

FED. AID DIST. NO.	STATE	FED. AID PROJECT	FISCAL YEAR
10	OHIO	409-D	1929

S.H.(I.C.H.) 21
FULTON

SEC. N.
COUNTY

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
TOLEDO-ANGOLA ROAD
SH.(I.C.H.) NO. 21 SEC. N. PET. NO. 5173
FULTON COUNTY
AMBOY TOWNSHIP MARCH 1929

The Standard Specifications of the State of Ohio, Department of Highways, in force on date of contract, will govern this improvement.
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 plan and estimates.

Approved: Karl Mohr
Date, 9/24/29 Resident District Deputy Director

Approved: John F. Gallie's
Date, Oct. 8, 1929, Resident Division Deputy Director

Approved: Col. J. Brighten
Date, 10/24/29 Chief Engineer
Bureau of Construction

Approved: _____
Date, _____ Chief Engineer
Bureau of Maintenance

Approved: _____
Date, _____ Chief Engineer
Bureau of Bridges

Approved: W.L. Pouchy
Date, 10-28-29 First Asst. Director & Chief Engineer.

Approved: Robert M. Ward
Date, 10-28-29 Director of Highways

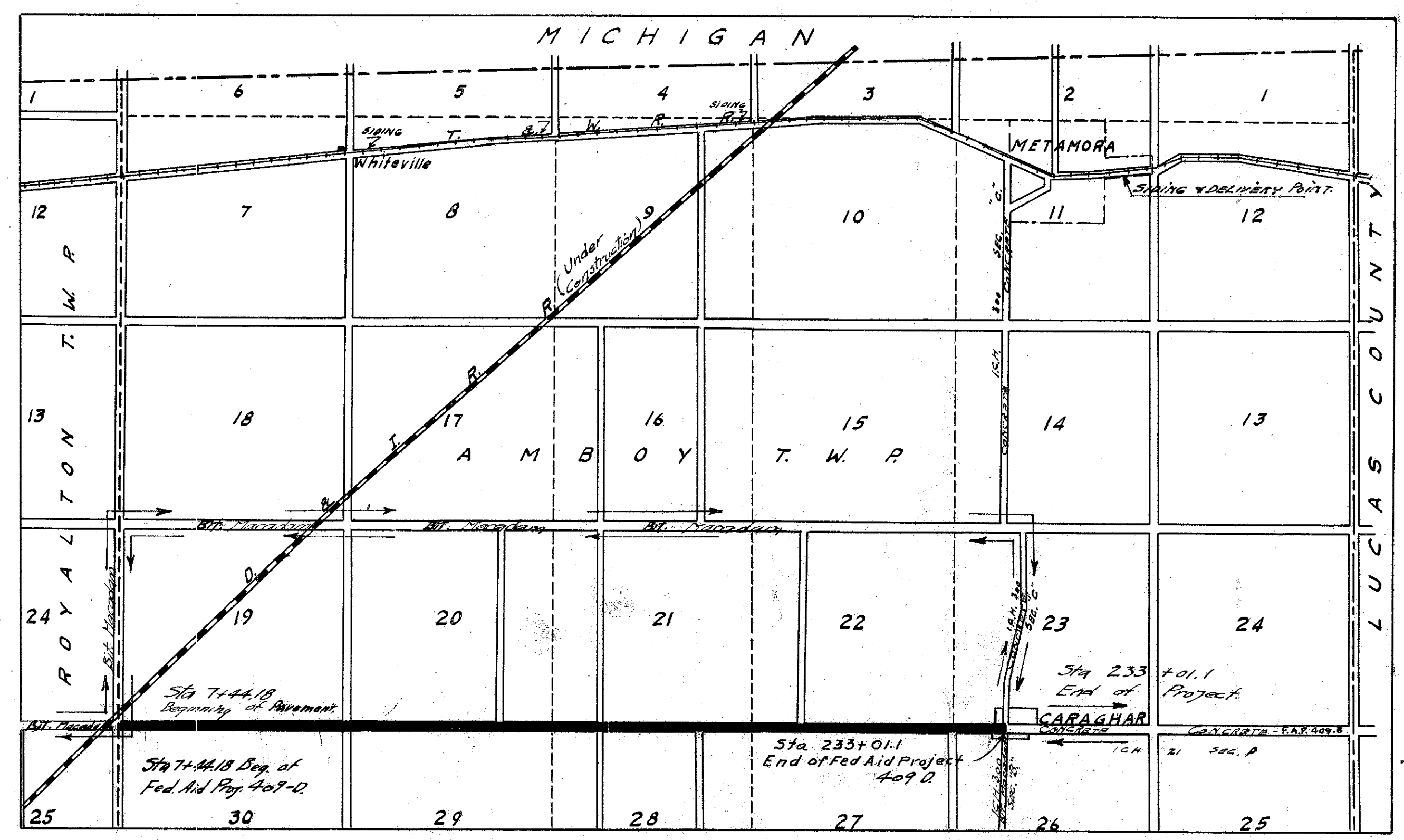
Recommended for Approval: _____
Date, _____ District Engineer
Bureau of Public Roads

Recommended for Approval: _____
Date, _____ Chief Engineer
Bureau of Public Roads.

Approved: _____
Date, _____ Chief of Bureau.

CONVENTIONAL SIGNS

- State Line
- County Line
- Township Line
- Section Line
- Property Line not fenced
- Center Line
- City or Village Line
- Fence
- Telephone or Telegraph
- Steam Railroad
- Electric Line
- Guard Rail
- Drain Pipe - new
- Drain Pipe - old



LOCATION PLAN

SCALE OF MILES

PORTION TO BE IMPROVED
DETOURS SHOWN THUS
IMPROVED ROAD

SCALES

- Plan 1"=100'
- Profile (Vertical) 1"=10'
- Profile (Horizontal) 1"=100'
- Cross-Sections 1"=5'

INDEX OF SHEETS
PROJECT TRACING

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SUPPLEMENTAL PRINTS OF STRUC. STDS.
Drawing Number 95, 96, 98, 100, 300, 305,
A5, 2430, SB 2430, RR-A and SC-A

We, the Commissioners of Fulton County, hereby approve these plans and certify that the right-of-way 60 feet wide is available for the construction, maintenance and repair of the above highway.

M. C. Batdorf
Edwin Russell
F. L. Cummend

Date 9/24/29 County Commissioners

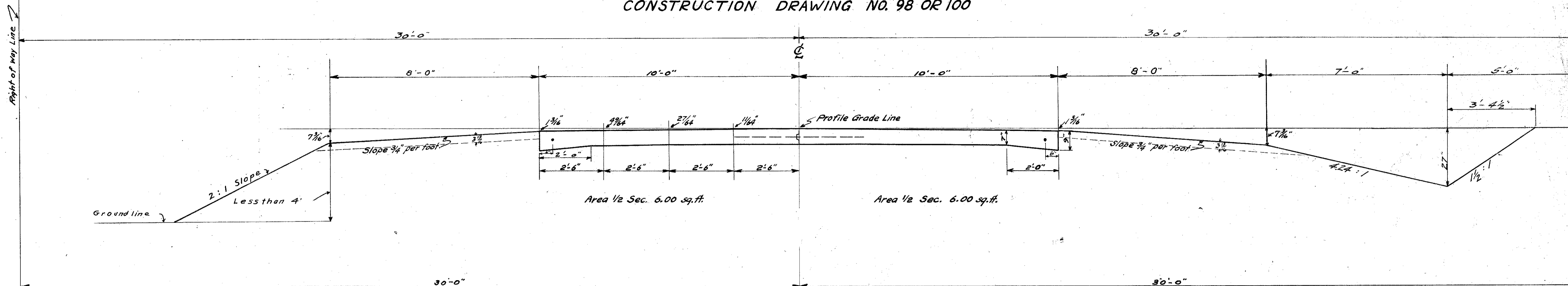
File N246

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S.H.I.C.H. 21 FULTON COUNTY SEC. "N"

