

# STATE OF CONNECTICUT





#### 2800 BERLIN TURNPIKE, P.O. BOX 317546 NEWINGTON, CONNECTICUT 06131-7546

Phone: (860) 594-3150

June 25, 2018

Ms. Amy Jackson-Grove **Division Administrator** Federal Highway Administration 628-2 Hebron Avenue, Suite 303 Glastonbury, Connecticut 06033

Dear Ms. Jackson-Grove:

Subject: Public Interest Finding Request

Salvage of Traffic Control Signal Equipment

The Connecticut Department of Transportation (Department) requests the Federal Highway Administration's (FHWA) concurrence to salvage the following traffic signal equipment that will be removed under federally funded projects:

- controller and cabinet (all components)
- aluminum pedestals
- steel span poles
- 360 degree camera, 360 degree video detection processor, and video cameras

#### This request is being made:

- in accordance with the Code of Federal Regulations, Title 23, Part 365, Section 635,407 "Use of materials made available by a public agency," Section (g,)
- per FHWA Memorandum dated August 17, 1988

For reference, attached is the previous FHWA concurrence for controllers and cabinets, pedestals, and span poles (January 11, 2013 letter).

Based on the enclosed cost analysis, the cost to salvage the items will not exceed the value of said items. In addition, the price of each item to be salvaged is below the salvage credit threshold of \$5.000.00.

Therefore, the Department recommends the signal equipment shown on the next page for salvage on federally funded projects.

Please contact Mr. Jorge Kuljis at (860) 594-2791, should you have any questions about this request.

Very truly yours,

Soma Kin

Scott Hill, P.E. 2018.06.25 15:08:36-04'00'

Scott A. Hill, P.E. Engineering Administrator Bureau of Engineering and Construction

#### **FHWA Concurrence**:

The Federal Highway Administration concurs with the Departments recommendation to salvage the following traffic signal equipment under federally funded projects through December 31, 2023:

Minimum quantities (based on the construction district in which the majority of the work will occur):

#### All Districts:

- one (1) controller and cabinet (all components with or without processor)
- one (1) 360 video detection processor
- one (1) 360 camera assembly
- two (2) video camera assemblies

#### District 1:

- two (2) steel span poles
- four (4) aluminum pedestals

#### District 2:

- three (3) steel span poles
- seven (7) aluminum pedestals

#### District 3:

- four (4) steel span poles
- seven (7) aluminum pedestals

#### District 4:

Federal Highway Administration

- four (4) steel span poles
- nine (9) aluminum pedestals

DAVID W NARDONE Digitally signed by DAVID W NARDONE Date: 2018.07.18 14:04:27 -04'00'	Date:	
Amy Jackson-Grove, Division Administrator		

Drive from Time to

Note: Typically, Contractors transport the salvaged items in a single trip per project, which results in a lower cost to transport the items. Therefore, the following calculations are conservative.

#### **COST ANALYSIS**

#### SALVAGE OF TRAFFIC SIGNAL CONTROLLER AND CABINET

1: Value of controller equipment and ca	abinet
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Equipment	Value (each)	Quantity	Total value
Controller cabinet (all components)			
Controller unit	\$500.00	1	\$500.00
all other components	\$500.00	1	\$500.00
total	\$1,000.00	1	\$1,000.00
salvage equipment	Total value of salvaged e	quipmen	t \$1,000.00

2: Cost to salvage equipment

				Total	Time to load	project to	unload at			
				hourly	at project	DOT Stores	DOT Stores	Total	No.	
Labor:		Pay rate	Fringe	wage	(HR)	& back (HR)*	(HR)	hours	workers	Total cost
	Laborer - Group 1 (unskilled)	\$29.25	\$19.50	\$48.75	0.25	3.2	0.25	3.7	2	\$360.75
	Truck driver - 3 axle	\$29.23	\$22.32	\$51.55	0.25	3.2	0.25	3.7	1	\$190.74
	* Note - time is for District 4, the longest drive of the 4 districts							Total I	abor cost:	\$551.49

#### Equipment:

Box truck

		Total	
	Use rate	Hours	Total cost
Total cost to salvage equipment:	\$25.00	3.7	\$92.50
Т	otal equipm	ent cost:	\$92.50
	\$643.99		

3: Comparison

Value of equipment to be salvaged: \$1,000.00 Cost to salvage equipment \$643.99

Value of equipment to be salvaged is greater than cost to deliver the equipment to DOT Stores or Lab

Note: Typically, Contractors transport the salvaged items in a single trip per project, which results in a lower cost to transport the items.

Therefore, the following calculations are conservative.

