

DIVISION 11 AIR HEATING, COOLING &
 PROJECT AS CONTRACTED
 FIELD & ITEMS: P.E. - PROJECT ENGINEER
 AND 1 ASSISTANT
 + CONSULTING AND SUPERVISOR
 BUREAU CHIEF
 MAY 1966

RECORD DRAWING
 FOR USE OF CONTRACTOR AND/OR
 CITY AND/OR AGENCIES. THESE
 ARE FOR FIELD STUDY (SAMPLING AND
 TITRATION).

78 126

TYPE "C" SIGNS (SALVAGE) [C]			
SIGN NO.	QUANTITY S.A.P. S.A.P. 12-49-10 12-517-15	PANEL SIZE	PANEL LEGEND
C-301	1	36 x 36	STOP
C-302	2	36 x 36	STOP AHEAD
C-304	2	18 x 36	ALL WAY
C-305	1	18 x 36	Y-WAY
C-306	1	48 x 24	DOUBLE ARROW
C-307	3	30 x 30	CURVE LEFT
C-308	3	30 x 30	SPEED LIMIT 40
C-309	1	30 x 30	NO OUTLET
C-310	3	36 x 30	LANE DESIGNATION (RIGHT, LEFT)
C-311	2	12 x 36	CONTROLLED ACCESS
C-312	3	9 x 12 1/2	RIGHT OF WAY
C-313	3	18 x 24	CHEVRON
C-314	3	36 x 36 x 36	DO NOT PASS
TOTAL	34	3	

NOTES:

1. SIGNS TO BE SALVAGED AND NOT REINSTALLED SHALL BE DELIVERED TO RAMSEY COUNTY PUBLIC WORKS DEPARTMENT.

TYPE "D" SIGNS (SALVAGE) [E]			
SIGN NO.	QUANTITY S.A.P. S.A.P. 12-559-10 12-517-15	PANEL LEGEND	
D-101	2	CSM 59 ROUTE MARKER	
TOTAL	4	0	

NOTES:

SEE MISCELLANEOUS REMOVAL PLANS FOR LOCATIONS OF SIGNS TO BE REMOVED

SALVAGED SIGNS THAT ARE TO BE REINSTALLED SHALL USE 3#/FT POSTS.

SIGNS TO BE SALVAGED AND NOT REINSTALLED SHALL BE DELIVERED TO RAMSEY COUNTY PUBLIC WORKS DEPARTMENT LOCATED AT:
3377 NORTH RICE STREET
SHOREVIEW, MN. 55126

THIS DRAWING IS OUR RECORD KNOWLEDGE OF THE PROJECT AS CONSTRUCTED

DONALD V. STERN, P.E. - PROJECT ENGINEER
WEB & ASSOCIATES
- CONSTRUCTION OBSERVER
RAMSEY COUNTY

JANUARY 2004

RECORD DRAWING

INFORMATION IS FURNISHED WITHOUT WARRANTY. USERS SHOULD FIELD VERIFY LOCATIONS AND ELEVATIONS.

RY 2004 *

CONTRACTOR : DANNER INC.

RAMSEY COUNTY DEPARTMENT OF PUBLIC WORKS

TABULATED QUANTITIES

SHEET

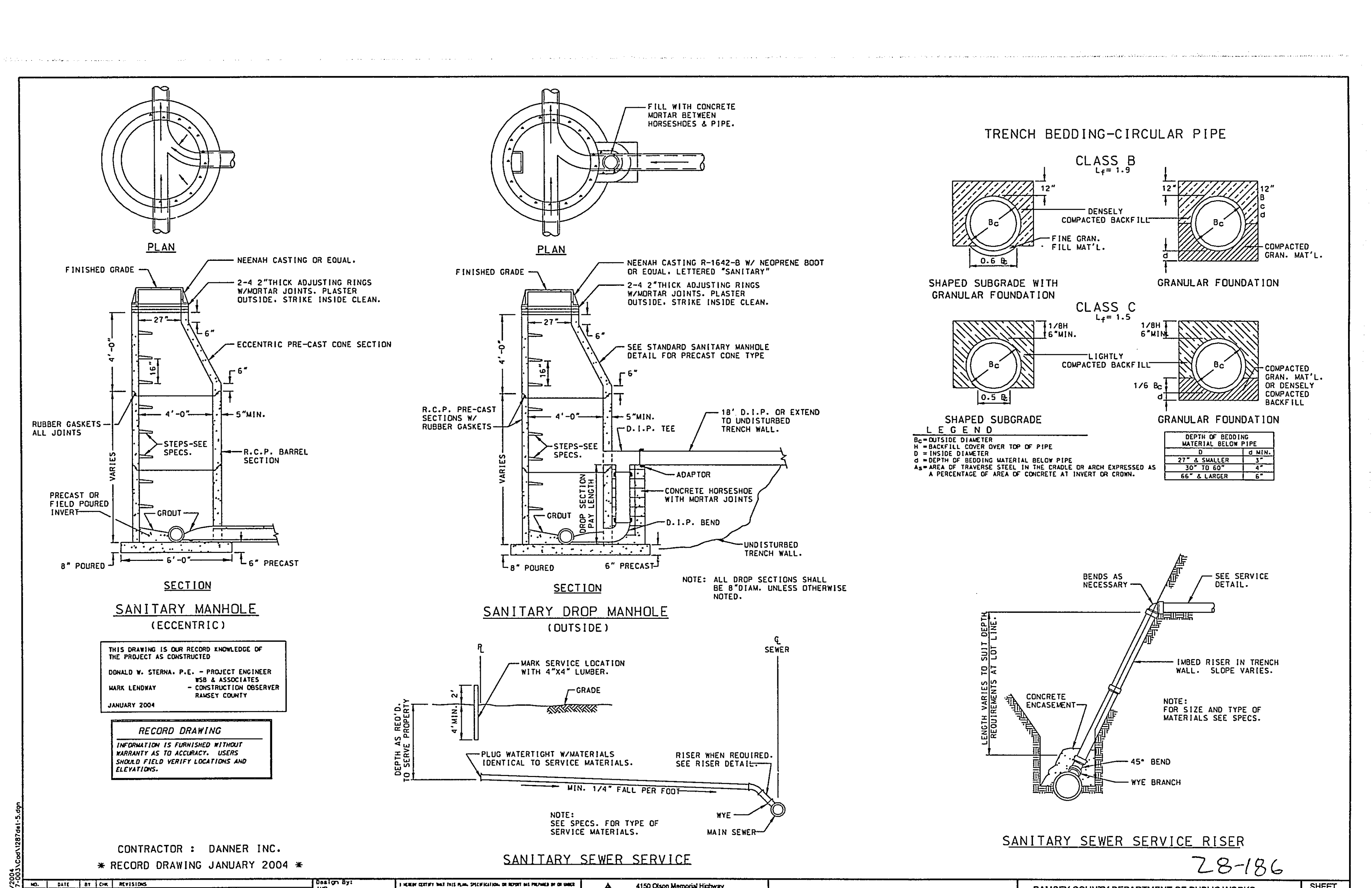
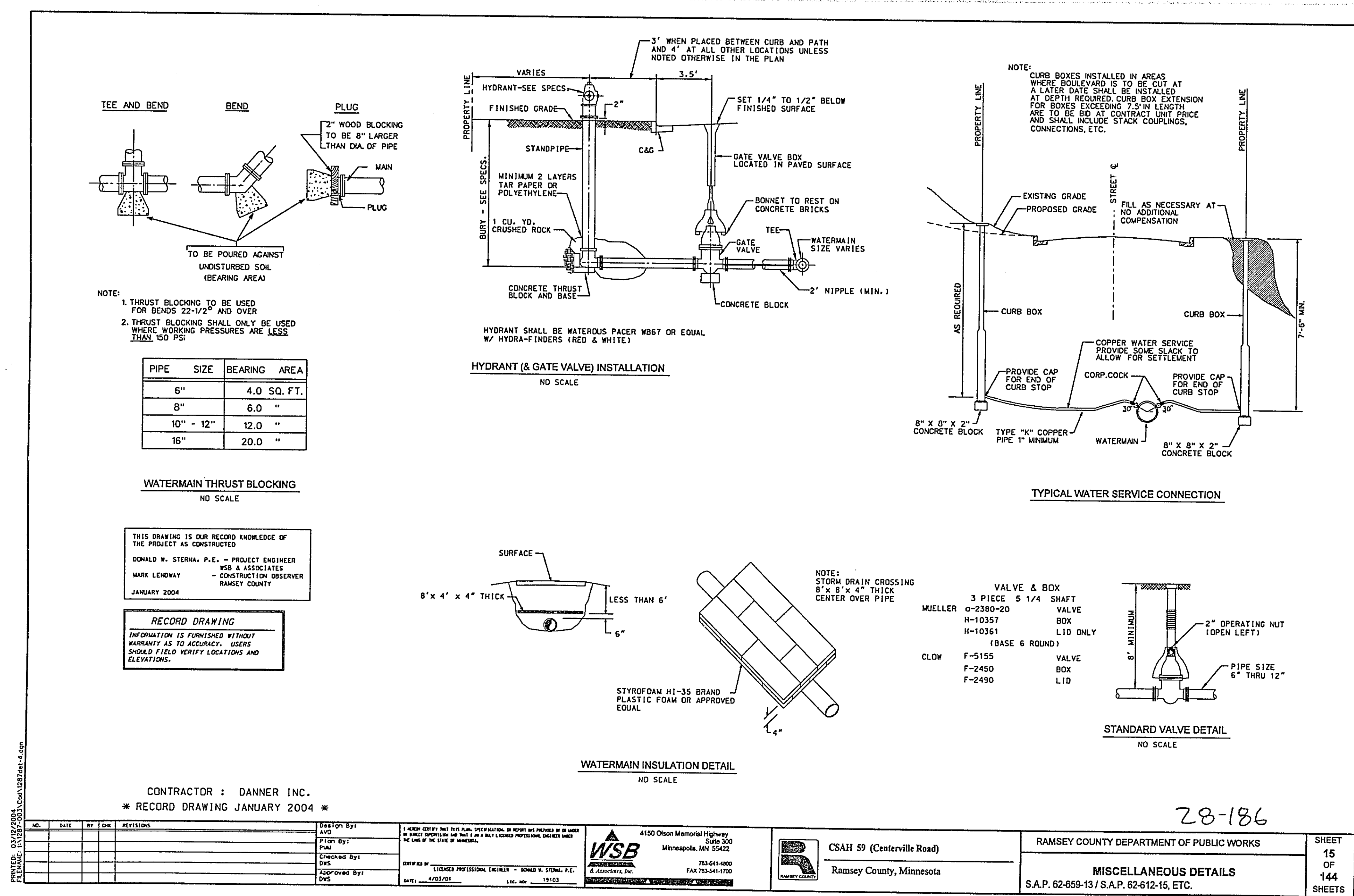
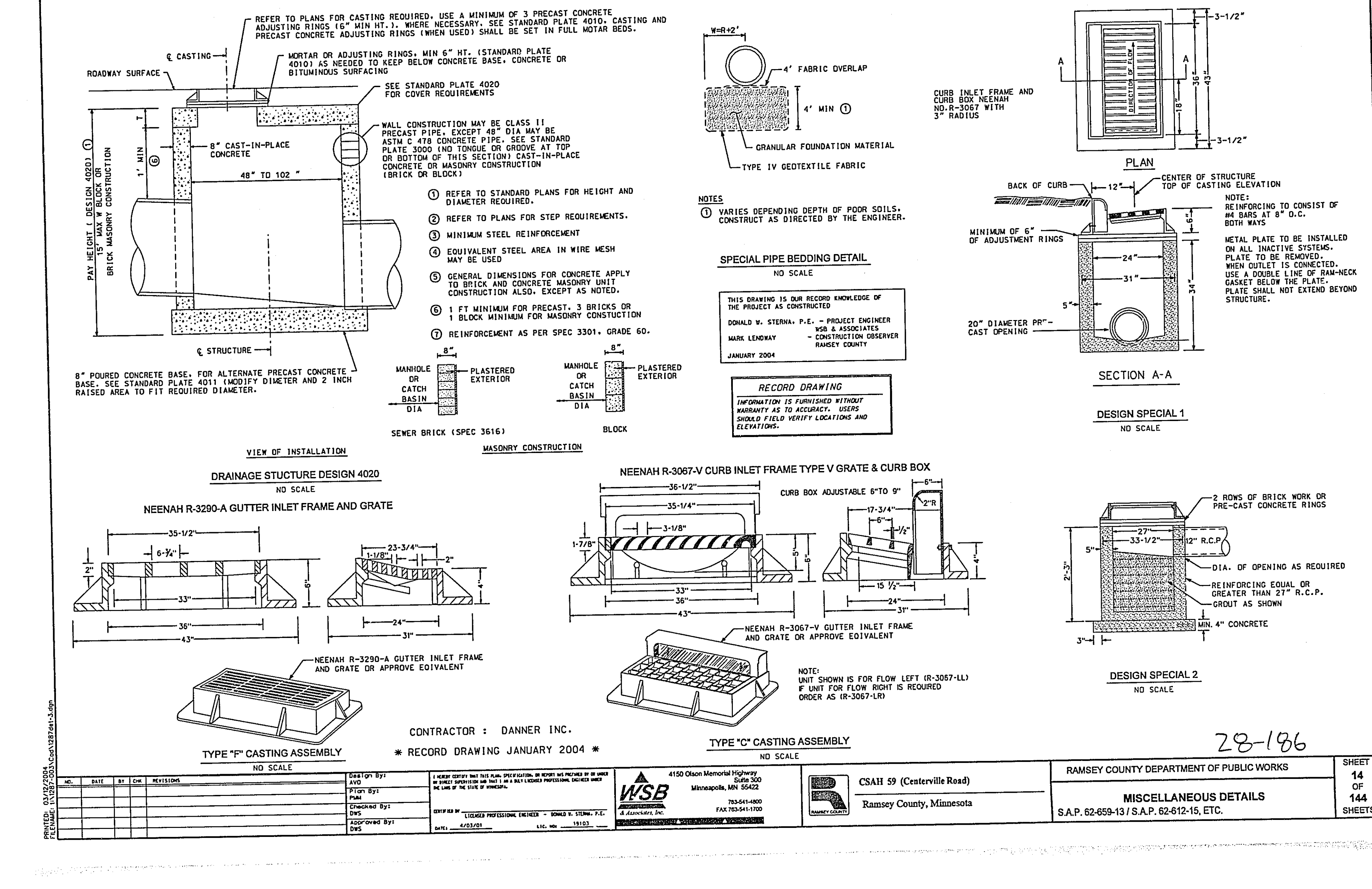
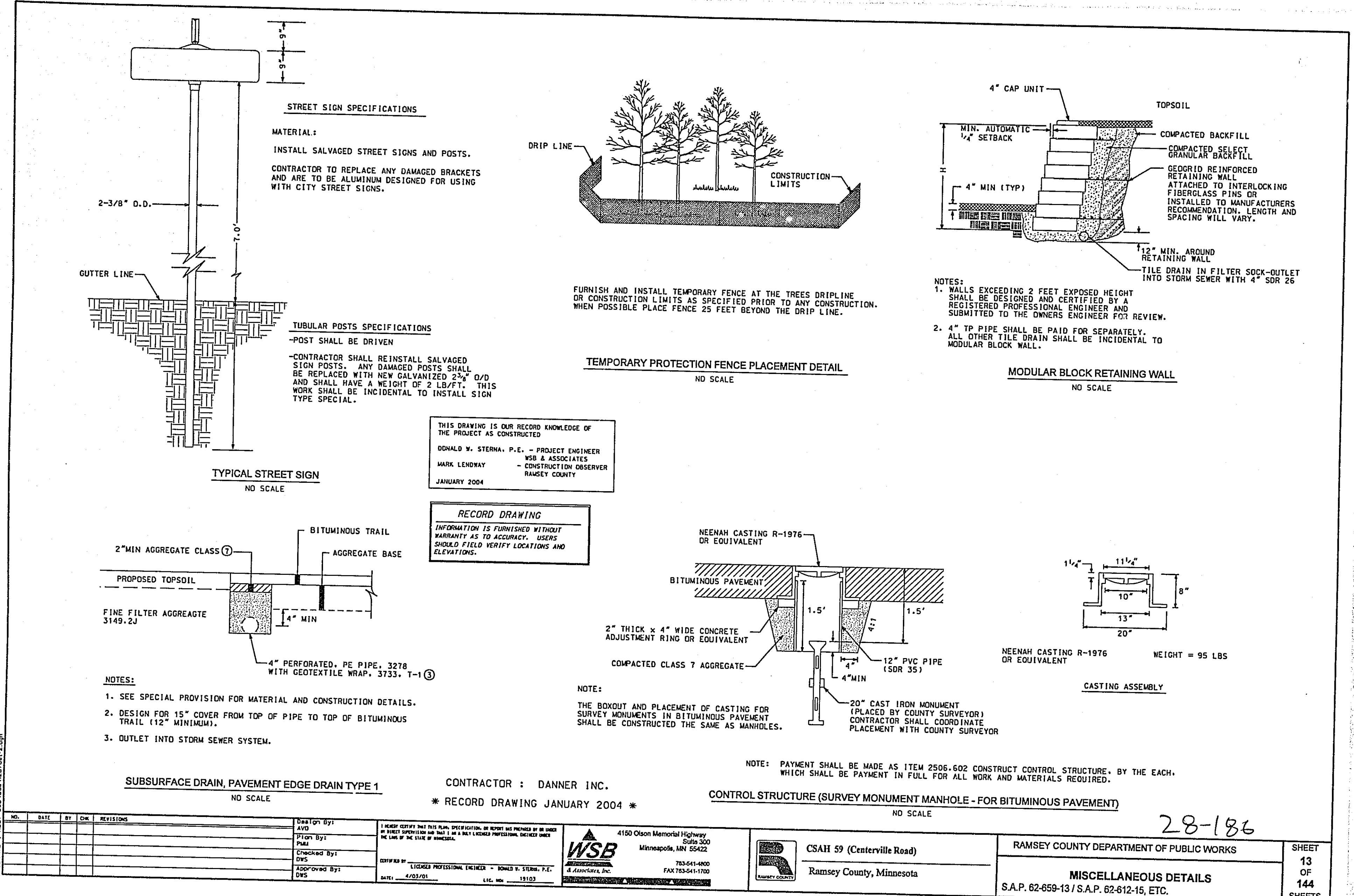
6

