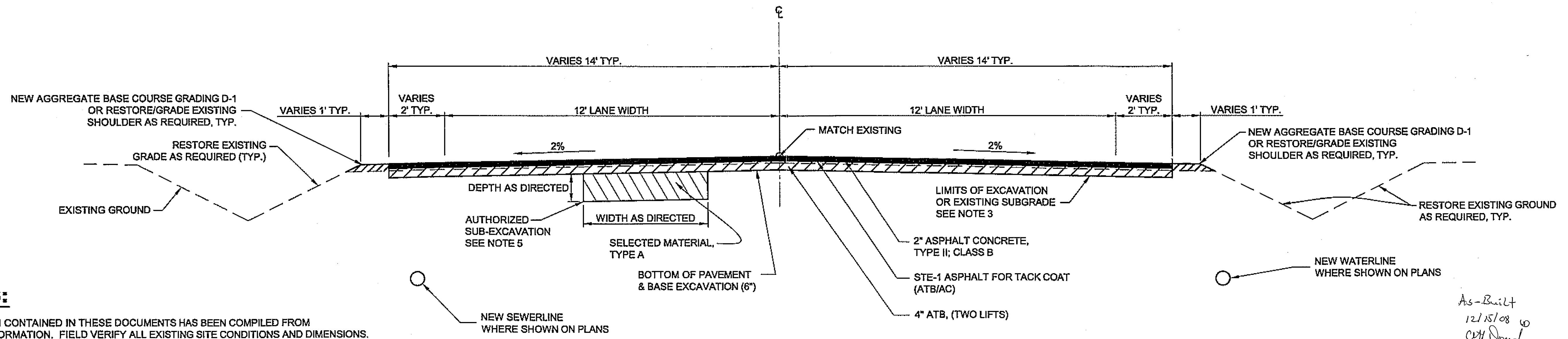


**EXISTING  
TYPICAL SECTION**  
STA. "C" 0+90 TO 10+43  
STA. "O" 0+18 TO 31+00

**NOTE:**  
FROM STA. "C" 0+90 TO STA. "C" 5+50  
AND "C" 8+80 TO STA. "C" 10+43  
HIGHWAY FORK WIDENS, SEE PLANS.



**NEW TYPICAL SECTION**

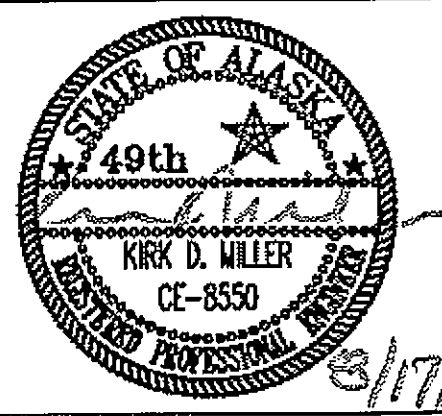
STA. "C" 0+90 TO 10+43  
STA. "O" 0+18 TO 31+00  
STA. "H" 10+00 TO 16+37 60 'H' 8+00 TO 'H' 10+13  
10+13

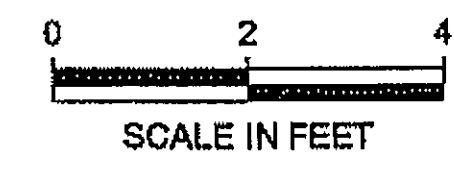
**NOTES:**

1. INFORMATION CONTAINED IN THESE DOCUMENTS HAS BEEN COMPILED FROM EXISTING INFORMATION. FIELD VERIFY ALL EXISTING SITE CONDITIONS AND DIMENSIONS.
2. SUMMARY TABLES ARE FOR BIDDING INFORMATION ONLY. ALL MANHOLES, MONUMENT CASES, VALVE BOXES, ETC. SHALL BE FIELD LOCATED, PRIOR TO REMOVAL OF PAVEMENT.
3. REMOVE EXISTING ASPHALT CONCRETE SURFACING, GRADE/RESTORE EXISTING SUBGRADE AS REQUIRED AND PLACE NEW ATB AND AC SURFACING ALONG PRIMARY PORTIONS OF UNION STREET. REMOVE 8-INCHES AND REFURBISH WITH NEW ATB AND AC SURFACING TO MATCH EXISTING FINISH GRADES AT BEGINNING AND END OF PROJECTS WHERE REQUIRED TO MATCH EXISTING ROADS, CONCRETE CURB, GUTTERS OR SIDEWALKS.
4. ALL EXISTING ASPHALT CONCRETE MATERIALS TO BE REMOVED SHALL BE GROUND AND STOCKPILED AT THE ADOT&PF MAINTENANCE FACILITY LOCATED BETWEEN UNION AND MAIN STREETS NEAR ALLEN ROAD. ALL OTHER REMOVED MATERIALS THAT ARE NOT DESIGNATED FOR REUSE ON THE PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND PROPERLY DISPOSED OF AT AN APPROVED SITE.
5. ESTIMATED SUB-EXCAVATION = 25 CY., PERFORM WHERE DIRECTED BY THE ENGINEER.
6. SURVEY CONTROL: USE MONUMENTS LISTED ON THE PLAN SHEETS. INDICATED ELEVATIONS ARE TOP OF CAP.

*As-Built  
12/15/08  
CJF/Dough*

**DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS**

CHECKED BY: K. MILLER  DESIGNED BY: L. SEIFERT DRAWN BY: R.S./R.G.		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION <b>HAINES ALASKA UNION STREET          REFURBISHMENT-68317 / STP-003(104)          SAWMILL CREEK CULVERT          REPLACEMENT - 69081 / HRM-003(114)          HAINES BOROUGH UTILITIES - 68623</b>	
PATH: Q:\Hns\68317\Plense\B_Typ.dwg TAB: B1 Thu, 16/Aug/07 02:27PM Itsselfert		<b>TYPICAL SECTION</b>	
REVISIONS NO. DATE DESCRIPTION		PROJECT DESIGNATION <b>STP-0003(104)</b>	YEAR <b>2006</b>
		SHEET NO. <b>B1</b>	TOTAL SHEETS <b>XX</b>



**ESTIMATE OF QUANTITIES - PLANSET A**

ITEM NO	PAY ITEM	PAY UNIT	UNION ST. 68317	SAWMILL CK CULVERT 69081	HAINES BOROUGH UTILITIES	COMBINED
202 (2)	REMOVAL OF PAVEMENT	SQUARE YARD	15500			15500
202 (5)	REMOVAL OF SANITARY SEWER AND WATER PIPE	LUMP SUM		ALL REQUIRED		ALL REQUIRED
202 (6)	REMOVAL OF MANHOLE	EACH		1	1	2
202 (13)	REMOVAL AND DISPOSAL OF ASBESTOS CEMENT PIPE	LUMP SUM			ALL REQUIRED	ALL REQUIRED
202 (14)	DECOMMISSION EXISTING CULVERT	LUMP SUM		ALL REQUIRED		ALL REQUIRED
203 (3)	UNCLASSIFIED EXCAVATION	CUBIC YARD	25			25
203 (6A)	BORROW, SELECTED MATERIAL, TYPE A	TON	50			50
203 (6B)	BORROW, SELECTED MATERIAL, TYPE B	TON	195	195	300	690
301 (1)	AGGREGATE BASE COURSE, GRADING D-1	TON	200	160	200	560
306 (1)	ATB	TON	4300			4300
401 (1)	ASPHALT CONCRETE, TYPE II, CLASS B	TON	3500			3500
401 (2)	ASPHALT CEMENT, GRADE PG 58-28	TON	382			382
402 (1)	STE-1 ASPHALT FOR TACK COAT	TON	9			9
501 (1)	CLASS A CONCRETE (ENCASEMENT)	EACH		2	3	5
603 (1-18)	18 INCH CSP	LINEAR FOOT			118	118
603 (1-24)	24 INCH CSP	LINEAR FOOT			54	54
603 (9-72)	72 INCH CORRUGATED ALUMINUM PIPE	LINEAR FOOT		300		300
604 (2)	SANITARY SEWER MANHOLE	EACH			3	3
604 (4)	ADJUST EXISTING MANHOLE	EACH	5	1		6
604 (5)	INLET, TYPE A	EACH			2	2
604 (8)	FURNISH AND INSTALL DROP MANHOLE	EACH		1		1
606 (1)	W-BEAM GUARDRAIL	LINEAR FOOT	100			100
606 (6)	REMOVING AND DISPOSING OF GUARDRAIL	LINEAR FOOT	100			100
606 (9)	CONTROLLED RELEASE TERMINAL (CRT)	EACH	1			1
606 (13)	DOWNSTREAM END ANCHOR	EACH	1			1
608 (1A)	CONCRETE SIDEWALK, 4 INCH THICK	SQUARE YARD	52			52
608 (6)	CURB RAMP	EACH	6			6
609 (2A)	CURB AND GUTTER, TYPE STANDARD	LINEAR FOOT	280			280
611 (1)	RIPRAP, CLASS I	TON		144		144
615 (1)	STANDARD SIGN	SQUARE FOOT	163			163
618 (1A)	SEEDING	SQUARE YARD		100	2500	2600
626 (1-8)	SANITARY SEWER CONDUIT, 8 INCH PVC	LINEAR FOOT			750	750
626 (1-10)	SANITARY SEWER CONDUIT, 10 INCH PVC	LINEAR FOOT		310		310
626 (2-6)	SEWER SERVICE CONNECTION, 6 INCH	EACH		2		2
626 (2-8)	SEWER SERVICE CONNECTION, 8 INCH	EACH			1	1
626 (3)	ADJUST EXISTING SANITARY SEWER CLEANOUT	EACH	-2			-2
626 (4)	SANITARY SEWER CLEANOUT	EACH			1	1
627 (1-8)	WATER CONDUIT, 8 INCH PVC	LINEAR FOOT		110	1000	1110
627 (5)	FIRE HYDRANT INSTALLATION	EACH			1	1
627 (8-1)	WATER SERVICE CONNECTION, 1"	EACH			6	6
627 (8-2)	WATER SERVICE CONNECTION, 2"	EACH			2	2
627 (8-6)	WATER SERVICE CONNECTION, 6"	EACH			2	2
627 (9-8)	INSTALL 8 INCH GATE VALVE	EACH			1	1
627 (10)	ADJUSTMENT OF VALVE BOX	EACH	7			7
635 (1)	INSULATION BOARD	SQUARE FOOT		96		96
639 (3)	APPROACH	EACH	34			34
640 (1)	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
640 (4)	WORKER MEALS AND LODGING, OR PER DIEM	LUMP SUM	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
641 (1)	EROSION AND POLLUTION CONTROL ADMINISTRATION	LUMP SUM	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
641 (3)	TEMPORARY EROSION AND POLLUTION CONTROL	LUMP SUM	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
641 (4)	TEMPORARY EROSION AND POLLUTION CONTROL AMENDMENTS	CONTINGENT SUM	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
642 (1)	CONSTRUCTION SURVEYING	LUMP SUM	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
642 (11)	ADJUST EXISTING MONUMENT CASE	EACH	8			8
643 (2)	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
643 (3)	PERMANENT CONSTRUCTION SIGNS	LUMP SUM	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
643 (15)	FLAGGING	CONTINGENT SUM	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
643 (25)	TRAFFIC CONTROL	CONTINGENT SUM	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
644 (6)	VEHICLES	LUMP SUM	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
648 (5A)	ARCHAEOLOGICAL MONITOR (SAWMILL CREEK CULVERT REPLACEMENT)	HOUR		60		60
648 (5B)	ARCHAEOLOGICAL MONITOR (HAINES BOROUGH UTILITIES)	HOUR			60	60
670 (1)	PAINTED TRAFFIC MARKINGS	LUMP SUM	ALL REQUIRED			ALL REQUIRED

**BASIS OF ESTIMATE**

ITEM	PAY ITEM	ESTIMATING FACTOR
203(5)	BORROW, SELECTED MATERIAL, TYPE A & B	1.9 TON/CY
301(1)	AGGREGATE BASE COURSE, GRADING D-1	2.0 TON/CY
306(1)	ATB	120 LB/SY/IN
306(2)	ASPHALT CEMENT, TYPE PG 58-28	4.0% OF ITEM 306 (1)
401(1)	ASPHALT CONCRETE, TYPE II; CLASS B	125 LB/SY/IN
401(2)	ASPHALT CEMENT, GRADE PG 58-28	6.0% OF ITEM 401 (1)
402(1)	STE-1 ASPHALT FOR TACK COAT	0.1 GAL/SY, 243 GAL/TON

**GENERAL NOTES FOR UTILITY CONSTRUCTION:**

- LOCATION OF NEW SEWER AND WATER UTILITIES MAY VARY FROM LOCATIONS SHOWN ON THE PLANS. THE CONTRACTOR SHALL FIELD VERIFY AND COORDINATE EXACT LOCATIONS OF NEW UTILITY FEATURES (ANGLE POINTS, VALVES, MANHOLES, ETC.) WITH THE ENGINEER AND THE HAINES BOROUGH PRIOR TO CONSTRUCTION.
- UNLESS OTHERWISE NOTED ON THE PLANS OR STANDARD DETAILS, ALL SEWER AND WATER PIPE MATERIALS SHALL BE PVC PER AWWA C900. DR 18. WATER PIPE SHALL BE BLUE IN COLOR. SEWER PIPE SHALL BE GREEN IN COLOR.
- ALL WATER PIPE PUSH-ON JOINTS SHALL BE RESTRAINED JOINT TYPE WITH LOCKING GASKETS SUCH AS MJ-FIELD-LOK GASKET, SERIES PV AS MANUFACTURED BY US PIPE OR APPROVED EQUAL. *Directed by Addendum No. 1.*
- ALL WATER VALVES SHALL BE RESTRAINED JOINT TYPE. EITHER PUSH-ON WITH RESTRAINING DEVICES OR FLANGED JOINTS.
- PROVIDE CONCRETE THRUST BLOCKS IN ACCORDANCE WITH STANDARD 414B AT ALL WATER PIPE BENDS THAT EQUAL OR EXCEED 22.5 DEGREES.
- WHERE WATER AND SEWER PIPES CROSS AND SEWER PIPE ENCASEMENT IS NOT NOTED ON THE PLANS: MAINTAIN 18-INCHES OF VERTICAL SEPARATION (UNLESS OTHERWISE NOTED ON THE PLANS OR NOT POSSIBLE) AND LOCATE WATER PIPE JOINTS A MINIMUM OF 10-FEET FROM THE CENTERLINE OF THE SEWER PIPE CROSSING.
- WATER SERVICE SADDLES ATTACHED TO PVC WATER PIPE SHALL BE DOUBLE STRAP TYPE SUCH AS ROMAC STYLE 202S OR 202NS OR APPROVED EQUAL.
- REFERENCE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS NOT NOTED IN THESE NOTES OR ON THE PLANS.

**CONSTRUCTION STAGING NOTES:**

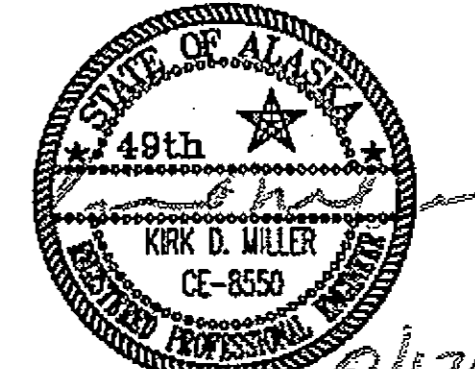
- ALL EXCAVATION UNDER PAVED ROADWAYS FOR UTILITY OR CULVERT CONSTRUCTION SHALL BE ACCOMPLISHED PRIOR TO PLACEMENT OF NEW ASPHALT CONCRETE SURFACING.
- PATCH ALL EXCAVATED AREAS UNDER PAVED SURFACES WITH COLD-MIX ASPHALT CONCRETE, CONCRETE OR CHIP SEAL SURFACING IF NEW PAVEMENT CANNOT BE PLACED WITHIN 3-WEEKS OF REMOVAL OF EXISTING PAVED SURFACING. ANY GRAVEL CROSSINGS SHALL BE MAINTAINED UNTIL NEW PAVEMENT IS PLACED. ALSO SEE SPECIFICATIONS.
- PLACE NEW ATB SURFACES WITHIN 14-DAYS OF REMOVAL OF EXISTING PAVEMENT.

**GENERAL NOTES:** THE LOCATIONS OF EXISTING FEATURES AND UTILITIES SHOWN ON THE DRAWING ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS IN THE FIELD AS NECESSARY TO COMPLETE THE WORK AND PRIOR TO EXCAVATION. THE HORIZONTAL & VERTICAL LOCATIONS OF ALL UTILITIES ENCOUNTERED IN THE FIELD SHALL BE RECORDED ON THE CONTRACTOR'S RECORD DRAWINGS. SEE SECTION 105 OF SPECIFICATIONS.

**CAUTIONS:** THE LOCATIONS OF EXISTING UTILITIES SHOWN ON DRAWINGS ARE APPROXIMATE. THERE MAY ALSO BE ADDITIONAL UTILITIES NOT SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD LOCATE ALL EXISTING UTILITIES PRIOR TO BEGINNING EXCAVATION.

WATER & WASTEWATER (907) 776-2200 POWER & LIGHTING (907) 776-6500  
AP&T (907) 776-6500 CATV (907) 983-2205

**DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS**

CHECKED BY: K. MILLER		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION	
		<b>HAINES ALASKA UNION STREET REFURBISHMENT-68317 / STP-003(104) SAWMILL CREEK CULVERT REPLACEMENT - 69081 / HRM-003(114) HAINES BOROUGH UTILITIES - 68623</b>	
		<b>ESTIMATE OF QUANTITIES</b>	
DESIGNED BY: L. SEIFERT		YEAR: 2006	
DRAWN BY: R.S.J.R.G.		SHEET NO. C1	
PATH: O:\hns\68317\PlanSet\C_Est.dwg		TOTAL SHEETS: XX	
TAB: C1 Thu, 16/Aug/07 10:32AM lseifert		PROJECT DESIGNATION: STP-0003(104)	
REVISIONS		NO. DATE DESCRIPTION	

REMOVAL OF CULVERT PIPE					
STATION	STATION	LENGTH (FT)	SIZE (IN)	OFFSET	REMARKS
"O" 6+59 7+22	"O" 7+42 63.5	62	18 CSP	RIGHT	INCIDENTAL TO ITEM 603 (1) ✓

202 (6) REMOVAL OF MANHOLE			
MANHOLE	STATION	OFFSET	REMARKS
MH	"O" 5+17	3.87 LT	
MH	"D" 2+35	2.3 LT	SEE 6TH AVENUE PLAN & PROFILE, F7 AND F8

202 (13) REMOVAL AND DISPOSAL OF ASBESTOS CEMENT PIPE				
STATION FROM	STATION TO	OFFSET	LENGTH (FT)	REMARKS
"O" 14+77	"O" 14+97	12.77 RT	20	LOCATION WHERE TO CONNECT NEW WATER MAIN TO EXISTING WATER MAIN

604 (4) ADJUST EXISTING MANHOLE				
STATION	OFFSET		TYPE	REMARKS
	LEFT	RIGHT		
"O" 15+97	X		SS	
"D" 0+03		X	SS	SEE 6TH AVENUE PLAN & PROFILE, F7
"O" 19+73		X	SS	
"O" 23+58		X	SS	OK
"O" 27+41		X	SS	
"O" 30+18	X		SS	

606 (6) REMOVING AND DISPOSING OF GUARDRAIL				
STATION FROM	STATION TO	OFFSET	LENGTH (FT)	REMARKS
"O" 16+49 50	"O" 17+49 50	LT ✓	100 ✓	

626 (3) ADJUST EXISTING SEWER CLEANOUT			
STATION	OFFSET (FT)		REMARKS
	LEFT	RIGHT	
"O" 14+98	X		INSTALLED NEW CO
"O" 30+29		X	DIES NOT EXIST

627 (10) ADJUSTMENT OF EXISTING VALVE BOX			
STATION	OFFSET (FT)		REMARKS
	LEFT	RIGHT	
"O" 16+21 16+20.6		X	INTERSECTION 6TH AVE.
"O" 16+31 16+22.8		X	INTERSECTION 6TH AVE.
"O" 19+84 19+62.5		X	INTERSECTION 5TH AVE.
"O" 19+94 19+82.5		X	INTERSECTION 5TH AVE.
"O" 23+75	X		INTERSECTION 4TH AVE.
"O" 23+85 77	X		INTERSECTION 4TH AVE.
"O" 5+34	X		INTERSECTION AVENUE RD

642 (11) ADJUST EXISTING MONUMENT CASE			
STATION	OFFSET (FT)		REMARKS
	LOCATION	POINT	
"O" 1+00.23	CL	P.C.	MONUMENT ADJUSTMENT INCIDENTAL
"O" 3+25.49	CL	P.T.	MONUMENT ADJUSTMENT INCIDENTAL
"C" 4+79.78	CL	P.C.	MONUMENT ADJUSTMENT INCIDENTAL
"O" 8+44.58	CL	P.C.	MONUMENT ADJUSTMENT INCIDENTAL
"O" 11+55.94	CL	P.T.	MONUMENT ADJUSTMENT INCIDENTAL
"O" 16+06.60	CL	P.T.	MONUMENT ADJUSTMENT INCIDENTAL
"O" 23+59.33	CL	P.T.	MONUMENT ADJUSTMENT INCIDENTAL
"O" 27+29.35	CL	P.T.	MONUMENT ADJUSTMENT INCIDENTAL

MONUMENT NOTE:  
ALL MONUMENTS THAT WILL BE DISTURBED OR BURIED WILL BE REFERENCED AND RE-ESTABLISHED IN THEIR ORIGINAL POSITION AND A RECORD OF MONUMENT FILED.

⑧ 10+135, 38' RT to "C" 8+85, 20' LT. 160 84 ASP New Fish Culvert

603 (1) & (9) CULVERT SUMMARY				
PIPE	STATION	LENGTH (FT)	SIZE (INCH)	REMARKS
①	"O" 6+59 7+22	54 41.5	18 24 CSP	REPLACE EXISTING CULVERT ✓
②	"O" 16+67	300	72 CAP	HIGHWAY CROSS CULVERT ✓
③	"O" 23+37 91	50 52	18 CSP	INSTALL NEW CULVERT WITH CATCH BASIN ✓
④	"O" 27+64 67	68 83	24 48 CSP	INSTALL NEW CULVERT WITH CATCH BASIN ✓
⑤	"H" 4+89	80	18 CSP	INSTALL NEW CULVERT WITH CATCH BASIN
⑥	"H" 11+20	150	12 CSP	INSTALL NEW CULVERT WITH CATCH BASIN
⑦	"H" 8+20	80	36 CSP	MAIN ST CROSS CULVERT

604 (2) & (8) SANITARY SEWER MANHOLE				
STATION	STATION	OFFSET (FT)		REMARKS
		LEFT	RIGHT	
MH-1	"O" 5+22 5+11.5	13.0	12.5	TYPE 1
MH-2	"O" 9+47 9+26.5	21.55	24.0	TYPE 1
MH-3	"O" 10+93 10+98	34.0	39.5	TYPE 1
MH-4	"D" 2+84		4.1	INSTALL DROP MANHOLE, 6TH AVE.

606 (1) GUARDRAIL SUMMARY				
STATION FROM	STATION TO	OFFSET	LENGTH (FT)	REMARKS
"O" 16+49 35	"O" 17+49 22	LT	100 12.5	

627 (5) FIRE HYDRANT INSTALLATION		
STATION	OFFSET	REMARKS
"O" 10+33 30.5	31.56 RT	PAST EDGE OF PAVEMENT
"O" 15+72	39.8 LT	CONNECTED EXISTING FH TO NEW MAIN

626 (4) SANITARY SEWER CLEANOUT		
STATION	OFFSET	REMARKS
"O" 11+97 45	34.0 LT 40.4	NEW

626 (2) SEWER SERVICE CONNECTION		
STATION	OFFSET	REMARKS
"O" 27+77 80	36.3 RT 34.7	8" SS CONNECTION - CONNECT TO EXISTING SEWER MAIN
"D" 1+83 7	17.5 4.8 RT of main	PRIVATE SEWER (LOCATE IN FIELD) CONNECT TO NEW SEWER LINE.
"D" 1+95 2+00	17.0 1.2 RT LT of main	1" EXISTING SEWER SERVICE CONNECT TO NEW SEWER LINE.

627 (8) WATER SERVICE CONNECTION					
NUMBER	STATION "O"	OFFSET (FT)		SIZE	REMARKS
		LEFT	RIGHT		
1	6+60		X	2"	CONNECT TO NEW WATERMAIN
2	9+60 57		X	2"	NEW
3	44+40 10+48	X		1"	NEW
4	44+65 12+67	X		1"	NEW
5	14+02 10	X		1"	REPLACE EXISTING SERVICE w/ 1" WSC
6	14+79 64		X	1"	NEW
7	15+48 59		X	1"	NEW WS CONNECT TO EXISTING WM
8	15+61 78	X		1"	NEW WS CONNECT TO EXISTING WM
9	27+88 95		X	6"	NEW WS CONNECT TO EXISTING WM
10	27+97 98		X	6"	NEW WS - FOR SPRINKLE
11	10+14	X		1"	NEW

627 (9) INSTALL GATE VALVE					
NUMBER	STATION "O"	OFFSET (FT)		SIZE	REMARKS
		LEFT	RIGHT		
4	5+44	X		8"	REPLACE EXISTING GV SEE F3 PLAN
1	5+15		24.6	8"	NEW LOCATION
2	5+34	22.6		8"	REMOVE & REINSTALL (CITY SUPPLIED USED VALVE)

639 (3) DRIVEWAY APPROACH SUMMARY				
STATION	LT / RT	WIDTH	TYPE	REMARKS
"O" 2+74 81	LT	20.00 24	SERVICE RD	SPRUCE GROVE
"O" 4+87 65	RT	20.00 22	COMMERCIAL	DOT MAINTENANCE
"O" 5+10 18	LT	24.00 36	SERVICE RD	ALLEN RD. INTERSECTION
"O" 6+82 74 25	RT	24.00 26	COMMERCIAL	LUTK LUMBER
"O" 9+76 31	LT	24.00 26	COMMERCIAL	ALASKA MARINE LINES
"O" 9+88 12	RT	24.00 34	COMMERCIAL	NEW
"O" 13+55 72	LT	20.00 18	RESIDENTIAL	
"O" 14+66 50	RT	20.00 23	RESIDENTIAL	
"O" 14+75 50	LT	20.00 14	RESIDENTIAL	NEW
"O" 16+12 10	RT	24.00 33	SERVICE RD	6TH AVE. INTERSECTION
"O" 16+12 08	LT	24.00 22	SERVICE RD	6TH AVE. INTERSECTION
"O" 17+56 59	RT	189.02 35	COMMERCIAL	HAINES BOROUGH SHOP
"O" 17+64 87	LT	24.00 21	COMMERCIAL	HAINES BOROUGH STORAGE
"O" 19+87 88	RT	24.00	SERVICE RD	5TH AVE. INTERSECTION
"O" 19+87 84	LT	24.00 32	SERVICE RD	5TH AVE. INTERSECTION
"O" 20+50	LT	71.00 120	COMMERCIAL	SALVATION ARMY
"O" 20+58 50	RT	20.00 44	RESIDENTIAL	
"O" 20+91 21 00	RT	12.00 13	RESIDENTIAL	
"O" 24+24 21 80	RT	20.00 27	RESIDENTIAL	
"O" 21+72	RT	99.00 76	RESIDENTIAL	
"O" 23+62 64	RT	24.00	SERVICE RD	4TH AVE. INTERSECTION
"O" 23+62 84	LT	24.00	SERVICE RD	4TH AVE. INTERSECTION
"O" 24+76 21	RT	14.00 44	RESIDENTIAL	
"O" 25+10	LT	14.00	RESIDENTIAL	
"O" 25+69 87	RT	14.00 86	RESIDENTIAL	2 HOMES
"O" 26+37	RT	48.00	RESIDENTIAL	DOES NOT EXIST
"O" 27+37 36	RT	24.00 38	SERVICE RD	3RD AVE. INTERSECTION
"O" 27+37 40	LT	24.00 28	SERVICE RD	3RD AVE. INTERSECTION
"O" 29+00 28 85	RT	14.00 28	RESIDENTIAL	
"O" 29+34	LT	14.00	RESIDENTIAL	GATED
"O" 30+45 37	RT	14.00 46	COMMERCIAL	CHURCH
"O" 30+06	RT	17	RESIDENTIAL	ADJACENT TO CHURCH

DRIVEWAY NOTE:  
EXACT LOCATION AND WIDTH TO BE DETERMINED BY THE ENGINEER (MATCHED EXISTING).

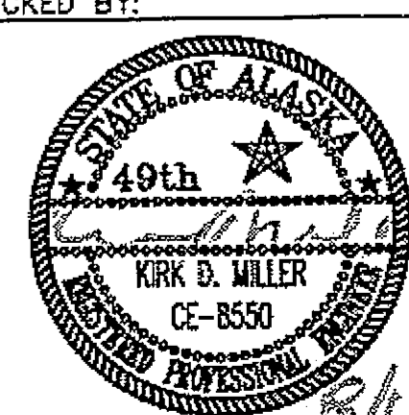
626 (2) SEWER SERVICE CONNECTION - CONTINUED			
"O" 15+48 RT	29 W	Comm-RED	REPAIR
"O" 24+16 LT	14	Res	
"O" 25+75 LT	15	Res	
"O" 0+55 LT	16	Comm	
"H" 10+43 LT	45	Comm-Hitchup RV	
"H" 14+28 LT	24	Comm-HNSF-F-G	

627 (8) WATER SERVICE CONNECTION - CONTINUED			
12	"O" 14+12	LT	1" NEW
13	"O" 15+10	LT	1" NEW

639 (3) DRIVEWAY APPROACH - CONTINUED			
"O" 15+48 RT	29 W	Comm-RED	REPAIR
"O" 24+16 LT	14	Res	
"O" 25+75 LT	15	Res	
"O" 0+55 LT	16	Comm	
"H" 10+43 LT	45	Comm-Hitchup RV	
"H" 14+28 LT	24	Comm-HNSF-F-G	

As Built 12/15/08 Off/Design

**DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS**

CHECKED BY: 

DESIGNED BY: L. SEIFERT  
DRAWN BY: R.S./R.G.

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION  
HAINES ALASKA UNION STREET  
REFURBISHMENT-68317 / STP-003(104)  
SAWMILL CREEK CULVERT  
REPLACEMENT - 69081 / HRM-003(114)  
HAINES BOROUGH UTILITIES - 68623

**MISCELLANEOUS SUMMARIES**

PATH: Q:\Hns\68317\PlanSet\0\_State Sum.dwg  
TAB: D1 Wed, 15/Aug/07 01:24PM lseifert

NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			STP-0003(104)	2006	D1	XX

SIDEWALK REMOVAL					
BEGIN STATION	END STATION	OFFSET		SQUARE YARDS	REMARKS
		LEFT	RIGHT		
"C" 5+55	5+70		X	16	INCIDENTAL TO ITEM 608 (1A)
"O" 0+18	0+42	X		22	INCIDENTAL TO ITEM 608 (1A)
"O" 0+18	0+23		X	10	INCIDENTAL TO ITEM 608 (1A)
"O" 30+94	30+99 ✓		X	4	INCIDENTAL TO ITEM 608 (1A)
TOTAL = 52					

CURB RAMP REMOVAL				
STATION	OFFSET		QUANTITY (EACH)	REMARKS
	LEFT	RIGHT		
"C" 5+70 55	X	c 5+70 X	2 ✓	INCIDENTAL TO ITEM 608 (6)
"O" 0+42	X		1	INCIDENTAL TO ITEM 608 (6)
"O" 0+23	X		1	INCIDENTAL TO ITEM 608 (6)
"O" 30+94	X ✓		1 ✓	INCIDENTAL TO ITEM 608 (6)
"O" 30+94		X ✓	1 ✓	INCIDENTAL TO ITEM 608 (6)
TOTAL = 6				

CURB AND GUTTER REMOVAL					
BEGIN STATION	END STATION	OFFSET		LENGTH (FT)	REMARKS
		LEFT	RIGHT		
"C" 3+85	3+95	X		10	INCIDENTAL TO ITEM 609 (2A)
"C" 4+24	4+55	X		31 ✓	INCIDENTAL TO ITEM 609 (2A)
"C" 5+05	5+55 45	X		50 40	INCIDENTAL TO ITEM 609 (2A)
"C" 5+55	5+70		X	40	INCIDENTAL TO ITEM 609 (2A)
"O" 0+18	0+42	X		44	INCIDENTAL TO ITEM 609 (2A)
"O" 0+18	0+23		X	20	INCIDENTAL TO ITEM 609 (2A)
"O" 30+48	30+96	X		48 68	INCIDENTAL TO ITEM 609 (2A)
"O" 30+74	30+98		X	36 40	INCIDENTAL TO ITEM 609 (2A)
TOTAL = 279					

604 (5) DRAINAGE STRUCTURE SUMMARY					
NUMBER	STATION "O"	OFFSET (FT)		TYPE	REMARKS
		LEFT	RIGHT		
(S-1)	23+88-91		19.94 29	A	NEW FIELD INLET APPROX. HEIGHT-6' 4.4
(S-2)	27+60-67		22.19 29	A	NEW FIELD INLET APPROX. HEIGHT-6' 4.4
(S-3)	"H" 4+89		18	A	NEW INLET
(S-4)	"H" 11+20.5		18	A	NEW INLET

**DRAINAGE STRUCTURE NOTES:**

1. STATION AND OFFSET GIVEN ARE APPROXIMATE, TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
2. INDICATED STRUCTURE HEIGHTS ARE APPROXIMATE ONLY. FIELD VERIFY PRIOR TO FABRICATION.
3. GRATE ELEVATION SHALL BE AS DIRECTED BY THE ENGINEER.
4. MINIMUM 18" SUMP REQUIRED.

642(11) Monument Cases

Station	Offset
"C" 0+98 ±	15 <sup>6</sup> Lt
"C" 5+53 ±	22 <sup>1</sup> Rt
"C" 8+96	23 <sup>6</sup> Rt
"O" 7+46 ±	13 <sup>2</sup> Lt
"O" 15+00	12 <sup>8</sup> Lt

608 (1A) CONCRETE SIDEWALK SUMMARY					
BEGIN STATION	END STATION	OFFSET		SQUARE YARDS	REMARKS
		LEFT	RIGHT		
"C" 5+55	5+70		X	16 13.8	
"O" 0+18	0+42	X		22 15.65	
"O" 0+18	0+23		X	10	
"O" 30+94	30+99		X	4	
"H" 11+18	"H" 11+41		X	11.96	
TOTAL = 52					

**CONCRETE SIDEWALK NOTES:**

1. SAWCUT AT EXISTING JOINTS.
2. STATION AND OFFSET ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED BY THE CONTRACTOR.
3. SPACE EXPANSION AND CONSTRUCTION JOINTS TO MATCH EXISTING SPACING.
4. USE 1/2" OIL IMPREGNATED FELT IN EXPANSION JOINTS AND AT SIDEWALK.
5. MATCH EXISTING CROSS SLOPE.

608 (6) CURB RAMP SUMMARY					
STATION	OFFSET		QUANTITY (EACH)	REMARKS	
	LEFT	RIGHT			
"C" 5+70 50	X	5+60 X	2 ✓		
"O" 0+42 20	X ✓		1 ✓		
"O" 0+23 20		X ✓	1 ✓		
"O" 30+94	X ✓		1 ✓		
"O" 30+94		X ✓	1 ✓		
"H" 4+90		X	TOTAL = 6 1	TOTAL = 7	

609 (2A) CURB AND GUTTER SUMMARY					
BEGIN STATION	END STATION	OFFSET		LENGTH (FT)	REMARKS
		LEFT	RIGHT		
"C" 3+85 15	3+95 25	X ✓		10.1	REPLACE WITH STANDARD CURB AND GUTTER
"C" 4+24 40	4+55	X		34 30.3	REPLACE WITH STANDARD CURB AND GUTTER
"C" 5+05 00	5+55 50	X		50.6	REPLACE WITH STANDARD CURB AND GUTTER
"C" 5+55	5+70		X	48 45.3	REPLACE C & G BETWEEN UNION ST AND MAIN ST
"O" 0+18	0+42	X		44 43.6	REPLACE C & G INTERSECTION OF UNION ST AND MAIN ST
"O" 0+18 20	0+23		X	28 25.6	REPLACE C & G INTERSECTION OF UNION ST AND MAIN ST
"O" 30+48	30+96	X		48 59	REPLACE C & G BETWEEN 2ND AVE AND UNION ST
"O" 30+74	30+98		X	36.2	REPLACE C & G BETWEEN 2ND AVE AND UNION ST
TOTAL = 279					

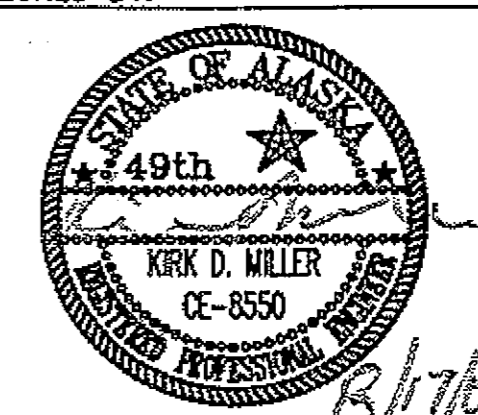
**CURB RAMP AND CURB & GUTTER NOTES:**

1. SEE STANDARD DRAWINGS I-20.13.

"H" 11+18	"H" 11+41			23.4
"H" 4+90	"H" 4+75			14.5

AS-BUILT 12/15/08 C/Douglas

**DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS**

		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION <b>HAINES ALASKA UNION STREET          REFURBISHMENT-68317 / STP-003(104)          SAWMILL CREEK CULVERT          REPLACEMENT - 69081 / HRM-003(114)          HAINES BOROUGH UTILITIES - 68623</b>	
CHECKED BY: _____ DESIGNED BY: L. SEIFERT DRAWN BY: R.S.R.G.		<b>MISCELLANEOUS          SUMMARIES</b>	
PATH: O:\Hns\68317\PlanSet\0_State Sum.dwg TAB: D2 Tue, 14/Aug/07 01:36PM lsaifert		PROJECT DESIGNATION <b>STP-0003(104)</b>	YEAR SHEET NO. TOTAL SHEETS 2006 <b>D2</b> <b>XX</b>

**615 (1) STANDARD SIGN SUMMARY**

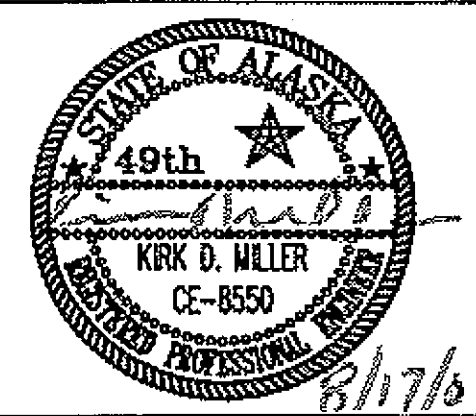
SIGN NO.	STATION	OFFSET	TYPE	LEGEND	FACING	HEIGHT (IN)	WIDTH (IN)	AREA (SF)	COLOR		REMARKS
									BACKGROUND	LETTERING	
1	"H" 15+50	RIGHT	N/A	DOWNTOWN HAINES	SB				GREEN	WHITE	DO NOT REMOVE
2	"H" 15+50	RIGHT	R14-1A	TRUCK ROUTE WITH 45° ARROW POINTING LEFT	SB	30	42	8.75	WHITE	BLACK	MOUNT BELOW SIGN 1 ON LEFT POST ON TOP
3	"C" 5+65	LEFT	R1-2	YIELD	SB	<del>33</del> 36	<del>33</del> 36	4.5 3.78	WHITE	RED	REMOVE & REPLACE
4	"C" "H" 4+50 5+65	RIGHT	R14	TRUCK ROUTE	WB				WHITE	BLACK	DO NOT REMOVE MOUNTED ON TOP OF SIGN NO. 5
5	"C" 5+65	RIGHT	R2-1	SPEED LIMIT 25	NB	<del>36</del> 30	30	6.25 7.5	WHITE	BLACK	REMOVE & REPLACE
6	"O" 0+18	LEFT	D3-1	ALLEN RD	NB	8	36	2	GREEN	WHITE	MOUNT ON TOP OF STOP SIGN
7	"O" 0+18	LEFT	R1-1	STOP	NB	30	30	6.25	RED	WHITE	REMOVE & REPLACE
8	"O" 4+90 2+25	RIGHT	R1-2	YIELD	SB	<del>23</del> 36	<del>33</del> 36	4.5 3.78	WHITE	RED	REMOVE & REPLACE
9	"O" 5+00	LEFT	D3-1	ALLEN RD	SB	8	36	2	GREEN	WHITE	MOUNT ON TOP OF STOP SIGN
10	"O" 5+00	LEFT	R1-1	STOP	SB	30	30	6.25	RED	WHITE	REMOVE & REPLACE - ON 2" POST
11	"O" 5+80 6+20	LEFT	I-150	ADOPT A HIGHWAY	SB	30	24	5	BLUE	WHITE	REMOVE & REPLACE
12	"O" 5+80 6+20	LEFT	I-150	HAINES TRUE VALUE	SB	30	12	2.5	BLUE	WHITE	MOUNT BELOW ADOPT A HIGHWAY SIGN
13	"O" 6+60 6+90	RIGHT	I-160	PLEASE DON'T DRINK AND DRIVE	NB	30	36	7.5	BLUE	WHITE	REMOVE & REPLACE
14	"O" 6+60 6+90	RIGHT	I-162	IN MEMORY OF DANIEL CLAYTON FOLLETTI	NB	30	12	2.5	BLUE	WHITE	MOUNT BELOW PLEASE DON'T DRINK AND DRIVE
15	"O" 9+40	LEFT	R5-1	DO NOT - NO THRU TRAFFIC ENTER	SB	36	36	9	WHITE	RED	REMOVE & REPLACE
16	"O" 10+60	RIGHT	R2-1	SPEED LIMIT 25	NB	<del>36</del> 30	30	6.25 7.5	WHITE	BLACK	REMOVE & REPLACE
17	"O" 10+20	LEFT	W1-8	CHEVRON	SB/WB	30	24	5	YELLOW	BLACK	MOUNT WITH BLACK ARROW POINTING LEFT TOWARD THE DIRECTION OF TRAVEL
18	"O" 11+00	LEFT	W1-8	CHEVRON	SB/WB	30	24	5	YELLOW	BLACK	MOUNT WITH BLACK ARROW POINTING LEFT TOWARD THE DIRECTION OF TRAVEL
19	"O" 11+80	LEFT	W1-8	CHEVRON	SB/WB	30	24	5	YELLOW	BLACK	MOUNT WITH BLACK ARROW POINTING LEFT TOWARD THE DIRECTION OF TRAVEL
20	"O" 16+30 16+27	RIGHT	R1-1	STOP	NB	30	30	6.25	RED	WHITE	REMOVE & REPLACE
21	"O" 16+30 16+27	RIGHT	D3-1	6TH AVENUE	NB	8	24	1.33	GREEN	WHITE	MOUNT ON TOP OF STOP SIGN
22	"O" 19+75 19+55	25'	R1-1	STOP	SB	30	30	6.25	RED	WHITE	REMOVE & REPLACE
23	"O" 19+75 19+55	25'	D3-1	5TH AVENUE	SB	8	24	1.33	GREEN	WHITE	MOUNT ON TOP OF STOP SIGN
24	"O" 20+05	25'	R1-1	STOP	NB	30	30	6.25	RED	WHITE	REMOVE & REPLACE
25	"O" 20+05	25'	D3-1	5TH AVENUE	NB	8	24	1.33	GREEN	WHITE	MOUNT ON TOP OF STOP SIGN
26	"O" 21+40	25'	N/A	DO NOT PARK ON PAVEMENT	NB				WHITE	RED	DO NOT REMOVE
27	"O" 23+45 23+40	25'	R1-1	STOP	SB	30	30	6.25	RED	WHITE	REMOVE & REPLACE
28	"O" 23+45 23+40	25'	D3-1	4TH AVENUE	SB	8	24	1.33	GREEN	WHITE	MOUNT ON TOP OF STOP SIGN
29	"O" 23+80 23+84	25'	R1-1	STOP	NB	30	30	6.25	RED	WHITE	REMOVE & REPLACE
30	"O" 23+80 23+84	25'	D3-1	4TH AVENUE	NB	8	24	1.33	GREEN	WHITE	MOUNT ON TOP OF STOP SIGN
31	"O" 27+20 27+10	25'	R1-1	STOP	SB	30	30	6.25	RED	WHITE	REMOVE & REPLACE
32	"O" 27+20 27+10	25'	D3-1	3RD AVENUE	SB	8	24	1.33	GREEN	WHITE	MOUNT ON TOP OF STOP SIGN
33	"O" 27+55 27+63	25'	R1-1	STOP	NB	30	30	6.25	RED	WHITE	REMOVE & REPLACE
34	"O" 27+55 27+63	25'	D3-1	3RD AVENUE	NB	8	24	1.33	GREEN	WHITE	MOUNT ON TOP OF STOP SIGN
35	"O" 30+00 29+15	25'	I-100	FERRY SYMBOL	EB	30	30	6.25	GREEN	WHITE	REMOVE & REPLACE
36	"O" 30+00 29+49	25'	R2-1	SPEED LIMIT 25	WB	<del>36</del> 30	30	6.25 7.5	WHITE	BLACK	REMOVE & REPLACE
37	"O" 34+90 30+90	25'	R1-1	STOP	EB	30	30	6.25	RED	WHITE	REMOVE & REPLACE
38	"O" 34+90 30+90	25'	D3-1	UNION ST	NB	8	24	1.33	GREEN	WHITE	MOUNT ON TOP OF STOP SIGN
39	"O" 34+90 30+90	25'	D3-1	2ND AVENUE	EB	8	24	1.33	GREEN	WHITE	MOUNT ON TOP OF STOP SIGN

**SIGNING NOTES:**

- SIGNING LOCATIONS NOT SHOWN ON PLANS. LOCATION INDICATED ON SUMMARY LIST ARE APPROXIMATE ONLY AND SUBJECT TO REVISION BY THE ENGINEER.
- ALL SIGNS USE 2.5" X 2.5" PST POST AND INSTALLED ACCORDANCE WITH STANDARD DRAWINGS UNLESS OTHERWISE NOTED.
- ALL SIGNS SHALL BE 0.125" THICK ALUMINUM SHEET.
- ALL EXISTING SIGNS AND POSTS SHALL BE REMOVED AND DISPOSED OR SALVAGED AS DIRECTED BY THE ENGINEER.

