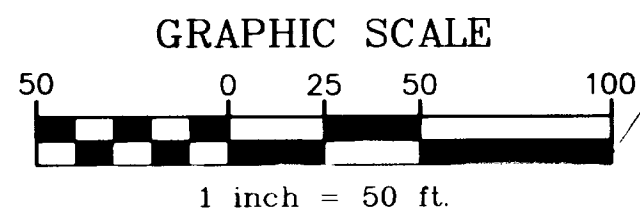


**CONSTRUCTION NOTES**

UNDER THIS PERMIT REQUEST, ONLY TREES WITHIN THE GRADING LIMITS AND STRIPPING AREAS ARE TO BE REMOVED.

TREE PRESERVATION AREAS TO BE SURROUNDED BY SAFETY FENCE, 10' PAST THE TREE'S DRIP LINES.



AS-BUILT  
THESE AS-BUILT PLANS ARE BASED ON PERIODIC FIELD OBSERVATIONS AND PERFORMING SURVEY MEASUREMENTS OF PUBLIC UTILITIES

AS-BUILT

5 CWC 12/15/00 AS-BUILT M-LAR

4 CWC 10/30/00 REVISED AS-BUILT

3 PAB 12/23/99 AS-BUILT

2 CWC 7/17/98 CHANGE TO PROPERTY LINES

1 SBT 7/10/98 GRADING REVISION ALONG FIREST

NO. BY DATE DESCRIPTION

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WEST LINN, OR 97068  
(503) 657-3402  
(503) 657-3635

**RIDGE VIEW ESTATES II & III**  
**EROSION CONTROL PLAN**  
BLAND CIRCLE  
WEST LINN, OR

Project 97024  
Designed: SBT  
Drawn: SBT  
Checked:  
Date: 3/98

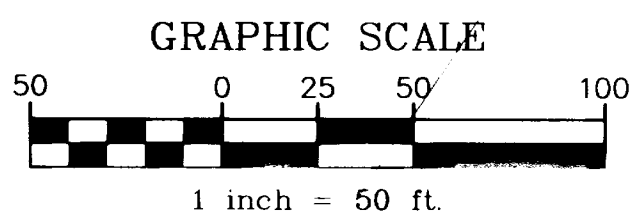
2 of 20



REF: CARLSON TESTING, INC. FINAL REPORT OF EARTHWORK  
OBSERVATION AND TESTING RIDGEVIEW ESTATES II & III- LOTS  
40 -104 DATED JANUARY 19 2000 SUBMITTED WITH THESE  
AS-BUILTS.

EXTENTS OF  
GRADING

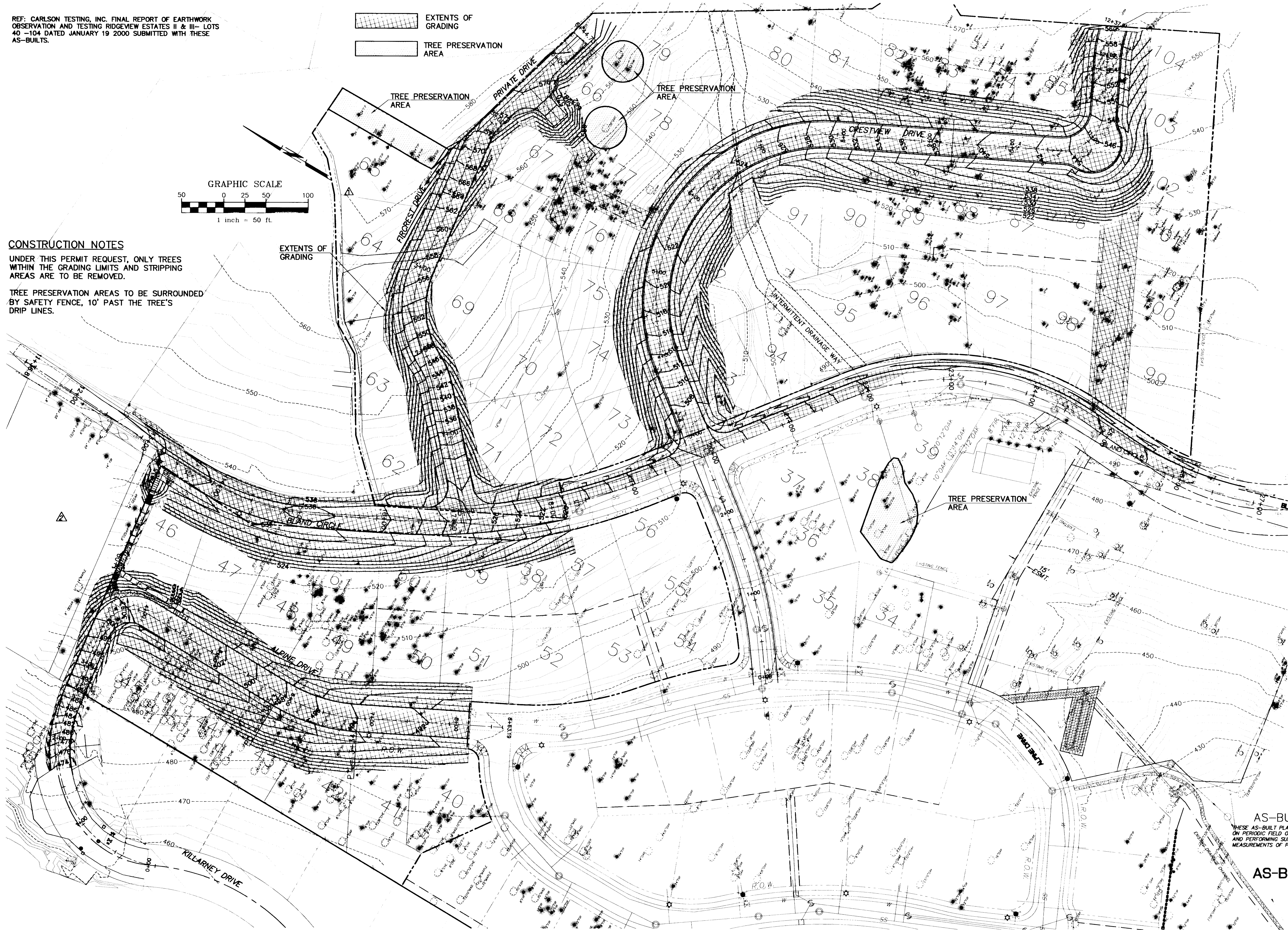
TREE PRESERVATION  
AREA



CONSTRUCTION NOTES

UNDER THIS PERMIT REQUEST, ONLY TREES  
WITHIN THE GRADING LIMITS AND STRIPPING  
AREAS ARE TO BE REMOVED.

TREE PRESERVATION AREAS TO BE SURROUNDED  
BY SAFETY FENCE, 10' PAST THE TREE'S  
DRIP LINES.



AS-BUILT  
THESE AS-BUILT PLANS ARE BASED  
ON PERIODIC FIELD OBSERVATIONS  
AND PERFORMING SURVEY  
MEASUREMENTS OF PUBLIC UTILITIES

AS-BUILT

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**RIDGE VIEW ESTATES II & III  
GRADING LIMITS & TREE PROTECTION PLAN**  
BLAND CIRCLE  
WEST LINN, OR

Project 97024  
Designed: SBT  
Drawn: SBT  
Checked:  
Date: 3/98

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REVISIONS		NO.	BY	DATE	DESCRIPTION
5	CWO	12/15/00	AS-BUILTS W/LAR		
4	CWO	10/30/00	REVISED AS-BUILTS		
3	PJB	12/23/99	AS-BUILTS		
2	CWO	7/17/98	CHANGE TO PROPERTY LINES		
1	SBT	7/10/98	GRADING REVISION ALONG FIRCREST		



SEEDING / MULCHING NOTES:

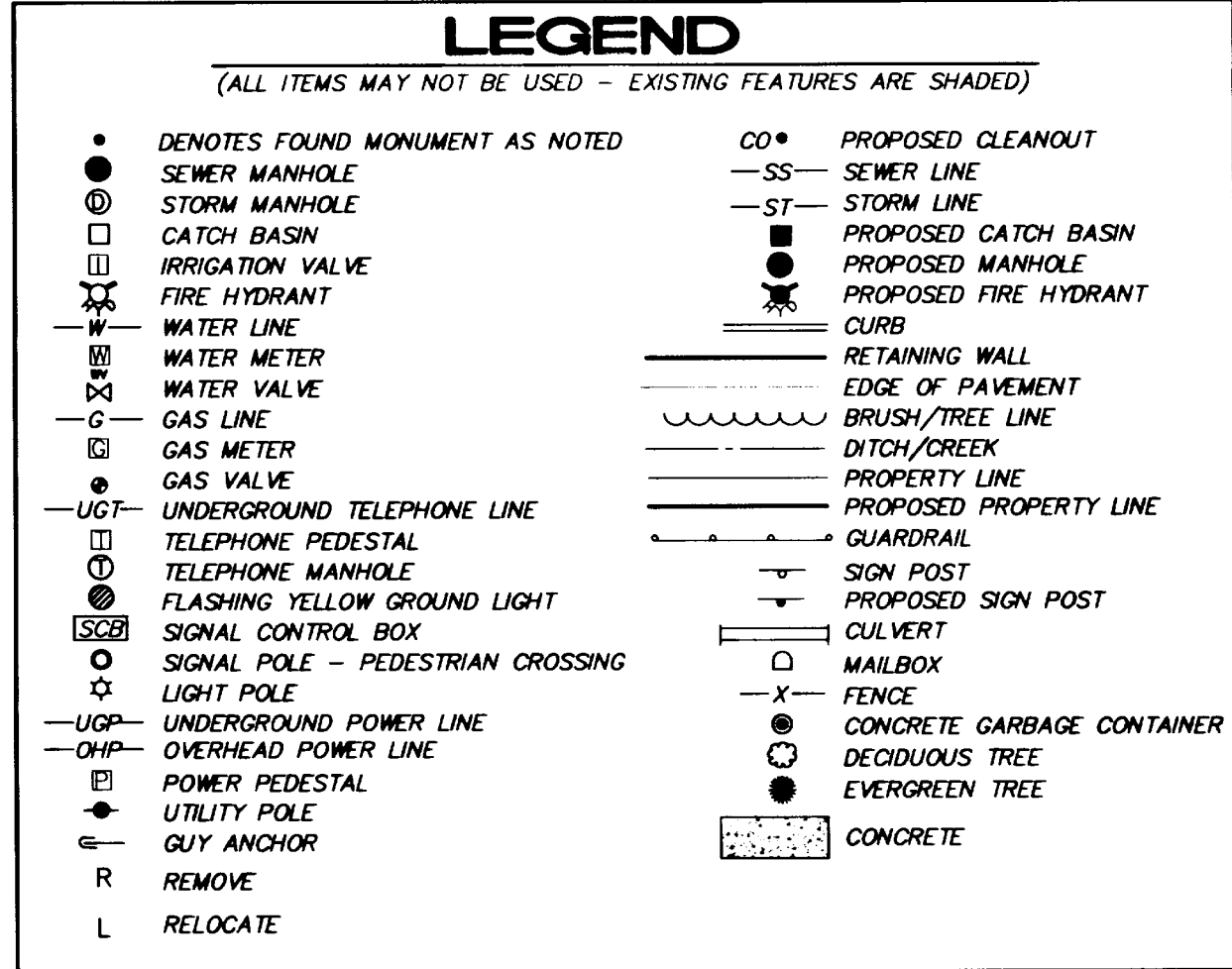
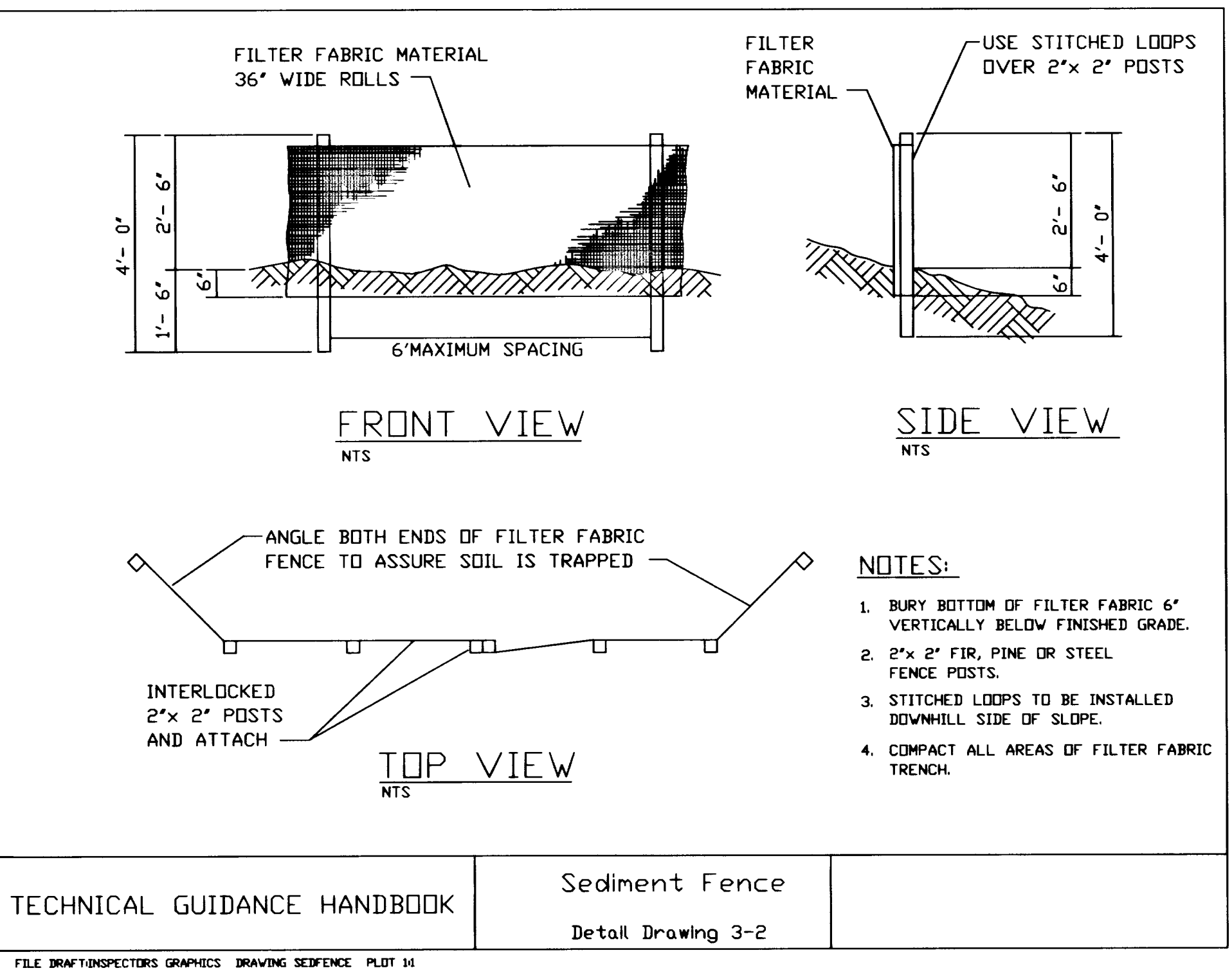
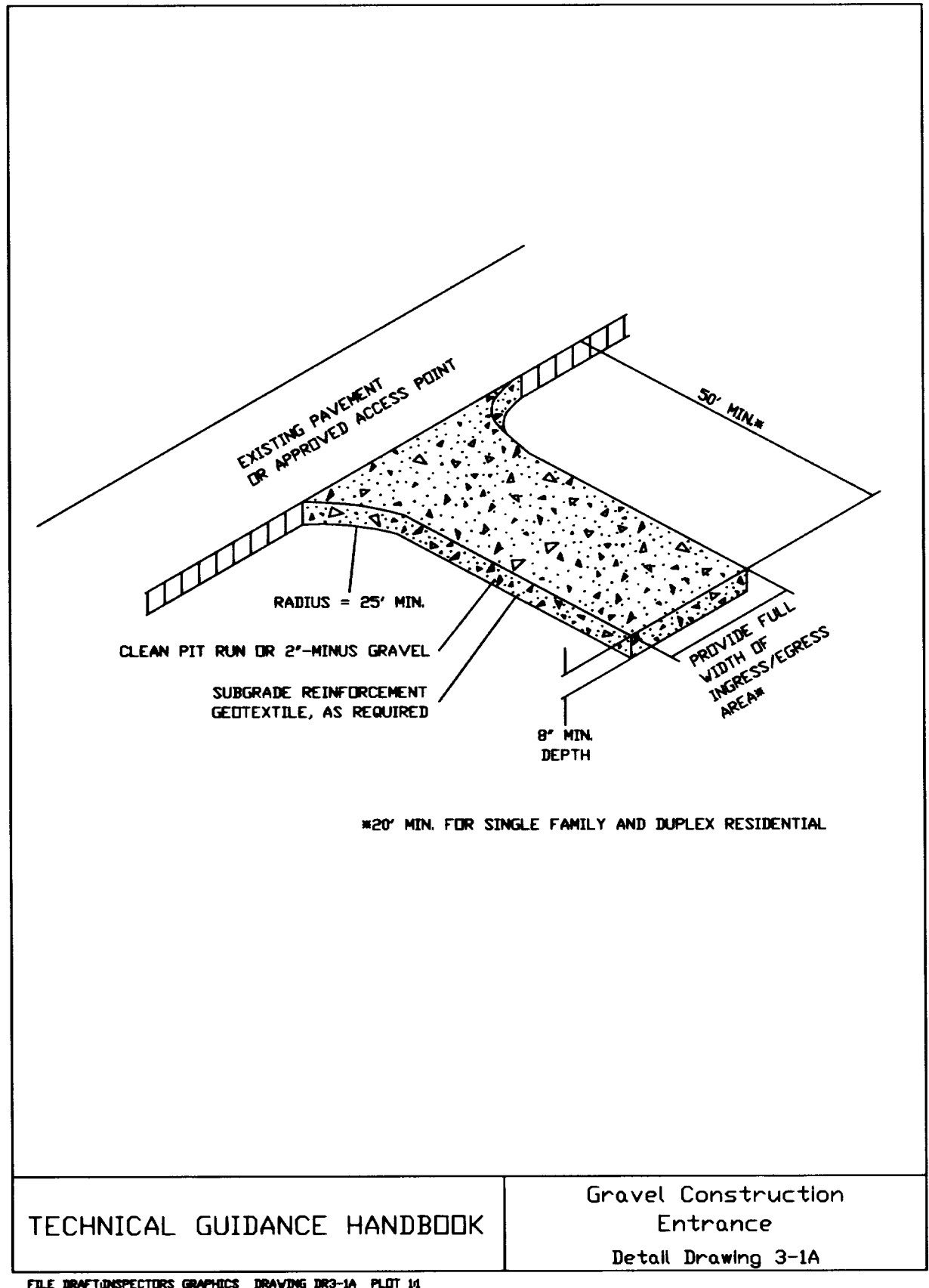
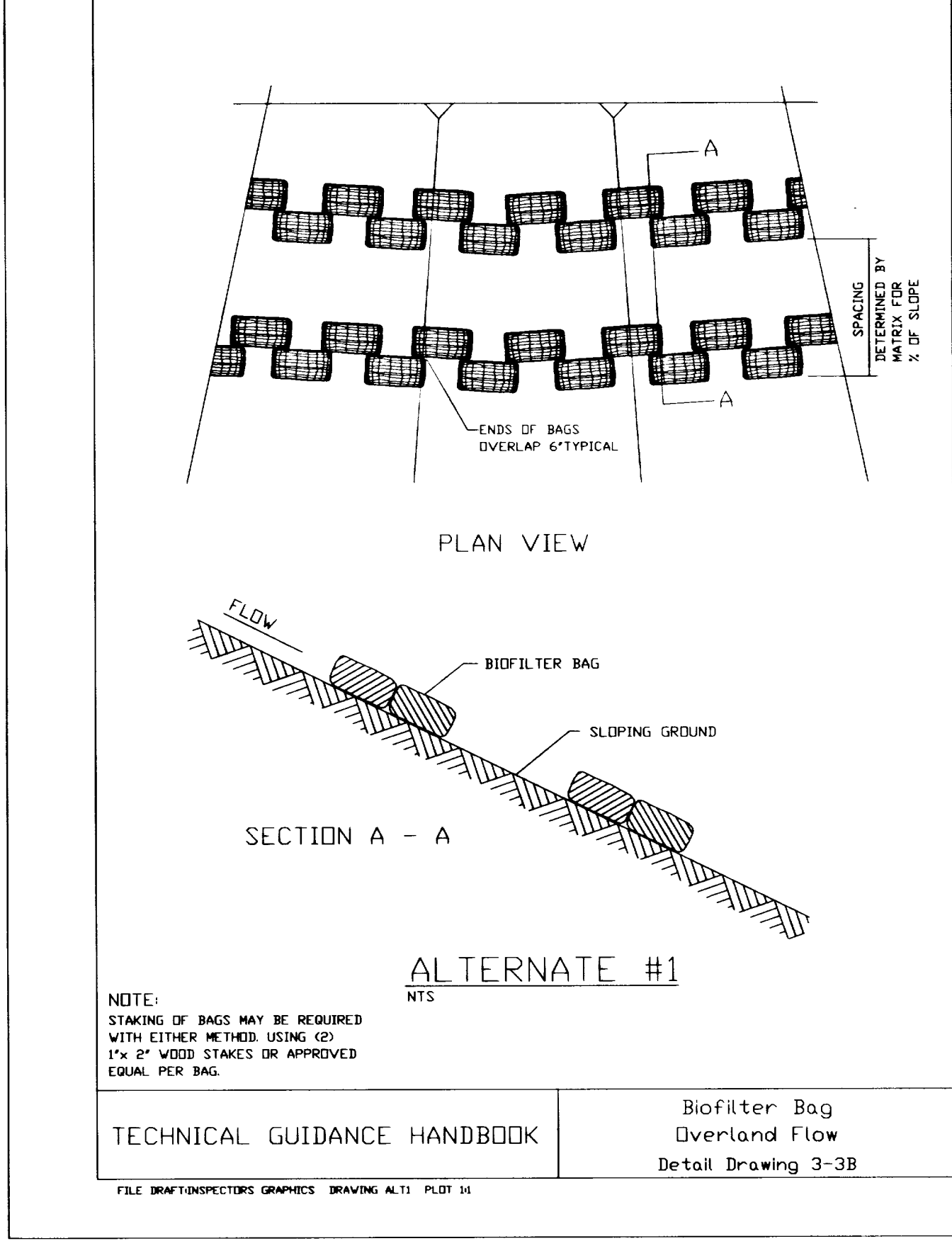
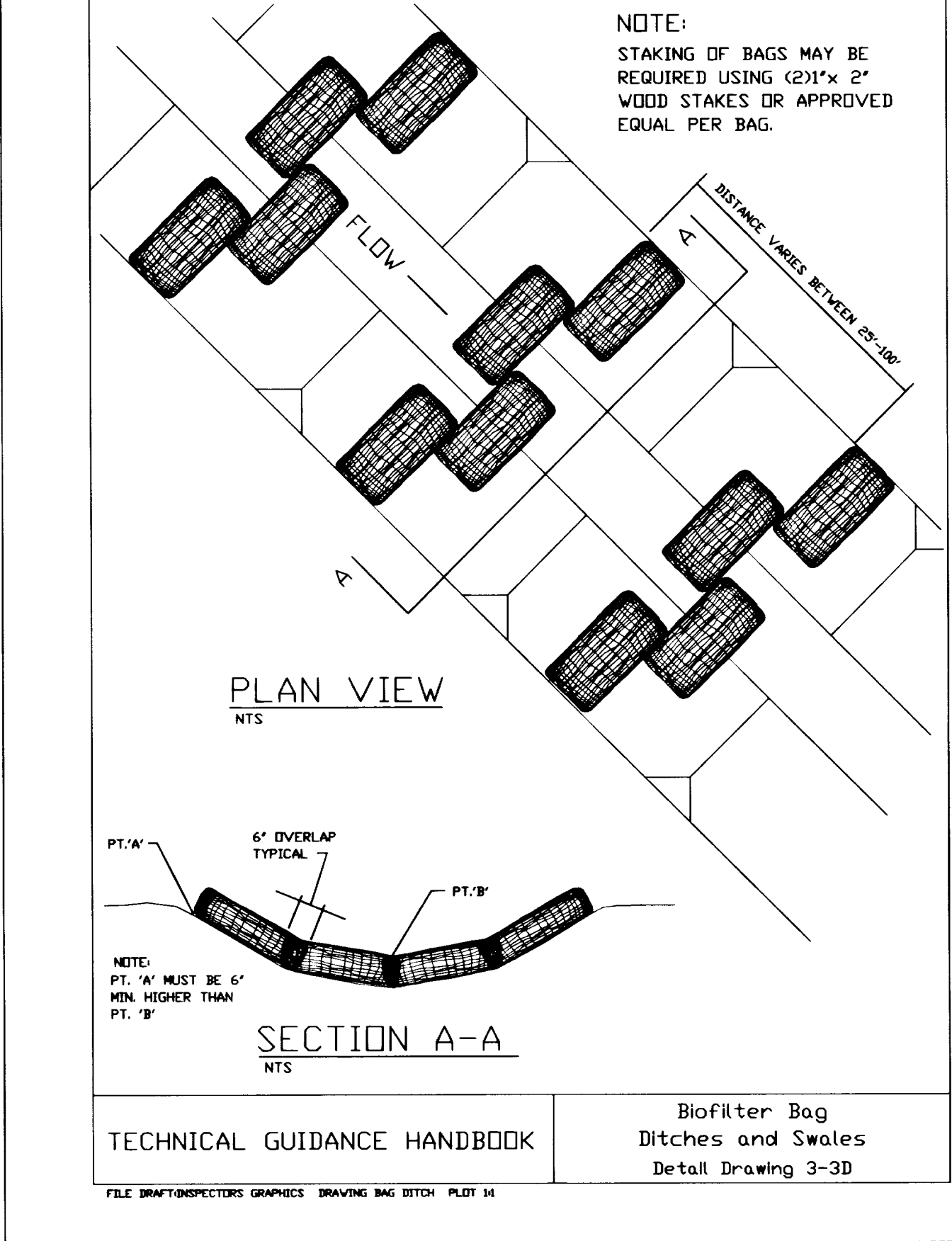
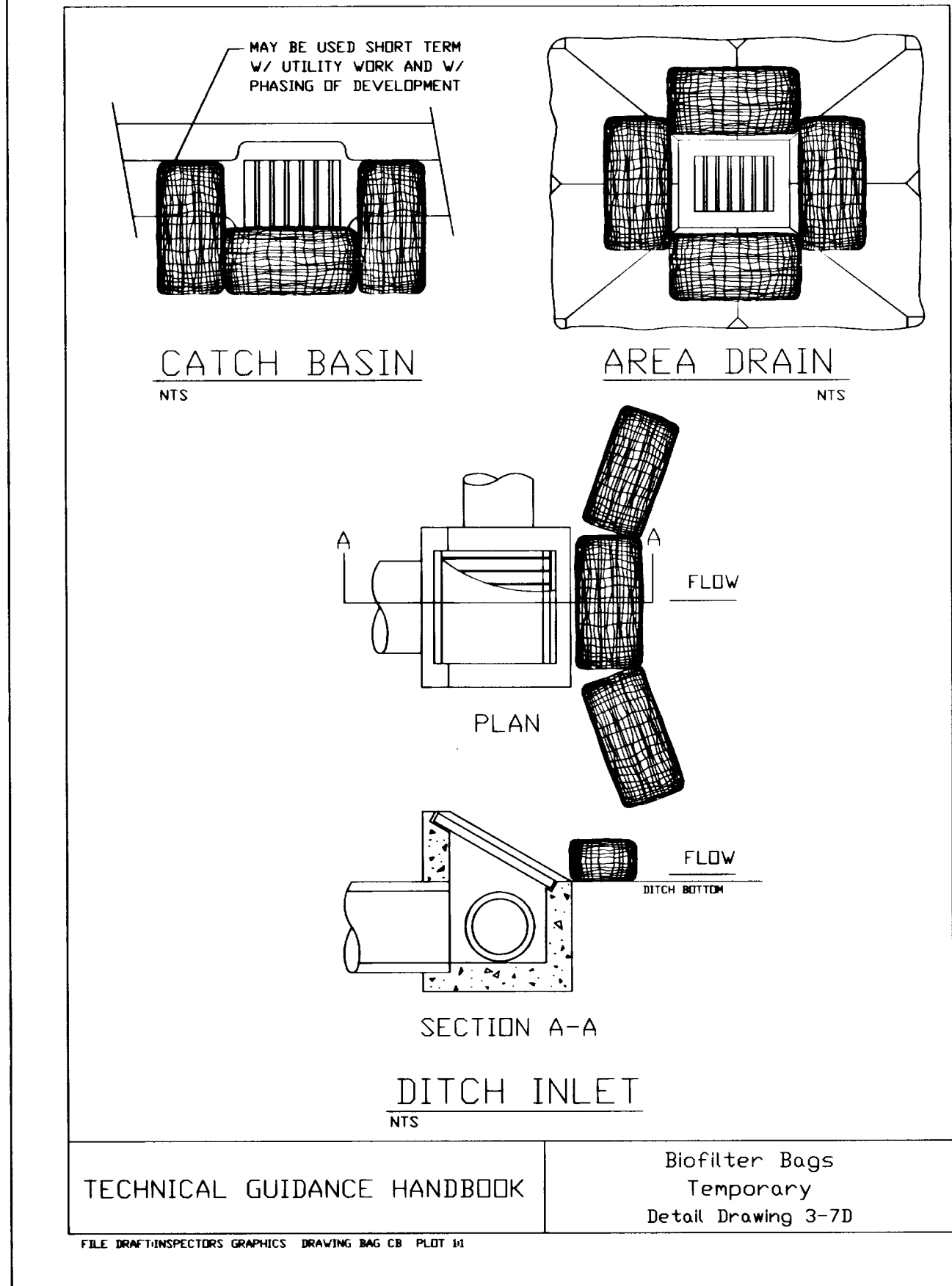
- A. Temporary grass cover measures must be fully established by November 1 or other cover measures will have to be implemented until adequate grass coverage is achieved. To establish an adequate grass stand for controlling erosion by November 1, it is recommended that seeding and mulching occur by September 1.
- B. Hydromulch shall be applied with grass seed at a rate of 2000 lb./acre. On slopes steeper than 10 percent, hydroseed and mulch shall be applied with a bonding agent (tackifier). Application rate and methodology to be in accordance with seed supplier recommendations.
- C. Dry, loose, weed-free straw used as mulch shall be applied at double the hydromulch application requirement (4000 lb./acre). Anchor straw by working in by hand or with equipment (rollers, cleat tracks, etc.).
- D. Mulch shall be spread uniformly immediately following seeding.
- E. Soil Preparation - Top soil should be prepared according to landscape plans, if available, or recommendations of grass seed supplier. It is recommended that slopes be roughened before seeding by "track-walking," (driving a crawling tractor up and down slopes to leave a pattern of cleat imprints parallel to slope contours) or other method to provide more stable sites for seeds to rest.
- F. Seeding - Recommended erosion control grass seed mixes are as follows. Similar mixes designed to achieve erosion control may be substituted if approved by jurisdiction.
- Dwarf Grass Mix (low height, low maintenance):  
Dwarf Perennial Ryegrass, 80% by weight  
Creeping Red Fescue, 20% by weight  
Application rate: 100 pounds minimum per acre
  - Standard Height Grass Mix  
Annual Ryegrass, 40% by weight  
Turf-type Fescue, 60% by weight  
Application rate: 100 pounds minimum per acre
- G. Fertilization for grass seed - In accordance with supplier's recommendations. Development areas within 50 feet of water bodies and wetlands must use a non-phosphorus fertilizer.
- H. Netting and Anchors, as needed - For disturbed areas on slopes and in ditches/swales, biodegradable netting or Jute is desirable and may be used instead of bonding agents to provide a stable area for seeding. Netting should be anchored in accordance with manufacturer's recommendations.
- I. Watering - Seeding shall be supplied with adequate moisture to establish grass. Supply water as needed, especially in abnormally hot or dry weather or on adverse sites. Water application rates should be controlled to provide adequate moisture without causing runoff.
- J. Re-seeding - Areas which fail to establish grass cover adequate to prevent erosion shall be re-seeded as soon as such areas are identified, and all appropriate measures taken to establish adequate cover.

