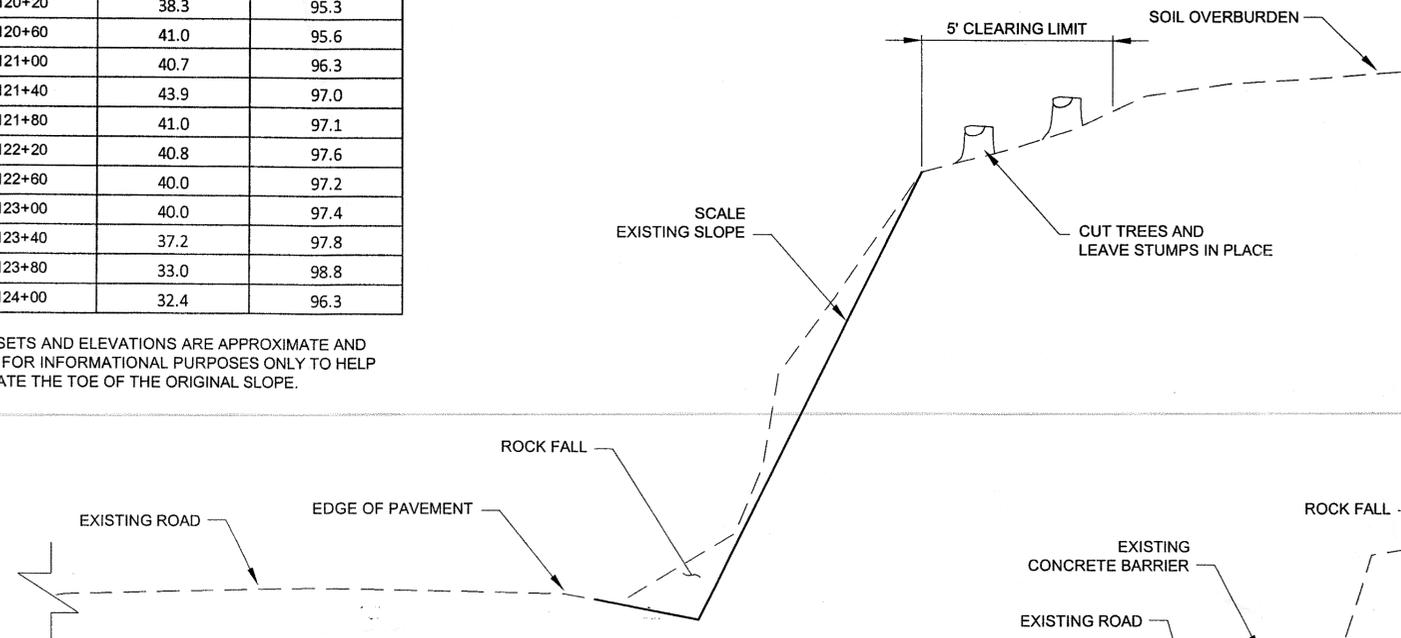


TOE OF ORIGINAL SLOPE

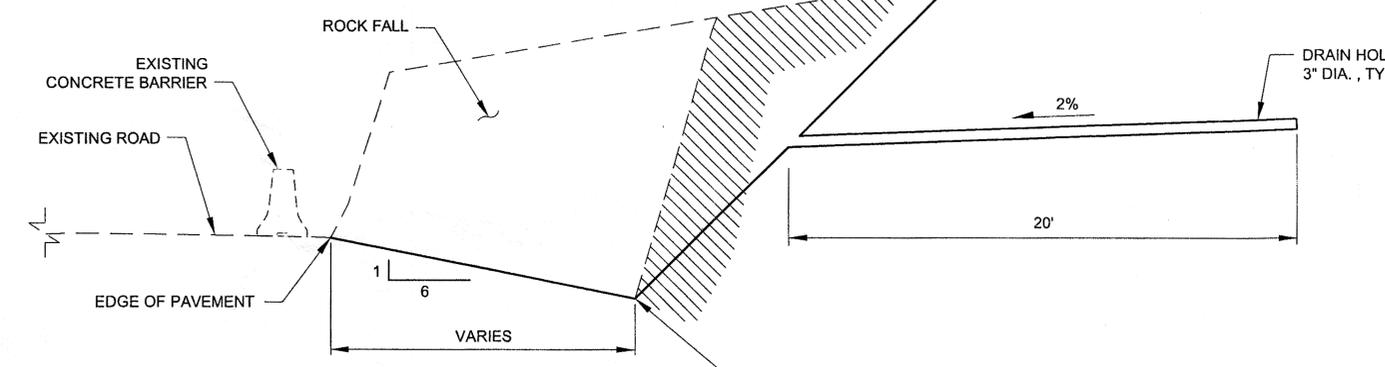
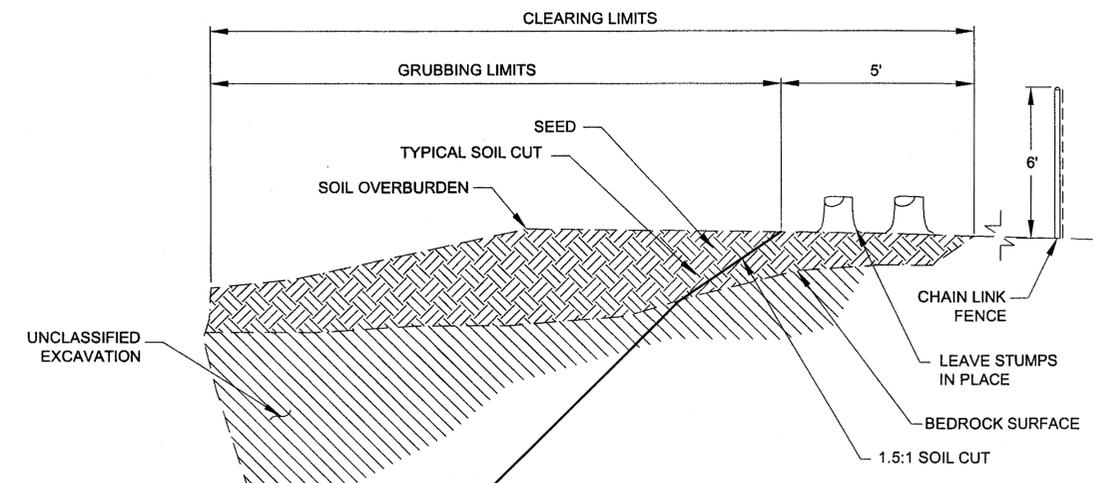
STATION	OFFSET	ELEV
119+00	30.5	93.8
119+40	33.5	94.8
119+80	41.5	96.0
120+20	38.3	95.3
120+60	41.0	95.6
121+00	40.7	96.3
121+40	43.9	97.0
121+80	41.0	97.1
122+20	40.8	97.6
122+60	40.0	97.2
123+00	40.0	97.4
123+40	37.2	97.8
123+80	33.0	98.8
124+00	32.4	96.3