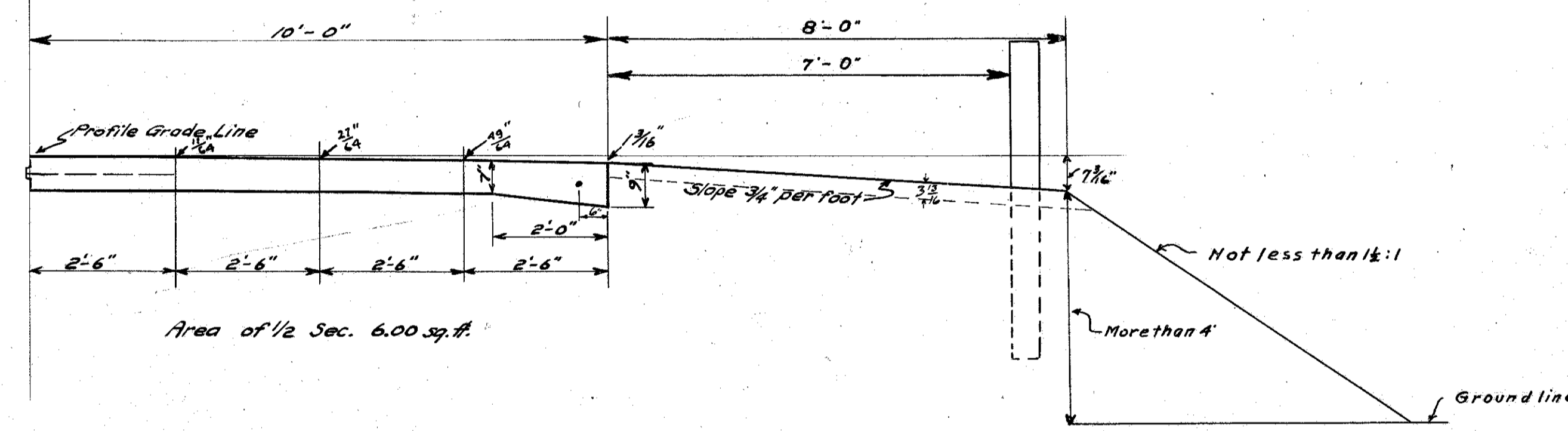
TYPE C
ITEM T-7
CONSTRUCTION DRAWING NO. 98 OR 100



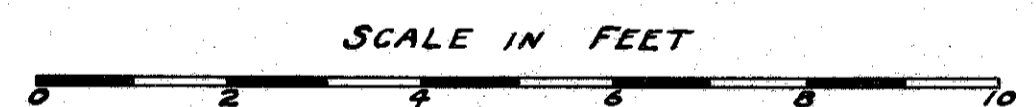
Note: Pavement on all curves will be superelevated and on all curves where the degree of curvature is 5° or more will be widened.

Note: Rough grading will be completed to the cross-section indicated by the broken line. All earth below the broken line for the width of pavement and the full widths of the berms shall be scarified to the depth of the sub-grade and parallel to the slope of the broken line before any excavated material is placed on the shoulders. The subgrade shall then be prepared as provided for in the specifications for the type of pavement to be built and the material removed from the subgrade or adjacent thereto be placed on the subgrade.

Note: Transverse construction joints shall be placed when required by specifications and as per standard construction drawing No. 95



TYPICAL SECTIONS



Note: In the construction of this concrete pavement, weight proportioning of aggregates will be required.

CONSTRUCTION NOTES

Berms, slopes and ditches shall be finished to conform to cross-sections as shown for each station and put in shape for immediate seeding.

There shall be no open ditches along yards and drives and where the new grade is finished above the present grade at yards and drives the slope shall continue back to conform with the berm slope.

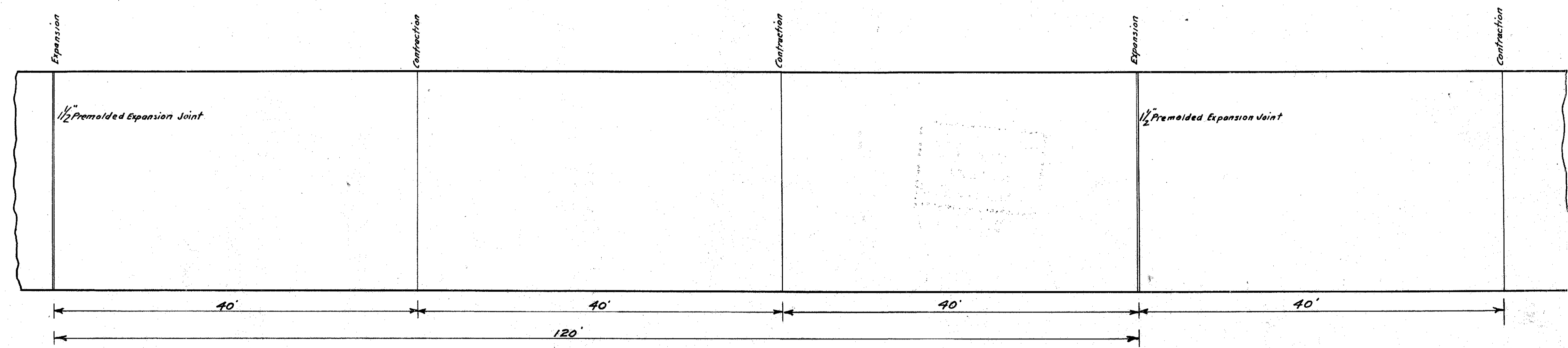
Contractor shall connect all lateral drains with tile providing the land owner does the extra excavating and furnishes the necessary tile at the time the Contractor is laying the tile under his contract. Care shall be taken not to damage any side drains along open ditches.

All materials removed from roadway which are not to be used as per contract shall be piled neatly on right of way, not more than 300 feet from place of removal, for the County Commissioners.

All monuments or land markers found by the Contractor during progress of work shall not be disturbed until Engineer has established witnesses to same.

Joints where size of tile change, special connections, lateral connections and up stream ends of tile drains shall be thoroughly sealed and covered with concrete.

Contractor shall remove no trees within limits of right of way unless he is directed to do so by the Engineer in charge.



