Alaska Testlab - Anchorage
4040 B Street, Suite 102
Anchorage, AK 99503
Phone: 907-205-1987
Fax: 907-782-4409
info@alaskatestlab.com

Material Test Report

Report No: ASM:22-1315
Issue No: 1

Client: CRW Engineering Group, LLC
3940 Arctic Blvd., Ste. 300
Anchorage, AK, 99503

Project Code: 220546

CC: CRW
Maria Kampsen

Project: Quinhagak St

10155.00

Reviewed By: Maria E Kampsen
Title: Senior Engineer
Date: 6/10/2022

Sample Details

Sample ID	22-1315-S04	22-1315-S05	22-1315-S06
Client Sample ID	BH-04 Sa4	BH-04 Sa5	BH-04 Sa6
Date Sampled			

Other Test Results

Description	Method	Results			Limits
Water Content (%)	ASTM D2216	30	29	20	
Date Tested		5/28/2022	5/26/2022	5/26/2022	
Tested By		Karen Jackson	Karen Jackson	Karen Jackson	
Group Code	ASTM D2487	CL			
Group Name		Lean clay			
Material Proportions Estimated		Yes			
Gravel (%)		0			
Sand (%)		0			
Fines (%)		100			
Tested By	ASTM D2487	Cindy Zickefoose			
Liquid Limit	ASTM D4318	43			
Plastic Limit		23			
Plasticity Index		20			
Preparation Method		Wet			
Oversize Removed By		Hand during mixing on glass plate			
Liquid Limit Apparatus		Mechanical			
Grooving Tool		Plastic			
Rolling		Hand			
Tested By		Cindy Zickefoose			
Date Tested		6/7/2022			

Comments

Soil Classification of Fines (-#200) in LMAs Assumed Unless Verified by Additional Testing

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Anchorage, AK 99503
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Material Test Report

Report No: MAT:22-1315-S01
Issue No: 1

Client: CRW Engineering Group, LLC
3940 Arctic Blvd., Ste. 300
Anchorage, AK, 99503

Project Code: 220546

CC: CRW
Maria Kampsen

Project: Quinhagak St

10155.00

Reviewed By: Maria E Kampsen
Title: Senior Engineer
Date: 6/10/2022

Sample Details

Sample ID	22-1315-S01
Client Sample ID	BH-04 Sa1S
Specification	Sieve SOILS

Other Test Results

Description	Method	Result	Limits
	ASTM D 422		
Dispersion device	Dispersant by hand		
Dispersion time (min)			
Shape			
Hardness			
Water Content (%)	ASTM D2216	5	
Date Tested		5/26/2022	
Tested By		Karen Jackson	
Group Code	ASTM D2487	GP-GM	
Group Name	Poorly graded gravel with silt and sand		
Atterberg Limits Estimated		Yes	
Gravel (%)		49	
Sand (%)		42	
Fines (%)		9	
	ASTM D2487		
Tested By		Nathan Wilson	
Date Tested		6/9/2022	

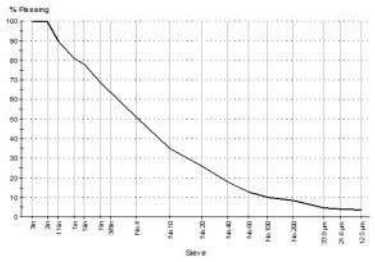
Particle Size Distribution

Method: ASTM D 422

Date Tested: 6/9/2022
Tested By: Nathan Wilson

Sieve Size	% Passing	Limits
3in	100	
2in	100	
1½in	90	
1in	81	
¾in	78	
½in	69	
3/8in	64	
No.4	51	
No.10	35	
No.20	26	
No.40	18	
No.60	13	
No.100	10	
No.200	8.5	
Finer No.200 (75µm)	12.5	
33.9 µm	4.7	
21.6 µm	4.2	
12.5 µm	3.7	

Chart



Comments

Soil Classification of Fines (-#200) in LMAs Assumed Unless Verified by Additional Testing
No Plasticity Index Test Performed

Alaska Testlab - Anchorage
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Anchorage, AK 99503
Phone: 907-205-1987
Fax: 907-782-4409
info@alaskatestlab.com

Material Test Report

Report No: ASM:22-1326
Issue No: 1

Client: CRW Engineering Group, LLC
3940 Arctic Blvd., Ste. 300
Anchorage, AK, 99503

Project Code: 220546

CC: CRW
Maria Kampsen

Project: Quinhagak St

10155.00

Reviewed By: Maria E Kampsen
Title: Senior Engineer
Date: 6/10/2022

Sample Details

Sample ID	22-1326-S01	22-1326-S02	22-1326-S03	22-1326-S04
Client Sample ID	BH-05 Sa1A	BH-05 Sa1B	BH-05 Sa2	BH-05 Sa3
Date Sampled				

Other Test Results

Description	Method	Results				Limits
Water Content (%)	ASTM D2216	11	22	28	28	
Date Tested		5/26/2022	5/26/2022	5/28/2022	5/26/2022	
Tested By		Karen Jackson	Karen Jackson	Karen Jackson	Karen Jackson	
Percent Gravel	LMA (Internal Method)		15			
Percent Sand			42			
Percent Fines (Silt/Clay)			43			
Group Symbol			SM			
Group Name			Silty sand with gravel			
Tested By			Frank Walters			

Comments

Soil Classification of Fines (-#200) in LMAs Assumed Unless Verified by Additional Testing

Alaska Testlab - Anchorage
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Anchorage, AK 99503
Phone: 907-205-1987
Fax: 907-782-4409
info@alaskatestlab.com

Material Test Report

Report No: ASM:22-1326
Issue No: 1

Client: CRW Engineering Group, LLC
3940 Arctic Blvd., Ste. 300
Anchorage, AK, 99503

Project Code: 220546

CC: CRW
Maria Kampsen

Project: Quinhagak St

10155.00

Reviewed By: Maria E Kampsen
Title: Senior Engineer
Date: 6/10/2022

Sample Details

Sample ID	22-1326-S05	22-1326-S06	22-1326-S07	22-1326-S08
Client Sample ID	BH-05 Sa4	BH-05 Sa5	BH-05 Sa6A	BH-05 Sa6B
Date Sampled				

Other Test Results

Description	Method	Results				Limits
Water Content (%)	ASTM D2216	37	43	26	20	
Date Tested		5/26/2022	5/26/2022	5/26/2022	5/26/2022	
Tested By		Karen Jackson	Karen Jackson	Karen Jackson	Karen Jackson	
Group Code	ASTM D2487		CH			
Group Name			Fat clay			
Material Proportions Estimated			Yes			
Gravel (%)			0			
Sand (%)			0			
Fines (%)			100			
Tested By	ASTM D2487		Cindy Zickefoose			
Liquid Limit	ASTM D4318		54			
Plastic Limit			25			
Plasticity Index			29			
Preparation Method			Wet			
Oversize Removed By			Hand during mixing on glass plate			
Liquid Limit Apparatus			Mechanical			
Grooving Tool			Plastic			
Rolling			Hand			
Tested By			Cindy Zickefoose			
Date Tested			6/7/2022			
Percent Gravel	LMA (Internal Method)				0	
Percent Sand					64	
Percent Fines (Silt/Clay)					36	
Group Symbol					SM	
Group Name					Silty sand	
Tested By					Frank Walters	

Comments

Soil Classification of Fines (-#200) in LMAs Assumed Unless Verified by Additional Testing

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Material Test Report

Report No: ASM:22-1327
Issue No: 1

Client: CRW Engineering Group, LLC
3940 Arctic Blvd., Ste. 300
Anchorage, AK, 99503

Project Code: 220546

CC: CRW
Maria Kampsen

Project: Quinhagak St

10155.00

Reviewed By: Maria E Kampsen
Title: Senior Engineer
Date: 6/10/2022

Sample Details

Sample ID	22-1327-S01	22-1327-S02	22-1327-S03	22-1327-S04
Client Sample ID	BH-06 Sa1	BH-06 Sa2	BH-06 Sa3	BH-06 Sa4A
Date Sampled				

Other Test Results

Description	Method	Results				Limits
Water Content (%)	ASTM D2216	4	27	42	20	
Date Tested		5/26/2022	5/26/2022	5/26/2022	5/26/2022	
Tested By		Karen Jackson	Karen Jackson	Karen Jackson	Karen Jackson	
Group Code	ASTM D2487	GW-GM		CL		
Group Name		Well-graded gravel with silt and sand		Lean clay		
Atterberg Limits Estimated		Yes				
Material Proportions Estimated				Yes		
Gravel (%)		63		0		
Sand (%)		32		0		
Fines (%)		5		100		
Tested By	ASTM D2487	Frank Walters		Cindy Zickefoose		
Method	ASTM D6913	A				
Preparation Method		Oven Dry				
Composite Sieving?		Yes				
Separating Sieve(s)		No. 4				
Cu	ASTM D2487	49.51				
Cc		1.47				
Liquid Limit	ASTM D4318			46		
Plastic Limit				23		
Plasticity Index				23		
Preparation Method				Wet		
Oversize Removed By				Hand during mixing on glass plate		
Liquid Limit Apparatus				Mechanical		
Grooving Tool				Plastic		
Rolling				Hand		
Tested By				Cindy Zickefoose		
Date Tested				6/7/2022		

Comments

Soil Classification of Fines (-#200) in LMAs Assumed Unless Verified by Additional Testing

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Material Test Report

Report No: ASM:22-1327
Issue No: 1

Client: CRW Engineering Group, LLC
3940 Arctic Blvd., Ste. 300
Anchorage, AK, 99503

Project Code: 220546

CC: CRW
Maria Kampsen

Project: Quinhagak St

10155.00

Reviewed By: Maria E Kampsen
Title: Senior Engineer
Date: 6/10/2022

Sample Details

Sample ID	22-1327-S05	22-1327-S06	22-1327-S07
Client Sample ID	BH-06 Sa4B	BH-06 Sa5	BH-06 Sa6
Date Sampled			

Other Test Results

Description	Method	Results			Limits
Water Content (%)	ASTM D2216	22	23	18	
Date Tested		5/26/2022	5/26/2022	5/26/2022	
Tested By		Karen Jackson	Karen Jackson	Karen Jackson	
Percent Gravel	LMA (Internal Method)		0	0	
Percent Sand			72	17	
Percent Fines (Silt/Clay)			28	83	
Group Symbol			SM	ML	
Group Name			Silty sand	Silt with sand	
Tested By			Frank Walters	Frank Walters	

Comments

Soil Classification of Fines (-#200) in LMAs Assumed Unless Verified by Additional Testing

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4040 B Street, Suite 102
Anchorage, AK 99503
Phone: 907-205-1987
Fax: 907-782-4409
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Material Test Report

Report No: MAT:22-1327-S01
Issue No: 1

Client: CRW Engineering Group, LLC
3940 Arctic Blvd., Ste. 300
Anchorage, AK, 99503

Project Code: 220546

CC: CRW
Maria Kampsen

Project: Quinhagak St

10155.00

Reviewed By: Maria E Kampsen
Title: Senior Engineer
Date: 6/10/2022

Sample Details

Sample ID 22-1327-S01
Client Sample ID BH-06 Sa1

Other Test Results

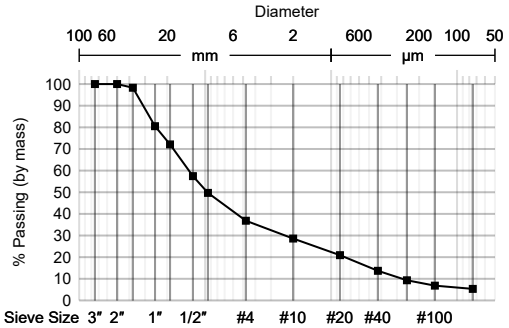
Description	Method	Result	Limits
Water Content (%)	ASTM D2216	4	
Date Tested		5/26/2022	
Tested By		Karen Jackson	
Group Code	ASTM D2487	GW-GM	
Group Name		Well-graded gravel with silt and sand	
Atterberg Limits Estimated		Yes	
Gravel (%)		63	
Sand (%)		32	
Fines (%)		5	
	ASTM D2487		
Tested By		Frank Walters	
Date Tested		6/6/2022	
Method	ASTM D6913	A	
Preparation Method		Oven Dry	
Composite Sieving?		Yes	
Separating Sieve(s)		No. 4	
Cu	ASTM D2487	49.51	
Cc		1.47	
Date Tested		6/6/2022	

Particle Size Distribution

Method: ASTM D6913
Drying By: Oven
Date Tested: 6/6/2022
Tested By: Frank Walters

Sieve Size	% Passing	Limits
3in	100	
2in	100	
1½in	98	
1in	81	
¾in	72	
½in	57	
3/8in	50	
No.4	36.8	
No.10	29	
No.20	21	
No.40	14	
No.60	9	
No.100	7	
No.200	5	

Chart



Comments

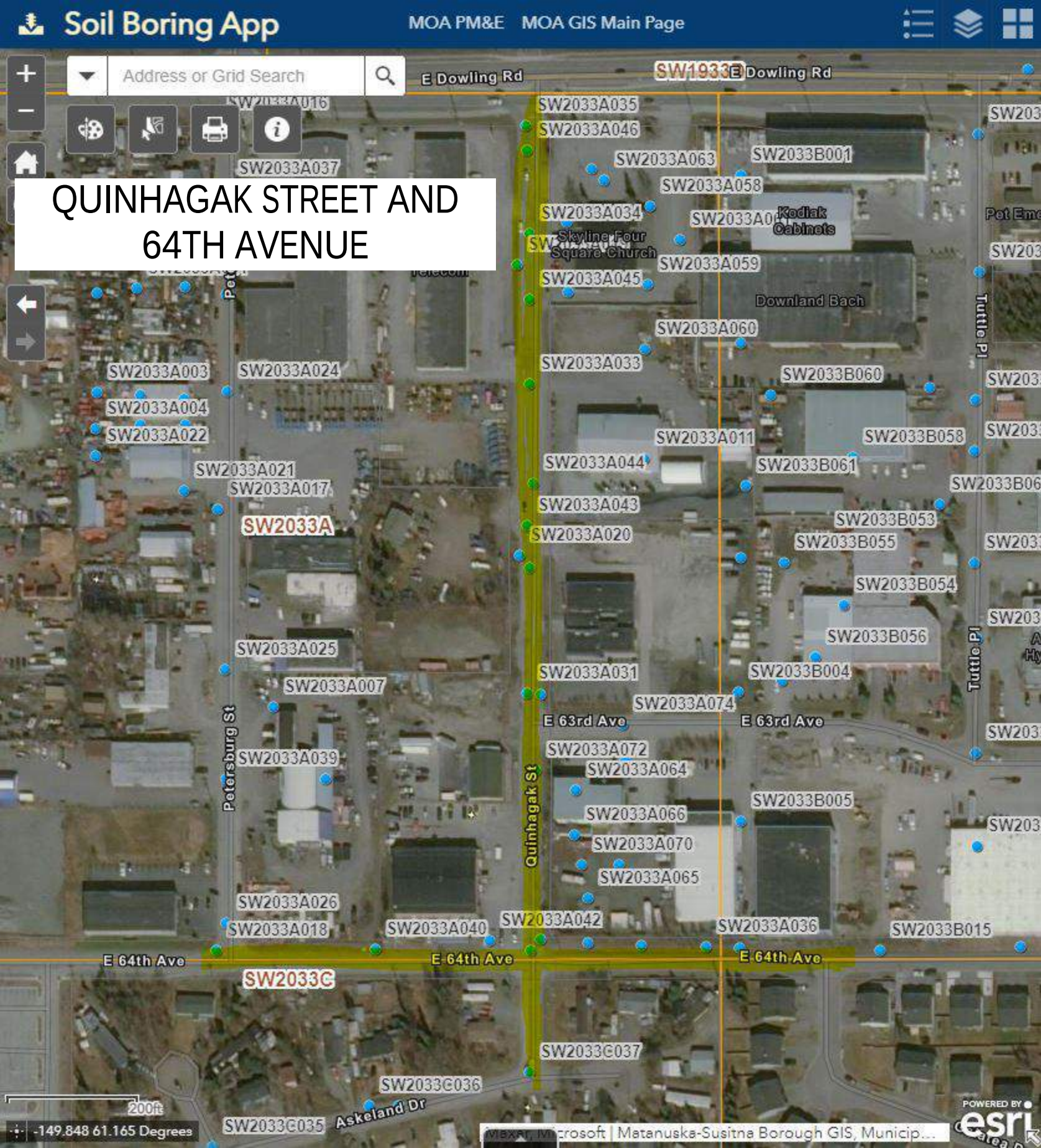
Sample Size Does Not Meet ASTM Requirements
Soil Classification of Fines (-#200) in Sieve Analyses Assumed Unless Verified by Additional Testing
No Plasticity Index Test Performed

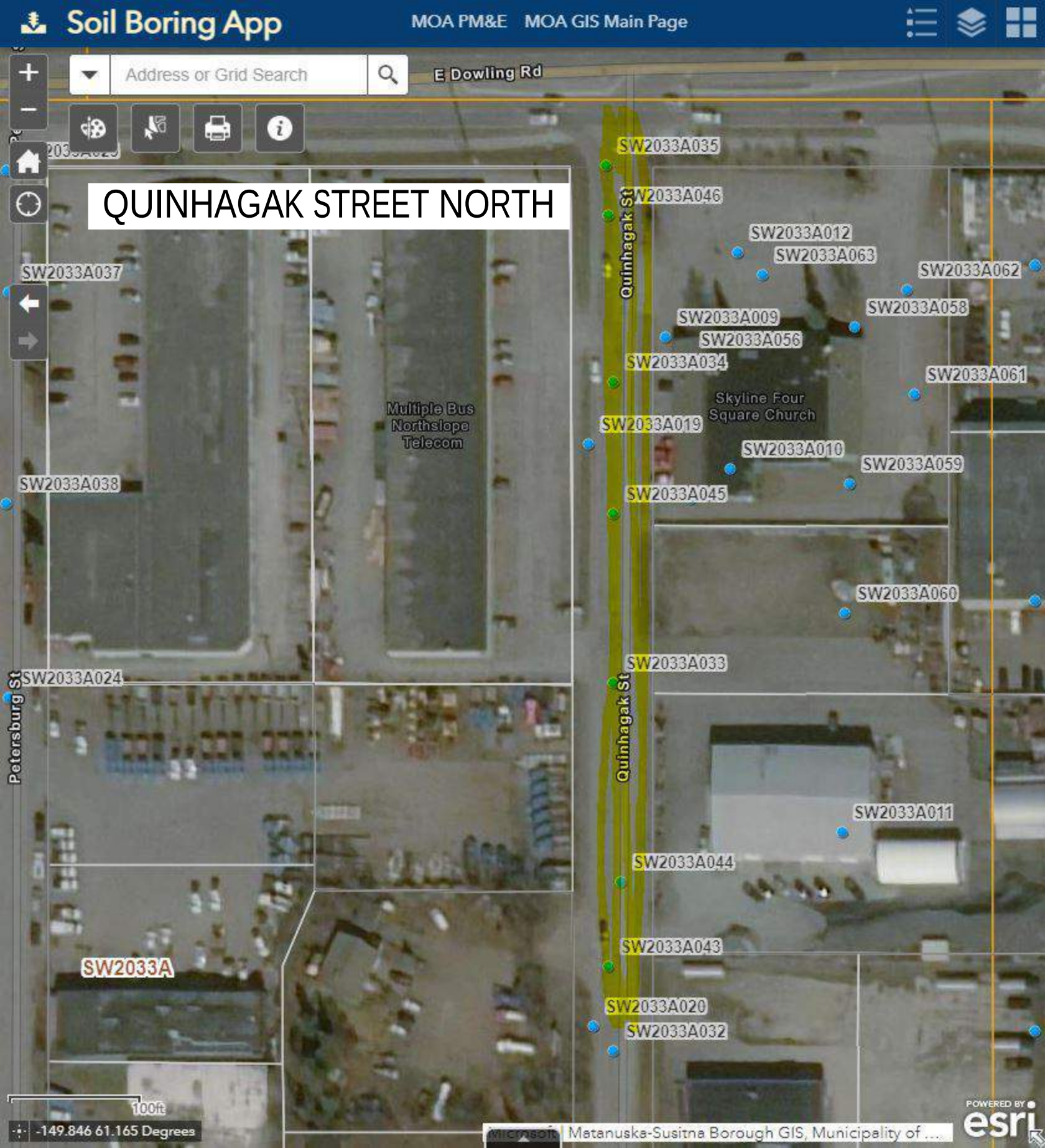
Appendix C

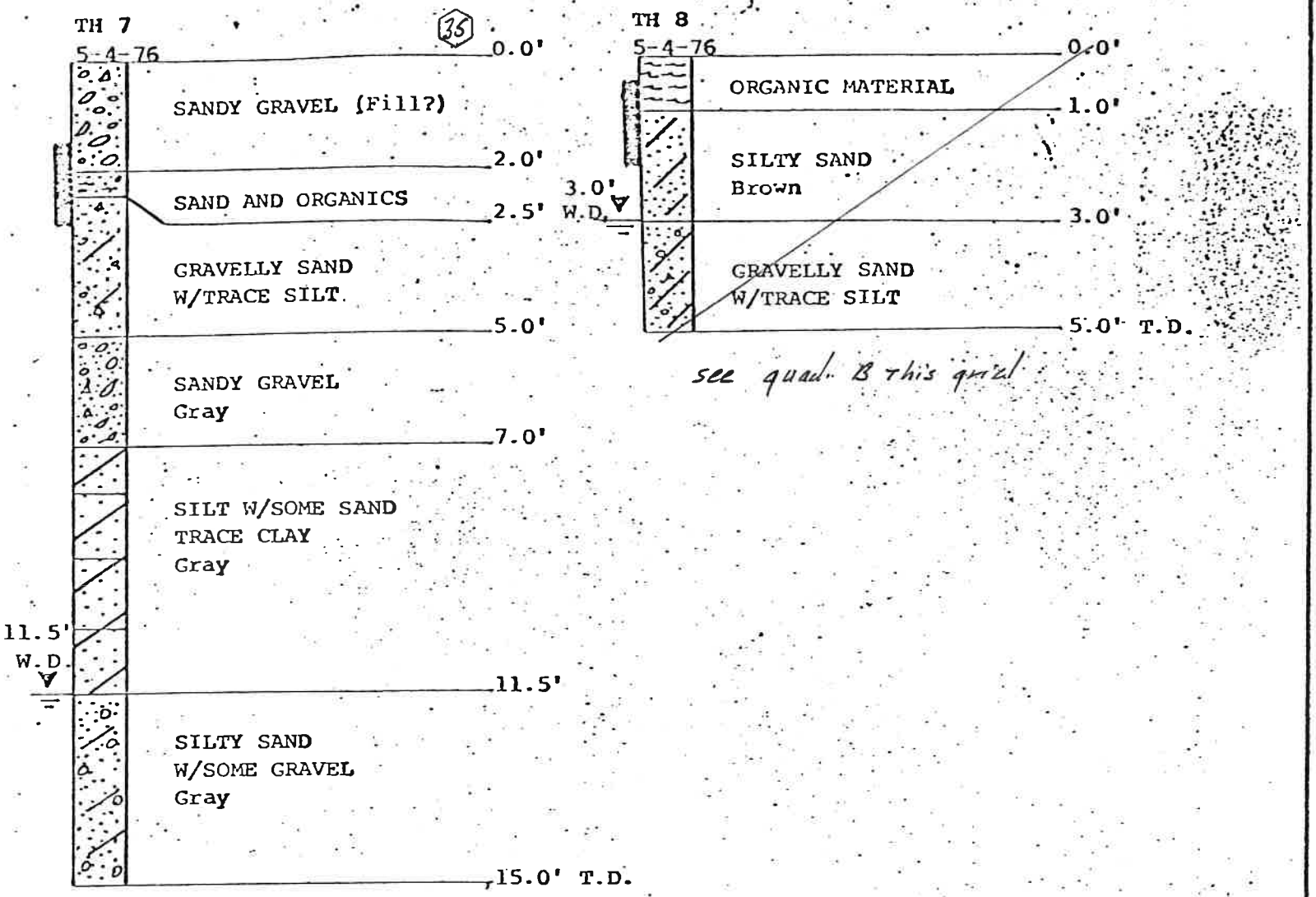
Historical Borehole and Test Pit Logs

Included in this section:

1) Historical borehole/test pit logs for Quinhagak Street with map
2) Historical borehole/test pit logs for 64th Avenue with map


Soil Boring App
MOA PM&E
MOA GIS Main Page
Address or Grid Search
QUINHAGAK STREET AND 64TH AVENUE
E Dowling Rd
SW2033A035
SW2033A046
SW2033A063
SW2033B001
SW2033A058
SW2033A034
Kodiak Cabinets
Skyline Four Square Church
SW2033A059
SW2033A045
Downland Bach
SW2033A060
SW2033A033
SW2033A003
SW2033A024
SW2033B060
SW2033A004
SW2033A022
SW2033A011
SW2033B058
SW2033A044
SW2033B061
SW2033A021
SW2033A017
SW2033A043
SW2033A
SW2033B053
SW2033A020
SW2033B055
SW2033B054
SW2033B056
SW2033A025
SW2033A031
SW2033B004
SW2033A007
SW2033A074
E 63rd Ave
SW2033A072
SW2033A039
SW2033A064
Petersburg St
Quinhagak St
Tuttle Pl
SW2033B005
SW2033A066
SW2033A070
SW2033A065
SW2033A026
SW2033A018
SW2033A040
SW2033A042
SW2033A036
SW2033B015
E 64th Ave
SW2033C
SW2033C037
SW2033C036
SW2033C035
Askeland Dr
200ft
-149.848 61.165 Degrees
Maxar, Microsoft | Matanuska-Susitna Borough GIS, Municip...
POWERED BY esri


Soil Boring App
MOA PM&E
MOA GIS Main Page
Address or Grid Search
E Dowling Rd
QUINHAGAK STREET NORTH
SW2033A035
SW2033A046
Quinhagak St
SW2033A012
SW2033A063
SW2033A062
SW2033A037
SW2033A058
SW2033A009
SW2033A056
SW2033A034
SW2033A061
Skyline Four Square Church
Multiple Bus Northslope Telecom
SW2033A019
SW2033A010
SW2033A059
SW2033A038
SW2033A045
SW2033A060
SW2033A033
SW2033A024
Petersburg St
Quinhagak St
SW2033A011
SW2033A044
SW2033A043
SW2033A
SW2033A020
SW2033A032
100ft
-149.846 61.165 Degrees
Matanuska-Susitna Borough GIS, Municipality of ...
POWERED BY esri



WN: PLA	R&M CONSULTANTS, INC.	Log of Test Holes George Jenson Anchorage, Alaska	F.B.
KD: WJL			GRID: 2033
ATE: 5-6-76			PROJ.NO. 651133
CALE: 1"=3'			DWG.NO. 3.06

LOG OF TEST BORING

R & M CONSULTANTS, INC.

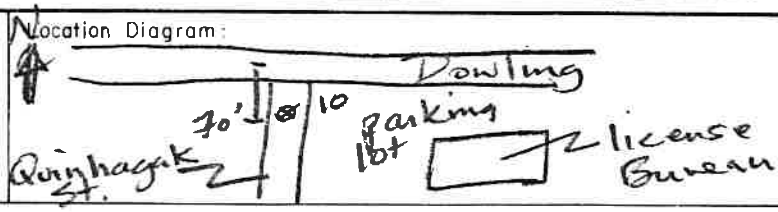
Date Begun 6-25-81
Date Completed 6-25-81
Rig No. CME 55 truck 110
Project No
Project Name
Location Quinhagak St. 70'S. of Dowling
Method Used 6" Solid Flite Auger
Field Party Grinder, Sattler
Geologist Barnwell
Weather Sunny, clear

Hole No. 10
Sheet 1 of 1 (46)
Total Depth 10 ft.

GROUND WATER TABLE

W.D = While Drilling	A.B. = After Boring	
Depth in Ft.		
Time	None	
Date		

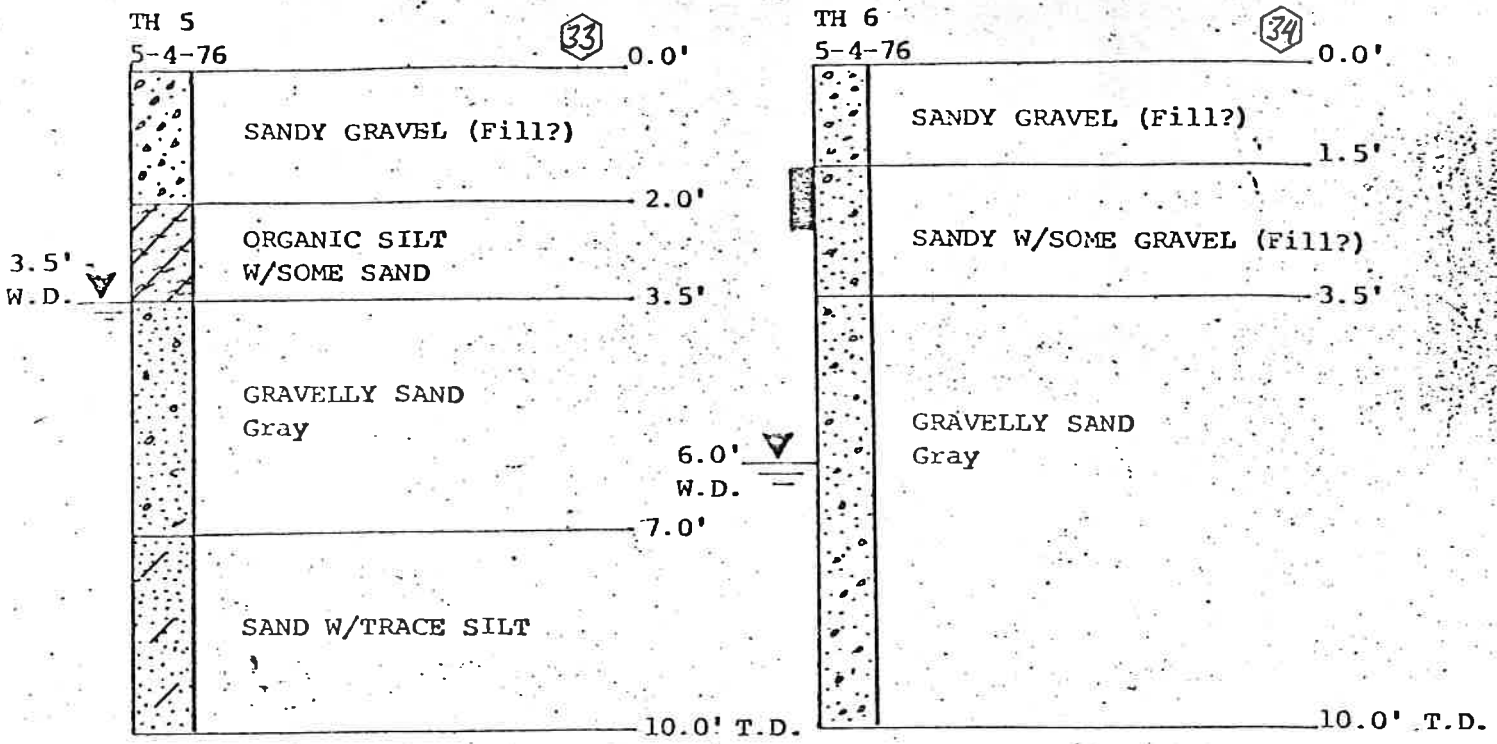
Location Diagram:



Vegetation: None.

Collar Elevation | Reference

Sample No.	Blow Count	Location Sampled	Recovery	Depth in Feet	% Ice Content	Frozen?	Soil Graph	Moisture	Consistency	T, °F	DESCRIPTION Soil type, color, texture, estimated particle size, sampler driving notes, depths circulation lost, notes on drilling ease, bits used, etc.
1				0				D		45	[Smpl. 1 0-0'-5.0' 1pb-] SW Brown, fairly clean well graded sands, gravelly sands.
				3				M			
2				5				W		43	[Smpl. 2 5.0-10.0 1pb-cb] SP-SC Brown-grey clayey, silty gravelly sands. Clay content highest 8.5-10.0' good gray color.
				9				W		42	
				10							



DWN: PLA	R&M CONSULTANTS, INC.	Log of Test Holes George Jenson Anchorage, Alaska	F.B.
CKD: WJL			GRID: 2033
DATE: 5-6-76			PROJ.NO. 651133
SCALE: 1"=3'			DWG.NO. B-05

Test Hole #9 Table A WO #A18638
Logged By: O.M. Hatch
Date: Sept. 28, 1978

(19)

Depth in Feet

From	To	Soil Description
0.0'	3.0'	F-2, brown Silty Gravelly Sand, SM, damp, medium density, particles to 6".
3.0'	8.0'	F-4, brown to grey Sandy Silt, ML with Silty Sand, SM, layering, damp to saturated, stiff, particles to 2", Group E.
8.0'	14.0'	F-2, grey Silty Sand, SM, with clayey silt lenses, saturated, medium density, Group B.
14.0'	16.5'	F-1/F-3, grey very Silty Sandy Gravel, GM, damp, medium to high density, damp, particles to 2", Group C.

Bottom of Test Hole: 16.5'

Frost Line: None Observed

Free Water Level: While Drilling 5.0'

Sample	Depth	Blows/6"	M%	Type of Sample	Dry Strength	Group	Unified	Temp °F
1	5.0'- 7.0'	12/12/17/22	18.6	SP	H	E	SM/ML	51
2	10.0'-12.0'	16/17/18/19	20.1	SP	N-L	B	CL/ML	50
3	15.0'-16.5'	23/56/54	9.4	SP	L	C	GM	

Remarks:
1. Type of Sample, G=Grab, SP = Standard Penetration, U = Undisturbed.
2. Dry Strength, N=None, L=Low, M=Medium, H=High.
3. Group refers to similar material, this study only.
4. General Information, see Sheet 1.
5. Frost and Textural Classification, see Sheet 2.
6. Unified Classification, see Sheet 3.

LOG OF TEST BORING

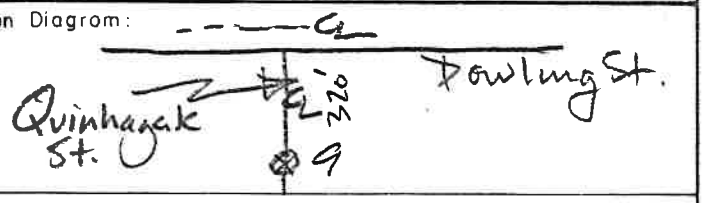
Date Begun 6-25-81
Date Completed 6-25-81
Rig No. CME 55 Truck 110
Project No
Project Name
Locotian Quinhagak St. 320' South of ℄ on Dowling
Method Used 6" Solid Flite Auger
Field Party Grinder, Sattler Gealagist Burnwell
Weather Sunny

R & M CONSULTANTS, INC.

Hole No. 9
Sheet 1 of 1 (45)
Total Depth 10'

GROUND WATER TABLE			
W.D = While Drilling		A.B. = After Boring	
Depth in Ft.	None		
Time			
Date			

Location Diagram:



Sampling: Sample No.	Blow Count	Location Sampled	Recovery	Depth in Feet	% Ice Content	Frozen ?	Soil Graph	Moisture	Consistency	T. °F
H 1				0				D		45
				1						
				2						
				3						
				4						
H 2				5				W		40
				6						
				7						
				8						
				9						
				0						
				1						
				2						
				3						
				4						
				5						
				6						
				7						
				8						
				9						
				0						

DESCRIPTION
Soil type, color, texture, estimated particle size, sampler driving rates, depths circulation lost, rates on drilling ease, bits used, etc.

Vegetation: None

Collar Elevation

Reference

Smpl. 1
0-0' - 5.0'
1pb-cb

GM

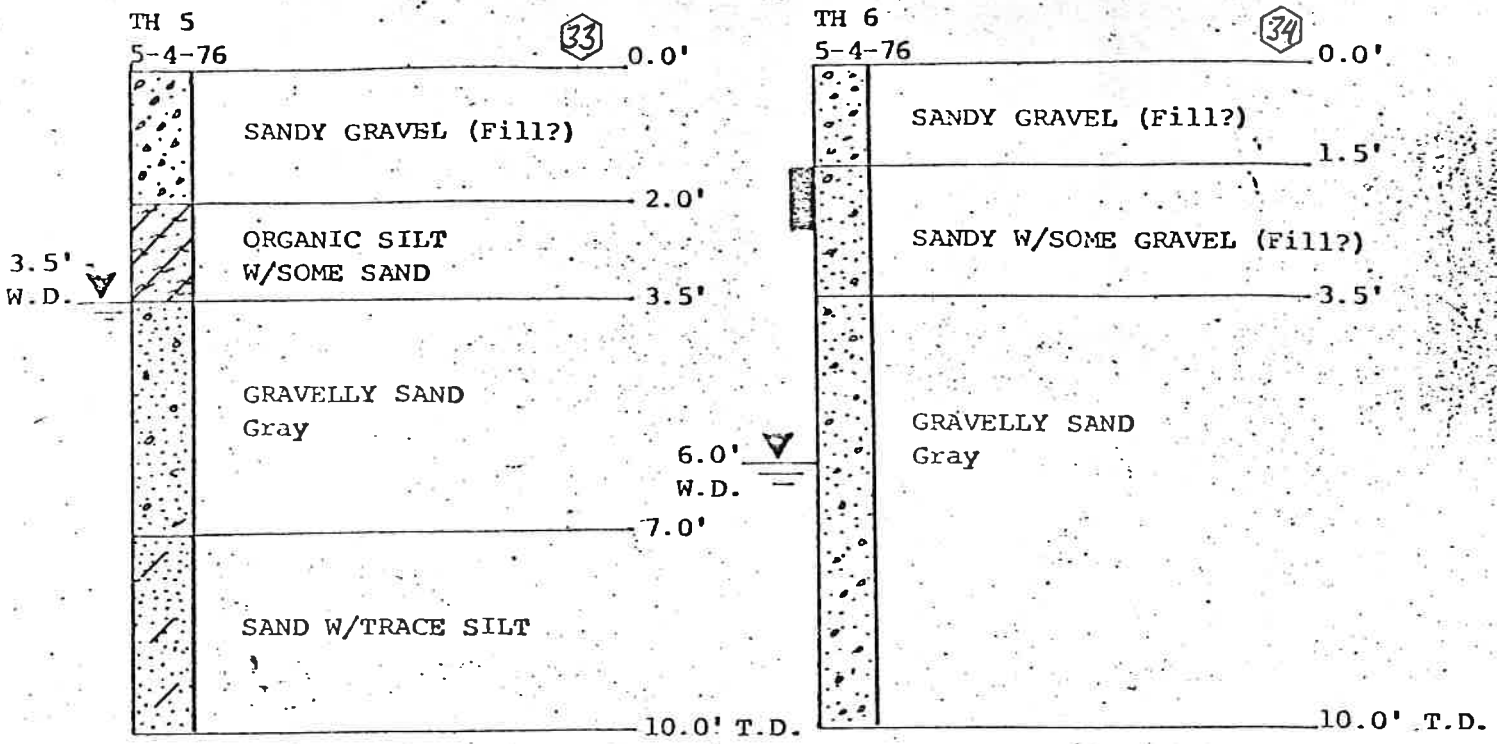
Brown poorly graded sandy gravel w/ some silt & subangular pebbles.

Smpl. 2
5.0 - 10.0
1pb-cb

Brown to grey silty clayey gravel. Clay content increases btwn. 7.5-10.0 ft.

GM-GC

END



DWN: PLA	R&M CONSULTANTS, INC.	Log of Test Holes George Jenson Anchorage, Alaska	F.B.
CKD: WJL			GRID: 2033
DATE: 5-6-76			PROJ.NO. 651133
SCALE: 1"=3'			DWG.NO. B-05

LOG OF TEST BORING

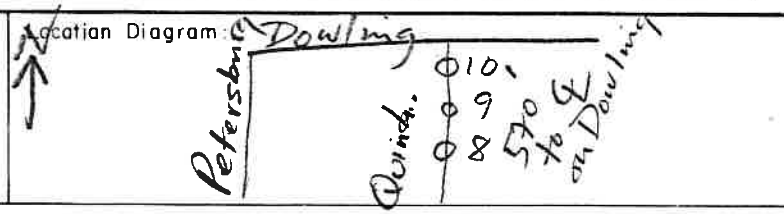
R & M CONSULTANTS, INC.

Date Begun 6-25-81
Date Completed 6-25-81
Rig No. CME 55 truck 110
Project No
Project Name
Location Quinhagak St.
Method Used 6" Solid Flite Auger
Field Party Grinder, Sattler
Geologist Barnwell
Weather Sunny clear

Hole No. 8
Sheet 1 of 1 (44)
Total Depth 10'

GROUND WATER TABLE			
W.D = While Drilling	A.B. = After Boring		
Depth in Ft.	none		
Time			
Date			

Location Diagram:



Vegetation: None

Collar Elevation | Reference

Sample No.	Blow Count	Location Sampled	Recovery	Depth in Feet	% Ice Content	Frozen ?	Soil Graph	Moisture	Consistency	T, °F	DESCRIPTION Soil type, color, texture, estimated particle size, sampler driving notes, depths circulation lost, notes on drilling ease, bits used, etc.
H 1		↓	↓	0				D	–	45	Smpl. 1 0.0'-5.0' 1pb-cb — Brown-grey silty clay w/ trace gravel. CL
				1							
				2							
				3							
				4							
2		↓	↓	5						45	Smpl. 2 5.0-10.0' 1pb-cb — Brown-grey silty clay w/ some gravel. trace organics btwn. 5.0 - 7.5 ft. CL
				6							
				7							
				8							
				9							
				10			END				
				1							
				2							
				3							
				4							
				5							
				6							
				7							
				8							
				9							
				0							

LOG OF TEST BORING

R & M CONSULTANTS, INC.

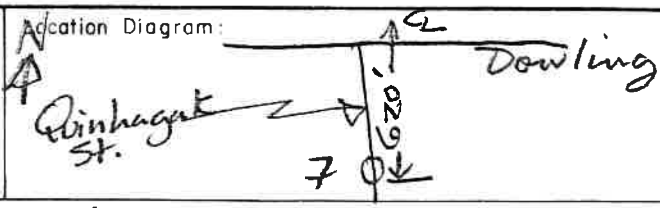
Date Begun: 6-25-81
Date Completed: 6-25-81
Rig No: CME 55 Truck 110
Project No:
Project Name:
Location: Quinhagak St.
Method Used: 6" Solid Flite Auger
Field Party: Grinder, Sattler
Geologist: Barnwell
Weather: Sunny

Hole No.: 7
Sheet 1 of 1
Total Depth: 10'

(43)

GROUND WATER TABLE			
W.D = While Drilling		A.B. = After Boring	
Depth in Ft.	None		
Time			
Date			

Location Diagram:



Vegetation: Grasses, horsetail

Collar Elevation:
Reference:

Sampling Method	Sample No.	Blow Count	Location Sampled	Recovery	Depth in Feet	% Ice Content	Frozen ?	Soil Graph	Moisture	Consistency	T, °F	DESCRIPTION: Soil type, color, texture, estimated particle size, sampler driving notes, depths circulation lost, notes on drilling ease, bits used, etc.
H	1		↓ 0–5	↓ 0–5	0				M	–	40	Smpl. 1, 0.0'–5.0', 1pb–cb. OL Grey-brown clay w/ some silt and organics. Clumps of peat, wood.
					1							
					2							
					3							
					4							
H	2		↓ 5–10	↓ 5–10	5				VM	–	–	Smpl. 2, 5.0–10.0', 1pb–cb. CL-CH Grey clay w/ trace amounts of fine size gravel.
					6							
					7							
					8							
					9							
					10			END				
					1							
					2							
					3							
					4							
					5							
					6							
					7							
					8							
					9							
					0							

Test Hole #8 Table A WO #A18638
Logged By: O.M. Hatch
Date: Sept. 29, 1978

Depth in Feet

From	To	Soil Description
0.0'	3.0'	Brown Peat, Pt, damp, soft.
3.0'	13.0'	NFS/F-4, grey Gravelly Sand, SP, with Sandy Silt, ML, layering, saturated, particles to 2".
13.0'	16.5'	F-4, grey Clayey Silt, CL/ML, damp, stiff, PL+, Group D.

Bottom of Test Hole: 16.5'

Frost Line: None Observed

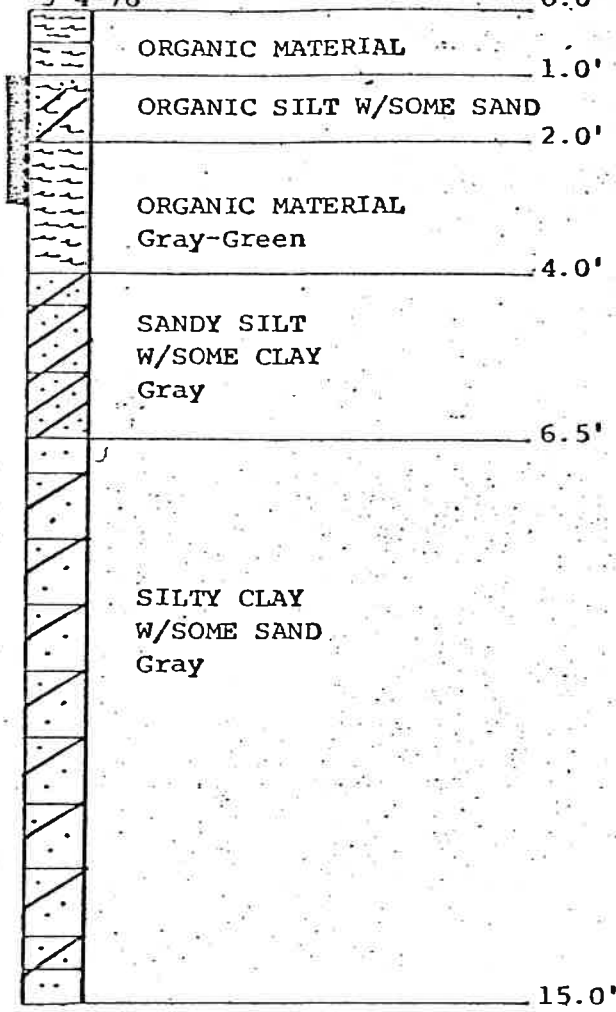
Free Water Level: While Drilling 4.0'
After 3 Days 2.0'

Sample	Depth	Blows/6"	M%	Type of Sample	Dry Strength	Group	Unified	Temp °F
1	5.0'- 6.5'	5/9/16	17.2	SP	L	-	SP/ML	42
2	10.0'-11.5'	28/31/11	15.0	SP	N	-	SP/ML	42
3	15.0'-16.5'	5/7/6	41.0	SP	M	D	CL/ML	42

Remarks:
1. Type of Sample, G=Grab, SP = Standard Penetration, U = Undisturbed.
2. Dry Strength, N=None, L=Low, M=Medium, H=High.
3. Group refers to similar material, this study only.
4. General Information, see Sheet 1.
5. Frost and Textural Classification, see Sheet 2.
6. Unified Classification, see Sheet 3.