OFFSETS AND ELEVATIONS ARE APPROXIMATE AND ARE FOR INFORMATIONAL PURPOSES ONLY TO HELP LOCATE THE TOE OF THE ORIGINAL SLOPE.



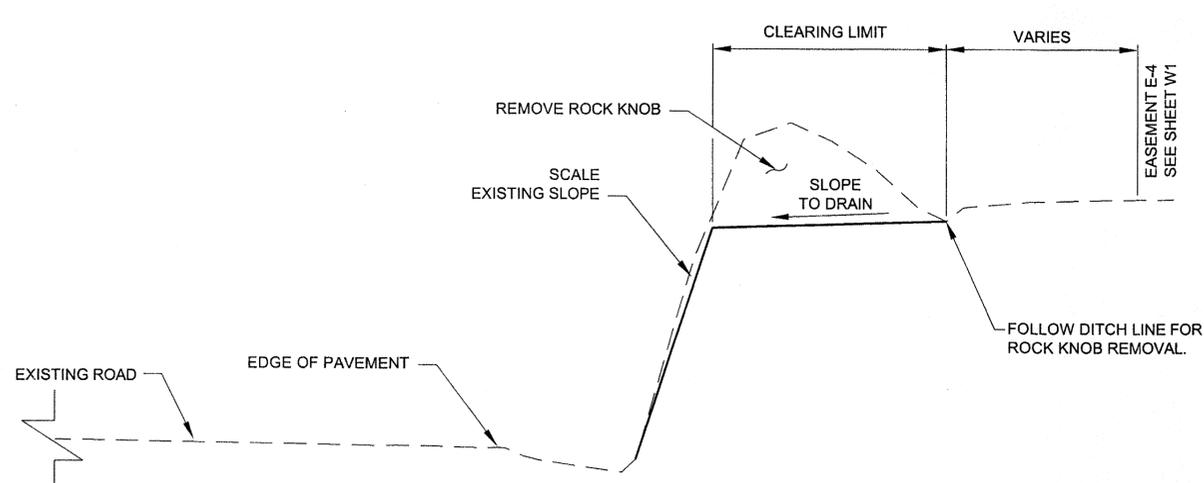
BOP TYPICAL SECTION

STA 119+00 TO 120+00
TRANSITION TO 1:1 ROCK CUT STA 119+60 TO 120+00
119+00 TO 119+60 TO 119+60



ROCK CUT TYPICAL SECTION

STA 120+00 TO STA 123+60
119+60



EOP TYPICAL SECTION

STA 123+60 TO 124+00
TRANSITION FROM 1:1 ROCK CUT TO MATCH EXISTING SLOPE

TYPICAL NOTES:

1. SLOPE FACE IS POTENTIALLY UNSTABLE AND IS ACTIVELY RAVELLING. THE CONTRACTOR SHALL USE CAUTION TO PROTECT THE PUBLIC AND HIS EMPLOYEES. A WORK SEQUENCING PLAN SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO BEGINNING WORK ACTIVITIES. SEE SECTIONS 108 AND 203 OF THE SPECIAL PROVISIONS.
2. STA. 122+31 TO STA. 122+81, AS-BUILTS INDICATE 700 SQ FT OF ROCK FACE IS BOLTED ON A 6FT X 6FT GRID PATTERN WITH A BOLT LENGTH OF 12FT.
3. STAKE ROW AND EASEMENT LIMITS PRIOR TO CLEARING AND GRUBBING.
4. REMOVE ALL ROCK FALL FROM DITCH TO LOCATE ORIGINAL SLOPE TOE AND ESTABLISH 1:1 ROCK CUT SLOPE.
5. SCALING SHALL ENCOMPASS REMOVING ALL LOOSE, HANGING, OR POTENTIALLY DANGEROUS ROCK FROM EXISTING SLOPES, TO THE SATISFACTION OF THE ENGINEER.
6. SEED ALL SOIL SLOPES.
7. PROTECT THE EXISTING PAVEMENT ON NORTH TONGASS. TRACKED VEHICLES SHALL NOT BE ALLOWED ON THE PAVEMENT SURFACE WITHOUT PROTECTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO NORTH TONGASS HIGHWAY.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Date 1-6-12