SEDIMENT FENCE:

- The filter fabric shall be purchased in a continuous roll cut to the length of the barrier to avoid use of joints. When joints are necessary, filter cloth shall be spliced together only at a support post, with a minimum 6-inch overlap, and both ends securely fastened to the post, or overlap 2"x 2" posts and attach as shown on detail sheet 3-2.
- The filter fabric fence shall be installed to follow the contours where feasible. The fence posts shall be spaced a maximum of 6 feet apart and driven securely into the ground a minimum of 24 inches.
- The filter fabric shall have a minimum vertical burial of 6 inches. All excavated material from filter fabric fence installation, shall be backfilled and compacted, along the entire disturbed area.
- Standard or heavy duty filter fabric fence shall have manufactured stitched loops for 2"x 2" post installation. Stitched loops shall be installed on the up hill side of the sloped area.
- Filter fabric fences shall be removed when they have served their useful purpose, but not before the upslope area has been permanently protected and stabilized.
- Filter fabric fences shall be inspected by applicant/contractor immediately after each rainfall and at least daily during prolonged rainfall. Any required repairs shall be made immediately.

EROSION CONTROL (WET WEATHER) NOTES:

- A. Wet weather measures apply to all disturbed soil areas with a slope greater than 2% and any soil stock piled on site. All section references in the following wet weather notes refer to sections of the Erosion/Sedimentation Control Plans Technical Guidance Handbook, Unified Sewerage Agency, August 1994
- B. All soil stock piled on site shall be treated with 2"-min. straw mulch cover (Sec. 3.3.7)



AS-BUILT  
THESE AS-BUILT PLANS ARE BASED ON PERIODIC FIELD OBSERVATIONS AND PERFORMING SURVEY MEASUREMENTS OF PUBLIC UTILITIES

AS-BUILT

NO	BY	DATE	DESCRIPTION
1	PAB	12/23/99	AS-BUILT
2	CWG	10/10/00	REVISED AS-BUILT
3	CWG	12/15/00	AS-BUILT MTCAR

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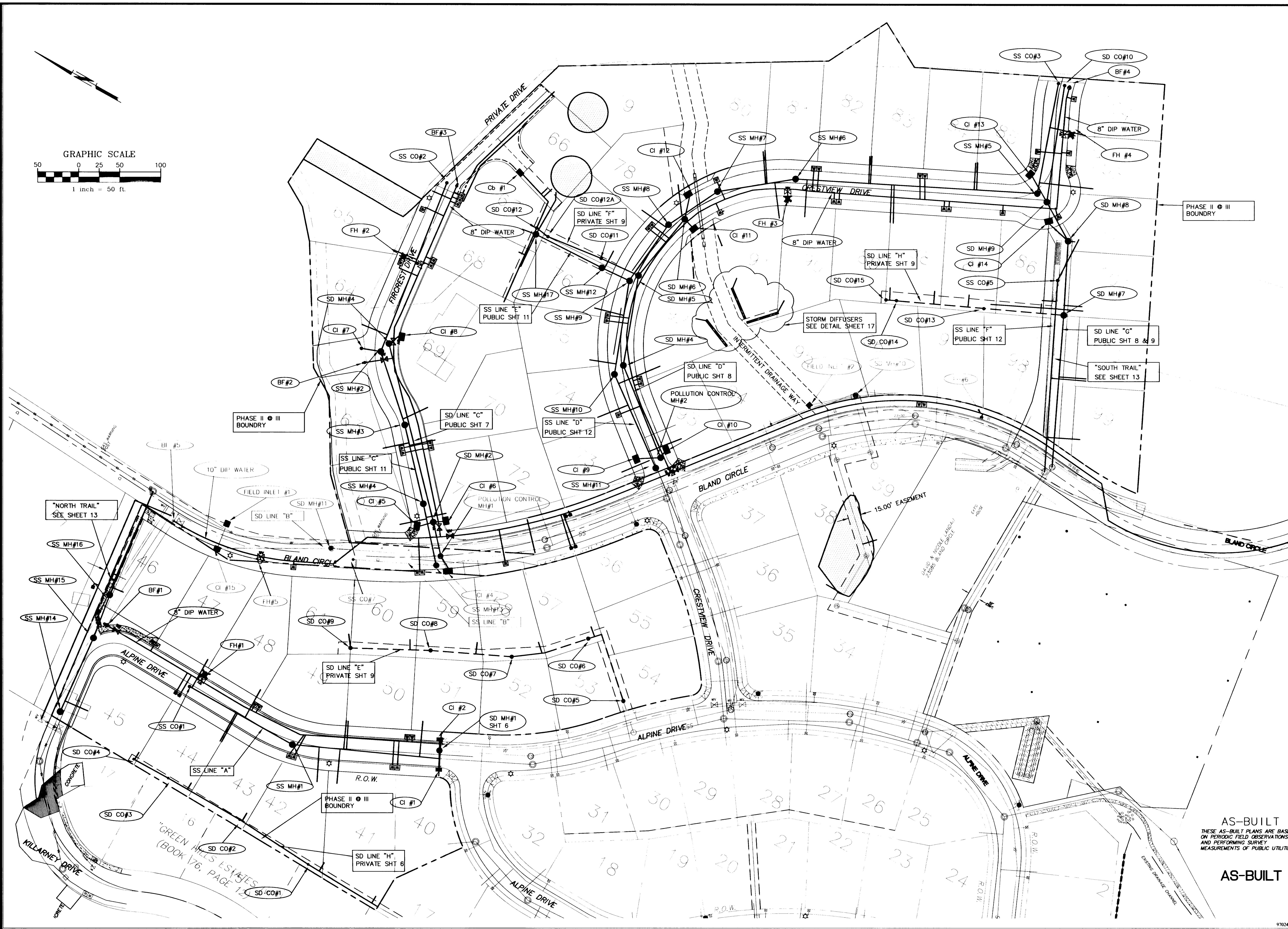
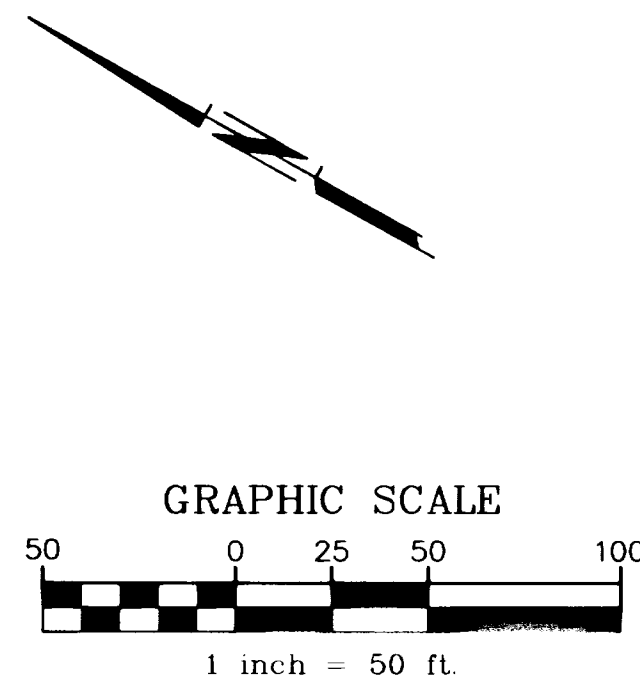
TRILAND DESIGN GROUP, INC.  
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PREPARED FOR:  
J.T. SMITH COMPANY  
23600 SALAMO ROAD  
WEST LINN, OR 97068  
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RIDGE VIEW ESTATES II & III  
EROSION CONTROL NOTE & DETAILS  
BLAND CIRCLE  
WEST LINN, OR

Project	97024
Designed:	SBT
Drawn:	SBT
Checked:	
Date:	4/98





AS-BUILT  
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ON PERIODIC FIELD OBSERVATIONS  
AND PERFORMING SURVEY  
MEASUREMENTS OF PUBLIC UTILITIES

AS-BUILT

NO.	DATE	BY	DESCRIPTION
1	7/15/99	CWQ	NEW PROPERTY LINES AND SEWER LATERAL
2	10/29/99	CWQ	CHANGE IN LENGTH OF DIFFUSERS AND CONFIG.
3	12/23/99	PJB	AS-BUILTS
4	10/30/00	CWQ	REVISED AS-BUILTS
5	12/15/00	CWQ	AS-BUILTS W/AR

REVISIONS



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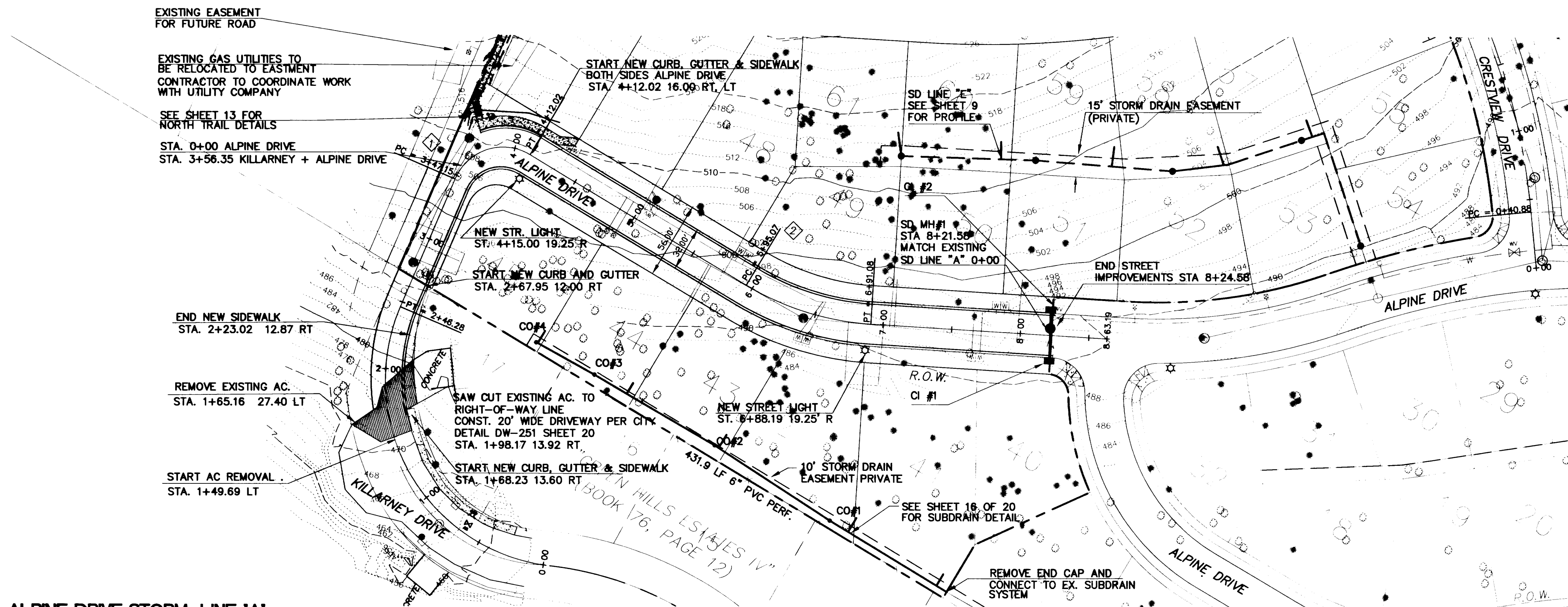
PREPARED FOR:

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WEST LINN, OR 97068  
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FAX (503) 657-3635

**RIDGE VIEW ESTATES II & III**  
**MASTER UTILITY PLAN**  
BLAND CIRCLE  
WEST LINN, OREGON

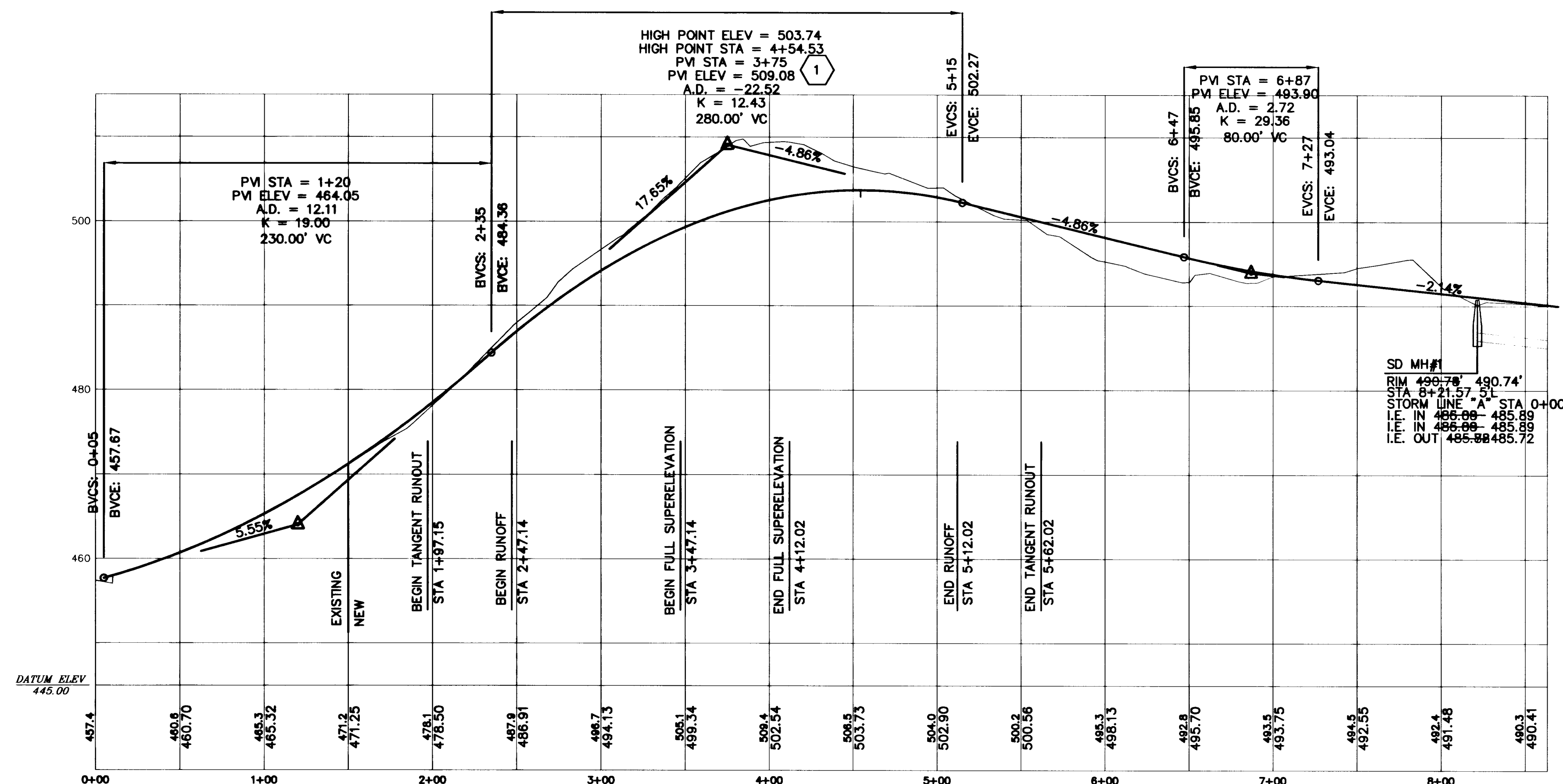
Project	97024
Designed	CWQ
Drawn	CWQ
Checked	
Date	4/98

5 of 20



ALPINE DRIVE STORM LINE 'A'

1" = 50' HORZ.

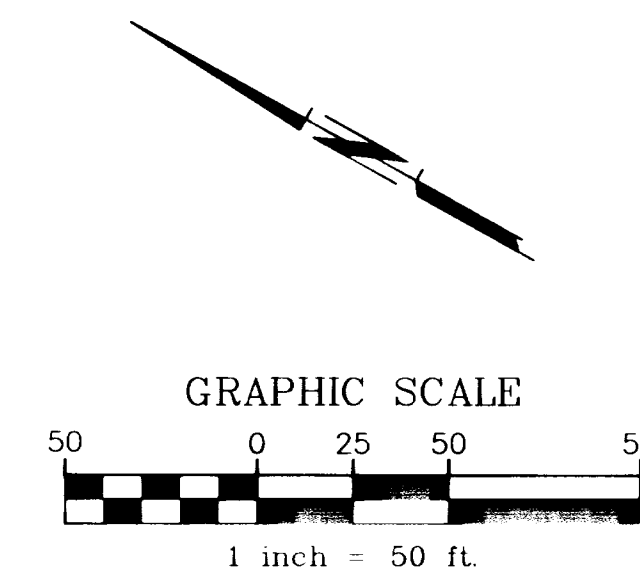


ALPINE DRIVE STORM LINE 'A' PROFILE

1" = 50 HORZ. 1" = 10' VERT.

NOTES:

- 1 THE K VALUE THAT MATCHES THE CENTER LINE RADIUS HAS BEEN PRE-APPROVED WITH THE CONDITION THAT A STREET LIGHT BE INSTALLED AT THE CORNER.



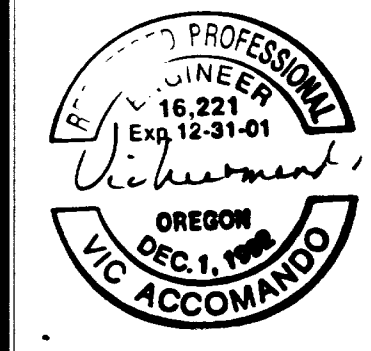
CURVE DATA				
CURVE	RADIUS	LENGTH	DELTA	STATION
1	38.00'	64.87'	97°48'30"	PC 3+47.15 PT 4+12.02
2	200.00'	96.01'	27°30'36"	PC 5+95.07 PT 6+91.08

CURB INLET TABLE					
STRUCTURE No.	STATION OFFSET	INVERT ELEVATION	PIPE L.F.	PIPE SIZE SLOPE	TOP OF CURB ELEVATION
CI#1	8+22.14 16' RT "ALPINE"	487.44' 486.50'	21.01'	10" 0.020 ft/ft	490.94' 490.06'
CI#2	8+21.12 16' LT "ALPINE"	486.50' 486.96'	13.27'	10" 0.031 "	490.06' 490.91'

AS-BUILT  
THESE AS-BUILT PLANS ARE BASED ON PERIODIC FIELD OBSERVATIONS AND PERFORMING SURVEY MEASUREMENTS OF PUBLIC UTILITIES

AS-BUILT

REVISION	NO.	BY	DATE	DESCRIPTION
1	1	CWQ	7/15/98	MOVE LIGHT TO NEW PROPERTY LINE
2	2	CWQ	7/17/98	CHANGE IN PROPERTY LINES
3	3	PJB	12/23/99	AS-BUILT
4	4	CWQ	10/30/00	AS-BUILT
5	5	CWQ	12/15/00	AS-BUILT MYLAR



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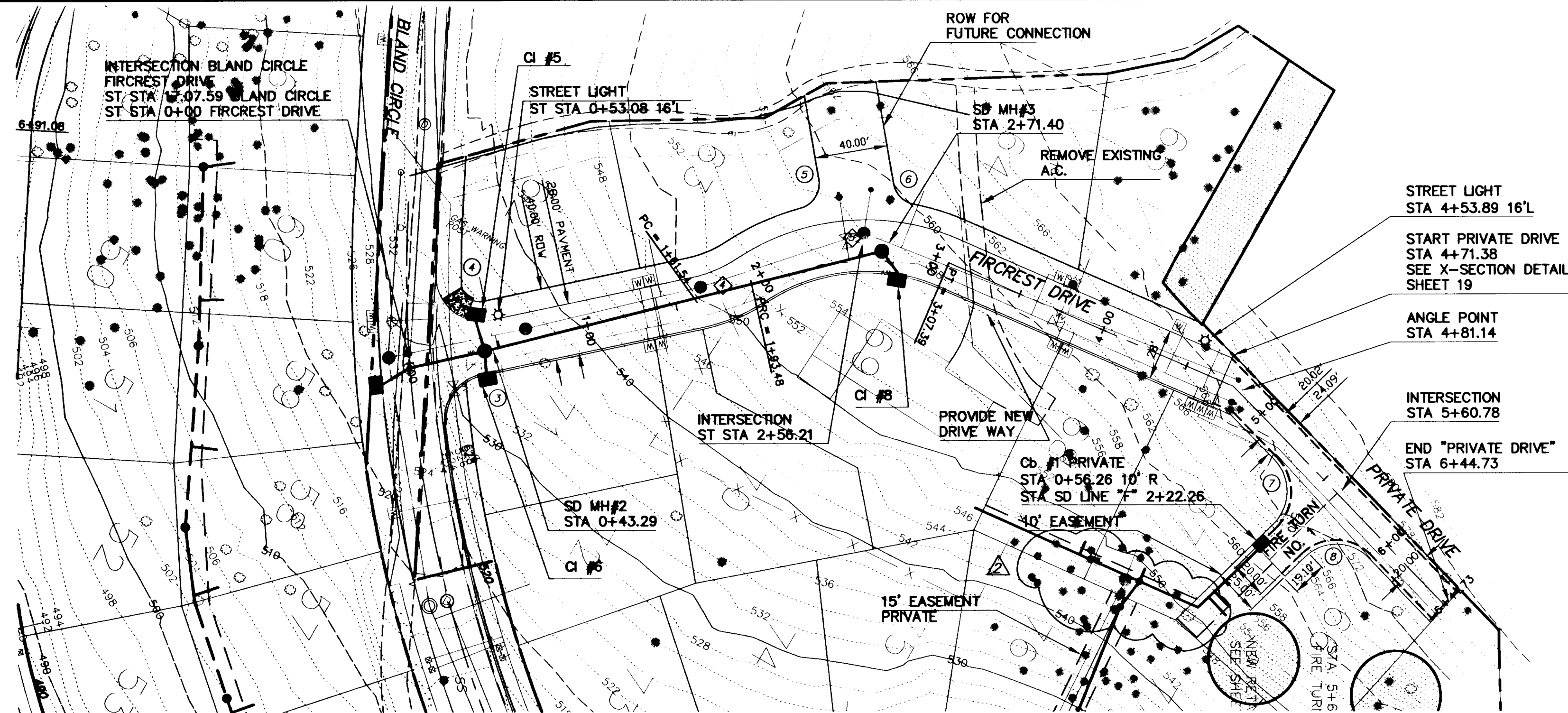
10250 S.W. Nimbus Ave.  
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(503) 968-6589  
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WEST LINN, OR 97068  
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**RIDGE VIEW ESTATES II & III**  
ALPINE STREET & STORM  
BLAND CIRCLE  
WEST LINN, OREGON

Project	97024
Designed	CWQ
Drawn	CWQ
Checked	
Date	4/98





FIRCREST DRIVE STORM LINE 'C'

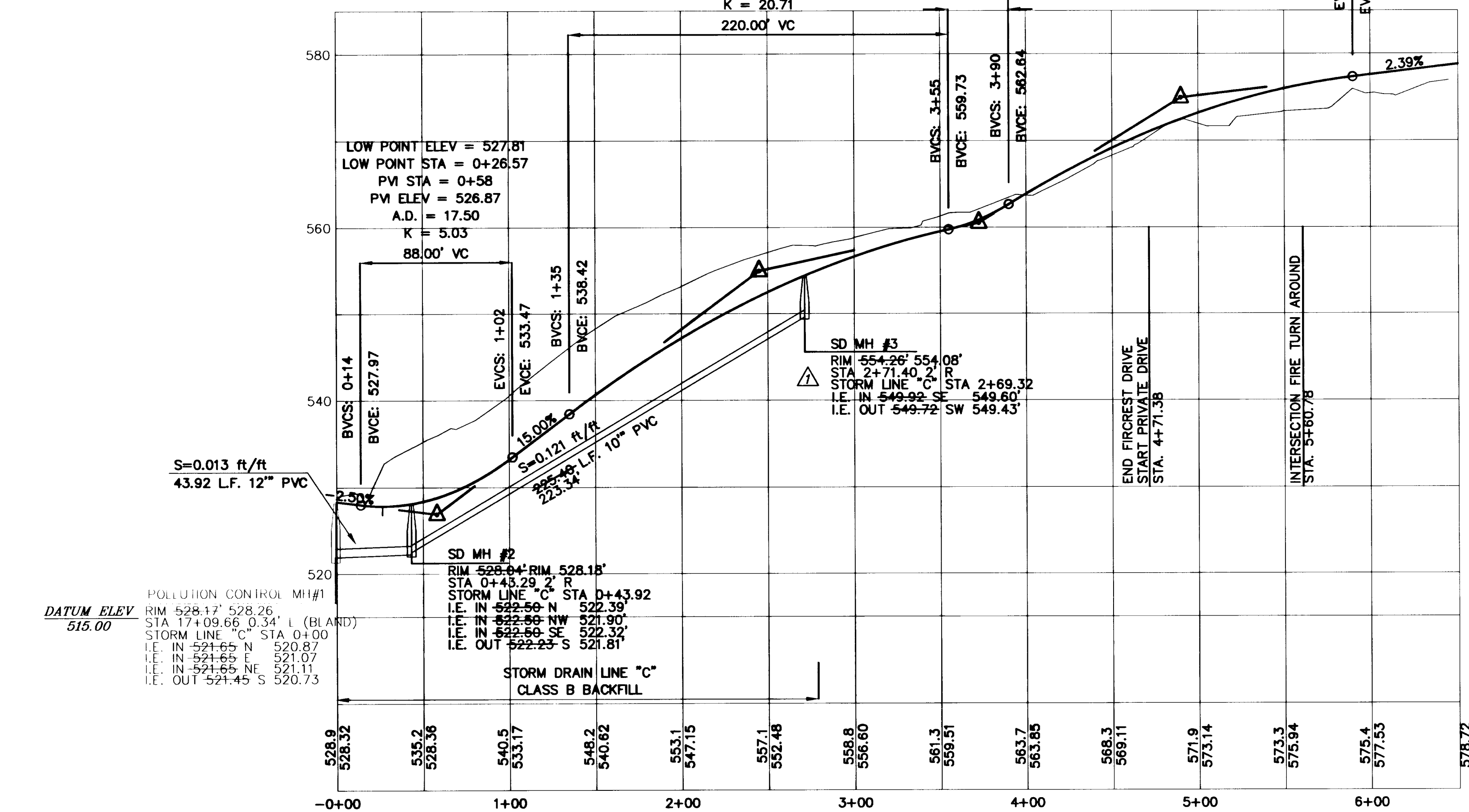
1" = 50' HORIZ.

PM STA = 4+90  
PM ELEV = 574.90  
A.D. = -9.87  
K = 20.27  
200.00' VC

PM STA = 2+45  
PM ELEV = 554.92  
A.D. = -10.62  
K = 20.71  
88.00' VC

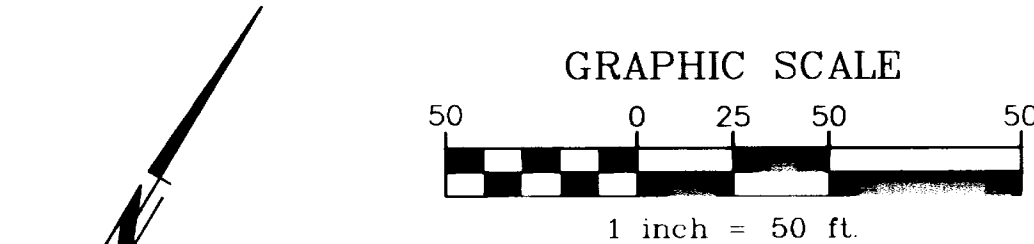
PM STA = 3+72.50  
PM ELEV = 560.50  
A.D. = 7.88  
K = 4.44  
35.00' VC

PM STA = 5+90  
PM ELEV = 577.29  
A.D. = 2.39  
K = 0.00  
2.39%



FIRCREST DRIVE STREET + STORM LINE 'C' PROFILE

1" = 50' HORIZ. 1" = 10' VERT.



CURVE DATA				
CURVE	RADIUS	LENGTH	DELTA	STATION
1	85.00'	31.94'	21°31'36"	PC 1+61.54 PT 1+93.48
2	115.00'	113.91'	56°45'18"	PC 1+93.48 PT 3+07.39

CURB INLET TABLE							
STRUCTURE No.	STATION	OFFSET	INVERT ELEVATION	PIPE L.F.	PIPE SIZE	PIPE SLOPE	TOP OF CURB ELEVATION
CI#5	0+40.29	15.51' L	"FIRCREST"	523.00-523.64'	17.76	10" 0.028 ft/ft	527.78-528.64'
CI#6	0+37.18	14' R	"FIRCREST"	523.00-523.36'	13.09	10" 0.038 "	528.02-528.36'
CI#7	3+00.00	14' L	"FIRCREST"	553.00-553.15	10"	0.093 "	557.54-557.64'
CI#8	2+84.12	14' R	"FIRCREST"	551.00-551.20'	16.77	10" 0.111 "	554.68-555.22'

CURB ELEVATION TABLE

CURVE No.	SYMBOL	DELTA	T.C.E.
3	BCR	00°00'00"	525.88'
	A	21°14'04"	526.32'
	B	42°28'08"	526.58'
	C	63°42'12"	527.03'
	ECR	84°56'16"	528.02'
4	BCR	00°00'00"	528.39'
	E	19°41'13"	527.78'
	F	25°28'42"	527.83'
	G	50°57'25"	528.83'
	H	76°26'08"	530.45'
5	BCR	00°00'00"	550.56'
	I	20°16'16"	551.48'
	J	40°32'33"	552.55'
	K	60°48'49"	553.74'
	ECR	81°05'06"	555.03'
6	BCR	00°00'00"	556.86'
	L	17°21'18"	555.88'
	M	34°42'35"	554.78'
	N	52°03'53"	554.11'
	O	55°30'29"	554.09'
7	BCR	00°00'00"	575.41'
	P	12°25'18"	575.47'
	Q	22°35'10"	575.43'
	R	45°10'19"	575.03'
	S	67°45'29"	574.20'
8	BCR	00°00'00"	573.01'
	T	22°24'51"	574.53'
	U	44°49'42"	575.97'
	V	67°14'32"	577.11'
	ECR	89°39'23"	577.70'

CURB LABELED 5 & 6 ARE FOR FUTURE CONSTRUCTION. DO NOT CONSTRUCT FOR PHASE II & III.

