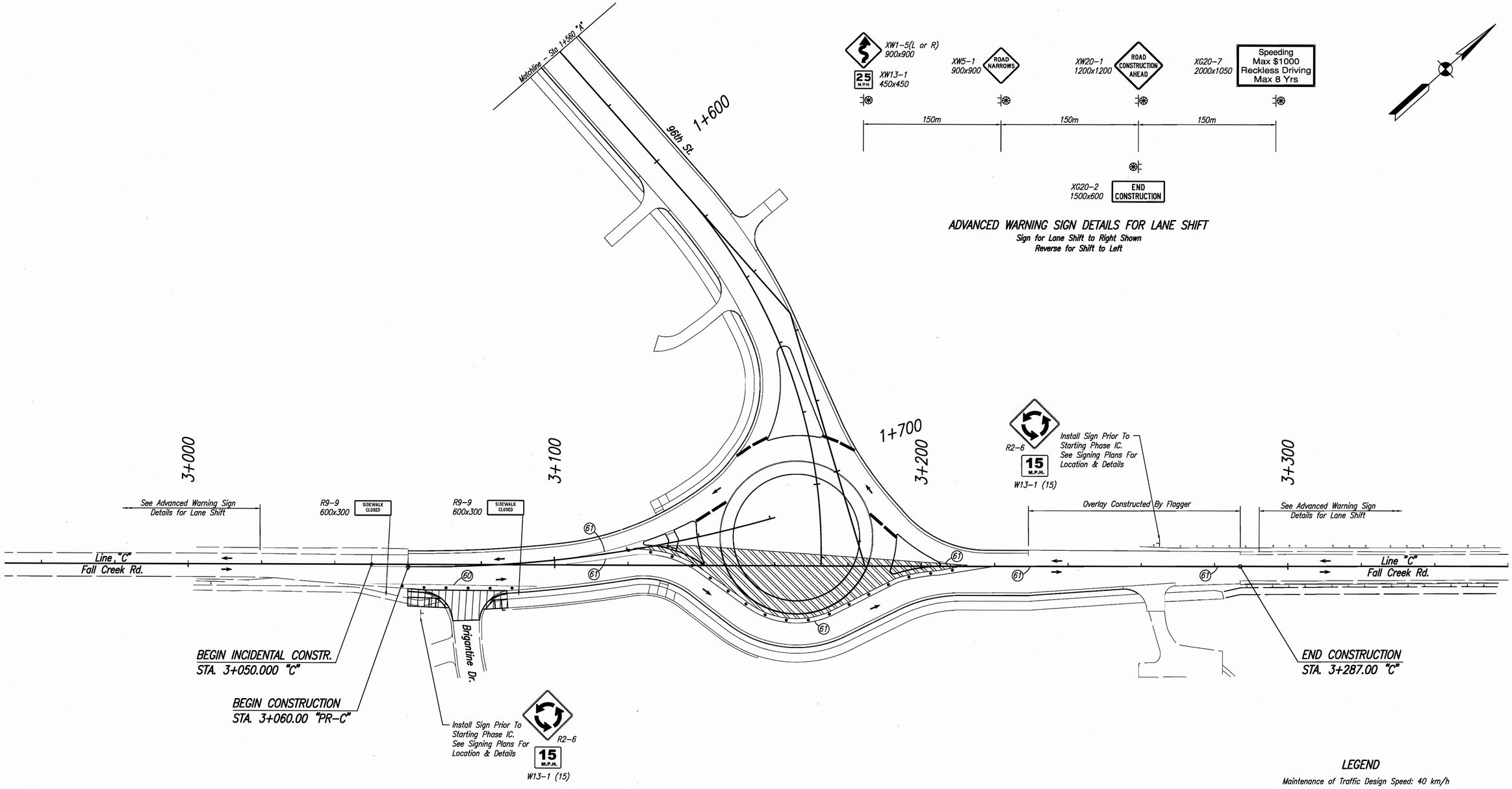

LEGEND

Maintenance of Traffic Design Speed: 40 km/h

- Area of Construction
- Drum (Not a Pay Item)
- Construction Sign, Type "A"
- (60) Temporary Pavement Marking, 100mm, White
- (61) Temporary Pavement Marking, 100mm, Yellow
- Type III-B, Barricade
- (T) HMA for Temporary Pavement
  - 90 kg/m² HMA Surface, Type C
  - 150 kg/m² HMA Intermediate, Type C
  - 240 kg/m² HMA Base, Type C

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JEROME A. RICHARDSON REGISTERED No. 10300110 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Jerome A. Richardson 4-13-09
DESIGN ENGINEER DATE

DESIGNED: HEK DRAWN: JNII
CHECKED: JAR CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC PHASE IC

HORIZONTAL SCALE	BRIDGE FILE
1:500	
VERTICAL SCALE	DESIGNATION
NONE	0600196
SURVEY BOOK	SHEETS
	11 of 68
CONTRACT	PROJECT
R-32103	0600196

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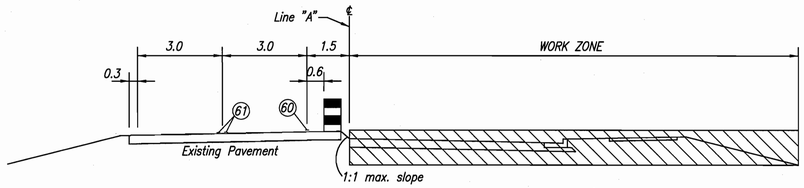
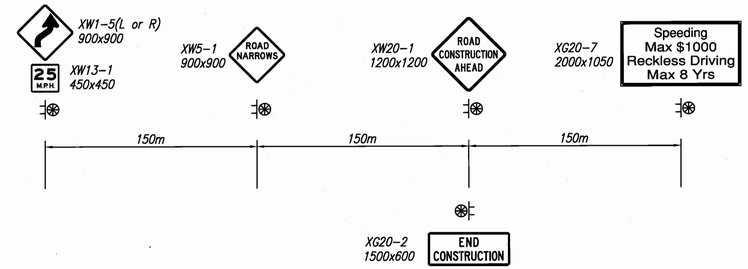
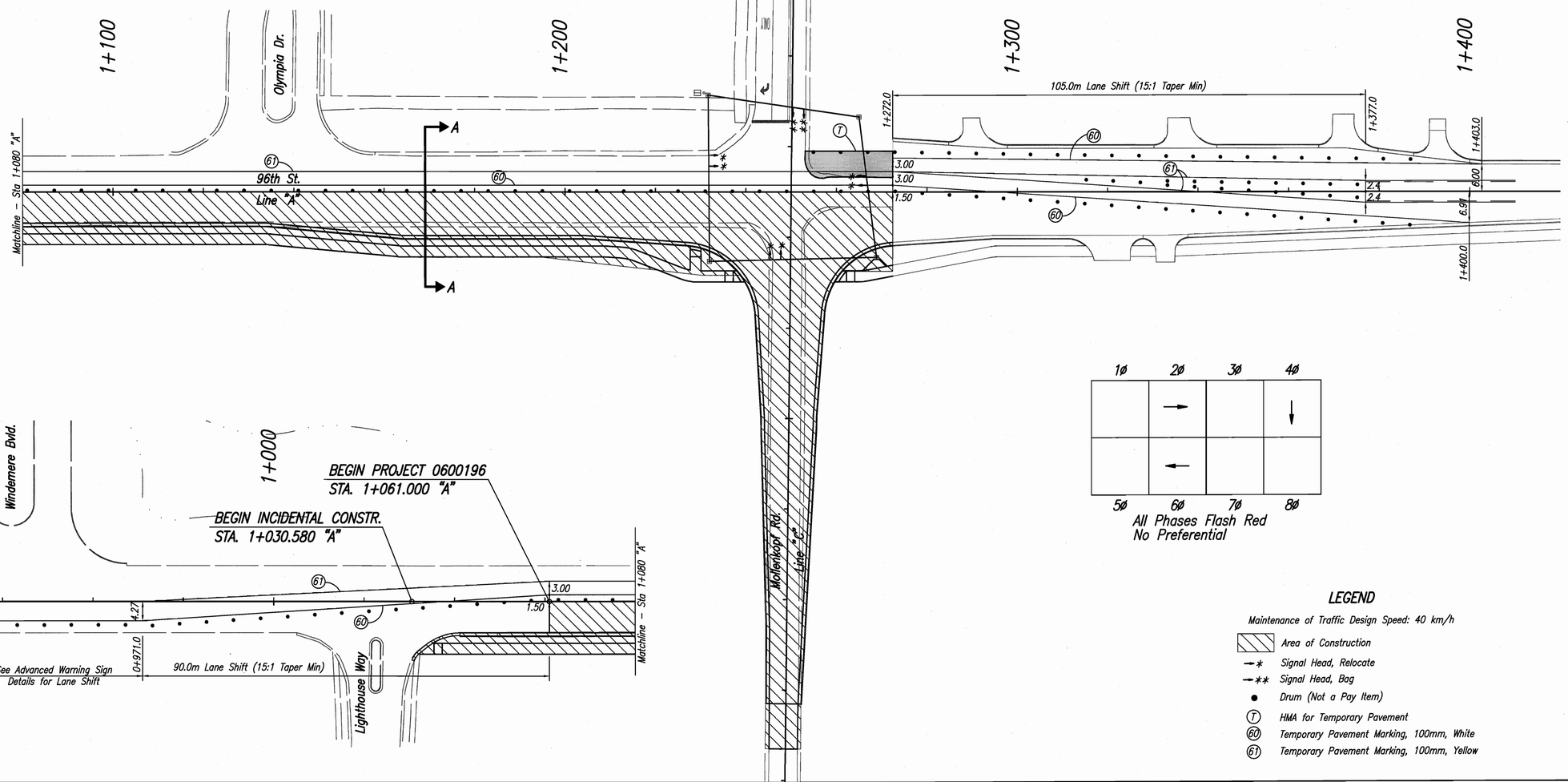


SECTION A–A



ADVANCED WARNING SIGN DETAILS FOR LANE SHIFT

Sign for Lane Shift to Right Shown
Reverse for Shift to Left



LEGEND

Maintenance of Traffic Design Speed: 40 km/h

- Area of Construction
- Signal Head, Relocate
- Signal Head, Bag
- Drum (Not a Pay Item)
- (T) HMA for Temporary Pavement
- (60) Temporary Pavement Marking, 100mm, White
- (61) Temporary Pavement Marking, 100mm, Yellow

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RECOMMENDED FOR APPROVAL Jerome A. Richardson 4-13-09
DESIGN ENGINEER DATE

DESIGNED: HEK DRAWN: JNII
CHECKED: JAR CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC PHASE IIA

HORIZONTAL SCALE	BRIDGE FILE
1:500	
VERTICAL SCALE	DESIGNATION
NONE	0600196
SURVEY BOOK	SHEETS
	12 of 68
CONTRACT	PROJECT
R–32103	0600196

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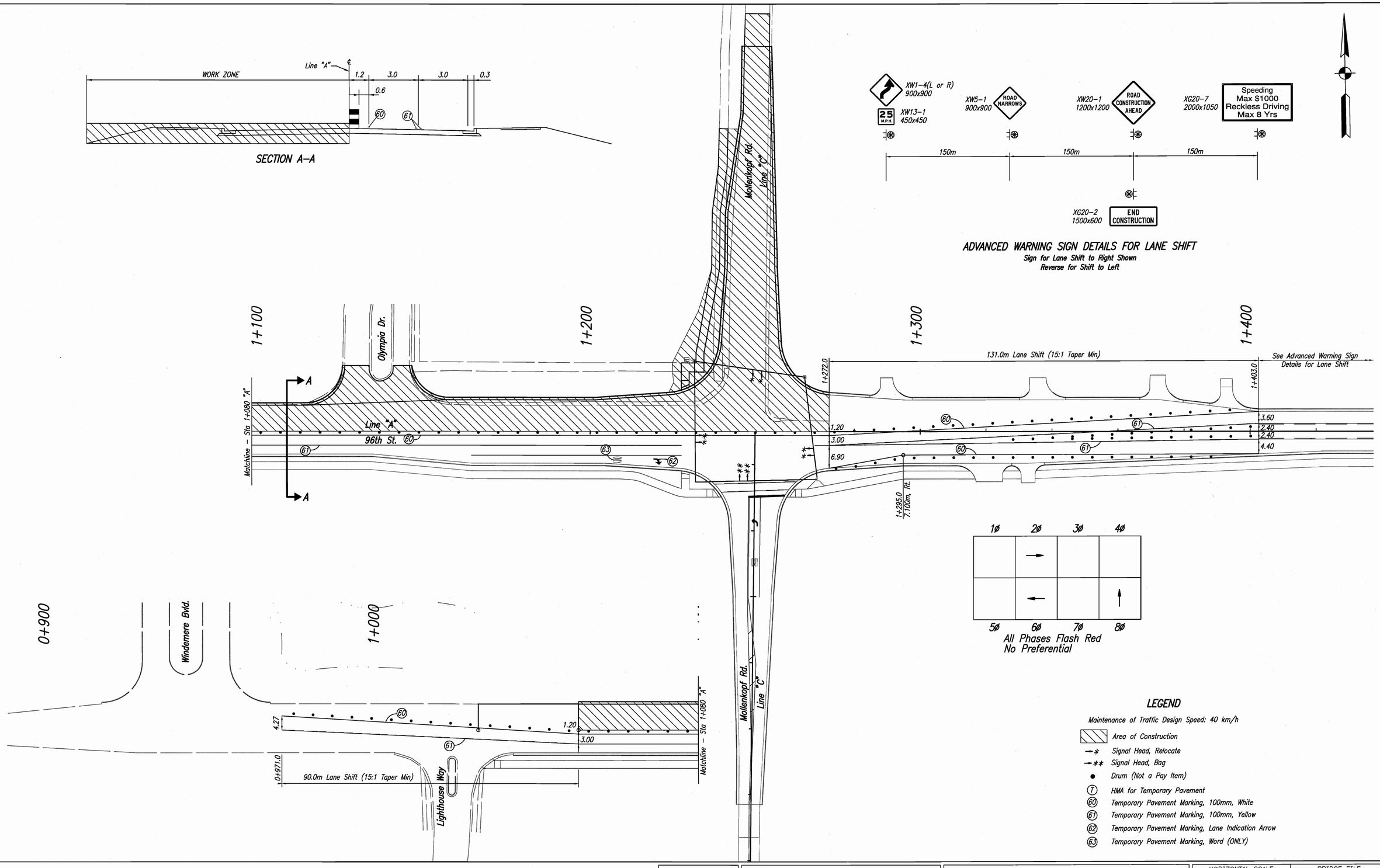
SECTION A–A

ADVANCED WARNING SIGN DETAILS FOR LANE SHIFT

Sign for Lane Shift to Right Shown
Reverse for Shift to Left



LEGEND

Maintenance of Traffic Design Speed: 40 km/h

- Area of Construction
- Signal Head, Relocate
- Signal Head, Bag
- Drum (Not a Pay Item)
- (T) HMA for Temporary Pavement
- (60) Temporary Pavement Marking, 100mm, White
- (61) Temporary Pavement Marking, 100mm, Yellow
- (62) Temporary Pavement Marking, Lane Indication Arrow
- (63) Temporary Pavement Marking, Word (ONLY)

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RECOMMENDED FOR APPROVAL Jerome A. Richardson 4-13-09
DESIGN ENGINEER DATE

DESIGNED: HEK DRAWN: JNII
CHECKED: JAR CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC PHASE IIB

HORIZONTAL SCALE	BRIDGE FILE
1:500	
VERTICAL SCALE	DESIGNATION
NONE	0600196
SURVEY BOOK	SHEETS
	13 of 68
CONTRACT	PROJECT
R–32103	0600196

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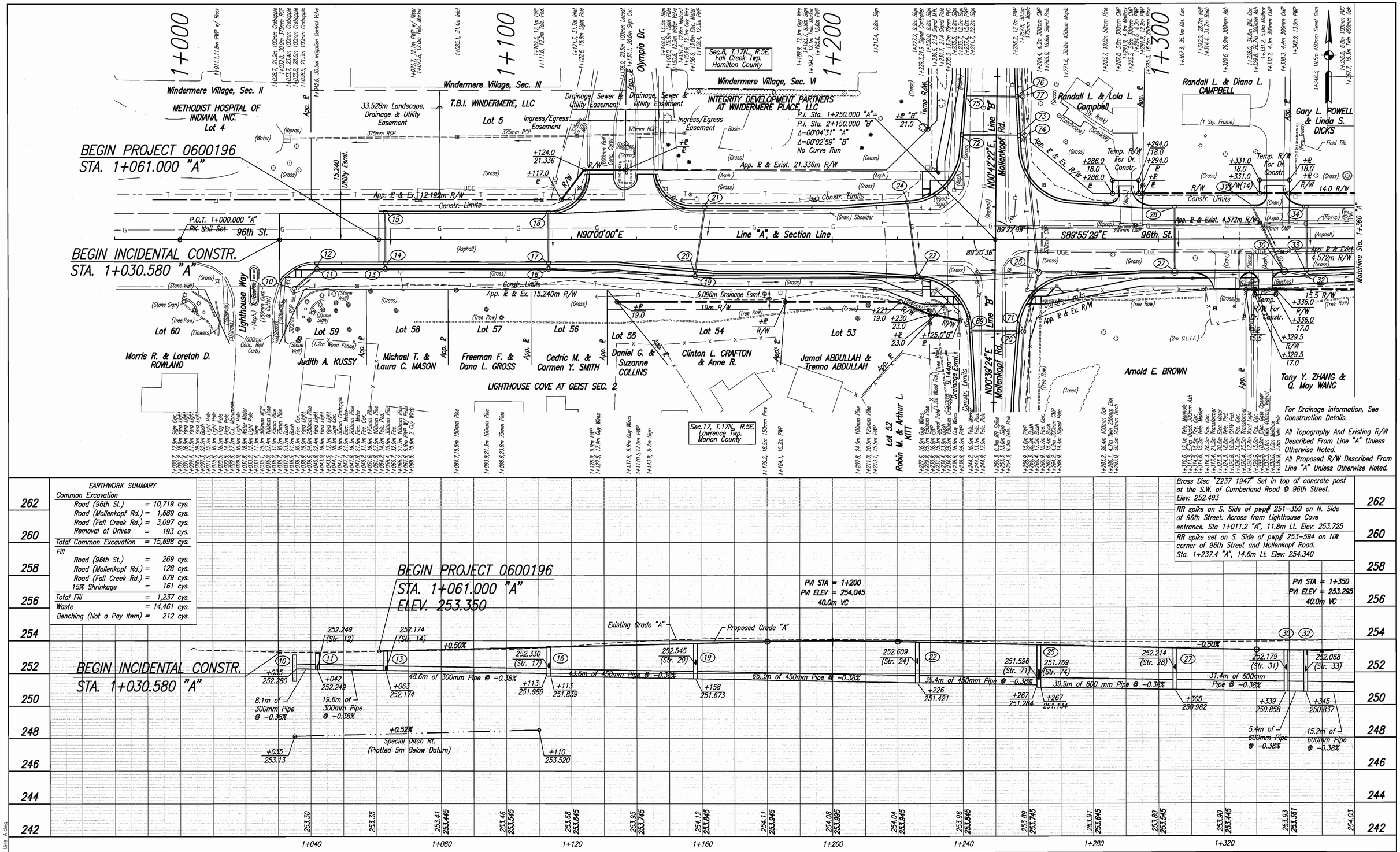

P.O.T. 1+000 "A"

P.I. 1+250 "A" = P.I. 2+150 "B"

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JEROMY A. RICHARDSON REGISTERED No. 10300110 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE 4-13-09

DESIGNED: WRC | DRAWN: JNII
CHECKED: JAR | CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE LINE "A"

HORIZONTAL SCALE 1:500	BRIDGE FILE
VERTICAL SCALE 1:100	DESIGNATION 0600196
SURVEY BOOK	SHEETS 14 of 68
CONTRACT R-32103	PROJECT 0600196

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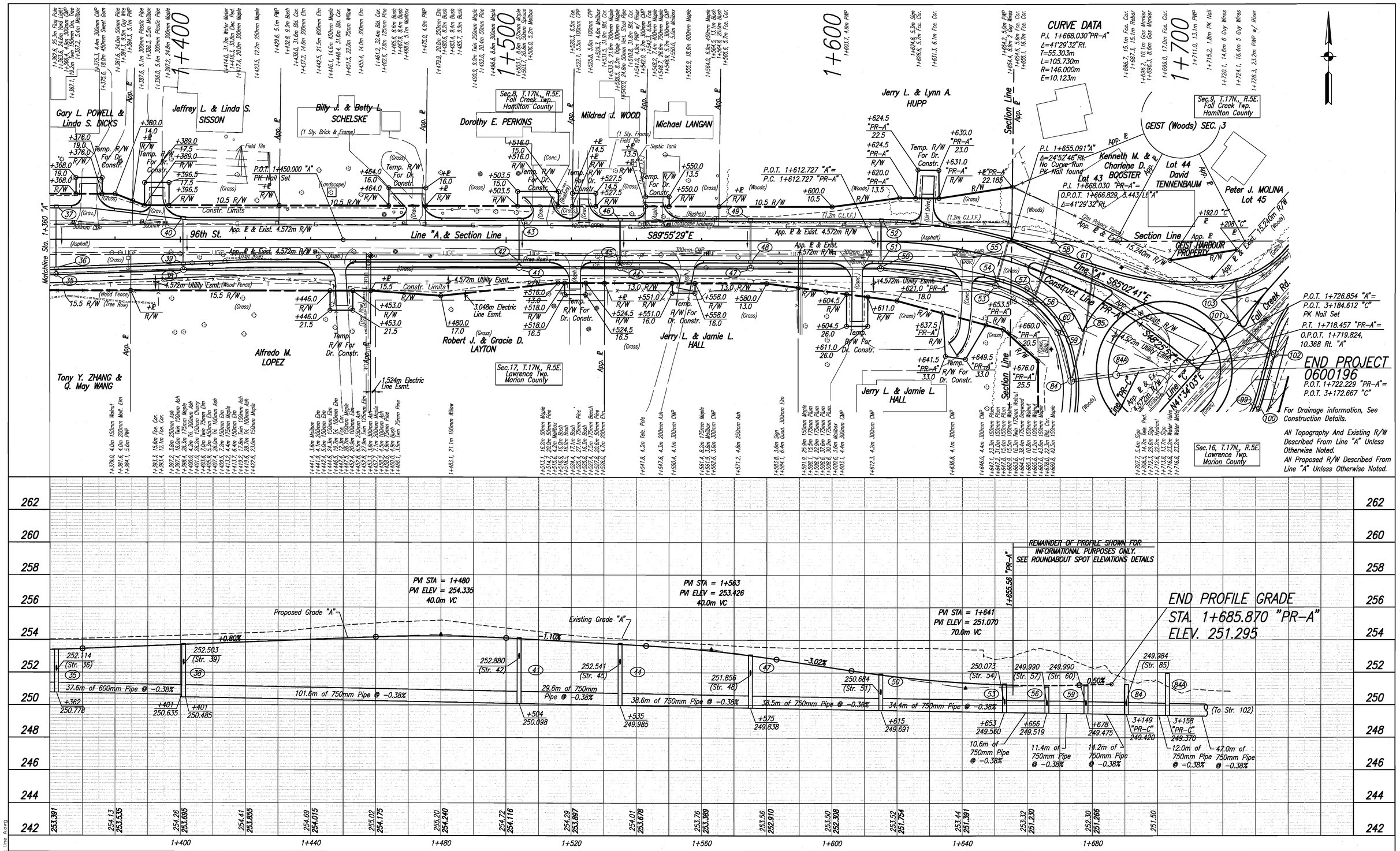

N. 4999.737
E. 5604.497
P.K. Set N. side PWP #197-686
P.K. set S. side PWP #07-008
Line "A"
P.K. Set
96th St.
③ P.O.T. 1+450 "A"

N. 4999.467
E. 5809.588
PK set E. side PWP #196-932
96th St.
P.K. Nail Fd.
NE. corner stone column
Lg. Rd. nail SW. side of 14" elm
SW. Cor., Sec. 8
④ P.I. 1+655.091 "A"

N. 4969.190
E. 5874.651
PK set E. side PWP #196-934
Line "A"
96th St.
Fall Creek Rd.
NE. Bonnet Bolt of F.H.
P.K. Set
R.R. spike W. side PWP #02-2108
⑤ P.O.T. 1+726.854 "A"=
P.O.T. 3+184.612 "C"

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JEROMY A. RICHARDSON REGISTERED No. 10300110 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Jeromy A. Richardson 4-13-09
DESIGN ENGINEER DATE

DESIGNED: WRC DRAWN: JNII
CHECKED: JAR CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE LINE "A"

HORIZONTAL SCALE	BRIDGE FILE
1:500	
VERTICAL SCALE	DESIGNATION
1:100	0600196
SURVEY BOOK	SHEETS
	15 of 68
CONTRACT	PROJECT
R-32103	0600196

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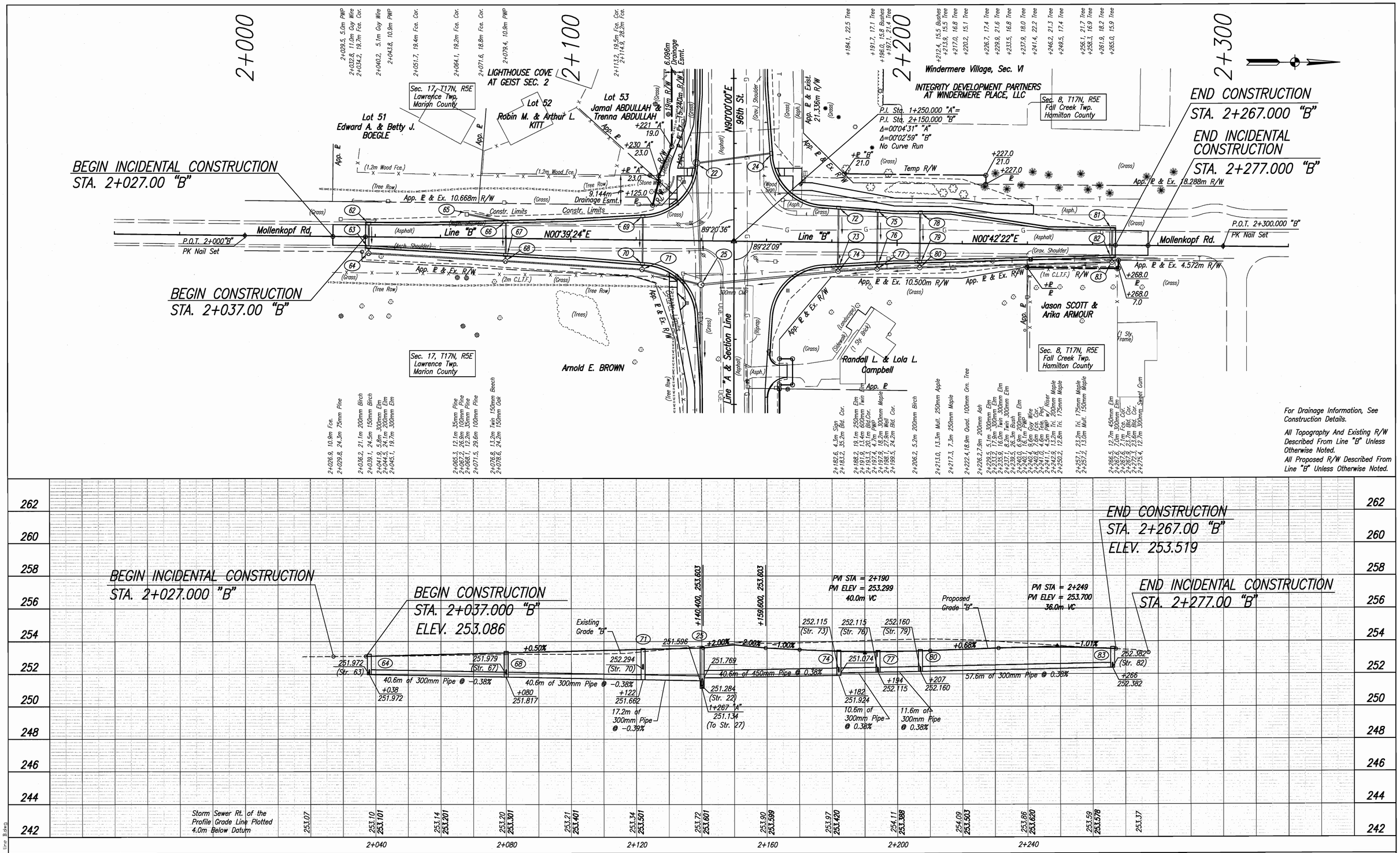

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DESIGNED: WRC | DRAWN: JNII
CHECKED: JAR | CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE LINE "B"

HORIZONTAL SCALE	BRIDGE FILE
1:500	
VERTICAL SCALE	DESIGNATION
1:100	0600196
SURVEY BOOK	SHEETS
	16 of 68
CONTRACT	PROJECT
R-32103	0600196

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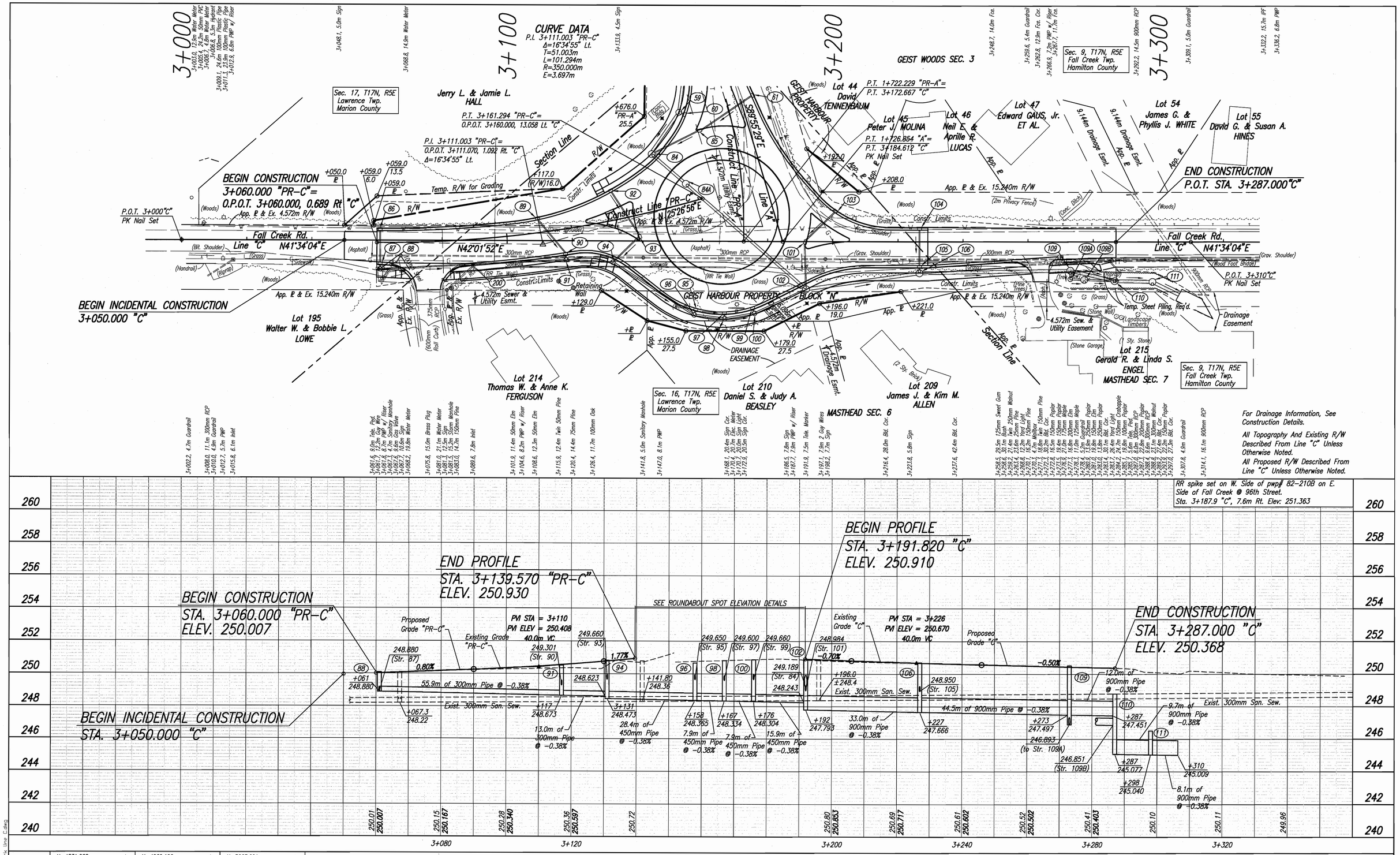

For Drainage Information, See Construction Details.

All Topography And Existing R/W Described From Line "C" Unless Otherwise Noted.

All Proposed R/W Described From Line "C" Unless Otherwise Noted.

RR spike set on W. Side of pwp# 82-210B on E. Side of Fall Creek @ 96th Street. Sta. 3+187.9 "C", 7.6m Rt. Elev: 251.363

4/8/2009 11:43 AM
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JEROMY A. RICHARDSON REGISTERED No. 10300110 STATE OF INDIANA PROFESSIONAL ENGINEER

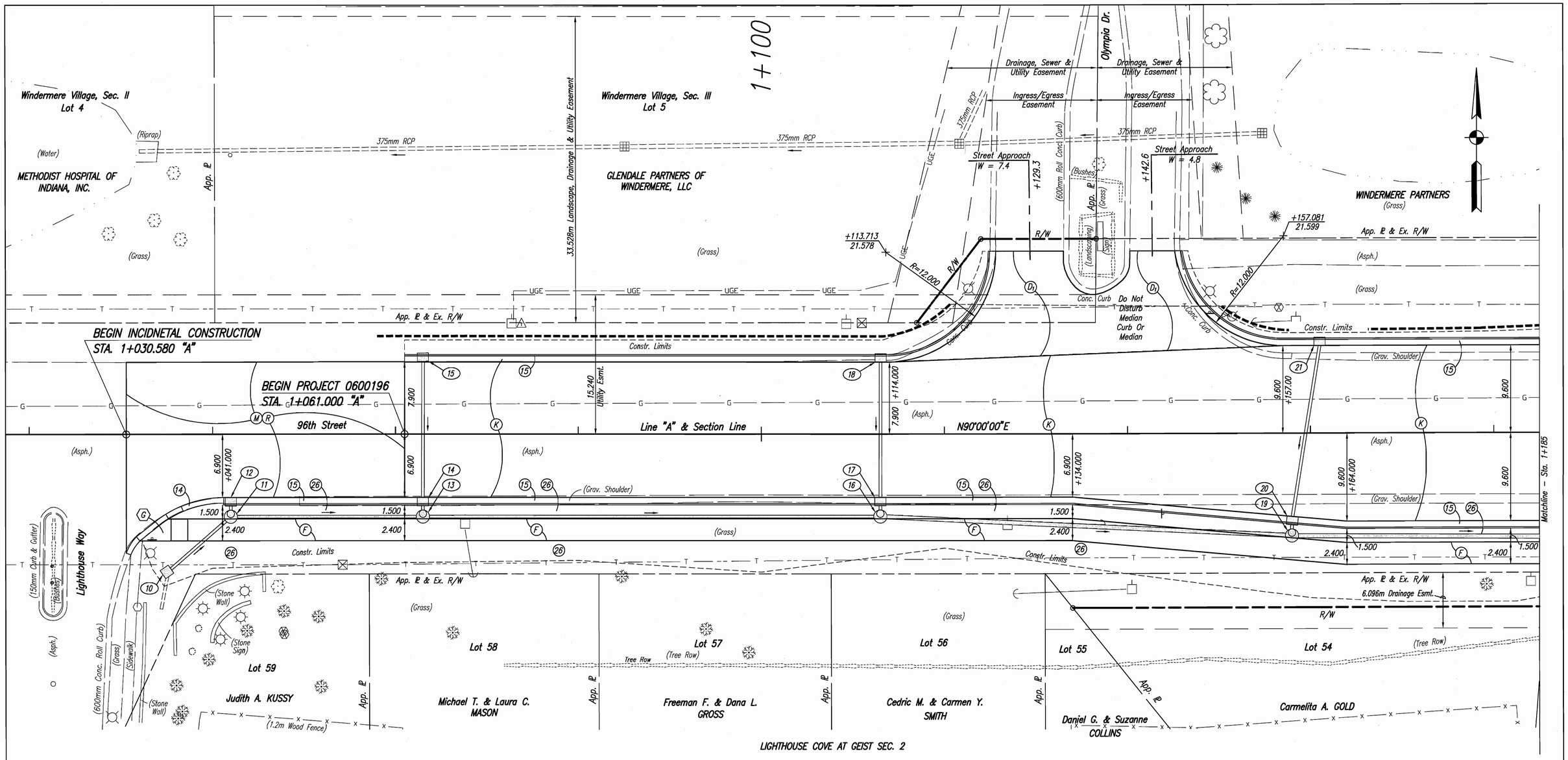
RECOMMENDED FOR APPROVAL Jeromy A. Richardson 4-13-09
DESIGN ENGINEER DATE

DESIGNED: WRC DRAWN: JNII
CHECKED: JAR CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE LINE "PR-C"/"C"

HORIZONTAL SCALE	BRIDGE FILE
1:500	
VERTICAL SCALE	DESIGNATION
1:100	0600196
SURVEY BOOK	SHEETS
	17 of 68
CONTRACT	PROJECT
R-32103	0600196



EROSION CONTROL NOTES

The following erosion control measures are required, but not shown on the plans:

1. *Temporary curb inlet protection for all existing and proposed structures and temporary ditch inlet protection for inlet structures located outside of the pavement area. Refer to appropriate special provisions, standard specifications and standard drawings for more information.*
2. *Temporary Seeding shall be placed in disturbed areas where additional work is not scheduled for at least 15 calendar days.*
3. *Mulching shall be used in concert with temporary seeding or by itself as directed in the INDOT Standard Specifications.*
4. *Erosion Control Blankets shall be required for all slopes, temporary or permanent, equal to or steeper than 3:1.*

STRUCTURE NOTES

1+035, 15.0m Rt., Str. No. 10
Catch Basin E-7 and 8.1m of 300mm Pipe Type 2 Req'd.

1+042, 8.8m Rt., Str. No. 11
Manhole C-4 and 19.6m of 300mm Pipe Type 2 Req'd.

1+042 Rt., Str. No. 12
Mod. Inlet C-15 and 0.5m of 300mm Pipe Type 2 Req'd.
1 Catch Basin Hood Req'd.

1+063, 8.8m Rt., Str. No. 13
Manhole C-4 and 48.6m of 300mm Pipe Type 2 Req'd.

1+063 Rt., Str. No. 14
Mod. Inlet C-15 and 0.5m of 300mm Pipe Type 2 Req'd.
1 Catch Basin Hood Req'd.