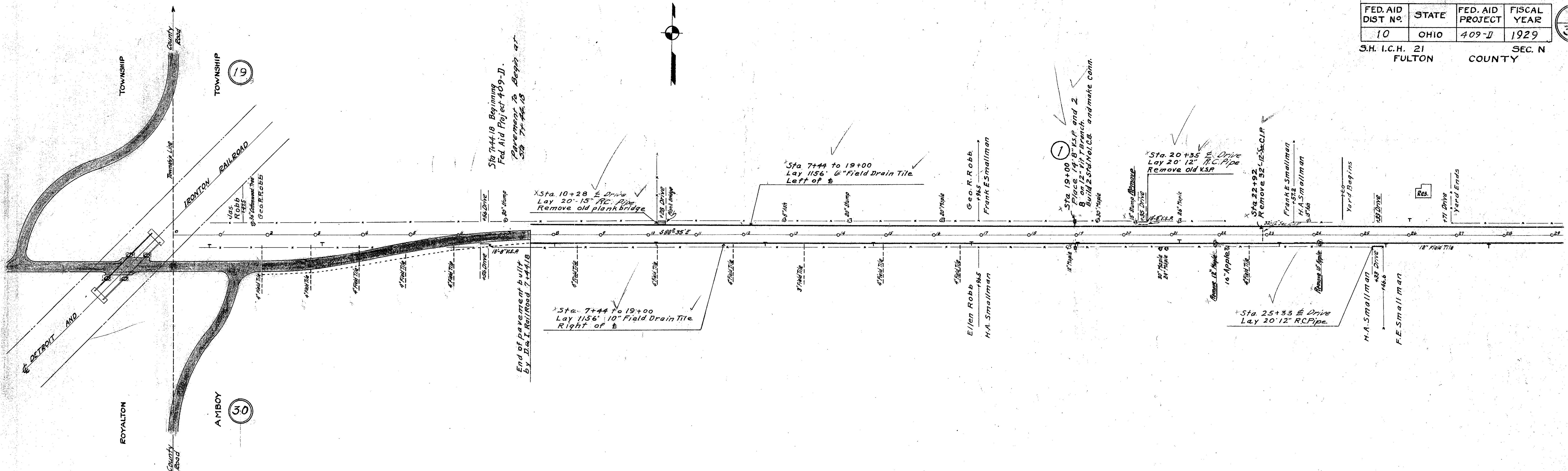
DETAIL OF JOINT SPACING
Contraction Joints as per Standard Construction Drawings 95, 96 & 98
Expansion Joints as per Standard Construction Drawing 95

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FULTON COUNTY

SEC. N
COUNTY



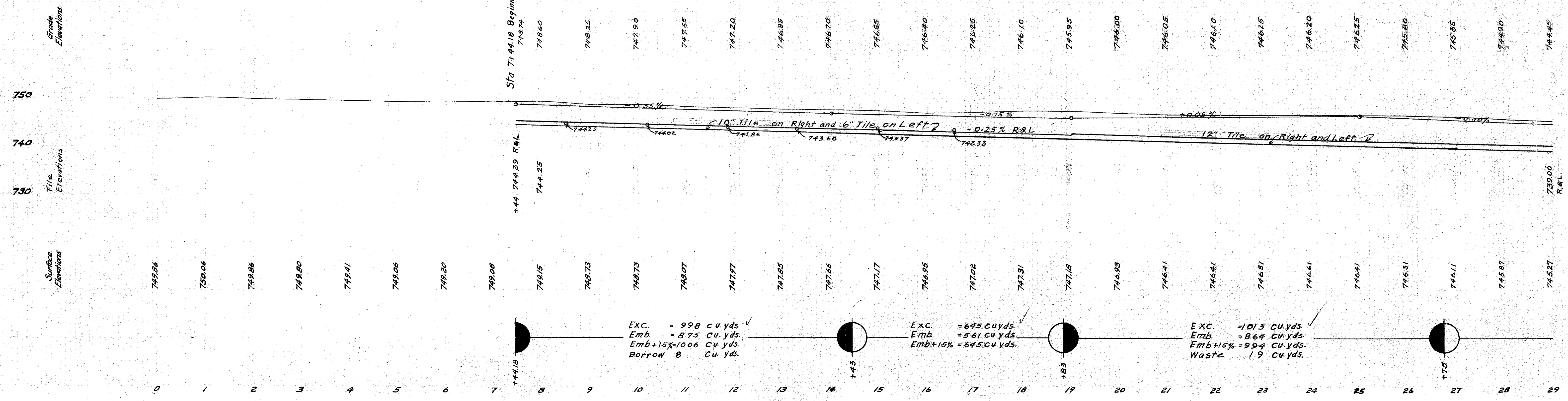
DETROIT AND IRONTON RAILROAD GRADE SEPARATION OVER S.H. I.C.H. 21
Shaded area indicates 20' Concrete Pavement constructed as a part of the Grade Separation Project.

B.M. Sta. 1+68
Spk. in Large Cottonwood Tree
on left of \mathcal{E}
Elev. 749.90

B.M. Sta. 12+60
Spk. in Large Elm Tree 50ft
left of \mathcal{E}
Elev. 747.93

B.M. Sta. 26+30
Cross on East End bot. Step of Porch
House on Left
Elev. 747.71

Grade line shown is crown of finished pavement.



Exc. = 998 Cu. yds.
Emb. = 875 Cu. yds.
Emb + 15% = 1006 Cu. yds.
Borrow 8 Cu. yds.

Exc. = 645 Cu. yds.
Emb. = 561 Cu. yds.
Emb + 15% = 645 Cu. yds.

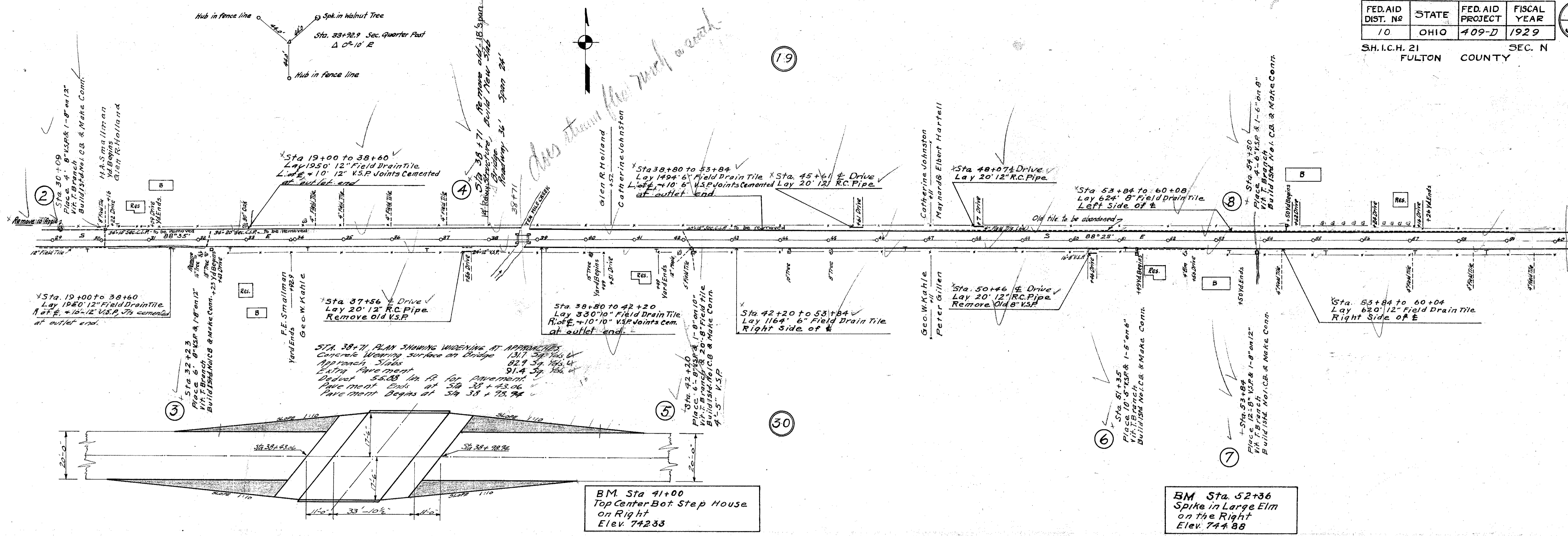
Exc. = 1013 Cu. yds.
Emb. = 864 Cu. yds.
Emb + 15% = 994 Cu. yds.
Waste 19 Cu. yds.

