

REVETMENT
STPN-224-1(17)--2J-50

LETTING DATE
 7/18/2017

JASPER CO.



Highway Division

PLANS OF PROPOSED IMPROVEMENT ON THE

PRIMARY ROAD SYSTEM
JASPER COUNTY
REVTMENT

0.1 mi N of Main St / Indigo Ave in Kellogg

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

Value Engineering Saves. Refer to Article 1105.14 of the Specifications.



REVISIONS

TOTAL

PROJECT IDENTIFICATION NUMBER

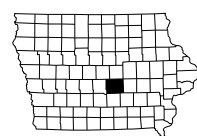
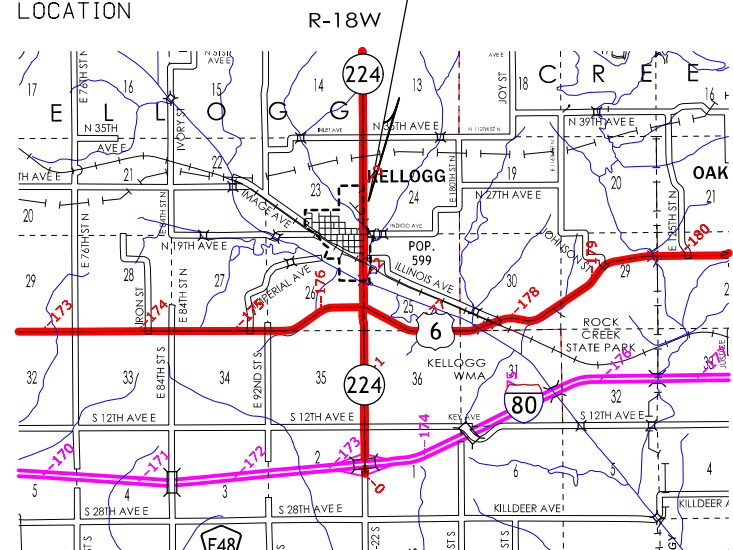
16-50-224-010

PROJECT NUMBER

STPN-224-1(17)--2J-50

R.O.W. PROJECT NUMBER

PROJECT LOCATION



LOCATION MAP SCALE



DESIGN DATA RURAL


20--	AADT	--	V.P.D.
20--	AADT	--	V.P.D.
20--	DHV	--	V.P.H.
	TRUCKS	--	%
	Total		
	Design ESALs	--	

INDEX OF SEALS

SHEET NO.	NAME	TYPE
A.1	Tony J. Gustafson	Primary Signature Block

DESIGN EVENT DATES

- D0 - Date: 07-01-2016
- D2 - Date: 09-16-2016
- D5 - Date: 11-04-2016
- D9 - Date: 05-02-2017



I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

Signature: _____ Date: _____
 Printed or Typed Name: Tony J. Gustafson
 My license renewal date is December 31, 20 17.

Pages or sheets covered by this seal: _____

100-1D
10-18-05

PROJECT DESCRIPTION

Project is for the clean out of existing culvert and placement of revetment on channel bottom and slopes on the inlet and the outlet.

100-0A
10-28-97

**ESTIMATED ROADWAY QUANTITIES
(1 DIVISION PROJECT)**

Item No.	Item Code	Item	Unit	Total	As Built Qty.
1	2102-2713090	EXCAVATION, CLASS 13, WASTE	CY	1,023.3	
2	2507-3250005	ENGINEERING FABRIC	SY	1,096.4	
3	2507-6800061	REVTMENT, CLASS E	TON	1,184.1	
4	2528-8445110	TRAFFIC CONTROL	LS	1.00	
5	2528-8445113	FLAGGERS	EACH	See Proposal	
6	2533-4980005	MOBILIZATION	LS	1.00	

100-4A
10-29-02

ESTIMATE REFERENCE INFORMATION

Item No.	Item Code	Description
1	2102-2713090	EXCAVATION, CLASS 13, WASTE Item is for excavation of class 13 material in creek bottom and slopes to a depth of 2'. 30% added for irregularities.
		For excavation of class 13 material in creek bottom and slopes to 2 feet depth. Refer to Typical on Sheet D.1. Tabulation calculation based on 2 feet of depth with an additional 40% added for irregularities and clean out of culvert.
-	-	-
2	2507-3250005	ENGINEERING FABRIC
3	2507-6800061	REVTMENT, CLASS E Refer to Typical on Sheet D.1.
	2507-3250005	ENGINEERING FABRIC Use material specified for embankment erosion control according to Article 4196.01, B, 3. Material will be measured in sq. yds. of actual area covered.
-	-	-
4	2528-8445110	TRAFFIC CONTROL
-	-	-
5	2528-8445113	FLAGGERS
-	-	-
6	2533-4980005	MOBILIZATION
-	-	-

105-4
10-18-11

STANDARD ROAD PLANS

The following Standard Road Plans apply to construction work on this project.

Number	Date	Title
TC-1	04-16-13	Work Not Affecting Traffic (Two-Lane or Multi-Lane)
TC-202	04-21-15	Work Within 15 ft of Traveled Way
TC-213	04-17-12	Lane Closure with Flaggers

111-25
10-18-11

INDEX OF TABULATIONS

Tabulation	Tabulation Title	Sheet No.
C Sheets		
100-0A	ESTIMATED ROADWAY QUANTITIES (1 DIVISION PROJECT)	C.1
100-1D	PROJECT DESCRIPTION	C.1
100-4A	ESTIMATE REFERENCE INFORMATION	C.1
105-4	STANDARD ROAD PLANS	C.2
111-25	INDEX OF TABULATIONS	C.2

281-6
10-18-11

TOPEKA SHINER WATERSHEDS

Special Conditions for Working in Topeka Shiner Watersheds:

1. Do not deposit sweepings, washings, treatment chemicals, or grouting and bonding materials in the stream or into any location where such pollutants can be washed in the stream by runoff water.
2. To protect Topeka Shiners during their peak spawning period, do not conduct project activity within the stream bed between the dates of May 15 and July 31, inclusive. Constructing or removing temporary crossings, causeways, and weirs is prohibited between those dates as well. Previously constructed crossings, causeways, and weirs may remain in place between those dates.
3. Prompt attention is required for placing and maintaining temporary erosion control measures to minimize unnecessary sediment loading of the stream. Within one week of land disturbance at the project site, place appropriate temporary erosion control measures (e.g. silt fencing, hay bale ditch checks, erosion control blankets, rock ditch checks, etc.) and/or temporary grass seeding.
4. Within one month (or during the next appropriate seeding period) following completion of construction, reseed all areas denuded of vegetation as a result of the permitted action, including all borrow areas that drain into the stream, using a permanent seed mix.
5. Do not take sand for use in mixing concrete and/or asphalt from the project site, unless indicated otherwise in the contract documents.
6. Protect off-channel wetland complexes, such as old oxbow meanders, that are present near the project area.
7. Locate and protect all temporary storage and/or staging facilities for petroleum products, other fuels, and chemicals to prevent accidental spills from entering waterways, tributaries, or drainageways within the project areas. In the event of an accidental spill, follow established state and federal spill reporting procedures. For Iowa DOT projects, immediately notify the Office of Location and Environment.

