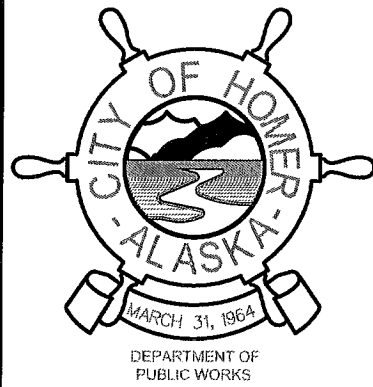
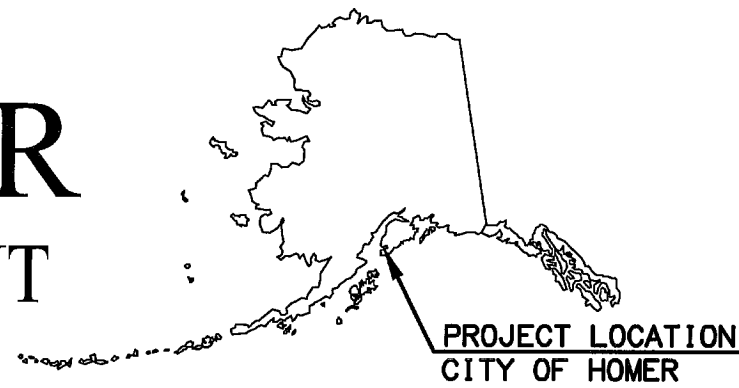


REVISIONS			YEAR	SHEET NO.	TOTAL 'A' SHEETS
NO.	DATE	DESCRIPTION			
			2016	A1	A3
				PLAN SET TOTAL	38



# CITY OF HOMER

## PUBLIC WORKS DEPARTMENT



MAYOR  
BETH WYTHE

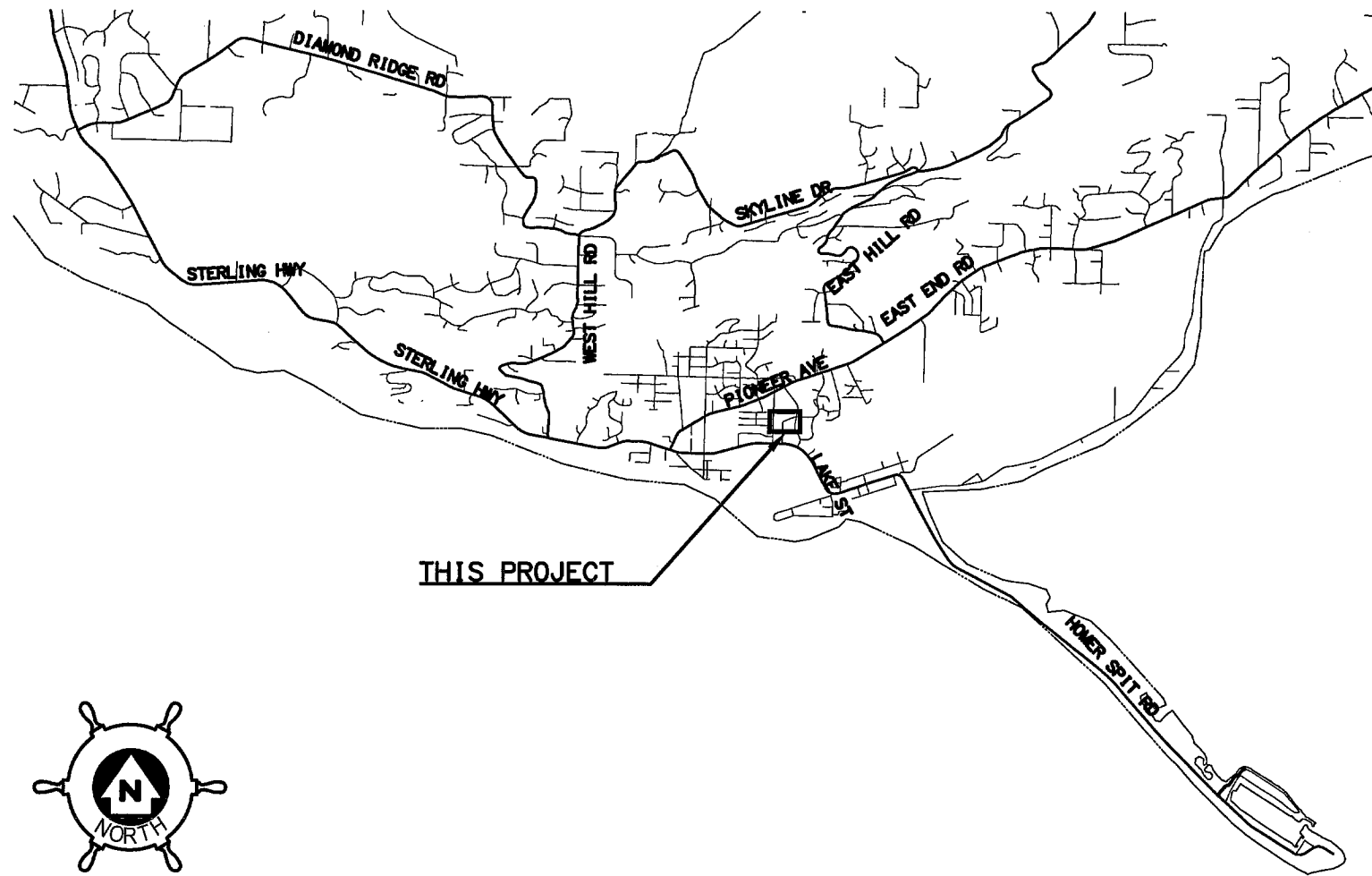
CITY MANAGER  
KATIE KOESTER

PUBLIC WORKS DIRECTOR  
CAREY S. MEYER, P.E.

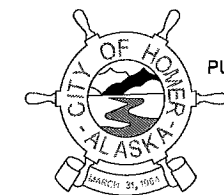
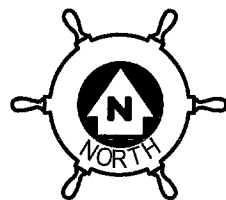
CITY COUNCIL MEMBERS  
DAVID LEWIS  
GUS VAN DYKE  
DONNA ADERHOLD  
CATRIONA REYNOLDS  
BRYAN ZAK  
HEATH SMITH

# WADDELL WAY ROAD AND WATER MAIN IMPROVEMENTS

DRAFTED BY SOPHIA HUFF  
 SCALE  
 LAYOUT A1  
 DATE TIME 1/15/2016 9:33 AM  
 DRAWING LOCATION Z:\PROJECTS\City of Homer\Term Contract Waddell Way\Civil3D\Production Drawings\A1\_Title



INDEX	
SHEET NO.	DESCRIPTION
A1	TITLE
A2	LEGEND
A3	GENERAL NOTES & SURVEY CONTROL INFORMATION
B1-B2	TYPICAL SECTIONS
C1	ESTIMATE OF QUANTITIES
D1-D2	SUMMARY TABLES
E1-E5	STORM DRAIN DETAILS
F1-F4	PLAN AND PROFILE
H1	TRAFFIC LEGEND AND NOTES
H2-H4	SIGNING, STRIPING AND ILLUMINATION PLANS
H5	SIGN SUMMARY
H6	ILLUMINATION SUMMARIES
H7-H9	SIGN DETAILS
H10-H12	ILLUMINATION DETAILS
J1-J2	TRAFFIC CONTROL
U1	WATER MAIN NOTES
U2	TYPICAL TRENCH SECTION
U3-U4	WATER MAIN PLAN AND PROFILE
U5-U8	WATER MAIN DETAILS

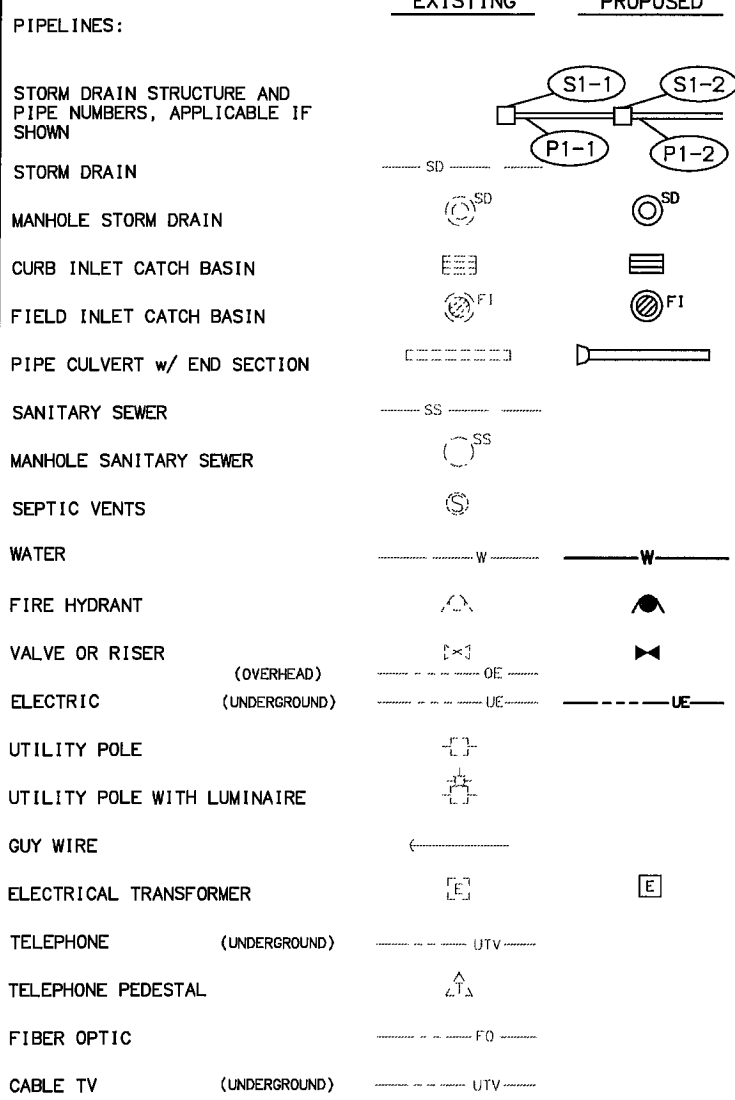


CITY OF HOMER, ALASKA  
PUBLIC WORKS DEPARTMENT  
3575 HEATH STREET  
HOMER, ALASKA 99603  
PHONE: (907) 235-3170  
FAX: (907) 235-3145

1/15/2016

DRAFTED BY: SOPHIA, MRF  
 SCALE: NTS  
 LAYOUT: A2  
 DATE TIME: 1/15/2016 9:03 AM  
 DRAWING LOCATION: Z:\PROJECTS\City of Homer\Term Contract\Waddell Way\Civil\3D\Production Drawings\A2\_LEGEND

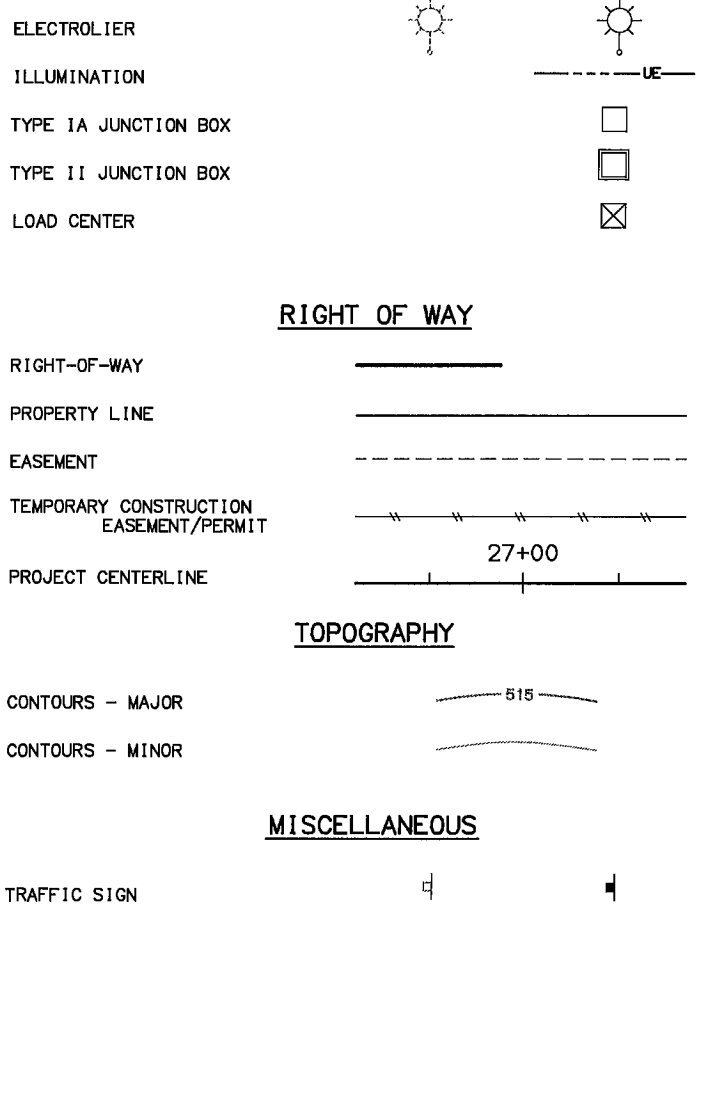
**UTILITIES**



**ABBREVIATIONS**

AC - ASPHALT CEMENT  
 ASTM - AMERICAN SOCIETY FOR TESTING AND MATERIALS  
 AWWA - AMERICAN WATER WORKS ASSOCIATION  
 BF - BOARD FOOT  
 B.O.P. - BOTTOM OF PIPE  
 CB - CATCH BASIN AND CONSTRUCT CATCH BASIN  
 CMP - CORRUGATED METAL PIPE  
 C.O.H. - CITY OF HOMER  
 CY - CUBIC YARD  
 D.I.P. - DUCTILE IRON PIPE  
 DOT - DEPARTMENT OF TRANSPORTATION  
 E - EASTING  
 EA - EACH  
 ELEV - ELEVATION  
 F&I - FURNISH AND INSTALL  
 FT - FOOT OR FEET  
 GRSC - GALVANIZED RIGID STEEL CONDUIT  
 GV - GATE VALVE  
 H - HORIZONTAL  
 HDPE - HIGH-DENSITY POLYETHYLENE

**UTILITIES**



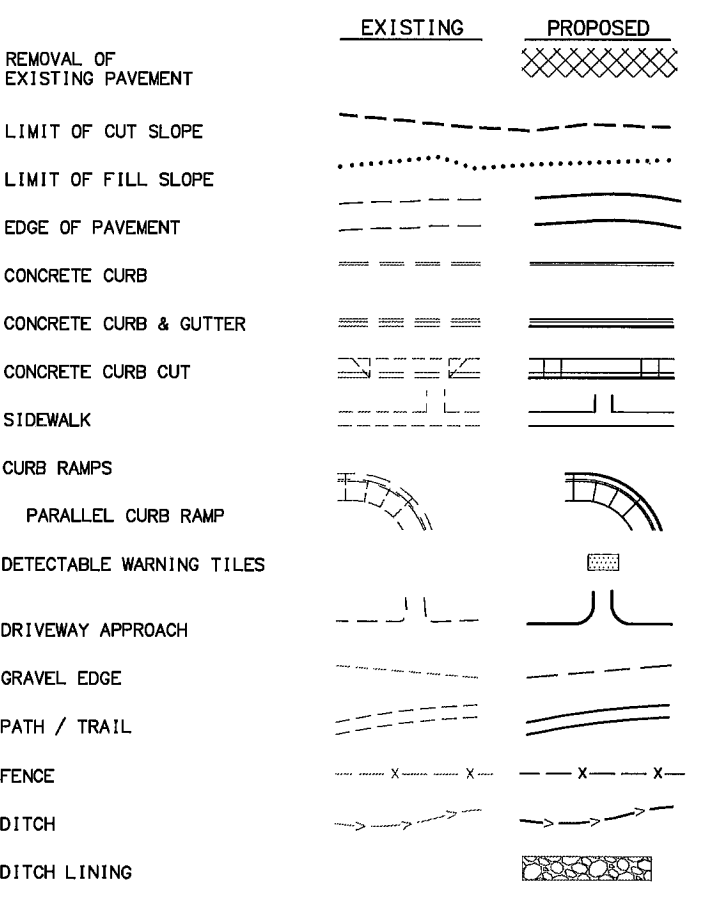
**RIGHT OF WAY**

**TOPOGRAPHY**

**MISCELLANEOUS**


HMWPE - HIGH MOLECULAR WEIGHT POLYETHYLENE  
 INV - INVERT  
 IPS - IRON PIPE SIZE  
 L - LENGTH  
 LF - LINEAR FOOT  
 LOC - LIP OF CURB  
 LT - LEFT  
 LS - LUMP SUM  
 MAX - MAXIMUM  
 MIN - MINIMUM  
 MJ - MECHANICAL JOINT  
 MSF - THOUSAND SQUARE FEET  
 N - NORTHING  
 NO. - NUMBER  
 N.T.S. - NOT TO SCALE  
 O.S.H.A. - OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION  
 PC - POINT OF CURVATURE  
 P.C.C. - PORTLAND CEMENT CONCRETE  
 PI - POINT OF INTERSECTION  
 PSI - POUNDS PER SQUARE INCH

**ROADWAY**

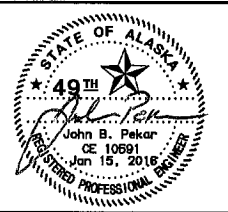


SHEET NO.	TOTAL SHEETS	
<b>A2</b>	<b>A3</b>	
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

PLANS DEVELOPED BY:  
 KINNEY ENGINEERING, LLC  
 FOR  
 CITY OF HOMER, ALASKA  
 PUBLIC WORKS DEPARTMENT



PHONE: (907) 235-3170  
 FAX: (907) 235-3145



CITY OF HOMER  
 WADDELL WAY ROAD AND  
 WATER MAIN IMPROVEMENTS  
**LEGEND SHEET**

DRAWING LOCATION: \\CE-SERVER\VE-F\100\PROJECTS\CITY OF HOMER\Term Contract\Wadde\1\Wey\Civil\30\Production Drawings\A3\_GENERAL\N07182016 11:59 AM  
 DATE: TIME: LAYOUT: SCALE: NTS: DRAFTED BY: SOPHIA.HFF

**GENERAL NOTES:**

1. CONTRACTOR SHALL COMPLETE CONSTRUCTION IN ACCORDANCE WITH THE CITY OF HOMER STANDARD SPECIFICATIONS LATEST EDITION INCLUDING ITEMS, DRAWINGS, TECHNICAL SPECIFICATIONS, AND SPECIAL PROVISIONS TAKE PRECEDENCE OVER THE STANDARD SPECIFICATIONS.
2. THE CITY SHALL OBTAIN ALL NECESSARY LOCAL, STATE AND FEDERAL PERMITS PRIOR TO BEGINNING CONSTRUCTION. THE PERMITS SHALL BE MAINTAINED AT THE JOB SITE.
3. CONTRACTOR SHALL MAINTAIN "REDLINE" RECORD DRAWINGS ON A CLEAN SET OF CONSTRUCTION DRAWINGS. THE CONTRACTOR SHALL MAINTAIN THE "REDLINES" CURRENT ON A DAILY BASIS WHICH SHALL BE AVAILABLE TO THE ENGINEER FOR INSPECTION ON THE JOB SITE. CONTRACTOR SHALL RECORD SURVEY NOTES AND SUBMIT DAILY TO THE ENGINEER. CONTRACTOR SHALL RECORD SURVEY NOTES FOR SUBMITTAL WITH RECORD DRAWINGS, INCLUDING HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES ENCOUNTERED IN THE FIELD. CONTRACTOR SHALL RECORD ALL DEVIATIONS FROM THE PLANS.
4. CONSTRUCTION OPERATIONS REQUIRED FOR THIS PROJECT SHALL REMAIN WITHIN EXISTING CITY OF HOMER AND STATE OF ALASKA RIGHTS-OF-WAY AND EASEMENTS, UNLESS OTHERWISE APPROVED IN WRITING BY THE ENGINEER AND THE AFFECTED PROPERTY OWNER.
5. LOCATIONS DEPICTED FOR THE UTILITIES AND OTHER EXISTING FEATURES ARE APPROXIMATE. SOME UTILITIES HAVE BEEN LOCATED FROM RECORD DRAWINGS AND UTILITY COMPANY LOCATES. CONTRACTOR SHALL LOCATE AND VERIFY ALL UTILITIES PRIOR TO CONSTRUCTION.
6. UNDERGROUND ELECTRICAL AND TELECOMMUNICATION LINES OCCUR WITHIN THE PROJECT AREA; CONTRACTOR SHALL COORDINATE WORK ACCORDINGLY. ALL WORK IN CLOSE PROXIMITY TO EXISTING UNDER-GROUND LINES SHALL COMPLY WITH APPLICABLE FEDERAL, STATE, AND LOCAL STATUTES, CODES AND GUIDELINES, AND THE ELECTRICAL FACILITY CLEARANCE REQUIREMENTS OF THE GOVERNING UTILITY. CONTRACTOR SHALL HAND DIG WITHIN TWO FEET OF BURIED ELECTRICAL CABLE.
7. CONTRACTOR SHALL SAWCUT EXISTING PAVEMENT (ROADS, PARKING AREAS, DRIVEWAYS, ETC.,) TO A LINE 2 FEET BEYOND THE PROPOSED IMPROVEMENTS, DURING THE INITIAL EXCAVATION OPERATIONS. IF EXISTING PAVEMENT HAS BEEN LIFTED, IF EDGE DOES NOT OCCUR IN UNDISTURBED MATERIAL, OR IF EDGE IS LOCATED WITHIN A TRAVEL LANE, FURTHER REMOVAL MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER, TO PROVIDE A PROPER TRANSITION BETWEEN NEW AND EXISTING PAVEMENT. SAW CUTTING OF EXISTING PAVEMENT IS INCIDENTAL TO THE BID ITEM "REMOVE PAVEMENT", AND NO SEPARATE PAYMENT SHALL BE MADE. SAWCUTS WITHIN THE ROADWAY SHALL BE SKEWED AT AN ANGLE OF 15 TO 25 DEGREES WHERE MATCHING EXISTING ASPHALT.
8. CONTRACTOR SHALL APPLY TACK COAT TO THE SAW CUT ASPHALT FACE PRIOR TO PAVING. CONTRACTOR SHALL SAWCUT CURB & GUTTER AND SIDEWALK AT THE NEAREST JOINT AT OR BEYOND REMOVAL LIMITS OR AS DIRECTED BY THE ENGINEER. TACK COAT IS INCIDENTAL TO THE RESPECTIVE BID ITEM.
9. CONTRACTOR SHALL MAINTAIN STOP SIGNS AND STREET NAME SIGNS OPERATIONAL IN THE PROJECT AREA DURING CONSTRUCTION.
10. LIMITS OF EXCAVATION AND BACKFILL SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
11. CONTRACTOR SHALL REMOVE ORGANIC MATERIAL FROM THE SUBGRADE TO A DEPTH TO BE DETERMINED BY THE ENGINEER. CONTRACTOR SHALL NOT PLACE OR SHALL NOT OTHERWISE UTILIZE ORGANIC MATERIAL OR OTHER DELETERIOUS MATERIAL FOR BACKFILL, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
12. WORK AND MATERIALS REQUIRED FOR REMOVING LITTER OR DEBRIS THAT EXIST WITHIN THE PROJECT LIMITS ARE INCIDENTAL TO THE PROJECT AND NO SEPARATE PAYMENT SHALL BE MADE.
13. CONTRACTOR SHALL REPLACE ALL DISTURBED PROPERTY CORNERS. PAYMENT FOR REPLACING DISTURBED PROPERTY CORNERS IS INCIDENTAL TO THE CONTRACT AND NO SEPARATE PAYMENT SHALL BE MADE.
14. CONTRACTOR SHALL TOPSOIL AND SEED ALL DISTURBED AREAS WHERE OTHER SURFACE IS NOT SPECIFIED.
15. CONTRACTOR SHALL RESTORE DISTURBED PROPERTY TO PRECONSTRUCTION CONDITION(S), UNLESS OTHERWISE DIRECTED BY THE ENGINEER. PAYMENT FOR RESTORING DISTURBED PROPERTY IS INCIDENTAL TO THE CONTRACT AND NO SEPARATE PAYMENT SHALL BE MADE.
16. IF CONTAMINATED SOIL, GROUNDWATER, OR FREE-PRODUCT ARE ENCOUNTERED, THE CONSTRUCTION CONTRACTOR SHALL IMMEDIATELY CONTACT THE ENGINEER WHO WILL IMMEDIATELY CONTACT THE DEC PREVENTION AND EMERGENCY RESPONSE (PERP) OFFICE STAFF AT (907) 465-5340 / FAX (907)465-2237 IN ACCORDANCE WITH SPILL REPORTING REQUIREMENTS UNDER 18 AAC 75.300, AND COORDINATE MANAGEMENT OF ALL CONTAMINATED MEDIA WITH EMERGENCY RESPONSE PERSONNEL.

**PROJECT SURVEY INFORMATION:**

THIS PROJECT WAS DESIGNED FROM A PLANIMETRIC AND TOPOGRAPHIC SURVEY BY STEVEN C. SMITH P.L.S. WHO PROVIDED THE FOLLOWING SURVEY CONTROL.

**BASIS OF BEARING**

1. BASIS OF BEARING FOR THIS SURVEY WAS DETERMINED BY A HIGH PRECISION GPS SURVEY USING TOPCON DUAL-FREQUENCY HiPer V RECEIVERS, DIFFERENTIALLY COLLECTED AND PROCESSED WITH MAGNET OFFICE VERSION 1.2.1 SOFTWARE. NAD83 ALASKA STATE PLANE GRID COORDINATES (U.S. SURVEY FEET) OBTAINED FROM THE GPS OBSERVATIONS WERE BASED ON THE NGS PUBLISHED VALUES FOR FEDERAL BASE NETWORK CONTROL STATION "HOMAIR" (PID TTO155).
2. TRUE BEARINGS AND DISTANCES WERE DETERMINED BY ROTATING AND SCALING FROM GRID USING FEDERAL BASE NETWORK CONTROL STATION "HOMAIR" AS A SCALING POINT. TRUE BEARINGS WERE DETERMINED BY ROTATING GRID INVERSE AZIMUTHS -1°17'13.4". TRUE DISTANCES WERE OBTAINED BY DIVIDING GRID INVERSE DISTANCES BY 0.999986696.
3. THE RESULTING SCALED COORDINATES WERE TRANSLATED TO A LOCAL COORDINATE SYSTEM BASED ON FEDERAL BASE NETWORK CONTROL STATION "HOMAIR" N=100,000 E=100,000. ALL COORDINATE VALUES REPRESENT GROUND DISTANCES IN U.S. SURVEY FEET ORIENTED TO TRUE NORTH.

**BASIS OF VERTICAL DATUM**

BASIS OF VERTICAL DATUM FOR THIS SURVEY IS THE NAVD88 NGS PUBLISHED VALUE FOR FEDERAL BASE NETWORK CONTROL STATION "HOMAIR" (PID TTO155). ORTHOMETRIC HEIGHTS (ELEVATIONS) WERE DETERMINED FROM ELLIPSOID HEIGHTS USING GEOID09. ELEVATIONS ARE IN U.S. SURVEY FEET.

**PROJECT CONTROL**

- CP-1  
N=102,344.3273  
E=93,791.1612  
EL=76.33  
PK NAIL IN ASPHALT SIDEWALK AT SE QUADRANT LAKE ST. / SMOKY BAY WAY
- CP-2  
N=102,156.1573  
E=92,913.6595  
EL=82.42  
PK NAIL IN ASPHALT SIDEWALK EAST SIDE HEATH STREET

THE PROJECT RIGHT-OF-WAY WAS SURVEYED AND PLATTED BY KENTON T. BLOOM, P.L.S. WITH SEABRIGHT SURVEY + DESIGN. SEE "WADDELL PARK 2016 REPLAT".

SHEET NO.	TOTAL SHEETS	
<b>A3</b>	<b>A3</b>	
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

**STANDARD DRAWING INDEX**

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:

**CITY OF HOMER**

- 200.06 COMPACTION OF BACKFILL
- 300.01 CURB AND GUTTER CROSS SECTIONS
- 600.05 HYDRANT GUARD POSTS
- 600.10 GATE VALVE EXTENSION ROD
- 700.07 SIGN PLACEMENT NO CURB OR SHOULDER
- 700.09 SIGN PLACEMENT CURB WITHOUT SIDEWALK
- 700.10 SIGN PLACEMENT CURB WITH SIDEWALK AND PARKWAY
- 800.01 STORM DRAIN CORRUGATED METAL PIPE BAND DETAIL
- 800.03 STORM DRAIN MANHOLE TYPE II
- 800.05 STORM DRAIN MANHOLE RING ADJUSTMENT
- 800.08 STORM DRAIN MANHOLE COVER
- 800.09 STORM DRAIN MANHOLE FRAME
- 800.11 STORM DRAIN PRECAST CATCH BASIN FOR TYPE 1 CURB + GUTTER
- 800.12 STORM DRAIN CATCH BASIN INLET FOR TYPE 1 CURB + GUTTER

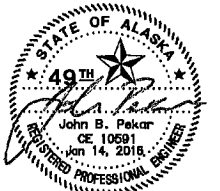
**STATE OF ALASKA**

CR-T-01.02 UNSIGNALIZED INTERSECTION STOP AND CROSSING

PLANS DEVELOPED BY:  
KINNEY ENGINEERING, LLC  
FOR  
CITY OF HOMER, ALASKA  
PUBLIC WORKS DEPARTMENT



PHONE: (907) 235-3170  
FAX: (907) 235-3145



CITY OF HOMER  
WADDELL WAY ROAD AND  
WATER MAIN IMPROVEMENTS  
**GENERAL NOTES  
AND  
SURVEY CONTROL**

NO.	DATE	DESCRIPTION

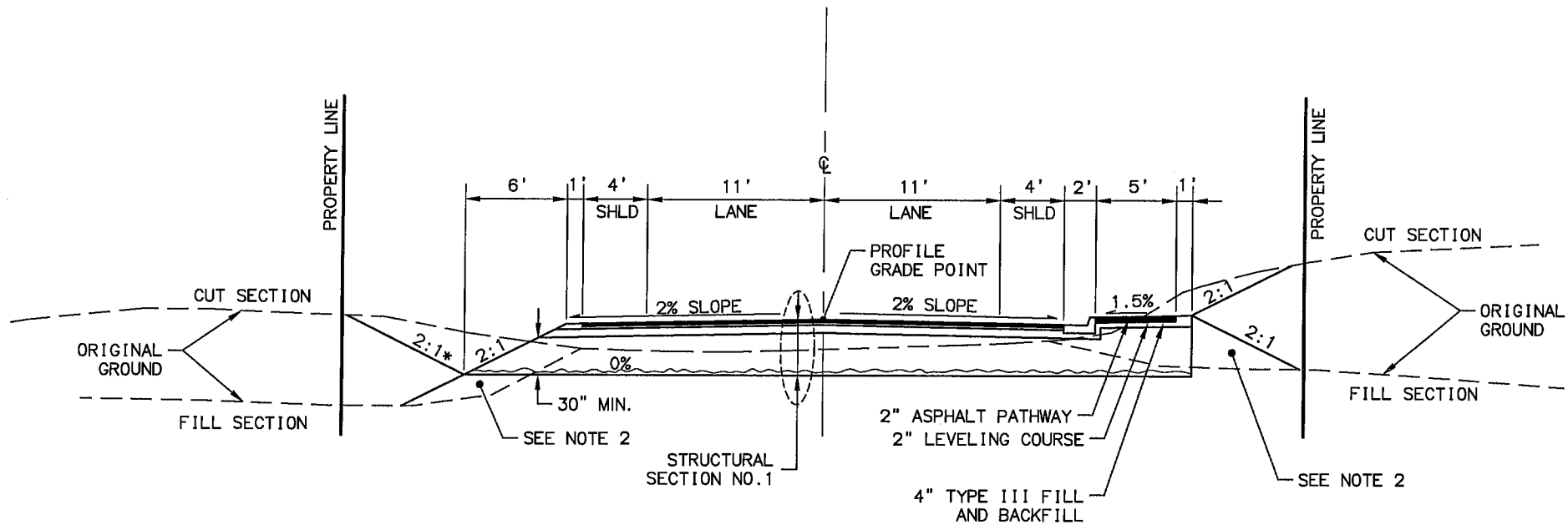
DRAFTED BY  
SOPHIA HUFF

SCALE

LAYOUT  
B1

1/13/2016 10:52 AM  
TYPICAL SECTIONS.dwg

DRAWING LOCATION  
\\KE-SERVER\KE-Files\PROJECTS\City of Homer\Term Contract\Waddell Way\Civil\3D\Production Drawings\B1-B2 TYPICAL SECTIONS.dwg

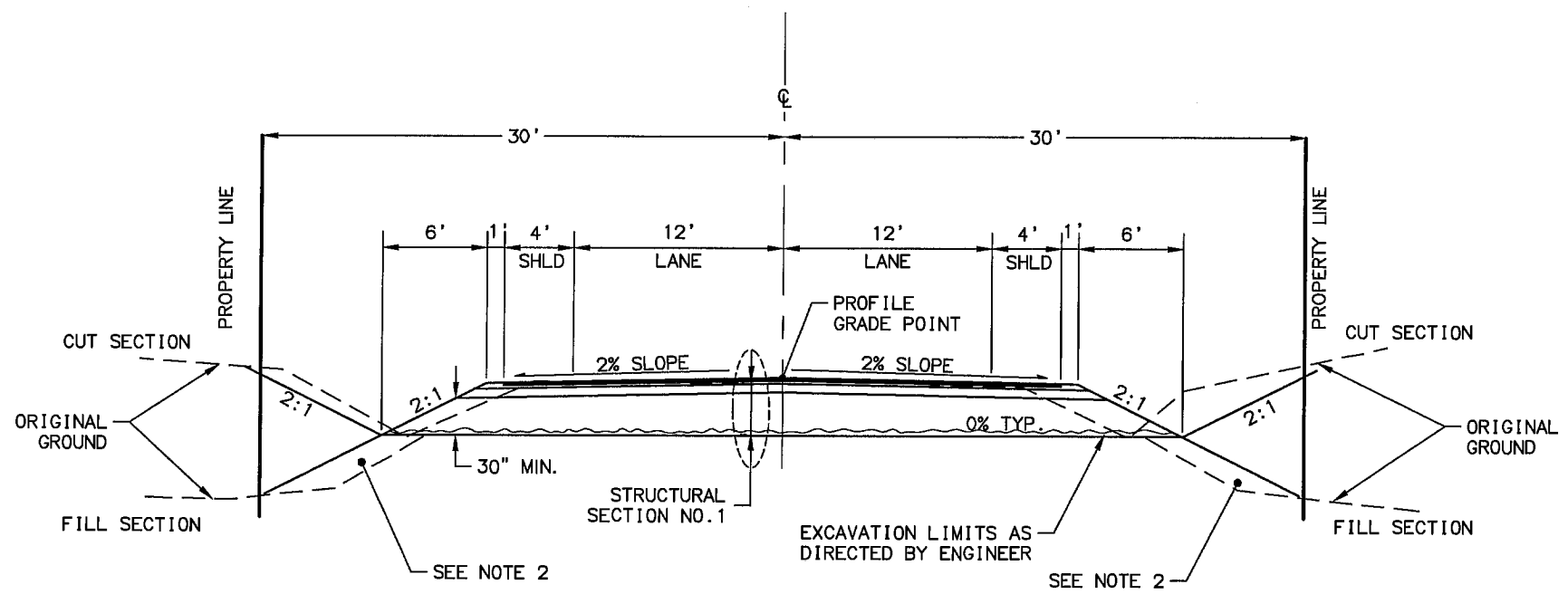


STATION FROM	STATION TO	SLOPE
9+50, LT	11+25, LT	1.5:1
12+05, LT	12+25, LT	1.5:1
12+75, LT	13+35, LT	1.5:1

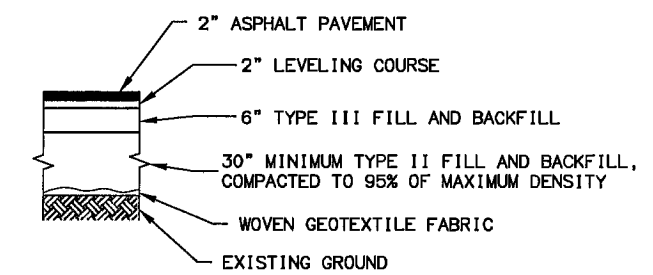
**GRUBSTAKE AVE**  
STA. 6+56.20 TO STA. 16+03.19  
\* SEE SLOPE EXCEPTION TABLE

**NOTES:**

1. APPLY 4 INCHES TOPSOIL AND SEED TO ALL DISTURBED AREAS OR AS DIRECTED BY THE ENGINEER.
2. FOR EMBANKMENT FILL, PROVIDE TYPE II FILL AND BACKFILL COMPACTED TO 95% OF MAXIMUM DENSITY.



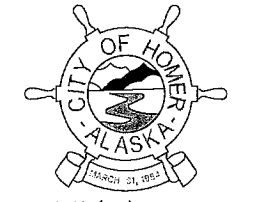
**SNOWBIRD ST.**  
STA. 22+41 TO STA. 25+32



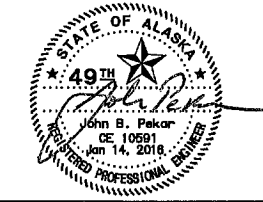
**STRUCTURAL SECTION NO. 1**

N.T.S.