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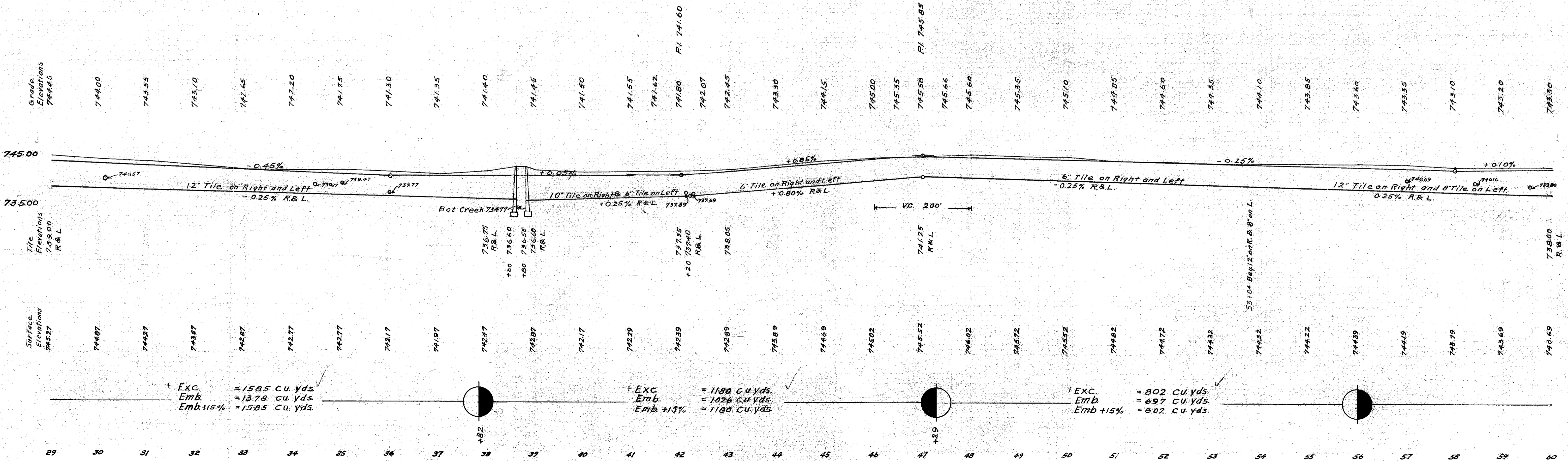
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SH. I.C.H. 21
FULTON COUNTY

SEC. N

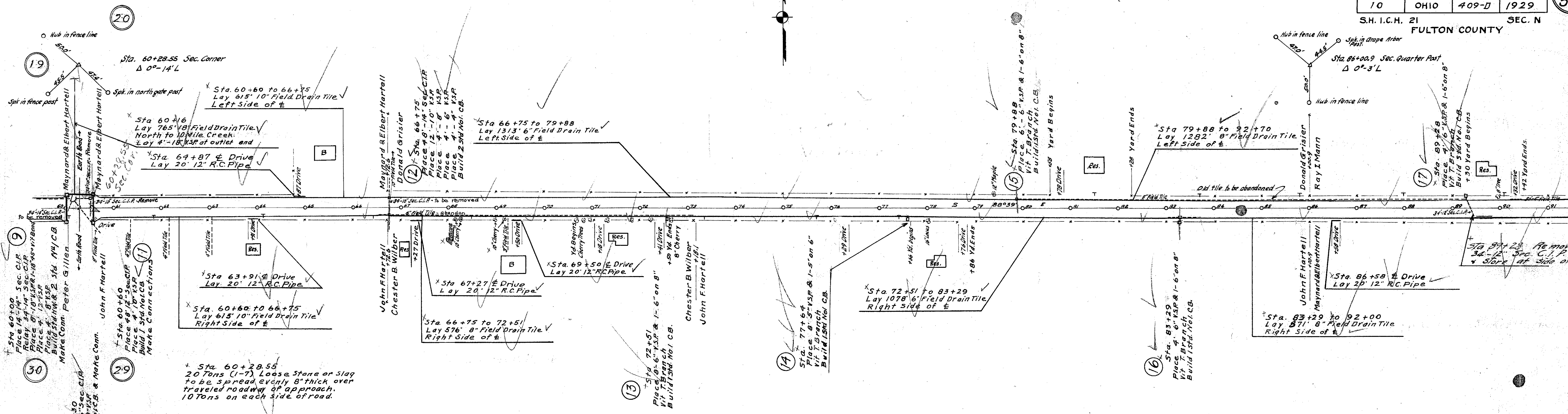


Grade line shown is crown of finished pavement



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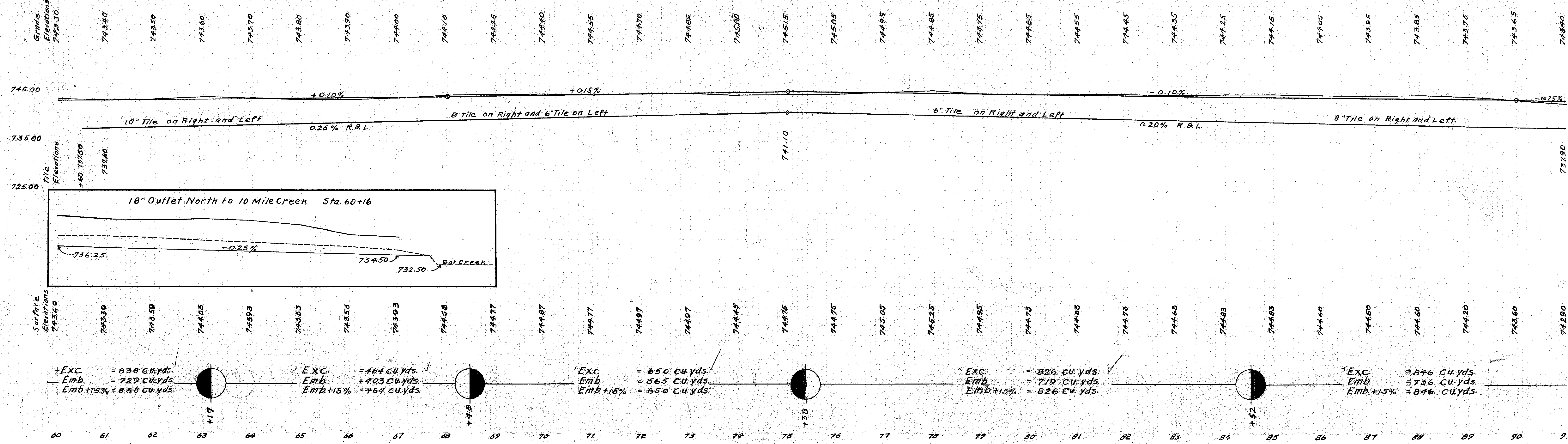