## COST ANALYSIS SALVAGE OF ALUMINUM PEDESTAL

#### 1: Value of aluminum pedestal

 Equipment
 Value (each)
 Quantity value

 Aluminum pedestal
 \$100.00
 1
 \$100.00

 Total value of salvaged equipment
 \$100.00

#### 2: Cost to salvage equipment

DISTRICT 1					Drive from				
Labor per 3 pedestals - District 1 Laborer - Group 1 (unskilled) Truck driver, 2 axle	<b>Pay rate</b> \$29.25 \$29.23	Fringe \$19.50 \$22.32	Total hourly wage \$48.75 \$51.55	Time to load at project (HR) 0.3 0.3	project to DOT Stores (HR) and back 1.4 1.4	Time to unload at DOT Stores (HR) 0.3 0.3	Total hours 2 2 Total I	No. workers 2 1 abor cost:	Total cost \$195.00 \$103.10 \$298.10
		Total							,
Equipment per 3 pedestals - District 1: 3 ton utility truck  Total cost to salvage 3	Use rate \$18.70 Total equipm pedestals: \$335.50	Hours 2 ent cost:	**Total cost \$37.40 ************************************						
			Total hourly	Time to load at project	Drive from project to DOT Stores (HR) and	Time to unload	Total	No.	
Labor per 4 pedestals - District 1	Pay rate	Fringe	wage	(HR)	back	(HR)	hours	workers	Total cost
Laborer - Group 1 (unskilled)	\$29.25	\$19.50	\$48.75	0.4	1.4	0.4	2.2	2	\$214.50
Truck driver, 2 axle	\$29.23	\$22.32	\$51.55	0.4	1.4	0.4	2.2	. 1	\$113.41
		Total					I otal I	abor cost:	\$327.91
Equipment per 4 pedestals - District 1:	Use rate	Hours	Total cost						
3 ton utility truck	\$18.70 Total equipm	2.2 ent cost:	\$41.14						
Total cost to salvage 4	pedestals: \$369.05								

District 1:

Value of equipment to be salvaged: \$400.00 Cost to salvage equipment: 4 Pedestals \$369.05

DISTRICT 2									
					Drive from project to				
			Total	Time to load	DOT Stores	Time to unload			
	_		hourly	at project	(HR) and	at DOT Stores	Total	No.	
Labor per 6 pedestals - District 2	Pay rate	Fringe	wage	(HR)	back	(HR)	hours	workers	Total cost
Laborer - Group 1 (unskilled)	\$29.25	\$19.50	\$48.75	0.6	2.4	0.6	3.6	2	\$351.00
Truck driver, 2 axle	\$29.23	\$22.32	\$51.55	0.6	2.4	0.6	3.6	1 abor cost:	\$185.58 <b>\$536.58</b>
		Total					lotari	apor cost:	<b>\$</b> 536.56
Equipment per 6 pedestals - District 2	Use rate	Hours	Total cost						
3 ton utility truck	\$18.70	3.6	\$67.32						
	otal equipm	ent cost:	\$67.32						
Total cost to salvage 6 pedestals	\$603.90								
					Drive from project to				
			Total	Time to load	DOT Stores	Time to unload	Total	No.	
Labor per 7 pedestals - District 2	Pay rate	Eringo	hourly	at project (HR)	(HR) and back	at DOT Stores (HR)	hours	workers	Total cost
Laborer - Group 1 (unskilled)	\$29.25	Fringe \$19.50	<b>wage</b> \$48.75	(HK) 0.7	2.4	(HK) 0.7	3.8	workers 2	\$370.50
Truck driver, 2 axle	\$29.23	\$22.32	\$51.55	0.7	2.4	0.7	3.8	1	\$370.30 \$195.89
Truck unver, 2 axie	Ψ23.23	ΨΖΖ.	ψυ1.00	0.7	2.7	0.7	3.0	'	Ψ190.09
							Total I	abor cost:	\$566.39
Equipment per 7 pedestals - District 2	Use rate	Total	Total cost						
3 ton utility truck	\$18.70	3.8	\$71.06						
	otal equipm	ent cost:	\$71.06						
Total cost to salvage 7 pedestals	\$637.45								

District 2:
Value of equipment to be salvaged: \$700.00
Cost to salvage equipment: 7 Pedestals \$637.45

DISTRICT 3									
					Drive from project to				
			Total	Time to load	DOT Stores	Time to unload			
			hourly	at project	(HR) and	at DOT Stores	Total	No.	
Labor per 6 pedestals - District 3	Pay rate	Fringe	wage	(HR)	back	(HR)	hours	workers	Total cost
Laborer - Group 1 (unskilled)	\$29.25	\$19.50	\$48.75	0.6	2.6	0.6	3.8	2	\$370.50
Truck driver, 2 axle	\$29.23	\$22.32	\$51.55	0.6	2.6	0.6	3.8	1	\$195.89
							Total I	abor cost:	\$566.39
Facility would not Considerately District 2	Han note	Total	T-4-14						
Equipment per 6 pedestals - District 3  3 ton utility truck	<b>Use rate</b> \$18.70	Hours 3.8	Total cost \$71.06						
· ·	काठ.70 tal equipm								
Total cost to salvage 6 pedestals		ieni cost.	Ψ11.00						
Polar ossite sarvage e poutotais	4001110								
					Drive from				
					project to				
			Total	Time to load	DOT Stores	Time to unload			
			hourly	at project	(HR) and	at DOT Stores	Total	No.	
Labor per 7 pedestals - District 3	Pay rate	Fringe	wage	(HR)	back	(HR)	hours	workers	Total cost
Laborer - Group 1 (unskilled)	\$29.25	\$19.50	\$48.75	0.7	2.6	0.7	4	2	\$390.00
Truck driver, 2 axle	\$29.23	\$22.32	\$51.55	0.7	2.6	0.7	4	. 1	\$206.20
		Total					i otai i	abor cost:	\$596.20
Equipment per 7 pedestals - District 3	Use rate	Hours	Total cost						
3 ton utility truck	\$18,70	4	\$74.80						
,	tal equipm								
Total cost to salvage 7 pedestals	\$671 00		•						

