

PLAN SYMBOLS

- COUNTY LINE.....
- TOWNSHIP OR RANGE LINE.....
- SECTION LINE.....
- QUARTER LINE.....
- SIXTEENTH LINE.....
- RIGHT OF WAY LINE.....
- SLOPE EASEMENT.....
- EXISTING RIGHT OF WAY.....
- PROPERTY LINE.....
- CORPORATE OR CITY LIMITS.....
- RETAINING WALL.....
- RAILROAD.....
- RAILROAD RIGHT OF WAY.....
- RIVER OR CREEK.....
- DRAINAGE DITCH.....
- CULVERT.....
- DROP INLET.....
- GUARD RAIL.....
- BARBED WIRE FENCE.....
- WOVEN WIRE FENCE.....
- CHAIN LINK FENCE.....
- WOOD FENCE.....
- STONE WALL OR FENCE.....
- HEDGE.....

- LOWLAND.....
- TIMBER ORCHARD.....
- BRUSH.....
- NURSERY.....

- CATTLE GUARD.....
- OVERPASS (Highway Over).....
- UNDERPASS (Highway Under).....
- BRIDGE.....

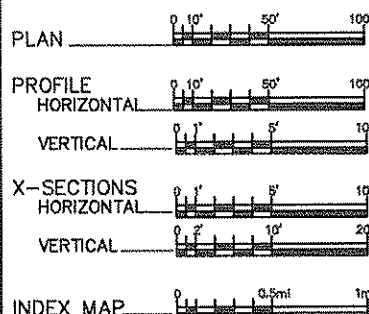
- BUILDING (One Story Frame).....
- F-FRAME C-CONCRETE.....
- S-STONE T-TILE.....
- B-BRICK ST-STUCCO.....

- RAILROAD CROSSING BELL.....
- RAILROAD CROSSING GATE.....
- MANHOLE.....
- CATCH BASIN.....
- FIRE HYDRANT.....
- CAST IRON MONUMENT.....
- IRON PILL.....
- GRAVEL PIT.....
- SAND PIT.....
- BORROW PIT.....
- ROCK QUARRY.....

UTILITY SYMBOLS

- POWER POLE LINE.....
- TELEPHONE OR TELEGRAPH POLE LINE.....
- JOINT TELEPHONE & POWER ON POWER POLES.....
- ON TELEPHONE POLES.....
- ANCHOR.....
- STEEL TOWER.....
- STREET LIGHT.....
- PEDESTAL (Cable Terminal).....
- GAS MAIN.....
- WATERMAIN.....
- TELEPHONE CABLE IN CONDUIT.....
- ELECTRIC CABLE IN CONDUIT.....
- TELEPHONE MANHOLE.....
- ELECTRIC MANHOLE.....
- BURIED TELEPHONE CABLE.....
- BURIED ELECTRIC CABLE.....
- AERIAL TELEPHONE CABLE.....
- SEWER (Sanitary or Storm).....
- SEWER MANHOLE.....