CURB CURVE DATA			
CURVE	RADIUS	LENGTH	DELTA
3	25.00'	37.07'	84°56'07"
4	25.00'	44.47'	101°54'50"
5	25.00'	35.38'	81°05'06"
6	25.00'	30.29'	69°25'10"
7	25.00'	39.42'	90°20'38"
8	25.00'	39.12'	89°39'23"

AS-BUILT

THESE AS-BUILT PLANS ARE BASED ON PERIODIC FIELD OBSERVATIONS AND PERFORMING SURVEY MEASUREMENTS OF PUBLIC UTILITIES

AS-BUILT

REVISION	NO.	DATE	DESCRIPTION
1	1	7/10/98	CHANGE R/W ELEVATIONS DUE TO VERTICAL CHANGE IN FIRCREST
2	2	7/17/98	CHANGE DUE CHANGE IN PROPERTY LINE
3	3	12/01/99	AS-BUILTS
4	4	10/30/00	REVISED AS-BUILTS
5	5	12/15/00	AS-BUILTS M/LAR



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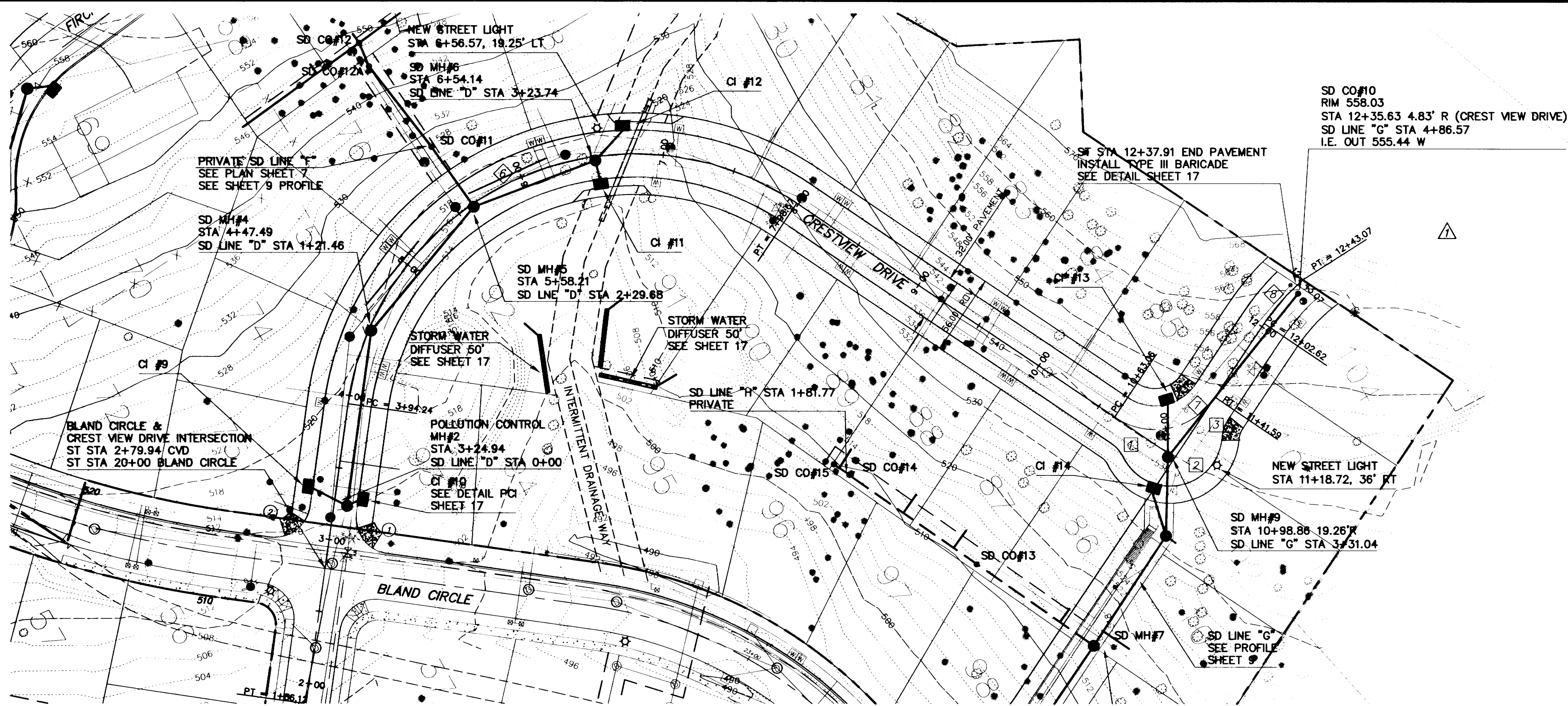
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**RIDGE VIEW ESTATES II & III**  
**FIRCREST STREET & STORM**  
**BLAND CIRCLE**  
**WEST LINN, OREGON**

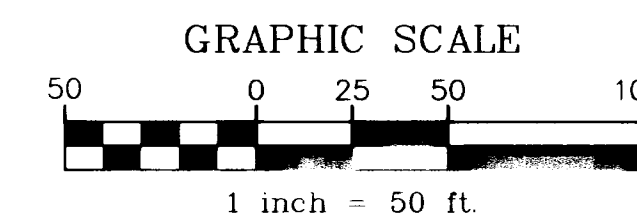
Project	97024
Designed	CWQ
Drawn	CWQ
Checked	
Date	4/98



CURVE DATA				
CURVE	RADIUS	LENGTH	DELTA	STATION
1	200.00'	404.43'	115°31'38"	PC 3+94.24 PT 7+98.67
2	50.00'	78.53'	89°59'27"	PC 10+63.06 PT 11+41.59
3	150.00'	40.45'	152°7'05"	PC 12+02.62 PT 12+43.07

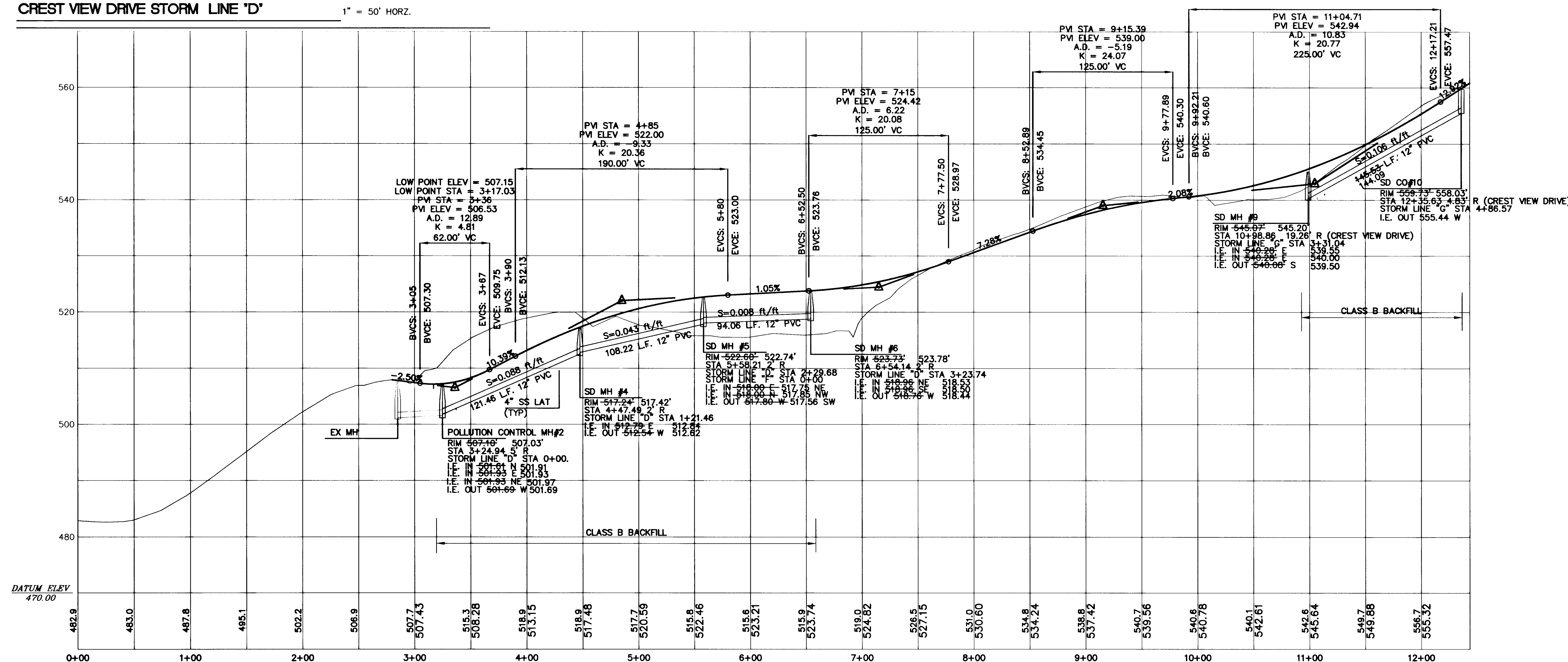
CURB CURVE DATA			
CURVE	RADIUS	LENGTH	DELTA
1	25.00'	39.27'	90°00'00"
2	25.00'	39.27'	90°00'00"

CURB ELEVATION TABLE			
CURVE No.	SYMBOL	DELTA	T.C.E.
1	BCR	00°00'00"	505.04'
	A	22°30'00"	505.57'
	B	45°00'00"	505.94'
	C	67°30'00"	506.39'
	ECR	90°00'00"	507.17'
2	BCR	00°00'00"	507.17'
	E	12°43'11"	506.89'
	F	22°30'00"	507.03'
	G	45°00'00"	508.12'
	H	67°30'00"	509.64'
	ECR	90°00'00"	510.78'



CURB INLET TABLE							
STRUCTURE No.	STATION	OFFSET	INVERT ELEVATION	PIPE SIZE	SLOPE	TOP OF CURB ELEVATION	
C#9	3+15.44	16.61' LT	504.79	40.0	10"	507.78	507.67
C#10	3+30.79	16' R	503.34	17.72	10"	507.60	507.55
C#11	6+54.27	16' R	519.80	17.30	10"	523.88	523.81
C#12	6+75.06	16' L	520.06	30.85	10"	524.18	524.13
C#13	11+05.92	16' L	542.00	35.94	10"	546.14	546.02
C#14	10+93.43	37.60' R	541.03	24.54	10"	545.18	545.00

CREST VIEW DRIVE STORM LINE "D" 1" = 50' HORIZ.



CREST VIEW DRIVE STORM + STORM LINE PROFILE LINE "D" 1" = 50' HORIZ. 1" = 10' VERT.

AS-BUILT  
THESE AS-BUILT PLANS ARE BASED ON PERIODIC FIELD OBSERVATIONS AND PERFORMING SURVEY MEASUREMENTS OF PUBLIC UTILITIES

AS-BUILT

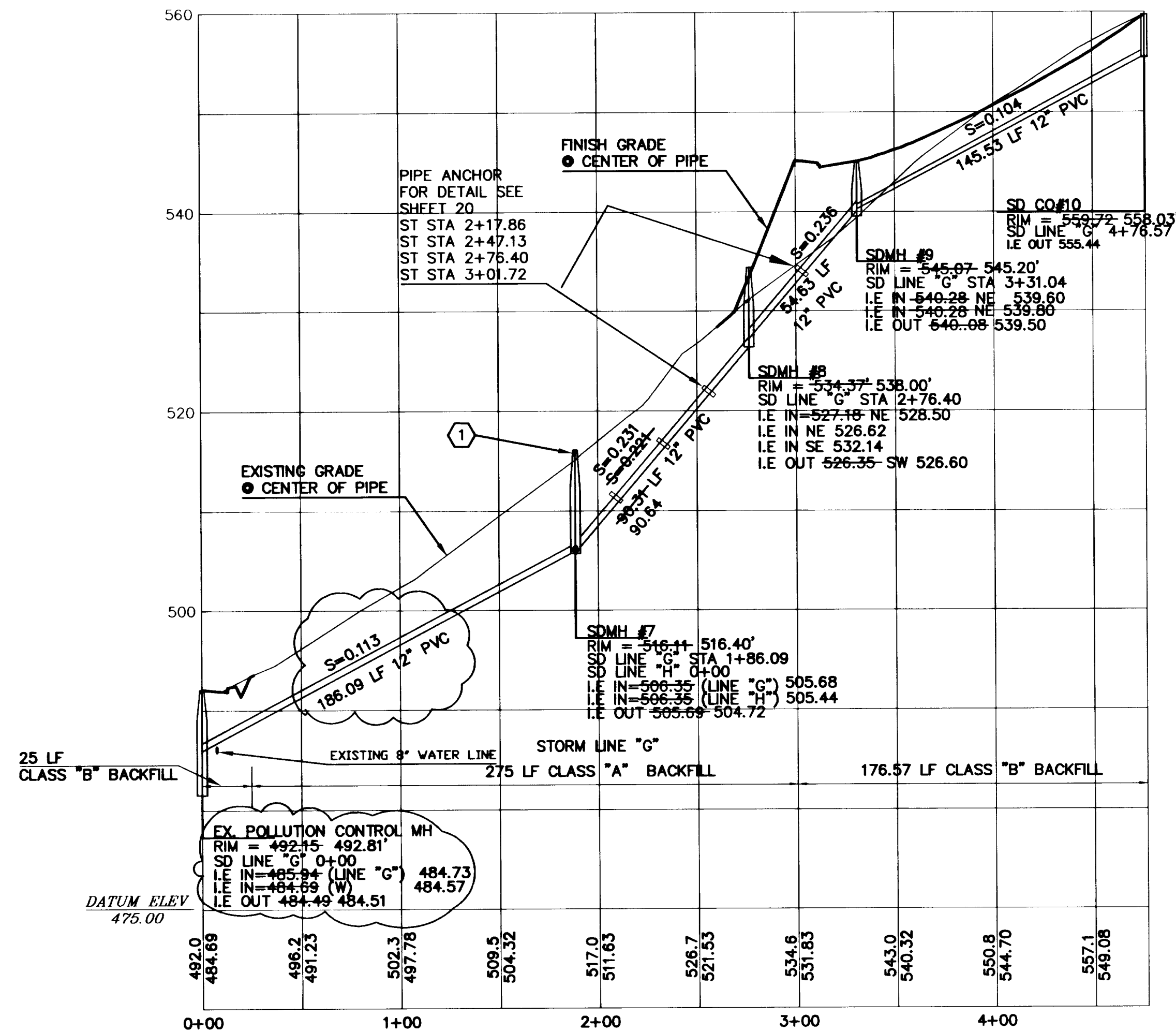
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RIDGE VIEW ESTATES II & III  
CREST VIEW DRIVE STREET & STORM  
BLAND CIRCLE  
WEST LINN, OREGON

Project: 97024  
Designed: CWQ  
Drawn: CWQ  
Checked:  
Date: 4/98



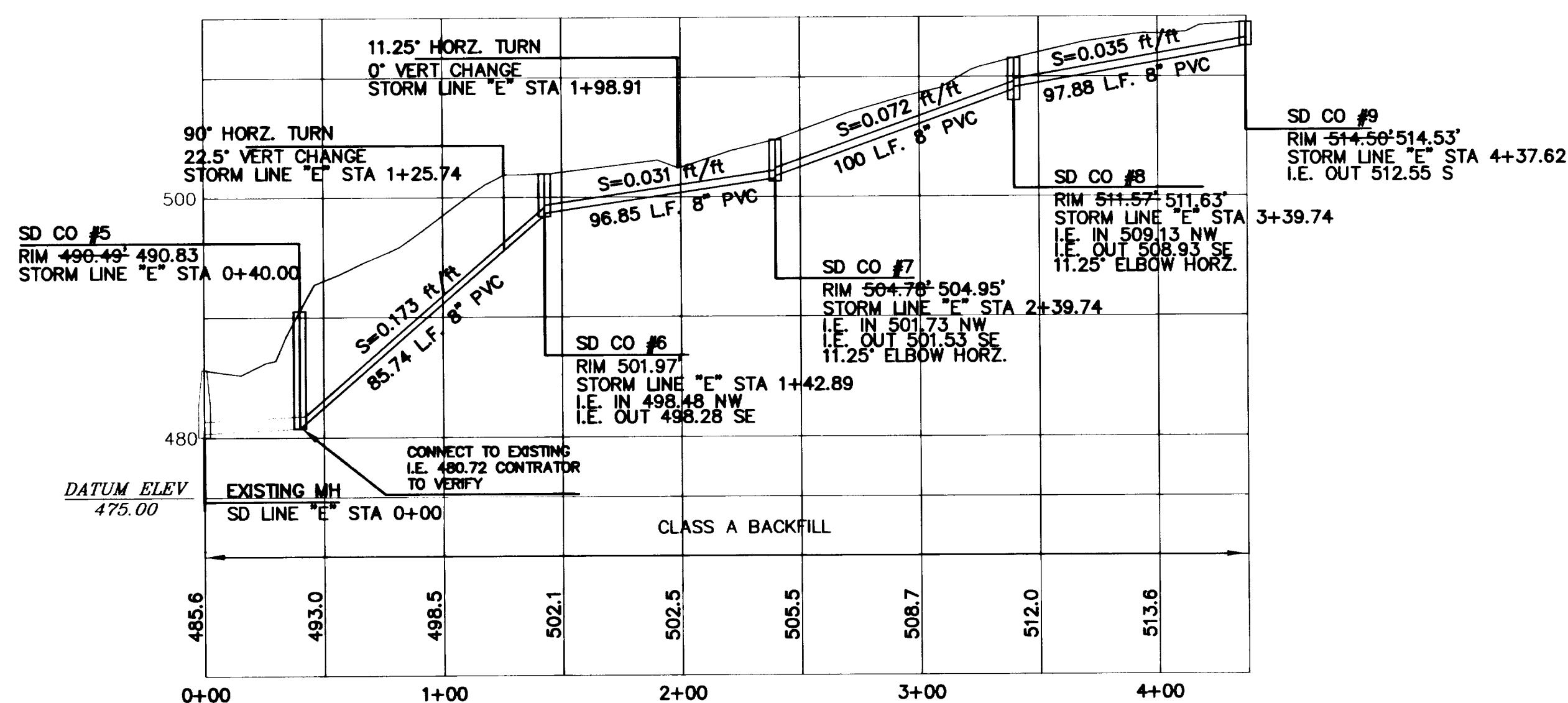


**PUBLIC STORM DRAIN LINE 'G'**

1" = 50 HORIZ. 1" = 10' VERT.

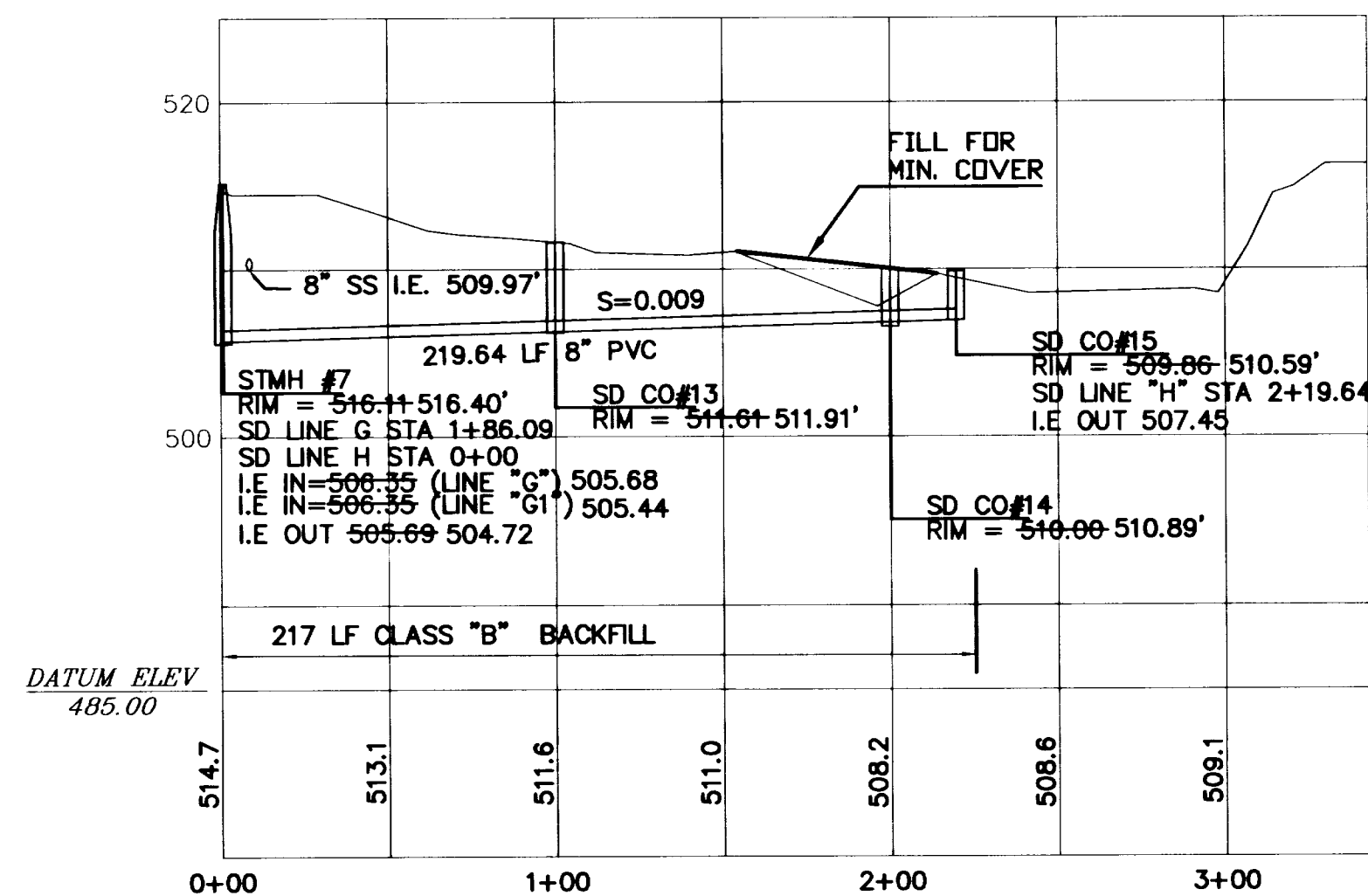
**CONSTRUCTION NOTES:**

- ALL MH RIM ELEVATIONS TO BE MIN OF 1' ABOVE THE FINISHED GRADE WHERE LOCATED OUTSIDE STREET RIGHT OF WAY



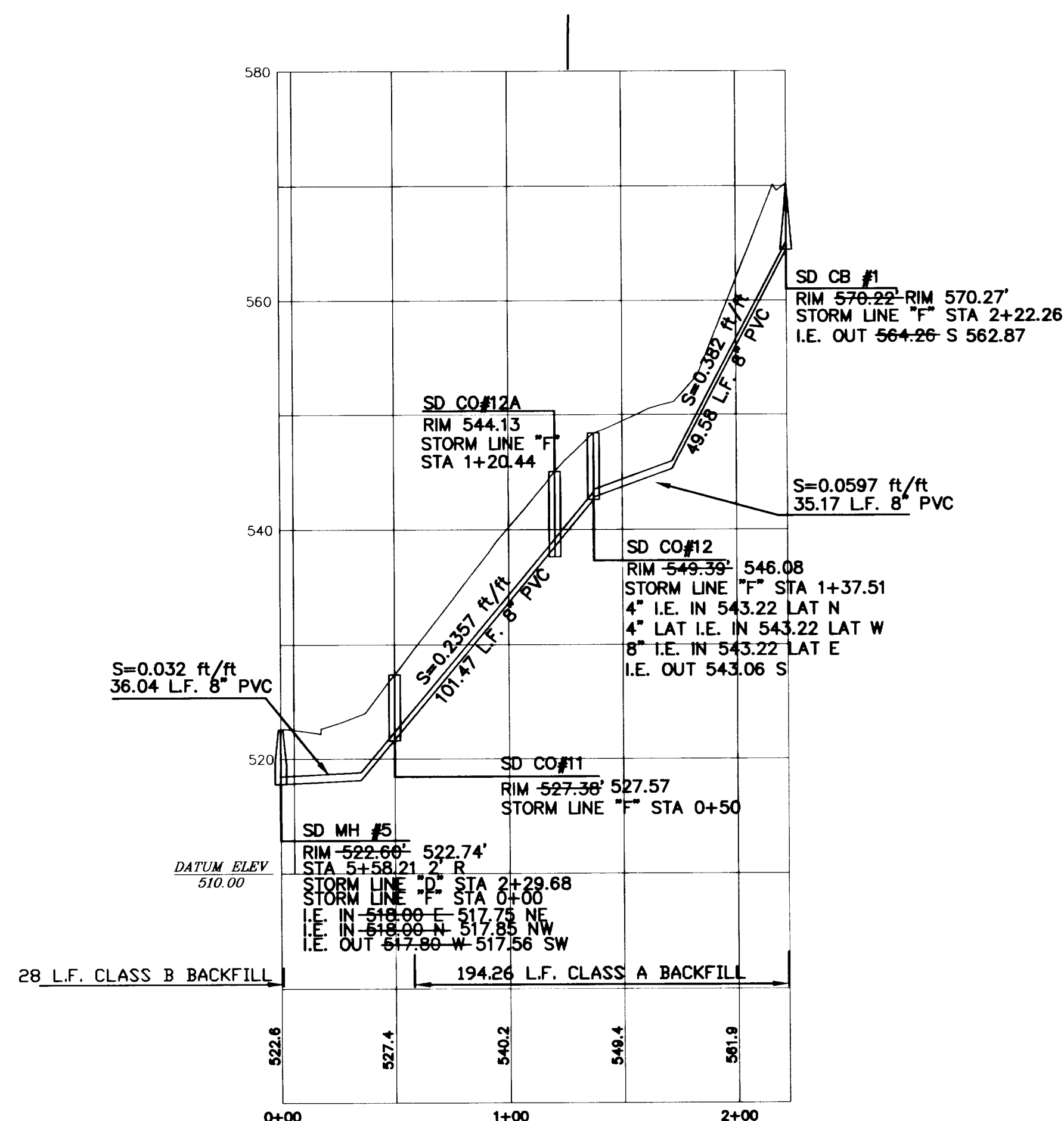
**PRIVATE STORM DRAIN LINE 'E'**

1" = 50 HORIZ. 1" = 10' VERT.



**PRIVATE STORM DRAIN LINE 'H'**

1" = 50 HORIZ. 1" = 10' VERT.



**PRIVATE STORM DRAIN LINE 'F'**

1" = 50 HORIZ. 1" = 10' VERT.

**AS-BUILT**

THESE AS-BUILT PLANS ARE BASED ON PERIODIC FIELD OBSERVATIONS AND PERFORMING SURVEY MEASUREMENTS OF PUBLIC UTILITIES

**AS-BUILT**

NO.	DATE	DESCRIPTION
1	12/15/00	AS-BUILT M/LAR
2	10/31/00	REVISED AS-BUILT
3	12/23/99	AS-BUILT



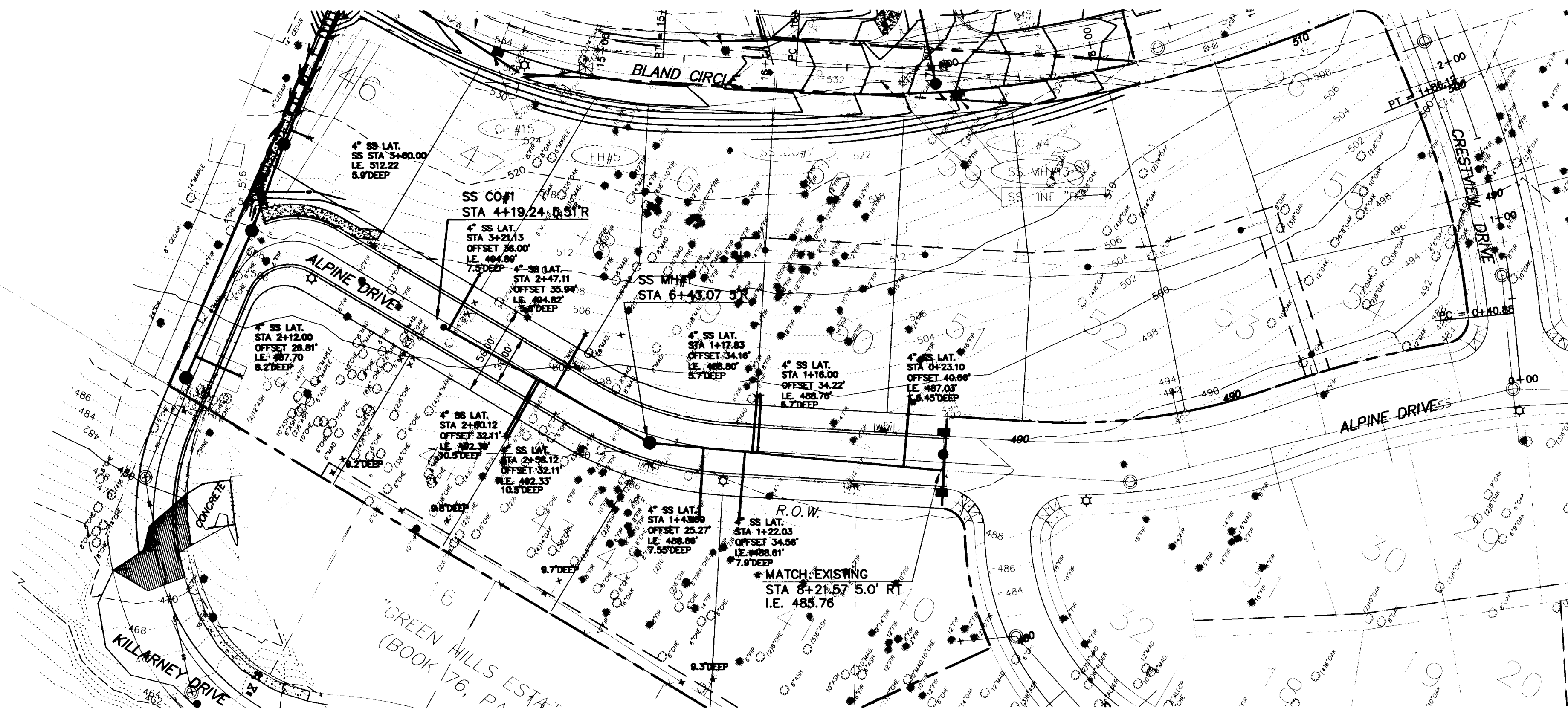
**TRILAND DESIGN GROUP, INC.**  
PLANNING · CIVIL ENGINEERING · LAND SURVEYING  
10250 S.W. Nimbus Ave.  
Suite M-4  
Tigard, Oregon  
(503) 968-6589  
FAX (503) 968-7439

**J.T. SMITH COMPANIES**  
23600 SALAMON RD  
WEST LINN, OR 97068  
PHONE (503) 657-3402  
FAX (503) 657-3635

**RIDGE VIEW ESTATES II & III**  
MISC. PROFILES  
BLAND CIRCLE  
WEST LINN, OREGON

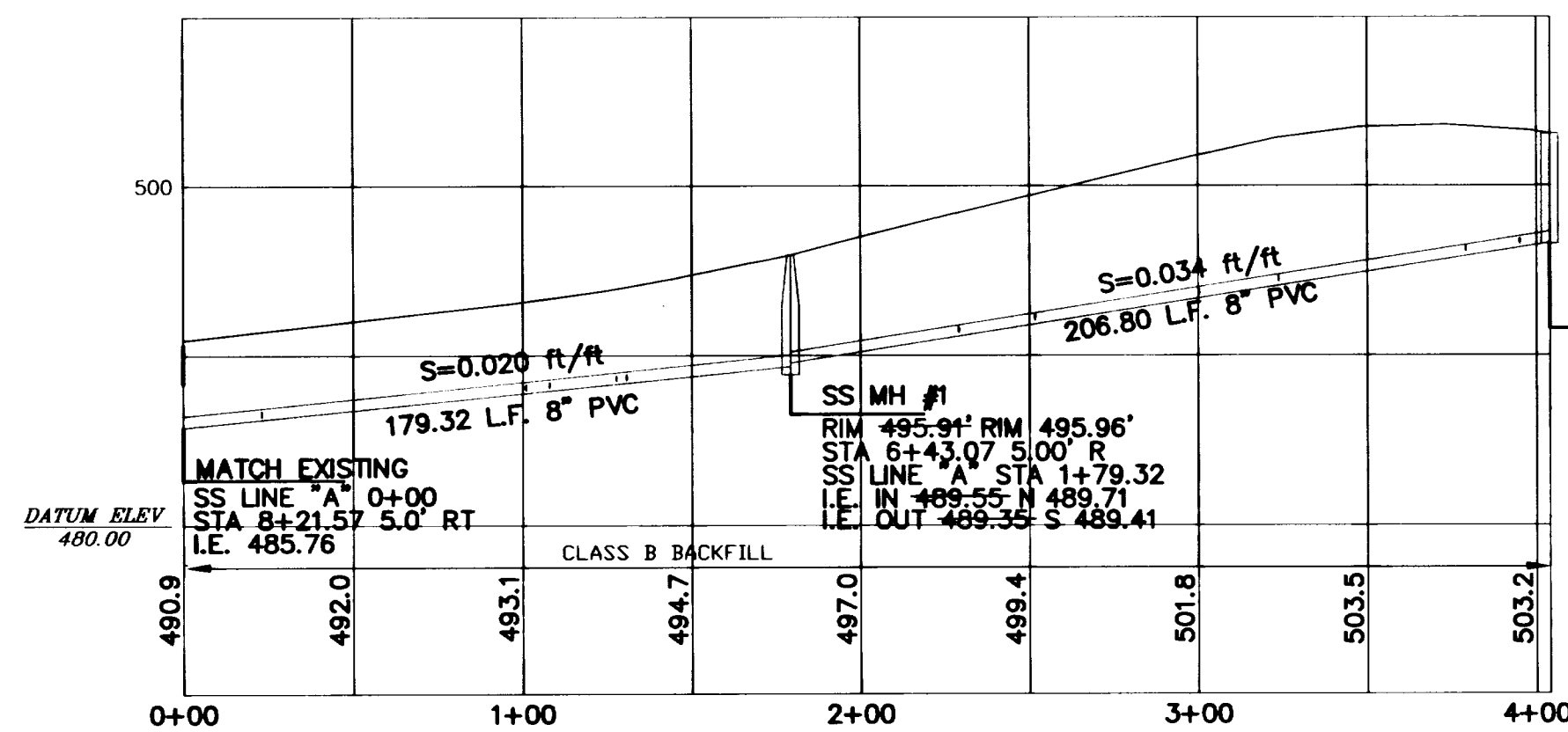
Project	97024
Designed	CWQ
Drawn	CWQ
Checked	
Date	4/98





ALPINE DR. SANITARY SEWER LINE 'A'

1" = 50' HORIZ.

