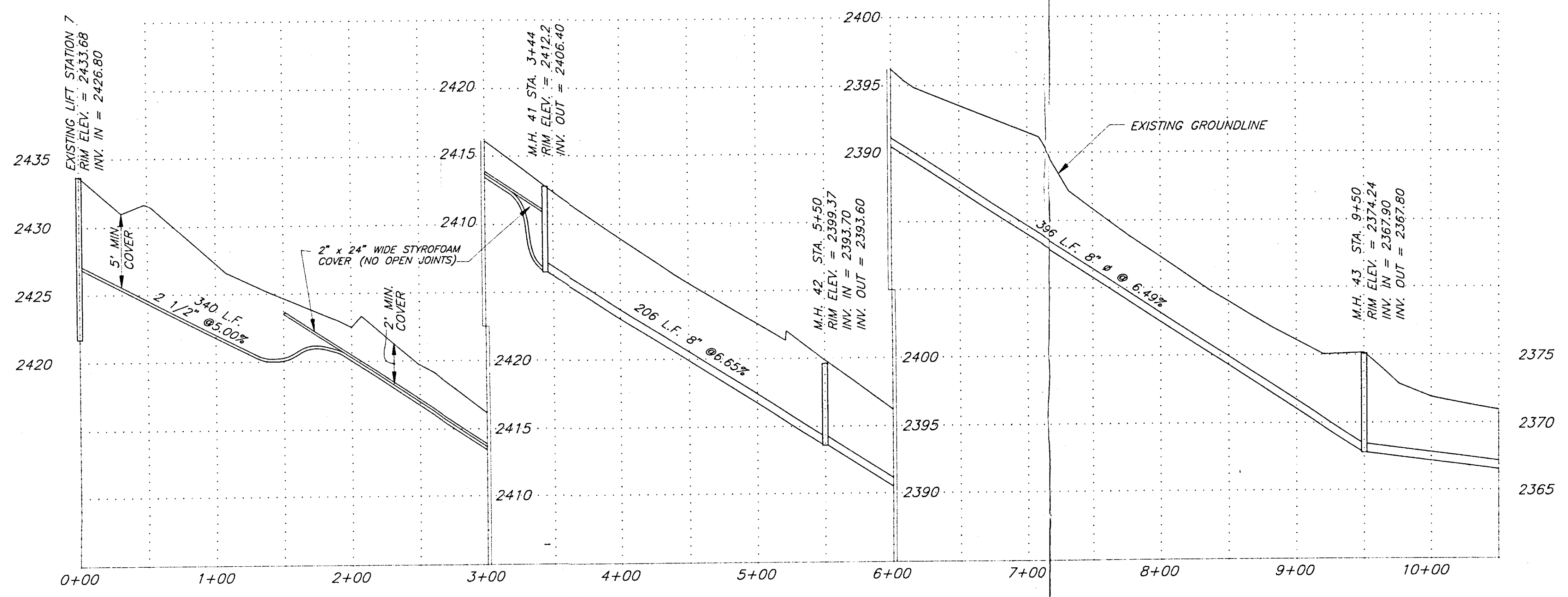
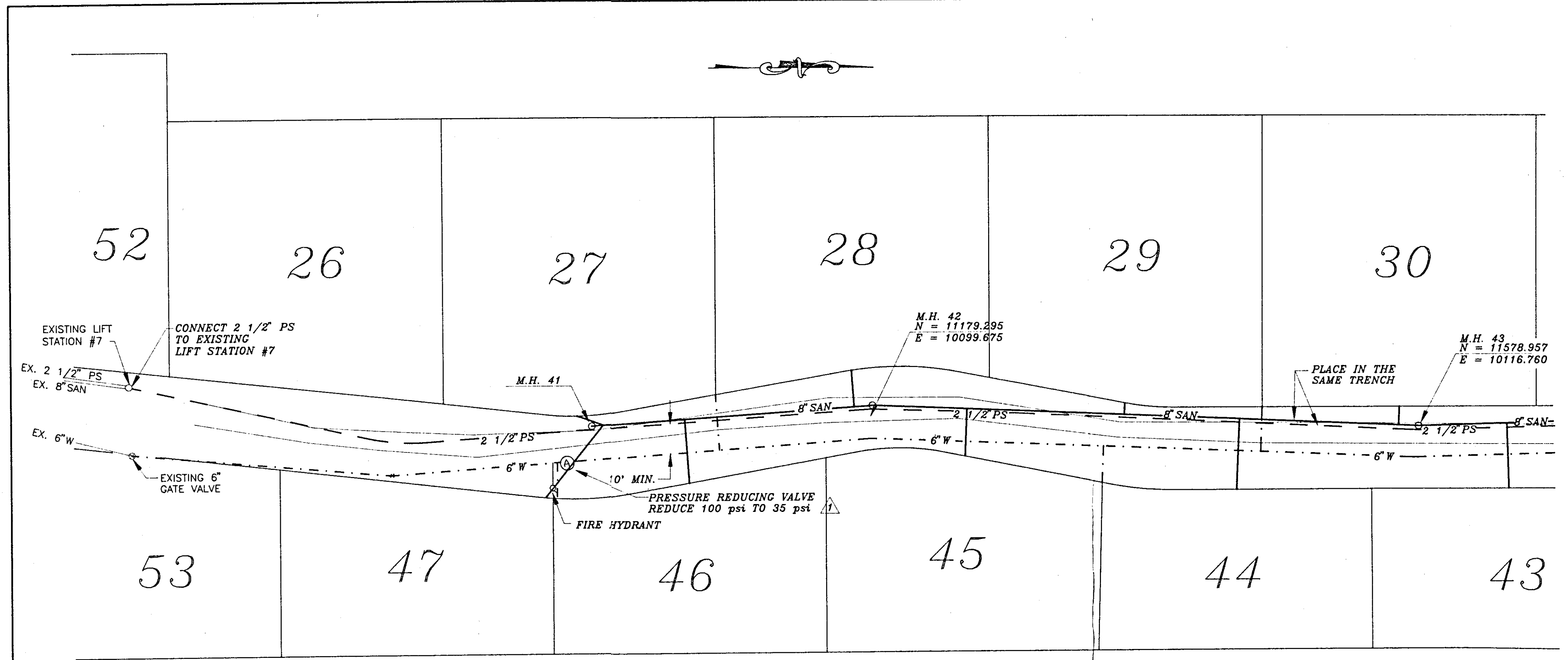




