

PLANS SYMBOLS

STATE LINE
COUNTY LINE
TOWNSHIP OR RANGE LINE
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
RIGHT OF WAY LINE
PRESENT RIGHT OF WAY LINE
CONTROL OF ACCESS LINE
PROPERTY LINE (Except Land Lines)
VACATED PLATTED PROPERTY
CORPORATE OR CITY LIMITS
TRUNK HIGHWAY CENTER LINE
RETAINING WALL
RAILROAD
RAILROAD RIGHT OF WAY LINE
RIVER OR CREEK
DRY RUN
DRAINAGE DITCH
DRAIN TILE
CULVERT
DROP INLET
GUARD RAIL
BARBED WIRE FENCE
WOODEN WIRE FENCE
CHAIN LINK FENCE
RAILROAD SNOW FENCE
STONE WALL OR FENCE
HEDGE
RAILROAD CROSSING SIGN
RAILROAD CROSSING BELL
ELECTRIC WARNING SIGN
CROSSING RATE
MEANDER CORNER
SLOPE EASEMENT (CONST. LIMITS)

SPRINGS
MARSH
TIMBER--DECIDUOUS--
CONIFEROUS
ORCHARD
BRUSH
NURSERY
CATCH BASIN
FIRE HYDRANT
CATTLE GUARD
OVERPASS (Highway Over)
UNDERPASS (Highway Under)
BRIDGE
BUILDING (One Story Frame)
FRAME C-CONCRETE
S STONE T TILE
B BRICK ST STUCCO
IRON PIPE OR ROD
MONUMENT (STONE, CONCRETE, OR METAL)
WOODEN PILE
GRAVEL PIT
SAND PIT
BORROW PIT
ROCK QUARRY

UTILITIES SYMBOLS

POWER POLE LINE
TELEPHONE OR TELEGRAPH
POLE LINE
JOINT TELEPHONE AND POWER
ON POWER POLES
ON TELEPHONE POLES
ANCHOR
STEEL TOWER
STREET LIGHT
MUNICIPAL TELEPHONE CABLE
TELEPHONE
GAS MAIN
WATER MAIN

CONDUIT
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

GROSS LENGTH 3,050.00 FEET (0.578 MILES)
NET LENGTH 3,050.00 FEET (0.578 MILES)
EXCEPTION
PLAN
PROFILE HORIZONTAL
PROFILE VERTICAL
CROSS SECTIONS - HORIZ.
CROSS SECTIONS - VERT.

MINNESOTA DEPARTMENT OF TRANSPORTATION RAMSEY COUNTY DEPARTMENT OF PUBLIC WORKS

CONSTRUCTION PLAN FOR: GRADING, AGGREGATE BASE AND BITUMINOUS SURFACING

COUNTY ROAD J (C.R. 81)

FROM TRUNK HIGHWAY 61 TO 3,050 FEET EAST
IN THE TOWN OF WHITE BEAR
S.P. NO. 62-600-03

FROM: A POINT APPROXIMATELY 484 FEET EAST OF THE NORTHWEST
CORNER OF SECTION 1, T30N, R22W.

TO: A POINT 907 FEET EAST OF THE NORTHWEST CORNER OF THE
NORTHEAST QUARTER OF SECTION 1, T30N, R22W.

INDEX TO PLAN SHEETS

SHEET NO.	DESCRIPTION
1	TITLE, INDEX AND LOCATION SHEET
2	SUMMARY OF ESTIMATED QUANTITIES BASIS OF PLANNED QUANTITIES CONSTRUCTION NOTES CULVERT CHART TURF ESTABLISHMENT & EROSION CONTROL STANDARD PLATES
3	TYPICAL SECTIONS
4 - 7	PLAN & PROFILE SHEETS
8 - 23	CROSS SECTIONS
24	TRAFFIC CONTROL PLAN
24 A-D	EROSION CONTROL PLANS

THIS PLAN CONTAINS 28 SHEETS

DESIGN SQUAD _____ DATE _____
DRAWN BY SWB DATE _____
CHECKED BY LDB DATE 4-11-91 DATE 4-11-91 REG. NO. 12120 ENGR. Larry D. Baker

RAMSEY COUNTY

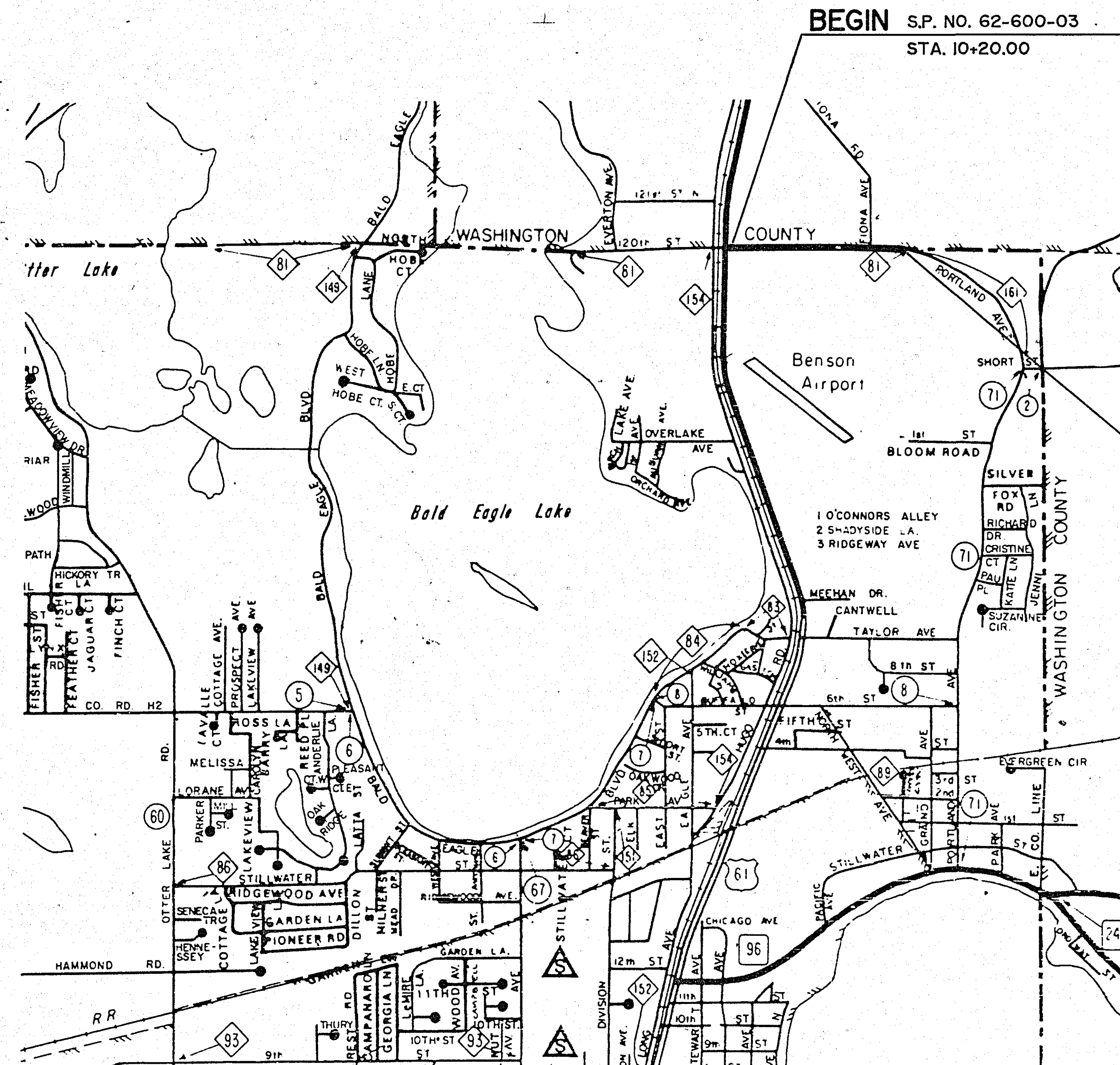
RECOMMENDED FOR APPROVAL DES DATE 2/2/92 RECOMMENDED FOR APPROVAL Paul K. Kuntz DATE 2/24/92
TRAFFIC ENGR. COUNTY ENGINEER
RECOMMENDED FOR APPROVAL KMR DATE 2/6/92 APPROVED H. A. Hargad DATE 6/9/92
ENV. ENGR. CHAIR, OF THE RAMSEY COUNTY BOARD
RECOMMENDED FOR APPROVAL DES DATE 2-24-92 APPROVED Robert J. Hargad DATE 4-15-91
CHAIR, OF THE WHITE BEAR TOWN BOARD
RECOMMENDED FOR APPROVAL RHP DATE 2-21-92 APPROVED Walter J. Hargad DATE 9-16-91
CHAIR, OF THE CITY OF HUGO
RECOMMENDED FOR APPROVAL DES DATE 2-21-92 MINNESOTA DEPARTMENT OF TRANSPORTATION
STATE AID ENGINEER
RECOMMENDED FOR APPROVAL DES DATE 2-21-92 RECOMMENDED FOR APPROVAL DES DATE 6-9-92
COORDINATING ENGR. DISTRICT STATE AID ENGINEER
RECOMMENDED FOR APPROVAL DES DATE 2-21-92 RECOMMENDED FOR APPROVAL DES DATE 2/5/92
PROGRAM ENGINEER APPROVAL DES DATE 6-9-93
FOR STATE AID ENGINEER

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: SW
DATE: 2/15/95

DATE	SHEET NO.	BY

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED _____
DIVISION ADMINISTRATOR DATE _____
TOLTZ, KING, DUVALL, ANDERSON AND ASSOCIATES INC.
COMM. NO. 9550



DESIGN DESIGNATION

PRESENT ADT (1992) 571
PROJECTED ADT (2012) 935
FUNCTIONAL CLASS MAJOR COLLECTOR RUPAL
TRAFFIC LANES 2
PARKING LANES 0
DESIGN LOAD 10 TON
STABILOMETER "R" VALUE 40
N18 20 YEAR 69,400
DESIGN SPEED 55 MPH

POSTED LEGAL SPEED LIMIT
STATION 13+60(R) 50 MPH
STATION 35+35(L) 50 MPH
STATION 35+35(R) 35 MPH
STATION 45+75(R) 35 MPH
POSTED ADVISORY SPEED LIMIT
STATION 36+50(R) 25 MPH
STATION 48+60(L) 25 MPH
STATION 49+65(R) 25 MPH

BASED ON STOPPING SIGHT DISTANCE
HEIGHT OF EYE: 3.50 FEET
HEIGHT OF OBJECT: 0.50 FEET

GOVERNING SPECIFICATIONS

THE 1988 EDITION OF THE MINNESOTA
DEPARTMENT OF TRANSPORTATIONS
"STANDARD SPECIFICATIONS FOR
CONSTRUCTION" AS AMENDED BY THE
JAN. 2, 1991 SUPPLEMENTAL SPECIFICATIONS
SHALL GOVERN.

ALL APPLICABLE FEDERAL, STATE AND
LOCAL LAWS AND ORDINANCES SHALL
BE COMPLIED WITH IN THE CONSTRUCTION
OF THIS PROJECT.

CULVERT CHART

STATION AT 1/2 OF DRIVEWAY OR SIDE ROAD	LOCATION TO CENTER OF CULVERT	INLET STATION	OUTLET STATION	INLET APRON INVERT EL.	OUTLET APRON INVERT EL.	LENGTH OF 15" CORRUGATED STEEL PIPE	% OF GRADE	SAFETY APRONS
11+45 (DRIVEWAY)	32' LEFT	11+10 11+15	11+80 11+85	936.52 (W) 936.41 (E)	935.20 (E) 934.92 (W)	60'	2.13%	2
14+91 (DRIVEWAY)	36' RIGHT	14+58	15+22	931.38 (W) 931.75 (E)	931.72 (E) 931.49 (W)	54'	0.40%	2
21+47 (DRIVEWAY)	32' RIGHT	21+26 21+22	21+76 21+72	932.67 (W) 932.99 (E)	933.09 (E) 932.79 (W)	40'	0.40%	2
26+25 (DRIVEWAY)	33' RIGHT	26+55 26+56	27+15 26+56	932.95 (W) 933.57 (W)	932.30 (E) 932.78 (E)	50'	0.40%	2
32+42 (FELINA RD.)	34' LEFT	32+07 32+04	32+81 32+78	934.46 (W) 934.88 (E)	934.82 (E) 934.52 (W)	64'	0.50%	2
12+08 TOTALS (DRIVEWAY)	36' RIGHT	11+73	12+43	935.84 (W)	934.86 (E)	60		2
19+30 TOTALS (DRIVEWAY)	35' LEFT	19+05	19+55	932.26 (W)	932.80 (E)	40		2
TOTALS						368		14

TURF ESTABLISHMENT & EROSION CONTROL

LOCATION	ROADSIDE SEEDING (ACRES)	SEED MIXTURE 500 (LB)	SODDING EROSION (SQ.YD.)	MULCH TYPE I (TON)	FERTILIZER 10-10-10 (LB)	BALE CHECKS EACH	SILT FENCE (LF)
STA. 10+20 TO 11+40	0.10	5		0.20	35		
STA. 11+50 TO 32+25	1.05	52.5		2.10	367.50		
STA. 32+60 TO 40+70	0.41	20.5		0.82	143.50		
STA. 10+20 TO 14+15	0.26	13		0.52	91.0		
STA. 22+00 TO 23+50	0.08	4		0.16	28.0		
STA. 23+80 TO 26+10	0.11	5.5		0.22	38.5		
STA. 26+40 TO 40+70	0.73	36.5		1.46	255.5		
STA. 10+20 TO 11+40			33.33				
STA. 11+50 TO 32+25			482.22				
STA. 32+60 TO 40+70			204.44				
STA. 10+20 TO 14+15				92.22			
STA. 14+15 TO 14+75				200.00			
STA. 15+08 TO 18+33				801.10			
STA. 18+57 TO 21+40				728.33			
STA. 21+64 TO 22+00				81.78			
STA. 22+00 TO 23+50				36.25			
STA. 23+82 TO 26+10				61.11			
STA. 26+40 TO 40+70				328.22			
STA. 12+00						4	4
STA. 14+00						4	4
STA. 20+50						4	
STA. 25+50							4
STA. 28+00							4
STA. 31+25							4
STA. 33+25							4
STA. 35+25							4
STA. 37+25							4
STA. 39+25							4
STA. 29+00						4	
STA. 31+00						4	
STA. 35+00						4	
STA. 37+00						4	
STA. 39+50						4	
STA. 32+00						4	
STA. 33+00						4	
STA. 15+25 TO 18+25							300
STA. 18+25 TO 24+25							650
STA. 24+25 TO 26+75							250
STA. 26+75 TO 31+25							300
N-S DITCH @ 14+25	0.13	6.5		0.26	45.5	4	
N-S DITCH @ 19+75	0.12	6.0		0.24	42	3	
N-S DITCH @ 27+25	0.13	6.5		0.26	45.5	3	
SUBTOTALS	1.56	78	720	2331	3.12	3.12	546
TOTALS	3.12	156	3,051	6,24	1092	86	1500

EARTHWORK

STATION	ITEM	QUANTITY
10+20 TO 40+70	COMMON EXCAVATION (INCLUDING TOPSOIL EXC.) TOTAL	8162 CY
12+00 TO 37+00	EMBANKMENT	1575 CY ②
	TOTAL	1575 CY
14+25 TO 19+25	SUBGRADE EXCAVATION	842 CY
25+50 TO 29+00	SUBGRADE EXCAVATION	675 CY
	TOTAL	1517 CY
10+20 TO 40+70	SELECT GRAN. BORROW MOD. (CV) TOTAL	10089 CY
		10089 CY
14+25 TO 23+25	TOPSOIL BORROW 3" DEPTH (LV)	226 CY ①

THE FOLLOWING STANDARD PLATES AS APPROVED BY THE FHWA SHALL APPLY.

