

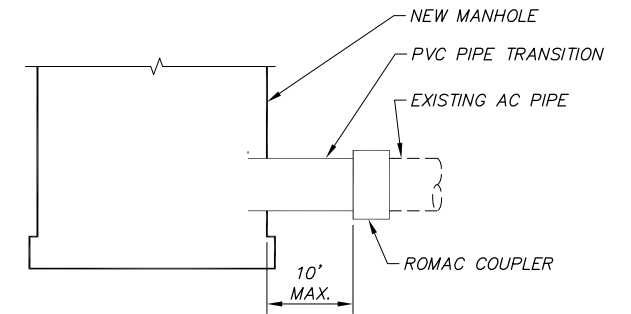
SEWER KEY MAP
NTS

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE INSTALLED AS SPECIFIED IN THE MOST CURRENT EDITION OF THE MUNICIPALITY OF ANCHORAGE STANDARD SPECIFICATIONS FOR STREETS--DRAINAGE--UTILITIES--PARKS (MASS), THE AWWU DESIGN AND CONSTRUCTION PRACTICES MANUAL, AND THE SPECIAL PROVISIONS.
- EXISTING GROUND FEATURES ARE BASED ON LOUNSBURY & ASSOCIATES, TOPOGRAPHIC SURVEY PERFORMED OCTOBER, 2009.
- LOCATIONS OF UTILITIES SHOWN ON THE DRAWINGS ARE NOT EXACT. THE CONTRACTOR SHALL VERIFY EXACT LOCATIONS BY OBTAINING UTILITY LOCATES AT LEAST 48 HOURS PRIOR TO COMMENCING WORK.
- EXISTING ELECTRIC, CABLE TELEVISION, TELEPHONE, STREET LIGHT AND GAS LINES IN THE RIGHT-OF-WAY MAY REQUIRE CONTINUOUS SUPPORT AND/OR RELOCATIONS SHALL BE DONE BY OTHERS, UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL COORDINATE WORK WITH THE OWNING UTILITY COMPANY. NOTIFY UTILITY COMPANIES 4 WEEKS PRIOR TO CONSTRUCTION FOR ADVANCED RELOCATION.
- MAINTAIN A MINIMUM OF TEN (10) FEET HORIZONTAL SEPARATION BETWEEN WATER AND SANITARY SEWER MAINS AND SERVICES. A MINIMUM VERTICAL SEPARATION OF EIGHTEEN (18) INCHES SHALL BE MAINTAINED AT ALL WATER/SEWER CROSSINGS.
- 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.
- 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.
- 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.
- 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.
- WATER RESULTING FROM CONTRACTORS DEWATERING EFFORTS SHALL NOT BE PUMPED OR OTHERWISE DIVERTED INTO EXISTING STORM DRAINS OR SANITARY SEWER MANHOLES OR CLEANOUTS UNLESS REQUIRED PERMITS ARE OBTAINED BY THE CONTRACTOR. UNDER NO CIRCUMSTANCES WILL THE CONTRACTOR BE ALLOWED TO DIVERT WATER FROM EXCAVATION ONTO THE ROADWAYS. CONTRACTOR SHALL PROVIDE DISPOSAL SITE FOR EXCESS WATER AND SHALL BE RESPONSIBLE FOR SECURING ALL NECESSARY PERMITS AND APPROVALS.