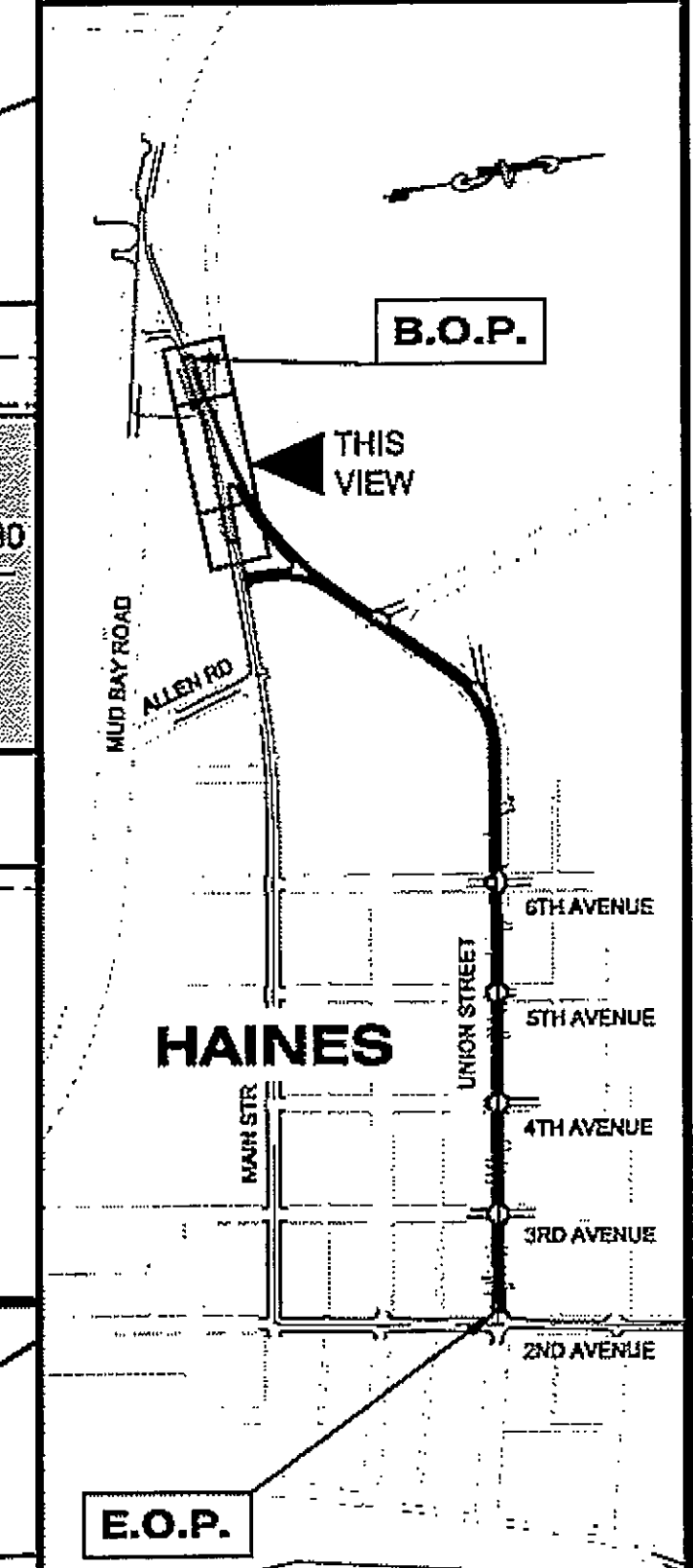
As-Built 12-15-08 Cliff Doughty

**DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS**

CHECKED BY: K. MILLER  DESIGNED BY: L. SEIFERT DRAWN BY: R.S./R.G.		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION <b>HAINES ALASKA UNION STREET                  REFURBISHMENT-68317 / STP-003(104)                  SAWMILL CREEK CULVERT                  REPLACEMENT - 69081 / HRM-003(114)                  HAINES BOROUGH UTILITIES - 68623</b>	
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REVISIONS NO. DATE DESCRIPTION	PROJECT DESIGNATION STP-0003(104)	YEAR 2006	SHEET NO. D3
			TOTAL SHEETS XX

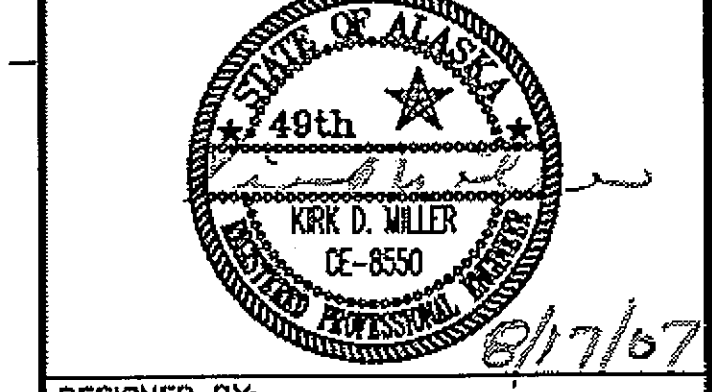
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 TAB: F1

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



Portage Cove  
**PLAN LEGEND**

CHECKED BY: K. MILLER



DESIGNED BY: L. SEIFERT

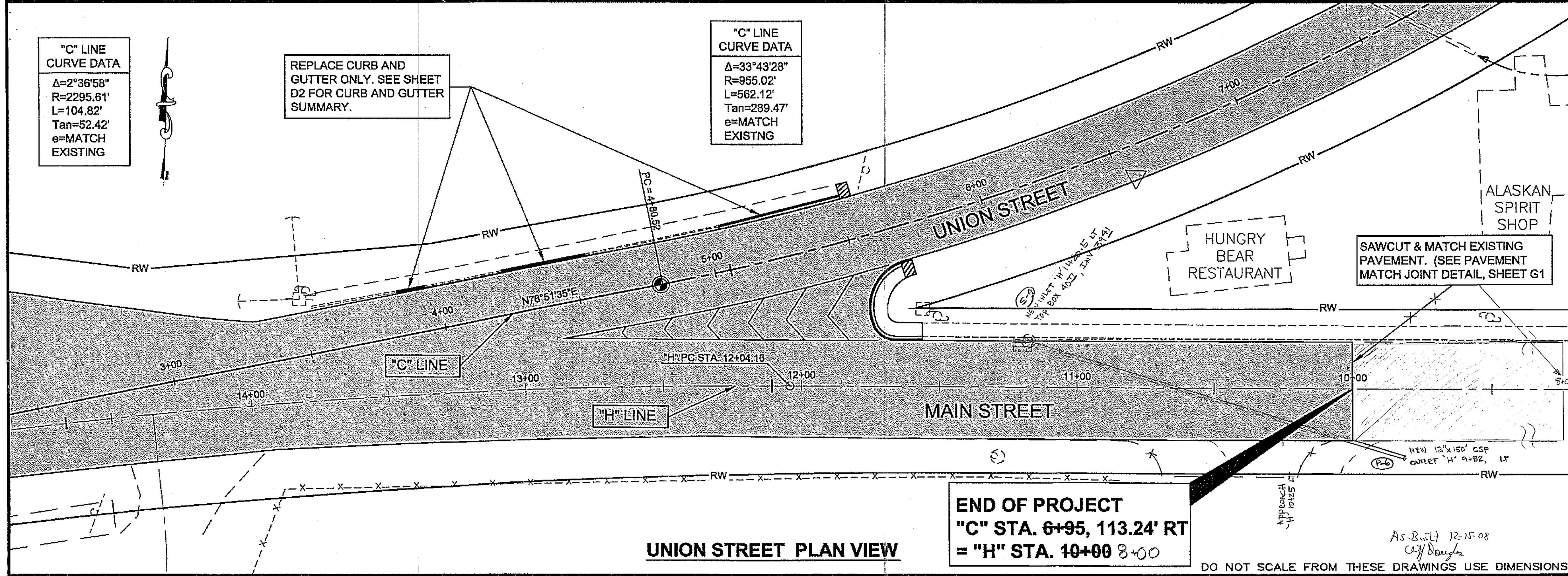
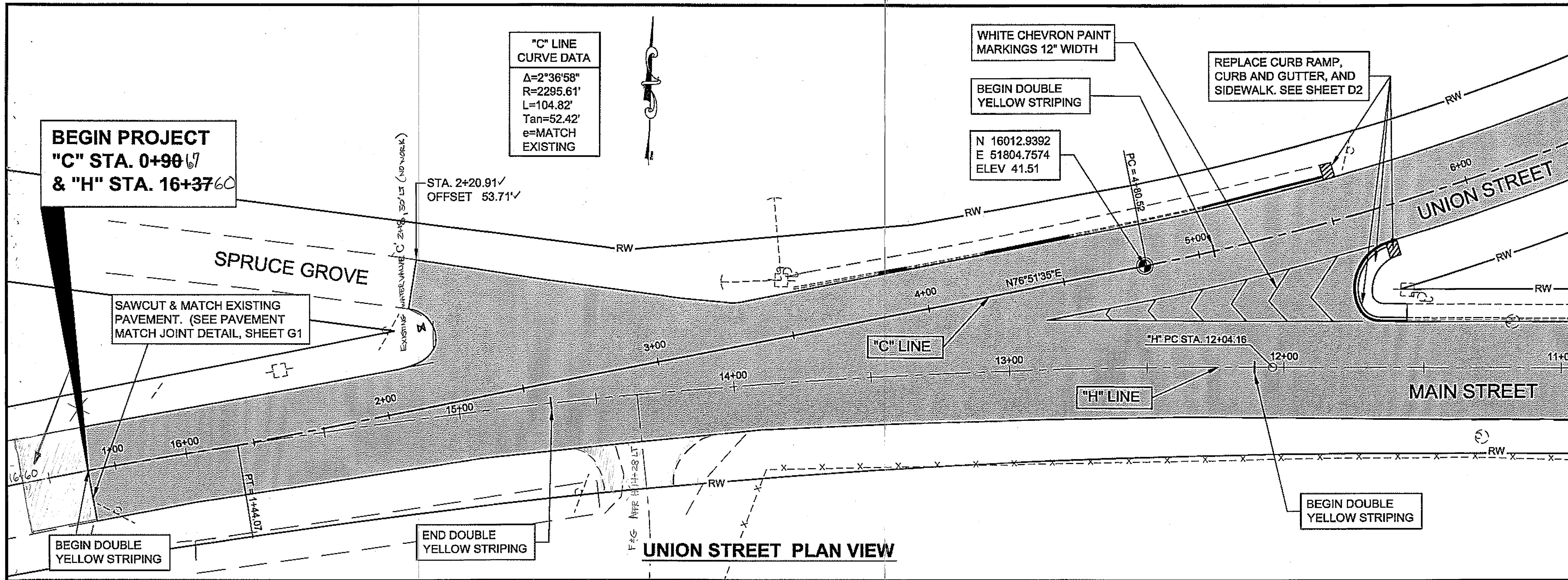
DRAWN BY: G.M.R.S./R.G.

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 S.E. REGION DESIGN & ENGINEERING  
 SERVICES DIVISION  
 HAINES ALASKA UNION STREET  
 REFURBISHMENT-68317 / STP-003(104)  
 SAWMILL CREEK CULVERT  
 REPLACEMENT - 69081 / HRM-003(114)  
 HAINES BOROUGH UTILITIES - 68623

**UNION STREET  
 PLAN VIEWS**

PROJECT DESIGNATION  
 STP-0003(104)

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
F1	XX



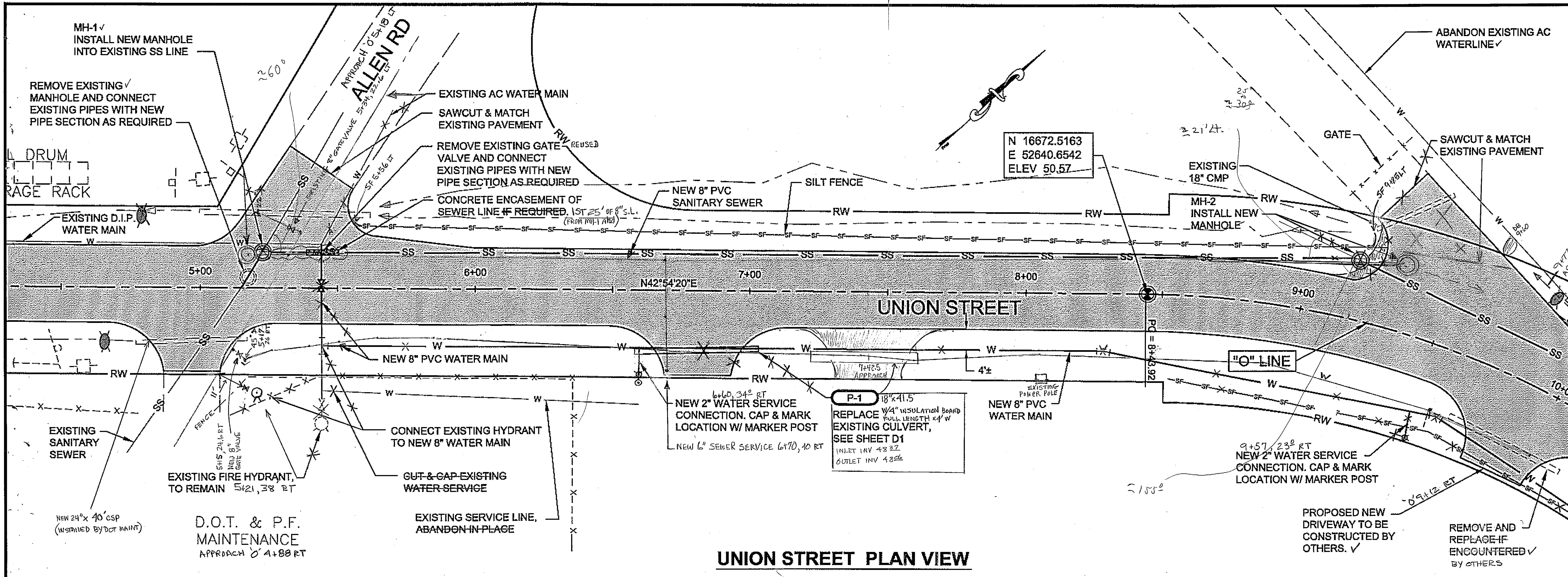
**END OF PROJECT**  
 "C" STA. 6+95, 113.24' RT  
 = "H" STA. 10+00 8+00

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

As-Built 12-15-08  
 C.D. Douglas







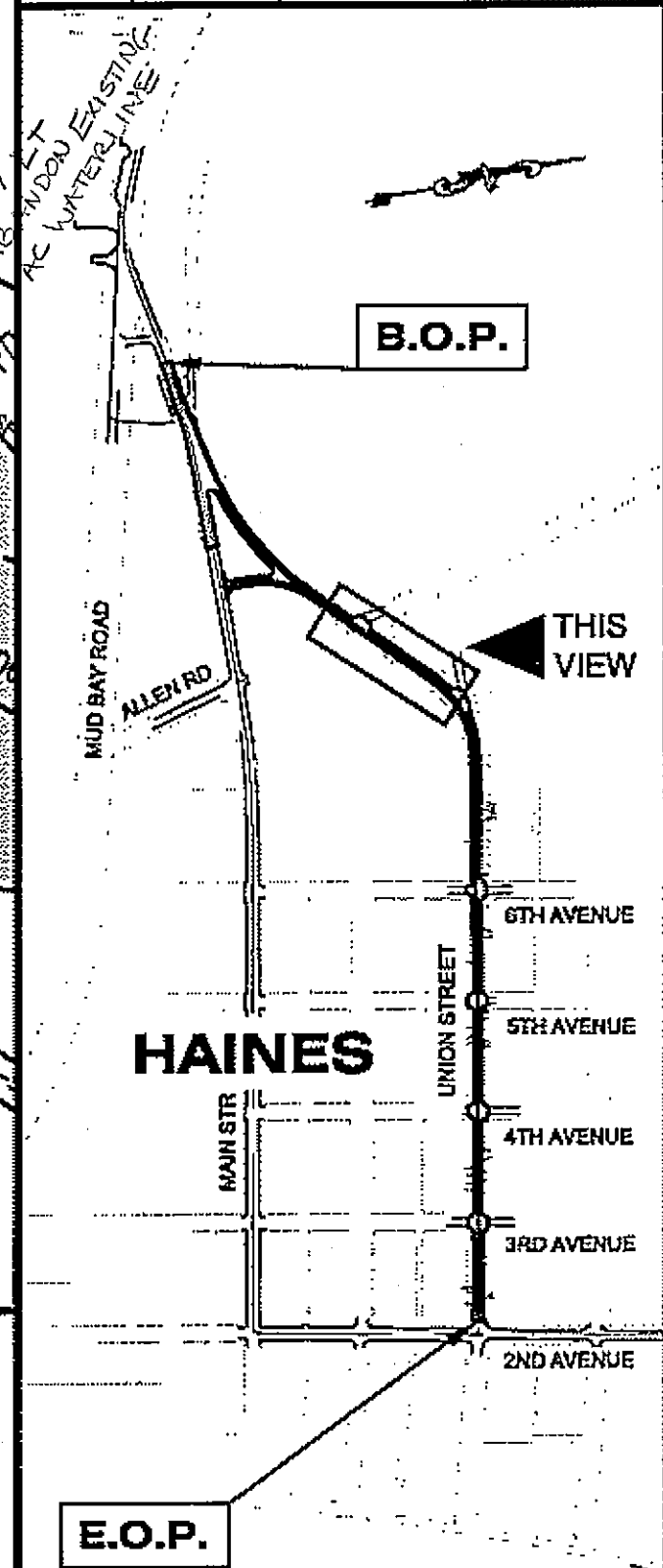
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ADDENDUM NUMBER

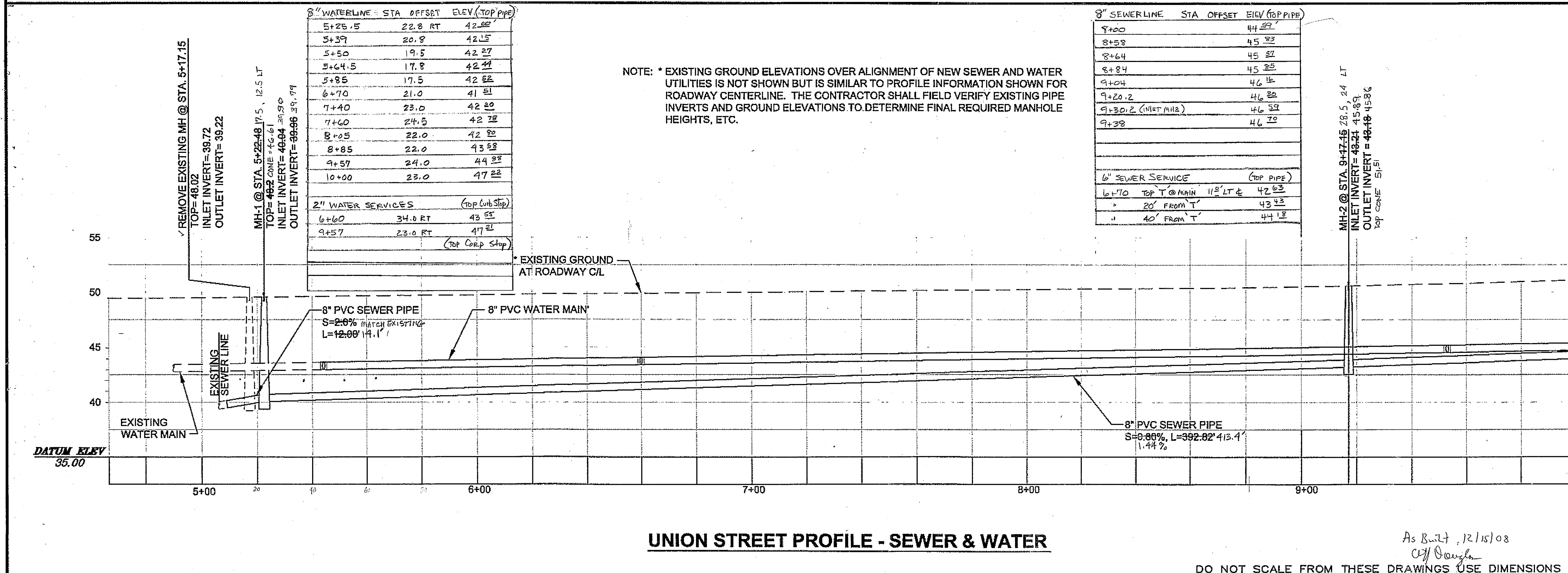
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION



**UNION STREET PLAN VIEW**



**UNION STREET PROFILE - SEWER & WATER**

PLAN LEGEND

CHECKED BY: K. MILLER

DESIGNED BY: L. SEIFERT  
DRAWN BY: G.M.R.S.J.R.G.

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

HAINES ALASKA UNION STREET  
REFURBISHMENT-68317 / STP-003(104)  
SAWMILL CREEK CULVERT  
REPLACEMENT - 69081 / HRM-003(114)  
HAINES BOROUGH UTILITIES - 68623

**UNION STREET PLAN & PROFILE**

PROJECT DESIGNATION  
STP-0003(104)

STATE	YEAR
ALASKA	2006

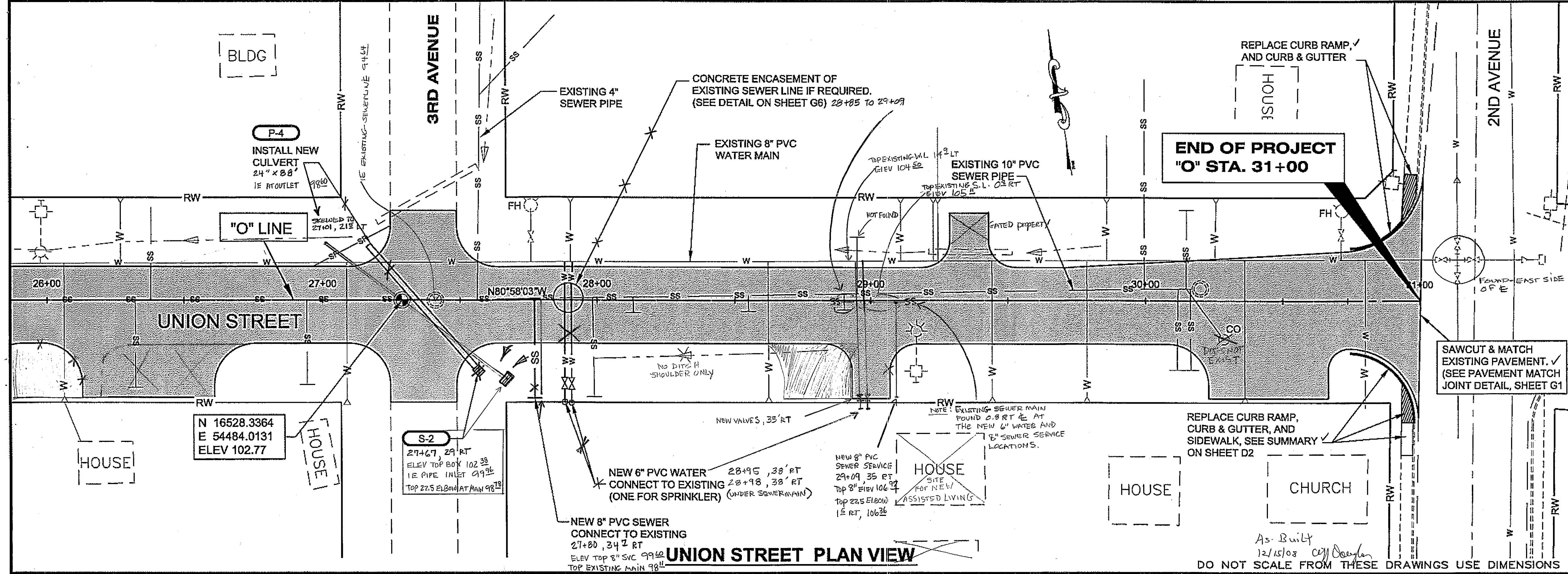
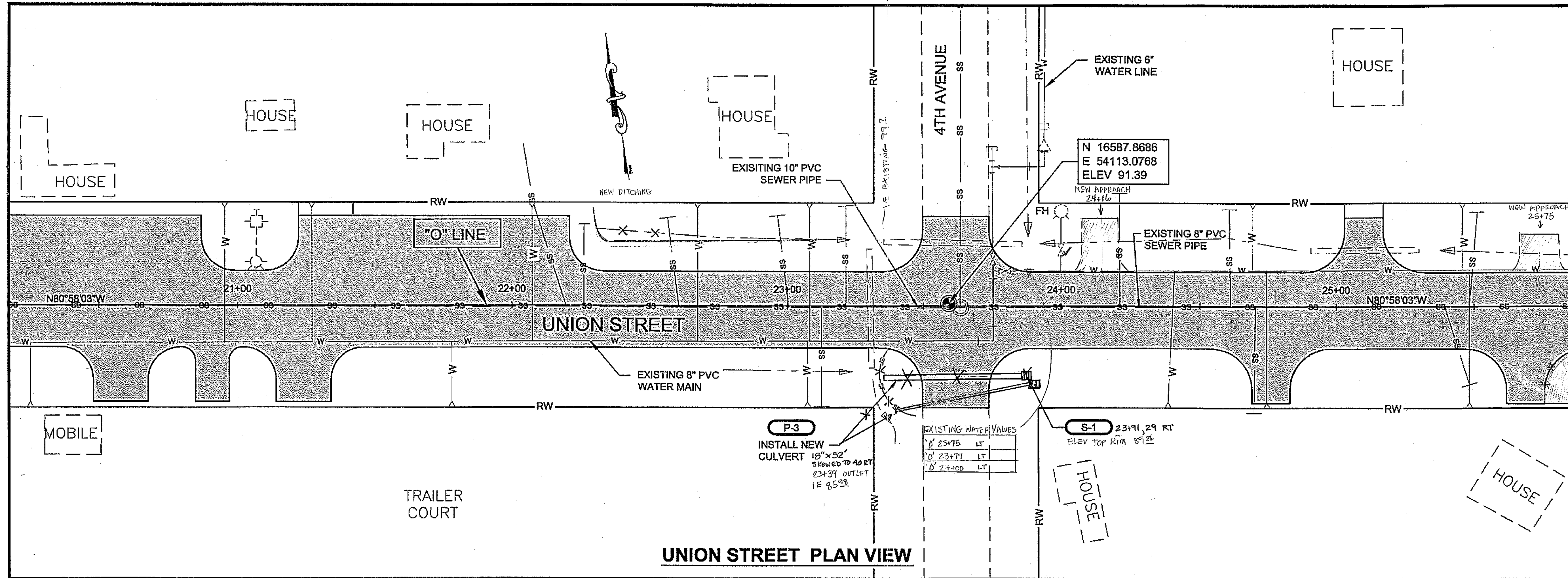
SHEET NUMBER: F3 TOTAL SHEETS: XX

As Built 12/15/08  
CJF Daughn

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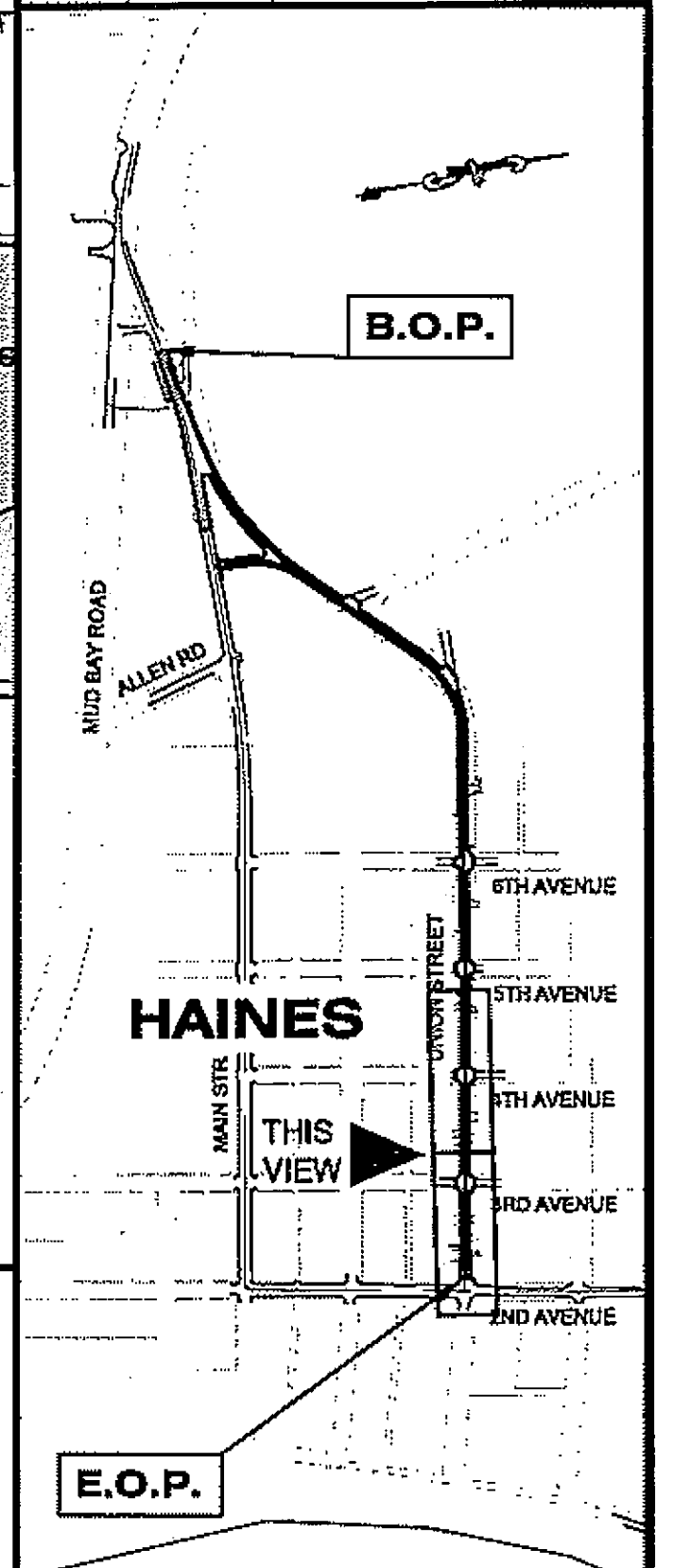




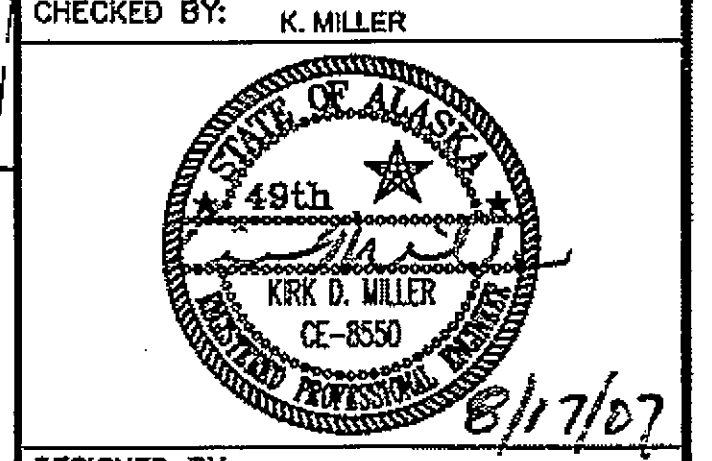


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TAB: F6

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RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



CHECKED BY: K. MILLER



DESIGNED BY: L. SEIFERT

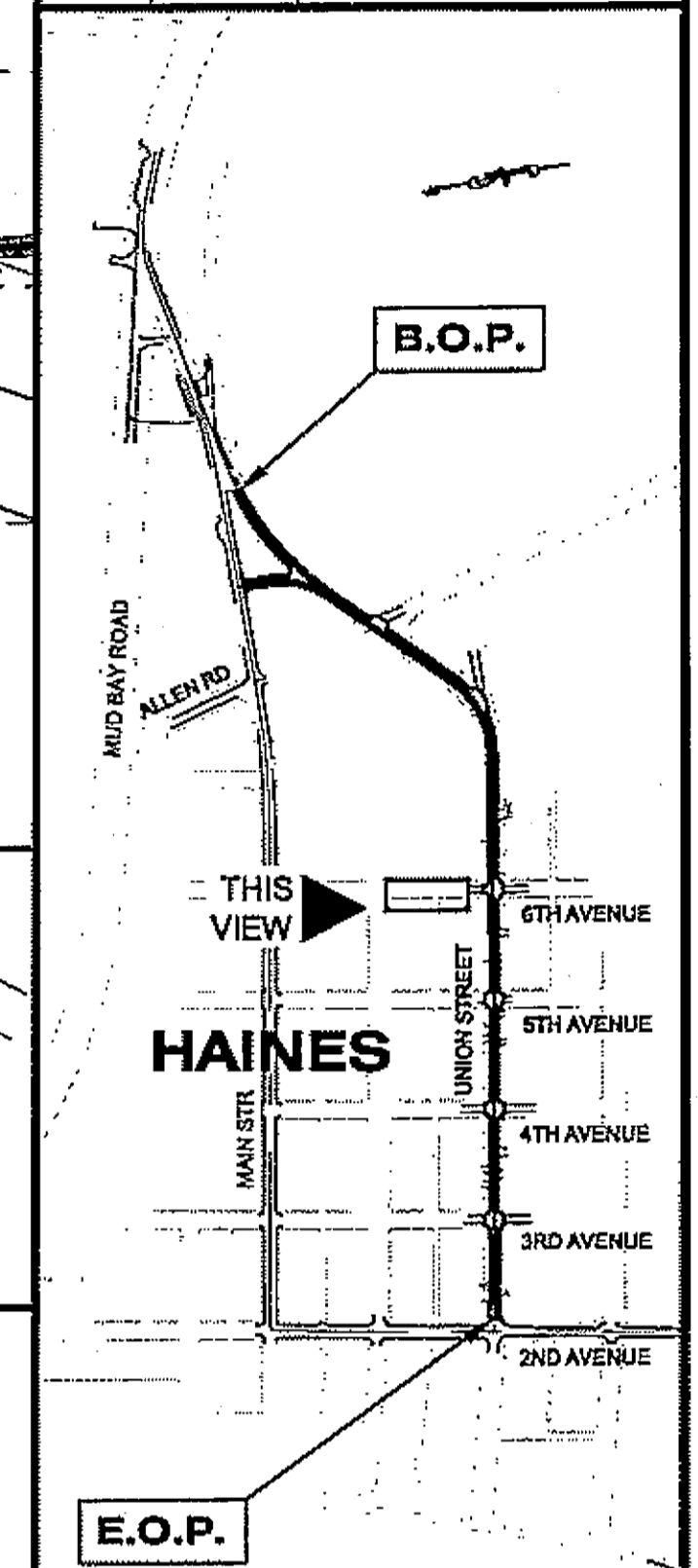
DRAWN BY: G.M./R.S./R.G.

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION  
HAINES ALASKA UNION STREET REFURBISHMENT-68317 / STP-003(104)  
SAWMILL CREEK CULVERT REPLACEMENT - 69081 / HRM-003(114)  
HAINES BOROUGH UTILITIES - 68623

<b>UNION STREET PLAN VIEWS</b>	
PROJECT DESIGNATION	
STP-0003(104)	
STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
F6	XX

As-Built  
12/15/08  
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



**PLAN LEGEND**

CHECKED BY: K. MILLER

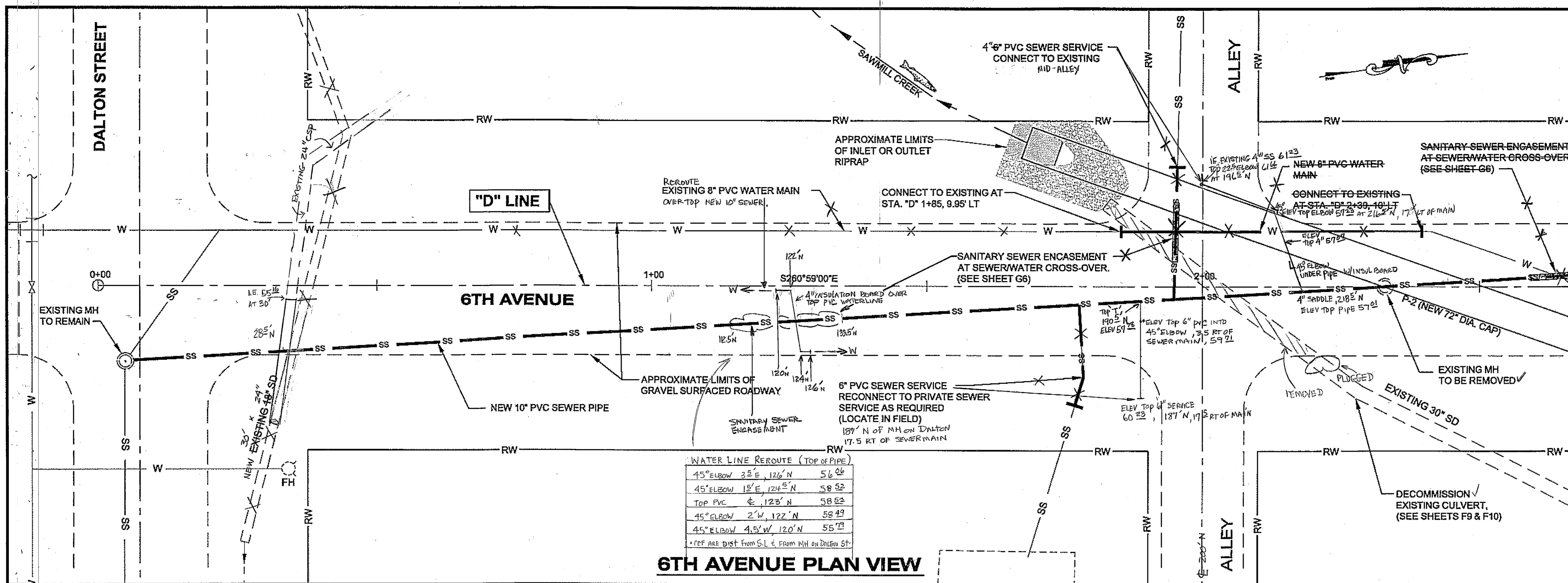
DESIGNED BY: M. KNAPP/ L. SEIFERT  
 DRAWN BY: G.M./R.S./R.G.

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 S.E. REGION DESIGN & ENGINEERING  
 SERVICES DIVISION

HAINES ALASKA UNION STREET  
 REFURBISHMENT-68317 / STP-003(104)  
 SAWMILL CREEK CULVERT  
 REPLACEMENT - 69081 / HRM-003(114)  
 HAINES BOROUGH UTILITIES - 68623

**6TH AVENUE  
 PLAN & PROFILE**

PROJECT DESIGNATION	
STP-0003(104)	
STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
F7	XX



**WATER LINE REROUTE (TOP OF PIPE)**

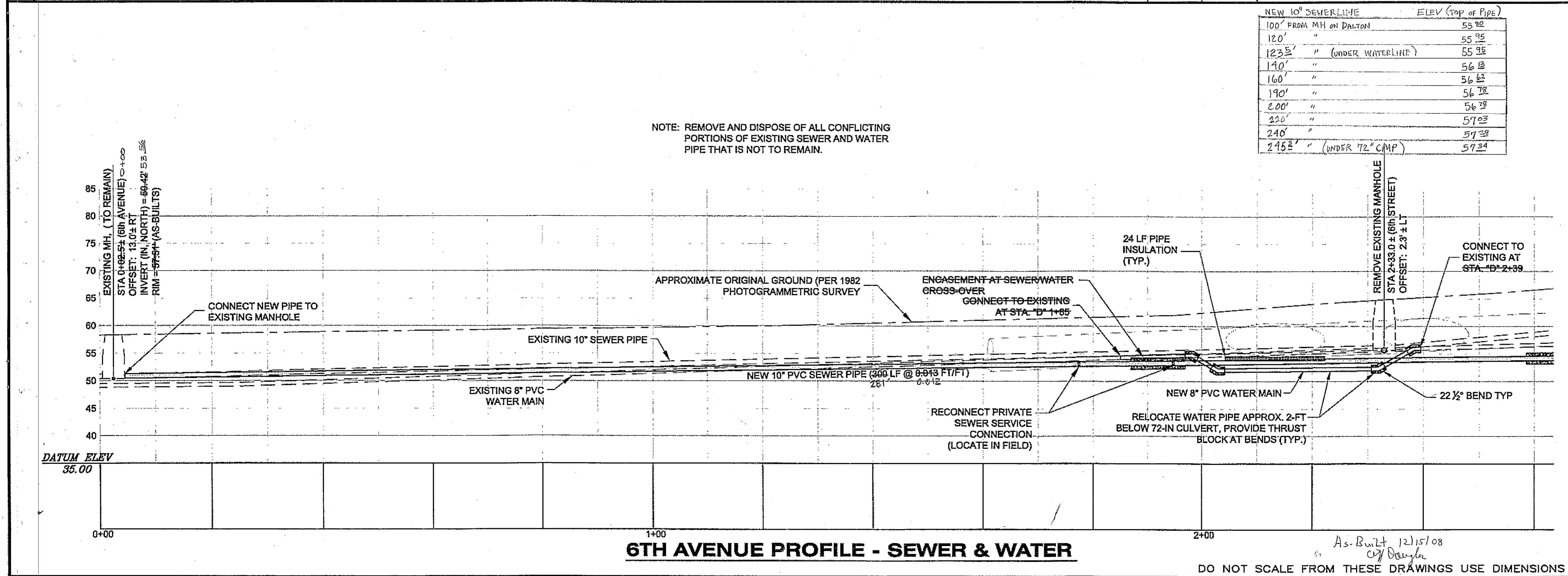
45° ELBOW	3'E, 126'N	56.06
45° ELBOW	15'E, 124'N	58.52
TOP PVC	4, 123'N	58.83
45° ELBOW	2'W, 127'N	58.49
45° ELBOW	4.5'W, 120'N	55.79

\* DFP ARE DIST FROM S.L. & FROM MH ON DALTON ST.

**NEW 10" SEWERLINE**

Distance	ELEV (TOP OF PIPE)
100' FROM MH ON DALTON	55.92
120' "	55.95
123.5' " (UNDER WATERLINE)	55.95
140' "	56.13
160' "	56.62
190' "	56.78
200' "	56.79
220' "	57.03
240' "	57.33
245.5' " (UNDER 72" CAP)	57.34

NOTE: REMOVE AND DISPOSE OF ALL CONFLICTING PORTIONS OF EXISTING SEWER AND WATER PIPE THAT IS NOT TO REMAIN.

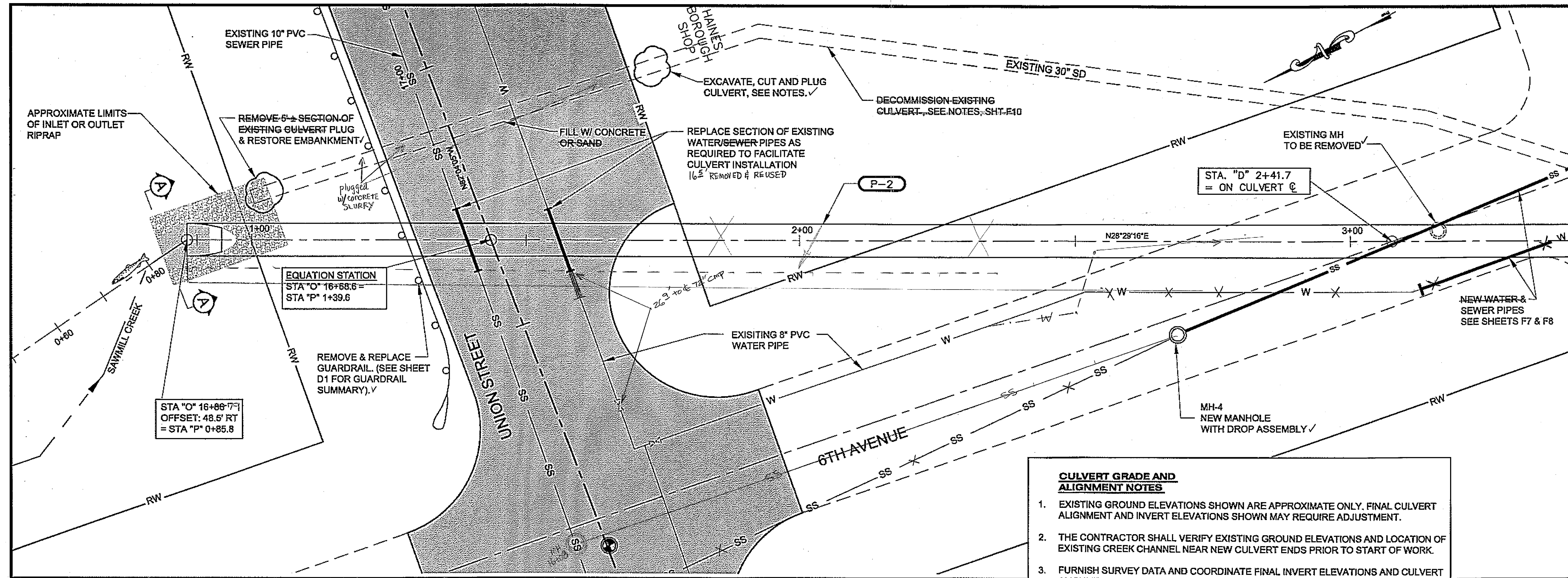


**6TH AVENUE PROFILE - SEWER & WATER**

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

*As-Built 12/15/08  
 City of Douglas*



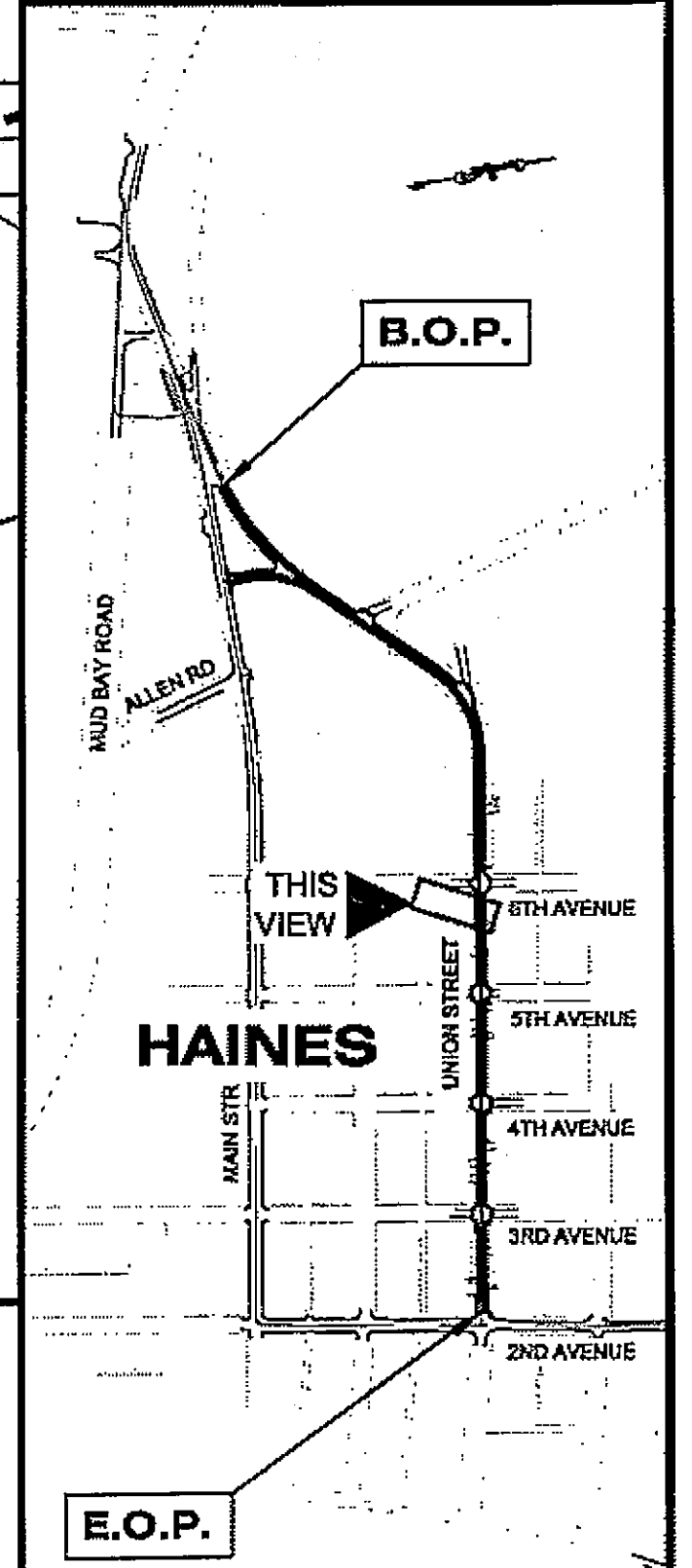


**CULVERT INSTALLATION PLAN**

- CULVERT GRADE AND ALIGNMENT NOTES**
- EXISTING GROUND ELEVATIONS SHOWN ARE APPROXIMATE ONLY. FINAL CULVERT ALIGNMENT AND INVERT ELEVATIONS SHOWN MAY REQUIRE ADJUSTMENT.
  - THE CONTRACTOR SHALL VERIFY EXISTING GROUND ELEVATIONS AND LOCATION OF EXISTING CREEK CHANNEL NEAR NEW CULVERT ENDS PRIOR TO START OF WORK.
  - FURNISH SURVEY DATA AND COORDINATE FINAL INVERT ELEVATIONS AND CULVERT ALIGNMENT WITH THE ENGINEER BEFORE STARTING ANY WORK.

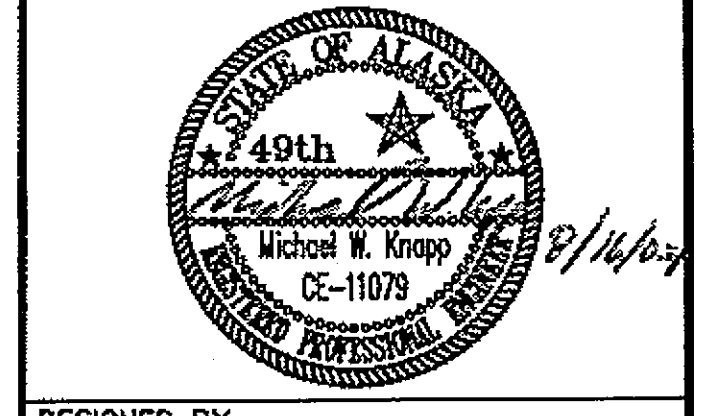
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ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



**PLAN LEGEND**

CHECKED BY: M. KNAPP



DESIGNED BY: M. KNAPP, L. SEIFERT

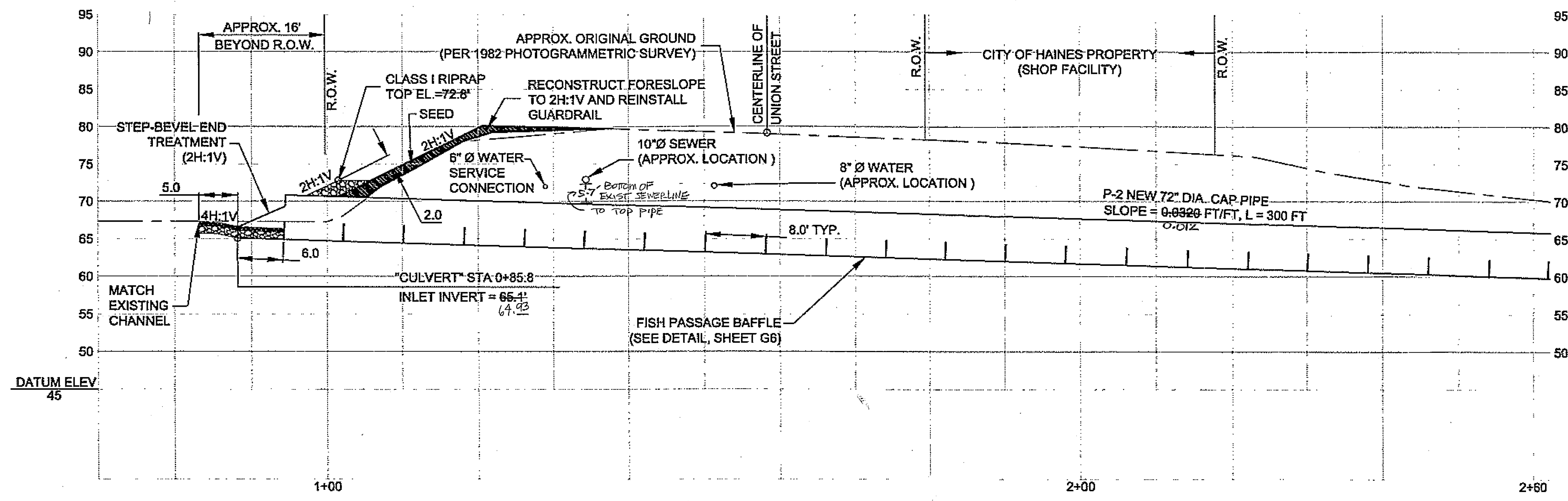
DRAWN BY: G.M./R.S./R.G.

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION  
HAINES ALASKA UNION STREET REFURBISHMENT-68317 / STP-003(104)  
SAWMILL CREEK CULVERT REPLACEMENT - 69081 / HRM-003(114)  
HAINES BOROUGH UTILITIES - 68623

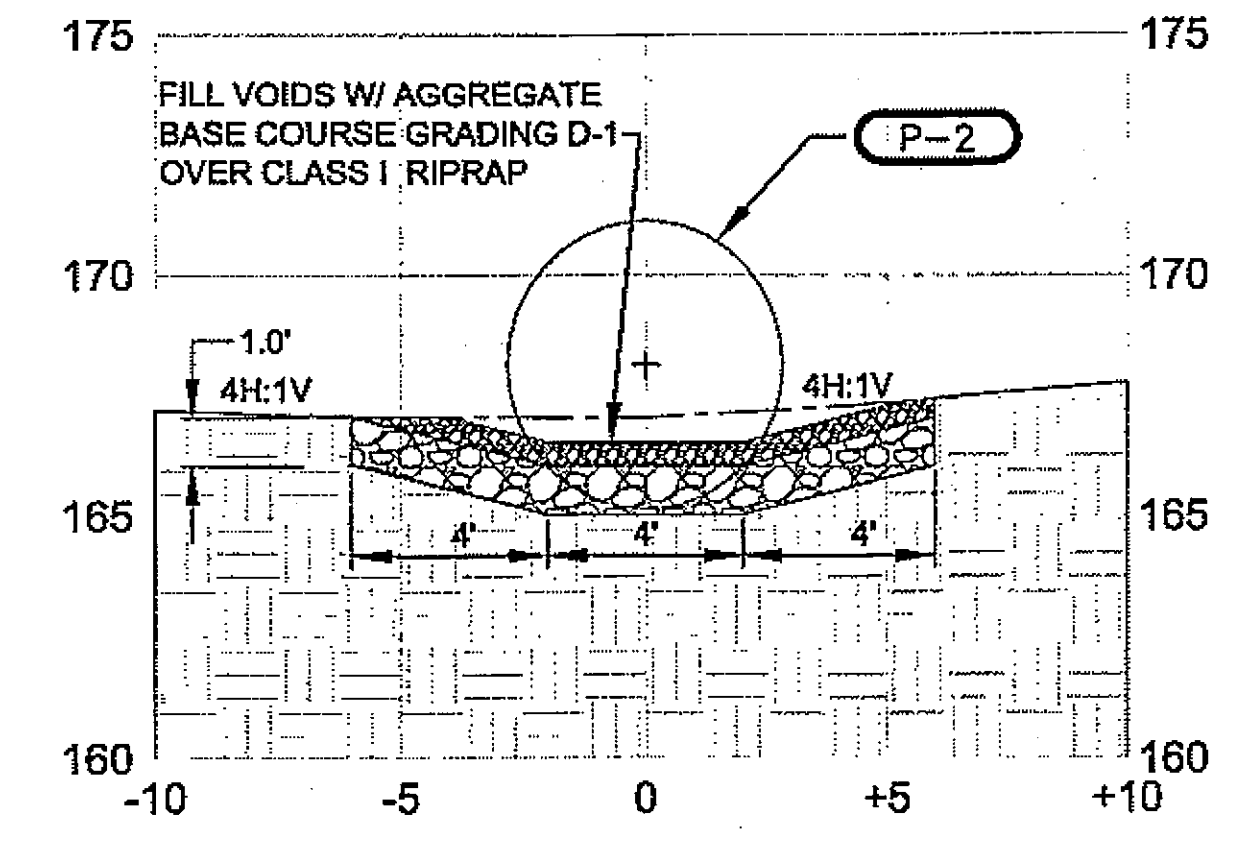
**SAWMILL CK. CULVERT PLAN & PROFILE**

PROJECT DESIGNATION  
STP-0003(104)

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
F9	XX



**CULVERT INSTALLATION PROFILE**



- NOTES:**
- SEE STANDARD DRAWING D-07.00 FOR CULVERT BEVELING DIMENSIONS ON PIPES 6" IN DIAMETER OR LARGER.