STANDARD PLATES

VNDOT PLATE NO.	DESCRIPTION
0005A	SPECIFICATION REFERENCE TO STANDARD PLATES
3040F	CORRUGATED METAL PIPE CULVERT
3128D	SAFETY APRON
3221C	CORRUGATED STEEL PIPE COUPLING BAND
7100F	CONCRETE CURB AND GUTTERS
8000I	STANDARD BARRICADES
9000B	APPROACHES AND ENTRANCES
9102	TURF ESTABLISHMENT AREAS

BASIS OF PLANNED QUANTITIES

BITUMINOUS BINDER COURSE	BITUMINOUS MIXTURE - 110#/SQ.YD./INCH DEPTH
BITUMINOUS WEARING COURSE	TACK COAT - 0.05 GAL./SQ.YD.
	BITUMINOUS MIXTURE - 110#/SQ.YD./INCH DEPTH
SEED MIXTURE NO. 500	50 POUNDS PER ACRE
MULCH MATERIAL TYPE 1	2 TONS PER ACRE
COMMERCIAL FERTILIZER, ANALYSIS 10-10-10	350 POUNDS PER ACRE

STATEMENT OF ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	S.P. 62-600-03 ESTIMATED FINAL QUANTITY	TOTAL ESTIMATED FINAL QUANTITY
2021.501	MOBILIZATION	LS	1	1
2031.501	FIELD OFFICE TYPE D	EA	1	1
2101.511	CLEARING & GRUBBING	LS	1	1
2104.501	REMOVE PIPE CULVERTS	LF	150	150
2104.501	REMOVE CURB AND GUTTER	LF	34	34
2104.505	REMOVE DRIVEWAY PAVEMENT	SY	231	231
2104.513	SAWING BITUMINOUS PAVEMENT	LF	179	179
2104.523	SALVAGE POST	EA	12	12
2104.521	SALVAGE PIPE CULVERT	LF	45	45
2104.521	SALVAGE BARBED WIRE FENCE	LF	2,018	2,018
2105.501	COMMON EXCAVATION	CY(P)	8,162	(P)8,162
2105.507	SUBGRADE EXCAVATION	CY	1,517	1,517
2105.522	SEL. GRANULAR BORROW MOD.(CV)	CY(P)	10,089	(P)10,089
2105.525	TOPSOIL BORROW (LV)	CY	226	226
2105.511	COMMON CHANNEL EXCAVATION	CY	400	400
2130.501	WATER	MGAL	20	20
2211.503	AGGREGATE BASE PLACED, CLASS 6	CY(P)	2,515	(P)2,515
2232.501	MILL BITUMINOUS SURFACE (4")	SY	8,188	8,188
2340.510	TYPE 31 BINDER COURSE	TON	1,178	1,178
2340.508	TYPE 41 WEARING COURSE	TON	1,518	1,518
2357.502	BIT. MATERIAL FOR TACK COAT	GAL	484	484
2501.511	15" CS PIPE CULVERT	LF	268	268
2501.567	15" GS SAFETY APR & GR/DES 3128	EA	10	10
2531.501	CONCRETE CURB & GUTTER B612	LF	34	34
2554.505	PERMANENT BARRICADES	LF	16	16
0557.603	INSTALL BARBED WIRE FENCE	LF	2,018	2,018
0563.601	TRAFFIC CONTROL	LS	1	1
2573.501	BALE CHECK	EA	86	86
2573.503	SILT FENCE, PREASSEMBLED	LF	1,500	1,500
2575.501	SEEDING	AC	3.12	3.12
2575.502	SEED MIXTURE NO. 500	LB	156	156
2575.505	SODDING, TYPE EROSION	SY	3,051	3,051
2575.511	MULCH MATERIAL TYPE 1	TON	6.24	6.24
2575.532	COMMERCIAL FERTILIZER 10-10-10	LB	1,092	1,092
2580.501	TEMPORARY LANE MARKING	RS	61	61
2575.519	DISK ANCHORING	AC	3.12	3.12

CONSTRUCTION NOTES

- ALL USES OF THE WORD "INCIDENTAL" IN THESE CONSTRUCTION DOCUMENTS SHALL BE CONSTRUED TO MEAN INCIDENTAL WORK FOR WHICH NO DIRECT COMPENSATION WILL BE MADE.
- GAS, ELECTRIC, TELEPHONE AND CABLE TV LINES SHOWN IN THE PLANS ARE PLOTTED FROM THE BEST INFORMATION AVAILABLE AT THE TIME OF PLAN PREPARATION, BUT MAY NOT REFLECT ACTUAL LOCATIONS OR ELEVATIONS. THE CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES BEFORE COMMENCING CONSTRUCTION. SEE SPECIAL PROVISIONS AND SECTION 1507 IN THE STANDARD SPECIFICATIONS.
- POWER POLES AND UTILITY BOXES WILL BE MOVED BY THE APPROPRIATE UTILITY COMPANY TO PROVIDE A 37' CLEAR ZONE FROM ROAD CENTERLINE. THE CONTRACTOR SHALL SCHEDULE HIS CONSTRUCTION OPERATIONS IN COOPERATION WITH UTILITY COMPANIES. SEE SPECIAL PROVISIONS.
- CONTRACTOR SHALL ALLOW ENTRANCE AND EXIT TO ALL BUSINESSES AND RESIDENTS DIRECTLY ABUTTING THE PROJECT AT ALL TIMES. A 48-HOUR NOTICE SHALL BE GIVEN BY THE CONTRACTOR TO PROPERTY OWNERS WHEN DISRUPTION OF DRIVEWAYS IS ANTICIPATED.
- TREES TO BE CLEARED AND GRUBBED WILL BE MARKED BY THE ENGINEER IN THE FIELD, PRIOR TO ANY REMOVAL OPERATIONS. TREES NOT DESIGNATED FOR REMOVAL SHALL BE PROTECTED BY THE CONTRACTOR.
- REMOVAL OPERATIONS SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO NOT DISTURB AREAS OUTSIDE OF THE RIGHT-OF-WAY.
- RIGHT-OF-WAY LINES AND EASEMENT LINES SHOWN IN THE PLANS SHALL BE CONSIDERED THE LIMITS OF CONSTRUCTION.
- STRIP AND REUSE TOPSOIL WHERE PRESENT IN AREAS TO BE DISTURBED BY CONSTRUCTION, AS DIRECTED BY THE ENGINEER.
- THE SPECIAL DITCH GRADE ELEVATIONS SHOWN ARE TO TOP OF FINISHED GRADE AFTER TOPSOIL PLACEMENT.
- WHEN EXCAVATING ADJACENT TO AN INPLACE PAVEMENT, NO MATERIAL SHALL BE REMOVED FROM INSIDE AN APPROXIMATE 1/2:1 SLOPED LINE DRAWN DOWNWARD AND OUTWARD FROM THE BOTTOM OF THE INPLACE PAVEMENT. THESE EXCAVATIONS SHALL BE BACKFILLED PROMPTLY TO AVOID UNDERMINING.
- SOME EXCAVATED MATERIAL ON THIS PROJECT MAY NOT BE SUITABLE FOR USE IN NEW CONSTRUCTION AS DETERMINED BY THE ENGINEER. UNSUITABLE MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR AT AN UNDESIGNATED WASTE AREA. PAYMENT FOR THIS WORK SHALL BE INCIDENTAL TO EXCAVATION ITEMS.
- ANY DEWATERING REQUIRED FOR CONSTRUCTION WILL BE CONSIDERED TO BE INCIDENTAL TO THE CONTRACT AND NO DIRECT COMPENSATION WILL BE MADE THEREFOR.
- REMOVED CONCRETE AND BITUMINOUS MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF THE PROJECT. THE MILLED BITUMINOUS MATERIAL SHALL BE USED AS AND INCORPORATED INTO THE BOTTOM OF THE SELECT GRANULAR BORROW SECTION AND SHALL NOT BE HAULED OFF THE PROJECT.
- COMPACTION OF GRADING ITEMS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH MNDOT SPECIFICATION 2105.3F2, "ORDINARY COMPACTION METHOD". THE BOTTOM OF ALL EXCAVATIONS SHALL BE COMPACTED WITH A MINIMUM OF FOUR PASSES OF AN APPROVED COMPACTING DEVICE.
- THE MODIFIED SELECT GRANULAR BORROW MATERIAL SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISIONS.
- WHEN CONNECTION TO EXISTING BITUMINOUS PAVEMENT IS REQUIRED, THE EDGE OF THE EXISTING PAVEMENT SHALL BE SAW CUT TO A NEAT LINE PRIOR TO CONSTRUCTING BITUMINOUS SURFACING.
- USE TACK COAT BETWEEN ALL BITUMINOUS PAVEMENT LIFTS AND WHERE NEW BITUMINOUS MEETS INPLACE BITUMINOUS PAVEMENT.
- COMPACTION OF ALL BITUMINOUS MIXTURES SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE "SPECIFIED DENSITY METHOD".
- PERMANENT STRIPING AND SIGNING WILL BE PLACED BY THE COUNTY AT PROJECT COMPLETION.
- CLEARING AND GRUBBING WILL BE DONE BY THE CONTRACTOR WITHIN THE GRADING LIMITS.

- NOTES: ① TOPSOIL BORROW SHALL BE PLACED BELOW AREAS TO BE SODDED WHERE COMMERCIAL AND INDUSTRIAL BUSINESSES ARE LOCATED.
- ② EXCESS COMMON EXCAVATION SHALL BE DISPOSED OF OFF THE PROJECT IN ACCORDANCE WITH THE PROVISIONS OF 2104.3C AND 2105.3.

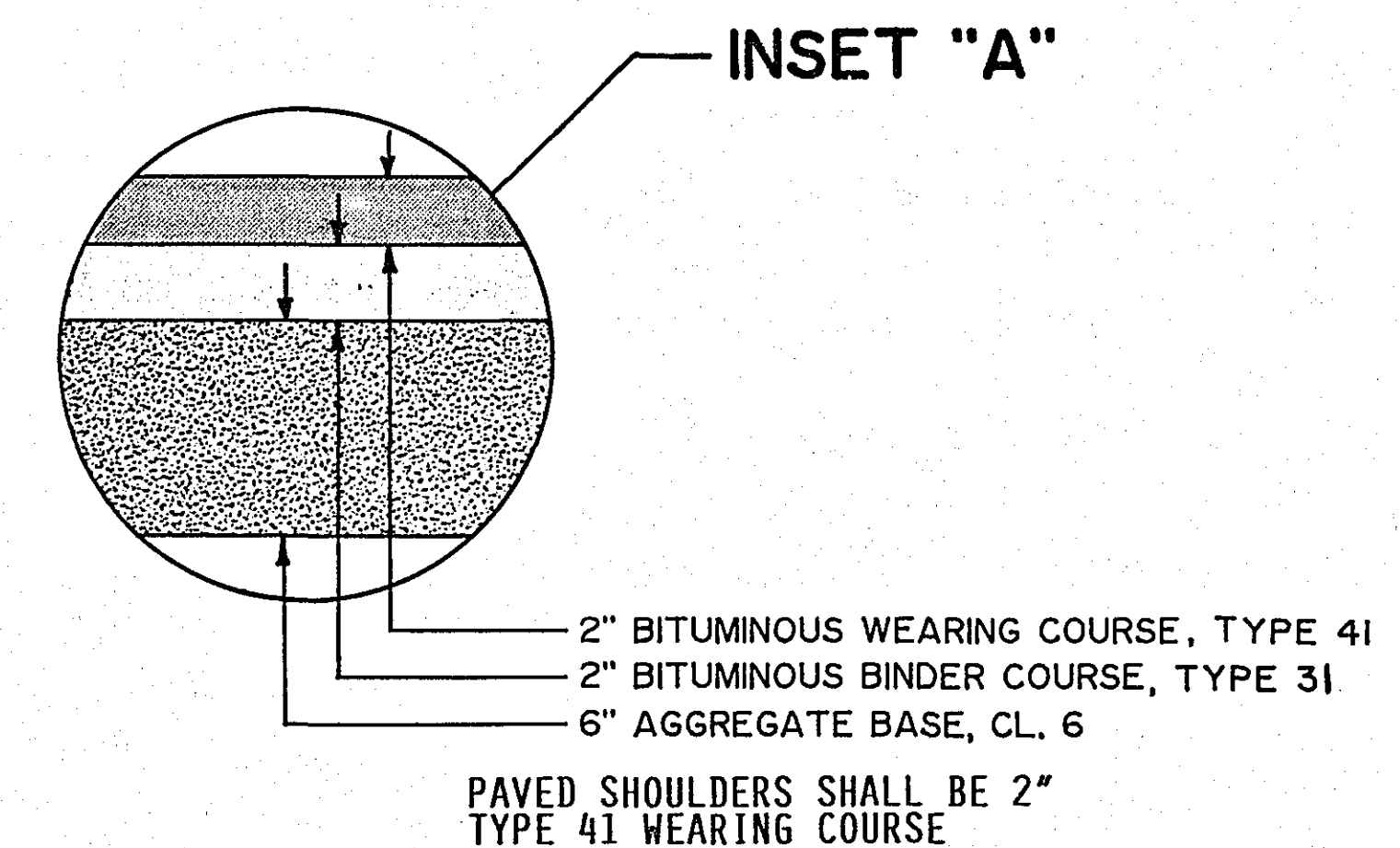
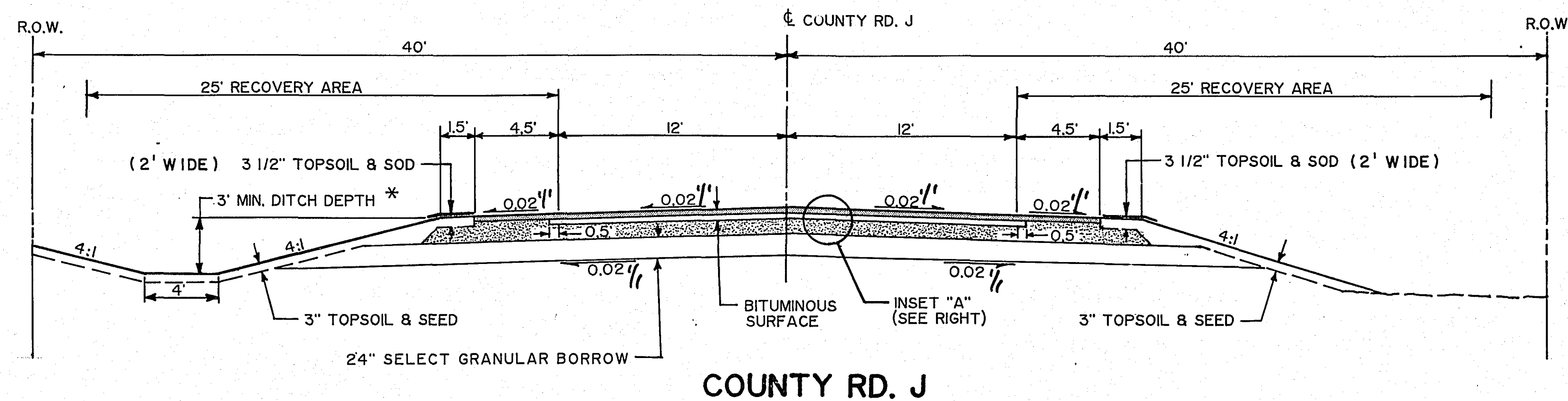
ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: BW
DATE: 2/15/95