262-5
10-18-05

**UTILITIES
(POINT 25 PROJECT)**

This is a POINT 25 project and is subject to the provisions of IAC 761-115.25.

281-1
10-18-16

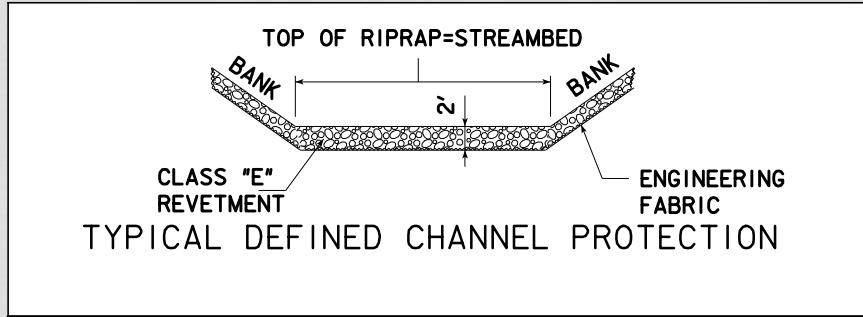
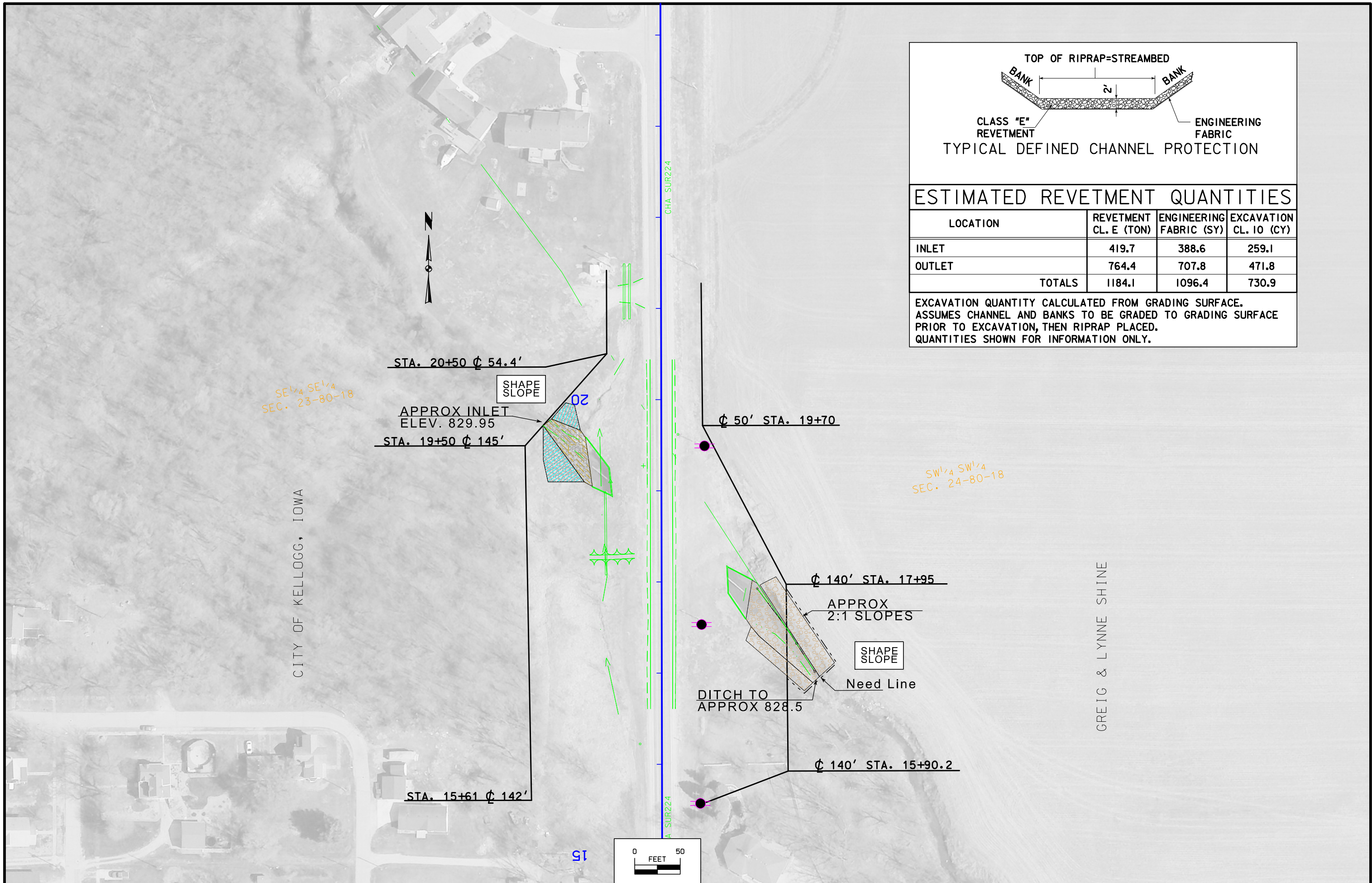
SECTION 404 PERMIT AND CONDITIONS

Construct this project according to the requirements of U.S. Army Corps of Engineers _____, Permit No. _____. A copy of this permit is available from the Iowa DOT website (<http://www.envpermits.iowadot.gov/>). The U.S. Army Corps of Engineers reserves the right to visit the site without prior notice.

281-2
10-15-13

INDIVIDUAL STORM WATER PERMIT

This project is regulated by the requirements of Iowa Department of Natural Resources (DNR) National Pollutant Discharge Elimination System (NPDES) permit, Permit No. #-#-#-#. A copy of this permit is available from the Iowa DOT Office of Contracts upon request. Co-permittee certification statement requirements from Standard Specifications Section 2602 apply.



ESTIMATED REVETMENT QUANTITIES

LOCATION	REVETMENT CL. E (TON)	ENGINEERING FABRIC (SY)	EXCAVATION CL. 10 (CY)
INLET	419.7	388.6	259.1
OUTLET	764.4	707.8	471.8
TOTALS	1184.1	1096.4	730.9

EXCAVATION QUANTITY CALCULATED FROM GRADING SURFACE. ASSUMES CHANNEL AND BANKS TO BE GRADED TO GRADING SURFACE PRIOR TO EXCAVATION, THEN RIPRAP PLACED. QUANTITIES SHOWN FOR INFORMATION ONLY.

