

FIGURE 27-11

PROPOSED PIONEER ROAD

CONCEPT PLAN AND PROFILE

STA. 227+00 TO STA. 240+00

SCALE



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
- Streets or Driveways to be Closed



AUGUST 2000

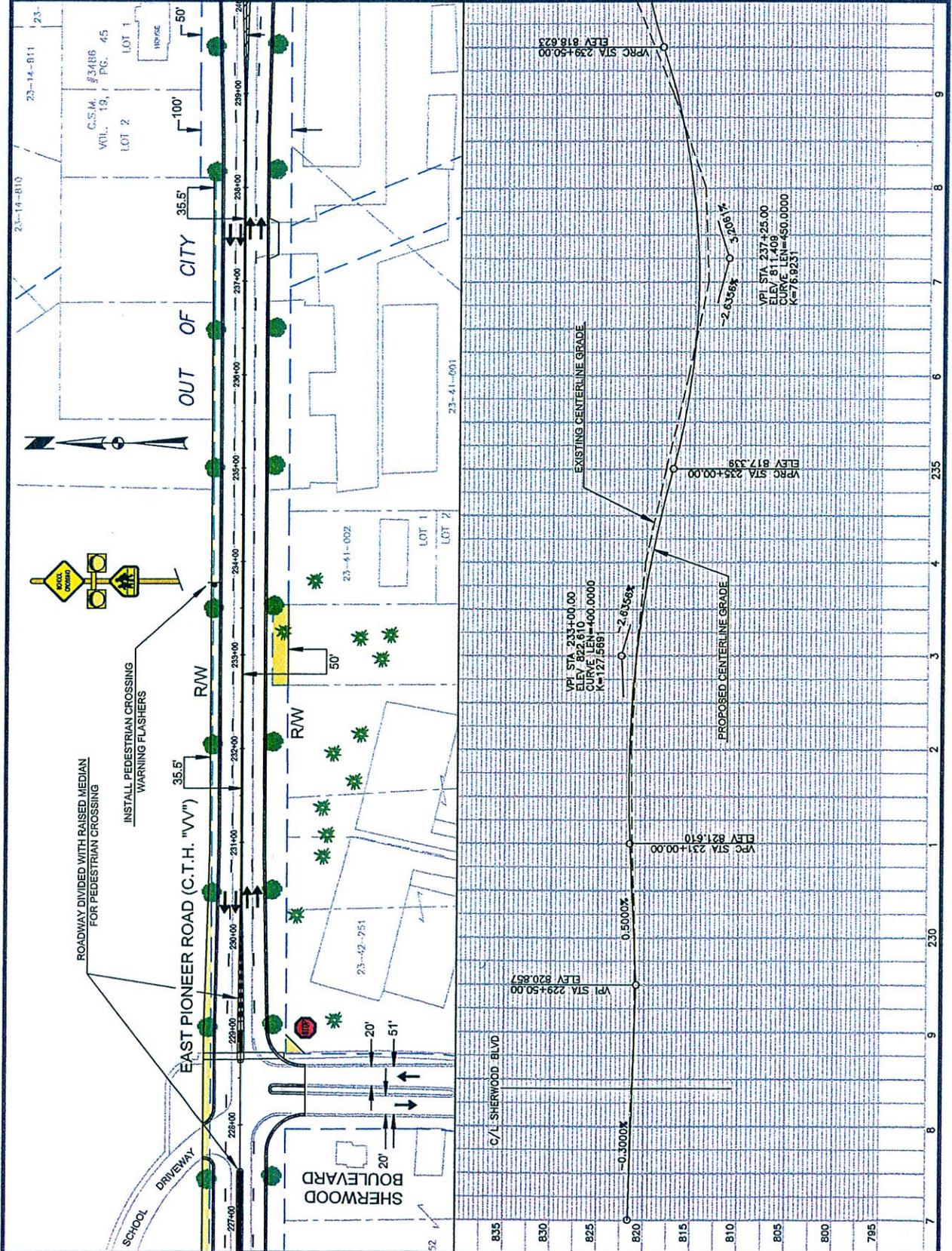


FIGURE 27-12

PROPOSED PIONEER ROAD CONCEPT PLAN AND PROFILE

STA. 240+00
TO
STA. 253+00

SCALE



LEGEND

- Travel Lanes
- Additional Right of Way to be Acquired
- Relaxed Concrete Median or Concrete Congregated 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



