Proposed Concept Plans & Profiles

The proposed improvements for Pioneer Road are shown on the concept plans and profile in ***Figure 27-1*** through ***Figure 27-17*** (pages 40 through 56).

The improvement begins approximately 300 feet west of Military Road. At Military Road, Pioneer Road is 2-lanes eastbound with an additional left turn lane and 2-lanes westbound with an additional double left turn lane and an additional right turn lane. Military Road has 2-lanes northbound and southbound with separate left turn lanes in each direction. The laneage shown is necessary to handle the forecasted traffic as discussed in previous chapters. The east approach has a raised concrete median to better delineate the double left turn lanes. The median would be designed to allow traffic to cross it for access to the Flaherty Company drive and the Marine Credit Union drive. From approximately the Marine Credit Union drive to Hickory Street, Pioneer Road is 2-lanes in each direction separated by a continuous two-way (14-foot wide) left turn lane (TWLTL). The roadway is an urban cross-section that is 66 feet wide face to face of curb. Through much of the section, the existing right-of-way is 100 feet wide and the new Pioneer Road pavement has been centered on this right-of-way. This width of right-of-way is sufficient for the proposed typical section shown in ***Figure 15*** (page 20).

At Hickory Street, Pioneer Road is 2-lanes eastbound and westbound with separate left turn and right turn lanes in both directions. The left turn lanes are painted into the TWLTL area. Hickory Street is one lane northbound and southbound with a separate left turn lane in each direction and a separate right turn lane in the northbound approach. From Hickory Street to Martin Road, Pioneer Road is 2-lanes in each direction separated by a 14-foot median. The median is generally flat except in the area of the railroad bridge center pier where it is raised to provide additional barrier protection for the pier column. The roadway is a 66-foot face to face urban section that is depressed approximately 19 feet below existing grade at the railroad crossing. The depressed profile results in a 12-foot change of grade (cut) at the existing west drive to the Pump and Pantry. This change of grade will result in a very steep drive. It is proposed the driveway be closed. Access to the parcel would be restricted to an existing driveway on Hickory Street. A large gravity storm sewer will drain the depressed roadway under the railroad bridge as shown in ***Figure 25-4*** (page 43).

At Morris Street, Pioneer Road is 2-lanes eastbound and westbound with separate painted left turn lanes in both directions. Morris Street is one lane northbound and southbound with separate painted left turn lanes in both directions.

From Morris Street to Main Street, Pioneer Road is two-lanes in each direction separated by a continuous two-way (14 foot) left turn lane.

At Main Street, Pioneer Road is two-lanes eastbound and westbound with double left turn lanes and a right turn lane in each direction. Main Street is two-lanes northbound and southbound with a painted left turn lane and a right turn lane in each direction. The double left turn lanes on Pioneer are delineated with a raised concrete median. The driveway on the south side of Pioneer Road just east of the intersection (Needsom Supplies) is too close to the intersection for safe operation. It is recommended the driveway be closed. Likewise, the intersection with Mihill Street is also too close to the Main Street intersection. It is recommended the Mihill Street/Pioneer Road intersection be closed.

From Main Street to Park Avenue, Pioneer Road is two-lanes in each direction separated by a 14 foot TWLTL. At Eastman Lane there is a painted left turn westbound on Pioneer Road. At Park Avenue, Pioneer Road is two lanes with a painted left turn lane in each direction. Park Avenue is one lane northbound and southbound with a separate left turn lane in each direction and a combination thru-right turn lane.

From Park Avenue to Martin Road, Pioneer Road is two-lanes in each direction with no separation between opposing lanes except on the intersection approaches where a painted left turn lane is necessary. Martin Road is one lane in each direction with no defined turn lanes. Pioneer Road has a separated painted left turn lane eastbound and westbound.

From Martin Road to Sherwood Boulevard, Pioneer Road is two-lanes in each direction separated by an eight foot curbed safety median. The median is recommended to provide a safety refuge for school children that jay walk to reach the school. The median has gaps at the school drives and at the church drive to allow access.

From Sherwood Drive to CTH V, Pioneer Road is two lanes in both directions. At the CTH V intersection, Pioneer Road transitions to one-lane in each direction to USH 45. The CTH V intersection is proposed to be signalized. Both the Pioneer Road approaches have separated painted left turn lanes. The eastbound outside lane is signed as a "right turn only" lane to create the lane reduction.

From CTH V to USH 45, Pioneer Road is one lane in each direction separated with a 14 foot TWLTL. At USH 45, Pioneer Road has a separate painted left turn lane. USH 45, is proposed to be widened on the intersection approaches to provide a separate painted left turn lane northbound and a separate painted right turn lane southbound. Pioneer Road would be controlled with a stop sign at USH 45. The proposed improvement ends at USH 45.

