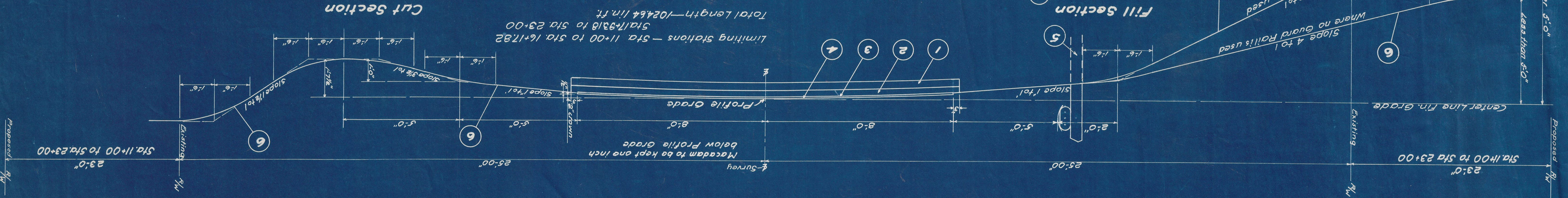


POST WARR	2	OHIO	S-457 (1)
TYPE FUNDS	11	PROJECT	
RD. NO.		STATE	
BIST. NO.		PROJECT	

MADISON COUNTY HWY. NO. T-70