1+063 Lt., Str. No. 15
Inlet B-15 and 14.9m of 300mm Pipe Type 2 Req'd.

1+113, 8.8m Rt., Str. No. 16
Manhole C-4 and 43.6m of 450mm Pipe Type 2 Req'd.

1+113 Rt., Str. No. 17
Mod. Inlet C-15 and 0.5m of 300mm Pipe Type 2 Req'd.
1 Catch Basin Hood Req'd.

1+113 Lt., Str. No. 18
Inlet B-15 and 14.8m of 300mm Pipe Type 2 Req'd.

1+158, 10.9m Rt., Str. No. 19
Manhole C-4 and 66.3m of 450mm Pipe Type 2 Req'd.

1+158 Rt., Str. No. 20
Mod. Inlet C-15 and 0.5m of 300mm Pipe Type 2 Req'd.
1 Catch Basin Hood Req'd.

1+161 Lt., Str. No. 21
Inlet B-15 and 18.9m of 300mm Pipe Type 2 Req'd.

LEGEND

- (C1) PCCP for Approaches, 150mm
- (C3) PCCP for Approaches, 225mm
- (D1) HMA for Approaches
- (F) HMA Multi-Use Path
- (H) 200 mm Compacted Aggregate, #53
- (K) Full Depth QC/QA HMA Pavement
- (M) Surface Milling, Asphalt
- (R) QC/QA HMA Pavement for Resurface
- (S) 0.100m Concrete Sidewalk
- (W) Widening with HMA, Type C
- (13) Curb, Concrete
- (14) Curb, Concrete, Type "B"
- (15) Curb and Gutter, Concrete, Type "C"
- (26) Sodding, Nursury
- (*) Curb Ramp, Type "*"
- (*m) Curb Ramp, Type "*", Modified
- (S) Sidewalk Elevation Transition
- Temporary Silt Fence

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JEROMY A. RICHARDSON REGISTERED No. 10300110 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE 4-13-09

DESIGNED: WRC | DRAWN: JNII
CHECKED: JAR | CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS LINE "A"

HORIZONTAL SCALE	BRIDGE FILE
1:200	
VERTICAL SCALE	DESIGNATION
NONE	0600196
SURVEY BOOK	SHEETS
	18 of 68
CONTRACT	PROJECT
R-32103	0600196

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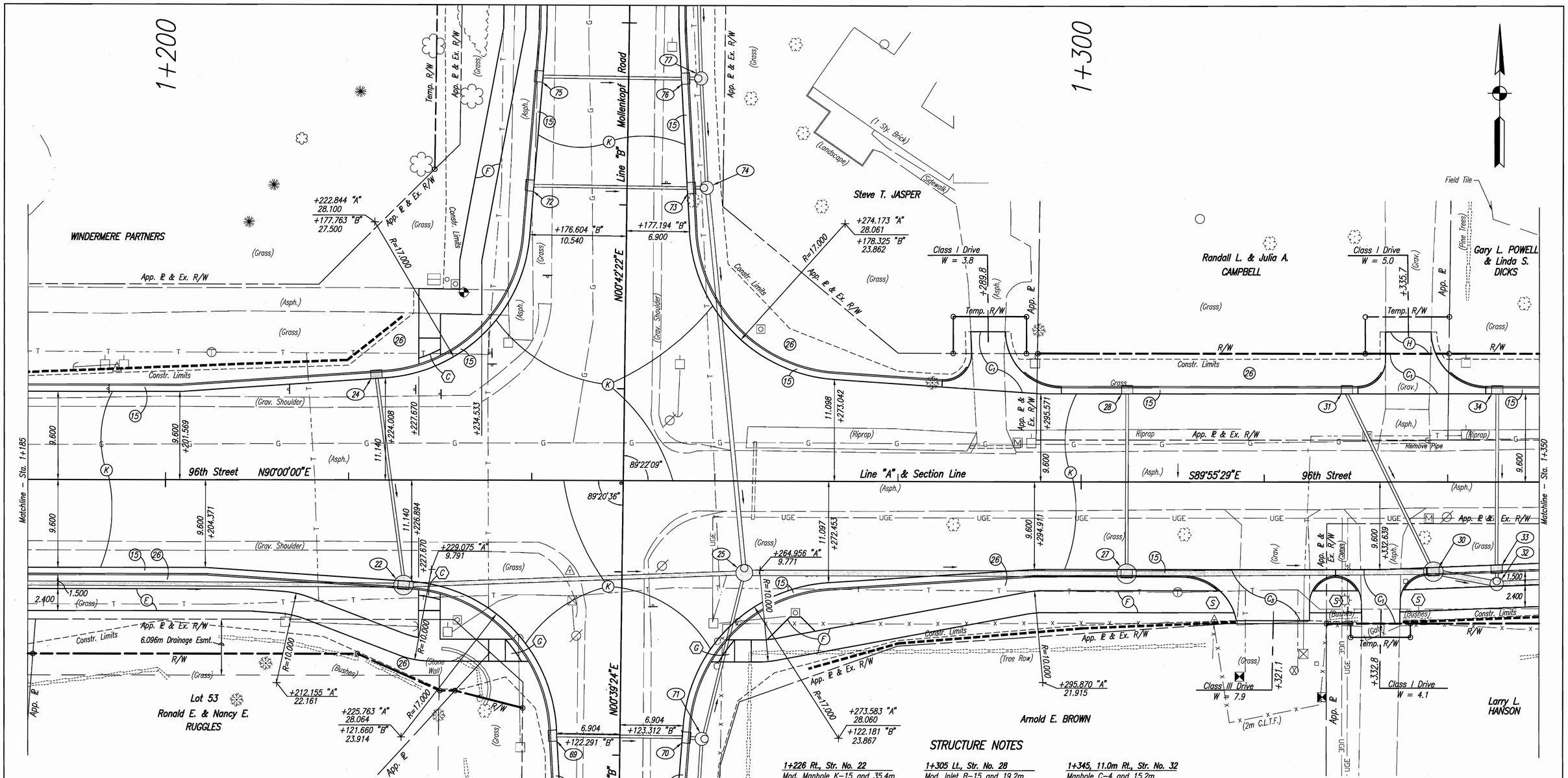

STRUCTURE NOTES

1+226 Rt., Str. No. 22
Mod. Manhole K–15 and 35.4m of 450mm Pipe Type 2 Req'd.

1+223 Lt., Str. No. 24
Mod. Inlet B–15 and 21.7m of 300mm Pipe Type 2 Req'd.
1 Catch Basin Hood Req'd

1+236, 10.1m Rt., Str. No. 25
Manhole J–4 and 39.9m of 600mm Pipe Type 2 Req'd.

1+305 Rt., Str. No. 27
Mod. Manhole K–15 and 31.4m of 600mm Pipe Type 2 Req'd.
1 Catch Basin Hood Req'd.

1+305 Lt., Str. No. 28
Mod. Inlet B–15 and 19.2m of 300mm Pipe Type 2 Req'd.
1 Catch Basin Hood Req'd

1+339 Rt., Str. No. 30
Mod. Manhole K–15 and 5.4m of 600mm Pipe Type 2 Req'd.
1 Catch Basin Hood Req'd.

1+329 Lt., Str. No. 31
Mod. Inlet B–15 and 21.2m of 300mm Pipe Type 2 Req'd.
1 Catch Basin Hood Req'd

1+345, 11.0m Rt., Str. No. 32
Manhole C–4 and 15.2m of 600mm Pipe Type 2 Req'd.

1+345 Rt., Str. No. 33
Mod. Inlet C–15 and 0.5m of 300mm Pipe Type 2 Req'd.
1 Catch Basin Hood Req'd.

1+345 Lt., Str. No. 34
Inlet B–15 and 18.7m of 300mm Pipe Type 2 Req'd.

Note: For Structure Nos. 69 thru 77 See Construction Details Line "B"

LEGEND

- (C1) PCCP for Approaches, 150mm
- (C2) PCCP for Approaches, 225mm
- (D1) HMA for Approaches
- (F) HMA Multi–Use Path
- (H) 200 mm Compacted Aggregate, #53
- (K) Full Depth QC/QA HMA Pavement
- (M) Surface Milling, Asphalt
- (R) QC/QA HMA Pavement for Resurface
- (S) 0.100m Concrete Sidewalk
- (W) Widening with HMA, Type C
- (13) Curb, Concrete
- (14) Curb, Concrete, Type "B"
- (15) Curb and Gutter, Concrete, Type "C"
- (26) Sodding, Nursury
- (*) Curb Ramp, Type "*"
- (*m) Curb Ramp, Type "*", Modified
- (S) Sidewalk Elevation Transition
- Temporary Silt Fence

EROSION CONTROL NOTES

The following erosion control measures are required, but not shown on the plans:

1. Temporary curb inlet protection for all existing and proposed structures and temporary ditch inlet protection for inlet structures located outside of the pavement area. Refer to appropriate special provisions, standard specifications and standard drawings for more information.
2. Temporary Seeding shall be placed in disturbed areas where additional work is not scheduled for at least 15 calendar days.
3. Mulching shall be used in concert with temporary seeding or by itself as directed in the INDOT Standard Specifications.
4. Erosion Control Blankets shall be required for all slopes, temporary or permanent, equal to or steeper than 3:1.

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JEROME A. RICHARDSON REGISTERED No. 10300110 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Jerome A. Richardson 4-13-09
DESIGN ENGINEER DATE

DESIGNED: WRC DRAWN: JNII
CHECKED: JAR CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS LINE "A"

HORIZONTAL SCALE	BRIDGE FILE
1:200	
VERTICAL SCALE	DESIGNATION
NONE	0600196
SURVEY BOOK	SHEETS
	19 of 68
CONTRACT	PROJECT
R-32103	0600196

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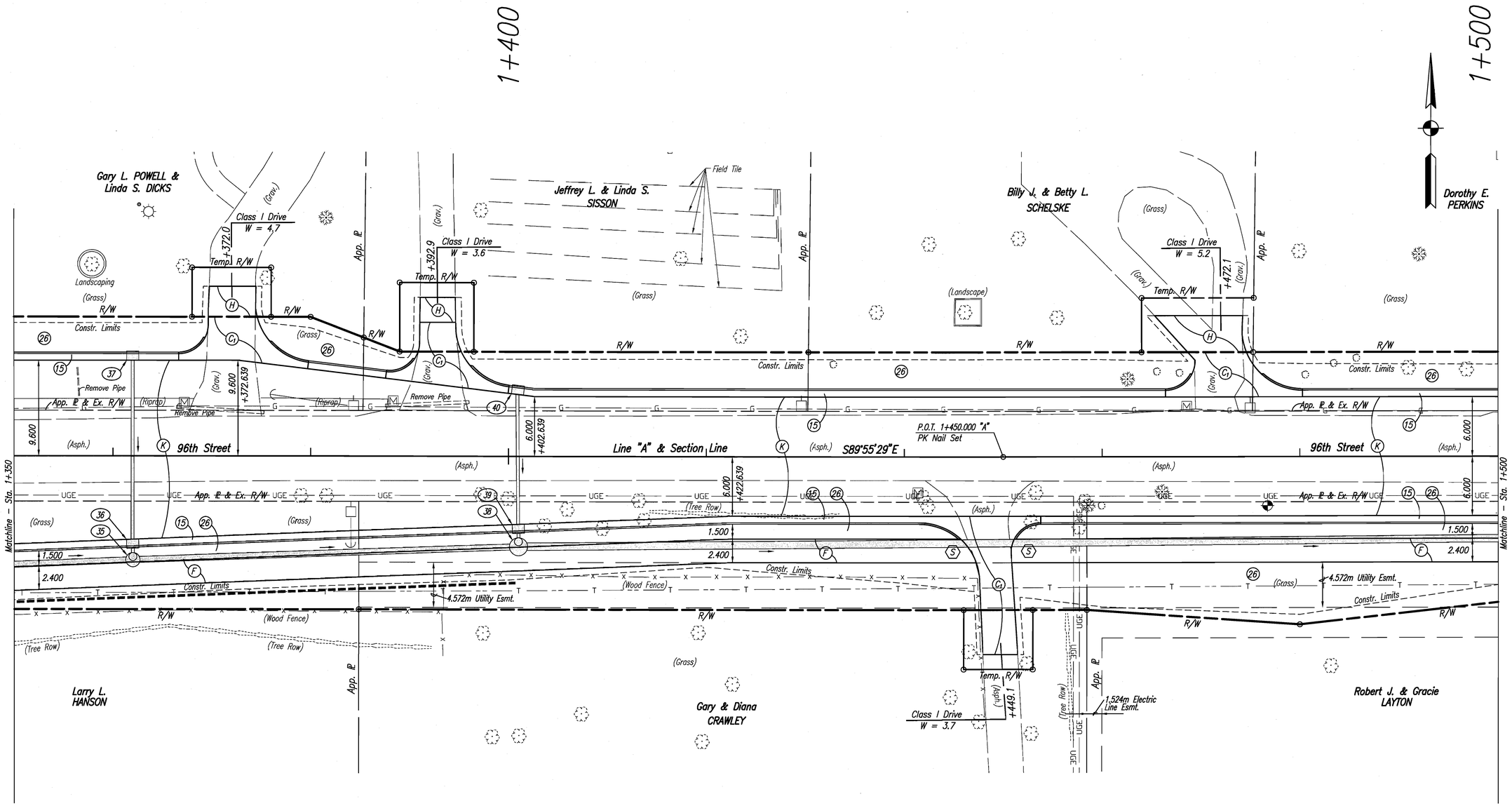

EROSION CONTROL NOTES

The following erosion control measures are required, but not shown on the plans:

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3. Mulching shall be used in concert with temporary seeding or by itself as directed in the INDOT Standard Specifications.
4. Erosion Control Blankets shall be required for all slopes, temporary or permanent, equal to or steeper than 3:1.

STRUCTURE NOTES

1+362, 10.3m Rt., Str. No. 35
Manhole C–4 and 37.6m of 600mm Pipe Type 2 Req'd.

1+362 Rt., Str. No. 36
Mod. Inlet C–15 and 0.5m of 300mm Pipe Type 2 Req'd.
1 Catch Basin Hood Req'd.

1+362 Lt., Str. No. 37
Inlet B–15 and 18m of 300mm Pipe Type 2 Req'd.

1+401, 8.9m Rt., Str. No. 38
Manhole J–4 and 101.6m of 750mm Pipe Type 2 Req'd.

1+401 Rt., Str. No. 39
Mod. Inlet C–15 and 0.5m of 300mm Pipe Type 2 Req'd.
1 Catch Basin Hood Req'd.

1+401 Lt., Str. No. 40
Inlet B–15 and 13.1m of 300mm Pipe Type 2 Req'd.

LEGEND

- C_1 PCCP for Approaches, 150mm
- C_2 PCCP for Approaches, 225mm
- D_1 HMA for Approaches
- F HMA Multi–Use Path
- H 200 mm Compacted Aggregate, #53
- K Full Depth QC/QA HMA Pavement
- M Surface Milling, Asphalt
- R QC/QA HMA Pavement for Resurface
- S 0.100m Concrete Sidewalk
- W Widening with HMA, Type C
- 13 Curb, Concrete
- 14 Curb, Concrete, Type "B"
- 15 Curb and Gutter, Concrete, Type "C"
- 26 Sodding, Nursury
- * Curb Ramp, Type "*"
- *m Curb Ramp, Type "*", Modified
- S Sidewalk Elevation Transition
- Temporary Silt Fence

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JEROMY A. RICHARDSON REGISTERED No. 10300110 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Jeromy A. Richardson 4-13-09
DESIGN ENGINEER DATE

DESIGNED: WRC DRAWN: JNII
CHECKED: JAR CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS LINE "A"

HORIZONTAL SCALE	BRIDGE FILE
1:200	
VERTICAL SCALE	DESIGNATION
NONE	0600196
SURVEY BOOK	SHEETS
	20 of 68
CONTRACT	PROJECT
R–32103	0600196

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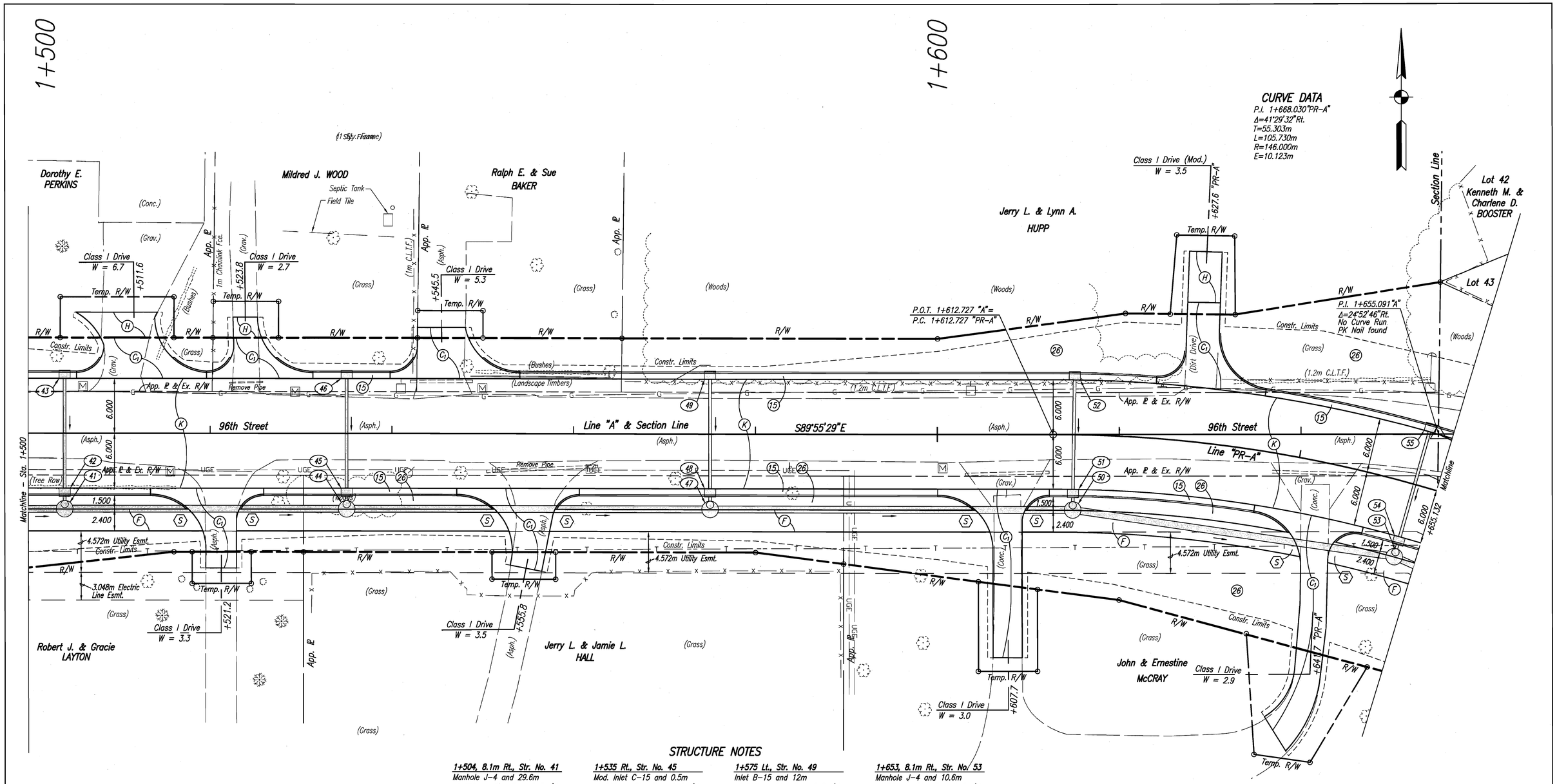

STRUCTURE NOTES

1+504, 8.1m Rt., Str. No. 41
Manhole J-4 and 29.6m of 750mm Pipe Type 2 Req'd.

1+504 Rt., Str. No. 42
Mod. Inlet C-15 and 0.5m of 300mm Pipe Type 2 Req'd.
1 Catch Basin Hood Req'd.

1+504 Lt., Str. No. 43
Inlet B-15 and 12m of 300mm Pipe Type 2 Req'd.

1+535, 8.1m Rt., Str. No. 44
Manhole J-4 and 38.6m of 750mm Pipe Type 2 Req'd.

1+535 Rt., Str. No. 45
Mod. Inlet C-15 and 0.5m of 300mm Pipe Type 2 Req'd.
1 Catch Basin Hood Req'd.

1+535 Lt., Str. No. 46
Inlet B-15 and 12m of 300mm Pipe Type 2 Req'd.

1+575, 8.1m Rt., Str. No. 47
Manhole J-4 and 38.5m of 750mm Pipe Type 2 Req'd.

1+575 Rt., Str. No. 48
Mod. Inlet C-15 and 0.5m of 300mm Pipe Type 2 Req'd.
1 Catch Basin Hood Req'd.

1+575 Lt., Str. No. 49
Inlet B-15 and 12m of 300mm Pipe Type 2 Req'd.

1+615, 8.1m Rt., Str. No. 50
Manhole J-4 and 34.4m of 750mm Pipe Type 2 Req'd.

1+615 Rt., Str. No. 51
Mod. Inlet C-15 and 0.5m of 300mm Pipe Type 2 Req'd.
1 Catch Basin Hood Req'd.

1+615 Lt., Str. No. 52
Inlet B-15 and 12m of 300mm Pipe Type 2 Req'd.

1+653, 8.1m Rt., Str. No. 53
Manhole J-4 and 10.6m of 750mm Pipe Type 2 Req'd.

1+653 Rt., Str. No. 54
Mod. Inlet C-15 and 0.5m of 300mm Pipe Type 2 Req'd.
1 Catch Basin Hood Req'd.

1+653 Lt., Str. No. 55
Inlet B-15 and 11.5m of 300mm Pipe Type 2 Req'd.

EROSION CONTROL NOTES

The following erosion control measures are required, but not shown on the plans:

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4. Erosion Control Blankets shall be required for all slopes, temporary or permanent, equal to or steeper than 3:1.

LEGEND

- C_1 PCCP for Approaches, 150mm
- C_3 PCCP for Approaches, 225mm
- D_1 HMA for Approaches
- F HMA Multi-Use Path
- H 200 mm Compacted Aggregate, #53
- K Full Depth QC/QA HMA Pavement
- M Surface Milling, Asphalt
- R QC/QA HMA Pavement for Resurface
- S 0.100m Concrete Sidewalk
- W Widening with HMA, Type C
- 13 Curb, Concrete
- 14 Curb, Concrete, Type "B"
- 15 Curb and Gutter, Concrete, Type "C"
- 26 Sodding, Nursury
- * Curb Ramp, Type "*"
- *m Curb Ramp, Type "*", Modified
- S Sidewalk Elevation Transition
- Temporary Silt Fence

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1625 N. Post Road
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JEROMY A. RICHARDSON REGISTERED No. 10300110 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Jeromy A. Richardson 4-13-09
DESIGN ENGINEER DATE

DESIGNED: WRC DRAWN: JNII
CHECKED: JAR CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS LINE "A"

HORIZONTAL SCALE	BRIDGE FILE
1:200	
VERTICAL SCALE	DESIGNATION
NONE	0600196
SURVEY BOOK	SHEETS
	21 of 68
CONTRACT	PROJECT
R-32103	0600196

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EROSION CONTROL NOTES

The following erosion control measures are required, but not shown on the plans:

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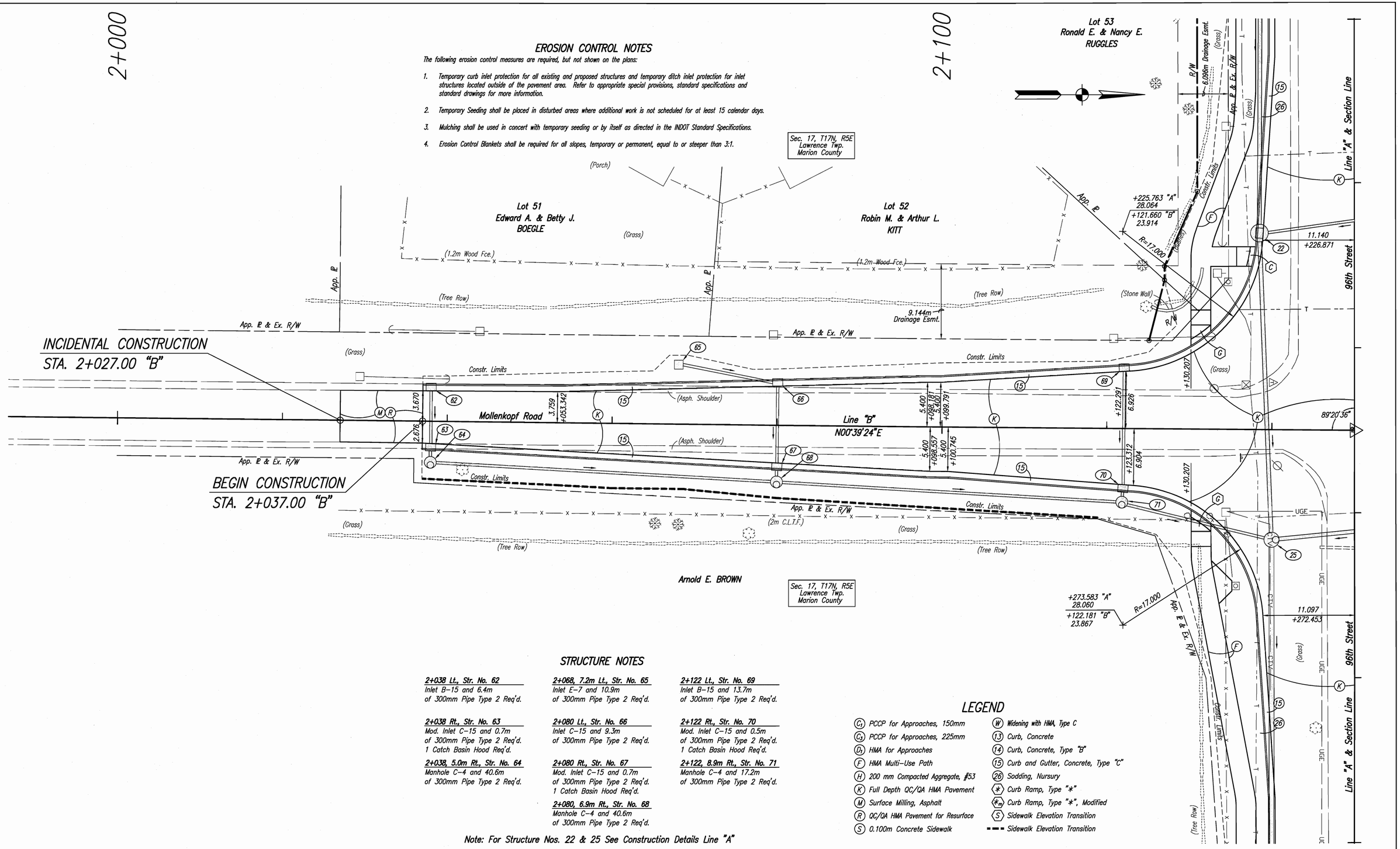

STRUCTURE NOTES

2+038 Lt., Str. No. 62
Inlet B–15 and 6.4m
of 300mm Pipe Type 2 Req'd.

2+038 Rt., Str. No. 63
Mod. Inlet C–15 and 0.7m
of 300mm Pipe Type 2 Req'd.
1 Catch Basin Hood Req'd.

2+038, 5.0m Rt., Str. No. 64
Manhole C–4 and 40.6m
of 300mm Pipe Type 2 Req'd.

2+068, 7.2m Lt., Str. No. 65
Inlet E–7 and 10.9m
of 300mm Pipe Type 2 Req'd.

2+080 Lt., Str. No. 66
Inlet C–15 and 9.3m
of 300mm Pipe Type 2 Req'd.

2+080 Rt., Str. No. 67
Mod. Inlet C–15 and 0.7m
of 300mm Pipe Type 2 Req'd.
1 Catch Basin Hood Req'd.

2+080, 6.9m Rt., Str. No. 68
Manhole C–4 and 40.6m
of 300mm Pipe Type 2 Req'd.

2+122 Lt., Str. No. 69
Inlet B–15 and 13.7m
of 300mm Pipe Type 2 Req'd.

2+122 Rt., Str. No. 70
Mod. Inlet C–15 and 0.5m
of 300mm Pipe Type 2 Req'd.
1 Catch Basin Hood Req'd.

2+122, 8.9m Rt., Str. No. 71
Manhole C–4 and 17.2m
of 300mm Pipe Type 2 Req'd.

Note: For Structure Nos. 22 & 25 See Construction Details Line "A"

LEGEND

- C_1 PCCP for Approaches, 150mm
- C_3 PCCP for Approaches, 225mm
- D_1 HMA for Approaches
- F HMA Multi–Use Path
- H 200 mm Compacted Aggregate, #53
- K Full Depth QC/QA HMA Pavement
- M Surface Milling, Asphalt
- R QC/QA HMA Pavement for Resurface
- S 0.100m Concrete Sidewalk
- W Widening with HMA, Type C
- 13 Curb, Concrete
- 14 Curb, Concrete, Type "B"
- 15 Curb and Gutter, Concrete, Type "C"
- 26 Sodding, Nursury
- * Curb Ramp, Type "*"
- *m Curb Ramp, Type "*", Modified
- S Sidewalk Elevation Transition
- Sidewalk Elevation Transition

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RECOMMENDED FOR APPROVAL Jeromy A. Richardson 4-13-09
DESIGN ENGINEER DATE

DESIGNED: ATW DRAWN: JNII
CHECKED: JAR CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS LINE "B"

HORIZONTAL SCALE	BRIDGE FILE
1:200	
VERTICAL SCALE	DESIGNATION
NONE	0600196
SURVEY BOOK	SHEETS
	22 of 68
CONTRACT	PROJECT
R–32103	0600196

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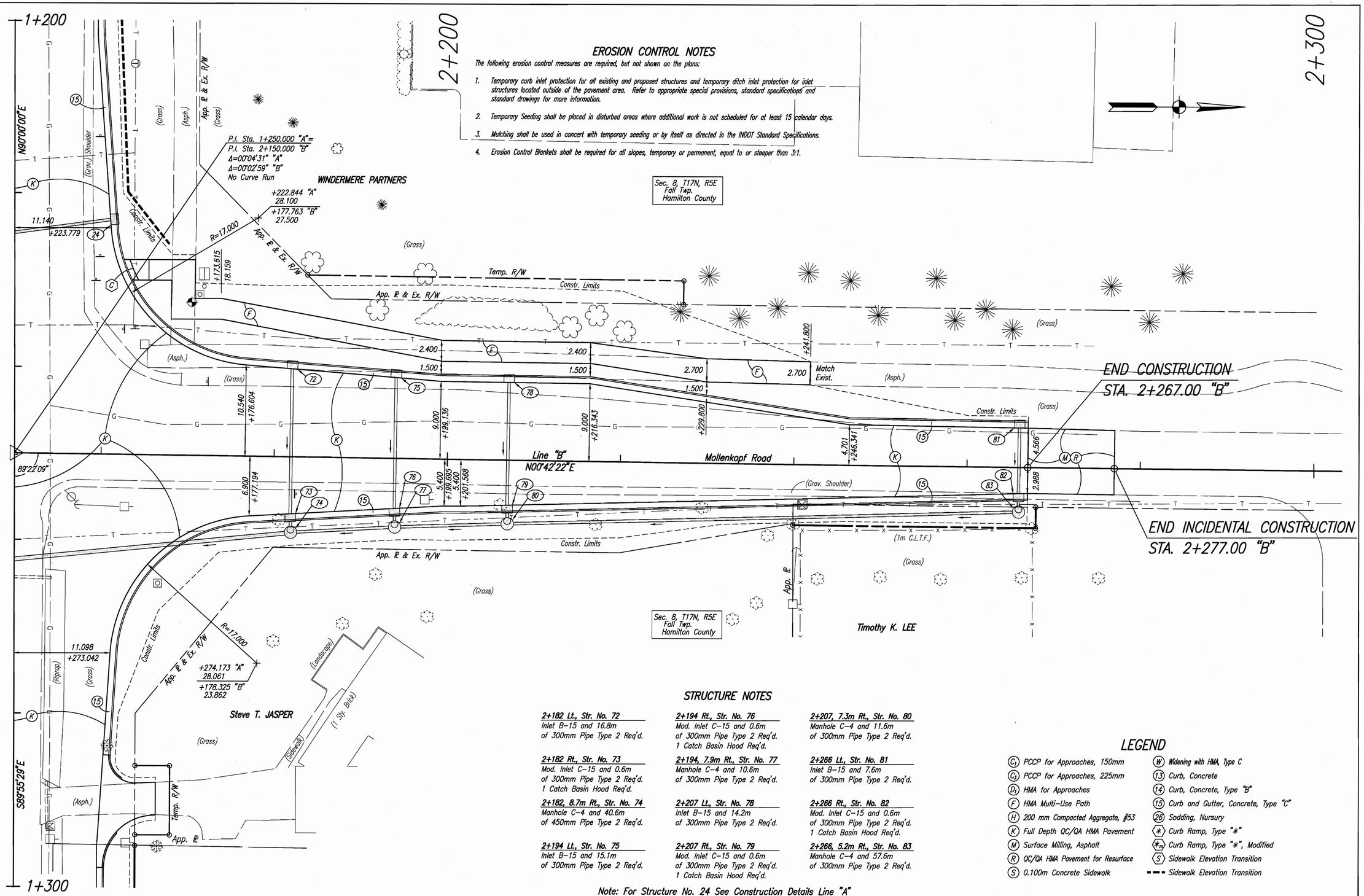

EROSION CONTROL NOTES

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2. Temporary Seeding shall be placed in disturbed areas where additional work is not scheduled for at least 15 calendar days.
3. Mulching shall be used in concert with temporary seeding or by itself as directed in the INDOT Standard Specifications.
4. Erosion Control Blankets shall be required for all slopes, temporary or permanent, equal to or steeper than 3:1.

STRUCTURE NOTES

2+182 Lt., Str. No. 72
Inlet B-15 and 16.8m of 300mm Pipe Type 2 Req'd.

2+182 Rt., Str. No. 73
Mod. Inlet C-15 and 0.6m of 300mm Pipe Type 2 Req'd.
1 Catch Basin Hood Req'd.

2+182, 8.7m Rt., Str. No. 74
Manhole C-4 and 40.6m of 450mm Pipe Type 2 Req'd.

2+194 Lt., Str. No. 75
Inlet B-15 and 15.1m of 300mm Pipe Type 2 Req'd.

2+194 Rt., Str. No. 76
Mod. Inlet C-15 and 0.6m of 300mm Pipe Type 2 Req'd.
1 Catch Basin Hood Req'd.

2+194, 7.9m Rt., Str. No. 77
Manhole C-4 and 10.6m of 300mm Pipe Type 2 Req'd.

2+207 Lt., Str. No. 78
Inlet B-15 and 14.2m of 300mm Pipe Type 2 Req'd.

2+207 Rt., Str. No. 79
Mod. Inlet C-15 and 0.6m of 300mm Pipe Type 2 Req'd.
1 Catch Basin Hood Req'd.

2+207, 7.3m Rt., Str. No. 80
Manhole C-4 and 11.6m of 300mm Pipe Type 2 Req'd.

2+266 Lt., Str. No. 81
Inlet B-15 and 7.6m of 300mm Pipe Type 2 Req'd.

2+266 Rt., Str. No. 82
Mod. Inlet C-15 and 0.6m of 300mm Pipe Type 2 Req'd.
1 Catch Basin Hood Req'd.

2+266, 5.2m Rt., Str. No. 83
Manhole C-4 and 57.6m of 300mm Pipe Type 2 Req'd.

Note: For Structure No. 24 See Construction Details Line "A"

LEGEND

- (G1) PCCP for Approaches, 150mm
- (G2) PCCP for Approaches, 225mm
- (D1) HMA for Approaches
- (F) HMA Multi-Use Path
- (H) 200 mm Compacted Aggregate, #53
- (K) Full Depth QC/QA HMA Pavement
- (M) Surface Milling, Asphalt
- (R) QC/QA HMA Pavement for Resurface
- (S) 0.100m Concrete Sidewalk
- (W) Widening with HMA, Type C
- (13) Curb, Concrete
- (14) Curb, Concrete, Type "B"
- (15) Curb and Gutter, Concrete, Type "C"
- (26) Sodding, Nursury
- (*) Curb Ramp, Type "*"
- (*m) Curb Ramp, Type "*", Modified
- (S) Sidewalk Elevation Transition
- Sidewalk Elevation Transition

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JEROMY A. RICHARDSON REGISTERED No. 10300110 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Jeromy A. Richardson 4-13-09
DESIGN ENGINEER DATE

DESIGNED: ATW DRAWN: JNII
CHECKED: JAR CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS LINE "B"

HORIZONTAL SCALE	BRIDGE FILE
1:200	
VERTICAL SCALE	DESIGNATION
NONE	0600196
SURVEY BOOK	SHEETS
	23 of 68
CONTRACT	PROJECT
R-32103	0600196

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STRUCTURE NOTES

1+666, 9.3m Rt., Str. No. 56
Manhole J-4 and 11.4m of 750mm Pipe Type 2 Req'd.

1+666 Rt., Str. No. 57
Mod. Inlet C-15 and 0.5m of 300mm Pipe Type 2 Req'd. 1 Catch Basin Hood Req'd.

1+666 Lt., Str. No. 58
Inlet B-15 and 13.2m of 300mm Pipe Type 2 Req'd.

1+678, 14.8m Rt., Str. No. 59
Manhole J-4 and 14.2m of 750mm Pipe Type 2 Req'd.

1+679 Rt., Str. No. 60
Mod. Inlet B-15 and 0.5m of 300mm Pipe Type 2 Req'd. 1 Catch Basin Hood Req'd.

1+679 Lt., Str. No. 61
Inlet B-15 and 18.3m of 300mm Pipe Type 2 Req'd.

1+686 Rt., Str. No. 85
Mod. Inlet C-15 and 15m of 300mm Pipe Type 2 Req'd. 1 Catch Basin Hood Req'd.

3+149, 17.3m Lt., Str. No. 84
Manhole K-4 and 12m of 750mm Pipe Type 2 Req'd.

3+158, 5.7m Lt., Str. No. 84A
Manhole K-4 and 47m of 750mm Pipe Type 2 Req'd. Adjust to Grade

3+061 Lt., Str. No. 86
Inlet B-15 and 9.6m of 300mm Pipe Type 2 Req'd.

3+061 Rt., Str. No. 87
Mod. Inlet C-15 and 0.5m of 300mm Pipe Type 2 Req'd. 1 Catch Basin Hood Req'd.

3+061, 7.8m Rt., Str. No. 88
Manhole C-4 and 55.9m of 300mm Pipe Type 2 Req'd.