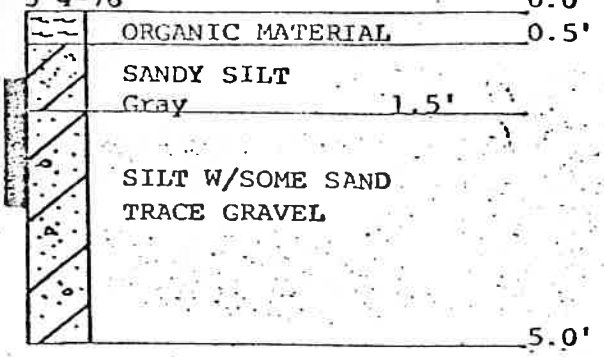
TH 3 (31)

5-4-76

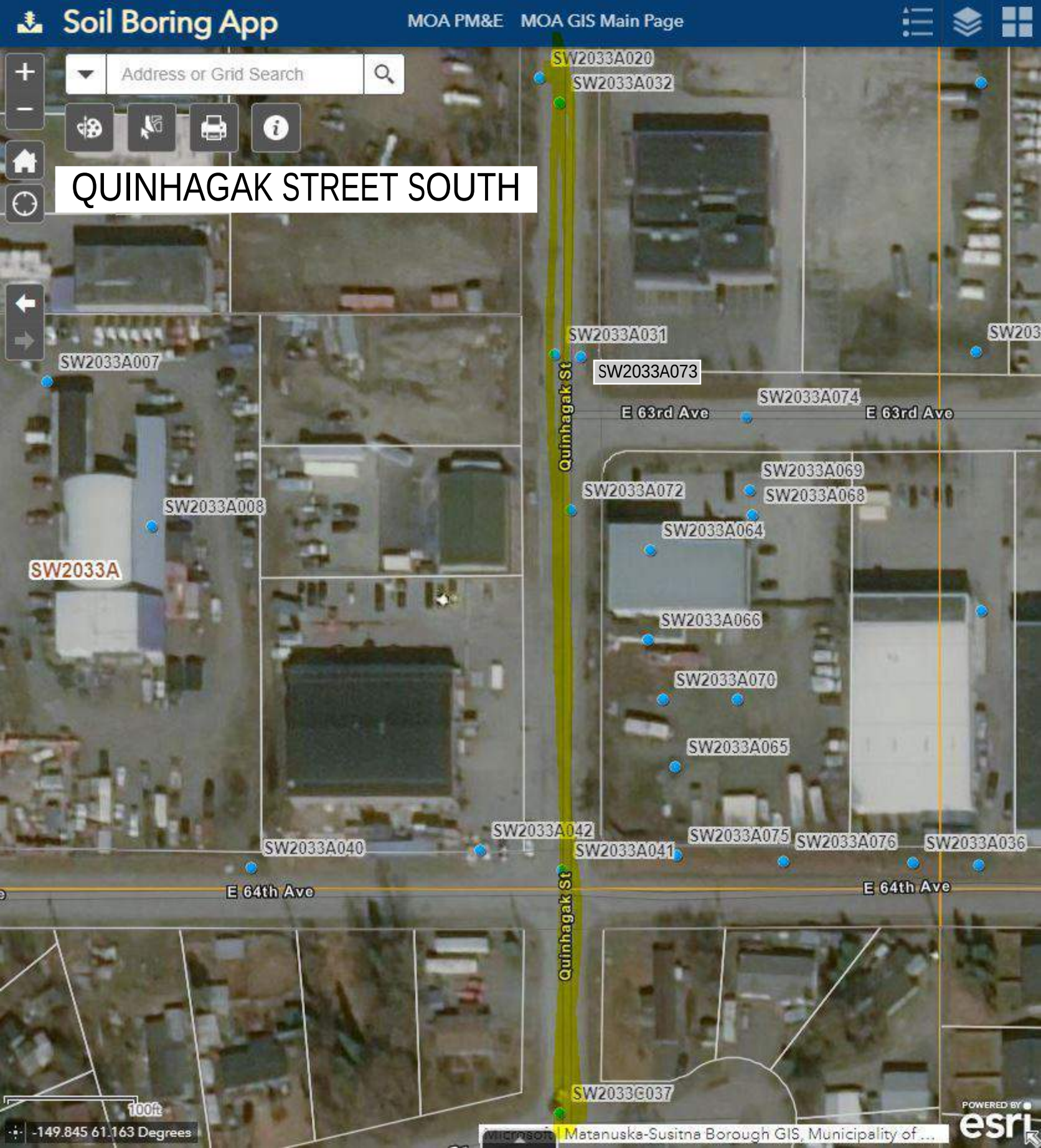


TH 4 (32)

5-4-76



DWN: PLA	R&M CONSULTANTS, INC.	Log of Test Hole George Jenson Anchorage, Alaska	F.B.
CKD: WJL			GRID: 2033
DATE: 5-6-76			PROJ.NO. 651133
SCALE: 1"=3'			DWG.NO. B-04


Soil Boring App
MOA PM&E
MOA GIS Main Page
Address or Grid Search
QUINHAGAK STREET SOUTH
SW2033A020
SW2033A032
SW2033A031
SW2033A007
SW2033A073
SW2033A074
E 63rd Ave
E 63rd Ave
Quinhagak St
SW2033A069
SW2033A072
SW2033A068
SW2033A008
SW2033A064
SW2033A
SW2033A066
SW2033A070
SW2033A065
SW2033A042
SW2033A040
SW2033A041
SW2033A075
SW2033A076
SW2033A036
E 64th Ave
E 64th Ave
Quinhagak St
SW2033C037
100ft
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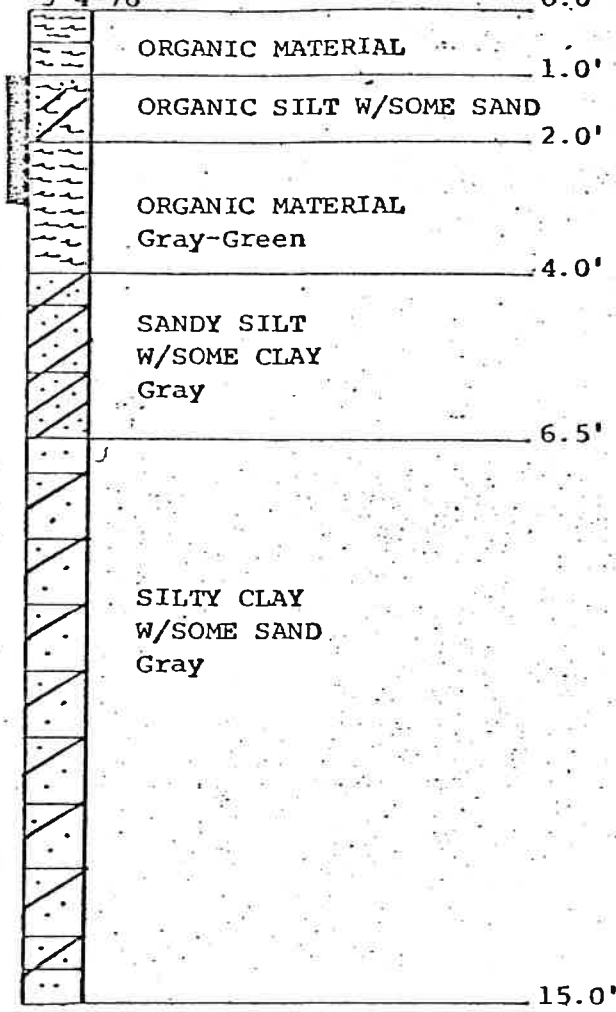
Matanuska-Susitna Borough GIS, Municipality of ...
POWERED BY esri

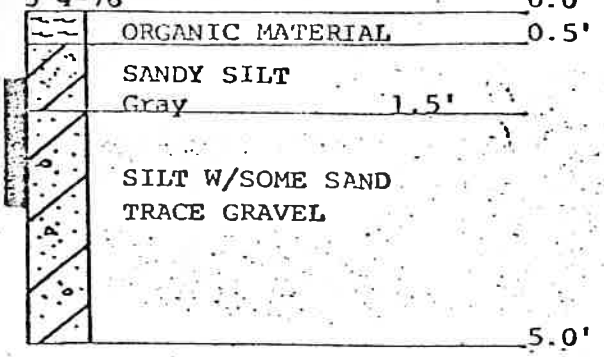
TH 3 (31)

5-4-76



TH 4 (32)

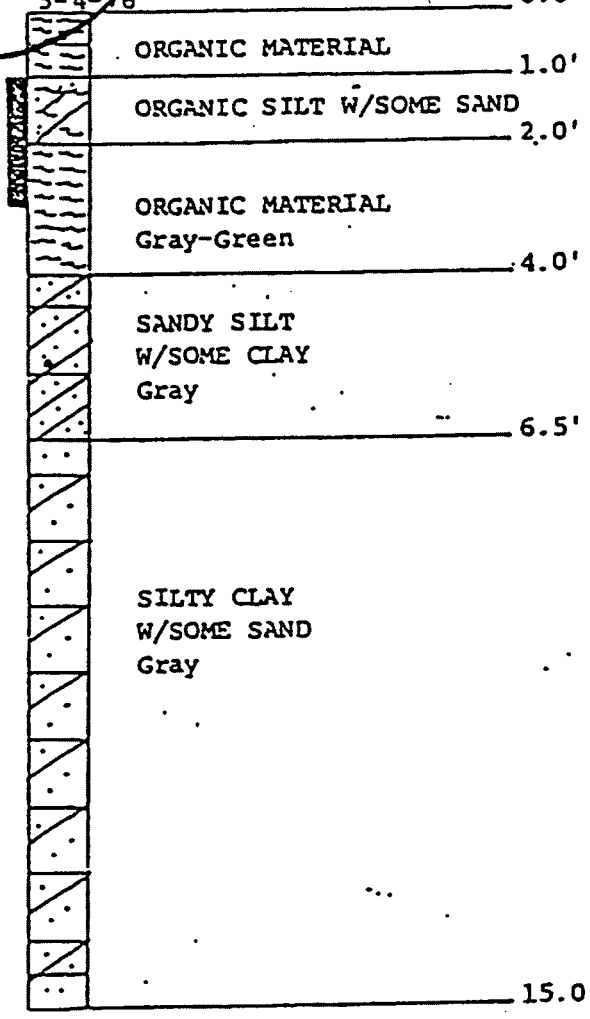
5-4-76



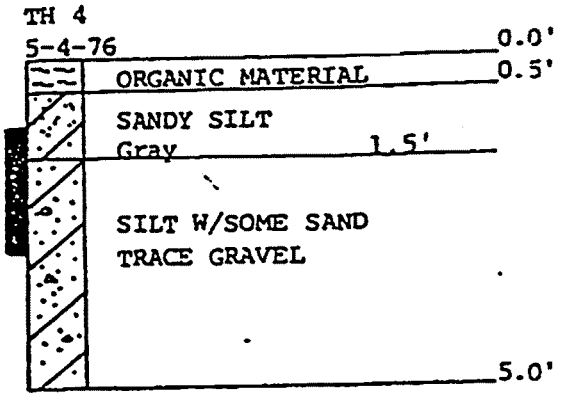
DWN: PLA	R&M CONSULTANTS, INC.	Log of Test Hole George Jenson Anchorage, Alaska	F.B.
CKD: WJL			GRID: 2033
DATE: 5-6-76			PROJ.NO. 651133
SCALE: 1"=3'			DWG.NO. B-04

73

TH 3
5-4-76

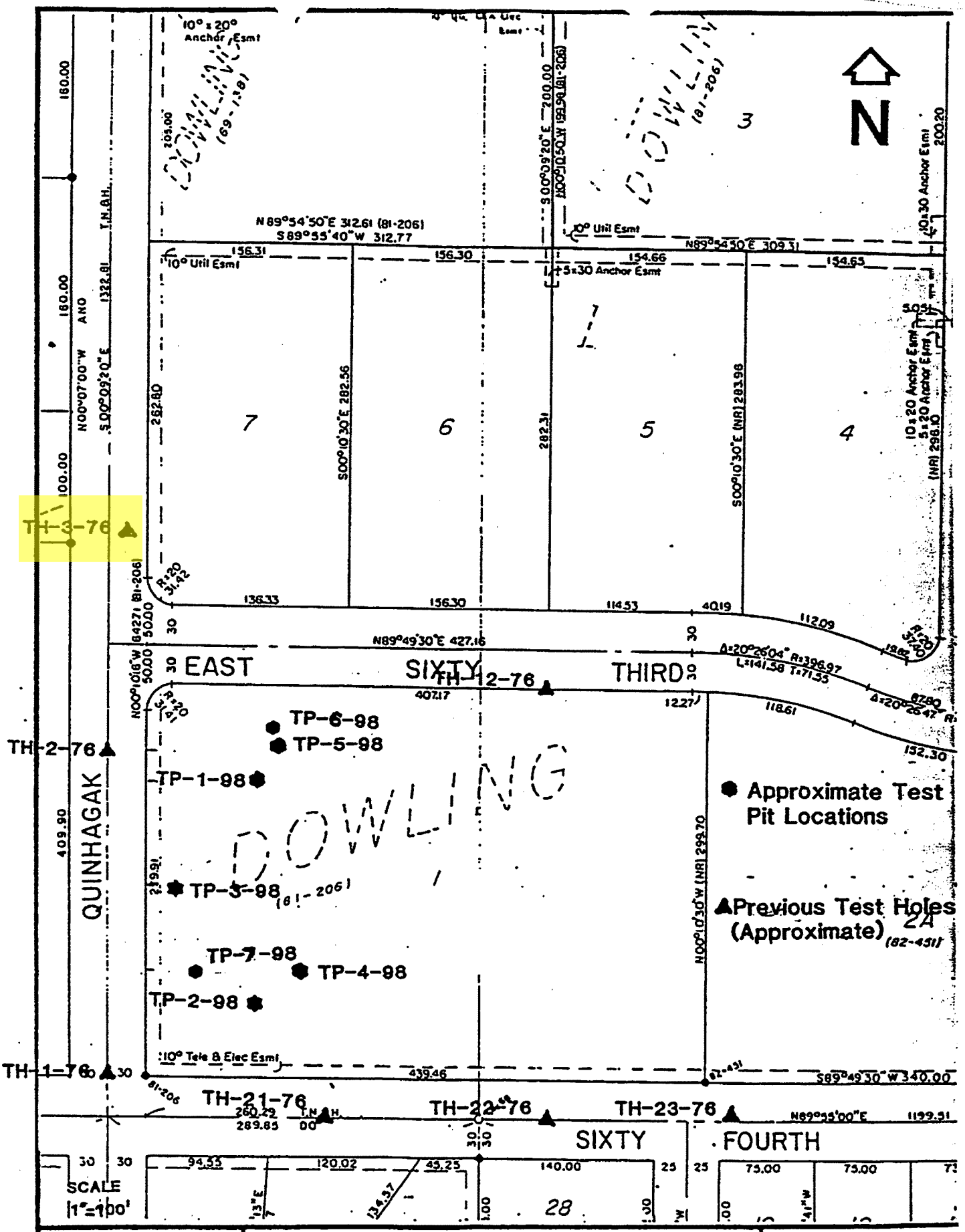


TH 4
5-4-76



DWN: PLA		Log of Test Hole George Jenson Anchorage, Alaska	F.B.
CKD: WJL			GRID: 2033
DATE: 5-6-76			PROJ.NO. 651133
			DWG.NO. B-04

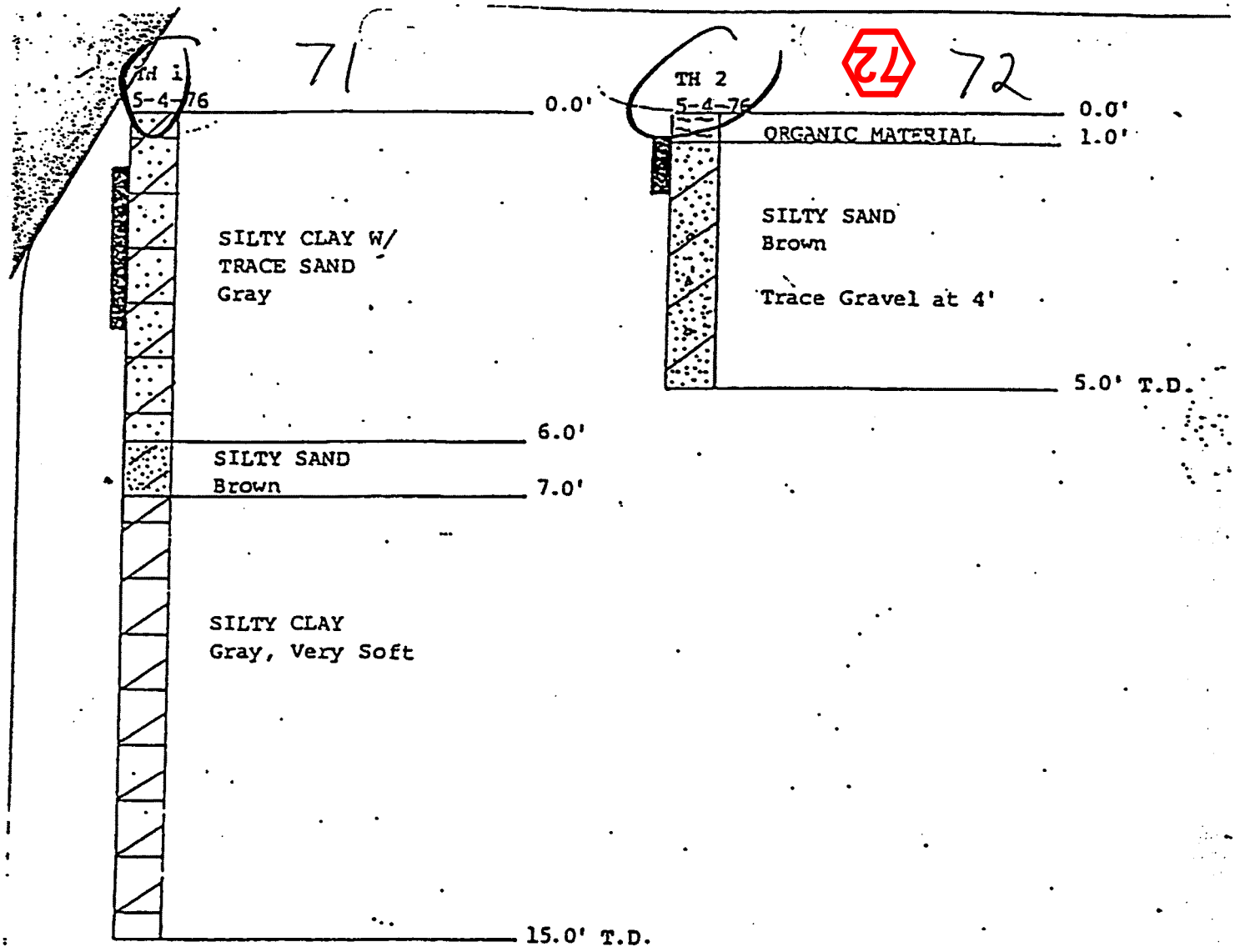
2033A #64-78



DOWL ENGINEERS

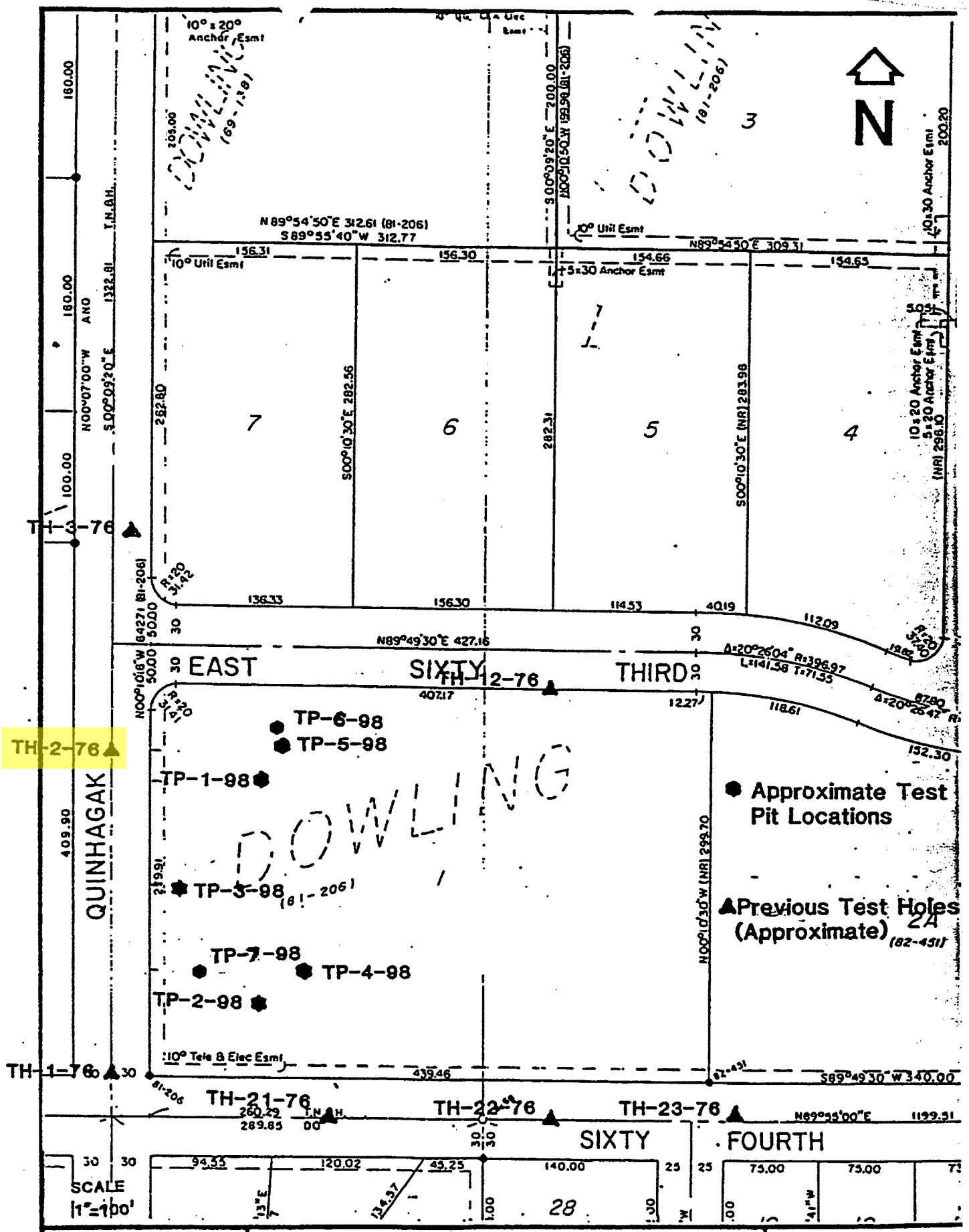
Test Pit Location Map
Quinhagak Street

FIGURE 1



DWN: PLA		Log of Test Holes	F.B.
CKD: WJL		George Jenson	GRID: 2033
DATE: 5-5-76		Anchorage, Alaska	PROJ.NO. 651133

2033A #64-78



DOWL ENGINEERS

Test Pit Location Map
Quinhagak Street

FIGURE 1

LOG OF TEST BORING

Date Begun 6-25-81
Date Completed 6-25-81
Rig No CME 55-Truck 110
Project No
Project Name
Location Quinhagak St. and 64th Ave.
Method Used 6" Solid Flite Auger
Field Party Grinder, Saddler TDC
Geologist Barnwell
Weather

R & M CONSULTANTS, INC.

Hole No. 6
Sheet 1 of 1
Total Depth 10

GROUND WATER TABLE			
W.D. = While Drilling		A.B. = After Boring	
Depth in Ft.		None	
Time			
Date			

Location Diagram:

Sampling Method	Sample No.	Blow Count	Location Sampled	Recovery	Depth in Feet	% Ice Content	Frozen ?	Soil Graph	Moisture	Consistency	T, °F
H	1				0				M	-40	
H	2				5				M	- -	

DESCRIPTION
Soil type, color, texture, estimated particle size, sampler driving notes, depths circulation lost, notes on drilling ease, bits used, etc.

Vegetation:

Collar Elevation

Reference

Smpl. 1
0-0" - 5.0'
1pb - cb

Brown-grey clay w/ some organic, dk. silt.

OH to OL

Smpl. 2
5.0-10.0'
1pb - cb

Grey - dk. brn. clay w/ some organic peat, small fr. silt.

OH to OL.

END

LOG OF TEST BORING

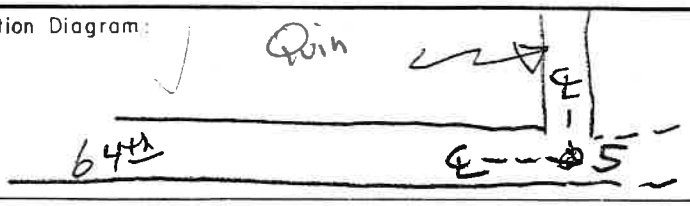
Date Begun 6-25-81
Date Completed 6-25-81
Rig No. CME 55 truck 110
Project No
Project Name
Location Intersection Quinhagak & 64th Ave.
Method Used 6" Solid Flay Auger
Field Party Grindy, Hn O
Geologist Bunnwell
Weather Cloudy, cool

R & M CONSULTANTS, INC.

Hole No. 5
Sheet 1 of 1
Total Depth 10 ft.

GROUND WATER TABLE			
W.D = While Drilling		A B. = After Boring	
Depth in Ft.			
Time	None		
Date			

Location Diagram:



Sampling: Sam. Me. / Sample No.	Blow Count	Location Sampled	Recovery	Depth in Feet	% Ice Content	Frozen ?	Soil Graph	Moisture	Consistency	T, °F

DESCRIPTION
Soil type, color, texture, estimated particle size, sampler driving notes, depths circulation last, notes on drilling ease, bits used, etc.

Vegetation:

Collar Elevation | Reference

H 1 — Smpl. 1, 0-0-5.0', 1pb-cb — M — Brown-grey clay w/ some silt. — CL

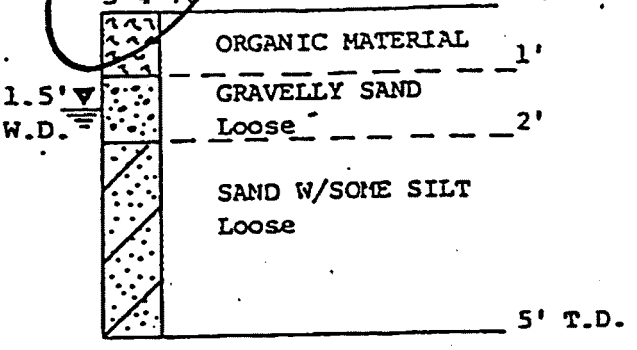
H 2 — Smpl. 2, 5.0-10.0', 1pb-cb — M — Grey clay w/ possibly < trace silt. — CH

END

75

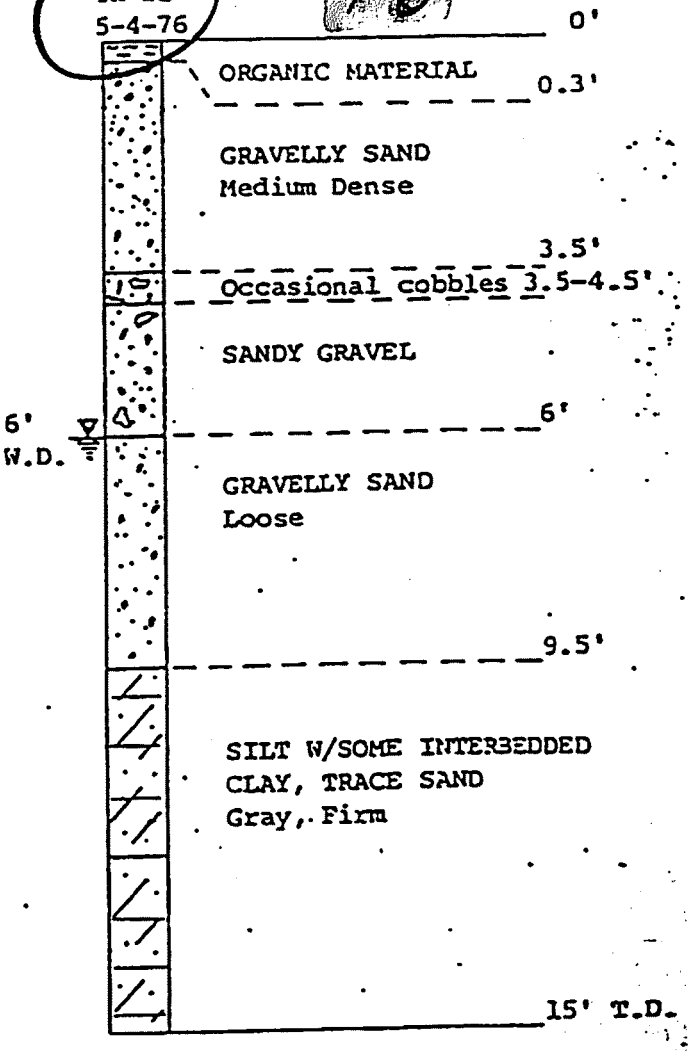
T5

TH 21
5-4-76



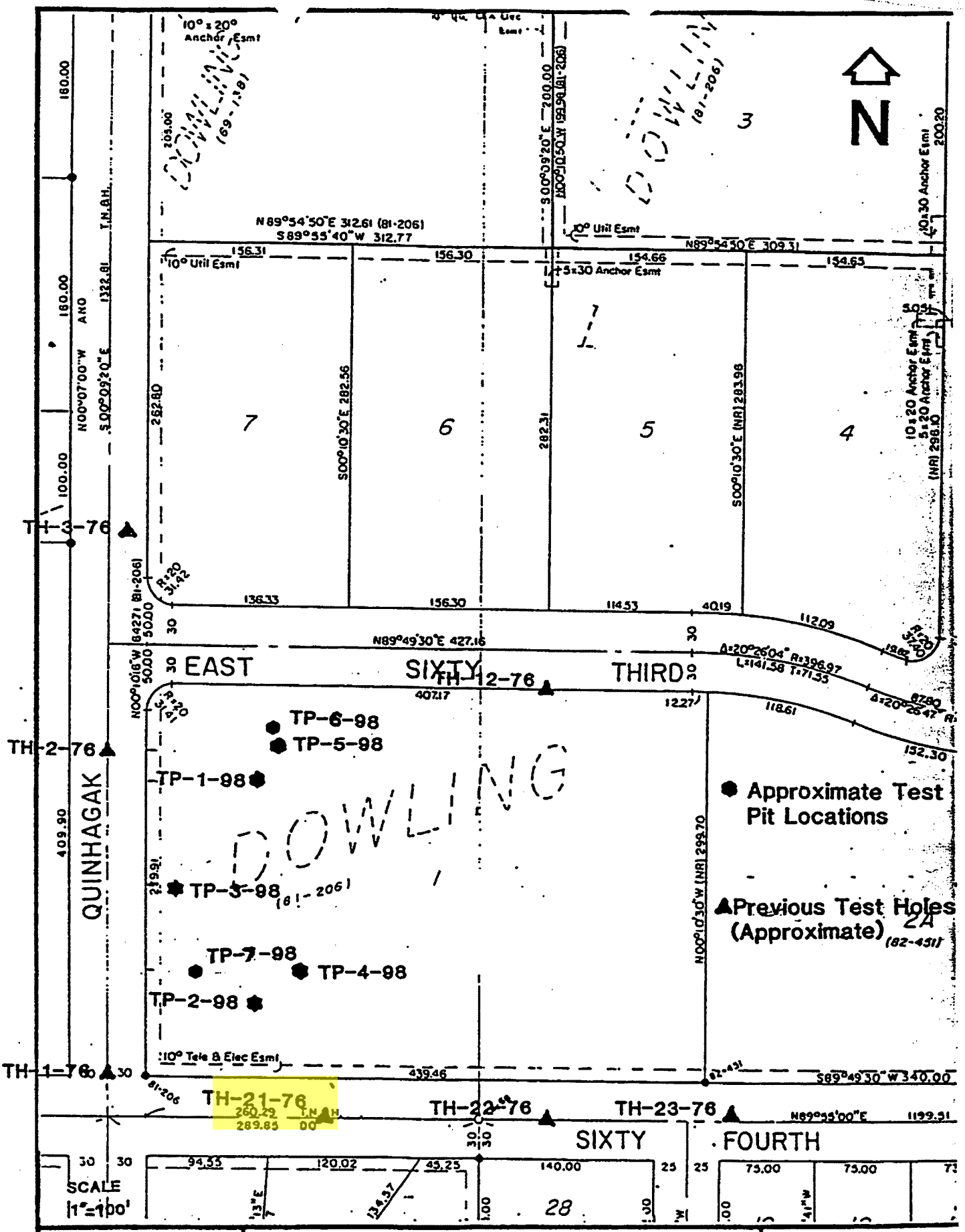
T6

TH 22
5-4-76



DWN: P.L.A.	R&M CONSULTANTS, INC.	Log of Test Holes George Jenson Anchorage, Alaska	F.B.
CKD: WJL			GRID: 2033
DATE: 11 May 76			PROJ.NO. 65113
SCALE: 1" = 3'			DWG.NO. B-13

2033A #64-78



DOWL ENGINEERS

Test Pit Location Map
Quinhagak Street

FIGURE 1

LOG OF TEST BORING

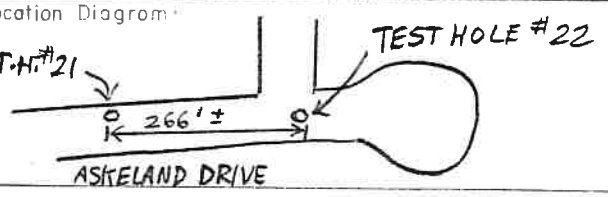
R & M CONSULTANTS, INC.

Date Begun 5/21/81
Date Completed 5/21/81
Rig No. MOBIL B50
Project No 151071
Project Name SHELIKOF RID
Location See diagram
Method Used STD. PENETRATION
Field Party L. WALTER + M. KALNOSKI Geologist E. OLSON
Weather SUNNY, 55°

Hole No 22
Sheet 1 of 1 (37)
Total Depth 11.0'

GROUND WATER TABLE		
W.D = While Drilling		A.B = After Boring
Depth in Ft.	4.5' WD	2.5' AB
Time	1:10 PM	1:20 PM
Date	5/21/81	5/21/81

Location Diagram:



Sampling: Sample No.	Blow Count	Location Sampled	Recovery	Depth in Feet	% Ice Content	Frozen ?	Soil Graph	Moisture	Consistency	DESCRIPTION: Soil type, color, texture, estimated particle size, sampler driving notes, depths circulation lost, notes on drilling ease, bits used, etc.
G 1				0			SM	D		SAMPLE #1 0.0'-1.0' 1 MT, 1 PB. SANDY GRAVEL W/ TRACE SILT. BROWN. GVL. SUBROUNDED, < 1½".
			AB	2						DRILLER NOTES SOFT DRILLING AT 3'. PEAT COMING UP IN AUGER TAILINGS.
			WD	3			M	L		SAMPLE #2 4.5'-6.0' 1 MT, 1 PB. SAND WITH SILT + TRACE ORGANICS. BROWN. SAND FINE. FROZEN.
2	8			4						
	10			5			VM	MD		
	6			6						SAMPLE #3 9.5'-11.0' 1 MT, 1 PB. SILTY SAND W/ TR. GRAVEL. GRAY. GVL. SUBROUNDED.
				7						
				8			M	MD		
3	7			9						
	6			0						SUMMARY: 0.0'-3.0' SANDY GRAVEL W/TR. SILT. 3.0'-4.5' PEAT. 4.5'-11.0': SILTY SAND W/ TR. GVL.
	8			1						
				2						T.D. @ 11.0'
				3						
				4						
				5						
				6						
				7						
				8						
				9						
				0						

T. of P.

Vegetation: NONE

Collar Elevation

Reference

Soil Boring App

MOA PM&E MOA GIS Main Page

Address or Grid Search

SW2033A008

SW2033A

SW2033A064

SW2033A066

SW2033B005

SW2033A070

SW2033A065

SW2033A026

Petersburg St

SW2033A018

SW2033A040

SW2033A042

SW2033A041

SW2033A075

SW2033A076

SW2033A036

SW2033B015

SW2033B014

E 64th Ave

E 64th Ave

Quinhagak St

E 64th Ave

E 64th Ave

SW2033C037

SW2033C036

Askeland Dr

SW2033C

SW2033C035

Askeland Dr

Galatea Dr

North Fork Little Campbell Creek

North Fork Little Campbell Creek

North Fork Little Campbell Creek

SW2033C034

Askeland Dr

SW2033C015

SW2033C027

SW2033C028

SW2033C008

SW2033C007

E 66th Ave

100ft

-149.847 61.164 Degrees

Microsoft | Matanuska-Susitna Borough GIS, Municipality of Anchorage, State of Alaska, © OpenSt...

POWERED BY esri

Test Hole #7 Table A WO #A18638
Logged By: O.M. Hatch
Date: Sept. 28, 1978

Depth in Feet

From	To	Soil Description
0.0'	1.0'	Brown Peat, Pt, damp, stiff.
1.0'	16.5'	F-4, brown to grey Clayey Silt, CL/ML, slightly sandy to 8.0', wood mixed to 2.5', damp, stiff, PL+ to PL-.

Bottom of Test Hole: 16.5'

Frost Line: None Observed

Free Water Level: Seepage at 2.0' while drilling
After 3 days 1.5'

Sample	Depth	Blows/6"	M%	Type of Sample	Dry Strength	Group	Unified	Temp °F
1	5.0'- 6.5'	4/7/7	19.5	SP	M-H	D	CL/ML	48
2	10.0'-11.5'	5/7/16	25.7	SP	L	D	CL/ML	44
3	15.0'-16.5'	11/19/14	30.6	SP	L	D	CL/ML	44

Remarks:
1. Type of Sample, G=Grab, SP = Standard Penetration, U = Undisturbed.
2. Dry Strength, N=None, L=Low, M=Medium, H=High.
3. Group refers to similar material, this study only.
4. General Information, see Sheet 1.
5. Frost and Textural Classification, see Sheet 2.
6. Unified Classification, see Sheet 3.

LOG OF TEST BORING

Date Begun 6-25-81
Date Completed 6-25-81
Rig No. CME 55 truck 110
Project No
Project Name
Location 64th Ave. Near intsect. w/ Petersburg
Methad Used 6" Solid Flay Auger
Field Party Grinder
Geologist Bennell
Weather Cloudy, cool

R & M CONSULTANTS, INC.

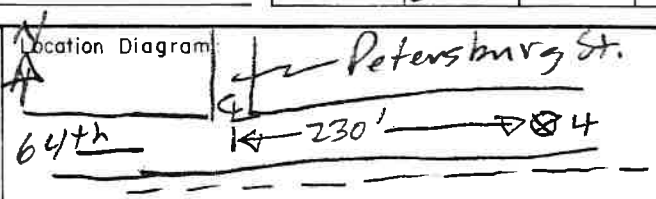
Hole No. 4
Sheet 1 of 1
Total Depth 10'

GROUND WATER TABLE		
(W.D.)-While Drilling		(A.B.)-After Boring
Depth in Ft.	8 WD	AB possible wet
Time	11 AM	
Date	6-25	

Sampling Method	Sample No.	Blow Count	Location Sampled	Recovery	Depth in Feet	% Ice Content	Frozen ?	Soil Graph	Moisture	Consistency

DESCRIPTION
Soil type, color, texture, estimated particle size, sampler driving notes, depths circulation lost, notes on drilling ease, bits used, etc.

Location Diagram



T, °F
Vegetation: None

Collar Elevation
Reference

Smpl. 1
0-0'-5.0'
1pb-cb

Brown grey silty clays. w/ trace gravel.
SC
Some organic peat at top 2" - 5"

Smpl. 2
5.0-10.0
1pb-cb.

Grey-brown clay w/ some silt.
CL

Inhomogeneous clay w/ silt. V. poorly graded.

END

LOG OF TEST BORING

Date Begun 6-25-81
Date Completed 6-25-81
Rig No CME 55-Truck 110
Project No
Project Name
Location Quinhagak St. and 64th Ave.
Method Used 6" Solid Flite Auger
Field Party Grinder, Saddler TDC
Geologist Barnwell
Weather

R & M CONSULTANTS, INC.

Hole No. 6
Sheet 1 of 1
Total Depth 10

GROUND WATER TABLE			
W.D. = While Drilling		A.B. = After Boring	
Depth in Ft.		None	
Time			
Date			

Location Diagram:

Sampling Method	Sample No.	Blow Count	Location Sampled	Recovery	Depth in Feet	% Ice Content	Frozen ?	Soil Graph	Moisture	Consistency	T, °F
H	1				0				M	-40	
H	2				5				M	- -	

DESCRIPTION
Soil type, color, texture, estimated particle size, sampler driving notes, depths circulation lost, notes on drilling ease, bits used, etc.

Vegetation:

Collar Elevation

Reference

Smpl. 1
0-0" - 5.0'
1pb - cb

Brown-grey clay w/ some organic, dk. silt.

OH to OL

Smpl. 2
5.0-10.0'
1pb - cb

Grey - dk. brn. clay w/ some organic peat, small fr. silt.

OH to OL.

END

LOG OF TEST BORING

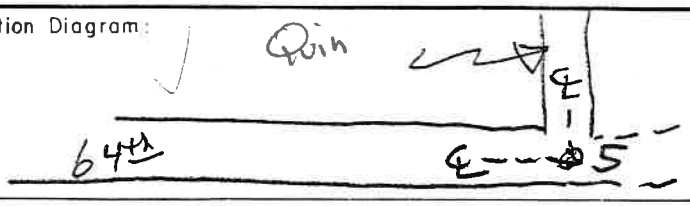
Date Begun 6-25-81
Date Completed 6-25-81
Rig No. CME 55 truck 110
Project No
Project Name
Location Intersection Quinhagak & 64th Ave.
Method Used 6" Solid Flay Auger
Field Party Grindy, Hn O
Geologist Bunnwell
Weather Cloudy, cool

R & M CONSULTANTS, INC.

Hole No. 5
Sheet 1 of 1
Total Depth 10 ft.

GROUND WATER TABLE			
W.D = While Drilling		A B. = After Boring	
Depth in Ft.			
Time	None		
Date			

Location Diagram:



Sampling: Sam. Me. / Sample No.	Blow Count	Location Sampled	Recovery	Depth in Feet	% Ice Content	Frozen ?	Soil Graph	Moisture	Consistency	T, °F

DESCRIPTION
Soil type, color, texture, estimated particle size, sampler driving notes, depths circulation last, notes on drilling ease, bits used, etc.