BM. Sta. 66+25
Top bolt, west side angle iron
s.w. corner Wind mill frame on the Right
Elev. 744.58

BM. Sta. 78+01
Spike in 16" Locust
29' to the Right
Elev. 745.52

BM. Sta. 89+90
Spike in small maple
Left Side
Elev. 744.27

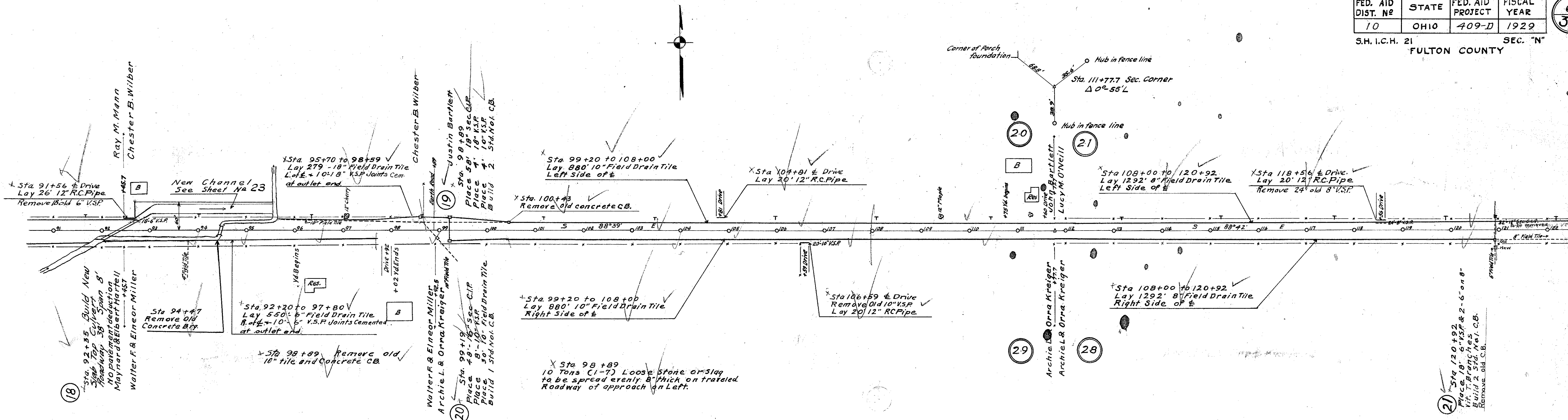
Gradeline shown is Crown of finished pavement



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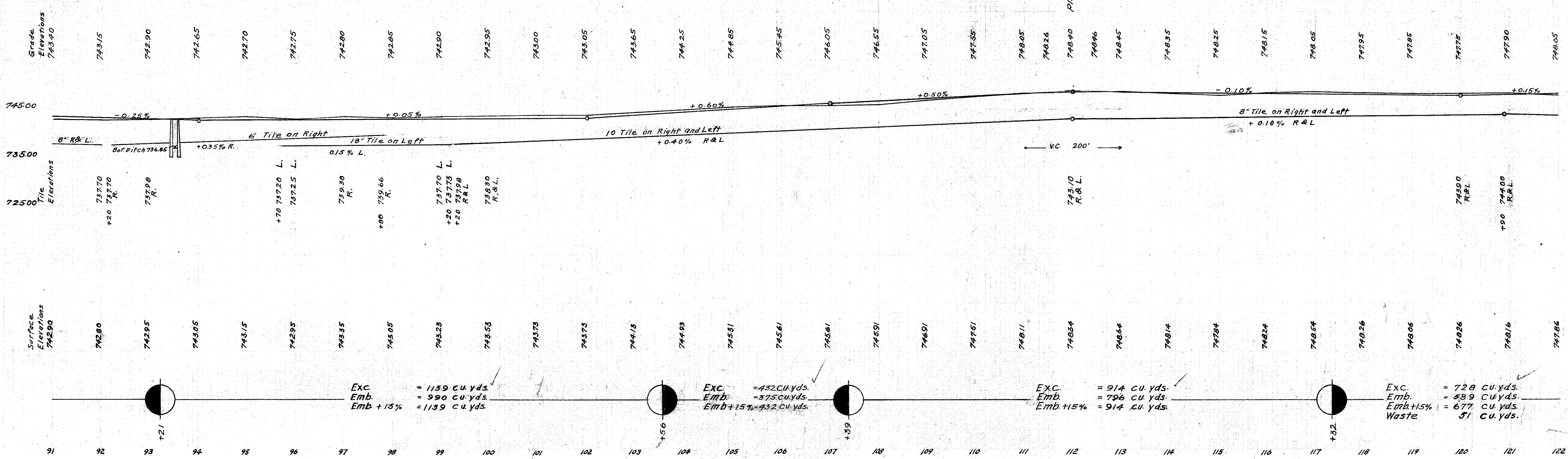
S.H. I.C.H. 21
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BM. Sta. 97+08
Spike Wild Cherry
30' Left
Elev 742.91

BM. Sta. 111+28
Spike in White Ash
Left side
Elev. 748.79

Gradeline shown is crown of finished pavement



Exc. = 1139 cu. yds.
Emb. = 990 cu. yds.
Emb + 15% = 1139 cu. yds.

Exc. = 432 cu. yds.
Emb. = 375 cu. yds.
Emb + 15% = 432 cu. yds.

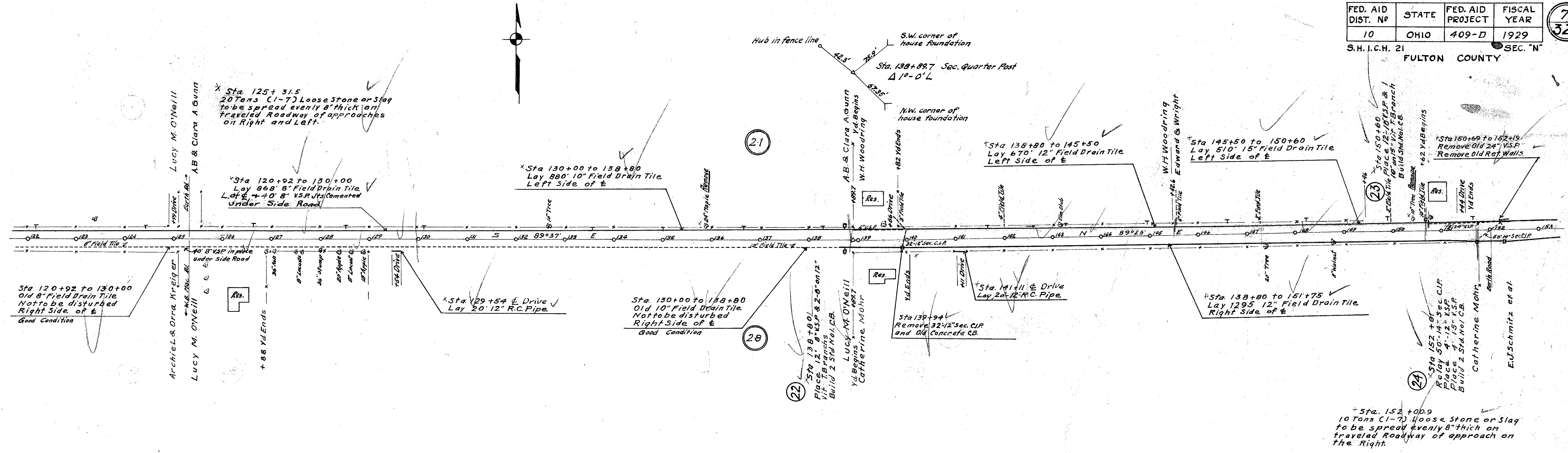
Exc. = 914 cu. yds.
Emb. = 796 cu. yds.
Emb + 15% = 914 cu. yds.