LEGEND

- EDGE OF ROAD
- SEWER LINE
- PROPERTY LINE
- 2 1/2" PRESSURE MAIN
- 6" WATER MAIN

4 RECENT DWGS. R.M.S. 4-25-91

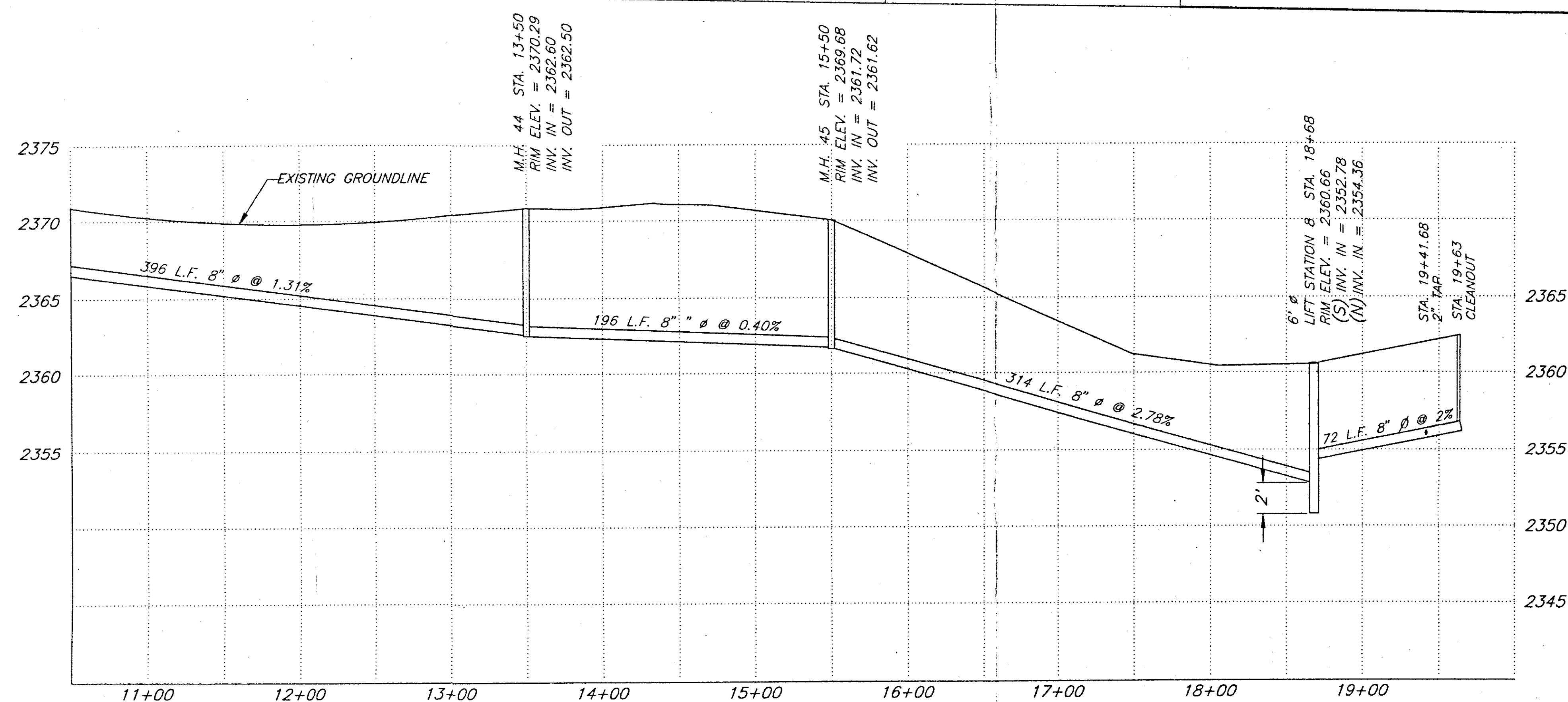
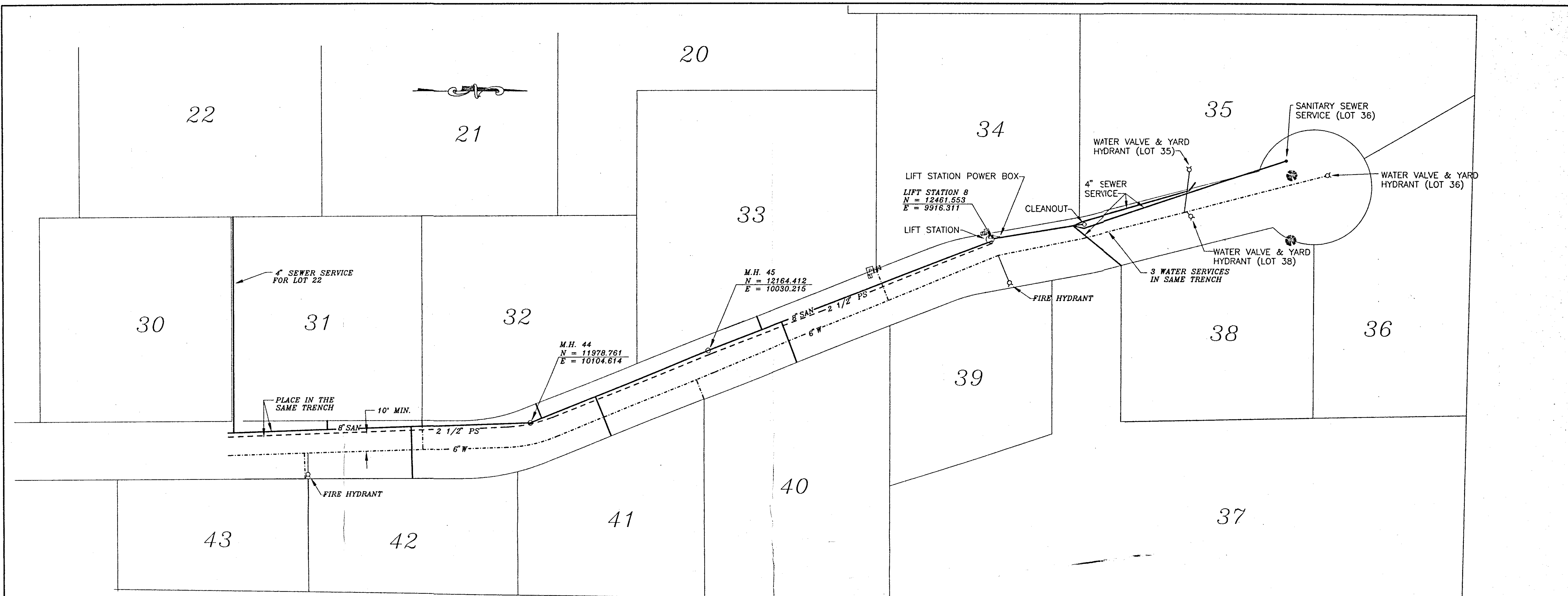
3	MOVE M.H. 41; DEFLECT P.S.; ADD STYROFOAM; ADD WATER SERV.	GWN	4-25-91
2	ADD LATERALS		10-03-90
1	ADDITION OF PRESSURE REDUCER	GWN	9-18-90
NO.	REVISION	BY	DATE