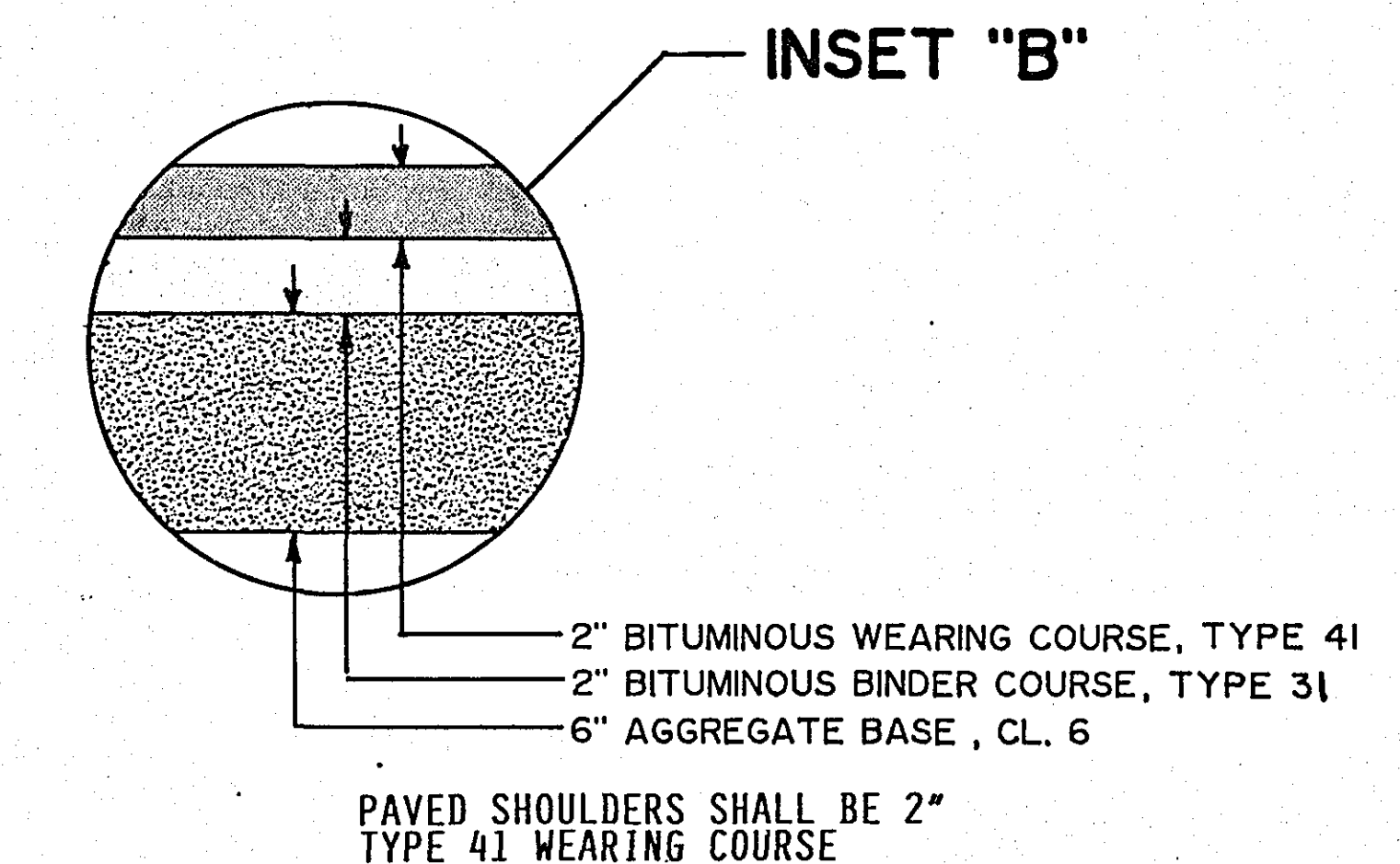
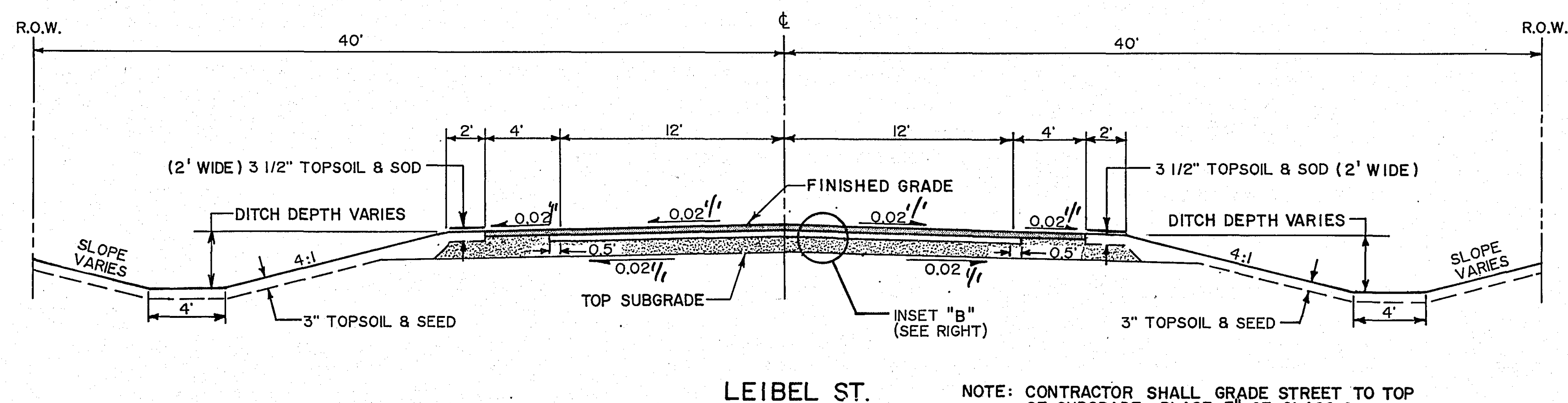
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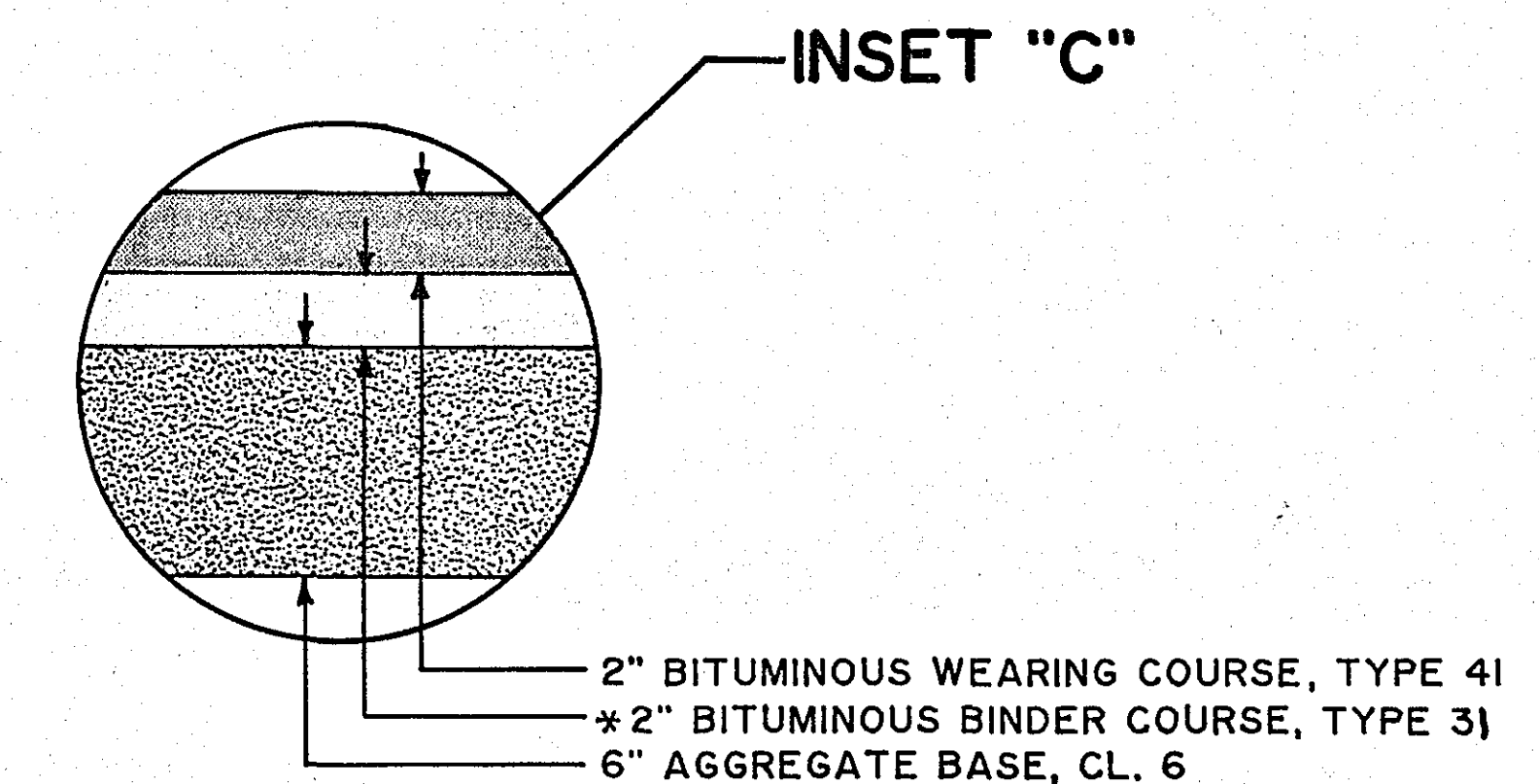
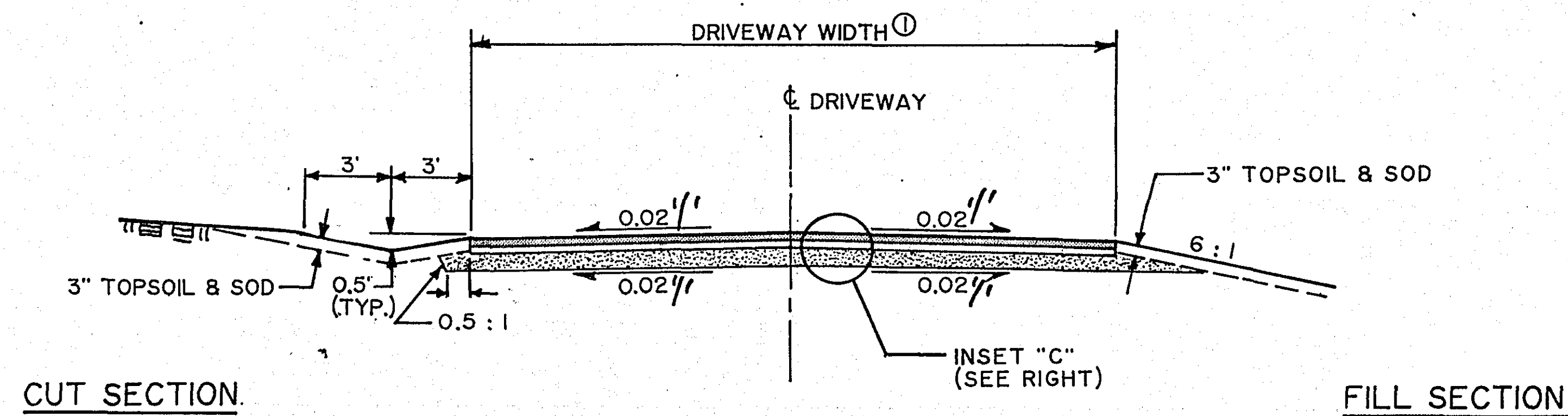
* DITCH DEPTH EXCEPTION
TO MEET EXISTING
STA. 37+50 TO STA. 40+70 LEFT
STA. 38+90 TO STA. 40+70 RIGHT



* DITCH DEPTH EXCEPTION
TO MEET EXISTING (FIONA RD.)
STA. 0+80 TO STA. 1+35 LEFT
STA. 0+62 TO STA. 1+35 RIGHT



NOTE: CONTRACTOR SHALL GRADE STREET TO TOP
OF SUBGRADE. PLACE 3" OF CLASS 6,
32' WIDE OVER STREET SUBGRADE.
TOP OF SUBGRADE 0.83' BELOW
FINISHED GRADE.



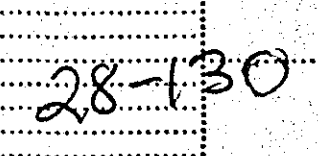
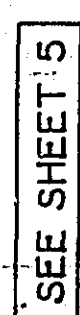
*NOTE: ELIMINATE 2" BITUMINOUS BINDER
COURSE FOR RESIDENTIAL DRIVEWAYS

DRIVEWAY
DETAIL

① DRIVEWAY WIDTHS:
RESIDENTIAL - 22' MAX.
COMMERCIAL - 32' MAX.