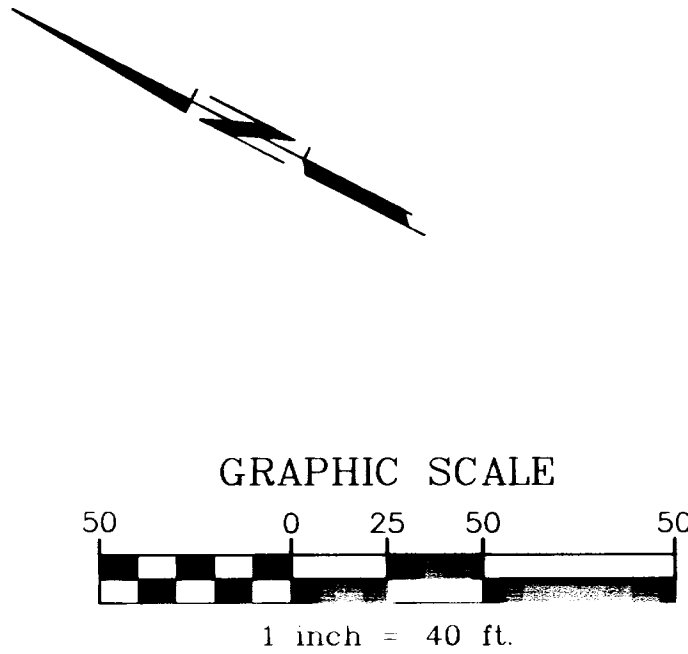


ALPINE DRIVE SANITARY SEWER PROFILE LINE 'A'

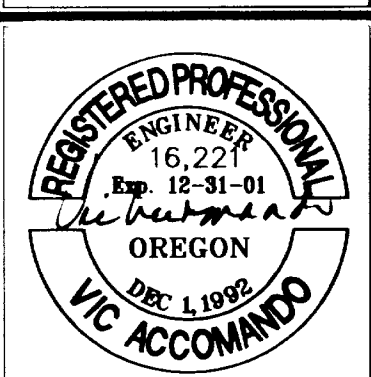
1" = 50 HORIZ. 1" = 10' VERT.

AS-BUILT  
THESE AS-BUILT PLANS ARE BASED  
ON PERIODIC FIELD OBSERVATIONS  
AND PERFORMING SURVEY  
MEASUREMENTS OF PUBLIC UTILITIES

AS-BUILT



REVISIONS			
NO.	BY	DATE	DESCRIPTION
3	CWQ	12/15/00	AS-BUILT'S M.T.A.P.
2	CWQ	10/31/00	REVISED AS-BUILT'S
1	PAB	12/23/99	AS-BUILT'S



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**TRILAND DESIGN GROUP, INC.**  
PLANNING - CIVIL ENGINEERING - LAND SURVEYING

PREPARED FOR:

**J.T. SMITH COMPANIES**  
23600 SALAMO RD  
WEST LINN, OR 97068  
PHONE (503) 657-3402  
FAX (503) 657-3635

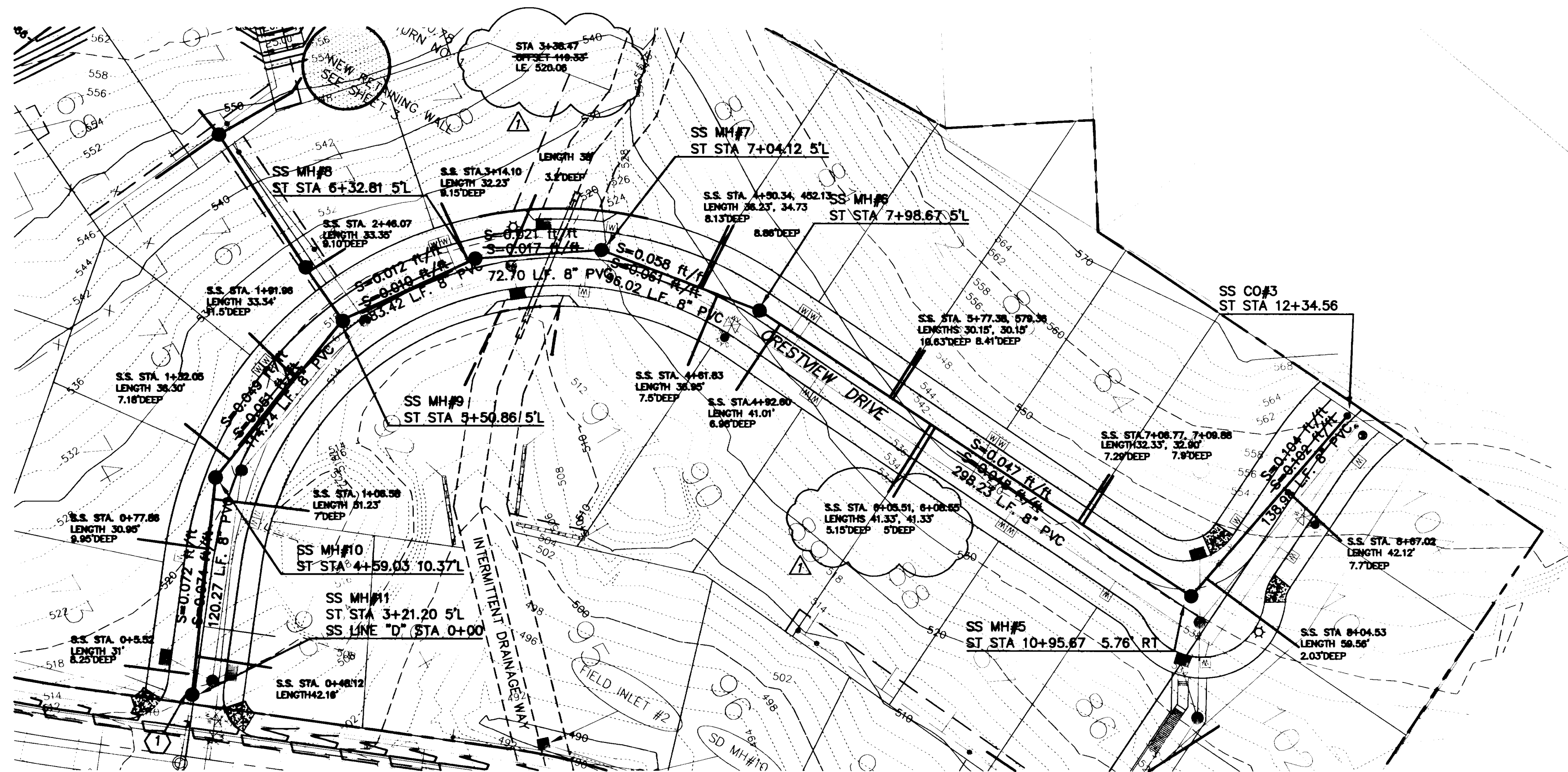
**RIDGE VIEW ESTATES II & III**  
ALPINE SANITARY SEWER  
BLAND CIRCLE  
WEST LINN, OREGON

Project	97024
Designed	CWQ
Drawn	CWQ
Checked	
Date	4/98



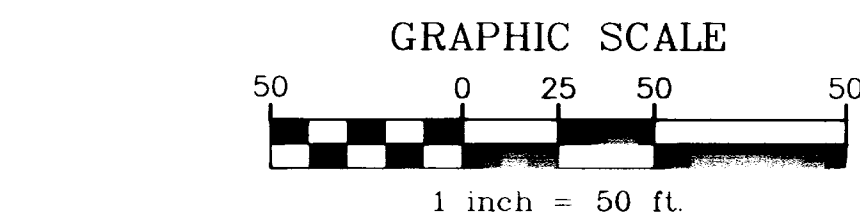






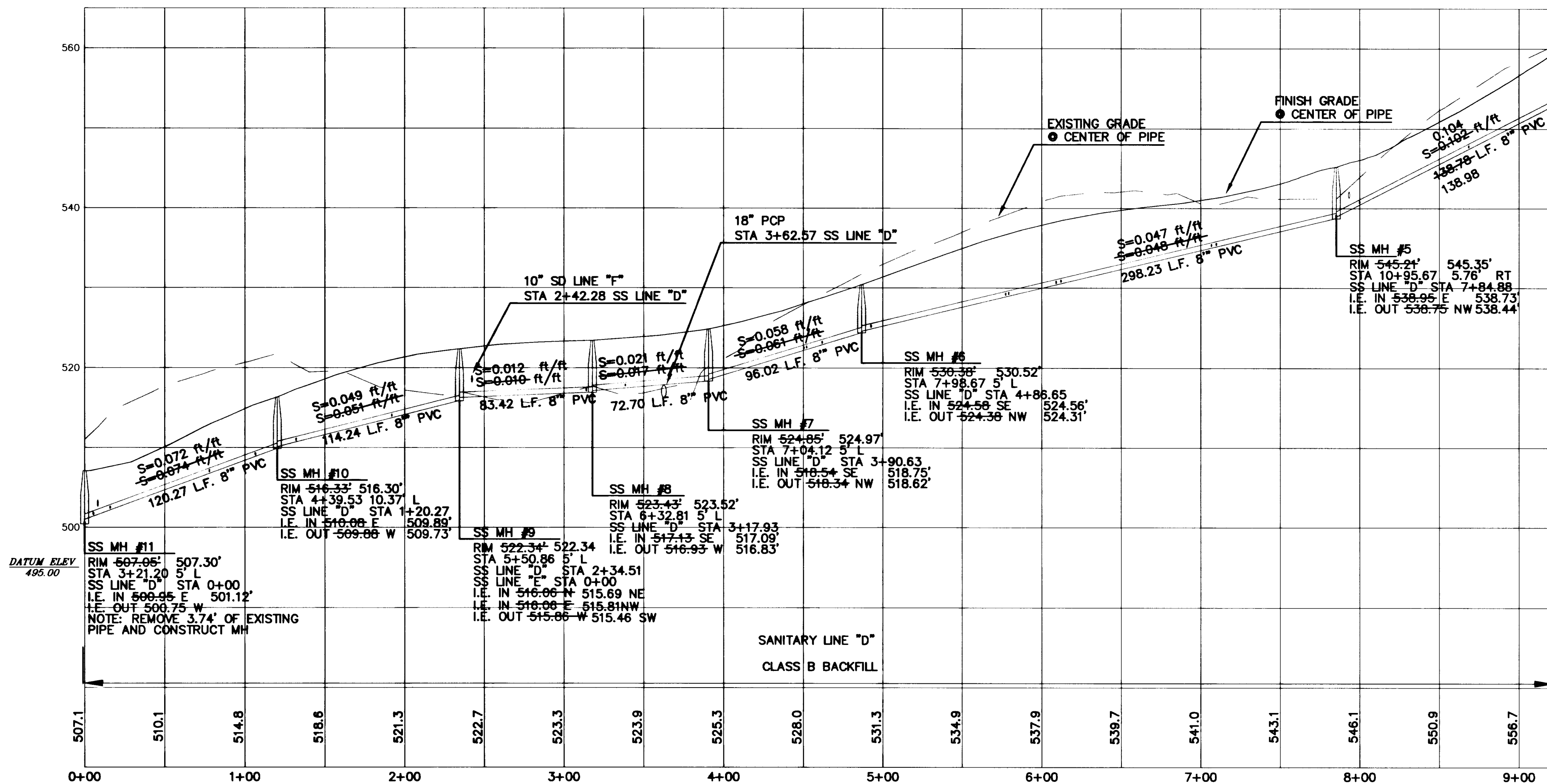
CRESTVIEW DR. SANITARY SEWER LINE "D"

1" = 50' HORZ.



CONSTRUCTION NOTES:

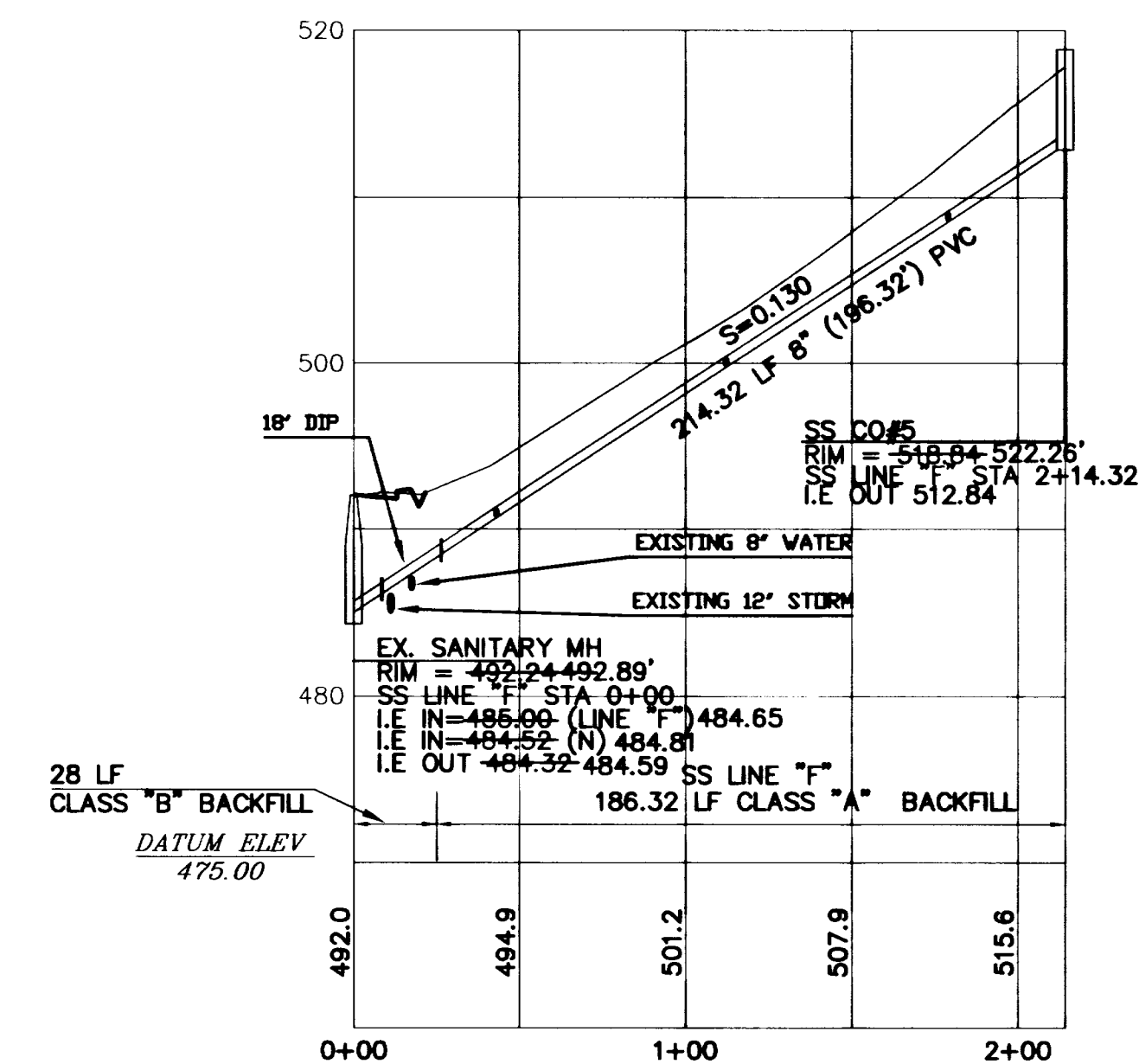
- 1 CONTRACTOR TO POT HOLE EX SS LINE PRIOR TO CONSTRUCTION AND VERIFY I.E.



CRESTVIEW DR. SANITARY SEWER PROFILE LINE "D"

1" = 50' HORZ. 1" = 10' VERT.

SS CO #3  
RIM 559.01' 558.67'  
STA 12+34.56 4.15' LT  
SS LINE "D" STA 9+23.66  
I.E. IN 553.32 F  
I.E. OUT 553.12 W



SANITARY SEWER LINE "F"

1" = 50 HORZ. 1" = 10' VERT.

AS-BUILT  
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ON PERIODIC FIELD OBSERVATIONS  
AND PERFORMING SURVEY  
MEASUREMENTS OF PUBLIC UTILITIES

AS-BUILT

NO.	DATE	DESCRIPTION
1	12/15/00	AS-BUILT W/LAR
2	12/23/99	AS-BUILT
3	7/15/98	MOVE LATERALS DUE TO PROPERTY LINE CHANGE



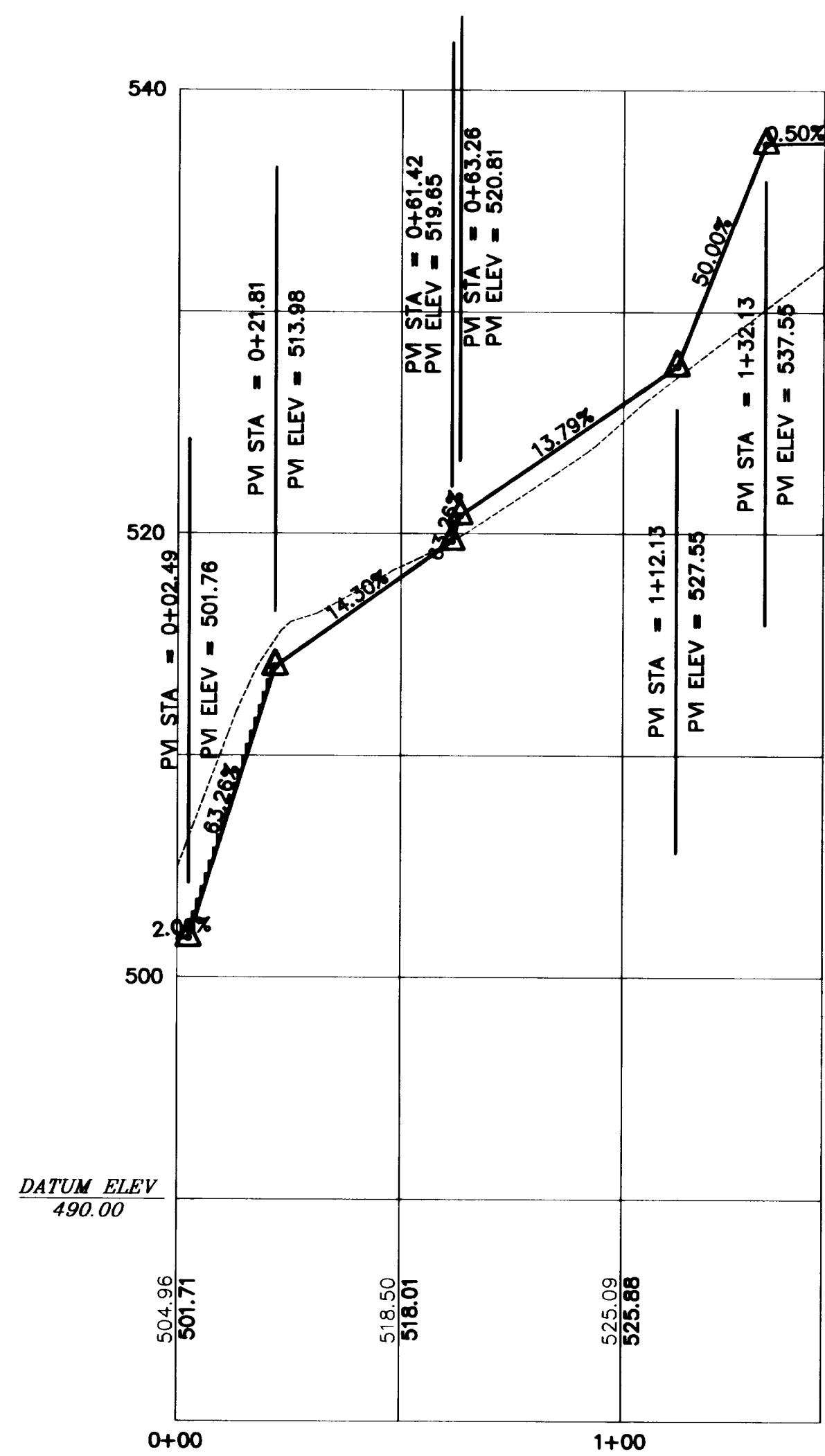
**TRILAND DESIGN GROUP, INC.**  
PLANNING • CIVIL ENGINEERING • LAND SURVEYING  
10340 S.W. Nimbus Ave.  
Suite 14-4  
Tigard, Oregon  
(503) 968-6589  
FAX (503) 968-7439

PREPARED FOR:  
**J.T. SMITH COMPANIES**  
23600 SALAMOND RD  
WEST LINN, OR 97068  
PHONE (503) 657-3402  
FAX (503) 657-3405

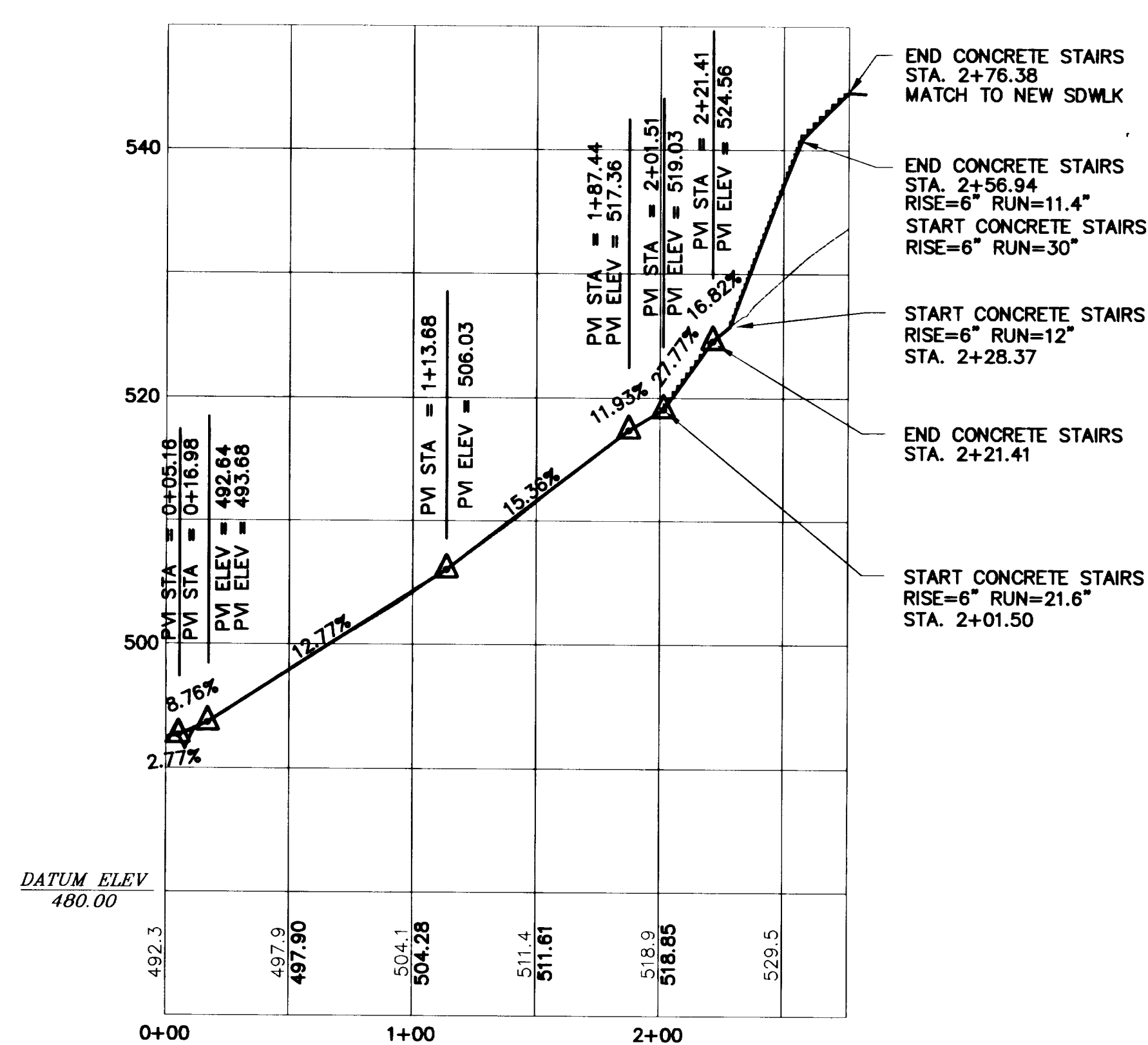
**RIDGE VIEW ESTATES II & III**  
**CRESTVIEW DR. SANITARY SEWER**  
BLAND CIRCLE  
WEST LINN, OREGON

Project	97024
Designed	CWQ
Drawn	CWQ
Checked	
Date	4/98

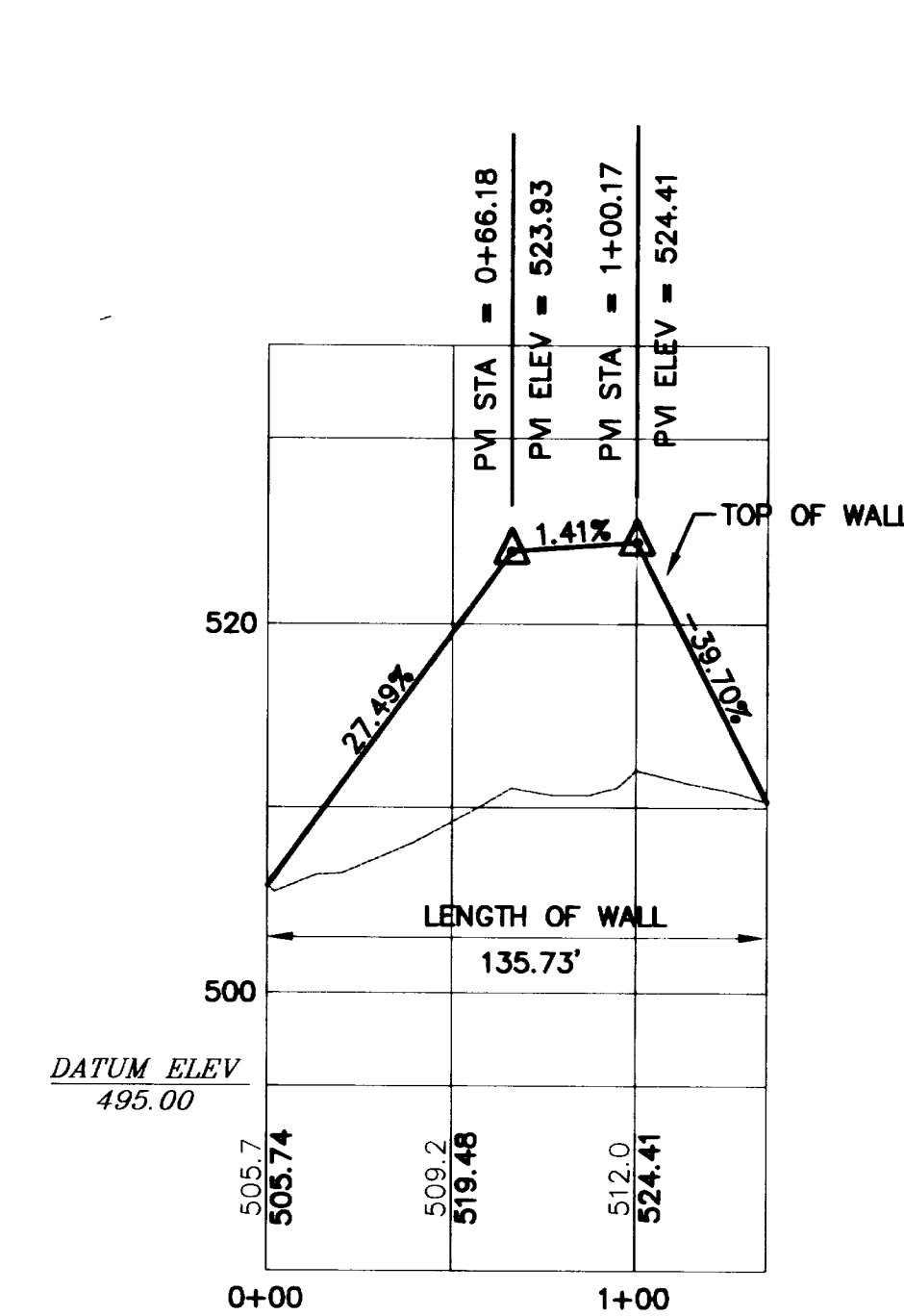




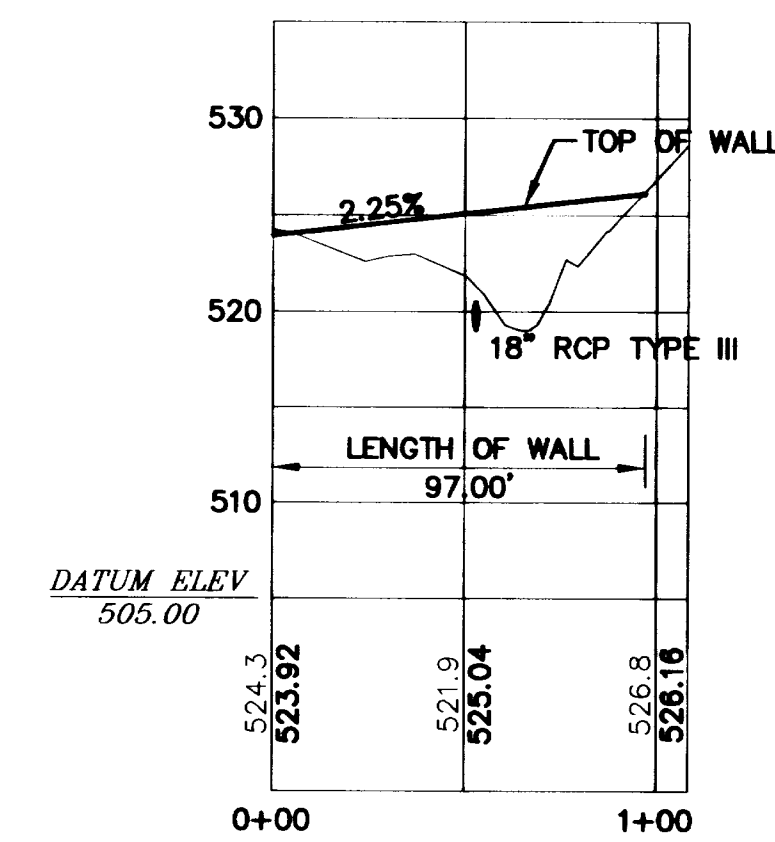
**NORTHERLY TRAIL PROFILE**  
SCALE 1"=50' HORZ. 1"=10' VERT.



