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Introduction

The purpose of this report is to identify, inventory and define a process to accomplish the paving of the remaining 81 unpaved residential alleys within the City of Minneapolis and to provide recommendations regarding the best way to address them. The report includes suggestions for vacating some as well as a long term program for the permanent paving of the remainder of these alleys. It only addresses public alleys (alleys in the public right-of-way) and not the private alleys throughout the City.

This report addresses what are commonly called “dirt” alleys. The description comes from the fact that the surface material may indeed be nothing but compacted soils, but in most cases these alleys are in poor condition with surfaces ranging from patches of asphalt, recycled asphalt millings, seal coat chips, crushed rock aggregates, “oiled dirt” like the old street surfaces, to just plain dirt. Some may look “paved” but they are not. They are generally poorly graded, provide poor surface water drainage and are difficult to maintain adequately. A few have been paved with a thin asphalt surface that is still in relatively good condition, but this was done as a maintenance measure long ago rather than as part of the alley paving program. In this report, these “dirt” or otherwise unimproved alleys are referred to as unpaved alleys.

Also, there are some unimproved alleys that serve commercial areas, particularly in the downtown area, but they have their own set of particular construction and funding issues, and are beyond the scope of this report.

Need for Program

There are multiple reasons for the City of Minneapolis to move forward with this initiative of investigating the unpaved residential alleys. The first and foremost is to continue the established commitment to provide a high quality of infrastructure throughout the City. For any city, providing and maintaining the city's basic infrastructure at a level that attracts and retains a strong business community as well as vibrant and livable neighborhoods is an essential element in making that city a place where people want to live, work and visit. This recommendation to address and complete the permanent paving of the City's residential alleys is also an effort to provide an equitable level of service to all residents of the City.

The system of alleys in Minneapolis is an essential component of its transportation network. Alleys provide access to the off-street sides of properties that are utilized for parking and deliveries in commercial and industrial areas. The residential alleys provide access to garages and/or off street parking and are used as the primary location for solid waste and recycling collection services.

Consequently, it is important that these alleys are built and maintained in a manner that provides for these needs and that is consistent, maintainable and cost-effective.

The City's streets and alleys are also originally designed to serve as a primary component of the storm drain system within the city. The City's alleys, with their inverted crown design (V shape) provide drainage from the abutting properties to the city's storm drain system. Having a paved surface with positive drainage through the alley was an important element in insuring that storm water is adequately conveyed away from private property and aids in reducing the potential for property damage due to flooding. Paving these alleys will also present opportunities to consider alternative storm water management strategies to reduce total storm water runoff.

Paving these alleys also provides significant environmental benefits. Runoff from their poor surfaces contributes to the pollutant loading of receiving waters. High quality pavement eliminates the release of debris and other contaminants that can degrade water quality. In developing a program for the paving of these remaining alleys, the city could also consider alternative surface water management approaches that would use some form or application of porous surfaces or pavements.

Finally, there are maintenance factors to consider. Maintaining these unpaved alleys is time-consuming; sometimes requiring multiple repairs in a season is rarely long lasting or effective and diverts valuable resources from more important activities. Consequently, maintenance is only done on a complaint basis which results in



inefficiencies when it must be done, poor service to residents and negative impacts to neighborhood quality of life.

In summary, in addition to the benefits of improved infrastructure, better storm water management, positive affects on water quality, and decreased maintenance costs, addressing the 81 remaining unpaved alleys ensures that all residential property owners that are served by public alleys are provided a consistent, fair and equitable level of service.

History

According to City records there are 3,576 individual blocks of public alleys totaling 377.4 miles located within the City of Minneapolis. The City first began paving its alleys in the 1920's. This program continued on an intermittent basis for the next 30 years followed by a major program during the 1950's. Because most residential streets were still "oiled dirt" Minneapolis for a while had the reputation of being the city with paved alleys but dirt streets! Since that time a few additional alleys have been paved on a very intermittent basis. The majority of the city's alleys were constructed prior to 1970. The median alley construction date is 1954 and currently approximately 98 percent of all alleys have a paved surface. The remaining 81 unpaved residential alleys, which represent 2.2 percent of the total, are the focus of this report.

Of all paved alleys, 97 percent are constructed of concrete. Concrete pavement was the preferred material of the time due to its durability and cost-effectiveness. Concrete is still the City standard because it resists load related damage from delivery and solid waste collection vehicles, is cost effective to maintain and has proven to stand the test of time. A more comprehensive analysis of life-cycle costs for concrete and asphalt is included later in this report.

Historically it has been the City's policy and practice that alley construction was funded by 100 percent assessment of all costs to the benefiting property owners. The primary reason that this particular group of alleys remains unpaved is that in many cases a significant amount of the abutting property is not assessable, or there are not enough properties served by the alley that results in a reasonable or affordable spread of the costs. Other reasons include extraordinary construction costs due to poor soils or other conditions, difficult terrain (need for retaining walls), dead-end alleys serving a limited number of properties, and unused or unneeded alley right-of-way that could be considered for disposal by vacation.

The objectives of this report are to:

- Determine if there is a public purpose that requires that these alleys need to be retained by the City or vacated to the abutting property owners
- Define a program that can be implemented to pave and improve the remainder of these alleys

Review of Existing Alleys

In order to determine what specifically should be done with the 81 unpaved alleys the first step was to physically inspect each of the alleys. The items looked at for each alley were:

- General Condition
- Current use and/or need
- Possibility to vacate
- Need for retaining walls
- Storm water management and drainage requirements
- Encroachment issues

The detailed data collected for each alley has been provided to the City separate from this report.

In general, most of the alleys are in poor condition with surfaces ranging from patches of asphalt, recycled asphalt millings, crushed rock aggregates to just plain dirt. They are generally poorly graded, provide poor surface water drainage and pose difficult maintenance problems. A few appear to have been paved with an asphalt surface that is still in relatively good condition but don't have the characteristic v-shape to provide appropriate drainage. Any obvious existing encroachments such as fences, structures, utility poles, or trees were noted for each alley.

Possible Alley Vacations

It was also noted whether each alley right-of-way was currently being used to serve the property owners and how, and identified those alleys that are potential candidates that could be vacated. These are detailed in Table 1.

Alley Right-of-Way - Possible Vacations		
Alley No.	Location	Description
9545	1st Ward #9, Monroe & 27th	Possibly vacate, only serves two properties it splits
1011	1st Ward #11, Park & Taylor	Connects the south ends of Park and Taylor
1020	1st Ward #15, Talmadge & 21-22nd	Grass, dead end alley
1015/1045	2nd Ward #1, 12-13th	12th to 13th should remain, vacate west of 12th
1017	2nd Ward #3, 17-18th & Elm	East-west alley north of Elm, serves as access to apartment parking lots. May need to do cooperative agreement between complex owners if vacated.
9373	4th Ward #5, 53rd Ave. N & West of Penn	Possibly vacate south half
9326	4th Ward #6, 44-45th & Irving-James	Keep north portion at Irving & 45th, Possible vacate south portion at James & 44th.
9358	4th Ward #7, 46th & Emerson	Vacate
4116	6th Ward #2, 22nd & 12th	Vacate
8856	9th Ward #2, 30th & Lake	Possibly vacate, keep east-west leg to retain access to Lake.
4144	9th Ward #3, 34th & Snelling	Vacate, depending on who owns what
4126	13th Ward #1, 30th1/2 & Lakeshore Dr.	Vacate south of Lake St.
1003	13th Ward #4, 44th & Xerxes	Vacate east portion, east part is a parking lot.

Table 1: Alley Right-of-Way - Possible Vacations

Further investigation will be needed to determine if the right-of-way is needed for underground utility easements or some other public purpose if a program is established.