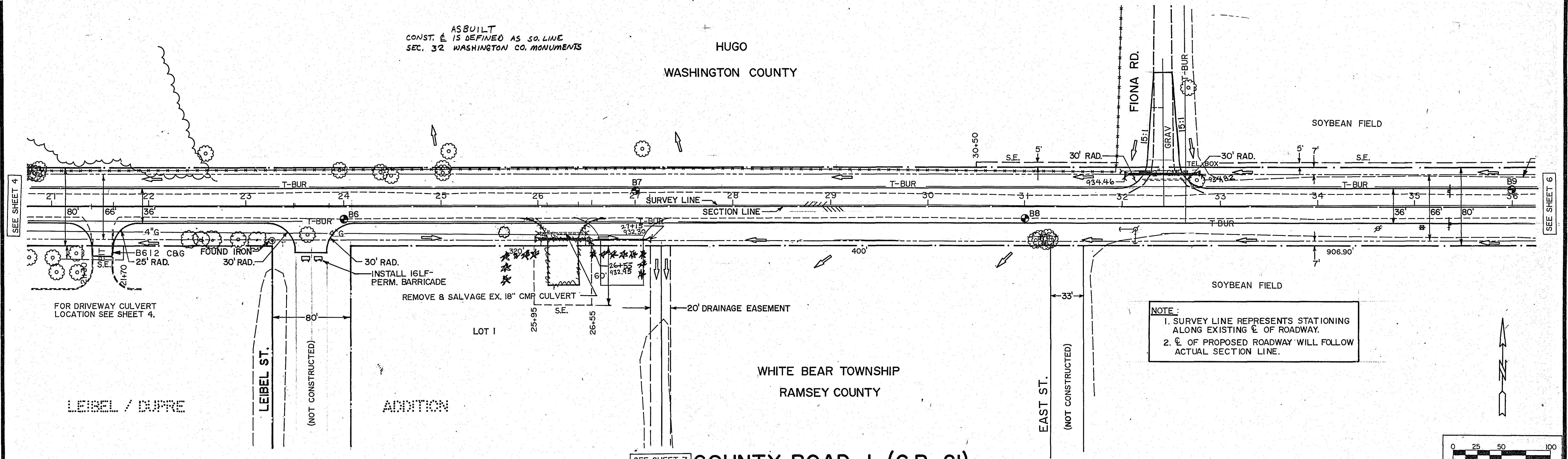
28-130
ASBUILT PLAN
CONFORMING TO
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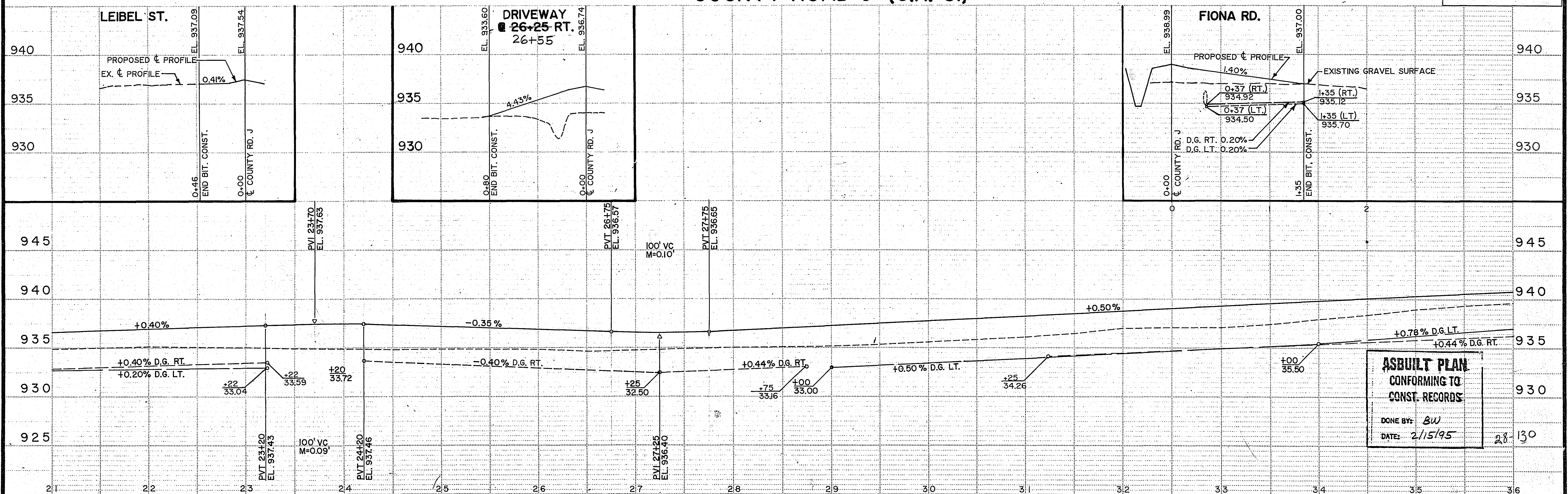
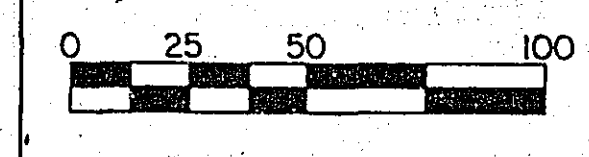


ASBUILT
CONST. IS DEFINED AS SO. LINE
SEC. 32 WASHINGTON CO. MONUMENTS

HUGO
WASHINGTON COUNTY



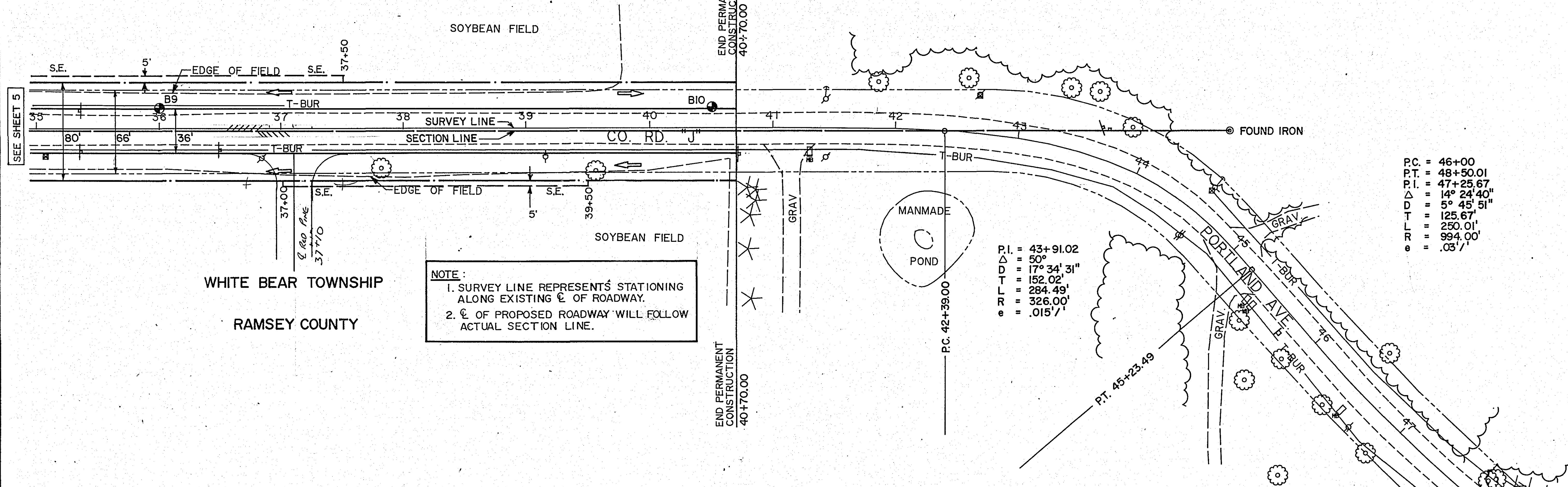
NOTE:
1. SURVEY LINE REPRESENTS STATIONING
ALONG EXISTING CL OF ROADWAY.
2. CL OF PROPOSED ROADWAY WILL FOLLOW
ACTUAL SECTION LINE.



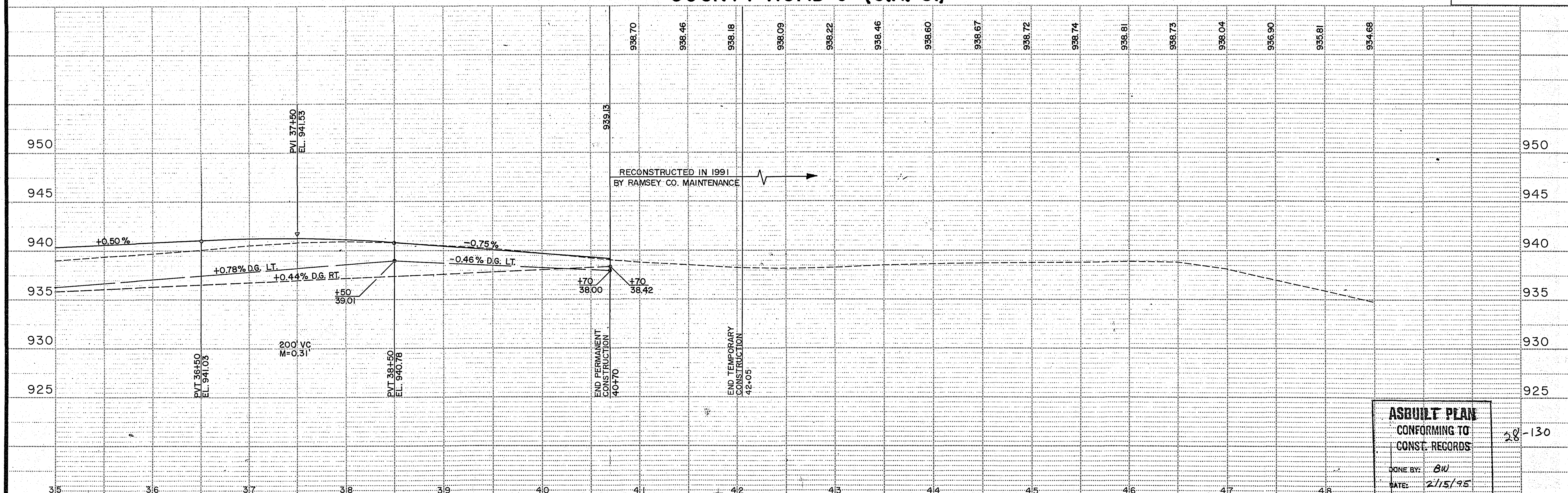
ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: BW
DATE: 2/15/95

HUGO
WASHINGTON COUNTY

ASBUILT
CONST. & IS DEFINED AS SO. LINE
SEC. 32 WASHINGTON CO. MONUMENTS

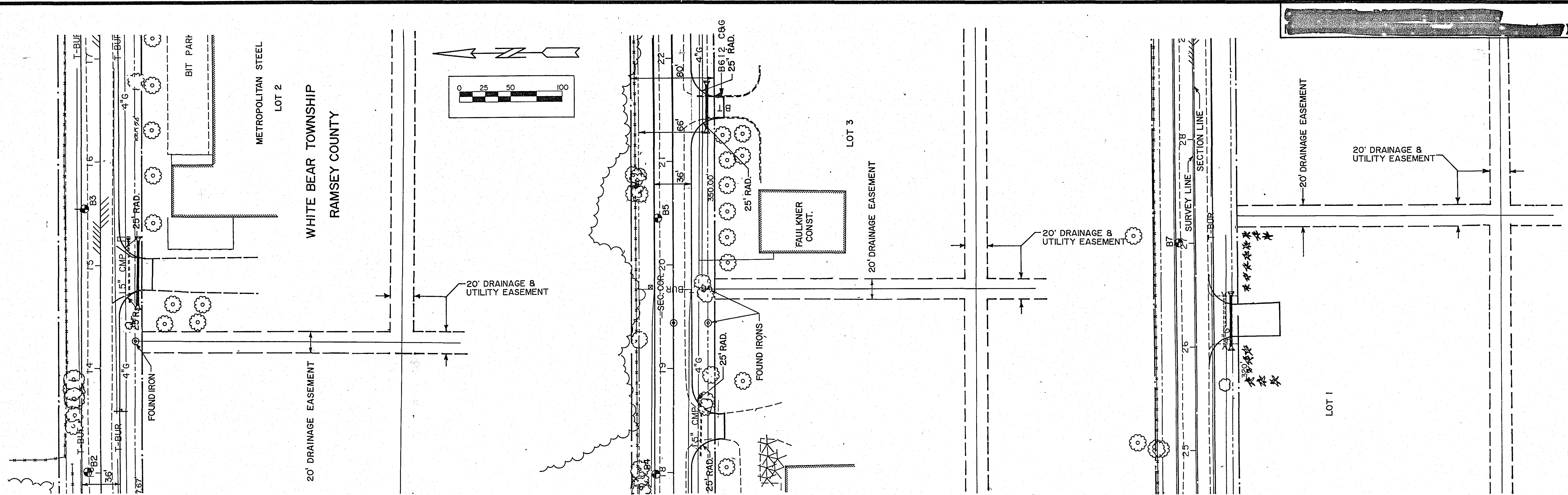


COUNTY ROAD J (C.R. 81)

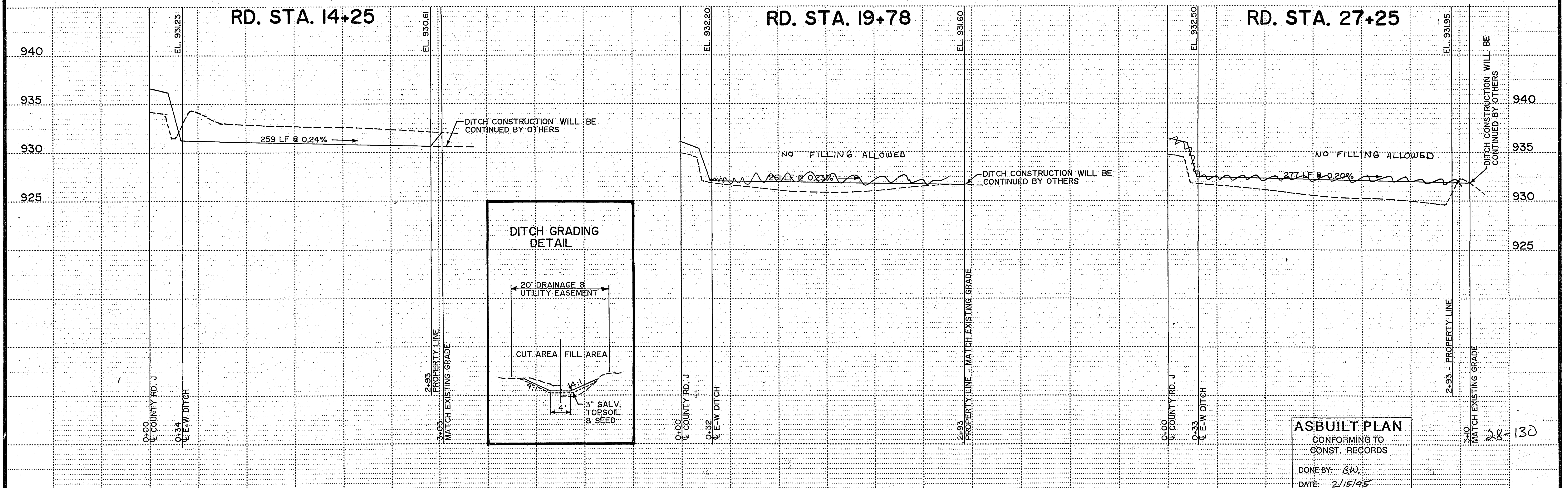


ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: BW
DATE: 2/15/95



DITCH GRADING



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

SUBGRADE
EXCAVATION

TOPSOIL
EXCAVATION

COMMON
EXCAVATION

EMBANKMENT

0 C.Y.

67 C.Y.

48 C.Y.

32 C.Y.

S.E.

R/W

R/W

S.E.

950 950

940 940

930 930

12+00

0 C.Y.

47 C.Y.

166 C.Y.

0 C.Y.

R/W

R/W

950 950

940 940

930 930

DRIVEWAY

11+50

0 C.Y.

RAW 50 C.Y.

259 C.Y.

0 C.Y.

R/W

950 950

940 940

930 930

11+00

0 C.Y.

69 C.Y.

303 C.Y.

0 C.Y.

950 950

940 940

930 930

10+50

0 C.Y.

19 C.Y.

(10+20 TO 10+50)

206 C.Y.

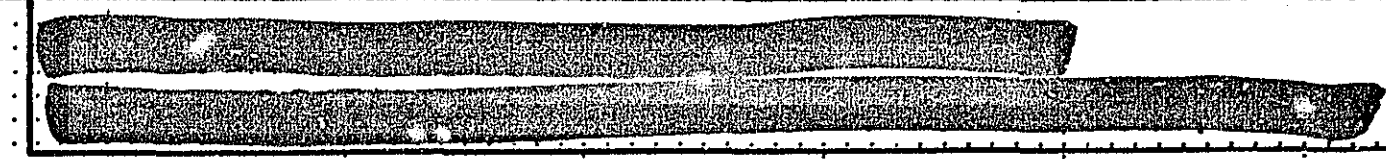
0 C.Y.

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: B.W.
DATE: 2/15/95

NOTE: BEGIN CONSTRUCTION @ 10+20.00

28-30



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

SUBGRADE
EXCAVATION

TOPSOIL
EXCAVATION

COMMON
EXCAVATION

EMBANKMENT

43 C.Y.

61 C.Y.

119 C.Y.

17 C.Y.

R/W

R/W

S.E.

