

**PUBLIC WORKS DEPARTMENT
MEMORANDUM #2015 – 47**

DATE: November 2, 2015
TO: Honorable Mayor Joyce Downing and City Council Members
FROM: David H. Willett, Acting City Manager/Public Works Director
SUBJECT: **Council Study Session**
2016 Residential Street Program



BACKGROUND

The Pavement Condition Index (PCI) survey was completed for all public roadways in the City of Northglenn in 2013. The PCI is completed every three years. The data collected during the survey is used to formulate recommendations for pavement maintenance for the 2016 Residential Street Program. The PCI data is available upon request.

RESIDENTIAL STREET PROGRAM (pavement maintenance)

Recommended pavement maintenance treatments includes: milling and overlay, chip seal, slurry seal and crack seal.

Mill and overlay involves removal of the top 1-1/2 inches of existing asphalt and applying 1-1/2 inches of new asphalt pavement section per CDOT recommendation. This treatment provides structural stability and adds ten to fifteen years to the life expectancy of the pavement.

- Clarkson Ct – Sylvia Dr to Cul De Sac PCI 62
- McCrumb Dr – E. 119th Pl to Cul De Sac PCI 64
- Claire Ln – Kennedy Dr to Lambert Ln PCI 71
- Claire Ln – Lambert Ln to Roseanna Dr PCI 50
- E. 117th Ave – Washington St – Dead End PCI 63

Chip seal is an application of a bituminous binder covered with an application of clean graded aggregate to an existing asphalt surface. This type of treatment is widely used and provides a new wear surface that will extend the life expectancy of the pavement by five to seven years.

- Gilpin St/Williams St – E. 105th Pl to E. 105th Pl PCI 43
- Marion Wy – E. 105th Pl to Marion St PCI 44
- Grant St – E. 117th Ave to Dead End PCI 66
- E. 116th Ave – Lincoln St to Grant St PCI 64
- Lunceford Ln – W. 99th Ave to W. 98th Ave PCI 52
- Highline Dr – Malley Dr to E. 113th Pl PCI 68
- Highline Dr – E. 113th Pl to E. 112th Pl PCI 72
- Lou Dr – Fred Dr to City Limits PCI 53

RESIDENTIAL STREET PROGRAM (PCI Survey Assessment)

Council Resolution CR-98 is a resolution to maintain the City of Northglenn street system at a rating of seventy (70) or better on the pavement condition index rating scale. In 2016 the Pavement Condition Index must be completed as to meet the requirements of every three years. To complete this task staff will solicit proposals from independent firms qualified to complete this task. This will allow for a more uniform and consistent ranking among all streets and better assist staff with future recommendations for pavement maintenance.

Residential Street Program 2016

104th AVE WASHINGTON TO IRMA (MILL AND OVERLAY)

In 2016 the City of Thornton is proposing to mill and overlay 104th Ave from Washington to Irma on the south side of the road. The City has the option to team with Thornton to complete both north and south side. The portion of work has not been included in the residential street program as 104th is classified as a major arterial. The estimated budget cost for Northglenn portion will be \$275,000. It is anticipated that Thornton would manage the project and Northglenn would provide funding for our portion only.

BUDGET/TIME IMPLICATIONS

- 2016 Residential Street Program has an appropriation of \$550,000 (ADCOT) for both the roadway maintenance and PCI survey work.
- 104th mill and overlay estimated Northglenn portion \$275,000.

STAFF REFERENCE

Kent Kisselman, PE, Engineering Manager

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Gregory Yanker, PE, Lead Engineer

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Attachments:

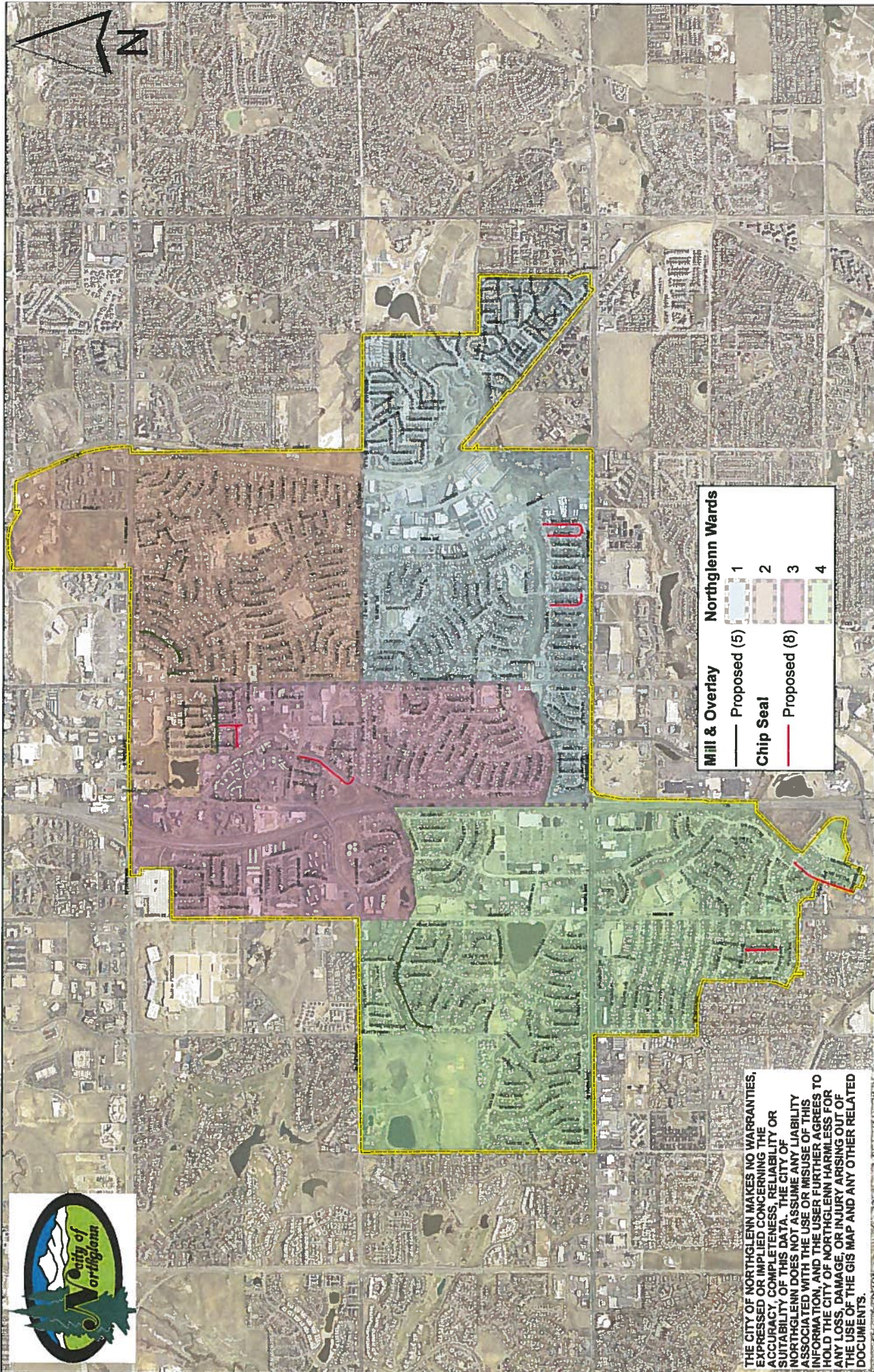
- *2016 Residential Street Program Cost*
- *2016 Residential Street Program Map*
- *Council Resolution CR-98*

Proposed Residential Street Program Work 2016

Proposed Work	Street	From	To	2013 PCI	Length (Feet)	Cost Estimate
Mill & Overlay	Clarkson Ct	Sylvia Dr	Cul De Sac	62	350	\$ 15,750
	McCrumb Dr	E 119th Pl	Cul De Sac	64	1260	\$ 56,700
	Claire Ln	Kennedy Dr	Lambert Ln	71	1448	\$ 65,160
	Claire Ln	Lambert Ln	Roseanna Dr	50	1312	\$ 59,040
	E 117th Ave	Washington St	Dead End	63	1520	\$ 68,400
		Total Length			5890	\$ 265,050
Chip Seal	Gilpin St/Williams St	E 105th Pl	E 105th Pl	43	1800	\$ 27,000
	Marion Wy	E 105th Pl	Marion St	44	870	\$ 13,050
	Grant St	E 117th Ave	Dead End	66	570	\$ 8,550
	E 116th Ave	Lincoln St	Grant St	64	480	\$ 7,200
	Lunceford Ln	W 99th Ave	W 98th Ave	52	743	\$ 11,145
	Highline Dr	Malley Dr	E 113th Pl	68	600	\$ 9,000
	Highline Dr	E 113th Pl	E 112th Pl	72	538	\$ 8,070
	Lou Dr	Fred Dr	TCL	53	590	\$ 8,850
		Total Length			6191	\$ 92,865
Mob/Demob, Traffic Control, Testing						\$ 35,791.50
Sub Total						\$ 425,589
Contingency						\$ 42,559
Grand Total						\$ 468,148