AUGUST 2000

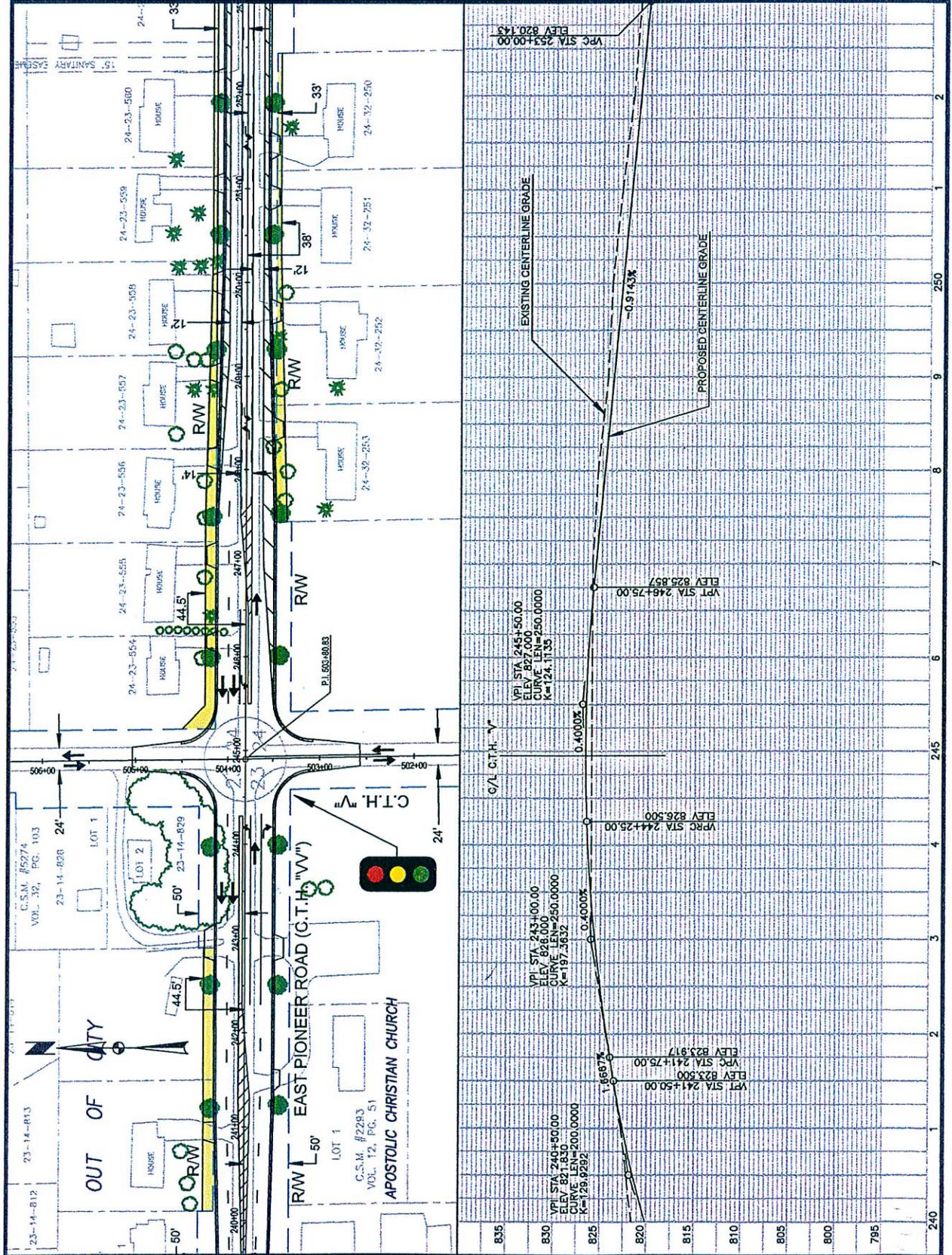


FIGURE 27-13

PROPOSED
PIONEER ROAD
CONCEPT
PLAN AND
PROFILE

STA. 253+00
TO
STA. 265+00

SCALE



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



AUGUST 2000

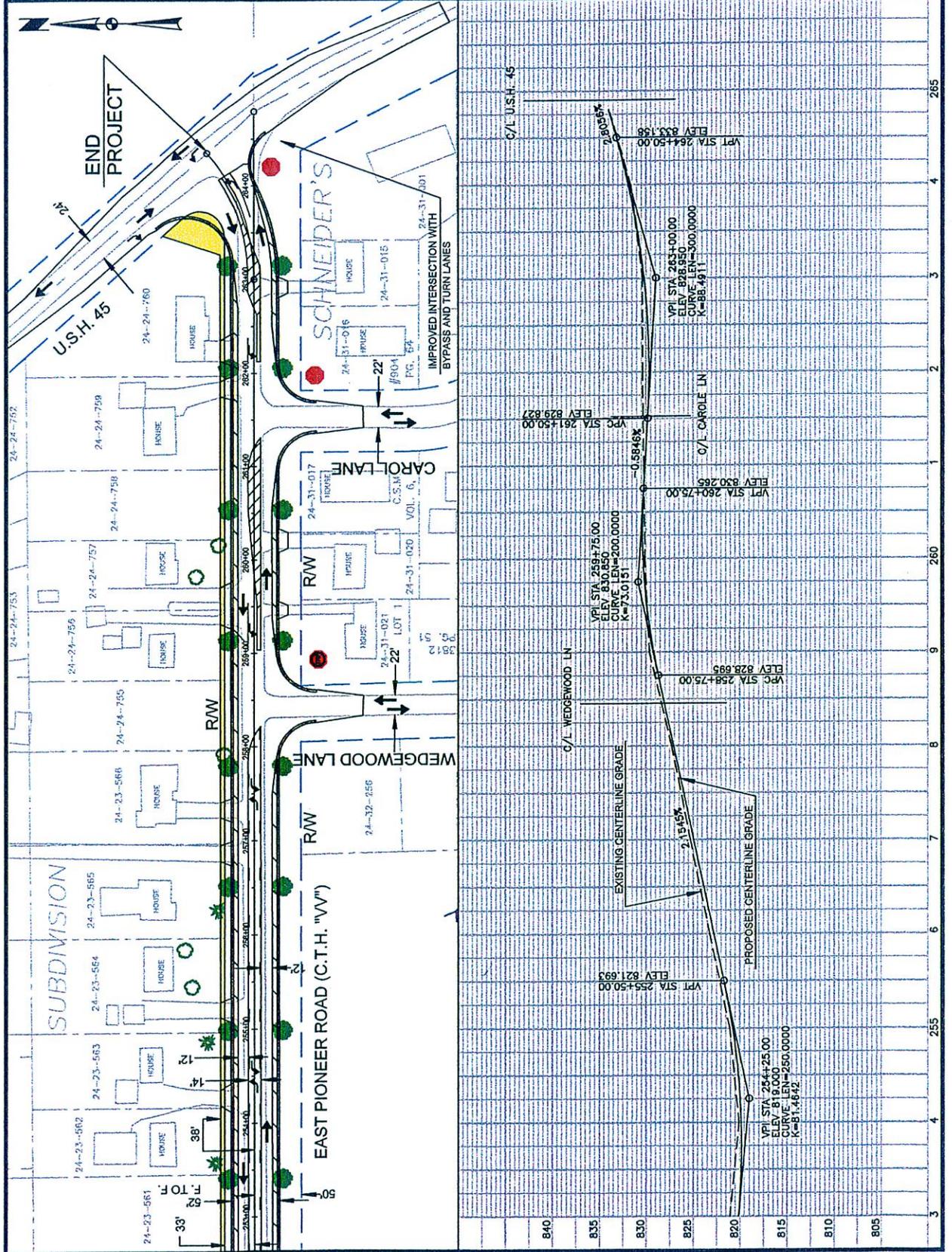


FIGURE 27-14

**PROPOSED
PIONEER ROAD**

**CONCEPT
PLAN AND
PROFILE**

**U.S.H. 151
STA. 46+60
TO
STA. 53+65**

SCALE



LEGEND

- Travel Lanes
- Additional Right of Way to be Acquired
- Relined 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



