

**RAMSEY COUNTY
COOPERATIVE AGREEMENT
WITH THE CITY OF SAINT PAUL FOR**

**Construction of Traffic Signal Interconnect System
On Payne Avenue between E. 7th Street and Minnehaha Ave East
S.A.P. 062-658-024, S.A.P. 164-020-151**

and

**Construction of Traffic Signal Interconnect System
On Como Avenue between Marion Street and Western Street
S.A.P. 062-030-026, S.A.P. 164-020-150**

and

**Traffic Signal Control Cabinet Hardware and Engineering Design
On Lexington Avenue between St. Anthony Avenue and Concordia Avenue
S.A.P. 062-651-063, S.P. 6282-212**

and

**Construction of Traffic Signal and Interconnect System
On Randolph Avenue at Cleveland Avenue
S.A.P. 062-656-037, S.A.P. 062-638-008, S.A.P. 164-183-007, S.A.P. 164-020-149**

and

**Intersection Safety Reconfiguration
On Randolph Avenue at Cleveland Avenue
S.A.P. 062-656-037, S.A.P. 062-638-008, S.A.P. 164-183-007, S.A.P. 164-020-149**

and

**Construction of Traffic Signal and Interconnect System
On Minnehaha Avenue West and Western Avenue
S.A.P. 062-656-037, S.A.P. 062-638-008**

and

**Downtown Signal Enhancements
On Warner/Shepard Road, Robert Street, and Marion Street
S.A.P. 062-030-027, S.A.P. 164-030-012**

Total Cost: \$1,450,997.20
City of Saint Paul Cost: \$480,336.80
Ramsey County Cost: \$970,660.40

Attachments:
A – Engineer’s Estimate

This Agreement is between the City of Saint Paul, a municipal corporation ("City") and Ramsey County, a political subdivision of the State of Minnesota, ("County") for construction of Traffic Signal Systems at noted locations within the City of Saint Paul ("Project").

RECITALS

1. These Projects are identified in Ramsey County's Transportation Improvement Program.
2. Designations
 - a. Payne Avenue, in the area affected by construction, is designated County State Aid Highway (CSAH) 58
 - b. Como Avenue, in the area affected by construction, is designated County State Aid Highway (CSAH) 33
 - c. Lexington Parkway, in the area affected by construction, is designated County State Aid Highway (CSAH) 51
 - d. Cleveland Avenue, in the area affected by construction, is designated County State Aid Highway (CSAH) 46
 - e. Randolph Avenue, in the area affected by construction, is designated County State Aid Highway (CSAH) 38
 - f. Minnehaha Avenue West, in the area affected by construction, is designated County State Aid Highway (CSAH) 33
 - g. Shepard/Warner Road, in the area affected by construction, is designated County State Aid Highway (CSAH) 37
 - h. Robert Street, in the area affected by construction, is designated County State Aid Highway (CSAH) 34
 - i. Marion Street, in the area affected by construction, is designated County State Aid Highway (CSAH) 56
3. The Project has been designated by the Minnesota Department of Transportation (Mn/DOT) as eligible for County State Aid Highway funds.
4. The Projects have been designated as State Aid Project (S.A.P.)
 - a. Payne Interconnect: S.A.P. 062-658-024, S.A.P. 164-020-151
 - b. Como Interconnect: S.A.P. 062-030-026, S.A.P. 164-020-150
 - c. Lexington Signal Reconstructions: S.A.P. 062-651-063, S.P. 6282-212
 - d. Cleveland and Randolph Signal Reconstruction and Intersection Reconfiguration: S.A.P. 062-656-037, S.A.P. 062-638-008, S.A.P. 164-183-007, S.A.P. 164-020-149
 - e. Minnehaha and Western Signal Reconstruction: S.A.P. 062-656-037, S.A.P. 062-638-008
 - f. Downtown Signal Enhancements Project: S.A.P. 062-030-027, S.A.P. 164-030-012
5. The subject road segments are located within the City.