SCALES

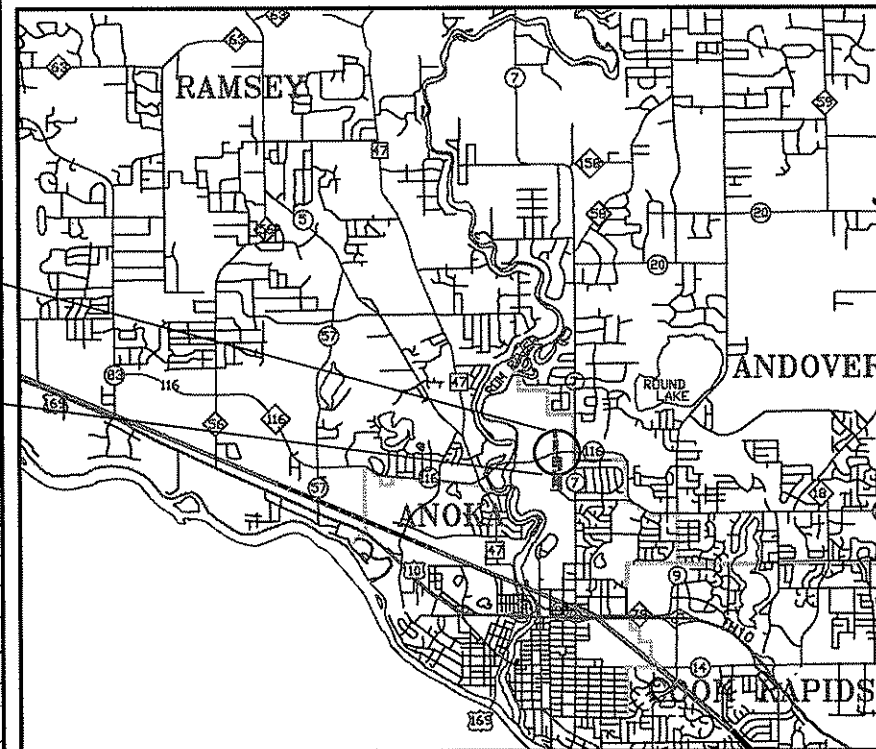
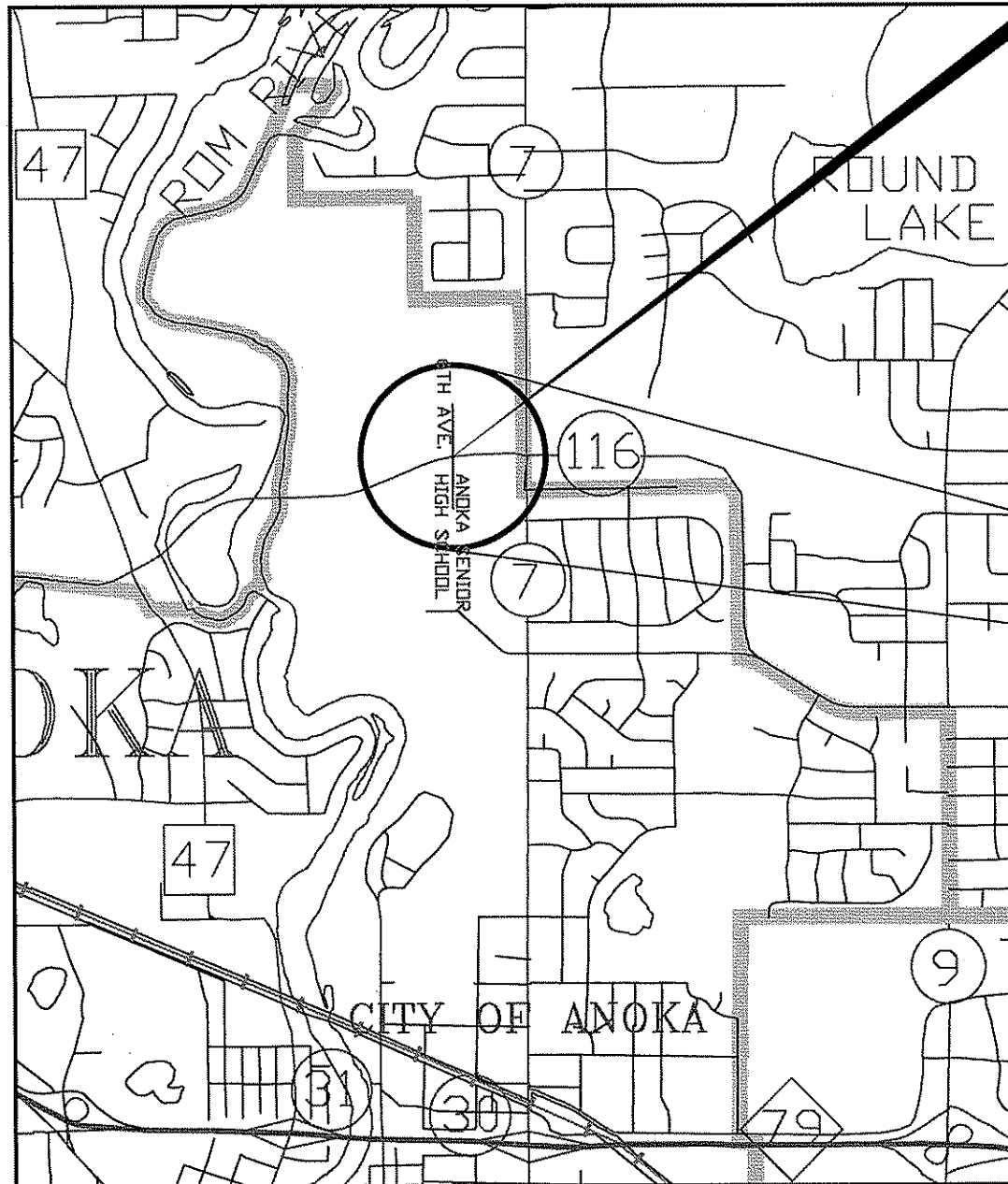


MINNESOTA DEPARTMENT OF TRANSPORTATION
ANOKA COUNTY

CONSTRUCTION PLAN FOR GRADING, AGG.BASE, BITUMINOUS SURFACING, DRAINAGE AND CURB & GUTTER

LOCATED ON CSAH 116 AT INTERSECTION WITH ANOKA COUNTY LIBRARY AND ENTRANCE TO ANOKA SENIOR HIGH SCHOOL. (Geographic Description)

STA. 144+18.70 TO STA. 149+06.60
AT INTERSECTION
CSAH 116 AND 6TH AVE. AND
ANOKA SENIOR HIGH SCHOOL ENTRANCE



MINN. PROJ. NO. _____
MINN. PROJ. NO. _____

GOVERNING SPECIFICATIONS

THE 1995 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MMUTCD, INCLUDING "FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS - JANUARY, 2001."

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	STATEMENT OF ESTIMATED QUANTITIES AND TABULATION CHARTS
3	EXISTING CONDITIONS AND NEW CONSTRUCTION PLAN
4	SIGNING PLAN AND TABULATION CHARTS

THIS PLAN CONTAINS 4 SHEETS

DESIGN DESIGNATION

ESAL ₂₀	00000000
R VALUE	00
ADT (2001)	00000
Proj. ADT (2021)	00000
Proj. HCADT (2021)	0000
Soil Factor	NA
TON DESIGN	

Functional Classification	XXXXXXXXXX
No. of Traffic Lanes	1
No. of Parking Lanes	0
Design Speed	25 MPH
Based on Stopping Sight Distance	
Height of eye	3.5'
Height of object	0.5'
Design Speed not achieved at:	
STA. _____ TO STA. _____	MPH _____
STA. _____ TO STA. _____	MPH _____
STA. _____ TO STA. _____	MPH _____

Approved 7/10/2002 *[Signature]*
ANOKA COUNTY ENGINEER

Recommended for Approval _____, 20____
METRO-ASSISTANT DIVISION ENGINEER-STATE AID

Approved for State Aid Division _____, 20____
STATE AID ENGINEER

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: LYNDRON ROBERT
SIGNATURE: *[Signature]*
DATE: 07/08/02 LICENSE NO. 25066

DRAWN BY: MN DATE 07/03/02
DESIGN BY: MN DATE 07/03/02
CHECKED BY: LAR DATE 00/00/00



ANOKA COUNTY
HIGHWAY DEPT.