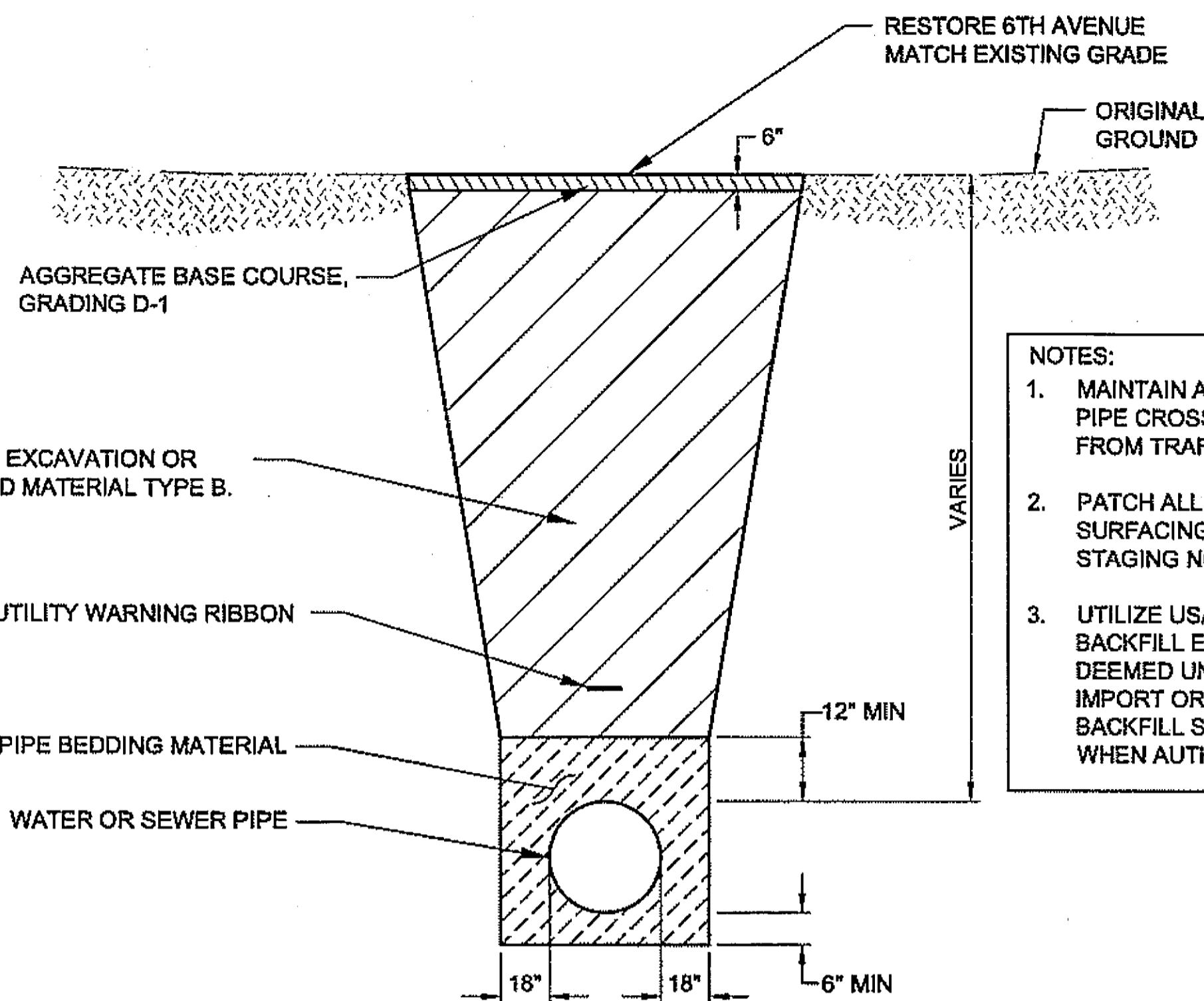
**SECTION A-A (INLET)**

As-Built  
12/15/08  
Cly Deery

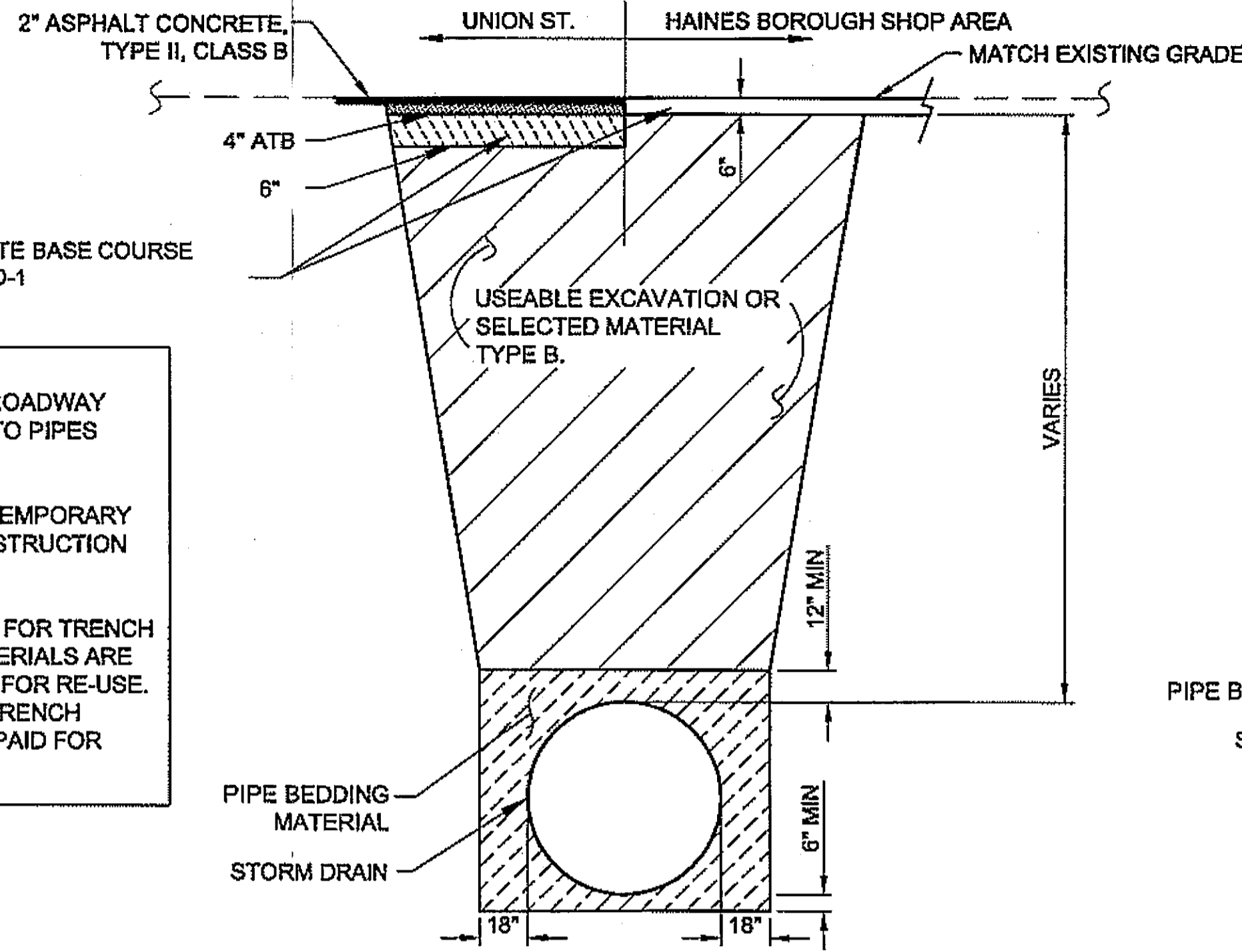
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



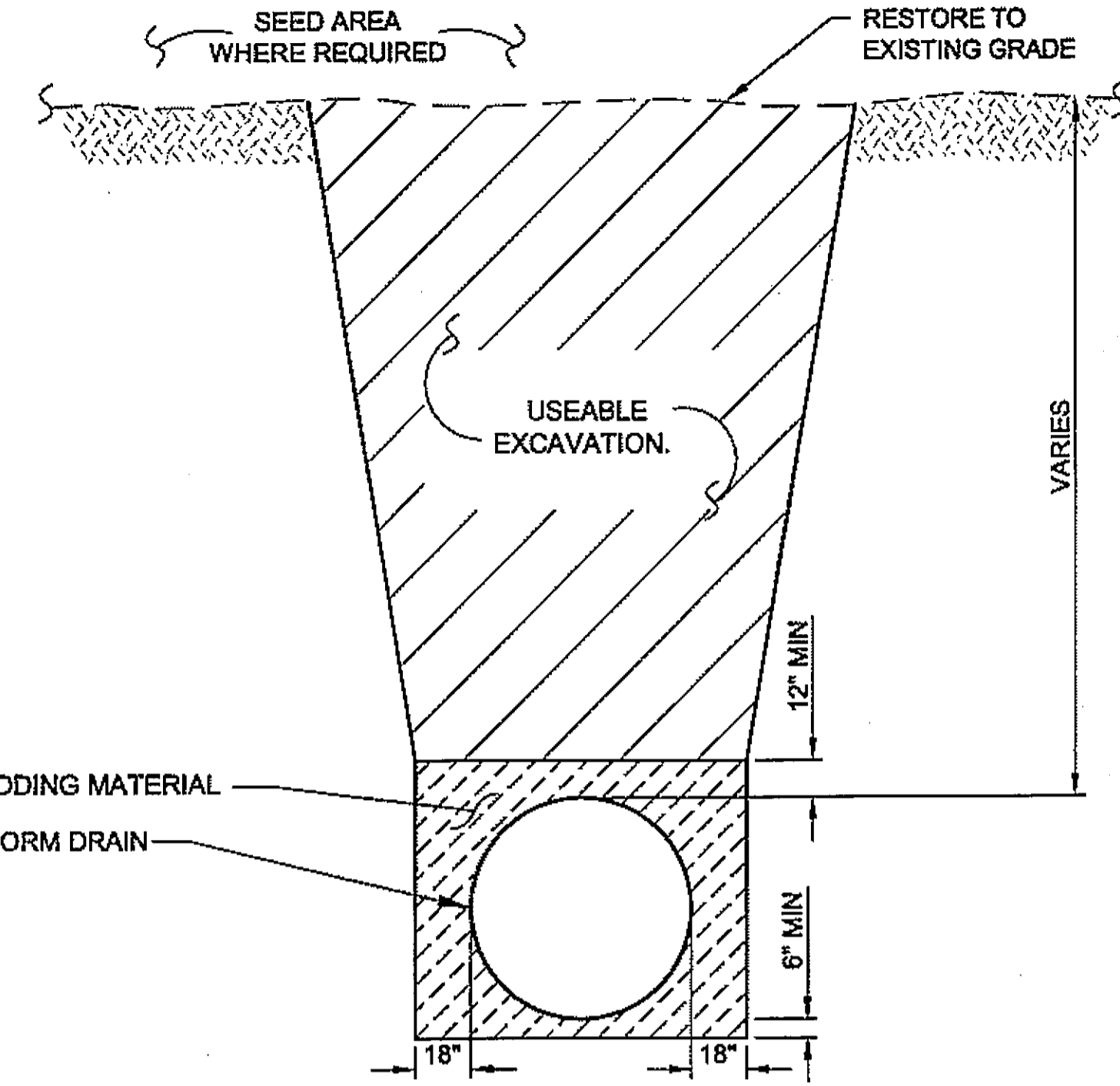




**6TH AVENUE UTILITY TRENCH AND BEDDING DETAIL**

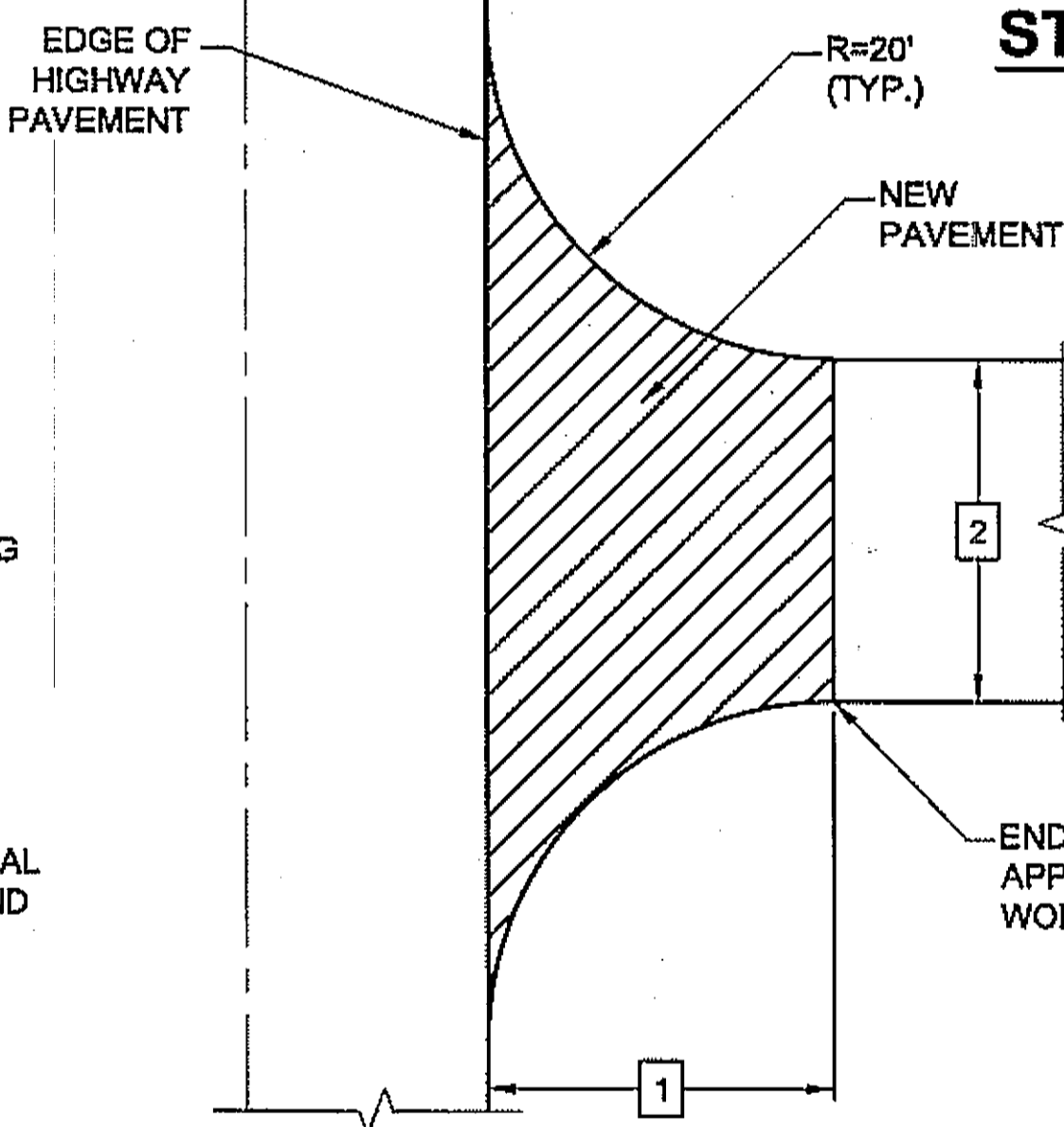


**STORM DRAIN TRENCH DETAIL WITHIN ROADWAYS**

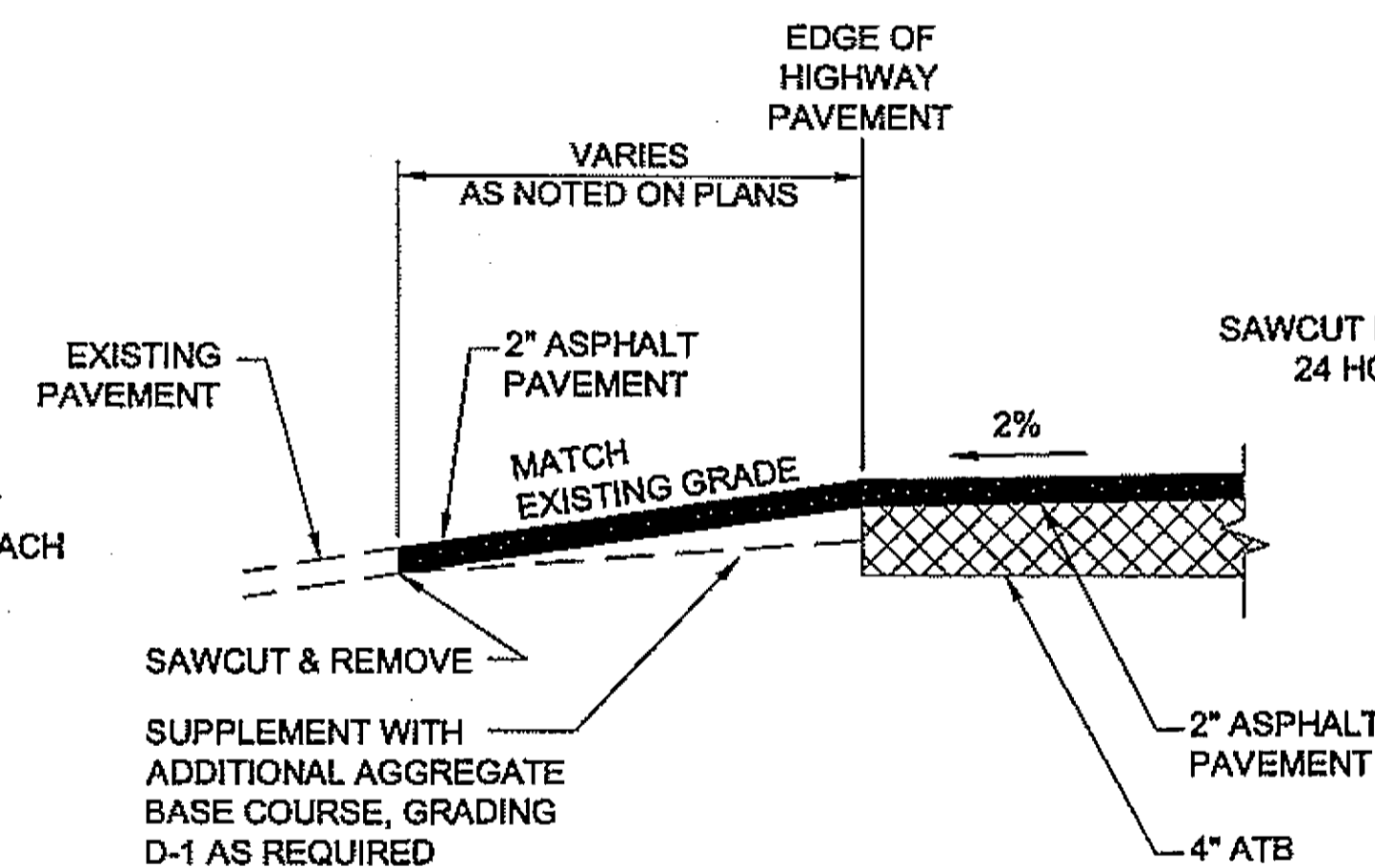


**STORM DRAIN TRENCH DETAIL UNDEVELOPED AREAS**

- NOTES:**
1. MAINTAIN ADEQUATE COVER OVER ALL ROADWAY PIPE CROSSINGS TO PREVENT DAMAGE TO PIPES FROM TRAFFIC.
  2. PATCH ALL ROADWAY TRENCHES WITH TEMPORARY SURFACING WHEN REQUIRED. SEE CONSTRUCTION STAGING NOTES, SHEET C1.
  3. UTILIZE USABLE EXCAVATED MATERIALS FOR TRENCH BACKFILL EXCEPT WHERE EXISTING MATERIALS ARE DEEMED UNSUITABLE BY THE ENGINEER FOR RE-USE. IMPORT OR SELECTED MATERIALS FOR TRENCH BACKFILL SHALL ONLY BE UTILIZED AND PAID FOR WHEN AUTHORIZED BY THE ENGINEER.



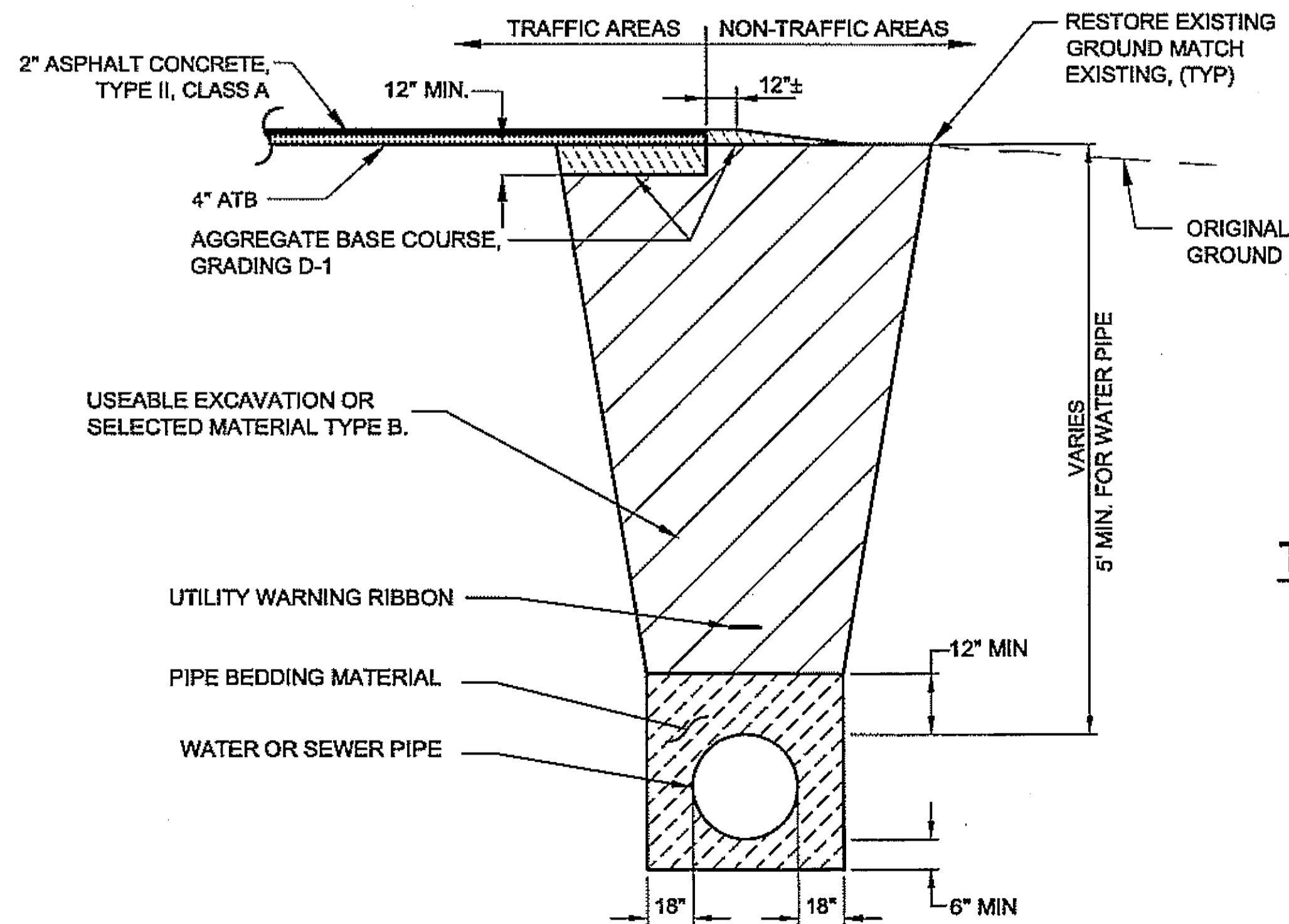
**TYPICAL UNPAVED APPROACH**



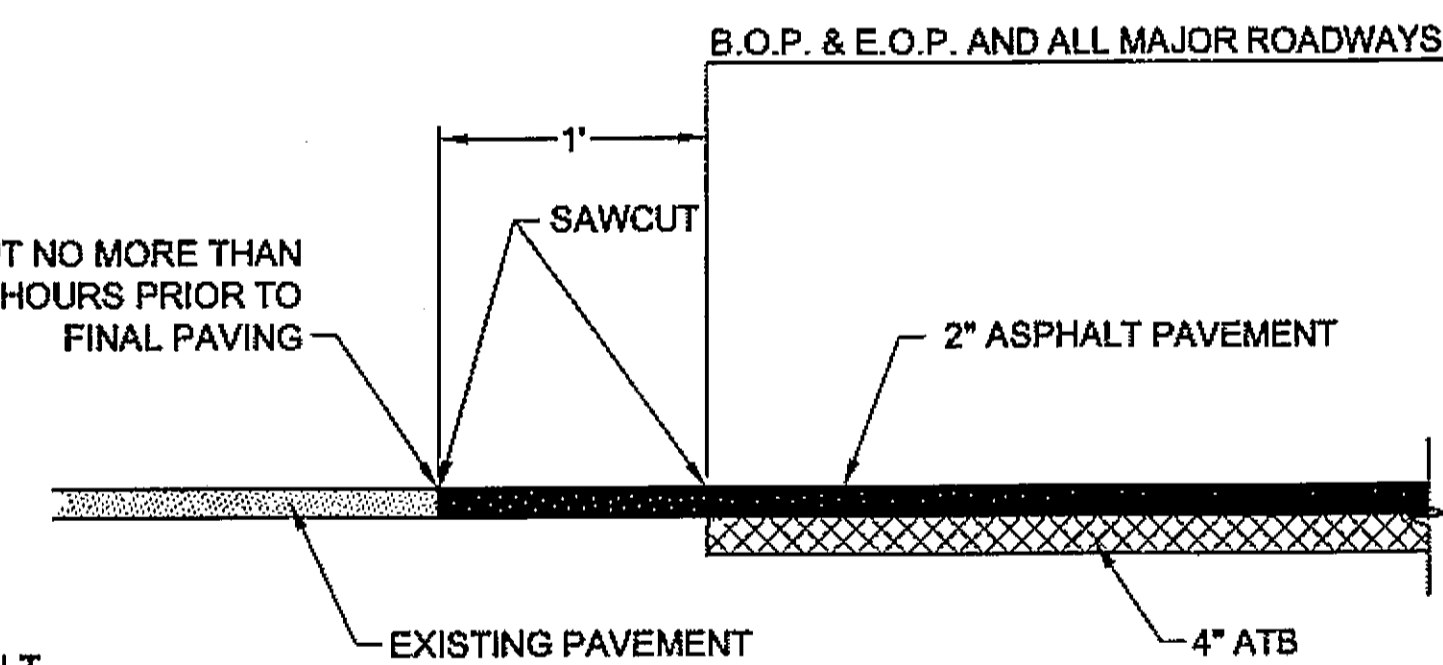
**TYPICAL PAVED APPROACH**

**UNPAVED & PAVED APPROACH NOTES:**

1. SAWCUT AND REMOVE EXISTING ASPHALT TO MATCH LINE ✓
2. ACTUAL MATCH DISTANCE TO BE DETERMINED BY ENGINEER IN FIELD ✓



**TYPICAL UTILITY TRENCH AND BEDDING DETAIL**



**PAVEMENT MATCH JOINT DETAIL**

*As Built 12/15/08  
CJ Douglas*

**RESIDENTIAL PAVING**

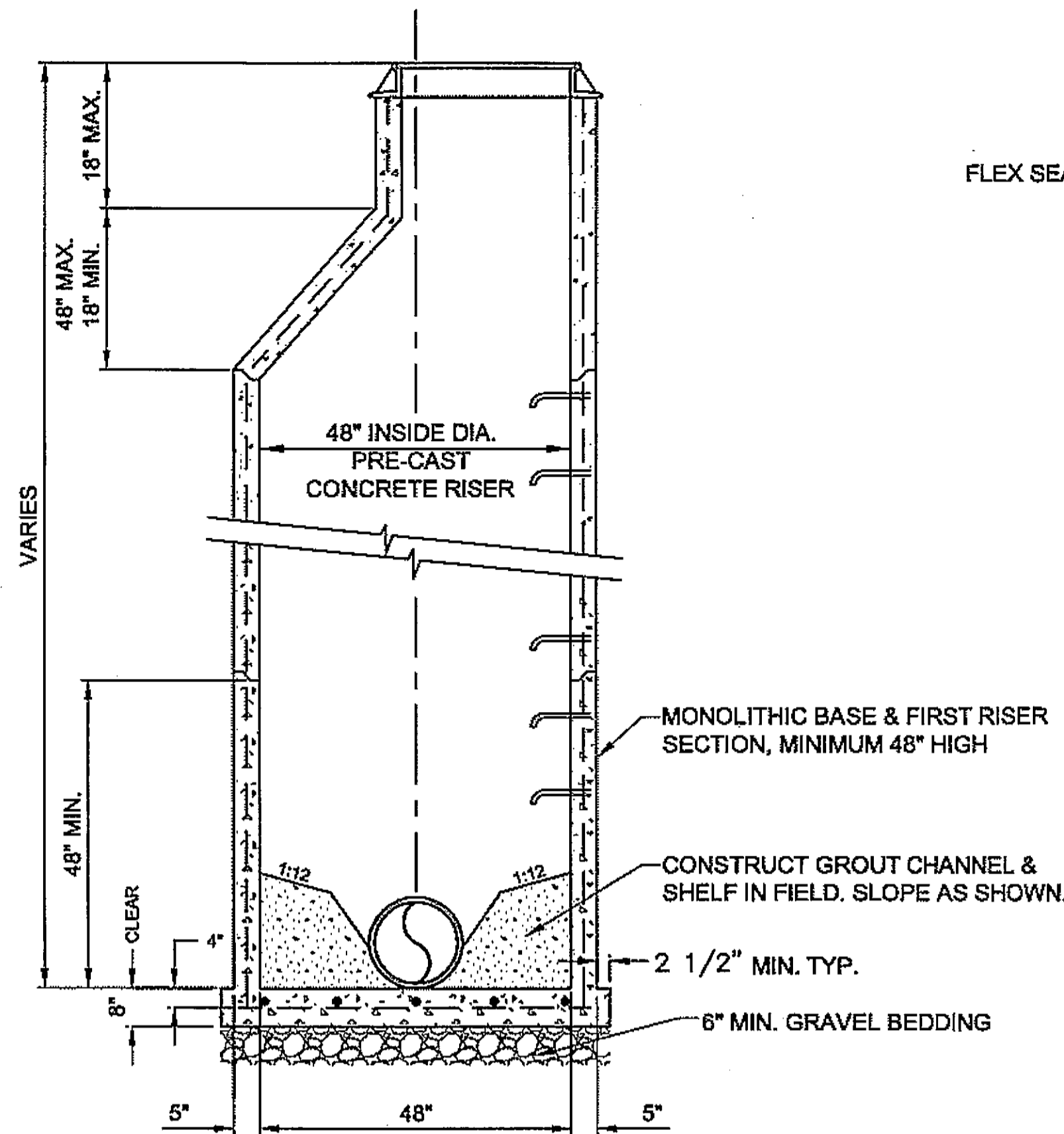
- 1 20' OR TO ROW LINE, WHICHEVER IS LESS ✓
- 2 MATCH EXISTING WIDTH, 20' MAX. DET. BY ENG IN FIELD

**COMMERCIAL PAVING**

- 1 40' OR TO ROW LINE, WHICHEVER IS LESS
- 2 MATCH EXISTING WIDTH, 24' MAX. OR AS SHOWN ON PLANS

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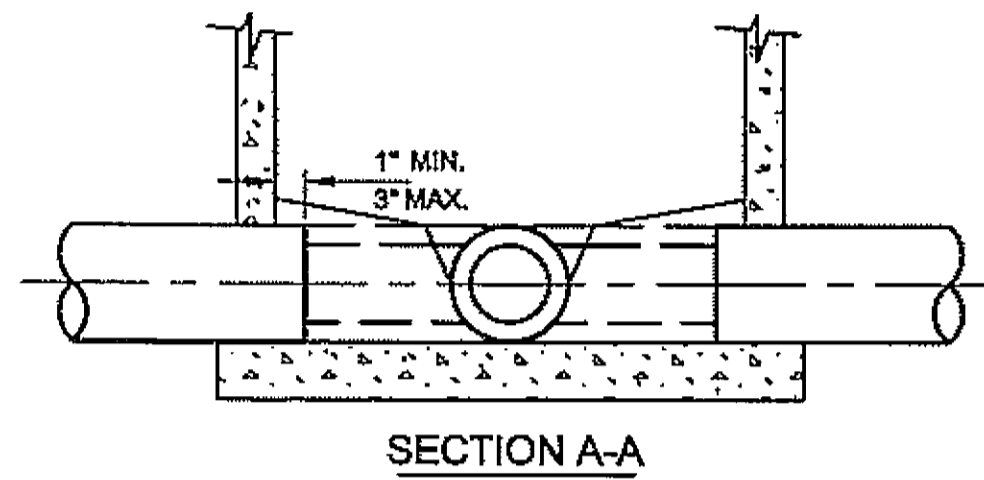
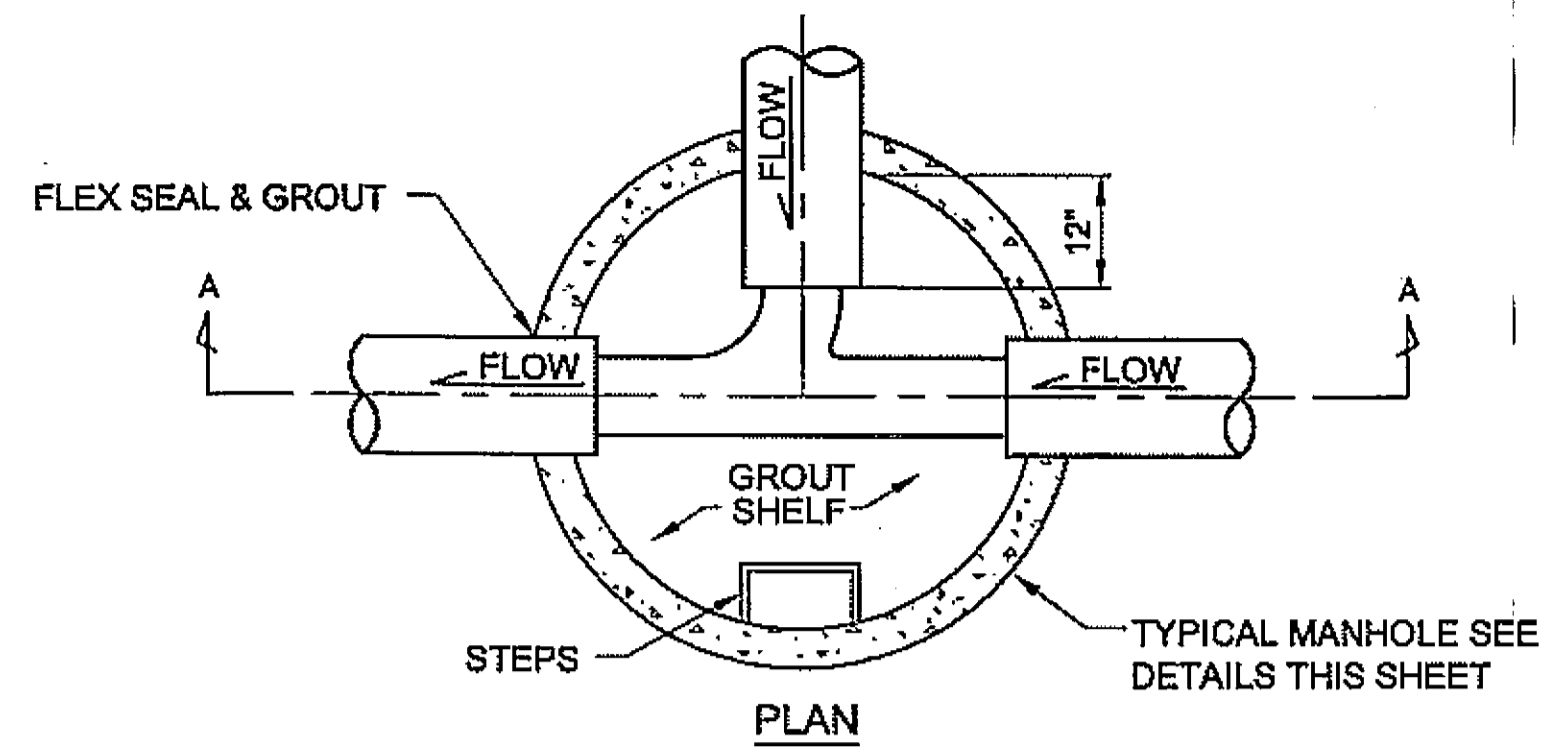
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DESIGNED BY: L. SEIFERT DRAWN BY: R.S./D.D./R.G.		<b>MISCELLANEOUS DETAILS</b>	
PATH: Q:\hna\68317\PlanSet\C_State Dets.dwg TAB: G1 Tue, 14/Aug/07 02:27PM hsaifert		PROJECT DESIGNATION <b>STP-0003(104)</b>	YEAR <b>2006</b>
REVISIONS NO. DATE DESCRIPTION	SHEET NO. <b>G1</b>	TOTAL SHEETS <b>XX</b>	



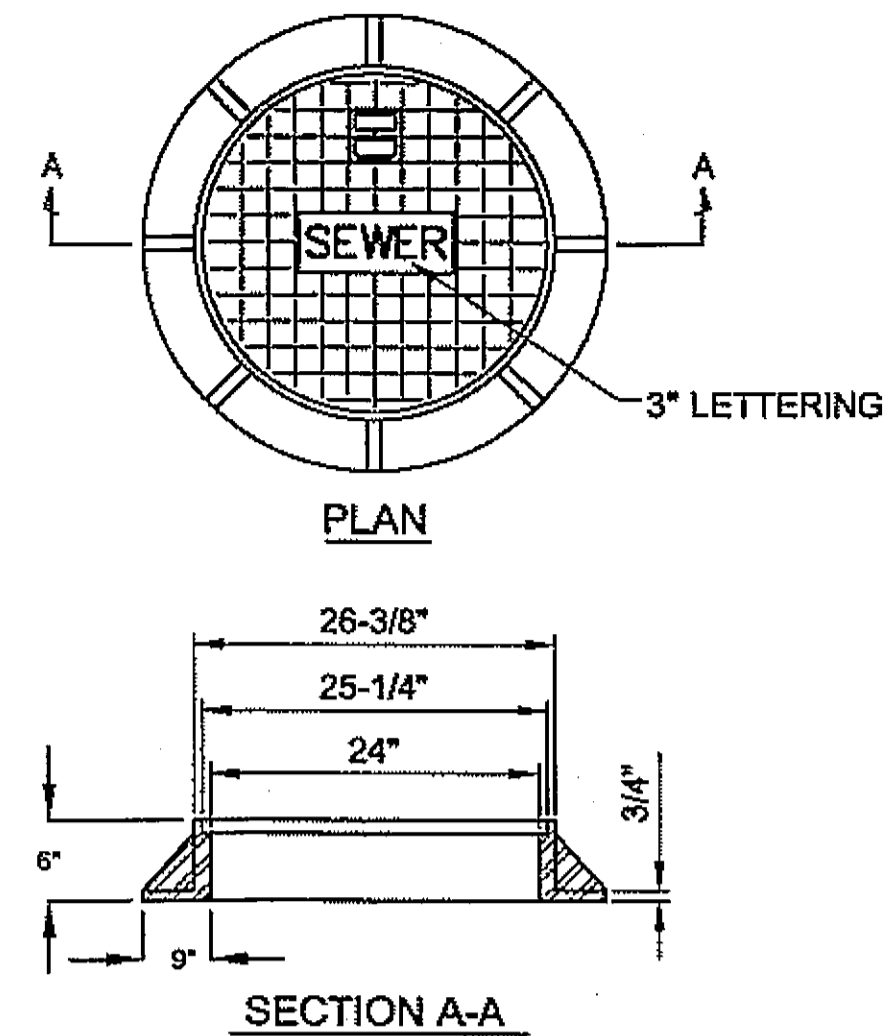
**STANDARD MANHOLE DETAIL**  
NOT TO SCALE

**NOTES:**

- SEE CBJ STANDARD DETAILS 203 AND 209 FOR MANHOLE AND PIPE PENETRATIONS DETAILS NOT SHOWN.
- PRECAST SECTIONS SHALL BE EQUIPPED WITH PICKING EYES, LIFT HOLES NOT PERMITTED.
- ✓ ALL MANHOLE JOINTS SHALL BE SEALED WITH MEMBRANE WRAP PER CBJ STD. 203.
- INSTALL GROUTED FLOW CHANNEL INSIDE MANHOLES.
- MIN. 12" SEPARATION BETWEEN WALL PENETRATIONS.
- MIN. 50% UNINTERRUPTED WALL AREA ON ANY HORIZONTAL PLANE.



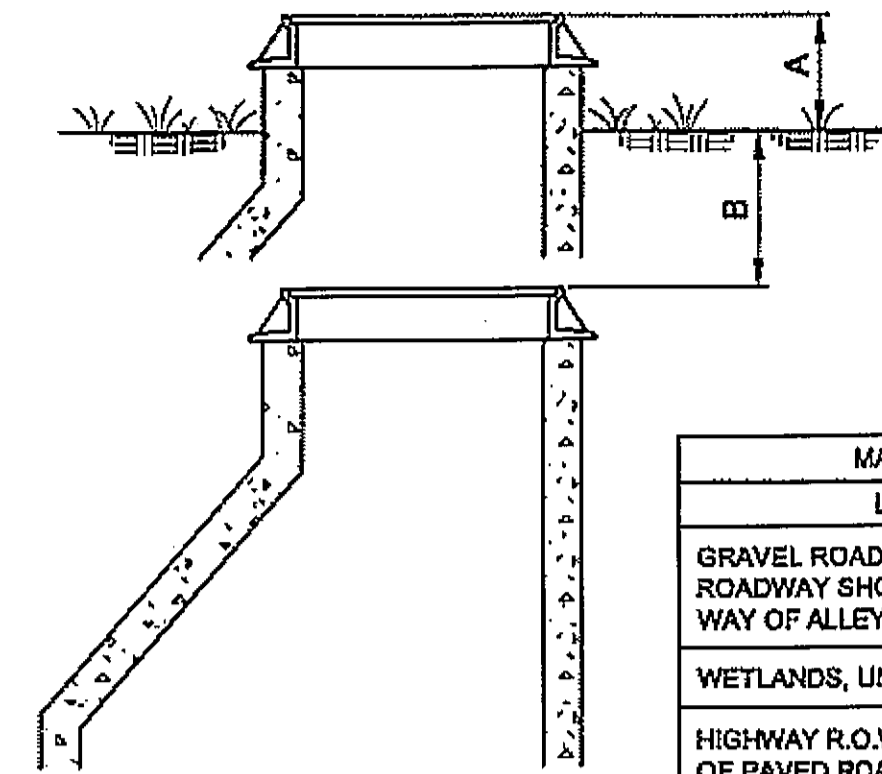
**SEWER MANHOLE CHANNELING DETAIL**  
NOT TO SCALE



**FRAME & COVER NOTES:**

- COVER AND FRAME SHALL BE HEAVY DUTY AND RATED FOR HS25 LOADING. MINIMUM TOTAL WEIGHT SHALL BE 360 POUNDS.
- COVER AND SEALING GASKET SHALL BE "NEENAH" SELF SEALING LID, OR APPROVED EQUAL. LOCKDOWN BOLTS WILL NOT BE ALLOWED.
- COVER SHALL BE MACHINED TO FIT WATERTIGHT FRAME. COVER SHALL HAVE THE WORD "SEWER" CAST IN, AND SHALL BE PROVIDED WITH AN INTEGRAL LIFT HANDLE.
- FRAME AND COVER DIMENSIONS SHALL BE IN ACCORDANCE WITH THE GUIDELINES INDICATED. VARIATIONS SUBJECT TO APPROVAL.
- ALL FRAMES AND COVERS SHALL BE IDENTICAL FOR ALL MANHOLE INSTALLATIONS.

**MANHOLE FRAME AND COVER**  
NOT TO SCALE

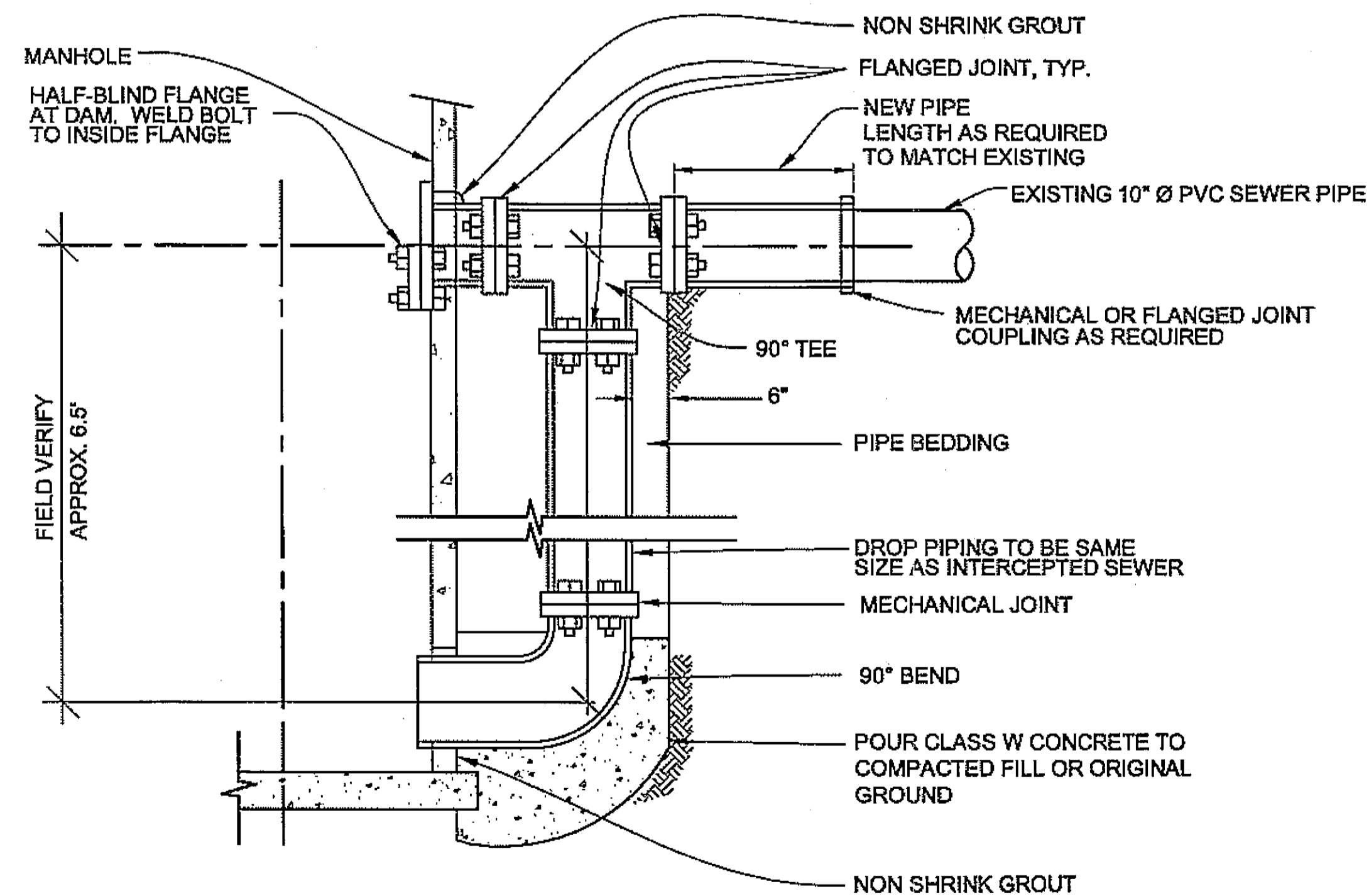


MANHOLE HEIGHT TABLE		
LOCATION	A	B
GRAVEL ROADWAYS, UNPAVED ROADWAY SHOULDERS, TRAVELED WAY OF ALLEYS	0"	
WETLANDS, UNDEVELOPED AREAS	24"	
HIGHWAY R.O.W. - 10 FEET OUTSIDE OF PAVED ROADWAY	6"	
PAVED ROADWAYS, PAVED PARKING AREAS		1/4"

**MANHOLE HEIGHT NOTES:**

- WHERE INSTALLED IN PAVED ROADWAYS OR PAVED PARKING AREAS, MANHOLE LID SHALL CONFORM TO THE GRADE AND CROSS SLOPE OF THE PAVEMENT. DIMENSION IS TO THE TOP OF EMBOSSED LETTERING IF LETTERING IS HIGHER THAN THE FRAME.
- TYPICAL MANHOLE HEIGHTS SHALL BE APPLIED TO THE TOP OF ANY SANITARY SEWER CLEANOUT COVERS INSTALLED.
- BURIED MANHOLES OR CLEANOUTS SHALL BE MARKED WITH AN ORANGE CARSONITE MARKER. SEE UTILITY MARKER DETAIL ON SHEET G4.
- SEE CONCRETE COLLAR DETAILS, SHEET G4 FOR MANHOLE LOCATED WITHIN TRAVELED WAY.