Vegetation:

Collar Elevation | Reference

H 1 — Smpl. 1, 0-0-5.0', 1pb-cb — M — Brown-grey clay w/ some silt. — CL

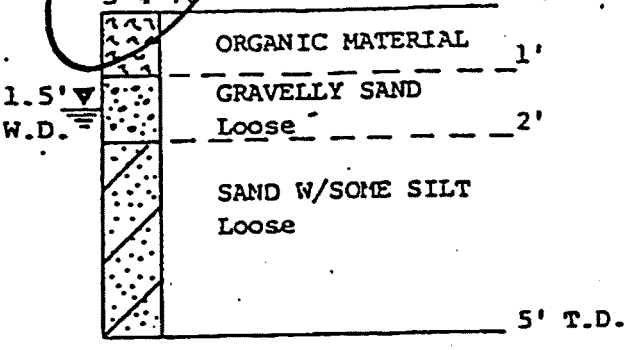
H 2 — Smpl. 2, 5.0-10.0', 1pb-cb — M — Grey clay w/ possibly < trace silt. — CH

END

75

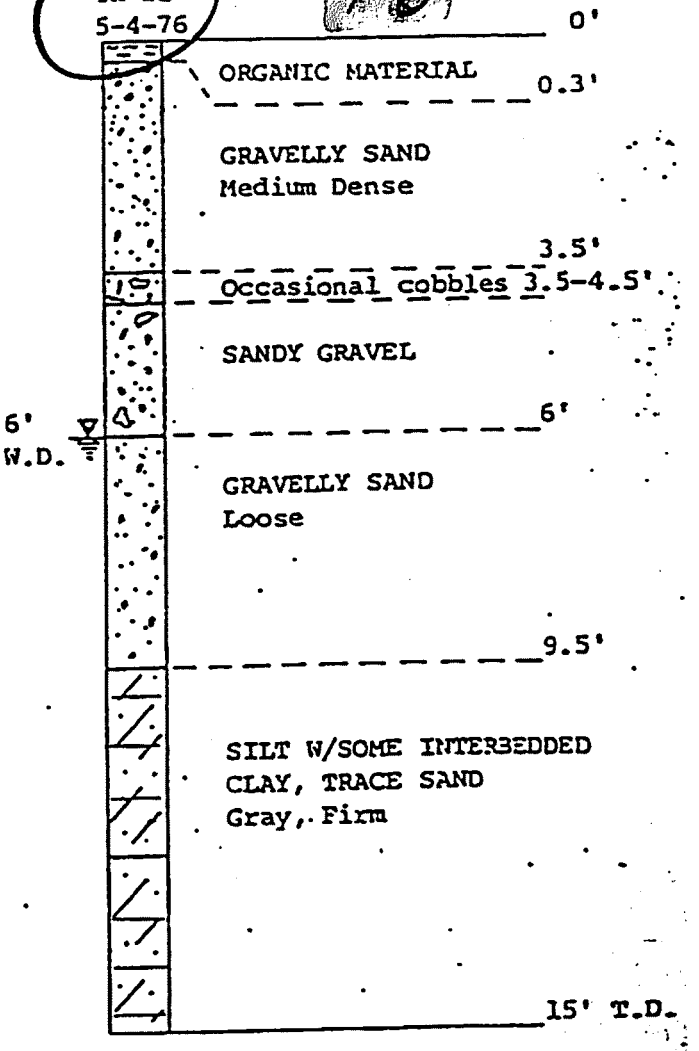
T5

TH 21
5-4-76



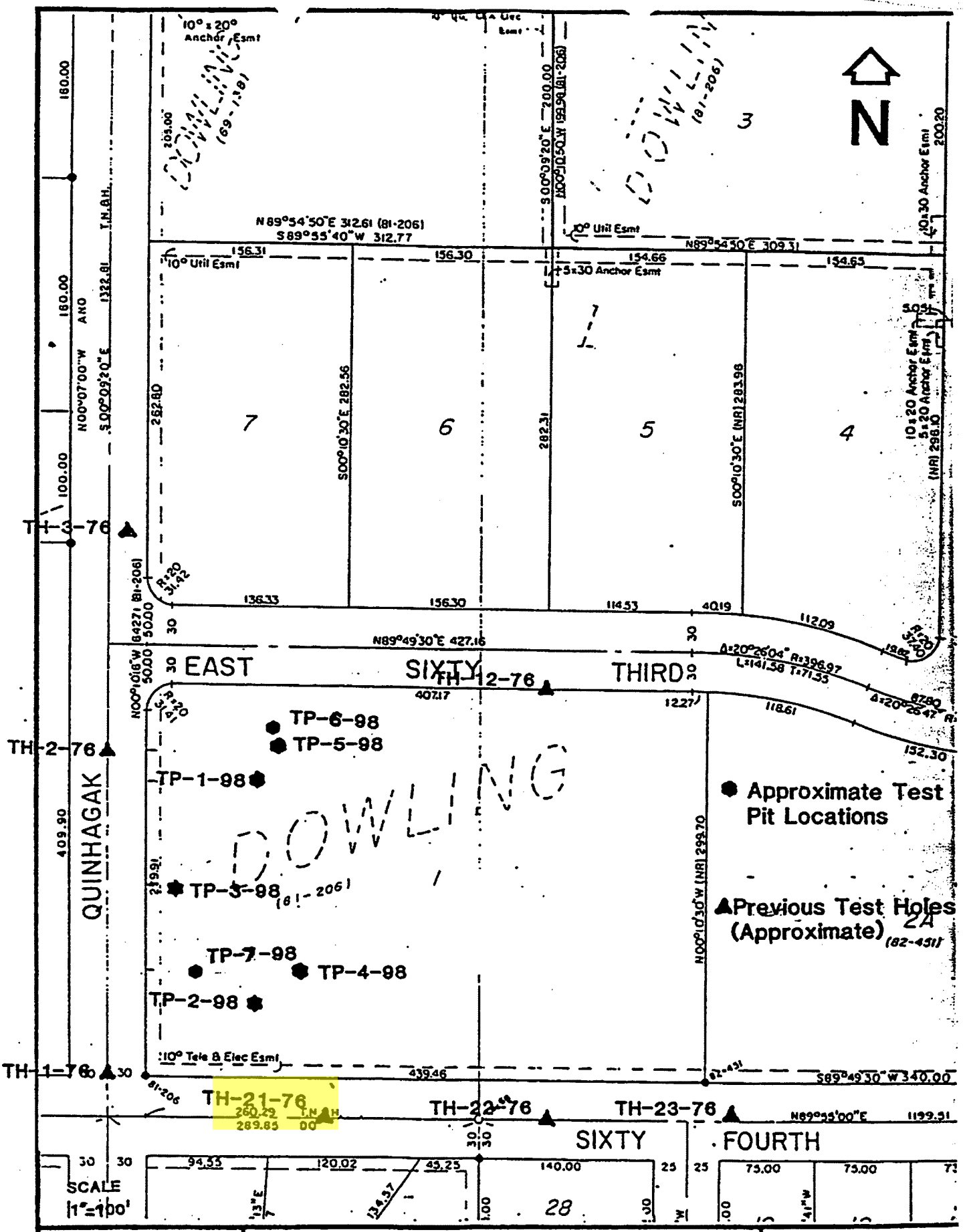
T6

TH 22
5-4-76



DWN: P.L.A.	R&M CONSULTANTS, INC.	Log of Test Holes George Jenson Anchorage, Alaska	F.B.
CKD: WJL			GRID: 2033
DATE: 11 May 76			PROJ.NO. 65113
SCALE: 1" = 3'			DWG.NO. B-13

2033A #64-78

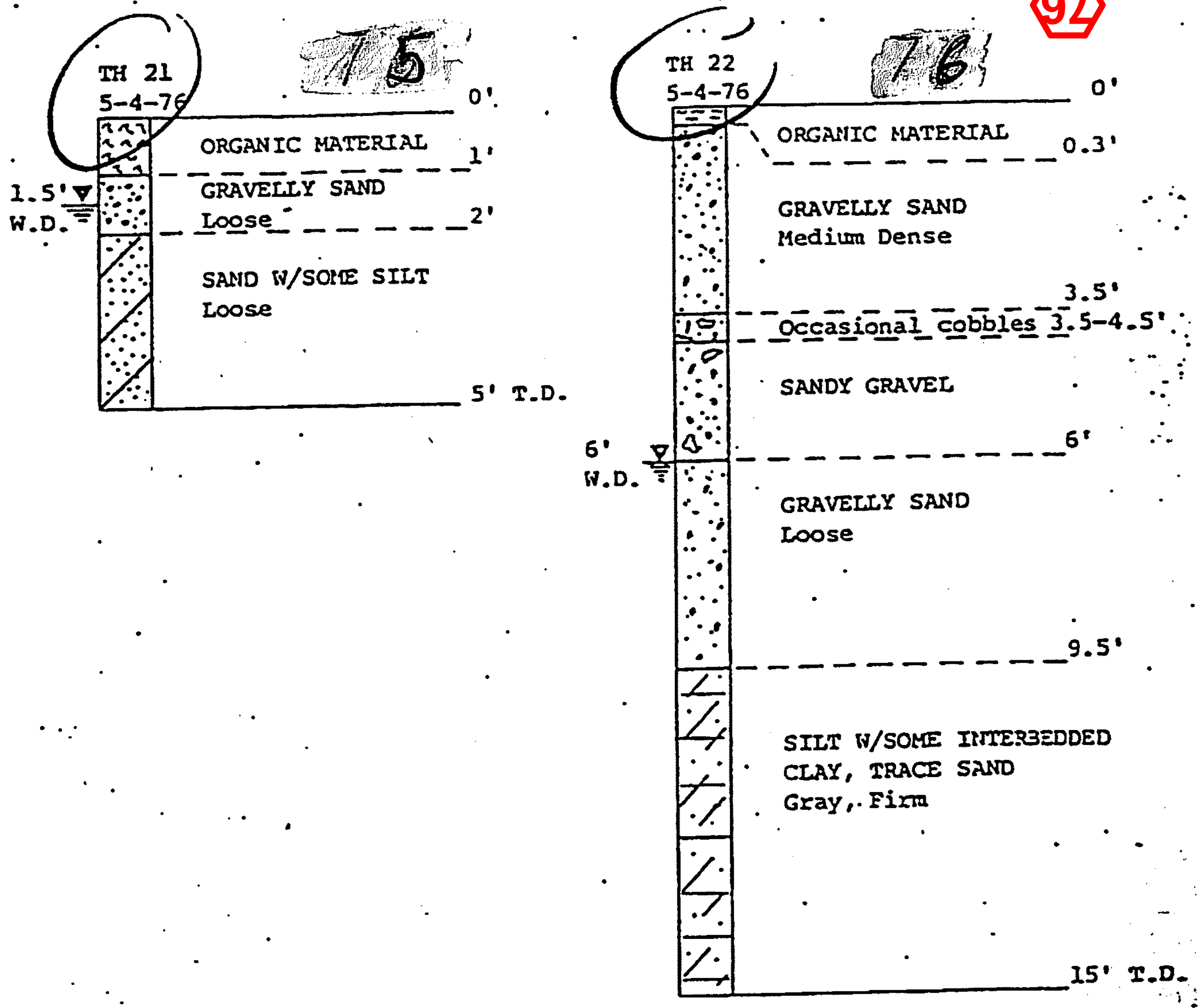


DOWL ENGINEERS

Test Pit Location Map
Quinhagak Street

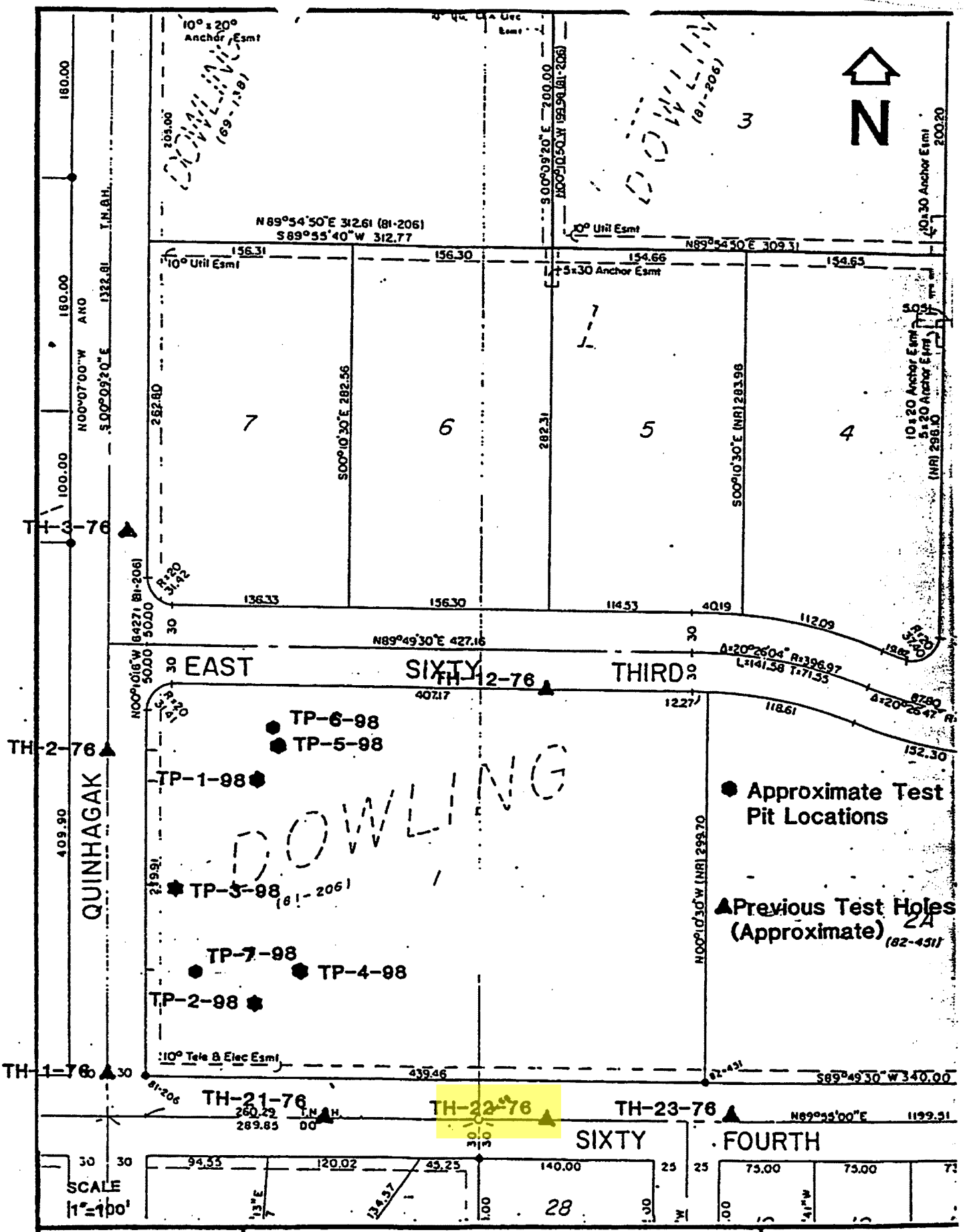
FIGURE 1

76



DWN: P.L.A.	R&M CONSULTANTS, INC.	Log of Test Holes George Jenson Anchorage, Alaska	F.B.
CKD: WJL			GRID: 2033
DATE: 11 May 76			PROJ.NO. 65113
SCALE: 1" = 3'			DWG.NO. B-13

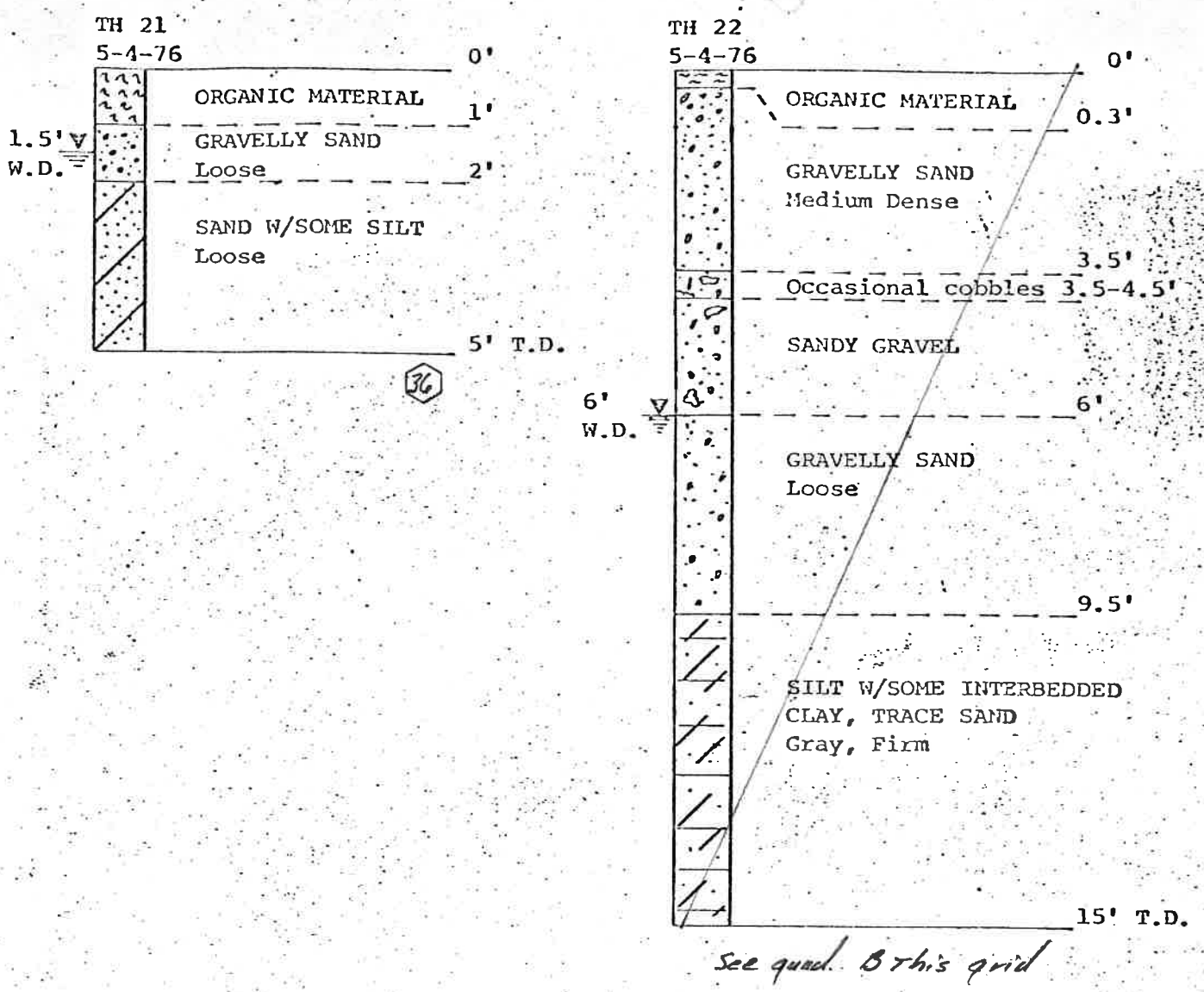
2033A #64-78



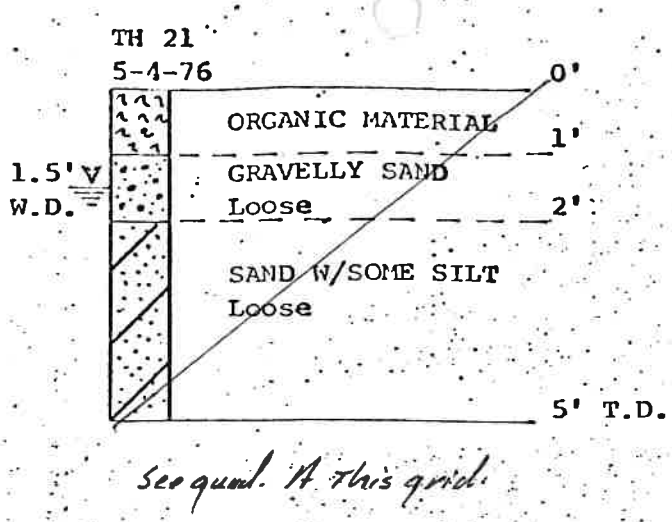
DOWL ENGINEERS

Test Pit Location Map
Quinhagak Street

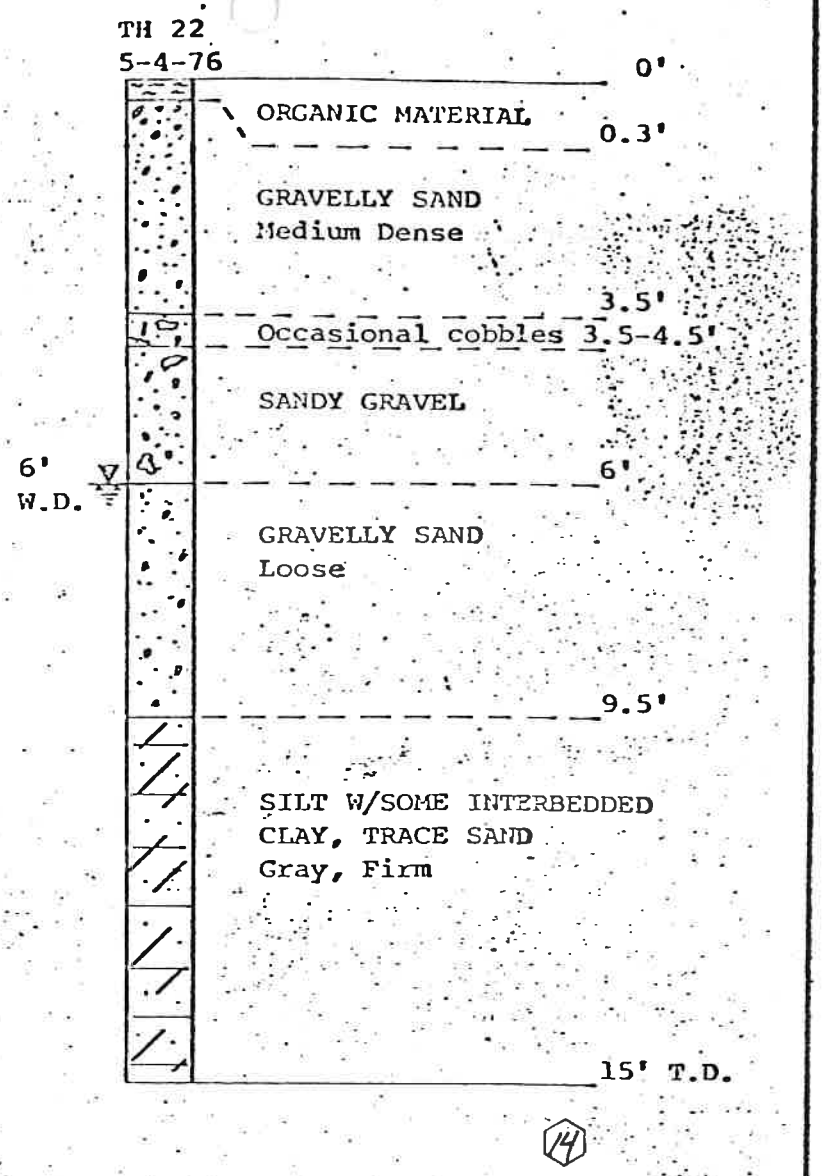
FIGURE 1



DWN: P.L.A.	R&M CONSULTANTS, INC.	Log of Test Holes George Jenson Anchorage, Alaska	F.B.
CKD: WJL			GRID: 2033
DATE: 11 MAY 76			PROJ.NO. 651133
SCALE: 1" = 3'			DWG.NO. B-13

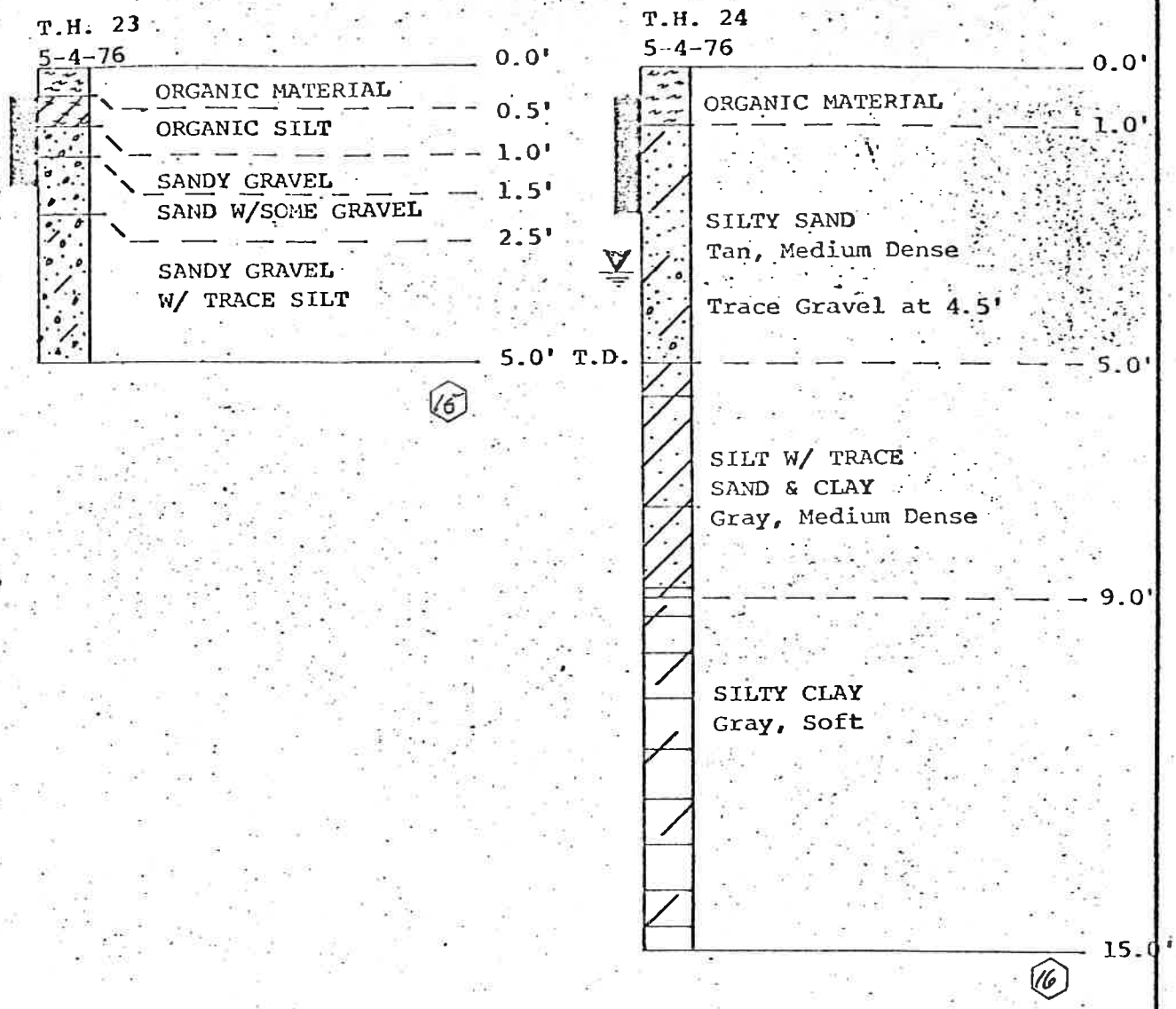


See quad. At this grid.



14

DWN: P.L.A.	R&M CONSULTANTS, INC.	Log of Test Holes George Jenson Anchorage, Alaska	F.B.
CKD: WJL			GRID: 2033
DATE: 11 MAY 76			PROJ.NO. 651133
SCALE: 1" = 3'			DWG.NO. B-13



DWN: PLA	R&M CONSULTANTS, INC.	Log of Test Holes George Jenson Anchorage, Alaska	F.B.	
CKD: WJL			GRID:	2033
DATE: 5-11-76			PROJ.NO.	651133
SCALE: 1"=3'			DWG.NO.	B-14

Appendix D

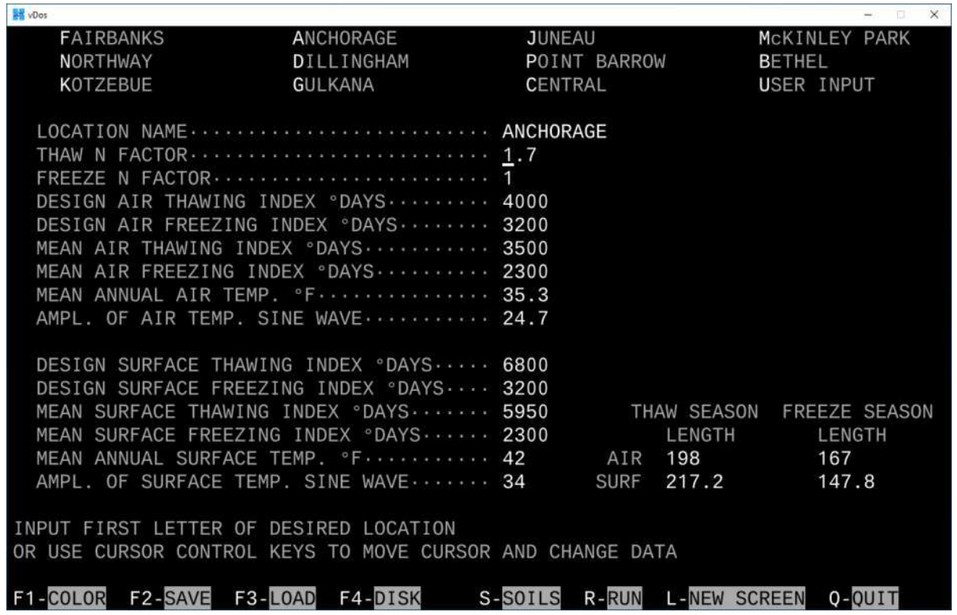
BERG2 Thermal Analysis Output

Included in this section:

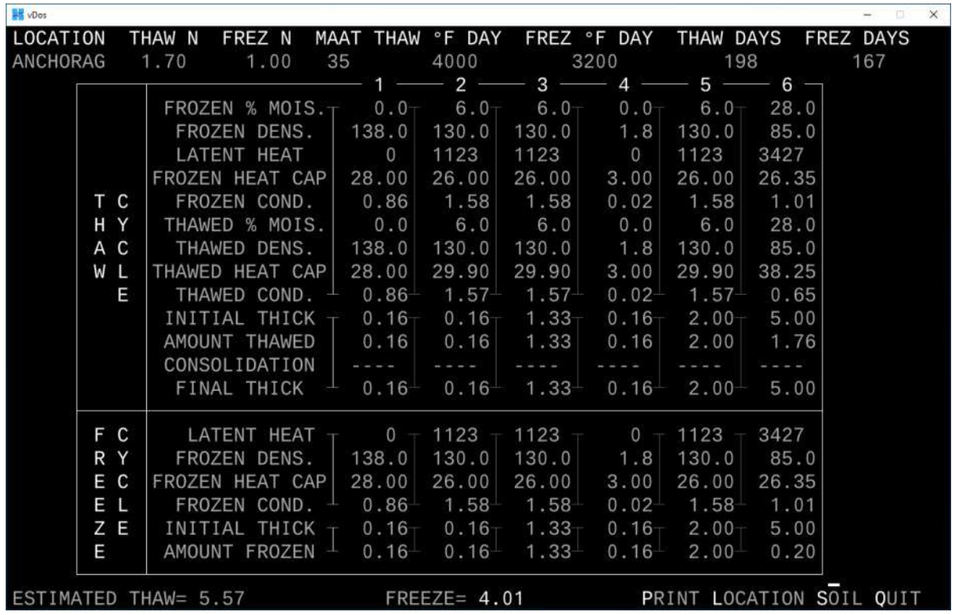
1) Output of BERG thermal modeling analysis

BERG2 Analysis – Limited Subgrade Frost Penetration Analysis – 2” Insulated Section

LOCATION/CLIMATE:



ANALYSIS RESULTS:



SOIL INPUTS

Layer	Thickness (ft)	Density (pcf)	M.C. (%)	Comment
Asphalt	0.17	138	-	-
Fill (Type II-A)	1.50	130	6.0	-
Insulation	0.17	1.8	-	-
Fill (Type II)	2.00	130	6.0	-
Subgrade	5.00	85	28	-

RESULTS

Parameter	Value
Total Section Thickness	3.83 ft
Thaw Depth	5.57 ft
Freeze Depth	4.01 ft
Subgrade Frost Penetration	0.20 ft
Subgrade Frost Percent[1]	5.2%

1. Equal to Subgrade Frost Penetration divided by Total Section Thickness

Traffic Data and Reports

Appendix G

Traffic Engineering

Municipality of Anchorage
Field Sheet

Data Section

Location: Dowling and Quinhagak

Distance: ____ ☒ at int ☐ ft ☐ mi

Posted Speed: ____

Latitude: ____ (optional) Longitude: ____ (optional)

Site Code (optional): 080911668/69/70

Equipment Number: Jamar 355 ☐ see diagram

8 Digit Code (for Manual counters): ____

Installer(s) (initials): JE/KC/CC

Weather: Sunny Temp: ____

Type: ☐ Electronic ☒ Pneumatic ☐ Manual ☐ Trail ☐ Other

Type of Study: AADT Volume

Dir: ☒ North ☐ South ☒ East ☒ West

Study Period: ____ Day(s) ____ Week(s)

☐ Standard AM 700-900 ____ to ____ Other Time

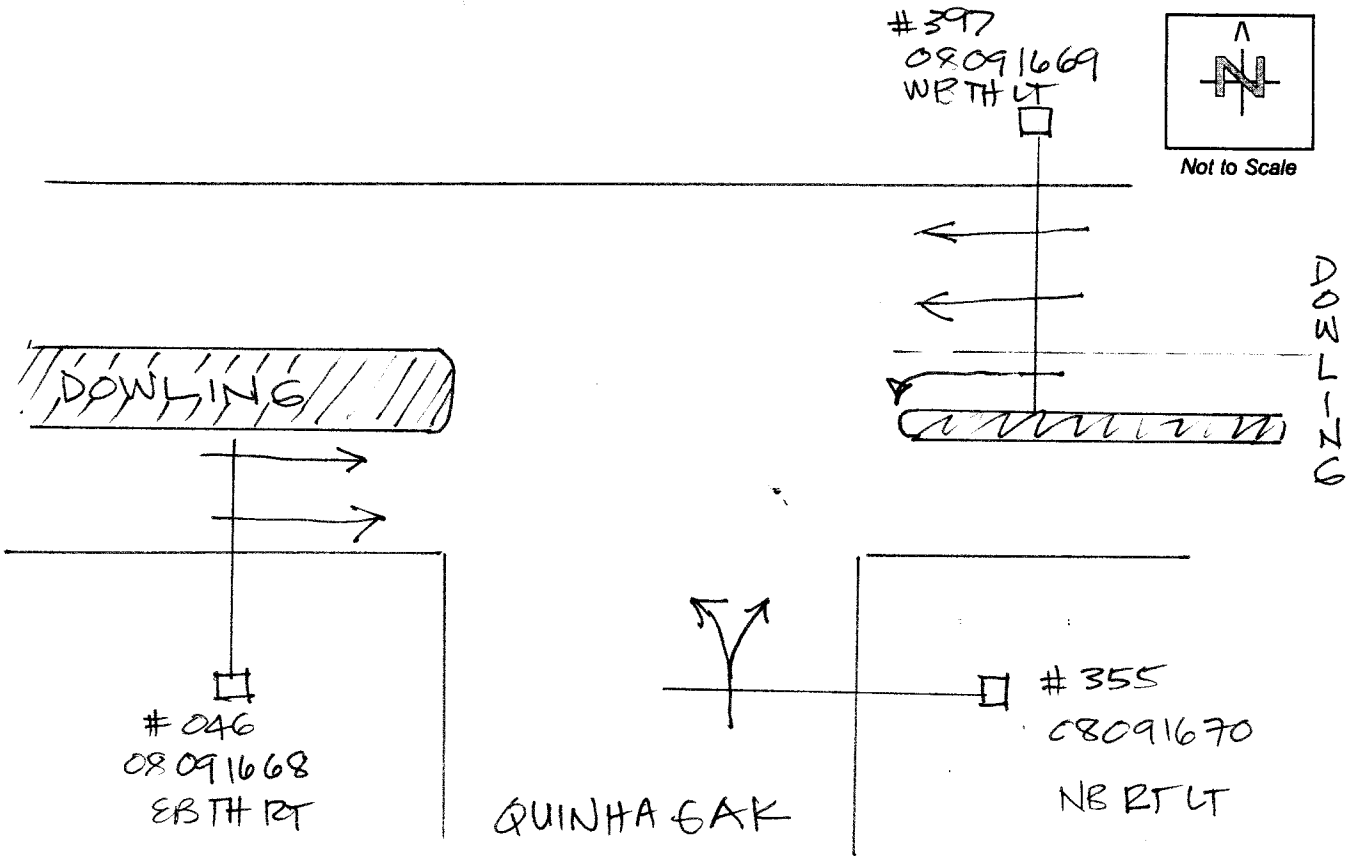
☐ Standard Midday 1100-100 ____ to ____ Other Time

☐ Standard PM 400-600 ____ to ____ Other Time

Installed: Date: 8/9/16 Time: 3:30 ☐ see diagram

Removed: Date: 8/11/16 Time: 1:20 ☐ see diagram

Comments (including unusual Roadway or Trail Condition): ____



Municipality of Anchorage

Data Source: MOA Data
Device Type: Pneumatic
Type: Intersection Volume
Report Date: 08/10/2016

Location: EAST DOWLING ROAD, ANCHORAGE and QUINHAGAK STREET, ANCHORAGE At: Intersection

Time Span: 15 Min

Vehicles

START_TIME	8/10/2016 Wednesday NBLR	8/10/2016 Wednesday EBTR	8/10/2016 Wednesday WBTL	NB	SB	EB	WB	ALL
12:00 AM	5	48	25	5	0	48	25	78
12:15 AM	3	37	23	3	0	37	23	63
12:30 AM	5	31	24	5	0	31	24	60
12:45 AM	1	26	31	1	0	26	31	58
01:00 AM	7	23	22	7	0	23	22	52
01:15 AM	1	24	15	1	0	24	15	40
01:30 AM	2	16	16	2	0	16	16	34
01:45 AM	0	23	8	0	0	23	8	31
02:00 AM	0	30	10	0	0	30	10	40
02:15 AM	2	13	11	2	0	13	11	26
02:30 AM	0	10	11	0	0	10	11	21
02:45 AM	3	14	6	3	0	14	6	23
03:00 AM	0	11	18	0	0	11	18	29
03:15 AM	3	17	19	3	0	17	19	39
03:30 AM	0	17	7	0	0	17	7	24
03:45 AM	4	16	14	4	0	16	14	34
04:00 AM	2	25	14	2	0	25	14	41
04:15 AM	6	18	33	6	0	18	33	57
04:30 AM	2	28	33	2	0	28	33	63
04:45 AM	4	31	46	4	0	31	46	81
05:00 AM	4	54	53	4	0	54	53	111
05:15 AM	9	76	78	9	0	76	78	163
05:30 AM	4	76	89	4	0	76	89	169
05:45 AM	8	95	68	8	0	95	68	171
06:00 AM	6	170	105	6	0	170	105	281
06:15 AM	5	144	155	5	0	144	155	304
06:30 AM	13	167	213	13	0	167	213	393
06:45 AM	2	227	208	2	0	227	208	437
07:00 AM	14	250	260	14	0	250	260	524
07:15 AM	17	301	366	17	0	301	366	684
07:30 AM	35	209	364	35	0	209	364	608
07:45 AM	22	215	251	22	0	215	251	488
08:00 AM	27	246	222	27	0	246	222	495
08:15 AM	20	239	243	20	0	239	243	502
08:30 AM	31	207	236	31	0	207	236	474
08:45 AM	23	205	207	23	0	205	207	435
09:00 AM	35	184	170	35	0	184	170	389
09:15 AM	22	226	181	22	0	226	181	429
09:30 AM	18	205	180	18	0	205	180	403
09:45 AM	22	203	164	22	0	203	164	389
10:00 AM	11	187	143	11	0	187	143	341
10:15 AM	18	192	168	18	0	192	168	378
10:30 AM	26	192	184	26	0	192	184	402

10:45 AM	31	184	186	31	0	184	186	401
11:00 AM	31	232	153	31	0	232	153	416
11:15 AM	29	260	148	29	0	260	148	437
11:30 AM	26	253	190	26	0	253	190	469
11:45 AM	32	247	187	32	0	247	187	466
12:00 PM	40	285	169	40	0	285	169	494
12:15 PM	29	246	176	29	0	246	176	451
12:30 PM	25	260	192	25	0	260	192	477
12:45 PM	26	280	183	26	0	280	183	489
01:00 PM	21	279	173	21	0	279	173	473
01:15 PM	41	223	175	41	0	223	175	439
01:30 PM	37	267	205	37	0	267	205	509
01:45 PM	28	248	162	28	0	248	162	438
02:00 PM	26	272	180	26	0	272	180	478
02:15 PM	22	260	194	22	0	260	194	476
02:30 PM	19	321	183	19	0	321	183	523
02:45 PM	30	295	210	30	0	295	210	535
03:00 PM	18	331	202	18	0	331	202	551
03:15 PM	33	329	225	33	0	329	225	587
03:30 PM	26	380	191	26	0	380	191	597
03:45 PM	37	383	291	37	0	383	291	711
04:00 PM	16	442	229	16	0	442	229	687
04:15 PM	20	448	232	20	0	448	232	700
04:30 PM	27	487	220	27	0	487	220	734
04:45 PM	32	446	221	32	0	446	221	699
05:00 PM	27	428	181	27	0	428	181	636
05:15 PM	28	338	220	28	0	338	220	586
05:30 PM	22	393	269	22	0	393	269	684
05:45 PM	15	294	232	15	0	294	232	541
06:00 PM	22	272	205	22	0	272	205	499
06:15 PM	25	247	203	25	0	247	203	475
06:30 PM	23	270	170	23	0	270	170	463
06:45 PM	16	203	177	16	0	203	177	396
07:00 PM	17	216	153	17	0	216	153	386
07:15 PM	22	175	135	22	0	175	135	332
07:30 PM	17	197	138	17	0	197	138	352
07:45 PM	18	202	106	18	0	202	106	326
08:00 PM	2	189	128	2	0	189	128	319
08:15 PM	15	203	120	15	0	203	120	338
08:30 PM	5	179	94	5	0	179	94	278
08:45 PM	17	164	102	17	0	164	102	283
09:00 PM	10	178	100	10	0	178	100	288
09:15 PM	15	187	95	15	0	187	95	297
09:30 PM	4	123	96	4	0	123	96	223
09:45 PM	4	120	82	4	0	120	82	206
10:00 PM	10	113	90	10	0	113	90	213
10:15 PM	7	92	66	7	0	92	66	165
10:30 PM	9	88	63	9	0	88	63	160
10:45 PM	9	88	54	9	0	88	54	151
11:00 PM	5	73	42	5	0	73	42	120
11:15 PM	3	61	39	3	0	61	39	103
11:30 PM	4	70	25	4	0	70	25	99
11:45 PM	0	41	30	0	0	41	30	71

Peak Hour Volumes

AM Peak	**NBLR**	**EBTR**	**WBTL**	**NB**	**SB**	**EB**	**WB**	**ALL**
07:00 AM - 08:00 AM	88	975	1241	88	0	975	1241	2304
Approach %	*100.00%*	*100.00%*	*100.00%*	*3.82%*	*0.00%*	*42.32%*	*53.86%*	
Midday Peak	**NBLR**	**EBTR**	**WBTL**	**NB**	**SB**	**EB**	**WB**	**ALL**
02:00 PM - 03:00 PM	97	1148	767	97	0	1148	767	2012
Approach %	*100.00%*	*100.00%*	*100.00%*	*4.82%*	*0.00%*	*57.06%*	*38.12%*	
PM Peak	**NBLR**	**EBTR**	**WBTL**	**NB**	**SB**	**EB**	**WB**	**ALL**
03:45 PM - 04:45 PM	100	1760	972	100	0	1760	972	2832
Approach %	*100.00%*	*100.00%*	*100.00%*	*3.53%*	*0.00%*	*62.15%*	*34.32%*	
Off Peak	**NBLR**	**EBTR**	**WBTL**	**NB**	**SB**	**EB**	**WB**	**ALL**
07:00 PM - 08:00 PM	74	790	532	74	0	790	532	1396
Approach %	*100.00%*	*100.00%*	*100.00%*	*5.30%*	*0.00%*	*56.59%*	*38.11%*	

Daily Total

TIME SPAN	NBLR	EBTR	WBTL	NB	SB	EB	WB	ALL
24 Hour	1515	17590	12986	1515	0	17590	12986	32091
Approach %	*100.00%*	*100.00%*	*100.00%*	*4.72%*	*0.00%*	*54.81%*	*40.47%*	

For Project:	Quinhagak	St.				
Project Notes:						
Location/Name:	Incoming					
Report Generated:	07/20/2022	16:56				
Speed Intervals	1 MPH					
Time Intervals	1					
Traffic Report From	07/14/2022	14:00:00	through	07/19/2022	13:59:59	
85th Percentile Speed	27 MPH					
85th Percentile Vehicles	837					
Max Speed	40 MPH	on	07/15/2022	09:16:19		
Total Vehicles	986					
AADT:	197					

Volumes - weekly counts

	Time	5 Day	7 Day
Average Daily		171	164
AM Peak	10:00	16	16
PM Peak	03:00	20	16

Speed

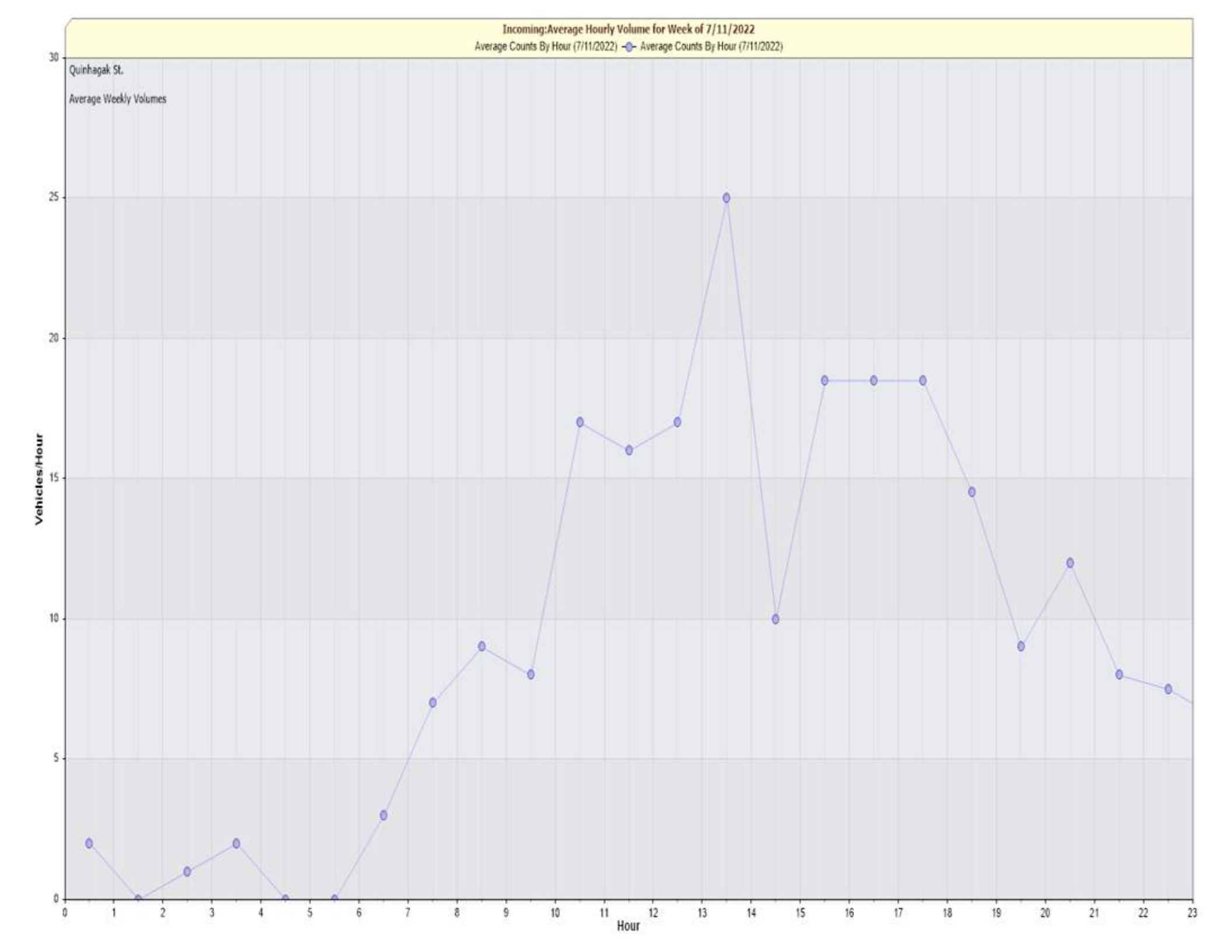
Speed Limit:	25
85th Percentile Speed:	27
Average Speed:	21.42

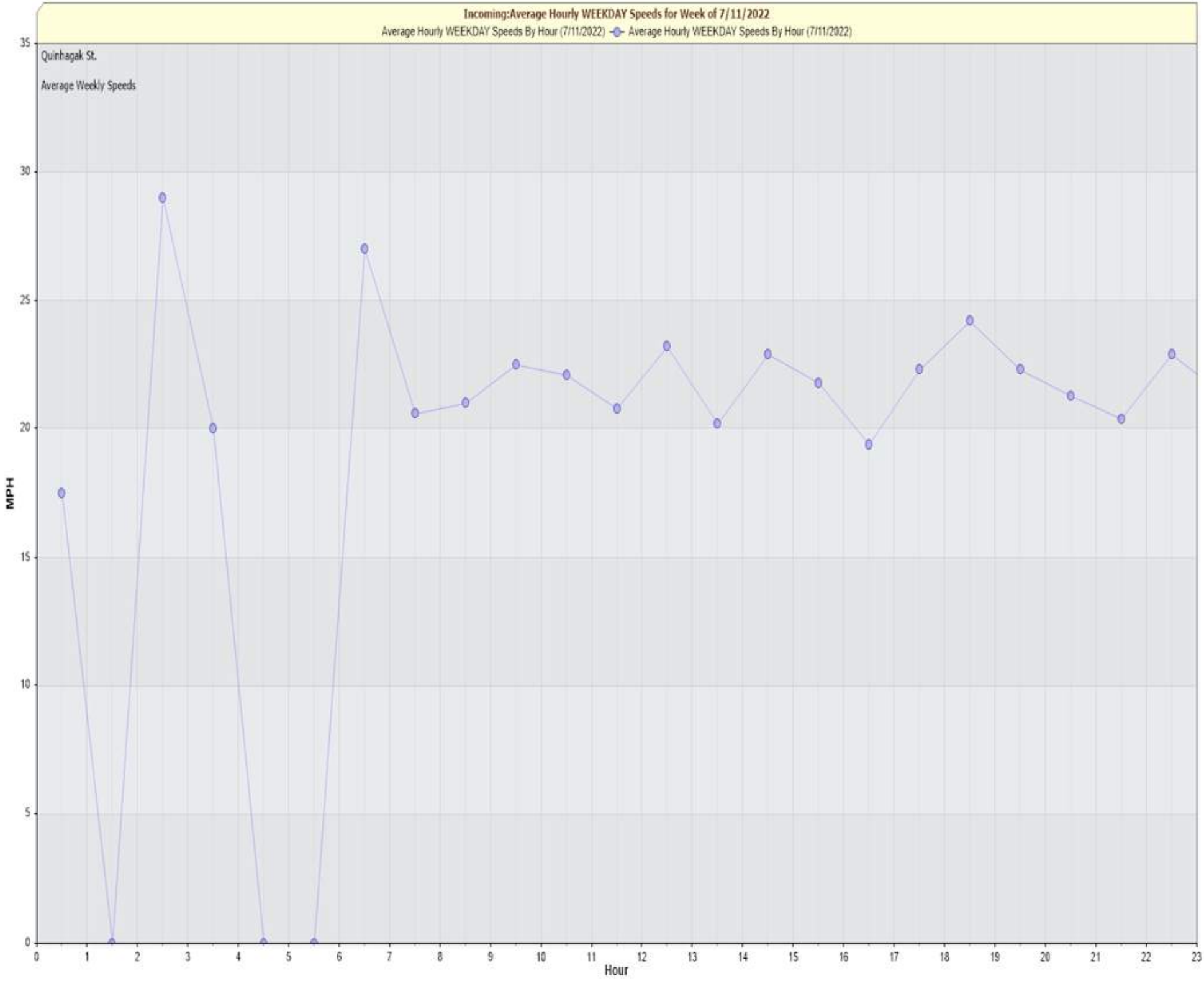
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Count over limit	39	14	N/A	20	54	39	31
% over limit	14.8	19.7	N/A	18.3	22.1	22.5	24.6
Avg Speeder	28.4	27.5	N/A	28.0	29.5	28.4	29.6

