

S.H. 551 & S.H. 11 SEC. A GRADE SEPARATION
TOLEDO-DETROIT ROAD & TOLEDO-TERMINAL R.R.
LUCAS Co., OHIO.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS

TOLEDO - DETROIT ROAD
GRADE SEPARATION WITH TOLEDO TERMINAL RAILROAD
RELOCATION & DIVERSION OF S.H.#551 SEC.A, S.H.#11 SEC.A, GRADE SEPARATION - TOLEDO TERMINAL R.R. PET. NO 6952
LUCAS COUNTY
WASHINGTON TOWNSHIP
1931

See Sheet No. 4 of these plans for completion dates

The contractor shall at all times maintain highway traffic on S.H. No. 11 between Station 16+28.13 South and Station 6+21.52 South and between Station 6+00 North and Station 8+60.98 North. He shall provide watchmen and take any other means to insure the safety of traffic when, in the opinion of the Engineer, his operations so require.

WORK SHOWN ON THESE PLANS WILL BE DONE AS FOLLOWS: THE STATE WILL AWARD THE CONTRACT FOR ALL WORK TO BE DONE ON PROPOSAL NO. 1 STA. 16+28.13 S TO STA. 6+21.52 S (S+60.52 S R.R.) AND STA. 6+00 N (STA. 7+24.8 N R.R.) TO STA. 22+25.26 N ALSO PROPOSAL NO. 2 BRIDGE ON DIVERSION OF S.H. 551. THE TOLEDO TERMINAL R.R. WILL AWARD CONTRACT NO. 1 PROPOSAL NO. 3 STA. 6+21.52 S (S+60.52 S R.R.) TO STA. 6+00 N R.R. INCLUDES ALL WORK EXCEPT FINE GRADING, SUB GRADE TREATMENT, UNDERDRAINS, SEEDING, PAVING, CURBING, SIDEWALKS, 18" SEWER, 24" SEWER, WATERLINE & FINISHING C&S & M.H.S. WITHIN PAVEMENT LIMITS. THE STATE WILL AWARD CONTRACT NO. 2 PROPOSAL NO. 3 WHICH INCLUDES ALL WORK FROM STA. 6+21.52 S (S+60.52 S R.R.) TO STA. 6+00 N NOT DONE BY RAILROAD CONTRACTOR. ALSO ALL WORK FROM STA. 6+00 N TO STA. 6+23.8 N (STA. 7+24.8 N R.R.) ON DIVERSION ROAD AND STA. 8+61 ON S.H. #11, ALSO ALL WORK ON RELOCATION OF LASKEY ROAD AND ALL WORK ON DETOUR ROAD.

CONSTRUCTION PROCEDURE:—
THE STATE CONTRACTOR SHALL FIRST CONSTRUCT THE RELOCATED S.H. 550 (LASKEY ROAD), THE DETOUR ROAD AND THE WESTERLY 17 FT. WIDENING SECTION SOUTH OF RAILROAD. THE TOLEDO TERMINAL R.R. SHALL CONSTRUCT THE TEMPORARY CROSSING ON THE DETOUR ROAD.

UPON THE COMPLETION OF THE ABOVE WORK S.H. #11 SHALL BE CLOSED TO TRAFFIC AND THE RECONTRACTOR SHALL BEGIN WORK AT ONCE ON CONTRACT NO. 1 OF PROPOSAL NO. 3, FIRST CONSTRUCTING THE PUMPING PLANT AND DISCHARGE PIPE. UPON COMPLETION OF CONTRACT NO. 1 BY THE RAILROAD CONTRACTOR THE STATE CONTRACTOR WILL BEGIN WORK ON PAVEMENT ETC. CONT. 2 PROP. NO. 3. ALL WORK BY THE RAILROAD CONTRACTOR SHALL PROCEED IN SUCH A MANNER AS TO AVOID UNNECESSARY DELAY TO THE STATE CONTRACTOR. DURING CONSTRUCTION OF CONTRACT NO. 1 PROP. NO. 3 STATE CONTRACTOR SHALL COMPLETE PROP. I & II. E.P. III.

ON CONTRACT NO. 1 PROPOSAL NO. 3 R.R. CONTRACTOR SHALL COMPLETE ALL M.H.S., C&S, & INLETS WITHIN THE LIMITS OF THE PAVEMENT TO SUBGRADE ELEVATION ONLY. HE SHALL FURNISH THE NECESSARY CASTINGS THEREFOR & STORE SAME AT THE SITE OF THE WORK FOR PLACING BY THE STATE CONTRACTOR. ALL UNFINISHED DRAINAGE STRUCTURES SHALL BE PROPERLY PLANKED TO AVOID SEDIMENTATION.

We, the Commissioners of Lucas County, Do hereby approve these Plans and certify that the Right of Way 100 Feet Minimum Width is available for the construction, maintenance and repair of Proposal No. 1 that part north of Toledo Terminal Railroad, and Proposal No. 2 of this improvement.

[Signatures]
Lucas County Commissioners

THESE PLANS TOGETHER WITH TOLEDO TERMINAL R.R. GENERAL PLAN NO. B-3-10 FOR PROPOSAL III AND DETAILED PLANS SUPPLEMENTARY THERETO SHALL CONSTITUTE COMPLETE PLANS FOR THIS IMPROVEMENT.

The Standard Specifications of the State of Ohio, Department of Highways in force on the date of contract shall govern all highway work on this improvement and the aforesaid specifications together with Supplemental Specifications for Winter Bridge Construction for Emergency Relief will govern Proposal No. 2 of this improvement. Section 8 of the Supplemental Specifications for Winter Bridge Construction for Emergency Relief shall govern the progress, prosecution and completion of all grading and drainage work on Proposal No. 1 and Proposal No. 3. Toledo Terminal Specifications shall govern Railroad Work.