AGREEMENTS

1. Responsibility for Design and Construction Engineering
 - 1.1. The City will provide all necessary plans, specifications, or proposals, in accordance with Mn/DOT State Aid requirements, required for the design and construction of the projects at the locations stated in Exhibit A.
2. Responsibility for Construction
 - 2.1. The City will provide all engineering, labor, materials and equipment necessary to fully complete the projects stated in Exhibit A.
3. Project Costs
 - 3.1. Except as provided herein, the County and City will participate in the costs of construction in accordance with the Ramsey County Cost Participation Policy and approved in the 2016 – 2020 Ramsey County Transportation Improvement Plan. If there is a conflict between the Cost Participation Policy and this Agreement, this Agreement will prevail.
 - 3.2. An estimate of the County's share of the Project costs is attached as Exhibit A, (Cost Participation Based on Engineer's Estimate). Actual costs shall be based on the documented material, equipment, and labor costs.
 - 3.3. Design Engineering Costs
 - 3.3.1. The County shall pay the City a design engineering fee equal to 10% of the County's share of the project items identified in Exhibit A.
 - 3.3.2. Design engineering fees shall be calculated based on the documented material, equipment, and labor costs.
 - 3.4. Construction Engineering and Administration Costs
 - 3.4.1. The County shall pay the City a construction engineering fee equal to 10% of the County's share of the items identified in Exhibit A.
 - 3.4.2. Construction engineering and administration fees shall be calculated based on the documented material, equipment, and labor costs.
4. Payment Schedule
 - 4.1. The City will invoice the County for final project costs. Invoice will include documented material, equipment, labor, and engineering costs.
 - 4.2. Payment will be made within 30 days of receipt of an invoice.

5. Ownership and Maintenance Responsibility for Project Elements

5.1. The City shall continue to be responsible for maintenance of traffic signal systems in accordance with the Joint Powers Agreement between Ramsey County (Resolution 93-643) and The City of Saint Paul (Council File 93-1974).

6. The County grants the City temporary construction easements over all County owned rights-of-way and property within the limits of the Project for use during construction at no cost to the City.

7. The City and County shall indemnify, defend, and hold each other harmless against any and all liability, losses, costs, damages, expenses, claims, or actions, including attorney's fees, which the indemnified party, its officials, agents, or employees may hereafter sustain, incur, or be required to pay, arising out of or by reason of any act or omission of the indemnifying party, its officials, agents, or employees, in the execution, performance, or failure to adequately perform the indemnifying party's obligation pursuant to this Agreement. Nothing in this Agreement shall constitute a waiver by the County or the City of any statutory or common law immunities, limits, or exceptions on liability.

8. This Agreement shall remain in full force and effect until terminated by mutual agreement of the parties.

9. COUNTERPARTS: The parties may sign this Agreement in counterparts, each of which constitutes an original, but all of which together constitute one instrument.

10. ELECTRONIC SIGNATURES: The parties agree that the electronic signature of a party to this Agreement shall be as valid as an original signature of such party and shall be effective to bind such party to this Agreement. The parties further agree that any document (including this Agreement and any attachments or exhibits to this Agreement) containing, or to which there is affixed, an electronic signature shall be deemed (i) to be "written" or "in writing," (ii) to have been signed and (iii) to constitute a record established and maintained in the ordinary course of business and an original written record when printed from electronic files. For purposes hereof, "electronic signature" also means a manually signed original signature that is then transmitted by any electronic means, including without limitation a faxed version of an original signature or an electronically scanned and transmitted version (e.g., via PDF) of an original signature. Any party's failure to produce the original signature of any electronically transmitted signature shall not affect the enforceability of this Agreement.