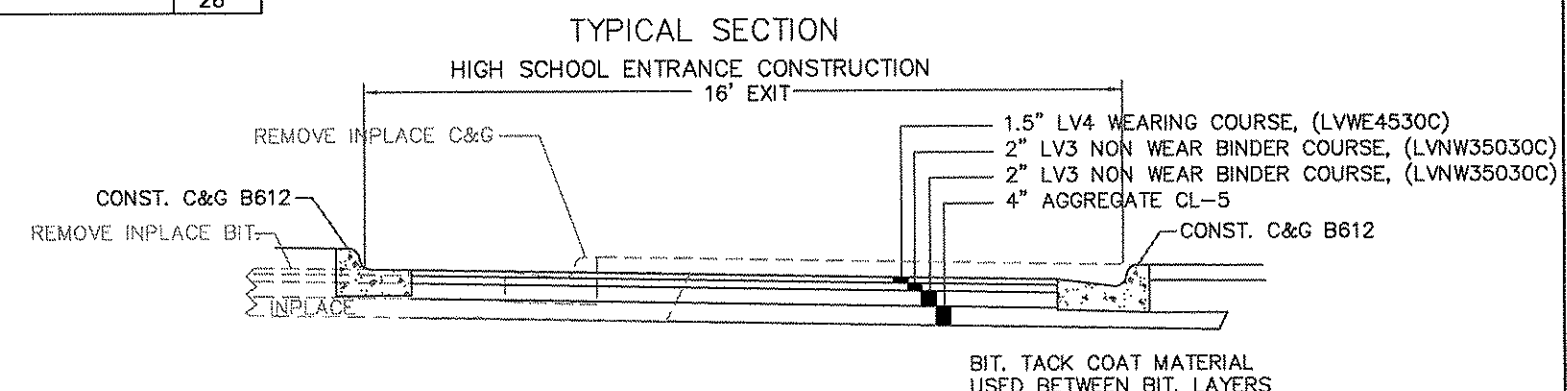
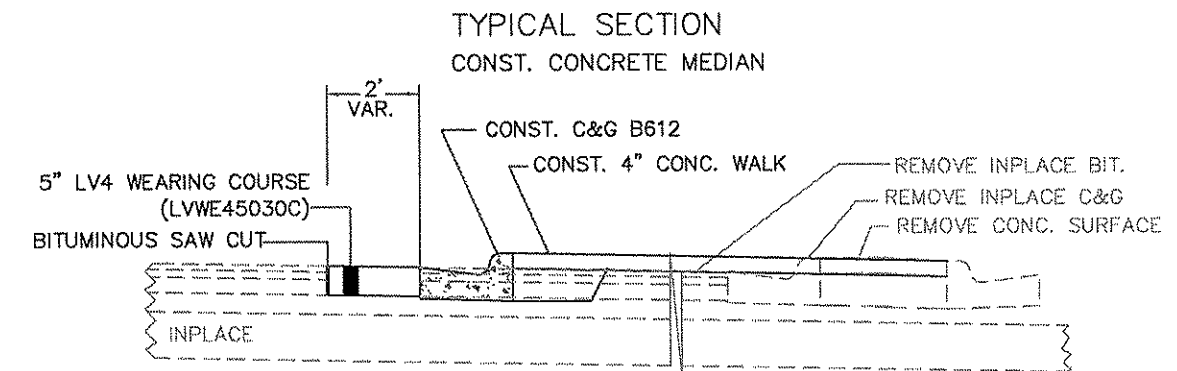
STATE PROJECT NO. _____
STATE AID PROJECT NO. _____
COUNTY PROJECT NO. 02-01-00
COUNTY PROJECT NO. 02-28-116

TITLE SHEET

Sheet 01 of 04 Sheets

STORM SEWER TABULATION

NO.	STA.	LOC.	REMARKS	MH. OR CB.	TOP CASTING ELEV.	OUTLET ELEV.	DSGN	PAY HT. LN.FT.	DRAINS TO	GRADE IN%	CAST ASSM	F&I 12" RCP LN.FT.	
1	146+10.45	31.10 LT. LEB	NEW CB. STRUCTURE	CB	872.69	867.70	F	5.1	12	1.0	A	23	
2	144+94.81	31.10 LT. LEB	NEW CB. STRUCTURE	CB	872.15	869.15	H	2.9	13	1.0	A	5	
3	145+13.20	26.30 RT. LEB	NEW CB. STRUCTURE	CB	871.14	868.14	H	2.9	15	5.0	A		
10	146+10.45	67.96 LT. LEB	NO CONST. REQD	CB	872.18				1				
11	146+10.45	18.97 LT. LEB	RECONSTRUCT TO MH.	MH	873.02			1.5	12		B		
12	146+10.45	21.00 RT. LEB	NO. CONST. REQD	CB	871.89				15				
13	145+14.36	19.20 LT. LEB	RECONSTRUCT TO MH.	MH	872.67			1.5	14		B		
14	145+14.43	13.10 LT. LEB	RECONSTRUCT AND ADJUST	CB	872.14			1.0	15		A		
15	145+15.03	21.12 RT. LEB	RECONSTRUCT TO MH.	MH	871.38	866.15		2.0	NEXT	1.0	B		
TOTAL								17.9				28	
SUBTOTAL								DESIGN- F	5.1				
								DESIGN- H	5.8				
								RECONSTRUCT	6.0				