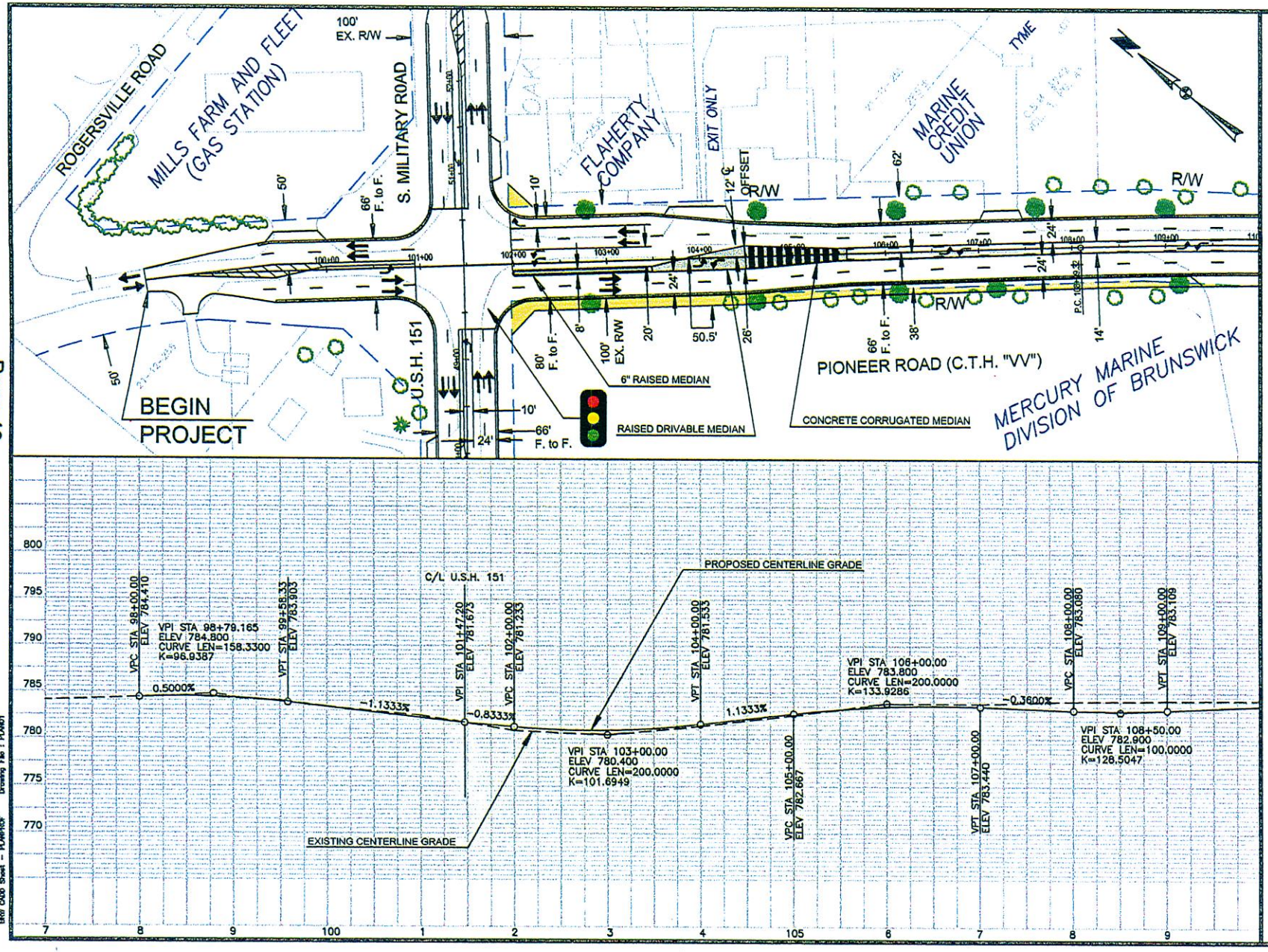

FIGURE 27-1

PROPOSED PIONEER ROAD

CONCEPT PLAN AND PROFILE

STA. 98+00 TO STA. 110+00

SCALE

0' 100'

LEGEND

- Travel Lanes
- Additional Right of Way to be Acquired
- Raised Concrete Median or Concrete Corrugated Median
- Raised Drivable Median
- Grassed Areas of Median
- New Tree Plantings (Typical)
- Intersection Controlled by Stop Signs
- Intersection Controlled by Traffic Signals
- XXX Streets or Driveways to be Closed

PIONEER ROAD Transportation Study

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BRW CADD Sheet - PLANPROF Drawing File : PLAN01

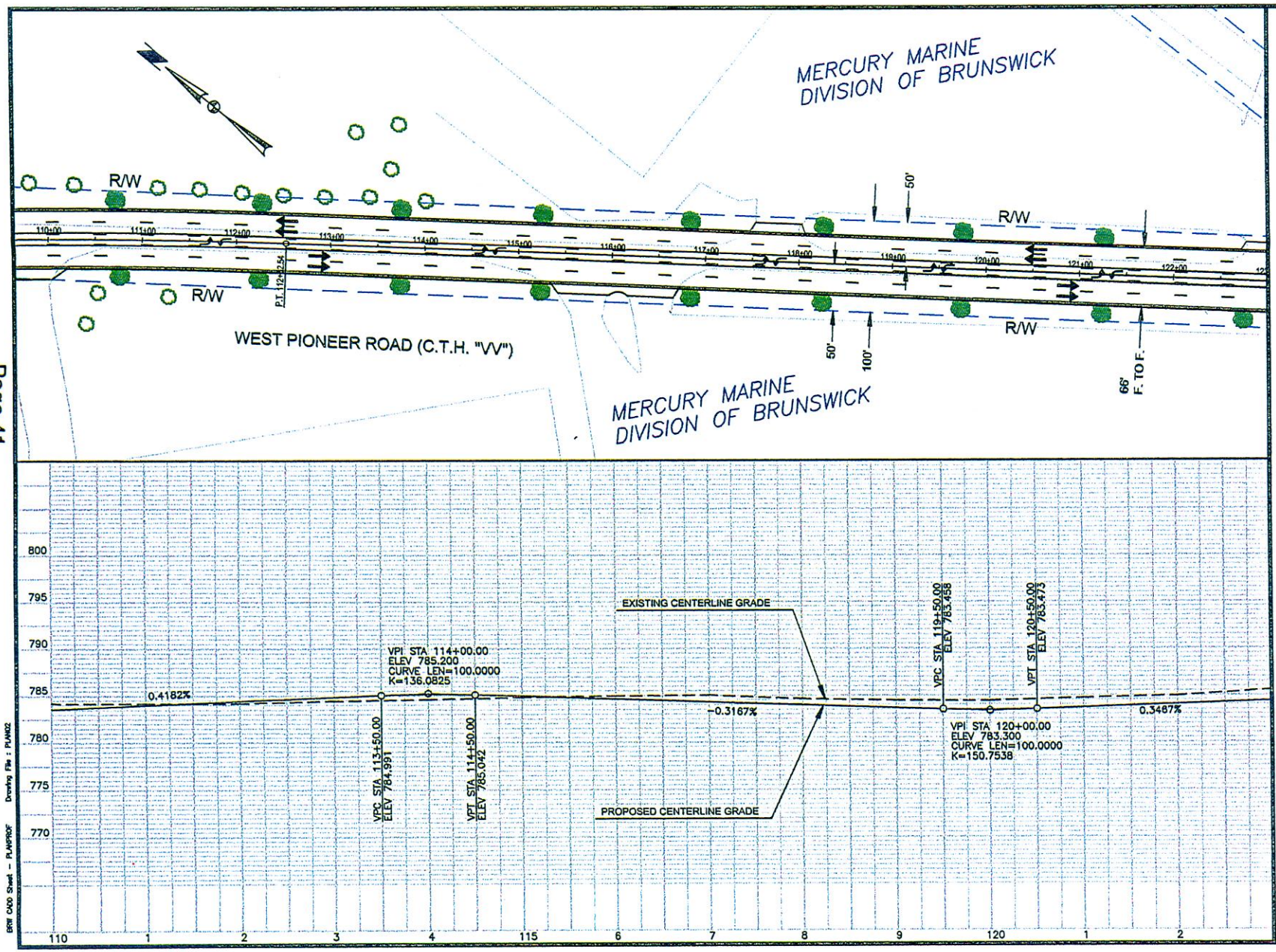

FIGURE 27-2

PROPOSED PIONEER ROAD

CONCEPT PLAN AND PROFILE

STA. 110+00 TO STA. 123+00

SCALE

0' 100'

LEGEND

- Travel Lanes
- Additional Right of Way to be Acquired
- Raised Concrete Median or Concrete Corrugated Median
- Grassed Areas of Median
- New Tree Plantings (Typical)
- Intersection Controlled by Stop Signs
- Intersection Controlled by Traffic Signals
- XXX Streets or Driveways to be Closed

