



CITY OF DULUTH
PURCHASING DIVISION
Room 100 City Hall
411 West First Street
Duluth, Minnesota 55802-1199
218/730-5340 218/730-5922 FAX
purchasing@duluthmn.gov

Addendum # 1

Bid No. 16-0438

File # 1468

Project: Arrowhead/Kenwood Signal & Roadway Improvements

This addendum serves to notify all bidders of the following changes to the solicitation documents:

DRAWINGS

- 1) Delete sheets 3-7 (SEQ) in their entirety and replace them with attached sheets 3-7. Changes to the sheets include, but are not limited to:
 - a. Conforming SEQ to the Bid Form.
 - b. Adding notes 26, 27, and 28 on sheet 4.
 - c. Revising note 9 conforming note 9, to Inset B on sheet 17.
- 2) Delete sheet 93 in its entirety and replace it with the attached sheet 93. The pole notes for pole 1 and 4 were updated to reflect the pole mounted pushbutton.
- 3) Delete sheet 102 in its entirety and replace it with the attached sheet 102. The pole notes for pole 3 were updated reflect the pole mounted pushbutton.

BID FORM

Use the attached revised Exhibit A that has the quantity changes noted in yellow and item changes in red.

Please acknowledge receipt of this Addendum by initialing and dating Addendum # 1 below the revised bid form on the invitation for bids.

Posted Date: 7/8/2016.

END OF ADDENDUM

STATEMENT OF ESTIMATED QUANTITIES

NOTES:

1. EXCESS MATERIAL TO BE DISPOSED OF BY THE CONTRACTOR OFF PROJECT RIGHT-OF-WAY (INCIDENTAL).
2. SELECT GRANULAR BORROW (SPEC. 3149) MODIFIED SO THAT THE RATIO OF THE PORTION PASSING THE #200 SIEVE DIVIDED BY THE PORTION PASSING THE 1" SIEVE MAY NOT EXCEED 7 PERCENT BY MASS.
3. USED FOR MATCHING EXISTING DRIVEWAYS.
4. MIXTURE SHALL BE PLACED IN TWO 1.5" LIFTS RESULTING IN A TOTAL COMPACTED THICKNESS OF 3".
5. UNDISTRIBUTED QUANTITY AS NEEDED FOR UTILITY TRENCHES. DISPOSAL OF EXCESS UNSUITABLE MATERIAL WILL BE CONSIDERED INCIDENTAL.
6. FILTER FABRIC AND COURSE FILTER AGGREGATE ARE INCIDENTAL TO THIS ITEM.
7. BITUMINOUS MIX COMPUTED AT 120 LBS/SQ.YD./INCH OF THICKNESS.
8. INCLUDES BITUMINOUS MATERIAL FOR TACK COAT APPLIED AT 0.05 GALLONS/SQ.YD. (INCIDENTAL).
9. INCLUDES PAYMENT FOR 6" CLASS 5 BASE UNDER WALK (INCIDENTAL). INCLUDES COMMON EXCAVATION (INCIDENTAL).
10. INCLUDES PAYMENT FOR 12" CLASS 5 BASE UNDER DRIVE (INCIDENTAL). INCLUDES COMMON EXCAVATION (INCIDENTAL).
11. RC PIPE SEWER INCLUDES COARSE FILTER AGGREGATE FOR BEDDING AND GRANULAR BACKFILL ENCASEMENT COVER (INCIDENTAL).
12. STRUCTURES INCLUDE BEDDING AND GRANULAR BACKFILL (INCIDENTAL).
13. INCLUDES CASTING ASSEMBLY (INCIDENTAL).
14. DUCTILE IRON (DI) PIPE AND ALL HDPE AND DUCTILE FITTINGS, TRANSITION COUPLINGS AND ADAPTERS SHALL BE INCIDENTAL.
15. FERTILIZER AT A RATE OF 150 LBS/ACRE ON SOD AREAS.
16. INCLUDES NECESSARY GRADING AND 6" TOPSOIL. INCLUDES COMMON EXCAVATION (0.33 CU. YD./SQ. YD.) AND SOIL PREPARATION (INCIDENTAL).
17. DOMES SHALL BE FACTORY PAINTED BRICK RED.
18. UNDISTRIBUTED QUANTITY FOR FOUNDATION STABILIZATION FOR WET UTILITY TRENCHES. DISPOSAL OF EXCESS UNSUITABLE MATERIAL WILL BE CONSIDERED INCIDENTAL.