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CITY OF SAINT PAUL, MINNESOTA

By: _____
Mayor

Date: _____

By: _____
Director of Public Works

Date: _____

Approved by the Office of Financial Services:

By: _____

Approved as to Form:

By: _____
City Attorney

RAMSEY COUNTY, MINNESOTA

County Manager

Date: _____

Approval recommended:

Director
Public Works Department

Approved as to form:

Assistant County Attorney

EXHIBIT A

	LOCATION	SPLIT	ESTIMATED COST			NOTES
			COUNTY	CITY	TOTAL	
Design and Construction	Payne Avenue Signal Interconnect SAP062-658-024, SAP164-020-151	By segment	\$ 75,050.00	\$ 24,350.00	\$ 99,400.00	Interconnect construction between E 7th and Minnehaha Ave E
	Como Avenue Signal Interconnect SAP062-030-026 SAP164-020-150	By segment	\$ 75,050.00	\$ 750.00	\$ 75,800.00	Interconnect construction between Marion and Western
	Cleveland Avenue and Randolph Avenue Signal Reconstruction SAP062-656-037, SAP062-638-008, SAP164-020-149, SAP164-183-007	1/4 St. Paul, 3/4 Ramsey	\$ 228,750.00	\$ 76,250.00	\$ 305,000.00	Signal reconstruction and interconnect work
	Cleveland Avenue and Randolph Avenue intersection improvements SAP062-656-037, SAP062-638-008, SAP164-020-149, SAP164-183-007	1/4 St. Paul, 3/4 Ramsey	\$ 112,354.50	\$ 37,451.50	\$ 149,806.00	Intersection safety reconfiguration
	Minnehaha and Western Signal Reconstruction SAP 062-633-010, SAP 164-214-017	1/2 St. Paul, 1/2 Ramsey	\$ 150,000.00	\$ 150,000.00	\$ 300,000.00	Signal reconstruction and interconnect work
		SUBTOTAL	\$ 641,204.50	\$ 288,801.50	\$ 930,006.00	
E & I		ENGINEERING (10%)	\$ 64,120.45	\$ 28,880.15	\$ 93,000.60	
		ADMIN & INSPECTION (10%)	\$ 64,120.45	\$ 28,880.15	\$ 93,000.60	
	Lexington Ave at Concordia Avenue and St. Anthony Avenue Signal reconstructions (engineering and inspection) SAP062-651-063, SP6282-212	E & I only	\$ 120,000.00	\$ -	\$ 120,000.00	Costs for design and inspection only
	Downtown Signal Enhancements Project SAP 164-030-012, SAP 062-030-027	E & I contribution only	\$ 15,215.00	\$ 133,775.00	\$ 148,990.00	Portions of E & I not covered by federal funds
Hardware	Lexington Ave at St. Anthony Avenue and Concordia Avenue Signal Reconstruction (Signal equipment) SAP062-651-063, SP6282-212	Hardware only	\$ 66,000.00	\$ -	\$ 66,000.00	2 Signal controller cabinets and 2 EVP systems, hardware only
		TOTAL	\$ 970,660.40	\$ 480,336.80	\$ 1,450,997.20	

Installation of Interconnect on Payne Avenue (CSAH 58) from East 7th to Minnehaha



Submitted as a proposed
Municipally-led Ramsey County Project
for 2019

By the City of Saint Paul
Department of Public Works
September 25, 2018

PROBLEM IDENTIFICATION

The City of Saint Paul maintains an advanced traffic management system (ATMS), allowing the City to remotely monitor and modify the operation of these signals, providing more rapid response to outages, eliminate time related operational issues and improving the ability to adjust settings.

As the City maintains and operates many of the traffic signals owned by Ramsey County, the City has worked to include many traffic signals on County roadways on its communication network, allowing them to be managed by the City's ATMS.

Currently, the traffic signals on Payne Avenue (CSAH 58) at Tedesco Street and Minnehaha Avenue, as well as on Tedesco Street at Burr Street are not connected to the City's communication network, and are therefore not able to be managed by the ATMS.

PROPOSED PROJECT

The City of Saint Paul proposes to establish communication between the traffic signal cabinets Payne Avenue at East 7th Street, Tedesco Street, and Minnehaha Avenue by installing fiber-optic interconnect, conduit, and hand-holes along Payne Avenue, and equipment in each cabinet necessary for communication. As Payne Avenue is no longer a county facility northeast of Edgerton Street, the City will fund all work on the segment between Edgerton Street and Minnehaha Avenue.