PIONEER ROAD Transportation Study

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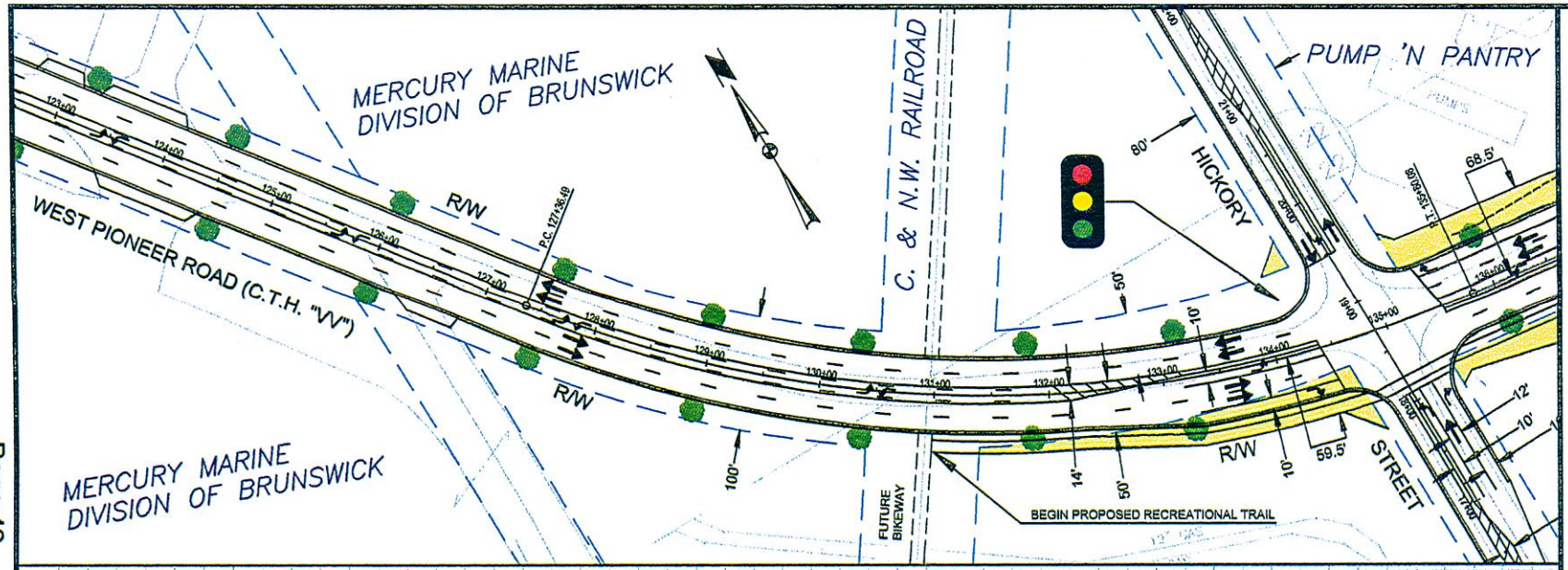
BRW CADD Sheet - PLANPROF Drawing File : PLAN02



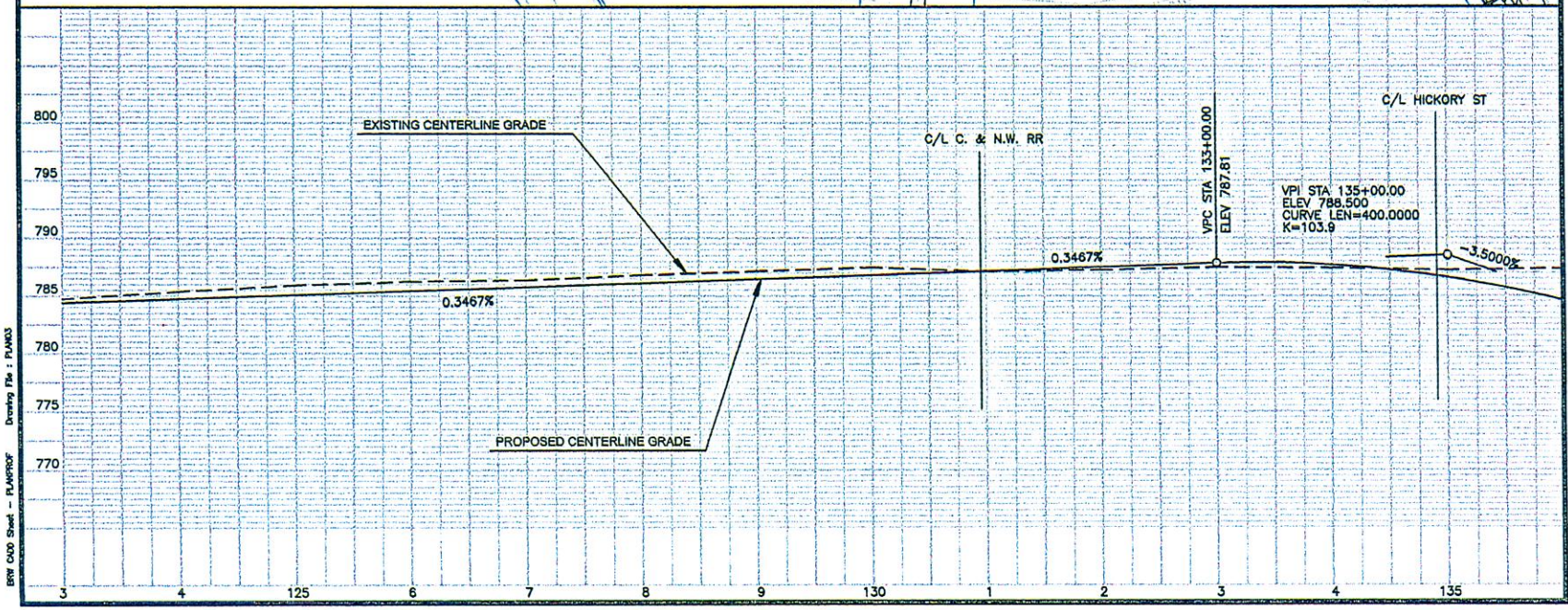


FIGURE 27-3

PROPOSED PIONEER ROAD

CONCEPT PLAN AND PROFILE

STA. 123+00 TO STA. 136+00

SCALE

0' 100'

LEGEND

- Travel Lanes
- Additional Right of Way to be Acquired
- Raised Concrete Median or Concrete Corrugated Median
- Grassed Areas of Median
- New Tree Plantings (Typical)
- Intersection Controlled by Stop Signs
- Intersection Controlled by Traffic Signals
- XXX Streets or Driveways to be Closed

PIONEER ROAD Transportation Study

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BRW CADD Sheet – PLANPROF Drawing File : PLAN03