LINE	NOTES	CHART	SHEET	SPEC. NO.	DESCRIPTION	UNIT	TOTAL PROJECT		CITY PROJECT 1468				COUNTY 34-278317		S.A.P. 118-160-023 (ARROWHEAD RD)		S.A.P. 118-151-012 (KENWOOD AVE)	
									NON-PARTICIPATING (BANK SITE)		NON-PARTICIPATING (CLEVELAND ST)		NON-PARTICIPATING (KENWOOD/HOWARD GNESEN RD)					
							TOTAL ESTIMATED QUANTITY	TOTAL FINAL QUANTITY	EST. QUANTITY	FINAL QUANTITY	EST. QUANTITY	FINAL QUANTITY	EST. QUANTITY	FINAL QUANTITY	EST. QUANTITY	FINAL QUANTITY		
1																		
2				2011.601	AS BUILT	LUMP SUM	1		0.13		0.22		0.06		0.39		0.20	
3																		
4				2021.501	MOBILIZATION	LUMP SUM	1		0.13		0.22		0.06		0.39		0.20	
5																		
6	20		29	2101.502	CLEARING	TREE	10		10									
7	20		29	2101.507	GRUBBING	TREE	10		10									
8																		
9		C, L	10, 14	2104.501	REMOVE CURB AND GUTTER	LIN FT	1 422		785						476		161	
10		E	11	2104.501	REMOVE SEWER PIPE (STORM)	LIN FT	165		87								78	
11		L	14	2104.501	REMOVE RETAINING WALL	LIN FT	14										14	
12		C, L	10, 14	2104.501	REMOVE FENCE	LIN FT	50				50							
13		L	14	2104.503	REMOVE BITUMINOUS WALK	SQ FT	92								92			
14		C, L	10, 14	2104.503	REMOVE CONCRETE WALK	SQ FT	2 466		54						1 926		486	
15		L, Q	14, 16	2104.505	REMOVE CONCRETE PAVEMENT	SQ YD	294								294			
16		C, L, Q	10, 14, 16	2104.505	REMOVE BITUMINOUS PAVEMENT	SQ YD	3 519		971		1 773				468		307	
17		C	10	2104.505	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	SQ YD	90		40		50							
18		C	10	2104.505	REMOVE CONCRETE DRIVEWAY PAVEMENT	SQ YD	36								36			
19	25	E	11	2104.509	REMOVE MANHOLE OR CATCH BASIN	EACH	3		1								2	
20			86-109	2104.509	REMOVE SIGN TYPE C	EACH	6										6	
21			86-109	2104.509	REMOVE SIGNAL SYSTEM	EACH	1										1	
22			29	2104.509	REMOVE SIGN BASE	EACH	1		1									
23		C	10	2104.511	SAWING CONCRETE PAVEMENT (FULL DEPTH)	LIN FT	44		11						33			
24		C, P	10, 16	2104.513	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	1 350		298		485		30		336		201	
25	25		29	2104.509	SALVAGE CASTING	EACH	1		1									
26				2104.523	SALVAGE SIGN TYPE C	EACH	2										2	
27			29	2104.523	SALVAGE SIGN	EACH	1		1									
28			29	2104.523	SALVAGE BOULDER	EACH	4		4									
29																		
30	1	A	9	2105.501	COMMON EXCAVATION (P)	CU YD	2 125		618		1 246						261	
31	2	B	9	2105.522	SELECT GRANULAR BORROW MOD 7% (CV) (P)	CU YD	1 912		764		668						480	
32		F	11	2105.604	GEOTEXTILE FABRIC TYPE I	SQ YD	110		110									
33		G	12	2105.604	GEOTEXTILE FABRIC TYPE IV (P)	SQ YD	42		42									
34		B	9	2105.604	GEOTEXTILE FABRIC TYPE V (P)	SQ YD	4 457		2 292		1 739						426	
35																		
36				2123.603	MOTOR GRADER	hour	10								5		5	
37	19	D	10	2118.502	AGGREGATE SURFACING (CV) CLASS 5 (P)	CU YD	6		1		5							
38		P	16	2131.502	CALCIUM CHLORIDE SOLUTION	GAL	8 995								6 395		2 600	
39																		
40		O, Q	15	2211.501	AGGREGATE BASE CLASS 5	TON	32				6				26			
41		B	9	2211.503	AGGREGATE BASE (CV) CLASS 5 (P)	CU YD	1 098		488		468						142	
42																		

1	07/08/2016	NJB	DGS	DGS	ADDENDUM 1
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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
Print Name: DAN SHAW

Date 06/08/16 License # 41423

STATE AID PROJECT NO. 118-151-012
118-160-023
STATE PROJECT NO.
COUNTY PROJECT NO. 0034-278317
CITY PROJECT NO. 1468

DRAWN BY PAB/SMH/MAG/ADB
DESIGNED BY NJB/BPS
CHECKED BY DGS
LHB PROJECT NO. 150746



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CITY OF DULUTH
ARROWHEAD/KENWOOD SIGNAL & ROADWAY IMPROVEMENTS
STATEMENT OF ESTIMATED QUANTITIES

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STATEMENT OF ESTIMATED QUANTITIES

NOTES:

19. AGGREGATE/GRAVEL PATCHING SHALL (AT A MINIMUM) CONSIST OF 6" OF CLASS 5 AGGREGATE SURFACING. INCLUDES COMMON EXCAVATION (INCIDENTAL).
20. CONTRACTOR SHALL PERFORM WALK THROUGH WITH ENGINEER TO CONFIRM TREES DESIGNATED FOR REMOVAL PRIOR TO PERFORMING ANY REMOVALS.
21. UNDISTRIBUTED QUANTITY TO BE PLACED AT DIRECTION OF THE ENGINEER.
22. EMPTY CONDUIT FOR FUTURE FIBER OPTIC CABLE SHALL INCLUDE A TRACER WIRE (INCIDENTAL).
23. PULL VAULTS LOCATED IN SIDEWALKS SHALL REQUIRE AN ADDITIONAL EXTENSION, LID, AND REINFORCEMENT. SEE DETAIL DRAWINGS (INCIDENTAL).
24. PIGTAILS INCLUDE FACTORY TERMINATED PATCH BLOCKS (INCIDENTAL).
25. SALVAGE CASTINGS AND DELIVER TO: 520 GARFIELD AVE (INCIDENTAL).
26. CONNECTION OF EXISTING SERVICE TO NEW CURB STOP IS INCIDENTAL.
27. INCLUDES 8" TAPPING VALVE AND 8"x10" TAPPING SLEEVE.
28. REPLACE TO MATCH EXISTING FENCE. CERTIFICATION AND TESTING NOT REQUIRED.

LINE	NOTES	CHART	SHEET	SPEC. NO.	DESCRIPTION	UNIT	TOTAL PROJECT		CITY PROJECT 1468				COUNTY 34-278317		S.A.P. 118-160-023 (ARROWHEAD RD)		S.A.P. 118-151-012 (KENWOOD AVE)	
									NON-PARTICIPATING (BANK SITE)		NON-PARTICIPATING (CLEVELAND ST)		NON-PARTICIPATING (KENWOOD/HOWARD GNESEN RD)					
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43																		
44		P	16	2215.501	FULL DEPTH RECLAMATION	SQ YD	6 662								4 737		1 925	
45		P	16	2232.501	MILL BITUMINOUS SURFACE (2")	SQ YD	7 569						7 569					
46		P	16	2232.501	MILL BITUMINOUS SURFACE (3")	SQ YD	6 662								4 737		1 925	
47																		
48		M	14	2301.504	CONCRETE PAVEMENT 9"	SQ YD	51								51			
49		Q	16	2301.504	PLACE CONCRETE PAVEMENT 9"	SQ YD	421								421			
50		Q	16	2301.508	SUPPLEMENTAL REINFORCEMENT BARS (EPOXY COATED) NO 7	LB	327								327			
51		Q	16	2301.511	STRUCTURAL CONCRETE HIGH EARLY	CU YD	157								157			
52		Q	16	2301.538	DOWEL BAR	EACH	165								165			
53		M, Q	14, 16	2301.602	DRILL & GROUT REINF BAR (EPOXY COATED)	EACH	251								201		50	
54		O	15	2302.603	FULL DEPTH REPAIR (TYPE CD-HV)	LIN FT	28								28			
55		O	15	2302.603	JOINT REPAIR (TYPE A1)	LIN FT	92								92			
56		O	15	2302.603	JOINT AND CRACK REPAIR (TYPE B3)	LIN FT	158								158			
57		O	15	2302.604	PAVEMENT REPLACEMENT (TYPE CX)	SQ YD	125								125			
58		O	15	2302.603	CURB AND GUTTER REPAIR	LIN FT	8								8			
59																		
60	7,8	B, P	9, 16	2360.501	TYPE SP 9.5 WEARING COURSE MIXTURE (3,C)	TON	1 210		155		110		908				37	
61		P	16	2360.501	TYPE SP 9.5 WEARING COURSE MIXTURE (3,A)	TON	599								426		173	
62		P	16	2360.501	TYPE SP 12.5 WEARING COURSE MIXTURE (3,C)	TON	599								426		173	
63	7	B, P	9, 16	2360.501	TYPE SP 12.5 NON WEARING COURSE MIXTURE (3,C)	TON	1 300		207		147				568		378	
64	3,4	D	10	2360.505	TYPE SP 9.5 BITUMINOUS MIXTURE FOR PATCHING	TON	38		2		34				2			
65																		
66		F	11	2411.604	CONSTRUCT STONE RETAINING WALL	SQ YD	30		30									
67																		
68	5			2451.607	GRANULAR BACKFILL (CV)	CU YD	150				150							
69	18			2451.511	COARSE FILTER AGGREGATE (LV)	CU YD	150				150							
70		F	11	2451.511	COARSE FILTER AGGREGATE MOD. (CV)	(P) CU YD	25		25									
71																		
72	11	G	12	2501.515	15" RC PIPE APRON	EACH	2		2									
73																		
74		F	11	2502.541	4" PERF PVC PIPE DRAIN	LIN FT	564		564									
75	6	B	9	2502.541	4" PERF PVC PIPE DRAIN (MOD.)	LIN FT	733				733							
76																		
77	11	G	12	2503.511	12" RC PIPE SEWER	LIN FT	645		90		447						108	
78	11	G	12	2503.511	15" RC PIPE SEWER	LIN FT	193		193									
79		G	12	2503.602	CONNECT TO EXISTING STORM SEWER	EACH	5		3								2	
80																		