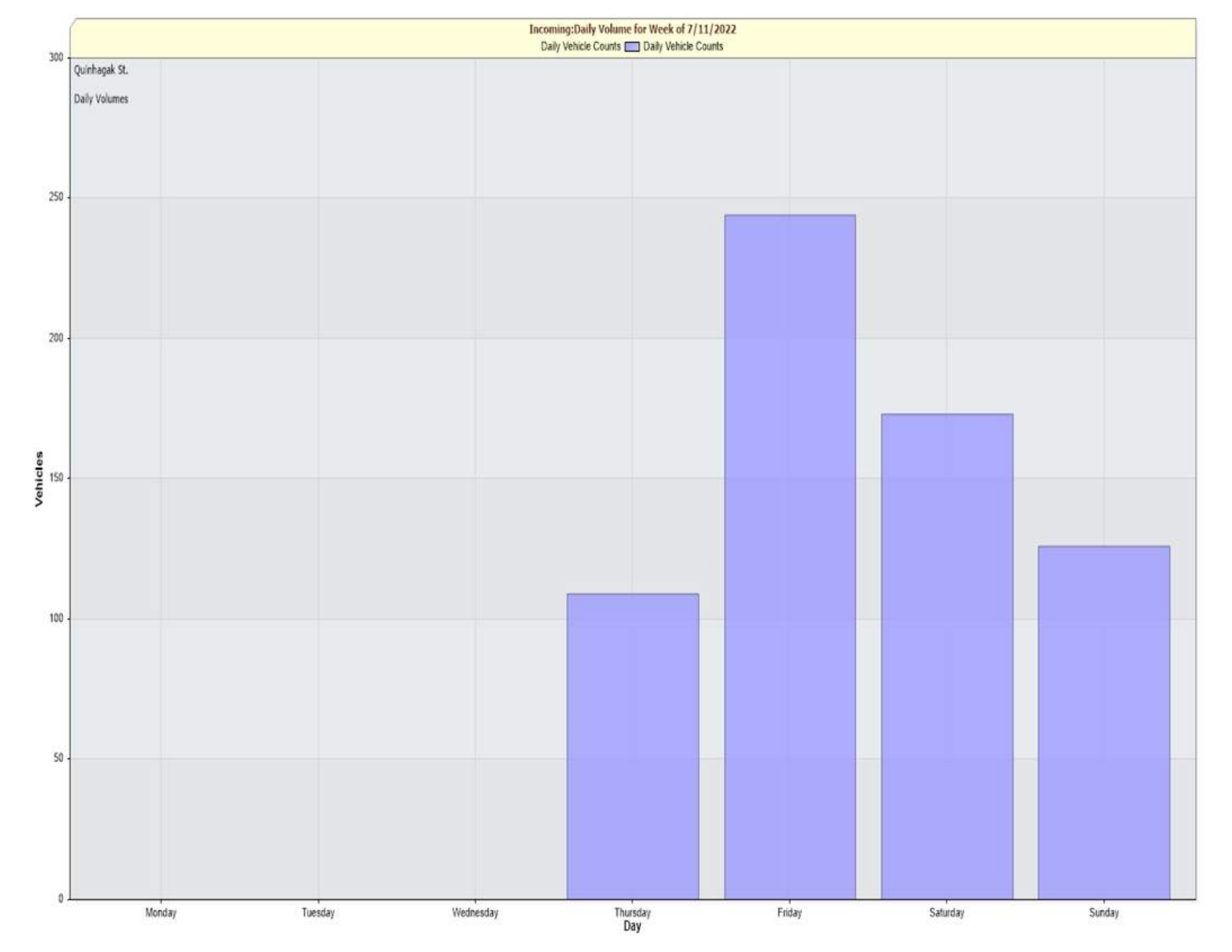
Class Counts

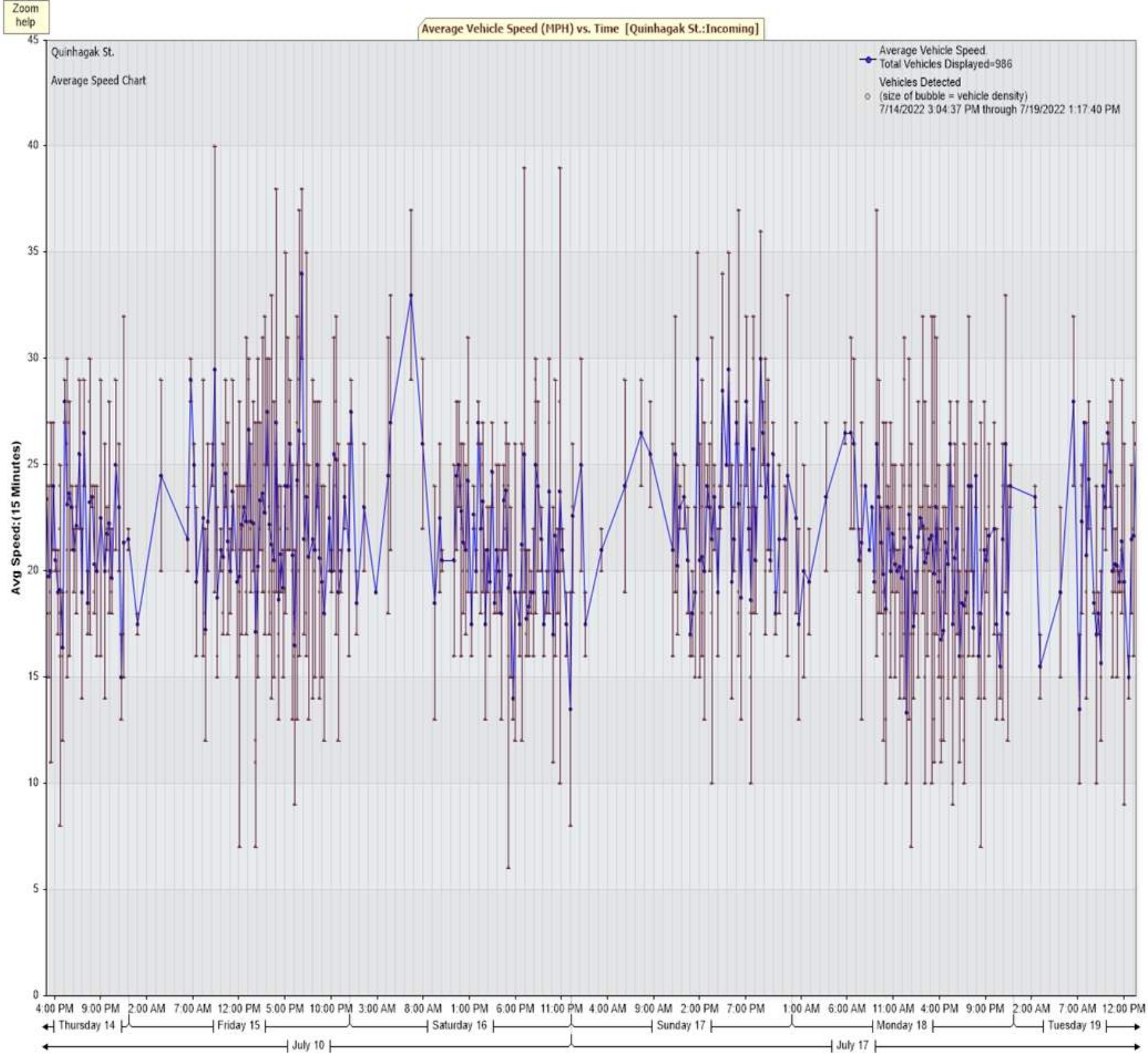
	Number	%
VEH_SM	2	0.2
VEH_MED	967	98.1
VEH_LG	17	1.7

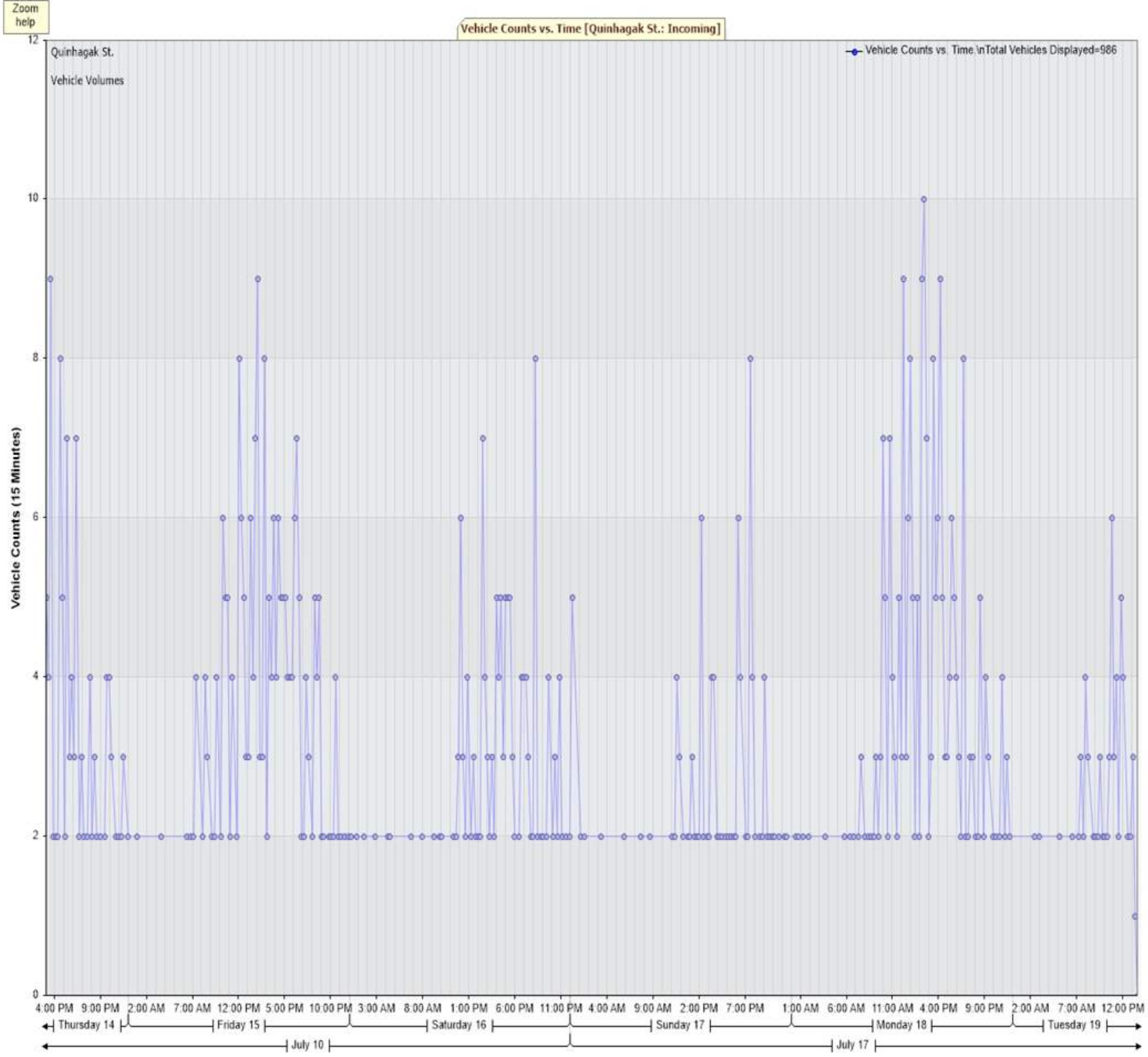
[VEH_SM=motorcycle, VEH_MED = sedan, VEH_LG = truck]

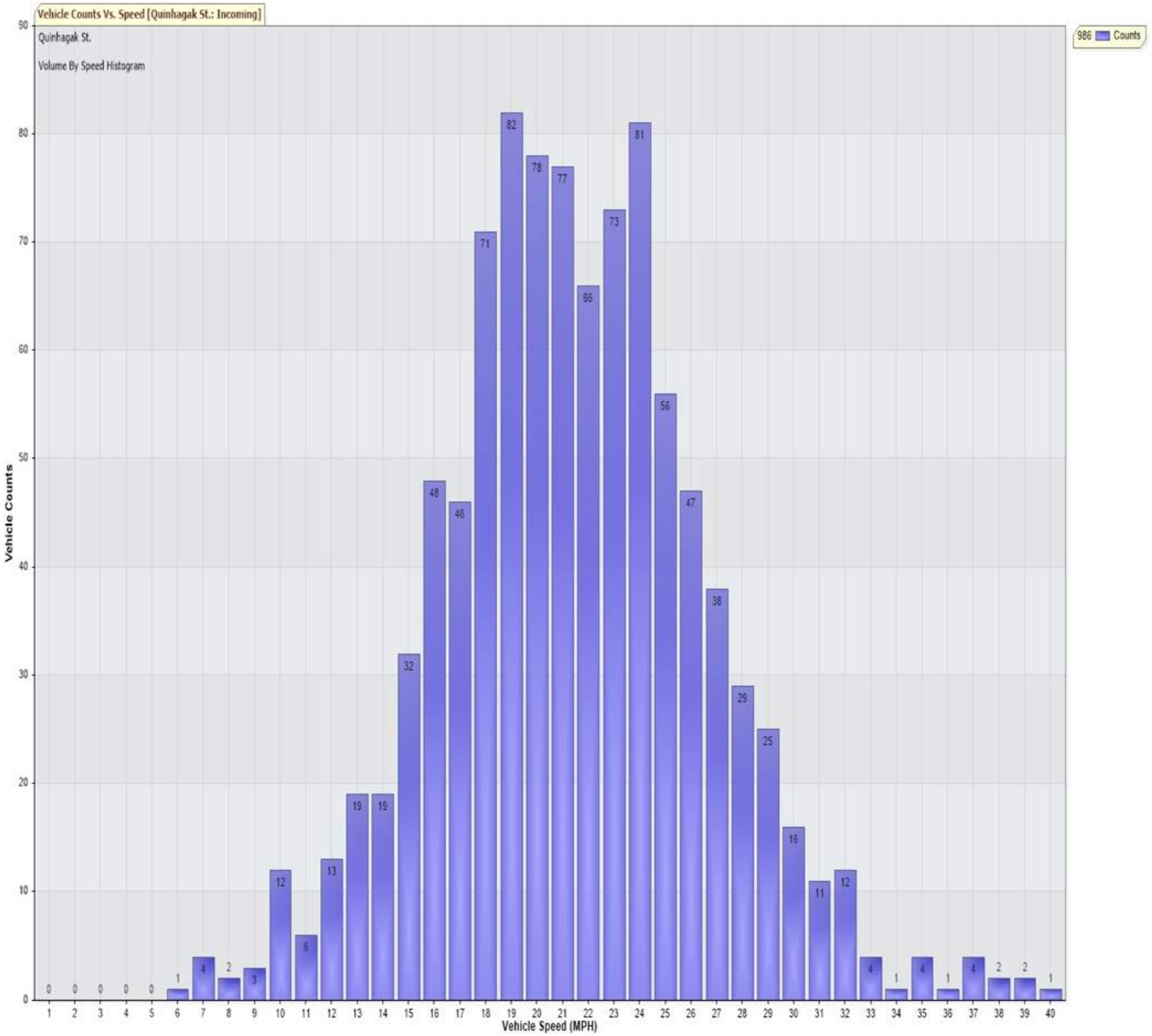

Incoming:Average Hourly Volume for Week of 7/11/2022
Average Counts By Hour (7/11/2022)
Average Counts By Hour (7/11/2022)
Quinhagak St.
Average Weekly Volumes
Vehicles/Hour
Hour
0
5
10
15
20
25
30
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

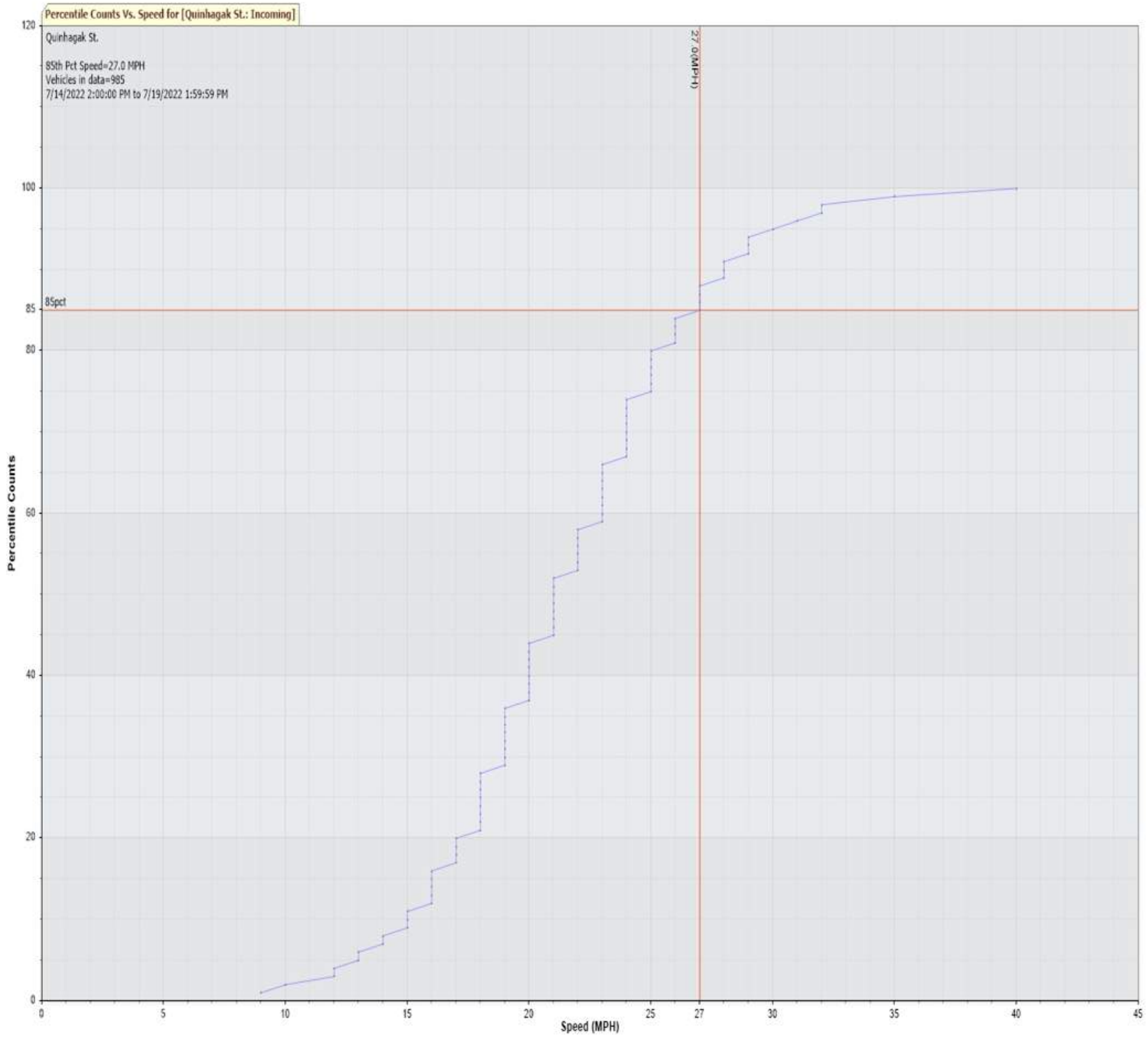

Incoming:Average Hourly WEEKDAY Speeds for Week of 7/11/2022
Average Hourly WEEKDAY Speeds By Hour (7/11/2022)
Average Hourly WEEKDAY Speeds By Hour (7/11/2022)
Quinhagak St.
Average Weekly Speeds
MPH
Hour
0
5
10
15
20
25
30
35
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

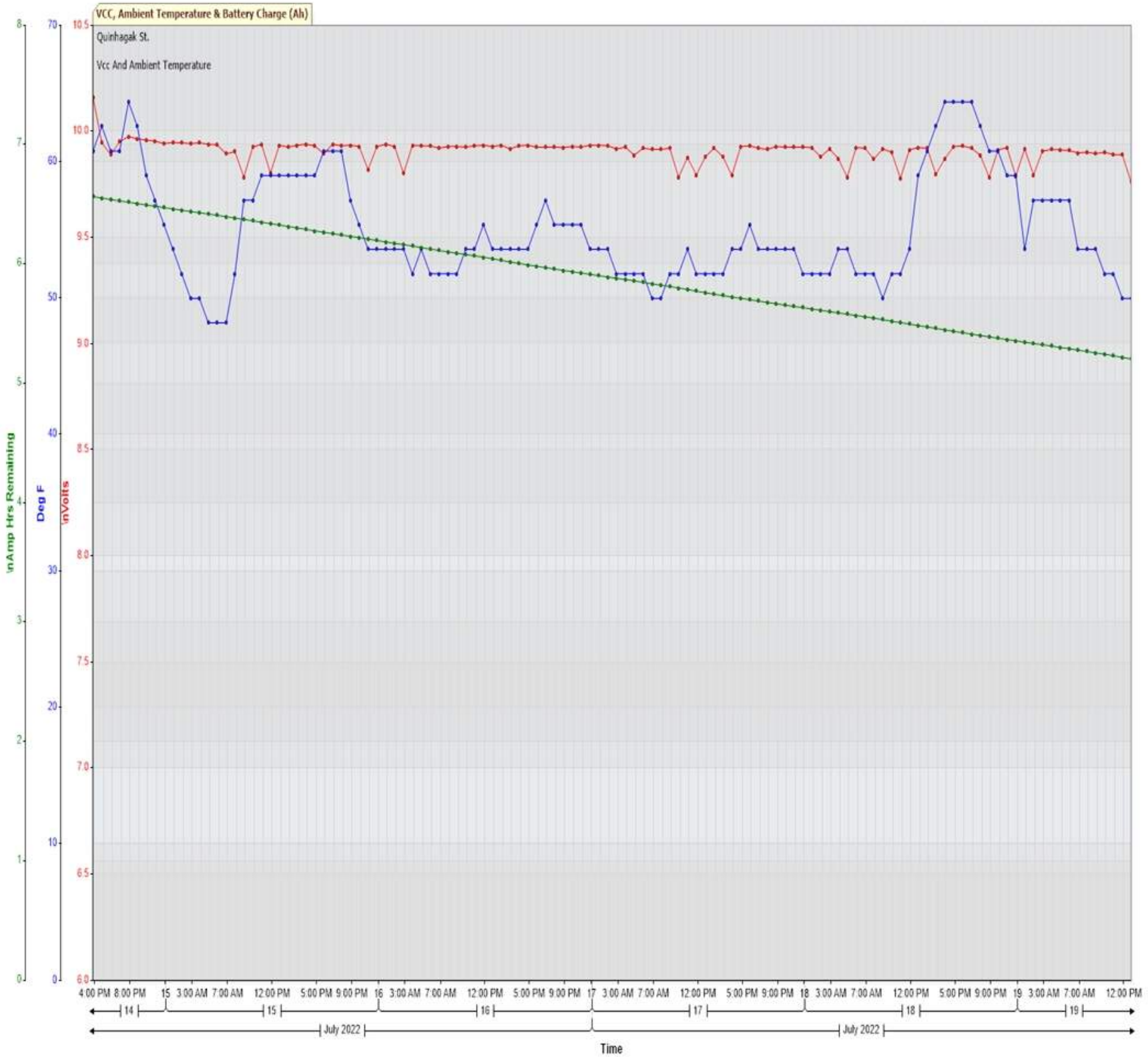

Incoming:Daily Volume for Week of 7/11/2022
Daily Vehicle Counts
Daily Vehicle Counts
Quinhagak St.
Daily Volumes
300
250
200
150
100
50
0
Vehicles
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Sunday
Day


Zoom help
Average Vehicle Speed (MPH) vs. Time [Quinhagak St.:Incoming]
Quinhagak St.
Average Speed Chart
Average Vehicle Speed
Total Vehicles Displayed=986
Vehicles Detected
(size of bubble = vehicle density)
7/14/2022 3:04:37 PM through 7/19/2022 1:17:40 PM
Avg Speed:(15 Minutes)
0
5
10
15
20
25
30
35
40
45
4:00 PM 9:00 PM 2:00 AM 7:00 AM 12:00 PM 5:00 PM 10:00 PM 3:00 AM 8:00 AM 1:00 PM 6:00 PM 11:00 PM 4:00 AM 9:00 AM 2:00 PM 7:00 PM 1:00 AM 6:00 AM 11:00 AM 4:00 PM 9:00 PM 2:00 AM 7:00 AM 12:00 PM
Thursday 14
Friday 15
Saturday 16
Sunday 17
Monday 18
Tuesday 19
July 10
July 17


Zoom help
Vehicle Counts vs. Time [Quinhagak St.: Incoming]
Quinhagak St.
Vehicle Volumes
Vehicle Counts vs. Time \nTotal Vehicles Displayed=986
Vehicle Counts (15 Minutes)
0
2
4
6
8
10
12
4:00 PM 9:00 PM 2:00 AM 7:00 AM 12:00 PM 5:00 PM 10:00 PM 3:00 AM 8:00 AM 1:00 PM 6:00 PM 11:00 PM 4:00 AM 9:00 AM 2:00 PM 7:00 PM 1:00 AM 6:00 AM 11:00 AM 4:00 PM 9:00 PM 2:00 AM 7:00 AM 12:00 PM
Thursday 14
Friday 15
Saturday 16
Sunday 17
Monday 18
Tuesday 19
July 10
July 17


Vehicle Counts Vs. Speed [Quinhagak St.: Incoming]
Quinhagak St.
Volume By Speed Histogram
986 Counts
Vehicle Counts
Vehicle Speed (MPH)
0 0 0 0 0 1 4 2 3 12 6 13 19 19 32 48 46 71 82 78 77 66 73 81 56 47 38 29 25 16 11 12 4 1 4 1 4 2 2 1
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40
0 10 20 30 40 50 60 70 80 90


Percentile Counts Vs. Speed for [Quinhagak St.: Incoming]
Quinhagak St.
85th Pct Speed=27.0 MPH
Vehicles in data=985
7/14/2022 2:00:00 PM to 7/19/2022 1:59:59 PM
27.0(MPH)
85pct
Percentile Counts
Speed (MPH)
0
20
40
60
80
85
100
120
0
5
10
15
20
25
27
30
35
40
45


VCC, Ambient Temperature & Battery Charge (Ah)
Quinhagak St.
Vcc And Ambient Temperature
nAmp Hrs Remaining
Deg F
nVolts
4:00 PM 8:00 PM 15 3:00 AM 7:00 AM 12:00 PM 5:00 PM 9:00 PM 16 3:00 AM 7:00 AM 12:00 PM 5:00 PM 9:00 PM 17 3:00 AM 7:00 AM 12:00 PM 5:00 PM 9:00 PM 18 3:00 AM 7:00 AM 12:00 PM 5:00 PM 9:00 PM 19 3:00 AM 7:00 AM 12:00 PM
14
15
16
17
18
19
July 2022
July 2022
Time

For Project:	Quinhagak	St.				
Project Notes:						
Location/Name:	Outgoing					
Report Generated:	07/20/2022	16:56				
Speed Intervals	1 MPH					
Time Intervals	Instant					
Traffic Report From	07/14/2022	14:00:00	through	07/19/2022	13:59:59	
85th Percentile Speed	29 MPH					
85th Percentile Vehicles	1459					
Max Speed	57 MPH	on	07/18/2022	21:25:08		
Total Vehicles	1717					
AADT:	343					

Volumes - weekly counts

	Time	5 Day	7 Day
Average Daily		310	286
AM Peak	11:00	31	27
PM Peak	04:00	36	29

Speed

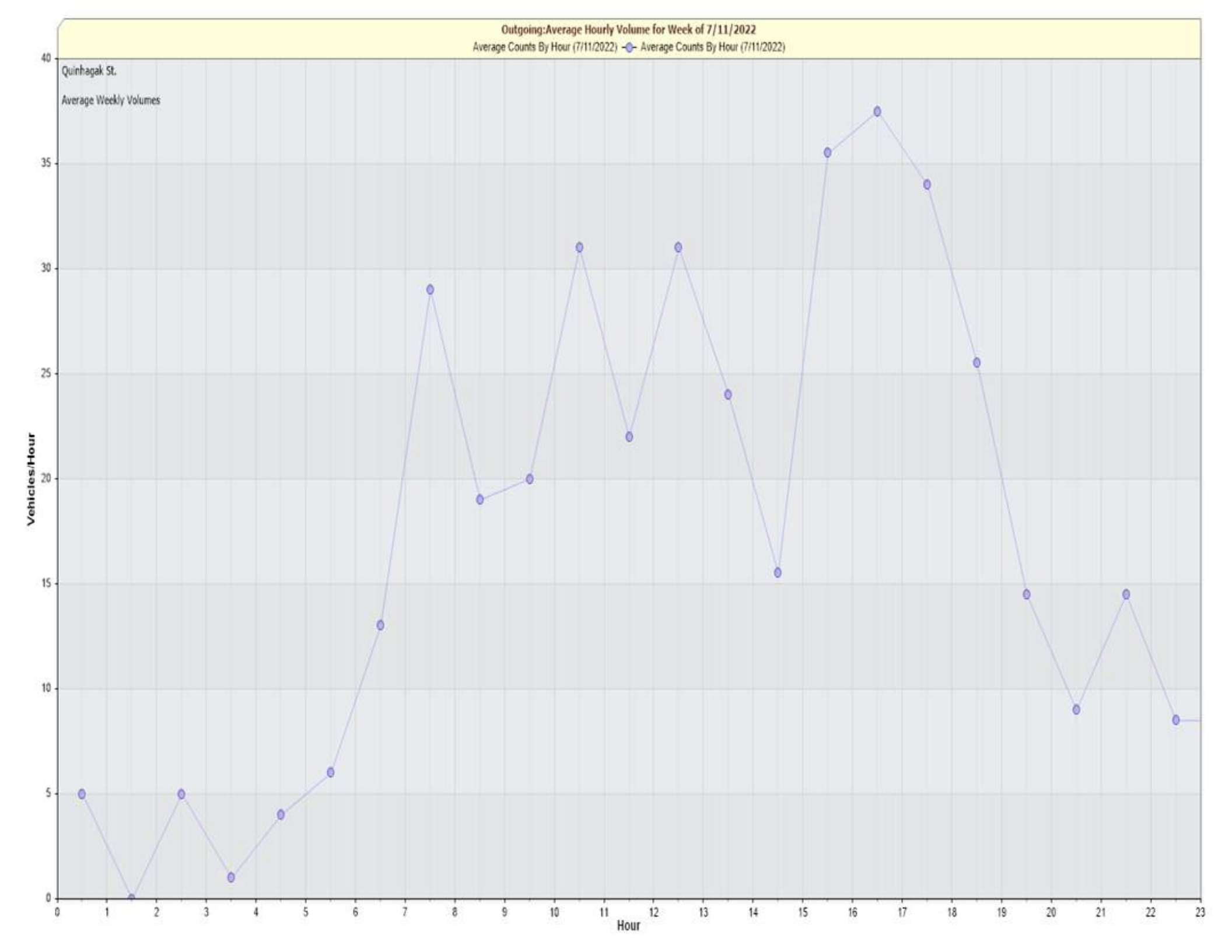
Speed Limit:	25
85th Percentile Speed:	29
Average Speed:	23.01

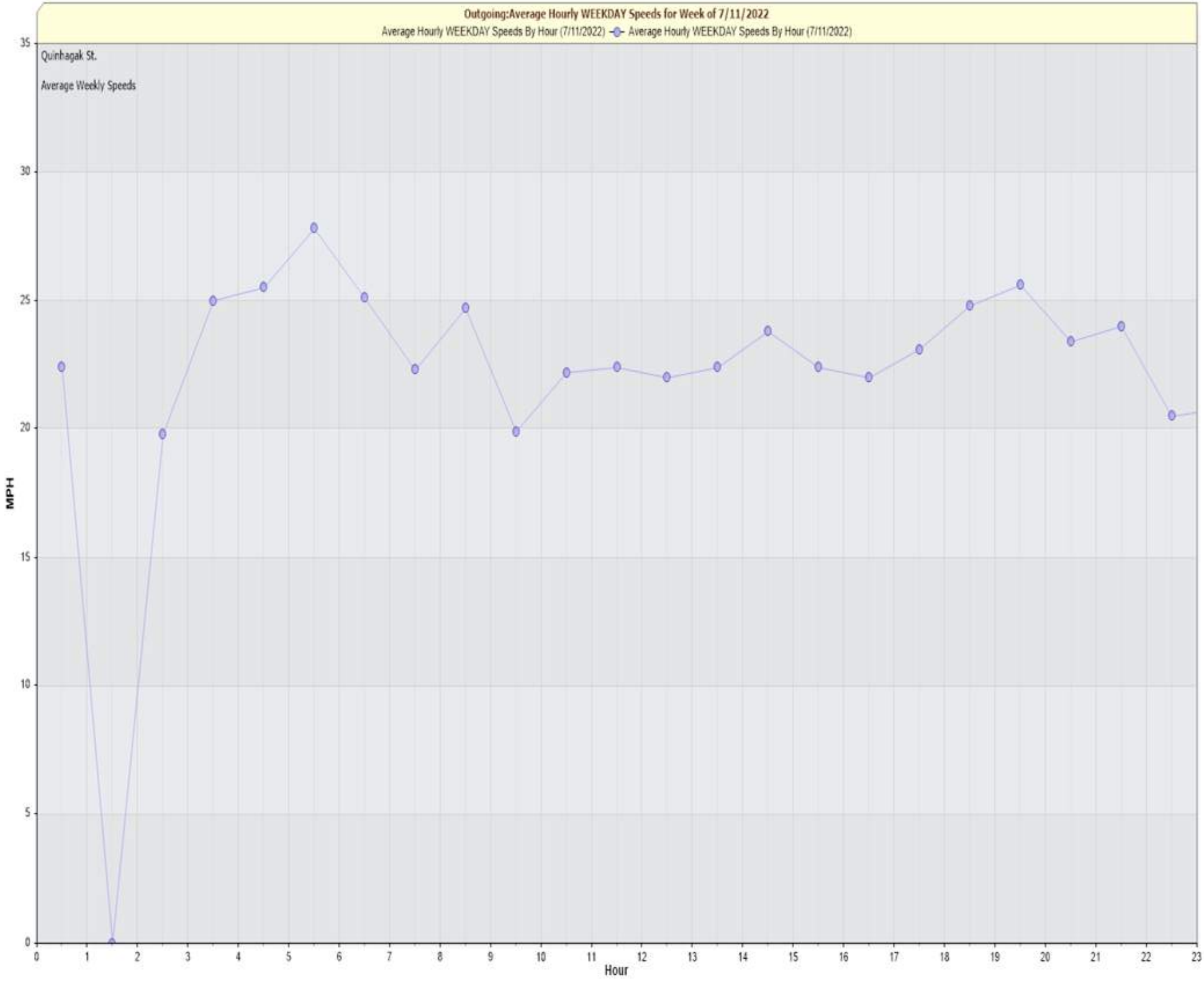
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Count over limit	132	50	N/A	52	147	76	70
% over limit	30.3	26.3	N/A	27.5	34.4	28.8	33.0
Avg Speeder	30.2	29.1	N/A	29.7	29.5	29.6	30.1

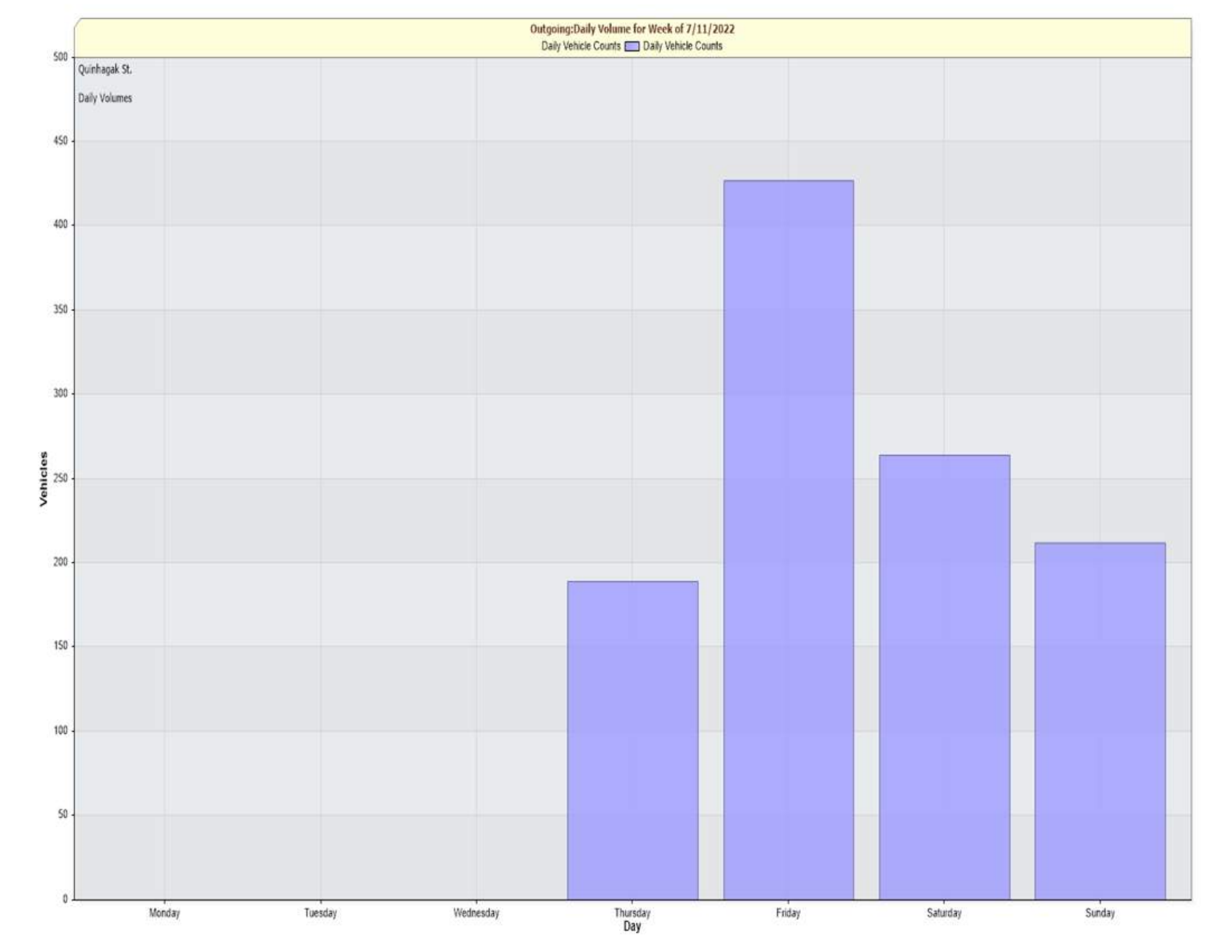
Class Counts

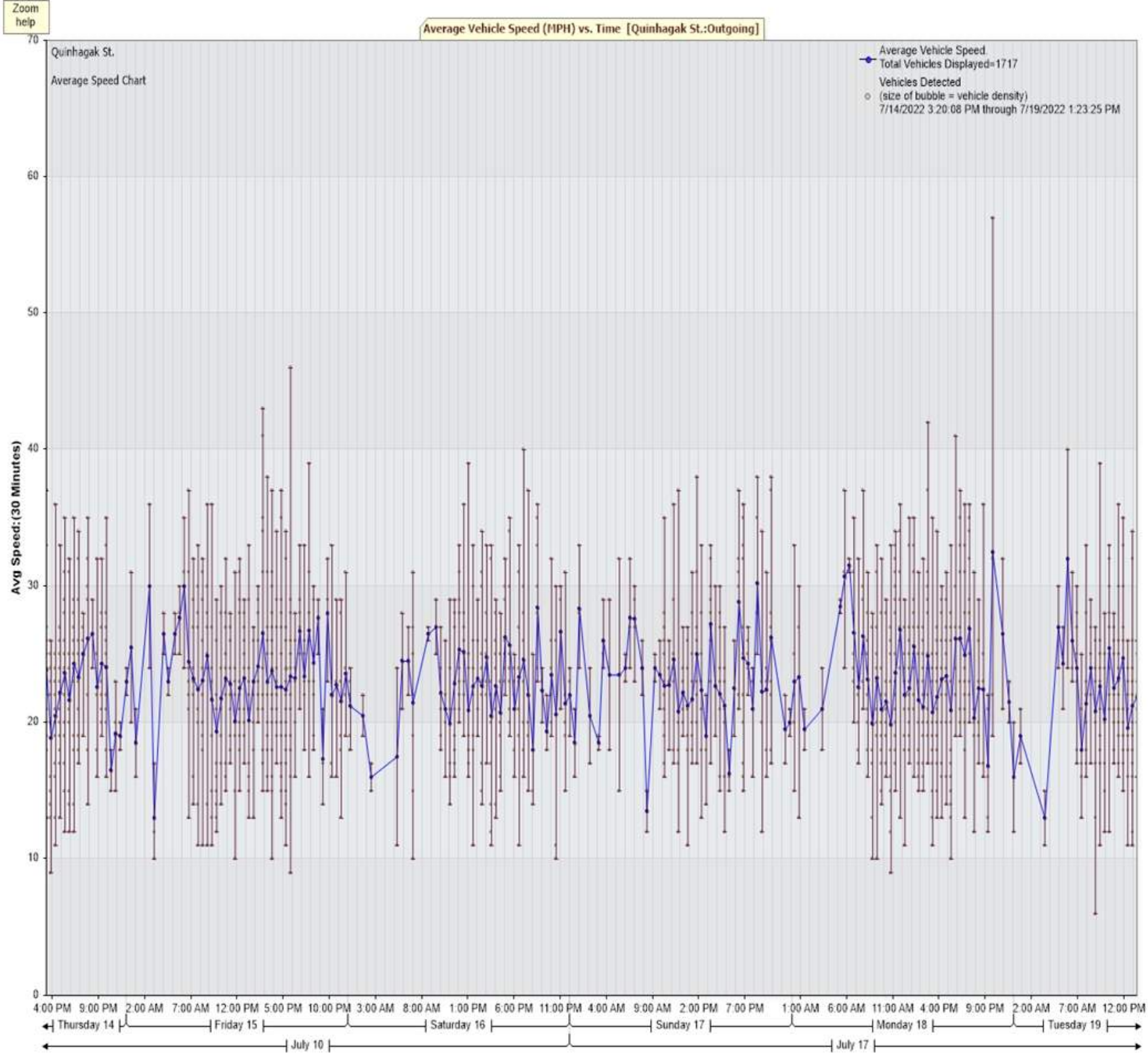
	Number	%
VEH_SM	4	0.2
VEH_MED	1650	96.1
VEH_LG	63	3.7

[VEH_SM=motorcycle, VEH_MED = sedan, VEH_LG = truck]


Outgoing:Average Hourly Volume for Week of 7/11/2022
Average Counts By Hour (7/11/2022)
Average Counts By Hour (7/11/2022)
Quinhagak St.
Average Weekly Volumes
Vehicles/Hour
Hour
0
5
10
15
20
25
30
35
40
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23


Outgoing:Average Hourly WEEKDAY Speeds for Week of 7/11/2022
Average Hourly WEEKDAY Speeds By Hour (7/11/2022)
Average Hourly WEEKDAY Speeds By Hour (7/11/2022)
Quinhagak St.
Average Weekly Speeds
MPH
Hour
0
5
10
15
20
25
30
35
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23


Outgoing:Daily Volume for Week of 7/11/2022
Daily Vehicle Counts
Daily Vehicle Counts
Quinhagak St.
Daily Volumes
500
450
400
350
300
250
200
150
100
50
0
Vehicles
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Sunday
Day


Zoom help
Average Vehicle Speed (MPH) vs. Time [Quinhagak St.:Outgoing]
Quinhagak St.
Average Speed Chart
Average Vehicle Speed
Total Vehicles Displayed=1717
Vehicles Detected
(size of bubble = vehicle density)
7/14/2022 3:20:08 PM through 7/19/2022 1:23:25 PM
Avg Speed:(30 Minutes)
0
10
20
30
40
50
60
70
4:00 PM 9:00 PM 2:00 AM 7:00 AM 12:00 PM 5:00 PM 10:00 PM 3:00 AM 8:00 AM 1:00 PM 6:00 PM 11:00 PM 4:00 AM 9:00 AM 2:00 PM 7:00 PM 1:00 AM 6:00 AM 11:00 AM 4:00 PM 9:00 PM 2:00 AM 7:00 AM 12:00 PM
Thursday 14
Friday 15
Saturday 16
Sunday 17
Monday 18
Tuesday 19
July 10
July 17

DataSource: MOA Data
Location: QUINHAGAK STREET, ANCHORAGE **and:** EAST 64TH AVENUE, ANCHORAGE
At: Intersection **Station: Type:** Intersection Volume **Report Date:** 11/17/2022

Study Type: Intersection Volume

START_TIME	11/17/2022 Thursday NBL	11/17/2022 Thursday NBT	11/17/2022 Thursday NBR	11/17/2022 Thursday SBL	11/17/2022 Thursday SBT	11/17/2022 Thursday SBR	11/17/2022 Thursday EBL	11/17/2022 Thursday EBT	11/17/2022 Thursday EBR	11/17/2022 Thursday WBL	11/17/2022 Thursday WBT	11/17/2022 Thursday WBR	NB	SB	EB	WB	ALL
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	1	0	1	0	0	0	0	0	0	2	1	1	0	2	4
5:15 AM	0	0	0	0	1	0	0	0	0	0	1	0	0	1	0	1	2
5:30 AM	1	0	0	0	0	2	1	0	0	0	1	3	1	2	1	4	8
5:45 AM	0	0	0	0	0	1	0	1	0	0	2	0	0	1	1	2	4
6:00 AM	0	1	0	0	0	0	0	0	1	0	1	2	1	0	1	3	5
6:15 AM	1	1	0	0	0	0	0	0	0	0	1	2	2	0	0	3	5
6:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
6:45 AM	1	1	0	1	0	0	3	0	0	0	2	1	2	1	3	3	9
7:00 AM	2	1	0	0	0	4	1	0	0	0	4	2	3	4	1	6	14
7:15 AM	1	2	0	1	0	6	3	0	3	0	1	3	3	7	6	4	20
7:30 AM	2	6	0	3	3	16	6	1	0	1	3	4	8	22	7	8	45
7:45 AM	2	1	0	0	4	53	36	0	3	1	5	2	3	57	39	8	107
8:00 AM	3	1	0	2	2	64	43	4	16	0	6	4	4	68	63	10	145
8:15 AM	2	4	0	2	4	14	36	1	3	0	2	2	6	20	40	4	70
8:30 AM	2	2	0	2	1	3	1	0	2	0	1	3	4	6	3	4	17
8:45 AM	2	2	0	4	1	7	0	0	0	0	0	4	4	12	0	4	20
9:00 AM	1	3	0	0	2	6	3	0	0	1	2	1	4	8	3	4	19
9:15 AM	3	1	0	1	3	3	1	0	0	1	2	1	4	7	1	4	16
9:30 AM	2	0	1	1	1	5	2	0	0	0	2	1	3	7	2	3	15
9:45 AM	1	3	1	0	1	2	1	1	1	0	1	2	5	3	3	3	14
10:00 AM	2	1	0	1	2	3	3	2	0	0	1	4	3	6	5	5	19

