

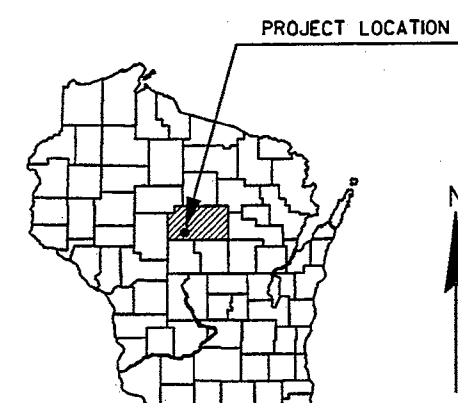
PROJECT ID: 6666-00-73
WITH:

COUNTY: MARATHON

ORDER OF SHEETS

Section No. 1	Title
Section No. 2	Typical Sections and Details
Section No. 3	Estimate of Quantities
Section No. 3	Miscellaneous Quantities
Section No. 4	Right of Way Plat
Section No. 5	Plan and Profile
Section No. 6	Standard Detail Drawings
Section No. 7	Sign Plates
Section No. 8	Structure Plans
Section No. 9	Computer Earthwork Data
Section No. 9	Cross Sections

TOTAL SHEETS =



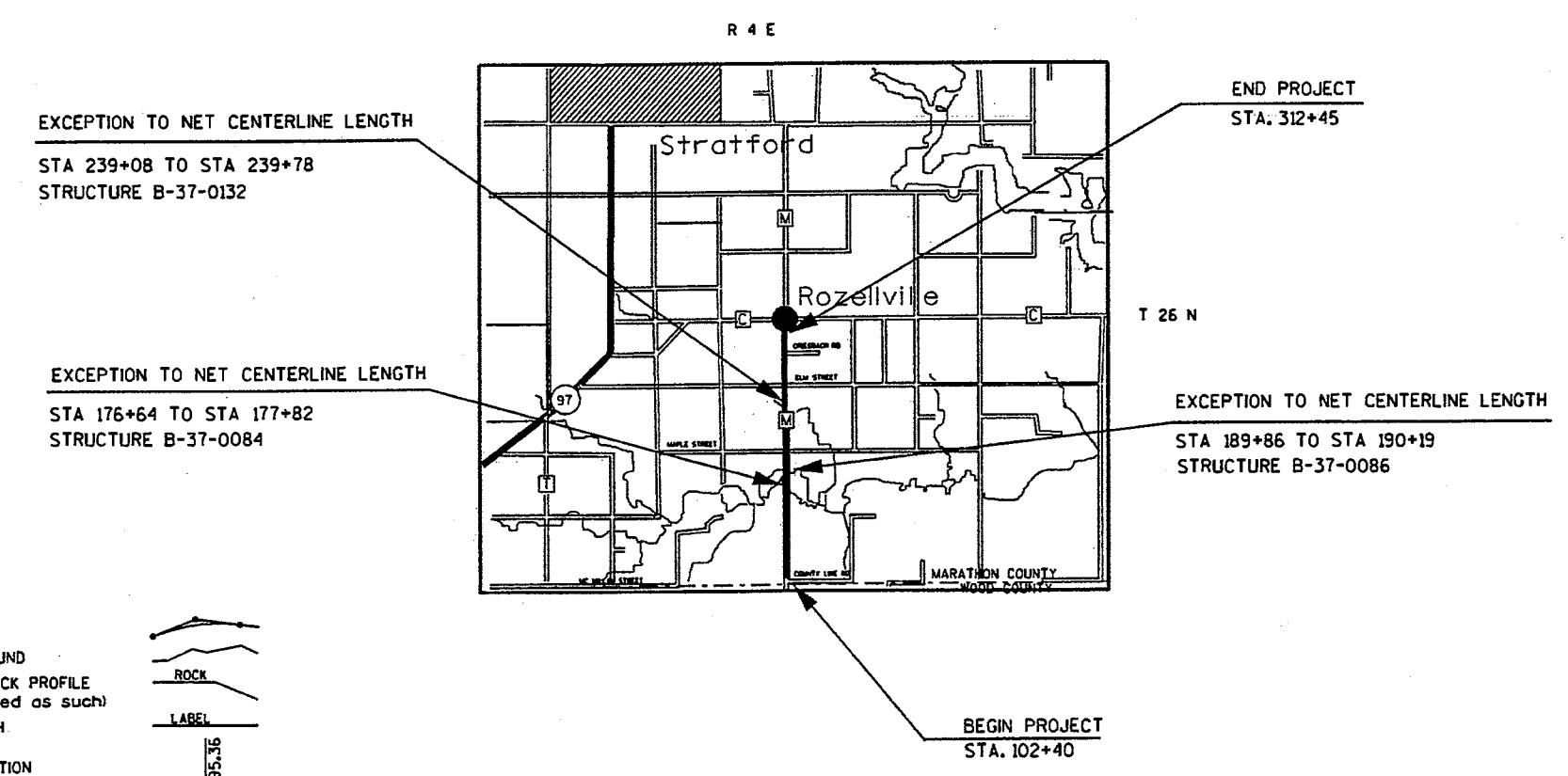
DESIGN DESIGNATION

A.A.D.T. (2009)	= 1200
A.A.D.T. (2029)	= 1600
D.H.V.	= 245
D.D.	= 62-38
T.	= 3.6%
DESIGN SPEED	= 55 MPH
ESALS	= 116,800

CONVENTIONAL SYMBOLS	
PLAN	
CORPORATE LIMITS	
PROPERTY LINE	
LOT LINE	
LIMITED HIGHWAY EASEMENT	
EXISTING RIGHT OF WAY	
PROPOSED OR NEW R/W LINE	
SLOPE INTERCEPT	
REFERENCE LINE	
EXISTING CULVERT	
PROPOSED CULVERT (Box or Pipe)	
COMBUSTIBLE FLUIDS	
MARSH AREA	
WOODED OR SHRUB AREA	
PROFILE	
GRADE LINE	
ORIGINAL GROUND	
MARSH OR ROCK PROFILE (To be noted as such)	
SPECIAL DITCH	
GRADE ELEVATION	
CULVERT (Profile View)	
UTILITIES	
ELECTRIC	
FIBER OPTIC	
GAS	
SANITARY SEWER	
STORM SEWER	
TELEPHONE	
WATER	
UTILITY PEDESTAL	
POWER POLE	
TELEPHONE POLE	

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT
SOUTH COUNTY LINE - CTH C
CTH M
MARATHON COUNTY

STATE PROJECT NUMBER
6666-00-73



LAYOUT
SCALE 0 1 MI.
TOTAL NET LENGTH OF CENTERLINE = 3.935 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), MARATHON COUNTY.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6666-00-73		

ACCEPTED FOR
MARATHON COUNTY HIGHWAY DEPARTMENT

DATE: 2-18-2009
HIGHWAY COMMISSIONER

ORIGINAL PLANS PREPARED BY:
TRAFFIC ANALYSIS AND DESIGN, INC.

ANTHONY A. KEMNITZ
E-27340
WAUSAU, WI
PROFESSIONAL ENGINEER

DATE: 2-18-09

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	EMCS
Designer	TRAFFIC ANALYSIS AND DESIGN, INC.
Management Consultant	CEDAR CORPORATION
C.O. Examiner	

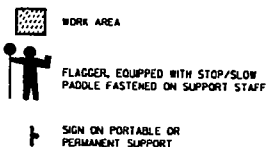
APPROVED FOR THE DEPARTMENT

DATE: _____
Management Consultant Signature

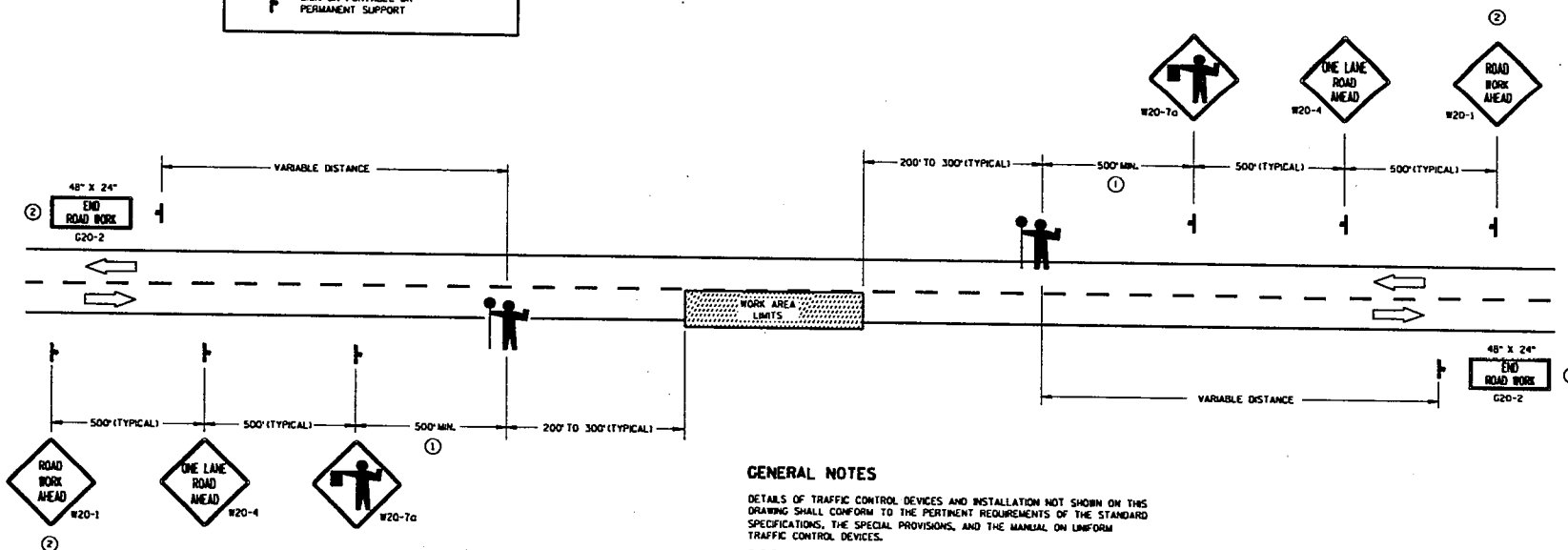
E

TWO-LANE ROADWAY

SYMBOLS



USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES (AND THE LOCATION OF ALL FLAGGERS) SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, THE "FLAGGER AHEAD", THE "ROAD WORK AHEAD" AND THE "ONE LANE ROAD AHEAD" SIGNS SHALL BE COVERED OR REMOVED AND THE HIGHWAY RESTORED TO NORMAL OPERATION.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

