01-33

COUNTY PROJECT NUMBER	SHEET NO.

RECEIVED
FEB 1 1984
OUTAGAMIE COUNTY
HIGHWAY COMMISSION

Index of Sheets

Sheet No.	1	Title
Sheet No.		Typical Sections and Details
Sheet No.		Estimate of Quantities
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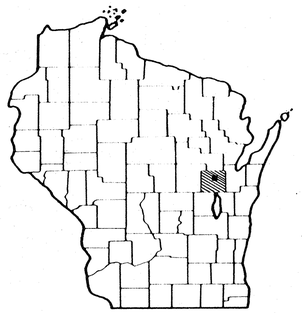
Sheet No.		Plan and Profile
Sheet No.		Standard Detail Drawings
Sheet No.		Standard Sign Plates
Sheet No.		Structure Plans
Sheet No.		Computer Earthwork Data
Sheet No.		Cross Sections

TOTAL SHEETS



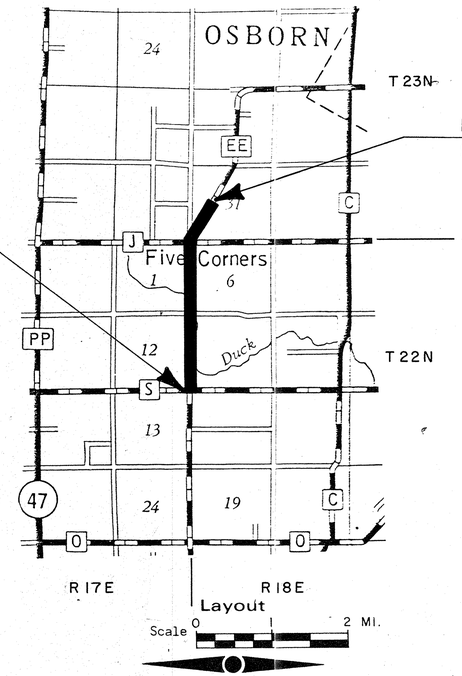
OUTAGAMIE COUNTY
COUNTY HIGHWAY DEPARMENT
PLAN OF PROPOSED IMPROVEMENT
C.T.H. "S" - C.T.H. "J" ROAD

C.T.H. "EE"

OUTAGAMIE COUNTY

COUNTY PROJECT NUMBER

10 FT. PLAN & PROFILE 100 FT. 0
10 FT. CROSS SECTION 10 FT. 0
SCALES



BEGIN PROJECT
STA. 234 +46.38
N- 206,100 (±100) *
E- 2,425,000 (±100) *

END PROJECT
STA. 347+00.00

Total Net Length of Centerline = 2.131 Mi.

*COORDINATES SCALED FROM U.S.G.S. TOPOGRAPHIC MAP FREEDOM WI, 7.5 MIN. QUADRANGLE, CENTRAL ZONE, FOR IDENTIFICATION ONLY

Design Designation

A.D.T.	=
A.D.T.	=
D.H.V.	=
D.	=
T.	=
V.	=

Conventional Signs

County Line		Caution Symbol (Combustible fluids under pressure)	CAUTION
Township or Range Line		Railroads	
Section Line		Fence	TYPE
Corporate or City Limits		Culverts in Place	
Property line		Culverts Required	
Lot Line		Power Pole	
Existing Right of Way Line		Telephone or Telegraph Pole	
New Right of Way Line		Right of Way Markers	
Base or Survey Line		Marsh	
Slope Intercept		Wooded Area	
Existing Roadway or Private Entrance		Grade Elevation	760

SCS APPROVED

EE-10

APPROVED
FOR
OUTAGAMIE COUNTY
11-3-84
DATE
SIGNATURE OF OFFICIAL

PLANS PREPARED
BY
AYRES ASSOCIATES
CONSULTING ENGINEERS
GREEN BAY, WISCONSIN

EE-10

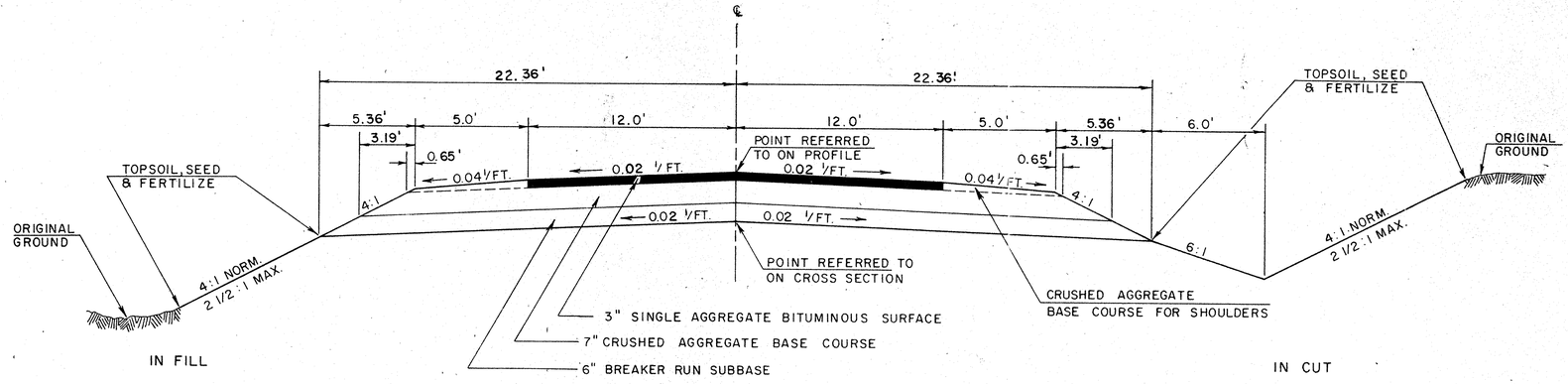
2 ABRS ZONED COM
DRIVEWAYS WILL INSTALL
REPAIR DRAIN TILE
1 ABR & DRAIN TILE OWNER PAY

Catalog No. 2130-D120

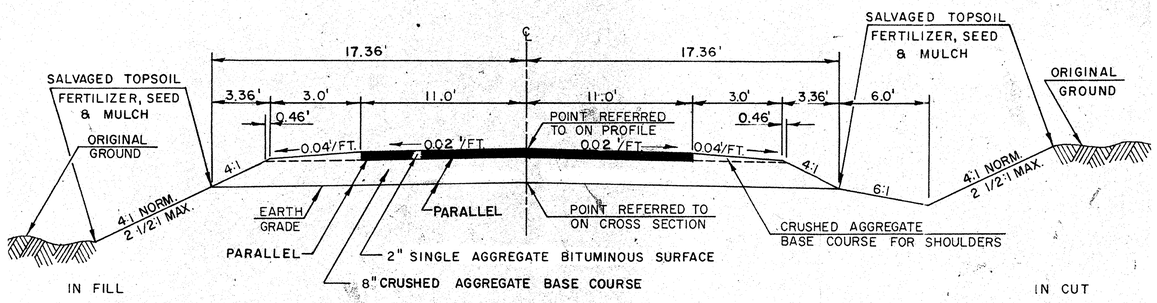
EE-10

STATE PROJECT NUMBER	SHEET NO.

