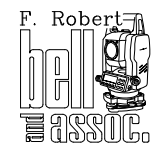
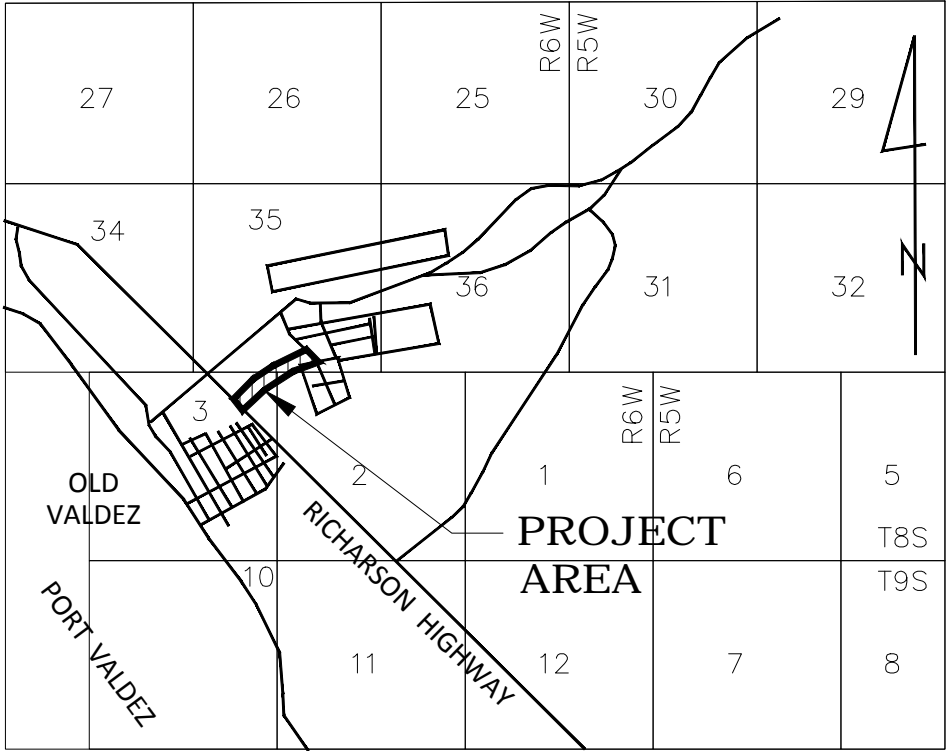


SAWMILL DRIVE ROAD EXTENSION  
VALDEZ, ALASKA  
SANITARY SEWER MAINLINE EXTENSION  
&  
STREET IMPROVEMENTS  
MARCH 30TH, 2012



F. ROBERT BELL & ASSOCIATES  
801 W. FIREWEED LN; #201  
ANCHORAGE, AK 99503  
(907) 274-5257



USGS QUADRANGLES VALDEZ (A-6 & A-7) SCALE 2"= 1 MILE

VICINITY MAP

CALL BEFORE YOU DIG

CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF EXCAVATION THE FOLLOWING IS A PARTIAL LIST:

CITY OF VALDEZ PUBLIC WORKS

VALDEZ WATER

CVEA

CROWLEY

LOCATE CENTER OF ALASKA: STATEWIDE

835-4473

835-2997

835-4301

835-4558

1-800-478-3121

CAUTION

EXISTING UTILITY LOCATIONS ARE APPROXIMATE.

CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION.



DATE: \_\_\_\_\_

REVISION: \_\_\_\_\_

CLIENT: CITY OF VALDEZ

ADDRESS: 212 CHENEGA AVE  
VALDEZ, AK 99686

JOB NUMBER: 2010-1534

SCALE: AS SHOWN

DRAWN BY: CLB

CHECKED BY: DDS

DATE: 5/18/11

FIELD BOOK: N/A

SAWMILL DRIVE UPGRADE  
& SEWER MAINLINE EXTENSION

VICINITY MAP, LEGEND & GENERAL NOTES

NO WEST FIREWEED LANE DRIVE 201  
FIREWEED LANE DRIVE 201  
PHONE (907) 274-5257

SHEET:

C0.00

GENERAL CONSTRUCTION NOTES

1. ALL CONSTRUCTION SHALL BE INSTALLED AS SPECIFIED IN THE MOST CURRENT EDITION OF THE CITY OF VALDEZ STANDARD CONSTRUCTION SPECIFICATIONS FOR STREETS--DRAINAGE--UTILITIES--PARKS (CVSS).
2. THE CONTRACTOR IS REQUIRED TO COMPLY WITH CITY OF VALDEZ NOISE AND HOURS OF OPERATION REQUIREMENTS.
3. HOURS OF CONSTRUCTION SHALL BE FROM 7 A.M. TO 8 P.M.
4. UNDERGROUND CABLE AND TELEPHONE UTILITIES WERE LOCATED BY THE LOCAL UTILITY COMPANIES AND ARE SHOWN ON THIS DRAWING. CONTRACTOR TO VERIFY LOCATIONS PRIOR TO CONSTRUCTION.
5. WATER AND SEWER UTILITIES SHOWN ON THIS PLAN ARE COPIED FROM MUNICIPAL GIS MAPPING PROVIDED BY THE VALDEZ CITY ENGINEER AND ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR TO VERIFY LOCATIONS PRIOR TO CONSTRUCTION.
6. ALL ORGANIC MATERIALS SHALL BE CLEARED AND REMOVED FROM THE SITE. ONLY CLASSIFIED FILL MATERIALS SHALL BE USED.
7. ALL MATERIALS REMOVED FROM THE SITE SHALL BE DISPOSED OF IN A LEGAL MANNER. CONTRACTOR IS TO PROVIDE CERTIFICATION AND RECEIPTS OF THE DISPOSAL LOCATION(S) TO THE OWNER.
8. CLASSIFIED FILLS SHALL BE HAULED FROM A CERTIFIED SITE AND SHALL MEET THE REQUIREMENTS OF SECTION 20.05 OF 2003 EDITION OF CVSS.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EROSION AND SEDIMENT CONTROLS AS NECESSARY TO COMPLY WITH FEDERAL, STATE, AND MUNICIPAL LAWS THAT PROHIBIT UNPERMITTED DISCHARGE OF POLLUTANTS, INCLUDING SEDIMENTS, THAT ARE A RESULT OF EROSION AND OTHER CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL CONDUCT ALL WORK SO SEDIMENT IS NOT TRANSPORTED ONTO THE ROADWAY OR ADJACENT PROPERTY. AT A MINIMUM, THE CONTRACTOR SHALL SWEEP UP ANY SEDIMENT TRACKED ONTO PAVED SURFACES IN PUBLIC RIGHT-OF-WAY WITHIN 24 HOURS OF THE TRACKING TO MINIMIZE THE WASH-OFF OF SEDIMENT INTO THE STORM DRAINS OR WATERWAYS.
10. CONTRACTOR SHALL PREPARE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND SUBMIT IT TO A.D.E.C. AND E.P.A. AND CITY OF VALDEZ FOR REVIEW AND APPROVAL. DURING ALL CONSTRUCTION PHASES A.D.E.C., E.P.A. AND CITY OF VALDEZ INSPECTORS MAY AT ANY TIME REQUEST THE SUBMITTAL OF THIS DOCUMENT.
11. ALL CLASSIFIED FILLS SHALL BE INSTALLED IN 12" LIFTS (MAXIMUM) AND COMPACTED TO 95% OF MAXIMUM DENSITY.
12. ALL FINISH GRADE SLOPES SHALL NOT EXCEED A 2H:1V RATIO.
13. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE WITHIN ALL CONSTRUCTION AREAS. NO WATER SHALL BE PERMITTED TO DRAIN OR POND ONTO ADJACENT PROPERTIES.
14. CONTRACTOR SHALL PROTECT ALL STRUCTURES, INCLUDING BUT NOT LIMITED TO BUILDINGS, POLES, FENCES, SIGNS, UTILITY PEDESTALS, ETC., WHICH HAVE NOT BEEN DESIGNATED FOR REMOVAL.
15. IMPACTS TO UTILITIES, STRUCTURES, AND MAILBOXES WILL REQUIRE COORDINATION WITH THE UTILITY COMPANY, PROPERTY OWNER AND POST OFFICE. IF REQUIRED FOR CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL REMOVE AND REPLACE ANY STRUCTURES, UTILITY PEDESTALS, FENCES, MAILBOXES AND PAVEMENTS TO THEIR ORIGINAL CONDITION. ANY SPECIAL PROVISIONS MUST BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY OR PROPERTY OWNER.
16. ALL DISTURBED AREAS AND DITCHES SHALL NOT BE SEEDED IF GRADES ARE LESS THEN 1%. REPLACE EXISTING ONLY.
17. ANY CHANGE TO THE PROPOSED SOURCE OF FILL, OR DISPOSAL LOCATION, FOR EXCAVATED MATERIALS WILL REQUIRE A CHANGE ORDER WITH CITY OF VALDEZ PUBLIC WORKS DEPARTMENT.
18. ALL SANITARY SEWER MANHOLES AND WATER SERVICE VALVE BOXES LOCATED DURING CONSTRUCTION OF THE ROAD SHALL BE RAISED TO JUST BELOW FINISHED GRADE PER CITY OF VALDEZ STANDARD SPECIFICATIONS SECTIONS 50.03 AND 60.10 RESPECTIVELY.
19. FOR ALL SEWER CONSTRUCTION, CONTRACTOR TO USE CITY OF VALDEZ APPROVED PLANS (SHEETS C6.00 TO C6.04).
20. THE CONTRACTOR IS RESPONSIBLE TO PROTECT ALL PAVED STREETS AND EXISTING UTILITIES, ANY DAMAGE TO EXISTING STREETS OR EXISTING UTILITIES CAUSED BY THE CONTRACTORS OPERATIONS SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.
21. ALL PORTIONS OF THE EXISTING BIKE TRAIL DISTURBED DURING CONSTRUCTION SHALL BE REPLACED AND TIED INTO THE NEW ROAD SECTION PER CITY OF VALDEZ STANDARD SPECIFICATIONS DETAIL 20--6.
22. ALL SIGNS SHALL BE INSTALLED PER CITY OF VALDEZ STANDARD SPECIFICATIONS SECTION 70.14.
23. THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL SHOW THE LOCATIONS OF ALL EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION ON THE REDLINE RECORD DRAWINGS AND SUBMIT THEM ALONG WITH THE FIELD INSPECTION NOTES TO THE ENGINEER FOR PREPARATION OF THE FINAL AS-BUILT DRAWINGS.
24. MAINTAIN A MINIMUM OF 36--INCHES OF VERTICAL SEPARATION BETWEEN ANY STORM SEWER (STORM DRAIN OR FOOTING DRAIN) AND WATERLINE (MAINS OR SERVICES) OR SANITARY SEWER (MAINS OR SERVICES). IF 36--INCHES CANNOT BE MAINTAINED, PROVIDE A MINIMUM OF 4--INCH THICK INSULATION.
25. ALL WATER/SEWER PIPE INSULATION SHALL BE RIGID BOARD, HIGH DENSITY EXTRUDED POLYSTYRENE, MIN. 60 P.S.I., FOR UNDERGROUND INSTALLATIONS EQUIVALENT TO R-20 PER FOUR (4) INCH THICK INSULATION, OR APPROVED EQUAL.
26. CONTRACTOR SHALL VERIFY AND RECORD THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES ENCOUNTERED IN THE FIELD AND RECORD ANY CHANGES ON THE CONTRACTOR RECORD DRAWINGS. CONTRACTOR SHALL RECORD FIELD INSTALLATION NOTES OF CONSTRUCTED IMPROVEMENTS AND ENCOUNTERED UTILITIES FOR SUBMITTAL WITH RECORD DRAWING PLANS.
27. THE CONTRACTOR SHALL RESTORE ALL DISTURBED PROPERTY, INCLUDING DRAINAGE SWALES, DISTURBED BY CONTRACT ACTIVITIES TO PRECONSTRUCTION CONDITION.
28. IN CASE OF CONFLICT BETWEEN STATIONING LOCATION OF PIPE OR FITTINGS, USE DIMENSIONED LOCATIONS RELATIVE TO THE CENTERLINE AND PROPERTY LINE, THE DIMENSIONED LOCATIONS SHALL GOVERN.
29. THE CONTRACTOR SHALL RECORD SURVEY NOTES FOR SUBMITTAL WITH RECORD DRAWING PLANS PRIOR TO CONTRACT FINAL PAYMENT.
30. CONTRACTOR SHALL FIELD INSTALL "MEG--A--LUG" JOINT RESTRAINT ON ALL MECHANICAL JOINTS.
31. CONTRACTOR SHALL USE DUCTILE IRON PIPE (DIP) LONG SOLID SLEEVES WITH RESTRAINED JOINTS TO FACILITATE CONNECTING DIP TO DIP OF SAME SIZE.
32. ALL DUCTILE AND CAST IRON PIPE AND FITTINGS SHALL BE ENCASED IN 8--MILS OF POLYETHYLENE WRAP, AS PER CVSS SECTION 50.13 "POLYETHYLENE ENCASEMENT."
33. CONTRACTOR SHALL MAINTAIN A MINIMUM OF TEN (10) FEET HORIZONTAL AND EIGHTEEN (18") INCHES VERTICAL SEPARATION BETWEEN WATER AND STORM OR SANITARY SEWER MAINS AND SERVICES (AS MEASURED FROM OUTSIDE TO OUTSIDE OF PIPE). SANITARY AND STORM SEWER PIPE JOINTS SHALL BE PLACED AT LEAST 9--FEET FROM ANY WATERLINE CROSSING.

SURVEY NOTES

1. THE FIELD SURVEY WAS PERFORMED BY F.ROBERT BELL & ASSOCIATES, ON JUNE 5TH, 2010.
2. BASIS OF BEARING IS N28°36'58"E (PER PLAT 97--15) BETWEEN FOUND MONUMENTS AS SHOWN ON SHEET C1.01.
3. ASSUMED BASIS OF COORDINATES (PNT# 160 N:31266.39 E:23094.92) LOCATED AT THE SOUTHEAST CORNER LOT 1B, BLOCK 4 OF RICHARDSON BUSINESS PARK PHASE 4.
4. BASIS OF ELEVATION IS FRB PNT#50 A FOUND OPC WITH AN ASSUMED ELEVATION OF 100.0'
5. UNDERGROUND UTILITY LOCATE REQUESTS WERE COORDINATED BY LOCATE CENTER OF ALASKA.

DRAINAGE PATTERNS

1. EXISTING DRAINAGE PATTERNS FOR THIS PROJECT IS GENERALLY FROM THE NORTHEAST TO THE SOUTHWEST ALONG SAWMILL DRIVE R.O.W. THE EXISTING DITCHES ARE SHALLOW AND PROVIDE INTERMITTENT CONNECTIVITY. THE EXISTING SOILS ARE VERY FREE DRAINING AND HAVE HISTORICALLY HAD VERY FEW PONDING ISSUES.
2. THE NEW DRAINAGE PATTERN WILL CONTINUE ALONG THE SAWMILL DRIVE R.O.W. IN THE SAME DIRECTION AS THE EXISTING DRAINAGE. THE DITCHES WILL BE UPGRADED TO PROMOTE FLOW OF RUNOFF.
3. EXISTING CULVERTS WILL BE REMOVED AND REPLACED AT EXISTING DRIVEWAYS AND ROAD INTERSECTIONS TO PROMOTE DRAINAGE CONNECTIVITY.

SHEET INDEX	
SHEET NO.	TITLE
C0.00	COVER SHEET
C0.01	VICINITY MAP, LEGEND AND GENERAL NOTES
C1.00	SURVEY CONTROL -- WEST END OF PROJECT
C1.01	SURVEY CONTROL -- EAST END OF PROJECT
C2.00	EXISTING SITE/DEMOLITION PLAN
C2.01	EXISTING SITE/DEMOLITION PLAN (CONT.)
C2.02	EXISTING SITE/DEMOLITION PLAN (CONT.)
C3.00	PLAN & PROFILE STA 0+00 TO 10+00
C3.01	PLAN & PROFILE STA 10+00 TO 21+00
C3.02	PLAN & PROFILE STA 21+00 TO 28+58
C4.00	SIGNAGE PLAN
C5.00	DETAIL SHEETS -- STREET IMPROVEMENTS
C6.00	SEWER MAINLINE EXTENSION -- NOTES & MAPS
C6.01	SEWER PLAN & PROFILE -- STA 10+00 TO 21+00
C6.02	SEWER PLAN & PROFILE -- STA 21+00 TO 32+00
C6.03	SEWER PLAN & PROFILE -- STA 32+00 TO END
C6.04	DETAIL SHEETS -- SEWER IMPROVEMENTS

CALL BEFORE YOU DIG

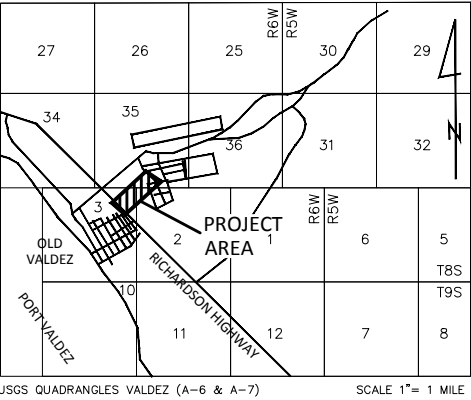
CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF EXCAVATION THE FOLLOWING IS A PARTIAL LIST:

CITY OF VALDEZ PUBLIC WORKS	835--4473
VALDEZ WATER	835--2997
CVEA	835--4301
CROWLEY	835--4558

LOCATE CENTER OF ALASKA:  
STATEWIDE 1--800--478--3121

CAUTION

EXISTING UTILITY LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION.