3+110 Lt., Str. No. 89
Inlet B-15 and 13.1m of 300mm Pipe Type 2 Req'd.

3+117 Rt., Str. No. 90
Mod. Inlet C-15 and 0.6m of 300mm Pipe Type 2 Req'd. 1 Catch Basin Hood Req'd.

3+117, 9.4m Rt., Str. No. 91
Manhole C-4 and 13.0m of 300mm Pipe Type 2 Req'd.

3+134 Lt., Str. No. 92
Inlet B-15 and 15.2m of 300mm Pipe Type 2 Req'd.

3+140 Rt., Str. No. 93
Mod. Inlet C-15 and 10.3m of 300mm Pipe Type 2 Req'd. 1 Catch Basin Hood Req'd.

3+131, 12.5m Rt., Str. No. 94
Mod. Inlet C-15 and 28.4m of 450mm Pipe Type 2 Req'd. 1 Catch Basin Hood Req'd.

3+158 Rt., Str. No. 95
Mod. Inlet B-15 and 0.5m of 300mm Pipe Type 2 Req'd. 1 Catch Basin Hood Req'd.

3+158, 22.4m Rt., Str. No. 96
Manhole C-4 and 7.9m of 450mm Pipe Type 2 Req'd.

3+167 Rt., Str. No. 97
Mod. Inlet B-15 and 0.5m of 300mm Pipe Type 2 Req'd. 1 Catch Basin Hood Req'd.

3+167, 23.5m Rt., Str. No. 98
Manhole C-4 and 7.9m of 450mm Pipe Type 2 Req'd.

3+176 Rt., Str. No. 99
Mod. Inlet B-15 and 0.5m of 300mm Pipe Type 2 Req'd. 1 Catch Basin Hood Req'd.

3+176, 21.9m Rt., Str. No. 100
Manhole C-4 and 15.9m of 450mm Pipe Type 2 Req'd.

3+191 Rt., Str. No. 101
Mod. Inlet C-15 and 12.9m of 300mm Pipe Type 2 Req'd. 1 Catch Basin Hood Req'd.

3+192, 14.6m Rt., Str. No. 102
Manhole K-4 and 35.9m of 900mm Pipe Type 2 Req'd.

3+201 Lt., Str. No. 103
Inlet B-15 and 12m of 300mm Pipe Type 2 Req'd.

3+089 Rt., Str. No. 200
Existing Inlet
Remove Inlet and Pipe

LEGEND

- (C1) PCCP for Approaches, 150mm
- (C2) PCCP for Approaches, 225mm
- (D1) HMA for Approaches
- (F) HMA Multi-Use Path
- (H) 200 mm Compacted Aggregate, #53
- (K) Full Depth QC/QA HMA Pavement
- (M) Surface Milling, Asphalt
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- (S) 0.100m Concrete Sidewalk
- (W) Widening with HMA, Type C
- (13) Curb, Concrete
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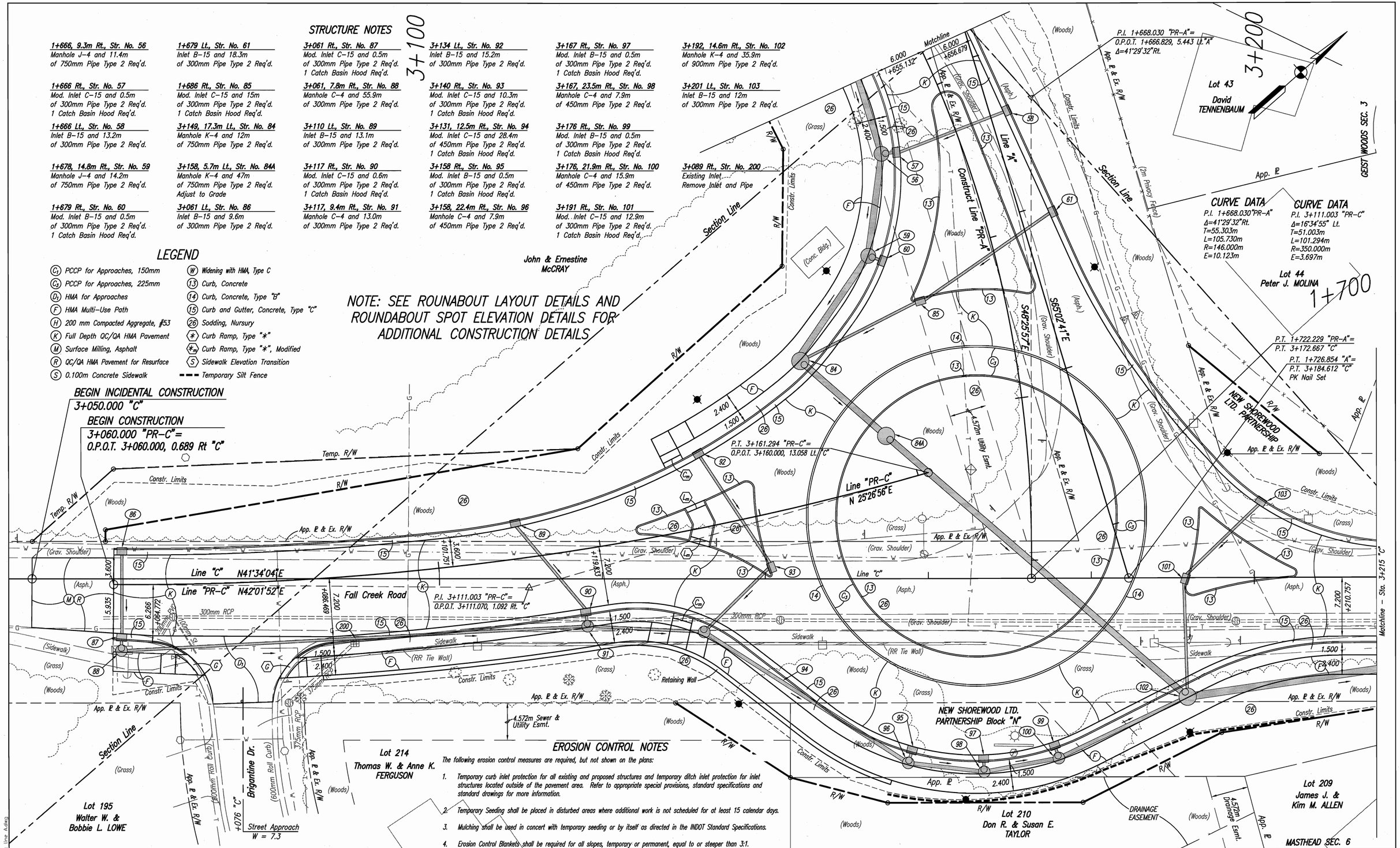
- (15) Curb and Gutter, Concrete, Type "C"
- (26) Sodding, Nursury
- (*) Curb Ramp, Type "*"
- (*m) Curb Ramp, Type "*", Modified
- (S) Sidewalk Elevation Transition
- Temporary Silt Fence

NOTE: SEE ROUNABOUT LAYOUT DETAILS AND ROUNDABOUT SPOT ELEVATION DETAILS FOR ADDITIONAL CONSTRUCTION DETAILS



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JEROMY A. RICHARDSON REGISTERED No. 10300110 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE 4-30-09

DESIGNED: WRC | DRAWN: JNII
CHECKED: JAR | CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS LINE "PR-C"/"C"

HORIZONTAL SCALE	BRIDGE FILE
1:200	
VERTICAL SCALE	DESIGNATION
NONE	0600196
SURVEY BOOK	SHEETS
	24 of 68
CONTRACT	PROJECT
R-32103	0600196

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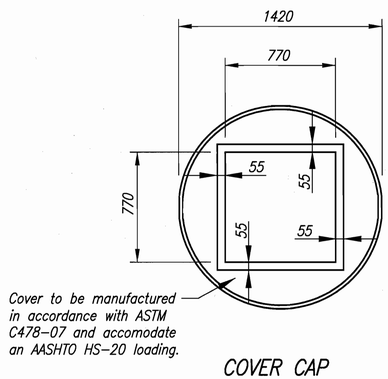
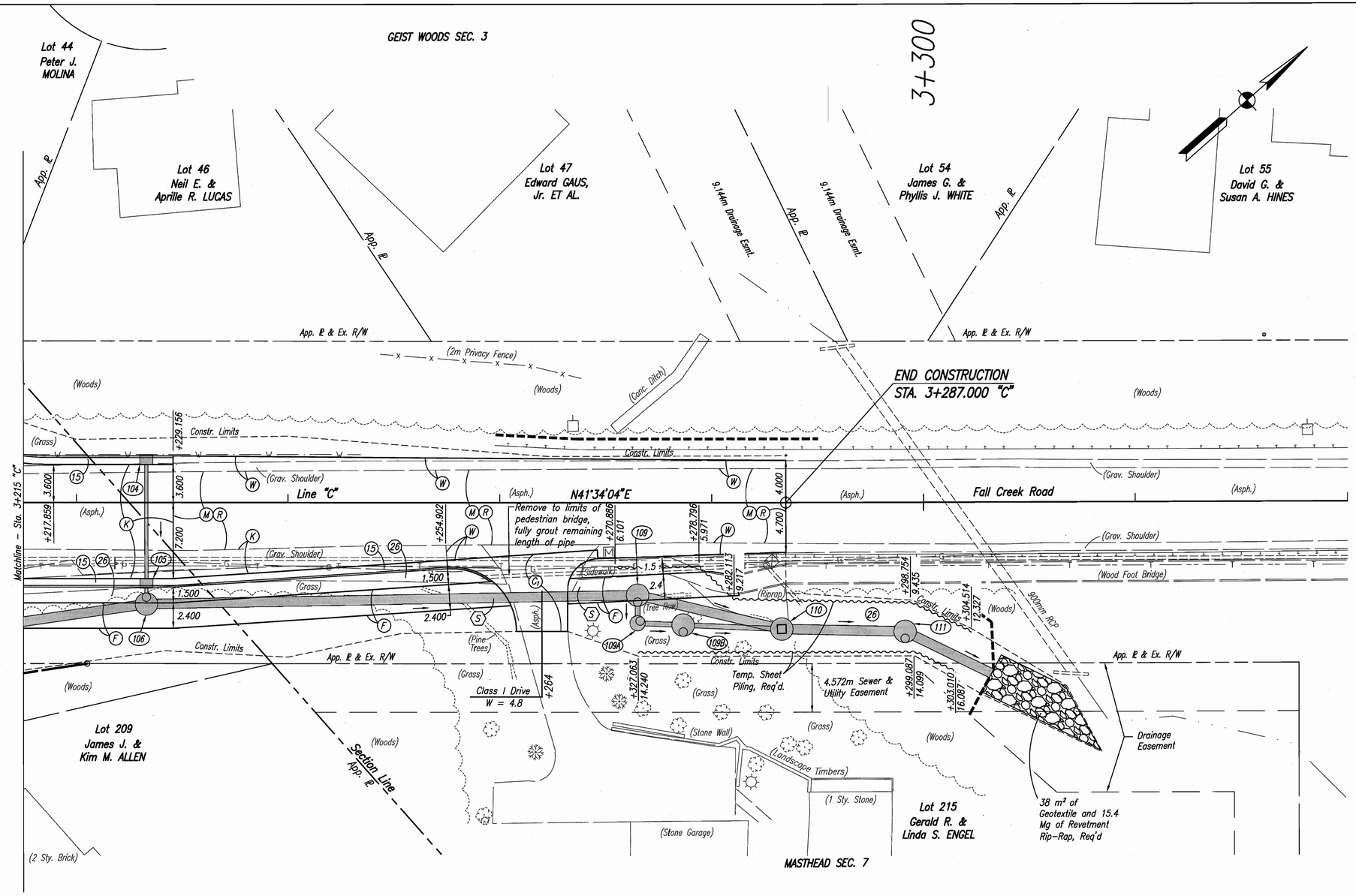


COVER CAP

MANHOLE K-7, MODIFIED



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STRUCTURE NOTES

3+228 Lt., Str. No. 104
Inlet B-15 and 10.3m of 300mm Pipe Type 2 Req'd.

3+228 Rt., Str. No. 105
Mod. Inlet C-15 and 0.5m of 300mm Pipe Type 2 Req'd. 1 Catch Basin Hood Req'd.

3+228, 9.4m Rt., Str. No. 106
Manhole K-4 and 44.5m of 900mm Pipe Type 2 Req'd.

3+273, 8.7m Rt., Str. No. 109
Manhole K-4 and 12m of 900mm Pipe Type 2 Req'd and 1.0m of 450mm Type 2 Req'd

3+273, 11.4m Rt., Str. No. 109A
Manhole C-4 and 2.6m of 450mm Pipe Type 2 Req'd.

3+277, 11.6m Rt., Str. No. 109B
Stromwater Quality Treatment Unit and 7.3m of 450mm Pipe Type 2 Req'd

3+287, 12.0m Rt., Str. No. 110
Mod. Manhole K-7 and 9.7m of 900mm Pipe Type 2 Req'd. Depress Casting Elevation 0.2m Below Grade

3+298, 8.1m Rt., Str. No. 111
Manhole K-4 and 12.3m of 900mm Pipe Type 2 Req'd. End Section Req'd

LEGEND

- (C1) PCCP for Approaches, 150mm
- (C2) PCCP for Approaches, 225mm
- (D1) HMA for Approaches
- (F) HMA Multi-Use Path
- (H) 200 mm Compacted Aggregate, #53
- (K) Full Depth QC/QA HMA Pavement
- (M) Surface Milling, Asphalt
- (R) QC/QA HMA Pavement for Resurface
- (S) 0.100m Concrete Sidewalk
- (W) Widening with HMA, Type C
- (13) Curb, Concrete
- (14) Curb, Concrete, Type "B"
- (15) Curb and Gutter, Concrete, Type "C"
- (26) Sodding, Nursury
- (*) Curb Ramp, Type "*"
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- Temporary Silt Fence

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RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE 4-13-09

DESIGNED: WRC | DRAWN: JNII
CHECKED: JAR | CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS LINE "C"

HORIZONTAL SCALE	BRIDGE FILE
1:200	
VERTICAL SCALE	DESIGNATION
NONE	0600196
SURVEY BOOK	SHEETS
	25 of 68
CONTRACT	PROJECT
R-32103	0600196

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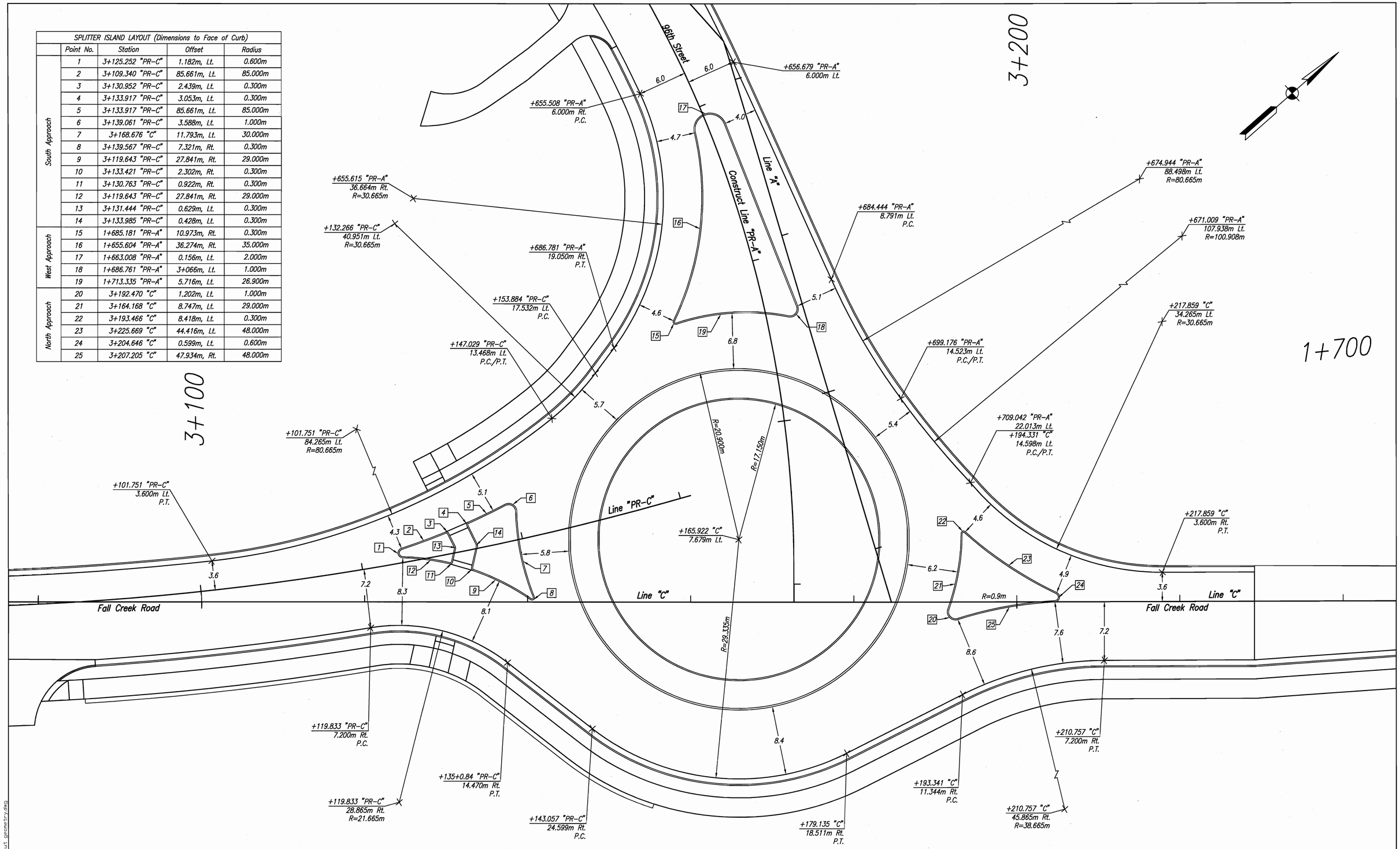
SPLITTER ISLAND LAYOUT (Dimensions to Face of Curb)				
	Point No.	Station	Offset	Radius
South Approach	1	3+125.252 "PR-C"	1.182m, Lt.	0.600m
	2	3+109.340 "PR-C"	85.661m, Lt.	85.000m
	3	3+130.952 "PR-C"	2.439m, Lt.	0.300m
	4	3+133.917 "PR-C"	3.053m, Lt.	0.300m
	5	3+133.917 "PR-C"	85.661m, Lt.	85.000m
	6	3+139.061 "PR-C"	3.588m, Lt.	1.000m
	7	3+168.676 "C"	11.793m, Lt.	30.000m
	8	3+139.567 "PR-C"	7.321m, Rt.	0.300m
	9	3+119.643 "PR-C"	27.841m, Rt.	29.000m
	10	3+133.421 "PR-C"	2.302m, Rt.	0.300m
	11	3+130.763 "PR-C"	0.922m, Rt.	0.300m
	12	3+119.643 "PR-C"	27.841m, Rt.	29.000m
	13	3+131.444 "PR-C"	0.629m, Lt.	0.300m
	14	3+133.985 "PR-C"	0.428m, Lt.	0.300m
West Approach	15	1+685.181 "PR-A"	10.973m, Rt.	0.300m
	16	1+655.604 "PR-A"	36.274m, Rt.	35.000m
	17	1+663.008 "PR-A"	0.156m, Lt.	2.000m
	18	1+686.761 "PR-A"	3+066m, Lt.	1.000m
	19	1+713.335 "PR-A"	5.716m, Lt.	26.900m
North Approach	20	3+192.470 "C"	1.202m, Lt.	1.000m
	21	3+164.168 "C"	8.747m, Lt.	29.000m
	22	3+193.466 "C"	8.418m, Lt.	0.300m
	23	3+225.669 "C"	44.416m, Lt.	48.000m
	24	3+204.646 "C"	0.599m, Lt.	0.600m
	25	3+207.205 "C"	47.934m, Rt.	48.000m



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RECOMMENDED FOR APPROVAL Jeromy A. Richardson 4-13-09
DESIGN ENGINEER DATE

DESIGNED: HEK DRAWN: JNII
CHECKED: JAR CHECKED: WRC

INDIANA DEPARTMENT OF TRANSPORTATION

ROUNDABOUT LAYOUT DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1:200	
VERTICAL SCALE	DESIGNATION
NONE	0600196
SURVEY BOOK	SHEETS
	26 of 68
CONTRACT	PROJECT
R-32103	0600196

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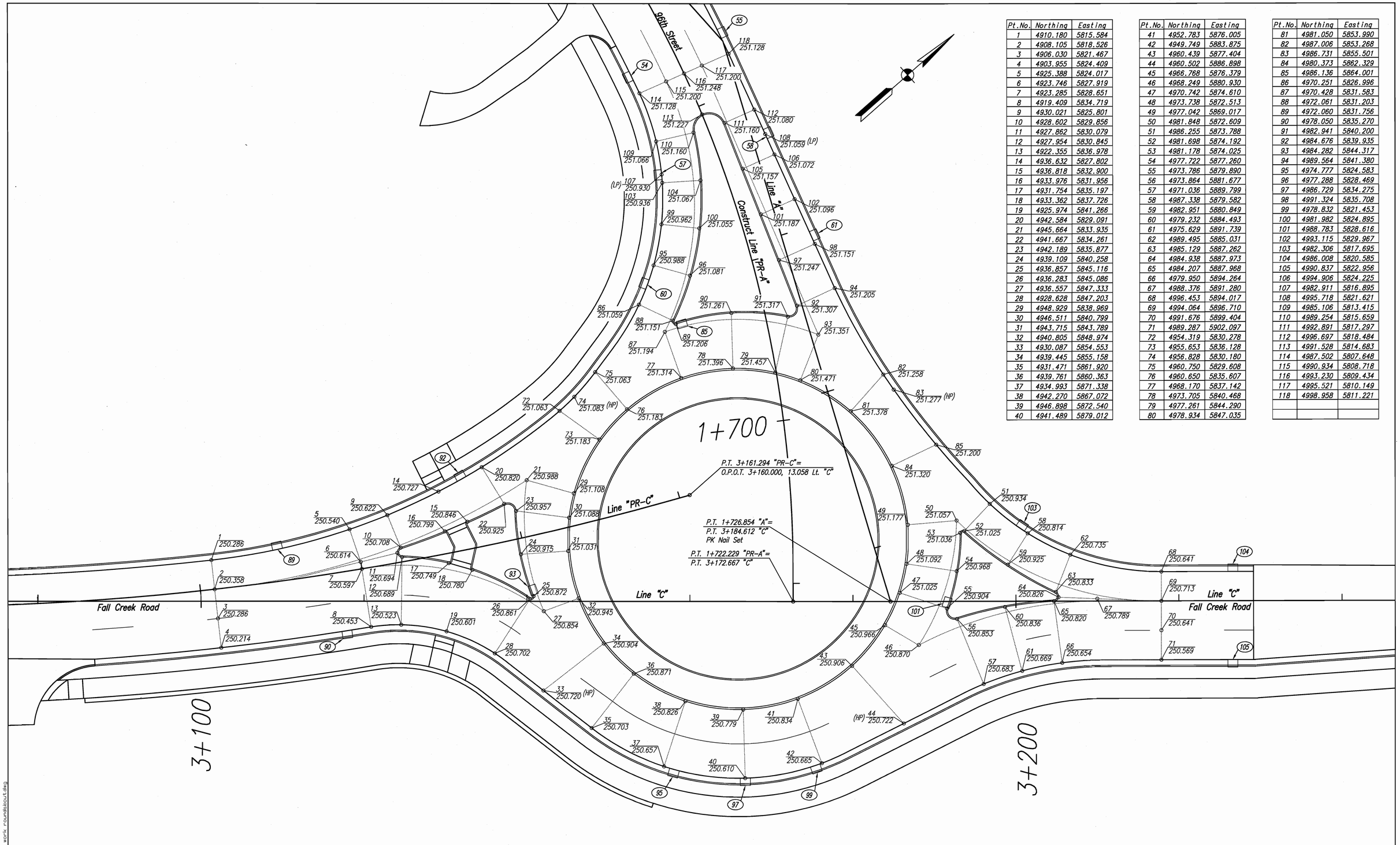

Pt.No.	Northing	Easting
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4	4903.955	5824.409
5	4925.388	5824.017
6	4923.746	5827.919
7	4923.285	5828.651
8	4919.409	5834.719
9	4930.021	5825.801
10	4928.602	5829.856
11	4927.862	5830.079
12	4927.954	5830.845
13	4922.355	5836.978
14	4936.632	5827.802
15	4936.818	5832.900
16	4933.976	5831.956
17	4931.754	5835.197
18	4933.362	5837.726
19	4925.974	5841.266
20	4942.584	5829.091
21	4945.664	5833.935
22	4941.667	5834.261
23	4942.189	5835.877
24	4939.109	5840.258
25	4936.857	5845.116
26	4936.283	5845.086
27	4936.557	5847.333
28	4928.628	5847.203
29	4948.929	5838.969
30	4946.511	5840.799
31	4943.715	5843.789
32	4940.805	5848.974
33	4930.087	5854.553
34	4939.445	5855.158
35	4931.471	5861.920
36	4939.761	5860.363
37	4934.993	5871.338
38	4942.270	5867.072
39	4946.898	5872.540
40	4941.489	5879.012

Pt.No.	Northing	Easting
41	4952.783	5876.005
42	4949.749	5883.875
43	4960.439	5877.404
44	4960.502	5886.898
45	4966.768	5876.379
46	4968.249	5880.930
47	4970.742	5874.610
48	4973.738	5872.513
49	4977.042	5869.017
50	4981.848	5872.609
51	4986.255	5873.788
52	4981.698	5874.192
53	4981.178	5874.025
54	4977.722	5877.260
55	4973.786	5879.890
56	4973.864	5881.677
57	4971.036	5889.799
58	4987.338	5879.582
59	4982.951	5880.849
60	4979.232	5884.493
61	4975.629	5891.739
62	4989.495	5885.031
63	4985.129	5887.262
64	4984.938	5887.973
65	4984.207	5887.968
66	4979.950	5894.264
67	4988.376	5891.280
68	4996.453	5894.017
69	4994.064	5896.710
70	4991.676	5899.404
71	4989.287	5902.097
72	4954.319	5830.278
73	4955.653	5836.128
74	4956.828	5830.180
75	4960.750	5829.608
76	4960.650	5835.607
77	4968.170	5837.142
78	4973.705	5840.468
79	4977.261	5844.290
80	4978.934	5847.035

Pt.No.	Northing	Easting
81	4981.050	5853.990
82	4987.006	5853.268
83	4986.731	5855.501
84	4980.373	5862.329
85	4986.136	5864.001
86	4970.251	5826.996
87	4970.428	5831.583
88	4972.061	5831.203
89	4972.060	5831.756
90	4978.050	5835.270
91	4982.941	5840.200
92	4984.676	5839.935
93	4984.282	5844.317
94	4989.564	5841.380
95	4974.777	5824.583
96	4977.288	5828.469
97	4986.729	5834.275
98	4991.324	5835.708
99	4978.832	5821.453
100	4981.982	5824.895
101	4988.783	5828.616
102	4993.115	5829.967
103	4982.306	5817.695
104	4986.008	5820.585
105	4990.837	5822.956
106	4994.906	5824.225
107	4982.911	5816.895
108	4995.718	5821.621
109	4985.106	5813.415
110	4989.254	5815.659
111	4992.891	5817.297
112	4996.697	5818.484
113	4991.528	5814.683
114	4987.502	5807.648
115	4990.934	5808.718
116	4993.230	5809.434
117	4995.521	5810.149
118	4998.958	5811.221

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JEROMY A. RICHARDSON REGISTERED No. 10300110 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Jeromy A. Richardson 4-13-09
DESIGN ENGINEER DATE

DESIGNED: WRC DRAWN: JNII
CHECKED: JAR CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

ROUNDABOUT SPOT ELEVATION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1:200	
VERTICAL SCALE	DESIGNATION
NONE	0600196
SURVEY BOOK	SHEETS
	27 of 68
CONTRACT	PROJECT
R-32103	0600196

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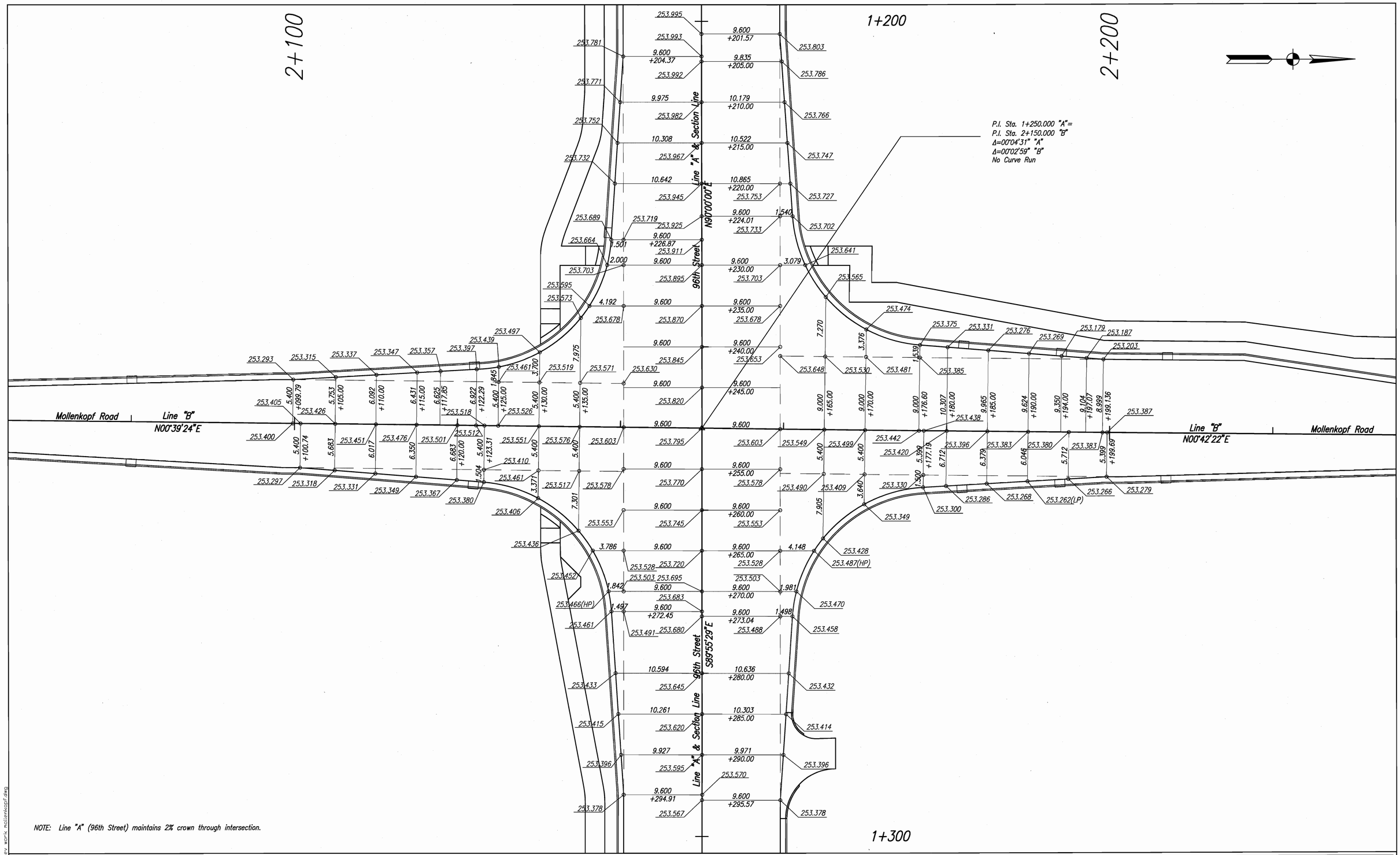

NOTE: Line "A" (96th Street) maintains 2% crown through intersection.

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JEROMY A. RICHARDSON REGISTERED No. 10300110 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE 4-13-09

DESIGNED: WRC | DRAWN: JNII
CHECKED: JAR | CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

MOLLENKOPF RD. SPOT ELEVATION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1:200	
VERTICAL SCALE	DESIGNATION
NONE	0600196
SURVEY BOOK	SHEETS
	28 of 68
CONTRACT	PROJECT
R-32103	0600196

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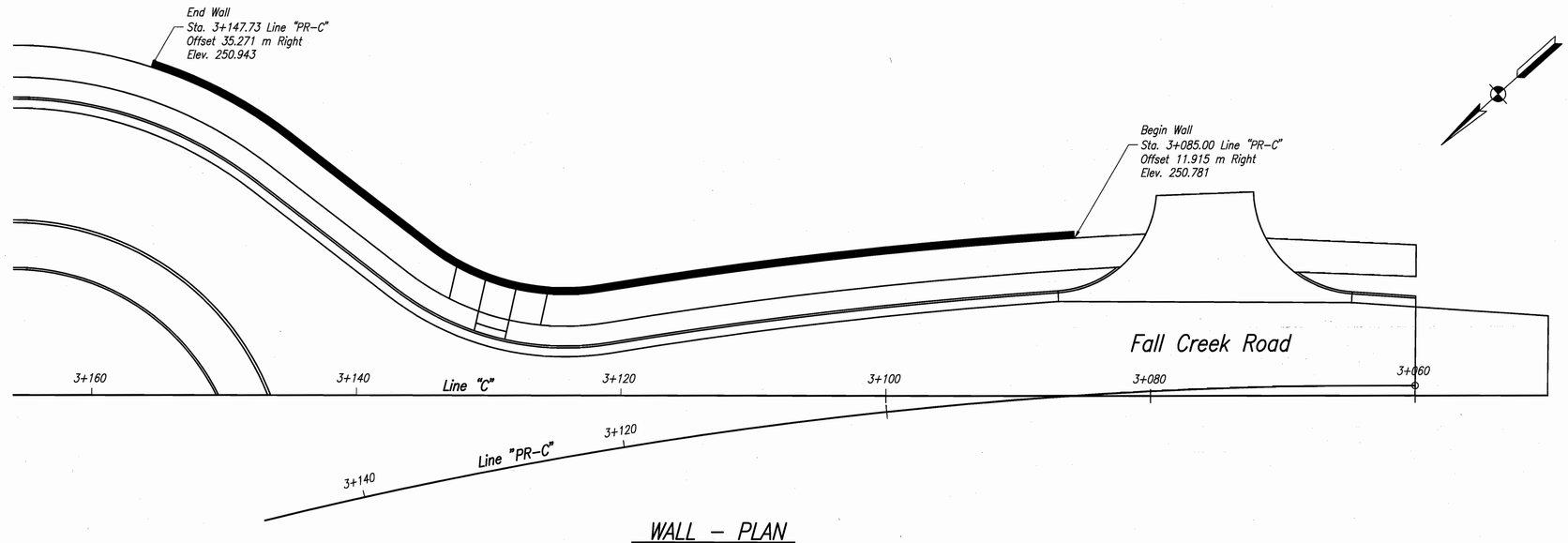
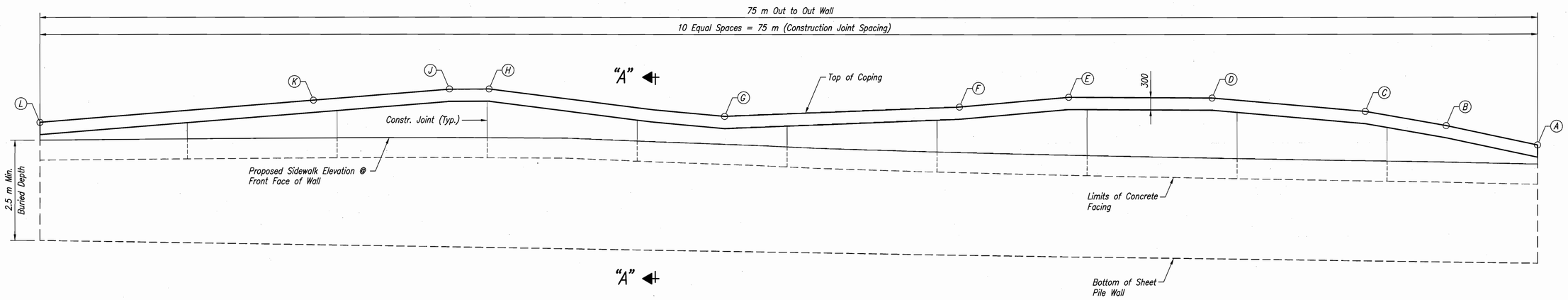


WALL – PLAN

Scale: 1:200



WALL – ELEVATION

Scale: 1:100 Horz.
Scale: 1:50 Vert.

NOTES:

All Dimensions in Millimeters unless otherwise noted.
All Elevations in Meters unless otherwise noted.
For Construction Joint Details, see Stnd. Drawing 724-BJTS-05.
For Additional Details see Sheet 30.

