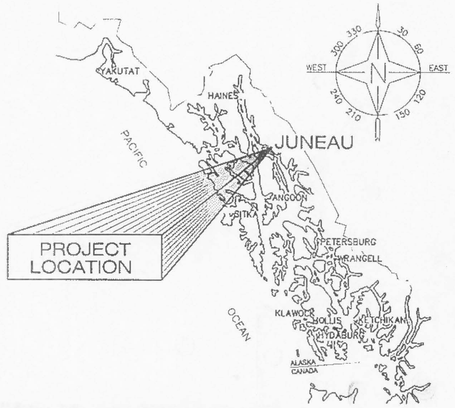
State of Alaska

Department of Transportation and Public Facilities

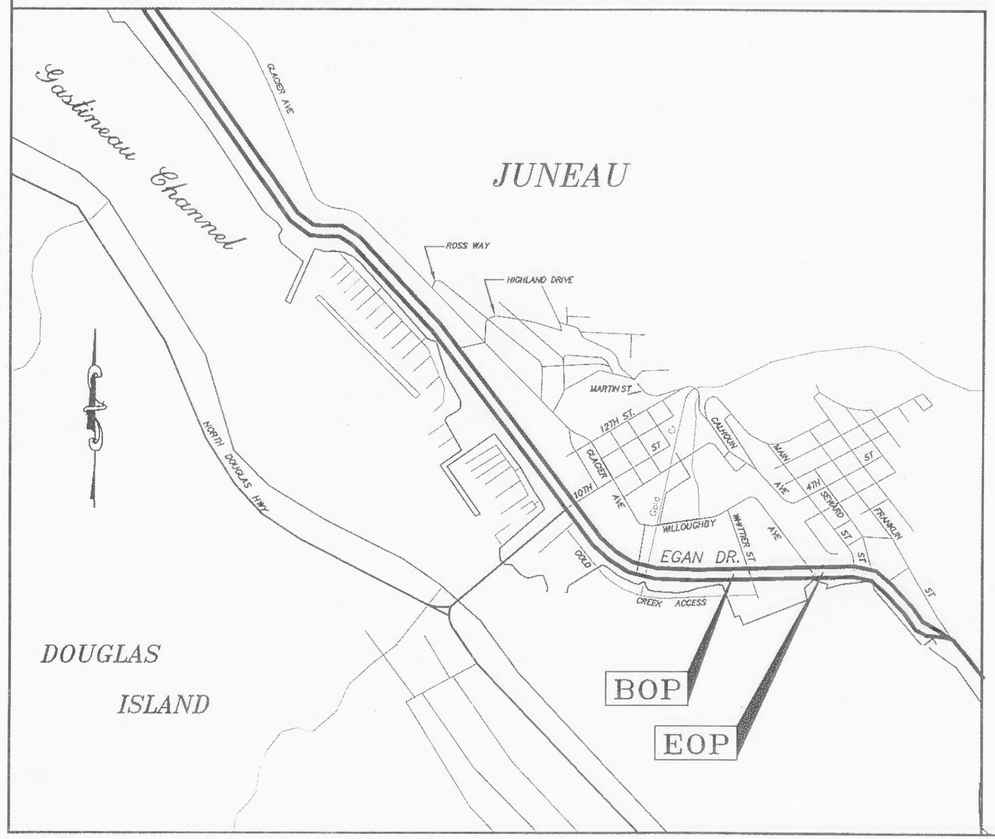
Southeast Region

Juneau, Alaska



WHITTIER AND WILLOUGHBY TRAFFIC IMPROVEMENTS

PROJECT No. 68473 ~ ACHHE-000S(594)



DESIGN DESIGNATION

A.D.T. 2007	=	14,130
A.D.T. 2027	=	21,000
D.H.V. 2027 (12.0%)	=	2520
% T	=	4.2%
V	=	30 MPH
E.A.L.	=	1,150,000

PROJECT SUMMARY

LENGTH OF PROJECT = 0.26 miles

ASBUILTS

CONTRACTOR: CHATHAM ELECTRIC, INC.
PROJECT ENGINEER: AL CULBREATH, JOHN KAJDAN, THAD HOPPER
BEGIN DATE: 4/9/09
END DATE: 7/15/09
ORIGINAL CONTRACT AMOUNT: $986,546.00

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:

A-1	L-3.10	S-23.00	T-31.00
C-03.10	L-23.01	S-30.03	T-34.01
C-04.12	L-24.00	S-31.00	T-35.00
C-05.10	L-25.00	T-20.02	T-52.15
I-20.13	S-00.10	T-21.02	
I-21.01	S-05.01	T-22.03	
I-22.01	S-20.10	T-23.00	

INDEX

SHEET NO.	DESCRIPTION
A1	TITLE SHEET
A2	SURVEY CONTROL DIAGRAM
C1	ESTIMATE OF QUANTITIES
D1-D2	SUMMARIES
F1-F2	ROADWAY PLAN
J1	DETAILS
P1-P3	SIGNING AND STRIPING
Q1-Q7	TRAFFIC SIGNAL
R1-R2	ILLUMINATION
S1-S4	TRAFFIC CONTROL PLANS

AS Built

PATH: Q:\Jnu\68473\TR\A1 Title.dwg
Tue, 11/Mar/08 10:21AM

PLOT: PSPACE OR MSPACE: 1000mm=1m(F)

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

STATE OF ALASKA 49th Carolyn H Morehouse CE-10691 REGISTERED PROFESSIONAL ENGINEER 3/10/08

APPROVED: Jack D. Beedle 3/17/08
REGIONAL PRE-CONSTRUCTION ENGINEER — DATE
JACK D. BEEDLE, P.E.

APPROVED: M A Menzies 3/17/08
DIRECTOR, SOUTHEAST REGION — DATE
MALCOLM A MENZIES, P.E., L.S.

CERTIFIED TRUE & CORRECT AS-BUILT OF ACTUAL FIELD CONDITION:

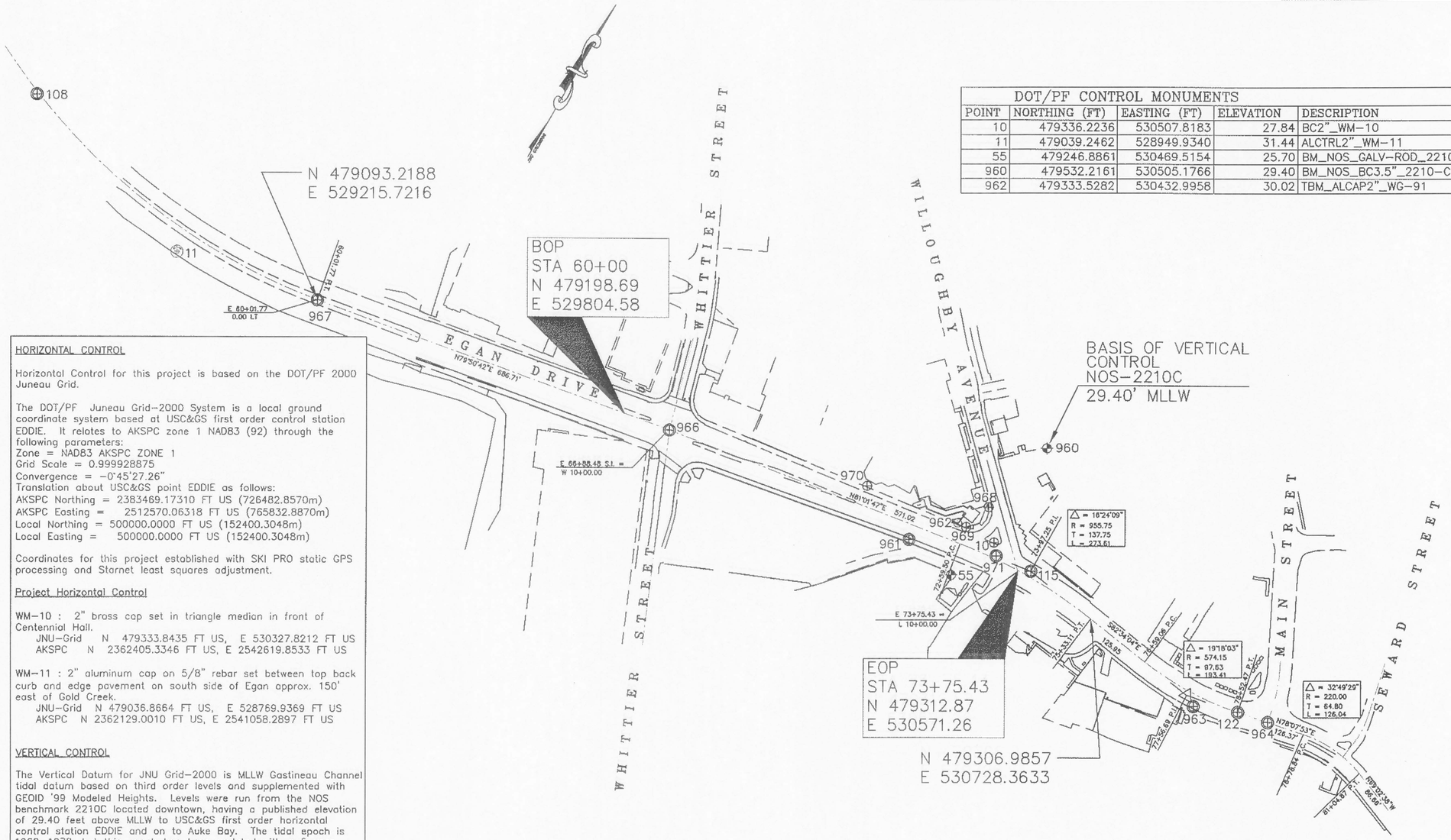
CONSTRUCTION PROJECT MANAGER — DATE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	68473 ~ ACHHE-000S(594)	2008	A-1	24

CONTROL MONUMENT NOTE:

IF ANY PAIR OF CONTROL POINTS DISAGREES FROM PUBLISHED VALUE BY MORE THAN 1:10,000 HORIZONTALLY OR VERTICALLY THEN A THIRD NETWORK POINT MUST BE TIED TO ASCERTAIN WHICH POINT IS IN ERROR OR HAS BEEN DISTURBED.

WHETHER LISTED OR NOT, ALL MONUMENTS OR PROPERTY MARKERS OR ACCESSORIES WHICH WILL BE DISTURBED OR BURIED SHALL BE REFERENCED PRIOR TO BEING DISTURBED AND RE-ESTABLISHED IN THEIR ORIGINAL POSITION AND A RECORD OF MONUMENT FORM IN ACCORDANCE WITH A.S.34.65.040 SHALL BE SUBMITTED TO THE CONSTRUCTION ENGINEER FOR REVIEW PRIOR TO RECORDING. COORDINATE VALUES LISTED ARE FOR INFORMATIONAL PURPOSES AND SHOULD BE USED TO RESET MONUMENTS ONLY AS A LAST RESORT.



HORIZONTAL CONTROL

Horizontal Control for this project is based on the DOT/PF 2000 Juneau Grid.

The DOT/PF Juneau Grid-2000 System is a local ground coordinate system based at USC&GS first order control station EDDIE. It relates to AKSPC zone 1 NAD83 (92) through the following parameters:
Zone = NAD83 AKSPC ZONE 1
Grid Scale = 0.999928875
Convergence = -0°45'27.26"
Translation about USC&GS point EDDIE as follows:
AKSPC Northing = 2383469.17310 FT US (726482.8570m)
AKSPC Easting = 2512570.06318 FT US (765832.8870m)
Local Northing = 500000.0000 FT US (152400.3048m)
Local Easting = 500000.0000 FT US (152400.3048m)

Coordinates for this project established with SKI PRO static GPS processing and Starnet least squares adjustment.

Project Horizontal Control

WM-10 : 2" brass cap set in triangle median in front of Centennial Hall.
JNU-Grid N 479333.8435 FT US, E 530327.8212 FT US
AKSPC N 2362405.3346 FT US, E 2542619.8533 FT US

WM-11 : 2" aluminum cap on 5/8" rebar set between top back curb and edge pavement on south side of Egan approx. 150' east of Gold Creek.
JNU-Grid N 479036.8664 FT US, E 528769.9369 FT US
AKSPC N 2362129.0010 FT US, E 2541058.2897 FT US

VERTICAL CONTROL

The Vertical Datum for JNU Grid-2000 is MLLW Gastineau Channel tidal datum based on third order levels and supplemented with GEOID '99 Modeled Heights. Levels were run from the NOS benchmark 2210C located downtown, having a published elevation of 29.40 feet above MLLW to USC&GS first order horizontal control station EDDIE and on to Auke Bay. The tidal epoch is 1960-1978, but this epoch has been updated with a 5 year observation period from Jan '94 to Dec '98 published Nov '99. EDDIE has an observed elevation of 26.52ft above MLLW. Ellipsoid elevation of EDDIE modified to 40.64ft to adjust GEOID'99 to our local Tidal Datum of MLLW. Geoid'99 Modeled Heights have proven better that 0.1' absolute accuracy compared with leveled values in the Juneau area.

EXISTING MONUMENTS

POINT	NORTHING (FT)	EASTING (FT)	STATION	OFFSET	DESCRIPTION
108	479157.4728	528587.1356	53+62.69	3.00 RT	CL_MON_PC
115	479324.8033	530591.7694	73+96.30	9.87 LT	CL_MON_PI
122	479298.1424	531045.6008	78+52.46	0.00 LT	CL_MON_PT
961	479262.7142	530370.4981	71+69.00	26.83 RT	CL_MON_DOH
963	479266.6684	530970.6065	77+75.15	20.76 RT	CL_MON_DOH
964	479310.0007	531101.9339	79+10.03	0.02 LT	CL_MON_DOH
966	479214.2002	529891.6172	66+88.41	0.08 RT	CL_MON_DOH
967	479093.2179	529215.7220	60+01.77	0.00 LT	CL_MON_DOH
968	479386.8786	530467.4311	72+82.18	81.00 LT	ALCAP3"_CBJ_CENT-HALL
969	479335.0956	530450.1326	72+58.94	32.25 LT	ALCAP3"_CBJ_CENT-HALL
970	479308.4344	530254.6660	70+61.71	36.39 LT	ALCAP3"_CBJ-CENT-HALL
971	479317.1597	530523.2704	73+28.05	5.60 LT	CL_MON_DOT

DOT/PF CONTROL MONUMENTS

POINT	NORTHING (FT)	EASTING (FT)	ELEVATION	DESCRIPTION
10	479336.2236	530507.8183	27.84	BC2"_WM-10
11	479039.2462	528949.9340	31.44	ALCTRL2"_WM-11
55	479246.8861	530469.5154	25.70	BM_NOS_GALV-ROD_2210-A
960	479532.2161	530505.1766	29.40	BM_NOS_BC3.5"_2210-C
962	479333.5282	530432.9958	30.02	TBM_ALCAP2"_WG-91

PATH:
Q:\Jnu\68473\TR\A2 CTRL_DIAGRAM_68253_TRAFFI
Tue, 11/Mar/08 10:05AM djfagnant
PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

WHITTIER & WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

SURVEY CONTROL DIAGRAM

DESIGNED BY: T. REED

STATE OF ALASKA
49th
TIMOTHY A. REED
LS #10613
REGISTERED PROFESSIONAL LAND SURVEYOR
3-11-08

CHECKED BY: R. MURPHY

DRAWN BY: T. REED

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

WHITTIER & WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

SURVEY CONTROL DIAGRAM

PROJECT DESIGNATION NUMBER
68473 ~ ACHHE-000S(594)

STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
A-2	24

SCALE 1" 100' AT FULL SIZE

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ESTIMATE OF QUANTITIES

ITEM NO.	PAY ITEM	PAY UNIT	QUANTITY
202 (1)	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LUMP SUM	ALL REQUIRED
202 (3)	REMOVAL OF SIDEWALK	SQUARE YARD	~~110~~ 207.17
202 (9)	REMOVAL OF CURB AND GUTTER	LINEAR FOOT	~~170~~ 186.0
301 (1)	AGGREGATE BASE COURSE, GRADING D1	TON	~~60~~ 76.95
604 (4)	ADJUST EXISTING MANHOLE	EACH	~~2~~ ~~0~~
608 (1a)	CONCRETE SIDEWALK, 4 INCHES THICK	SQUARE YARD	~~130~~ 198.0
608 (6)	CURB RAMP	EACH	~~0~~ 7
609 (2)	CURB AND GUTTER TYPE 1, STANDARD	LINEAR FOOT	~~210~~ 229.0
615 (1)	STANDARD SIGN	SQUARE FOOT	~~104.75~~ 106.64
627 (10)	ADJUSTMENT OF VALVE BOX	EACH	~~1~~ 2
640 (1)	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQUIRED
642 (3)	THREE PERSON SURVEY PARTY	HOUR	~~40~~ 27.5
643 (2)	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQUIRED
643 (3)	PERMANENT CONSTRUCTION SIGNS	LUMP SUM	ALL REQUIRED
643 (15)	FLAGGING	HOUR	~~200~~ 22.0
660 (1)	TRAFFIC SIGNAL SYSTEM, COMPLETE	LUMP SUM	ALL REQUIRED
660 (3)	HIGHWAY LIGHTING SYSTEM COMPLETE	LUMP SUM	ALL REQUIRED
660 (14)	DEMOLITION OF EXISTING LIGHTING SYSTEM	LUMP SUM	ALL REQUIRED
660 (15)	UNINTERRUPTIBLE POWER SYSTEM	LUMP SUM	ALL REQUIRED
660 (16)	SIGNAL CABINET SHOP TESTING	CONTINGENT SUM	ALL REQUIRED
660 (17)	TRAFFIC LOOP REPLACEMENT	CONTINGENT SUM	ALL REQUIRED
661 (1)	LOAD CENTER, TYPE 1	EACH	1
670 (10)	METHYL METHACRYLATE PAVEMENT MARKINGS	LUMP SUM	ALL REQUIRED
615 (5)	DELINEATOR, FLEXIBLE	EACH	4 ← NOTE: ORIGINAL BID ITEM
606 (13)	BOLLARDS C.O. #2	L.S.	ALL REQ'D
660 (1a)	RELOCATE TRAFFIC SIGNAL CABINETS C.O. #1	L.S.	ALL REQ'D
660 (16)	TRAFFIC SIGNAL UPGRADE C.O. #1	L.S.	ALL REQ'D
660 (1c)	MISC. ELECTRICAL EXTRAS C.O. #2	L.S.	ALL REQ'D
670 (13)	REMOVAL OF STRIPING C.O. #2	L.S.	ALL REQ'D

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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

ESTIMATE OF QUANTITIES

DESIGNED BY: D. Fagnant

STATE OF ALASKA
CE-10691
REGISTERED PROFESSIONAL ENGINEER
3/10/08

CHECKED BY: C. Morehouse

DRAWN BY: D. Fagnant

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING
SERVICES DIVISION

WHITTIER & WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

ESTIMATE OF QUANTITIES

PROJECT DESIGNATION NUMBER

68473 ~ ACHHE-000S(594)

STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
C-1	24

SIGNAL HEAD SUMMARY TABLE

SIGNAL HEAD NO.	POLE	PHASE	MUTCD CONFIG.	LENSE SIZE	MOUNTING TYPE	FACING
11	1	1+6	O.	12"	ASTROBRAC AS-109	EB
61	1	6	A.	12"	S-1	EB
62	1	6	A.	12"	ASTROBRAC AS-0116	EB
82	1	8	A.	12"	ASTROBRAC AS-0116	SB
12	2	1+6	M.	12"	S-2	EB
41	2	4	A.	12"	S-2	NB
42	2	4	A.	12"	ASTROBRAC AS-0116	NB
21	3	2	A.	12"	S-1	WB
22	3	2	A.	12"	ASTROBRAC AS-0116	WB
51	3	2+5	O.	12"	ASTROBRAC AS-0109	WB
52	4	2+5	M.	12"	T-2	WB
81	4	8	A.	12"	T-2	SB
48	1	4	COUNT-DOWN PED		CLAMSHELL	SB
69	1	6	COUNT-DOWN PED		CLAMSHELL	EB
28	2	2	COUNT-DOWN PED		CLAMSHELL	EB
49	2	4	COUNT-DOWN PED		CLAMSHELL	NB
29	3	2	COUNT-DOWN PED		CLAMSHELL	WB
68	4	6	COUNT-DOWN PED		CLAMSHELL	WB

NOTES:
1. SEE SHEET Q5 FOR MOUNTING TYPE AND MUTCD CONFIGURATIONS.
2. SEE 2003 MUTCD FIGURE 4D-3 FOR TYPICAL ARRANGEMENTS OF SIGNAL LENSES IN SIGNAL FACES.