LEGEND

- FOUND 2--1/2" ALUMINUM CAP
- FOUND OPC
- FOUND REBAR
- (#--##) RECORD PLAT #
- (M) MEASURED
- CMP CORRUGATED METAL PIPE
- FES FLARED END SECTION
- DIP DUCTILE IRON PIPE
- ROW RIGHT--OF--WAY
- INV INVERT
- ELEV ELEVATION
- EXISTING SANITARY SEWER MANHOLE
- PROPOSED SANITARY SEWER MANHOLE
- SIGN
- UTILITY POLE
- BOLLARD
- WATER VALVE
- FIRE HYDRANT
- COMMUNICATIONS PEDESTAL
- EXISTING UTILITY POLE
- CULVERT (EXISTING)
- CULVERT (PROPOSED)
- B.O.P. BEGINNING OF PROJECT
- E.O.P. END OF PROJECT
- CONTOURS (EXISTING)
- CONTOURS (PROPOSED)
- WATER
- SEWER
- UNDERGROUND ELECTRIC
- UNDERGROUND GAS
- UNDERGROUND TELEPHONE
- EXISTING OVERHEAD UTILITY
- RIGHT--OF--WAY CENTERLINE
- GRAVEL SHOULDER
- GRAVEL TOE
- EXISTING BUILDING
- EXISTING PAVEMENT
- PROPOSED PAVEMENT
- GRAVEL (EXISTING)



DATE:

REVISION:

CLIENT: CITY OF VALDEZ

ADDRESS: 212 CHENEGA AVE  
VALDEZ, AK 99686

DRAWN BY: CLB  
CHECKED BY: DDS  
DATE: 5/18/11

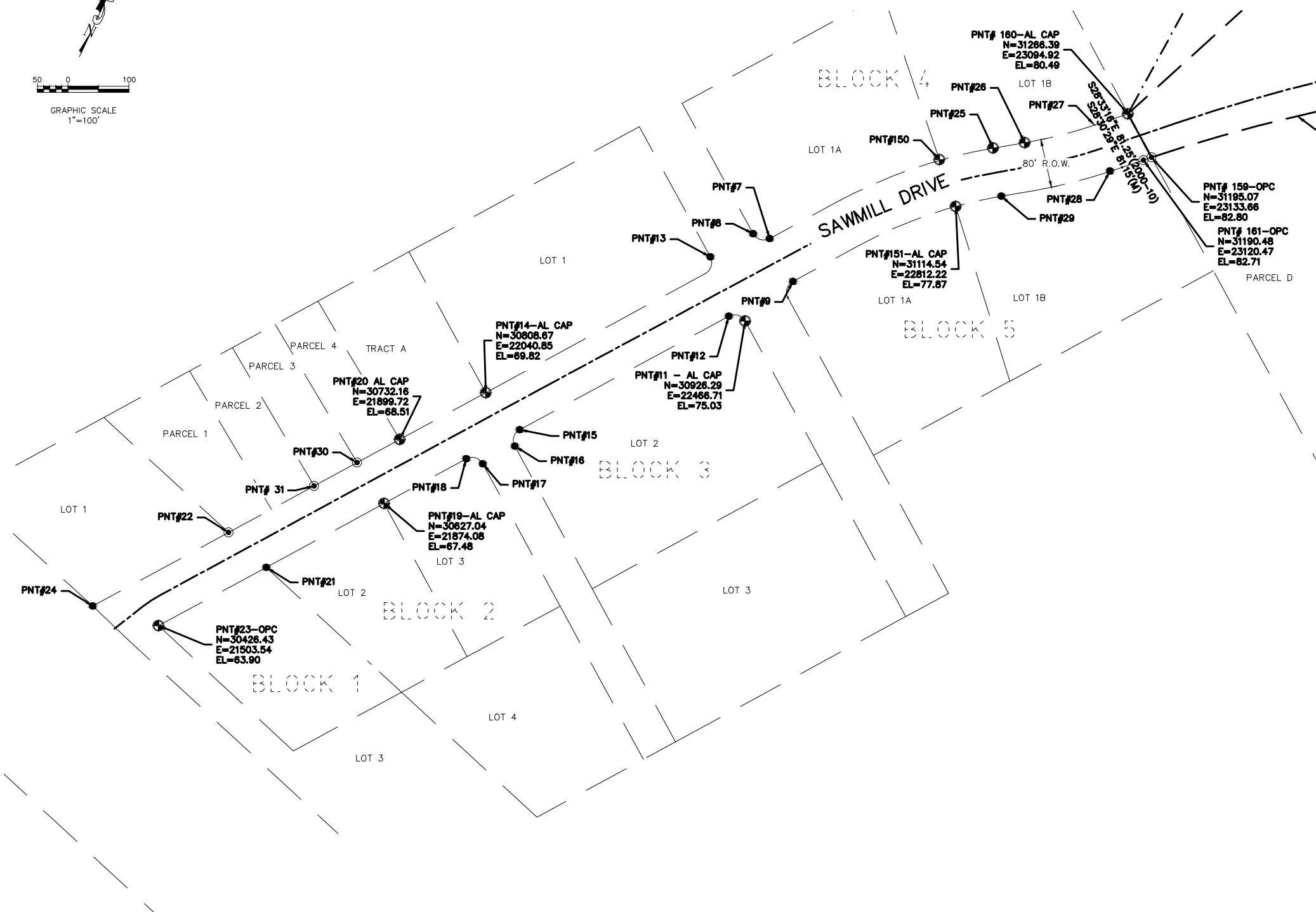
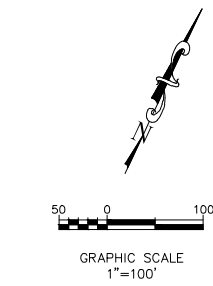
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SCALE: AS SHOWN  
FIELD BOOK: N/A

SAWMILL DRIVE UPGRADE  
& SEWER MAINLINE EXTENSION  
VICINITY MAP, LEGEND & GENERAL NOTES



SHEET:

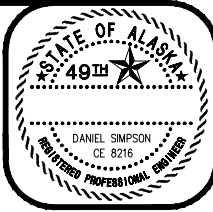
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**LEGEND**

- FOUND 2-1/2" ALUMINUM CAP
- FOUND OPC
- FOUND REBAR
- (#-##) RECORD PLAT NUMBER
- (M) MEASURED

CONTROL POINT TABLE				
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
7	31061.82	22506.95	75.40	FND RBR
8	31069.82	22479.73	75.56	FND RBR
9	30991.50	22545.08	75.43	FND RBR
10	31190.52	23120.49	82.70	CK 161
11	30926.29	22466.71	75.03	FND AC
12	30934.26	22439.78	74.45	FND RBR
13	31031.65	22409.40	74.41	FND RBR
14	30808.67	22040.85	69.82	FND AC
15	30747.97	22096.54	70.32	FND RBR
16	30720.89	22088.62	69.89	FND RBR
17	30692.17	22035.98	69.51	FND RBR
18	30700.25	22008.83	69.23	FND RBR
19	30627.04	21874.08	67.48	FND AC
20	30732.16	21899.72	68.51	FND AC
21	30521.98	21680.70	65.80	FND RBR
22	30579.22	21618.75	63.81	FND OPC
23	30426.43	21503.54	63.90	FND AC
24	30458.56	21395.71	62.95	FND RBR
25	31210.42	22873.60	77.87	FND AC
26	31219.19	22925.57	79.75	FND AC
27	31248.10	23040.00	80.04	FND RBR
28	31172.55	23065.49	80.51	FND RBR
29	31131.26	22887.13	78.58	FND RBR
30	30693.91	21829.56	67.22	FND OPC
31	30655.77	21759.16	66.43	FND OPC
50	31602.15	24582.52	100.00	FND OPC
51	32055.94	23525.69	101.60	FND OPC
151	31114.54	22812.21	77.87	FND AL CAP
159	31195.07	23133.66	82.80	FND YPC
160	31266.39	23094.92	80.49	FND AL CAP



DATE:

REVISION:

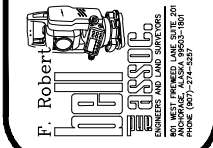
CLIENT: CITY OF VALDEZ

ADDRESS: 212 CHENEGA AVE  
VALDEZ, AK 99686

DRAWN BY: CLB  
CHECKED BY: DDS  
DATE: 5/18/11  
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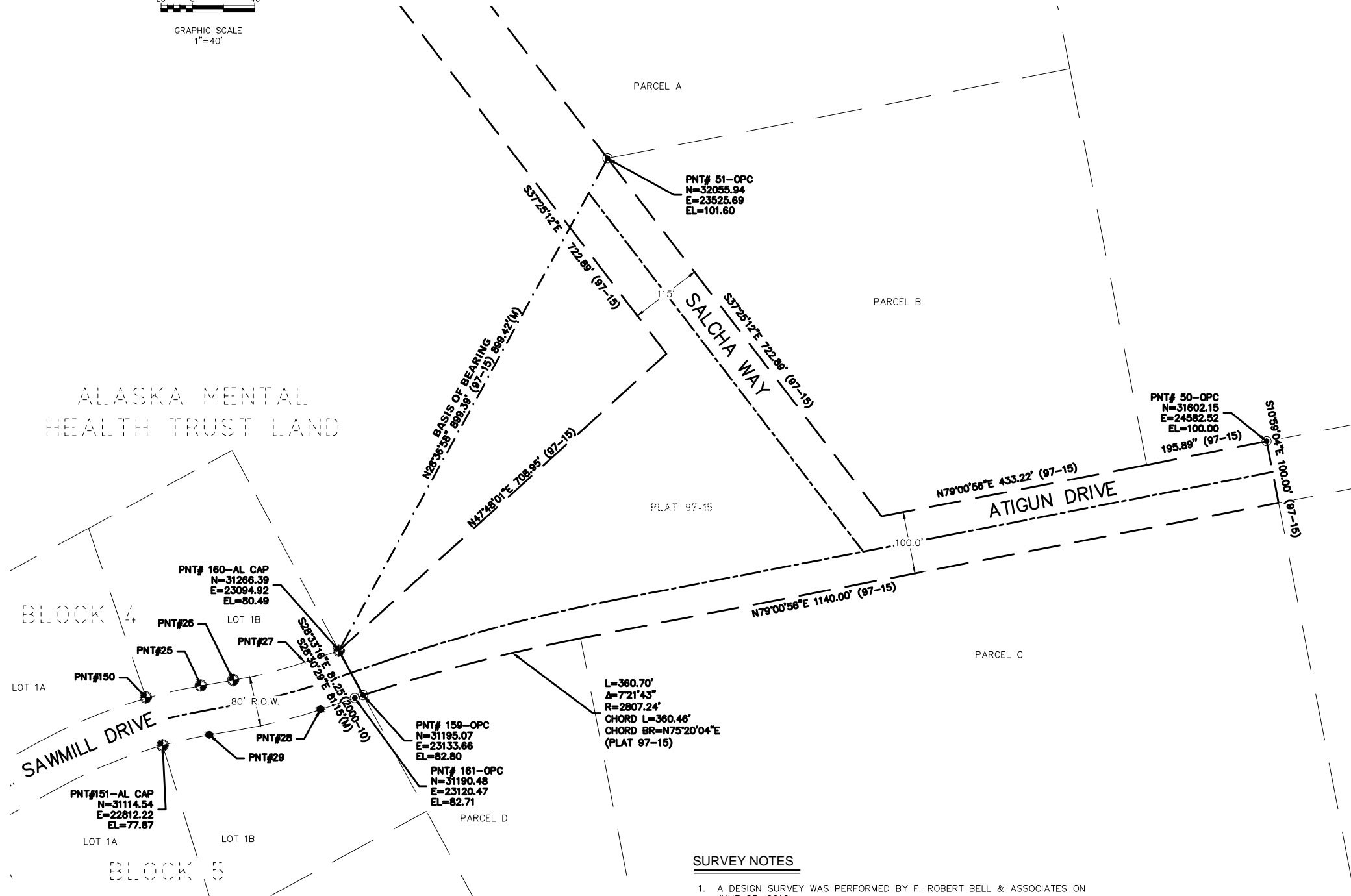
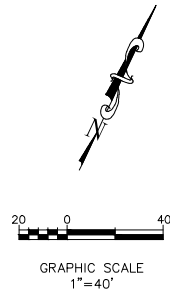
SAWMILL DRIVE UPGRADE  
& SEWER MAINLINE EXTENSION

SURVEY CONTROL  
WEST END OF PROJECT



SHEET:

C1.00



LEGEND

- ⊕ FOUND 2-1/2" ALUMINUM CAP
- ⊙ FOUND OPC
- FOUND REBAR
- (#-##) RECORD PLAT NUMBER
- (M) MEASURED

CONTROL POINT TABLE				
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
25	31210.42	22873.60	77.87	FND AC
26	31219.19	22925.57	79.75	FND AC
27	31248.10	23040.00	80.04	FND RBR
28	31172.55	23065.49	80.51	FND RBR
29	31131.26	22887.13	78.58	FND RBR
50	31602.15	24582.52	100.00	FND OPC
51	32055.94	23525.69	101.60	FND OPC
150	31191.31	22785.37	79.01	FND AL CAP
151	31114.54	22812.21	77.87	FND AL CAP
159	31195.07	23133.66	82.80	FND YPC
160	31266.39	23094.92	80.49	FND AL CAP
161	31190.48	23120.47	82.71	FND OPC

SURVEY NOTES

- A DESIGN SURVEY WAS PERFORMED BY F. ROBERT BELL & ASSOCIATES ON JUNE 05, 2010.
- BASIS OF COORDINATES IS POINT 160, A FOUND ALUMINUM CAP LOCATED NEAR THE WEST END OF THE PROJECT AREA. COORDINATES ARE IN A LOCAL COORDINATE SYSTEM. THE COORDINATES FOR THIS POINT IS (N31266.39; E23094.92; EL80.49).
- BASIS OF BEARING IS BETWEEN THE FOUND ALUMINUM CAP (PNT 160) AND THE FOUND ORANGE PLASTIC CAP (PNT 51). THE BEARING IS N28°36'58"E. THE MEASURED HORIZONTAL GROUND DISTANCE WAS 899.42' <RECORD DISTANCE IS 899.39'>.
- BASIS OF VERTICAL DATUM IS POINT 50 A FOUND ORANGE PLASTIC CAP WITH AN ASSUMED ELEVATION OF 100.00.



DATE:

REVISION:

CLIENT: CITY OF VALDEZ

ADDRESS: 212 CHENEGA AVE  
VALDEZ, AK 99686

JOB NUMBER: 2010-1534

SCALE: AS SHOWN

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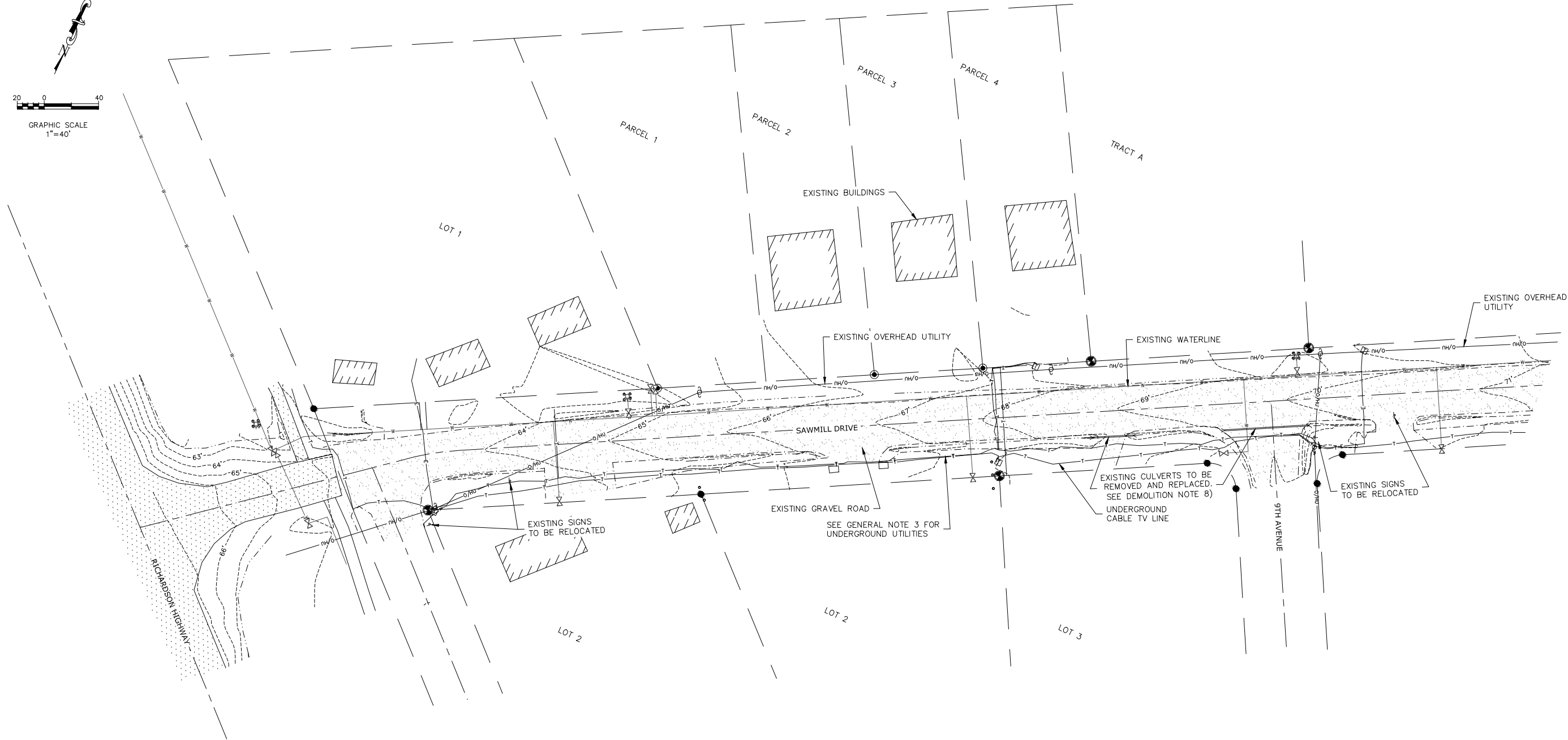
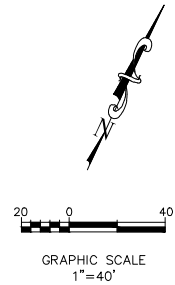
SAWMILL DRIVE UPGRADE  
& SEWER MAINLINE EXTENSION

SURVEY CONTROL  
EAST END OF PROJECT

F. Robert Bell & Associates  
REGISTERED PROFESSIONAL ENGINEERS  
ALASKA LICENSE NO. 275-23-0001  
NO WEST PAVED LANE 18500-1801  
PHONE (907) 275-2300

SHEET:

C1.01



#### GENERAL NOTES - EXISTING SITE

1. THE AREA DESIGNATED FOR THE SAWMILL DRIVE EXTENSION IS GENERALLY A NON-VEGETATED GRAVEL SURFACE WITH THE EXISTING SITE DRAINAGE GENERALLY SLOPING FROM EAST TO WEST.
2. THE SAWMILL DRIVE TIE-IN ON THE WEST SIDE OF THE PROJECT IS A 24' GRAVEL DRIVE WITHIN A 80FT WIDE R.O.W. THE ATIGUN DRIVE/SALCHA ROAD TIE-IN ON THE EAST SIDE OF THE PROJECT IS A 24' WIDE PAVED ROAD SECTION WITHIN A 100FT WIDE R.O.W.
3. UNDERGROUND CABLE AND TELEPHONE UTILITIES WERE LOCATED BY THE LOCAL UTILITY COMPANIES AND ARE SHOWN ON THIS DRAWING.
4. WATER AND SEWER UTILITIES SHOWN ON THIS PLAN ARE COPIED FROM MUNICIPAL GIS MAPPING PROVIDED BY THE VALDEZ CITY ENGINEER AND ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR TO VERIFY LOCATIONS PRIOR TO CONSTRUCTION.
5. THE BUILDING OUTLINES AND PAVED/GRAVEL ROADS SHOWN ON PARCEL C WERE NOT SURVEYED AS PART OF THIS DESIGN. FEATURES SHOWN ARE BASED ON A GOOGLE AERIAL MAP OF THE AREA AND ARE SHOWN FOR REFERENCE PURPOSES ONLY.
6. THERE IS NO EXISTING CONNECTIVITY BETWEEN SAWMILL DRIVE ON THE WEST SIDE OF THE PROJECT AREA AND THE ROADS SHOWN ON PARCEL C.