950

940

930

950

940

930

14+00

0 C.Y.

66 C.Y.

84 C.Y.

34 C.Y.

R/W

R/W

S.E.

950

940

930

950

940

930

13+50

0 C.Y.

63 C.Y.

50 C.Y.

41 C.Y.

S.E.

R/W

R/W

S.E.

950

940

930

950

940

930

13+00

0 C.Y.

66 C.Y.

16 C.Y.

54 C.Y.

S.E.

R/W

R/W

S.E.

950

940

930

950

940

930

12+50

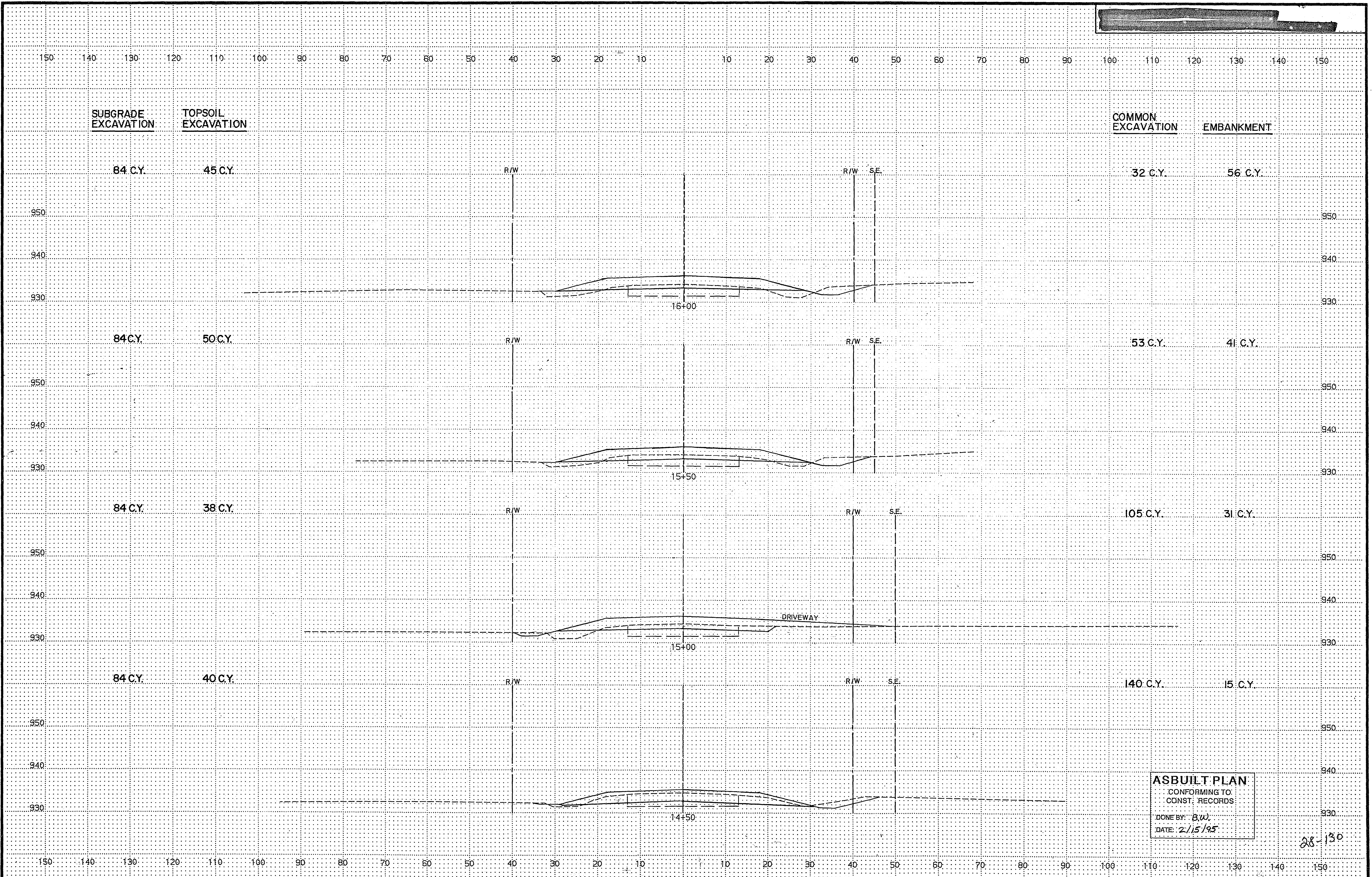
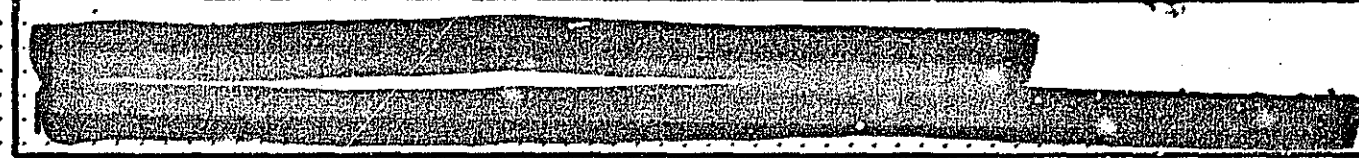
ASBUILT PLAN

CONFORMING TO
CONST. RECORDS

DONE BY: B.W.
DATE: 2/15/95

28-130

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: B.W.
DATE: 2/15/95

28-130

COPY EQUIPMENT FORM 11

[Redacted]

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

SUBGRADE
EXCAVATION

TOPSOIL
EXCAVATION

COMMON
EXCAVATION

EMBANKMENT

84 C.Y.

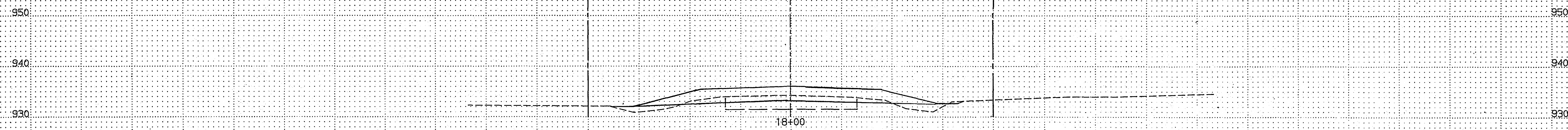
33 C.Y.

88 C.Y.

37 C.Y.

R/W

R/W



84 C.Y.

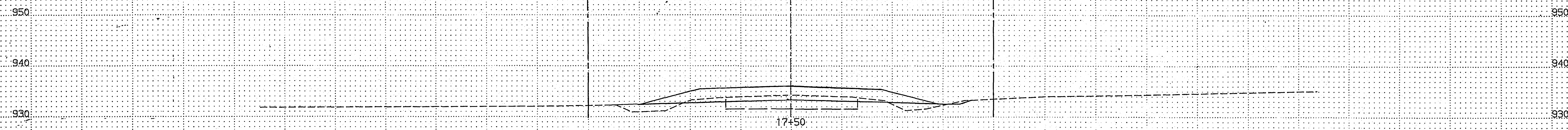
43 C.Y.

28 C.Y.

44 C.Y.

R/W

R/W



84 C.Y.

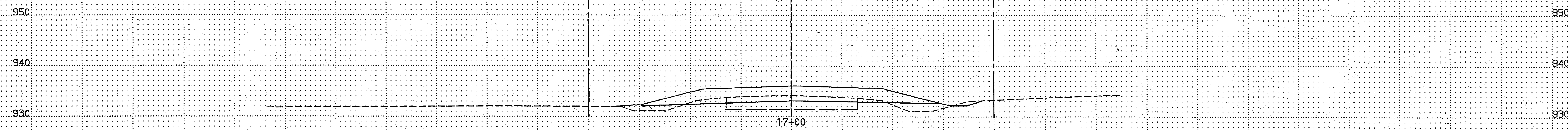
44 C.Y.

22 C.Y.

41 C.Y.

R/W

R/W



84 C.Y.

42 C.Y.

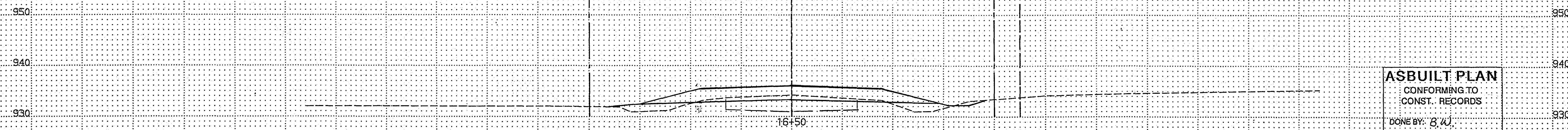
25 C.Y.

54 C.Y.

R/W

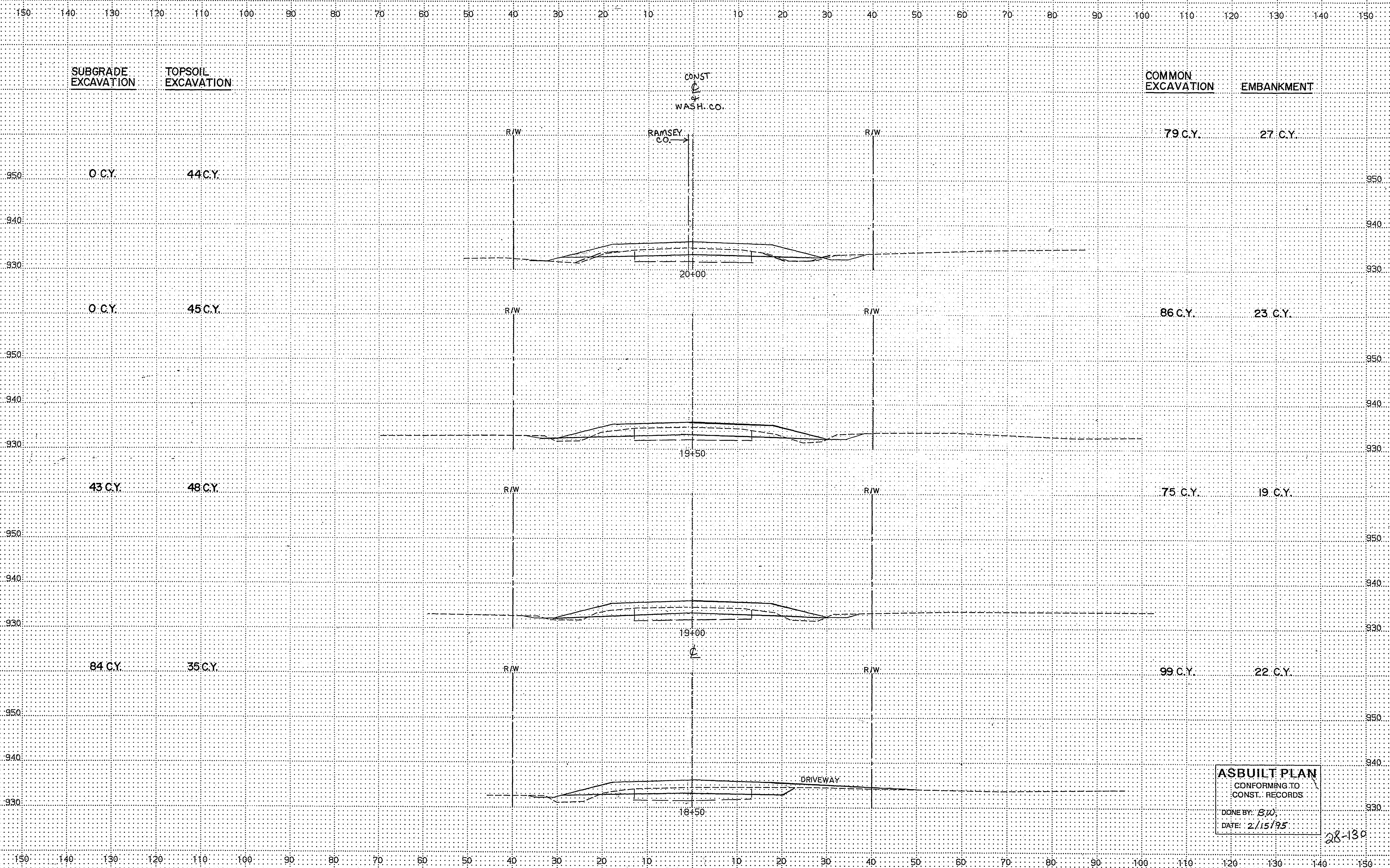
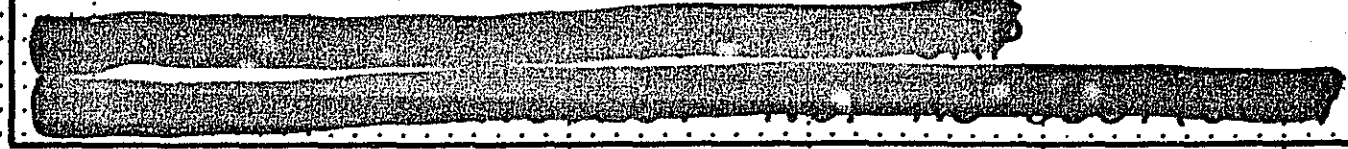
R/W

S.E.



ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: B.W.
DATE: 2/15/95

28-130



CONST
WASH. CO.

RAMSEY
CO.