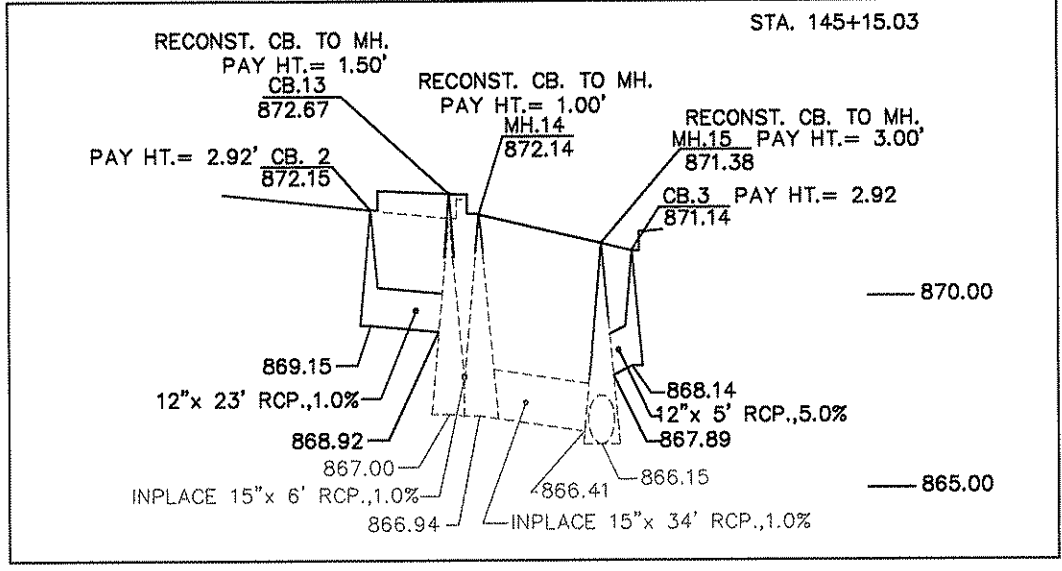
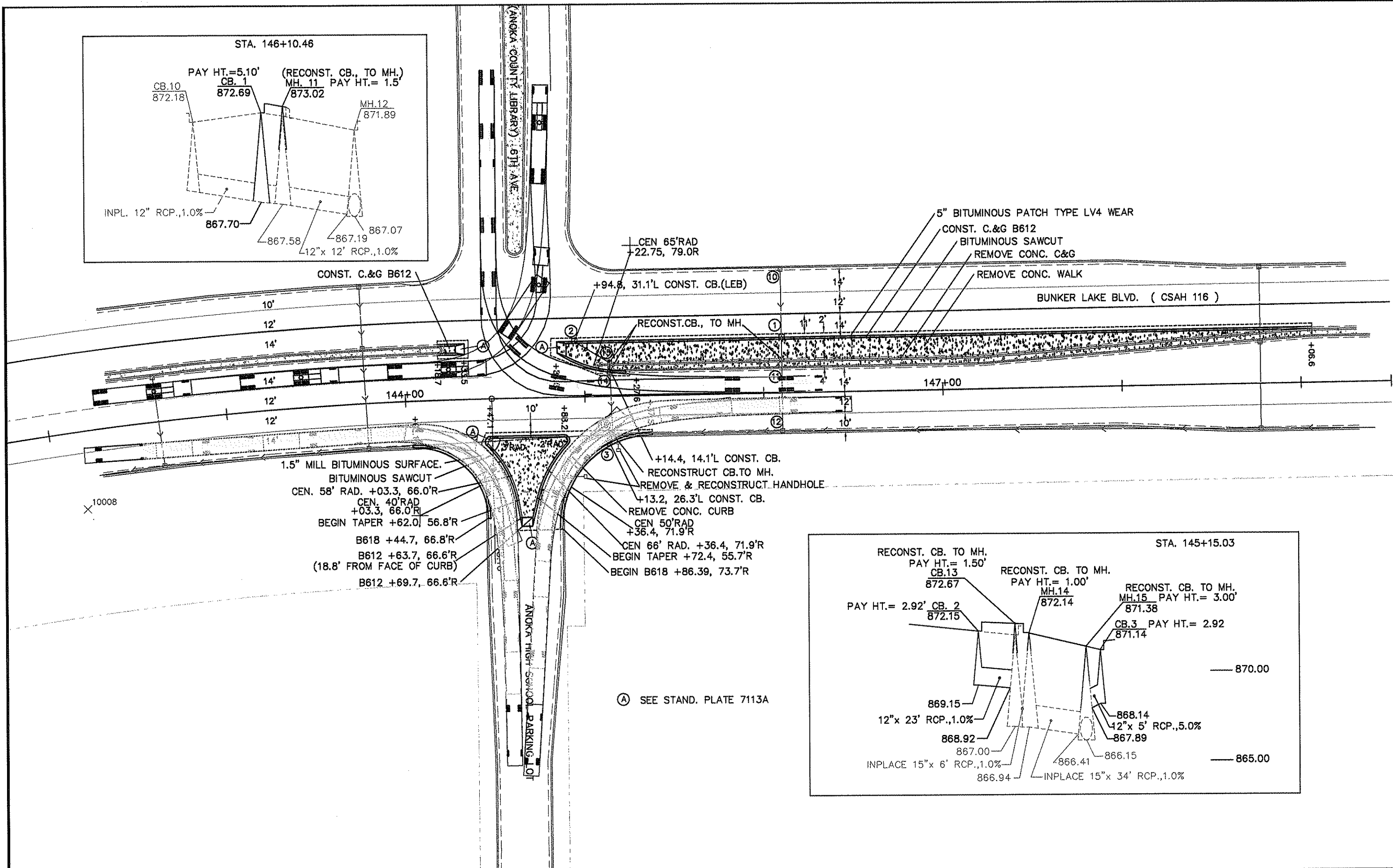
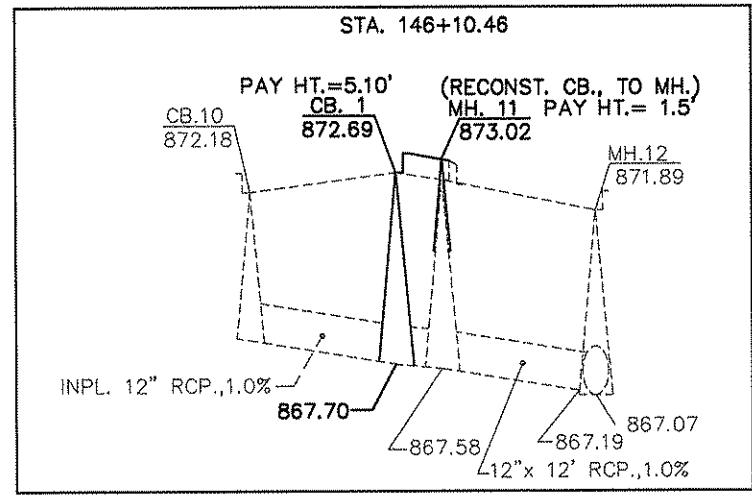


