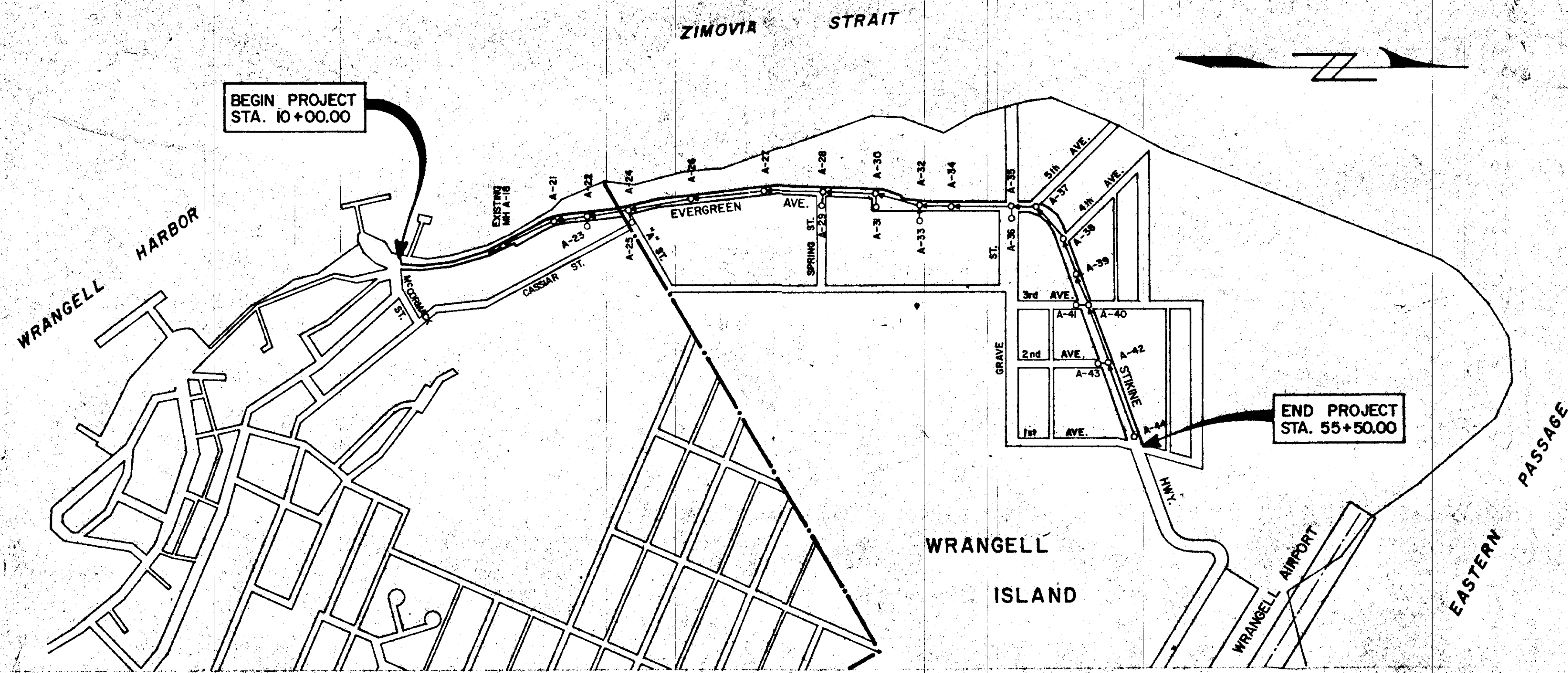


# SUPPLEMENTAL WORK "A"

## STIKINE & EVERGREEN AVE. SEWER & WATER EXTENSION A - 80311



VICINITY MAP  
SCALE: 1" = 400'

### SHEET INDEX

S-1	COVER SHEET
S-2	ESTIMATE OF QUANTITIES, LEGEND & NOTES
S-3	STATION 10+00.00 TO 15+00.00
S-4	STATION 15+00.00 TO 21+00.00
S-5	STATION 21+00.00 TO 27+00.00
S-6	STATION 27+00.00 TO 32+00.00
S-7	STATION 32+00.00 TO 38+00.00
S-8	STATION 38+00.00 TO 43+00.00
S-9	STATION 43+00.00 TO 49+00.00
S-10	STATION 49+00.00 TO 55+50.00

ESTIMATE OF QUANTITIES

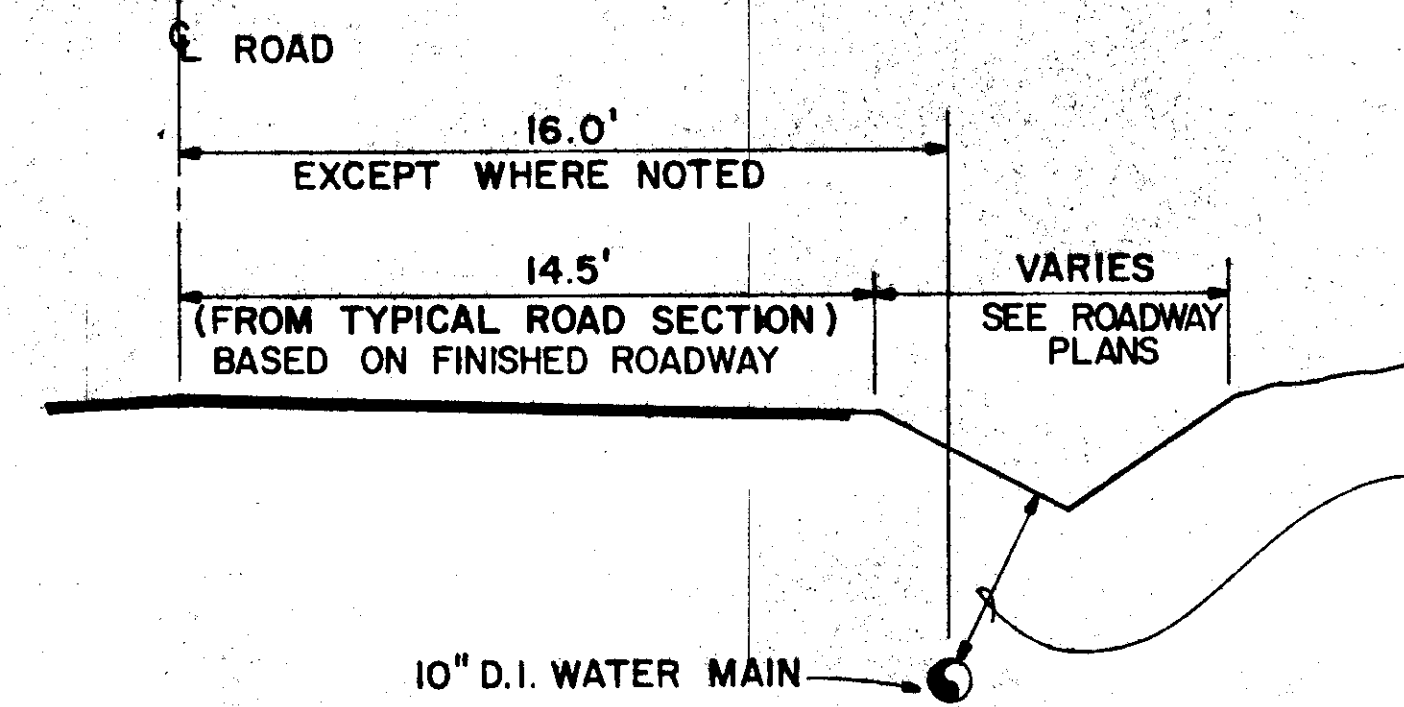
ITEM NUMBER	ITEM	UNIT	SHEET NUMBERS								TOTAL
			S-3	S-4	S-5	S-6	S-7	S-8	S-9	S-10	
110 (1)	MOBILIZATION	L.S.									ALL REQUIRED
114 (1)	CONSTRUCTION SURVEYING BY THE CONTRACTOR	L.S.									ALL REQUIRED
113 (1)	FLAGGING	MAN HOUR									200
ESTIMATED QUANTITY = 200 HOURS											
SANITARY SEWER											
604 (2)	SANITARY SEWER MANHOLE	EACH	0	3	3	3	4	4	4	3	24
604 (8)	MANHOLE EXTRA DEPTH	V.F.	0	2	8	3	6	5	8	8	40
604 (9)	INSIDE DROP MANHOLE CONNECTION	EACH	0	0	0	0	1	0	0	0	1
626 (1-6)	6 INCH PVC SEWER CONDUIT	L.F.	0	320	200	170	30	170	260	370	1520
626 (1-8)	8 INCH PVC SEWER CONDUIT	L.F.	0	602	621	529	708	621	622	559	4262
626 (2)	8 INCH DUCTILE IRON SEWER CONDUIT	L.F.	0	18	18	18	36	18	18	18	144
626 (3)	6" ON 8" TEE	EACH	0	3	5	9	3	7	10	13	50
626 (4)	6" ON 6" TEE OR WYE	EACH	0	12	5	11	3	9	12	18	70
626 (5)	CONNECTION TO EXISTING SEWER LINE	EACH	0	1	0	0	3	0	0	0	4
626 (6)	CLEANOUT	EACH	0	2	0	0	0	1	0	0	3
WATER											
628 (2-4)	4 INCH DUCTILE IRON WATER CONDUIT, CLASS 50	L.F.	0	25	0	0	0	0	0	0	25
628 (2-6)	6 INCH DUCTILE IRON WATER CONDUIT, CLASS 50	L.F.	0	0	0	0	20	0	0	0	20
628 (2-8)	8 INCH DUCTILE IRON WATER CONDUIT, CLASS 50	L.F.	0	0	20	20	0	110	110	0	260
628 (2-10)	10 INCH DUCTILE IRON WATER CONDUIT, CLASS 50	L.F.	495	600	592	500	600	490	578	615	4470
628 (2-12)	12 INCH DUCTILE IRON WATER CONDUIT, CLASS 50	L.F.	0	0	0	0	0	0	0	55	55
628 (4)	INSTALL VALVE BOX	EACH	2	1	2	2	1	3	5	4	20
628 (6)	FIRE HYDRANT INSTALLATION	EACH	1	1	1	1	1	1	1	2	9
628 (8)	FIRE HYDRANT REMOVAL	EACH	1	1	0	0	0	0	0	0	2
628 (9)	2 INCH WATER SERVICE CONNECTION	EACH	0	0	0	1	0	1	0	0	2
628 (10-4)	INSTALL 4 INCH GATE VALVE	EACH	0	1	0	0	0	0	0	0	1
628 (10-6)	INSTALL 6 INCH GATE VALVE	EACH	1	0	0	0	1	0	0	0	2
628 (10-8)	INSTALL 8 INCH GATE VALVE	EACH	0	0	1	1	0	2	3	1	8
628 (12)	CAST IRON FITTINGS	L.B.	970	1000	730	600	550	1380	1450	1750	8430
628 (13)	COMBINATION AIR VACUUM RELEASE VALVE ASSEMBLY	EACH	0	0	0	0	1	0	0	1	2
628 (14)	CONNECTION OF WATER CONDUIT TO EXISTING WATER SYSTEM	EACH	2	1	0	0	0	0	0	0	3
628 (15-10)	INSTALL 10 INCH BUTTERFLY VALVE	EACH	1	0	1	1	0	1	2	2	8
628 (15-12)	INSTALL 12 INCH BUTTERFLY VALVE	EACH	0	0	0	0	0	0	0	1	1
628 (16)	3/4" WATER SERVICE CONNECTION, NEAR SIDE	EACH	7	2	5	4	0	2	2	5	27
628 (17)	3/4" WATER SERVICE CONNECTION, FAR SIDE	EACH	7	2	0	7	3	4	5	10	38
628 (18)	GUARD POSTS	EACH	0	2	2	2	0	2	0	2	10