#### DEMOLITION NOTES

1. THE EXISTING TREES AND BRUSH SHALL BE CLEARED AND GRUBBED 40 FEET FROM CENTERLINE OF THE PROPOSED SAWMILL DRIVE EXTENSION FROM STA 18+75 TO 26+00.
2. THE EXISTING TREES AND BRUSH SHALL BE CLEARED AND GRUBBED 30 FEET FROM CENTERLINE OF THE PROPOSED SAWMILL DRIVE EXTENSION FROM STA 0+00 TO 18+75.
3. A PORTION OF THE EXISTING PAVED CURVE CONNECTING ATIGUN DRIVE AND SALCHA ROAD WILL BE REMOVED AS PART OF THE REDESIGN OF THE SAWMILL DRIVE EXTENSION. THIS AREA SHALL HAVE THE PAVEMENT REMOVED AND THE AREA RE-GRADED.
4. ALL CLEARING AND GRUBBING SHALL MEET THE CITY OF VALDEZ STANDARD SPECIFICATIONS (SECTION 20.03).
5. ALL EXISTING PAVEMENT DEMOLITION REQUIRED FOR THIS PROJECT SHALL BE COMPLETED PER CITY OF VALDEZ STANDARD SPECIFICATIONS (SECTION 20.19).
6. IT IS THE CONTRACTORS RESPONSIBILITY TO REMOVE AND DISPOSE OF ALL DEMOLISHED MATERIALS THAT ARE NOT SCHEDULED TO BE REUSED AS PART OF THE ON-SITE CONSTRUCTION AT LEGAL DUMPING AREAS, OR OTHER SITE(S) APPROVED BY THE CITY OF VALDEZ ENGINEER.
7. UNDERGROUND UTILITIES TO BE RELOCATED 36" BELOW GRADE TO MEET THE CITY OF VALDEZ STANDARD SPECIFICATIONS.
8. ALL EXISTING DRIVEWAY CULVERTS TO BE REMOVED AND REPLACED PER SHEETS C3.00 TO C3.02 AND DETAIL 5 ON SHEET C5.00.



DATE:

REVISION:

CLIENT: CITY OF VALDEZ

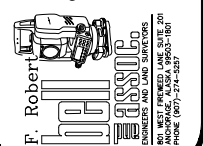
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VALDEZ, AK 99686

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FIELD BOOK: N/A

SAWMILL DRIVE UPGRADE  
& SEWER MAINLINE EXTENSION

EXISTING SITE PLAN  
WEST END OF PROJECT

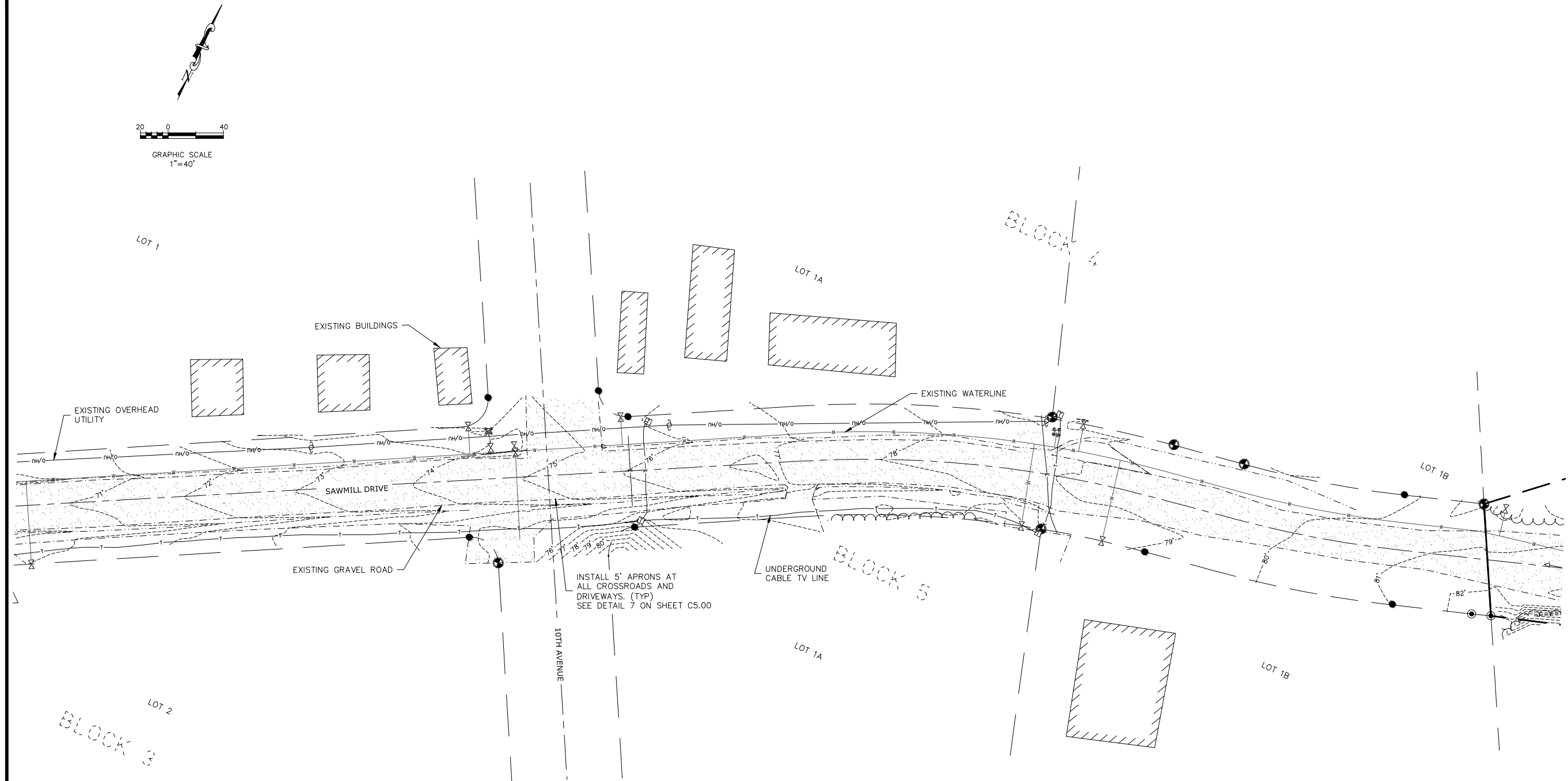


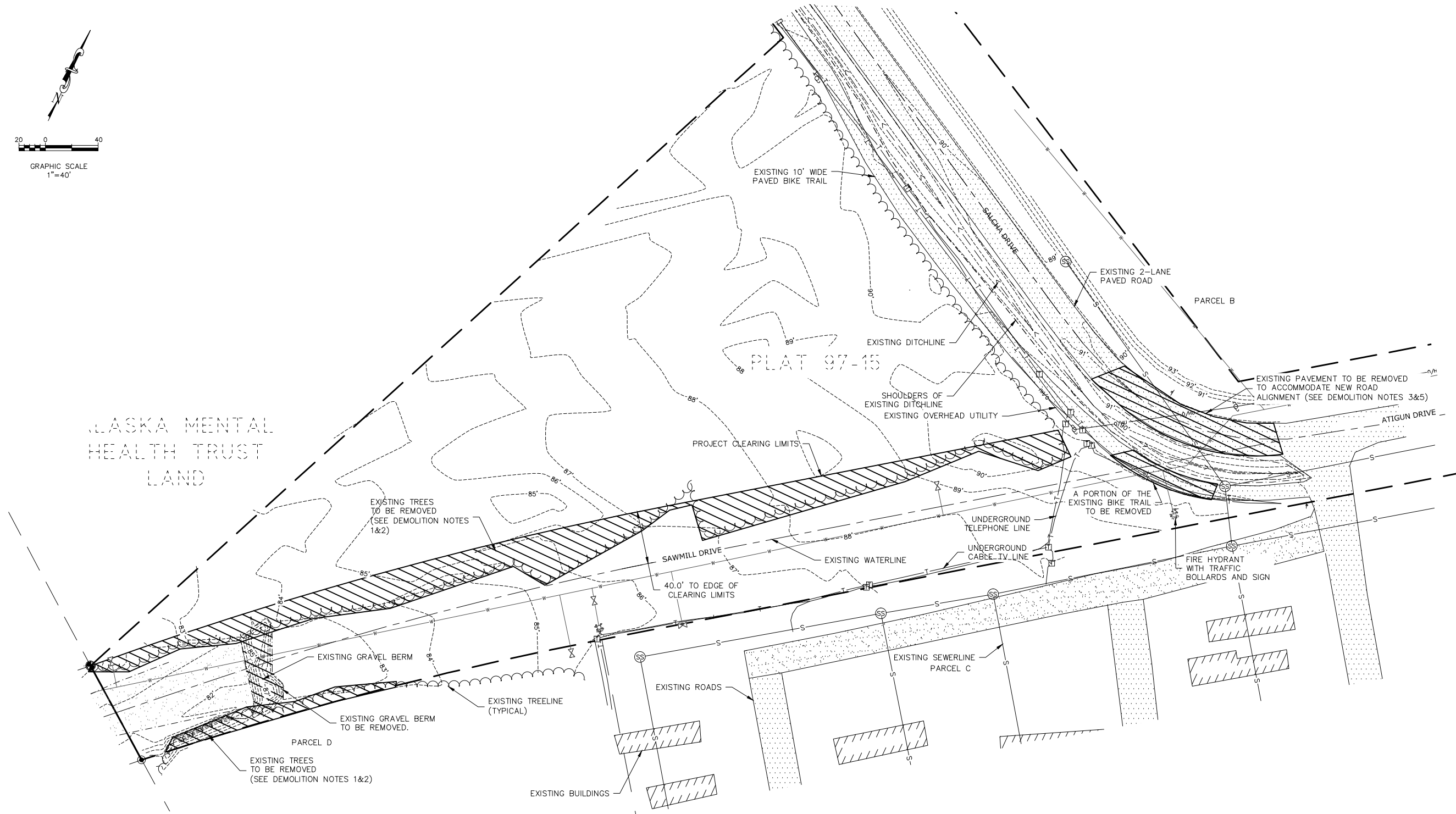
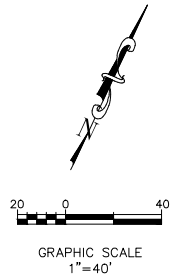
SHEET:

C2.00

F.R. BELL & ASSOCIATES

SHEET:  
**C2.01**





**GENERAL NOTES - EXISTING SITE**

1. THE AREA DESIGNATED FOR THE SAWMILL DRIVE EXTENSION IS GENERALLY A NON-VEGETATED GRAVEL SURFACE WITH THE EXISTING SITE DRAINAGE GENERALLY SLOPING FROM EAST TO WEST.
2. THE SAWMILL DRIVE TIE-IN ON THE WEST SIDE OF THE PROJECT IS A 24' GRAVEL DRIVE WITHIN A 80FT WIDE R.O.W. THE ATIGUN DRIVE/SALCHA ROAD TIE-IN ON THE EAST SIDE OF THE PROJECT IS A 24' WIDE PAVED ROAD SECTION WITHIN A 100FT WIDE R.O.W.
3. UNDERGROUND CABLE AND TELEPHONE UTILITIES WERE LOCATED BY THE LOCAL UTILITY COMPANIES AND ARE SHOWN ON THIS DRAWING.
4. WATER AND SEWER UTILITIES SHOWN ON THIS PLAN ARE COPIED FROM MUNICIPAL GIS MAPPING PROVIDED BY THE VALDEZ CITY ENGINEER AND ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR TO VERIFY LOCATIONS PRIOR TO CONSTRUCTION.
5. THE BUILDING OUTLINES AND PAVED/GRAVEL ROADS SHOWN ON PARCEL C WERE NOT SURVEYED AS PART OF THIS DESIGN. FEATURES SHOWN ARE BASED ON A GOOGLE AERIAL MAP OF THE AREA AND ARE SHOWN FOR REFERENCE PURPOSES ONLY.
6. THERE IS NO EXISTING CONNECTIVITY BETWEEN SAWMILL DRIVE ON THE WEST SIDE OF THE PROJECT AREA AND THE ROADS SHOWN ON PARCEL C.

**SAWMILL DRIVE - STA. 18+00 TO 27+91.33**  
**SCALE: 1/40**

**DEMOLITION NOTES**

1. THE EXISTING TREES AND BRUSH SHALL BE CLEARED AND GRUBBED 40 FEET FROM CENTERLINE OF THE PROPOSED SAWMILL DRIVE EXTENSION FROM STA 18+75 TO 26+00.
2. THE EXISTING TREES AND BRUSH SHALL BE CLEARED AND GRUBBED 30 FEET FROM CENTERLINE OF THE PROPOSED SAWMILL DRIVE EXTENSION FROM STA 0+00 TO 18+75.
3. A PORTION OF THE EXISTING PAVED CURVE CONNECTING ATIGUN DRIVE AND SALCHA ROAD WILL BE REMOVED AS PART OF THE REDESIGN OF THE SAWMILL DRIVE EXTENSION. THIS AREA SHALL HAVE THE PAVEMENT REMOVED AND THE AREA RE-GRADED.
4. ALL CLEARING AND GRUBBING SHALL MEET THE CITY OF VALDEZ STANDARD SPECIFICATIONS (SECTION 20.03).
5. ALL EXISTING PAVEMENT DEMOLITION REQUIRED FOR THIS PROJECT SHALL BE COMPLETED PER CITY OF VALDEZ STANDARD SPECIFICATIONS (SECTION 20.19).
6. IT IS THE CONTRACTORS RESPONSIBILITY TO REMOVE AND DISPOSE OF ALL DEMOLISHED MATERIALS THAT ARE NOT SCHEDULED TO BE REUSED AS PART OF THE ON-SITE CONSTRUCTION AT LEGAL DUMPING AREAS, OR OTHER SITE(S) APPROVED BY THE CITY OF VALDEZ ENGINEER.
7. UNDERGROUND UTILITIES TO BE RELOCATED 36" BELOW GRADE TO MEET THE CITY OF VALDEZ STANDARD SPECIFICATIONS.