SE¹/₄ SE¹/₄
SEC. 23-80-18

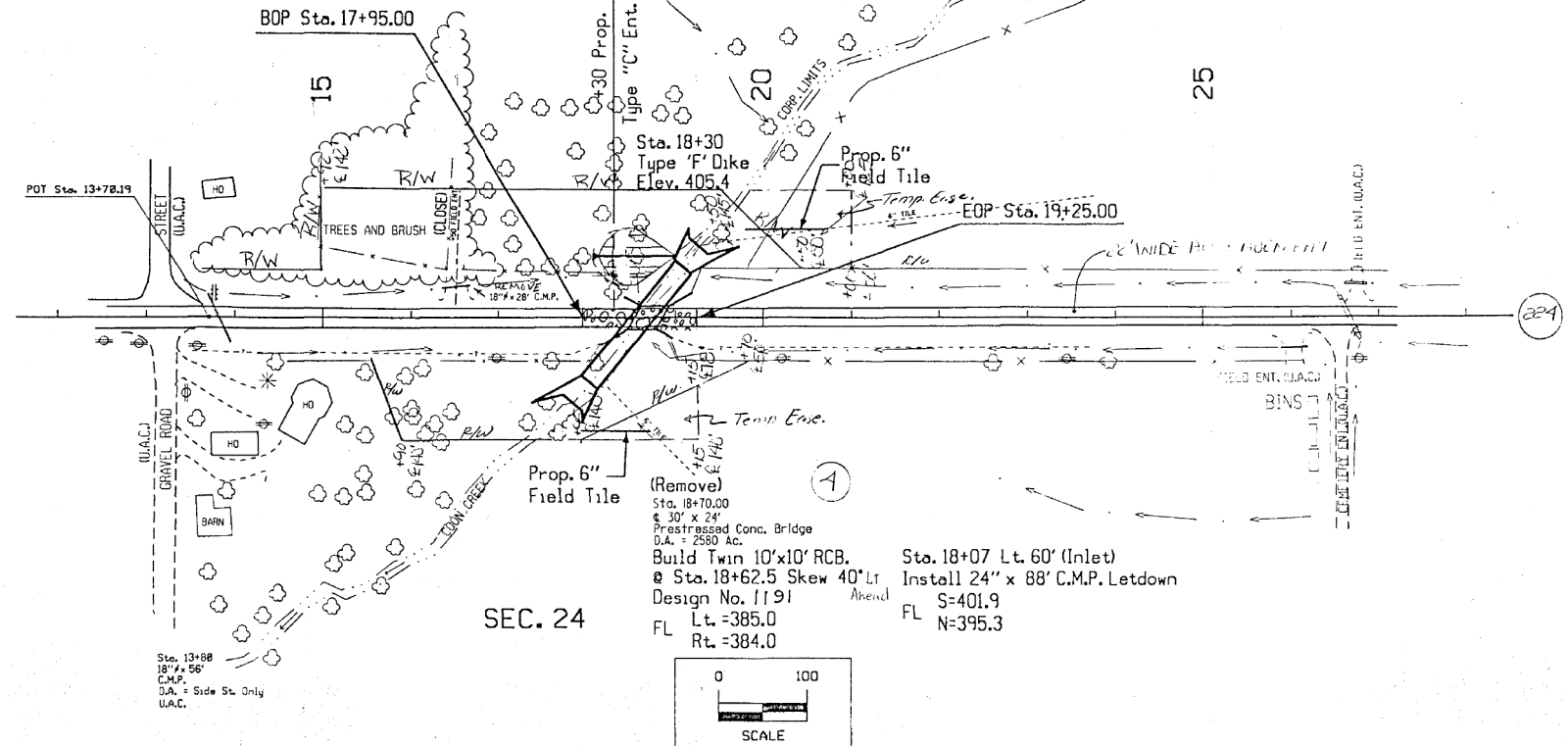
SW¹/₄ SW¹/₄
SEC. 24-80-18

CITY OF KELLOGG, IOWA

GREIG & LYNNE SHINE

④ JERRY C. & MARY PAULINE DEAL
 ⑤ JAMES L. & PRICILLA J. ANDERSON

KELLOGG TWP.
 T-80 N R-18 W
 SEC. 23

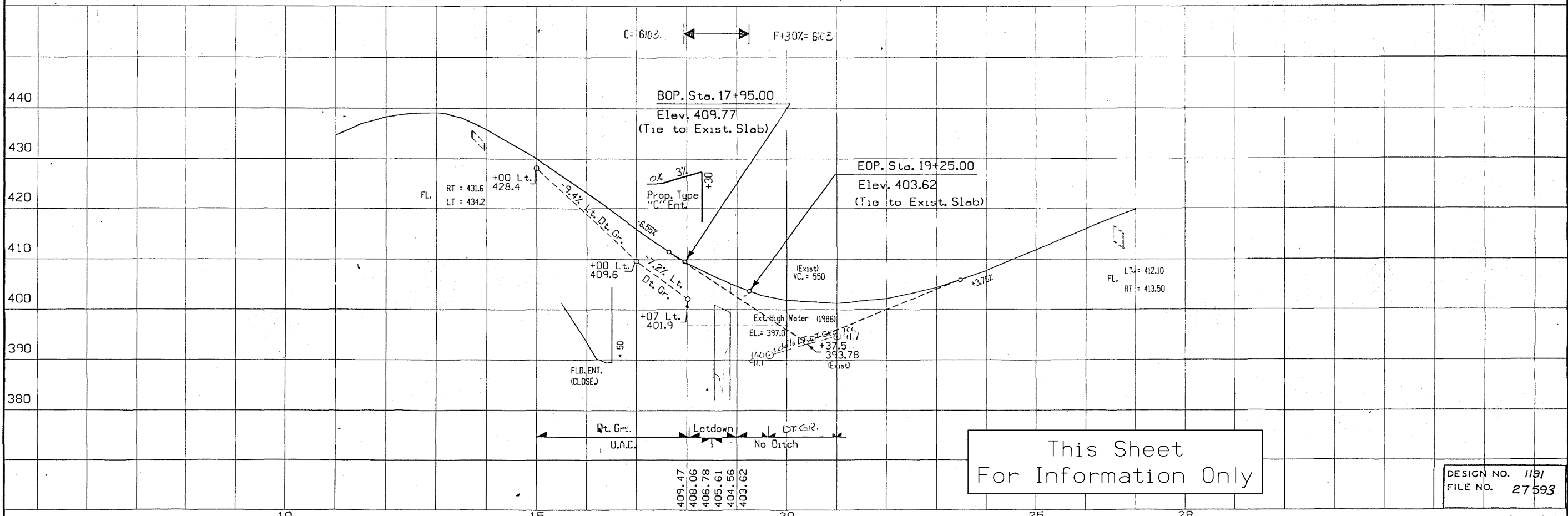
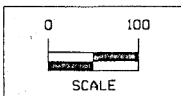


Utility Legend

—●—	Iowa Southern Utilities
- - -	Mid - Iowa Telephone Co.