Exc. = 728 cu. yds.
Emb. = 889 cu. yds.
Emb + 15% = 677 cu. yds.
Waste = 51 cu. yds.

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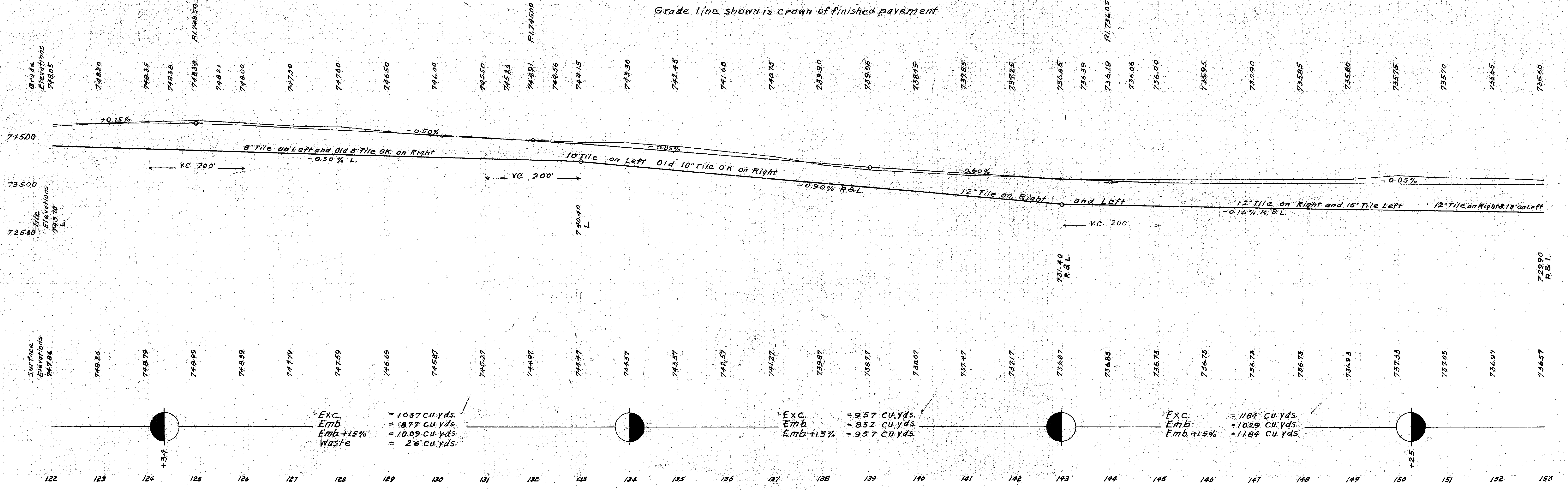
BM. Sta. 123+06
Spike in Hickory
Left Side
Elev. 74839

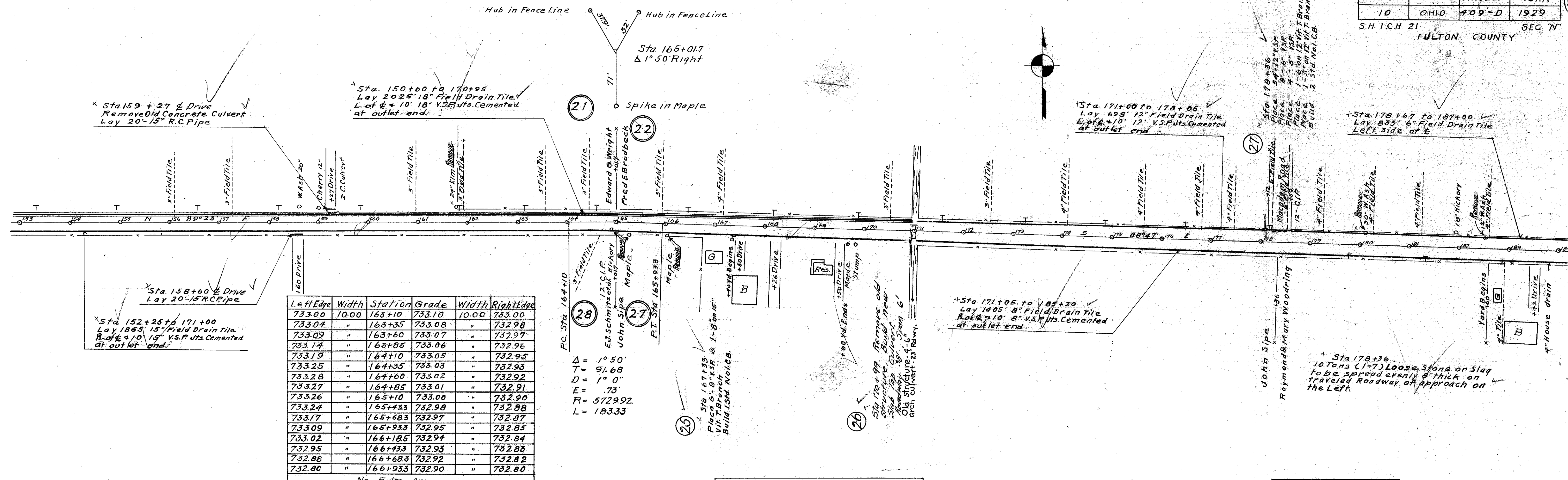
BM. Sta. 128+88
Spike Apple tree
Right Side
Elev. 74659

BM. Sta. 139+08
Bot. Corboard SW. Cor. House
Left Side
Elev. 73970

BM. Sta. 151+14
Top E.E. Coping of South Rail
Porch Steps. House on Left
Elev. 74006

Grade line shown is crown of finished pavement





Left Edge	Width	Station	Grade	Width	Right Edge
733.00	10.00	163+10	733.10	10.00	733.00
733.04	"	163+35	733.08	"	732.98
733.09	"	163+60	733.07	"	732.97
733.14	"	163+85	733.06	"	732.96
733.19	"	164+10	733.05	"	732.95
733.25	"	164+35	733.03	"	732.93
733.28	"	164+60	733.02	"	732.92
733.27	"	164+85	733.01	"	732.91
733.26	"	165+10	733.00	"	732.90
733.24	"	165+35	732.98	"	732.88
733.17	"	165+60	732.97	"	732.87
733.09	"	165+85	732.95	"	732.85
733.02	"	166+10	732.94	"	732.84
732.95	"	166+35	732.93	"	732.83
732.88	"	166+60	732.92	"	732.82
732.80	"	166+85	732.90	"	732.80