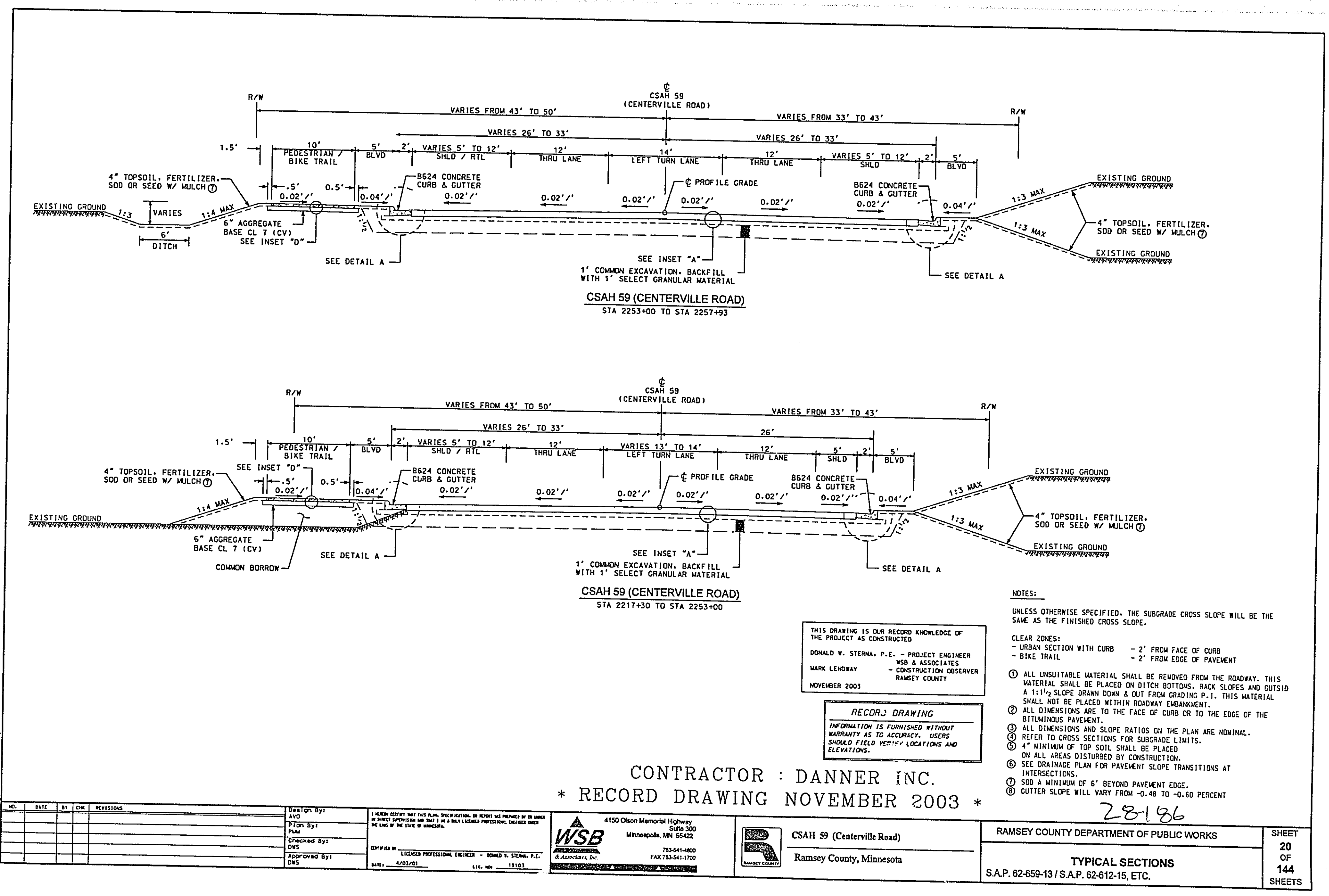
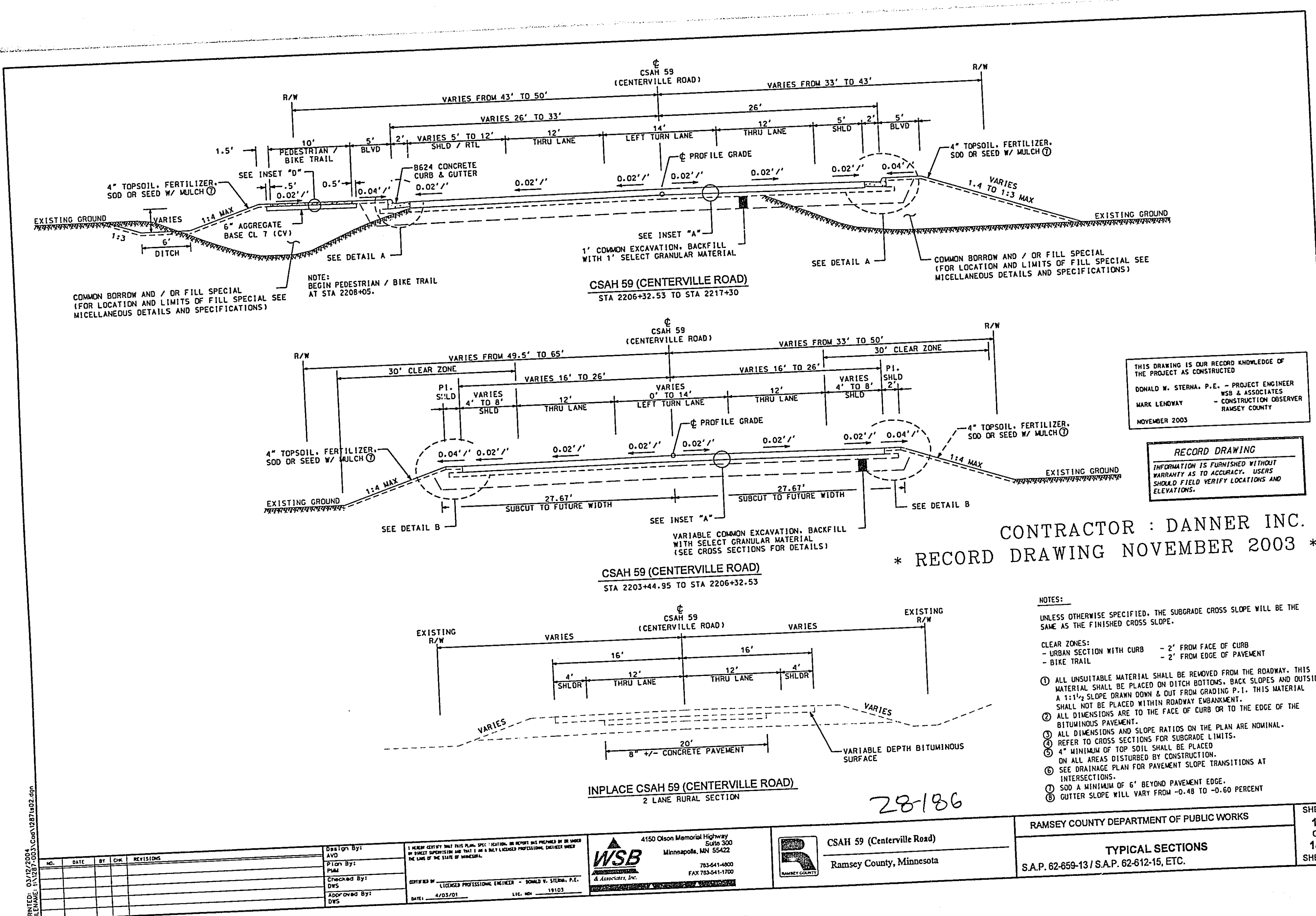
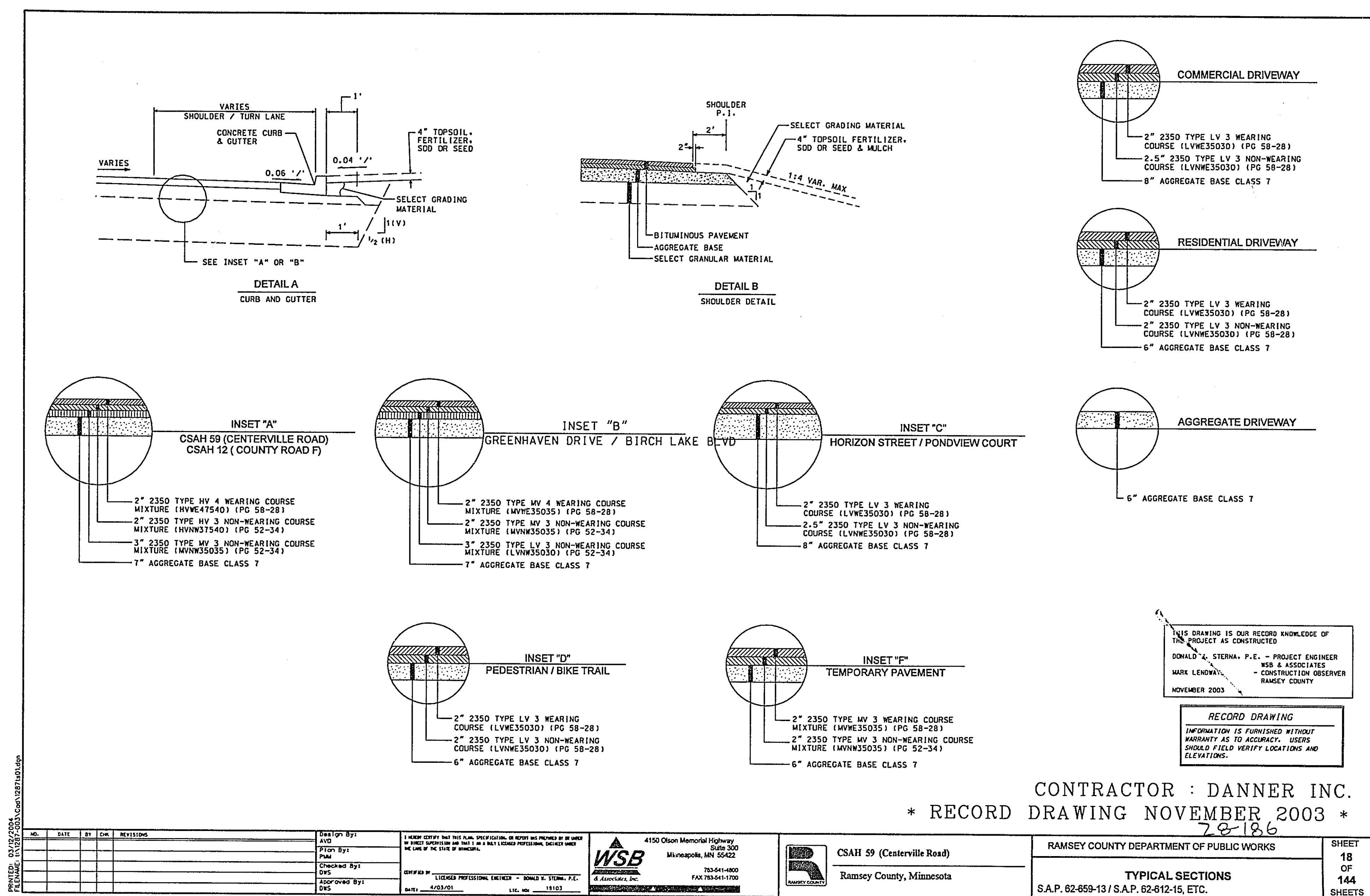
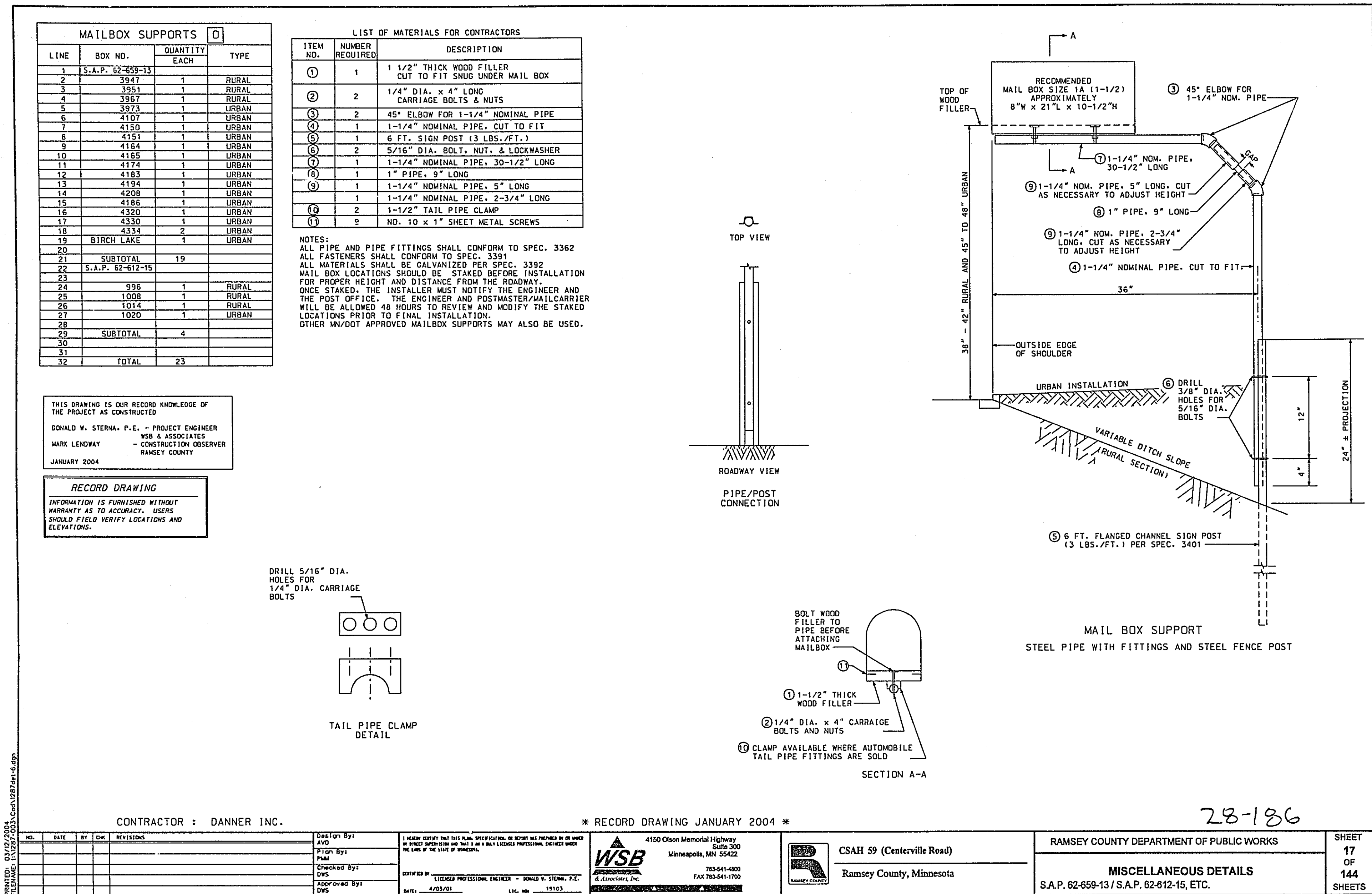
OF

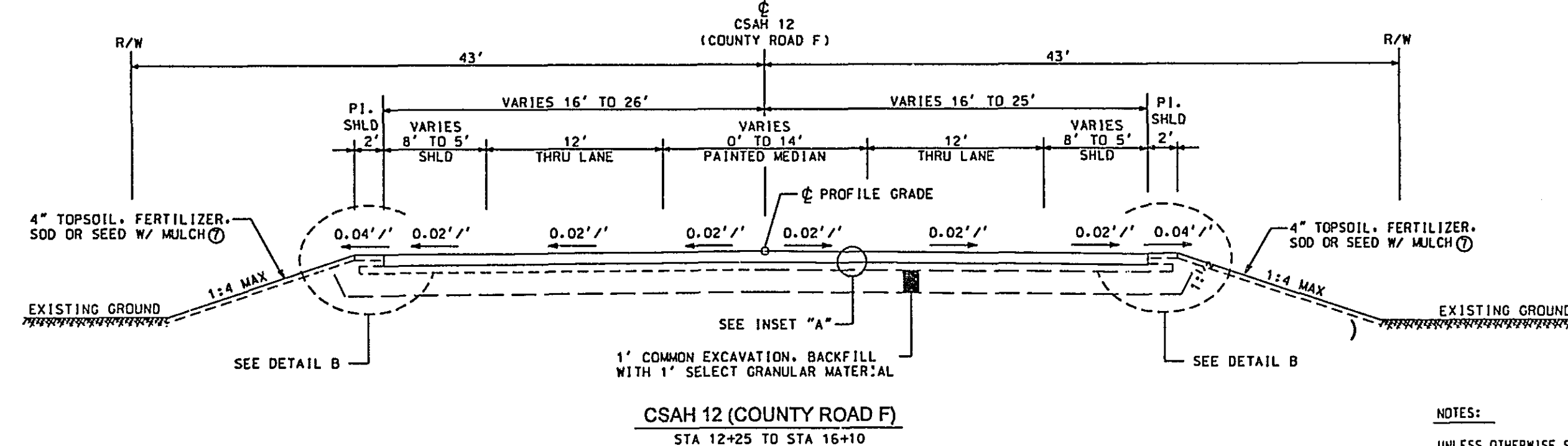
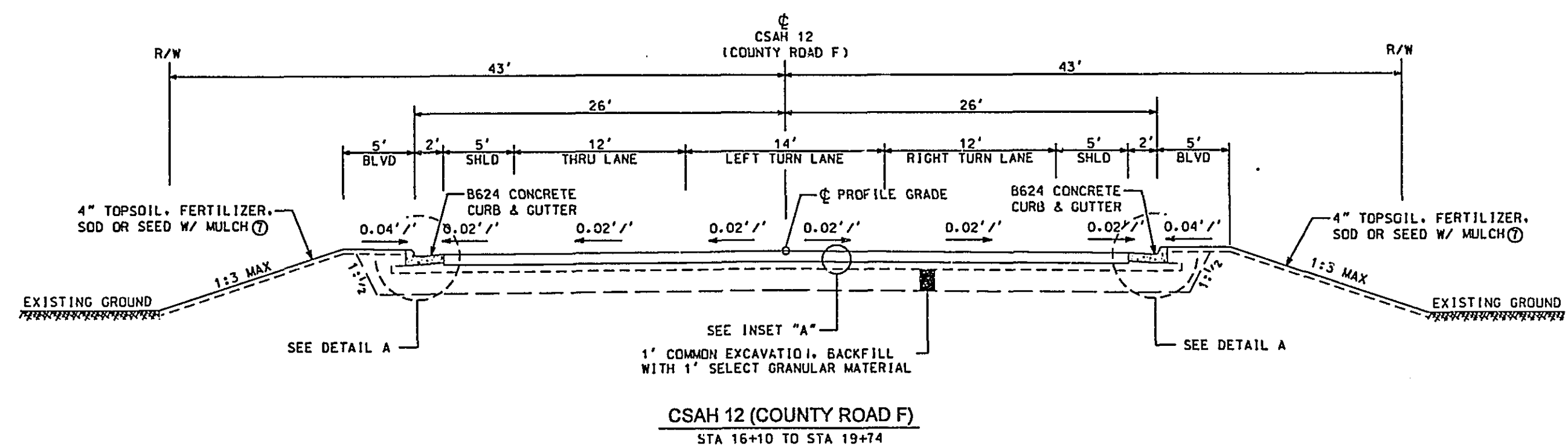
S.A.P. 12-559-10

28-186

[illegible][illegible]







THIS DRAWING IS OUR RECORD KNOWLEDGE OF THE PROJECT AS CONSTRUCTED.

DONALD W. STERNA, P.E. - PROJECT ENGINEER
WSB & ASSOCIATES
MARK LEHNDAY - CONSTRUCTION OBSERVER
RAMSEY COUNTY
NOVEMBER 2003

RECORD DRAWING

INFORMATION IS FURNISHED WITHOUT WARRANTY AS TO ACCURACY. USERS SHOULD FIELD VERIFY LOCATIONS AND ELEVATIONS.