CONTROLLER CABINET

NUMBER	STATION	OFFSET	REMARKS
1	~~67+58.5~~ +50	~~54.5~~ R 108 R	

UPS

NUMBER	STATION	OFFSET	REMARKS
1	~~67+63.5~~ +50	~~53.6~~ R 120 R	

TRANSFORMER

NUMBER	STATION	OFFSET	REMARKS
1	~~67+73.0~~ +50	~~54.2~~ R 126 R	TO BE INSTALLED BY UTILITY COMPANY. COORDINATE WITH ERIC ERIKSON OF AEL&P. MR ERIKSON MAY BE REACHED AT 780-2222.

NEW LUMINAIRE SUMMARY

NUMBER	STATION	OFFSET	MOUNTING HEIGHT	MAST ARM	TYPE	REMARKS
1	POLE 1		35'	18'	250W, 240V, HPS MC3, Mag Reg	ACROSS WHITTIER ST
2	POLE 1		35'	18'	250W, 240V, HPS MC3, Mag Reg	ACROSS EGAN DRIVE
3	POLE 2		35'	15'	250W, 240V, HPS MC3, Mag Reg	
4	POLE 3		35'	12'	250W, 240V, HPS MC3, Mag Reg	
5	67 + 03	137 L	35'	10'	250W, 240V, HPS MC3, Mag Reg	

EXISTING LUMINAIRE REMOVAL SUMMARY

NUMBER	STATION	OFFSET	REMARKS
1	66 + 20	44 L	CONTRACTOR SHALL REMOVE AND DISPOSE
2	67 + 10	75 L	RETURN TO DOT MAINTENANCE AT 7 MILE GLACIER HWY.
3	67 + 42	83 R	RETURN TO DOT MAINTENANCE AT 7 MILE GLACIER HWY.
4	67 + 77	44 L	RETURN TO DOT MAINTENANCE AT 7 MILE GLACIER HWY.

POLE SUMMARY

STATION	OFFSET	POLE NO.	SPECIAL FEATURES	MAST ARM LENGTH	REMARKS
67+50.6	52.3' RT.	1	COMBINATION POLE	51'	FACING EGAN
~~67+23.2~~ 26	~~51.3'~~ 53 LT.	1	COMBINATION POLE	52'	FACING WHITTIER
66+50.3	48.0' LT.	2		32'	
66+66.0	~~47.6~~ 43.0 RT.	3		47'	
		4	POST MOUNT		

NOTES:
1. THE FOUNDATION LOCATION FOR POLE #4 SHALL BE HAND DUG DUE TO PROXIMITY TO ADJACENT UNDERGROUND UTILITY VAULTS.
2. LOCATE UTILITIES PRIOR TO EXCAVATION FOR ALL SIGNAL POLE BASES.

SUMMARY OF LOAD CENTER: 1

LOAD CENTER TYPE 1

LOAD CENTER: LOCATION DATA: 67+~~68.0~~ +50, ~~53.6'~~ 116' RT
POWER SOURCE: TRANSFORMER AT 67+73.0, 54.2' RT
PHOTOELECTRIC CONTROL: YES

SERVICE VOLTAGE 1 PHASE, 3-WIRE, 120/240 VOLTS, 60 Hz.

INTERRUPTING CAPACITY OF CIRCUIT BREAKERS-SERIES RATED 10,000 AIC
PROVIDE METER SOCKET? YES SERVICE AMPS 125A

MAIN BREAKER A: 120/240 VOLT, 2 POLE, 100 AMPHERES

CONTACTOR: 600 VOLT, 12 POLE, 30 AMPHERES

LOAD PANEL A SUMMARY

CIRCUIT NUMBER	DESCRIPTION	KVA LOAD	BREAKER AMPS	BREAKER POLES
A1	TRAFFIC SIGNAL SYSTEM	5.54	20A	1
A2	FAN, LIGHT AND HEATER	1.44	15A	1
A3	LIGHTING CIRCUIT	1.2	20A	2
A4	SPACE	-	20A	2
A5	SPACE	-	30A	2
	TOTAL DEMAND LOAD:	8.18		

JUNCTION BOX TABLE

NUMBER	STATION	OFFSET	TYPE	REMARKS
01	67 + 45	49 R	2	REMOVE J-BOX
11	67 + 34	100 R	1A	
20	67 + 34	40 L	2	
21	67 + 32	46 L	2	REPLACE EXISTING WITH NEW TYPE 2 J-BOX
22	67 + 81	40 L	1A	
23	69 + 03	40 L	1A	REPLACE AND ADJUST EXISTING J-BOX
24	67 + 00	137 L	1A	
25	67 + 01	107 L	1A	
26	66 + 94	106 L	1A	
30	66 + 58	60 L	2	
40	66 + 50	47 R	2	
41	66 + 43	47 R	2	REPLACE EXISTING WITH NEW TYPE 2 J-BOX
42	66 + 10	44 R	1A	
43	64 + 83	44 R	1A	
44	63 + 90	44 R	1A	
L5	66 + 98	137 L	1A	NEW J-BOX ADJACENT TO NEW LUMINAIRE 5

NOTES:
1. UNLESS OTHERWISE SPECIFIED, LOCATIONS ARE EXISTING AND SHOWN FOR REFERENCE PURPOSES ONLY.
2. REPLACE, REMOVE, OR INSTALL JUNCTION BOXES ONLY AS NOTED IN THE REMARKS.
3. INSTALL NEW MARKER BALLS IN ALL J-BOXES NOT IN SIDEWALK OR PAVEMENT.
4. JUNCTION BOXES TO BE INSTALLED IN THE FOUNDATION OF THE CONTROLLER CABINET, LOAD CENTER AND UPS ARE NOT LISTED IN THE JUNCTION BOX TABLE. SEE STD DWGS T-35.00 AND L-24.00 FOR DETAILS.

PATH:
Q:\Jnu\68473\TR\D1-2 signal sums.dwg
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ADDENDUM NUMBER

ATTACHMENT NUMBER

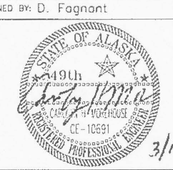
RECORD OF REVISIONS

No.	DATE	DESCRIPTION

WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

ELECTRICAL SUMMARIES

DESIGNED BY: D. Fagnant



CHECKED BY: C. Morehouse

DRAWN BY: D. Fagnant

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

WHITTIER & WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

ELECTRICAL SUMMARIES

PROJECT DESIGNATION NUMBER
68473 ~ ACHHE-000S(594)

STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
D-1	24

VIDEO DETECTOR SUMMARY

DETECTOR	PHASES	MOUNTING LOCATION	REMARKS
V2	2 & 5	ON SIGNAL POLE 3 LUMINAIRE	
V4	4	ON SIGNAL POLE 2 LUMINAIRE	
V6	1 & 6	ON SIGNAL POLE 1 LUMINAIRE, ABOVE EGAN DR	
V8	8	ON SIGNAL POLE 1 LUMINAIRE, ABOVE WHITTIER	

LOOP DETECTOR SUMMARY

DETECTOR NUMBER	DETECTOR DET NO	DETECTOR CHAN NO	EAGLE EPAC CONTROLLER CHAN	EAGLE EPAC CONTROLLER PHASE	FUNCTION TYPE	SIZE FT	REMARKS
111	1	1	VEH 1	1	PRESENCE	6 X 6	111-115 CONNECTED IN
112	1	1	VEH 1	1	PRESENCE	6 X 6	SERIES SEE. TYPICAL WIRING
113	1	1	VEH 1	1	PRESENCE	6X6	DETAIL
114	1	1	VEH 1	1	PRESENCE	BIKE	
115	1	1	VEH 1	1	PRESENCE	6 X 6	
221	1	2	AUX 2	2	EXTENSION	6 X 6	
222	1	2	AUX 2	2	EXTENSION	6 X 6	
223	1	3	VEH 2	2	EC/DC	6 X 6	223-225 CONNECTED IN
224	1	3	VEH 2	2	EC/DC	6 X 6	SERIES SEE. TYPICAL WIRING
225	1	3	VEH 2	2	EC/DC	6 X 6	DETAIL
231	1	4	AUX 2	2	EXTENSION	6 X 6	
232	1	4	AUX 2	2	EXTENSION	6 X 6	
233	2	1	VEH 2	2	EC/DC	6 X 6	233-235 CONNECTED IN
234	2	1	VEH 2	2	EC/DC	6 X 6	SERIES SEE. TYPICAL WIRING
235	2	1	VEH 2	2	EC/DC	6 X 6	DETAIL
411	2	2	VEH 4	4	PRESENCE	6 X 6	411-415 CONNECTED IN
412	2	2	VEH 4	4	PRESENCE	BIKE	SERIES SEE TYPICAL WIRING
413	2	2	VEH 4	4	PRESENCE	6 X 6	DETAIL
414	2	2	VEH 4	4	PRESENCE	6 X 6	
415	2	2	VEH 4	4	PRESENCE	6 X 6	
511	2	3	VEH 5	5	PRESENCE	6 x 6	511-515 CONNECTED IN
512	2	3	VEH 5	5	PRESENCE	6 x 6	SERIES SEE. TYPICAL WIRING
513	2	3	VEH 5	5	PRESENCE	6 X 6	DETAIL
514	2	3	VEH 5	5	PRESENCE	BIKE	
515	2	3	VEH 5	5	PRESENCE	6 X 6	
621	2	4	AUX 6	6	PRESENCE	6 x 6	
622	2	4	AUX 6	6	PRESENCE	BIKE	
623	3	1	VEH 6	6	PRESENCE	6 X 6	623-625 CONNECTED IN
624	3	1	VEH 6	6	PRESENCE	6 X 6	SERIES SEE. TYPICAL WIRING
625	3	1	VEH 6	6	PRESENCE	6 X 6	DETAIL
631	3	2	AUX 6	6	EXTENSION	6 X 6	
632	3	2	AUX 6	6	EXTENSION	6 X 6	
633	3	3	VEH 6	6	EC/DC	6 X 6	633-635 CONNECTED IN
634	3	3	VEH 6	6	EC/DC	6 X 6	SERIES SEE. TYPICAL WIRING
635	3	3	VEH 6	6	EC/DC	6 X 6	DETAIL
811	3	4	VEH 8	8	PRESENCE	6 X 6	811-815 CONNECTED IN
812	3	4	VEH 8	8	PRESENCE	BIKE	SERIES SEE. TYPICAL WIRING
813	3	4	VEH 8	8	PRESENCE	6 X 6	DETAIL
814	3	4	VEH 8	8	PRESENCE	6 X 6	
815	3	4	VEH 8	8	PRESENCE	6 X 6	

NOTES:
1. ALL LOOP CONDUIT IS ALREADY IN PLACE IN THE ROADWAY. REPLACE LOOP CONDUCTORS. LOOP LEAD IN CABLE SHALL BE INSTALLED FROM THE JUNCTION BOXES TO THE CONTROLLER CABINET.
2. EACH LOOP SHALL HAVE ITS OWN SEPARATE LEAD-IN CABLE.
3. USE 7-PAIR MULTI-CONDUCTOR LEAD-IN CABLE, ALSO KNOWN AS SNYDER CABLE AS DESCRIBED IN 740-2.05(6). EACH LOOP SHALL HAVE ITS OWN SEPARATE PAIR.
4. EC/DC: EXTEND CALL / DELAY CALL

PATH:
Q:\Jnu\68473\TR\D1-2 signal sums.dwg
Mon, 10/Mar/08 04:13PM djfagnant
PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

DETECTOR SUMMARIES

DESIGNED BY: D. Fagnant

STATE OF ALASKA
49th
CARL H. MOREHOUSE
CE-16691
REGISTERED PROFESSIONAL ENGINEER
3/10/08

CHECKED BY: C. Morehouse

DRAWN BY: D. Fagnant

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

WHITTIER & WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

DETECTOR SUMMARIES

PROJECT DESIGNATION NUMBER

68473 ~ ACHHE-000S(594)

STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
D-2	24

NOTES:

1. USE STD DWG I-20.13 FOR ISLAND CURB RAMPS AT WHITTIER-EGAN INTERSECTION.

2. USE STD DWG I-21.01 FOR CURB RAMPS AT NE, NW, AND SE CORNERS OF WILLOUGHBY-EGAN INTERSECTION.

3. USE STD DWG I-22.01 FOR CURB RAMPS AT SW CORNER OR WILLOUGHBY-EGAN INTERSECTION AND NON-ISLAND CURB RAMPS AT WHITTIER-EGAN INTERSECTION.

N

WHITTIER STREET

Subport Semaphore, Alaska Subdivision

ADL 352
(Plat 532)
Tract A
KTOO

PORTION OF LOT 1
USS 3566
ADL 54086

PROSPECTOR HOTEL

NATIONAL GUARD ARMORY

CBJ RIGHT OF WAY
ADL # 50536

STATE OF ALASKA
ADL 100882
PORTION OF LOT 1
USS 3566

PARKING LOT

P-7A

REMOVE

PORTION OF LOT 1

B.O.P

64+00 65+00 66+00 67+00 68+00 69+00

SUBPORT BUILDING

STATE OF ALASKA
ADL 100882
PORTION OF LOT 1
USS 3566

PORTION OF LOT 1
USS 3566

WHITTIER STREET

NOTE: SUBPORT BUILDING TO BE DEMOLISHED BY OTHERS FOR AN UNRELATED PROJECT. CONTACT TOM CARSON 586-4447 OF CARSON DORN FOR MORE INFORMATION. COORDINATE ALL CONSTRUCTION ACTIVITIES WITH OTHER CONTRACTORS.

PORTION OF LOT 1

PATH:
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Mon, 10/Mar/08 04:14PM dfagnant
PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)

ADDENDUM NUMBER
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WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

PLANVIEW
WHITTIER / EGAN INTERSECTION

DESIGNED BY: D. FAGNANT

STATE OF ALASKA
49TH
Carolyn L. Morehouse
CE-10691
REGISTERED PROFESSIONAL ENGINEER
3/10/08

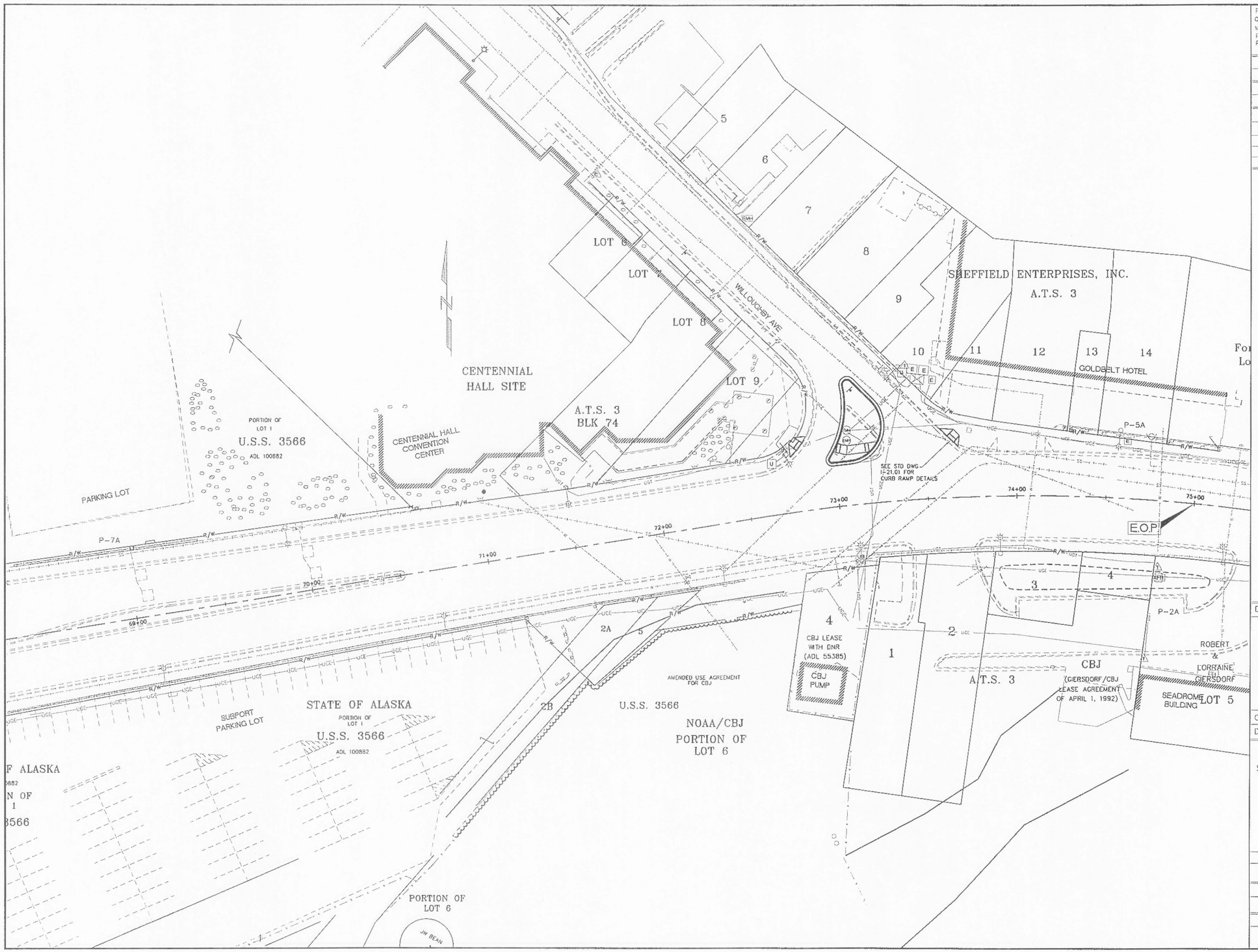
CHECKED BY: C. MOREHOUSE
DRAWN BY: D. FAGNANT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