LEGEND - SHEETS S-3 THRU S-10

NEW CONSTRUCTION

- ⊖ 8" SANITARY SEWER W/ MANHOLE
- ⊖ 6" SANITARY SEWER
- WATER MAIN
- WATER SERVICE
- ⊖ WATER VALVE
- ⊖ FIRE HYDRANT ASSEMBLY
- ⊖ AIR VACUUM RELEASE VALVE

NOTE: SHADED AREAS TAKEN FROM HIGHWAY PLANS, SEE NOTE 1 BELOW.



TYPICAL WATER MAIN LOCATION  
NOT TO SCALE

4' MIN. COVER (SEE SPECIFICATIONS SECTION 205-3.01 2.B). IN AREAS OUTSIDE THE LIMITS OF STAGE I ROADWAY CONSTRUCTION, THE FUTURE ROADWAY & DITCH ELEVATIONS SHALL BE USED AS CONTROL FOR DEPTH OF COVER

GENERAL NOTES

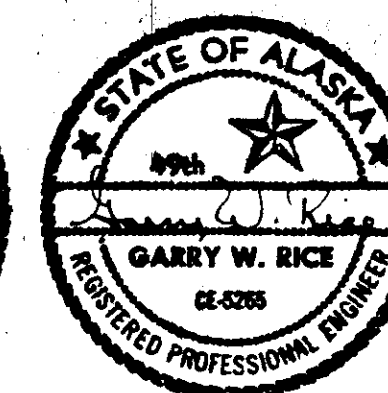
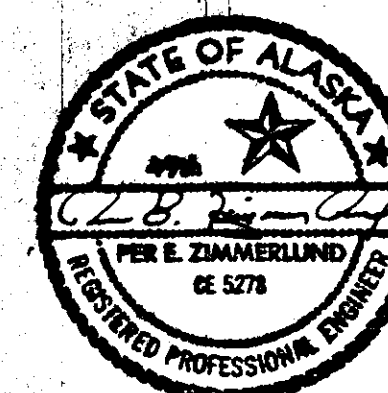
- THE SHADED PORTIONS OF SHEETS S-3 THRU S-10 WERE TAKEN FROM THE PLAN AND PROFILE SHEETS OF 'PROPOSED HIGHWAY PROJECT A-80311' PRIOR TO COMPLETION OF THE FINAL DESIGN AND SHOULD BE USED AS A REFERENCE ONLY. REFER TO THE HIGHWAY PLAN AND PROFILE SHEETS FOR THE FINAL DESIGN DATA.
- THE 'FINISHED PROFILE' SHOWN REFERS TO THE CENTERLINE OF 'PROPOSED HIGHWAY PROJECT A-80311'.
- ALL EXISTING WATER SERVICES WITHIN THE RIGHT-OF-WAY SHALL BE REPLACED AND SHALL BE RECONNECTED TO THE NEW WATER MAIN.
- THE EXACT LOCATION OF WATER AND SEWER SERVICES SHALL BE DETERMINED AT THE TIME OF CONSTRUCTION.
- PROVIDE 10' MINIMUM HORIZONTAL SEPARATION BETWEEN WATER AND SEWER CONDUITS.
- INSTALL ONE 18 L.F. LENGTH OF 8 INCH DUCTILE IRON SEWER CONDUIT WHERE THE 8 INCH SEWER CROSSES OVER, OR LESS THAN 3 FEET BELOW, A NEW OR EXISTING WATER MAIN. THE 18 L.F. LENGTH OF DUCTILE IRON PIPE SHALL BE CENTERED OVER (OR UNDER) THE WATER MAIN.
- THE EXISTING FIRE HYDRANTS AND VALVES TO BE REMOVED SHALL BE DELIVERED TO THE CITY OF WRANGELL'S MAINTENANCE DEPARTMENT.
- LOCATION OF EXISTING UTILITIES ARE APPROXIMATE AND SUBJECT TO FIELD VERIFICATION BY THE CONTRACTOR.
- PIPE CONDUIT LENGTHS AND LOCATIONS ARE APPROXIMATE AND ARE SUBJECT TO FIELD ADJUSTMENTS.
- FOR SUBSOILS INFORMATION SEE CENTERLINE SOILS REPORT MARCH 1982 FOR INTERPRETATION OF UNDERLYING MATERIALS.
- FIRE HYDRANTS, VALVES, WATER MAIN AND SERVICES SHALL BE INSTALLED AT DEPTHS AND LOCATIONS TO AVOID CONFLICTS WITH EXISTING AND FUTURE STORM DRAINS AND SANITARY SEWERS.

MANHOLE SUMMARY

MH. NO.	STATION	OFFSET	MH. NO.	STATION	OFFSET
A-21	18+00	24' LT.	A-33	36+84	50' RT.
A-22	19+80	17' LT.	A-34	38+05	15' LT.
A-23	19+70	28' RT.	A-35	40+87	15' LT.
A-24	22+12	17' LT.	A-36	40+87	30' RT.
A-25	22+12	30' RT.	A-37	42+06	20' LT.
A-26	24+82	17' LT.	A-38	44+24	17' LT.
A-27	28+40	17' LT.	A-39	46+16	17' LT.
A-28	31+65	17' LT.	A-40	47+83	17' LT.
A-29	31+65	30' RT.	A-41	47+66	30' RT.
A-30	34+23	17' LT.	A-42	50+75	17' LT.
A-31	34+26	22' RT.	A-43	50+75	30' RT.
A-32	36+84	16' LT.	A-44	54+30	17' LT.