**SOUTHERLY TRAIL PROFILE**  
SCALE 1"=50' HORZ. 1"=10' VERT.



**SOUTH RETAINING WALL PROFILE**  
SCALE 1"=50' HORZ. 1"=10' VERT.



**NORTH RETAINING WALL PROFILE**  
SCALE 1"=50' HORZ. 1"=10' VERT.

AS-BUILT

THESE AS-BUILT PLANS ARE BASED ON PERIODIC FIELD OBSERVATIONS AND PERFORMING SURVEY MEASUREMENTS OF PUBLIC UTILITIES

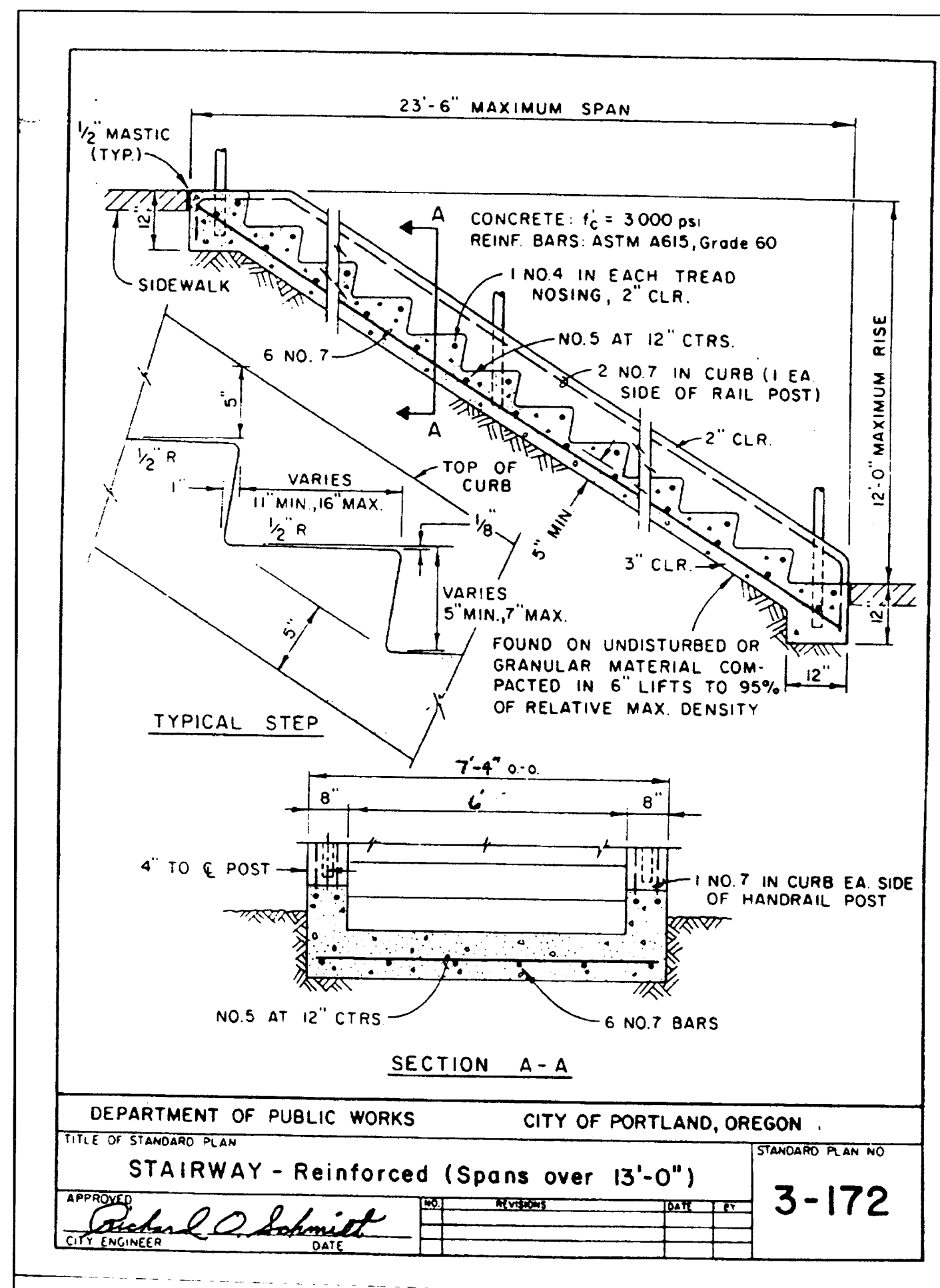
AS-BUILT

CONSTRUCTION NOTES:

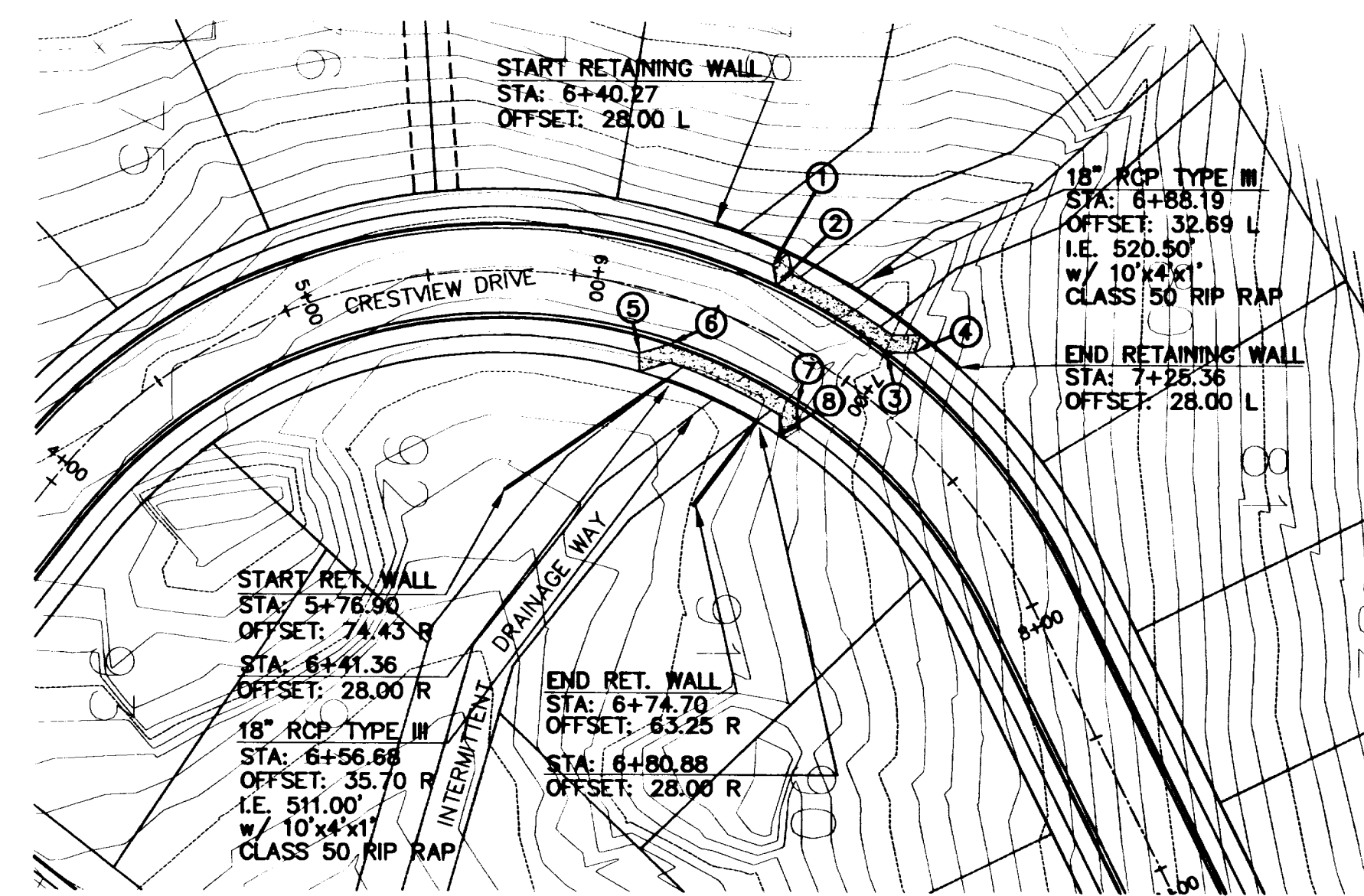
- ① START SIDEWALK TRANSITION STA: 6+60.90 OFFSET: 22.00 L
- ② SIDEWALK AT CURB STA: 6+64.83 OFFSET: 16.00 L
- ③ START SIDEWALK TRANSITION STA: 7+05.28 OFFSET: 16.00 L
- ④ SIDEWALK AT R-O-W STA: 7+00.15 OFFSET: 22.78 R
- ⑤ START SIDEWALK TRANSITION STA: 6+28.41 OFFSET: 22.00 R
- ⑥ SIDEWALK AT CURB STA: 6+38.53 OFFSET: 16.00 R
- ⑦ START SIDEWALK TRANSITION STA: 6+90.97 OFFSET: 16.00 R
- ⑧ SIDEWALK AT R-O-W STA: 6+95.30 OFFSET: 22.00 R

### RETAINING WALL NOTES

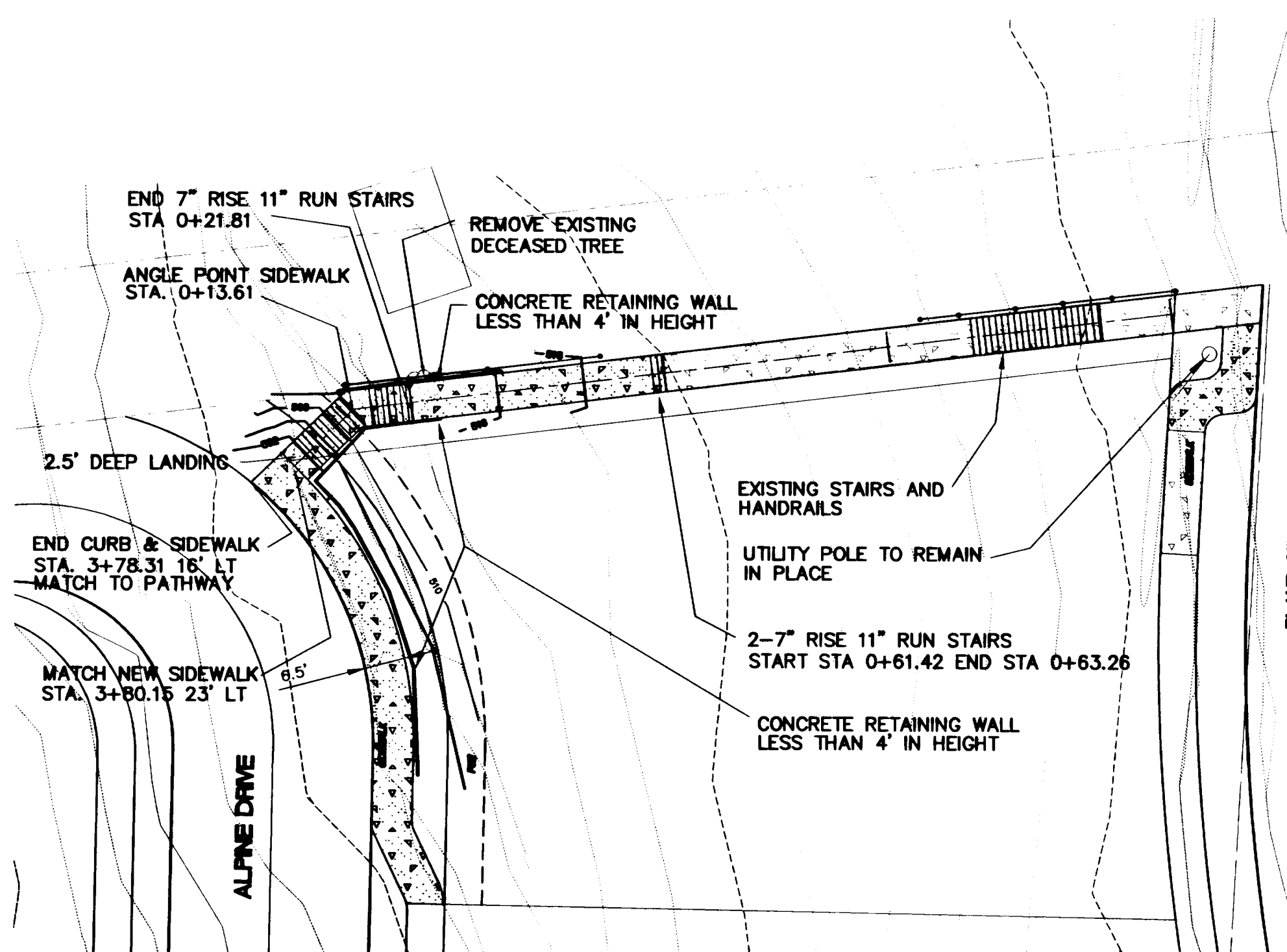
1. RETAINING WALLS SHALL BE KEYSTONE OR OTHER REINFORCED EARTH WALL AS APPROVED BY THE OWNER. THE CONTRACTOR SHALL SUBMIT A WALL SYSTEM TO THE OWNER FOR REVIEW AND APPROVAL PRIOR TO SUBMITTING FOR PERMITS.
2. RETAINING WALL DESIGN AND CALCULATIONS SHALL BE PROVIDED BY THE CONTRACTOR. THE DRAWINGS SHALL BE SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF OREGON.



DEPARTMENT OF PUBLIC WORKS		CITY OF PORTLAND, OREGON	
TITLE OF STANDARD PLAN			
STAIRWAY - Reinforced (Spans over 13'-0")			
APPROVED	DATE	BY	STANDARD PLAN NO.
<i>Richard C. Schmidt</i>			3-172



**RETAINING WALL PLAN**  
SCALE 1"=50'



**NORTH TRAIL PLAN**  
SCALE: 1"=20'

10200 S.W. Nimbus Ave.  
Suite 104  
Tigard, Oregon  
(503) 968-5389  
FAX (503) 968-7439

PREPARED FOR:  
**J.T. SMITH COMPANIES**  
23600 SALAMO ROAD  
WEST LINN, OR 97068  
(503) 657-3402  
(503) 657-3635

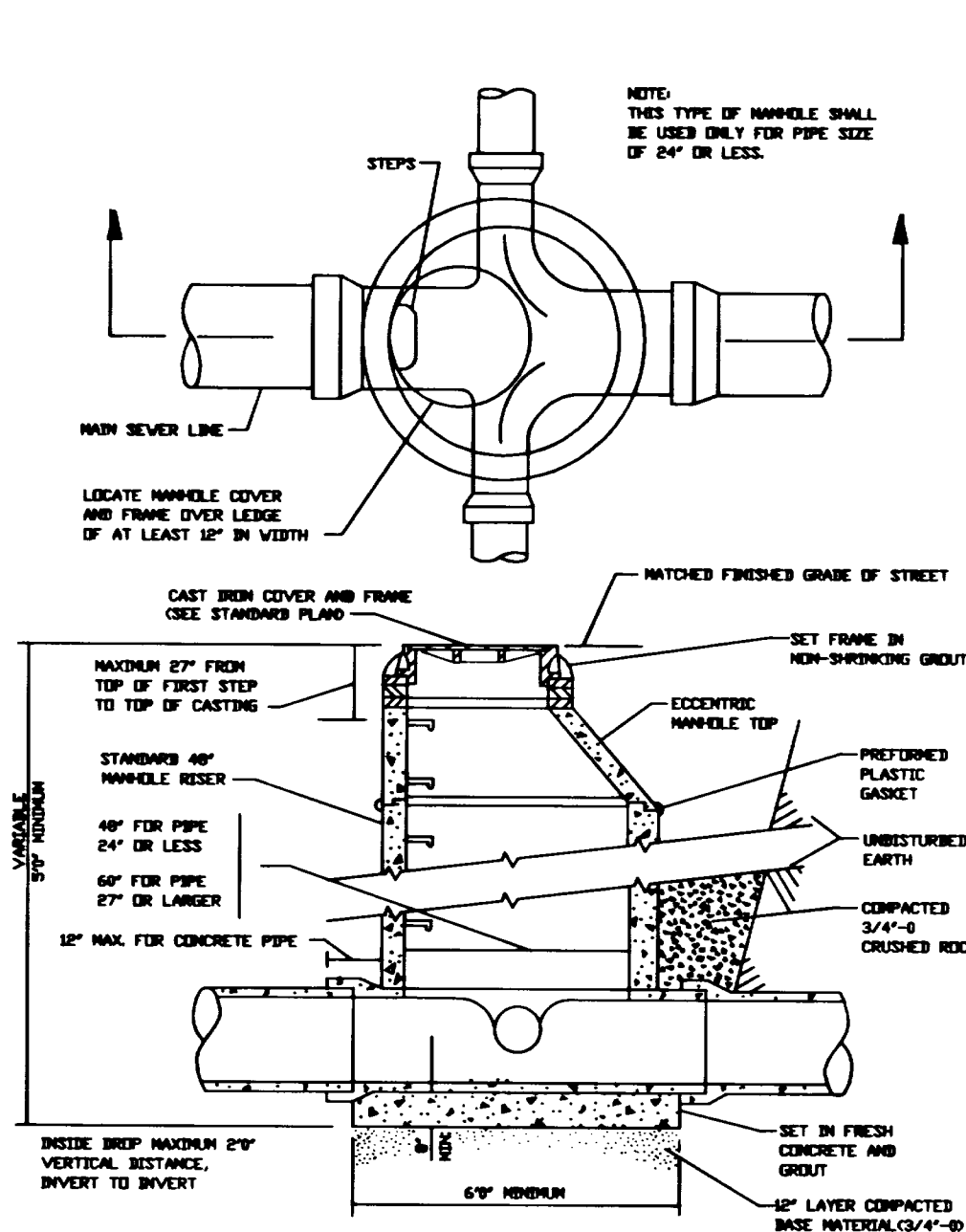
**RIDGE VIEW ESTATES II & III**  
RETAINING WALL PLAN  
BLAND CIRCLE  
WEST LINN, OREGON

Project: 97024  
Designed: SBT  
Drawn: SBT  
Checked:  
Date: 4/98

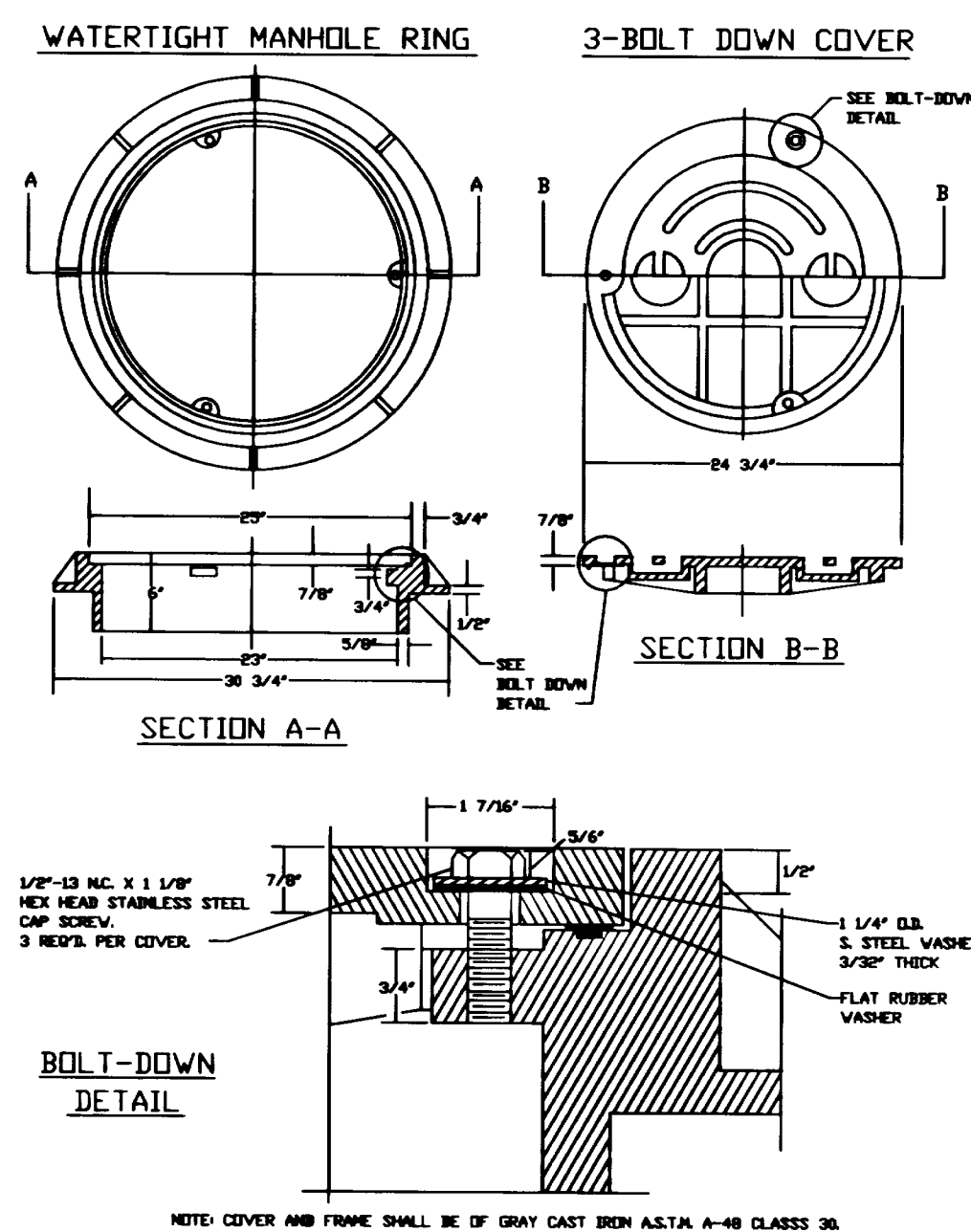




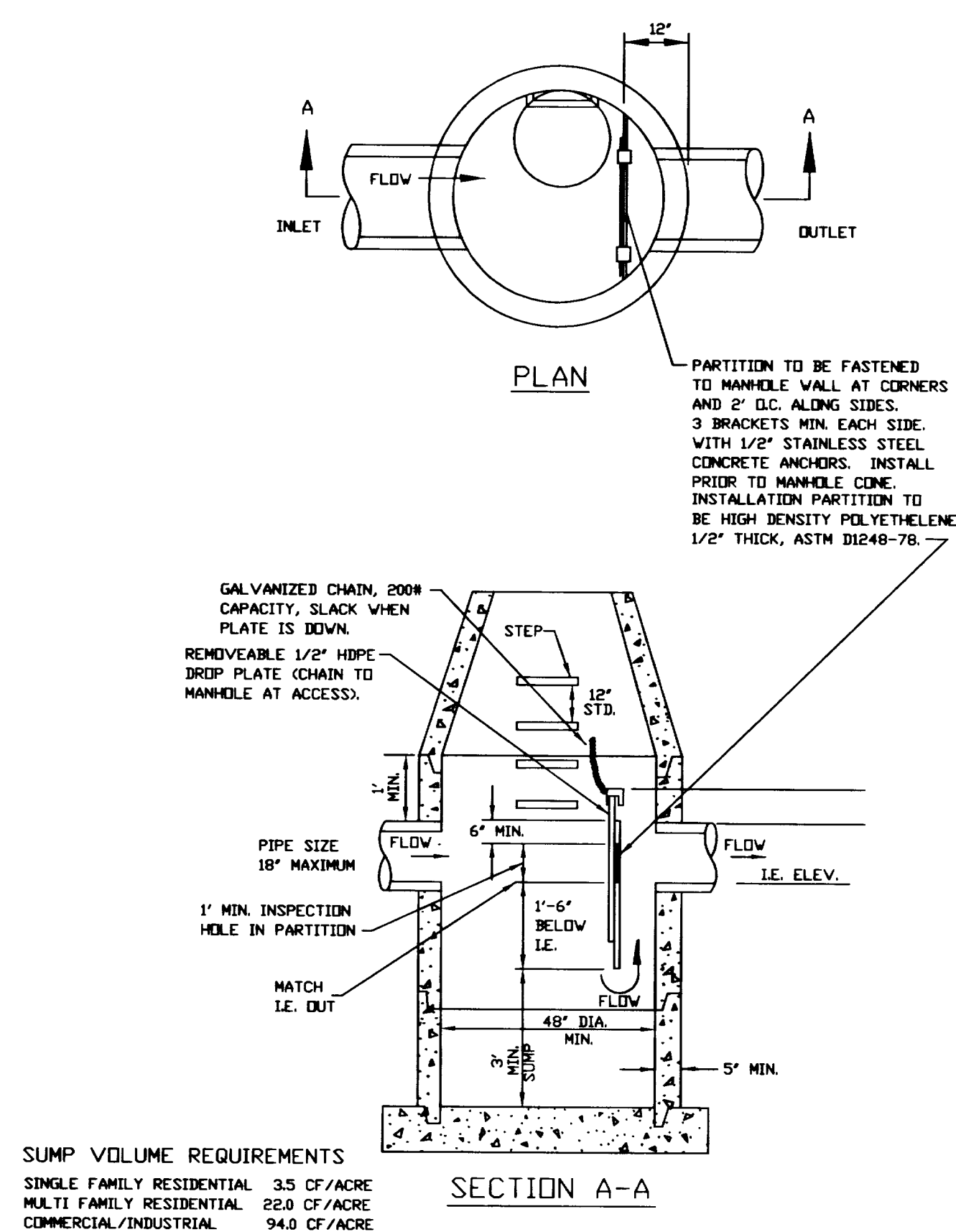




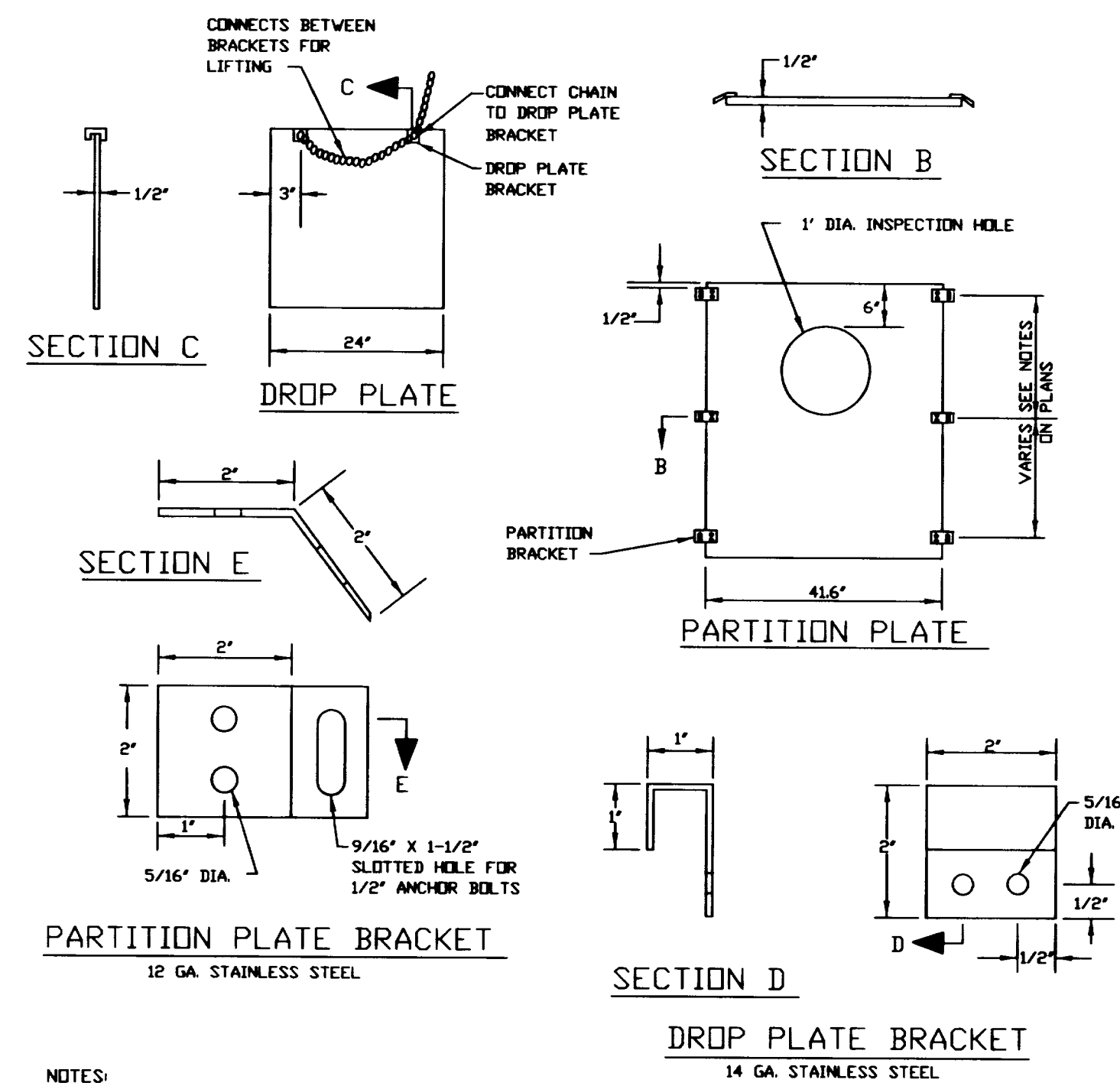
**TYPICAL MANHOLE SECTION**  
NOT TO SCALE