**TYPICAL MANHOLE HEIGHTS**  
NOT TO SCALE

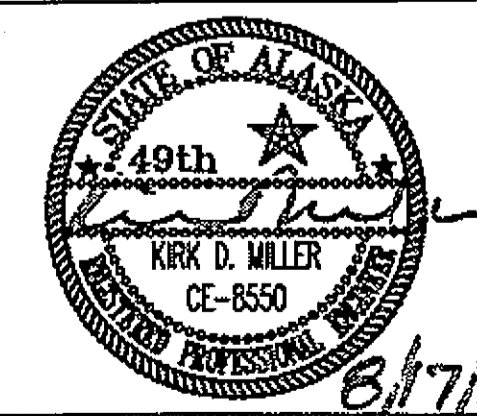


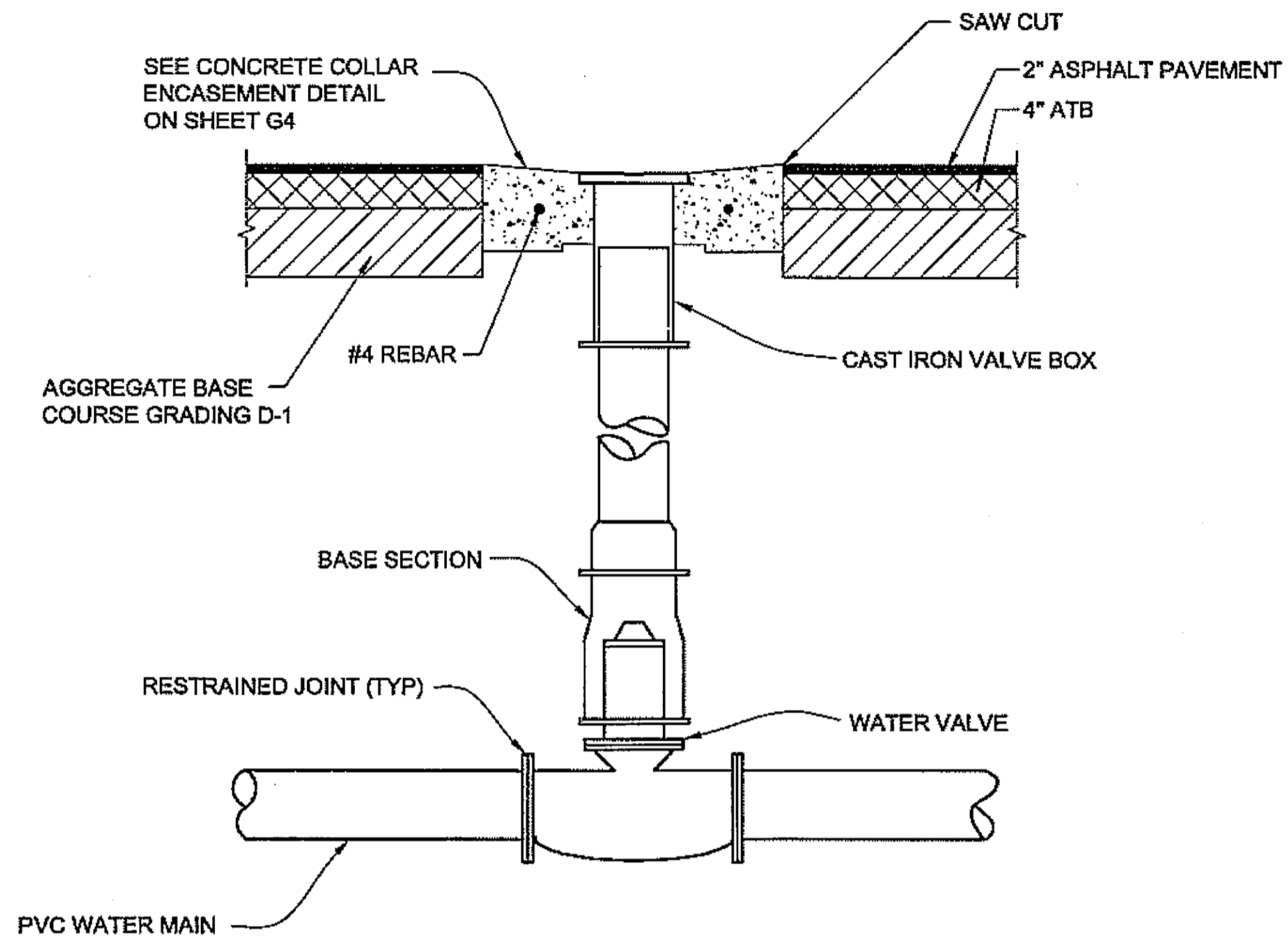
ALL PIPE & FITTINGS ASSOCIATED WITH DROP CONNECTION TO BE DUCTILE IRON

**OUTSIDE DROP MANHOLE CONNECTION (MH-4)**

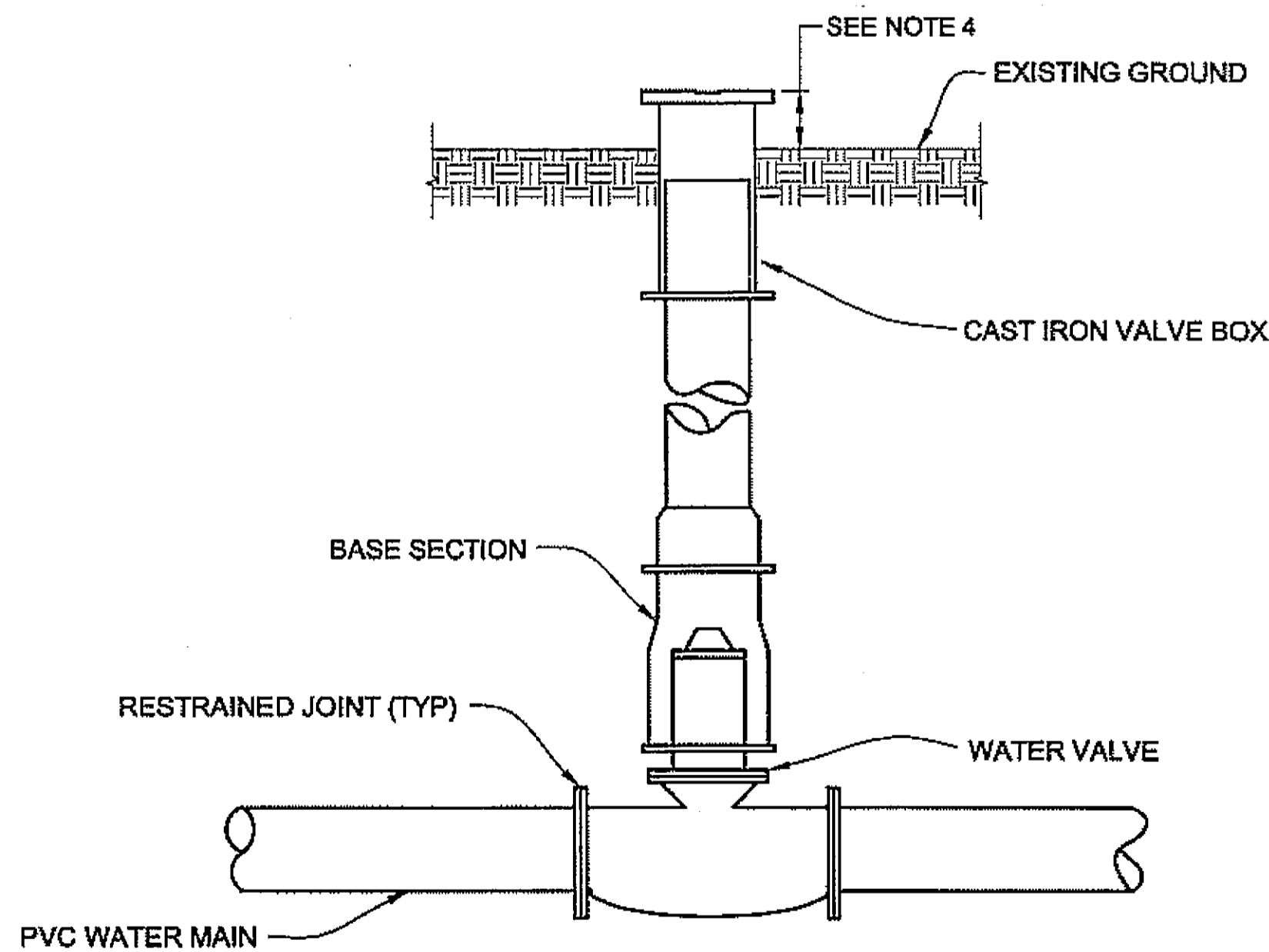
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12/15/08  
CJ Douglas*

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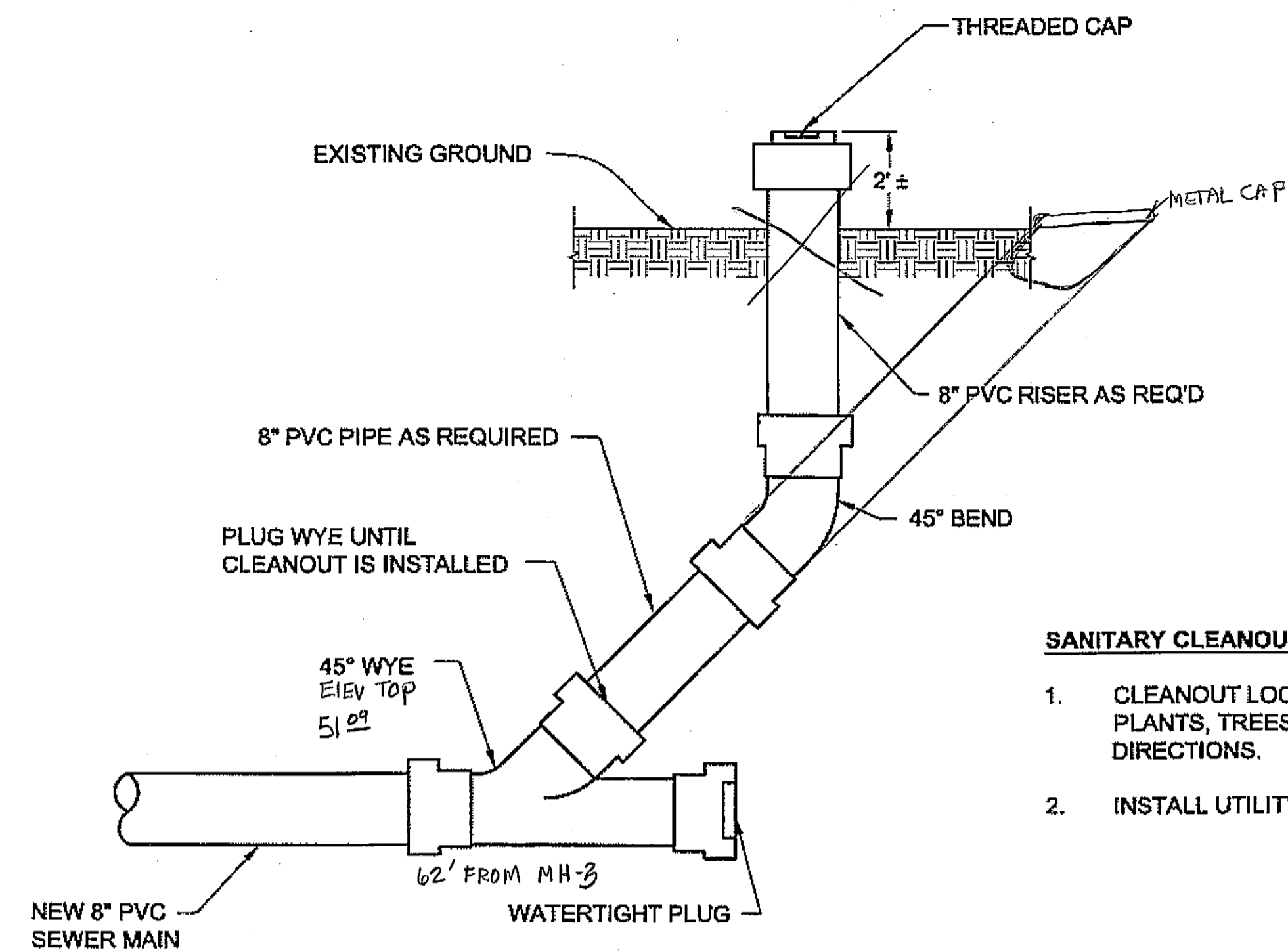
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DESIGNED BY: L. SEIFERT DRAWN BY: R.S./D.D./R.G.		<b>MISCELLANEOUS DETAILS</b>	
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REVISIONS NO. DATE DESCRIPTION	SHEET NO. <b>G2</b>	TOTAL SHEETS <b>XX</b>	



**VALVE BOX DETAIL  
PAVED AREA**



**VALVE BOX DETAIL  
UNDEVELOPED AREA**



NEW CLEAN OUT '0' 11+45, 40± LT &

**SANITARY CLEANOUT DETAIL  
UNDEVELOPED AREA**

**SANITARY CLEANOUT NOTES:**

1. CLEANOUT LOCATIONS SHALL BE CLEARED OF ALL OBSTRUCTIONS, PLANTS, TREES, BOULDERS, ETC. BY A MINIMUM OF 3' IN ALL DIRECTIONS.
2. INSTALL UTILITY MARKER NEAR CLEANOUT. SEE SHEET G4.

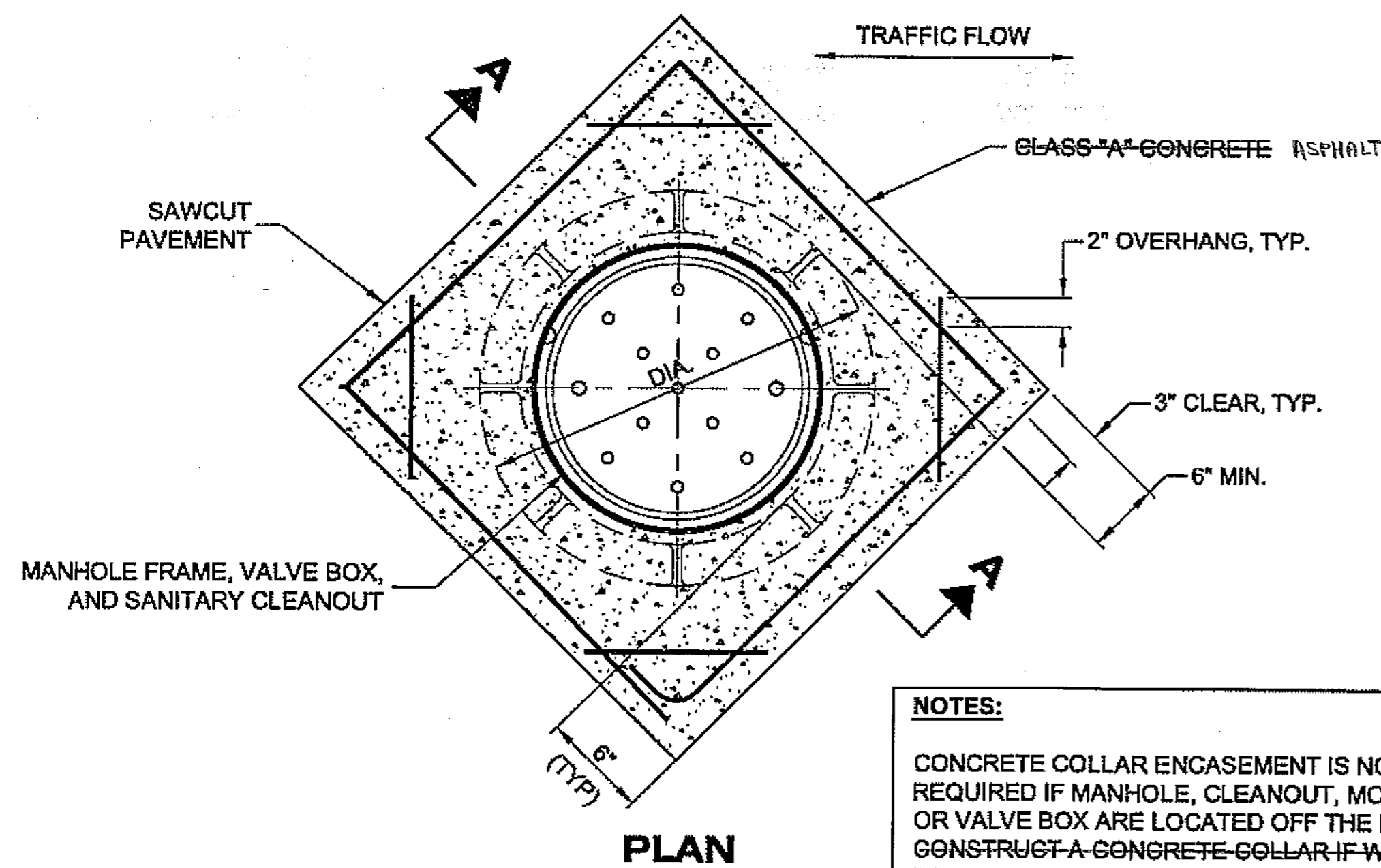
**VALVE BOX NOTES:**

1. SEE CBJ STANDARD 407 FOR VALVE BOX DETAILS NOT SHOWN.
2. VALVE BOX RISER EXTENSIONS SHALL BE DUCTILE IRON PIPE.
3. THE CAST IRON COVER IS TO HAVE WATER OR W CAST WITH RAISED LETTERING INTO TOP OF SURFACE.
4. IN AREAS OUTSIDE THE TRAVELED WAY VALVE BOXES SHALL BE EXTENDED 6" TO 12" ABOVE GRADE. CONCRETE COLLAR AROUND COVER FRAME IS NOT REQUIRED.
5. VALVE BOX LOCATIONS SHALL BE CLEARED OF ALL OBSTRUCTIONS BY A MINIMUM OF 3' IN ALL DIRECTIONS.
6. INSTALL UTILITY MARKER NEAR VALVE BOX AT ALL UNDEVELOPED AREAS, SEE SHEET G4.

*As Built  
12/15/03  
CJ/Douglas*

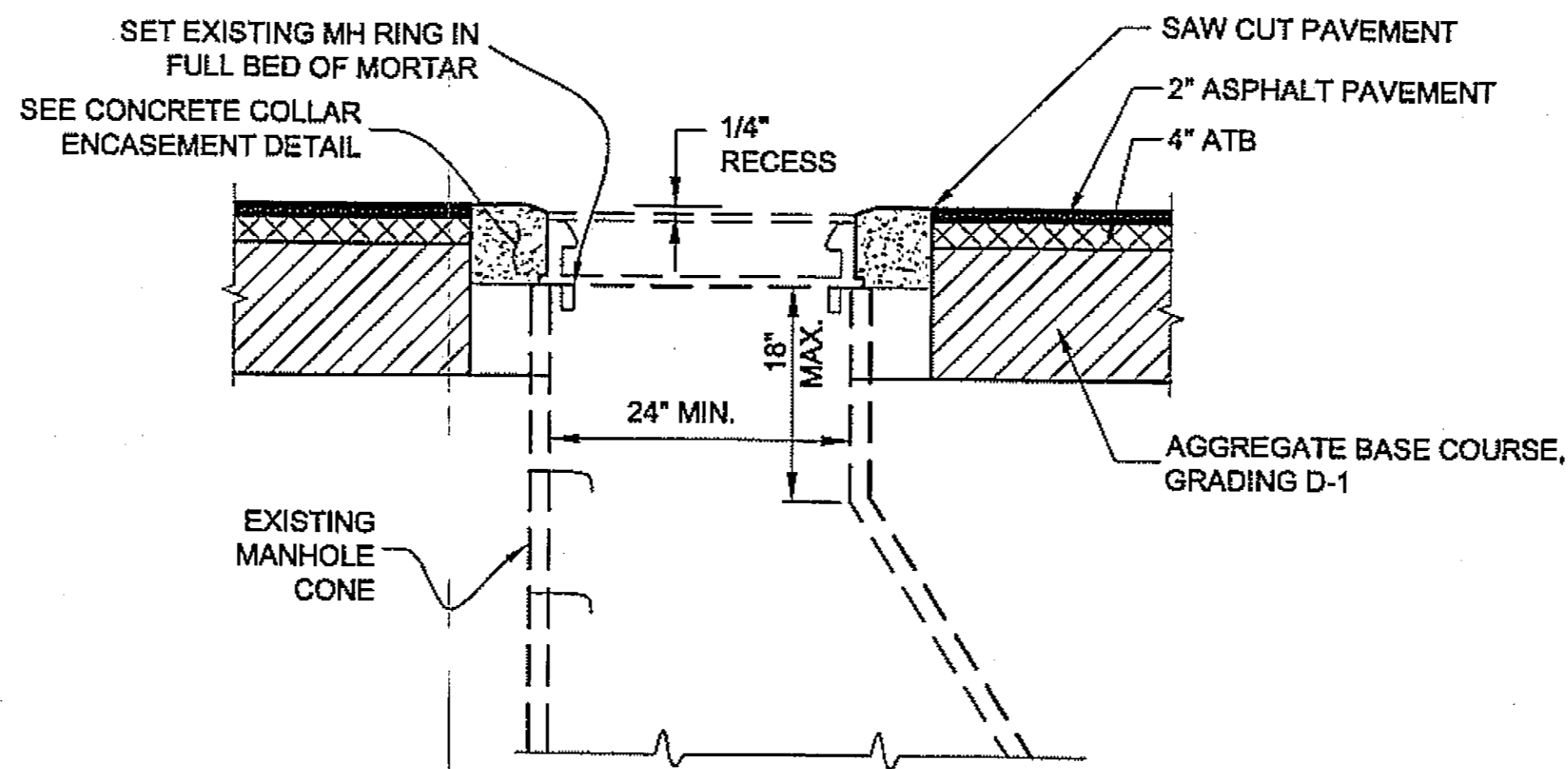
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CHECKED BY: K. MILLER 		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION <b>HAINES ALASKA UNION STREET          REFURBISHMENT-68317 / STP-003(104)          SAWMILL CREEK CULVERT          REPLACEMENT - 69081 / HRM-003(114)          HAINES BOROUGH UTILITIES - 68623</b>							
DESIGNED BY: L. SEIFERT DRAWN BY: R.S./D.D./R.G.		<b>MISCELLANEOUS          DETAILS</b>							
PATH: Q:\Hna\68317\Plans\G_State_Dets.dwg TAB: G3 Tue, 14/Aug/07 02:28PM ltsifert		PROJECT DESIGNATION <b>STP-0003(104)</b>	YEAR <b>2006</b>						
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NO.	DATE	DESCRIPTION							



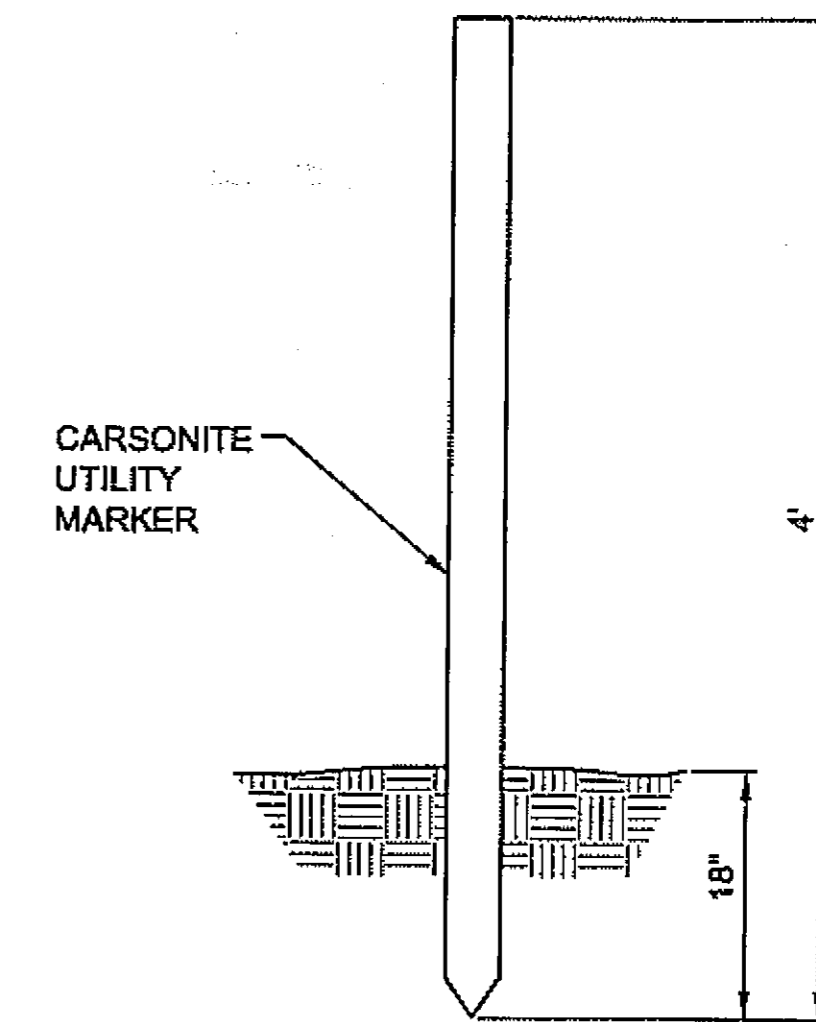
**NOTES:**  
 CONCRETE COLLAR ENCASUREMENT IS NOT REQUIRED IF MANHOLE, CLEANOUT, MONUMENTS OR VALVE BOX ARE LOCATED OFF THE ROADWAY. CONSTRUCT A CONCRETE COLLAR IF WITHIN THE ROADWAY PAVEMENT LIMITS.

**PLAN**



**ADJUST EXISTING MANHOLE DETAIL**

- NOTES:**
- ALL ADJUSTMENTS SHALL BE MADE BELOW THE FRAME ON THE MANHOLE CONE.
  - USE EITHER BRICKS OR CONCRETE RINGS TO ADJUST THE HEIGHT OF EXISTING MANHOLES.

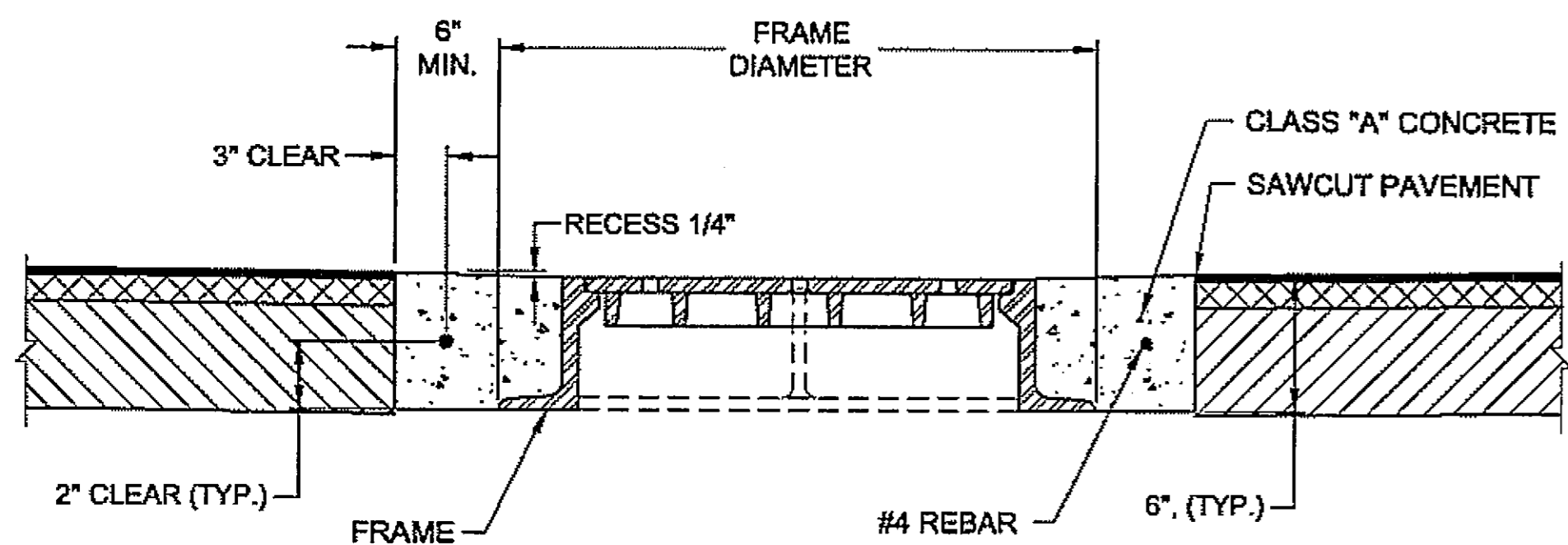


UTILITY	A
HYDRANT	3'
MANHOLE - GRAVEL ROADWAY	25'
MANHOLE - ALL OTHER LOCATIONS	3'

- UTILITY MARKER NOTES:**
- INSTALL UTILITY MARKERS WITHIN 3- FEET OF BURIED OR EXPOSED UTILITIES WHERE NOTED ON THE PLANS AND AS FURTHER SPECIFIED BELOW.
  - INSTALL ORANGE UTILITY MARKERS AT SEWER MANHOLES AND CLEANOUTS NOT IN DEVELOPED AREAS (3 EACH REQUIRED).
  - INSTALL BLUE UTILITY MARKERS AT NEW WATER SERVICE TERMINATIONS AND FIRE HYDRANT INSTALLATIONS (7 EACH REQUIRED).

**UTILITY MARKER DETAIL**

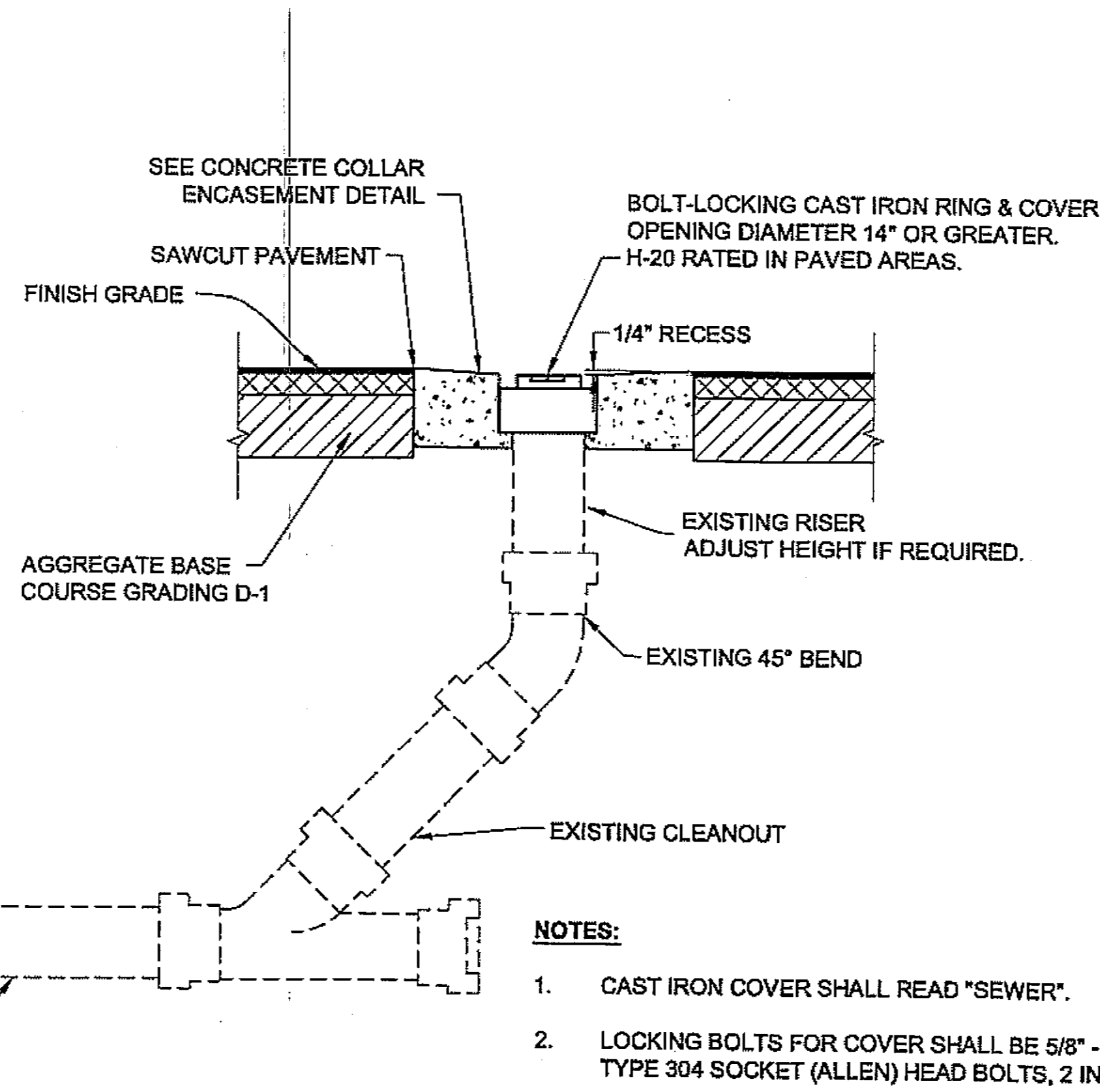
NOT TO SCALE



**SECTION A-A**

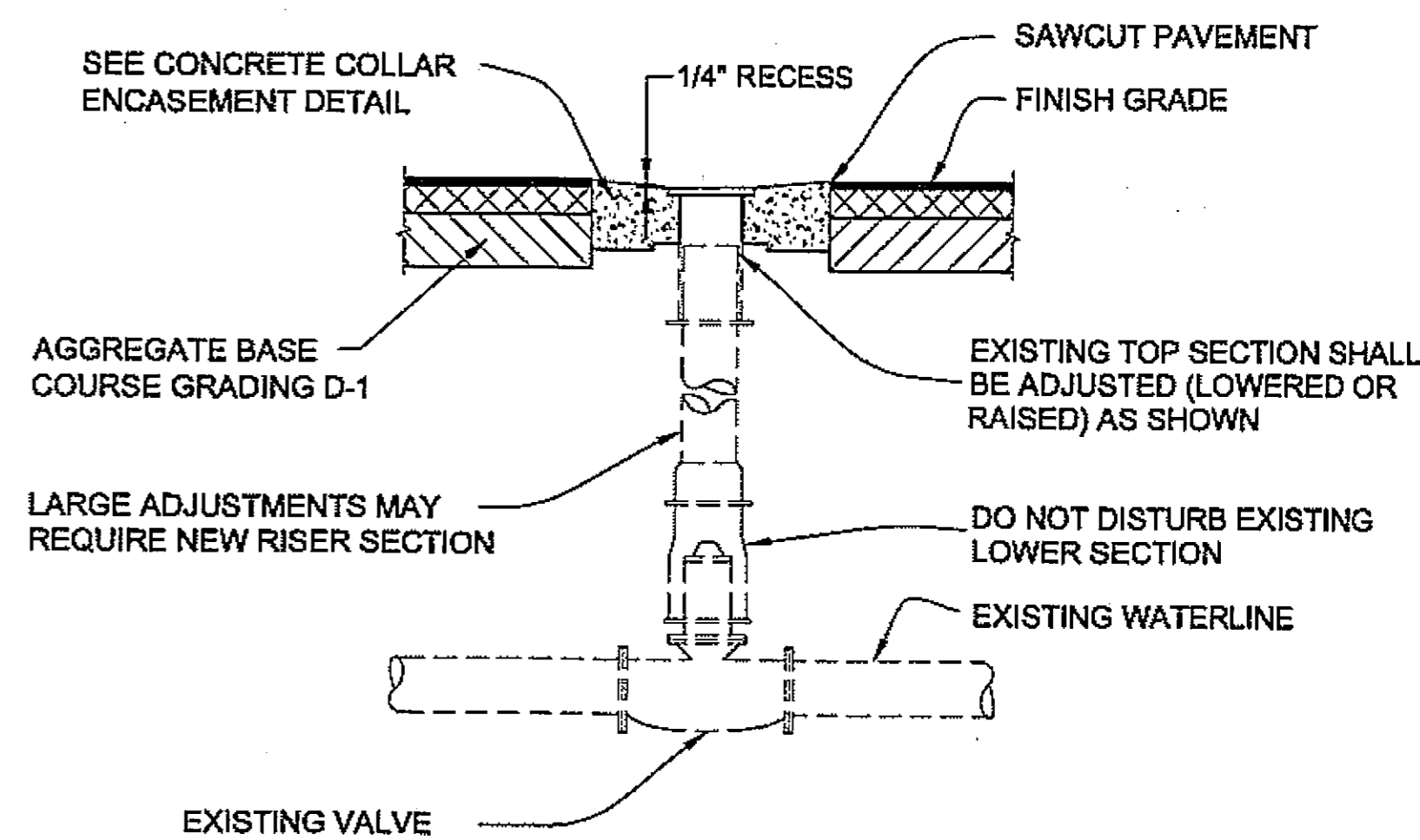
**CONCRETE COLLAR ENCASUREMENT DETAIL**

NOT USED AT REQUEST OF PUBLIC WORKS.



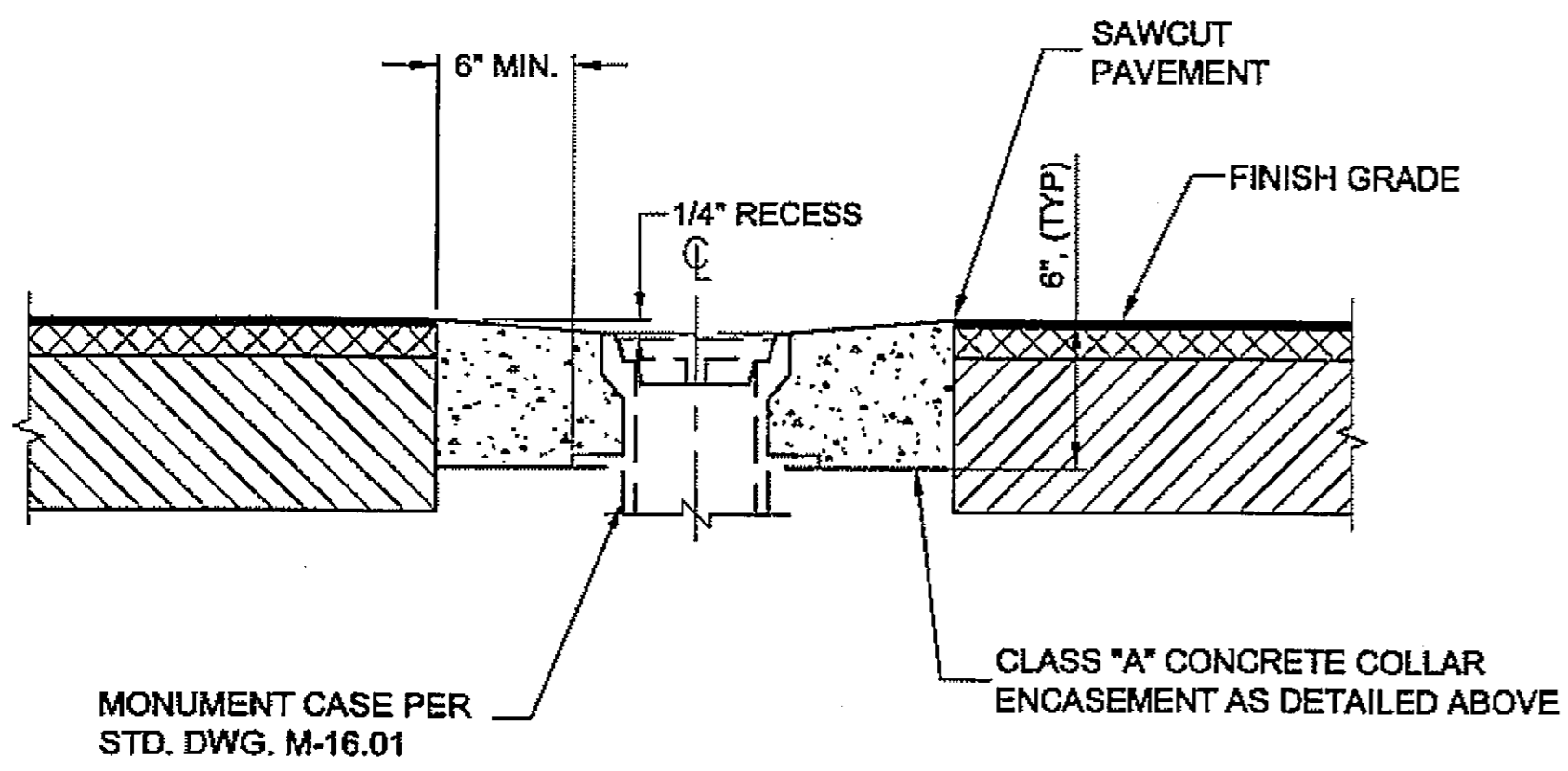
- NOTES:**
- CAST IRON COVER SHALL READ "SEWER".
  - LOCKING BOLTS FOR COVER SHALL BE 5/8" - 11 NC STAINLESS STEEL TYPE 304 SOCKET (ALLEN) HEAD BOLTS, 2 INCHES LONG.
  - 14" BOLT-LOCKING CAST IRON COVER SHALL BE EQUAL TO INLAND FOUNDRY NO. 209.

**ADJUST EXISTING SANITARY CLEANOUT DETAIL**



**VALVE BOX ADJUSTMENT DETAIL**

As Built  
 12/15/08  
 C. J. Douglas



**MONUMENT CASE ADJUSTMENT DETAIL**

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CHECKED BY: K. MILLER

DESIGNED BY: L. SEIFERT

DRAWN BY: R.S.J.D./R.G.

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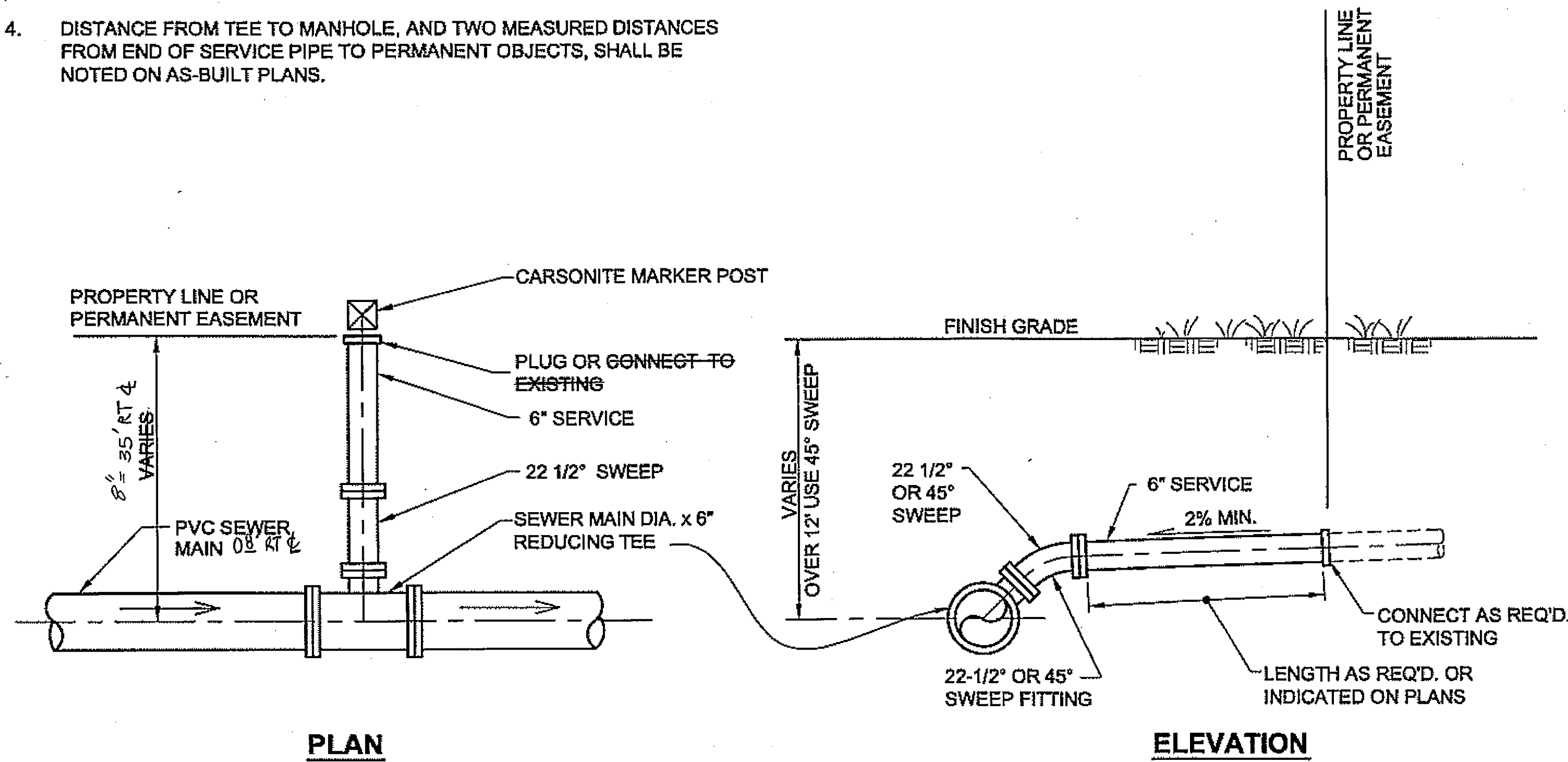
STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION  
**HAINES ALASKA UNION STREET REFURBISHMENT-68317 / STP-003(104)**  
**SAWMILL CREEK CULVERT REPLACEMENT - 69081 / HRM-003(114)**  
**HAINES BOROUGH UTILITIES - 68623**

**MISCELLANEOUS DETAILS**

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
			STP-0003(104)	2006	G4	XX

**SEWER SERVICE CONNECTION NOTES:**

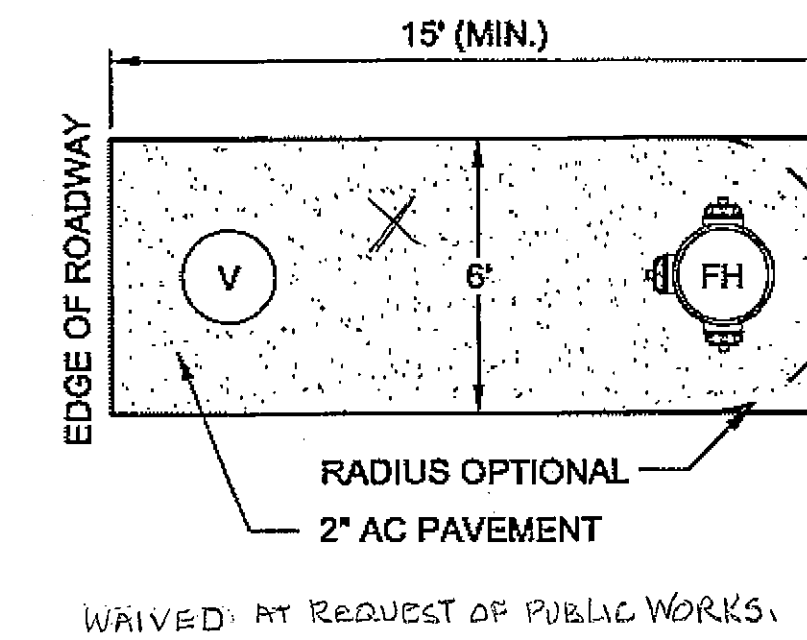
- SERVICE CONNECT SHALL BE 8" DIA. @ STA. 27+88.80 NEW @ 29+00
- SEWER SERVICE PIPING SHALL BE C900 PVC (DR 18) OR MAY BE DUCTILE IRON OR CAST IRON (CLASS 2200).
- 8" DOUBLE STRAP SERVICE SADDLE OR EQUAL MAY BE SUBSTITUTED FOR REDUCING TEE.
- DISTANCE FROM TEE TO MANHOLE, AND TWO MEASURED DISTANCES FROM END OF SERVICE PIPE TO PERMANENT OBJECTS, SHALL BE NOTED ON AS-BUILT PLANS.



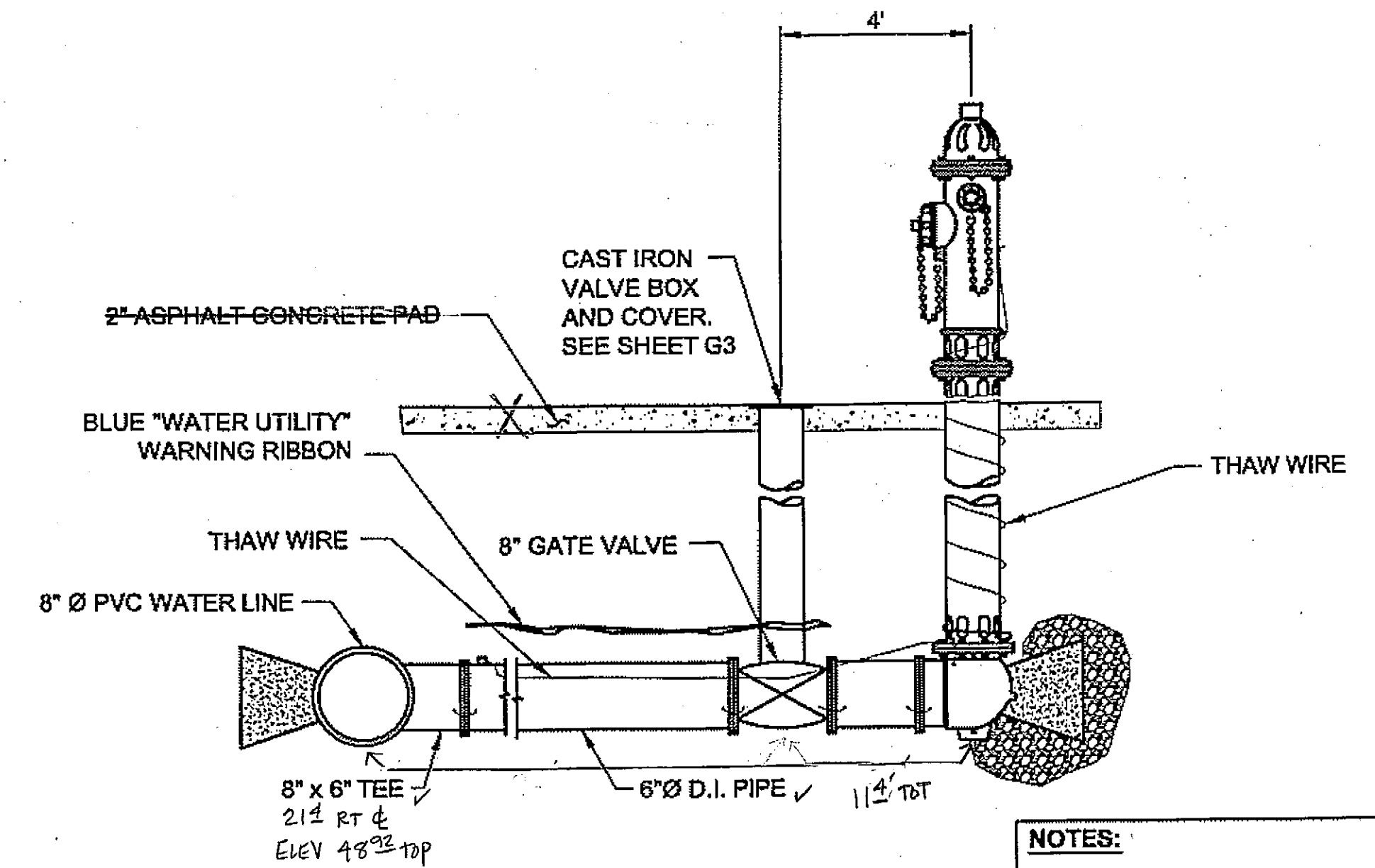
**SEWER SERVICE CONNECTION DETAIL**

**ACCESS PAD NOTES:**

- CLEAR GRADE AND COMPACT EXISTING SUBGRADE AND INSTALL 4-INCHES OF AGGREGATE BASE COURSE, GRADING D-1 PRIOR TO PLACEMENT OF AC PAVEMENT FOR HYDRANT PAD.
- SEED ALL DISTURBED AREAS.