1 07/08/2016 NJB DGS DGS ADDENDUM 1

NO DATE BY CKD APPR
PLOT DATE: 7/8/2016 11:30:12 AM FILE: R:\15Pro\150746\600 Drawings\C\150746_02_SEQ.dwg

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
Print Name: DAN SHAW
Daniel J. Shaw
Date 06/08/16 License # 41423

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118-160-023
STATE PROJECT NO.
COUNTY PROJECT NO. 0034-278317
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CITY OF DULUTH

ARROWHEAD/KENWOOD SIGNAL & ROADWAY IMPROVEMENTS
STATEMENT OF ESTIMATED QUANTITIES

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STATEMENT OF ESTIMATED QUANTITIES

LINE	NOTES	CHART	SHEET	SPEC. NO.	DESCRIPTION	UNIT	TOTAL PROJECT		CITY PROJECT 1468				COUNTY 34-278317		S.A.P. 118-160-023 (ARROWHEAD RD)		S.A.P. 118-151-012 (KENWOOD AVE)	
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							TOTAL ESTIMATED QUANTITY	TOTAL FINAL QUANTITY	EST. QUANTITY	FINAL QUANTITY	EST. QUANTITY	FINAL QUANTITY	EST. QUANTITY	FINAL QUANTITY	EST. QUANTITY	FINAL QUANTITY		
81																		
82	27	I	13	2504.601	10"X8" HOT TAP	LUMP SUM	1					1						
83	14	I	13	2504.602	CONNECT TO EXISTING 6" CI WATER MAIN	EACH	1					1						
84	14	I	13	2504.602	CONNECT TO EXISTING 10" CI WATER MAIN	EACH	2					2						
85		I	13	2504.602	DISCONNECT AND CAP EXISTING WATERMAIN	EACH	2					2						
86		I	13	2504.602	HYDRANT ASSEMBLY	EACH	1					1						
87		I	13	2504.602	8" X 1" DIPS TAPPING TEE W/ELECTROFUSION SADDLE	EACH	3					3						
88	26	I	13	2504.602	1" CURB STOP AND BOX	EACH	3					3						
89		I	13	2504.602	6" GATE VALVE AND BOX	EACH	1					1						
90		I	13	2504.602	8" GATE VALVE AND BOX	EACH	1					1						
91		I	13	2504.602	WATER TRACER BOX	EACH	6					6						
92		I, N	13, 15	2504.602	CONCRETE ENCASED VALVE BOX COLLAR	EACH	9					2		4		2		1
93		N	15	2504.602	ADJUST VALVE BOX	EACH	2									2		
94		I	13	2504.603	1" HDPE SDR 11 TAP SERVICE PIPE	LIN FT	181					181						
95		I	13	2504.603	8" DIPS HDPE WATER MAIN SDR 11	LIN FT	424					424						
96	21			2504.604	3" POLYSTYRENE INSULATION	SQ YD	200					200						
97																		
98	12	G	12	2506.501	CONST DRAINAGE STRUCTURE DESIGN 60-4020	LIN FT	10		10									
99		G	12	2506.501	CONST DRAINAGE STRUCTURE DESIGN F	LIN FT	51		19			14						18
100	13	G	12	2506.502	CONST DRAINAGE STRUCTURE DESIGN G OR H	EACH	6		3			3						
101		G	12	2506.516	CASTING ASSEMBLY	EACH	14		6			4						4
102			72	2506.522	ADJUST FRAME & RING CASTING	EACH	1					1						
103		G, N	12, 15	2506.602	CONCRETE ENCASED CASTING COLLAR	EACH	12		1							9		2
104		N	15	2506.602	MANHOLE FRAME SEAL	EACH	6									6		
105																		
106		G	12	2511.501	RANDOM RIPRAP CLASS III (P)	CU YD	10		10									
107			32	2511.602	PLACE BOULDER	EACH	4		4									
108																		
109	9	D	10	2521.501	4" CONCRETE WALK	SQ FT	2 150					1 692				458		
110		D	10	2521.501	8" CONCRETE WALK	SQ FT	376					376						
111		M	14	2521.618	4" CONCRETE WALK - ADA	SQ FT	701									501		200
112		M	14	2521.618	6" CONCRETE WALK - ADA	SQ FT	2 904									1 815		1 089
113																		
114		D	10	2531.501	CONCRETE CURB & GUTTER DESIGN B612	LIN FT	711		711									
115		D, Q	10, 16	2531.501	CONCRETE CURB & GUTTER DESIGN B624	LIN FT	1 067		166			759				142		
116		D	10	2531.501	CONCRETE CURB & GUTTER DESIGN S524	LIN FT	247					247						
117		D	10	2531.505	CONCRETE MEDIAN	LIN FT	43									43		
118	10	D	10	2531.507	8" CONCRETE DRIVEWAY PAVEMENT	SQ YD	135		26			109						
119																		