PROJECT NUMBER 241-C
FILE NAME D241C_1

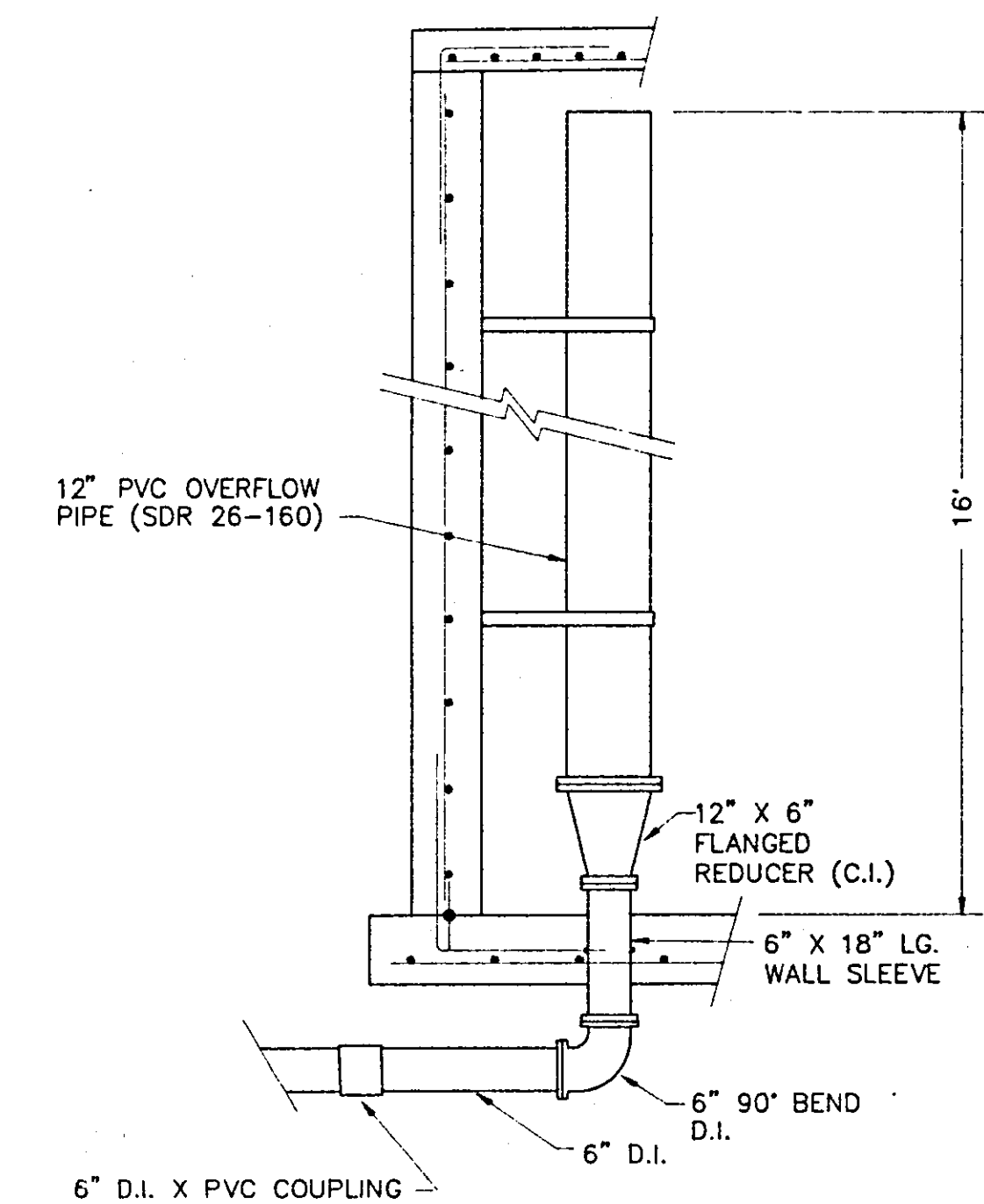
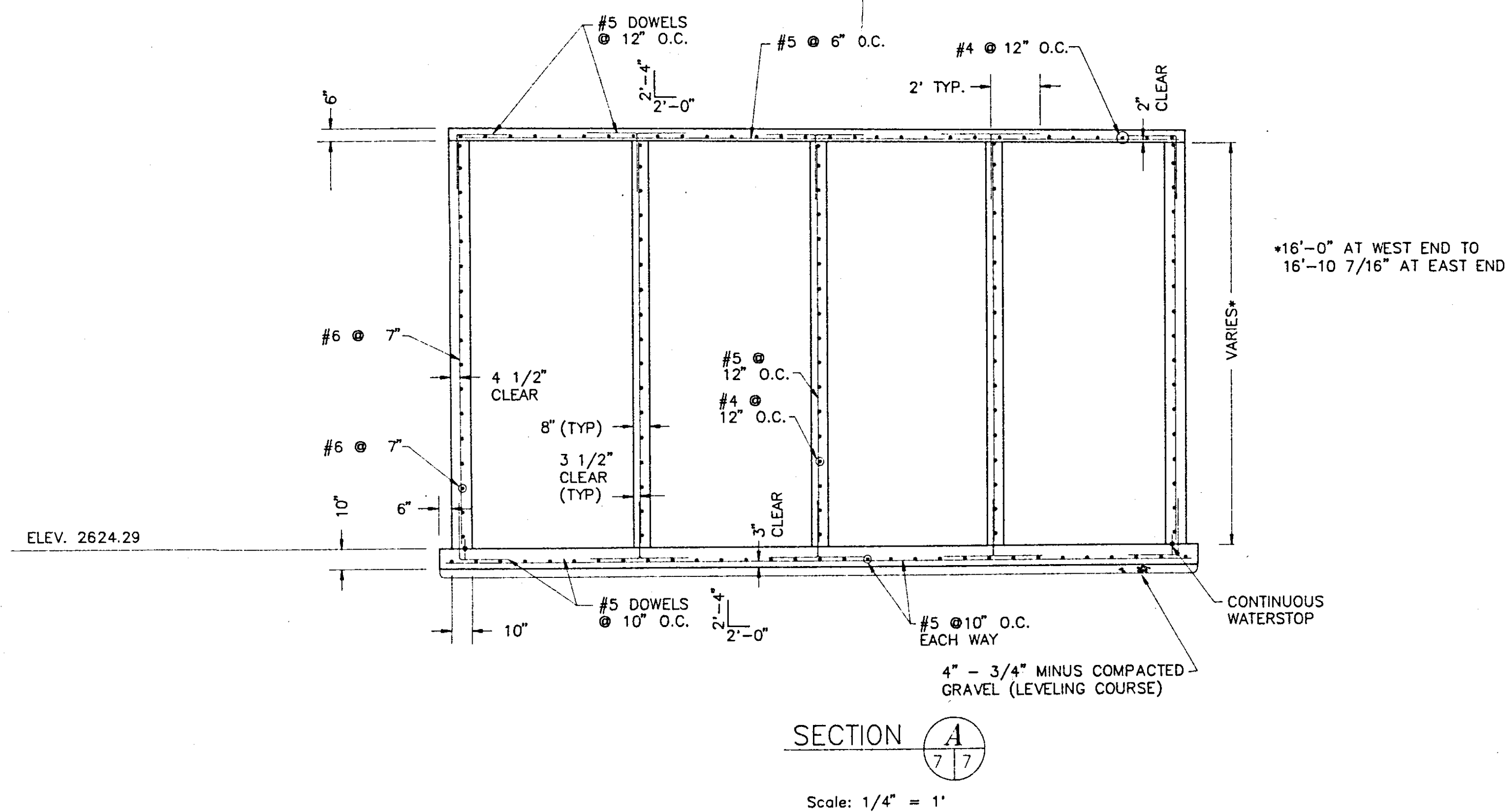
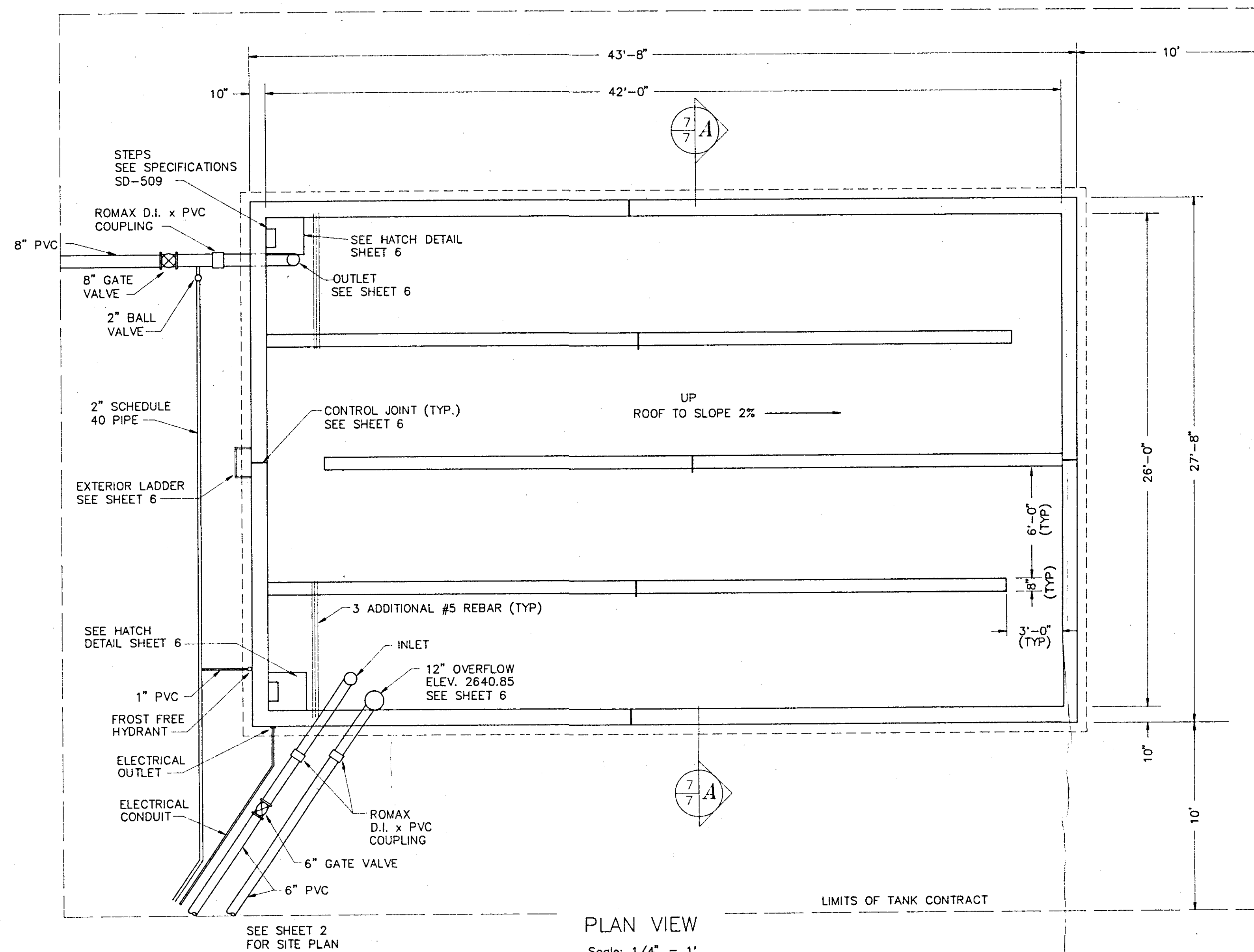
HARBOR VIEW ESTATES
HARBOR VIEW DRIVE
WATER & SANITARY SEWER

RUEN-YEAGER & ASSOCIATES, INC.
Consulting Engineers
1119 Ironwood Parkway, Suite 200
Coeur d'Alene, Idaho 83814

SCALE 1"=50'
DESIGN BY TEY
DRAWN BY DV
DATE 4-25-91
SHEET 1 OF 3



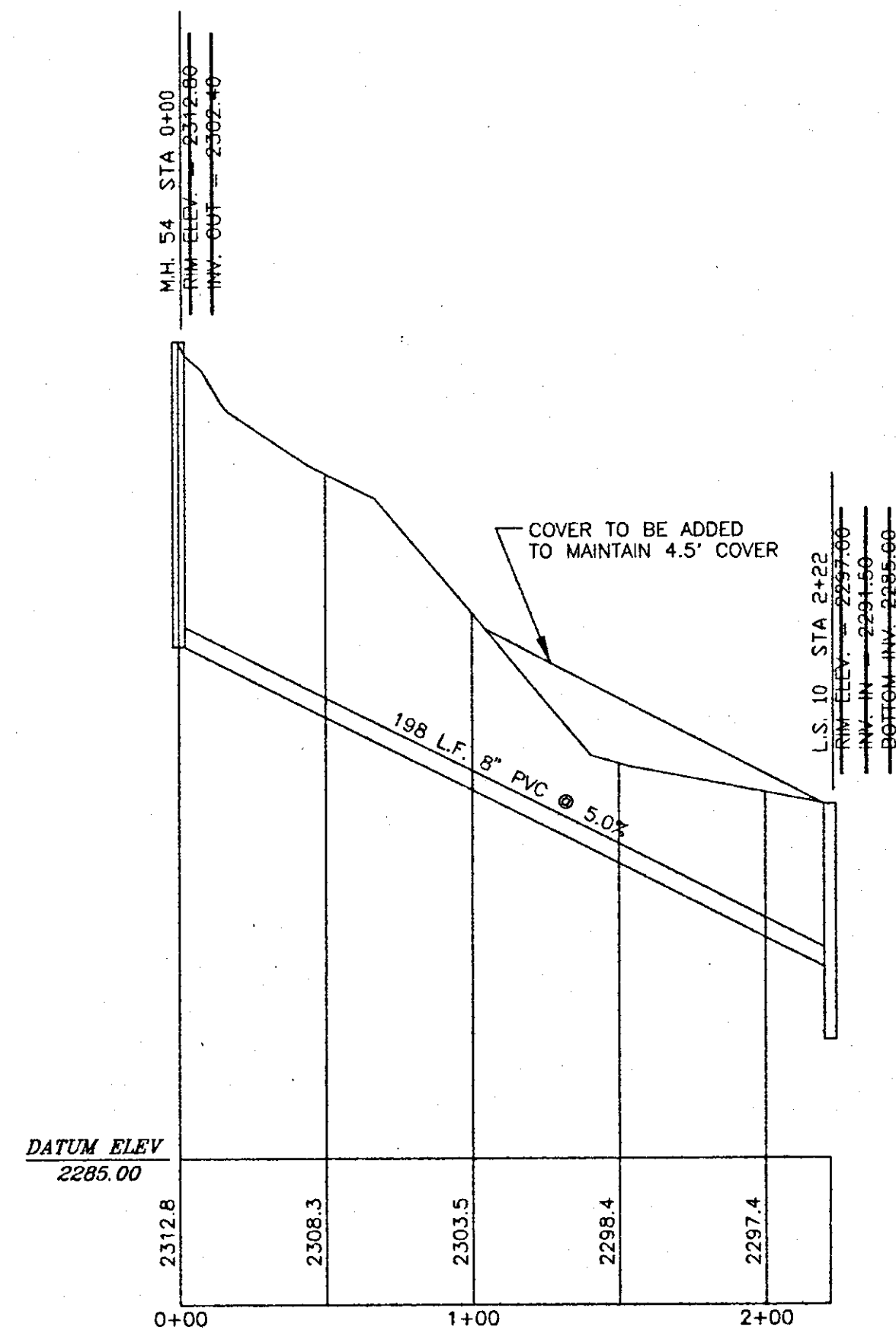
5	UPDATE RECORD DWG SERVICES TO LOTS 35, 36 & 38	BMG	11-22-96
4	RECORD DRAWING	BMG	12-4-91
3	ADD SEWER SERVICE TO LOT 22, BLOCK 2	GN	12-03-91
2	ADD 13' SEWERLINE ON N. END; ADD WATERLINE LATERALS		4-24-91
1	ADD LATERALS		10-03-90
NO.	REVISION	BY	DATE
PROJECT NUMBER 241-C		HARBOR VIEW ESTATES	
FILE NAME D241C-2R		HARBOR VIEW DRIVE	
		WATER & SANITARY SEWER	
		RUEN-YEAGER & ASSOCIATES, INC.	
		Consulting Engineers	
		1119 Ironwood Parkway, Suite 200	
		Coeur d'Alene, Idaho 83814	
		SCALE 1"=50'	
		DESIGN BY TEY	DRAWN BY DV
		DATE AUG. 1990	SHEET 2 of 3
		PLOT DATE 11-22-96	