I, Hereby Approve these plans and declare that the making of this improvement will require the closing to traffic of the Highway and that detours will be provided as shown on the plans and estimates. Necessary right of way will be provided for Proposal No. 3

Approved *[Signature]*
Date Sept. 1, 1931 Resident District Deputy Director

Approved *[Signature]*
Date Sept. 9, 1931 Resident Division Deputy Director

Approved *[Signature]*
Date 10-26-31 Chief Engineer, Bureau of Construction

Approved _____
Date _____ Chief Engineer, Bureau of Maintenance

Approved *[Signature]*
Date 10-26-31 Chief Engineer, Bureau of Bridges

Approved *[Signature]*
Date 10-26-31 Chief Engineer and First Assistant Director

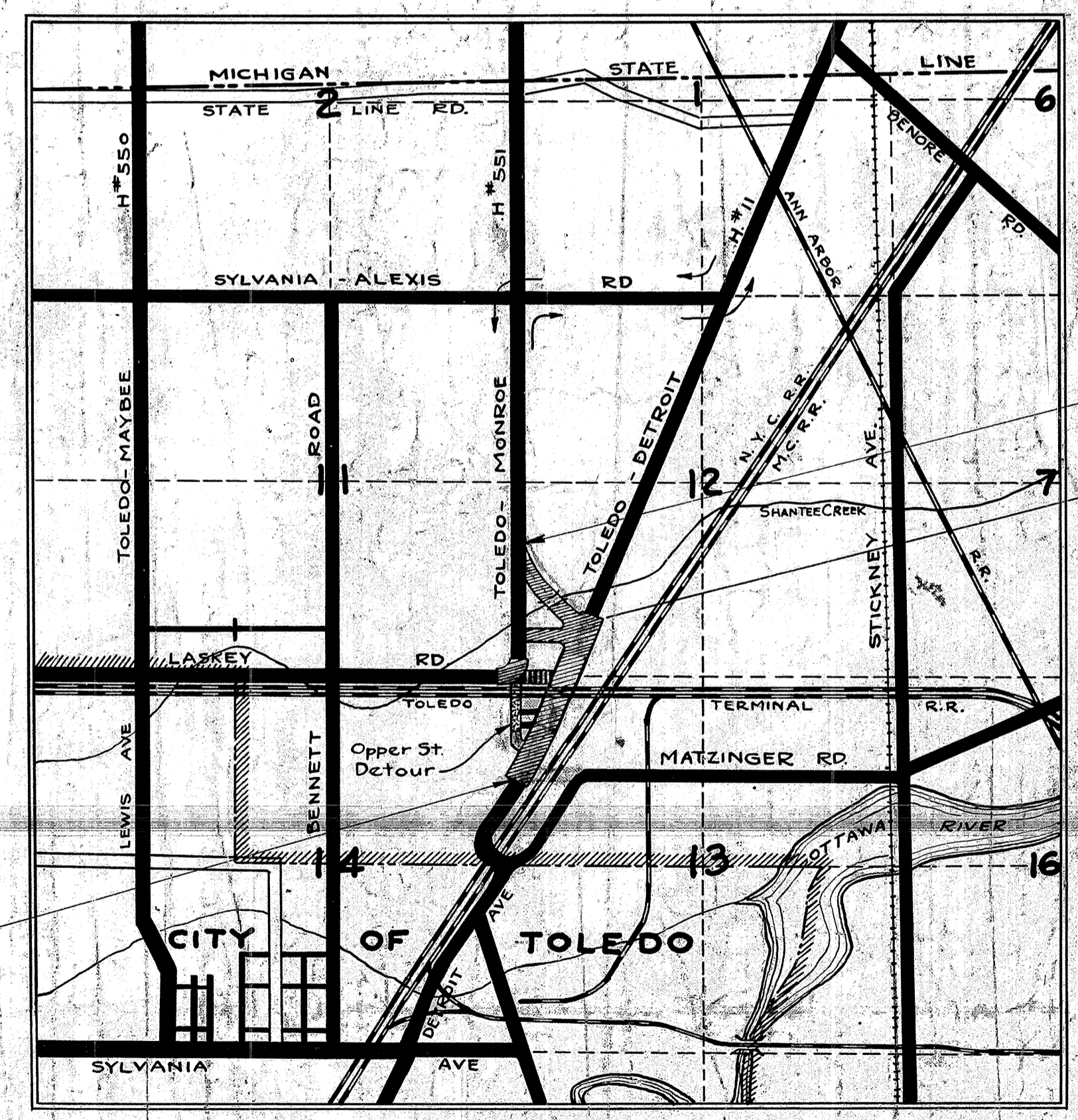
Approved *[Signature]*
Date 10-26-31 Director of Highways

Recommended for Approval _____
Date _____ District Engineer Bureau of Public Roads

Recommended for Approval _____
Date _____ Chief Engineer Bureau of Public Roads

Approved _____
Date _____ Chief of Bureau

Approved for THE TOLEDO TERMINAL RAILROAD as to Proposal No. 3
By _____



Sta. 22+25.26 End of Project
Sta. 6+00 N End of Project

NOTE
The State's contractor must start work immediately on all grading and drainage work on Proposal No. 1 and on Proposal No. 3, contract No. 2 and must prosecute this work continuously through the winter without interruption. This work shall be governed as to progress, prosecution and completion by Section 8 of The Supplemental Specifications for Winter Bridge Construction for Emergency Relief.

Work must start at once and be prosecuted continuously on Proposal No. 2 under specifications noted elsewhere hereon.

