

3+42 Lt.
Inp. 18" x 22" C.M.
Rem. & Replace

17+81 ±
Inp. 24" x 28" C.M. &
1' x 6" Conc. Head Wall
Remove Head Wall
Ext. 24" x 12" C.M. Lt.
Ext. 24" x 16" C.M. Rt.
2 - 24" Bands

21+20 Rt.
Pl. 15' x 30" C.M.

21+30 Lt.
Pl. 24" x 30" C.M.
Riprap East End Culv.

21+89 Rt.
Pl. 15' x 20" C.M.

| DATE | BY | REVISION |
|------|----|----------|
| | | |
| | | |
| | | |

| DATE | BY | REVISION |
|------|----|----------|
| | | |
| | | |
| | | |

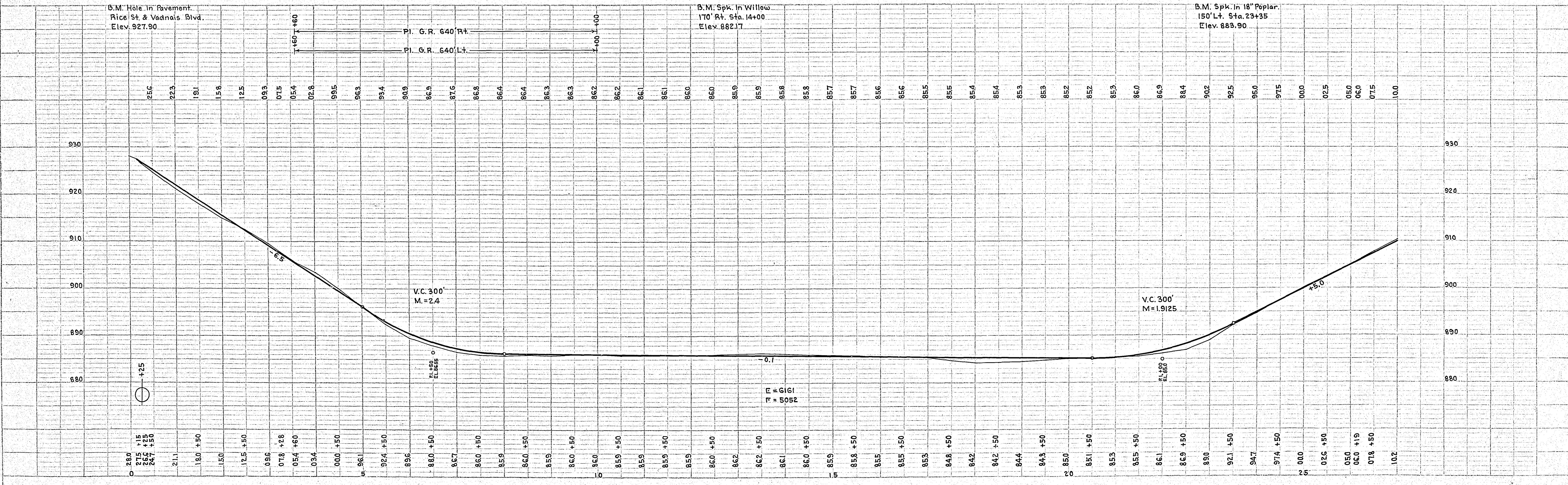
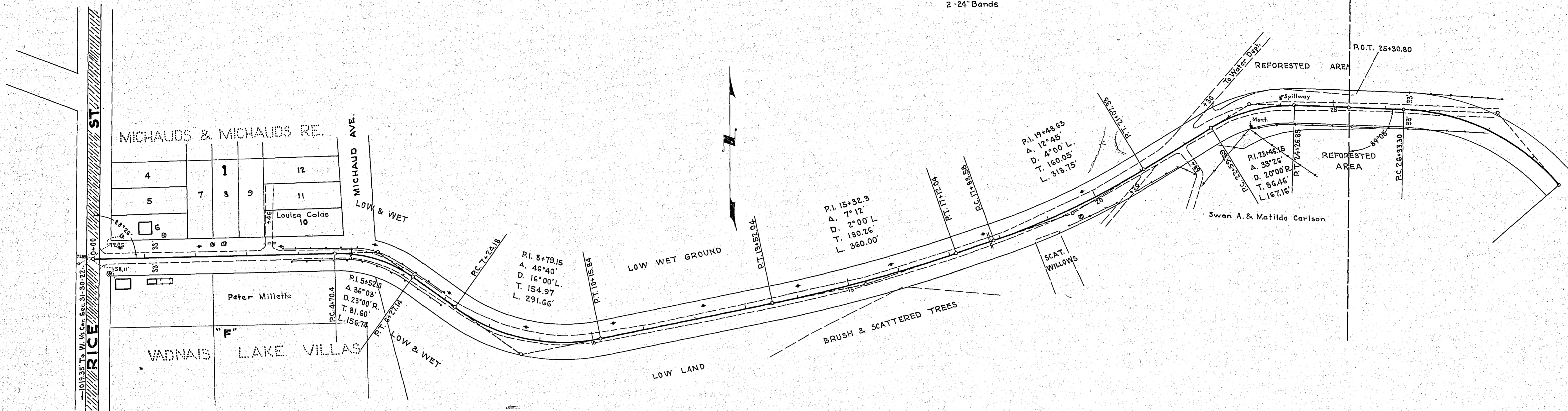
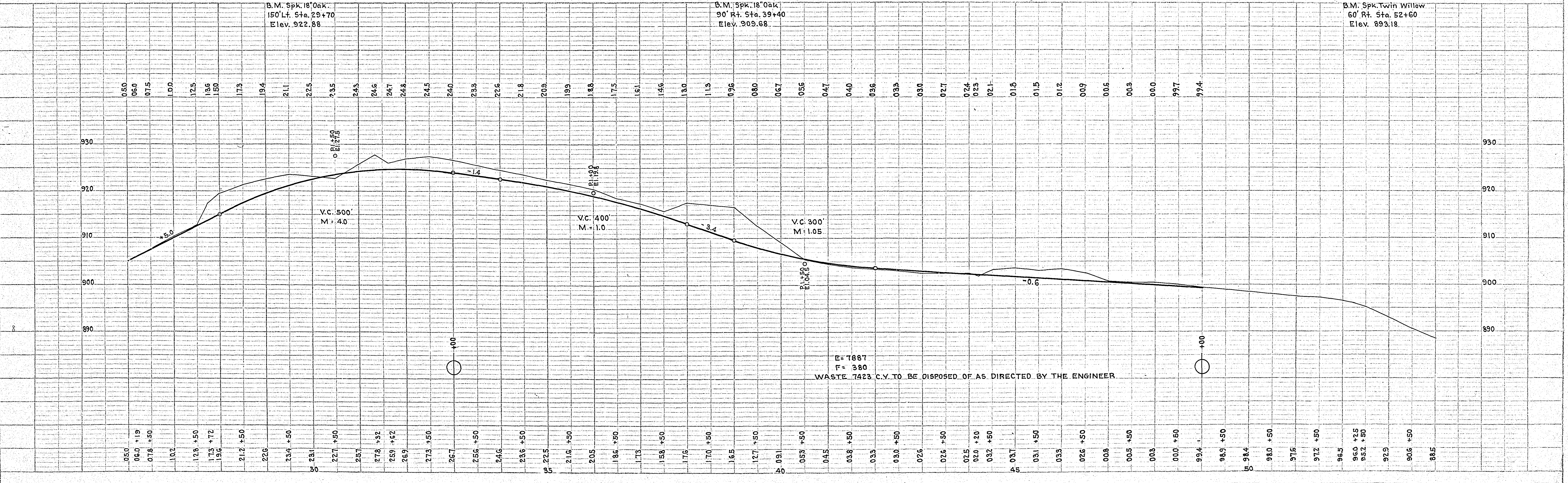
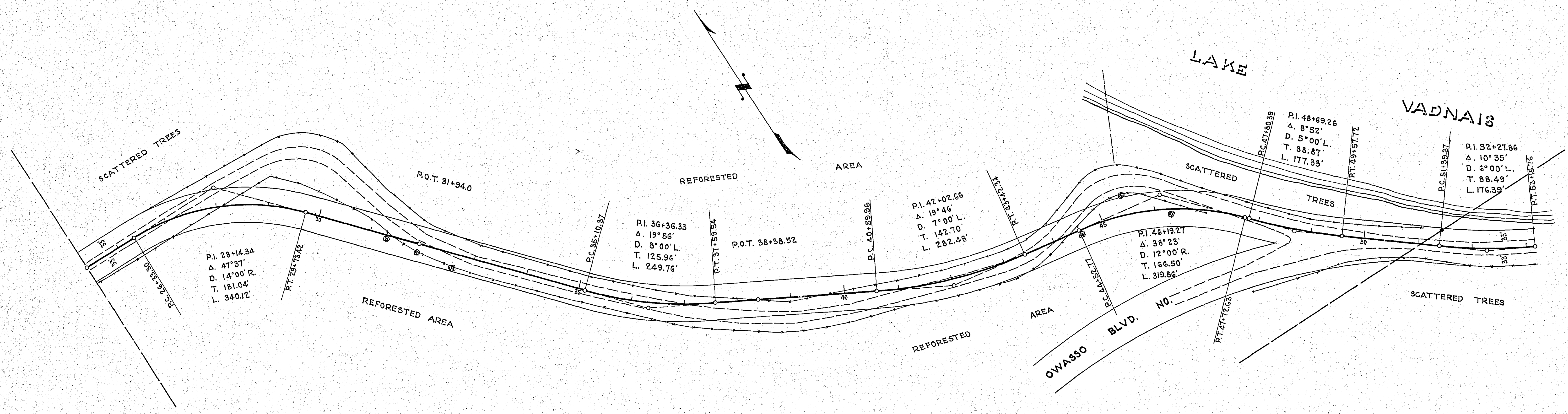