PLANS DEVELOPED BY:  
KINNEY ENGINEERING, LLC  
FOR  
CITY OF HOMER, ALASKA  
PUBLIC WORKS DEPARTMENT



PHONE: (907) 235-3170  
FAX: (907) 235-3145

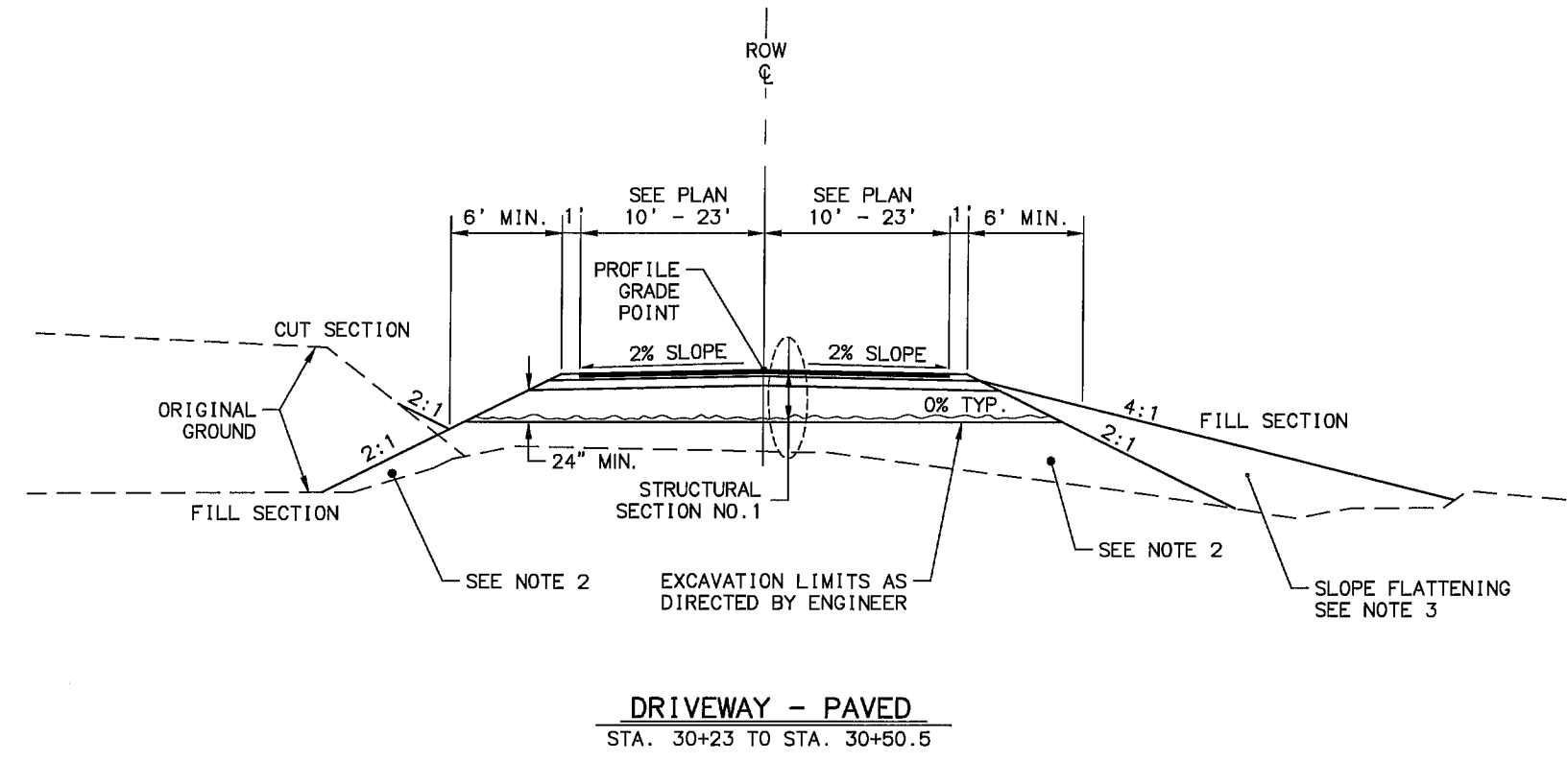


CITY OF HOMER  
WADDELL WAY ROAD AND  
WATER MAIN IMPROVEMENTS

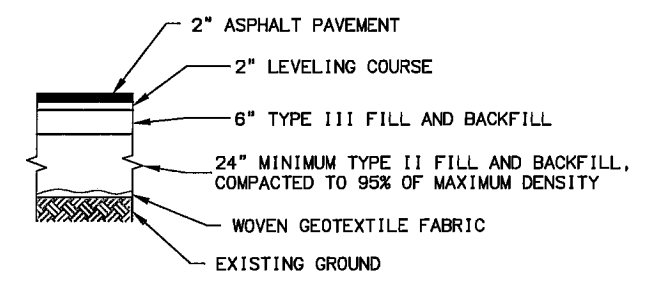
**TYPICAL SECTIONS**

DRAWING LOCATION: \\VE-SERVER\KE-Files\PROJECTS\City of Homer\Term Contract\Waddell Way\Civil\3D\Production Drawings\B1-B2 TYPICAL SECTIONS.dwg  
 1/14/2016 5:11 PM  
 LAYOUT: B2  
 SCALE:  
 DESIGNED BY: BRIAN LAUSON

SHEET NO.	TOTAL SHEETS	
<b>B2</b>	<b>B2</b>	
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION



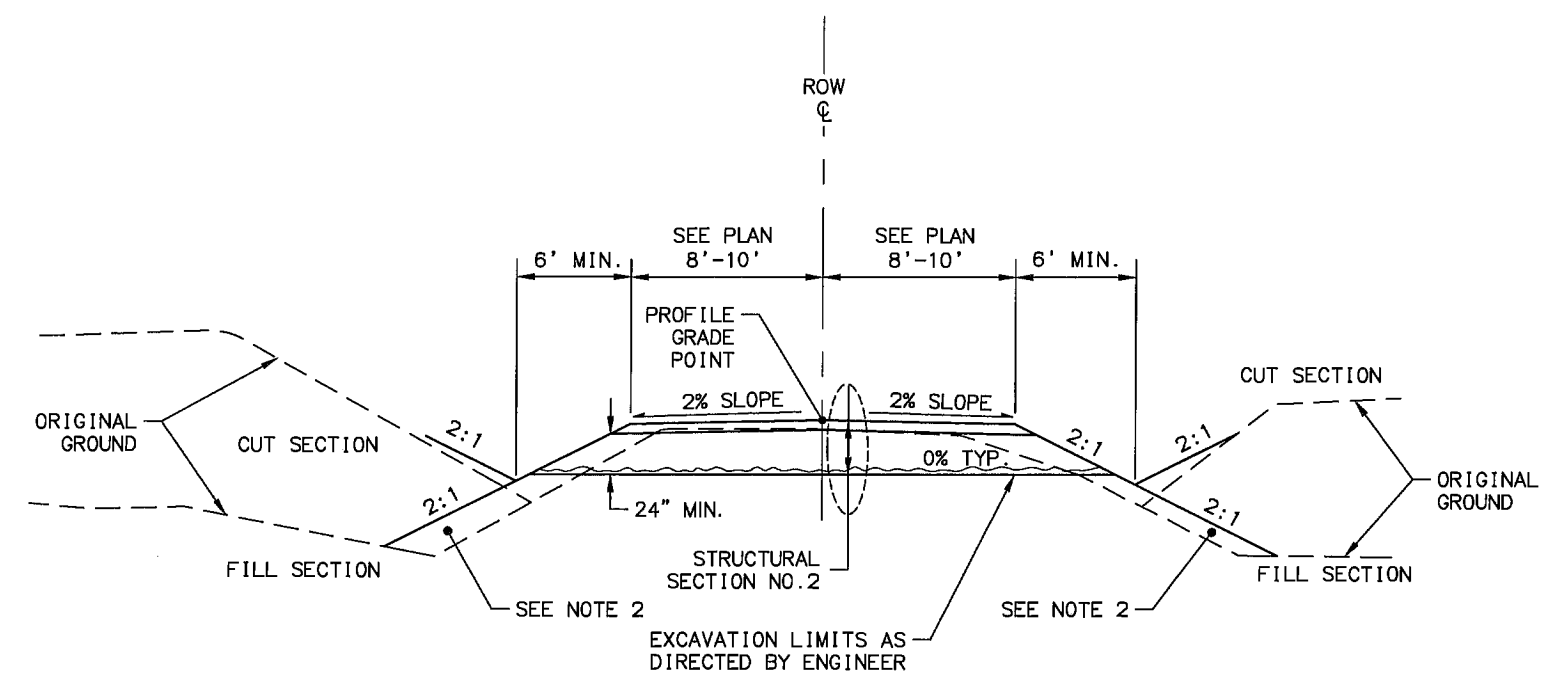
**DRIVEWAY - PAVED**  
STA. 30+23 TO STA. 30+50.5



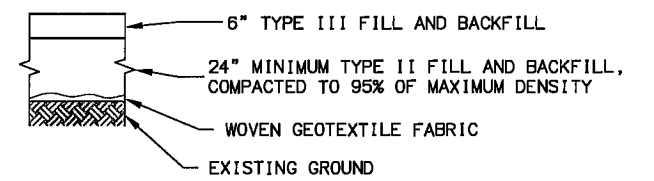
**STRUCTURAL SECTION NO. 2**  
N.T.S.

**NOTES:**

1. APPLY 4 INCHES TOPSOIL AND SEED TO ALL DISTURBED AREAS OR AS DIRECTED BY THE ENGINEER.
2. FOR EMBANKMENT FILL, PROVIDE TYPE II FILL AND BACKFILL COMPACTED TO 95% OF MAXIMUM DENSITY.
3. FOR 4:1 SLOPE FLATTENING EMBANKMENT FILL, PROVIDE USABLE EXCAVATION MATERIAL APPROVED BY THE ENGINEER.



**DRIVEWAY - UNPAVED**  
STA. 30+50.5 TO STA. 32+42

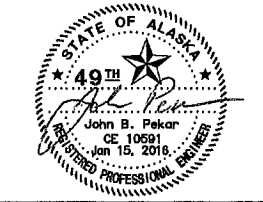


**STRUCTURAL SECTION NO. 3**  
N.T.S.

PLANS DEVELOPED BY:  
KINNEY ENGINEERING, LLC  
FOR  
CITY OF HOMER, ALASKA  
PUBLIC WORKS DEPARTMENT



PHONE: (907) 235-3170  
FAX: (907) 235-3145



CITY OF HOMER  
WADDELL WAY ROAD AND  
WATER MAIN IMPROVEMENTS

**TYPICAL SECTIONS**


DRAWING LOCATION Z:\PROJECTS\City of Homer\Term Contract\Waddell Way\Civil\3D\Production Drawings\C1\_ESTIMATE  
 DATE TIME 7/15/2016 9:50 AM  
 LAYOUT C1  
 SCALE NTS  
 DRAFTED BY SOPHIA HUFF

ESTIMATE OF QUANTITIES				
ITEM NO.	SPEC. NO.	WORK DESCRIPTION	UNIT	ESTIMATED QUANTITY
A-1	101	MOBILIZATION AND DEMOBILIZATION	LS	1
A-2	102	CONSTRUCTION SURVEYING	LS	1
A-3	103	TRAFFIC MAINTENANCE	LS	1
A-4	202	CLEARING AND GRUBBING	LS	1
A-5	203	REMOVAL OF OBSTRUCTIONS	LS	1
A-6	204	EXCAVATION	CY	5,150
A-7	205	TYPE II FILL AND BACKFILL	TON	13,150
A-8	205	TYPE III FILL AND BACKFILL	TON	2,130
A-9	206	LEVELING COURSE	TON	670
A-10	208	COMPACTION CONTROL BY THE CONTRACTOR	LS	1
A-11	219	REMOVAL OF EXISTING PAVEMENT	SY	972
A-12	220	DITCH LINING	TON	10
A-12	302	CURB AND GUTTER, ALL TYPES	LF	1,157
A-13	303	CONCRETE SIDEWALK, 6" THICK	SY	29
A-14	306	P.C.C. CURB RAMP (PARALLEL)	EA	5
A-15	306	DETECTABLE WARNINGS	EA	5
A-16	401	ASPHALT PAVEMENT	TON	650
A-17	402	TRAFFIC MARKINGS	LS	1
A-18	602	FURNISH AND INSTALL WATER MAIN	LF	992
A-19	603	FURNISH AND INSTALL GATE VALVE, VALVE BOX AND MARKER	EA	5
A-20	604	FURNISH AND INSTALL FIRE HYDRANT ASSEMBLY (SINGLE PUMPER)	EA	2
A-21	607	ADJUST VALVE BOX TO FINISH GRADE	EA	5
A-22	702 (W)	WOVEN GEOTEXTILE FABRIC	SY	7,605
A-23	704	FURNISH & INSTALL 4" THICK INSULATION	BF	432
A-24	707	FURNISH & INSTALL STANDARD SIGN	EA	14
A-25	708	SEEDING (TYPE 1)	MSF	21
A-26	710	TOPSOIL (4" DEPTH)	MSF	21
A-27	712	CHAIN LINK SECURITY FENCE 8' (9 GAGE)	LF	80
A-28	712	GATE (36' WIDE DOUBLE SWING 8' HT)	EA	1
A-29	802	FURNISH AND INSTALL CMP, 12"	LF	42
A-30	802	FURNISH AND INSTALL CMP, 18"	LF	152
A-31	802	FURNISH AND INSTALL CMP, 24"	LF	95
A-32	802-E	FURNISH AND INSTALL CMP END SECTION	EA	2
A-33	804	STORM DRAIN MANHOLE	EA	2
A-34	806	CONSTRUCT CATCH BASIN	EA	2
A-35	807	CONNECT TO EXISTING STORM DRAIN MANHOLE	EA	1
A-36	810	DITCH LINING	TON	10
A-37	8002	TRENCH AND BACKFILL (2' X 3')	LF	992
A-38	8004	DRIVEN PILE LUMINAIRE POLE FOUNDATIONS	EA	8
A-39	8005	SLIP BASE LUMINAIRE POLE (22' LENGTH)	EA	7
A-40	8005	LUMINAIRE ARM (8' LENGTH)	EA	6
A-41	8005	LUMINAIRE ARM (15' LENGTH)	EA	1
A-42	8007	SCHEDULE 40 HDPE CONDUIT (2")	LF	950
A-43	8007	GRC STEEL CONDUIT (2")	LF	130
A-44	8007	SCHEDULE 40 HDPE CONDUIT (4")	LF	180
A-45	8008	REMOVE JUNCTION BOX	EA	1
A-46	8008	JUNCTION BOX (TYPE 1A)	EA	9
A-47	8008	JUNCTION BOX (TYPE II)	EA	2
A-48	8010	3 CONDUCTOR, #8 AWG XHHW	LF	1,150
A-49	8014	POST-MOUNTED LOAD CENTER UNDERGROUND SERVICE, TYPE 2	EA	1
A-50	8023	LUMINAIRE, 135W LED, 60 LED, TYPE 3 OPTICS	EA	7
A-51	8028	RELOCATE LUMINAIRE POLE	EA	1
A-52	9001	STORM WATER POLLUTION PREVENTION PLAN, TYPE 3	LS	1

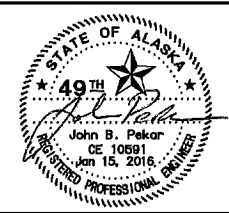
TABLE OF ESTIMATING FACTORS		
ITEM NO.	ITEM DESCRIPTION	ESTIMATING FACTOR
205	TYPE II FILL AND BACKFILL	144 LBS. / C.F.
205	TYPE III FILL AND BACKFILL	144 LBS. / C.F.
206	LEVELING COURSE	144 LBS. / C.F.
220	DITCH LINING	108 LBS. / C.F.
401	ASPHALT PAVEMENT	151 LBS. / C.F.

SHEET NO.	TOTAL SHEETS	
C1	C1	
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

PLANS DEVELOPED BY:  
 KINNEY ENGINEERING, LLC  
 FOR  
 CITY OF HOMER, ALASKA  
 PUBLIC WORKS DEPARTMENT



PHONE: (907) 235-3170  
 FAX: (907) 235-3145



CITY OF HOMER  
 WADDELL WAY ROAD AND  
 WATER MAIN IMPROVEMENTS  
 ESTIMATE OF  
 QUANTITIES

DRAWING LOCATION: Z:\PROJECTS\City of Homer\Term Contract\Waddell\Way\Civil\3D\Production Drawings\DI\_SUMMARY SHEETS.dwg  
 DATE TIME: 7/14/2016 6:04 PM  
 SCALE: LAYOUT DT  
 DRAFTED BY: SOPHIA HUFF

SPEC NO. 203				
REMOVAL OF OBSTRUCTIONS				
SHEET	DESCRIPTION	STATION	OFFSET	REMARKS
F1	LIGHT POLE FOUNDATION	6+63	1 RT	RELOCATE POLE TO NEW FOUNDATION
F1	REMOVE PIPE	6+45	LT	EXISTING STORM DRAIN PIPE
F1	HEATH ST., CURB AND GUTTER	6+54	LT & RT	APPROX. 200 LF
F1	CATCH BASIN	6+56	27 LT	HEATH ST. CATCH BASIN
F1	REMOVE PIPE	9+77 TO 9+92	70 RT TO 34 RT	OLD DRIVEWAY CULVERT TO LOT 3-A-1
F2	CHAIN LINK FENCE	14+41 TO 15+32	30 LT TO 20 LT	AFTER FENCE REMOVAL PROVIDE TEMPORARY FENCE TO SECURE HEA EQUIPMENT YARD
F2	SIGN, POST, FOUNDATION	15+23	16 LT	NOT CITY MAINTAINED SIGN
F2	REMOVE PIPE	15+36 TO 15+78	18 LT TO 54 LT	OLD HEA DRIVEWAY CULVERT
F2	STOP SIGN, STREET SIGNS, POST, & FOUNDATION	15+54	45 RT	AT LAKE ST / WADDELL WAY
F3	SIGN, POST, FOUNDATION	22+65	16 RT	NOT CITY MAINTAINED SIGN ON SNOWBIRD ST ALIGNMENT

SPEC NO. 219			
REMOVAL OF EXISTING PAVEMENT			
SHEET	LOCATION	SY	REMARKS
F1	STA. 6+22 TO STA. 6+56	272	HEATH ST. INTERSECTION
F2	STA. 15+41 TO STA. 16+01	367	LAKE ST INTERSECTION
F3	STA. 22+41 TO STA. 22+43	7	SNOWBIRD ST
F1, F4	STA. 6+58 TO 7+71	190	EXISTING HEA DRIVEWAY
F1, F4	STA. 6+55	25	TWO FOOT OFFSET FROM REMOVED CURB ON HEATH
F1, F4	STA. 6+55	111	EXISTING AC PAVEMENT SIDEWALK ON EAST SIDE OF HEATH ST.
TOTAL		971	

SPEC NO. 220									
DITCH LINING									
START STA.	END STA.	LENGTH (FT)	OFFSET	AVG WIDTH (FT)	AREA (SF)	DEPTH (FT)	VOLUME (CY)	TON	REMARKS
10+12	10+36	25	22 LT	12	297	0.5	5.5	8.0	
10+04	10+12	8	104	8	59	0.5	1.1	2.0	
TOTAL					356		6.6	10.0	

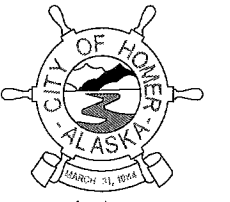
SPEC NO. 302				
CURB AND GUTTER, ALL TYPES				
SHEET	LOCATION	OFFSET	LENGTH (LF)	NOTES
F1	STA. 6+56 TO STA. 9+81	RT	370	LIP OF CURB MATCHES PAVEMENT ELEV.
F1	STA. 6+56 TO STA. 6+89	LT	52	LIP OF CURB MATCHES PAVEMENT ELEV.
F2	STA. 10+24 TO STA. 15+53	RT	617	LIP OF CURB MATCHES PAVEMENT ELEV.
F4	STA. 6+56	RT	118	HEA DRIVEWAY AND SIDEWALK REBUILD
TOTAL			1,157	

SPEC NO. 303		
CONCRETE SIDEWALK, 6" THICK		
SHEET	LOCATION	QTY (SY)
F4	CURB CUT FOR HEA DRIVEWAY ON HEATH ST	29
TOTAL		29

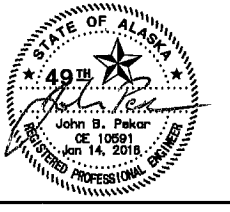
SPEC NO. 306					
P.C.C. CURB RAMP (PARALLEL) & DETECTABLE WARNINGS					
SHEET	STATION	OFFSET	P.C.C. CURB RAMP (PARALLEL)	DETECTABLE WARNINGS	REMARKS
F1	6+62	21 LT	1	1	HEATH ST / GRUBSTAKE LT
F1	6+62	21 RT	1	1	HEATH ST / GRUBSTAKE RT
F1	9+75	22 RT	1	1	GRUBSTAKE / SNOWBIRD WEST
F1	10+20	21 RT	1	1	GRUBSTAKE / SNOWBIRD EAST
F2	15+51	36 RT	1	1	LAKE ST / GRUBSTAKE RT
TOTAL			5	5	

SHEET NO.	TOTAL SHEETS	
D1	D2	
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

PLANS DEVELOPED BY:  
 KINNEY ENGINEERING, LLC  
 FOR  
 CITY OF HOMER, ALASKA  
 PUBLIC WORKS DEPARTMENT



PHONE: (907) 235-3170  
 FAX: (907) 235-3145



CITY OF HOMER  
 WADDELL WAY ROAD AND  
 WATER MAIN IMPROVEMENTS  
**SUMMARY**

DRAWING LOCATION Z:\PROJECTS\City of Homer\Term Contract\Wade11 Way Civil\3D\Production Drawings\01 SUMMARY SHEETS.dwg  
 DATE TIME 7/15/2016 9:23 AM  
 LAYOUT D2  
 SCALE  
 DRAFTED BY SOPHIA HUFF

SPEC NO. 603					
FURNISH AND INSTALL GATE VALVE, VALVE BOX AND MARKER					
SHEET	STATION	OFFSET	8" GV	10" GV	REMARKS
U3	100+04	0 RT	1		ON GRUBSTAKE MAIN AT HEATH ST INTERSECTION
U3	103+00	22 RT	1		FOR FUTURE FIRE SERVICE TO LOT 3-A-1
U4	106+40	22 RT	1		FOR FUTURE FIRE SERVICE TO LOT 2-A-1
U4	109+31	0 RT	1		ON GRUBSTAKE MAIN AT LAKE ST INTERSECTION
U4	109+35	4 RT		1	ON LAKE ST MAIN AT LAKE ST INTERSECTION
TOTAL			4	1	

NOTE: FIRE HYDRANT VALVES AND VALVE BOXES ARE INCIDENTAL TO THE FIRE HYDRANT ASSEMBLY

SPEC NO. 604				
FURNISH AND INSTALL FIRE HYDRANT ASSEMBLY (SINGLE PUMPER)				
SHEET	STATION	OFFSET	QTY	REMARKS
U3	103+07	18 RT	1	LOT 3-A-1
U4	106+47	18 RT	1	LOT 2-A-1
TOTAL			2	

SPEC NO. 607				
ADJUST VALVE BOX TO FINISH GRADE				
SHEET	STATION	OFFSET	QTY	REMARKS
F1	6+45	11 RT	1	EX. HEATH ST MAIN
F1	6+45	26 RT	1	EX. HEATH ST MAIN
F2	15+85	10 LT	1	EX. TEE ON LAKE ST. MAIN
F2	15+86	7 LT	1	EX. LAKE ST MAIN
F2	15+99	34 LT	1	EX. FIRE HYDRANT VALVE BOX
TOTAL			5	

SPEC NO. 702 (W)			
WOVEN GEOTEXTILE FABRIC			
SHEET	LOCATION	QTY (SY)	REMARKS
F1-F2	STA. 6+56 TO 15+98	4,781	GRUBSTAKE ST
F1-F2	STA. 6+56 TO 15+98	401	ADDITIONAL FOR INTERSECTIONS
F3	STA. 22+41 TO STA. 25+16	1,531	SNOWBIRD ST
F4	STA. 30+16 TO STA. 32+43	892	WEST HEA DRIVEWAY ON HEATH ST
TOTAL		7,605	

SPEC NO. 704			
FURNISH & INSTALL 4" THICK INSULATION			
SHEET	LOCATION	QTY (BOARD FOOT)	REMARKS
F1	6+45, 20 LT	144	PLACE INSULATION 4 INCHES BELOW SD, L=6', W=6', 4 INCHES THICK
F1 U3	STA. 10+20, 12 RT STA. 103+78.57 to STA. 103+84.57	144	PLACE INSULATION 4 INCHES BELOW SD, L=6', W=6', 4 INCHES THICK
F2 U4	STA. 15+59, 17 RT STA. 109+15.24 to STA. 109+21.24	144	PLACE INSULATION 4 INCHES BELOW SD, L=6', W=6', 4 INCHES THICK
F2	STA. 15+71, 20 LT	144	PLACE INSULATION 4 INCHES BELOW SD, L=6', W=6', 4 INCHES THICK
TOTAL		432	


SPEC NO. 712				
CHAIN LINK SECURITY FENCE 8' (9 GAGE)				
START STA.	START OFFSET	END STA.	END OFFSET	LF
14+41	30 LT	15+18	34 LT	80
TOTAL				80

SPEC NO. 712				
GATE, 36' WIDE DOUBLE SWING 8' HT				
START STA.	START OFFSET	END STA.	END OFFSET	EACH
15+18	34 LT	15+43	41 LT	1
TOTAL				1

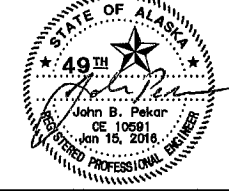
SPEC NO. 807			
CONNECT TO EXISTING STORM DRAIN MANHOLE			
SHEET	STATION	OFFSET	NOTES
F1	6+35	1 RT	
TOTAL		1	

SHEET NO.	TOTAL SHEETS	
D2	D2	
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

PLANS DEVELOPED BY:  
 KINNEY ENGINEERING, LLC  
 FOR  
 CITY OF HOMER, ALASKA  
 PUBLIC WORKS DEPARTMENT



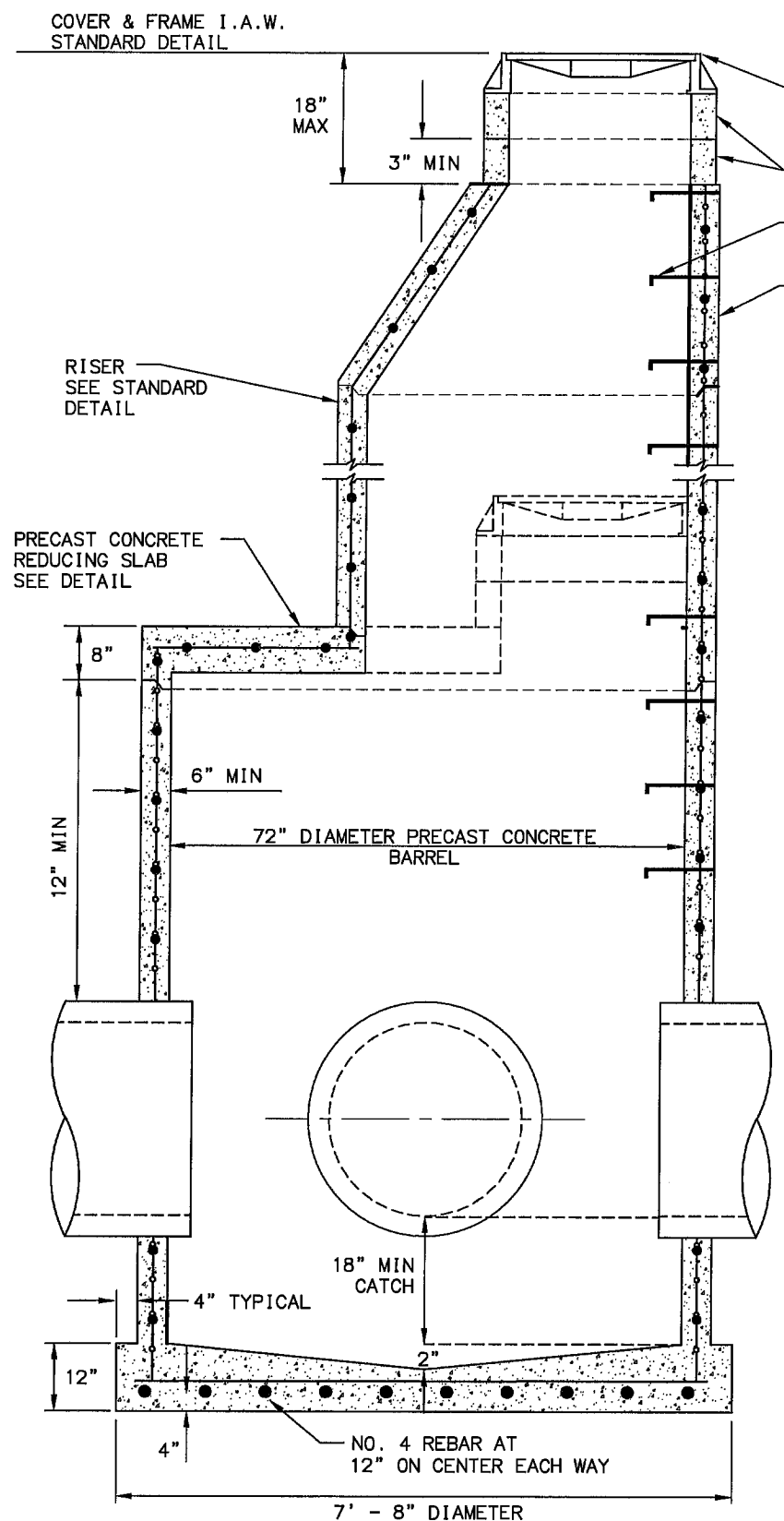
PHONE: (907) 235-3170  
 FAX: (907) 235-3145



CITY OF HOMER  
 WADDELL WAY ROAD AND  
 WATER MAIN IMPROVEMENTS  
**SUMMARY**

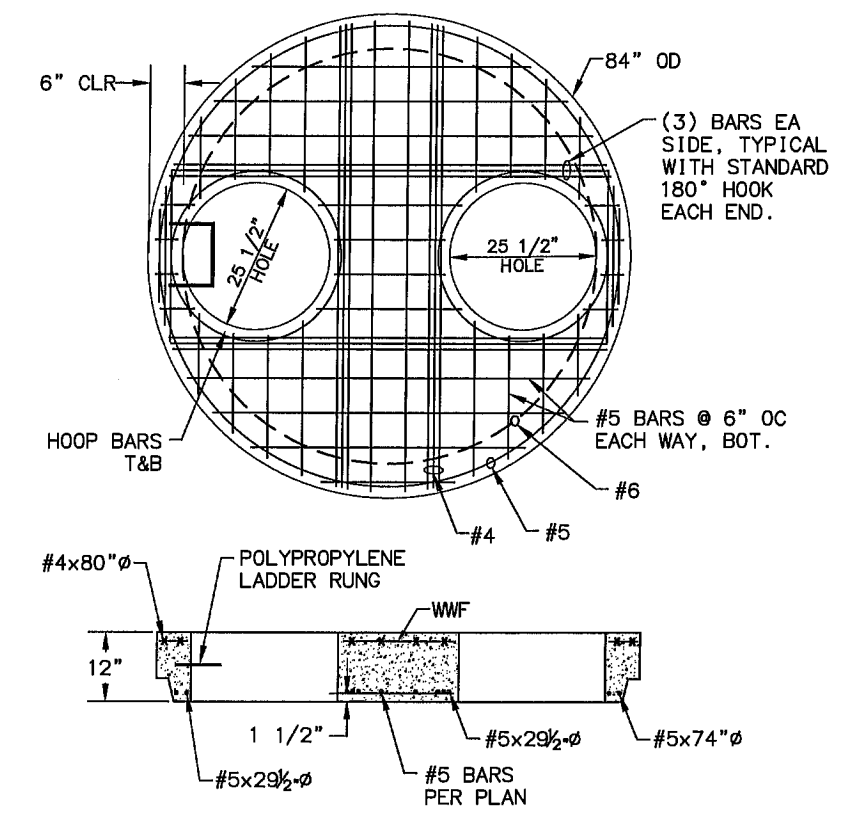


DRAWING LOCATION: z:\PROJECTS\city\_of\_homer\contract\waddell\_way\civ1130\Production Drawings\EL\_Details.dwg  
 1/13/2016 11:56 AM  
 LAYOUT: E1  
 SCALE:  
 DRAFTED BY: SOPHIA RUFF

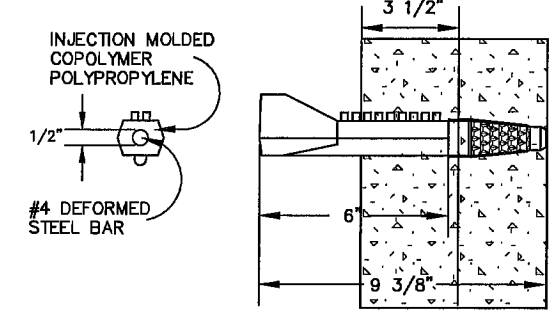
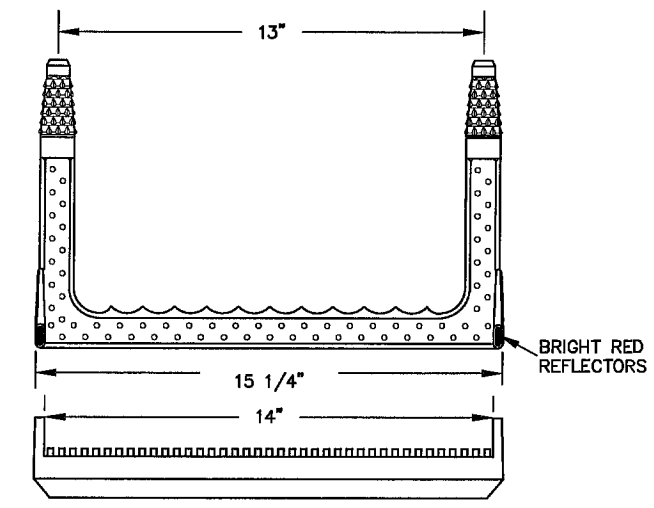


**STORM DRAIN MANHOLE TYPE II**

- NOTES:
- MANHOLE SECTIONS SHALL CONFORM TO A.S.T.M. C-478.
  - EXTEND PIPE 2" INTO MANHOLE. SEAL PIPE PENETRATIONS WITH NON-SHRINKABLE GROUT MIXED WITH POTABLE WATER I.A.W. MANUFACTURERS RECOMMENDATIONS.
  - BLOCKOUTS SHALL BE FORMED.
  - PLACE RUNGS 12" ON-CENTER ON UNOBSTRUCTED SIDE OF MANHOLE 18" MAX. FROM BOTTOM OF MANHOLE & 6" MAX. FROM TOP OF CONE. IF UNOBSTRUCTED SIDE NOT AVAILABLE, BOTTOM RUNG TO BE PLACED 6" OVER SMALLEST PIPE. SEE MANHOLE STEP DETAIL.
  - MANHOLE SHALL HAVE MINIMUM OF ONE 6" GRADE RING.
  - BACKFILL AROUND MANHOLE WITH A MINIMUM OF 3' TYPE II CLASSIFIED FILL & BACKFILL. BACKFILL SHALL BE INCIDENTAL TO COST OF MANHOLE INSTALLATION.
  - CATCH BASIN LEADS SHALL ENTER THE MANHOLE AT LEAST ONE PRIMARY LEAD DIAMETER ABOVE THE TOP OF THE PRIMARY LEAD UNLESS MINIMUM PIPE SLOPES CANNOT BE ACHIEVED.
  - STEEL REQ'D FOR BARREL SHALL CONFORM TO A.S.T.M. C-478. EMBED STEEL IN BASE SO THAT FIRST BARREL SECTION IS CONNECTED WITH BASE.
  - "RAM-NEK" OR EQUAL AND PRIME BARREL JOINTS. HEAT "RAM-NEK" AND SEAL SURFACES BEFORE FINAL ASSEMBLY.
  - PRIMARY LEADS NOT TO EXCEED TWO 36" CMP, CPEP OR HDPEP WITH INCLUDED ANGLE BETWEEN LEADS GREATER THAN OR EQUAL TO 135°.
  - USE THE TWO HOLE PRECAST REDUCING SLAB PER DETAIL ON THIS SHEET. CONTRACTOR SHALL ALIGN THE MANHOLE SO THAT THE LADDER RUNGS ARE IN LINE WITH THE MANHOLE ACCESS LID. A 3" GRADE RING UNDER THE CATCH BASIN IS SUFFICIENT FOR THE TWO-HOLE CONFIGURATION.



**PRECAST CONCRETE TWO HOLE REDUCING SLAB**  
(72" TO TWO 25 1/2")

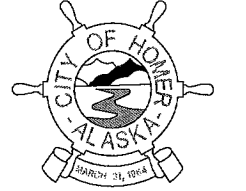


**COPOLYMER POLYPROPYLENE MANHOLE STEP**

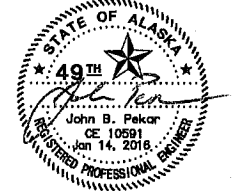
- NOTE:
- DRIVE RUNG INTO PREFORMED OR DRILLED HOLES WITH A 6 TO 10 LB. SLEDGE HAMMER, AFTER CONCRETE IS CURED TO 3000 PSI MIN.
  - THE INSTALLED STEP SHALL RESIST A PULLOUT FORCE OF 1500 LBS.

SHEET NO.		TOTAL SHEETS	
E1		E5	
ADDENDUM NO.			
ATTACHMENT NO.			
REVISIONS			
NO.	DATE	DESCRIPTION	

PLANS DEVELOPED BY:  
KINNEY ENGINEERING, LLC  
FOR  
CITY OF HOMER, ALASKA  
PUBLIC WORKS DEPARTMENT



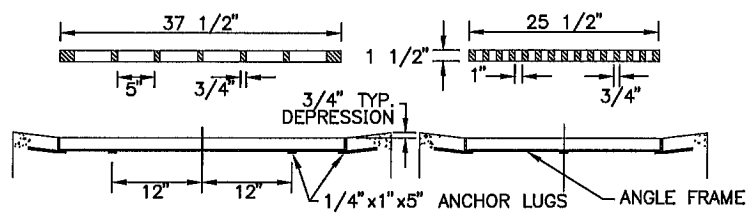
PHONE: (907) 235-3170  
FAX: (907) 235-3145



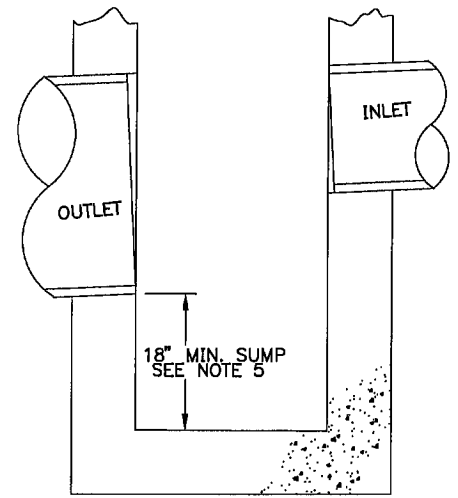
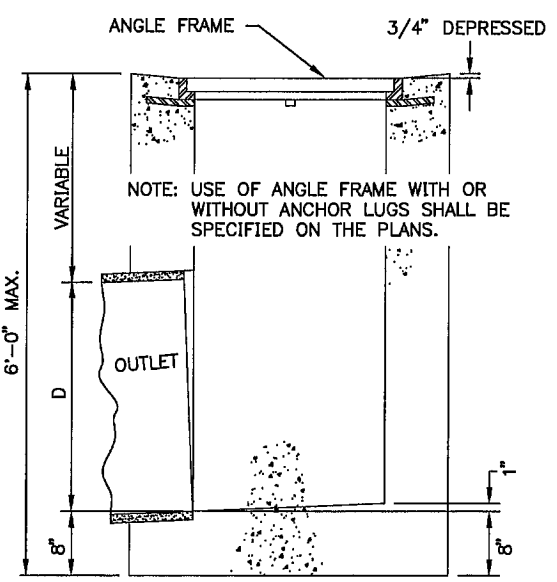
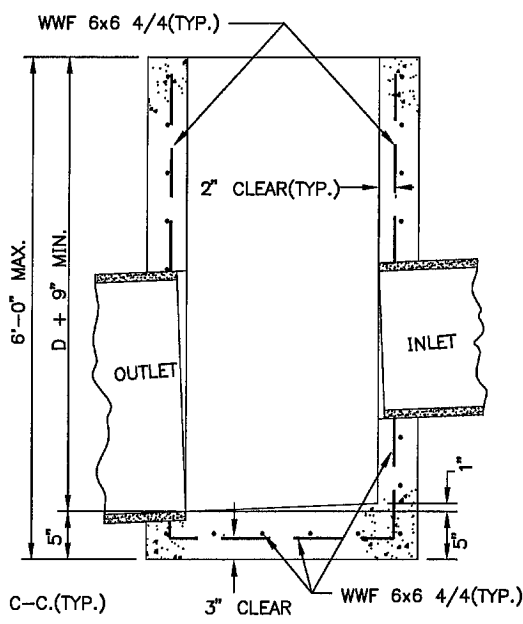
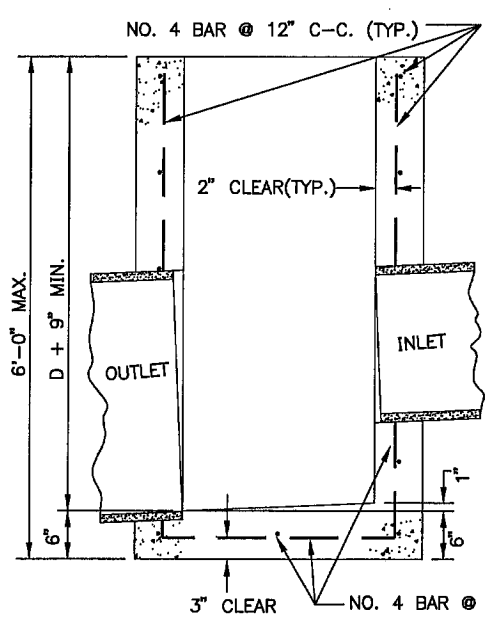
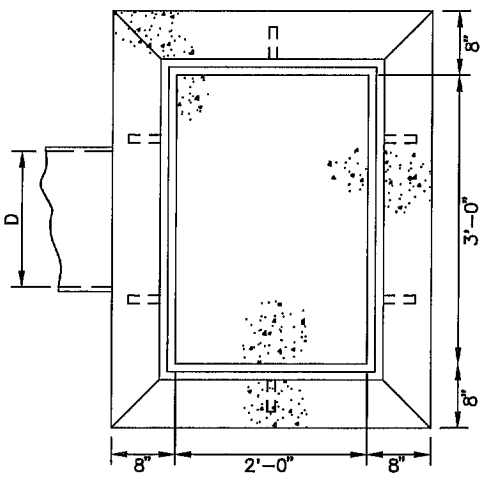
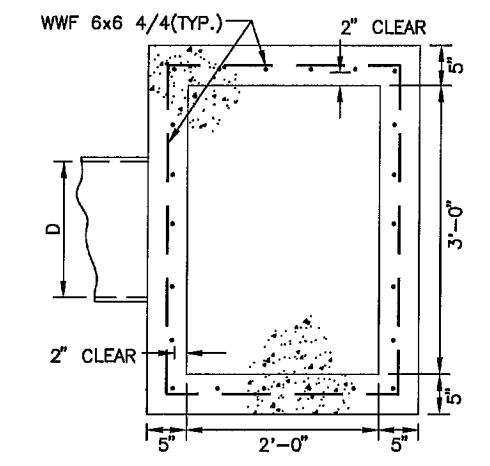
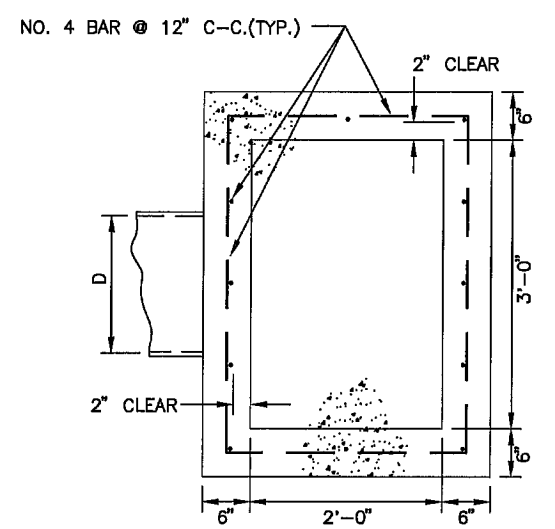
CITY OF HOMER  
WADDELL WAY ROAD AND  
WATER MAIN IMPROVEMENTS

**DETAILS**

DRAWING LOCATION  
 z:\PROJECTS\city of homer\term contract\waddell way\Civil\3D\Production Drawings\E1\_Details.dwg  
 1/13/2016 11:56 AM  
 LAYOUT E2  
 SCALE  
 DRAFTED BY SPHIA.HFF



NOTE: ALL ANGLE FRAME SHALL HAVE ANCHOR LUGS  
**FIELD INLET FRAME AND GRATE**



**REINFORCED  
 CAST IN PLACE**

**PRECAST**

**FIELD INLET BOX  
 CAST\* IN PLACE**

\* MAY BE PRECAST OR REINFORCED  
 CAST-IN-PLACE BOX.