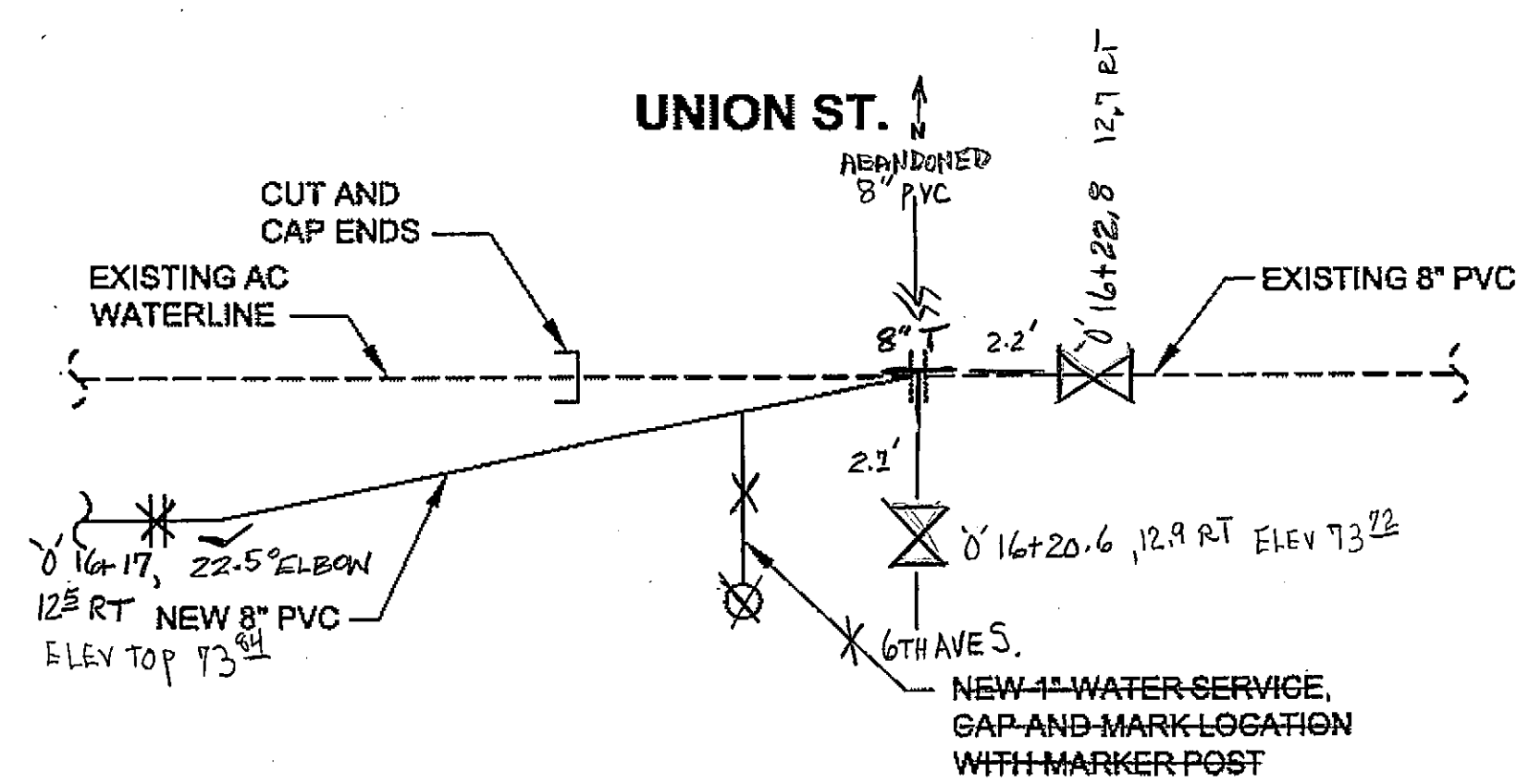
**PLAN**



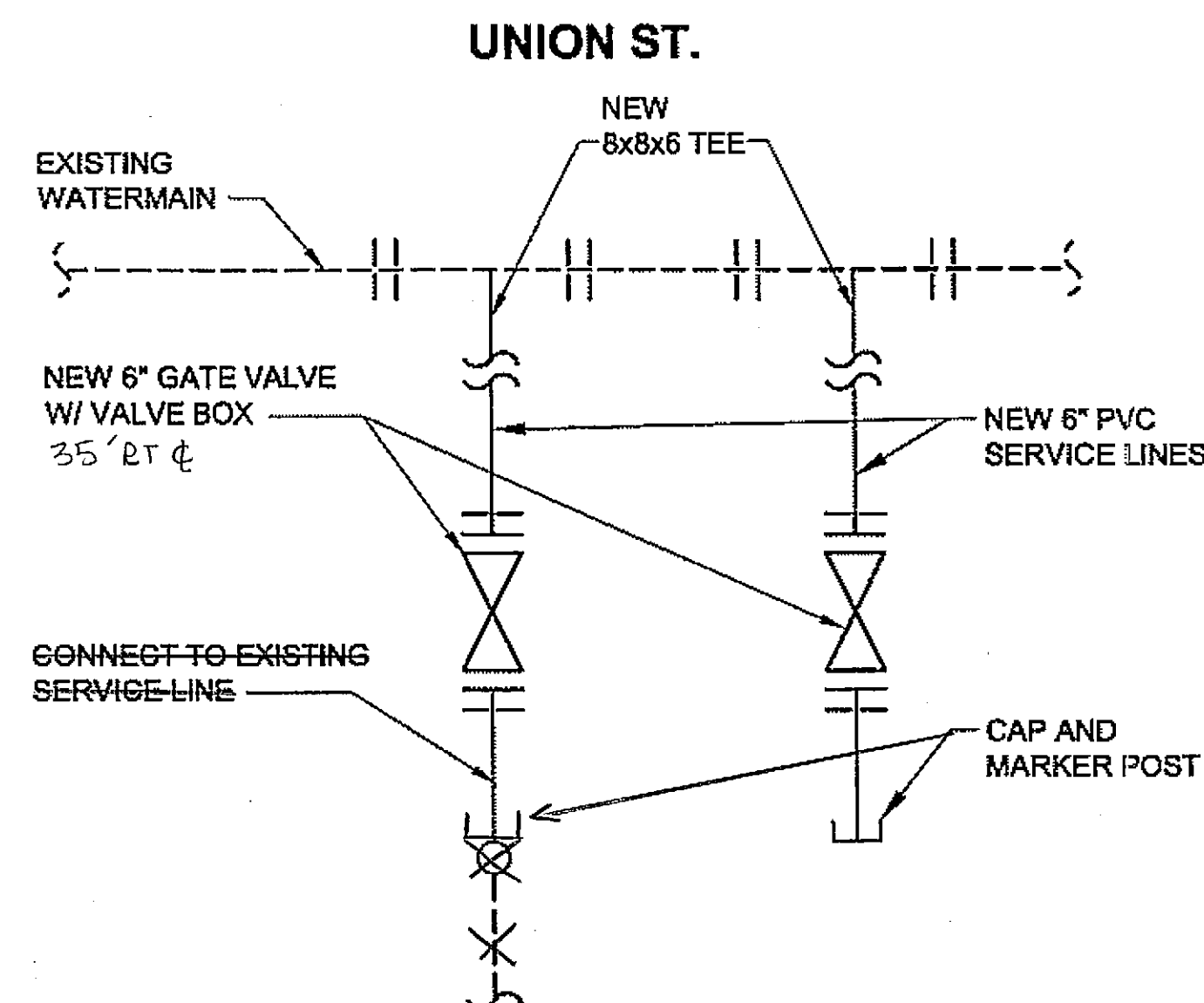
**ELEVATION**

**NOTES:**  
SEE CBJ STANDARD 403 FOR FIRE HYDRANT DETAILS NOT SHOWN.

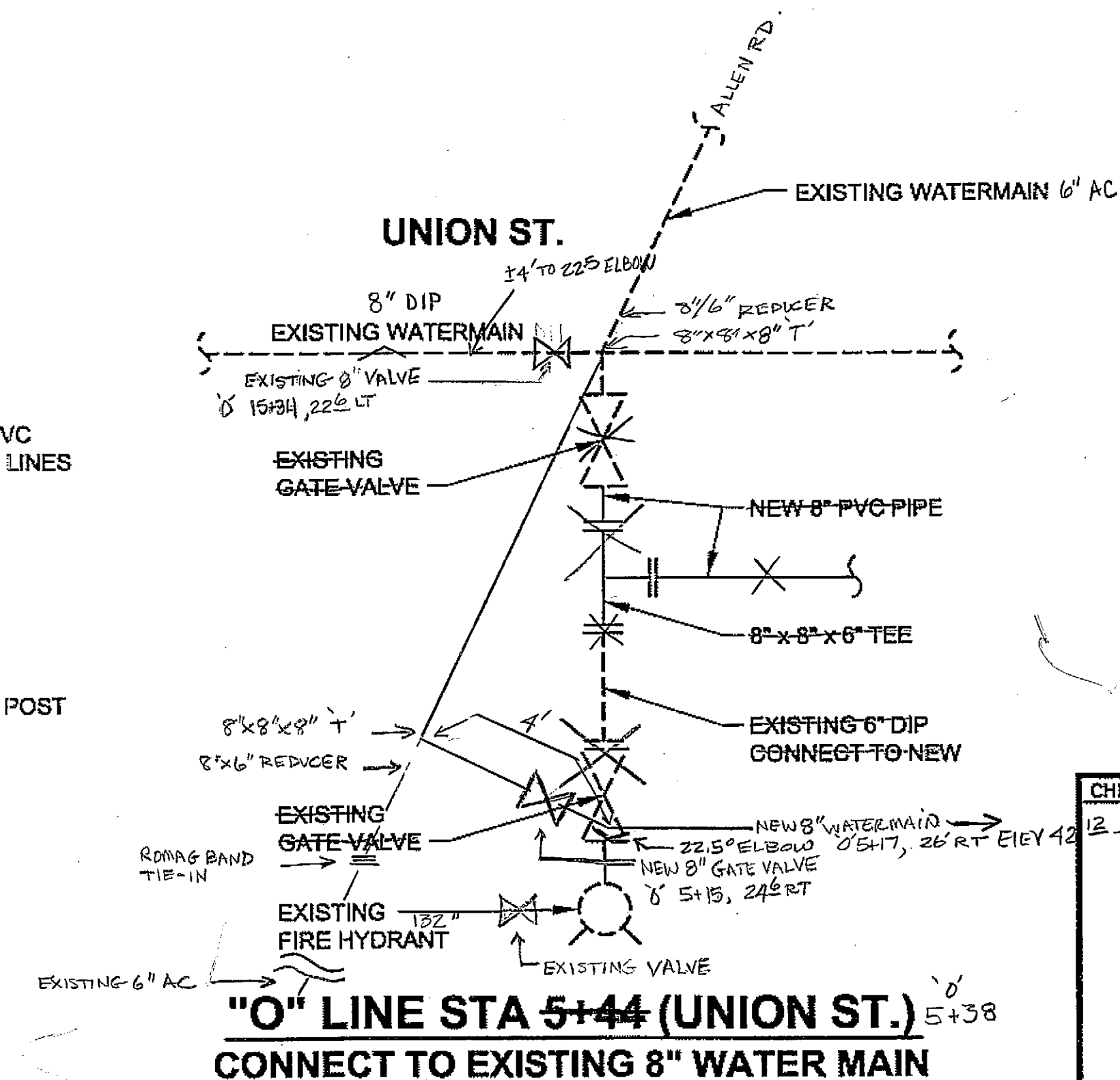
**FIRE HYDRANT INSTALLATION @ 10+30.3, 32.5 RT &**



**"O" LINE STA 15+00 (UNION ST.)  
CONNECT TO EXISTING 8" PVC WATER MAIN**



**WATER SERVICE CONNECTIONS  
"O" STA. 27+97 (UNION ST.)  
@ 28+95 AND 28+98**



**"O" LINE STA 5+44 (UNION ST.)  
CONNECT TO EXISTING 8" WATER MAIN**

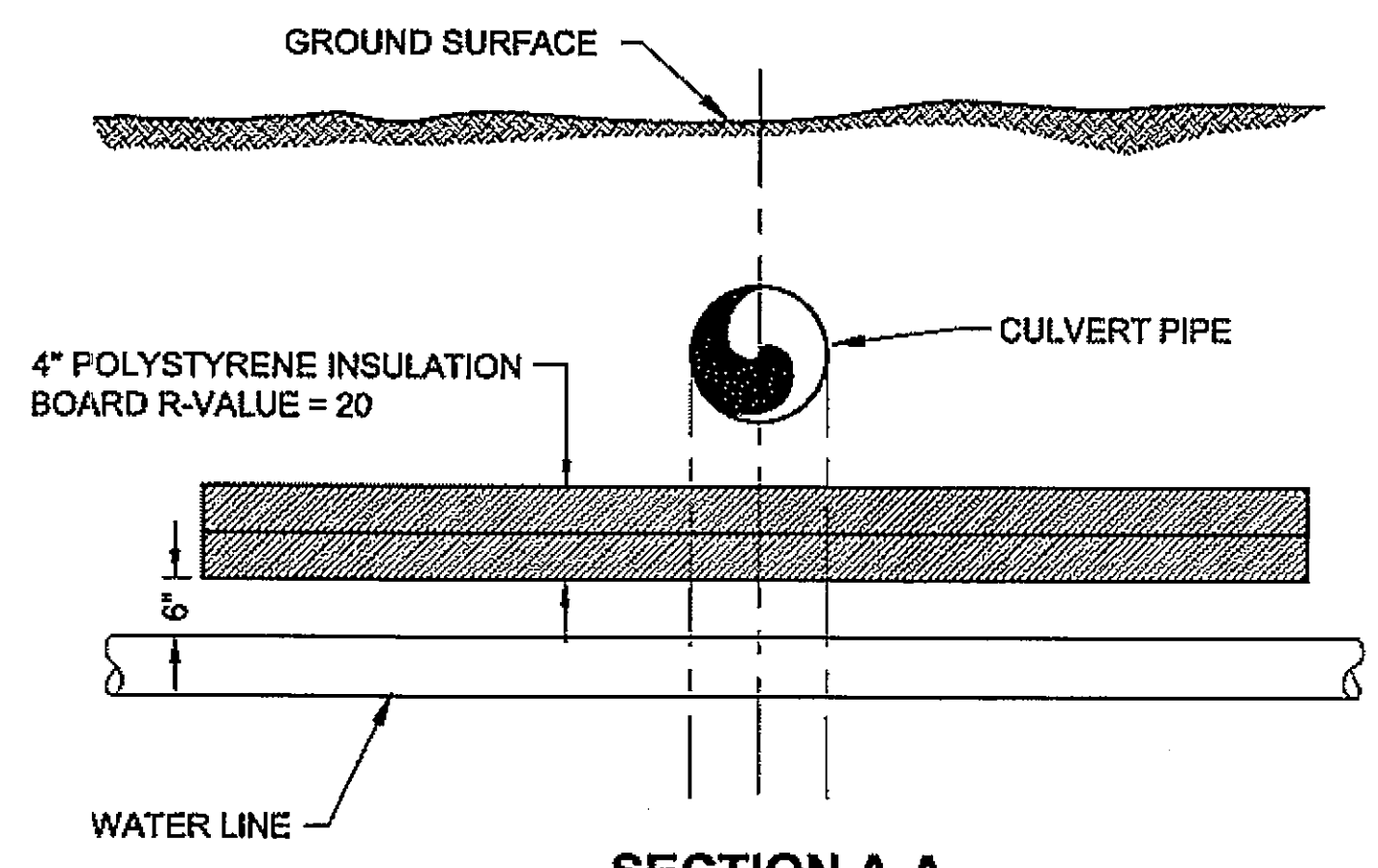
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DRAWN BY: R.G.  
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STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
& PUBLIC FACILITIES  
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION  
**HAINES ALASKA UNION STREET  
REFURBISHMENT-68317 / STP-003(104)  
SAWMILL CREEK CULVERT  
REPLACEMENT - 69081 / HRM-003(114)  
HAINES BOROUGH UTILITIES - 68623**

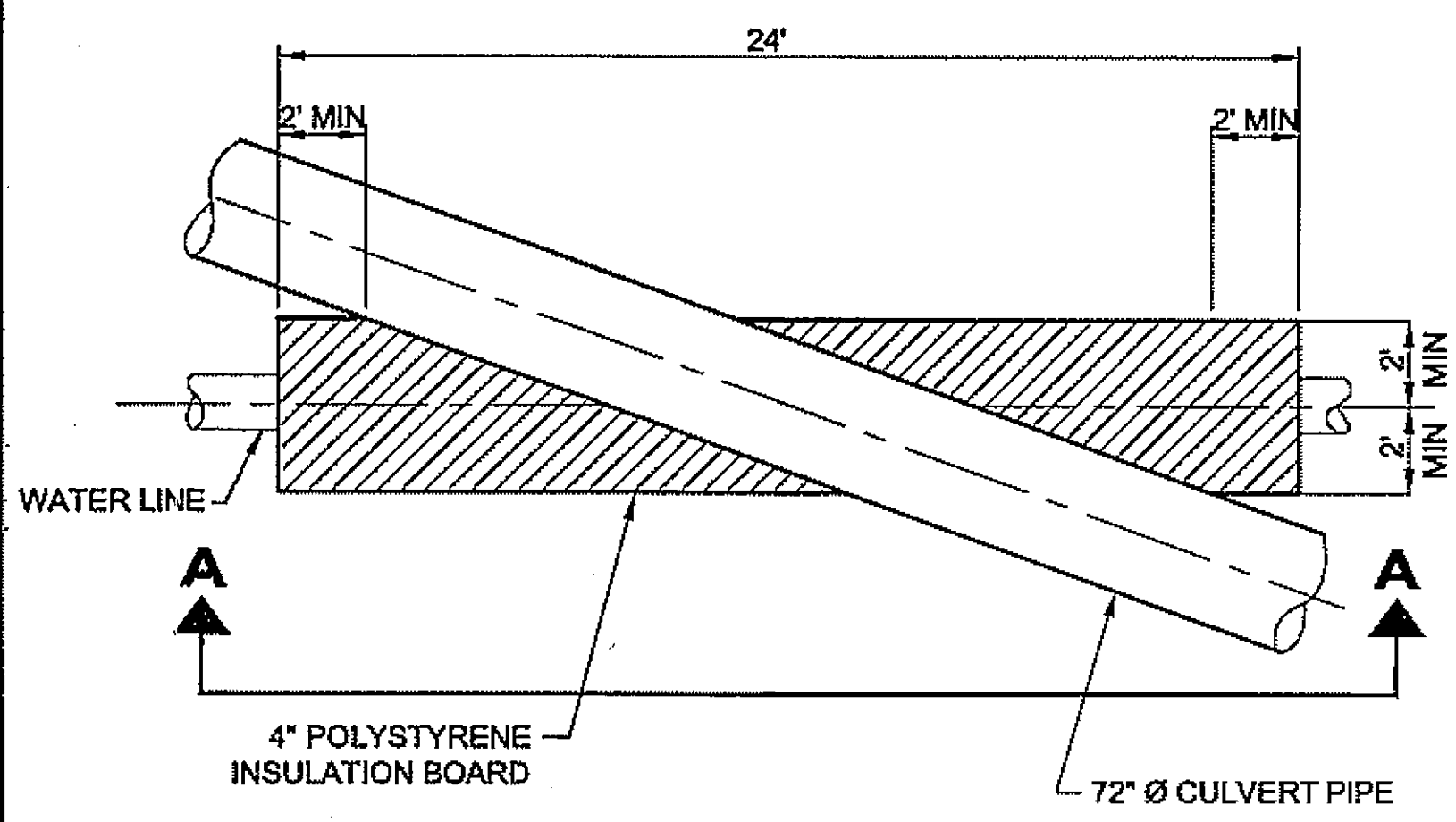
**MISCELLANEOUS  
DETAILS**

NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			STP-0003(104)	2006	G5	XX



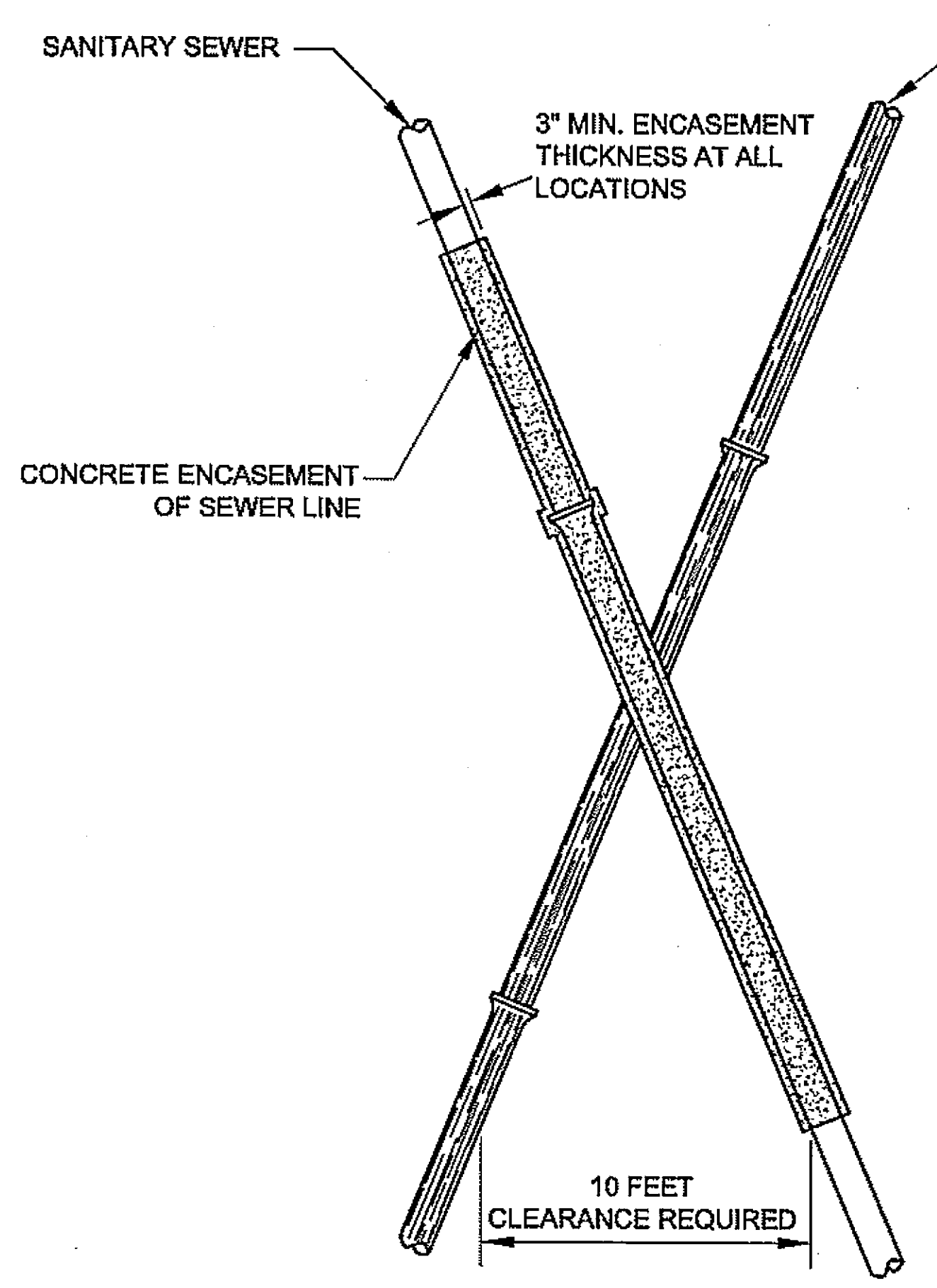
**SECTION A-A**

- NOTES:**
1. INSTALL INSULATION AS SHOWN.
  2. WRAP AROUND INSULATION WITH R-VALUE EQUAL TO 20 MAY BE SUBSTITUTED FOR BOARD INSULATION IF APPROVED BY THE ENGINEER.



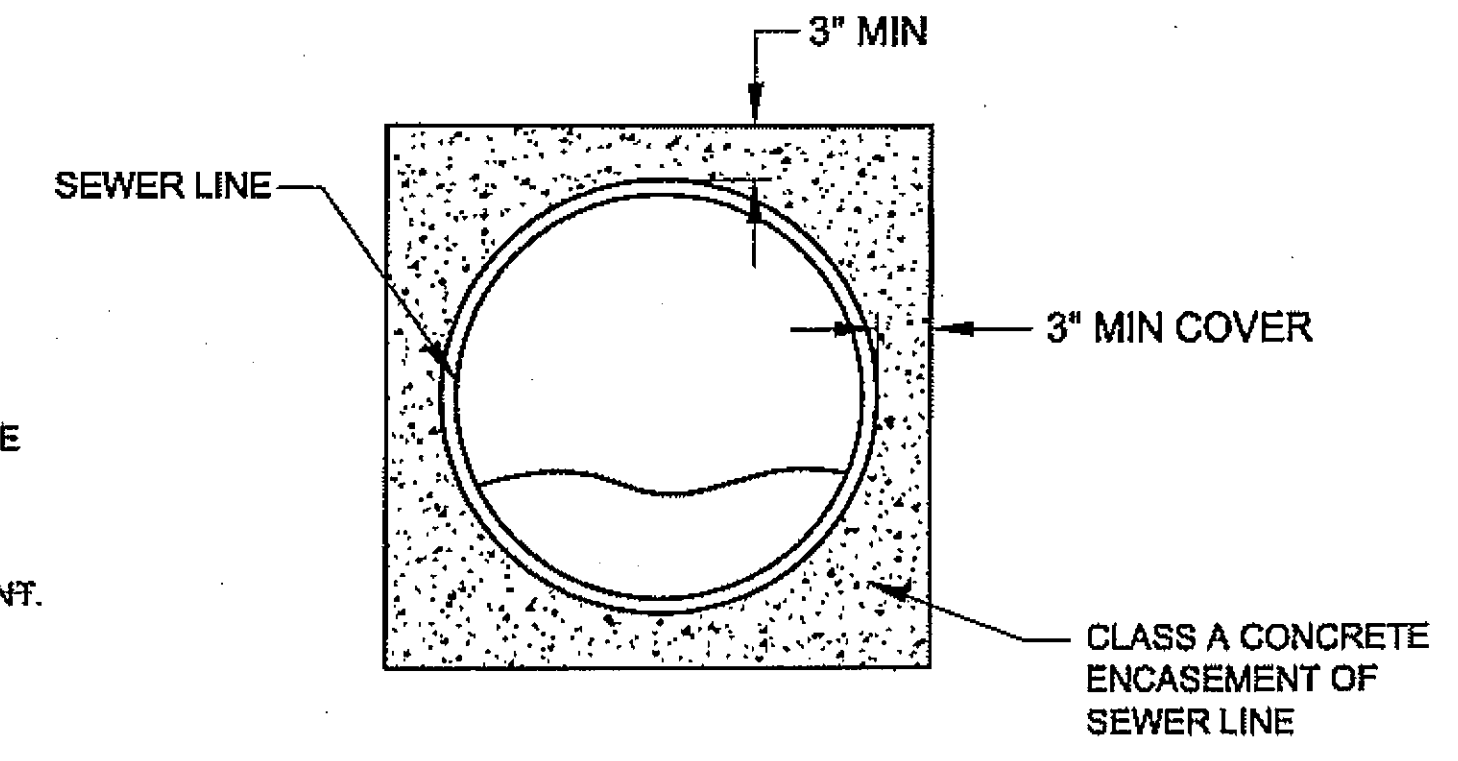
**PLAN**  
**RIGID INSULATION**

- CULVERT NOTES:**
1. ALL BAFFLES UNIFORMLY SLANT THE SAME DIRECTION.
  2. TOP EDGE OF BAFFLES SHALL BE CANTED 15° FROM HORIZONTAL AS NOTED ON BAFFLE DETAIL.
  3. ALL BAFFLES SHALL BE MANUFACTURED FROM 1/4" ALUMINUM SHEET MATERIAL AND INSTALLED BY THE PIPE MANUFACTURER.
  4. ALL DIMENSIONS ON THIS SHEET ARE NOMINAL- ALTERNATE METHODS OF BAFFLE INSTALLATION PROVIDING WATER-TIGHT SEAL MAY BE SUBMITTED TO THE DESIGN ENGINEER FOR REVIEW AND APPROVAL.
  5. LOW SIDE OF BAFFLE SHALL BE USED FOR THE WEIR LAYOUT AND SPACING.

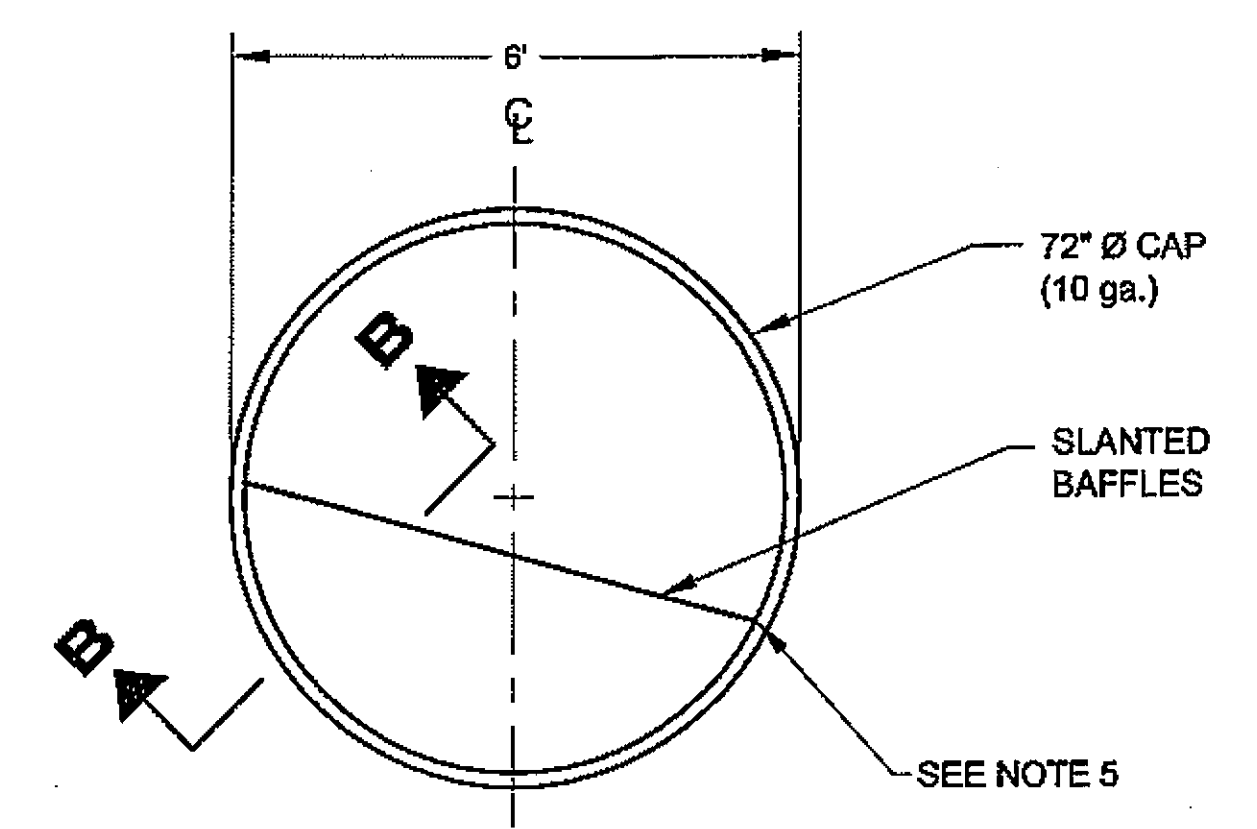


**PLAN VIEW**  
**PIPE ENCASEMENT DETAIL**

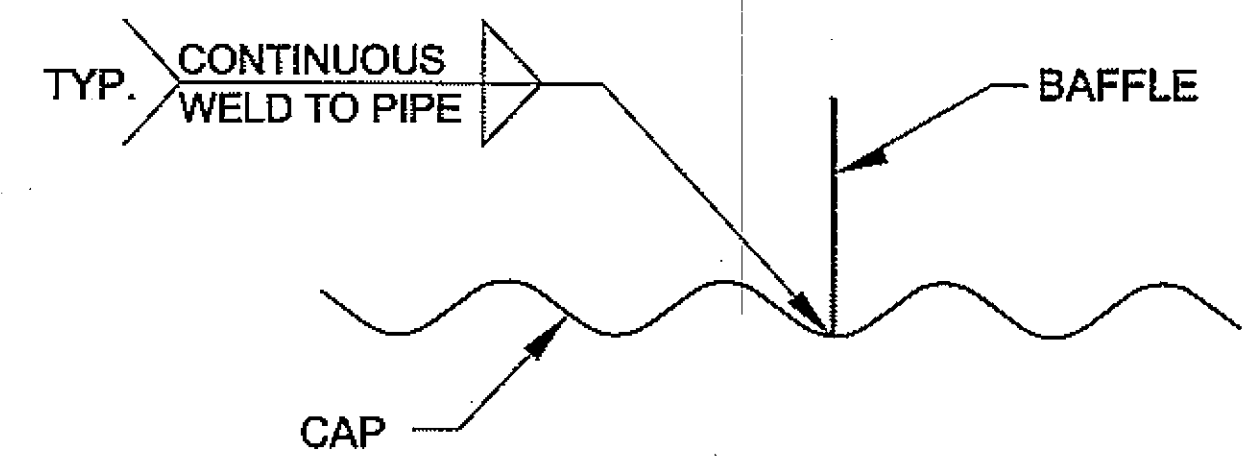
- PIPE ENCASEMENT NOTES:**
1. ENCASE SEWER PIPE UNTIL CLEARANCE FROM WATER LINE EXCEEDS 10 FEET.
  2. THE SEWER PIPE MAY BE ENCASED WITH A CONTINUOUS SECTION OF HDPE PIPE IN LIEU OF CONCRETE ENCASEMENT. ANY JOINTS IN THE HDPE PIPE ENCASEMENT SHALL BE FUSION-WELDED. ALSO SEE SPECS.



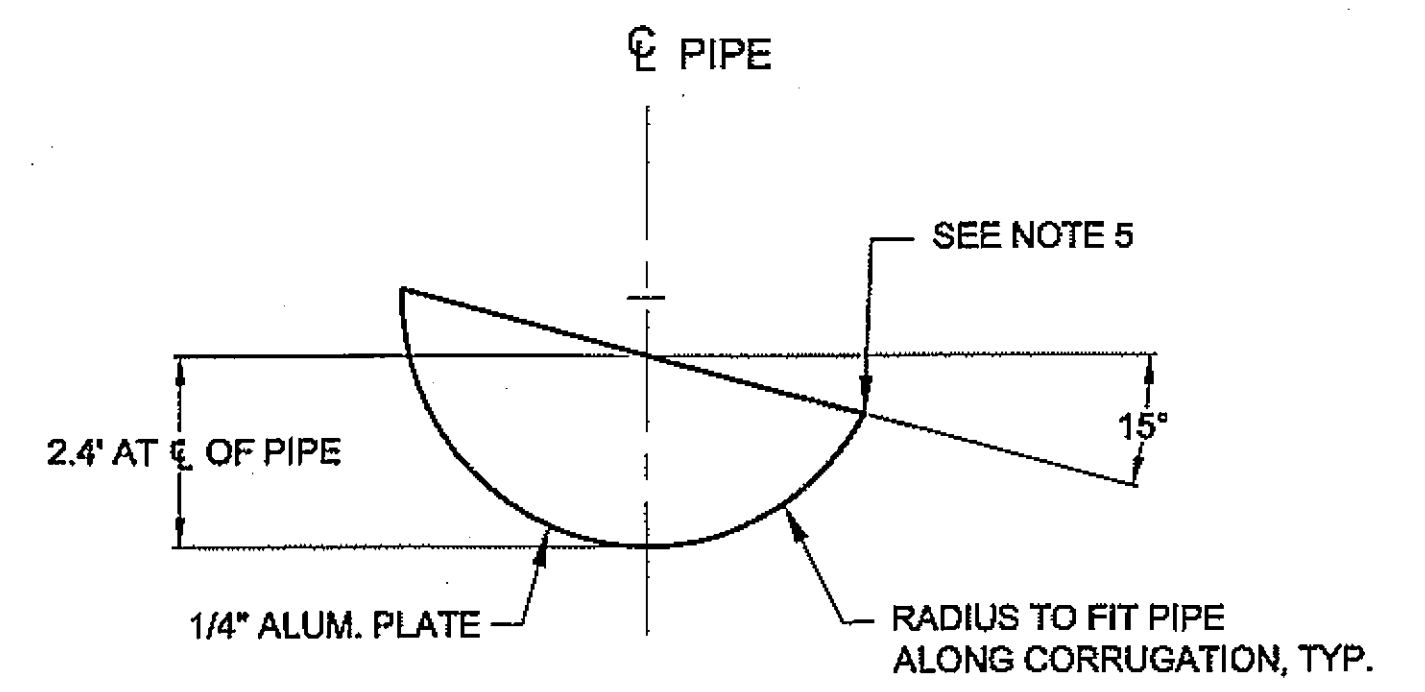
**END VIEW**  
**CONCRETE ENCASEMENT DETAIL**



**SECTION A-A**  
**BAFFLE & PIPE DETAIL**

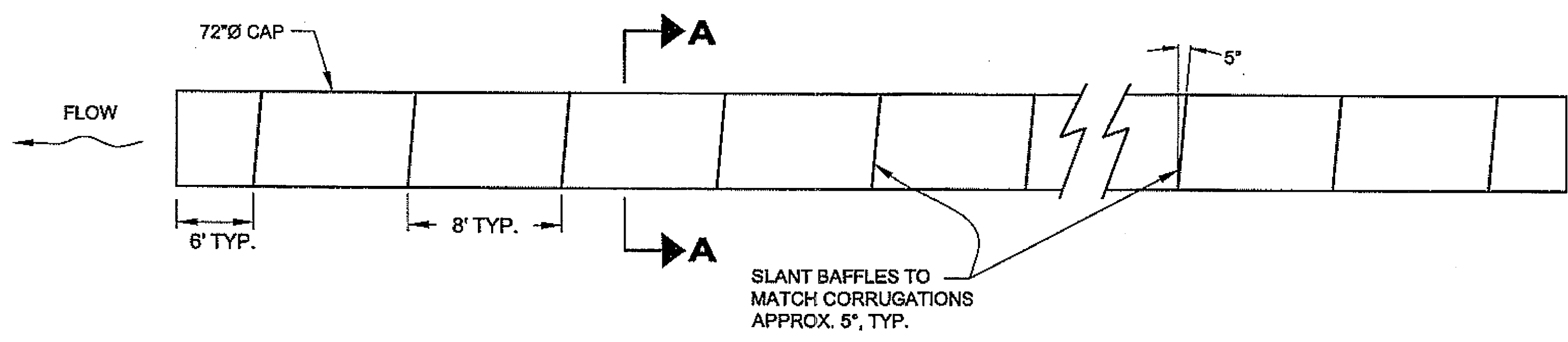


**SECTION B-B**  
**BAFFLE DETAIL**



**BAFFLE DETAIL**

*As Built 12/15/08  
C. Douglas*



**TYPICAL CULVERT PLAN**  
**BAFFLE LAYOUT - P3**

**DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS**

CHECKED BY: K. MILLER

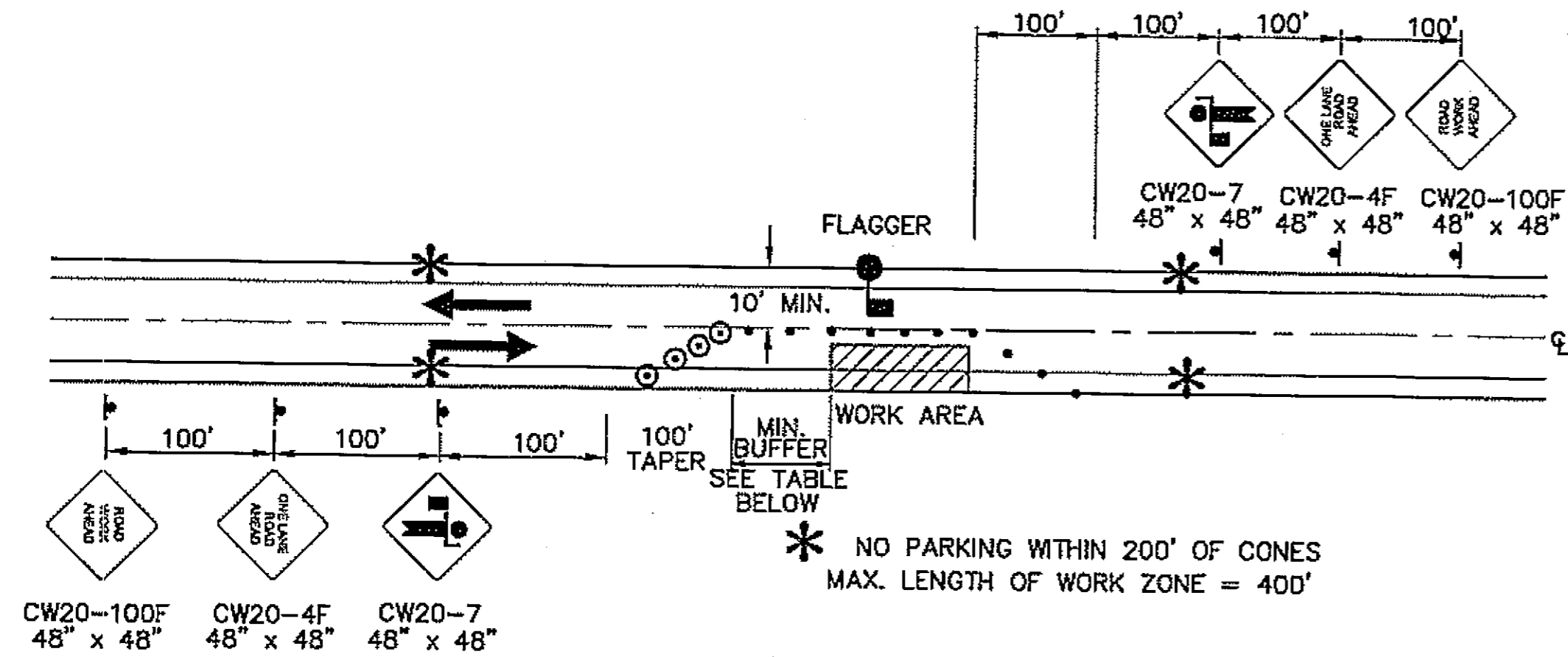
DESIGNED BY: L. SEIFERT  
DRAWN BY: R.G.

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION  
HAINES ALASKA UNION STREET  
REFURBISHMENT-68317 / STP-003(104)  
SAWMILL CREEK CULVERT  
REPLACEMENT - 69081 / HRM-003(114)  
HAINES BOROUGH UTILITIES - 68623

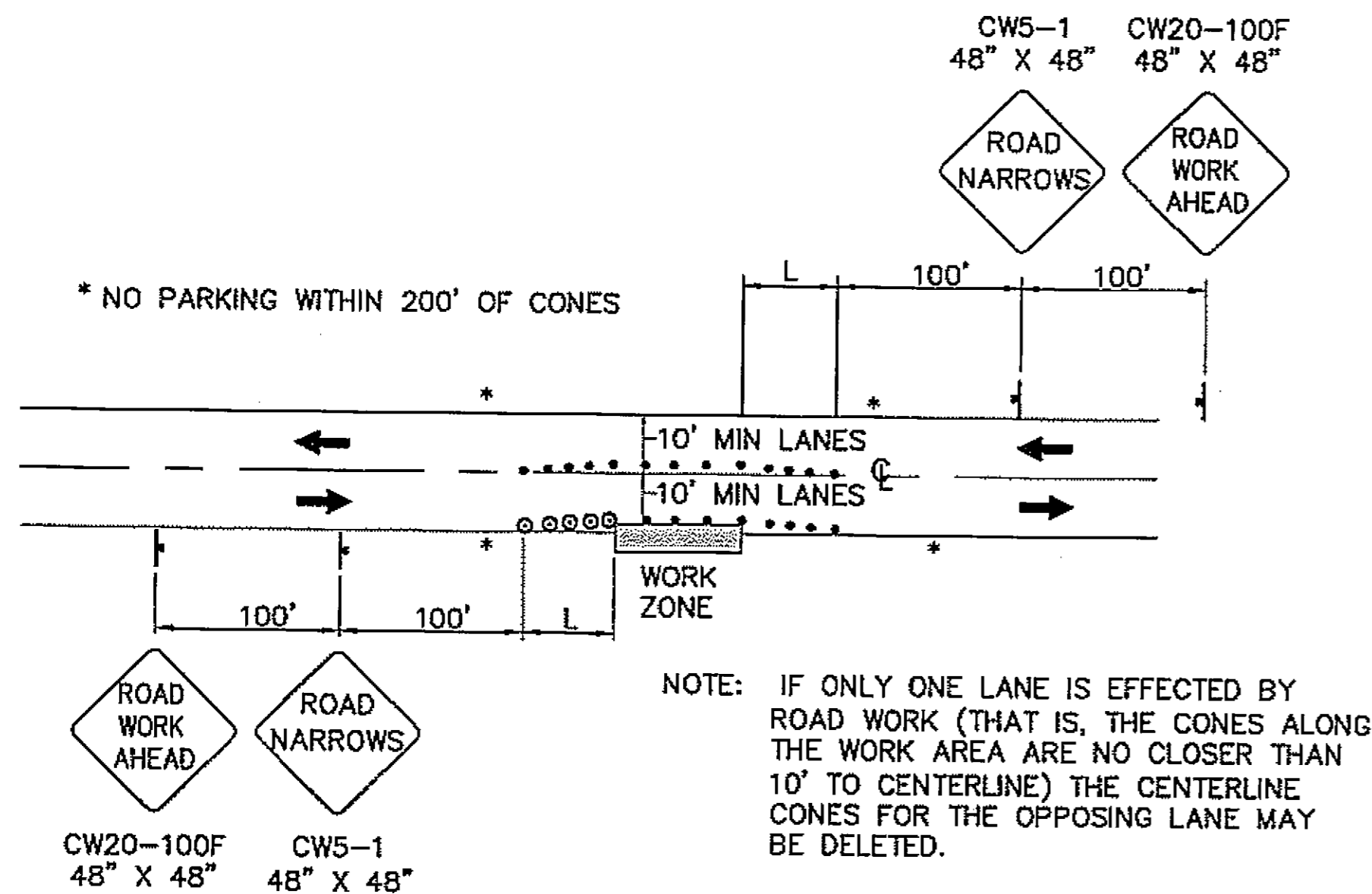
**MISCELLANEOUS DETAILS**

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REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION	STP-0003(104)	2006	G6	XX



**TWO LANE ROAD - SINGLE LANE CLOSURE**  
SINGLE FLAGGER



**ROADWAY ENCROACHMENT**

FORMULAS FOR L (TAPER LENGTH)

40 MPH OR LESS  $L = \frac{W \times S^2}{60}$

WHERE W= WIDTH OF OFFSET  
S= POSTED SPEED LIMIT

S	MIN. BUFFER LENGTH
20	155
25	155
30	200

MIN. DRUM OR CONE SPACING ALONG TANGENT IS 2X SPEED (IN FEET).

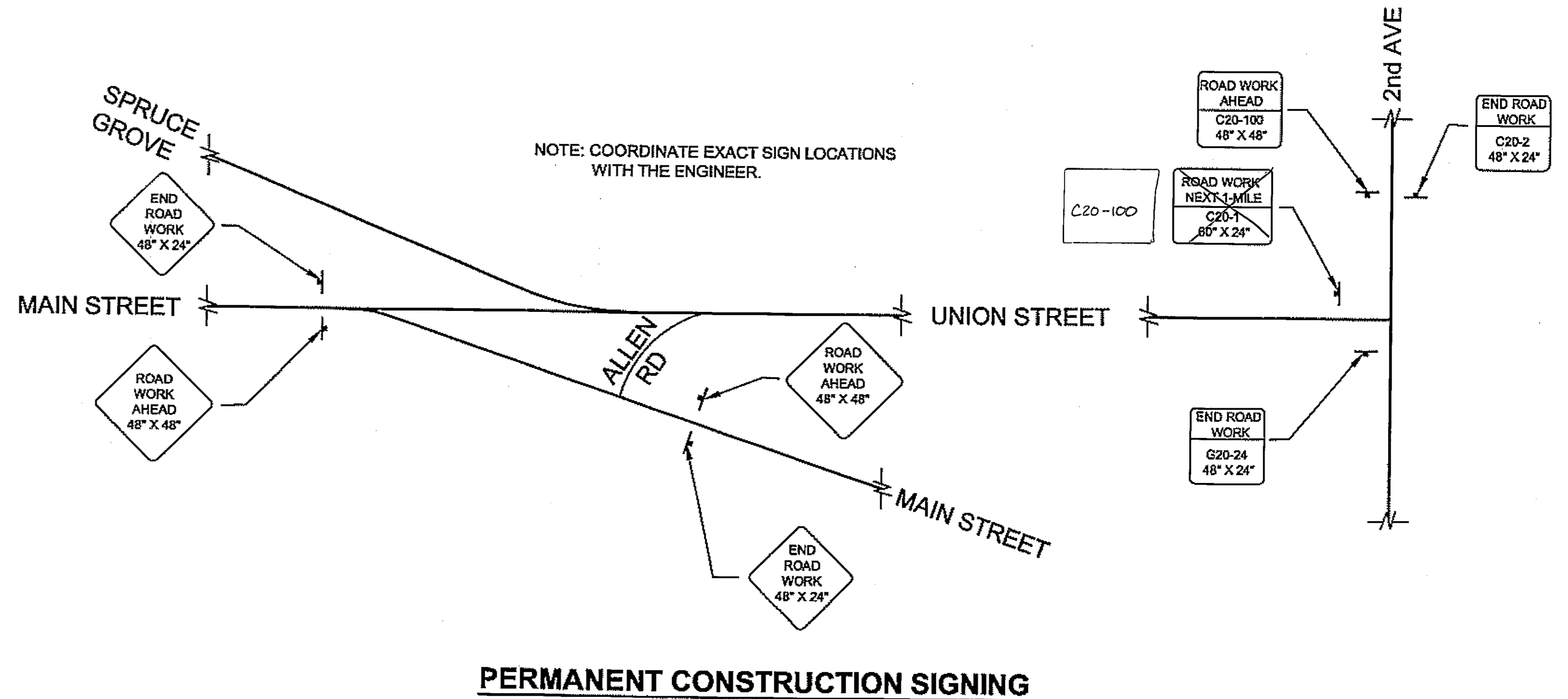
MIN. DRUM OR CONE SPACING ALONG TAPER IS SPEED (IN FEET).

**LEGEND**

—	SIGN
●	CONE
⊙	DRUM
	TYPE III BARRICADE
⚑	FLAGGING STATION

**TRAFFIC CONTROL NOTES**

- IT IS THE INTENT OF THIS TRAFFIC CONTROL PLAN (TCP) TO ILLUSTRATE SOME BUT NOT ALL OF THE TRAFFIC CONTROL CONFIGURATIONS THAT WILL BE REQUIRED BY THIS PROJECT. TRAFFIC CONTROL PLANS FOR CONFIGURATIONS NOT COVERED BY THIS TCP SHALL BE DEVELOPED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO USE.
- A MINIMUM OF ONE LANE SHALL BE MAINTAINED AT ALL TIMES AT WORK AREAS.
- TWO LANES SHALL BE MAINTAINED AT ALL TIMES WITHIN THE PROJECT LIMITS IN NON-WORK AREAS AND DURING NON-WORKING HOURS.
- DRIVING LANES SHALL BE A MINIMUM WIDTH OF 10'.
- INTERSECTION ROADWAYS SHALL REMAIN ACCESSIBLE AT ALL TIMES OR AS APPROVED BY ENGINEER.
- FLOOD LIGHTS SHALL BE PROVIDED FOR FLAGGER STATIONS DURING NIGHT OPERATIONS.
- THE CONTRACTOR SHALL KEEP THE PUBLIC INFORMED OF HIS CONSTRUCTION ACTIVITIES THROUGH THE USE OF THE LOCAL NEWS MEDIA. NEWS RELEASES SHALL BE APPROVED BY THE PROJECT ENGINEER PRIOR TO THEIR RELEASE. NEWS RELEASES WILL BE REQUIRED BUT NOT LIMITED TO, THE ONSET OF WORK, AND CHANGES IN THE LANE CONFIGURATIONS. ALSO CONTACT HOMEOWNERS AS REQUIRED TO FACILITATE ACCESS.



**PERMANENT CONSTRUCTION SIGNING**

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

As Built  
12/15/08  
City of Douglas

CHECKED BY: [Signature]

DESIGNED BY: L. SEIFERT  
DRAWN BY: R.S.D.J.R.G.