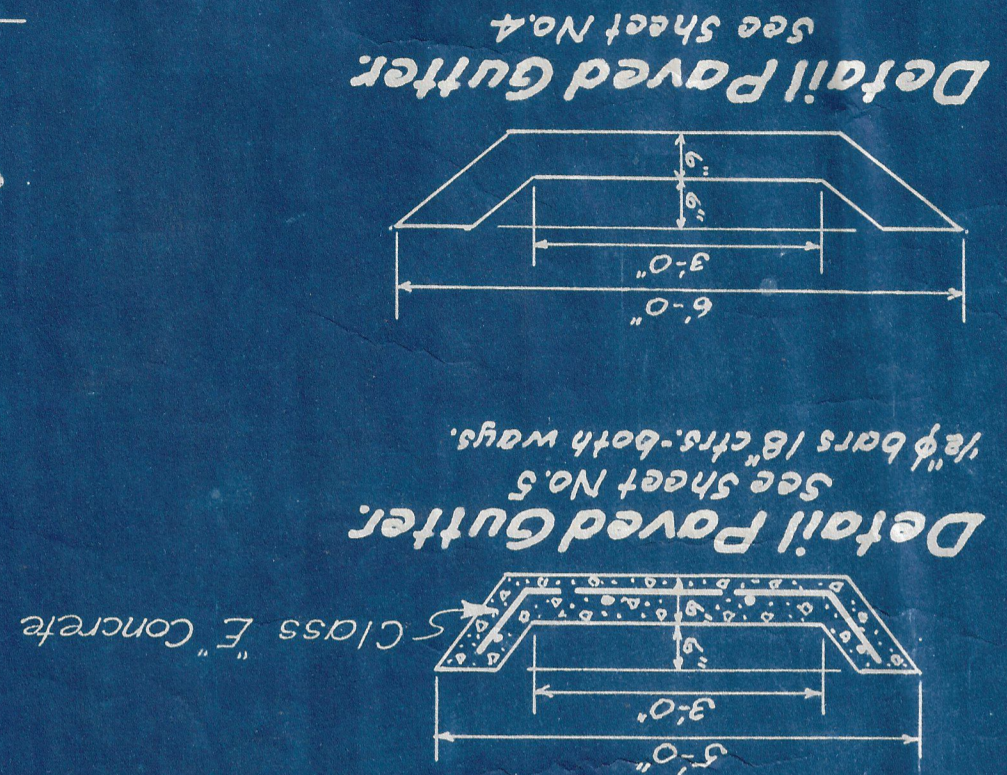
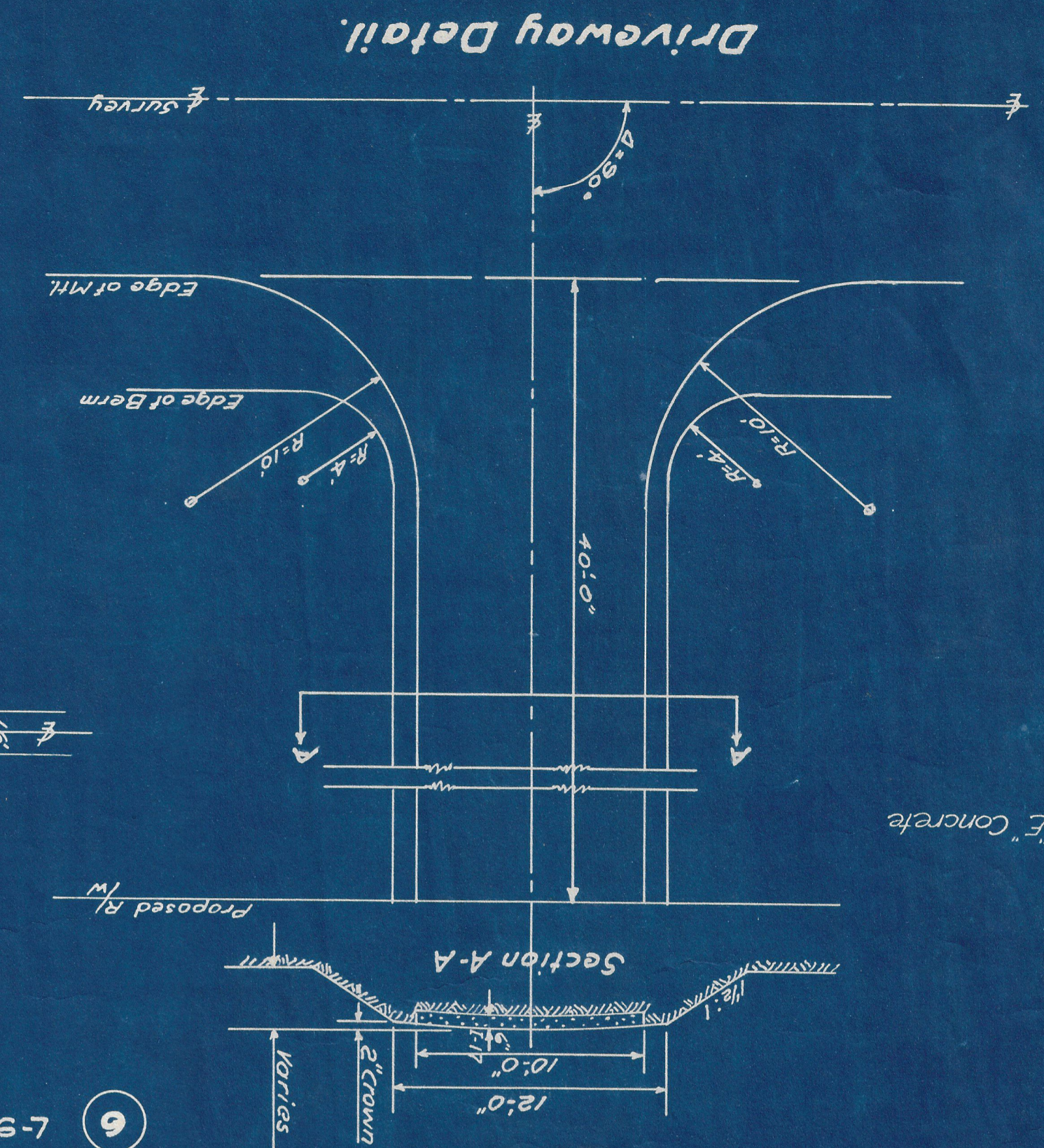
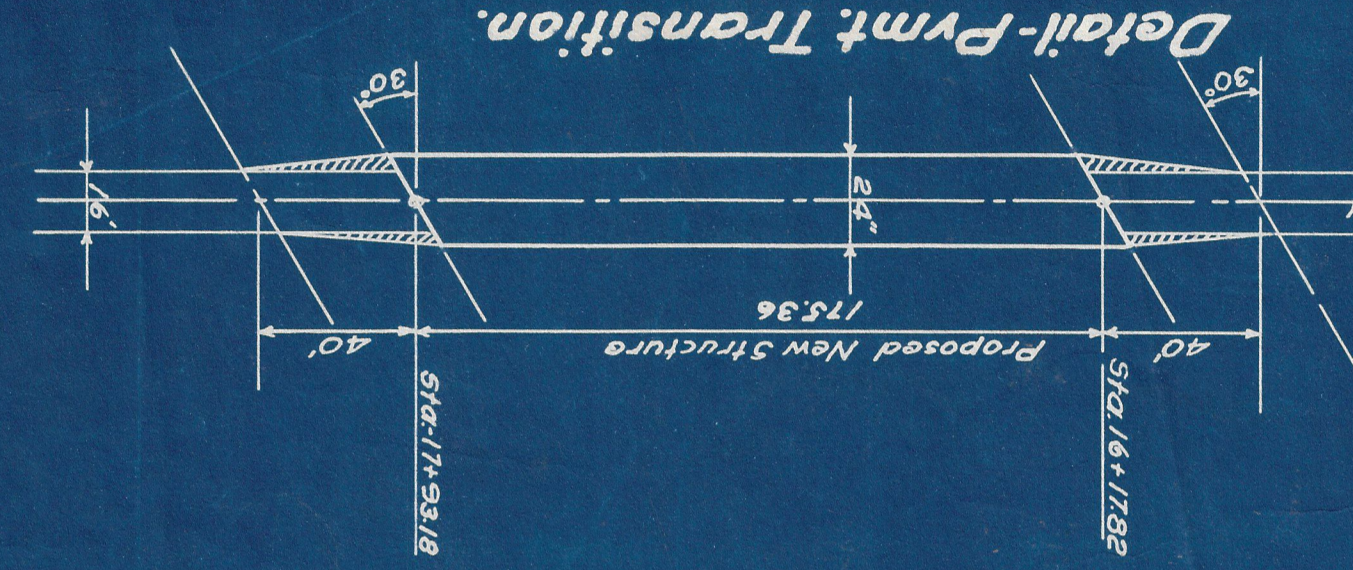
TYPICAL SECTION TYPE B-20