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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
Print Name: DAN SHAW

Date 06/08/16 License # 41423

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0034-278317
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							TOTAL ESTIMATED QUANTITY	TOTAL FINAL QUANTITY	EST. QUANTITY	FINAL QUANTITY	EST. QUANTITY	FINAL QUANTITY	EST. QUANTITY	FINAL QUANTITY	EST. QUANTITY	FINAL QUANTITY		
120																		
121		M	14	2531.603	CONCRETE CURB & GUTTER DESIGN B424 - ADA	LIN FT	91								91			
122		M	14	2531.603	CONCRETE CURB & GUTTER DESIGN B618 - ADA	LIN FT	10								10			
123		M	14	2531.603	CONCRETE CURB & GUTTER DESIGN B624 - ADA	LIN FT	305								126		179	
124		M	14	2531.603	CONCRETE CURB & GUTTER DESIGN B636 - ADA	LIN FT	168								168			
125		M	14	2531.603	CONCRETE CURB & GUTTER DESIGN D424 - ADA	LIN FT	11										11	
126		M	14	2531.603	CONCRETE CURB DESIGN V6 - ADA	LIN FT	310								226		84	
127	17	M	14	2531.618	TRUNCATED DOMES	SQ FT	278								169		109	
128																		
129			46	2440.602	SURVEY MONUMENT IN ROADWAY	EACH	1								1			
130																		
131			86-109	2550.515	OUTDOOR FIBER SPLICE ENCLOSURE	EACH	2										2	
132	22		86-109	2550.523	1.5" NON-METALLIC CONDUIT	LIN FT	280										280	
133			86-109	2550.601	FIBER OPTIC CABLE TESTING	LUMP SUM	1										1	
134			86-109	2550.602	FIBER OPTIC CABLE SPLICING	EACH	2										2	
135	23		86-109	2550.602	PULL VAULT	EACH	3										3	
136	24		86-109	2550.603	PRE-TERMINATED/ARMORED FIBER OPTIC PIGTAIL 6SM	LIN FT	270										270	
137			86-109	2550.603	FIBER OPTIC TRUNK CABLE 36SM	LIN FT	400										400	
138	22		86-109	2550.603	1.5" BORED CONDUIT	LIN FT	70										70	
139																		
140	28			2557.603	INSTALL CHAIN LINK FENCE	LIN FT	50				50							
141			58-64	2563.601	TRAFFIC CONTROL	LUMP SUM	1		0.13		0.22		0.06		0.39		0.20	
142			58-64	2564.601	TRAFFIC CONTROL SUPERVISOR	LUMP SUM	1		0.13		0.22		0.06		0.39		0.20	
143																		
144			76-85	2564.531	SIGN PANELS TYPE C	SQ FT	35										35	
145			76-85	2564.537	INSTALL SIGN TYPE C	EACH	3										3	
146				2564.537	INSTALL SIGN	EACH	1		1									
147			76-85	2564.552	OBJECT MARKER TYPE X4-2	EACH	1										1	
148			76-85	2564.552	OBJECT MARKER TYPE X4-4	EACH	1										1	
149																		
150			86-109	2565.511	TRAFFIC CONTROL SIGNAL SYSTEM A	SIG SYS	1								1			
151			86-109	2565.511	TRAFFIC CONTROL SIGNAL SYSTEM B	SIG SYS	1				0.50						0.50	
152			86-109	2565.513	EMERGENCY VEHICLE PREEMPTION SYSTEM A	LUMP SUM	1								1			
153			86-109	2565.513	EMERGENCY VEHICLE PREEMPTION SYSTEM B	LUMP SUM	1										1	
154																		
155		K	13	2571.502	DECIDUOUS TREE 1.5" CAL B&B	TREE	4		4									
156		K	13	2571.505	DECIDUOUS SHRUB NO 5 CONT	SHURB	41		41									
157		K	13	2571.507	PERENNIAL NO 1 CONT	PLANT	9		9									
158		K	13	2571.507	ORNAMENTAL GRASS NO 1 CONT	PLANT	7		7									
159																		

1	07/08/2016	NJB	DGS	DGS	ADDENDUM 1
NO	DATE	BY	CKD	APPR	
PLOT DATE: 7/8/2016 11:30:22 AM FILE: R:\15Proj\150746\600 Drawings\C\150746_02_SEQ.dwg					

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
Print Name: DAN SHAW

Date 06/08/16 License # 41423

STATE AID PROJECT NO.
118-151-012
118-160-023
STATE PROJECT NO.
COUNTY PROJECT NO.
0034-278317
CITY PROJECT NO. 1468

DRAWN BY
PAB/SMH/MAG/ADB
DESIGNED BY
NJB/BPS
CHECKED BY
DGS
LHB PROJECT NO.150746



PERFORMANCE
DRIVEN DESIGN.
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CITY OF DULUTH
ARROWHEAD/KENWOOD SIGNAL & ROADWAY IMPROVEMENTS
STATEMENT OF ESTIMATED QUANTITIES