Once completed, the City would add the traffic signals at the intersection of Payne Avenue & Tedesco Street and Payne Avenue & Minnehaha Street to its ATMS. Of additional benefit to the City, this connection would also allow for the addition of the traffic signal at the intersection of Tedesco Street & Burr Avenue to the City's ATMS by utilizing existing interconnection between Payne Avenue and Burr Street on Tedesco Street.

This project is proposed for 2019, but could also be done in subsequent years. While the completion of this project is not urgent, delays in funding will not provide the benefits of connection to the City's ATMS in the interim.



Figure 1: Project Location Map

COST ESTIMATE

ITEM DESCRIPTION	UNIT	UNIT COST	CITY OF SAINT PAUL		RAMSEY COUNTY		TOTAL	
			QTY	COST	QTY	COST	QTY	COST
2" NON-METALLIC COND (DIRECTIONAL BORE)	LF	\$ 25	800	\$ 20,000	2,300	\$ 57,500	3,100	\$ 77,500
24 SM FIBER OPTIC CABLE	LF	\$ 3	800	\$ 2,400	2,300	\$ 6,900	3,100	\$ 9,300
MISC. FIBER OPTIC LABOR & MATERIALS	EACH	\$ 1,500	1.5	\$ 2,250	0.5	\$ 750	2	\$ 3,000
SUBTOTAL				\$ 24,650		\$ 75,050		\$ 89,800
ENGINEERING AND INSPECTION (25%)				\$ 6,200		\$ 16,300		\$ 22,500
TOTAL				\$ 30,850		\$ 81,450		\$ 112,300

Per the above cost estimate and Ramsey County's cost participation policy, the City is requesting \$81,450 in Ramsey County funds for this project.

OTHER PROJECT DETAILS

The project location is completely within an area of racially concentrated poverty. No right of way acquisition or temporary easements are anticipated.

Installation of Interconnect on Como Avenue from Western to Marion



Submitted as a proposed
Municipally-led Ramsey County Project
for 2019

By the City of Saint Paul
Department of Public Works
September 25, 2018

PROBLEM IDENTIFICATION

The City of Saint Paul maintains an advanced traffic management system (ATMS), allowing the City to remotely monitor and modify the operation of these signals, providing more rapid response to outages, eliminate time related operational issues and improving the ability to adjust settings.

As the City maintains and operates many of the traffic signals owned by Ramsey County, the City has worked to include many traffic signals on County roadways on its communication network, allowing them to be managed by the City's ATMS.

Currently, the traffic signals on Western Avenue at Como Avenue (CSAH 32) and Minnehaha Avenue are not connected to the City's communication network, and are therefore not able to be managed by the ATMS.

PROPOSED PROJECT

The City of Saint Paul proposes to establish communication between the traffic signal cabinets at the intersections of Como Avenue & Western Avenue and Como Avenue & Marion Street/Pennsylvania Avenue by installing fiber-optic interconnect, conduit, and hand-holes along Como Avenue, and equipment in each cabinet necessary for communication. Once completed, the City would add the traffic signal at the intersection of Como Avenue & Western Avenue to its ATMS. Of additional benefit to the City, this connection would also allow for the addition of the traffic signal at the intersection of Minnehaha Avenue & Western Avenue to the City's ATMS using existing low-voltage interconnect, or through a new fiber-optic connection installed in a separate project within existing conduit.

This project is proposed for 2019, but could also be done in subsequent years. While the completion of this project is not urgent, delays in funding will not provide the benefits of connection to the City's ATMS in the interim.