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: C. HOWARD 		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION KTN - NORTH TONGASS HWY EMERGENCY SLOPE STABILIZATION PROJECT #69086	
DESIGNED BY: D. LESTER DRAWN BY: R. GRANTHAM		TYPICAL SECTIONS	
PATH: Q:\KTN\69086\PLANSET\69086_B1_TYP.DWG TAB: B1 Thursday, September 10, 2009 10:43:48 AM GRANTHAM, RICK L (DOT)		PROJECT DESIGNATION 69086	YEAR 2009
NO.	DATE	DESCRIPTION	SHEET NO. B1
			TOTAL SHEETS 7

ESTIMATE OF QUANTITIES			
ITEM NO	ITEM DESCRIPTION	PAY UNIT	Quantity
201(3B)	CLEARING AND GRUBBING	LUMP SUM	ALL REQUIRED
202 (1)	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LUMP SUM	ALL REQUIRED
203(3)	UNCLASSIFIED EXCAVATION Deleted CO #3	CUBIC YARD	15000
203 (12)	DRAIN HOLES	LINEAR FOOT	400
203 (19)	PRE-BLAST SURVEY	EACH	15 10
607 (3)	CHAIN LINK FENCE	LINEAR FOOT	488 419.80
615(1)	STANDARD SIGN	SQUARE FOOT	1.75
618 (1)	SEEDING	ACRE	0.8 0.07
640 (1)	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQUIRED
640(4)	WORKER MEALS AND LODGING, OR PER DIEM	LUMP SUM	ALL REQUIRED
641 (1)	EROSION, SEDIMENT AND POLLUTION CONTROL ADMINISTRATION	LUMP SUM	ALL REQUIRED
641 (2)	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL	CONTINGENT SUM	ALL REQUIRED
642(1)	CONSTRUCTION SURVEYING	LUMP SUM	ALL REQUIRED
643 (2)	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQUIRED
643 (15)	FLAGGING	CONTINGENT SUM	ALL REQUIRED
643(25)	TRAFFIC CONTROL	CONTINGENT SUM	ALL REQUIRED
202(1A)	Removal of Additional Structure (CO #1)	Lump Sum	ALL REQUIRED
202(1B)	Addition Asbestos Abatement (CO #1)	Lump Sum	ALL REQUIRED
401(7)	Shoulder Patch Paving (CO #2)	Lump Sum	ALL REQUIRED
401(8)	Access Road Patch (CO #2)	Lump Sum	ALL REQUIRED
203(3A)	Unclassified Excavation (CO #3)	Lump Sum	ALL REQUIRED

BASIS OF ESTIMATE		
ITEM NO.	ITEM	ESTIMATING FACTOR
201 (3B)	CLEARING AND GRUBBING	0.6 ACRE

607 CHAIN LINK FENCE					
BEGIN		ANGLE POINT		END	
STATION	OFFSET	STATION	OFFSET	STATION	OFFSET
119+00	49 RT	119+00	72 RT	123+05	162 RT

MOUNT FABRIC TO POST SIDE FACING AWAY FROM HIGHWAY.

REMOVAL OF STRUCTURES AND OBSTRUCTIONS			
HOUSE NO. 5480		1920 SF	
CARPORT		384 SF	
2 SHEDS			
CISTERN			
SEPTIC			
HOUSE NO. 79		1150 SF	
GARAGE		606 SF	
ENCLOSED PORCH		136 SF	
DECK		192 SF	
CISTERN STORAGE SHED			
SEPTIC			
CONCRETE RETAINING WALL		15 CY	(44 LF)
CHAIN LINK FENCE		140 LF	
SLOPE STABILIZATION WIRE MESH		720 SF	
EXISTING ROCK BOLTS		27 EA	
CONCRETE BARRIERS		300 LF	

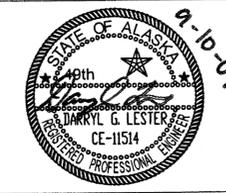
ADDITIONAL MINOR STRUCTURES MAY BE PRESENT

Structures at 17 Ridge Road (CO #1)

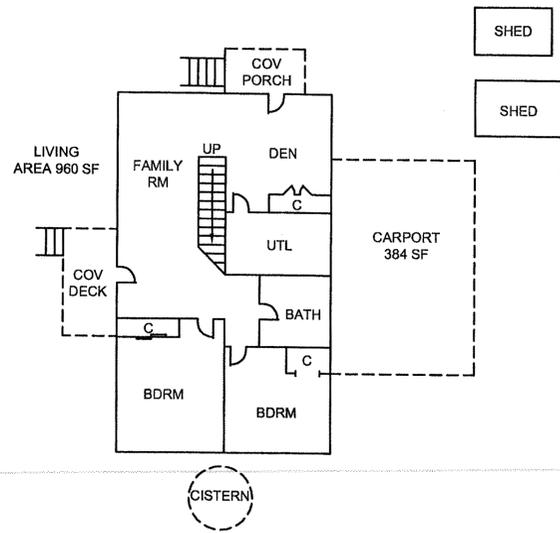
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
 PE: [Signature] Date 1-9-12

615 (1) STANDARD SIGN SUMMARY											
SIGN NO.	STA	ASDS CODE	LEGEND	SIGN FACING	HEIGHT (IN)	WIDTH (IN)	AREA (SQ FT)	POST			REMARKS
								NO.	SIZE (IN)	TYPE	
1	121+00 RT	D10-101	MILE 5	SB	18	14	1.75	1	2.5	PST	