STATEMENT OF ESTIMATED QUANTITIES				STORM	
ITEM NO.	ITEM	UNIT	ESTIMATE	FINAL	FINAL
2104.501	REMOVE CURB AND GUTTER	LIN.FT.	514		
2104.501	REMOVE SEWER PIPE (STORM)	LIN.FT.	4		
2104.505	REMOVE CONCRETE PAVEMENT	SQ.YD.	122		
2104.505	REMOVE BITUMINOUS PAVEMENT	SQ.YD.	756		
2104.509	REMOVE CASTING	EACH	4		
2104.509	REMOVE HANDHOLE	EACH	2		
2104.511	SAWING CONCRETE PAVEMENT	LIN.FT.	4		
2104.513	SAWING BITUMINOUS PAVEMENT	LIN.FT.	710		
(A)	2105.501 COMMON EXCAVATION	CU.YD.	19		
(B)	2105.521 GRANULAR BORROW (LV)	CU.YD.	170		
(C)	2211.503 AGGREGATE BASE CLASS 5	TON	110		
	2232.501 MILL BITUMINOUS SURFACE, 1.5"	SQ.YD.	76		
	2350.501 TYPE LV 4 WEARING COURSE MIXTURE	TON	7		
	2350.502 TYPE LV 3 NON WEARING COURSE MIXTURE	TON	26		
	2350.604 TYPE LV 4 WEARING COURSE MIXTURE, 5" THICK	SQ.YD.	137		
	2357.502 BITUMINOUS MATERIAL FOR TACK COAT	TON	12		
	2503.541 12" RC PIPE SEWER DESIGN 3006	LIN.FT.		28	
	2503.602 CONNECT TO EXISTING STORM SEWER	EACH		3	
	2506.501 CONST DRAINAGE STRUCTURE DESIGN F	LIN.FT.		5.1	
	2506.501 CONST DRAINAGE STRUCTURE DESIGN H	EACH		5.8	
	2506.503 RECONSTRUCT DRAINAGE STRUCTURE	LIN.FT.		6.0	
	2506.516 CASTING ASSEMBLY	EACH		7	
	2531.501 CONCRETE CURB AND GUTTER DESIGN B612	LIN.FT.	599		
	2531.501 CONCRETE CURB AND GUTTER DESIGN B618	LIN.FT.	80		
(B)	2521.501 4" CONCRETE WALK	SQ.FT.	5811		
(D)	2521.501 6" CONCRETE WALK	SQ.FT.	174		
	2545.521 4" RIGID STEEL CONDUIT	LIN.FT.	12		
(E)	2550.512 HANDHOLE TYPE-PVC METAL FRAME & COVER	EACH	2		
(F)	2563.601 TRAFFIC CONTROL	LS	1		
	2564.531 F&I SIGN PANEL, TYPE C	SQ.FT.	59		
	2564.602 TEMPORARY RELOCATE SIGN TYPE C	EACH	6		
	2564.603 4" SOLID LINE WHITE-PAINT	LIN.FT.	65		
	2564.603 4" SOLID LINE YELLOW-PAINT	LIN.FT.	100		
	2564.603 4" DOUBLE SOLID LINE YELLOW-PAINT	LIN.FT.	205		
	2564.603 24" SOLID LINE YELLOW-PAINT	LIN.FT.	37		
(G)	2575.523 EROSION CONTROL BLANKETS CATEGORY 2	SQ.YD.	40		