Figure 1: Project Location Map

COST ESTIMATE

ITEM DESCRIPTION	UNIT	UNIT COST	CITY OF SAINT PAUL		RAMSEY COUNTY		TOTAL	
			QTY	COST	QTY	COST	QTY	COST
2" NON-METALLIC COND (DIRECTIONAL BORE)	LF	\$ 25		\$ -	2,600	\$ 65,000	2,600	\$ 65,000
24 SM FIBER OPTIC CABLE	LF	\$ 3		\$ -	2,600	\$ 7,800	2,600	\$ 7,800
MISC. FIBER OPTIC LABOR & MATERIALS	EACH	\$ 1,500	0.5	\$ 750	1.5	\$ 2,250	2	\$ 3,000
SUBTOTAL				\$ 750		\$ 75,050		\$ 75,800
ENGINEERING AND INSPECTION (25%)				\$ 200		\$ 18,800		\$ 19,000
TOTAL				\$ 950		\$ 93,850		\$ 94,800

Per the above cost estimate and Ramsey County's cost participation policy, the City is requesting \$93,850 in Ramsey County funds for this project.

OTHER PROJECT DETAILS

The project location is completely within an area of racially concentrated poverty. No right of way acquisition or temporary easements are anticipated.

ENGINEERING ESTIMATE	19-P-1444		
DEPT. OF PUBLIC WORKS CITY OF ST. PAUL	Cleveland/Randolph	2/7/2019	
	Total Cost	Installed Cost	E&I (25%)
SIGNAL SYSTEM TOTAL	\$186,752.45	\$ 186,752.45	\$46,688.11
INTERCONNECT SYSTEM TOTAL	\$93,991.00	\$ 93,991.00	\$23,497.75
REMOVE/SALVAGE SIGNAL SYSTEM TOTAL	\$5,000.00	\$ 5,000.00	\$ 1,250.00
SIGNING TOTAL	\$1,674.00	\$ 1,674.00	\$ 418.50
SIGNAL PROJECT SUBTOTAL	\$287,417.45	\$ 287,417.45	\$71,854.36
		\$287,417.45	\$71,854.36
		Total Cost	\$359,271.81
Splits			
Saint Paul (1/4)			\$89,817.95
Ramsey (3/4)			\$269,453.86

SAP 062-656-037, 062-638-008, 164-020-149, 164-183-007

ENGINEERING ESTIMATE

1/28/2020

DEPT. OF PUBLIC WORKS CITY OF ST. PAUL

Minnehaha/Western

	Total Cost	Installed Cost	E&I (25%)
SIGNAL SYSTEM A TOTAL MINNEHAHA & WESTER	\$148,656.35	\$ 148,656.35	\$ 37,164.09
INTERCONNECT SYSTEM TOTAL	\$17,680.00	\$ 17,680.00	\$ 4,420.00
REMOVAL SIGNAL SYSTEM TOTAL	\$10,000.00	\$ 10,000.00	\$ 2,500.00
SALVAGE INTERCONNECT SYSTEM TOTAL		\$ -	\$ -
SIGNING TOTAL	\$4,224.00	\$ 4,224.00	\$ 1,056.00
PED QUADRANT WORK	\$ 50,000.00	\$ 50,000.00	\$ 12,500.00
SIGNAL PROJECT SUBTOTAL	\$180,560.35	\$ 230,560.35	\$ 57,640.09
Total Cost	\$180,560.35	\$230,560.35	\$57,640.09
		Totals:	\$288,200.44