District 3:

Value of equipment to be salvaged: \$700.00
Cost to salvage equipment: 7 Pedestals \$671.00

proper 8 pedestals - District 4 Labor per 8 pedestals - Group 1 (unskilled) Truck driver, 2 axle  Equipment per 8 pedestals - District 4 Suserate Hours 3 ton utility truck  Total Cost to salvage 8 pedstals  Total Cost to salvage 8 pedstals  Total Time to load DO hourly at project (Har)  Pay rate Fringe wage (HR)  \$29.25 \$19.50 \$48.75 0.8  Total  **Total**  **Total**  **Total**  **Total**  **Total**  **Se9.76*  **Total**  **Total**  **Total**  **Dri pr  **Total**  **Tot		e to unload OOT Stores (HR) 0.8 0.8	Total hours 4.8 4.8 Total la	No. workers 2 1 abor cost:	Total cost \$468.00 \$247.44 \$715.44
Hourly   at project   CHR	HR) and at D back 3.2	OOT Stores (HR) 0.8	<b>hours</b> 4.8 4.8	workers 2 1	\$468.00 \$247.44
Laborer - Group 1 (unskilled) \$29.25 \$19.50 \$48.75 0.8  Truck driver, 2 axle \$29.23 \$22.32 \$51.55 0.8  Total  Equipment per 8 pedestals - District 4 Use rate Hours 7 total cost \$89.76  Total equipment cost: \$89.76  Total cost to salvage 8 pedstals \$805.20  Dri pr  Total Time to load DO hourly at project (HR)  Labor per 9 pedestals - District 4 Pay rate Fringe wage (HR)  Laborer - Group 1 (unskilled) \$29.25 \$19.50 \$48.75 0.9	3.2	0.8	4.8 4.8	2 1	\$468.00 \$247.44
Truck driver, 2 axle \$29.23 \$22.32 \$51.55 0.8  Total  Equipment per 8 pedestals - District 4			4.8	1	\$247.44
Equipment per 8 pedestals - District 4  Use rate Hours Total cost 3 ton utility truck \$18.70 4.8 \$89.76  Total equipment cost: \$89.76  Total cost to salvage 8 pedstals \$805.20  Dri pr  Total Time to load DO hourly at project (H Labor per 9 pedestals - District 4  Laborer - Group 1 (unskilled)  Pay rate Fringe wage (HR)  Laborer \$ 9.805.20 \$19.50 \$48.75 0.9	3.2	0.8		1 abor cost:	
Equipment per 8 pedestals - District 4  3 ton utility truck  Total equipment cost:  Total equipment cost:  Total cost to salvage 8 pedstals  Total equipment cost:  \$89,76  Total cost to salvage 8 pedstals  Dri  pr  Total Time to load DO  hourly at project (H  Labor per 9 pedestals - District 4  Laborer - Group 1 (unskilled)  Pay rate Fringe wage (HR)  \$29,25 \$19,50 \$48,75 0.9			Total la	abor cost:	\$715.44
Equipment per 8 pedestals - District 4  3 ton utility truck  Total equipment cost:  Total equipment cost:  Total cost to salvage 8 pedstals  Total equipment cost:  \$89,76  Total cost to salvage 8 pedstals  Dri  pr  Total Time to load DO  hourly at project (H  Labor per 9 pedestals - District 4  Laborer - Group 1 (unskilled)  Pay rate Fringe wage (HR)  \$29,25 \$19,50 \$48,75 0.9					
3 ton utility truck \$18.70 4.8 \$89.76  Total equipment cost: \$89.76  Total cost to salvage 8 pedstals \$805.20  Dri  pr  Total Time to load DO  hourly at project (H  Labor per 9 pedestals - District 4  Laborer - Group 1 (unskilled)  \$29.25 \$19.50 \$48.75 0.9					
Total equipment cost: \$89,76  Total cost to salvage 8 pedstals \$805.20  Dri pr Total Time to load DO hourly at project (H Labor per 9 pedestals - District 4 Pay rate Fringe wage (HR) Laborer - Group 1 (unskilled) \$29.25 \$19.50 \$48.75 0.9					
Total cost to salvage 8 pedstals \$805.20  Dri pr Total Time to load DO hourly at project (H Labor per 9 pedestals - District 4 Pay rate Fringe wage (HR) Laborer - Group 1 (unskilled) \$29.25 \$19.50 \$48.75 0.9					
Dri pr Total Time to load DO hourly at project (H Labor per 9 pedestals - District 4 Pay rate Fringe wage (HR) Laborer - Group 1 (unskilled) \$29.25 \$19.50 \$48.75 0.9					
pr Total Time to load DO hourly at project (H Labor per 9 pedestals - District 4 Pay rate Fringe wage (HR) Laborer - Group 1 (unskilled) \$29.25 \$19.50 \$48.75 0.9					
Labor per 9 pedestals - District 4Pay rateFringewage(HR)Laborer - Group 1 (unskilled)\$29.25\$19.50\$48.750.9		e to unload			
Laborer - Group 1 (unskilled) \$29.25 \$19.50 \$48.75 0.9	,	OOT Stores	Total	No.	
	back	· ,	hours	workers	Total cost
I TUCK OFFVER 2 AXIE \$29.23 \$27.32 \$51.55 U.9	3.2	0.9	5	2	\$487.50
Ψ20.20 Ψ21.02 Ψ01.00 0.0	3.2	0.9	5 <b>T</b> -4-11-	-1	\$257.75
Total			ı otal la	abor cost:	\$745.25
Equipment per 9 pedestals - District 4 Use rate Hours Total cost					
3 ton utility truck \$18,70 5 \$93,50					
Total equipment cost: \$93.50					
Total cost to salvage 9 pedstals \$838,75					