10:15 AM	1	0	0	3	0	4	4	1	1	0	1	0	1	7	6	1	15
10:30 AM	2	0	0	2	1	5	0	1	0	0	2	3	2	8	1	5	16
10:45 AM	0	4	0	1	2	5	3	1	2	0	2	3	4	8	6	5	23
11:00 AM	1	1	0	2	2	5	4	0	0	0	2	0	2	9	4	2	17
11:15 AM	0	0	0	2	3	10	4	1	0	0	0	1	0	15	5	1	21
11:30 AM	2	0	0	3	1	5	5	0	0	0	2	2	2	9	5	4	20
11:45 AM	3	1	0	4	3	5	3	0	2	2	2	2	4	12	5	6	27
12:00 PM	3	1	0	3	2	4	5	0	1	0	1	2	4	9	6	3	22
12:15 PM	0	2	1	0	2	6	3	2	1	0	3	3	3	8	6	6	23
12:30 PM	2	0	0	1	2	8	8	1	2	1	3	1	2	11	11	5	29
12:45 PM	1	1	0	1	2	5	5	0	1	0	0	1	2	8	6	1	17
1:00 PM	2	0	0	4	0	11	4	1	2	0	1	0	2	15	7	1	25
1:15 PM	0	2	0	3	2	5	1	3	0	1	1	2	2	10	4	4	20
1:30 PM	3	1	1	2	3	8	6	1	2	0	3	2	5	13	9	5	32
1:45 PM	2	2	0	0	4	6	2	0	2	0	0	1	4	10	4	1	19
2:00 PM	0	1	0	0	5	7	6	0	2	0	0	0	1	12	8	0	21
2:15 PM	1	1	0	5	4	9	4	1	3	0	1	1	2	18	8	2	30
2:30 PM	1	1	0	3	4	20	11	0	4	1	2	2	2	27	15	5	49
2:45 PM	2	1	0	1	1	33	5	0	2	0	3	0	3	35	7	3	48
3:00 PM	0	4	0	4	3	27	68	1	17	0	1	1	4	34	86	2	126
3:15 PM	2	1	0	6	4	10	21	2	3	0	1	6	3	20	26	7	56
3:30 PM	0	3	0	2	4	11	4	1	3	0	2	2	3	17	8	4	32
3:45 PM	2	2	1	7	9	5	3	3	2	0	1	1	5	21	8	2	36
4:00 PM	0	2	0	6	3	8	3	2	2	3	3	5	2	17	7	11	37
4:15 PM	2	2	0	4	7	12	17	1	4	0	1	2	4	23	22	3	52
4:30 PM	0	2	2	7	6	10	17	1	2	0	1	3	4	23	20	4	51
4:45 PM	3	3	0	4	6	8	8	4	2	1	3	3	6	18	14	7	45
5:00 PM	1	2	1	7	1	8	7	2	2	1	0	3	4	16	11	4	35
5:15 PM	2	2	0	3	6	9	8	2	8	0	2	2	4	18	18	4	44
5:30 PM	2	2	0	2	3	5	5	2	5	0	2	1	4	10	12	3	29
5:45 PM	5	0	0	3	3	4	4	1	4	0	0	1	5	10	9	1	25
6:00 PM	0	4	0	4	2	5	1	2	0	0	1	3	4	11	3	4	22
6:15 PM	2	0	0	4	3	4	2	1	3	0	4	1	2	11	6	5	24
6:30 PM	0	2	0	3	1	4	3	0	1	0	3	5	2	8	4	8	22
6:45 PM	2	1	0	2	2	0	0	1	1	0	0	1	3	4	2	1	10
7:00 PM	1	0	0	5	3	3	0	0	2	0	3	1	1	11	2	4	18
7:15 PM	1	1	0	7	4	1	2	0	1	0	0	0	2	12	3	0	17
7:30 PM	2	2	0	3	7	0	0	0	4	0	1	2	4	10	4	3	21
7:45 PM	3	0	1	1	3	2	0	1	3	0	1	3	4	6	4	4	18
8:00 PM	0	1	0	3	6	0	0	1	0	0	0	1	1	9	1	1	12
8:15 PM	0	0	0	2	4	0	1	1	1	0	0	0	0	6	3	0	9
8:30 PM	0	0	0	1	3	0	1	2	0	0	0	0	0	4	3	0	7
8:45 PM	0	4	0	2	2	2	0	0	1	0	1	0	4	6	1	1	12
9:00 PM	1	2	0	1	4	1	0	2	0	0	1	0	3	6	2	1	12
9:15 PM	1	6	0	3	2	0	0	0	0	0	2	0	7	5	0	2	14
9:30 PM	2	1	0	2	5	1	0	0	0	0	0	0	3	8	0	0	11
9:45 PM	0	1	0	2	1	0	1	1	0	0	1	0	1	3	2	1	7
10:00 PM	1	1	0	1	1	0	1	0	0	0	1	1	2	2	1	2	7
10:15 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	1	1	0	2
10:30 PM	0	0	0	0	1	1	0	0	1	0	1	0	0	2	1	1	4

10:45 PM	1	0	0	1	1	0	0	0	1	0	1	0	1	2	1	1	5
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour Volumes

AM Peak	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	NB	SB	EB	WB	ALL
07:30 AM - 08:30 AM	9	12	0	7	13	147	121	6	22	2	16	12	21	167	149	30	367
Approach %	42.86%	57.14%	0.00%	4.19%	7.78%	88.02%	81.21%	4.03%	14.77%	6.67%	53.33%	40.00%	5.72%	45.50%	40.60%	8.17%	

Midday Peak	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	NB	SB	EB	WB	ALL
02:00 PM - 03:00 PM	4	4	0	9	14	69	26	1	11	1	6	3	8	92	38	10	148
Approach %	50.00%	50.00%	0.00%	9.78%	15.22%	75.00%	68.42%	2.63%	28.95%	10.00%	60.00%	30.00%	5.41%	62.16%	25.68%	6.76%	

PM Peak	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	NB	SB	EB	WB	ALL
03:00 PM - 04:00 PM	4	10	1	19	20	53	96	7	25	0	5	10	15	92	128	15	250
Approach %	26.67%	66.67%	6.67%	20.65%	21.74%	57.61%	75.00%	5.47%	19.53%	0.00%	33.33%	66.67%	6.00%	36.80%	51.20%	6.00%	

Off Peak	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	NB	SB	EB	WB	ALL
07:00 PM - 08:00 PM	7	3	1	16	17	6	2	1	10	0	5	6	11	39	13	11	74
Approach %	63.64%	27.27%	9.09%	41.03%	43.59%	15.38%	15.38%	7.69%	76.92%	0.00%	45.45%	54.55%	14.86%	52.70%	17.57%	14.86%	

Daily Total

TIME SPAN	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	NB	SB	EB	WB	ALL
24 Hour	90	101	10	160	180	491	400	58	129	14	105	117	201	831	587	236	1855
Approach %	44.78%	50.25%	4.98%	19.25%	21.66%	59.09%	68.14%	9.88%	21.98%	5.93%	44.49%	49.58%	10.84%	44.80%	31.64%	12.72%	

Municipality of Anchorage

Collision Events

Date Range: **1/1/2014 - 12/31/2021**
Intersection Related: **Yes**
Location: **Street: QUINHAGAK STREET @ EAST 64TH AVENUE**

Date	Time	Dir	Street	Cross Reference	1st Harmful Event Location	Most Harmful Event	Impact	Unit No.	Most Contributing Unit	Unit Event	Vehicle Circumstances 1	Vehicle Circumstances 2	Vehicle Action	Human Circum 1	Human Circum 2	Human Circum 3	Human Circum 4	Alcohol / Drugs Suspected	Int Related
05/16/2014	02:33 PM	None	EAST 64TH AVENUE, ANCHORAGE	QUINHAGAK STREET, ANCHORAGE	Roadside	Motor Vehicle In-Transport	Front-to-Front	1	Yes	Motor Vehicle In-Transport	None		Straight ahead	Unk	HR			No / No	Related
								2	No	Motor Vehicle In-Transport	None		Stopped	Other				No / No	Related
09/25/2015	09:50 AM	None	QUINHAGAK STREET, ANCHORAGE	EAST 64TH AVENUE, ANCHORAGE	Roadway	Motor Vehicle In-Transport	Sideswipe - Same Direction	1	Yes	Motor Vehicle In-Transport	None		Passing	Improper passing				No / No	Related
								2	No	Motor Vehicle In-Transport	None		Stopped					/	Related
01/21/2020	08:21 AM	None	EAST 64TH AVENUE, ANCHORAGE	QUINHAGAK STREET, ANCHORAGE	Roadway	Motor Vehicle In-Transport	Angle	1	Yes	Motor Vehicle In-Transport	None		Straight ahead	Stop sign violation				No / No	Related
								2	No	Motor Vehicle In-Transport	None		Straight ahead	No improper driving				No / No	Related

Municipality of Anchorage

Collision Events

Date Range: **1/1/2014 - 12/31/2021**
Intersection Related: **Yes**
Location: **Street: QUINHAGAK STREET @ EAST 63RD AVENUE**

Date	Time	Dir	Street	Cross Reference	1st Harmful Event Location	Most Harmful Event	Impact	Unit No.	Most Contributing Unit	Unit Event	Vehicle Circumstances 1	Vehicle Circumstances 2	Vehicle Action	Human Circum 1	Human Circum 2	Human Circum 3	Human Circum 4	Alcohol / Drugs Suspected	Int Related
02/16/2018	02:50 PM	None	QUINHAGAK STREET, ANCHORAGE	EAST 63RD AVENUE, ANCHORAGE	Roadway	Motor Vehicle In-Transport	Angle	1	Yes	Motor Vehicle In-Transport	None		Passing	Unk	HR			No / No	Related
								2	No	Motor Vehicle In-Transport	None		Turning left	Unk				No / No	Related
								3	No	Not-In-Motion or Working Motor Vehicle is Struck by Motor Vehicle In-Transport	None		Parked					/	Related

Memorandum

Date: September 6, 2022
To: Russ Oswald, PE, PLS & Jennifer Noffke – MOA PM&E
Through: Justin Keene, PE - CRW Engineering Group, LLC
From: Kelly Yanoshek, EIT - CRW Engineering Group, LLC
Project: Quinhagak Street Reconstruction
Project No: MOA PM&E#21-13 (CRW#10155.00)
Subject: Parking Study

Purpose and Background

The Municipality of Anchorage Project Management & Engineering Department (PM&E) plans to reconstruct Quinhagak Street from East Dowling Road to Askeland Drive. To aid in the design of the improvements, an on-street parking study was completed for the project roadway. The purpose of the study was to document the current use of on-street parking for consideration in the design of the proposed improvements. Parked vehicles within the adjacent parking lots/driveways were also noted during the study to document available adjacent off-street parking.

Quinhagak Street is approximately 1,500 feet long and runs parallel and between Petersburg Street and Tuttle Place. Adjacent Quinhagak Street parcels are zoned for industrial use from East Dowling Road to East 64th Avenue then the zoning changes to residential south of East 64th Avenue to Askeland Drive. Many of the business access driveways/parking areas along Quinhagak Street are fenced off and a few of the lots have fencing with privacy slats preventing accurate parking analysis on-property.

The parking study was based on observations from four separate site visits, documenting parked vehicles located along the roadway and in visible, adjacent parking lots. Site visits were completed on one weekday afternoon/evening and one weekend afternoon/evening.

Responses from Questionnaire

A survey questionnaire was mailed and e-mailed out to the residents/owners within and near the project limits in June 2022. A total of 21 responses were received of which 5 owned properties along Quinhagak Street. The question regarding if there should be space for on-street parking along Quinhagak Street & the responses are shown in the table below.

Question	Answers
Do you think there should be space for on-street parking along Quinhagak Street?	**No (17)**, Yes (3)

Of the three respondents who answered yes, one of them lives along Quinhagak Street and the other two live within the project limits. The respondent who lives along Quinhagak Street lives northwest of the Quinhagak Street/Askeland Drive intersection.

Observations

The observations took place Thursday, July 14, 2022 and Saturday, July 16, 2022. The weather on Thursday was sunny, with temperatures in the 60s and Saturday was overcast with similar temperatures. The attached figure summarizes the parking observations during the site visits.

During the parking study only one car was parked on the roadway near Askeland Drive. This vehicle was parked in the same location for all four site visits. Parking lots/driveways were visually observed to analyze occupancy to assess available off-street parking. The parking lot observations were recorded as a percentage of capacity utilization and are also noted on the attached figure.

Recent construction on East Dowling Road at the Seward Highway may have affected the parking counts with less traffic driving through Quinhagak Street correlating to the low number of parked vehicles on the roadway.

Conclusions

With no cars observed parked on the roadway except for near Askeland Drive, there is no shortage of available on-street parking. Each business in the industrial zone north of East 64th Avenue also appears to have enough parking on their private lots.

The greatest demand for on-street parking appears to be closer to Askeland Drive in the residential zone where there are a few driveways requiring on-street parking. This is also in the same location where the lone resident responded that they think there should be space for on-street parking on Quinhagak Street.

CRW ENGINEERING GROUP, LLC
3490 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
PHONE (907) 562-3252
#AECL882-AK

PM&E PROJECT NUMBER 21-13
QUINHAGAK STREET RECONSTRUCTION
PARKING STUDY

Project:	10155.00
Drawn By:	NRI
Scale:	Graphic
Date:	9/6/2022
Figure:	1

File Path: J:\JobsData\10155.00 Quinhagak Street Reconstruction\00 CADD 2019\04 GIS\05 Parking Map\05 Parking Map.aprx

Service Layer: Maxar Technologies Inc., Alaska Geospatial Office, USGS

Easement Spreadsheets

Appendix H

Quinhagak Street Reconstruction - Alternative 2: ROW Summary

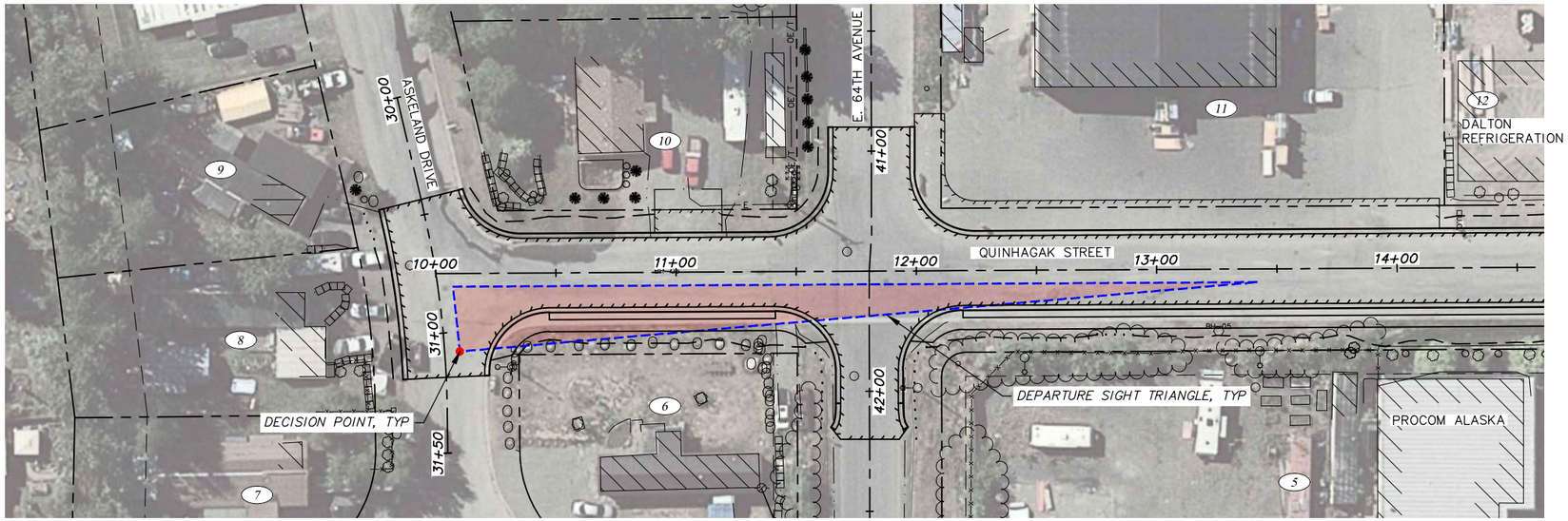
PARCEL	PUE	SE	TCE	FHE	Drainage Easement	# Of TCP's
1			X	X	X	3
2					X	1
3				X	X	1
4					X	3
5						0
6				X	X	0
7						0
8						0
9						0
10						1
11						1
12						2
13						1
14						1
15			X			1
16						1
17						2
TOTAL	0	0	2	3	5	18

Quinhagak Street Reconstruction - Alternative 3: ROW Summary

PARCEL	PUE	SE	TCE	FHE	Drainage Easement	# Of TCP's
1			X	X	X	3
2					X	1
3				X	X	1
4					X	3
5						0
6				X	X	0
7						0
8						0
9						0
10						1
11						1
12						2
13						1
14						1
15			X			1
16						1
17						2
TOTAL	0	0	2	3	5	18

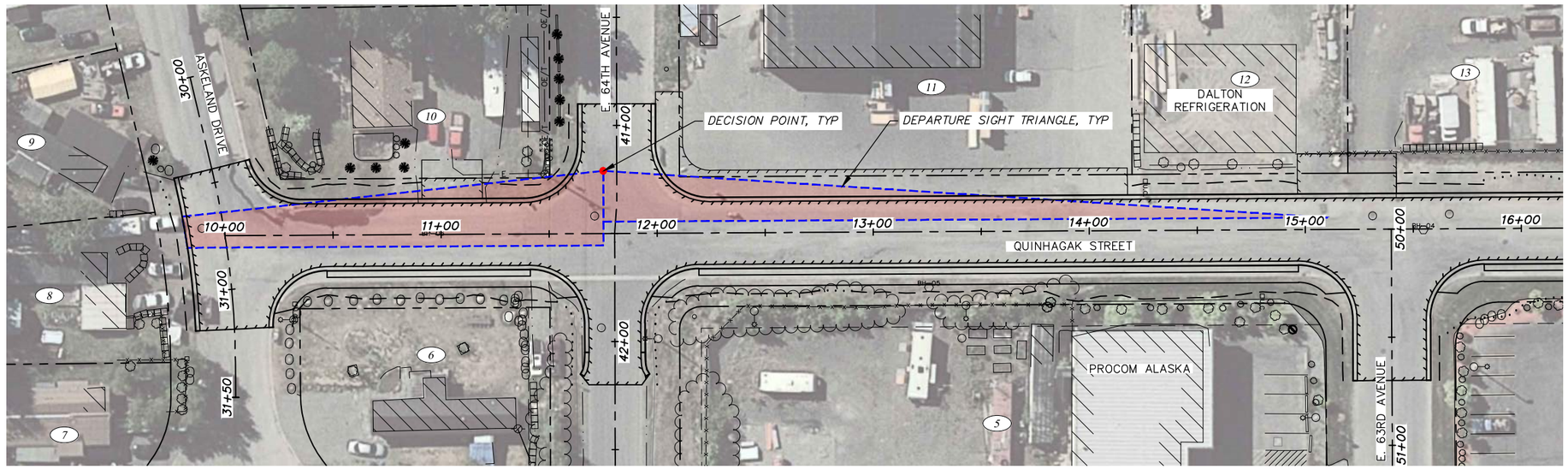
Intersection Departure Sight Triangles

Appendix I



1 **QUINHAGAK STREET & ASKELAND DRIVE INTERSECTION**

SCALE: GRAPHIC



2 **QUINHAGAK STREET & E. 64TH AVENUE INTERSECTION**

SCALE: GRAPHIC

NOTE:

DECISION POINT FOR EACH INTERSECTION IS SETBACK 18' FROM EDGE OF TRAVELED WAY PER FIGURE 1-19 OF THE MOA DCM. DESIGN SPEED OF 30 MPH FOR QUINHAGAK STREET IS USED IN SIGHT DISTANCE ANALYSIS.

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MUNICIPALITY OF ANCHORAGE

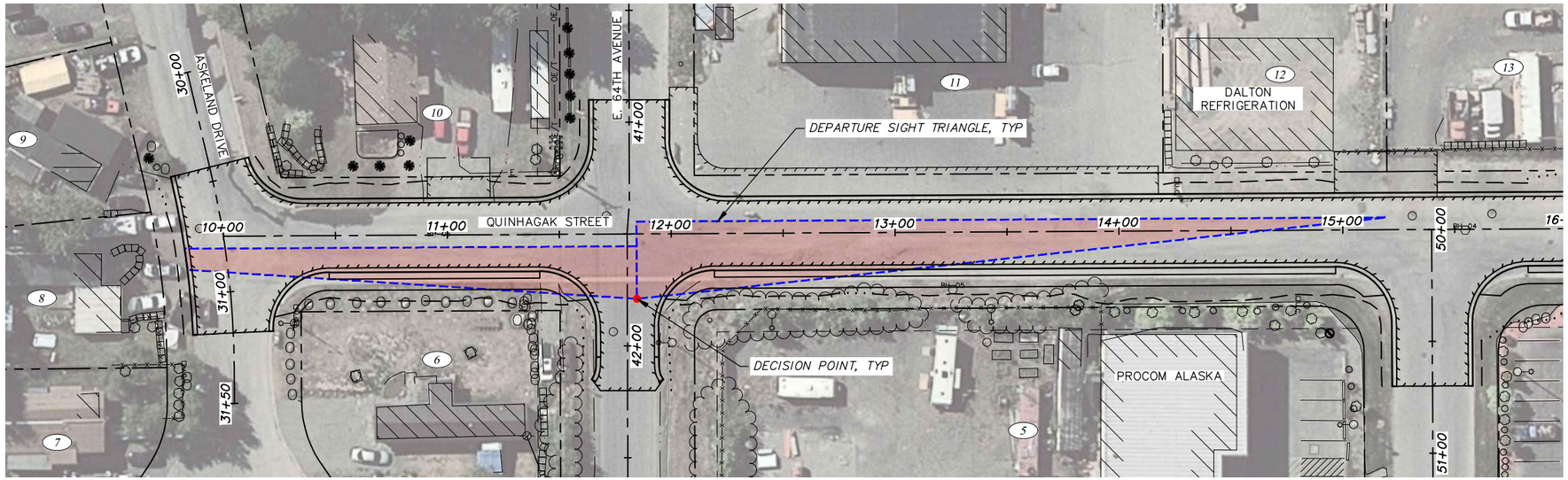
PROJECT MANAGEMENT AND ENGINEERING DEPARTMENT

21-13 QUINHAGAK STREET RECONSTRUCTION

INTERSECTION DEPARTURE SIGHT TRIANGLES

SCALE HOR. 1"=30' VER. N/A | GRID SW2033 | DATE MAY 2023 | STATUS DSR | SHEET 11 of 12

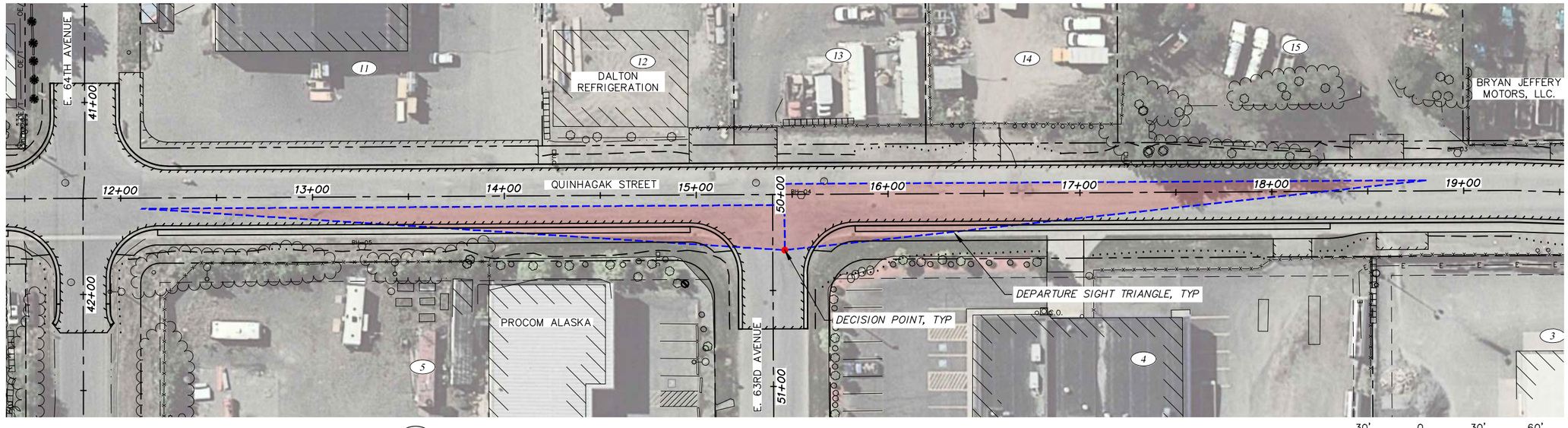
File: J:\JobsData\10155.00 Quinhagak Street Reconstruction\00 CADD 2019\02 Figures\01 DSR\03 Sight Triangles\10155.00 Intersection Sight Triangles.dwg



30' 0 30' 60'

1 **QUINHAGAK STREET & E. 64TH AVENUE INTERSECTION**

SCALE: GRAPHIC



30' 0 30' 60'

2 **QUINHAGAK STREET & E. 63RD AVENUE INTERSECTION**

SCALE: GRAPHIC

NOTE:

DECISION POINT FOR EACH INTERSECTION IS SETBACK 18' FROM EDGE OF TRAVELED WAY PER FIGURE 1-19 OF THE MOA DCM. DESIGN SPEED OF 30 MPH FOR QUINHAGAK STREET IS USED IN SIGHT DISTANCE ANALYSIS.

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21-13 QUINHAGAK STREET RECONSTRUCTION

INTERSECTION DEPARTURE SIGHT TRIANGLES

SCALE HOR. 1"=30' VER. N/A | GRID SW2033 | DATE MAY 2023 | STATUS DSR | SHEET 12 of 12

File: J:\Jobs\Data\10155.00 Quinhagak Street Reconstruction\00 CADD 2019\02 Figures\01 DSR\03 Sight Triangles\10155.00 Intersection Sight Triangles.dwg

Project Cost Estimates

Appendix J

Quinhagak Street Reconstruction
MOA Project No. 21-13

ENGINEER'S ESTIMATE - DRAFT DSR - ALTERNATIVE 2

ITEM No.	MASS No.	ITEM DESCRIPTION	UNIT	CALC. QUANT	CONT. FACTOR	ROUND FACTOR	EST QUANT	UNIT PRICE	TOTAL COST
Schedule A - Roadway Improvements									
A-1	20.02	Storm Water Pollution Prevention Plan (Type 3)	LS	1	1.00	0	1	$26,000	$26,000
A-2	20.03	Test Pit for Utility Locate	Hour	24	1.00	0	24	$800	$19,200
A-3	20.04	Clearing and Grubbing	LS	1	1.00	0	1	$26,000	$26,000
A-4	20.07	Remove Sidewalk or Concrete Apron	SY	85	1.00	0	85	$35	$2,975
A-5	20.08	Remove Curb and Gutter	LF	3,161	1.00	0	3,161	$12	$37,932
A-6	20.09	Remove Pavement	SY	7,462	1.00	0	7,462	$4	$29,848
A-7	20.10	Unusable Excavation	CY	10,686	1.20	-2	12,800	$19	$243,200
A-8	20.12	Dewatering	LS	1	1.00	0	1	$11,000	$11,000
A-9	20.21	Classified Fill and Backfill (Type II)	Ton	11,171	1.20	-2	13,400	$18	$241,200
A-10	20.21	Classified Fill and Backfill (Type II-A)	Ton	8,324	1.20	-2	10,000	$19	$190,000
A-11	20.22	Leveling Course	Ton	730	1.06	-1	770	$60	$46,200
A-12	20.25	Geotextile (Type A)	SY	9,618	1.00	-1	9,620	$2	$19,240
A-13	20.26	Insulation Board (R-9)	SF	69,234	1.01	-1	69,930	$4	$279,720
A-14	20.26	Insulation Board (R-4.5)	SF	6,034	1.01	-1	6,090	$3	$18,270
A-15	30.02	P.C.C. Curb and Gutter (All Types)	LF	3,216	1.00	0	3,216	$40	$128,640
A-17	30.03	P.C.C. Sidewalk (6" Thick, Standard Finish)	SY	782	1.00	0	782	$120	$93,840
A-18	30.04	P.C.C. Curb Ramp (6" Thick)	EA	7	1.00	0	7	$4,500	$31,500
A-19	30.04	Detectable Warnings	SF	77	1.00	0	77	$150	$11,550
A-21	30.10	Colored Concrete (Red, 6" Thick, Imprinted)	SY	283	1.00	0	283	$300	$84,900
A-22	40.06	A.C. Pavement (Class E)	Ton	758	1.06	-1	800	$175	$140,000
A-23	50.06	Remove and Replace Manhole Cone Section	EA	3	1.00	0	3	$2,650	$7,950
A-24	50.06	Remove and Replace Manhole Cover and Frame	EA	4	1.00	0	4	$1,400	$5,600
A-25	55.08	Adjust Storm Drain Manhole Ring to Finish Grade	EA	1	1.00	0	1	$1,000	$1,000
A-26	60.03	Remove and Replace Valve Box Top Section	EA	9	1.00	0	9	$700	$6,300
A-27	60.04	Furnish and Install Fire Hydrant Assembly (Single Pumper)	EA	3	1.00	0	3	$12,000	$36,000
A-28	60.05	Adjust Key Box	EA	5	1.00	0	5	$600	$3,000
A-29	60.08	Decommission Fire Hydrant Assembly (Single Pumper)	EA	3	1.00	0	3	$3,500	$10,500
A-30	65.02	Construction Survey Measurement	LS	1	1.00	0	1	$40,000	$40,000
A-31	65.02	Two-Person Survey Crew	Hour	40	1.00	0	40	$250	$10,000
A-32	70.08	Remove and Reset Fence	LF	119	1.05	0	125	$55	$6,875
A-33	70.08	Remove Fence	LF	10	1.00	0	10	$14	$140
A-34	70.08	Remove and Reset Gate	LF	86	1.00	0	86	$20	$1,720
A-35	70.10	Inlaid Traffic Markings (Methyl Methacrylate, 24" White, 125 Mil)	LF	78	1.00	0	78	$100	$7,800
A-36	70.11	Standard Sign	SF	66	1.00	0	66	$110	$7,260
A-37	70.12	Traffic Maintenance	LS	1	1.00	0	1	$170,000	$170,000
A-38	70.16	Temporary Group Mailboxes	LS	1	1.00	0	1	$7,000	$7,000
A-39	70.17	Relocate Mailbox	EA	1	1.00	0	1	$800	$800
A-40	70.22	Removal/Disposal and/or Salvage/Installation of Obstructions	LS	1	1.00	0	1	$20,000	$20,000
A-41	70.23	Temporary Fencing	LF	205	1.05	0	215	$20	$4,300
A-42	75.11	Salvage and Relocate or Dispose Existing Boulder	EA	20	1.00	0	20	$150	$3,000
A-43	75.12	Temporary Tree Protection Fence	LF	300	1.00	0	300	$18	$5,400
A-44	75.13	Landscaping	LS	1	1.00	0	1	$25,000	$25,000
								TOTAL	**$2,060,860**

ITEM No.	MASS No.	ITEM DESCRIPTION	UNIT	CALC. QUANT	CONT. FACTOR	ROUND FACTOR	EST QUANT	UNIT PRICE	TOTAL COST
Schedule B - Drainage Improvements									
B-1	20.13	Trench Dewatering	LS	1	1.00	0	1	$60,000	$60,000
B-2	20.13	Trench Excavation and Backfill (Various Depths)	LF	3,183	1.00	0	3,183	$35	$111,405
B-3	20.15	Furnish Trench Backfill (Type II)	Ton	200	1.20	0	240	$20	$4,800
B-4	20.19	Foundation Backfill (Type C Filter Material)	Ton	210	1.10	0	231	$35	$8,085
B-5	20.26	Insulation Board (R-20)	SF	1,000	1.10	0	1,100	$7	$7,700
B-6	20.27	Disposal of Unusable or Surplus Material	CY	1,000	1.20	0	1,200	$25	$30,000
B-7	55.03	Furnish, Install, and Televise Subdrain with Geotextile (12-Inch, Type SP, CPEP, Type C Filter Material, Type C non-woven Geotextile)	LF	1,447	1.00	0	1,447	$85	$122,995
B-8	55.03	Furnish, Install, and Televise Subdrain with Geotextile (18-Inch, Type SP, CPEP, Type C Filter Material, Type C non-woven Geotextile)	LF	1,340	1.00	0	1,340	$95	$127,300
B-9	55.03	Furnish, Install, and Televise Subdrain with Geotextile (24-Inch, Type SP, CPEP, Type C Filter Material, Type C non-woven Geotextile)	LF	122	1.00	0	122	$125	$15,250
B-10	55.03	Furnish, Install, and Televise Subdrain with Geotextile (30-Inch, Type SP, CPEP, Type C Filter Material, Type C non-woven Geotextile)	LF	230	1.00	0	230	$135	$31,050
B-11	55.03	Furnish, Install, and Televise Subdrain with Geotextile (36-Inch, Type SP, CPEP, Type C Filter Material, Type C non-woven Geotextile)	LF	44	1.00	0	44	$150	$6,600
B-12	55.04	Connect to Existing Storm Drain System	EA	6	1.00	0	6	$3,000	$18,000
B-13	55.05	Construct (Type I) Manhole	EA	11	1.00	0	11	$7,000	$77,000
B-14	55.05	Construct (Type I) Catch Basin Manhole	EA	1	1.00	0	1	$8,000	$8,000
B-15	55.05	Construct (Type II) Manhole	EA	3	1.00	0	3	$11,000	$33,000
B-16	55.05	Construct (Type II) Catch Basin Manhole	EA	8	1.00	0	8	$11,500	$92,000
B-17	55.05	Construct (Type II) Bypass Manhole	EA	1	1.00	0	1	$30,000	$30,000
B-18	55.09	Construct Catch Basin	EA	11	1.00	0	11	$6,000	$66,000
B-19	55.11	Remove Manhole	EA	7	1.00	0	7	$1,200	$8,400
B-20	55.11	Remove Catch Basin	EA	10	1.00	0	10	$1,000	$10,000
B-21	55.22	Oil and Grit Separator (Stormceptor STC XXX)	EA	1	1.00	0	1	$30,000	$30,000
B-22	55.27	Storm Drain Bypass System	LS	1	1.00	0	1	$50,000	$50,000
B-23	70.07	Remove Pipe	LF	1,417	1.00	0	1,417	$15	$21,255
								TOTAL	**$968,840**

Quinhagak Street Reconstruction
MOA Project No. 21-13

ENGINEER'S ESTIMATE - DRAFT DSR - ALTERNATIVE 2

ITEM No.	MASS No.	ITEM DESCRIPTION	UNIT	CALC. QUANT	CONT. FACTOR	ROUND FACTOR	EST QUANT	UNIT PRICE	TOTAL COST
Schedule C - Illumination Improvements									
C-1	80.01	Temporary Illumination	LS	1	1.00	0	1	$10,000	$10,000
C-2	80.02	Trench and Backfill (2'W x 3.5'D)	LF	1,520	1.10	-1	1,670	$17	$28,390
C-3	80.04	Driven Pile Luminaire Pole Foundations	EA	11	1.00	0	11	$2,500	$27,500
C-4	80.05	Fixed Base Luminaire Pole (26-29 Ft. Length)	EA	11	1.00	0	11	$4,800	$52,800
C-5	80.05	Spare Fixed Base Luminaire Pole (28 Ft. Length)	EA	1	1.00	0	1	$3,750	$3,750
C-6	80.05	Luminaire Arm (6-17 Ft. Length)	EA	14	1.00	0	14	$850	$11,900
C-7	80.07	GRC Steel Conduit (2 inch)	LF	1,647	1.05	-1	1,730	$23	$39,790
C-8	80.08	Junction Box (Type IA)	EA	13	1.00	0	13	$1,250	$16,250
C-9	80.10	3 Conductor 8 AWG Type XHHW-2 Cable	LF	1,604	1.05	-1	1,680	$8	$13,440
C-10	80.23	Luminaire (5000 Lm, Medium, Type 2)	EA	8	1.00	0	8	$561	$4,488
C-11	80.23	Luminaire (6000 Lm, Medium, Type 2)	EA	2	1.00	0	2	$611	$1,222
C-12	80.23	Luminaire (7000 Lm, Medium, Type 2)	EA	4	1.00	0	4	$661	$2,644
C-13	80.23	Spare Luminaire (5000 Lm, Medium, Type 2)	EA	1	1.00	0	1	$411	$411
C-14	80.23	Spare Luminaire (6000 Lm, Medium, Type 2)	EA	1	1.00	0	1	$461	$461
C-15	80.23	Spare Luminaire (7000 Lm, Medium, Type 2)	EA	1	1.00	0	1	$511	$511
C-16	80.28	Remove Luminaire	EA	2	1.00	0	2	$1,200	$2,400
								TOTAL	**$215,957**

Schedule A - Roadway Improvements	$2,060,860
Schedule B - Drainage Improvements	$968,840
Schedule C - Illumination Improvements	$215,957
Total Estimated Construction Cost:	**$3,245,657**

Quinhagak Street
MOA Project No. 21-13

Utility Relocation Cost Estimate Summary Alternative 2	
Electric (CEA)	$34,000
Telephone (ACS)	$18,000
Cable Television (GCI)	$442,000
Natural Gas (ENSTAR)	$349,000
Subtotal:	*$843,000*
Construction Contingency (15%)	*$126,000*
Total Utility Relocation Cost:	**$969,000**

Quinhagak Street
MOA Project No. 21-13
ACS Utility Conflict Summary
Alternative 2

Id No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST
ACS-1	12+08	Crossing	UG Telephone	Roadway Structural Section, Storm Drain Pipe, Storm Drain Structure	Relocate	56	LF	$110	$6,160
ACS-2	24+46	Crossing	UG Telephone	Roadway Structural Section, Storm Drain Structures	Lower as Needed	50	LF	$151	$7,550

Construction Costs:	$13,710
Engineering/Administration (30%):	$4,113
Total:	**$18,000**

Quinhagak Street
MOA Project No. 21-13
CEA Utility Conflict Summary
Alternative 2

Id No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST
CEA-1	22+01	RT	Pad Mount Transformer	Storm Drain Pipe	Relocate as Needed	1	EA	$19,365	$19,365
CEA-2	24+45	Crossing	3ø 4 Wire Primary Conductor	Roadway Structural Section, Storm Drain Structures	Relocate as Needed	52	LF	$124	$6,448

Construction Costs:	$25,813
Engineering/Administration (30%):	$7,744
Total:	**$34,000**

Quinhagak Street
MOA Project No. 21-13
ENSTAR Utility Conflict Summary
Alternative 2

Id No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST
ENSTAR-1	10+23	Crossing	2" Plastic Main	Roadway Structural Section, Subdrain Pipe, Storm Drain Structures	Lower as Needed	70	LF	$172	$12,019
ENSTAR-2	10+21 - 11+45	LT	2" Plastic Main	Roadway Structural Section, Subdrain Pipe, Storm Drain Structures	Relocate	125	LF	$172	$21,463
ENSTAR-3	10+54	LT	5/8" Plastic Service	Subdrain Pipe	Relocate	1	EA	$3,090	$3,090
ENSTAR-4	12+06	Crossing	12" Pressurized Transmission Main	Roadway Structural Section, Subdrain Pipe, Storm Drain Structure	Relocate	57	LF	$591	$33,664
ENSTAR-5	14+87 - 24+38	RT	2" Plastic Main	Subdrain Pipes, Storm Drain Structures	Relocate	952	LF	$172	$163,458
ENSTAR-6	14+92	Crossing	5/8" Plastic Service	Roadway Structural Section, Subdrain Pipe, Storm Drain Structure	Relocate	1	EA	$3,090	$3,090
ENSTAR-7	15+17	RT	2" Plastic Main	Storm Drain Structure	Relocate as Needed	17	LF	$172	$2,919
ENSTAR-8	16+37	RT	7/8" Plastic Service	Subdrain Pipe	Relocate	1	EA	$3,846	$3,846
ENSTAR-9	17+15	Crossing	5/8" Plastic Service	Roadway Structural Section, Subdrain Pipe	Lower as Needed	1	EA	$3,090	$3,090
ENSTAR-10	18+59	Crossing	5/8" Plastic Service	Roadway Structural Section, Subdrain Pipe, Storm Drain Structures	Relocate	1	EA	$3,090	$3,090
ENSTAR-11	19+49	Crossing	5/8" Plastic Service	Roadway Structural Section, Subdrain Pipe	Lower as Needed	1	EA	$3,090	$3,090
ENSTAR-12	20+00	RT	7/8" Plastic Service	Subdrain Pipe	Relocate as Needed	1	EA	$3,846	$3,846
ENSTAR-13	21+61	RT	7/8" Plastic Service	Roadway Structural Section, Subdrain Pipe	Relocate as Needed	1	EA	$3,846	$3,846
ENSTAR-14	24+36	Crossing	7/8" Plastic Service	Roadway Structural Section, Subdrain Pipe, Storm Drain Structures	Relocate as Needed	1	EA	$3,846	$3,846
ENSTAR-15	24+38	RT	7/8" Plastic Service	Storm Drain Structures	Relocate as Needed	1	EA	$3,846	$3,846

Construction Costs:	$268,202
Engineering/Administration (30%)	$80,461
Total:	**$349,000**

Quinhagak Street
MOA Project No. 21-13
GCI Utility Conflict Summary
Alternative 2

Id No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST
GCI-1	10+25 - 11+54	RT	.750 Coaxial Cable	Roadway Structural Section, Subdrain Pipe, Storm Drain Structures	Relocate	143	LF	$110	$15,730
GCI-2	10+27 - 11+55	RT	.500 Coaxial Cable	Roadway Structural Section, Subdrain Pipe, Storm Drain Structures	Relocate as Needed	142	LF	$96	$13,632
GCI-3	10+32	RT	CATV Pedestal	Roadway Structural Section, Subdrain Pipe, Storm Drain Structure	Relocate as Needed	1	EA	$1,476	$1,476
GCI-4	11+51	Crossing	.625 Coaxial Cable	Roadway Structural Section	Lower as Needed	49	LF	$103	$5,047
GCI-5	11+57	Crossing	.500 and .750 Coaxial Cables	Roadway Structural Section	Lower as Needed	98	LF	$103	$10,094
GCI-6	11+62 - 12+00	LT	.500 and .750 Coaxial Cables	Roadway Structural Section	Lower as Needed	75	LF	$103	$7,725
GCI-7	11+54 - 14+80	RT	.625 Coaxial Cable	Roadway Structural Section, Subdrain Pipe, Storm Drain Structures	Relocate	329	LF	$103	$33,887
GCI-8	12+21 - 16+01	LT	.750 Coaxial Cable	Storm Drain Pipe, Storm Drain Structures	Relocate	381	LF	$110	$41,910
GCI-9	12+21 - 17+24	LT	.500 Coaxial Cable	Roadway Structural Section, Subdrain Pipes, Storm Drain Structures	Relocate	506	LF	$96	$48,576
GCI-10	13+99 - 14+33	LT	.625 Coaxial Cable	Subdrain Pipe, Storm Drain Structures	Lower as Needed	34	LF	$103	$3,502
GCI-11	14+26	LT	CATV Pedestal	Storm Drain Structures	Relocate as Needed	1	EA	$1,476	$1,476
GCI-12	14+26 - 17+24	LT	(2) .625 Coaxial Cables	Subdrain Pipes, Storm Drain Structures	Relocate	600	LF	$103	$61,800
GCI-13	14+80	RT	CATV Pedestal	Subdrain Pipe	Relocate as Needed	1	EA	$1,476	$1,476
GCI-14	17+24	LT	CATV Pedestal	Subdrain Pipe	Relocate as Needed	1	EA		$0
GCI-15	17+24 - 24+46	LT	.750 Coaxial Cable	Roadway Structural Section, Subdrain Pipes, Storm Drain Structures	Relocate	725	LF	$110	$79,750
GCI-16	24+03	LT	Communications Vault	Subdrain Pipe	Relocate as Needed	1	EA	$5,906	$5,906
GCI-17	24+47	Crossing	UG Fiber Optic Cables	Roadway Structural Section	Lower as Needed	48	LF	$165	$7,920

Construction Costs:	$339,907
Engineering/Administration (30%)	$101,972
Total:	**$442,000**

Date: 5/1/2023 **Basis:** **Prepared By:** **CRW** **Ver. 5.1**

Project: Quinhagak Street Reconstruction Alternative 2

Project Number: **21-13** [B]=local bond; [S]=state grant; [F]= federal grant

DESIGN		Design Management	$47,586	
	Start 20??	PM&E Design Services	$0	
		PM&E Design Survey	$0	
		PM&E Design Soil	$0	
		Contractual Dsgn Sers (Basic)	$527,000	
		Contractual Dsgn Sers (Add'l)	$130,000	
		Contractual Design Survey	$70,000	
		Contractual Design Soils	$33,000	
		Miscellaneous	$0	
Subtotal				$807,586
UTILITIES		AWWU	$0	
	Start 20??	MOA Shoring	$0	
		CEA	$39,000	
		ACS	$21,000	
		GCI	$508,000	
		Enstar	$401,000	
Subtotal				$969,000
ROW		Real Estate Services	$40,000	
	Start 20??	Land Acquisition	$32,000	
Subtotal				$72,000
CONSTRUCTION		Construction Management	$74,658	
	Start 20??	Inspection	$198,006	
		Materials Testing	$32,460	
		Survey	$29,214	
		Miscellaneous	$0	
		Construction Contract	$3,246,000	
Subtotal				$3,580,338
MISCELLANEOUS		Bond Overhead (15.0%)	$1,043,987	
		Grant Overhead (0.0%)	$0	
		Contingency (15%)	$487,000	
Subtotal				$1,530,987
PROJECT TOTAL				$6,959,911

WEBPAGE DATA	
Environ	$0
DS	$201,897
Prelim Dsgn	$403,793
Final Dsgn	$201,897
ROW	$72,000
Utilities	$969,000
Const	$5,111,325
Total	$6,959,911