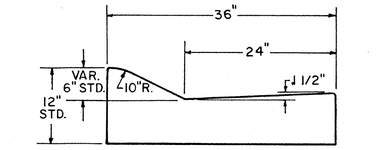
TYPICAL CROSS SECTION
FOR
C.T.H. "EE" OUTAGAMIE CO



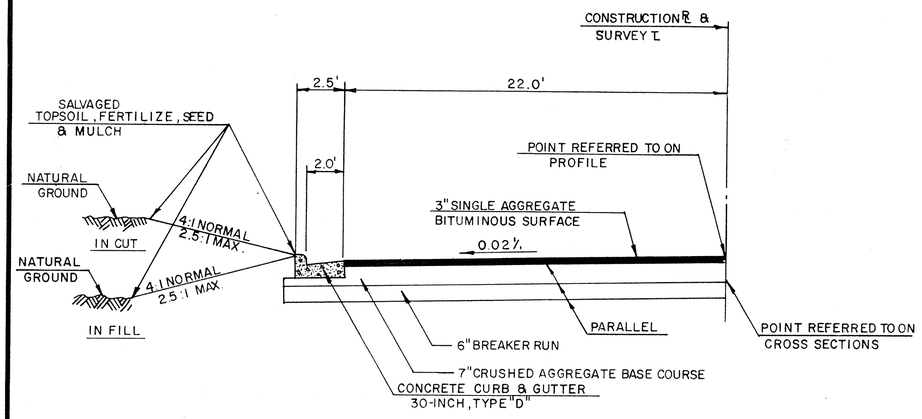
TYPICAL FINISHED SECTION



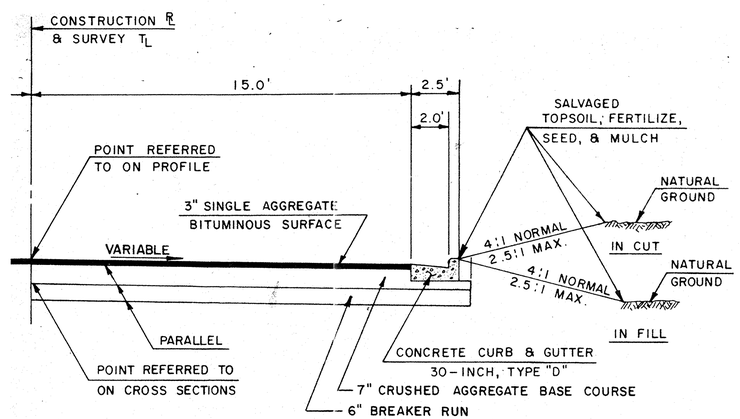
TYPICAL FINISHED SECTION
SIDE ROADS



36" CONCRETE CURB & GUTTER



1/2 TYPICAL SECTION



1/2 TYPICAL SECTION

UTILITIES

WISCONSIN TELEPHONE COMPANY TELEPHONE (414) 735-3245
MR. JEFFREY P. JANSSEN-ASST. MGR.-OUTSIDE PLANT ENG.
221 W. WASHINGTON ST.
P.O. BOX 2159
APPLETON, WI. 54913

WISCONSIN ELECTIC POWER COMPANY TELEPHONE (414) 735-0705
MR NORBERT P. SCHEMM
807 S. ONEIDA ST.
P.O. BOX 1699.
APPLETON, WI. 54913

STATE PROJECT NUMBER	SHEET NO.

CONSTRUCTION DETAIL
FOR
C.T.H. "EE" OUTAGAMIE CO.

STA. 336+07.62 C.T.H."EE"
STA. 10+00.00 C.T.H. "J"

STA. 10+00.00 BALLARD RD.

OBLITERATE OLD ROAD

BALLARD RD

HOUSE

NOTE : ALL DIMENSIONS ARE TO EDGE OF PAV'T.
ALL RADII ARE TO FACE OF CURB.

PC = 12+31.02

BALLARD RD

C.T.H. "J"

No PARKING TO END OF BUILDING

18" C.M.P.

12" C.M.P.

P.E.

CONC. SURFACE DRAIN REQ'D.

GRAV. P.E.

HOUSE

TAVERN

GRAVEL PARKING LOT.

TYPE 3 INLET AND TYPE "H" COVER
(CONSTRUCT OVER CROSS DRAIN)
DISC. ELEV. = 815.60

CONC. CURB & GUTTER 30-IN. TYPE 'D' REQ'D.

CONC. SURFACE DRAIN REQ'D.

75' TAPER

60' R.

40' R.

CULVERT PIPE REQ'D.

75' TAPER

24" R.C.C.P.

18" C.M.P.

BITUMINOUS

CONC. CURB & GUTTER 30-IN. TYPE 'D' REQ'D.

TAVERN

HOUSE

TO BE REMOVED

CONC. CURB & GUTTER 36-IN. TYPE 'D' REQ'D.

CONC. SURFACE DRAINS REQ'D.

250' TAPER

24" C.M.P.

100' TAPER

C.T.H. "EE"

TYPE "B" INTERSECTION REQ'D.

TYPE "C" INTERSECTION REQ'D.

END PROJECT

P.I. = 333+11.51 C.T.H."EE"
AZ. = 180° - 17'-11"

P.I. = 114+41.03 C.T.H. J
AZ. = 173° - 21' - 13"

P.I. = 342+22.76 C.T.H."EE"
AZ. = 260° 02' 45"

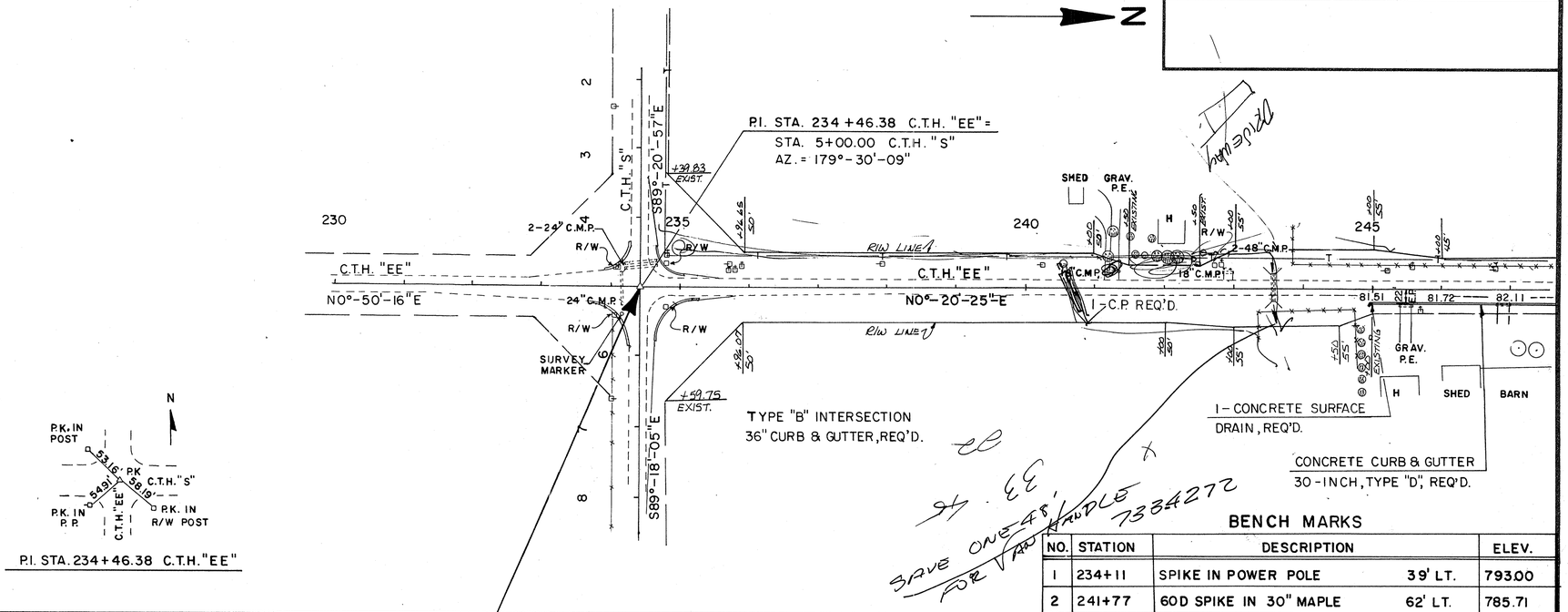
STA. 345+10.00 C.T.H."EE" =
STA. 10+00.00 BALLARD RD.