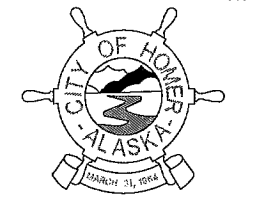
**DOT TYPE "A" CONCRETE INLET BOX TYPES**

**NOTES:**

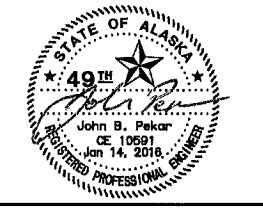
1. CAST IN PLACE CONCRETE INLET BOX SHALL BE ALASKA DOT CLASS "W" CONCRETE.
2. CONCRETE INLET BOX LOCATION SHALL BE SHOWN ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.
3. PRECAST OR REINFORCED CAST-IN-PLACE CONCRETE INLET BOXES MAY BE USED PROVIDED THEY ARE MODIFIED TO INCLUDE THE ANGLE FRAME AND IF APPROVED BY THE ENGINEER. PROVIDE SUBMITTAL FOR ONE OF THE CONCRETE INLET BOX TYPES TO THE ENGINEER FOR REVIEW AND APPROVAL.
4. CONCRETE INLET BOX SHALL BE PARALLEL TO ROADWAY CENTERLINE UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
5. SUMP SHALL BE PROVIDED ON ALL STORM DRAIN STRUCTURES.
6. PAYMENT FOR THE FIELD INLET BOX SHALL BE MADE UNDER ITEM 604 STORM DRAIN MANHOLE.

SHEET NO.	TOTAL SHEETS	
<b>E2</b>	<b>E5</b>	
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

PLANS DEVELOPED BY:  
 KINNEY ENGINEERING, LLC  
 FOR  
 CITY OF HOMER, ALASKA  
 PUBLIC WORKS DEPARTMENT



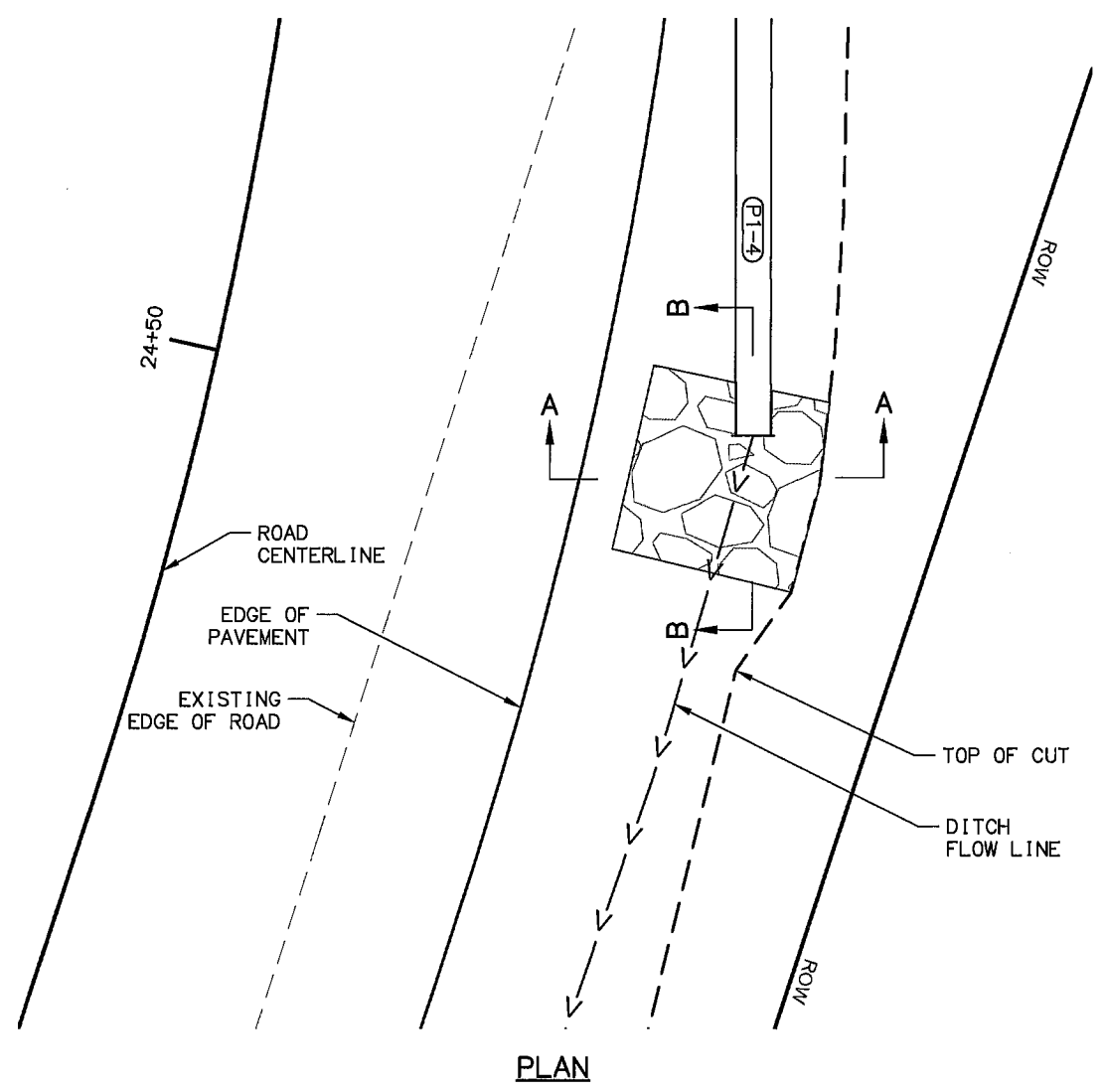
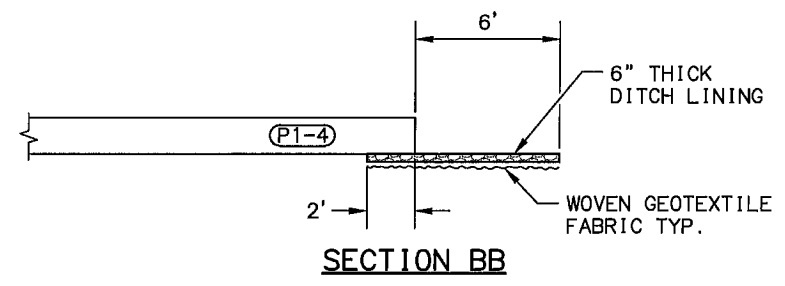
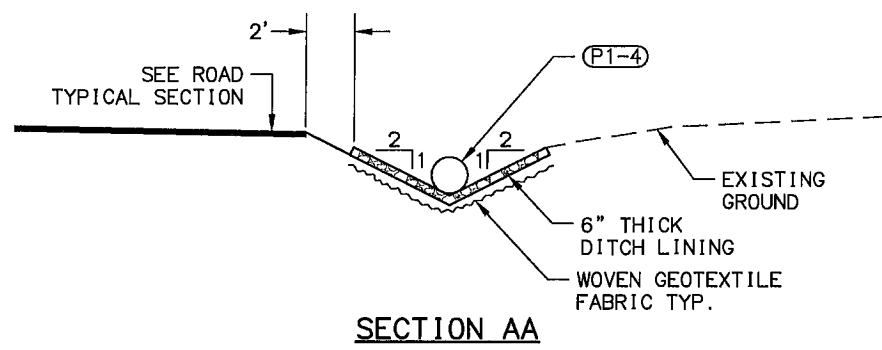
PHONE: (907) 235-3170  
 FAX: (907) 235-3145



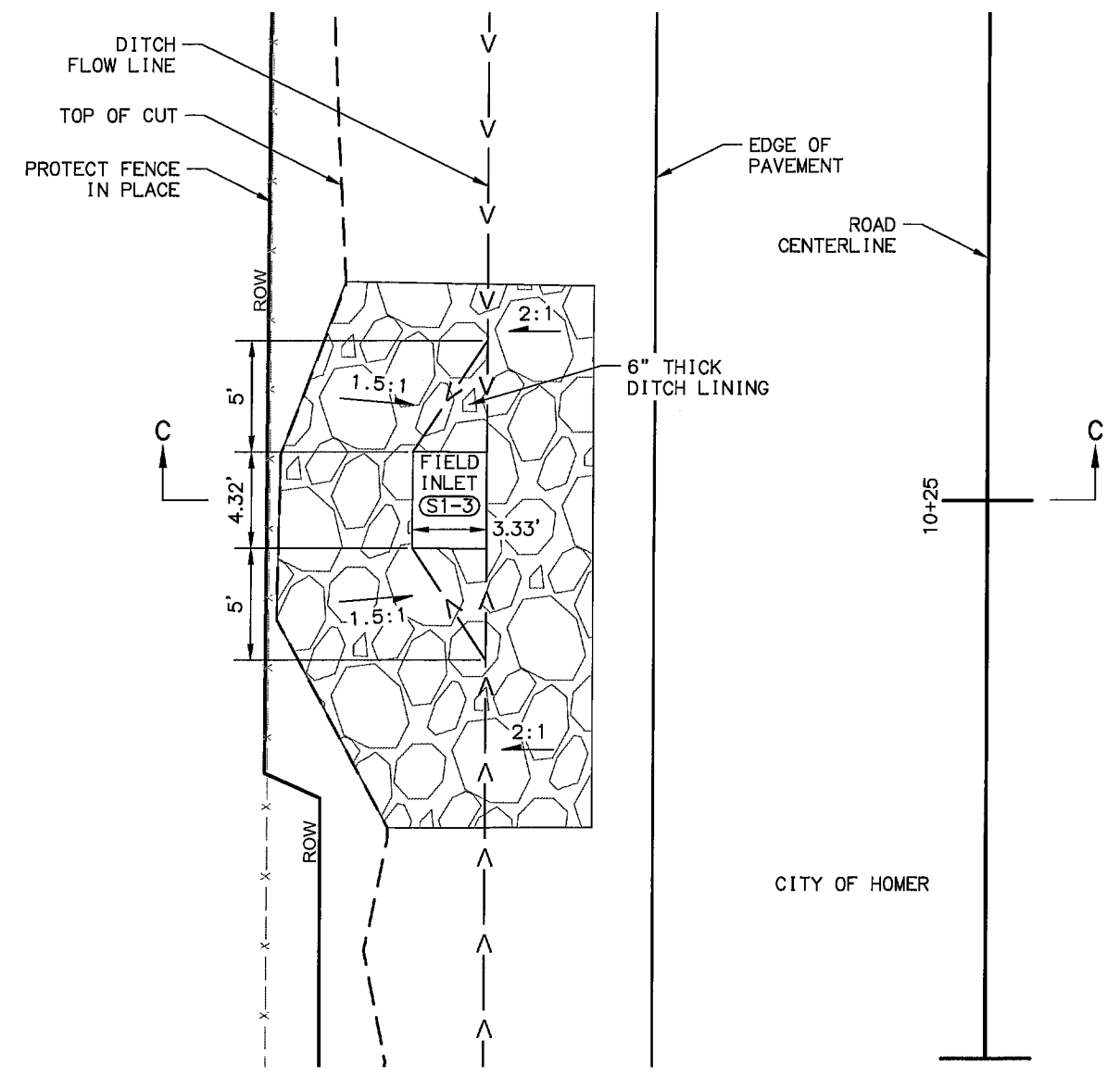
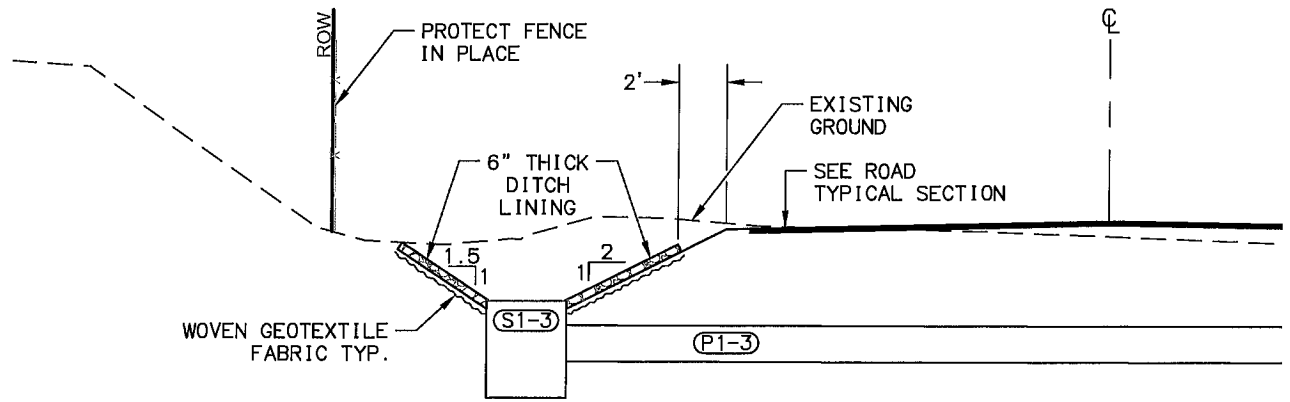
CITY OF HOMER  
 WADDELL WAY ROAD AND  
 WATER MAIN IMPROVEMENTS

**DETAILS**

DRAFTED BY SOPHIA RUFF  
 SCALE  
 LAYOUT E3  
 1/15/2016 9:14 AM  
 Z:\PROJECTS\City of Homer\Term Contract\Waddell Way\Civil\3D\Production Drawings\E1\_Details.dwg




DITCH LINING DETAIL  
P1-4 OUTFALL



DITCH LINING DETAIL  
S1-3

SHEET NO.		TOTAL SHEETS
E3		E5
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

PLANS DEVELOPED BY:  
 KINNEY ENGINEERING, LLC  
 FOR  
 CITY OF HOMER, ALASKA  
 PUBLIC WORKS DEPARTMENT

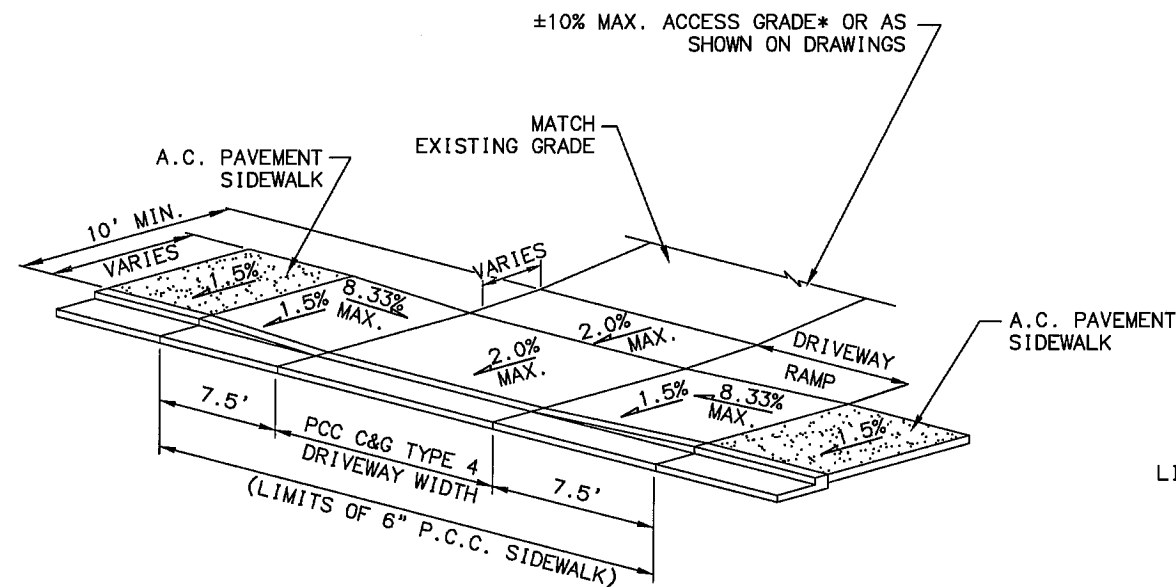


PHONE: (907) 235-3170  
 FAX: (907) 235-3145

STATE OF ALASKA  
 49th  
 John B. Pekar  
 CE 10691  
 Jan 15, 2016  
 REGISTERED PROFESSIONAL ENGINEER

CITY OF HOMER  
 WADDELL WAY ROAD AND  
 WATER MAIN IMPROVEMENTS  
**DETAILS**

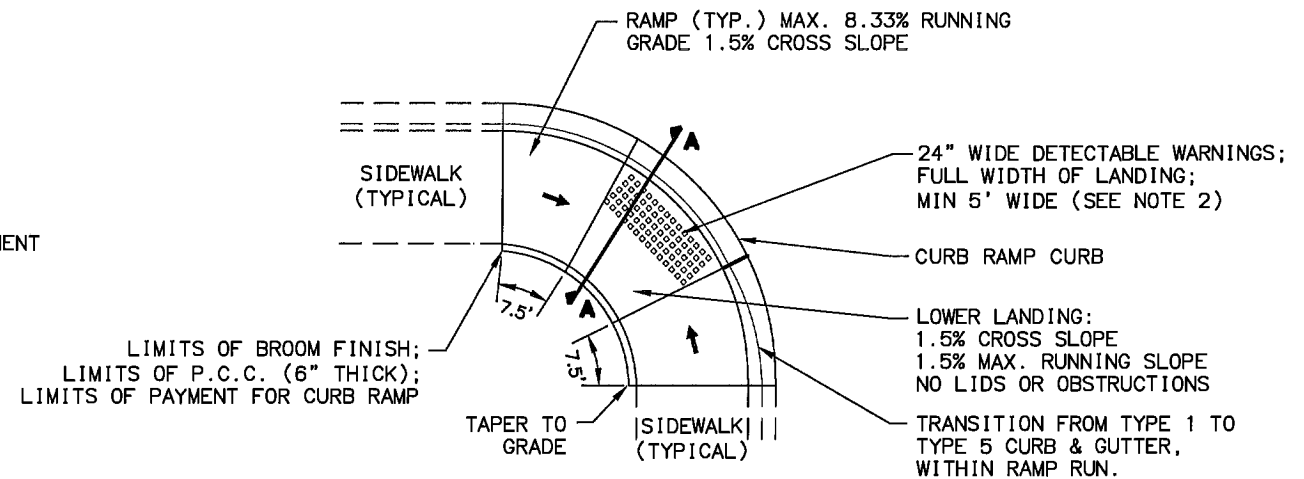
DRAWING LOCATION  
 z:\projects\city of homer\term contract\waddell way\civil\3d\Production Drawings\ET\_Details.dwg  
 1/13/2018 11:56 AM  
 LAYOUT E4  
 SCALE  
 DRAFTED BY SOPHIA RUFF



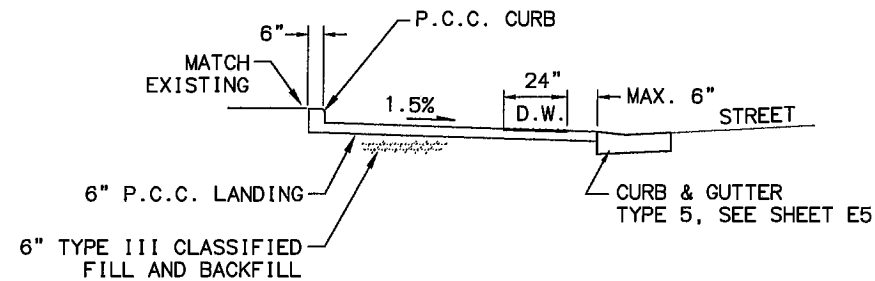
**TYPICAL DRIVEWAY ENTRANCE  
(WITH ATTACHED SIDEWALK)**

**DRIVEWAY CURB-CUT  
WITH ATTACHED SIDEWALK**

\* MAXIMUM ALGEBRAIC DIFFERENCE IS 8%  
ON COMMERCIAL/INDUSTRIAL DRIVEWAYS.



**SECTION AA**



**NOTES:**

1. RAMP LENGTHS SHALL BE 7.5' TYPICAL OR AS DIRECTED BY THE ENGINEER.
2. INSTALL DETECTABLE WARNINGS (D.W.) IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND THESE DRAWINGS. SET DETECTABLE WARNINGS SO THAT THE FIELD AREA AT THE BASE OF THE DOMES IS FLUSH WITH THE SURROUNDING CONCRETE. NO LIP IS ALLOWED AT THE EDGE OF THE DETECTABLE WARNINGS.
3. CONSTRUCT RAMPS AND LANDINGS WITH A BROOM FINISH PERPENDICULAR TO CURB.

**PARALLEL CURB RAMP**

SHEET NO. TOTAL SHEETS

**E4 E5**

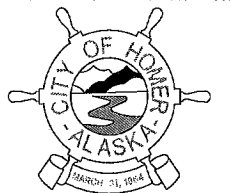
ADDENDUM NO.

ATTACHMENT NO.

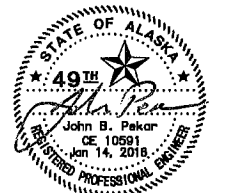
REVISIONS

NO.	DATE	DESCRIPTION

PLANS DEVELOPED BY:  
KINNEY ENGINEERING, LLC  
FOR  
CITY OF HOMER, ALASKA  
PUBLIC WORKS DEPARTMENT



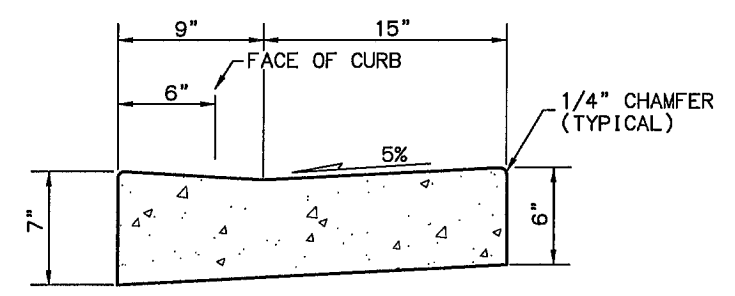
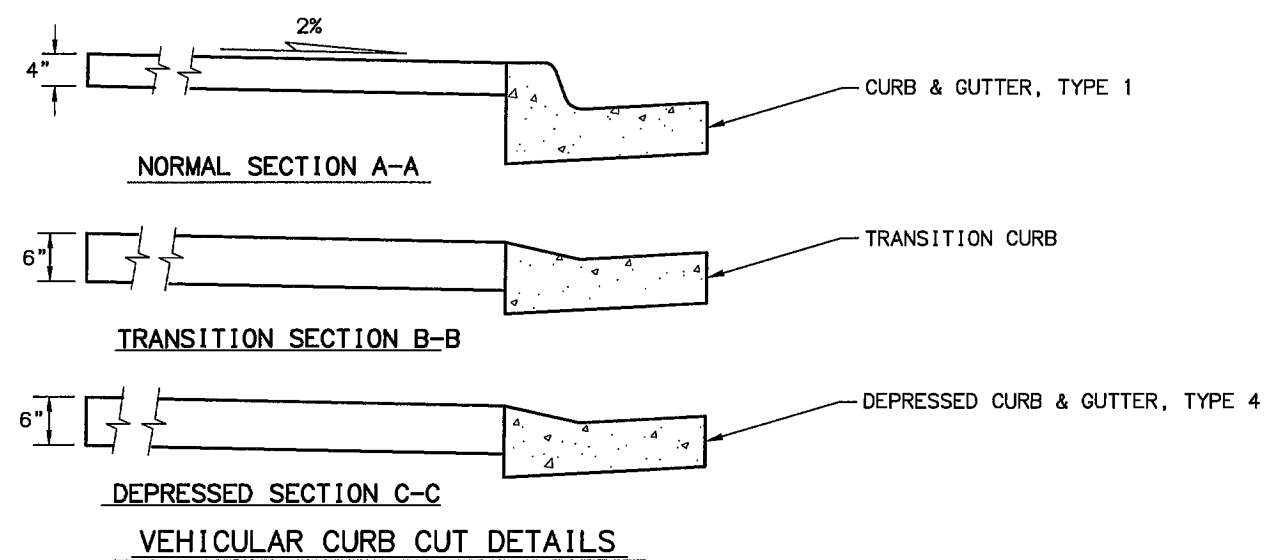
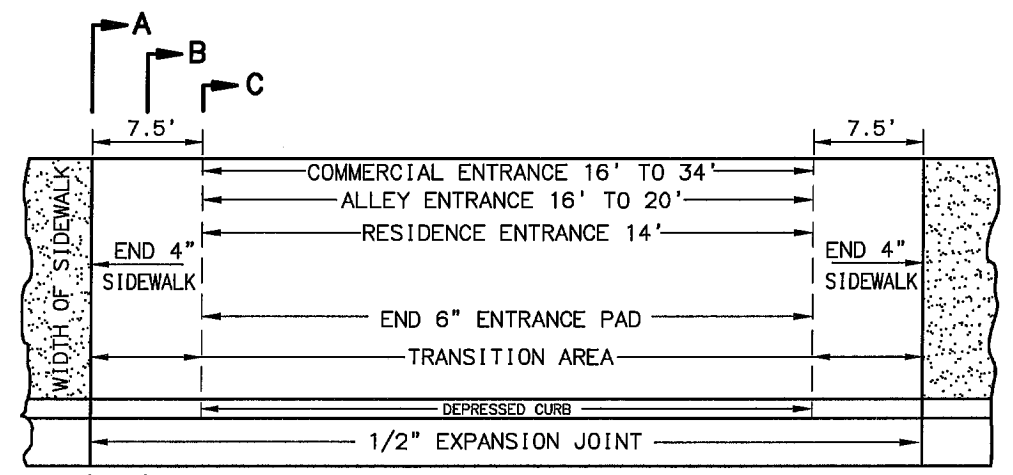
PHONE: (907) 235-3170  
FAX: (907) 235-3145



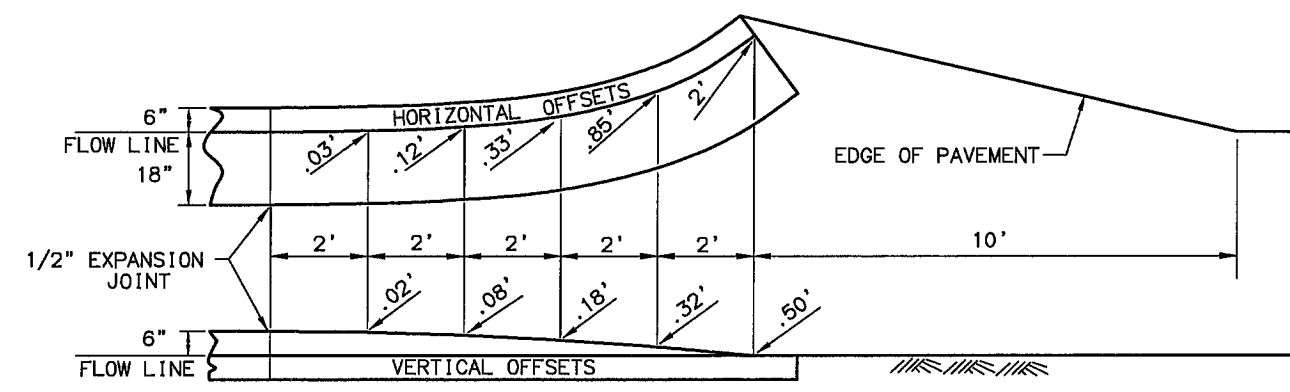
CITY OF HOMER  
WADDELL WAY ROAD AND  
WATER MAIN IMPROVEMENTS

**DETAILS**

DRAWING LOCATION: z:\projects\city of homer\term contract\waddell\way\Civil\3D\Production Drawings\ET\_Details.dwg  
 1/13/2016 11:56 AM  
 LAYOUT: ES  
 SCALE:  
 DRAFTED BY: SOPHIA, RUFF



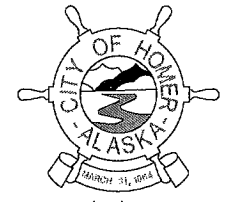
**CURB RAMP CURB & GUTTER, TYPE 5**



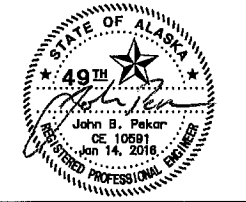
**CURB AND GUTTER TERMINATION TRANSITIONS**

SHEET NO.	TOTAL SHEETS	
E5	E5	
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

PLANS DEVELOPED BY:  
 KINNEY ENGINEERING, LLC  
 FOR  
 CITY OF HOMER, ALASKA  
 PUBLIC WORKS DEPARTMENT



PHONE: (907) 235-3170  
 FAX: (907) 235-3145



CITY OF HOMER  
 WADDELL WAY ROAD AND  
 WATER MAIN IMPROVEMENTS

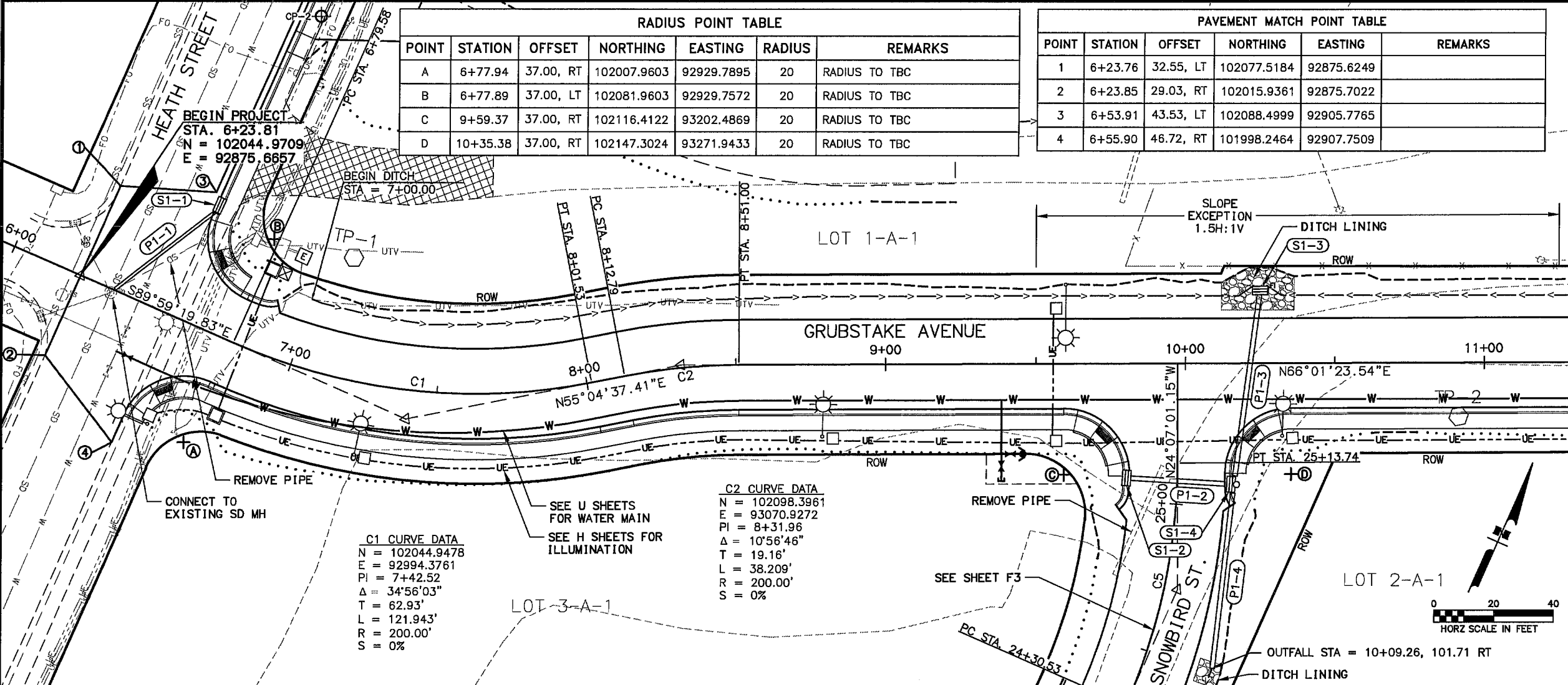
**DETAILS**

1/14/2016 5:14 PM SCALE LAYOUT DRAWING LOCATION  
 \\VE-SERVERVE-F1\es\PROJECTS\CITY OF HOMER\Term Contract\Wadell Way\Drawings\F1-F3\_Wadell Way Plan and Profile.dwg F1

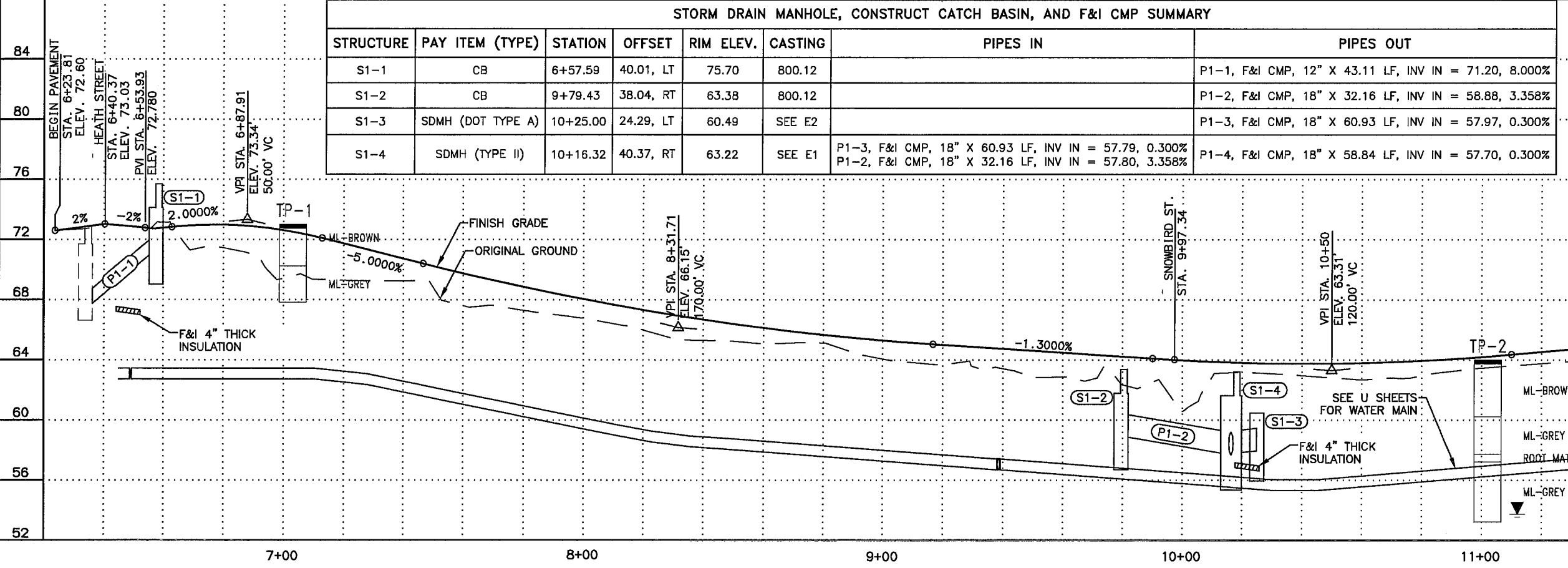
RADIUS POINT TABLE						
POINT	STATION	OFFSET	NORTHING	EASTING	RADIUS	REMARKS
A	6+77.94	37.00, RT	102007.9603	92929.7895	20	RADIUS TO TBC
B	6+77.89	37.00, LT	102081.9603	92929.7572	20	RADIUS TO TBC
C	9+59.37	37.00, RT	102116.4122	93202.4869	20	RADIUS TO TBC
D	10+35.38	37.00, RT	102147.3024	93271.9433	20	RADIUS TO TBC

PAVEMENT MATCH POINT TABLE					
POINT	STATION	OFFSET	NORTHING	EASTING	REMARKS
1	6+23.76	32.55, LT	102077.5184	92875.6249	
2	6+23.85	29.03, RT	102015.9361	92875.7022	
3	6+53.91	43.53, LT	102088.4999	92905.7765	
4	6+55.90	46.72, RT	101998.2464	92907.7509	

SHEET NO.	TOTAL SHEETS	
F1	F4	
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

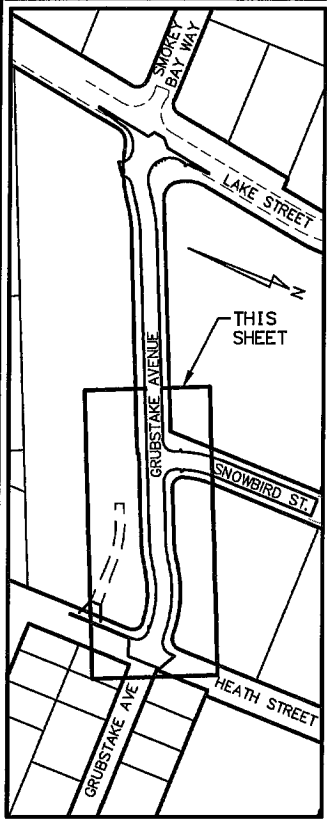


STORM DRAIN MANHOLE, CONSTRUCT CATCH BASIN, AND F&I CMP SUMMARY							
STRUCTURE	PAY ITEM (TYPE)	STATION	OFFSET	RIM ELEV.	CASTING	PIPES IN	PIPES OUT
S1-1	CB	6+57.59	40.01, LT	75.70	800.12		P1-1, F&I CMP, 12" X 43.11 LF, INV IN = 71.20, 8.000%
S1-2	CB	9+79.43	38.04, RT	63.38	800.12		P1-2, F&I CMP, 18" X 32.16 LF, INV IN = 58.88, 3.358%
S1-3	SDMH (DOT TYPE A)	10+25.00	24.29, LT	60.49	SEE E2	P1-3, F&I CMP, 18" X 60.93 LF, INV IN = 57.79, 0.300%	P1-4, F&I CMP, 18" X 58.84 LF, INV IN = 57.70, 0.300%
S1-4	SDMH (TYPE II)	10+16.32	40.37, RT	63.22	SEE E1	P1-2, F&I CMP, 18" X 32.16 LF, INV IN = 57.80, 3.358%	

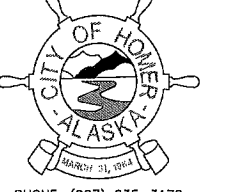


MATCH LINE STATION 11+30  
SEE SHEET F2

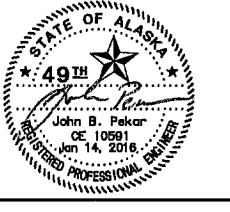
MATCH LINE STATION 11+30



PLANS DEVELOPED BY:  
 KINNEY ENGINEERING, LLC  
 FOR  
 CITY OF HOMER, ALASKA  
 PUBLIC WORKS DEPARTMENT



PHONE: (907) 235-3170  
 FAX: (907) 235-3145

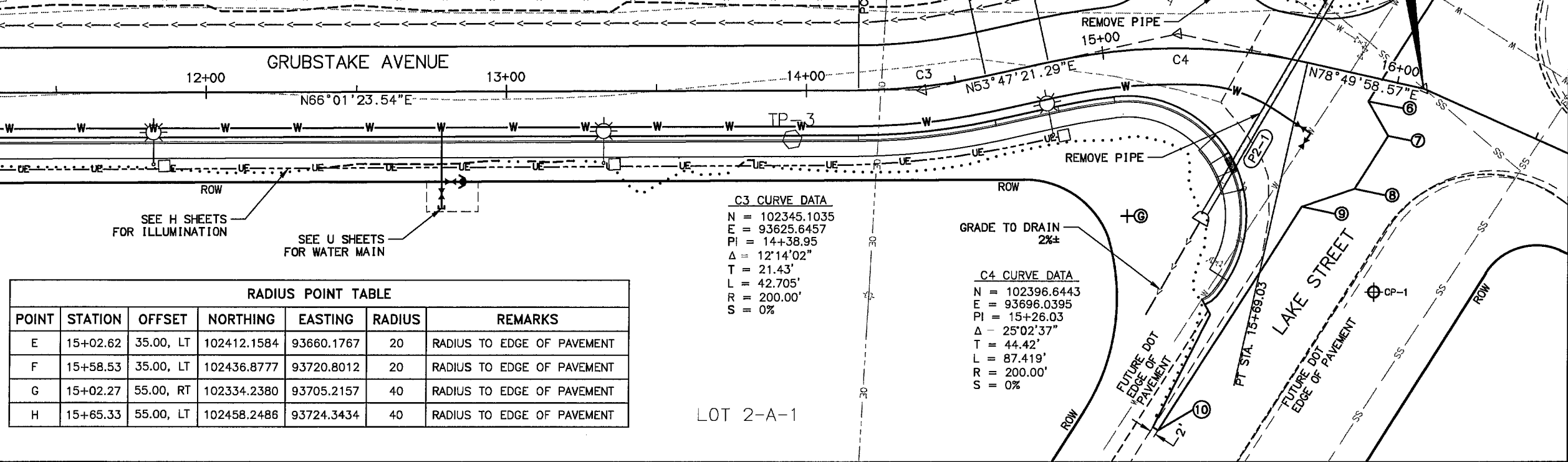
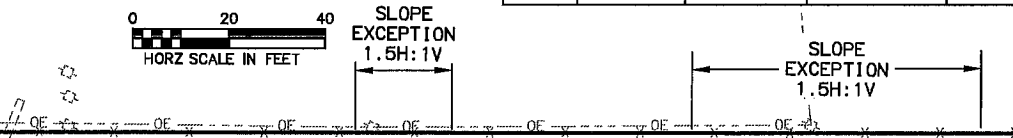


CITY OF HOMER  
 WADDELL WAY ROAD AND  
 WATER MAIN IMPROVEMENTS

**PLAN AND PROFILE**  
 BOP TO STA. 11+30

DRAWING LOCATION: \\VE-SERVER\KCF-F1\es\PROJECTS\City of Homer\Term Contract\Wadde11\Way\Civil\3D\Production Drawings\F1-F3\_Wadde11\Way Plan and Profile.dwg F2  
 1/14/2016 5:14 PM SCALE LAYOUT  
 DRAFTED BY: SOPHIA HUFF