SHEET
6
OF
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STATEMENT OF ESTIMATED QUANTITIES

LINE	NOTES	CHART	SHEET	SPEC. NO.	DESCRIPTION	UNIT	TOTAL PROJECT		CITY PROJECT 1468				COUNTY 34-278317		S.A.P. 118-160-023 (ARROWHEAD RD)		S.A.P. 118-151-012 (KENWOOD AVE)	
									NON-PARTICIPATING (BANK SITE)		NON-PARTICIPATING (CLEVELAND ST)		NON-PARTICIPATING (KENWOOD/HOWARD GNESEN RD)					
							TOTAL ESTIMATED QUANTITY	TOTAL FINAL QUANTITY	EST. QUANTITY	FINAL QUANTITY	EST. QUANTITY	FINAL QUANTITY	EST. QUANTITY	FINAL QUANTITY	EST. QUANTITY	FINAL QUANTITY		
160																		
161		J	13	2573.502	SILT FENCE, TYPE HI	LIN FT	338				338							
162		J	13	2573.530	STORM DRAIN INLET PROTECTION	EACH	36		14		8						14	
163		J	13	2573.535	STABILIZED CONSTRUCTION EXIT	LUMP SUM	3		1		2							
164		J	13	2573.504	SANDBAGS BARRIER	SQ FT	72		24								48	
165																		
166	15	K	13	2574.508	FERTILIZER TYPE 1	POUND	56		16		40							
167		K	13	2574.508	FERTILIZER TYPE 4	POUND	32		32									
168		F	11	2574.525	FILTER TOPSOIL BORROW	CU YD	55		55									
169		K	13	2574.525	TOPSOIL COMMON BORROW	CU YD	51		51									
170																		
171		K	13	2575.502	SEED MIX 25-141	POUND	10		10									
172		K	13	2575.502	SEED MIX 33-361	POUND	5		5									
173	16	K	13	2575.505	SODDING TYPE LAWN	SQ YD	1 796		515		1 281							
174		K	13	2575.523	EROSION CONTROL BLANKETS CATEGORY 3	SQ YD	1 276		715		546						15	
175		M	14	2575.602	SITE RESTORATION	EACH	10								6		4	
176																		
177			65-67	2580.603	INTERIM PAVEMENT MARKING	LIN FT	7 150				410		3 345		2 640		755	
178																		
179			76-85	2582.501	PAVEMENT MESSAGE PREFORM THERMOPLASTIC GROUND IN	SQ FT	240						90				150	
180			76-85	2582.502	4" SOLID LINE EPOXY GROUND IN (WR)	LIN FT	7 740				260		3 580				3 900	
181			76-85	2582.502	4" BROKEN LINE EPOXY GROUND IN (WR)	LIN FT	2 510						900				1 610	
182			76-85	2582.502	4" DOTTED LINE EPOXY GROUND IN (WR)	LIN FT	540						260				280	
183			76-85	2582.502	4" DOUBLE SOLID LINE EPOXY GROUND IN (WR)	LIN FT	3 820				220		1 740				1 860	
184			76-85	2582.502	8" SOLID LINE PREFORM THERMOPLASTIC GROUND IN	LIN FT	160										160	
185			76-85	2582.502	12" SOLID LINE PREFORM THERMOPLASTIC GROUND IN	LIN FT	210						30				180	
186			76-85	2582.502	24" SOLID LINE PREFORM THERMOPLASTIC GROUND IN	LIN FT	90						90					
187			76-85	2582.503	CROSSWALK PREFORM THERMOPLASTIC GROUND IN	SQ FT	1 206						180				1 026	
188																		

1	07/08/2016	NJB	DGS	DGS	ADDENDUM 1
NO	DATE	BY	CKD	APPR	
PLOT DATE: 7/8/2016 11:30:27 AM FILE: R:\15Proj\150746\600 Drawings\C\150746_02_SEQ.dwg					

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
Print Name: DAN SHAW

Date 06/08/16 License # 41423

STATE AID PROJECT NO. 118-151-012 118-160-023	DRAWN BY PAB/SMH/MAG/ADB
STATE PROJECT NO.	DESIGNED BY NJB/BPS
COUNTY PROJECT NO. 0034-278317	CHECKED BY DGS
CITY PROJECT NO. 1468	LHB PROJECT NO.150746



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CITY OF DULUTH	
ARROWHEAD/KENWOOD SIGNAL & ROADWAY IMPROVEMENTS	
STATEMENT OF ESTIMATED QUANTITIES	

SHEET
7
OF
117

NATHAN POOLE | 7/8/2016 11:52:12 AM
C:\Users\NPOOLE\AppData\Roaming\Autodesk\CTD 2015\enb\Projects\09000\9114\CAD_BIM\PLAN\9114_SGNL01_TRAFFICSIGNALPLANDetails.DWG: POLE NOTES A

1

P85 POLE FOUNDATION
INSTALL- TYPE PA85-A-25-D40-9 (DAVIT AT 350 DEG) (CITY FURNISHED)
2 - SWING AWAY HINGES
1 - ANGLE MOUNT SIGNAL OVERHEAD AT 0'
1 - STRAIGHT MOUNT SIGNAL OVERHEAD AT 11'
2 - ANGLE MOUNT SIGNAL AT 90 AND 180 DEG
2 - ANGLE MOUNT COUNTDOWN PED INDICATIONS AT 90 AND 180 DEG
*-1 - ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT (PHASES 4+7)
1 - LED LUMINAIRE
1 - VIDEO DETECTION CAMERA
1 - Ø4 RED LIGHT ENFORCEMENT LIGHT (FACING SOUTH)
1 - R10-X12 SIGN ADJACENT TO HEAD (7-1)
1 - TYPE D SIGN (D-1) (SEE SIGN DETAILS)
1 - APS PB AND SIGN (LT ARROW) (PB2-1) AND APS MOUNTING SPACERS
EXTEND INTO HH-2:
1 - 4" CONDUIT
3 - 12/C #14
*1 - 3/C #20
*1 - 3/C #14
1 - 3/C #14 (LUM.)
1 - 3/C #18 (CAMERA)
2 - 2/C #14
1 - #6 INS. GR.

3

P100 POLE FOUNDATION
INSTALL- TYPE PA100-A-45-D40-9 (DAVIT AT 350 DEG) (CITY FURNISHED)
2 - SWING AWAY HINGES
1 - ANGLE MOUNT SIGNAL OVERHEAD AT 0'
2 - STRAIGHT MOUNT SIGNALS OVERHEAD AT 9' AND 20'
2 - ANGLE MOUNT SIGNAL AT 90 AND 180 DEG
2 - ANGLE MOUNT COUNTDOWN PED INDICATIONS AT 90 AND 180 DEG
*-1 - ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT (PHASES 3+8)
1 - LED LUMINAIRE
1 - VIDEO DETECTION CAMERA
1 - Ø8 RED LIGHT ENFORCEMENT LIGHT (FACING NORTH)
1 - R10-X12 SIGN ADJACENT TO HEAD (3-1)
1 - TYPE D SIGN (D-1) (SEE SIGN DETAILS)
EXTEND INTO HH-4:
1 - 4" CONDUIT
3 - 12/C #14
1 - 6/C #14
*1 - 3/C #20
*1 - 3/C #14
1 - 3/C #14 (LUM.)
1 - 3/C #18 (CAMERA)
1 - 2/C #14
1 - #6 INS. GR.