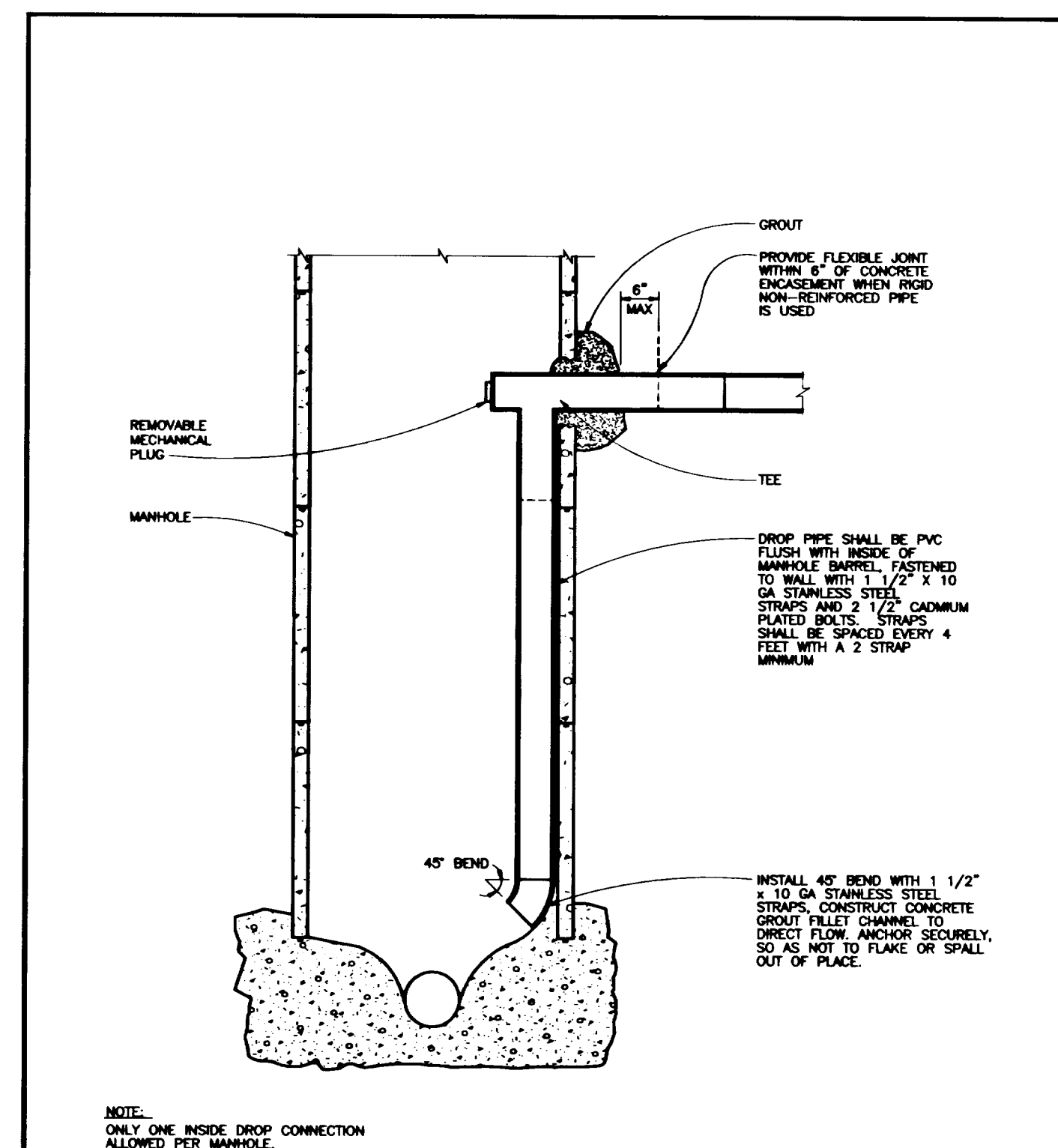
**MANHOLE FRAME & COVER**  
NOT TO SCALE



**POLLUTION CONTROL MANHOLE**  
SD MH #2 & #5  
NOT TO SCALE DRAWING NO. 100 1 OF 2

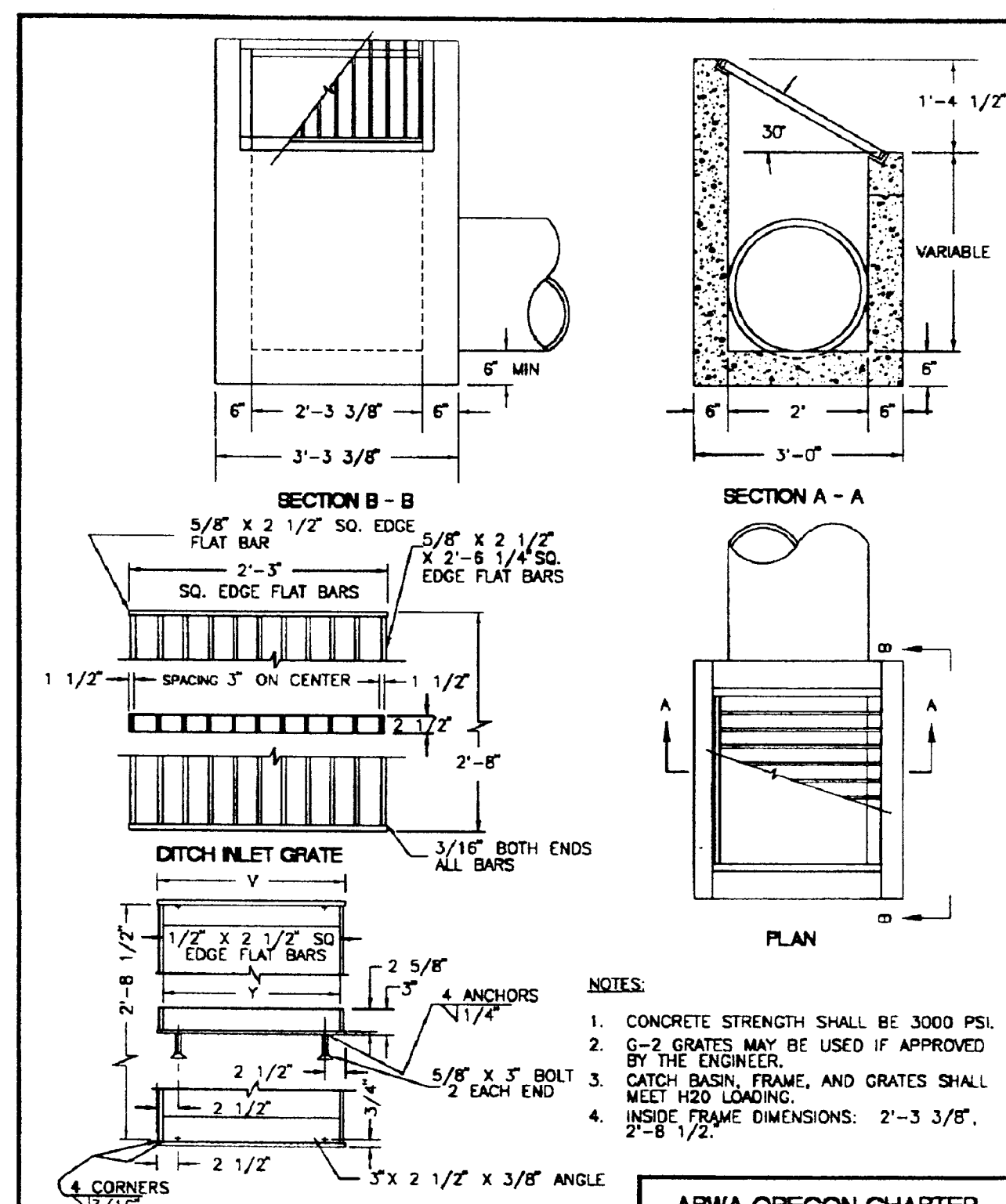


**POLLUTION CONTROL MANHOLE**  
NOT TO SCALE DRAWING NO. 100 2 OF 2



**DETAILS FOR INSIDE DROP CONNECTION FOR MANHOLES**

DATE: MAY 1992 DRAWING NO: 317

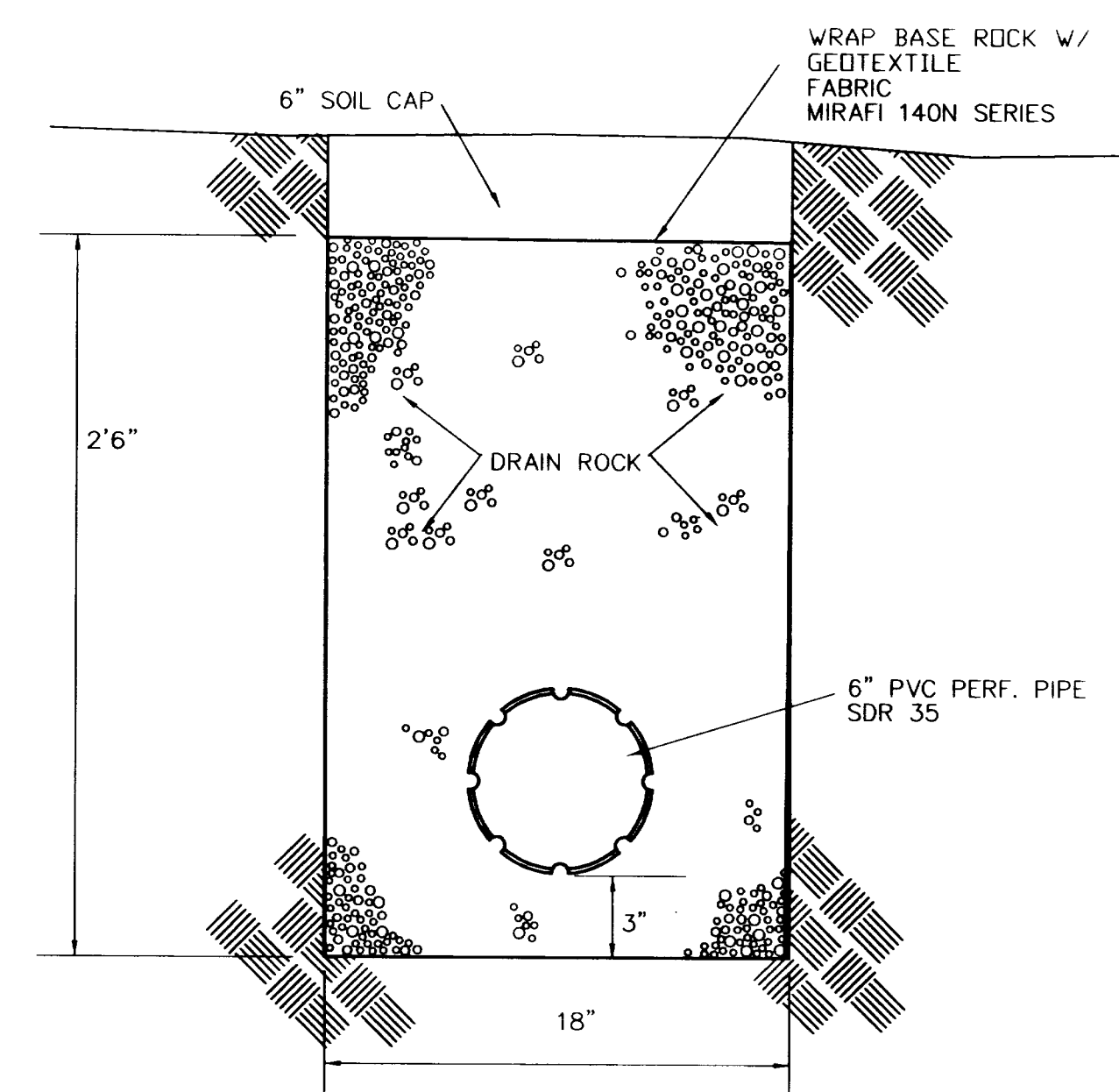


APWA OREGON CHAPTER

DITCH INLET

INLET TYPE	V	Y	Y1	NO. OF BARS	TYPE
D	2'-4 3/4"	2'-3 3/8"	2'-3"	9	1

DATE: AUG 1995 DRAWING NO: 306A



**SUBDRAIN TYPICAL**

**AS-BUILT**  
THESE AS-BUILT PLANS ARE BASED ON PERIODIC FIELD OBSERVATIONS AND PERFORMING SURVEY MEASUREMENTS OF PUBLIC UTILITIES

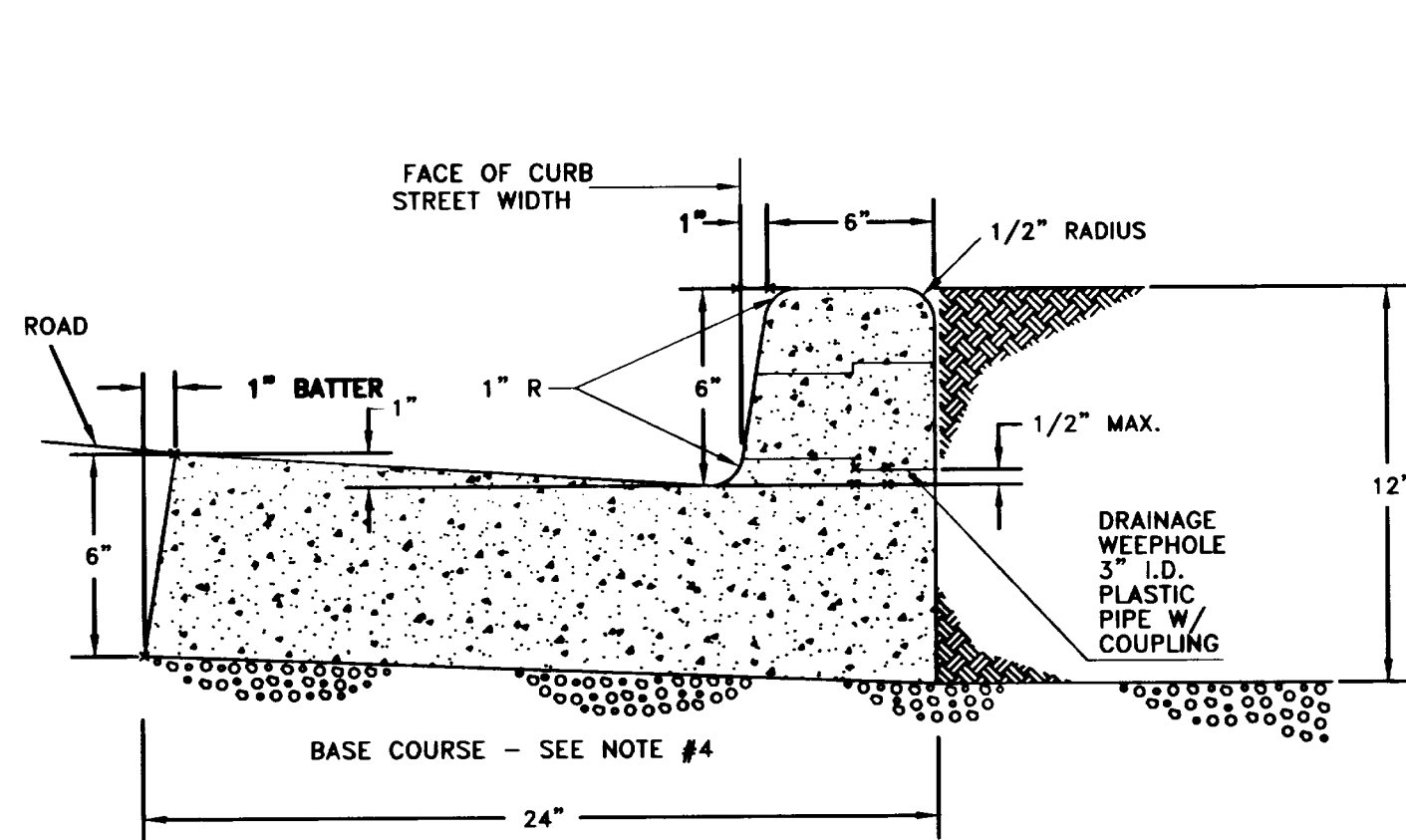
**AS-BUILT**

PREPARED FOR:  
**J.T. SMITH COMPANIES**  
23600 SALAMON RD.  
WEST LINN, OR 97068  
PHONE (503) 657-3402  
FAX (503) 657-3635

**RIDGE VIEW ESTATES II & III**  
**STORM DETAILS**  
BLAND CIRCLE  
WEST LINN, OREGON

Project: 97024  
Designed: CWQ  
Drawn: SAE  
Checked: PJB  
Date: 5/99

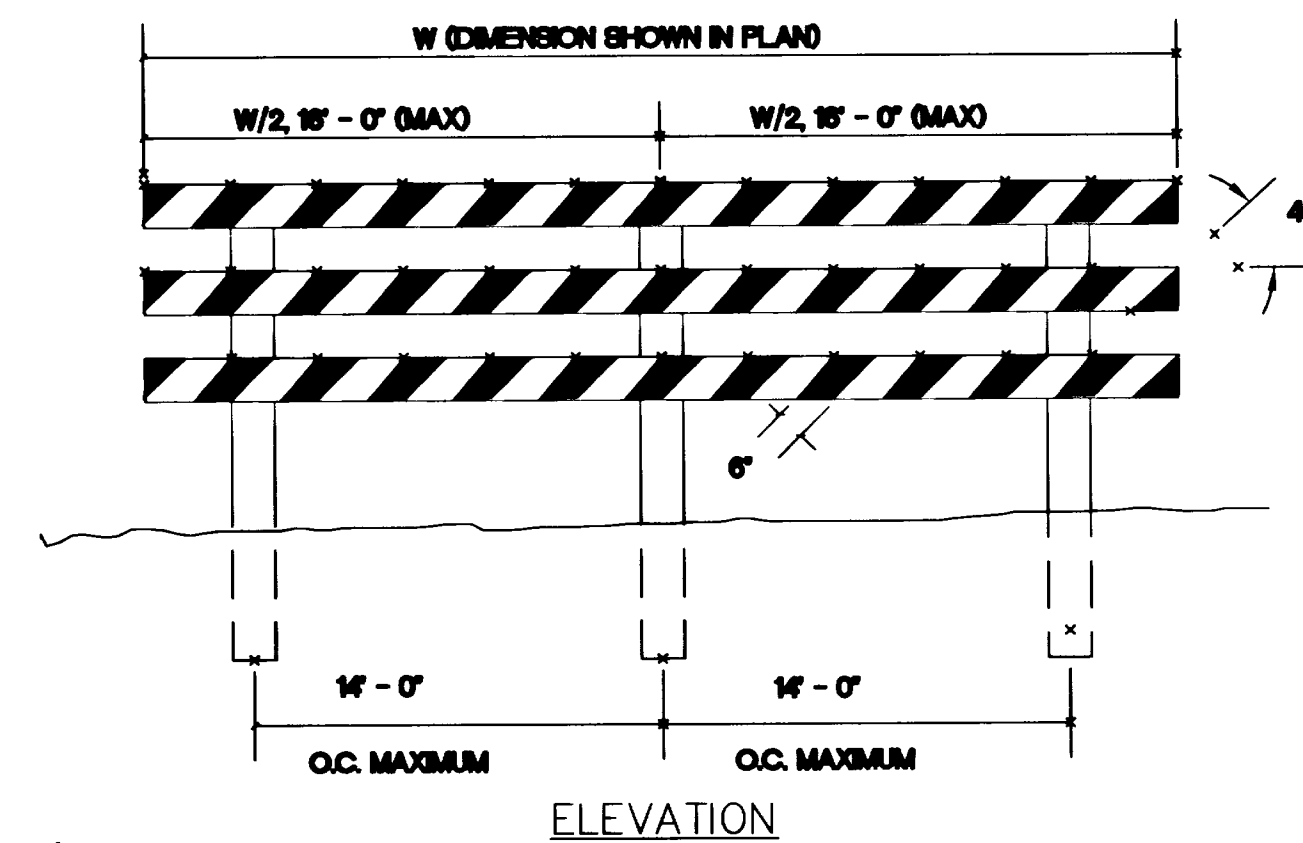




- NOTES:
- FOR USE ALONG MEDIANS, GUTTERS MAY BE REDUCED WITH PRIOR APPROVAL FROM THE CITY ENGINEER.
  - CONCRETE TO HAVE A BREAKING STRENGTH OF 3000 P.S.I. AFTER 28 DAYS.
  - CONTRACTION JOINTS:
    - AT EACH POINT OF TANGENCY OF THE CURB.
    - AT EACH COLD JOINT.
    - AT EACH SIDE OF INLET STRUCTURES.
    - AT BOTH ENDS OF AN APPROACH.
  - BASE ROCK - 1 1/2" MINUS 95% COMPACTION. ROCK SHALL BE TO SUBGRADE OF STREET STRUCTURE OR 4 INCHES, WHICHEVER IS GREATER.
  - DRAINAGE BLOCK - 3" DIAMETER PLASTIC PIPE:
    - DRAINAGE ACCESS THROUGH EXISTING CURBS SHALL BE BY THE FOLLOWING:
      - CORE DRILLING.
      - VERTICAL SAW CUT OF CURB 18" EACH SIDE OF DRAIN & REPAIRED TO FULL DEPTH OF CURB.

## CURB AND GUTTER

NOT TO SCALE

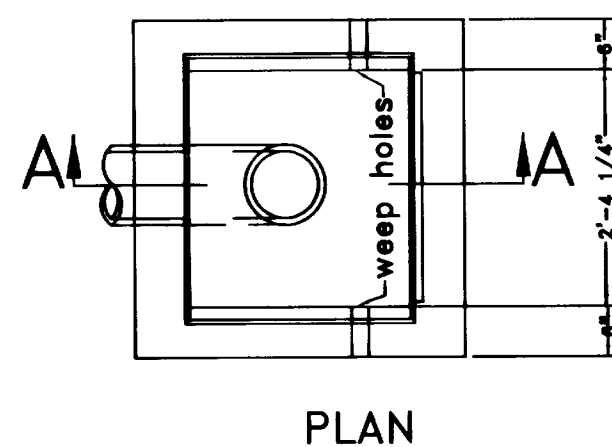


- NOTES:
- RAILS TO HAVE ALTERNATING BLACK AND WHITE STRIPES. ALL STRIPES WILL BE REFLECTORIZED.
  - SEE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND THE OREGON SUPPLEMENT.
  - ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE CURRENT STATE OF OREGON STANDARD SPECIFICATIONS FOR HWY. CONSTRUCTION

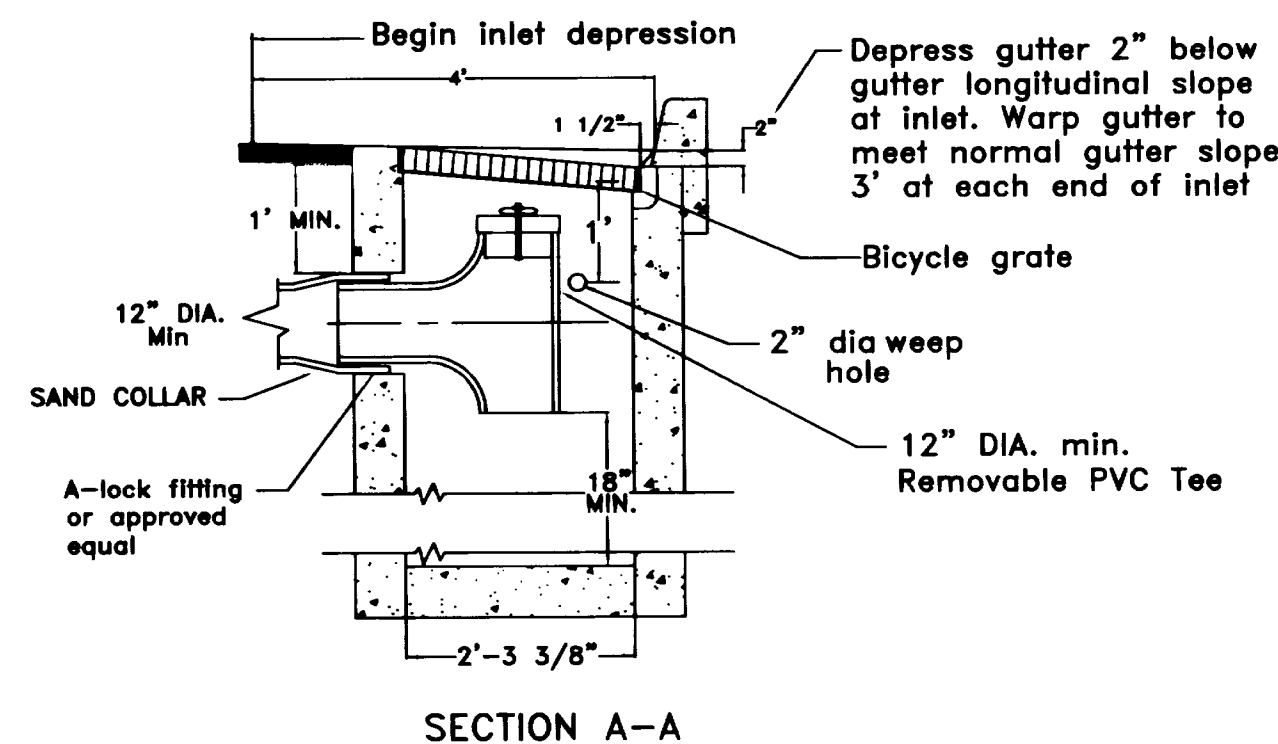
## STREET BARRICADE, TYPE III

NOT TO SCALE

## TRAPPED CATCH BASINS



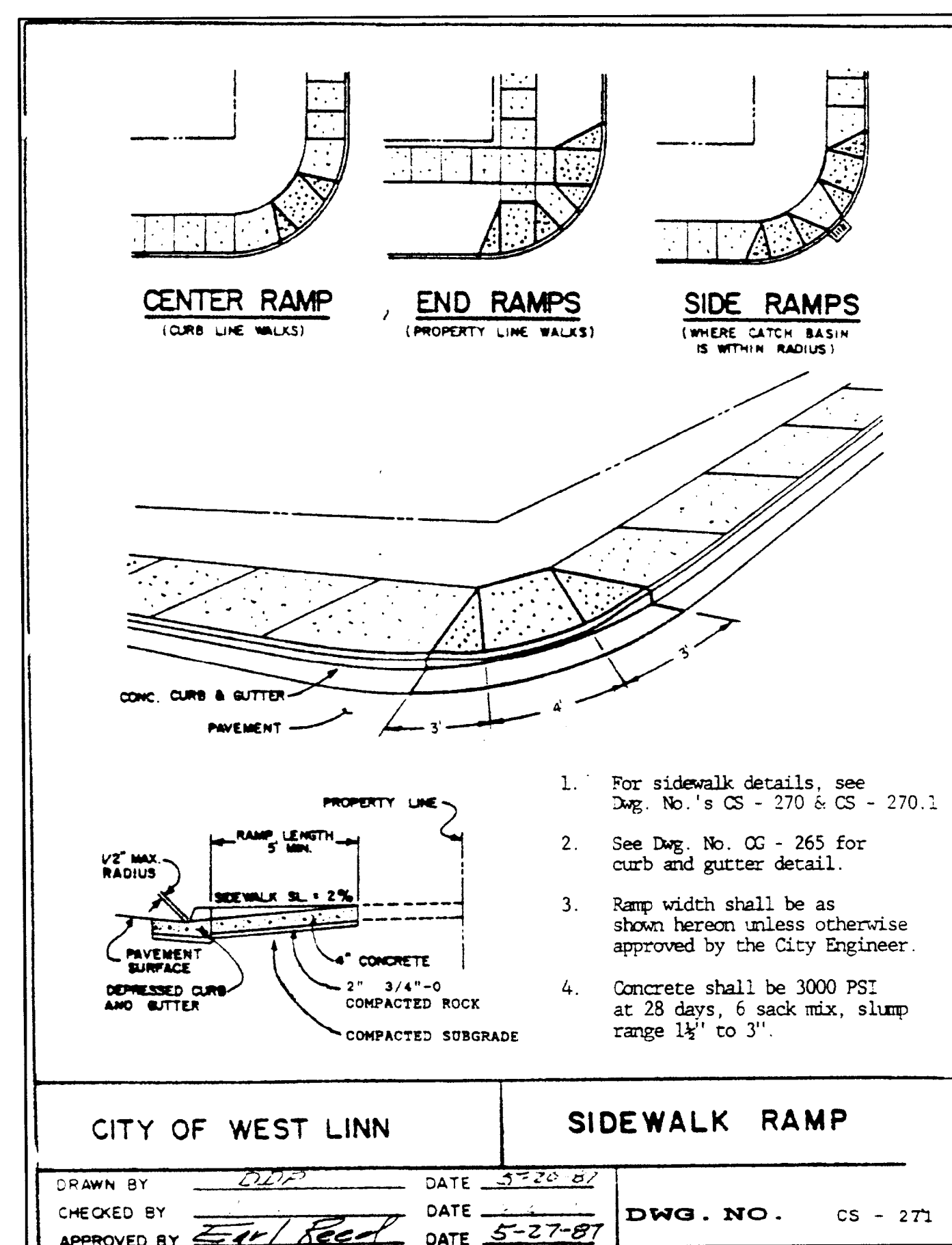
- NOTES:
- Use 3000 lb concrete
  - 2" to 4" slump



- NOTE:
- Trapped Catch Basins required in parking lots; use either elbow or baffles (see drawing No SWM-0003).
  - GB-2 Catch Basin required.
  - GB & GB-1 Catch Basins not acceptable.