PAVEMENT MATCH POINT TABLE					
POINT	STATION	OFFSET	NORTHING	EASTING	REMARKS
5	16+09.29	92.07, LT	102505.0518	93779.5926	
6	15+91.83	8.13, RT	102401.6871	93763.5663	
7	16+00.87	17.91, RT	102393.8390	93774.3252	
8	15+93.83	37.54, RT	102373.2153	93771.2169	
9	15+77.88	47.21, RT	102360.6503	93757.4484	
10	15+09.15	127.17, RT	102273.1427	93743.8027	

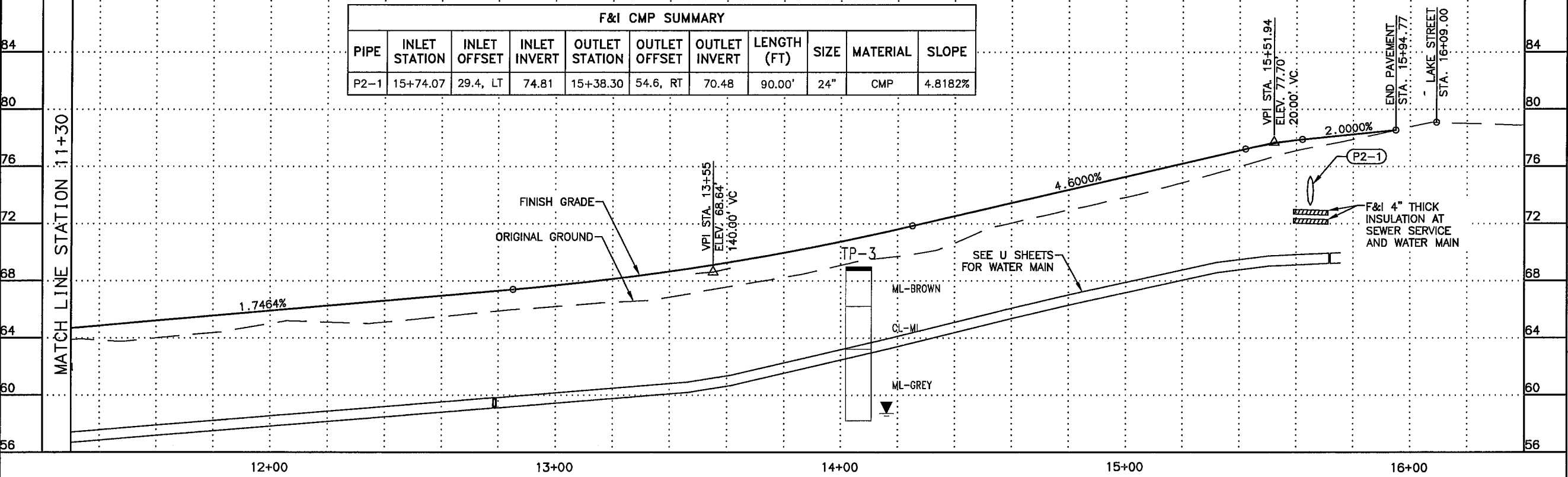


RADIUS POINT TABLE						
POINT	STATION	OFFSET	NORTHING	EASTING	RADIUS	REMARKS
E	15+02.62	35.00, LT	102412.1584	93660.1767	20	RADIUS TO EDGE OF PAVEMENT
F	15+58.53	35.00, LT	102436.8777	93720.8012	20	RADIUS TO EDGE OF PAVEMENT
G	15+02.27	55.00, RT	102334.2380	93705.2157	40	RADIUS TO EDGE OF PAVEMENT
H	15+65.33	55.00, LT	102458.2486	93724.3434	40	RADIUS TO EDGE OF PAVEMENT

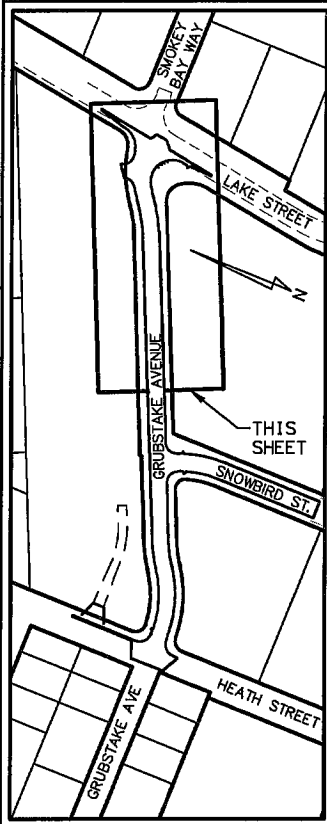
**C3 CURVE DATA**  
 N = 102345.1035  
 E = 93625.6457  
 PI = 14+38.95  
 Δ = 12°14'02"  
 T = 21.43'  
 L = 42.705'  
 R = 200.00'  
 S = 0%

**C4 CURVE DATA**  
 N = 102396.6443  
 E = 93696.0395  
 PI = 15+26.03  
 Δ = 25°02'37"  
 T = 44.42'  
 L = 87.419'  
 R = 200.00'  
 S = 0%

F&I CMP SUMMARY										
PIPE	INLET STATION	INLET OFFSET	INLET INVERT	OUTLET STATION	OUTLET OFFSET	OUTLET INVERT	LENGTH (FT)	SIZE	MATERIAL	SLOPE
P2-1	15+74.07	29.4, LT	74.81	15+38.30	54.6, RT	70.48	90.00'	24"	CMP	4.8182%



SHEET NO.	TOTAL SHEETS	
<b>F2</b>	<b>F4</b>	
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION



PLANS DEVELOPED BY:  
 KINNEY ENGINEERING, LLC  
 FOR  
 CITY OF HOMER, ALASKA  
 PUBLIC WORKS DEPARTMENT

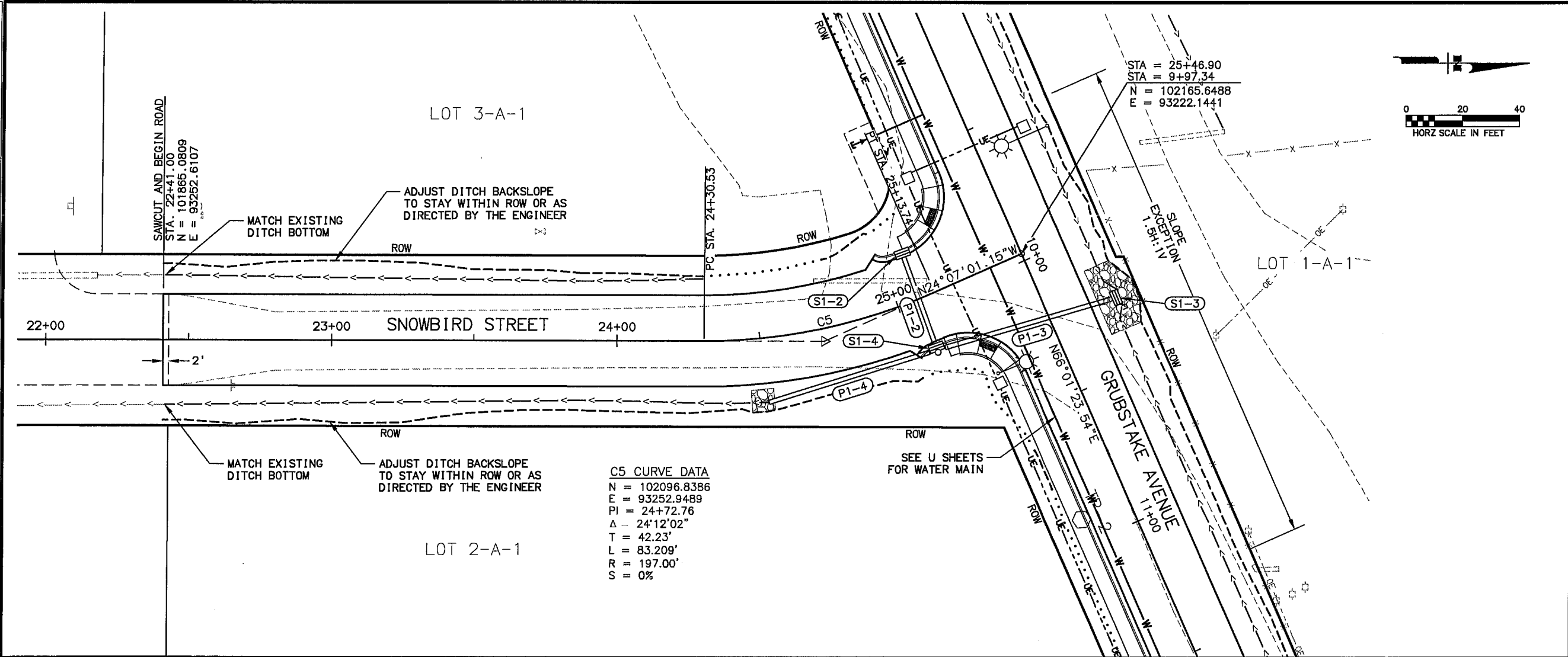
PHONE: (907) 235-3170  
 FAX: (907) 235-3145

STATE OF ALASKA  
 49th  
 John B. Peltor  
 CE 10591  
 Jan 4, 2016  
 REGISTERED PROFESSIONAL ENGINEER

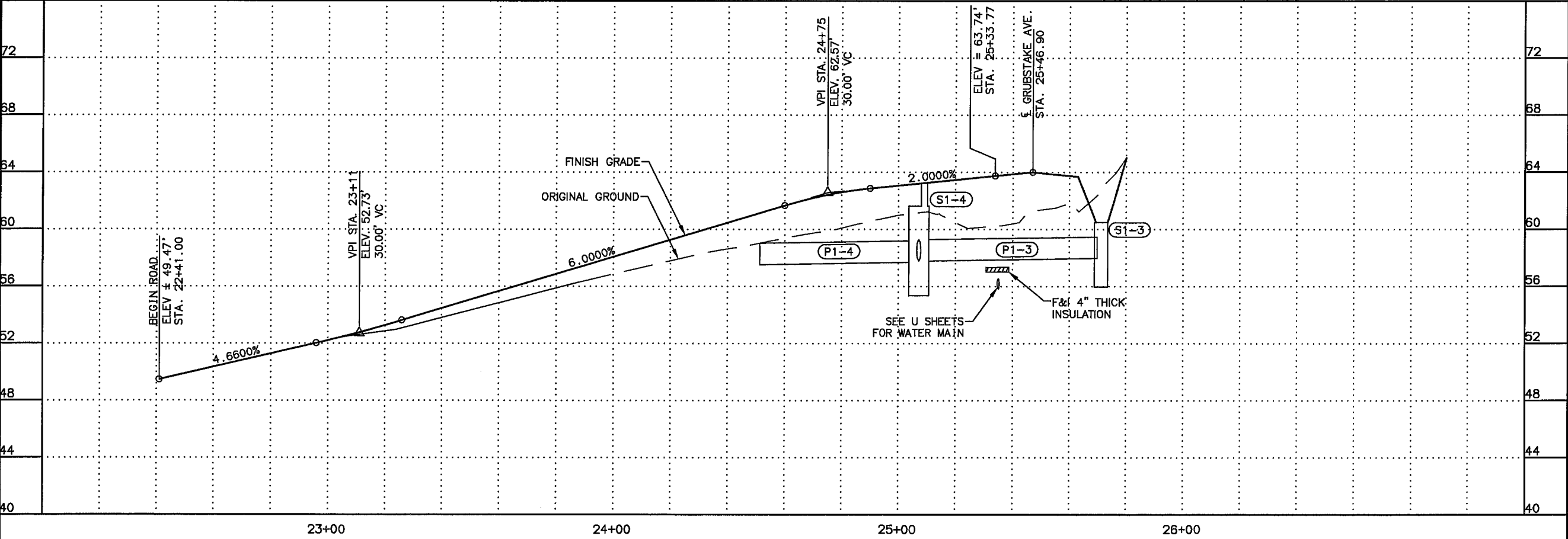
CITY OF HOMER  
 WADDELL WAY ROAD AND  
 WATER MAIN IMPROVEMENTS

**PLAN AND PROFILE**  
 STA. 11+30 TO STA. EOP

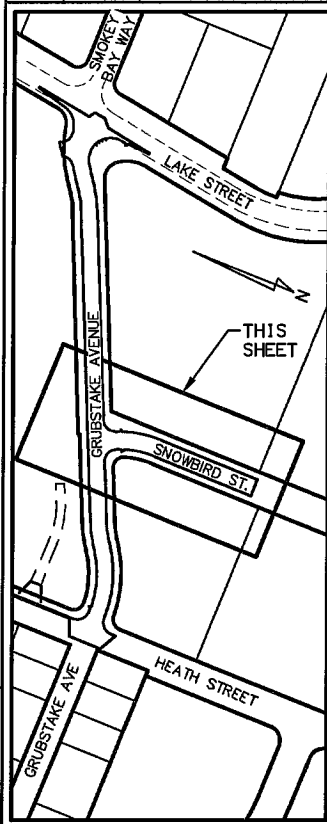
DRAWING LOCATION: \\VE-SERVER\VE-Files\PROJECTS\City of Homer\Term Contract\Wadell Way\Civil\3D\Production Drawings\F1-F3\_Wadell Way Plan and Profile.dwg F3  
 1/14/2016 3:40 PM  
 LAYOUT SCALE  
 DRAFTED BY: BRIAN LANSON



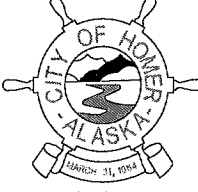
**C5 CURVE DATA**  
 N = 102096.8386  
 E = 93252.9489  
 PI = 24+72.76  
 Δ = 24°12'02"  
 T = 42.23'  
 L = 83.209'  
 R = 197.00'  
 S = 0%



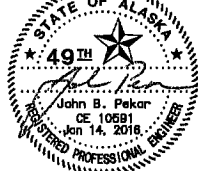
SHEET NO.	TOTAL SHEETS	
F3	F4	
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION



PLANS DEVELOPED BY:  
 KINNEY ENGINEERING, LLC  
 FOR  
 CITY OF HOMER, ALASKA  
 PUBLIC WORKS DEPARTMENT



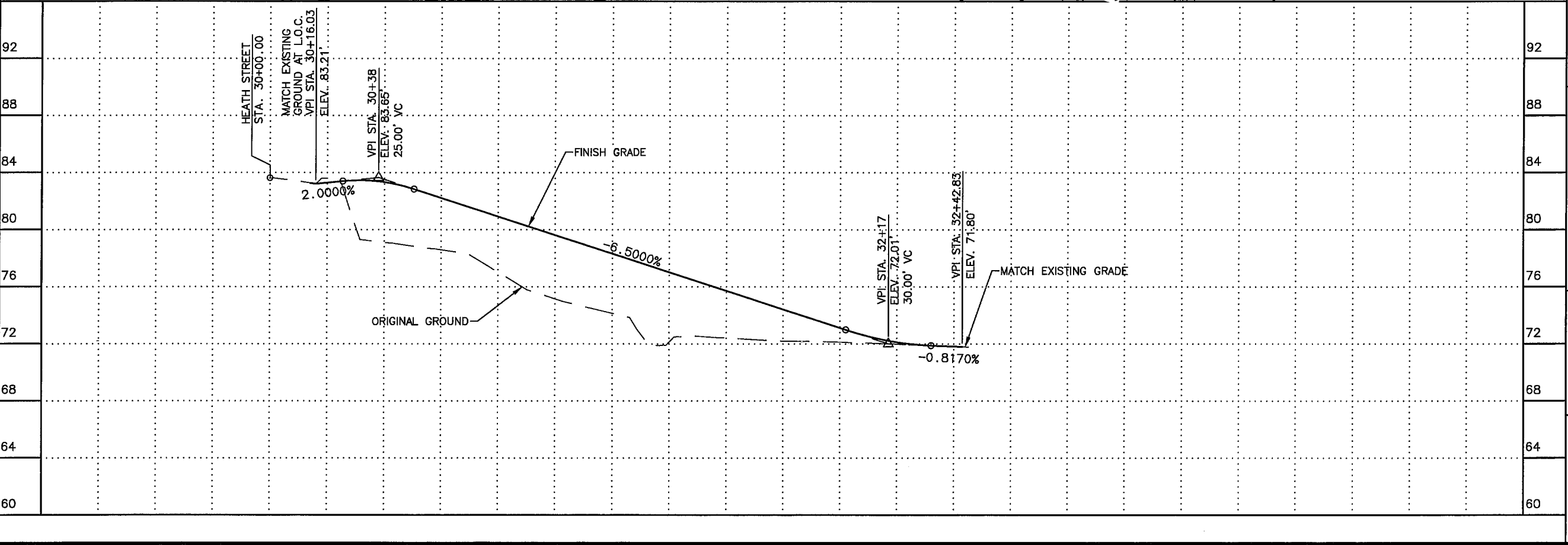
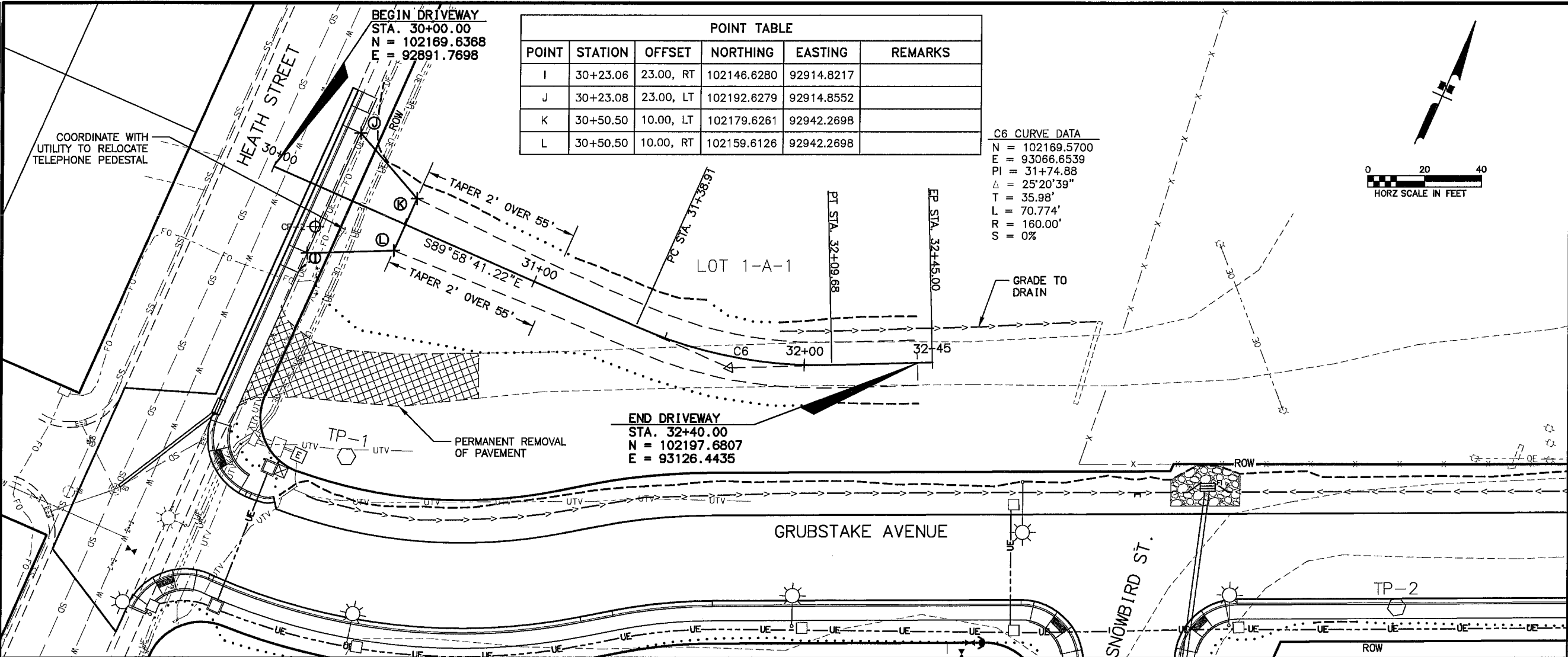
PHONE: (907) 235-3170  
 FAX: (907) 235-3145



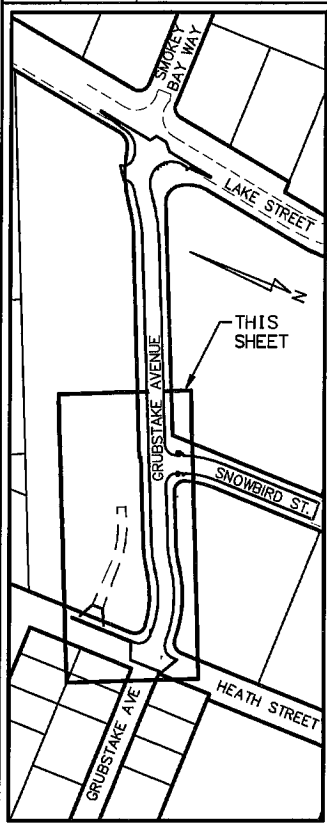
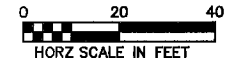
CITY OF HOMER  
 WADDELL WAY ROAD AND  
 WATER MAIN IMPROVEMENTS  
**WADDELL WAY  
 PLAN AND PROFILE**  
 STA. 22+50 TO STA. 25+50



1/15/2016 10:18 AM  
 DRAWING LOCATION  
 \\VE-SERVER\VE-F1\es\PROJECTS\City of Homer\Term Contract\Waddell Way\Production Drawings\F\_Waddell Way Plan and Profile.dwg F4  
 LAYOUT SCALE  
 DRAFTED BY  
 BRIAN LAMSON



SHEET NO.	TOTAL SHEETS	
F4	F4	
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION



PLANS DEVELOPED BY:  
 KINNEY ENGINEERING, LLC  
 FOR  
 CITY OF HOMER, ALASKA  
 PUBLIC WORKS DEPARTMENT

PHONE: (907) 235-3170  
 FAX: (907) 235-3145

STATE OF ALASKA  
 49<sup>TH</sup>  
 John B. Pekar  
 CE 10991  
 Jan 15, 2016  
 REGISTERED PROFESSIONAL ENGINEER

CITY OF HOMER  
 WADDELL WAY ROAD AND  
 WATER MAIN IMPROVEMENTS

**PLAN AND PROFILE**  
 BOP TO STA. 11+30

DRAWING LOCATION  
 Z:\PROJECTS\City of Homer\Term Contract\Waddell Way\Civil\3D\Production Drawings\TRAFFIC CONTROL.dwg  
 1/15/2016 9:06 AM  
 LAYOUT J1  
 SCALE  
 DRAFTED BY SOPHIA RUFF

TRAFFIC MAINTENANCE NOTES:

1. THE CONTRACTOR SHALL SUBMIT A DETAILED TRAFFIC CONTROL PLAN (TCP) TO THE COH FOR REVIEW BY BOTH THE COH AND ADOT&PF. THE TCP MUST RECEIVE APPROVAL FROM BOTH THE COH AND ADOT&PF BEFORE STARTING ANY WORK.
2. PROVIDE, INSTALL, MAINTAIN, MOVE AND REMOVE THE SPECIFIED TRAFFIC CONTROL DEVICES AND ACCESS ACCORDING TO COH STANDARDS, CURRENT ALASKA TRAFFIC MANUAL, ALASKA SIGN DESIGN SPECIFICATION AND APPROVED TRAFFIC CONTROL PLAN (TCP) SETUPS.
3. MOUNT SIGNS SECURELY. MAINTAIN WORK SITE AND AFFECTED AREAS DAILY.
4. THE FINAL JUDGEMENT IN THE SELECTION NUMBER, AND APPLICATION OF THE TRAFFIC CONTROL DEVICES AND LOCATION OF ALL TRAFFIC CONTROL MEASURES WILL REST WITH THE ENGINEER.
5. COVER EXISTING SIGNS WHICH CONFLICT WITH CONSTRUCTION SIGNING.
6. CONSTRUCTION SIGNING SPECIFIED MAY BE ALTERED BY THE ENGINEER TO MEET CHANGING CONDITIONS AND TO PROTECT THE TRAVELING PUBLIC.
7. TYPE 'A' FLASHING WARNING LIGHTS SHALL BE USED IN CONJUNCTION WITH TYPE III BARRICADES, ROAD CLOSURE SIGNS, ADVANCE DETOUR SIGNING AND THE FIRST TYPE II BARRICADE ENCOUNTERED BY TRAFFIC WHEN USED FOR CHANNELIZING. TYPE 'C' STEADY BURN WARNING LIGHTS SHALL BE USED IN CONJUNCTION WITH REMAINING TYPE II BARRICADES USED FOR CHANNELIZING.
8. ALL CONSTRUCTION SIGNS SHALL HAVE HIGH LEVEL WARNING DEVICES ATTACHED.
9. WORK ZONES MAY OVERLAP DURING CONSTRUCTION UPON APPROVAL BY THE ENGINEER.
10. INTEGRATE TRAFFIC CONTROL WITH OTHER CONSTRUCTION IN THE AREA.
11. DETAILS NOT SHOWN, BUT NECESSARY TO IMPLEMENT THE TRAFFIC CONTROL PLAN SHALL COMPLY WITH THE ALASKA TRAFFIC MANUAL AND MUTCD.
12. ALL SPECIAL SIGNS SHALL BE BLACK ON ORANGE BACKGROUND WITH BORDERS HAVING 1.5" RADIUS AND 0.75" THICKNESS.
13. CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS.
14. PEDESTRIAN FENCE SHALL HAVE R9-9 (SIDEWALK CLOSED) SIGNS MOUNTED AT BOTH ENDS OF THE WORK ZONE AND AT EVERY LOCATION PEDESTRIANS ARE LIKELY TO ENCOUNTER THE CLOSED PATHWAY.
15. INSTALL PEDESTRIAN FENCING AROUND OPEN EXCAVATIONS AT NIGHT.

SHEET NO.	TOTAL SHEETS	
J1	J2	
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

PLANS DEVELOPED BY:  
 KINNEY ENGINEERING, LLC  
 FOR  
 CITY OF HOMER, ALASKA  
 PUBLIC WORKS DEPARTMENT



PHONE: (907) 235-3170  
 FAX: (907) 235-3145



CITY OF HOMER  
 WADDELL WAY ROAD AND  
 WATER MAIN IMPROVEMENTS  
**TRAFFIC CONTROL DEVICES  
 FOR ROADSIDES**

NO.	DATE	DESCRIPTION

**NOTES:**

- TRAFFIC CONTROL DEVICES REQUIRED BY THE GUIDELINES ON THIS SHEET ARE INTENDED FOR CONDITIONS WHICH WILL BE IN PLACE LONGER THAN ONE CONTINUOUS WORK SHIFT. AN APPROVED TRAFFIC CONTROL PLAN IS REQUIRED PRIOR TO BEGINNING WORK.
- THE GROUND CROSS SECTION AT A LOCATION BEFORE CONSTRUCTION DETERMINES WHETHER TRAFFIC CONTROL DEVICES ARE NEEDED AT THE SAME LOCATION DURING CONSTRUCTION.
- GUARDRAIL EXISTING AT A LOCATION BEFORE CONSTRUCTION SHALL REMAIN IN PLACE DURING CONSTRUCTION OR APPROVED ALTERNATE DEVICES INSTALLED.
- INSTALL TRAFFIC CONTROL DEVICES BETWEEN THE EDGE OF TRAVELED WAY AND THE WORK AREA ON ANY ROADWAY OPENED TO TRAFFIC WHEN REQUIRED BY THIS DRAWING.
- EXISTING ROADWAY ALIGNMENTS INSTALL TRAFFIC CONTROL DEVICES WHEN WORK OCCURS IN THE DEVICES REQUIRED AREAS SHOWN ON THIS DRAWING.
- DETOURS, TEMPORARY ROADWAYS, OR NEW ROADWAYS NOT YET COMPLETE. INSTALL TRAFFIC CONTROL DEVICES WHEN ANY OF THE FOLLOWING CONDITIONS EXIST:
  - THE HORIZONTAL OR VERTICAL CURVATURE IS MORE SEVERE THAN BEFORE CONSTRUCTION BEGAN.
  - THE ROADWAY OR SHOULDER WIDTH IS LESS THAN BEFORE CONSTRUCTION BEGAN.
  - THE BACKSLOPE OR FORESLOPE IS STEEPER THAN BEFORE CONSTRUCTION BEGAN.
  - THE HEIGHT OF THE FORESLOPE IS GREATER THAN BEFORE CONSTRUCTION BEGAN.
- DROPOFFS:
 

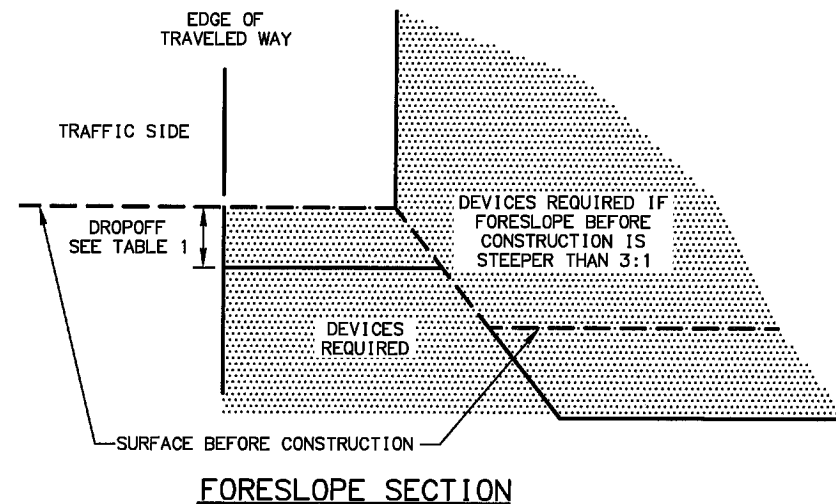
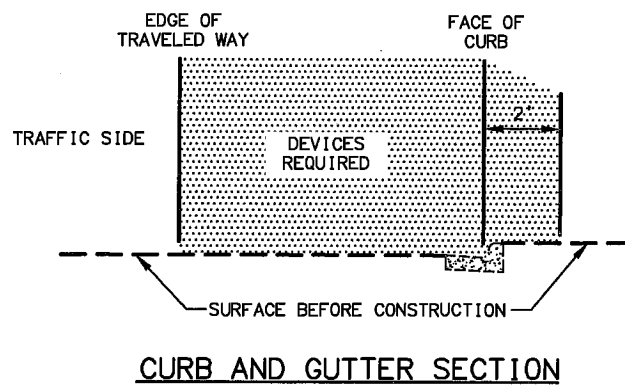
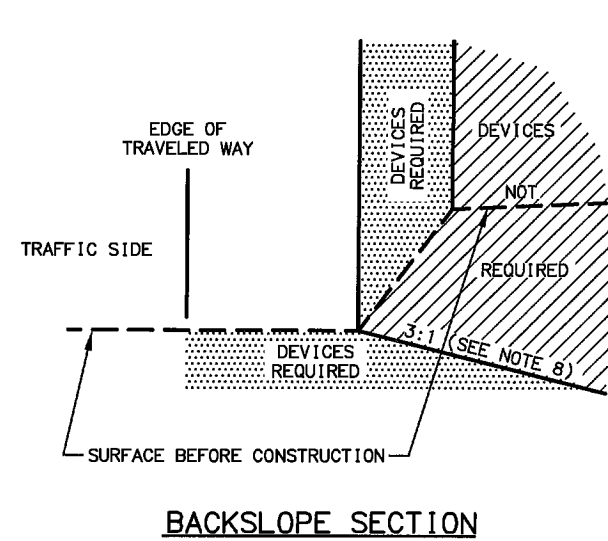
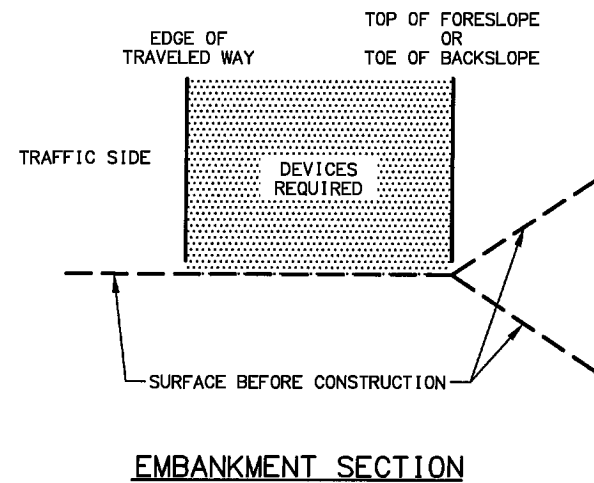
INSTALL TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE FORESLOPE SECTION DETAIL AND TABLE 1.
- ON ANY NEWLY CONSTRUCTED SLOPE STEEPER THAN 4:1 TO 3:1 PROVIDE A TEN FOOT FLAT RECOVERY AREA AT THE TOE OF SLOPE OR INSTALL TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE FORESLOPE SECTION DETAIL.
- TRAFFIC CONTROL DEVICE REQUIREMENTS:
  - ON ROADWAYS WITH A SPEED LIMIT GREATER THAN 40 MILES PER HOUR OR AVERAGE DAILY TRAFFIC VOLUME GREATER THAN 4000 VEHICLES PER DAY INSTALL TEMPORARY PORTABLE CONCRETE BARRIER OR TEMPORARY GUARDRAIL. ON MULTI-LANE ROADWAYS CLOSE THE LANE CLOSEST TO THE WORK AREA AND INSTALL DRUMS.
 

TERMINATE RUNS OF TEMPORARY PORTABLE CONCRETE BARRIER USING ONE OF THE FOLLOWING THREE METHODS:

    - TEMPORARY CRASH ATTENUATOR.
    - RIGID TO SEMI-RIGID GUARDRAIL TRANSITION WITH SLOTTED RAIL TERMINAL OR OTHER APPROVED CRASHWORTHY END TREATMENT.
    - FLARE THE ENDS OF THE TEMPORARY BARRIER AWAY FROM THE ROADWAY AT A RATE OF 15:1 ON A TRANSVERSE SLOPE OF 10:1 OR FLATTER TO THE OUTSIDE EDGE OF THE CLEAR ZONE AND INSTALL A SLOPING END TREATMENT, PER STANDARD DRAWING G-46.11.

TERMINATE RUNS OF TEMPORARY GUARDRAIL USING EITHER OF THE FOLLOWING TWO METHODS:

    - SLOTTED RAIL TERMINAL OR OTHER APPROVED CRASHWORTHY END TREATMENT.
    - FLARE THE ENDS OF THE TEMPORARY GUARDRAIL AWAY FROM THE ROADWAY AT A RATE OF 15:1 ON TRANSVERSE SLOPE OF 10:1 OR FLATTER TO THE OUTSIDE EDGE OF THE CLEAR ZONE.
  - ON ALL OTHER ROADWAYS INSTALL TYPE II BARRICADES, DRUMS OR DELINEATORS WHEN DEVICES ARE REQUIRED. SPACE THE DEVICES IN ACCORDANCE WITH THE REQUIREMENTS FOR SPACING TYPE II BARRICADES AND DRUMS SET FORTH IN THE ALASKA TRAFFIC MANUAL.
- DO NOT CONSTRUCT VERTICAL DROP OFFS GREATER THAN 1.5" WITHIN THE TRAFFIC LANE OR ACTIVE WHEEL TRACK. PROVIDE 2' OF SHY DISTANCE FROM EDGE OF ALL TRAFFIC CONTROL DEVICES TO THE EDGE OF THE TRAVELED WAY.



**LEGEND**

- WORK AREA WHERE TRAFFIC CONTROL DEVICES ARE REQUIRED
- WORK AREA WHERE TRAFFIC CONTROL DEVICES ARE NOT REQUIRED
- SURFACE BEFORE CONSTRUCTION
- CONSTRUCTION AREA BOUNDARY

**TABLE 1**  
TRAFFIC CONTROL DEVICES REQUIRED FOR VERTICAL DROPOFFS ≤ 4 FEET FROM TRAVELED WAY\*

ROADWAY TYPE	DROPOFF ≤ 2"	2" < DROPOFF ≤ 12"	DROPOFF ≥ 12"
AVERAGE DAILY TRAFFIC > 4000 OR SPEED > 40 MPH	TAPER ASPHALT AT 1:1 OR 45°	TYPE II BARRICADES OR DRUMS	TEMPORARY PORTABLE CONCRETE BARRIER OR TEMPORARY GUARDRAIL
ALL OTHER ROADWAYS	NONE REQUIRED	TUBULAR CANDLES OR DELINEATORS	TYPE II BARRICADES OR DRUMS

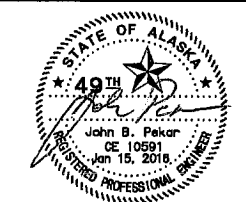
\* SPACE THE DEVICES IN ACCORDANCE WITH REQUIREMENTS FOR SPACING TYPE II BARRICADES AND DRUMS SET FORTH IN THE ALASKA TRAFFIC MANUAL.