Limiting Stations - Sta. 11+00 to Sta. 16+17.82
 Sta. 17+93.18 to Sta. 23+00
 Total Length - 1024.64 lin. ft.

GENERAL NOTES

GUARD RAIL.
 Guard Rail shall be flared to meet bridge railing in such a manner that the change in alignment of the guard rail will not exceed 1 to 10.
 Posts shall be 6"x8" square sawed wood posts, but treated. (Sections M-B.5 & M-B.6)



MADISON COUNTY
HWY. NO. T-70

APPROACHES

Sheet No.	I-17	I-1
	6" Aggregate	12" Pipe
	Sq. Yds.	Lin. Ft.
5	100	18
Totals	100	18

GUARD RAIL

Sheet No.	I-15	I-15	I-15
	Removed & Stored	Removed & Rebuilt	Type I-15.14
	Lin. Ft.	Lin. Ft.	Lin. Ft.
4	1007	193	1007
5	590		443
Totals	1597	193	1450

CALCULATIONS

Begin Project Sta- 11+00
 End Project Sta- 23+00
 Gross Length 1200 lin. ft.
 Deduct for Bridge 175.36 lin. ft.
 Net Length 1024.64 lin. ft.

1024.64' x 16.5' x 1/8 = 1879 sq. yds.
 Add for Bridge Transitions 36 sq. yds.
 Total Pavement Area 1915 sq. yds.

8" Waterbound Macadam Base Course Item B-20
 Estimated Area 1915 sq. yds.

Bituminous Prime Coat, including sand cover. Item T-30
 1915 x 0.35 = 670 gal.

Item I-17 6" thick
 100 sq. yds. x 1/6 x 115% = 20 cu. yds.

GENERAL SUMMARY

Item	Description	Est. Pmnt.	Total	
			CODE TYPE 3210	Units
Roadway				
E-1	Roadway Excavation	337	337	cu. yds.
E-4	Borrow	4762	4762	cu. yds.
E-9	Removal of Trees and Stumps	8	8	each
E-11	Water	22	22	M. gal.
Structures				
I-1	12" Pipe for Driveways	18	18	lin. ft.
I-14	Paved Gutters	137	137	lin. ft.
I-15	Guard Rail Removed and Stored	1597	1597	lin. ft.
I-15	Guard Rail Removed and Rebuilt	193	193	lin. ft.
I-15	Guard Rail Steel Beam Type (Shallow) or Flexible Steel Plate Tension Type, Standard Strength	1450	1450	lin. ft.
I-17	Side Approaches, Mail Box Turnouts & Berm Material	20	20	Cu. Yds.
L-9	Seeding & Protecting Type A	6818	6818	sq. yds.
L-9	Commercial Fertilizer (10-6-4)	0.61	0.61	tons

RIPRAP

Sheet No.	Type "A" Sq. Yds.
4	137
5	27
Total	164

PAVED GUTTER

Sheet No.	Plain	Reinf.
	Lin. Ft.	Lin. Ft.
4	137	
5		27
Totals	137	27*

* Carried to Sheet 9

ROADSIDE IMPROVEMENT

Sheet No.	L-9 Seeding Type "A"	L-9 Commercial Fertilizer	L-9 Agricultural Ground Limestone
	Sq. Yds.	Tons	Tons
4 & 5	6818	0.61	
Totals	6818	0.61	

TREES & STUMPS

Sheet No.	Removal of Trees & Stumps
	Units
4	2
5	6
Total	8

EARTHWORK E-1 E-4

Sheet No.	Station		Exc. Cu. Yds.	Emb. Cu. Yds.	Emb. +20% Cu. Yds.	Borrow Cu. Yds.
	From	To				
6	11+00	16+16.82	56	2959	3351	
7	17+94.18	24+00	281	1527	1832	
		Total	337	4486	5383	5046

Gross Borrow 5046 cu. yds.
 E-2 & E-3 Excavation from Sheet No. 9 284 " "
 Net Borrow 4762 " "

Pavement				
B-20	8" Waterbound Macadam Base Course (2-4" Courses)	1915	1915	sq. yds.
T-30	Bituminous Prime Coat - Sec. M57-RF2 or RF-3, including sand cover	670	670	Gals.