- ① FOR A MOVING WORK OPERATION, SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

- ② SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE: 5/5/08
DATE: 5/5/08
STATE TRAFFIC ENGINEER OF DESIGN
FHR

Standard Detail Drawing 15C12-3

References: FDM Procedure 11-50-20 - Manual on Uniform Traffic Control Devices

Bid items associated with this drawing:

<u>Item #</u>	<u>Title</u>
---------------	--------------

Standardized Special Provisions associated with this drawing:

Other SDD's associated with this drawing:

Design Notes:

No traffic control bid items are used with this drawing because 104.6.1 (4) of the Standard Specifications specifies that the costs for flagging, and signs associated with flagging, are incidental to the contract.

Drop offs or open trenches adjacent to one lane traffic operations should be marked with cones or drums. Provide appropriate details and/or special provisions when this condition is expected.

This detail is appropriate for rural high-speed conditions. Urban lower speed conditions require a closer sign spacing.

Contact Person: Patrick Fleming (608) 266-8486

October 31, 2006

GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY OF EACH APPROACH ROADWAY.

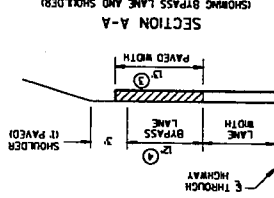
SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT, WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS AND CONSTRUCTION LIMITS SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

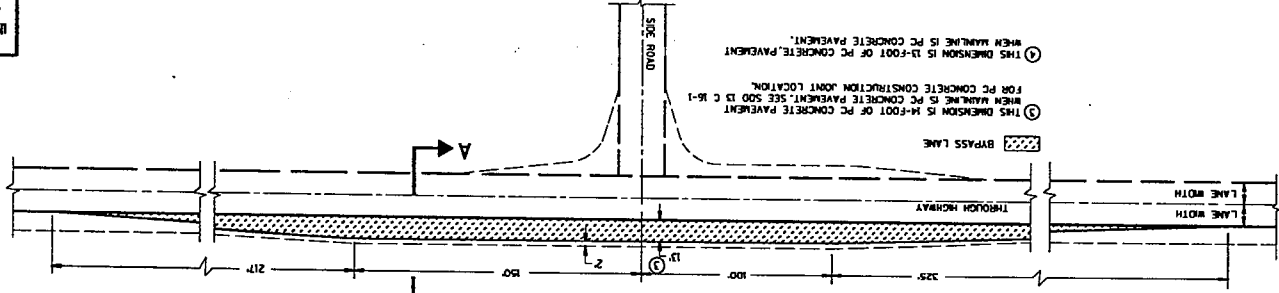
WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

EXISTING SURFACE



SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)

TEE INTERSECTION BYPASS LANE DETAIL



RADE DIMENSIONS FOR TYPES	R ₁	R ₂
0	0	0
1-10	10	10
11-20	20	20
21-30	30	30
31-40	40	40
41-50	50	50
51-60	60	60
61-70	70	70
71-80	80	80
81-90	90	90
91-100	100	100

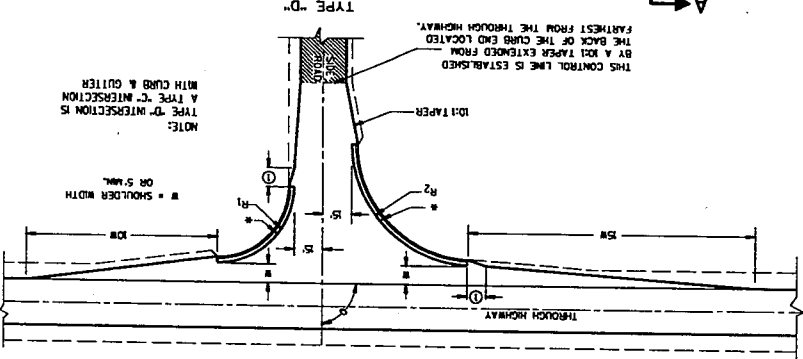
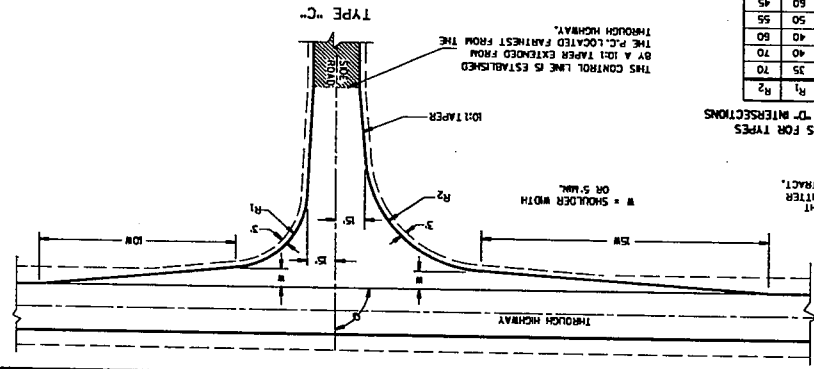
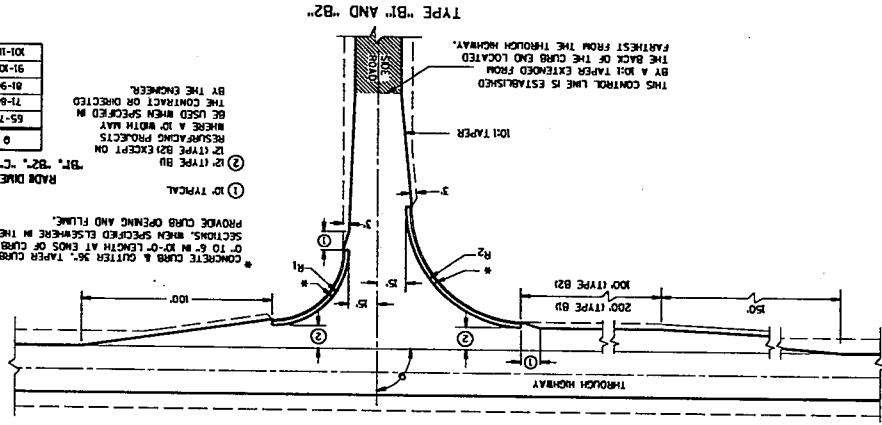
RADE DIMENSIONS FOR TYPES "B1", "B2", "C", AND "D" INTERSECTIONS

① IF TYPICAL

② IF TYPE "B1" EXCEPT ON RESURFACING PROJECTS WHERE A 10' WIDTH MAY BE USED WHEN SPECIFIED IN THE CONTRACT OR DIRECTED BY THE ENGINEER.

③ PROVIDE CURB OPENING AND FLUME.

④ CONCRETE CURB & GUTTER 36" TAPER CURB HEIGHT OF 10" TO 6" IN 20'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS, WHEN SPECIFIED ELSEWHERE IN THE CONTRACT.



AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C", AND "D" AND TEE INTERSECTION BYPASS LANE

Standard Detail Drawing 9A1 - 12a

References: FDM Procedure 11-25-1

Bid items associated with this drawing:

<u>Item #</u>	<u>Title</u>
416.1010	Concrete Surface Drains (CY)
465.0315	Asphaltic Flumes (SY)
601.0413	Concrete Curb & Gutter 30-Inch Type G (LF)
601.0415	Concrete Curb & Gutter 30-Inch Type J (LF)
305.0110 to 305.0135	Base Aggregate Dense (TON, CY)
205.9010.S	Grading and Shaping Intersection (location)
205.9015.S	Grading Shaping and Finishing Intersection (location)
Var.	Pavements
601.0555	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type A (LF)
601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D (LF)

Standardized Special Provisions associated with this drawing:

<u>STSP #</u>	<u>Title</u>
205-010	Grading and Shaping Intersection (location)
205-015	Grading Shaping and Finishing Intersection (location)

Use these provisions if the work is not covered under standard grading bid items.

Other SDD's associated with this drawing: 8D1-12 or 8D4-3

Design Notes:

See Procedure 11-25-1 for selection criteria for Types B1, B2, C and D Intersections and Tee Intersection Bypass Lane.

These intersection designs will accommodate the turning of the WB-50 design vehicle; however, the WB-50 vehicle turning right into or from the Type C intersection will encroach into the opposing traffic lane.

Special evaluation and modification of these intersection details may be warranted for major intersections on designated long truck routes to accommodate the WB-62 design vehicle.