STANDARD PLATES	
THESE STANDARD PLATES AS APPROVED BY THE FHWA SHALL APPLY.	
PLATE NO.	DESCRIPTION
3000 L	REINFORCED CONCRETE PIPE
3006 G	GASKET JOINT FOR R.C. PIPE
4005 L	MANHOLE OR CATCH BASIN (DESIGN F)
4006 L	MANHOLE OR CATCH BASIN (DESIGN G OR H)
4101 D	RING CASTING FOR MANHOLE
4110 F	RING CASTING FOR MANHOLE
4126 F	CATCH BASIN FRAME CASTING
4149 C	GRATE CASTING FOR CATCH BASIN
4161 F	CURB BOX CASTING FOR CATCH BASIN
7100 G	CONCRETE CURB AND GUTTER (DESIGN B)
7113 A	CONCRETE APPROACH NOSE DETAIL
7111 J	INSTALLATION OF CATCH BASIN CASTINGS
8114 A	PVC HANHOLE/PULLBOX
SEE TRAFFIC SIGNAL PLAN SHEETS FOR ADDITIONAL STANDARD PLATES	

- (A) CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSAL AND ALL RELATED COSTS SHALL BE INCIDENTAL TO CONSTRUCTION AS A WHOLE.
- (B) FOR CONC. MEDIAN CONSTRUCTIN.
- (C) FOR NEW HIGH SCHOOL EXIT RADIUS ADDITION.
- (D) FOR CONC. MEDIAN NOSE (SEE STAND. PLATE NO. 7113A)
- (E) NEW LOCATION IS 4' BACK OF NEW CURB.
- (F) BY FIELD MANUAL.
- (G) FOR RESTORATION OF DISTURBED AREAS BEHIND THE NEW CURB. (BID PRICE PER SQ. YD. SHALL INCLUDE 0.10 POUND SEED MIXTURE 50B AND 0.10 POUND/SQ.YD. FERTILIZER ANALYSIS 22-5-10, -SLOW RELEASE)

CASTING ASSEMBLY SUMMARY				
ASSE.	RING OR FRAME CAST.	COVER OR GRATE CASTING	CURB BOX CASTING	QUANT.
A	801	810	721B	4
B	700-7	716		3