Structures over 20' Span				
For Estimated Quantities see Sheet No. 9				

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

GENERAL SUMMARY & CALCULATIONS
BRIDGE NO. T-70-1
OVER DEER CREEK
MADISON CO. TH-70
STA. 17+05.5

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
G.T.C.	G.T.C.	G.T.C.				

J. Gladstone Holway

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	S-457 (1)	POST WAR

4
11

MADISON COUNTY
HWY. NO. T-70.

Ref. No.	Station		Side	I-15		
	From	To		Remove & Store Lin. Ft.	Type I-15.14 Lin. Ft.	Remove & Rebuild Lin. Ft.
G-1	10+00	10+96.5	Rt. & Lt.			193
G-2	10+96.5	16+00	"	1007		
G-3	10+96.5	16+00	"		1007	
Totals				1007	1007	193

E-9 Removal of Trees & Stumps

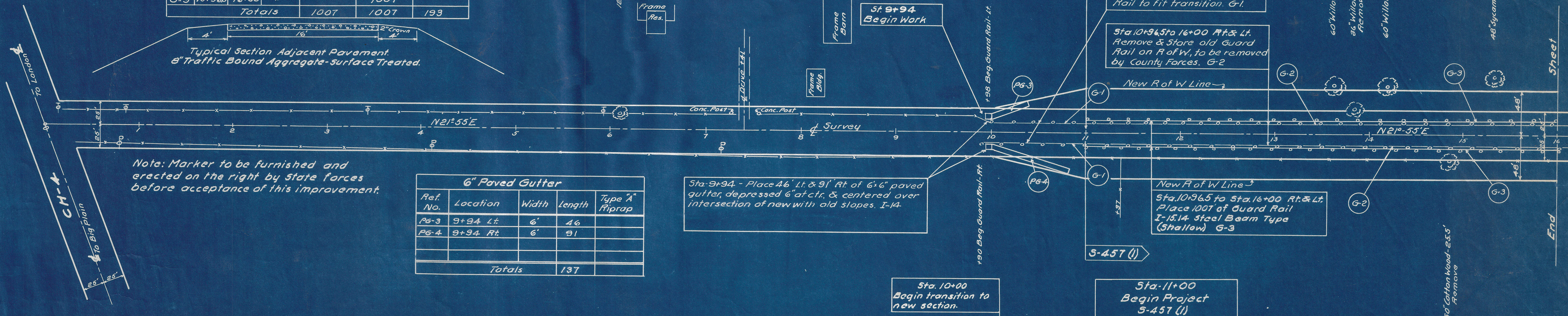
Sta.	Location	Kind	No.
13+85	25' Lt.	36" Willow	1
14+85	25' Rt.	50" Cottonwood	1
Total			2



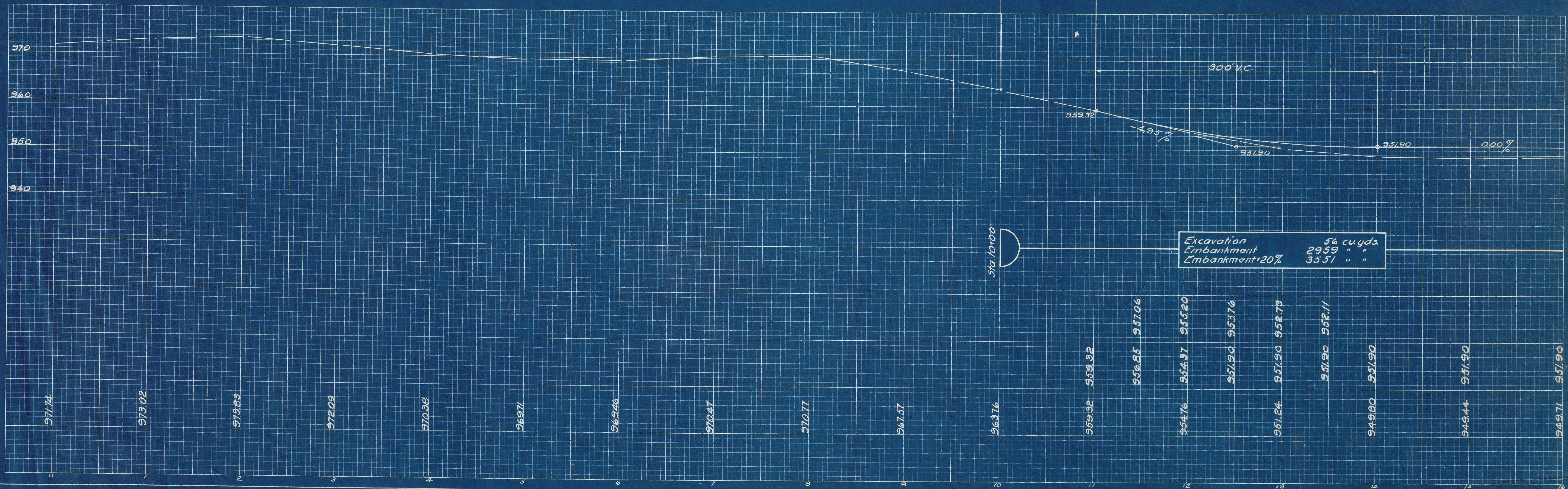
Note: Marker to be furnished and erected on the right by State forces before acceptance of this improvement.