2

P90 POLE FOUNDATION
INSTALL- TYPE PA90-A-35-D40-9 (DAVIT AT 350 DEG) (CITY FURNISHED)
2 - SWING AWAY HINGES
1 - ANGLE MOUNT SIGNAL OVERHEAD AT 0'
1 - STRAIGHT MOUNT SIGNAL OVERHEAD AT 11'
2 - ANGLE MOUNT SIGNAL AT 90 AND 180 DEG
2 - ANGLE MOUNT COUNTDOWN PED INDICATIONS AT 90 AND 180 DEG
*-1 - ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT (PHASES 1+6)
1 - LED LUMINAIRE
1 - VIDEO DETECTION CAMERA
1 - Ø6 RED LIGHT ENFORCEMENT LIGHT (FACING WEST)
1 - R10-X12 SIGN ADJACENT TO HEAD (1-1)
1 - TYPE D SIGN (D-2) (SEE SIGN DETAILS)
EXTEND INTO HH-3:
1 - 4" CONDUIT
3 - 12/C #14
*1 - 3/C #20
*1 - 3/C #14
1 - 3/C #14 (LUM.)
1 - 3/C #18 (CAMERA)
1 - 2/C #14
1 - #6 INS. GR.

4

P90 POLE FOUNDATION
INSTALL- TYPE PA90-A-30-D40-9 (DAVIT AT 350 DEG) (CITY FURNISHED)
2 - SWING AWAY HINGES
1 - ANGLE MOUNT SIGNAL OVERHEAD AT 0'
1 - STRAIGHT MOUNT SIGNAL OVERHEAD AT 11'
2 - ANGLE MOUNT SIGNAL AT 90 AND 180 DEG
2 - ANGLE MOUNT COUNTDOWN PED INDICATIONS AT 90 AND 180 DEG
*-1 - ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT (PHASES 2+5)
1 - LED LUMINAIRE
1 - VIDEO DETECTION CAMERA
1 - Ø2 RED LIGHT ENFORCEMENT LIGHT (FACING EAST)
1 - R10-X12 SIGN ADJACENT TO HEAD (5-1)
1 - TYPE D SIGN (D-2) (SEE SIGN DETAILS)
1 - APS PB AND SIGN (LT ARROW) (PB8-1) AND APS MOUNTING SPACERS
EXTEND INTO HH-5:
1 - 4" CONDUIT
3 - 12/C #14
*1 - 3/C #20
*1 - 3/C #14
1 - 3/C #14 (LUM.)
1 - 3/C #18 (CAMERA)
2 - 2/C #14
1 - #6 INS. GR.

A

EQUIPMENT PAD (SEE DETAIL SHEET)
SERVICE CABINET (SSB)
CONTROLLER AND CABINET

2 - 4" CONDUITS TO HH-1:
6 - 12/C #14
2 - 3/C #20
*2 - 3/C #14
2 - 3/C #18 (CAMERA)
6 - 2/C #14
1 - #6 INS. GR.

2 - 4" CONDUITS TO HH-7:
6 - 12/C #14
1 - 6/C #14
*2 - 3/C #20
*2 - 3/C #14
2 - 3/C #18 (CAMERA)
6 - 2/C #14
1 - #6 INS. GR.

1 - 2" CONDUIT STUBBED OUT OF SERVICE CABINET (CAPPED BOTH ENDS)
1 - 3" CONDUIT STUBBED OUT OF CONTROLLER CABINET (CAPPED BOTH ENDS)

CONTROLLER CABINET TO PV-1:
**1 1/2" CONDUIT:
1 - FO PIGTAIL (6-SM)

CONTROLLER CABINET TO SERVICE CABINET:
2" CONDUIT:
2 - 1/C #6
1 - 1/C #6 INS. GR.

SERVICE CABINET TO HH-1:
3" CONDUIT:
2 - 3/C #14 (LUM.)

SERVICE CABINET TO HH-7:
3" CONDUIT:
2 - 3/C #14 (LUM.)

SERVICE CABINET TO INP. HH-13:
2" CONDUIT:
3 - 1/C #2

SERVICE CABINET TO HH-8 (TO SYSTEM "B"):
2" CONDUIT:
4 - 3/C #14 (LUM.)
3 - 1/C #4
1 - 1/C #6 INS. GR.

B

SOP-INPLACE WOOD POLE TRANSFORMER (MINNESOTA POWER)
INP. 2" CONDUIT TO INP. HH-13:
3 - 1/C #2

NOTES:

- SEE SPECIAL PROVISIONS FOR CITY FURNISHED MATERIALS.
- THE EXACT LOCATION OF HANDHOLES, POLES, AND EQUIPMENT PAD SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE CONNECTION OF THE POWER FOR THE TRAFFIC SIGNAL SYSTEM WITH MINNESOTA POWER.
- FOR TYPE D SIGNS SEE DETAIL SHEET. ALL SIGNS REQUIRED ARE INCIDENTAL.
- THIS PLAN SPECIFIES CONDUIT SIZES, TYPES AND GENERAL LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD. CONDUITS UNDER THE ROADWAYS REQUIRE BORING.
- ALL NEW CONDUIT SHALL BE PVC - SCHEDULE 80 OR HDPE SCHEDULE 80 AND SHALL CARRY 1/C #6 GREEN INSULATED GROUNDING CONDUCTOR AS SHOWN IN THE PLAN.
- ITEMS DENOTED WITH AN * ARE INCLUDED IN PAYMENT FOR THE EVP SYSTEM PAY ITEM.
- ITEMS DENOTED WITH AN ** ARE INCLUDED IN PAYMENT FOR THE INTERCONNECT SYSTEM PAY ITEMS. SEE SPECIAL PROVISIONS DIVISIONS SZ.
- ALL EQUIPMENT IS F.&I. UNLESS OTHERWISE NOTED.
- REFER TO "FOR INFORMATION ONLY" SHEETS FOR INPLACE SIGNAL COMPONENTS.
- FOR PAVEMENT MARKINGS, SEE SHEETS 82-85.
- FOR CONSTRUCTION OF PEDESTRIAN CURB RAMPS, SEE SHEETS 15-21.

1	7-8-16	NP	SP	SP	ADDENDUM 1
NO	DATE	BY	CKD	APPR	

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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
Print Name: SCOTT C. POSKA
Scott C. Poska
Date 06/08/16 License # 47068

STATE AID PROJECT NO.
118-151-012
118-160-023
STATE PROJECT NO.