## TRAPPED CATCHBASIN, ELBOW

NOT TO SCALE

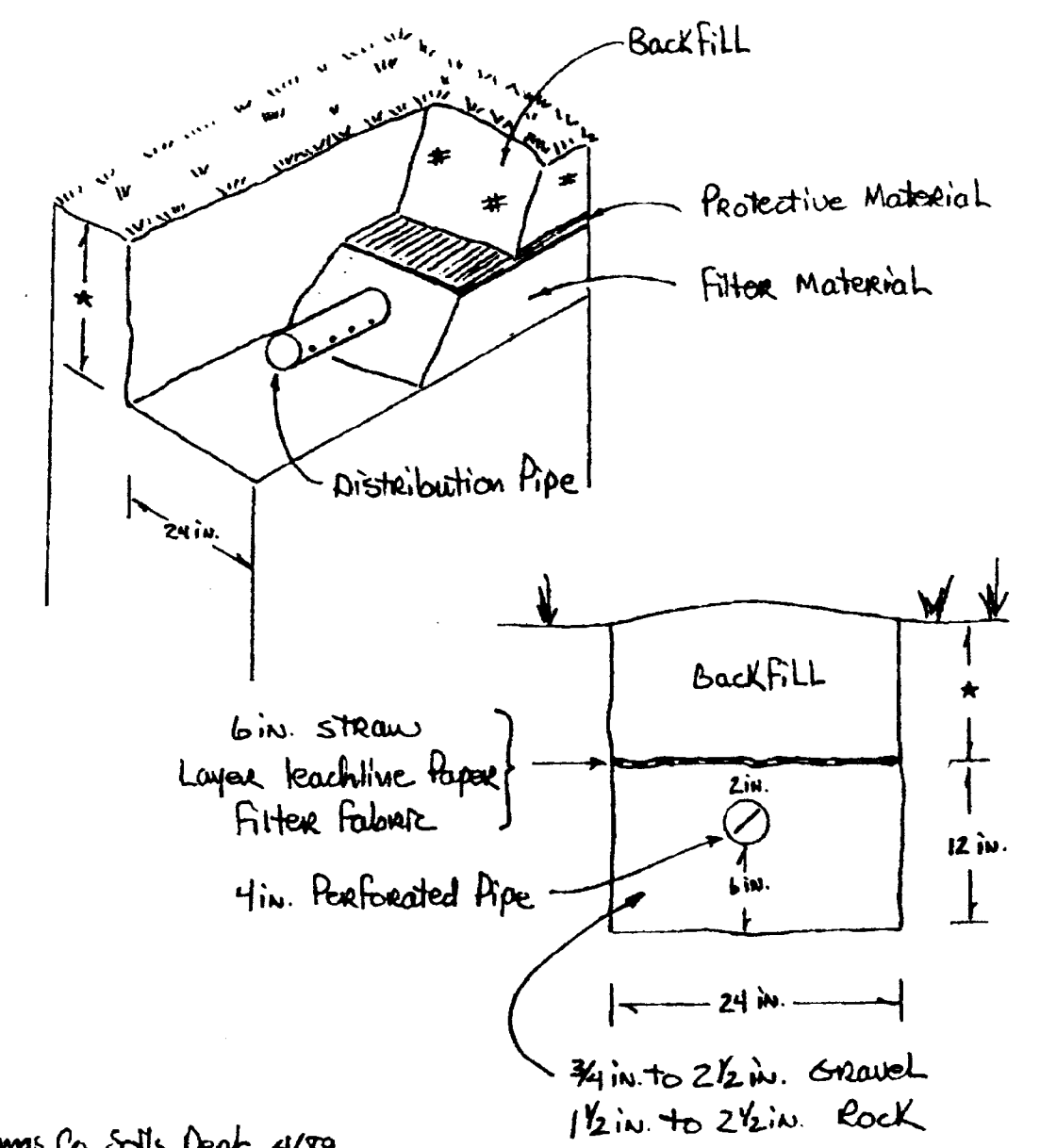


## CITY OF WEST LINN SIDEWALK RAMP

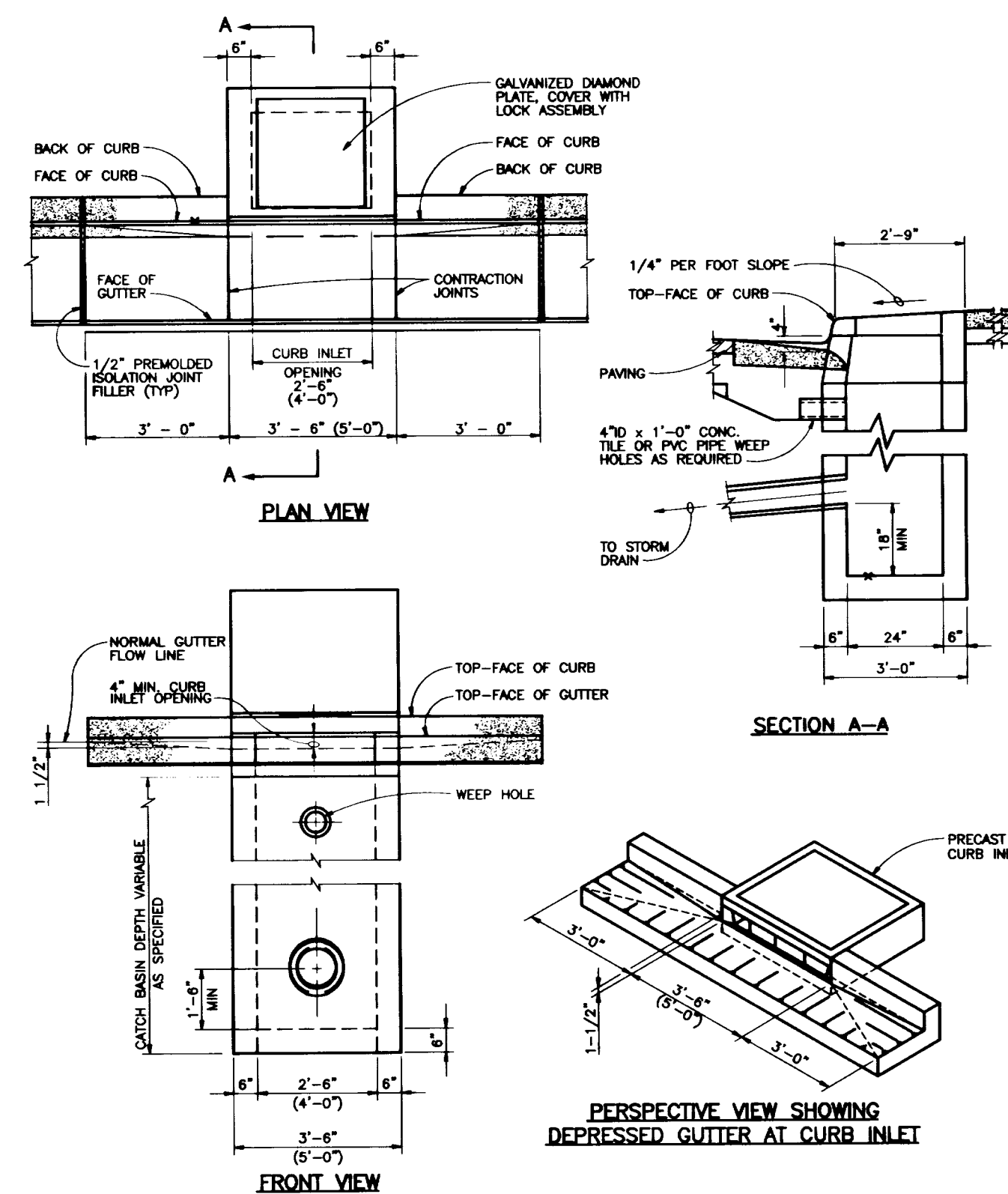
DRAWN BY: *[Signature]* DATE: 5-20-81  
 CHECKED BY: *[Signature]* DATE: 5-27-81  
 DWG. NO.: CS - 271

## DISPOSAL TRENCH CONSTRUCTION

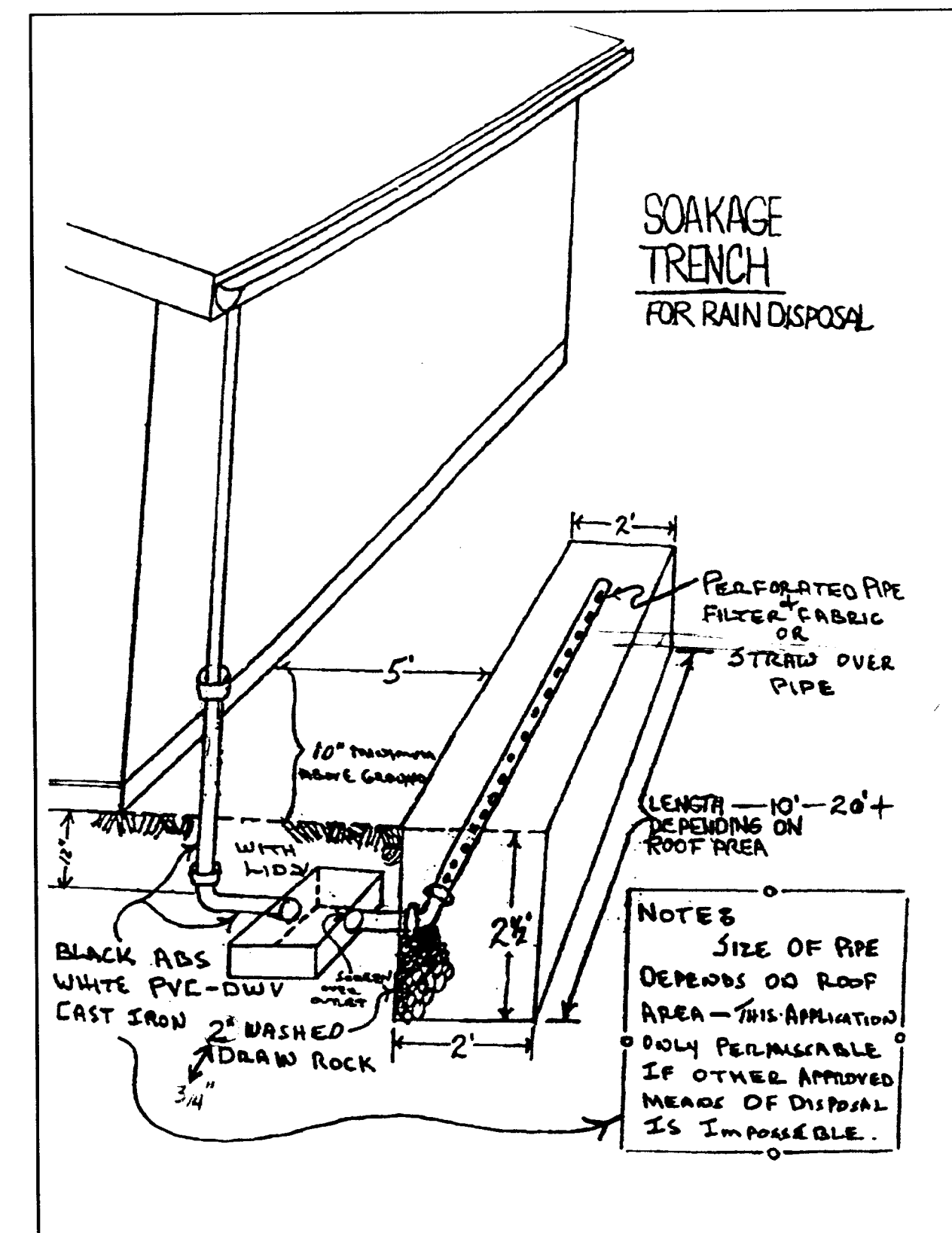
\* Check Permit criteria for minimum & maximum depth



Checkmas Co. Solls Dept 4/89



- NOTES:
- ALL FABRICATED METAL PARTS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION.
  - CONCRETE SHALL BE CLASS 3000.
  - FOR STEEP GRADES USE STD. PRECAST INLET WITH 4"-0" OPENING OR TWO 2"-6" OPENING INLETS.
  - CURB INLET BASE MAY BE PRECAST OR CAST-IN-PLACE.



- NOTES:
- SIZE OF PIPE DEPENDS ON ROOF AREA - THIS APPLICATION ONLY PERMISSIBLE IF OTHER APPROVED MEANS OF DISPOSAL IS IMPOSSIBLE.

## AS-BUILT

THESE AS-BUILT PLANS ARE BASED ON PERIODIC FIELD OBSERVATIONS AND PERFORMING SURVEY MEASUREMENTS OF PUBLIC UTILITIES

PREPARED FOR:  
**J.T. SMITH COMPANIES**  
 23600 SALAMON RD.  
 WEST LINN, OR 97068  
 PHONE (503) 657-3402  
 FAX (503) 657-3635

**RIDGE VIEW ESTATES II & III**  
**STORM & ROAD DETAILS**  
 BLAND CIRCLE  
 WEST LINN, OREGON

Project: 97024  
 Designed: CWQ  
 Drawn: SAE  
 Checked: PJB  
 Date: 5/99

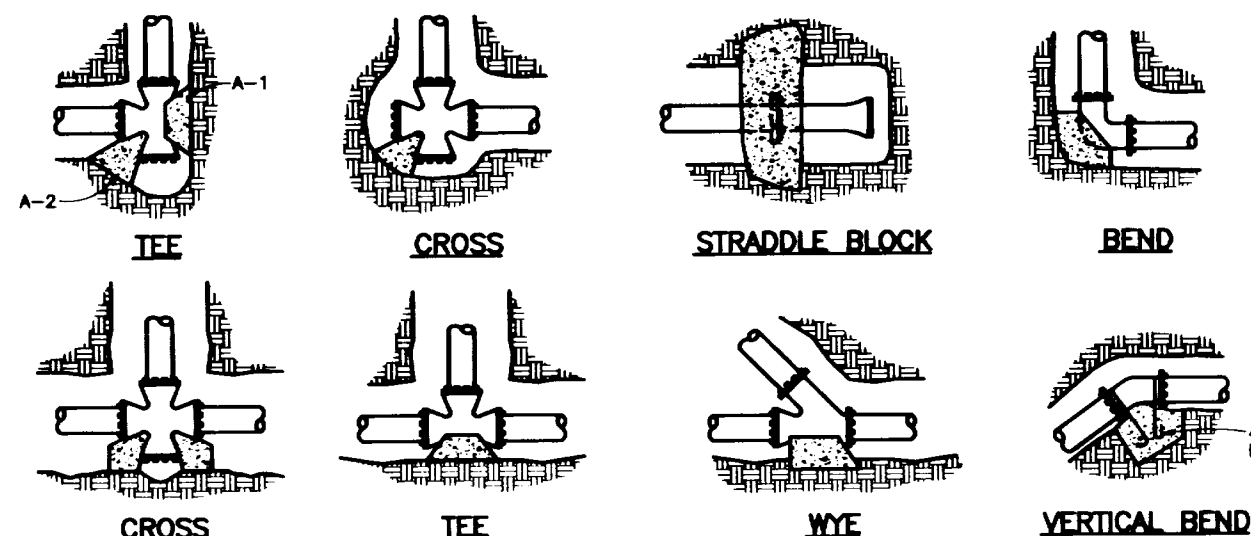


(HORIZONTAL) BEARING AREA OF THRUST BLOCKS IN SQUARE FEET										(VERTICAL) VOLUME OF THRUST BLOCK IN CUBIC YARDS			
FITTING SIZE	TEE, WYE, DEAD END AND HYDRANT	STRADDLE BLOCK	90° BEND PLUGGED CROSS	TEE PLUGGED ON RUN	45° BEND	22-1/2° BEND	11-1/4° BEND	90° BEND	45° BEND	22-1/2° BEND	11-1/4° BEND	90° BEND	45° BEND
4	1.0	1.6	1.4	1.9	1.4	1.0	---	---	---	---	---	---	---
6	2.1	3.7	3.0	4.3	3.0	1.6	1.0	---	1.3	---	---	---	---
8	3.8	6.5	5.3	7.6	5.4	2.9	1.5	1.0	2.3	1.1	---	---	---
10	5.9	10.2	8.4	11.8	8.4	4.6	2.4	1.2	3.7	1.8	---	---	---
12	8.5	14.7	12.0	17.0	12.0	6.6	3.4	1.7	5.5	2.8	1.2	---	---
14	11.5	---	---	23.0	16.3	8.9	4.6	2.3	7.6	3.9	1.7	---	---
16	15.0	26.1	21.3	30.0	21.3	11.6	6.0	3.0	9.9	5.1	2.3	0.9	---
18	19.0	---	---	38.0	27.0	14.6	7.6	3.8	---	---	---	---	---
20	23.5	40.8	33.3	47.0	33.3	18.1	9.4	4.7	---	---	---	---	---
24	34.0	58.8	48.0	68.0	48.0	26.2	13.6	6.8	---	---	---	---	---

- NOTES:
- ABOVE BEARING AREAS BASED ON TEST PRESSURE OF 150 PSI AND AN ALLOWABLE SOIL BEARING STRESS OF 2000 POUNDS PER SQUARE FOOT. TO COMPUTE BEARING AREAS FOR DIFFERENT TEST PRESSURES AND SOIL BEARING STRESSES, USE THE FOLLOWING EQUATION:  

$$\text{BEARING AREA} = (\text{TEST PRESSURE} / 150) \times (2000 / \text{SOIL BEARING STRESS}) \times (\text{TABLE VALUE})$$
  - ABOVE VOLUMES BASED ON TEST PRESSURE OF 150 PSI AND THE WEIGHT OF CONCRETE = 4050 POUNDS PER CUBIC YARD. TO COMPUTE FOR DIFFERENT TEST PRESSURES, USE THE FOLLOWING EQUATION:  

$$\text{VOLUME} = (\text{TEST PRESSURE} / 150) \times (\text{TABLE VALUE})$$



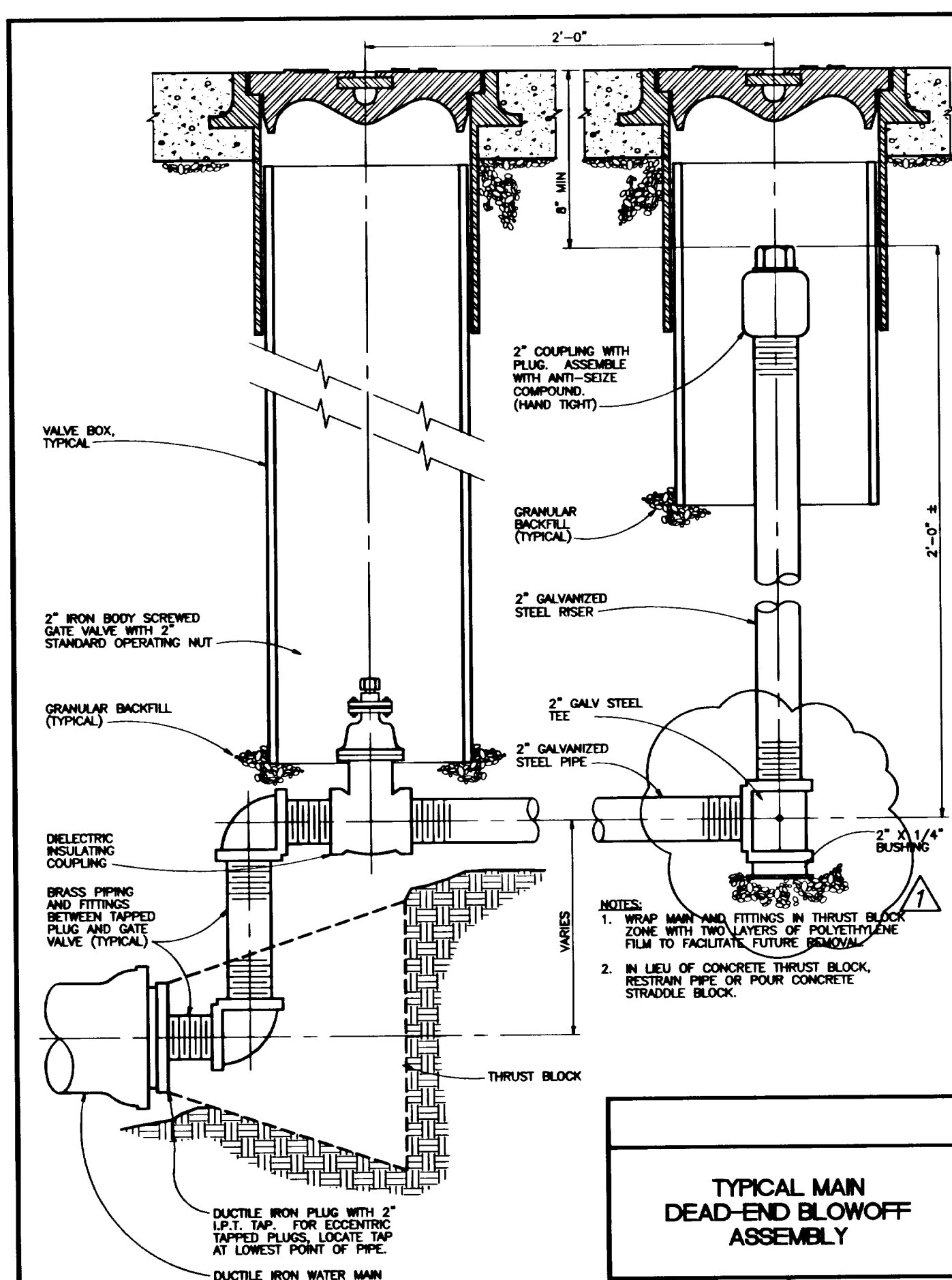
RODS FOR VERTICAL BENDS		
FITTING SIZE	ROD SIZE	EMBEDMENT
12" AND LESS	#6	30"
14"-16"	#8	36"

- NOTES:
- CONCRETE BLOCKING TO BE POURED AGAINST UNDISTURBED EARTH.
  - ALL CONCRETE TO BE CLASS 2400 MINIMUM.
  - INSTALL ISOLATION MATERIAL BETWEEN PIPE AND/OR FITTINGS BEFORE POURING CONCRETE BLOCKING.
  - CONCRETE SHALL BE KEPT CLEAR OF ALL JOINTS AND ACCESSORIES.
  - THE RODS SHALL BE DEFORMED GALVANIZED COLD ROLLED STEEL, 40000 PSI TENSILE STRENGTH.

#### THRUST BLOCKING

DATE: MAY 1992 DRAWING NO: 401

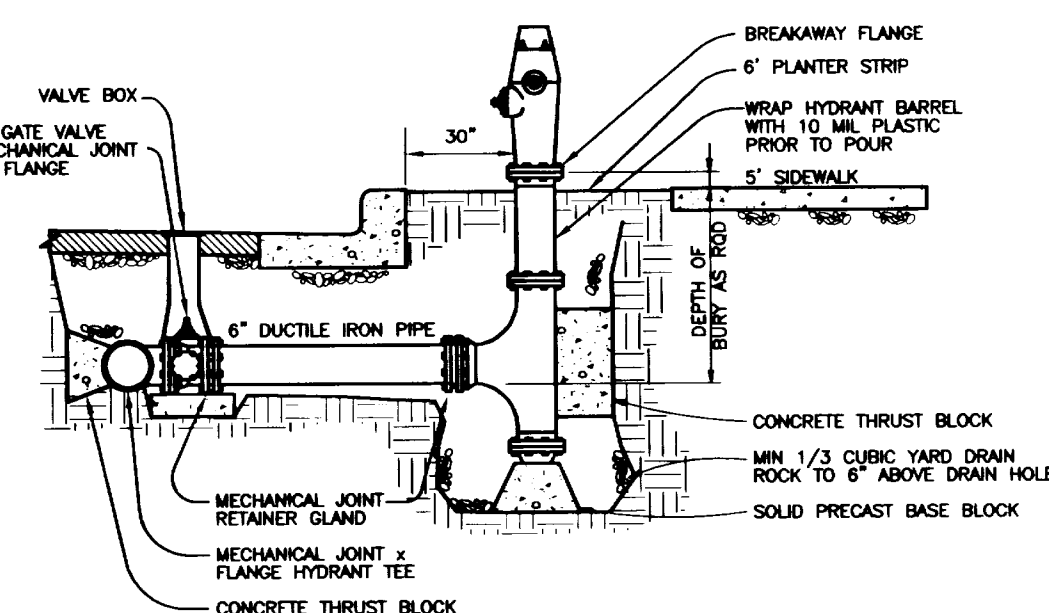
FILENAME: APWA0036.DWG



#### TYPICAL MAIN DEAD-END BLOWOFF ASSEMBLY

DATE: MAR 1992 DRAWING NO: 404

FILENAME: APWA0039.DWG

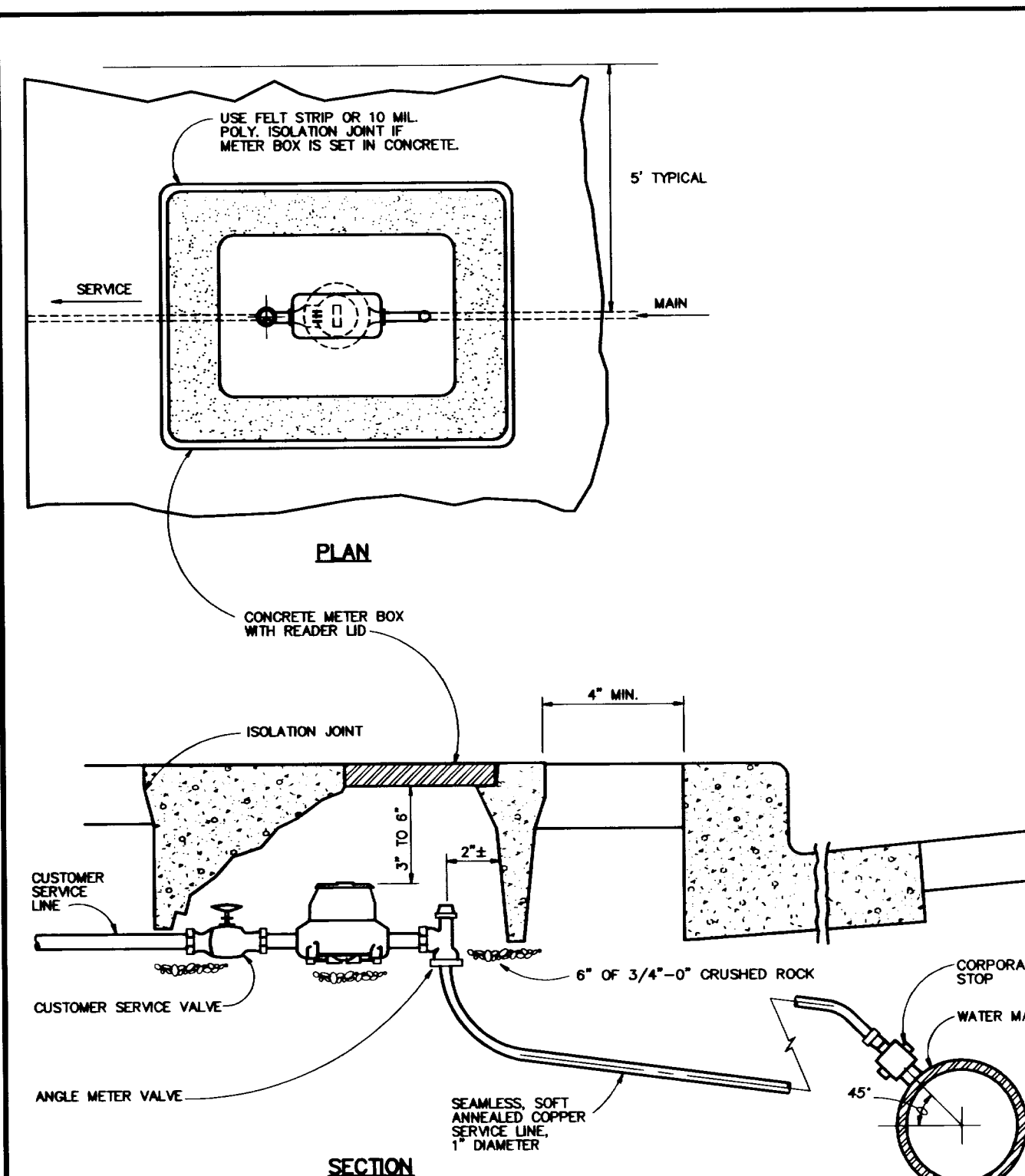


- NOTES:
- WHEN PIPE IS SHORTER THAN 18', NO JOINTS ALLOWED. USE MECHANICAL JOINT RETAINER GLANDS. TWO 3/4" GALVANIZED THE RODS MAY BE USED IN LIEU OF THRUST BLOCKS FOR INSTALLATIONS LESS THAN 18' LONG. THE RODS SHALL BE COATED WITH TWO COATS OF BITUMASTIC.
  - WHEN PIPE IS LONGER THAN 18', RETAINER GLANDS NOT REQUIRED.
  - THERE SHALL BE A MINIMUM OF 18" HORIZONTAL CLEARANCE AROUND HYDRANT.
  - WHEN PLACED ADJACENT TO CURB, HYDRANT PORT SHALL BE 24" FROM FACE OF CURB.
  - CONCRETE THRUST BLOCKS SHALL BE CONSTRUCTED AS PER THRUST BLOCK STANDARD DRAWING. DO NOT BLOCK DRAIN HOLES.
  - EXTENSIONS REQUIRED FOR HYDRANT SYSTEMS SHALL BE INSTALLED TO THE MANUFACTURER'S SPECIFICATIONS.
  - FIRE HYDRANTS SHALL BE PLACED TO PROVIDE A MINIMUM OF 5' CLEARANCE FROM DRIVEWAYS, POLES, AND OTHER OBSTRUCTIONS.
  - HYDRANT PUMPER PORT SHALL FACE DIRECTION OF ACCESS.