NOTE:
ALL CONCRETE CURING COMPOUNDS USED IN
CONSTRUCTION MUST BE LISTED ON THE EPA
APPROVED LIST FOR USE WITH POTABLE
WATER VESSELS.

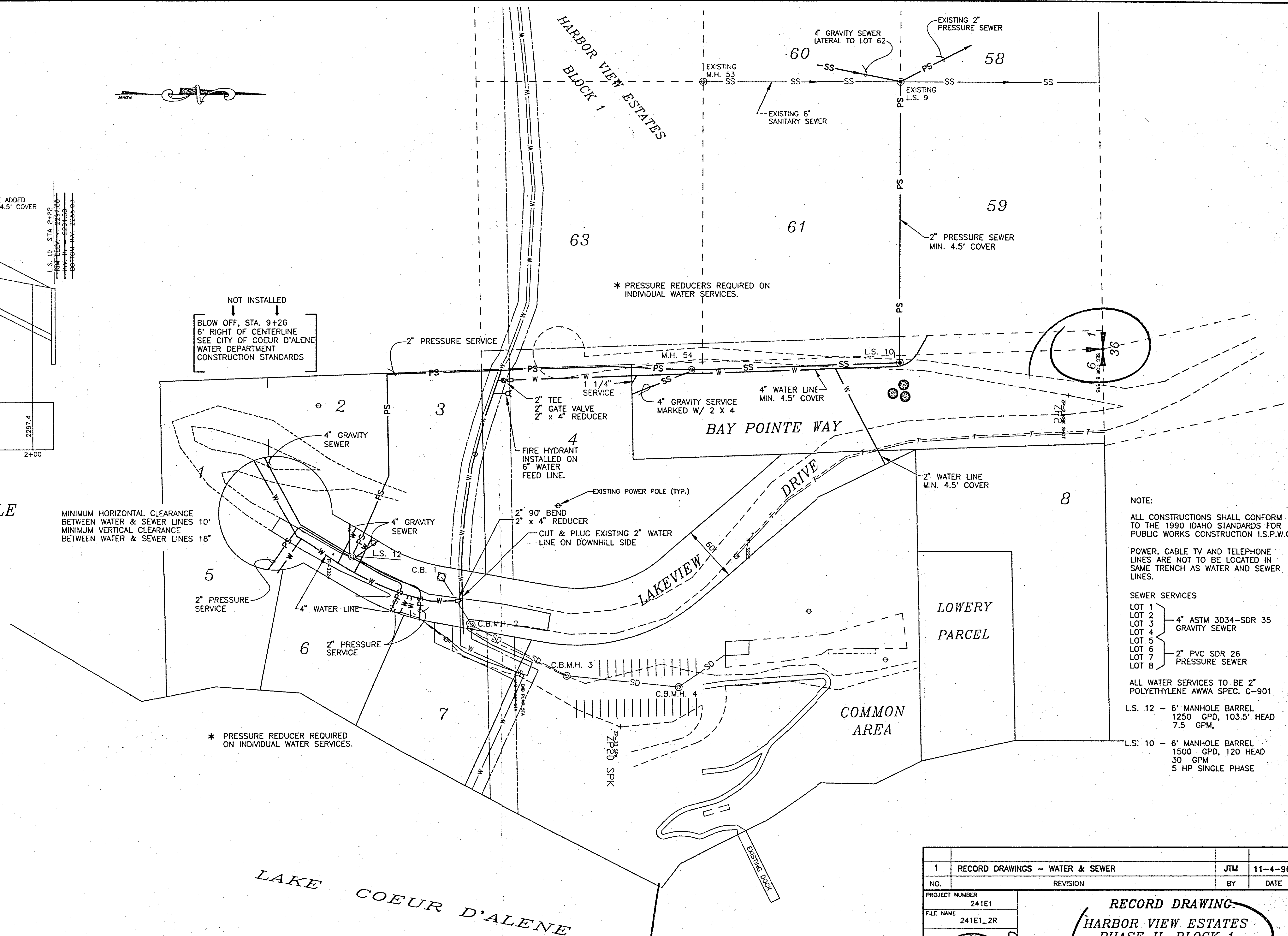
95-08447

1	RECORD DRAWING	G.W.N.	12-4-91
NO.	REVISION	BY	DATE
PROJECT NUMBER	241		
FILE NAME	D241F-7		
HARBOR VIEW ESTATES RESERVOIR STRUCTURAL RUEN-YEAGER & ASSOCIATES, INC. Consulting Engineers 1119 Ironwood Parkway, Suite 200 Coeur d'Alene, Idaho 83814			
PLOT DATE	12-6-91	SCALE	AS NOTED
DESIGN BY	G.W.N.	DRAWN BY	JLG/DSM
DATE	OCT. 1990	SHEET	7 OF 7



SEWER PROFILE

MINIMUM HORIZONTAL CLEARANCE
BETWEEN WATER & SEWER LINES 10'
MINIMUM VERTICAL CLEARANCE
BETWEEN WATER & SEWER LINES 18"



NOTE:
ALL CONSTRUCTIONS SHALL CONFORM
TO THE 1990 IDAHO STANDARDS FOR
PUBLIC WORKS CONSTRUCTION I.S.P.W.C.

POWER, CABLE TV AND TELEPHONE
LINES ARE NOT TO BE LOCATED IN
SAME TRENCH AS WATER AND SEWER
LINES.

SEWER SERVICES
LOT 1 }
LOT 2 } 4" ASTM 3034-SDR 35
LOT 3 } GRAVITY SEWER
LOT 4 }
LOT 5 }
LOT 6 } 2" PVC SDR 26
LOT 7 } PRESSURE SEWER
LOT 8 }