The Type B1 and B2 design do not apply when the side road is on curved alignment at the intersection. For this situation extend the full width curbed cross-section 50 feet minimum into the curve. Provide special details.

Specify sod, topsoil or salvaged topsoil and seed & fertilize to a 3'-0" width in back of the curb & gutter sections.

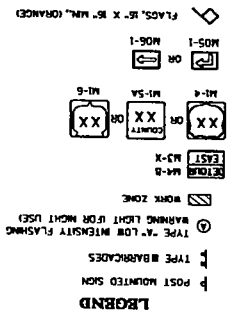
If curb & gutter is built under a separate contract from the grading work, the designer must specify who is responsible for backfilling the two feet behind the curb & gutter.

SDD 9A1-b is required when this drawing is called for in the plans.

Contact Person: Pat Fleming (608) 266-8486

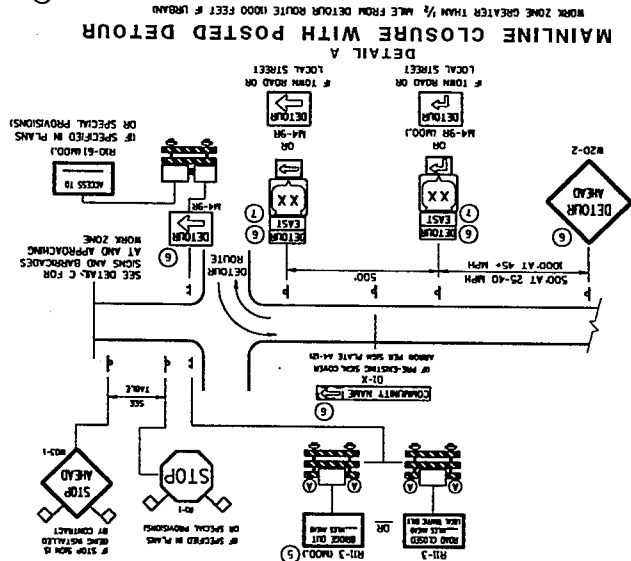
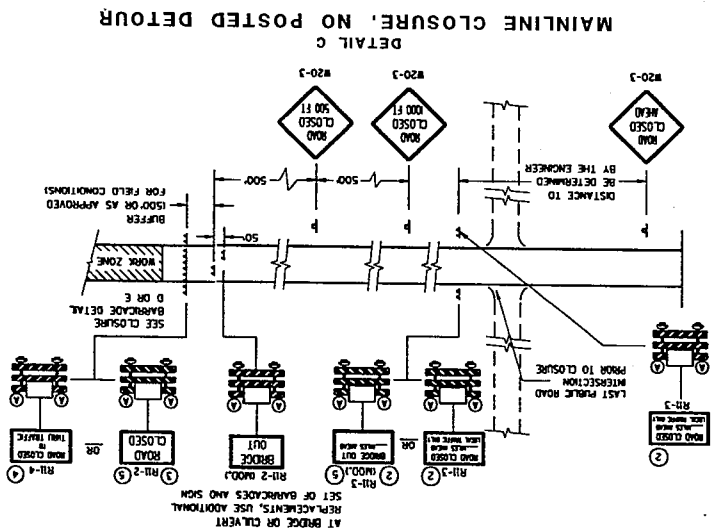
April 16, 2008

BARRICADES AND SIGNS
FOR
MAINLINE CLOSURES
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

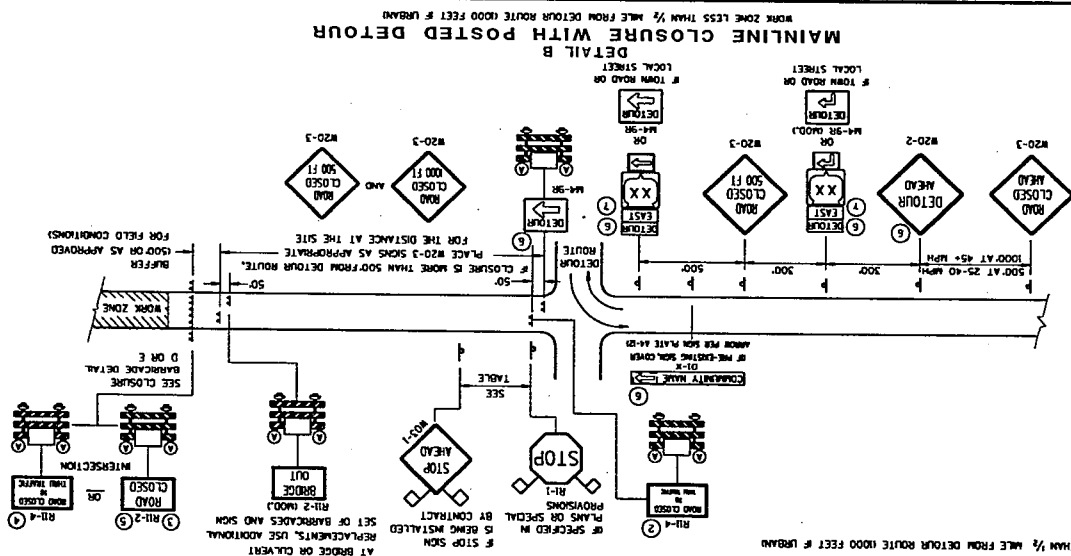


SEE SDD 15C2-4b
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

SPEED LIMIT MATH	STOP AHEAD ADVANCE WARNING DISTANCE (ft)
25	200
30	200
35	350
40	350
45	500
50	550
55	750



MAINLINE CLOSURE WITH POSTED DETOUR



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

Standard Detail Drawing 15C2-4a

References: Part 6 of the Manual on Uniform Traffic Control Devices (MUTCD); FDM 11-50-20

Bid items associated with this drawing:

Item #	Title
643.0100	Traffic Control (EACH)
643.0420	Traffic Control Barricades Type III (DAYS)
643.0705	Traffic Control Warning Lights Type A (DAYS)
643.0900	Traffic Control Signs (DAYS)
643.1000	Traffic Control Signs Fixed Message (SF) (For D1-x and R10-61 Mod. "Access To ____" signs.)
643.2000	Traffic Control Detour (EACH)
643.3000	Traffic Control Detour Signs (DAYS) (Use Items 643.2000 & 643.3000 if detour route signing is included in the contract.)

Standardized Special Provisions associated with this drawing: None

Other SDD's associated with this drawing: 15C2-4b (required), 15C2-4c (if detour route signing is included in the contract), 15C3 (if sideroads intersect the mainline within the closure), 15D30 (if sidewalk will be closed)

Design Notes:

A traffic control overview sheet is desirable to indicate the following:

- Whether to use Detail A, B, or C (and Detail D or E from SDD 15C2-4b) at each end of the project.
- Sideroads within the project and whether to use Detail 1, 2, 3, or 4 from SDD 15C3 at each sideroad.
- Detour route if one is being designated, unless the route is shown on a detour route signing sheet.

On Details A & B, the following signing is to be installed by the contractor only if specified elsewhere in the contract. Consult with the District Traffic Unit about the need to include these signs in the contract:

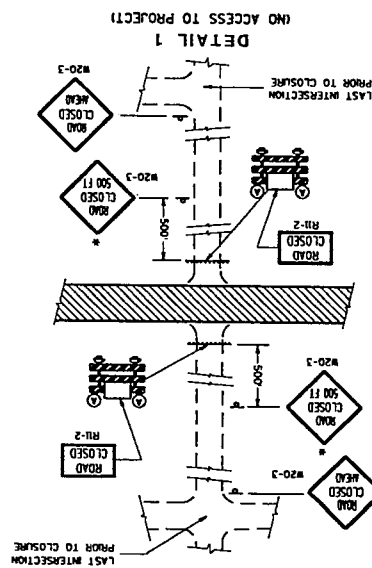
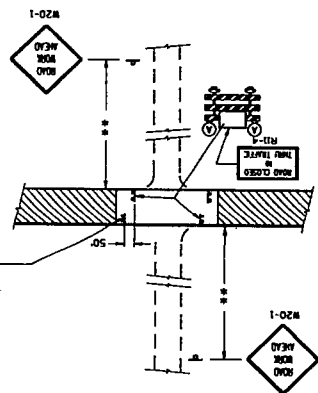
- Detour Route signing. Districts (or other maintaining authority) may choose to install detour route signing with their own forces. If so, indicate it in the Special Provisions. If it is to be installed by the contractor, include separate sheets to show the detour route signing (including signs to be covered or modified) along and in advance of the detour, and on main intersecting roads. If the route being detoured is a local road, the M4-9 signs should be supplemented by a road name plaque (using Item 643.1000), especially if the local road is detoured onto a state-trunk highway. Include a special sign layout for the road name plaque, or specify the plaque color and letter size (typically black on white or orange, 5" Series C letters) on the detour sheets.
- Detour warning signs (W20-2). W20-2 signs are usually included in the contract. Some districts or other maintaining authorities may choose to install them with their own forces. If additional warning of the detour is desired, a W20-2 "Detour ½ Mile" sign may be added to the series of advance warning signs. Where multiple routes run concurrently on the same road but not all of them are being detoured, W20-2 signs may be supplemented by a route marker if needed to clearly indicate the detoured highway.
- Route markers to supplement W20-2 signs (as described above) or W20-3 signs. Districts may choose to furnish route markers for installation by the contractor. If so, indicate it in the plan or Special Provisions.
- Community guide signs (D1-x). New or modified D1-x signs are desirable if motorists must take an alternate route to a community. If new signs are to be installed, include plan details showing the special sign layouts.
- "Access To ____" signs (R10-61 Mod.). These signs are desirable if there is a community located beyond the beginning of the detour route but prior to the actual road closure point.
- "Stop" and "Stop Ahead" signs. Consider using these signs as shown if the traffic volume on the detour route is expected to be greater than the local traffic volume that will continue using the normal mainline route, especially if the detour traffic makes a left turn at the intersection. Also consider the need for "3-Way" (R1-3) or R1-52-series supplementary signs if temporary stop signs are to be installed.