Retaining Walls

Of the 81 alleys included in this report, 19 have existing retaining walls. 17 of these are small walls, less than 4 feet in height and 20 to 60 feet in length. Their condition ranges from very good to very poor with four being in good condition, eight being in fair condition, and five of them being in the poor to very poor category. Of the two large existing walls one is in good condition and the other is in need of replacement. There is also one additional alley that does not currently have any retaining walls but would need a couple of small walls in order to pave the alley. These alleys are identified in the following chart:

Alley Retaining Walls			
Alley No.	Location	Description	Rating
9341	1st Ward #2, 35th & Benjamin/ McKinley	30" Timber wall on east side	Poor
7803	1st Ward #4, 35th & Architect	Stone wall Large shotcrete wall Large difficult walls	Poor
9545	1st Ward #9, Monroe & 27th	75' Long timber wall east side	Poor
9376/9377	1st Ward #12, 14th & Pierce	Small block wall on east side	Poor
9485	2nd Ward #5, 6-7th St. & 26-27th Ave.	North-South leg, block wall - leaning	Poor
9484	2nd Ward #6,7, 7-8th St. & 26-27th Ave.	East end - maybe encroaching	Fair
1000	2nd Ward #8, Malcolm & Melbourne	6"x6" timber wall north side Rock wall south side	Fair
1044	2nd Ward #9, Arthur & Seymour	Block and stone walls on east side	Fair
9481	2nd Ward #10, Arthur & Cecil	Brick & block - all about to fall down	Poor
9448	3rd Ward #1, 6-4th St. & 31-30th Ave	Poured concrete wall at east end	Good
9560	3rd Ward #4, 14th & Grand	20' Timber wall	Fair
9360	4th Ward #8, 43rd & Fremont	Small block wall	Fair
9304	5th Ward #2, 23rd & Irving	Large wall for school	Good
9590	7th Ward #5, Sheridan & Kenwood Pkwy.	Some timber and brick walls	Fair
9321	10th Ward #1, 25th & Irving	Block wall	Good
6397	11th Ward #1, Highview & Gladstone	Many walls, many types	Good
7110	11th Ward #2, 56th & Nicollett	Few different walls	Good
9398	13th Ward #2, 38th & Washburn	One stone wall & one timber wall	Fair
7707	13th Ward #6, 39th & Thomas	One stone wall & one timber wall	Fair
9434	8th Ward, 41st & Clinton	May need up to two walls on east side	

Table 2: Alley Retaining Walls

It has been assumed that all of the smaller walls rated as fair eight walls and poor five walls will need replacement as well as a new wall for one alley. In addition, the large wall in alley #7803 at 35th & Architect would also need replacement. Cost estimates for this work are as follows:



Estimates for each of the 13 alleys with one or more smaller walls result in a need for 300 square foot of retaining wall work (an average of 100 lineal feet at three feet in height). The cost of this work at \$60.00 per square foot is \$18,000.00 per alley. The cost for all 13 locations would be \$234,000. The retaining wall in the alley at 35th & Architect is the most significant problem and the replacement cost is estimated at approximately \$100,000.00.

Assuming that additional field verification and a more detailed analysis results in the need to follow through with all of these preliminary recommendations, the estimated cost for retaining walls in conjunction with these alleys is \$334,000.00. A discussion of how to potentially fund this work is addressed later in this report.

Storm Drains

In reviewing the storm drainage requirements for each alley, existing alley drains were noted. Without field surveys to determine or verify grades, preliminary judgments were made regarding the need for installing additional storm drains in conjunction with paving of the respective alleys and noted in Table 3.

The review of the 81 alleys showed that nine have existing mid-block storm drains. It was also determined that four of these alleys will need an additional mid-block storm drain, and that seven other alleys may need to have mid-block storm drains installed.

The alleys that either have or appear to need new or additional mid-block storm drains are identified in Table 3.

Alley Storm Drain Requirements		
Alley No.	Location	Description
9529	1st Ward #1, Johnson & 36th Ave	May need a storm drain
1031	1st Ward #6, 30th & California	May need a storm drain
9540	1st Ward #7, Lowry & California	Needs a storm drain
9376	1st Ward #12, 14th & Pierce	May need a storm drain
9518	1st Ward #14, Garfield & 14th	Existing storm drain, may need adjustment or reconstruct
9309	3rd Ward #3, 16th & Main	Needs a storm drain
9555	3rd Ward #5, 7th & Main	Existing storm drain, may need adjustment or reconstruct
1035	3rd Ward #6, Summer & Park	Needs a storm drain
9360	4th Ward #8, Fremont & 43rd	Needs a storm drain
9357	4th Ward #9, 43rd & Emerson	Existing storm drain, may need adjustment or reconstruct
9330	4th Ward #10, 41st & James	May need a storm drain
9578	5th Ward #1, Walton & 24th	May need a storm drain
9388	7th Ward #2, Hawthorne & Thomas	Existing storm drain, may need adjustment or reconstruct
7942	7th Ward #4, Edin Pl. & Lakeview	2- Existing storm drains, may need adjustment or reconstruct
4101	7th Ward #8, 28th & Xerxes	May need a storm drain
8935	9th Ward #1, 32nd Ave & 29th St	Existing storm drain, may need adjustment or reconstruct
9321	10th Ward #1, 25th & Irving	Existing storm drain, may need adjustment or reconstruct
7110	11th Ward #2, 56th & Nicollet	Existing storm drain, may need adjustment or reconstruct
9415	11th Ward #3, 57th & Pillsbury	May need a storm drain
7707	13th Ward #6, 39th & Thomas	Existing storm drain, may need adjustment or reconstruct

Table 3: Alley Storm Drain Requirements

The following is a preliminary estimate of costs to provide the appropriate storm drainage as listed above.

We have assumed that there is an existing storm drain trunk line in the street at the end of each alley that needs a new alley drain. This



may not always be the case and additional storm drain work may be required at some locations.

For the nine alleys which contain ten existing alley drains each would need to be adjusted. We have assumed that these structures are in good condition and have not estimated any costs for reconstruction, although this may be necessary at some locations.

Estimated costs for alley storm drains for each alley are as follows:

For the nine alleys with existing storm drains, adjust structure at \$500 each	\$4,500
For each alley needing a new storm drain:	
○ 300 lineal feet of 12" RCP sewer pipe at \$60 per lineal foot	\$18,000
○ One drainage inlet structure and casting	\$2,500
○ One manhole structure and casting at the connection point with the trunk sewer	\$2,500
○ Street repair at the connection point	\$1,000
Total cost per alley for new storm drain	\$24,000
Assuming all potential storm drain needs were verified the total cost would be 11 at \$24,000	\$264,000
The total cost for all alleys with or needing storm drains is \$4,500 + \$264,000	\$268,500

Funding Options Research

In order to provide some additional data interviews were conducted with Public Works officials from the cities of St. Paul and Richfield, to identify and compare how their policies regarding the construction maintenance and funding of alleys compare to those in the city of Minneapolis. The results of this research are shown in Table 4.

Comparison of Alley Paving with Other Cities			
Item Description	St. Paul	Richfield	Minneapolis
# Of Alley's	2311	100	3576
Current Condition	1150 Paved 888 Oiled Dirt 273 Unimproved Grass or Gravel	95 Paved 5 Unpaved	98% Paved 81 Unimproved
Type of Pavement	A few concrete, most ac pavement	All concrete	97% concrete & a few ac pavement
Status of Program	No existing program, by petition only, average 2 alleys per year for past several years	Most completed in 1980's Five remaining, all currently being built	Revised program under consideration
Method of Funding	100% Assessed	100% Assessed	100% Assessed
Non-Assessable Properties	Paid by City through aid fund	Paid by City	Historically not paid by City
Storm Sewers	Assessed if needed	Originally assessed Now paid by City through storm water utility	Paid by City through S.D. fund

Table 4: Comparison of Alley Paving with Other Cities

This information shows that the alley paving program in Minneapolis is more advanced than in St. Paul and almost complete as it is in Richfield. It supports the City's policy of assessing 100 percent of the cost for new alley construction, but also indicates a practice of other City's paying the costs attributable to non-assessable properties. Minneapolis' policy of paying for storm drain costs through a separate fund differs from the comparison City's where these costs, when needed, have also assessed. This comparison identified a mixture of both asphalt and concrete being used for alley construction.

In summary, the recommendation in this report is relatively consistent with the practices of other cities in our metro area.



Standard Plan & Cost Estimates

Appendix A shows a standard alley plan and typical cross-section which will be used to prepare cost estimates for this program.

The typical section for a concrete alley is the same as the current standard being used by the City. In order to provide an alternative for construction with asphalt, we have used a typical section that provides a 4" asphalt surface over 6" of aggregate base. This would provide a permanent pavement surface of adequate strength, but would not have the durability of the concrete surfacing.

The decision that this brings to the forefront is one of making the choice between a lower first cost for asphalt surfacing with an estimated life of 35 years or a more permanent concrete pavement with an estimated life of 70 years and a lower annual life cycle cost. Both are viable options and could be considered.

A construction cost estimate for a standard alley has been prepared considering both asphalt and concrete construction. We have used the current list of Mn/DOT average bid prices for awarded projects as the basis for all our cost estimates. The actual costs may vary due to particular site conditions and would need further analysis for each specific alley. Each of these options has then been further evaluated to determine the estimated life cycle cost of each. These estimates and life cycle cost analysis are shown in Tables 5 through 8 below.