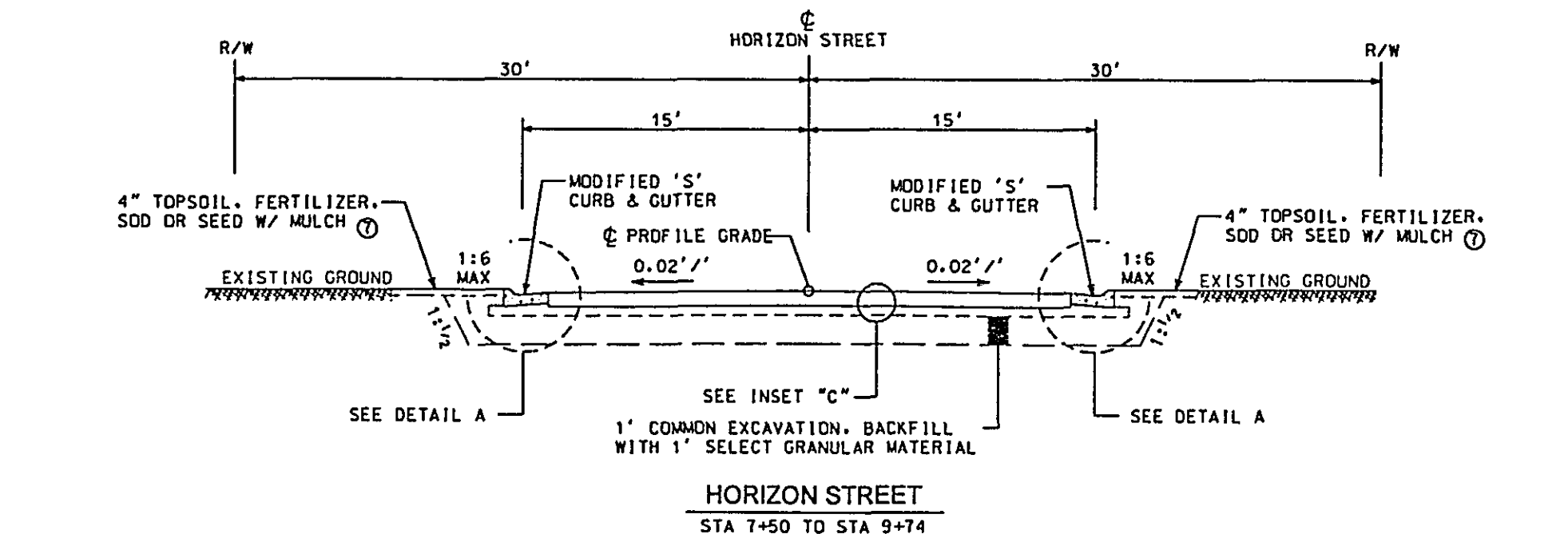
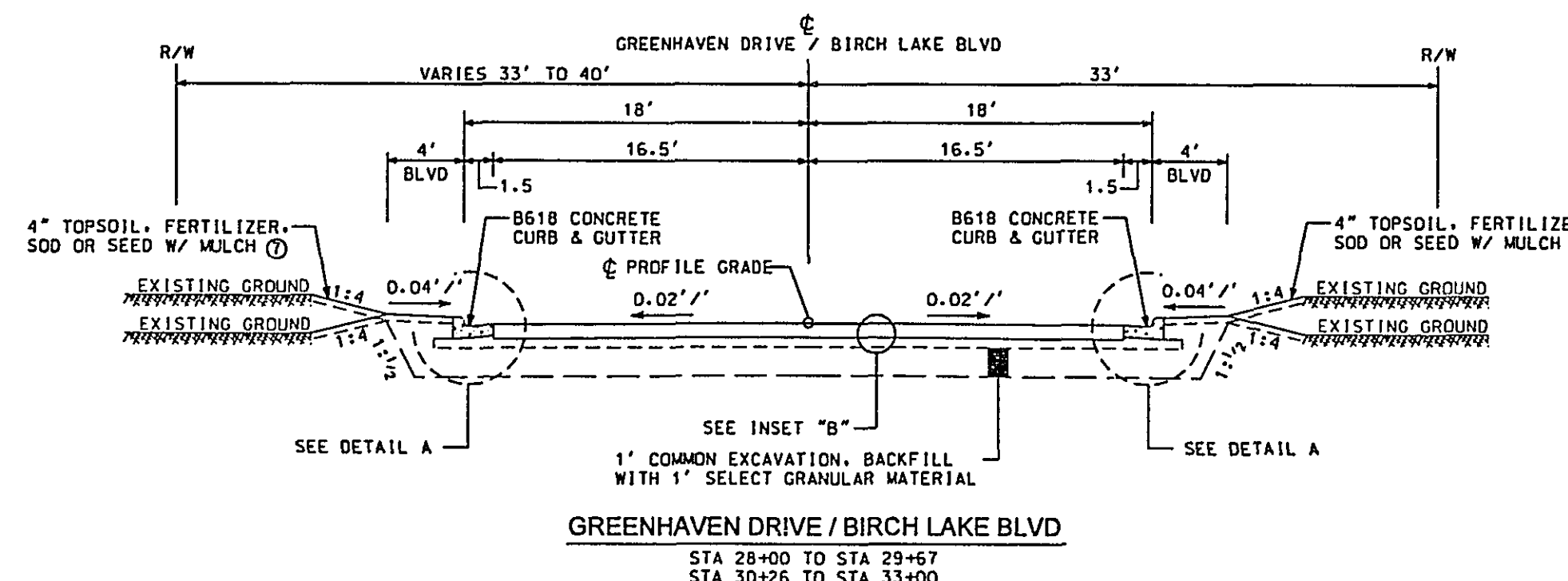
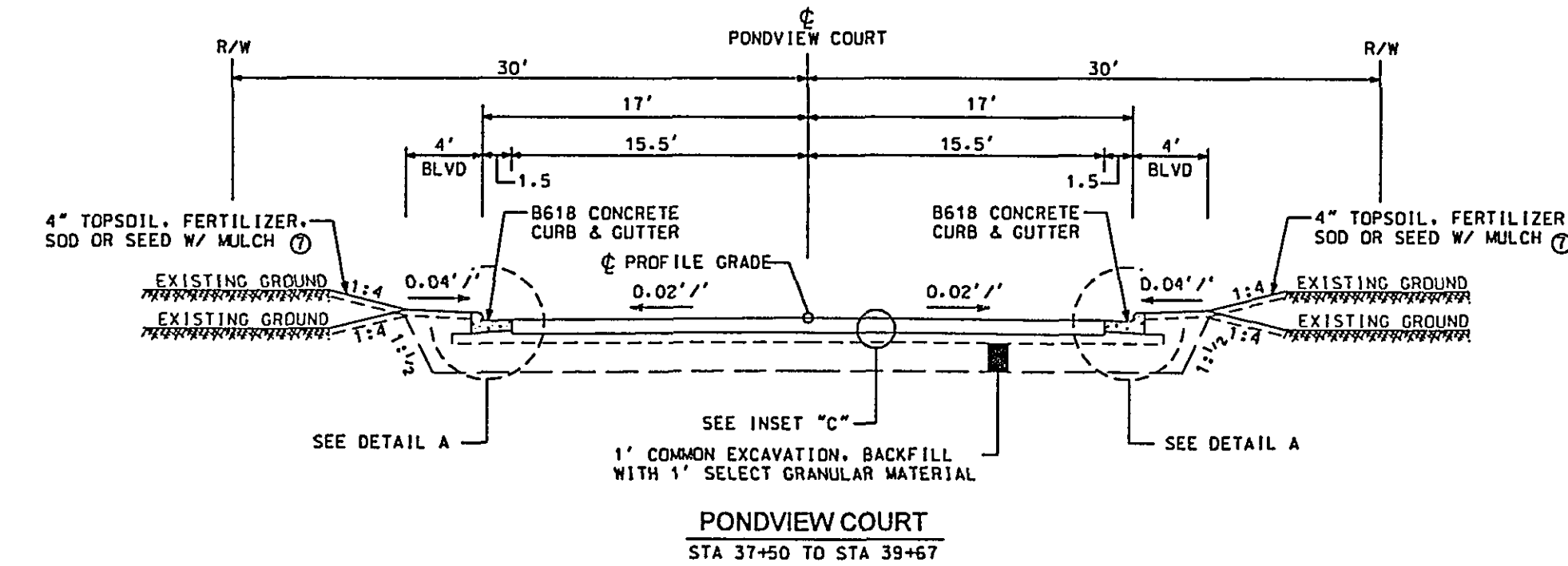
- NOTES:**
- UNLESS OTHERWISE SPECIFIED, THE SUBGRADE CROSS SLOPE WILL BE THE SAME AS THE FINISHED CROSS SLOPE.
- CLEAR ZONES:**
- URBAN SECTION WITH CURB - 2' FROM FACE OF CURB
 - BIKE TRAIL - 2' FROM EDGE OF PAVEMENT
- ① ALL UNSUITABLE MATERIAL SHALL BE REMOVED FROM THE ROADWAY. THIS MATERIAL SHALL BE PLACED ON DITCH BOTTOMS, BACK SLOPES AND OUTSIDE A 1:1 1/2 SLOPE DRAWN DOWN & OUT FROM GRADING P.I. THIS MATERIAL SHALL NOT BE PLACED WITHIN ROADWAY EMBANKMENT.
- ② ALL DIMENSIONS ARE TO THE FACE OF CURB OR TO THE EDGE OF THE BITUMINOUS PAVEMENT.
- ③ ALL DIMENSIONS AND SLOPE RATIOS ON THE PLAN ARE NOMINAL.
- ④ REFER TO CROSS SECTIONS FOR SUBGRADE LIMITS.
- ⑤ 4" MINIMUM OF TOP SOIL SHALL BE PLACED ON ALL AREAS DISTURBED BY CONSTRUCTION.
- ⑥ SEE DRAINAGE PLAN FOR PAVEMENT SLOPE TRANSITIONS AT INTERSECTIONS.
- ⑦ SOD A MINIMUM OF 6' BEYOND PAVEMENT EDGE.
- ⑧ GUTTER SLOPE WILL VARY FROM -0.48 TO -0.60 PERCENT

CONTRACTOR : DANNER INC.
* RECORD DRAWING NOVEMBER 2003 *

PRINTED: 03/07/2004
FILENAME: I:\2003\03\03\CSAH12\144.dgn

NO.	DATE	BY	CHK	REVISIONS
1	4/03/01	AVD		DESIGN BY: AVD
2		PJM		DESIGN BY: PJM
3		DWS		CHECKED BY: DWS
4		DWS		APPROVED BY: DWS

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT 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. DATE: 4/03/01 L.I.C. NO.: 19103	WSB & ASSOCIATES, INC. 4150 Olson Memorial Highway Suite 300 Minneapolis, MN 55422 763-541-4800 FAX 763-541-1700	RAMSEY COUNTY CSAH 59 (Centerville Road) Ramsey County, Minnesota	RAMSEY COUNTY DEPARTMENT OF PUBLIC WORKS S.A.P. 62-659-13 / S.A.P. 62-612-15, ETC.	SHEET 21 OF 144 SHEETS
---	--	--	--	------------------------------------



THIS DRAWING IS OUR RECORD KNOWLEDGE OF THE PROJECT AS CONSTRUCTED.

DONALD W. STERNA, P.E. - PROJECT ENGINEER
WSB & ASSOCIATES
MARK LEHNDAY - CONSTRUCTION OBSERVER
RAMSEY COUNTY
NOVEMBER 2003

RECORD DRAWING

INFORMATION IS FURNISHED WITHOUT WARRANTY AS TO ACCURACY. USERS SHOULD FIELD VERIFY LOCATIONS AND ELEVATIONS.

CONTRACTOR : DANNER INC.
* RECORD DRAWING NOVEMBER 2003 *

- NOTES:**
- UNLESS OTHERWISE SPECIFIED, THE SUBGRADE CROSS SLOPE WILL BE THE SAME AS THE FINISHED CROSS SLOPE.
- CLEAR ZONES:**
- URBAN SECTION WITH CURB - 2' FROM FACE OF CURB
 - BIKE TRAIL - 2' FROM EDGE OF PAVEMENT
- ① ALL UNSUITABLE MATERIAL SHALL BE REMOVED FROM THE ROADWAY. THIS MATERIAL SHALL BE PLACED ON DITCH BOTTOMS, BACK SLOPES AND OUTSIDE A 1:1 1/2 SLOPE DRAWN DOWN & OUT FROM GRADING P.I. THIS MATERIAL SHALL NOT BE PLACED WITHIN ROADWAY EMBANKMENT.
- ② ALL DIMENSIONS ARE TO THE FACE OF CURB OR TO THE EDGE OF THE BITUMINOUS PAVEMENT.
- ③ ALL DIMENSIONS AND SLOPE RATIOS ON THE PLAN ARE NOMINAL.
- ④ REFER TO CROSS SECTIONS FOR SUBGRADE LIMITS.
- ⑤ 4" MINIMUM OF TOP SOIL SHALL BE PLACED ON ALL AREAS DISTURBED BY CONSTRUCTION.
- ⑥ SEE DRAINAGE PLAN FOR PAVEMENT SLOPE TRANSITIONS AT INTERSECTIONS.
- ⑦ SOD A MINIMUM OF 6' BEYOND PAVEMENT EDGE.
- ⑧ GUTTER SLOPE WILL VARY FROM -0.48 TO -0.60 PERCENT

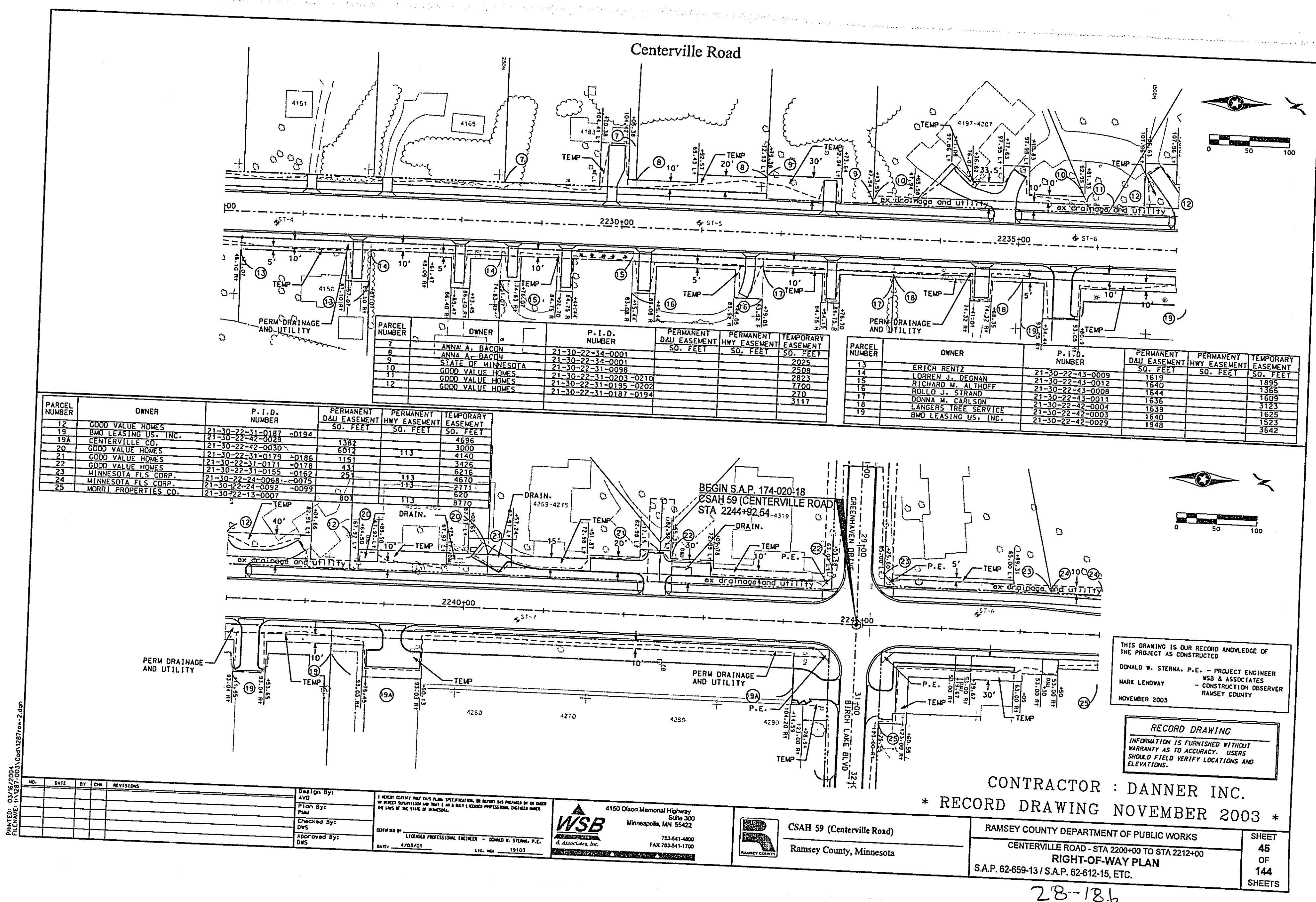
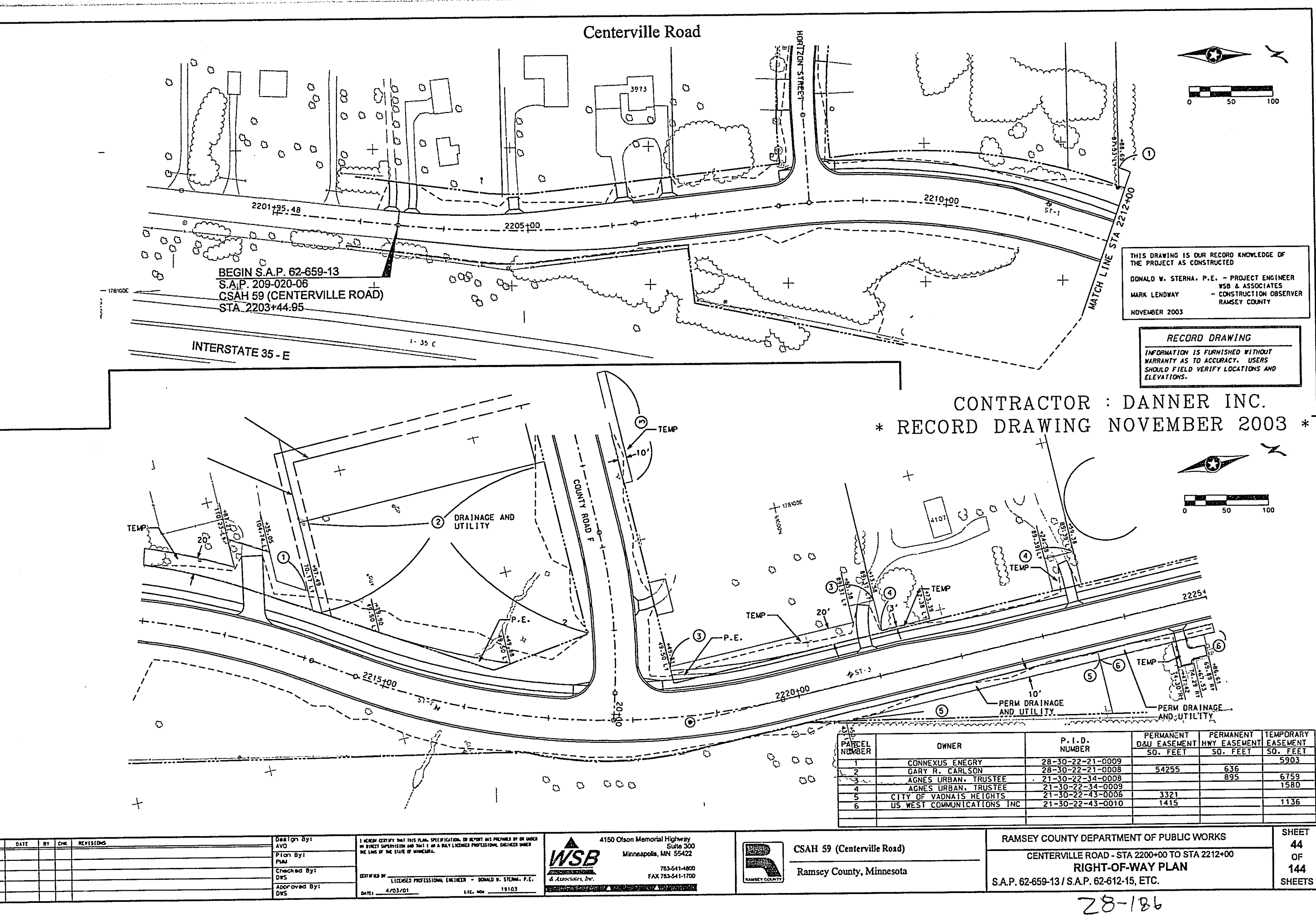
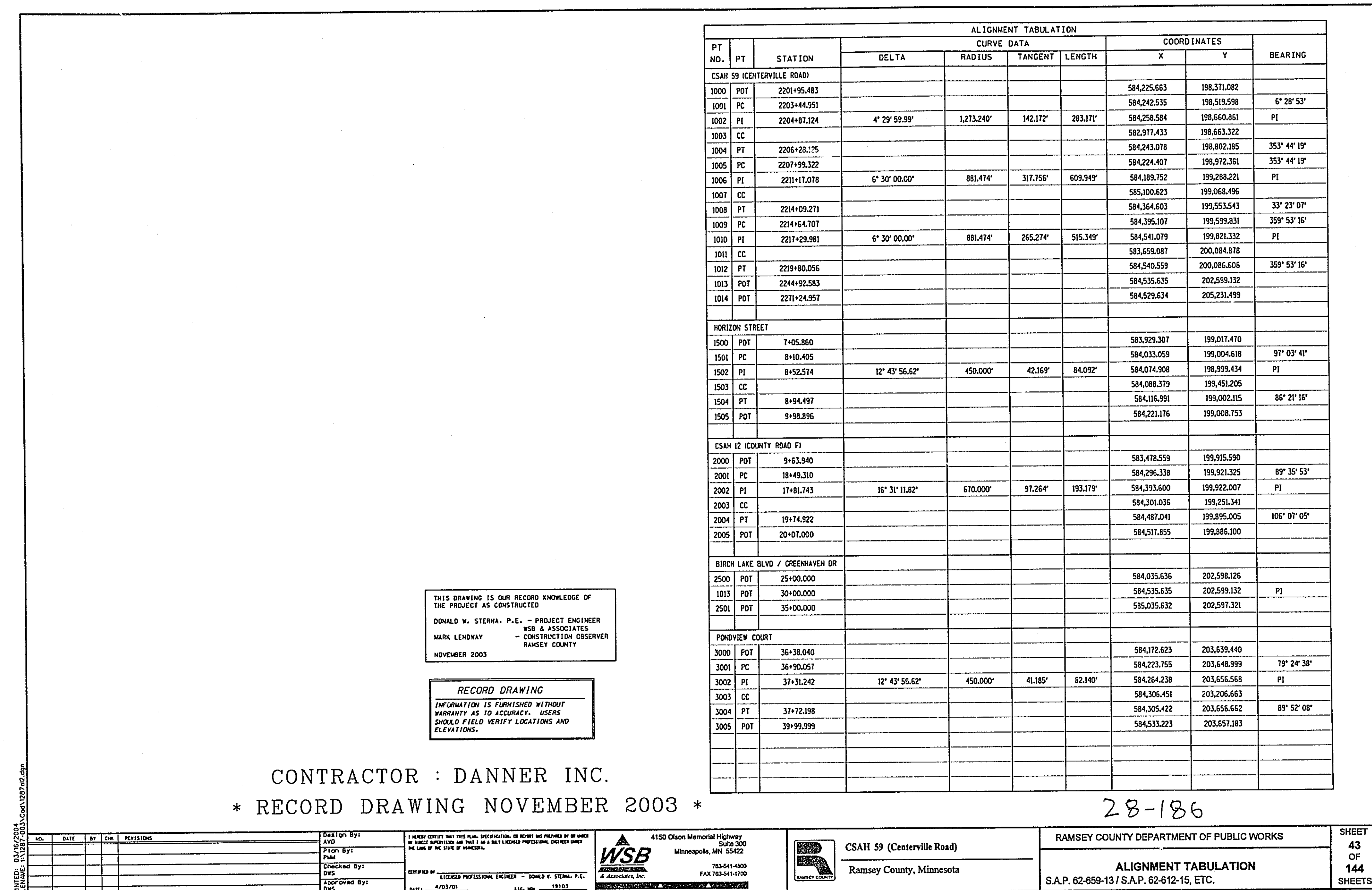
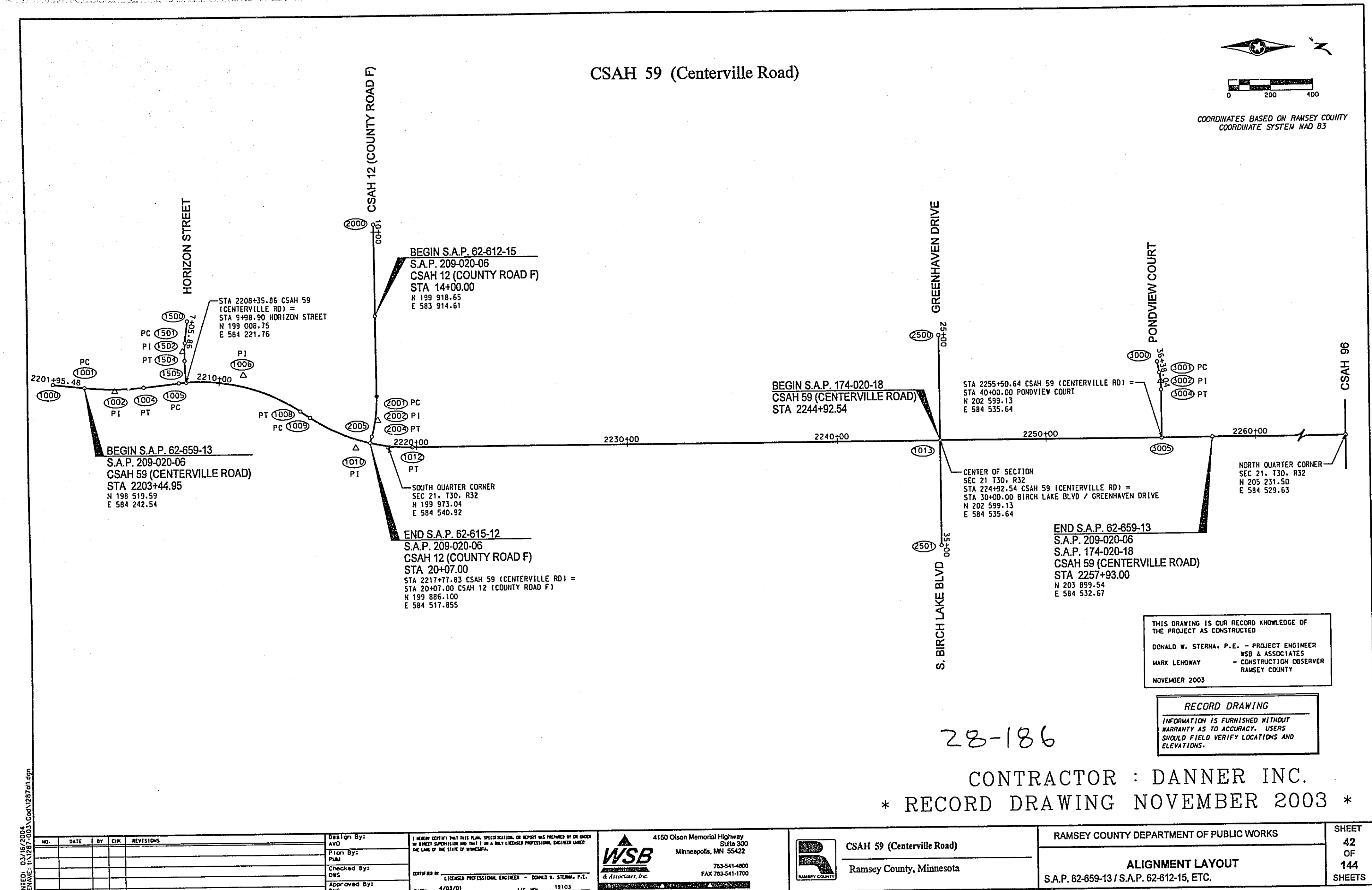
PRINTED: 03/07/2004
FILENAME: I:\2003\03\03\CSAH59\144.dgn