PLATE 1 - PLAN-PROFILE - D. P. A. & R. E. STANDARD
ROUTED BY ENGINEER, NEW YORK

PLAN
 SURVEYED BY DATE
 NOTE BOOK ALIGNMENT CHECKED
 RT. OF WAY CHECKED
 NO.

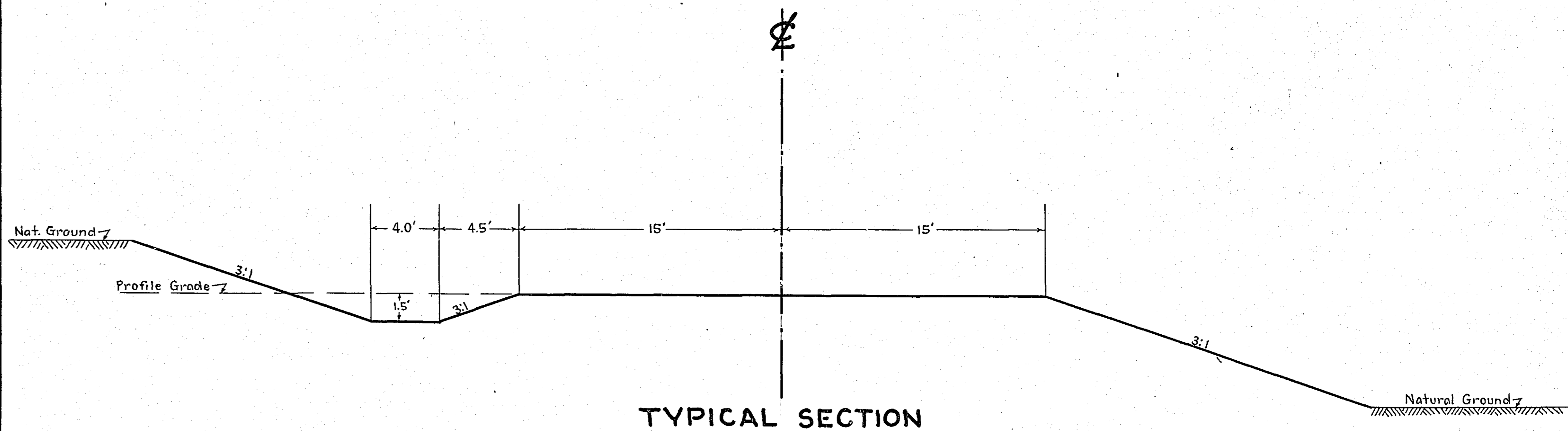
PROFILE
 SURVEYED BY DATE
 NOTE BOOK GRADES CHECKED
 B. M. NOTED
 STRUCTURE NOTED
 NO.