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DARRYL P. WINEINGER REGISTERED No. 10200129 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE: 4/13/09

DESIGNED: CJD | DRAWN: RSJ
CHECKED: DPW | CHECKED: DPW

INDIANA DEPARTMENT OF TRANSPORTATION

RETAINING WALL LAYOUT

HORIZONTAL SCALE	BRIDGE FILE
AS SHOWN	
VERTICAL SCALE	DESIGNATION
AS SHOWN	0600196
SURVEY BOOK	SHEETS
	29 of 68
CONTRACT	PROJECT
R-32103	0600196

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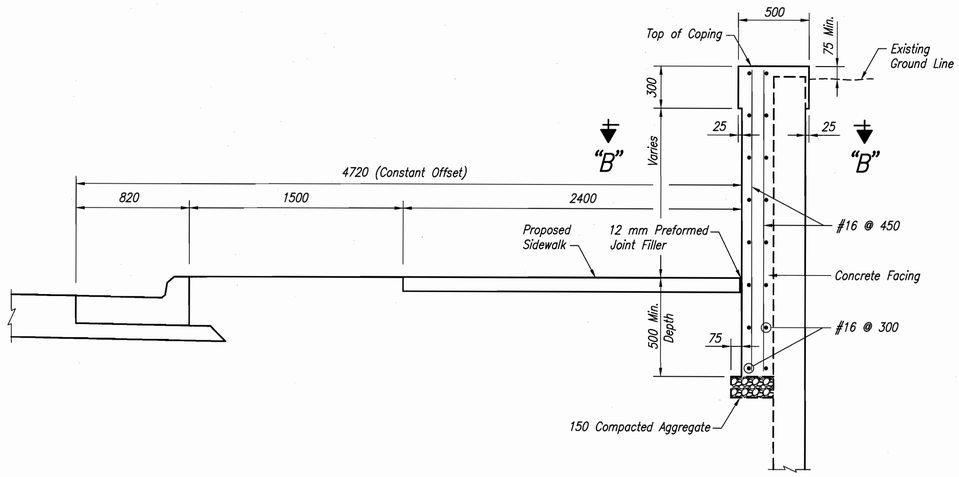
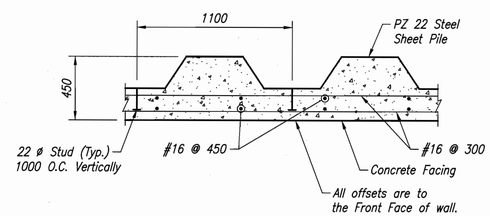


SECTION "A–A"

Scale: 1:20



SECTION "B–B"

Scale: 1:20

SHEET PILE WALL TABLE

POINT	STATION	OFFSET	TOP OF COPING ELEV.	MIN SHEET PILE TIP ELEV.
A	3+085.00 "PR–C"	11.915 m Right	250.781	247.802
B	3+089.41 "PR–C"	11.915 m Right	251.267	247.855
C	3+093.31 "PR–C"	11.915 m Right	251.622	247.890
D	3+100.71 "PR–C"	11.915 m Right	251.962	247.961
E	3+107.65 "PR–C"	11.915 m Right	251.986	248.041
F	3+112.93 "PR–C"	11.915 m Right	251.743	248.109
G	3+124.23 "PR–C"	12.566 m Right	251.506	248.310
H	3+133.18 "PR–C"	19.392 m Right	252.187	248.470
J	3+135.16 "PR–C"	21.846 m Right	252.182	248.478
K	3+138.51 "PR–C"	26.096 m Right	251.937	248.462
L	3+147.73 "PR–C"	35.271 m Right	251.358	248.415

ESTIMATE OF QUANTITIES

ITEM	QTY.
Sheet Piling, Steel, S = 18.1	264.4 m^2
Concrete Facing	92.2 m^2

NOTES:

All Dimensions in Millimeters unless otherwise noted.
All Elevations in Meters unless otherwise noted.
For Construction Joint Details, see stnd. Drawing 724–BJTS–05.
For Additional Details see previous sheet, "Retaining Wall Layout"

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DARRYL P. WINEINGER REGISTERED No. 10200129 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER 4/13/09 DATE

DESIGNED: CJD DRAWN: RSJ
CHECKED: DPW CHECKED: DPW

INDIANA DEPARTMENT OF TRANSPORTATION

RETAINING WALL DETAILS

HORIZONTAL SCALE	BRIDGE FILE
AS SHOWN	
VERTICAL SCALE	DESIGNATION
AS SHOWN	0600196
SURVEY BOOK	SHEETS
	30 of 68
CONTRACT	PROJECT
R–32103	0600196

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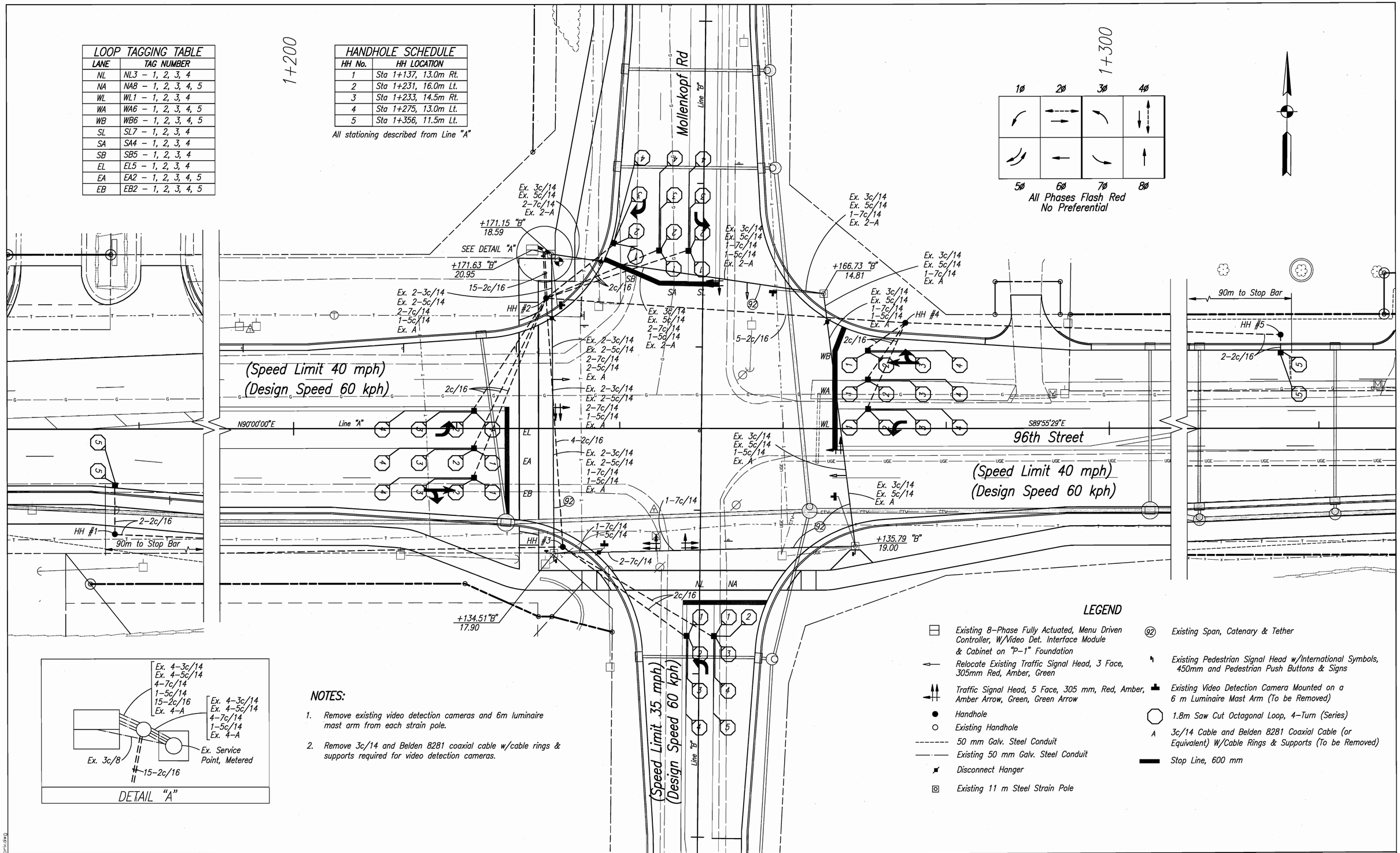
LOOP TAGGING TABLE	
LANE	TAG NUMBER
NL	NL3 – 1, 2, 3, 4
NA	NA8 – 1, 2, 3, 4, 5
WL	WL1 – 1, 2, 3, 4
WA	WA6 – 1, 2, 3, 4, 5
WB	WB6 – 1, 2, 3, 4, 5
SL	SL7 – 1, 2, 3, 4
SA	SA4 – 1, 2, 3, 4
SB	SB5 – 1, 2, 3, 4
EL	EL5 – 1, 2, 3, 4
EA	EA2 – 1, 2, 3, 4, 5
EB	EB2 – 1, 2, 3, 4, 5

HANDHOLE SCHEDULE	
HH No.	HH LOCATION
1	Sta 1+137, 13.0m Rt.
2	Sta 1+231, 16.0m Lt.
3	Sta 1+233, 14.5m Rt.
4	Sta 1+275, 13.0m Lt.
5	Sta 1+356, 11.5m Lt.

All stationing described from Line "A"



DETAIL "A"

NOTES:

1. Remove existing video detection cameras and 6m luminaire mast arm from each strain pole.
2. Remove 3c/14 and Belden 8281 coaxial cable w/cable rings & supports required for video detection cameras.

LEGEND

- Existing 8–Phase Fully Actuated, Menu Driven Controller, W/Video Det. Interface Module & Cabinet on "P–1" Foundation
- Relocate Existing Traffic Signal Head, 3 Face, 305mm Red, Amber, Green
- Traffic Signal Head, 5 Face, 305 mm, Red, Amber, Amber Arrow, Green, Green Arrow
- Handhole
- Existing Handhole
- 50 mm Galv. Steel Conduit
- Existing 50 mm Galv. Steel Conduit
- Disconnect Hanger
- Existing 11 m Steel Strain Pole
- (92) Existing Span, Catenary & Tether
- Existing Pedestrian Signal Head w/International Symbols, 450mm and Pedestrian Push Buttons & Signs
- Existing Video Detection Camera Mounted on a 6 m Luminaire Mast Arm (To be Removed)
- 1.8m Saw Cut Octagonal Loop, 4–Turn (Series)
- A 3c/14 Cable and Belden 8281 Coaxial Cable (or Equivalent) W/Cable Rings & Supports (To be Removed)
- Stop Line, 600 mm

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JEROMY A. RICHARDSON REGISTERED No. 10300110 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE 4-13-09

DESIGNED: ATW | DRAWN: JNII
CHECKED: JAR | CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

E. 96TH ST. & MOLLENKOPF RD. SIGNAL DETAIL

HORIZONTAL SCALE	BRIDGE FILE
1:200	
VERTICAL SCALE	DESIGNATION
NONE	0600196
SURVEY BOOK	SHEETS
	31 of 68
CONTRACT	PROJECT
R–32103	0600196

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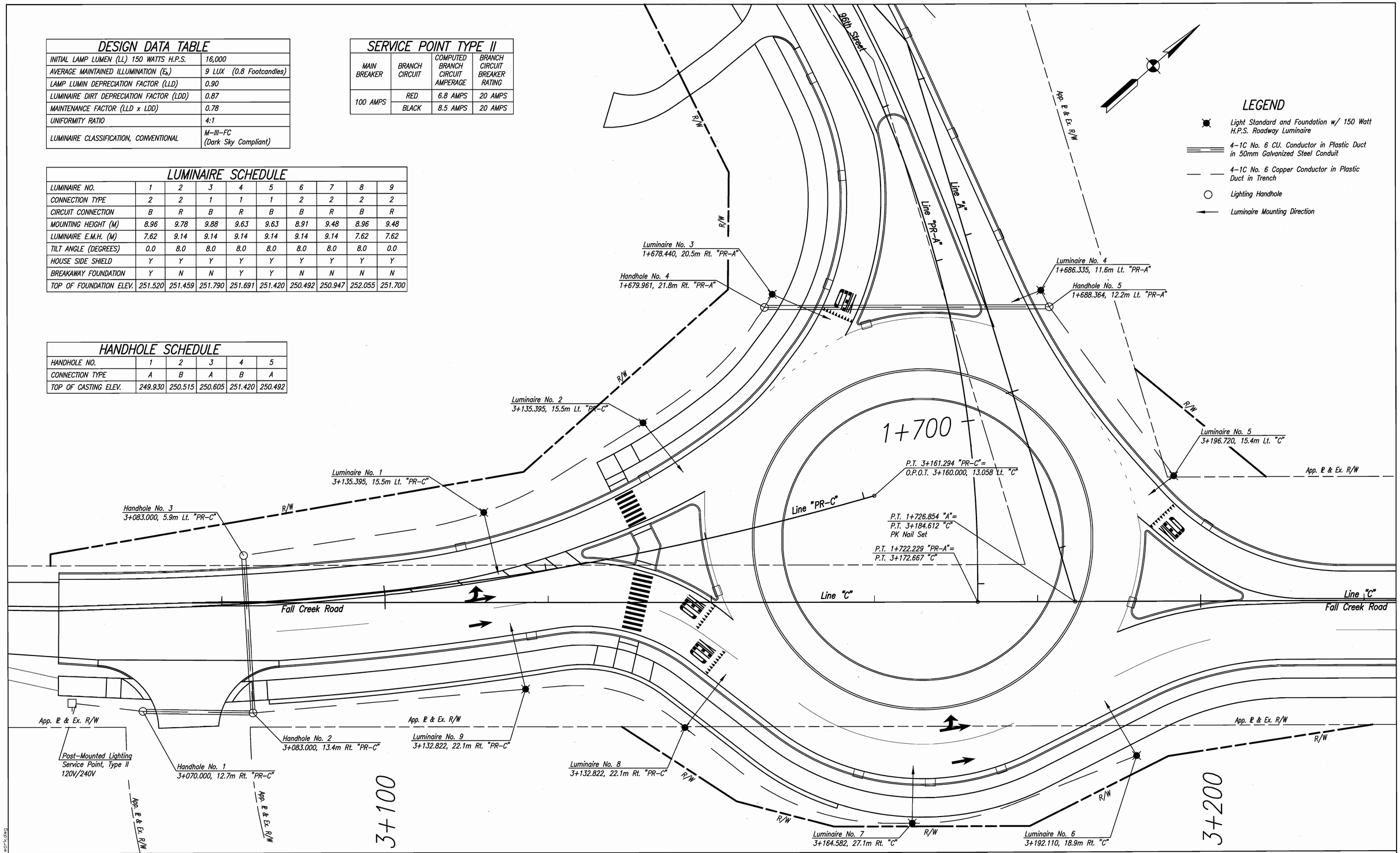
DESIGN DATA TABLE	
INITIAL LAMP LUMEN (LL) 150 WATTS H.P.S.	16,000
AVERAGE MAINTAINED ILLUMINATION (E_h)	9 LUX (0.8 Footcandles)
LAMP LUMIN DEPRECIATION FACTOR (LLD)	0.90
LUMINAIRE DIRT DEPRECIATION FACTOR (LDD)	0.87
MAINTENANCE FACTOR (LLD x LDD)	0.78
UNIFORMITY RATIO	4:1
LUMINAIRE CLASSIFICATION, CONVENTIONAL	M–III–FC (Dark Sky Compliant)

SERVICE POINT TYPE II			
MAIN BREAKER	BRANCH CIRCUIT	COMPUTED BRANCH CIRCUIT AMPERAGE	BRANCH CIRCUIT BREAKER RATING
100 AMPS	RED	6.8 AMPS	20 AMPS
	BLACK	8.5 AMPS	20 AMPS

LUMINAIRE SCHEDULE									
LUMINAIRE NO.	1	2	3	4	5	6	7	8	9
CONNECTION TYPE	2	2	1	1	1	2	2	2	2
CIRCUIT CONNECTION	B	R	B	R	B	B	R	B	R
MOUNTING HEIGHT (M)	8.96	9.78	9.88	9.63	9.63	8.91	9.48	8.96	9.48
LUMINAIRE E.M.H. (M)	7.62	9.14	9.14	9.14	9.14	9.14	9.14	7.62	7.62
TILT ANGLE (DEGREES)	0.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	0.0
HOUSE SIDE SHIELD	Y	Y	Y	Y	Y	Y	Y	Y	Y
BREAKAWAY FOUNDATION	Y	N	N	Y	Y	N	N	N	N
TOP OF FOUNDATION ELEV.	251.520	251.459	251.790	251.691	251.420	250.492	250.947	252.055	251.700

HANDHOLE SCHEDULE					
HANDHOLE NO.	1	2	3	4	5
CONNECTION TYPE	A	B	A	B	A
TOP OF CASTING ELEV.	249.930	250.515	250.605	251.420	250.492



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JEROMY A. RICHARDSON REGISTERED No. 10300110 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE 4-13-09

DESIGNED: WRC | DRAWN: JNII
CHECKED: JAR | CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

LIGHTING DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1:200	
VERTICAL SCALE	DESIGNATION
NONE	0600196
SURVEY BOOK	SHEETS 32 of 68
CONTRACT	PROJECT
R-32103	0600196

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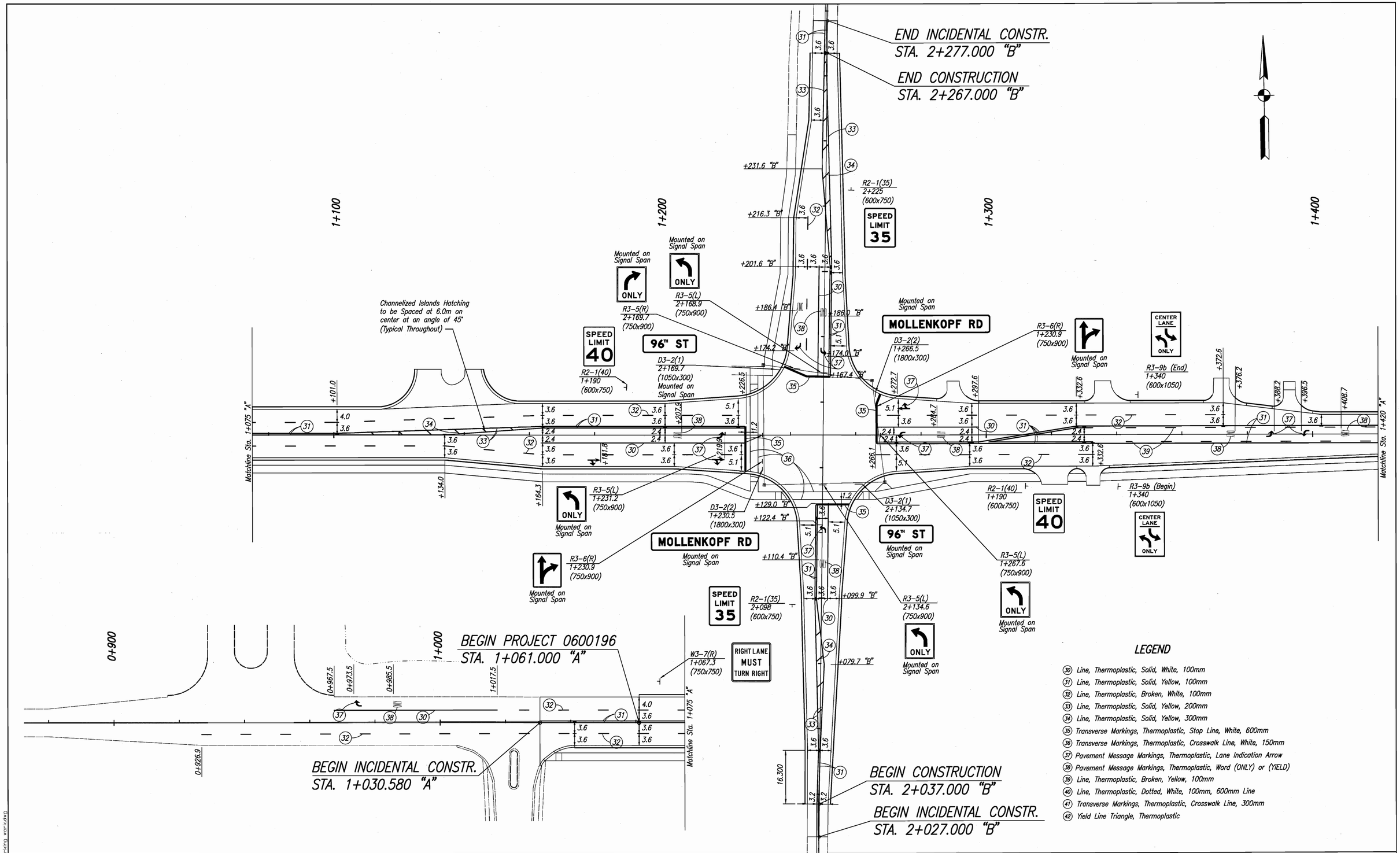

LEGEND

(30) Line, Thermoplastic, Solid, White, 100mm
(31) Line, Thermoplastic, Solid, Yellow, 100mm
(32) Line, Thermoplastic, Broken, White, 100mm
(33) Line, Thermoplastic, Solid, Yellow, 200mm
(34) Line, Thermoplastic, Solid, Yellow, 300mm
(35) Transverse Markings, Thermoplastic, Stop Line, White, 600mm
(36) Transverse Markings, Thermoplastic, Crosswalk Line, White, 150mm
(37) Pavement Message Markings, Thermoplastic, Lane Indication Arrow
(38) Pavement Message Markings, Thermoplastic, Word (ONLY) or (YIELD)
(39) Line, Thermoplastic, Broken, Yellow, 100mm
(40) Line, Thermoplastic, Dotted, White, 100mm, 600mm Line
(41) Transverse Markings, Thermoplastic, Crosswalk Line, 300mm
(42) Yield Line Triangle, Thermoplastic

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JEREMY A. RICHARDSON REGISTERED No. 10300110 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Jeremy A. Richardson 4-13-09
DESIGN ENGINEER DATE

DESIGNED: HEK DRAWN: JNII
CHECKED: JAR CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

SIGNING & PAVEMENT MARKING

HORIZONTAL SCALE	BRIDGE FILE
1:500	
VERTICAL SCALE	DESIGNATION
NONE	0600196
SURVEY BOOK	SHEETS
	33 of 68
CONTRACT	PROJECT
R-32103	0600196

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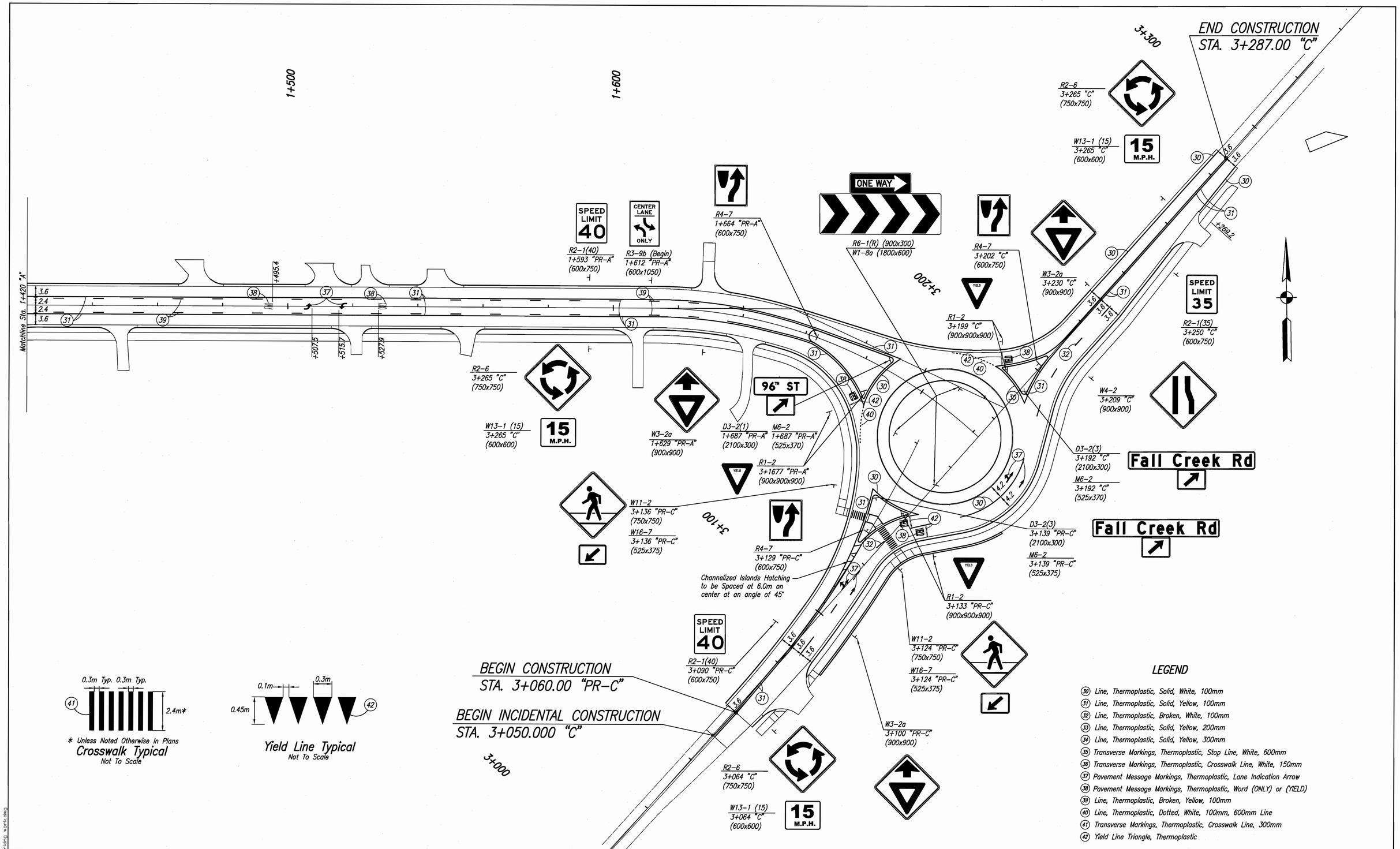

LEGEND

- (30) Line, Thermoplastic, Solid, White, 100mm
- (31) Line, Thermoplastic, Solid, Yellow, 100mm
- (32) Line, Thermoplastic, Broken, White, 100mm
- (33) Line, Thermoplastic, Solid, Yellow, 200mm
- (34) Line, Thermoplastic, Solid, Yellow, 300mm
- (35) Transverse Markings, Thermoplastic, Stop Line, White, 600mm
- (36) Transverse Markings, Thermoplastic, Crosswalk Line, White, 150mm
- (37) Pavement Message Markings, Thermoplastic, Lane Indication Arrow
- (38) Pavement Message Markings, Thermoplastic, Word (ONLY) or (YIELD)
- (39) Line, Thermoplastic, Broken, Yellow, 100mm
- (40) Line, Thermoplastic, Dotted, White, 100mm, 600mm Line
- (41) Transverse Markings, Thermoplastic, Crosswalk Line, 300mm
- (42) Yield Line Triangle, Thermoplastic

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JEROMY A. RICHARDSON REGISTERED No. 10300110 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Jeromy A. Richardson 4-13-09
DESIGN ENGINEER DATE

DESIGNED: HEK DRAWN: JNII
CHECKED: JAR CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

SIGNING & PAVEMENT MARKING

HORIZONTAL SCALE	BRIDGE FILE
1:500	
VERTICAL SCALE	DESIGNATION
NONE	0600196
SURVEY BOOK	SHEETS
	34 of 68
CONTRACT	PROJECT
R-32103	0600196

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SHEET SIGN & POST SUMMARY

SIGN										POST									
PLAN SHEET OR LINE	SIGN LOCATION (STA.)	SIGN CODE	SIGN SIZE (W x H) (mm x mm)	ENCAPSULATED LENS METAL THICKNESS AND SIGN AREA (m^2)			ENCLOSED LENS METAL THICKNESS AND SIGN AREA (m^2)			SQUARE									
										50.8 x 50.8 x 2.66 (TYPE 2)						57.2 x 57.2 x 2.66 (TYPE 1)			
										REINFORCED			UNREINFORCED			REINFORCED		UNREINFORCED	
				2.00	2.50	3.20	2.00	2.50	3.20	POST LENGTH (m)			POST LENGTH (m)			POST LENGTH (m)		POST LENGTH (m)	
				(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	1	2	TOTAL	1	2	TOTAL	1	TOTAL	1	TOTAL
Line "A"																			
	1+067.3	W3-7(R)	750x750	0.56												3.05	3.05		
	1+190	R2-1(40)	600x750	0.45												3.05	3.05		
	1+230.5	D3-2(2)	1800x300			0.54													
	1+230.9	R3-6(R)	750x900	0.63															
	1+231.2	R3-5(L)	750x900	0.63															
	1+266.4	R3-6(R)	750x900	0.63															
	1+266.5	D3-2(2)	750x900	0.63															
	1+267.6	R3-5(L)	750x900	0.63															
	1+190	R2-1(40)	600x750	0.45												3.05	3.05		
	1+340	R3-9b (Begin)	600x1050	0.63												3.35	3.35		
	1+340	R3-9b (End)	600x1050	0.63												3.35	3.35		
Line "PR-A"																			
	1+593	R2-1(40)	600x750	0.45												3.05	3.05		
	1+612	R3-9b (Begin)	600x1050	0.63												3.35	3.35		
	1+629	W3-2a	900x900		0.81											3.20	3.20		
	1+664	R4-7	600x750	0.45												3.05	3.05		
	1+687	D3-2(1)	2100x300			0.63										2.97	2.97		
	1+687	M6-2	525x370	0.19												2.97	2.97		
	3+1677	R1-2	900x900x900		0.35											3.09	3.09		
Line "B"																			
	2+098	R2-1(35)	600x750	0.45												3.05	3.05		
	2+134.6	R3-5(L)	750x900	0.63															
	2+134.7	D3-2(1)	1050x300			0.32													
	2+168.9	R3-5(L)	750x900	0.63															
	2+169.7	D3-2(1)	1050x300			0.32													
	2+169.7	R3-5(R)	750x900	0.63															
	2+225	R2-1(35)	600x750	0.45												3.05	3.05		
Line "PR-C"																			
	3+090	R2-1(40)	600x750	0.45												3.05	3.05		
	3+100	W3-2a	900x900		0.81											3.57	3.57		
	3+124	W11-2	750x750	0.56												3.74	3.74		
	3+124	W16-7	525x375	0.20												3.74	3.74		
	3+129	R4-7	600x750	0.45												3.05	3.05		
	3+133	R1-2	900x900x900		0.35											3.09	3.09		
	3+136	W11-2	750x750	0.56												3.74	3.74		
	3+136	W16-7	525x375	0.19												3.74	3.74		
	3+139	D3-2(3)	2100x300			0.63				2.60	2.60	5.20							
	3+139	M6-2	525x375	0.20															
Line "C"																			
	3+064	R2-6	750x750	0.56												3.68	3.68		
	3+064	W13-1 (15)	600x600	0.36												3.68	3.68		
	3+192	D3-2(3)	2100x300	0.63						2.60	2.60	5.20							
	3+192	M6-2	525x370	0.19															
	3+199	W3-2a	900x900x900		0.35											3.09	3.09		
	3+202	R4-7	600x750	0.45												3.05	3.05		
	3+209	W4-2	900x900		0.81											3.57	3.57		
	3+230	W3-2a	900x900		0.81											3.57	3.57		
	3+250	R2-1(35)	600x750	0.45												3.05	3.05		
	3+265	R2-6	750x750	0.56												3.68	3.68		
	3+265	W13-1 (15)	600x600	0.36												3.68	3.68		
	3+265	R2-6	750x750	0.56												3.68	3.68		
	3+265	W13-1 (15)	600x600	0.36												3.68	3.68		
		W1-8a	1800x600	1.08															
		R6-1(R)	900x300	0.27															

SHEET SIGN & POST SUMMARY

SIGN										POST									
PLAN SHEET OR LINE	SIGN LOCATION (STA.)	SIGN CODE	SIGN SIZE (W x H) (mm x mm)	ENCAPSULATED LENS METAL THICKNESS AND SIGN AREA (m^2)			ENCLOSED LENS METAL THICKNESS AND SIGN AREA (m^2)			SQUARE									
										50.8 x 50.8 x 2.66 (TYPE 2)						57.2 x 57.2 x 2.66 (TYPE 1)			
										REINFORCED			UNREINFORCED			REINFORCED		UNREINFORCED	
				2.00	2.50	3.20	2.00	2.50	3.20	POST LENGTH (m)			POST LENGTH (m)			POST LENGTH (m)		POST LENGTH (m)	
				(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	1	2	TOTAL	1	2	TOTAL	1	TOTAL	1	TOTAL

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JEROMY A. RICHARDSON REGISTERED No. 10300110 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Jeromy A. Richardson 4-13-09
DESIGN ENGINEER DATE

DESIGNED: WRC DRAWN: WRC
CHECKED: JAR CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

SHEET SIGN AND POST SUMMARY TABLE

HORIZONTAL SCALE	BRIDGE FILE
NONE	
VERTICAL SCALE	DESIGNATION
NONE	0600196
SURVEY BOOK	SHEETS
	35 of 68
CONTRACT	PROJECT
R-32103	0600196

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SUMMARY OF QUANTITIES AND APPROACH TABLE

LOCATION	DESCRIPTION	WIDTH	LENGTH	RADII	DISTANCE BEYOND R/W	SURFACE BEYOND R/W LINE			QC/QA HMA MATERIAL FOR MAINLINE					HMA FOR APPROACHES, TYPE A	HMA FOR TEMPORARY PAVEMENT	HMA, TYPE A (for Multi-use Path)		ASPHALT MATERIAL FOR:		COMPACTED AGGREGATE FOR BASE NO. 53	SUBGRADE TREATMENT, TYPE IA	SUBGRADE TREATMENT, TYPE IIA	PCCP FOR APPROACHES, 150mm	PCCP FOR APPROACHES, 250mm	CURB RAMP, CONCRETE, C	CURB RAMP, CONCRETE, G	CURB RAMP, CONCRETE, L	CURB, CONCRETE	CURB, CONCRETE, B	CURB AND GUTTER, C, CONCRETE	MILLING, ASPHALT, 38mm				REMARKS
						COMPACTED AGGREGATE SURFACE	BITUMINOUS	CONCRETE	SURF. 9.5mm	INTER. 19.0mm	BASE 25.0mm	INTER. OG19.0mm	BASE 19.0mm			SURF.	INTER.	PRIME COAT	TACK COAT																
									kg/m²					kg/m²	kg/m²	90 kg/m²	150 kg/m²			100mm															
		"W"	"L"						90	150	240	165	180	720	480																				
		m	m	m	m	m²	m²	m²	Mg	Mg	Mg	Mg	Mg	Mg	Mg	Mg	Mg	Mg	Mg	Mg	m²	m²	m²	m²	m²	m²	m	m	m	m²					
Line "A" & "PR-A"																																			
1+061 to 1+722.229									844.6	1407.6	2265.9	1796.4	1720.9		52.1	115.5	192.4		19.40	356.5	10657.3				18.5	27.9				1075.6	466.9				
1+129 LT	STREET APPROACH	7.4	10.4	12.0/-										100.7																					
1+143 LT	STREET APPROACH	4.9	10.4	12.0/-										81.0																					
1+290 LT	CLASS I DRIVE	3.8	6.4	3.0/6.1	4.0																	39.7	39.7												
1+321 RT	CLASS III MOD.	7.9	5.6	6.1/3.0	1.5																	62.3		62.3											
1+333 RT	CLASS I MOD.	4.1	5.9	3.0/3.0	1.5																	32.4	32.4												
1+336 LT	CLASS I MOD.	5.0	6.8	3.0/6.1	4.0																	49.7	49.7												
1+372 LT	CLASS I DRIVE	4.7	7.5	3.0/6.1	5.0																	49.4	49.4												
1+393 LT	CLASS I DRIVE	3.6	8.9	3.0/6.1	7.0																	46.7	46.7												
1+449 RT	CLASS I DRIVE	3.7	14.0	6.1/3.0	6.0																	62.7	62.7												
1+472 LT	CLASS I MOD.	5.2	8.2	3.0/6.1	5.5																	64.2	64.2												
1+512 LT	CLASS I MOD.	6.7	7.3	3.0/6.1	4.5																	60.7	60.7												
1+521 RT	CLASS I DRIVE	3.3	8.8	6.1/3.0	3.5																	33.6	33.6												
1+524 LT	CLASS I MOD.	2.7	6.8	3.0/6.1	4.0																	45.4	45.4												
1+545 LT	CLASS I DRIVE	5.3	5.7	3.0/6.1	3.0																	45.3	45.3												
1+555 RT	CLASS I DRIVE	3.5	9.0	6.1/3.0	3.0																	51.8	51.8												
1+608 RT	CLASS I DRIVE	3.0	18.5	6.1/3.0	9.3																	75.1	75.1												
1+627 "PR-A" LT	CLASS I DRIVE	3.5	15.0	3.0/6.1	8.7																	67.9	67.9												
1+642 "PR-A" RT	CLASS I MOD	2.9	26.0	6.1/3.0	12.0																	55.9	55.9												
Line "B"																																			
2+037 to 2+140	STREET								113.0	188.2	421.2	346.3	321.1						2.50		1473.4									221.2	63.4				
2+159 to 2+267	STREET								139.6	232.6	276.5	226.6	210.8			16.0	26.6		3.00	42.1	1777.1									229.7	75.4				
Line "C" & "PR-C"																																			
3+060 to 3+287	STREET								116.5	117.4	198.8	166.2	151.8		502.2	32.5	54.0		2.00	85.5	938.3				36.1	21.6				247.1	444.4				
3+076 "PR-C" RT	STREET APPROACH	7.3	8.2	8.0/8.0										69.9																					
3+264 RT	CLASS I DRIVE	4.8	7.3	6.1/3.0																		52.8	52.8												
ROUNDABOUT									226.5	377.5	644.5	495.1	488.1			30.5	50.8		4.91	102.2	2774.4	405.2					12.6	108.7	287.2	272.8					
TOTAL									**1440.2**	**2323.3**	**3806.9**	**3030.6**	**2892.7**	**251.6**	**554.3**	**194.5**	**323.8**		**31.81**	**586.3**	**17620.5**	**1300.8**	**833.3**	**62.3**	**54.6**	**49.5**	**12.6**	**108.7**	**287.2**	**2046.4**	**1050.1**				

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JEROMY A. RICHARDSON REGISTERED No. 10300110 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Jeromy A. Richardson 4-13-09
DESIGN/ENGINEER DATE

DESIGNED: WRC DRAWN: WRC
CHECKED: JAR CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES AND APPROACH TABLE

HORIZONTAL SCALE	BRIDGE FILE
NONE	
VERTICAL SCALE	DESIGNATION
NONE	0600196
SURVEY BOOK	SHEETS
	36 of 68
CONTRACT	PROJECT
R-32103	0600196

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UNDERDRAIN TABLE

UNDERDRAIN PIPE										OUTLET PIPE								OUTLET PROTECTOR						
UNDERDRAIN PIPE LIMITS	TYPE 4 PIPE		AGGREGATE FOR UNDERDRAINS	GEOTEXTILES FOR UNDERDRAINS	HMA FOR UNDERDRAINS	SPECIAL GRADE	FLOWLINE ELEVATION @ UNDERDRAIN PIPE LIMIT	CONNECT TO STRUCTURE NO.	STRUCTURE INVERT ELEVATION	OUTLET STATION	OUTLET ELEVATION	150mm OUTLET PIPE	45 DEGREE ELBOWS REQUIRED	DITCH FLOW LINE ELEVATION @ OUTLET	CONNECT OUTLET PIPE TO STR. NO.	STRUCTURE BACKFILL	HMA FOR UNDERDRAINS	OUTLET PROTECTOR NO.	OUTLET PROTECTOR TYPE	LOCATION				REMARKS
	150mm	200mm	m^3	m^2	Mg	%						m	each			m^3	Mg			OUTSIDE LEFT	MEDIAN LEFT	MEDIAN RIGHT	OUTSIDE RIGHT	
Line "A" – Left																								
1+063	50.0		11.3	138.4			252.503	15	252.240															
1+113							252.513	18	252.400															
1+113	45.0		10.2	124.6			252.513	18	252.400															
1+161							252.719	21	252.630															
1+161	31.0		7.0	85.8			252.719	21	252.630															
1+192	8.0		1.8	22.1		0.20%	252.856																	
1+200							252.872																	High Point
1+200	8.0		1.8	22.1		–0.20%	252.872																	
1+208	15.0		3.4	41.5			252.856																	High Point
1+223							252.768	24	252.690															
1+223	29.0		6.6	80.3			252.768	24	252.690															
2+182 "B"							252.267	72	252.190															
2+182 "B"	25.0		5.7	69.2			252.338	73	252.130															
1+270	40.0		9.0	110.7			252.518																	
1+310							252.364	28	252.290															
1+310	19.0		4.3	52.6			252.364	28	252.290															
1+329							252.269	31	252.260															
1+329	10.0		2.3	27.7			252.269	31	252.260															
1+339	6.0		1.4	16.6		–0.20%	252.232																	
1+345							252.220	34	252.150															Low Point
1+345	7.0		1.6	19.4		0.20%	252.219	34	252.150															Low Point
1+352	10.0		2.3	27.7			252.233																	
1+362							252.270	37	252.190															
1+362	39.0		8.8	108.0			252.270	37	252.190															
1+401							252.644	40	252.560															
1+401	71.0		16.0	196.5			252.644	40	252.560															
1+472	5.0		1.1	13.8		0.20%	253.178																	High Point
1+477							253.188																	
1+477	4.0		0.9	11.1		–0.20%	253.188																	High Point
1+481	23.0		5.2	63.7			253.180																	
1+504							253.013	43	252.940															
1+504	31.0		7.0	85.8			253.013	43	252.940															
1+535							252.674	46	252.600															
1+535	40.0		9.0	110.7			252.674	46	252.600															
1+575							251.989	49	251.910															
1+575	40.0		9.0	110.7			251.989	49	251.910															
1+615 "PR–A"							250.817	52	250.740															
Line "PR–A" – Left																								
1+615	38.0		8.6	105.2			250.817	52	250.740															
1+653							250.204	55	250.130															
SUBTOTALS	594.0		134.2	1644.2																				