AUGUST 2000

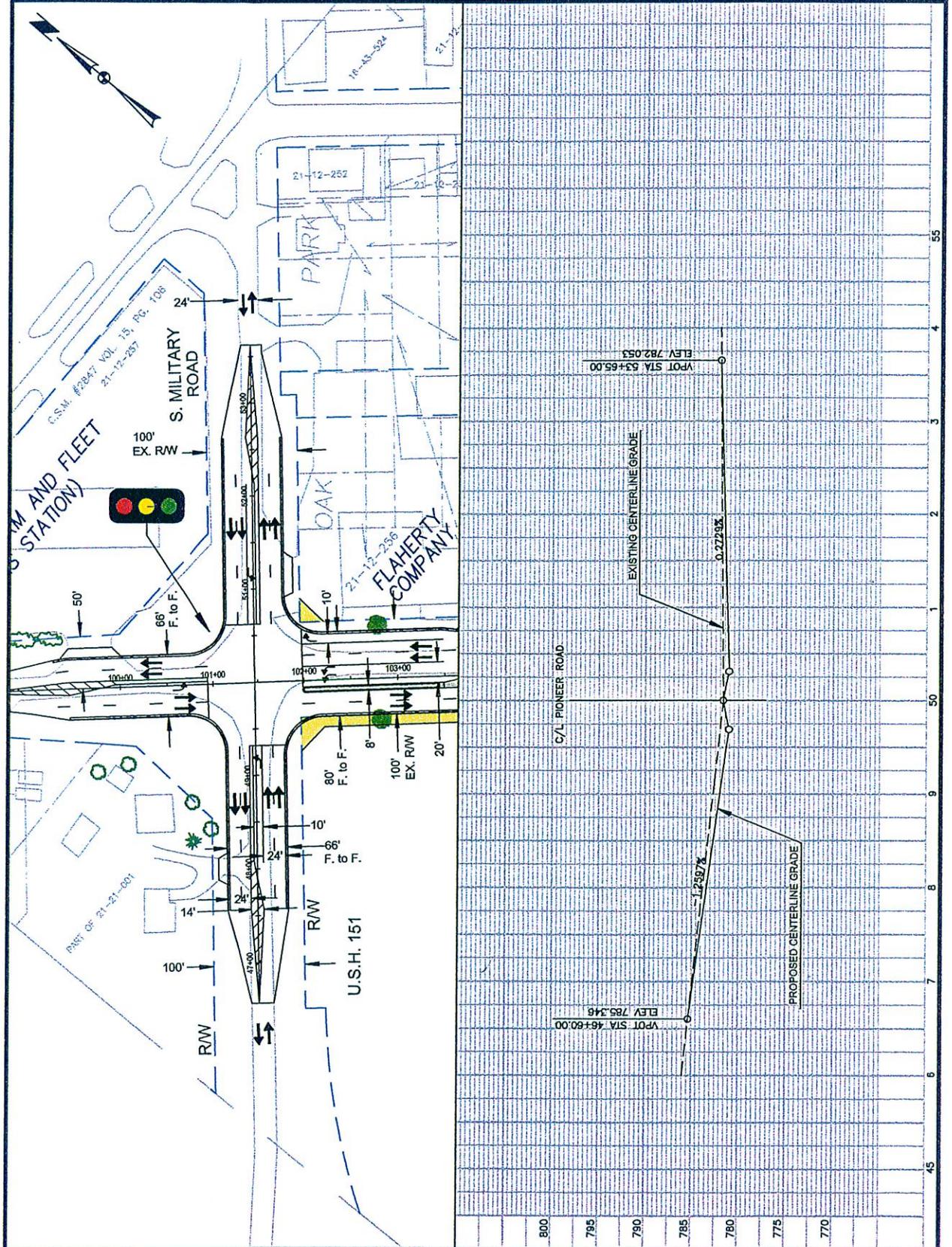


FIGURE 27-15

PROPOSED
PIONEER ROAD
CONCEPT
PLAN AND
PROFILE
HICKORY
STREET
TO
STA. 23+70

SCALE



LEGEND

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



AUGUST 2000

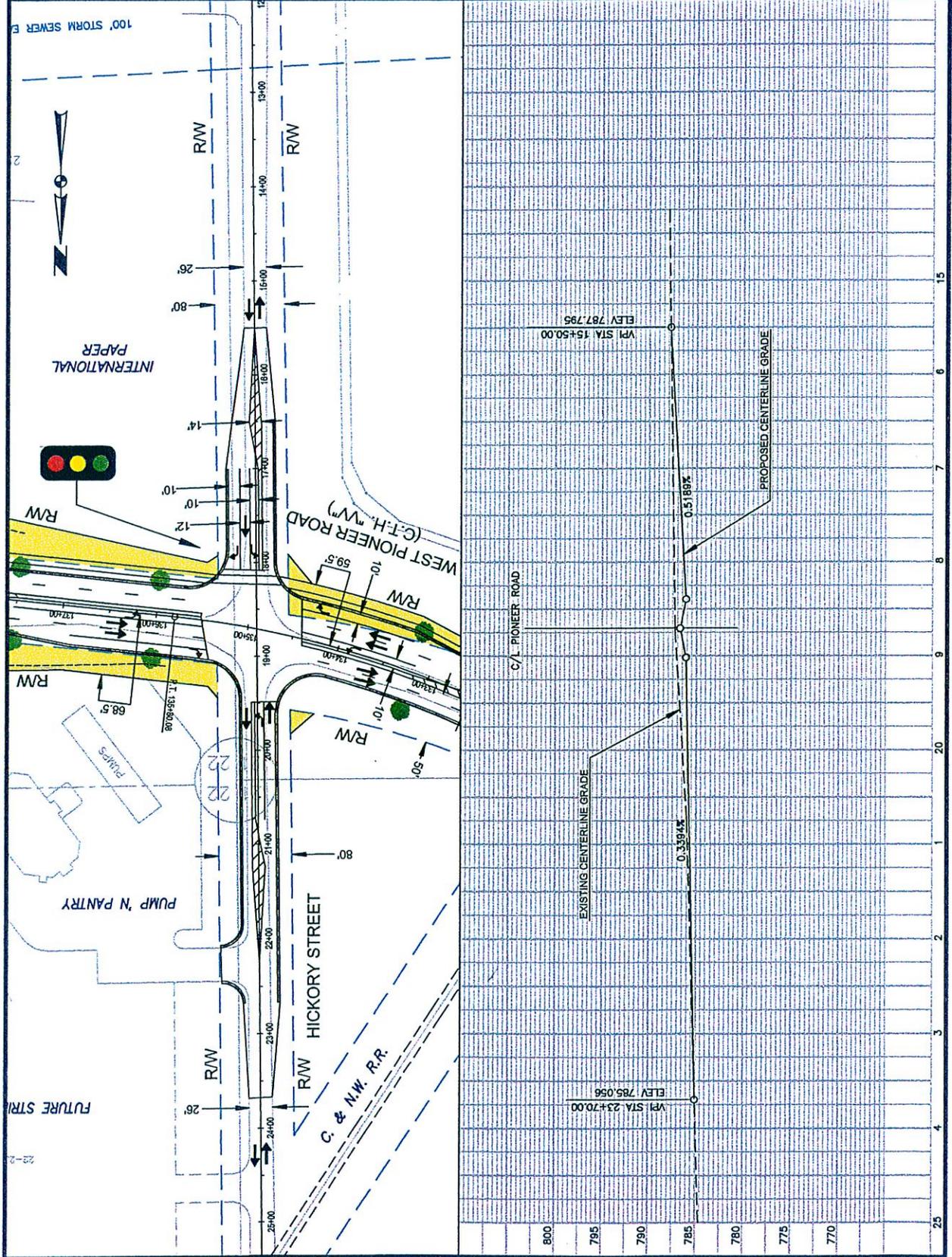


FIGURE 27-16

**PROPOSED
PIONEER ROAD
CONCEPT
PLAN AND
PROFILE**
MORRIS
STREET
STA. 72+55
TO
STA. 78+55

SCALE

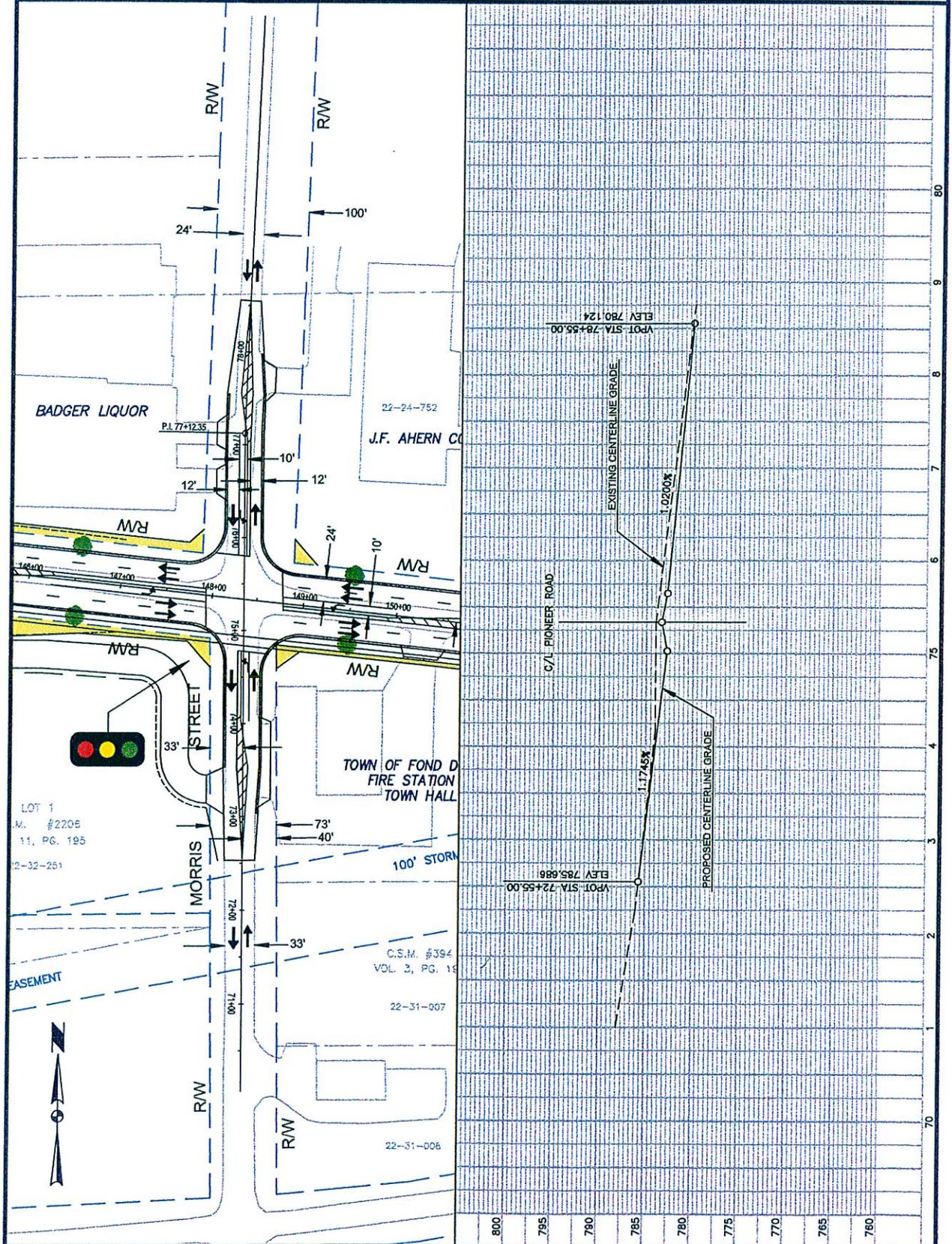


LEGEND

- 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



AUGUST 2000



LOT 1
M. #2205
11, PG. 195
12-32-251

EASEMENT



C.S.M. #394
VOL. 3, PG. 15
22-31-007

22-31-006

FIGURE 27-17

**PROPOSED
PIONEER ROAD
CONCEPT
PLAN AND
PROFILE
MAIN
STREET
STA. 80+55
TO
STA. 87+85**

SCALE

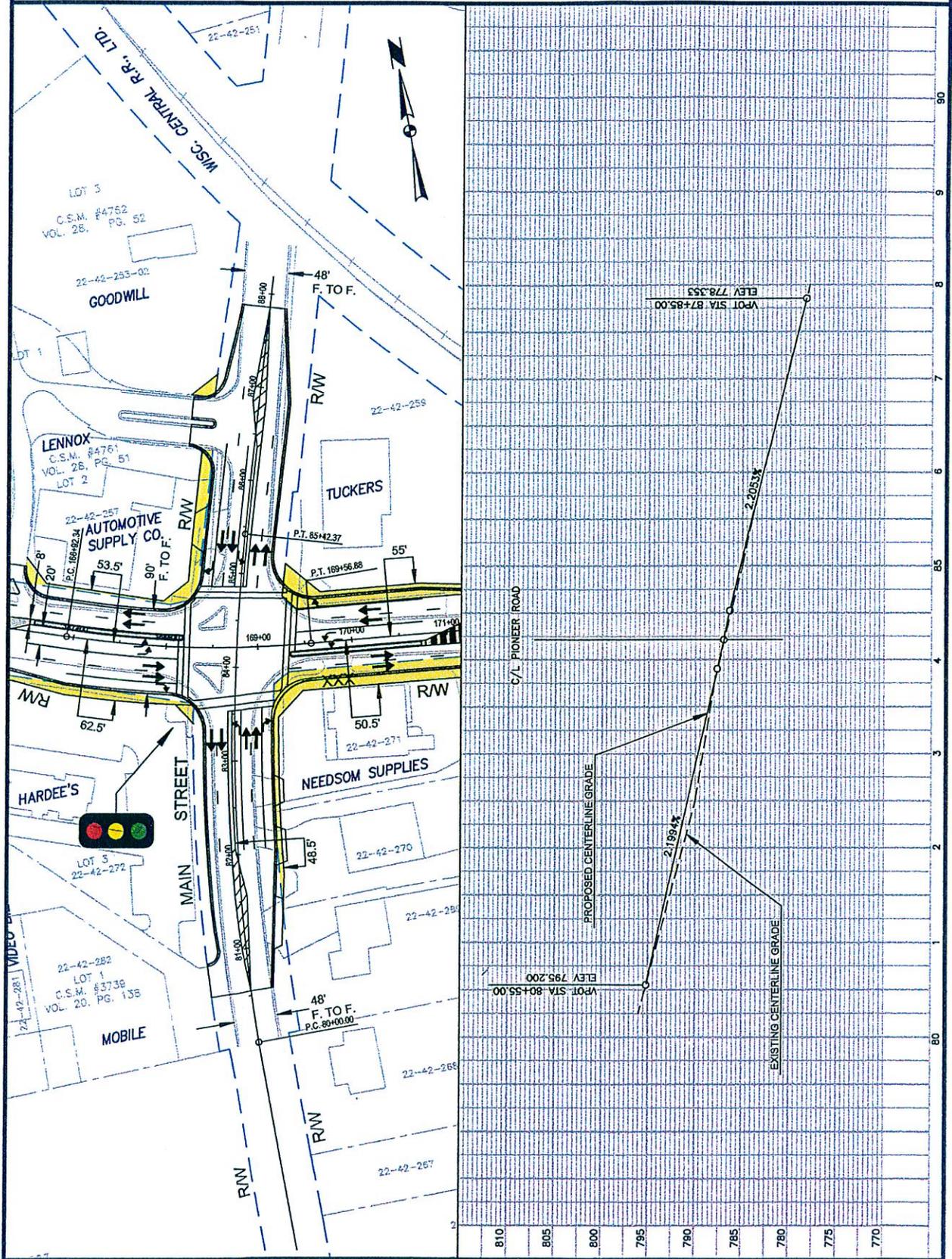


LEGEND

- Travel Lanes
- Additional Right of Way to be Acquired
- Released Concrete Median or Concrete Congruated 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



AUGUST 2000



Cost Estimates