SCALE: 3" = 1 MILE

INDEX OF SHEETS

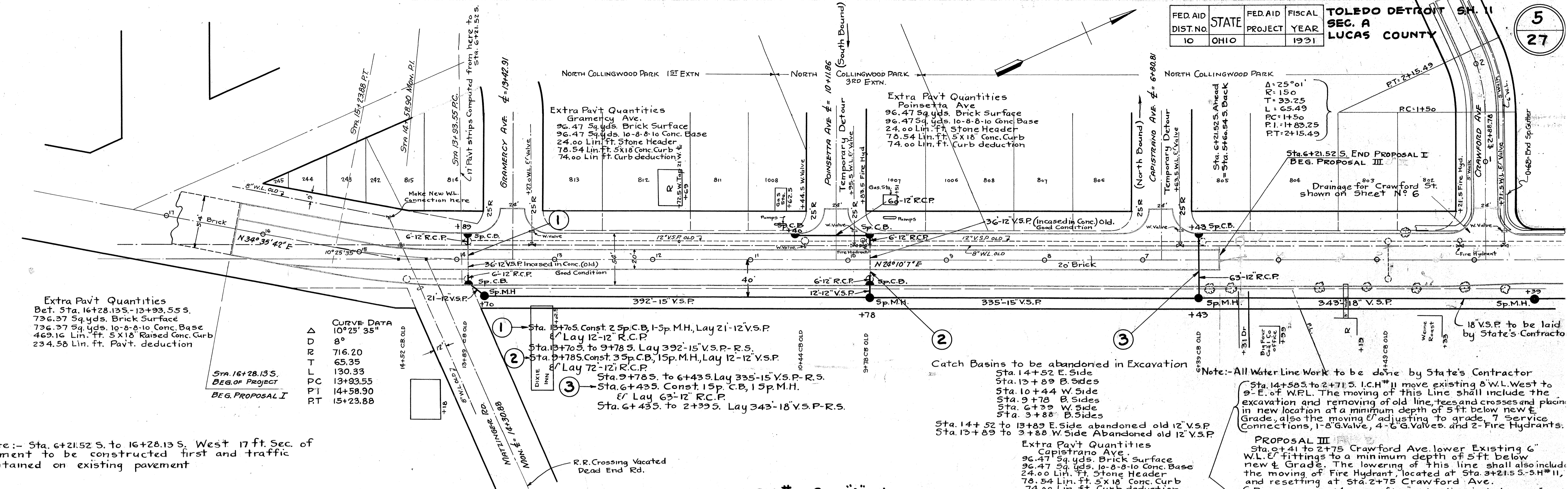
TITLE SHEET	No. 1
TYPICAL CROSS SECTIONS	No's. 2, 3 and 4
PLAN SHEETS	No's. 5 to 9 inclusive
CROSS-SECTIONS	No's. 10 to 19 inclusive
STRUCTURES (UNDER 20' SPAN)	No's. 20 and 21
STRUCTURE (OVER 20' SPAN)	No. 22
STRUCTURE DETAILS	No. 23
PUMPING PLANT	No's. 24 and 25
SUMMARY SHEETS	No's. 26 and 27

CONVENTIONAL SIGNS

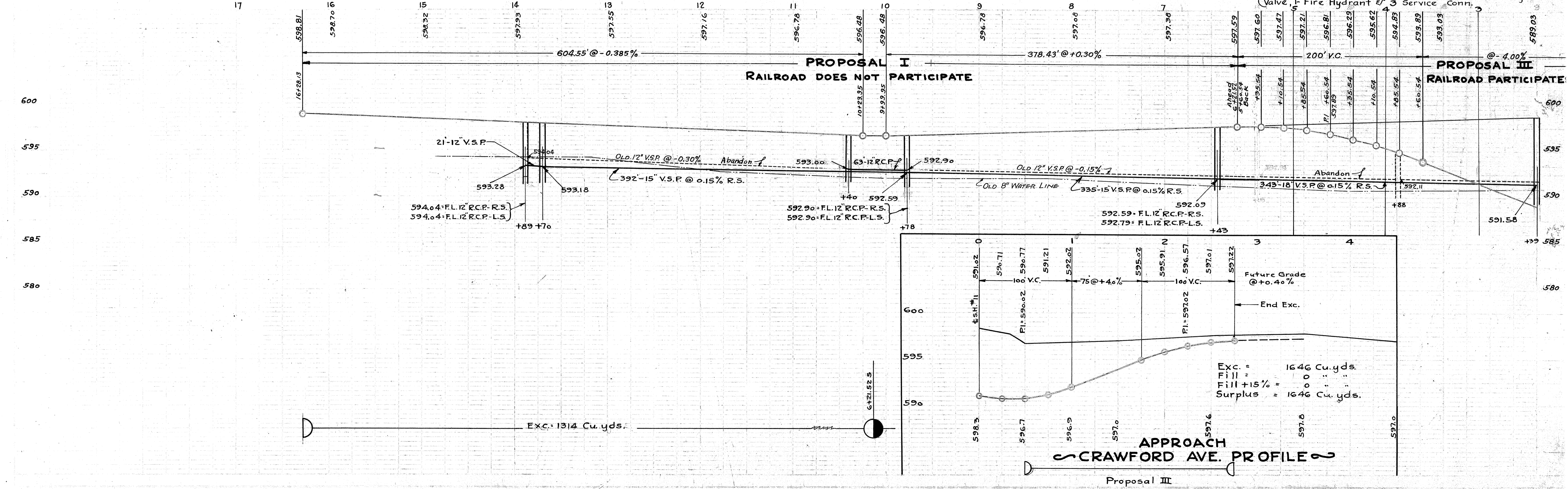
State Line	-----
Township Line	-----
Section Line	-----
Property Line (Not fenced)	-----
Center Line	o-o-o-o-o
City or Village Line	-----
Fence	x-x-x-x-x
Telephone or Telegraph	7-7-7-7-7
Steam Railroad	-----
Electric Line	-----
Guard Rail	-----
Drain Pipe - New	-----
Drain Pipe - Old	-----
Water Line	-----
Fire Hydrant	o
Detour Road to be Improved	-----
Sections to be Improved	-----
Improved Roads	-----
Direction of Detour	-----