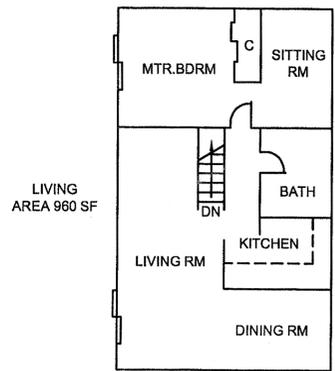
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: C. HOWARD	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION				
	KTN - NORTH TONGASS HWY EMERGENCY SLOPE STABILIZATION PROJECT #69086				
DESIGNED BY: D. LESTER	ESTIMATE OF QUANTITIES				
DRAWN BY: R. GRANTHAM					
PATH: Q:\KTN\69086\PLANSET\69086_C1_ESTIMATE.DWG					
TAB: C1 Thursday, September 10, 2009 2:11:53 PM GRANHAM, RICK L (DOT)					
NO.	REVISIONS	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
	DATE DESCRIPTION	69086	2009	C1	7

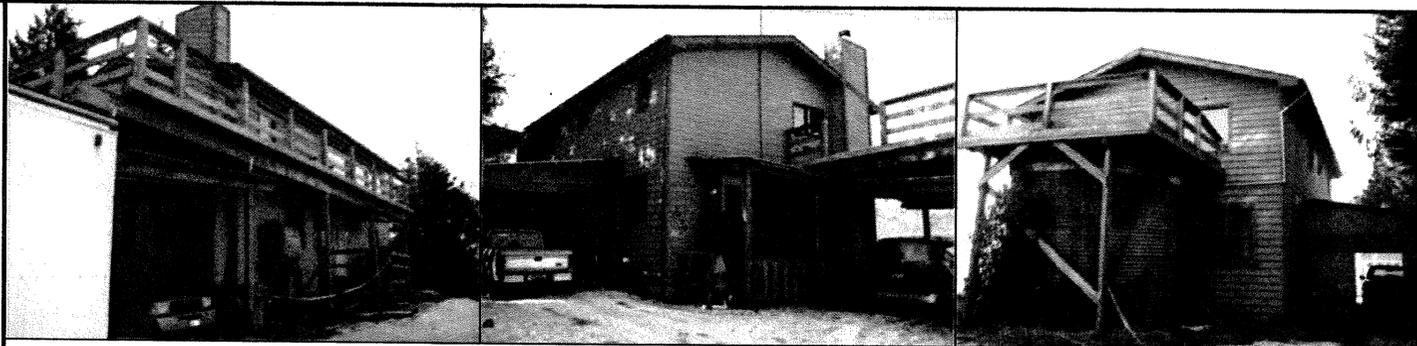
HOUSE NO. 5480 RIDGE RD



FIRST FLOOR



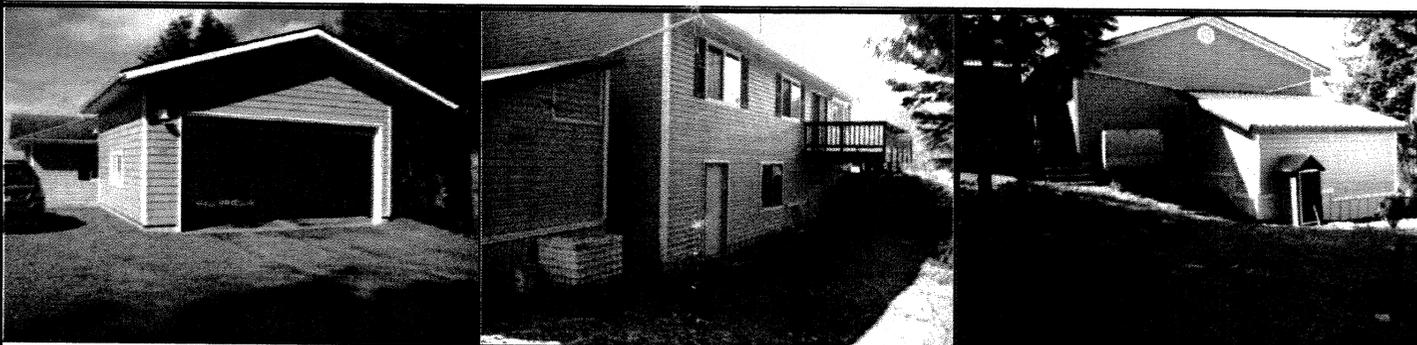
SECOND FLOOR



HOUSE NO. 5480 RIDGE RD

REFERENCE SPECIAL PROVISIONS, APPENDIX G, PRE-DEMOLITION HAZARDOUS MATERIALS ASSESSMENT 5480 RIDGE ROAD

- NON-FRIABLE ASBESTOS-CONTAINING MATERIALS
 - KITCHEN SINK UNDERCOATING
- MERCURY-CONTAINING FLORESCENT TUBES AND THERMOSTATS
- SMOKE DETECTORS WITH RADIOACTIVE SOURCES
- OTHER
 - LEAD ACID BATTERIES
 - PROPANE
 - CANS OF CARPET CLEANER
 - PRESSURIZED CANS OF PAINT AND PAINT RELATED MATERIAL

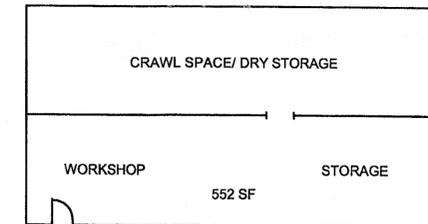
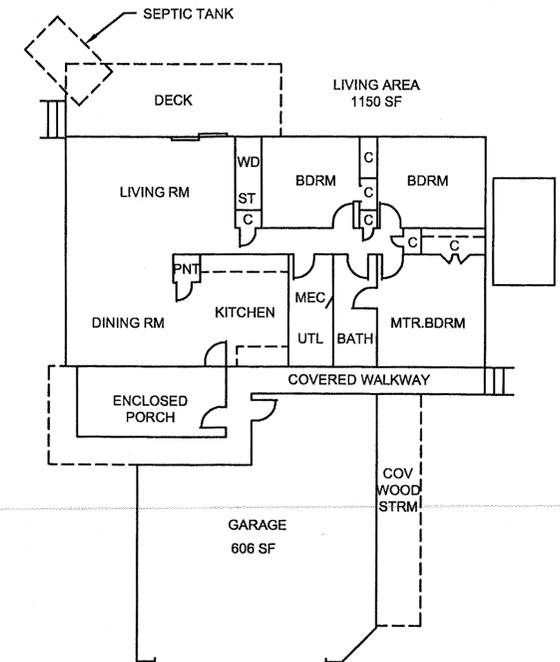