DATE:

REVISION:

CLIENT: CITY OF VALDEZ

ADDRESS: 212 CHENEGA AVE  
VALDEZ, AK 99686

JOB NUMBER: 2010-1534

SCALE: AS SHOWN

DRAWN BY: CLB

CHECKED BY: DDS

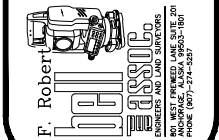
DATE: 5/18/11

FIELD BOOK: N/A

**SAWMILL DRIVE UPGRADE  
& SEWER MAINLINE EXTENSION**

**EXISTING SITE PLAN (CONTINUED)**

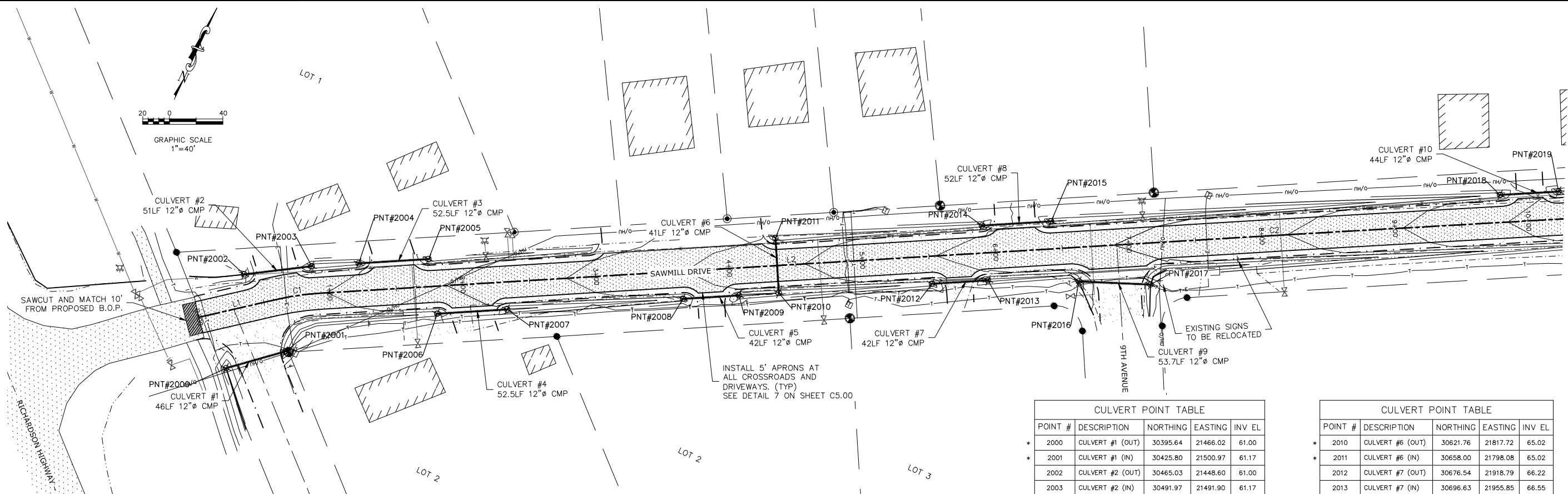
**EAST END OF PROJECT**



SHEET:

**C2.02**

F.R. BELL & ASSOCIATES



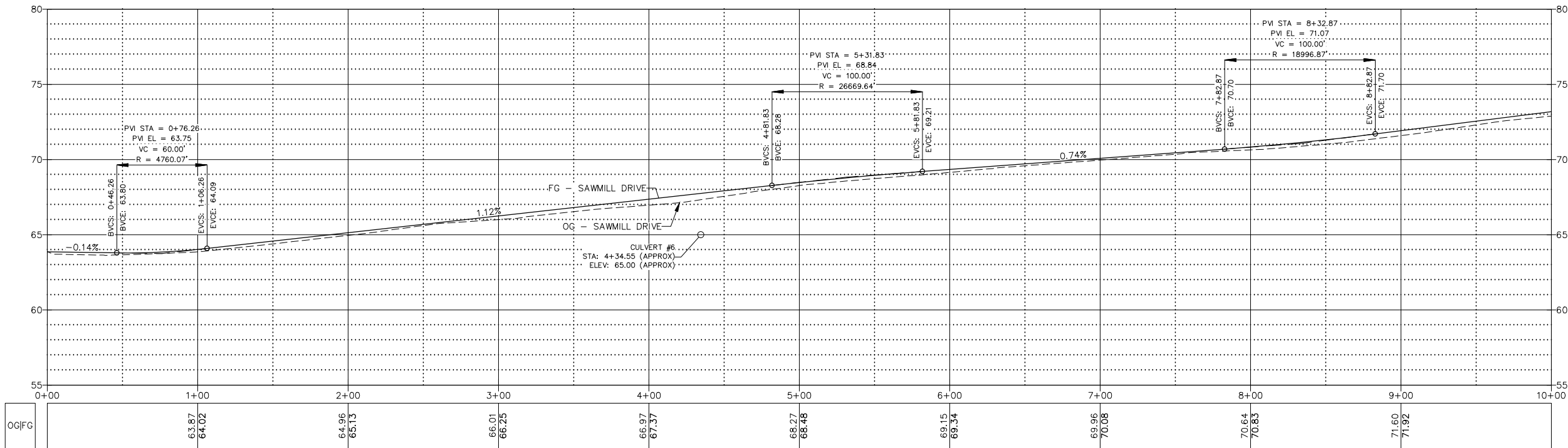
LINE TABLE: SAWMILL DRIVE				
LINE#	LENGTH	DIRECTION	START NORTHING/EASTING	END NORTHING/EASTING
L1	59.17	N52° 00' 59.79"E	(21431.43,30421.53)	(21478.07,30457.94)
L2	709.04	N61° 32' 14.25"E	(21505.84,30476.13)	(22129.17,30814.05)
L3	557.92	N61° 43' 30.53"E	(22143.60,30821.84)	(22634.95,31086.12)
L4	65.24	N79° 53' 59.28"E	(22873.61,31169.18)	(22937.84,31180.62)
L5	130.33	N71° 18' 14.77"E	(23053.98,31210.43)	(23177.43,31252.21)
L6	534.54	N79° 00' 56.00"E	(23541.43,31348.66)	(24066.18,31450.51)
L7	112.58	N36° 56' 49.54"W	(23914.70,31421.11)	(23847.03,31511.08)

CURVE TABLE: SAWMILL DRIVE					
CURVE #	RADIUS	LENGTH	CHORD DIRECTION	START NORTHING/EASTING	END NORTHING/EASTING
C1	200.00	33.233	N56° 46' 37.02"E	(21478.07,30457.94)	(21505.84,30476.13)
C2	5000.00	16.394	N61° 37' 52.39"E	(22129.17,30814.05)	(22143.60,30821.84)
C3	800.00	253.766	N70° 48' 44.90"E	(22634.95,31086.12)	(22873.61,31169.18)
C4	800.00	120.019	N75° 36' 07.02"E	(22937.84,31180.62)	(23053.98,31210.43)
C5	2800.00	376.853	N75° 09' 35.39"E	(23177.43,31252.21)	(23541.43,31348.66)

CULVERT POINT TABLE				
POINT #	DESCRIPTION	NORTHING	EASTING	INV EL
2000	CULVERT #1 (OUT)	30395.64	21466.02	61.00
2001	CULVERT #1 (IN)	30425.80	21500.97	61.17
2002	CULVERT #2 (OUT)	30465.03	21448.60	61.00
2003	CULVERT #2 (IN)	30491.97	21491.90	61.17
2004	CULVERT #3 (OUT)	30508.83	21522.91	61.53
2005	CULVERT #3 (IN)	30533.85	21569.06	62.11
2006	CULVERT #4 (OUT)	30499.51	21592.20	62.16
2007	CULVERT #4 (IN)	30524.53	21638.35	62.75
2008	CULVERT #5 (OUT)	30587.41	21754.38	64.22
2009	CULVERT #5 (IN)	30607.49	21791.41	64.69

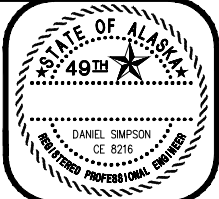
CULVERT POINT TABLE				
POINT #	DESCRIPTION	NORTHING	EASTING	INV EL
2010	CULVERT #6 (OUT)	30621.76	21817.72	65.02
2011	CULVERT #6 (IN)	30658.00	21798.08	65.02
2012	CULVERT #7 (OUT)	30676.54	21918.79	66.22
2013	CULVERT #7 (IN)	30696.63	21955.85	66.55
2014	CULVERT #8 (OUT)	30731.87	21934.34	66.53
2015	CULVERT #8 (IN)	30756.66	21980.06	66.92
2016	CULVERT #9 (OUT)	30724.66	22017.90	67.50
2017	CULVERT #9 (IN)	30745.23	22067.54	68.11
2018	CULVERT #10 (OUT)	30916.81	22276.65	70.19
2019	CULVERT #10 (IN)	30937.65	22315.40	70.75

\* FLARES NOT TO BE INSTALLED AT THE INLET AND OUTLET OF THE PIPE.



SAWMILL DRIVE EXTENSION - STA 0+00 TO 10+00

F.R. BELL & ASSOCIATES



DATE:

REVISION:

CLIENT: CITY OF VALDEZ

ADDRESS: 212 CHENEGA AVE  
VALDEZ, AK 99686

DRAWN BY: CLB  
CHECKED BY: DDS

JOB NUMBER: 2010-1534  
SCALE: AS SHOWN

DATE: 5/18/11  
FIELD BOOK: N/A

SAWMILL DRIVE UPGRADE  
& SEWER MAINLINE EXTENSION

ROAD PLAN AND PROFILE

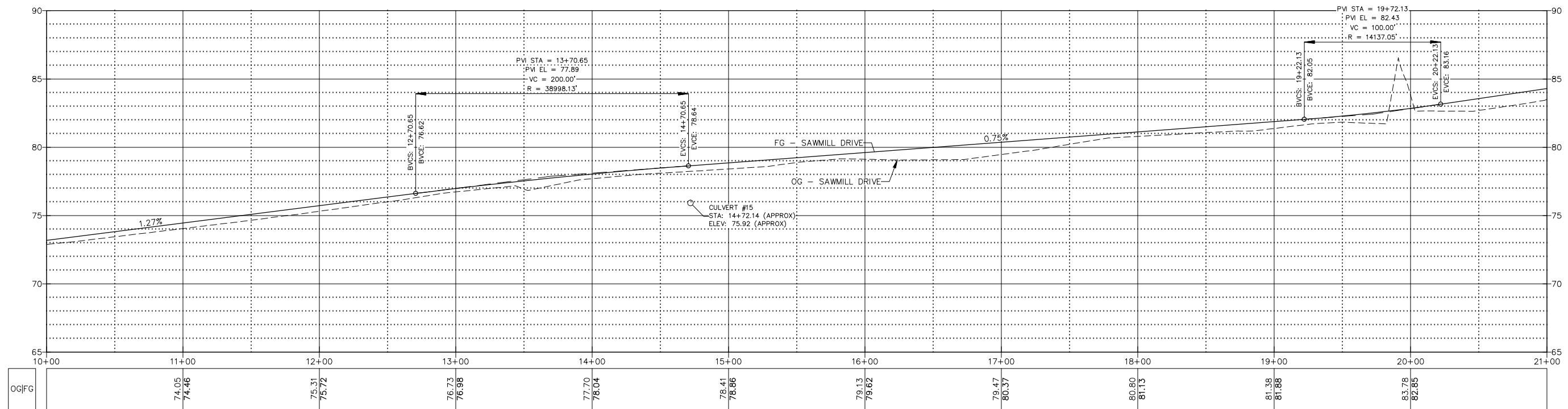
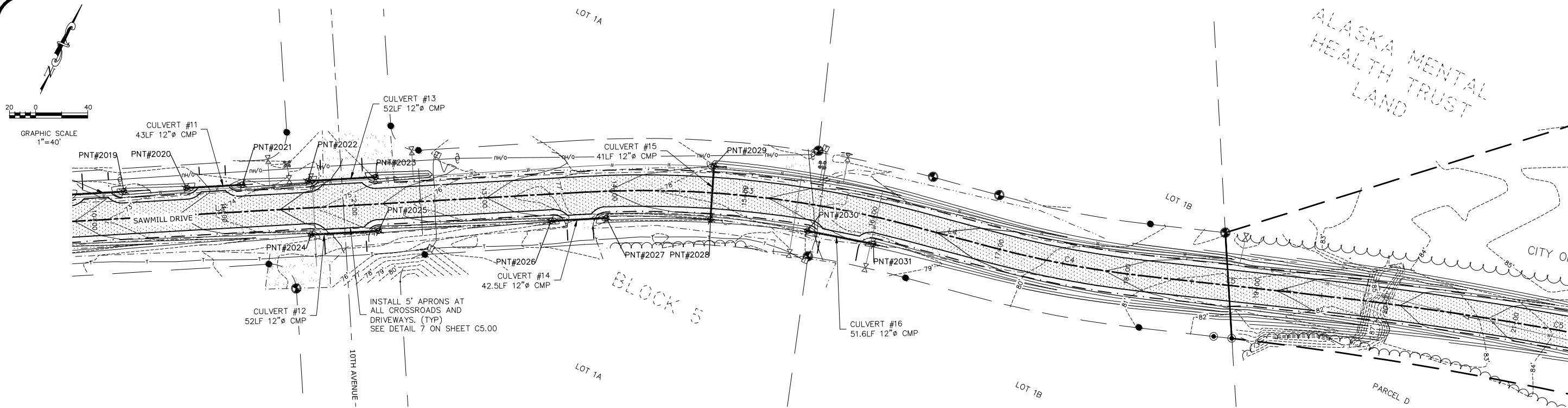
STA 0+00 TO 10+00



SHEET:

C3.00





SAWMILL DRIVE EXTENSION - STA 10+00 TO 21+00

LINE TABLE: SAWMILL DRIVE				
LINE#	LENGTH	DIRECTION	START NORTHING/EASTING	END NORTHING/EASTING
L1	59.17	N52° 00' 59.79"E	(21431.43,30421.53)	(21478.07,30457.94)
L2	709.04	N61° 32' 14.25"E	(21505.84,30476.13)	(22129.17,30814.05)
L3	557.92	N61° 43' 30.53"E	(22143.60,30821.84)	(22634.95,31086.12)
L4	65.24	N79° 53' 59.28"E	(22873.61,31169.18)	(22937.84,31180.62)
L5	130.33	N71° 18' 14.77"E	(23053.98,31210.43)	(23177.43,31252.21)
L6	534.54	N79° 00' 56.00"E	(23541.43,31348.66)	(24066.18,31450.51)
L7	112.58	N36° 56' 49.54"W	(23914.70,31421.11)	(23847.03,31511.08)

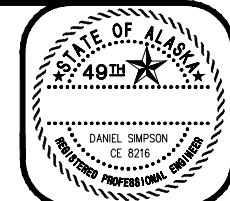
CURVE TABLE: SAWMILL DRIVE					
CURVE #	RADIUS	LENGTH	CHORD DIRECTION	START NORTHING/EASTING	END NORTHING/EASTING
C1	200.00	33.233	N56° 46' 37.02"E	(21478.07,30457.94)	(21505.84,30476.13)
C2	5000.00	16.394	N61° 37' 52.39"E	(22129.17,30814.05)	(22143.60,30821.84)
C3	800.00	253.766	N70° 48' 44.90"E	(22634.95,31086.12)	(22873.61,31169.18)
C4	800.00	120.019	N75° 36' 07.02"E	(22937.84,31180.62)	(23053.98,31210.43)
C5	2800.00	376.853	N75° 09' 35.39"E	(23177.43,31252.21)	(23541.43,31348.66)

CULVERT POINT TABLE				
POINT #	DESCRIPTION	NORTHING	EASTING	INV. EL.
2020	CULVERT #11 (OUT)	30960.39	22357.67	71.35
2021	CULVERT #11 (IN)	30980.76	22395.54	71.90
2022	CULVERT #12 (OUT)	31004.68	22440.02	72.54
2023	CULVERT #12 (IN)	31029.33	22485.85	73.20
2024	CULVERT #13 (OUT)	30968.38	22459.54	72.54
2025	CULVERT #13 (OUT)	30993.03	22505.37	73.20
2026	CULVERT #14 (OUT)	31055.77	22622.03	74.80
2027	CULVERT #14 (IN)	31075.77	22659.59	75.23
2028	CULVERT #15 (OUT)	31108.38	22732.48	75.93
2029	CULVERT #15 (IN)	31146.82	22717.60	75.93
2030	CULVERT #16 (OUT)	31132.06	22803.63	76.51
2031	CULVERT #16 (IN)	31144.34	21899.72	76.91

CONTROL POINT TABLE				
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
7	31061.82	22506.95	75.40	FND RBR
8	31069.82	22479.73	75.56	FND RBR
9	30991.50	22545.08	75.43	FND RBR
10	31190.52	23120.49	82.70	CK 161
11	30926.29	22466.71	75.03	FND AC
12	30934.26	22439.78	74.45	FND RBR
13	31031.65	22409.40	74.41	FND RBR
14	30808.67	22040.85	69.82	FND AC
15	30747.97	22096.54	70.32	FND RBR
16	30720.89	22088.62	69.89	FND RBR
17	30692.17	22035.98	69.51	FND RBR
18	30700.25	22008.83	69.23	FND RBR
19	30627.04	21874.08	67.48	FND AC
20	30732.16	21899.72	68.51	FND AC

21	30521.98	21680.70	65.80	FND RBR
22	30579.22	21618.75	63.81	FND OPC
23	30426.43	21503.54	63.90	FND AC
24	30458.56	21395.71	62.95	FND RBR
25	31210.42	22873.60	77.87	FND AC
26	31219.19	22925.57	79.75	FND AC
27	31248.10	23040.00	80.04	FND RBR
28	31172.55	23065.49	80.51	FND RBR
29	31131.26	22887.13	78.58	FND RBR
30	30693.91	21829.56	67.22	FND OPC
31	30655.77	21759.16	66.43	FND OPC
50	31602.15	24582.52	100.00	FND OPC
51	32055.94	23525.69	101.60	FND OPC
151	31114.54	22812.21	77.87	FND AL CAP
159	31195.07	23133.66	82.80	FND YPC
160	31266.39	23094.92	80.49	FND AL CAP

\* FLARES NOT TO BE INSTALLED AT THE INLET AND OUTLET OF THE PIPE.