The total cost of implementing the improvements recommended in this report is approximately \$19,122,000 in year 1999 dollars. This cost includes both right-of-way and construction. This cost also includes design engineering and right-of-way appraisal and acquisition services. **Table 6** (below) shows a breakdown of project cost by roadway segments.

Table 6
Project Implementation Cost Summary

Segment	R/W Cost	Design Eng. Cost	Construction Cost	Total Cost
USH 151 to Hickory Street	\$85,000	\$207,000	\$2,590,000	\$2,882,000
W. of Hickory St. to W. of Morris St.	\$403,000	\$395,000	\$4,940,000	\$5,738,000
W. of Morris St. to W. of Main St.	\$126,000	\$206,000	\$2,569,000	\$2,901,000
W. of Main St. to Park Ave.	\$138,000	\$180,000	\$2,249,000	\$2,567,000
Park Ave. to CTH V	\$90,000	\$258,000	\$3,233,000	\$3,581,000
CTH V to USH 45	\$107,000	\$100,000	\$1,246,000	\$1,453,000
Totals	\$949,000	\$1,346,000	\$16,827,000	\$19,122,000

ENVIRONMENTAL ISSUES/CONSIDERATIONS

The improvements proposed in this document will be a Type II action as defined in Trans 400.08 *Wisconsin Administrative Code*. The project will require an environmental analysis to be