ABBREVIATIONS

A.C.	ASBESTOS CEMENT
BSMT.	BASEMENT
C.O.	CLEANOUT
D.I.	DUCTILE IRON
DMH	DROP MANHOLE
F.	FLANGE
FF.	FINISHED FLOOR
F.H.	FIRE HYDRANT
G.V.	GATE VALVE
H.	HUB
HSE.	HOUSE
INV.	INVERT
L.F.	LINEAL FEET
LT.	LEFT OF HIGHWAY CENTERLINE
M.J.	MECHANICAL JOINT
MH.	MANHOLE
P.E.	PLAIN END
PVC.	POLYVINYL CHLORIDE
RT.	RIGHT OF HIGHWAY CENTERLINE
S.	SLOPE
S.S.	SANITARY SEWER



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Seattle, Washington

STIKINE & EVERGREEN AVE.  
ESTIMATE OF QUANTITIES,  
LEGEND & NOTES

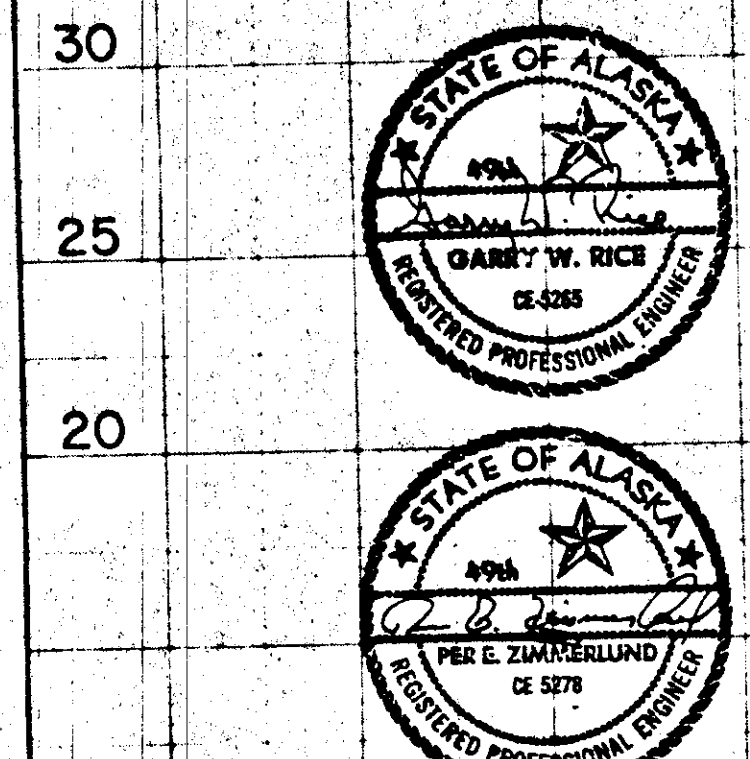
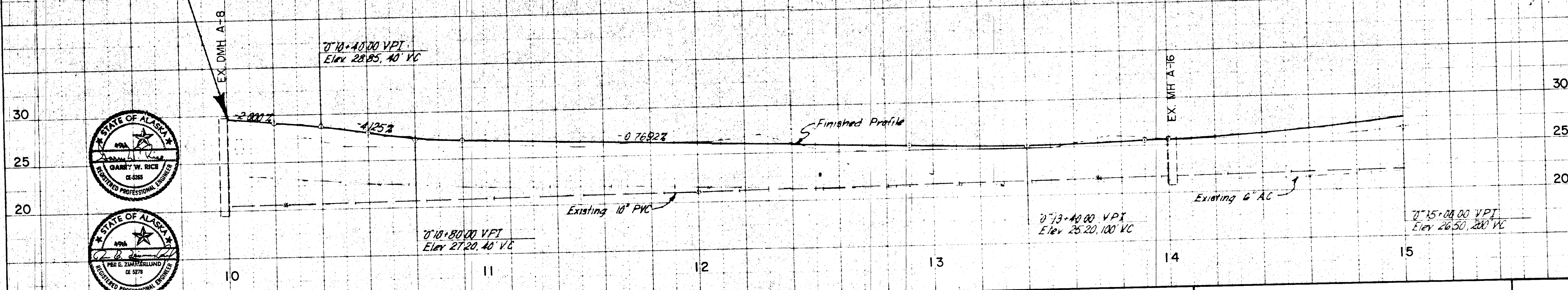
**HORIZONTAL CONTROL**  
 Horizontal Control is based on a reference bearing of S21°56'35"W from U.S.C. # 65 Brass Cap Field to a U.S.C. # 65 Brass Cap Lithograph

Indicates wood structures to be removed and paid for under Item 202(1), Removal of Structures and Obstructions

BOP Coordinates  
 State Plane Grid Coordinates  
 (N 1697779.967) (E 2944135.043)  
 Project Datum (Assumed)  
 (N 26790.907) (E 80951.604)

BEGIN PROJECT  
 A-80311  
 STA. "O" 10+00 (4.0' LT.) =  
 STA. "L" 10+00

**VERTICAL CONTROL**  
 Vertical Control is based on a U.S.C. # 65 Bench Mark No. 9 1971. It is set flush with the top step of the stairs leading to the basement of the U.S. Post Office # Customs House Elevation 44.80 above M.L.L.W.



No.	DATE	BY	REVISION

Job No. 4634-0007-05  
 SCALE: Vert. 1" = 5', Horiz. 1" = 20'  
 Designed: VS / KRL  
 Drawn: SM / DJ  
 Checked: GR  
 Project Engineer: [Signature]  
 Approved: [Signature]  
 Date: 11-18-82

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STIKINE & EVERGREEN AVE.  
 STATION 10+00 TO STATION 15+00  
 SEWER & WATER EXTENSIONS

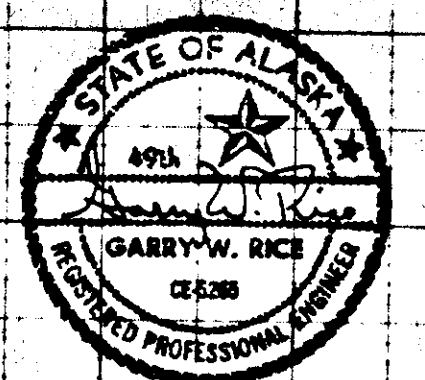
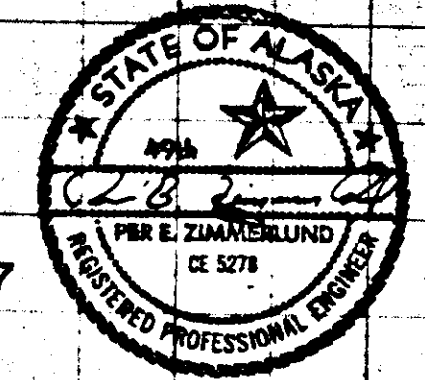
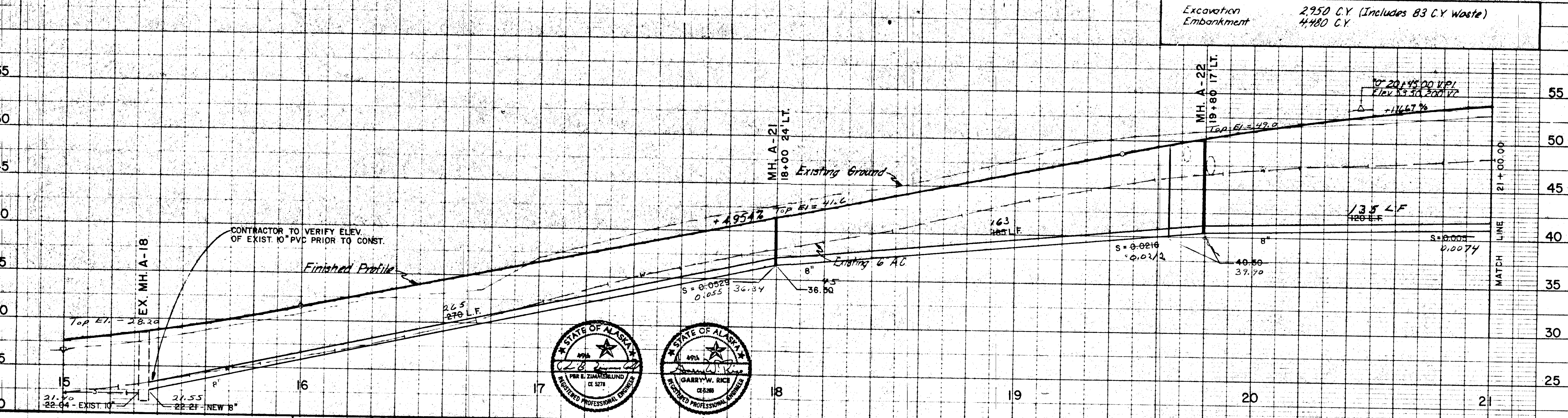
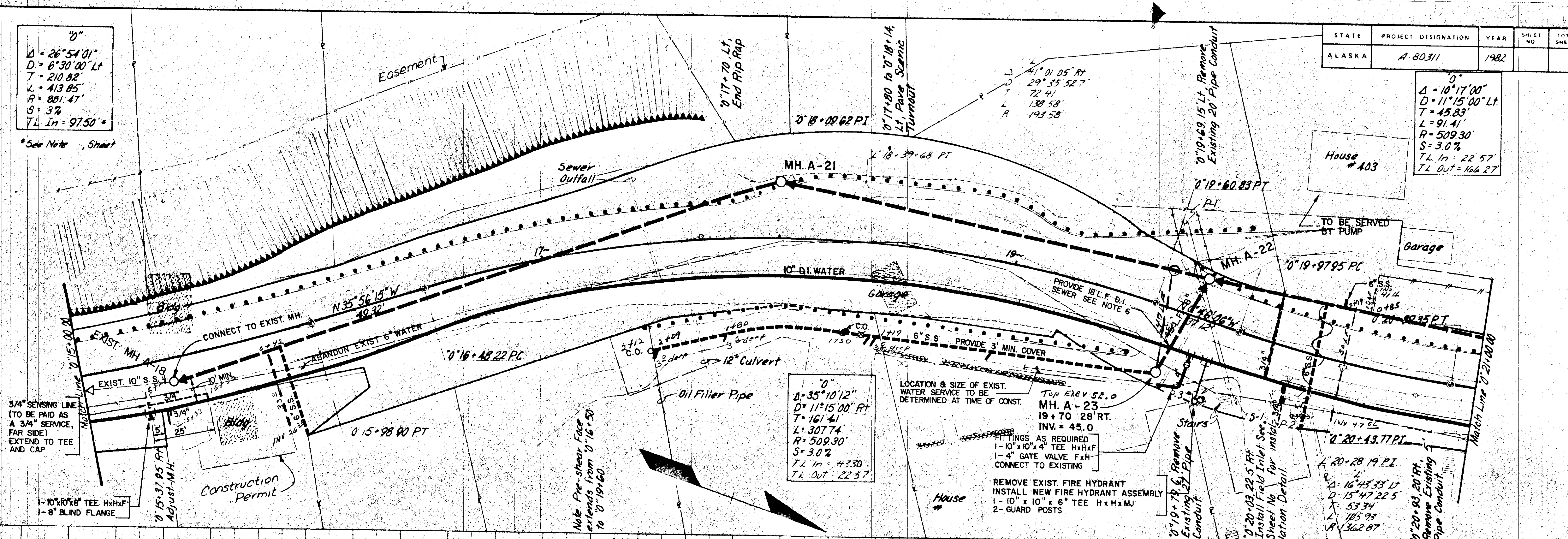
S-3  
 SHEET 3 OF 10  
 3/4" Service (Near) - 7 ea.