EQUATION = P.T. = 337+74.29 BK.
337+80.65 A.H.

CONSTRUCTION DETAIL FOR C.T.H."EE"
SCALE : 1 IN. = 50 FT.

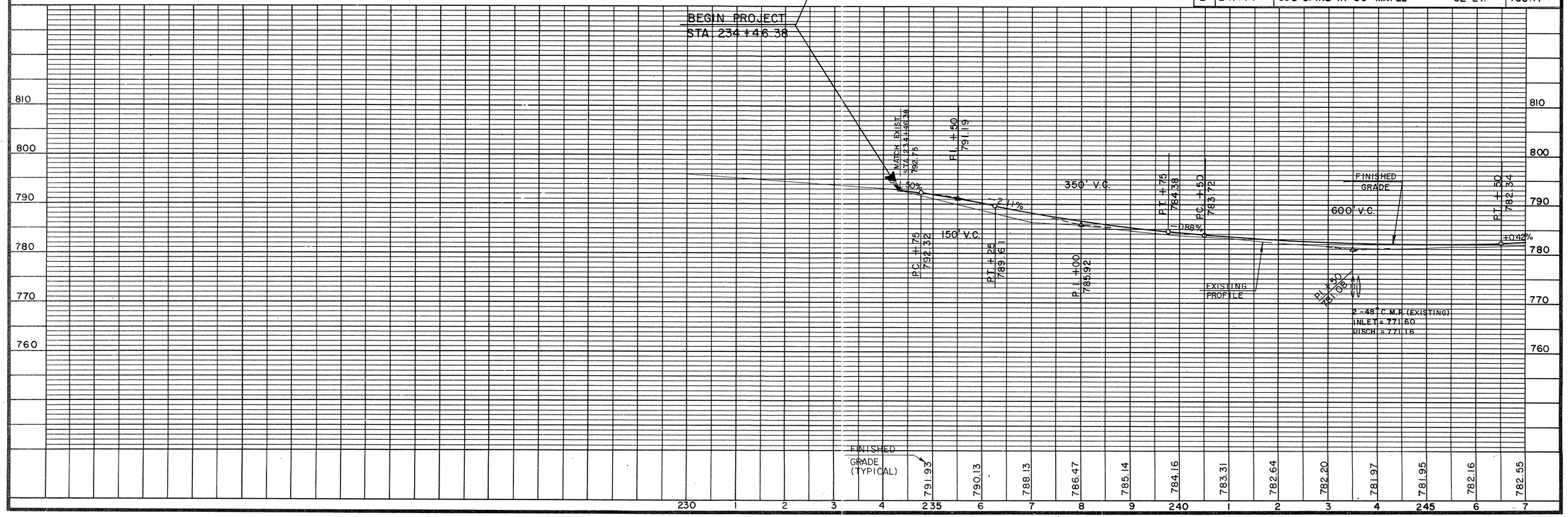
Catalog No. 2130-D120

STATE PROJECT NUMBER	SHEET NO.



BENCH MARKS

NO.	STATION	DESCRIPTION		ELEV.
1	234+11	SPIKE IN POWER POLE	39' LT.	793.00
2	241+77	60D SPIKE IN 30" MAPLE	62' LT.	785.71



Cat. No. 2130 – 0140

STATE PROJECT NUMBER	SHEET NO.

CURVE NOTES

P.I. = 258+00.35	P.I. = 265+27.25	P.I. = 271+86.17
Δ = 7°-00'-29"	Δ = 15°-43'-53"	Δ = 7°-48'-12"
D = 1°-30'	D = 4°-00'	D = 2°-00'
T = 233.89'	T = 197.89'	T = 195.39'
L = 467.20'	L = 393.29'	L = 390.17'
E = 7.15'	E = 13.61'	E = 6.66'
R = 3819.72'	R = 1432.40'	R = 2864.79'
S.E. = 0.028'/'	S.E. = 0.051'/'	S.E. = 0.035'/'

N

P.I. STA. 249+37.23 C.T.H. "EE"
AZ = 179°-58'-20"

C.T.H. "EE" NO°-20'-25"E

82.11 82.53 82.74

NO°-18'-45"E

N6°-41'-44"W

N9°-09'-02"E

N1°-13'-57"E

P.C. = 255+66.46

P.T. = 260+33.66

P.C. = 263+29.37

P.C. = 267+22.65

P.C. = 269+90.78

P.T. = 273+80.96 BK. =
273+84.14 AH.

EQUATION

250 255 260 270 275

BARN

I-C.P. REQ'D.

END CBG. STA. 248+50

SEPTIC VENT

GRAV. P.E.

H

HT

F.E.

R/W

18" C.M.P.

30" C.M.P.

2-36" C.M.P

SUMP DRAIN

6" FIELD DRAIN

2" I.P.

DUCK CREEK

R/W LINE

T

P.I. STA. 249+37.23 C.T.H. "EE"

PK. IN P.P.
122.75'
C.T.H. "EE"
PK.
136.67'
PK. IN L.P.
PK. IN P.P.
77.69'

P.I. STA. 258+00.35 C.T.H. "EE"

PK. IN P.P.
48.16'
C.T.H. "EE"
PK.
45.55'
PK. IN F.P.
167.87'
PK. IN P.P.

P.I. STA. 265+27.25 C.T.H. "EE"