STATEMENT OF ESTIMATED QUANTITIES

| CLASS | ITEM | UNIT | MILE 1 From 0+00 To 49+00 | MILE From To | MILE From To | MILE From To | MILE From To | MILE From To | MILE From To | MILE From To | MILE From To | MILE From To | TOTAL ESTIMATED QUANTITIES |
|-------------------------|------|----------------------------|---------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|----------------------------------|
| GRADING | 1 | Clearing | Trees | | | | | | | | | | |
| | 2 | Grubbing | Trees | | | | | | | | | | |
| | 3 | Clearing | Acres | | | | | | | | | | |
| | 4 | Grubbing | Acres | | | | | | | | | | |
| | 5 | Excavation Earth | Cu. Yds. | 14046 | | | | | | | | | |
| | 6 | Excavation Loose Rock | Cu. Yds. | | | | | | | | | | |
| | 7 | Excavation Solid Rock | Cu. Yds. | | | | | | | | | | |
| | 8 | Excavation Overhaul | Cu. Yds. | | | | | | | | | | |
| | 9 | Excavation Special | Cu. Yds. | | | | | | | | | | |
| | 10 | Excavation Hand Ditch | Cu. Yds. | | | | | | | | | | |
| | 11 | Install 12" C.M. | Lin. Ft. | | | | | | | | | | |
| | 12 | Install 15" C.M. | Lin. Ft. | 50 | | | | | | | | | |
| | 13 | Install 18" C.M. | Lin. Ft. | | | | | | | | | | |
| | 14 | Install 24" C.M. | Lin. Ft. | 58 | | | | | | | | | |
| | 15 | Install | Lin. Ft. | | | | | | | | | | |
| | 16 | Install | Lin. Ft. | | | | | | | | | | |
| | 17 | Install 18" Ps | Lin. Ft. | | | | | | | | | | |
| | 18 | Install 24" Ps | Lin. Ft. | | | | | | | | | | |
| | 19 | Install 30" Ps | Lin. Ft. | | | | | | | | | | |
| | 20 | Install 36" Ps | Lin. Ft. | | | | | | | | | | |
| | 21 | Install | Lin. Ft. | | | | | | | | | | |
| | 22 | Install | Lin. Ft. | | | | | | | | | | |
| | 23 | Remove Old Culvert | Lin. Ft. | 22 | | | | | | | | | |
| | 24 | Replace Old Culvert | Lin. Ft. | 22 | | | | | | | | | |
| | 25 | Finishing and Seeding | 100 Sq.Yds. | | | | | | | | | | |
| | 26 | Rubble Gutter | Cu. Yds. | | | | | | | | | | |
| | 27 | Headwall Concrete | Cu. Yds. | | | | | | | | | | |
| | 28 | Headwall Steel | Lbs. | | | | | | | | | | |
| | 29 | Riprap | Cu.Yds. | 10 | | | | | | | | | |
| | 30 | | | | | | | | | | | | |
| | 31 | | | | | | | | | | | | |
| | 32 | | | | | | | | | | | | |
| C.M. CULVERTS | 1 | Furnish 12" C.M. | Lin. Ft. | | | | | | | | | | |
| | 2 | Furnish 15" C.M. | Lin. Ft. | 50 | | | | | | | | | |
| | 3 | Furnish 18" C.M. | Lin. Ft. | | | | | | | | | | |
| | 4 | Furnish 24" C.M. | Lin. Ft. | 58 | | | | | | | | | |
| | 5 | Furnish | Lin. Ft. | | | | | | | | | | |
| | 6 | Furnish | Lin. Ft. | | | | | | | | | | |
| | 7 | Furnish 12" C.M. Band | Each | | | | | | | | | | |
| | 8 | Furnish 24" C.M. Band | Each | 2 | | | | | | | | | |
| | 9 | | | | | | | | | | | | |
| | 10 | | | | | | | | | | | | |
| P ₃ CULVERTS | 1 | Furnish 18" Ps | Lin. Ft. | | | | | | | | | | |