in compliance with the Wisconsin Environmental Policy Act (WEPA) and to receive State and Federal funding. The reconstruction of Pioneer Road, with an additional lane in each direction for the majority of the length of the project, will necessitate the preparation of an Environmental Assessment/Finding of No Significant Impact Document.

Coordination with State and Federal agencies will be required including; WisDOT, Wisconsin Department of Natural Resources (WisDNR), Army Corps of Engineer (COE), U.S. Fish and Wildlife Service (USFW) and the Federal Highway Agency (FHWA).

The document will address the project's impact on the environment in the following categories: Wetlands, Historical and Archeological Resources, Hazardous Materials, Noise/Air and Wildlife Habitat, Stream and Floodplain impact.

Wetlands

An investigation will need to be performed to identify the location and limits of wetlands in the corridor. A preliminary review of the corridor indicates the possibility of isolated wetlands in the vicinity of the WCL railroad crossing between Hickory Street and Morris Street (in the roadway ditches and against the railroad fill) and along the banks of the Fond du Lac River, south of the existing bridge. The project's impact to wetlands would be minor and could be easily mitigated, if required. Coordination with the WisDNR and COE will be necessary.

Historical

A historical investigation following the State's Section 106 process will need to be performed to identify historically significant buildings. The Galloway House, located in the vicinity of Old Pioneer Road is the only historical resource identified to date. This project will not require right-of-way acquisition from the Galloway House.

Archeological

An archeological investigation following the State's Section 106 process will need to be performed to identify archeological resources. A literature search should be performed and a field investigation should be conducted. The ground surrounding the corridor has been previously disturbed by development. Archeological resources are not anticipated to have a major effect on the project.