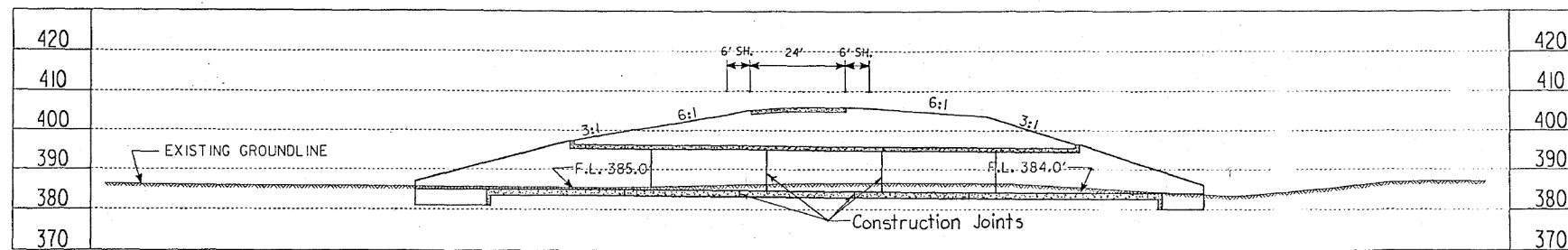
(Remove)
 Sta. 18+70.00
 30' x 24'
 Prestressed Conc. Bridge
 D.A. = 2580 Ac.
 Build Twin 10'x10' RCB. Sta. 18+07 Lt. 60' (Inlet)
 @ Sta. 18+62.5 Skew 40° Lt. Install 24" x 88' C.M.P. Letdown
 Design No. 1191 Ahead S=401.9
 FL Lt.=385.0 Rt.=384.0
 N=395.3

Sta. 13+88
 18' x 56'
 C.M.P.
 D.A. = Side St. Only
 U.A.C.

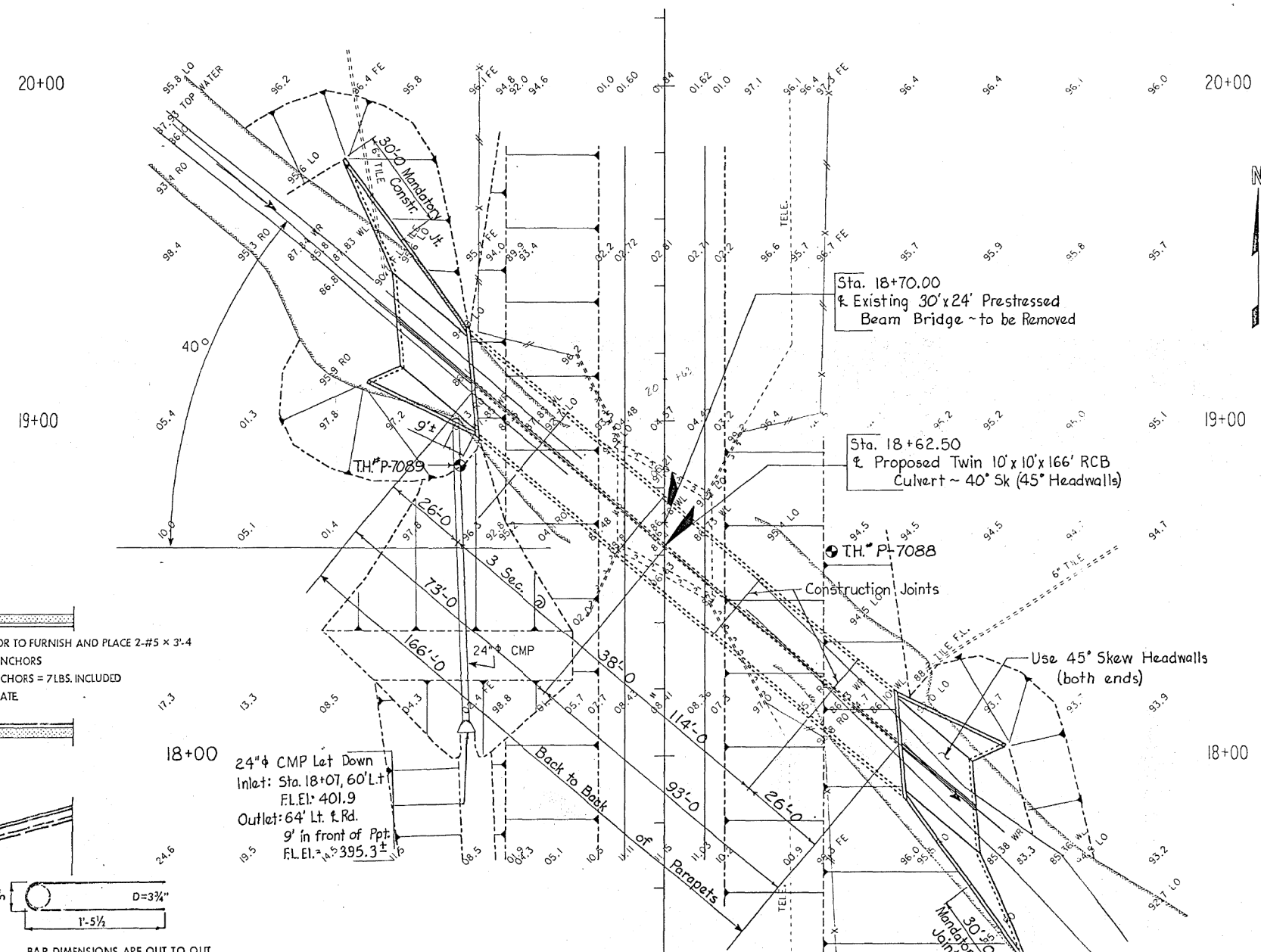


This Sheet
 For Information Only

DESIGN NO. 1191
 FILE NO. 27593



LONGITUDINAL SECTION ALONG CULVERT



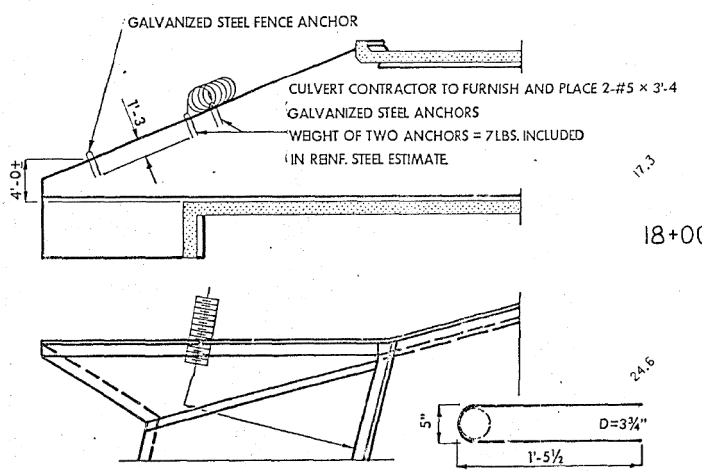
TRAFFIC WILL BE DETOURED OFF SITE

U.A.C. EXISTING GRADE ON IA. 224

TRAFFIC ESTIMATE
 1987: 1120 VPD
 2007: 1520 VPD
 8% TRUCKS

HYDRAULIC DATA
 DRAINAGE AREA= 2180 AC.-ROLLING
 STREAM SLOPE= 22.2 FT./MI.
 Q₅₀ = 1350 CFS
 NATURAL STAGE= 393.8'
 Q₁₀₀ = 1630 CFS
 NATURAL STAGE= 394.6'
 Q₅₀₀ = 2750 CFS
 STAGE W/BACKWATER= 396.6'
 EXTREME HW STAGE= 397.0'
 DATE= SEPT. 1986