HOUSE NO. 79 RIDGE RD

REFERENCE SPECIAL PROVISIONS, APPENDIX G, PRE-DEMOLITION HAZARDOUS MATERIALS ASSESSMENT 79 RIDGE ROAD

- NON-FRIABLE ASBESTOS-CONTAINING MATERIALS
 - LINOLEUM AND YELLOW MASTIC
- MERCURY-CONTAINING FLORESCENT TUBES AND THERMOSTATS
- SMOKE DETECTORS WITH RADIOACTIVE SOURCES

HOUSE NO. 79 RIDGE RD



FIRST FLOOR

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
 PE *[Signature]* Date 1-6-12

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: C. HOWARD

DESIGNED BY: D. LESTER
 DRAWN BY: R. GRANTHAM

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

9-10-09

STATE OF ALASKA
 49th
 RICK L. GRANTHAM
 RICK L. GRANTHAM
 CE-11514
 REGISTERED PROFESSIONAL ENGINEER

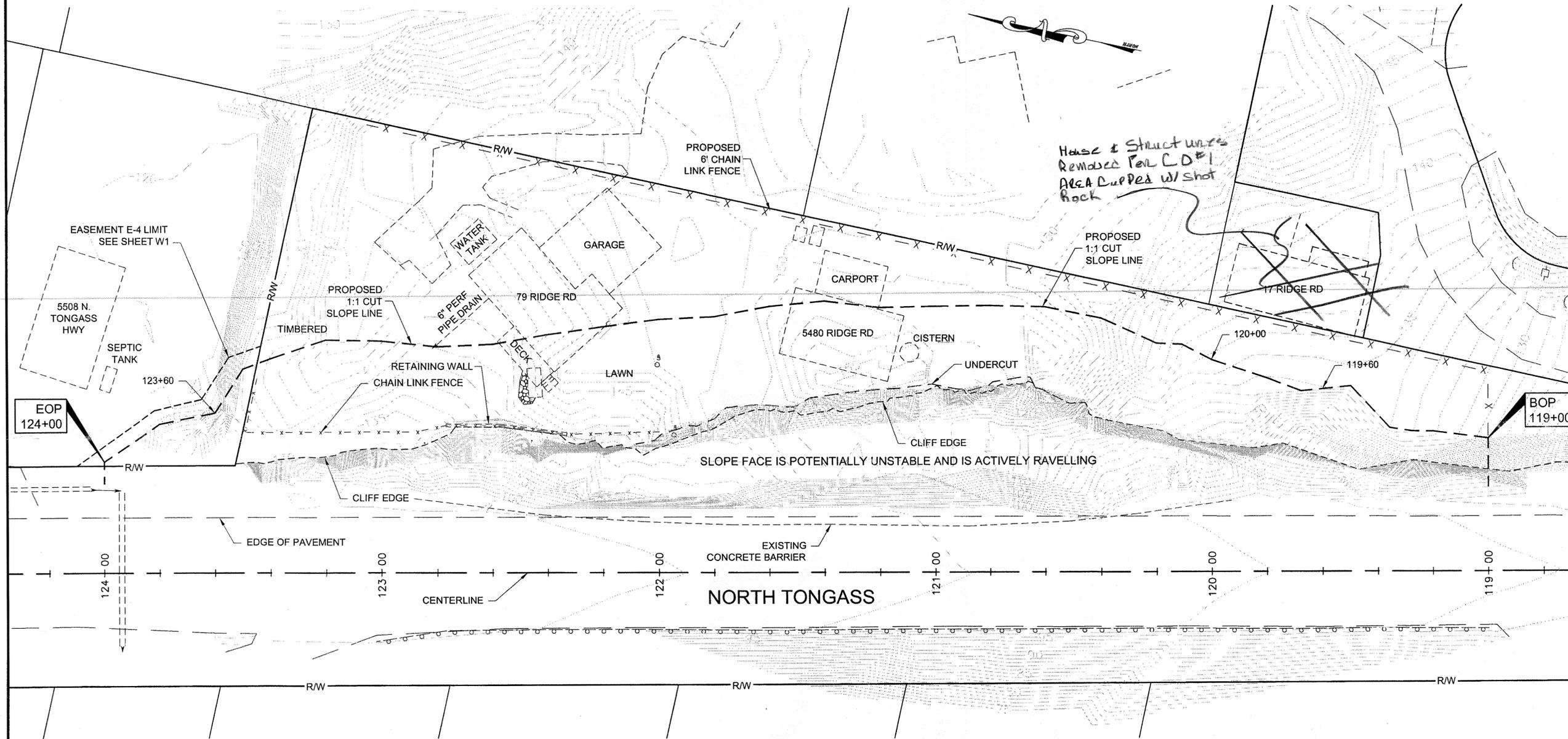
KTN - NORTH TONGASS HWY
 EMERGENCY SLOPE
 STABILIZATION
 PROJECT #69086

STRUCTURE REMOVAL

PATH: Q:\KTN\69086\PLANSET\69086_D1_STRUCTURE2.DWG
 TAB: D1 Thursday, September 10, 2009 10:45:18 AM GRANTHAM, RICK L (DOT)

NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			69086	2009	D1	7

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



CONTROL MONUMENTS						
POINT	NORTH	EAST	STATION	OFFSET	ELEV	DESCRIPTION
13	102383.5425	87897.9805	113+50.74	17.11 L	91.72	SH_MON_NT-13
14	103604.1860	87618.4720	126+00.64	17.16 L	100.00	SH_MON_NT-14
15	104199.0870	87668.3380	132+00.56	16.90 R	93.37	SH_MON_NT-15

STATION: ~~119+00~~ ^{118+50 to 119+00} TO 119+00
 REMOVE ROCK FALL TO REESTABLISH DITCH AND ORIGINAL TOE OF SLOPE PRIOR TO SLIDE EVENT. REMOVE ALL LOOSE, HANGING, OR POTENTIALLY DANGEROUS ROCK FROM THE EXISTING SLOPE, TO THE SATISFACTION OF THE ENGINEER.

STATION: ~~119+00 to 120+00~~ ^{119+00 to 119+60}
 TRANSITION TO 1:1 ROCK CUT

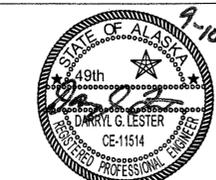
STATION: ~~120+00 to 123+60~~ ¹¹⁹⁺⁶⁰
 1:1 ROCK CUT

STATION: 123+60 TO 124+00
 TRANSITION FROM 1:1 ROCK CUT TO MATCH EXISTING SLOPE.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
 PE *[Signature]* Date 10-6-12

PLAN LEGEND

CHECKED BY: C. HOWARD



DESIGNED BY: D. LESTER

DRAWN BY: R. GRANTHAM

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION

KTN - NORTH TONGASS HWY
 EMERGENCY SLOPE
 STABILIZATION
 PROJECT #69086

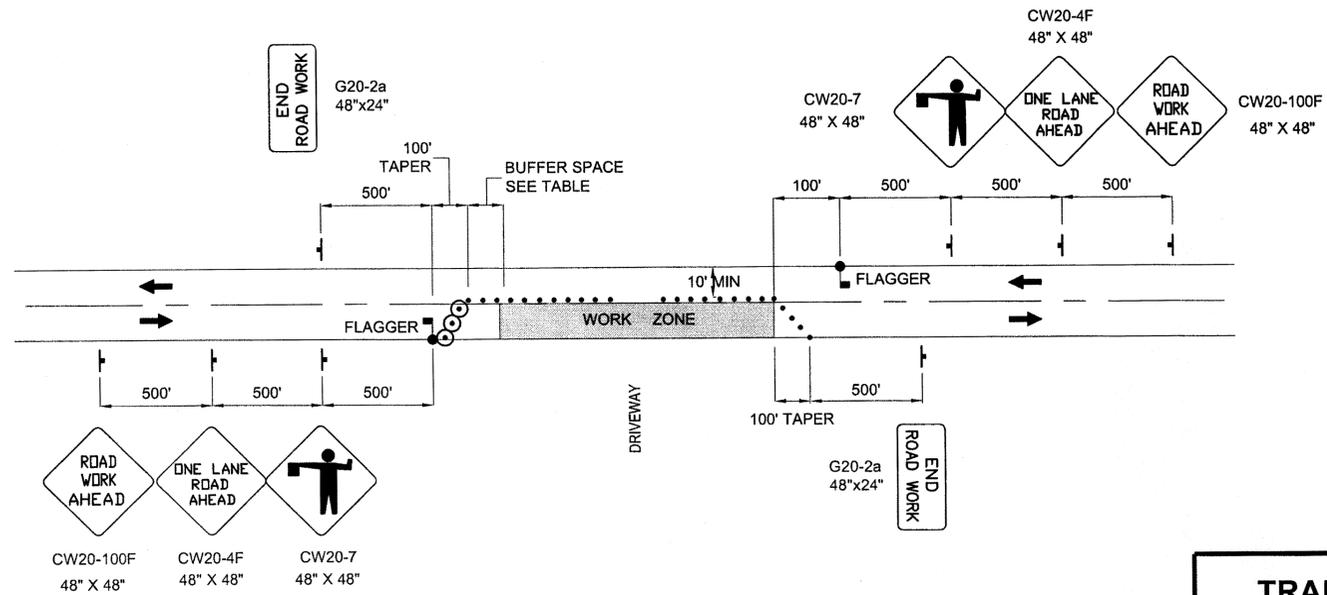
PLAN

PROJECT DESIGNATION

69086

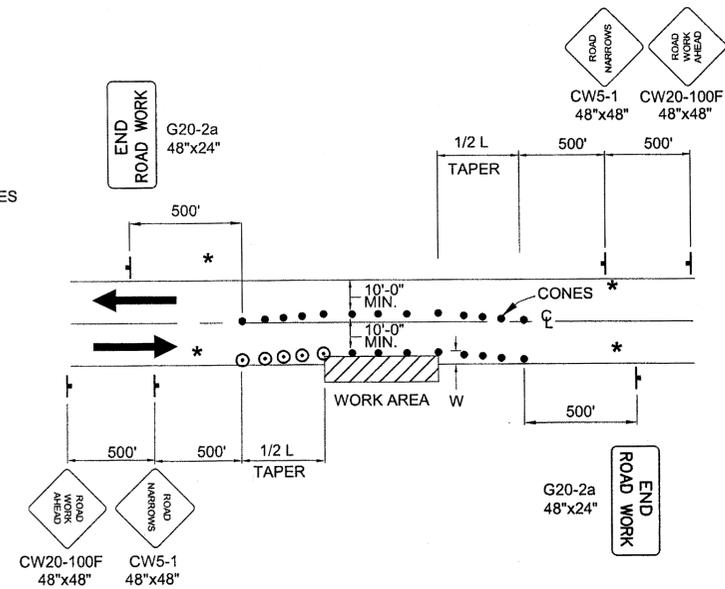
STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
F1	7

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



TWO LANE ROADWAY-SINGLE LANE CLOSURE

NOTE: ADDITIONAL FLAGGER IS REQUIRED AT INTERSECTIONS REMAINING OPEN WITHIN THE WORK AREA.