Construction & Maintenance Cost Estimates

Concrete Option - Construction Cost						
Item No.	Item Description	Units	Unit Price	Quantity	Costs	Remarks
1	Mobilization	LS	\$5,000	1	\$5,000	
2	Remove Pavement	SY	\$5	800	\$4,000	600'x12'
3	Remove Concrete Alley Approach	SY	\$9	44	\$396	14'x14', 2 approaches
4	Sawcut Pavement	LF	\$4	300	\$1,200	
5	Common Excavation	CY	\$13	290	\$3,770	12"Dx13'Wx600'L
6	Aggregate Base Class 5	TON	\$25	185	\$4,625	4"
7	Concrete Pavement	SY	\$50	800	\$40,000	6"
8	Concrete Alley Approach	SY	\$63	44	\$2,772	22SY each, 8"Conc & 4"Class5
9	Match Property (Driveway or Yard)	LS	\$15,000	1	\$15,000	
	Subtotal - Construction				\$76,763	
	10% Construction Contingency				\$7,676	
	Total Project Cost				\$84,439	Equals \$140.73/LF
Asphalt Option - Construction Cost						
Item No.	Item Description	Units	Unit Price	Quantity	Costs	Remarks
1	Mobilization	LS	\$5,000	1	\$5,000	
2	Remove Pavement	SY	\$5	800	\$4,000	600'x12'
3	Remove Concrete Alley Approach	SY	\$9	44	\$396	14'x14', 2 approaches
4	Sawcut Pavement	SY	\$4	300	\$1,200	
5	Common Excavation	SY	\$13	294	\$3,822	12"Dx13'Wx600'L
6	Aggregate Base Class 5	TON	\$25	245	\$6,125	6"
7	Asphalt Pavement	TON	\$110	180	\$19,800	4"
8	Concrete Alley Approach	SY	\$63	44	\$2,772	22SY each, 8"Conc & 4"Class5
9	Match Property (Driveway or Yard)	LS	\$15,000	1	\$15,000	
	Subtotal - Construction				\$58,115	
	10% Construction Contingency				\$5,812	
	Total Project Cost				\$63,927	Equals \$106.55/LF



Concrete Option - Lifetime Maintenance Cost					
	Item Description	Units	Unit Price	Quantity	Costs
35yr	Minor Concrete Repair	SF	\$25.00	200	\$5,000.00
	Joint & Crack Seal	LF	\$1.00	360	\$360.00
	Total Maintenance Costs				\$5,360.00
Asphalt Option - Lifetime Maintenance Cost					
	Item Description	Units	Unit Price	Quantity	Costs
10yr	Crack Seal	LF	\$1.00	360	\$360.00
20yr	Crack Seal	LF	\$1.00	360	\$360.00
	Seal Coat	SY	\$3.00	800	\$2,400.00
30yr	Patch & Repair	TON	\$130.00	5	\$650.00
	Crack Seal	LF	\$1.00	360	\$360.00
	Total Maintenance Costs				\$4,130.00

Initial Cost

Initial cost of a concrete alley	\$84,439
Initial cost of an asphalt alley	\$63,927
Initial cost difference	\$20,512
Percent of cost difference	$\$20,512/63,927 = .321$

In a direct comparison of initial cost only a concrete alley is 32.1 percent more expensive than an asphalt alley.

Life Cycle Cost Analysis

Concrete Alley:

Initial construction cost	\$84,439
Lifetime maintenance cost	\$5,360
* Total lifetime cost	\$89,799
Expected useful life	70 years
Annual life cycle cost	$\$89,799/70 = \$1,283$ per year

Asphalt Alley:

Initial construction cost	\$63,927
Lifetime maintenance cost	\$4,130
* Total lifetime cost	\$68,057
Expected useful life	35 years
Annual life cycle cost	$\$63,927/35 = \$1,944$ per year

Life Cycle Cost Comparison

Annual life cycle cost of asphalt alley	\$1,944 per year
Annual life cycle cost of concrete alley	\$1,283 per year
Annual cost difference	\$661 per year
Percent of cost difference	$661/1283 = .515$

On an annual life-cycle cost comparison, an asphalt alley is 51.5 percent more expensive than a concrete alley.

* Life time maintenance costs are estimated in current (2008) dollars.



If the construction cost index rate of inflation and the cost of money are assumed to be approximately equal, both in the 4-5 percent range, then the present value of future maintenance costs would be equal to today's cost.

As you can see from this analysis, the initial cost for construction with concrete is higher by 32.1 percent, but the life cycle cost is lower by 51.5 percent.

Our cost estimate for initial construction of a standard alley with concrete is \$141.00 per linear foot. This figure was then applied to the length of each alley to determine an estimated base cost for each alley as well as for the entire program. The results of these calculations are shown in Appendix B. The basic cost to complete this program with concrete alley construction is \$3.9 million.

We have added the additional costs for retaining walls and storm drains which will be needed in some of the alleys.

Preliminary cost estimates and breakdowns for illustrative purposes are shown in Table 9. These figures assume that all alleys would be paved. The overall estimated cost of this program in today's (2008) dollars is estimated to be \$4,512,289.

	Cost	Assessed	City Capital Funds	City Storm Drain Funds
Basic Alley Paving	\$3,909,789	\$2,736,852	\$1,172,937	
Retaining Walls	\$234,000	\$234,000		
	\$100,000	\$10,000	\$90,000	
Storm Drains	\$268,500			\$268,500
Totals:	\$4,512,289	\$2,980,852	\$1,262,937	\$268,500

Table 9: Estimated Alley Paving Program Costs

The analysis and recommendation contained in this report identify a total estimated cost of approximately \$4,500,000.00 with about 67 percent of that amount generated through assessments to abutting property owners (for paving) and the remaining 33 percent from City Capital funding programs (net debt or other capital funds and storm sewer funds).

This report does not address or provide estimates for the installations of porous pavements. If an alley paving program is established that includes porous pavements costs would be higher and a policy for funding the differential costs would need to be determined, and considered on a case-by-case basis.



Porous Pavement

As stated previously in this report, the City may want to consider using porous pavement as a storm water management measure in at least some of the alleys that would be constructed as a part of this program. Porous pavements or surfaces can be created in a number of ways such as using porous concrete or asphalt pavement, porous pavers, grid system paving, natural surfaces or various other methods. Public Works is preparing a report regarding their experiences with porous pavements to date as well as some other research and investigation of uses elsewhere. Results of that report can be used to identify potential applications of, or candidates for porous pavements in alleys that are improved if a program for paving the City unpaved alleys is established. However a brief discussion is offered here for information purposes.

If deemed to be appropriate for some of these alleys, the utilization of porous pavements could potentially provide options for the localized management of storm water runoff by providing a means for infiltration of most low and moderate rainfall events. Higher intensity storms would most likely still result in some volume of runoff beyond what could be handled through infiltration.

The potential use of this type of pavement in the City's alleys also presents some concerns that require further investigation. Porous pavements should be designed so that surface flow from adjacent open surfaced areas such as yards, gardens, etc. does not flow to or across the porous pavement surface. As the City's alleys, with their characteristic v-shape, are designed to serve as the conduit for storm water flow from adjacent properties this condition will need to be considered carefully. Debris and other materials may be concentrated on the alleys surface and cause the premature or permanent elimination of their permeability.

Porous pavements need to be kept relatively clean in order to prevent clogging over time. Methods, procedures and equipment for cleaning will need to be evaluated. Porous surfaces also need underlying special treatment such as drain tile or specially designed permeable subgrades that may or may not be practical in alley applications.

The higher basic cost of a porous pavement plus the increased subgrade preparation that is required for this type of pavement will result in significantly higher costs. Funding for this differential expense will need to be identified.

However, Public Works is committed to exploring some stormwater management options using porous pavements if an alley paving program is established.

Funding of Alley Construction

Historically it has been the City's policy to assess 100 percent of the costs for the construction of a new alley to the benefited (abutting) property owners. This has worked well when the construction costs were limited to just basic alley paving, there were a number of properties and all were assessable so the costs were kept affordable by spreading them out.

This policy has been problematic when there are too few properties, a significant portion of the abutting properties are not assessable and/or the cost of constructing a particular alley was substantially above the norm due to the need for retaining walls or other problems (poor soil, etc.) that were unique to that particular alley. Under these conditions the City may have not even attempted to bother to approach the affected owners about paving the alley and impose these extraordinary costs. Or the affected owners objected to the proposed assessments which were often several times more than the average assessments of the time. These are likely the primary reasons why many of these 81 alleys still remain unpaved. In fact, Public Works occasionally receives requests from property owners to pave these alleys but once the policies and costs to the owners are explained, interest quickly diminishes resulting in the perpetuation of the problem.