District 4:

Value of equipment to be salvaged: \$900.00 Cost to salvage equipment: 9 Pedestals \$838.75

#### 3: Comparison

For District 1, value of **four** salvaged pedestals is *greater* than cost to deliver equipment to DOT Stores For District 2, value of **seven** salvaged span poles is *greater* than cost to deliver equipment to DOT Stores For District 3, value of **seven** salvaged span poles is *greater* than cost to deliver equipment to DOT Stores For District 4 value of **nine** salvaged span poles is *greater* than cost to deliver equipment to DOT Stores

Note: Typically, Contractors transport the salvaged items in a single trip per project, which results in a lower cost to transport the items.

Therefore, the following calculations are conservative.

## COST ANALYSIS SALVAGE OF STEEL SPAN POLE

1: Value of steel span pole

EquipmentValueTotalSteel span pole\$250.001\$250.00Total value of salvaged equipment\$250.00

#### 2: Cost to salvage equipment

DISTRICT	1									
-	<b>span pole - District 1</b> Laborer - Group 1 (unskilled) Power equipment operator - Group 5	<b>Pay rate</b> \$29.25 \$37.26	Fringe \$19.50 \$24.05	Total hourly wage \$48.75 \$61.31	Time to load at project (HR) 0.25 0.25	Drive from project to DOT Stores (HR) and back 1.4 1.4	Time to unload at DOT Stores (HR) 0.25 0.25	Total hours 1.9 1.9	No. workers 2 1	Total cost \$185.25 \$116.49
		701.20	*=	******					bor cost:	\$301.74
			Total							
	per 1 span pole - District 1:	Use rate	Hours	Total cost						
	Bucket truck	\$31.10	1.9	\$59.09						
		Total equipm	ent cost:	\$59.09						
	Total cost to salvage 1 spa	n pole: \$360.83								
				Total hourly	Time to load at project	Drive from project to DOT Stores (HR) and	Time to unload at DOT Stores	Total	No.	
abor per 2	span poles - District 1	Pay rate	Fringe	wage	. (HR)	báck	(HR)	hours	workers	Total cost
	Laborer - Group 1 (unskilled)	\$29.25	\$19.50	\$48.75	0.5	1.4	0.5	2.4	2	\$234.00
	Power equipment operator - Group 5	\$37.26	\$24.05	\$61.31	0.5	1.4	0.5	2.4	1	\$147.14
								Total la	bor cost:	\$381.14
			Total							
	per 2 span poles - District 1:	Use rate	Hours	Total cost						
	Bucket truck	\$31.10	2.4	\$74.64						
	Total cost to salvage 2 span	Total equipm poles: \$455.78	ent cost:	\$74.64						
	Total Cost to Salvage 2 Spain	poics. \$400.70								

District 1:

Value of equipment to be salvaged: \$500.00 Cost to salvage equipment: 2 Span poles \$455.78

DISTRICT 2									<u> </u>
<b>Labor per 2 span poles - District 2</b> Laborer - Group 1 (unskilled) Power equipment operator - Group 5	<b>Pay rate</b> \$29.25 \$37.26	Fringe \$19.50 \$24.05	Total hourly wage \$48.75 \$61.31	Time to load at project (HR) 0.5 0.5	Drive from project to DOT Stores (HR) and back 2.4 2.4	Time to unload at DOT Stores (HR) 0.5 0.5	Total hours 3.4 3.4 Total la	No. workers 2 1 abor cost:	Total cost \$331.50 \$208.45 \$539.95
		Total							
Equipment per 2 span poles - District 2	Use rate	Hours	Total cost						
Bucket truck	\$31.10	3.4	\$105.74 <b>\$105.74</b>						
Total cost to salvage 2 span po	Total equipm les: \$645.69	eni cosi.	\$105.74						
			Total hourly	Time to load at project	Drive from project to DOT Stores (HR) and	Time to unload at DOT Stores	Total	No.	
Labor per 3 span poles - District 2	Pay rate	Fringe	wage	(HR)	back	(HR)	hours	workers	Total cost
Laborer - Group 1 (unskilled)	\$29.25	\$19.50	\$48.75	0.75	2.4	0.75	3.9	2	\$380.25
Power equipment operator - Group 5	\$37.26	\$24.05	\$61.31	0.75	2.4	0.75	3.9	1	\$239.11
		Total					Total la	bor cost:	\$619.36
Equipment per 3 span poles - District 2	Use rate	Hours	Total cost						
Bucket truck	\$31.10 Total equipm	3.9	\$121.29						
Total cost to salvage 3 span po									