ALL WATER SERVICES TO BE 2"
POLYETHYLENE AWWA SPEC. C-901

L.S. 12 - 6" MANHOLE BARREL
1250 GPD, 103.5' HEAD
7.5 GPM,

L.S. 10 - 6" MANHOLE BARREL
1500 GPD, 120 HEAD
30 GPM
5 HP SINGLE PHASE

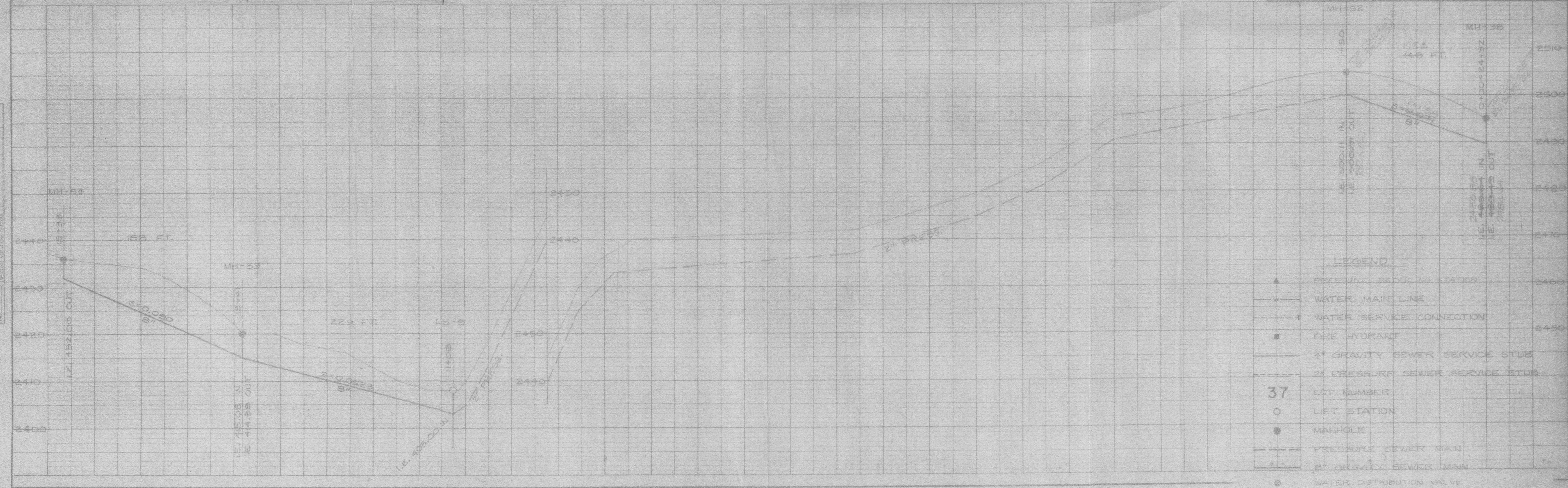
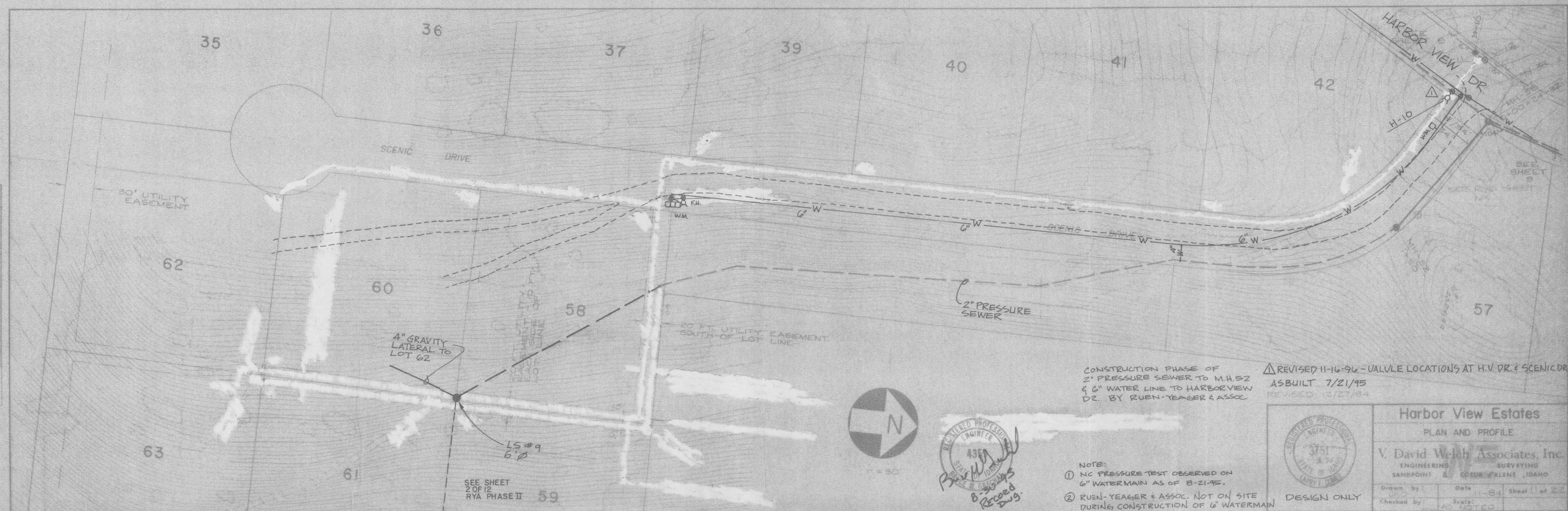
1	RECORD DRAWINGS - WATER & SEWER	JTM	11-4-96
NO.	REVISION	BY	DATE
PROJECT NUMBER 241E1			
FILE NAME 241E1_2R			
		RECORD DRAWING HARBOR VIEW ESTATES PHASE II, BLOCK 1 SEWER & WATER DESIGN	
		RUEN-YEAGER & ASSOCIATES, INC. Consulting Engineers 1119 Ironwood Parkway, Suite 200 Coeur d'Alene, Idaho 83814	
PLOT DATE 11-05-96	SCALE Horiz. 1" = 50' Vert. 1" = 5'	DESIGN BY G.N.	DRAWN BY J.L.G.
		DATE 2-18-92	SHEET 2 of 12

POD
#1#2

95-08447

PLAN
 DATE: 11-16-94
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]
 SCALE: AS SHOWN

PROFILE
 DATE: 11-16-94
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]
 SCALE: AS SHOWN



CONSTRUCTION PHASE OF
 2" PRESSURE SEWER TO M.H. 52
 4" WATER LINE TO HARBOR VIEW
 DR. BY RUEN-YEAGER & ASSOC.

REVISD 11-16-94 - VALVE LOCATIONS AT H.V. DR. & SCENIC DR.
 AS BUILT 7/21/95
 REVISED 12/27/94

- NOTE:
- ① NO PRESSURE TEST OBSERVED ON 6" WATERMAIN AS OF 8-21-95.
 - ② RUEN-YEAGER & ASSOC. NOT ON SITE DURING CONSTRUCTION OF 6" WATERMAIN



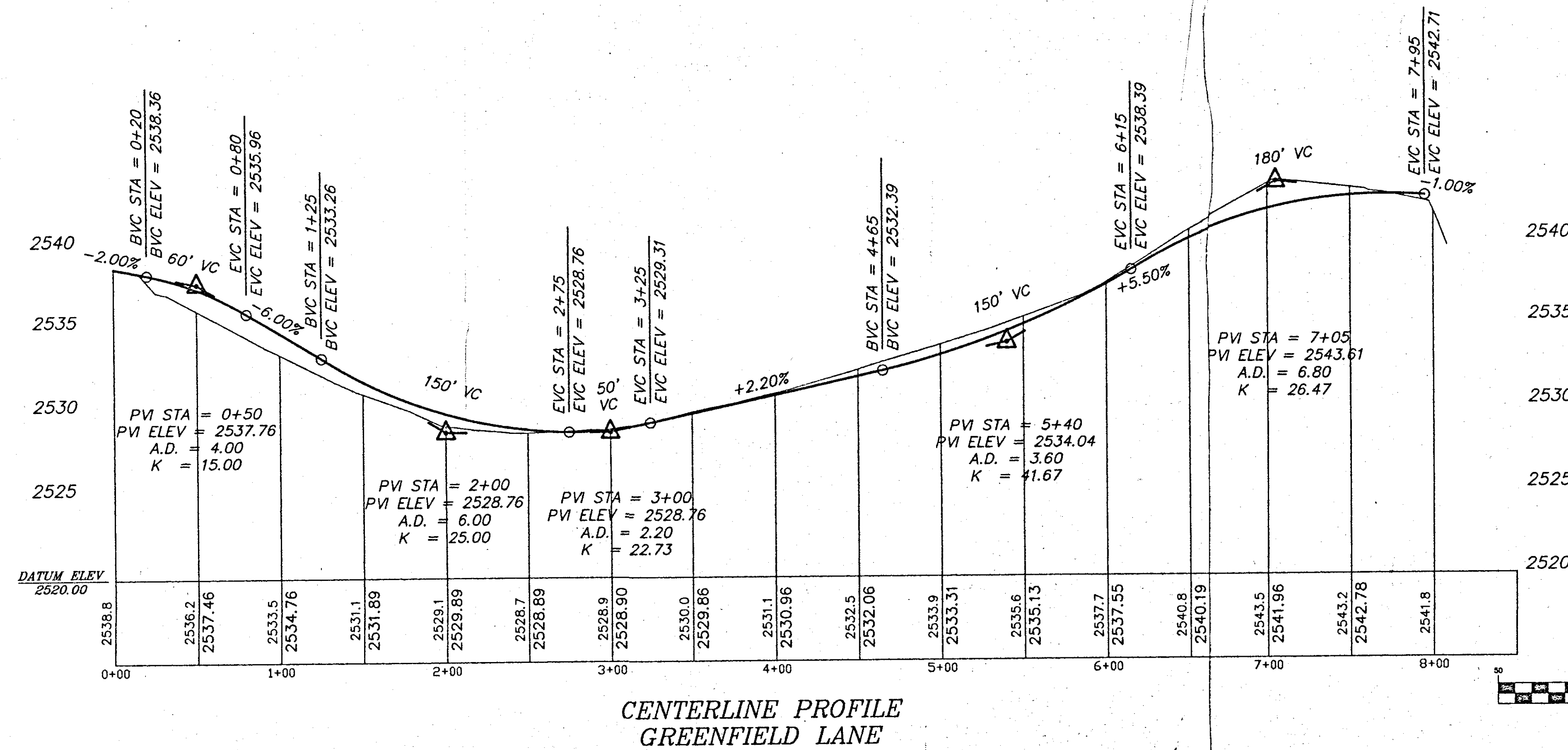
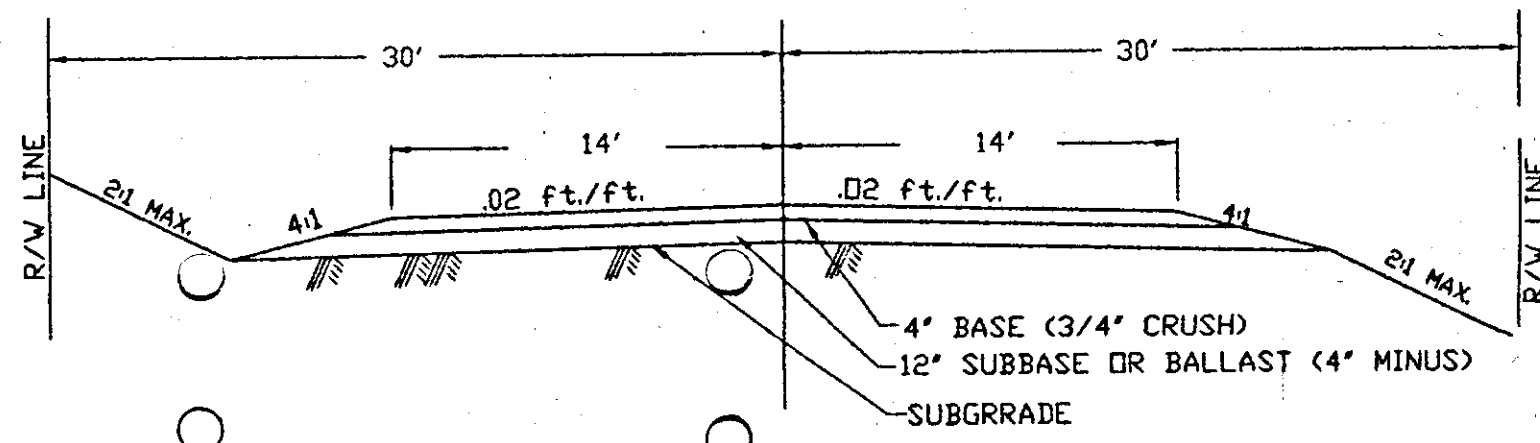
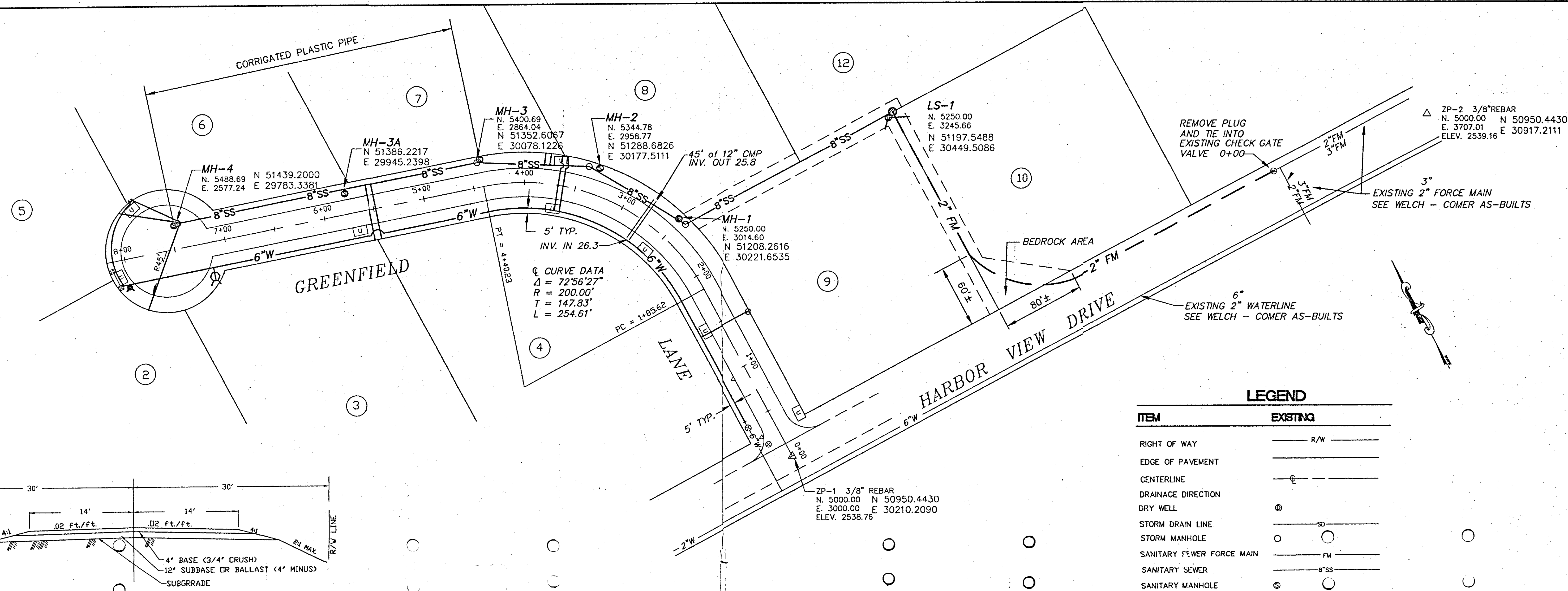
Harbor View Estates
 PLAN AND PROFILE
 V. David Welch Associates, Inc.
 ENGINEERING SURVEYING
 SANDPOINT & COOTER, IDAHO