SAP 062-633-010 & SAP 164-214-017

DOWNTOWN SIGNAL ENHANCEMENTS
ENGINEER'S ESTIMATE
CMAQ 6219 (176), SP 164-030-012, SP 062-030-027

ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT COST	FEDERAL PARTICIPATING		
					S.P. 164-030-012	S.P. 164-030-012 S.P. 062-030-027	TOTAL COST
2021.501	MOBILIZATION	L.S.	1	\$ 65,000.00	.92	.08	\$ 65,000.00
2104.502	REMOVE HANDHOLE	EACH	2	\$ 400.00	2		\$ 800.00
2104.503	SAWING CONCRETE WALK	L.F.	1,270	\$ 5.00	1,270		\$ 6,350.00
2104.518	REMOVE CONCRETE SIDEWALK	S.F.	1,421	\$ 2.00	1,421		\$ 2,842.58
2104.601	REMOVE CABLES	L.S.	1	\$ 7,000.00	1.00		\$ 7,000.00
2104.618	REMOVE BRICK PAVERS	S.F.	183	\$ 25.00	183		\$ 4,581.25
2104.618	INSTALL BRICK PAVERS	S.F.	156	\$ 25.00	156		\$ 3,910.88
2521.518	6" CONCRETE WALK	S.F.	1,380	\$ 15.00	1,380		\$ 20,697.79
2550.502	DYNAMIC MESSAGE SIGN A	SYS	1	\$ 55,000.00	1		\$ 55,000.00
2550.502	DYNAMIC MESSAGE SIGN B	SYS	1	\$ 52,000.00	1		\$ 52,000.00
2550.502	DYNAMIC MESSAGE SIGN C	SYS	1	\$ 45,000.00	1		\$ 45,000.00
2550.502	DYNAMIC MESSAGE SIGN D	SYS	1	\$ 36,000.00	1		\$ 36,000.00
2550.502	DYNAMIC MESSAGE SIGN E	SYS	1	\$ 68,000.00	1		\$ 68,000.00
2550.502	DYNAMIC MESSAGE SIGN F	SYS	1	\$ 38,000.00	1		\$ 38,000.00
2550.502	DYNAMIC MESSAGE SIGN G	SYS	1	\$ 38,000.00	1.00		\$ 38,000.00
2550.502	DYNAMIC MESSAGE SIGN H	SYS	1	\$ 40,000.00	1		\$ 40,000.00
2550.502	DYNAMIC MESSAGE SIGN I	SYS	1	\$ 72,000.00	1		\$ 72,000.00
2550.502	DYNAMIC MESSAGE SIGN J	SYS	1	\$ 93,000.00	1		\$ 93,000.00
2550.503	2" NON-METALLIC CONDUIT (PUSHED CONDUIT)	L.F.	3,805	\$ 25.00	3,805		\$ 95,125.00
2550.503	3" NON-METALLIC CONDUIT (PUSHED CONDUIT)	L.F.	5,132	\$ 30.00	5,132		\$ 153,960.00
2550.532	1/C #2 AWG	L.F.	7,480	\$ 3.50	7,480		\$ 26,180.00
2550.532	1/C #4 AWG	L.F.	1,417	\$ 3.25	1417.00		\$ 4,605.25
2550.532	1/C #6 AWG INSULATED	L.F.	4,034	\$ 3.00	4034		\$ 12,102.00
2550.532	CAT 6 ARMORED CABLE	L.F.	1,366	\$ 3.00	1,366		\$ 4,098.00
2550.601	FIBER OPTIC CABLE TESTING	L.S.	1	\$ 12,000.00	1	0.04	\$ 12,000.00
2550.602	HANDHOLE (SPECIAL)	EACH	21	\$ 1,500.00	21		\$ 31,500.00
2550.602	MODIFY SIGNAL CONTROLLER CABINET FOUNDATION	EACH	10	\$ 2,500.00	10.00		\$ 25,000.00
2550.602	FIBER OPTIC CABLE SPLICING	EACH	54	\$ 2,750.00	52.00	2.00	\$ 148,500.00
2550.603	ARMORED FIBER OPTIC TRUNK CABLE 24 SM	L.F.	19,188	\$ 3.50	18832.60	355.00	\$ 67,156.60
2563.601	TRAFFIC CONTROL	L.S.	1	\$ 5,000.00	.96	.04	\$ 5,000.00
2565.602	SERVICE CABINET - TYPE DUAL METER	EACH	4	\$ 8,000.00	4.00		\$ 32,000.00
2565.603	3" NON-METALLIC CONDUIT (TRENCH & RESTORE)	L.F.	105	\$ 20.00	105.00		\$ 2,100.00
2565.603	1/C #10 AWG	L.F.	18,035	\$ 3.00	17680.00	355.00	\$ 54,105.00
2573.601	TEMPORARY EROSION CONTROL	L.S.	1	\$ 65,000.00	.96	.04	\$ 65,000.00
SUBTOTAL							\$1,386,614.34
ENGINEERING & INSPECTION (25%)							\$346,653.59
TOTAL							\$1,733,267.93