SUPPLEMENTAL DRAWINGS
No's 95, 98, 100, 131, Mod. 134 Mod., A5-31,
SR-A

FED. AID DIST. NO.	STATE	FED. AID PROJECT	FISCAL YEAR	TOLEDO DETROIT SH. #11 SEC. A LUCAS COUNTY
10	OHIO		1931	

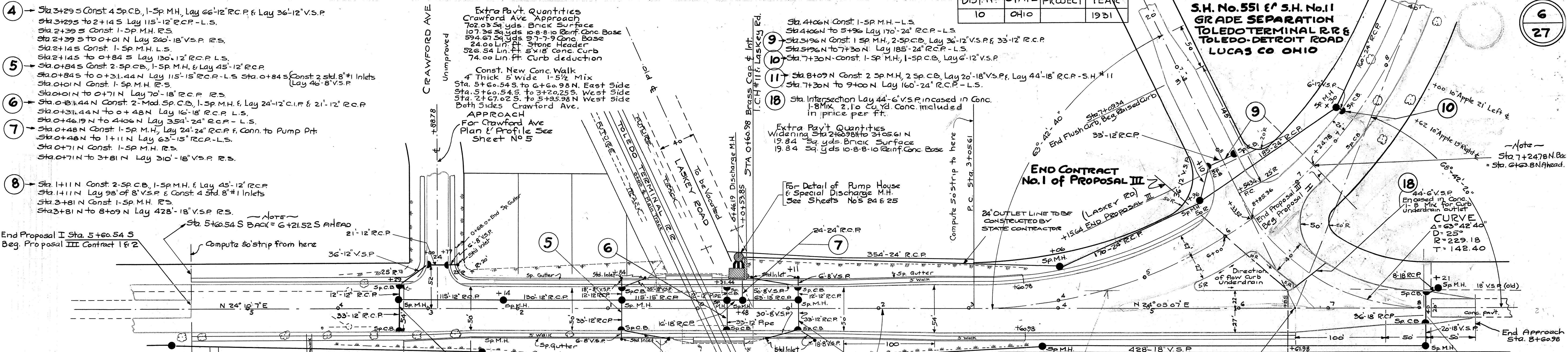


~ SH. #11 SEC. A WIDENING ~
 PROPOSAL I



FED.AID DIST. NO.	STATE	FED.AID PROJECT	FISCAL YEAR
10	OHIO		1931

S.H. No. 551 E/ S.H. No. 11
 GRADE SEPARATION
 TOLEDO TERMINAL R.R. &
 TOLEDO-DETROIT ROAD
 LUCAS CO OHIO



Extra Pavt. Quantities
 Widening Sta. 5+60.54 to Sta. 3+2578.5
 104.34 Sq. yds. Brick Surface
 104.34 Sq. yds. 10-8-8-10 Reinf. Conc. Base

Extra Pavt. Quantities
 Flare Sta. 2+51.78 S East Side
 8.22 Sq. yds. Brick Surface
 8.22 Sq. yds. 10-8-8-10 Reinf. Conc. Base
 0.03 Lin. ft. 5x18 Conc. Curb

Extra Pavt. Quantities
 Sta. 1+49.02 to 1+70.98 N
 640.00 Lin. ft. 5x18 Raised Conc. Curb
 488.00 Lin. ft. Variable Curb

Extra Pavt. Quantities
 Crawford Ave. Approach
 702.03 Sq. yds. Brick Surface
 107.36 Sq. yds. 10-8-8-10 Reinf. Conc. Base
 594.67 Sq. yds. 9-7-7-9 Conc. Base
 24.00 Lin. ft. Stone Header
 526.54 Lin. ft. 5x18 Conc. Curb
 74.00 Lin. ft. Curb deduction

Const. New Conc. Walk
 4\" Thick 5 Wide 1-5/2 Mix
 Sta. 5+60.54 S. to 6+60.98 N. East Side
 Sta. 5+60.54 S. to 3+20.25 S. West Side
 Sta. 2+67.02 S. to 5+95.98 N. West Side
 Both Sides Crawford Ave.

APPROACH
 For Crawford Ave
 Plan & Profile See
 Sheet No 5

Extra Pavt. Quantities
 Flare Sta. 4+09.88 N to 2+40.98 N
 22.22 Sq. yds. Brick Surface
 22.22 Sq. yds. 10-8-8-10 Reinf. Conc. Base
 0.04 Lin. ft. 5x18 Conc. Curb

Extra Pavt. Quantities
 Widen Sta. 2+40.98 N to 2+40.98 N
 19.84 Sq. yds. Brick Surface
 19.84 Sq. yds. 10-8-8-10 Reinf. Conc. Base

For Detail of Pump House
 & Special Discharge M.H.
 See Sheets Nos 24 & 25

24\" OUTLET LINE TO BE
 CONSTRUCTED BY
 STATE CONTRACTOR

Compute 50' strip to here
 P.C. Sta. 3+05.61

END CONTRACT
 No. 1 of PROPOSAL III
 (LASKEY RD)

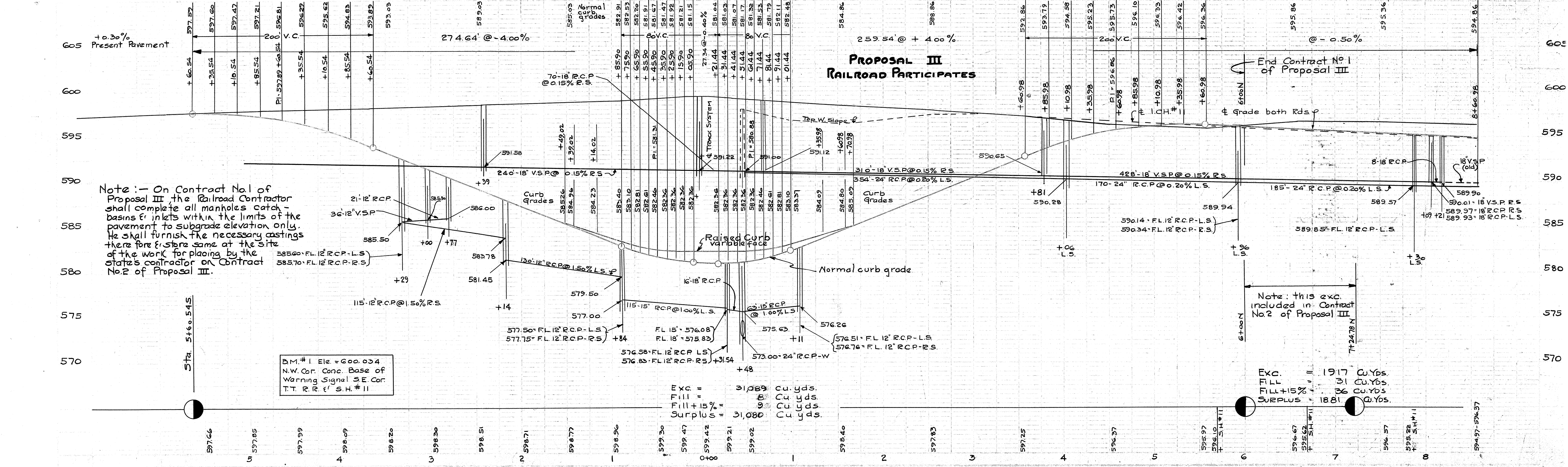
~ CURVE DATA ~
 Δ = 63° 42' 20\"
 D = 11\"
 T = 356.02'
 L = 624.59'
 R = 520.87'
 P.C. = Sta. 3+05.61
 P.I. = Sta. 6+61.63
 P.T. = Sta. 8+69.22

Note: 4' 5\" of Rds
 intersect at Sta. 6+61.63 S.H. #11
 & Sta. 9+96.74 Laskey Rd. Relocation.