Drawn by: [Signature] Date: 11-16-94 Sheet 1 of 22
 Checked by: [Signature] Scale: AS NOTED

DESIGN ONLY

- LEGEND**
- ▲ PRESSURE REDUCING STATION
 - WATER MAIN LINE
 - WATER SERVICE CONNECTION
 - FIRE HYDRANT
 - 4" GRAVITY SEWER SERVICE STUB
 - 2" PRESSURE SEWER SERVICE STUB
 - 37 LOT NUMBER
 - LIFT STATION
 - MANHOLE
 - PRESSURE SEWER MAIN
 - 4" GRAVITY SEWER MAIN
 - WATER DISTRIBUTION VALVE
 - AIR RELEASE VALVE - WATER

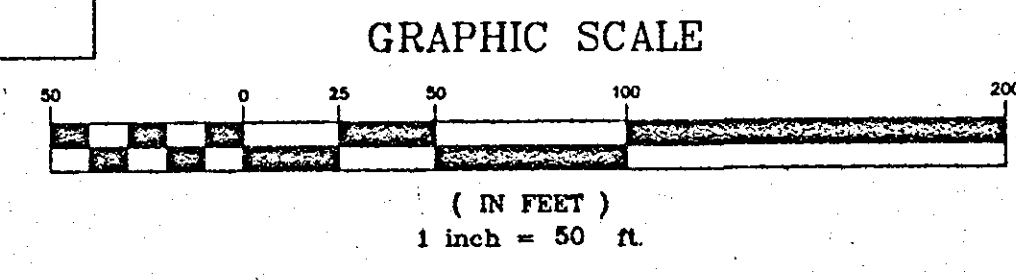
95-08447



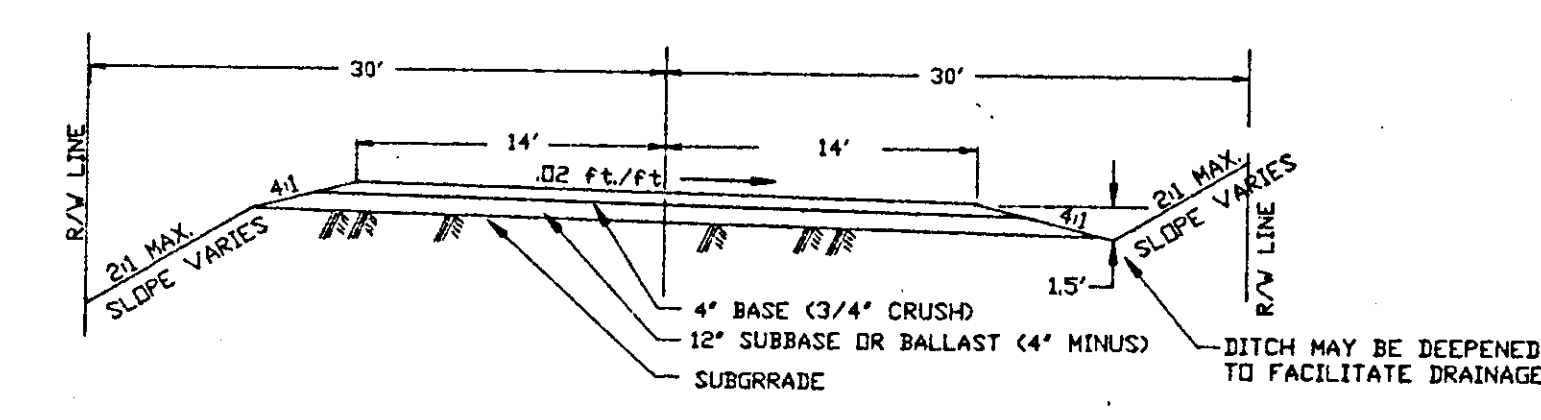
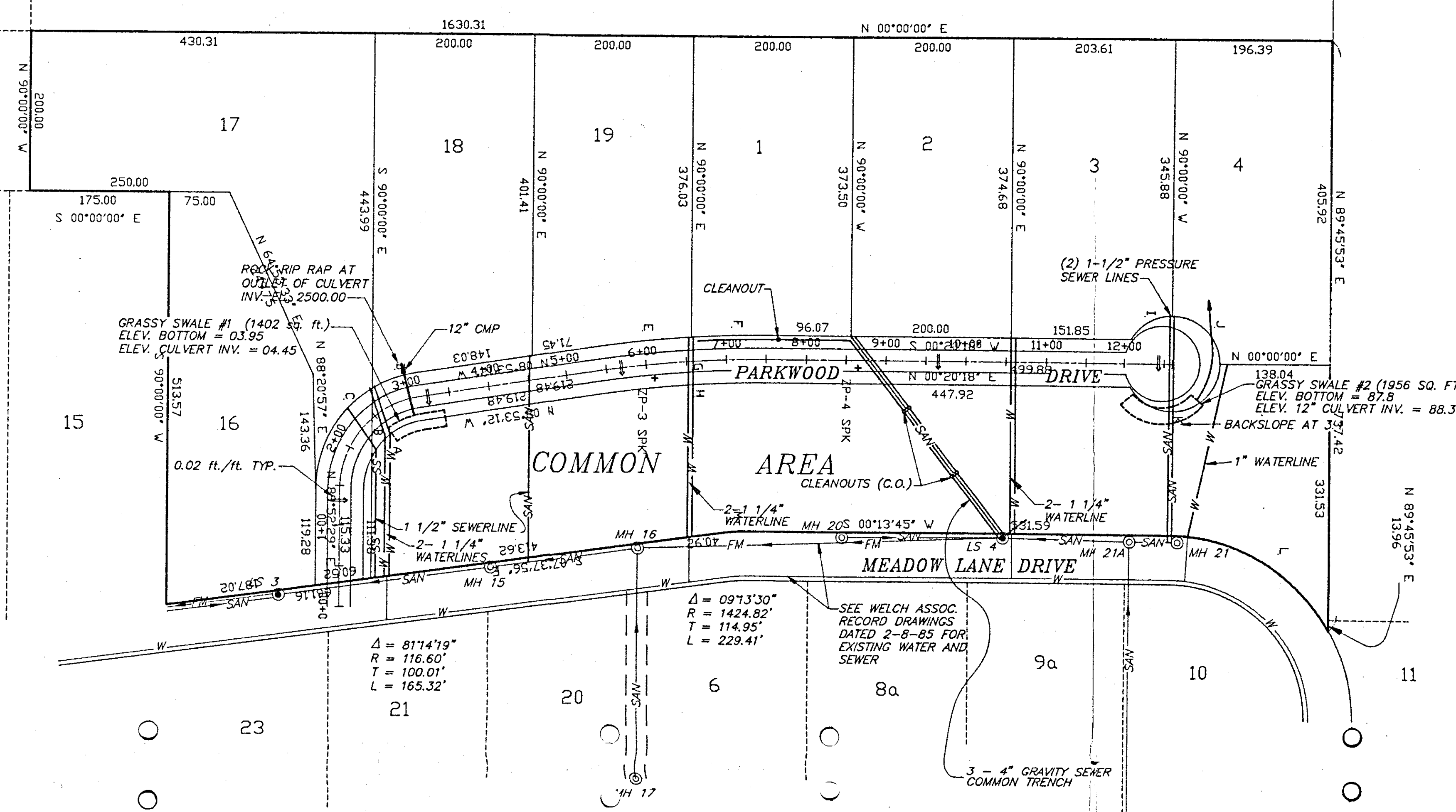
2 CORRUGATED POLYETHYLENE PLASTIC PIPE MANUFACTURED BY ADS (ASTM D3350 "STANDARD SPECIFICATIONS FOR POLYETHYLENE PLASTIC PIPE AND FITTING MATERIALS") USED BETWEEN MANHOLE #3 & #4.