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JEROME A. RICHARDSON REGISTERED No. 10300110 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Jerome A. Richardson 4-13-09
DESIGN ENGINEER DATE

DESIGNED: WRC DRAWN: WRC
CHECKED: JAR CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

UNDERDRAIN TABLE

HORIZONTAL SCALE	BRIDGE FILE
NONE	
VERTICAL SCALE	DESIGNATION
NONE	0600196
SURVEY BOOK	SHEETS
	37 of 68
CONTRACT	PROJECT
R–32103	0600196

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UNDERDRAIN TABLE

UNDERDRAIN PIPE									
UNDERDRAIN PIPE LIMITS	TYPE 4 PIPE		AGGREGATE FOR UNDERDRAINS	GEOTEXTILES FOR UNDERDRAINS	HMA FOR UNDERDRAINS	SPECIAL GRADE	FLOWLINE ELEVATION @ UNDERDRAIN PIPE LIMIT	CONNECT TO STRUCTURE NO.	STRUCTURE INVERT ELEVATION
	150mm	200mm	m^3	m^2	Mg	%			
Line "PR-A" - Left (Con't)									
1+653	13.0		2.9	36.0			250.204	55	250.130
1+666							250.120	58	250.060
1+666	13.0		2.9	36.0			250.120	58	250.060
1+679							250.169	61	250.110
1+679	24.0		5.4	66.4			250.169	61	250.110
1+700							250.342		
1+700	21.0		4.7	58.1			250.342		
3+201 "C"							249.895	103	249.830
Line "A" - Right									
1+042	21.0		4.7	58.1			252.091	12	252.250
1+063							252.283	14	252.180
1+063	50.0		11.3	138.4			252.283	14	252.180
1+113							252.533	17	252.340
1+113	45.0		10.2	124.6			252.533	17	252.340
1+158							252.715	20	252.560
1+158	34.0		7.7	94.1			252.715	20	252.560
1+192	8.0		1.8	22.1		0.20%	252.856		
1+200							252.872		
1+200	8.0		1.8	22.1		-0.20%	252.872		
1+208	18.0		4.1	49.8			252.856		
1+226							252.755	22	251.420
1+226	25.0		5.7	69.2			252.755	22	251.420
2+122 "B"							252.434	69	252.360
2+122 "B"	23.0		5.2	63.7			252.434	70	252.300
1+270	40.0		9.0	110.7			252.522		
1+310							252.364	27	250.961
1+310	29.0		6.6	80.3			252.364	27	250.961
1+339							252.232	30	250.858
1+339	6.0		1.4	16.6			252.232	30	250.858
1+345							252.236	33	252.080
1+345	17.0		3.8	47.1			252.236	33	252.080
1+362							252.293	36	252.120
1+362	39.0		8.8	108.0			252.293	36	252.120
1+401							252.627	39	252.510
1+401	71.0		16.0	196.5			252.627	39	252.510
1+472	5.0		1.1	13.8		0.20%	253.178		
1+477							253.188		
1+477	4.0		0.9	11.1		-0.20%	253.188		
1+481	23.0		5.2	63.7			253.180		
1+504							253.013	42	252.890
SUBTOTALS	537.0		121.4	1486.4					

OUTLET PIPE							
OUTLET STATION	OUTLET ELEVATION	150mm OUTLET PIPE	45 DEGREE ELBOWS REQUIRED	DITCH FLOW LINE ELEVATION @ OUTLET	CONNECT OUTLET PIPE TO STR. NO.	STRUCTURE BACKFILL	HMA FOR UNDERDRAINS
		m	each			m^3	Mg

OUTLET PROTECTOR						
OUTLET PROTECTOR NO.	OUTLET PROTECTOR TYPE	LOCATION				REMARKS
		OUTSIDE LEFT	MEDIAN LEFT	MEDIAN RIGHT	OUTSIDE RIGHT	
						High Point
						High Point

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RECOMMENDED FOR APPROVAL Jeromy A. Richardson 4-13-09
DESIGN ENGINEER DATE

DESIGNED: WRC DRAWN: WRC
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INDIANA DEPARTMENT OF TRANSPORTATION

UNDERDRAIN TABLE

HORIZONTAL SCALE	BRIDGE FILE
NONE	
VERTICAL SCALE	DESIGNATION
NONE	0600196
SURVEY BOOK	SHEETS
	38 of 68
CONTRACT	PROJECT
R-32103	0600196

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UNDERDRAIN TABLE

UNDERDRAIN PIPE										OUTLET PIPE								OUTLET PROTECTOR						
UNDERDRAIN PIPE LIMITS	TYPE 4 PIPE		AGGREGATE FOR UNDERDRAINS	GEOTEXTILES FOR UNDERDRAINS	HMA FOR UNDERDRAINS	SPECIAL GRADE	FLOWLINE ELEVATION @ UNDERDRAIN PIPE LIMIT	CONNECT TO STRUCTURE NO.	STRUCTURE INVERT ELEVATION	OUTLET STATION	OUTLET ELEVATION	150mm OUTLET PIPE	45 DEGREE ELBOWS REQUIRED	DITCH FLOW LINE ELEVATION @ OUTLET	CONNECT OUTLET PIPE TO STR. NO.	STRUCTURE BACKFILL	HMA FOR UNDERDRAINS	OUTLET PROTECTOR NO.	OUTLET PROTECTOR TYPE	LOCATION				REMARKS
	150mm	200mm	m^3	m^2	Mg	%						m	each			m^3	Mg			OUTSIDE LEFT	MEDIAN LEFT	MEDIAN RIGHT	OUTSIDE RIGHT	
Line "A" – Right (Con't)																								
1+504	31.0		7.0	85.8			253.013	42	252.890															
1+535							252.674	45	252.550															
1+535	40.0		9.0	110.7			252.674	45	252.550															
1+575							251.989	48	251.870															
1+575	40.0		9.0	110.7			251.989	48	251.870															
1+615 "PR-A"							250.817	51	250.690															
Line "PR-A" – Right																								
1+615	38.0		8.6	105.2			250.817	51	250.690															
1+653							250.204	54	250.080															
1+653	12.0		2.7	33.2			250.204	54	250.080															
1+666							250.000	57	250.000															
1+666	13.0		2.9	36.0			250.000	57	250.000															
1+679							250.049	60	250.000															
1+679	16.0		3.6	44.3			250.049	60	250.000															
3+150 "PR-C"							250.144																	High Point
3+150 "PR-C"	17.0		3.8	47.1			250.144																	High Point
3+134 "PR-C"							249.827	92	249.770															
Line "B" – Left																								
2+038	42.0		9.5	116.3			252.078	62	252.000															
2+080							252.267	66	252.020															
2+080	42.0		9.5	116.3			252.267	66	252.020															
2+122							252.434	69	252.360															
2+182	7.0		1.6	19.4			252.267	72	252.190															
2+189	5.0		1.1	13.8		-0.20%	252.252																	
2+194							252.242	75	252.180															Low Point
2+194	7.0		1.6	19.4		0.20%	252.347	75	252.180															Low Point
2+199	5.0		1.1	13.8			252.252																	
2+207							252.242	78	252.220															
2+207	33.0		7.5	91.3			252.242	78	252.220															
2+240	4.0		0.9	11.1		0.20%	252.569																	
2+244							252.577																	High Point
2+244	7.0		1.6	19.4		-0.20%	252.577																	High Point
2+251	15.0		3.4	41.5			252.563																	
2+266							252.499	81	252.420															
Line "B" – Right																								
2+038	42.0		9.5	116.3			252.098	63	251.980															
2+080							252.270	67	251.980															
2+080	42.0		9.5	116.3			252.270	67	251.980															
2+122							252.434	70	252.300															
SUBTOTALS	458.0		103.5	1267.7																				

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RECOMMENDED FOR APPROVAL Jeromy A. Richardson 4-13-09
DESIGN ENGINEER DATE

DESIGNED: WRC DRAWN: WRC
CHECKED: JAR CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

UNDERDRAIN TABLE

HORIZONTAL SCALE	BRIDGE FILE
NONE	
VERTICAL SCALE	DESIGNATION
NONE	0600196
SURVEY BOOK	SHEETS
	39 of 68
CONTRACT	PROJECT
R-32103	0600196

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UNDERDRAIN TABLE

UNDERDRAIN PIPE									
UNDERDRAIN PIPE LIMITS	TYPE 4 PIPE		AGGREGATE FOR UNDERDRAINS	GEOTEXTILES FOR UNDERDRAINS	HMA FOR UNDERDRAINS	SPECIAL GRADE	FLOWLINE ELEVATION @ UNDERDRAIN PIPE LIMIT	CONNECT TO STRUCTURE NO.	STRUCTURE INVERT ELEVATION
	150mm	200mm	m^3	m^2	Mg	%			
Line "B" – Right (Con't)									
2+182	7.0		1.6	19.4			252.338	73	252.130
2+189	5.0		1.1	13.8		–0.20%	252.324		
2+194							252.314	76	252.130
2+194	7.0		1.6	19.4		0.20%	252.314	76	252.130
2+199	5.0		1.1	13.8			252.324		
2+207							252.361	79	252.170
2+207	33.0		7.5	91.3			252.361	79	252.170
2+240	4.0		0.9	11.1		0.20%	252.601		
2+244							252.609		
2+244	7.0		1.6	19.4		–0.20%	252.609		
2+251	15.0		3.4	41.5			252.595		
2+266							252.530	82	252.420
Line "PR–C" – Left									
3+061	49.0		11.1	135.6			249.004	86	248.930
3+110							249.438	89	249.360
3+110	24.0		5.4	66.4			249.438	89	249.360
3+134							249.827	92	249.770
Line "PR–C" – Right									
3+061	56.0		12.7	155.0			248.956	87	248.890
3+117							249.469	90	249.310
3+117	27.0		6.1	74.7			249.469	90	249.310
3+143 "C"	17.0		3.8	47.1			249.776		
3+158 "C"							249.718	95	249.660
Line "C" – Right									
3+158	9.0		2.0	24.9			249.718	95	249.660
3+167							249.671	97	249.610
3+167	9.0		2.0	24.9			249.671	97	249.610
3+176							249.726	99	249.670
3+176	9.0		2.0	24.9			249.726	99	249.670
3+185	42.0		9.5	116.3			249.783		
3+227							249.591	105	249.540
Line "C" – Left									
3+201	26.0		5.9	72.0			249.895	103	249.830
3+227							249.663	104	249.580
SUBTOTALS	351.0		79.3	971.6					
TOTALS	1940.0		438.4	5369.9					

OUTLET PIPE							
OUTLET STATION	OUTLET ELEVATION	150mm OUTLET PIPE	45 DEGREE ELBOWS REQUIRED	DITCH FLOW LINE ELEVATION @ OUTLET	CONNECT OUTLET PIPE TO STR. NO.	STRUCTURE BACKFILL	HMA FOR UNDERDRAINS
		m	each			m^3	Mg

OUTLET PROTECTOR						
OUTLET PROTECTOR NO.	OUTLET PROTECTOR TYPE	LOCATION				REMARKS
		OUTSIDE LEFT	MEDIAN LEFT	MEDIAN RIGHT	OUTSIDE RIGHT	
						Low Point
						Low Point
						High Point
						High Point
						High Point
						High Point

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JEROMY A. RICHARDSON REGISTERED No. 10300110 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Jeromy A. Richardson 4-13-09
DESIGN ENGINEER DATE

DESIGNED: WRC DRAWN: WRC
CHECKED: JAR CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

UNDERDRAIN TABLE

HORIZONTAL SCALE	BRIDGE FILE
NONE	
VERTICAL SCALE	DESIGNATION
NONE	0600196
SURVEY BOOK	SHEETS
	40 of 68
CONTRACT	PROJECT
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R/W MARKERS

STATION	OFFSET		
	DISTANCE	LEFT	RIGHT
Line "A" & "PR-A"			
1+117.00	12.200	X	
1+124.000	21.300	X	
1+134.000	19.000		X
1+136.600	21.336	X	
1+221.000	19.000		X
1+230.000	23.000		X
1+232.000	23.000		X
1+295.200	14.000	X	
1+326.800	15.500		X
1+380.000	14.000	X	
1+389.000	10.500	X	
1+458.500	15.500		X
1+480.000	17.000		X
1+516.000	13.000		X
1+580.000	13.000		X
1+600.000	10.500	X	
1+620.000	13.500	X	
1+621.000	18.000		X
1+631.000	14.400	X	
1+650.070	22.185	X	
1+660.000	20.500		X
1+676.000	20.500		X
Line "B"			
2+125.000	10.700	X	
2+240.000	7.000		X
2+268.000	7.000		X
2+268.000	4.572		X
Line "C"			
3+059.000	4.572	X	
3+059.000	6.000	X	
3+117.000	16.000	X	
3+129.000	15.200		X
3+143.000	24.400		X
3+155.000	27.500		X
3+179.000	27.500		X
3+192.000	28.500	X	
3+196.000	19.000		X
3+208.000	15.200	X	
3+221.000	15.200		X

MAILBOX ASSEMBLIES

STATION	OFFSET	
	LEFT	RIGHT
Line "A" & "PR-A"		
1+289.800		X
1+321.100		X
1+332.800		X
1+335.700	X	
1+372.000	X	
1+392.900	X	
1+449.100		X
1+472.100	X	
1+511.600	X	
1+521.200		X
1+523.800	X	
1+545.500	X	
1+555.800		X
1+607.700		X
1+627.600	X	
1+641.700		X
Line "C"		
3+264.000		X

MONUMENTS & CORNERS

STATION	TYPE		
	B	C	CORNER
Line "A" & "PR-A"			
1+061.000	X		
1+250.000	X		
1+450.000	X		
1+612.727	X		
1+653.960			X
1+655.091	X		
1+668.030	X		
1+718.457	X		
Line "B"			
2+037.000	X		
2+150.000	X		
2+267.000	X		
Line "PR-C" & "C"			
3+060.000	X		
3+111.003	X		
3+161.294	X		
3+172.667	X		
3+184.612	X		
3+287.000	X		

SODDING & RIPRAP

FROM STATION	TO STATION	LOCATION			REVETMENT RIPRAP	GEOTEXTILES	SODDING FOR DITCHES	SODDING FOR BUFFER	NURSERY SODDING FOR LAWN
		RIGHT	MEDIAN	LEFT	Mg	m²	m²	m²	m²
Line "A" & "PR-A"									3967.7
Line "B"									1253.8
Line "PR-C" & "C"									2036.1
Roundabout Center Island									924.0
3+310.327					9.2	22.7			
TOTALS					9.2	22.7			8181.6

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RECOMMENDED FOR APPROVAL Jeromy A. Richardson 4-13-09
DESIGN ENGINEER DATE

DESIGNED: WRC DRAWN: WRC
CHECKED: JAR CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS TABLES

HORIZONTAL SCALE	BRIDGE FILE
NONE	
VERTICAL SCALE	DESIGNATION
NONE	0600196
SURVEY BOOK	SHEETS
	41 of 68
CONTRACT	PROJECT
R-32103	0600196

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STRUCTURE DATA TABLE

STRUCTURE NUMBER	LOCATION					SIZE	PIPE TYPE	MANHOLE, INLET, CATCH BASIN, OR SPECIALTY STRUCTURE	LENGTH	SKEW	COVER	FLOW LINE			SERVICE LIFE	SITE DESIGNATION	pH	BACKFILL METHOD	STRUCTURE BACKFILL	REVETMENT RIPRAP	PIPE ANCHOR	PIPE END SECTION	GRATED BOX END SECTION			SAFETY METAL END SECTION		CATCH BASIN HOOD	CONNECT TO STR. NO.	REMARKS
	STATION	LEFT	RIGHT	CROSS	OFFSET							UP STREAM	DOWN STREAM										TYPE	SLOPE	EA	SLOPE	EA			
					m	m			m		m	Elev	Elev		YR				m³	Mg	EA	EA								
Line A																														
10	1+035		X		15.0	300	2	Catch Basin E-7	8.1		0.53	252.280	253.130		75	NA	7	1	5.2										11	
11	1+042		X		8.8	300	2	Manhole C-4	19.6		0.68	252.249	252.174		75	NA	7	1	15.4										13	
12	1+042		X			300	2	Mod. Inlet C-15	0.5		0.46	252.259	252.249		75	NA	7	1	0.3									1	11	
13	1+063		X		8.8	300	2	Manhole C-4	48.6		0.93	252.174	251.989		75	NA	7	1	50.1										16	
14	1+063		X			300	2	Mod. Inlet C-15	0.5		0.72	252.184	252.174		75	NA	7	1	0.4									1	13	
15	1+063	X				300	2	Inlet B-15	14.9		0.63	252.241	252.184		75	NA	7	1	11.0										14	
16	1+113		X		8.8	450	2	Manhole C-4	43.6		1.38	251.839	251.673		75	NA	7	1	80.2										19	
17	1+113		X			300	2	Mod. Inlet C-15	0.5		0.79	252.340	252.330		75	NA	7	1	0.4									1	16	
18	1+113	X				300	2	Inlet B-15	14.8		0.68	252.403	252.340		75	NA	7	1	11.7										17	
19	1+158		X		10.9	450	2	Manhole C-4	66.3		1.73	251.673	251.421		75	NA	7	1	151.5										22	
20	1+158		X			300	2	Mod. Inlet C-15	0.5		0.76	252.555	252.545		75	NA	7	1	0.4									1	19	
21	1+161	X				300	2	Inlet B-15	18.9		0.68	252.627	252.555		75	NA	7	1	14.9										20	
22	1+226		X			450	2	Mod. Manhole K-15	35.4		2.03	251.421	251.284		75	NA	7	1	94.9										25	
24	1+223	X				300	2	Mod. Inlet B-15	21.7		0.68	252.692	252.609		75	NA	7	1	17.1									1	22	
25	1+263		X		10.1	600	2	Manhole J-4	39.9		1.96	251.134	250.982		75	NA	7	1	121.7										27	
27	1+305		X			600	2	Mod. Manhole K-15	31.4		0.76	250.982	250.858		75	NA	7	1	42.5										30	
28	1+305	X				300	2	Mod. Inlet B-15	18.6		0.68	252.287	252.214		75	NA	7	1	14.7									1	27	
30	1+339		X			600	2	Mod. Manhole K-15	5.4		0.73	250.858	250.837		75	NA	7	1	7.1										32	
31	1+329	X				300	2	Mod. Inlet B-15	20.6		0.68	252.260	252.179		75	NA	7	1	16.2									1	30	
32	1+345		X		11.0	600	2	Manhole C-4	15.2		1.96	250.837	250.778		75	NA	7	1	46.3										35	
33	1+345		X			300	2	Mod. Inlet C-15	0.5		0.76	252.078	252.068		75	NA	7	1	0.4									1	32	
34	1+345	X				300	2	Inlet B-15	18.7		0.68	252.149	252.078		75	NA	7	1	14.7										33	
35	1+362		X		10.3	600	2	Manhole C-4	37.6		2.08	250.778	250.635		75	NA	7	1	121.5										38	
36	1+362		X			300	2	Mod. Inlet C-15	0.5		0.78	252.124	252.114		75	NA	7	1	0.4									1	35	
37	1+362	X				300	2	Inlet B-15	18.0		0.68	252.193	252.124		75	NA	7	1	14.2										36	
38	1+401		X		8.9	750	2	Manhole J-4	101.6		2.56	250.485	250.098		75	NA	7	1	466.8										41	
39	1+401		X			300	2	Mod. Inlet C-15	0.5		0.72	252.513	252.503		75	NA	7	1	0.4									1	38	
40	1+401	X				300	2	Inlet B-15	13.1		0.68	252.563	252.513		75	NA	7	1	10.3										39	
41	1+504		X		8.1	750	2	Manhole J-4	29.6		3.33	250.098	249.995		75	NA	7	1	178.4										44	
42	1+504		X			300	2	Mod. Inlet C-15	0.5		0.73	252.890	252.880		75	NA	7	1	0.4									1	41	
43	1+504	X				300	2	Inlet B-15	12.0		0.68	252.936	252.890		75	NA	7	1	9.5										42	
44	1+535		X		8.1	750	2	Manhole J-4	38.6		3.11	249.985	249.838		75	NA	7	1	216.4										47	
45	1+535		X			300	2	Mod. Inlet C-15	0.5		0.73	252.551	252.541		75	NA	7	1	0.4									1	44	
46	1+535	X				300	2	Inlet B-15	12.0		0.68	252.597	252.551		75	NA	7	1	9.5										45	
47	1+575		X		8.1	750	2	Manhole J-4	38.5		2.57	249.838	249.691		75	NA	7	1	177.5										50	
48	1+575		X			300	2	Mod. Inlet C-15	0.5		0.73	251.866	251.856		75	NA	7	1	0.4									1	47	
49	1+575	X				300	2	Inlet B-15	12.0		0.68	251.912	251.912		75	NA	7	1	9.5										48	
Line PR-A																														
50	1+615		X		8.1	750	2	Manhole J-4	34.4		1.55	249.691	249.560		75	NA	7	1	98.5										53	
51	1+615		X			300	2	Mod. Inlet C-15	0.5		0.73	250.6940	250.6840		75	NA	7	1	0.4									1	50	
52	1+615	X				300	2	Inlet B-15	12.0		0.68	250.740	250.694		75	NA	7	1	9.5										51	
53	1+653		X		8.1	750	2	Manhole J-4	10.6		1.07	249.560	249.519		75	NA	7	1	22.3										56	
54	1+653		X			300	2	Mod. Inlet C-15	0.5		0.59	250.083	250.073		75	NA	7	1	0.4									1	53	
55	1+653	X				300	2	Inlet B-15	11.5		0.68	250.127	250.083		75	NA	7	1	9.1										54	
56	1+666		X		9.3	750	2	Manhole J-4	11.4		0.93	249.519	249.475		75	NA	7	1	21.5										59	
57	1+666		X			300	2	Mod. Inlet C-15	0.5		0.61	250.000	249.990		75	NA	7	1	0.4									1	56	
58	1+666	X				300	2	Inlet B-15	13.2		0.68	250.059	250.008		75	NA	7	1	10.4										57	
59	1+678		X		14.8	750	2	Manhole J-4	14.2		1.05	249.475	249.420		75	NA	7	1	29.4										84	
60	1+679		X			300	2	Mod. Inlet B-15	0.5		0.68	250.000	249.990		75	NA	7	1	0.4									1	59	
61	1+679	X				300	2	Inlet B-15	18.3		0.68	250.111	250.041		75	NA	7	1	14.4										85	
85	1+686		X			300	2	Mod. Inlet C-15	15.0		0.85	250.041	249.984		75	NA	7	1	14.3									1	84	

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STRUCTURE DATA TABLE

HORIZONTAL SCALE	BRIDGE FILE
NONE	
VERTICAL SCALE	DESIGNATION
NONE	0600196
SURVEY BOOK	SHEETS
	42 of 68
CONTRACT	PROJECT
R-32103	0600196

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STRUCTURE DATA TABLE

STRUCTURE NUMBER	LOCATION: STATION	LOCATION: LEFT	LOCATION: RIGHT	LOCATION: CROSS	LOCATION: OFFSET	SIZE	PIPE TYPE	MANHOLE, INLET, CATCH BASIN, OR SPECIALTY STRUCTURE	LENGTH	SKEW	COVER	FLOW LINE: UP STREAM	FLOW LINE: DOWN STREAM		SERVICE LIFE	SITE DESIGNATION	pH	BACKFILL METHOD	STRUCTURE BACKFILL	REVETMENT RIPRAP	PIPE ANCHOR	PIPE END SECTION	GRATED BOX END SECTION: TYPE	GRATED BOX END SECTION: SLOPE	GRATED BOX END SECTION: EA	SAFETY METAL END SECTION: SLOPE	SAFETY METAL END SECTION: EA	CATCH BASIN HOOD	CONNECT TO STR. NO.	REMARKS
					m	m			m		m	Elev	Elev		YR				m^3	Mg	EA	EA	TYPE	SLOPE	EA	SLOPE	EA			
LINE B																														
62	2+038	X				300	2	Inlet B-15	6.4		0.68	252.000	251.975		75	NA	7	1	5.0										63	
63	2+038		X			300	2	Mod. Inlet C-15	0.7		0.73	251.975	251.972		75	NA	7	1	0.6									1	64	
64	2+038		X		5.0	300	2	Manhole C-4	40.6		0.94	251.972	251.817		75	NA	7	1	42.3										68	
65	2+068	X			7.2	300	2	Inlet E-7	10.9		0.68	252.060	252.018		75	NA	7	1	8.6										66	
66	2+080	X				300	2	Inlet C-15	9.3		0.86	252.018	251.982		75	NA	7	1	8.9										67	
67	2+080		X			300	2	Mod. Inlet C-15	0.7		0.91	251.982	251.979		75	NA	7	1	0.7									1	68	
68	2+080		X		6.9	300	2	Manhole C-4	40.6		1.28	251.817	251.662		75	NA	7	1	56.4										71	
69	2+122	X				300	2	Inlet B-15	13.7		0.68	252.357	252.304		75	NA	7	1	10.8										70	
70	2+122		X			300	2	Mod. Inlet C-15	0.5		0.74	252.304	252.294		75	NA	7	1	2.1									1	71	
71	2+122		X		8.9	300	2	Manhole C-4	17.2		1.61	251.662	251.596		75	NA	7	1	30.0										25	
72	2+182	X				300	2	Inlet B-15	16.8		0.68	252.189	252.125		75	NA	7	1	13.2										73	
73	2+182		X			300	2	Mod. Inlet C-15	0.6		0.82	252.125	252.115		75	NA	7	1	0.6									1	74	
74	2+182		X		8.7	450	2	Manhole C-4	40.6		1.23	251.924	251.769		75	NA	7	1	67.2										25	
75	2+194	X				300	2	Inlet B-15	15.1		0.68	252.183	252.125		75	NA	7	1	11.9										76	
76	2+194		X			300	2	Mod. Inlet C-15	0.6		0.81	252.125	252.115		75	NA	7	1	0.5									1	77	
77	2+194		X		7.9	300	2	Manhole C-4	10.6		1.03	252.115	252.074		75	NA	7	1	12.0										74	
78	2+207	X				300	2	Inlet B-15	14.2		0.68	252.220	252.166		75	NA	7	1	11.2										79	
79	2+207		X			300	2	Mod. Inlet C-15	0.6		0.82	252.166	252.160		75	NA	7	1	0.6									1	80	
80	2+207		X		7.3	300	2	Manhole C-4	11.6		1.03	252.160	252.115		75	NA	7	1	13.1										77	
81	2+266	X				300	2	Inlet B-15	7.6		0.68	252.421	252.392		75	NA	7	1	6.0										82	
82	2+266		X			300	2	Mod. Inlet C-15	0.6		0.75	252.392	252.382		75	NA	7	1	0.5									1	83	
83	2+266		X		5.2	300	2	Manhole C-4	57.6		0.96	252.382	252.160		75	NA	7	1	61.1										80	
LINE PR-C																														
84	3+149	X			17.3	750	2	Manhole K-4	12.0		1.17	249.420	249.370		75	NA	7	1	27.1										84A	
84A	3+158	X			5.7	750	2	Manhole K-4	47.0		1.17	249.370	249.189		75	NA	7	1	106.1										102	Adjust to Grade
86	3+061	X				300	2	Inlet B-15	9.6		0.68	248.927	248.890		75	NA	7	1	7.6										87	
87	3+061		X			300	2	Mod. Inlet C-15	0.5		0.67	248.890	248.886		75	NA	7	1	0.4									1	89	
88	3+061		X		7.8	300	2	Manhole C-4	55.9		0.88	248.886	248.673		75	NA	7	1	58.3										91	
89	3+110	X				300	2	Inlet B-15	13.1		0.68	249.361	249.311		75	NA	7	1	10.3										90	
90	3+117		X			300	2	Mod. Inlet C-15	0.6		0.67	249.311	249.301		75	NA	7	1	3.4									1	91	
91	3+117		X		9.4	300	2	Manhole C-4	13.0		1.53	248.673	248.623		75	NA	7	1	21.5										94	
92	3+134	X				300	2	Inlet B-15	15.2		0.68	249.770	249.710		75	NA	7	1	12.0										93	
93	3+140		X			300	2	Mod Inlet C-15	10.3		0.84	249.710	249.660		75	NA	7	1	9.7									1	94	
94	3+131		X		12.5	450	2	Mod Inlet C-15	28.4		2.04	248.473	248.365		75	NA	7	1	76.6									1	96	
200	3+089		X					Existing Inlet																						Remove Inlet and Pipe
LINE C																														
95	3+158		X			300	2	Mod. Inlet B-15	0.5		0.68	249.660	249.650		75	NA	7	1	0.4									1	96	
96	3+158		X		22.4	450	2	Manhole C-4	7.9		1.85	248.365	248.334		75	NA	7	1	19.3										98	
97	3+167		X			300	2	Mod. Inlet B-15	0.5		0.68	249.610	249.600		75	NA	7	1	0.4									1	98	
98	3+167		X		23.5	450	2	Manhole C-4	7.9		2.04	248.334	248.304		75	NA	7	1	21.3										100	
99	3+176		X			300	2	Mod. Inlet B-15	0.5		0.68	249.670	249.660		75	NA	7	1	0.4									1	100	
100	3+176		X		21.9	450	2	Manhole C-4	15.9		2.13	248.304	248.243		75	NA	7	1	44.8										102	
101	3+191		X			300	2	Mod. Inlet C-15	12.9		1.22	249.033	248.984		75	NA	7	1	17.1									1	102	
102	3+192		X		14.6	900	2	Manhole K-4	33.2		2.23	247.793	247.666		75	NA	7	1	160.4										106	
103	3+201	X				300	2	Mod. Inlet B-15	12.0		1.10	249.079	249.033		75	NA	7	1	14.4										101	
104	3+227	X				300	2	Mod. Inlet B-15	10.3		0.93	248.999	248.960		75	NA	7	1	10.6										105	
105	3+227		X			300	2	Mod. Inlet C-15	0.5		0.89	248.960	248.950		75	NA	7	1	0.5									1	106	
106	3+227		X		9.4	900	2	Manhole K-4	44.5		2.17	247.666	247.497		75	NA	7	1	209.6										109	
109	3+273		X		8.7	900	2	Manhole K-4	12.0		2.18	247.497	247.451		75	NA	7	1	56.7										110	
						450	2		1.0		2.63	246.893	246.889		75	NA	7	1	3.5										109A	
109A	3+273		X		11.4	450	2	Manhole C-4	2.6		2.63	246.889	246.879		75	NA	7	1	9.2										109B	
109B	3+277		X		11.6	450	2	Stormwater Quality Treatment Unit	7.3		2.63	~246.879	~246.851		75	NA	7	1	25.7										110	Per Special Provision
110	3+287		X		12.0	900	2	Mod. Manhole K-7	9.7		2.82	245.077	245.040		75	NA	7	1	58.6										111	
111	3+289		X		12.2	900	2	Manhole K-4	8.1		0.6	245.040	245.009		75	NA	7	1	14.0											

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JEROMY A. RICHARDSON REGISTERED No. 10300110 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Jeromy A. Richardson 4-13-09
DESIGN ENGINEER DATE

DESIGNED: WRC DRAWN: WRC
CHECKED: JAR CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

STRUCTURE DATA TABLE

HORIZONTAL SCALE	BRIDGE FILE
NONE	
VERTICAL SCALE	DESIGNATION
NONE	0600196
SURVEY BOOK	SHEETS
	43 of 68
CONTRACT	PROJECT
R-32103	0600196

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PIPE MATERIAL TABLE

			STRUCTURE NUMBER						
			12, 13, 14, 15, 17, 18, 20, 21, 24, 27, 28, 31, 33, 34, 36, 37, 39, 40, 42, 43, 45, 46, 48, 49, 51, 52, 54, 55, 57, 58, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 75, 76, 77, 78, 79, 80, 81, 82, 83, 85, 86, 87, 88, 89, 90, 91	92, 93, 95, 97, 99, 101, 103, 104, 105	16, 19, 22, 74, 94, 96, 98, 100, 109, 109A, 109B	25, 26, 29, 30, 32, 35	38, 41, 44, 47, 50, 53, 56, 59, 84		
	PIPE TYPE/ SHAPE		2/CIR	2/CIR	2/CIR	2/CIR	2/CIR		
	SMOOTH PIPE SIZE		300	300	450	600	750		
	CORRUGATED PIPE SIZE								
	RCP/RCHEP (S)	CLASS	II	II	II	II	II		
		D0.3 RATING	50.0	60.0000	50.0	50.0	50.0		
	NON-REINFORCED CONCRETE PIPE, CLASS 3 (S)		OK	OK	OK	OK	OK		
	CORRUGATED PE PIPE, TYPE S (S) *		OK	OK	OK	OK	OK		
	RIBBED PE PIPE (S) *				OK	OK	OK		
	SMOOTH WALL PE PIPE (S) * / MAXIMUM DR		OK/26	OK/26	OK/26	OK/26	OK/26		
	PROFILE WALL PVC PIPE (S)		OK	OK	OK	OK	OK		
	SMOOTH WALL PVC PIPE (S) *		OK	OK	OK	OK			
	VITRIFIED CLAY PIPE, EXTRA STRENGTH (S)		OK	OK	OK	OK	OK		
CORRUGATED STEEL PIPE / PIPE-ARCH	FULLY BIT. PAVED & LINED (S)	CORR. PROFILE			68 x 13	68 x 13	68 x 13		
		THICKNESS			2.7700	2.7700	2.7700		
	ZINC COATED (C)	CORR. PROFILE							
		THICKNESS							
	ZINC COATED W/ BPI (C)	CORR. PROFILE							
		THICKNESS							
	ALUM. COATED TYPE 2 (C)	CORR. PROFILE							
		THICKNESS							
	ALUM. COATED TYPE 2 W/ BPI (C)	CORR. PROFILE							
		THICKNESS							
	POLYMER PRECOATED GALVANIZED (C)	CORR. PROFILE							
		THICKNESS							
	POLYMER PRECOATED GALVANIZED W/ BPI (C)	CORR. PROFILE							
		THICKNESS							
	POLYMER PRECOATED GALVANIZED TYPE IA (S)	CORR. PROFILE			68 x 13	68 x 13	68 x 13		
		THICKNESS			2.7700	2.7700	2.7700		
	POLYMER PRECOATED GALVANIZED IIA	CORR. PROFILE							
		THICKNESS							
	CORRUGATED ALUM. ALLOY PIPE (C)	CORR. PROFILE							
		THICKNESS							
	CORRUGATED ALUM. ALLOY PIPE W/ BPI (C)	CORR. PROFILE							
		THICKNESS							
	STR. PLATE ALUMINUM ALLOY PIPE (C)	CORR. PROFILE							
		THICKNESS							
	STR. PLATE ALUMINUM ALLOY PIPE W/ CFP (C)	CORR. PROFILE							
		THICKNESS							
	STR. PLATE STEEL PIPE (C)	CORR. PROFILE							
		THICKNESS **							
	STR. PLATE STEEL PIPE W/ CFP (C)	CORR. PROFILE							
		THICKNESS **							

			STRUCTURE NUMBER																
			102, 106, 109, 110, 111																
	PIPE TYPE/ SHAPE		2/CIR																
	SMOOTH PIPE SIZE		600																
	CORRUGATED PIPE SIZE																		
	RCP/RCHEP (S)	CLASS	II																
		D0.1 RATING	50.0000																
	NON-REINFORCED CONCRETE PIPE, CLASS 3 (S)		OK																
	CORRUGATED PE PIPE, TYPE S (S) *		OK																
	RIBBED PE PIPE (S) *		OK																
	SMOOTH WALL PE PIPE (S) * / MAXIMUM DR		OK/26																
	PROFILE WALL PVC PIPE (S)		OK																
	SMOOTH WALL PVC PIPE (S) *		OK																
	VITRIFIED CLAY PIPE, EXTRA STRENGTH (S)		OK																
CORRUGATED STEEL PIPE / PIPE-ARCH	FULLY BIT. PAVED & LINED (S)	CORR. PROFILE	68 x 13																
		THICKNESS	2.7700																
	ZINC COATED (C)	CORR. PROFILE																	
		THICKNESS																	
	ZINC COATED W/ BPI (C)	CORR. PROFILE																	
		THICKNESS																	
	ALUM. COATED TYPE 2 (C)	CORR. PROFILE																	
		THICKNESS																	
	ALUM. COATED TYPE 2 W/ BPI (C)	CORR. PROFILE																	
		THICKNESS																	
	POLYMER PRECOATED GALVANIZED (C)	CORR. PROFILE																	
		THICKNESS																	
	POLYMER PRECOATED GALVANIZED W/ BPI (C)	CORR. PROFILE																	
		THICKNESS																	
	POLYMER PRECOATED GALVANIZED TYPE IA (S)	CORR. PROFILE	68 x 13																
		THICKNESS	2.7700																
	POLYMER PRECOATED GALVANIZED IIA	CORR. PROFILE																	
		THICKNESS																	
	CORRUGATED ALUM. ALLOY PIPE (C)	CORR. PROFILE																	
		THICKNESS																	
	CORRUGATED ALUM. ALLOY PIPE W/ BPI (C)	CORR. PROFILE																	
		THICKNESS																	
	STR. PLATE ALUMINUM ALLOY PIPE (C)	CORR. PROFILE																	
		THICKNESS																	
	STR. PLATE ALUMINUM ALLOY PIPE W/ CFP (C)	CORR. PROFILE																	
		THICKNESS																	
	STR. PLATE STEEL PIPE (C)	CORR. PROFILE																	
		THICKNESS **																	
	STR. PLATE STEEL PIPE W/ CFP (C)	CORR. PROFILE																	
		THICKNESS **																	

LEGEND

RCP–	REINFORCED CONCRETE PIPE
RCHEP–	REINFORCED CONCRETE HORIZONTAL ELLIPTICAL PIPE
PE–	POLYETHYLENE
DR–	DIMENSION RATIO
PVC–	POLYVINYL CHLORIDE
BIT–	BITUMINOUS
CORR–	CORRUGATION
BPI–	BITUMINOUS PAVED INVERT
ALUM–	ALUMINUM
STR–	STRUCTURAL
CFP–	CONCRETE FIELD PAVING
CIR–	CIRCULAR PIPE
DEF–	DEFORMED PIPE
(S)–	SMOOTH PIPE MATERIAL
(C)–	CORRUGATED PIPE MATERIAL
OK–	ACCEPTABLE FOR USE
(LS)–	LOCK SEAM PIPE REQUIRED
(LS & R)–	LOCK SEAM PIPE AND RIVETED REQUIRED
(B)–	BOLTED
(RIV)–	RIVETED PIPE REQUIRED
*–	REFER TO STANDARD DRAWING 715-PHCL-18 OR 19 FOR NOMINAL DIAMETER APPROPRIATE FOR PAY ITEM DIAMETER
**–	TABULATED THICKNESS REFERS TO TOP & SIDE PLATES. BOTTOM PLATES SHALL BE OF NEXT GREATER AVAILABLE THICKNESS.