SANITARY SEWER NOTES

- THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO EXCAVATION, AND SHALL CALL FOR UTILITY LOCATES A MINIMUM OF TWO (2) DAYS (EXCLUDING NON-WORKING DAYS) PRIOR TO COMMENCEMENT OF ANY EXCAVATION.
- 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.
- THIS PROJECT IS A SEWER UPGRADE. MANHOLE INVERTS SHALL BE COMPLETED WITH AWWU APPROVAL PRIOR TO LIVE SEWAGE FLOWING THROUGH. THE MAIN LINE SHALL BE CONSTRUCTED CLEAN.
- ALL SANITARY SEWER PIPE SHALL BE C900 DR-18, PVC PIPE.
- ALL BEDDING SHALL BE CASS E.
- ALL MANHOLES SHALL HAVE A MINIMUM OF ONE-SIX (6") INCH GRADE RING. MAXIMUM GRADE RING ADJUSTMENT SHALL NOT EXCEED EIGHTEEN (18") INCHES.
- SEWER MAIN TRENCHES AND BEDDING SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY.
- THE CONTRACTOR SHALL REVIEW MASS DETAIL 50-1 AND BECOME FAMILIAR WITH THE LATEST REVISION TO THE MANHOLE DETAIL DENOTING Z-LOC, BITUMINOUS WATER PROOFING, MAC WRAP, AND INFI-SHIELD EXTERNAL UNI-BAND.
- CLEANOUT REMOVAL AND DISPOSAL IS INCIDENTAL TO INSTALLING NEW MANHOLE. DISPOSAL OF AC PIPE IS INCIDENTAL TO NEW MANHOLE.
- PVC PIPE TRANSITIONS ARE INCIDENTAL TO REMOVE AND REPLACE MANHOLE OR CONSTRUCT TYPE A MANHOLE.
- COORDINATE WITH AWWU ON SANITARY SEWER BYPASS FOR SPENARD ROAD AND BENSON BLVD. MANHOLE (MH-008) PER MASS 50.06, EXISTING MANHOLE MODIFICATIONS.



NOTE:

- FURNISH AND INSTALL 8' TO 10' OF C900 DR-18 PVC PIPE ON ALL EXISTING PIPES.

1 CONNECTION TO MANHOLE DETAIL
SS1 NTS



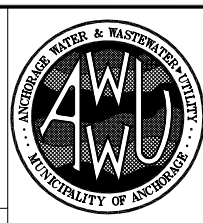
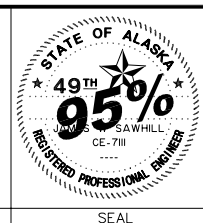
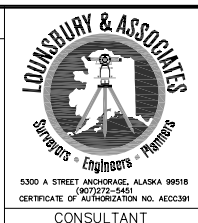
BEFORE YOU DIG
CALL FOR FREE
UNDERGROUND
LOCATION

Locate Call Center of Alaska
Statewide.....800-478-3121
will notify subscribed utilities only. Other
utilities need to be contacted individually.

VERIFY SCALE		THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.		IF BAR IS NOT ONE INCH, ADJUST DRAWING SCALE ACCORDINGLY.		FULL SIZE SCALE	
DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE
BASE	-	-	TELEPHONE	-	-		
TOPOGRAPHY	-	-	ELECTRIC	-	-		
PROFILE	-	-	CABLE TV	-	-		
SANITARY SEWER	-	-	TRAFFIC SIGNAL	-	-		
STORM SEWER	-	-	DESIGN	-	-		
WATER	-	-	QUANTITIES	-	-		
GAS	-	-	MUN. FINAL CHECK	-	-		
PLAN CHECK				REVISIONS			

RECORD DRAWING		Note: To be filled out on original drawings upon project completion.	
1. DATA PROVIDED BY:	3. Based on periodic field observations by the Engineer (or an individual under his/her direct supervision), the Contractor-provided data appears to represent the project as constructed.	CONTRACTOR:	DATA TRANSFER CHECKED BY:
BY:	TITLE:	DATE:	BY:
2. DATA TRANSFERRED BY:	DATE:	COMPANY:	TITLE:
DATE:			