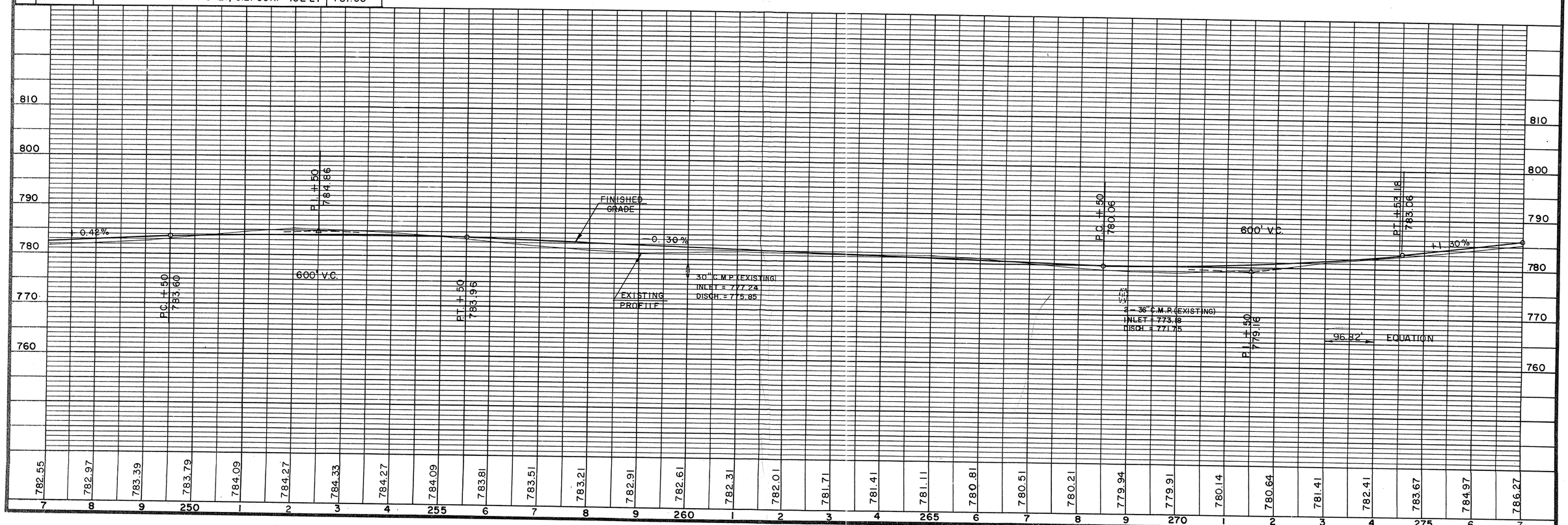
PK. IN 14" MAPLE
78.67'
C.T.H. "EE"
PK. IN 18" ELM
84.88'
R.R. SPK.
57.92'
PK. IN 14" ELM

P.I. STA 271+86.17 C.T.H. "EE"

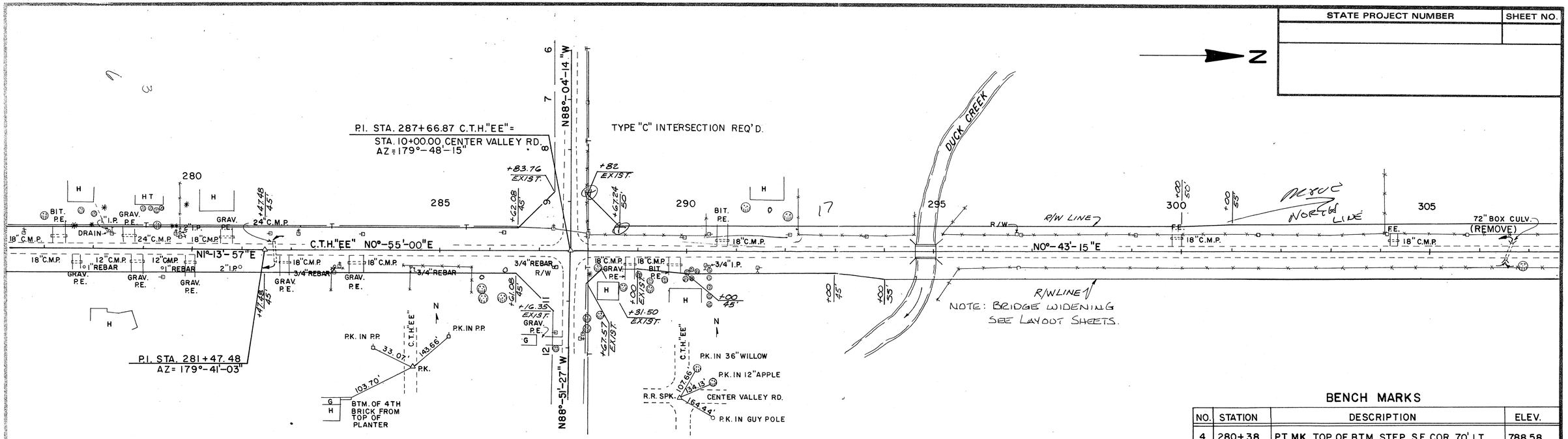
PK. IN P.P.
240.13'
C.T.H. "EE"
PK. IN P.P.
238.33'
PK.
56.31'
PK. IN P.P.

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
3	258+85	P.T. MK. TOP OF BTM. STEP, S.E. COR. 102' LT	787.58

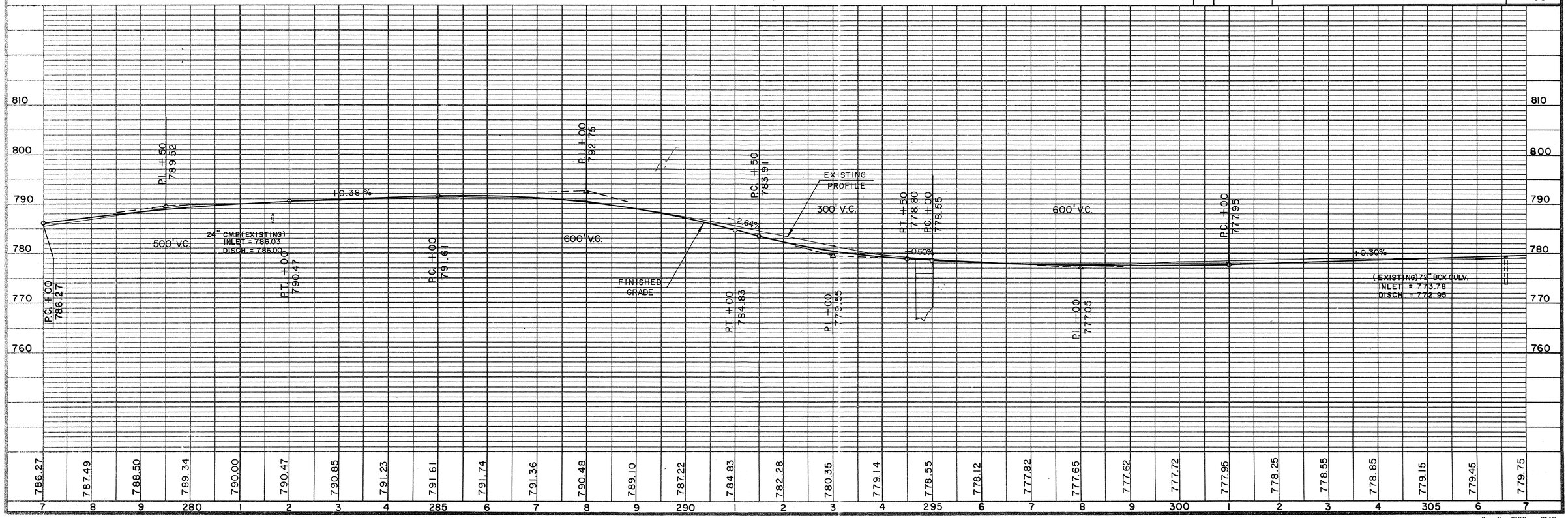


STATE PROJECT NUMBER	SHEET NO.



BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
4	280+38	PT. MK. TOP OF BTM. STEP S.E. COR. 70' LT.	788.58
5	291+18	60D SPIKE IN 30" BOX ELDER 88' LT.	789.22
6	306+86	60D SPIKE IN 20" MAPLE 32' RT	777.33



STATE PROJECT NUMBER	SHEET NO.

NOTE: SEE 1" = 50' CONSTRUCTION DETAIL. STA. 335+00 - 347+00

P.I. = 336+44.84 C.T.H."EE" = STA. 10 + 00.00 BALLARD RD.