Therefore, a new strategy for funding the construction of these remaining public alleys needs to be found in order to move forward. It would be ideal to devise a mechanism that aligns with the long standing practice that property owners essentially paid for all alley improvements (other than storm sewer) but some process needs to be developed where a few property owners don't have to pay extraordinarily high and burdensome assessments simply due to their location. It is in the City's best interest to complete all alley paving, so it may also be in its best interest to cover the incremental costs over what a "normal" alley paving assessment might be to a property owner.

We have estimated the basic cost of paving this collective group of 81 alleys to be \$3.9 million.

If all of the abutting properties were assessable, a standard assessment of \$70.50 per linear foot or \$2820 for a 40 foot lot would generate assessment revenue equal to the basic construction cost for each alley. It is estimated that the amount of assessable property abutting this select group of 81 alleys ranges from a high of 100 percent at several locations to possibly as little as 0 percent in the case of some "L" or "T" alleys where all of the abutting property has already been assessed for paving of the main alley behind their properties and would result in them paying twice. Another common factor causing these differences is that there are several alleys contained in this program where one whole side of the alley is property that belongs to one of several railroads and is non-assessable.



For purposes of illustration and providing comparisons and estimates, it is estimated that on average 70 percent of abutting properties are assessable, and that number has been used in our allocation of costs going forward in this report.

When the cost of retaining walls and storm drains are added to the total estimated cost it becomes \$4.5 million with approximately 66 percent being collected through assessments to abutting property owners.

In order to move this program forward it is recommended that the City make some modifications to its policy for the assessment of new alley construction. We recommend that the City continue with a policy of assessing 100 percent of the cost for new alley construction against the benefiting property owners but that this policy be applied in a manner that maintains a reasonably fair and equitable assessment to each property. The following two elements should be taken into consideration when determining the assessments for each particular alley.

1. The City will assume the paving costs that would otherwise be borne by any non-assessable property that abuts the alley, or whatever difference is needed (e.g., too few properties on the alley) in order to not pass that extra burden onto the remaining assessable properties. The City cost should be provided through a net-debt bond appropriation.
2. In some alleys with poor soils, difficult grades or other unusual conditions the costs for construction will be greater than the basic, “normal” per foot expenditures for alley construction. The City should consider minimizing these cost differentials to the property owners in order to insure that the project can be completed.

In order to accomplish these two elements, a method of determining the cost for “normal” alley construction must be found so the City’s incremental share can be calculated. The already established practice of determining a uniform annual construction rate would be appropriate and has precedent. This rate would then be applied to the assessable property in each respective alley and the City could fund the remaining incremental costs using net debt bond appropriations.

Once a standard rate is established for assessments under this program, it should be adjusted annually in the same manner that standard assessments rates for residential paving or renovation projects, as well as the alley and new street Resurfacing Program.

As stated, the idea and use of uniform rates is not new. During the 1960’s and early 1970’s residential paving project assessments were project specific with 25 percent of the actual construction costs assessed against all benefited properties on a lineal foot basis against



the front footage of each property. In the 1970s this was modified to be a uniform annual rate for all of the projects in a given year. These rates were adjusted each year to reflect current construction costs. In the 1990s the assessment policy for residential paving was further modified by changing from using lineal foot to square foot of property for the basis of assessments.

Retaining Wall Funding

The question of financial responsibility for retaining walls that abut the City's alleys has not been clear cut in the past. Originally, the responsibility for maintaining and for replacing existing retaining walls was assigned by the City to whomever (City or property owner) originally constructed the wall. This determination was generally made by researching old alley paving records for evidence that the City built the original wall at the time that the alley was paved. In the absence of any positive evidence to that effect, the responsibility was assigned to the private property owners that abut that particular alley. It was also common practice for the cost of a retaining wall that abutted an alley to be shared by all properties that were served by that alley, and that all costs were 100 percent assessed as with the construction of the alley itself.

In the past the City Council has approved exceptions to these general rules for specific individual projects. For example, in some cases a single property owner volunteered to pay a larger share when they had a greater interest in the project because the proposed wall directly abutted their property. In other cases the City has paid for significant portions of the cost for some larger walls when a full assessment would have caused significant financial hardship to the abutting property owners.

In the 1990's, Public Works adopted the policy that if a retaining wall existed within the City right-of-way, Public Works would assume ownership and the financial responsibility of the wall.

In order to provide some consistency with existing policies and past practice it is proposed to include the cost of retaining walls that are necessary to accomplish the paving of an alley as an additional assessment for that alley. However, to protect the property owners from being overburdened financially, they would only be responsible for up to a maximum amount equal to 25 percent of the basic assessment for alley paving. The City will assume any costs over that amount.

The logic here is consistent with the City assuming an incremental cost over a uniform rate for alley paving. For most cases all of the costs would be assessable, even including a few small retaining walls. In the few isolated cases where a large and/or lengthy wall is required the City could incur a significant cost.

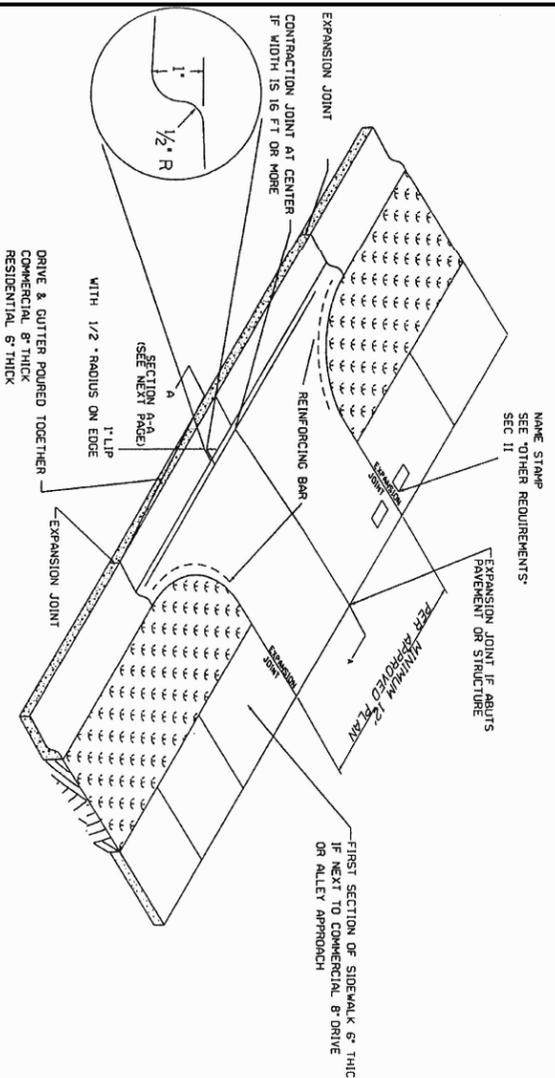
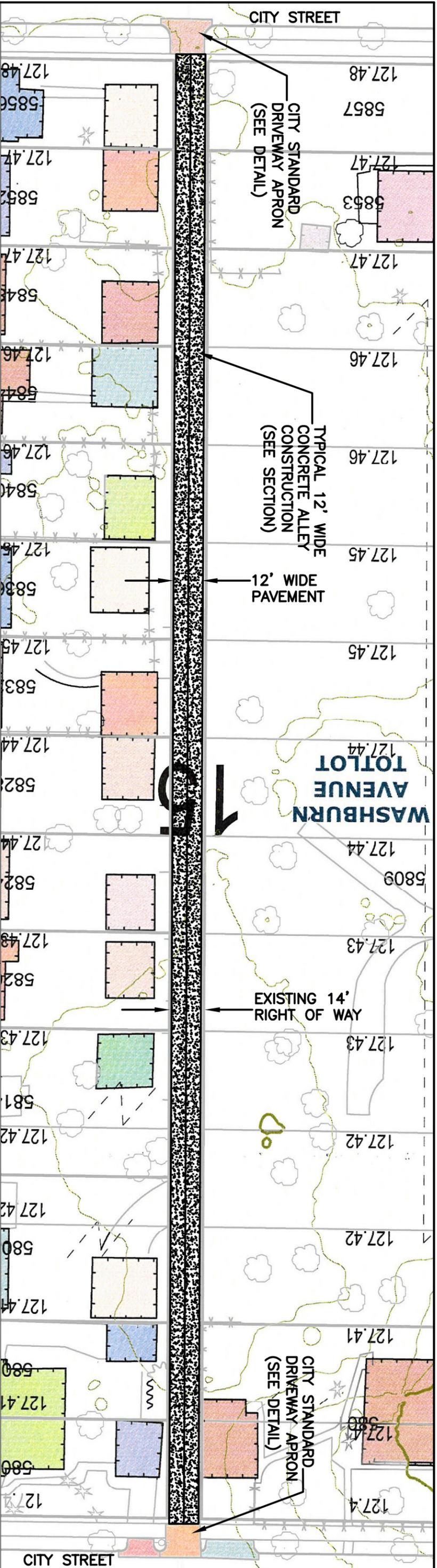
Recommendations and Conclusions

It is recommended that the City adopt and approve a 10 year capital program to accomplish the permanent vacation or paving of the 81 remaining unpaved residential alleys in the City.