DATE: \_\_\_\_\_

REVISION: \_\_\_\_\_

CLIENT: CITY OF VALDEZ

ADDRESS: 212 CHENEGA AVE  
VALDEZ, AK 99686

JOB NUMBER: 2010-1534

SCALE: AS SHOWN

DRAWN BY: CLB

CHECKED BY: DDS

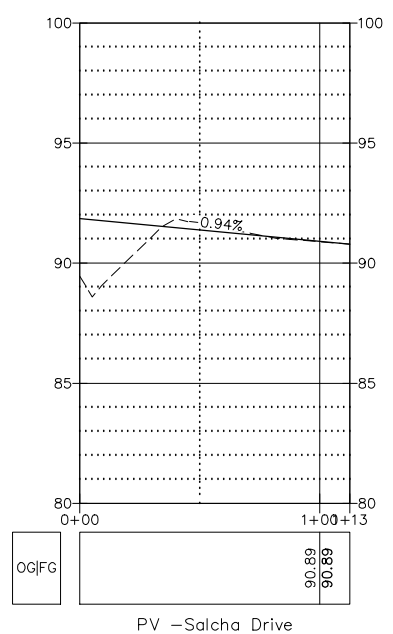
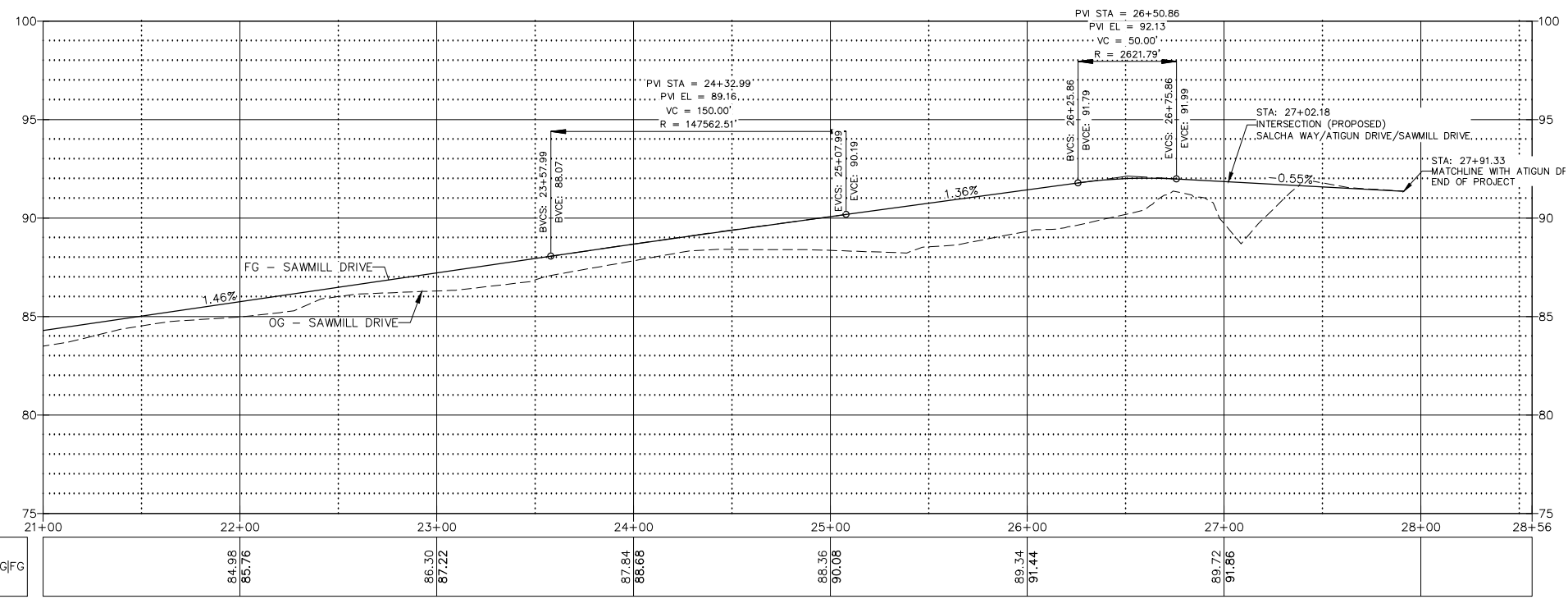
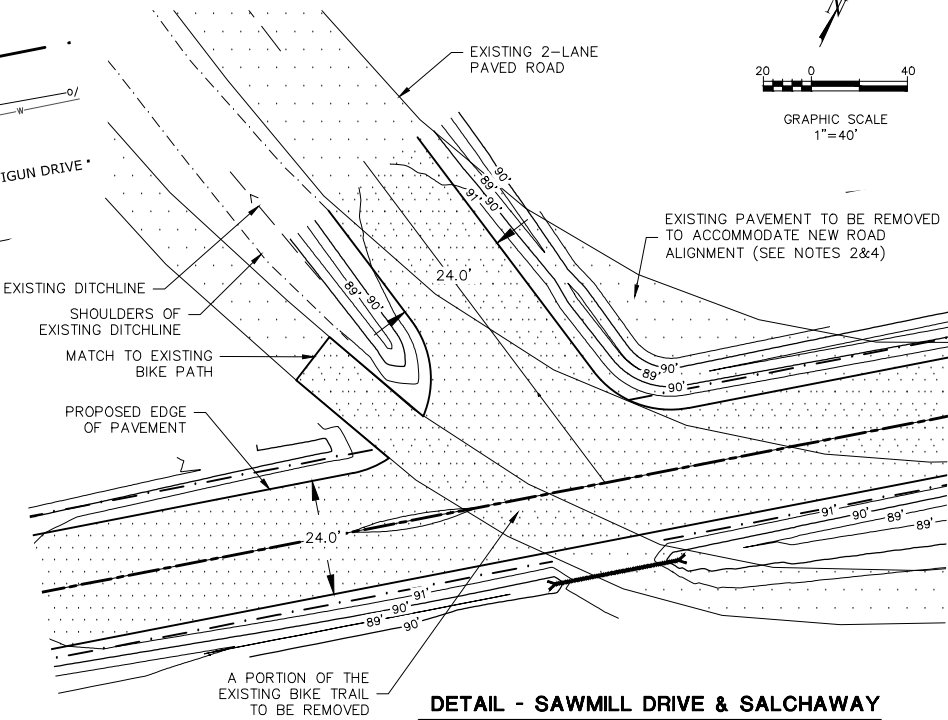
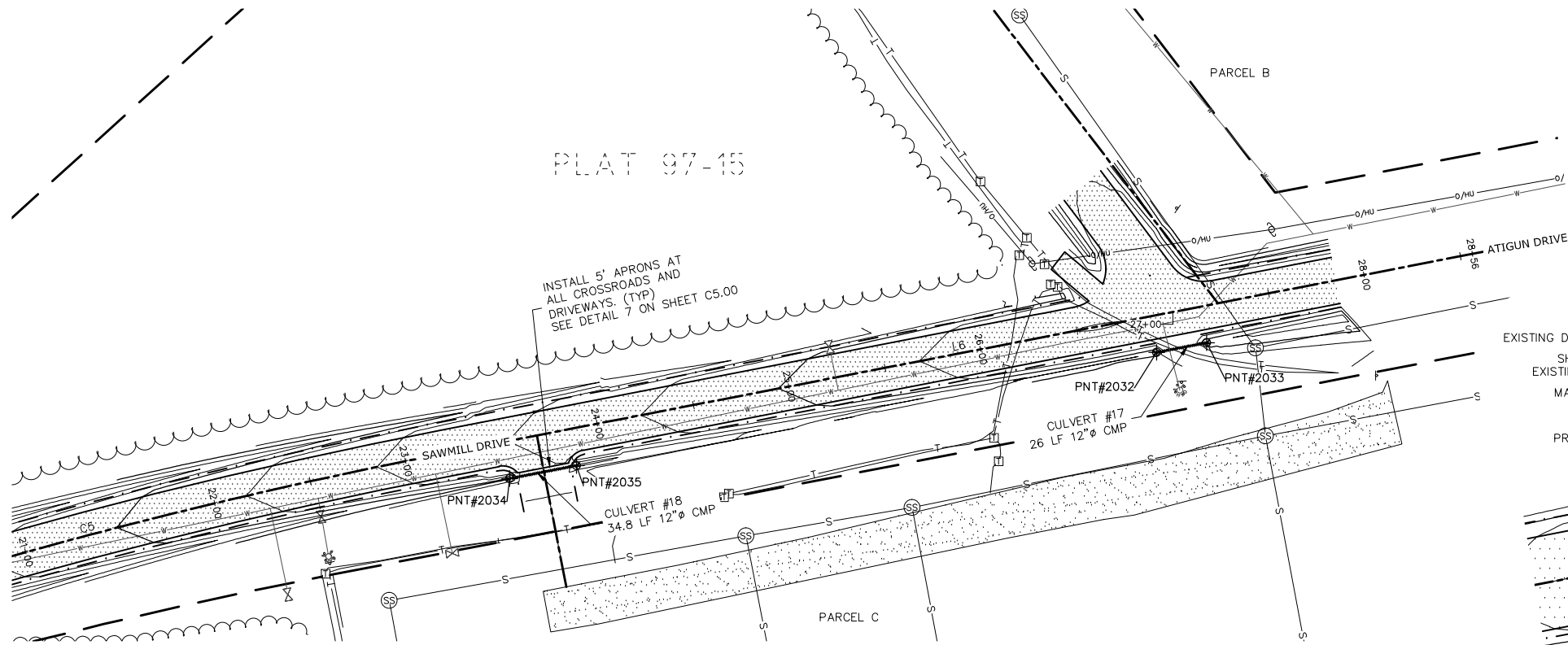
DATE: 5/18/11

FIELD BOOK: N/A

**SAWMILL DRIVE UPGRADE  
& SEWER MAINLINE EXTENSION**

ROAD PLAN AND PROFILE  
STA 10+00 TO 21+00

F. Robert Bell & Associates, Inc.  
10000 10th Avenue, Suite 200  
Valdez, Alaska 99686  
Phone: (907) 272-2222

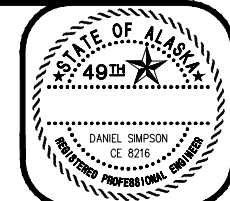


CULVERT POINT TABLE				
POINT #	DESCRIPTION	NORTHING	EASTING	INV EL
2032	CULVERT #17 (OUT)	31400.02	23904.34	89.22
2033	CULVERT #17 (IN)	31404.97	23929.87	89.08
2034	CULVERT #18 (OUT)	31335.44	23573.06	84.84
2035	CULVERT #18 (IN)	31342.08	23607.25	85.71

CONTROL POINT TABLE				
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
7	31061.82	22506.95	75.40	FND RBR
8	31069.82	22479.73	75.56	FND RBR
9	30991.50	22545.08	75.43	FND RBR
10	31190.52	23120.49	82.70	CK 161
11	30926.29	22466.71	75.03	FND AC
12	30934.26	22439.78	74.45	FND RBR
13	31031.65	22409.40	74.41	FND RBR
14	30808.67	22040.85	69.82	FND AC
15	30747.97	22096.54	70.32	FND RBR
16	30720.89	22088.62	69.89	FND RBR
17	30692.17	22035.98	69.51	FND RBR
18	30700.25	22008.83	69.23	FND RBR
19	30627.04	21874.08	67.48	FND AC
20	30732.16	21899.72	68.51	FND AC
21	30521.98	21680.70	65.80	FND RBR
22	30579.22	21618.75	63.81	FND OPC
23	30426.43	21503.54	63.90	FND AC
24	30458.56	21395.71	62.95	FND RBR
25	31210.42	22873.60	77.87	FND AC
26	31219.19	22925.57	79.75	FND AC
27	31248.10	23040.00	80.04	FND RBR
28	31172.55	23065.49	80.51	FND RBR
29	31131.26	22887.13	78.58	FND RBR
30	30693.91	21829.56	67.22	FND OPC
31	30655.77	21759.16	66.43	FND OPC
50	31602.15	24582.52	100.00	FND OPC
51	32055.94	23525.69	101.60	FND OPC
151	31114.54	22812.21	77.87	FND AL CAP
159	31195.07	23133.66	82.80	FND YPC
160	31266.39	23094.92	80.49	FND AL CAP

LINE TABLE: SAWMILL DRIVE					
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DATE: \_\_\_\_\_

REVISION: \_\_\_\_\_

CLIENT: CITY OF VALDEZ

ADDRESS: 212 CHENEGA AVE  
VALDEZ, AK 99686

DRAWN BY: CLB  
CHECKED BY: DDS  
DATE: 5/18/11  
FIELD BOOK: N/A

**SAWMILL DRIVE UPGRADE  
& SEWER MAINLINE EXTENSION**

ROAD PLAN AND PROFILE

STA 21+00 TO 28+56 &  
SALCHA DRIVE INTERSECTION REDESIGN

F. Robert Bell & Associates  
10000 10TH AVENUE  
SUITE 200  
ANCHORAGE, ALASKA 99503-2000  
PHONE (907) 273-4327



DATE:

REVISION:

CLIENT: CITY OF VALDEZ

ADDRESS: 212 CHENEGA AVE  
VALDEZ, AK 99686

DRAWN BY: CLB  
CHECKED BY: DDS

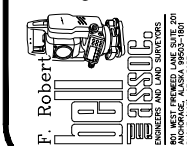
JOB NUMBER: 2010-1534  
SCALE: AS SHOWN

DATE: 5/18/11

FIELD BOOK: N/A

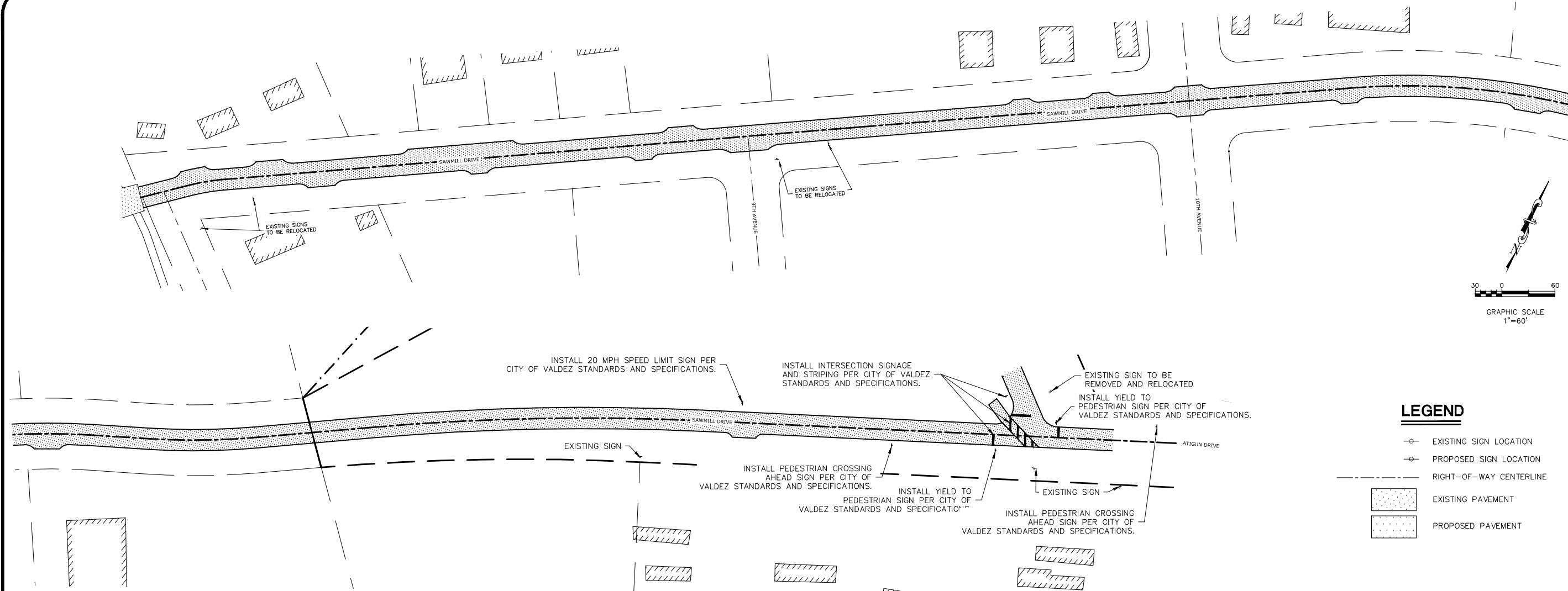
## SAWMILL DRIVE UPGRADE & SEWER MAINLINE EXTENSION

### SIGNAGE PLAN



SHEET:  
**C4.00**

F.R. BELL & ASSOCIATES

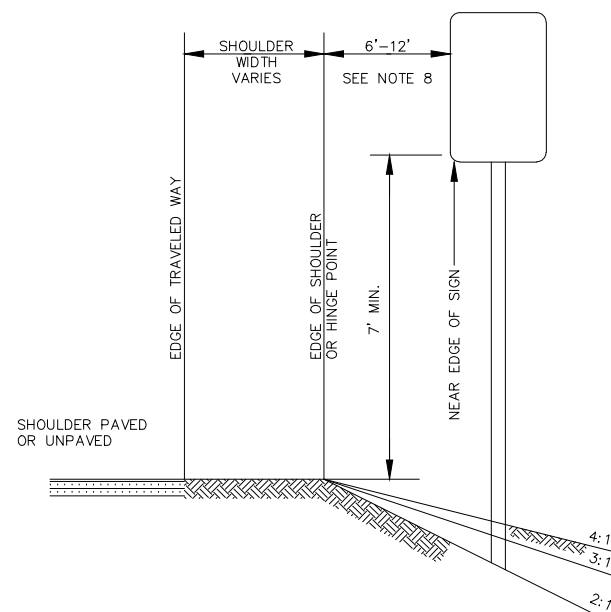


### LEGEND

- EXISTING SIGN LOCATION
- PROPOSED SIGN LOCATION
- RIGHT-OF-WAY CENTERLINE
- EXISTING PAVEMENT
- PROPOSED PAVEMENT

### NOTES

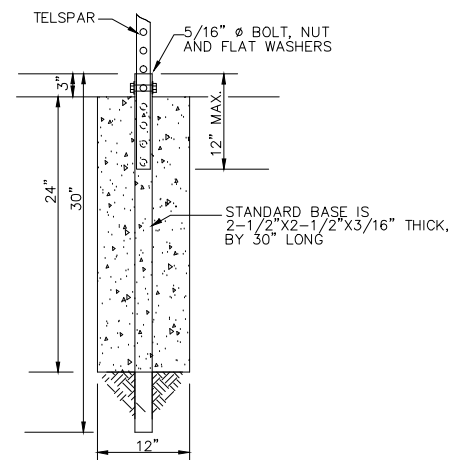
- ALL SIGNS TO BE INSTALLED PER M.A.S.S. SPECIFICATIONS, AND M.A.S.S. DETAIL 70-31.
- PAVEMENT STRIPING AND MARKINGS SHOWN ON THIS SHEET ARE FOR REFERENCE ONLY AND ARE NOT SHOWN TO SCALE. ALL PAVEMENT STRIPING AND MARKINGS ARE TO MEET M.A.S.S. SIZING AND CONSTRUCTION CRITERIA UNLESS OTHERWISE NOTED IN THESE PLANS.
- WHEN THE SIDE LACKS EDGE LINES, BEGIN AND END THE MAIN STREET EDGE LINES AT THE MAIN STREET PAVEMENT RETURNS AND EXTEND THE TOP BAR TO THE EDGE OF PAVEMENT AS SHOWN IN THE 'UNCURBED RETURN WITHOUT PATHWAY' DETAIL.
- INSTALL DETECTABLE WARNING TILES IN PATHWAYS AT THE LOCATIONS SHOWN. INSTALL ACCORDING TO THE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS.
- BREAK THE MAIN STREET CENTERLINE MARKINGS AT SIDE STREET INTERSECTIONS ONLY WHEN LEFT TURN LANES ARE PROVIDED. OTHERWISE, INSTALL THEM CONTINUOUSLY THROUGH THE INTERSECTION.
- LOCATE STOP SIGNS TO THEY ARE:
  - A. VISIBLE TO APPROACHING TRAFFIC AND
  - B. AS NEAR TO THE STOP BAR AS PRACTICABLE.
- WHEN THE SIDE STREET LACKS THE RIGHT OF WAY TO INSTALL THE STOP SIGN AT THE 13.5' OFFSET, REDUCE THE OFFSET TO FIT THE SIGN WITHIN THE RIGHT OF WAY. IF SIGHT OBSTRUCTIONS OBSCURE THE SIGN, RELOCATE THE SIGN SO IT IS VISIBLE.
- UNLESS SHOWN OTHERWISE ON DRAWINGS, THE STANDARD SIGN OFFSET IS 12'. THE MINIMUM IS 6'.
- IF SIGNS EXTEND OVER SIDEWALKS, THE MINIMUM VERTICAL CLEARANCE IS 7'-0".
- ADD 6" TO MOUNTING HEIGHT ON UNPAVED ROADS.
- IF SIGNS EXTEND OVER BIKE PATHS, THE MINIMUM VERTICAL CLEARANCE IS 8'-0".
- PAINT ALL SIGN MOUNTING FASTENERS ON SIGN FACE A COLOR MATCHING THE SIGN FACE.
- ATTACH ALL SIGNS ZEES AND BRACES MOUNTED TO THE POSTS WITH 5/16" BOLTS WITH SELF-LOCKING NUTS.