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RECOMMENDED FOR APPROVAL Jeromy A. Richardson 4-13-09
DESIGN ENGINEER DATE

DESIGNED: WRC DRAWN: WRC
CHECKED: JAR CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

PIPE MATERIAL TABLE

HORIZONTAL SCALE	BRIDGE FILE
NONE	
VERTICAL SCALE	DESIGNATION
NONE	0600196
SURVEY BOOK	SHEETS
	44 of 68
CONTRACT	PROJECT
R-32103	0600196

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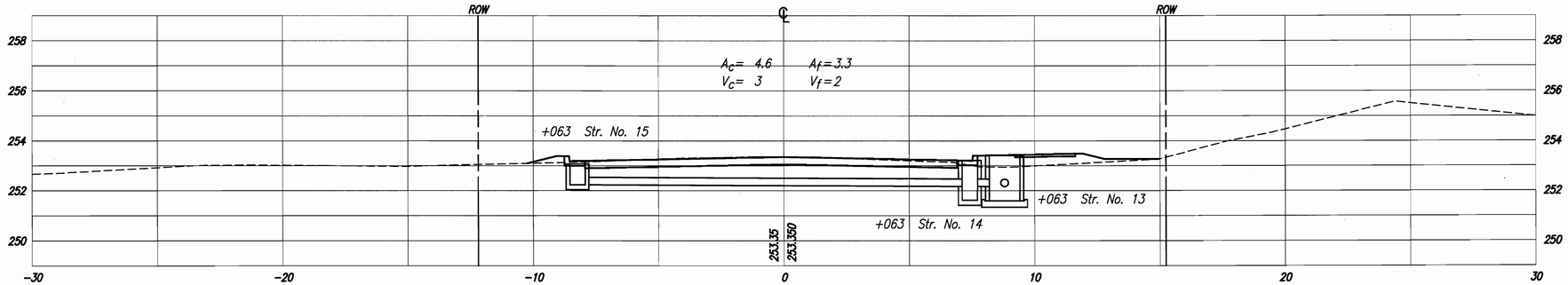

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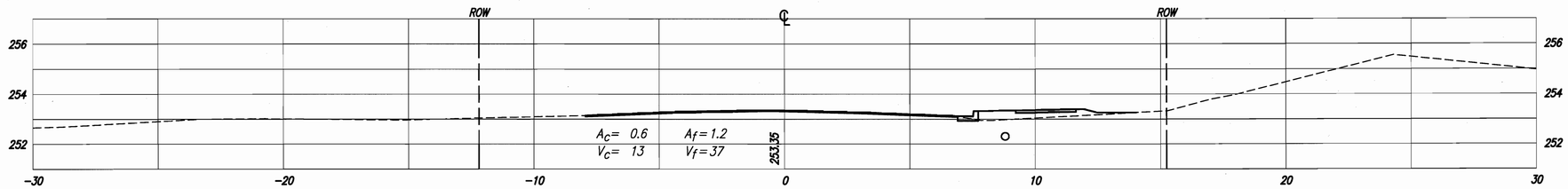

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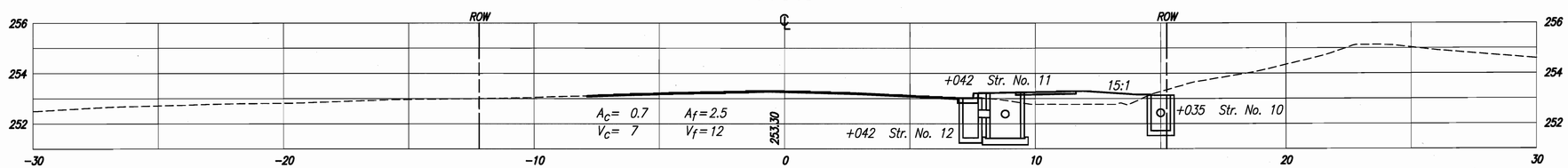

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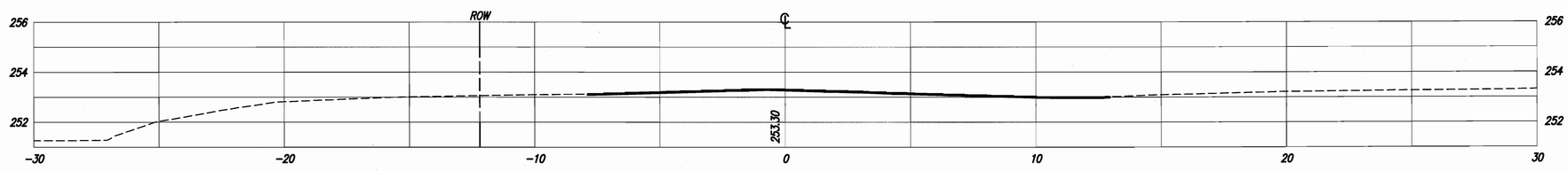

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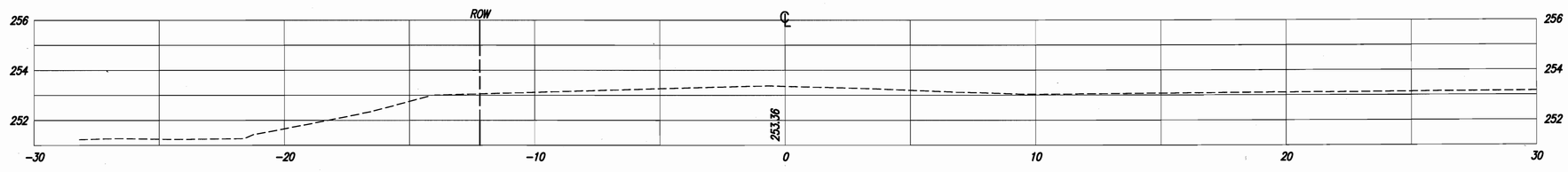

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DESIGN ENGINEER DATE

DESIGNED: WRC DRAWN: JNII
CHECKED: JAR CHECKED: JAR

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CROSS SECTIONS LINE "A"

HORIZONTAL SCALE	BRIDGE FILE
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VERTICAL SCALE	DESIGNATION
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SURVEY BOOK	SHEETS
	45 of 68
CONTRACT	PROJECT
R-32103	0600196

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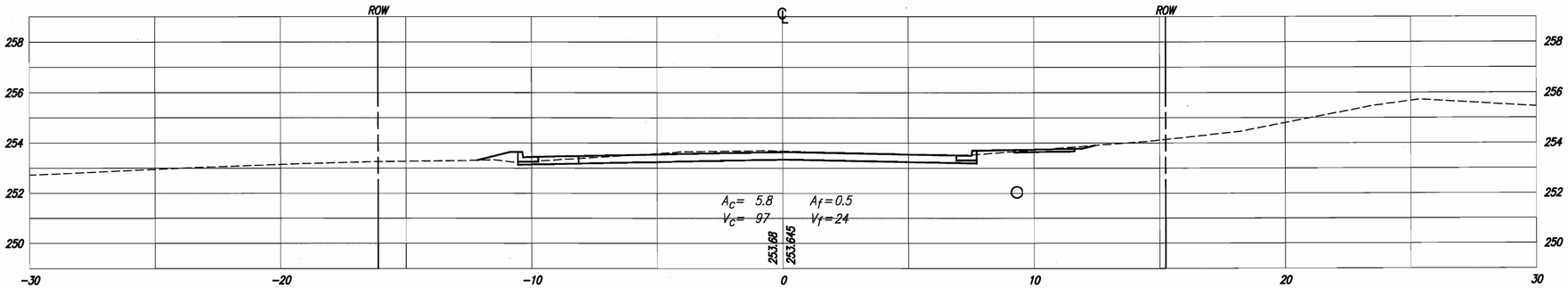

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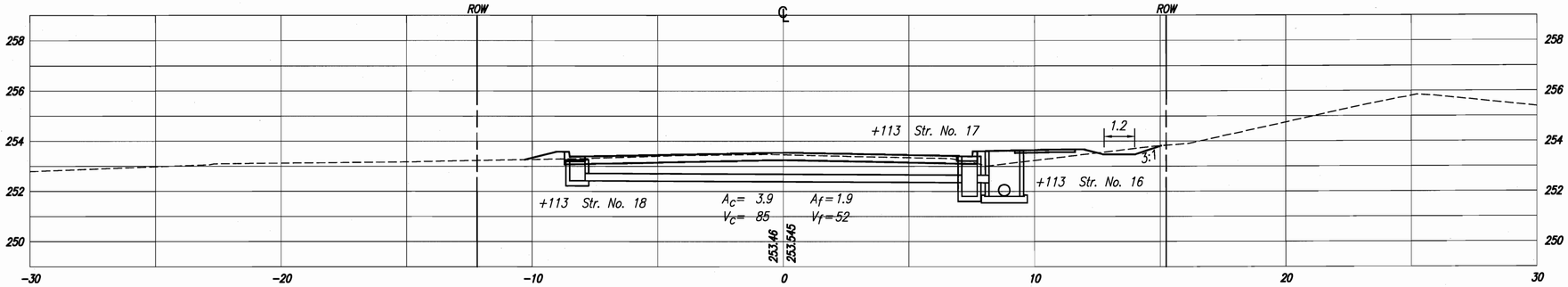

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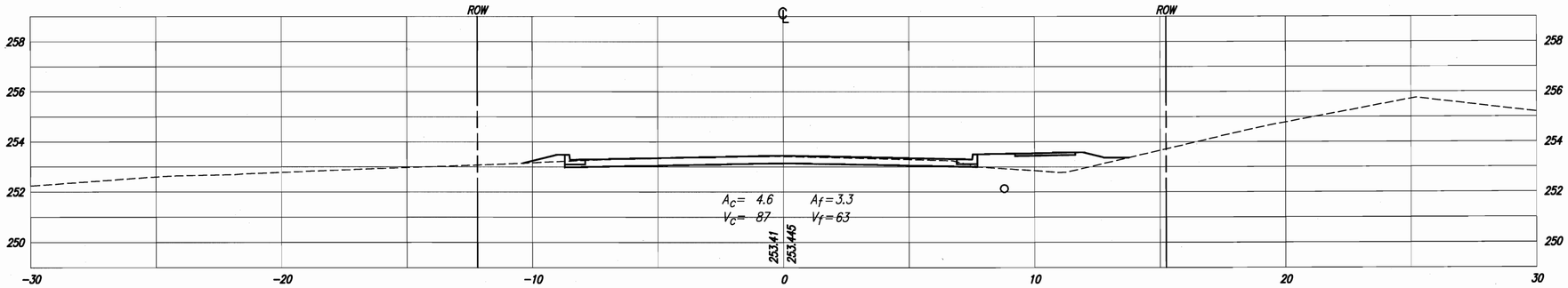

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CROSS SECTIONS LINE "A"

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SURVEY BOOK	SHEETS
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CONTRACT	PROJECT
R-32103	0600196

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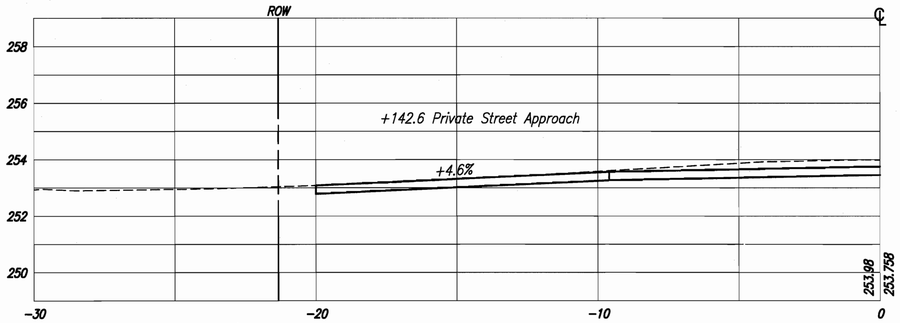

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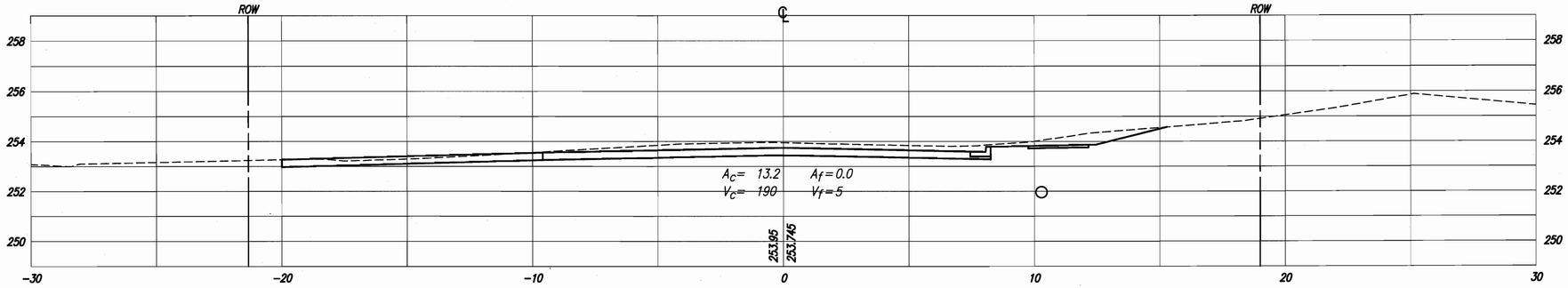

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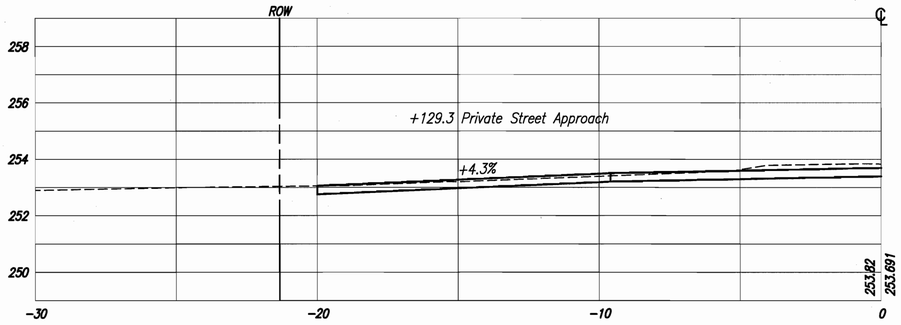

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INDIANA DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS LINE "A"

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VERTICAL SCALE	DESIGNATION
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SURVEY BOOK	SHEETS
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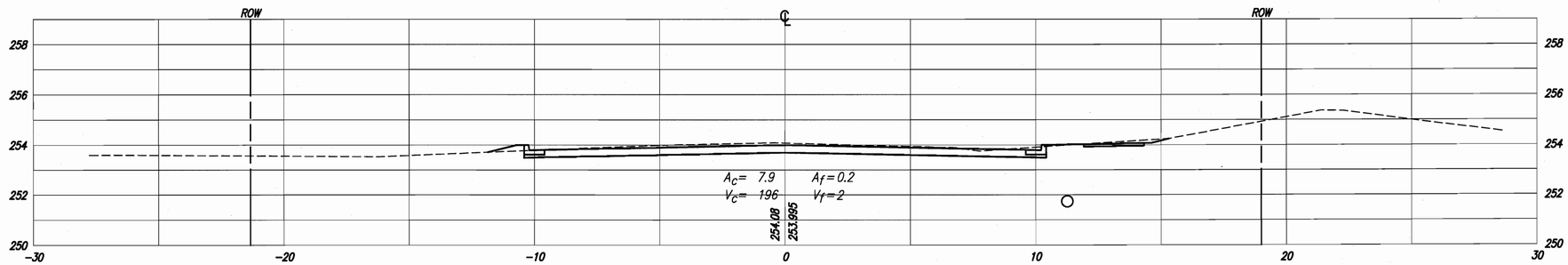

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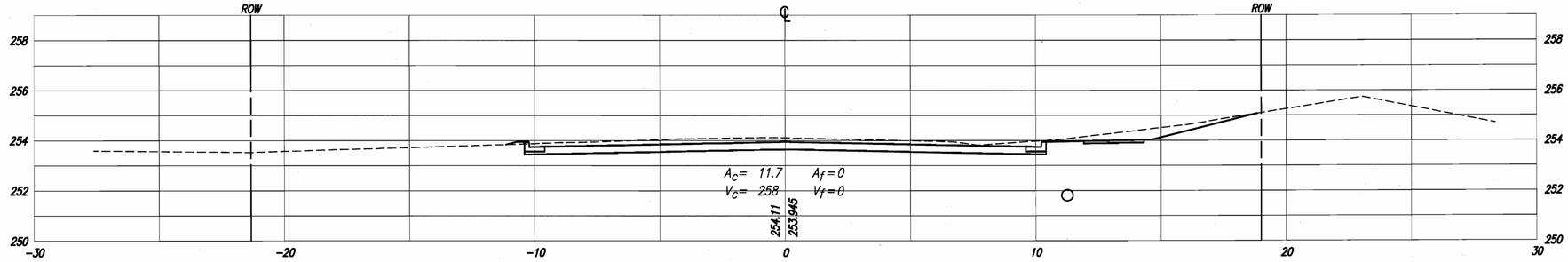

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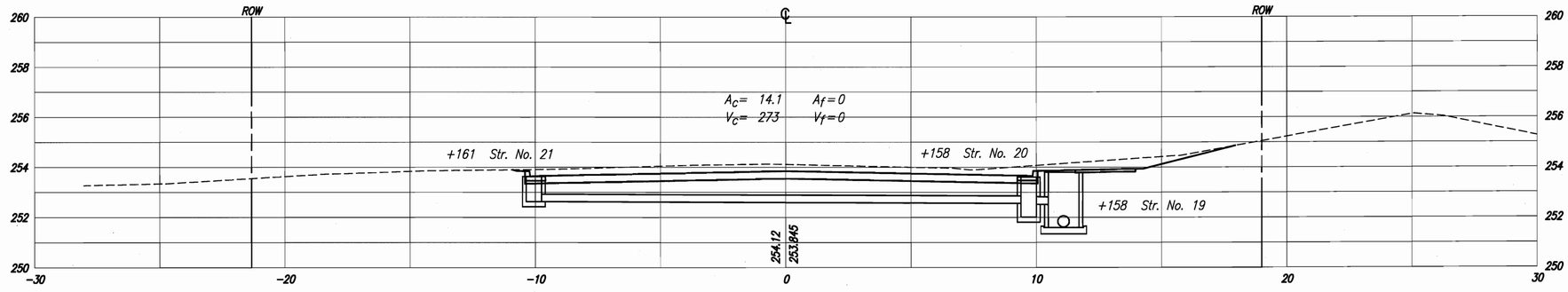

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CROSS SECTIONS LINE "A"

HORIZONTAL SCALE	BRIDGE FILE
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VERTICAL SCALE	DESIGNATION
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SURVEY BOOK	SHEETS
	48 of 68
CONTRACT	PROJECT
R-32103	0600196

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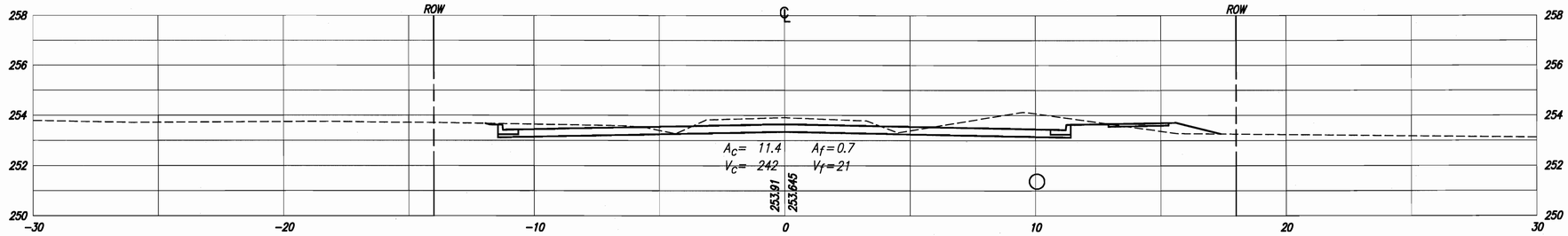

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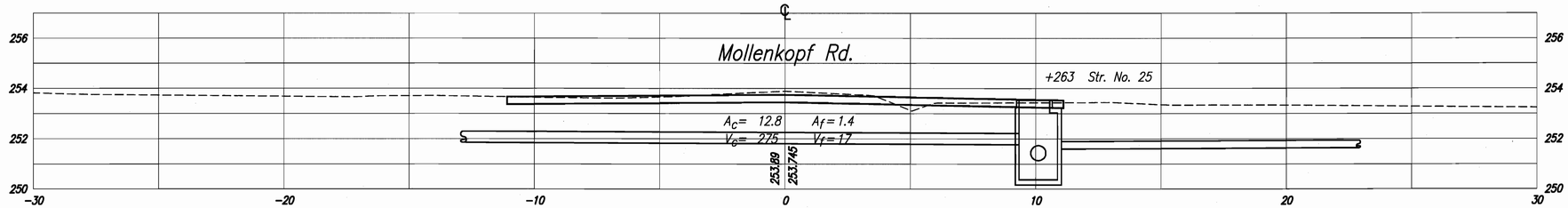

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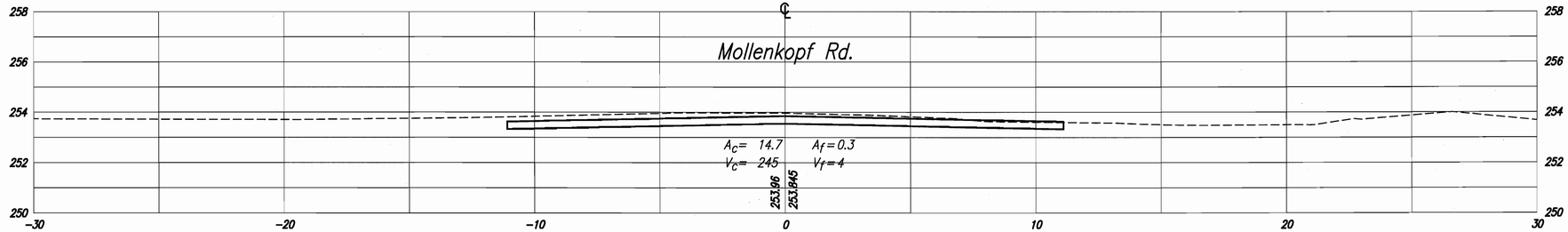

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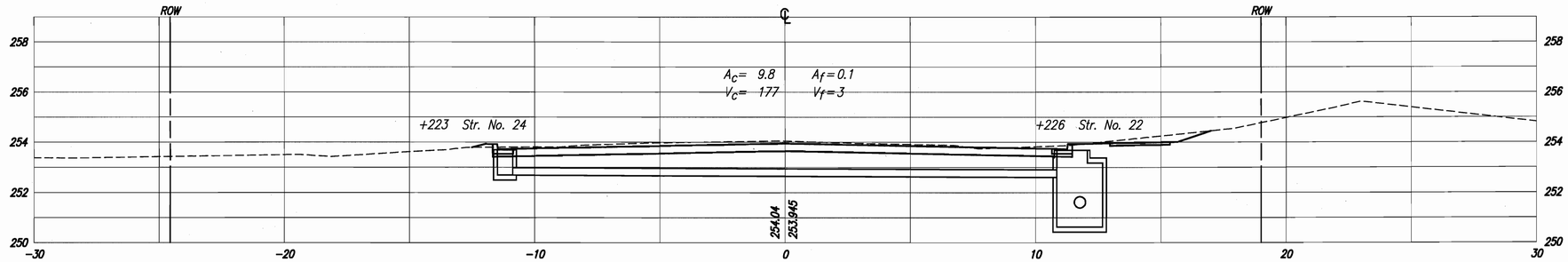

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HORIZONTAL SCALE	BRIDGE FILE
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SURVEY BOOK	SHEETS
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R-32103	0600196

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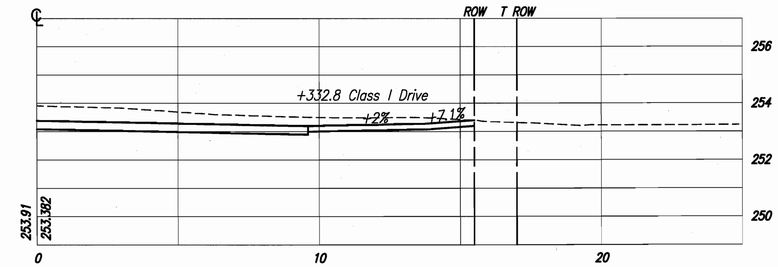

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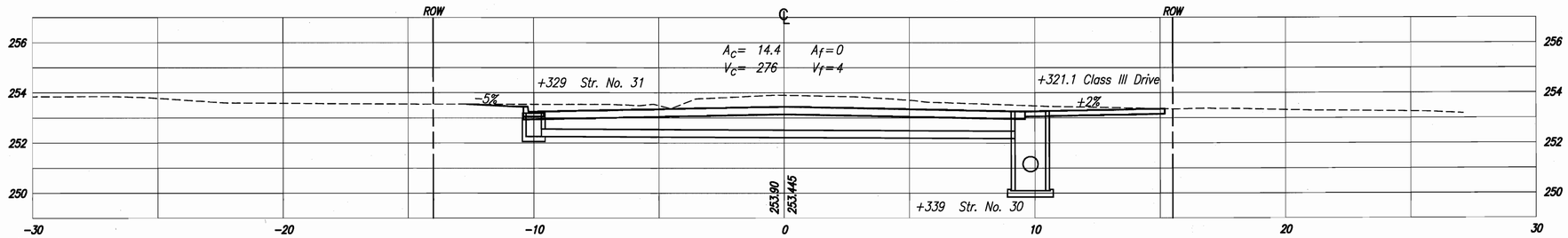

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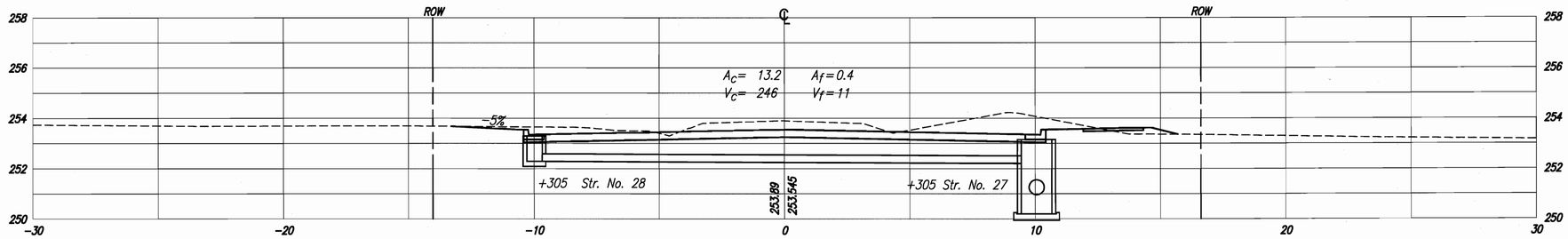

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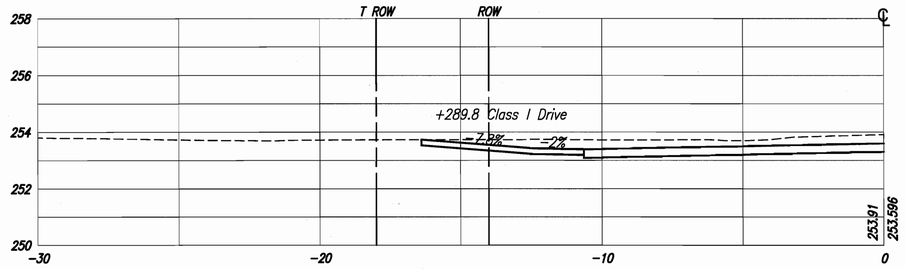

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CROSS SECTIONS LINE "A"

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SURVEY BOOK	SHEETS
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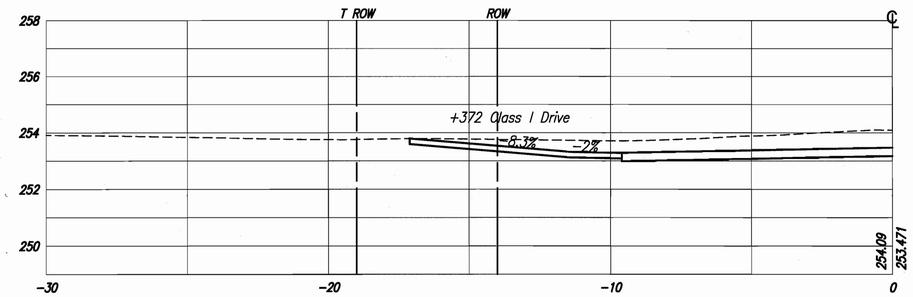

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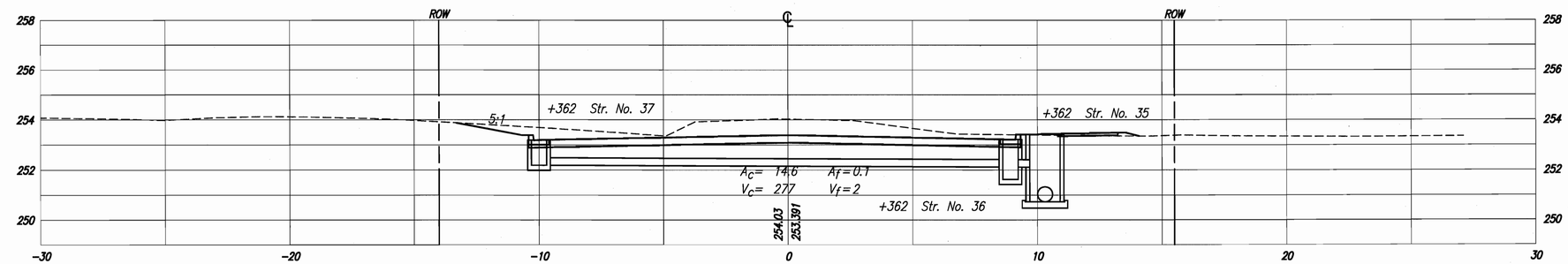

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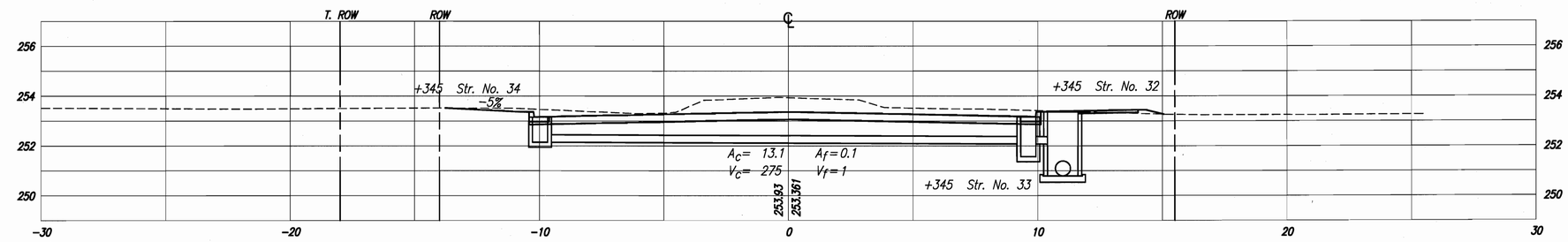

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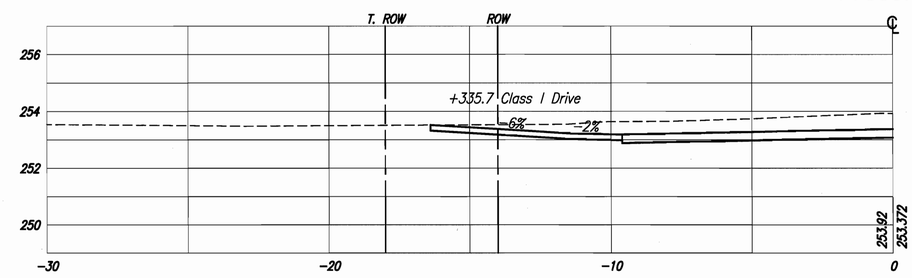

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CROSS SECTIONS LINE "A"

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VERTICAL SCALE	DESIGNATION
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SURVEY BOOK	SHEETS
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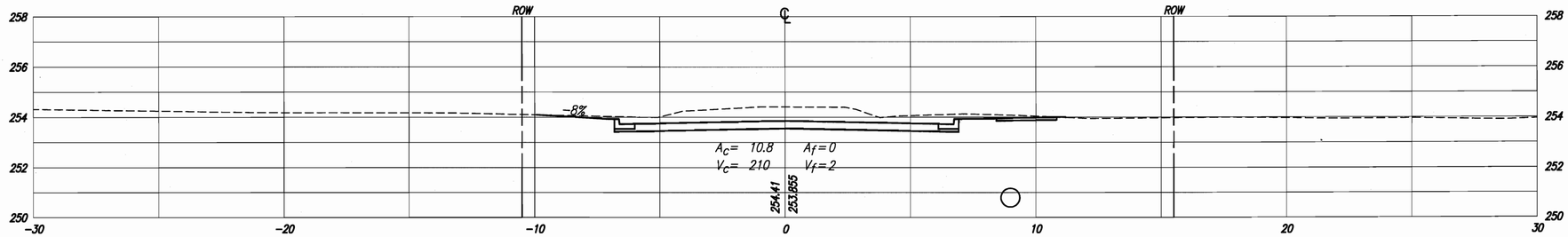

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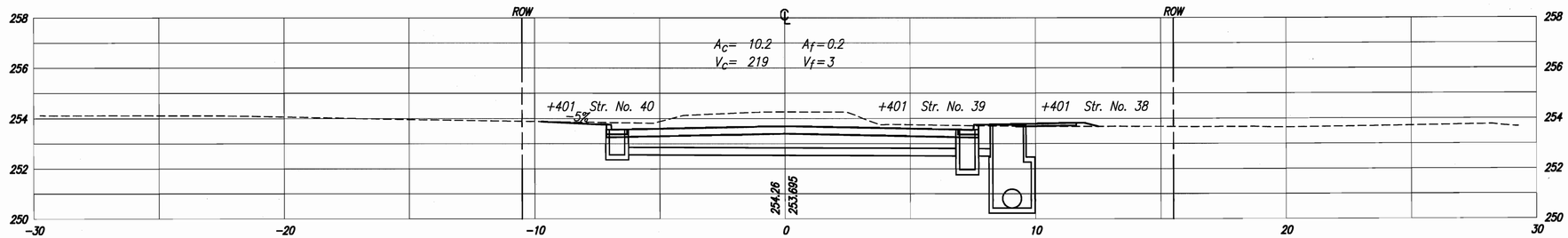

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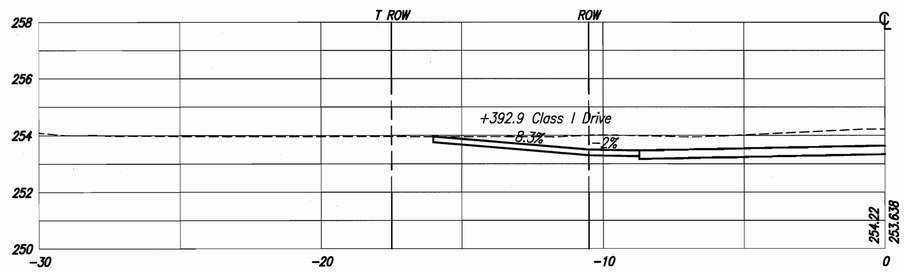

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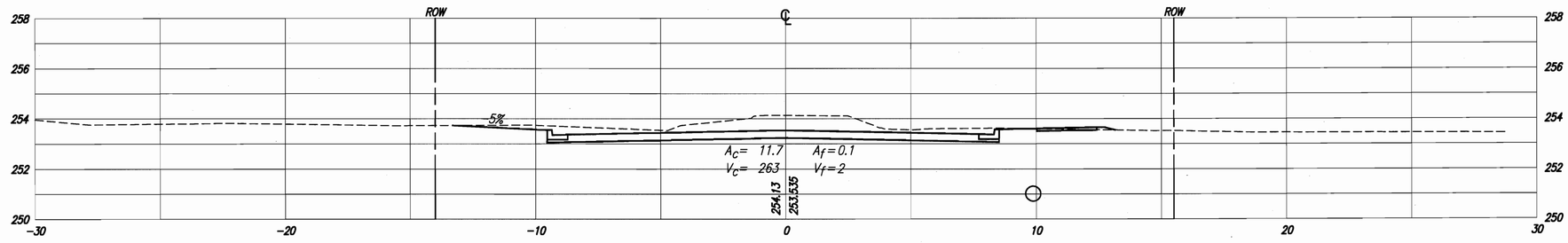

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CROSS SECTIONS LINE "A"