COUNTY PROJECT NO.
0034-278317
CITY PROJECT NO. 1468

DRAWN BY
N. POOLE
DESIGNED BY
N. POOLE
CHECKED BY
S. POSKA
COMM. NO. 0169114



ENGINEERS
PLANNERS
DESIGNERS

CITY OF DULUTH
KENWOOD AVENUE & ARROWHEAD ROAD (SYSTEM "A")
ARROWHEAD/KENWOOD SIGNAL & ROADWAY IMPROVEMENTS
TRAFFIC SIGNAL PLANS

SHEET
93
OF
117

Project Name: Kenwood and Arrowhead Signals
 SAP Project Number: SAP 118-151-012
 City Project Number: 1468

REVISED

EXHIBIT A

ADDENDUM 1

Item No.	Spec. No.	Description	Units	Est. Qty	Unit Price	Total Price
1	2011.601	AS BUILT	LS	1		
2	2021.501	MOBILIZATION	LS	1		
3	2101.502	CLEARING	TREE	10		
4	2101.507	GRUBBING	TREE	10		
5	2104.501	REMOVE CURB AND GUTTER	L F	1,422.00		
6	2104.501	REMOVE SEWER PIPE (STORM)	L F	165		
7	2104.501	REMOVE RETAINING WALL	L F	14		
8	2104.501	REMOVE FENCE	L F	50		
9	2104.503	REMOVE BITUMINOUS WALK	S F	92		
10	2104.503	REMOVE CONCRETE WALK	S F	2,466.00		
11	2104.505	REMOVE CONCRETE PAVEMENT	S Y	294		
12	2104.505	REMOVE BITUMINOUS PAVEMENT	S Y	3,519.00		
13	2104.505	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	S Y	90		
14	2104.505	REMOVE CONCRETE DRIVEWAY PAVEMENT	S Y	36		
15	2104.509	REMOVE MANHOLE OR CATCH BASIN	EACH	3		
16	2104.509	REMOVE SIGN TYPE C	EACH	6		
17	2104.509	REMOVE SIGNAL SYSTEM	EACH	1		
18	2104.509	REMOVE SIGN BASE	EACH	1		
19	2104.511	SAWING CONCRETE PAVEMENT (FULL DEPTH)	L F	44		
20	2104.513	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	L F	1,350.00		
21	2104.509	SALVAGE CASTING	EACH	1		
22	2104.523	SALVAGE SIGN TYPE C	EACH	2		
23	2104.523	SALVAGE SIGN	EACH	1		

24	2104.523	SALVAGE BOULDER	EACH	4		
25	2105.501	COMMON EXCAVATION	C Y	2,125.00		
26	2105.522	SELECT GRANULAR BORROW MOD 7% (CV)	C Y	1,912.00		
27	2105.604	GEOTEXTILE FABRIC TYPE I	S Y	110		
28	2105.604	GEOTEXTILE FABRIC TYPE IV	S Y	42		
29	2105.604	GEOTEXTILE FABRIC TYPE V	S Y	4,457.00		
30	2123.603	MOTOR GRADER	HOURL	10		
31	2118.502	AGGREGATE SURFACING (CV) CLASS 5	CU YD	6		
32	2131.502	CALCIUM CHLORIDE SOLUTION	GAL	8,995.00		
33	2211.501	AGGREGATE BASE CLASS 5	TON	32		
34	2211.503	AGGREGATE BASE (CV) CLASS 5	C Y	1,098.00		
35	2215.501	FULL DEPTH RECLAMATION	S Y	6,662.00		
36	2232.501	"MILL BITUMINOUS SURFACE (2.0")"	S Y	7,569.00		
37	2232.501	"MILL BITUMINOUS SURFACE (3.0")"	S Y	6,662.00		
38	2301.504	"CONCRETE PAVEMENT 9.0""	S Y	51		
39	2301.504	"PLACE CONCRETE PAVEMENT 9""	S Y	421		
40	2301.508	SUPPLEMENTAL REINFORCEMENT BARS (EPOXY COATED) NO 7	LB	327		
41	2301.511	STRUCTURAL CONCRETE HIGH EARLY	C Y	157		
42	2301.538	DOWEL BAR	EACH	165		
43	2301.602	DRILL AND GROUT REINFORCEMENT BAR (EPOXY COATED)	EACH	251		
44	2302.603	FULL DEPTH REPAIR (TYPE CD-HV)	L F	28		
45	2302.603	JOINT REPAIR (TYPE A1)	L F	92		
46	2302.603	JOINT AND CRACK REPAIR (TYPE B3)	L F	158		
47	2302.604	PAVEMENT REPLACEMENT (TYPE CX)	S Y	125		
48	2302.603	CURB & GUTTER REPAIR	LIN FT	8		

49	2360.501	TYPE SP 9.5 WEARING COURSE MIXTURE (3,C)	TON	1,210.00		
50	2360.501	TYPE SP 9.5 WEAR COURSE MIX (3,A)	TON	599		
51	2360.501	TYPE SP 12.5 WEARING COURSE MIXTURE (3,C)	TON	599		
52	2360.501	TYPE SP 12.5 NON WEARING COURSE MIXTURE (3,C)	TON	1,300.00		
53	2360.505	TYPE SP 9.5 BITUMINOUS MIXTURE FOR PATCHING	TON	38		
54	2411.604	CONSTRUCT STONE RETAINING WALL	S Y	30		
55	2451.607	GRANULAR BACKFILL (CV)	CU YD	150		
56	2451.511	COARSE FILTER AGGREGATE (LV)	C Y	150		
57	2451.511	COARSE FILTER AGGREGATE MOD (CV)	C Y	25		
58	2501.515	"15" RC PIPE APRON"	EACH	2		
59	2502.541	"4" PERF PVC PIPE DRAIN"	L F	564		
60	2502.541	4" PERF PVC PIPE DRAIN (MOD)	LIN FT	733		
61	2503.511	"12" RC PIPE SEWER"	L F	645		
62	2503.511	"15" RC PIPE SEWER"	L F	193		
63	2503.602	CONNECT TO EXISTING STORM SEWER	EACH	5		
64	2504.601	10"X8" HOT TAP	LUMP SU	1		
65	2504.602	CONNECT TO 6" CI WATER MAIN	EACH	1		
66	2504.602	CONNECT TO EXISTING 10" CI WATER MAIN	EACH	2		
67	2504.602	DISCONNECT AND CAP EXISTING WATER MAIN	EACH	2		
68	2504.602	HYDRANT ASSEMBLY	EACH	1		
69	2504.602	8"X1" DIPS TAPPING TEE WITH ELECTROFUSION SADDLE	EACH	3		
70	2504.602	"1" CURB STOP AND BOX"	EACH	3		
71	2504.602	"6" GATE VALVE AND BOX"	EACH	1		
72	2504.602	"8" GATE VALVE AND BOX"	EACH	1		
73	2504.602	WATER TRACER BOX	EACH	6		