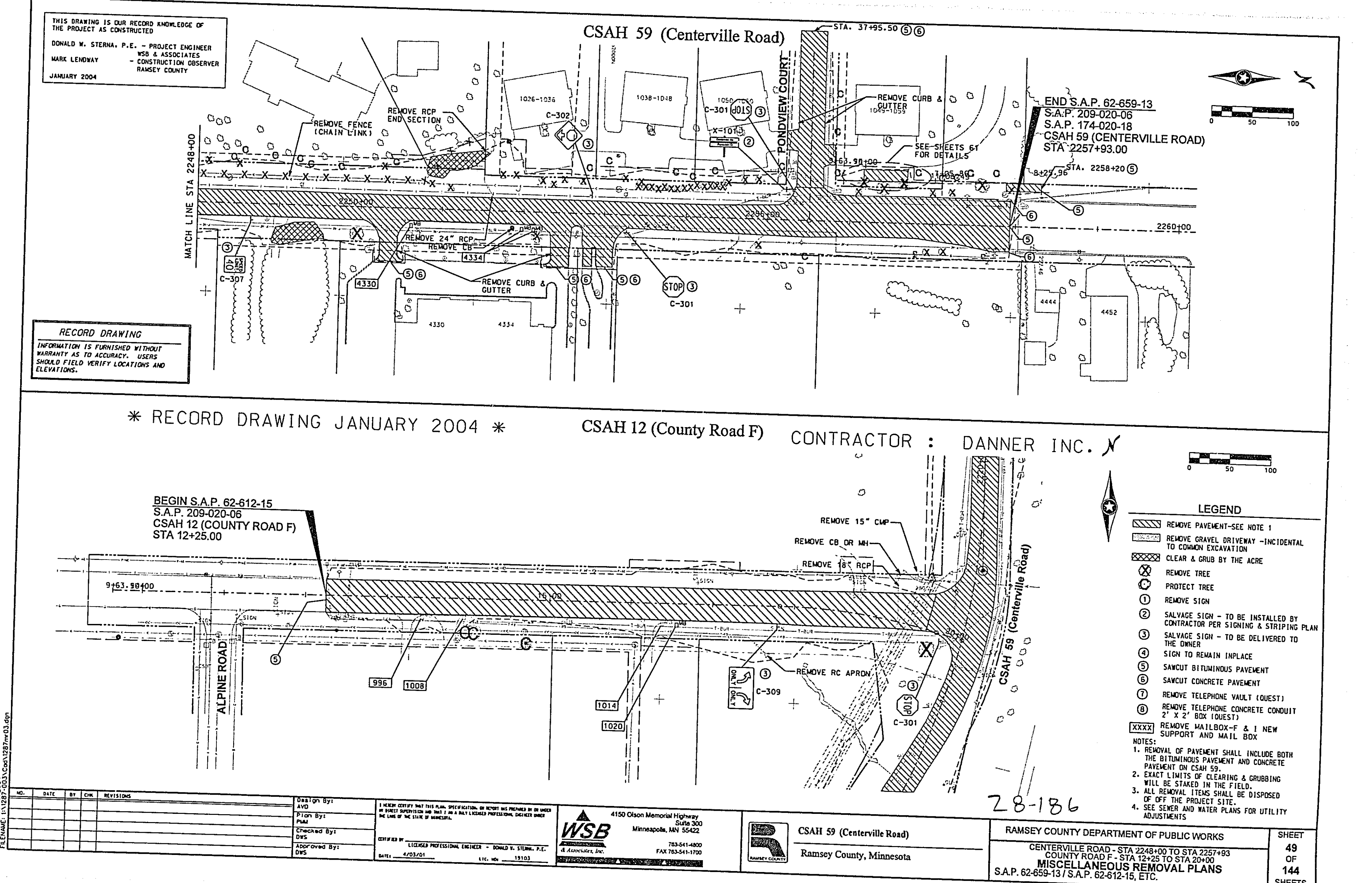
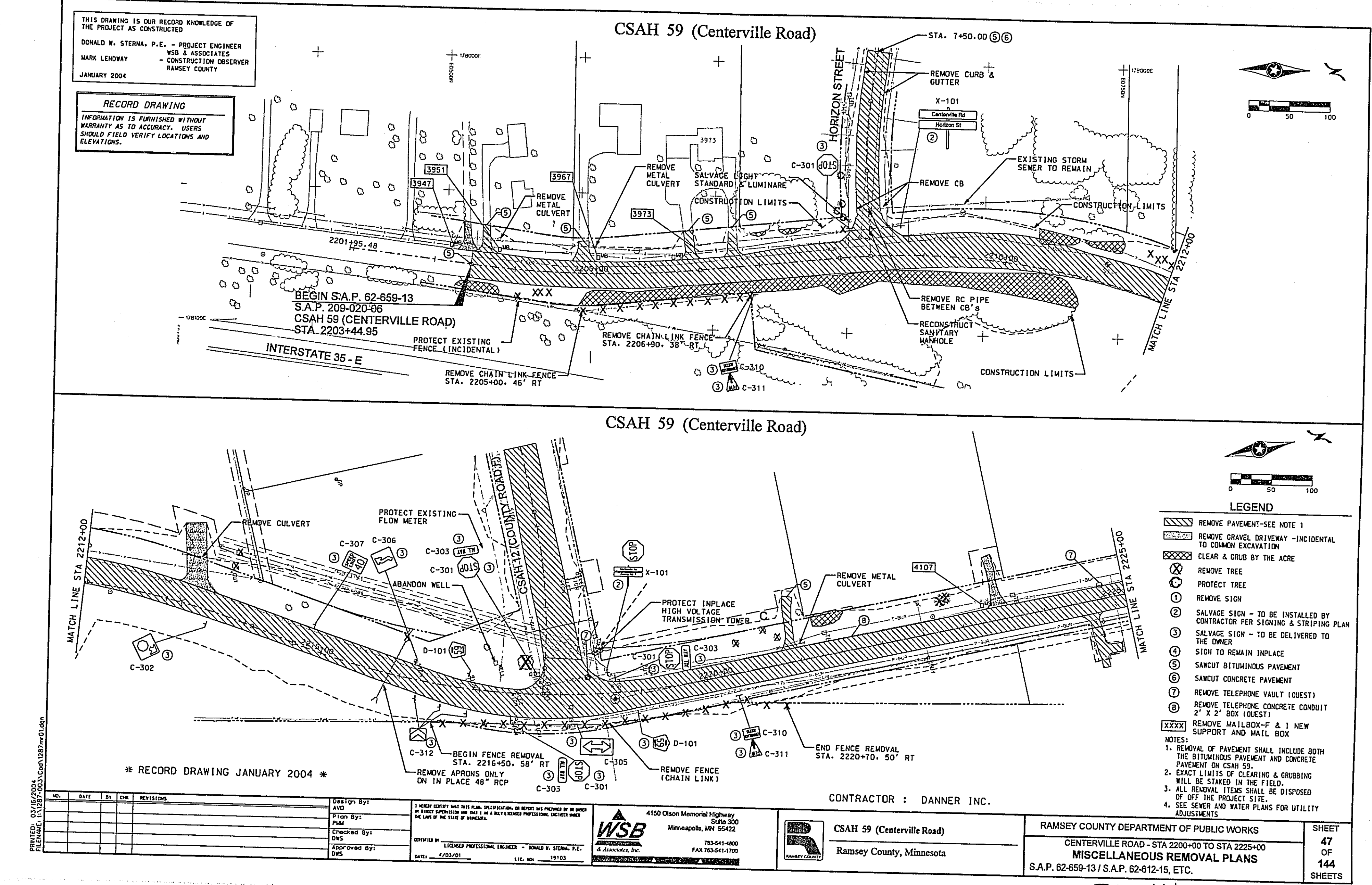
NO.	DATE	BY	CHK	REVISIONS
1	4/03/01	AVD		DESIGN BY: AVD
2		PJM		DESIGN BY: PJM
3		DWS		CHECKED BY: DWS
4		DWS		APPROVED BY: DWS

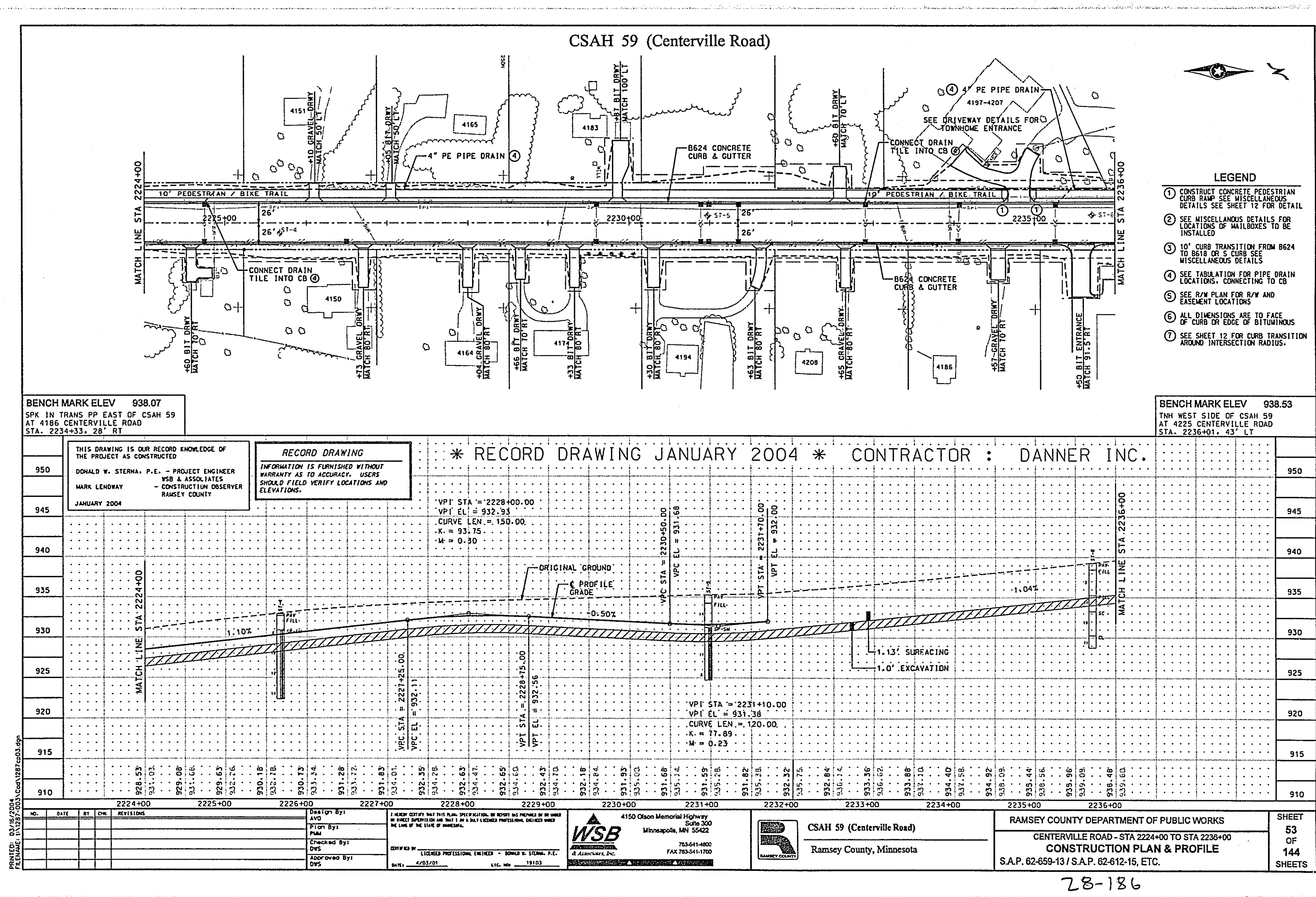
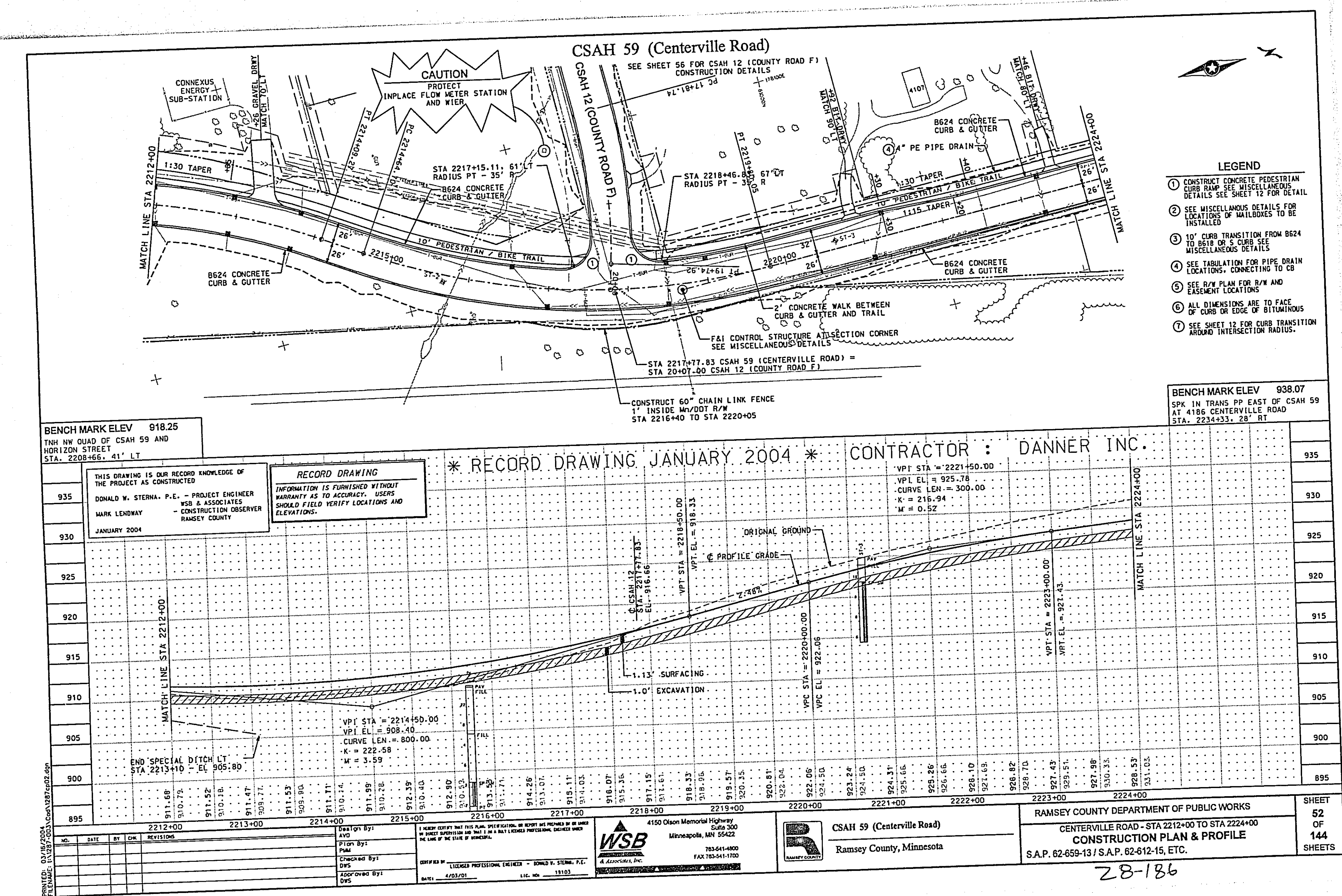
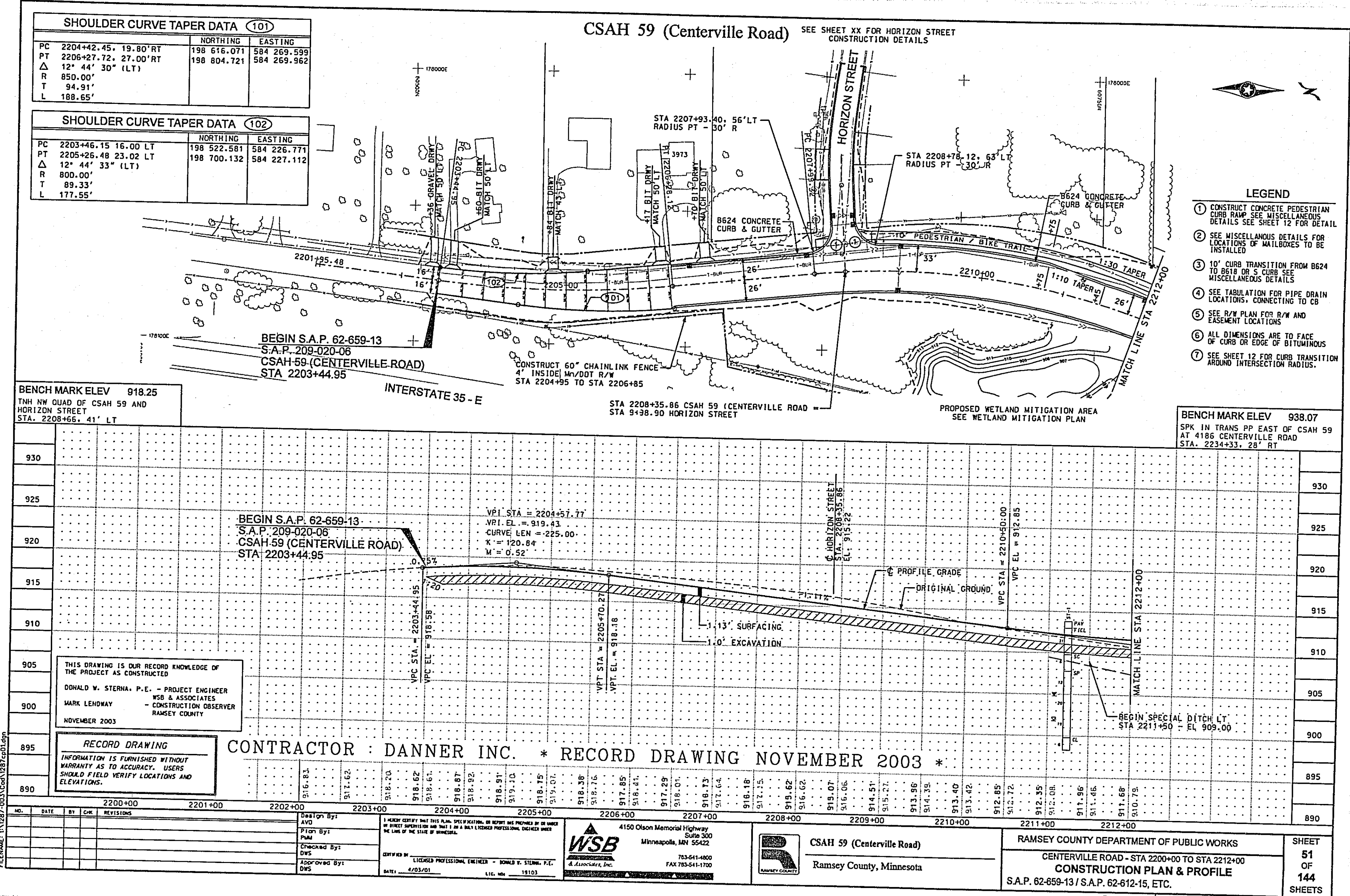
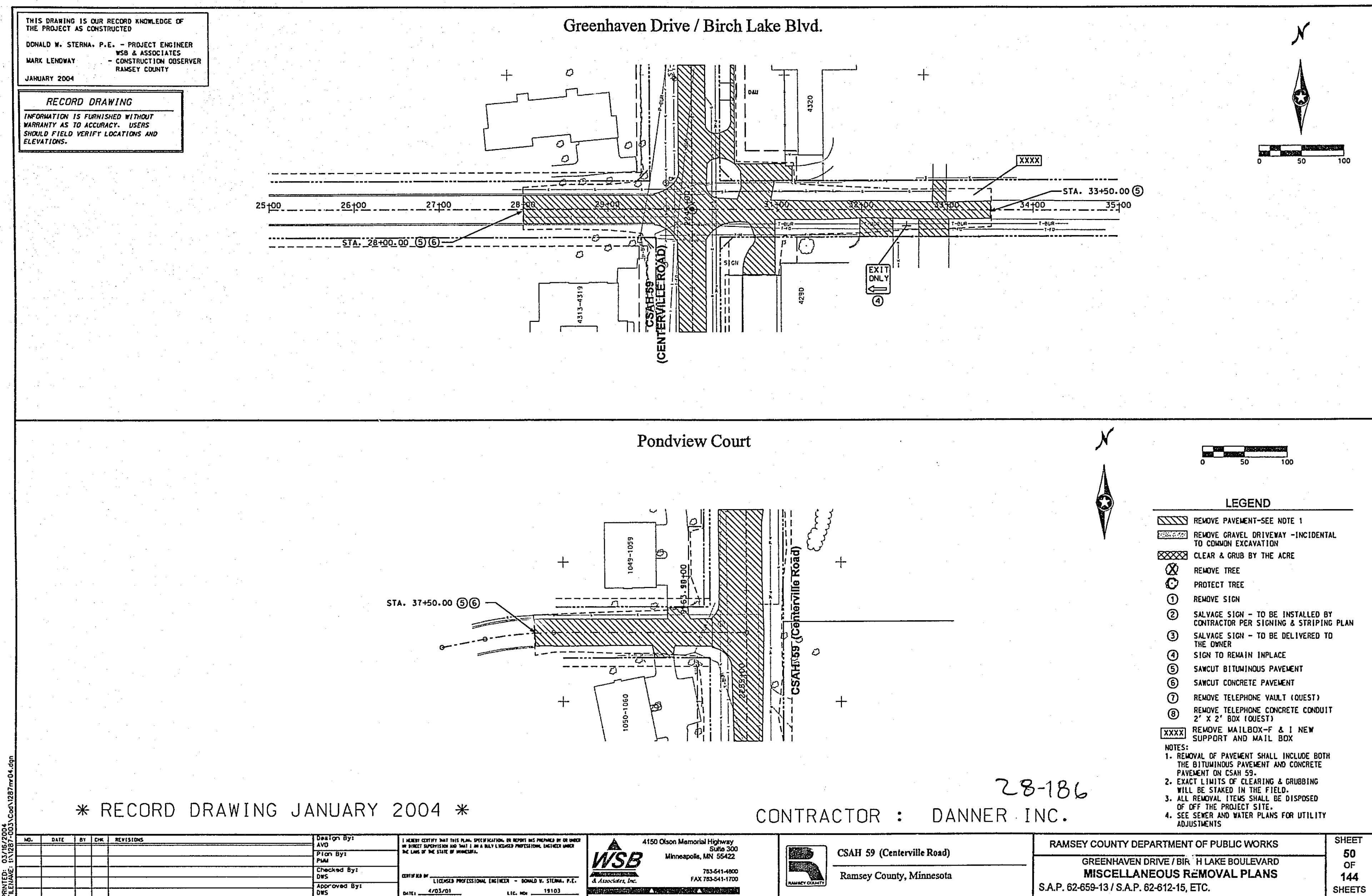
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. DATE: 4/03/01 L.I.C. NO.: 19103	WSB & ASSOCIATES, INC. 4150 Olson Memorial Highway Suite 300 Minneapolis, MN 55422 763-541-4800 FAX 763-541-1700	RAMSEY COUNTY CSAH 59 (Centerville Road) Ramsey County, Minnesota	RAMSEY COUNTY DEPARTMENT OF PUBLIC WORKS S.A.P. 62-659-13 / S.A.P. 62-612-15, ETC.	SHEET 22 OF 144 SHEETS
---	--	--	--	------------------------------------