Quinhagak Street Reconstruction
MOA Project No. 21-13

ENGINEER'S ESTIMATE - DRAFT DSR - ALTERNATIVE 3

ITEM No.	MASS No.	Special No.	ITEM DESCRIPTION	UNIT	CALC. QUANT	CONT. FACTOR	ROUND FACTOR	EST QUANT	UNIT PRICE	TOTAL COST
Schedule A - Roadway Improvements										
A-1	20.02		Storm Water Pollution Prevention Plan (Type 3)	LS	1	1.00	0	1	$26,000	$26,000
A-2	20.03		Test Pit for Utility Locate	Hour	24	1.00	0	24	$800	$19,200
A-3	20.04		Clearing and Grubbing	LS	1	1.00	0	1	$26,000	$26,000
A-4	20.07		Remove Sidewalk or Concrete Apron	SY	85	1.00	0	85	$35	$2,975
A-5	20.08		Remove Curb and Gutter	LF	3,161	1.00	0	3,161	$12	$37,932
A-6	20.09		Remove Pavement	SY	7,462	1.00	0	7,462	$4	$29,848
A-7	20.10		Unusable Excavation	CY	10,750	1.20	-2	12,900	$19	$245,100
A-8	20.12		Dewatering	LS	1	1.00	0	1	$10,000	$10,000
A-9	20.21		Classified Fill and Backfill (Type II)	Ton	11,171	1.20	-2	13,400	$18	$241,200
A-10	20.21		Classified Fill and Backfill (Type II-A)	Ton	9,008	1.20	-2	10,800	$19	$205,200
A-11	20.22		Leveling Course	Ton	730	1.06	-1	770	$60	$46,200
A-12	20.25		Geotextile (Type A)	SY	9,618	1.00	-1	9,620	$2	$19,240
A-13	20.26		Insulation Board (R-9)	SF	69,234	1.01	-1	69,930	$4	$279,720
A-14	20.26		Insulation Board (R-4.5)	SF	6,034	1.01	-1	6,090	$3	$18,270
A-15	30.02		P.C.C. Curb and Gutter (All Types)	LF	3,216	1.00	0	3,216	$40	$128,640
A-16	30.03		P.C.C. Sidewalk (4" Thick, Standard Finish)	SY	666	1.00	0	666	$100	$66,600
A-17	30.03		P.C.C. Sidewalk (6" Thick, Standard Finish)	SY	116	1.00	0	116	$120	$13,920
A-18	30.04		P.C.C. Curb Ramp (6" Thick)	EA	7	1.00	0	7	$4,500	$31,500
A-19	30.04		Detectable Warnings	SF	77	1.00	0	77	$150	$11,550
A-20	30.10		Colored Concrete (Red, 4" Thick, Imprinted)	SY	247	1.00	0	247	$250	$61,750
A-21	30.10		Colored Concrete (Red, 6" Thick, Imprinted)	SY	36	1.00	0	36	$300	$10,800
A-22	40.06		A.C. Pavement (Class E)	Ton	758	1.06	-1	800	$175	$140,000
A-23	50.06		Remove and Replace Manhole Cone Section	EA	3	1.00	0	3	$2,650	$7,950
A-24	50.06		Remove and Replace Manhole Cover and Frame	EA	4	1.00	0	4	$1,400	$5,600
A-25	55.08		Adjust Storm Drain Manhole Ring to Finish Grade	EA	1	1.00	0	1	$1,000	$1,000
A-26	60.03		Remove and Replace Valve Box Top Section	EA	9	1.00	0	9	$700	$6,300
A-27	60.04		Furnish and Install Fire Hydrant Assembly (Single Pumper)	EA	3	1.00	0	3	$12,000	$36,000
A-28	60.05		Adjust Key Box	EA	5	1.00	0	5	$600	$3,000
A-29	60.08		Decommission Fire Hydrant Assembly (Single Pumper)	EA	3	1.00	0	3	$3,500	$10,500
A-30	65.02		Construction Survey Measurement	LS	1	1.00	0	1	$40,000	$40,000
A-31	65.02		Two-Person Survey Crew	Hour	40	1.00	0	40	$250	$10,000
A-32	70.08		Remove and Reset Fence	LF	119	1.05	0	125	$55	$6,875
A-33	70.08		Remove Fence	LF	10	1.00	0	10	$14	$140
A-34	70.08		Remove and Reset Gate	LF	86	1.00	0	86	$20	$1,720
A-35	70.10		Inlaid Traffic Markings (Methyl Methacrylate, 24" White, 125 Mil)	LF	78	1.00	0	78	$100	$7,800
A-36	70.11		Standard Sign	SF	66	1.00	0	66	$110	$7,260
A-37	70.12		Traffic Maintenance	LS	1	1.00	0	1	$170,000	$170,000
A-38	70.16		Temporary Group Mailboxes	LS	1	1.00	0	1	$7,000	$7,000
A-39	70.17		Relocate Mailbox	EA	1	1.00	0	1	$800	$800
A-40	70.22		Removal/Disposal and/or Salvage/Installation of Obstructions	LS	1	1.00	0	1	$20,000	$20,000
A-41	70.23		Temporary Fencing	LF	205	1.05	0	215	$20	$4,300
A-42	75.11		Salvage and Relocate or Dispose Existing Boulder	EA	20	1.00	0	20	$150	$3,000
A-43	75.12		Temporary Tree Protection Fence	LF	300	1.00	0	300	$18	$5,400
A-44	75.13		Landscaping	LS	1	1.00	0	1	$25,000	$25,000
									TOTAL	**$2,051,290**

ITEM No.	MASS No.	Special No.	ITEM DESCRIPTION	UNIT	CALC. QUANT	CONT. FACTOR	ROUND FACTOR	EST QUANT	UNIT PRICE	TOTAL COST
Schedule B - Drainage Improvements										
B-1	20.13	0.00	Trench Dewatering	LS	1	1.00	0	1	$60,000	$60,000
B-2	20.13	0.00	Trench Excavation and Backfill (Various Depths)	LF	3,183	1.00	0	3,183	$35	$111,405
B-3	20.15	0.00	Furnish Trench Backfill (Type II)	Ton	200	1.20	0	240	$20	$4,800
B-4	20.19	0.00	Foundation Backfill (Type C Filter Material)	Ton	210	1.10	0	231	$35	$8,085
B-5	20.26	0.00	Insulation Board (R-20)	SF	1,000	1.10	0	1,100	$7	$7,700
B-6	20.27	0.00	Disposal of Unusable or Surplus Material	CY	1,000	1.20	0	1,200	$25	$30,000
B-7	55.03	0.00	Furnish, Install, and Televise Subdrain with Geotextile (12-Inch, Type SP, CPEP, Type C Filter Material, Type C non-woven Geotextile)	LF	1,447	1.00	0	1,447	$85	$122,995
B-8	55.03	0.00	Furnish, Install, and Televise Subdrain with Geotextile (18-Inch, Type SP, CPEP, Type C Filter Material, Type C non-woven Geotextile)	LF	1,340	1.00	0	1,340	$95	$127,300
B-9	55.03	0.00	Furnish, Install, and Televise Subdrain with Geotextile (24-Inch, Type SP, CPEP, Type C Filter Material, Type C non-woven Geotextile)	LF	122	1.00	0	122	$125	$15,250
B-10	55.03	0.00	Furnish, Install, and Televise Subdrain with Geotextile (30-Inch, Type SP, CPEP, Type C Filter Material, Type C non-woven Geotextile)	LF	230	1.00	0	230	$135	$31,050
B-11	55.03	0.00	Furnish, Install, and Televise Subdrain with Geotextile (36-Inch, Type SP, CPEP, Type C Filter Material, Type C non-woven Geotextile)	LF	44	1.00	0	44	$150	$6,600
B-12	55.04	0.00	Connect to Existing Storm Drain System	EA	6	1.00	0	6	$3,000	$18,000
B-13	55.05	0.00	Construct (Type I) Manhole	EA	11	1.00	0	11	$7,000	$77,000
B-14	55.05	0.00	Construct (Type I) Catch Basin Manhole	EA	1	1.00	0	1	$8,000	$8,000
B-15	55.05	0.00	Construct (Type II) Manhole	EA	3	1.00	0	3	$11,000	$33,000
B-16	55.05	0.00	Construct (Type II) Catch Basin Manhole	EA	8	1.00	0	8	$11,500	$92,000
B-17	55.05	0.00	Construct (Type II) Bypass Manhole	EA	1	1.00	0	1	$30,000	$30,000
B-18	55.09	0.00	Construct Catch Basin	EA	11	1.00	0	11	$6,000	$66,000
B-19	55.11	0.00	Remove Manhole	EA	7	1.00	0	7	$1,200	$8,400
B-20	55.11	0.00	Remove Catch Basin	EA	10	1.00	0	10	$1,000	$10,000
B-21	55.22	0.00	Oil and Grit Separator (Stormceptor STC XXX)	EA	1	1.00	0	1	$30,000	$30,000
B-22	55.27	0.00	Storm Drain Bypass System	LS	1	1.00	0	1	$50,000	$50,000
B-23	70.07	0.00	Remove Pipe	LF	1,417	1.00	0	1,417	$15	$21,255
									TOTAL	**$968,840**

Quinhagak Street Reconstruction
MOA Project No. 21-13

ENGINEER'S ESTIMATE - DRAFT DSR - ALTERNATIVE 3

ITEM No.	MASS No.	Special No.	ITEM DESCRIPTION	UNIT	CALC. QUANT	CONT. FACTOR	ROUND FACTOR	EST QUANT	UNIT PRICE	TOTAL COST
Schedule C - Illumination Improvements										
C-1	80.01	0.00	Temporary Illumination	LS	1	1.00	0	1	$10,000	$10,000
C-2	80.02	0.00	Trench and Backfill (2'W x 3.5'D)	LF	1,520	1.10	-1	1,670	$17	$28,390
C-3	80.04	0.00	Driven Pile Luminaire Pole Foundations	EA	11	1.00	0	11	$2,500	$27,500
C-4	80.05	95.04	Fixed Base Luminaire Pole (26-29 Ft. Length)	EA	11	1.00	0	11	$4,800	$52,800
C-5	80.05	95.04	Spare Fixed Base Luminaire Pole (28 Ft. Length)	EA	1	1.00	0	1	$3,750	$3,750
C-6	80.05	95.04	Luminaire Arm (6-17 Ft. Length)	EA	14	1.00	0	14	$850	$11,900
C-7	80.07	0.00	GRC Steel Conduit (2 inch)	LF	1,647	1.05	-1	1,730	$23	$39,790
C-8	80.08	95.04	Junction Box (Type IA)	EA	13	1.00	0	13	$1,250	$16,250
C-9	80.10	0.00	3 Conductor 8 AWG Type XHHW-2 Cable	LF	1,604	1.05	-1	1,680	$8	$13,440
C-10	80.23	95.04	Luminaire (5000 Lm, Medium, Type 2)	EA	8	1.00	0	8	$561	$4,488
C-11	80.23	95.04	Luminaire (6000 Lm, Medium, Type 2)	EA	2	1.00	0	2	$611	$1,222
C-12	80.23	95.04	Luminaire (7000 Lm, Medium, Type 2)	EA	4	1.00	0	4	$661	$2,644
C-13	80.23	95.04	Spare Luminaire (5000 Lm, Medium, Type 2)	EA	1	1.00	0	1	$411	$411
C-14	80.23	95.04	Spare Luminaire (6000 Lm, Medium, Type 2)	EA	1	1.00	0	1	$461	$461
C-15	80.23	95.04	Spare Luminaire (7000 Lm, Medium, Type 2)	EA	1	1.00	0	1	$511	$511
C-16	80.28	95.04	Remove Luminaire	EA	2	1.00	0	2	$1,200	$2,400
									TOTAL	**$215,957**

Schedule A - Roadway Improvements	$2,051,290
Schedule B - Drainage Improvements	$968,840
Schedule C - Illumination Improvements	$215,957
Total Estimated Construction Cost:	**$3,236,087**

Quinhagak Street
MOA Project No. 21-13

Utility Relocation Cost Estimate Summary Alternative 3	
Electric (CEA)	$34,000
Telephone (ACS)	$18,000
Cable Television (GCI)	$442,000
Natural Gas (ENSTAR)	$349,000
Subtotal:	*$843,000*
Construction Contingency (15%)	*$126,000*
Total Utility Relocation Cost:	**$969,000**

Quinhagak Street
MOA Project No. 21-13
ACS Utility Conflict Summary
Alternative 3

Id No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST
ACS-1	12+08	Crossing	UG Telephone	Roadway Structural Section, Storm Drain Pipe, Storm Drain Structure	Relocate	56	LF	$110	$6,160
ACS-2	24+46	Crossing	UG Telephone	Roadway Structural Section, Storm Drain Structures	Lower as Needed	50	LF	$151	$7,550

Construction Costs:	$13,710
Engineering/Administration (30%):	$4,113
Total:	**$18,000**

Quinhagak Street
MOA Project No. 21-13
CEA Utility Conflict Summary
Alternative 3

Id No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST
CEA-1	22+01	RT	Pad Mount Transformer	Storm Drain Pipe	Relocate as Needed	1	EA	$19,365	$19,365
CEA-2	24+45	Crossing	3ø 4 Wire Primary Conductor	Roadway Structural Section, Storm Drain Structures	Relocate as Needed	52	LF	$124	$6,448

Construction Costs:	$25,813
Engineering/Administration (30%):	$7,744
Total:	**$34,000**

Quinhagak Street
MOA Project No. 21-13
ENSTAR Utility Conflict Summary
Alternative 3

Id No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST
ENSTAR-1	10+23	Crossing	2" Plastic Main	Roadway Structural Section, Subdrain Pipe, Storm Drain Structures	Lower as Needed	70	LF	$172	$12,019
ENSTAR-2	10+21 - 11+45	LT	2" Plastic Main	Roadway Structural Section, Subdrain Pipe, Storm Drain Structures	Relocate	125	LF	$172	$21,463
ENSTAR-3	10+54	LT	5/8" Plastic Service	Subdrain Pipe	Relocate	1	EA	$3,090	$3,090
ENSTAR-4	12+06	Crossing	12" Pressurized Transmission Main	Roadway Structural Section, Subdrain Pipe, Storm Drain Structure	Relocate	57	LF	$591	$33,664
ENSTAR-5	14+87 - 24+38	RT	2" Plastic Main	Subdrain Pipes, Storm Drain Structures	Relocate	952	LF	$172	$163,458
ENSTAR-6	14+92	Crossing	5/8" Plastic Service	Roadway Structural Section, Subdrain Pipe, Storm Drain Structure	Relocate	1	EA	$3,090	$3,090
ENSTAR-7	15+17	RT	2" Plastic Main	Storm Drain Structure	Relocate as Needed	17	LF	$172	$2,919
ENSTAR-8	16+37	RT	7/8" Plastic Service	Subdrain Pipe	Relocate	1	EA	$3,846	$3,846
ENSTAR-9	17+15	Crossing	5/8" Plastic Service	Roadway Structural Section, Subdrain Pipe	Lower as Needed	1	EA	$3,090	$3,090
ENSTAR-10	18+59	Crossing	5/8" Plastic Service	Roadway Structural Section, Subdrain Pipe, Storm Drain Structures	Relocate	1	EA	$3,090	$3,090
ENSTAR-11	19+49	Crossing	5/8" Plastic Service	Roadway Structural Section, Subdrain Pipe	Lower as Needed	1	EA	$3,090	$3,090
ENSTAR-12	20+00	RT	7/8" Plastic Service	Subdrain Pipe	Relocate as Needed	1	EA	$3,846	$3,846
ENSTAR-13	21+61	RT	7/8" Plastic Service	Roadway Structural Section, Subdrain Pipe	Relocate as Needed	1	EA	$3,846	$3,846
ENSTAR-14	24+36	Crossing	7/8" Plastic Service	Roadway Structural Section, Subdrain Pipe, Storm Drain Structures	Relocate as Needed	1	EA	$3,846	$3,846
ENSTAR-15	24+38	RT	7/8" Plastic Service	Storm Drain Structures	Relocate as Needed	1	EA	$3,846	$3,846

Construction Costs:	$268,202
Engineering/Administration (30%)	$80,461
Total:	**$349,000**

Quinhagak Street
MOA Project No. 21-13
GCI Utility Conflict Summary
Alternative 3

Id No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST
GCI-1	10+25 - 11+54	RT	.750 Coaxial Cable	Roadway Structural Section, Subdrain Pipe, Storm Drain Structures	Relocate	143	LF	$110	$15,730
GCI-2	10+27 - 11+55	RT	.500 Coaxial Cable	Roadway Structural Section, Subdrain Pipe, Storm Drain Structures	Relocate as Needed	142	LF	$96	$13,632
GCI-3	10+32	RT	CATV Pedestal	Roadway Structural Section, Subdrain Pipe, Storm Drain Structure	Relocate as Needed	1	EA	$1,476	$1,476
GCI-4	11+51	Crossing	.625 Coaxial Cable	Roadway Structural Section	Lower as Needed	49	LF	$103	$5,047
GCI-5	11+57	Crossing	.500 and .750 Coaxial Cables	Roadway Structural Section	Lower as Needed	98	LF	$103	$10,094
GCI-6	11+62 - 12+00	LT	.500 and .750 Coaxial Cables	Roadway Structural Section	Lower as Needed	75	LF	$103	$7,725
GCI-7	11+54 - 14+80	RT	.625 Coaxial Cable	Roadway Structural Section, Subdrain Pipe, Storm Drain Structures	Relocate	329	LF	$103	$33,887
GCI-8	12+21 - 16+01	LT	.750 Coaxial Cable	Storm Drain Pipe, Storm Drain Structures	Relocate	381	LF	$110	$41,910
GCI-9	12+21 - 17+24	LT	.500 Coaxial Cable	Roadway Structural Section, Subdrain Pipes, Storm Drain Structures	Relocate	506	LF	$96	$48,576
GCI-10	13+99 - 14+33	LT	.625 Coaxial Cable	Subdrain Pipe, Storm Drain Structures	Lower as Needed	34	LF	$103	$3,502
GCI-11	14+26	LT	CATV Pedestal	Storm Drain Structures	Relocate as Needed	1	EA	$1,476	$1,476
GCI-12	14+26 - 17+24	LT	(2) .625 Coaxial Cables	Subdrain Pipes, Storm Drain Structures	Relocate	600	LF	$103	$61,800
GCI-13	14+80	RT	CATV Pedestal	Subdrain Pipe	Relocate as Needed	1	EA	$1,476	$1,476
GCI-14	17+24	LT	CATV Pedestal	Subdrain Pipe	Relocate as Needed	1	EA		$0
GCI-15	17+24 - 24+46	LT	.750 Coaxial Cable	Roadway Structural Section, Subdrain Pipes, Storm Drain Structures	Relocate	725	LF	$110	$79,750
GCI-16	24+03	LT	Communications Vault	Subdrain Pipe	Relocate as Needed	1	EA	$5,906	$5,906
GCI-17	24+47	Crossing	UG Fiber Optic Cables	Roadway Structural Section	Lower as Needed	48	LF	$165	$7,920

Construction Costs:	$339,907
Engineering/Administration (30%)	$101,972
Total:	**$442,000**

Date: 5/1/2023 **Basis:** **Prepared By:** **CRW** **Ver. 5.1**

Project: Quinhagak Street Reconstruction Alternative 3

Project Number: **21-13** [B]=local bond; [S]=state grant; [F]= federal grant

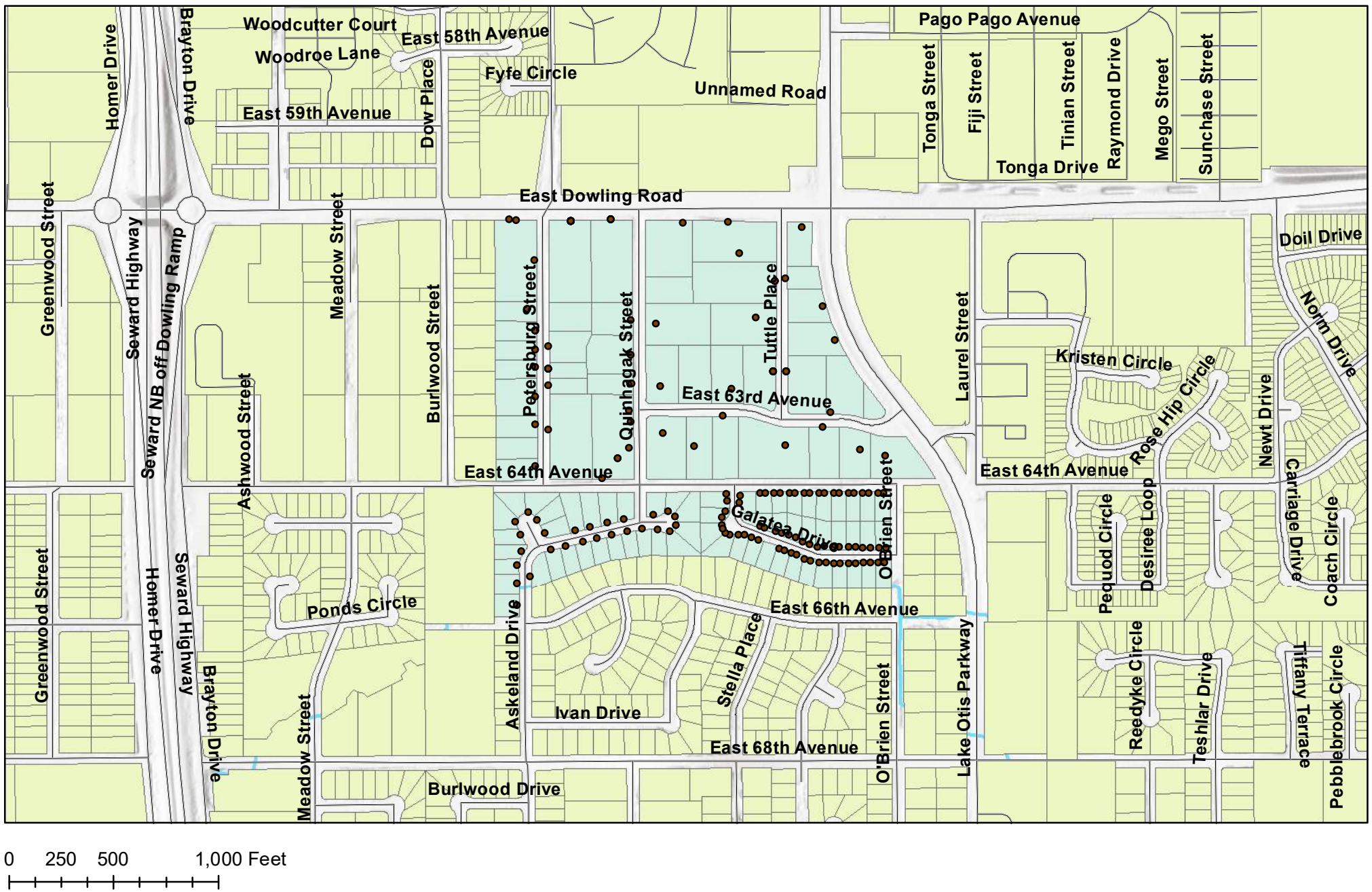
DESIGN	Design Management	$47,440		
Start 20??	PM&E Design Services	$0		
	PM&E Design Survey	$0		
	PM&E Design Soil	$0		
	Contractual Dsgn Sers (Basic)	$527,000		
	Contractual Dsgn Sers (Add'l)	$130,000		
	Contractual Design Survey	$70,000		
	Contractual Design Soils	$33,000		
	Miscellaneous	$0		
Subtotal			$807,440	
UTILITIES	AWWU	$0		
Start 20??	MOA Shoring	$0		
	CEA	$39,000		
	ACS	$21,000		
	GCI	$508,000		
	Enstar	$401,000		
Subtotal			$969,000	
ROW	Real Estate Services	$40,000		
Start 20??	Land Acquisition	$32,000		
Subtotal			$72,000	
CONSTRUCTION	Construction Management	$74,428		
Start 20??	Inspection	$197,396		
	Materials Testing	$32,360		
	Survey	$29,124		
	Miscellaneous	$0		
	Construction Contract	$3,236,000		
Subtotal			$3,569,308	
MISCELLANEOUS	Bond Overhead (15.0%)	$1,041,661		
	Grant Overhead (0.0%)	$0		
	Contingency (15%)	$485,000		
Subtotal			$1,526,661	
PROJECT TOTAL			$6,944,409	

WEBPAGE DATA	
Environ	$0
DS	$201,860
Prelim Dsgn	$403,720
Final Dsgn	$201,860
ROW	$72,000
Utilities	$969,000
Const	$5,095,969
Total	$6,944,409

Public Involvement

Appendix K

Quinhagak Street Imrpovements Mailing Area
106 Parcels
More than 182 Owner/Occupant Addresses
April 27, 2022
Source, MOA GIS & Property Tax Database



Q1 Please provide the below contact information.

Answered: 21 Sk pped: 0

ANSWER CHOICES	RESPONSES	
Name	100.00%	21
Company	0.00%	0
Add ess	100.00%	21
Add ess 2	4.76%	1
C ty/Town	100.00%	21
State/P ov nce	100.00%	21
ZIP/Posta Code	100.00%	21
Count y	0.00%	0
Ema Add ess	90.48%	19
Phone Numbe	76.19%	16

#	NAME	DATE
1	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
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	There are no esponses.	

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#	COUNTRY	DATE
	There are no esponses.	

#	EMAIL ADDRESS	DATE
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Q2 Mailing Address (if different):

Answered: 5 Sk pped: 16

#	RESPONSES	DATE
1	[redacted]	[redacted]
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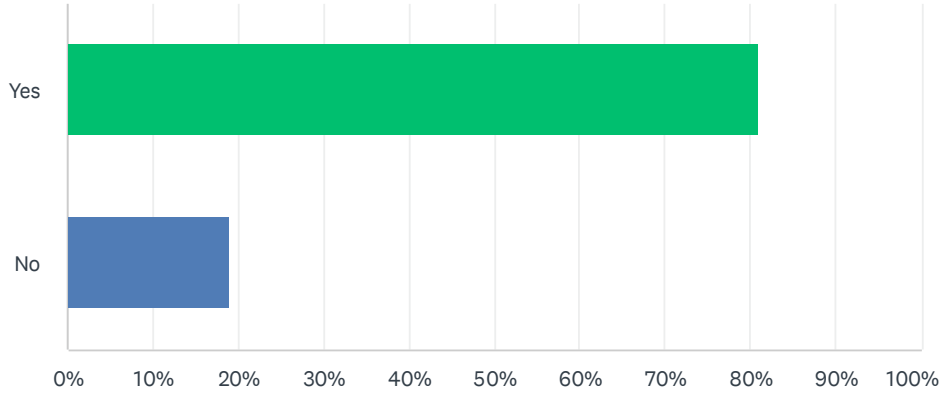
Q3 Can we send you future project updates via email?

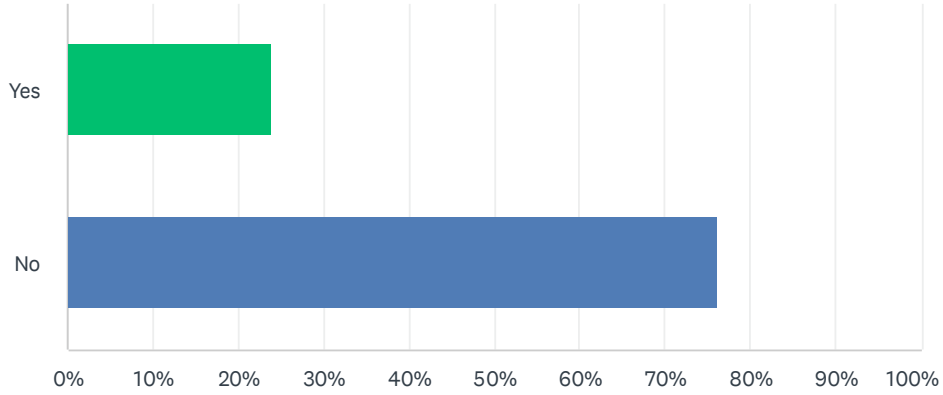
Answered: 21 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	80.95%	17
No	19.05%	4
TOTAL		21

Q4 Do you own a property along Quinhagak Street?

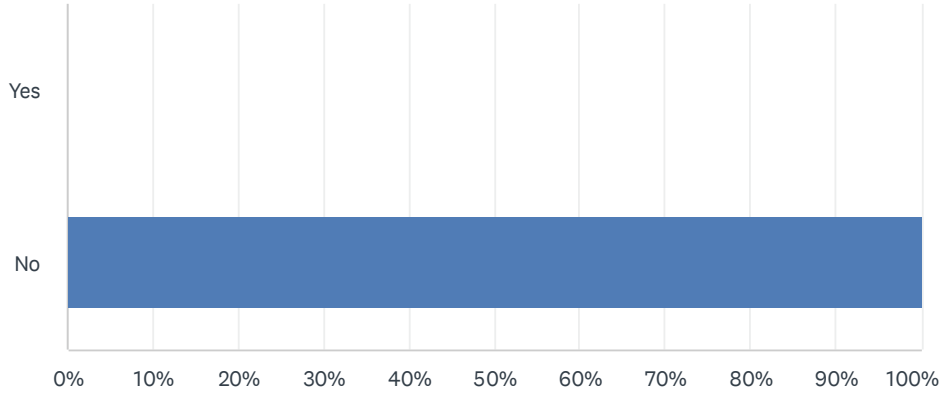
Answered: 21 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	23.81%	5
No	76.19%	16
TOTAL		21

Q5 Is your driveway heated?

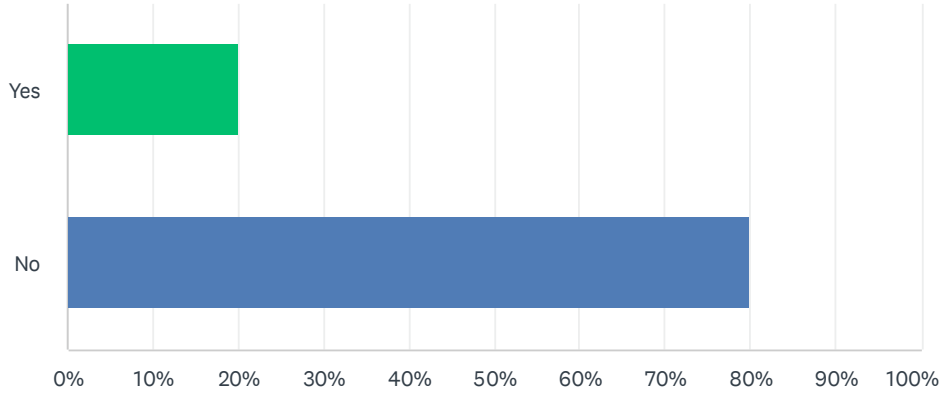
Answered: 5 Skipped: 16



ANSWER CHOICES	RESPONSES	
Yes	0.00%	0
No	100.00%	5
TOTAL		5

Q6 Is your driveway constructed with concrete?

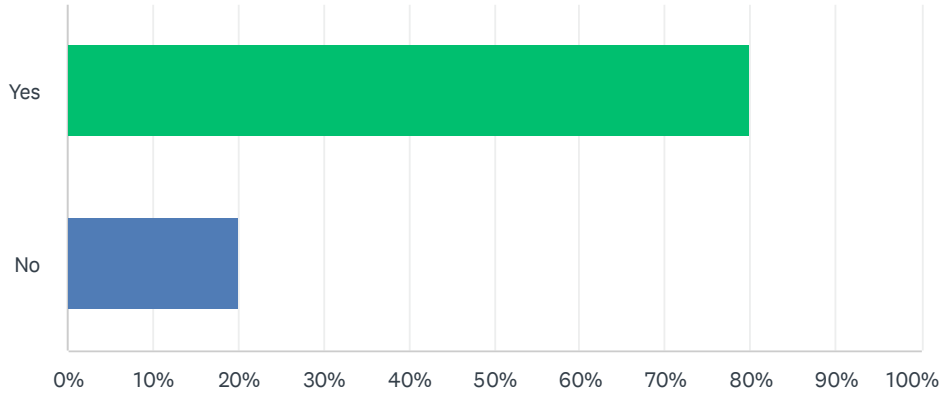
Answered: 5 Skipped: 16



ANSWER CHOICES	RESPONSES	
Yes	20.00%	1
No	80.00%	4
TOTAL		5

Q7 Are there any special conditions on your property that you feel the design team should be aware of in designing the project?

Answered: 5 Skipped: 16

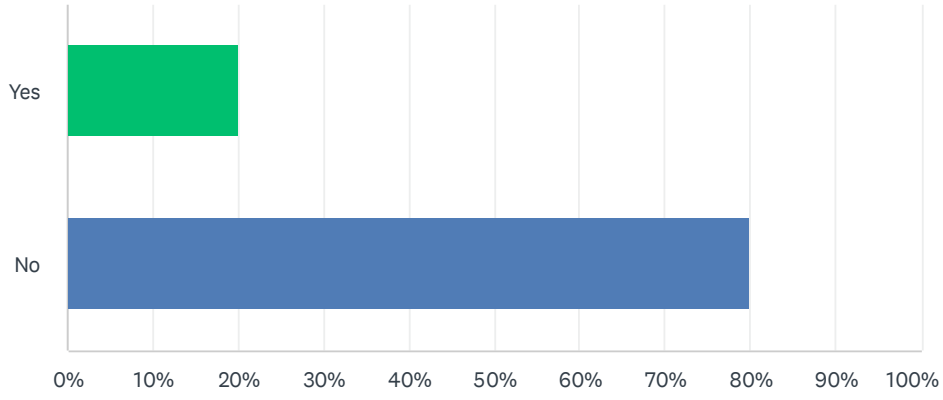


ANSWER CHOICES	RESPONSES	
Yes	80.00%	4
No	20.00%	1
TOTAL		5

#	IF YES, PLEASE EXPLAIN:	DATE
1	Our property is primarily accessed from the west side of the property. Additionally, we park on the west side of the building. Any improvements restricting access from the west may negatively affect our use.	7/1/2022 11:00 AM
2	Askeland gets flooded each year because the road is higher than the drains	6/16/2022 11:49 AM
3	A STORM SEWER IS NEEDED AT THE NORTHEAST CORNER OF THE PROPERTY (OUR PROPERTY AND SEVERAL ADJACENT LOTS DRAIN TO THAT POINT	6/6/2022 11:46 AM
4	STORM DRAIN IN NORTHEAST CORNER OF PROPERTY	6/6/2022 10:51 AM

Q8 Have you ever experienced groundwater problems in your crawl space or basement?

Answered: 5 Skipped: 16

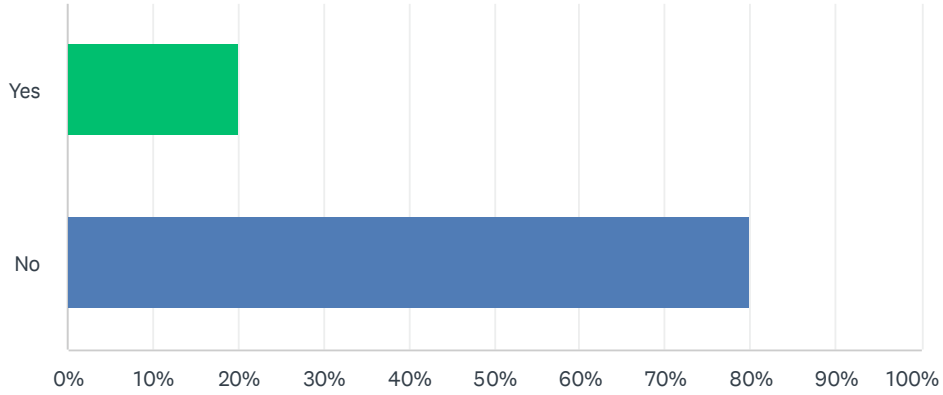


ANSWER CHOICES	RESPONSES	
Yes	20.00%	1
No	80.00%	4
TOTAL		5

#	IF YES, PLEASE EXPLAIN:	DATE
1	Our crawlspace often gets large amounts of groundwater during heavy rains and breakup. We continue to get groundwater in drier months albeit in lesser volumes. The sump pump is operational year round.	7/1/2022 11:00 AM

Q9 Do you have a foundation drain or sump pump?

Answered: 5 Skipped: 16



ANSWER CHOICES	RESPONSES	
Yes	20.00%	1
No	80.00%	4
TOTAL		5

#	IF YES, HOW MANY:	DATE
1	1	7/1/2022 11:00 AM

Q10 Where are they located?

Answered: 1 Skipped: 20

#	RESPONSES	DATE
1	NW corner of the building footprint in the crawlspace.	7/1/2022 11:01 AM

Q11 Where does it drain?

Answered: 1 Skipped: 20

#	RESPONSES	DATE
1	To the asphalt on the south side of the building.	7/1/2022 11:01 AM

Q12 How often does the pump run? (e.g. all year, spring, fall, after storms, etc.)

Answered: 1 Skipped: 20

#	RESPONSES	DATE
1	All year	7/1/2022 11:01 AM

Q13 What best describes you? For example, property owner in the area, renter in project limits or area, business owner in project limits or area, work in project limits or area, roadway user.

Answered: 16 Skipped: 5

#	RESPONSES	DATE
1	renting	6/21/2022 10:31 AM
2	use to get home. own a duplex of 64th & Quinhagak	6/16/2022 11:52 AM
3	I own property on Galatea Drive and I have to use Quinhagak Street to access my property	6/16/2022 9:35 AM
4	Renter that uses the road daily	6/15/2022 5:27 PM
5	Business and property owner on Petersburg Street and 64th Avenue	6/13/2022 9:39 AM
6	Renter in area	6/10/2022 4:31 PM
7	Renter in the project limits	6/10/2022 11:45 AM
8	renter	6/9/2022 10:21 AM
9	work in project limits or area	6/7/2022 3:52 PM
10	Renter in the area	6/6/2022 1:36 PM
11	I own the building that Neighbors runs out of on Tuttle Place	6/6/2022 9:48 AM
12	Nearby property owner, daily roadway user	6/2/2022 9:43 PM
13	Business in project limits (we rent, not own, building)	6/2/2022 1:52 PM
14	Renter	6/2/2022 12:38 PM
15	Community Council Board Member	6/2/2022 9:35 AM
16	work in project area, daily roadway user	6/1/2022 1:26 PM

Q14 What are the top 3 things you would change about Quinhagak Street within the project area?

Answered: 16 Skipped: 5

ANSWER CHOICES	RESPONSES	
#1	100.00%	16
#2	75.00%	12
#3	50.00%	8

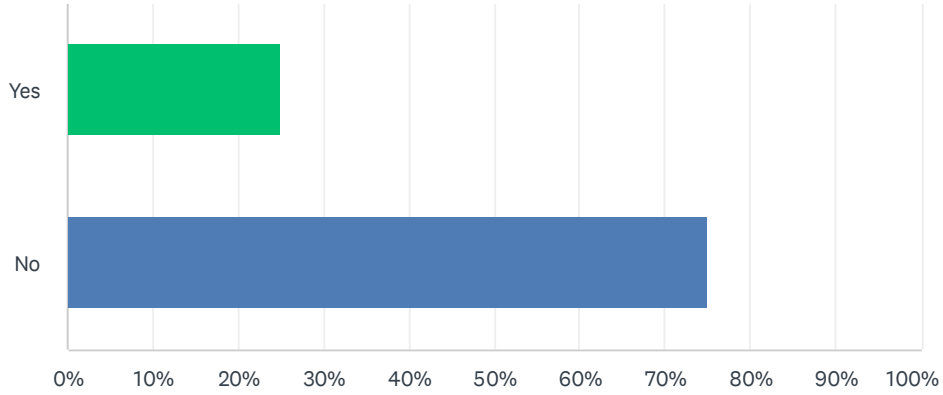
#	#1	DATE
1	Repairs and improvements to grading and asphalt	7/1/2022 11:03 AM
2	Potholes! They are so bad.	6/21/2022 10:35 AM
3	potholes	6/16/2022 11:53 AM
4	Stop sign at end of Askeland - Always speeder going around the corner	6/16/2022 11:51 AM
5	REpair the street itself so one can drive on it without swerving ten times to avoid potholes	6/16/2022 9:40 AM
6	establish easement for business on the street	6/15/2022 5:41 PM
7	Re-paving	6/13/2022 9:40 AM
8	Better road foundation	6/10/2022 4:33 PM
9	Filling pot holes	6/10/2022 11:47 AM
10	The whole road is terrible and would love to have it replaced	6/6/2022 1:40 PM
11	It’s so bad anything will be an improvement	6/6/2022 12:23 PM
12	No changes - repave. Please look at repaving Tuttle Place as well.	6/6/2022 9:50 AM
13	Fix the potholes	6/2/2022 9:50 PM
14	Replace asphalt	6/2/2022 1:56 PM
15	Fix the potholes	6/2/2022 12:47 PM
16	needs repaving	6/1/2022 1:32 PM

#	#2	DATE
1	Water drainage - spring breakup is rough!	6/21/2022 10:35 AM
2	the name, haha	6/16/2022 11:53 AM
3	speed humps	6/16/2022 11:51 AM
4	sidewalks	6/16/2022 9:40 AM
5	eliminate brush/trees that causes blind spots	6/15/2022 5:41 PM
6	New pedestrian facilities	6/10/2022 4:33 PM
7	Better drainage	6/10/2022 11:47 AM
8	uneven road	6/6/2022 1:40 PM
9	Fix the drain system to prevent areas of slightly flooding water	6/2/2022 9:50 PM
10	Remove holes and frost heaves	6/2/2022 1:56 PM

11	A sidewalk would be nice, especially for children on bikes	6/2/2022 12:47 PM
12	drainage issues	6/1/2022 1:32 PM
#	**#3**	**DATE**
1	Not pedestrian friendly and so close to school/poor lighting on street	6/21/2022 10:35 AM
2	space to park vehicles on the road without reducing the area for driving on the road	6/16/2022 9:40 AM
3	Better snow removal during winter months	6/15/2022 5:41 PM
4	New pavement	6/10/2022 4:33 PM
5	Level terrain	6/10/2022 11:47 AM
6	potholes	6/6/2022 1:40 PM
7	Possibly add speed deterents	6/2/2022 1:56 PM
8	Street lamps are nice- not the bright street lights, don’t like the light pollution, but enough light to be safe walking	6/2/2022 12:47 PM

Q15 Do you have any concerns about speeding along Quinhagak Street?

Answered: 20 Skipped: 1

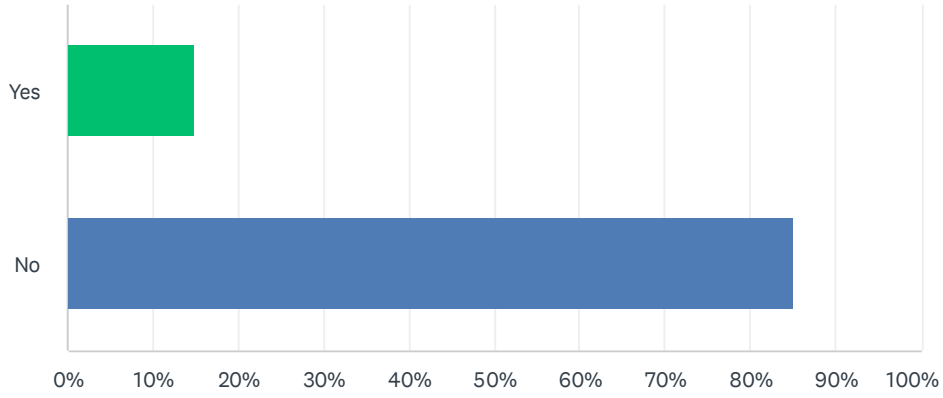


ANSWER CHOICES	RESPONSES	
Yes	25.00%	5
No	75.00%	15
TOTAL		20

#	IF YES, PLEASE EXPLAIN:	DATE
1	The potholes slow people down	6/21/2022 10:35 AM
2	People hauling a$$ around the Askeland corner. I live there.	6/16/2022 11:51 AM
3	I have personally witnessed people driving at extreme speeds on Quinhagak. There are a lot of children in the area and they could easily be hit by one of these people	6/16/2022 9:40 AM
4	Commercial vehicles use the street often because of the businesses on 63rd and 64th Avenues. They are always travelling too fast. Two schools in the area so there are children walking too and from school on the connecting streets.	6/15/2022 5:41 PM
5	Rilke School parents coming and going to school	6/9/2022 10:23 AM
6	Currently the road is so bad it would be hard to speed.	6/6/2022 12:23 PM
7	It is a constant problem. People drive this road at high rate of speed, all the time.	6/2/2022 1:56 PM
8	Not now that the road is full of potholes, but maybe a speed bump would help that	6/2/2022 12:47 PM

Q16 Do you think there should be space in the roadway for on-street parking along Quinhagak Street?

Answered: 20 Skipped: 1

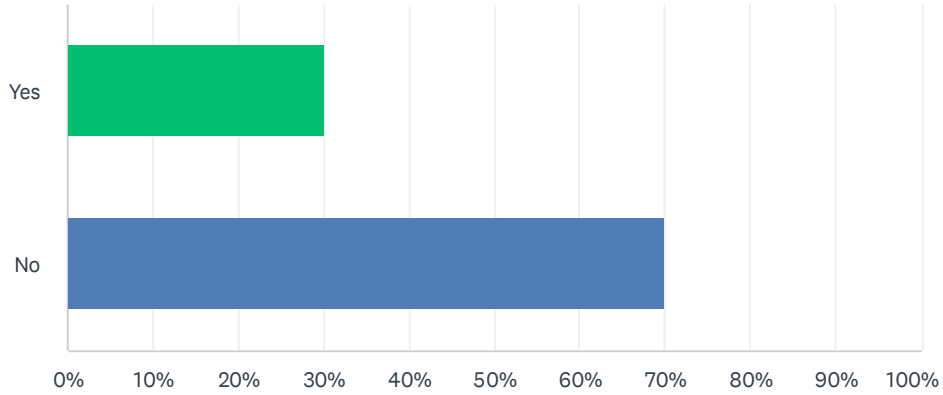


ANSWER CHOICES	RESPONSES	
Yes	15.00%	3
No	85.00%	17
TOTAL		20

#	IF YES, PLEASE EXPLAIN WHERE PARKING SHOULD BE PROVIDED:	DATE
1	by the businesses	6/21/2022 10:35 AM
2	Sides of road	6/16/2022 11:51 AM
3	Along the south side of the street	6/16/2022 9:40 AM
4	Too many commercial vehicles will park on the road and during winter the snow doesn't get removed because of that and the road narrows as time goes on.	6/15/2022 5:41 PM
5	We operate long commercial vehicles and street parking adds a potential safety risk. Most of the corridor is commercial.	6/6/2022 12:23 PM
6	Businesses typically have sufficient parking lot space	6/2/2022 12:47 PM
7	this is a big NO. all businesses have adequate parking. On street parking would immediately turn into abandoned vehicle / homeless RV / living in vehicle parking	6/1/2022 1:32 PM

Q17 Are you aware of any sight distance problems along Quinhagak Street that may need to be corrected as part of the project? (For example, are there trees or structures blocking your visibility while driving?)

Answered: 20 Skipped: 1

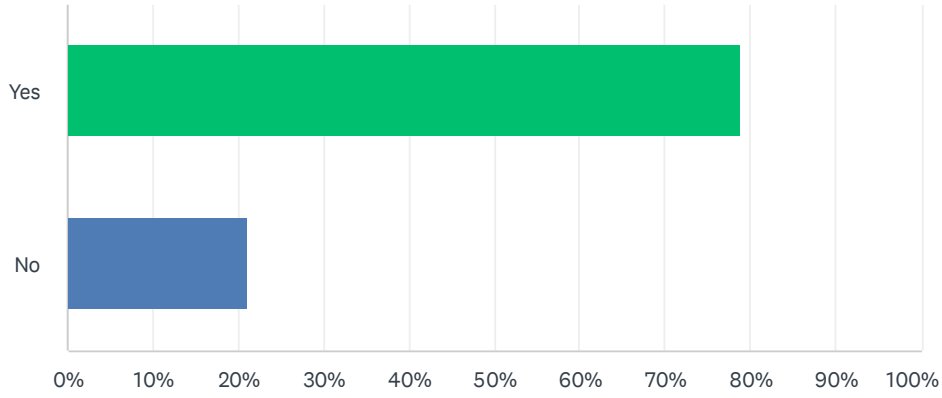


ANSWER CHOICES	RESPONSES	
Yes	30.00%	6
No	70.00%	14
TOTAL		20

#	IF YES, PLEASE EXPLAIN:	DATE
1	Intersection of Quinhagak and E. 64th/Galatea trees blocking turn onto E. 64th	6/21/2022 10:35 AM
2	Some trees could be cut back on 64th	6/16/2022 11:53 AM
3	on the northwest corner of 64th and Quinhagak there is a business that allows their employees to park right up next to the street so you have to pull too far forward to see vehicles travelling south towards 64th. also trees/snowbanks on the east side of the road obstruct the view also.	6/15/2022 5:41 PM
4	Corner of 63rd, looking north - tree branches	6/9/2022 10:23 AM
5	Drivers making a left onto Quinhagak from 64th are sometimes blinded by cars parked in the kreative audio and security parking lot. Drivers coming towards Askeland from Quinhagak at times stop in the intersection of 64th and Quinhagak because they are unsure whether to continue through with no stop sign.	6/2/2022 9:50 PM
6	Bushes block sight minimally while turning onto or off Galatea Drive	6/2/2022 12:47 PM

Q18 Do you think pedestrian facilities (e.g. sidewalks) should be constructed as part of this project?