ROADWAY ENCROACHMENT

NOTE: IF ONLY ONE LANE IS EFFECTED BY ROAD WORK (THAT IS, THE CONES ALONG THE WORK AREA ARE NO CLOSER THAN 10' TO CENTERLINE) THE CENTERLINE CONES FOR THE OPPOSING LANE MAY BE DELETED.

TRAFFIC CONTROL NOTES

1. IT IS THE INTENT OF THIS TRAFFIC CONTROL PLAN (TCP) TO ILLUSTRATE SOME, NOT ALL, OF THE TRAFFIC CONTROL SETUPS WHICH WILL BE REQUIRED ON THIS PROJECT. PLANS FOR CONFIGURATIONS NOT COVERED BY THE TCP SHALL BE CREATED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL. WHERE APPROPRIATE, THEY SHALL INCORPORATE APPLICABLE DETAILS FROM THESE SHEETS.
2. ALL TRAFFIC CONTROL PLANS SUBMITTED BY THE CONTRACTOR SHALL BE NUMBERED. ALL TRAFFIC CONTROL PLANS THAT USE A TYPICAL APPLICATION AS DESCRIBED IN THE MUTCD SHALL REFERENCE THE TYPICAL APPLICATION. EXAMPLE: TCP 3, MUTCD TA-10.
3. TWO LANES SHALL BE MAINTAINED ALONG NORTH TONGASS HIGHWAY AT ALL TIMES IN NON-WORK AREAS AND DURING NON-WORKING HOURS.
4. TEMPORARY DRIVING LANES SHALL HAVE A MINIMUM WIDTH OF 10'.
5. CONSTRUCTION SIGNING SHALL BE IN PLACE ONLY WHEN THE CONDITIONS EXIST FOR WHICH THE SIGNS ARE INTENDED. CHANNELIZATION DEVICES IF USED AT NIGHT SHALL BE LIT IN ACCORDANCE WITH THE ALASKA TRAFFIC MANUAL.
6. WHEN ROAD CLOSURES ARE REQUIRED FOR BLASTING EVENTS AND RELATED WORK, THEY SHALL NOT BE LONGER THAN 30 MINUTES IN DURATION.
7. KEEP THE PUBLIC INFORMED OF CONSTRUCTION ACTIVITIES. SEE SECTION 643-3.03 OF THE SPECIAL PROVISIONS.
8. ACCESS TO BUSINESS AND HOMES WILL BE MAINTAINED AT ALL TIMES.

TRAFFIC SUMMARY

A.D.T. 2008	=	6,587
% T	=	5.5%
V	=	50 M.P.H.

LEGEND

- SIGN
- CONE
- ⊙ DRUM
- TYPE III BARRICADE
- FLAGGING STATION

FORMULAS FOR L (TAPER LENGTH)

45 MPH OR GREATER $L = W \times S$

WHERE W = WIDTH OF OFFSET
S = POSTED SPEED LIMIT

DRUM OR CONE SPACING = S (IN FEET)