Optional Additions	Street	From	To		Length (Feet)	Cost Estimate
Crack Seal	E 105th Pl	Washington St	Irma Dr	70	4075	\$ 18,338
	Franklin St/Franklin Wy	E 105th Pl	E 105th Pl	81	1540	\$ 6,930
	Sylvia Dr	E 120th Ave	Washington St	75	1470	\$ 6,615
		Total Length			7085	\$ 31,883
Mill & Overlay	Clarkson St/Carlile St	E 105th Pl	E 105th Pl	55	1585	\$ 71,325
	Emerson St/Ogden St	E 105th Pl	E 105th Pl	51	1695	\$ 76,275
	Corona St/Downing St	E 105th Pl	E 105th Pl	62	1525	\$ 68,625
	Roseanna Dr	Claire Ln	Kennedy Dr	72	1062	\$ 47,790
		Total Length			5867	\$ 264,015
Chip Seal	Palmer Ln	W 99th Ave	W 98th Ave	70	740	\$ 11,100
	Grant St	E 118th Pl	E 117th Ave	83	1000	\$ 15,000
	Sherman St	E 118th Pl	E 118th Ave	72	400	\$ 6,000
	Sherman St	E 118th Ave	E 117th Ave	78	960	\$ 14,400
	Lincoln St	E 118th Pl	E 117th Pl	78	910	\$ 13,650
	E 117th Pl	Lincoln St	Sherman St	84	230	\$ 3,450
	Lincoln Dr	Malley Dr	E 113th Pl	77	575	\$ 8,625
	Sherman Dr	E 113th Pl	Cul De Sac	80	455	\$ 6,825
	E 116th Ave	Logan St	Pearl St	78	470	\$ 7,050
	Logan St	E. 117th Ave	Dead End	77	570	\$ 8,550
	Humboldt St/Lafayette St	E 105th Pl	E 105th Pl	76	1525	\$ 22,875
	E 113th Pl	Highline Dr	Cul De Sac	75	830	\$ 12,450
		Total Length			8665	\$ 129,975

Cost estimate based on 2015 cost per linear foot with CPI price adjustment



Mill & Overlay		Northglenn Wards			
—	Proposed (5)	1	2	3	4
—	Chip Seal	1	2	3	4
—	Proposed (8)	1	2	3	4

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SPONSORED BY: COUNCIL MEMBERS CLYNE, LINDSEY & PAIZ

COUNCILMAN'S RESOLUTION

RESOLUTION NO.

No. CR-98
Series of 2006

06-92
Series of 2006

A RESOLUTION TO MAINTAIN THE CITY OF NORTHGLENN STREET SYSTEM AT A RATING OF SEVENTY (70) OR BETTER ON THE PAVEMENT CONDITION INDEX RATING SCALE.

WHEREAS, the cost of rehabilitation and reconstruction is approximately fourteen (14) times as much as pavement preservation projects per lane mile over the life of a project; and

WHEREAS, for every dollar spent on preventive maintenance, between \$4 and \$14 are saved in rehabilitation.

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF NORTHGLENN, COLORADO, THAT:

Section 1. The City Council directs that the City of Northglenn street system in its entirety be maintained at an average rating of seventy (70) or better on the Pavement Condition Index Rating Scale in accordance with the then current version of ASTM Standard No. D 6433 using the PAVER system or a comparable pavement condition rating system.

Section 2. The City Council further directs that the street condition be assessed every three (3) years using the PAVER system or a comparable pavement condition rating system.


DATED at Northglenn, Colorado, this 27th day of July, 2006.


KATHLEEN M. NOVAK
Mayor

ATTEST:


DIANA L. LENTZ, CMC
City Clerk

APPROVED AS TO FORM:


COREY Y. HOFMANN
City Attorney