Ref. No.	Location	Width	Length	Type "A" Riprap
PG-3	9+94 Lt.	6'	46	
PG-4	9+94 Rt.	6'	91	
Totals			137	

Sta. 9+94 - Place 46' Lt. & 91' Rt. of 6"x6" paved gutter, depressed 6" at ctr. & centered over intersection of new with old slopes. I-14.



The Starr-Jackson Mining Co.



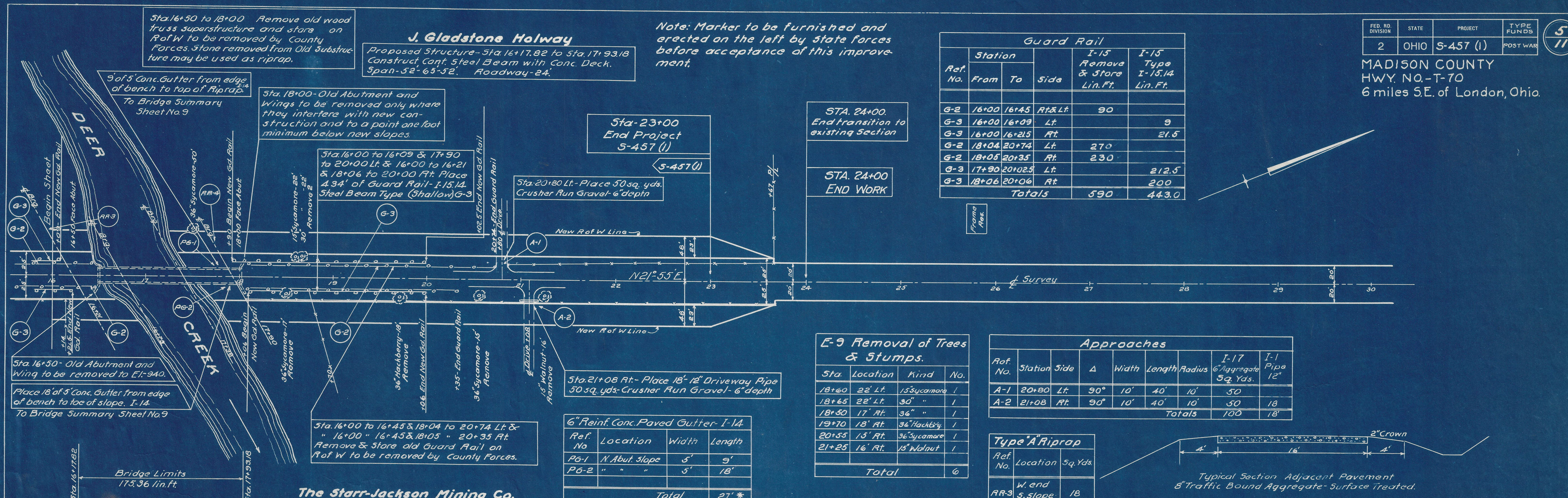
MADISON COUNTY
HWY. NO.-T-70
6 miles S.E. of London, Ohio.

Sta. 16+50 to 18+00 Remove old wood truss superstructure and store on Rof W to be removed by County Forces. Stone removed from Old Substructure may be used as riprap.

J. Gladstone Holway
Proposed Structure - Sta. 16+17.82 to Sta. 17+93.18
Construct Cont. Steel Beam with Conc. Deck.
Span - 52'-65'-52". Roadway - 24'.

Note: Marker to be furnished and erected on the left by State forces before acceptance of this improvement.