District 2:

Value of equipment to be salvaged: \$750.00 Cost to salvage equipment: 3 Span poles \$740.65

DISTRICT 3									IT Fole Fage 3 of
Labor per 2 span poles - District 3	Pay rate	Fringe	Total hourly wage	Time to load at project (HR)	Drive from project to DOT Stores (HR) and back	Time to unload at DOT Stores (HR)	<del>-</del>	No. orkers Tota	al cost
Laborer - Group 1 (unskilled) Power equipment operator - Group 5	\$29.25 \$37.26	\$19.50 \$24.05	\$48.75 \$61.31	0.5 0.5	2.6 2.6	0.5 0.5	3.6 3.6 Total labor	1 \$2	51.00 20.72 <b>571.72</b>
Equipment per 2 span poles - District 3  Bucket truck	Use rate \$31.10 Total equipm	3.6	Total cost \$111.96 \$111.96						
Total cost to salvage 2 span pole		one ooot.	Ψ111100						
Labor per 3 span poles - District 3 Laborer - Group 1 (unskilled) Power equipment operator - Group 5	Pay rate \$29.25 \$37.26	Fringe \$19.50 \$24.05	Total hourly wage \$48.75 \$61.31	Time to load at project (HR) 0.75 0.75	Drive from project to DOT Stores (HR) and back 2.6 2.6	Time to unload at DOT Stores (HR) 0.75 0.75		1 \$2	al cost 99.75 51.37 <b>651.12</b>
	Use rate \$31.10 Total equipm	Total Hours 4.1 ent cost:	Total cost \$127.51 <b>\$127.51</b>				rotar labor	, 000ti.	551112
Total cost to salvage 3 span pole  Labor per 4 span poles - District 3  Laborer - Group 1 (unskilled)  Power equipment operator - Group 5	Pay rate \$29.25 \$37.26	Fringe \$19.50 \$24.05	Total hourly wage \$48.75 \$61.31	Time to load at project (HR)	Drive from project to DOT Stores (HR) and back 2.6 2.6	Time to unload at DOT Stores (HR) 1	hours wo 4.6 4.6	1 \$2	48.50 82.03
Equipment per 4 span poles - District 3  Bucket truck  Total cost to salvage 3 span pole	Use rate \$31.10 Total equipm es: \$873.59	Total Hours 4.6 ent cost:	Total cost \$143.06 <b>\$143.06</b>				Total laboi	r cost:     \$	730.53

District 3:

Value of equipment to be salvaged: \$1000.00 Cost to salvage equipment: 4 Span poles \$873.59

DISTRICT 4									
Labor per 3 span poles - District 4  Laborer - Group 1 (unskilled)  Power equipment operator - Group 5  Equipment per 3 span poles - District 4:  Bucket truck	Pay rate \$29.25 \$37.26 Use rate \$31.10 otal equipm	Fringe \$19.50 \$24.05 Total Hours 4.7 ent cost:	Total hourly wage \$48.75 \$61.31  Total cost \$146.17 \$146.17	Time to load at project (HR) 0.75 0.75	Drive from project to DOT Stores (HR) and back 3.2 3.2	Time to unload at DOT Stores (HR) 0.75 0.75	Total hours 4.7 4.7 Total la	No. workers 2 1 abor cost:	Total cost \$458.25 \$288.16 \$746.41
Total cost to salvage 3 span poles:	\$892.58								
Labor per 4 span poles - District 4	Pay rate	Fringe	Total hourly wage	Time to load at project (HR)	Drive from project to DOT Stores (HR) and back	Time to unload at DOT Stores (HR)	Total hours	No. workers	Total cost
Laborer - Group 1 (unskilled)	\$29.25	\$19.50	\$48.75	1	3.2	1	5.2	2	\$507.00
Power equipment operator - Group 5	\$37.26	\$24.05	\$61.31	1	3.2	1	5.2 <b>Total la</b>	1 abor cost:	\$318.81 <b>\$825.81</b>
Equipment per 4 span poles - District 4:	Use rate	Total	Total cost						
Bucket truck	\$31.10 otal equipm	5.2 ent cost:	\$161.72 <b>\$161.72</b>						
Total cost to salvage 4 span poles:	\$987.53								

District 4:

Value of equipment to be salvaged: \$1000.00 Cost to salvage equipment: 4 Span poles \$987.53

#### 3: Comparison

For District 1, value of **two** salvaged span poles is *greater* than cost to deliver equipment to DOT Stores For Districts 2, value of **three** salvaged span poles is *greater* than cost to deliver equipment to DOT Stores For Districts 3, value of **four** salvaged span poles is *greater* than cost to deliver equipment to DOT Stores For District 4, value of **four** salvaged span poles is *greater* than cost to deliver equipment to DOT Stores

#### Note: Typically, Contractors transport the salvaged items in a single trip per project, which results in a lower cost to transport the items.

Therefore, the following calculations are conservative.

