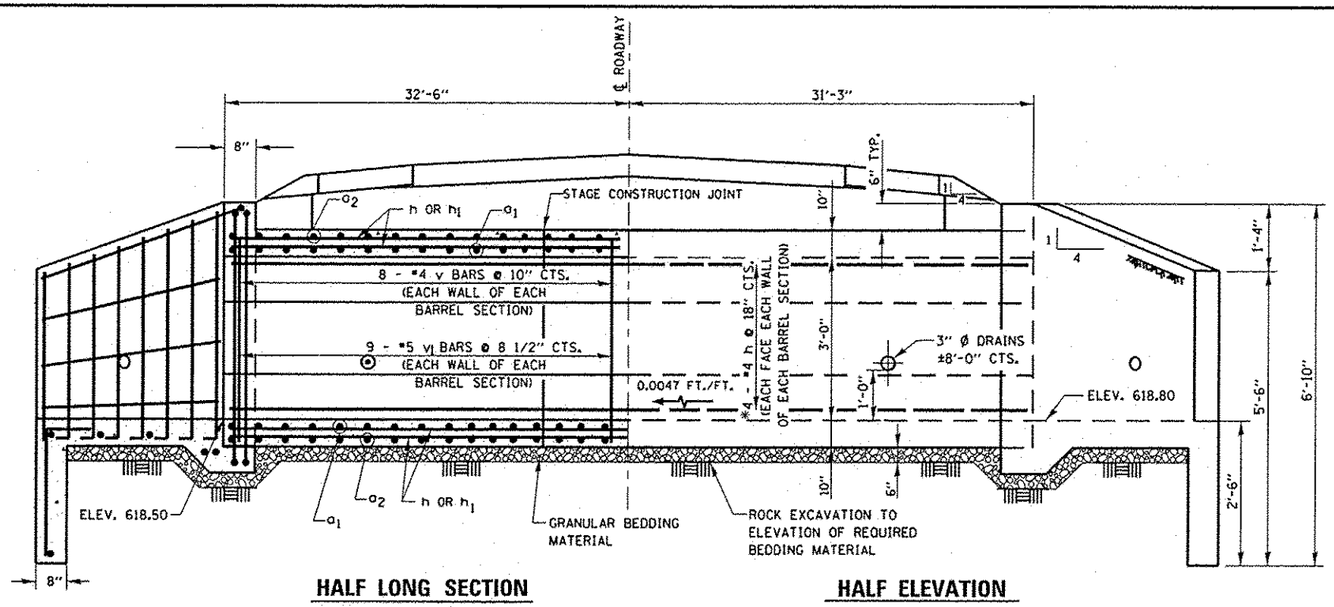
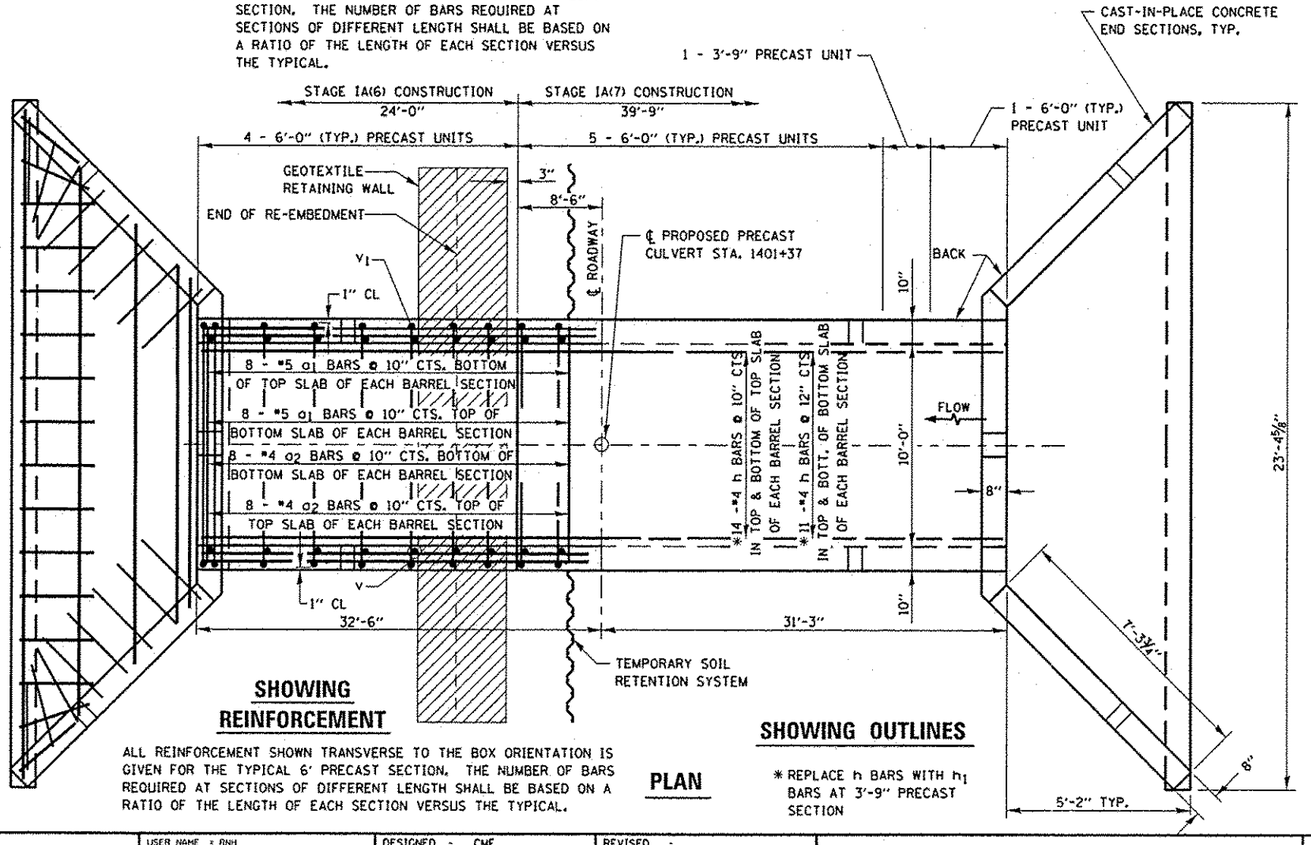