MIN. BUFFER	
S	LENGTH
20	35
25	55
30	85
35	120
40	170
45	220
50	280
55	335
60	415
65	485



SIGN FOR 48 HOUR ADVANCED NOTICE OF BLASTING

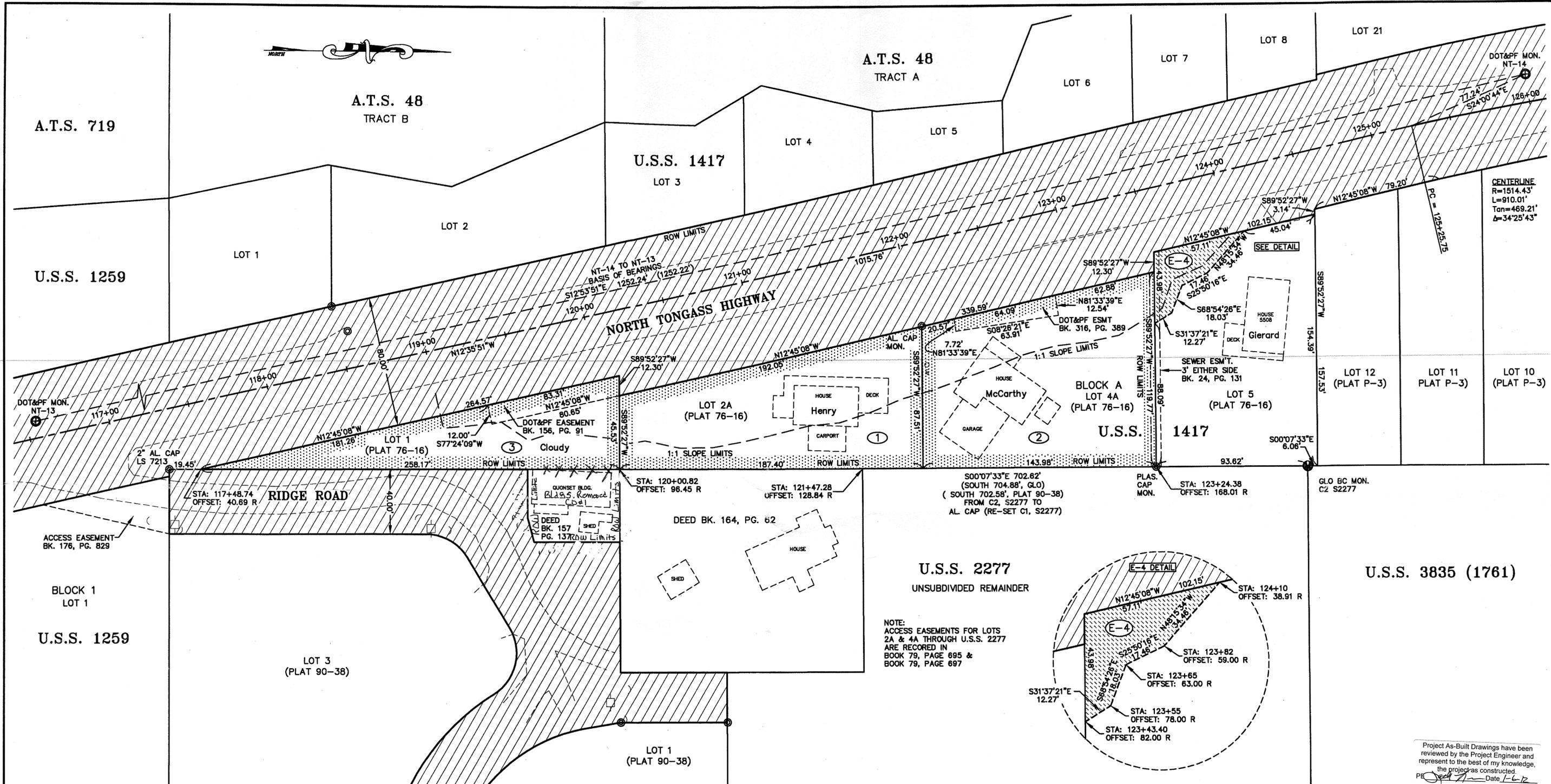
SIGNS SHALL BE ORANGE BACKGROUND WITH BLACK BORDER AND TEXT. SIGNS SHALL INCLUDE THE DATE OF CLOSURE, BEGINNING TIME OF CLOSURE, AND EXPECTED TIME THE ROAD WILL REOPEN. SIGNS SHALL BE IN PLACE A MINIMUM OF 48 HOURS PRIOR TO ROAD CLOSURE.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

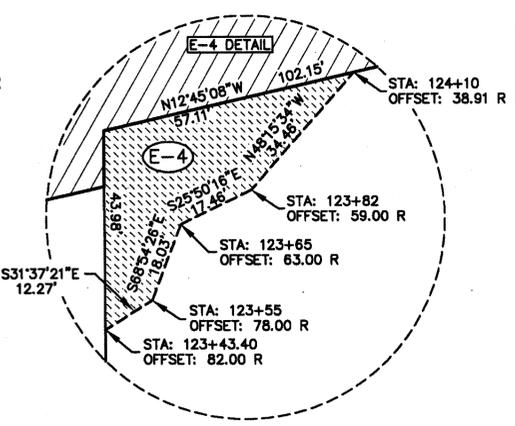
CHECKED BY: C. HOWARD		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION				
DESIGNED BY: D. LESTER						
DRAWN BY: R. GRANTHAM						
PATH: Q:\KTN\69086\PLANSET\69086_J1_TCP.DWG		KTN - NORTH TONGASS HWY EMERGENCY SLOPE STABILIZATION PROJECT #69086				
TAB: J1 Thursday, September 10, 2009 2:42:57 PM GRANTHAM, RICK L (DOT)						
REVISIONS		PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS	
NO.	DATE	DESCRIPTION	69086	2009	J1	7

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE: [Signature] Date: 1-6-12

C:\Ktr\69086\RW\5MI_SLOPE_REPAIR_2009\dwg\W1_PLANS.dwg Wed, 09/Sep/09 10:04AM



CENTERLINE
R=1514.43'
L=910.01'
Tan=469.21'
Δ=34°25'43"



U.S.S. 2277
UNSUBDIVIDED REMAINDER

NOTE:
ACCESS EASEMENTS FOR LOTS 2A & 4A THROUGH U.S.S. 2277 ARE RECORDED IN BOOK 79, PAGE 695 & BOOK 79, PAGE 697

- LEGEND**
- EXISTING RIGHT OF WAY
 - RIGHT OF WAY ACQUIRED FOR THIS PROJECT
 - EASEMENT ACQUIRED FOR THIS PROJECT

PROJECT NOTES:

THESE PLANS ARE BASED ON THE ALASKA DOT&PF RIGHT OF WAY PLANS FOR PROJECT S-0920(17), NORTH TONGASS HIGHWAY, RECORDED AS PLAT 92-43, K.R.D.

DOT&PF CONTROL MONUMENTS NT-13 & NT-14 WERE USED AS THE BASIS OF BEARINGS TO ESTABLISH THE CENTERLINE AND RIGHT OF WAY LIMITS FROM THAT PROJECT.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
 PE *[Signature]* Date 1-6-12

DATE	REVISIONS	BY
08/2009	SLOPE REVISION, ADD PARCEL 3 & E-4	GJY

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 &
 PUBLIC FACILITIES
 RIGHT OF WAY MAP
 ALASKA PROJECT NO.
 69086 ~ NORTH TONGASS HWY.
 EMERGENCY SLOPE STABILIZATION

DRAWN	DATE	SCALE
GJY	04/2009	1"=30'
CHECKED	DATE	SHEET
		W1 OF