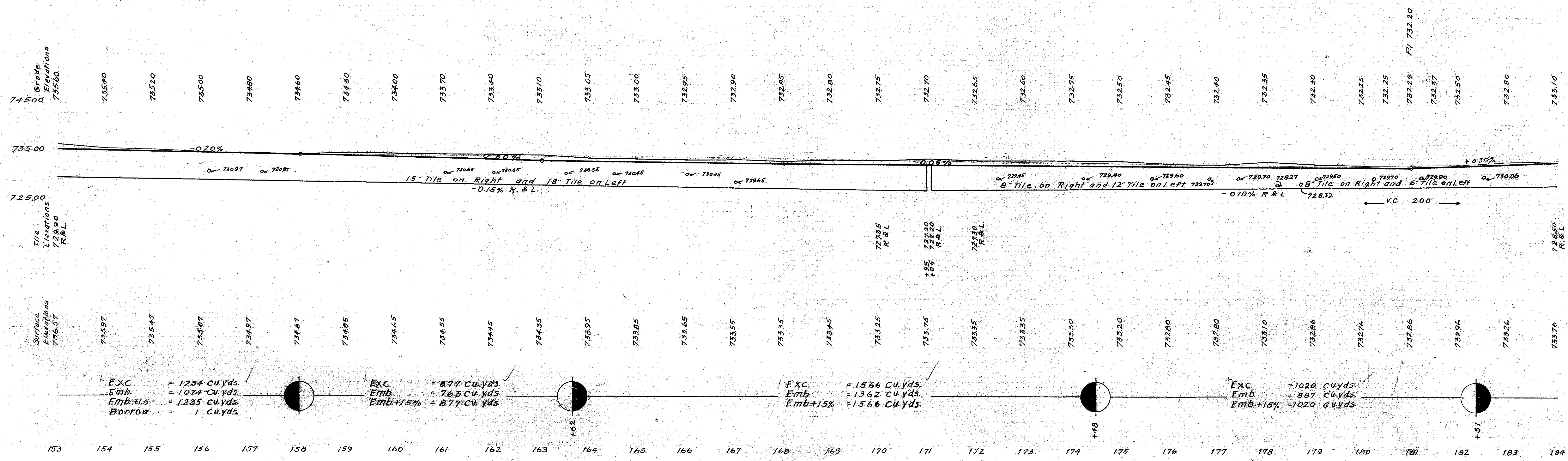
No Extra Area

$\Delta = 1^\circ 50'$
 $T = 91.68$
 $D = 1^\circ 0'$
 $E = .73$
 $R = 572992$
 $L = 183.33$

B.M. Sta. 169+00
 Top of Ctr. of Bot Concrete Step
 Front of House on Right
 Elev. 733.07

B.M. Sta. 179+75
 Spike in 30" Wash
 Right Side
 Elev. 732.38

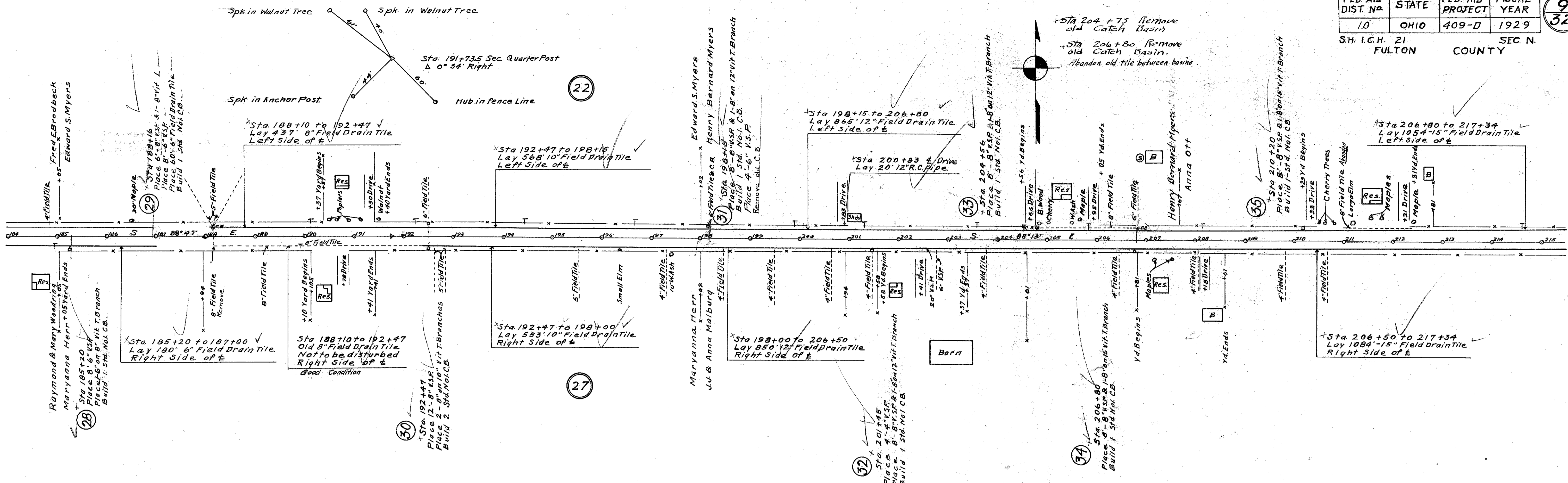
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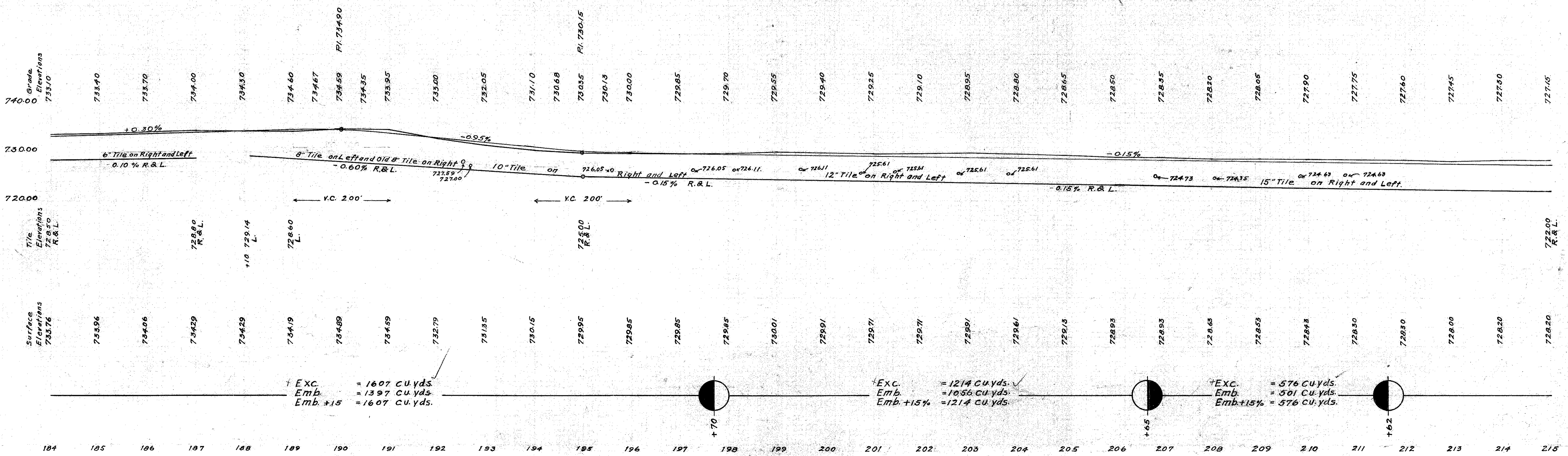
SEC. N. 32