REF TO P.I. OF CURVE +10.98N END PROPOSAL III
 30.80 NE to Spk in T.P.
 88.39 SE to Spk in T.P.

Extra Pavt. Quantities
 In Sta. 3+05.61 N to 7+24.78 N
 50.00 Sq. yds. Brick Surface
 50.00 Sq. yds. 10-8-8-10 Reinf. Conc. Base
 13.81 Lin. ft. 5x18 Conc. Curb
 419.17 Lin. ft. Pavt. Deduction

Exist. Pavement to be broken
 Sta. 5+60.54 S. to Sta. 8+10.98 N. S.H. #11



Note: - On Contract No. 1 of Proposal III, the Railroad Contractor shall complete all manholes catch-basins & inlets within the limits of the pavement to subgrade elevation only. He shall furnish the necessary castings there for & store same at the site of the work for placing by the state contractor on Contract No. 2 of Proposal III.

D.M. #1 Elev = 600.034
 N.W. Cor. Conc. Base of
 Warning Signal SE Cor.
 T.T. R.R. E/ S.H. #11

Exc. = 31,089 Cu. yds.
 FILL = 98 Cu. yds.
 FILL + 15% = 112 Cu. yds.
 Surplus = 31,080 Cu. yds.

Exc. = 1917 Cu. Yds.
 FILL = 31 Cu. Yds.
 FILL + 15% = 36 Cu. Yds.
 SURPLUS = 1881 Cu. Yds.

FED. AID DIST. NO.	STATE	FED. AID PROJECT	FISCAL YEAR
10	OHIO		1931

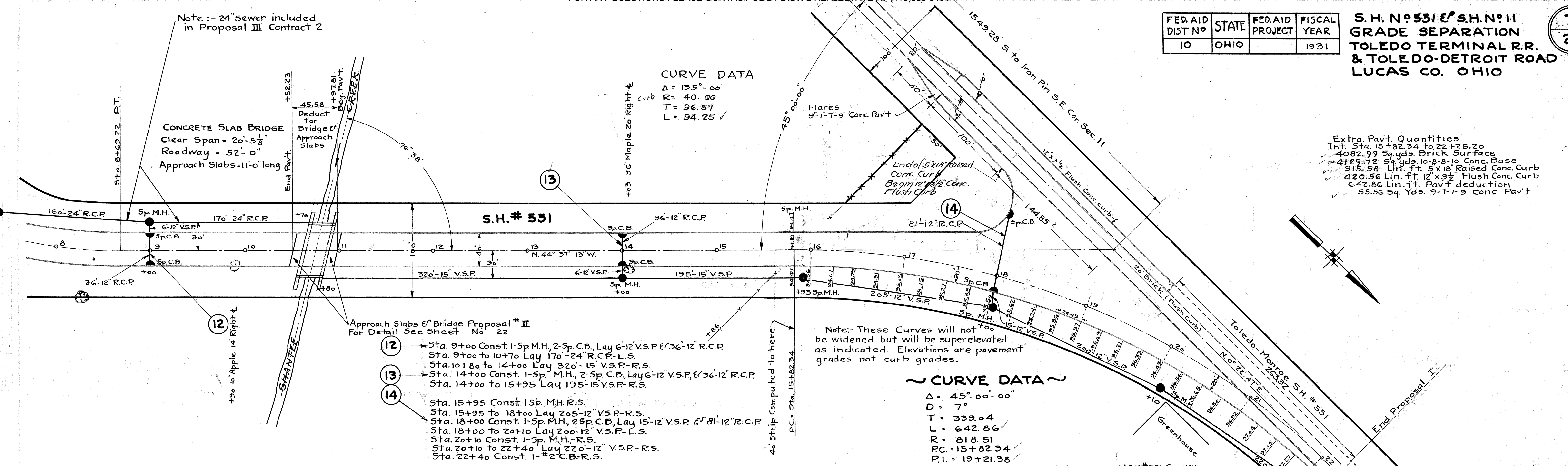
S. H. N^o 551 & S. H. N^o 11
 GRADE SEPARATION
 TOLEDO TERMINAL R.R.
 & TOLEDO-DETROIT ROAD
 LUCAS CO. OHIO

Note: - 24" sewer included in Proposal III Contract 2

CONCRETE SLAB BRIDGE
 Clear Span = 20'-5 1/8"
 Roadway = 52'-0"
 Approach Slabs = 11'-0" long

CURVE DATA
 $\Delta = 135^{\circ}00'$
 $R = 40.00$
 $T = 96.57$
 $L = 94.25$

Extra Pavt. Quantities
 Int. Sta. 15+82.34 to 22+25.20
 4082.99 Sq. yds. Brick Surface
 4129.72 Sq. yds. 10-8-10 Conc. Base
 915.58 Lin. Ft. 5x18 Raised Conc. Curb
 420.56 Lin. Ft. 12x3 1/2 Flush Conc. Curb
 642.86 Lin. Ft. Pavt. deduction
 55.56 Sq. Yds. 9-7-7-9 Conc. Pavt