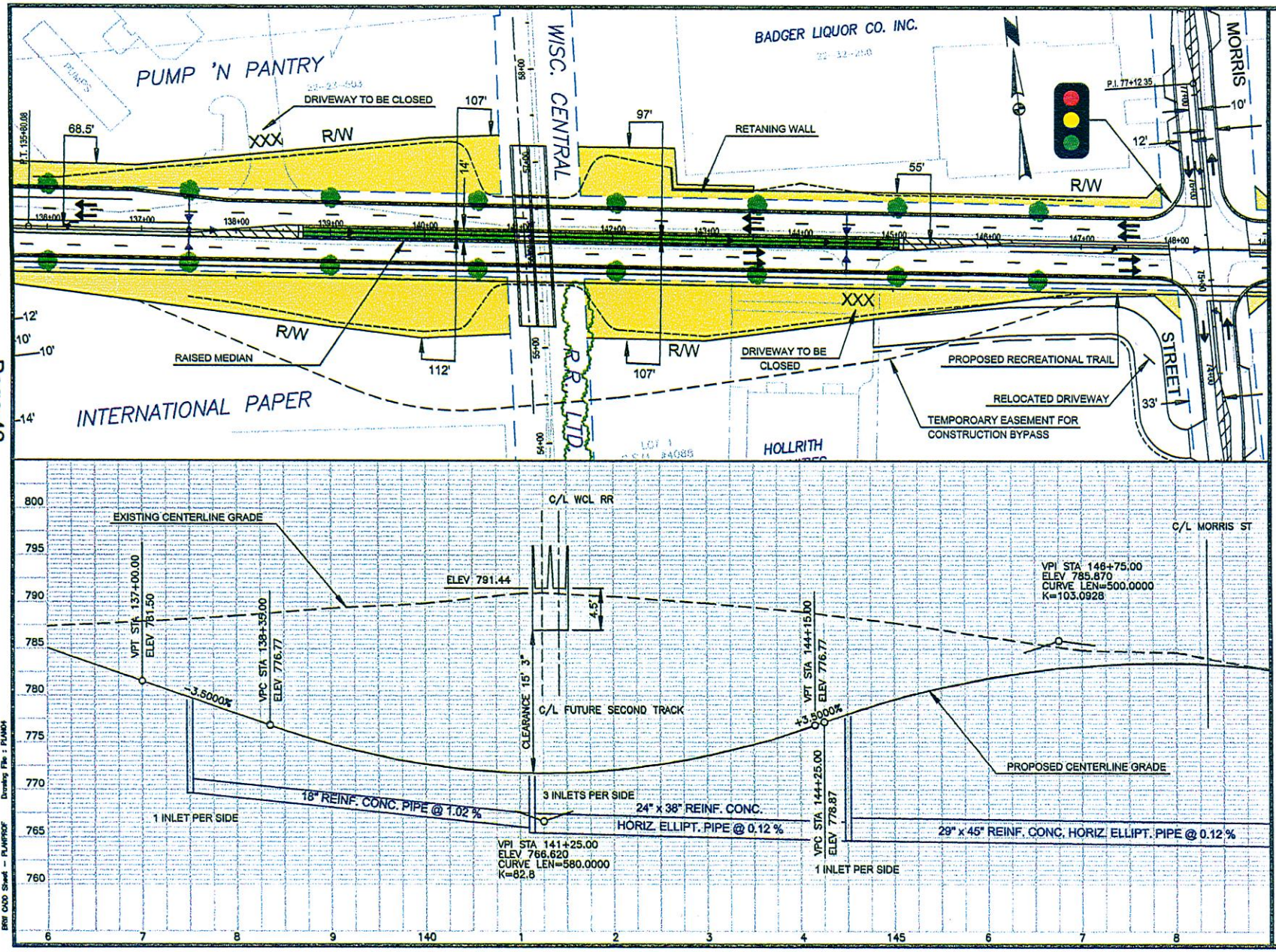

FIGURE 27-4

PROPOSED PIONEER ROAD

CONCEPT PLAN AND PROFILE

STA. 136+00 TO STA. 149+00

SCALE

0' 100'

LEGEND

- Travel Lanes
- Additional Right of Way to be Acquired
- Raised Concrete Median or Concrete Corrugated Median
- Grassed Areas of Median
- New Tree Plantings (Typical)
- Intersection Controlled by Stop Signs
- Intersection Controlled by Traffic Signals
- XXX Streets or Driveways to be Closed

PIONEER ROAD Transportation Study

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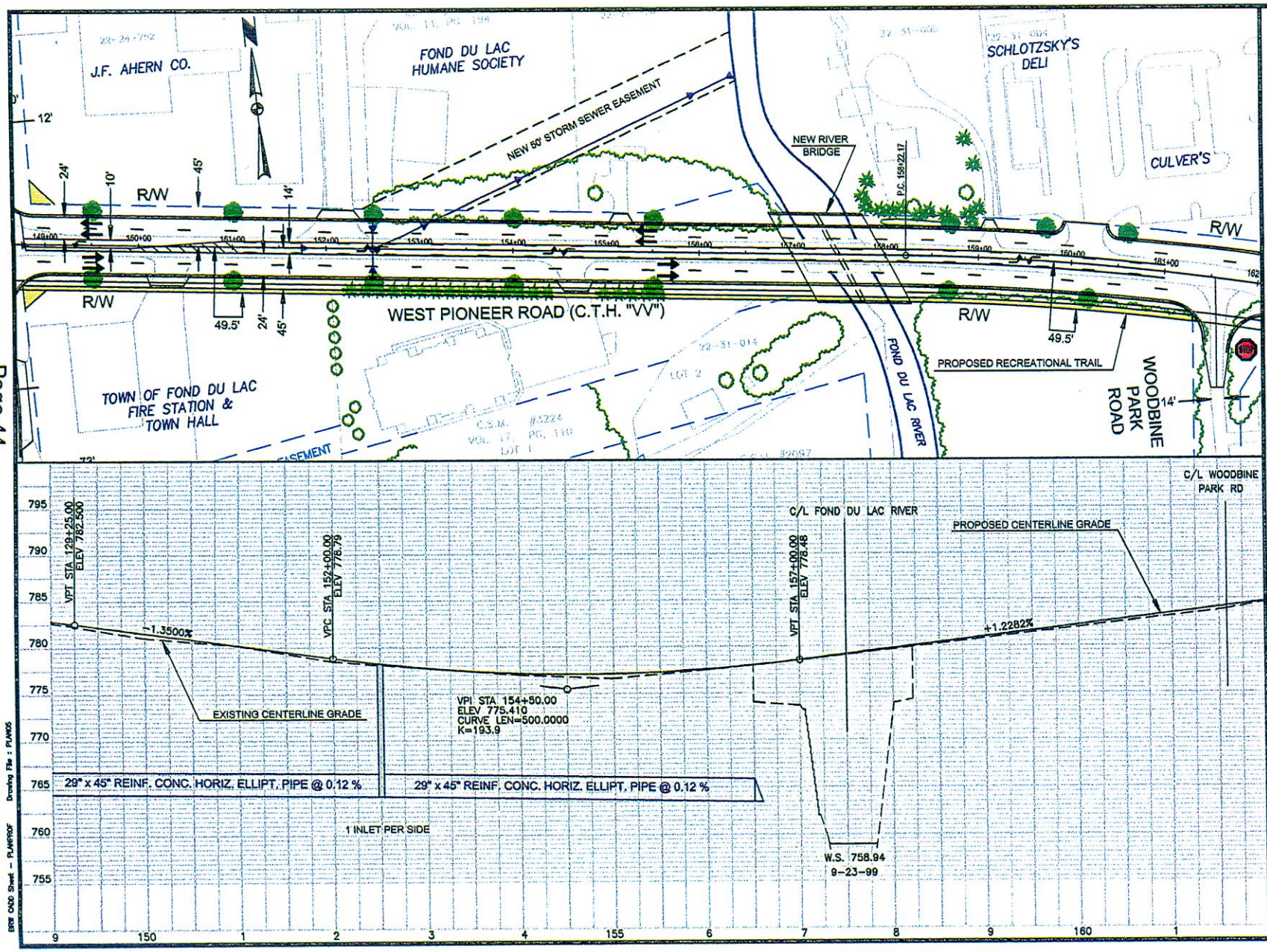