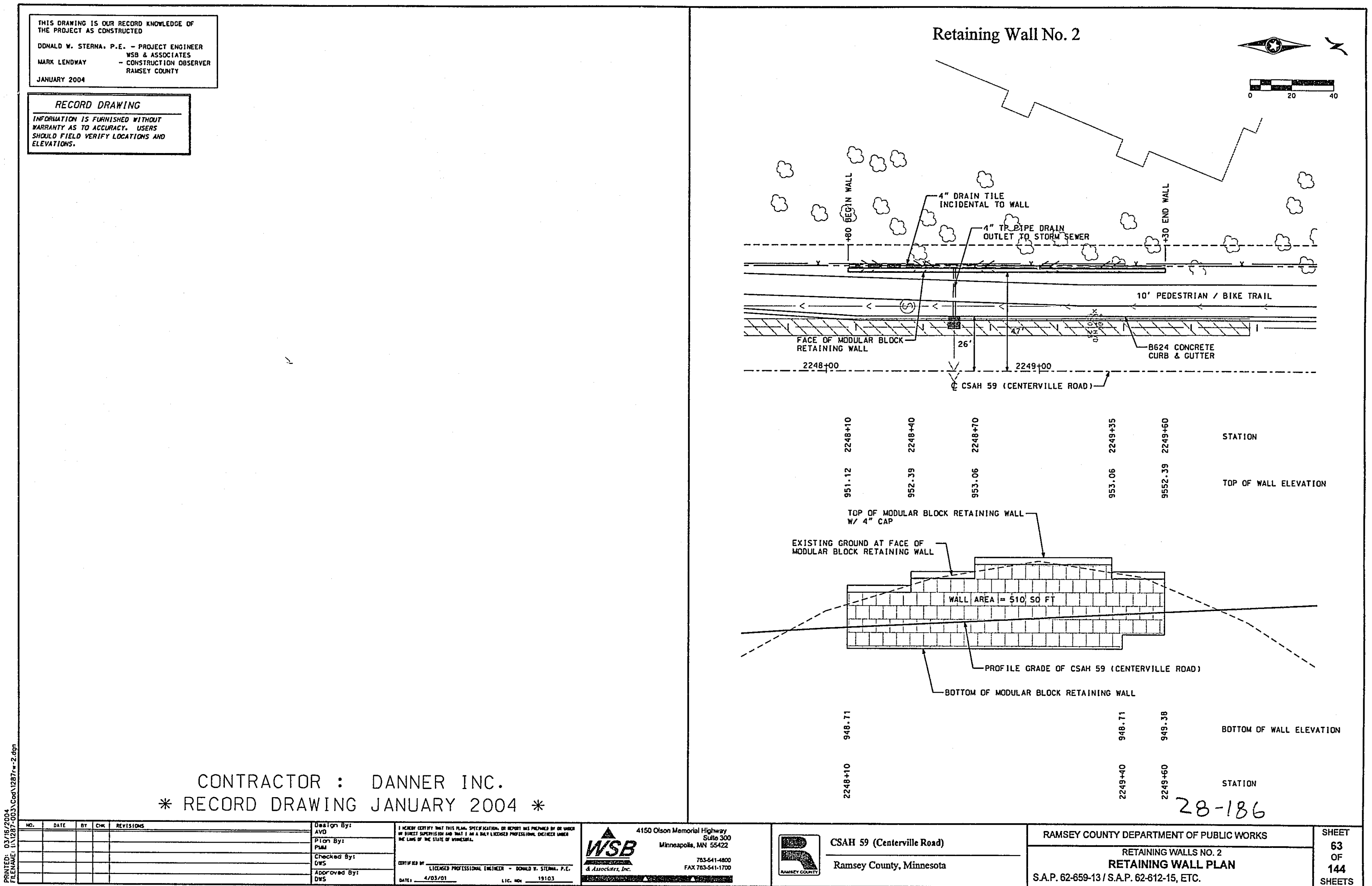
Pages 23 thru 41

Missing at time of
filming



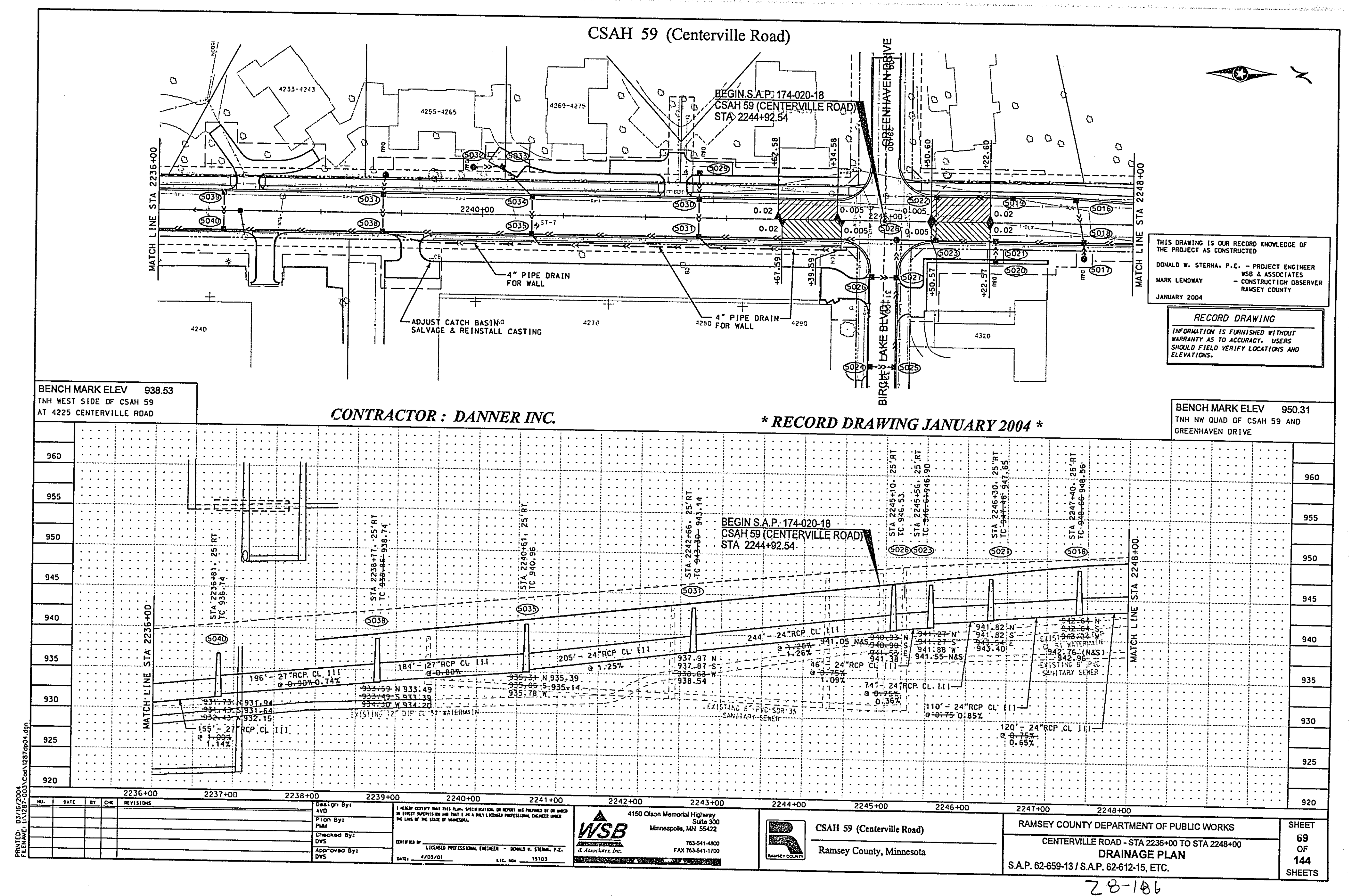
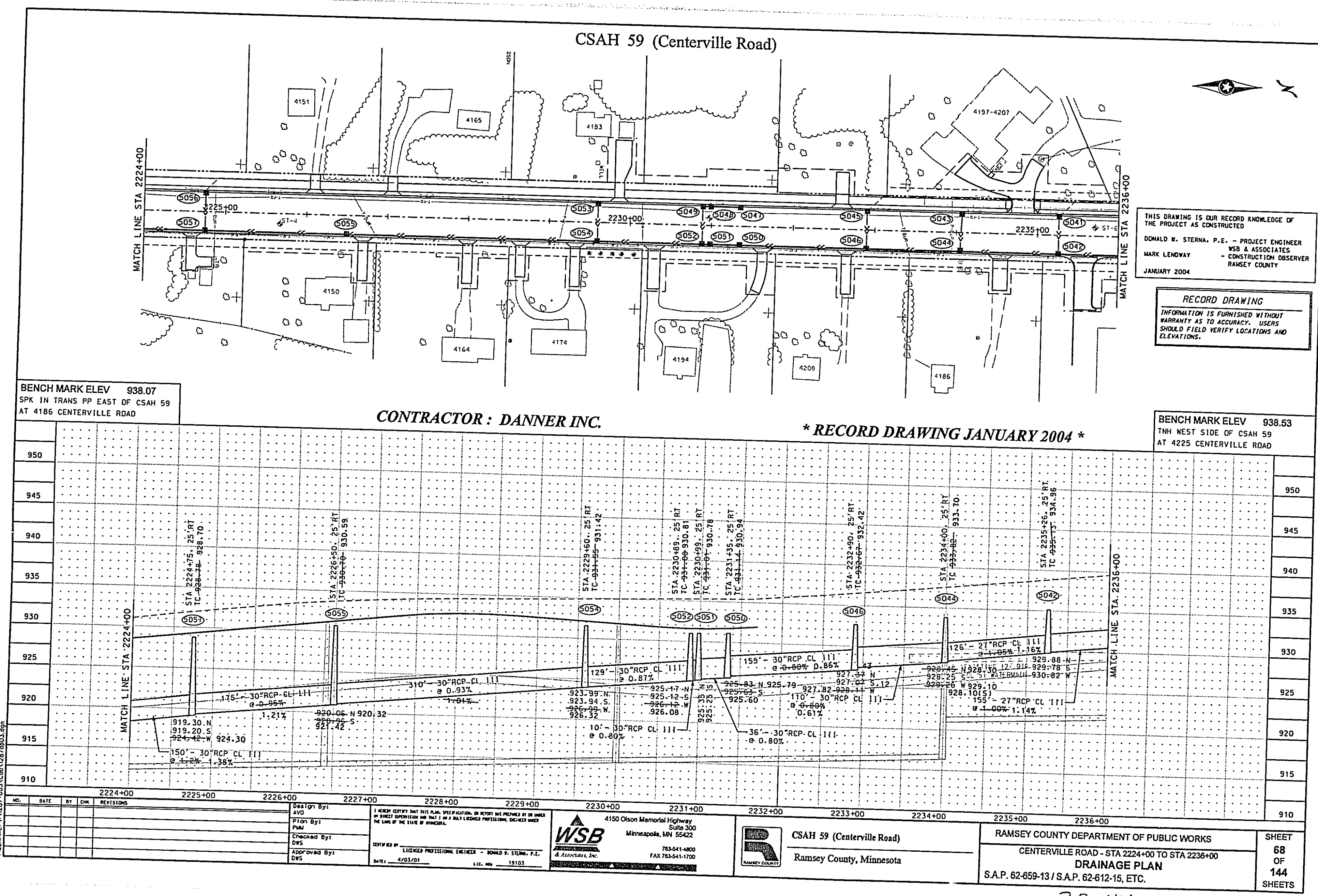
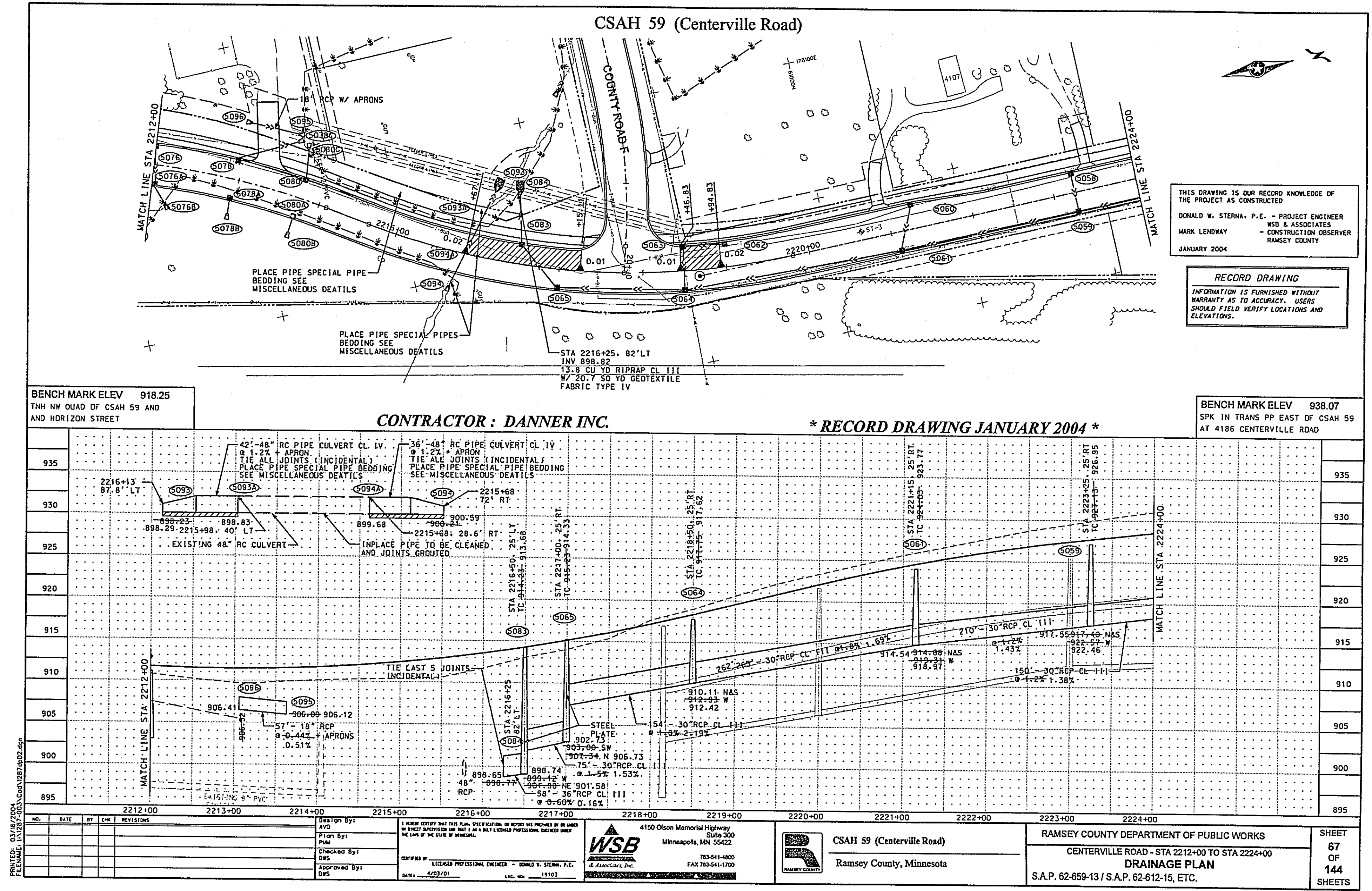
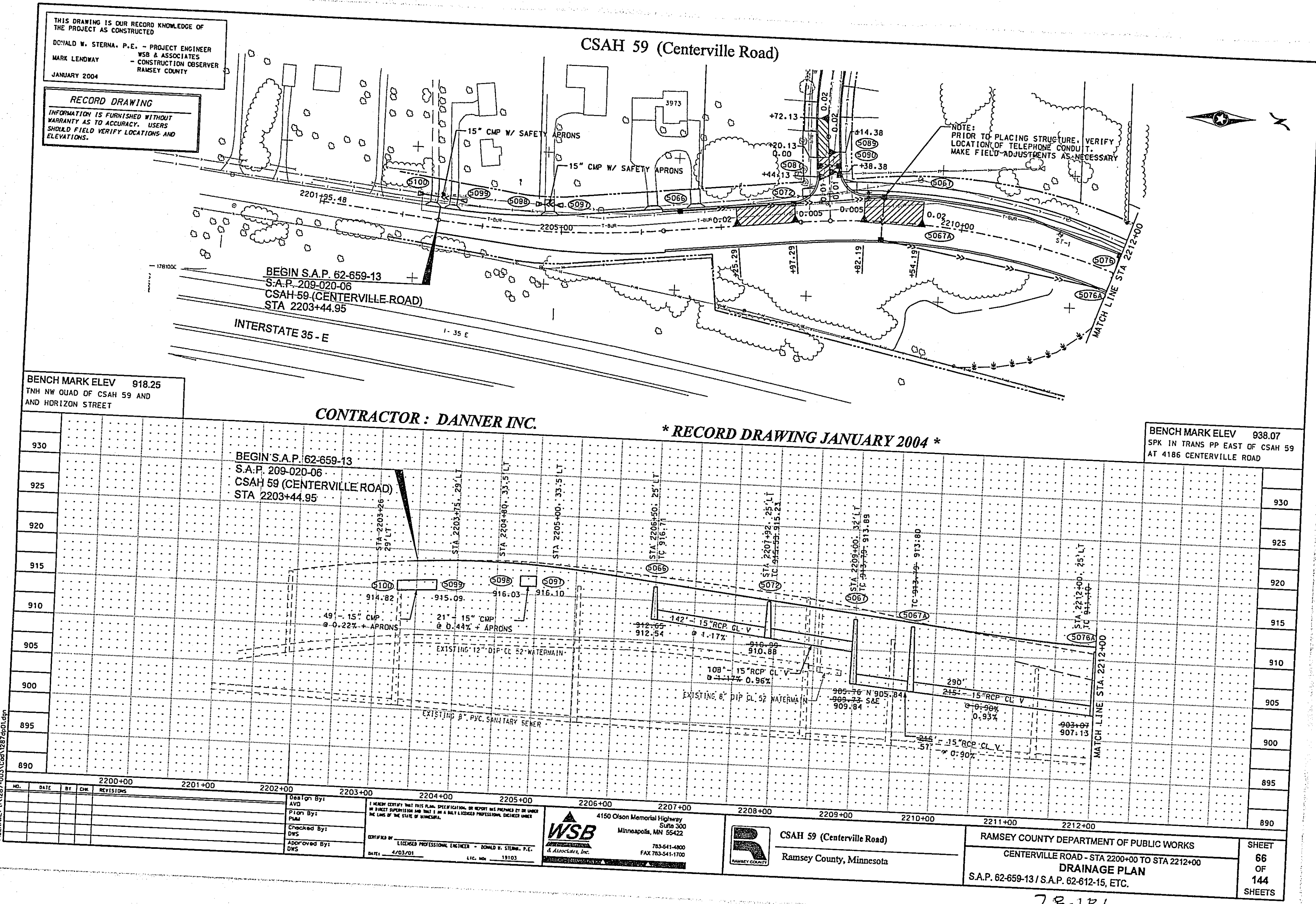