If W20-2, D1-x, R10-61 (Mod.), or Stop-control signs along or in advance of the detour are to be installed or modified by the contractor, indicate them on the traffic control overview or detour route signing sheet, Special Provisions, and/or Misc. Quantities.

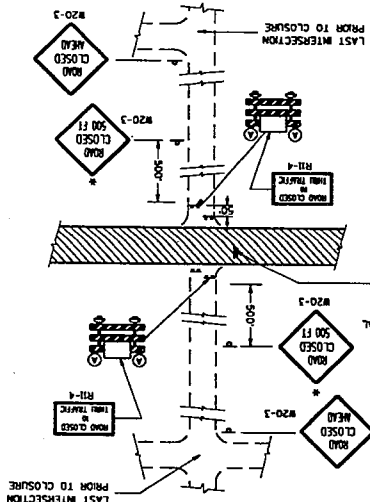
Contact Person: Tom Notbohm (608) 266-0982

October 3, 2003

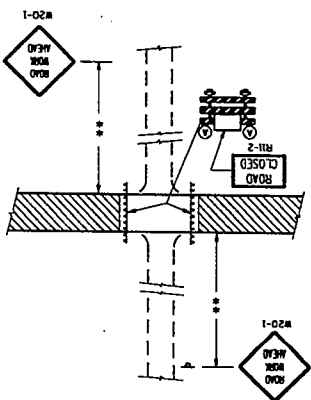
DETAIL 3
PUBLIC CROSS-TRAFFIC MAINTAINED, CONTRACTOR,
LOCAL BUSINESS AND RESIDENT ACCESS.



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED,
NO ACCESS TO PROJECT)



GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
ANY SIGNS TEMPORARILY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL, SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.
IF A STOP SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY STOP SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.
BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.
ALL TYPE B BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY STOPPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.
TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.
THE R11-2, R11-3 AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MODEL OR BOTTOM RAIL.
THE REFLECTIVE SHEETING USED ON R11-2, R11-3 AND R11-4 SIGNS SHALL COMPLY WITH SUBSECTION 637.2.2.2 OF THE STANDARD SPECIFICATIONS.
ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW.
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

NOTE: THE "ROAD CLOSED 500 FT." SIGN IS FROM THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.
**SLOW DOWN AT LAST INTERSECTION WHENEVER IS CLOSED.
LEGEND
P POST MOUNTED WARNING SIGN
B TYPE B BARRICADES
A TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
W WORK AREA

DATE _____
APPROVED _____
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
BARRICADES AND SIGNS
FOR
SIDEROAD CLOSURES

Standard Detail Drawing 15C3-1

References: Part 6 of the Manual on Uniform Traffic Control Devices (MUTCD)
FDM Procedure 11-50-20

Bid items associated with this drawing:

<u>Item #</u>	<u>Title</u>
643.0100	Traffic Control (EACH)
643.0420	Traffic Control Barricades Type III (DAYS)
643.0705	Traffic Control Warning Lights Type A (DAYS)
643.0900	Traffic Control Signs (DAYS)

Standardized Special Provisions associated with this drawing: None

Other SDD's associated with this drawing: 15C2-4a (required), 15C2-4b (required), 15D30 (if sidewalk will be closed)

Design Notes:

A traffic control overview sheet is desirable to indicate the following:

- Sideroads within the project and whether to use Detail 1, 2, 3, or 4 at each sideroad.
- Whether to use Detail A, B, or C from SDD 15C2-4a and Detail D or E from SDD 15C2-4b at each mainline end of the project.
- Detour route if one is being designated, unless the route is shown on a detour route signing sheet.

Contact Person: Tom Notbohm (608) 266-0982

October 3, 2003

PROJECT ID: 6666-00-73
WITH:

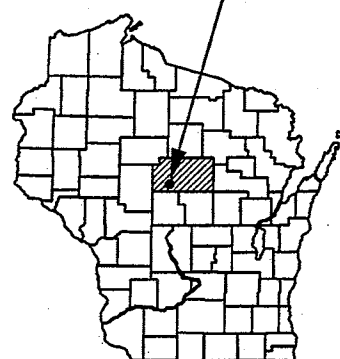
COUNTY: MARATHON

ORDER OF SHEETS

- | | |
|---------------|------------------------------|
| Section No. 1 | Title |
| Section No. 2 | Typical Sections and Details |
| Section No. 3 | Estimate of Quantities |
| Section No. 3 | Miscellaneous Quantities |
| Section No. 4 | Right of Way Plat |
| Section No. 5 | Plan and Profile |
| Section No. 6 | Standard Detail Drawings |
| Section No. 7 | Sign Plates |
| Section No. 8 | Structure Plans |
| Section No. 9 | Computer Earthwork Data |
| Section No. 9 | Cross Sections |

TOTAL SHEETS =

PROJECT LOCATION



DESIGN DESIGNATION

- | | | |
|-----------------|---|---------|
| A.A.D.T. (2009) | = | 1200 |
| A.A.D.T. (2029) | = | 1600 |
| D.H.V. | = | 245 |
| D.D. | = | 62-38 |
| T. | = | 3.6% |
| DESIGN SPEED | = | 55 MPH |
| ESALS | = | 116,800 |

CONVENTIONAL SYMBOLS

- | | |
|--------------------------------|--|
| PLAN | |
| CORPORATE LIMITS | |
| PROPERTY LINE | |
| LOT LINE | |
| LIMITED HIGHWAY EASEMENT | |
| EXISTING RIGHT OF WAY | |
| PROPOSED OR NEW R/W LINE | |
| SLOPE INTERCEPT | |
| REFERENCE LINE | |
| EXISTING CULVERT | |
| PROPOSED CULVERT (Box or Pipe) | |
| COMBUSTIBLE FLUIDS | |
| MARSH AREA | |
| WOODED OR SHRUB AREA | |

PROFILE

- | | |
|---|--|
| GRADE LINE | |
| ORIGINAL GROUND | |
| MARSH OR ROCK PROFILE (To be noted as such) | |
| SPECIAL DITCH | |
| GRADE ELEVATION | |
| CULVERT (Profile View) | |
| UTILITIES | |
| ELECTRIC | |
| FIBER OPTIC | |
| GAS | |
| SANITARY SEWER | |
| STORM SEWER | |
| TELEPHONE | |
| WATER | |
| UTILITY PEDESTAL | |
| POWER POLE | |
| TELEPHONE POLE | |

EXCEPTION TO NET CENTERLINE LENGTH

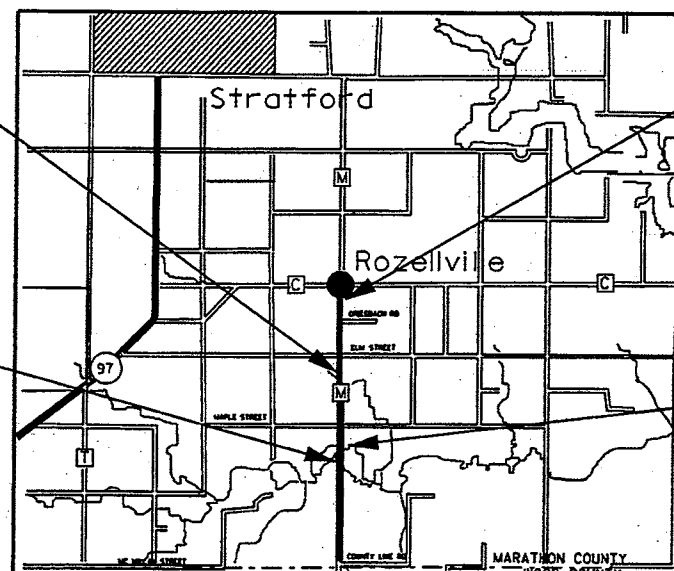
STA 239+08 TO STA 239+78
STRUCTURE B-37-0132

EXCEPTION TO NET CENTERLINE LENGTH

STA 176+64 TO STA 177+82
STRUCTURE B-37-0084

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT
SOUTH COUNTY LINE - CTH C
CTH M
MARATHON COUNTY

STATE PROJECT NUMBER
6666-00-73



END PROJECT
STA. 312+45

T 26 N

EXCEPTION TO NET CENTERLINE LENGTH
STA 189+86 TO STA 190+19
STRUCTURE B-37-0086

BEGIN PROJECT
STA. 102+40

LAYOUT
SCALE 0 MI.

TOTAL NET LENGTH OF CENTERLINE = 3.935 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), MARATHON COUNTY.

STATE PROJECT

6666-00-73

FEDERAL PROJECT

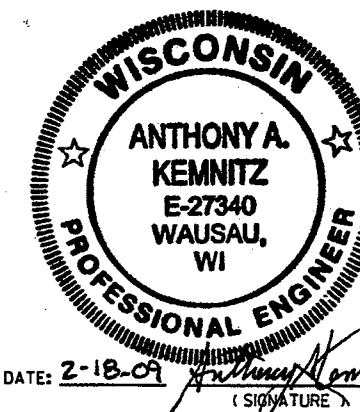
PROJECT

CONTRACT

ACCEPTED FOR
MARATHON COUNTY HIGHWAY DEPARTMENT

DATE: 2-18-2009
HIGHWAY COMMISSIONER

ORIGINAL PLANS PREPARED BY:
TRAFFIC ANALYSIS AND DESIGN, INC.