## COST ANALYSIS SALVAGE OF TRAFFIC SIGNAL 360 VIDEO DETECTION SYSTEM

#### 1: Value of equipment

360 Camera Video detection system

EquipmentValueVideo detection processor\$1,700.001\$1,700.00

Total value of salvaged equipment \$1,700.00

#### 2: Cost to salvage equipment

				Total	Time to load	Drive from	Time to unload			
				hourly	at project	project to DOT	at DOT Stores	Total	No.	
Labor:		Pay rate	Fringe	wage	(HR)	Stores (HR)	(HR)	hours	workers	Total cost
	Laborer - Group 1 (unskilled)	\$29.25	\$19.50	\$48.75	0.25	3.2	0.25	3.7	1	\$180.38
	Truck driver - 3 axle	<b>\$29.23</b>	\$22.32	\$51.55	0.25	3.2	0.25	3.7	1	\$190.74
								Total I	abor cost	\$371 11

Equipment: Use rate Total Hours Total cost

Box truck \$25.00 3.7 \$92.50 **Total equipment cost: \$92.50** 

Notes:

Total cost to salvage equipment: \$463.61

Salvaged equipment is delivered to DOT Rocky Hill Lab, 280 West Street, Rocky Hill, CT

Distances and driving times taken from Google Maps

	Distance				
Distance from district to DOT Rocky Hill Lab	Town	(mi)	Time (hr)		
DISTRICT 1 to DOT Lab	Stafford	39.2	0.7		
DISTRICT 2 to DOT Lab	Putnam	76.3	1.2		
DISTRICT 3 to DOT Lab	Greenwich	73.4	1.3		
DISTRICT 4 to DOT Lab	Kent	72.2	1.6		

3: Comparison

Labor wage and fringe are prevailing wage rates for Fairfield County (highest rates in state)

Equipment rates are adapted from Kelly Blue Book for developing ConnDOT estimates for maintenance work by service memo

Value of equipment to be salvaged: \$1,700.00 Cost to salvage equipment \$463.61

Value of equipment to be salvaged is greater than cost to deliver the equipment to DOT Rocky Hill Lab

#### Note: Typically, Contractors transport the salvaged items in a single trip per project, which results in a lower cost to transport the items.

Therefore, the following calculations are conservative.

#### **COST ANALYSIS**

#### SALVAGE OF TRAFFIC SIGNAL 360 VIDEO DETECTION SYSTEM

#### 1: Value of equipment

360 Camera Video detection system

Value

Equipment(each)QuantityTotal value360 Degree Camera\$585.001\$585.00

Total value of salvaged equipment \$585.00

2: Cost to salvage equipment

				Total	Time to load	Drive from	Time to unload			
				hourly	at project	project to DOT	at DOT Stores	Total	No.	
Labor:		Pay rate	Fringe	wage	(HR)	Stores (HR)	(HR)	hours	workers	Total cost
	Laborer - Group 1 (unskilled)	\$29.25	\$19.50	\$48.75	0.25	3.2	0.25	3.7	1	\$180.38
	Truck driver - 3 axle	\$29.23	\$22.32	\$51.55	0.25	3.2	0.25	3.7	1	\$190.74
								Total	ahor cost	\$371 11

Equipment: Use rate Total Hours Total cost

Box truck \$25.00 3.7 \$92.50

Total equipment cost: \$92.50

Notes:

Total cost to salvage equipment: \$463.61

Salvaged equipment is delivered to DOT Rocky Hill Lab, 280 West Street, Rocky Hill, CT

Distances and driving times taken from Google Maps

	Distance					
Distance from district to DOT Rocky Hill Lab	Town	(mi)	Time (hr)			
DISTRICT 1 to DOT Lab	Stafford	39.2	0.7			
DISTRICT 2 to DOT Lab	Putnam	76.3	1.2			
DISTRICT 3 to DOT Lab	Greenwich	73.4	1.3			
DISTRICT 4 to DOT Lab	Kent	72.2	1.6			

3: Comparison

Labor wage and fringe are prevailing wage rates for Fairfield County (highest rates in state)

Equipment rates are adapted from Kelly Blue Book for developing ConnDOT estimates for maintenance work by service memo

Value of equipment to be salvaged: \$585.00 Cost to salvage equipment \$463.61

Value of equipment to be salvaged is greater than cost to deliver the equipment to DOT Rocky Hill Lab

#### Note: Typically, Contractors transport the salvaged items in a single trip per project, which results in a lower cost to transport the items.

Therefore, the following calculations are conservative.

## COST ANALYSIS SALVAGE OF TRAFFIC SIGNAL camera assemblies

#### 1: Value of camera assemblies

Video detection system

EquipmentValue<br/>(each)QuantityTotal valueIP Camera, thermal camera, or standard camera\$327.002\$654.00

Total value of salvaged equipment \$654.00

#### 2: Cost to salvage equipment

Labor:		Pay rate	Fringe	hourly wage	at project (HR)	project to DOT Stores (HR)	at DOT Stores (HR)	Total hours	No. workers	Total cost
Labor.	Laborer - Group 1 (unskilled)	\$29.25	\$19.50	\$48 <b>.</b> 75	0.25	3.2	0.25	3.7	1	\$180.38
	Truck driver - 3 axle	\$29.23	\$22,32	\$51,55	0.25	3,2	0.25	3.7	1	\$190.74
								Total I	abor cost:	\$371.11

