PLANNING DEPARTMENT **MEMORANDUM # 14-04**

DATE:

April 21st, 2014

TO:

Honorable Mayor Joyce Downing and City Council Members

FROM:

John Pick, City Manager

Brook Svoboda, Director of Planning & Development

SUBJECT:

I-25 Replacement of Wood Picket Fences with Concrete Noise Walls

BACKGROUND

As part of the I-25 Managed Lanes Project (TIGER IV/CDOT), which is currently underway, the existing wood picket fences are to be repaired and replaced on the highway side of the project. Recent efforts of CDOT, Adams County and Northglenn staff have prompted further discussion on replacing as much of the wood picket fences along I- 25 with concrete sound walls as possible as part of the project.

The scope of the project would include an additional 13,055 linear feet of concrete sound walls - replacing the existing wood fence(s). Attachment 1 provides a graphical depiction of the project area's existing wood fence - 76% of which is located in Northglenn and 24% of which is located in unincorporated Adams County. There are no wood fences in Thornton.

CDOT requested that the contra tor develop additional engineering and construction cost estimates for this purpose. Their estimated cost to replace the wood fences with concrete sound walls is approximately \$8.4 million (see Attachment 2 for a detailed cost estimate). Based on the commitments to date, there is a \$500,000 gap to execute this project. The table below provides proposed funding commitments:

Total Cost to Replace Wood Fence	\$8,429,675.73
Funding Resources	
Adams County	\$3,000,000.00
CDOT	\$4,929,675.73
Northglenn	\$500,000.00
Total Funding	\$8,429,675.73

BUDGET/TIME IMPLICATIONS

In 2014, the City is in the second year of a three-year \$550,000.00 local match commitment (\$183,000/yr) towards the I-25 Managed Lanes project (TIGER IV Grant). As a condition for receiving the federal monies (\$15 Million) from the TIGER IV Grant, all local commitments are required to be made prior to the completion of the project, currently scheduled for the end of 2015. However, CDOT has recently determined that the local match payments can be extended two additional years to 2017. As a result, Council could consider the following payment options to address the additional \$500,000 we are being asked to commit:

- Extend the current payment schedule two additional years, in the amount of \$250,000/yr for 2016 and 2017.
- Recalculate the payment schedule over the remaining 4 year term, for an annual payment of \$216,750 each year between 2014-2017.
- Increase the 2014 and 2015 payments to \$433,000/yr, to complete our payments in two years.

The Capital Projects Fund is a potential funding source for the \$500,000 now being requested. The Fund has approximately \$5.6 Million of ½% sales/use tax restricted fund balance available. The current financial commitment is being appropriated through the Capital Projects Fund as well.

RECOMMENDATION

At this time CDOT is seeking a Letter of Commitment (LoC) from the City for this additional \$550,000. A draft LoC is included with this report as **Attachment 3**. If approved by Council, an amendment to the IGA between CDOT and Northglenn would be required at a later date. Staff is seeking direction from the Council if there is an interest in participating in the replacement of the wood picket fences with concrete sound walls along I-25. With the additional funding commitment discussed we have been advised that if the City does not participate, it is likely that a portion of the existing wood picket fences would not be replaced with concrete.

STAFF REFERENCE

Brook Svoboda, Director of Planning & Development <u>bsvoboda@northglenn.org</u> 303.450.8937

ATTACHMENTS

ATTACHMENT 1 Project Area Map

ATTACHMENT 2 Cost Estimate and Proposed Funding Analysis

ATTACHMENT 3 Letter of Commitment (Draft)

ATTACHMENT 4 Noise Wall Rendering

Final Technical Memorandum

Exhibit 2. Existing Wood Noise Barrier 1



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Final Technical Memorandum

Exhibit 3. Existing Wood Noise Barrier 2



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Final Technical Memorandum

Exhibit 4. Existing Wood Noise Barriers 3 and 4



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I-25 Managed Lanes Existing Wooden Barrier Analysis - Replace with Concrete at same dimensions as existing barrier

% of Barrier in Adams County =

24%

% of Barrier in Northglenn = **76%**

Existing Wooden Barrier 1

Station to Station	NB/SB	City or County	Wall Length (FT)	Wall Height (FT)	Wall Area (SF)			Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @			
92+50 to 97+00	NB	Adams County	450	12	5,400	\$	220,536	\$	18,900																																												
97+00 to 107+00	NB	Adams County	1,069	12	12,828	\$	523,896	\$	44,898																																												
107+00 to 118+00	NB	Adams County	1,100	12	13,200	\$	539,088	\$	46,200																																												
118+00 to 122+50	NB	Adams County	450	12	5,400	\$	220,536	\$	18,900																																												
		Barrier 1 Totals -	3,069		36,828	\$	1,504,056	\$	128,898																																												