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor
Designer
Management Consultant
C.O. Examiner

APPROVED FOR THE DEPARTMENT
DATE: _____
(Management Consultant Signature)

E

GENERAL NOTES

ASPHALTIC WASTE MATERIAL RESULTING FROM VARIOUS OPERATIONS UNDER THIS CONTRACT SHALL BE ENTIRELY REMOVED AND PROPERLY DISPOSED OF AT TIME OF OCCURENCE.

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

UNLESS OTHERWISE SHOWN ALL INTERSECTIONS SHALL BE TYPE "C" MODIFIED.

THE EXACT LOCATION OF BUTT JOINTS AND AMOUNT OF MILLED ASPHALTIC SURFACE AT THE SIDE ROADS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

PROVIDE A TRUE STRAIGHT EDGE DURING MILLING OPERATIONS AT BEGIN AND END PROJECT LIMITS, ROAD INTERSECTIONS AND ASPHALTIC PRIVATE ENTRANCES. THIS WORK IS CONSIDERED INCIDENTAL TO PULVERIZE AND RELAY.

EXACT LOCATIONS OF PRIVATE AND FIELD ENTRANCES ARE TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE HIS CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

SECTION MONUMENT LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE ONLY. ACTUAL LOCATION TO BE ESTABLISHED IN THE FIELD BY THE COUNTY SURVEYOR AS REQUIRED BY THE ENGINEER.

PLACE TACK COAT BETWEEN BINDER AND SURFACE HMA PAVEMENT AND ON MILLED ASPHALTIC SURFACE PER COUNTY PRACTICE.

HMA PAVMENT, TYPE E-0.3 QUANTITY IS BASED ON 115#/ INCH/SY PER PER COUNTY PRACTICE.

AC MATERIAL QUANTITY IS BASED ON 5.5% OF HMA PAVMENT, TYPE E-0.3 TONAGE PER COUNTY PRACTICE.

ASPHALTIC HMA PAVEMENT SHALL BE CONSTRUCTED WITH THE FOLLOWING LAYER THICKNESSES:

PAVEMENT THICKNESS (INCH)	LOWER LAYER (INCH)	NOM AGG SIZE (MM)	UPPER LAYER (INCH)	NOM AGG SIZE (MM)
4	2.25	19	1.75	12.5

THE ROADWAY SHALL REMAIN OPEN TO LOCAL TRAFFIC AT ALL TIMES WITH ONLY ONE LANE CLOSED DURING DAYTIME HOURS. FLAGGERS SHALL BE USED AT ALL TIMES WHILE ONE LANE IS CLOSED. THE ROADWAY SHALL BE OPENED TO TWO LANES OF TRAFFIC DURING NIGHTTIME HOURS.

DESIGN CONTACTS

TRAFFIC ANALYSIS & DESIGN, INC.
207 RESERVOIR AVENUE
PO BOX 843
WAUSAU, WI 54402-0843
TELEPHONE: 715.864.7580
ATTENTION: TONY KEMNITZ, P.E., PTDE

MARATHON COUNTY HIGHWAY DEPT.
1430 WEST STREET
WAUSAU, WI 54401
TELEPHONE: 715.261.1801
ATTENTION: JIM GRIESBACH, COMMISSIONER

WISCONSIN DNR CONTACT

STATE OF WISCONSIN
DEPT. OF NATURAL RESOURCES
473 GRIFFITH AVENUE
WISCONSIN RAPIDS, WI 54494
TELEPHONE: 715.421.7867
ATTENTION: TONY FISHCER

UTILITY CONTACTS

ALLIANT ENERGY
4902 NORTH BILTMORE LANE
MADISON, WI 53707-1007
TELEPHONE: 608.458.4871 (OFFICE)
608.395.7395 (CELL)
ATTENTION: JASON HOGAN

VERIZON
521- FOURTH STREET
WAUSAU, WI 54403-4869
TELEPHONE: 715.847.1501
ATTENTION: KEVIN SCHEDLBAUER

WE ENERGIES
1921 EIGHTH STREET SOUTH
WISCONSIN RAPIDS, WI 54494-5217
TELEPHONE: 715.421.7265
ATTENTION: DENNIS CHERNEY

TOWN OF DAY
D1968 ELM STREET
STRATFORD, WI 54484
TELEPHONE: 715.384.5860
ATTENTION: RICHARD KRAUS

TDS TELECOM
10 COLLEGE AVENUE, SUITE 218A
APPLETON, WI 54911
TELEPHONE: 920.882.4166 (OFFICE)
920.562.7221 (CELL)
ATTENTION: STEVE JAKUBIEC

VILLAGE OF ROZELLVILLE
SANITARY SEWER UTILITY
1891 COUNTY ROAD "C"
STRATFORD, WI 54484
TELEPHONE: 715.384.2629
ATTENTION: TOM SEUBERT



TO OBTAIN LOCATION OF PARTICIPATANT'S UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

CALL DIGGERS HOTLINE
1-800-242-8511
TOLL FREE

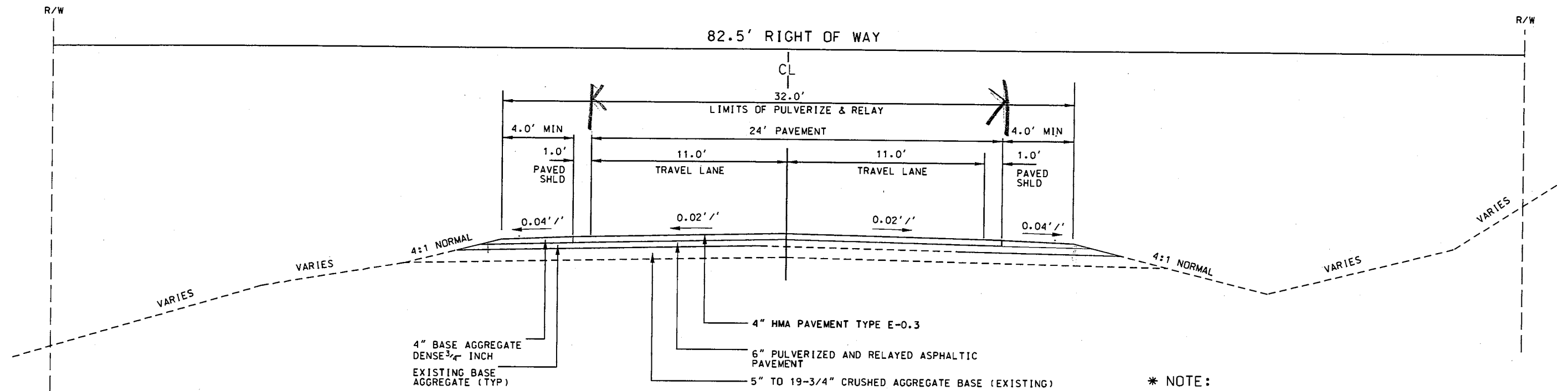
WIS. STATUTE 182.0175 (1974)
REQUIRES MIN. 3 WORKING DAYS
NOTICE BEFORE YOU DIG

STANDARD DETAIL DRAWINGS

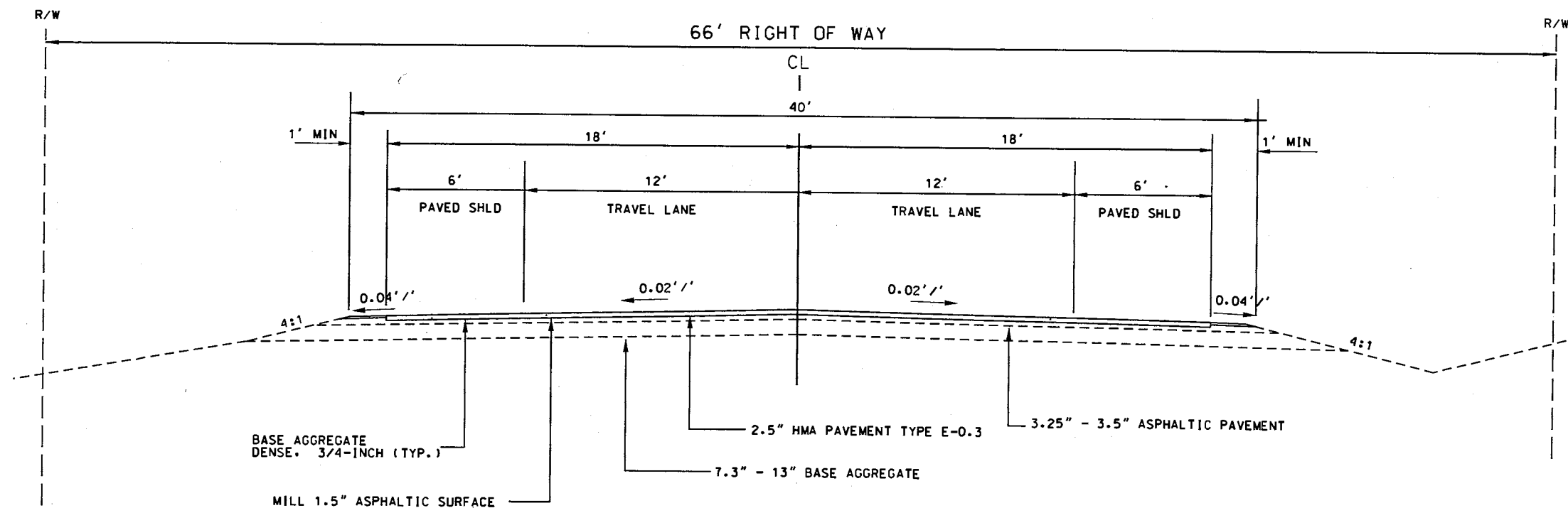
9A1-12a	AT GRADE SIDE ROAD INTERSECTIONS, TYPE "B1", "B2", "C", AND "D" AND TEE INTERSECTION BYPASS LANE
15C2-4a	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C3-1	BARRICADES AND SIGNS FOR SIDE ROAD CLOSURES
15C8-10a	PAVEMENT MARKING (MAINLINE)
15C8-10b	PAVEMENT MARKING (INTERSECTIONS)
15C12-3	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STANDARD ABBREVIATIONS