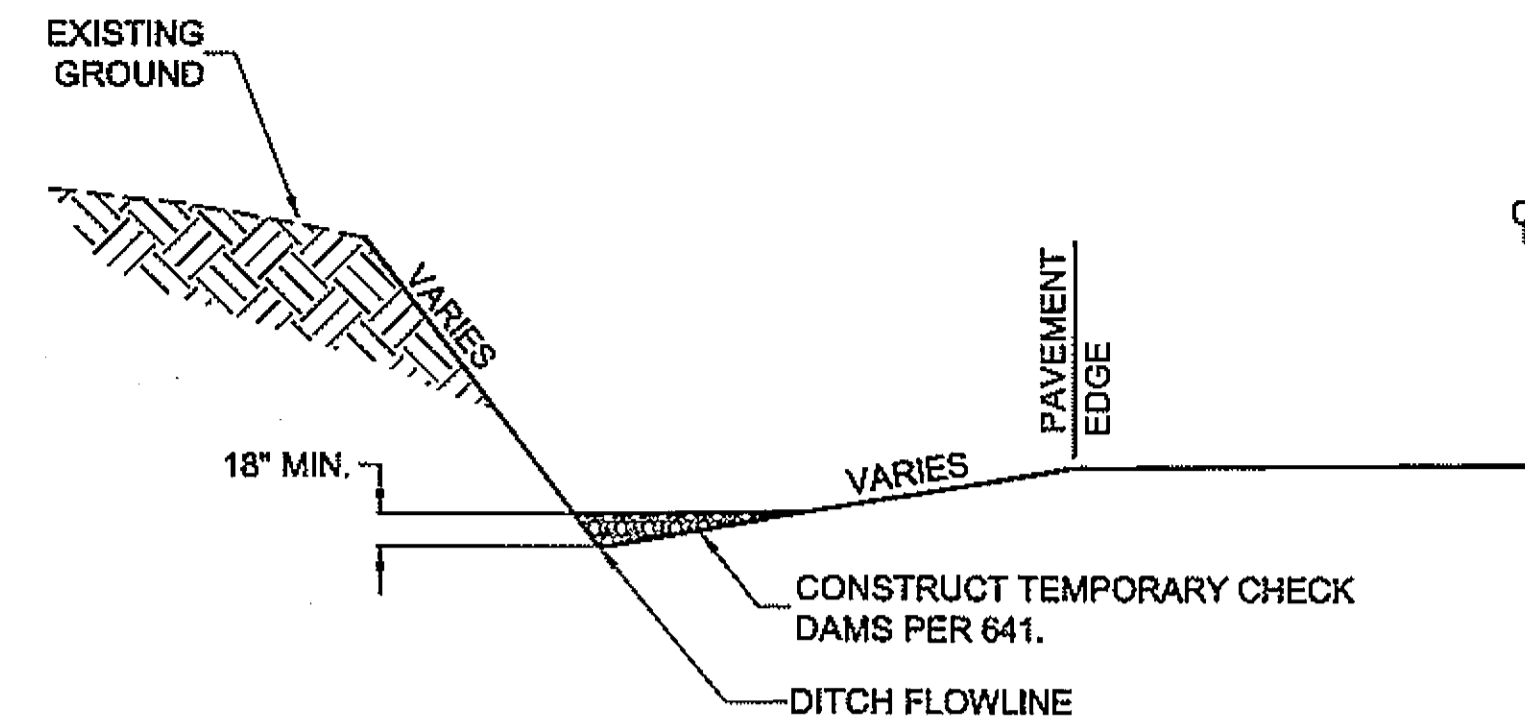
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION  
HAINES ALASKA UNION STREET  
REPURBISHMENT-68317 / STP-003(104)  
SAWMILL CREEK CULVERT  
REPLACEMENT - 69081 / HRM-003(114)  
HAINES BOROUGH UTILITIES - 68623

**TRAFFIC CONTROL DETAILS**

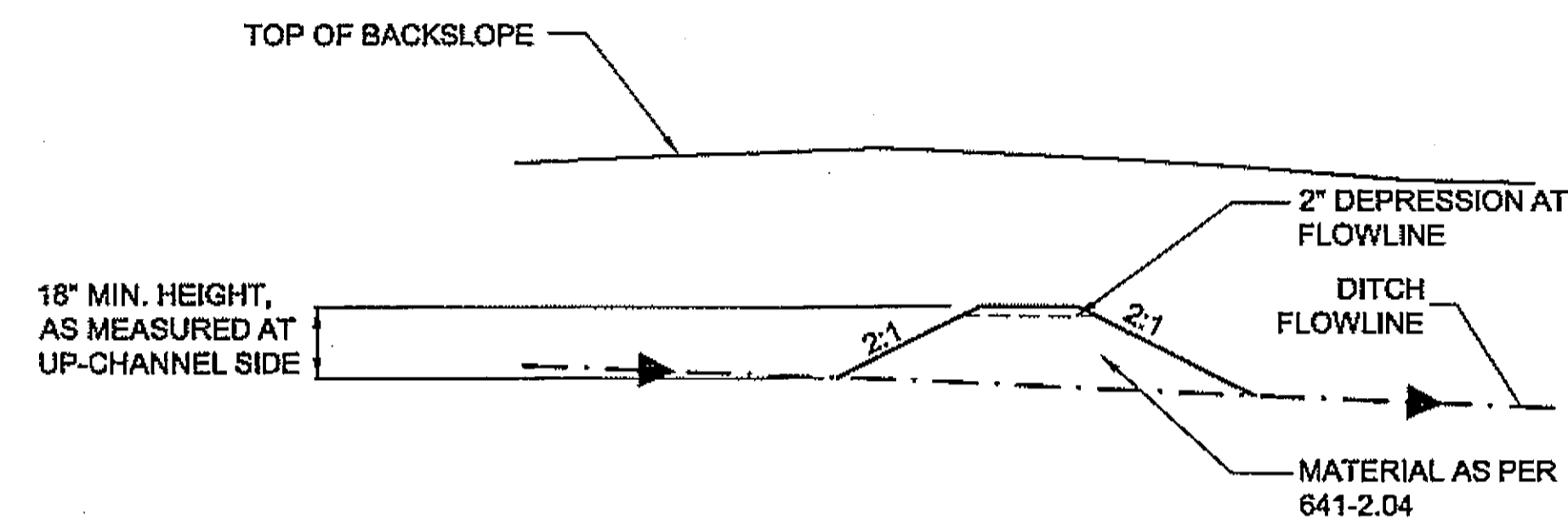
7/23/07

DESIGNED BY: L. SEIFERT  
DRAWN BY: R.S.D.J.R.G.  
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Mon, 23/Jul/07 02:42PM  
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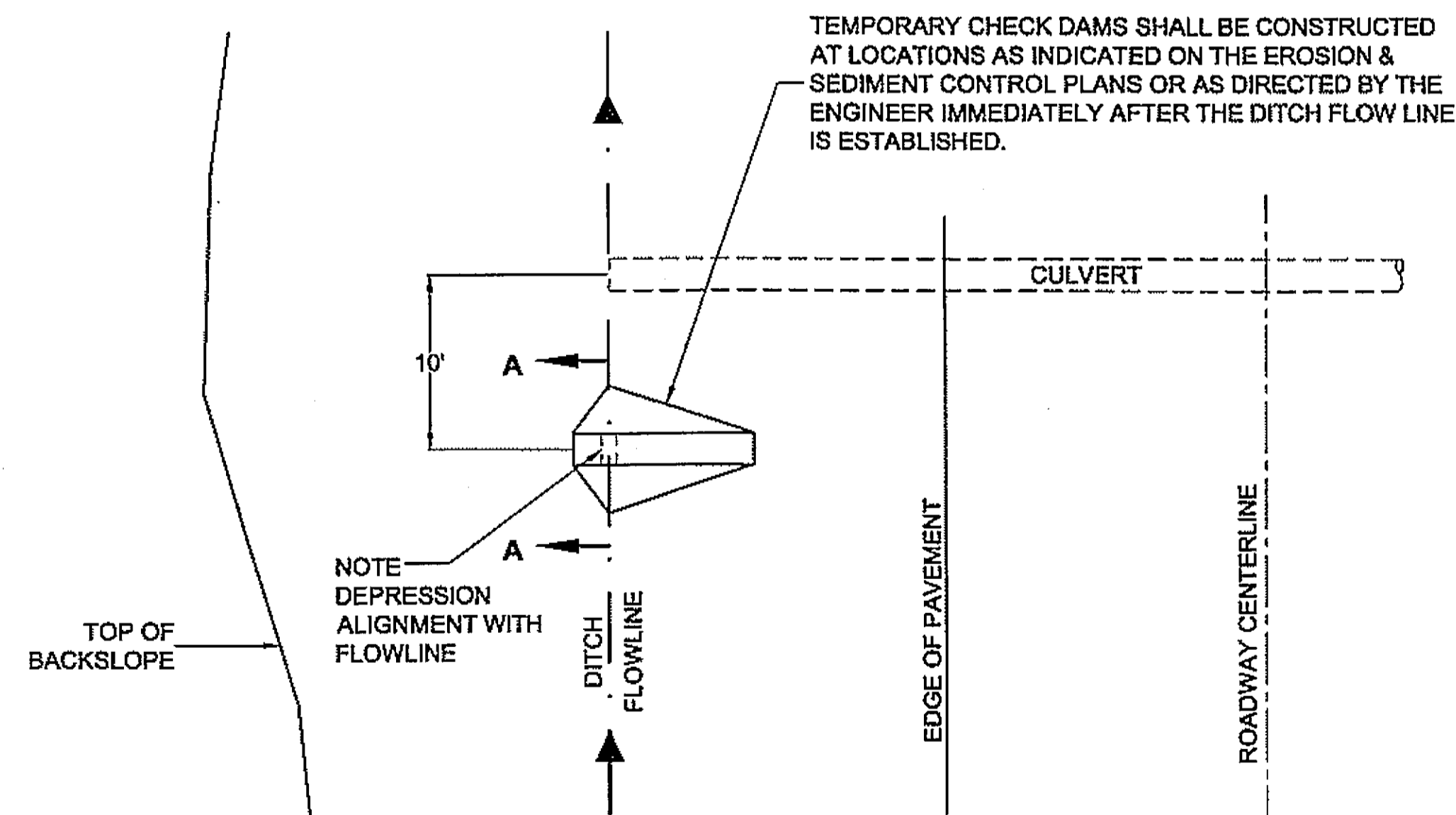
REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
			STP-0003(104)	2006	K1	XX



**ELEVATION**



**SECTION A-A**



**PLAN**

**TEMPORARY CHECK DAM DETAILS**

**TEMPORARY ROCK CHECK DAM SUMMARY**

STATION "O"	OFFSET	LENGTH (FT)
4+66 50	RT	1
4+70 5+75	LT	4 2
9+86 60	LT	1
11+88 10	LT	1
		<b>TOTAL 4 10</b>
2+50	RT	1
3+75	LT	1
4+10	RT	1
11+70	LT	1
12+70	LT	1

**SILT FENCE SUMMARY**

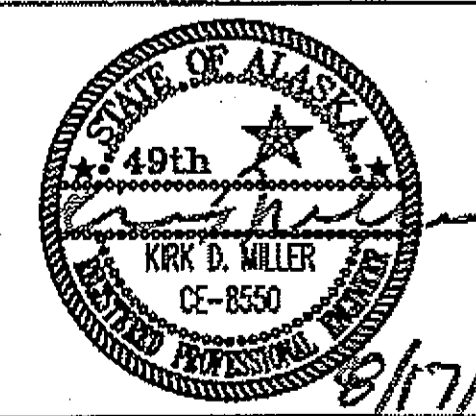
STATION "O"	OFFSET	LENGTH (FT)
5+56 - 9+25	LT	370 369
8+53 5+54	RT LT	241 17.5
40+88	LT	50
10+76	LT	100
23+37	RT	32
26+96	LT	32
11+76 - 14+42	RT	266
STAGING AREA	LT	44
		<b>TOTAL 655 176.5</b>
		<b>USE 800</b>

**NOTES**

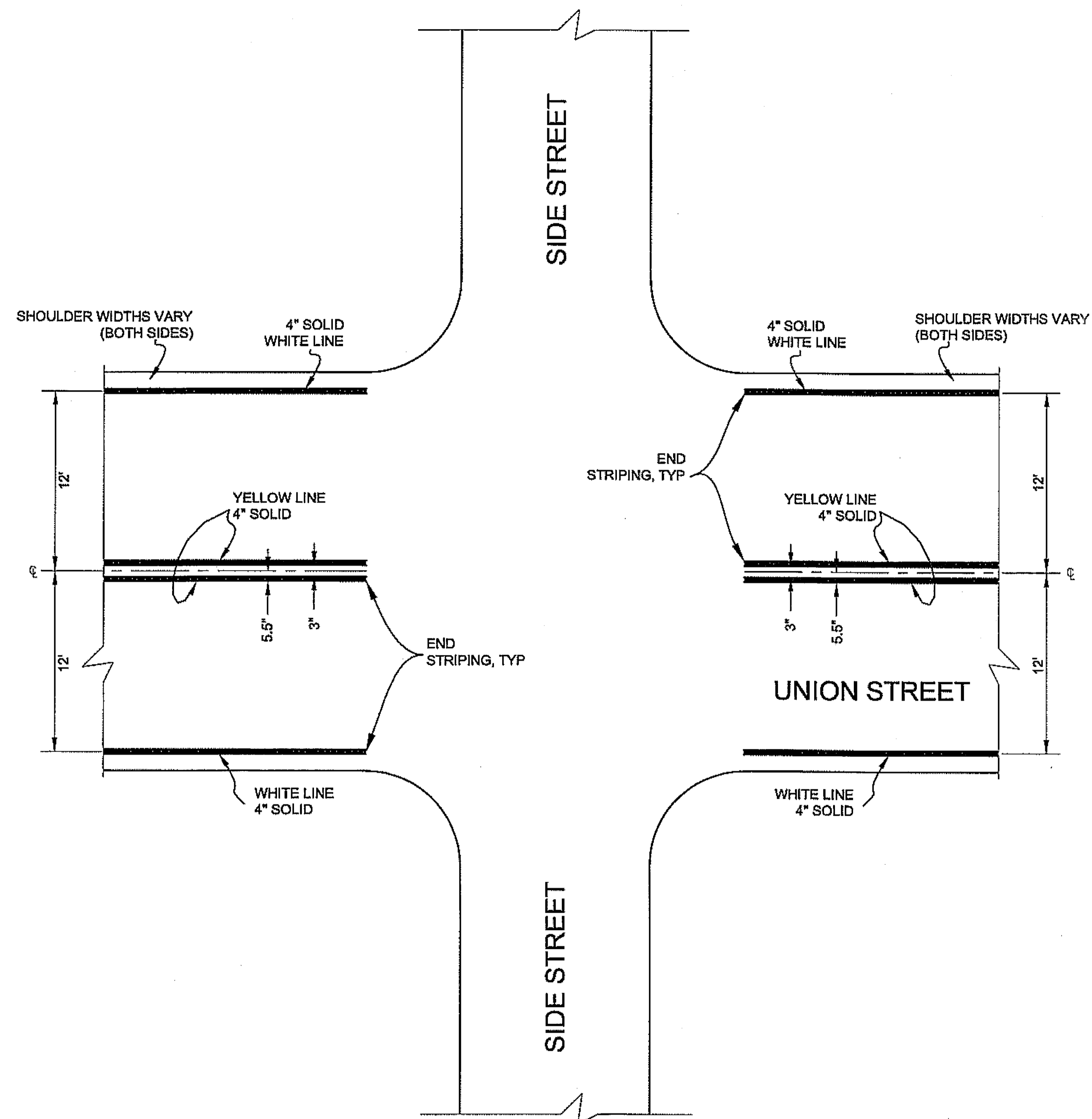
1. INSTALL EROSION AND SEDIMENT CONTROL DEVICES BEFORE EARTH DISTURBING ACTIVITIES.
2. MAINTAIN DEVICES. MONITOR DAILY. EXCAVATE BEHIND CHECK DAMS WHEN 4" OF SEDIMENT ACCUMULATES.
3. IF INSPECTION REVEALS WATER IS DISCHARGING BEYOND THE PROJECT WORK LIMITS, IMMEDIATELY IMPLEMENT CORRECTIVE ACTION. ADDITIONAL CHECK DAMS MAY BE REQUIRED. SWEEPING OF PAVED SURFACES AND TEMPORARY SEEDING AND MATTING MAY ALSO BE REQUIRED.
4. STABILIZE DISTURBED GROUND AS SOON AS POSSIBLE. UNSTABILIZED SURFACES MUST BE TEMPORARILY STABILIZED WITH SEEDING, MATTING, OR OTHER EFFECTIVE MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EROSION AND SEDIMENT CONTROL UNTIL PROJECT WORK AREAS ARE PAVED AND SEEDING AREAS HAVE ACHIEVED 70% VEGETATIVE COVER.

*As Built Drawing  
12/15/08 C. J. Douglas*

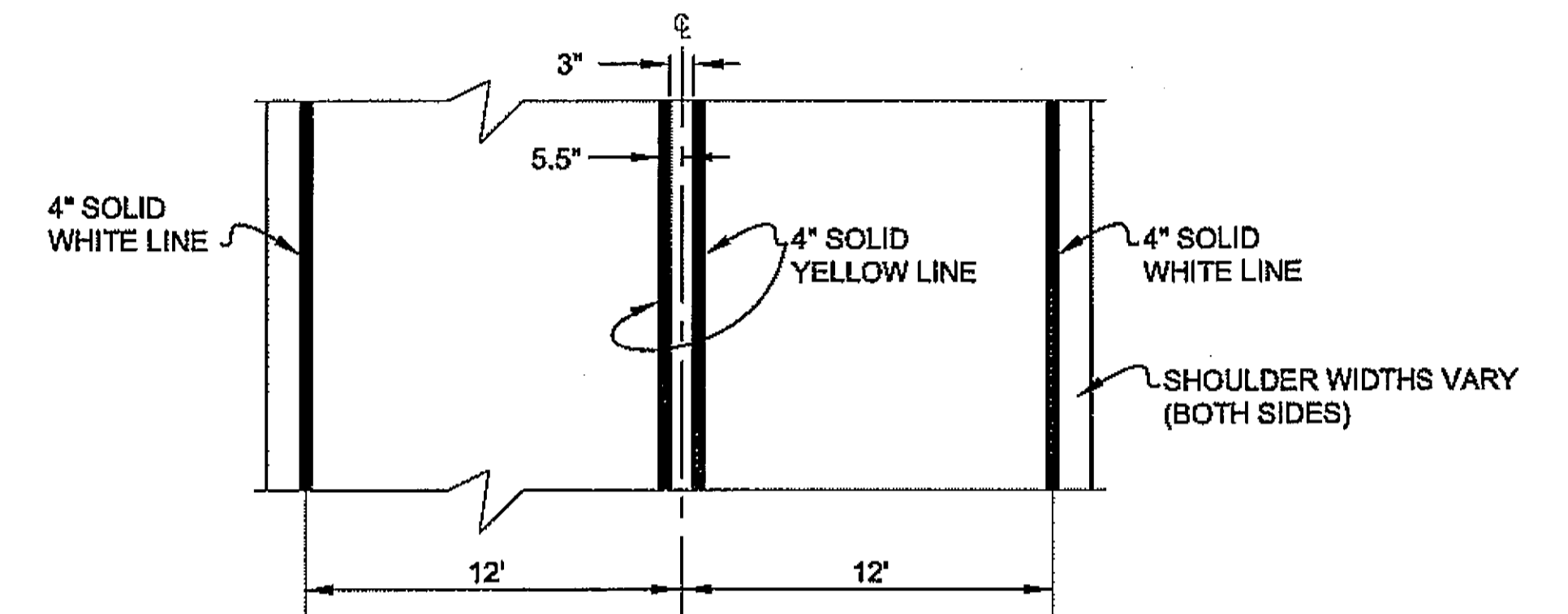
**DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS**

CHECKED BY: K. MILLER 		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION <b>HAINES ALASKA UNION STREET          REFURBISHMENT-68317 / STP-003(104)          SAWMILL CREEK CULVERT          REPLACEMENT - 69081 / HRM-003(114)          HAINES BOROUGH UTILITIES - 68623</b>				
DESIGNED BY: L. SEIFERT DRAWN BY: R.S.D.R.G.		<b>EROSION AND SEDIMENT          CONTROL DETAILS</b>				
PATH: Q:\hna\68317\Plans\1\1 Dets.dwg TAB: L1		PROJECT DESIGNATION <b>STP-0003(104)</b>		YEAR <b>2006</b>	SHEET NO. <b>L1</b>	TOTAL SHEETS <b>XX</b>
REVISIONS NO. DATE DESCRIPTION		PROJECT DESIGNATION <b>STP-0003(104)</b>		YEAR <b>2006</b>	SHEET NO. <b>L1</b>	TOTAL SHEETS <b>XX</b>





**TYPICAL STRIPING AT INTERSECTION**



**TYPICAL ROADWAY STRIPING DETAIL**  
SOLID LINES

**GENERAL STRIPING NOTES**

1. MARKINGS AS SHOWN ARE APPROXIMATE ONLY. THE EXACT LOCATIONS SHALL BE DETERMINED AFTER GRADE IS COMPLETE. THE CONTRACTOR IS RESPONSIBLE FOR ALL ALIGNMENT LAYOUT.
2. ALL STRIPING DETAILS MAY NOT BE SHOWN. EXISTING TRAFFIC MARKINGS SHALL BE REFERENCED AND RESTORED OR AS OTHERWISE DIRECTED BY THE ENGINEER.

*As Built*  
*12/15/08* *Coff Douglas*

**DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS**

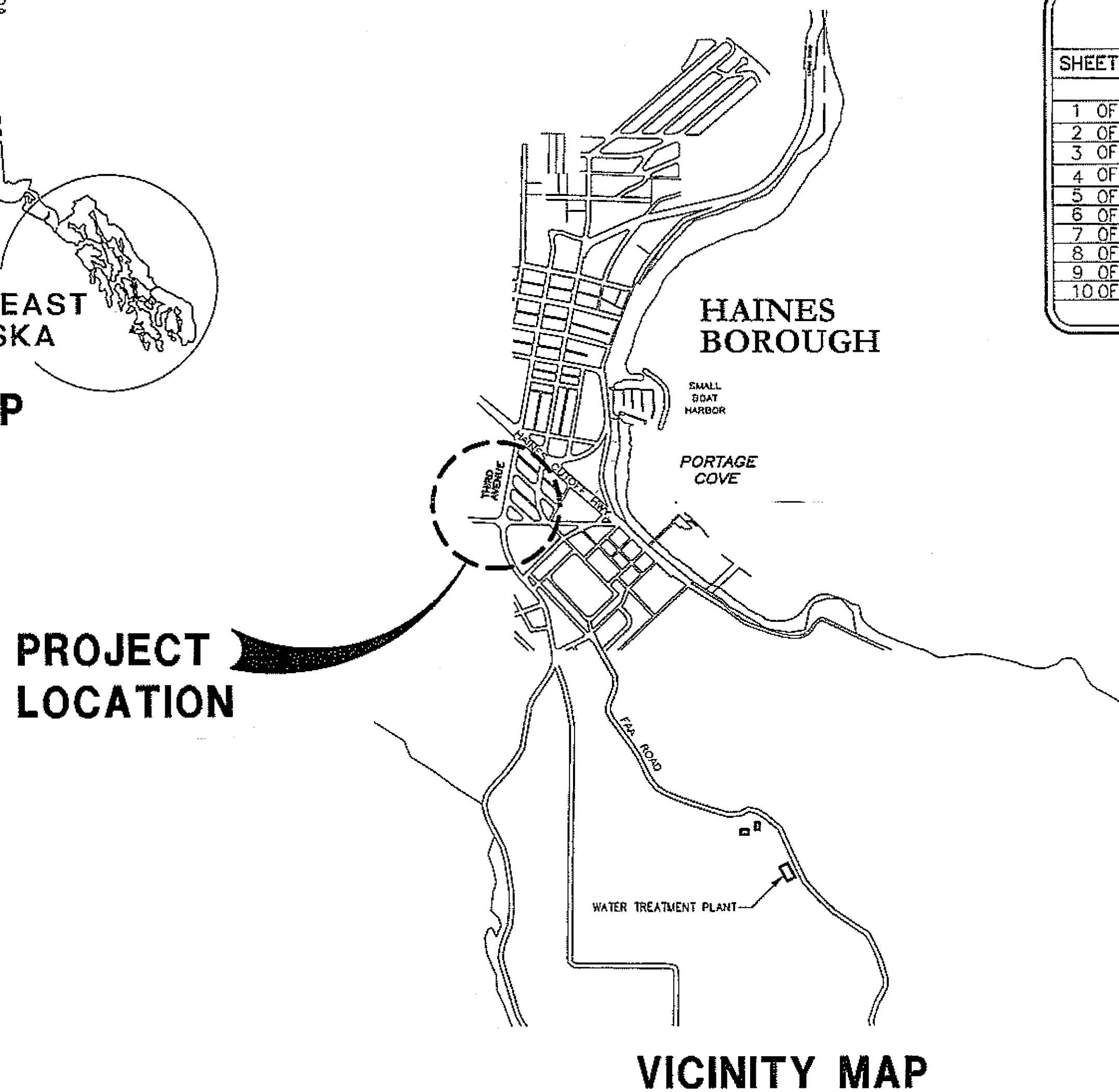
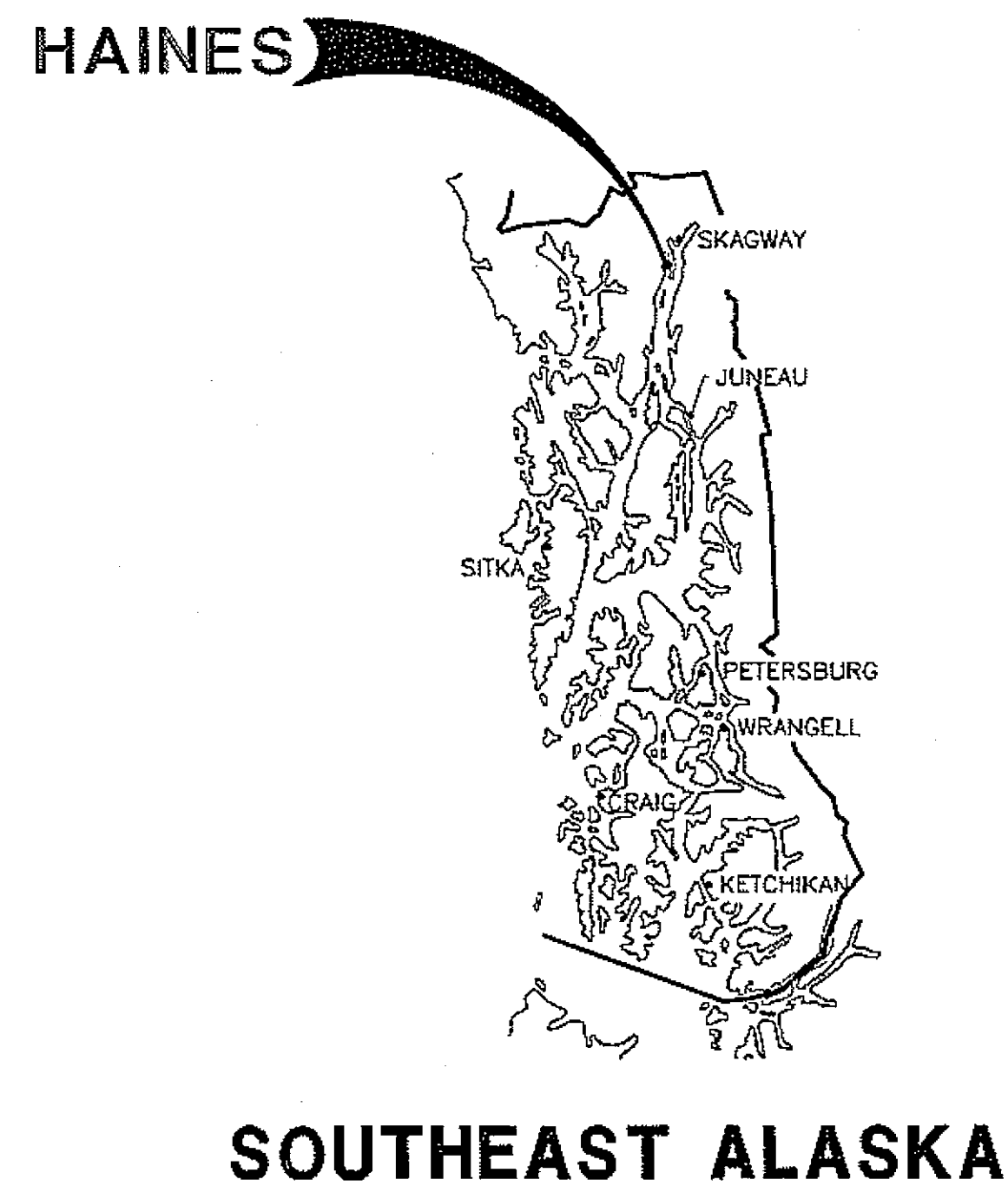
CHECKED BY: K. MILLER		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION			
		<b>HAINES ALASKA UNION STREET</b> <b>REFURBISHMENT-68317 / STP-003(104)</b> <b>SAWMILL CREEK CULVERT</b> <b>REPLACEMENT - 69081 / HRM-003(114)</b> <b>HAINES BOROUGH UTILITIES - 68623</b>			
		<b>GENERAL SIGNING &amp; STRIPING DETAILS</b>			
DESIGNED BY: L. SEIFERT		PROJECT DESIGNATION			
DRAWN BY: R.S.D.D.J.R.G.		YEAR			
PATH: Q:\hna\68317\Plans\p_Striping notes.dwg		SHEET NO.			
TAB: P1		TOTAL SHEETS			
REVISIONS		STP-0003(104)			
NO.	DATE	DESCRIPTION	YEAR	SHEET NO.	TOTAL SHEETS
			2006	P1	XX

# HAINES BOROUGH, ALASKA

# THIRD AVENUE RECONSTRUCTION

## 2007

## PLANSET B



DRAWING INDEX		
SHEET NO.	SHEET	TITLE
1 OF 10	C1.0	COVER, VICINITY MAP AND DRAWING INDEX
2 OF 10	C1.1	GENERAL NOTES, ABBREVIATIONS, LEGEND, ESTIMATE OF QUANTITIES
3 OF 10	C1.2	EXISTING CONDITIONS, SURVEY CONTROL, TRAFFIC CONTROL
4 OF 10	C2.1	ROAD PLAN AND PROFILE B.O.P. STA. 7+53.11 TO STA. 13+25.00
5 OF 10	C2.2	ROAD PLAN AND PROFILE STA. 13+25.00 TO STA. 19+00.00
6 OF 10	C2.3	ROAD PLAN AND PROFILE STA. 19+00.00 TO STA. 20+00.00 E.O.P., MISCELLANEOUS DETAILS
7 OF 10	C2.4	CONCRETE SIDEWALK, ACP GRADING SCHEDULE & STRIPING PLAN
8 OF 10	C3.1	TYPICAL SECTIONS AND DETAILS
9 OF 10	C3.2	TYPICAL SECTIONS AND DETAILS
10 OF 10	C3.3	TYPICAL SECTIONS AND DETAILS

### MAJOR ITEMS OF WORK INCLUDE

1. APPROXIMATELY 1,212 LF OF ROAD RECONSTRUCTION
2. SANITARY SEWER MANHOLE REPAIRS

HAINES BOROUGH	
MAYOR	FRED SHIELDS
BOROUGH MANAGER	ROBERT VENABLES
PUBLIC WORKS SUPERINTENDENT	BRUCE SMITH

*As Built  
12/15/08  
CJ Douglas*

REVISIONS					
REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.

**PND**  
ENGINEERS, INC.

9360 Glacier Hwy. Ste 100  
Juneau, Alaska 99801

Phone: 907-586-2093  
Fax: 907-586-2099  
www.pnd-anc.com

DESIGN: KEI	CHECKED: CRS	SCALE: NTS
DRAWN: PJD	APPROVED: CRS	

DATE: 8/16/07

**HAINES BOROUGH, ALASKA**  
**THIRD AVENUE RECONSTRUCTION**

**C1.0**  
SHEET  
1 OF 10

SHEET TITLE: COVER, VICINITY MAP AND DRAWING INDEX	PND PROJECT NO.: 062045	DWG. FILE:
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# GENERAL NOTES

1. INFORMATION CONTAINED IN THESE DOCUMENTS HAS BEEN COMPILED FROM EXISTING INFORMATION PROVIDED BY THE HAINES BOROUGH. FIELD VERIFY ALL EXISTING SITE CONDITIONS AND DIMENSIONS.
2. SUMMARY TABLES ARE FOR BIDDING INFORMATION ONLY. ALL MANHOLES, VALVE BOXES, ETC. SHALL BE FIELD LOCATED, PRIOR TO REMOVAL OF PAVEMENT.
3. MATCH EXISTING FINISH GRADES AT BEGINNING AND END OF PROJECTS AND WHERE REQUIRED TO MATCH EXISTING ROADS, CONCRETE CURB, GUTTERS OR SIDEWALKS.
4. ALL EXISTING ASPHALT CONCRETE MATERIALS TO BE REMOVED SHALL BE GROUND AND STOCKPILED AT THE ADOT&PF MAINTENANCE FACILITY LOCATED BETWEEN UNION AND MAIN STREETS NEAR ALLEN ROAD. ALL OTHER REMOVED MATERIALS THAT ARE NOT DESIGNATED FOR REUSE ON THE PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND PROPERLY DISPOSED OF AT AN APPROVED SITE.
5. THE LOCATIONS OF EXISTING FEATURES AND UTILITIES SHOWN ON THE DRAWINGS ARE APPROXIMATE. ADDITIONAL UTILITIES MAY BE PRESENT HOWEVER ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS IN THE FIELD AS NECESSARY, PRIOR TO BEGINNING WORK. THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES ENCOUNTERED IN THE FIELD SHALL BE RECORDED ON THE CONTRACTOR'S RECORD DRAWINGS. CONTACT LOCAL UTILITY COMPANIES PRIOR TO ANY/ ALL EXCAVATIONS AT THE FOLLOWING TELEPHONE NUMBERS:

WATER AND WASTEWATER: (907) 766-2237 OR 766-2200  
 POWER & LIGHT: (907) 766-2331  
 CATV: (907) 766-2137  
 TELEPHONE, GTE ALASKA: (907) 766-2311

**DIAL BEFORE YOU DIG**

6. ALL ROADWAY IMPROVEMENTS SHALL BE GRADED TO TOP OF SUBBASE PRIOR TO WINTER SHUT DOWN. HAINES BOROUGH SHALL MAINTAIN ROADWAY OVER WINTER SHUT DOWN PERIOD.

# LEGEND

EXISTING	PROPOSED	
---	---	CENTERLINE
---	---	EDGE PAVEMENT
---	---	GUY ANCHOR
E	---	OVERHEAD ELECTRIC LINE
---	---	PROPERTY LINE
---	SF	SILT FENCE
---	---	CULVERT
---	---	CONCRETE SIDEWALK
---	---	FIELD INLET w/ FRAME & GRATE
PP	---	POWER POLE
---	---	RADIUS
---	---	SANITARY SEWER MANHOLE
A	---	SIGN
---	---	SURVEY CONTROL POINT
---	---	UTILITY POLE

SECTION OR DETAIL CALLOUT **DETAIL TITLE**

DRAWING SHEET WHERE DETAIL CAN BE FOUND OR WHERE DETAIL WAS REFERENCED FROM

# ABBREVIATIONS

ACP	ASPHALT CONCRETE PAVEMENT	IE	INVERT ELEVATION
APPROX	APPROXIMATE	INV	INVERT
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS	LF	LINEAR FOOT
AVE	AVENUE	LS	LUMP SUM
BK	BACK	LT	LEFT
BOP	BEGINNING OF PROJECT	MH	MANHOLE
BVCE	BEGIN VERTICAL CURVE ELEVATION	MIN	MINIMUM
BVCS	BEGIN VERTICAL CURVE STATION	N	NORTH
CAP	CORRUGATED ALUMINUM PIPE	NO	NUMBER
CBJ	CITY AND BOROUGH OF JUNEAU	PND	PND ENGINEERS, INC.
CL	CENTERLINE	PP	POWER POLE
CMP	CORRUGATED METAL PIPE	PT	POINT
CONC	CONCRETE	PVC	POLYVINYL CHLORIDE
CPEP	CORRUGATED POLYETHYLENE PIPE	PVI	POINT OF VERTICAL INTERSECTION
CSP	CORRUGATED STEEL PIPE	R	RADIUS
CY	CUBIC YARD	RD	ROAD
CY	CUBIC YARD	REQ'D	REQUIRED
D/DIA	DIAMETER	RT	RIGHT
DOT&PF	DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES	S	SOUTH
DR	DRIVE	SPEC	SPECIFICATION
E	EAST	SSMH	SANITARY SEWER MANHOLE
EA	EACH	ST	STREET
EL/ ELEV	ELEVATION	STA	STATION
EOP	END OF PROJECT	STD	STANDARD
EP	EXISTING PAVEMENT	TYP	TYPICAL
EXIST	EXISTING	VC	VERTICAL CURVE
FH	FIRE HYDRANT	W	WEST
FT	FOOT	W/	WITH
H/V	HORIZONTAL/VERTICAL	WV	WATER VALVE

**THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:**

DOT&PF	CBJ
C-3.10 I-20.13	126 - CONCRETE COLLAR
D-01.02	203 - SS MANHOLE
D-24.00	206B - SS LOCKING M.H. COVER
D-26.02	209 - M.H. CONNECTION DETAILS

**202 (4) REMOVAL OF CULVERT PIPE**

STATION	STATION	LENGTH (FT)	SIZE (IN)	REMARKS
19+40	19+40	10	18 CSP	MANHOLE LOCATION
19+50	19+50	60	24 CAP	CROSSING 3RD AVE.

**202 (6) REMOVAL OF MANHOLE**

MANHOLE	STATION	OFFSET	REMARKS
MH	19+40	15' RT	CURB & SIDEWALK REMOVAL/ REPLACEMENT INCIDENTAL

# ESTIMATE OF QUANTITIES - PLANSET B

ITEM NO.	PAY ITEM	PAY UNIT	QUANTITY
201(3B)	CLEARING AND GRUBBING	LS	ALL REQ'D
202(2)	REMOVAL OF PAVEMENT	SY	-4,000-
202(4)	REMOVAL OF CULVERT PIPE	LS	ALL REQ'D
202(6)	REMOVAL OF MANHOLE	EA	1
203(3)	UNCLASSIFIED EXCAVATION	CY	-3,700-
203(6A)	BORROW, SELECTED MATERIAL TYPE A	TON	2,500-
301(1)	AGGREGATE BASE COURSE, GRADING D-1	TON	1,650-
304(1)	SUBBASE, GRADING B	TON	-2,600-
401(1)	ASPHALT CONCRETE, TYPE II, CLASS B	TON	-600-
401(2)	ASPHALT CEMENT, GRADE PG 58-28	TON	-36-
603(1-18)	18 INCH CSP	LF	10
603(1-24)	24 INCH CSP	LF	60
604(3)	RECONSTRUCT EXISTING MANHOLE	EA	4
604(5)	INLET, TYPE A	EA	1
604(8)	FURNISH AND INSTALL DROP MANHOLE	EA	1
604(9)	RECONSTRUCT EXISTING MANHOLE INVERT	EA	1
608(1B)	CONCRETE SIDEWALK, 6 INCHES THICK	SY	-28-
609(2B)	CURB AND GUTTER, TYPE DEPRESSED	LF	-55-
609(2C)	CURB AND GUTTER, TYPE GUTTER	LF	-30-
615(1)	STANDARD SIGN	SF	25 ✓
618(1A)	SEEDING	SY	2,200
630(1)	GEOTEXTILE, SEPARATION	SY	-2,000-
640(1)	MOBILIZATION AND DEMOBILIZATION	LS	ALL REQ'D
641(1)	EROSION AND POLLUTION CONTROL ADMINISTRATION	LS	ALL REQ'D
641(3)	TEMPORARY EROSION AND POLLUTION CONTROL	LS	ALL REQ'D
641(4)	TEMPORARY EROSION AND POLLUTION CONTROL AMENDMENTS	CS	ALL REQ'D
642(1)	CONSTRUCTION SURVEYING	LS	ALL REQ'D
643(2)	TRAFFIC MAINTENANCE	LS	ALL REQ'D
643(3)	PERMANENT CONSTRUCTION SIGNS	LS	ALL REQ'D
643(15)	FLAGGING	CS	ALL REQ'D
643(25)	TRAFFIC CONTROL	CS	ALL REQ'D
644(6)	VEHICLES	LS	ALL REQ'D
670(1)	PAINTED TRAFFIC MARKINGS	LS	ALL REQ'D

# BASIS OF ESTIMATE

ITEM	PAY ITEM	ESTIMATING FACTOR
203(6A)	BORROW, SELECTED MATERIAL TYPE A	1.9 TON/CY
301(1)	AGGREGATE BASE COURSE, GRADING D-1	2.0 TON/CY
304(1)	SUBBASE, GRADING B	1.9 TON/CY
401(1)	ASPHALT CONCRETE, TYPE II, CLASS B	125 LB/SY/IN
401(2)	ASPHALT CEMENT, GRADE PG 58-28	6.0% OF ITEM 401 (1)

As-Built  
12/15/08 *off Douglas*

**REVISIONS**

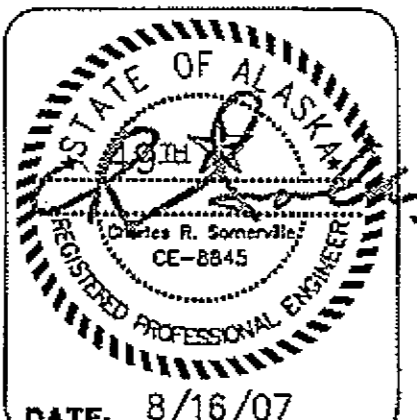
REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.

**PND ENGINEERS, INC.**

9360 Glacier Hwy. Ste 100  
Juneau, Alaska 99801  
Phone: 907-586-2093  
Fax: 907-586-2099  
www.pnd-inc.com

DESIGN: KEI    CHECKED: CRS    SCALE:  
DRAWN: PJD    APPROVED: CRS

DATE: 8/16/07



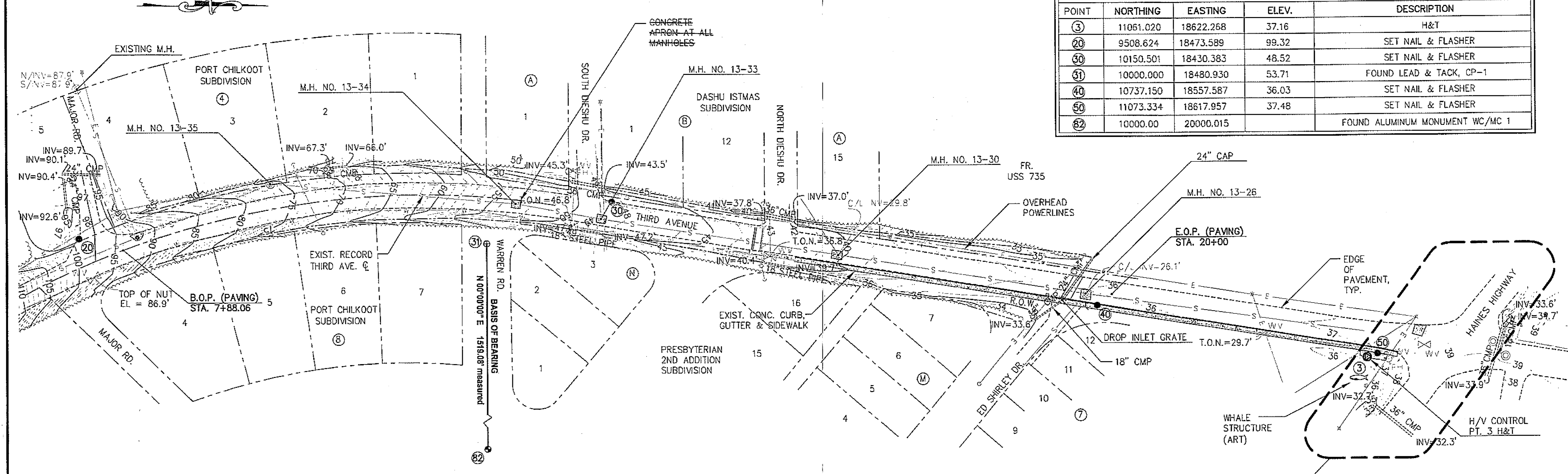
**HAINES BOROUGH, ALASKA  
THIRD AVENUE RECONSTRUCTION**

SHEET TITLE:  
**GENERAL NOTES, ABBREVIATIONS,  
LEGEND, ESTIMATE OF QUANTITIES**

PND PROJECT NO.: 062045    DWG. FILE: base.dwg

**C1.1**  
SHEET 2 OF 10

SURVEY CONTROL				
POINT	NORTHING	EASTING	ELEV.	DESCRIPTION
③	11061.020	18622.268	37.16	H&T
②①	9508.624	18473.589	99.32	SET NAIL & FLASHER
③①	10150.501	18430.383	48.52	SET NAIL & FLASHER
③①	10000.000	18480.930	53.71	FOUND LEAD & TACK, CP-1
④①	10737.150	18557.587	36.03	SET NAIL & FLASHER
⑤①	11073.334	18617.957	37.48	SET NAIL & FLASHER
⑥②	10000.00	20000.015		FOUND ALUMINUM MONUMENT WC/MC 1



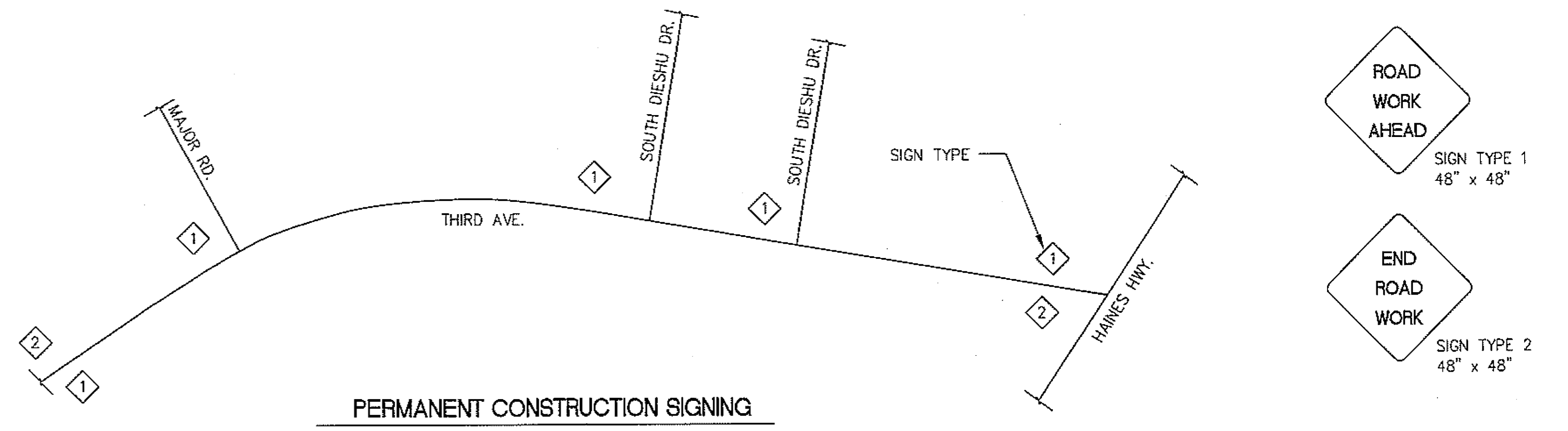
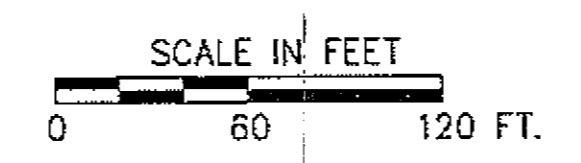
**SURVEY NOTES:**

1. VERTICAL DATUM IS MEAN LOWER LOW WATER (MLLW = 0.00') AS PER NOTE 2 SHEET 1 OF 4, PND DRAWING SET TITLED 'THIRD AVENUE RECONSTRUCTION 2000' DATED JANUARY 2000.
2. BASIS OF VERTICAL DATUM FOR THIS SURVEY IS CONTROL POINT 31, A FOUND LEAD AND TACK, ELEVATION = 53.71' AS PER THE CONTROL TABLE ON SHEET 2 OF 4, PND DRAWING SET TITLED 'THIRD AVENUE RECONSTRUCTION 2000' DATED JANUARY 2000.
3. BASIS OF BEARING FOR THIS SURVEY IS N90°00'00\"E BETWEEN A FOUND LEAD AND TACK AND A FOUND ALUMINUM MONUMENT AS SHOWN ON THE ABOVE MENTIONED PND DRAWING, SHEET 2 OF 4.
4. NO RIGHT-OF-WAY OR PROPERTY RETRACEMENT SURVEY HAS BEEN COMPLETED AT THIS TIME. ALL PROPERTY AND RIGHT-OF-WAY LINES SHOWN WERE TAKEN FROM THE ORIGINAL SURVEY AND BASE MAPPING PERFORMED BY ALASKA SURVEYING COMPANY, INC IN NOVEMBER, 1999.
5. INFORMATION REGARDING THE LOCATION OF THE UNDERGROUND UTILITIES WAS PROVIDED BY ONSITE UTILITY COMPANY LOCATORS AND INFORMATION SUPPLIED TO PND SURVEYORS BY THE HAINES BOROUGH, TYPICAL ALL SHEETS.
6. CONTOURS ARE IN FEET, WITH TWO FOOT INTERVALS.
7. FIELD SURVEY PERFORMED JUNE 6-9, 2006.

**TRAFFIC CONTROL NOTES:**

1. ALL TRAFFIC CONTROL PLANS SHALL BE DEVELOPED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO USE.
2. A MINIMUM OF ONE LANE SHALL BE MAINTAINED AT ALL TIMES AT WORK AREAS.
3. TWO LANES SHALL BE MAINTAINED AT ALL TIMES WITHIN THE PROJECT LIMITS IN NON-WORK AREAS AND DURING NON-WORKING HOURS.
4. DRIVING LANES SHALL BE A MINIMUM WIDTH OF 10'.
5. INTERSECTION ROADWAYS SHALL REMAIN ACCESSIBLE AT ALL TIMES OR AS APPROVED BY ENGINEER.
6. FLOOD LIGHTS SHALL BE PROVIDED FOR FLAGGER STATIONS DURING NIGHT OPERATIONS.
7. THE CONTRACTOR SHALL KEEP THE PUBLIC INFORMED OF HIS CONSTRUCTION ACTIVITIES THROUGH THE USE OF THE LOCAL NEWS MEDIA. NEWS RELEASES SHALL BE APPROVED BY THE PROJECT ENGINEER PRIOR TO THEIR RELEASE. NEWS RELEASES WILL BE REQUIRED BUT NOT LIMITED TO, THE ONSET OF WORK, AND CHANGES IN THE LANE CONFIGURATIONS. ALSO CONTACT HOMEOWNERS AS REQUIRED TO FACILITATE ACCESS.

**EXISTING CONDITIONS**

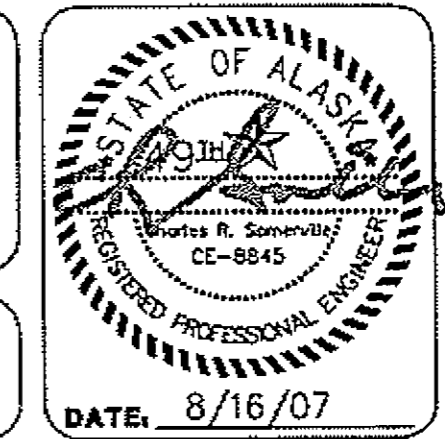


*As Built 12/15/08  
CJP/Dough*

**REVISIONS**

REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.