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VERTICAL SCALE	DESIGNATION
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SURVEY BOOK	SHEETS
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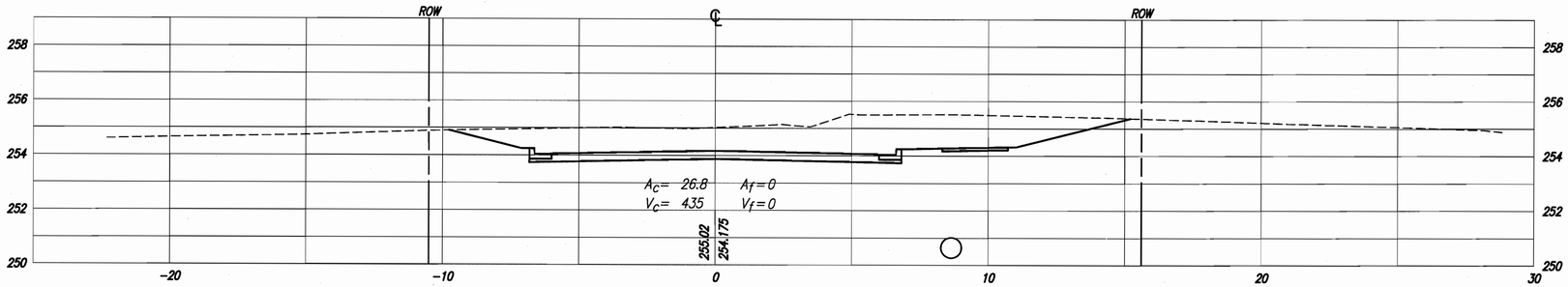

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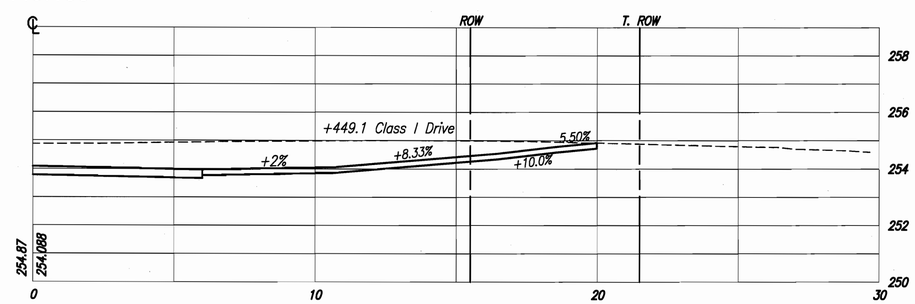

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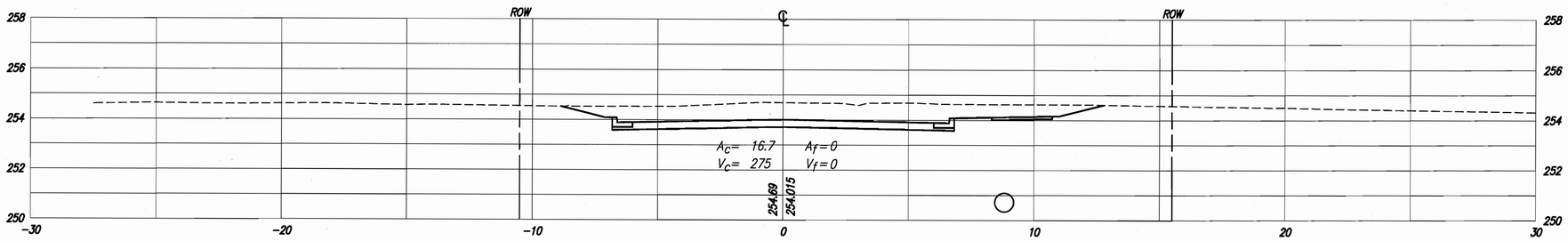

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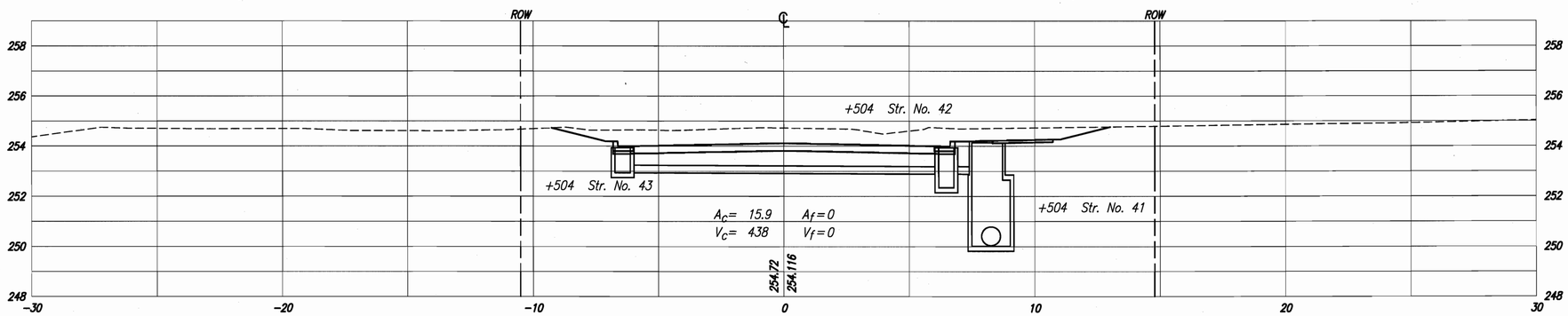

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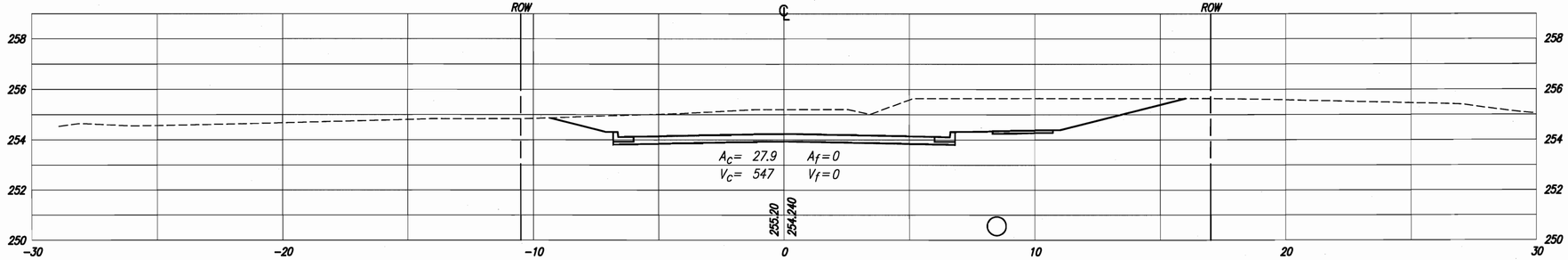

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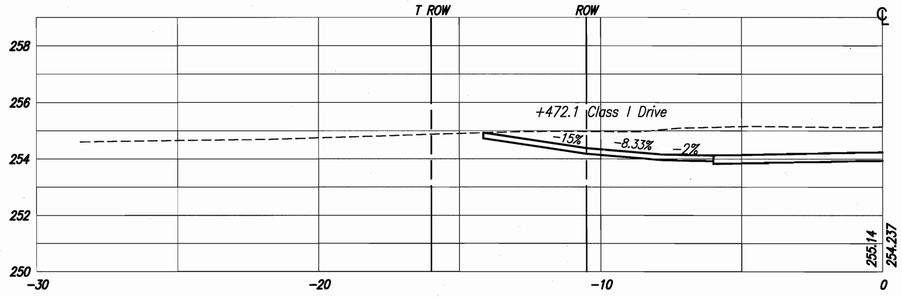

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CROSS SECTIONS LINE "A"

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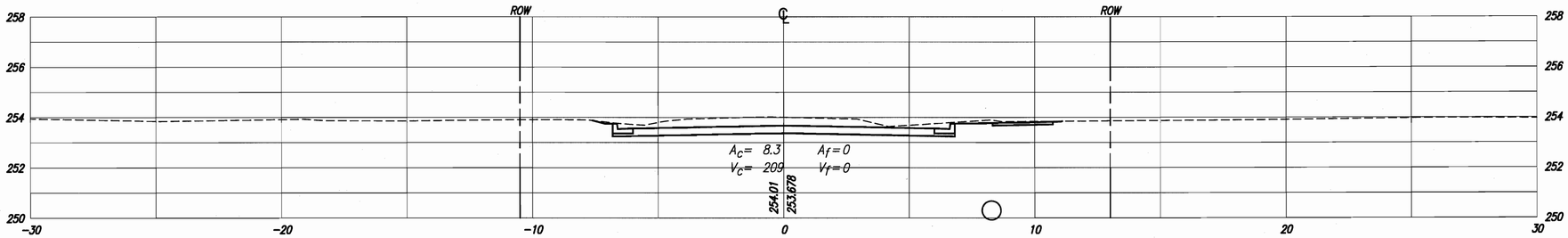

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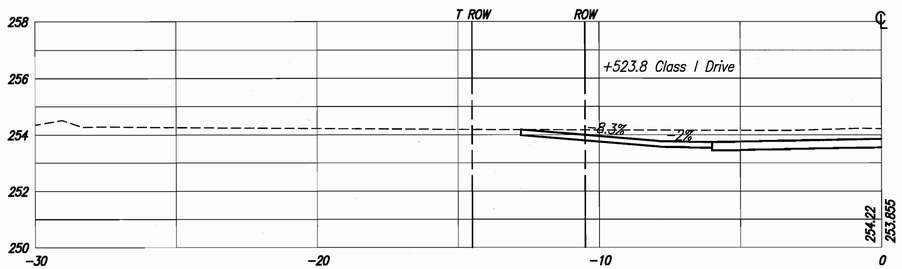

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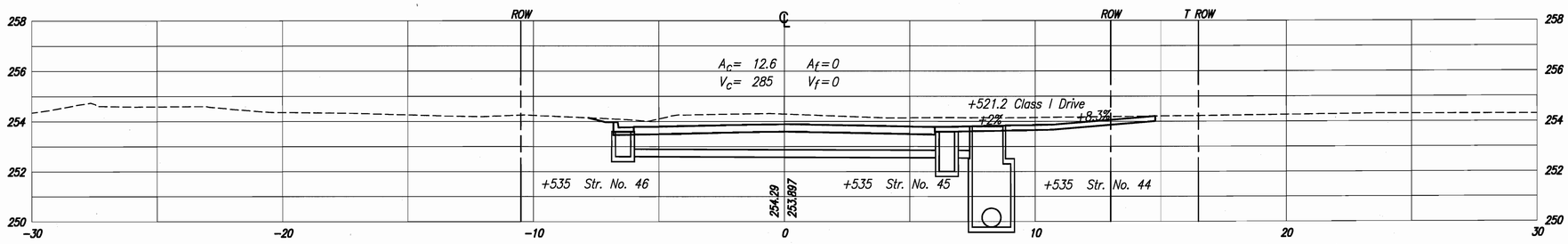

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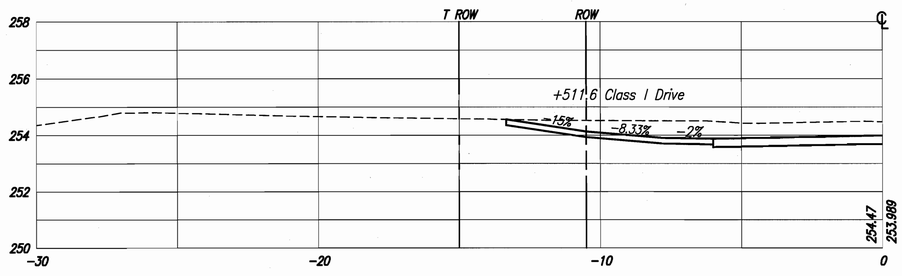

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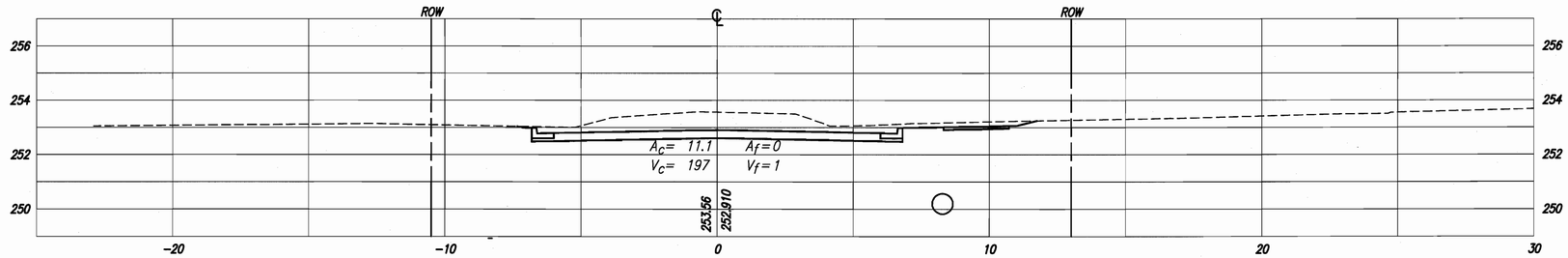

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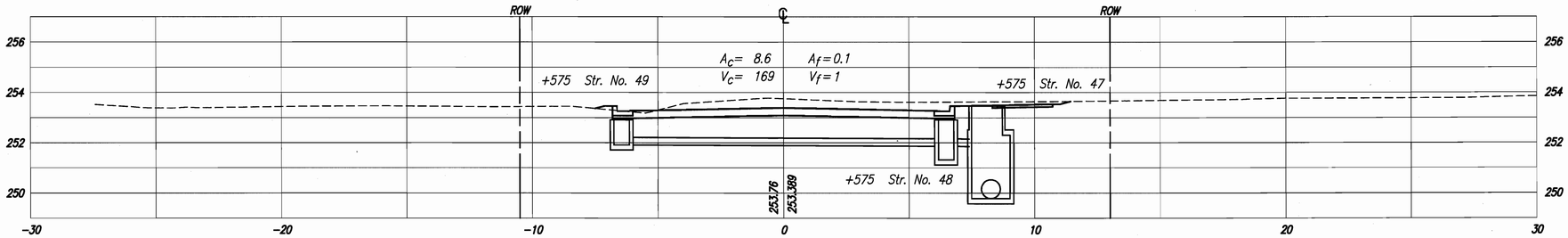

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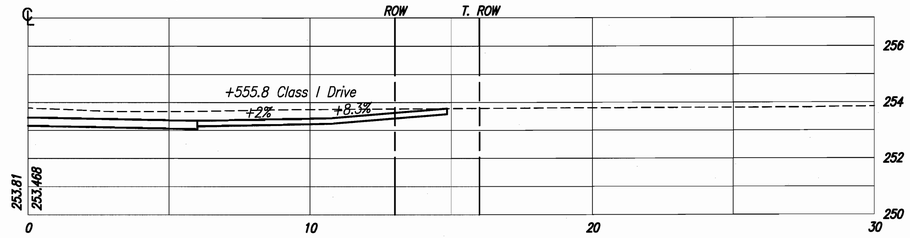

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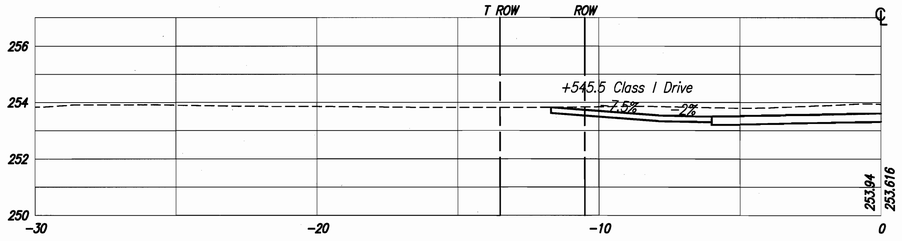

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CROSS SECTIONS LINE "A"

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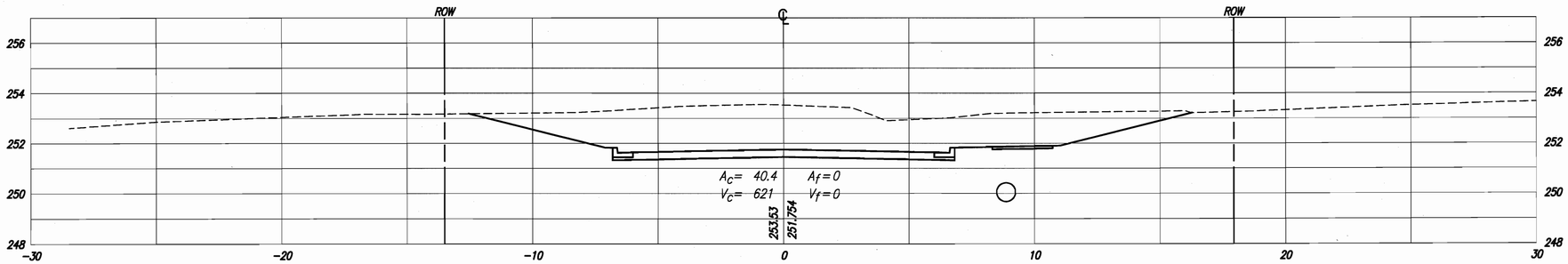

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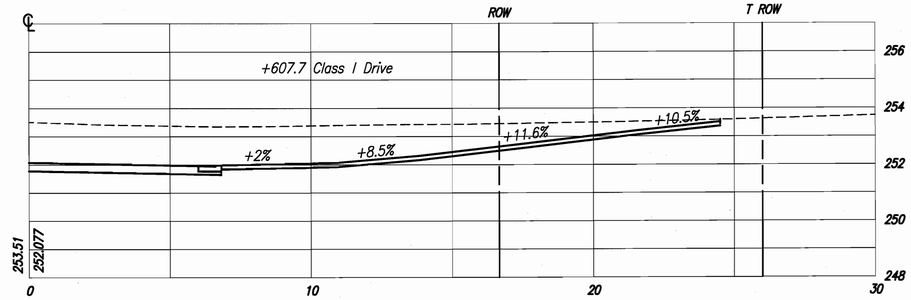

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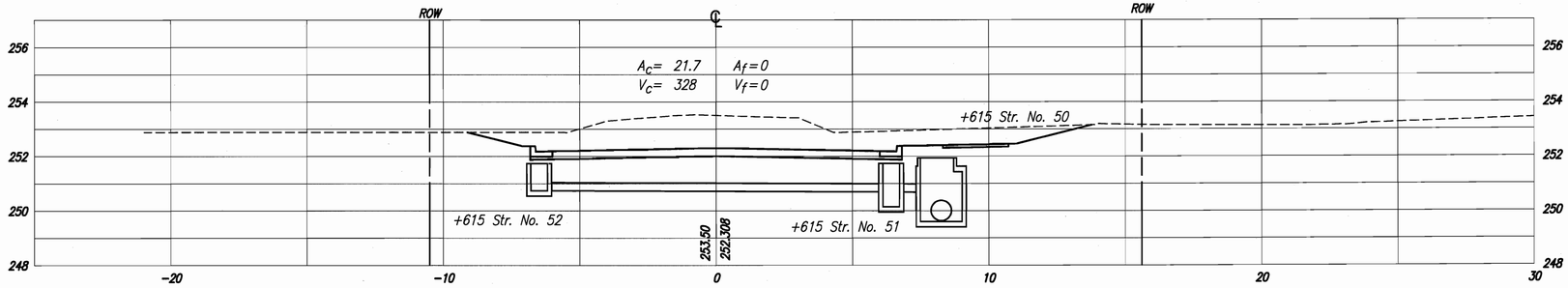

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CROSS SECTIONS LINE "A"/"PR-A"

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SURVEY BOOK	SHEETS
-	57 of 68
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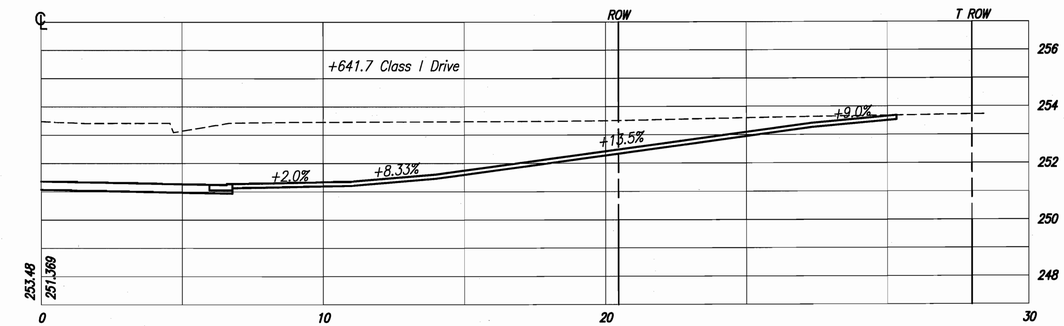

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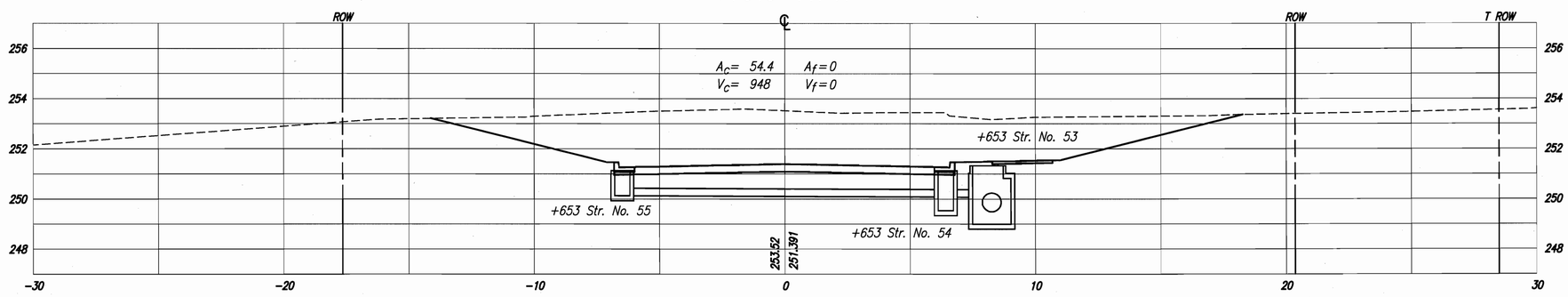

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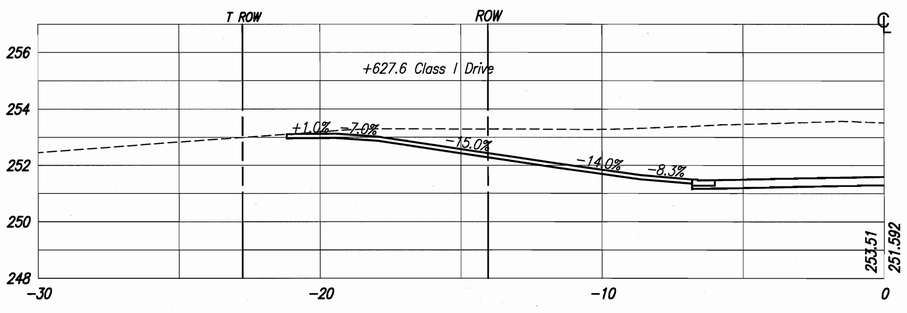

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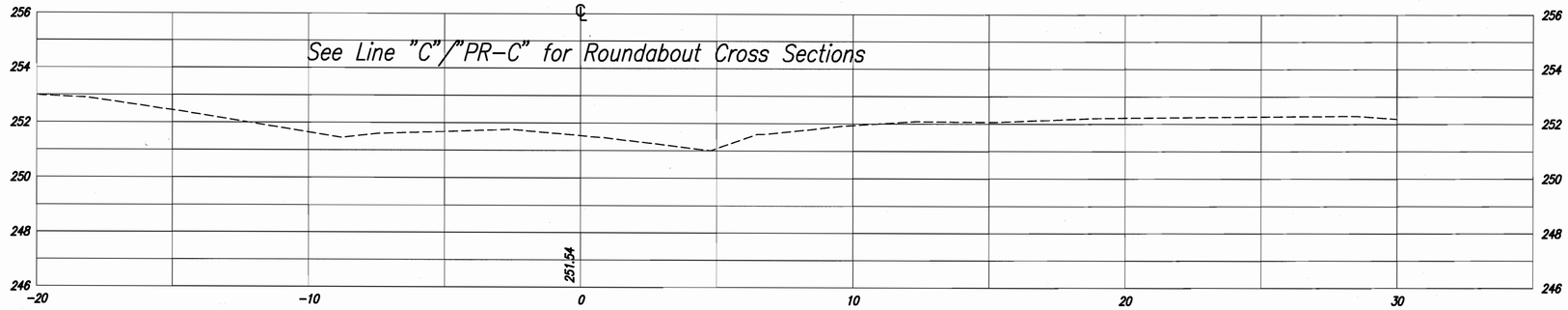

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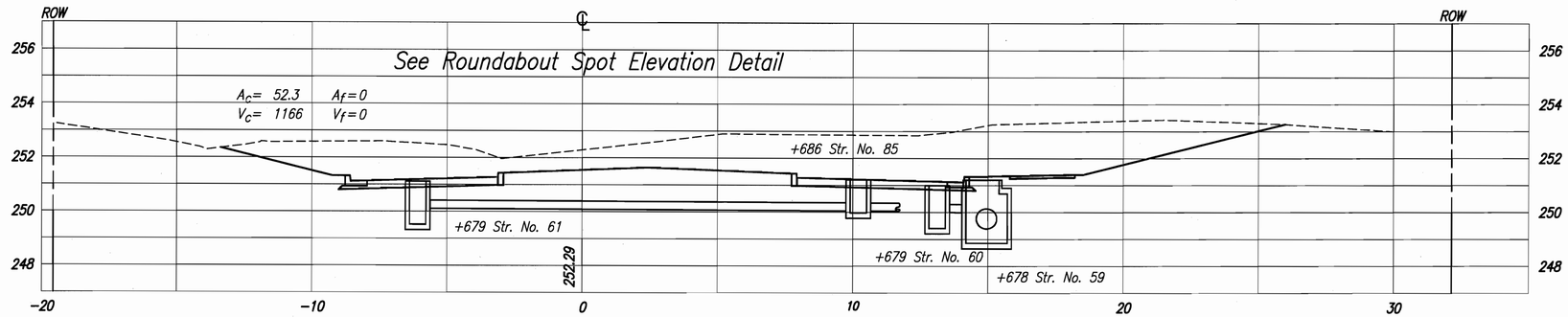

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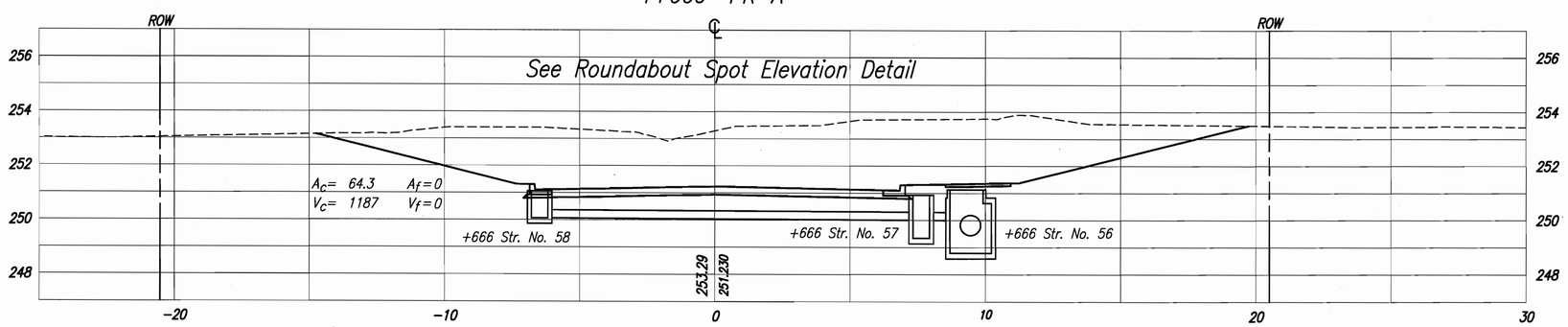

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CROSS SECTIONS LINE "PR-A"

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SURVEY BOOK	SHEETS
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R-32103	0600196

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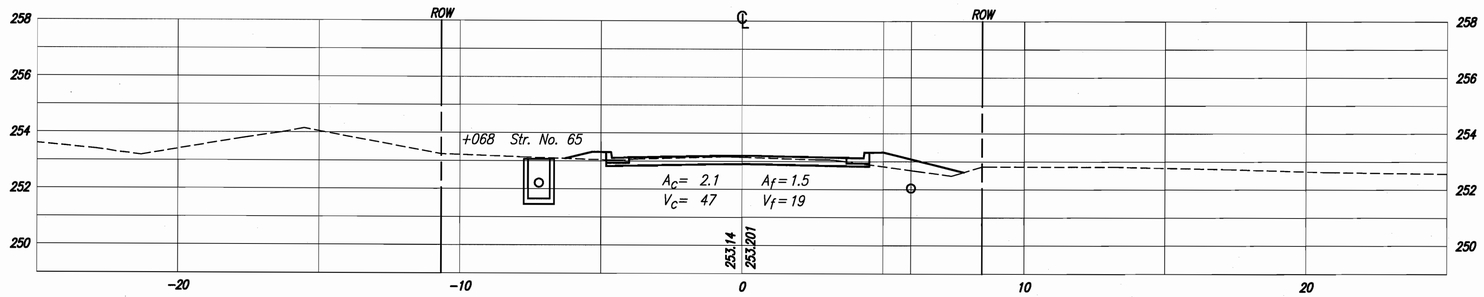

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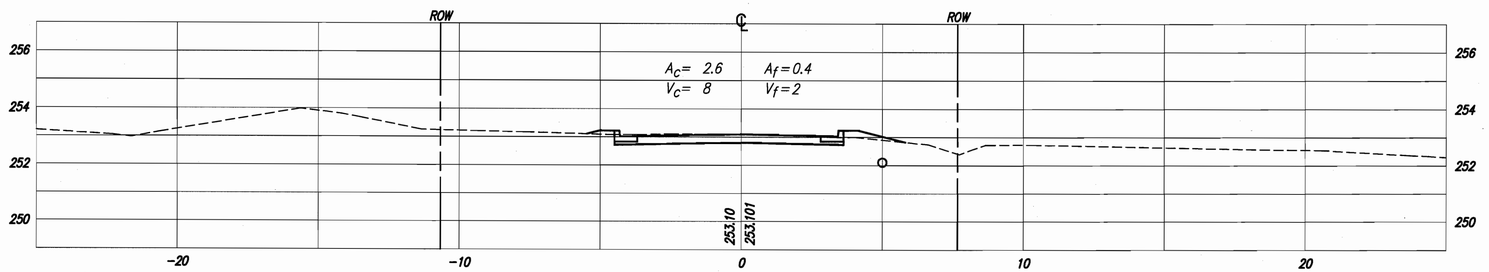

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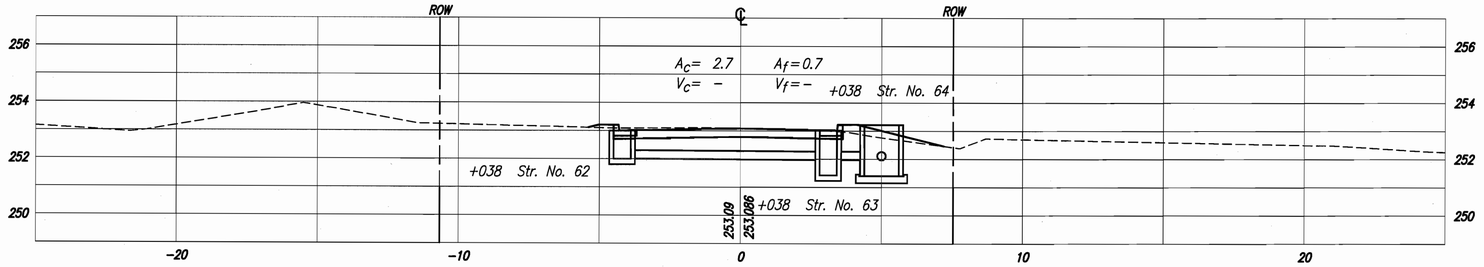

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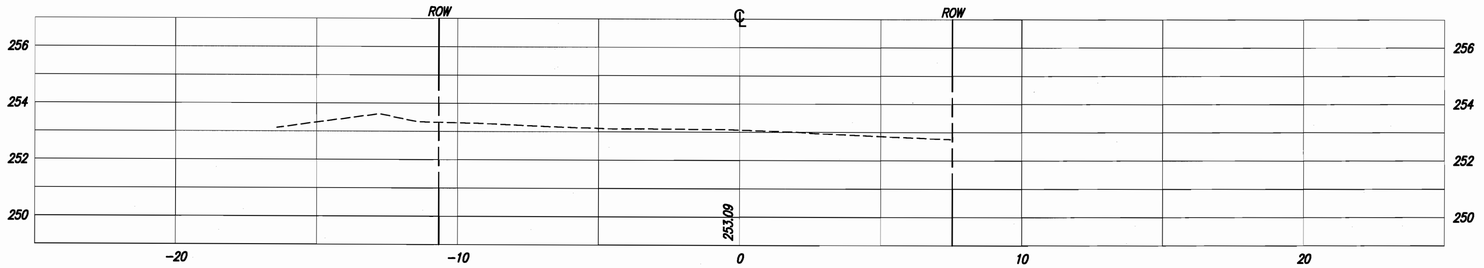

BEGIN INCIDENTAL CONSTRUCTION 2+027.000 "B"

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R-32103	0600196

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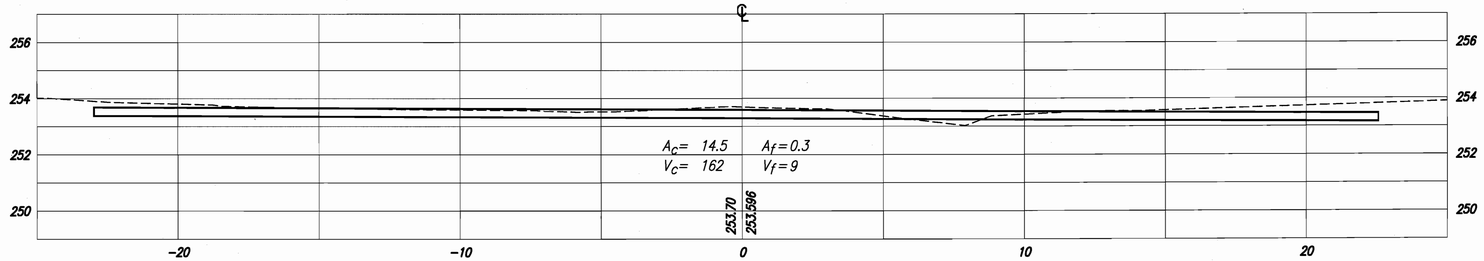

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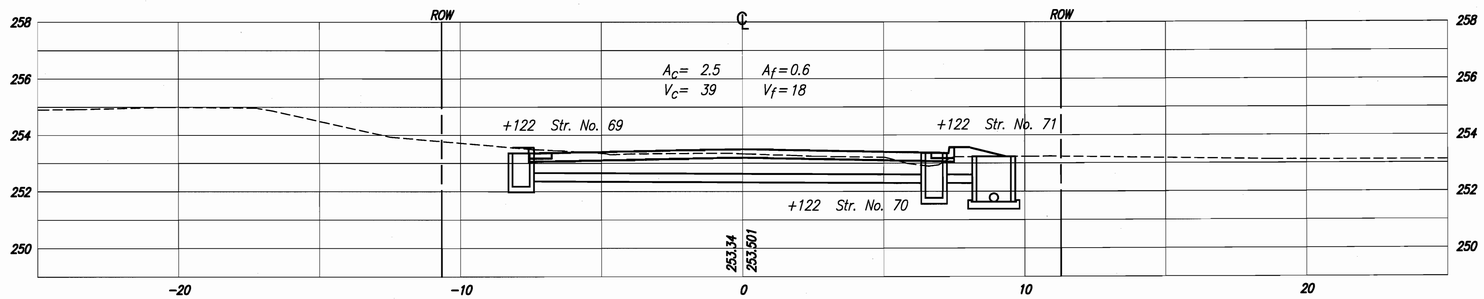

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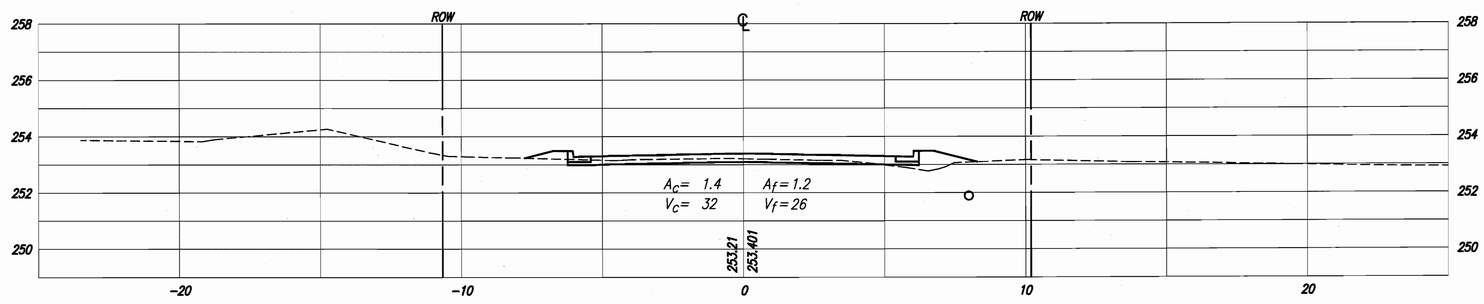

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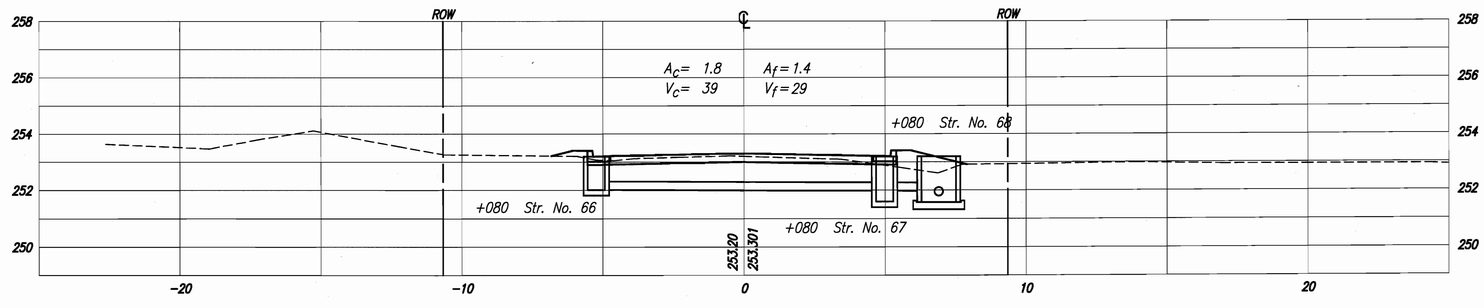