$\Delta = 26^{\circ}54'01''$   
 $D = 6^{\circ}30'00''$  LT  
 $T = 210.82'$   
 $L = 413.85'$   
 $R = 881.47'$   
 $S = 3\%$   
 $T.L. In = 97.50'$

\* See Note, Sheet

STATE	PROJECT DESIGNATION	YEAR	SHEET NO	TOTAL SHEETS
ALASKA	A 80311	1982		

$\Delta = 10^{\circ}17'00''$   
 $D = 11^{\circ}15'00''$  LT  
 $T = 45.83'$   
 $L = 91.41'$   
 $R = 509.30'$   
 $S = 3.0\%$   
 $T.L. In = 22.57'$   
 $T.L. Out = 166.27'$



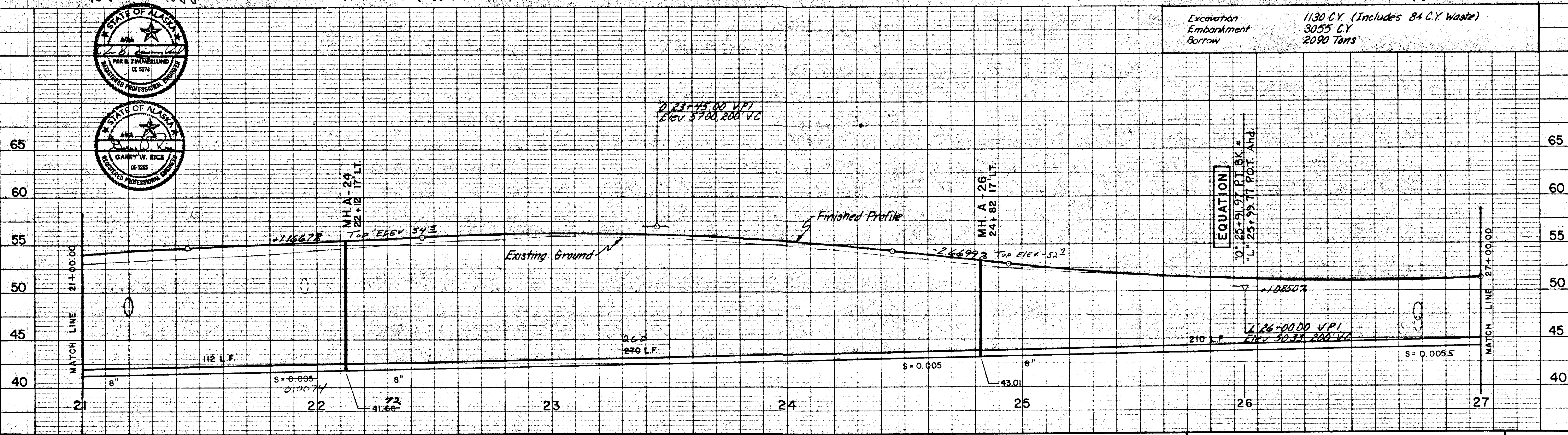
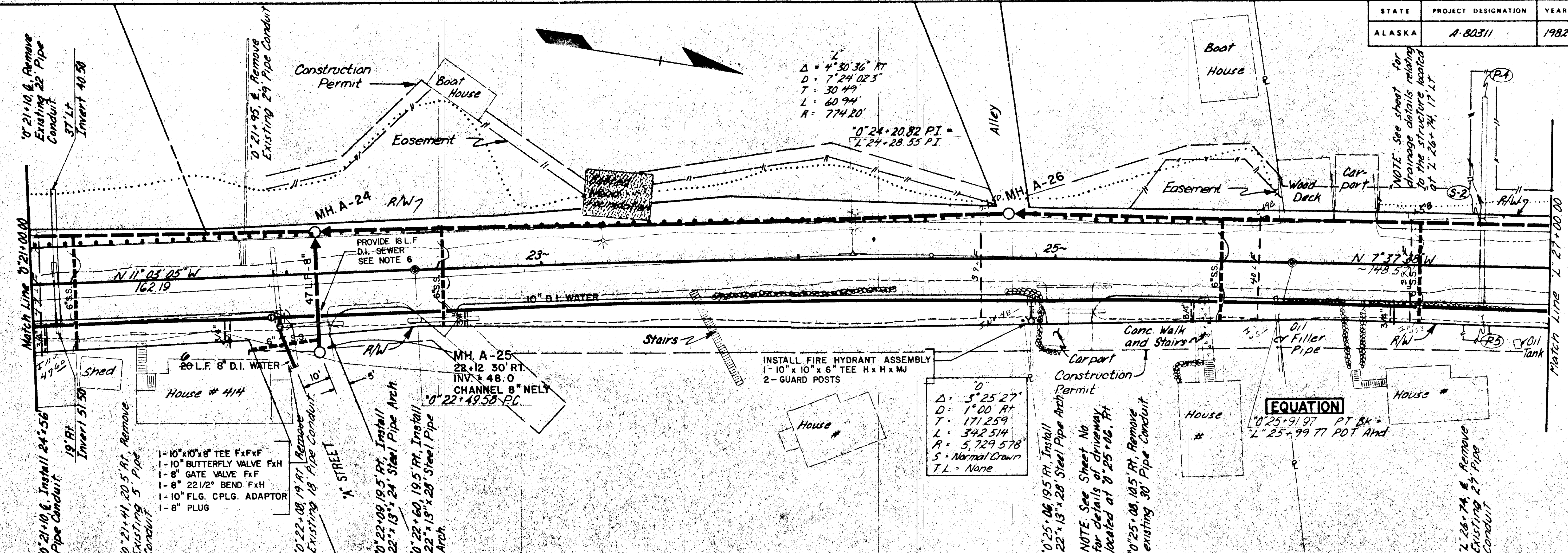
**URS COMPANY**  
 A Professional Services Organization  
 Seattle, Washington

STIKINE & EVERGREEN AVE  
 STATION 15+00 TO STATION 21+00  
 SEWER & WATER EXTENSIONS

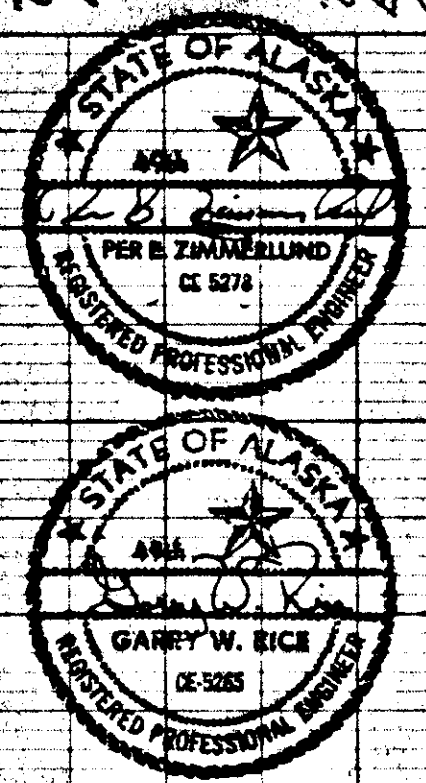
S-4

No.	DATE	BY	REVISION

Job No 4634-0007-05  
 SCALE: Vert 1" = 5', Horiz 1" = 20'  
 Designed: VS / KRL, Drawn: SM / DJ, Checked: GR  
 Proj. Engr: [Signature], Approved: [Signature], Date: 11-18-82



Excavation  
Embankment  
Borrow  
1130 C.Y. (Includes 84 C.Y. Waste)  
3055 C.Y.  
2090 Tons