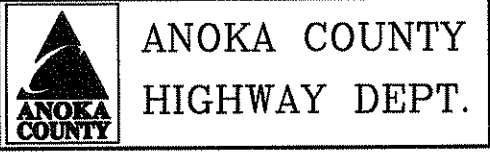


Ⓐ SEE STAND. PLATE 7113A

NO	DATE	BY	CKD	APPR	REVISION

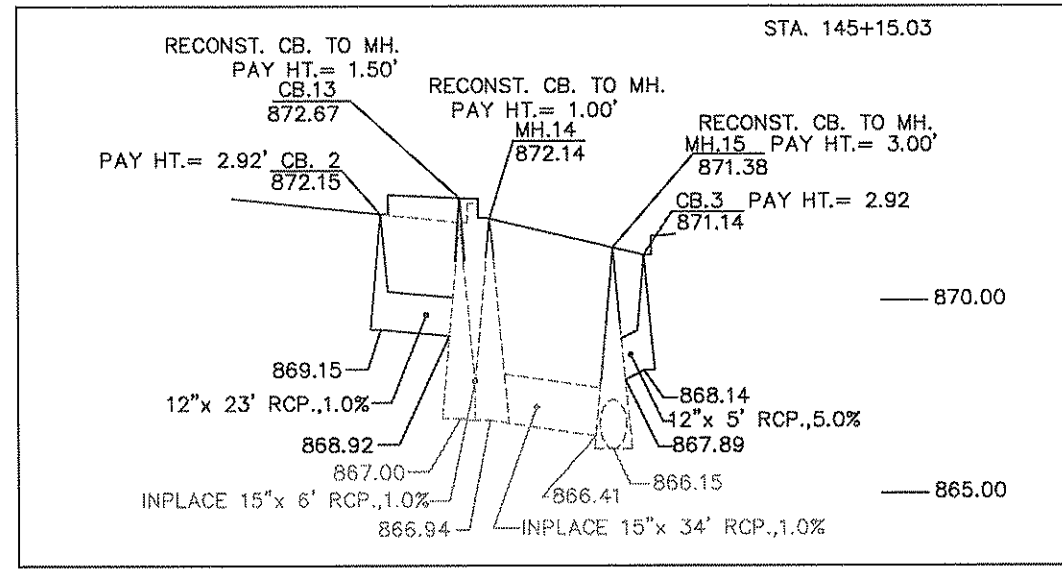
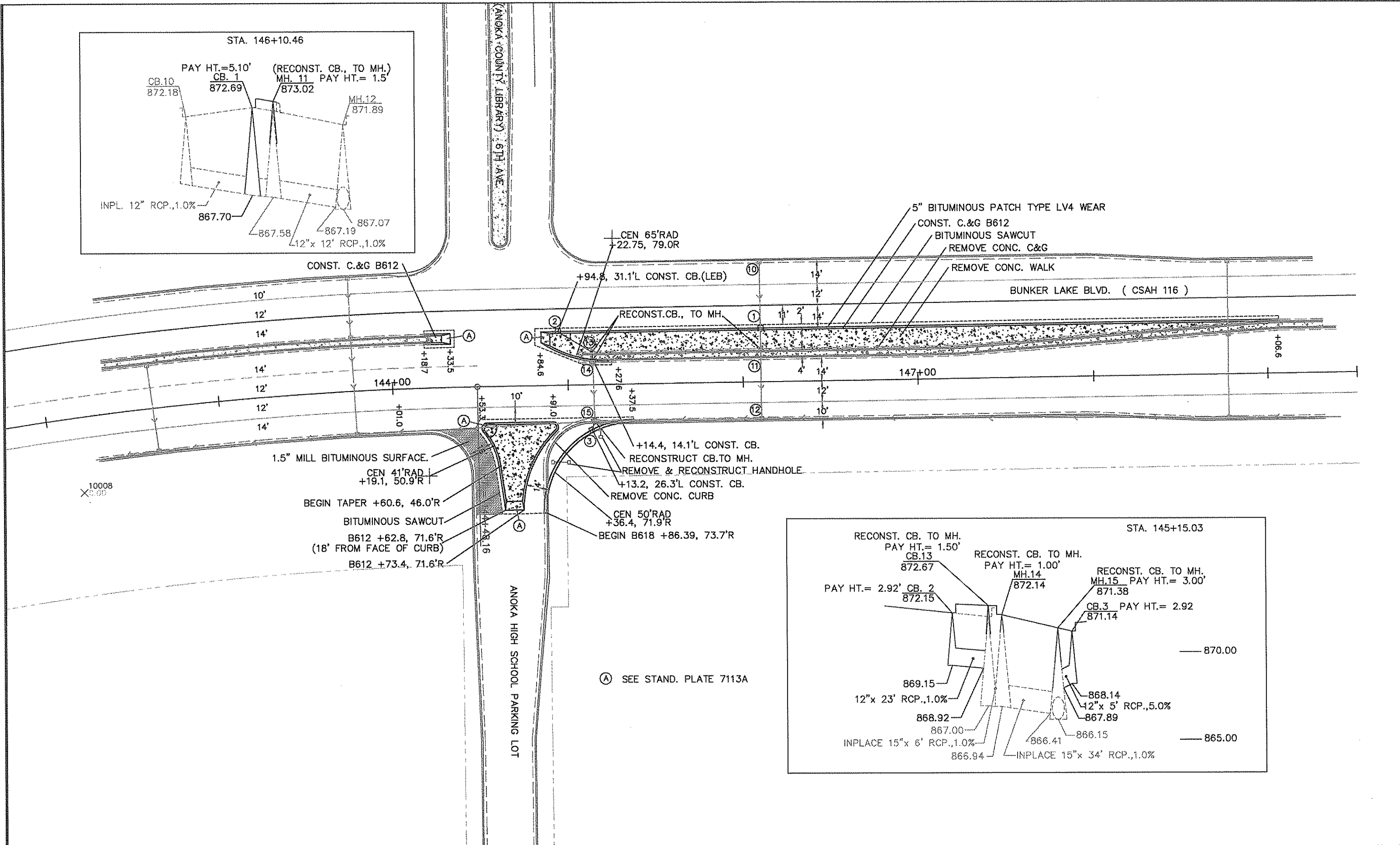
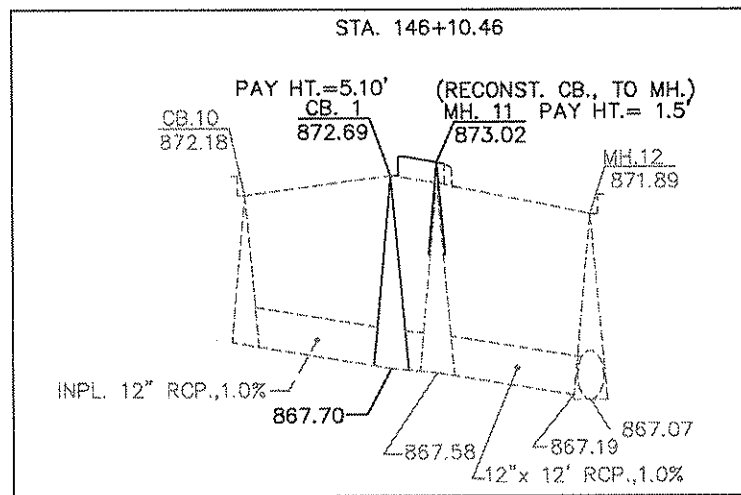
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 PRINT NAME: ANDREW ROBERTSON
 SIGNATURE: [Signature]
 DATE: 07/02/02 LICENSE NO. 25066

DRAWN BY: MN DATE 00/00/00
 DESIGN BY: LAR DATE 00/00/00
 CHECKED BY: LAR DATE 00/00/00



STATE PROJECT NO.
 STATE AID PROJECT NO.
 COUNTY PROJECT NO. 02-01-00
 COUNTY PROJECT NO. 02-28-116

PLAN & CHART SHEET
 STA 143+00 TO 149+50.00
 Sheet 3 of 4 Sheets

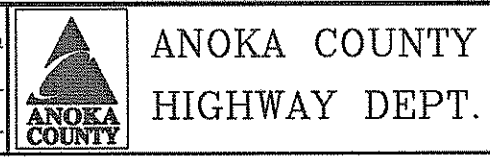


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PRINT NAME: ANDREW ROBERTSON
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 DATE: 07/02/02 LICENSE NO. 25066