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DESIGNED: WRC | DRAWN: JNII
CHECKED: JAR | CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS LINE "B"

HORIZONTAL SCALE	BRIDGE FILE
1:100	
VERTICAL SCALE	DESIGNATION
1:100	0600196
SURVEY BOOK	SHEETS
	61 of 68
CONTRACT	PROJECT
R-32103	0600196

4/8/2009 13:41 PM
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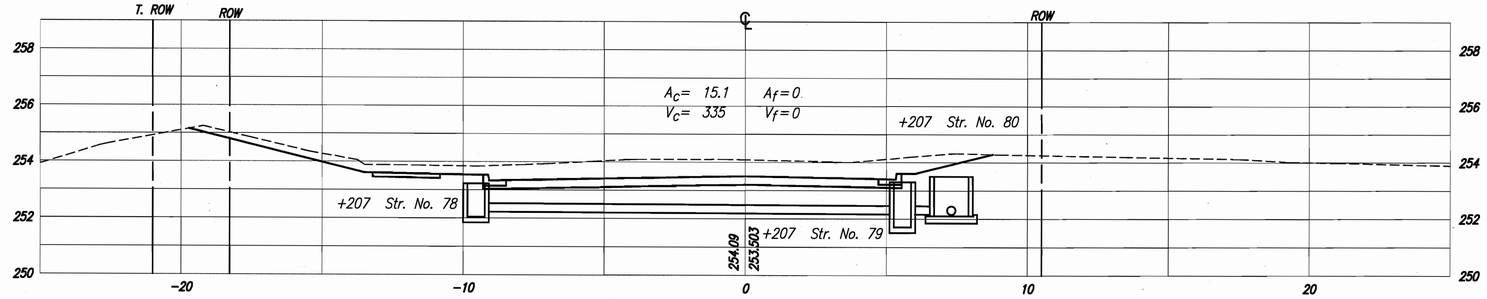
2+220



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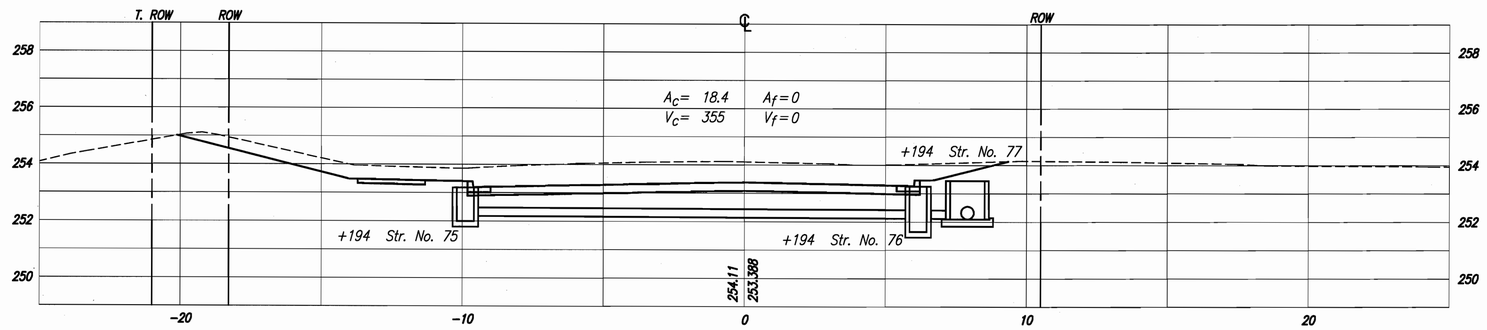

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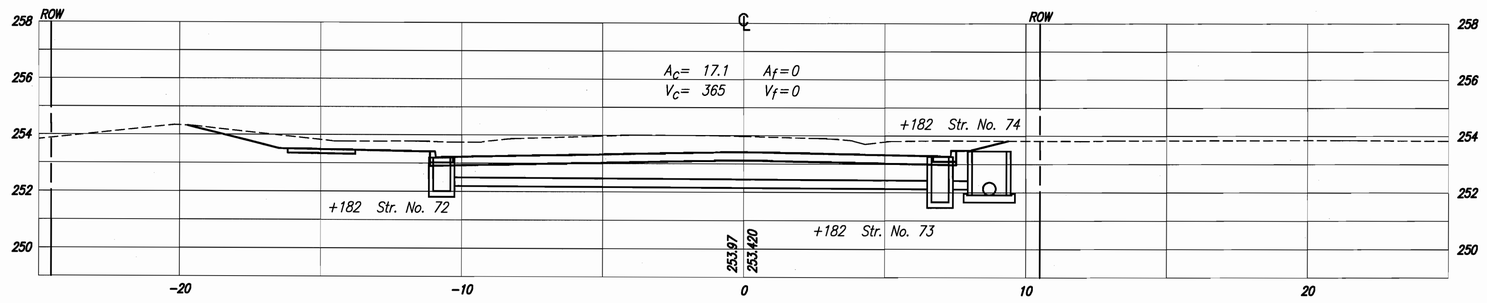

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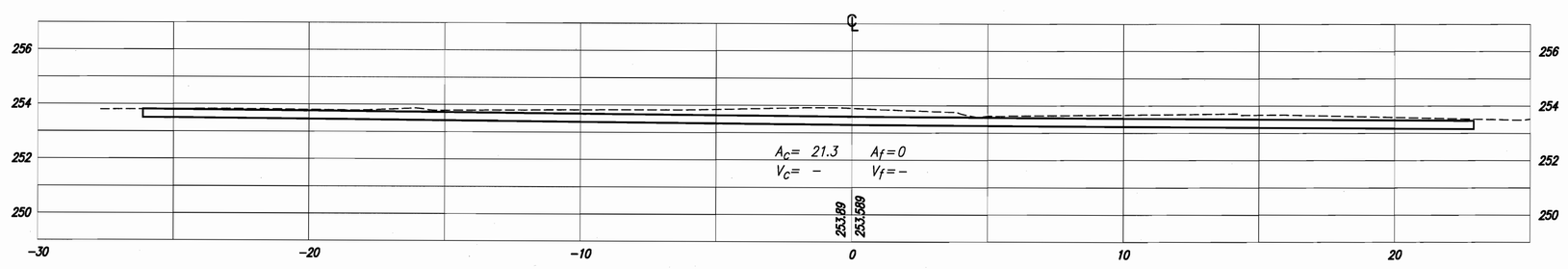

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CHECKED: JAR	CHECKED: JAR

INDIANA DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS LINE "B"

HORIZONTAL SCALE	BRIDGE FILE
1:100	
VERTICAL SCALE	DESIGNATION
1:100	0600196
SURVEY BOOK	SHEETS
	62 of 68
CONTRACT	PROJECT
R-32103	0600196

4/8/2009 12:40 PM
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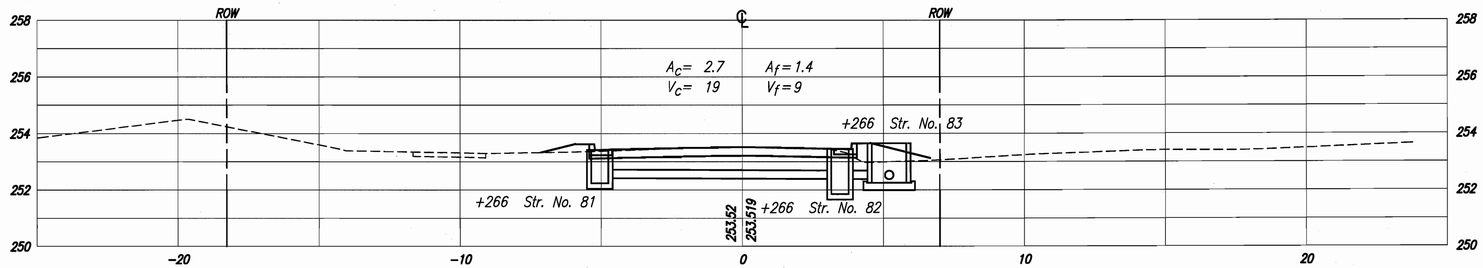
END INCIDENTAL CONSTRUCTION 2+277.000 "B"
END CONSTRUCTION 2+267.000 "B"

2+267



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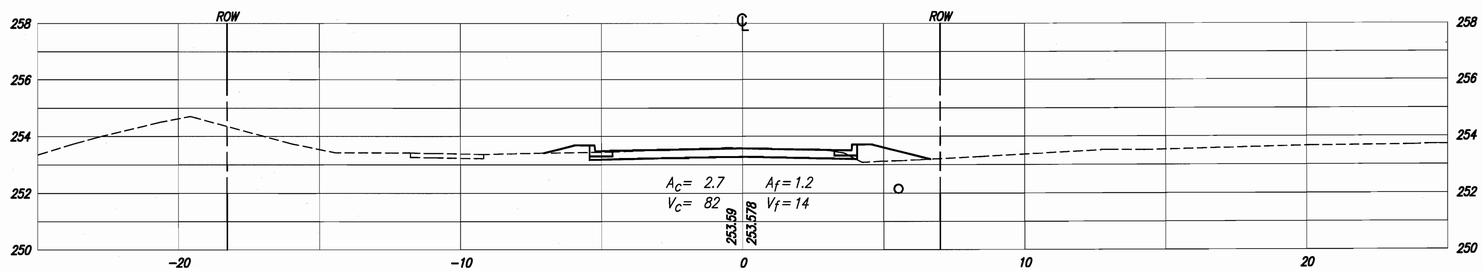

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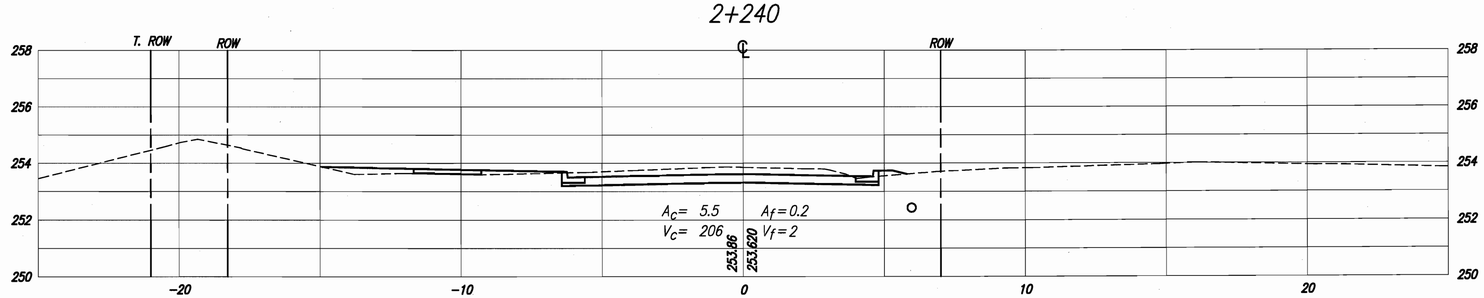

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DESIGN ENGINEER DATE

DESIGNED: WRC DRAWN: JNII
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INDIANA DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "B"

HORIZONTAL SCALE	BRIDGE FILE
1:100	
VERTICAL SCALE	DESIGNATION
1:100	0600196
SURVEY BOOK	SHEETS
	63 of 68
CONTRACT	PROJECT
R-32103	0600196

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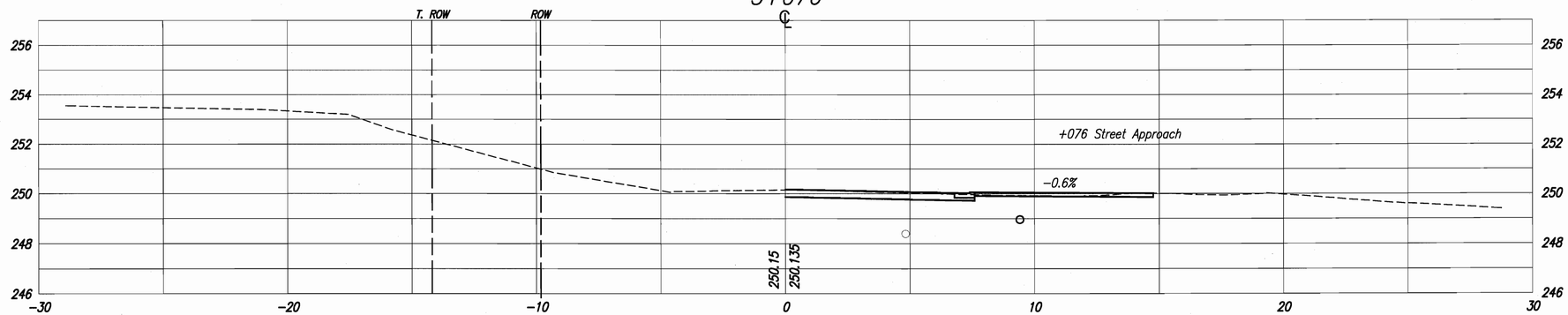
3+076



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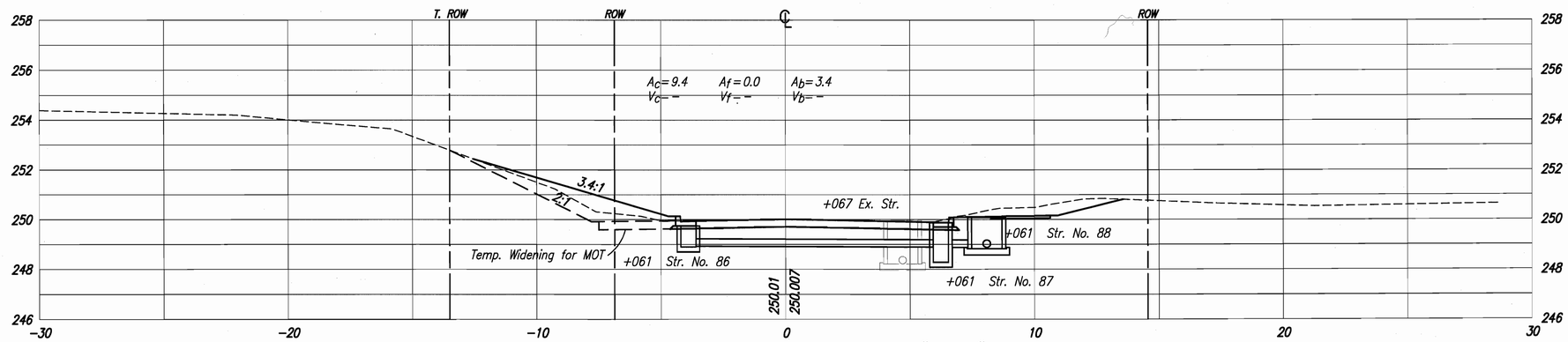
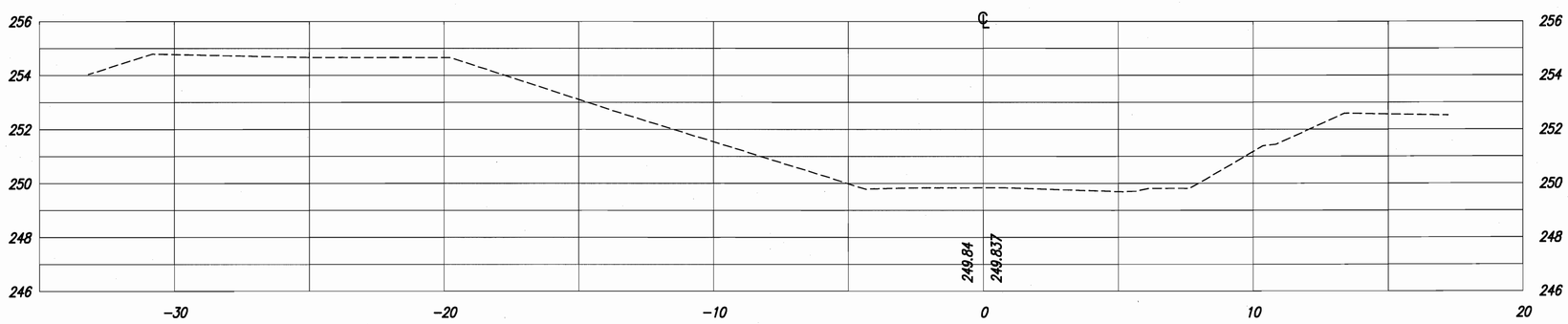


BEGIN CONSTRUCTION 3+060.000 "PR-C"
BEGIN INCIDENTAL CONSTRUCTION 3+050.000 "C"

3+040



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CROSS SECTIONS LINE "PR-C"

HORIZONTAL SCALE	BRIDGE FILE
1:100	
VERTICAL SCALE	DESIGNATION
1:100	0600196
SURVEY BOOK	SHEETS
	64 of 68
CONTRACT	PROJECT
R-32103	0600196

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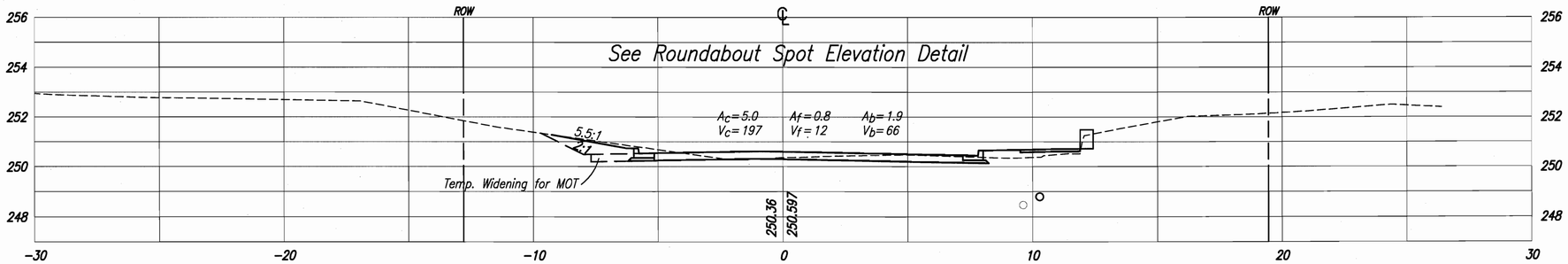
3+120



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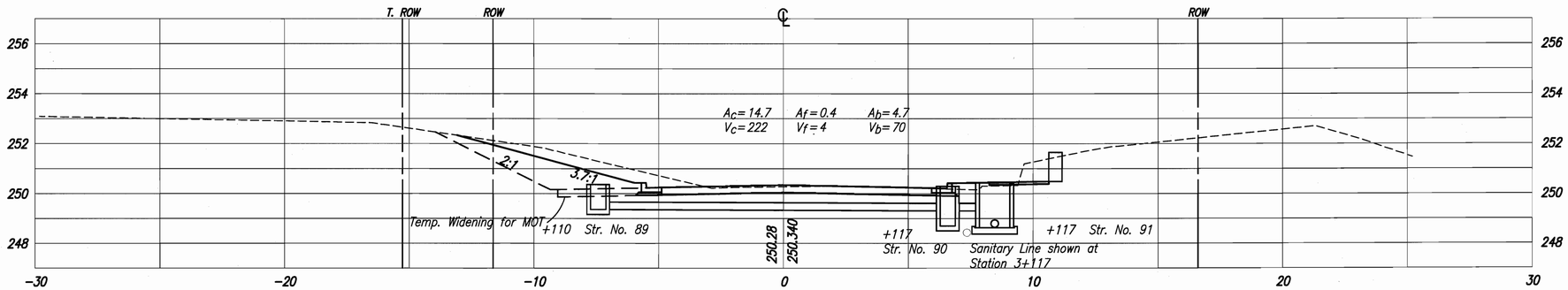

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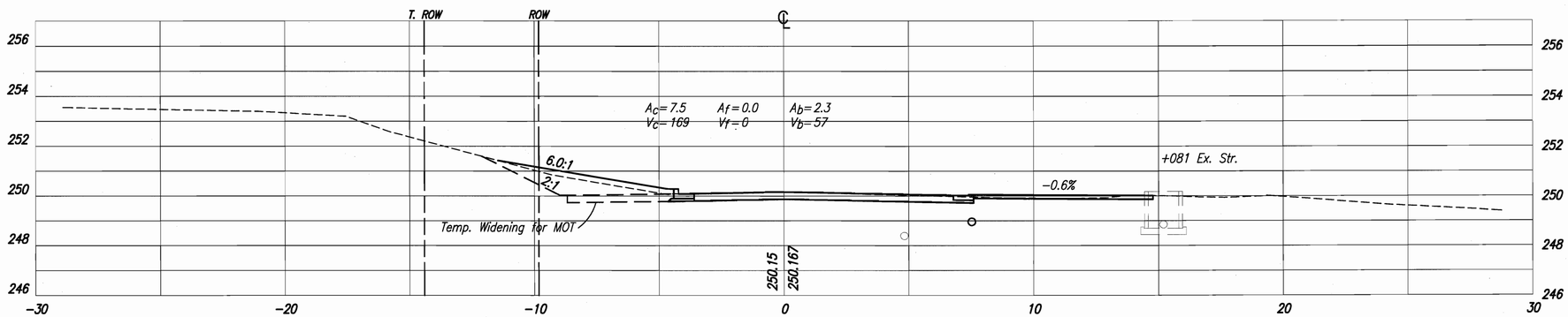

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RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: WRC DRAWN: JNII

CHECKED: JAR CHECKED: JAR

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CROSS SECTIONS LINE "PR-C"

HORIZONTAL SCALE 1:100	BRIDGE FILE
VERTICAL SCALE 1:100	DESIGNATION 0600196
SURVEY BOOK	SHEETS 65 of 68
CONTRACT R-32103	PROJECT 0600196

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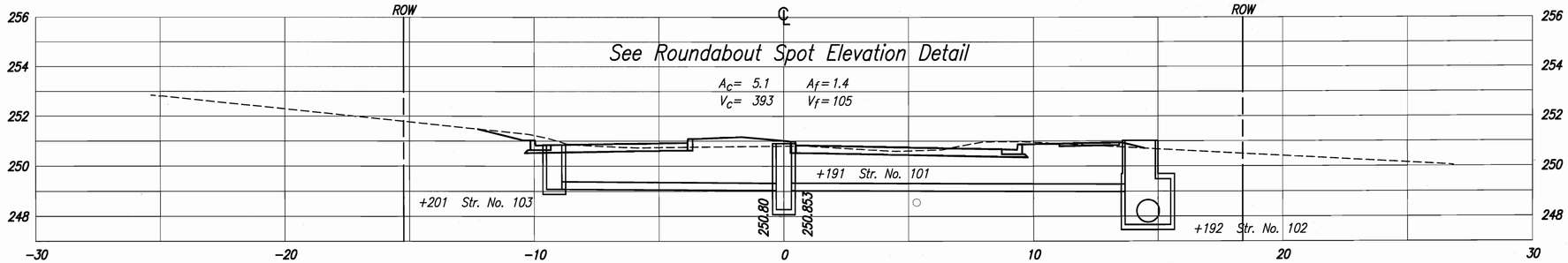
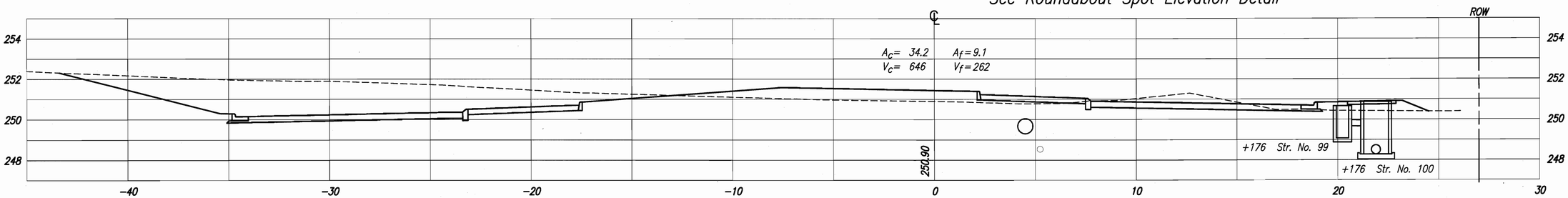
3+200

See Roundabout Spot Elevation Detail



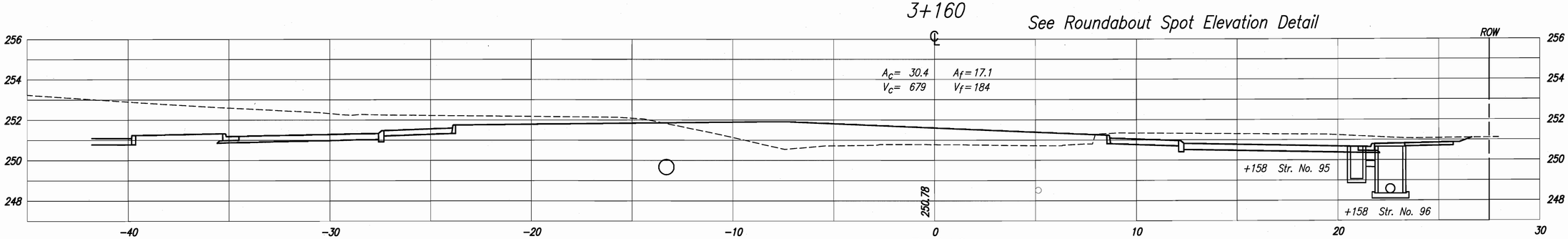
3+180

See Roundabout Spot Elevation Detail



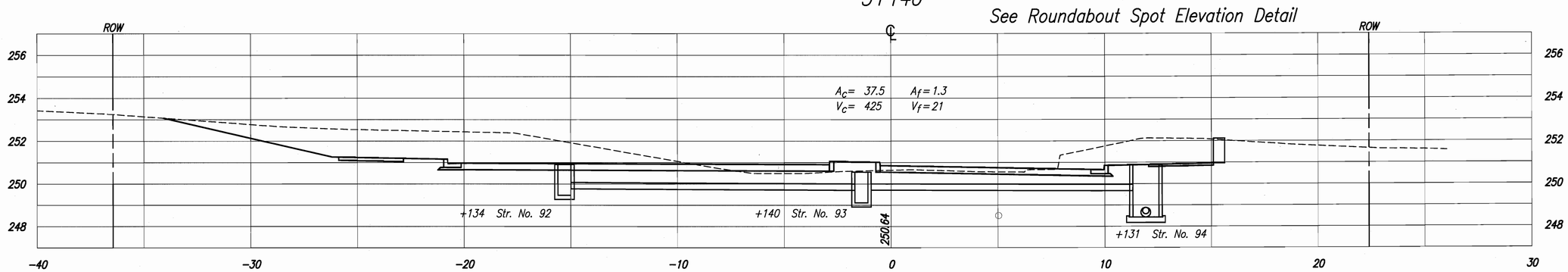
3+160

See Roundabout Spot Elevation Detail



3+140

See Roundabout Spot Elevation Detail



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CROSS SECTIONS LINE "C"

HORIZONTAL SCALE	BRIDGE FILE
1:100	
VERTICAL SCALE	DESIGNATION
1:100	0600196
SURVEY BOOK	SHEETS
	66 of 68
CONTRACT	PROJECT
R-32103	0600196

4/8/2009 11:39 AM
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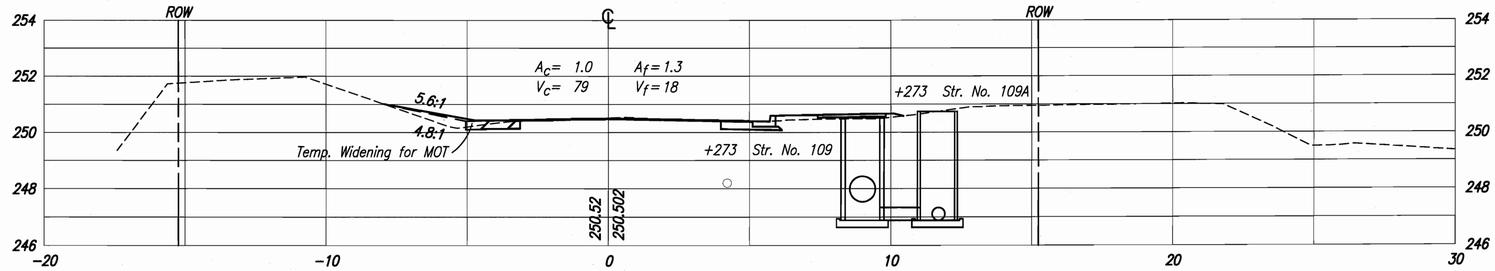
3+260



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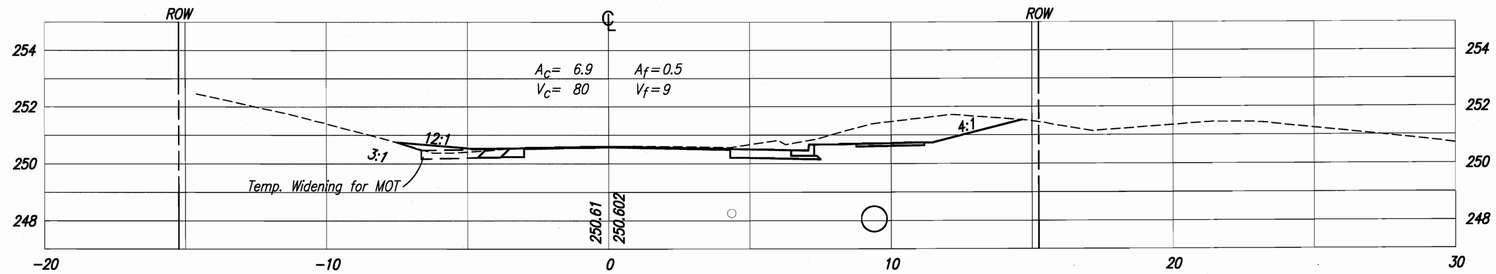

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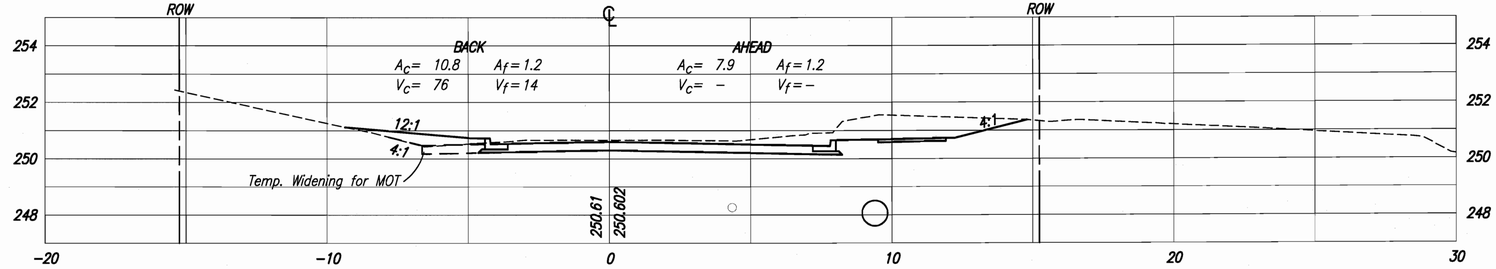

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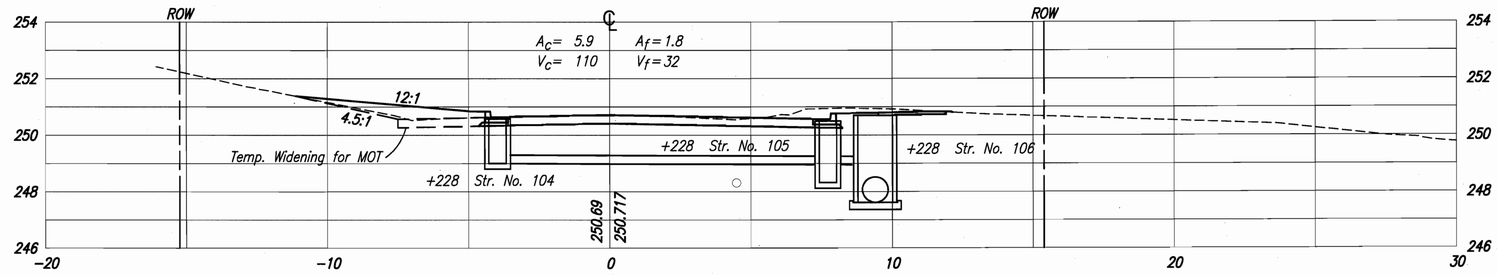

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CROSS SECTIONS LINE "C"

HORIZONTAL SCALE	BRIDGE FILE
1:100	
VERTICAL SCALE	DESIGNATION
1:100	0600196
SURVEY BOOK	SHEETS
	67 of 68
CONTRACT	PROJECT
R-32103	0600196

4/4/2008 1:05 AM
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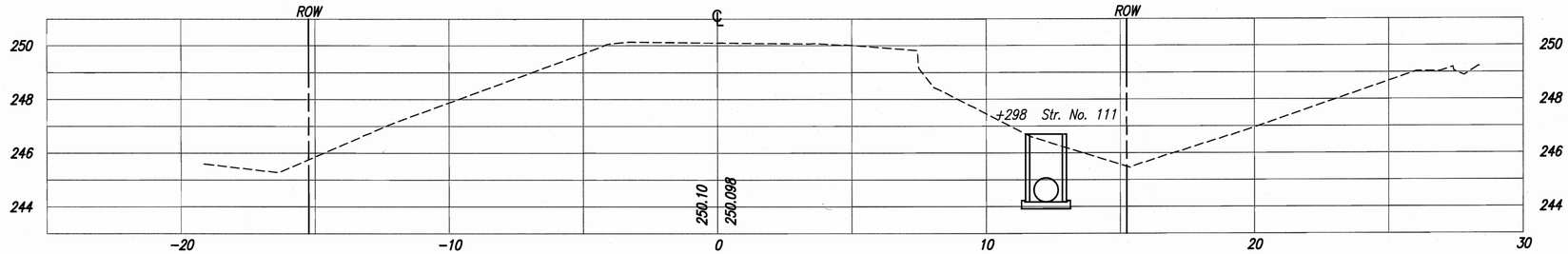
3+300



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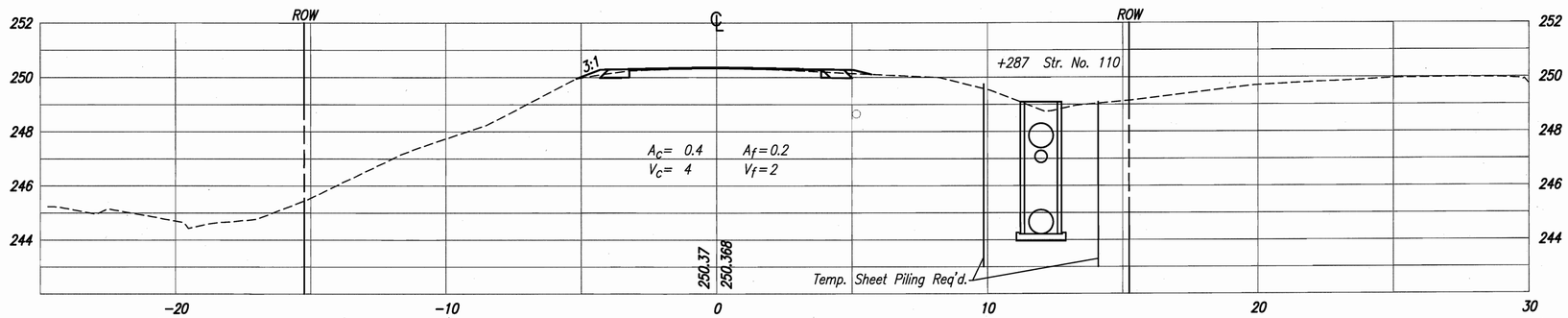
END CONSTRUCTION 3+287.000 "C"

3+287



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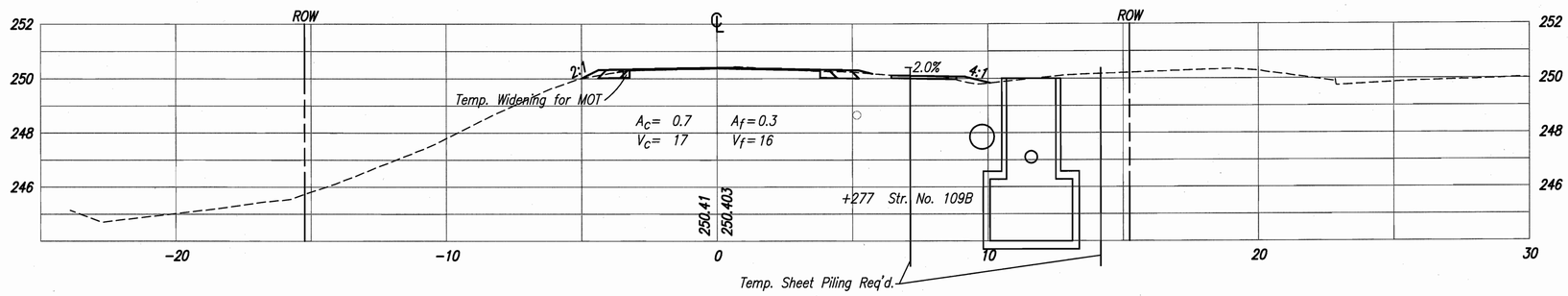

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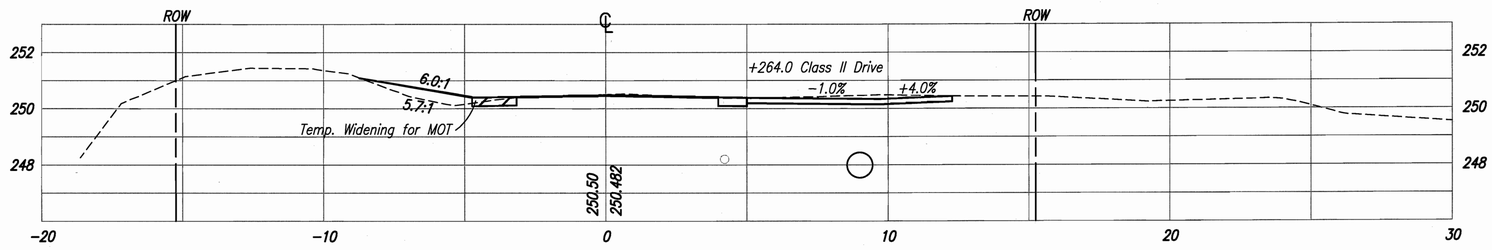

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CROSS SECTIONS LINE "C"

HORIZONTAL SCALE	BRIDGE FILE
1:100	
VERTICAL SCALE	DESIGNATION
1:100	0600196
SURVEY BOOK	SHEETS
	68 of 68
CONTRACT	PROJECT
R-32103	0600196

4/13/2009 4:29 PM
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