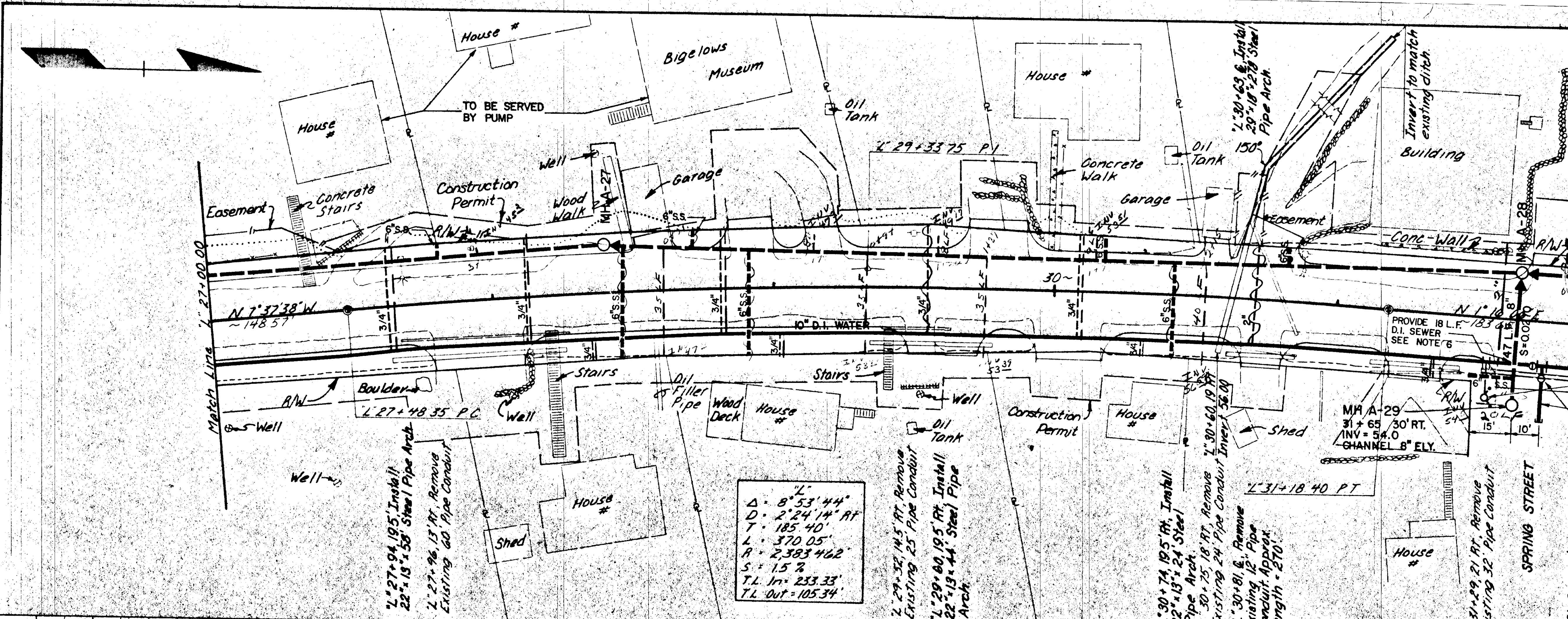
No.	DATE	BY	REVISION

Job No 4634-0007-05  
 SCALE: Vert. 1" = 5', Horiz. 1" = 20'  
 Designed by VS/KRL  
 Drawn by SM/DJ  
 Checked by GR  
 Proj. Eng. [Signature]  
 Approved by [Signature]  
 Date: 11-18-82

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 A Professional Services Organization  
 Seattle, Washington

**STIKINE & EVERGREEN AVE.**  
 STATION 21+00 TO STATION 27+00  
 SEWER & WATER EXTENSIONS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO	TOTAL SHEETS
ALASKA	A-80311	1982		



Note: See Sheet No. for details of driveways located at L 27+94 Ft., L 29+60 Ft., L 29+80 Ft.

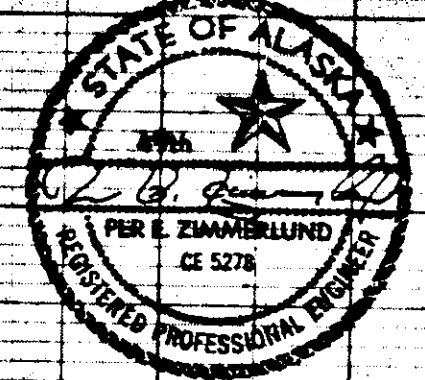
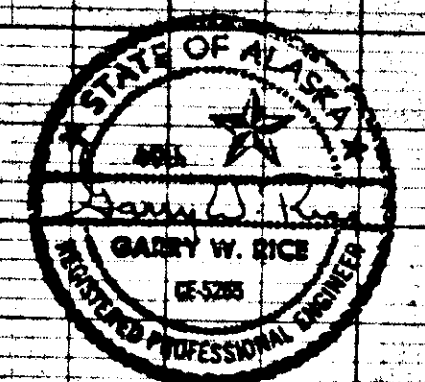
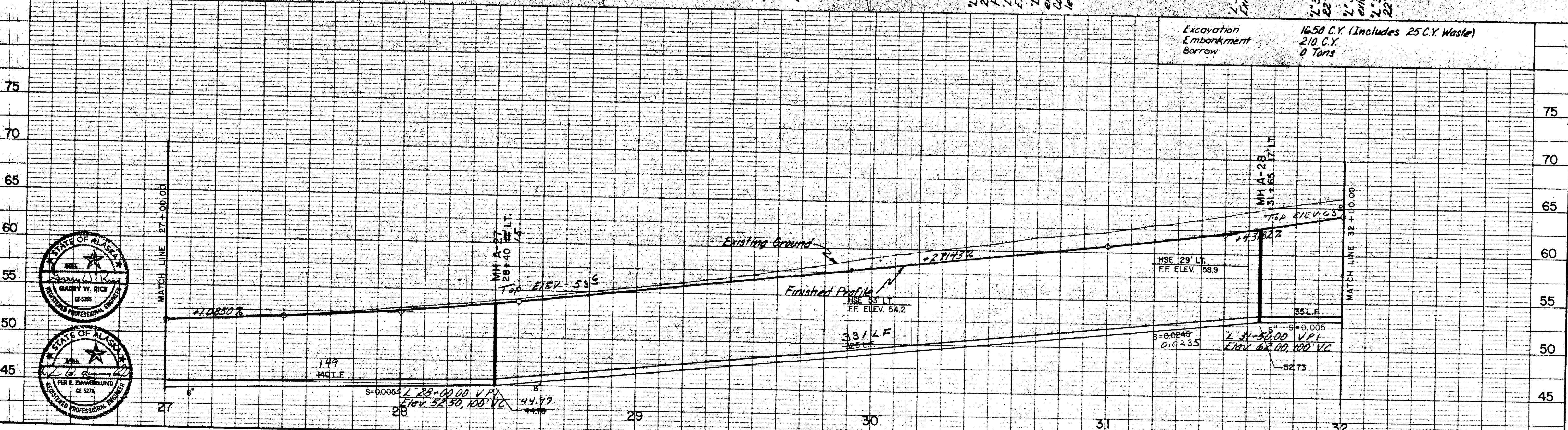
INSTALL FIRE HYDRANT ASSEMBLY  
1- 10" x 10" x 6" TEE - H x H x MJ  
2- GUARD POSTS

20 L.F. 8" D.I. WATER

1- 10" x 10" x 8" TEE - F x F x F  
1- 10" BUTTERFLY VALVE - F x H  
1- 8" GATE VALVE F x H  
1- 10" FLG. CPLG. ADAPTOR  
1- 8" PLUG

L  
Δ = 8' 53' 44"  
D = 2' 24' 14" RT  
T = 185' 40"  
L = 370' 05"  
R = 2,383' 462"  
S = 1.5 %  
T.L. In = 233' 33"  
T.L. Out = 105' 34'

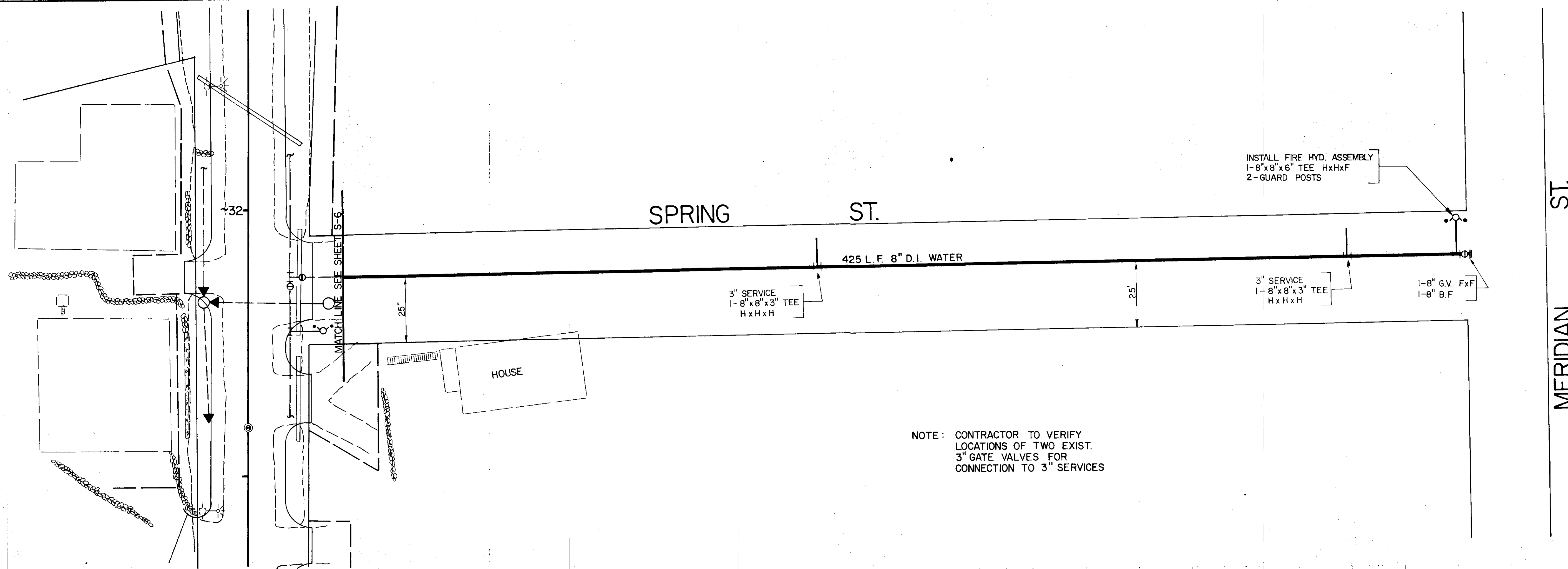
Excavation 1650 C.Y. (Includes 25 C.Y. Waste)  
Embankment 210 C.Y.  
Borrow 0 Tons