20+00

19+50

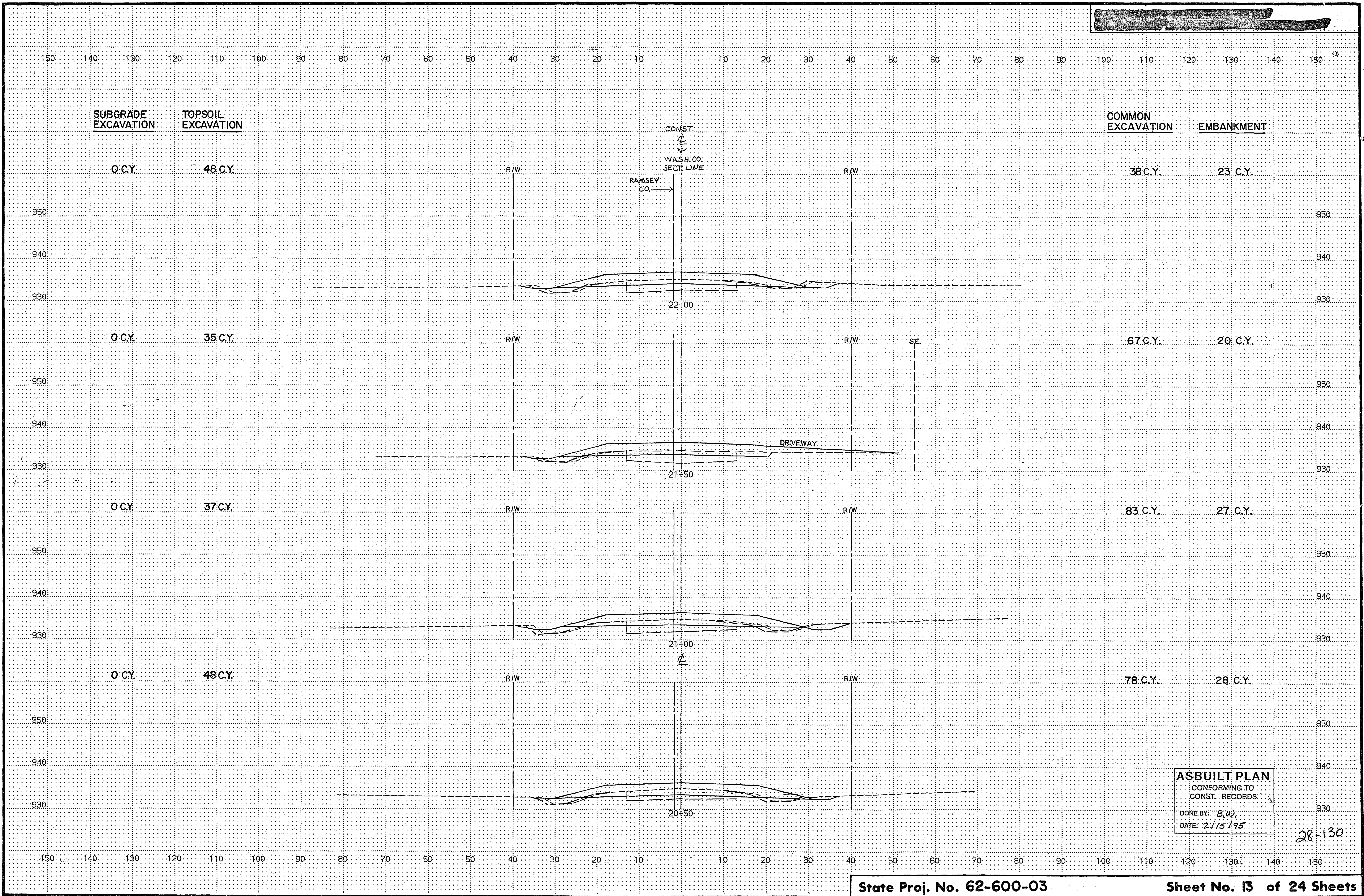
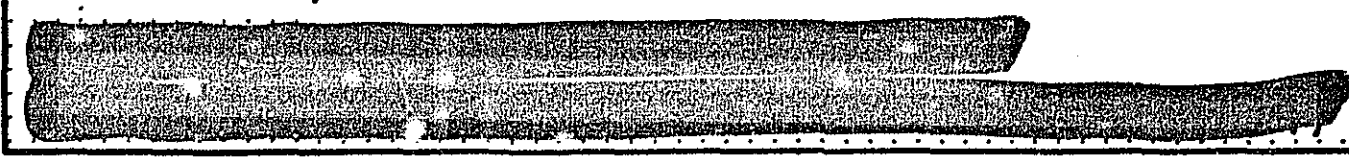
19+00

18+50

DRIVEWAY

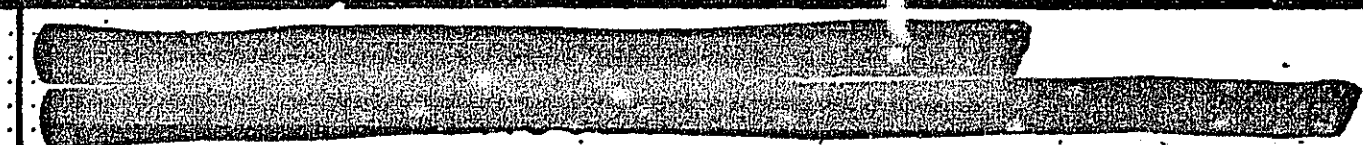
ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: BJO
DATE: 2/15/95

28-130



ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: B.W.
DATE: 2/15/95

28-130



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

SUBGRADE
EXCAVATION

TOPSOIL
EXCAVATION

COMMON
EXCAVATION

EMBANKMENT

0 C.Y.

49 C.Y.

3 C.Y.

100 C.Y.

950

940

930

950

940

930

0 C.Y.

42 C.Y.

14 C.Y.

78 C.Y.

950

940

930

950

940

930

0 C.Y.

42 C.Y.

18 C.Y.

56 C.Y.

950

940

930

950

940

930

0 C.Y.

47 C.Y.

22 C.Y.

37 C.Y.

950

940

930

950

940

930

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

CONST.

WASH. CO.

SECT. LINE

RAMSEY
CO.

24+00

23+50

23+00

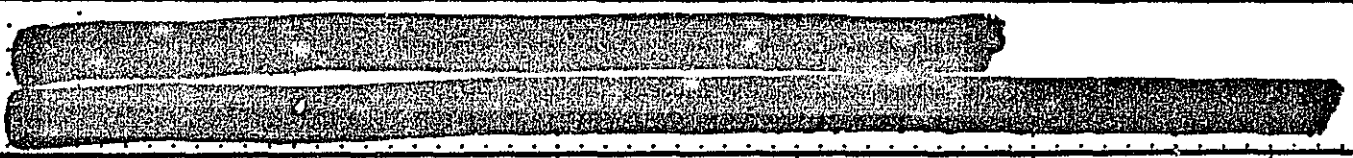
22+50

LEIBEL ST.

4:1

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: B.W.
DATE: 2/15/95

28-130



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

SUBGRADE
EXCAVATION

TOPSOIL
EXCAVATION

COMMON
EXCAVATION

EMBANKMENT

97 C.Y.

44 C.Y.

39 C.Y.

37 C.Y.

CONST.
WASH. CO.
SECT. LINE
RAMSEY CO.

R/W

R/W

26+00

97 C.Y.

45 C.Y.

40 C.Y.

45 C.Y.

25+50

R/W

R/W

0 C.Y.

46 C.Y.

27 C.Y.

52 C.Y.

25+00

R/W

R/W

0 C.Y.

49 C.Y.

9 C.Y.

83 C.Y.

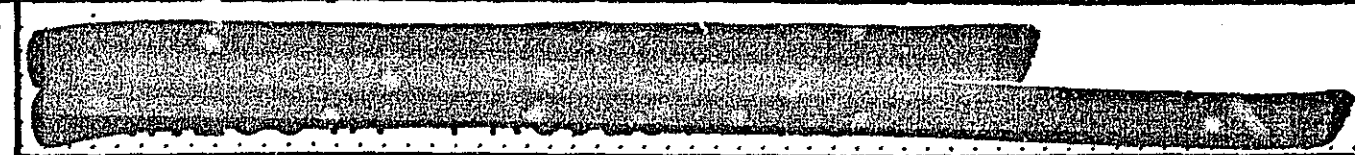
24+50

R/W

R/W

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: B.W.
DATE: 2/15/95

28-130



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

SUBGRADE
EXCAVATION

TOPSOIL
EXCAVATION

COMMON
EXCAVATION

EMBANKMENT

96 C.Y.

42 C.Y.

48 C.Y.

31 C.Y.

CONST.
WASH. CO.
SECT. LINE

28+00

96 C.Y.

40 C.Y.

55 C.Y.

23 C.Y.

27+50

96 C.Y.

41 C.Y.

46 C.Y.

29 C.Y.

27+00

97 C.Y.

44 C.Y.

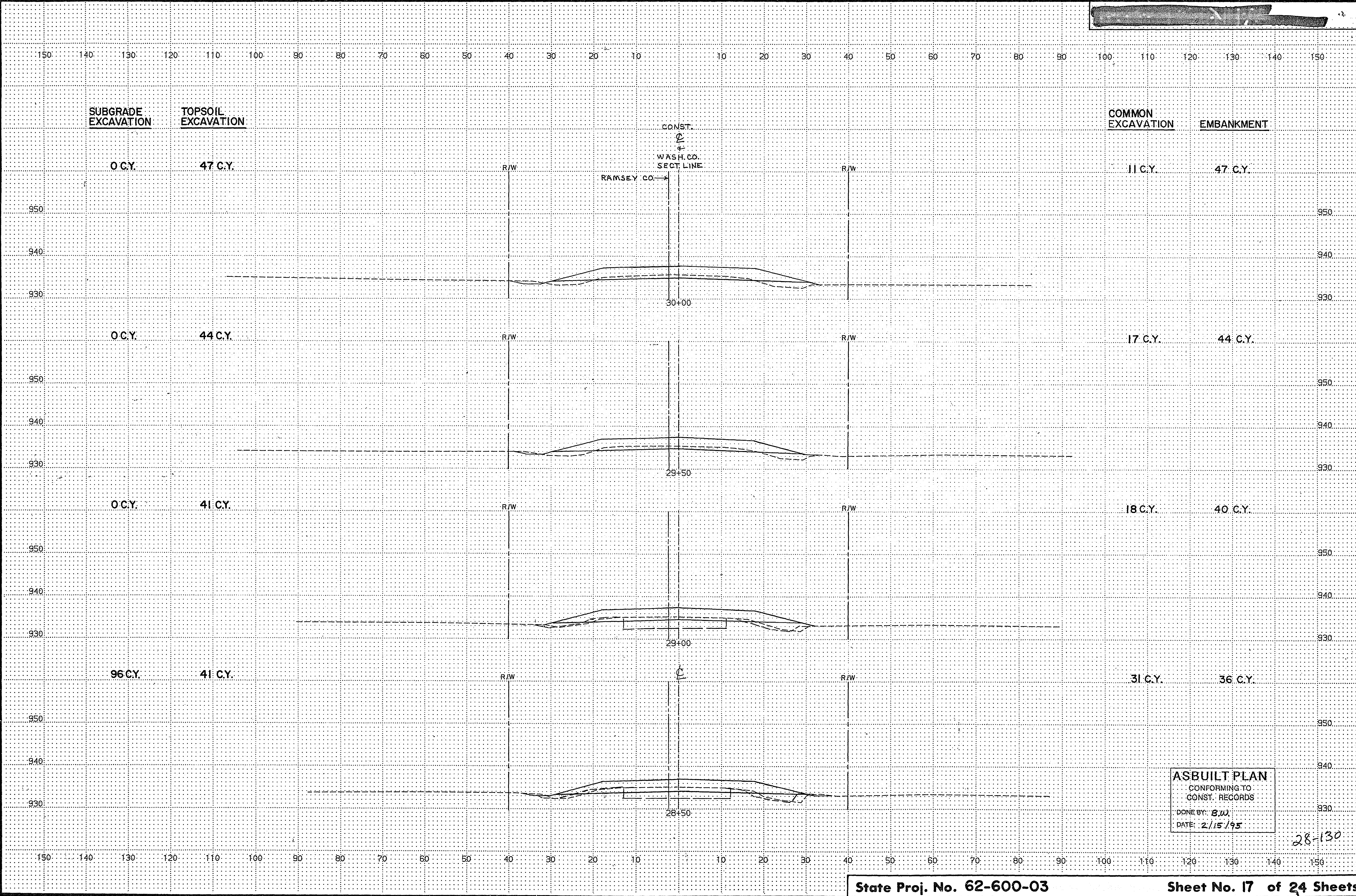
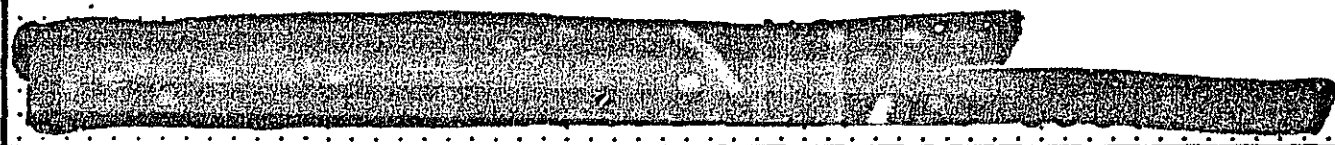
38 C.Y.

34 C.Y.

26+50

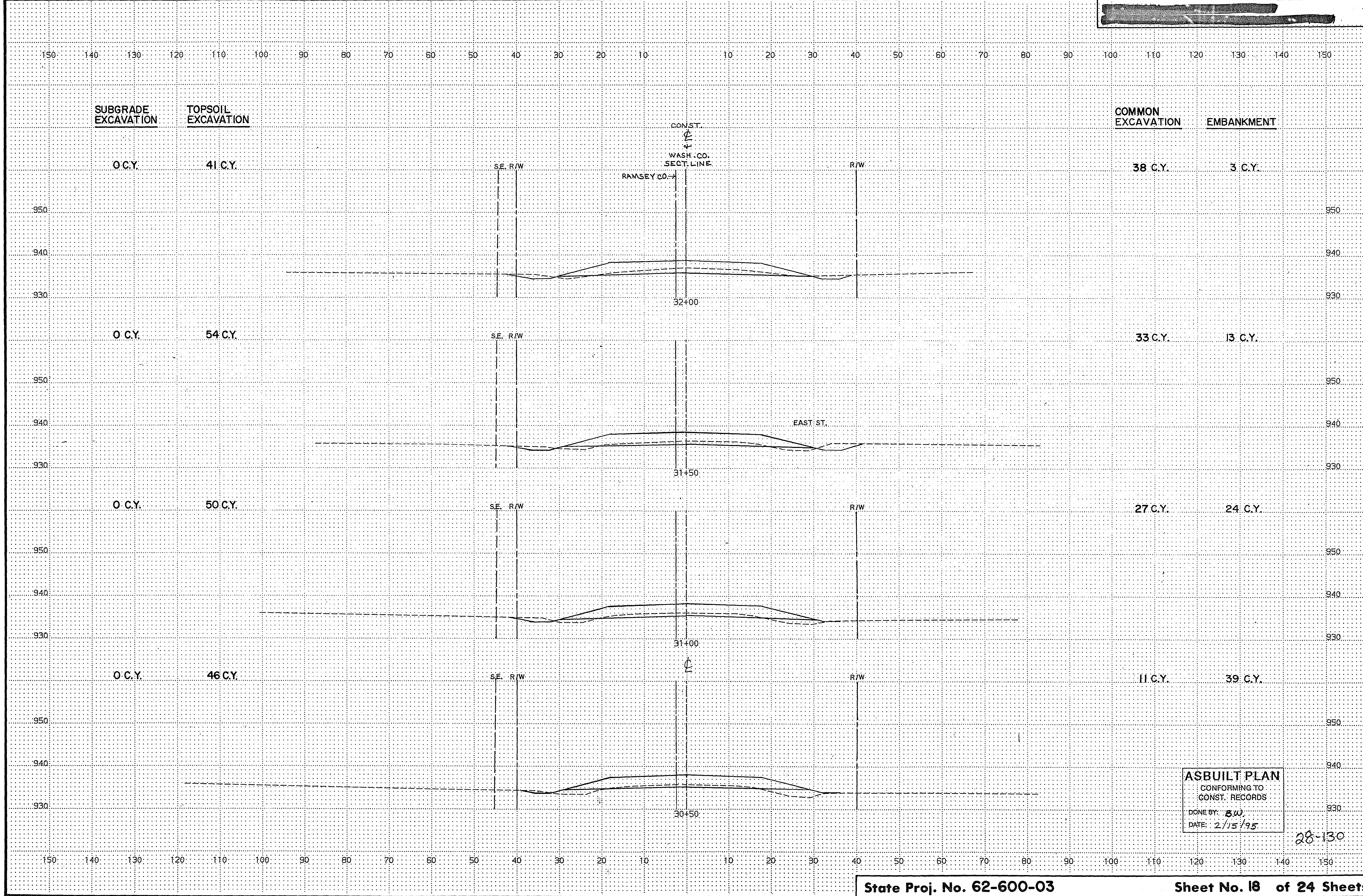
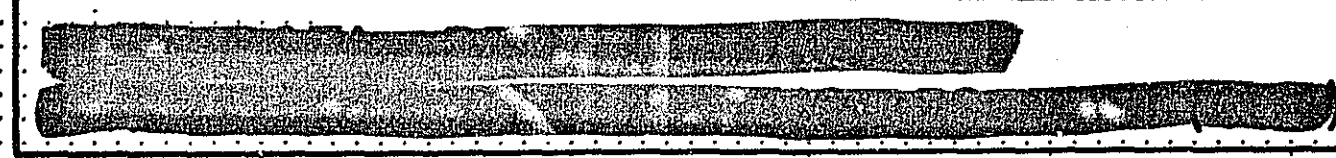
ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: BW
DATE: 2/15/95