HALF LONG SECTION

HALF ELEVATION

ALL REINFORCEMENT SHOWN TRANSVERSE TO THE BOX ORIENTATION IS GIVEN FOR THE TYPICAL 6' PRECAST SECTION. THE NUMBER OF BARS REQUIRED AT SECTIONS OF DIFFERENT LENGTH SHALL BE BASED ON A RATIO OF THE LENGTH OF EACH SECTION VERSUS THE TYPICAL.



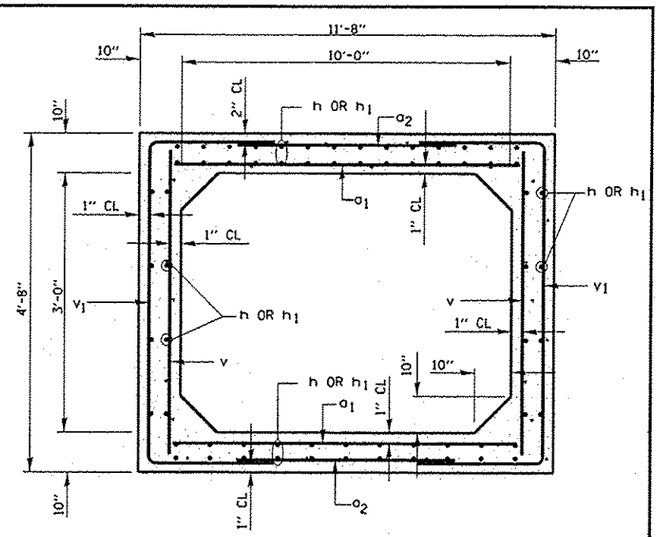
SHOWING REINFORCEMENT

ALL REINFORCEMENT SHOWN TRANSVERSE TO THE BOX ORIENTATION IS GIVEN FOR THE TYPICAL 6' PRECAST SECTION. THE NUMBER OF BARS REQUIRED AT SECTIONS OF DIFFERENT LENGTH SHALL BE BASED ON A RATIO OF THE LENGTH OF EACH SECTION VERSUS THE TYPICAL.

PLAN

SHOWING OUTLINES

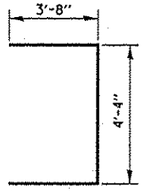
* REPLACE h BARS WITH h_1 BARS AT 3'-9" PRECAST SECTION



SECTION THRU PRECAST BARREL

BILL OF MATERIAL

BAR	NUMBER	SIZE	LENGTH
a_1	170	5	10'-6"
a_2	170	4	6'-8"
h	660	4	5'-10"
h_1	66	4	3'-7"
v	170	4	3'-4"
v_1	192	5	11'-8"
PRECAST CONCRETE BOX CULVERTS 10'x3' (SPECIAL)		FOOT	64
BOX CULVERT END SECTIONS, CULVERT NO. 1		EACH	2



BAR v_1

N

DESIGN STRESSES

FIELD UNITS

fy=60,000 p.s.i.

f'c= 3,500 p.s.i.

PRECAST UNITS

fy=60,000 p.s.i.

f'c= 5,000 p.s.i.

LOADING HL-93

GENERAL NOTES

CLASS SI CONCRETE SHALL BE USED THROUGHOUT FOR CAST-IN-PLACE CONSTRUCTION.

EXPOSED EDGES SHALL BE BEVELED ¾".

FOR BACKFILLING AND EMBANKMENTS SEE STANDARD SPECIFICATIONS.

REINFORCEMENT SHOWN SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF PRECAST CONCRETE BOX CULVERTS 10'x3' SPECIAL.

END SECTION REINFORCEMENT NOT DETAILED ON THIS SHEET. SEE END SECTION DETAILS SHEET FOR 10'x3' PRECAST BOX CULVERT.

DESIGN OF BOX CULVERT AND END SECTIONS PER AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 5TH EDITION AND ASTM C1577.

SEE SHEET 156 FOR SOIL BORINGS.

FILE NAME =	USER NAME = RNH	DESIGNED - CMF	REVISED -
		DRAWN - RNH	REVISED -
	PLOT SCALE =	CHECKED - TMM	REVISED -
	PLOT DATE =	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BOX CULVERT #1
10'x3' PRECAST BOX CULVERT
STATION 1401+37

SCALE: | SHEET NO. __ OF __ SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
41	(1))W&RS-1	KANKAKEE	450	163
		CONTRACT NO. 66905		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		