PLANVIEW

PROJECT DESIGNATION NUMBER	
68473 ~ ACHHE-000S(594)	
STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
F-1	24



PATH:
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Mon, 10/Mar/08 04:14PM djfagnant
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TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

PLANVIEW
WILLOUGHBY / EGAN INTERSECTION

DESIGNED BY: D. FAGNANT

STATE OF ALASKA
49TH
Carolyn R. Morehouse
CE-10691
REGISTERED PROFESSIONAL ENGINEER
3/10/08

CHECKED BY: C. MOREHOUSE

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

PLANVIEW

PROJECT DESIGNATION NUMBER	
68473 ~ ACHHE-000S(594)	
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ALASKA	2008
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F-2	24

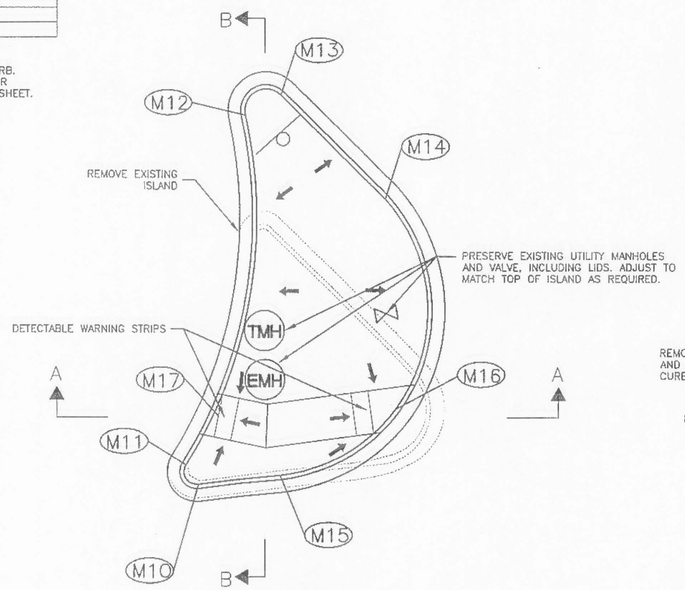
CURB LAYOUT TABLE

53.0

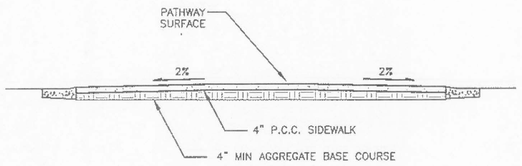
POINT	DESC.	STATION	OFFSET	ELEV.	LENGTH	RADIUS	NOTES
M10	PC	72+98.79	24.32' LT	27.27	4.62'	2'	RADIUS POINT 72+97.95, 24.84 LT
M11	PT/PC	72+97.62	26.77' LT	27.57			
M12	PT/PC	73+08.55	66.13' LT	26.84	42.87'	~~52.5'~~	RADIUS POINT 72+59.04, 61.17' LT
M13	PT	73+12.66	68.03' LT	26.89	7.71'	3'	
M14	PC	73+22.96	55.06' LT	27.06	43.85'	~~19.79'~~	RADIUS POINT 73+08.02, 43.59' LT
M15	PT	73+08.24	24.30' LT	27.33			
M16		73+22.04	30.72' LT	27.20			POINT ⊕ HC RAMP 4'
M17		73+01.92	32.00' LT	27.46			POINT ⊕ HC RAMP 4'

19+45 to 19+29

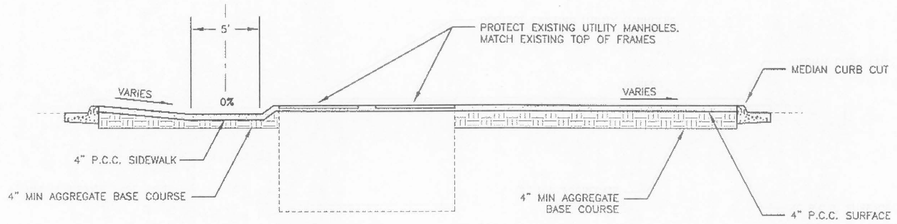
NOTES: CURB LAYOUT POINTS M10 – M15 ARE MEASURED FROM THE BACK AND TOP OF THE CURB. SEE STD DWG I-20.13 FOR CURB DETAILS. ALL CURBS ARE STNADARD CURB AND GUTTER EXCEPT FOR THE WILLOUGHBY ISLAND NOSE WHICH IS DEPRESSED AS DETAILED ON THIS SHEET.



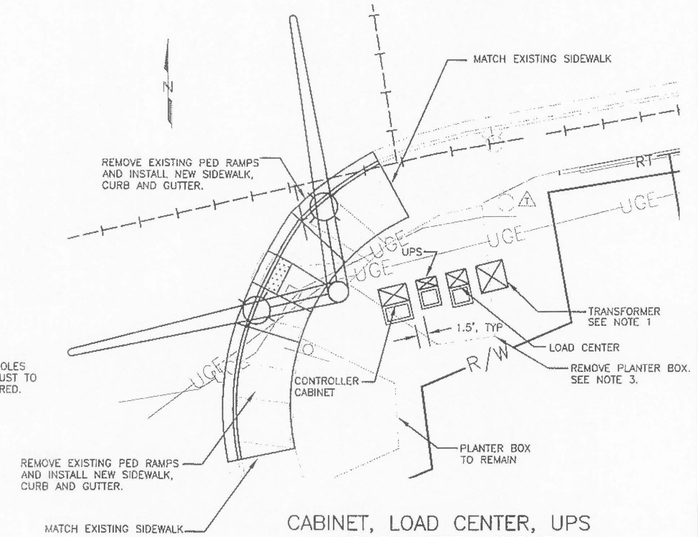
WILLOUGHBY ISLAND DETAIL



SECTION A–A



SECTION B–B



CABINET, LOAD CENTER, UPS AND PLANTER LAYOUT

NOTES

1. TRANSFORMER TO BE INSTALLED BY UTILITY COMPANY. COORDINATE WITH AEL&P FOR ALL ELECTRICAL WORK AND CONDUIT RUNS ACROSS WHITTIER STREET.

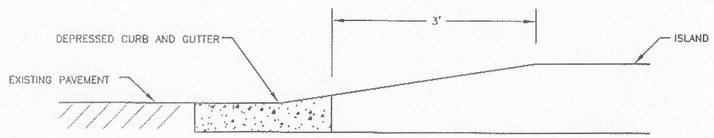
2. MAINTAIN 1.5' SEPARATION BETWEEN TRAFFIC SIGNAL POLE, CONTROLLER CABINET, UPS, AND LOAD CENTER PADS.

3. "AS-BUILT" DETAILS OF THE WHITTIER STREET PLANTER BOXES ARE AVAILABLE ONLINE AT www.dot.state.ak.us/sereg/asbuilts/assetts/jnu/71802.pdf. THE DRAWING IS ON PAGE 83 OF 83.

4. REMOVAL OF CURB RAMPS SHALL BE PAID FOR UNDER THE REMOVAL OF SIDEWALK AND REMOVAL OF CURB AND GUTTER BID ITEMS.

5. ALIGN BACK OF CONTROLLER CABINET, UPS CABINET, LOAD CENTER AND TRANSFORMER IN A STRAIGHT LINE. THIS LINE SHALL BE LOCATED APPROXIMATELY 3' FROM THE EXISTING UNDERGROUND ELECTRIC LINE BENEATH THE PLANTER.

6. THE EXACT LOCATION OF THE CONTROLLER CABINET, UPS CABINET, LOAD CENTER AND TRANSFORMER MAY BE ADJUSTED IN THE FIELD AS DIRECTED BY THE ENGINEER.



ISLAND NOSE DETAIL

PATH:
O:\jnu\68473\TR\J1 Island Dets.dwg
Thu, 13/Mar/08 11:54AM djfagnant
PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

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WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

MISCELLANEOUS DETAILS

DESIGNED BY: D. Fagnant

STATE OF ALASKA
49TH
Carolyn H. Morehouse
CE-10691
REGISTERED PROFESSIONAL ENGINEER

CHECKED BY: C. Morehouse

DRAWN BY: D. Fagnant

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

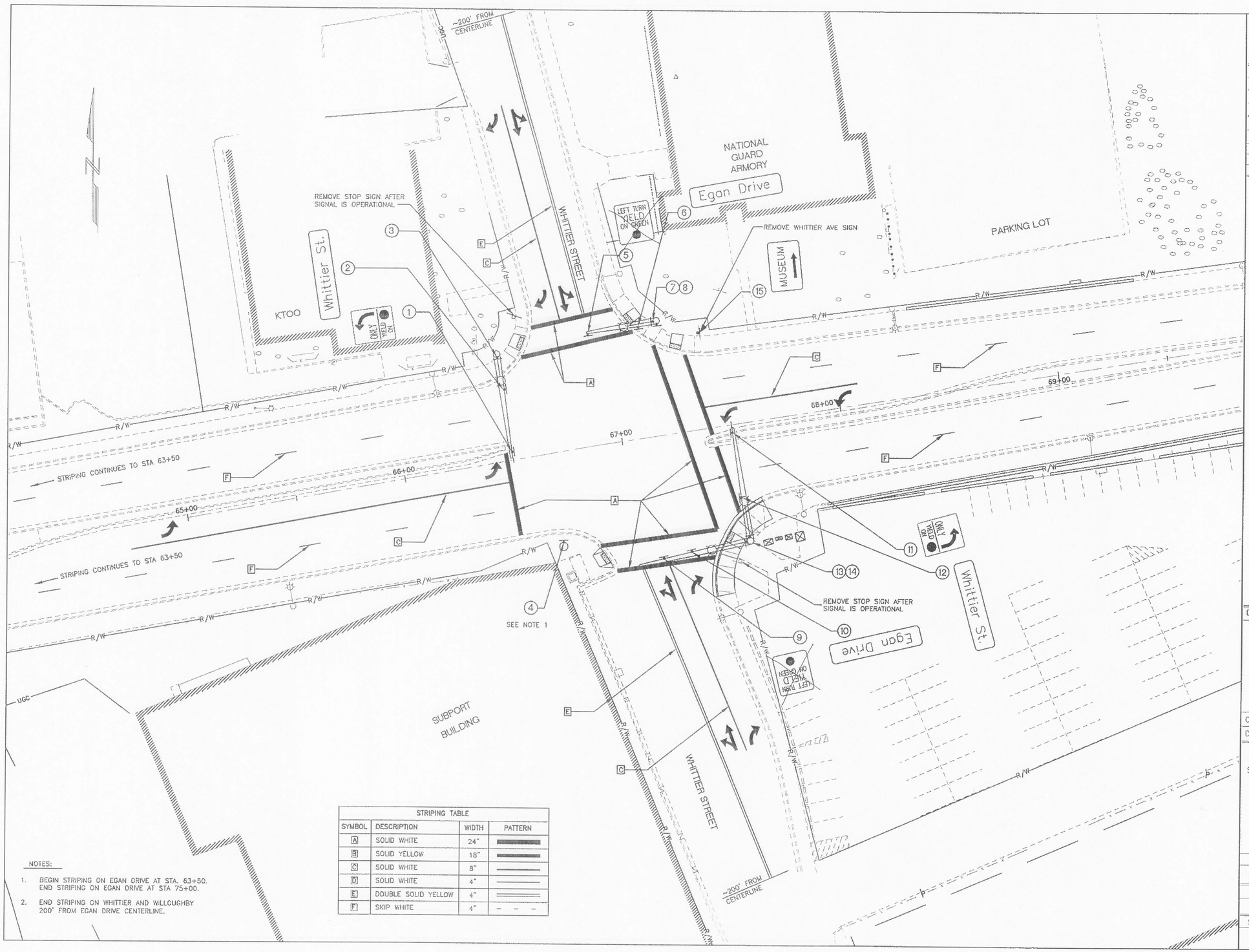
WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

MISCELLANEOUS DETAILS

PROJECT DESIGNATION NUMBER
68473 ~ ACHHE-000S(594)

STATE	YEAR
ALASKA	2008

SHEET NUMBER	TOTAL SHEETS
J-1	24



STRIPING TABLE			
SYMBOL	DESCRIPTION	WIDTH	PATTERN
A	SOLID WHITE	24"	
B	SOLID YELLOW	18"	
C	SOLID WHITE	8"	
D	SOLID WHITE	4"	
E	DOUBLE SOLID YELLOW	4"	
F	SKIP WHITE	4"	– – –

NOTES:

1. BEGIN STRIPING ON EGAN DRIVE AT STA. 63+50. END STRIPING ON EGAN DRIVE AT STA 75+00.
2. END STRIPING ON WHITTIER AND WILLOUGHBY 200' FROM EGAN DRIVE CENTERLINE.

PATH:
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Mon, 10/Mar/08 04:16PM djfagnant
PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

SIGNING & STRIPING
WHITTIER / EGAN INTERSECTION

DESIGNED BY: D. FAGNANT

STATE OF ALASKA
49TH
Carolyn H. Morehouse
CE-10691
REGISTERED PROFESSIONAL ENGINEER
3/10/08

CHECKED BY: C. MOREHOUSE

DRAWN BY: D. FAGNANT

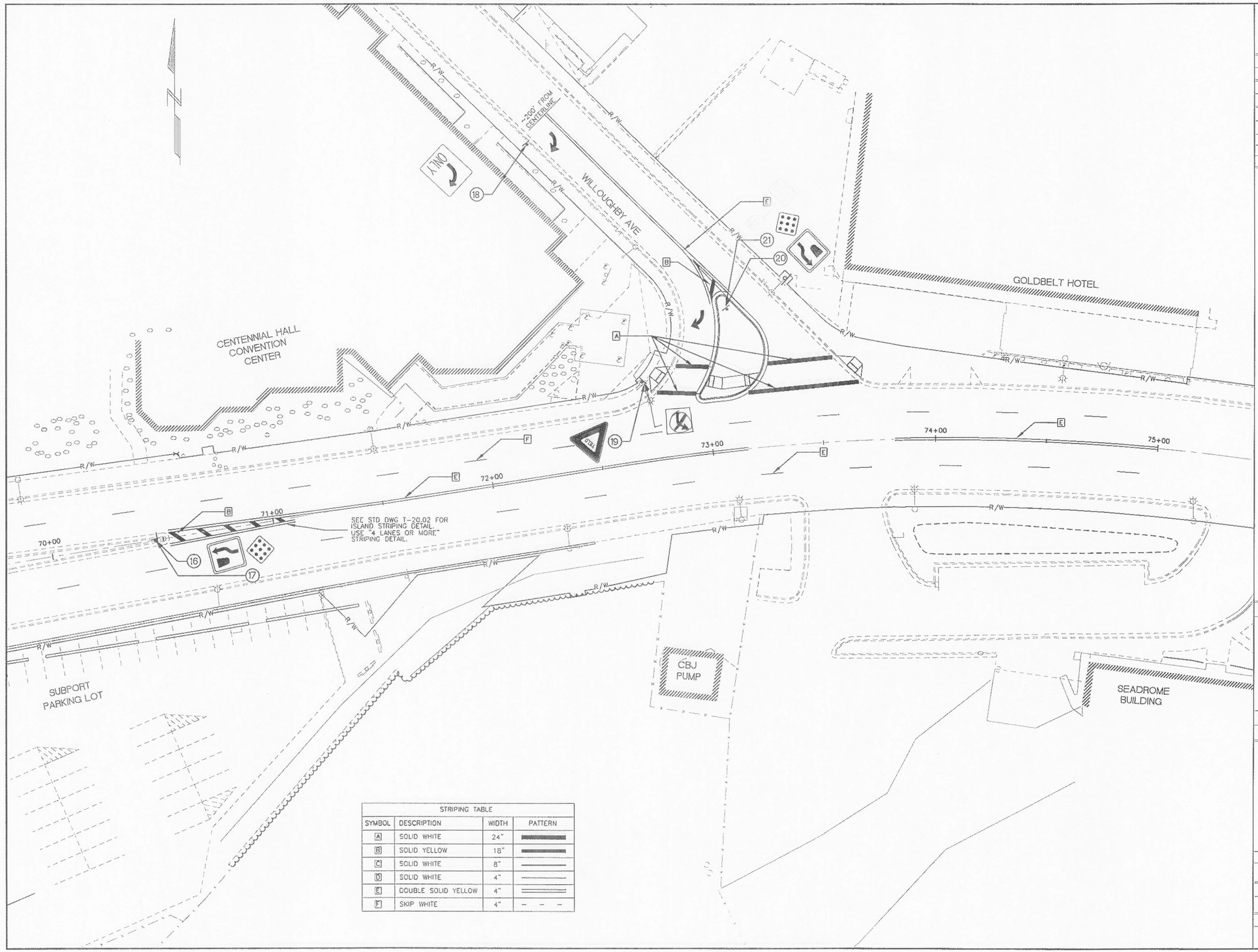
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

SIGNING AND STRIPING

PROJECT DESIGNATION NUMBER
68473 ~ ACHHE-000S(594)

STATE	YEAR
ALASKA	2008
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STRIPING TABLE			
SYMBOL	DESCRIPTION	WIDTH	PATTERN
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Mon, 10/Mar/08 04:16PM djfagnant
PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

SIGNING AND STRIPING
WILLOUGHBY / EGAN INTERSECTION

DESIGNED BY: D. FAGNANT

STATE OF ALASKA
49TH
Carolyn H. Morehouse
CE-10691
REGISTERED PROFESSIONAL ENGINEER
3/10/08

CHECKED BY: C. MOREHOUSE

DRAWN BY: D. FAGNANT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

SIGNING AND STRIPING

PROJECT DESIGNATION NUMBER	
68473 ~ ACHHE-000S(594)	
STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
P-2	24