28-130



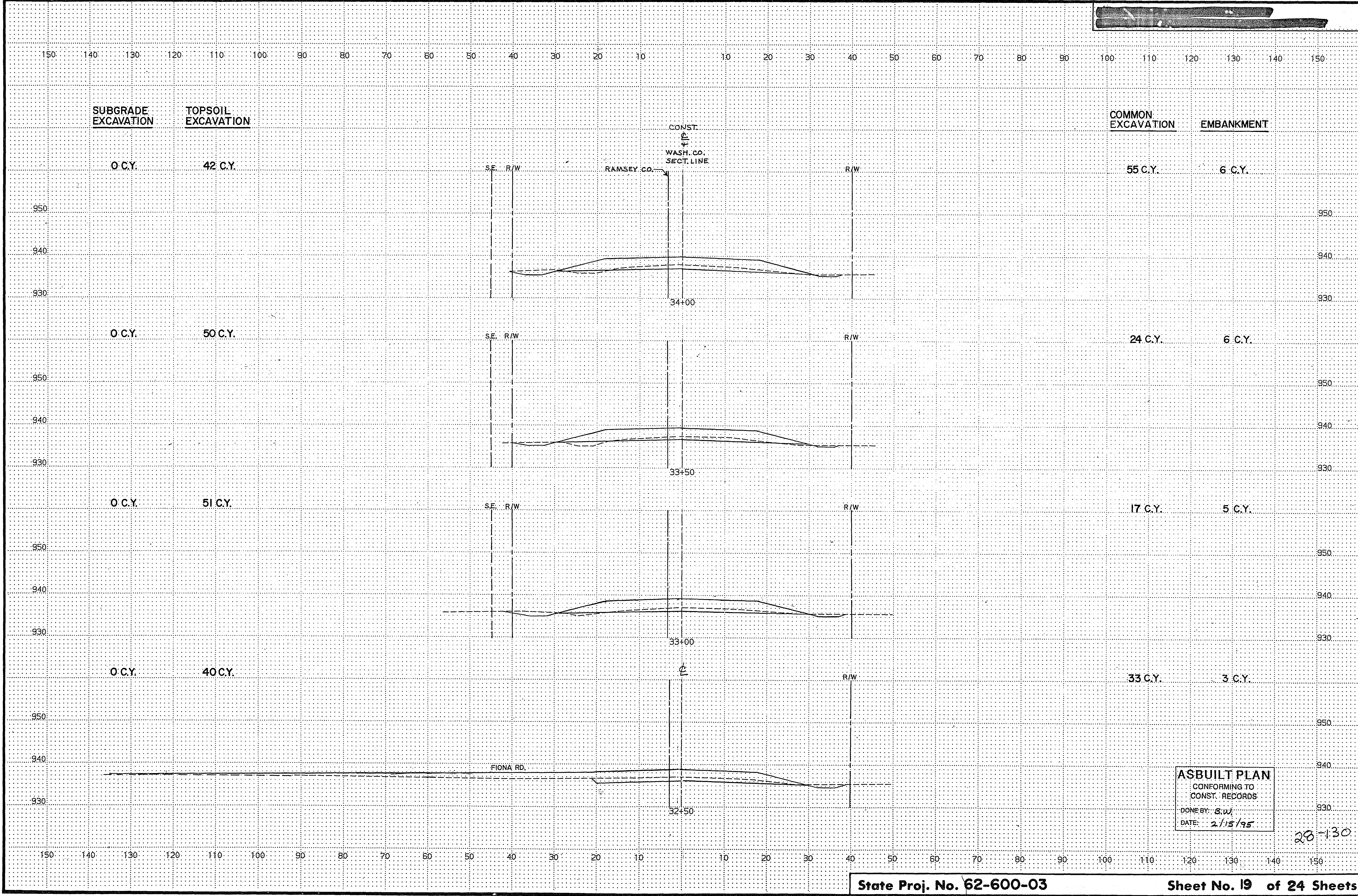
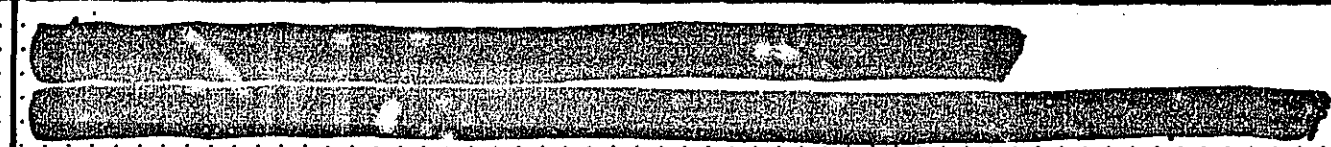
ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: B.W.
DATE: 2/15/95

28-130



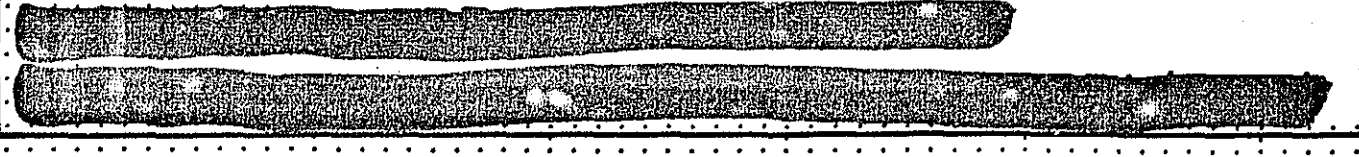
COPY EQUIPMENT FORM 11

28-130



ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: B.W.
DATE: 2/15/95

28-130



SUBGRADE
EXCAVATION

TOPSOIL
EXCAVATION

COMMON
EXCAVATION

EMBANKMENT

0 C.Y.

47 C.Y.

110 C.Y.

2 C.Y.

950

950

940

940

930

930

0 C.Y.

52 C.Y.

95 C.Y.

4 C.Y.

950

950

940

940

930

930

0 C.Y.

52 C.Y.

96 C.Y.

6 C.Y.

950

950

940

940

930

930

0 C.Y.

53 C.Y.

74 C.Y.

4 C.Y.

950

950

940

940

930

930

CONST.
WASH. CO.
SECT. LINE

RAMSEY CO. →

36+00

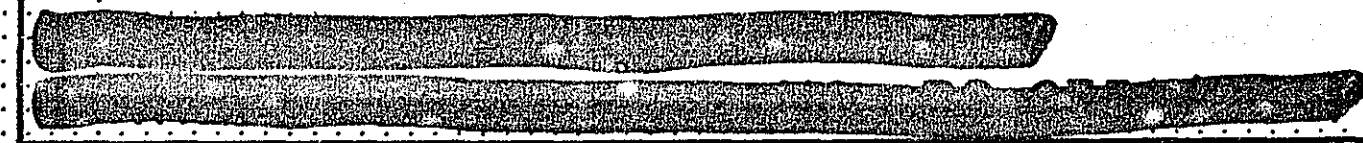
35+50

35+00

34+50

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: B.W.
DATE: 2/15/95

28-130



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

SUBGRADE
EXCAVATION

TOPSOIL
EXCAVATION

COMMON
EXCAVATION

EMBANKMENT

0 C.Y.

52 C.Y.

202 C.Y.

0 C.Y.

950 950

940 940

930 930

0 C.Y.

48 C.Y.

276 C.Y.

0 C.Y.

950 950

940 940

930 930

0 C.Y.

49 C.Y.

212 C.Y.

0 C.Y.

950 950

940 940

930 930

0 C.Y.

48 C.Y.

159 C.Y.

2 C.Y.

950 950

940 940

930 930

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

CONST.
+
WASH. CO.
SECT. LINE
RAMSEY CO. →

R/W

R/W S.E.

38+00

S.E. R/W

R/W S.E.

37+50

S.E. R/W

R/W S.E.

37+00

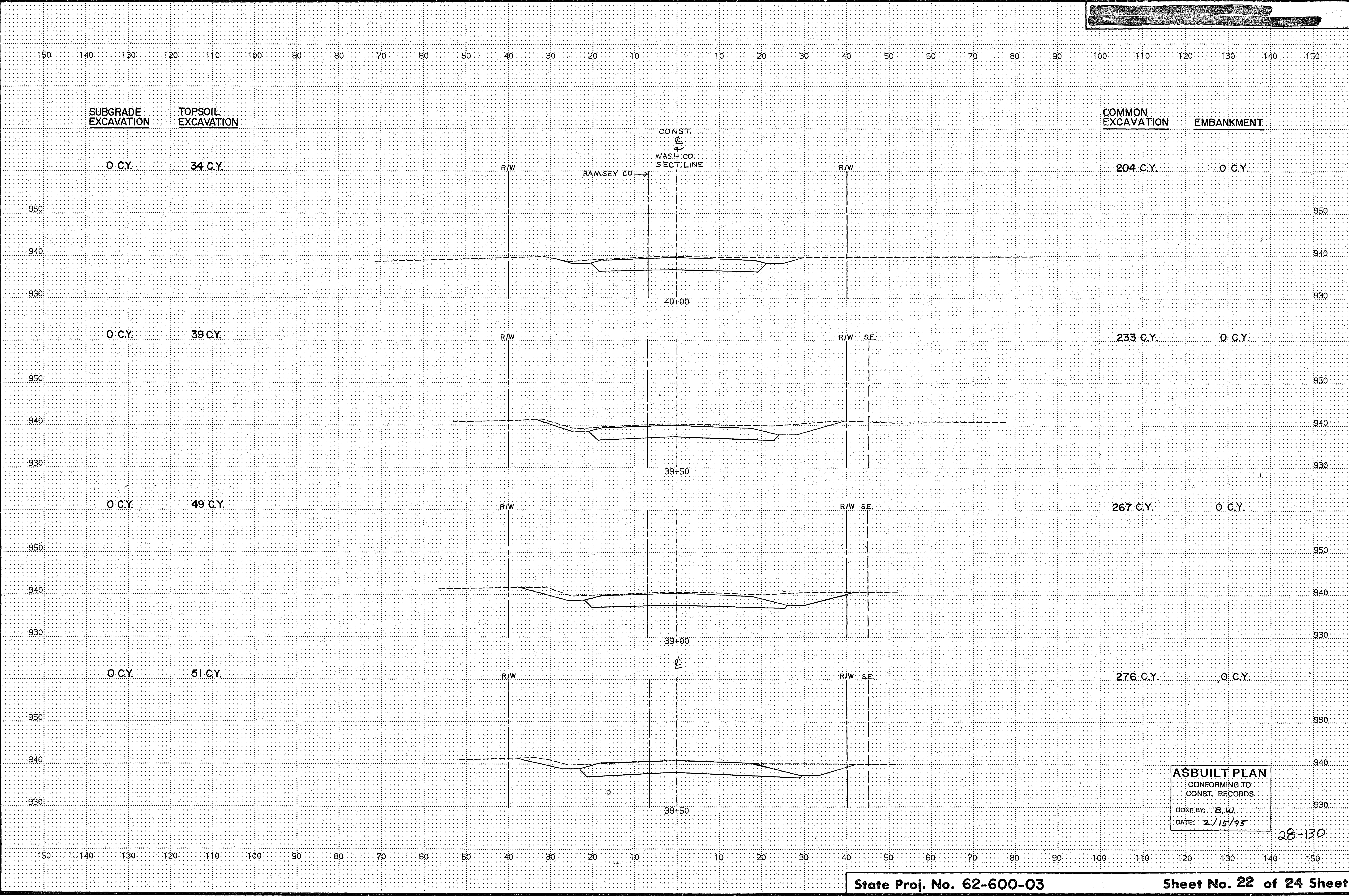
S.E. R/W

R/W

36+50

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: B.W.
DATE: 2/15/95

28-130



SUBGRADE
EXCAVATION

TOPSOIL
EXCAVATION

COMMON
EXCAVATION

EMBANKMENT

CONST.
WASH. CO.
SECT. LINE

RAMSEY CO.

0 C.Y.

34 C.Y.

204 C.Y.

0 C.Y.

40+00

0 C.Y.

39 C.Y.

233 C.Y.

0 C.Y.

39+50

0 C.Y.

49 C.Y.

267 C.Y.

0 C.Y.

39+00

0 C.Y.

51 C.Y.

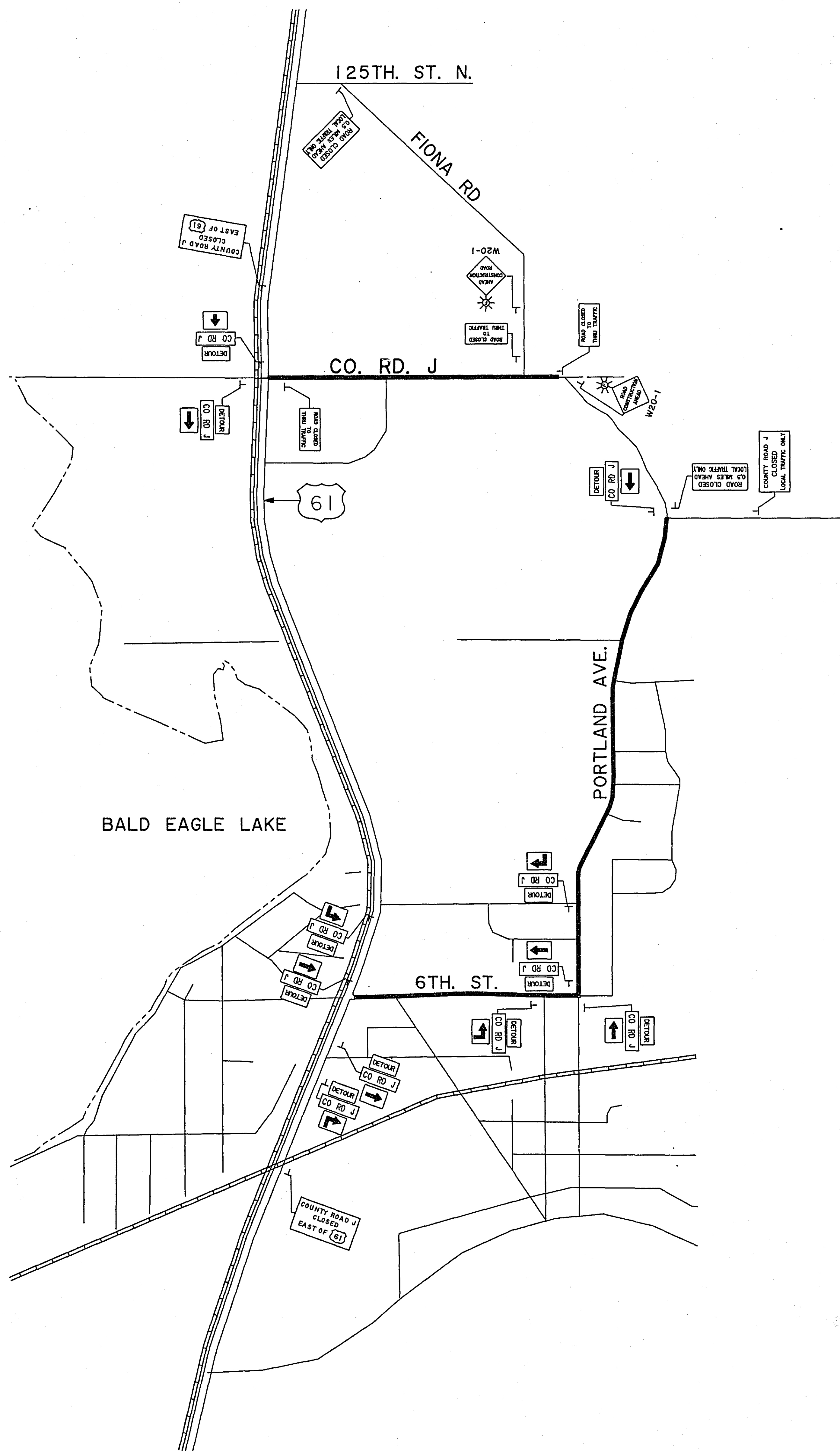
276 C.Y.