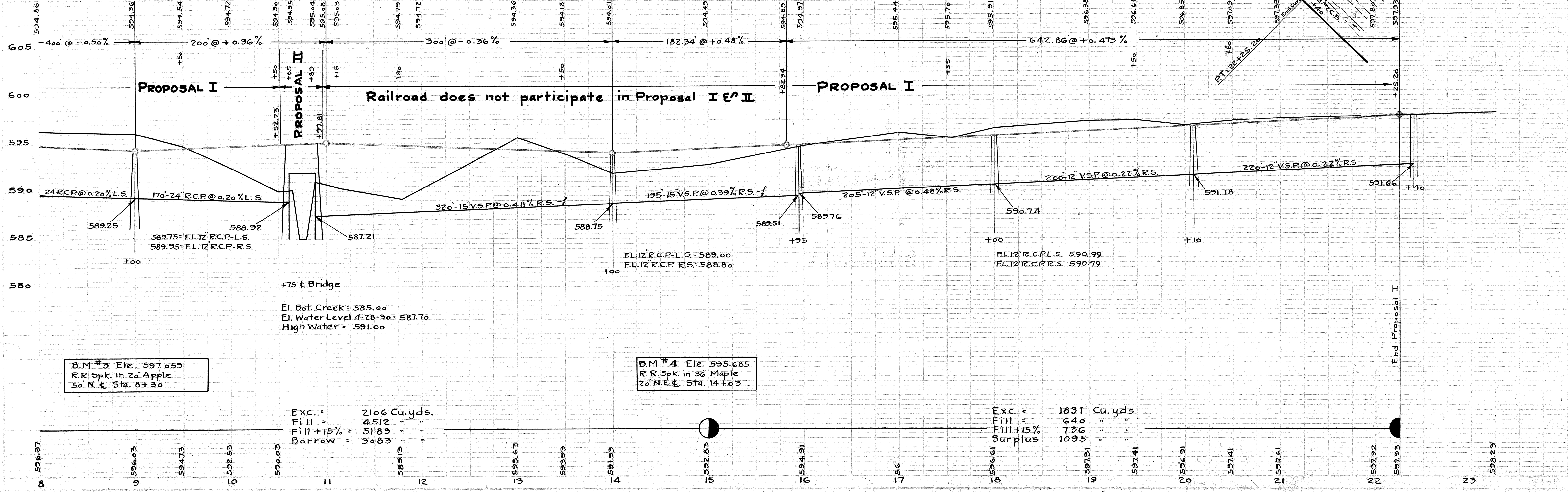


Note: These Curves will not be widened but will be superelevated as indicated. Elevations are pavement grades not curb grades.

~ CURVE DATA ~

$\Delta = 45^{\circ}00'00''$
 $D = 7^{\circ}$
 $T = 339.04$
 $L = 642.86$
 $R = 818.51$
 $PC = 15+82.34$
 $PI = 19+21.38$
 $PT = 22+25.20 - 63+82.71$ (old Crabb Rd.) S.H.#551 Survey
 REF. TO P.I.
 9.42' E. to x in conc. header
 41.38' W. to Tack in Hub

~ DIVERSION of S.H. # 551 ~
 PROPOSAL I



B.M. #3 Ele. 597.059
 R.R. Spk. in 20' Apple
 50' N. of Sta. 8+30

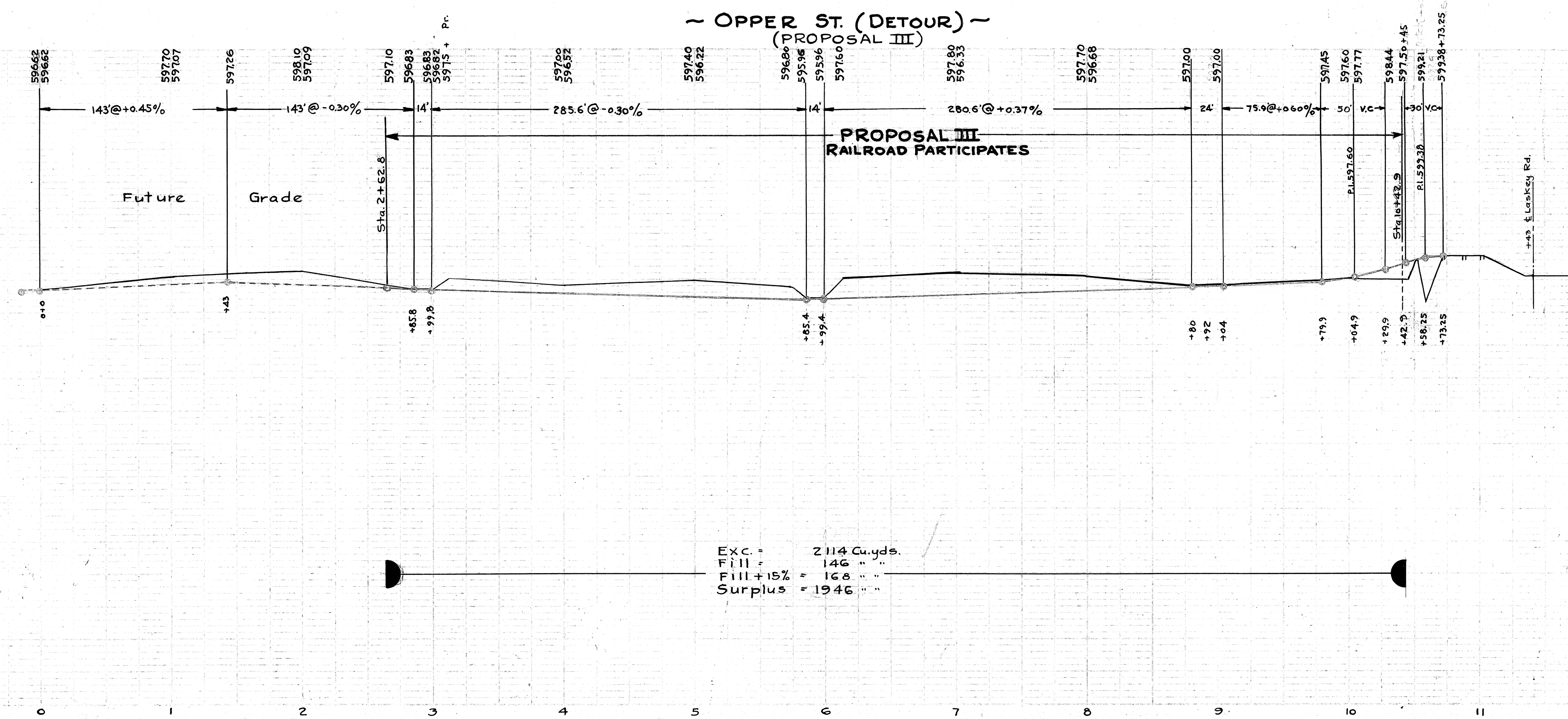
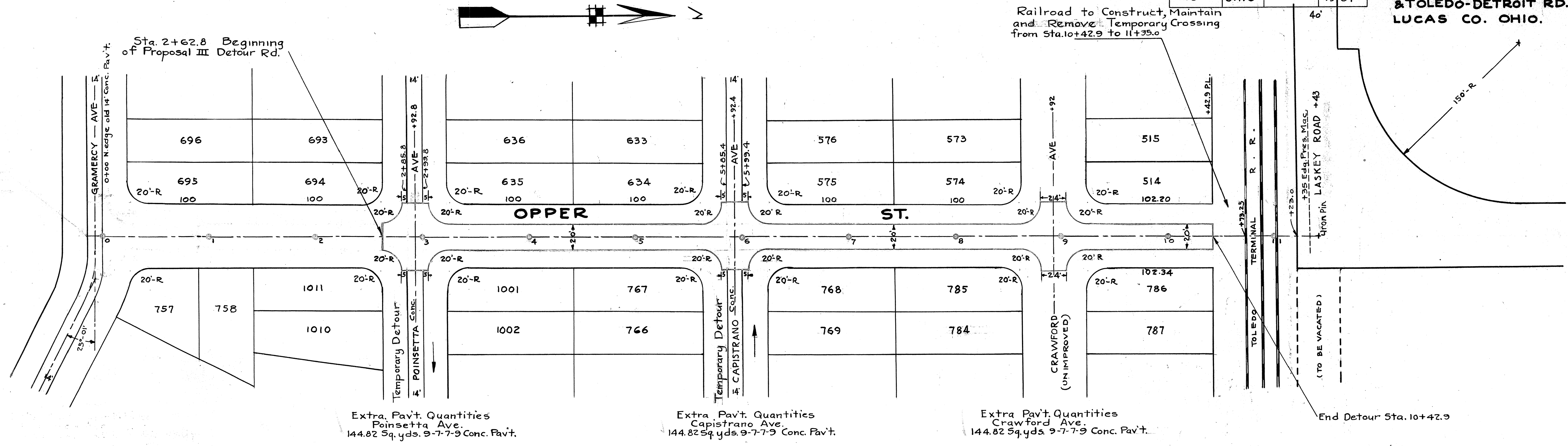
B.M. #4 Ele. 595.685
 R.R. Spk. in 36' Maple
 20' N.E. of Sta. 14+03