P.I. STA. 309+15.35 C.T.H. "EE"
AZ = 179°-41'-44"

P.I. STA. 319+99.40 C.T.H. "EE"
AZ = 179°-56'-14"

P.I. STA. 333+11.51 C.T.H."EE"
AZ = 180°-17'-11"

DRAINTILE 12" REPLACE OUT

72" BOX CULV. (REMOVE)

C.T.H."EE" NO°-43'-15"E

NO°-24'-59"E

NO°-21'-13"E

NO°-38'-24"E

S89°-21'-36"E

S89°-57'-37"E

S83°-51'-14"E

R/W LINE

DRAIN TILE MOVE

6 DRIVE-WAYS MOVE

6" FIELD DRAIN

BIT. PARKING LOT

1 BAR

TAVERN

WELL

BARN

STA. 336+07.62 C.T.H."EE"
STA. 10 + 00.00 C.T.H."J"

P.I. STA. 11+41.03 C.T.H."J"
AZ. = 173°-21'-13"

P.I. STA. 336+44.84 C.T.H."EE"

P.I. STA. 309+15.35 C.T.H."EE"

P.I. STA. 319+99.40 C.T.H."EE"

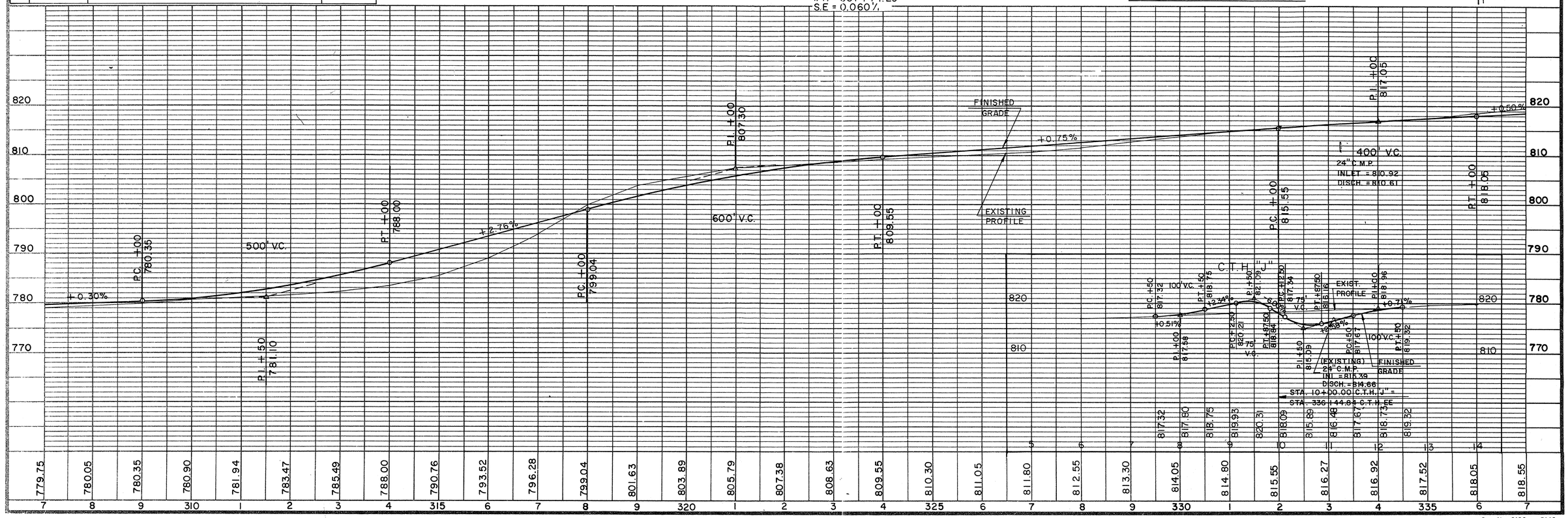
P.I. STA. 333+11.51 C.T.H."EE"

BENCH MARKS

NO.	STATION	DESCRIPTION		ELEV.
6	306+86	60D SPIKE IN 20" MAPLE	32' RT.	777.33
7	320+16	60D SPIKE IN 15" APPLE	67' LT.	806.25
8	10+81	PT. MK. TOP OF STEP, N.E. COR.	35' LT.	820.11

CURVE NOTES

PI = 336+44.84
Δ = 30°-31'-00"
D = 11°-30'-00"
T = 135.91'
L = 265.36'
E = 18.21'
R = 498.22'
P.C. = 335+08.93
P.T. = 337+74.29
S.E = 0.060'/'



Cat. No. 2130 – D140

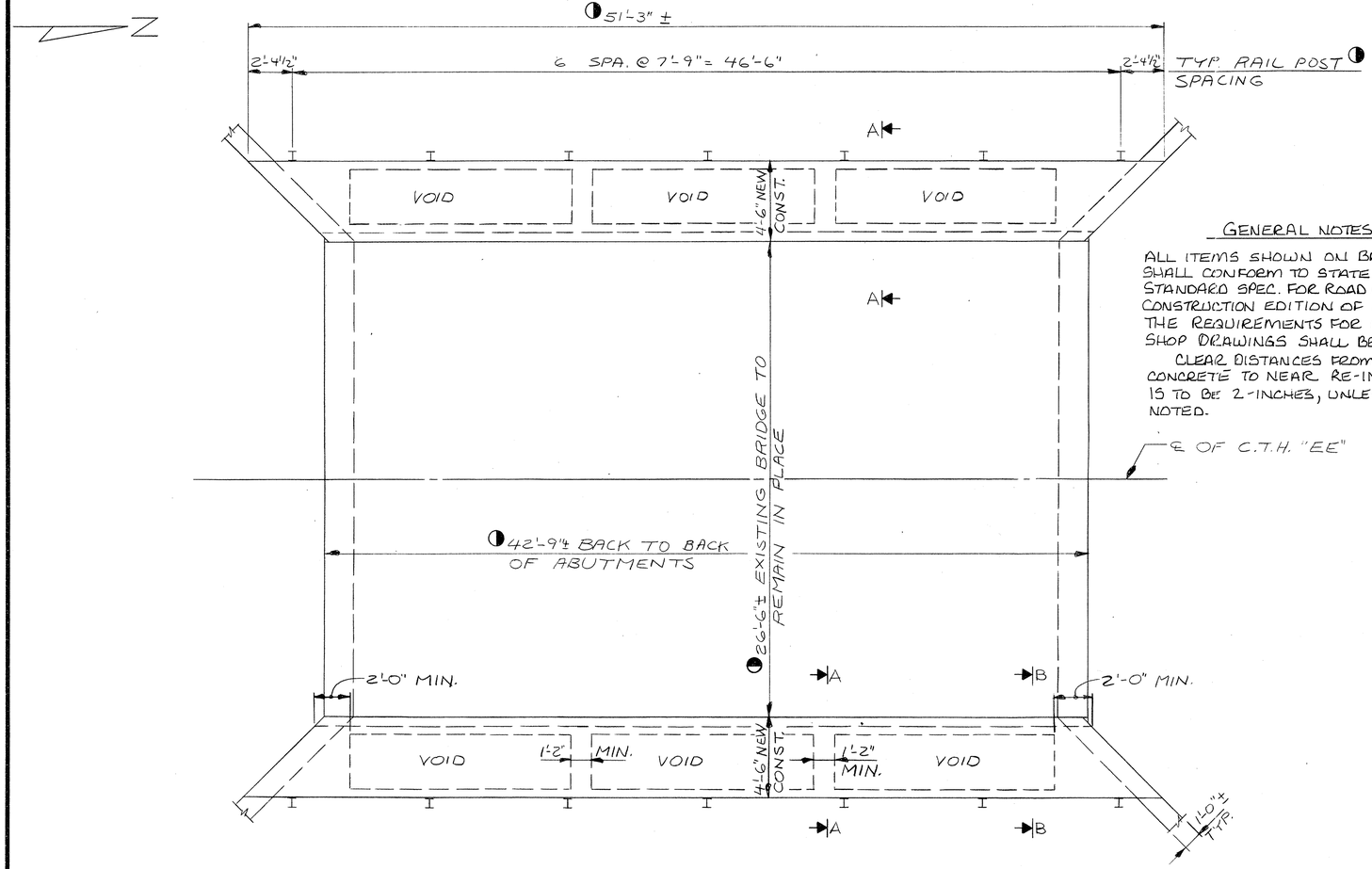
CURVE NOTES

P.I.	=	14+74.92
Δ	=	65°-07'-10"
D	=	15°-00'
T	=	243.90'
L	=	434.13'
E	=	71.22'
R	=	381.97'
S.E.	=	0.040'/'