0 C.Y.

38+50

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: B.W.
DATE: 2/15/95

28-130



3" 2.7 7.0 16.6 21.0 30.3
6" CO RD J
3"

SIGN A

36" X 12" BLACK ON ORANGE
LINE 1 30.6" 6" C

5.5" 3.8 10.1 17.2 24.9 31.9 37.6 49.6 56.1 62.6 70.8 81.7
6" COUNTY ROAD J
5.5" 28.0 33.0 39.0 45.4 52.3 59.1
3.5" 8.8 15.9 23.5 29.6 40.1 47.3 57.8
18" EAST OF 61
3.5"

SIGN B

90" X 48" BLACK ON ORANGE
LINE 1 82.5" 6" E MOD.
LINE 2 38.0" 6" E MOD.
LINE 3 70.5" 6" E MOD., 22"X18" --7" NUM.

4.5" 7.5 11.5 15.9 20.1 24.1 27.3 35.3 39.3 43.4 48.3 55.5
4" COUNTY ROAD J
4" 18.6 23.6 28.3 33.5 38.9 43.5
5" CLOSED
4" 3.3 6.5 10.1 13.3 17.4 23.9 27.0 30.5 34.6 37.8 40.9 42.5 49.2 52.9 56.6 59.3
4" LOCAL TRAFFIC ONLY
4.5"

SIGN C

66" X 30" BLACK ON ORANGE
LINE 1 51.0" 4" E
LINE 2 28.9" 5" E
LINE 3 59.4" 4" D

ASBUILT PLAN

CONFORMING TO
CONST. RECORDS

DONE BY: BW

DATE: 2/15/95

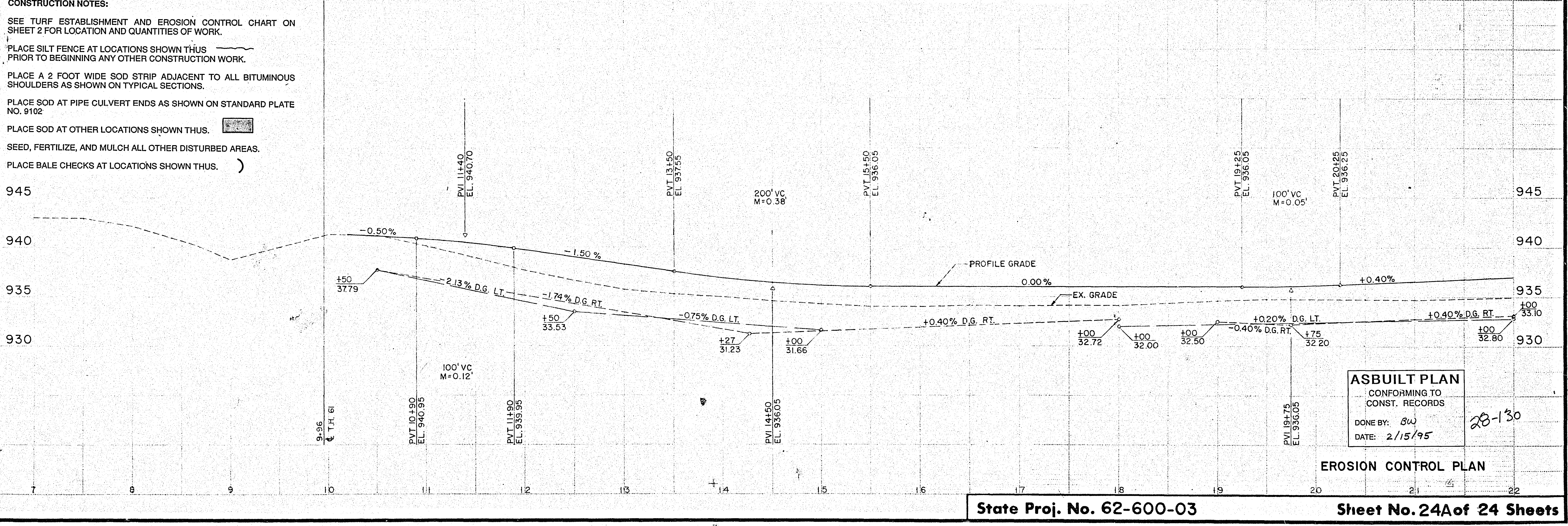
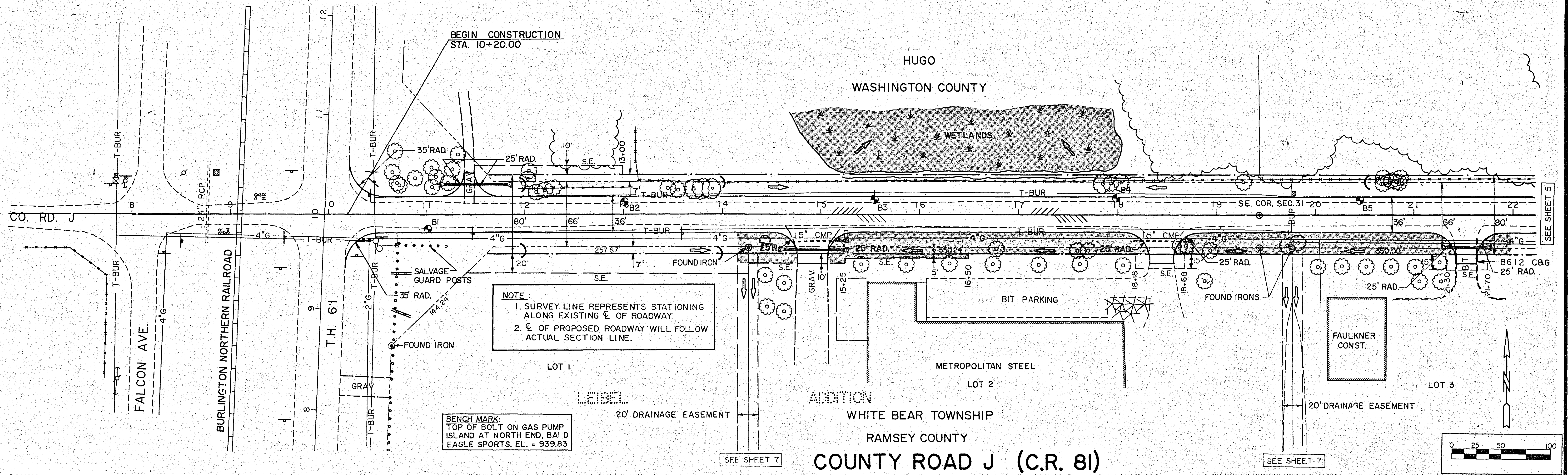
TRAFFIC CONTROL DEVICES FOR TRAFFIC CONTROL (0563.501)

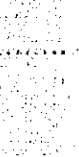
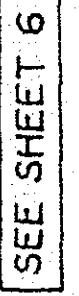
ITEM	SIGN NO. OR TYPE OF DEVICE	SIZE AND COLOR	QUANTITY (EACH)
DETOUR	M4-8	24"X12" BLACK ON ORANGE	11
	M5-IR	21"X15" BLACK ON WHITE	2
	M5-IL	21"X15" BLACK ON WHITE	2
	M6-1	21"X15" BLACK ON WHITE	3
	M6-3	21"X15" BLACK ON WHITE	1
	M6-1	21"X15" BLACK ON WHITE	3
COUNTY ROAD J CLOSED EAST OF 61	SPECIAL "B" (SEE LAYOUT)	90"X48" BLACK ON ORANGE	2
CO RD J	SPECIAL "A" (SEE LAYOUT)	36"X12" BLACK ON ORANGE	11
ROAD CLOSED TO THRU TRAFFIC	R11-4	60"X30" BLACK ON WHITE	3
ROAD CLOSED 0.5 MILE AHEAD LOCAL TRAFFIC ONLY	R11-3	60"X30" BLACK ON WHITE	2
COUNTY ROAD J CLOSED LOCAL TRAFFIC ONLY	SPECIAL "C" (SEE LAYOUT)	60"X30" BLACK ON ORANGE	1
ROAD CONSTRUCTION AHEAD	W20-1	48"X48" BLACK ON ORANGE	2
	TYPE III BARRICADE	8' ORANGE AND WHITE	5
	FLASHER,	28-130 8	

TRAFFIC CONTROL

State Proj. No. 62-600-03

Sheet No. 24 of 24 Sheets





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Sheet No.24B of 24 Sheets

HUGO
WASHINGTON COUNTY

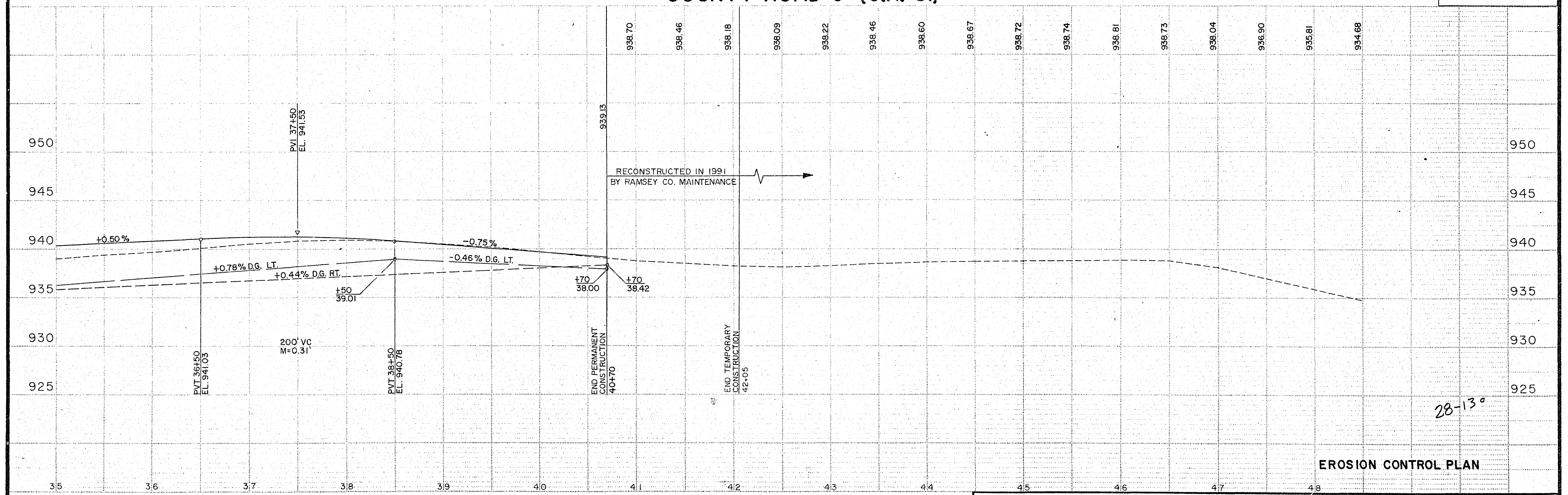
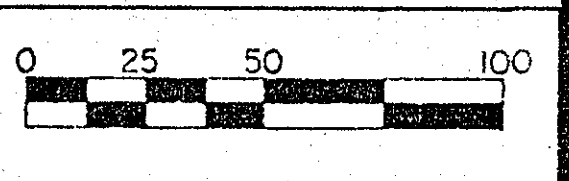
WHITE BEAR TOWNSHIP
RAMSEY COUNTY

NOTE:
1. SURVEY LINE REPRESENTS STATIONING
ALONG EXISTING ℓ OF ROADWAY.
2. ℓ OF PROPOSED ROADWAY WILL FOLLOW
ACTUAL SECTION LINE.

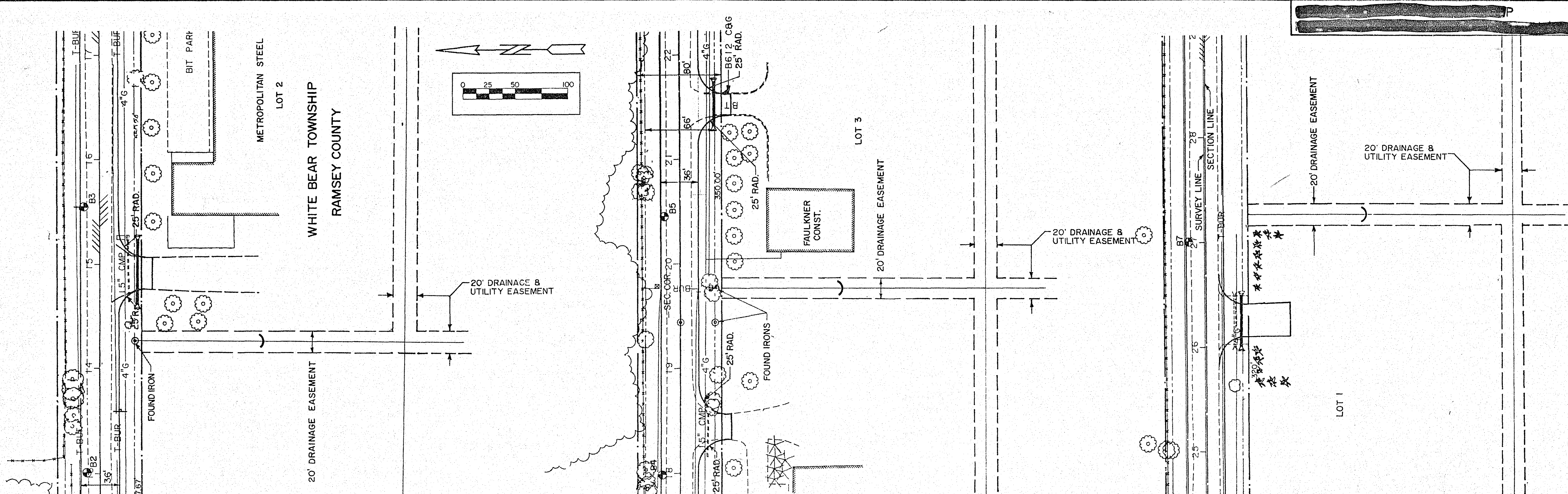
COUNTY ROAD J (C.R. 81)

P.C. = 46+00
P.T. = 48+50.01
P.I. = 47+25.67
 Δ = 14° 24' 40"
D = 5° 45' 51"
T = 125.67'
L = 250.01'
R = 994.00'
e = .03' /'

P.I. = 43+91.02
 Δ = 50°
D = 17° 34' 31"
T = 152.02'
L = 284.49'
R = 326.00'
e = .015' /'



EROSION CONTROL PLAN



DITCH GRADING