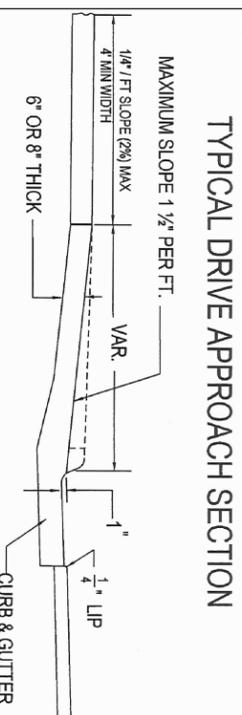
It is further recommended that the City continue in concept with the idea that 100 percent of the cost for new construction or reconstruction of alleys and alley retaining walls be assessed to the benefiting property owners with the following modifications in cases where this leads to inconsistent or extraordinary costs to the property owners:

1. The City should assess costs based upon a uniform rate per L. F. (or per S. F.) for normal alley construction and the City should assume responsibility for any extraordinary costs.
2. The City will assume the cost for any non-assessable properties that abut the alley, or costs above a uniform assessment rate.
3. Alley storm sewers should continue to be furnished by the City through miscellaneous storm drain fund.
4. The cost for retaining walls required to construct an alley should be 100 percent assessed to all properties along the alley in the amount up to but not to exceed 25 percent of the assessment for alley paving. The City will provide funding for retaining walls above that amount.

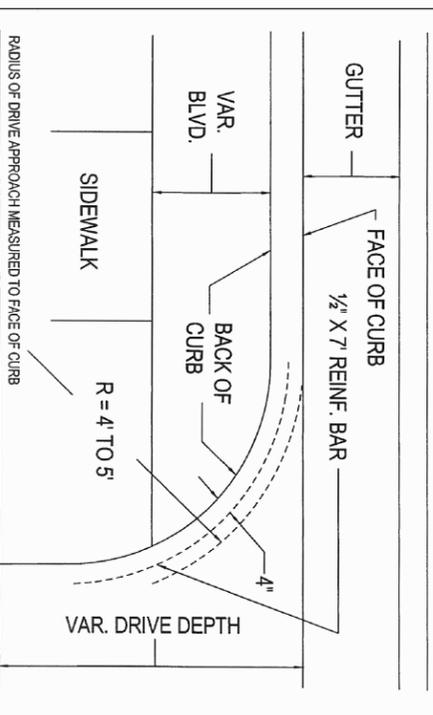
In order to provide consistent alley facilities and service to Minneapolis residential property owners, the City should adopt and implement a program to provide for the disposition or permanent paving of the remaining unpaved residential public alleys in Minneapolis. Adoption of a multi-year program to address the 81 remaining unimproved residential alleys that still exist in the City would be a positive step toward maintaining the quality of the City's basic infrastructure.



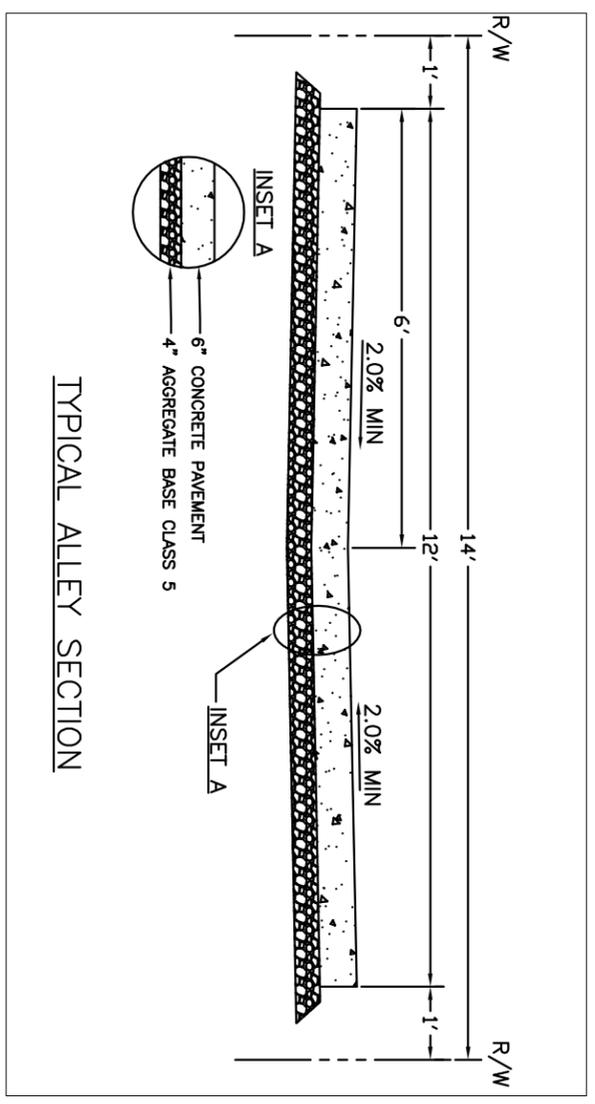
TYPICAL DRIVEWAY DETAIL



TYPICAL DRIVE APPROACH SECTION



DRIVE APPROACH DETAIL



TYPICAL ALLEY SECTION

DESIGNER: JMG	NO.	BY	DATE	REVISIONS
CHECKED BY: AMG				
APPROVED BY: BILL				
DESIGN TEAM				

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HEREBY CERTIFY THAT THIS PLAN 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. Date: JAN 21, 2008 Justin M. Geese, P.E. License No. 43337

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100 North 6th Street
Minneapolis, MN 55403
612/758-6700

CITY OF MINNEAPOLIS ALLEY REHABILITATION	TYPICAL ALLEY CONSTRUCTION	FILE NO. AMP1500801.00	DATE 01/21/08
		1	1

CITY OF MINNEAPOLIS ALLEY REHABILITATION PLAN
COST ESTIMATE - ORDER OF MAGNITUDE

SEH PROJECT NO.: A_MPLSO0801.00

DATE: 1-22-08

REVISED:

P:\KO\MMPLS0\080100\4-rpt\qryUpavedAlleysParts.xls(qryAlleysWithParts

COSTS ARE BASED ON AN AVE. LINEAR FOOT PRICE \$141.00

ALLEY ID	PART	LIMIT1	LIMIT2	LIMIT3	LIMIT4	WARD	TYPE	COMMENTS	FROM	TO	RW WIDTH	LENGTH	CURRENT CONDITION	TOTAL COST
1000	A	ARTHUR AVE	MALCOLM AVE	MELBOURNE AVE	ARTHUR AVE	2ND WARD, #8	STRAIGHT	6"X6" TIMBER WALL ON NORTH SIDE & ROCK WALL ON SOUTH SIDE BOTH IN FAIR CONDITION, WALLS MAY BE ENCROACHING.				567	POOR AC PAVEMENT	\$79,947.00
1003	A	XERXES AVE S	UPTON AVE S	44TH ST W	43RD ST W	13TH WARD, #4	STRAIGHT	OLD STREETCAR RIGHT-OF-WAY. PART ASPHALT, PART DIRT. EAST HALF IS EXTRA WIDE AND USED AS PARKING LOT FOR BUSINESS AND SHOULD BE VACATED, DRIVEWAY EAST OF #2923 ON 43RD ST. DOES NOT NEED ALLEY ACCESS.			50	953	POOR PATCHY AC PAVEMENT	\$134,373.00
1011	A	POLK ST NE	TAYLOR ST NE	RR TRACKS	18TH AVE NE	1ST WARD, #11		ALL HEAVY BRUSH, SHOULD BE VACATED				285	ALL BRUSH	\$40,185.00
1014	A	14TH AVE SE	15TH AVE SE	8TH AVE SE	ROLLINS AVE	2ND WARD, #2	DEAD END	MAY NEED TO RE-DO SOME OF PARKING LOT TO ACHIEVE PROPER DRAINAGE			12	104	GRAVEL & VERY POOR AC PAVEMENT	\$14,664.00
1015	A	12TH AVE SE	13TH AVE SE	RR TRACKS	COMO AVE	2ND WARD, #1	STRAIGHT				14	290	VERY POOR AC PAVEMENT	\$40,890.00
1016	A	CALIFORNIA ST NE	RR TRACKS	30TH AVE NE	31ST AVE NE	1ST WARD, #6	STRAIGHT	NORTH HALF, EAST SIDE VACANT R.R. R.W, WEST SIDE RESIDENTIAL				300	VERY POOR AC PAVEMENT	\$42,300.00
1017	A	17TH AVE SE	18TH AVE SE	ELIM ST	ROLLINS AVE	2ND WARD, #3	STRAIGHT	SERVES AS ACCESS TO APARTMENT PARKING LOTS, MAY NEED TO DO COOPERATIVE AGREEMENT BETWEEN COMPLEX OWNERS IF VACATED. SHOULD BE VACATED			14,20	371	GOOD AC PAVEMENT	\$52,311.00
1018	A	25TH AVE SE	COLE AVE	ELIM ST	COLE AVE	2ND WARD, #4	STRAIGHT	DEAD END				124	DIRT	\$17,484.00
1019	A	22ND AVE SE	23RD AVE SE	COMO AVE	TALMADGE AVE	1ST WARD, #16	STRAIGHT	IF ALLEY R/W HAS LOOP AT SOUTH END, THEN ENCROACHMENTS INCLUDE BRUSH AND SHEDS.			14	470	DIRT & POOR AC PAVEMENT	\$66,270.00
1020	A	21ST AVE SE	22ND AVE SE	COMO AVE	TALMADGE AVE	1ST WARD, #15	STRAIGHT	GRASS DEAD END, SHOULD BE VACATED			14	90	GRASS	\$12,690.00
1023	A	6TH AVE SE	7TH AVE SE	UNIVERSITY AVE SE	4TH ST SE	3RD WARD, #8	DEAD END				15	214	DECENT TO MODERATE AC PAVEMENT	\$30,174.00
1026	A	HIAWATHA AVE	SNELLING AVE	44TH ST E	43RD ST E	12TH WARD, #1	STRAIGHT				14	147	POOR AC PAVEMENT	\$20,727.00
1031	A	CALIFORNIA ST NE	RR TRACKS	29TH AVE NE	30TH AVE NE	1ST WARD, #6	STRAIGHT	SOUTH HALF, EAST SIDE VACANT R.R. R.W, WEST SIDE RESIDENTIAL, MAY NEED STORM SEWER, ONE COMMERCIAL PROPERTY EAST SIDE.				300	VERY POOR AC PAVEMENT	\$42,300.00
1035	A	RR TRACKS	POLK ST NE	SPRING ST	SUMMER ST	3RD WARD, #6	DEAD END	STORM SEWER WILL BE NEEDED TO PROVIDE PROPER DRAINAGE, VACANT R.R. R/W ON WEST SIDE, UTILITY POLE ENCROACHMENT.				198	POOR AC PAVEMENT	\$27,918.00
1044	A	ARTHUR AVE	SEYMOUR AVE	SHARON AVE	FRANKLIN AVE SE	2ND WARD, #9	DEAD END	BLOCK & STONE WALLS ON EAST SIDE ARE NON ISSUE.				250	DIRT & VERY POOR AC PAVEMENT	\$35,250.00
1045	A	11TH AVE SE	12TH AVE SE	RR TRACKS	COMO AVE	2ND WARD, #1	DEAD END	NOT DIGITIZED AND THIS ALLEY ROW APPEARS TO BE PART OF THE PARKING LOT FOR ADJACENT BUILDINGS. SHOULD BE VACATED WEST OF 12TH			16	267	VERY POOR AC PAVEMENT	\$37,647.00
4101	A	DEAD END	XERXES AVE S	28TH ST W	CEDAR LAKE PKWY	7TH WARD, #8	COMPLEX	MAY NEED STORM SEWER TO PROVIDE DRAINAGE.				300	DIRT	\$42,300.00
4106	A	NEWTON AVE S	CEDAR LAKE RD S	HAWTHORNE AVE W	RR TRACKS	7TH WARD, #3	DEAD END	OTHER LEG NEEDS TO BE PAVED AS WELL, COULD ELIMINATE ONE OF THE TWO LEGS.			16	300	DIRT & GRAVEL	\$42,300.00
4107	A	IRVING AVE N	HUMBOLDT AVE N	CURRIE AVE	2ND AVE N	5TH WARD, #4	STRAIGHT				12	300	DIRT & GRAVEL	\$42,300.00

4109	A	15TH AVE S	16TH AVE S	18TH ST E	HWY 94	6TH WARD, #1	U-ALLEY	UTILITY POLES & TREES ENCRANCHING			15	300	DIRT		\$42,300.00
4116	A	11TH AVE S	12TH AVE S	22ND STE	21ST ST E	6TH WARD, #2	L-ALLEY	SHOULD BE VACATED, TREES ENCRANCHING			13.8	300	DIRT & GRASS		\$42,300.00
4126	A	EWING AVE S	DREW AVE S	30 1/2 ST W	LAKE ST W	13TH WARD, #1	STRAIGHT	SHOULD BE VACATED, BRUSH AND FENCE ENCRANCHING.			12	164	VERY POOR AC PAVEMENT AND GRAVEL		\$23,124.00
4127	A	BEARD AVE S	ABBOTT AVE S	44TH ST W	43RD ST W	13TH WARD, #3	STRAIGHT	ALLEY IS SKEWED SO MAY BE SOME ENCRANCHMENTS			12	303	AVG. AC PAVEMENT WITH SOME PATCHING		\$42,723.00
4131	A	ALDRICH AVE S	LYNDALE AVE S	59TH ST W	58TH ST W	11TH WARD, #4	STRAIGHT	THE "L" SHAPED PART OF ALLEY (PART B), WHICH IS S OF THE E-W PART, APPEARS ON GEOMASTER TO BE A PRIVATE ALLEY. ALSO 70' OF PART B IS VERY POOR CONCRETE, BUT SINCE ITS LESS THAN THE 90' MINIMUM, PART B IS CONSIDERED GRAVEL.	LYNDALE AVE S	ALDRICH AVE S		271	POOR PATCHY AC PAVEMENT		\$38,211.00
4144	A	RR TRACKS	SNELLING AVE	34TH ST E	33RD ST E	9TH WARD, #3	DEAD END	POSSIBLY VACATE DEPENDING ON WHO OWNS WHAT.	34TH ST E	33RD ST E	15	160	POOR AC PAVEMENT		\$22,560.00
5821	B	CENTRAL AVE NE	POLK ST NE	28TH AVE NE	29TH AVE NE	1ST WARD, #10	COMPLEX	FENCE ENCRANCHMENT ON WEST SIDE	PART A	29TH AVE NE	16	204	DIRT		\$28,764.00
6397	A	HARRIET AVE	GLADSTONE AVE	ELMWOOD PL W	HIGHVIEW PL	11TH WARD, #1	L-ALLEY	MANY WALLS. MANY TYPES ALL IN PRETTY GOOD SHAPE, SOME MAY BE ENCRANCHING.	ELMWOOD PL W	HIGHVIEW PL W	14	492	DECENT TO MODERATE AC PAVEMENT		\$69,372.00
7110	A	NICOLLET AVE	1ST AVE S	56TH ST E	DIAMOND LK RD E	11TH WARD, #2	STRAIGHT	EXISTING STORM SEWER INLET AT MID BLOCK, FEW DIFFERENT WALLS ALL IN DECENT SHAPE.	56TH ST E	55TH ST E	14	800	DECENT AC PAVEMENT		\$112,800.00
7535	A	SHERIDAN AVE N	RUSSELL AVE N	52ND AVE N	53RD AVE N	4TH WARD, #4	DEAD END				14	182	POOR AC PAVEMENT		\$25,662.00
7707	A	THOMAS AVE	UPTON AVE	39TH AVE	40TH AVE	13TH WARD, #6	DEAD END	FIRST 30'-40' OF NORTH END HAS TIMBER WALL ON EAST SIDE AND STONE/CONCRETE WALL ON THE WEST SIDE BOTH IN FAIR CONDITION, HAS AN EXISTING STORM SEWER INLET AT MID ALLEY.			14	230	POOR AC PAVEMENT AND GRAVEL		\$32,430.00
7803	A	VALLEY ST	ARCHITECT AVE NE	COLUMBIA BLVD	36TH AVE NE	1ST WARD, #4	COMPLEX	SERVES 4 PROPERTIES ON NORTH END, WALLS ON SOUTH END, VERY POOR SPRAYED CONC. WALL @ #3522, DECENT POURED CONC. WALL @ #817 & 3514 ON VERY EDGE OF ALLEY, ENCRANCHMENTS ON SOUTH END INCLUDE FENCES, BUILDINGS, BRUSH AND STEEP HILL.			14	300	DIRT, APPROX. 100' NORTH END		\$42,300.00
7942	B	LAKEVIEW AVE	XERXES AVE S	EDLIN PL	LAKEVIEW AVE	7TH WARD, #4	COMPLEX	EXISTING STORM SEWER INLETS AT MID AND NORTH END.	PART A	EDLIN PL	14	205	POOR PATCHY AC PAVEMENT		\$28,905.00
8240	B	5TH ST NE	SPAIN PL NE	35TH AVE NE	36TH AVE NE	1ST WARD, #5	COMPLEX	N - S SEGMENT CONCRETE; E - W SEGMENT GRAVEL, VACANT PROPERTY ON NORTH SIDE	PART A	SPAIN PL NE	14	355	DIRT		\$50,055.00
8291	B	11TH AVE SE	12TH AVE SE	8TH ST SE	RR TRACKS	3RD WARD, #7	COMPLEX	N-S LEG	PART A	DEAD END N OF PART A		122	POOR AC PAVEMENT		\$17,202.00
8856	B	29TH AVE S	30TH AVE S	31ST ST E	LAKE ST E	9TH WARD, #2	T-ALLEY	POSSIBLY VACATE AND CAN ACCESS OFF OF LAKE ST. AND 31ST ST.	PART A	30TH AVE S		171	DIRT		\$24,111.00
8935	A	32ND AVE S	33RD AVE S	29TH ST E	28TH ST E	9TH WARD, #1	L-ALLEY	E - W SEGMENT CONCRETE, N - S SEGMENT GRAVEL, EXISTING STORM SEWER INLET MIDWAY, 120' OF SOUTH END IS PAVED CHURCH PARKING LOT.	33RD AVE S	PART B	12	100	DIRT		\$14,100.00
9304	A	IRVING AVE N	GIRARD AVE N	22ND AVE N	23RD AVE N	5TH WARD, #2	STRAIGHT	SOUTH END IS PARKING LOT FOR PRAIRIE SEEDS ACADEMY SCHOOL WITH LARGE WALL DOWN CENTER OF RW, LARGE BLOCK WALL FOR SCHOOL IN GOOD CONDITION, UTILITY POLES AND WALL ARE ENCRANCHING.			14	340	POOR PATCHY AC PAVEMENT		\$47,940.00
9305	A	GRAND ST NE	CALIFORNIA ST NE	18TH AVE NE	22ND AVE NE	3RD WARD, #2	DEAD END	PAVING ONLY NECESSARY TO SERVE 2 PROPERTIES ON SOUTH END, CONSTRUCTION YARD AND LUMBER YARD HAVE ACCESS OFF OF GRAND & CALIFORNIA. COULD JUST PAVE FIRST 60'-70' FROM STREET.			12	300	GRAVEL		\$42,300.00
9308	A	BURNHAM BLVD	BURNHAM BLVD	BURNHAM BLVD	WASHBURN AVE S	7TH WARD, #6	CURVED	BRUSH ENCRANCHMENT, NARROW ALLEY			25	400	DIRT & POOR AC PAVEMENT		\$56,400.00