RECORD DRAWING CERTIFICATION
THE WATER AND SANITARY SEWER UTILITIES DENOTED ON THIS DRAWING HAVE BEEN TESTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, EXCLUDING THE 6" WATER MAIN ALONG GREENFIELD LANE AS OF 8-14-95.

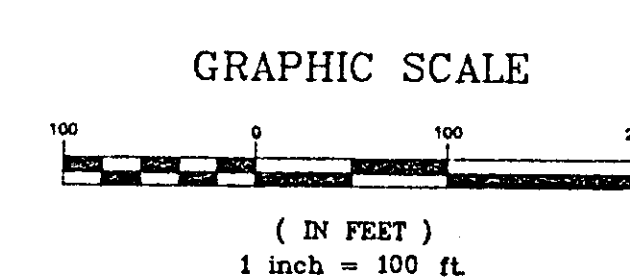
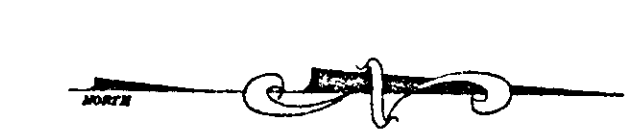
2	ADDITIONS TO RECORD DRAWING	BMG	11/96
1.	RECORD DRAWING	BMG	8/95
NO.	REVISION	BY	DATE
PROJECT NUMBER	241M		
FILE NAME	D241M_R		
		RECORD DRAWINGS WATER AND SEWER ONLY GREENFIELD LANE ROAD PLAN & PROFILE SEWER AND WATER PLAN	
RUEN-YEAGER & ASSOCIATES, INC. Consulting Engineers E. 5685 SELTICE WAY POST FALLS, IDAHO 83854		SCALE: HORIZ. 1" = 50' VERT. 1" = 5'	DESIGN BY: GN DRAWN BY: DM DATE: AUG., 1991 SHEET: 1 OF 3
PLOT DATE 11-22-96			



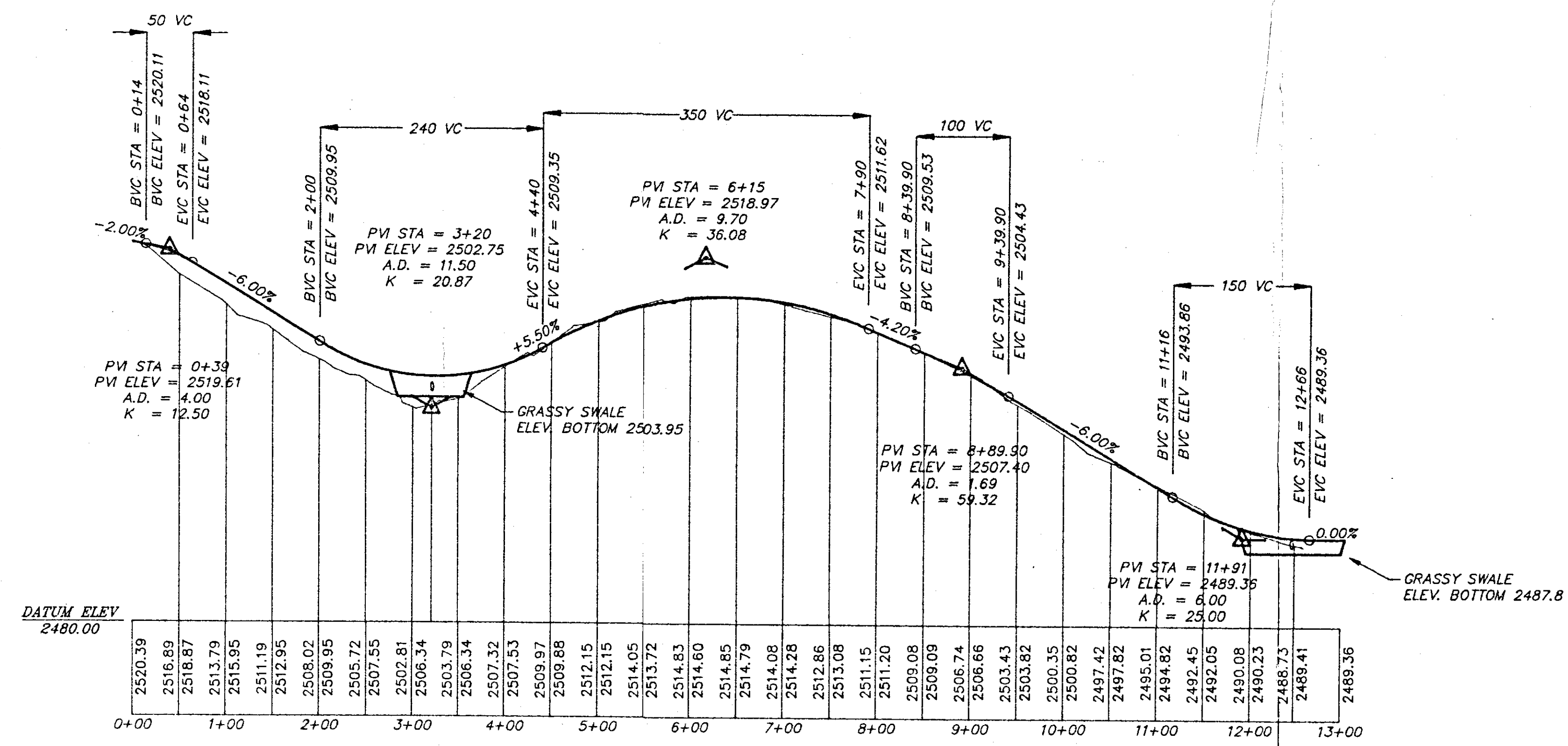
95-08447



NOTE:
CONSTRUCTION FOR SERVICES TO LOTS 1 THRU 4
& LOTS 17 THRU 18 NOT INSPECTED OR TESTED BY
RUEN-YEAGER & ASSOC.
LOCATIONS & SIZES SUPPLIED BY CONTRACTOR.



CONTOUR INTERVAL 1 FT.



CENTERLINE PROFILE
PARKWOOD
SCALE VERT. 1" = 10'
HORIZ. 1" = 100'

- NOTES:
1. ALL WATER AND SEWER CONSTRUCTION SHALL CONFORM TO IDAHO STANDARDS FOR PUBLIC WORKS STANDARDS AND DEQ REQUIREMENTS. IMPORT BEDDING MATERIAL FOR ALL WATER AND SEWER.
 2. ALL ROADWAY CONSTRUCTION SHALL CONFORM TO THE CURRENT HIGHWAY STANDARDS FOR THE ASSOCIATED HIGHWAY DISTRICTS, KOOTENAI COUNTY.