FIGURE 27-5

PROPOSED PIONEER ROAD

CONCEPT PLAN AND PROFILE

STA. 149+00 TO STA. 162+00

SCALE

0' 100'

LEGEND

- Travel Lanes
- Additional Right of Way to be Acquired
- Raised Concrete Median or Concrete Corrugated Median
- Grassed Areas of Median
- New Tree Plantings (Typical)
- Intersection Controlled by Stop Signs
- Intersection Controlled by Traffic Signals
- XXX Streets or Driveways to be Closed

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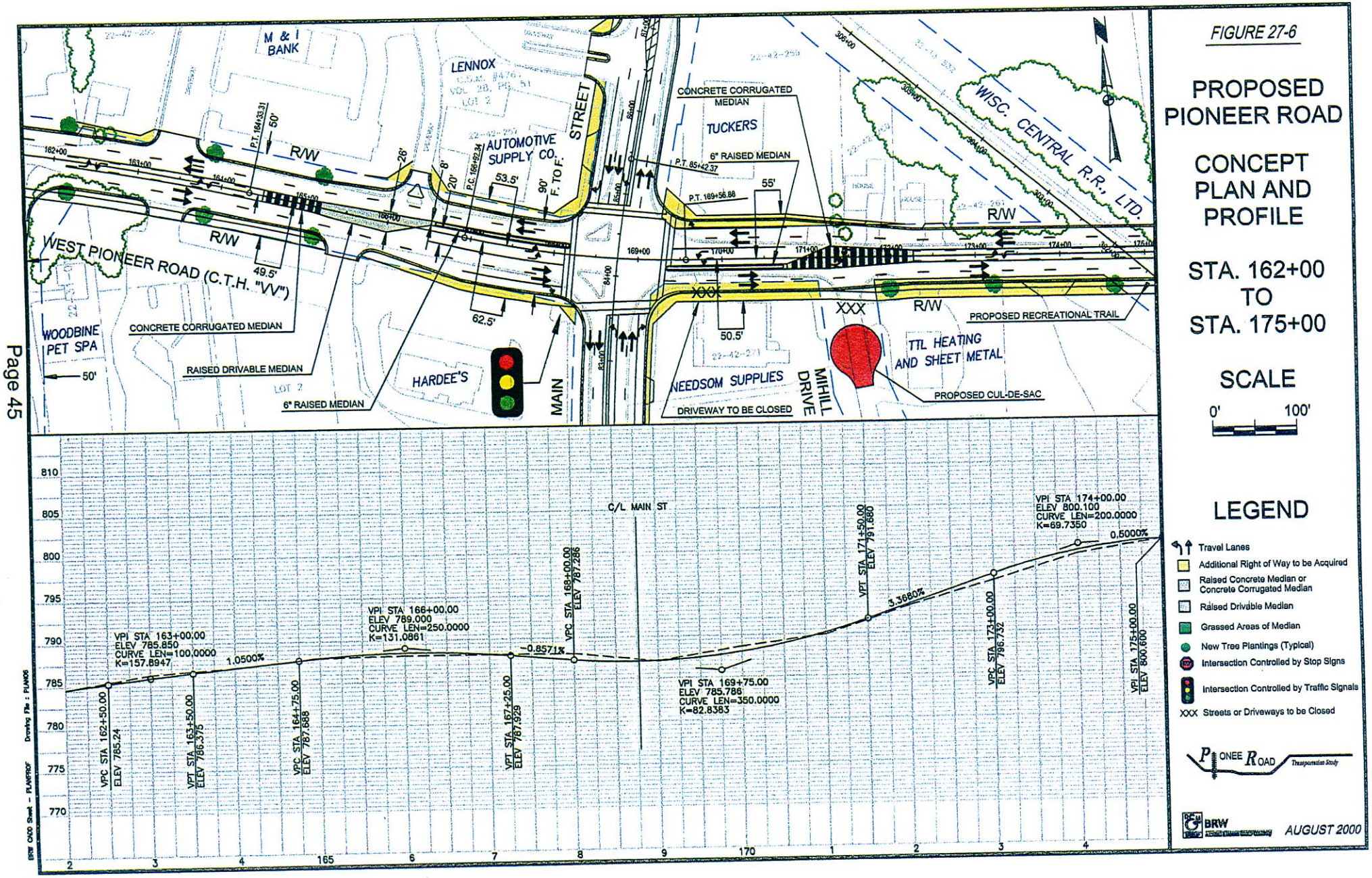
FIGURE 27-6
PROPOSED PIONEER ROAD
CONCEPT PLAN AND PROFILE
STA. 162+00 TO STA. 175+00
SCALE
0' 100'
LEGEND
Travel Lanes
Additional Right of Way to be Acquired
Raised Concrete Median or Concrete Corrugated Median
Raised Drivable Median
Grassed Areas of Median
New Tree Plantings (Typical)
Intersection Controlled by Stop Signs
Intersection Controlled by Traffic Signals
XXX Streets or Driveways to be Closed
PIONEER ROAD Transportation Study
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M & I BANK
LENNOX
AUTOMOTIVE SUPPLY CO.
MAIN STREET
WEST PIONEER ROAD (C.T.H. "VV")
WOODBINE PET SPA
HARDEE'S
TUCKERS
NEEDSOM SUPPLIES
TTL HEATING AND SHEET METAL
MIHILL DRIVE
WISC. CENTRAL R.R., LTD.
CONCRETE CORRUGATED MEDIAN
RAISED DRIVABLE MEDIAN
6" RAISED MEDIAN
DRIVEWAY TO BE CLOSED
PROPOSED CUL-DE-SAC
PROPOSED RECREATIONAL TRAIL
R/W
C/L MAIN ST
VPI STA 163+00.00 ELEV 785.850 CURVE LEN=100.0000 K=157.8947
VPC STA 162+50.00 ELEV 785.24
VPT STA 163+50.00 ELEV 786.375
VPC STA 164+75.00 ELEV 787.688
VPI STA 166+00.00 ELEV 789.000 CURVE LEN=250.0000 K=131.0861
VPT STA 167+25.00 ELEV 787.929
VPC STA 168+00.00 ELEV 787.286
VPI STA 169+75.00 ELEV 785.786 CURVE LEN=350.0000 K=82.8383
VPT STA 171+50.00 ELEV 791.680
VPC STA 173+00.00 ELEV 796.732
VPI STA 174+00.00 ELEV 800.100 CURVE LEN=200.0000 K=69.7350
VPT STA 175+00.00 ELEV 800.600
1.0500%
-0.857%
3.3680%
0.5000%