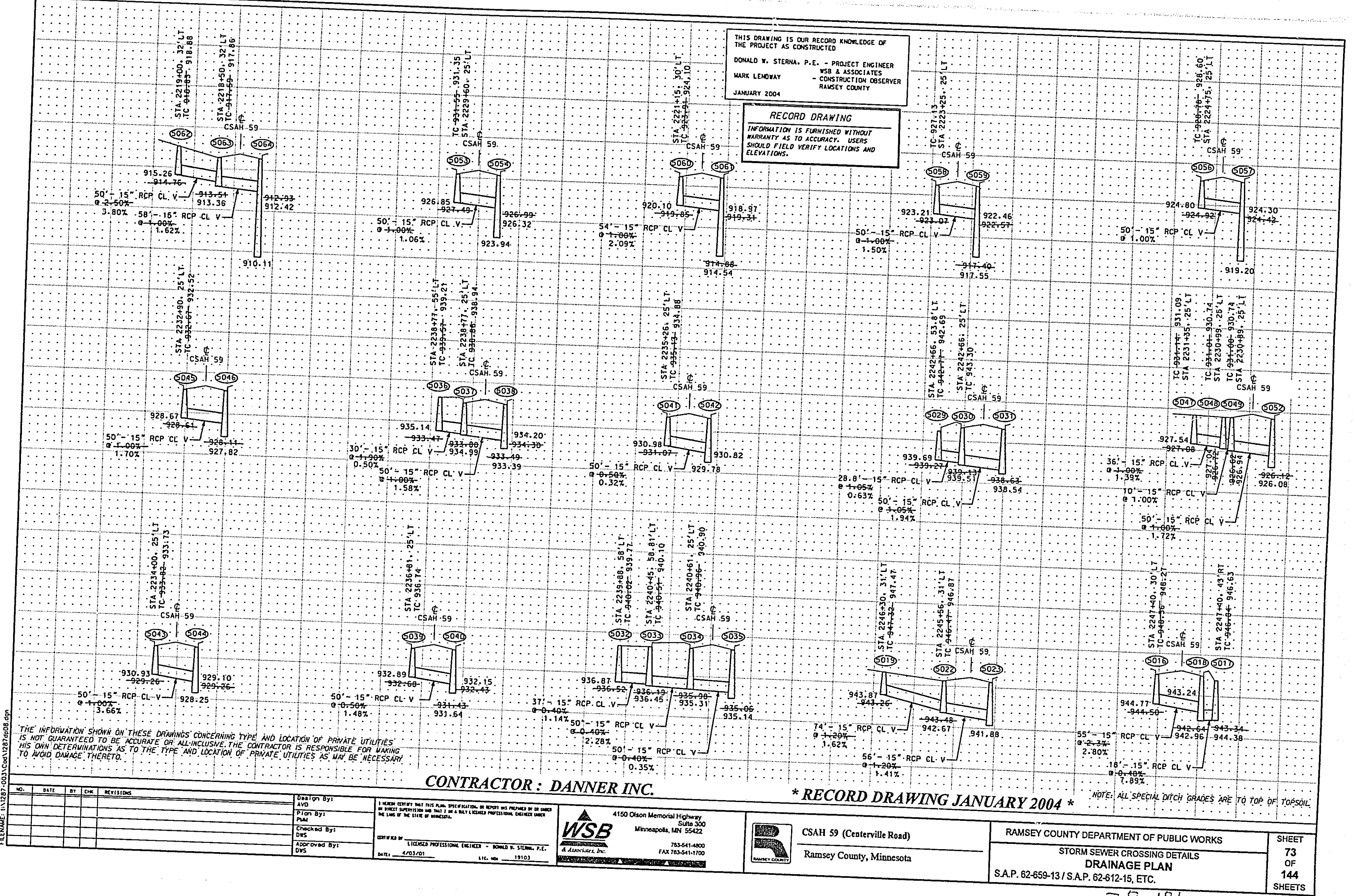
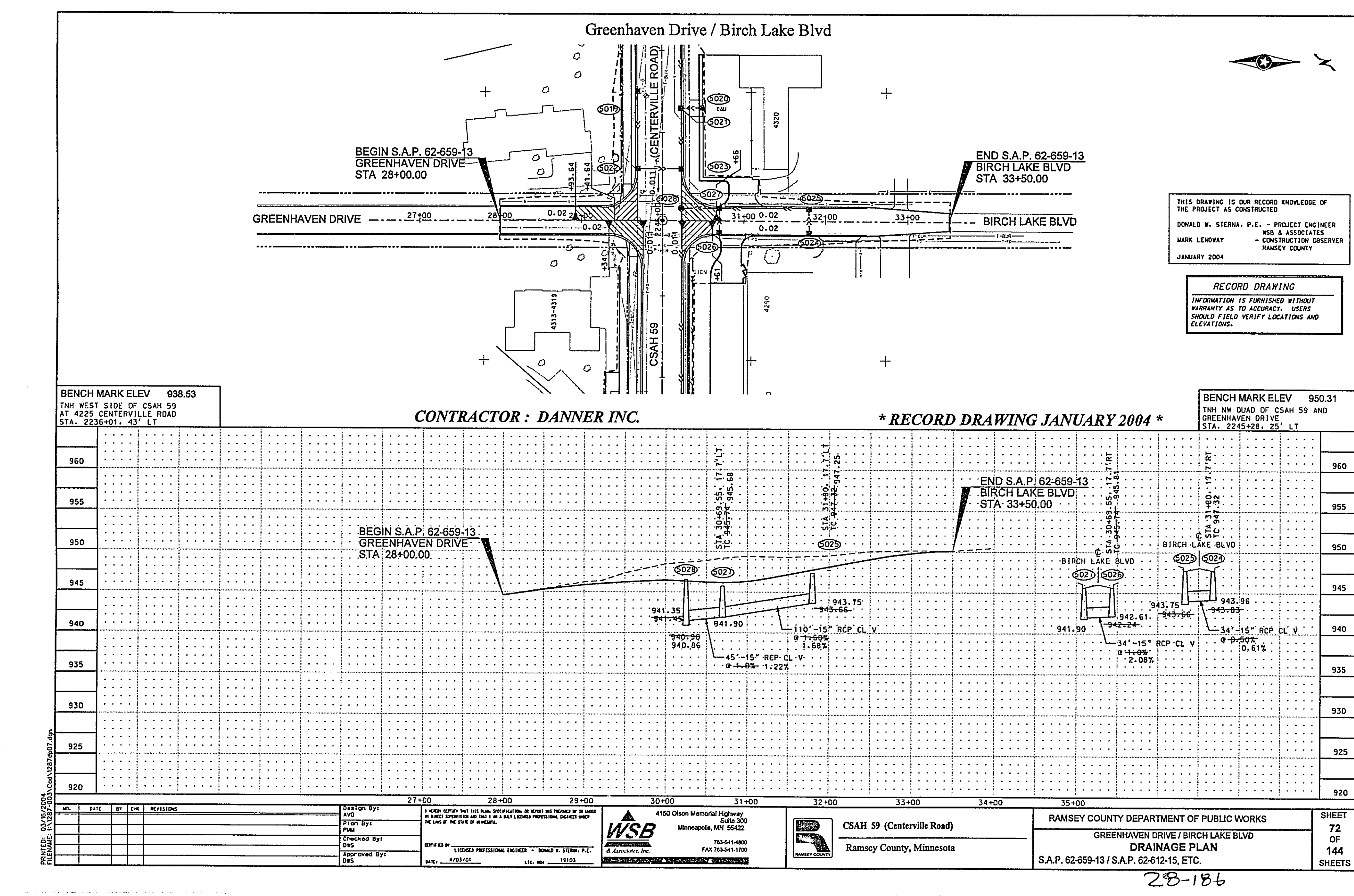
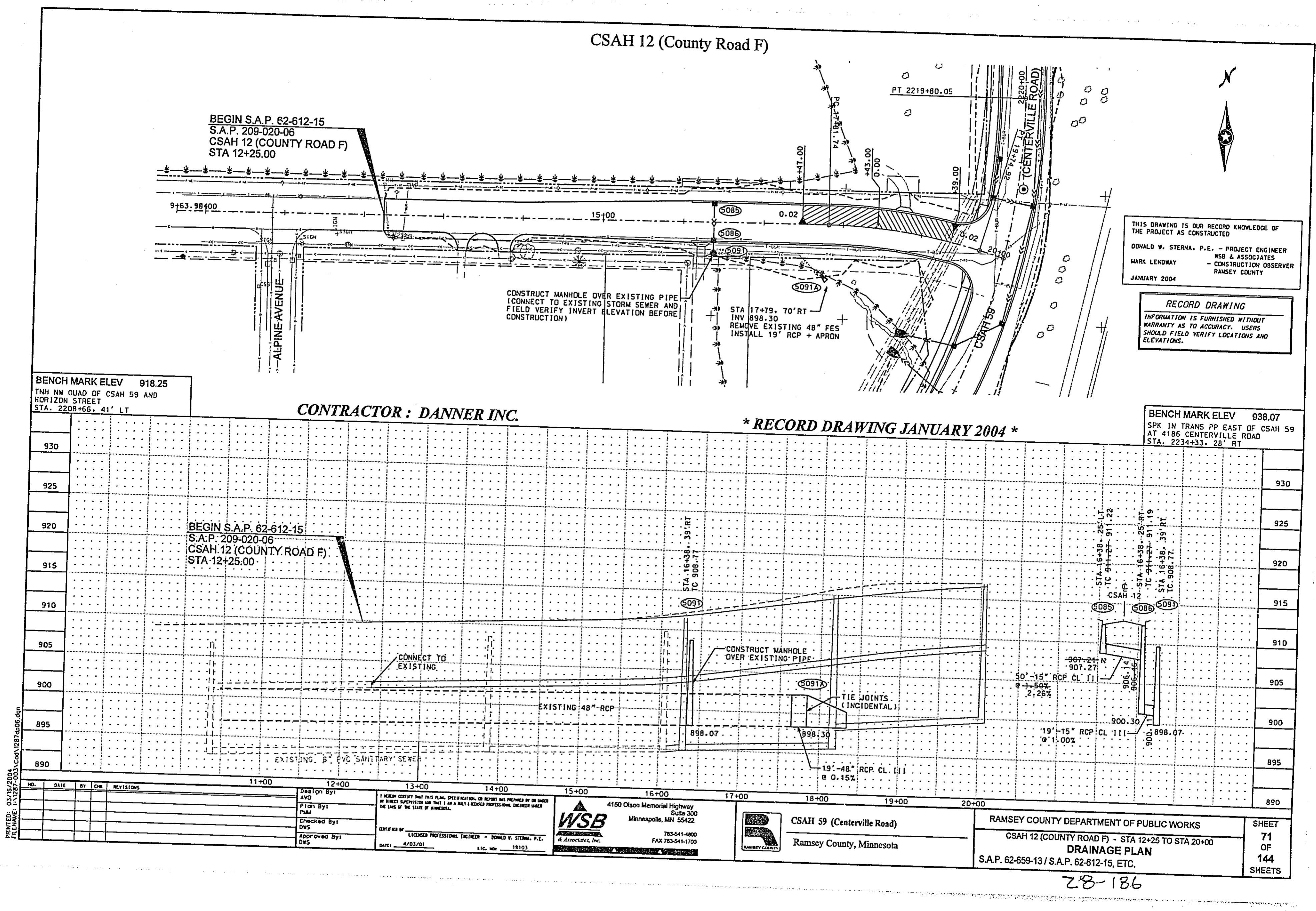
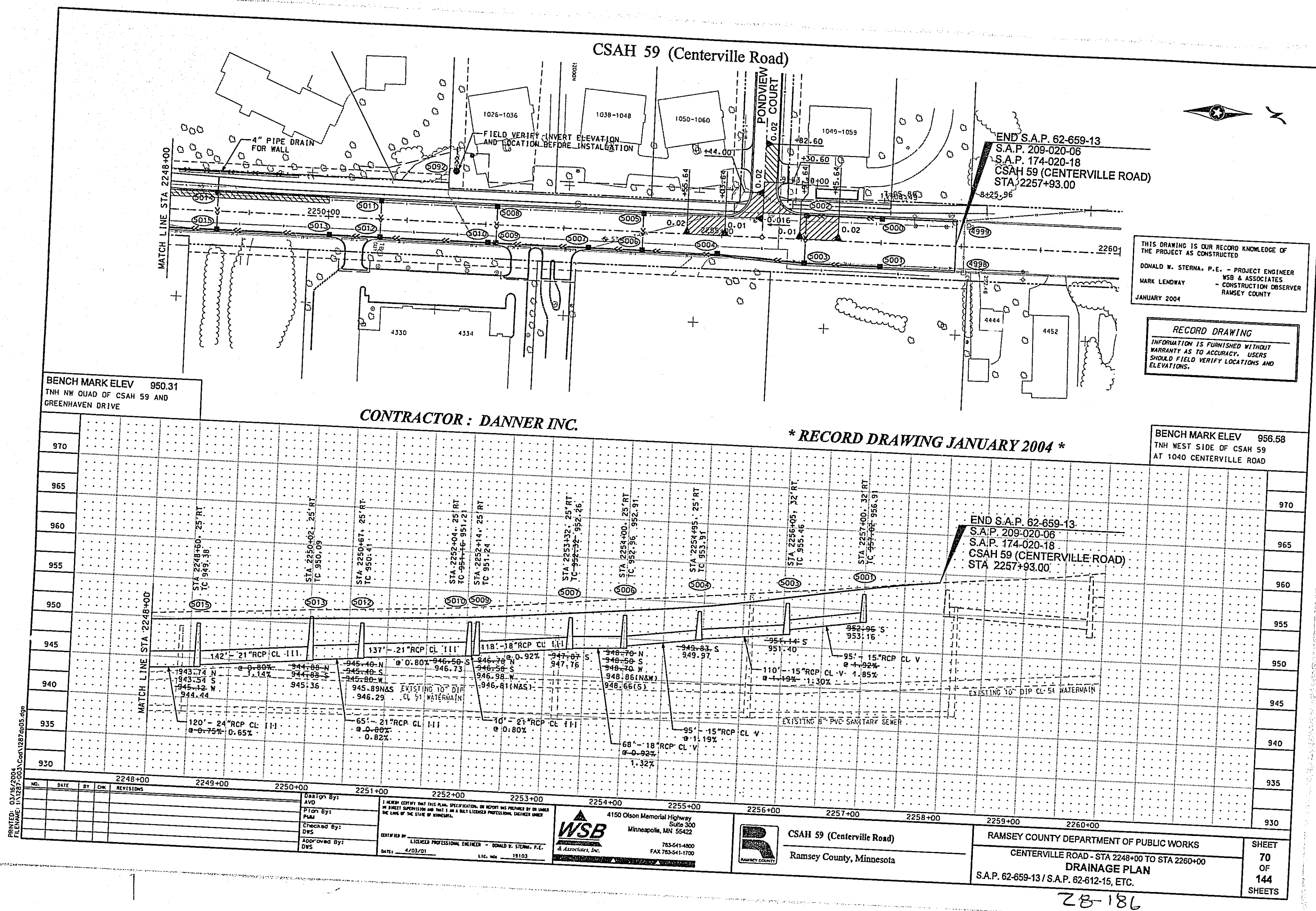