LOCATION
 IA. 224 OVER COON CREEK
 T 80 N R 18 W
 SECTIONS 23 AND 24
 KELLOGG TOWNSHIP
 JASPER COUNTY
 BRIDGE MAINT. NO. 5002.55224



Galvanized Steel Anchors
 For
Corrugated Metal Pipe
 Over
Culvert Wing Wall

24" φ CMP Let Down
 Inlet: Sta. 18+07, 60' Lt.
 F.L. El. 401.9
 Outlet: 64' Lt. & Rd.
 9' in front of Ppt.
 F.L. El. 395.31

LEGEND
 Tele ~ Mid-Iowa Telephone Co.
 Iowa Southern Utilities power poles
 located Rt. Sta's 17+00 & 20+12

This Sheet
 For Information Only

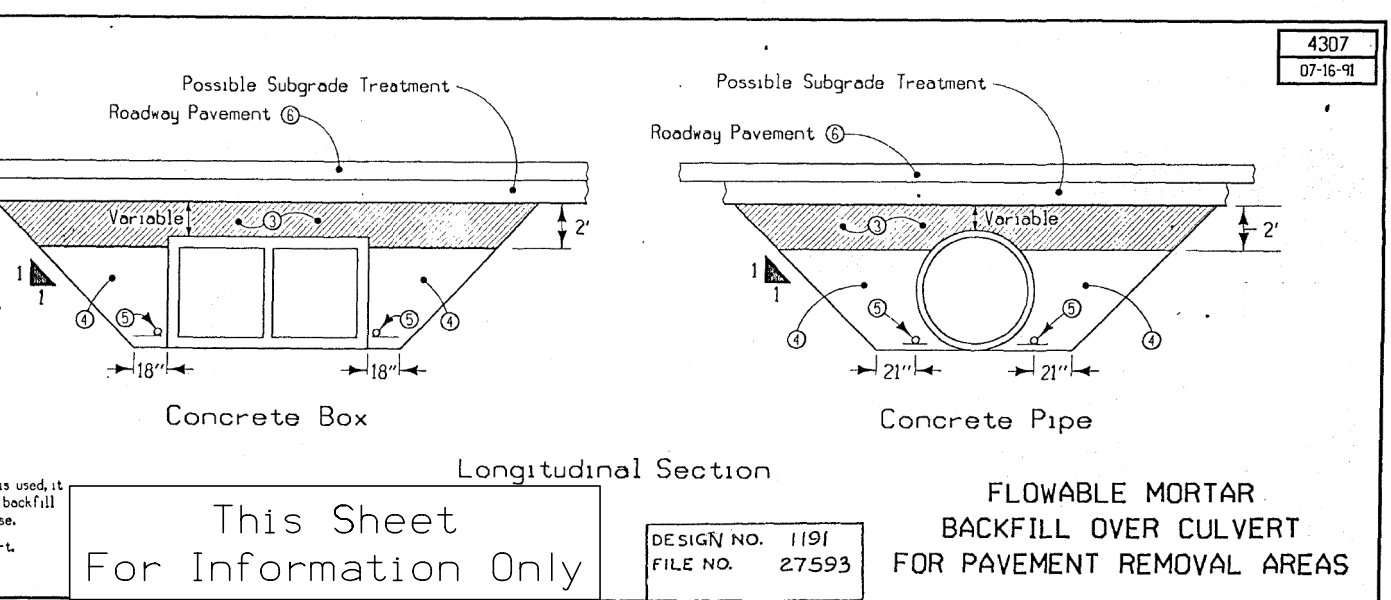
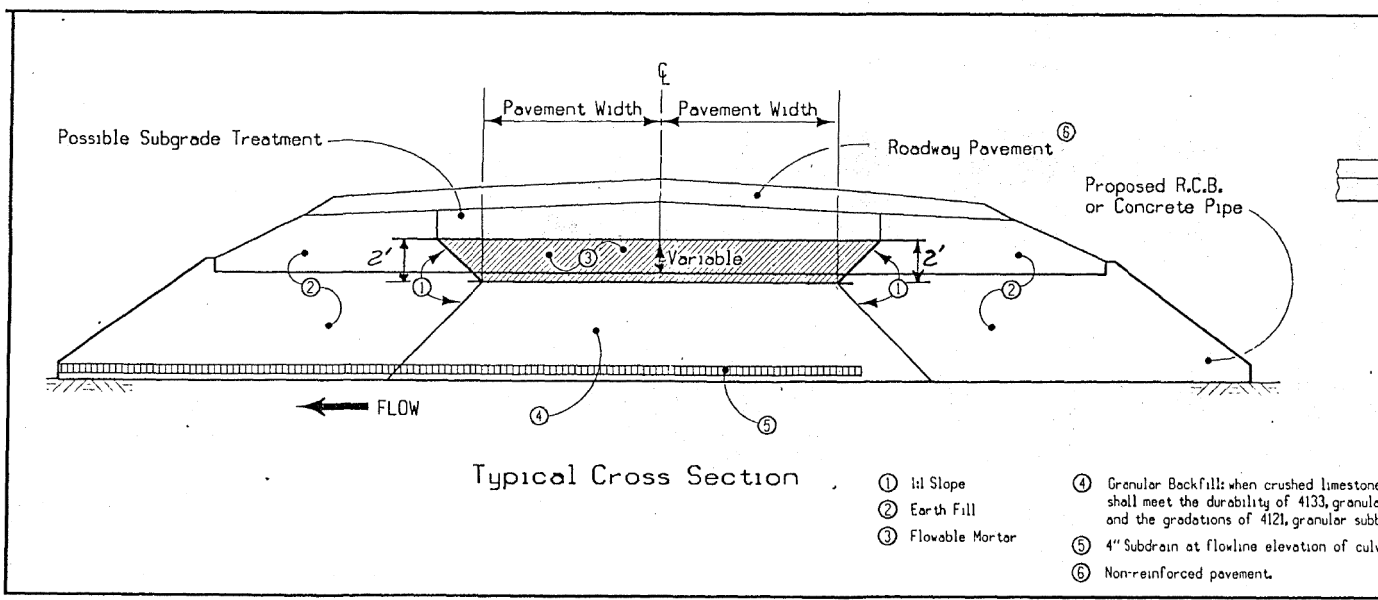
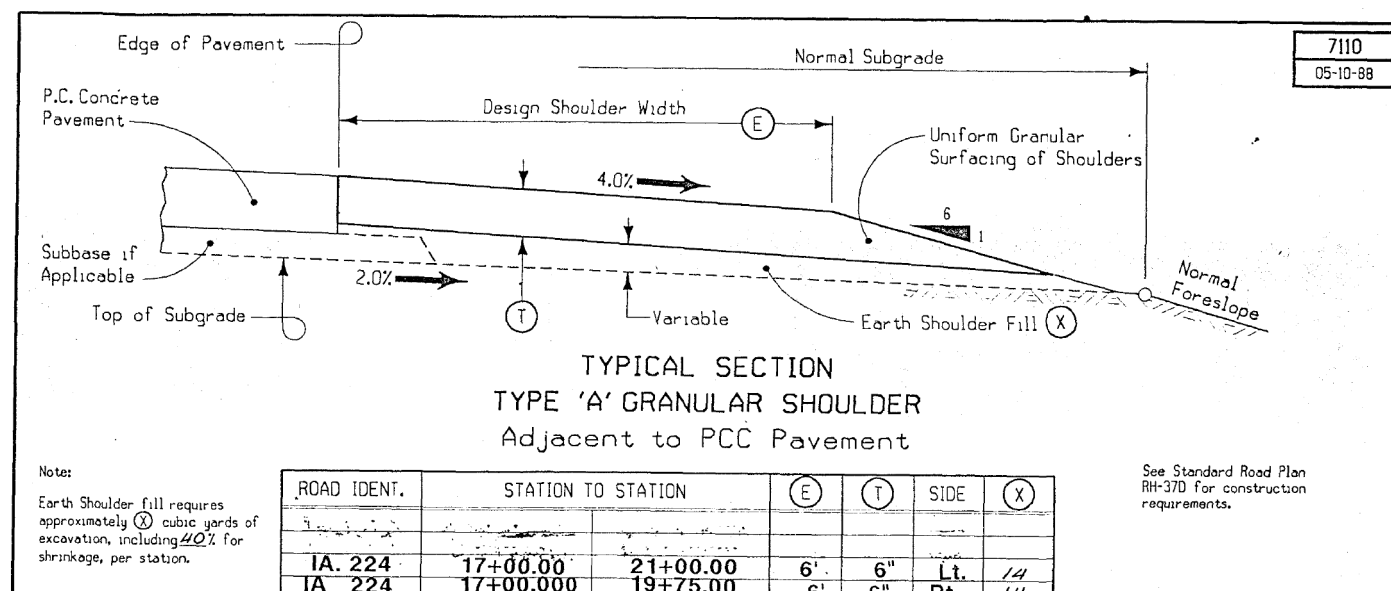
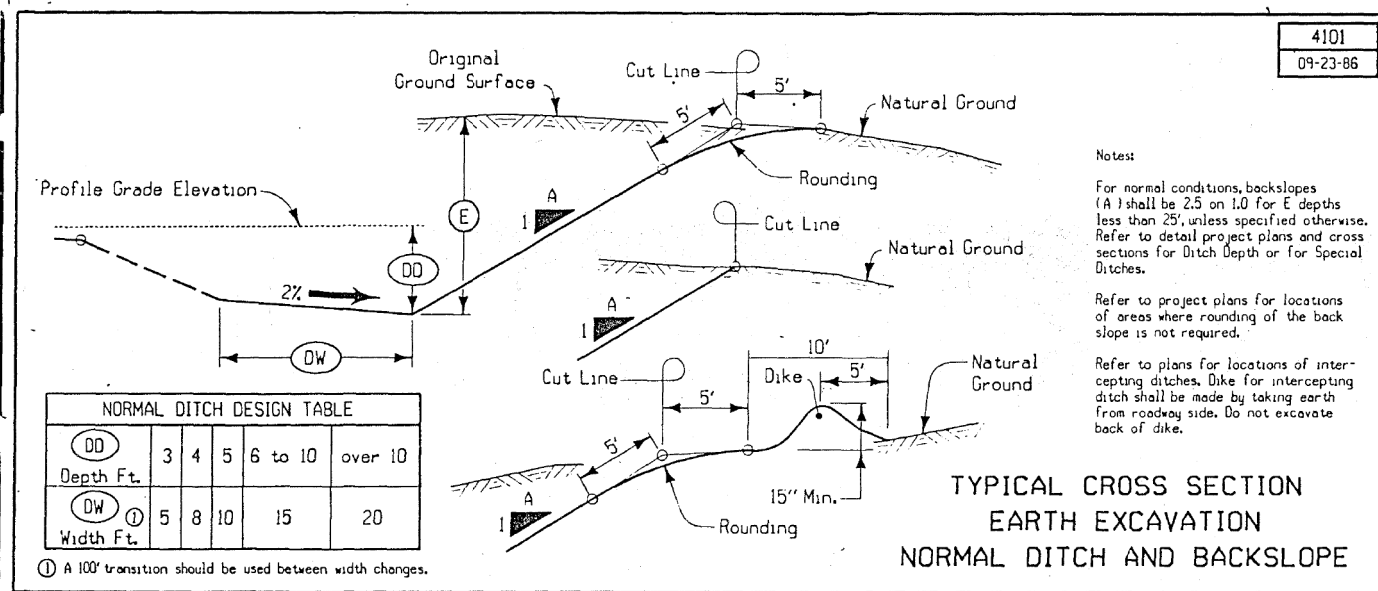
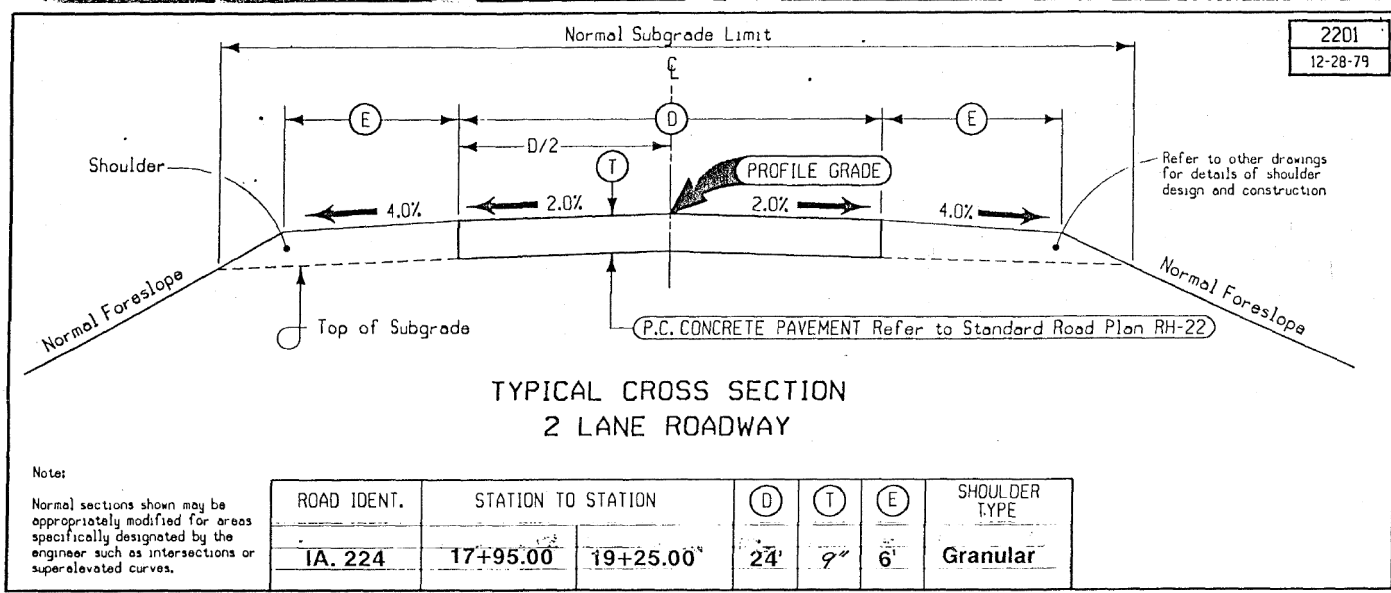
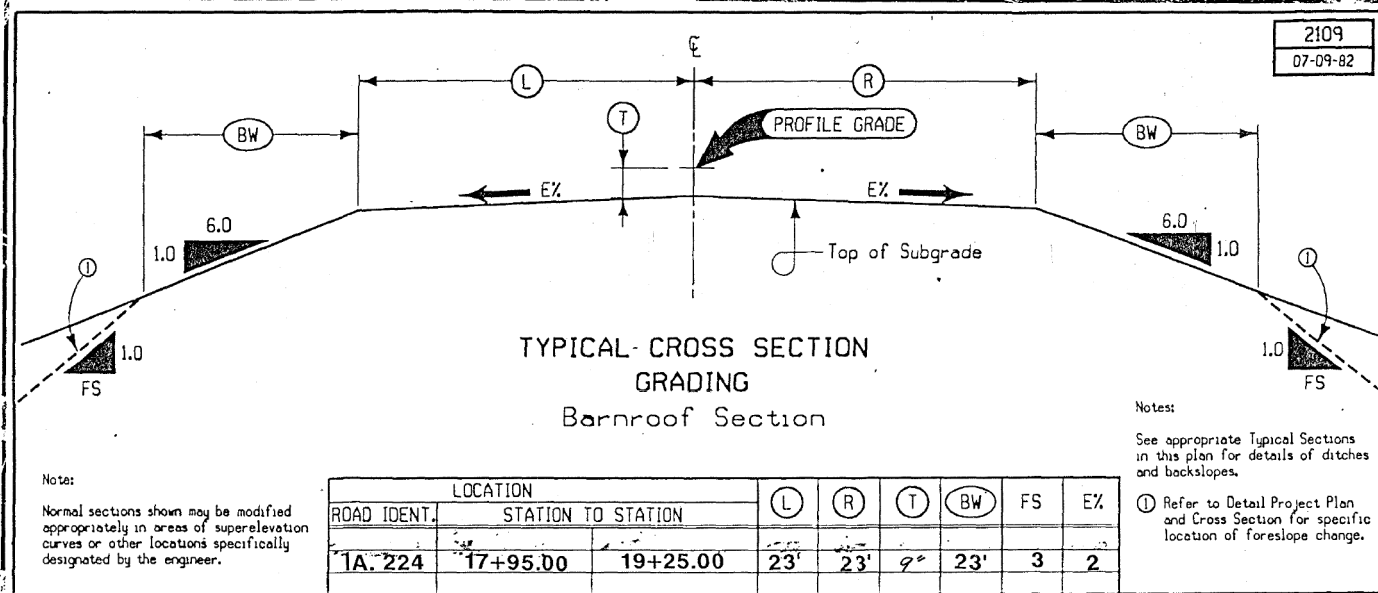
SITUATION PLAN