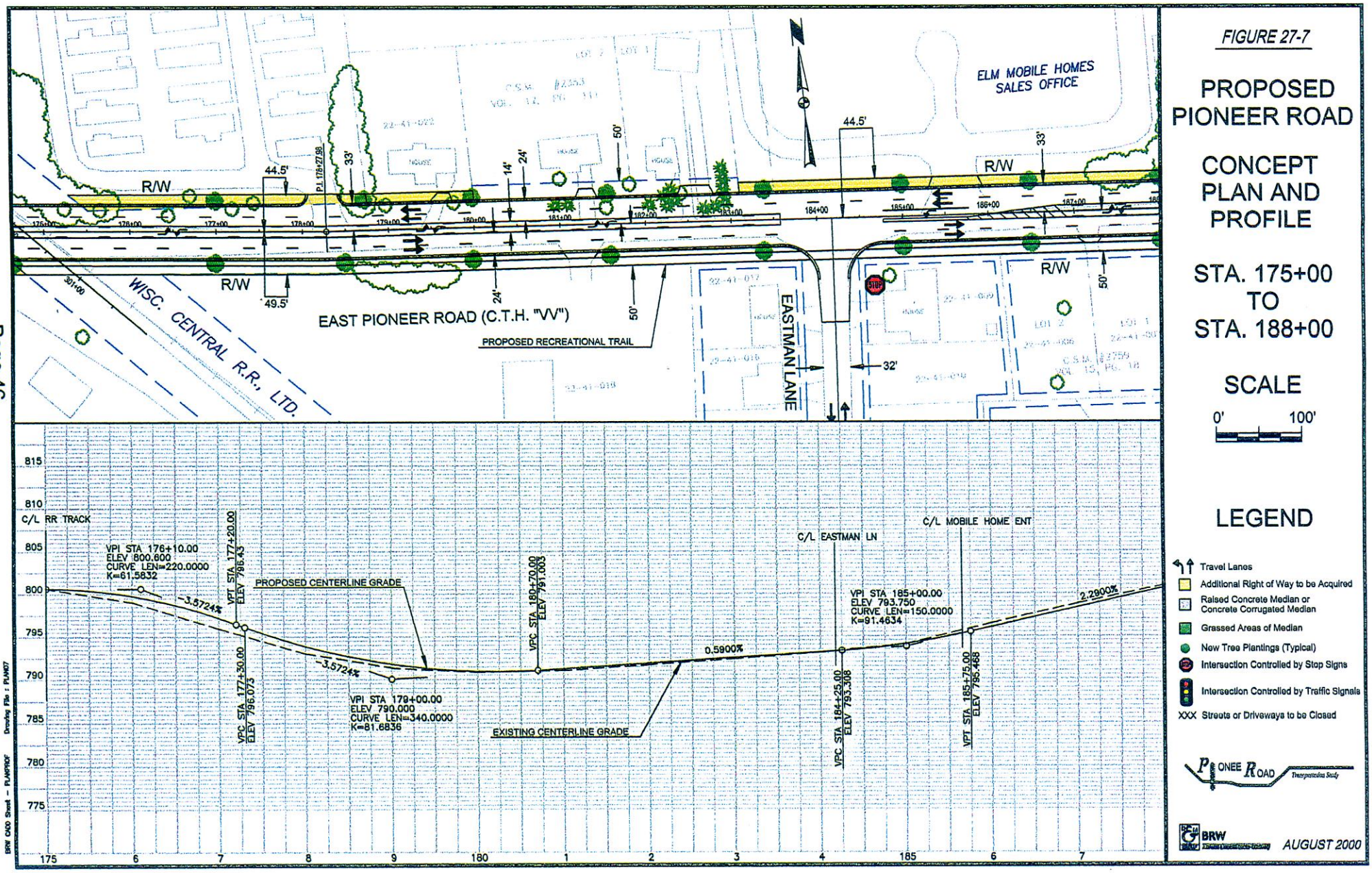
FIGURE 27-7
PROPOSED PIONEER ROAD
CONCEPT PLAN AND PROFILE
STA. 175+00 TO STA. 188+00
SCALE
0' 100'
LEGEND
Travel Lanes
Additional Right of Way to be Acquired
Raised Concrete Median or Concrete Corrugated Median
Grassed Areas of Median
New Tree Plantings (Typical)
Intersection Controlled by Stop Signs
Intersection Controlled by Traffic Signals
XXX Streets or Driveways to be Closed
PIONEER ROAD Transportation Study
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ELM MOBILE HOMES SALES OFFICE
R/W
44.5'
33'
14'
24'
50'
49.5'
32'
EAST PIONEER ROAD (C.T.H. "VV")
PROPOSED RECREATIONAL TRAIL
EASTMAN LANE
WISC. CENTRAL R.R., LTD.
STOP
C/L RR TRACK
C/L EASTMAN LN
C/L MOBILE HOME ENT
VPI STA 176+10.00
ELEV 800.600
CURVE LEN=220.0000
K=61.5832
VPT STA 177+20.00
ELEV 796.43
VPC STA 177+30.00
ELEV 796.073
PROPOSED CENTERLINE GRADE
-3.5724%
VPI STA 179+00.00
ELEV 790.000
CURVE LEN=340.0000
K=81.6836
VPC STA 180+70.00
ELEV 791.003
EXISTING CENTERLINE GRADE
0.5900%
VPC STA 184+25.00
ELEV 793.308
VPI STA 185+00.00
ELEV 793.750
CURVE LEN=150.0000
K=91.4634
VPT STA 185+75.00
ELEV 795.468
2.2900%
815
810
805
800
795
790
785
780
775
175
6
7
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9
180
1
2
3
4
185
6
7