ABUT	ABUTMENT	HYD	HYDRANT	EBS	EXCAVATION BELOW SUBGRADE
AC	ACRE	ID	INSIDE DIAMETER	EXIST	EXISTING
AGG	AGGREGATE	INV	INVERT	FC	FACE OF CURB
AECPRC	APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE	IP	IRON PIPE ON PIN	FF	FACE TO FACE
ASPH	ASPHALTIC	LHF	LEFT-HAND FORWARD	FERT	FERTILIZE
AVG	AVERAGE	L	LENGTH OF CURVE	FE	FIELD ENTRANCE
ADT	AVERAGE DAILY TRAFFIC	LF	LINEAR FOOT	FL	FLOW LINE
BF	BACK FACE	LC	LONG CHORD OF CURVE	FO	FIBER OPTIC
BM	BENCH MARK	LS	LUMP SUM	CWT	HUNDREDWEIGHT
BR	BRIDGE	MH	MANHOLE	SE	SUPERELEVATION RATE
CE	COMMERCIAL ENTRANCE	MOR	MID POINT OF RADIUS	TC	TOP OF CURB
CL OR C/L OR Δ	CENTER LINE	NC	NORMAL CROWN	T OR TN	TOWN
Δ	CENTRAL ANGLE OR DELTA	NO	NUMBER	T	TRUCKS (PERCENT OF)
CONC	CONCRETE	OBLIT	OBLITERATE	TYP	TYPICAL
CPRC	CULVERT PIPE REINFORCED CONCRETE	PAVT	PAVEMENT	VAR	VARIABLE
CPRCHE	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL	PE	PRIVATE ENTRANCE	VC	VERTICAL CURVE
CR	CREEK	PVRC	POINT OF VERTICAL REVERSE CURVE	Y	NORTH GRID COORDINATE
CY	CUBIC YARD	QDR	QUARTER POINT OF RADIUS	YD	YARD
C & G	CURB AND GUTTER	R	RADIUS		
D	DEGREE OF CURVE	REQ'D	REQUIRED		
DHV	DESIGN HOUR VOLUME	RES	RESIDENCE OR RESIDENTIAL		
DISCH	DISCHARGE	RHF	RIGHT-HAND FORWARD		
DG	DITCH GRADE	R/W	RIGHT-OF-WAY		
DWY	DRIVEWAY	R	RIVER		
X	EAST GRID COORDINATE	RDWY	ROADWAY		
EAT	STEEL PLATE BEAM GUARD	R/L OR Δ	REFERENCE LINE		
EOR	ENERGY ABSORBING TERMINAL	SALV	SALVAGED		
EL	ELEVATION	SAN	SANITARY SEWER		
ENT	ENTRANCE	SF	SQUARE FEET		
ESALS	EQUIVALENT SINGLE AXLE LOADS	SY	SQUARE YARD		
EXC	EXCAVATION	SDD	STANDARD DETAIL DRAWINGS		
		STA	STATION		
		SS	STORM SEWER		
		SSPRC	STORM SEWER PIPE REINFORCED CONCRETE		



TYPICAL FINISHED SECTION
CTH M
STA 102+40 TO STA 283+75



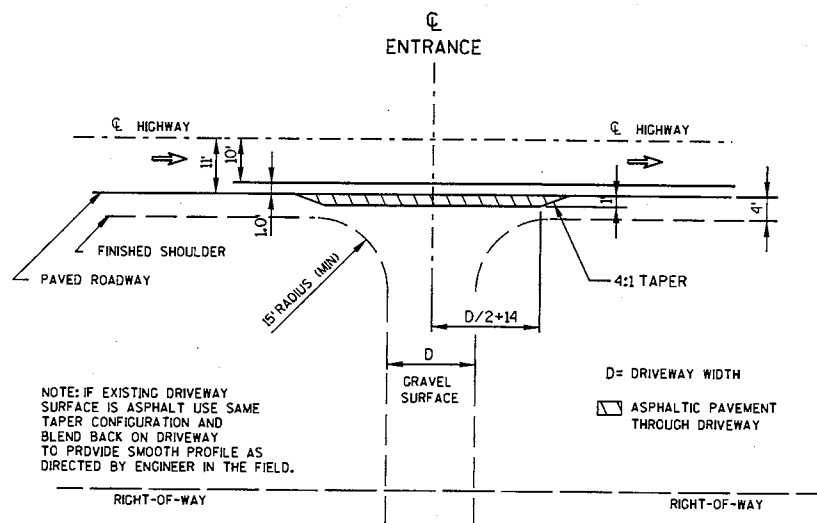
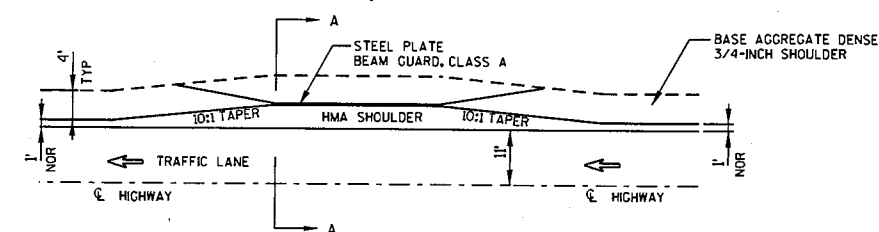
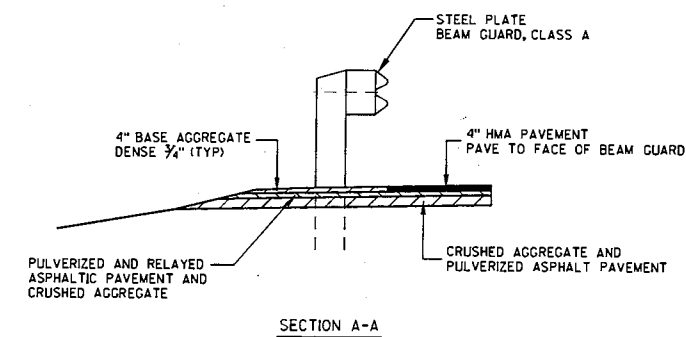
TYPICAL FINISHED SECTION
CTH M
STA 283+75 TO STA 286+75*
STA 286+75 TO STA 312+45

RUNOFF COEFFICIENT TABLE

LAND USE:	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)											
	0-2	2-6	6 ≥	0-2	2-6	6 ≥	0-2	2-6	6 ≥	0-2	2-6	6 ≥
ROW CROPS	.08	.16	.22	.12	.20	.27	.15	.24	.33	.19	.28	.38
	.22	.30	.38	.26	.34	.44	.30	.37	.50	.34	.41	.56
MEDIAN STRIP TURF	.19	.20	.24	.19	.22	.26	.20	.23	.30	.20	.25	.30
	.24	.26	.30	.25	.28	.33	.26	.30	.37	.27	.32	.40
SIDE SLOPE TURF			.25			.27			.28			.30
			.32			.34			.35			.38
PAVEMENT:												
ASPHALT									.70 - .95			
CONCRETE									.80 - .95			
BRICK									.70 - .80			
DRIVES, WALKS									.75 - .85			
ROOFS									.70 - .95			
GRAVEL ROADS, SHOULDERS									.40 - .60			

TOTAL PROJECT AREA = 16.80 ACRES

TOTAL AREA TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 16.80 ACRES

RURAL DRIVEWAY INTERSECTION DETAIL
(PE'S, FE'S & CE'S)

HMA SHOULDER AT BEAM GUARD DETAIL

BORING LOG

CORE NO.	STATION	CL OFFSET	ASPHALT DEPTH	BASE COURSE	SUBBASE
M - 1	101+55	4' RT	4 1/2"	4 1/2" TO 1.2' SILTY SAND, BROWN W/ GRAVEL	1.2' TO 2' SILTY SAND, W/ GRAVEL
M - 2	127+95	4' LT	5 3/4"	5 3/4" TO 2.0' SILTY SAND, BROWN W/ GRAVEL	2' TO 6' SAND, TRC SILT, W/ GRAVEL
M - 3	154+35	4' RT	4 "	4" TO 1.0' SILTY SAND, BROWN W/ GRAVEL	1' TO 2' BROWN SAND, W/ GRAVEL
M - 4	180+75	4' LT	4 "	4" TO 2.0' SILTY SAND, BROWN W/ GRAVEL	2' TO 4' SAND, W/ GRAVEL
M - 5	207+15	4' RT	3 1/2"	3 1/2" TO 1.4' SILTY SAND, BROWN W/ GRAVEL	1.4' TO 2' SILTY SAND, W/ GRAVEL
M - 6	233+55	4' LT	4 1/2"	4 1/2" TO 1.0' SILTY SAND, BROWN W/ GRAVEL	1' TO 4' SAND, W/ GRAVEL
M - 7	259+95	4' RT	4 1/2"	4 1/2" TO 1.2' SILTY SAND, BROWN W/ GRAVEL	1.2' TO 2' SILTY SAND, W/ TRC GRAVEL
M - 8	286+35	4' LT	5 "	5" TO 1.5' SILTY SAND, BROWN W/ GRAVEL	1.5' TO 6' SAND, W/ TRC GRAVEL
M - 9	312+85	4' RT	4 3/4"	4 3/4" TO 1.0' SILTY SAND, BROWN W/ GRAVEL	1' TO 2' SAND, W/ GRAVEL & SML COBBLES