DESIGN FOR 40° SKEW
TWIN 10' X 10' X 166' REINFORCED CONCRETE BOX CULVERT
 WITH 2-45° HEADWALLS
SITUATION PLAN
 STATION: 18+62.50
JASPER COUNTY
 APRIL, 1989
 IOWA DEPARTMENT OF TRANSPORTATION--HIGHWAY DIVISION
 DESIGN SHEET NO. 2 OF 2 FILE NO. 27593 DESIGN NO. 1191

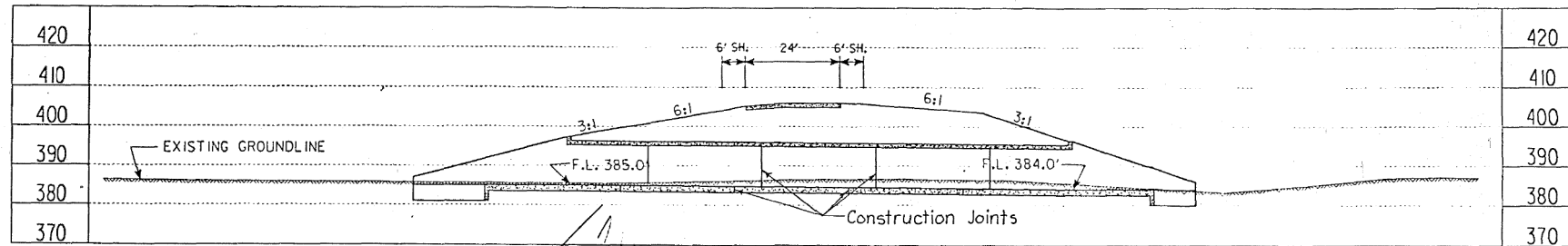
STATE	FHWA REGION	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
IOWA	7		4	19

DESIGNED BY M. Loupee TRACED BY D.A. Wright
 CHECKED BY D.A. Wright
 H50028700-501