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
9	359+39	PT. MK. TOP STEP, N.E. COR. 106' RT.	813.44

STATE PROJECT NUMBER	SHEET NO.

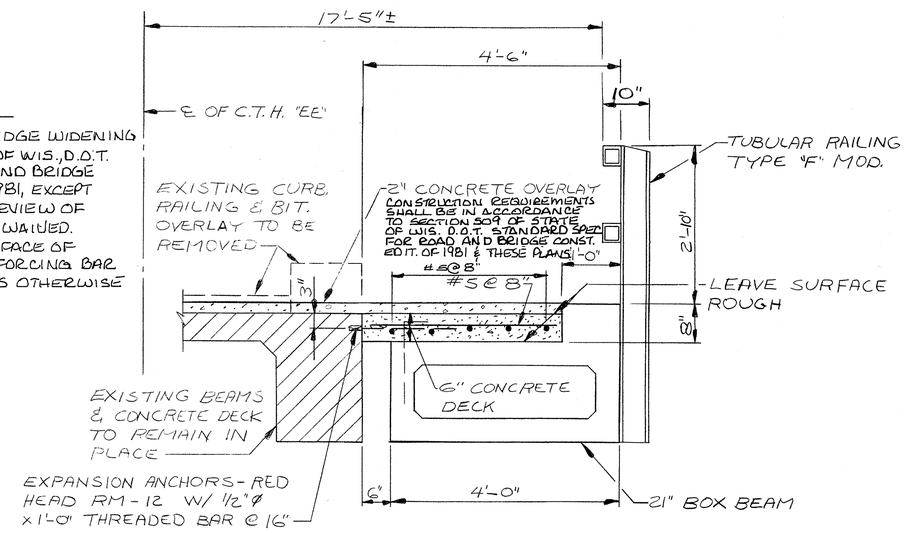


PLAN

GENERAL NOTES

ALL ITEMS SHOWN ON BRIDGE WIDENING SHALL CONFORM TO STATE OF WIS., D.O.T. STANDARD SPEC. FOR ROAD AND BRIDGE CONSTRUCTION EDITION OF 1981, EXCEPT THE REQUIREMENTS FOR REVIEW OF SHOP DRAWINGS SHALL BE WAIVED.

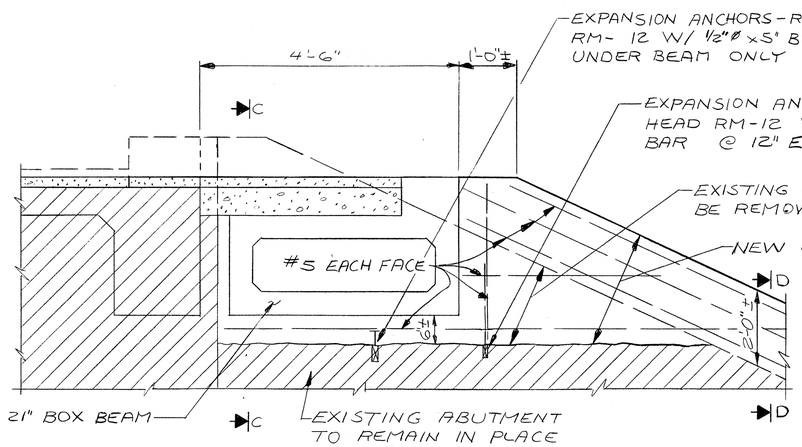
CLEAR DISTANCES FROM FACE OF CONCRETE TO NEAR RE-INFORCING BAR IS TO BE 2-INCHES, UNLESS OTHERWISE NOTED.



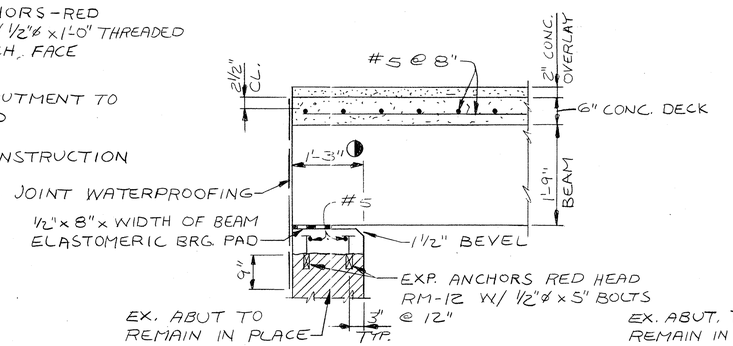
SECTION A-A

DESIGN LOADING : H-20 (STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20#/S.F.)

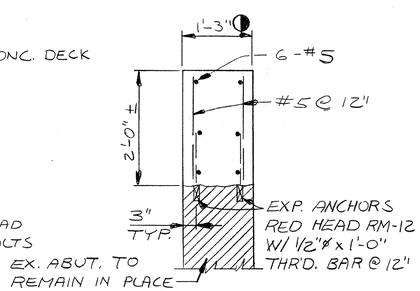
◑ DIMENSIONS ARE APPROXIMATE FIELD VERIFY BEFORE CONSTRUCTION BEGINS.