Exc. = 2106 Cu. yds.
 Fill = 4512
 Fill + 15% = 5189
 Borrow = 3083

Exc. = 1831 Cu. yds.
 Fill = 640
 Fill + 15% = 736
 Surplus = 1095

FED AID DIST. NO.	STATE	FED AID PROJECT	FISCAL YEAR
10	OHIO		1931

S.H. No 551 E / S.H. No 11
 GRADE SEPARATION
 TOLEDO TERMINAL R.R.
 & TOLEDO-DETROIT RD.
 LUCAS CO. OHIO.



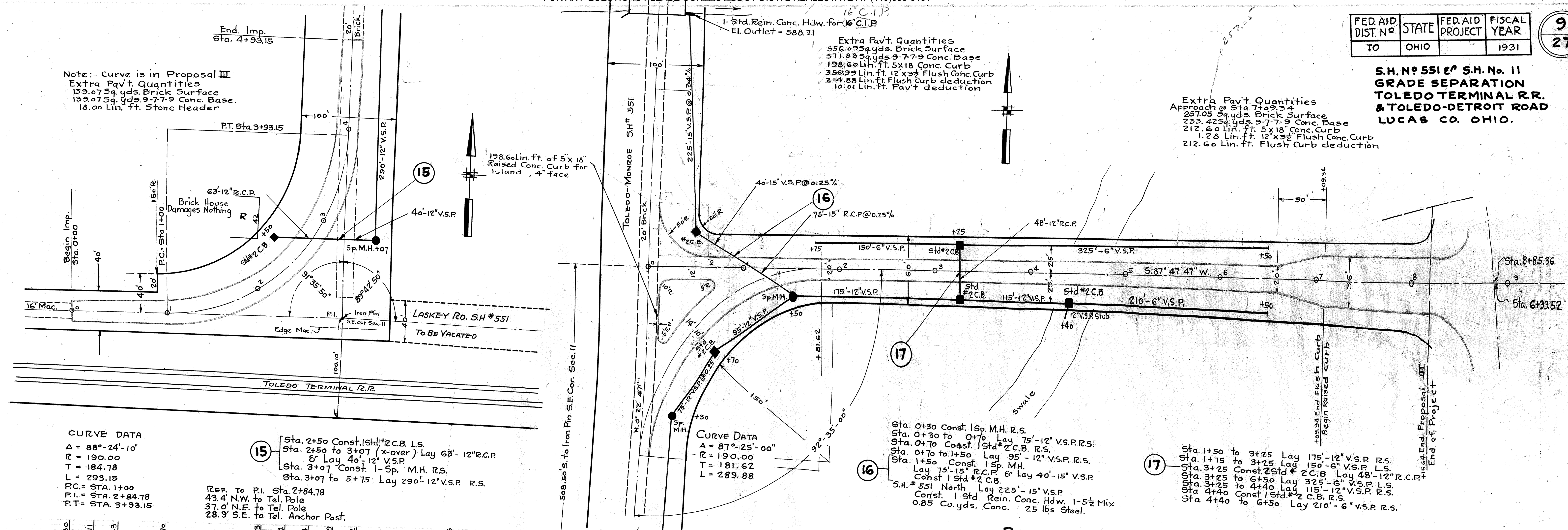
FED. AID DIST. NO.	STATE	FED. AID PROJECT	FISCAL YEAR
TO	OHIO		1931

**S.H. No. 551 & S.H. No. 11
GRADE SEPARATION
TOLEDO TERMINAL R.R.
& TOLEDO-DETROIT ROAD
LUCAS CO. OHIO.**

Note: Curve is in Proposal III
Extra Pav't Quantities
139.07 Sq. yds. Brick Surface
139.07 Sq. yds. 9-7-9 Conc. Base
18.00 Lin. ft. Stone Header

Extra Pav't Quantities
556.99 Sq. yds. Brick Surface
571.88 Sq. yds. 9-7-9 Conc. Base
198.60 Lin. ft. 5x18 Conc. Curb
356.99 Lin. ft. 12'x3' Flush Conc. Curb
214.88 Lin. ft. Flush Curb deduction
10.01 Lin. ft. Pav't deduction