Guard Rail					
Ref. No.	Station		Side	I-15 Remove & Store Lin. Ft.	I-15 Type I-15.14 Lin. Ft.
	From	To			
G-2	16+00	16+45	Rt & Lt	90	
G-3	16+00	16+09	Lt		9
G-3	16+00	16+25	Rt		21.5
G-2	18+04	20+74	Lt	270	
G-2	18+05	20+35	Rt	230	
G-3	17+90	20+02.5	Lt		212.5
G-3	18+06	20+06	Rt		200
Totals				590	443.0



E-9 Removal of Trees & Stumps.

Sta.	Location	Kind	No.	
18+60	22' Lt	15 Sycamore	1	
18+65	22' Lt	30 "	1	
18+50	17' Rt	36 "	1	
19+70	18' Rt	36 Hackberry	1	
20+55	15' Rt	36 Sycamore	1	
21+25	16' Rt	15 Walnut	1	
Total				6

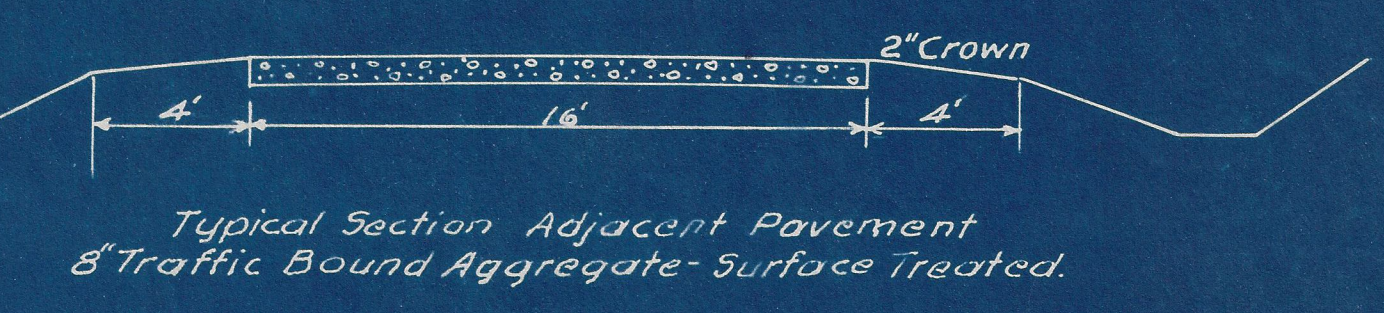
Approaches

Ref. No.	Station	Side	Δ	Width	Length	Radius	I-17 6" Aggregate Sq. Yds.	I-1 12" Pipe	
A-1	20+80	Lt	90°	10'	40'	10'	50		
A-2	21+08	Rt	90°	10'	40'	10'	50	18	
Totals								100	18

Type "A" Riprap

Ref. No.	Location	Sq. Yds.
RR-3	W. end S. slope	18
RR-4	W. end N. slope	32
Total		50 *

See Site Plan for location.
* Carried to Sheet 9

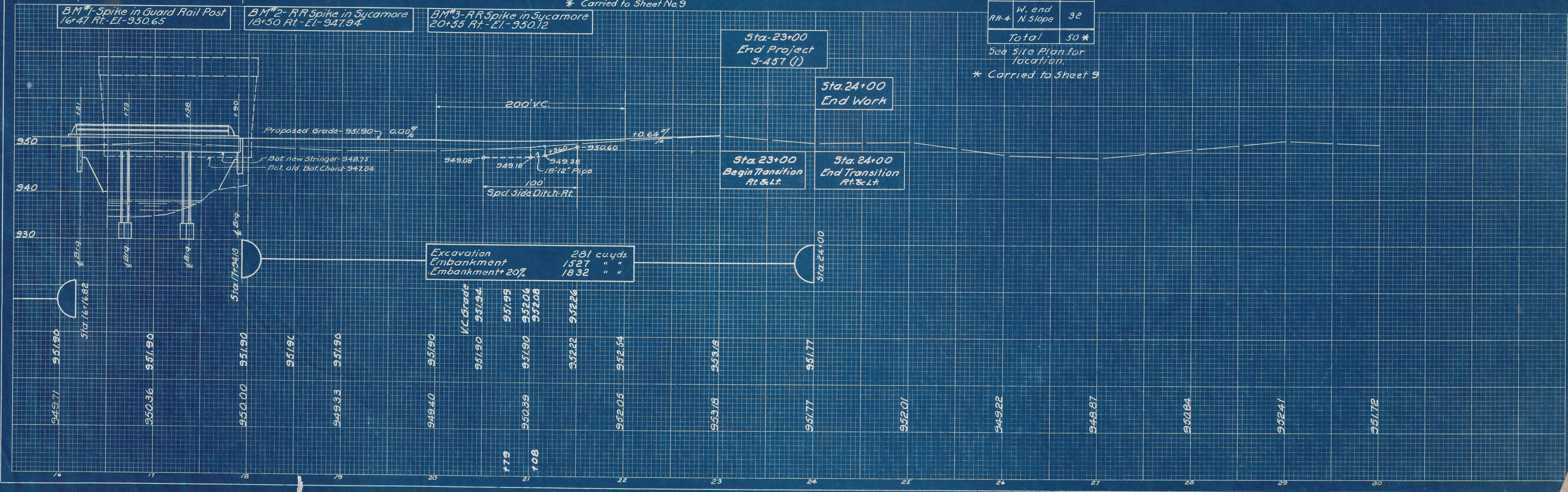


The Starr-Jackson Mining Co.