SIGN SUMMARY

SIGN NUMBER	LEGEND	STATION	OFFSET	ASDS CODE	WIDTH (IN)	HEIGHT (IN)	AREA (SQ FT)	POST	FACING	COMMENTS
~~1~~	~~LEFT TURN ONLY, YIELD ON GREEN BALL~~	~~POLE 3~~		R10-100	30	36	7.5		WB	
2	Whittier St	POLE 3		D3-1B	78	18	9.75		WB	FONT CLEARVIEW 5W
3	ED. PLAQUE FOR PED SIGNALS (COUNTDOWN)	POLE 3		R10-3E	9	15	.94		NB	
4	ED. PLAQUE FOR PED SIGNALS (COUNTDOWN)	POLE 4		R10-3E	9	15	.94		SB	
5	LEFT TURN YIELD ON GREEN BALL	POLE 2		R10-12	30	36	7.5		NB	
6	Egan Dr	POLE 2		D3-1B	60	18	7.5		NB	FONT CLEARVIEW 5W
7	ED. PLAQUE FOR PED SIGNALS (COUNTDOWN)	POLE 2		R10-3E	9	15	.94		EB	
8	ED. PLAQUE FOR PED SIGNALS (COUNTDOWN)	POLE 2		R10-3E	9	15	.94		NB	
9	LEFT TURN YIELD ON GREEN BALL	POLE 1		R10-12	30	36	7.5		SB	
10	Egan Dr	POLE 1		D3-1B	60	18	7.5		SB	FONT CLEARVIEW 5W
~~11~~	~~LEFT TURN ONLY, YIELD ON GREEN BALL~~	~~POLE 1~~		R10-100	30	36	7.5		EB	
12	Whittier St	POLE 1		D3-1B	78	18	9.75		EB	FONT CLEARVIEW 5W
13	ED. PLAQUE FOR PED SIGNALS (COUNTDOWN)	POLE 1		R10-3E	9	15	.94		SB	
14	ED. PLAQUE FOR PED SIGNALS (COUNTDOWN)	POLE 1		R10-3E	9	15	.94		EB	
15	MUSEUM ->	67+42	43' L	I-103	24	18	3.0	2.5" PST	WB	GREEN I-103 WITH D9-301 DIRECTIONAL ARROW BELOW. USE A SINGLE SIGN.
16	KEEP RIGHT (SYMBOL)	70+47	CL	R4-7	30	36	7.5	2.5" PST	WB	
17	OBJECT MARKER	70+47	CL	OM1-1	18	18	2.25		WB	MOUNT BELOW SIGN 20
18	RIGHT TURN ONLY	72+39	148' L	R3-5R	30	36	7.5	2.5" PST	SB	
19	YIELD	72+73	36' L	R1-2	36	36	4.5	2.5" PST	SB	
20	KEEP RIGHT (SYMBOL)	73+11	65' L	R4-7	30	36	7.5	2.5" PST	SB	
21	OBJECT MARKER	73+11	65' L	OM1-1	18	18	2.25		SB	MOUNT BELOW SIGN 24
22	NO LEFT TURN SYMBOL	73+11	65' L			TOTAL	104.75 SQ FT			MOUNT BELOW SIGN #19

SIGNING NOTES:

1. SIGNS MOUNTED ON MAST ARMS SHALL USE DIAMOND GRADE SIGN SHEETING AS PER STD SPEC 615-2.01(2c)
2. SIGNS SHALL BE AT LEAST 0.125" THICKNESS ALUMINUM AS PER STD DWG S-00.10.
3. SEE STD DWG S-23.00 FOR MOUNTING DETAILS FOR SIGNS MOUNTED ON SIGNAL MAST ARMS.
4. SEE STD DWG S-30.30 DETAIL "SLEEVE TYPE SOIL EMBEDMENT" FOR SIGNS MOUNTED ON 2.5" PST.

STRIPING SUMMARY

DESCRIPTION	WIDTH	LENGTH	COMMENTS
SOLID WHITE	24"	525'	METHYL METHACRYLATE
SOLID YELLOW	18"	35'	METHYL METHACRYLATE
SOLID WHITE	8"	450'	METHYL METHACRYLATE
SOLID WHITE	4"	0'	METHYL METHACRYLATE
DOUBLE SOLID YELLOW	4"	825'	METHYL METHACRYLATE
SKIP WHITE	4"	1300'	METHYL METHACRYLATE, LENGTH INCLUDES BLANK SPACE BETWEEN MARKINGS
SINGLE DIRECTION ARROW	–	–	METHYL METHACRYLATE, 11 REQUIRED
MULTI DIRECTION ARROW	–	–	METHYL METHACRYLATE, 4 REQUIRED

STRIPING NOTES:

1. BEGIN STRIPING ON EGAN DRIVE AT STA. 63+50. END STRIPING ON EGAN DRIVE AT STA 75+00.
2. END STRIPING ON WHITTIER AND WILLOUGHBY 200' FROM EGAN DRIVE CENTERLINE.

PATH:

Mon, 10/Mar/08 04:16PM djfagnant
PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)

ADDENDUM NUMBER

ATTACHMENT NUMBER

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WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

SIGNING AND STRIPING SUMMARIES
WILLOUGHBY / EGAN INTERSECTION

DESIGNED BY: D. FAGNANT

STATE OF ALASKA 49TH
Carolyn H. Morehouse
CE-10691
REGISTERED PROFESSIONAL ENGINEER
3/10/08

CHECKED BY: C. MOREHOUSE

DRAWN BY: D. FAGNANT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING
SERVICES DIVISION

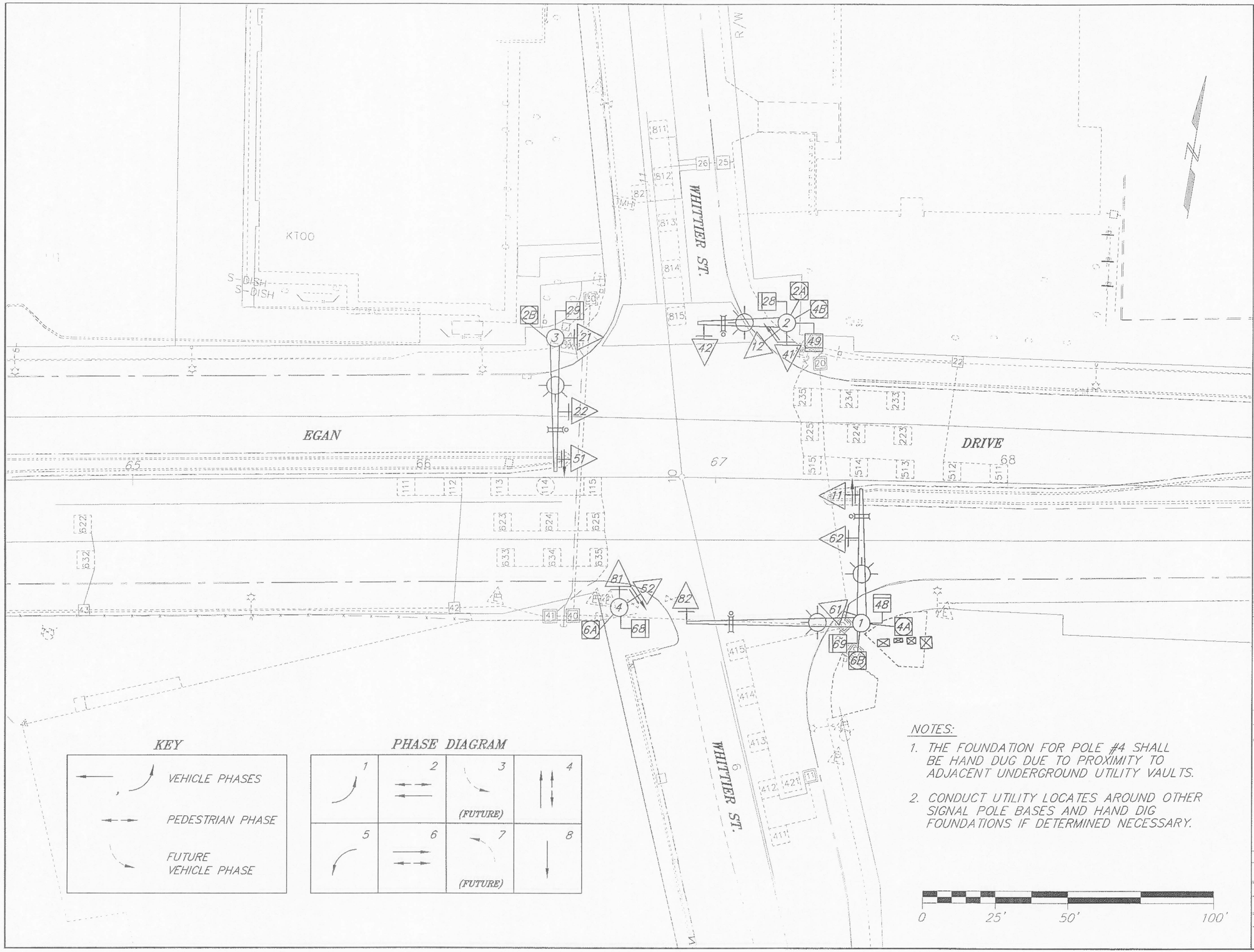
WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
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SIGNING AND
STRIPING SUMMARIES

PROJECT DESIGNATION NUMBER

68473 ~ ACHHE-000S(594)

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PATH:
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Mon, 10/Mar/08 04:17PM djfagnant
PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)

ADDENDUM NUMBER

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WHITTIER & WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

TRAFFIC SIGNAL PLANVIEW AND PHASING

DESIGNED BY: D. Fagnant

STATE OF ALASKA
CARLTON H. MOREHOUSE
CE-10691
REGISTERED PROFESSIONAL ENGINEER
3/10/08

CHECKED BY: C. Morehouse

DRAWN BY: D. Fagnant

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

WHITTIER & WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

TRAFFIC SIGNAL PHASING AND PLAN

PROJECT DESIGNATION NUMBER
68473 ~ ACHHE-000S(594)

STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
Q-1	24

PATH:
Q:\Jnu\68473\TR\02 Loop Layout.dwg
Mon, 10/Mar/08 04:18PM djfagnant
PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

0 25' 50' 100'

Tract B

KTOO

WHITTIER ST.

R/W

10.0' TYP.

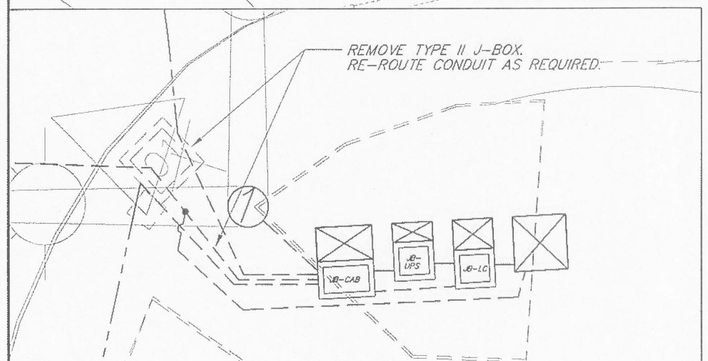
EGAN DRIVE

SEE WHITTIER ST TRENCH DETAIL

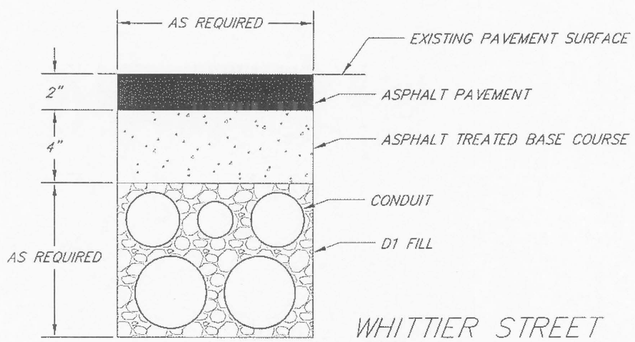
IF TRAFFIC LOOP 415 IS DAMAGED WHILE RUNNING CONDUIT ACROSS WHITTIER STREET, THE CONTRACTOR SHALL REPLACE IT AT NO COST TO THE STATE.

WHITTIER ST.

REMOVE TYPE II J-BOX.
RE-ROUTE CONDUIT AS REQUIRED.



CABINET LAYOUT



WHITTIER STREET TRENCH DETAIL

NOTE: TRENCHING, BACKFILL AND PAVING SHALL BE CONSIDERED SUBSIDIARY TO THE TRAFFIC SIGNAL COMPLETE BID ITEM.

WHITTIER & WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

TRAFFIC SIGNAL LOOP, CONDUIT AND JUNCTION BOX LAYOUT

DESIGNED BY: D. Fagnant

STATE OF ALASKA
19th
CARL D. HUNSPERGER
REGISTERED PROFESSIONAL ENGINEER
CE-10591
3/10/08

CHECKED BY: C. Morehouse

DRAWN BY: D. Fagnant

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

WHITTIER & WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

TRAFFIC SIGNAL LOOP, CONDUIT AND J-BOX LAYOUT

PROJECT DESIGNATION NUMBER
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LEGEND

- 20 — TYPE IA J-BOX
- 20 — TYPE II J-BOX
- 20 — TYPE III J-BOX
- 2" — RIGID METAL CONDUIT =DIAMETER IN INCHES
- 2" — EXISTING RMC =DIAMETER IN INCHES
- VIDEO DETECTOR
- OPTICOM DETECTOR
- 515 — LOOP DETECTOR

LOW VOLTAGE SIGNAL CONDUCTOR

1C #14:	LOOP WIRES
2C #14:	LOOP LEAD-IN
2C:	PEDESTRIAN PUSH BUTTON
7PR:	SNYDER CABLE FOR LOOP DETECTORS
3C #18	CABLE FOR VIDEO DETECTORS
3C #20:	PROPRIETARY OPTICOM CABLE

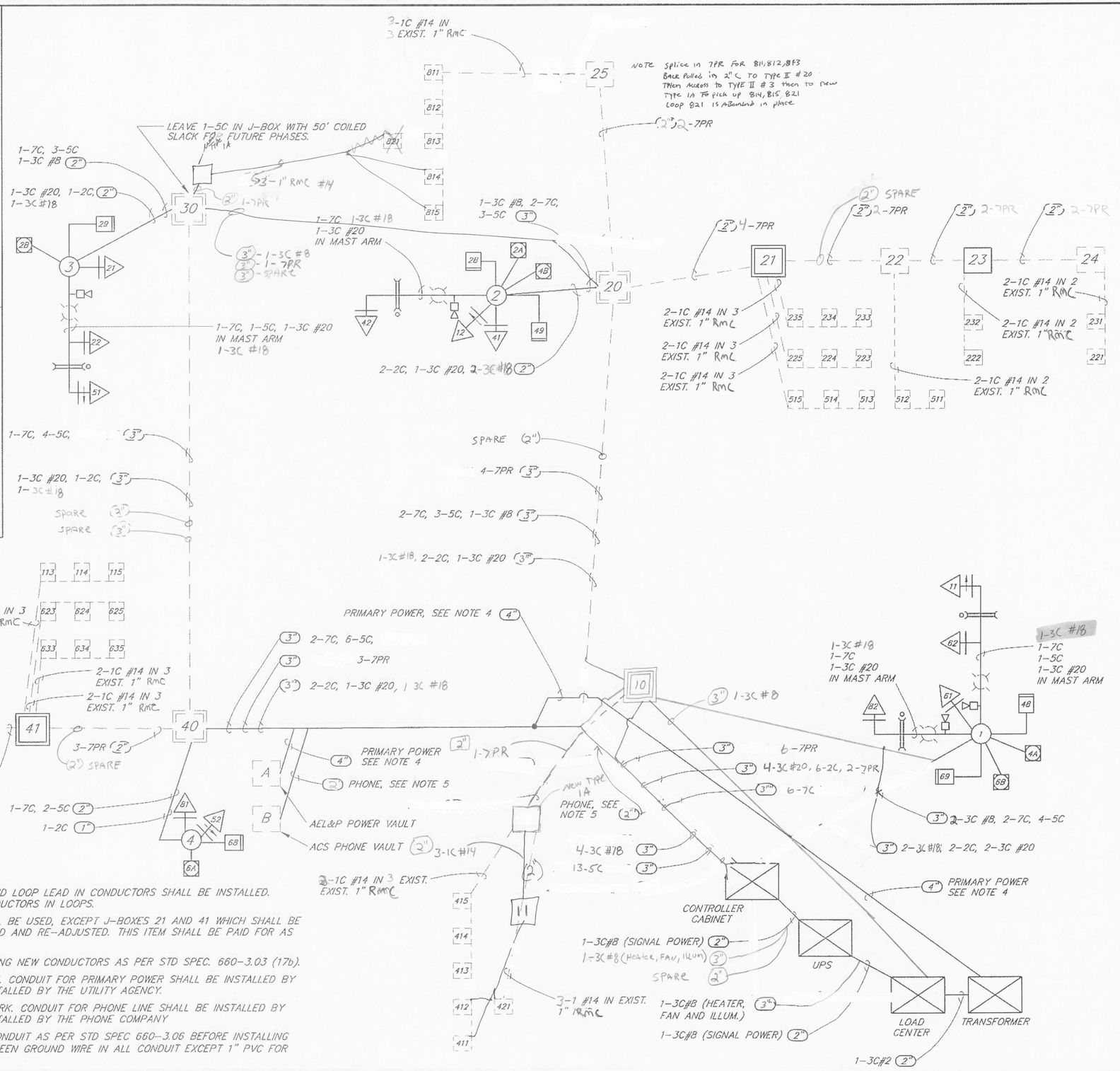
120 VOLT SIGNAL CONDUCTOR

5C:	PEDESTRIAN AND STANDARD SIGNAL HEADS
7C:	5 SECTION SIGNAL HEADS

LIGHTING AND POWER CONDUCTOR

3C#X: LIGHTING OR SIGNAL POWER

THE NUMBER PRECEEDING THE CABLE DESIGNATION INDICATED THE NUMBER OF CABLES TO BE INSTALLED.