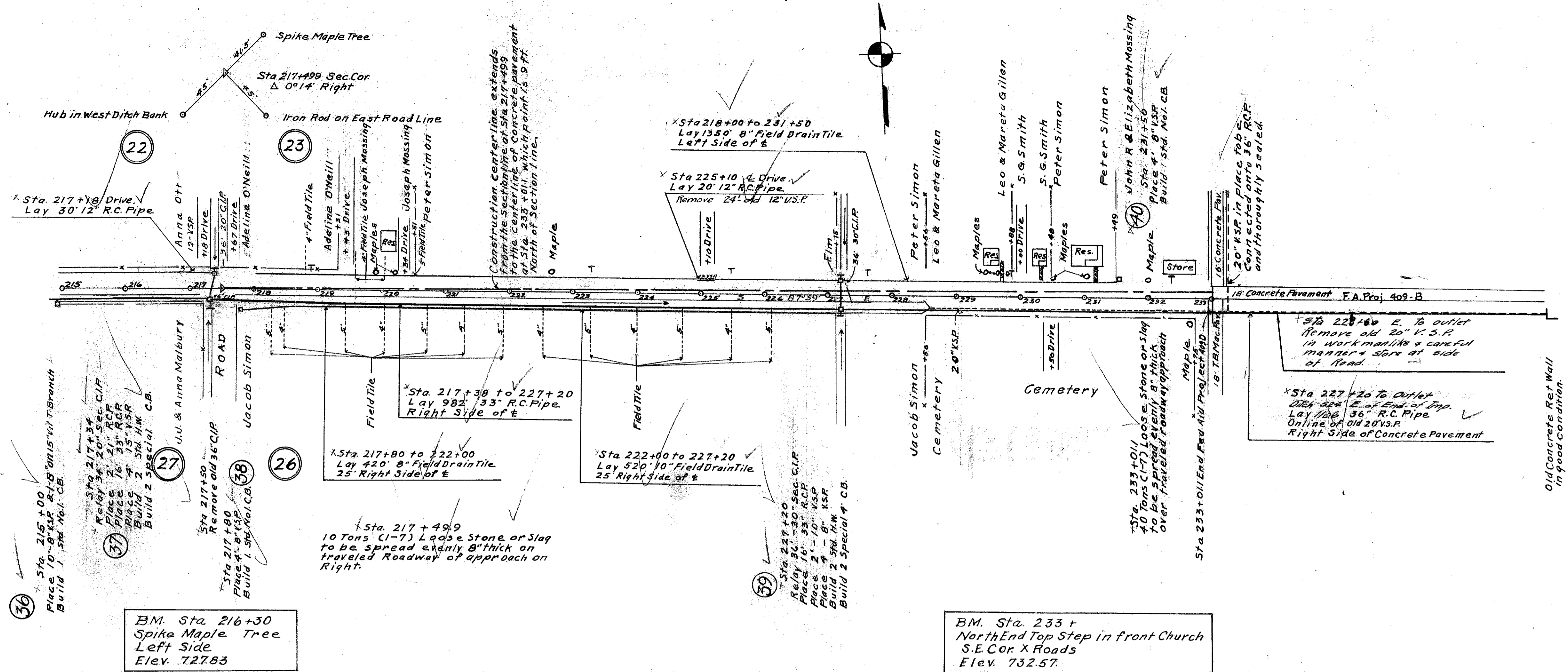


BM Sta. 191+50
Spike in Walnut Tree
33' Left
Elev. 732.95

BM Sta. 202+10
Bot Cor. board NE Cor. House
Right Side
Elev. 732.10

Grade line shown is crown of finished pavement.

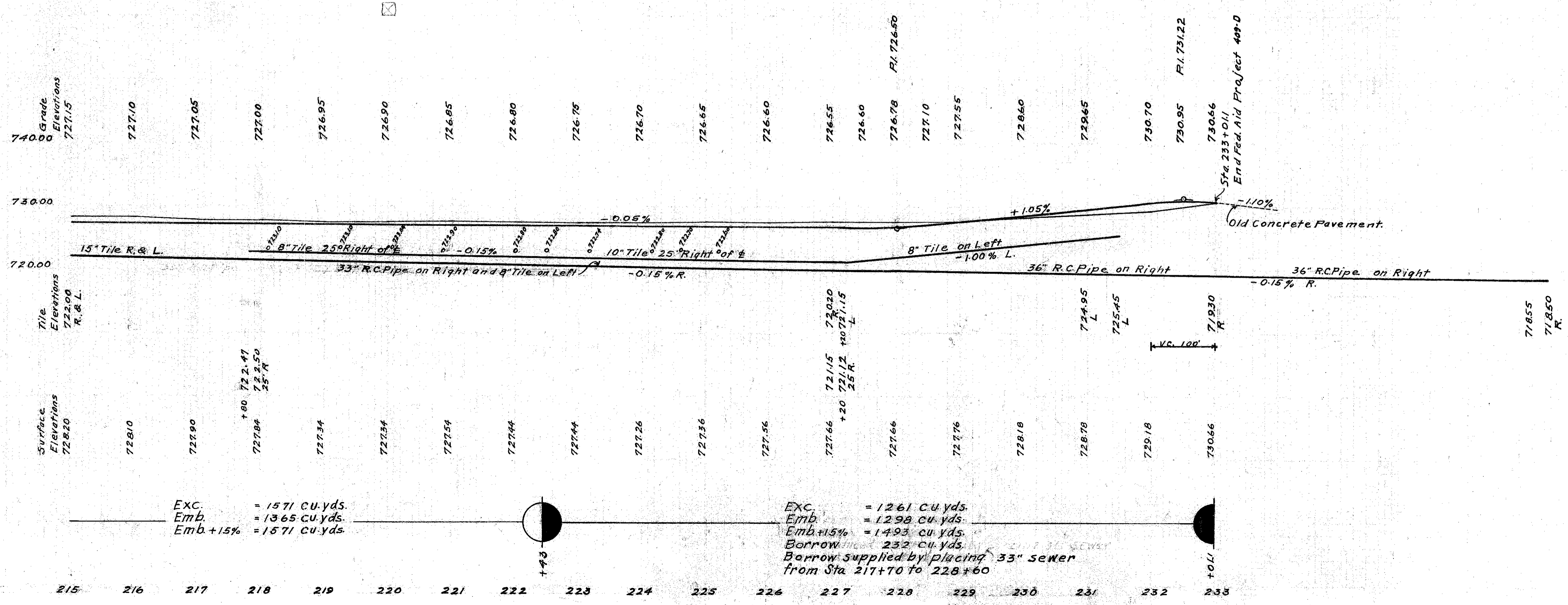




BM. Sta. 216+30
Spike Maple Tree
Left Side
Elev. 72783

BM. Sta. 233 +
North End Top Step in front Church
S.E. Cor. X Roads
Elev. 732.57

Grade line shown is crown of finished pavement



Exc. = 1571 cu. yds.
Emb. = 1365 cu. yds.
Emb. +15% = 1571 cu. yds.

Exc. = 1261 cu. yds.
Emb. = 1299 cu. yds.
Emb. +15% = 1493 cu. yds.
Borrow = 232 cu. yds.
Borrow supplied by placing 33" sewer from Sta. 217+70 to 228+60

FOR ANY QUESTIONS PLEASE CONTACT ODOT DIST. 2 REAL ESTATE AT 419-363-8131