DRAWN BY: MM DATE: 00/00/00
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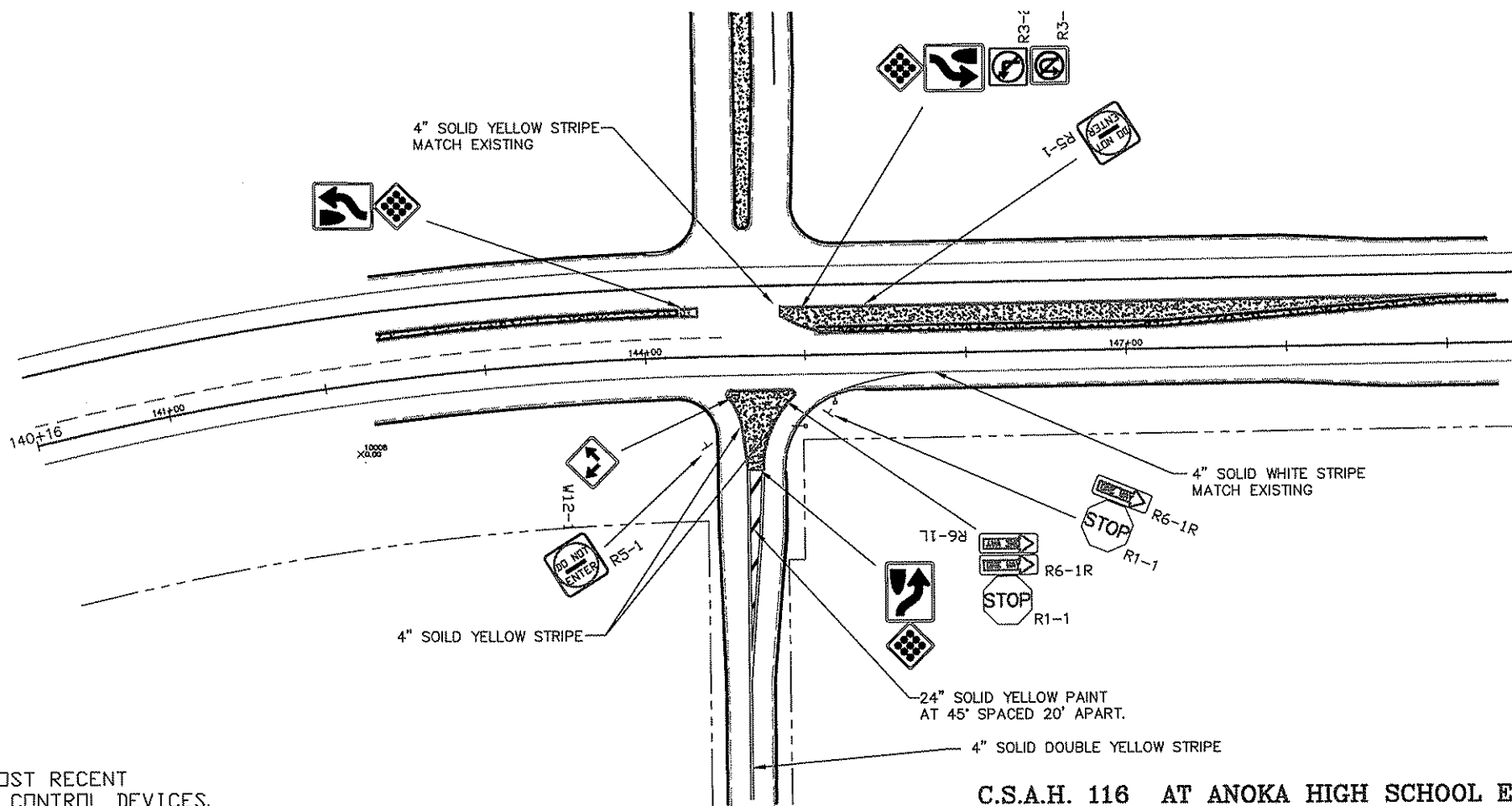
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PLAN & CHART SHEET
 STA 143+00 TO 149+50.00
 Sheet 3 of 4 Sheets

M. U. T. C. D. CODE	SIZE	INSERT	QTY	Sq. FT.	TOTAL Sq. FT.	MOUNTING POST PER INSTALLATION	MOUNTING HEIGHT
R1-1	30" x 30"	STOP	2	6.25	12.50	1	7.0
R3-2	24" x 24"	Left Turn	1	4.00	4.00	①	
R3-4	24" x 24"	No Right Turn	1	4.00	4.00	①	
R4-7	24" x 30"	Right Turn	3	5.00	15.00	1	7.0
X4-2	18" x 18"	Diamond	3	1.00	6.00		
R5-1	30" x 30"	DO NOT ENTER	2	6.25	12.50	1	7.0
R6-1R	36" x 12"	ONE WAY (Right)	1	3.00	3.00	②	
R6-1L	36" x 12"	ONE WAY (Left)	1	3.00	3.00	②	
W12-1	18" x 18"	Warning	1	1.00	1.00	1	5.0
TOTAL					59.00		

- ① MOUNTED BACK TO BACK w/ R4-7
- ② MOUNTED ABOVE R1-1

4" SOLID WHITE PAINT 65'
4" SOLID YELLOW PAINT 100'
4" DOUBLE YELLOW PAINT 205'
24" SOLID YELLOW 37'



C.S.A.H. 116 AT ANOKA HIGH SCHOOL ENTRANCE

NOTE:

- 1. > LOCATIONS OF 'NO PASSING ZONES' ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD
- 2. > ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MOST RECENT EDITION OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. PRINT NAME: <u>LYNDON ROBERTS</u> SIGNATURE: <u>[Signature]</u> DATE: <u>07/02/02</u> REG. NO. <u>25066</u>					DRAWN BY: <u>DM</u> DATE <u>08/27/02</u> DESIGN BY: _____ DATE _____ CHECKED BY: _____ DATE _____		ANOKA COUNTY HIGHWAY DEPT.		STATE PROJECT NO. _____ STATE AID PROJECT NO. _____ COUNTY PROJECT NO. <u>02-01-00</u> COUNTY PROJECT NO. <u>02-28-116</u>		PERMANENT SIGN / STRIPING Sheet <u>4</u> of <u>4</u> Sheets	
NO	DATE	BY	CHKD	APPR	REVISION							
NAME: S:\SDSKPROJ\020000\020000\028000.DWG												