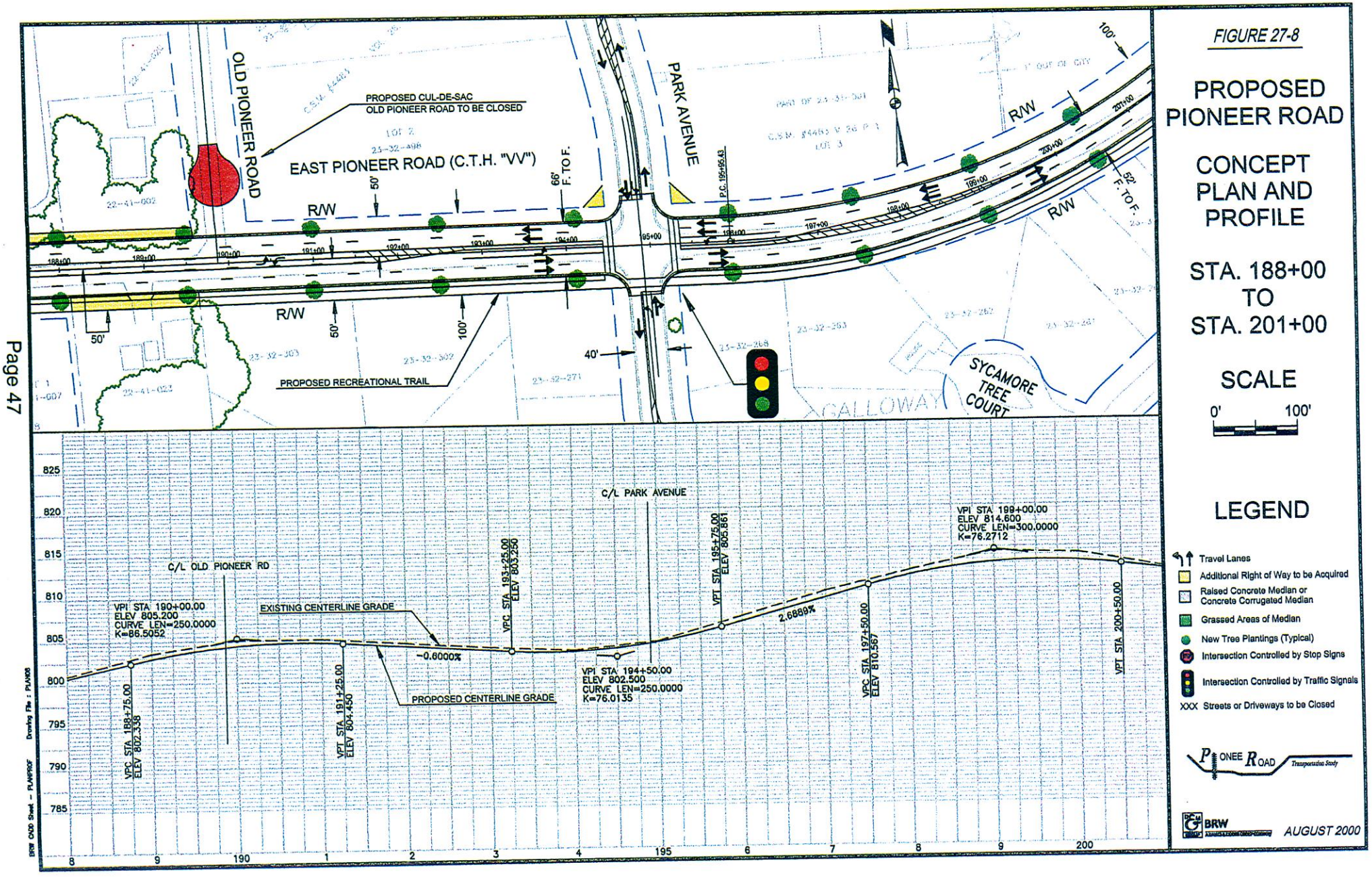
FIGURE 27-8
PROPOSED PIONEER ROAD
CONCEPT PLAN AND PROFILE
STA. 188+00 TO STA. 201+00
SCALE
0' 100'
LEGEND
Travel Lanes
Additional Right of Way to be Acquired
Raised Concrete Median or Concrete Corrugated Median
Grassed Areas of Median
New Tree Plantings (Typical)
Intersection Controlled by Stop Signs
Intersection Controlled by Traffic Signals
XXX Streets or Driveways to be Closed
PIONEER ROAD Transportation Study
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OLD PIONEER ROAD
PROPOSED CUL-DE-SAC
OLD PIONEER ROAD TO BE CLOSED
EAST PIONEER ROAD (C.T.H. "VV")
PARK AVENUE
R/W
50'
66' F. TO F.
52' F. TO F.
100'
40'
PROPOSED RECREATIONAL TRAIL
SYCAMORE TREE COURT
GALLOWAY
C/L OLD PIONEER RD
C/L PARK AVENUE
EXISTING CENTERLINE GRADE
PROPOSED CENTERLINE GRADE
-0.6000%
2.6889%
VPI STA 190+00.00
ELEV 805.200
CURVE LEN=250.0000
K=86.5052
VPC STA 188+75.00
ELEV 802.338
VPT STA 191+25.00
ELEV 804.450
VPC STA 193+25.00
ELEV 803.250
VPI STA 194+50.00
ELEV 802.500
CURVE LEN=250.0000
K=76.0135
VPT STA 195+75.00
ELEV 805.861
VPC STA 197+50.00
ELEV 810.567
VPI STA 199+00.00
ELEV 814.600
CURVE LEN=300.0000
K=76.2712
VPT STA 200+50.00
825
820
815
810
805
800
795
790
785
8
9
190
1
2
3
4
195
6
7
8
9
200