DRAFTED BY SOPHIA.HUFF  
 SCALE  
 LAYOUT J2  
 1/15/2016 10:43 AM  
 Z:\PROJECTS\City of Homer\Term Contract\Wadell Way\Civil\3D\Production Drawings\Traffic Control.dwg  
 DRAWING LOCATION

PLANS DEVELOPED BY:  
KINNEY ENGINEERING, LLC  
FOR  
CITY OF HOMER, ALASKA  
PUBLIC WORKS DEPARTMENT



PHONE: (907) 235-3170  
FAX: (907) 235-3145



CITY OF HOMER

WADDELL WAY ROAD AND WATER MAIN IMPROVEMENTS

TRAFFIC CONTROL DEVICES FOR ROADSIDES

**HDPE WATER MAIN NOTES:**

1. HDPE PIPING MATERIAL - HDPE PIPING MATERIAL SHALL CONFORM TO THE CITY OF HOMER STANDARD SPECIFICATIONS FOR HIGH DENSITY POLYETHYLENE PIPE. HDPE PIPE, TUBING, AND FITTINGS SHALL CONFORM TO ALL APPLICABLE PROVISIONS AND REQUIREMENTS OF THE LATEST REVISION OF AWWA C901 AND AWWA C906 AND, BY INCLUSION, ALL APPROPRIATE STANDARDS REFERENCED THEREIN. ALL PIPE AND FITTINGS 4" AND LARGER SHALL BE MANUFACTURED TO IRON PIPE SIZE EQUIVALENT OUTSIDE DIAMETER (IPS).
2. HDPE PIPING MATERIAL - HDPE MJ/FLANGE CONNECTIONS SHALL BE ONE-PIECE, MOLDED POLYETHYLENE ADAPTERS WITH STAINLESS STEEL RETAINER RING. RETAINER RING SHALL BE TYPE 316 STAINLESS STEEL. MJ/FLANGE CONNECTIONS SHALL HAVE A MINIMUM PRESSURE RATING EQUAL TO OR GREATER THAN THAT OF THE HDPE PIPING. NUTS, BOLTS, AND WASHERS SHALL BE STAINLESS STEEL, TYPE 316. RUBBER GASKETS FOR MJ/FLANGE CONNECTIONS SHALL BE NSF STANDARD 61 CERTIFIED FOR USE IN POTABLE WATER SYSTEMS.
3. HDPE PIPING INSTALLATION - ALL HDPE WATER MAIN PIPING AND FITTINGS SHALL BE BUTT-FUSED IN ACCORDANCE WITH ASTM D2657. THE INDIVIDUAL WHO PERFORMS THE BUTT-FUSION SHALL HAVE WRITTEN CERTIFICATION FROM AN HDPE PIPE MANUFACTURER STATING HE/SHE HAS SUCCESSFULLY COMPLETED AN 8-HOUR (MINIMUM) CERTIFICATION CLASS ON BUTT-FUSION TECHNIQUES AND PROCEDURES. IN ADDITION, THIS INDIVIDUAL SHALL HAVE FUSED A COMBINED TOTAL OF MORE THAN 5,000 FEET OF HDPE PIPING IN DIAMETERS 4-INCHES AND LARGER.
4. HDPE PIPING INSTALLATION - A MAXIMUM OF THREE (3) JOINTS SELECTED AT RANDOM BY C.O.H. MAY BE TESTED FOR COMPLIANCE WITH ASTM D38 AS A QUALITY CONTROL MEASURE. SPECIMENS TO BE TESTED SHALL BE OBTAINED BY CUTTING THE WATER MAIN PIPING AT LEAST 12-INCHES ON EACH SIDE OF A FIELD-MADE JOINT. CONTRACTOR SHALL THEN REJOIN THE ENDS OF THE PIPING AND WORK MAY PROCEED. COSTS FOR REMOVAL AND REPAIR OF BUTT-FUSED JOINTS SHALL BE BORNE BY THE CONTRACTOR. ALL LAB COSTS ASSOCIATED WITH TESTING OF BUTT-FUSED JOINTS WILL BE BORNE BY C.O.H.
5. HDPE PIPING INSTALLATION - THE CONTRACTOR SHALL ENSURE THAT EACH JOINT IS FUSED AT THE TEMPERATURE AND PRESSURE RECOMMENDED BY THE PIPE MANUFACTURER IN ORDER TO ACHIEVE THE MAXIMUM PRESSURE RATING FOR THAT JOINT. ALL BUTT-FUSED JOINTS FOR HDPE PIPING AND FABRICATED FITTINGS SHALL BE DOCUMENTED BY A COMPUTER DATA LOGGER THAT RECORDS PRESSURE AND TEMPERATURE APPLIED AT EACH FUSED JOINT, ALONG WITH THE DATE AND TIME THE JOINT WAS FUSED. COMPUTER PRINTOUTS, ELECTRONIC DATA, AND THE PROJECT STATION FOR EACH FIELD FUSED JOINT SHALL BE SUBMITTED TO C.O.H.
6. HDPE PIPING INSTALLATION - THE USE OF ELECTRO-FUSION COUPLINGS TO JOIN HDPE PIPING MAY BE ALLOWED AT LOCATIONS WHERE THE BEND RADIUS IS GREATER THAN 75 FEET AND THE PIPE CURVATURE AT THE JOINT IS REDUCED TO A MINIMUM OF 100 TIMES PIPE OUTER DIAMETER FOR THE DURATION OF THE FUSION PROCESS UPON WRITTEN APPROVAL OF C.O.H.. ELECTRO-FUSION COUPLINGS SHALL COMPLY WITH ASTM F1055. CONTRACTOR SHALL RECORD THE EXACT LOCATION OF ANY INSTALLED ELECTRO-FUSION COUPLING IN THE RECORD DRAWING SUBMITTAL.
7. HDPE PIPING INSTALLATION - CONTRACTOR SHALL INSPECT THE HDPE PIPING FOR DAMAGE IMMEDIATELY PRIOR TO JOINING. DAMAGE IS DEFINED AS CUTS OR GOUGES EXCEEDING 10% OF THE PIPE WALL THICKNESS, KINKED PIPE SECTIONS, PIPE SECTIONS FLATTENED TO MORE THAN 5% OF THE ORIGINAL DIAMETER, OR ANY ABRASION OR CUTTING OF THE INSIDE SURFACE OF THE PIPING. DAMAGED PORTIONS OF PIPING SHALL BE CUT OUT AND DISCARDED.
8. HDPE PIPING INSTALLATION - THE HANDLING OF THE JOINED PIPELINE SHALL BE IN SUCH A MANNER THAT THE PIPE IS NOT DAMAGED. ROPES, FABRIC, OR RUBBER-PROTECTED SLINGS, OR STRAPS SHALL BE USED WHEN HANDLING PIPES. CHAINS, CABLES, OR HOOKS INSERTED INTO THE PIPE ENDS SHALL NOT BE ALLOWED. TWO SLINGS SPREAD APART SHALL BE USED FOR LIFTING EACH LENGTH OF PIPE. SLINGS FOR HANDLING THE PIPELINE SHALL NOT BE POSITIONED AT BUTT-FUSED JOINTS.
9. HDPE PIPING INSTALLATION - THE HORIZONTAL BENDING RADIUS FOR HDPE PIPING SHALL NOT BE LESS THAN THE MINIMUM RADIUS RECOMMENDED BY THE PIPING MANUFACTURER.
10. HDPE PIPING INSTALLATION: TRACER WIRE - INSTALL TRACER WIRE ON TOP OF ALL HDPE WATER MAINS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. TRACER WIRE SHALL BE SUITABLE FOR DIRECT BURY APPLICATIONS AND SHALL BE 10 AWG WITH 30-MIL HDPE JACKET (JACKET COLOR BLUE), CAPABLE OF A 575 POUND AVERAGE TENSILE BREAK LOAD. TRACER WIRE SHALL BE COPPERHEAD INDUSTRIES REINFORCED TRACER WIRE OR APPROVED EQUAL. TRACER WIRE SHALL BE INSTALLED IN CONTINUOUS LENGTHS WITH NO SPLICES. TERMINATE EACH END OF TRACER WIRE AT GROUND SURFACE IN A VALVE BOX TOP SECTION WITH CAP. PROVIDE A MINIMUM OF FIVE (5) FEET OF ADDITIONAL WIRE NEATLY COILED WITHIN VALVE BOX AT EACH END. SPLICES MAY BE ALLOWED AT THE DIRECTION OF THE ENGINEER. IF A SPLICE IS ALLOWED USE COPPERHEAD INDUSTRIES CONNECTOR, PART #3WB-01 (BLUE) OR APPROVED EQUAL.
11. HDPE PIPING FLUSHING - NEWLY INSTALLED HDPE WATER MAINS SHALL BE OPEN-BORE FLUSHED BY C.O.H. PRIOR TO INSTALLATION OF WATER SERVICES. WATER FROM PIPE FLUSHING SHALL BE DIRECTED TO THE LAKE STREET (EAST) END OF THE PROJECT IN A MANNER THAT SHALL DISPOSE OF WATER TO EXISTING VEGETATED DRAINAGE FACILITIES WITHOUT CAUSING EROSION OR DAMAGING THE VEGETATION.
12. HDPE PIPING TESTING - A HYDROSTATIC TEST SHALL BE CONDUCTED AFTER "OPEN-BORE" FLUSHING ON ALL NEWLY INSTALLED HDPE WATER MAINS IN THE PRESENCE OF C.O.H. PRIOR TO PERFORMING THE HYDROSTATIC TEST, ENSURE THAT THERE IS NO AIR TRAPPED IN THE TEST SECTION. THE HYDROSTATIC PRESSURE TEST PROCEDURE CONSISTS OF FILLING THE PIPING WITH WATER, AN INITIAL EXPANSION PHASE, A TEST PHASE, AND DEPRESSURIZING. BEFORE APPLYING HYDROSTATIC PRESSURE TEST, ALL PIPING AND ALL COMPONENTS IN THE TEST SECTION SHALL BE RESTRAINED AND THE TRENCH SECTION BACKFILLED TO ORIGINAL GRADE. THE MAXIMUM TEST DURATION IS EIGHT (8) HOURS INCLUDING TIME TO PRESSURIZE, TIME FOR INITIAL EXPANSION, TIME AT TEST PRESSURE AND TIME TO DEPRESSURIZE THE TEST SECTION. IF THE TEST IS NOT COMPLETED DUE TO LEAKAGE, EQUIPMENT FAILURE, OR FOR ANY OTHER REASON, DEPRESSURIZE THE TEST SECTION COMPLETELY AND ALLOW IT TO RELAX FOR AT LEAST EIGHT (8) HOURS BEFORE PRESSURIZING THE TEST SECTION AGAIN. THE NEWLY INSTALLED HDPE WATER MAIN SHALL BE HYDROSTATICALLY TESTED TO THE RATED OPERATING PRESSURE OF THE PIPE. THE RATED OPERATING PRESSURE OF HDPE SDR11 PIPING IS 160 PSI. GRADUALLY PRESSURIZE THE TEST SECTION TO TEST PRESSURE AND MAINTAIN TEST PRESSURE FOR FOUR (4) HOURS. DURING THE INITIAL EXPANSION PHASE, POLYETHYLENE PIPE WILL EXPAND SLIGHTLY. ADDITIONAL TEST LIQUID WILL BE REQUIRED TO MAINTAIN PRESSURE. IT IS NOT NECESSARY TO MONITOR THE AMOUNT OF WATER ADDED DURING THE INITIAL EXPANSION PHASE. IMMEDIATELY FOLLOWING THE INITIAL EXPANSION PHASE, REDUCE TEST PRESSURE BY 10 PSI AND STOP ADDING TEST LIQUID. IF THERE ARE NO VISIBLE LEAKS AND THE TEST PRESSURE REMAINS STEADY (WITHIN 5% OF THE TARGET VALUE) FOR ONE (1) HOUR, THE WATER MAIN SHALL BE DEEMED AS HAVING PASSED THE TEST.
13. VALVE MATERIAL - GATE VALVES SHALL BE IRON BODY, RESILIENT-SEATED VALVES WITH NON-RISING STEMS FOR WATER SUPPLY SERVICE, MANUFACTURED IN ACCORDANCE WITH AWWA C509. GATE VALVES SHALL HAVE A TWO (2) INCH SQUARE OPERATING NUT, AND SHALL OPEN COUNTERCLOCKWISE. UNLESS OTHERWISE DETAILED ON THE DRAWINGS, VALVE AND VALVE/PIPE INTERFACE SHALL BE MJ/FLANGE TYPE CONNECTIONS CONFORMING TO AWWA C110. INTERIOR AND EXTERIOR VALVE COATING SHALL BE FUSION BONDED EPOXY (FBE) IN ACCORDANCE WITH AWWA C550. IF INTEGRITY OF FBE COATING IS DAMAGED DURING SHIPPING OR INSTALLATION, CONTRACTOR SHALL FIELD REPAIR FBE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. CARBON STEEL ZINC PLATED NUTS, BOLTS, AND WASHERS WILL BE ALLOWED.
14. VALVE BOX MATERIAL - USE MUELLER MVB COMPOSITE VALVE BOXES OR APPROVED EQUAL.

SHEET NO. TOTAL SHEETS

U1 U8

ADDENDUM NO.

ATTACHMENT NO.

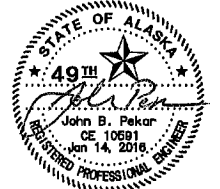
REVISIONS

NO.	DATE	DESCRIPTION

PLANS DEVELOPED BY:  
KINNEY ENGINEERING, LLC  
FOR  
CITY OF HOMER, ALASKA  
PUBLIC WORKS DEPARTMENT



PHONE: (907) 235-3170  
FAX: (907) 235-3145



CITY OF HOMER  
WADELL WAY ROAD AND  
WATER MAIN IMPROVEMENTS

**WATER MAIN NOTES**

DRAFTED BY  
SOPHIA.HUFF

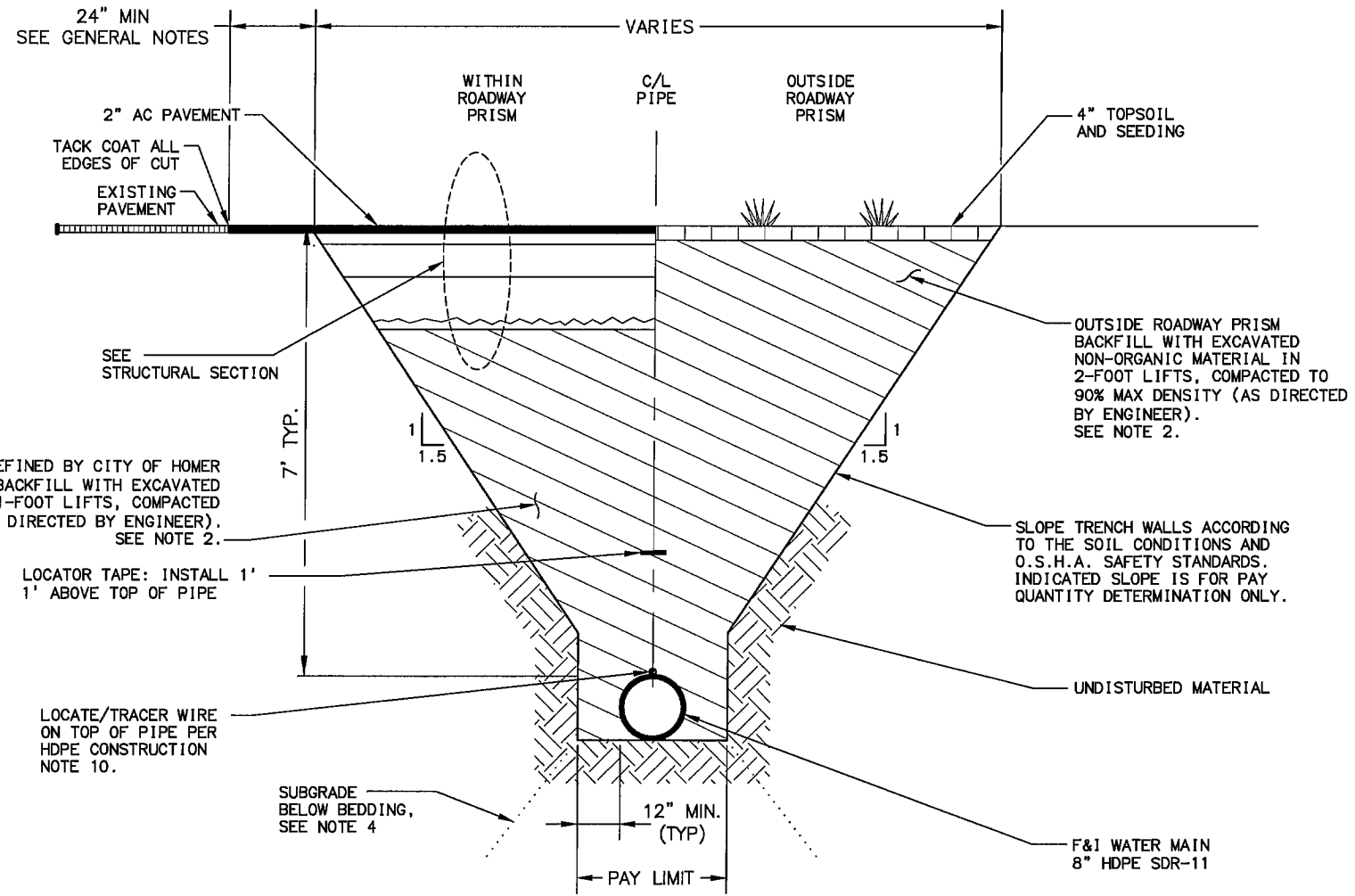
SCALE

LAYOUT  
U1

1/13/2016 10:37 AM

DRAWING LOCATION  
z:\PROJECTS\CITY OF HOMER\Term contract\waddell way\Civil\3D\Production Drawings\U1\_Water Main Notes & Trench.dwg

DRAWING LOCATION  
 Z:\PROJECTS\City of Homer\Term Contract\Waddell Way\Civil3D\Production Drawings\U1 Water Main Notes & Trench.dwg  
 1/15/2016 9:08 AM  
 LAYOUT U2  
 SCALE  
 DESIGNED BY  
 SPPH.A.HFF



WITHIN ROAD PRISM (DEFINED BY CITY OF HOMER  
 STANDARD DRAWING 200.06), BACKFILL WITH EXCAVATED  
 NON-ORGANIC MATERIAL IN 1-FOOT LIFTS, COMPACTED  
 TO 95% MAX DENSITY (AS DIRECTED BY ENGINEER).  
 SEE NOTE 2.

OUTSIDE ROADWAY PRISM  
 BACKFILL WITH EXCAVATED  
 NON-ORGANIC MATERIAL IN  
 2-FOOT LIFTS, COMPACTED TO  
 90% MAX DENSITY (AS DIRECTED  
 BY ENGINEER).  
 SEE NOTE 2.

SLOPE TRENCH WALLS ACCORDING  
 TO THE SOIL CONDITIONS AND  
 O.S.H.A. SAFETY STANDARDS.  
 INDICATED SLOPE IS FOR PAY  
 QUANTITY DETERMINATION ONLY.

LOCATOR TAPE: INSTALL 1'  
 1' ABOVE TOP OF PIPE

LOCATE/TRACER WIRE  
 ON TOP OF PIPE PER  
 HDPE CONSTRUCTION  
 NOTE 10.

SUBGRADE  
 BELOW BEDDING,  
 SEE NOTE 4

12" MIN.  
 (TYP)

F&I WATER MAIN  
 8" HDPE SDR-11

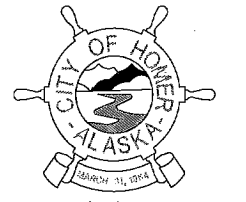
**TRENCH SECTION NOTES**

1. TRENCH EXCAVATION AND SHORING SHALL COMPLY WITH ALL LOCAL, STATE AND OSHA REGULATIONS AND REQUIREMENTS. PROVIDE PORTABLE STEEL TRENCH SHIELD AS REQUIRED.
2. FOUNDATION MATERIAL FOR TRENCH BACKFILL SHALL BE NATIVE MATERIAL, MEETING TYPE II CLASSIFICATION (MINIMUM) AS APPROVED BY THE ENGINEER. NATIVE MATERIAL NOT MEETING TYPE II CLASSIFICATION SHALL BE REMOVED AND REPLACED WITH TYPE II FILL AND BACKFILL. BACKFILL MATERIAL WITHIN ROADWAY PRISM SHALL HAVE 8" MAXIMUM ROCK SIZE. SEE STANDARD DETAIL 200.06.
3. REMOVE AND PROPERLY DISPOSE OF ALL ORGANIC MATERIALS.
4. SUBGRADE BELOW BEDDING PRISM SHALL BE CLEARED OF ALL DEBRIS AND ORGANIC MATERIAL. BACKFILL AND COMPACT EXCAVATED SUBGRADE.
5. TYPICAL DEPTH OF BURY IS 7 FEET. FURNISH AND INSTALL 4" THICK INSULATION WHERE DEPTH OF BURY IS LESS THAN 7 FEET OR AS NOTED ON THE PLANS. INSULATION SHALL BE 4 FEET WIDE PLACED 1-FOOT ABOVE PIPE. INSULATION SHALL BE R-20 FOR A 4 INCH THICKNESS.

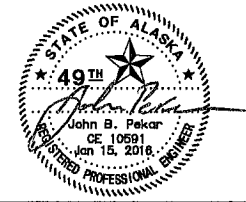
**TYPICAL TRENCH SECTION - HDPE WATER MAIN**

SHEET NO.	TOTAL SHEETS	
U2	U8	
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

PLANS DEVELOPED BY:  
 KINNEY ENGINEERING, LLC  
 FOR  
 CITY OF HOMER, ALASKA  
 PUBLIC WORKS DEPARTMENT



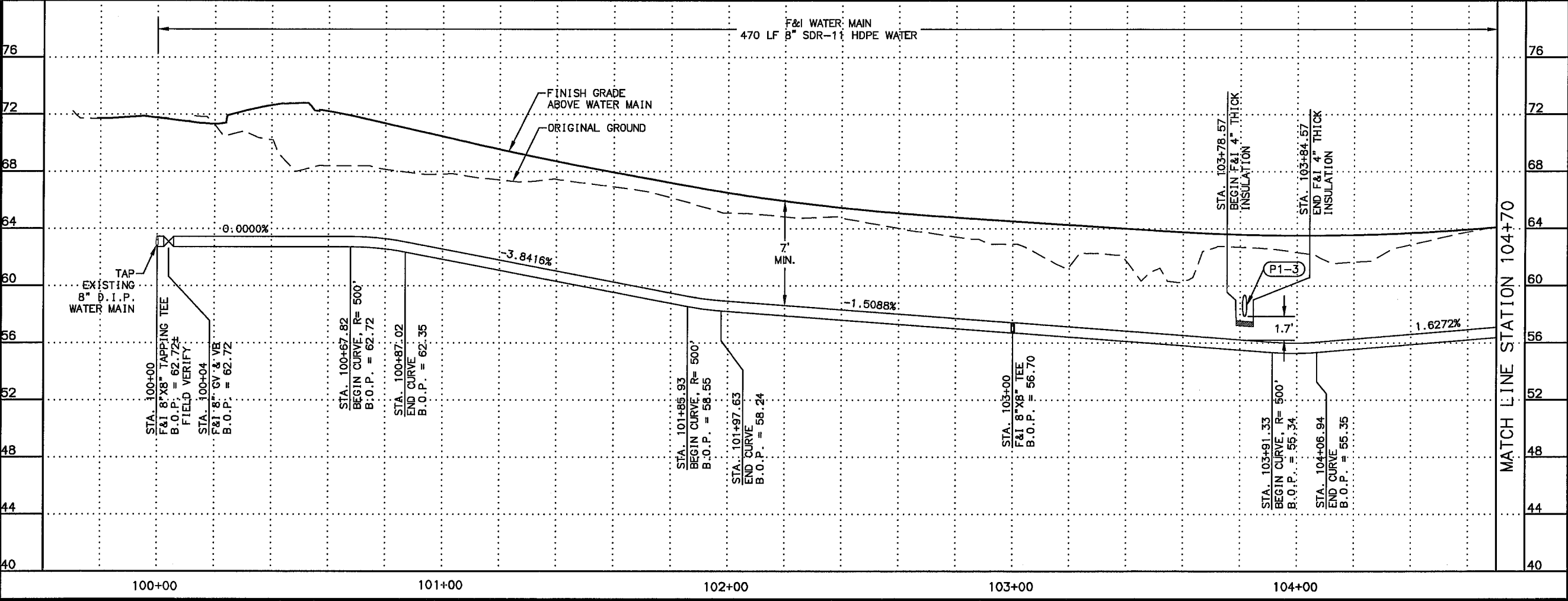
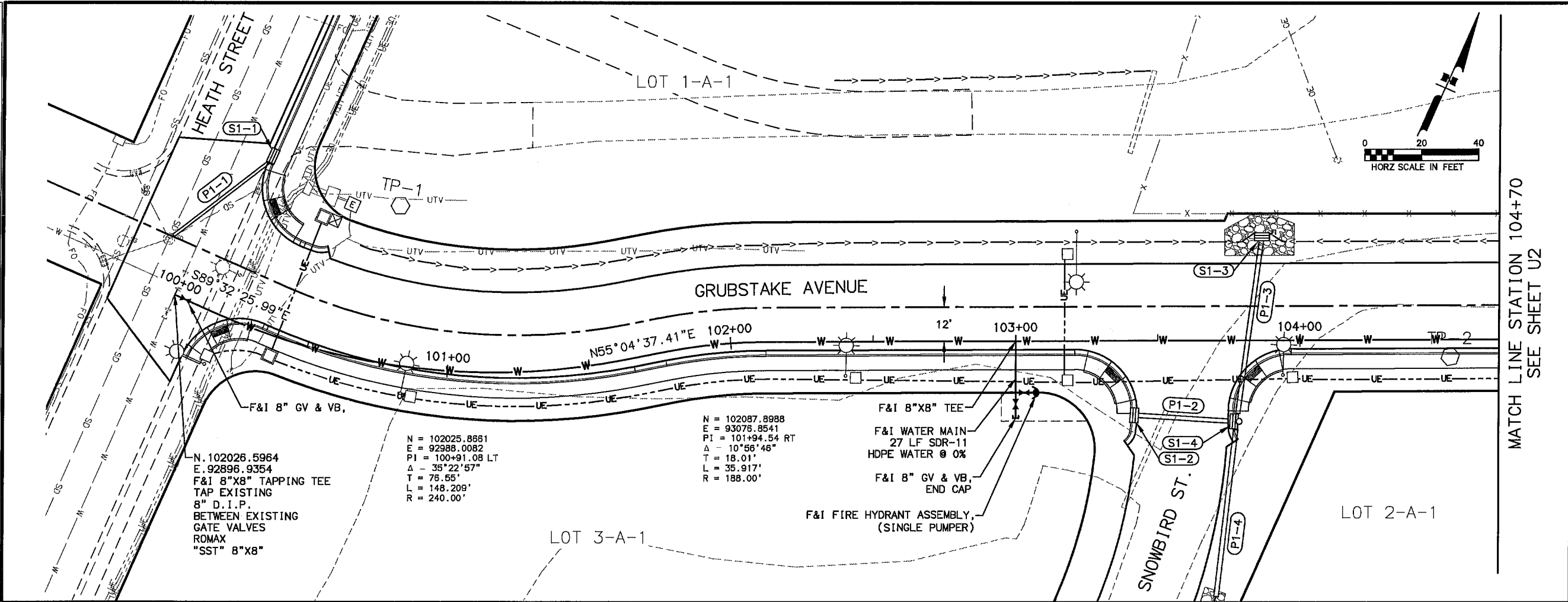
PHONE: (907) 235-3170  
 FAX: (907) 235-3145



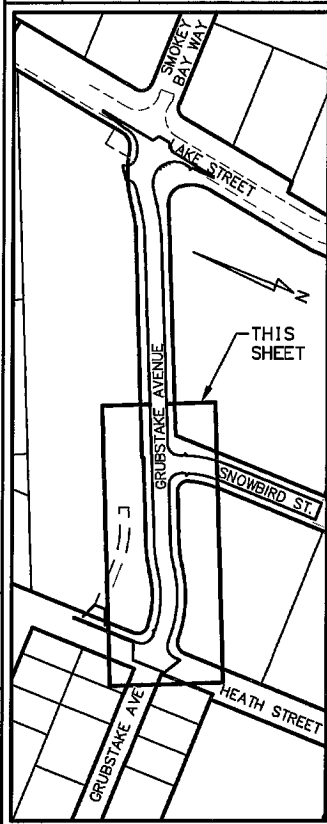
CITY OF HOMER  
 WADDELL WAY ROAD AND  
 WATER MAIN IMPROVEMENTS

**TYPICAL TRENCH SECTION**


DRAWING LOCATION Z:\PROJECTS\CITY OF HOMER\Contract\waddell\way\Civil\3D\Source Drawings\Pipe Networks\U1-U2\waddell Way Water\13/20 08.dwg: 1B PKM  
 DATE TIME LAYOUT SCALE  
 U3  
 DRAFTED BY BILL PADDOCK



SHEET NO.	TOTAL SHEETS	
U3	U7	
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION



PLANS DEVELOPED BY:  
 KINNEY ENGINEERING, LLC  
 FOR  
 CITY OF HOMER, ALASKA  
 PUBLIC WORKS DEPARTMENT



PHONE: (907) 235-3170  
 FAX: (907) 235-3145

STATE OF ALASKA  
 49th  
 John B. Pekar  
 CE 10591  
 Jan 14, 2016  
 REGISTERED PROFESSIONAL ENGINEER

CITY OF HOMER  
 WADDELL WAY ROAD AND  
 WATER MAIN IMPROVEMENTS  
**WATER MAIN  
 PLAN AND PROFILE**  
 STA. 100+00  
 TO  
 STA. 104+70

MATCH LINE STATION 104+70  
SEE SHEET U2

MATCH LINE STATION 104+70

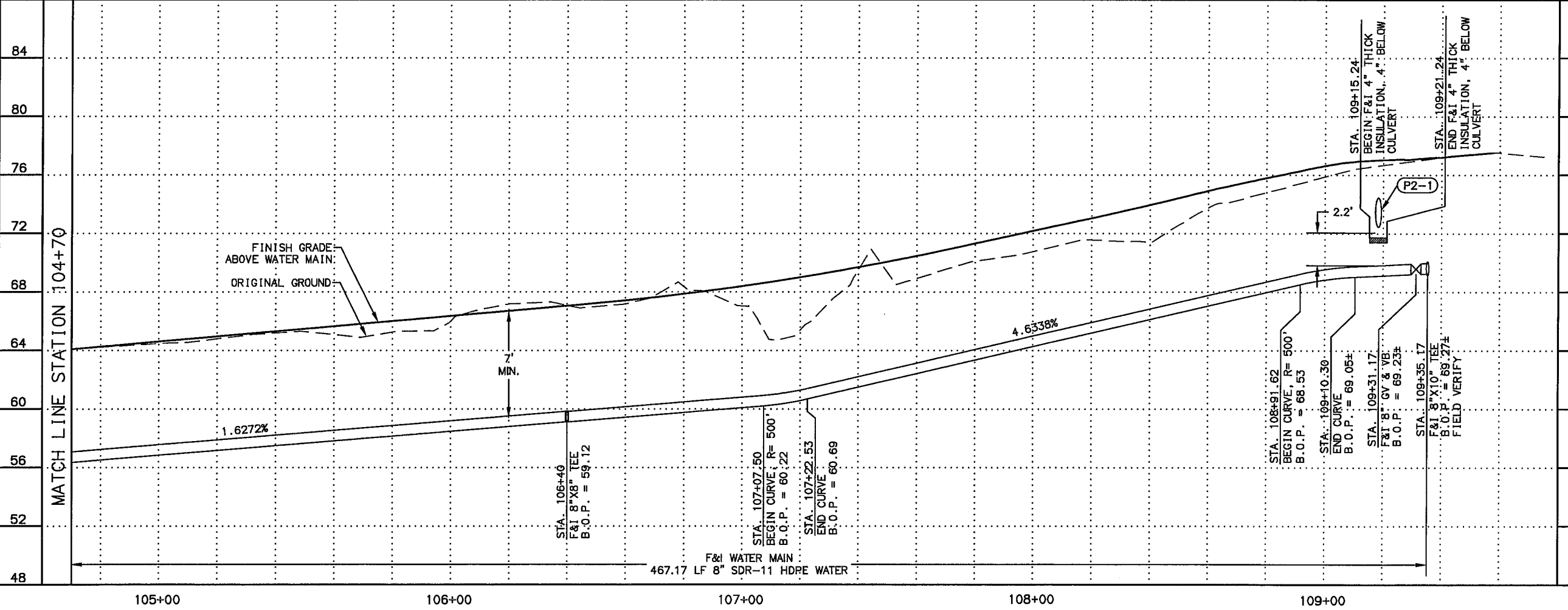
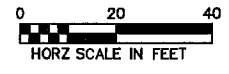
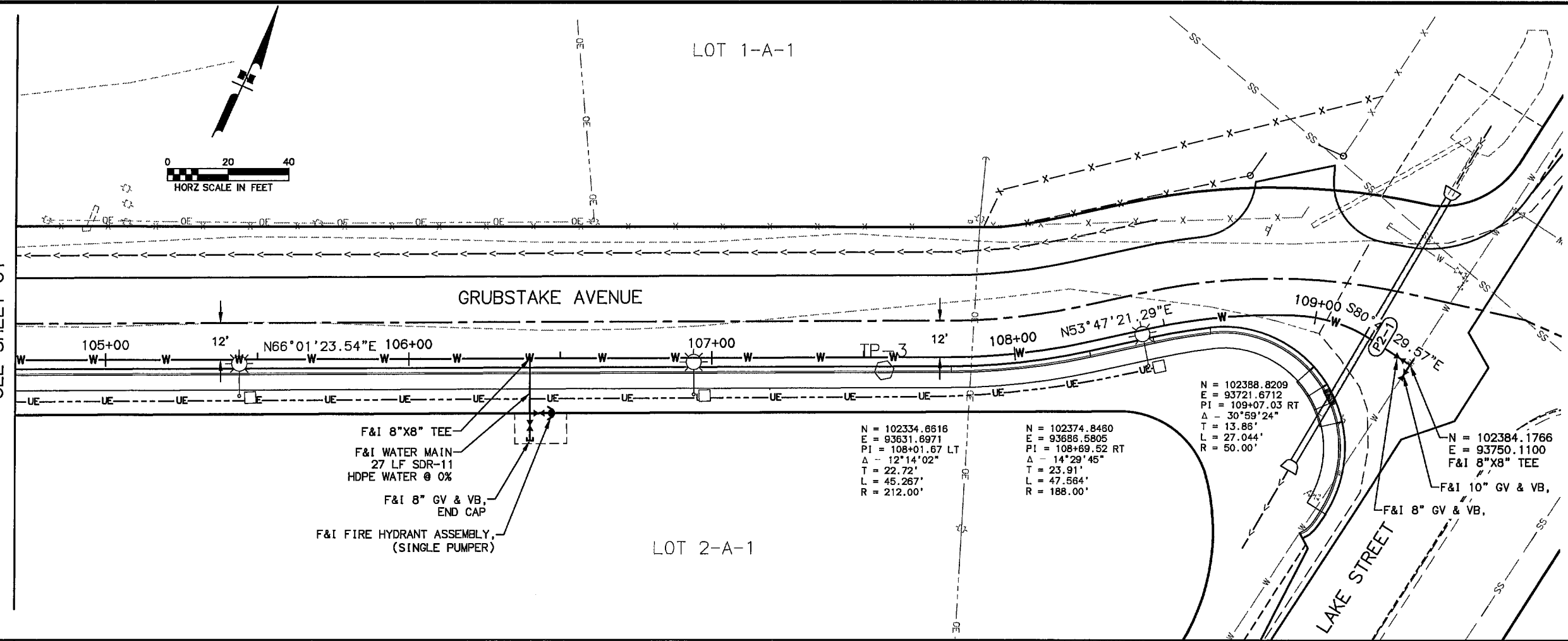
DRAWING LOCATION: z:\PROJECTS\City of Homer\Term contract\waddell\way\Civil\SD\Source Drawings\PIPE Networks\U1-U2\Waddell Way Water\13\60\Range: 18 PM

DRAFTED BY: BILL PADOCK

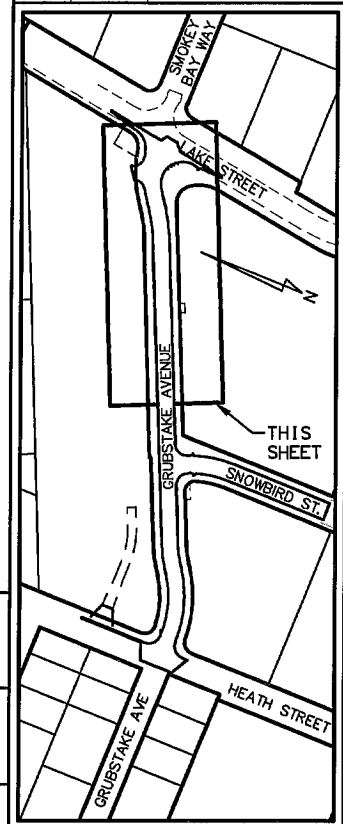
SCALE: LAYOUT U4

DATE: TIME

MATCH LINE STATION 104+70  
SEE SHEET U1



SHEET NO.	TOTAL SHEETS	
U4	U7	
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

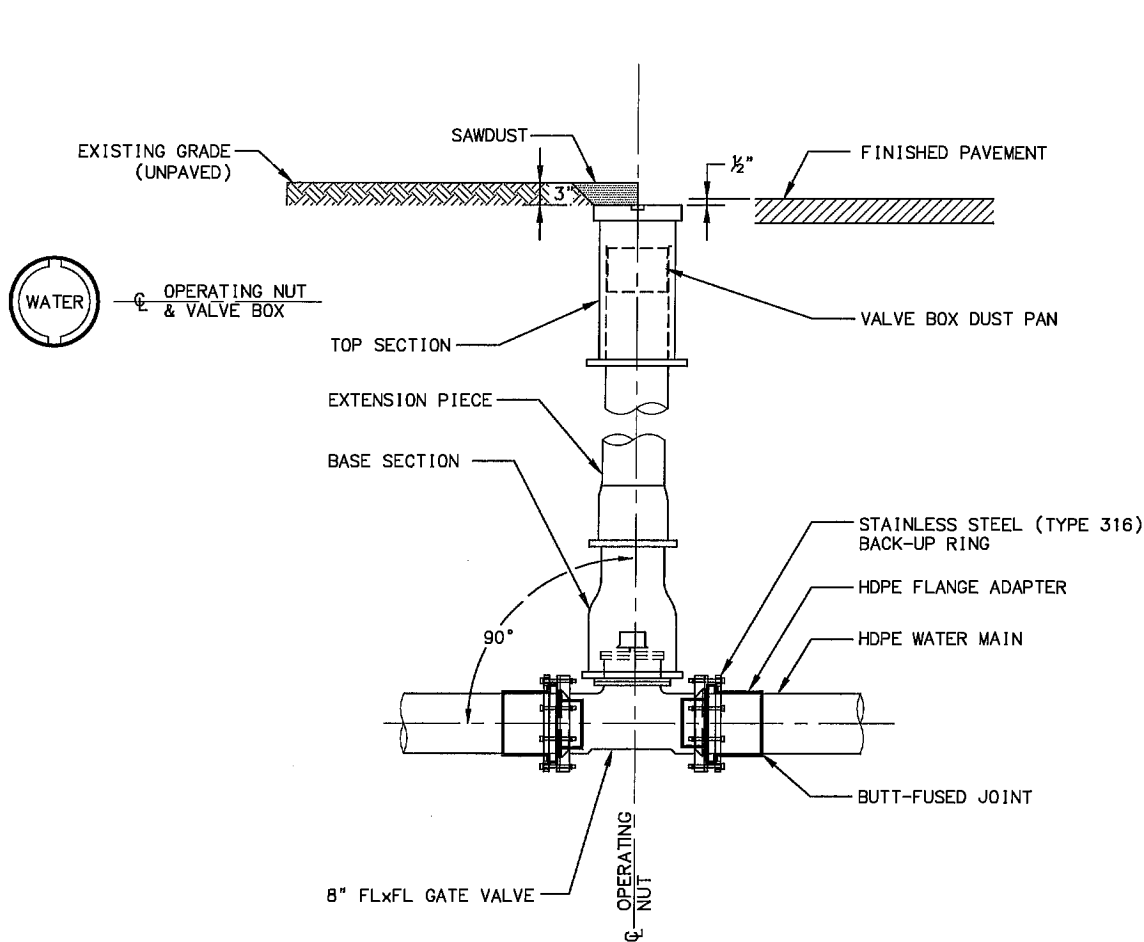


PLANS DEVELOPED BY:  
KINNEY ENGINEERING, LLC  
FOR  
CITY OF HOMER, ALASKA  
PUBLIC WORKS DEPARTMENT

PHONE: (907) 235-3170  
FAX: (907) 235-3145

CITY OF HOMER  
WADDELL WAY ROAD AND  
WATER MAIN IMPROVEMENTS  
**WATER MAIN  
PLAN AND PROFILE**  
STA. 104+70  
TO  
STA. 109+35.17

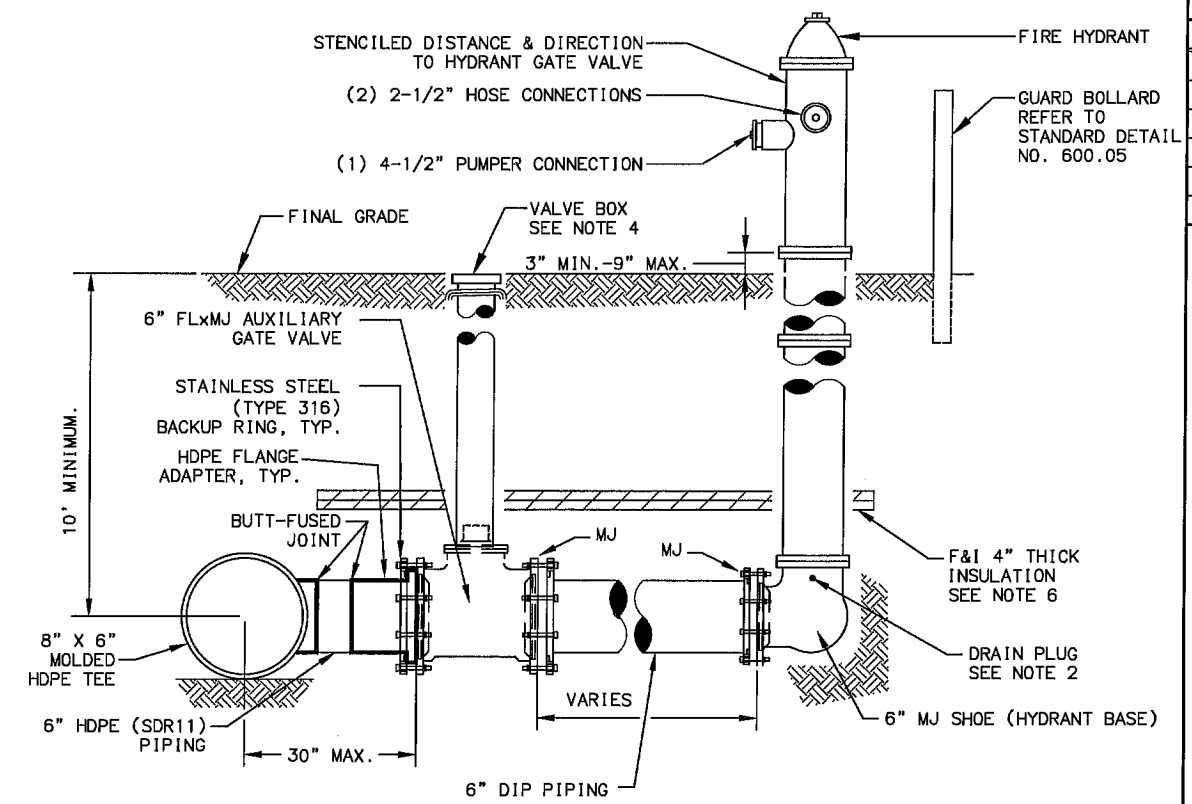
DRAWING LOCATION  
 z:\PROJECTS\city of homer\term contract\waddell way\civil3d\production Drawings\U5-US\_Water Main Details.dwg  
 1/13/2016 10:38 AM  
 LAYOUT U5  
 SCALE  
 DRAFTED BY SOPHIA.HUFF



**VALVE INSTALLATION NOTES:**

1. LID AND TOP SECTION SHALL BE MUELLER MVB DUCTILE IRON ADJUSTABLE TOP OR APPROVED EQUAL.
2. EXTENSION PIECE AND BASE SECTION SHALL BE MUELLER MVB COMPOSITE OR APPROVED EQUAL.
3. VALVE BOX DUST PAN SHALL BE THE PRODUCT OF THE VALVE BOX MANUFACTURER.
4. FURNISH AND INSTALL RUBBER GASKET/NSF 61 BETWEEN ALL FLANGES.

TYPICAL VALVE & VALVE BOX ASSEMBLY DETAIL



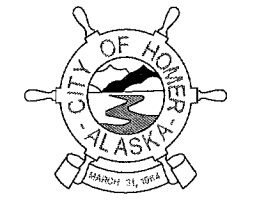
**HYDRANT INSTALLATION NOTES:**

1. HYDRANT BARREL SHALL BE INSTALLED PLUMB AND THE LEG SHALL BE INSTALLED LEVEL.
2. DRAIN PLUG SHALL BE INSTALLED BY CONTRACTOR.
3. ALL HYDRANTS SHALL BE PAINTED CATERPILLAR YELLOW.
4. AUXILIARY GATE VALVE & VALVE BOX SHALL BE INSTALLED TO ELEVATION ACCORDING TO DETAIL FOR TYPICAL VALVE & VALVE BOX ASSEMBLY. USE MUELLER MVB COMPOSITE VALVE BOX WITH MUELLER MVB DUCTILE IRON ADJUSTABLE TOP OR APPROVED EQUAL.
5. FURNISH AND INSTALL RUBBER GASKET/NSF 61 BETWEEN ALL FLANGES.
6. 4" (R-20 EQUIVALENT) EXTRUDED POLYSTYRENE, 60 PSI, RIGID BOARD INSULATION. 4' WIDE CENTERED OVER THE PIPE WITH STAGGERED INSULATION SEAMS. INSTALL ENTIRE LENGTH FROM THE MAIN TO THE HYDRANT SHOE, INCLUDING AROUND THE VALVE BOX BASE AND EXTENSION.