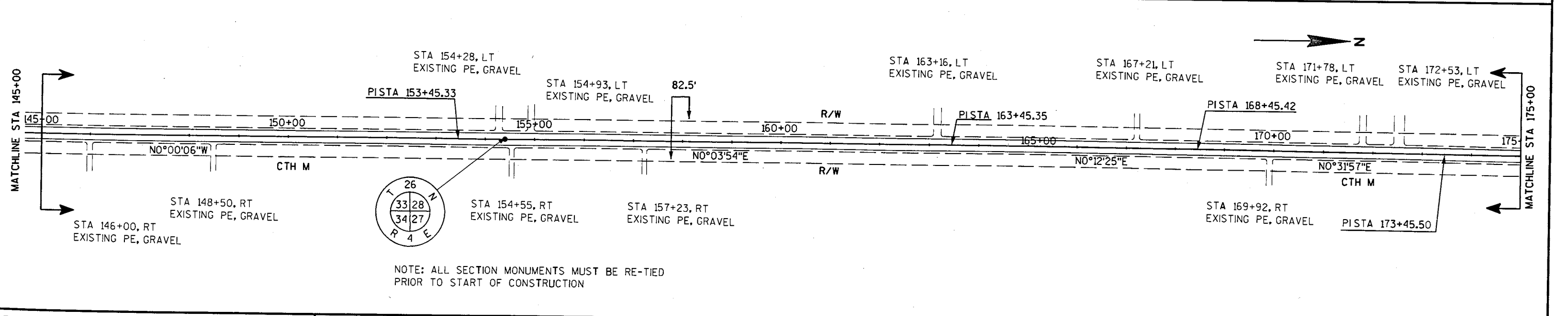
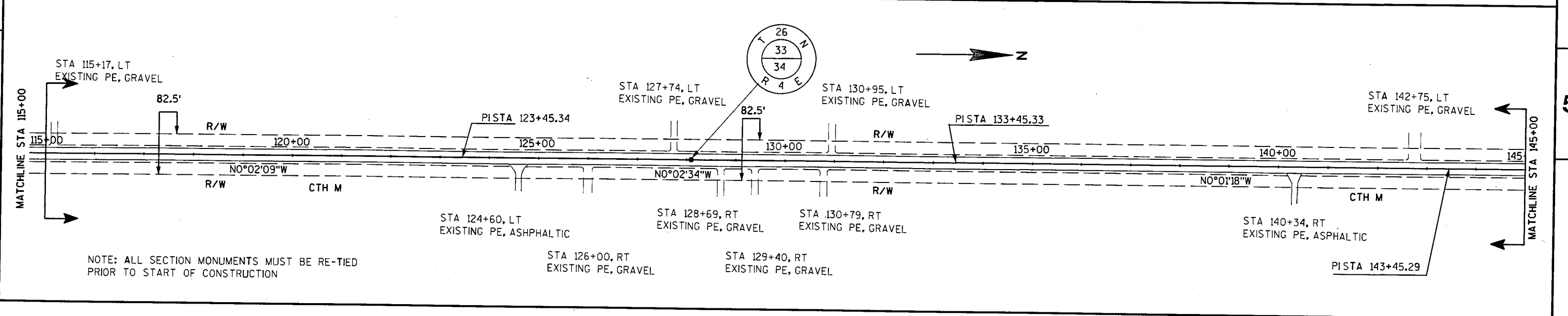
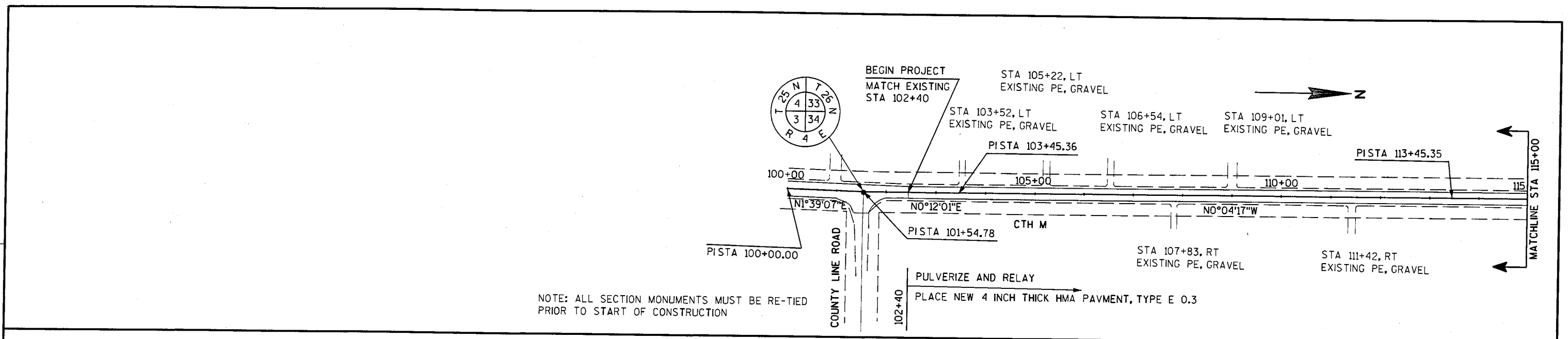
DRIVEWAY QUANTITIES