Answered: 19 Skipped: 2

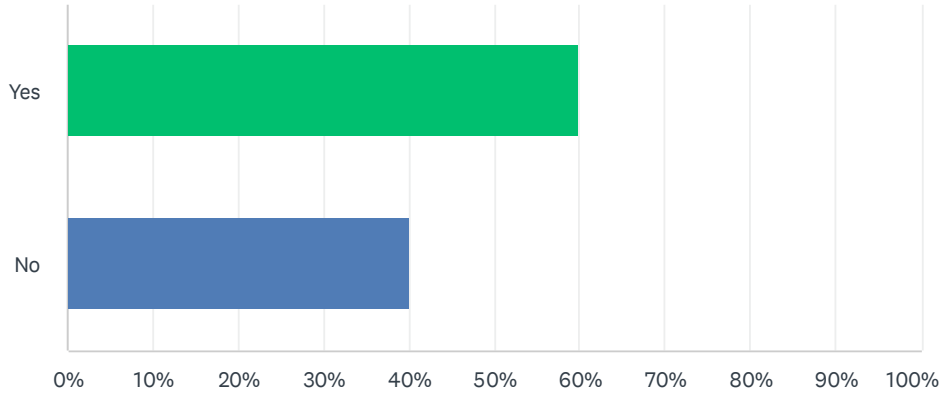


ANSWER CHOICES	RESPONSES	
Yes	78.95%	15
No	21.05%	4
TOTAL		19

#	IF YES, SHOULD PEDESTRIAN FACILITIES BE INSTALLED ONE OR BOTH SIDES OF THE STREET? WRITE "ONE" OR "BOTH" IN THE TEXT BOX BELOW:	DATE
1	One	7/1/2022 11:03 AM
2	One - for businesses/kids walking to school	6/21/2022 10:35 AM
3	One	6/16/2022 11:53 AM
4	One	6/16/2022 11:51 AM
5	Both	6/16/2022 9:40 AM
6	ONE	6/15/2022 5:41 PM
7	Both	6/10/2022 4:33 PM
8	One	6/10/2022 11:47 AM
9	One	6/9/2022 10:23 AM
10	ONE	6/7/2022 3:58 PM
11	both	6/6/2022 1:40 PM
12	One	6/6/2022 12:23 PM
13	This is always appreciated as I walk at lunch everyday in the area but understand space constraints.	6/6/2022 9:50 AM
14	Sidewalks along one side should be fine	6/2/2022 9:50 PM
15	both	6/2/2022 1:56 PM
16	One side seems good enough	6/2/2022 12:47 PM

Q19 Are you aware of any drainage problems along Quinhagak Street that need to be corrected?

Answered: 20 Skipped: 1



ANSWER CHOICES	RESPONSES	
Yes	60.00%	12
No	40.00%	8
TOTAL		20

#	IF YES, PLEASE EXPLAIN:	DATE
1	huge amounts of water accumulate on Quinhagak/so icy in spring breakup	6/21/2022 10:35 AM
2	As explained in #5	6/16/2022 11:51 AM
3	The snow and water always pool in the potholes and near the edges of the road	6/16/2022 9:40 AM
4	All of the drains don't work because they are elevated above the pavement and the storm drains pipes are collapsed	6/15/2022 5:41 PM
5	Corner of Quinhagak and 64th	6/13/2022 9:40 AM
6	64th - accumulation	6/9/2022 10:23 AM
7	water doesn't drain very well, potholes fill with water and get worse. A lot of puddles.	6/7/2022 3:58 PM
8	The road is so uneven that pooling and drainage is very poor.	6/6/2022 12:23 PM
9	By Combs Sheet Metal	6/6/2022 9:50 AM
10	Break up season especially presents a moderate amount of flooding along Quinhagak	6/2/2022 9:50 PM
11	it appears drainage problems are related to damaged road surface conditions	6/1/2022 1:32 PM

Q20 Please include any other comments:

Answered: 14 Skipped: 7

#	RESPONSES	DATE
1	Many drivers cut through our parking lot from Quinhagak to access Dowling from the north side of the lot, rather than continuing north on Quinhagak and turning right onto Dowling. Unsure how to mitigate this without negatively affecting our primary access from the west side.	7/1/2022 11:03 AM
2	Thank you so much for considering our little street. It is so often forgotten.	6/21/2022 10:35 AM
3	Will appreciate the rebuild	6/16/2022 11:51 AM
4	I have spoken to my city coucil woman about this multiple times and she continues to defer repairing the road. The road is a hazard to drivers and people due to the high number of potholes and loose gravel on the road	6/16/2022 9:40 AM
5	Nothing ever drains on the street and the cause is easily determined by the condition of the asphalt. The Muni just patches on top of patches. The original asphalt is raveled so bad is just washes down into the AskelandDrive/Quinhagak intersection.	6/15/2022 5:41 PM
6	No streetlights please	6/10/2022 4:33 PM
7	I'm being thankful this is being fixed!	6/9/2022 10:23 AM
8	Let's get it done, this street has needed it for a long time. Small maintenance has been done over the years; however it doesn't seem to help or last that long.	6/7/2022 3:58 PM
9	I use this street multiple times a day; leaving and coming home. It would be great to fix this street. It is awful in the summer time and worse in the winter. I see no issues with speeding in this road, you couldn't safely even if you wanted to with how poor it is.	6/6/2022 1:40 PM
10	Any road improvements in this area would be wonderful! These roads are horrible.	6/6/2022 9:50 AM
11	The potholes and bumps along the road are my biggest concerns.	6/2/2022 9:50 PM
12	My main reason for the speed concern and the need for sidewalks, are the number of children walking to and from the schools in the area	6/2/2022 1:56 PM
13	I appreciate the road being fixed, it has long been a problem.	6/2/2022 12:47 PM
14	Might as well do Tuttle, E 63rd, and 64th while you're at it!	6/1/2022 1:32 PM

HUDDLE

Meeting Summary
Quinhagak Street Reconstruction
SUBJECT: Abbott Loop Community Council Meeting (ALCC) Meeting
LOCATION: Abbott Loop Elementary,
8427 Lake Otis Parkway (hybrid meeting with some virtual attendees)
DATE: Thursday, October 20, 2022, 6:30 PM

ATTENDEES: Justin Keene (CRW Engineering Group), Bri Keifer (Huddle AK), 15 in-person and 10 virtual attendees including ALCC Members, local Assembly Representatives, Senators, and Representatives

Summary
Justin presented a brief project overview and invited ALCC members to Open House #1. The following topics were covered during a 5-minute presentation:

- Quinhagak Street which intersects E. Dowling Road, then runs south connecting to Askeland Drive is in poor condition with cracking, heaving, and drainage issues and is due for upgrades. Justin shared a map of the project location.
- The Municipality of Anchorage (MOA) Project Management and Engineering Department (PM&E) has contracted CRW Engineering to provide preliminary engineering and design services to evaluate the current conditions and determine the extent of upgrades.
- The project is currently funded through the Design Study Report (DSR) phase.
- During the DSR phase potential improvements will be evaluated. Improvements could include a full rebuild of the structural section including replacing the subgrade, new curb and gutters, a new storm drain system, lighting, and pedestrian facilities.
- Future construction would be funded through a Municipal bond.
- Justin shared the upcoming Open House #1 information:
  Open House #1
  Thursday, November 3rd
  5:00 - 7:00 PM
  Polaris K-12 School
  6200 Ashwood Street
- PM&E welcomes and encourages the public and ALCC members to attend this Open House to review and comment on detailed project information.
- The Open House documents will be posted on the website after the meeting for those not able to attend.
- Documents can be reviewed, and comments can also be provided via the project website: https://quinhagakstreetreconstruction.com/

Comments/Questions from UACC Members and Responses

- An attendee asked if there would be a designated place for bicycles.

  Justin responded that the designers always try and consider multi-modal opportunities in roadway design, but because Quinhagak Street is classified as a Local Road it is unlikely to receive bike-specific designations such as striping. The requirements to maintain bike striping at the Local Road level are typically cost-prohibitive. Although bicycle striping is unlikely, engineers can consider the possibility of providing enough space for bicycles.

- The importance of having sufficient space for snow storage in addition to the pedestrian facilities was emphasized by a community council member.

  Justin agreed that snow storage is an important design element. They will be working with MOA PM&E and Street Maintenance in determining snow storage solutions.

- An attendee asked for clarification on what a pedestrian facility would consist of.

  Just explained that a pedestrian facility is another term for a sidewalk. Due to the surrounding industrial and commercial land uses, the code allows for a sidewalk on one side of Quinhagak Street as opposed to a sidewalk on both sides. During the DSR process, they will investigate the options of one versus two sidewalks. Some of the initial project questionnaire responses indicate interest in one sidewalk.

- Clarification on the potential construction timeline was requested.

  Justin answered that construction might be possible as soon as 2024 depending on the timing of a successful bond passing.

Abbott Loop Community Council

AGENDA

GENERAL MEMBERSHIP MEETING

Date: October 20th, 2022

Time: 6:30-8:30 PM

******WE ARE MEETING IN-PERSON/ZOOM OPTION BELOW******

LOCATION: Abbott Loop Elementary
8427 Lake Otis Parkway

Abbott Loop Community Council Zoom Hybrid
Join Zoom Meeting Access:
https://us02web.zoom.us/j/85226973011?pwd=OVVGZC9KT25jU2N2OGdlamJkSWNJdz09
Meeting ID: 852 2697 3011 Passcode: 546795

Zoom Meeting etiquette:

- The hybrid meetings are NEW to our council, so have patience with us and the tech.
- You must list your name
- If you are a member of Abbott Loop Community Council- type ALCC after your name. If you are a guest- type guest and/or your affiliation after your name.
- Please do not use the chat for private or side conversations. Chat can be used to add relevant information like links or contact information and to kindly help us "fine tune" the meeting (indicate sound problems, etc).
- To ask a question or make a comment use the raise hand function.
- Prior to speaking each speaker should state their name, area of Abbott Loop they live in, and if a member, or guest.

If you would like to receive email notifications from the Federation of Community Councils about the ALCC meetings, visit www.communitycouncils.org and click "Sign-Up" (upper right-hand corner of page). This will get you registered for emails and the reminders before meetings.

- A member is anyone who resides in or has a business in the ALCC district.
- The setting is informal and participation is encouraged.
- Meetings are open to the public and everyone is invited and welcome!

Call to Order

- Round of Introductions
- Changes or additions to agenda
- Approval of minutes from September 2022: Kathleen Easley
- Treasurer's report: Heather Schrage

APD Report-Report and Q & A- APD Officer

Legislative Reports: Q & A http://akleg.gov/

- Senator: Josh Revak
- Representative: Calvin Schrage
- Representative Laddie Shaw

Community Reports and Q & A:

- Assembly member(s) www.muni.org/departments/assembly
- School Board member(s) https://www.asdk12.org/Page/1442
- Mayor's Office Report https://www.muni.org/departments/mayor/Pages/default.aspx
- JBER Community Engagement Report below

Candidate Introductions

Information about the upcoming November 8, 2022 General Election can be found here: Alaska Division of Elections

Reports

FCC Representative: Bruce Roberts

Roads & Projects Committee: Mary Minor

- Spruce Street Extension/Upgrade- Non-Public Hearing before the Urban Design Commission on 11/16/2022. Comments can be sent in by mail or email.

Parks & Rec Committee: Mark Miner

- Final Recreation Plan was signed by BLM for Campbell Tract. The main thing to note is, the proposed action authorization of pedal assist E-bikes was not approved. Link to project and all documents here: https://eplanning.blm.gov/eplanning-ui/project/2013694/570

Planning & Zoning Committee: Mary Miner

Cannabis & Alcohol Committee: Yolanda Meza

Membership & Events: Lizzie Newell

Abbott Loop Community Patrol: Dan Rudder, Lead http://www.accpatrols.org/

Old Business

New Business

- Huddle-Holly Spoth-Torres- Quinhagak Street Reconstruction Project
- December meeting?

Announcements/Comments

Upcoming Meeting Dates

ALCC monthly meetings are usually the last Thursday of the month. October-December meetings are scheduled for the 3rd Thursday because of Parent/Teacher conferences and holiday closures of the school.

- November 17th (3rd Thursday)
- December 15th (3rd Thursday) TBA

Adjourn

HUDDLE

Quinhagak Street Reconstruction - Open House #1 Summary

Date: November 3, 2022
Attendees: Public Attendance List Attached
Project Team Members Present: Russ Oswald & Jennifer Noffke, PM&E; Bill Johnson, Justin Keene, & Rob Burdick, CRW; Holly Spoth-Torres, Huddle
Reporter: Holly Spoth-Torres, Huddle AK
Location: Polaris K-12 School
Project: Quinhagak Street Reconstruction – East Dowling Road to Askeland Drive PM&E Project #21-13
Subject: Open House #1 Meeting Summary

Summary
The first public open house for the Quinhagak Street Reconstruction project was held on Thursday, November 3, 2022, from 5:00-7:00pm at Polaris K-12 School located at 6200 Ashwood St. Attendees had the opportunity to view project boards and preliminary street cross section alternatives. Attendees then had the opportunity to ask questions and provide comments to the project team. The boards presented included:

- Summary of Proposed Improvements
- June 2022 Questionnaire Responses Summary
- Project Timeline
- Typical Roadway Cross Section – Alternative 1
- Typical Roadway Cross Section – Alternative 2
- Project Scroll – Showing the Concept Alternatives

Huddle documented conversations, questions, and notes made on the project scrolls and are summarized below.

Open House Advertising
Abbott Loop Community Council (ALCC): The project team attended the October 20, 2022 ALCC meeting and gave a 5-minute presentation about the project and invited council members to Open House #1.

Mailing: A mailer invitation inviting people to the Open House #1 was sent by postcard via the USPS on October 19, 2022.

Web: The project website (www.quinhagakstreetreconstruction.com) was updated with the Open House #1 meeting information, including the date, time, and location on October 17, 2022.

E-mail: A Constant Contact Open House #1 invitation email was sent to the project email list on October 20, 2022. A Constant Contact Open House #1 reminder email was sent to the project email list on October 31, 2022. Due to inclement weather, schools were closed in Anchorage on November 3, 2022 however Polaris K-12 remained open for this community event. A Constant Contact email was sent on November 3, 2022 letting people know that the Open House #1 was going ahead as planned.

HUDDLE

Open House Follow-up

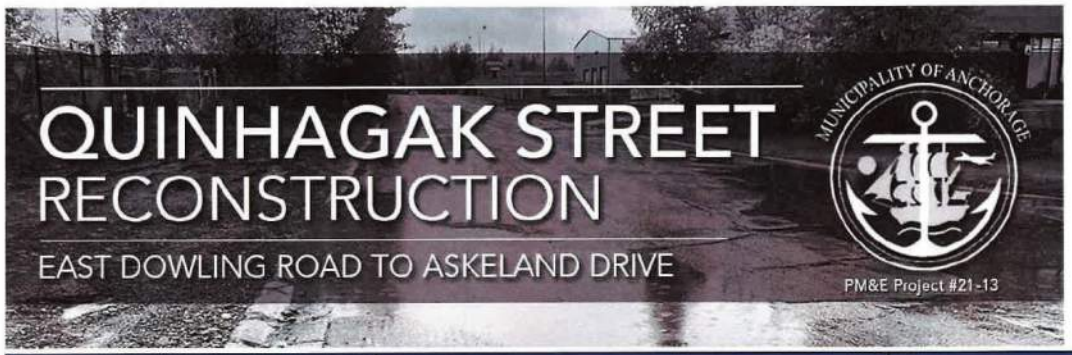
An e-newsletter was sent out to the project email list on November 8, 2022, thanking those who were able to attend and providing updates to those who were not able to make it. All the open house materials were uploaded to the project website on November 7, 2022.

Comment Summary

How Comment Was Received	Comment
Verbal	I don't see very many cars parking on the street.
Verbal	The road surface is in terrible shape.
Verbal	Sidewalks will conflict with industrial/commercial traffic. There are a lot of semi-trucks on the street.
Verbal	If Type 1 curbs are installed on the west side of the road they will get destroyed by large trucks. Sidewalks on the east side of the street shouldn't be a problem.
Verbal	I would support subsurface drainage improvements to stop frost heaving.
Map	Faith Presbyterian Church needs access from the west. The property has 4 sump pumps. Parking is mostly used between 6 PM and 8 PM on Wednesdays and on Sundays. The Church would like access from the west to drive around the south side of the building and would like to maintain parking along the west side of the building where the ADA ramp is located.
Verbal	Vehicles run the stop signs at 64th and Quinhagak frequently.
Verbal	The Rilke Schule school queue can back up to 64th and Quinhagak.
Verbal	Please construct the project sooner if possible.
Verbal	Runoff from the roadway cannot be conveyed into existing catch basins because of existing curbs heaving.
Map	There are two catch basins at Quinhagak and Askeland that are jacking, and the asphalt and ground is sinking at the northwest corner of Quinhagak and Askeland.
Map	Snow piles up on the east side of Quinhagak just north of E 64th causing sight distance problems.
Map	There are frost heaves in front of Parcel 11. See map for semi-truck circulation.
Map	Parcel 6: RV parking on the north side of lot. No sump pump.
Map	Stop control at the intersection of Quinhagak and 64th should be analyzed.
Map	Consider a 3rd alternative that includes Type 1 (on the east side) and Type 2 curb (on the west side).
Map	Parcels 11 and 12 are currently owned by the same person.
Map	A participant indicated that they preferred Alternative 2.

Attachments

1. Sign-In Sheets
2. Open House Advertisements and Follow-up (Emails, Mailer)
3. Photos of Map Comments



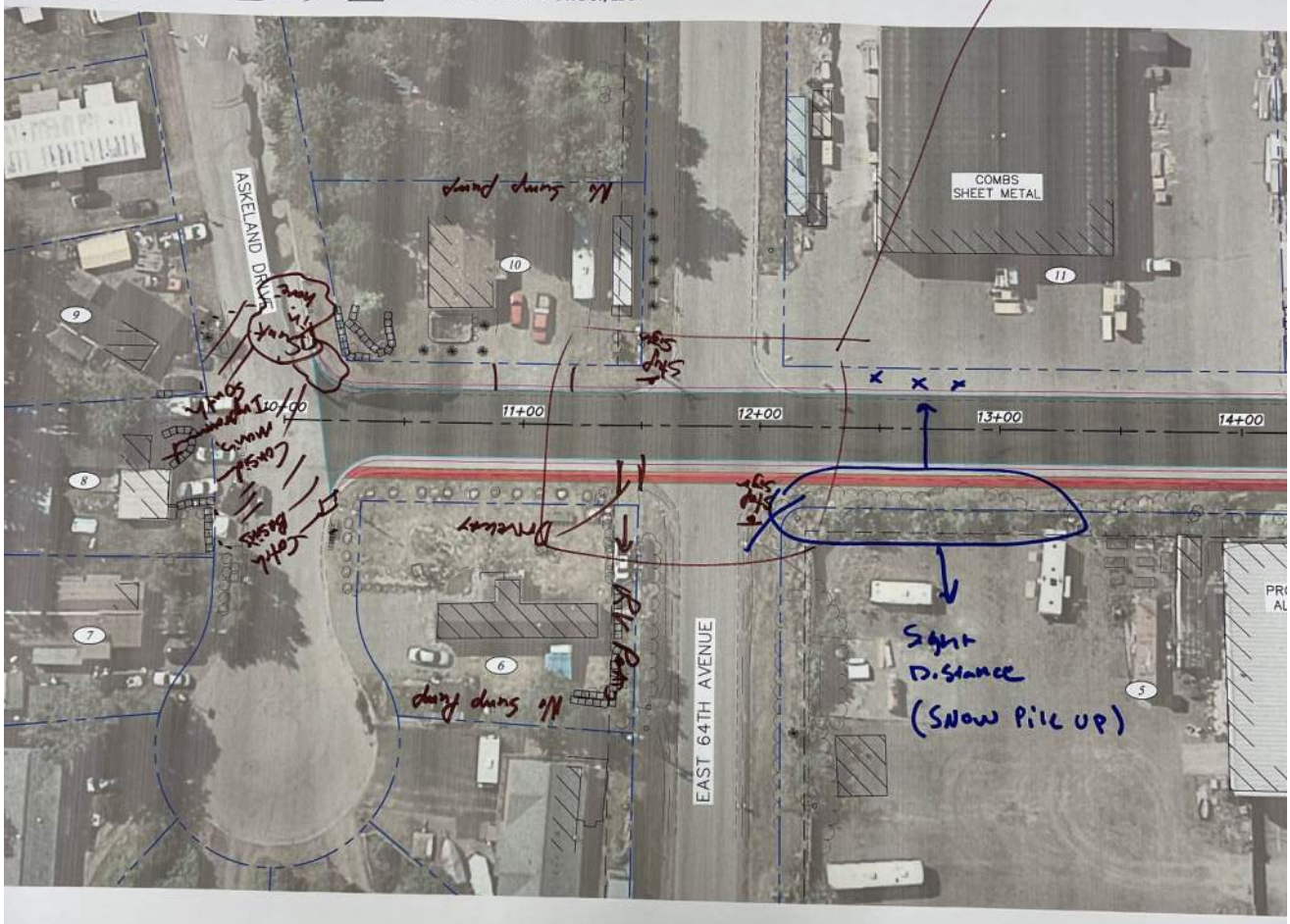
Open House 1
Thursday, November 3, 2022
5:00 pm - 7:00 pm
Polaris K-12 School

NAME	ADDRESS	PHONE	EMAIL ADDRESS	CHECK HERE TO RECEIVE EMAIL UPDATES!
Bill Combs	[redacted]			✓
Ron Yeager				✓
Rick McClure +1				✓
Josh Briggs				✓
Al Warfield				✓

MUNICIPALITY OF ANCHORAGE

PM&E

CRW ENGINEERING GROUP, LLC



PARCEL NUMBER

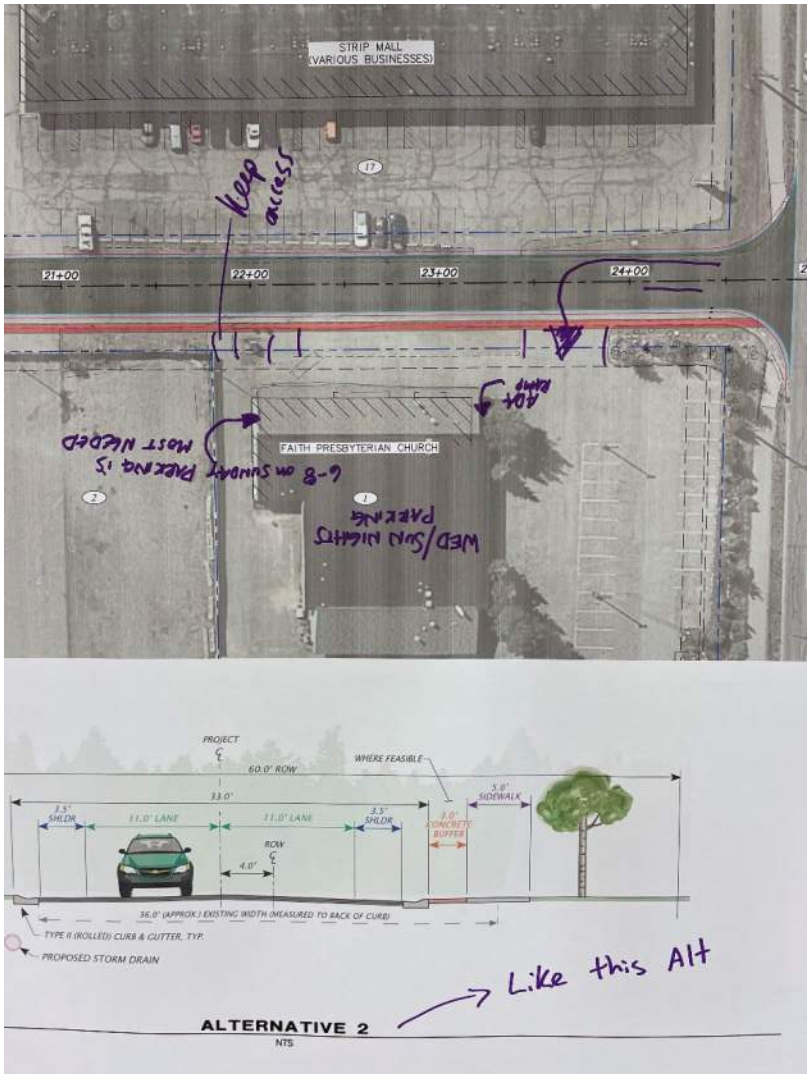
EXISTING EASEMENTS

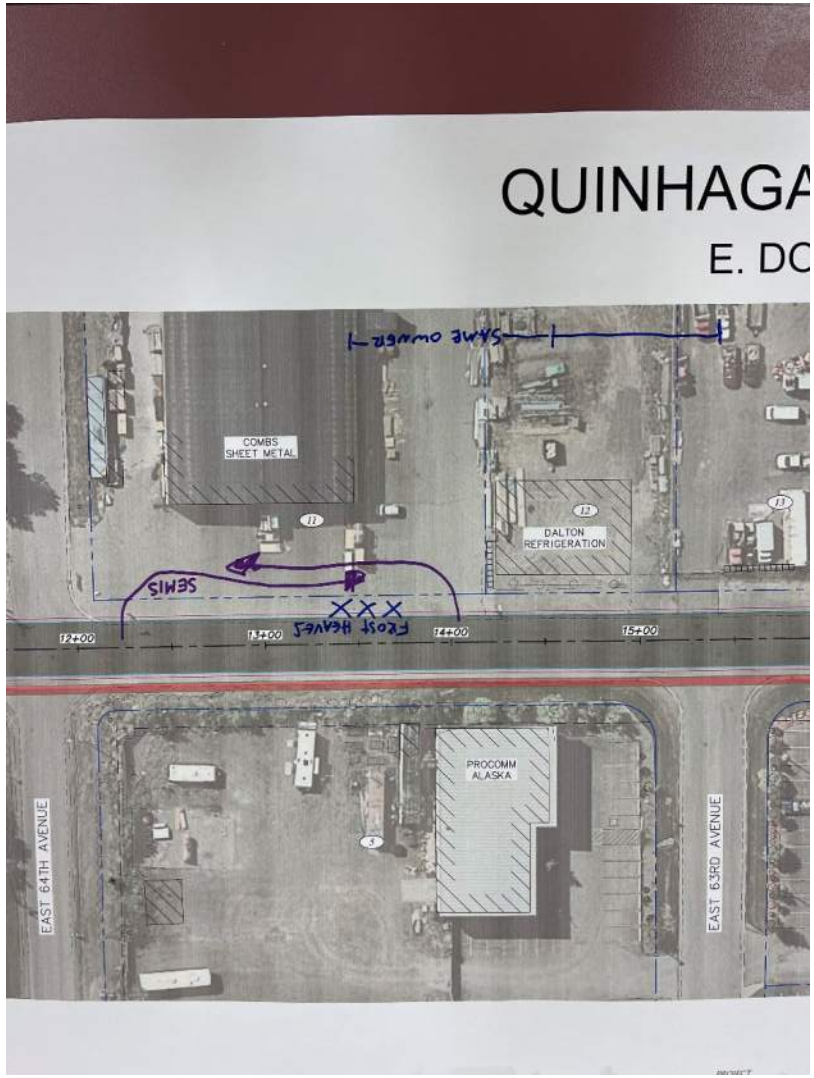
EXISTING PROPERTY / RIGHT-OF-WAY LINES

PROPOSED BACK OF CURB

PROPOSED PAVEMENT

PROPOSED SIDEWALK


STRIP MALL
(VARIOUS BUSINESSES)
keep access
21+00
22+00
23+00
24+00
ADA ramp
FAITH PRESBYTERIAN CHURCH
WED/SUN NIGHTS
PARKING
6-8 on SUNDAY PARKING IS MOST NEEDED
PROJECT
60.0' ROW
WHERE FEASIBLE
33.0'
3.5' SHLDR
11.0' LANE
11.0' LANE
3.5' SHLDR
8.0' CONCRETE BUFFER
5.8' SIDEWALK
ROW
4.0'
36.0' (APPROX.) EXISTING WIDTH (MEASURED TO BACK OF CURB)
TYPE II (ROLLED) CURB & GUTTER, TYP.
PROPOSED STORM DRAIN
ALTERNATIVE 2
NTS
Like this Alt


QUINHAGA
E. DO
SAME OWNER
COMBS SHEET METAL
DALTON REFRIGERATION
SEMIS
FROST HEAVES
12+00
13+00
14+00
15+00
PROCOMM ALASKA
EAST 64TH AVENUE
EAST 63RD AVENUE

Municipality of Anchorage
Project Management & Engineering Department

QUINHAGAK STREET RECONSTRUCTION

EAST DOWLING ROAD TO ASKELAND DRIVE

Improvements May Include

- Roadway base and asphalt pavement
- Curb and gutter
- Piped drainage system
- Pedestrian facilities
- Street lighting

Municipality of Anchorage
Project Management & Engineering Department

QUINHAGAK STREET RECONSTRUCTION

EAST DOWLING ROAD TO ASKELAND DRIVE

Questionnaire Responses (Completed June 2022)

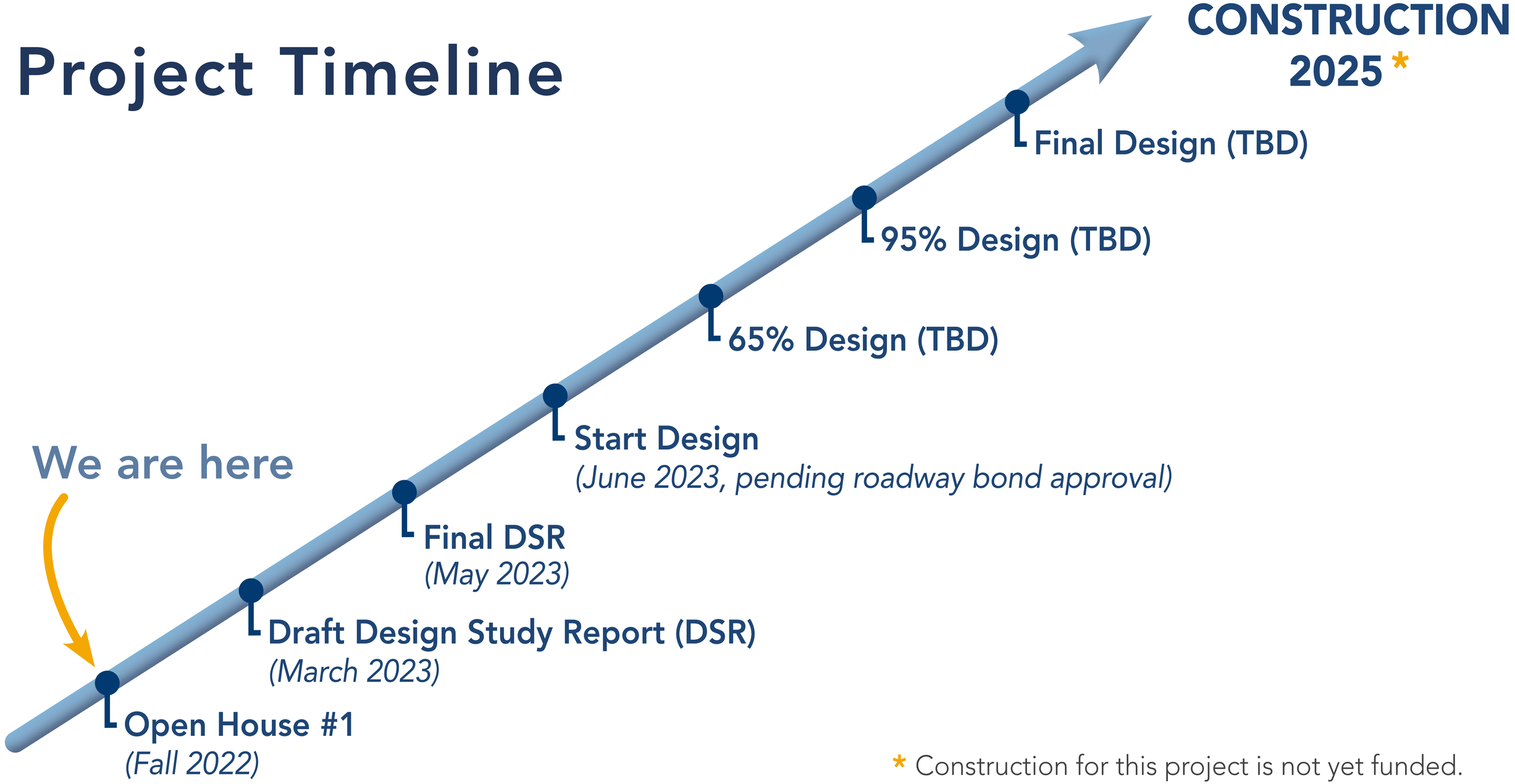
	QUESTIONS	ANSWERS No	Yes
1	Do you have concerns about speeding along Quinhagak Street?	**15**	5
2	Do you think there should be space for on-street parking along Quinhagak Street?	**17**	3
3	Have you noticed any sight distance problems along Quinhagak Street?	**14**	6
4	Do you think pedestrian facilities should be constructed as part of the proposed improvements?	4	**15**
	QUESTION	**One**	**Both**
5	If yes, should pedestrian facilities be installed on one or both sides of the street?	**11**	4

Municipality of Anchorage
Project Management & Engineering Department

QUINHAGAK STREET RECONSTRUCTION

EAST DOWLING ROAD TO ASKELAND DRIVE

Project Timeline



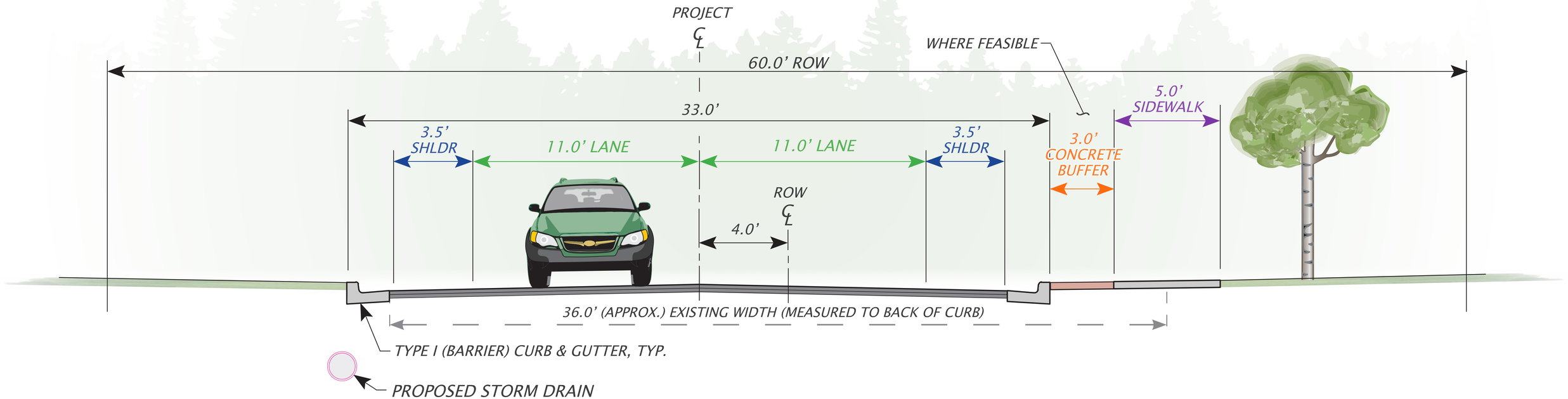
* Construction for this project is not yet funded.

Municipality of Anchorage
Project Management & Engineering Department

QUINHAGAK STREET RECONSTRUCTION

EAST DOWLING ROAD TO ASKELAND DRIVE

Alternative 1

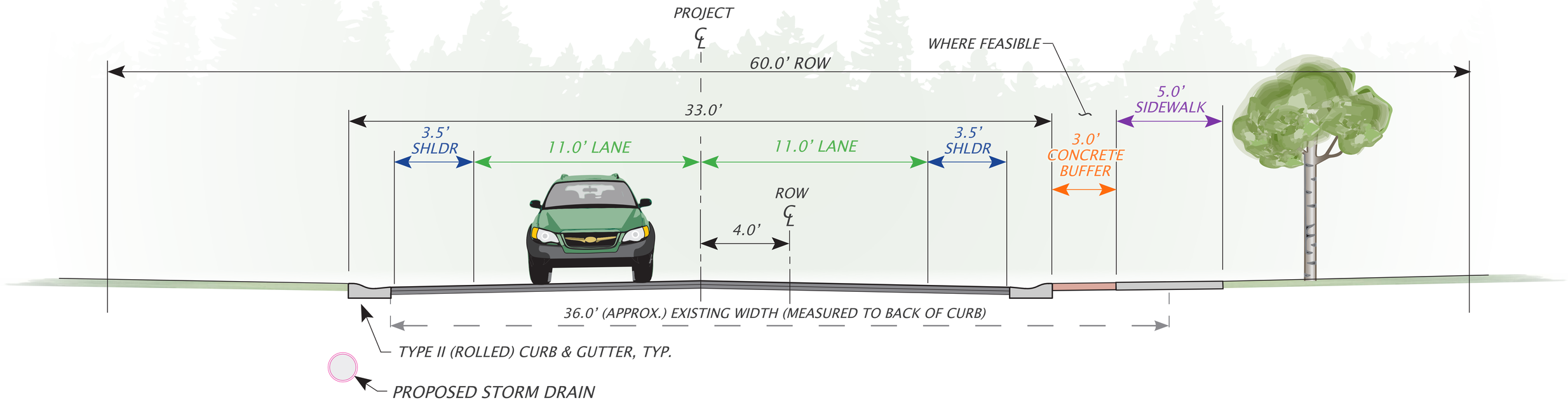


Municipality of Anchorage
Project Management & Engineering Department

QUINHAGAK STREET RECONSTRUCTION

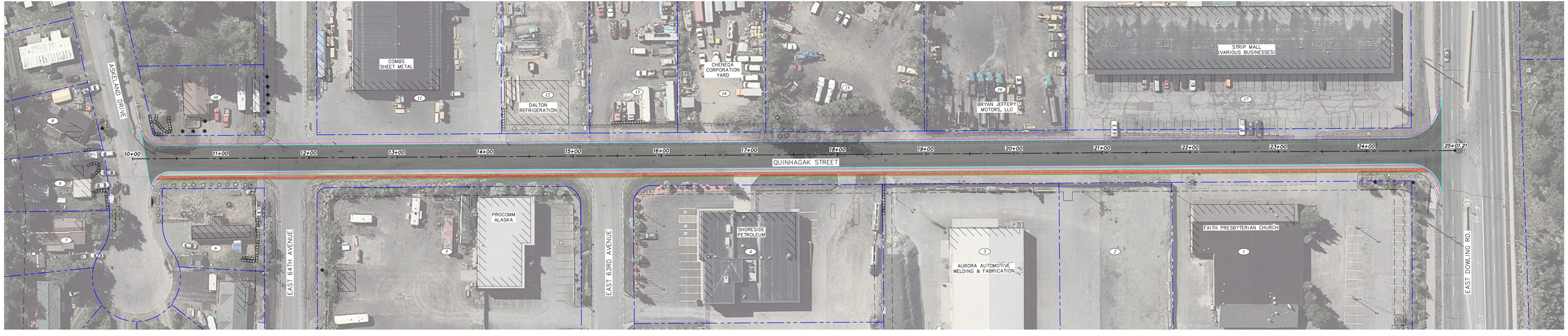
EAST DOWLING ROAD TO ASKELAND DRIVE

Alternative 2



QUINHAGAK STREET RECONSTRUCTION

E. DOWLING ROAD TO ASKELAND DRIVE

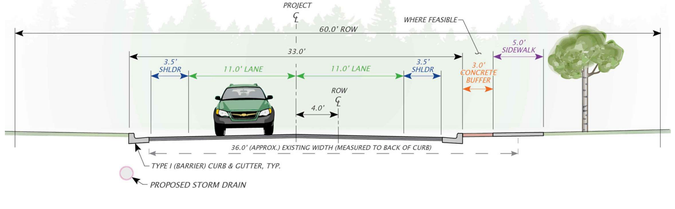


LEGEND

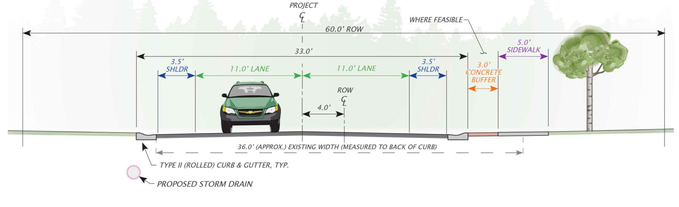
- (100) PARCEL NUMBER
- EXISTING EASEMENTS
- EXISTING PROPERTY / RIGHT-OF-WAY LINES
- PROPOSED BACK OF CURB
- PROPOSED PAVEMENT
- PROPOSED SIDEWALK

30' 0 30' 60'

AERIAL: 2015 ORTHO-PHOTOGRAPHY



1 **ALTERNATIVE 1**
NTS



2 **ALTERNATIVE 2**
NTS

May 2022

The Municipality of Anchorage Project Management & Engineering Department (MOA PM&E) is planning to upgrade Quinhagak Street from East Dowling Road to Askeland Drive (see map on back). Improvements may include:

- New road foundation
- New asphalt pavement
- New curb & gutter
- New storm drain system
- New pedestrian facilities
- New street lighting

The MOA has contracted with CRW Engineering Group, LLC (CRW) to provide preliminary engineering and design services. CRW will evaluate alternatives to improve the roadway and provide recommendations in a Design Study Report (DSR). The project is funded only through the DSR phase. No funding for construction has been received at this time.

CREWS WILL BE WORKING IN THE NEIGHBORHOOD

Starting in May, expect to see geotechnical and survey crews in your neighborhood. They will be drilling within public right-of-way to collect soil and groundwater data as well as mapping important features like driveways, utilities, and building corners. Thanks in advance for your patience, and please use caution when driving near the crews.

How to get involved:

- Visit the project website for meeting schedules, project documents, and to sign up for e-mail updates.
- Complete the project questionnaire, which will be mailed next month with instructions for submitting your responses by mail or online.
- Attend a public open house: The first is expected to be held in fall 2022.

For more information and to sign up for e-mail updates, please visit the web page or contact:

Holly Spoth-Torres,
Public Involvement

(907) 223-0136 • holly@huddleak.com

www.QuinhagakStreetReconstruction.com

CRW ENGINEERING GROUP, LLC
3940 Arctic Blvd. Suite 300
Anchorage, Alaska 99503

Quinhagak Street Reconstruction, Project Map

www.QuinhagakStreetReconstruction.com

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QUESTIONNAIRE WITHIN

Huddle AK
605 W. 2nd Ave
Anchorage, AK 99501

www.QuinhagakStreetReconstruction.com

NAME
ADDRESS
ANCHORAGE, AK

Please fold along the dotted line to return questionnaire

Please secure here before returning

Return address of
recipients here

First class
stamp

Huddle AK
605 W. 2nd Ave
Anchorage, AK 99501

Please secure here before returning

HELLO, QUINHAGAK STREET NEIGHBORS!

This packet contains important information regarding an upcoming project in your neighborhood. It also contains a project questionnaire designed to gather more information about the current conditions of the project area.

Follow these steps to get the most out of this process:

REVIEW the information in this packet.

COMPLETE AND RETURN the questionnaire by July 1, 2022.

VISIT THE PROJECT WEBSITE to sign up for email updates and stay up to date.

CONTACT US
If you have questions or concerns, or would like to provide feedback to project staff, please contact us or visit the project website!

Call: Holly Spoth-Torres at (907) 223-0136
Email: holly@huddleak.com

www.QuinhagakStreetReconstruction.com

June 2022

Project Background

The Municipality of Anchorage Project Management & Engineering Department (MOA PM&E) is planning to upgrade Quinhagak Street from East Dowling Road to Askeland Drive (see map to the right).

Improvements may include:

- New road foundation
- New asphalt pavement
- New curb & gutter
- New storm drain system
- New pedestrian facilities
- New street lighting

The MOA has contracted with CRW Engineering Group, LLC (CRW) to provide preliminary engineering and design services. CRW will evaluate alternatives to improve the roadway and provide recommendations in a Design Study Report (DSR). The project is funded only through the DSR phase. No funding for construction has been received at this time.

Project Map

Ways to Participate:

1 Complete and Return the Project Questionnaire by July 1, 2022.

Online

By visiting the website listed below or scan the QR code below using your smart phone camera.

OR

By Mail

Complete the questionnaire and return it by mail. Tear off the last page, fold, and secure with the prepaid postage visible.

OR

By E-Mail

Fill out, scan, and email your completed questionnaire to holly@huddleak.com.

You can call 907-223-0136 if you need any additional accommodations.

2 Comment on the Interactive Map on the website

3 Sign up for email updates on the website

www.QuinhagakStreetReconstruction.com

Please **cut** or **tear** along the dotted line to return questionnaire

Quinhagak Street Reconstruction Questionnaire

Name: _____

Physical Address: _____ Mailing Address (if different): _____

Email (optional): _____ Would you like to receive email updates (circle one): YES / NO

Phone Number (optional): _____

Your comments are important to us. We will use this information to aid in designing the improvements.

1a. Do you own a property along Quinhagak Street? Please circle one: YES / NO

1b. If NO, what best describes you? (business owner or renter in project area, worker, roadway user)_ _____

Questions 2-5 are for property owners along Quinhagak Street only. Skip to question 6 if you are not a property owner along Quinhagak Street.

2. Is your driveway heated or constructed with concrete? Please circle one answer for each:
   Heated: YES / NO
   Concrete: YES / NO

3. Have you ever experienced groundwater problems in your crawl space or basement? Please circle one: YES / NO
If yes, please explain: _____

4. Do you have a foundation drain or sump pump? Please circle one: YES / NO
If yes, how many? _____
Where are they located? _____
Where does it drain? _____
How often does the pump run? (e.g. All year, spring, fall, after storms, etc.) _____

5. Are there any special conditions on your property that you feel the design team should be aware of in designing the project?
Please circle one: YES / NO
If yes, please explain: _____

6. What are the top 3 things you would change about Quinhagak Street?
   1. _____
   2. _____
   3. _____

7. Do you have any concerns about speeding along Quinhagak Street? Please circle one: YES / NO
If yes, please explain: _____

8. Do you think there should be space in the roadway for on-street parking along Quinhagak Street?
Please circle one: YES / NO
If yes, please explain where parking should be provided: _____

9. Are you aware of any sight distance problems along Quinhagak Street that may need to be corrected as part of the project?
For example, trees or structures blocking your visibility while driving. Please circle one: YES / NO
If yes, please explain: _____

10. Do you think pedestrian facilities (e.g. sidewalks) should be constructed as part of this project? Please circle one: YES / NO
If yes, should pedestrian facilities be installed on one or both sides of the street? Please circle your answer:
ONE / BOTH

11. Are you aware of any drainage problems along Quinhagak Street that need to be corrected?
Please circle one: YES / NO
If yes, please explain: _____

12. Please include any other comments: _____

Thank you. We appreciate your input.

Holly Spoth-Torres

From: CRW Engineering Group LLC <comments@crweng.com>
Sent: Wednesday, June 1, 2022 9:35 AM
To: Holly Spoth-Torres
Subject: Quinhagak Street Reconstruction: Project Intro & Questionnaire

PROJECT INTRODUCTION

The Municipality of Anchorage Project Management & Engineering Department (MOA PM&E) is planning to upgrade Quinhagak Street from East Dowling Road to Askeland Drive (see map below).