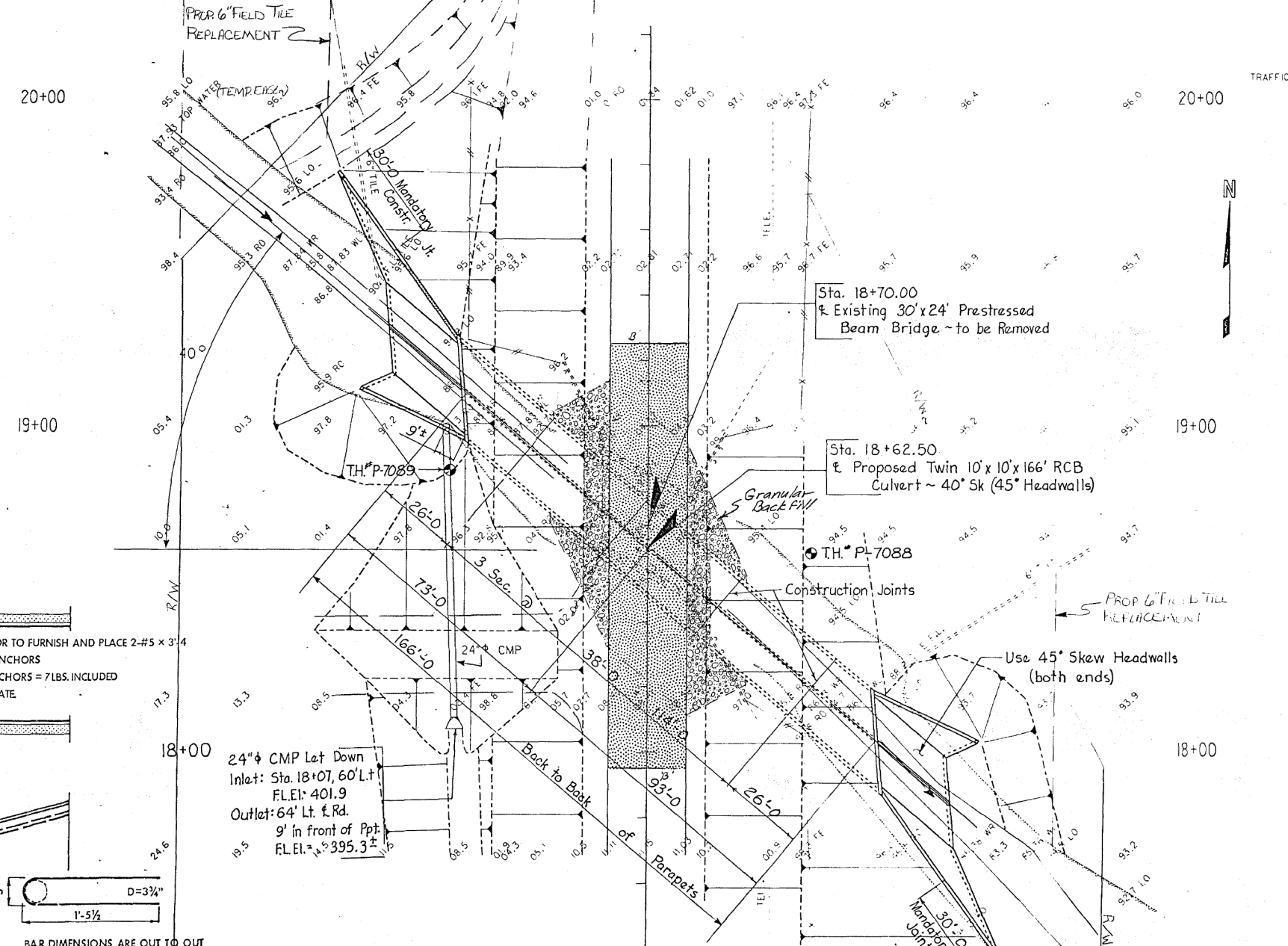
JASPER COUNTY PROJECT NUMBER STATE IOWA FHWA REGION 7 FISCAL YEAR SHEET NO. 4 TOTAL SHEETS 19



This Sheet For Information Only



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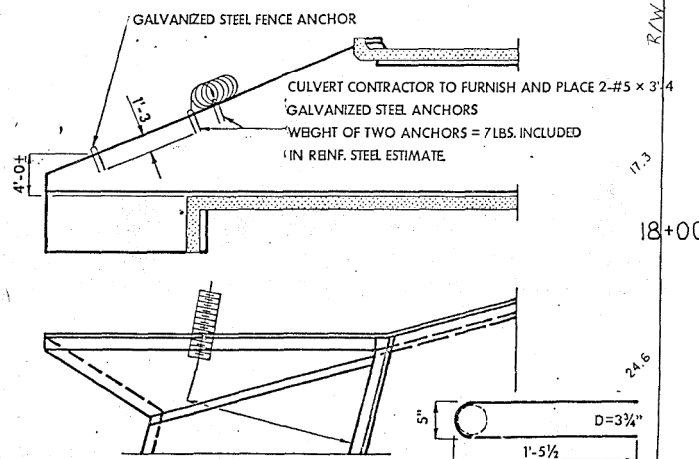
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T 80 N R 18 W
SECTIONS 23 AND 24
KELLOGG TOWNSHIP
JASPER COUNTY
BRIDGE MAINT. NO. 5002.5S224

FOR INFORMATIONAL PURPOSES ONLY



Galvanized Steel Anchors
For
Corrugated Metal Pipe
Over
Culvert Wing Wall

BAR DIMENSIONS ARE OUT TO OUT
"D" = PIN DIAMETER

24" ϕ CMP Let Down
Inlet: Sta. 18+07, 60' Lt.
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Outlet: 64' Lt. ϕ Rd.
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DESIGN SHEET NO. 2 OF 2 FILE NO. 27593 DESIGN NO. 1191

DESIGNED BY M. Loupee TRACED BY
DETAILED BY M. Loupee CHECKED BY D.A. Wright
H50028700.501

JASPER COUNTY	PROJECT NUMBER	BRT-24-1(17)-2J-50	STATE	IOWA	FEDERAL REGION	7	SHEET NO.	12	TOTAL SHEETS	19
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Jasper	ROW: STPN-224-1(18)--2J-50		PIN 16-50-224-010														
	0.1 mi N of Main St / Indigo Ave in Kellogg																
		STATE		COUNTY		CITY		BORROW									
PARCEL NO.	OWNER NAME	FEE	EASE	FEE	EASE	FEE	EASE	EXCESS	FEE	T.E.	MITIGATION	OTHER	HOUSE	BUILDING(S)	A/C ONLY	TOTAL ACQ.	
1	Greig Shine - Fee		0.1 AC														
1 Parcel	"TOTALS	0 AC	0.1 AC	0 AC	0 AC	0 AC	0 AC	0 AC	0 AC	0 AC	0 AC						
		0 SF		0 SF	0 SF		0 SF	0 SF		0 SF	0 SF						

SE 1/4 SE 1/4
SEC. 23-80-18

APPROX INLET
ELEV. 829.95

SHAPE
SLOPE

CITY OF KELLOGG, IOWA

GREIG & LYNNE SHINE

18+15

⊘128'±EX.R/W

SW 1/4 SW 1/4
SEC. 24-80-18

18+15

⊘140'

17+95

⊘140'±EX.R/W

APPROX
2:1 SLOPES

17+10

⊘200'

17+05

⊘215'

Need Line

DITCH TO
APPROX 828.5

16+55

⊘138'±EX.R/W

16+40

⊘138'±EX.R/W

TEMPORARY EASEMENT
TO SHAPE

CHA SUR224



Right of Way Design Information
THIS SHEET INCLUDED
FOR INFORMATION ONLY

ROW Team: LENEA /LARSON
ROW #: STPN-224-1(18)--2J-50
Plan Date: 11/09/16

Color Legend:

- Property Lines
- Temporary Easement
- Permanent Acquisition

SE COR. SEC. 23-80-18

FD. MAG N 112° 13' E 102.05'

9.12' LT. STA. 13+22.52