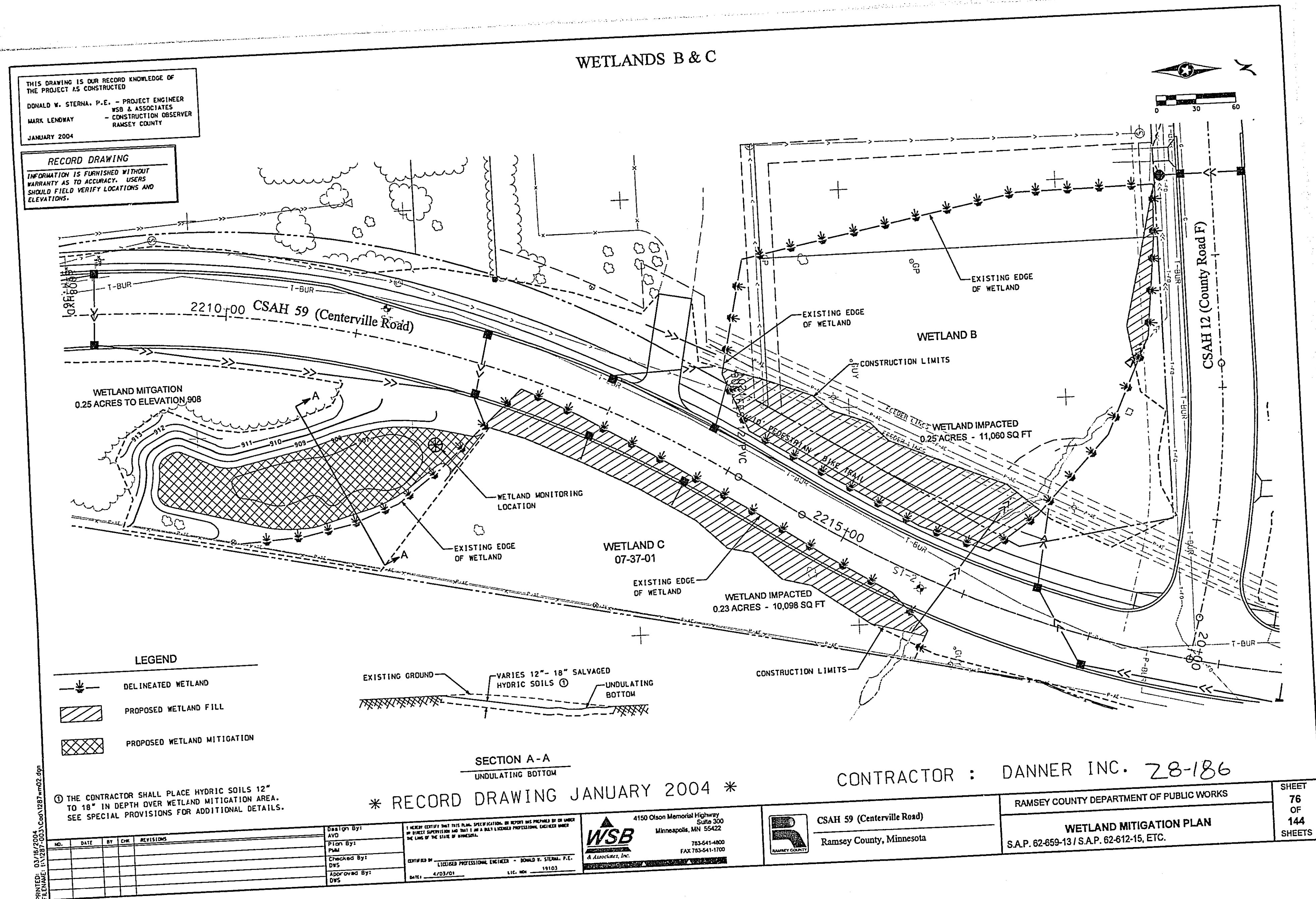
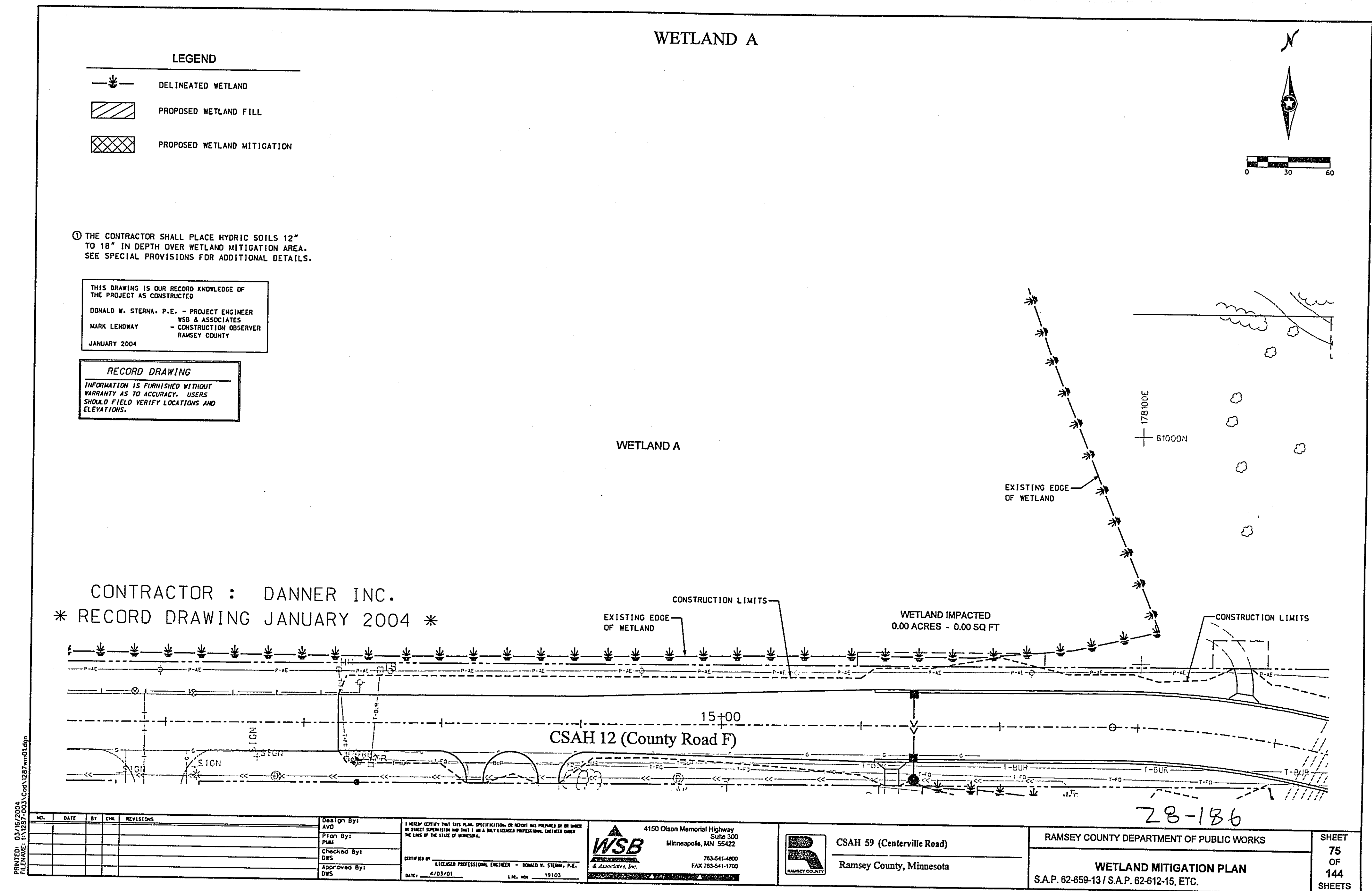
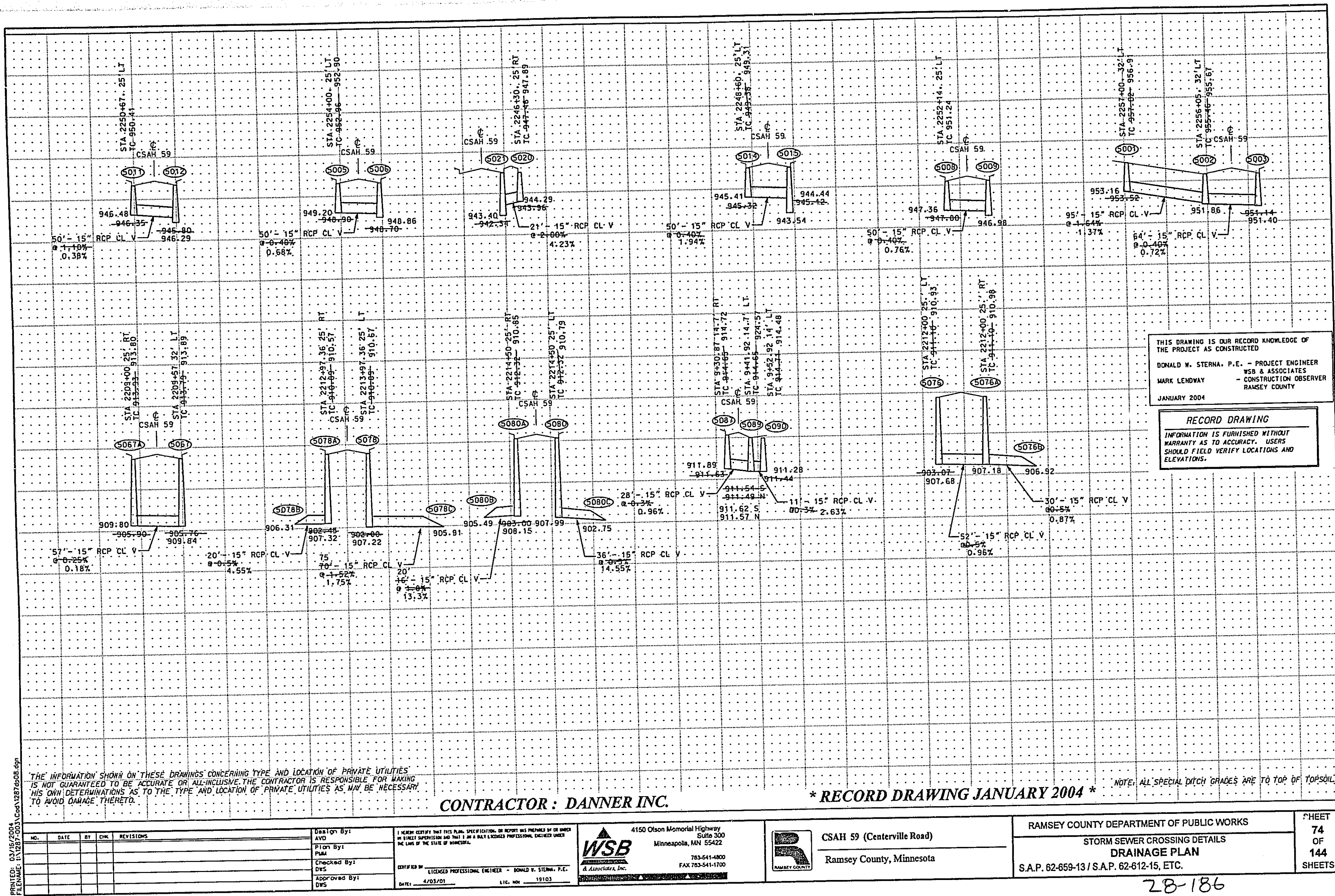
[illegible]

DRAINAGE TABULATION [R]

STRUCT NO.	STATION	LOCATION	OFFSET		DESIGN	PIPE CLASS	PAY HEIGHT (FEET)	PAY HEIGHT (FEET)	TOP OF CASTING ELEV	OUTLET ELEV	CASTING ASSEMBLY TYPE												RCP				RCP APRONS				FLOWS TO STREET NO.	SLOPE OF PIPE %	RIPRAP CLASS 111 CU YD	DETEXTILE FABRIC TYPE 111 50 YD																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
			CENTER STRUCT	CENTER CASTING							A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T					U	V	W	X	Y	Z																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
5060	2221+15	CSAH 59	25' RT	L		G	V	3.93	923.91	919.89	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	</







THIS DRAWING IS OUR RECORD KNOWLEDGE OF THE PROJECT AS CONSTRUCTED.

RECORD DRAWING

INFORMATION IS FURNISHED WITHOUT WARRANTY AS TO ACCURACY. USERS SHOULD FIELD VERIFY LOCATIONS AND ELEVATIONS.

CONTRACTOR : DANNER INC.

* RECORD DRAWING JANUARY 2004 *

4150 Olson Memorial Highway, Suite 300, Minneapolis, MN 55422

CSAH 59 (Centerville Road)

RAMSEY COUNTY DEPARTMENT OF PUBLIC WORKS

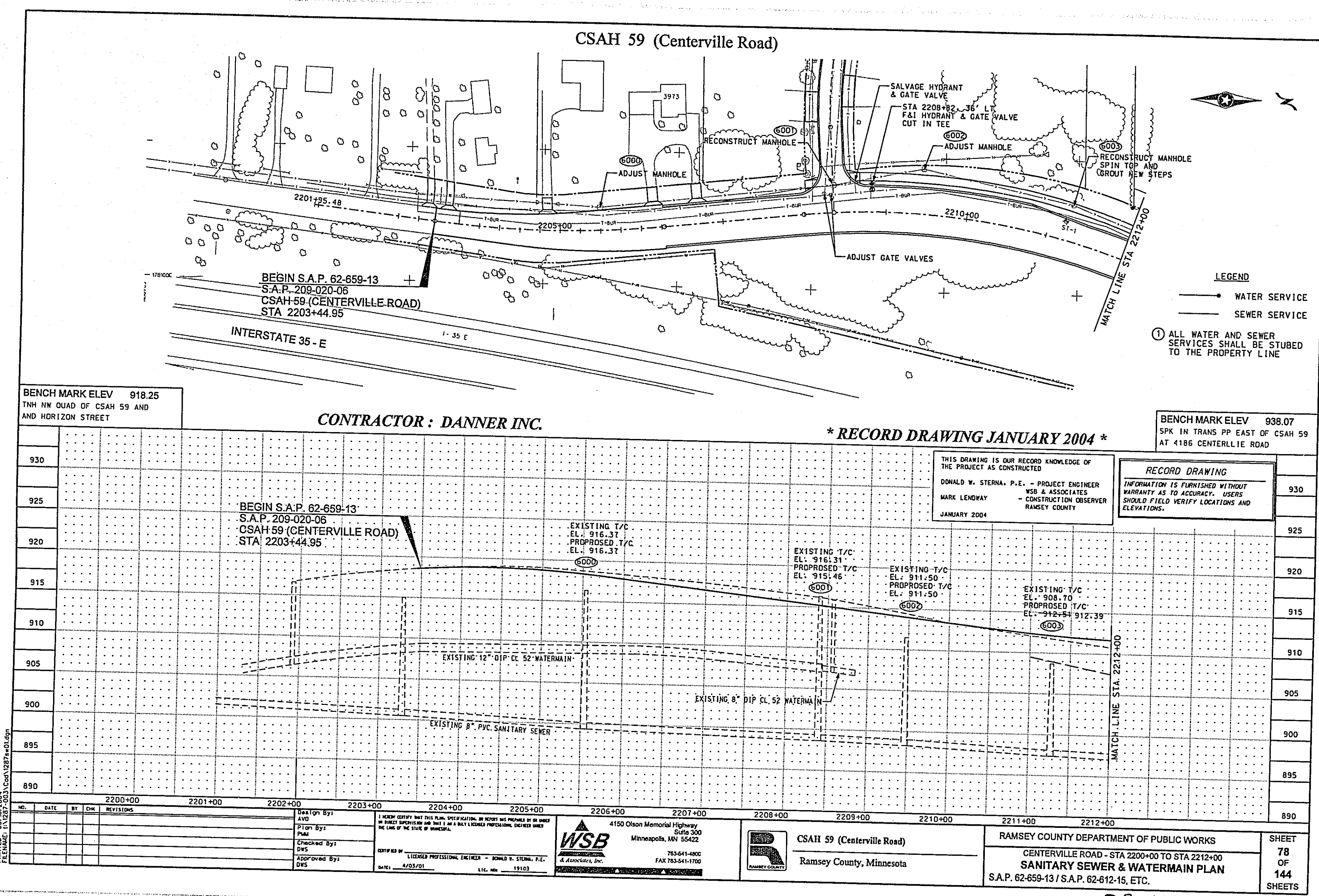
STORM SEWER CROSSING DETAILS

DRAINAGE PLAN

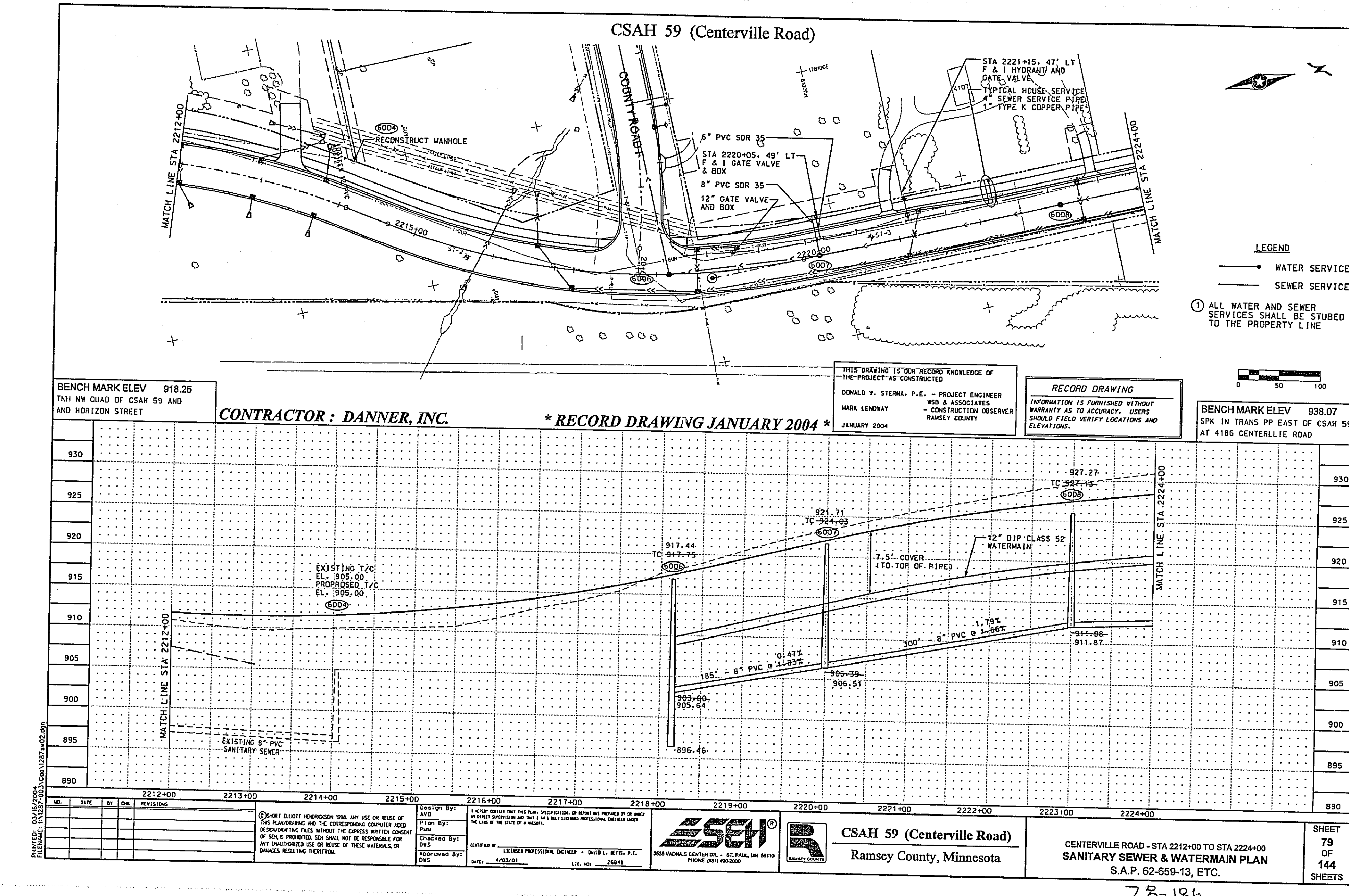
S.A.P. 62-659-13 / S.A.P. 62-612-15, ETC.