#### HYDRANT INSTALLATION

DATE: MAY 1992 DRAWING NO: 402

FILENAME: APWA0037.DWG

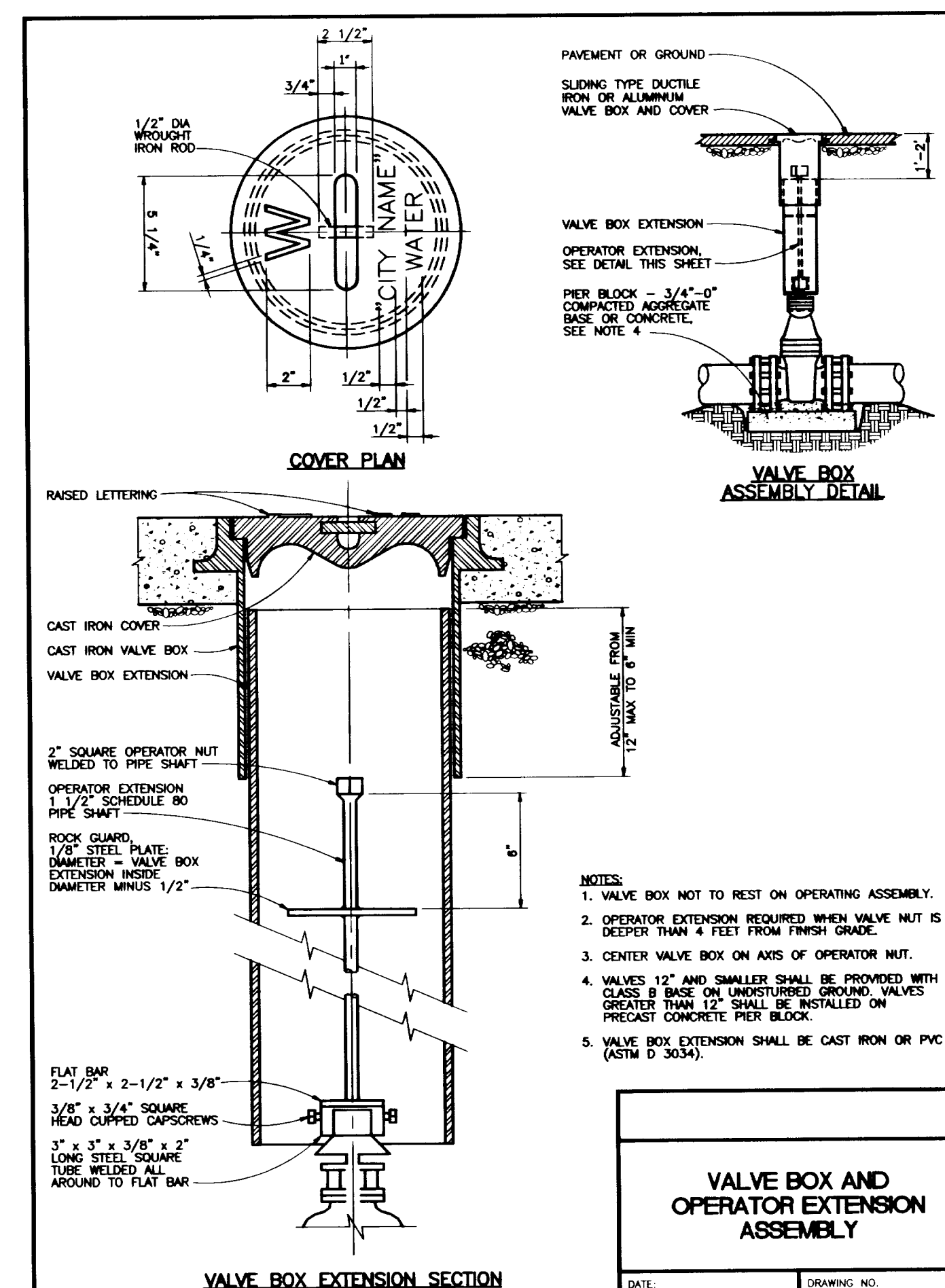


- NOTES:
- METER TO BE CENTERED AND SET PLUMB INSIDE METER BOX.
  - MANUFACTURED METER SETTER MAY BE USED FOR 3/4" TO 2" SERVICES.
  - SET METER BOX 4" MINIMUM BEHIND CURB OR SIDEWALK.
  - METER BOXES SET IN DRIVEWAYS SHALL HAVE TRAFFIC LIDS.

#### 3/4" TO 2" WATER METER SETTING DETAIL

DATE: MAY 1992 DRAWING NO: 408

FILENAME: APWA0043.DWG

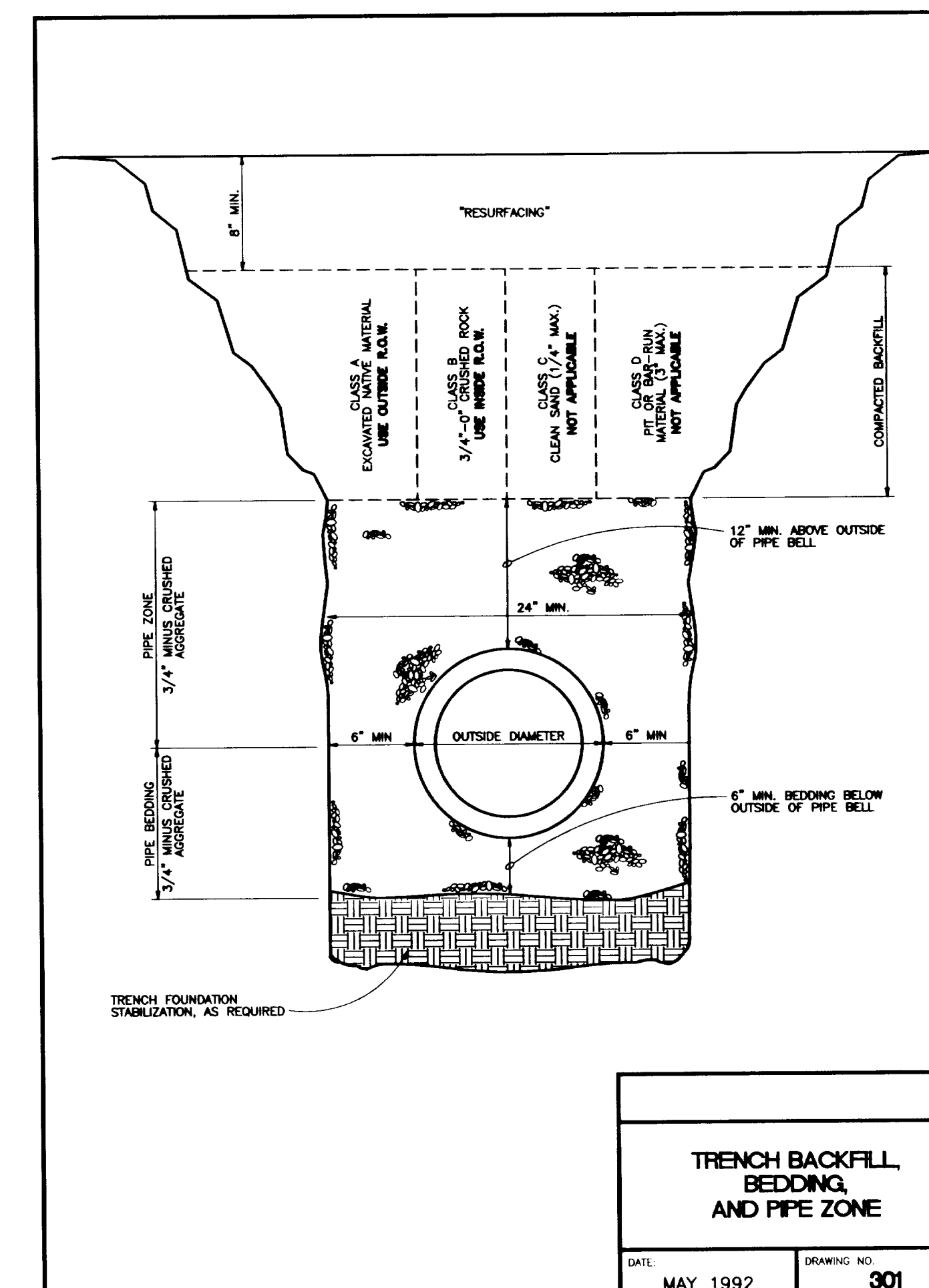


- NOTES:
- VALVE BOX NOT TO REST ON OPERATING ASSEMBLY.
  - OPERATOR EXTENSION REQUIRED WHEN VALVE NUT IS DEEPER THAN 4 FEET FROM FINISH GRADE.
  - CENTER VALVE BOX ON AXIS OF OPERATOR NUT.
  - VALVES 12" AND SMALLER SHALL BE PROVIDED WITH CLASS B BASE ON UNDISTURBED GROUND. VALVES GREATER THAN 12" SHALL BE INSTALLED ON PRECAST CONCRETE PIER BLOCK.
  - VALVE BOX EXTENSION SHALL BE CAST IRON OR PVC (ASTM D 3034).

#### VALVE BOX AND OPERATOR EXTENSION ASSEMBLY

DATE: MAY 1992 DRAWING NO: 403

FILENAME: APWA0038.DWG



#### TRENCH BACKFILL, BEDDING, AND PIPE ZONE

DATE: MAY 1992 DRAWING NO: 301

FILENAME: APWA0015.DWG

**AS-BUILT**  
 THESE AS-BUILT PLANS ARE BASED ON PERIODIC FIELD OBSERVATIONS AND PERFORMING SURVEY MEASUREMENTS OF PUBLIC UTILITIES

**AS-BUILT**

97024DET.dwg

10260 S.W. Nimbus Ave.  
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**TRILAND DESIGN GROUP, INC.**  
 PLANNING • CIVIL ENGINEERING • LAND SURVEYING

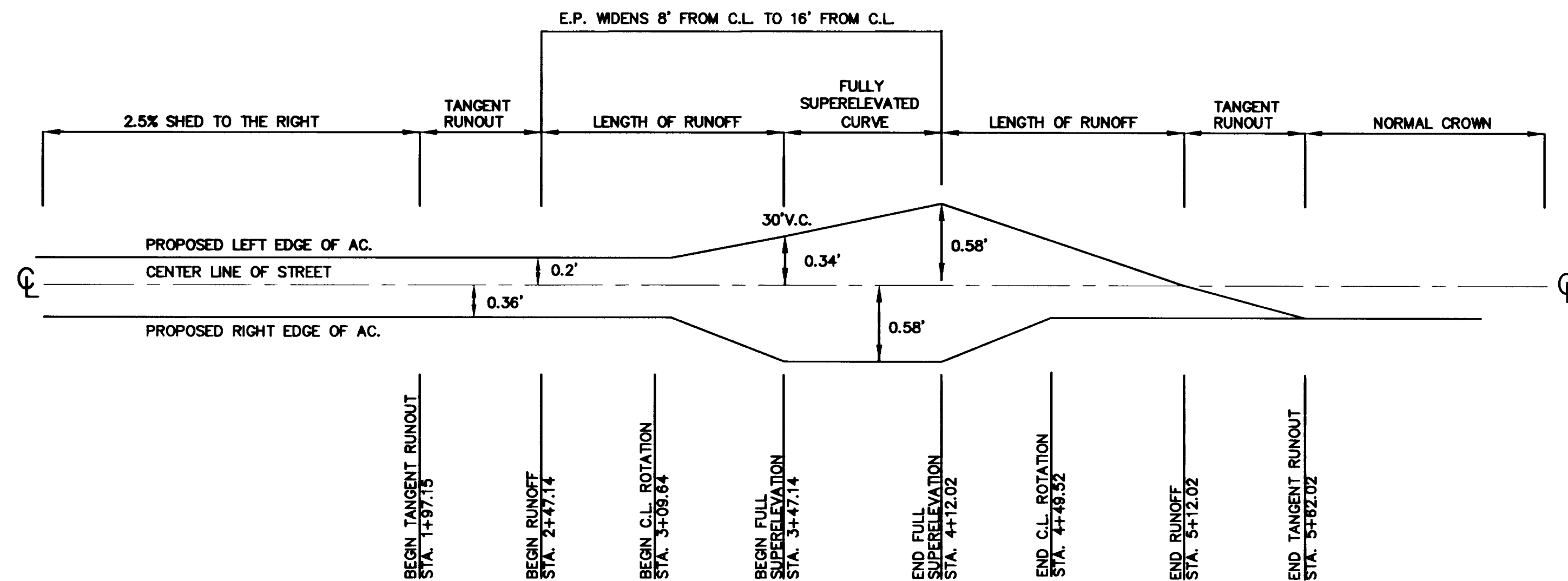
PREPARED FOR:  
**J.T. SMITH COMPANIES**  
 23600 SALAMON RD.  
 WEST LINN, OR 97068  
 PHONE (503) 657-3402  
 FAX (503) 657-3635

**RIDGE VIEW ESTATES II & III**  
**WATER LINE DETAILS**  
 BLAND CIRCLE  
 WEST LINN, OREGON

Project: 97024  
 Designed: CWQ  
 Drawn: SAE  
 Checked: PTB  
 Date: 599

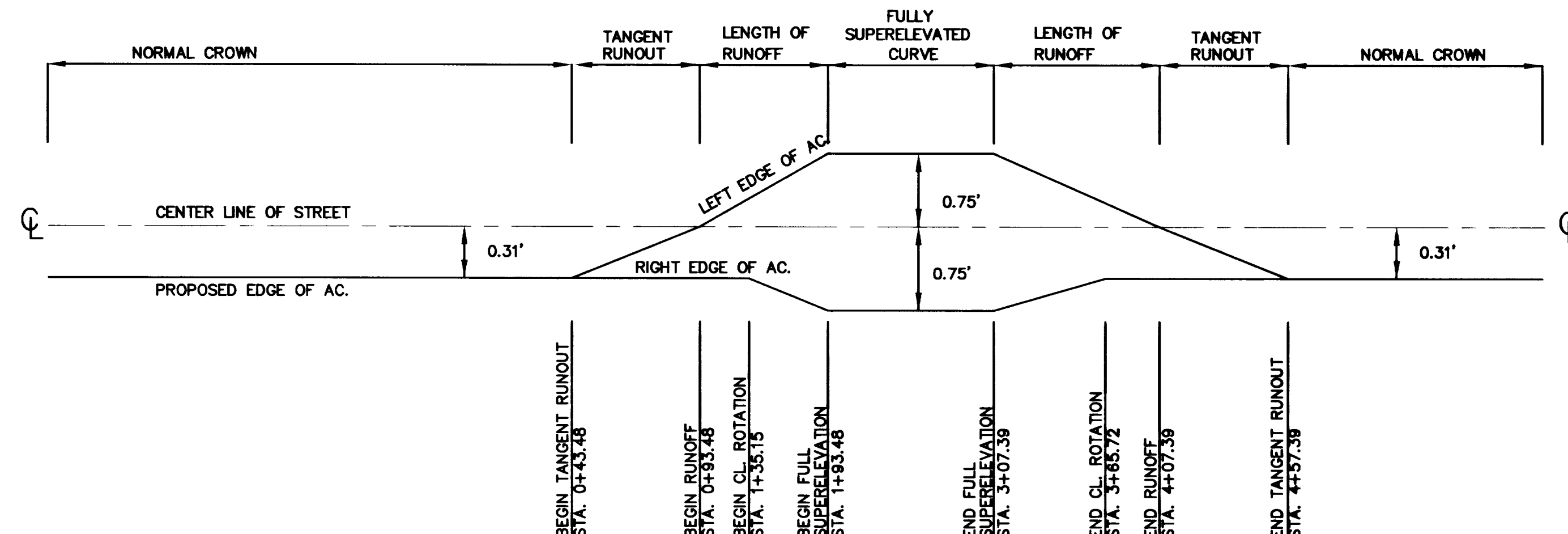
18 of 20





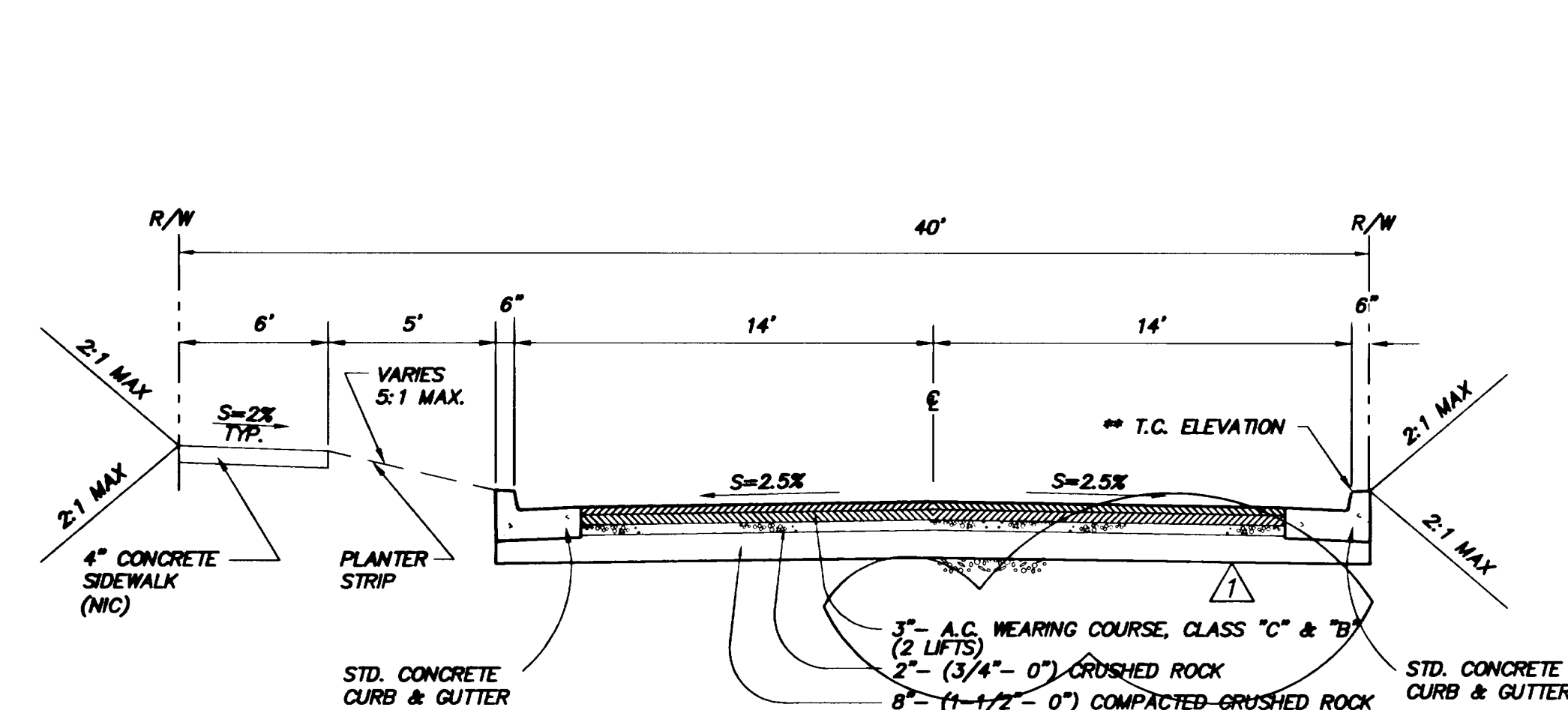
**KILLARNEY/ALPINE DRIVE SUPERELEVATION DIAGRAM  $\theta=0.04$**

NOT TO SCALE



**FIRCREST DRIVE SUPERELEVATION DIAGRAM  $\theta=0.06$**

NOT TO SCALE

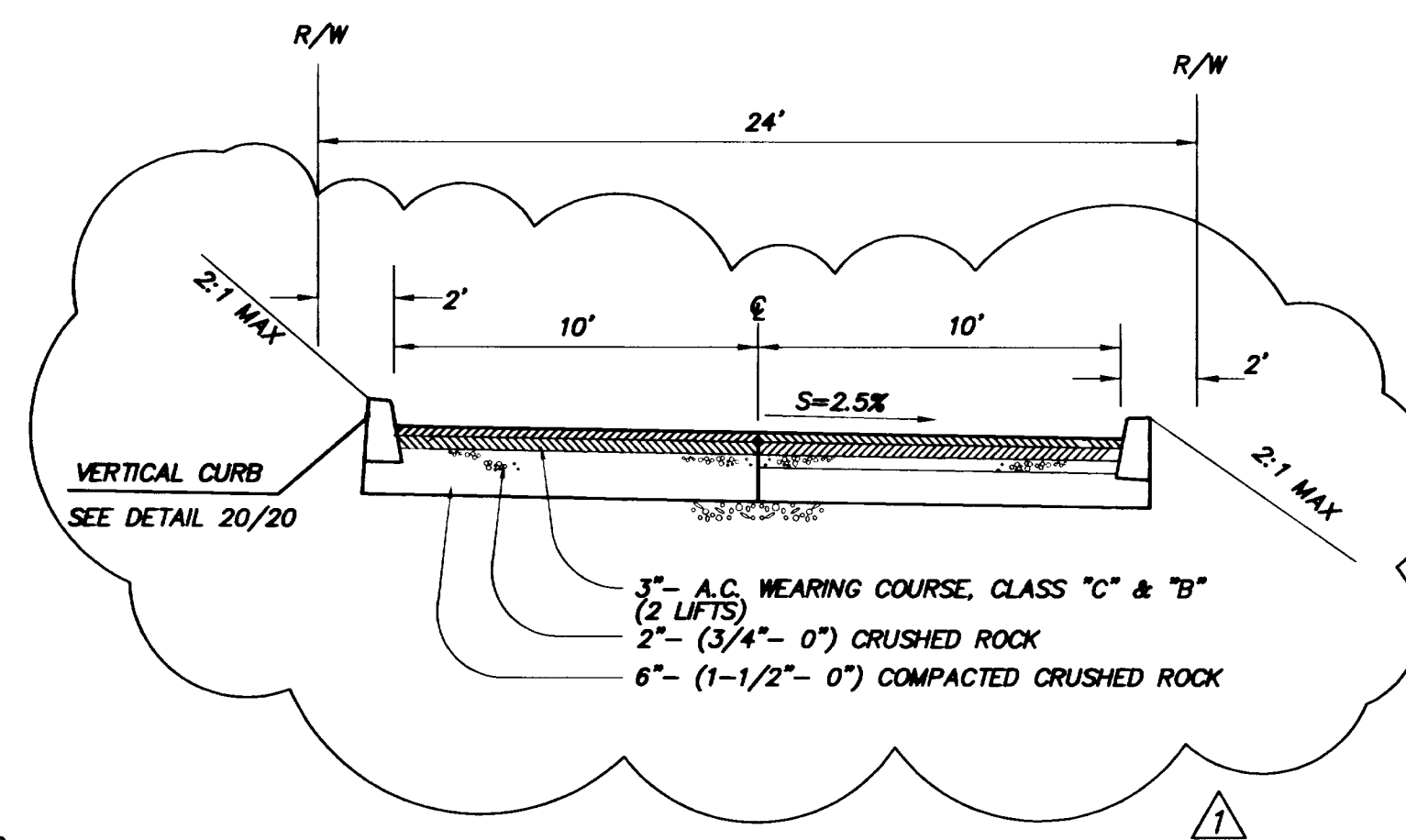


\*\* T.C. ELEVATION = FINISH GRADE @ CENTERLINE + 0.10' FOR 14' LANE WIDTH

**TYPICAL FIRCREST DRIVE SECTION**

NOT TO SCALE

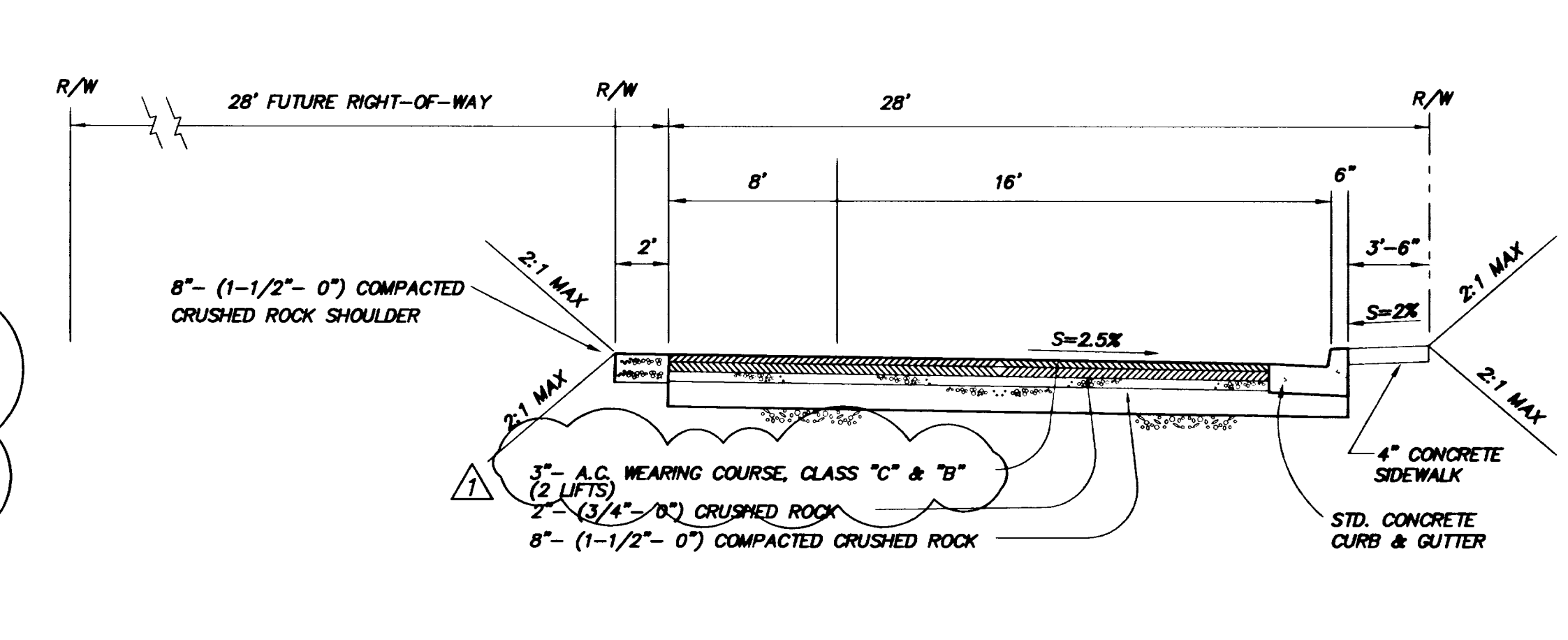
STA 0+00 TO 4+71.38



**PRIVATE DRIVEWAY SECTION**

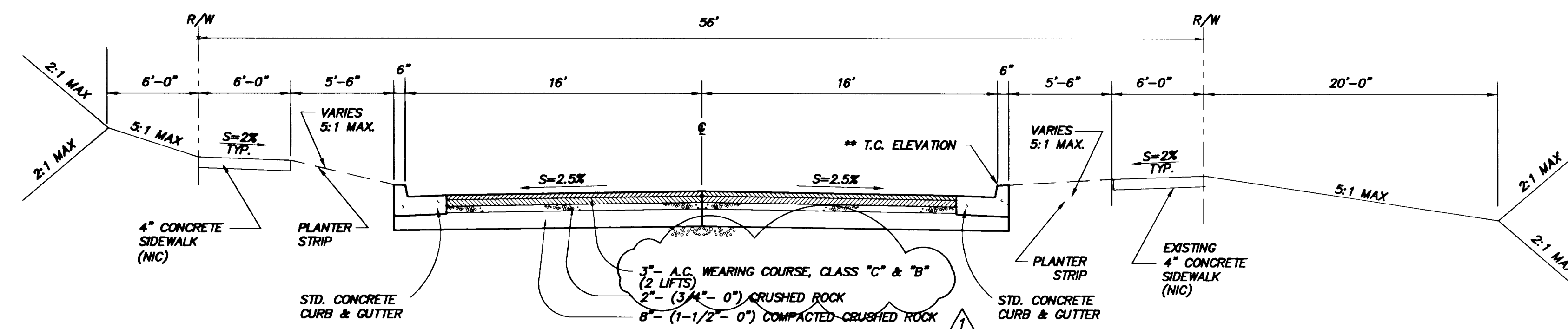
NOT TO SCALE

STA 4+71.38 TO 6+44.73



**KILLARNEY DRIVE EXTENTION ROAD SECTION NOT TO SCALE**

WIDTH OF SECTION FROM STA. 1+68.19 TO 3+42.12 = 24 FEET  
WIDTH OF SECTION FROM STA. 3+42.12 TO 4+12.02 VARIES FROM 24 FT. TO 32 FT.  
WHEN WIDTH REACHES 32' REFER TO TYPICAL ROAD SECTION ALPINE DRIVE.

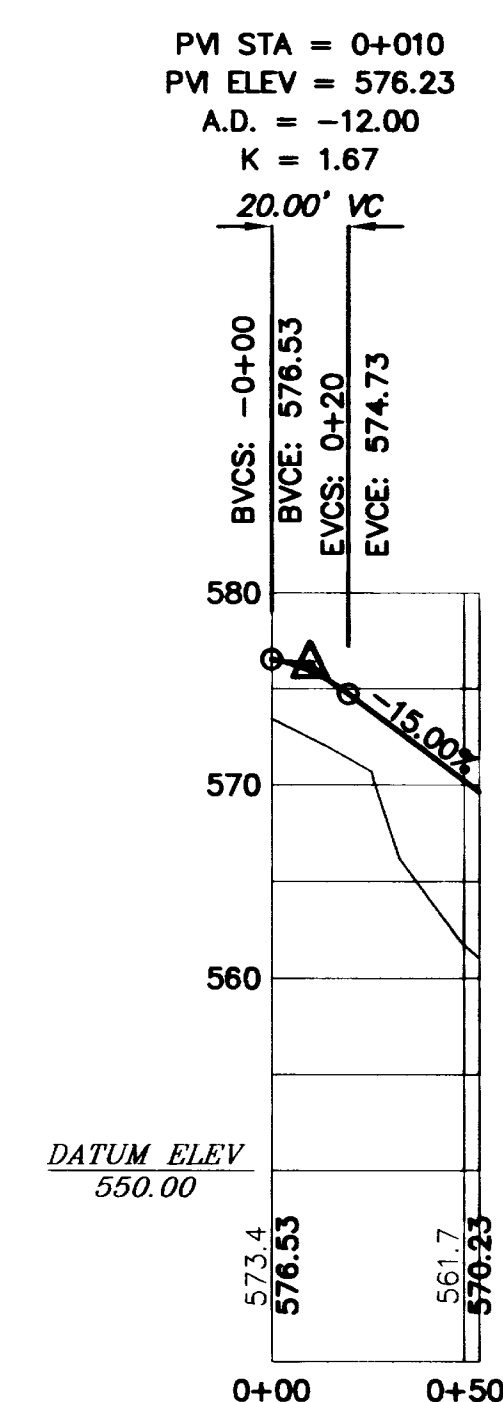


\*\* T.C. ELEVATION = FINISH GRADE @ CENTERLINE + 0.05' FOR 16' LANE WIDTH

**TYPICAL ROAD SECTION**

NOT TO SCALE

CRESTVIEW DRIVE STA 2+79.94 TO 12+43.07  
ALPINE DRIVE STA 4+12.02 TO 8+24.58  
BLAND CIRCLE STA 16+05.10 TO 18+24.19



**FIRE TURN NO. 1 PROFILE**

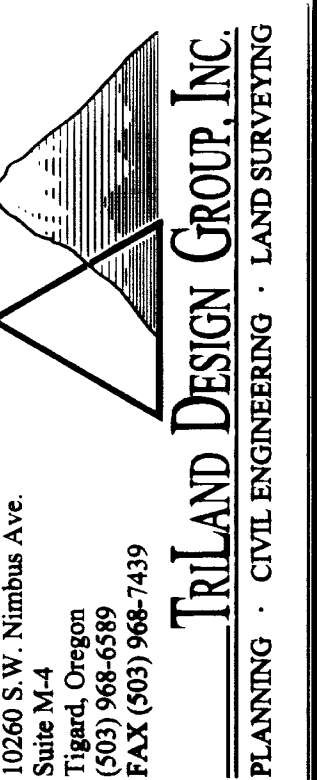
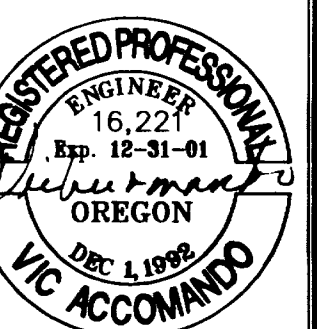
SCALE 1"=50' HORZ. 1"=10' VERT.

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**AS-BUILT**

REVISION	NO.	BY	DATE	DESCRIPTION
4	CWQ	12/15/00		AS-BUILT'S W/LAP
3	P.K.	10/31/00		AS-BUILT'S REVISION II
2	P.B.	12/23/99		AS-BUILT'S
1	CWQ	6/15/98		CHANGE CROSS SECTION OF PRIVATE DRIVE SO AS TO HAVE CURB ADD "B" ASPHALT



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**RIDGE VIEW ESTATES II & III**  
**STREET DETAILS & PROFILES**  
BLAND CIRCLE  
WEST LINN, OREGON

Project	97024
Designed	CWQ
Drawn	SAE
Checked	PJB
Date	5/99