WIRING NOTES

1. ALL DETECTOR LOOPS ARE IN PLACE. LOOP AND LOOP LEAD IN CONDUCTORS SHALL BE INSTALLED. REMOVE AND DISPOSE OF EXISTING LOOP CONDUCTORS IN LOOPS.
2. ALL JUNCTION BOXES ARE EXISTING AND SHALL BE USED, EXCEPT J-BOXES 21 AND 41 WHICH SHALL BE REPLACED AND 23 WHICH SHALL BE REPLACED AND RE-ADJUSTED. THIS ITEM SHALL BE PAID FOR AS PART OF THE SIGNAL SYSTEM.
3. CLEAN ALL EXISTING CONDUIT BEFORE INSTALLING NEW CONDUCTORS AS PER STD SPEC. 660-3.03 (17b).
4. CONTACT AEL&P TO COORDINATE UTILITY WORK. CONDUIT FOR PRIMARY POWER SHALL BE INSTALLED BY THE CONTRACTOR. CONDUCTORS SHALL BE INSTALLED BY THE UTILITY AGENCY.
5. CONTACT ACS TO COORDINATE PHONE LINE WORK. CONDUIT FOR PHONE LINE SHALL BE INSTALLED BY THE CONTRACTOR. CONDUCTORS SHALL BE INSTALLED BY THE PHONE COMPANY
6. INSTALL NEW GROUNDING BUSHINGS ON ALL CONDUIT AS PER STD SPEC 660-3.06 BEFORE INSTALLING CONDUCTORS. INSTALL #8 INSULATED XHHW GREEN GROUND WIRE IN ALL CONDUIT EXCEPT 1" PVC FOR LOOPS.

PATH:
Q:\Jnu\68473\TR\Q3 Wiring Diagram.dwg
Mon, 10/Mar/08 04:19PM djfagnant
PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)

ADDENDUM NUMBER
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

WIRING DIAGRAM SCHEMATIC

DESIGNED BY: D. Fagnant

STATE OF ALASKA — CHRISTOPHER M. MOREHOUSE — CE-10891 — REGISTERED PROFESSIONAL ENGINEER — 19th — 3/10/08

CHECKED BY: C. Morehouse

DRAWN BY: D. Fagnant

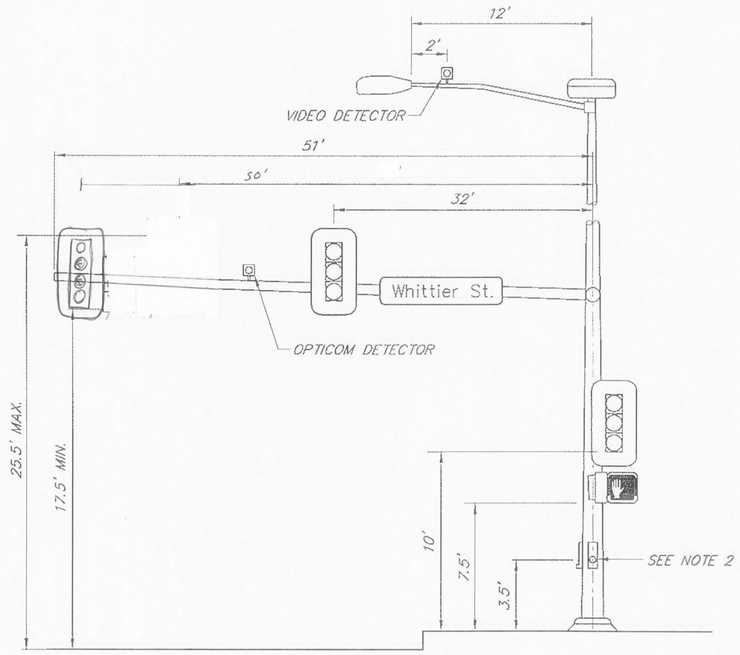
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

WHITTIER & WILLOUGHBY TRAFFIC IMPROVEMENTS PROJECT NO. 68473

WIRING DIAGRAM SCHEMATIC

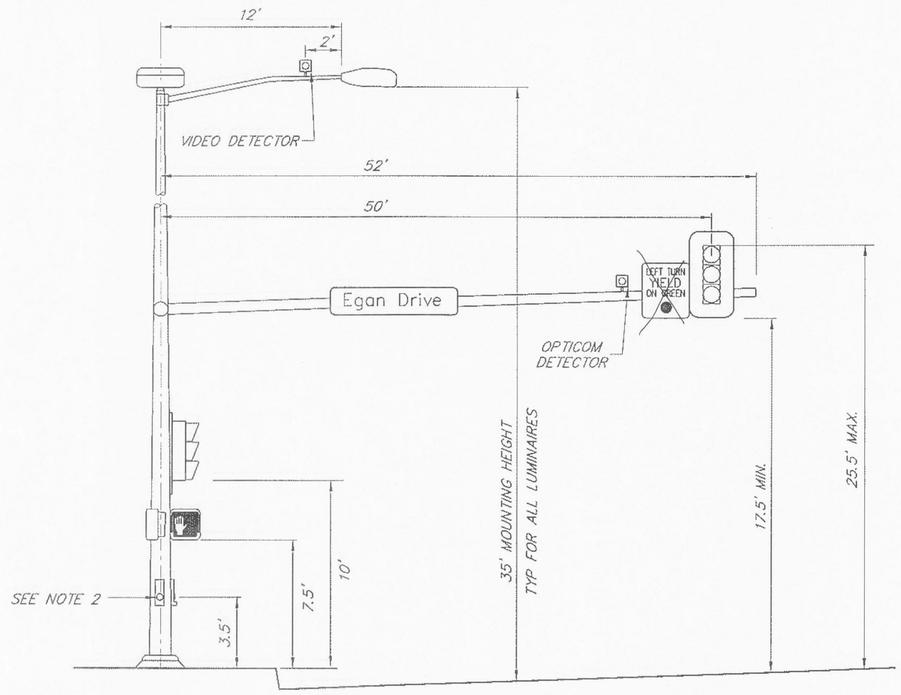
PROJECT DESIGNATION NUMBER
68473 ~ ACHHE-000S(594)

STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
Q-3	24



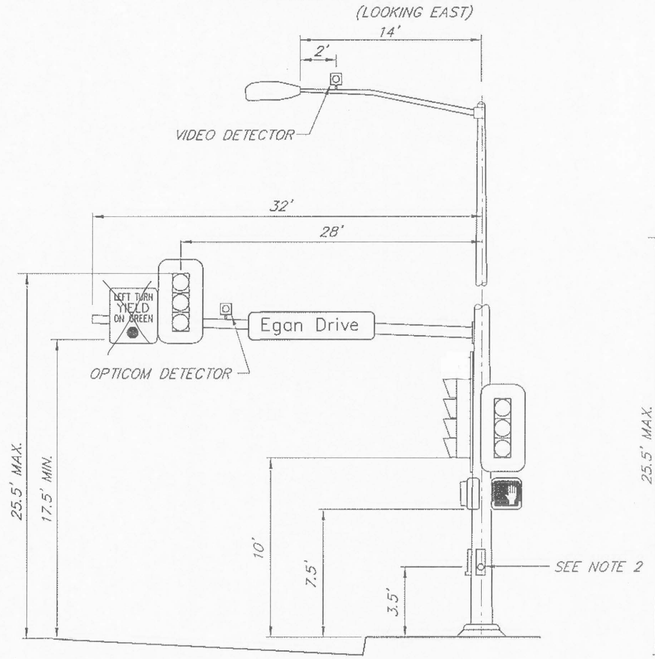
SIGNAL POLE NO. 1 DETAIL

(LOOKING EAST)



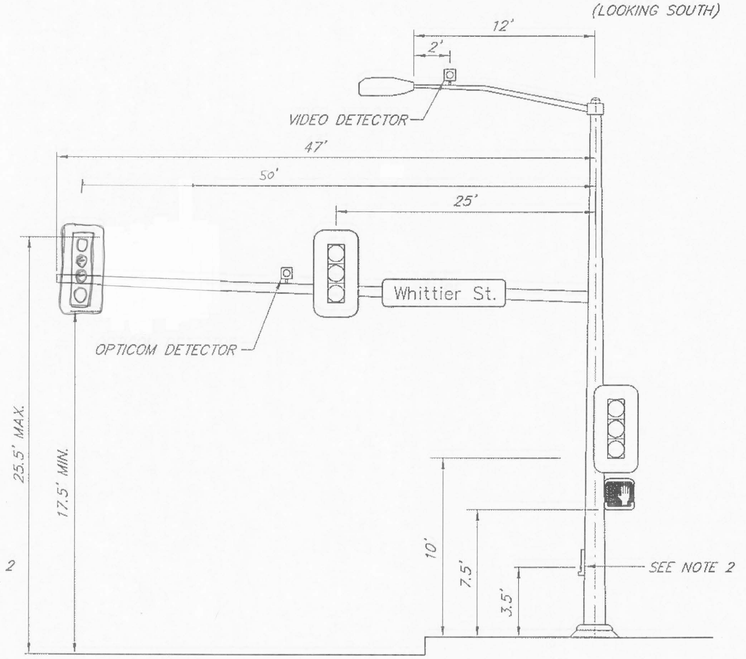
SIGNAL POLE NO. 1 DETAIL

(LOOKING SOUTH)



SIGNAL POLE NO. 2 DETAIL

(LOOKING NORTH)

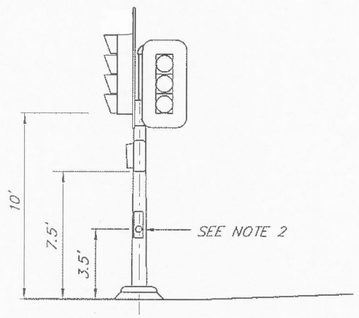


SIGNAL POLE NO. 3 DETAIL

(LOOKING WEST)

SIGNAL POLE NOTES:

1. SIGNAL POLES, MAST ARMS AND LUMINAIRES SHALL BE DESIGNED FOR 100 MPH WIND SPEED AND STAMPED BY A REGISTERED ENGINEER.
2. THE 3.5' DIMENSION IS TO THE CENTER OF THE PUSH BUTTON.
3. USE 3' DIAMETER FOUNDATIONS FOR POLES 1–3 AS DETAILED IN STD. DRAWING T–52.15. USE CIDH FOUNDATION DETAIL.
4. USE 2' DIAMETER FOUNDATION AS DETAILED IN STD DWG T–31.00, SIGNAL BASE POST TYPE "A" FOR POLE 4 FOUNDATION.
5. THE CONTRACTOR MAY SUBMIT AN ALTERNATE PILE OR OTHER TYPE OF FOUNDATION FOR ANY OR ALL SIGNAL POLES, SUBJECT TO DOT APPROVAL.



SIGNAL POLE NO. 4 DETAIL

(LOOKING SOUTH)

PATH:
O:\Jnu\68473\TR\Q4 signal pole dets.dwg
Mon, 10/Mar/08 04:20PM djfagnant
PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

SIGNAL POLE DETAILS

DESIGNED BY: D. Fagnant

STATE OF ALASKA
CHRISTOPHER J. MOREHOUSE
CE-8737
PROFESSIONAL ENGINEER
3/10/08

CHECKED BY: C. Morehouse

DRAWN BY: D. Fagnant

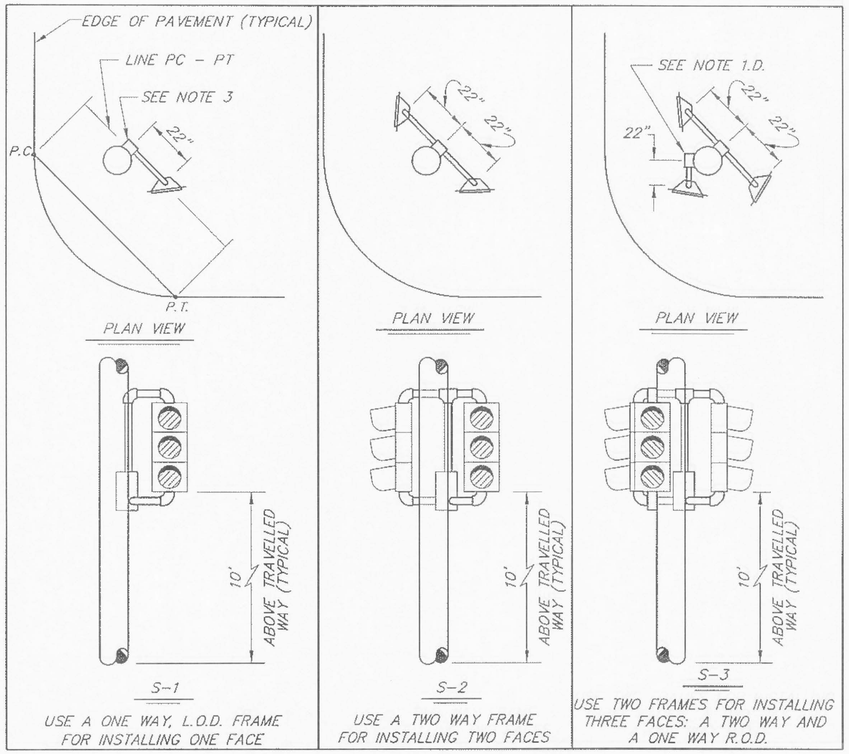
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

SIGNAL POLE DETAILS

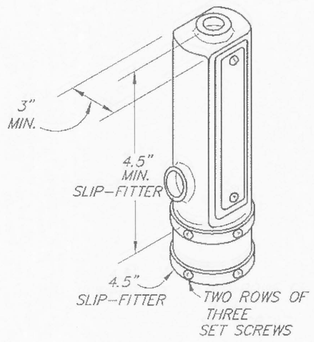
PROJECT DESIGNATION NUMBER
68473 -- ACHHE-000S(594)

STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
Q-4	24



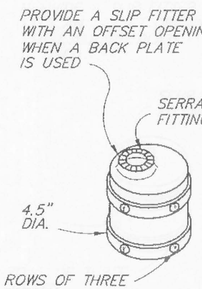
SIDE MOUNTED SIGNAL FRAMES WITH VEHICULAR SIGNALS

(SHOWN WITHOUT BACKPLATES)



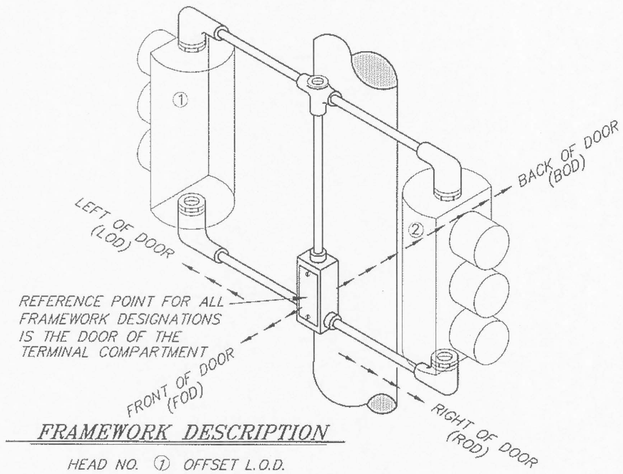
TERMINAL COMPARTMENT (WITH SLIP FITTER)

(SEE NOTES 1.C. AND 2)



SLIP FITTER

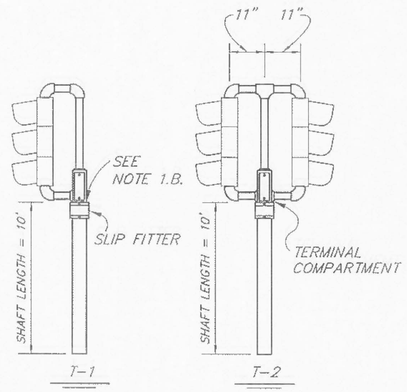
(SEE NOTE 1.B.)



FRAMEWORK DESCRIPTION

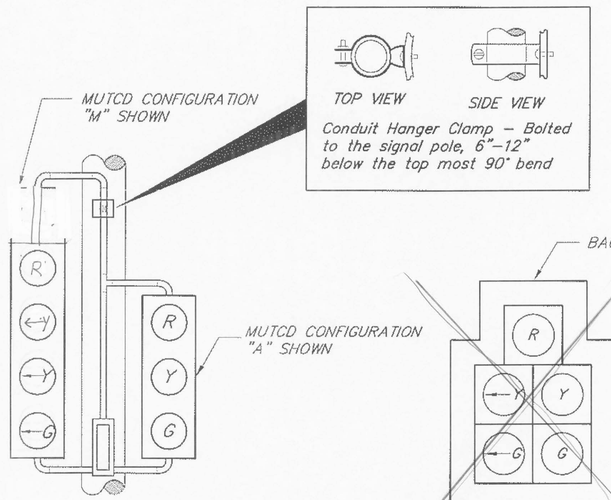
HEAD NO. ① OFFSET L.O.D.
HEAD NO. ② OFFSET R.O.D.

1. INSTALL THE SIGNAL FACES SHOWN IN THE PLANS AS DETAILED ON THIS SHEET.
   - A. USE SLIP FITTERS TO INSTALL PEDESTRIAN SIGNALS ON THE TOP OF POSTS.
   - B. USE SIGNAL FRAMES TO INSTALL SIGNAL FACES ON THE SIDES OF POLES. AND ON THE TOPS OF POSTS.
   - C. USE A SECOND SIGNAL FRAME TO INSTALL THE THIRD FACE WHEN THREE SIDE MOUNTED SIGNAL FACES ARE SHOWN.
   - D. USE CLAMSHELL BRACKETS TO INSTALL ALL PEDESTRIAN SIGNALS.
2. FURNISH ALL SIGNAL FRAMES WITH TERMINAL COMPARTMENTS.
3. FIELD DRILL THE HOLES NEEDED FOR ATTACHING ALL SIGNAL HARDWARE. USE HOLE SAWS WHEN DRILL BITS ARE NOT AVAILABLE. TREAT THE BARE STEEL SURFACES IN ACCORDANCE WITH SECTION 716-2.07, GALVANIZING, OF THE STANDARD SPECIFICATIONS. USE GROMMETS WHEREVER CONDUCTORS PENETRATE THE MAST ARM.
4. PROVIDE LOUVERED BACK PLATES SIZED FOR THE NUMBER OF SIGNAL SECTIONS AND MOUNTING TYPE, SO THAT NO LIGHT IS VISIBLE BETWEEN THE BACK PLATE AND THE SIGNAL FACE. FURNISH BACK PLATES FOR DOGHOUSE STYLE SIGNALS THAT FEATURE NOTCHED UPPER CORNERS.
5. ATTACH ALL BACK PLATES USING 0.18" DIAMETER LARGE FLANGE STAINLESS STEEL RIVETS WITH A GRIP RANGE OF 0.37"-0.50".
6. SEE SHEET D1 FOR INDIVIDUAL SIGNAL HEAD MOUNTING CONFIGURATIONS.