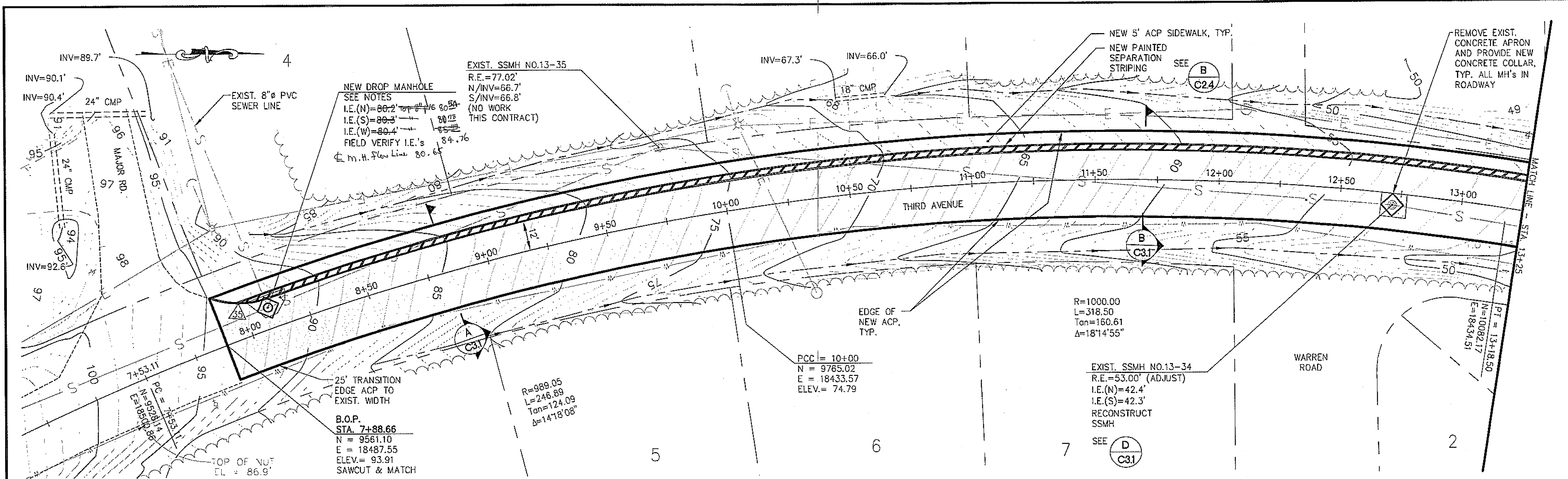
**PND ENGINEERS, INC.**  
 9360 Glacier Hwy. Ste 100  
 Juneau, Alaska 99801  
 Phone: 907-586-2093  
 Fax: 907-586-2099  
 www.pnd-anc.com



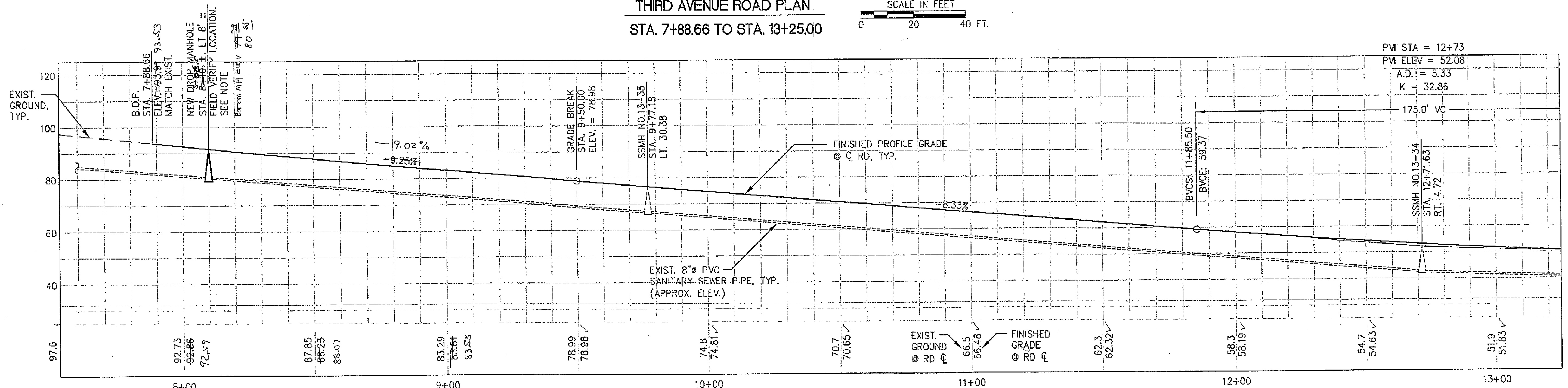
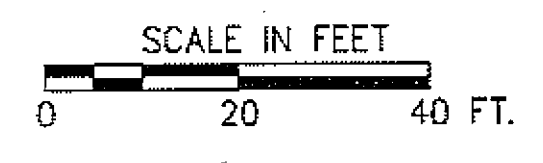
**HAINES BOROUGH, ALASKA  
 THIRD AVENUE RECONSTRUCTION**

SHEET TITLE: **EXISTING CONDITIONS,  
 SURVEY CONTROL,  
 TRAFFIC CONTROL**  
 PND PROJECT NO. 062045 DWG. FILE: base.dwg

**C1.2**  
 SHEET 3 OF 10



THIRD AVENUE ROAD PLAN  
STA. 7+88.66 TO STA. 13+25.00



THIRD AVENUE ROAD PROFILE  
STA. 10+00.00 TO STA. 13+25.00

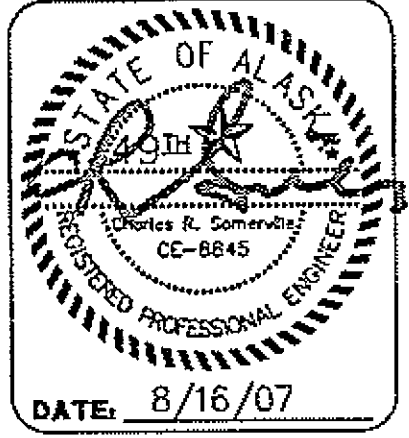
NOTE: NEW MANHOLE AT STA. 8+10 SHALL BE FIELD LOCATED TO CONNECT TO EXISTING SEWER LINES. DATA FOR MAJOR RD. SEWER LATERAL IS UNAVAILABLE. I.E. OF THAT LATERAL IS UNKNOWN THEREFORE A DROP MANHOLE CONNECTION IS DESIGNATED FOR THIS INSTALLATION. CONTRACTOR SHALL UNCOVER EXISTING LATERAL TO DETERMINE FINAL CONNECTION REQUIREMENTS TO NEW MANHOLE.

As-Built  
12/15/08  
CJF/Douglas

REVISIONS					
REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.

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DESIGN: KEI CHECKED: CRS SCALE: AS SHOWN  
 DRAWN: PJD APPROVED: CRS

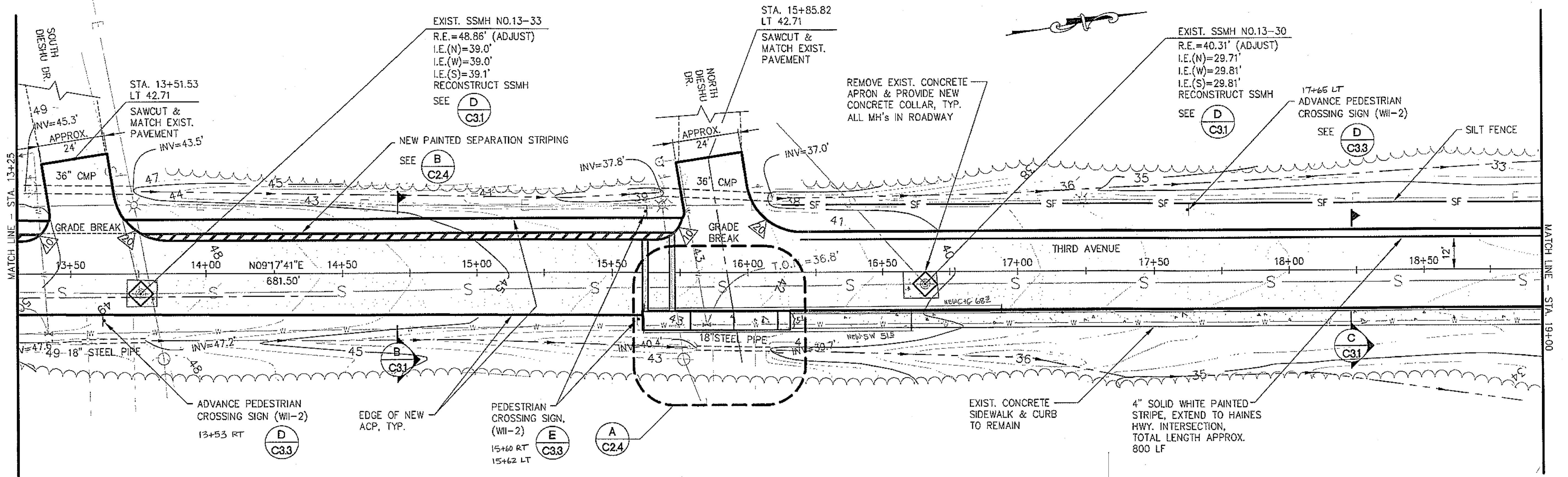


**HAINES BOROUGH, ALASKA  
THIRD AVENUE RECONSTRUCTION**

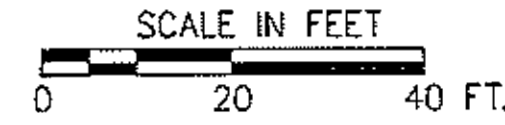
SHEET TITLE:  
**ROAD PLAN AND PROFILE**  
B.O.P. STA. 7+53.11 TO STA. 13+25.00

PN&D PROJECT No. 062045 DWG. FILE: base.dwg

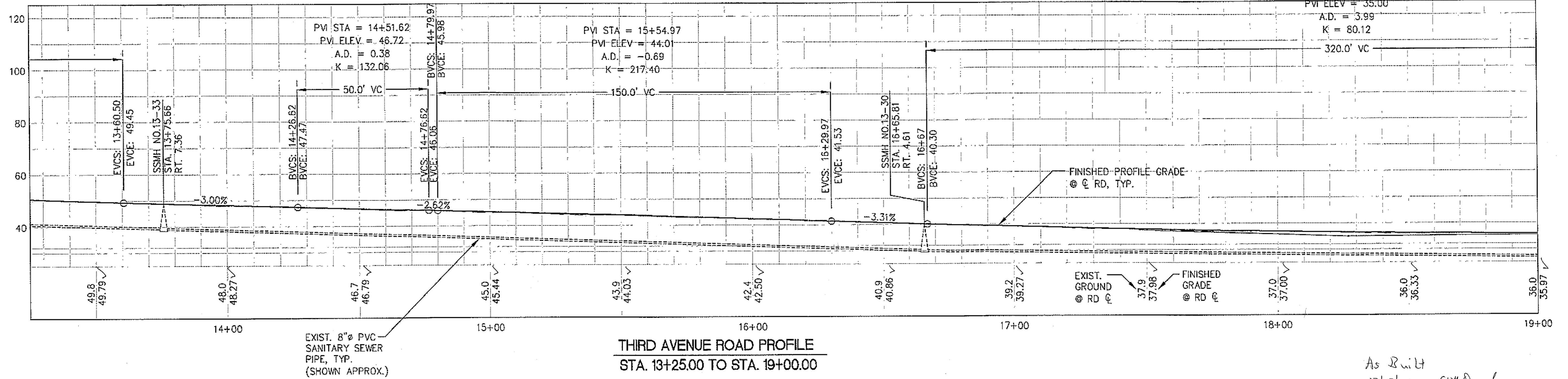
**C2.1**  
SHEET 4 OF 10



THIRD AVENUE ROAD PLAN  
STA. 13+25.00 TO STA. 19+00.00



LOW POINT ELEV = 35.90  
LOW POINT STA = 19+32.35  
PVI STA = 18+27  
PVI ELEV = 35.00  
A.D. = 3.99  
K = 80.12  
320.0' VC



THIRD AVENUE ROAD PROFILE  
STA. 13+25.00 TO STA. 19+00.00

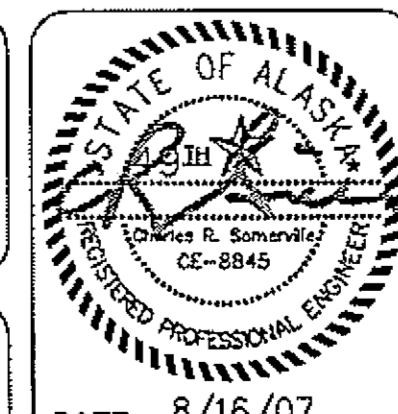
As Built  
12/15/08  
CJ Dough

REVISIONS

REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.

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HAINES BOROUGH, ALASKA  
THIRD AVENUE RECONSTRUCTION

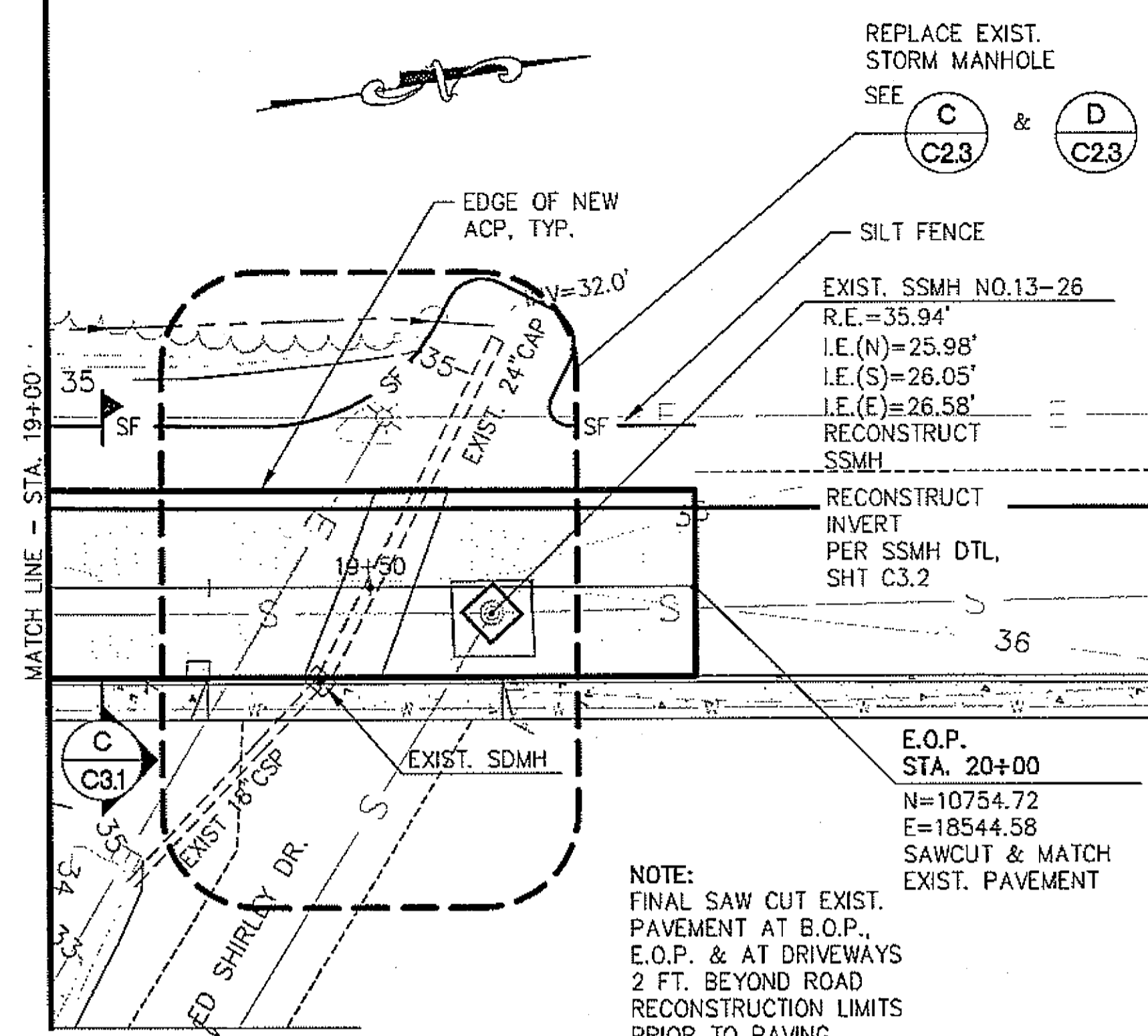
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ROAD PLAN AND PROFILE  
STA. 13+25.00 TO STA. 19+00.00

C2.2  
SHEET  
5 OF 10

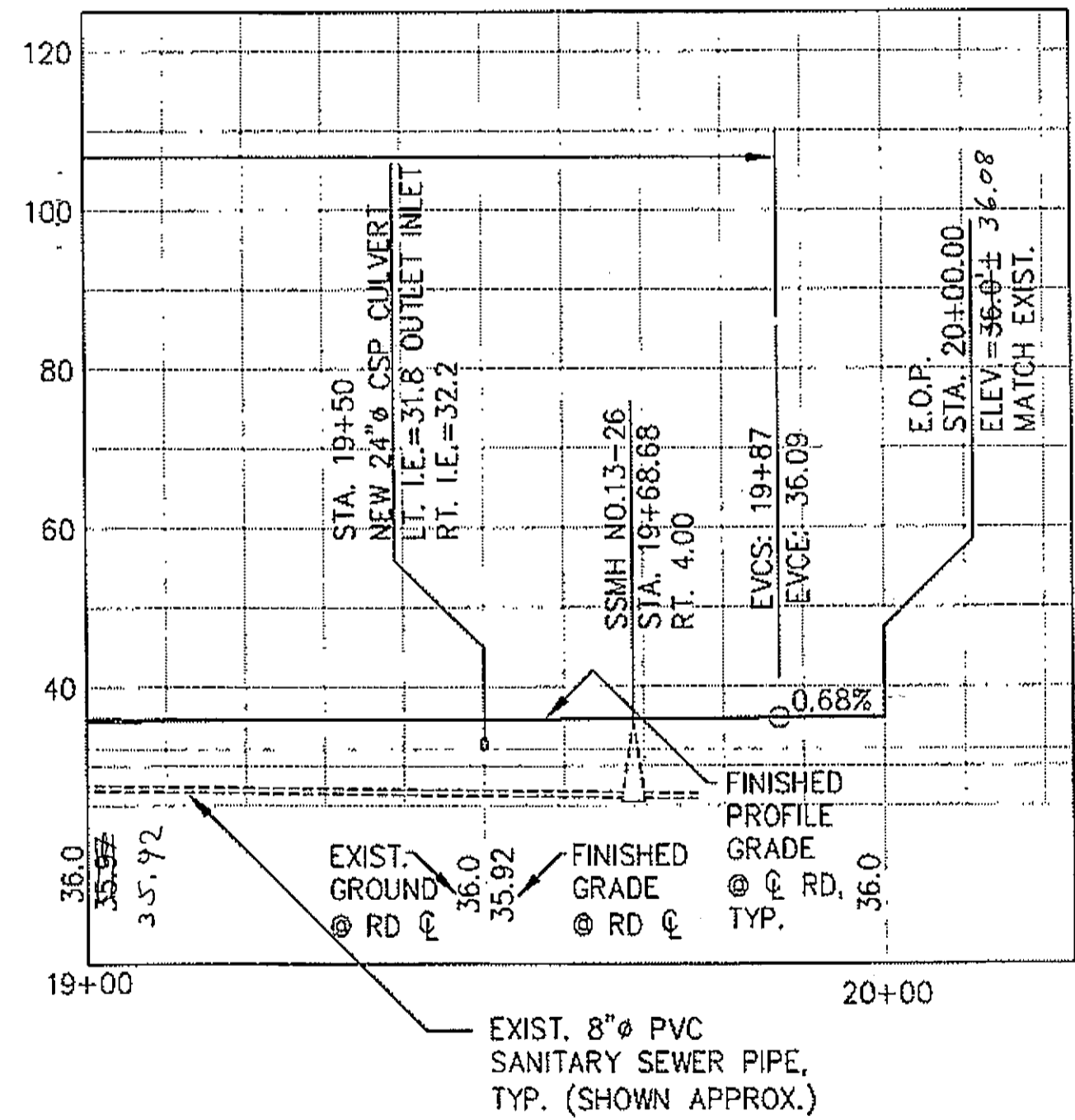
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DATE: 8/16/07

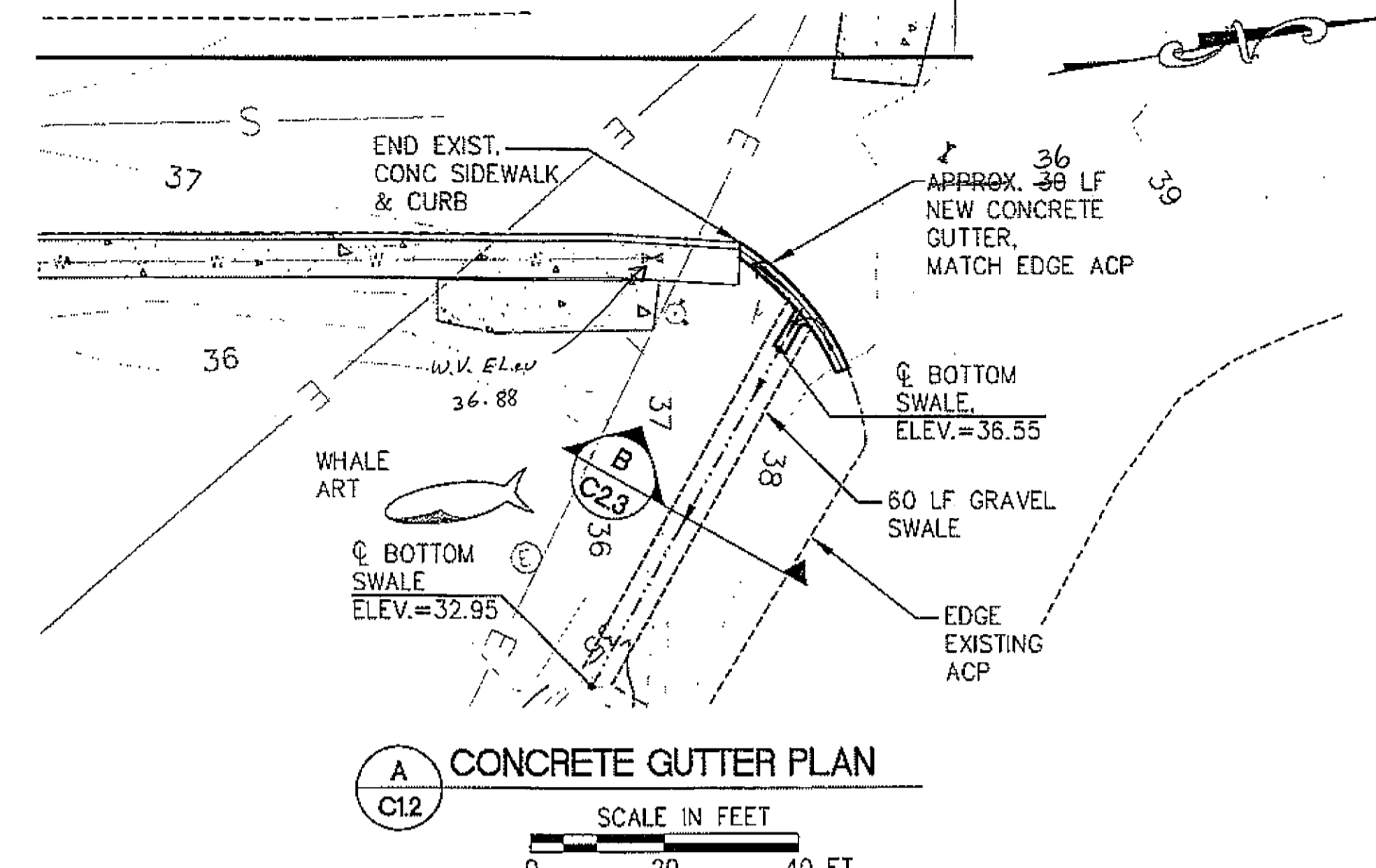
PND PROJECT No. 062045 DWG. FILE: base.dwg



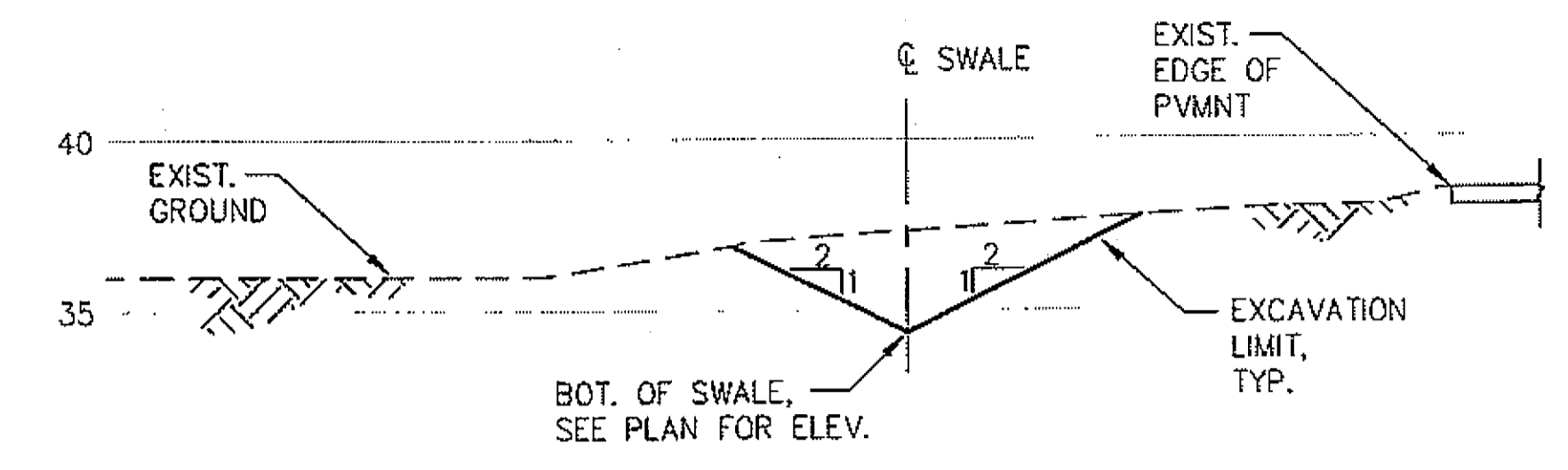
**THIRD AVENUE ROAD PLAN**  
STA. 19+00.00 TO STA. 20+00.00 E.O.P. SCALE IN FEET



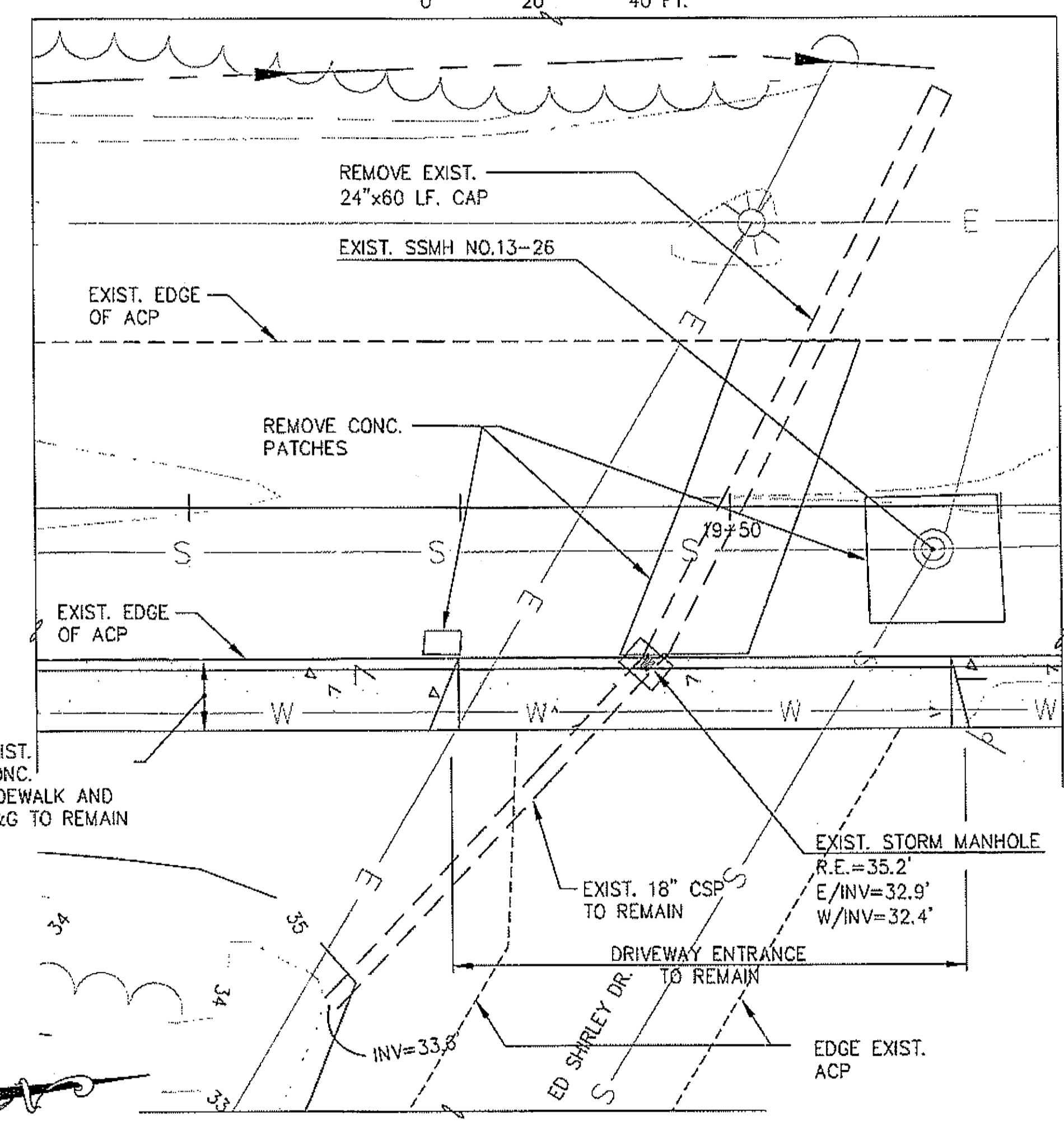
**THIRD AVENUE ROAD PROFILE**  
STA. 19+00.00 TO STA. 20+00.00 E.O.P.



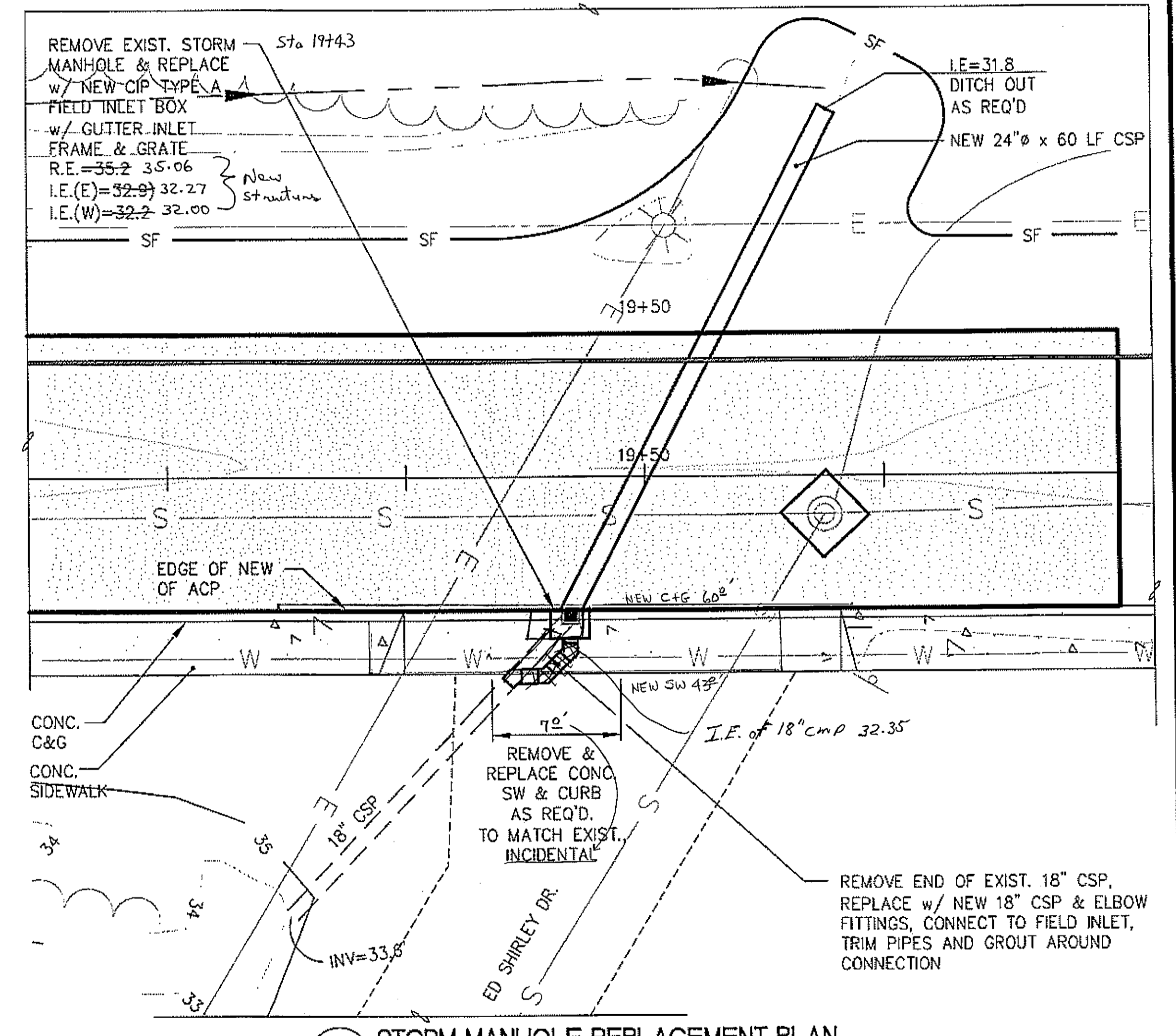
**A CONCRETE GUTTER PLAN**  
SCALE IN FEET



**B GRAVEL SWALE SECTION (INCIDENTAL)**  
N.T.S.



**C EXISTING STORM MANHOLE CONDITIONS**  
SCALE IN FEET



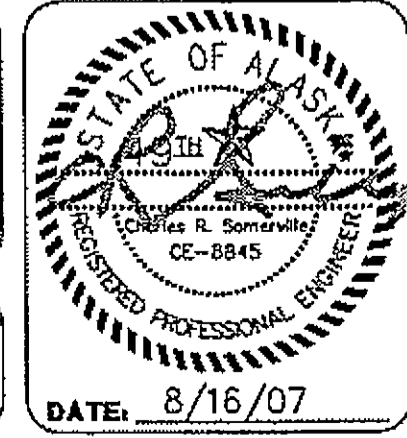
**D STORM MANHOLE REPLACEMENT PLAN**  
SCALE IN FEET

As Built 12/15/08  
CJ/Douglas

REVISIONS					
REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.

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DESIGN: KEI CHECKED: CRS SCALE: AS SHOWN  
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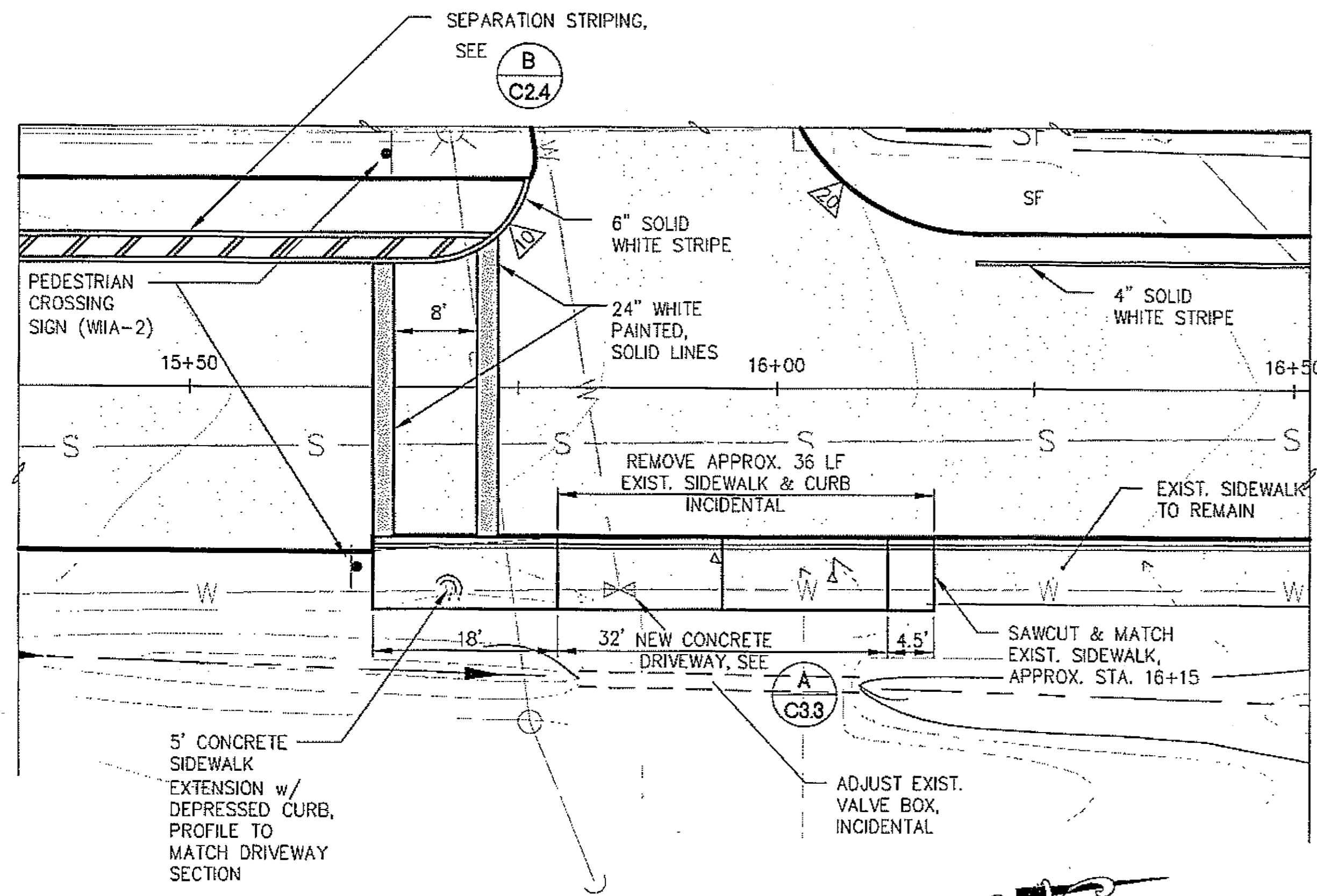


**HAINES BOROUGH, ALASKA  
THIRD AVENUE RECONSTRUCTION**

SHEET TITLE:  
**ROAD PLAN AND PROFILE  
STA. 19+00.00 TO STA. 20+00.00 E.O.P.,  
MISCELLANEOUS DETAILS**

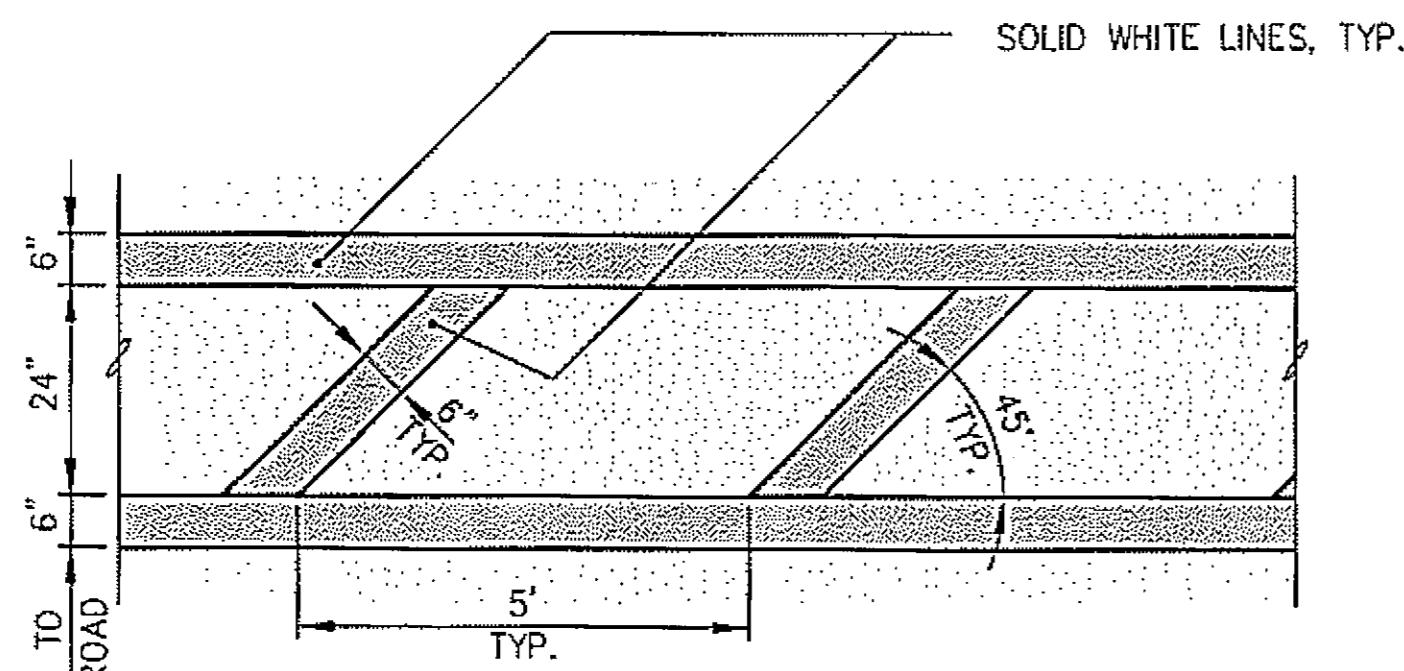
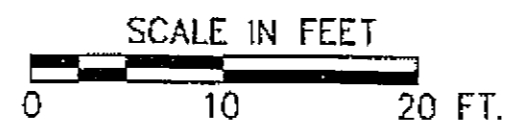
**C2.3**  
SHEET 6 OF 10

PND PROJECT NO. 062045 DWG. FILE: base.dwg



**A**  
C22 CONCRETE SIDEWALK PLAN  
STA. 15+70 TO STA. 16+15

NOTE: CONCRETE CURB & GUTTER & SIDEWALK THIS SECTION ONLY; ALL OTHER IS TO BE ACP.



**B**  
C24 PAINTED SEPARATION STRIPING DETAIL

**ACP GRADING SCHEDULE**  
( ELEVATIONS ARE FINISHED GRADE )

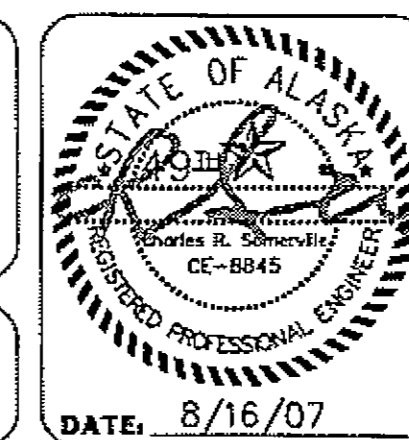
STATION	OFFSET	ELEVATION	DESCRIPTION	STATION	OFFSET	ELEVATION	DESCRIPTION	STATION	OFFSET	ELEVATION	DESCRIPTION
7+68.66	0	MATCH EXIST.	⊕	12+00	0	58.19 ✓	⊕	16+25	0	41.69 ✓	⊕
	20' LT.	MATCH EXIST.	E.P.		15' LT.	58.89 ✓	E.P.		15' LT.	41.24 .39	E.P.
	15' RT.	MATCH EXIST.	E.P.		15' RT.	57.52 ✓	E.P.		*	MATCH EXIST.	CURB LIP, E.P.
8+00	0	92.86 92.57	⊕	12+25	0	56.32 ✓	⊕	16+50	0	40.86	⊕
	20' LT.	93.73 93.96	E.P.		15' LT.	57.02 ✓	E.P.		15' LT.	40.44 .56	E.P.
	15' RT.	92.06 91.79	E.P.		15' RT.	55.65 ✓	E.P.		*	MATCH EXIST.	CURB LIP, E.P.
8+25	0	90.58 .35	⊕	12+50	0	54.63 ✓	⊕	16+75	0	40.04	⊕
	20' LT.	91.35 .14	E.P.		15' LT.	55.33 ✓	E.P.		15' LT.	39.88 .74	E.P.
	15' RT.	89.80 .59	E.P.		15' RT.	53.96 ✓	E.P.		*	MATCH EXIST.	CURB LIP, E.P.
8+50	0	88.23 .07	⊕	12+75	0	53.14 ✓	⊕	17+00	0	39.27	⊕
	20' LT.	88.93 .77	E.P.		15' LT.	53.74 ✓	E.P.		15' LT.	38.82 .97	E.P.
	15' RT.	87.54 .35	E.P.		15' RT.	52.47 ✓	E.P.		*	MATCH EXIST.	CURB LIP, E.P.
8+75	0	85.92 .80	⊕	13+00	0	51.83 ✓	⊕	17+25	0	38.59	⊕
	20' LT.	86.62 .50	E.P.		15' LT.	52.33 ✓	E.P.		15' LT.	38.14 .29	E.P.
	15' RT.	85.23 .11	E.P.		15' RT.	51.16 ✓	E.P.		*	MATCH EXIST.	CURB LIP, E.P.
9+00	0	83.67 .43	⊕	13+25	0	50.71 ✓	⊕	17+50	0	37.98	⊕
	20' LT.	84.37 .23	E.P.		15' LT.	51.01 ✓	E.P.		15' LT.	37.53 .68	E.P.
	15' RT.	82.94 .86	E.P.		15' RT.	50.11 ✓	E.P.		*	MATCH EXIST.	CURB LIP, E.P.
9+25	0	81.28 .26	⊕	13+50	0	49.79 ✓	⊕	17+75	0	37.45	⊕
	20' LT.	81.98 .96	E.P.		15' LT.	49.78 ✓	E.P.		15' LT.	37.00 .15	E.P.
	15' RT.	80.62 .59	E.P.		15' RT.	49.27 ✓	E.P.		*	MATCH EXIST.	CURB LIP, E.P.
9+50	0	78.98	⊕	13+75	0	49.02 ✓	⊕	18+00	0	37.00	⊕
	20' LT.	79.68	E.P.		15' LT.	48.72 ✓	E.P.		15' LT.	36.55 .70	E.P.
	15' RT.	78.31	E.P.		15' RT.	48.57 ✓	E.P.		*	MATCH EXIST.	CURB LIP, E.P.
9+75	0	76.89	⊕	14+00	0	48.27	⊕	18+25	0	36.62	⊕
	20' LT.	77.59	E.P.		15' LT.	47.77	E.P.		15' LT.	36.17 .32	E.P.
	15' RT.	76.22	E.P.		15' RT.	47.82	E.P.		*	MATCH EXIST.	CURB LIP, E.P.
10+00	0	74.81	⊕	14+25	0	47.52	⊕	18+50	0	36.33	⊕
	20' LT.	75.51	E.P.		15' LT.	47.02	E.P.		15' LT.	35.88 36.03	E.P.
	15' RT.	74.14	E.P.		15' RT.	47.07	E.P.		*	MATCH EXIST.	CURB LIP, E.P.
10+25	0	72.73	⊕	14+50	0	46.79	⊕	18+75	0	36.11	⊕
	20' LT.	73.43	E.P.		15' LT.	46.19	E.P.		15' LT.	35.66 .91	E.P.
	15' RT.	72.06	E.P.		15' RT.	46.34	E.P.		*	MATCH EXIST.	CURB LIP, E.P.
10+50	0	70.65	⊕	14+75	0	46.11	⊕	19+00	0	35.97	⊕
	20' LT.	71.35	E.P.		15' LT.	45.51	E.P.		15' LT.	35.52 .67	E.P.
	15' RT.	69.98	E.P.		15' RT.	45.66	E.P.		*	MATCH EXIST.	CURB LIP, E.P.
10+75	0	68.57	⊕	15+00	0	45.44	⊕	19+25	0	35.91	⊕
	20' LT.	69.40	E.P.		15' LT.	44.84	E.P.		15' LT.	35.46 .61	E.P.
	15' RT.	67.90	E.P.		15' RT.	44.99	E.P.		*	MATCH EXIST.	CURB LIP, E.P.
11+00	0	66.49	⊕	15+25	0	44.75	⊕	19+50	0	35.92	⊕
	20' LT.	67.19	E.P.		15' LT.	44.15	E.P.		15' LT.	35.47 .62	E.P.
	15' RT.	65.82	E.P.		15' RT.	44.30	E.P.		*	MATCH EXIST.	CURB LIP, E.P.
11+25	0	64.40	⊕	15+50	0	44.03	⊕	19+75	0	36.02	⊕
	20' LT.	65.10	E.P.		15' LT.	43.43	E.P.		15' LT.	35.57 .72	E.P.
	15' RT.	63.73	E.P.		15' RT.	43.58	E.P.		*	MATCH EXIST.	CURB LIP, E.P.
11+50	0	62.32	⊕	15+75	0	43.28	⊕	20+00	0	MATCH EXIST.	⊕
	20' LT.	63.02	E.P.		15' LT.	42.68	E.P.		15' LT.	MATCH EXIST.	E.P.
	15' RT.	61.65	E.P.		15' RT.	42.83	E.P.		*	MATCH EXIST.	CURB LIP, E.P.
11+75	0	60.24	⊕	16+00	0	42.50	⊕				
	20' LT.	60.94	E.P.		15' LT.	41.90 42.20	E.P.				
	15' RT.	59.57	E.P.		*	MATCH EXIST.	CURB LIP, E.P.				