POST MOUNTED SIGN WITH SHOULDER

SCALE: NTS

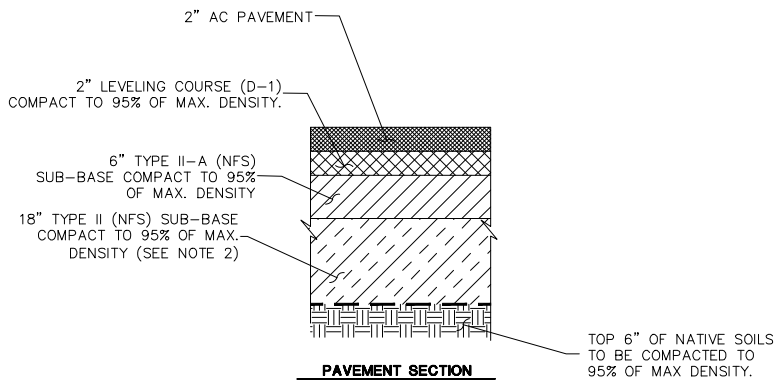
MASS DETAIL 70-20



CONCRETE FOUNDATION FOR SIGN POST

SCALE: NTS

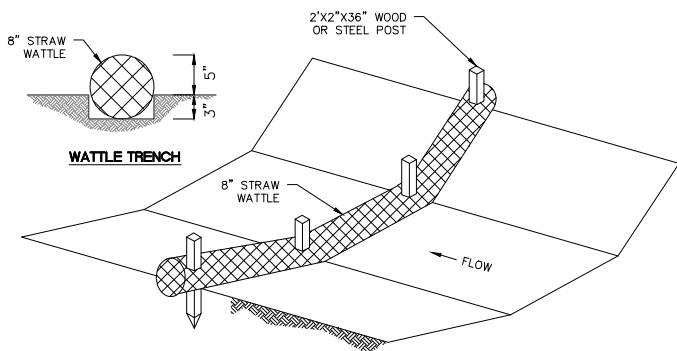
MASS DETAIL 70-31



NOTES

1. ALL BACKFILLED MATERIAL SHALL BE PLACED IN LIFTS NO GREATER THAN 12".
2. THE NATIVE MATERIAL THAT CONSTITUTES THE EXISTING GRAVEL SECTION OF SAWMILL DRIVE CAN BE USED IN PLACE OF THE TYPE II & TYPE IIA BACKFILL UPON APPROVAL OF CITY OF VALDEZ PUBLIC WORKS ENGINEER.

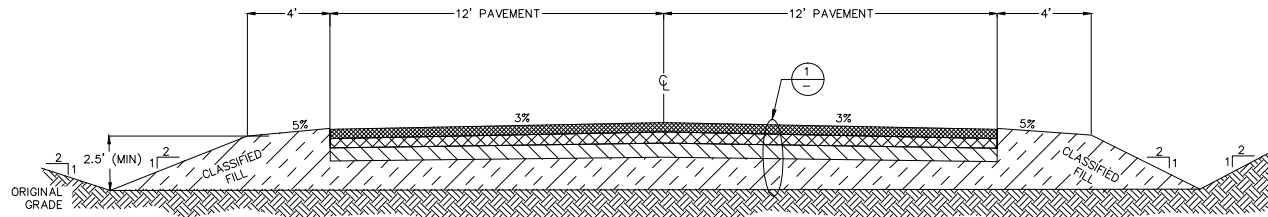
**1 TYPICAL PAVEMENT SECTION**  
C5.00 SCALE: NTS



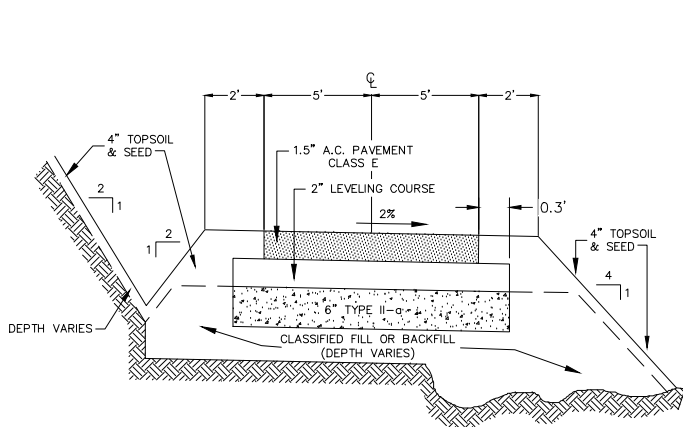
CONSTRUCTION NOTES:

1. CHECK DAMS TO REMAIN UNTIL VEGETATION IS IN PLACE TO STABILIZE SLOPES AND REDUCE SEDIMENT DISCHARGES.
2. INSTALL EVERY 100 FEET, OR AS NEEDED, IN DITCHES.
3. STRAW WATTLES SHALL BE EMBEDDED 3 INCHES.
4. 2"x2" STAKES SHALL BE DRIVEN THROUGH THE MIDDLE OF THE WATTLE. AT LEAST 3 INCHES OF STAKE MUST BE LEFT PROTRUDING ABOVE THE WATTLE.

**4 DETAIL - WATTLE CHECK DAM**  
C5.00 SCALE: NTS



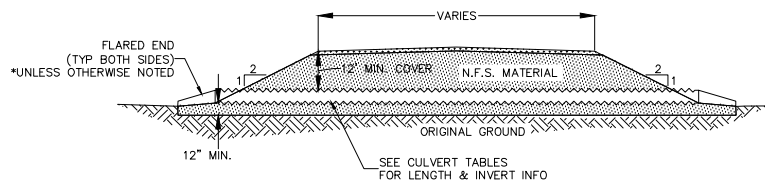
**2 SECTIONS - TYPICAL 24' WIDE STRIP PAVING**  
C5.00 SCALE: NTS



NOTES

1. DEPTH OF CLASSIFIED FILL OR BACKFILL TO BE DETERMINED BY THE ENGINEER
2. DEPTH OF THE DITCH SHALL BE AS NECESSARY FOR POSITIVE DRAINAGE AS DIRECTED BY THE ENGINEER.
3. CROSS CULVERTS SHALL BE PLACED AS DIRECTED BY THE ENGINEER.

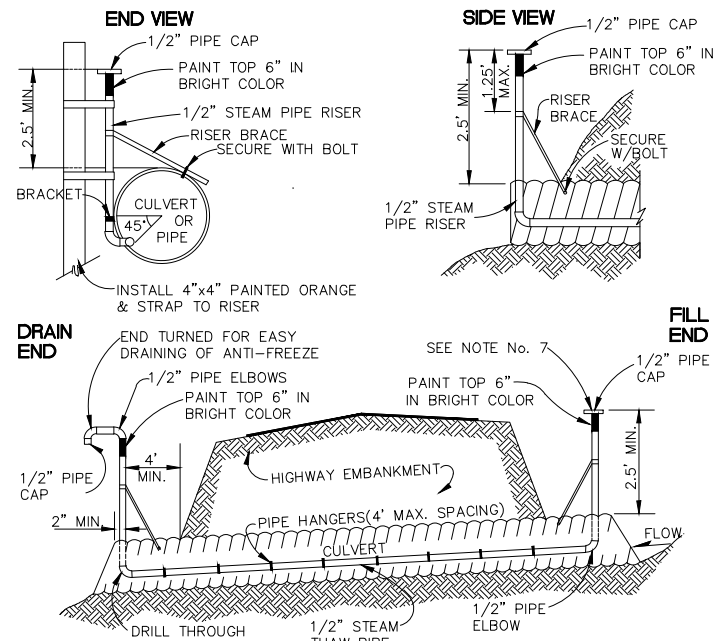
**3 SECTIONS - TYPICAL BIKE TRAIL**  
C5.00 SCALE: NTS



NOTES:

1. CORRUGATED METAL PIPE SHALL BE USED. SEE CULVERT TABLES ON PLAN & PROFILE SHEETS FOR DIAMETERS AND INVERT INFORMATION.
2. FLARES SHALL BE INSTALLED AT THE INLET AND OUTLET OF THE PIPE.
3. ALL FILL MATERIAL SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY.
4. ALL GRAVEL FILL MATERIAL WILL BE NON-FROST SUSCEPTIBLE (NFS), A MIXTURE OF SAND AND GRAVEL CONTAINING SIX PERCENT OR LESS MATERIAL FINER THAN #200 SIEVE SIZE.
5. CULVERT NO.'S 1, 6, AND 15 WILL NOT REQUIRE FLARED ENDS

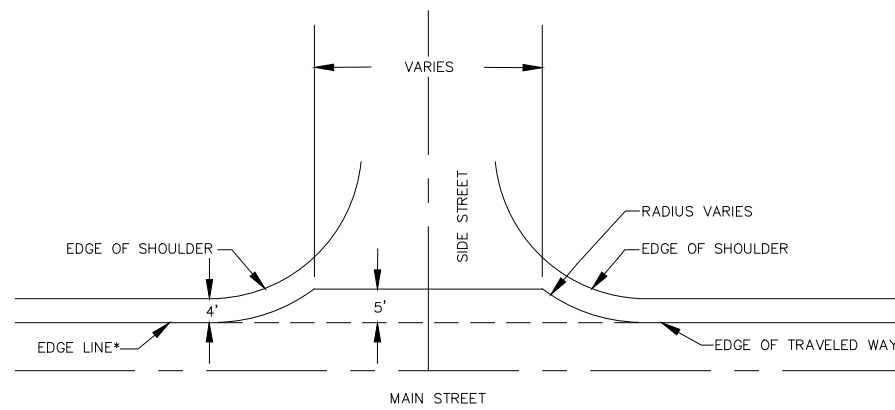
**5 DETAIL - TYPICAL CULVERT**  
C5.00 SCALE: NTS



NOTES:

1. ALL MAINLINE PIPES AND STAND PIPES TO BE STANDARD GALVANIZED STEEL PIPE A.S.T.M. A-120-69 WITH STANDARD FITTINGS.
2. THAW PIPE TO BE FILLED WITH ANTI-FREEZE AND THE ENDS CAPPED.
3. MAXIMUM LENGTH OF THAW PIPE ALLOWABLE IS 40 FT.
4. STAND PIPE SHALL BE LOCATED IN SUCH A WAY AS TO MINIMIZE DAMAGE FROM SNOW REMOVAL EQUIPMENT.
5. THAW PIPE SHALL BE INSTALLED 45° BELOW FLOWLINE.
6. RISER BRACES TO BE 1/2" ANGLE IRON OR EQUIVALENT.
7. THE FILL END SHOULD BE 1' HIRER THAN THE DRAIN END FOR EASY DRAINING.

**6 CULVERT THAW PIPES**  
C5.00 SCALE: NTS



\* EDGE LINES DEFINE THE EDGE OF TRAVELED WAY

**7 TYPICAL UNCURBED PAVEMENT APRON**  
C5.00 SCALE: NTS



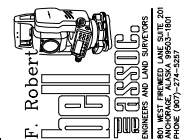
DATE:

REVISION:

CLIENT: CITY OF VALDEZ  
ADDRESS: 212 CHENEGA AVE  
VALDEZ, AK 99686

DRAWN BY: CLB  
CHECKED BY: DDS  
DATE: 5/18/11  
FIELD BOOK: N/A

SAWMILL DRIVE UPGRADE  
& SEWER MAINLINE EXTENSION  
DETAILS - STREET IMPROVEMENTS



SHEET:

**C5.00**



GENERAL CONSTRUCTION NOTES

- ALL CONSTRUCTION SHALL BE INSTALLED AS SPECIFIED IN THE MOST CURRENT EDITION OF THE CITY OF VALDEZ STANDARD CONCRUCTION SPECIFICATIONS FOR STREETS--DRAINAGE--UTILITIES--PARKS (CVSS).
- MAINTAIN A MINIMUM OF 36--INCHES OF VERTICAL SEPARATION BETWEEN ANY STORM SEWER (STORM DRAIN OR FOOTING DRAIN) AND WATERLINE (MAINS OR SERVICES) OR SANITARY SEWER (MAINS OR SERVICES). IF 36--INCHES CANNOT BE MAINTAINED, PROVIDE A MINIMUM OF 4--INCH THICK INSULATION.
- ALL WATER/SEWER PIPE INSULATION SHALL BE RIGID BOARD, HIGH DENSITY EXTRUDED POLYSTYRENE, MIN. 60 P.S.I., FOR UNDERGROUND INSTALLATIONS EQUIVALENT TO R--20 PER FOUR (4) INCH THICK INSULATION, OR APPROVED EQUAL.
- CONTRACTOR SHALL VERIFY AND RECORD THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES ENCOUNTERED IN THE FIELD AND RECORD ANY CHANGES ON THE CONTRACTOR RECORD DRAWINGS. CONTRACTOR SHALL RECORD FIELD INSTALLATION NOTES OF CONSTRUCTED IMPROVEMENTS AND ENCOUNTERED UTILITIES FOR SUBMITTAL WITH RECORD DRAWING PLANS.
- THE CONTRACTOR SHALL RESTORE ALL DISTURBED PROPERTY, INCLUDING DRAINAGE SWALES, DISTURBED BY CONTRACT ACTIVITIES TO PRECONSTRUCTION CONDITION.
- IN CASE OF CONFLICT BETWEEN STATIONING LOCATION OF PIPE OR FITTINGS, USE DIMENSIONED LOCATIONS RELATIVE TO THE CENTERLINE AND PROPERTY LINE, THE DIMENSIONED LOCATIONS SHALL GOVERN.
- THE CONTRACTOR SHALL RECORD SURVEY NOTES FOR SUBMITTAL WITH RECORD DRAWING PLANS PRIOR TO CONTRACT FINAL PAYMENT.
- ALL DUCTILE AND CAST IRON PIPE AND FITTINGS SHALL BE ENCASED IN 8--MILS OF POLYETHYLENE WRAP, AS PER CVSS SECTION 50.13 "POLYETHYLENE ENCASEMENT."
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR EROSION AND SEDIMENT CONTROLS AS NECESSARY TO COMPLY WITH FEDERAL, STATE, AND MUNICIPAL LAWS THAT PROHIBIT UNPERMITTED DISCHARGE OF POLLUTANTS, INCLUDING SEDIMENTS, THAT ARE A RESULT OF EROSION AND OTHER CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL CONDUCT ALL WORK SO SEDIMENT IS NOT TRANSPORTED ONTO THE ROADWAY OR ADJACENT PROPERTY. AT A MINIMUM, THE CONTRACTOR SHALL SWEEP UP ANY SEDIMENT TRACKED ONTO PAVED SURFACES IN PUBLIC RIGHT--OF--WAY WITHIN 24 HOURS OF THE TRACKING TO MINIMIZE THE WASH--OFF OF SEDIMENT INTO THE STORM DRAINS OR WATERWAYS.
- CONTRACTOR SHALL MAINTAIN A MINIMUM OF TEN (10) FEET HORIZONTAL AND EIGHTEEN (18") INCHES VERTICAL SEPARATION BETWEEN WATER AND STORM OR SANITARY SEWER MAINS AND SERVICES (AS MEASURED FROM OUTSIDE TO OUTSIDE OF PIPE). SANITARY AND STORM SEWER PIPE JOINTS SHALL BE PLACED AT LEAST 9--FEET FROM ANY WATERLINE CROSSING.