Improvements may include:

- New road foundation
- New asphalt pavement
- New curb & gutter
- New storm drain system
- New pedestrian facilities
- New street lighting

MOA PM&E has contracted with CRW Engineering Group, LLC (CRW) to provide preliminary engineering and design services. CRW will evaluate alternatives to improve the roadway and provide recommendations in a Design Study Report (DSR). The project is funded only through the DSR phase. No funding for construction has been received at this time.

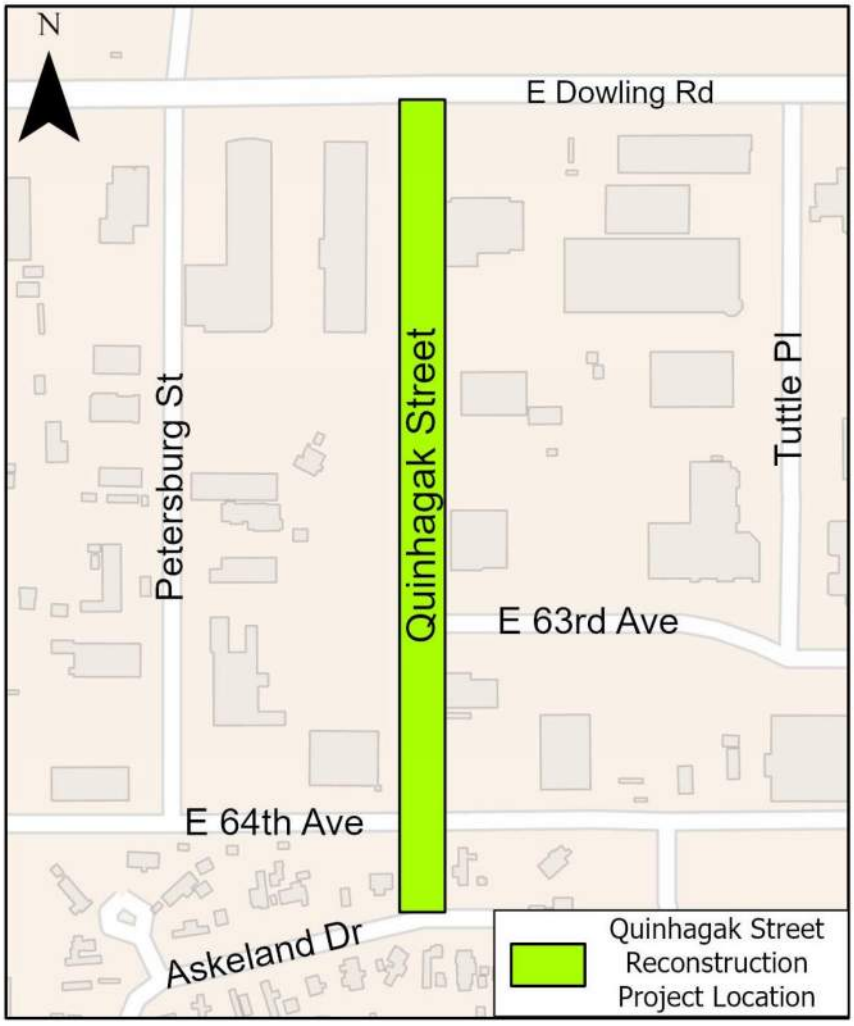
How to Get Involved:

1. Complete the project questionnaire online or by completing and returning the paper version, which was mailed to residents/owners in June 2022. Complete the questionnaire by July 1, 2022.

2. Attend a public open house meeting: there will be two meetings scheduled during the DSR phase. The first one will be held in fall 2022.
3. Contact us anytime with comments or questions at jkeene@crweng.com and holly@huddleak.com.

PROJECT WEBSITE

PROJECT AREA



For more information, contact project staff or visit the project website.

Email the project team.

PM&E

The Municipality of Anchorage Project Management & Engineering Department (MOA PM&E) is planning to upgrade Quinhagak Street from East Dowling Road to Askeland Drive (see map on back). Improvements may include:

- New road foundation
- New asphalt pavement
- New curb & gutter
- New storm drain system
- New pedestrian facilities
- New street lighting

OPEN HOUSE #1: November 3, 2022 - 5:00 pm to 7:00 pm

Polaris K-12 School, 6200 Ashwood Street

Join us at the first public meeting to discuss this project. We are eager to learn about your thoughts about this project.

The MOA has contracted with CRW Engineering Group, LLC (CRW) to provide preliminary engineering and design services. CRW will evaluate alternatives to improve the roadway and provide recommendations in a Design Study Report (DSR). The project is funded only through the DSR phase. No funding for construction has been received at this time.

You're Invited!

OPEN HOUSE #1

WHEN: Thursday, November 3, 2022
WHERE: Polaris K-12
6200 Ashwood Street
TIME: 5:00 - 7:00 p.m.

Talk to a project representative to ask questions, learn about the project and tell us what you think.

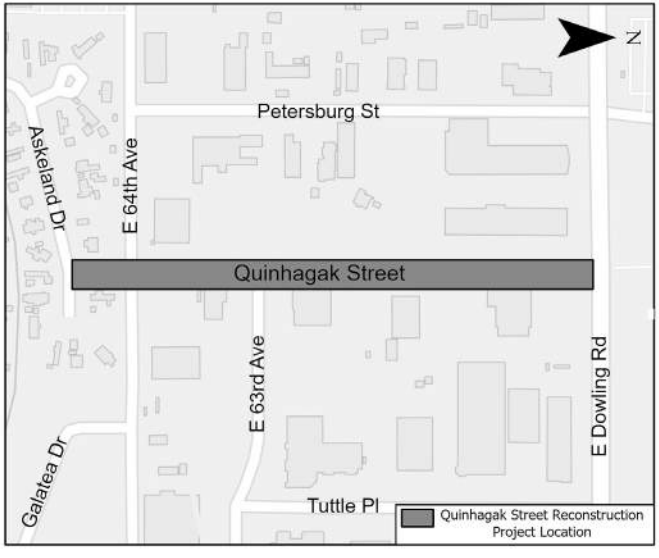
For more information and to sign up for e-mail updates, please visit the web page or contact:

Holly Spoth-Torres,
Public Involvement

(907) 223-0136 • holly@huddleak.com

www.QuinhagakStreetReconstruction.com

CRW ENGINEERING GROUP, LLC
3940 Arctic Blvd. Suite 300
Anchorage, Alaska 99503



Quinhagak Street Reconstruction, Project Map

www.QuinhagakStreetReconstruction.com

Subject: Quinhagak Street Reconstruction: Open House #1
Date: Thursday, October 20, 2022 at 7:00:48 PM Eastern Daylight Time
From: CRW Engineering Group LLC <comments@crweng.com>
To: Mandy Powers <mandy@huddleAK.com>

PLEASE JOIN US!

Public Open House #1
WHEN: Thursday, November 3, 2022
5:00 pm to 7:00 pm

WHERE: Polaris K-12 School
6200 Ashwood Street
Anchorage, AK 99507

Please join us for the first public open house meeting to discuss the Quinhagak Street Reconstruction project and view potential road design concepts. Come share your comments and provide input to the project team. We look forward to seeing you there!

PROJECT INFORMATION

The Municipality of Anchorage Project Management & Engineering Department (MOA PM&E) is planning to upgrade Quinhagak Street from East Dowling Road to Askeland Drive (see map below).

Improvements may include:

- New road foundation
- New asphalt pavement
- New curb & gutter

- New storm drain system
- New pedestrian facilities
- New street lighting

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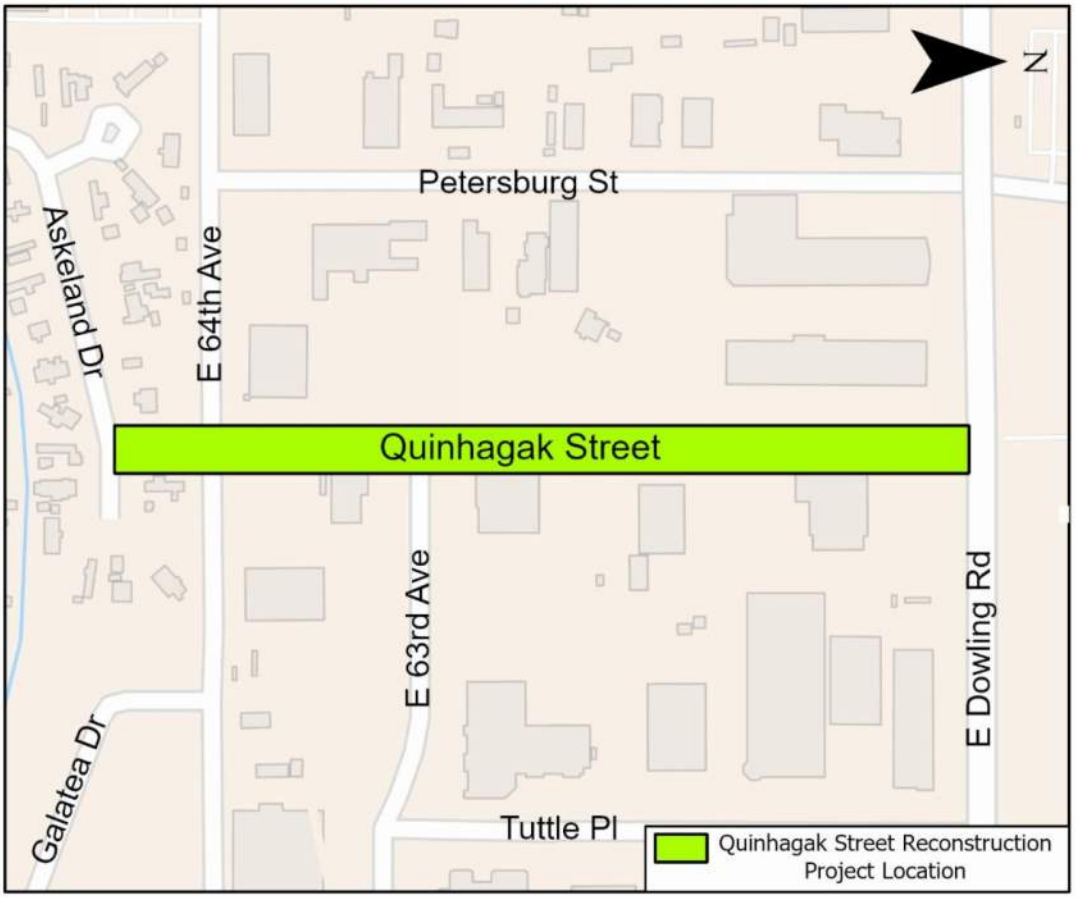
How to Get Involved:

1. Attend a public open house meeting! Our first meeting is coming up on Thursday, November 3rd at Polaris K-12 school from 5-7pm.
2. Contact us anytime with comments or questions at jkeene@crweng.com and holly@huddleak.com.

PROJECT WEBSITE

PROJECT AREA



Subject: REMINDER: Quinhagak Street Reconstruction: Open House #1
Date: Monday, October 31, 2022 at 8:30:14 PM Eastern Daylight Time
From: CRW Engineering Group LLC <comments@crweng.com>
To: Mandy Powers <mandy@huddleAK.com>

PLEASE JOIN US!

Public Open House #1
WHEN: Thursday, November 3, 2022
5:00 pm to 7:00 pm

WHERE: Polaris K-12 School
6200 Ashwood Street
Anchorage, AK 99507

Please join us for the first public open house meeting to discuss the Quinhagak Street Reconstruction project and view potential road design concepts. Come share your comments and provide input to the project team. We look forward to seeing you there!

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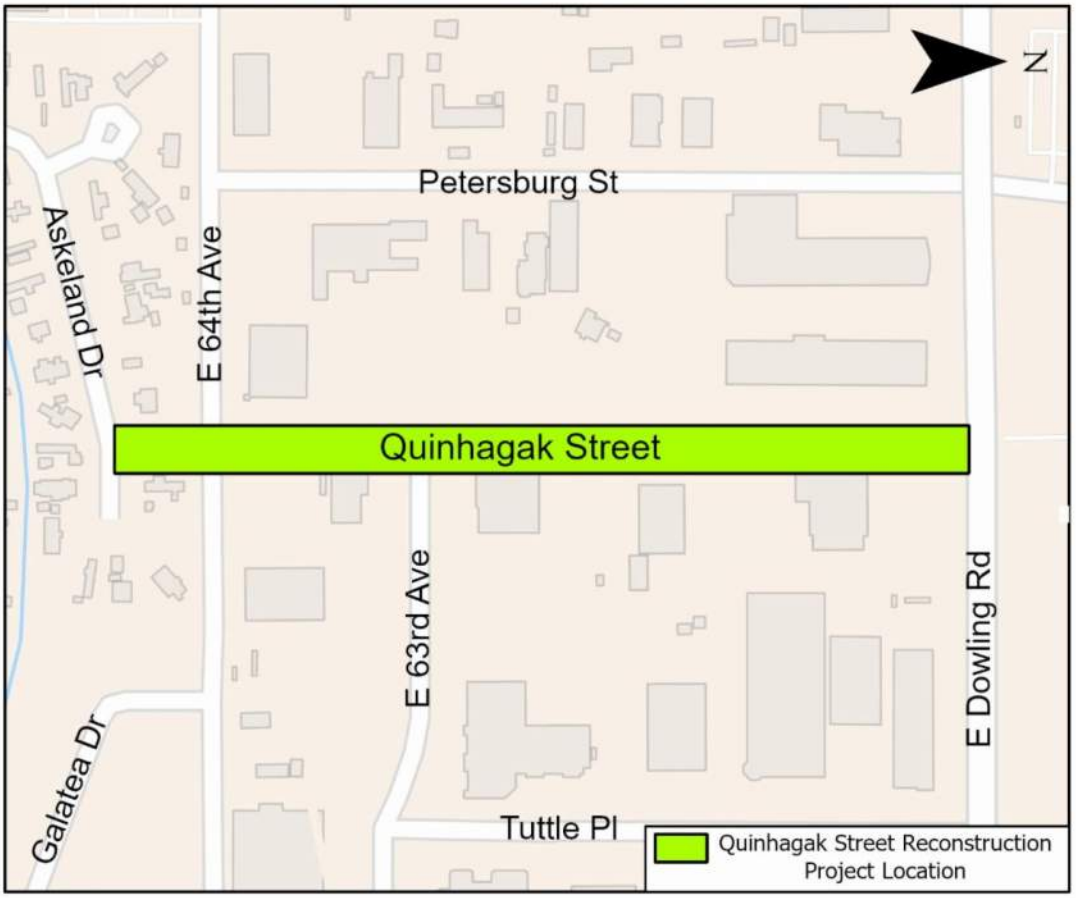
PROJECT WEBSITE

PROJECT AREA



Subject: MEETING TONIGHT: Quinhagak Street Reconstruction Open House
Date: Thursday, November 3, 2022 at 2:01:52 PM Eastern Daylight Time
From: CRW Engineering Group LLC <comments@crweng.com>
To: Mandy Powers <mandy@huddleAK.com>

MEETING TONIGHT AS PLANNED

Join us tonight!
The open house meeting at Polaris K-12 School is going ahead as planned! Although ASD schools are closed today, the district is still open for our community event. We hope to see you if you can safely make it to the meeting! If you can't attend the meeting all materials presented will be posted on the project website.

OPEN HOUSE #1

Public Open House #1
WHEN: Thursday, November 3, 2022
5:00 pm to 7:00 pm

WHERE: Polaris K-12 School
6200 Ashwood Street
Anchorage, AK 99507

Please join us for the first public open house meeting to discuss the Quinhagak Street Reconstruction project and view potential road design concepts. Come share your comments and provide input to the project team. We look forward to seeing you there!

PROJECT INFORMATION

The Municipality of Anchorage Project Management & Engineering Department (MOA PM&E) is planning to upgrade Quinhagak Street from East Dowling Road to Askeland Drive (see map below).

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1. Attend a public open house meeting! Our first meeting is coming up on Thursday, November 3rd at Polaris K-12 school from 5-7pm.
2. Contact us anytime with comments or questions at jkeene@crweng.com and holly@huddleak.com.

PROJECT WEBSITE

PROJECT AREA

For more information, contact project staff or visit the project website.

Email the project team.

Subject: Quinhagak Street Reconstruction: Thanks for attending the open house!
Date: Tuesday, November 8, 2022 at 6:00:27 PM Eastern Standard Time
From: CRW Engineering Group LLC <comments@crweng.com>
To: Mandy Powers <mandy@huddleAK.com>

THANKS FOR JOINING US!

Thank you to everyone who was able to join us on November 3rd to discuss the Quinhagak Street Reconstruction project. If you were not able to attend the meeting, we have uploaded the graphics presented at the open house to the website for your review. If you have questions or comments, please get in touch with the project team via the website.

https://quinhagakstreetreconstruction.com/

As the Quinhagak Street Reconstruction project progresses, the website will have the most up-to-date schedule and project information. We will also send periodic eNewsletters to alert you of important meetings and milestones.

PROJECT INFORMATION

The Municipality of Anchorage Project Management & Engineering Department (MOA PM&E) is planning to upgrade Quinhagak Street from East Dowling Road to Askeland Drive (see map below).

Improvements may include:

- New road foundation
- New asphalt pavement
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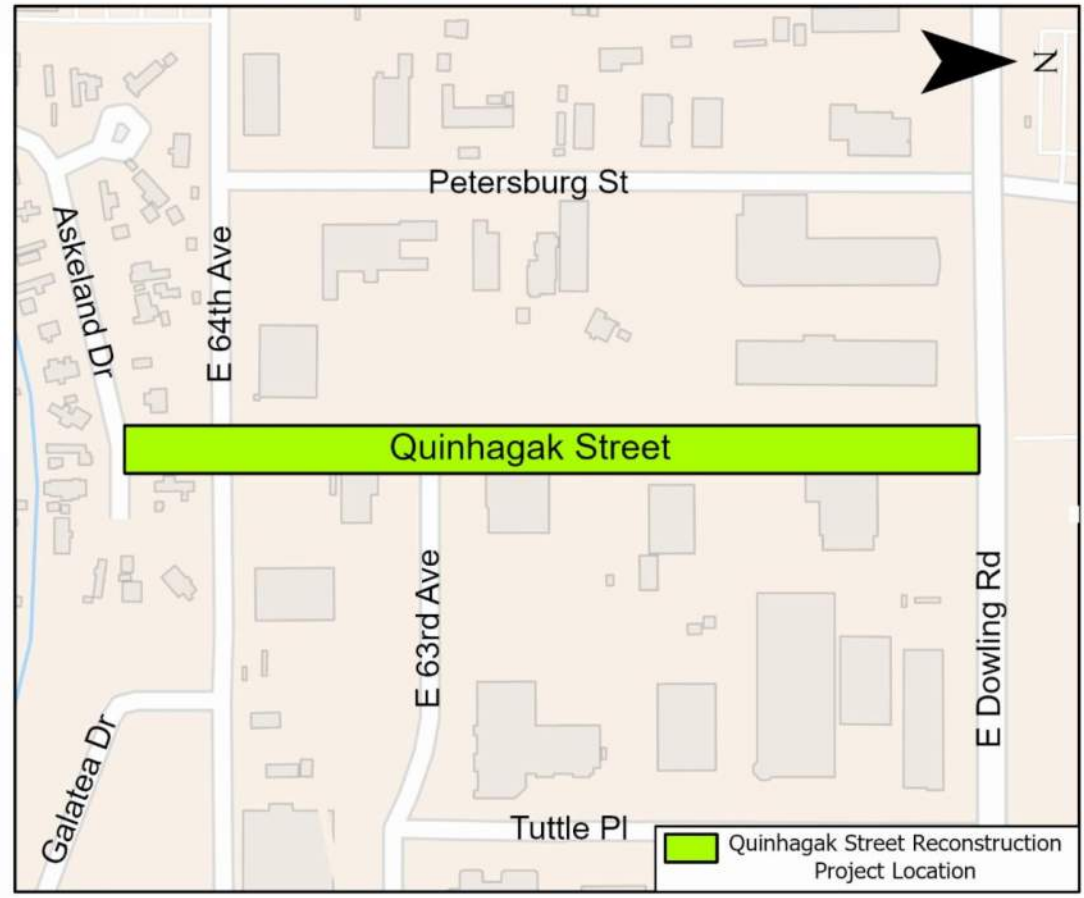
MOA PM&E has contracted with CRW Engineering Group, LLC (CRW) to provide preliminary engineering and design services. CRW will evaluate alternatives to improve the roadway and provide recommendations in a Design Study Report (DSR). The project is funded only through the DSR phase. No funding for construction has been received at this time.

How to Get Involved:

1. Stay informed about the latest project news by visiting the project website. Important information will also be shared in future eNewsletters.
2. Contact us anytime with comments or questions at jkeene@crweng.com and holly@huddleak.com.

PROJECT WEBSITE

PROJECT AREA



Summary of Driveway Grades

Appendix L

Quinhagak Street Reconstruction
MOA Project No. 21-13

DRIVEWAY SUMMARY - ALTERNATIVE 3

SHEET	PARCEL	CENTERLINE REFERENCE		EXISTING GRADE	PROPOSED GRADE	REMARKS
		STATION	OFFSET			
B1.1	10	11+05.21	LT	11.4%	10.0%	
B1.1	11	13+12.14	LT	5.4%	4.6%	
B1.2	12	15+08.30	LT	4.4%	4.1%	
B1.2	13	15+31.03	LT	6.3%	6.8%	
B1.2	14	16+51.65	LT	6.5%	5.2%	
B1.2	4 SOUTH	16+92.22	RT	14.0%	9.8%	
B1.2	4 NORTH	18+10.60	RT	2.8%	5.8%	
B1.2	15	18+54.83	LT	3.2%	5.5%	
B1.2	3	18+67.80	RT	5.4%	6.3%	
B1.3	16	19+61.62	LT	7.3%	6.3%	
B1.3	2	20+60.77	RT	1.1%	6.1%	
B1.3	17 SOUTH	20+83.35	LT	9.2%	8.0%	
B1.3	1 SOUTH	21+86.11	RT	7.4%	7.9%	
B1.3	17 NORTH	23+31.26	LT	8.3%	7.6%	
B1.3	1 NORTH	23+67.83	RT	0.8%	1.3%	

Business List

Appendix M

I. Businesses along the Quinhagak Street Reconstruction project limits:

A. 2020 E. Dowling Road (Parcel 17)

1) Fraternal Order of Eagles
2) North Slope Telecom, Inc
3) Ram Services Overhead Doors
4) Window Accessories

B. 6128 Quinhagak Street (Parcel 16)

1) Bryan Jeffery Motors, LLC

C. 6111 Quinhagak Street (Parcel 3)

1) Aurora Automotive Welding & Fabrication
2) Freshrain Hot Tub Store

D. E. 63rd Avenue (Parcel 4)

1) Shoreside Petroleum

E. 6320 Quinhagak Street (Parcel 12)

1) Dalton Refrigeration Inc.

F. 2100 E. 63rd Avenue (Parcel 5)

1) ProComm Alaska

G. 6348 Quinhagak Street (Parcel 11)

1) Combs Sheet Metal Inc
2) Alaska Hammer & Home

Final Technical Memorandum

Appendix N

Final Technical Memorandum

Date:	November 21, 2022
To:	Russ Oswald, Jennifer Noffke (MOA PM&E); Randy Ribble, Kris Langley (MOA Traffic Engineering); Paul VanLandingham, Eric Hodgson (MOA Street Maintenance)
From:	Justin Keene; Rob Burdick (CRW Engineering Group, LLC)
Project:	Quinhagak Street Reconstruction – E. Dowling Road to Askeland Drive
Project No:	PM&E #21-13 (CRW#10155.00)
Subject:	Final Technical Memorandum

A. Purpose and Background

The Municipality of Anchorage Project Management and Engineering Department (MOA PM&E) has contracted with CRW Engineering Group, LLC (CRW) to provide professional services to develop and evaluate alternatives to upgrade Quinhagak Street (see FIGURE 1 for project location/limits including parcel number labels referenced in this document). The purpose of the project is to upgrade Quinhagak Street from E. Dowling Road to Askeland Drive to meet current MOA Design Criteria for a local roadway.

The purpose of this Technical Memorandum is to gain concurrence from MOA PM&E, MOA Traffic Engineering Department, and MOA Street Maintenance Department on the conceptual roadway design elements before presenting the concepts to the public and beginning the Design Study Report (DSR). A meeting was held on September 9, 2022 with MOA PM&E, Traffic Engineering, and Street Maintenance to discuss the conceptual roadway design elements. The Draft Technical Memorandum was submitted to these MOA departments for review and comment on October 13, 2022. The Draft Technical Memorandum was updated based upon review comments received. The review comments and responses are included in APPENDIX C. In coordination with PM&E, an additional typical section (Alternative 3) is included in the Final Technical Memorandum. The MOA Departments were notified of this additional typical section Alternative 3 on November 14, 2022 and were asked to provide comments on it or provide any outstanding review comments on the Draft Technical Memorandum by November 18, 2022. No comments regarding the Alternative 3 typical section were received.

B. Existing Conditions

1. Neighborhood Context, Zoning, Driveways, and Private Improvements

Quinhagak Street from E. Dowling Road to E. 64th Avenue is a local industrial road, and the adjacent properties are zoned I-1 "light industrial." Adjacent commercial/industrial properties include a strip mall, a church, a used car lot, fenced yards, and other miscellaneous businesses. There is one residential single-family parcel located mid-block along this segment, Parcel 15.

Quinhagak Street from E. 64th Avenue to Askeland Drive is a local residential road, and the adjacent properties are zoned R-5 "low-density residential." Adjacent properties have mobile homes on the parcels.

Some driveways appear to be wider than allowable based on current MOA Design Criteria for maximum width requirements and Parcels 1 and 11 have full frontage driveways. Most of the buildings are higher than the adjacent roadway with positive drainage towards the roadway.

Like many areas in Anchorage there are private improvements along the project limits that extend into the right-of-way (ROW). Examples of a few of these include the Parcel 1 landscaping and the parking lot for Parcel 17. These private improvements hinder available snow storage areas.

Figure 1 – Project Location and Limits Map

2. Traffic and Parking Studies

The posted speed along Quinhagak Street is 25 miles per hour (mph). Existing daily traffic volumes and speeds were collected for this project in late July 2022. The traffic data collected was adjusted for day and month, based on the nearest permanent Alaska Department of Transportation and Public Facilities (ADOT&PF) traffic recorder. The adjusted annual average daily traffic (AADT) volume and 85th percentile speed is shown below in TABLE 1.

Table 1 - Existing Conditions – Traffic Data

Location	AADT	85th Percentile Speed (mph)
Quinhagak Street north of E. 63rd Avenue	285	27

**E. Dowling Road at Seward Highway was in construction during speed/volume study which may have skewed traffic data.*

A parking study was conducted to document the current use of on-street parking for consideration in the design of the proposed improvements. Parked vehicles within the adjacent parking lots were also during noted during the study to assess available off-street parking. The parking study was based on observations from four separate site visits. Site visits were organized to include one weekday afternoon/evening and one weekend afternoon/evening and took place on Thursday, July 14, 2022 and Saturday, July 16, 2022 (see APPENDIX A for the parking study memorandum). During the parking study only one car was observed parked on the roadway near Askeland Drive and the adjacent parking lots in the industrial zone north of E. 64th Avenue appeared to have enough parking on their private lots. Based upon the parking study results there is not a significant demand for on-street parking along the roadway. The greatest demand for on-street parking is closer to Askeland Drive within the low-density residential zoning area.

3. Intersections and Access Control

There are four side streets within the project corridor, inclusive of E. Dowling Road and Askeland Drive. Of these, three are three-way intersections (E. Dowling Road, E. 63rd Avenue, and Askeland Drive) and one is a four-way intersection (E. 64th Avenue). Stop signs are located on E. 63rd Avenue, on E. 64th Avenue, on the east side of Askeland Drive, and on Quinhagak Street at E. Dowling Road.

4. Roadways and Drainage

The existing roadway grades in the project area are moderate, between approximately 1%-4% except for just south of E. Dowling Road where the grades are very flat, between 0.1%-0.6%. Many of the existing curbs are heaving which doesn't allow surface drainage to effectively drain, and during spring break up or large rain events these areas form large ponds in the roadway. The existing roadway pavement conditions are very poor with cracking, settling, and heaving conditions throughout many sections of the roadway. Rolled curb and gutter is installed along Quinhagak Street except there are short sections of barrier curb gutter installed on both sides of the roadway just south of E. Dowling Road. There are no sidewalks along Quinhagak Street. There is an approximately 8.5-foot wide asphalt sidewalk that runs east-west on the south side of E. Dowling Road that crosses Quinhagak Street.

Other existing roadway conditions are summarized in TABLE 2 below.

Table 2 - Existing Conditions – Roadway

Item	Value	Notes
Right-of-Way (ROW) Width:	60 ft.	Existing improvements are approximately centered in the ROW.
Roadway width:	36 ft.	Measured from back of curb to back of curb.
Curb & Gutter Type	Type 2 (rolled)	Short sections of Type 1 (barrier) curb & gutter are installed south of E. Dowling Road.
Posted speed	25 mph	
Sidewalk width	N/A	None along the roadway.

There are two sets of curb inlets north of E. 63rd Avenue, three curb inlets at both the E. 63rd Avenue and E. 64th Avenue intersections, and two curb inlets at the Askeland Drive intersection. There is one additional catch basin at the southeast quadrant of the E. Dowling Road intersection. Many of the curb inlets are heaving such that drainage is not able to make it effectively to the catch basin. The catch basin at E. Dowling Road outfalls to an ADOT&PF storm drain system that continues to the west along E. Dowling Road. The catch basins at E. 64th Avenue and the ones to the north outfall to a storm drain system that continues west along E. 64th Avenue. The catch basins at the Askeland Drive intersection outfall to a storm drain system that continues to the west along Askeland Drive.

5. Utilities

An existing water main extends along the entire length of the project and is within 10 feet of the existing storm drain main, which does not meet current Alaska Department of Environmental Conservation (ADEC) separation distance requirements and will need correction as part of the project improvements. An existing sewer main extends nearly the entire length of the project but stops approximately 100 feet south of E. Dowling Road. These water/sewer mains serve all adjacent properties with buildings on them, apart from the single-family residence (Parcel 15) within the industrial segment which is not connected to the public water and sewer system. An existing cable line extends along the west side of Quinhagak Street and a gas main extends along the east side. A 12-inch gas transmission main crosses Quinhagak Street at E. 64th Avenue. An underground electric line extends along a portion of the east side of Quinhagak Street from E. Dowling Road; there are overhead electric/communication crossings at E. Dowling Road and E. 64th Avenue.

6. Illumination

The only two roadway lights near Quinhagak Street are MOA owned and are located on the east side of the roadway at the intersections of E. 64th Avenue and Askeland Drive but there are no roadways lights directly on Quinhagak Street.

7. Survey Questionnaire

A survey questionnaire was mailed and e-mailed out to the residents/owners within the project limits in June of 2022. A total of 21 responses were received (see APPENDIX B for questionnaire responses). Relevant roadway related responses to the questions are summarized in TABLE 3 below.

Table 3 - Questionnaire Responses

Question	Answers
Do you have concerns about speeding along Quinhagak Street?	**No (15)**, Yes (5)
Do you think there should be space for on-street parking along Quinhagak Street?	**No (17)**, Yes (3)
Have you noticed any sight distance problems along Quinhagak Street?	**No (14)**, Yes (6)
Do you think pedestrian facilities should be constructed as part of the proposed improvements?	No (4), **Yes (15)**
If yes, should pedestrian facilities be installed on one or both sides of the street?	**One (11)**, Both (4)

C. Design Challenges

Some of the significant design challenges associated with the Quinhagak Street project area include:

- The street grade near E. Dowling Road is very flat, as low as 0.1%. Roadway improvements along this segment may require forced high and low spots to facilitate minimum grades to improve drainage. Matching into the existing driveways may be a challenge with the forced low spots.
- A few parcels have full-frontage access and have wider than the allowable maximum driveway widths. Owners may resist eliminating their full-frontage access with the construction of barrier curb with driveway cuts. Only if approved by MOA Traffic Engineering Department, some parcels may be allowed to keep wider than allowable driveways. A design variance waiver will be required for installing a wider than allowable driveway.

D. Design Criteria & Proposed Design

1. Roadway Design Criteria

The MOA Design Criteria Manual (DCM) requires roadway improvements to be centered in the ROW; the existing roadway improvements are generally centered in the ROW. It is anticipated that the overall proposed footprint of the improvements will also be centered in the ROW, this will be confirmed during the development of the DSR.

The design criteria values from the DCM for a secondary (local) commercial and industrial roadway typical section are summarized in TABLE 4 below and for an urban secondary (local) roadway typical section are summarized in TABLE 5 below. Typical sections alternatives are discussed in the following section.

Table 4 – DCM Table 1-5 Secondary Streets: Commercial and Industrial Standards

Street Width[1,2] (Feet)	Number of Lanes and Lane Width (Feet)		Shoulder Width (Feet)	Design Speed (mph)	Application
	Moving	Parking			
33'	2–11'	Prohibited[4]	3.5'	30	No on-street parking
40'	2–11'	2 – 7'[3]	3.5'[3]	30	Commercial/Industrial/Urban Streets
47'	2–11', 1–14' (turn lane)[5]	Prohibited[4]	3.5'	35	Major Commercial/Industrial Urban Streets where turn lane required

[1]Street widths and sections specified in assembly-adopted plans and regulations will generally take precedence over street widths and sections in this table.
[2]Street width is measured from back of curb.
[3]The platting authority may allow off-street parking (AMC 21.85.060). When off-street parking is utilized, the parking lane may be eliminated and the street width reduced. Minimum 3.5-ft shoulder sections are required if parking is eliminated.
[4]Off-street parking must be provided.
[5]May reduce width of turn lane to 12' if median not constructed.

Table 5 - DCM Table 1-6 Secondary Streets: Urban Residential Standards

ADT[4]	Street Width[1,2] (Feet)	Number of Lanes		Shoulder Width (feet)	Design Speed (mph)	Application
		Moving	Parking[3]			
0 – 300	31'	2	1	3.5'	25	Residential Minor streets, cul-de-sacs and small loops
301 – 1,000	33'	2	1	3.5'	25	Residential Major streets, loop streets, high-volume cul-de-sacs
>1,000	38'	2	2[5]	3.5'	30	Residential Subconnector

[1]Street widths and sections specified in assembly-adopted plans and regulations will generally take precedence over street widths and sections in this table.
[2]Street width is measured from back of curb.
[3]The platting authority may allow off-street parking (AMC 21.85.060). When off-street parking is utilized, the parking lane may be eliminated and the street width reduced. Minimum 3.5-ft shoulder sections are required if parking is eliminated.
[4]See Section 1.3 F to determine Average Daily Traffic (ADT).
[5]For single-loaded streets (houses on one side only), may replace one parking lane with shoulder section.

Additional design criteria values are listed below:

- Curb and Gutter Type
  a) DCM curb type for secondary streets is required to be Type 2 (rolled) curb and gutter.
  b) MOA Title 21.08.050 G requires curb and gutters to be in accordance with the DCM but shall be Type 1 (barrier) except for the following exceptions: 1). Curb and gutter within the arc of a residential scale cul-de-sac may be Type 2 (rolled) curb and gutter. 2). Type 2 (rolled) curb and gutter may be provided for residential minor streets carrying 500 average daily trips i.) that do not require installation of sidewalks per Section 21.08.050H; ii.) when the pedestrian facilities will be separated from the curb by a minimum of 3 feet; or iii.) if the Municipal Traffic Engineer determines that strict adherence to Type 1 curb is not expected to improve walkability or is not achievable based on documentation to include topography, developmental lot size, anticipated driveway spacing, and dimensional standards.
- Sidewalks
  a) DCM requires sidewalks on both sides of an urban secondary (local) street.
  b) Title 21.07.060.E.2.b states that sidewalks shall be installed on both sides of all local streets. In industrial zoning districts, a sidewalk shall be installed on one side of all local streets, and on both sides of local street if the new sidewalks would connect to existing sidewalks on both ends and needed length is no greater than one quarter mile.

2. Typical Cross Section Alternatives

Three typical cross section alternatives will be analyzed in detail during the DSR phase. The cross sections will consider grading, access, drainage, lighting and other improvements. The proposed typical section Alternatives 1 & 2 were reviewed and discussed at the meeting held on September 9, 2022 with MOA PM&E, Traffic Engineering, and Street Maintenance and are shown in FIGURE 2 at end of this technical memorandum. The difference between the typical sections is the curb type. Alternative 1 includes Type 1 (barrier) curb while Alternative 2 includes Type 2 (rolled) curb. An additional typical section alternative was developed in coordination with PM&E after the Draft Technical Memorandum was published as shown in FIGURE 3 at the end of this technical memorandum. Alternative 3 includes Type 2 (rolled) curb on the west side of the roadway and Type 1 (barrier) curb on the east side of the roadway. The Alternative 3 typical section was sent to MOA Traffic Engineering & Street Maintenance to review prior to finalizing the Technical Memorandum.

The typical sections aim to balance the context of the roadway with design criteria and driveway allowances and standards. Each typical section includes one detached concrete sidewalk. As discussed at the meeting with MOA PM&E, Traffic Engineering, and Street Maintenance the preferred sidewalk location is on the east side of the roadway as shown in FIGURE 2. However, subsequent site visits by the design team after the meeting noted that the existing fences with slats on Parcels 2 and 3 along the east side of the roadway may hinder the driveway departure sight distance of sidewalk users by vehicles exiting the driveways, see Photo 1 below of the Parcel 3 driveway gate fence with slats. Upon further review, if the sidewalk were to be attached along this segment the required departure sight distances are achievable. Areas where the sidewalk may need to be attached will be analyzed during the DSR development.

The concept typical sections Alternative 1 & Alternative 2 were presented to the public during the first open house of the project to gather comments and feedback prior to assembling the DSR.

Photo 1 – Parcel 3 Driveway Gate Fence with Slats

3. Traffic Calming

Based upon the 85th percentile speeds from the traffic study, no traffic calming will be proposed for this project.

4. Access Control

Based upon a comment received from a nearby resident regarding issues with drivers stopping on 64th Avenue at Quinhagak Street during adjacent school pick up and drop off times, the design team will investigate this intersection access control in more detail during the DSR. Traffic counts will be acquired at the 64th Avenue and Quinhagak Street intersection to determine whether the stop signs should be reconfigured at the intersection.

5. Illumination and Signage

Illumination along the project limits will be upgraded to meet current MOA standards. The signage and street names will also be upgraded and replaced within the project limits.

E. Proposed Storm Drainage

A full drainage analysis and preliminary storm drain design will be included in the DSR.

F. Design Variances

Design variances will be required from MOA Traffic Engineering & the Municipal Engineer for those items which do not adhere to the DCM or Title 21. Design variances are anticipated for:

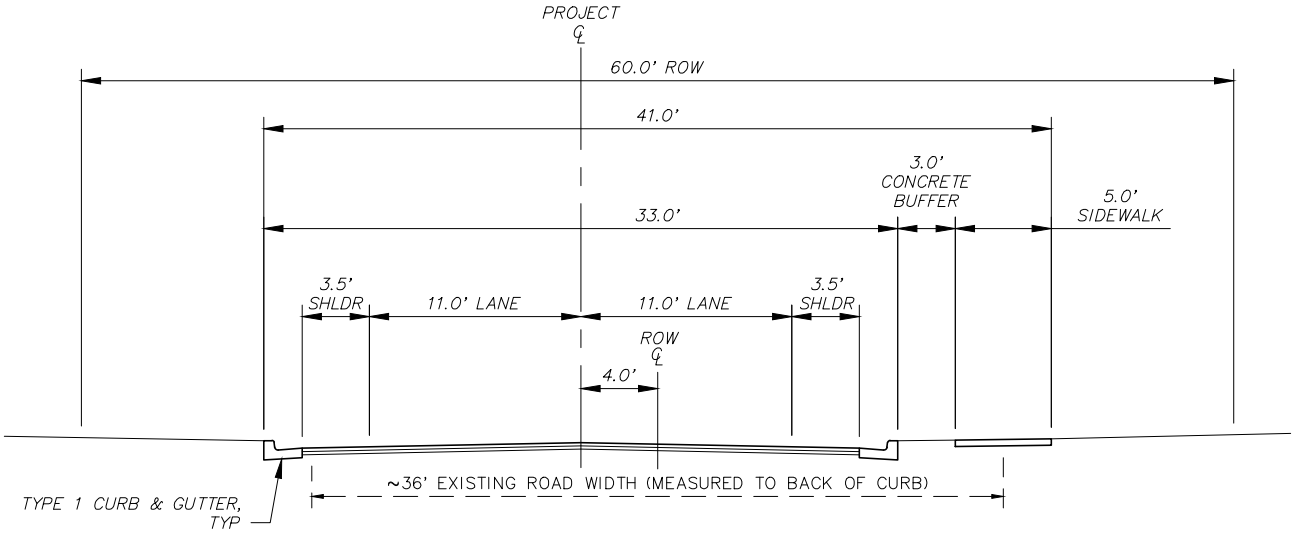
- Curb type: If Type 1 curb and gutter is the preferred alternative a DCM waiver would be required (DCM requires Type 2).
- Driveway widths: some proposed driveway widths if approved by MOA Traffic Engineering may be allowed to exceed the maximum allowable widths.
- Driveway landings: some proposed driveways may not be able to provide landings to meet the DCM.
- If only one sidewalk is installed a design variance would be required since sidewalks are required on both sides of the roadway per the DCM.

G. Cost Estimate

A cost estimate for each alternative will be prepared for the DSR.

H. Summary and Next Steps

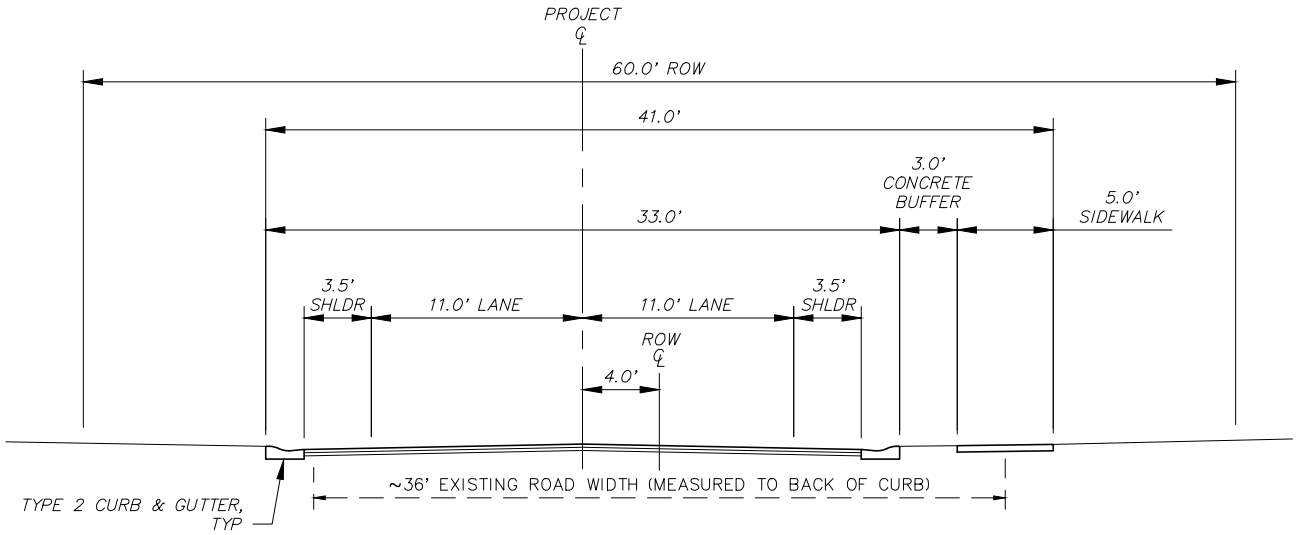
The DSR will be prepared based upon the support from MOA PM&E, Traffic Engineering, and Street Maintenance of the proposed typical sections. The DSR will analyze the proposed typical section alternatives further and include recommended improvements.



ALTERNATIVE 1

ALTERNATIVE 1 FEATURES:

- *NO ROADWAY MARKINGS*
- *TYPE 1 (BARRIER) CURB & GUTTER*



ALTERNATIVE 2

ALTERNATIVE 2 FEATURES:

- *NO ROADWAY MARKINGS*
- *TYPE 2 (ROLLED) CURB & GUTTER*

FILE NAME: J:\JobsData\10155.00 Quinhagak Street Reconstruction\00 CADD 2019\02 Figures\01 DSR\01 Typical Section Options\10155.00 Quinhagak Street Reconstruction Typical Sections.dwg

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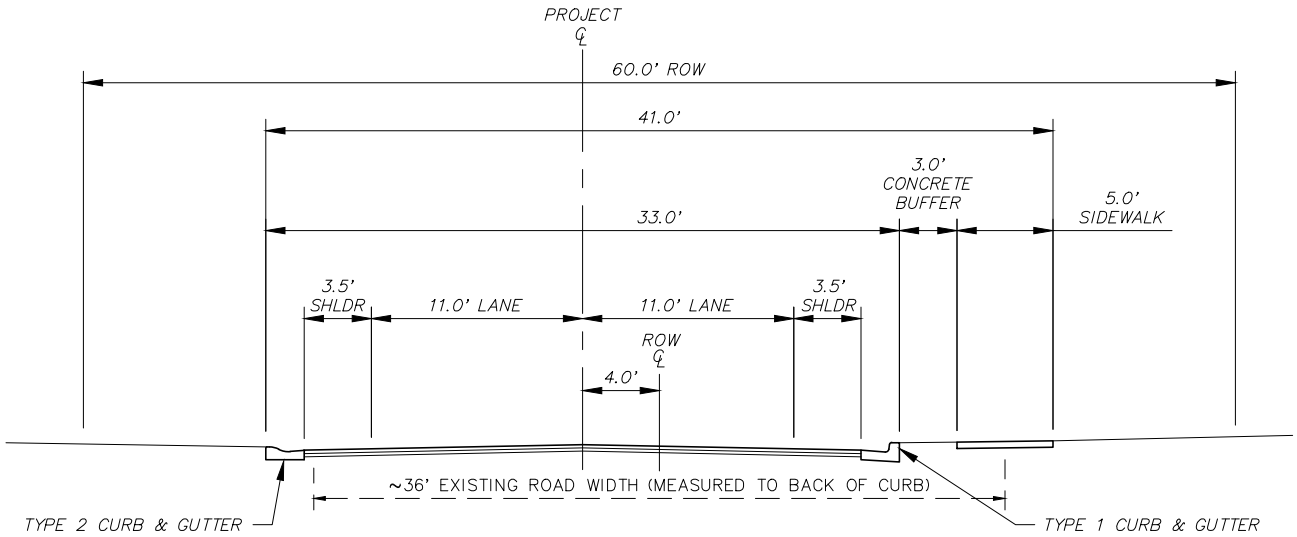
QUINHAGAK STREET RECONSTRUCTION

PM&E PROJECT NO. 21-13

TYPICAL SECTION ALTERNATIVES

Project No:	10155.00
Drawn By:	EKH
Scale:	NTS
Date:	NOV 2022
Figure:	2



ALTERNATIVE 3

ALTERNATIVE 3 FEATURES:

- *NO ROADWAY MARKINGS*
- *TYPE 2 (ROLLED) CURB & GUTTER – WEST SIDE*
- *TYPE 1 (BARRIER) CURB & GUTTER – EAST SIDE*

FILE NAME: J:\JobsData\10155.00 Quinhagak Street Reconstruction\00 CADD 2019\02 Figures\01 DSR\01 Typical Section Options\10155.00 Quinhagak Street Reconstruction Typical Sections.dwg

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Figure:	3