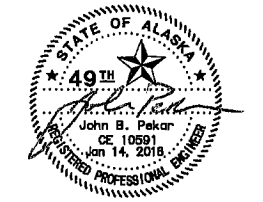
SINGLE PUMPER 'L' BASE HYDRANT ASSEMBLY DETAIL

SHEET NO.	TOTAL SHEETS	
U5	U7	
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

PLANS DEVELOPED BY:  
 KINNEY ENGINEERING, LLC  
 FOR  
 CITY OF HOMER, ALASKA  
 PUBLIC WORKS DEPARTMENT



PHONE: (907) 235-3170  
 FAX: (907) 235-3145

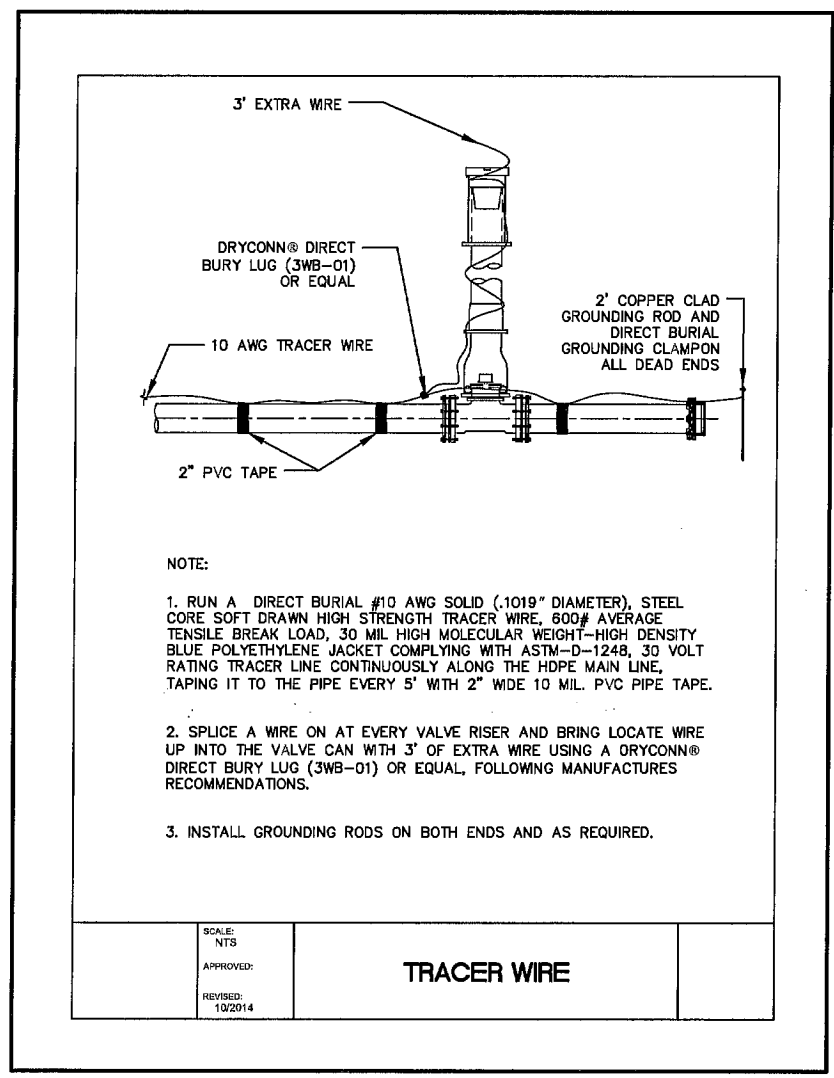


CITY OF HOMER  
 WADDELL WAY ROAD AND  
 WATER MAIN IMPROVEMENTS  
 HDPE MJ DETAILS

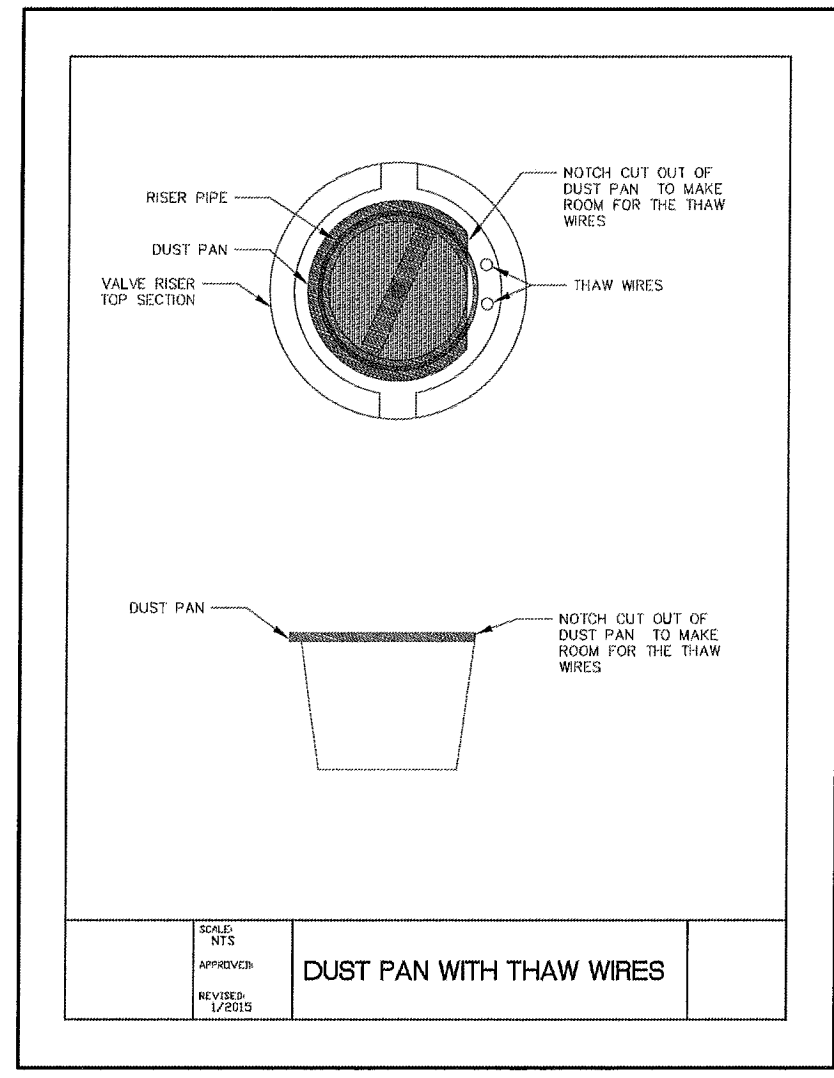


DRAWING LOCATION: z:\PROJECTS\city of homer\learn contract\waddell way\Civil3D\Production Drawings\U6-U8\_Water Main Details.dwg  
 1/13/2016 10:38 AM  
 LAYOUT U6  
 SCALE  
 DRAFTED BY SOPHIA HUFF

SHEET NO.	TOTAL SHEETS	
<b>U6</b>	<b>U7</b>	
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION



- NOTE:
1. RUN A DIRECT BURIAL #10 AWG SOLID (.1019" DIAMETER), STEEL CORE SOFT DRAWN HIGH STRENGTH TRACER WIRE, 600# AVERAGE TENSILE BREAK LOAD, 30 MIL HIGH MOLECULAR WEIGHT-HIGH DENSITY BLUE POLYETHYLENE JACKET COMPLYING WITH ASTM-D-1248, 30 VOLT RATING TRACER LINE CONTINUOUSLY ALONG THE HDPE MAIN LINE, TAPING IT TO THE PIPE EVERY 5' WITH 2" WIDE 10 MIL PVC PIPE TAPE.
  2. SPLICE A WIRE ON AT EVERY VALVE RISER AND BRING LOCATE WIRE UP INTO THE VALVE CAN WITH 3' OF EXTRA WIRE USING A DRYCONN® DIRECT BURY LUG (3WB-01) OR EQUAL, FOLLOWING MANUFACTURES RECOMMENDATIONS.
  3. INSTALL GROUNDING RODS ON BOTH ENDS AND AS REQUIRED.



PLANS DEVELOPED BY:  
 KINNEY ENGINEERING, LLC  
 FOR  
 CITY OF HOMER, ALASKA  
 PUBLIC WORKS DEPARTMENT

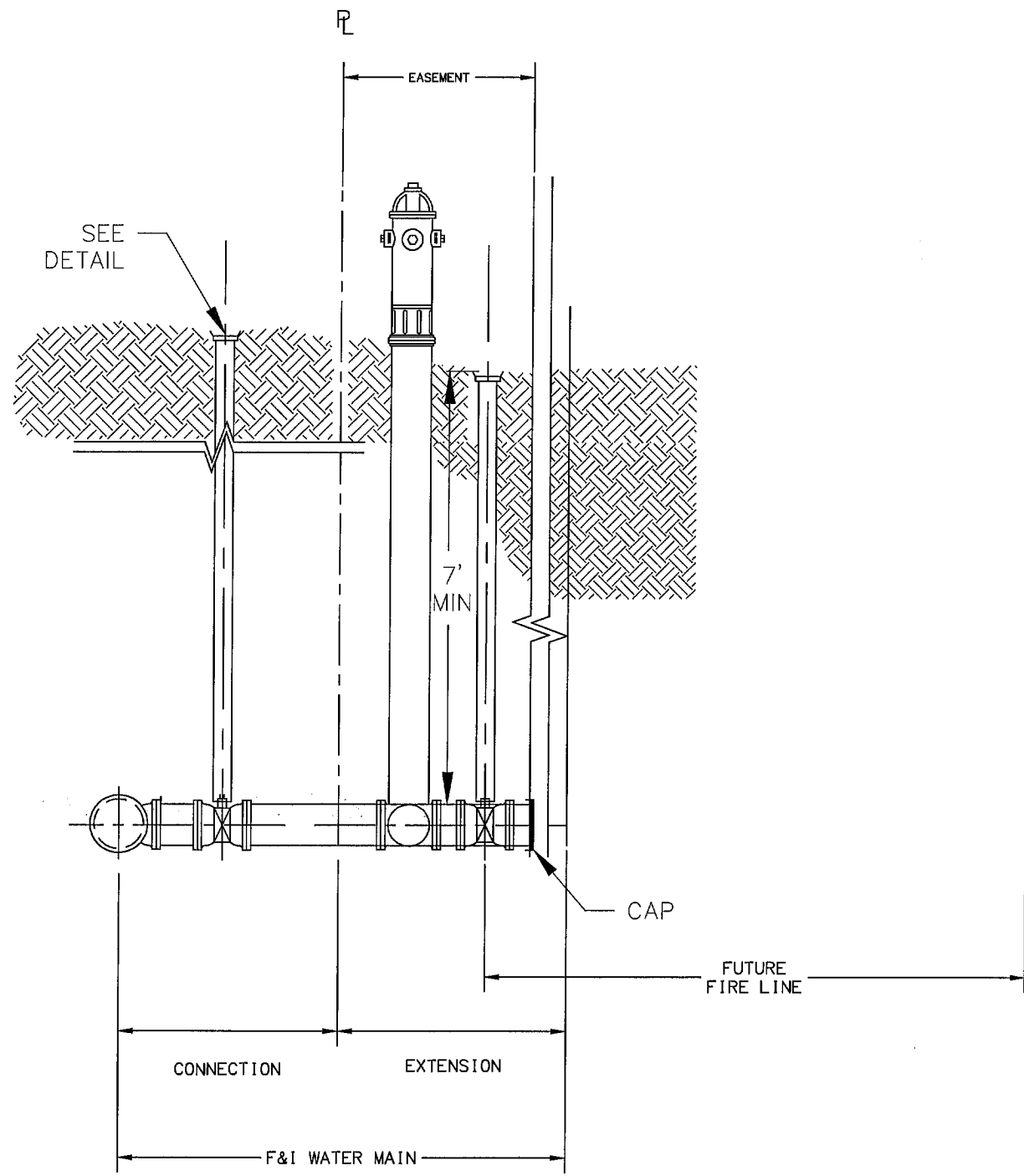


PHONE: (907) 235-3170  
 FAX: (907) 235-3145



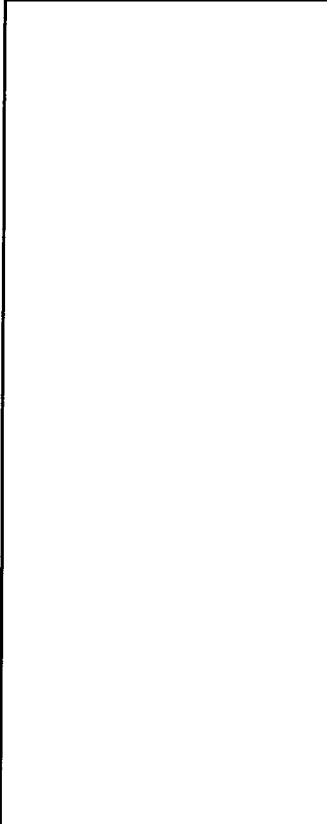
CITY OF HOMER  
 WADDELL WAY ROAD AND  
 WATER MAIN IMPROVEMENTS  
**WATER MAIN DETAILS**

DRAWING LOCATION: z:\PROJECTS\City of Homer\Term contract\waddell\way\Civil\3D\Production Drawings\US-JB\_Water Main Details.dwg  
 1/13/2016 10:38 AM  
 LAYOUT: U7  
 SCALE  
 DRAFTED BY: SOPHIA RUFF

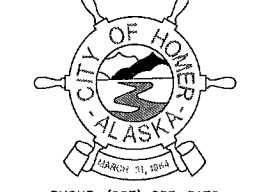


**F&I WATER MAIN - FIRE LINE EXTENSION**

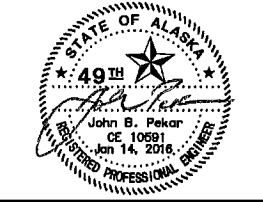
SHEET NO.	TOTAL SHEETS	
<b>U7</b>	<b>U7</b>	
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION



PLANS DEVELOPED BY:  
 KINNEY ENGINEERING, LLC  
 FOR  
 CITY OF HOMER, ALASKA  
 PUBLIC WORKS DEPARTMENT



PHONE: (907) 235-3170  
 FAX: (907) 235-3145



CITY OF HOMER  
 WADDELL WAY ROAD AND  
 WATER MAIN IMPROVEMENTS  
**WATER MAIN DETAILS**

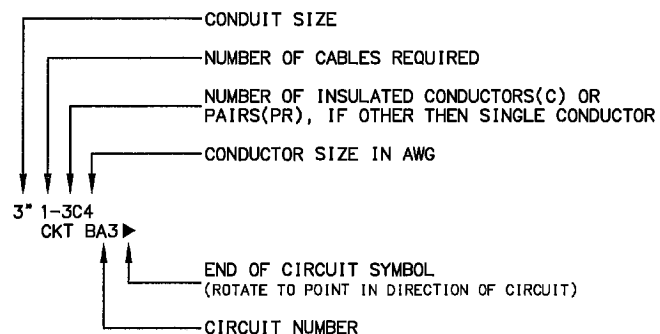
NO.	DATE	DESCRIPTION

**SYMBOL LEGEND**

EXISTING	PROPOSED	
		LOAD CENTER
		TYPE 1A JUNCTION BOX
		TYPE II JUNCTION BOX
		TYPE III JUNCTION BOX
		ELECTROLIER'
		LIGHTING CONDUIT
		CONDUIT CALLOUT
		SIGN POST & NUMBER
		PRIVATE SIGN

**PAVEMENT MARKING LEGEND**

PROPOSED		
		PROJECT CENTERLINE
	8"W	8" WHITE SOLID STRIPE
	4"W	4" WHITE SOLID STRIPE
	4"W SKIP	4" WHITE SKIP STRIPE 10' STRIPES AND 30' SPACES
	8"W GUIDE SKIP	8" WHITE LANE GUIDE SKIP LANE CONTINUATION DR TURN SKIP 1' STRIPES AND 3' SPACES
	8"Y	8" YELLOW SOLID STRIPE
	4"Y	4" YELLOW SOLID STRIPE
	4"Y SKIP	4" YELLOW SKIP STRIPE 10' STRIPES AND 30' SPACES
	+20	STRIPING CHANGE STATION INTERVAL
	24"W (TYP)	2' CROSSWALK OR STOPBAR
		LADDER CROSSWALK LAYOUT 2' WIDE RUNGS WITH 2' SPACES ALIGNED TO AVOID TIRE PATHS
		TYPICAL PAINTED MEDIAN



**ABBREVIATIONS**

CL - CENTERLINE	TC - TRAFFIC CONTROLLER	RMC - RIGID METAL CONDUIT
SIG - SERVICE TO CONTROLLER	P1 - TRAFFIC SIGNAL POLE #	PE - POLYETHYLENE CONDUIT
INTX - INTERSECTION	PEC - PHOTOELECTRIC CELL	LFNC - LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT
INTX L - INTERSECTION LIGHTING	YAGI - DIRECTIONAL ANTENNA	AWG - AMERICAN WIRE GAUGE
LTG - LIGHTING	OMNI - OMNI DIRECTIONAL ANTENNA	NB - NORTH BOUND
PRE 2 - PREEMPTION #	HEAD - VEHICULAR SIGNAL HEAD	EB - EAST BOUND
PRE CON 2 - PREEMPTION CONTROLLER #	PED B 28 - PEDESTRIAN PUSH BUTTON #	SB - SOUTH BOUND
LC - LOAD CENTER	PEDI - PEDESTRIAN SIGNAL HEAD	WB - WEST BOUND

**NOTES:**

**FOUNDATIONS NOTES:**

1. STATION & C.L. REFERENCE ARE TO THE CENTER OF THE STRUCTURE, EXCEPT ON LOOPS WHICH ARE TO THE CENTER OF THE TRAILING EDGE OF THE LOOP (EDGE NEAREST INTERSECTION).
2. JUNCTION BOX LOCATIONS APPROXIMATE. LOCATE J-BOXES SO THAT THEY ARE LOCATED OUT OF THE PATHWAY, SIDEWALK, CURB RAMPS, AND DRAINAGE COLLECTION AREAS, AND ARE ON THE DOWNSTREAM TRAFFIC SIDE OF POLE.
3. INSTALL LOAD CENTER AND TRAFFIC CONTROLLER FOUNDATIONS WITHIN 1-DEGREE OF PLUMB.
4. INSTALL ANCHOR BOLTS IN CAST FOUNDATIONS TO BE WITHIN 1:40 OF PLUMB.
5. TOPSOIL AND SEED ANY DISTURBED AREAS.

**SIGNING & STRIPING NOTES:**

1. ALL STATION LOCATIONS FOR SIGN INSTALLATION ARE APPROXIMATE. INSTALL SIGNS AT LOCATIONS AS DIRECTED BY THE ENGINEER.
2. USE THE FOLLOWING DEFINITIONS TO DECIPHER THE ABBREVIATED SIGN POST TYPES IN THE SIGN SUMMARY SHEETS.
  - A. PT MEANS A PERFORATED STEEL TUBE.
  - B. T MEANS A SQUARE STEEL TUBE.
  - C. P MEANS A ROUND STEEL PIPE.
  - D. W MEANS A WIDE FLANGE BEAM.
  - E. POPL MEANS A POLE PLATE INSTALLED PER ITS STANDARD DRAWING S-23
3. FABRICATE ALL SIGNS FROM 0.125" THICK ALUMINUM SHEETING, UNLESS STATED ELSEWHERE.
4. FOR SIGNS SUPPORTED BY MULTIPLE POSTS, FABRICATE THE POSTS WITH THEIR TOPS LEVEL WITH ONE ANOTHER.
5. FOR PERFORATED STEEL TUBE SIGNPOSTS, INSTALL THE CONCRETE FOUNDATION OPTION SHOWN ON STANDARD DRAWING. TRIM EACH PT POST TO LIMIT THE LENGTH INSERTED INTO THE FOUNDATION TO 12 INCHES.
6. FABRICATE GUIDE SIGNS ACCORDING TO THE SHOP DRAWINGS INCLUDED IN THE TECHNICAL SPECIFICATIONS. TRIM THE CORNERS OF ALL SIGNS TO THE RADIUS SHOWN ON EACH SHOP DRAWING.
7. ERECT NEW SIGNS BEFORE REMOVAL OF EXISTING SIGNS WITH SIMILAR MESSAGE. NOTIFY THE ENGINEER A MINIMUM OF 14 DAYS PRIOR TO BEGINNING SIGN REMOVAL AND SALVAGE OR DISPOSAL ACTIVITIES.
8. FOR SIGNS SUPPORTED BY MULTIPLE TUBES OR PIPES, LOCATE THE OUTER POSTS ON MAXIMUM SIX FEET CENTERS. INSTALL ADJACENT WIDE FLANGE POSTS ON MINIMUM EIGHT FEET CENTERS.
9. SELECTIVE AND HAND CLEARING SHALL BE PERFORMED AT THE DISCRETION OF THE ENGINEER. UPSTREAM OF ALL SIGN INSTALLATION LOCATIONS TO ACHIEVE MINIMUM SIGN VISIBILITY REQUIREMENTS. IF NOT INCLUDED AS A SEPARATE ITEM, THIS WORK SHALL BE SUBSIDIARY TO THE SIGN INSTALLATION ITEMS AND WORK.
10. FOR ALL FINAL PAVEMENT MARKINGS USE GROOVED-IN METHYL METHACRYLATE (MMA), 125 MILS THICK.
11. DIMENSIONS REFER TO THE CENTER OF STRIPE AND THE EDGE OF PAVEMENT.
12. IF THE NEW AND EXISTING PAVEMENT MARKINGS ARE NOT ALIGNED AT MATCH LINE, TRANSITION BETWEEN THE TWO USING A 100:1 TAPER ON THE NEW PAVEMENT.
13. WHERE NEW STRIPING IS TO EXTEND BEYOND PAVING LIMITS, REMOVE EXISTING STRIPING, TO THE EXTENT OF STRIPING LIMITS.

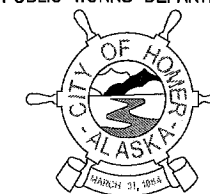
**CALL BEFORE YOU DIG!**

CONTRACTOR SHALL CALL A MINIMUM OF 3 DAYS IN ADVANCE OF CONSTRUCTION

ALASKA DIGLINE...907-278-3121 OR 800-478-3121

CALL OR GO TO [WWW.AKONECALL.COM/STATEWIDE.HTM](http://WWW.AKONECALL.COM/STATEWIDE.HTM) FOR MEMBER LIST OF WHO WILL BE NOTIFIED

PLANS DEVELOPED BY:  
KINNEY ENGINEERING, LLC  
FOR  
CITY OF HOMER, ALASKA  
PUBLIC WORKS DEPARTMENT



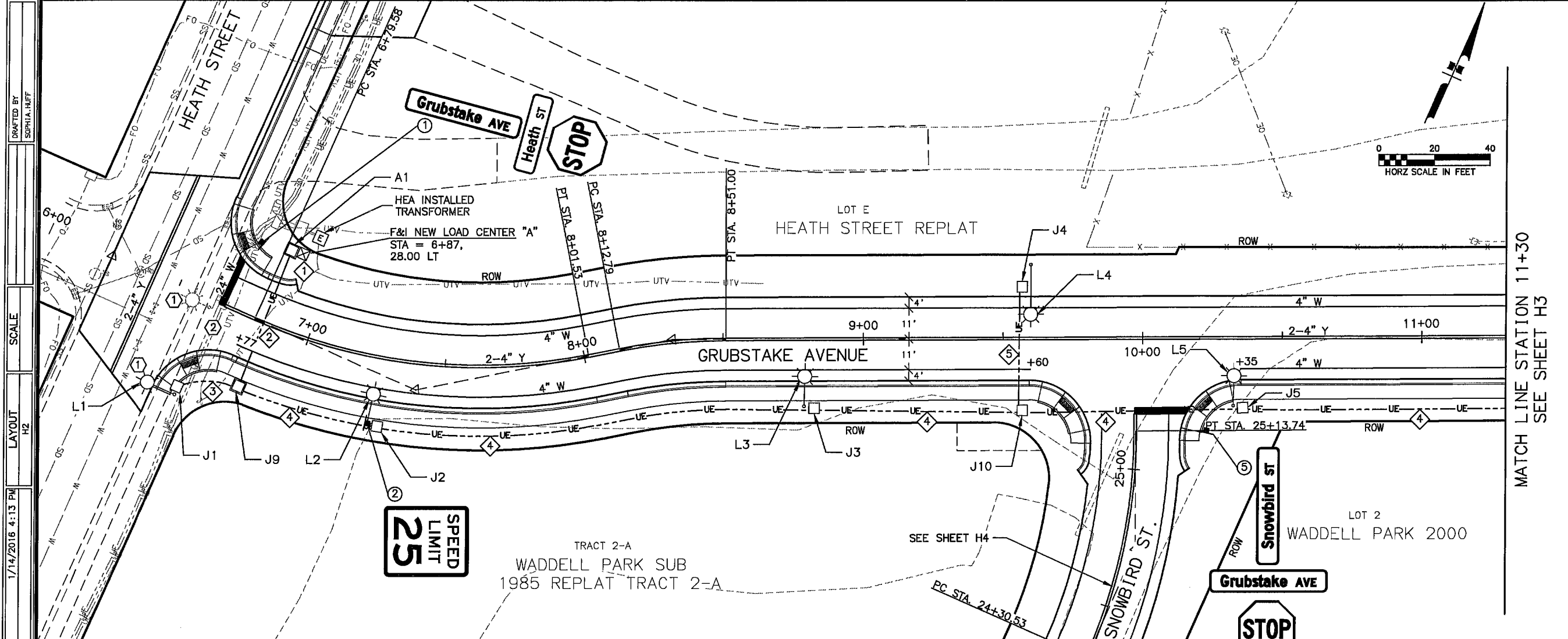
PHONE: (907) 235-3170  
FAX: (907) 235-3145



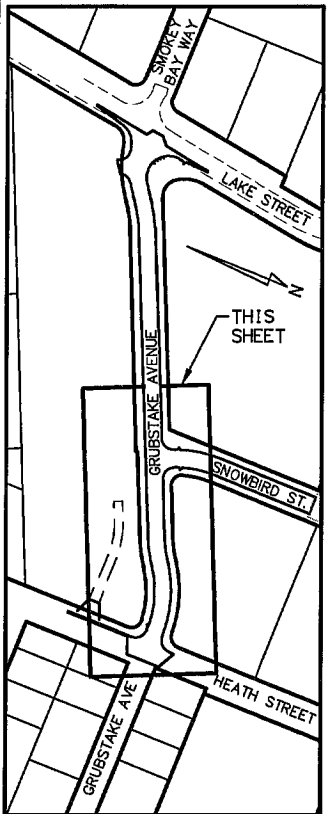
CITY OF HOMER

WADDELL WAY ROAD AND  
WATER MAIN IMPROVEMENTS  
**TRAFFIC LEGEND AND NOTES**

DRAWING LOCATION: z:\PROJECTS\city of homer\term contract\waddell way\civil\3D\Production Drawings\H1\_Traffic Legend & Notes.dwg 7/14/2016 4:18 PM



SHEET NO.	TOTAL SHEETS	
H2	H12	
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION



**CONSTRUCTION NOTES:**

- RELOCATE EXISTING STEEL LIGHT POLE, MAST ARM, AND LUMINAIRE TO NEW PILE FOUNDATION. REMOVE EXISTING CONCRETE FOUNDATION AND JUNCTION BOX. EXISTING SERVING LOAD CENTER IS LOCATED AT KLONDIKE AVE.
- REMOVE CONDUCTORS RUNNING NORTH TO NEXT J-BOX (≈ 122'). ABANDON OR REMOVE EXISTING CONDUIT AS NECESSARY TO CONSTRUCT ROADWAY IMPROVEMENTS.

**STRIPING NOTES:**

- DISTANCES SHOWN ARE TO CENTER OF SINGLE STRIPE, TO CENTER OF PAIR OF STRIPES, OR TO EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED.

**SIGNING NOTES:**

- ⑤ - SIGN POST NUMBER REFERS TO SIGN POST NUMBER NOTES IN THE SIGN SUMMARY TABLES, SHEET H5.

**CONDUIT NOTES:**

- 2" RMC  
2-3c#8 (LTG A1, A2),  
1-1c#8 GND
- 2" HDPE  
2-3c#8 (LTG A1, A2),  
1-1c#8 GND  
3-4" HDPE (SPARE)
- 2" HDPE  
1-3c#8 (LTG A2),  
1-1c#8 GND
- 2" HDPE  
1-3c#8 (LTG A1),  
1-1c#8 GND
- 2" HDPE  
2-3c#8 (LTG A1),  
1-1c#8 GND

**ILLUMINATION NOTES:**

- CONTRACTOR SHALL DECREASE CONDUIT BURIAL DEPTH FROM 30" TO 18" WHEN CROSSING OVER SHALLOW UG UTILITIES LOCATED BEHIND THE CURB & GUTTER AND OUT OF THE ROADWAY.
- THE CIRCUITRY BETWEEN AN ELECTROLIER AND THE JUNCTION BOX SERVING IT SHALL CONSIST OF 1-3c #8 CABLE IN AND OUT (2-3c #8), AND 1-1c #8 BARE CU IN A 2" RMC.
- CONTRACTOR SHALL CONTAIN ALL IMPROVEMENTS WITHIN THE R.O.W. CONTRACTOR SHALL VERIFY IMPROVEMENT LOCATIONS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES BEFORE PROCEEDING.
- CONTRACTOR SHALL STAKE LUMINAIRE POLE LOCATIONS AND BASE PLATE ELEVATIONS FOR THE ENGINEER'S APPROVAL PRIOR TO LUMINAIRE FOUNDATION INSTALLATION.

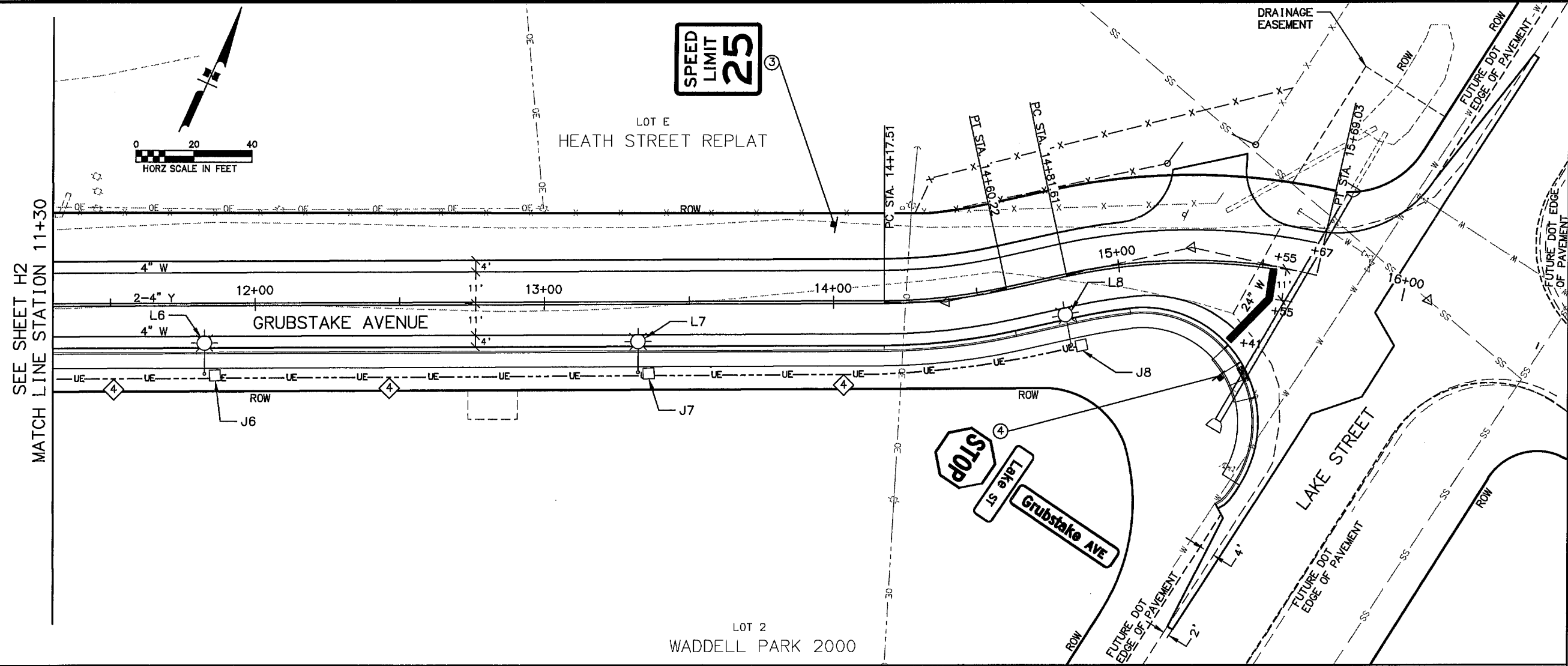
DRAFTED BY: SPPH/A.HUFF  
 SCALE: H2  
 LAYOUT: H2  
 1/14/2016 4:13 PM  
 z:\PROJECTS\City of Homer\contract\waddell way\Civil\3D\Production Drawings\H2-H4 SSI Plans.dwg

PLANS DEVELOPED BY:  
 KINNEY ENGINEERING, LLC  
 FOR  
 CITY OF HOMER, ALASKA  
 PUBLIC WORKS DEPARTMENT

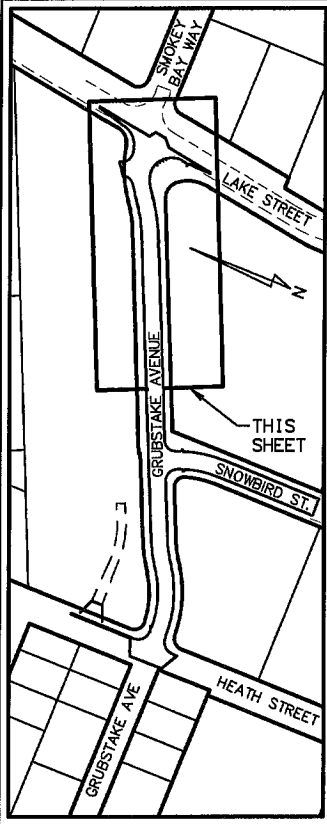
PHONE: (907) 235-3170  
 FAX: (907) 235-3145

CITY OF HOMER  
 WADDELL WAY ROAD AND  
 WATER MAIN IMPROVEMENTS  
**SIGNING, STRIPING AND  
 ILLUMINATION PLANS**  
 BOP TO STA. 11+30

DRAWING LOCATION  
 Z:\PROJECTS\city of homer\term contract\waddell way\civil\3D\Production Drawings\12-H4-SSJ Plans.dwg  
 1/14/2016 4:13 PM  
 LAYOUT H3  
 SCALE  
 DRAFTED BY SOPHIA RUFF



SHEET NO.	TOTAL SHEETS	
H3	H12	
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION



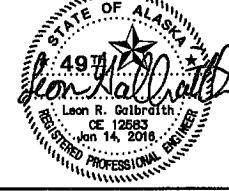
**NOTES:**  
 1. SEE PREVIOUS SHEET FOR ILLUMINATION NOTES.

**CONDUIT NOTES:**  
 ◆ 2" HDPE  
 1-3c#8 (LTG A1),  
 1-1c#8 GND

PLANS DEVELOPED BY:  
 KINNEY ENGINEERING, LLC  
 FOR  
 CITY OF HOMER, ALASKA  
 PUBLIC WORKS DEPARTMENT

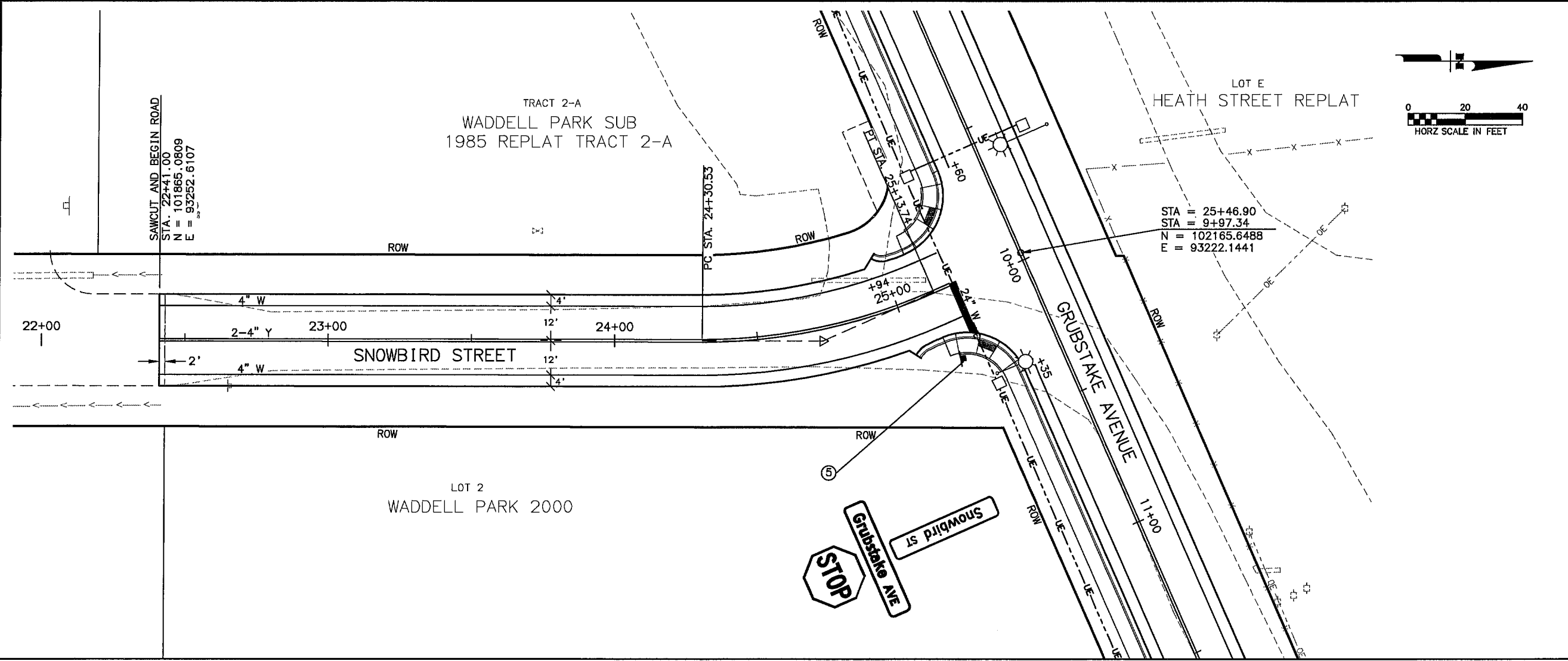


PHONE: (907) 235-3170  
 FAX: (907) 235-3145

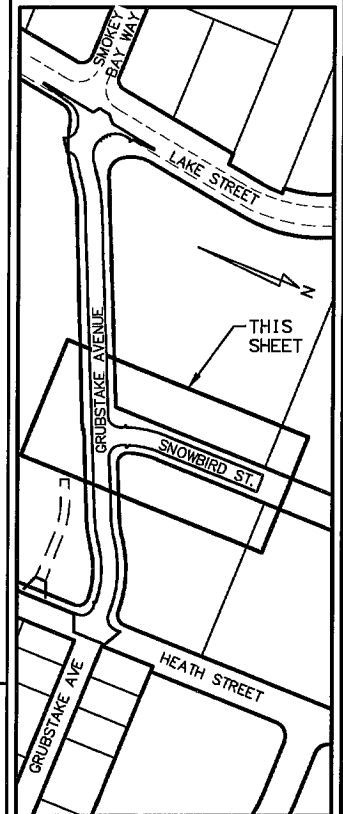


CITY OF HOMER  
 WADDELL WAY ROAD AND  
 WATER MAIN IMPROVEMENTS  
**SIGNING, STRIPING AND  
 ILLUMINATION PLANS**  
 STA. 11+30 TO EOP

DRAWING LOCATION z:\PROJECTS\City of Homer\term contract\waddell way\Civil\3D\Production Drawings\H2-H4 SS1 Plans.dwg  
 1/14/2016 4:13 PM  
 LAYOUT H4  
 SCALE  
 DRAFTED BY SOPHIA MJFF




SHEET NO.	TOTAL SHEETS	
H4	H12	
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION



PLANS DEVELOPED BY:  
 KINNEY ENGINEERING, LLC  
 FOR  
 CITY OF HOMER, ALASKA  
 PUBLIC WORKS DEPARTMENT








PHONE: (907) 235-3170  
 FAX: (907) 235-3145




CITY OF HOMER  
 WADDELL WAY ROAD AND  
 WATER MAIN IMPROVEMENTS  
**SIGNING, STRIPING AND  
 ILLUMINATION PLANS**  
 STA. 22+50 TO STA. 25+50

DRAWING LOCATION: Z:\PROJECTS\City of Homer\Term contract\Waddell way\Civil\3D\Production Drawings\H5\_Sign\_Summary.dwg  
 1/14/2016 10:57 AM  
 LAYOUT: H5  
 SCALE:  
 DRAFTED BY: SOPHIA, NJFF

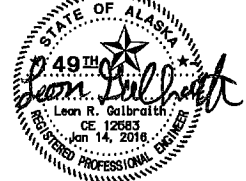
SHEET NO.	TOTAL SHEETS	
H5	H12	
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

SIGN SUMMARY													
SHEET NO.	SIGN NO.	LOCATION		TYPE	LEGEND	SIZE (FT)		AREA SQ FT	SIGN FACES	POSTS NO., SIZE, & TYPE	THICKNESS (in)		REMARKS
		STATION	OFFSET			WIDTH	HEIGHT				FRAMED		
											YES	NO	
H2	1	6+70.65	LT	D3-1D	<b>Grubstake AVE</b>	3.50	0.67	2.345	N/S	1-2.5" PT	0.125		MOUNT TWO SIGNS BACK TO BACK
				D3-1D	<b>Heath ST</b>	2.50	0.67	1.675	E/W			0.125	
				R1-1		2.50	2.50	6.250	E			0.125	
H2	2	7+26.41	RT	R2-1		2.50	3.00	7.500	W	1-2.5 PT		0.125	
H3	3	14+00.00	LT	R2-1		2.50	3.00	7.500	E	1-2.5 PT		0.125	
H3	4	15+37.92	RT	D3-1D	<b>Grubstake AVE</b>	3.50	0.67	2.345	N/S	1-2.5 PT	0.125		MOUNT TWO SIGNS BACK TO BACK
				D3-1D	<b>Lake ST</b>	2.50	0.67	1.675	E/W			0.125	
				R1-1		2.50	2.50	6.250	W			0.125	
H4	5	10+22.88	RT	D3-1D	<b>Snowbird ST</b>	3.50	0.67	2.345	E/W	1-2.5 PT	0.125		MOUNT TWO SIGNS BACK TO BACK
				D3-1D	<b>Grubstake AVE</b>	3.50	0.67	2.345	N/S			0.125	
				R1-1		2.50	2.50	6.250	S			0.125	
TOTAL SIGN AREA:								46.48	SF				

PLANS DEVELOPED BY:  
 KINNEY ENGINEERING, LLC  
 FOR  
 CITY OF HOMER, ALASKA  
 PUBLIC WORKS DEPARTMENT



PHONE: (907) 235-3170  
 FAX: (907) 235-3145



Leon R. Galbraith  
 CE 12563  
 Jan 14, 2018  
 REGISTERED PROFESSIONAL ENGINEER

CITY OF HOMER  
 WADDELL WAY ROAD AND  
 WATER MAIN IMPROVEMENTS  
**SIGN SUMMARY**

NO.	DATE	DESCRIPTION

ROADWAY ELECTROLIER SUMMARY

LUMINAIRE NO.	STATION	OFFSET		MOUNTING HEIGHT	MAST ARM LENGTH	LAMP SIZE (WATTS)	LAMP TYPE	IES DISTRIBUTION	CIRCUIT	REMARKS
		DISTANCE	RT/LT							
L1	6+64.44	36.33	RT	EXISTING	EXISTING	EXISTING			A-A2	RELOCATE EX. POLE TO NEW FOUND.
L2	7+26.41	24.01	RT	24'	8'	135	LED	MC-III	A-A1	
L3	8+78.96	24.00	RT	24'	8'	135	LED	MC-III	A-A1	
L4	9+59.93	26.32	LT	24'	15'	135	LED	MC-III	A-A1	
L5	10+32.55	24.22	RT	24'	8'	135	LED	MC-III	A-A1	
L6	11+82.55	24.00	RT	24'	8'	135	LED	MC-III	A-A1	
L7	13+32.55	24.00	RT	24'	8'	135	LED	MC-III	A-A1	
L8	14+78.19	24.00	RT	24'	8'	135	LED	MC-III	A-A1	

ROADWAY ILLUMINATION JUNCTION BOX SUMMARY

JUNCTION BOX NO.	STATION	OFFSET		TYPE	REMARKS
		DISTANCE	RT/LT		
J1	6+64.02	33.28	RT	1A	
J2	7+29.64	24.48	RT	1A	
J3	8+82.48	24.68	RT	1A	
J4	9+56.75	18.48	LT	1A	
J5	10+35.95	24.93	RT	1A	
J6	11+86.13	24.50	RT	1A	
J7	13+36.16	24.37	RT	1A	
J8	14+81.59	24.90	RT	1A	
J9	6+83.64	24.46	RT	II	
J10	9+56.88	25.71	RT	1A	
A1	6+82.04	27.63	LT	II	INSTALL ADJACENT TO NEW LOAD CENTER "A"

ELECTROLIER NOTES:

1. MOUNTING HEIGHT REFERS TO HEIGHT OF A LUMINAIRE ABOVE THE POINT ON THE ROADWAY DIRECTLY BENEATH IT.
2. UNLESS OTHERWISE NOTED, ALL ROADWAY LUMINAIRE POLES SHALL BE MOUNTED ON DRIVEN PILE FOUNDATIONS.
3. CONTRACTOR SHALL VERIFY UNDERGROUND UTILITIES AND ADJUST FOUNDATION LOCATION, IF CONFLICT EXISTS.
4. CONTRACTOR SHALL ENSURE THAT FOUNDATION BOLT CIRCLE MATCHES LUMINAIRE POLE BASE. ROADWAY LUMINAIRE POLES SHALL BE FABRICATED TO THE DETAILS IN THESE PLANS.
5. AN ELECTROLIER CONSISTS OF A LUMINAIRE POLE, MAST ARM, AND LUMINAIRE.
6. J-BOXES, ELECTROLIERS, AND LED LUMINAIRES SHALL CONFORM TO DETAILS AND SPECIFICATIONS (DIVISION 8000) IN THIS PLAN SET.