SANITARY SEWER NOTES

- EXISTING CUSTOMERS SHALL BE NOTIFIED SEVENTY--TWO (72) HOURS IN ADVANCE OF SANITARY SEWER SERVICE INTERRUPTION. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TEMPORARY SANITARY SEWER SERVICE TO THE EXISTING CUSTOMERS IF DEEMED NECESSARY BY THE ENGINEER. (TEMPORARY SEWER SERVICE NEEDS CITY OF VALDEZ REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.)
- THE MANHOLE SHALL BE A TYPE A MANHOLE PER CVSS DETAIL 50--1.
- MANHOLE SHALL HAVE A MINIMUM OF ONE--SIX (6") INCH GRADE RING. MAXIMUM GRADE RING ADJUSTMENT SHALL NOT EXCEED EIGHTEEN (18") INCHES.
- ALL SANITARY SEWER MAINS SHALL BE CLASS 50, DUCTILE IRON PIPE.
- SANITARY SEWER SERVICES SHALL BE 4--INCH DIP UNLESS NOTED ON PLANS WITH A MINIMUM SLOPE FOR 6--INCH SERVICES TO BE 1% AND FOR 4--INCH SERVICES TO BE 2%.
- SANITARY SEWER SERVICES SHALL BE PLACED NO CLOSER THAN: 15 FEET HORIZONTALLY MEASURED TO ANY FIRE HYDRANT OR FIRE HYDRANT LEG; 10 FEET HORIZONTALLY MEASURED TO ANY WATER MAIN, WATER SERVICE, STORM SEWER, FOOTING DRAIN, STREET LIGHT, TRANSFORMER PAD, ELECTRICAL/TELEPHONE/CABLE BOX; AND 5 FEET HORIZONTALLY MEASURED TO ANY SIDE LOT LINE.
- ALL BEDDING SHALL BE CLASS 'C'.
- SEWER MAIN AND SERVICE TRENCHES AND BEDDING SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY.
- THE CONTRACTOR SHALL RELOCATE ANY SEWER SERVICE CONNECTIONS INSTALLED WITH LESS THAN MINIMUM STANDARD MEASURED DISTANCES PRIOR TO FINAL ACCEPTANCE BY THE CITY OF VALDEZ.
- ALL PORTIONS OF THE SEWER SERVICE WITH LESS THAN 8' OF COVER SHALL BE INSULATED WITH 4" OF RIGID BOARD INSULATION.
- LATERAL SEWER SERVICE CONNECTION LOCATIONS SHALL BE APPROVED BY THE CITY OF VALDEZ DURING CONSTRUCTION OF SEWER MAIN LINE..

SURVEY NOTES

- BASIS OF BEARING IS N28°36'58"E (PER PLAT 97--15) BETWEEN FOUND MONUMENTS AS SHOWN ON SHEET C1.0.1.
- BASIS OF COORDINATES IS POINT 160, A FOUND ALUMINUM CAP LOCATED NEAR THE WEST END OF THE PROJECT AREA. COORDINATES ARE IN A LOCAL COORDINATE SYSTEM. THE COORDINATES FOR THIS POINT IS (N31266.39; E23094.92; EL80.49).
- BASIS OF VERTICAL DATUM IS POINT 50 A FOUND ORANGE PLASTIC CAP WITH AN ASSUMED ELEVATION OF 100.00.
- THE FIELD SURVEY WAS PERFORMED BY FR BELL & ASSOCIATES ON JUNE 5TH, 2010.
- UNDERGROUND UTILITY LOCATE REQUESTS WERE COORDINATED BY LOCATE CENTER OF ALASKA.

SAWMILL DRIVE ROAD EXTENSION  
VALDEZ, ALASKA  
SANITARY SEWER MAINLINE EXTENSION

March 30th, 2012



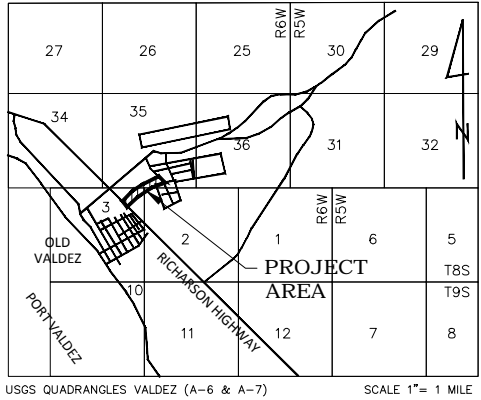
F. ROBERT BELL & ASSOCIATES  
801 W. FIREWEED LN; #201  
ANCHORAGE, AK 99503  
(907) 274--5257

CALL BEFORE YOU DIG

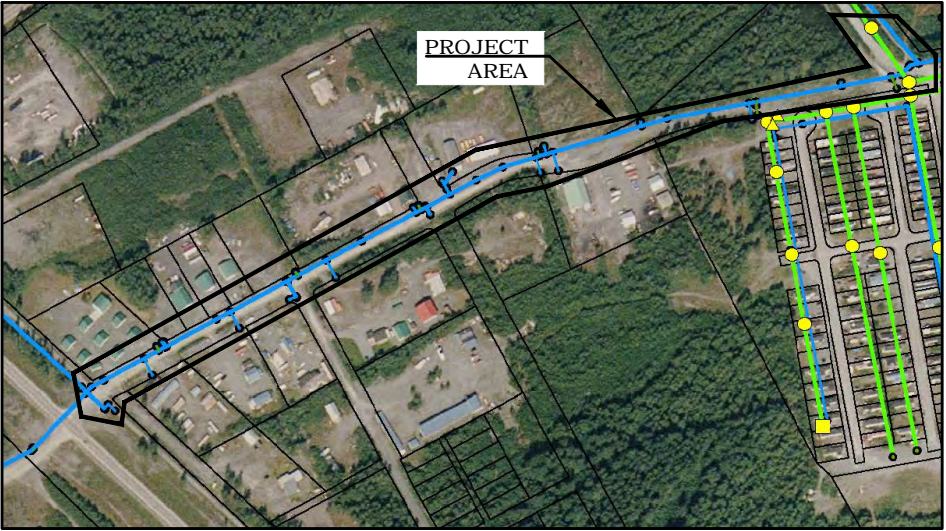
CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF EXCAVATION THE FOLLOWING IS A PARTIAL LIST:  
CITY OF VALDEZ PUBLIC WORKS 835--4473  
VALDEZ WATER 835--2997  
CVEA 835--4301  
CROWLEY 835--4558  
LOCATE CENTER OF ALASKA:  
STATEWIDE 1--800--478--3121

CAUTION

EXISTING UTILITY LOCATIONS ARE APPROXIMATE.  
CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION.

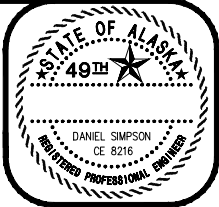


VICINITY MAP



WATER/SEWER KEY MAP

SCALE: NTS



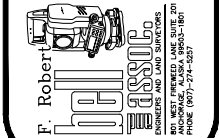
DATE:

REVISION:

CLIENT: CITY OF VALDEZ  
ADDRESS: 212 CHENEGA AVE  
VALDEZ, AK 99686

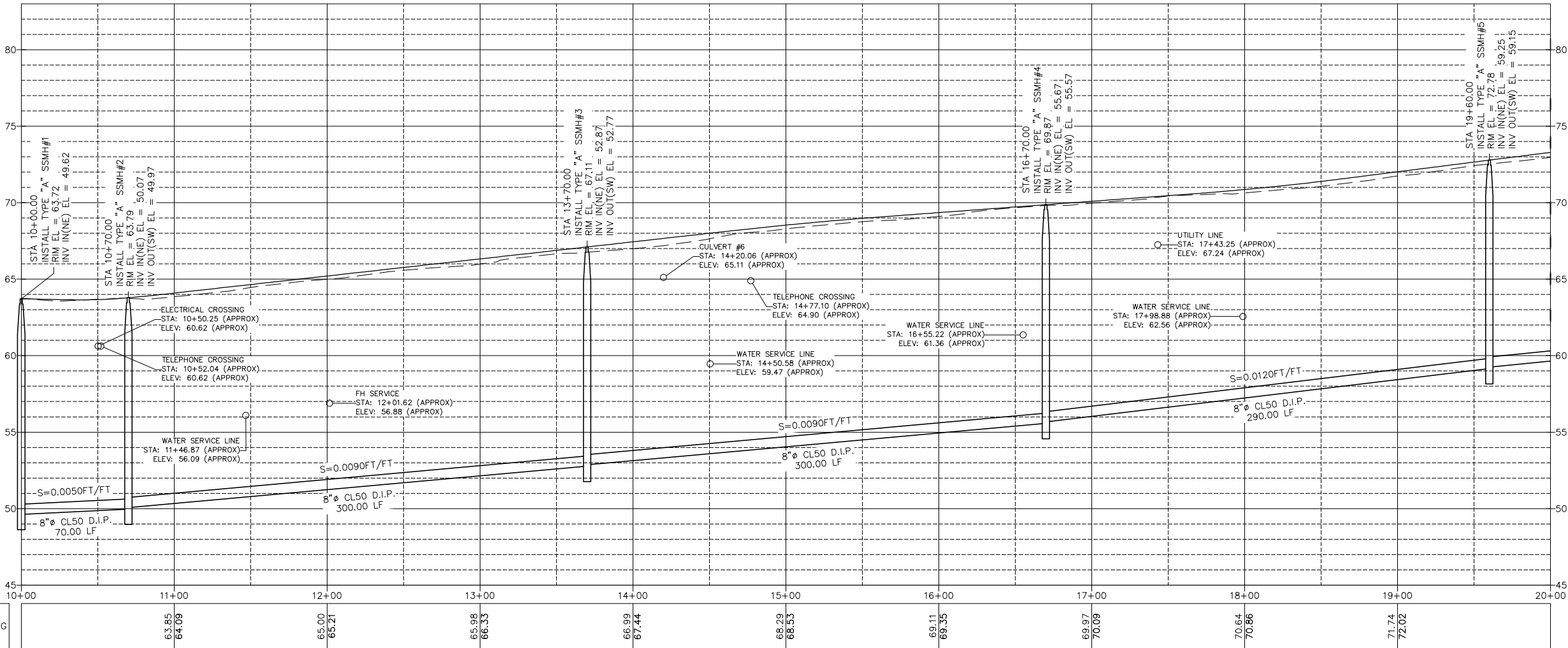
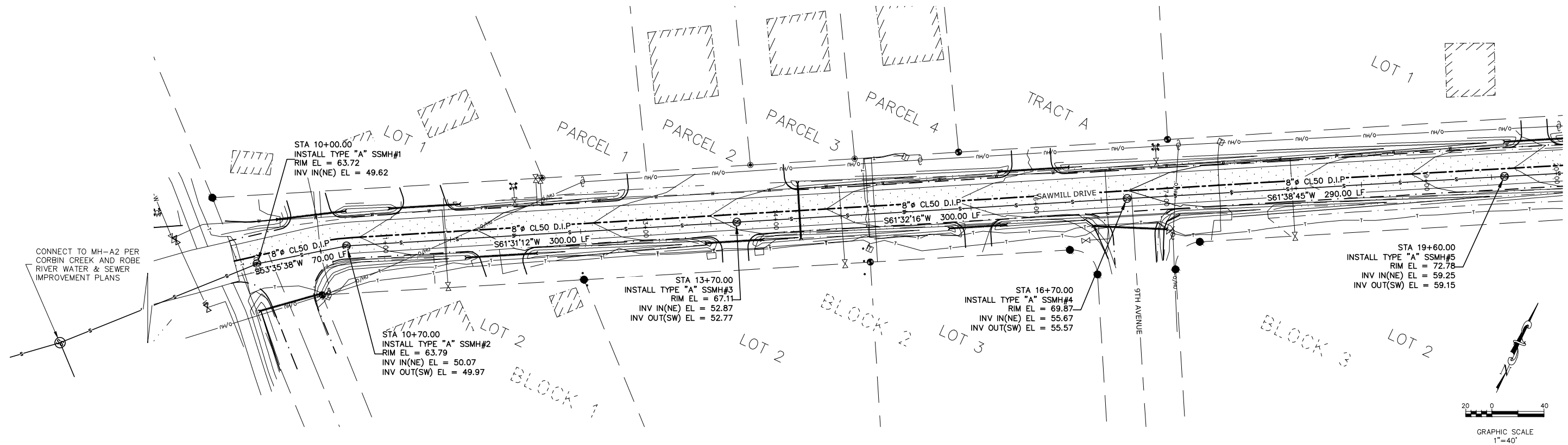
DRAWN BY: MSB  
CHECKED BY: DS  
DATE: 3/30/12  
FIELD BOOK: N/A  
JOB NUMBER: 2010-1534  
SCALE: AS SHOWN

SAWMILL DRIVE UPGRADE  
& SEWER MAINLINE EXTENSION  
NOTES & MAPS



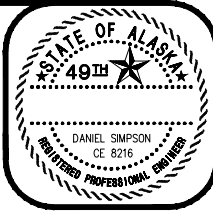
SHEET:

C6.00



SAWMILL DRIVE - PROPOSED SEWER

STA: 10+00 TO 20+00



DATE: \_\_\_\_\_

REVISION: \_\_\_\_\_

CLIENT: CITY OF VALDEZ

ADDRESS: 212 CHENEGA AVE  
VALDEZ, AK 99686

JOB NUMBER: 2010-1534

SCALE: AS SHOWN

DRAWN BY: MSB

CHECKED BY: DS

DATE: 3/30/12

FIELD BOOK: N/A

SAWMILL DRIVE UPGRADE  
& SEWER MAINLINE EXTENSION

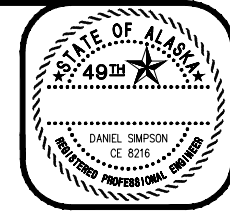
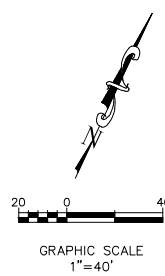
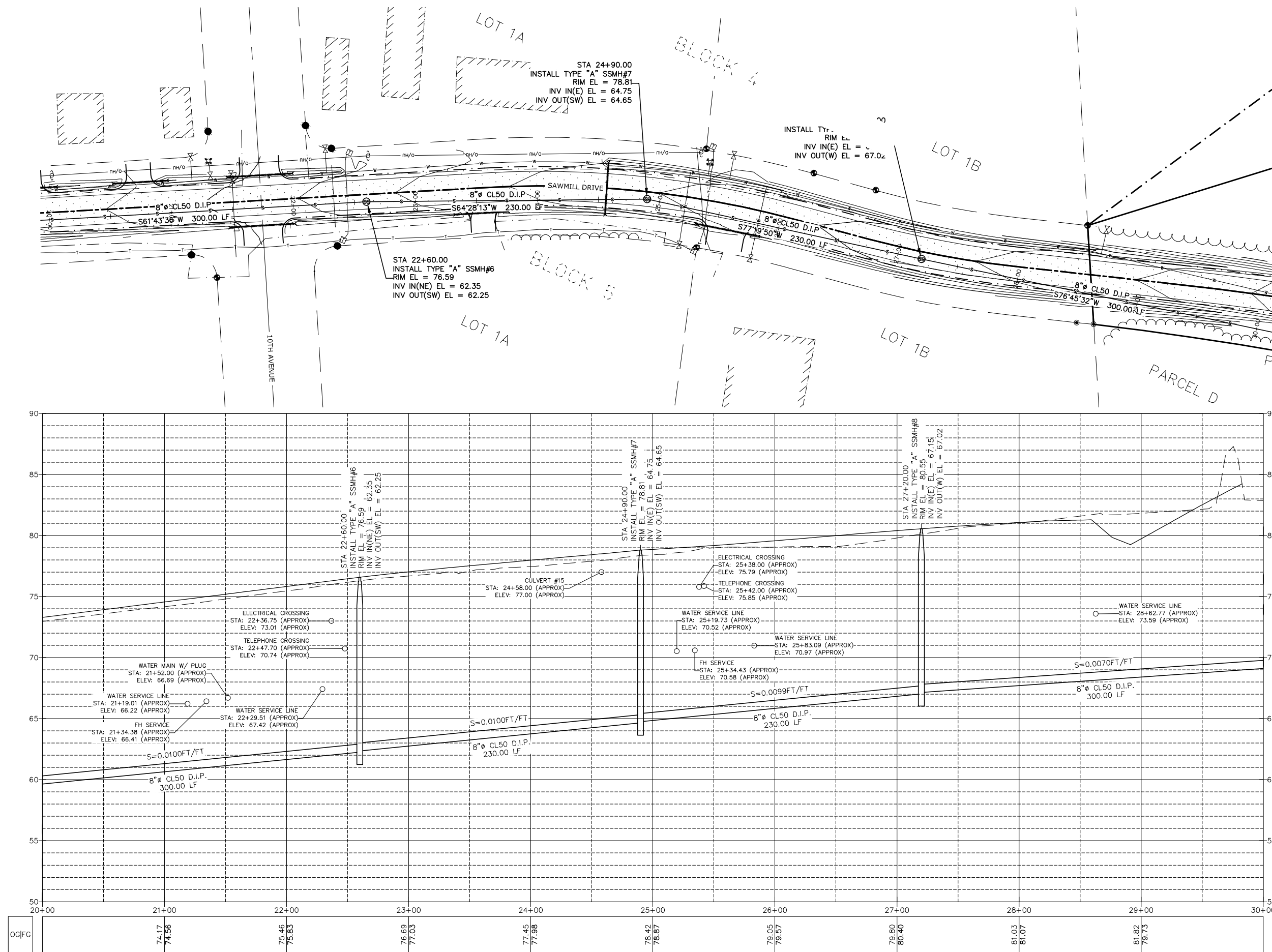
PLAN & PROFILE

STA 10+00 TO 20+00

F. Robert Bell & Associates, Inc.  
10000 10TH AVENUE, SUITE 200  
VALDEZ, ALASKA 99686  
PHONE: (907) 272-4321

SHEET:

C6.01



DATE: \_\_\_\_\_

REVISION: \_\_\_\_\_

CLIENT: CITY OF VALDEZ

ADDRESS: 212 CHENEGA AVE  
VALDEZ, AK 99686

JOB NUMBER: 2010-1534

SCALE: AS SHOWN

DRAWN BY: MSB

CHECKED BY: DS

DATE: 3/30/12

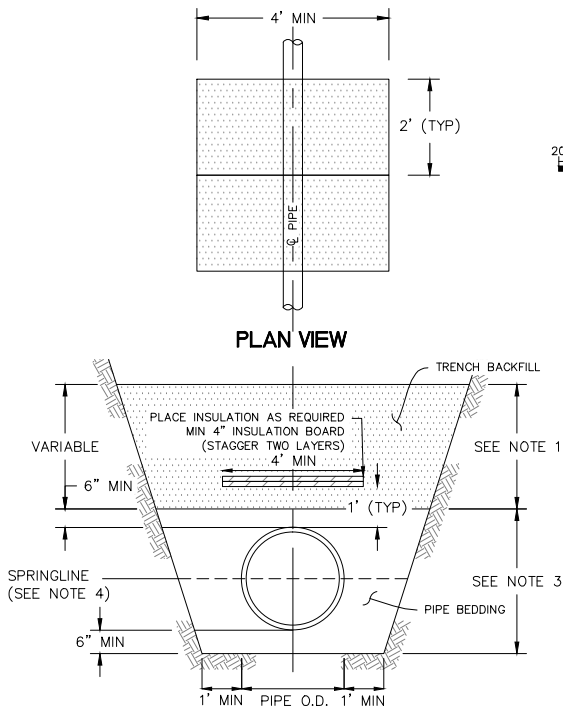
FIELD BOOK: N/A

**SAWMILL DRIVE UPGRADE  
& SEWER MAINLINE EXTENSION**

**PLAN & PROFILE**

**STA 20+00 TO 30+00**

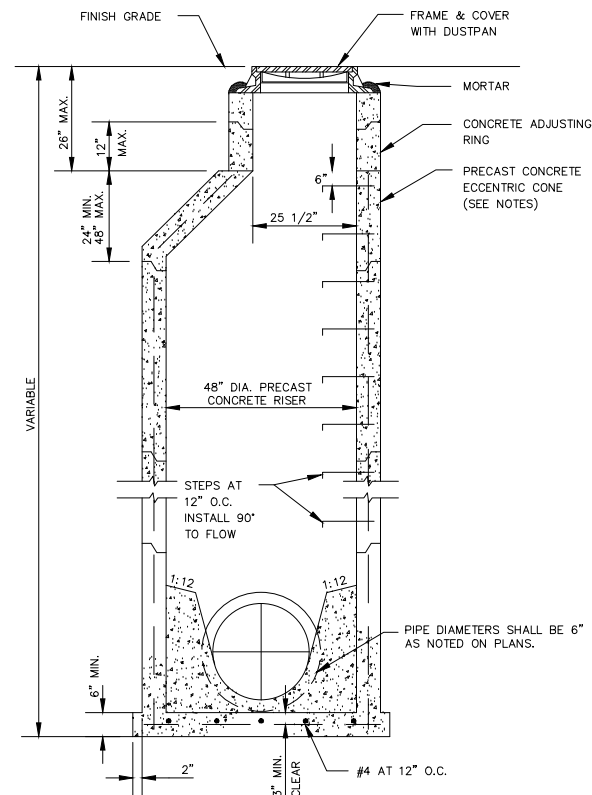
F. Robert  
F.R. BELL & ASSOCIATES  
10000 10TH AVENUE  
VALDEZ, AK 99686  
PHONE (907) 272-4327



- NOTES:
1. ALL TRENCH BACKFILL MATERIAL PLACED SHALL BE COMPACTED TO A MINIMUM OF 95% OF MAXIMUM DENSITY.
  2. TRENCH WALLS SHALL HAVE MAXIMUM SIDE SLOPES OF 1.5:1.
  3. CLASS "C" BEDDING.
  4. BEDDING TO SPRING LINE ONLY WHEN DUCTILE IRON PIPE IS INSTALLED.

## 1 DETAIL - TRENCH BACKFILL

CVSS DETAIL 20-13  
SCALE: NTS

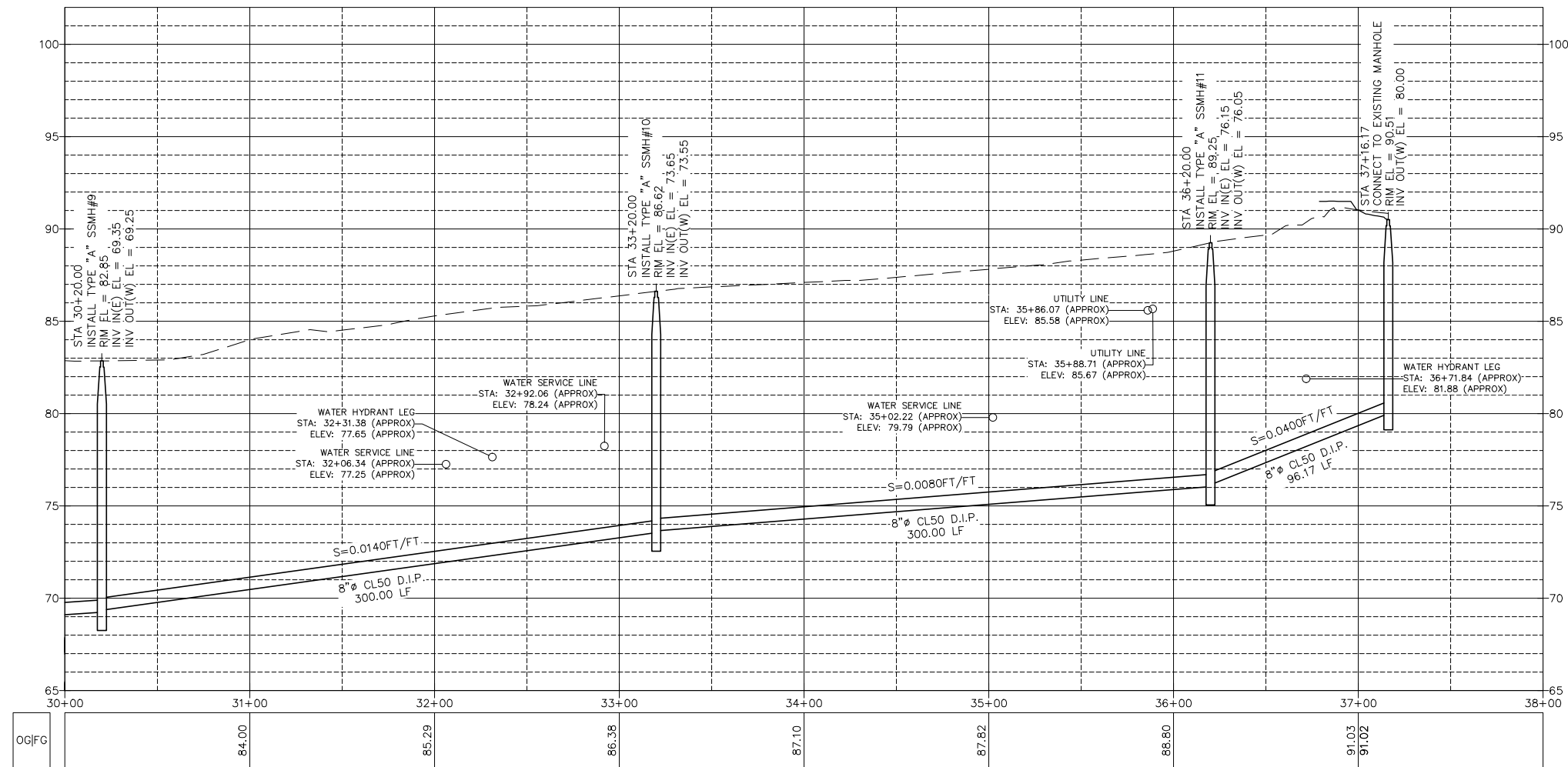
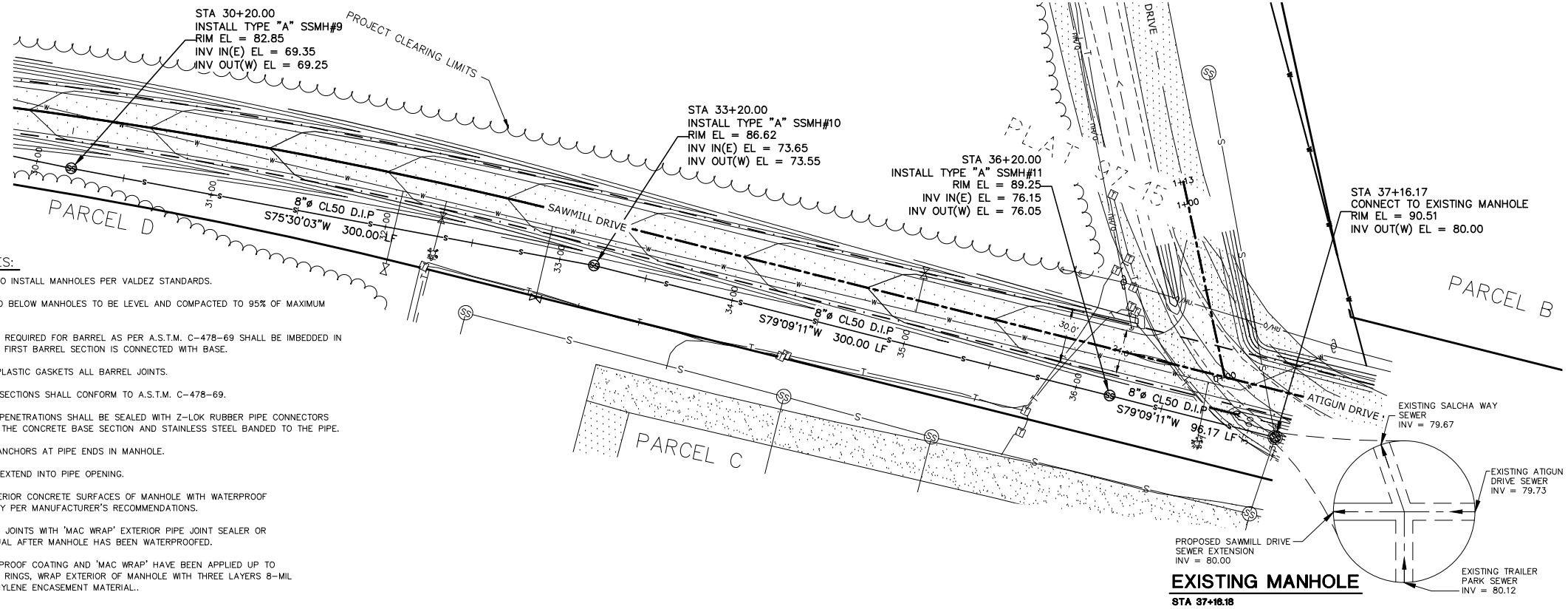


## 2 DETAIL - TYPE 'A' SANITARY SEWER MANHOLE

CVSS DETAIL 50-1  
SCALE: NTS

### DETAIL NOTES:

- 1) CONTRACTOR TO INSTALL MANHOLES PER VALDEZ STANDARDS.
- 2) NATIVE GROUND BELOW MANHOLES TO BE LEVEL AND COMPACTED TO 95% OF MAXIMUM DENSITY.
- 3) MINIMUM STEEL REQUIRED FOR BARREL AS PER A.S.T.M. C-478-69 SHALL BE IMBEDDED IN BASE SO THAT FIRST BARREL SECTION IS CONNECTED WITH BASE.
- 4) PRE-MOLDED PLASTIC GASKETS ALL BARREL JOINTS.
- 5) ALL MANHOLE SECTIONS SHALL CONFORM TO A.S.T.M. C-478-69.
- 6) ALL MANHOLE PENETRATIONS SHALL BE SEALED WITH Z-LOK RUBBER PIPE CONNECTORS PRECAST INTO THE CONCRETE BASE SECTION AND STAINLESS STEEL Banded TO THE PIPE.
- 7) INSTALL PIPE ANCHORS AT PIPE ENDS IN MANHOLE.
- 8) NO REBAR TO EXTEND INTO PIPE OPENING.
- 9) COAT ALL EXTERIOR CONCRETE SURFACES OF MANHOLE WITH WATERPROOF COATING. APPLY PER MANUFACTURER'S RECOMMENDATIONS.
- 10) SEAL MANHOLE JOINTS WITH 'MAC WRAP' EXTERIOR PIPE JOINT SEALER OR APPROVED EQUAL AFTER MANHOLE HAS BEEN WATERPROOFED.
- 11) AFTER WATER PROOF COATING AND 'MAC WRAP' HAVE BEEN APPLIED UP TO TOP OF GRADE RINGS, WRAP EXTERIOR OF MANHOLE WITH THREE LAYERS 8-MIL THICK POLYETHYLENE ENCASEMENT MATERIAL.



## SAWMILL DRIVE - PROPOSED SEWER

STA: 30+00 TO 38+00



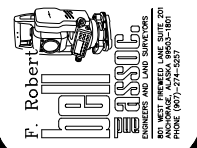
DATE:

REVISION:

CLIENT: CITY OF VALDEZ  
ADDRESS: 212 CHENEGA AVE  
VALDEZ, AK 99686

DRAWN BY: MSB  
CHECKED BY: DS  
DATE: 3/30/12  
FIELD BOOK: N/A

SAWMILL DRIVE UPGRADE  
& SEWER MAINLINE EXTENSION  
PLAN & PROFILE  
STA 30+00 TO 37+20

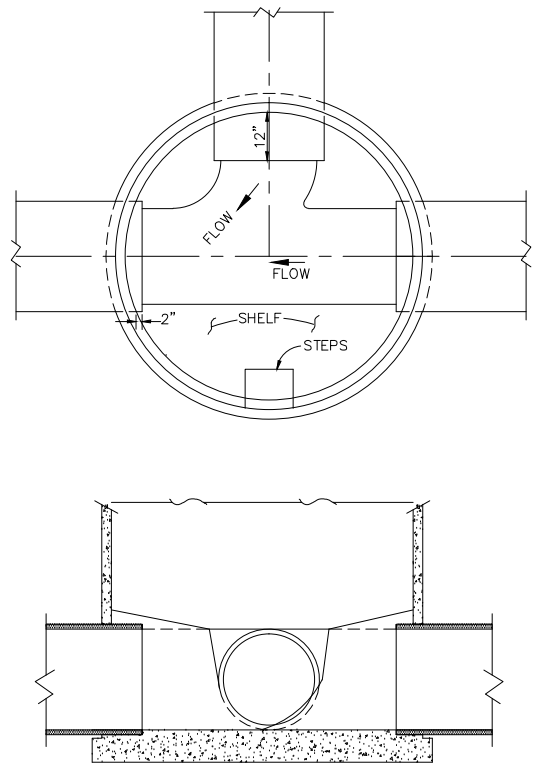


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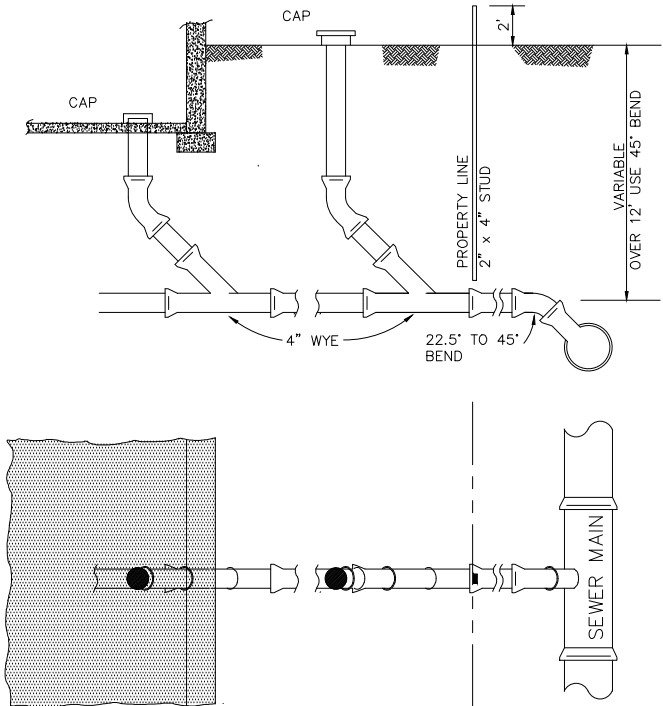
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F.R. BELL & ASSOCIATES

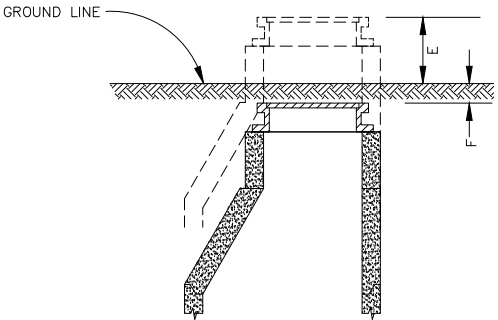




TYPE A AND B MANHOLE BASEPLAN  
SCALE: NTS



SEWER CONNECTION SERVICE  
SCALE: NTS



LOCATION	E	F
BACKYARDS, GRAVEL STREETS, AND ALLEY AREAS WHERE TRAVELED.		6"–12"
UNDEVELOPED AND SWAMPY AREAS.	24" MIN	
HIGHWAY R.O.W.S OUTSIDE TRAFFIC AREAS.	6"	
PAVED STREETS.		1/2"

MANHOLE HEIGHTS  
SCALE: NTS



DATE:

REVISION:

CLIENT: CITY OF VALDEZ

ADDRESS: 212 CHENEGA AVE  
VALDEZ, AK 99686

DRAWN BY: MSB

CHECKED BY: DS

DATE: 3/30/12

FIELD BOOK: N/A

F. Robert Bell & Associates, Inc.

SAWMILL DRIVE UPGRADE  
& SEWER MAINLINE EXTENSION

DETAILS - SEWER IMPROVEMENTS

REGISTERED PROFESSIONAL ENGINEER

ALASKA LICENSE NO. 8216

NO WEST PAVED LANE DATE 2/20

PHONE (907) 275-5371

SHEET:

C6.04