SECTION B-B



SECTION C-C



SECTION D-D

No.	Date	Revision	By

PLANS PREPARED BY
OWEN AYRES & ASSOCIATES
CONSULTING ENGINEERS
EAU CLAIRE, WISCONSIN

C.T.H. "EE" OVER DUCK CR.
BRIDGE WIDENING

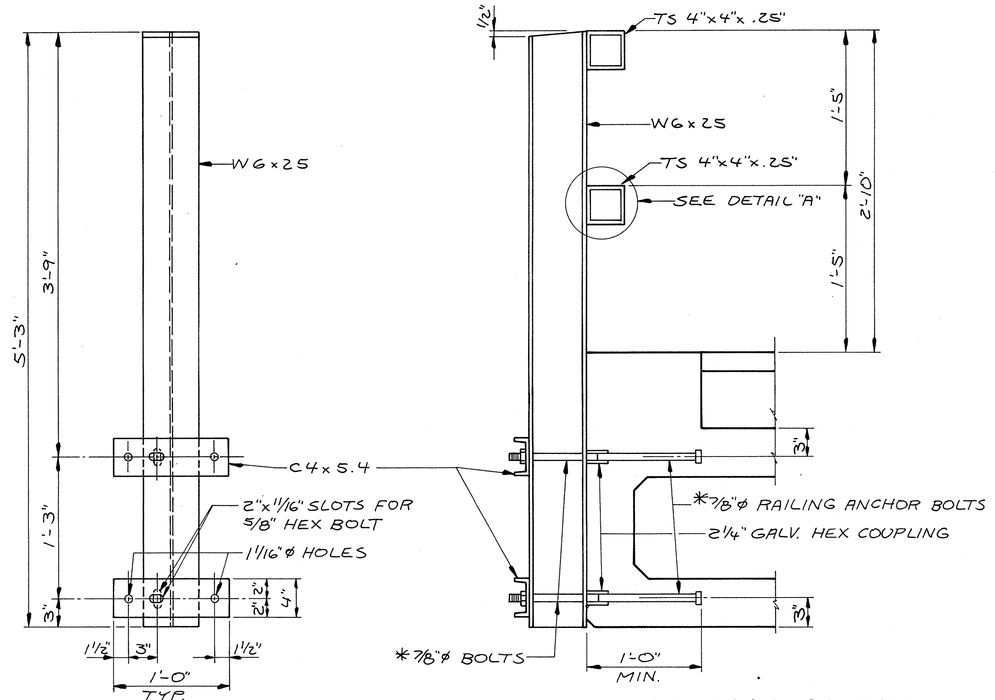
Const. Spec.	Drawn By	Plans Checked
1981	G.L.D.	D.H.P.

LAYOUT

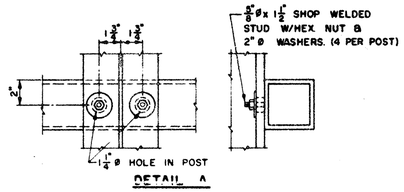
SHEET 1 OF 2

X

STATE PROJECT NUMBER	SHEET NO.



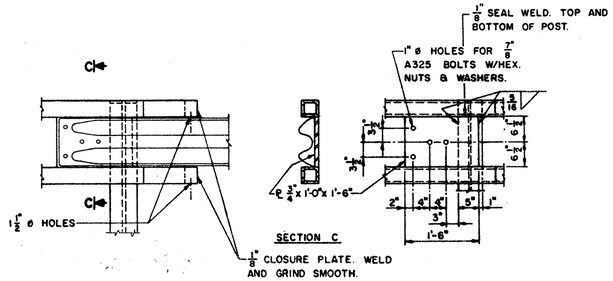
Railing Details



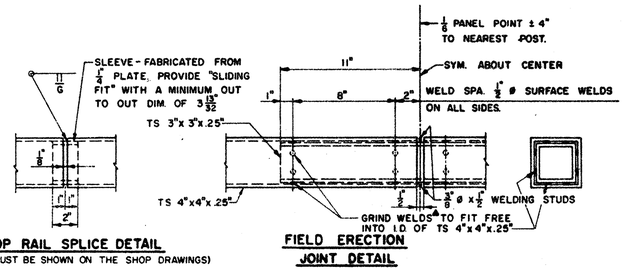
DETAIL A

⅝"ø x 1½" SHOP WELDED STUD W/HEX. NUT & 2" ø WASHERS. (4 PER POST)

▲ MINIMUM ⅝" FLAT SURFACE DIAMETER PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.

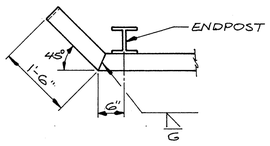


DETAIL AT END POST
(BEAM GUARD RAIL ATTACHMENT)



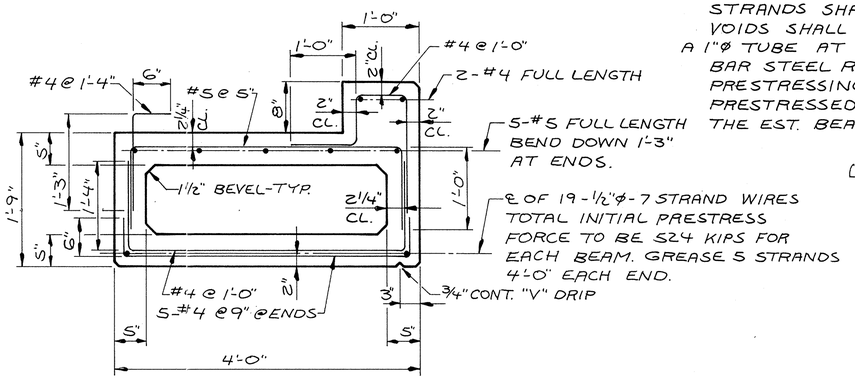
SHOP RAIL SPLICE DETAIL
(LOCATION MUST BE SHOWN ON THE SHOP DRAWINGS)

FIELD ERECTION JOINT DETAIL



END DETAIL AT WINGS

* BOLTS MAY BE EITHER ¾"ø A325 OR ⅞"ø A307.



SECTION THRU BEAM

General Notes (Beam)

STRANDS SHALL BE FLUSH WITH END OF BEAM.
VOIDS SHALL BE VENTED AND DRAINED BY CASTING A 1"ø TUBE AT EACH END AND CENTER OF VOID SEGMENT.
BAR STEEL REINF. SHALL BE GRADE 60 (Fy = 60 KSI.)
PRESTRESSING STEEL ULTIMATE STRENGTH = 270 K.S.I.
PRESTRESSED CONCRETE STRENGTH AT 28 DAYS = 5 K.S.I.
THE EST. BEAM CAMBER IS ½".

(CONSTRUCTION REQUIREMENTS SHALL BE IN ACCORDANCE TO SECTION 503 OF THE WISC. D.O.T. STANDARD SPEC. FOR ROAD AND BRIDGE CONST. EDITION OF 1981 AND THESE PLANS.)

General Notes (Railing)

RAILING SHALL BE 4"x4"x.25" STRUCTURAL TUBING CONFORMING TO A.S.T.M. DESIGNATION A36.

POST & CHANNELS SHALL BE MADE FROM MATERIAL CONFORMING TO A.S.T.M. DESIGNATION A36.

PLACE POST NORMAL TO GRADE LINE.

ALL MEMBERS, INCLUDING ANCHOR BOLTS, SHALL BE GALVANIZED AFTER FABRICATION.

BEAM GUARD ATTACHMENT MAY BE WELDED TO RAILS AND RAILS MAY BE WELDED TO POSTS.

RAILING SHALL BE FABRICATED IN 2 AND 3 PANEL LENGTHS.

PRIOR TO GALVANIZING, ALL STEEL RAILING SHALL BE GIVEN A NO. 6 COMMERCIAL BLAST CLEANING BY S.S.P.C. SPECIFICATIONS.

CONSTRUCTION REQUIREMENTS SHALL BE IN ACCORDANCE TO SECTION 513 OF THE WISC. D.O.T. STANDARD SPEC. FOR ROAD AND BRIDGE CONST. EDITION OF 1981 AND THESE PLANS.

No.	Date	Revision	By

PLANS PREPARED BY
OWEN AYRES & ASSOCIATES
CONSULTING ENGINEERS
EAU CLAIRE, WISCONSIN

C.T.H. "EE" OVER DUCK CR.
BRIDGE WIDENING

Const. Spec. 1981	Drawn By G.L.D.	Plans Checked D.H.P.

DETAILS

SHEET 2 OF 2

X

TELEDYNE POST N76404

STATE PROJECT NUMBER | SHEET NUMBER

STATION	DISTANCE	YARDAGE EXCAVATION	FILL

SURVEY TC

82.46

P.E. RIGHT

25+00
7.00

RW

4%

28+00
7.80

28+75
7.80

4%

RW

80.67

TWIN P.S.