Hazardous Materials

A Phase 1 Hazardous Materials Investigation will need to be performed during the next phase of project development. The investigation involves database searches, historical maps and records review and a field investigation. The purpose is to determine recognized environmental conditions involving hazardous materials or current practices that may be an indicator of potential environmental conditions. A preliminary review of the corridor indicates petroleum related uses in the vicinity of Pioneer Road and Military Road, Hickory Street and Main Street.

Noise/Air

The project will require an air quality analysis to determine the project's impact on the carbon monoxide and nitrous oxide emission levels. This project's effect on air quality is expected to be minimal.

The project will also require noise model to be created to determine the project's impact on sound levels at nearby receivers. It is anticipated that there may be sites (receivers) that would experience slight elevations in noise levels. Noise impacts are expected to be minor and due to the urban character of the corridor not able to be mitigated with soundwalls or earth berms.

Wildlife Habitat

The project will require coordination with USFW to determine if there are any threatened or endangered species in the project area. The vast majority of the project is developed land and not wildlife habitat.

In conclusion, there does not appear to be issues in the corridor that would seriously jeopardize the proposed project from an environmental standpoint.

IMPLEMENTATION CONSIDERATIONS

This study has considered the need for improvements on Pioneer Road from USH 151 (Military Road) to USH 45. These termini are considered “logical” termini according to the Federal definition. To maintain eligibility for Federal funding a project must be considered (studied) between “logical” termini. After the environmental document is completed and approved, the project can be subdivided and constructed in segments according to needs and availability of funding.

Prioritization of Construction Segments

A construction schedule has not been established at this time. However, the proposed roadway improvements on Pioneer Road can be prioritized into individual construction segments, so that when funding becomes available the most critical needs can be addressed first.

The delay of vehicles and the potential for accidents at the WCL railroad crossing between Hickory Street and Morris Street serve to make the proposed railroad grade separation the highest priority improvement need within the corridor. To complete the proposed railroad grade separation it will be necessary to reconstruct the segment of Pioneer Road from west of Hickory Street to east of Morris Street.

The second highest priority need is to increase the road capacity in the areas of the highest commercial and industrial traffic volumes. This would involve the segments from Military Road to Hickory Street and from Morris Street to east of Main Street. Therefore, these segments would be priority number two.

The remaining segment from Main Street to USH 45, which is largely residential in character and has lower traffic volumes than the other segments, would be the third construction segment. This segment could be further subdivided, if desirable due to financial constraints.

The proposed segments and their respective lengths are:

Construction Segment No.	Location	Length
1	Hickory Street to Morris Street & Railroad Bridge	0.38 miles
2	Military Road (USH 151) to Hickory Street and Morris Street to Main Street	0.99 miles
3	Main Street to USH 45	1.80 miles

Implementation Costs by Construction Segment

The implementation costs for these improvements includes three major elements; Design Engineering Cost, Right-of-way Acquisition Cost and Construction Cost. The estimated implementation cost by prioritized construction segment is shown in **Table 7**, below.

Table 7
Implementation Cost by Construction Segment*

Construction Segment No.	Right of Way Cost	Design Engineering Cost	Construction Cost	Total Implementation Cost
1	\$403,000	\$395,000	\$4,940,000	\$5,738,000
2	\$211,000	\$413,000	\$5,159,000	\$5,783,000
3	\$335,000	\$538,000	\$6,728,000	\$7,601,000
Totals	\$949,000	\$1,346,000	\$16,827,000	\$19,122,000

*note: All costs in 1999 value dollars

SUMMARY OF RECOMMENDATIONS

Following is a summary of the recommendations presented in this report:

- A grade separation of the Wisconsin Central Limited Railroad with Pioneer Road is warranted and recommended. The roadway should be lowered and a railroad bridge(s) constructed to carry the trains over Pioneer Road. The underpass should be drained by a gravity storm sewer to the Fond du Lac River.
- Future improvements to Pioneer Road are recommended. The roadway should be reconstructed with curb and gutter, storm sewer and with provision for a future sidewalk. The roadway should have at least 2-lanes in each direction. A two-way center turn lane median is recommended from Military Road to Park Avenue. Additional turn lanes are required at most intersections.
- A ten foot wide recreation trail is recommended on the south side of Pioneer Road from Hickory Street to Martin Road.
- A raised curbed safety median is recommended on Pioneer Road in front of Theisen High School for pedestrian refuge.
- Special signing and warning flashes advising of pedestrian crossways is recommended on Pioneer Road in advance of Theisen High School.
- A future traffic signal is recommended at CTH V.
- To enhance the aesthetics of the neighborhoods, street trees are recommended in the curb terrace of future Pioneer Road.
- The first improvement priority on Pioneer road is the grade separation of the WCL tracks. The second priority is from Military Road to Hickory Street and Hickory Street to Main Street.