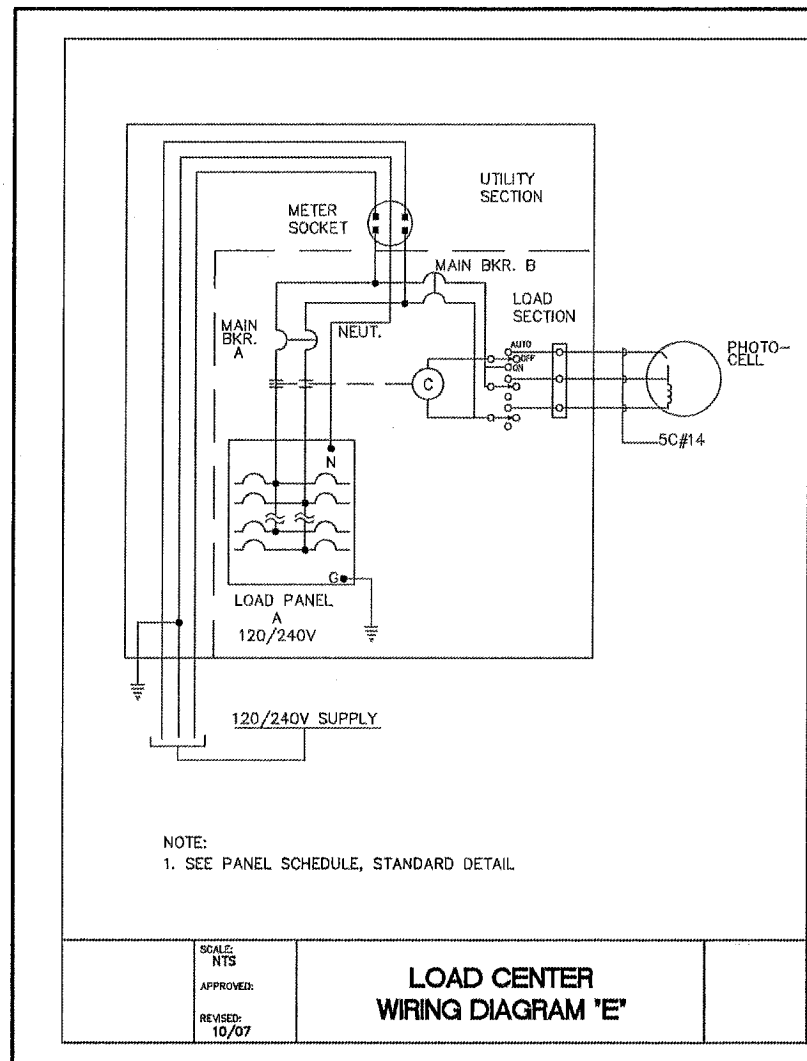
DESIGN CRITERIA FOR ROADWAY LUMINAIRES

LUMINAIRE CRITERIA	VALUE
ARRANGEMENT	1 SIDE
ROAD WIDTH	30'
MOUNTING HEIGHT	24'
SPACING	152'
LUMINAIRE OVERHANG*	0.5'
FIXTURE LUMEN OUTPUT	10,430
UNIFORMITY RATIO AVE/MIN (MAX)	6.0
AVE ILLUMINANCE (MIN.)	0.7 FC

\* LUMINAIRE OVERHANG IS THE HORIZONTAL DISTANCE BETWEEN THE LUMINAIRE AND THE FACE OF THE CURB. A POSITIVE VALUE INDICATES THE LUMINAIRE IS ON THE ROAD SIDE OF THE CURB.

LIGHTING CERTIFICATION STATEMENT:

SIGNED STAMP ON THIS DRAWING INDICATES THAT THE LIGHTING DESIGN FOR THIS PROJECT HAS BEEN DESIGNED IN ACCORDANCE WITH AND MEETS THE GUIDELINES SET FORTH IN CHAPTER 5 OF THE 2007 MOA DESIGN CRITERIA MANUAL, AND IESNA RP-8-00.



NOTE:  
1. SEE PANEL SCHEDULE, STANDARD DETAIL.

SCALE: NTS  
APPROVED:  
REVISED: 10/07  
**LOAD CENTER WIRING DIAGRAM 'E'**

LOAD CENTER "A" SUMMARY, TYPE 2 INSTALLATION

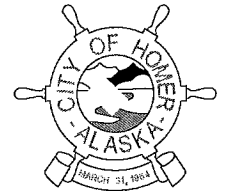
LOAD CENTER LOCATION: 6+86.97, 28' LT.				SOURCE LOCATION: HEA TRANSFORMER			
SERVICE: SINGLE PHASE, 3 WIRE, 120/240VAC 100A				SOCKET REQ'D. YES			
LOAD	MAIN BREAKERS		CONTACTORS		REMARKS		
PANEL A	240V	2P	100A	240V	2P	100A	
PE CNTRL	240V	2P	15A				
SPACE	NOTE B	2P	100AF				
TRANSFORMER: NONE VOLT PRIMARY WITH _____ VOLT SECONDARY _____ KVA 60 HERTZ				PANEL "A" RATING: 10,000 AIC, 16 SPACE			
120/240 VAC 1-PHASE, 3 WIRE, 100A BUS							
CKT#	LOAD PANEL "A"	LOAD	BREAKER	CKT#	LOAD	BREAKER	
	DESCRIPTION	KVA	AMPS POLE		KVA	AMPS POLE	
A-1	L2-L8 (NEW)	1.0	20 2				
A-2	EXISTING LIGHT	0.3	20 2				
A-3	SPARE	0.0	20 2				
TOTAL LOAD KVA:		1.3					

- NOTES:
1. CONNECTED LOAD 1.4 KVA 5.8 AMPS; NEC DEMAND LOAD 1.8 KVA 7.5 AMPS
  2. PROVIDE LAMINATED LABELS, 1/4" BLACK LETTERS ON WHITE BACKGROUND, TO IDENTIFY LOAD AND DEVICE TAG AS APPLICABLE.
  3. PROVIDE CONTACTORS WITH 240V COILS, 0.1 KVA LOAD INCLUDED.
  4. MOUNT HOA SWITCHES ON DEAD-FRONT COVER, WIRED FOR PE CONTROL IN AUTOMATIC POSITION.
  5. MOUNT PHOTOCELL ON LOAD CENTER.
  6. LOAD CENTER SHALL CONFORM TO DIVISION 8000 SPECIFICATIONS.
  7. CONTRACTOR SHALL CONFORM PROPOSED POWER SUPPLY CAPACITY PROVIDED BY UTILITY AND SUBMIT DATA TO ENGINEER FOR REVIEW. PROVIDE DURABLE FIELD MARKING AT SERVICE EQUIPMENT PER NEC 110.24 AS FOLLOWS: AVAILABLE FAULT CURRENT: 8,680 AMPS, BASED ON 25kVA 1-PH SUPPLY TRANSFORMER. DATE: 10/30/2015.
  8. PROVIDE 2P SPACE FOR FUTURE 100A-FRAME SIZE MAIN BREAKER.

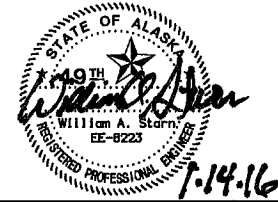
LOAD CENTER SERVICE NOTES:

1. CITY OF HOMER SHALL MAKE APPLICATION FOR SERVICE AND PAY FOR ENGINEERING AND APPLICATION FEES. CONTRACTOR SHALL PROVIDE POST MOUNTED LOAD CENTER AND METER BASE AND COORDINATE WITH HEA TO ENERGIZE.

PLANS DEVELOPED BY:  
KINNEY ENGINEERING, LLC  
FOR  
CITY OF HOMER, ALASKA  
PUBLIC WORKS DEPARTMENT



PHONE: (907) 235-3170  
FAX: (907) 235-3145

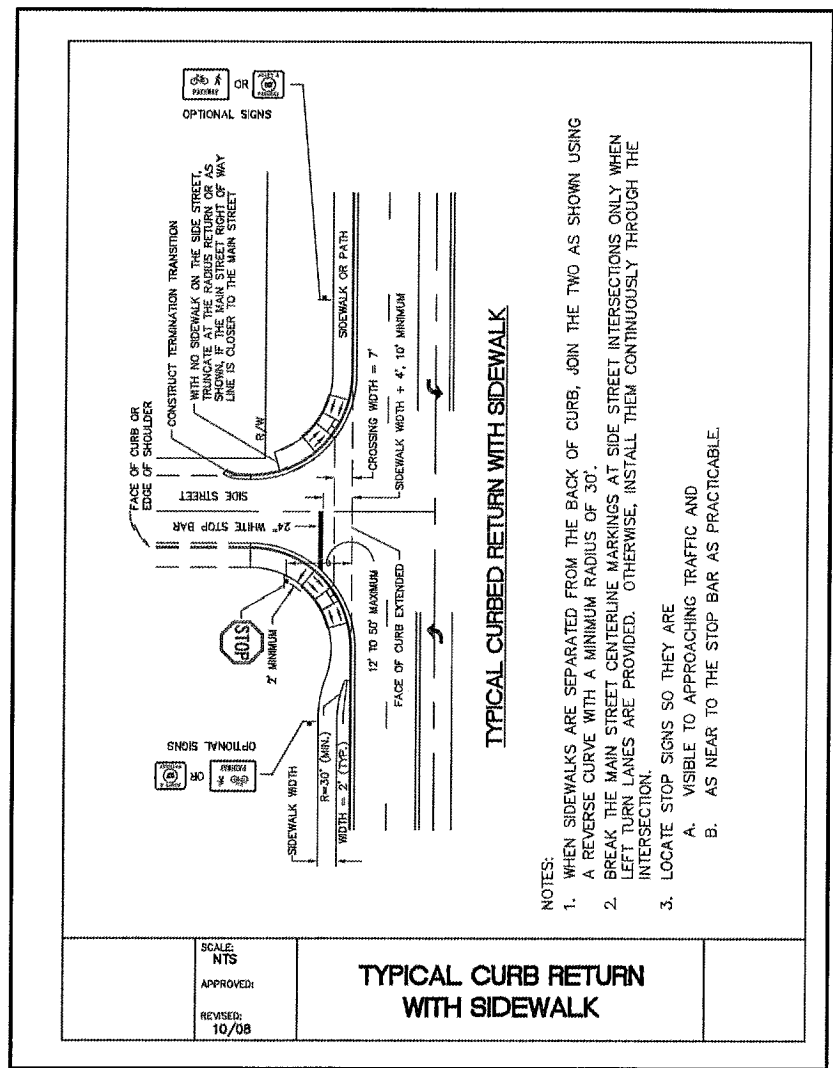


CITY OF HOMER  
WADDELL WAY ROAD AND  
WATER MAIN IMPROVEMENTS  
ILLUMINATION SUMMARIES

DRAWING LOCATION z:\PROJECTS\city of homer\term contract\waddell way\civil\3d\Production Drawings\H6\_11\Illumination Summary.dwg 1/13/2016 8:44 AM SCALE LAYOUT H6 DRAFTED BY SOPHIA RUFF



DRAWING LOCATION: z:\PROJECTS\City of Homer\term contract\waddell way\Civil\3D\Production Drawings\H7-H9\_Signing & Striping Details.dwg  
 1/14/2016 3:25 PM  
 SCALE: H7  
 LAYOUT: H7  
 DRAFTED BY: SOPHIA HUFF

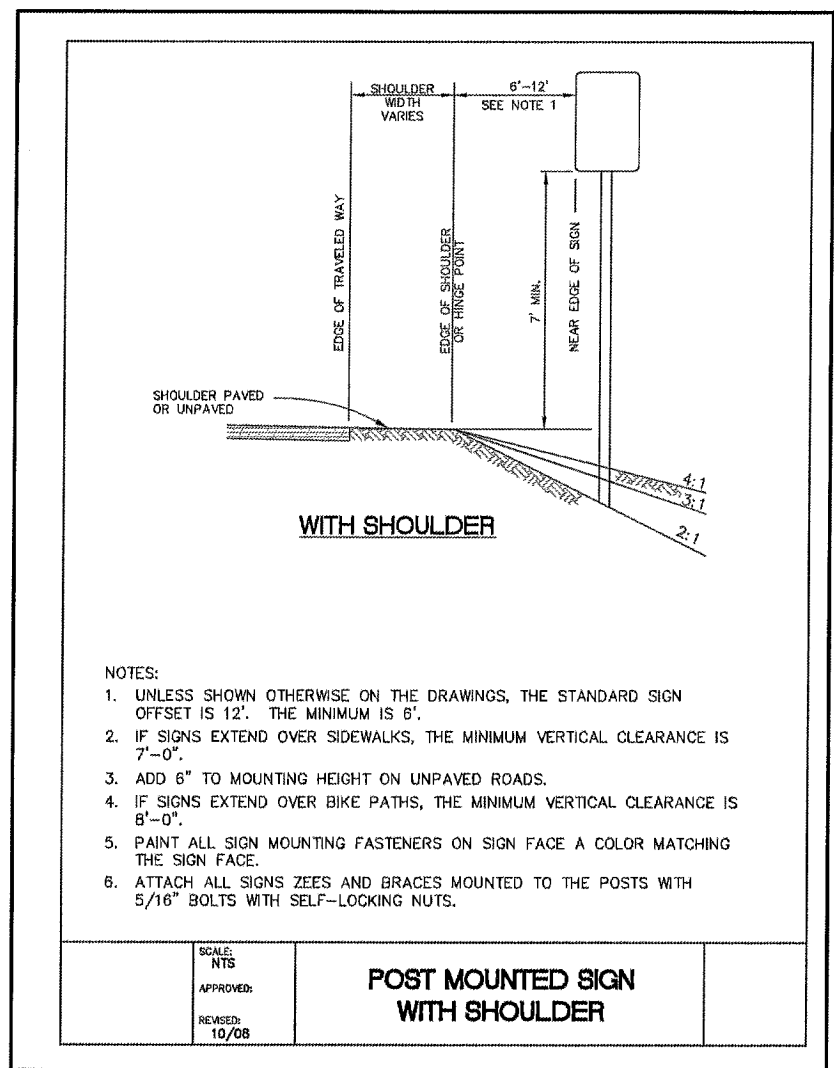


**TYPICAL CURBED RETURN WITH SIDEWALK**

- NOTES:
- WHEN SIDEWALKS ARE SEPARATED FROM THE BACK OF CURB, JOIN THE TWO AS SHOWN USING A REVERSE CURVE WITH A MINIMUM RADIUS OF 30'.
  - 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 SO THEY ARE
    - VISIBLE TO APPROACHING TRAFFIC AND
    - AS NEAR TO THE STOP BAR AS PRACTICABLE.

SCALE: NTS  
 APPROVED:  
 REVISED: 10/08

**TYPICAL CURB RETURN WITH SIDEWALK**

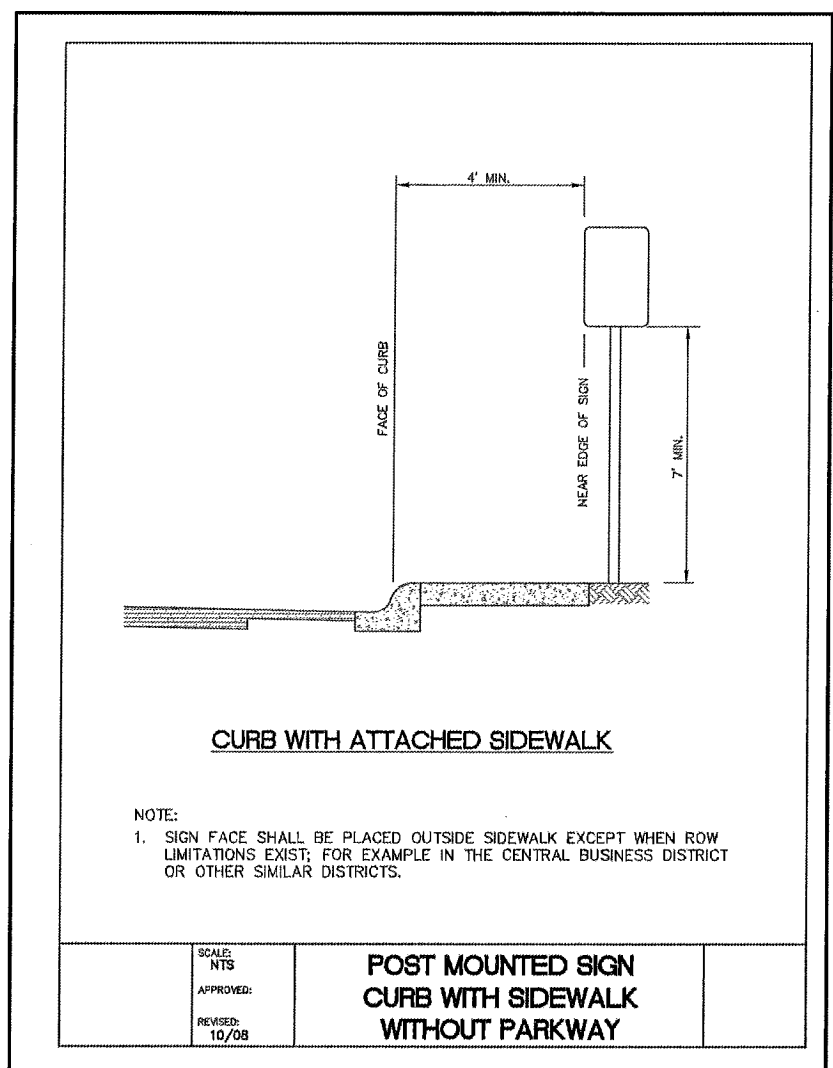


**WITH SHOULDER**

- NOTES:
- UNLESS SHOWN OTHERWISE ON THE 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.

SCALE: NTS  
 APPROVED:  
 REVISED: 10/08

**POST MOUNTED SIGN WITH SHOULDER**



**CURB WITH ATTACHED SIDEWALK**

- NOTE:
- SIGN FACE SHALL BE PLACED OUTSIDE SIDEWALK EXCEPT WHEN ROW LIMITATIONS EXIST; FOR EXAMPLE IN THE CENTRAL BUSINESS DISTRICT OR OTHER SIMILAR DISTRICTS.

SCALE: NTS  
 APPROVED:  
 REVISED: 10/08

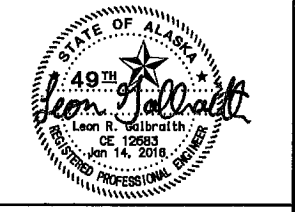
**POST MOUNTED SIGN CURB WITH SIDEWALK WITHOUT PARKWAY**

SHEET NO.	TOTAL SHEETS	
H7	H12	
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

PLANS DEVELOPED BY:  
 KINNEY ENGINEERING, LLC  
 FOR  
 CITY OF HOMER, ALASKA  
 PUBLIC WORKS DEPARTMENT

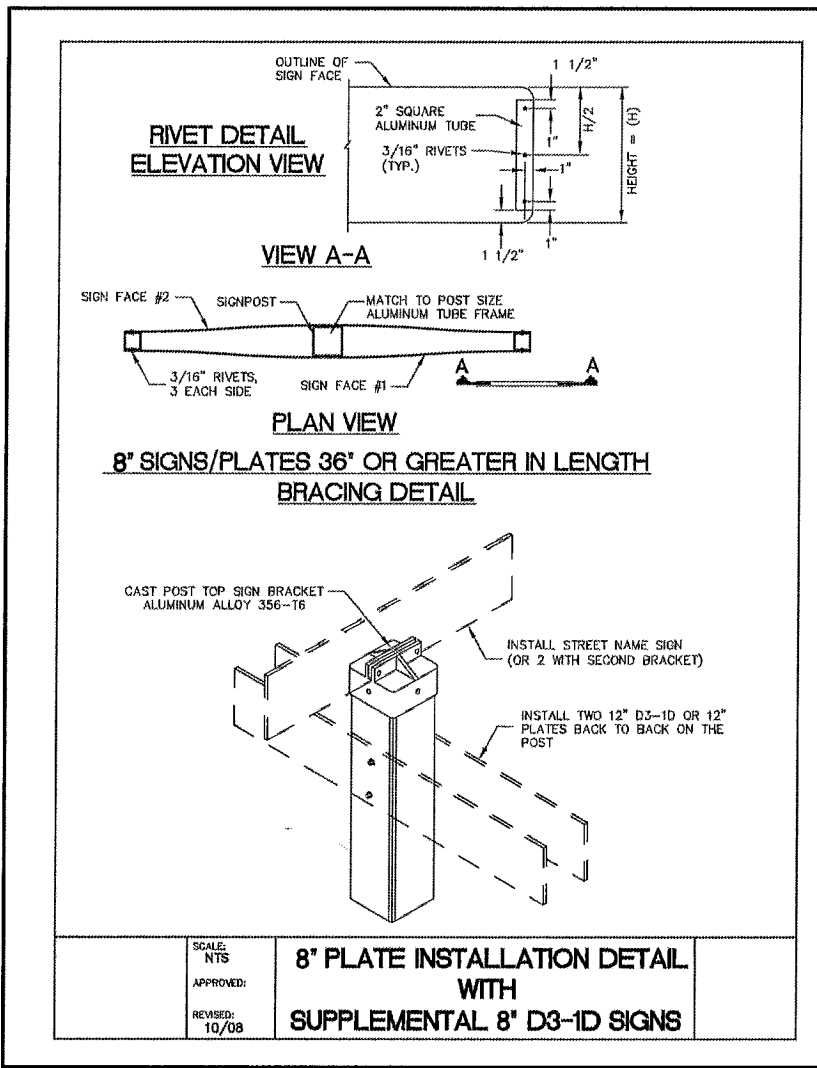
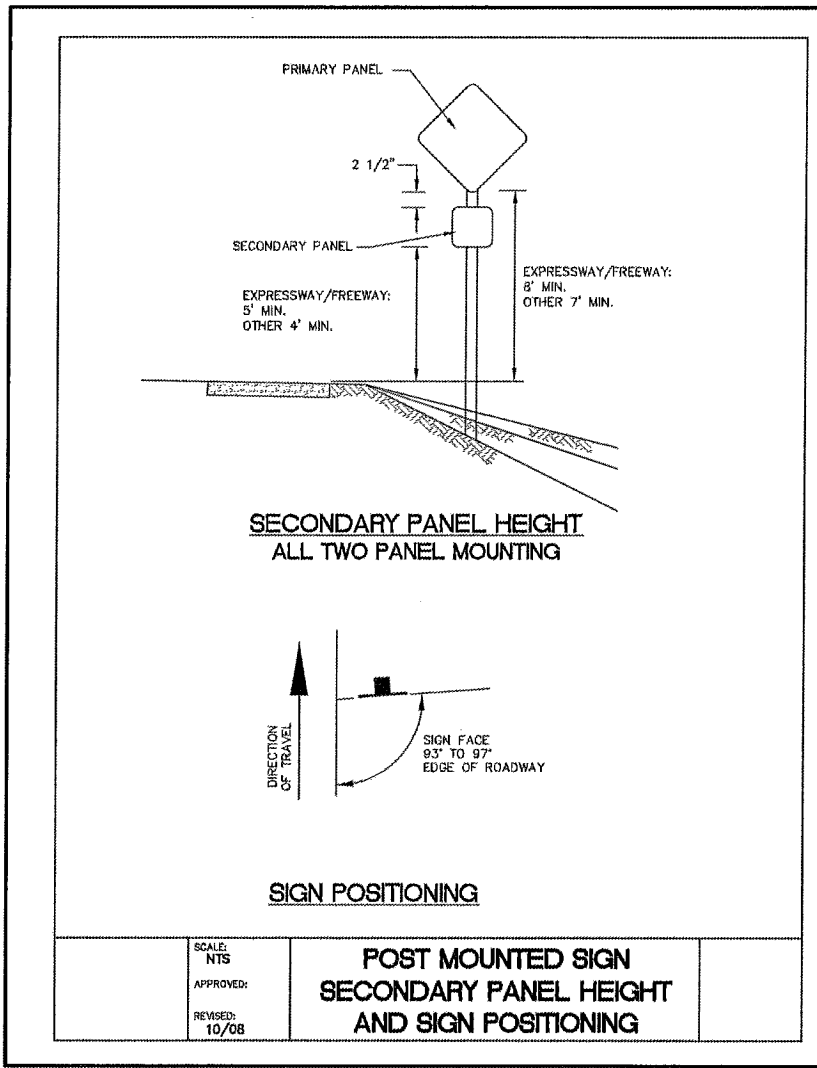


PHONE: (907) 235-3170  
 FAX: (907) 235-3145



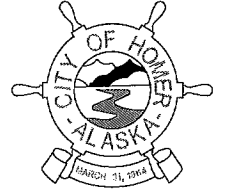
CITY OF HOMER  
 WADDELL WAY ROAD AND  
 WATER MAIN IMPROVEMENTS  
**SIGN DETAILS**

DRAWING LOCATION: z:\PROJECTS\City of Homer\term contract\waddell\waddell\PROJECTS\City of Homer\term contract\waddell\waddell\Production Drawings\17-HB\_Signing & Striping Details.dwg  
 1/14/2016 3:25 PM  
 LAYOUT: HB  
 SCALE:

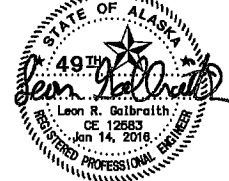


SHEET NO. <b>H8</b>	TOTAL SHEETS <b>H12</b>	
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

PLANS DEVELOPED BY:  
 KINNEY ENGINEERING, LLC  
 FOR  
 CITY OF HOMER, ALASKA  
 PUBLIC WORKS DEPARTMENT



PHONE: (907) 235-3170  
 FAX: (907) 235-3145

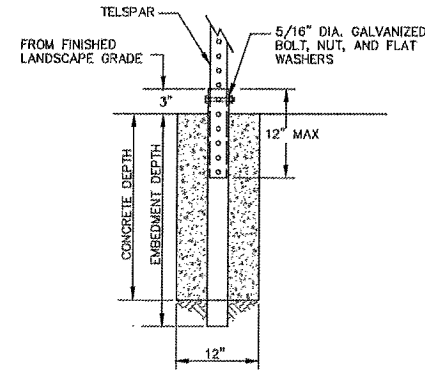


CITY OF HOMER  
 WADDELL WAY ROAD AND  
 WATER MAIN IMPROVEMENTS

**SIGN DETAILS**

DRAWING LOCATION: Z:\PROJECTS\City of Homer\Term contract\waddell way\Civil\3D\Production Drawings\H7-H9\_Signing & Striping Details.dwg  
 1/14/2016 3:25 PM  
 LAYOUT: H9  
 SCALE:

SHEET NO.	TOTAL SHEETS	
H9	H12	
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION



**CONCRETE FOUNDATION FOR SIGN POST**

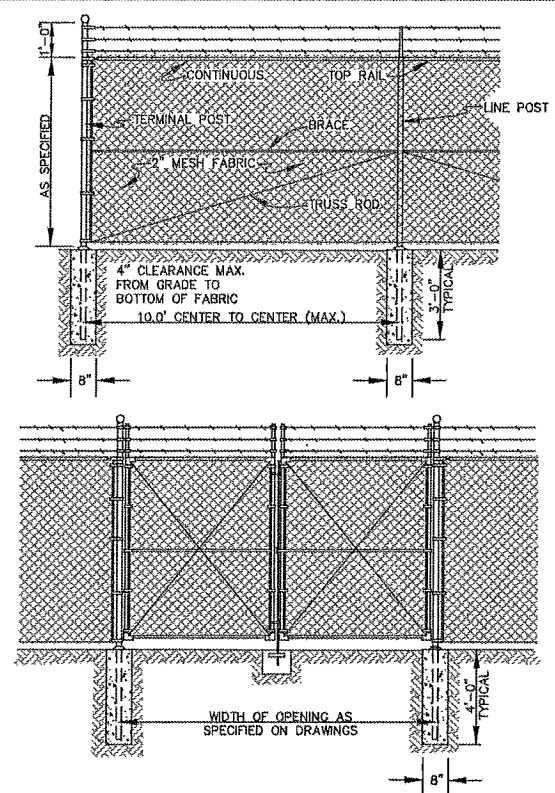
PERFORATED STEEL TUBES (P.S.T.)  
(12ga. - .105" Wall Thickness)

SIGN SURFACE AREA SQ. FT.	POST SIZE	EMBEDMENT DEPTH	CONCRETE DEPTH
7' OR LESS	2" X 2"	27"	24"
GREATER THAN 7'	2 1/2" X 2 1/2"	33"	30"

SCALE: NTS  
 APPROVED:  
 REVISED: 11/14

**CONCRETE FOUNDATION FOR SIGN POST**

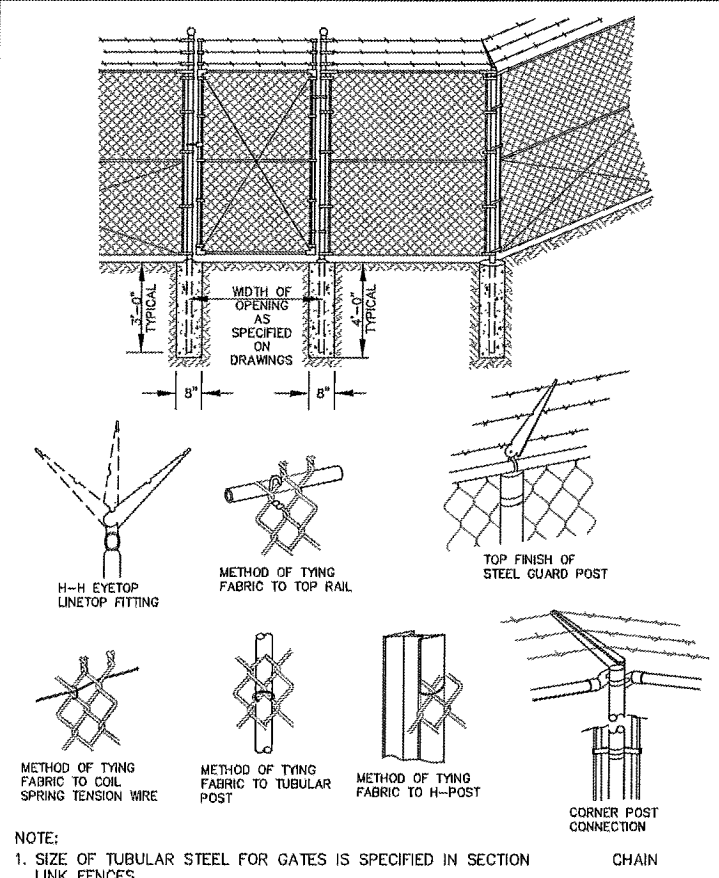
REVISION: 11/14 FIXED TYPO IN TITLE



NOTES:  
 1. GAUGE OF FABRIC AS SPECIFIED ON DRAWINGS.  
 2. SIZE OF TUBULAR STEEL FOR GATE FRAMES IS SPECIFIED IN SECTION CHAIN LINK FENCES.

SCALE: NTS  
 APPROVED:  
 REVISED: 10/08

**FENCE DETAILS**



NOTE:  
 1. SIZE OF TUBULAR STEEL FOR GATES IS SPECIFIED IN SECTION LINK FENCES.