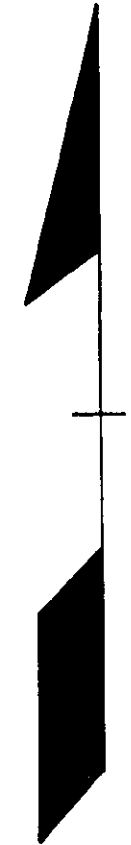
Job No 4634-0007-06  
SCALE: Vert. 1" = 5', Horiz. 1" = 20'  
Designed VS/KRL  
Drawn by DJ/SM  
Checked by GR  
Proj. Engr. [Signature]  
Approved by [Signature]  
Date 11-18-82

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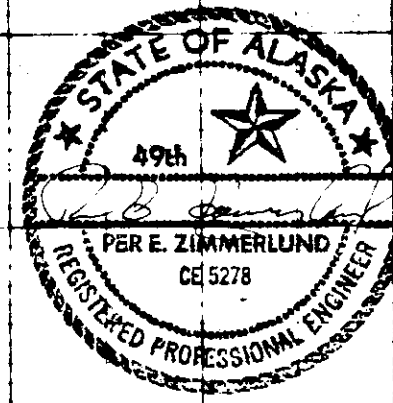
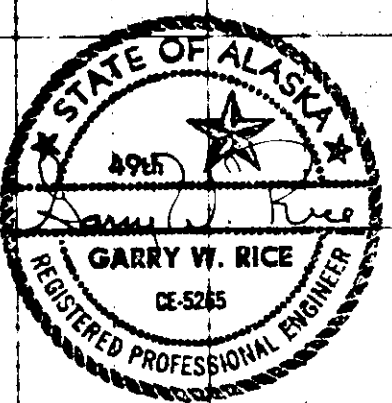
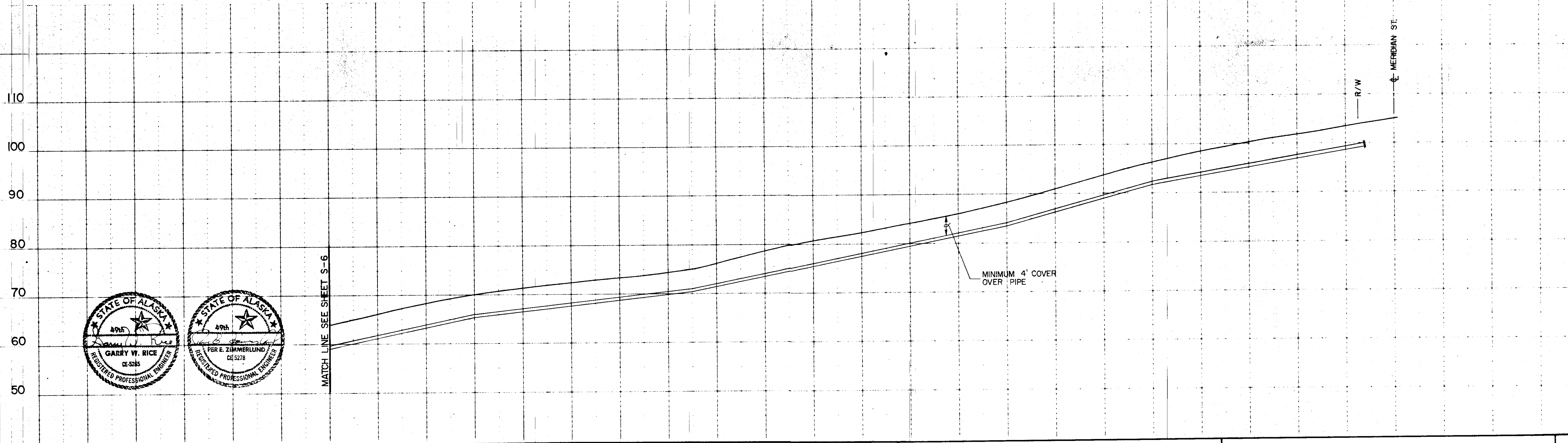
STIKINE & EVERGREEN AVE.  
STATION 27+00 TO STATION 32+00  
SEWER & WATER EXTENSIONS



MERIDIAN ST.