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 Equipment:
 Use rate
 Total Hours
 Total cost

 Box truck
 \$25.00
 3.7
 \$92.50

Total equipment cost: \$92.50

Notes:

Total cost to salvage equipment: \$463.61

Salvaged equipment is delivered to DOT Rocky Hill Lab, 280 West Street, Rocky Hill, CT

Distances and driving times taken from Google Maps

	Distance						
Distance from district to DOT Rocky Hill Lab	Town	(mi)	Time (hr)				
DISTRICT 1 to DOT Lab	Stafford	39.2	0.7				
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3: Comparison Labor wage and fringe are prevailing wage rates for Fairfield County (highest rates in state)

Equipment rates are adapted from Kelly Blue Book for developing ConnDOT estimates for maintenance work by service memo

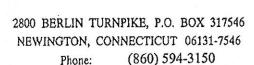
Value of equipment to be salvaged: \$654.00 Cost to salvage equipment \$463.61

Value of equipment to be salvaged is greater than cost to deliver the equipment to DOT Rocky Hill Lab



# STATE OF CONNECTICUT

#### DEPARTMENT OF TRANSPORTATION



January 11, 2013



Ms. Amy Jackson-Grove Division Administrator Federal Highway Administration 628-2 Hebron Avenue, Suite 303 Glastonbury, CT 06033

Dear Ms. Jackson-Grove:

Subject: Salvage of Traffic Control Signal Equipment

This letter is to provide additional information to the Connecticut Department of Transportation's (ConnDOT) request to the Federal Highway Administration (FHWA) to salvage traffic signal controllers, aluminum pedestals, and steel span poles that will be removed under federally funded projects.

Based on the enclosed cost analysis, the ConnDOT recommends that all controllers and cabinets be salvaged on federally funded projects. Additionally, ConnDOT recommends the following minimum quantities of steel span poles and aluminum pedestals for salvage on federally funded projects based on the construction district in which the majority of the work will occur:

District 1: two (2) steel span poles and three (3) aluminum pedestals District 2: three (3) steel span poles and five (5) aluminum pedestals District 3: three (3) steel span poles and six (6) aluminum pedestals District 4: four (4) steel span poles and seven (7) aluminum pedestals

Based on the above, it is our recommendation that FHWA give concurrence for ConnDOT to salvage certain traffic signal equipment removed under federally funded projects, and that it cover these projects for a period not to exceed five (5) years from the time of approval,

Please contact Ms. Lisa Conroy at (860) 594-2985, should you have any questions about this request.

Very truly yours,

James H. Norman, P.E. Engineering Administrator

Bureau of Engineering and Construction

Enclosure

#### FHWA Concurrence

The Federal Highway Administration concurs with ConnDOT's recommendation to salvage traffic signal controllers, aluminum pedestals, and steel span poles under federally funded projects.

Amy Jackson-Grove, Division Administrator

Federal Highway Administration



#### §635.403 Definitions.

As used in this subpart, the following terms have the meanings indicated:

- (a) FHWA Division Administrator means the chief Federal Highway Administration (FHWA) official assigned to conduct business in a particular
- (b) Material means any tangible substance incorporated into a Federal-aid highway project;

(c) PS&E means plans, specifications, and estimates;

(d) Special provisions means additions and revisions to the standard and supplemental specifications applicable to an individual project;

(e) Standard specifications means a compilation in book form of specifications approved for general application and repetitive use;

(f) State has the meaning set forth in 23 U.S.C. 101;

- (g) State highway agency means that department, commission, board, or official of any State charged by its laws with the responsibility for highway construction;
- (h) Supplemental specifications means approved additions and revisions to the standard specifications.

#### §635.405 Applicability.

The requirements and procedures prescribed in this subpart apply to all contracts relating to Federal-aid highway projects, except those constructed under a Certification Acceptance Plan.

#### §635.407 Use of materials made available by a public agency.

(a) Contracts for highway projects shall require the contractor to furnish all materials to be incorporated in the work and shall permit the contractor to select the sources from which the materials are to be obtained. Exception to this requirement may be made when there is a definite finding by the State highway agency and concurred in by the FHWA Division Administrator, that it is in the public interest to require the contractor to use material furnished by the State highway agency or from sources designated by the State highway agency. In cases such as this, the FHWA does not expect mutual sharing of costs unless the State highway agency receives a related credit from another agency or political subdivision of the State. Where such a credit does accrue to the State highway agency, it shall be applied to the Federal-aid project involved. The designation of a mandatory material source may be permitted based on environmental considerations, provided the environment would be substantially enhanced without excessive cost. Otherwise, if a State highway agency proposal to designate a material source for mandatory use would result in higher project costs, Federal-aid funds shall not participate in the increase even if the designation would conserve other public funds.

(b) The provisions of paragraph (a) of this section will not preclude the designation in the plans and specifications of sources of local natural materials, such as borrow aggregates, that have been investigated by the State highway agency and found to contain materials meeting specification requirements. The use of materials from such designated sources shall not be mandatory unless there is a finding of public interest as stated in paragraph (a) of this section.