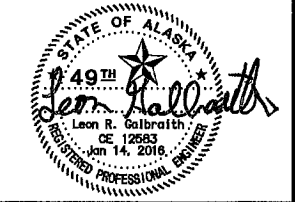
SCALE: NTS  
 APPROVED:  
 REVISED: 10/08

**FENCE DETAILS**

PLANS DEVELOPED BY:  
 KINNEY ENGINEERING, LLC  
 FOR  
 CITY OF HOMER, ALASKA  
 PUBLIC WORKS DEPARTMENT

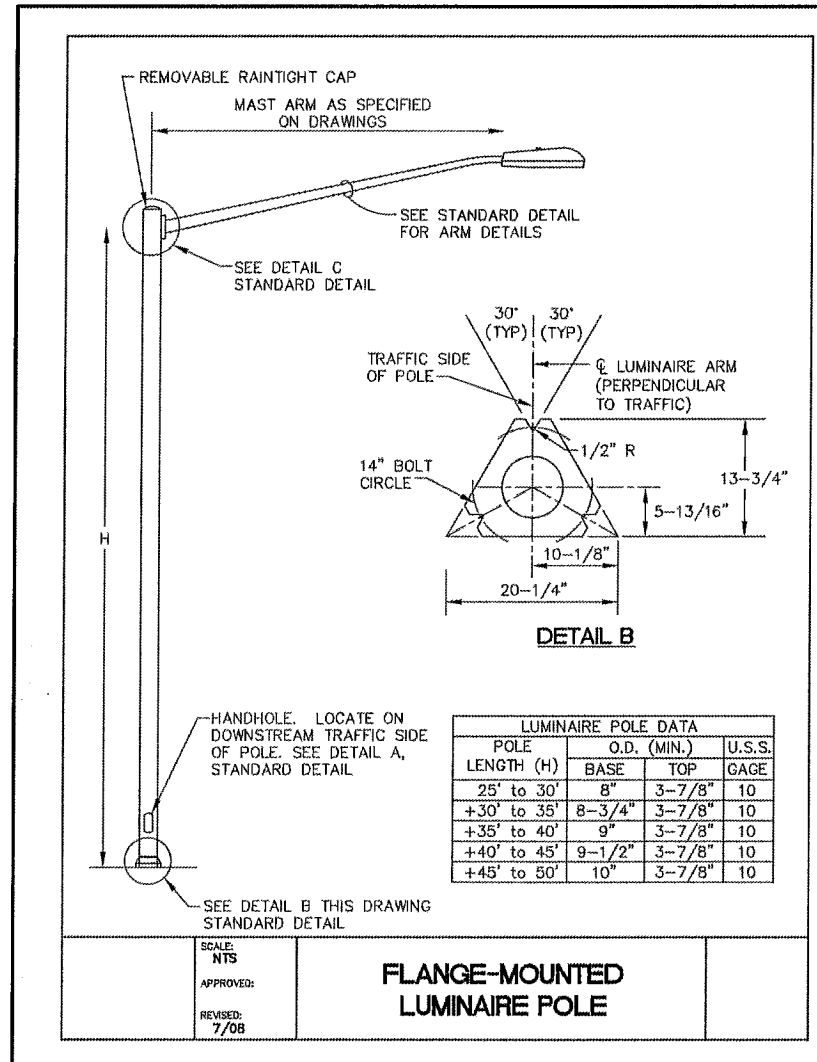
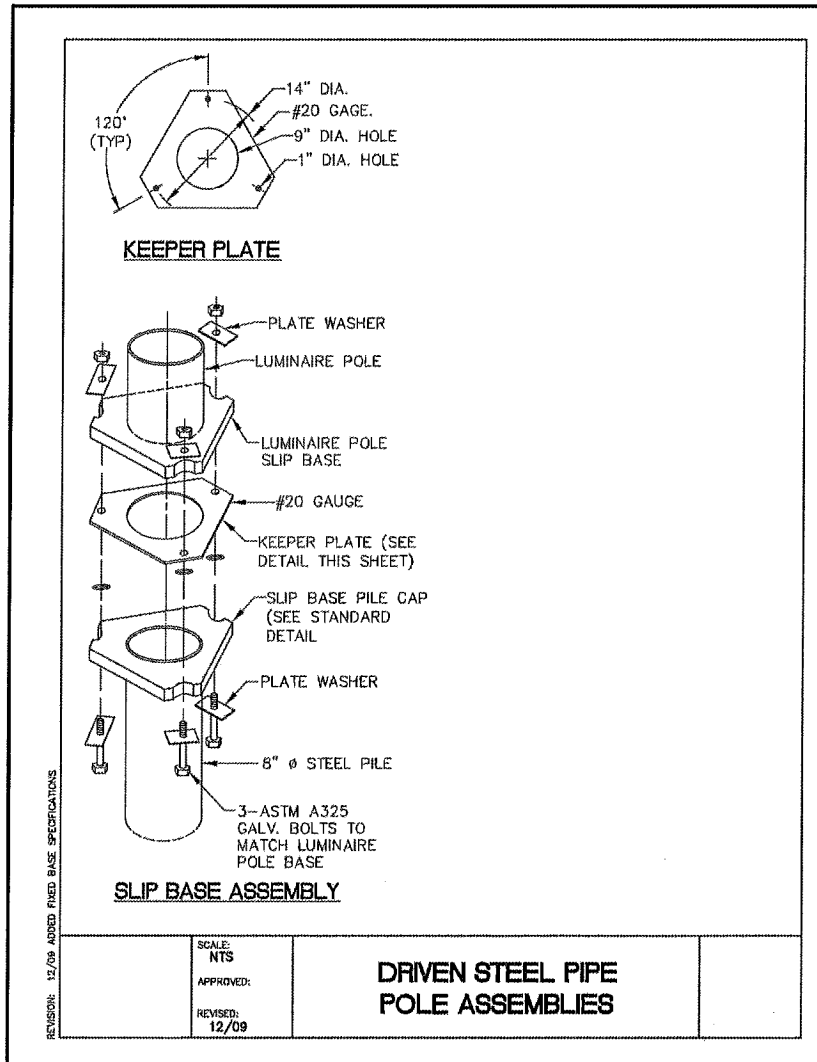
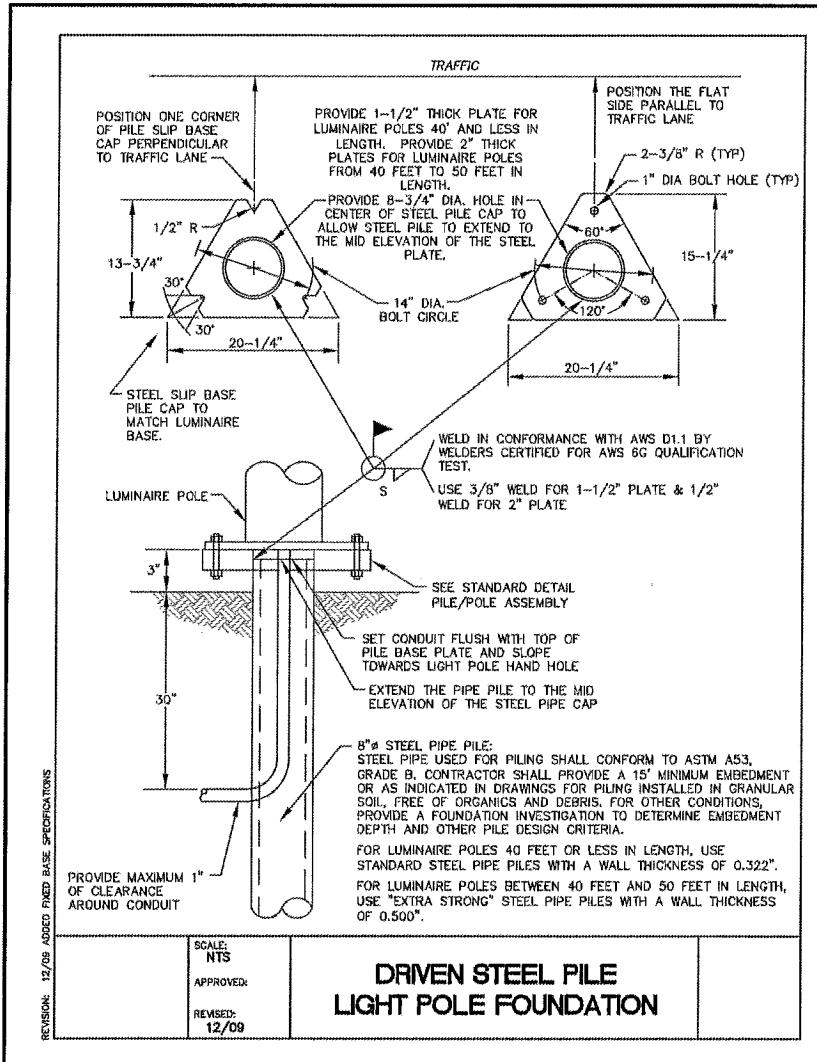


PHONE: (907) 235-3170  
 FAX: (907) 235-3145



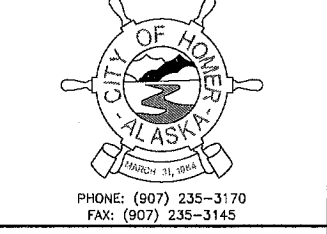
CITY OF HOMER  
 WADDELL WAY ROAD AND  
 WATER MAIN IMPROVEMENTS  
**SIGN AND FENCE DETAILS**

DRAWING LOCATION: z:\PROJECTS\city of homer\term contract\waddell way\civil\3D\Production Drawings\H10-13\_illumination Details.dwg  
 1/14/2016 4:16 PM  
 LAYOUT H10  
 SCALE  
 DRAFTED BY SOPHIA RUFF



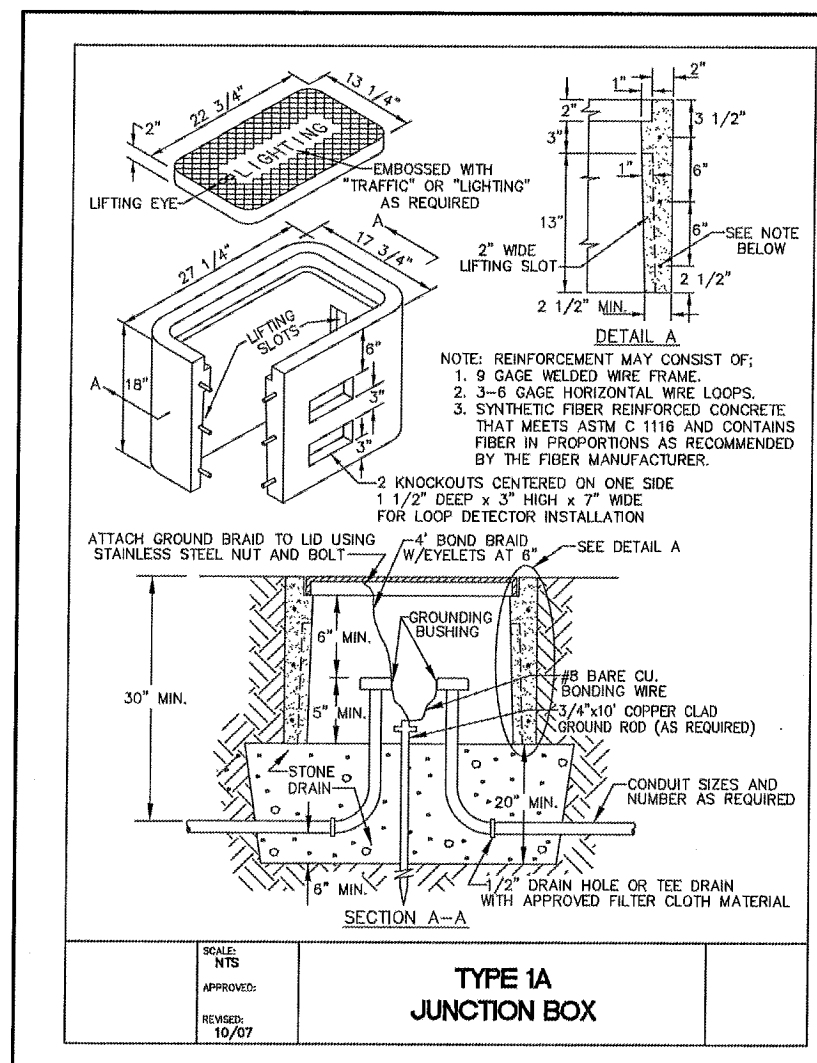
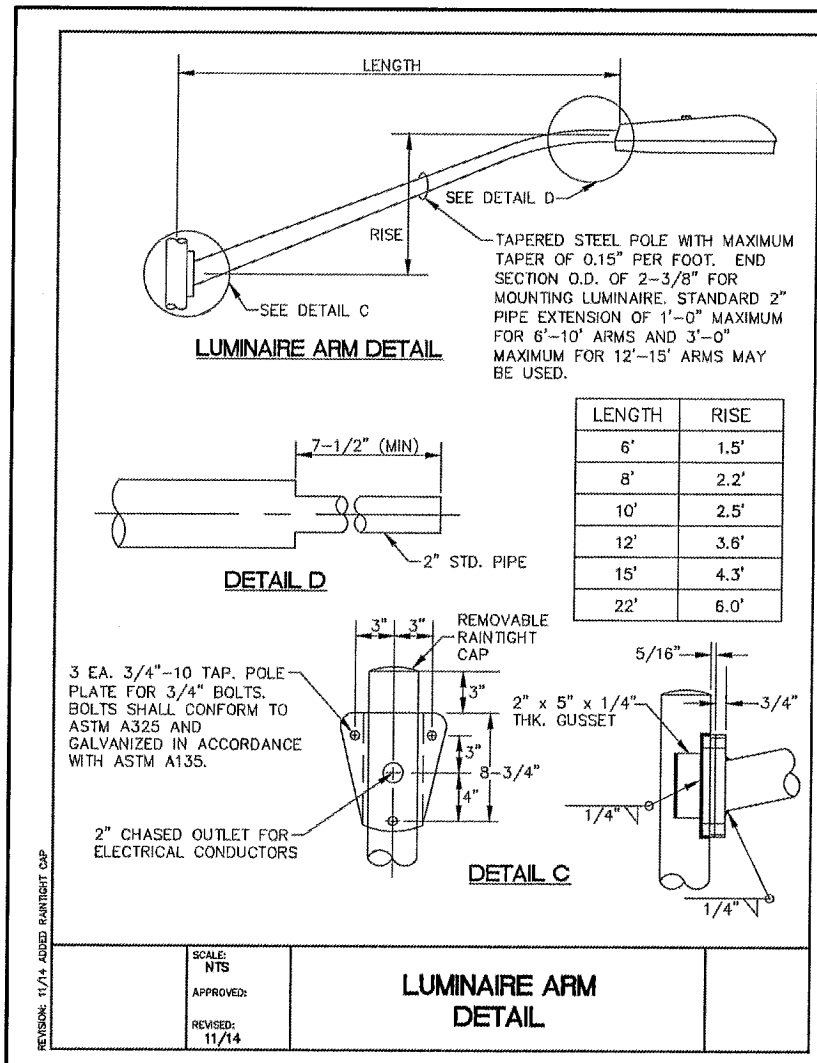
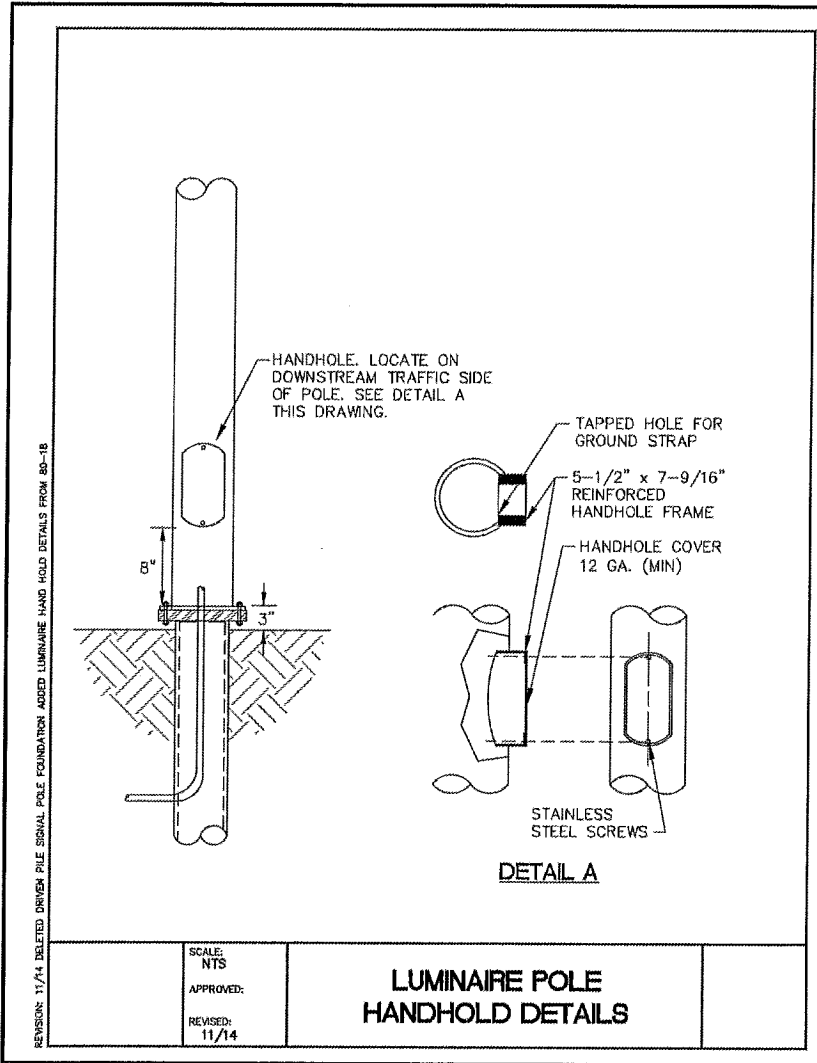
SHEET NO.	TOTAL SHEETS	
H10	H12	
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

PLANS DEVELOPED BY:  
 KINNEY ENGINEERING, LLC  
 FOR  
 CITY OF HOMER, ALASKA  
 PUBLIC WORKS DEPARTMENT



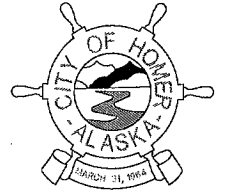
CITY OF HOMER  
 WADDELL WAY ROAD AND  
 WATER MAIN IMPROVEMENTS  
 ILLUMINATION DETAILS

DRAWING LOCATION: z:\PROJECTS\city of homer\term contract\waddell way\civil\3D\Production Drawings\H10-13\_Illumination Details.dwg  
 1/14/2016 4:16 PM  
 LAYOUT H11  
 SCALE  
 DRAFTED BY SOPHIA RUFF

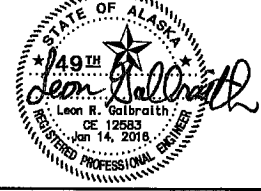


SHEET NO.	TOTAL SHEETS	
H11	H12	
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

PLANS DEVELOPED BY:  
 KINNEY ENGINEERING, LLC  
 FOR  
 CITY OF HOMER, ALASKA  
 PUBLIC WORKS DEPARTMENT



PHONE: (907) 235-3170  
 FAX: (907) 235-3145

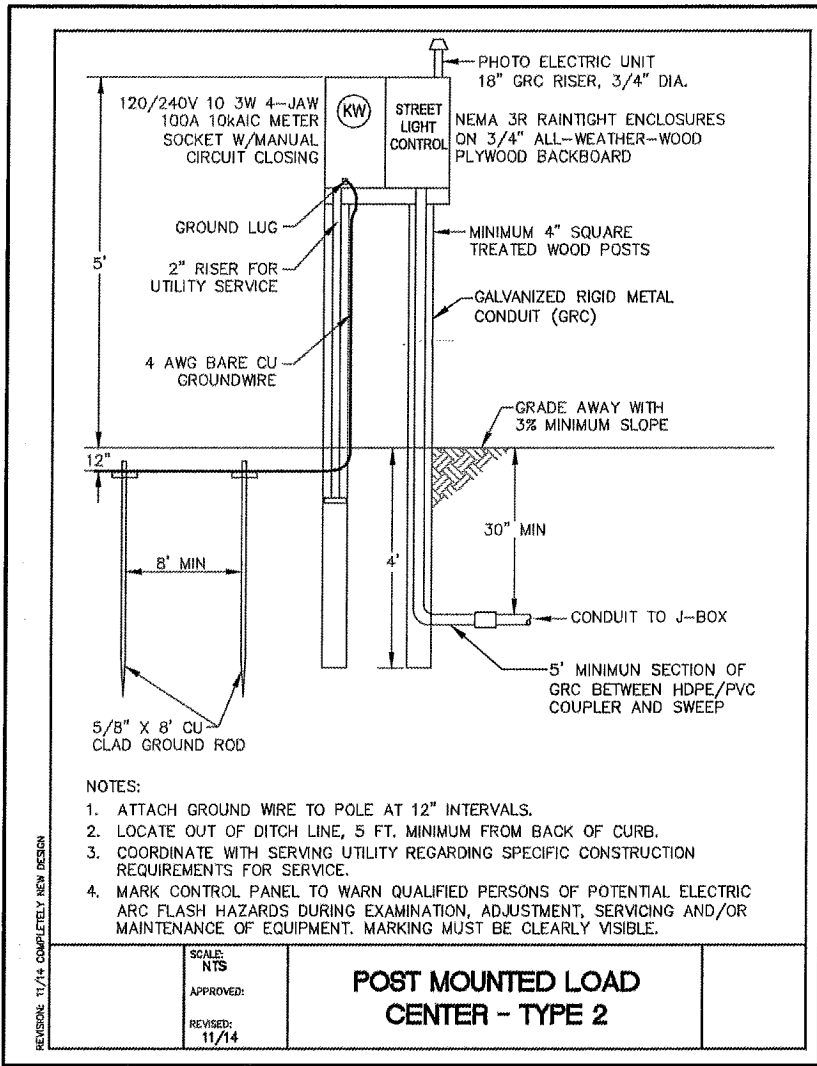
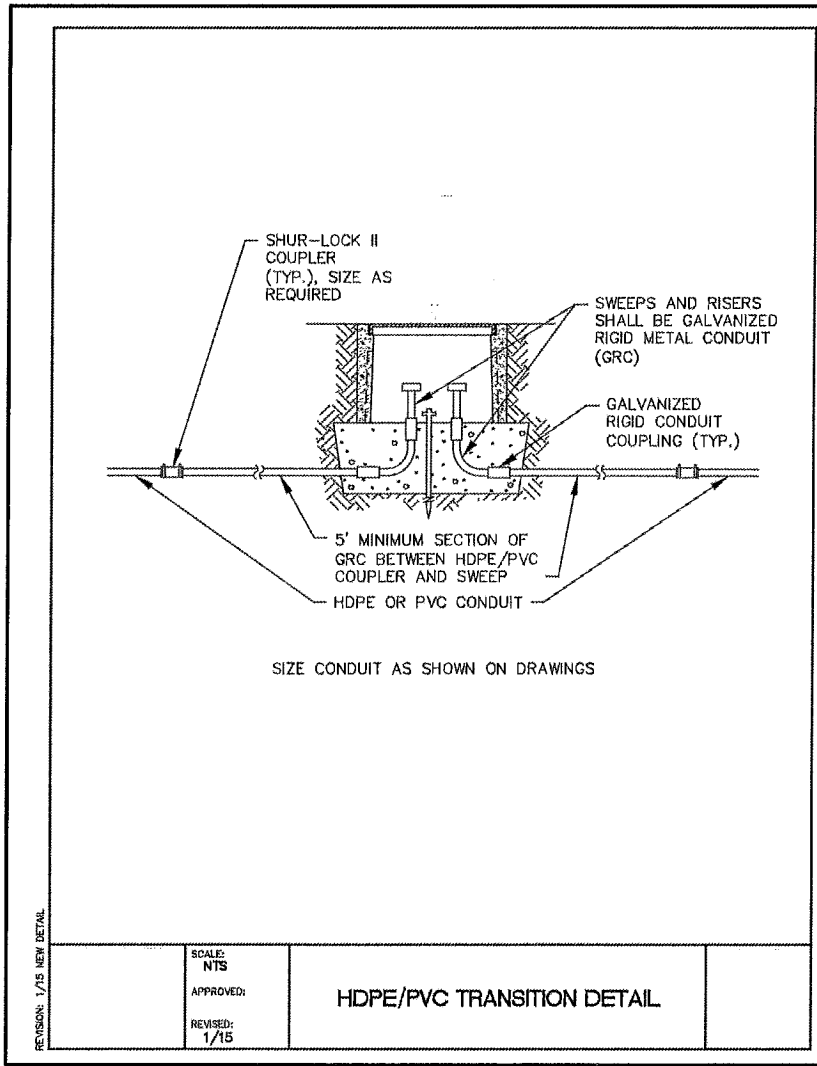
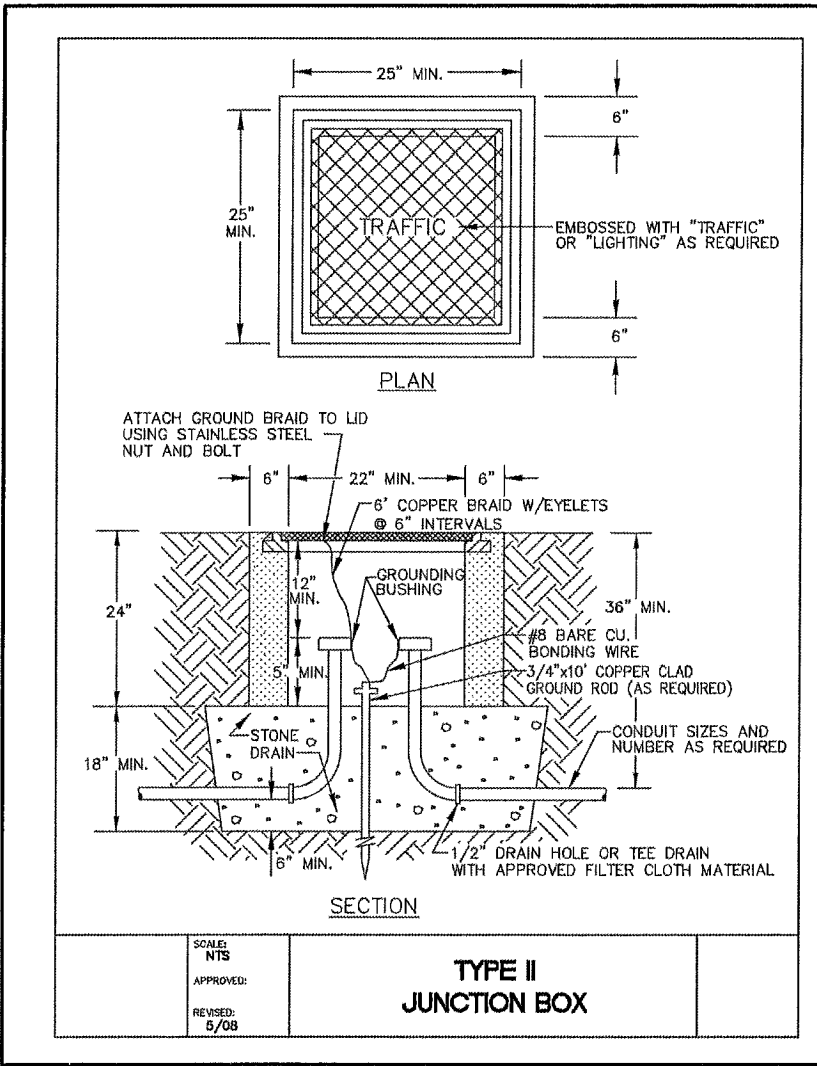


CITY OF HOMER

WADDELL WAY ROAD AND WATER MAIN IMPROVEMENTS

**ILLUMINATION DETAILS**

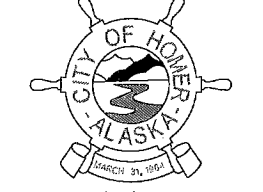
DRAWING LOCATION z:\PROJECTS\City of Homer\Term contract\waddell way\Civil\3D\Production Drawings\H10-13\_Illumination Details.dwg  
 1/14/2016 4:16 PM  
 LAYOUT H12  
 SCALE  
 DRAFTED BY SOPHIA.HFF



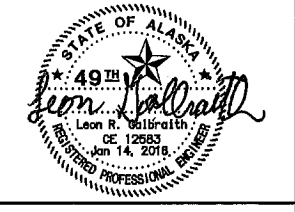
NOTE:  
 CITY OF HOMER TO PAY FEES FOR TRANSFORMER INSTALLATION. CONTRACTOR TO PROVIDE METER BASE AND POSTMOUNTED LOAD CENTER AND COORDINATE WITH H.E.A. TO ENERGIZE.

SHEET NO.	TOTAL SHEETS	
H12	H12	
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

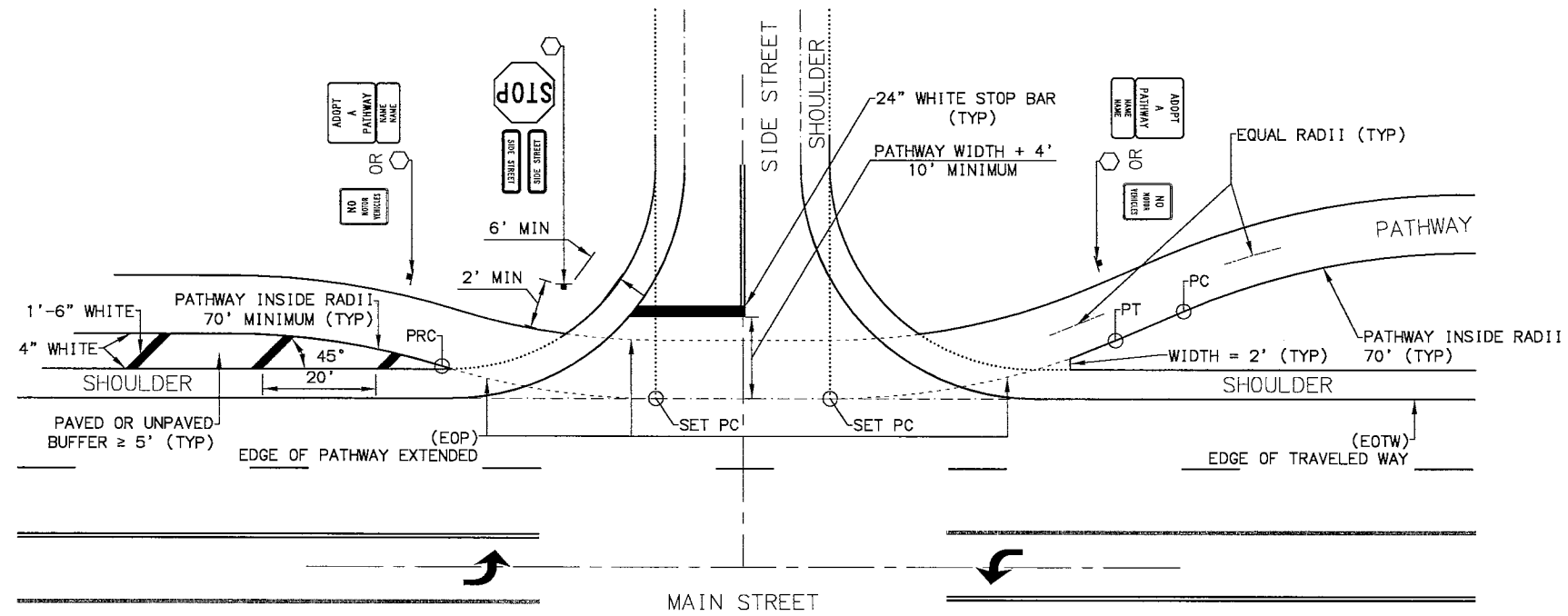
PLANS DEVELOPED BY:  
 KINNEY ENGINEERING, LLC  
 FOR  
 CITY OF HOMER, ALASKA  
 PUBLIC WORKS DEPARTMENT



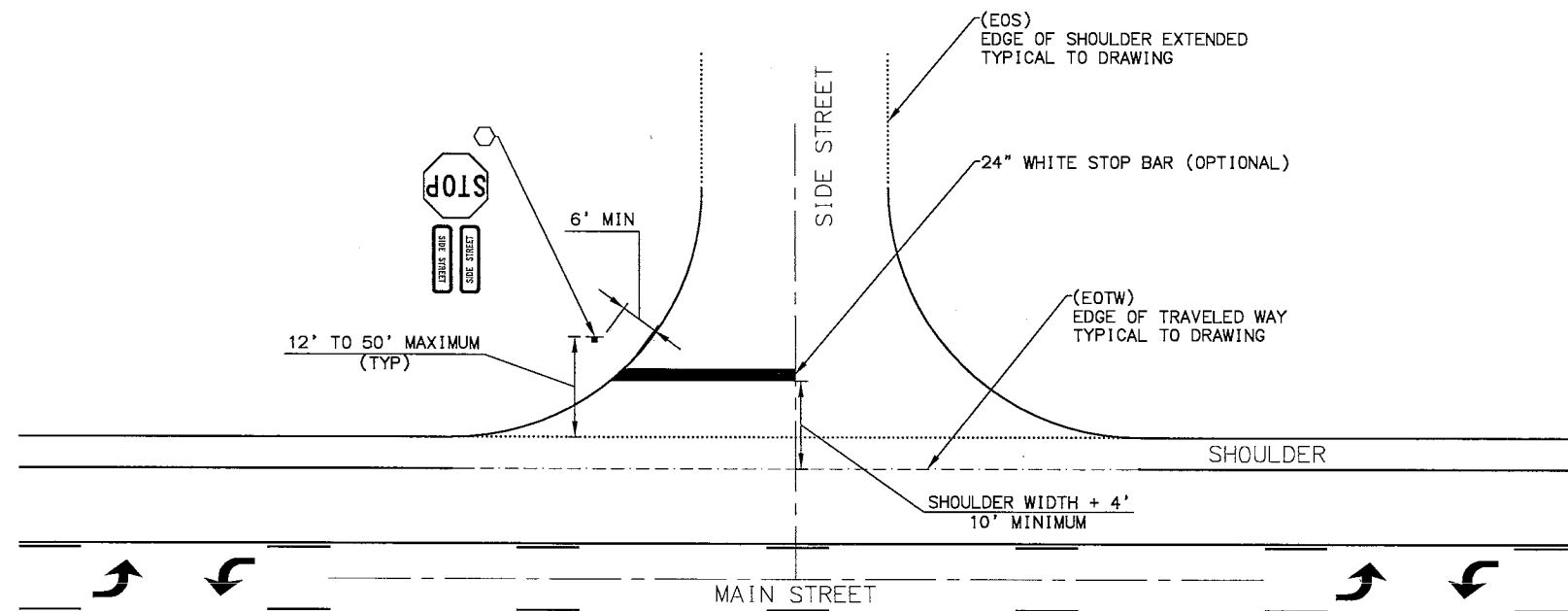
PHONE: (907) 235-3170  
 FAX: (907) 235-3145



CITY OF HOMER  
 WADDELL WAY ROAD AND  
 WATER MAIN IMPROVEMENTS  
 ILLUMINATION DETAILS



TYPICAL UNCURBED RETURN WITH PATHWAY



TYPICAL UNCURBED RETURN WITHOUT SIDEWALK

UNCURBED INTERSECTION NOTES: (IN PRIORITY ORDER)

1. LOCATE STOP BAR 4' MINIMUM BEHIND THE WIDTH OF PATHWAY.
2. LOCATE STOP SIGN SO IT IS VISIBLE TO APPROACHING TRAFFIC AND NEAR THE STOP BAR.
3. SEE PLANS FOR PATHWAY SIGNING REQUIRED AT SIDE STREETS.
4. BREAK CENTERLINE STRIPING WITHIN INTERSECTIONS WHICH HAVE DEDICATED TURN LANES.
5. CONTINUE CENTERLINE STRIPING THROUGH INTERSECTIONS WITH CENTER TWO-WAY-LEFT-TURN-ONLY LANES OR WHEN THERE ARE NO LEFT TURN LANES.
6. CONTINUE LANE "SKIP" STRIPING THROUGH INTERSECTIONS.
7. DELETE OUTERMOST EDGE OF TRAVELED WAY STRIPING AT INTERSECTIONS OR WRAP EOTW STRIPING TO SIDE STREET EOTW.
8. PROVIDE 2' OF CLEARANCE BETWEEN EDGE OF STOP SIGN PANEL AND EDGE OF PATHWAY OR SIDEWALK.
9. PROVIDE 6' OF CLEARANCE BETWEEN EDGE OF STOP SIGN PANEL AND EDGE OF SIDE STREET.
10. "NO MOTOR VEHICLES" SIGNS ARE NOT REQUIRED WITHIN THE MUNICIPALITY OF ANCHORAGE.
11. STOP BARS ARE NOT REQUIRED WHEN NO PATHWAY OR SIDEWALK IS PRESENT. SEE PLANS.
12. MATCH SIDESTREET STRIPING IF STRIPING IS PRESENT.

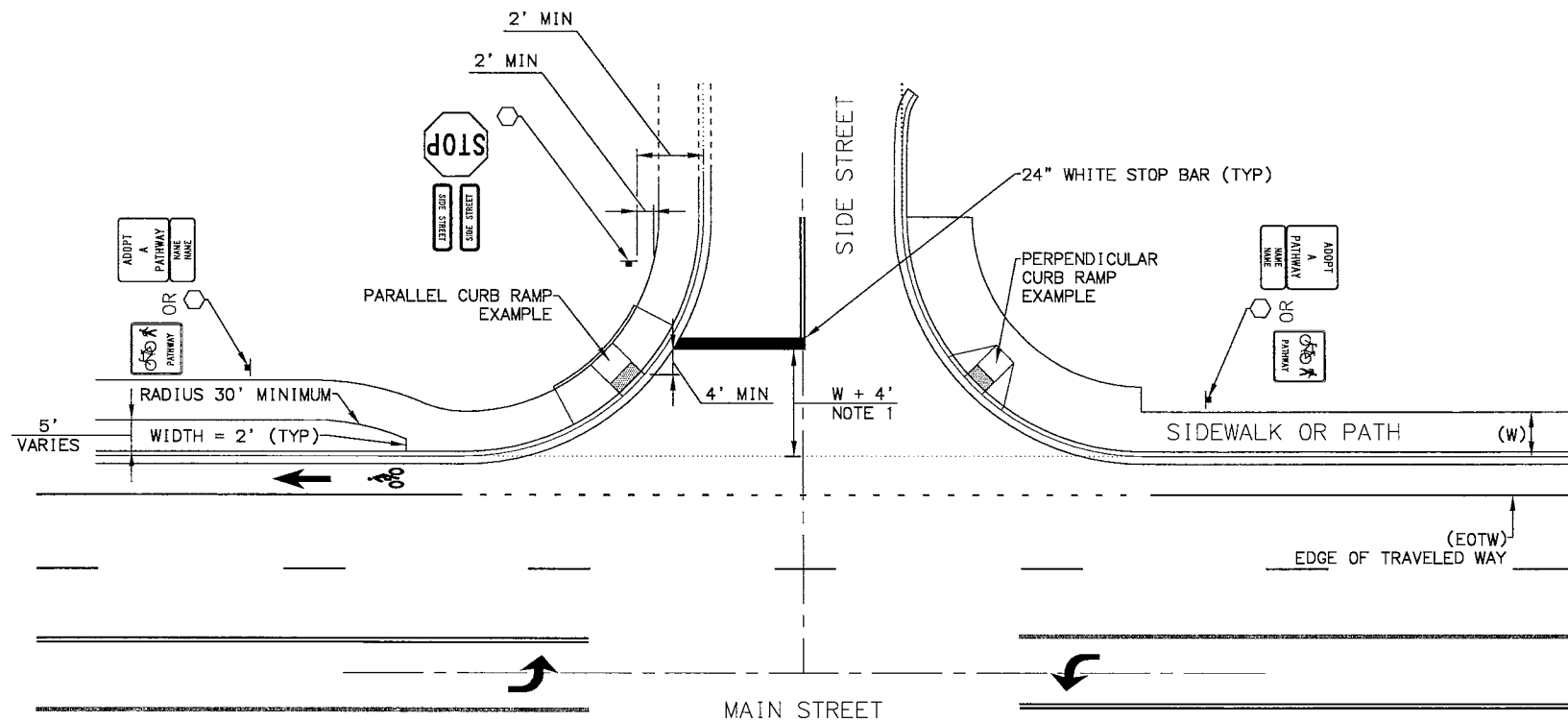
REVISIONS		
Date	Description	By
01/17/13	SHEET NUMBER AND DRAWING	SET
09/16/13	NOTES ADDED	SET
12/10/14	RADIUS/REVISED NOTES	SET
06/23/15	GED: ADA TILES NOT REQ	SET

SHEET 1 OF 2

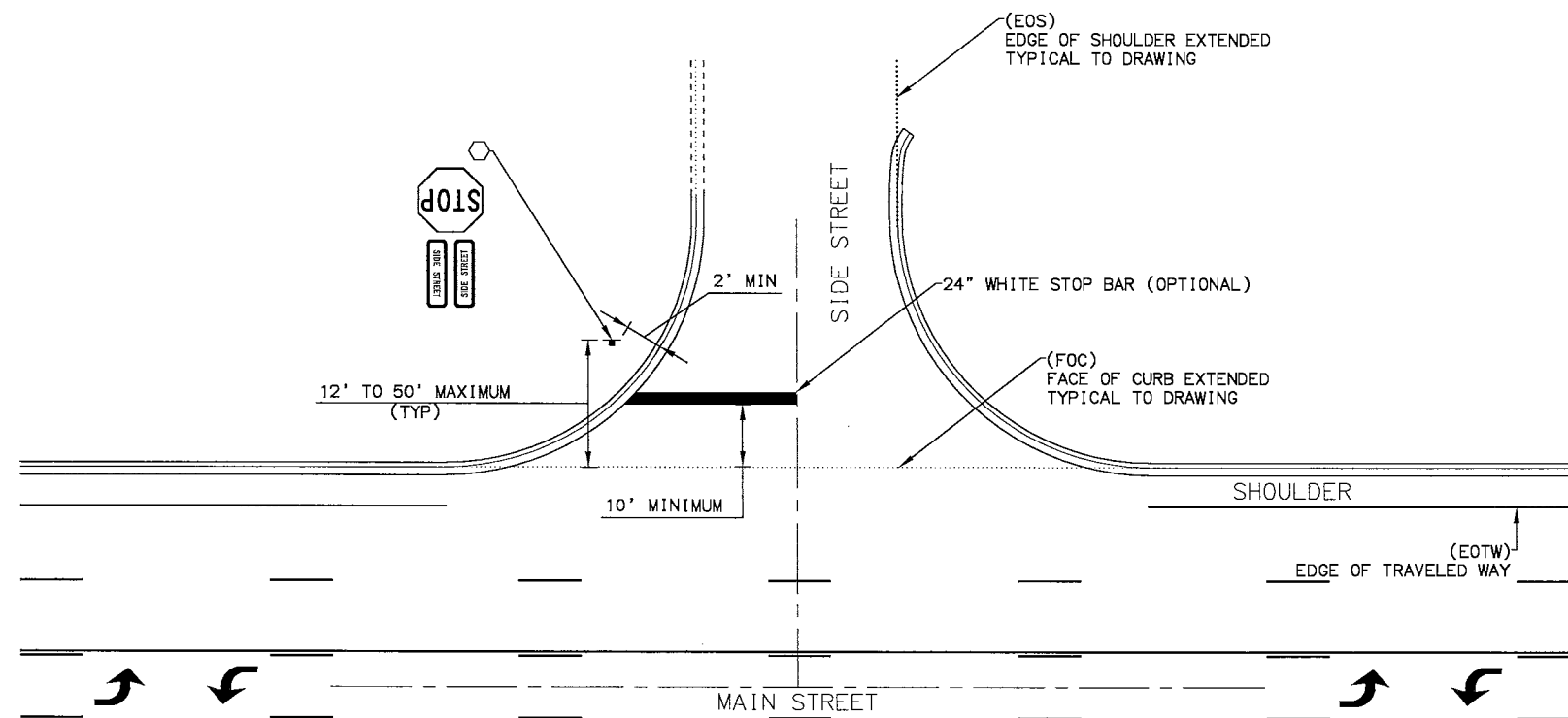
State of Alaska  
Department of Transportation  
& Public Facilities  
UNSIGNALIZED INTERSECTION  
STOP AND CROSSING



Date 06/23/15



TYPICAL CURBED RETURN WITH SIDEWALK



TYPICAL CURBED RETURN WITHOUT SIDEWALK

**CURBED INTERSECTION NOTES: (IN PRIORITY ORDER)**

1. LOCATE STOP BAR 4' MINIMUM BETWEEN THE TOE OF CURB RAMP AND EDGE OF STOP BAR OR A DISTANCE OF THE WIDTH OF THE SIDEWALK OR PATHWAY PLUS 4'.
2. LOCATE STOP SIGN SO IT IS VISIBLE TO APPROACHING TRAFFIC AND NEAR THE STOP BAR.
3. SEE PLANS FOR PATHWAY SIGNING REQUIRED AT SIDE STREETS.
4. BREAK CENTERLINE STRIPING WITHIN INTERSECTIONS WHICH HAVE DEDICATED TURN LANES.
5. CONTINUE CENTERLINE STRIPING THROUGH INTERSECTIONS WITH CENTER TWO-WAY-LEFT-TURN-ONLY LANES OR WHEN THERE ARE NO LEFT TURN LANES.
6. CONTINUE LANE "SKIP" STRIPING THROUGH INTERSECTIONS.
7. DELETE OUTERMOST EDGE OF TRAVELED WAY STRIPING AT INTERSECTIONS OR WRAP EOTW STRIPING TO SIDE STREET EOTW.
8. PROVIDE 2' OF CLEARANCE BETWEEN EDGE OF STOP SIGN PANEL AND EDGE OF PATHWAY OR SIDEWALK.
9. PROVIDE 6' OF CLEARANCE BETWEEN EDGE OF STOP SIGN PANEL AND SIDE STREET FACE OF CURB.
10. "NO MOTOR VEHICLES" SIGNS ARE NOT REQUIRED WITHIN THE MUNICIPALITY OF ANCHORAGE.
11. STOP BARS ARE NOT REQUIRED WHEN NO PATHWAY OR SIDEWALK IS PRESENT. SEE PLANS.
12. MATCH SIDESTREET STRIPING IF STRIPING IS PRESENT.

REVISIONS		
Date	Description	By
01/17/13	SHEET NUMBER AND DRAWING	SET
09/16/13	NOTES ADDED	SET
12/10/14	REVISED NOTES	SET

SHEET 2 OF 2

State of Alaska  
 Department of Transportation  
 & Public Facilities  
**UNSIGNALIZED INTERSECTION  
 STOP AND CROSSING**



Date 06/23/15