NOTE: CONTRACTOR TO VERIFY  
LOCATIONS OF TWO EXIST.  
3\"/>



MATCH LINE SEE SHEET S-6

PROJECT NO.	4634-0007-05
SCALE	VERT : 10' HORZ : 20'
DATE	5-6-83

DESIGNED BY: SC  
DRAWN BY: DJ  
CHECKED BY: SC

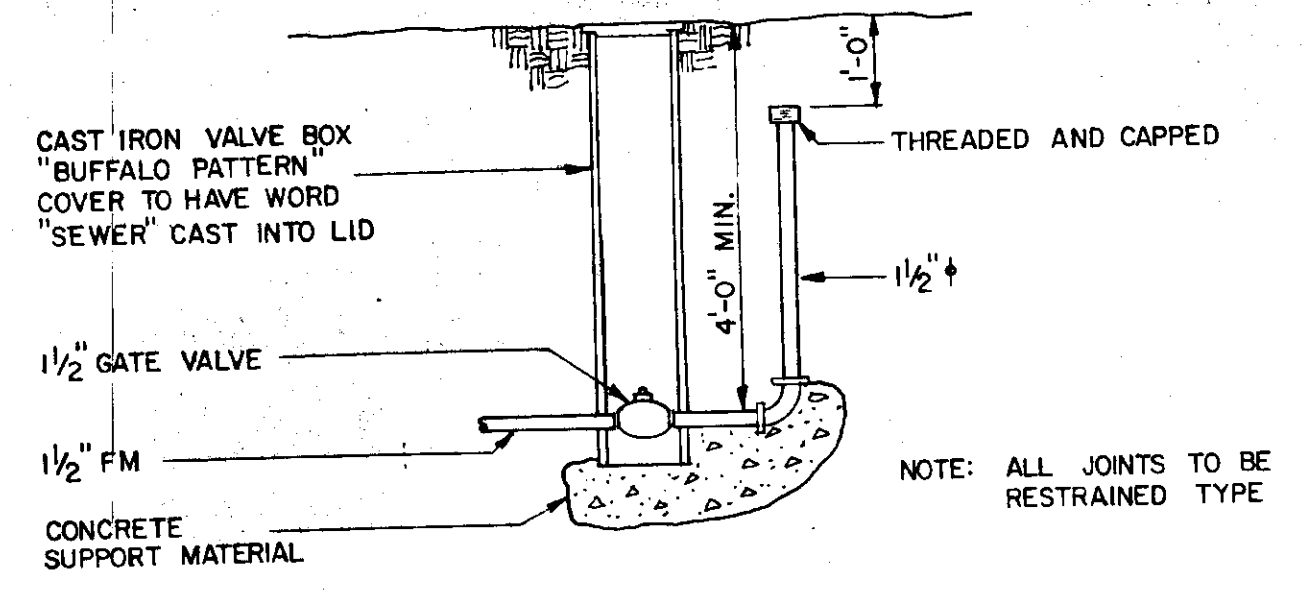
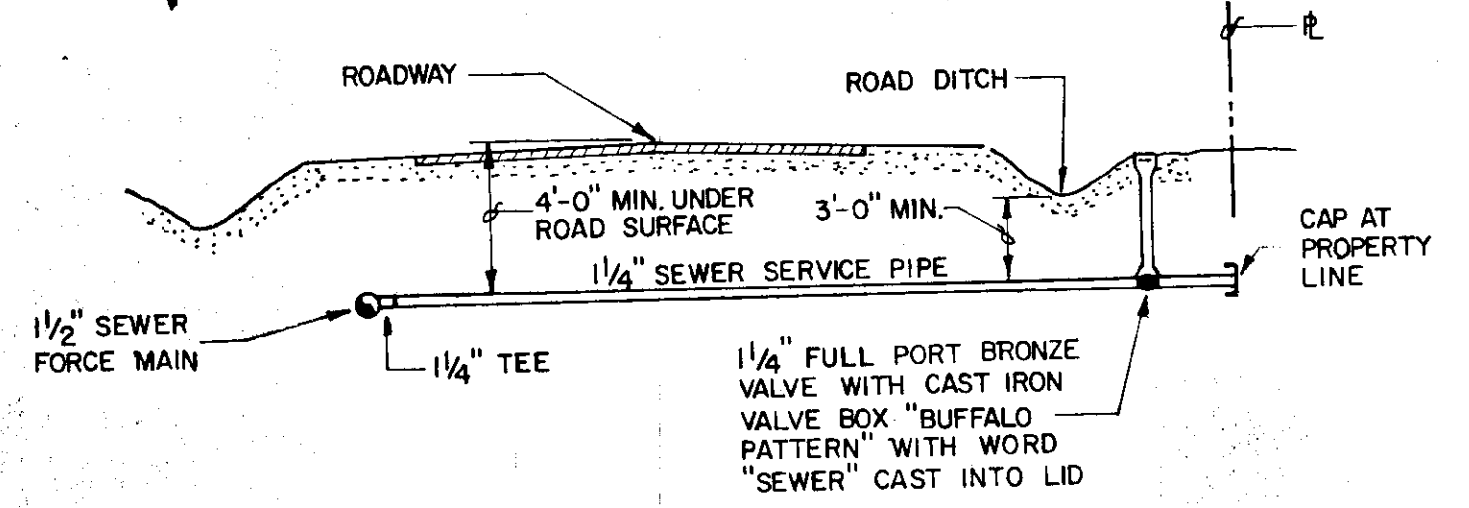
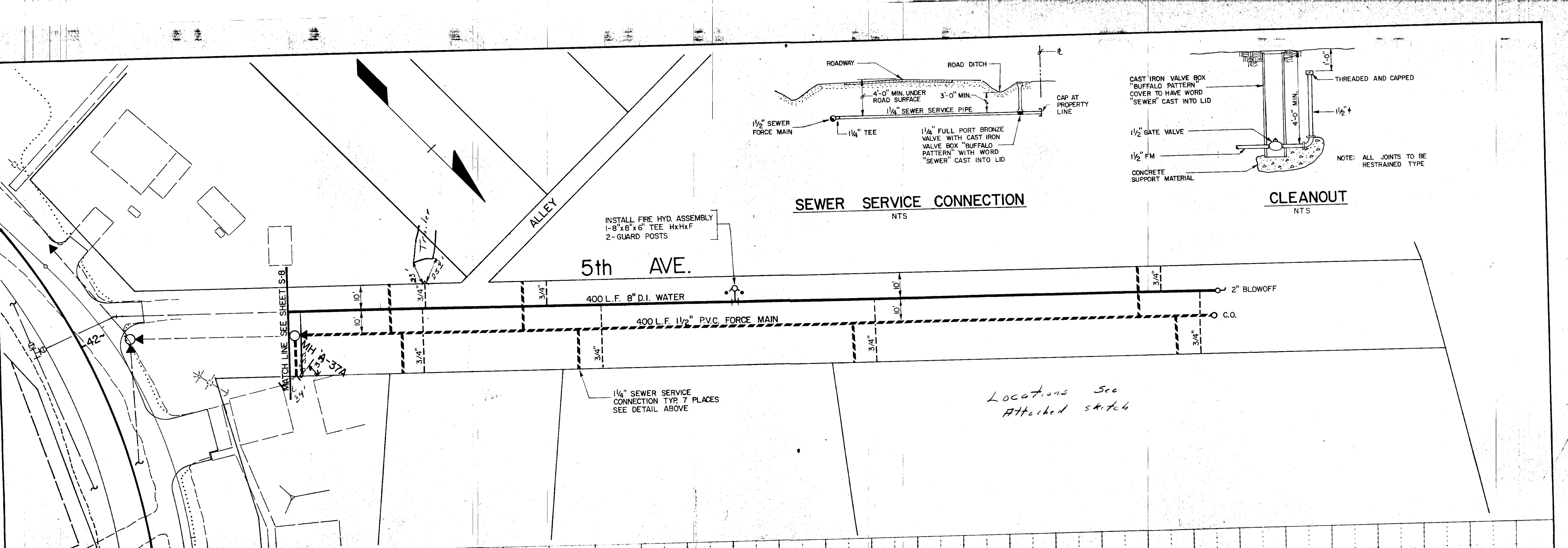
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Seattle, Washington

STIKINE & EVERGREEN AVE.  
SPRING STREET  
WATER EXTENSION

S-6A  
SHEET 6A OF

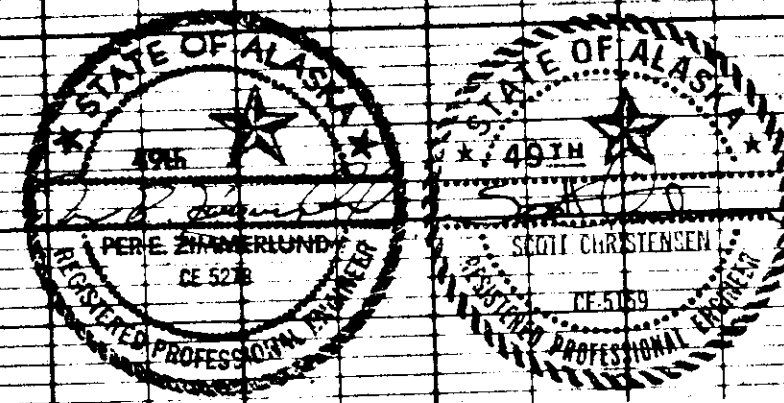
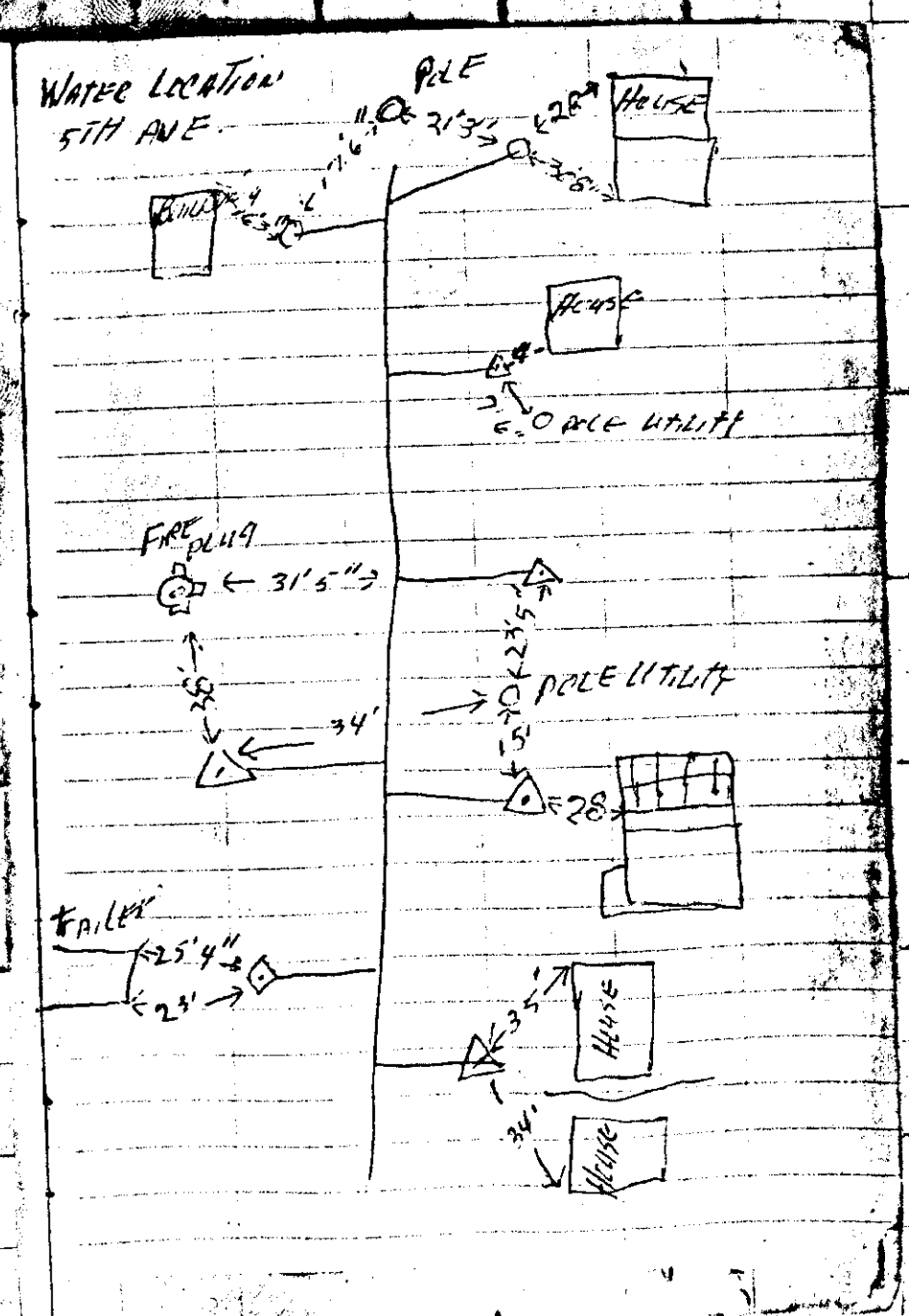
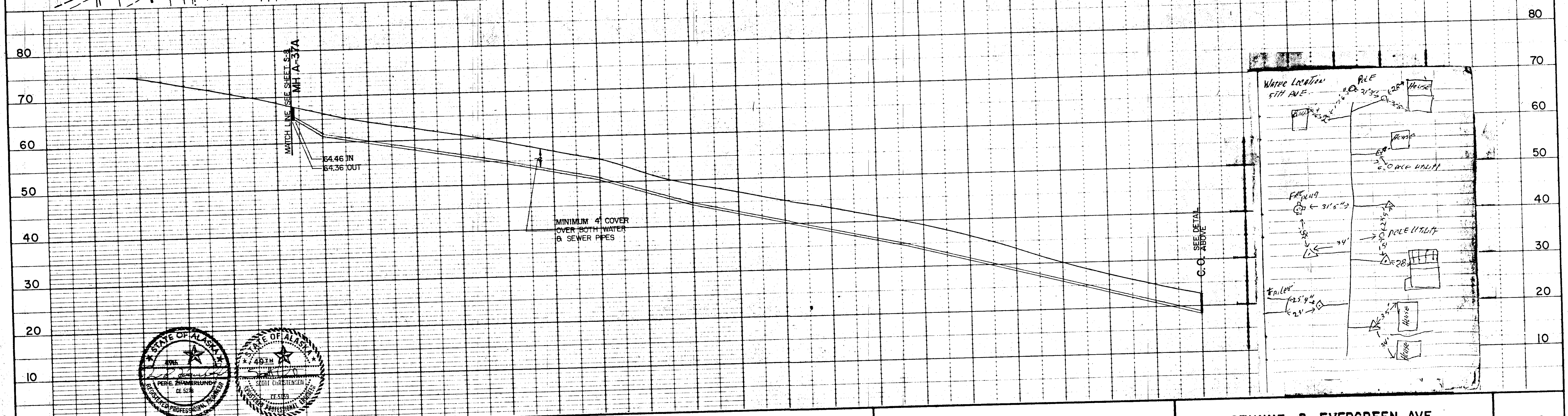