81.31

EXIST TWIN 48" C.P.P.

END RW

RW

HOUSE

P.E. RIGHT

P.E. RIGHT

RW

24+00
7.80

24+75
7.80

RW

80.83

P.E. LEFT

80.83

CURV. ROAD CATCH BOX

RW

23+00
7.90

NISSEN CORNER

10'

10'

VISION CORNER

SHEET TOTAL

STATE PROJECT NUMBER | SHEET NUMBER

STATION	DISTANCE	YARDAGE EXCAVATION	YARDAGE FILL

SHEET TOTAL

STATE PROJECT NUMBER | SHEET NUMBER

STATION	DISTANCE	YARDAGE EXCAVATION	YARDAGE FILL

27+80
790
RW
PE LEFT
PE RIGHT

27+85
790
RW
93.0
96.16
PE LEFT
PE RIGHT
RW
HOUSE

27+64
785
PE LEFT
PE RIGHT

27+27
780

27+00
780
RW
CONST. ℄
74.31
RW
EXIST. RW
EXIST. TWIN 36" C.P.S.
HOUSE

25+00
780
TOP OF BANK
CHANNEL BOTTOM
RW
76.19
31.41
76.18
EXIST. RW

26+40
780
10
10
PE LEFT
EXIST. RW
HOUSE

SHEET TOTAL

STATE PROJECT NUMBER	SHEET NUMBER

STATION	DISTANCE	YARDAGE EXCAVATION	YARDAGE FILL

SHEET TOTAL

Catalog No. 2130-C121

STATE PROJECT NUMBER | SHEET NUMBER

STATION	DISTANCE	YARDAGE EXCAVATION	YARDAGE FILL

SHEET TOTAL

STATE PROJECT NUMBER | SHEET NUMBER

STATION	DISTANCE	YARDAGE EXCAVATION	YARDAGE FILL

SHEET TOTAL

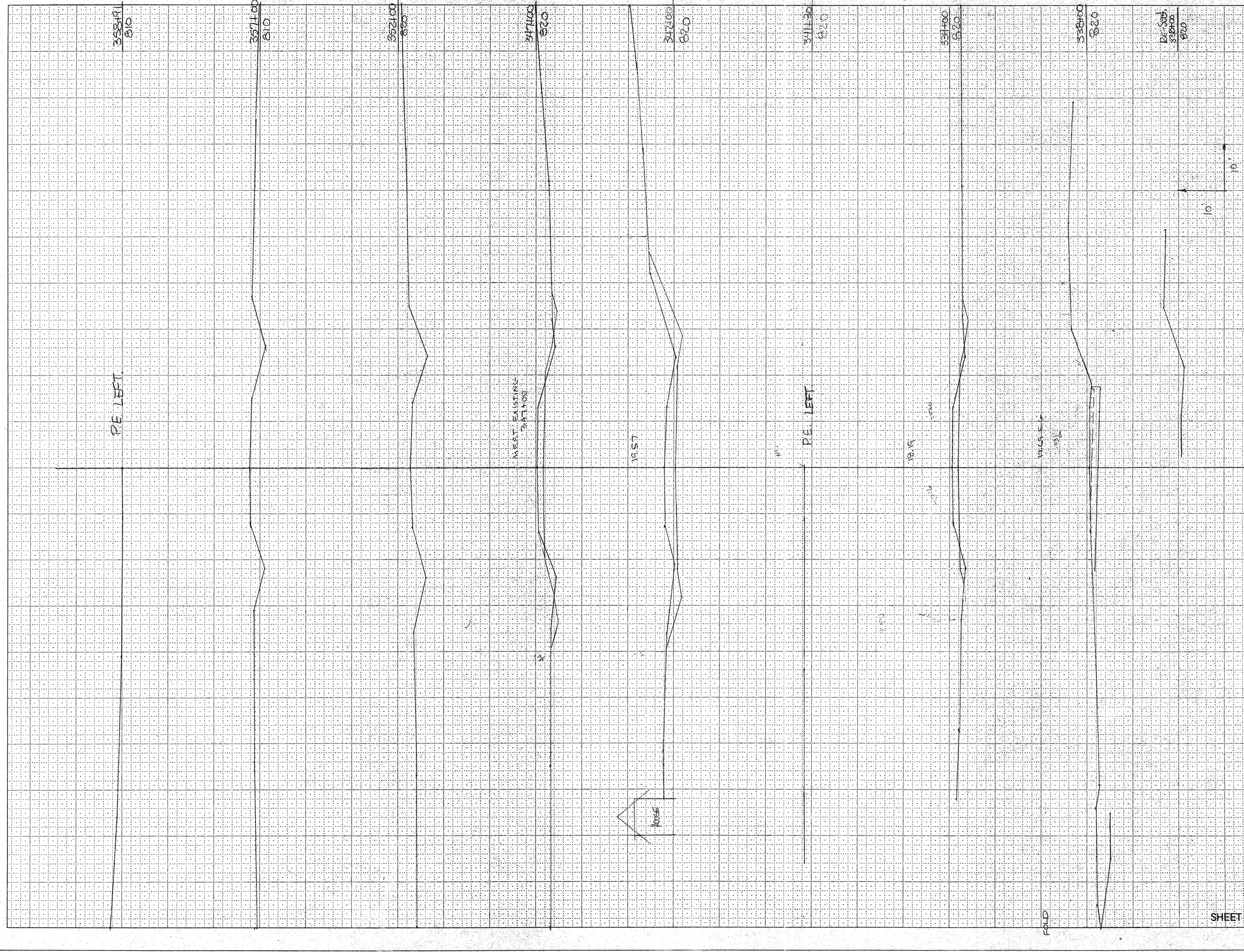
STATE PROJECT NUMBER | SHEET NUMBER

STATION	DISTANCE	YARDAGE EXCAVATION	YARDAGE FILL

SHEET TOTAL

STATE PROJECT NUMBER | SHEET NUMBER

STATION	DISTANCE	YARDAGE EXCAVATION	FILL



SHEET TOTAL

C.T.H. "EE"
SUPPLEMENTAL
CROSS-SECTIONS

STATE PROJECT NUMBER | SHEET NUMBER

STATION	DISTANCE	YARDAGE EXCAVATION	YARDAGE FILL
322+00			
810			
97.03			
318+00			
800			
97.71			
313+00			
780			
84.16			
SHEET TOTAL			

10'
15'

STATE PROJECT NUMBER		SHEET NUMBER

STATION	DISTANCE	YARDAGE EXCAVATION	FILL

11+79
820

P.G. LEFT

11+00
820

10+00
820

C.T.H. "EE"

9+00
820

8+00
820

7+00
790

6+00
790

5+00
790

CENTER VALLEY ROAD

C.T.H. "EE"

C.T.H. "F"

HOUSE

SHEET TOTAL

STATE PROJECT NUMBER | SHEET NUMBER

STATION	DISTANCE	YARDAGE EXCAVATION	YARDAGE FILL

10'
10'

1400
828

1100
828

1300
828

1200
828

DE LEFT

BALLARD ROAD

C.T.H. 'J'

SHEET TOTAL

C.T.H. EE – BALLARD CONNECTOR ROAD

16445 B.O. 14400 B.O. 12400 B.O.

STATE PROJECT NUMB

STATION	DISTANCE	YARDA EXCAVATION

10'

10'

SHEET TOTAL