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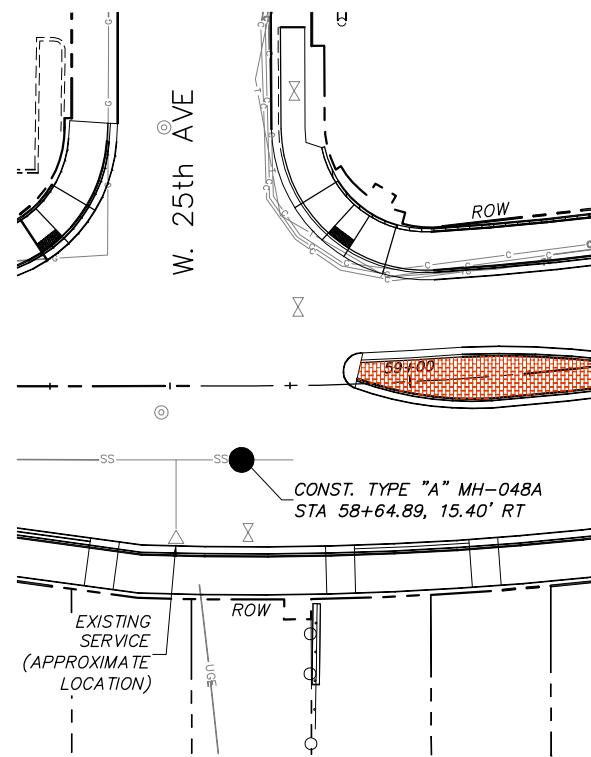
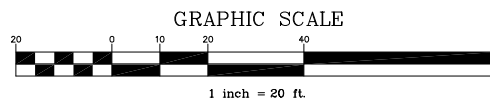
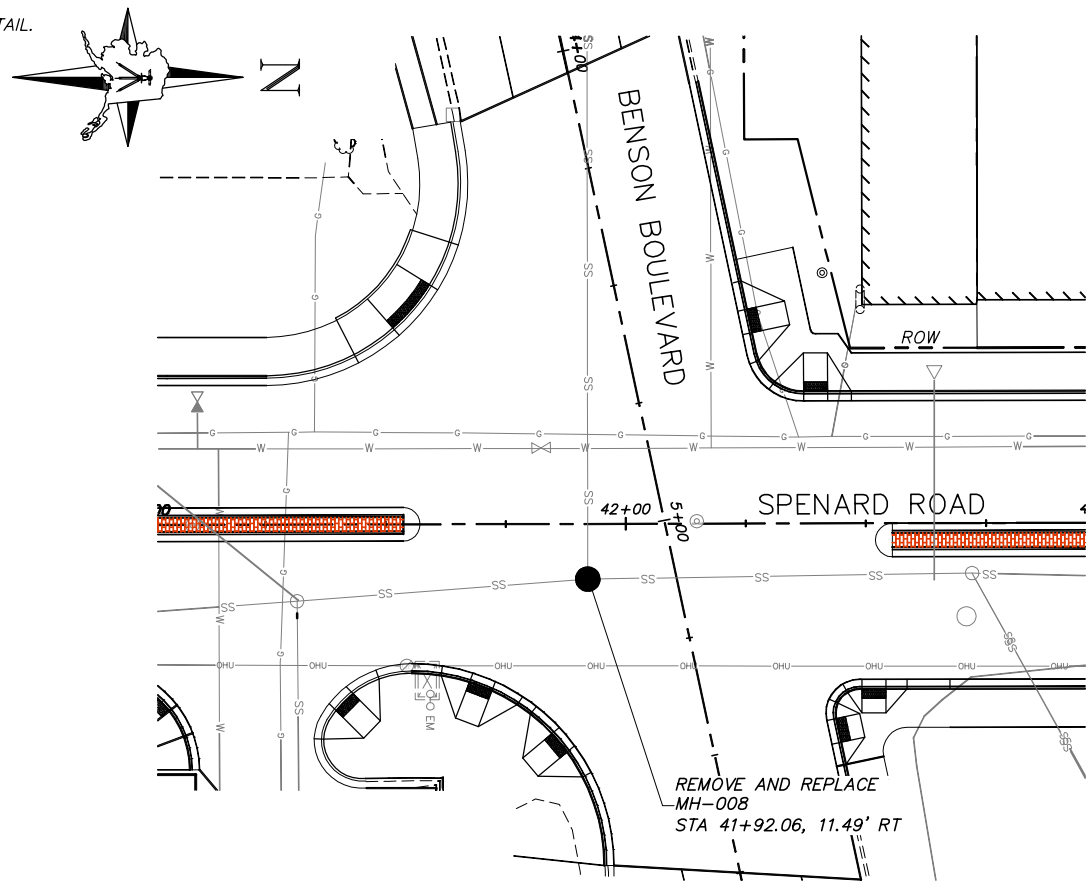
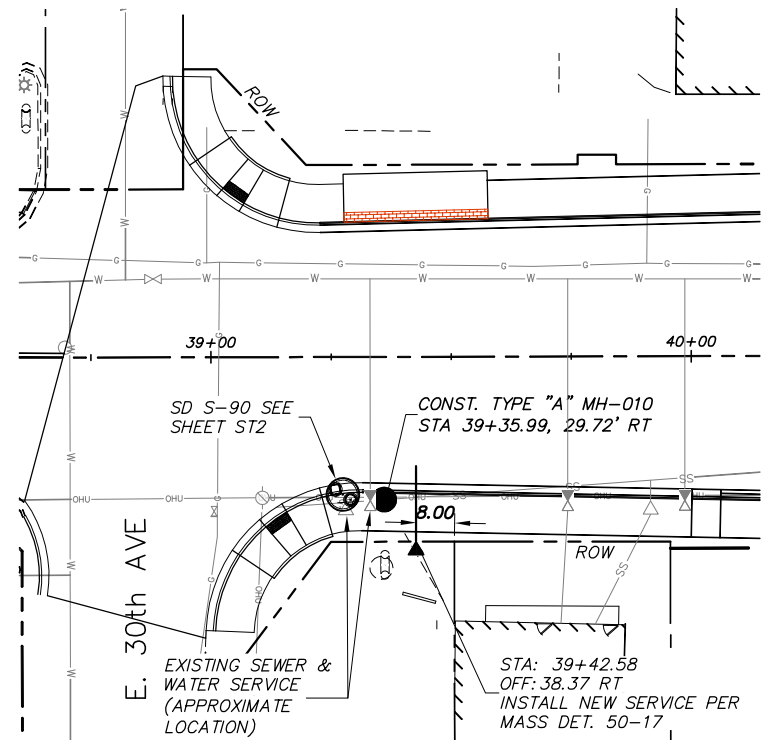
PROJECT MANAGEMENT AND ENGINEERING DEPARTMENT			
AWWU PROJECT NO. 51-000007909	PM&E PROJECT NO. 03-22B		
SPENARD ROAD RECONSTRUCTION PHASE II, HILLCREST DRIVE TO BENSON BOULEVARD			
SEWER PLANS			
SEWER KEY MAP, NOTES & DETAIL			
SCALE: NO SCALE	DATE: 12-12-2016	GRIDS: SW1529,1629	SHEET SS1 of SS2
ACCT. NO. 05-037G			