INSTALL FIRE HYD. ASSEMBLY  
1-8"x8"x6" TEE HxHxF  
2- GUARD POSTS

*Locations see  
Attached sketch*



Job No 4634-0007-05  
Designed SC  
Drawn by DJ  
SCALE

Proj. Engr. [Signature]  
Approved by [Signature]  
3-15-83

**URS COMPANY**

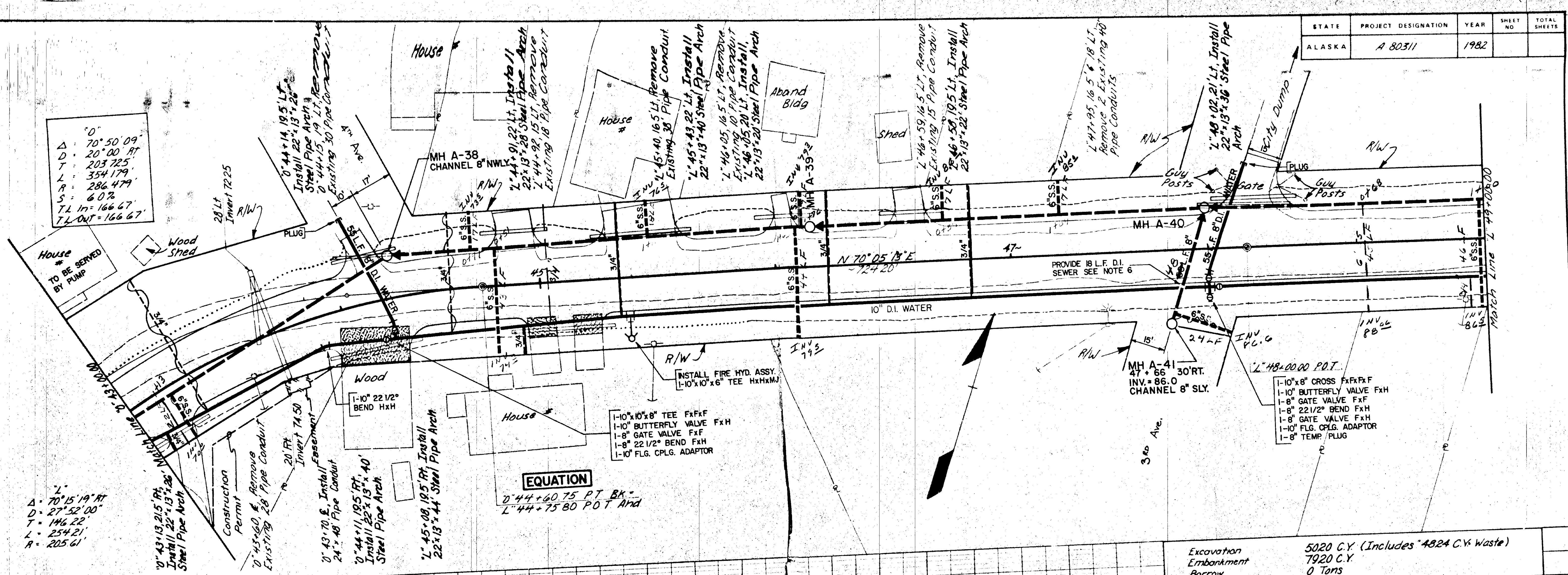
A Professional Services Organization  
Seattle, Washington

STIKINE & EVERGREEN AVE.  
FIFTH AVENUE  
SEWER & WATER EXTENSIONS

S-8A.

SHEET 8A OF 10

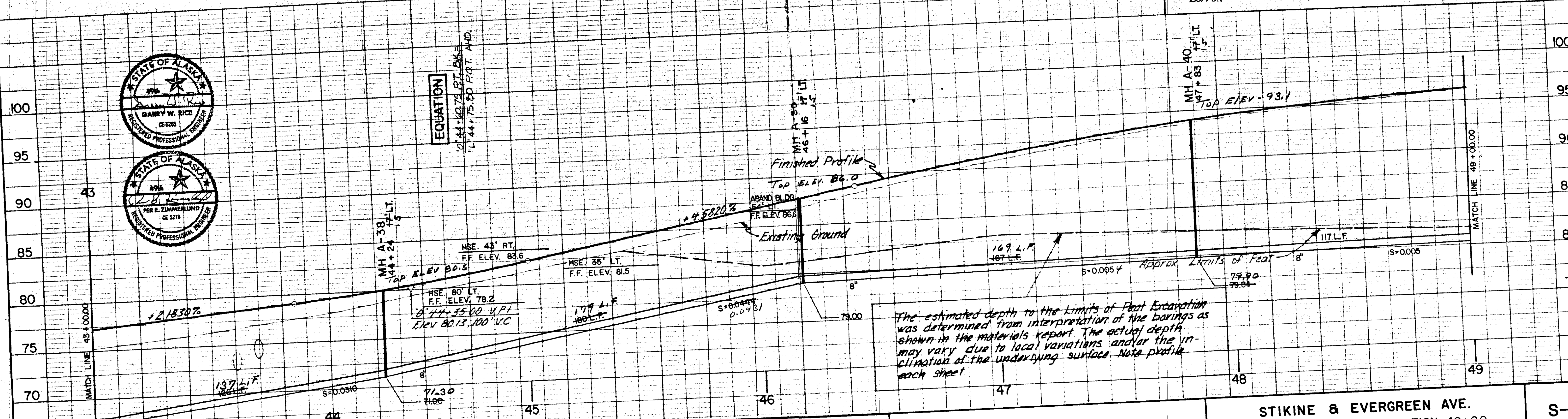
STATE	PROJECT DESIGNATION	YEAR	SHEET NO	TOTAL SHEETS
ALASKA	A 80311	1982		



$\Delta = 70^{\circ}15'19''$   
 $D = 27^{\circ}52'00''$   
 $T = 146.22'$   
 $L = 254.21'$   
 $R = 205.61'$

**EQUATION**  
 $0^{\circ}44+60.75$  PT. BK.  
 $L^{\circ}44+75.80$  P.O.T. AND

- 1-10" x 8" CROSS FxFxFxH
- 1-10" BUTTERFLY VALVE FxH
- 1-8" GATE VALVE FxF
- 1-8" 22 1/2" BEND FxH
- 1-8" GATE VALVE FxH
- 1-10" FLG. CPLG. ADAPTOR
- 1-8" TEMP. PLUG



The estimated depth to the Limits of Peat Excavation was determined from interpretation of the borings as shown in the materials report. The actual depth may vary due to local variations and/or the inclination of the underlying surface. Note profile each sheet.

Excavation Embankment Borrow 5020 C.Y. (Includes 4824 C.Y. Waste) 7920 C.Y. 0 Tons