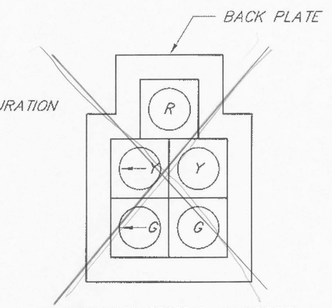
POST MOUNTED SIGNALS

(SHOWN WITHOUT BACKPLATE)



TYPICAL POST MOUNTING OF TWO UNEQUAL SIZE SIGNAL HEADS

(SHOWN WITHOUT BACKPLATE)



5-SECTION SIGNAL CLUSTER HEAD CONFIGURATION

(MUTCD CONFIGURATION "O")

PATH:
Q:\Jnu\68473\TR\Q5 Signal Hardware.dwg
Mon, 10/Mar/08 04:21PM djfagnant
PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)

ADDENDUM NUMBER

ATTACHMENT NUMBER

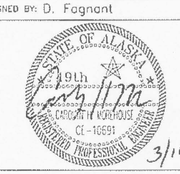
RECORD OF REVISIONS

No.	DATE	DESCRIPTION

WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

TRAFFIC SIGNAL HARDWARE DETAILS

DESIGNED BY: D. Fagnant



CHECKED BY: C. Morehouse

DRAWN BY: D. Fagnant

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

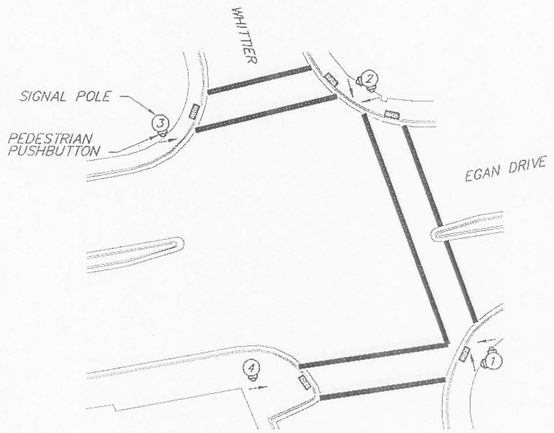
WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

TRAFFIC SIGNAL HARDWARE DETAILS

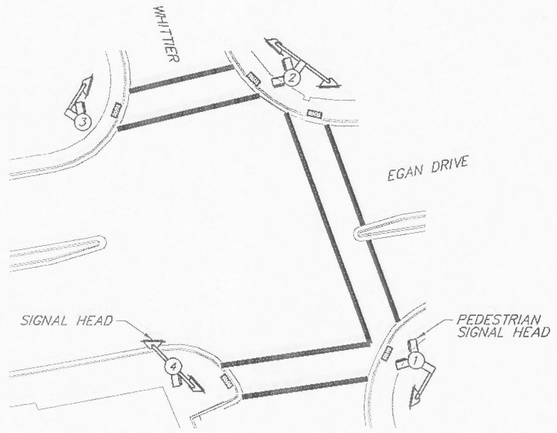
PROJECT DESIGNATION NUMBER

68473 ~ ACHHE-000S(594)

STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
Q-5	24



PEDESTRIAN PUSHBUTTON LAYOUT

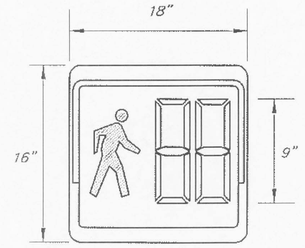


TRAFFIC SIGNAL HEAD LAYOUT

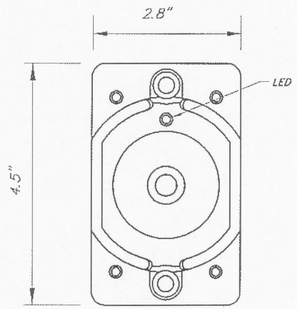
NOTES: THE TRAFFIC SIGNAL HEAD LAYOUT DETAIL ONLY APPLIES TO SIGNAL HEADS MOUNTED TO THE SHAFT OF THE TRAFFIC SIGNAL POLES. FOR MAST ARM MOUNTED SIGNAL DETAILS, SEE SHEET Q-4.

BEEPER TO SOUND SIMULTANEOUSLY WITH LED FLASH

USE POLARA BULLDOG PUSHBUTTON OR ENGINEER APPROVED EQUAL



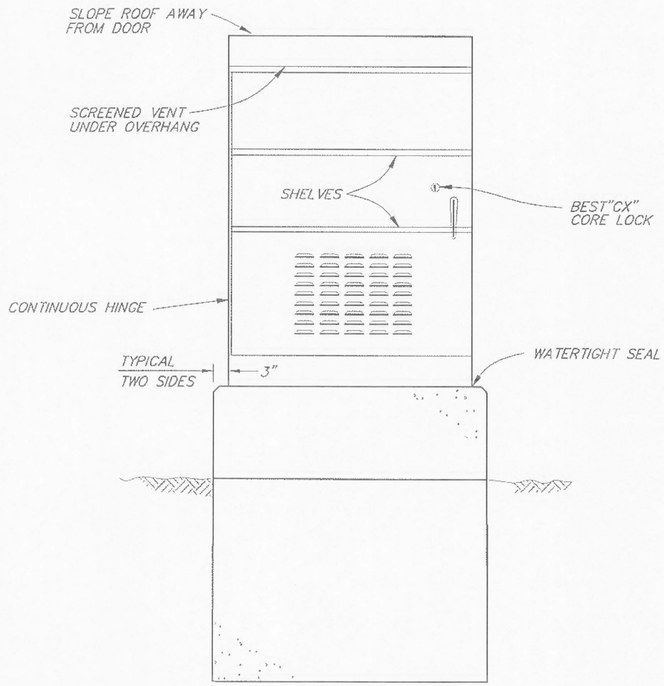
COUNTDOWN PED SIGNAL



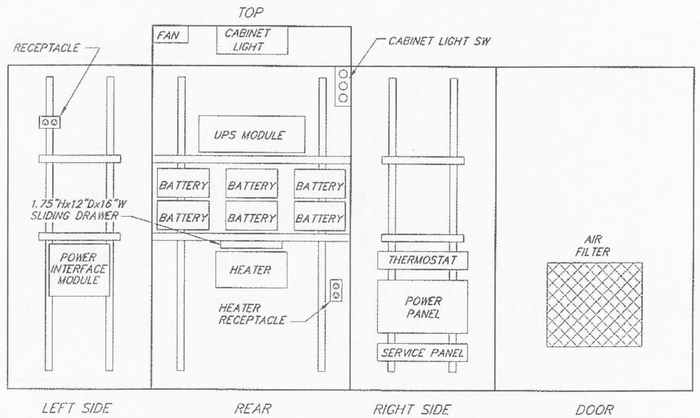
PED PUSH BUTTON

PEDESTRIAN HARDWARE

ABOVE EACH PEDESTRIAN PUSH BUTTON, INSTALL A R10-4B (LEFT OR RIGHT, AS APPROPRIATE) SIGN.



SIGNAL CABINET ELEVATION



UPS CABINET LAYOUT

PATH:
Q:\Jnu\68473\TR\Q6 Cab Layout and Peds.dw
Thu, 13/Mar/08 11:52AM djfagnant
PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

MISCELLANEOUS SIGNAL DETAILS

DESIGNED BY: D. Fagnant

STATE OF ALASKA
49th
CARL W. M. MOREHOUSE
CE-10691
REGISTERED PROFESSIONAL ENGINEER
3/10/08

CHECKED BY: C. Morehouse

DRAWN BY: D. Fagnant

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

MISCELLANEOUS SIGNAL DETAILS

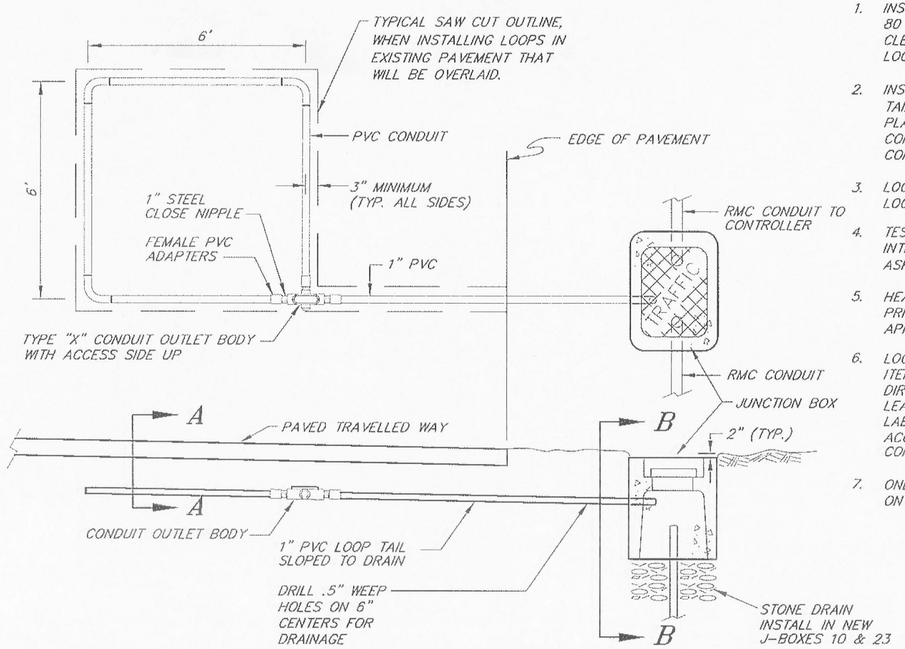
PROJECT DESIGNATION NUMBER
68473 ~ ACHHE-000S(594)

STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
Q-6	24

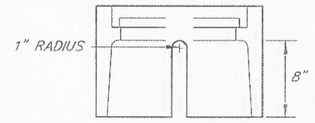
TRAFFIC LOOP WORK SUMMARY

REMOVE CONDUCTORS IN EXISTING LOOPS AND INSTALL LOOP WIRING PER SPECS AND DETAILS ON THIS SHEET.

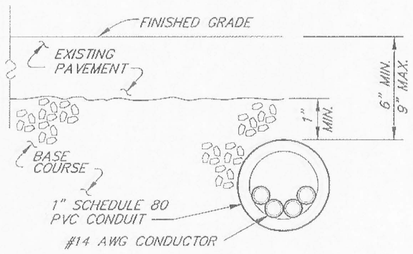
IF EXISTING LOOPS ARE DAMAGED AND SOUTHEAST REGIONAL MAINTENANCE ELECTRICIAN DETERMINES THAT CONDUCTORS CANNOT BE INSTALLED IN EXISTING LOOPS, INSTALL NEW TRAFFIC LOOPS PER SPECS AND DETAILS ON THIS SHEET. THIS SHALL BE PAID FOR BY CONTINGENY ITEM 660 (17).



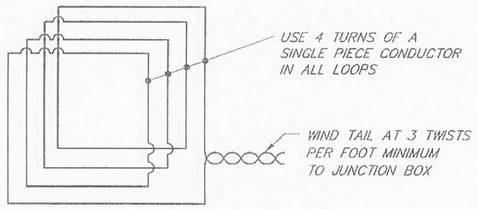
SHOULDER SECTION



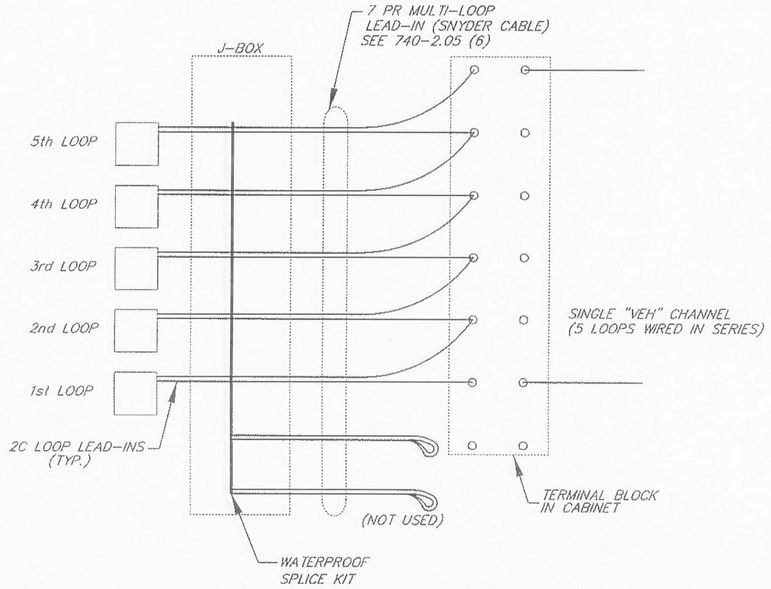
VIEW B-B



SECTION A-A



LOOP WIRING DETAIL
TYPICAL PVC CONDUIT ENCASED LOOP DETECTOR INSTALLATION



TYPICAL LOOP LEAD-INS

NOTES

1. INSTALL A SINGLE #14 AWG CONDUCTOR IN EXISTING 1" SCHEDULE 80 PVC CONDUIT. REMOVE EXISTING CONDUCTORS IN LOOPS AND CLEAN PER STD SPEC. 660-3.03 (17B) BEFORE INSTALLING NEW LOOP CONDUCTORS.
2. INSTALL 4 TURNS OF CONDUCTOR IN ALL LOOPS AND PROVIDE TAILS THAT EXTEND TO THE JUNCTION BOX SPECIFIED ON THE PLANS. USE #14 AWG CONDUCTOR IN A POLYETHYLENE TUBE CONFORMING TO IMSA SPECIFICATION 51-5. WIND THE TAIL CONDUCTORS TOGETHER AT A RATE OF 3 TWISTS PER FOOT.
3. LOCATE CONDUIT OUTLETS IN THE ROADWAY TO ACCESS EXISTING LOOPS FOR LOOP CONDUCTOR REPLACEMENT.
4. TEST ALL LOOP DETECTORS FOR CONTINUITY AND INSULATION INTEGRITY PRIOR TO SEALING THE CONDUIT OUTLET UNDER ASPHALT.
5. HEAT AND TACK COAT THE EDGES OF EXISTING PAVEMENT PRIOR TO PAVING THE CUTOUTS. THE ASPHALT MIX SHALL BE APPROVED FOR USE BY THE ENGINEER.
6. LOOP CONDUCTORS ARE CONSIDERED PART OF THE TRAFFIC SIGNAL ITEM AND WILL NOT BE MEASURED SEPARATELY OR PAID FOR DIRECTLY. THIS WORK INCLUDES BUT IS NOT LIMITED TO: LOOP WIRE, LEAD IN CABLES, TESTING, SPLICING, JUNCTION BOXES, CONDUIT LABELING AND ANY SAWCUT AND PATCH WORK REQUIRED TO ACCESS LOOPS AND RESTORE THE PAVEMENT TO ITS ORIGINAL CONDITION.
7. ONLY ONE LANE IN EACH DIRECTION MAY BE CLOSED AT A TIME ON EGAN DRIVE. SEE SHEET S-2 FOR LANE CLOSURE DETAILS.

PATH:
Q:\Jnu\68473\TR\Q7 Det Dets.dwg
Mon, 10/Mar/08 04:22PM djfagnant
PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

LOOP DETECTOR DETAILS

DESIGNED BY: D. Fagnant

STATE OF ALASKA
Carolyn Morehouse
CE-10591
REGISTERED PROFESSIONAL ENGINEER
3/10/08

CHECKED BY: C. Morehouse
DRAWN BY: D. Fagnant

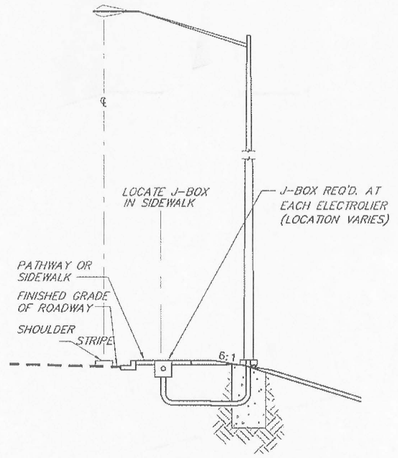
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

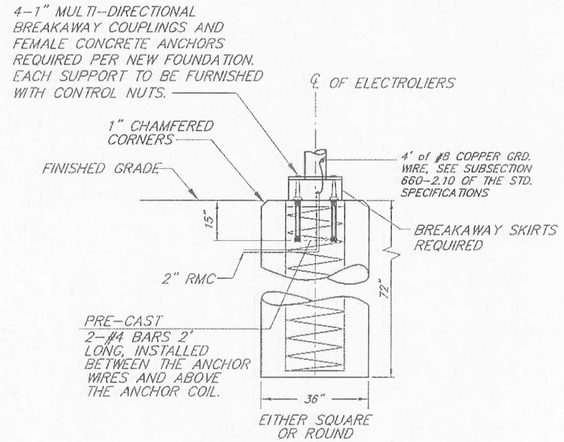
LOOP DETECTOR DETAILS

PROJECT DESIGNATION NUMBER
68473 ~ ACHHE-000S(594)

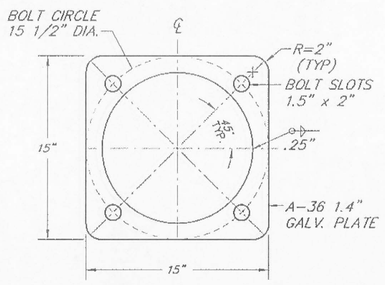
STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
Q-7	24



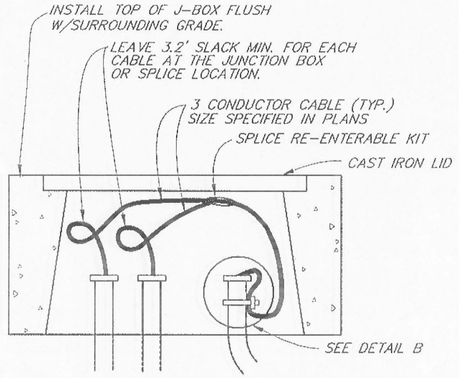
TYPICAL SECTION FOR ELECTROLIER



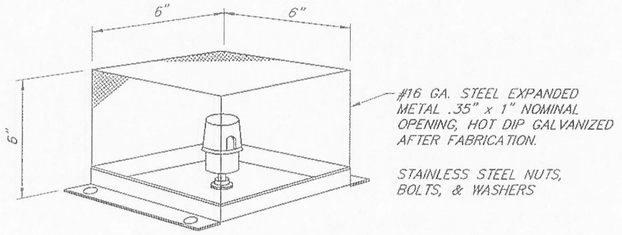
FOUNDATION WITH BREAKAWAY COUPLINGS



ANCHOR BASE DETAIL



DETAIL A



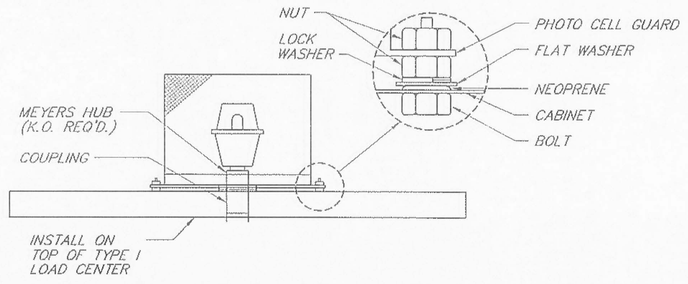
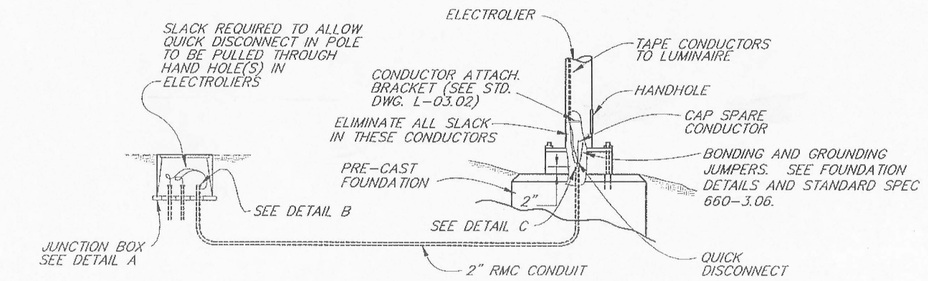
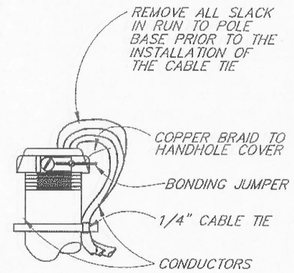


PHOTO CELL GUARD



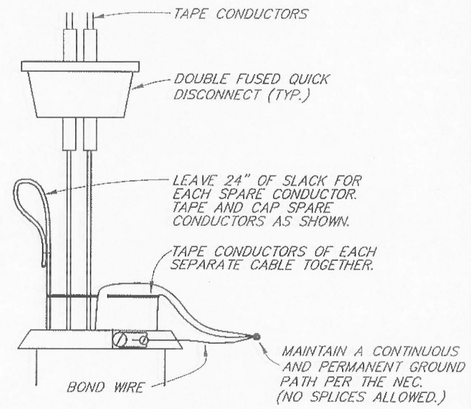
LIGHTING SYSTEM POLE AND J-BOX WIRING DETAILS

(BREAKAWAY COUPLINGS)



DETAIL B

(IN J-BOX)



DETAIL C

(IN POLE BASE)

ILLUMINATION GENERAL NOTES:

1. LUMINAIRE 5 SHALL HAVE A J-BOX INSTALLED ADJACENT TO THE ELECTROLIER FOUNDATION AS SHOWN IN THE ILLUMINATION PLANVIEW.