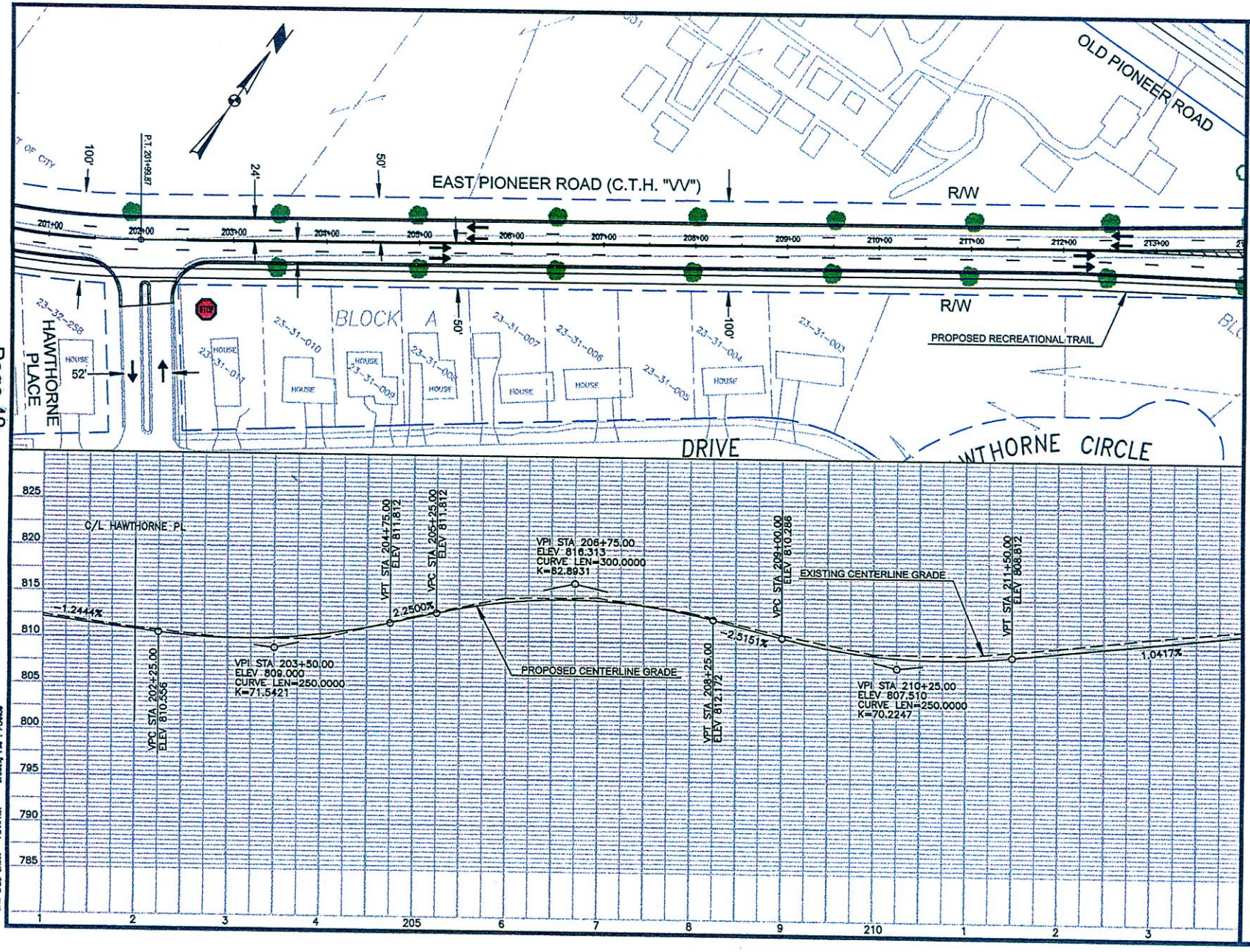

FIGURE 27-9

PROPOSED PIONEER ROAD

CONCEPT PLAN AND PROFILE

STA. 201+00 TO STA. 214+00

SCALE

0' 100'

LEGEND

- Travel Lanes
- Additional Right of Way to be Acquired
- Raised Concrete Median or Concrete Corrugated Median
- Grassed Areas of Median
- New Tree Plantings (Typical)
- Intersection Controlled by Stop Signs
- Intersection Controlled by Traffic Signals
- XXX Streets or Driveways to be Closed

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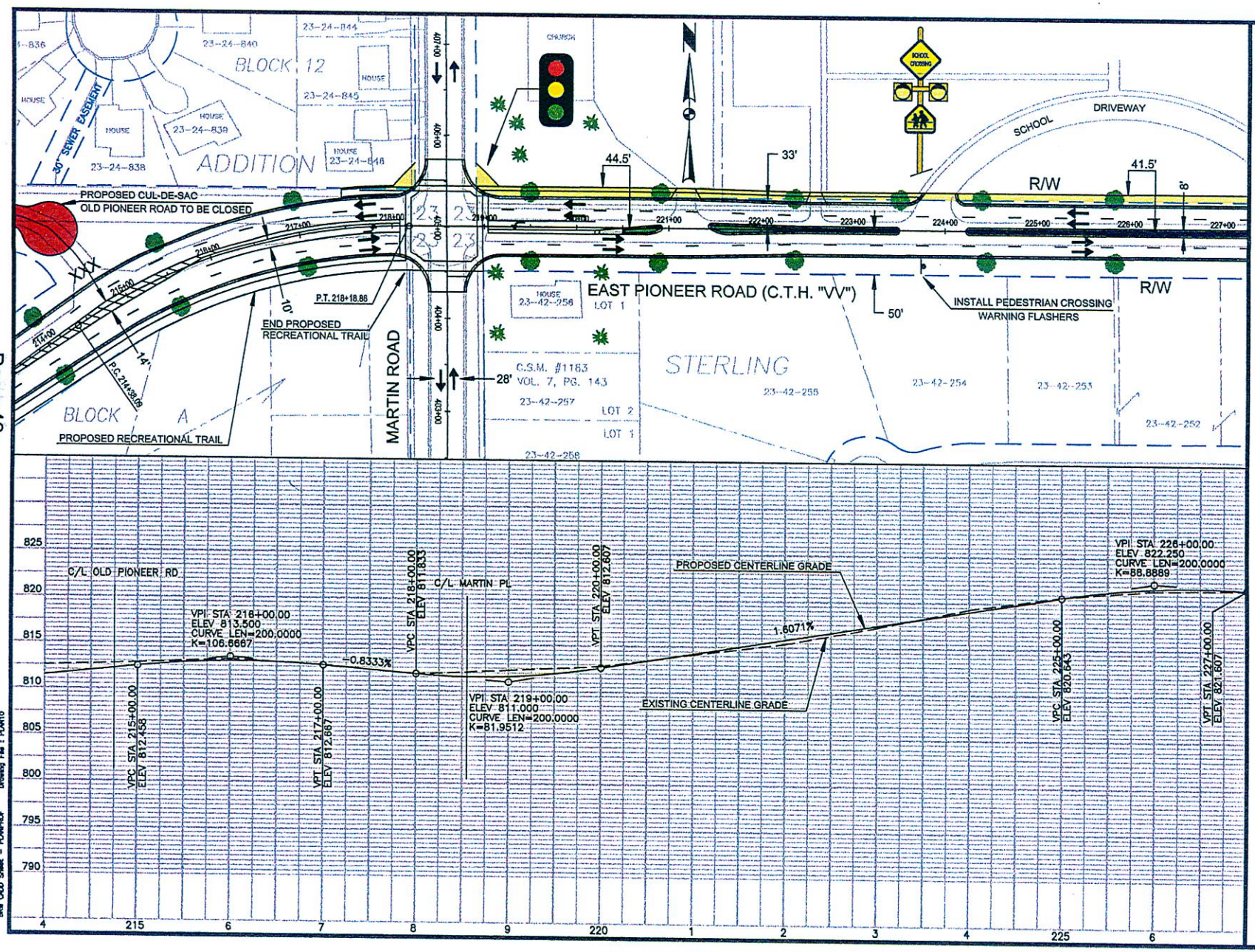

FIGURE 27-10

PROPOSED PIONEER ROAD

CONCEPT PLAN AND PROFILE

STA. 214+00 TO STA. 227+00

SCALE

0' 100'

LEGEND

- Travel Lanes
- Additional Right of Way to be Acquired
- Raised Concrete Median or Concrete Corrugated Median
- Grassed Areas of Median
- New Tree Plantings (Typical)
- Intersection Controlled by Stop Signs
- Intersection Controlled by Traffic Signals
- XXX Streets or Driveways to be Closed

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