9309	A	MAIN ST NE	2ND ST NE	16TH AVE NE	17TH AVE NE	3RD WARD, #3	DEAD END	STORM SEWER IS NEEDED TO PROVIDE DRAINAGE			15	198	POOR AC PAVEMENT	\$27,918.00
9310	A	MAIN ST NE	2ND ST NE	LOWRY AVE NE	26TH AVE NE	1ST WARD, #8	L-ALLEY	ALL COMMERCIAL PROPERTY, PARKING LOTS ARE PART OF ALLEY, SOME ENCROACHMENTS INCLUDE BRUSH			14,30	480	E-W LEG IS GOOD AC PAVEMENT, N-S LEG IS VERY POOR AC PAVEMENT	\$67,680.00
9321	A	IRVING AVE S	HUMBOLDT AVE S	26TH ST W	25TH ST W	10TH WARD, #1	DEAD END	BLOCK WALL IS NON ISSUE; EXISTING STORM SEWER INLET AT SOUTH END, DRIVEWAY AT SOUTH END MAY BE ENCROACHING.			14	325	DIRT & GRAVEL	\$45,825.00
9324	A	JAMES AVE N	IRVING AVE N	2ND AVE N	CEDAR LAKE RD N	5TH WARD, #3	STRAIGHT	BRUSH IS ENCROACHING ON WEST SIDE NORTH END.			12	195	GRAVEL	\$27,495.00
9326	A	JAMES AVE N	IRVING AVE N	44TH AVE N	45TH AVE N	4TH WARD, #6	DEAD END	POSSIBLY VACATE DEAD END OFF OF JAMES (SOUTH LEG)			14	280	VERY POOR AC PAVEMENT	\$39,480.00
9327	A	JAMES AVE N	IRVING AVE N	44TH AVE N	45TH AVE N	4TH WARD, #6	L-ALLEY	IRVING AVE N WAS NUMBER 4121, (NORTH LEG)		45TH AVE N	14	255	GRAVEL	\$35,955.00
9330	A	DEAD END	JAMES AVE N	41ST AVE N	42ND AVE N	4TH WARD, #10	STRAIGHT	MAY NEED STORM SEWER TO PROVIDE DRAINAGE.			12	595	DIRT AND VERY POOR AC PAVEMENT	\$83,895.00
9341	A	BENJAMIN ST NE	MCKINLEY ST NE	35TH AVE NE	36TH AVE NE	1ST WARD, #2	DEAD END	30" TIMBER WALL ON EAST SIDE 50' LONG IN POOR CONDITION, ALLEY ONLY SERVES 2 PROPERTIES ON WEST SIDE.			14	155	MODERATE TO GOOD AC PAVEMENT	\$21,855.00
9344	A	BUCHANAN ST NE	LINCOLN ST NE	BROADWAY ST NE	12TH AVE NE	1ST WARD, #13	L-ALLEY				14	360	DIRT, POOR AC PAVEMENT	\$50,760.00
9345	A	BUCHANAN ST NE	LINCOLN ST NE	12TH AVE NE	13TH AVE NE	1ST WARD, #13	STRAIGHT				14	235	DIRT, POOR AC PAVEMENT	\$33,135.00
9357	A	EMERSON AVE N	DUPONT AVE N	43RD AVE N	WEBBER PKWY	4TH WARD, #9	DEAD END	EXISTING STORM SEWER INLET AT NORTH END WILL NEED TO BE ADJUSTED.			15	240	GRAVEL	\$33,840.00
9358	A	EMERSON AVE N	DUPONT AVE N	SHINGLE CREEK PKWY	46TH AVE N	4TH WARD, #7	DEAD END	SHOULD BE VACATED			14	200	GRAVEL	\$28,200.00
9360	A	FREMONT AVE N	EMERSON AVE N	43RD AVE N	WEBBER PKWY	4TH WARD, #8	DEAD END	SMALL BLOCK WALL - NON ISSUE, NORTH END WILL NEED STORM SEWER TO PROVIDE DRAINAGE.			15	330	POOR AC PAVEMENT	\$46,530.00
9373	A	QUEEN AVE N	PENN AVE N	52ND AVE N	53RD AVE N	4TH WARD, #5	DEAD END	POSSIBLY VACATE SOUTH HALF			14	450	POOR PATCHY AC PAVEMENT	\$63,450.00
9376	A	PIERCE ST NE	BUCHANAN ST NE	BROADWAY ST NE	13TH AVE NE	1ST WARD, #12	DEAD END	SERVES 1 COMMERCIAL PROPERTY & 1 HOUSE, SMALL BLOCK WALL EAST SIDE @ HOUSE, MAY NEED SOME STORM SEWER.			12	600	DIRT, POOR AC PAVEMENT	\$84,600.00
9377	A	PIERCE ST NE	BUCHANAN ST NE	13TH AVE NE	14TH AVE NE	1ST WARD, #12	STRAIGHT				14	340	DIRT, POOR AC PAVEMENT	\$47,940.00
9379	A	FILLMORE ST NE	BUCHANAN ST NE	36TH AVE NE	RR TRACKS	1ST WARD, #3	DEAD END				14	300	MODERATE AC PAVEMENT	\$42,300.00
9387	A	THOMAS AVE N	SHERIDAN AVE N	52ND AVE N	53RD AVE N	4TH WARD, #3	L-ALLEY	WEST SIDE PROPERTY IS ALL POND			14	600	POOR PATCHY AC PAVEMENT	\$84,600.00
9388	A	THOMAS AVE S	SHERIDAN AVE S	HAWTHORNE AVE W	CHESTNUT AVE W	7TH WARD, #2	DEAD END	EXISTING STORM SEWER INLET AT NORTH END WILL NEED TO BE ADJUSTED.			14	598	DIRT & GRAVEL	\$84,318.00
9392	A	UPTON AVE N	THOMAS AVE N	51ST AVE N	52ND AVE N	4TH WARD, #2	DEAD END				14	600	VERY POOR AC PAVEMENT	\$84,600.00
9396	A	VINCENT AVE N	UPTON AVE N	51ST AVE N	52ND AVE N	4TH WARD, #1	STRAIGHT	EAST SIDE PROPERTY IS MOSTLY A LARGE POND			14	605	POOR PATCHY AC PAVEMENT	\$85,305.00