2. THE ELECTROLIER FOUNDATIONS SHALL BE PRE-CAST. PRE-CAST FOUNDATIONS SHALL BE LIFTED AND TRANSPORTED USING A DEVICE THAT DISTRIBUTES THE LOAD EVENLY BETWEEN THE ANCHOR BOLTS.

3. ILLUMINATION CIRCUIT WIRES SHALL BE NO. 8 AWG. 3-CONDUCTOR CABLE AS SPECIFIED IN STANDARD SPECIFICATION 660.

4. NON-BREAKAWAY PORTIONS OF FOUNDATIONS SHALL NOT PROTRUDE MORE THAN 4" ABOVE ANY 5' CHORD STARTING AND ENDING ON THE FINISHED GRADE OF THE ELECTROLIER PADS.

5. ALL LUMINAIRES SHALL BE 250 WATT MEDIUM CUTTOFF, TYPE III HPS. A MAGNETIC REGULATOR BALLAST SHALL BE USED AND THE HPS LAMP SHALL BE USED AND THE HPS LAMP SHALL HAVE A 24,000 HOUR RATED LIFE.

PATH:
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Mon, 10/Mar/08 04:22PM djfagnant
PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

ILLUMINATION DETAILS

DESIGNED BY: D. Fagnant

STATE OF ALASKA
9349b
CARL H. MAL
CE-10691
REGISTERED PROFESSIONAL ENGINEER
3/10/08

CHECKED BY: C. Morehouse

DRAWN BY: D. Fagnant

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

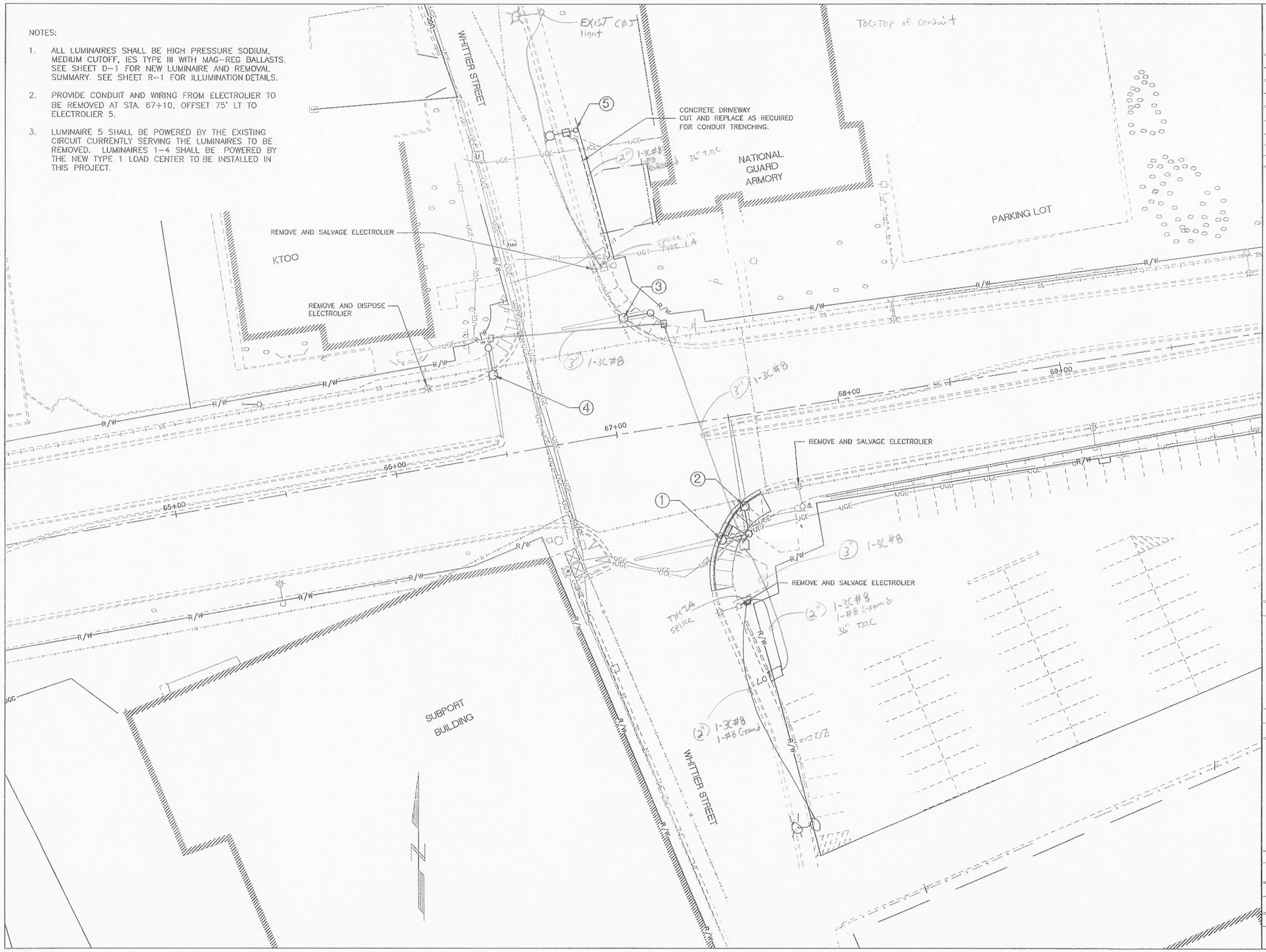
ILLUMINATION DETAILS

PROJECT DESIGNATION NUMBER
68473 ~ ACHHE-000S(594)

STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
R-1	24

NOTES:

1. ALL LUMINAIRES SHALL BE HIGH PRESSURE SODIUM, MEDIUM CUTOFF, IES TYPE III WITH MAG-REG BALLASTS. SEE SHEET D-1 FOR NEW LUMINAIRE AND REMOVAL SUMMARY. SEE SHEET R-1 FOR ILLUMINATION DETAILS.
2. PROVIDE CONDUIT AND WIRING FROM ELECTROLIER TO BE REMOVED AT STA. 67+10, OFFSET 75' LT TO ELECTROLIER 5.
3. LUMINAIRE 5 SHALL BE POWERED BY THE EXISTING CIRCUIT CURRENTLY SERVING THE LUMINAIRES TO BE REMOVED. LUMINAIRES 1-4 SHALL BE POWERED BY THE NEW TYPE 1 LOAD CENTER TO BE INSTALLED IN THIS PROJECT.



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ADDENDUM NUMBER
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

ILLUMINATION PLANVIEW

DESIGNED BY: D. FAGNANT

STATE OF ALASKA 49TH
Carolyn H. Morehouse
CE-10891
REGISTERED PROFESSIONAL ENGINEER
3/10/08

CHECKED BY: C. MOREHOUSE

DRAWN BY: D. FAGNANT

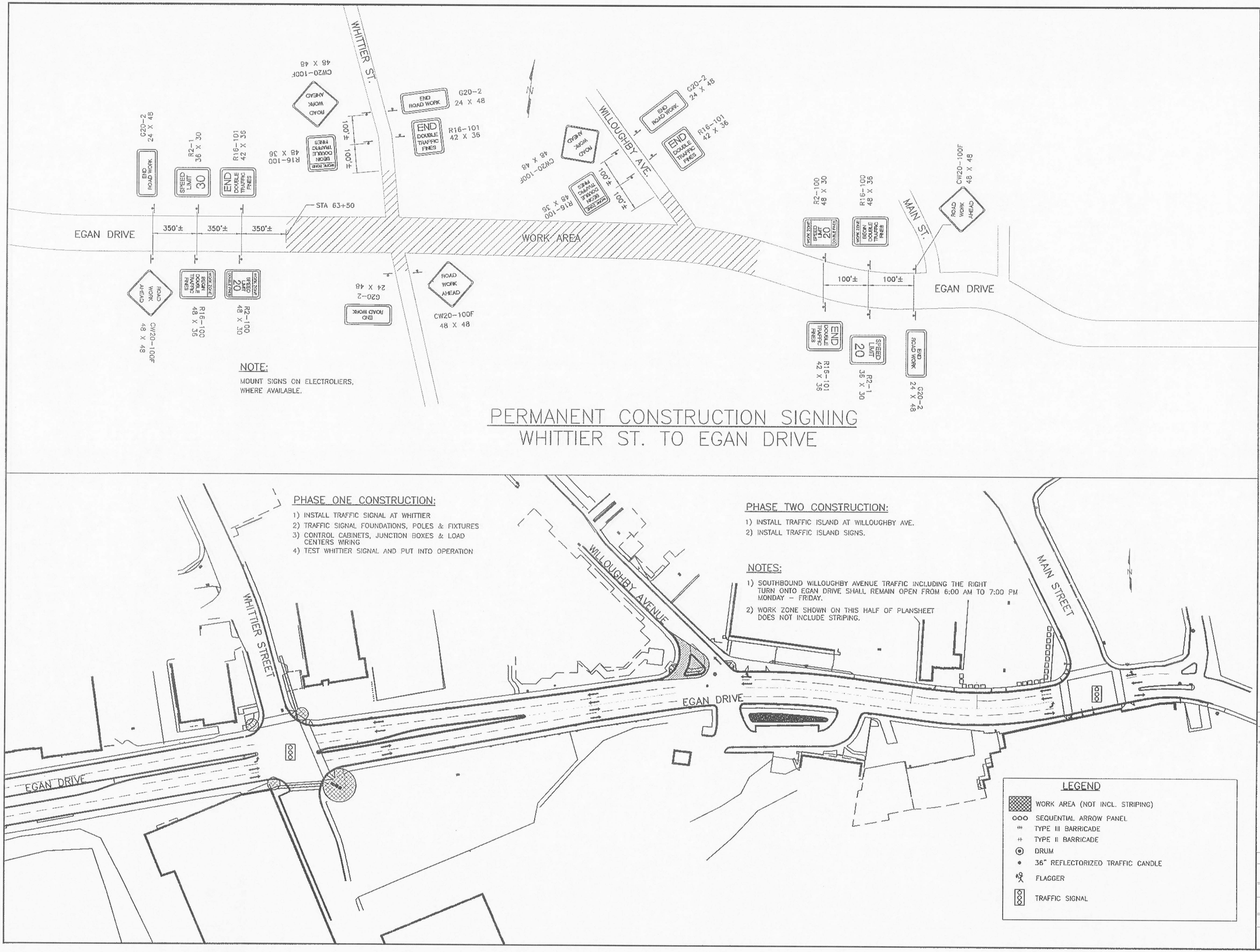
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

ILLUMINATION PLAN

PROJECT DESIGNATION NUMBER
68473 ~ ACHHE-000S(594)

STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
R-2	24



PERMANENT CONSTRUCTION SIGNING
WHITTIER ST. TO EGAN DRIVE

PHASE ONE CONSTRUCTION:

1) INSTALL TRAFFIC SIGNAL AT WHITTIER
2) TRAFFIC SIGNAL FOUNDATIONS, POLES & FIXTURES
3) CONTROL CABINETS, JUNCTION BOXES & LOAD CENTERS WRING
4) TEST WHITTIER SIGNAL AND PUT INTO OPERATION

PHASE TWO CONSTRUCTION:

1) INSTALL TRAFFIC ISLAND AT WILLOUGHBY AVE.
2) INSTALL TRAFFIC ISLAND SIGNS.

NOTES:

1) SOUTHBOUND WILLOUGHBY AVENUE TRAFFIC INCLUDING THE RIGHT TURN ONTO EGAN DRIVE SHALL REMAIN OPEN FROM 6:00 AM TO 7:00 PM MONDAY – FRIDAY.
2) WORK ZONE SHOWN ON THIS HALF OF PLANSHEET DOES NOT INCLUDE STRIPING.

PATH:
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Mon, 10/Mar/08 04:24PM djfagnant
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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

TRAFFIC CONTROL &
CONSTRUCTION PHASING PLANS

DESIGNED BY: D. Fagnant

STATE OF ALASKA
49TH
Carolyn H. Morehouse
CE-10691
REGISTERED PROFESSIONAL ENGINEER
3/10/08

CHECKED BY: C. Morehouse

DRAWN BY: D. Fagnant

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

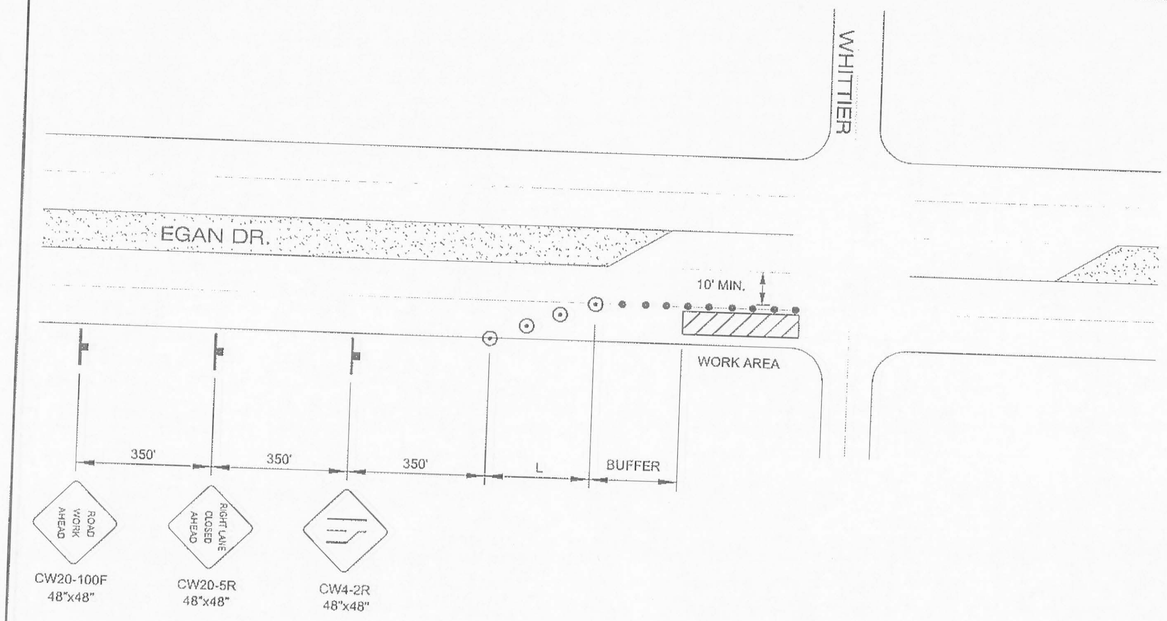
WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

TRAFFIC CONTROL &
CONSTRUCTION
PHASING PLANS

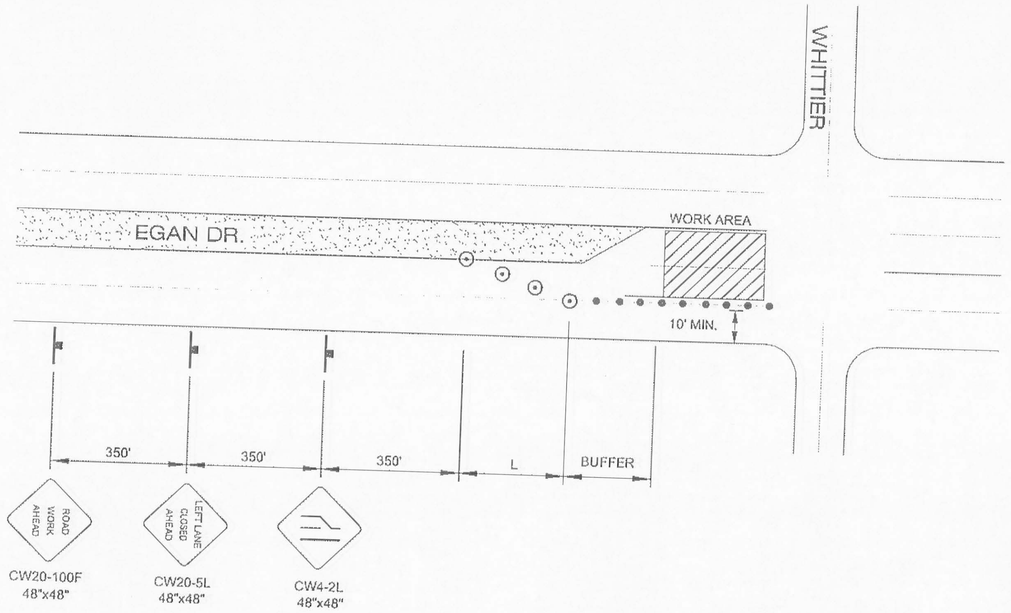
PROJECT DESIGNATION NUMBER

68473 – ACHHE-000S(594)