(c) Federal funds may participate in the cost of specifications materials made available by a public agency when they have been actually incorporated in accepted items of work, or in the cost of such materials meeting the criteria and stockpiled at the locations specified in §635.114 of this chap-

- (d) To be eligible for Federal participation in its cost, any material, other than local natural materials, to be purchased by the State highway agency and furnished to the contractor for mandatory use in the project, must have been acquired on the basis of competitive bidding, except when there is a finding of public interest justifying the use of another method of acquisition. The location and unit price at which such material will be available to the contractor must be stated in the special provisions for the benefit of all prospective bidders. The unit cost eligible for Federation participation will be limited to the unit cost of such material to the State highway agency.
- (e) When the State highway agency or another public agency owns or has

§ 635.409

control over the source of a local natural material the unit price at which such material will be made available to the contractor must be stated in the plans or special provisions. Federal participation will be limited to (1) the cost of the material to the State highway agency or other public agency; or (2) the fair and reasonable value of the material, whichever is less. Special cases may arise that will justify Federal participation on a basis other than that set forth above. Such cases should be fully documented and receive advance approval by the FHWA Division Administrator.

- (f) Costs incurred by the State highway agency or other public agency for acquiring a designated source or the right to take materials from it will not be eligible for Federal participation if the source is not used by the contractor.
- (g) The contract provisions for one or a combination of Federal-aid projects shall not specify a mandatory site for the disposal of surplus excavated materials unless there is a finding by the State highway agency with the concurrence of the FHWA Division Administrator that such placement is the most economical except that the designation of a mandatory site may be permitted based on environmental considerations, provided the environment would be substantially enhanced without excessive cost.

#### §635.409 Restrictions upon materials.

No requirement shall be imposed and no procedure shall be enforced by any State highway agency in connection with a project which may operate:

- (a) To require the use of or provide a price differential in favor of articles or materials produced within the State, or otherwise to prohibit, restrict or discriminate against the use of articles or materials shipped from or prepared, made or produced in any State, territory or possession of the United States; or
- (b) To prohibit, restrict or otherwise discriminate against the use of articles or materials of foreign origin to any greater extent than is permissible under policies of the Department of Transportation as evidenced by requirements and procedures prescribed

by the FHWA Administrator to carry out such policies.

#### §635.410 Buy America requirements.

- (a) The provisions of this section shall prevail and be given precedence over any requirements of this subpart which are contrary to this section. However, nothing in this section shall be construed to be contrary to the requirements of §635.409(a) of this subpart.
- (b) No Federal-aid highway construction project is to be authorized for advertisement or otherwise authorized to proceed unless at least one of the following requirements is met:
- (1) The project either: (i) Includes no permanently incorporated steel or iron materials, or (ii) if steel or iron materials are to be used, all manufacturing processes, including application of a coating, for these materials must occur in the United States. Coating includes all processes which protect or enhance the value of the material to which the coating is applied.
- (2) The State has standard contract provisions that require the use of domestic materials and products, including steel and iron materials, to the same or greater extent as the provisions set forth in this section.
- (3) The State elects to include alternate bid provisions for foreign and domestic steel and iron materials which comply with the following requirements. Any procedure for obtaining alternate bids based on furnishing foreign steel and iron materials which is acceptable to the Division Administrator may be used. The contract provisions must (i) require all bidders to submit a bid based on furnishing domestic steel and iron materials, and (ii) clearly state that the contract will be awarded to the bidder who submits the lowest total bid based on furnishing domestic steel and iron materials unless such total bid exceeds the lowest total bid based on furnishing foreign steel and iron materials by more than 25 percent.
- (4) When steel and iron materials are used in a project, the requirements of this section do not prevent a minimal use of foreign steel and iron materials, if the cost of such materials used does not exceed one-tenth of one percent (0.1)



## Memorandum

Federal Highway **Administration** 

Washington, D.C. 20590

Subject: Salvage Credits

Date:

AUG 17 1988

Chief, Construction and Maintenance Division Office of Highway Operations

Reply to HH0-32 Attn. of:

Regional Federal Highway Administrators Direct Federal Program Administrator

This memorandum is to supersede Mr. Cunningham's memorandum of 1985, which provided guidance relating to salvage and salvage credit on active Federal-aid construction projects. In keeping with the Department of Transportation's policy on disposition of equipment, the threshold value for salvage credit has been revised to \$5,000. Guidance relating to salvage and salvage credit on active Federal-and construction projects is as follows.

In general, salvage credit (credit to Federal funds) should be considered when there is a need to dispose of expendable and nonexpendable tangible personal property acquired with federal funds. Such property may be unused construction materials or salvaged highway appurtenances or other equipment and/or material for which the useful life extends beyond the construction contract.

Careful attention should be given to the contract provisions for salvage to ensure that the cost of the operation, i.e., removal or salvage, does not exceed the value of the item(s) once salvaged.

Salvage credit (credit to Federal funds) will not be required under the following circumstances: a) the salvaged item has a value less than \$5,000; b) the salvaged item becomes the contractor's property by virtue of the contract provisions, or c) the salvaged item will be reused in future projects eligible under Title 23 U.S.C. until its useful life is expended. The disposition of salvaged items on demonstration projects for which project funds are designated by amount and location should be determined in consultation with the appropriate program office in Headquarters.

Original Signed By William A. Weseman

William A. Weseman