| | 2 | Furnish 24" Ps | Lin. Ft. | | | | | | | | | | |
| | 3 | Furnish 30" Ps | Lin. Ft. | | | | | | | | | | |
| | 4 | Furnish 36" Ps | Lin. Ft. | | | | | | | | | | |
| | 5 | | | | | | | | | | | | |
| GUARD RAIL | 1 | Guard Rail - Cable | Lin. Ft. | 1280 | | | | | | | | | |
| | 2 | Guard Rail Anchors | Each | 4 | | | | | | | | | |
| | 3 | Dummy Posts | Each | | | | | | | | | | |
| | 4 | | | | | | | | | | | | |
| SIDEWALKS AND CURBING | 1 | Concrete Curb - Straight | Lin. Ft. | | | | | | | | | | |
| | 2 | Concrete Curb - Radius | Lin. Ft. | | | | | | | | | | |
| | 3 | Remove Old Curb | Lin. Ft. | | | | | | | | | | |
| | 4 | Remove Old Curb and Gutter | Lin. Ft. | | | | | | | | | | |
| | 5 | Remove Old Sidewalk | Sq. Ft. | | | | | | | | | | |
| | 6 | Replace Old Sidewalk | Sq. Ft. | | | | | | | | | | |
| | 7 | Construct New Sidewalk | Sq. Ft. | | | | | | | | | | |
| | 8 | Curb Inlet | Each | | | | | | | | | | |
| | 9 | Catch Basin Complete | Each | | | | | | | | | | |
| | 10 | | | | | | | | | | | | |
| | 11 | | | | | | | | | | | | |
| | 12 | | | | | | | | | | | | |
| SEWER | 1 | 12" Vitrified Sewer Pipe | Lin. Ft. | | | | | | | | | | |
| | 2 | 15" Vitrified Sewer Pipe | Lin. Ft. | | | | | | | | | | |
| | 3 | 18" Vitrified Sewer Pipe | Lin. Ft. | | | | | | | | | | |
| | 4 | 20" Vitrified Sewer Pipe | Lin. Ft. | | | | | | | | | | |
| | 5 | 24" Vitrified Sewer Pipe | Lin. Ft. | | | | | | | | | | |
| | 6 | Manhole Complete | Each | | | | | | | | | | |
| | 7 | Catch Basin Complete | Each | | | | | | | | | | |
| | 8 | | | | | | | | | | | | |
| | 9 | | | | | | | | | | | | |
| | 10 | | | | | | | | | | | | |
| PAVEMENT | 1 | Pavement - 1 Course Conc. | Sq. Yds. | | | | | | | | | | |
| | 2 | Pavement - Asphaltic Conc. | Sq. Yds. | | | | | | | | | | |
| | 3 | Integral Curb 6" | Lin. Ft. | | | | | | | | | | |
| | 4 | Integral Curb 12" | Lin. Ft. | | | | | | | | | | |
| | 5 | Surface Drain | Each | | | | | | | | | | |
| | 6 | Surface Drain Basin | Each | | | | | | | | | | |
| | 7 | Shoulders - Earth | Lin. Ft. | | | | | | | | | | |
| | 8 | | | | | | | | | | | | |
| STRUCTURES | 1 | Concrete | Cu. Yds. | | | | | | | | | | |
| | 2 | Reinforcing Steel | Lbs. | | | | | | | | | | |
| | 3 | Excavation | Cu. Yds. | | | | | | | | | | |
| | 4 | Piling | Lin. Ft. | | | | | | | | | | |
| | 5 | | | | | | | | | | | | |
| | 6 | | | | | | | | | | | | |
| | 7 | | | | | | | | | | | | |
| | 8 | | | | | | | | | | | | |
| | 9 | | | | | | | | | | | | |
| | 10 | | | | | | | | | | | | |

DETAILS



NOTE: USE 2:1 SLOPE FROM STA. 8+50 TO STA. 20+00

OFFICE OF
RAMSEY COUNTY SURVEYOR
HARRY S. BRONSON
GRADING PLAN OF
VADNAIS BLVD.
RICE ST. TO OWASSO BLVD. NO.
SCALE AS SHOWN APRIL 1938

PLANS APPROVED 1938 *Harry S. Bronson*
APPROVED 1938 *J. H. St. Peter*
APPROVED 1938 *W. J. ...*