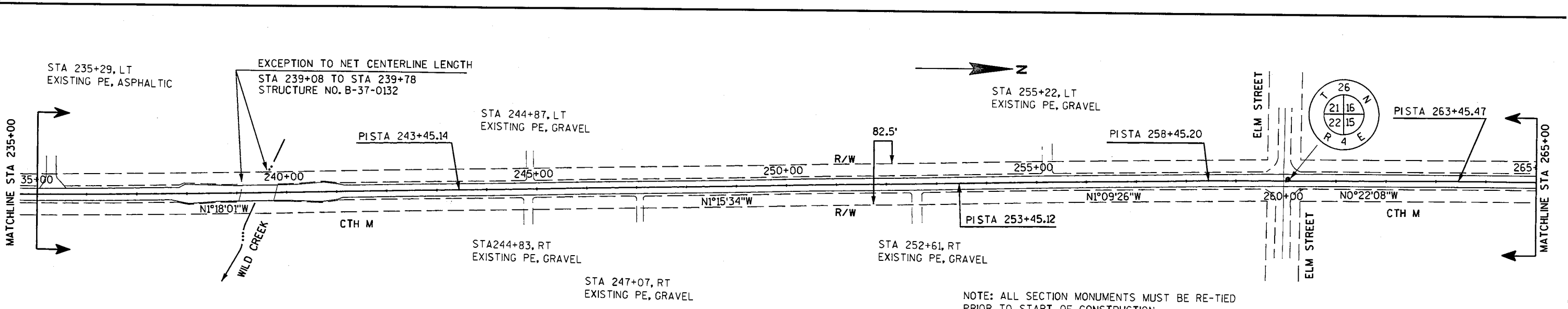
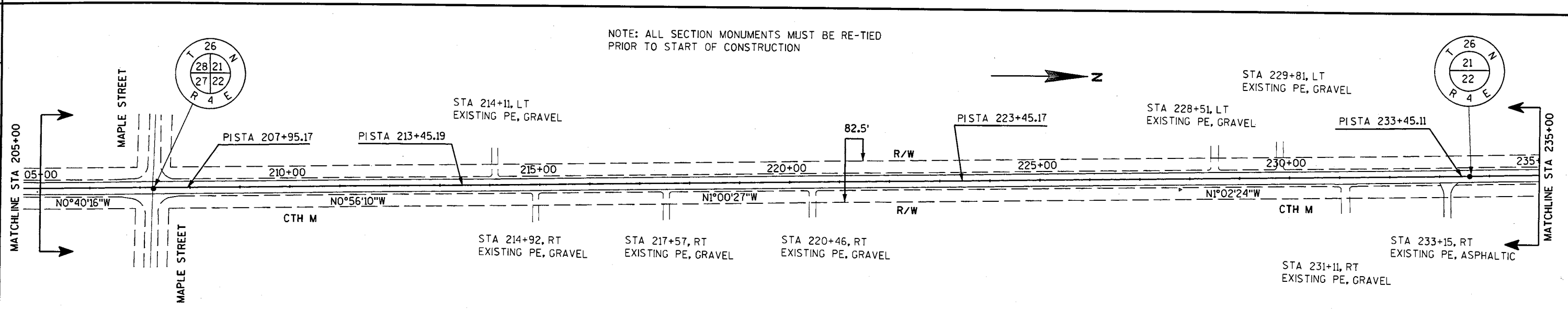
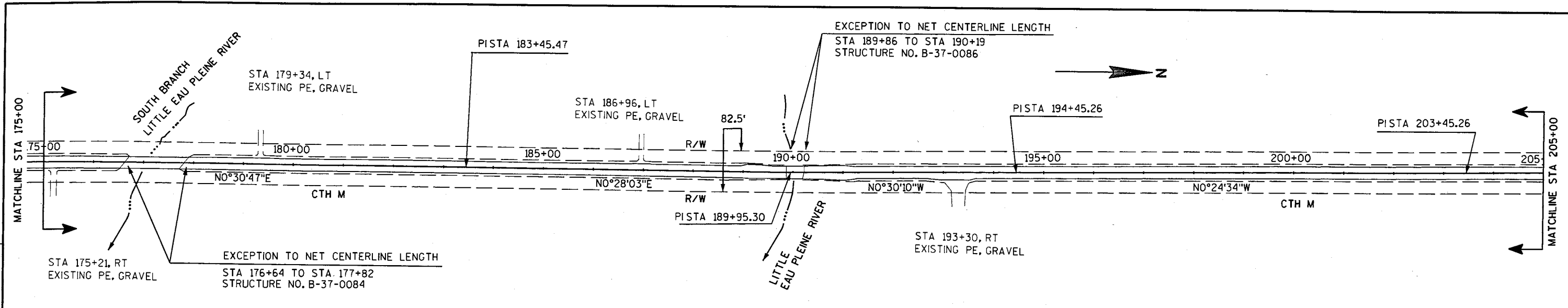
STATION	LOCATION	TYPE	305.0110* 460.1100* 455.0105* 455.0605*						
			PAVED SHLD		BASE AGGREGATE	HMA PAVEMENT	ASPHALTIC	TACK	COAT
			WIDTH	SY	DENSE 3/4	TYPE E-0.3	MATERIAL	COAT	
			FT		TON	TON	TON	GAL	
103+52	LT	Gravel	13	45	5.0	7.1	1.15	0.06	0.13
105+22	LT	Gravel	14	46	5.1	7.5	1.18	0.06	0.13
106+54	LT	Gravel	13	45	5.0	7.1	1.15	0.06	0.13
107+83	RT	Gravel	12	44	4.9	6.8	1.12	0.06	0.12
109+01	LT	Gravel	19	51	5.7	9.3	1.30	0.07	0.14
111+42	RT	Gravel	15	47	5.2	7.9	1.20	0.07	0.13
115+17	LT	Gravel	13	45	5.0	7.1	1.15	0.06	0.13
124+60	RT	Asphalt	12	44	4.9	0.0	1.12	0.06	0.12
126+00	RT	Gravel	18	50	5.6	9.0	1.28	0.07	0.14
127+74	LT	Gravel	13	45	5.0	7.1	1.15	0.06	0.13
128+69	RT	Gravel	13	45	5.0	7.1	1.15	0.06	0.13
129+40	RT	Gravel	14	46	5.1	7.5	1.18	0.06	0.13
130+79	RT	Gravel	15	47	5.2	7.9	1.20	0.07	0.13
130+95	LT	Gravel	14	46	5.1	7.5	1.18	0.06	0.13
140+34	RT	Asphalt	12	44	4.9	0.0	1.12	0.06	0.12
142+75	LT	Gravel	25	57	6.3	11.5	1.46	0.08	0.16
146+00	RT	Gravel	11	43	4.8	6.4	1.10	0.06	0.12
148+50	RT	Gravel	11	43	4.8	6.4	1.10	0.06	0.12
154+28	LT	Gravel	14	46	5.1	7.5	1.18	0.06	0.13
154+55	RT	Gravel	10	42	4.7	6.0	1.07	0.06	0.12
154+93	LT	Gravel	13	45	5.0	7.1	1.15	0.06	0.13
157+23	RT	Gravel	9	41	4.6	5.7	1.05	0.06	0.11
163+16	LT	Gravel	15	47	5.2	7.9	1.20	0.07	0.13
167+21	LT	Gravel	11	43	4.8	6.4	1.10	0.06	0.12
169+92	RT	Gravel	12	44	4.9	6.8	1.12	0.06	0.12
171+78	LT	Gravel	14	46	5.1	7.5	1.18	0.06	0.13
172+53	LT	Gravel	21	53	5.9	10.1	1.35	0.07	0.15
175+21	RT	Gravel	12	44	4.9	6.8	1.12	0.06	0.12
179+34	LT	Gravel	10	42	4.7	6.0	1.07	0.06	0.12
186+96	LT	Gravel	10	42	4.7	6.0	1.07	0.06	0.12
193+30	RT	Gravel	28	60	6.7	12.6	1.53	0.08	0.17
214+11	LT	Gravel	12	44	4.9	6.8	1.12	0.06	0.12
214+92	RT	Gravel	12	44	4.9	6.8	1.12	0.06	0.12
217+57	RT	Gravel	13	45	5.0	7.1	1.15	0.06	0.13
220+46	RT	Gravel	14	46	5.1	7.5	1.18	0.06	0.13
228+51	LT	Gravel	16	48	5.3	8.2	1.23	0.07	0.13
229+81	LT	Gravel	14	46	5.1	7.5	1.18	0.06	0.13
231+11	RT	Gravel	17	49	5.4	8.6	1.25	0.07	0.14
233+15	RT	Asphalt	14	46	5.1	0.0	1.18	0.06	0.13
235+29	LT	Asphalt	20	52	5.8	0.0	1.33	0.07	0.14
244+83	RT	Gravel	18	50	5.6	9.0	1.28	0.07	0.14
244+87	LT	Gravel	14	46	5.1	7.5	1.18	0.06	0.13
247+07	RT	Gravel	14	46	5.1	7.5	1.18	0.06	0.13
252+61	RT	Gravel	20	52	5.8	9.7	1.33	0.07	0.14
255+22	LT	Gravel	20	52	5.8	9.7	1.33	0.07	0.14

DRIVEWAY QUANTITIES - CONTINUED

STATION	LOCATION	TYPE	305.0110* 460.1100* 455.0105* 455.0605*						
			PAVED SHLD		BASE AGGREGATE	HMA PAVEMENT	ASPHALTIC	TACK	COAT
			WIDTH	SY	DENSE 3/4	TYPE E-0.3	MATERIAL	COAT	
			FT		TON	TON	TON	GAL	
273+28	RT	Gravel	14	46	5.1	7.5	1.18	0.06	0.13
276+72	LT	Gravel	15	47	5.2	7.9	1.20	0.07	0.13
280+00	LT	Gravel	18	50	5.6	9.0	1.28	0.07	0.14
282+79	LT	Gravel	15	47	5.2	7.9	1.20	0.07	0.13
283+20	RT	Gravel	17	49	5.4	8.6	1.25	0.07	0.14
284+89	LT	Asphalt	11	43	4.8	0.0	0.69	0.04	0.12
285+86	RT	Asphalt	21	53	5.9	0.0	0.85	0.05	0.15
287+10	RT	Asphalt	12	44	4.9	0.0	0.70	0.04	0.12
287+48	LT	Gravel	15	47	5.2	5.0	0.75	0.04	0.13
288+29	RT	Asphalt	17	49	5.4	0.0	0.78	0.04	0.14
288+85	LT	Gravel	15	47	5.2	5.0	0.75	0.04	0.13
289+90	RT	Asphalt	17	49	5.4	0.0	0.78	0.04	0.14
290+72	LT	Asphalt	16	48	5.3	0.0	0.77	0.04	0.13
291+49	RT	Gravel	17	49	5.4	5.5	0.78	0.04	0.14
292+55	LT	Asphalt	16	48	5.3	0.0	0.77	0.04	0.13
293+45	RT	Asphalt	15	47	5.2	0.0	0.75	0.04	0.13
294+14	LT	Asphalt	22	54	6.0	0.0	0.86	0.05	0.15
294+94	RT	Asphalt	18	50	5.6	0.0	0.80	0.04	0.14
295+51	LT	Asphalt	17	49	5.4	0.0	0.78	0.04	0.14
298+54	RT	Asphalt	21	53	5.9	0.0	0.85	0.05	0.15
299+26	RT	Asphalt	13	45	5.0	0.0	0.72	0.04	0.13
299+44	LT	Gravel	17	49	5.4	5.5	0.78	0.04	0.14
300+90	LT	Gravel	17	49	5.4	5.5	0.78	0.04	0.14
301+90	RT	Asphalt	22	54	6.0	0.0	0.86	0.05	0.15
302+70	RT	Asphalt	25	57	6.3	0.0	0.91	0.05	0.16
302+76	LT	Gravel	20	52	5.8	6.2	0.83	0.05	0.14
303+82	LT	Gravel	24	56	6.2	7.1	0.89	0.05	0.16
304+65	LT	Asphalt	16	48	5.3	0.0	0.77	0.04	0.13
305+45	RT	Gravel	20	52	5.8	6.2	0.83	0.05	0.14
306+72	LT	Gravel	23	55	6.1	6.9	0.88	0.05	0.15
306+77	RT	Gravel	18	50	5.6	5.7	0.80	0.04	0.14
307+28	RT	Gravel	15	47	5.2	5.0	0.75	0.04	0.13
307+55	LT	Gravel	17	49	5.4	5.5	0.78	0.04	0.14
308+22	RT	Asphalt	14	46	5.1	0.0	0.73	0.04	0.13
309+33	LT	Asphalt	19	51	5.7	0.0	0.81	0.04	0.14
310+44	RT	Gravel	22	54	6.0	6.6	0.86	0.05	0.15
310+42	LT	Asphalt	19	51	5.7	0.0	0.81	0.04	0.14
312+05	LT	Asphalt	70	102	11.3	0.0	1.63	0.09	0.28
DRIVEWAY QUANTITY TOTALS =					432	87	5	11	

* ALSO IN OTHER LOCATIONS





NOTE: ALL SECTION MONUMENTS MUST BE RE-TIED PRIOR TO START OF CONSTRUCTION