\* VARIES RT. - MATCH EXISTING CURB LIP

REVISIONS					
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HAINES BOROUGH, ALASKA  
THIRD AVENUE RECONSTRUCTION

SHEET TITLE: CONCRETE SIDEWALK,  
ACP GRADING SCHEDULE &  
STRIPING PLAN

**C2.4**

SHEET  
7 OF 10

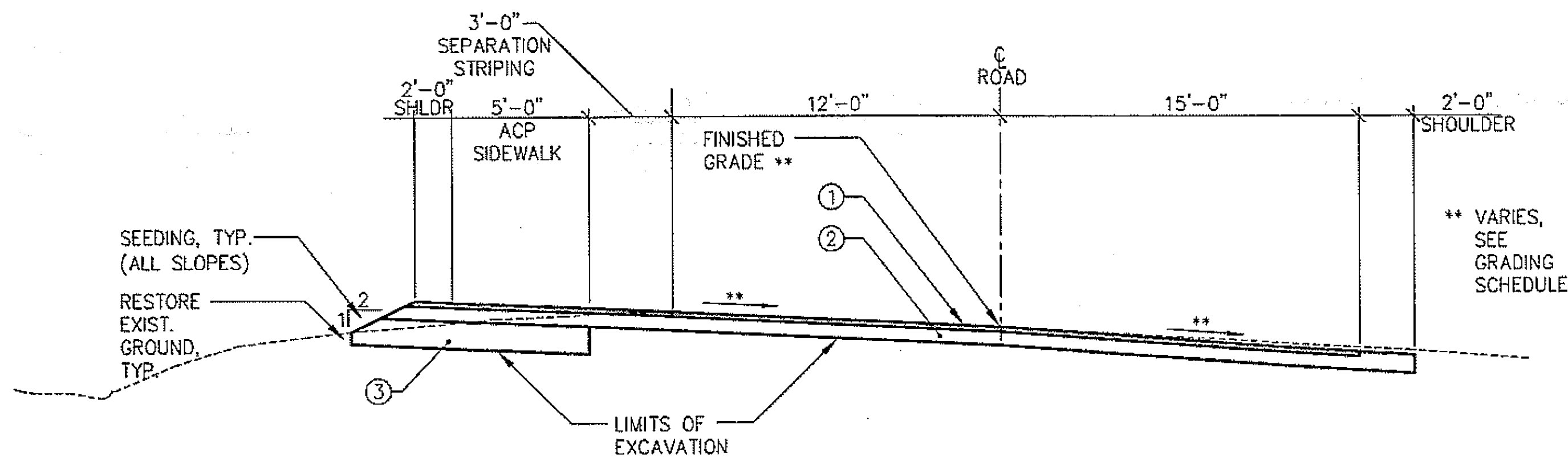
PND PROJECT NO. 062045 DWG. FILE: base.dwg

DESIGN: KEI CHECKED: CRS SCALE: AS SHOWN  
DRAWN: PJD APPROVED: CRS

DATE: 8/16/07

As-Built  
12/15/08  
CJ/Dough

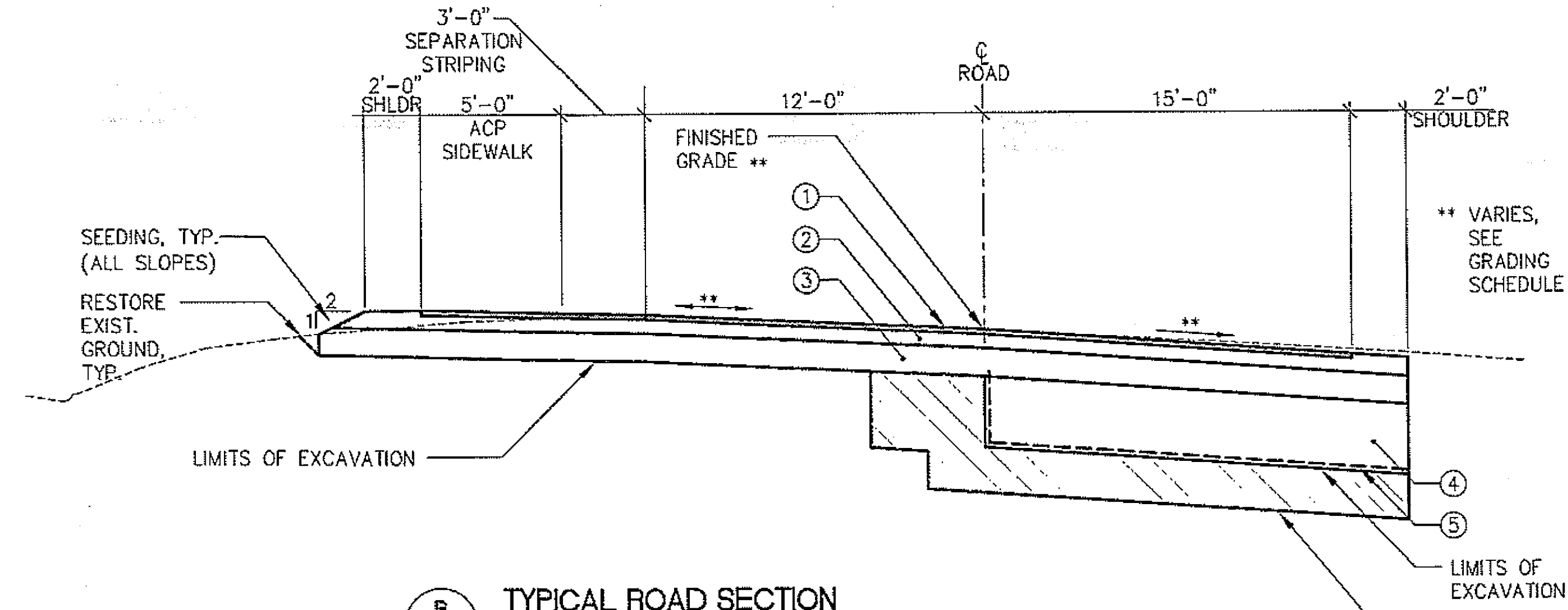




**A**  
C21  
C2.2  
**TYPICAL ROAD SECTION**  
STA. 7+88.66 TO STA. 11+00

**NOTES:**

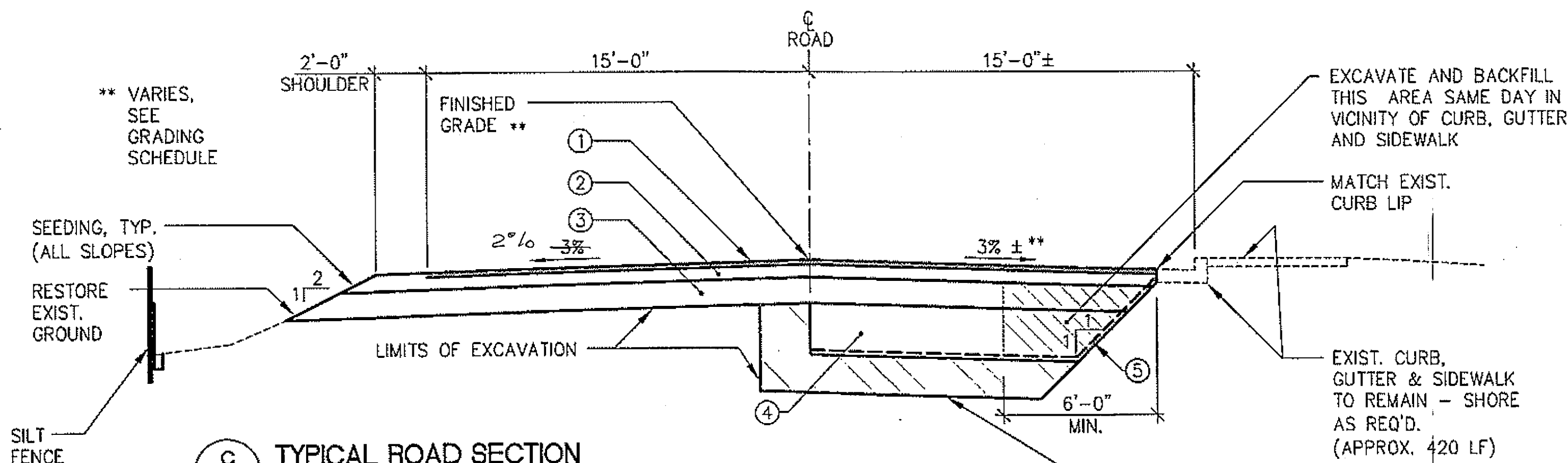
1. REMOVE EXISTING A.C. PAVEMENT AND UNDERLYING MATERIALS TO LIMITS SHOWN OR TO COMPETENT SUBGRADE MATERIAL AS DETERMINED BY ENGINEER.
2. SEE PLAN & PROFILE FOR EXISTING WATER & SEWER UTILITIES.



**B**  
C21  
C2.2  
**TYPICAL ROAD SECTION**  
STA. 11+00.00 TO STA. 15+70 (±)

**NOTES:**

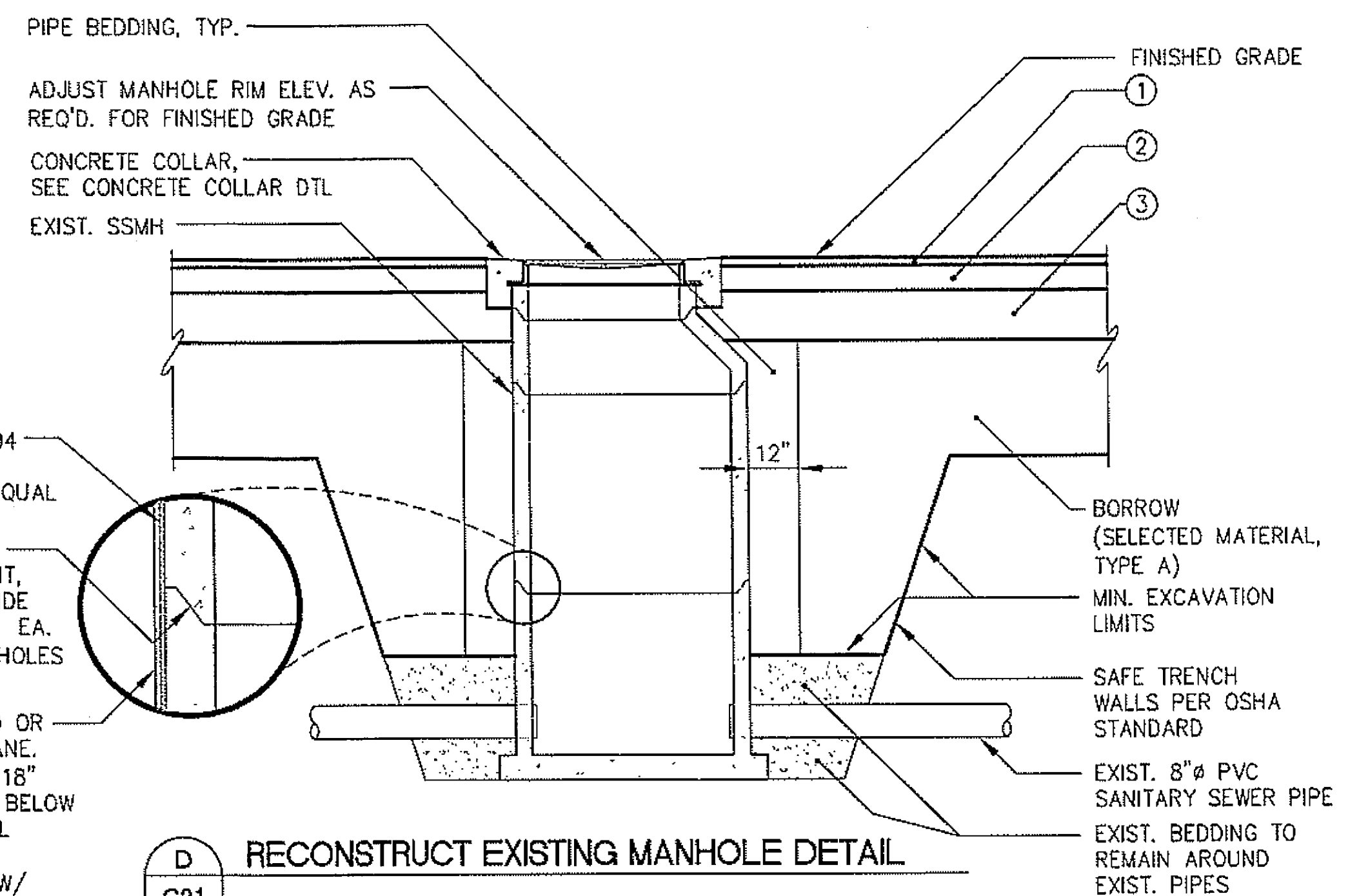
1. REMOVE EXISTING A.C. PAVEMENT AND UNDERLYING MATERIALS TO LIMITS SHOWN OR TO COMPETENT SUBGRADE MATERIAL AS DETERMINED BY ENGINEER.
2. SEE PLAN & PROFILE FOR EXISTING WATER & SEWER UTILITIES.



**C**  
C2.2  
C2.3  
**TYPICAL ROAD SECTION**  
STA. 15+70 (±) TO STA. 20+00.00 E.O.P.

**NOTES:**

1. REMOVE EXISTING AC PAVEMENT AND UNDERLYING MATERIALS TO LIMITS SHOWN OR TO COMPETENT SUBGRADE MATERIAL AS DETERMINED BY ENGINEER.
2. SEE PLAN & PROFILE FOR EXISTING WATER & SEWER UTILITIES.
3. PROVIDE SILT FENCE STA. 16+00 - 20+00, LEFT.



**D**  
C21  
C2.2  
C2.3  
**RECONSTRUCT EXISTING MANHOLE DETAIL**

**NOTES:**

1. REMOVE DEBRIS AND POWER WASH ENTIRE MANHOLE w/ HIGH PRESSURE POWER WASHER, REMOVE BARREL SECTIONS, REPLACE RANNECK, AND RECONSTRUCT MANHOLE w/ EXISTING BARREL SECTIONS. WATERPROOF ALL JOINTS. REMOVE EXISTING CONCRETE PATCHES AROUND MANHOLE AND PROVIDE NEW CONCRETE COLLAR. ADJUST GRADE AS REQUIRED.
2. PLASTER INTERIOR OF ALL JOINTS w/ NON-SHRINKING GROUT, PLACE "RAM NECK", RUB R NEK OR OTHER APPROVED MANHOLE "O" RING GASKETING MATERIAL BETWEEN SECTIONS AND BETWEEN FRAME AND CONCRETE.

*As Built 12/15/08 C/P/D*

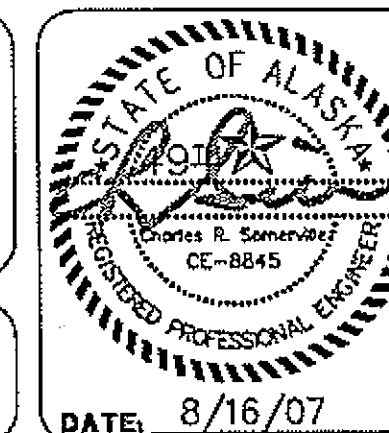
MATERIAL SCHEDULE	
SYMBOL	MATERIAL DESCRIPTION
①	2" ACP, TYPE II, CLASS B
②	6" AGGREGATE BASE COURSE, GRADING D-1
③	12" SUBBASE, GRADING B
④	24" BORROW, SELECTED MATERIAL, TYPE A
⑤	GEOTEXTILE SEPARATION

REVISIONS					
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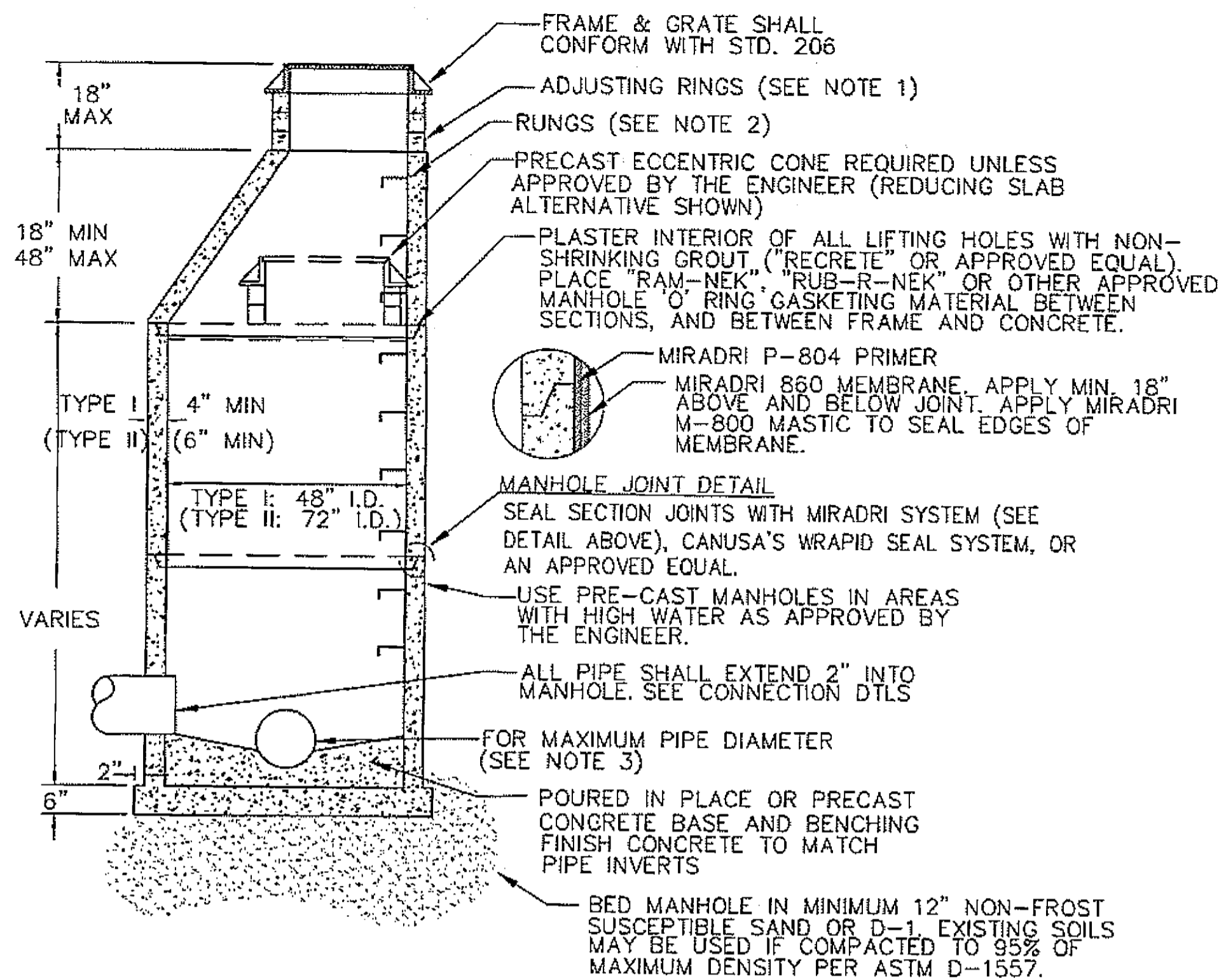


**HAINES BOROUGH, ALASKA**  
**THIRD AVENUE RECONSTRUCTION**

SHEET TITLE:  
**TYPICAL SECTIONS AND DETAILS**

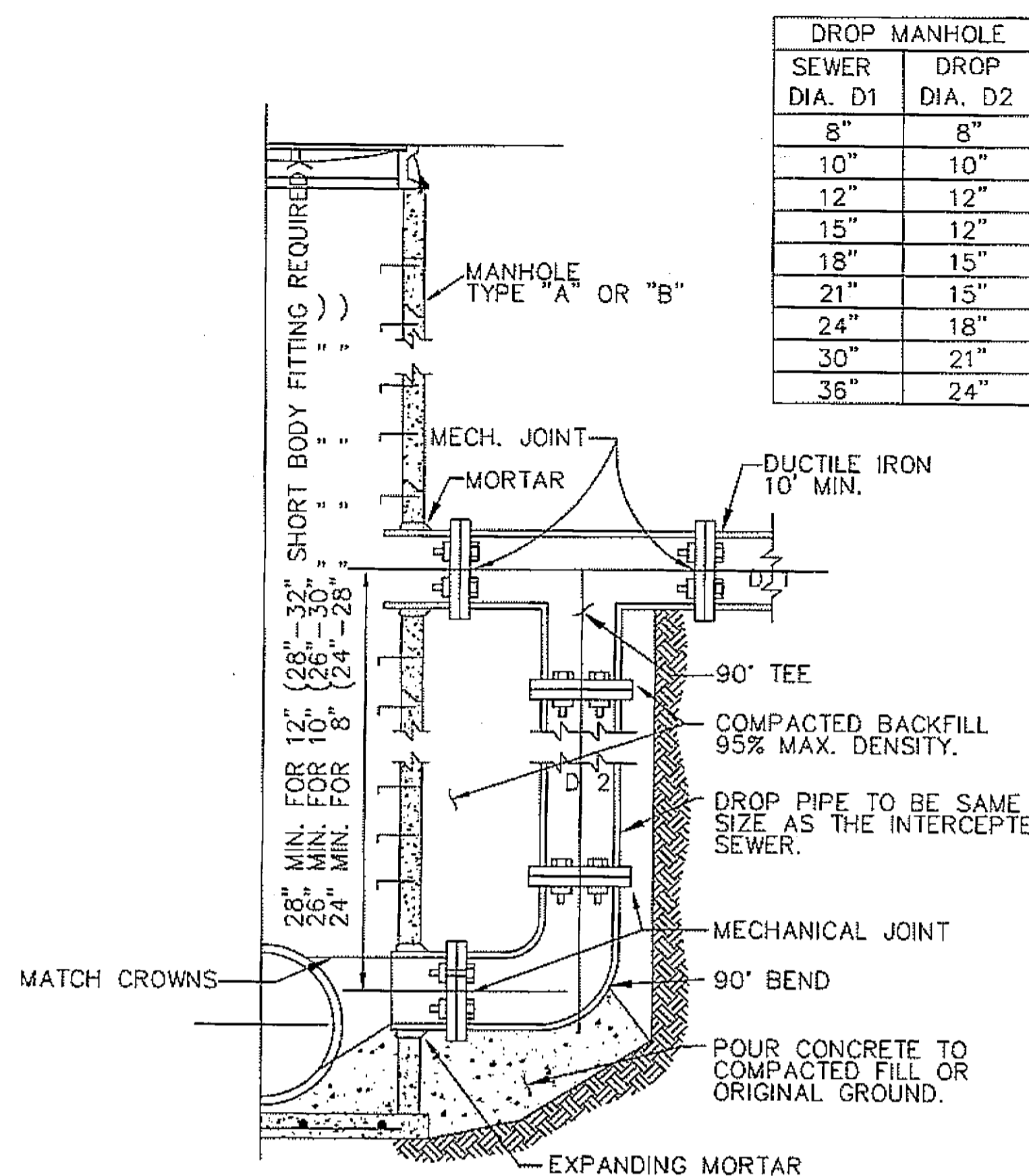
PN4D PROJECT No. 062045 DWG. FILE: SECTIONS.dwg

**C3.1**  
SHEET  
8 OF 10



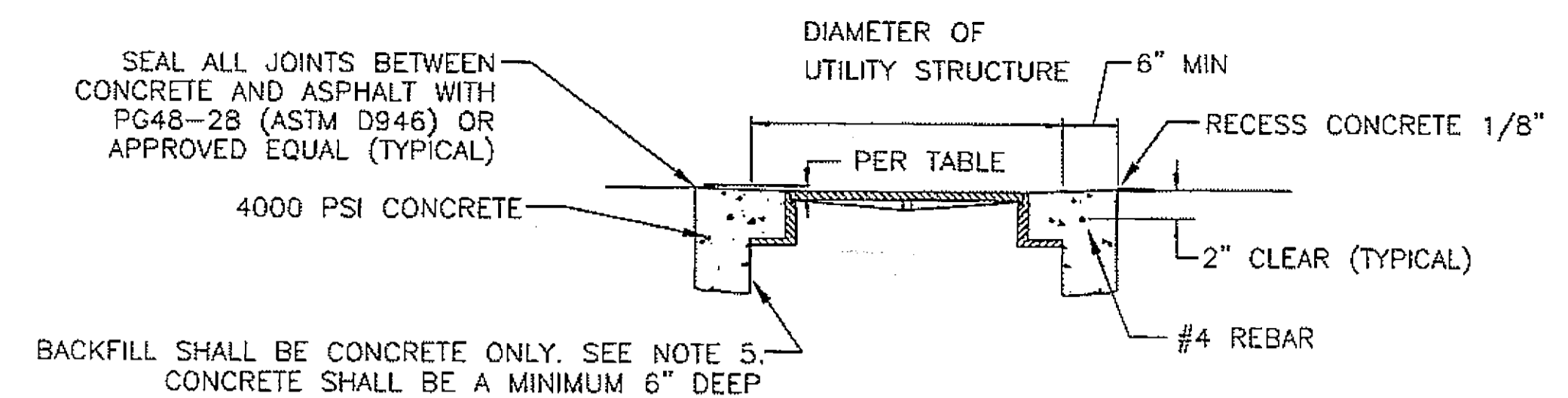
TYPICAL NEW SANITARY SEWER MANHOLE

- NOTES:
- USE NO MORE THAN ONE 4" ADJUSTING RING ON NEW CONSTRUCTION ON UNPAVED ROADS, AND NO MORE THAN THREE 4" RINGS ON RECONSTRUCTIONS, PAVED ROADS OR CHIPSEAL ROADS. FINAL ADJUSTING RINGS SHALL BE AN "INFRA-RISER" TO MEET FINAL GRADE. USE "PL POLYURETHANE SELF-LEVELING CONCRETE CRACK SEALANT" OR APPROVED EQUAL FOR "INFRA-RISER" INSTALLATION.
  - RUNGS TO BE PLACED ON 12" O.C. ON UNOBSTRUCTED SIDE OF MANHOLE. LAST RUNG SHALL BE 18" MAX FROM BOTTOM OF MANHOLE, AND TOP RUNG SHALL BE 6" MAXIMUM FROM TOP OF CONE, IF UNOBSTRUCTED SIDE NOT AVAILABLE, LAST RUNG SHALL BE PLACED 6" OVER SMALLEST PIPE. RUNGS SHALL BE LANE POLYURETHANE 14" LADDER STEPS OR AN APPROVED EQUAL.
  - MAXIMUM PIPE DIAMETER SHALL BE 20" FOR A TYPE I MANHOLE, FOR LARGER PIPES, USE A TYPE II MANHOLE.
  - REFER TO ASTM C-478 FOR DESIGN REQUIREMENTS AND C-478-69 FOR MINIMUM STEEL BARREL. FIRST BARREL SECTION SHALL BE IMBEDDED IN BASE. BLOCKOUTS SHALL BE FORMED.
  - IF MANHOLE IS WITHIN A ROADWAY, COMPACTION TESTS MUST BE TAKEN ON BACKFILL EVERY 3'. DENSITY SHALL BE 95% OF MAXIMUM PROCTOR DENSITY.
  - MANHOLE FRAMES MAY BE RAISED TO ACCOMMODATE PAVEMENT OVERLAYS PROVIDED THE DISTANCE FROM THE TOP OF THE FRAME TO THE FIRST RUNG IS LESS THAN 36".

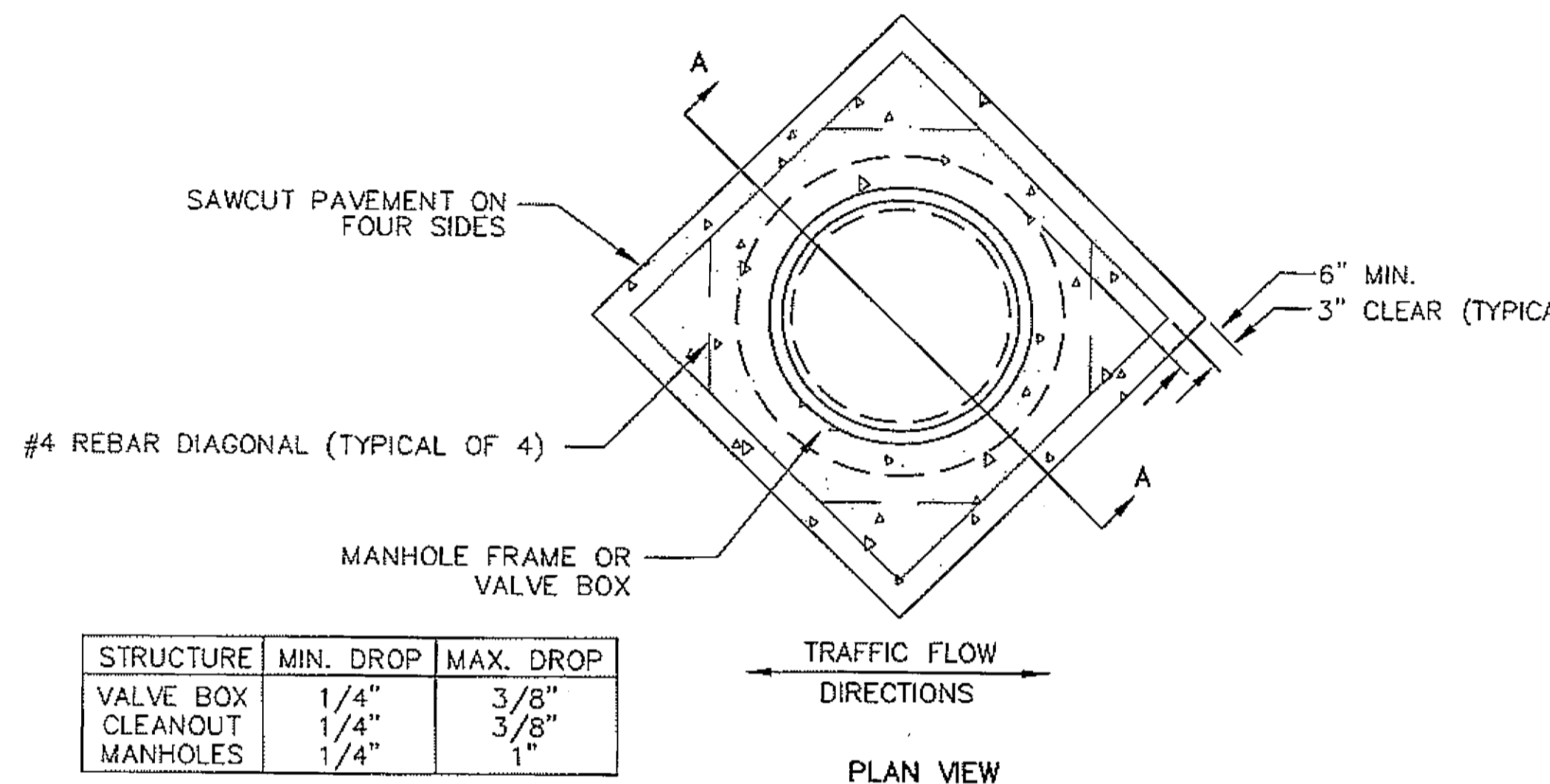


TYPICAL DROP CONNECTION

DROP MANHOLE	
SEWER DIA. D1	DROP DIA. D2
8"	8"
10"	10"
12"	12"
15"	12"
18"	15"
21"	15"
24"	18"
30"	21"
36"	24"



SECTION A-A

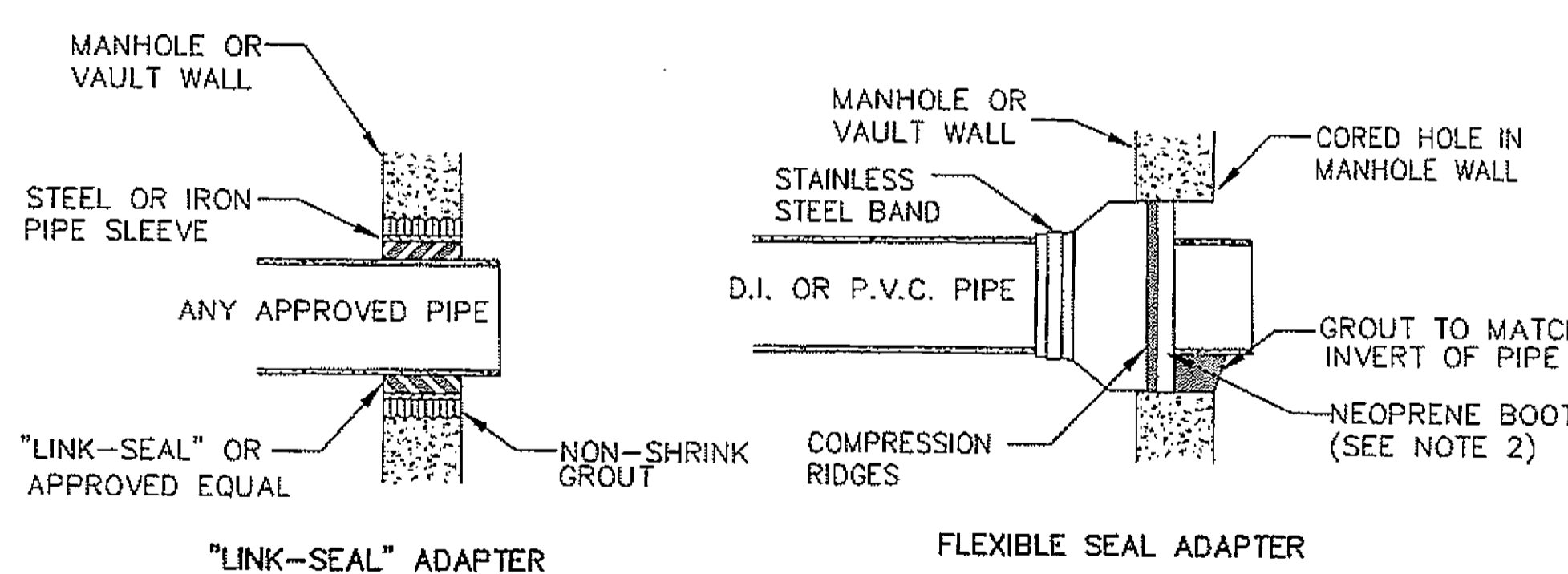


STRUCTURE	MIN. DROP	MAX. DROP
VALVE BOX	1/4"	3/8"
CLEANOUT	1/4"	3/8"
MANHOLES	1/4"	1"

CONCRETE COLLAR DETAIL (INCIDENTAL) NOT USED

REQUIRED FOR ALL MANHOLES WITHIN ACP ROADWAY

- NOTES:
- BRING ALL STRUCTURES TO FINISH GRADE PRIOR TO PAVING. STRUCTURES NOT MEETING TOLERANCES IN ABOVE TABLE SHALL BE ADJUSTED TO GRADE AND CONCRETE COLLAR INSTALLED.
  - INSTALL CONCRETE COLLAR AROUND ALL UTILITY STRUCTURES WHEN REQUIRED BY THE ENGINEER.
  - AFTER ADJUSTING STRUCTURE TO FINISH GRADE, BACKFILL WITH CONCRETE ONLY. ASHFORD FORMULA OR APPROVED EQUAL SHALL BE APPLIED AS A CURING COMPOUND. APPLICATION SHALL CONFORM TO THE MANUFACTURER'S RECOMMENDATIONS.
  - UNLESS IMMEDIATELY BACKFILLED WITH CONCRETE, ALL SAWCUTS AND EXCAVATIONS SHALL BE PROTECTED WITH STEEL PLATES OR OTHER SUITABLE MATERIALS. THIS DETAIL TO BE USED WHEN NOT POSSIBLE TO PAVE IN PLACE OR GRADES NEED TO BE ADJUSTED AFTER PAVING.
  - TABLE ABOVE WILL GOVERN GRADE FOR PAVING IN PLACE.



TYPICAL MANHOLE CONNECTION DETAILS

- NOTES:
- ALL MANHOLE CONNECTIONS SHALL BE 100% WATERTIGHT.
  - NEOPRENE BOOT ON THE FLEXIBLE SEAL SHALL BE A MINIMUM OF 3/8" THICK PER ASTM C-443 AND SHALL BE HELD IN PLACE WITH AN INTERNAL EXPANDING BAND SUCH AS "KOR-N-SEAL" OR APPROVED EQUAL.
  - ALL PIPE SHALL EXTEND 2" INTO MANHOLE.

As Built 12/15/08  
WJ Douglas

REVISIONS					
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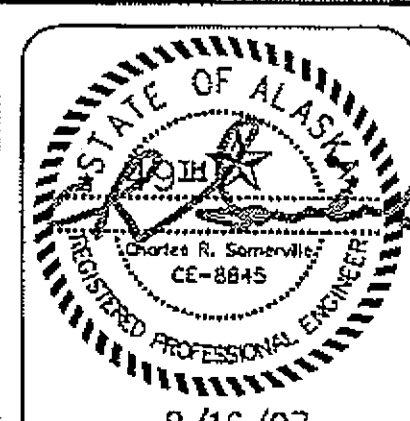
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SCALE: N.T.S.

DATE: 8/16/07

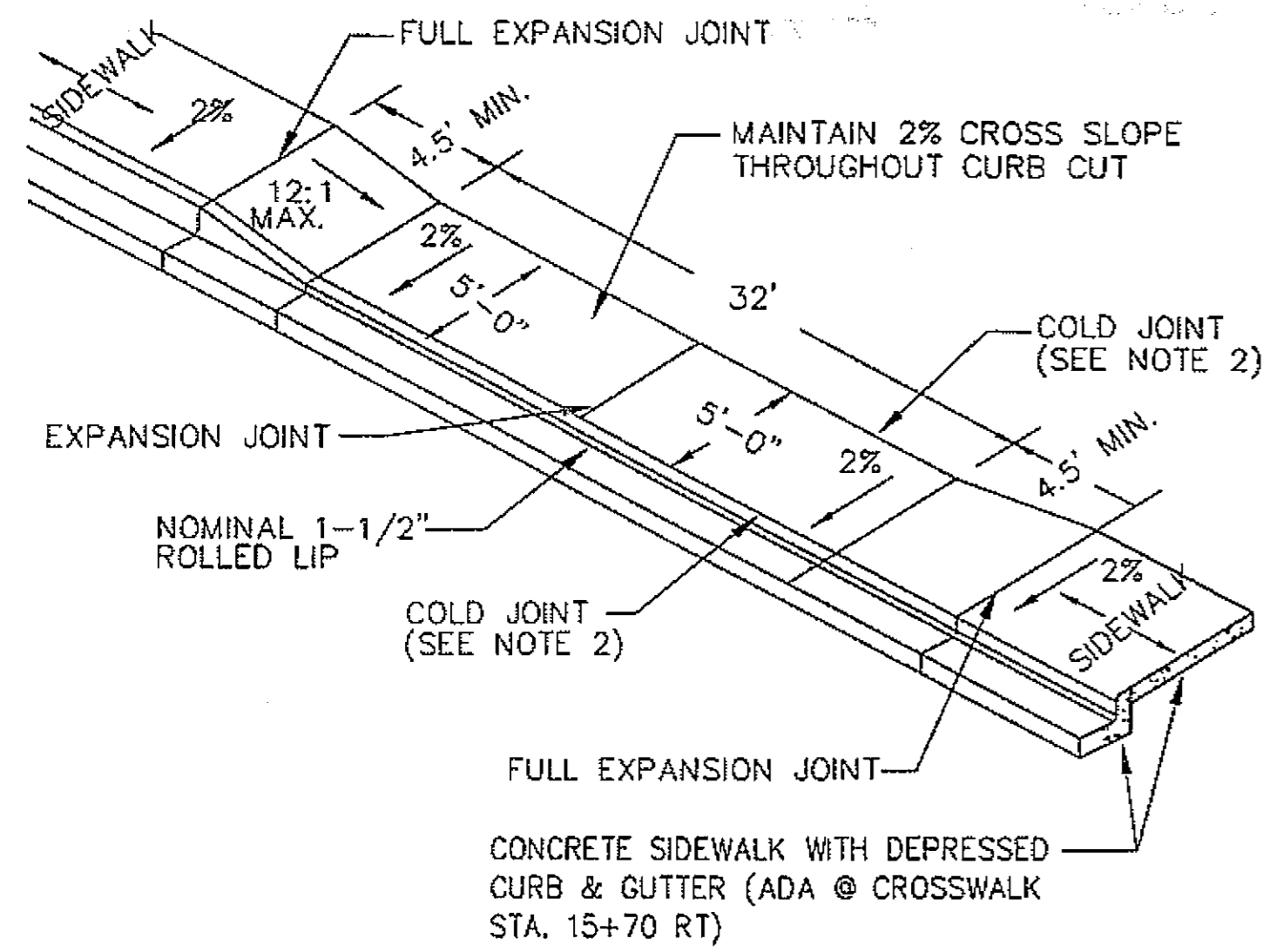


**HAINES BOROUGH, ALASKA  
THIRD AVENUE RECONSTRUCTION**

SHEET TITLE: **TYPICAL SECTIONS AND DETAILS**

PH&D PROJECT NO. 062045 DWG. FILE: SECTIONS.dwg

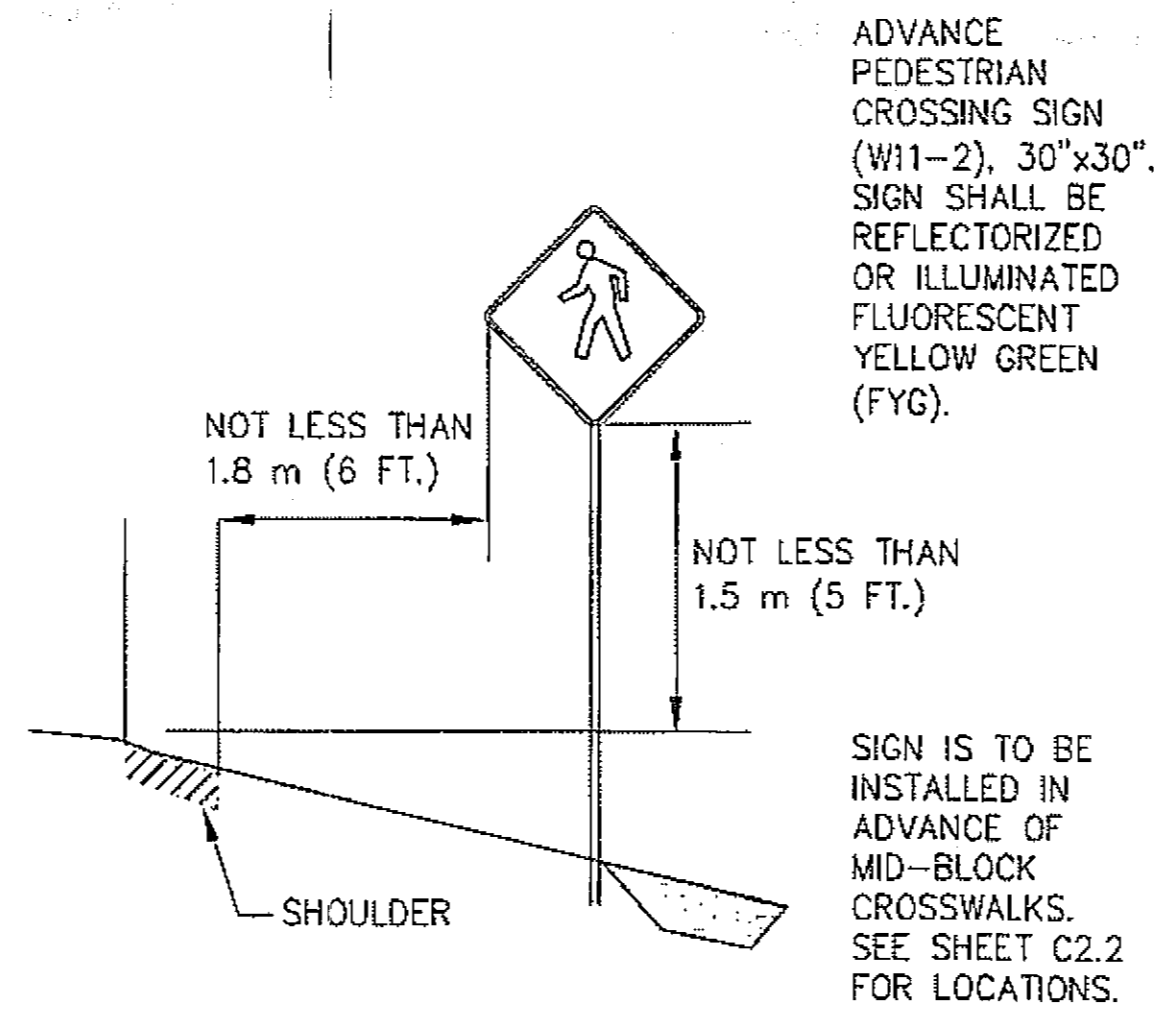
**C3.2**  
SHEET 9 OF 10



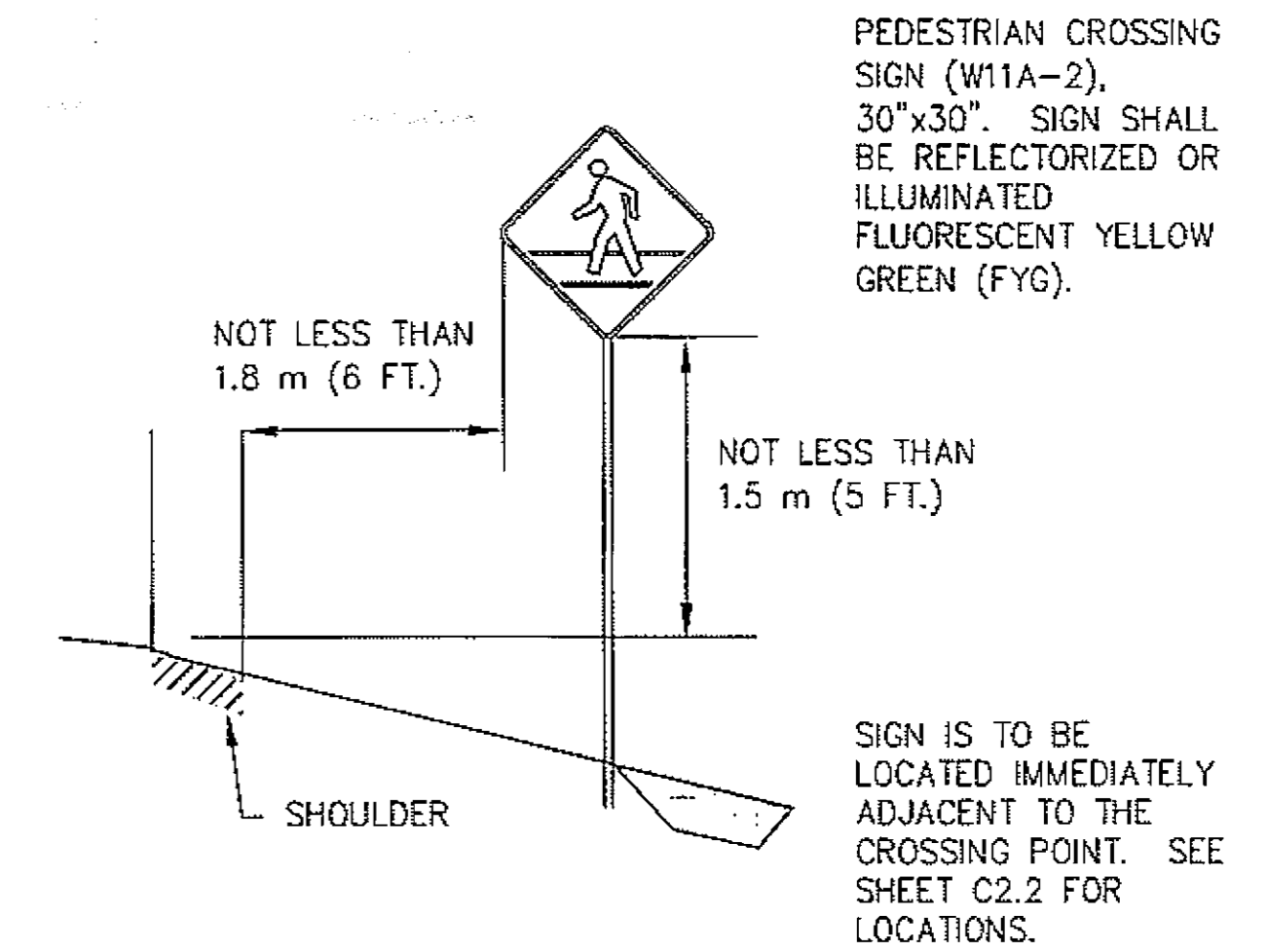
**A**  
C2.4  
**CONCRETE DRIVEWAY CURB CUT DETAIL**

**NOTES:**

1. CONCRETE INTERNATIONAL CORPORATION ASHFORD FORMULA OR APPROVED EQUAL SHALL BE APPLIED AS A CURING COMPOUND. APPLICATION SHALL CONFORM TO THE MANUFACTURER'S RECOMMENDATIONS.
2. COLD JOINT REQUIRED BETWEEN SIDEWALK AND DRIVEWAY AND BETWEEN SIDEWALK AND CURB.
3. ALL DRIVEWAY CONCRETE IN THE R.O.W. SHALL BE A MINIMUM 6" THICK AND SHALL BE POURED ON A 4" BASE OF D-1 COMPACTED TO 95% OF ITS MAXIMUM DENSITY, INCIDENTAL.
4. ADJUST SIDEWALK GRADES AT CROSSWALKS PER ADA REQUIREMENTS.



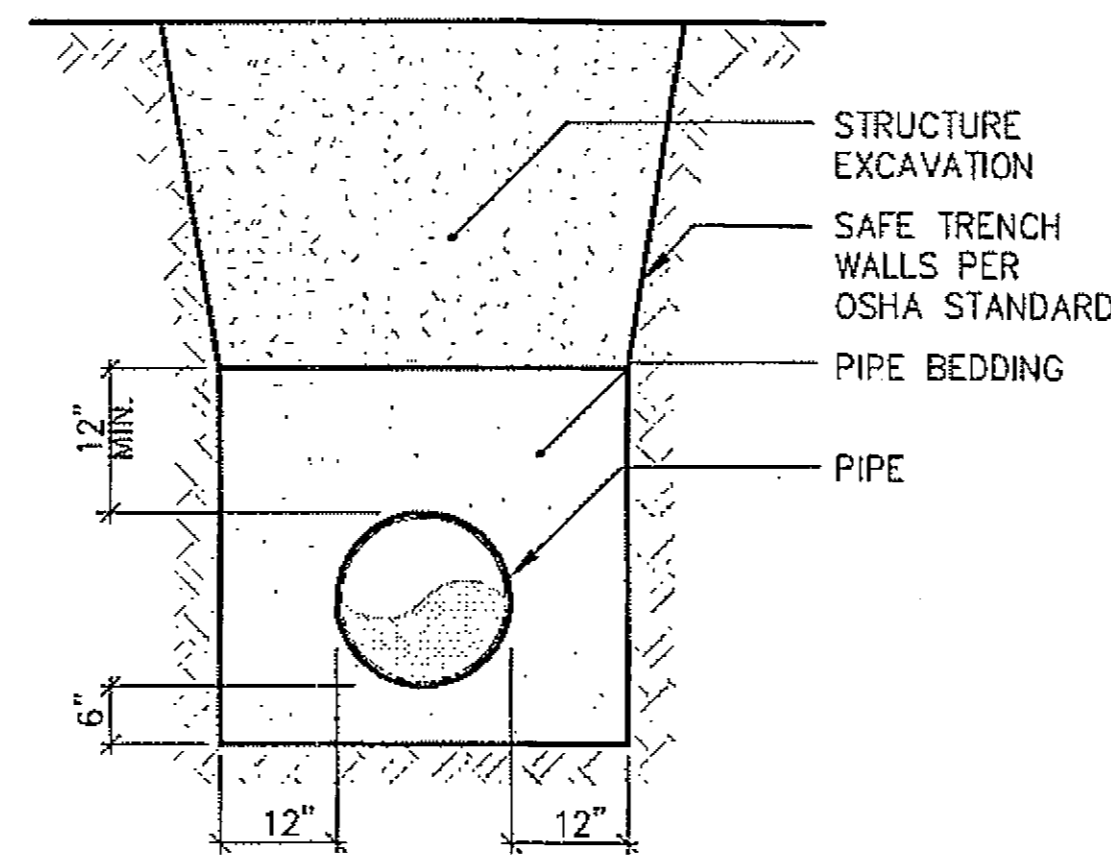
**D**  
C2.2  
**ADVANCE PEDESTRIAN CROSSING SIGN**



**E**  
C2.2  
**PEDESTRIAN CROSSING SIGN SIGN**

**NOTES:**

1. FIELD LOCATE ALL SIGNS PER ENGINEER'S APPROVAL.
2. POST SIZE TO BE 2-3/8" O.D. PERFORATED TUBE, PROVIDE CONCRETE FOUNDATION BASE, 12"  $\phi$  X 36" DEEP FOR ALL SIGNS. SOIL EMBED



**TYPICAL PIPE BEDDING SECTION**

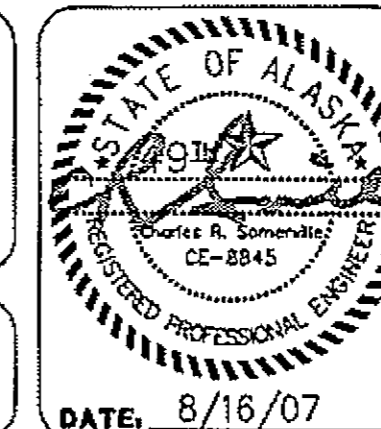
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*As Built 12/15/08*  
*WJ Daugh*

**HAINES BOROUGH, ALASKA  
THIRD AVENUE RECONSTRUCTION**

SHEET TITLE:  
**TYPICAL SECTIONS  
AND DETAILS**

PHAD PROJECT NO. 062045 DWG. FILE: SECTIONS.dwg

**C3.3**

SHEET  
10 OF 10