Existing Wooden Barrier 2

Station to Station	NB/SB	City or County	Wall Length (FT)	Wall Height (FT)	Wall Area (SF)			(SF) Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @			
232+00 to 241+50	SB	Northglenn	950	12	11,400	\$	465,576	\$	39,900																
242+00 to 245+00	SB	Northglenn	416	12	4,992	\$	203,873	\$	17,472																
245+00 to 248+00	SB	Northglenn	300	12	3,600	\$	147,024	\$	12,600																
		Barrier 2 Totals -	1,666		19,992	\$	816,473	\$	69,972																

Existing Wooden Barrier 3

Station to Station	NB/SB	City or County	Wall Length (FT)	Wall Height (FT)	Wall Area (SF)			Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Removal of Sound Barrier Fence Cos @ \$3.50/SF	
266+91 to 275+00	NB	Northglenn	733	8	5,864	\$	239,486	\$	20,524																																																				
275+00 to 293+00	NB	Northglenn	1,934	12	23,208	\$	947,815	\$	81,228																																																				
293+00 to 310+00	NB	Northglenn	1,735	12	20,820	\$	850,289	\$	72,870																																																				
310+00 to 313+00	NB	Northglenn	246	8	1,968	\$	80,373	\$	6,888																																																				
313+00 to 317+00	NB	Northglenn	419	12	5,028	\$	205,344	\$	17,598																																																				
		Barrier 3 Totals -	5,067		56,888	\$	2,323,306	\$	199,108																																																				

Existing Wooden Barrier 4

Station to Station	NB/SB	City or County	Wall Length (FT)	Wall Height (FT)	Wall Area (SF)	Concrete Noise Wall Cost @ \$40.84/SF		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Wall Cost @		Barı	noval of Sound rier Fence Cost @ \$3.50/SF
288+00 to 309+36	SB	Northglenn	2,057	12	24,684	\$	1,008,095	\$	86,394																																				
308+48 to 311+91	SB	Northglenn	339	8	2,712	\$	110,758	\$	9,492																																				
310+32 to 317+93	SB	Northglenn	745	12	8,940	\$	365,110	\$	31,290																																				
318+05 to 319+18	SB	Northglenn	112	8	896	\$	36,593	\$	3,136																																				
	•	Barrier 4 Totals -	3,253		37,232	\$	1,520,555	\$	130,312																																				

		Wall Length (FT)	Wall Area (SF)	Wa	crete Noise all Cost @ 40.84/SF	Barrier	al of Sound Fence Cost 3.50/SF
W	ooden Barrier Totals -	13,055	150,940	\$	6,164,390	\$	528,290

Cost of Wooden Barrier Replacement =	\$ 6,692,679.60
Estimated Cost of Noise Analysis and Design =	\$ 375,000.00
Construction Engineering (22.1%) =	\$ 1,361,996.13
Total Funding for Wooden Barrier Replacement =	\$ 8,429,675.73
Project Savings from Eliminating Wood Barrier Rehab =	\$ (904,801.20)
Adams County Funding =	\$ 2,000,000.00
CDOT RPP Funding =	\$ 2,000,000.00
Funding Gap =	\$ 3,524,874.53

Additional Monies to close Funding Gap

Additional Local Agency Funding = \$	\$ 1,500,000.00
Additional Funding From Project = S	\$ 2.024.874.53

ATTACHMENT 3

April 8, 2014

Jay Hendrickson Colorado Department of Transportation Region 1 North Engineering 4670 North Holly Street Denver, CO 80216

RE: CDOT Project IM 0253-222, SA 18695, I-25 Managed Lanes: US 36 to 120th Ave

Dear Jay;

The City of Northglenn is pleased to work with CDOT to replace the existing wood soundwalls along I-25 between US 36 and 112th Avenue with concrete post and panel walls. This work will be included in the current work of the I-25 Managed Lanes project currently under construction. The estimated construction cost to complete this additional work is approximately \$8,429,675.73, and the City's portion would be a total of \$500,000.

Please accept this letter as the City's commitment letter to furnish an additional \$500,000 and initiate the process to amend the current IGA. The payments will be made in two installments of \$250,000 in 2016 and 2017.

If you have any questions, please do not hesitate to call me.

Sincerely,

ATTACHMENT 4



ATTACHMENT 4