74	2504.602	CONCRETE ENCASED VALVE BOX COLLAR	EACH	9		
75	2504.602	ADJUST VALVE BOX	EACH	2		
76	2504.603	1" HDPE SDR 11 TAP SERVICE PIPE	LIN FT	181		
77	2504.603	8" DIPS HDPE WATER MAIN SDR 11	LIN FT	424		
78	2504.604	"3" POLYSTYRENE INSULATION"	S Y	200		
79	2506.501	CONSTRUCT DRAINAGE STRUCTURE DESIGN 60-4020	L F	10		
80	2506.501	CONSTRUCT DRAINAGE STRUCTURE DESIGN F	L F	51		
81	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN G OR H	EACH	6		
82	2506.516	CASTING ASSEMBLY	EACH	14		
83	2506.522	ADJUST FRAME AND RING CASTING	EACH	1		
84	2506.602	CONCRETE ENCASED CASTING COLLAR	EACH	12		
85	2506.602	MANHOLE FRAME SEAL	EACH	6		
86	2511.501	RANDOM RIPRAP CLASS III	C Y	10		
87	2511.602	PLACE BOULDER	EACH	4		
88	2521.501	"4" CONCRETE WALK"	S F	2,150.00		
89	2521.501	"8" CONCRETE WALK"	S F	376		
90	2521.618	4" CONCRETE WALK - ADA	SQ FT	701		
91	2521.618	6" CONCRETE WALK - ADA	SQ FT	2,904.00		
92	2531.501	CONCRETE CURB AND GUTTER DESIGN B612	L F	711		
93	2531.501	CONCRETE CURB AND GUTTER DESIGN B624	L F	1,067.00		
94	2531.501	CONCRETE CURB AND GUTTER DESIGN S524	L F	247		
95	2531.505	CONCRETE MEDIAN	L F	43		
96	2531.507	"8" CONCRETE DRIVEWAY PAVEMENT"	S Y	135		
97	2531.603	CONCRETE CURB & GUTTER DESIGN B424 - ADA	LIN FT	91		
98	2531.603	CONCRETE CURB & GUTTER DESIGN B618 - ADA	LIN FT	10		

99	2531.603	CONCRETE CURB & GUTTER DESIGN B624 - ADA	LIN FT	305		
100	2531.603	CONCRETE CURB & GUTTER DESIGN B636 - ADA	LIN FT	168		
101	2531.603	CONCRETE CURB & GUTTER DESIGN D424 - ADA	LIN FT	11		
102	2531.603	CONCRETE CURB DESIGN V6 - ADA	LIN FT	310		
103	2531.618	TRUNCATED DOMES	S F	278		
104	2440.602	SURVEY MONUMENT IN ROADWAY	EACH	1		
105	2550.515	OUTDOOR FIBER SPLICE ENCLOSURE	EACH	2		
106	2550.523	"1.5" NON-METALLIC CONDUIT"	L F	280		
107	2550.601	FIBER OPTIC CABLE TESTING	LS	1		
108	2550.602	FIBER OPTIC CABLE SPLICING	EACH	2		
109	2550.602	PULL VAULT	EACH	3		
110	2550.603	PRE-TERMINATED/ARMORED FIBER OPTIC PIGTAIL 6SM	L F	270		
111	2550.603	FIBER OPTIC TRUNK CABLE 36SM	L F	400		
112	2550.603	"1.5" BORED CONDUIT"	L F	70		
113	2557.603	INSTALL CHAIN LINK FENCE	L F	50		
114	2563.601	TRAFFIC CONTROL	LS	1		
115	2564.601	TRAFFIC CONTROL SUPERVISOR	LUMP SU	1		
116	2564.531	SIGN PANELS TYPE C	S F	35		
117	2564.537	INSTALL SIGN TYPE C	EACH	3		
118	2564.537	INSTALL SIGN	EACH	1		
119	2564.552	OBJECT MARKER TYPE X4-2	EACH	1		
120	2564.552	OBJECT MARKER TYPE X4-4	EACH	1		
121	2565.511	TRAFFIC CONTROL SIGNAL SYSTEM A	SIGS	1		
122	2565.511	TRAFFIC CONTROL SIGNAL SYSTEM B	SIGS	1		
123	2565.513	EMERGENCY VEHICLE PREEMPTION SYSTEM A	LS	1		

124	2565.513	EMERGENCY VEHICLE PREEMPTION SYSTEM B	LUMP SU	1		
125	2571.502	"DECIDUOUS TREE 1.5" CAL B&B"	TREE	4		
126	2571.505	DECIDUOUS SHRUB NO 5 CONT	SHRB	41		
127	2571.507	PERENNIAL NO 1 CONT	PLT	9		
128	2571.507	ORNAMENTAL GRASS NO 1 CONT	PLT	7		
129	2573.502	SILT FENCE, TYPE HI	L F	338		
130	2573.53	STORM DRAIN INLET PROTECTION	EACH	36		
131	2573.535	STABILIZED CONSTRUCTION EXIT	LS	3		
132	2573.504	SANDBAG BARRIER	S F	72		
133	2574.508	FERTILIZER TYPE 1	LB	56		
134	2574.508	FERTILIZER TYPE 4	LB	32		
135	2574.525	FILTER TOPSOIL BORROW	C Y	55		
136	2574.525	COMMON TOPSOIL BORROW	C Y	51		
137	2575.502	SEED MIXTURE 25-141	LB	10		
138	2575.502	SEED MIXTURE 33-361	LB	5		
139	2575.505	SODDING TYPE LAWN	S Y	1,796.00		
140	2575.523	EROSION CONTROL BLANKETS CATEGORY 3	S Y	1,276.00		
141	2575.602	SITE RESTORATION	EACH	10		
142	2580.603	INTERIM PAVEMENT MARKING	L F	7,150.00		
143	2582.501	PAVEMENT MESSAGE PREFORM THERMOPLASTIC GROUND IN	S F	240		
144	2582.502	"4" SOLID LINE EPOXY GROUND IN (WR)"	L F	7,740.00		
145	2582.502	"4" BROKEN LINE EPOXY GROUND IN (WR)"	L F	2,510.00		
146	2582.502	"4" DOTTED LINE EPOXY GROUND IN (WR)"	L F	540		
147	2582.502	"4" DOUBLE SOLID LINE EPOXY GROUND IN (WR)"	L F	3,820.00		
148	2582.502	8" SOLID LINE PREFORM THERMOPLASTIC GROUND IN	LIN FT	160		

149	2582.502	12" SOLID LINE PREFORM THERMOPLASTIC GROUND IN	LIN FT	210		
150	2582.502	24" SOLID LINE PREFORM THERMOPLASTIC GROUND IN	LIN FT	90		
151	2582.503	CROSSWALK PREFORM THERMOPLASTIC GROUND IN	S F	1,206.00		

GRAND TOTAL: _____

ACKNOWLEDGEMENT OF
ADDENDUM NO. 1

INITIAL