74 OF 144 SHEETS

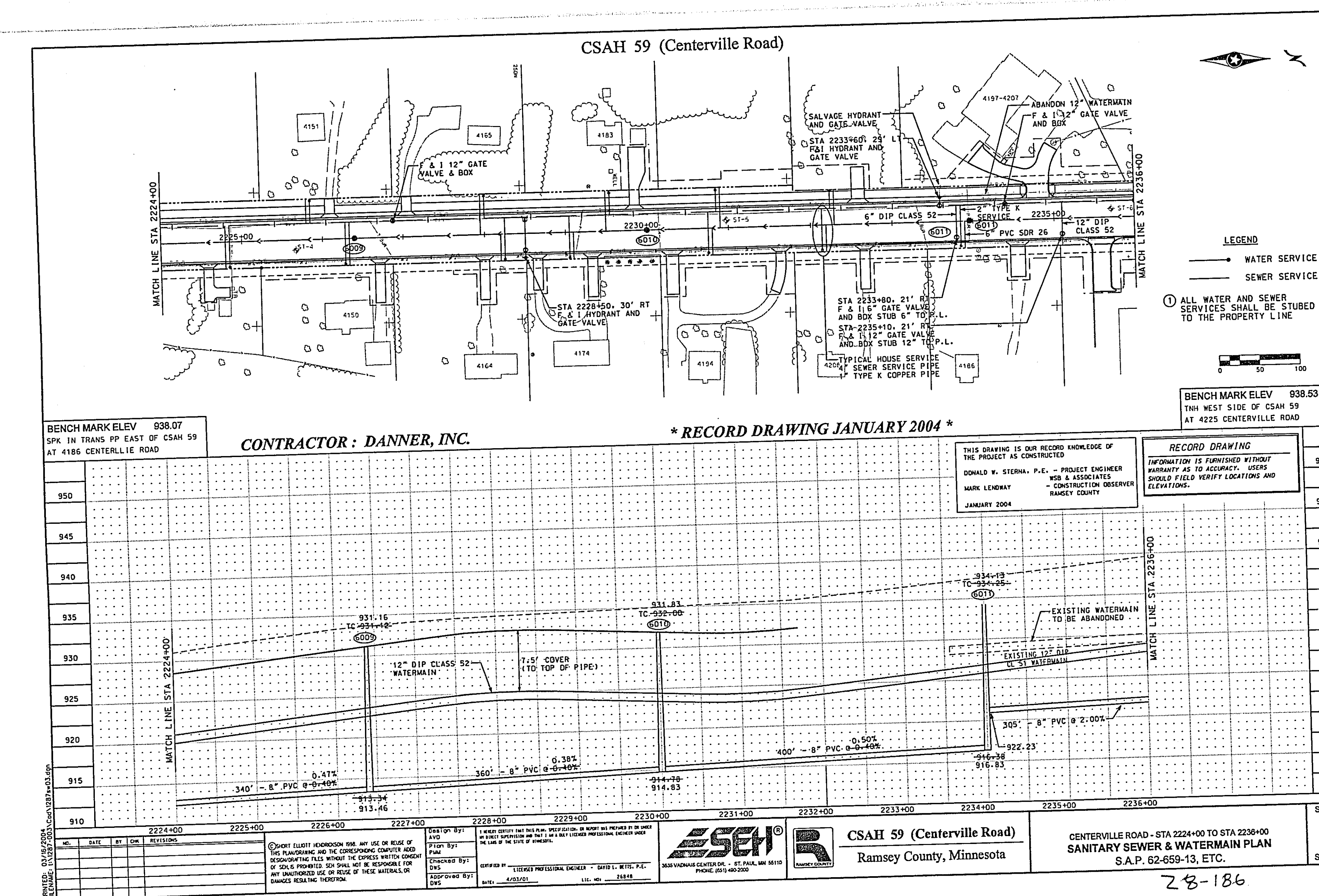
28-186



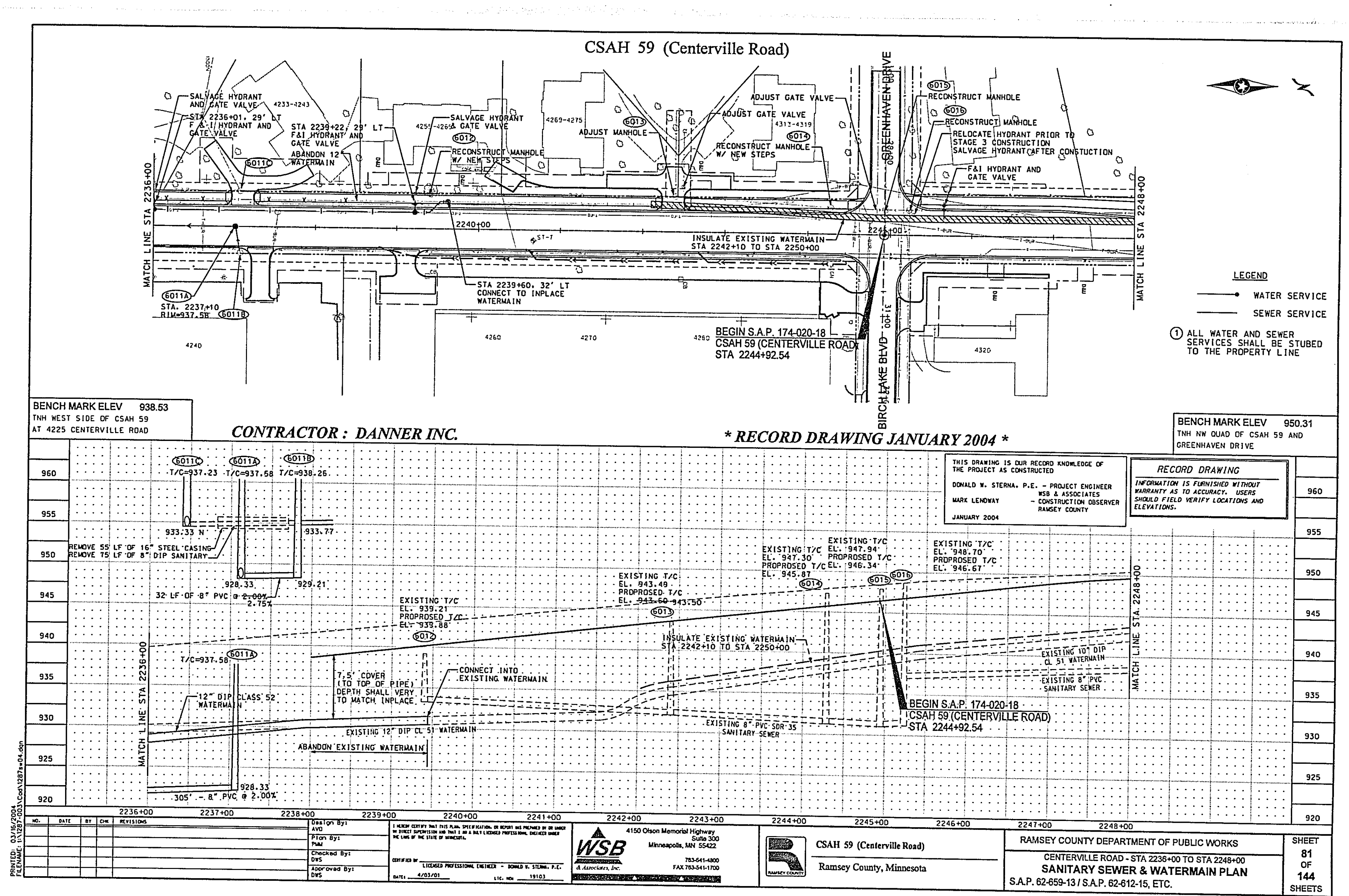
28-186



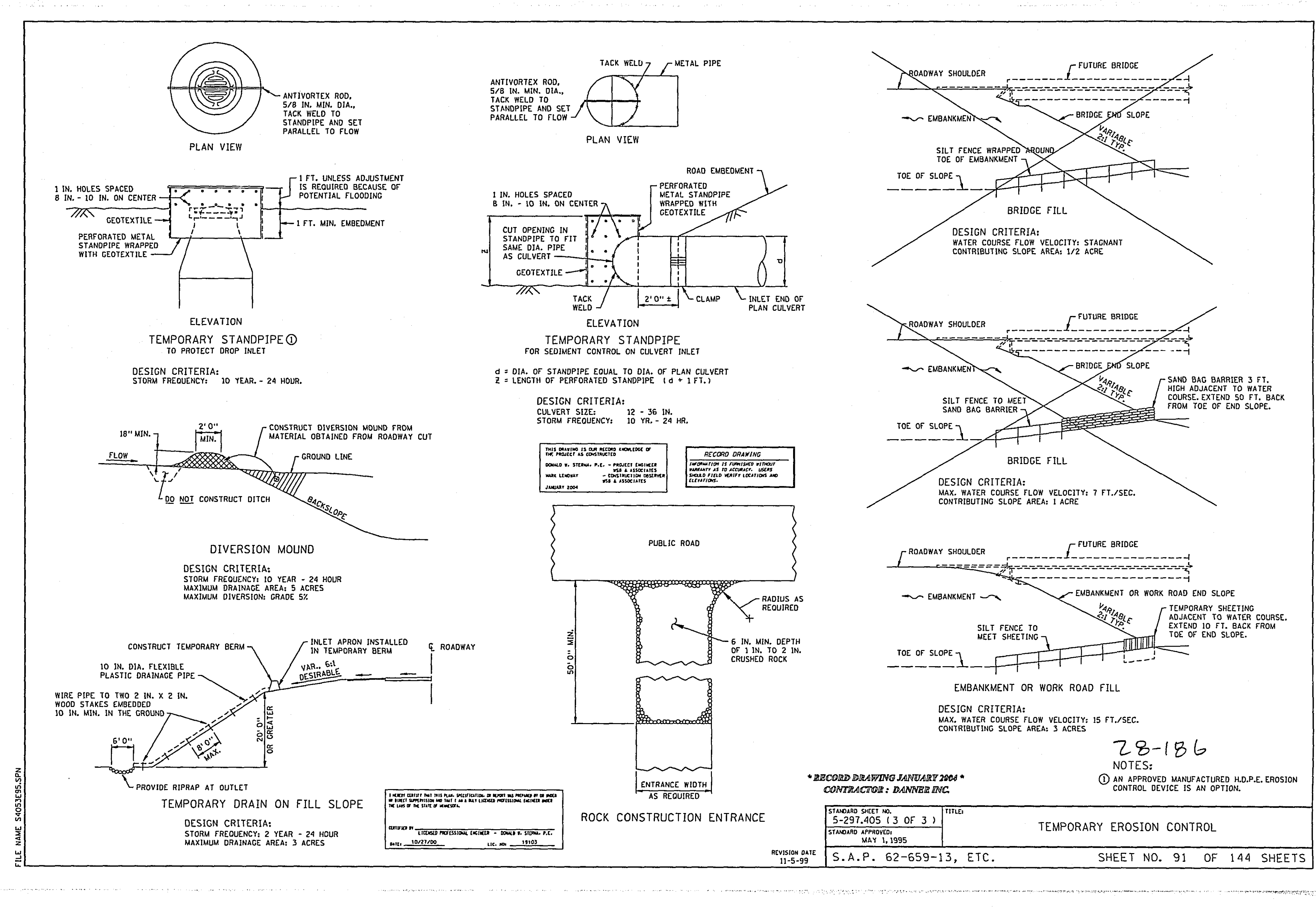
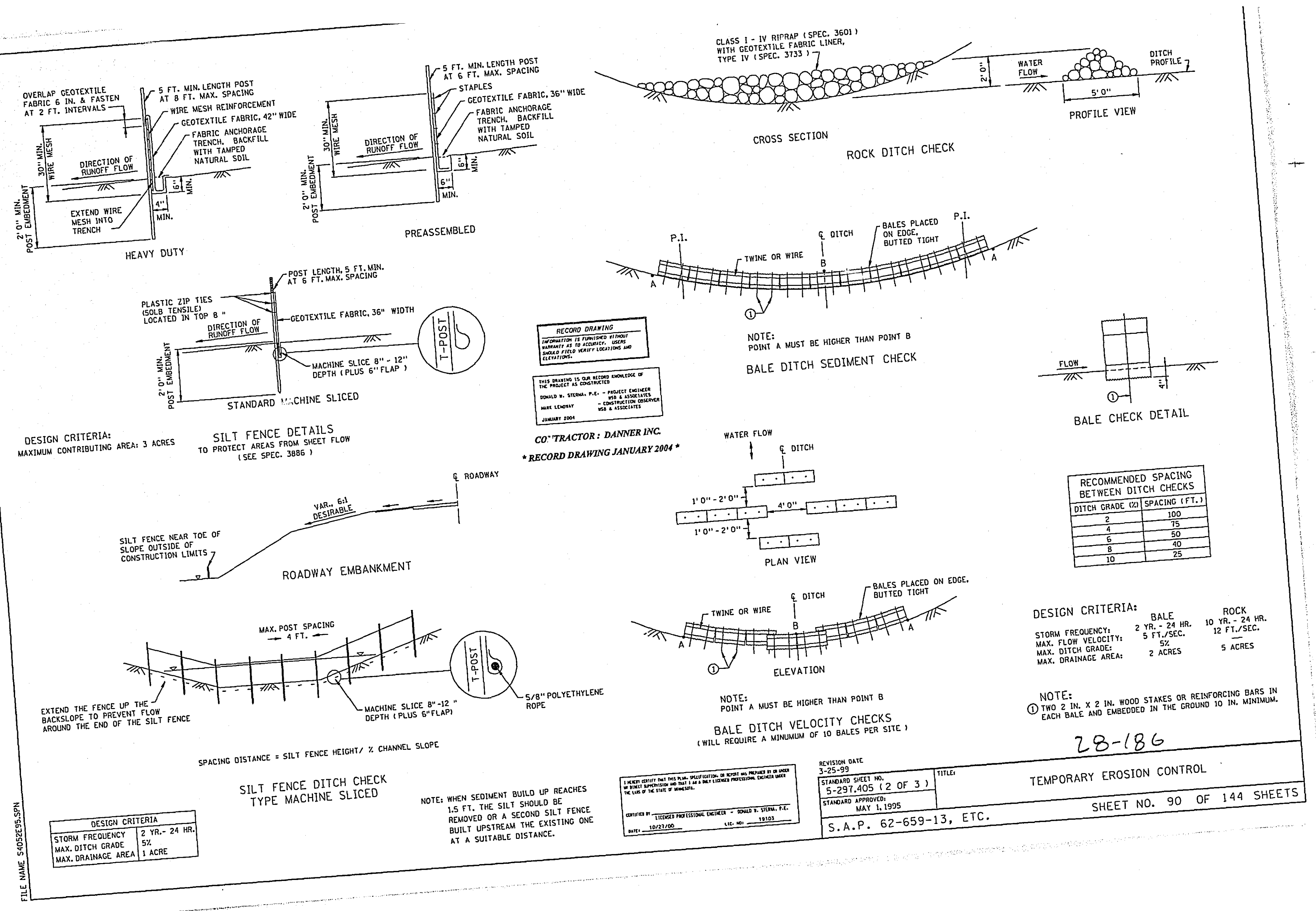
28-186



28-186



28-186



Page 92

Was missing at time of filming

FORM 62-659-13 (2-2003) CONTRACTOR USE ONLY

TYPE "C" SIGNING TABULATION [X]														
SIGN NO.	QUANTITY	S.A.P.	S.A.P.	POST TYPE	NOTES	POST LENGTH	MOUNTING HEIGHT	SIZE	SIGN EACH	SIGN TOTAL	PANEL CODE	LEGEND	REMARKS	
M-6A	4	0	10	A, B	14	7	24 X 24	4.00	16.00	0.00	CSAH 59 ROUTE MARKER			
R1-1	4	0	10	A, B	14	7	24 X 24	4.00	16.00	0.00	STOP			
R1-2	4	0	20	A, B	14	7	36 X 36	9.00	36.00	0.00	STOP			
R1-3	4	0	20	A, B	14	7	36 X 36	9.00	36.00	0.00	STOP			
R1-4	4	0	20	A, B	14	7	36 X 36	9.00	36.00	0.00	STOP			
R2-1	4	0	10	A, B	14	7	24 X 24	4.00	16.00	0.00	STOP			
R2-2	4	0	10	A, B	14	7	24 X 24	4.00	16.00	0.00	STOP			
R3-3a	11	0	20	A, B	14	7	36 X 36	9.00	36.00	0.00	STOP			
R3-3b	4	0	10	A, B	14	7	24 X 24	4.00	16.00	0.00	STOP			
R3-3c	27	0	10	A, B	14	7	24 X 24	4.00	16.00	0.00	STOP			
M-1	4	0	20-14	A, B	14	7	48 X 24	4.00	108.00	16.00	NO PARKING			
R3-1	2	0	10	A, B	14	7	24 X 24	4.00	16.00	0.00	STOP			
R3-2	2	0	10	A, B	14	7	24 X 24	4.00	16.00	0.00	STOP			
O-101	1	0	10	A, B	14	7	30 X 30	6.57	1.34	0.00	CONTROLLED ACCESS (MOUNTED WITH R3-1)			
TOTAL	78	0							397.27	49.25				

THIS DRAWING IS OUR RECORD KNOWLEDGE OF THE PROJECT AS CONSTRUCTED
DONALD W. STERN, P.E. - PROJECT ENGINEER
MARK LENDRAT - CONSTRUCTION OBSERVER
JANUARY 2004

RECEIVED
INFORMATION (IS PLANNED WITHOUT
INFORMATION AND TO ACCURACY, USUALLY
REMARKS (RECEIVED) VARIATION LIGHTING AND
REMARKS

NOTES:
A. POST LENGTHS ARE APPROXIMATE AND INCLUDE EMBEDMENT, BUT DOES NOT INCLUDE ADDITIONAL LENGTH REQUIRED FOR SPLICE.
B. SEE STANDARD SIGNING MANUAL FOR PUNCHING CODE AND DETAILED DRAWINGS OF TYPE "C" SIGN PANELS.
C. TO BE INSTALLED BELOW STOP SIGN (R1-1).
D. TO BE INSTALLED BELOW R/W SIGN (R3-1).

TYPE "SPECIAL" SIGNS (SALVAGE & INSTALL) [W]				
SIGN NO.	QUANTITY	S.A.P.	S.A.P.	PANEL LEGEND
X-101	5	0		STREET SIGNS
TOTAL	5	0		

NOTES:
1. SALVAGING AND INSTALLING X-101 SIGNS CONSISTS OF TWO SIGN PANELS CONNECTED TO ONE POST.

PERMANENT MARKING TABULATION [Y]														
STATION TO STATION	SOLID LINE	STOP LINE	WHITE	YELLOW	SOLID LINE	STOP LINE	WHITE	YELLOW	SOLID LINE	STOP LINE	WHITE	YELLOW	SOLID LINE	STOP LINE
CSAH 59														
2203+48.36 - 2208+50	1150				700			35						
2208+50 - 2211+50	300	80	1100	350	42	240	4	1						
2211+50 - 2224+50	550	60	450	1450	42	350	2	1						
2224+50 - 2235+50	2700	160	1400	700	42	140	1	2						
2235+50 - 2257+50	1250				150									
SUBTOTAL CSAH 59	13050	350	7750	1300	115	875	24	6						
CSAH 12														
12+25 - 20+00	1525	110	1350	95										
SUBTOTAL CSAH 12	1525	110	1350	95										
TOTAL	14575	430	7750	4650	257	875	25	6						

* RECORD DRAWING JANUARY 2004 *

CONTRACTOR : DANNER INC.

28-186

NO. DATE BY REV. REVISIONS

DATE BY: 01/04/04

DATE BY: 01/04/04

DATE BY: 01/04/04

DATE BY: 01/04/04

1. SIGNIFICANT: THIS SIGN, THE SIGN

Diagram illustrating the components and dimensions of a breakaway sign post assembly:

- SIGN PANEL, TYPE "C"
- 2" RISER POST
- U-POST SPLICE (TYP) SEE DETAIL THIS SHEET
- 3 TO 5 FT. - 3" BASE POST
- 1-1/2" X 1-1/2" X 12" LONG GALVANIZED STEEL TUBING 12 GAUGE WITH 7/16" HOLES SPACED 1" EACH SIDE (T/ELSPAR) BOLT TO U-POST WITH 2 5/16" STAINLESS STEEL BOLTS WITH WASHERS
- 3" MIN 4" MAX
- CONCRETE FOUNDATION FOR BREAKAWAY SIGN POST. SEE DETAIL THIS SHEET.

12" DIA

PLAN

1. THE 1-3/4" X 6" TUBING SHALL NOT BE WELDED OR BOLTED TO THE 2" STAINLESS STEEL TUBING.
2. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
3. CONCRETE MIX SHALL BE 3A32 OR EQUAL.

Technical drawing of a "U" post splice. The drawing shows a vertical post with a splice. The splice is labeled "11/2\" POST SPLICE". The dimensions are: 18\" MIN. for the length of the splice, 12\" MIN. for the length of the splice, and 5/16\" WITH P LOCK TOP A. The drawing also shows a cross-section of the post with a 3.5\" MIN. dimension.

1. USE 3" RISER STUB POSTS, WITH 2" RISER POSTS, ALL SHALL CONFORM TO MN/DOT SPECIFICATION 3401.
2. MOUNTING (PUNCHING CODE) FOR TYPE "C" SIGN PANELS SHALL BE AS INDICATED IN THE STANDARD SIGNS MANUAL UNLESS OTHERWISE SPECIFIED.
3. ALL RISER (VERTICAL) "U" POSTS SHALL BE SPLICED, DRIVEN STUB POSTS SHALL BE AT LEAST 7 FEET LONG.
4. USE STAINLESS STEEL 5/16" BOLTS AND WASHERS WITH PLATED STEEL NYLON INSERT LOCK NUTS AS SHOWN.
5. STAINLESS STEEL WASHER WITH THE SAME DIMENSIONS SHALL BE PROVIDED BETWEEN ALL NYLON WASHERS AND BOLT HEADS.
6. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, INCLUDING "FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS - JANUARY 2001."
7. ALL TRAFFIC CONTROL DEVICES SHALL HAVE RETROREFLECTIVE V.I.P. SHEETING.

TYPICAL CENTER LEFT TURN ARROWS

	RAMSEY COUNTY DEPARTMENT OF PUBLIC WORKS	SHEET
	RAMSEY COUNTY SIGNING & STRIPING DETAILS	98
	SIGNING & STRIPING PLAN	OF
	S.A.P. 62-659-13 / S.A.P. 62-612-15, ETC.	144
		SHEETS

By: _____
By: _____
ed By: _____
ved By: _____

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY OR UNDER THE DIRECT SUPERVISION AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN.

TESTIFIED BY _____
LICENSED PROFESSIONAL ENGINEER - DONALD W. STEWART, P.E.

DATE: 4/03/01 LIC. NO. 18103

THIS DRAWING IS OUR RECORD KNOWLEDGE OF
THE PROJECT AS CONSTRUCTED

DONALD W. STERNA, P.E. - PROJECT ENGINEER
WSR & ASSOCIATES
CONSTRUCTION OBSERVER
MARK LENDWAY
RAMSEY COUNTY

JANUARY 2004

RECORD DRAWING

INFORMATION IS FURNISHED WITHOUT
WARRANTY AS TO ACCURACY. USERS
SHOULD FIELD VERIFY LOCATIONS AND
ELEVATIONS.

Diagram illustrating the mounting assembly for a sign panel. The assembly includes a stainless steel washer and nylon washer (7/16" MN., I.D. = 3/8" MAX., O.D. = 7/8" MAX.), a sign panel, a post, and a 5/16" stainless steel bolt with a plated steel nylon insert lock nut.

"U" POST MOUNTING
TYPE "C" SIGNS

PRINTED: 03/16/2004
FILE NAME: I:\287-003\Cad\287ss-b.dwg

[illegible]

Design By:
AVD

Plan By:
PJM

Checked By:
DWS

Approved By:
DWS

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY OR UNDER THE DIRECT SUPERVISION AND THAT I AM A duly LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE: 4/03/01

LIC. NO: 18103

LICENSED PROFESSIONAL ENGINEER - DONALD V. STEINHA, P.E.

WSB
4150 Olson Memorial Highway
Suite 300
Minneapolis, MN 55422
763-541-4800
FAX 763-541-1700
Associates, Inc.

 CSAH 59 (Centerville Road)
Ralisey County, Minnesota

RAMSEY COUNTY DEPARTMENT OF PUBLIC WORKS	SHEET
RAMSEY COUNTY SIGNING & STRIPING DETAILS	98
SIGNING & STRIPING PLAN	OF
S.A.P. 62-659-13 / S.A.P. 62-612-15, ETC.	144
	SHEETS

Page 94 thru 144
was missing
at time of filming.