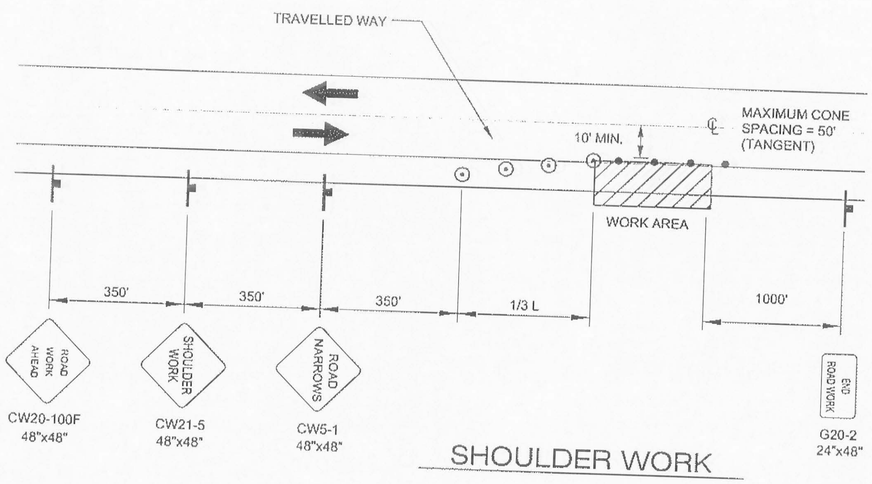
STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
S-1	24



RIGHT LANE CLOSURE



LEFT LANE CLOSURE



SHOULDER WORK

LEGEND

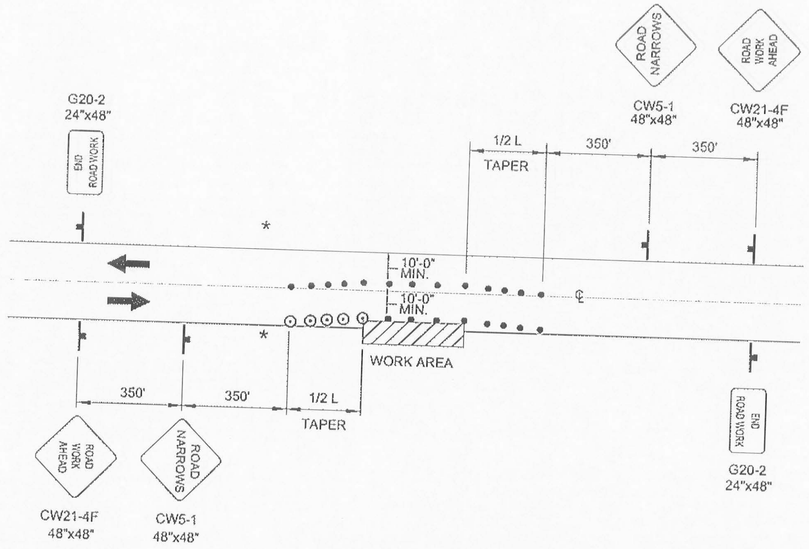
- SIGN
- CONE
- DRUM
- TYPE III BARRICADE

L= WS (45 MPH OR >)

L= $\frac{WS}{60}$ (40 MPH OR <)

WHERE:
L= LENGTH OF TAPER (FT)
W= WIDTH OF OFFSET (FT)
S= SPEED (MPH)

TCP TABLE SETUP		
SPEED (MILES PER HOUR)	BUFFER/ LENGTH (ft)	CONE/DRUM SPACING ON TAPER (ft)
≤ 25	155	25
30	200	30
35	250	35
40	305	40
45	360	45
50	425	50
55	495	55
60	570	60



ROADWAY ENCROACHMENT

NOTE: IF ONLY ONE LANE IS AFFECTED 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 SHALL BE DELETED.

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Mon, 10/Mar/08 04:24PM djfagnant
PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)

ADDENDUM NUMBER

ATTACHMENT NUMBER

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No.	DATE	DESCRIPTION

WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

TRAFFIC CONTROL PLANS

DESIGNED BY: D. Fagnant

STATE OF ALASKA 49TH Marilyn H. Morehouse CE-10691 REGISTERED PROFESSIONAL ENGINEER 3/10/08

CHECKED BY: C. Morehouse

DRAWN BY: D. Fagnant

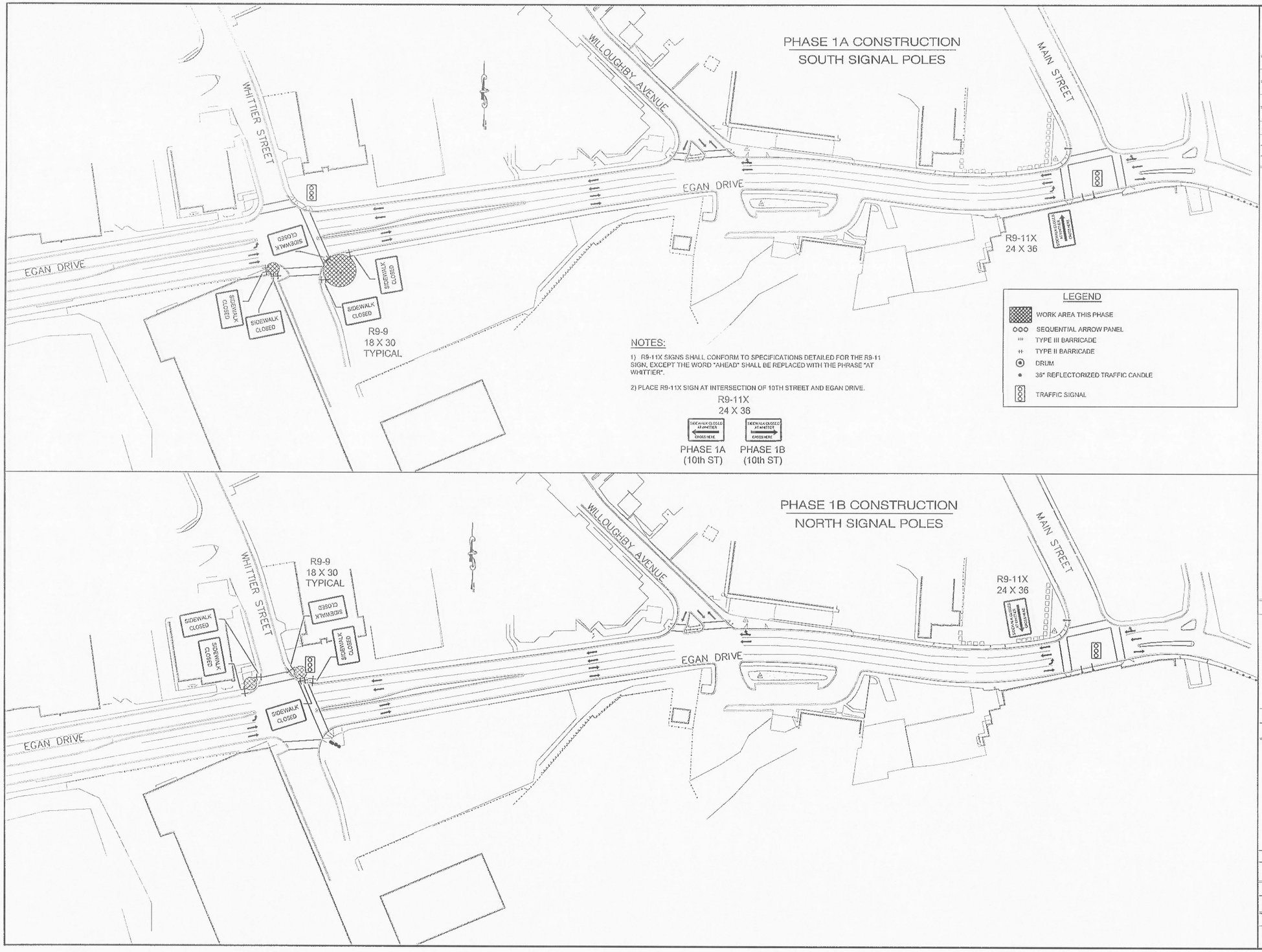
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

TRAFFIC CONTROL PLANS

PROJECT DESIGNATION NUMBER
68473 ~ ACHHE-000S(594)

STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
S-2	24



PATH:
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Mon, 10/Mar/08 04:24PM djfagnant
PLOT:
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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

PEDESTRIAN TRAFFIC CONTROL PLANS

DESIGNED BY: D. Fagnant

STATE OF ALASKA
49TH
Carolyn M. Morehouse
CS-10691
REGISTERED PROFESSIONAL ENGINEER
3/10/08

CHECKED BY: C. Morehouse

DRAWN BY: D. Fagnant

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

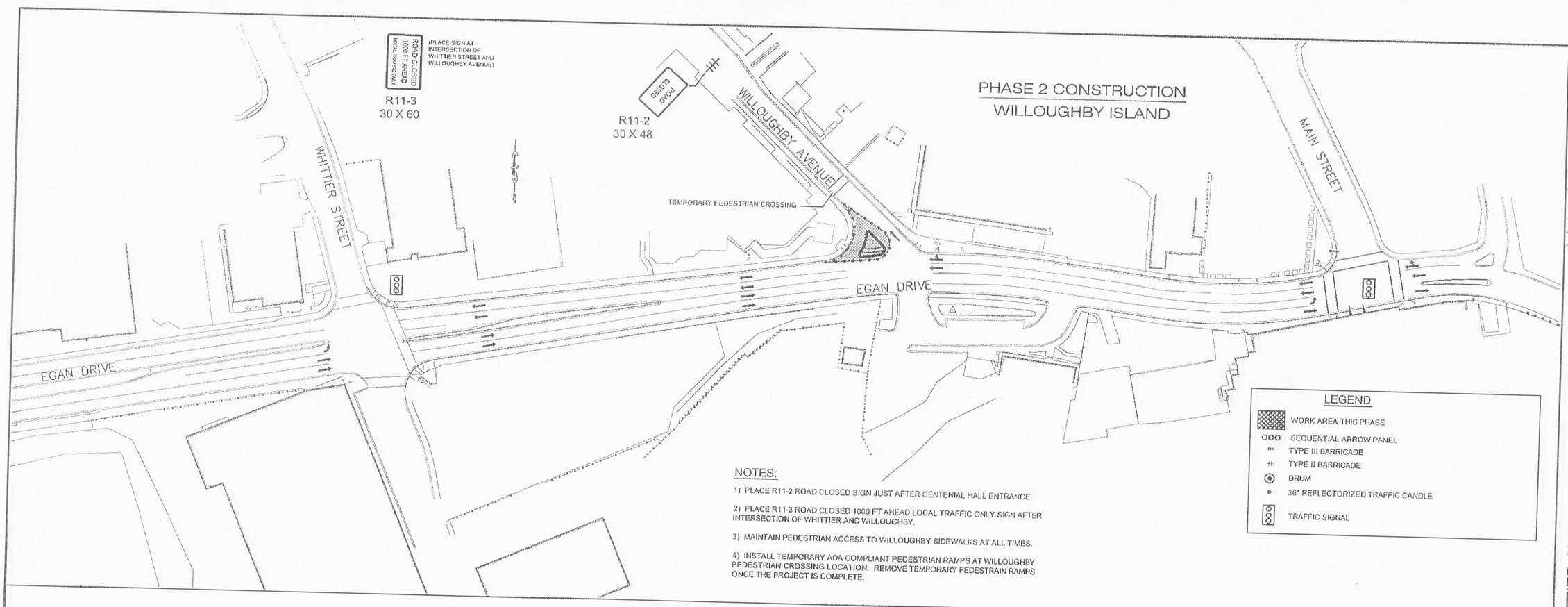
WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

PEDESTRIAN TRAFFIC CONTROL PLANS

PROJECT DESIGNATION NUMBER

68473 ~ ACHHE-000S(594)

STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
S-3	24



PHASE 2 CONSTRUCTION
WILLOUGHBY ISLAND

LEGEND

- WORK AREA THIS PHASE
- SEQUENTIAL ARROW PANEL
- TYPE III BARRICADE
- TYPE II BARRICADE
- DRUM
- 36" REFLECTORIZED TRAFFIC CANDLE
- TRAFFIC SIGNAL

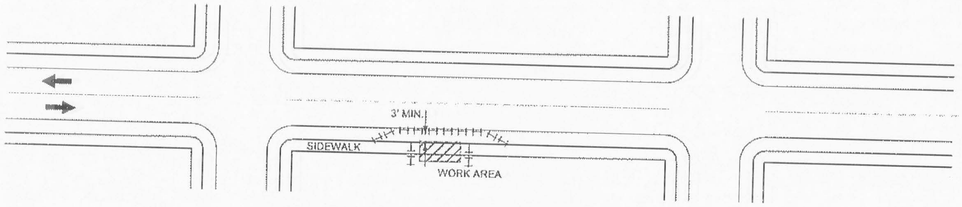
NOTES:

1) PLACE R11-2 ROAD CLOSED SIGN JUST AFTER CENTENIAL HALL ENTRANCE.

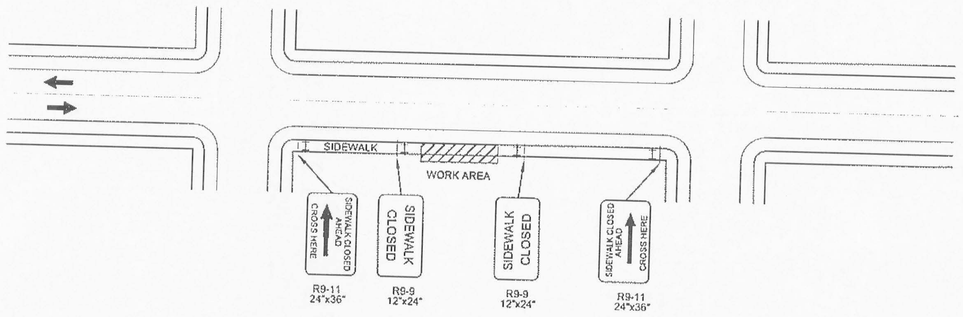
2) PLACE R11-3 ROAD CLOSED 1000 FT AHEAD LOCAL TRAFFIC ONLY SIGN AFTER INTERSECTION OF WHITTIER AND WILLOUGHBY.

3) MAINTAIN PEDESTRIAN ACCESS TO WILLOUGHBY SIDEWALKS AT ALL TIMES.

4) INSTALL TEMPORARY ADA COMPLIANT PEDESTRIAN RAMPS AT WILLOUGHBY PEDESTRIAN CROSSING LOCATION. REMOVE TEMPORARY PEDESTRAIN RAMPS ONCE THE PROJECT IS COMPLETE.



SIDEWALK DIVERSION



SIDEWALK DETOUR

GENERAL TRAFFIC CONTROL NOTES

1. IT IS THE INTENT OF THIS TRAFFIC CONTROL PLAN (TCP) TO ILLUSTRATE SOME BUT NOT ALL OF THE TRAFFIC CONTROL CONFIGURATIONS THAT WILL BE REQUIRED BY THIS PROJECT. TRAFFIC CONTROL PLANS FOR CONFIGURATIONS NOT COVERED BY THIS TCP SHALL BE DEVELOPED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO USE.
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. SPEED LIMIT SIGNS, DOUBLE FINES SIGNS, AND OTHER ASSOCIATED SIGNS SHOWN IN STD DWG C-4.12 SHALL BE PAID FOR UNDER THE PERMANANT CONSTRUCTION SIGNS BID ITEM.
4. ORANGE CONSTRUCTION SIGNS SHALL USE TYPE VIII OR IX FLOURESCENT SHEETING AS DETAILED IN SECTION 615-2.01.
5. TRAFFIC LANES SHALL BE A MINIMUM OF 10' WIDE.
6. CONTACT THE SOUTHEAST REGION DOT TRAFFIC ENGINEER (465-4234) A MINIMUM OF 1 WEEK BEFORE ANTICIPATED SIGNAL TURNON.
7. AS MUCH AS POSSIBLE, THE CONTRACTOR SHALL STAGE HIS WORK FROM THE SHOULDER OF THE ROAD. THE SINGLE LANE CLOSURE SHALL ONLY BE USED IF ABSOLUTELY NECESSARY AND ONLY WITH THE WRITTEN AUTHORIZATION OF THE ENGINEER.
8. A ONE LANE CLOSURE DURING THE MORNING AM PEAK (7:00 TO 8:30 AM) SHALL NOT BE ALLOWED. A ONE LANE CLOSURE DURING THE EVENING PM PEAK (3:30 TO 6:00 PM) SHALL NOT BE ALLOWED.
9. THE TRAFFIC SIGNAL SHALL BE COMPLETED AND IN OPERATION BY THE 30TH OF MAY, 2008. SUBSTANTIAL COMPLETION SHALL BE FINISHED BY THE 30TH OF SEPTEMBER, 2008.
10. PLACE A CW3-3 SIGN (SIGNAL AHEAD) WITH A CW3-3P PLATE (NEW SIGNAL) 350 FEET IN ADVANCE OF THE TRAFFIC SIGNAL IN EACH DIRECTION 3 DAYS BEFORE TURNING THE SIGNAL ON. REMOVE THE SIGNS AFTER SEVEN DAYS OF ACTIVE SIGNAL OPERATION.
11. PLACE A CW3-100 SIGN (NEW TRAFFIC PATTERN) ON WILLOUGHBY 350 FEET IN ADVANCE OF ISLAND AFTER THE NEW ISLAND HAS BEEN CONSTRUCTED.
12. THE CONTRACTOR MAY PROPOSE AN ALTERNATIVE PEDESTRIAN TRAFFIC CONTROL PLAN BY USING A SIDEWALK DIVERSION OR SIDEWALK DETOUR. ALTERNATIVE PEDESTRIAN TRAFFIC CONTROL PLANS SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR REVIEW BY THE REGIONAL TRAFFIC ENGINEER.

PATH:
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Mon, 10/Mar/08 04:24PM djfagnant
PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

PEDESTRIAN TRAFFIC CONTROL PLANS

DESIGNED BY: D. Fagnant

STATE OF ALASKA
49TH
Carolyn Morehouse
CE 10691
REGISTERED PROFESSIONAL ENGINEER
3/10/08

CHECKED BY: C. Morehouse

DRAWN BY: D. Fagnant

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

WHITTIER AND WILLOUGHBY
TRAFFIC IMPROVEMENTS
PROJECT NO. 68473

PEDESTRIAN TRAFFIC CONTROL PLANS

PROJECT DESIGNATION NUMBER
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STATE	YEAR
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