9398	A	WASHBURN AVE S	VINCENT AVE S	39TH ST W	38TH ST W	13TH WARD, #2	DEAD END	STONE WALLS ON EAST & WEST SIDE ON SOUTH HALF, TIMBER WALLS ON EAST SIDE ON NORTH HALF, UTILITY POLE ENCROACHING ON SOUTH HALF			12	331	SOUTH HALF IS GRAVEL & NORTH HALF IS POOR AC & GRAVEL	\$46,671.00
9399	A	WASHBURN AVE S	VINCENT AVE S	59TH ST W	58TH ST W	13TH WARD, #5	STRAIGHT				14	596	DIRT & POOR AC PAVEMENT	\$84,036.00
9401	A	VINCENT AVE N	UPTON AVE N	CHESTNUT AVE W	2ND AVE N	7TH WARD, #1	DEAD END	BRUSH IS ENCROACHING			14	591	DIRT & GRAVEL	\$83,331.00
9415	A	PILLSBURY AVE	WENTWORTH AVE	57TH ST W	56TH ST W	11TH WARD, #3	DEAD END	MAY NEED STORM SEWER INLET AT NORTH END, ENCROACHMENTS INCLUDE DRIVEWAYS AND BRUSH.			14	190	POOR PATCHY AC PAVEMENT	\$26,790.00
9434	A	3RD AVE S	CLINTON AVE	42ND STE	41ST STE	8TH WARD, #1	DEAD END	MAY NEED A COUPLE WALLS ON EAST SIDE, POSSIBLE ENCROACHMENTS INCLUDE FENCES, TREES, & BRUSH.			12	295	DIRT	\$41,595.00
9448	A	6TH ST N	4TH ST N	30TH AVE N	31ST AVE N	3RD WARD, #1	DEAD END	SPLIT - NORTH AND SOUTH ALLEYS. SOUTH ALLEY HAS POURED CONCRETE WALL ON EAST END, POSSIBLE ENCROACHMENTS BY BUILDINGS AND UTILITY POLES			12	170	DIRT AND GRAVEL	\$23,970.00
9481	A	WARWICK ST	CECIL ST	WARWICK ST	SHARON AVE	2ND WARD, #10	L-ALLEY	BRICK AND BLOCK WALLS AT SOUTH END ALL WALLS ABOUT TO FALL DOWN, SOME ENCROACHMENT FROM BRUSH AND TREES, VERY NARROW.			14	780	VERY POOR PATCHY AC PAVEMENT	\$109,980.00
9483	A	26TH AVE S	27TH AVE S	8TH ST S	7TH ST S	2ND WARD, #7	STRAIGHT	WALL ON EAST END POSSIBLE ENCROACHMENT, ALSO POSSIBLE ENCROACHMENT OF FENCES, BUILDINGS, & UTILITY POLES			12	331	DIRT, GRAVEL, VERY POOR AC PAVEMENT	\$46,671.00
9484	A	26TH AVE S	27TH AVE S	8TH ST S	7TH ST S	2ND WARD, #6	COMPLEX				12	385		\$54,285.00
9485	A	26TH AVE S	27TH AVE S	7TH ST S	6TH ST S	2ND WARD, #5	T-ALLEY	BOTH LEGS HAVE BLOCK WALLS IN POOR CONDITION LEANING OVER, POSSIBLE UTILITY POLE ENCROACHING.			14	410	DIRT & GRAVEL	\$57,810.00
9512	A	UPTON AVE S	THOMAS AVE S	26TH ST W	UPTON AVE S	7TH WARD, #7	T-ALLEY	APPROX. 50' HAS BEEN FINISHED IN CONCRETE OFF OF KENWORTH END.			14	360	DIRT & GRAVEL	\$50,760.00
9518	A	GARFIELD ST NE	ARTHUR ST NE	HENNEPIN AVE E	WINTER ST	1ST WARD #14	T-ALLEY	STORM SEWER INLET IN N-S LEG WILL NEED TO BE ADJUSTED & REPAIRED			14,20	710	VERY POOR AC PAVEMENT, W/PATCHY AREAS	\$100,110.00
9529	A	JOHNSON ST NE	CLEVELAND ST NE	36TH AVE NE	RR TRACKS	1ST WARD, #1	COMPLEX	EAST END VERY NARROW, NORTH SIDE IS VACANT R.R. R/W, MAY HAVE SOME DRAINAGE ISSUES ON EAST END, SOME ENCROACHMENTS OF BRUSH AND SMALL TREES.			14	850	AVERAGE AC PAVEMENT, POOR PATCHY AREAS	\$119,850.00
9540	A	CALIFORNIA ST NE	MAIN ST NE	LOWRY AVE NE	26TH AVE NE	1ST WARD, #7	STRAIGHT	SOUTH HALF, EAST SIDE VACANT R.R. R/W, WEST SIDE RESIDENTIAL, WILL NEED STORM SEWER TO PROVIDE DRAINAGE.			12	590	POOR AC PAVEMENT	\$83,190.00
9541	A	CALIFORNIA ST NE	MAIN ST NE	26TH AVE NE	27TH AVE NE	1ST WARD, #7	STRAIGHT	NORTH HALF, EAST SIDE VACANT R.R. R/W, WEST SIDE RESIDENTIAL,			12	605	POOR AC PAVEMENT	\$85,305.00
9545	A	MONROE ST NE	QUINCY ST NE	27TH AVE NE	CEMETARY	1ST WARD, #9	COMPLEX	75' LONG TIMBER WALL ON EAST SIDE SOUTH END IN POOR CONDITION, MAY BE ABLE TO VACATE SINCE ALLEY ONLY SERVES THE TWO HOUSES THAT IT GOES BETWEEN.	27TH AVE NE	DEAD END	16	132	POOR AC PAVEMENT	\$18,612.00
9555	B	MAIN ST NE	2ND ST NE	7TH AVE NE	8TH AVE NE	3RD WARD, #5	DEAD END	EXISTING STORM SEWER INLET AT SOUTH END WILL NEED TO BE ADJUSTED, POSSIBLE UTILITY POLE ENCROACHMENT ON EAST SIDE.	PART A	DEAD END N OF PART A	16.5	218	POOR AC PAVEMENT	\$30,738.00
9560	A	MARSHALL ST NE	GRAND ST NE	14TH AVE NE	16TH AVE NE	3RD WARD, #4	L-ALLEY	20' LONG TIMBER WALL AT SOUTH END IN AVG. CONDITION ON PRIVATE PROPERTY - NON ISSUE, UTILITY POLES MAY BE ENCROACHING.			12	260	N-S LEG IS VERY POOR AC PAVEMENT, E-W LEG IS GRAVEL	\$36,660.00
9578	A	SHERIDAN AVE N	FERRANT PL	WALTON PL	24TH AVE N	5TH WARD, #1	DEAD END	MAY NEED STORM SEWER TO PROVIDE DRAINAGE.			14	155	DIRT & GRAVEL	\$21,855.00
9590	A	RR TRACKS	SHERIDAN AVE S	FRANKLIN AVE W	KENWOOD PKWY	7TH WARD, #5	COMPLEX	SOME TIMBER AND BRICK WALLS IN FAIR CONDITION, POSSIBLE ENCROACHMENTS INCLUDE TREES AND BRUSH.			14	300	DIRT & GRAVEL	\$42,300.00

TOTAL CONSTRUCTION COST

\$3,909,789.00

CITY OF MINNEAPOLIS UNPAVED ALLEY

81 Dirt Alleys

DIRT ALLEYS PER WARD

WARDS	TOTALS
1	21
2	11
3	8
4	11
5	4
6	2
7	8
8	1
9	3
10	1
11	4
12	1
13	6