Extra Pav't Quantities
Approach @ Sta. 7+03.34
257.05 Sq. yds. Brick Surface
233.42 Sq. yds. 9-7-9 Conc. Base
212.60 Lin. ft. 5x18 Conc. Curb
1.20 Lin. ft. 12'x3' Flush Conc. Curb
212.60 Lin. ft. Flush Curb deduction



CURVE DATA

Δ = 88°-24'-10"
RR = 190.00
T = 184.78
L = 293.15
PC = STA. 1+00
PI = STA. 2+84.78
PT = STA. 3+93.15

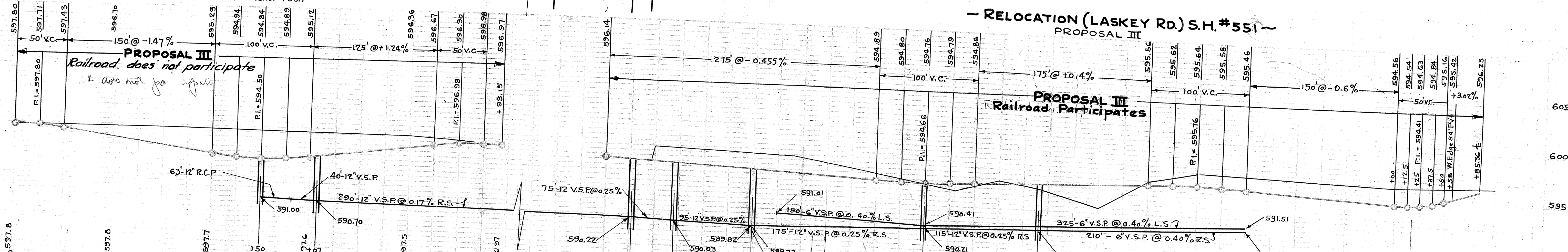
REF. TO P.I. Sta. 2+84.78
43.4' NW to Tel. Pole
37.0' N to Tel. Pole
28.9' S to Tel. Anchor Post.

CURVE DATA

A = 87°-25'-00"
R = 190.00
T = 181.62
L = 289.88

Sta. 0+30 Const. 1 Sp. M.H. R.S.
Sta. 0+30 to 0+70 Lay 75'-12" V.S.P. R.S.
Sta. 0+70 Const. 1st #2 C.B. R.S.
Sta. 0+70 to 1+50 Lay 95'-12" V.S.P. R.S.
Sta. 1+50 Const. 1 Sp. M.H.
Lay 75'-15" R.C.P. & Lay 40'-15" V.S.P.
Const. 1st #2 C.B.
S.H. # 551 North Lay 225'-15" V.S.P.
Const. 1 Std. Rein. Conc. Hdw. 1-5/8" Mix
0.85 Cu. yds. Conc. 25 lbs Steel.

Sta. 1+50 to 3+25 Lay 175'-12" V.S.P. R.S.
Sta. 1+75 to 3+25 Lay 150'-6" V.S.P. L.S.
Sta. 3+25 Const. 2nd #2 C.B. Lay 48'-12" R.C.P.
Sta. 3+25 to 6+50 Lay 325'-6" V.S.P. L.S.
Sta. 4+25 to 4+40 Lay 115'-12" V.S.P. R.S.
Sta. 4+40 Const. 1st #2 C.B. R.S.
Sta. 4+40 to 6+50 Lay 210'-6" V.S.P. R.S.



SCHEDULE OF SUPERELEVATION AND WIDENING STA. 0+00 TO 4+93.15

LEFT	CENTER		RIGHT	
	W	STA	GRADE	W
0.17	597.63	0+00	597.80	10.0
0.17	597.54	0+25	597.71	10.0
0.17	597.26	0+50	597.43	10.0
0.17	596.89	0+75	597.06	10.0
0.17	596.53	1+00	596.70	10.0
0.17	596.16	1+25	596.33	10.0
0.17	595.79	1+50	595.96	10.0
0.17	595.42	1+75	595.59	10.0
0.17	595.06	2+00	595.23	10.0
0.17	594.77	2+25	594.94	10.0
0.17	594.47	2+50	594.84	10.0
0.17	594.25	2+75	594.89	10.0
0.17	594.00	3+00	595.12	10.0
0.17	593.75	3+25	595.43	10.0
0.17	593.54	3+50	595.74	10.0
0.17	593.36	3+75	596.05	10.0
0.17	593.21	4+00	596.36	10.0
0.17	593.08	4+25	596.67	10.0
0.17	592.98	4+50	596.98	10.0
0.17	592.81	4+75	596.98	10.0
0.17	592.68	5+00	596.97	10.0
0.17	592.50	5+25	596.80	10.0
0.17	592.37	5+50	596.63	10.0
0.17	592.20	5+75	596.46	10.0
0.17	592.08	6+00	596.29	10.0
0.17	591.92	6+25	596.12	10.0
0.17	591.76	6+50	595.95	10.0
0.17	591.64	6+75	595.78	10.0
0.17	591.45	7+00	595.61	10.0
0.17	591.22	7+25	595.44	10.0
0.17	591.07	7+50	595.27	10.0
0.17	590.90	7+75	595.10	10.0
0.17	590.74	8+00	594.93	10.0
0.17	590.57	8+25	594.76	10.0
0.17	590.41	8+50	594.59	10.0
0.17	590.21	8+75	594.42	10.0
0.17	590.00	9+00	594.25	10.0
0.17	589.80	9+25	594.08	10.0
0.17	589.60	9+50	593.91	10.0
0.17	589.40	9+75	593.74	10.0
0.17	589.20	10+00	593.57	10.0

CURVE

Exc.	1293	Cu. yds.
Fill	12	Cu. yds.
Fill + 15%	14	Cu. yds.
Surplus	1279	Cu. yds.

CURVE

Exc.	3131	Cu. yds.
Fill	185	Cu. yds.
Fill + 15%	213	Cu. yds.
Surplus	2918	Cu. yds.

B.M. #2 Ele. = 598.558
Spk in T.P. S. side Laskey Rd. (old)
150' E. of (Crabb Rd) S.H. #551

End of Project