6" Reinf. Conc. Paved Gutter - I-14

Ref. No.	Location	Width	Length
PG-1	N. Abut. Slope	5'	9'
PG-2	" " "	5'	18'
Total			27' *

* Carried to Sheet No. 9



Excavation
Embankment
Embankment + 20%

231 cu. yds.
1527 " "
1832 " "

Sta. 23+00 End Project 5-457 (1)
Sta. 24+00 End Work
Sta. 23+00 Begin Transition Rt. & Lt.
Sta. 24+00 End Transition Rt. & Lt.

BM #1 - Spike in Guard Rail Post 16+47 Rt. - El. - 950.65
BM #2 - RR Spike in Sycamore 18+50 Rt. - El. - 947.94
BM #3 - RR Spike in Sycamore 20+55 Rt. - El. - 950.12

GENERAL NOTES

REFERENCE shall be made to Std. Dwg. CSB-3-47, dated 9-18-47.

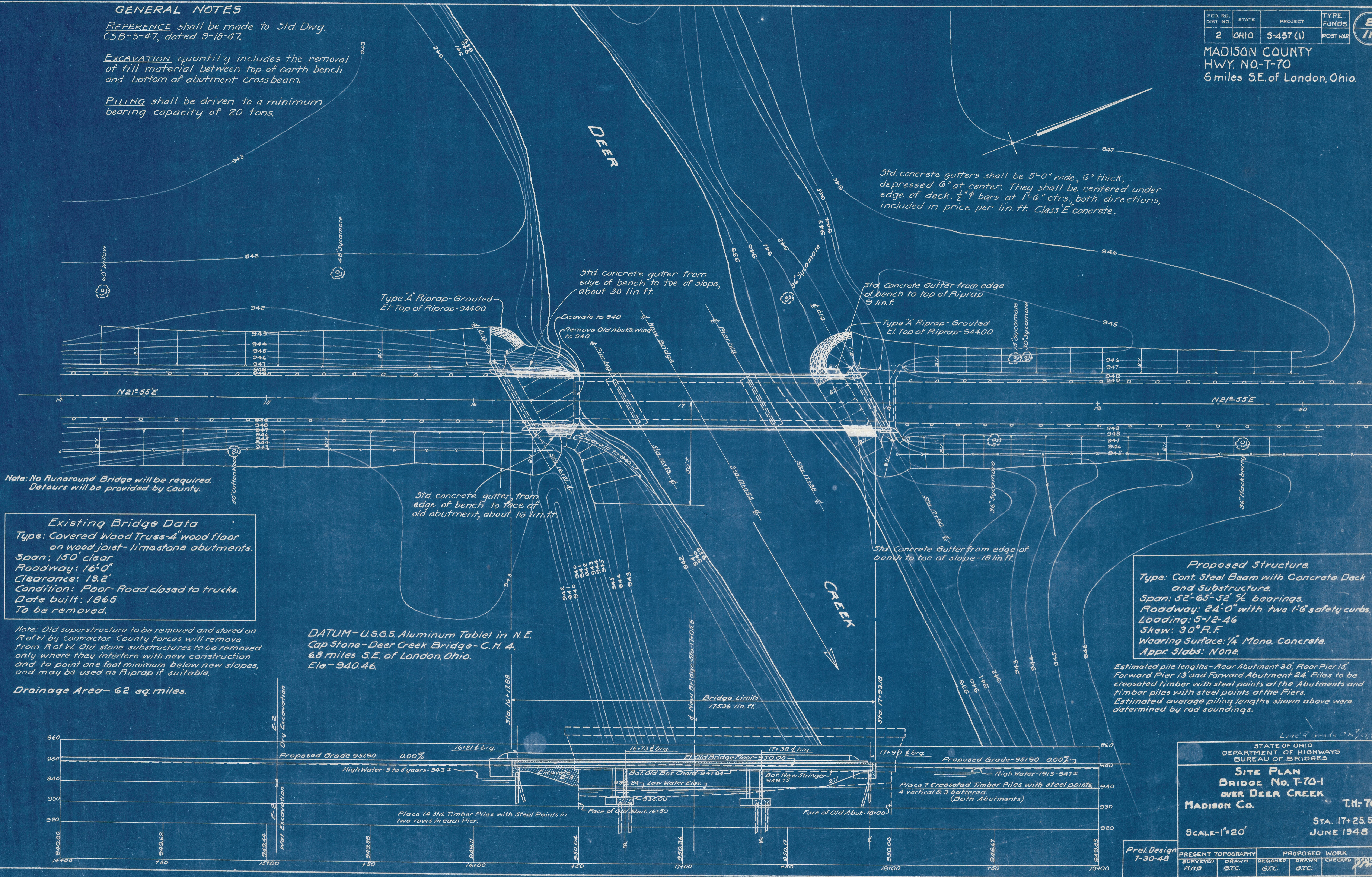
EXCAVATION quantity includes the removal of fill material between top of earth bench and bottom of abutment crossbeam.