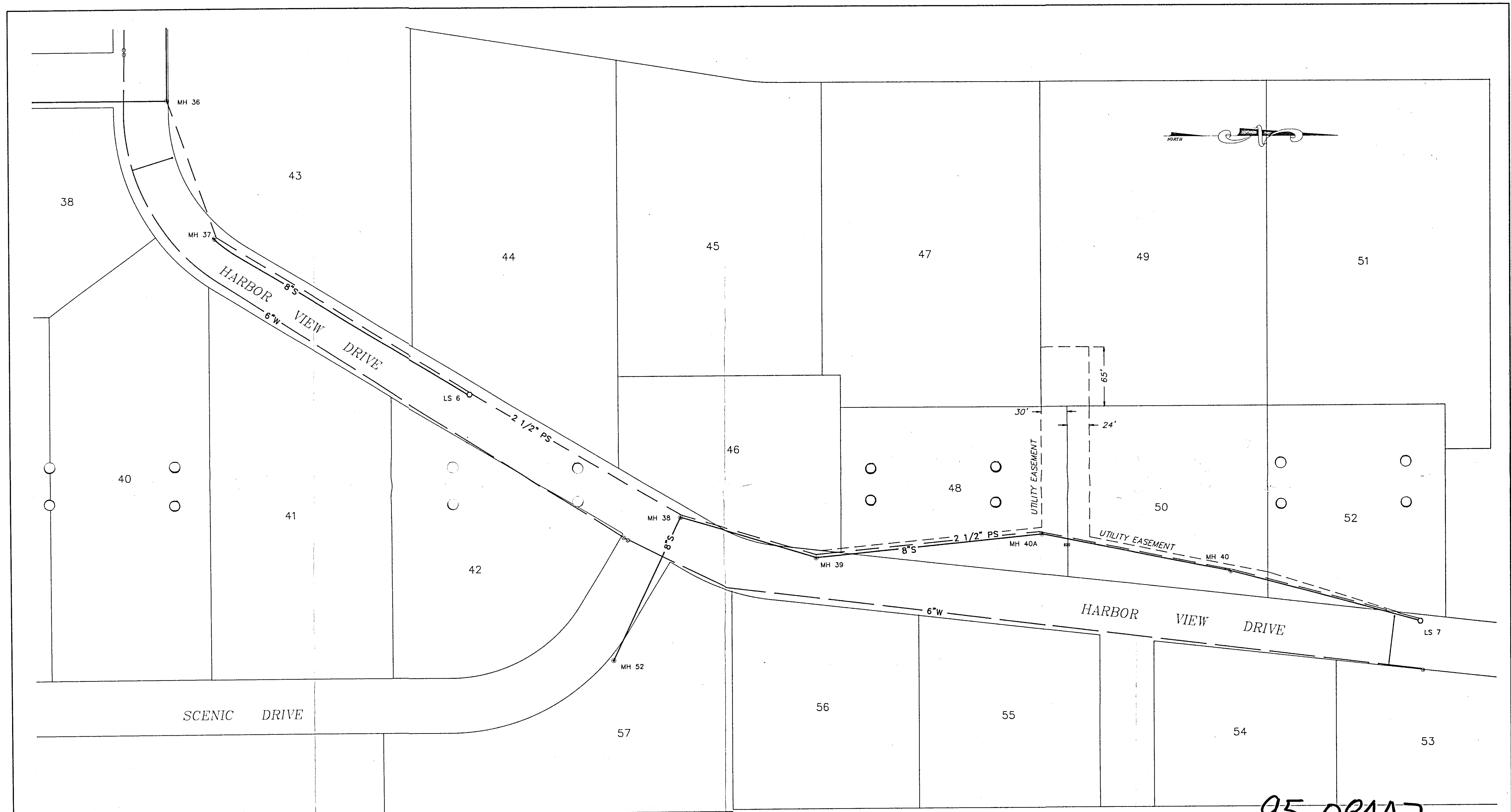
STORAGE CALCULATIONS FOR GRASSY SWALES TO STORE 6" OF WATER FROM FIRST 1/2" OF RAIN ON IMPERVIOUS AREAS.

GRASSY SWALE #1 - LENGTH 601', WIDTH 28'
 $\frac{0.5"}{12"} \times 28' \times 601' = 701 \text{ CUBIC FT. WATER}$
 AREA REQUIRED FOR 6" DEEP STORAGE = $\frac{701 \text{ FT.}^3}{.5 \text{ FT.}} = 1402 \text{ SQ. FT.}$

GRASSY SWALE #2 - LENGTH 585', WIDTH 28' + 95' DIA. CULDESAC
 $\frac{0.5"}{12"} \left((28' \times 585') + \pi \left(\frac{95'}{2} \right)^2 \right) = 977.7 \text{ CUBIC FT. WATER}$
 AREA REQUIRED FOR 6" DEEP STORAGE = $\frac{977.7 \text{ FT.}^3}{.5 \text{ FT.}} = 1956 \text{ SQ. FT.}$

1. RECORD DRAWING - FOR SEWER & WATER SERVICES		BMG	9/95
NO.	REVISION	BY	DATE
PROJECT NUMBER 241L			
FILE NAME D241L_1R			
RECORD DRAWING SEWER AND WATER SERVICES HARBOR VIEW ESTATES PARKWOOD LANE			
		SCALE HORIZ. 1"=100' VERT. 1"=10' DESIGN BY GN DRAWN BY DM DATE 9-9-91 SHEET	
E. 5685 SELTICE WAY POST FALLS, IDAHO 83835		PLOT DATE 09-22-95	

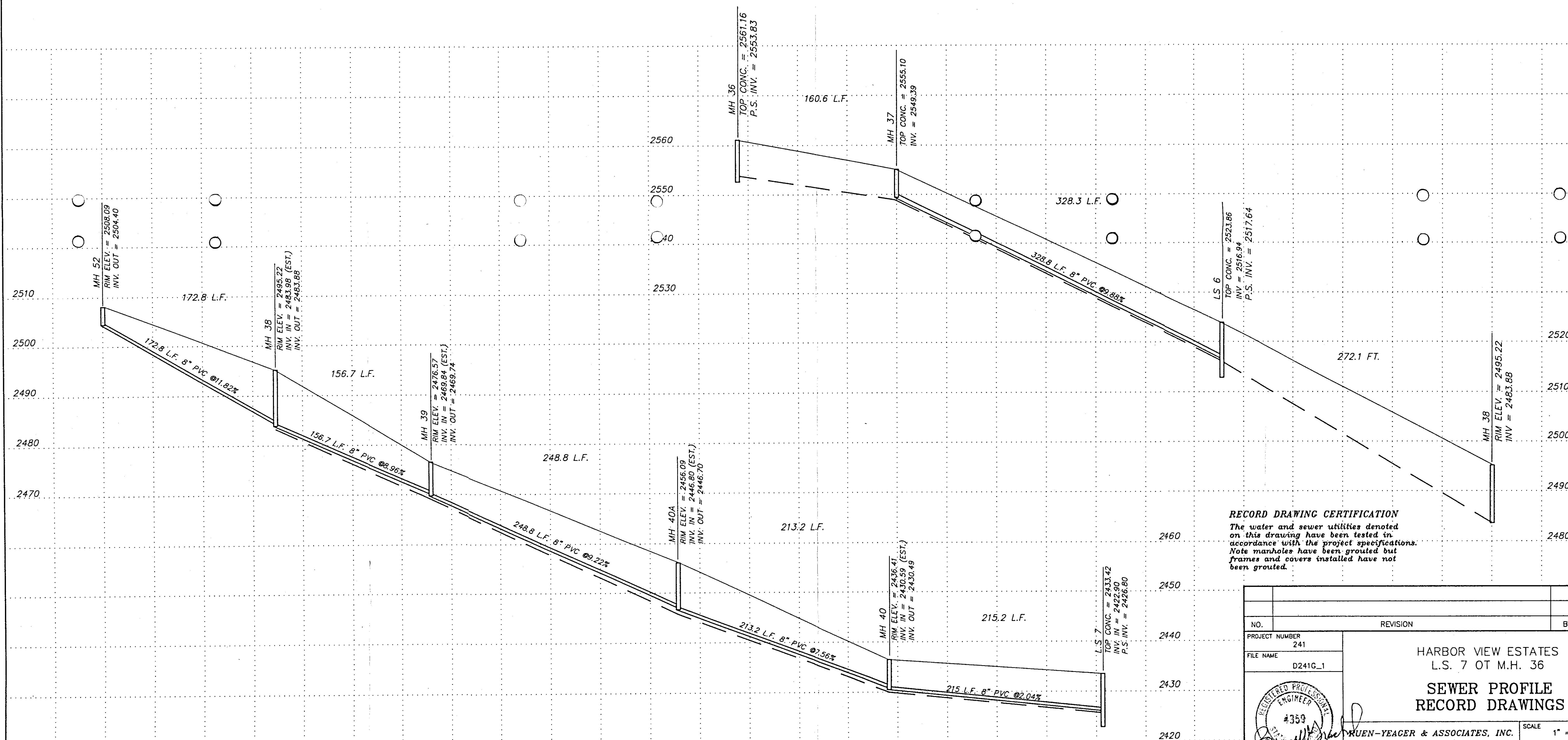
95-08447



95-08447

RECORD DRAWING CERTIFICATION
 The water and sewer utilities denoted on this drawing have been tested in accordance with the project specifications. Note manholes have been grouted but frames and covers installed have not been grouted.

NO.		REVISION		BY	DATE
PROJECT NUMBER 241		HARBOR VIEW ESTATES L.S. 7 OT M.H. 36 WATER AND SEWER RECORD DRAWINGS			
FILE NAME D241G_1					
PLOT DATE 05-24-91		RUEN-YEAGER & ASSOCIATES, INC. Consulting Engineers 1119 Ironwood Parkway, Suite 200 Coeur d' Alene, Idaho 83814		SCALE 1" = 50'	DESIGN BY DM DATE OCT. 1990 SHEET 1-A



RECORD DRAWING CERTIFICATION
 The water and sewer utilities denoted on this drawing have been tested in accordance with the project specifications. Note manholes have been grouted but frames and covers installed have not been grouted.

NO.		REVISION		BY	DATE
PROJECT NUMBER 241		HARBOR VIEW ESTATES L.S. 7 OT M.H. 36			
FILE NAME D241G_1		SEWER PROFILE RECORD DRAWINGS			
		KUEN-YEAGER & ASSOCIATES, INC. Consulting Engineers 1119 Ironwood Parkway, Suite 200 Coeur d' Alene, Idaho 83814		SCALE 1" = 50' DESIGN BY DATE OCT. 1990 DRAWN BY DM SHEET 1-B	
PLOT DATE 10-26-90					