DEMOLITION NOTES:

- (A) SEE DEMOLITION SHEETS FOR LIMITS OF DEMOLITION.
- (B) REPLACE ASPHALT TO LIMITS SHOWN ON STREET IMPROVEMENT SHEETS.

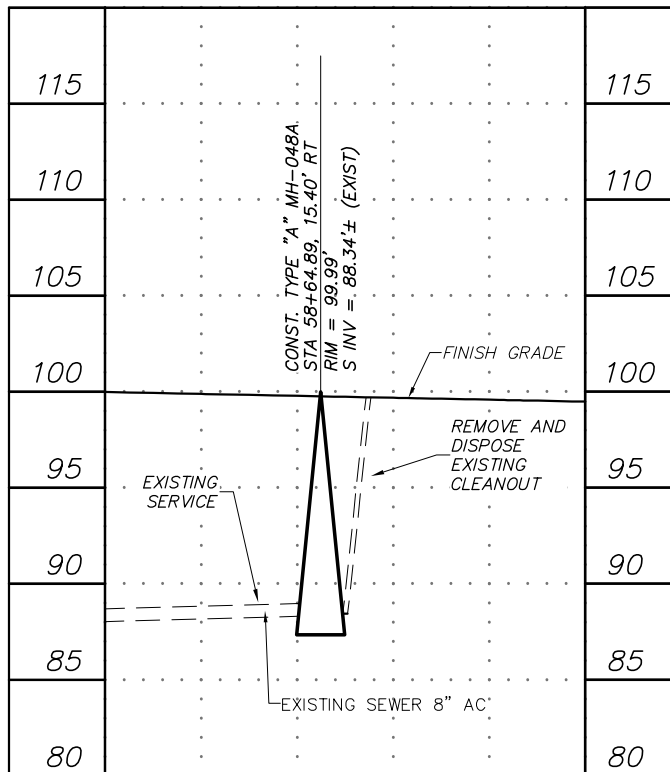
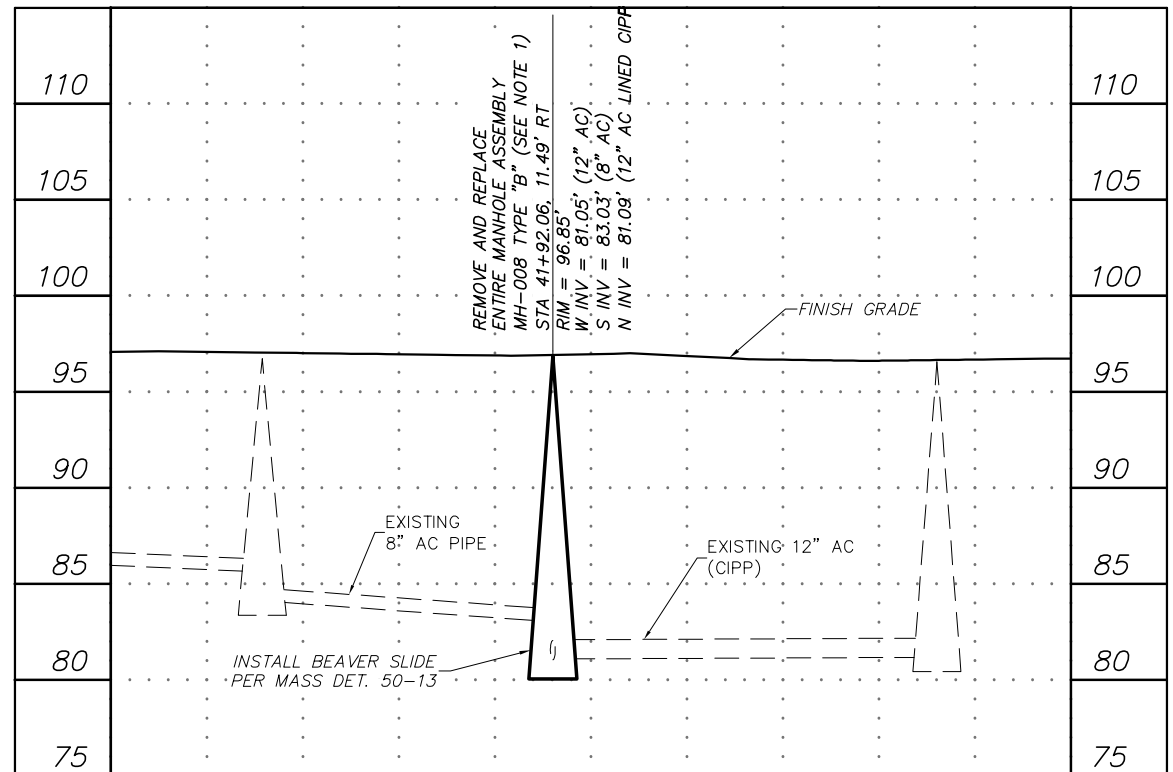
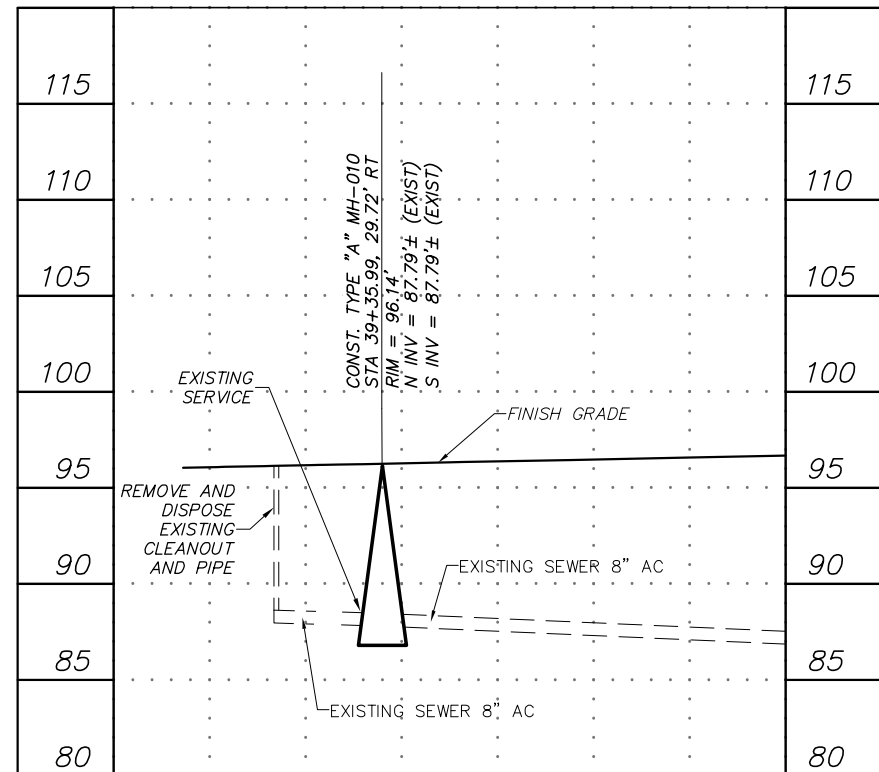
CONSTRUCTION NOTES:

- 1. SEE (1/SS1) FOR CONNECTION TO MANHOLE DETAIL.



BEFORE YOU DIG CALL FOR FREE UNDERGROUND LOCATION

Locate Call Center of Alaska
Statewide: 800-478-3121
will notify subscribed utilities only. Other utilities need to be contacted individually.



VERIFY SCALE		THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.		IF BAR IS NOT ONE INCH, ADJUST DRAWING SCALE ACCORDINGLY.		FULL SIZE SCALE	
DATA	BY	DATA	BY	DATE	DESCRIPTION	BY	DATE
BASE		TELEPHONE					
TOPOGRAPHY		ELECTRIC					
PROFILE		CABLE TV					
SANITARY SEWER		TRAFFIC SIGNAL					
STORM SEWER		DESIGN					
WATER		QUANTITIES					
GAS		MUN. FINAL CHECK					

RECORD DRAWING Note: To be filled out on original drawings upon project completion.

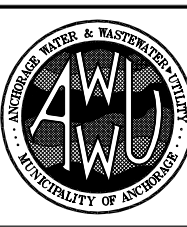
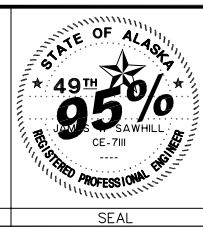
1. DATA PROVIDED BY: _____
This will serve to certify that these Record Drawings are a true and accurate representation of the project as constructed.
CONTRACTOR: _____
BY: _____ TITLE: _____
DATE: _____

2. DATA TRANSFERRED BY: _____
COMPANY: _____
DATE: _____

3. Based on periodic field observations by the Engineer (or an individual under his/her direct supervision), the Contractor-provided data appears to represent the project as constructed.
DATA TRANSFER CHECKED BY: _____
COMPANY: _____
BY: _____ TITLE: _____
DATE: _____

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PROJECT MANAGEMENT AND ENGINEERING DEPARTMENT

AWWU PROJECT NO. 51-000007909 PM&E PROJECT NO. 03-22B

SPENARD ROAD RECONSTRUCTION PHASE II, HILLCREST DRIVE TO BENSON BOULEVARD

SEWER PLANS

PLAN & PROFILE

SCALE: H: 1:20 DATE: 12-12-2016 GRIDS: SW1529,1629 SHEET SS2 of SS2
V: 1"=5' ACCT. NO. 05-037G