PILING shall be driven to a minimum bearing capacity of 20 tons.

FED. RD. DIST. NO.	STATE	PROJECT	TYPE FUNDS
2	OHIO	5-457 (1)	POST WAR

8
11

MADISON COUNTY
HWY. NO-T-70
6 miles S.E. of London, Ohio.



Std. concrete gutters shall be 5'-0" wide, 6" thick, depressed 6" at center. They shall be centered under edge of deck. 2" # bars at 1'-6" ctrs, both directions, included in price per lin. ft. Class 'E' concrete.

Type A Riprap-Gouted
El. Top of Riprap-944.00

Std. concrete gutter from edge of bench to toe of slope, about 30 lin. ft.

Std. Concrete Gutter from edge of bench to top of Riprap 9 lin. ft.

Std. concrete gutter from edge of bench to face of old abutment, about 16 lin. ft.

Std. Concrete Gutter from edge of bench to toe of slope-18 lin. ft.

Note: No Runaround Bridge will be required. Detours will be provided by County.

Existing Bridge Data
Type: Covered Wood Truss-4" wood floor on wood joist- limestone abutments.
Span: 150' clear
Roadway: 16'-0"
Clearance: 13.2'
Condition: Poor- Road closed to trucks.
Date built: 1865
To be removed.

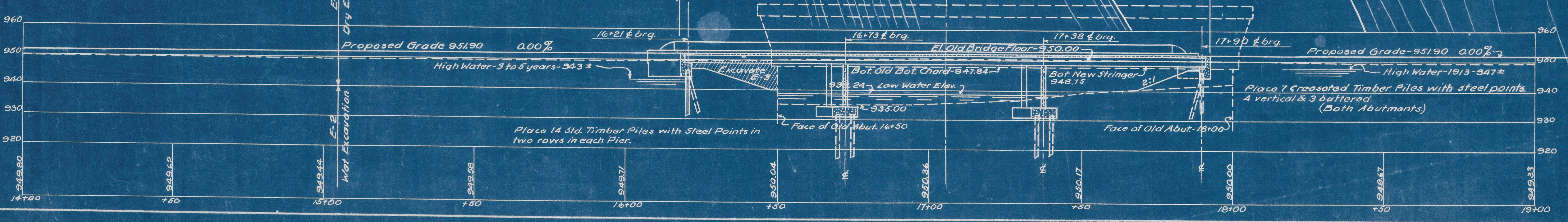
Note: Old superstructure to be removed and stored on R of W by Contractor. County forces will remove from R of W. Old stone substructures to be removed only where they interfere with new construction and to point one foot minimum below new slopes, and may be used as Riprap if suitable.

Drainage Area- 62 sq. miles.

DATUM-U.S.G.S. Aluminum Tablet in N.E. Cap Stone-Deer Creek Bridge-C.H. 4, 6.8 miles S.E. of London, Ohio.
Elev-940.46.

Proposed Structure
Type: Cont. Steel Beam with Concrete Deck and Substructure.
Span: 52'-65'-52' 1/2 bearings.
Roadway: 24'-0" with two 1'-6" safety curbs.
Loading: 5-12-46
Skew: 30° R.F.
Wearing Surface: 1/4" Mono. Concrete.
Appr. Slabs: None.

Estimated pile lengths- Rear Abutment 30', Rear Pier 15', Forward Pier 13' and Forward Abutment 24'. Piles to be creosoted timber with steel points at the Abutments and timber piles with steel points at the Piers. Estimated average piling lengths shown above were determined by rod soundings.



STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

SITE PLAN
BRIDGE No. T-70-1
OVER DEER CREEK
MADISON Co. TH-70

STA. 17+25.5
JUNE 1948

SCALE-1"=20'

PRESENT TOPOGRAPHY		PROPOSED WORK	
SURVEYED R.H.B.	DRAWN G.T.C.	DESIGNED G.T.C.	CHECKED G.T.C.

Prel. Design 7-30-48

Revised 6-27-49